

Efficient Storage and Importance Sampling for Fluorescent Reflectance - Supplemental

Q. Hua, V. Tázlar, A. Fichet and A. Wilkie

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3.52 PLAORAN
3.53 PHP8HP5K
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3.55 CIPLAW9
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3.57 POLYRED
3.58 IXCAXPMA

- 3.59 CIPLAW8
- 3.60 IXCMMINT
- 3.61 HERPIBLU
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- 3.63 PFUJI5C
- 3.64 IXCPUPI
- 3.65 PLIWFWH
- 3.66 IXCBBBLUE
- 3.67 IXCCLBL
- 3.68 IXCAXPGR
- 3.69 PXEROY5R
- 3.70 PKODXLWH
- 3.71 PXEROM5R
- 3.72 LITWFWH
- 3.73 PFUJI5M
- 3.74 PHP8HP1C
- 3.75 PFUJI5Y
- 3.76 PHP8RV5M
- 3.77 POLYPUR
- 3.78 PXEROC5R
- 3.79 PLIWF4M
- 3.80 IXCRINFR
- 3.81 PKODXL5M
- 3.82 PKODXL5C
- 3.83 PHP8RV5K
- 3.84 PLIWF4Y
- 3.85 POLYBLUE
- 3.86 PKODXL5Y
- 3.87 PLIWF1M
- 3.88 PLIWF4C
- 3.89 PLIWF1C
- 3.90 PKODXL1C
- 3.91 PHP8HP1M
- 3.92 PXEROM1R
- 3.93 PXEROK5R
- 3.94 MSCHIP1
- 3.95 PFUJI5K
- 3.96 PHP8HP1Y
- 3.97 MCMODRED

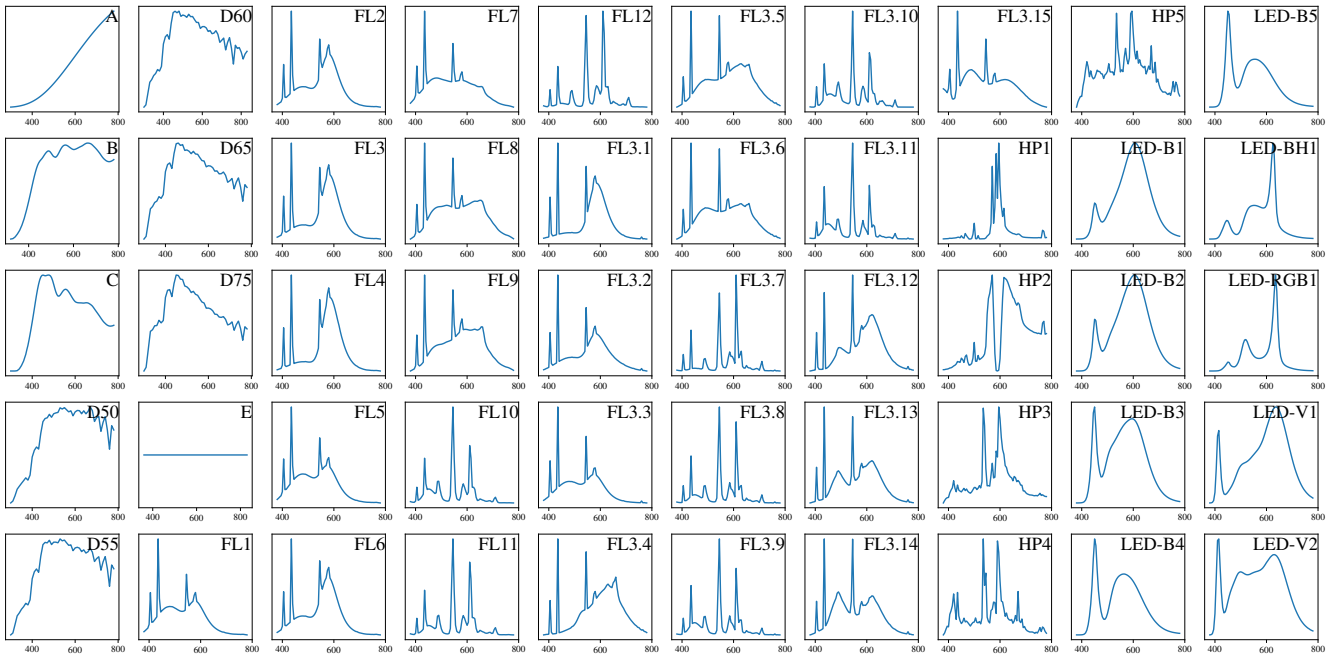
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3.99 P3MP1K
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3.104PEP1C
3.105PLIWF1Y
3.106PXEROC1R
3.107P3MP1M
3.108PEP1M
3.109PKODXL5K
3.110PLIWF4K
3.111PXEROY1R
3.112RM3MGRID
3.113PFUJ1Y
3.114PHP8RV5C
3.115PLTOSF1C
3.116PLTOSF1Y
3.117INCWHITE
3.118RM3MUNI
3.119PHP8RV1Y
3.120P3MP5Y
3.121PKODXL1M
3.122P3MP1Y
3.123PLTOSF1K
3.124PHP8RV1M
3.125PLTOSF5K
3.126PLTOSF1M
3.127PEP1Y
3.128P3MP5K
3.129P3MP5M
3.130PHP8RV1C
3.131PLIWF1K
3.132PLAGREE
3.133P3MP1YB
3.134PLAWH1
3.135P3MP5C
3.136PKODXL1Y

3.137PKODXL1K
3.138PFUJI1K
3.139PEP1K
3.140PLAWH2
3.141PLTOSF5Y
3.142PLTOSF5C
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3.144P3MPWH
3.145P3MP1C
3.146PXEROK1R
3.147PLTOSF5M

1. Illuminants

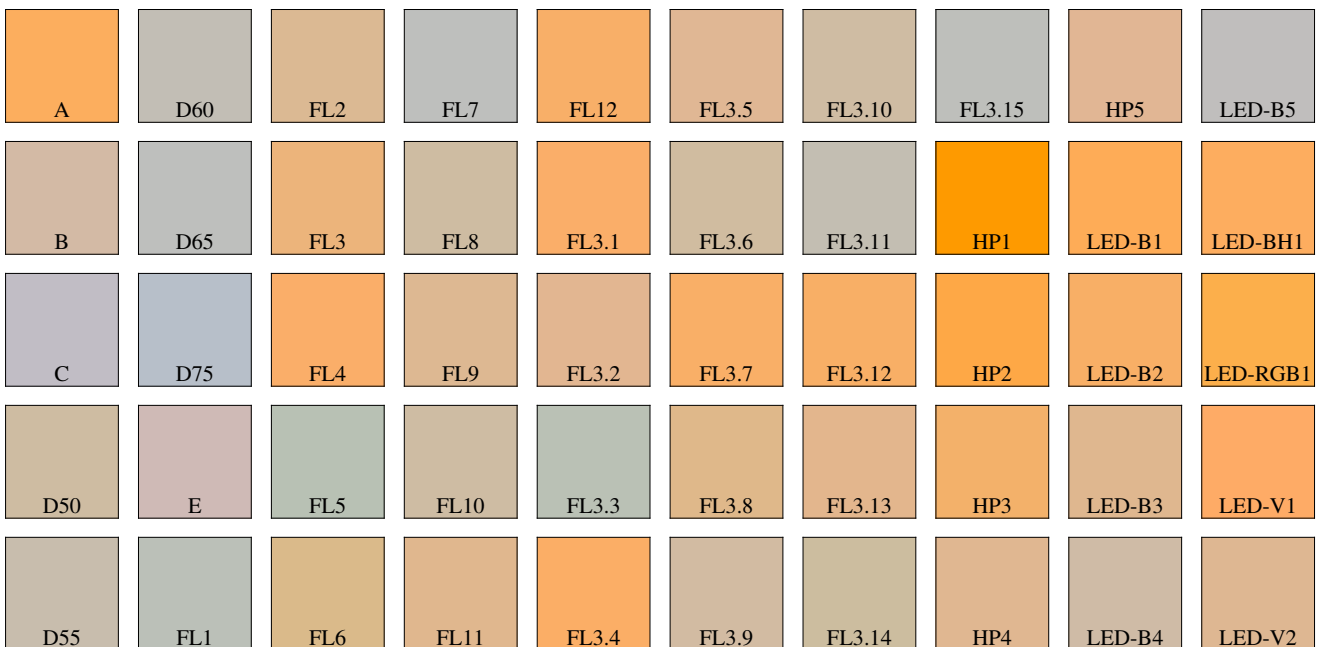
1.1. CIE standard illuminants – Spectra

Used CIE standard illuminant spectra to generate the colour patches in this supplemental.



1.2. CIE standard illuminants – White points

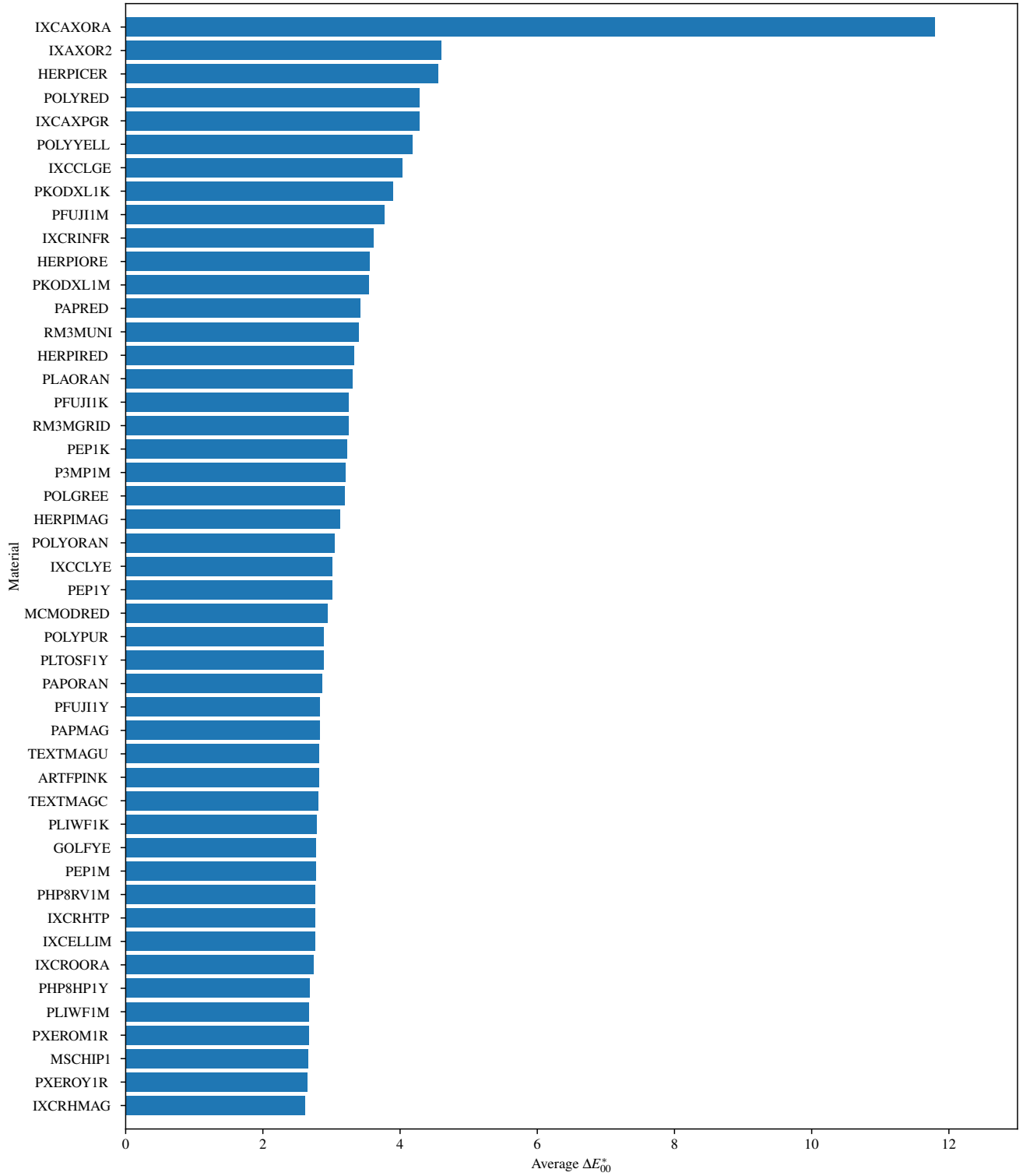
RGB D65 colours for CIE standard illuminants using the CIE-XYZ 1931 2° colour matching functions with Y set at 0.52.

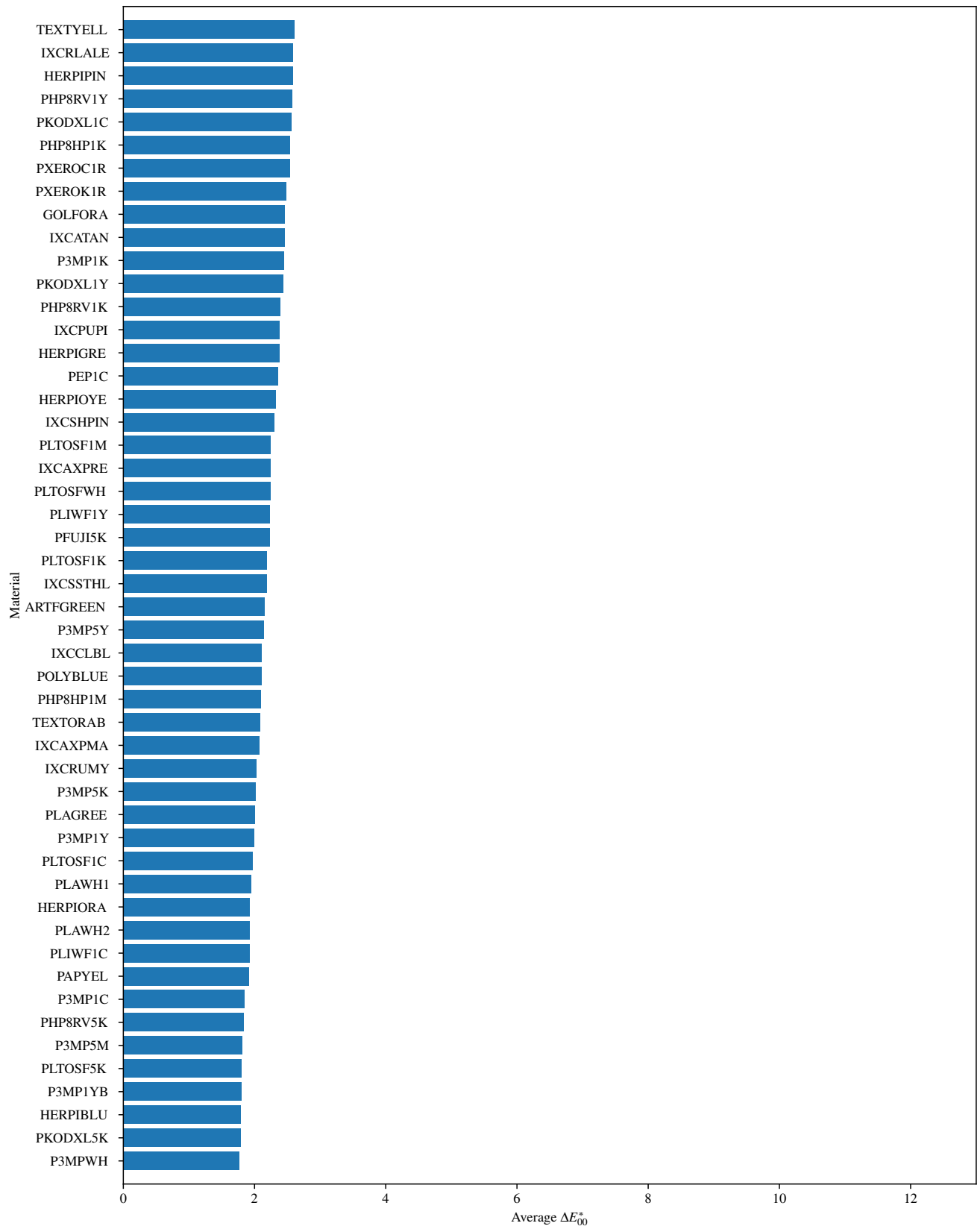


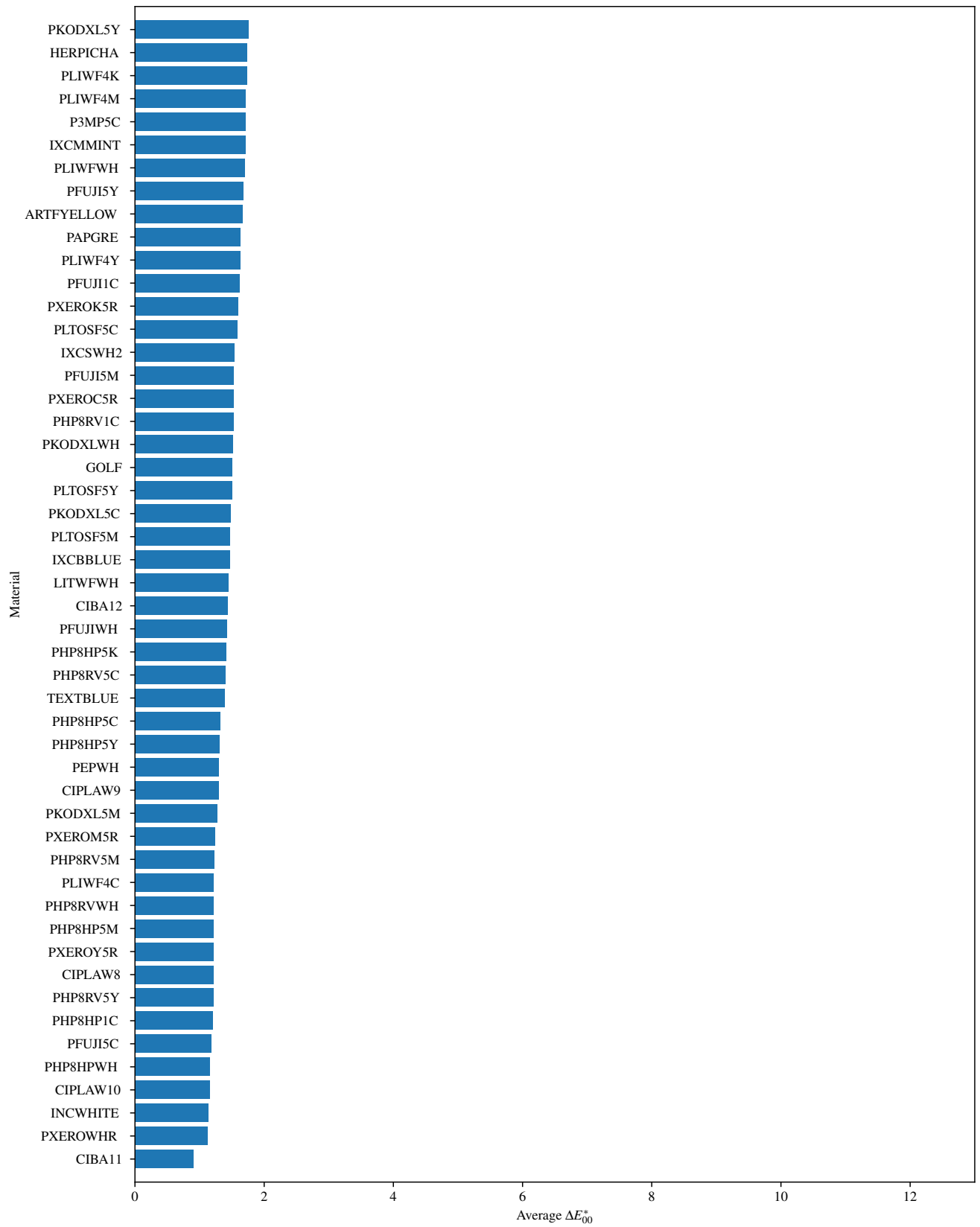
2. Dataset

2.1. Average ΔE_{00}^* – Worst performing materials with monochromatic illuminants

Average ΔE_{00}^* over monochromatic illumination from 300 to 780 nm between the original measurement and the fit with 4 Gaussians using EM.

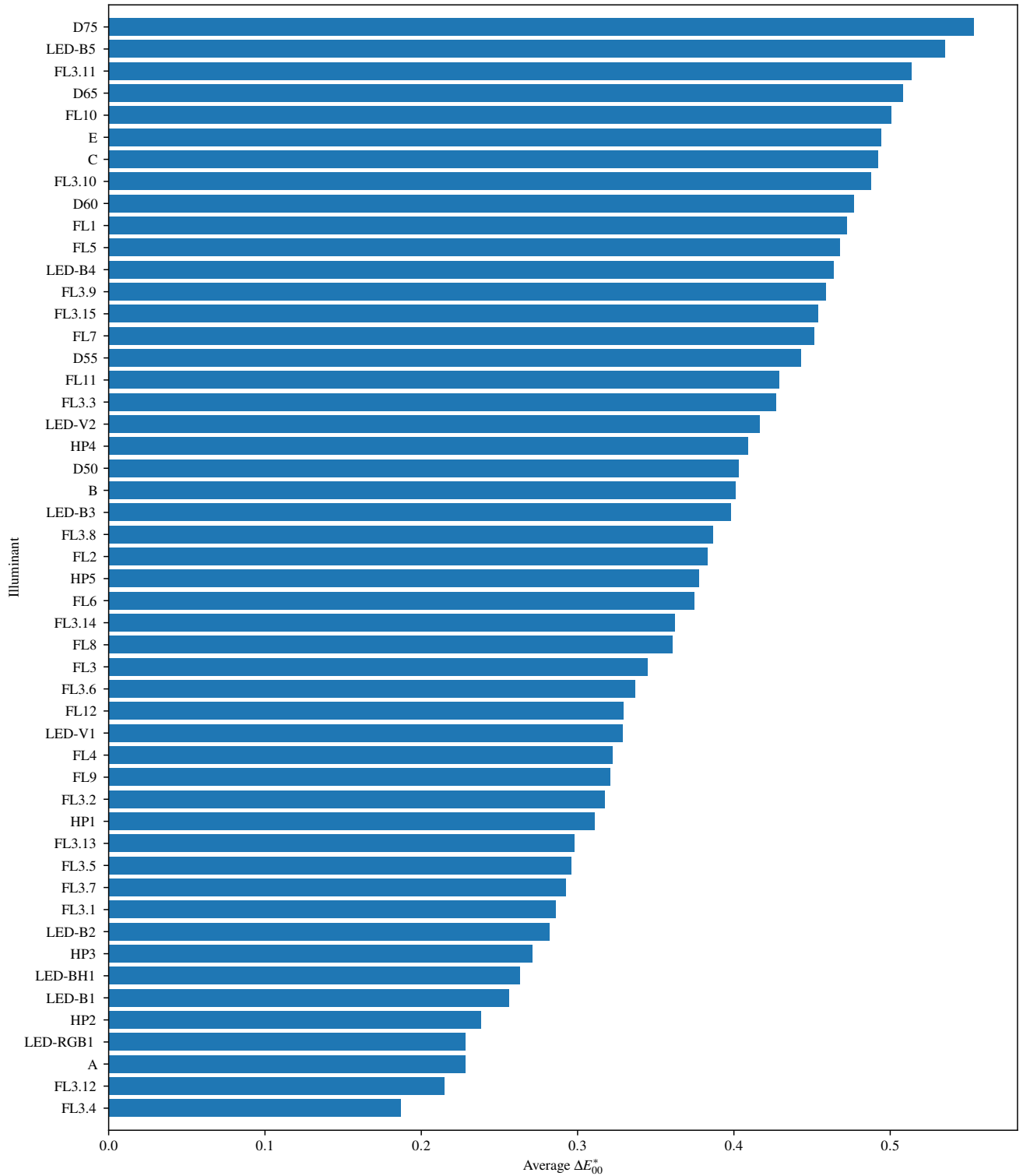
























2.2. Average ΔE_{00}^* – Worst performing illuminants

Average ΔE_{00}^* between the original measurement and the fit with 4 Gaussians using EM on the whole database for each CIE standard illuminant.



2.3. Material list – Sorted by fluorescence contribution



	IXCAXORA		PHP8HPWH		ARTFYELLOW
	IXAXOR2		CIBA12		PHP8HP5M
	HERPIOYE		IXCATAN		PAPMAG
	HERPIORE		IXCCLGE		PAPORAN
	HERPIORA		ARTFPINK		IXCELLIM
	HERPICER		TEXTORAB		ARTFGREEN
	HERPIPIN		HERPIGRE		PAPYEL
	HERPIRED		PEPWH		IXCROORA
	POLYORAN		CIBA11		POLGREE
	GOLFYE		PHP8RVWH		CIPLAW10
	IXCAXPRE		IXCRUMY		PAPGRE
	IXCCLYE		GOLFORA		PFUJIWH
	HERPIMAG		PXEROWHR		GOLF
	HERPICHA		TEXTMAGC		PLAORAN
	TEXTYELL		IXCSHPIN		PHP8HP5K
	IXCRLALE		PHP8HP5Y		PHP8HP5C
	POLYYELL		TEXTBLUE		CIPLAW9
	IXCSSTHL		TEXTMAGU		IXCRHMAG
	IXCRHTP		PAPRED		POLYRED






	IXCAXPMA		PXEROC5R		PFUJI1M
	CIPLAW8		PLIWF4M		P3MP1K
	IXCMMINT		IXCRINFR		IXCSWH2
	HERPIBLU		PKODXL5M		PLTOSFWH
	PHP8RV5Y		PKODXL5C		PFUJI1C
	PFUJI5C		PHP8RV5K		PHP8HP1K
	IXCPUPI		PLIWF4Y		PEPIC
	PLIWFWH		POLYBLUE		PLIWF1Y
	IXCBBLUE		PKODXL5Y		PXEROC1R
	IXCCLBL		PLIWF1M		P3MP1M
	IXCAXPGR		PLIWF4C		PEP1M
	PXEROY5R		PLIWF1C		PKODXL5K
	PKODXLWH		PKODXL1C		PLIWF4K
	PXEROM5R		PHP8HP1M		PXEROY1R
	LITWFWH		PXEROM1R		RM3MGRID
	PFUJI5M		PXEROK5R		PFUJI1Y
	PHP8HP1C		MSCHIP1		PHP8RV5C
	PFUJI5Y		PFUJI5K		PLTOSF1C
	PHP8RV5M		PHP8HP1Y		PLTOSF1Y
	POLYPUR		MCMODRED		INCWHITE



2.4. Material list – Sorted by alphabetical order

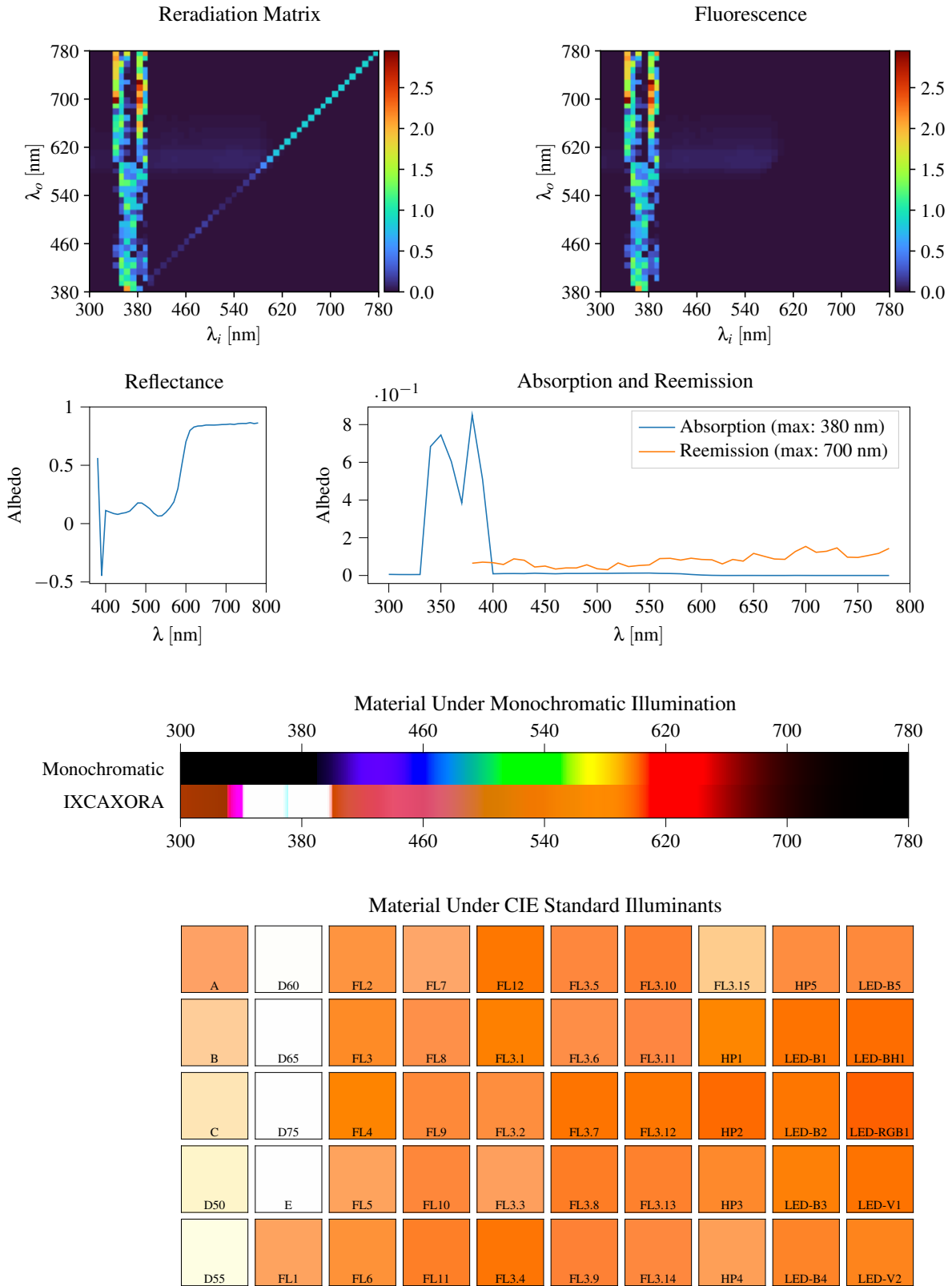
	ARTFGREEN		HERPIPIN		IXCRLALE
	ARTFPINK		HERPIRED		IXCROORA
	ARTFYELLOW		INCWHITE		IXCRUMY
	CIBA11		IXAXOR2		IXCSHPIN
	CIBA12		IXCATAN		IXCSSTHL
	CIPLAW10		IXCAXORA		IXCSWH2
	CIPLAW8		IXCAXPGR		LITWFWH
	CIPLAW9		IXCAXPMA		MCMODRED
	GOLF		IXCAXPRE		MSCHIP1
	GOLFORA		IXCBBBLUE		P3MP1C
	GOLFYE		IXCCLBL		P3MP1K
	HERPIBLU		IXCCLGE		P3MP1M
	HERPICER		IXCCLYE		P3MP1Y
	HERPICHA		IXCELLIM		P3MP1YB
	HERPIGRE		IXCMMINT		P3MP5C
	HERPIMAG		IXCPUPI		P3MP5K
	HERPIORA		IXCRHMAG		P3MP5M
	HERPIORE		IXCRHTP		P3MP5Y
	HERPIOYE		IXCRINFR		P3MPWH

	PAPGRE		PHP8HP1K		PKODXL1Y
	PAPMAG		PHP8HP1M		PKODXL5C
	PAPORAN		PHP8HP1Y		PKODXL5K
	PAPRED		PHP8HP5C		PKODXL5M
	PAPYEL		PHP8HP5K		PKODXL5Y
	PEP1C		PHP8HP5M		PKODXLWH
	PEP1K		PHP8HP5Y		PLAGREE
	PEP1M		PHP8HPWH		PLAORAN
	PEP1Y		PHP8RV1C		PLAWH1
	PEPWH		PHP8RV1K		PLAWH2
	PFUJ1C		PHP8RV1M		PLIWF1C
	PFUJ1K		PHP8RV1Y		PLIWF1K
	PFUJ1M		PHP8RV5C		PLIWF1M
	PFUJ1Y		PHP8RV5K		PLIWF1Y
	PFUJ5C		PHP8RV5M		PLIWF4C
	PFUJ5K		PHP8RV5Y		PLIWF4K
	PFUJ5M		PHP8RVWH		PLIWF4M
	PFUJ5Y		PKODXL1C		PLIWF4Y
	PFUJIWH		PKODXL1K		PLIWFWH
	PHP8HP1C		PKODXL1M		PLTOSF1C

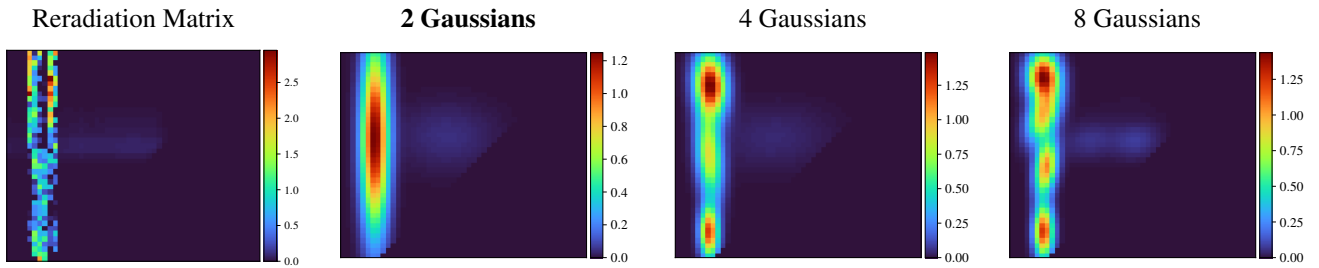
	PLTOSF1K		PXEROWHR
	PLTOSF1M		PXEROY1R
	PLTOSF1Y		PXEROY5R
	PLTOSF5C		RM3MGRID
	PLTOSF5K		RM3MUNI
	PLTOSF5M		TEXTBLUE
	PLTOSF5Y		TEXTMAGC
	PLTOSFWH		TEXTMAGU
	POLGREE		TEXTORAB
	POLYBLUE		TEXTYELL
	POLYORAN		
	POLYPUR		
	POLYRED		
	POLYYELL		
	PXEROC1R		
	PXEROC5R		
	PXEROK1R		
	PXEROK5R		
	PXEROM1R		
	PXEROM5R		

3. Individual Materials

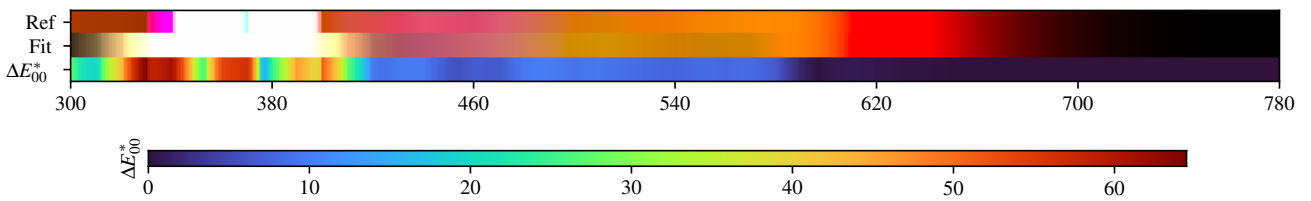
3.1. IXCAXORA



IXCAXORA - Weighted Expectation-Maximization - 2 Gaussians



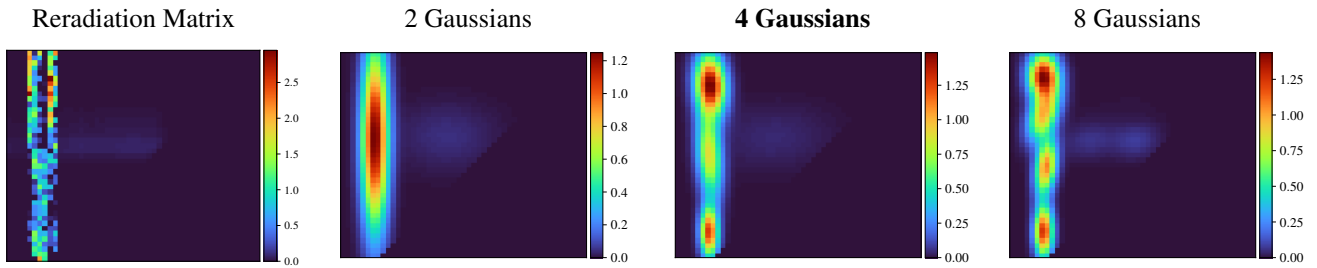
Fitted Material Under Monochromatic Illumination



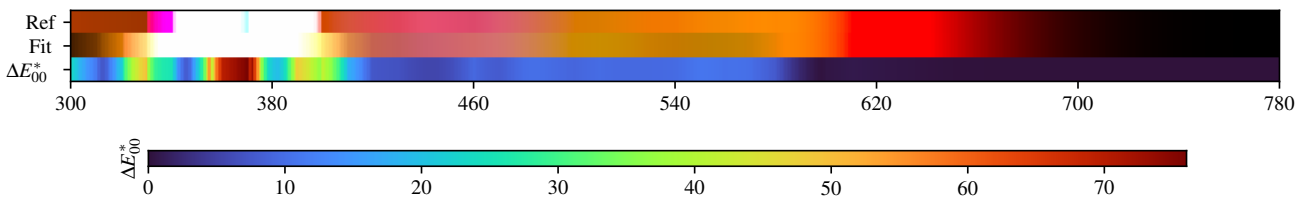
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 8.11$	D60 $\Delta E = 21.46$	FL2 $\Delta E = 5.66$	FL7 $\Delta E = 9.50$	FL12 $\Delta E = 1.80$	FL3.5 $\Delta E = 4.59$	FL3.10 $\Delta E = 2.78$	FL3.15 $\Delta E = 13.78$	HP5 $\Delta E = 5.72$	LED-B5 $\Delta E = 4.09$
B $\Delta E = 12.95$	D65 $\Delta E = 22.87$	FL3 $\Delta E = 3.91$	FL8 $\Delta E = 5.91$	FL3.1 $\Delta E = 2.38$	FL3.6 $\Delta E = 5.54$	FL3.11 $\Delta E = 3.86$	HP1 $\Delta E = 1.72$	LED-B1 $\Delta E = 1.80$	LED-BH1 $\Delta E = 1.73$
C $\Delta E = 15.56$	D75 $\Delta E = 24.93$	FL4 $\Delta E = 2.68$	FL9 $\Delta E = 4.60$	FL3.2 $\Delta E = 5.00$	FL3.7 $\Delta E = 1.44$	FL3.12 $\Delta E = 2.12$	HP2 $\Delta E = 1.66$	LED-B2 $\Delta E = 2.03$	LED-RGB1 $\Delta E = 1.68$
D50 $\Delta E = 17.80$	E $\Delta E = 19.31$	FL5 $\Delta E = 8.73$	FL10 $\Delta E = 3.80$	FL3.3 $\Delta E = 8.43$	FL3.8 $\Delta E = 2.52$	FL3.13 $\Delta E = 3.46$	HP3 $\Delta E = 4.63$	LED-B3 $\Delta E = 2.89$	LED-V1 $\Delta E = 2.71$
D55 $\Delta E = 19.74$	FL1 $\Delta E = 8.66$	FL6 $\Delta E = 5.29$	FL11 $\Delta E = 2.73$	FL3.4 $\Delta E = 2.29$	FL3.9 $\Delta E = 3.07$	FL3.14 $\Delta E = 4.67$	HP4 $\Delta E = 8.32$	LED-B4 $\Delta E = 3.49$	LED-V2 $\Delta E = 4.56$

IXCAXORA - Weighted Expectation-Maximization - 4 Gaussians



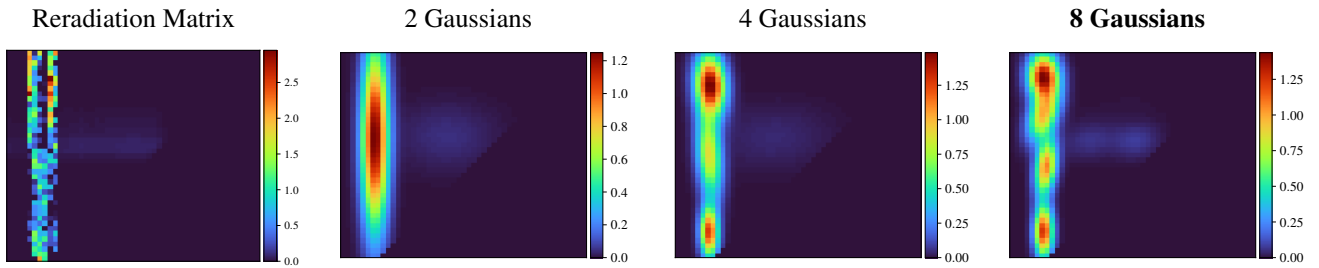
Fitted Material Under Monochromatic Illumination



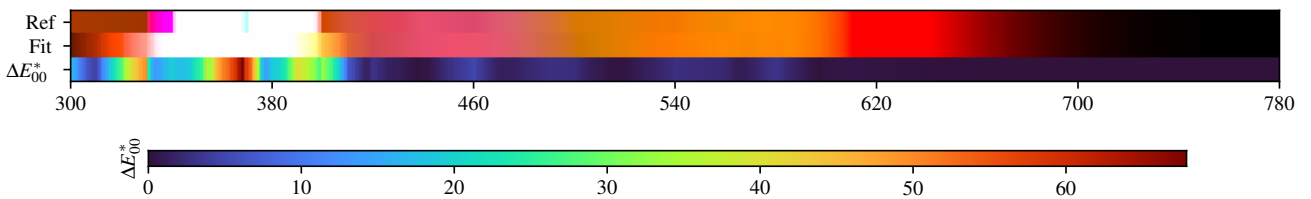
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 2.52$	D60 $\Delta E = 5.38$	FL2 $\Delta E = 4.73$	FL7 $\Delta E = 6.56$	FL12 $\Delta E = 2.23$	FL3.5 $\Delta E = 3.60$	FL3.10 $\Delta E = 2.82$	FL3.15 $\Delta E = 7.41$	HP5 $\Delta E = 5.80$	LED-B5 $\Delta E = 4.38$
B $\Delta E = 2.84$	D65 $\Delta E = 6.05$	FL3 $\Delta E = 3.76$	FL8 $\Delta E = 4.55$	FL3.1 $\Delta E = 2.93$	FL3.6 $\Delta E = 4.26$	FL3.11 $\Delta E = 3.41$	HP1 $\Delta E = 2.41$	LED-B1 $\Delta E = 2.14$	LED-BH1 $\Delta E = 2.07$
C $\Delta E = 3.25$	D75 $\Delta E = 7.17$	FL4 $\Delta E = 3.09$	FL9 $\Delta E = 3.80$	FL3.2 $\Delta E = 4.07$	FL3.7 $\Delta E = 1.99$	FL3.12 $\Delta E = 2.18$	HP2 $\Delta E = 2.42$	LED-B2 $\Delta E = 2.34$	LED-RGB1 $\Delta E = 1.71$
D50 $\Delta E = 4.05$	E $\Delta E = 14.63$	FL5 $\Delta E = 6.72$	FL10 $\Delta E = 3.19$	FL3.3 $\Delta E = 6.40$	FL3.8 $\Delta E = 2.39$	FL3.13 $\Delta E = 3.07$	HP3 $\Delta E = 4.17$	LED-B3 $\Delta E = 3.16$	LED-V1 $\Delta E = 2.18$
D55 $\Delta E = 4.69$	FL1 $\Delta E = 6.60$	FL6 $\Delta E = 4.66$	FL11 $\Delta E = 2.52$	FL3.4 $\Delta E = 2.32$	FL3.9 $\Delta E = 2.78$	FL3.14 $\Delta E = 3.95$	HP4 $\Delta E = 5.95$	LED-B4 $\Delta E = 3.77$	LED-V2 $\Delta E = 4.03$

IXCAXORA - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 1.79$	D60 $\Delta E = 4.61$	FL2 $\Delta E = 1.30$	FL7 $\Delta E = 2.29$	FL12 $\Delta E = 1.10$	FL3.5 $\Delta E = 0.79$	FL3.10 $\Delta E = 0.60$	FL3.15 $\Delta E = 3.63$	HP5 $\Delta E = 3.03$	LED-B5 $\Delta E = 0.47$
B $\Delta E = 1.50$	D65 $\Delta E = 5.09$	FL3 $\Delta E = 0.89$	FL8 $\Delta E = 1.04$	FL3.1 $\Delta E = 0.59$	FL3.6 $\Delta E = 0.87$	FL3.11 $\Delta E = 0.55$	HP1 $\Delta E = 0.64$	LED-B1 $\Delta E = 0.23$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 1.43$	D75 $\Delta E = 5.89$	FL4 $\Delta E = 0.59$	FL9 $\Delta E = 0.79$	FL3.2 $\Delta E = 1.16$	FL3.7 $\Delta E = 0.84$	FL3.12 $\Delta E = 0.27$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.26$	LED-RGB1 $\Delta E = 0.23$
D50 $\Delta E = 3.66$	E $\Delta E = 9.79$	FL5 $\Delta E = 1.99$	FL10 $\Delta E = 0.72$	FL3.3 $\Delta E = 1.95$	FL3.8 $\Delta E = 0.70$	FL3.13 $\Delta E = 0.38$	HP3 $\Delta E = 2.45$	LED-B3 $\Delta E = 0.29$	LED-V1 $\Delta E = 0.49$
D55 $\Delta E = 4.11$	FL1 $\Delta E = 1.96$	FL6 $\Delta E = 1.19$	FL11 $\Delta E = 0.79$	FL3.4 $\Delta E = 0.38$	FL3.9 $\Delta E = 0.64$	FL3.14 $\Delta E = 0.44$	HP4 $\Delta E = 3.13$	LED-B4 $\Delta E = 0.40$	LED-V2 $\Delta E = 0.85$

IXCAXORA - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.562715	0.000000	0.112369	0.099152	0.086263	0.079219	0.088030	0.094158	0.107254	0.141936	0.177200
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.176230	0.153159	0.127263	0.088776	0.064676	0.067213	0.096419	0.135227	0.185841	0.300197	0.506648
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.701330	0.798135	0.827453	0.836375	0.837944	0.844635	0.844860	0.844443	0.846232	0.848971	0.849860
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.853284	0.849872	0.856305	0.858548	0.858003	0.865165	0.857097	0.862764			

2 Gaussians

Scaling factor: 18416.85231347274

Gaussians:

Weight	Mean		Covariance			
0.054233754	505.853635387	617.282745392	4666.920597836	-7.573092544	-7.573092544	2121.183585742
0.945766246	363.961304328	614.151670538	319.222734804	14.849262290	14.849262290	14797.040034322

4 Gaussians

Scaling factor: 17195.20282646306

Gaussians:

Weight	Mean		Covariance			
0.305052068	362.853007273	579.019858648	280.338905614	-217.308576827	-217.308576827	3278.699675421
0.443050872	365.234342144	719.586722370	403.925622618	-76.689937672	-76.689937672	1641.542014004
0.060919583	490.839856945	615.193517100	6108.609414137	202.456508629	202.456508629	1973.465407826
0.190977477	362.600060491	426.225223728	147.528780288	-13.563543153	-13.563543153	1131.178364559

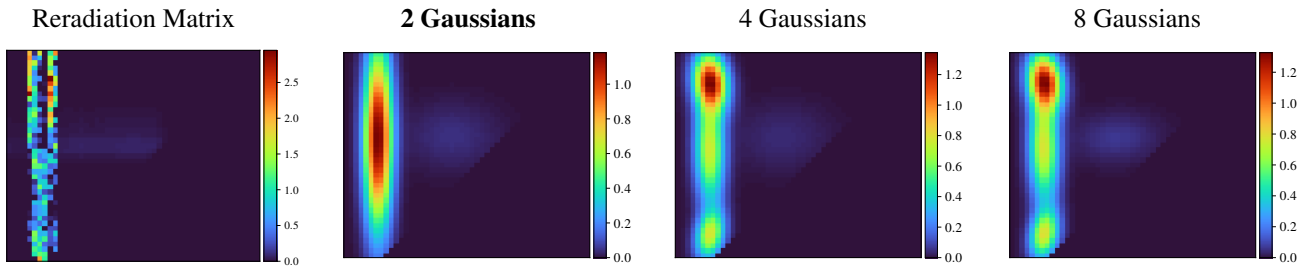
8 Gaussians

Scaling factor: 17059.160347094938

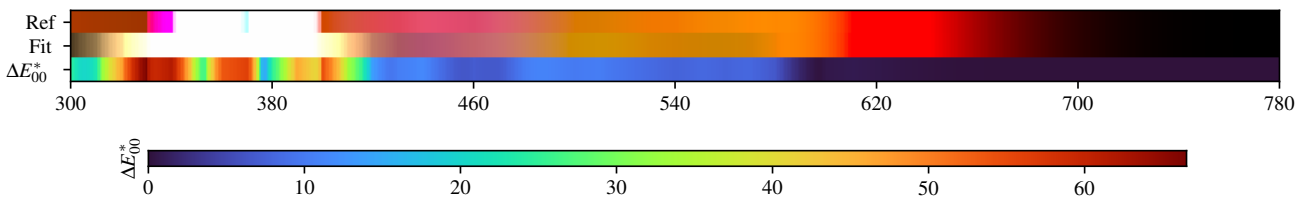
Gaussians:

Weight	Mean		Covariance			
0.022388952	546.684686639	608.179872661	976.707201478	64.960944157	64.960944157	556.422777784
0.202601240	367.421168994	556.126765320	206.622748977	132.729389768	132.729389768	1321.003068725
0.001509681	563.822327127	466.206880310	14163.593594748	1346.945401071	1346.945401071	3563.369833525
0.201801195	363.194026701	428.237433838	154.528764500	3.098314217	3.098314217	1190.448346491
0.212601093	362.230528371	658.799672407	419.417066113	262.887320922	262.887320922	1093.161667326
0.023912147	453.045232940	609.038231079	1489.665897278	139.297711706	139.297711706	634.601226334
0.007369612	535.555515953	683.354386287	7225.941126719	504.027861600	504.027861600	1840.847919326
0.327816081	363.136760444	735.928968479	410.602073267	-7.717454848	-7.717454848	948.875106621

IXCAXORA - Weighted variational Bayesian inference - 2 Gaussians



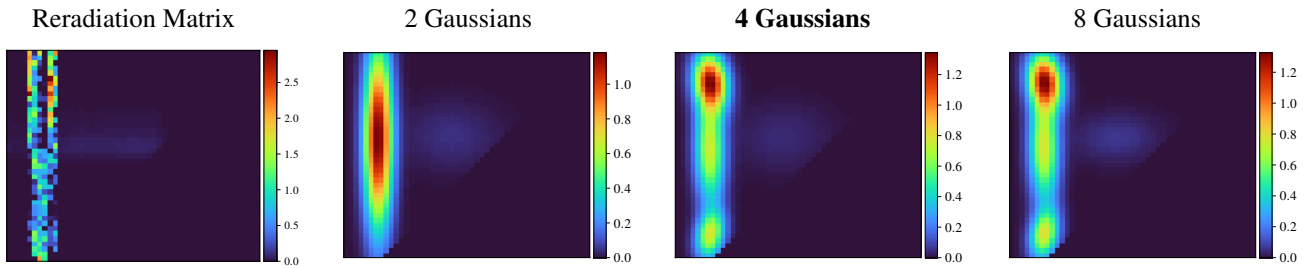
Fitted Material Under Monochromatic Illumination



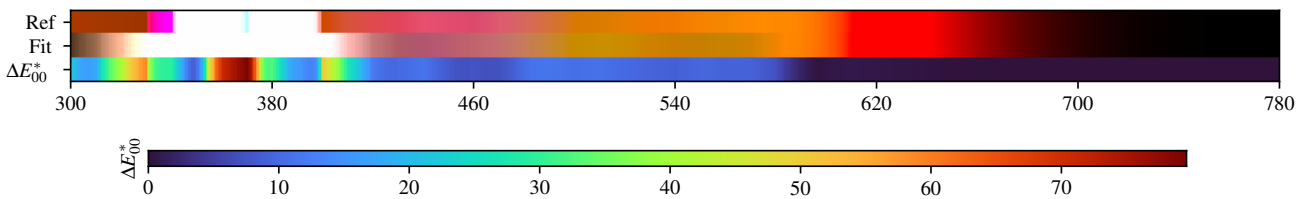
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 8.28$	D60 $\Delta E = 21.71$	FL2 $\Delta E = 6.08$	FL7 $\Delta E = 10.27$	FL12 $\Delta E = 1.97$	FL3.5 $\Delta E = 4.94$	FL3.10 $\Delta E = 3.01$	FL3.15 $\Delta E = 14.53$	HP5 $\Delta E = 6.20$	LED-B5 $\Delta E = 4.38$
B $\Delta E = 13.36$	D65 $\Delta E = 23.11$	FL3 $\Delta E = 4.16$	FL8 $\Delta E = 6.39$	FL3.1 $\Delta E = 2.43$	FL3.6 $\Delta E = 5.96$	FL3.11 $\Delta E = 4.19$	HP1 $\Delta E = 1.67$	LED-B1 $\Delta E = 1.86$	LED-BH1 $\Delta E = 1.76$
C $\Delta E = 16.09$	D75 $\Delta E = 25.15$	FL4 $\Delta E = 2.80$	FL9 $\Delta E = 4.96$	FL3.2 $\Delta E = 5.38$	FL3.7 $\Delta E = 1.56$	FL3.12 $\Delta E = 2.24$	HP2 $\Delta E = 1.70$	LED-B2 $\Delta E = 2.11$	LED-RGB1 $\Delta E = 1.81$
D50 $\Delta E = 18.05$	E $\Delta E = 19.28$	FL5 $\Delta E = 9.43$	FL10 $\Delta E = 4.12$	FL3.3 $\Delta E = 9.08$	FL3.8 $\Delta E = 2.72$	FL3.13 $\Delta E = 3.70$	HP3 $\Delta E = 4.98$	LED-B3 $\Delta E = 3.07$	LED-V1 $\Delta E = 3.55$
D55 $\Delta E = 20.00$	FL1 $\Delta E = 9.36$	FL6 $\Delta E = 5.67$	FL11 $\Delta E = 2.96$	FL3.4 $\Delta E = 2.43$	FL3.9 $\Delta E = 3.33$	FL3.14 $\Delta E = 5.03$	HP4 $\Delta E = 9.08$	LED-B4 $\Delta E = 3.71$	LED-V2 $\Delta E = 5.58$

IXCAXORA - Weighted variational Bayesian inference - 4 Gaussians



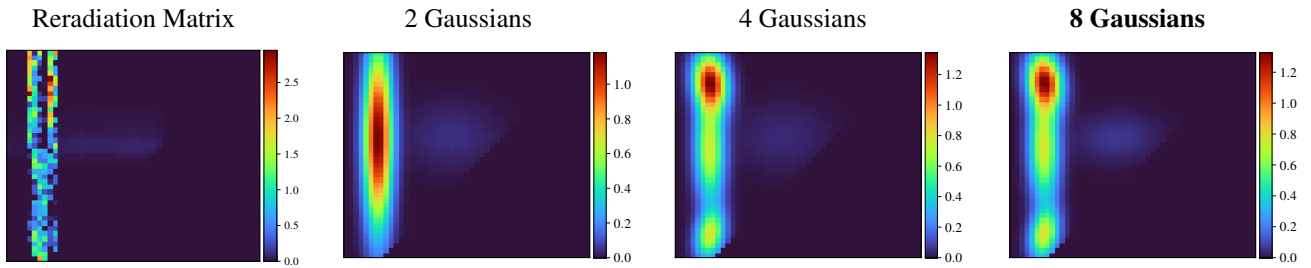
Fitted Material Under Monochromatic Illumination



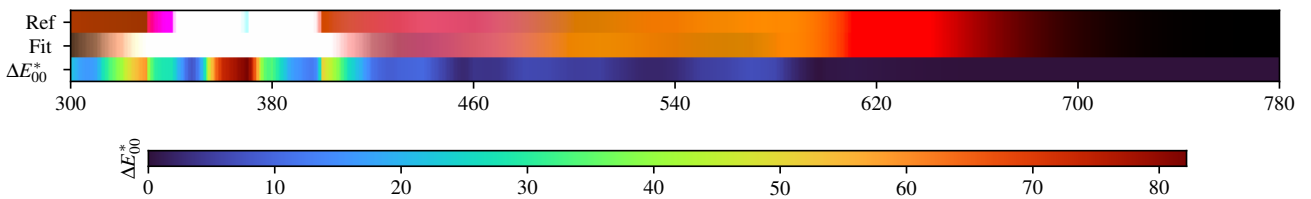
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 2.41$	D60 $\Delta E = 3.24$	FL2 $\Delta E = 4.59$	FL7 $\Delta E = 5.72$	FL12 $\Delta E = 3.79$	FL3.5 $\Delta E = 3.38$	FL3.10 $\Delta E = 2.73$	FL3.15 $\Delta E = 8.72$	HP5 $\Delta E = 3.57$	LED-B5 $\Delta E = 4.59$
B $\Delta E = 3.95$	D65 $\Delta E = 3.49$	FL3 $\Delta E = 4.22$	FL8 $\Delta E = 4.03$	FL3.1 $\Delta E = 3.48$	FL3.6 $\Delta E = 3.69$	FL3.11 $\Delta E = 3.45$	HP1 $\Delta E = 3.23$	LED-B1 $\Delta E = 2.13$	LED-BH1 $\Delta E = 2.03$
C $\Delta E = 4.75$	D75 $\Delta E = 3.91$	FL4 $\Delta E = 3.97$	FL9 $\Delta E = 3.68$	FL3.2 $\Delta E = 4.19$	FL3.7 $\Delta E = 3.00$	FL3.12 $\Delta E = 2.21$	HP2 $\Delta E = 3.62$	LED-B2 $\Delta E = 2.38$	LED-RGB1 $\Delta E = 1.75$
D50 $\Delta E = 2.63$	E $\Delta E = 12.07$	FL5 $\Delta E = 5.52$	FL10 $\Delta E = 3.73$	FL3.3 $\Delta E = 5.24$	FL3.8 $\Delta E = 3.05$	FL3.13 $\Delta E = 2.54$	HP3 $\Delta E = 3.65$	LED-B3 $\Delta E = 3.26$	LED-V1 $\Delta E = 5.83$
D55 $\Delta E = 2.97$	FL1 $\Delta E = 5.42$	FL6 $\Delta E = 4.55$	FL11 $\Delta E = 3.40$	FL3.4 $\Delta E = 3.19$	FL3.9 $\Delta E = 3.09$	FL3.14 $\Delta E = 3.06$	HP4 $\Delta E = 5.64$	LED-B4 $\Delta E = 3.97$	LED-V2 $\Delta E = 5.56$

IXCAXORA - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 2.63$	D60 $\Delta E = 4.76$	FL2 $\Delta E = 4.25$	FL7 $\Delta E = 5.20$	FL12 $\Delta E = 3.86$	FL3.5 $\Delta E = 2.97$	FL3.10 $\Delta E = 1.21$	FL3.15 $\Delta E = 8.73$	HP5 $\Delta E = 2.86$	LED-B5 $\Delta E = 1.64$
B $\Delta E = 4.41$	D65 $\Delta E = 5.14$	FL3 $\Delta E = 4.03$	FL8 $\Delta E = 3.49$	FL3.1 $\Delta E = 3.26$	FL3.6 $\Delta E = 3.05$	FL3.11 $\Delta E = 2.51$	HP1 $\Delta E = 3.11$	LED-B1 $\Delta E = 0.99$	LED-BH1 $\Delta E = 1.08$
C $\Delta E = 5.28$	D75 $\Delta E = 5.76$	FL4 $\Delta E = 3.84$	FL9 $\Delta E = 3.30$	FL3.2 $\Delta E = 3.91$	FL3.7 $\Delta E = 2.98$	FL3.12 $\Delta E = 1.88$	HP2 $\Delta E = 3.41$	LED-B2 $\Delta E = 1.03$	LED-RGB1 $\Delta E = 0.53$
D50 $\Delta E = 3.76$	E $\Delta E = 13.95$	FL5 $\Delta E = 4.71$	FL10 $\Delta E = 3.33$	FL3.3 $\Delta E = 4.41$	FL3.8 $\Delta E = 2.83$	FL3.13 $\Delta E = 1.74$	HP3 $\Delta E = 3.59$	LED-B3 $\Delta E = 1.23$	LED-V1 $\Delta E = 6.16$
D55 $\Delta E = 4.30$	FL1 $\Delta E = 4.63$	FL6 $\Delta E = 4.19$	FL11 $\Delta E = 3.24$	FL3.4 $\Delta E = 3.06$	FL3.9 $\Delta E = 2.51$	FL3.14 $\Delta E = 1.82$	HP4 $\Delta E = 5.58$	LED-B4 $\Delta E = 1.58$	LED-V2 $\Delta E = 5.86$

IXCAXORA - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.562715	0.000000	0.112369	0.099152	0.086263	0.079219	0.088030	0.094158	0.107254	0.141936	0.177200
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.176230	0.153159	0.127263	0.088776	0.064676	0.067213	0.096419	0.135227	0.185841	0.300197	0.506648
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.701330	0.798135	0.827453	0.836375	0.837944	0.844635	0.844860	0.844443	0.846232	0.848971	0.849860
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.853284	0.849872	0.856305	0.858548	0.858003	0.865165	0.857097	0.862764			

2 Gaussians max

Scaling factor: 18425.315476944794

Gaussians:

Weight	Mean		Covariance			
0.946601408	364.136261803	614.150555620	358.655258665	12.461086404	12.461086404	14762.080026208
0.053398592	509.478380474	616.952746283	4510.285870589	-14.485437646	-14.485437646	2245.877814051

4 Gaussians max

Scaling factor: 17254.407612719424

Gaussians:

Weight	Mean		Covariance			
0.163730695	364.029335463	420.944679073	370.710287919	138.194454110	138.194454110	1045.144220638
0.053548142	507.946011666	615.510812589	4723.593228265	133.513864506	133.513864506	2164.474962984
0.410125805	363.658077011	590.599358735	391.931733439	-80.101917459	-80.101917459	5526.910605047
0.372595358	365.433743469	725.770888452	502.586089820	-112.411207331	-112.411207331	1416.830862830

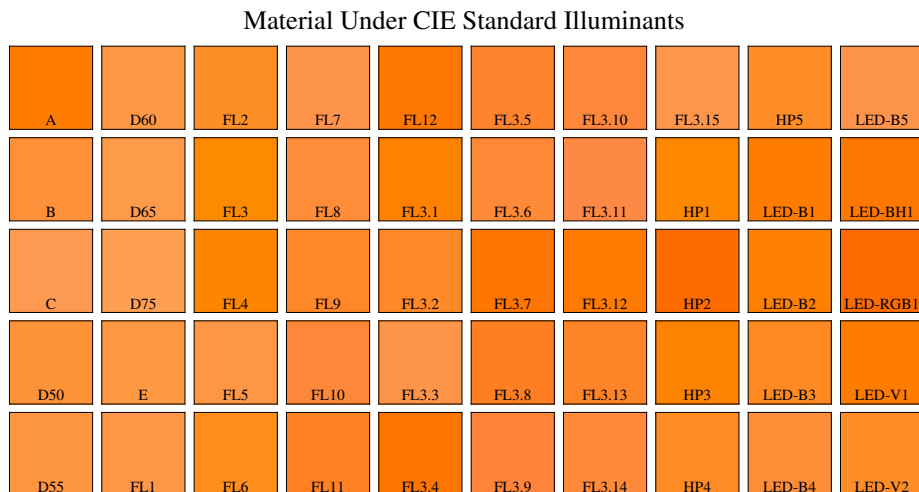
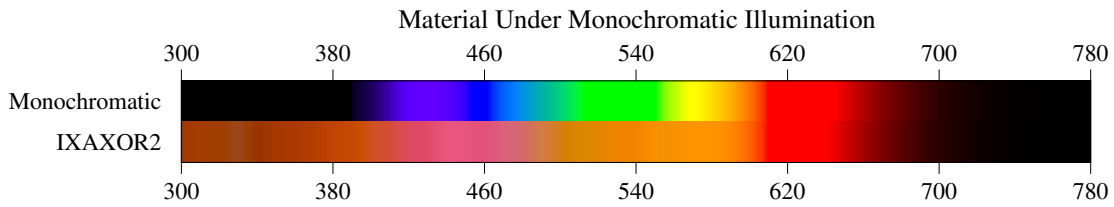
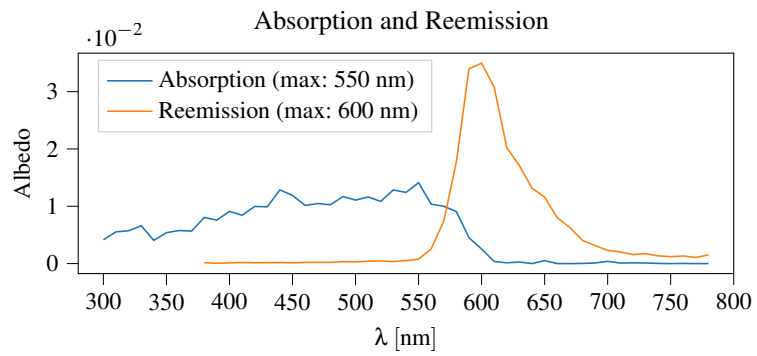
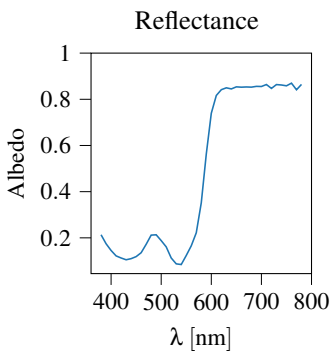
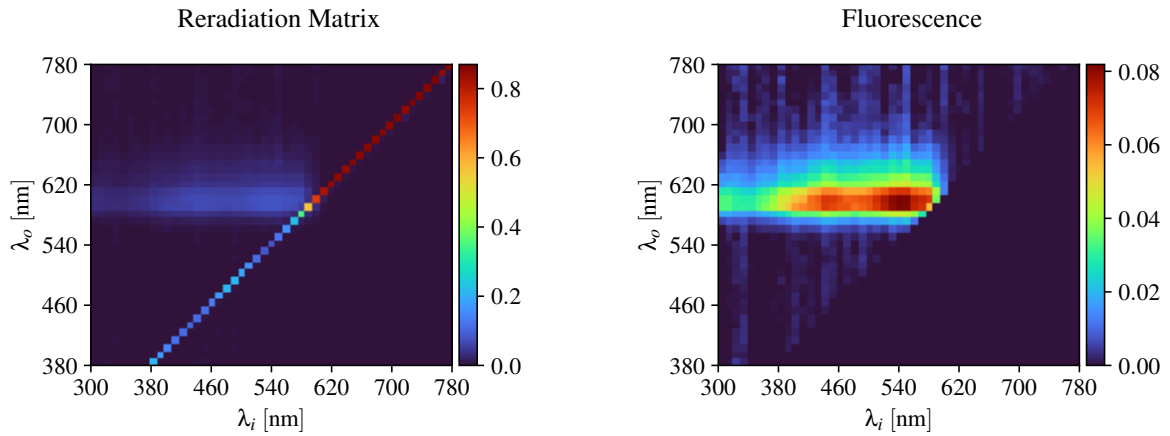
8 Gaussians max

Scaling factor: 17283.68563762016

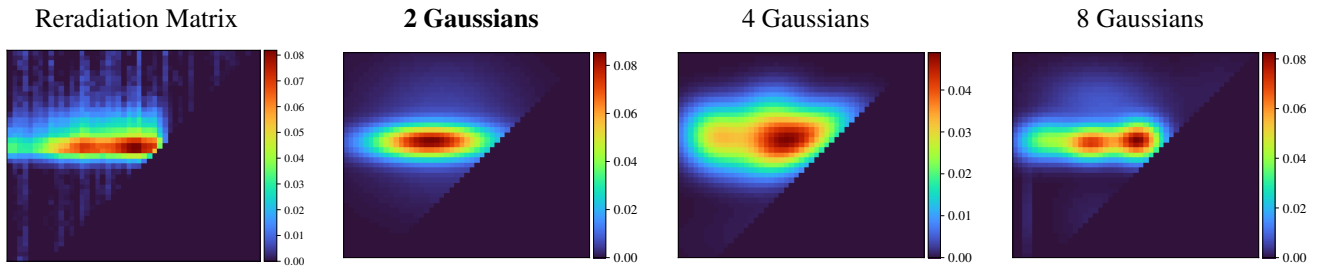
Gaussians:

Weight	Mean		Covariance			
0.166948521	363.999042147	421.581752928	366.911964005	135.956523401	135.956523401	1072.489141532
0.004571785	570.341644622	622.564211490	10637.746191048	38.036562153	38.036562153	12464.415594133
0.421825211	363.616855104	594.552828140	394.318122731	-85.957433768	-85.957433768	5658.270334167
0.048295529	506.275889102	614.225171613	3420.382210021	111.380909491	111.380909491	1110.731309929
0.355927863	365.599021354	726.906955096	508.529413272	-119.972487890	-119.972487890	1368.075002152

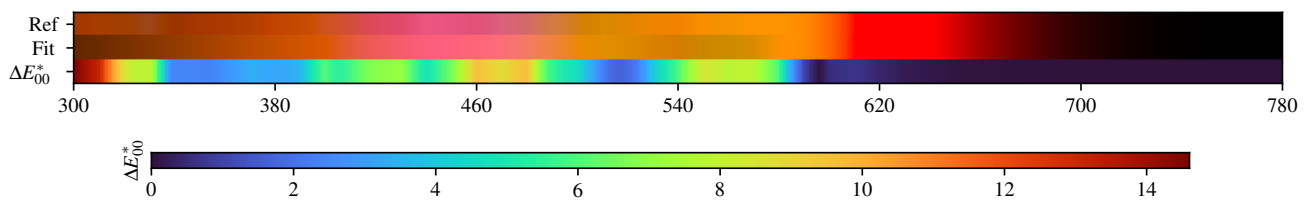
3.2. IXAXOR2



IXAXOR2 - Weighted Expectation-Maximization - 2 Gaussians



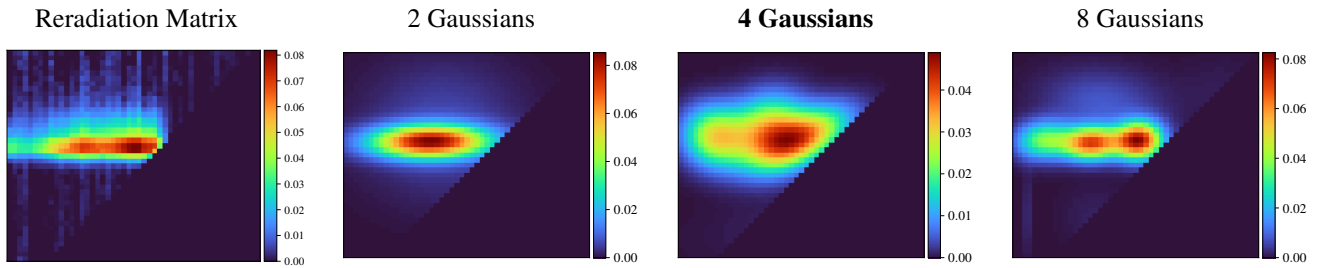
Fitted Material Under Monochromatic Illumination



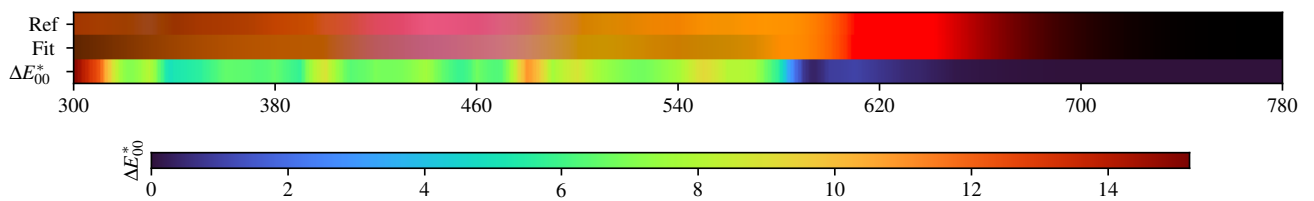
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.55$	$\Delta E = 1.29$	$\Delta E = 0.84$	$\Delta E = 1.02$	$\Delta E = 0.94$	$\Delta E = 0.46$	$\Delta E = 0.33$	$\Delta E = 1.28$	$\Delta E = 0.63$	$\Delta E = 0.73$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.91$	$\Delta E = 1.45$	$\Delta E = 1.22$	$\Delta E = 0.63$	$\Delta E = 1.50$	$\Delta E = 0.67$	$\Delta E = 0.27$	$\Delta E = 1.32$	$\Delta E = 0.85$	$\Delta E = 0.86$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.52$	$\Delta E = 1.71$	$\Delta E = 1.45$	$\Delta E = 0.51$	$\Delta E = 0.79$	$\Delta E = 0.94$	$\Delta E = 0.59$	$\Delta E = 1.40$	$\Delta E = 0.78$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.92$	$\Delta E = 1.43$	$\Delta E = 0.83$	$\Delta E = 0.34$	$\Delta E = 0.81$	$\Delta E = 0.60$	$\Delta E = 0.40$	$\Delta E = 0.41$	$\Delta E = 0.53$	$\Delta E = 0.33$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.11$	$\Delta E = 0.88$	$\Delta E = 1.07$	$\Delta E = 0.58$	$\Delta E = 1.01$	$\Delta E = 0.30$	$\Delta E = 0.80$	$\Delta E = 0.63$	$\Delta E = 0.58$	$\Delta E = 0.76$

IXAXOR2 - Weighted Expectation-Maximization - 4 Gaussians



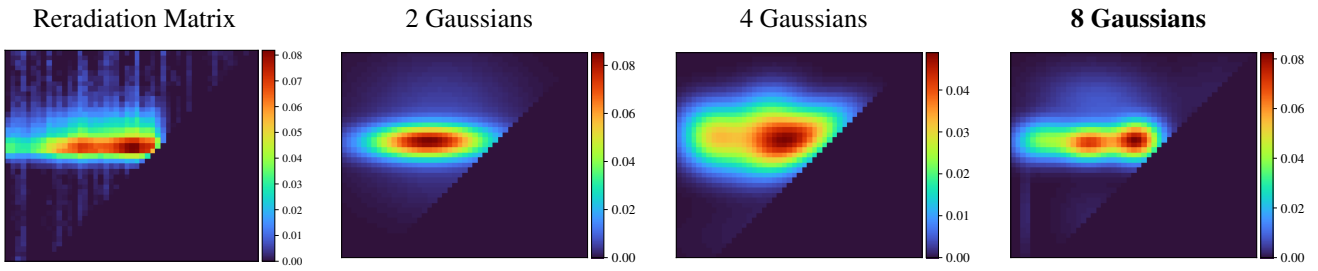
Fitted Material Under Monochromatic Illumination



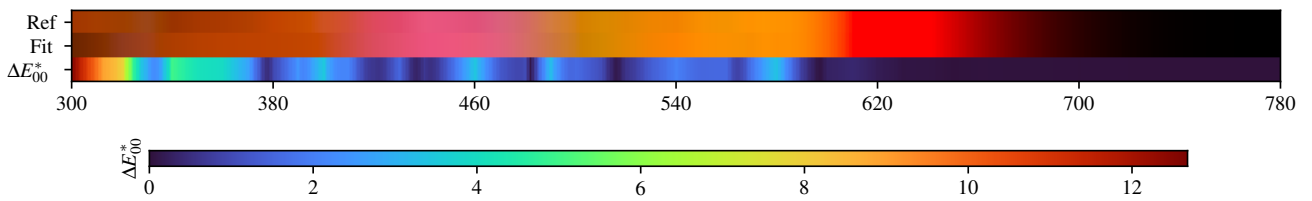
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.62$	$\Delta E = 3.64$	$\Delta E = 2.80$	$\Delta E = 3.47$	$\Delta E = 1.58$	$\Delta E = 2.08$	$\Delta E = 2.20$	$\Delta E = 3.50$	$\Delta E = 2.48$	$\Delta E = 3.52$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 2.96$	$\Delta E = 3.87$	$\Delta E = 2.47$	$\Delta E = 2.69$	$\Delta E = 2.12$	$\Delta E = 2.52$	$\Delta E = 2.56$	$\Delta E = 1.67$	$\Delta E = 1.68$	$\Delta E = 1.74$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 3.78$	$\Delta E = 4.26$	$\Delta E = 2.27$	$\Delta E = 2.32$	$\Delta E = 2.34$	$\Delta E = 1.37$	$\Delta E = 1.35$	$\Delta E = 2.14$	$\Delta E = 1.83$	$\Delta E = 1.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 3.06$	$\Delta E = 3.53$	$\Delta E = 3.82$	$\Delta E = 2.43$	$\Delta E = 3.55$	$\Delta E = 1.76$	$\Delta E = 1.84$	$\Delta E = 1.72$	$\Delta E = 2.46$	$\Delta E = 1.60$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 3.36$	$\Delta E = 3.73$	$\Delta E = 2.87$	$\Delta E = 1.97$	$\Delta E = 1.57$	$\Delta E = 2.11$	$\Delta E = 2.46$	$\Delta E = 2.49$	$\Delta E = 3.04$	$\Delta E = 2.55$

IXAXOR2 - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.38$	$\Delta E = 0.39$	$\Delta E = 0.52$	$\Delta E = 0.44$	$\Delta E = 0.37$	$\Delta E = 0.40$	$\Delta E = 0.41$	$\Delta E = 0.44$	$\Delta E = 0.36$	$\Delta E = 0.34$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.40$	$\Delta E = 0.39$	$\Delta E = 0.54$	$\Delta E = 0.40$	$\Delta E = 0.57$	$\Delta E = 0.40$	$\Delta E = 0.47$	$\Delta E = 0.72$	$\Delta E = 0.37$	$\Delta E = 0.32$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.40$	$\Delta E = 0.40$	$\Delta E = 0.56$	$\Delta E = 0.43$	$\Delta E = 0.50$	$\Delta E = 0.40$	$\Delta E = 0.41$	$\Delta E = 0.48$	$\Delta E = 0.37$	$\Delta E = 0.24$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.38$	$\Delta E = 0.38$	$\Delta E = 0.49$	$\Delta E = 0.44$	$\Delta E = 0.48$	$\Delta E = 0.45$	$\Delta E = 0.42$	$\Delta E = 0.29$	$\Delta E = 0.37$	$\Delta E = 0.44$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.48$	$\Delta E = 0.53$	$\Delta E = 0.42$	$\Delta E = 0.39$	$\Delta E = 0.46$	$\Delta E = 0.40$	$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.45$

IXAXOR2 - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.213356	0.174494	0.145319	0.121847	0.112788	0.105068	0.109889	0.118708	0.135580	0.172097	0.211832
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.213255	0.188109	0.160979	0.112734	0.087396	0.084422	0.123567	0.165485	0.221918	0.351797	0.562958
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.739588	0.816559	0.841598	0.849689	0.844942	0.853873	0.852434	0.853416	0.852602	0.855999	0.855404
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.863949	0.847101	0.863715	0.861894	0.858393	0.869827	0.841214	0.864404			

2 Gaussians

Scaling factor: 1275.8949355540724

Gaussians:

Weight	Mean		Covariance			
0.319194655	491.117458471	629.324937103	10739.995794835	121.592946317	121.592946317	7781.728022996
0.680805345	466.520215474	606.772570714	6286.486287355	59.238212683	59.238212683	482.687836579

4 Gaussians

Scaling factor: 1223.9745849776568

Gaussians:

Weight	Mean		Covariance			
0.345851042	545.724919030	614.889134739	3554.615029334	1267.476171096	1267.476171096	1609.349065278
0.255355270	369.160479235	616.386253927	1871.633270840	-101.535944254	-101.535944254	1627.824732000
0.365816617	475.268579533	627.093595661	2485.681095734	242.113623169	242.113623169	2224.112419017
0.032977071	530.786202204	440.074907890	16077.718644902	1823.357689209	1823.357689209	2278.694980480

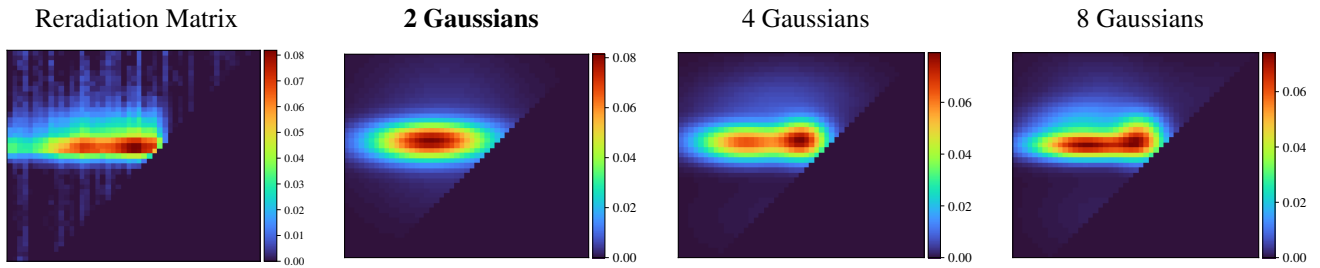
8 Gaussians

Scaling factor: 1217.4274154501757

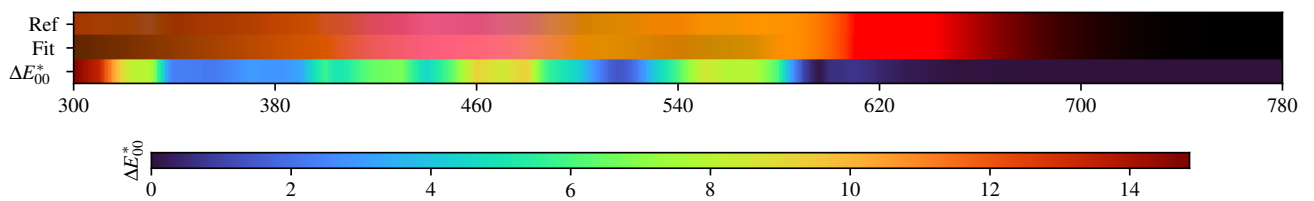
Gaussians:

Weight	Mean		Covariance			
0.018439038	699.272720170	712.352976549	3360.465580547	684.595415987	684.595415987	2459.289741021
0.173627278	356.257952972	609.345336631	1388.475683130	71.906081695	71.906081695	645.223718715
0.021780648	462.009779296	451.649609425	2196.222834386	-206.228508214	-206.228508214	2335.721338491
0.015859994	651.546478823	470.711678673	4620.962221556	279.409525688	279.409525688	4408.776427854
0.306195819	451.793668218	603.715702798	1535.030770588	37.215916864	37.215916864	493.027634364
0.005780161	325.316011996	463.196487647	36.721233734	22.599133397	22.599133397	3474.749542415
0.306562432	545.810874559	608.665431937	965.341388229	26.744429955	26.744429955	619.880326502
0.151754629	472.356546231	682.732743341	6216.540093178	-346.986717713	-346.986717713	2058.943877286

IXAXOR2 - Weighted variational Bayesian inference - 2 Gaussians



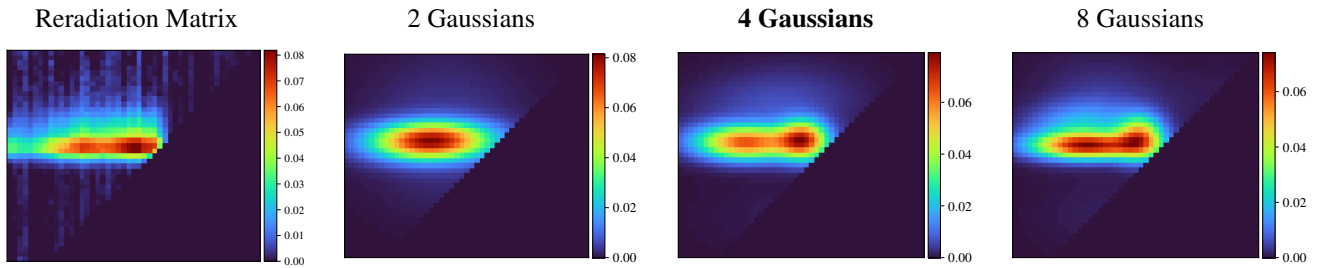
Fitted Material Under Monochromatic Illumination



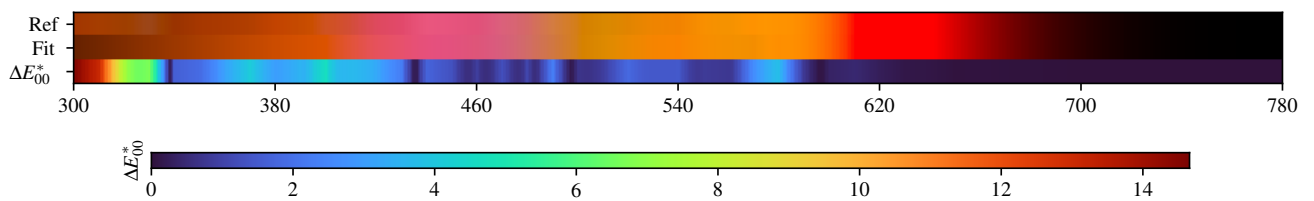
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.60$	$\Delta E = 1.02$	$\Delta E = 0.85$	$\Delta E = 0.77$	$\Delta E = 1.02$	$\Delta E = 0.31$	$\Delta E = 0.13$	$\Delta E = 1.02$	$\Delta E = 0.44$	$\Delta E = 0.49$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.67$	$\Delta E = 1.17$	$\Delta E = 1.27$	$\Delta E = 0.42$	$\Delta E = 1.56$	$\Delta E = 0.46$	$\Delta E = 0.18$	$\Delta E = 1.35$	$\Delta E = 0.92$	$\Delta E = 0.94$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.25$	$\Delta E = 1.41$	$\Delta E = 1.51$	$\Delta E = 0.46$	$\Delta E = 0.82$	$\Delta E = 1.02$	$\Delta E = 0.65$	$\Delta E = 1.50$	$\Delta E = 0.85$	$\Delta E = 0.35$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.67$	$\Delta E = 1.17$	$\Delta E = 0.60$	$\Delta E = 0.39$	$\Delta E = 0.58$	$\Delta E = 0.71$	$\Delta E = 0.27$	$\Delta E = 0.43$	$\Delta E = 0.52$	$\Delta E = 0.32$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.86$	$\Delta E = 0.63$	$\Delta E = 1.10$	$\Delta E = 0.68$	$\Delta E = 1.09$	$\Delta E = 0.38$	$\Delta E = 0.59$	$\Delta E = 0.46$	$\Delta E = 0.52$	$\Delta E = 0.54$

IXAXOR2 - Weighted variational Bayesian inference - 4 Gaussians



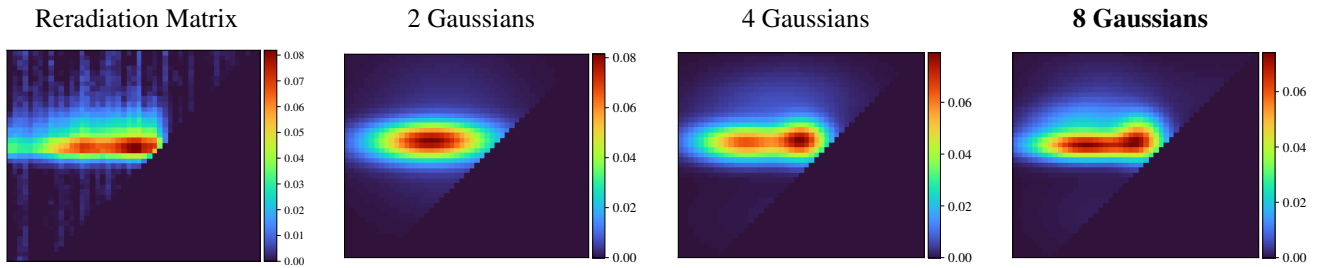
Fitted Material Under Monochromatic Illumination



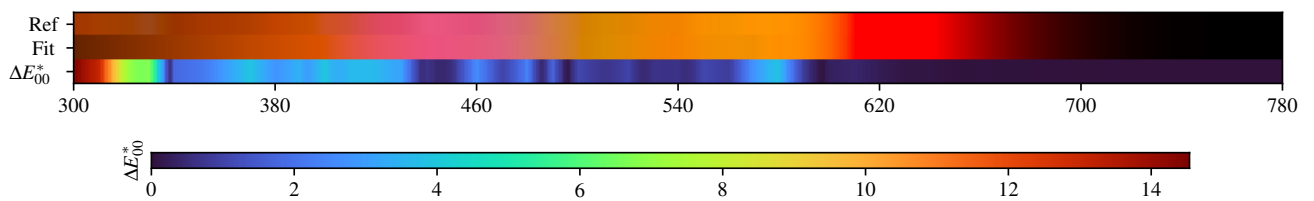
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.08$	$\Delta E = 0.47$	$\Delta E = 0.17$	$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.30$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.38$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.57$	$\Delta E = 0.23$	$\Delta E = 0.63$	$\Delta E = 0.22$	$\Delta E = 0.26$	$\Delta E = 0.78$	$\Delta E = 0.41$	$\Delta E = 0.26$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.05$	$\Delta E = 0.18$	$\Delta E = 0.63$	$\Delta E = 0.32$	$\Delta E = 0.43$	$\Delta E = 0.32$	$\Delta E = 0.32$	$\Delta E = 0.50$	$\Delta E = 0.41$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.07$	$\Delta E = 0.31$	$\Delta E = 0.30$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.30$	$\Delta E = 0.31$	$\Delta E = 0.10$	$\Delta E = 0.38$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.06$	$\Delta E = 0.29$	$\Delta E = 0.51$	$\Delta E = 0.28$	$\Delta E = 0.32$	$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.02$	$\Delta E = 0.40$	$\Delta E = 0.08$

IXAXOR2 - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.28$	$\Delta E = 0.17$	$\Delta E = 0.44$	$\Delta E = 0.04$	$\Delta E = 0.32$	$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.20$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.07$	$\Delta E = 0.22$	$\Delta E = 0.58$	$\Delta E = 0.15$	$\Delta E = 0.69$	$\Delta E = 0.14$	$\Delta E = 0.24$	$\Delta E = 0.79$	$\Delta E = 0.43$	$\Delta E = 0.33$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.30$	$\Delta E = 0.67$	$\Delta E = 0.28$	$\Delta E = 0.43$	$\Delta E = 0.33$	$\Delta E = 0.34$	$\Delta E = 0.55$	$\Delta E = 0.41$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.07$	$\Delta E = 0.37$	$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.19$	$\Delta E = 0.30$	$\Delta E = 0.25$	$\Delta E = 0.12$	$\Delta E = 0.33$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.50$	$\Delta E = 0.28$	$\Delta E = 0.41$	$\Delta E = 0.26$	$\Delta E = 0.09$	$\Delta E = 0.04$	$\Delta E = 0.30$	$\Delta E = 0.10$

IXAXOR2 - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.213356	0.174494	0.145319	0.121847	0.112788	0.105068	0.109889	0.118708	0.135580	0.172097	0.211832
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.213255	0.188109	0.160979	0.112734	0.087396	0.084422	0.123567	0.165485	0.221918	0.351797	0.562958
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.739588	0.816559	0.841598	0.849689	0.844942	0.853873	0.852434	0.853416	0.852602	0.855999	0.855404
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.863949	0.847101	0.863715	0.861894	0.858393	0.869827	0.841214	0.864404			

2 Gaussians max

Scaling factor: 1276.1798030277084

Gaussians:

Weight	Mean		Covariance			
0.251492529	495.502258488	628.916923236	11722.594694283	151.170934693	151.170934693	9523.513837318
0.748507471	467.386129285	608.912265141	6347.652494429	69.544842973	69.544842973	616.462687092

4 Gaussians max

Scaling factor: 1233.4545821471509

Gaussians:

Weight	Mean		Covariance			
0.042285473	511.263950418	460.435920144	14755.106849249	289.051799958	289.051799958	3569.437197549
0.493751482	429.273884359	604.535734301	4547.315171273	-44.997617490	-44.997617490	526.936342093
0.264801038	544.390461040	609.782878027	1080.349400972	-11.510022592	-11.510022592	659.616368328
0.199162007	485.956498729	675.671224740	11579.633340004	869.083259346	869.083259346	2682.513823130

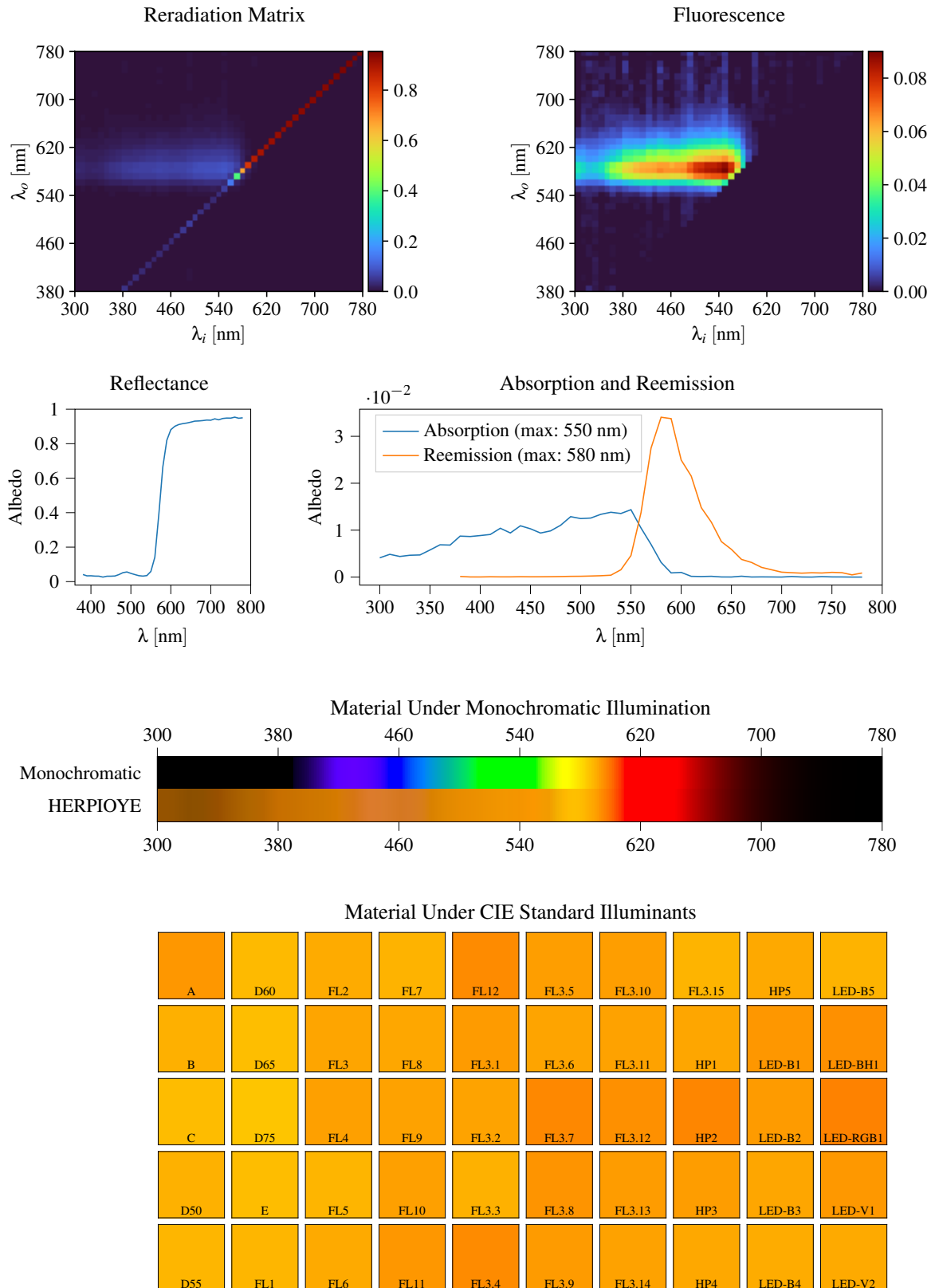
8 Gaussians max

Scaling factor: 1237.134136096558

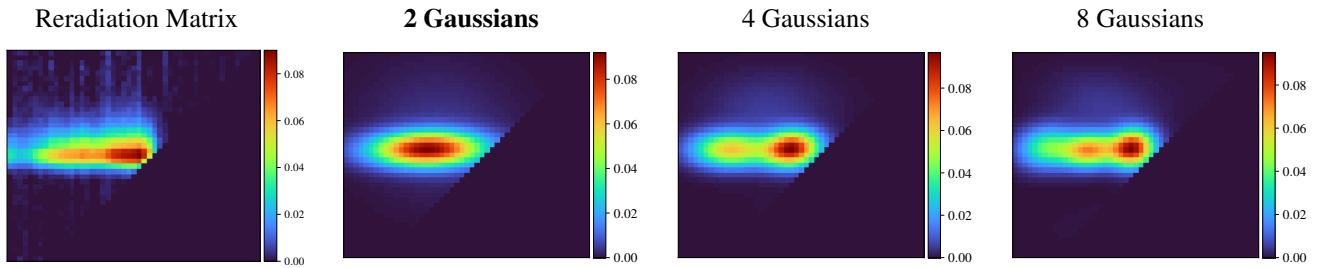
Gaussians:

Weight	Mean		Covariance			
0.034783149	459.117312581	463.832175392	7646.488292459	-93.289582231	-93.289582231	3806.009253889
0.012379852	651.759799447	488.540195336	6764.331557222	-2135.755375092	-2135.755375092	6134.054737244
0.221858891	547.859760046	614.457711473	950.354705174	5.642569116	5.642569116	801.555829967
0.239934826	427.806277018	633.715003543	4835.850664842	313.721650980	313.721650980	1149.283611968
0.401897676	446.740820198	597.797579257	5444.885788435	-26.101246984	-26.101246984	292.484274150
0.019411815	683.169502834	696.948087996	6056.476837902	2202.631910367	2202.631910367	3837.329847021
0.068970653	480.594736111	709.915606333	8434.855009932	-574.363624595	-574.363624595	2214.950557312

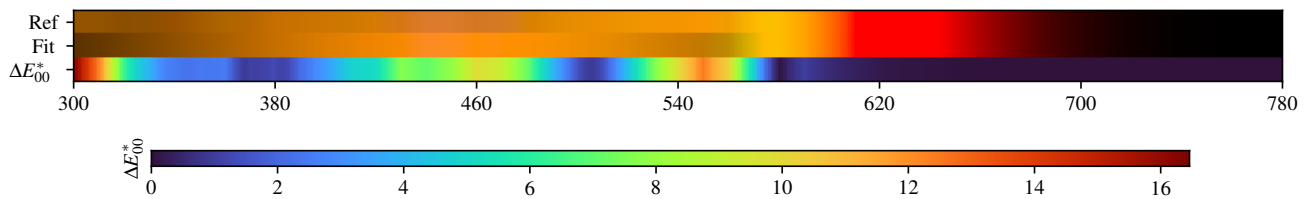
3.3. HERPIOYE



HERPIOYE - Weighted Expectation-Maximization - 2 Gaussians



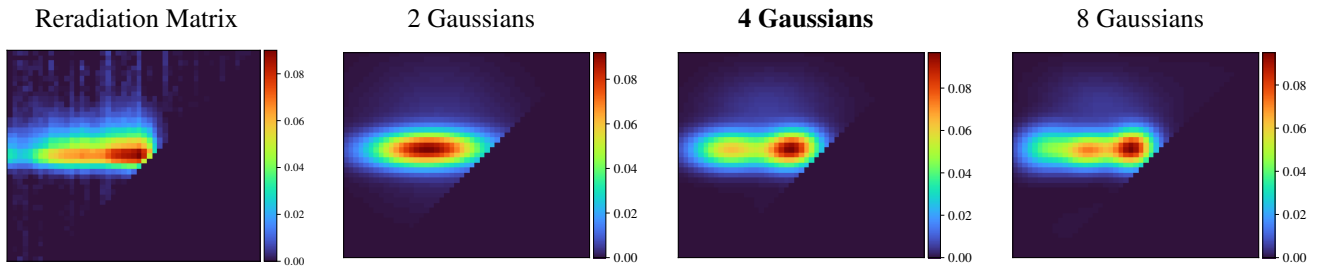
Fitted Material Under Monochromatic Illumination



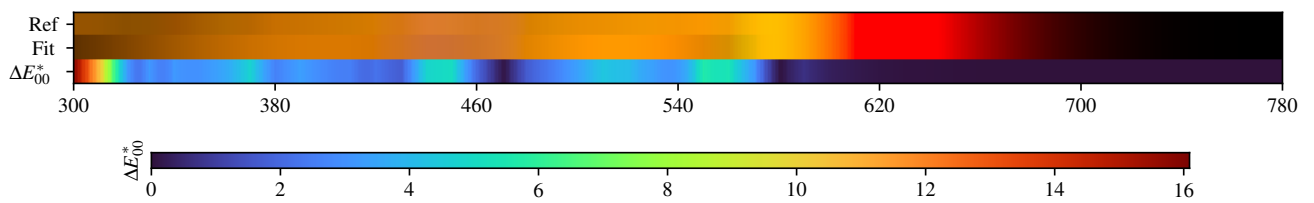
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.22$	$\Delta E = 0.76$	$\Delta E = 0.87$	$\Delta E = 0.72$	$\Delta E = 2.26$	$\Delta E = 0.71$	$\Delta E = 1.07$	$\Delta E = 0.78$	$\Delta E = 0.69$	$\Delta E = 0.71$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.68$	$\Delta E = 0.82$	$\Delta E = 1.12$	$\Delta E = 0.77$	$\Delta E = 1.25$	$\Delta E = 0.67$	$\Delta E = 1.38$	$\Delta E = 0.46$	$\Delta E = 1.24$	$\Delta E = 1.67$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.95$	$\Delta E = 0.94$	$\Delta E = 1.23$	$\Delta E = 0.92$	$\Delta E = 0.91$	$\Delta E = 2.26$	$\Delta E = 1.22$	$\Delta E = 2.12$	$\Delta E = 1.20$	$\Delta E = 1.73$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.72$	$\Delta E = 0.82$	$\Delta E = 0.70$	$\Delta E = 1.57$	$\Delta E = 0.66$	$\Delta E = 2.02$	$\Delta E = 0.75$	$\Delta E = 1.14$	$\Delta E = 0.95$	$\Delta E = 0.99$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.72$	$\Delta E = 0.70$	$\Delta E = 1.07$	$\Delta E = 1.92$	$\Delta E = 1.60$	$\Delta E = 1.64$	$\Delta E = 0.69$	$\Delta E = 0.79$	$\Delta E = 0.83$	$\Delta E = 0.71$

HERPIOYE - Weighted Expectation-Maximization - 4 Gaussians



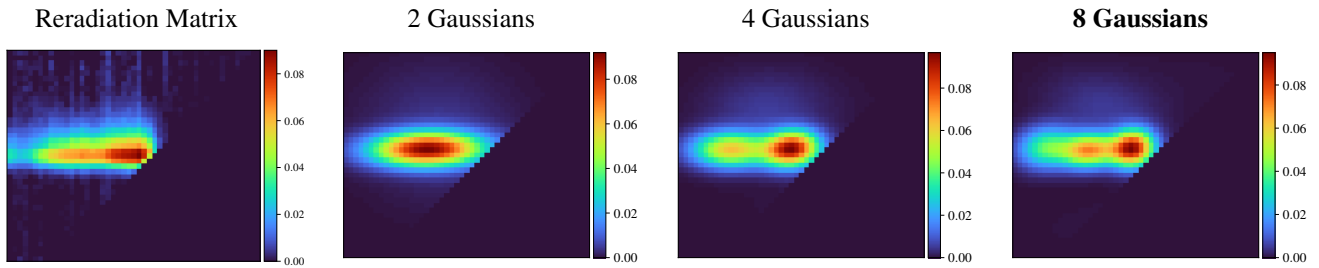
Fitted Material Under Monochromatic Illumination



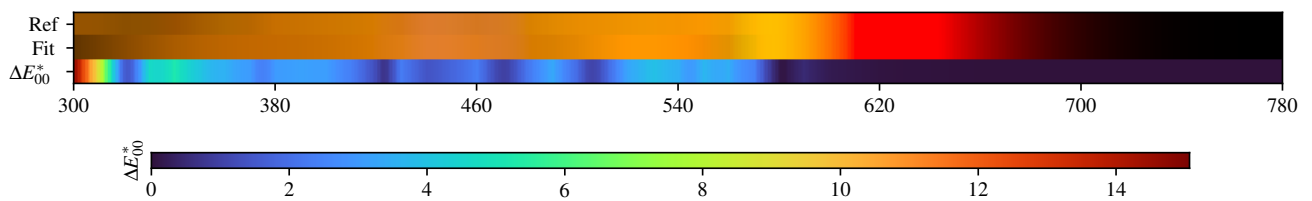
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.67$	$\Delta E = 0.88$	$\Delta E = 1.01$	$\Delta E = 0.97$	$\Delta E = 1.33$	$\Delta E = 0.67$	$\Delta E = 1.31$	$\Delta E = 0.87$	$\Delta E = 0.82$	$\Delta E = 1.37$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.86$	$\Delta E = 0.89$	$\Delta E = 1.03$	$\Delta E = 0.85$	$\Delta E = 0.87$	$\Delta E = 0.71$	$\Delta E = 1.68$	$\Delta E = 0.44$	$\Delta E = 0.82$	$\Delta E = 0.96$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.96$	$\Delta E = 0.92$	$\Delta E = 1.00$	$\Delta E = 0.85$	$\Delta E = 0.85$	$\Delta E = 1.17$	$\Delta E = 0.54$	$\Delta E = 1.43$	$\Delta E = 0.89$	$\Delta E = 0.48$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.83$	$\Delta E = 0.87$	$\Delta E = 1.04$	$\Delta E = 1.69$	$\Delta E = 0.92$	$\Delta E = 1.46$	$\Delta E = 0.57$	$\Delta E = 0.81$	$\Delta E = 1.05$	$\Delta E = 0.61$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.86$	$\Delta E = 1.00$	$\Delta E = 1.07$	$\Delta E = 1.59$	$\Delta E = 0.65$	$\Delta E = 1.61$	$\Delta E = 0.65$	$\Delta E = 0.89$	$\Delta E = 1.35$	$\Delta E = 0.76$

HERPIOYE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.73$	$\Delta E = 1.07$	$\Delta E = 0.92$	$\Delta E = 1.03$	$\Delta E = 0.95$	$\Delta E = 0.79$	$\Delta E = 1.08$	$\Delta E = 1.10$	$\Delta E = 0.81$	$\Delta E = 0.92$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.98$	$\Delta E = 1.10$	$\Delta E = 0.85$	$\Delta E = 0.92$	$\Delta E = 0.73$	$\Delta E = 0.86$	$\Delta E = 1.21$	$\Delta E = 0.51$	$\Delta E = 0.64$	$\Delta E = 0.64$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.07$	$\Delta E = 1.15$	$\Delta E = 0.78$	$\Delta E = 0.86$	$\Delta E = 0.84$	$\Delta E = 0.88$	$\Delta E = 0.70$	$\Delta E = 1.15$	$\Delta E = 0.67$	$\Delta E = 0.53$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.99$	$\Delta E = 1.18$	$\Delta E = 1.07$	$\Delta E = 1.20$	$\Delta E = 1.01$	$\Delta E = 1.06$	$\Delta E = 0.81$	$\Delta E = 0.72$	$\Delta E = 0.78$	$\Delta E = 0.77$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.03$	$\Delta E = 1.04$	$\Delta E = 0.94$	$\Delta E = 1.10$	$\Delta E = 0.64$	$\Delta E = 1.13$	$\Delta E = 0.92$	$\Delta E = 0.85$	$\Delta E = 0.85$	$\Delta E = 0.95$

HERPIOYE - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.041186	0.033445	0.033847	0.031940	0.031628	0.026365	0.031222	0.031471	0.032536	0.040740	0.051893
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.056040	0.047828	0.040856	0.034415	0.031989	0.034969	0.058671	0.141549	0.390535	0.665571	0.820045
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.881303	0.900901	0.911193	0.916409	0.919844	0.924981	0.930895	0.931913	0.934010	0.937131	0.936203
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.944257	0.938679	0.946256	0.948629	0.948264	0.954012	0.947636	0.950220			

2 Gaussians

Scaling factor: 1207.3196307479982

Gaussians:

Weight	Mean		Covariance			
0.787812649	461.163048179	591.859640479	5600.135473218	80.779150100	80.779150100	529.246144869
0.212187351	487.921010442	623.292812553	10107.059115981	-535.803513866	-535.803513866	7431.138828647

4 Gaussians

Scaling factor: 1163.582066759102

Gaussians:

Weight	Mean		Covariance			
0.119093120	468.073382041	669.809173366	6671.472070647	212.835811296	212.835811296	2488.118823339
0.430595500	520.964772693	592.402610412	1349.155355275	79.030508767	79.030508767	567.557963393
0.407829383	399.341679964	590.835342988	2681.801452355	4.642769829	4.642769829	561.379406897
0.042481996	562.781270758	534.668510151	16388.798094319	4945.132180832	4945.132180832	13431.735930840

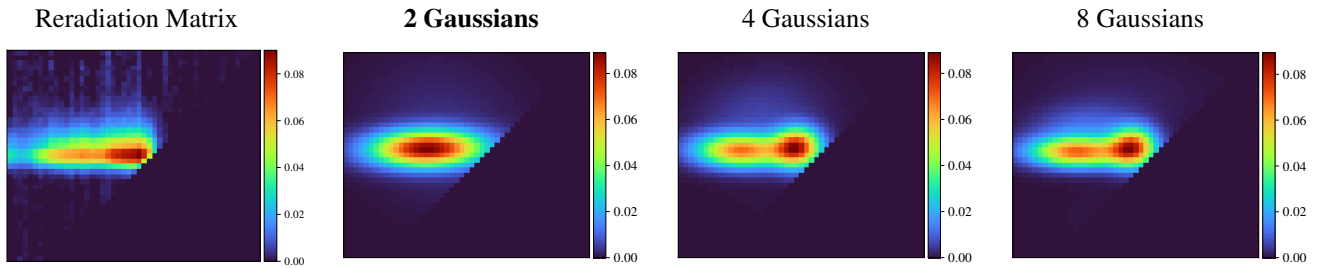
8 Gaussians

Scaling factor: 1156.5307124169228

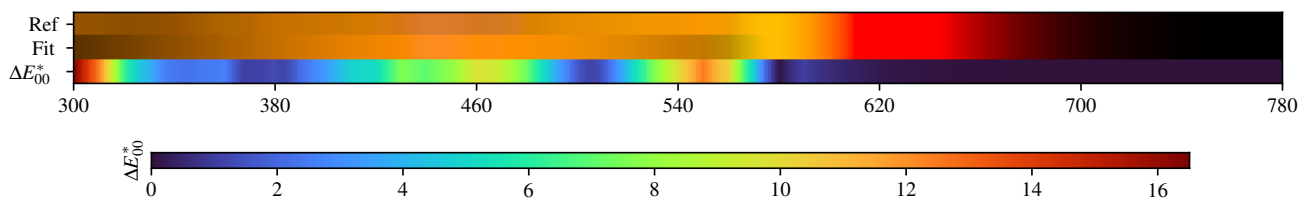
Gaussians:

Weight	Mean		Covariance			
0.104786149	478.512226842	672.603008948	5822.487127228	-720.932832688	-720.932832688	2320.855687034
0.346179242	533.235204232	593.067156829	838.733147786	51.469196370	51.469196370	605.046304403
0.299543026	447.588305441	589.192159153	1340.364062497	68.143886446	68.143886446	504.639042606
0.004917886	743.681853377	489.850057258	591.718749475	117.244884140	117.244884140	7731.636763643
0.009832000	674.442541810	726.386331819	6520.501590018	-1156.373608326	-1156.373608326	1785.586076525
0.215439876	362.348191223	594.851834724	1417.641026507	87.654661753	87.654661753	740.381787970
0.009970091	552.777943950	452.386688726	4133.059102452	296.690419520	296.690419520	2235.646723169
0.009331732	446.693635270	432.711080442	8443.522011057	-411.502176761	-411.502176761	1615.654922925

HERPIOYE - Weighted variational Bayesian inference - 2 Gaussians



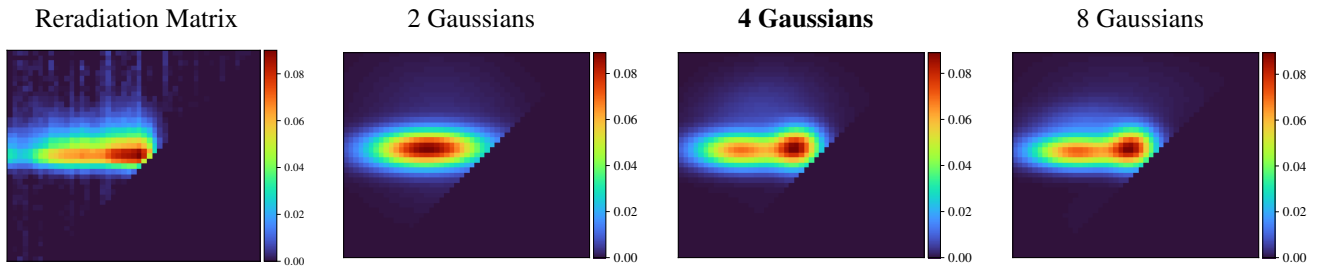
Fitted Material Under Monochromatic Illumination



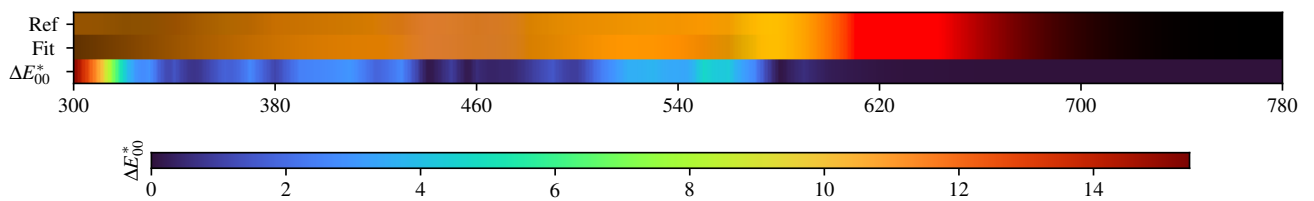
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.29$	$\Delta E = 0.88$	$\Delta E = 0.97$	$\Delta E = 0.84$	$\Delta E = 2.32$	$\Delta E = 0.81$	$\Delta E = 1.18$	$\Delta E = 0.89$	$\Delta E = 0.79$	$\Delta E = 0.84$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.80$	$\Delta E = 0.93$	$\Delta E = 1.20$	$\Delta E = 0.89$	$\Delta E = 1.30$	$\Delta E = 0.78$	$\Delta E = 1.51$	$\Delta E = 0.49$	$\Delta E = 1.30$	$\Delta E = 1.73$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.02$	$\Delta E = 1.03$	$\Delta E = 1.28$	$\Delta E = 1.02$	$\Delta E = 1.00$	$\Delta E = 2.32$	$\Delta E = 1.28$	$\Delta E = 2.18$	$\Delta E = 1.26$	$\Delta E = 1.79$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.84$	$\Delta E = 0.92$	$\Delta E = 0.84$	$\Delta E = 1.69$	$\Delta E = 0.80$	$\Delta E = 2.10$	$\Delta E = 0.85$	$\Delta E = 1.21$	$\Delta E = 1.05$	$\Delta E = 1.06$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.84$	$\Delta E = 0.83$	$\Delta E = 1.16$	$\Delta E = 2.01$	$\Delta E = 1.65$	$\Delta E = 1.75$	$\Delta E = 0.81$	$\Delta E = 0.89$	$\Delta E = 0.95$	$\Delta E = 0.82$

HERPIOYE - Weighted variational Bayesian inference - 4 Gaussians



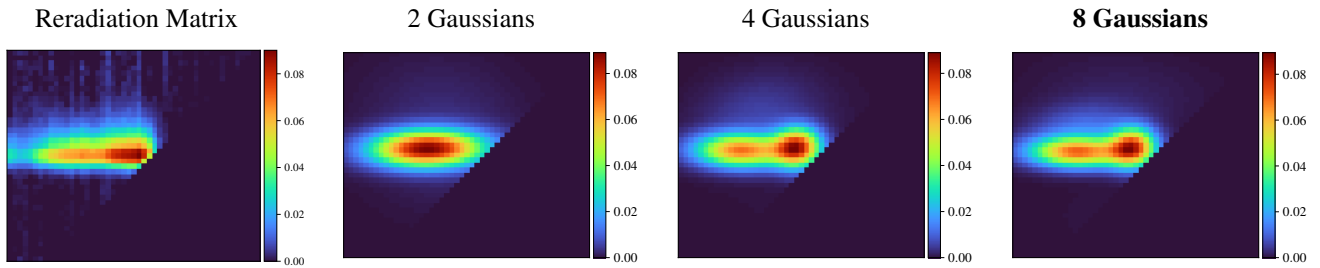
Fitted Material Under Monochromatic Illumination



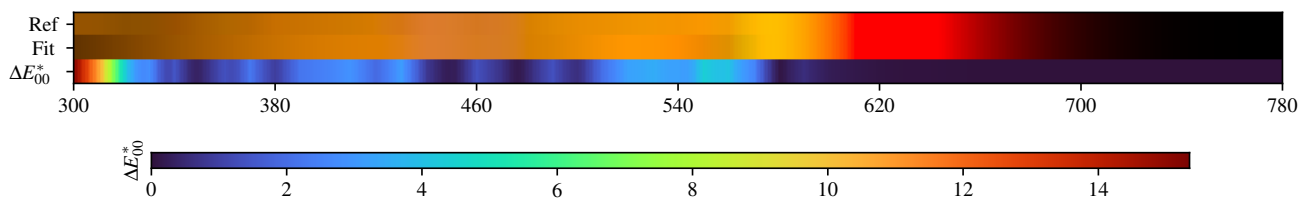
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.70$	$\Delta E = 0.76$	$\Delta E = 0.86$	$\Delta E = 0.82$	$\Delta E = 1.14$	$\Delta E = 0.70$	$\Delta E = 1.14$	$\Delta E = 0.79$	$\Delta E = 0.67$	$\Delta E = 0.96$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.75$	$\Delta E = 0.75$	$\Delta E = 0.87$	$\Delta E = 0.82$	$\Delta E = 0.78$	$\Delta E = 0.74$	$\Delta E = 1.30$	$\Delta E = 0.47$	$\Delta E = 0.76$	$\Delta E = 0.79$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.75$	$\Delta E = 0.75$	$\Delta E = 0.84$	$\Delta E = 0.82$	$\Delta E = 0.78$	$\Delta E = 1.05$	$\Delta E = 0.68$	$\Delta E = 1.29$	$\Delta E = 0.80$	$\Delta E = 0.57$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.76$	$\Delta E = 0.72$	$\Delta E = 0.89$	$\Delta E = 1.32$	$\Delta E = 0.83$	$\Delta E = 1.22$	$\Delta E = 0.73$	$\Delta E = 0.67$	$\Delta E = 0.87$	$\Delta E = 0.56$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.76$	$\Delta E = 0.86$	$\Delta E = 0.92$	$\Delta E = 1.28$	$\Delta E = 0.68$	$\Delta E = 1.27$	$\Delta E = 0.78$	$\Delta E = 0.68$	$\Delta E = 0.97$	$\Delta E = 0.69$

HERPIOYE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.63$	$\Delta E = 0.63$	$\Delta E = 0.74$	$\Delta E = 0.67$	$\Delta E = 1.03$	$\Delta E = 0.59$	$\Delta E = 0.96$	$\Delta E = 0.65$	$\Delta E = 0.58$	$\Delta E = 0.77$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.63$	$\Delta E = 0.63$	$\Delta E = 0.77$	$\Delta E = 0.69$	$\Delta E = 0.72$	$\Delta E = 0.62$	$\Delta E = 1.10$	$\Delta E = 0.44$	$\Delta E = 0.67$	$\Delta E = 0.70$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.61$	$\Delta E = 0.63$	$\Delta E = 0.76$	$\Delta E = 0.70$	$\Delta E = 0.68$	$\Delta E = 0.95$	$\Delta E = 0.61$	$\Delta E = 1.19$	$\Delta E = 0.70$	$\Delta E = 0.51$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.64$	$\Delta E = 0.63$	$\Delta E = 0.74$	$\Delta E = 1.13$	$\Delta E = 0.68$	$\Delta E = 1.08$	$\Delta E = 0.62$	$\Delta E = 0.60$	$\Delta E = 0.74$	$\Delta E = 0.51$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.64$	$\Delta E = 0.70$	$\Delta E = 0.80$	$\Delta E = 1.12$	$\Delta E = 0.62$	$\Delta E = 1.09$	$\Delta E = 0.65$	$\Delta E = 0.62$	$\Delta E = 0.79$	$\Delta E = 0.59$

HERPIOYE - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.041186	0.033445	0.033847	0.031940	0.031628	0.026365	0.031222	0.031471	0.032536	0.040740	0.051893
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.056040	0.047828	0.040856	0.034415	0.031989	0.034969	0.058671	0.141549	0.390535	0.665571	0.820045
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.881303	0.900901	0.911193	0.916409	0.919844	0.924981	0.930895	0.931913	0.934010	0.937131	0.936203
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.944257	0.938679	0.946256	0.948629	0.948264	0.954012	0.947636	0.950220			

2 Gaussians max

Scaling factor: 1207.7591603021426

Gaussians:

Weight	Mean		Covariance			
0.182507702	491.325197303	624.511661949	10664.967600471	-658.357797252	-658.357797252	8376.301758456
0.817492298	461.459414345	592.691229663	5633.467455204	81.982873981	81.982873981	589.765145961

4 Gaussians max

Scaling factor: 1169.0975597439976

Gaussians:

Weight	Mean		Covariance			
0.040781657	567.489089493	535.652912850	16164.236666607	5024.859735149	5024.859735149	13611.974830827
0.144151886	453.231286050	656.729840106	6654.775846010	776.171580699	776.171580699	3101.373087020
0.489715939	419.786166631	588.961039665	3823.709657313	-44.832654020	-44.832654020	502.989465255
0.325350518	531.465260298	595.160978035	967.644783463	30.582604366	30.582604366	670.050013518

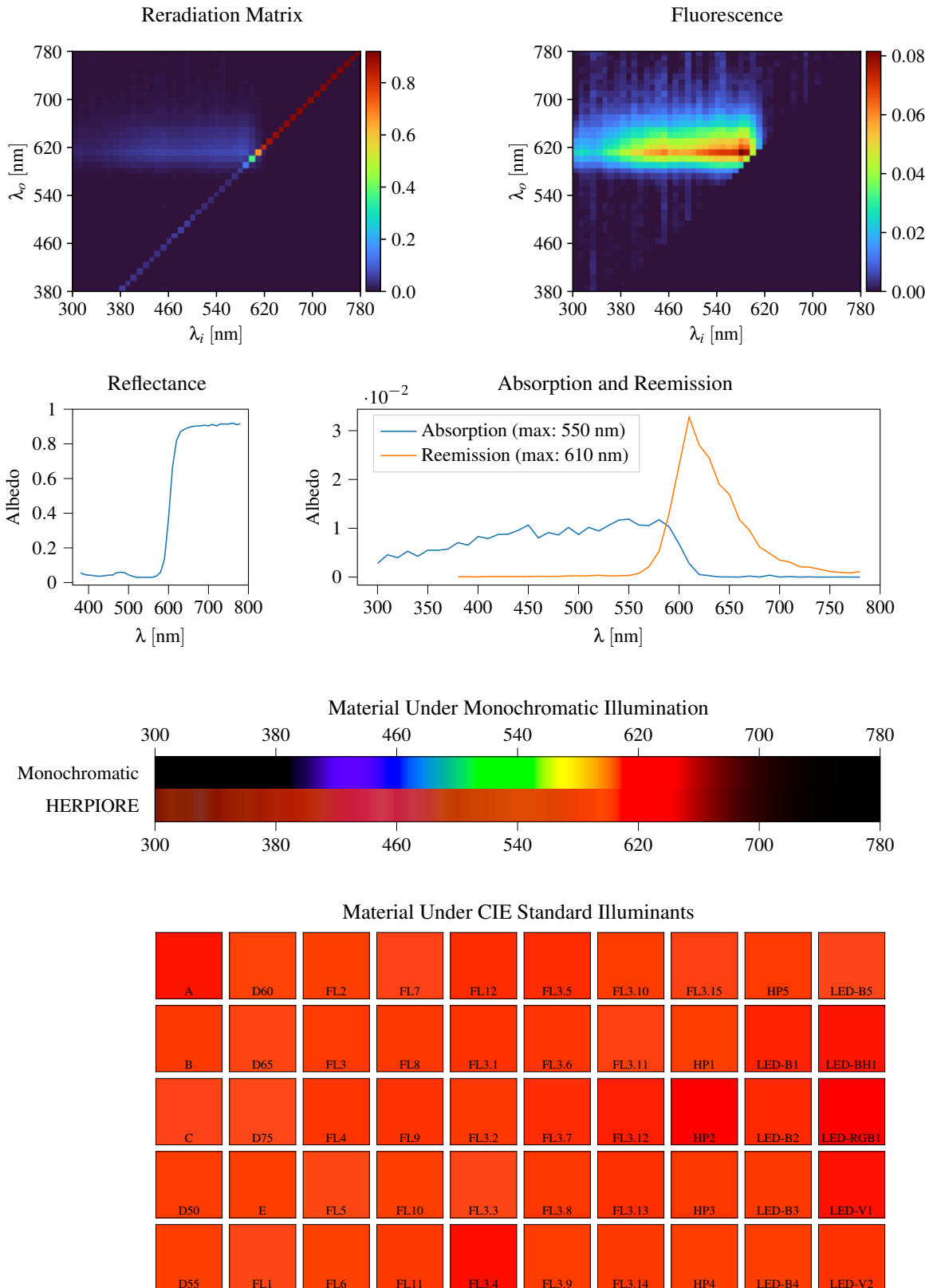
8 Gaussians max

Scaling factor: 1171.3858092181504

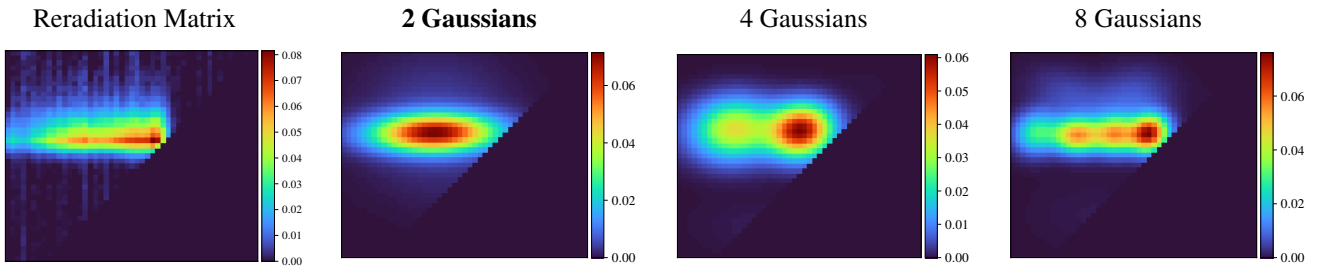
Gaussians:

Weight	Mean		Covariance			
0.025559405	531.841933640	459.855644064	15772.641915045	-25.302627374	-25.302627374	3895.675270820
0.457911290	424.415136424	585.423154781	4103.701629171	-41.557594471	-41.557594471	404.463887191
0.306011030	533.016592516	595.051446184	927.817607501	33.128119764	33.128119764	665.910396622
0.057899419	514.673885275	702.689505710	13822.547947074	-567.250971842	-567.250971842	2725.355346557
0.150915878	433.595372579	629.372406053	4933.309747806	340.399307989	340.399307989	1139.087819081

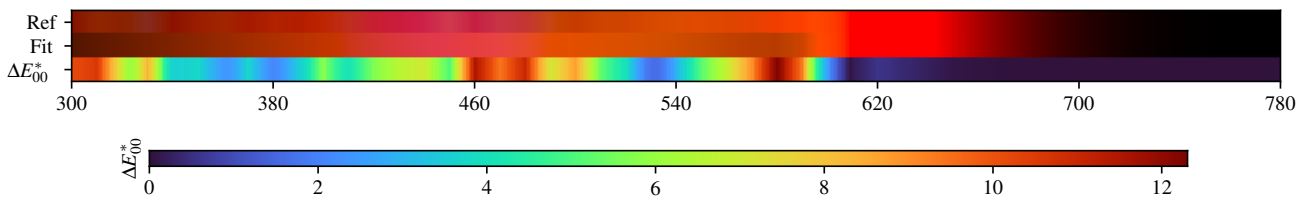
3.4. HERPIORE



HERPIORE - Weighted Expectation-Maximization - 2 Gaussians



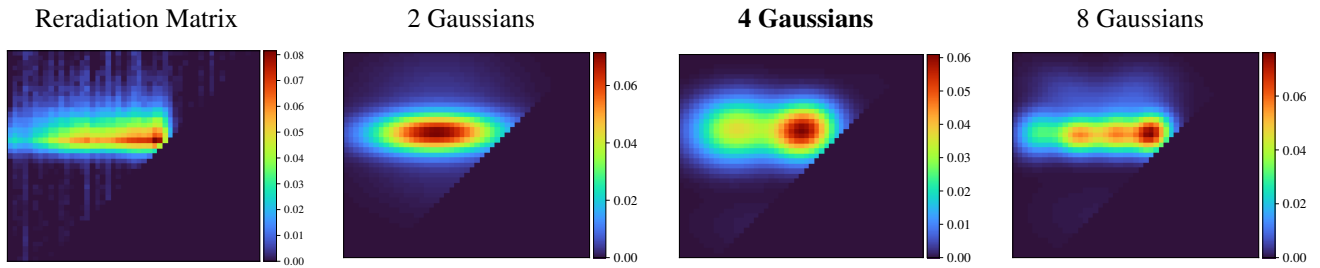
Fitted Material Under Monochromatic Illumination



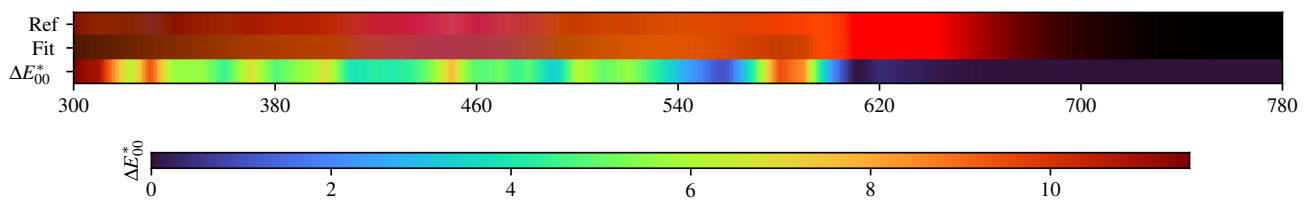
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.85$	$\Delta E = 1.94$	$\Delta E = 1.47$	$\Delta E = 1.68$	$\Delta E = 0.90$	$\Delta E = 0.88$	$\Delta E = 0.96$	$\Delta E = 1.97$	$\Delta E = 1.10$	$\Delta E = 1.36$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.45$	$\Delta E = 2.12$	$\Delta E = 2.11$	$\Delta E = 1.20$	$\Delta E = 2.79$	$\Delta E = 1.17$	$\Delta E = 0.95$	$\Delta E = 3.34$	$\Delta E = 1.36$	$\Delta E = 0.86$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.16$	$\Delta E = 2.40$	$\Delta E = 2.60$	$\Delta E = 0.90$	$\Delta E = 1.41$	$\Delta E = 0.97$	$\Delta E = 0.98$	$\Delta E = 0.85$	$\Delta E = 1.23$	$\Delta E = 0.56$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.51$	$\Delta E = 1.87$	$\Delta E = 1.45$	$\Delta E = 0.78$	$\Delta E = 1.37$	$\Delta E = 0.62$	$\Delta E = 0.83$	$\Delta E = 1.04$	$\Delta E = 0.95$	$\Delta E = 0.73$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.74$	$\Delta E = 1.51$	$\Delta E = 1.73$	$\Delta E = 0.61$	$\Delta E = 1.37$	$\Delta E = 0.67$	$\Delta E = 1.40$	$\Delta E = 1.38$	$\Delta E = 1.02$	$\Delta E = 1.23$

HERPIORE - Weighted Expectation-Maximization - 4 Gaussians



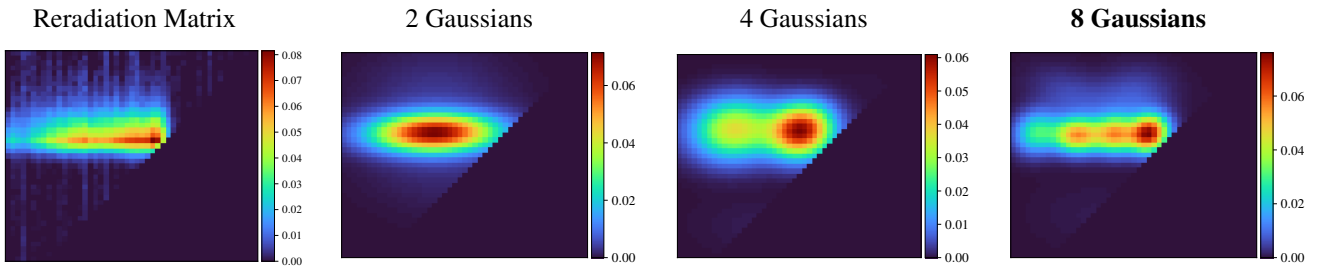
Fitted Material Under Monochromatic Illumination



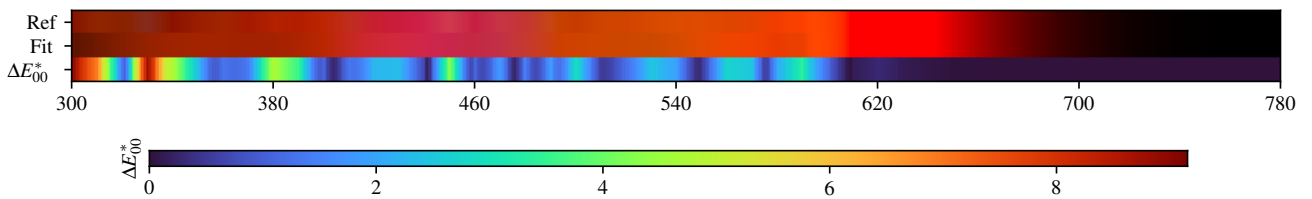
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 1.31$	D60 $\Delta E = 2.38$	FL2 $\Delta E = 2.33$	FL7 $\Delta E = 2.26$	FL12 $\Delta E = 1.00$	FL3.5 $\Delta E = 1.63$	FL3.10 $\Delta E = 1.65$	FL3.15 $\Delta E = 2.23$	HP5 $\Delta E = 2.08$	LED-B5 $\Delta E = 2.44$
B $\Delta E = 1.98$	D65 $\Delta E = 2.51$	FL3 $\Delta E = 2.28$	FL8 $\Delta E = 1.84$	FL3.1 $\Delta E = 2.27$	FL3.6 $\Delta E = 1.80$	FL3.11 $\Delta E = 1.70$	HP1 $\Delta E = 2.88$	LED-B1 $\Delta E = 1.57$	LED-BH1 $\Delta E = 1.07$
C $\Delta E = 2.35$	D75 $\Delta E = 2.74$	FL4 $\Delta E = 2.29$	FL9 $\Delta E = 1.74$	FL3.2 $\Delta E = 2.05$	FL3.7 $\Delta E = 0.92$	FL3.12 $\Delta E = 1.32$	HP2 $\Delta E = 0.64$	LED-B2 $\Delta E = 1.64$	LED-RGB1 $\Delta E = 0.95$
D50 $\Delta E = 2.06$	E $\Delta E = 2.31$	FL5 $\Delta E = 2.58$	FL10 $\Delta E = 1.60$	FL3.3 $\Delta E = 2.49$	FL3.8 $\Delta E = 1.23$	FL3.13 $\Delta E = 1.60$	HP3 $\Delta E = 1.61$	LED-B3 $\Delta E = 1.92$	LED-V1 $\Delta E = 1.24$
D55 $\Delta E = 2.23$	FL1 $\Delta E = 2.56$	FL6 $\Delta E = 2.34$	FL11 $\Delta E = 1.30$	FL3.4 $\Delta E = 1.21$	FL3.9 $\Delta E = 1.46$	FL3.14 $\Delta E = 1.75$	HP4 $\Delta E = 2.43$	LED-B4 $\Delta E = 2.20$	LED-V2 $\Delta E = 1.76$

HERPIORE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.35$	$\Delta E = 0.29$	$\Delta E = 0.43$	$\Delta E = 0.28$	$\Delta E = 0.47$	$\Delta E = 0.35$	$\Delta E = 0.41$	$\Delta E = 0.53$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.29$	$\Delta E = 0.23$	$\Delta E = 0.38$	$\Delta E = 0.27$	$\Delta E = 0.41$	$\Delta E = 0.27$	$\Delta E = 0.54$	$\Delta E = 0.24$	$\Delta E = 0.35$	$\Delta E = 0.26$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.30$	$\Delta E = 0.22$	$\Delta E = 0.40$	$\Delta E = 0.29$	$\Delta E = 0.35$	$\Delta E = 0.43$	$\Delta E = 0.29$	$\Delta E = 0.44$	$\Delta E = 0.37$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.25$	$\Delta E = 0.48$	$\Delta E = 0.31$	$\Delta E = 0.51$	$\Delta E = 0.32$	$\Delta E = 0.49$	$\Delta E = 0.27$	$\Delta E = 0.49$	$\Delta E = 0.40$	$\Delta E = 0.25$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.25$	$\Delta E = 0.31$	$\Delta E = 0.35$	$\Delta E = 0.49$	$\Delta E = 0.32$	$\Delta E = 0.52$	$\Delta E = 0.25$	$\Delta E = 0.69$	$\Delta E = 0.51$	$\Delta E = 0.22$

HERPIORE - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.055616	0.046218	0.042827	0.040816	0.037324	0.036445	0.039194	0.043059	0.043036	0.055846	0.060045
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.056473	0.044301	0.037068	0.029943	0.030280	0.030278	0.030230	0.030478	0.037711	0.058618	0.135168
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.369401	0.665101	0.818339	0.871282	0.884305	0.894633	0.900339	0.903529	0.904100	0.907537	0.904395
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.912392	0.904055	0.914380	0.914673	0.914259	0.920068	0.911437	0.915629			

2 Gaussians

Scaling factor: 1175.4267648786447

Gaussians:

Weight	Mean		Covariance			
0.247387970	484.970726284	641.106434717	9690.815679915	-103.009762292	-103.009762292	7739.932878170
0.752612030	478.989849326	624.152712034	6956.943772621	84.208289261	84.208289261	632.473199291

4 Gaussians

Scaling factor: 1132.1725661499831

Gaussians:

Weight	Mean		Covariance			
0.492461579	543.744297656	630.974309264	1801.687490993	121.422924860	121.422924860	1277.320347550
0.020360343	473.950992061	437.842253758	9311.886134943	-238.345622034	-238.345622034	1641.756868810
0.473803411	409.018715149	633.481717628	3226.964014644	120.853921797	120.853921797	1716.545872526
0.013374667	691.755824760	639.704704246	3413.684584356	-1558.983622882	-1558.983622882	15850.126028222

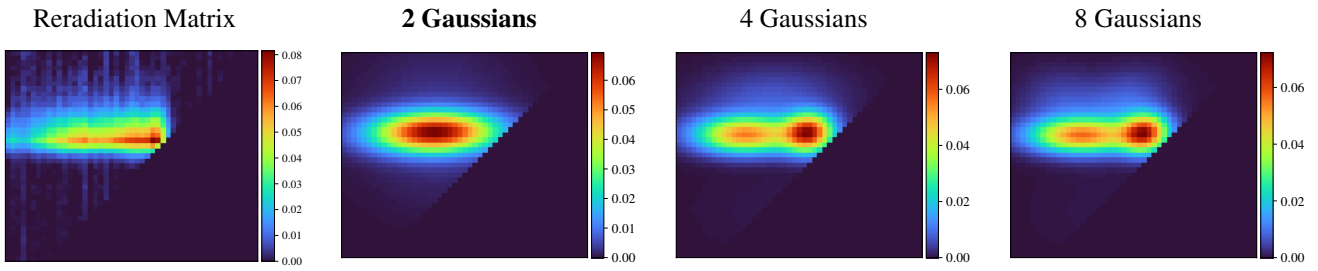
8 Gaussians

Scaling factor: 1117.5265709940284

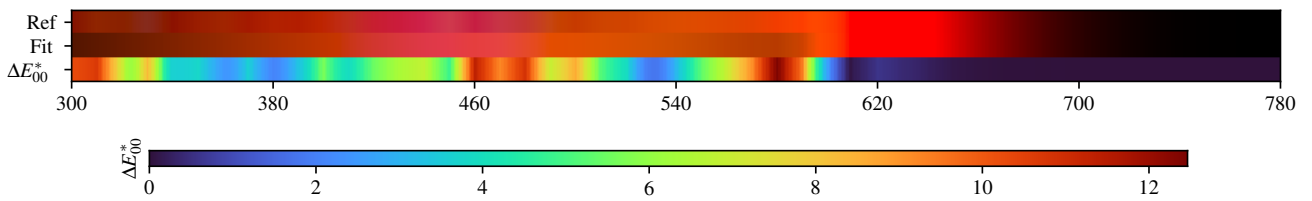
Gaussians:

Weight	Mean		Covariance			
0.071570103	418.427012054	691.927665723	3062.677338040	-818.213794430	-818.213794430	1554.217154989
0.197013350	502.896455678	620.683994061	819.858813418	9.535565676	9.535565676	592.235364898
0.134027645	346.459567063	624.169354046	880.157569734	59.581018342	59.581018342	776.197357024
0.010742744	713.470753965	605.555000444	1583.411545338	839.911747093	839.911747093	16312.105241347
0.218685678	427.082710180	619.022664307	972.853946474	1.626213927	1.626213927	548.163159097
0.094044066	537.026722128	689.010753237	2545.761825394	248.416110017	248.416110017	1700.130219856
0.026400039	465.493014170	459.529355158	8457.749341916	-444.554770188	-444.554770188	2830.105442432
0.247516376	570.287079972	622.507759683	635.252015277	57.380178577	57.380178577	597.492998051

HERPIORE - Weighted variational Bayesian inference - 2 Gaussians



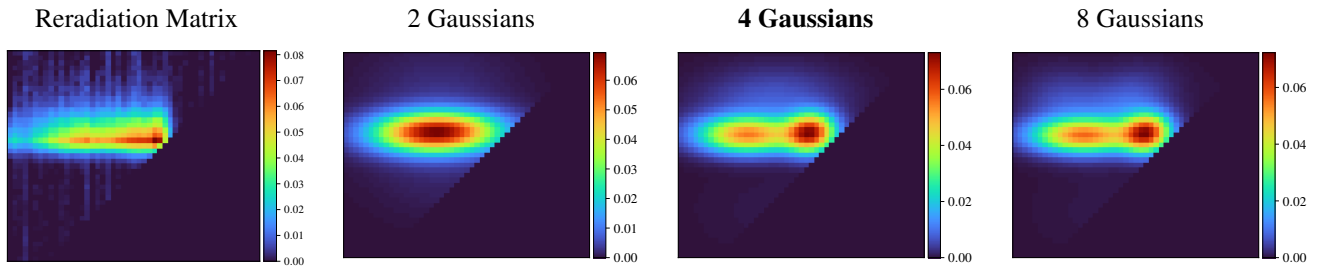
Fitted Material Under Monochromatic Illumination



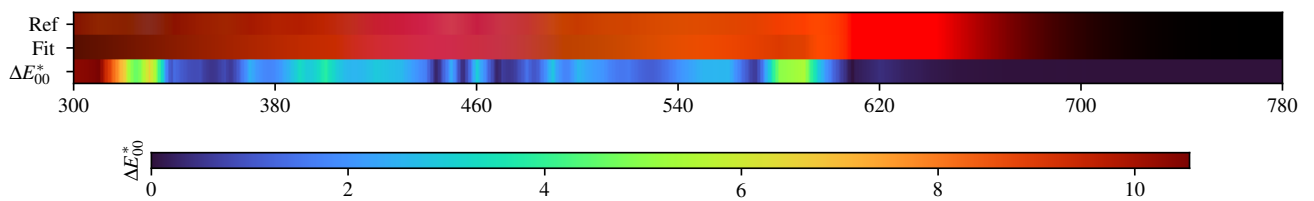
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.92$	$\Delta E = 1.89$	$\Delta E = 1.57$	$\Delta E = 1.65$	$\Delta E = 0.96$	$\Delta E = 0.90$	$\Delta E = 0.95$	$\Delta E = 1.92$	$\Delta E = 1.14$	$\Delta E = 1.35$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.42$	$\Delta E = 2.06$	$\Delta E = 2.21$	$\Delta E = 1.19$	$\Delta E = 2.86$	$\Delta E = 1.16$	$\Delta E = 0.95$	$\Delta E = 3.42$	$\Delta E = 1.43$	$\Delta E = 0.92$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.10$	$\Delta E = 2.33$	$\Delta E = 2.68$	$\Delta E = 0.95$	$\Delta E = 1.50$	$\Delta E = 1.03$	$\Delta E = 1.05$	$\Delta E = 0.90$	$\Delta E = 1.31$	$\Delta E = 0.56$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.48$	$\Delta E = 1.81$	$\Delta E = 1.47$	$\Delta E = 0.81$	$\Delta E = 1.39$	$\Delta E = 0.69$	$\Delta E = 0.86$	$\Delta E = 1.12$	$\Delta E = 1.02$	$\Delta E = 0.78$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.70$	$\Delta E = 1.51$	$\Delta E = 1.84$	$\Delta E = 0.68$	$\Delta E = 1.43$	$\Delta E = 0.70$	$\Delta E = 1.37$	$\Delta E = 1.46$	$\Delta E = 1.08$	$\Delta E = 1.21$

HERPIORE - Weighted variational Bayesian inference - 4 Gaussians



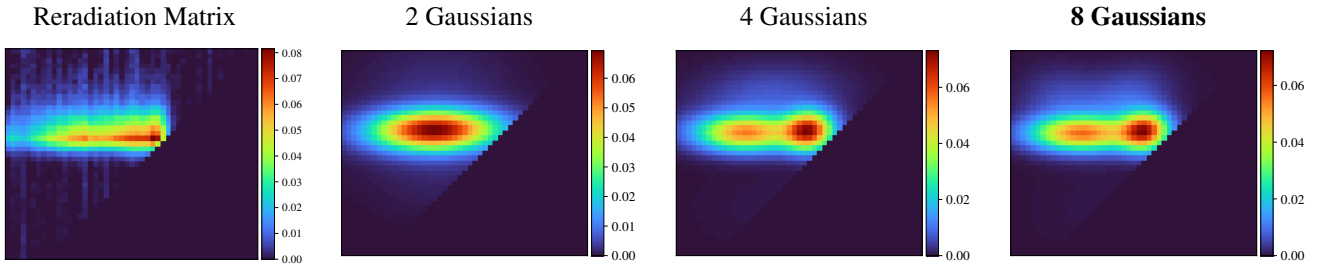
Fitted Material Under Monochromatic Illumination



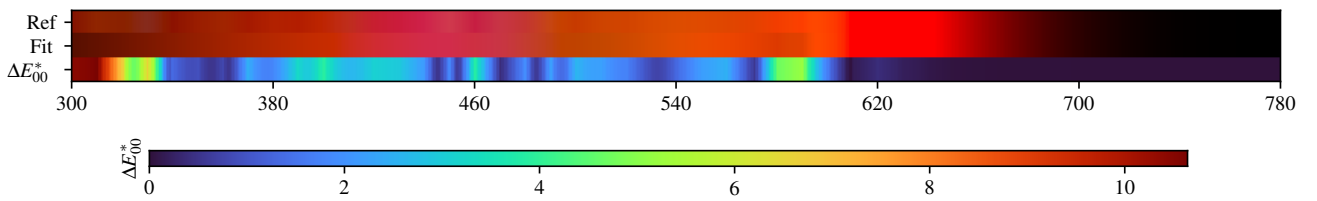
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.42$	$\Delta E = 0.27$	$\Delta E = 0.05$	$\Delta E = 0.32$	$\Delta E = 0.11$	$\Delta E = 0.28$	$\Delta E = 0.38$	$\Delta E = 0.25$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.22$	$\Delta E = 0.36$	$\Delta E = 0.54$	$\Delta E = 0.25$	$\Delta E = 0.75$	$\Delta E = 0.30$	$\Delta E = 0.27$	$\Delta E = 1.17$	$\Delta E = 0.43$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.32$	$\Delta E = 0.41$	$\Delta E = 0.66$	$\Delta E = 0.28$	$\Delta E = 0.45$	$\Delta E = 0.01$	$\Delta E = 0.44$	$\Delta E = 0.42$	$\Delta E = 0.40$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.26$	$\Delta E = 0.36$	$\Delta E = 0.31$	$\Delta E = 0.24$	$\Delta E = 0.34$	$\Delta E = 0.15$	$\Delta E = 0.43$	$\Delta E = 0.27$	$\Delta E = 0.33$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.29$	$\Delta E = 0.32$	$\Delta E = 0.41$	$\Delta E = 0.18$	$\Delta E = 0.35$	$\Delta E = 0.22$	$\Delta E = 0.34$	$\Delta E = 0.57$	$\Delta E = 0.25$	$\Delta E = 0.21$

HERPIORE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.43$	$\Delta E = 0.37$	$\Delta E = 0.35$	$\Delta E = 0.04$	$\Delta E = 0.29$	$\Delta E = 0.15$	$\Delta E = 0.37$	$\Delta E = 0.36$	$\Delta E = 0.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.30$	$\Delta E = 0.47$	$\Delta E = 0.49$	$\Delta E = 0.27$	$\Delta E = 0.70$	$\Delta E = 0.29$	$\Delta E = 0.32$	$\Delta E = 1.06$	$\Delta E = 0.42$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.45$	$\Delta E = 0.54$	$\Delta E = 0.61$	$\Delta E = 0.27$	$\Delta E = 0.41$	$\Delta E = 0.03$	$\Delta E = 0.42$	$\Delta E = 0.43$	$\Delta E = 0.38$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.33$	$\Delta E = 0.47$	$\Delta E = 0.34$	$\Delta E = 0.28$	$\Delta E = 0.33$	$\Delta E = 0.14$	$\Delta E = 0.38$	$\Delta E = 0.28$	$\Delta E = 0.31$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.34$	$\Delta E = 0.38$	$\Delta E = 0.18$	$\Delta E = 0.37$	$\Delta E = 0.24$	$\Delta E = 0.32$	$\Delta E = 0.54$	$\Delta E = 0.26$	$\Delta E = 0.26$

HERPIORE - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.055616	0.046218	0.042827	0.040816	0.037324	0.036445	0.039194	0.043059	0.043036	0.055846	0.060045
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.056473	0.044301	0.037068	0.029943	0.030280	0.030278	0.030230	0.030478	0.037711	0.058618	0.135168
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.369401	0.665101	0.818339	0.871282	0.884305	0.894633	0.900339	0.903529	0.904100	0.907537	0.904395
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.912392	0.904055	0.914380	0.914673	0.914259	0.920068	0.911437	0.915629			

2 Gaussians max

Scaling factor: 1175.9775086923726

Gaussians:

Weight	Mean		Covariance			
0.211802656	486.133892814	640.171475151	10057.746132121	-138.586591177	-138.586591177	8765.233189775
0.788197344	479.025831693	625.115690648	6988.260568077	82.575735215	82.575735215	710.794233374

4 Gaussians max

Scaling factor: 1134.2488698592501

Gaussians:

Weight	Mean		Covariance			
0.033233283	498.207683355	470.708383822	14425.633595051	-221.754394108	-221.754394108	4183.649639307
0.485036743	432.159968530	619.930582874	4579.992315123	-25.999959664	-25.999959664	601.517056685
0.297669776	558.879404215	624.136437130	1080.023950141	45.224335232	45.224335232	688.451284939
0.184060198	478.712341644	685.034238144	9018.441145462	372.764454240	372.764454240	2042.399542450

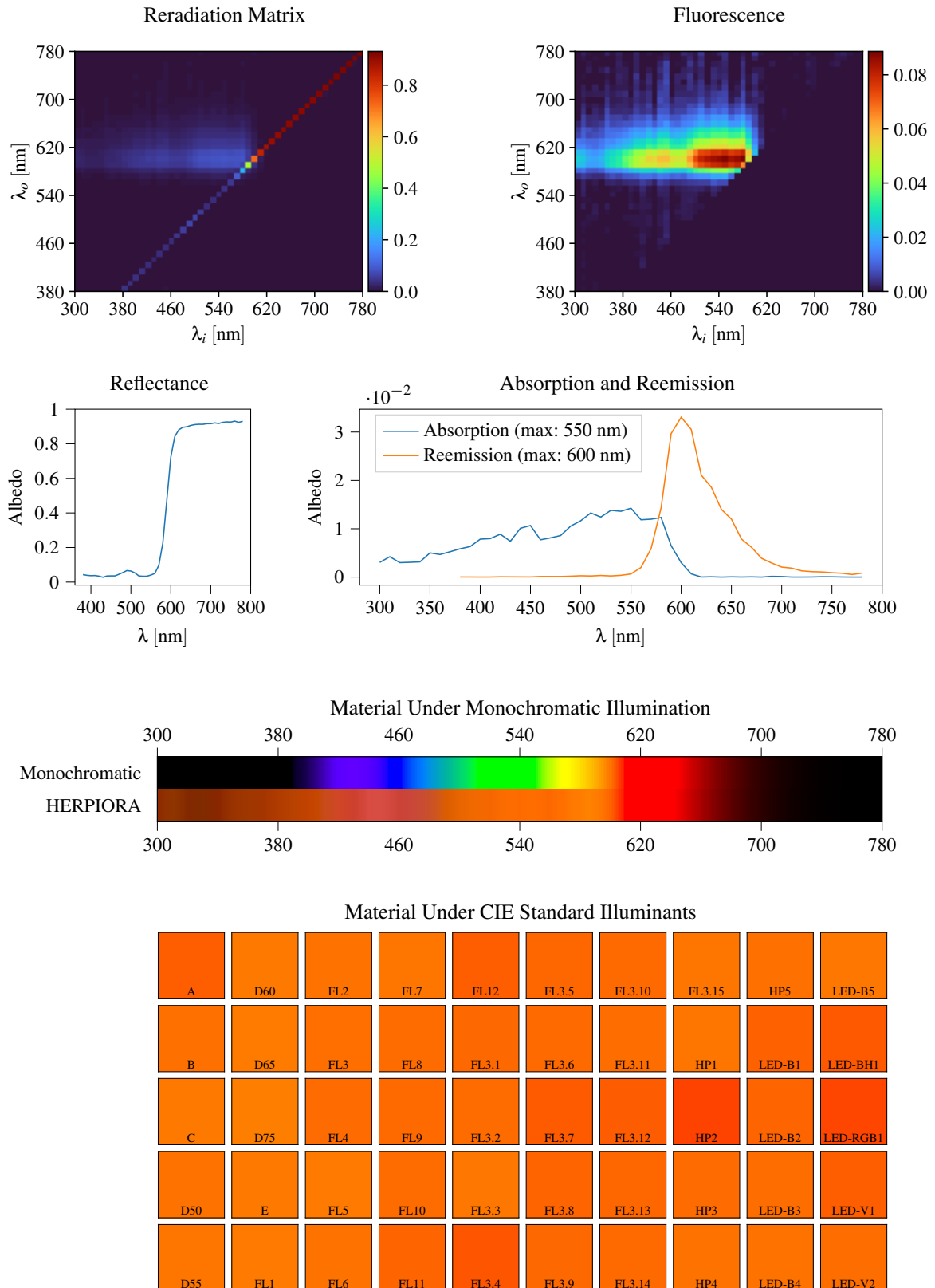
8 Gaussians max

Scaling factor: 1133.916976308453

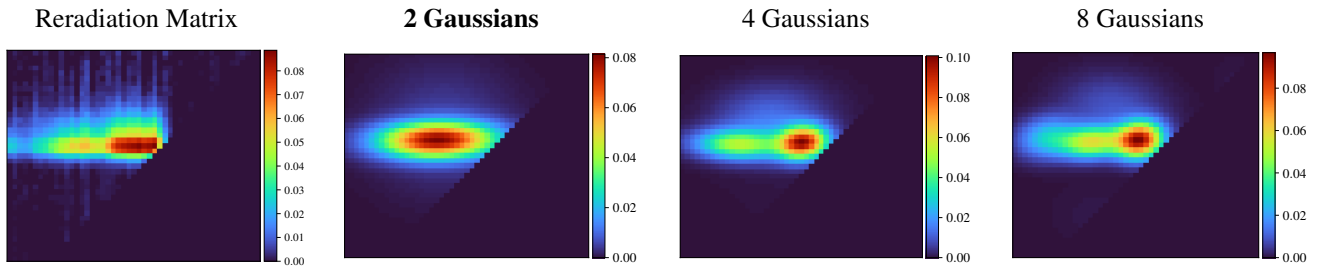
Gaussians:

Weight	Mean		Covariance			
0.030862591	497.870136917	464.981109208	14282.374044560	-350.684726046	-350.684726046	3848.534332675
0.123842385	404.608044926	666.124744535	3428.146317099	-229.583188054	-229.583188054	2427.652436378
0.445878774	436.042642724	618.385254328	4878.805982921	-14.681280191	-14.681280191	521.594342292
0.262484299	561.932726883	623.316171916	988.288143552	64.260700577	64.260700577	658.337350469
0.010438644	657.049289765	678.536916228	8707.524670841	2220.719720121	2220.719720121	4863.813396536
0.124881902	524.022862510	672.632641813	2869.550185528	576.372502749	576.372502749	2235.847812986

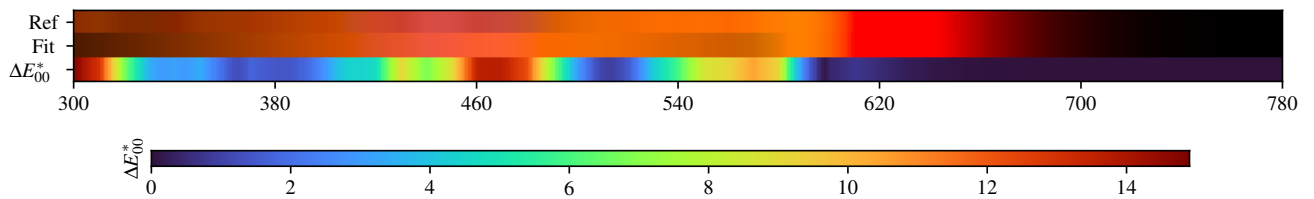
3.5. HERPIORA



HERPIORA - Weighted Expectation-Maximization - 2 Gaussians



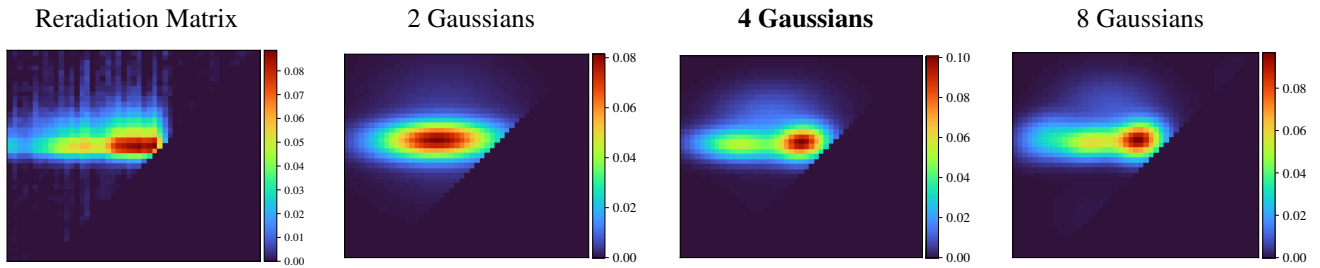
Fitted Material Under Monochromatic Illumination



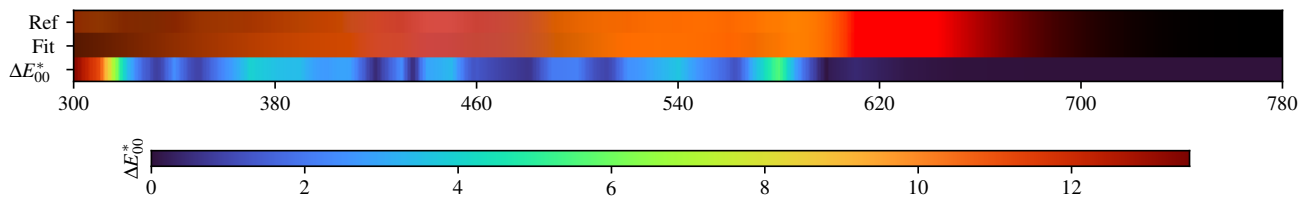
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.00$	$\Delta E = 0.79$	$\Delta E = 1.27$	$\Delta E = 0.61$	$\Delta E = 1.23$	$\Delta E = 0.38$	$\Delta E = 0.16$	$\Delta E = 0.88$	$\Delta E = 0.36$	$\Delta E = 0.54$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.46$	$\Delta E = 0.94$	$\Delta E = 1.89$	$\Delta E = 0.31$	$\Delta E = 2.33$	$\Delta E = 0.30$	$\Delta E = 0.05$	$\Delta E = 2.18$	$\Delta E = 1.35$	$\Delta E = 1.32$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.16$	$\Delta E = 1.20$	$\Delta E = 2.22$	$\Delta E = 0.69$	$\Delta E = 1.29$	$\Delta E = 1.25$	$\Delta E = 1.10$	$\Delta E = 1.98$	$\Delta E = 1.24$	$\Delta E = 0.71$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.43$	$\Delta E = 0.78$	$\Delta E = 0.51$	$\Delta E = 0.32$	$\Delta E = 0.51$	$\Delta E = 0.80$	$\Delta E = 0.39$	$\Delta E = 0.76$	$\Delta E = 0.76$	$\Delta E = 0.73$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.61$	$\Delta E = 0.50$	$\Delta E = 1.62$	$\Delta E = 0.73$	$\Delta E = 1.65$	$\Delta E = 0.34$	$\Delta E = 0.43$	$\Delta E = 0.57$	$\Delta E = 0.63$	$\Delta E = 0.36$

HERPIORA - Weighted Expectation-Maximization - 4 Gaussians



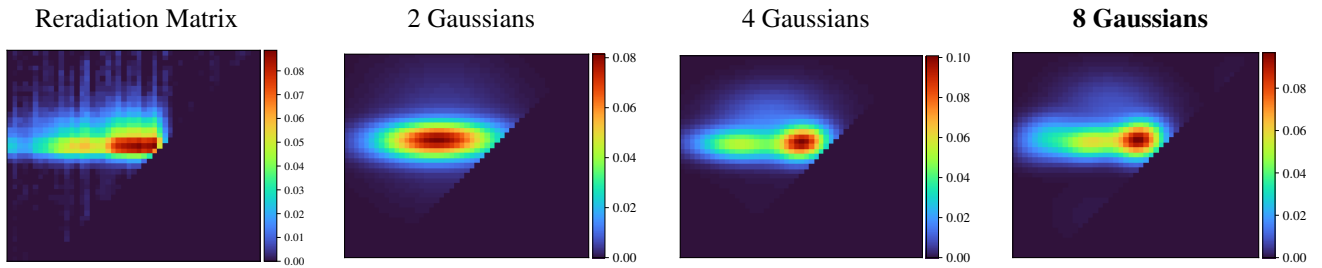
Fitted Material Under Monochromatic Illumination



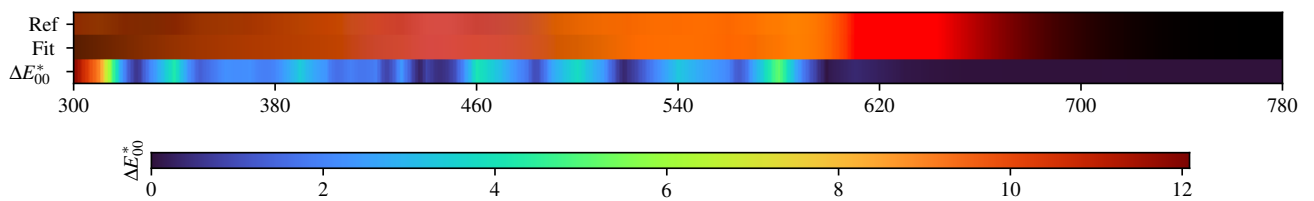
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.55$	$\Delta E = 0.23$	$\Delta E = 0.37$	$\Delta E = 0.27$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.35$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.65$	$\Delta E = 0.19$	$\Delta E = 0.77$	$\Delta E = 0.24$	$\Delta E = 0.41$	$\Delta E = 1.21$	$\Delta E = 0.36$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.75$	$\Delta E = 0.29$	$\Delta E = 0.50$	$\Delta E = 0.42$	$\Delta E = 0.30$	$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.09$	$\Delta E = 0.22$	$\Delta E = 0.37$	$\Delta E = 0.36$	$\Delta E = 0.39$	$\Delta E = 0.46$	$\Delta E = 0.32$	$\Delta E = 0.12$	$\Delta E = 0.33$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.10$	$\Delta E = 0.38$	$\Delta E = 0.56$	$\Delta E = 0.39$	$\Delta E = 0.26$	$\Delta E = 0.44$	$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.19$

HERPIORA - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.41$	$\Delta E = 0.43$	$\Delta E = 0.60$	$\Delta E = 0.45$	$\Delta E = 0.44$	$\Delta E = 0.44$	$\Delta E = 0.38$	$\Delta E = 0.48$	$\Delta E = 0.42$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.43$	$\Delta E = 0.44$	$\Delta E = 0.66$	$\Delta E = 0.40$	$\Delta E = 0.74$	$\Delta E = 0.44$	$\Delta E = 0.65$	$\Delta E = 1.14$	$\Delta E = 0.37$	$\Delta E = 0.24$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.44$	$\Delta E = 0.46$	$\Delta E = 0.72$	$\Delta E = 0.45$	$\Delta E = 0.59$	$\Delta E = 0.45$	$\Delta E = 0.47$	$\Delta E = 0.43$	$\Delta E = 0.34$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.41$	$\Delta E = 0.56$	$\Delta E = 0.52$	$\Delta E = 0.58$	$\Delta E = 0.54$	$\Delta E = 0.58$	$\Delta E = 0.48$	$\Delta E = 0.29$	$\Delta E = 0.31$	$\Delta E = 0.43$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.42$	$\Delta E = 0.52$	$\Delta E = 0.60$	$\Delta E = 0.55$	$\Delta E = 0.43$	$\Delta E = 0.63$	$\Delta E = 0.41$	$\Delta E = 0.48$	$\Delta E = 0.22$	$\Delta E = 0.43$

HERPIORA - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.043050	0.039061	0.037017	0.037817	0.034301	0.027763	0.035159	0.035719	0.035702	0.044813	0.055229
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.066519	0.063744	0.053070	0.035585	0.033604	0.033797	0.040490	0.049950	0.096883	0.225766	0.473608
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.723782	0.842600	0.880638	0.895163	0.898166	0.906015	0.910893	0.912626	0.912325	0.915950	0.916084
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.920631	0.917265	0.923923	0.926415	0.925425	0.930847	0.924038	0.929835			

2 Gaussians

Scaling factor: 1170.2468374525051

Gaussians:

Weight	Mean		Covariance			
0.771932087	480.629731551	610.699382805	6161.557738058	88.486255360	88.486255360	576.176207429
0.228067913	494.510907500	634.912376526	8990.668543135	-7.889438789	-7.889438789	6967.366471131

4 Gaussians

Scaling factor: 1125.1488809126836

Gaussians:

Weight	Mean		Covariance			
0.254255613	473.842531639	652.231659944	5336.932199347	250.723200734	250.723200734	2039.814258106
0.375921235	542.932146758	608.425587950	1114.549799720	76.447973744	76.447973744	490.551210042
0.314297714	411.368747907	604.287464998	3382.251792392	-84.962883619	-84.962883619	400.354341927
0.055525438	538.968803215	571.661622309	15203.761974487	3407.100195563	3407.100195563	14418.280699063

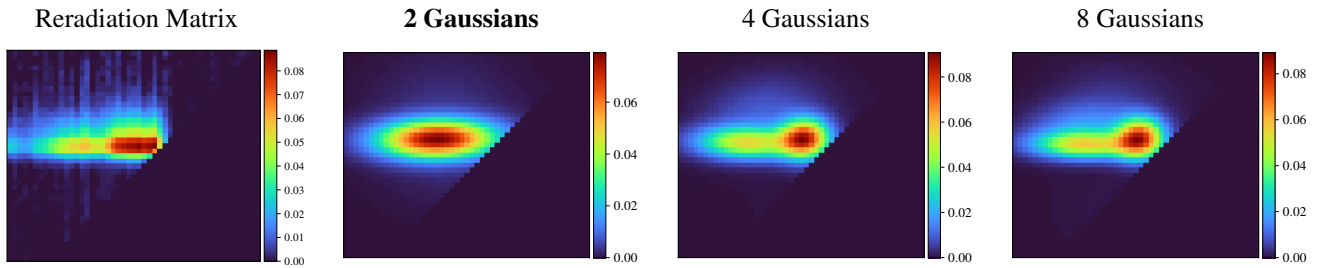
8 Gaussians

Scaling factor: 1118.4538746398214

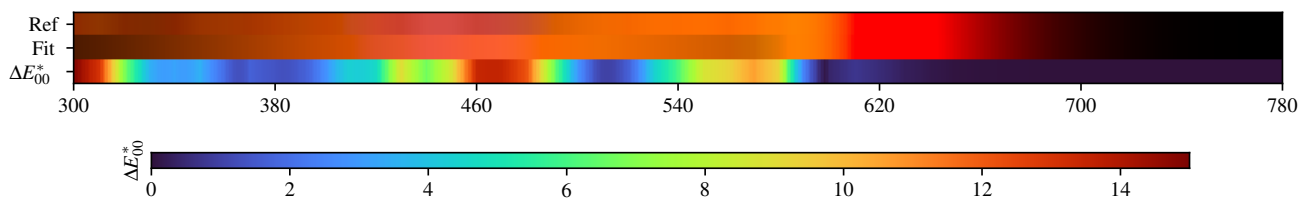
Gaussians:

Weight	Mean		Covariance			
0.153822107	494.832410241	675.554758603	4848.021199826	-298.194748605	-298.194748605	1935.302197996
0.371910617	547.510780828	609.461593241	951.488343395	69.060403437	69.060403437	576.600640195
0.160619302	362.861087565	614.940292431	1588.168974848	150.379408685	150.379408685	773.290042442
0.004786564	736.131116514	734.439229750	1070.644136708	19.019782597	19.019782597	1098.500236379
0.004013428	737.219687868	594.066974878	802.880728228	-139.866774894	-139.866774894	5962.529487072
0.019551619	466.734599657	454.366308537	4504.707706252	-506.816344273	-506.816344273	2670.865468700
0.003656551	684.903940917	442.993561072	4350.391525861	-1447.025405549	-1447.025405549	1678.263472555
0.281639812	453.273031238	605.264943052	1837.655865461	109.728723887	109.728723887	460.713594251

HERPIORA - Weighted variational Bayesian inference - 2 Gaussians



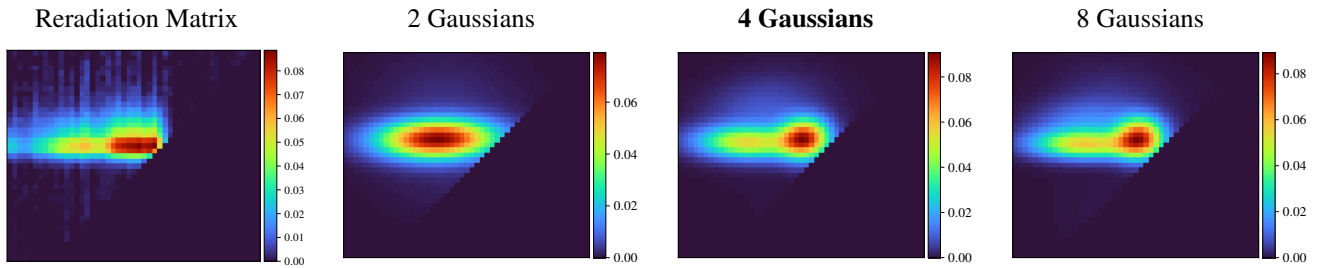
Fitted Material Under Monochromatic Illumination



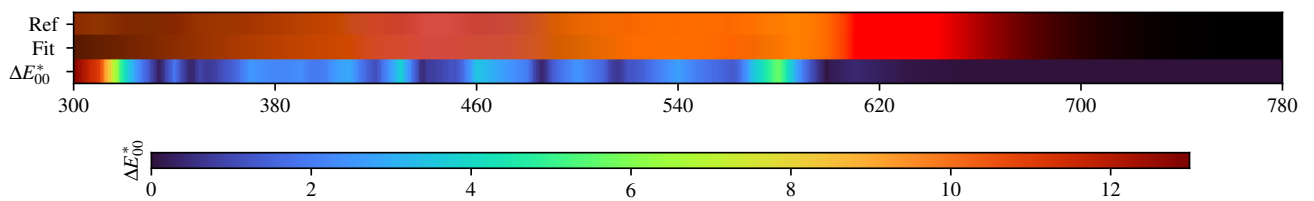
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.05$	$\Delta E = 0.73$	$\Delta E = 1.34$	$\Delta E = 0.57$	$\Delta E = 1.26$	$\Delta E = 0.44$	$\Delta E = 0.13$	$\Delta E = 0.82$	$\Delta E = 0.40$	$\Delta E = 0.53$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.43$	$\Delta E = 0.88$	$\Delta E = 1.95$	$\Delta E = 0.34$	$\Delta E = 2.38$	$\Delta E = 0.31$	$\Delta E = 0.10$	$\Delta E = 2.22$	$\Delta E = 1.40$	$\Delta E = 1.36$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.09$	$\Delta E = 1.13$	$\Delta E = 2.27$	$\Delta E = 0.75$	$\Delta E = 1.35$	$\Delta E = 1.28$	$\Delta E = 1.14$	$\Delta E = 2.02$	$\Delta E = 1.29$	$\Delta E = 0.75$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.41$	$\Delta E = 0.73$	$\Delta E = 0.56$	$\Delta E = 0.38$	$\Delta E = 0.55$	$\Delta E = 0.84$	$\Delta E = 0.44$	$\Delta E = 0.81$	$\Delta E = 0.82$	$\Delta E = 0.77$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.57$	$\Delta E = 0.51$	$\Delta E = 1.68$	$\Delta E = 0.77$	$\Delta E = 1.69$	$\Delta E = 0.39$	$\Delta E = 0.39$	$\Delta E = 0.62$	$\Delta E = 0.69$	$\Delta E = 0.37$

HERPIORA - Weighted variational Bayesian inference - 4 Gaussians



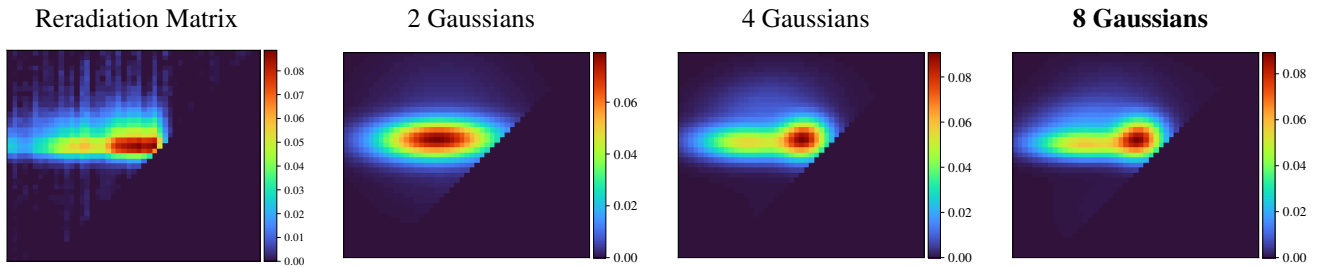
Fitted Material Under Monochromatic Illumination



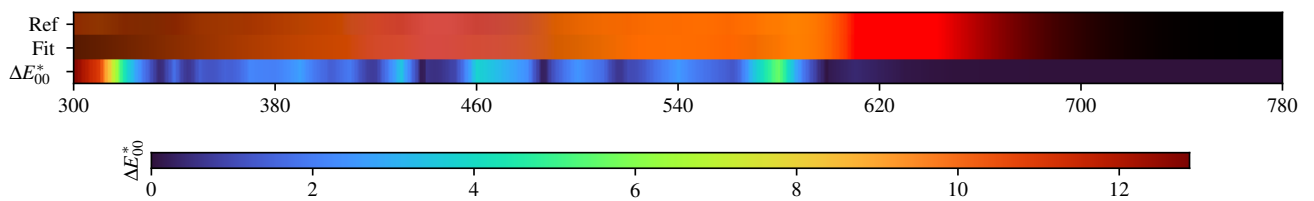
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.31$	$\Delta E = 0.18$	$\Delta E = 0.58$	$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.31$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.23$	$\Delta E = 0.26$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.73$	$\Delta E = 0.22$	$\Delta E = 0.89$	$\Delta E = 0.26$	$\Delta E = 0.44$	$\Delta E = 1.27$	$\Delta E = 0.45$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.22$	$\Delta E = 0.27$	$\Delta E = 0.84$	$\Delta E = 0.34$	$\Delta E = 0.57$	$\Delta E = 0.30$	$\Delta E = 0.44$	$\Delta E = 0.43$	$\Delta E = 0.42$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.34$	$\Delta E = 0.36$	$\Delta E = 0.37$	$\Delta E = 0.37$	$\Delta E = 0.38$	$\Delta E = 0.08$	$\Delta E = 0.35$	$\Delta E = 0.25$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.34$	$\Delta E = 0.62$	$\Delta E = 0.33$	$\Delta E = 0.45$	$\Delta E = 0.42$	$\Delta E = 0.20$	$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.22$

HERPIORA - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.37$	$\Delta E = 0.07$	$\Delta E = 0.60$	$\Delta E = 0.18$	$\Delta E = 0.28$	$\Delta E = 0.34$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.24$	$\Delta E = 0.14$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.76$	$\Delta E = 0.23$	$\Delta E = 0.90$	$\Delta E = 0.27$	$\Delta E = 0.43$	$\Delta E = 1.26$	$\Delta E = 0.47$	$\Delta E = 0.26$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.87$	$\Delta E = 0.38$	$\Delta E = 0.60$	$\Delta E = 0.31$	$\Delta E = 0.47$	$\Delta E = 0.49$	$\Delta E = 0.44$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.34$	$\Delta E = 0.36$	$\Delta E = 0.38$	$\Delta E = 0.37$	$\Delta E = 0.39$	$\Delta E = 0.16$	$\Delta E = 0.35$	$\Delta E = 0.27$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.33$	$\Delta E = 0.65$	$\Delta E = 0.34$	$\Delta E = 0.49$	$\Delta E = 0.42$	$\Delta E = 0.20$	$\Delta E = 0.30$	$\Delta E = 0.22$	$\Delta E = 0.15$

HERPIORA - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.043050	0.039061	0.037017	0.037817	0.034301	0.027763	0.035159	0.035719	0.035702	0.044813	0.055229
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.066519	0.063744	0.053070	0.035585	0.033604	0.033797	0.040490	0.049950	0.096883	0.225766	0.473608
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.723782	0.842600	0.880638	0.895163	0.898166	0.906015	0.910893	0.912626	0.912325	0.915950	0.916084
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.920631	0.917265	0.923923	0.926415	0.925425	0.930847	0.924038	0.929835			

2 Gaussians max

Scaling factor: 1171.1064042865612

Gaussians:

Weight	Mean		Covariance			
0.194531635	496.449999866	634.994061730	9411.024740533	-40.778667328	-40.778667328	7899.803801144
0.805468365	480.818115052	611.631479546	6182.502170472	89.975371016	89.975371016	644.631894727

4 Gaussians max

Scaling factor: 1129.6638841152153

Gaussians:

Weight	Mean		Covariance			
0.040843478	558.971100716	541.125594849	15659.647857120	6096.515213586	6096.515213586	13423.278096341
0.200656692	459.818360583	660.181433373	6059.470993427	784.191419678	784.191419678	2470.073798649
0.398180197	431.716144747	604.611344049	4465.397088426	-89.261313094	-89.261313094	447.022067464
0.360319633	546.496845030	613.137245773	1042.135290759	34.021155689	34.021155689	681.809458567

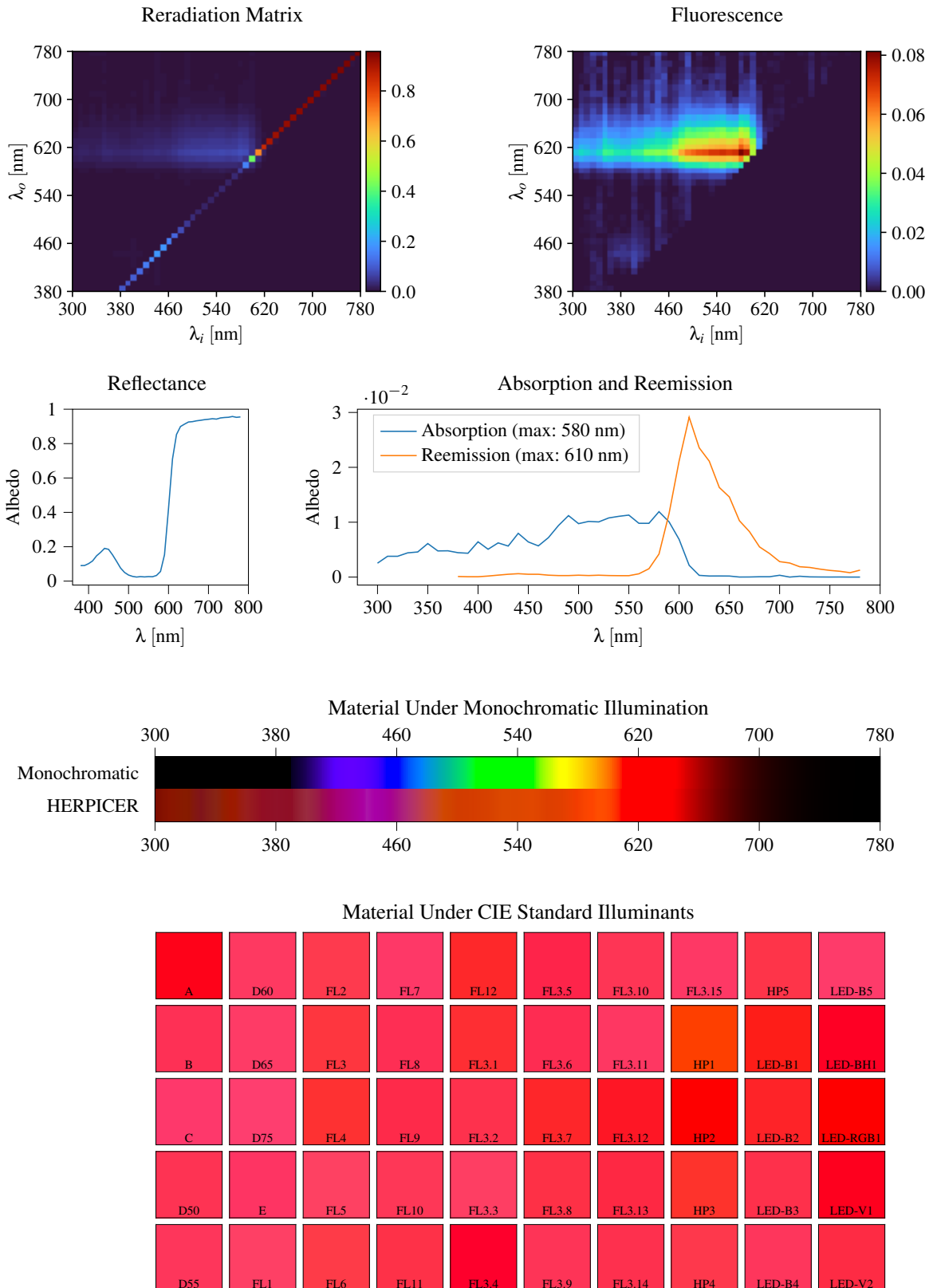
8 Gaussians max

Scaling factor: 1131.5650453049525

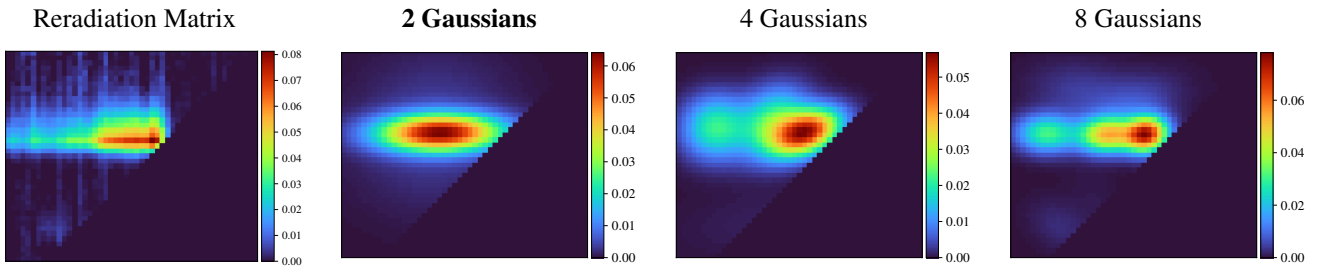
Gaussians:

Weight	Mean		Covariance			
0.023004262	469.571107925	472.929390148	5684.782226470	-402.844126774	-402.844126774	4651.149450292
0.006083616	662.720679128	496.323660565	9988.968768275	-3895.137019898	-3895.137019898	6883.910504125
0.346226299	547.412915739	613.716492710	1013.507072887	36.435972856	36.435972856	708.070284941
0.207952188	432.500292199	633.647470837	4846.331704659	333.330497562	333.330497562	1107.246948118
0.327780874	440.575234367	599.957644026	4833.818171078	-60.843019944	-60.843019944	321.435965976
0.009871730	682.343453923	679.894688581	8761.777728788	2110.105207680	2110.105207680	5198.258910864
0.078249747	490.415537089	692.436440763	6438.459526111	-91.138306521	-91.138306521	2405.408444473

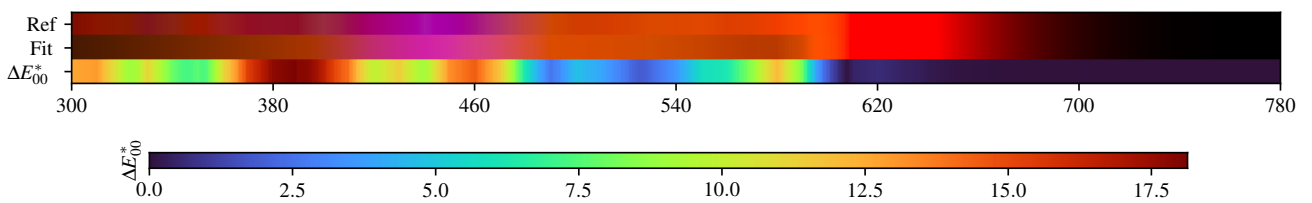
3.6. HERPICER



HERPICER - Weighted Expectation-Maximization - 2 Gaussians



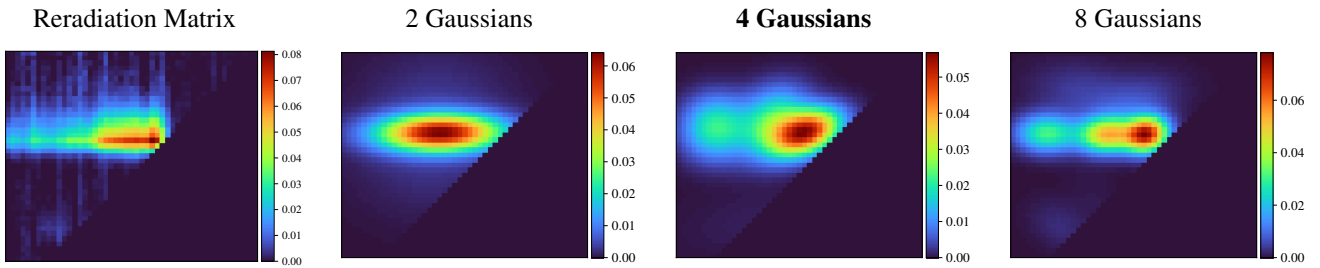
Fitted Material Under Monochromatic Illumination



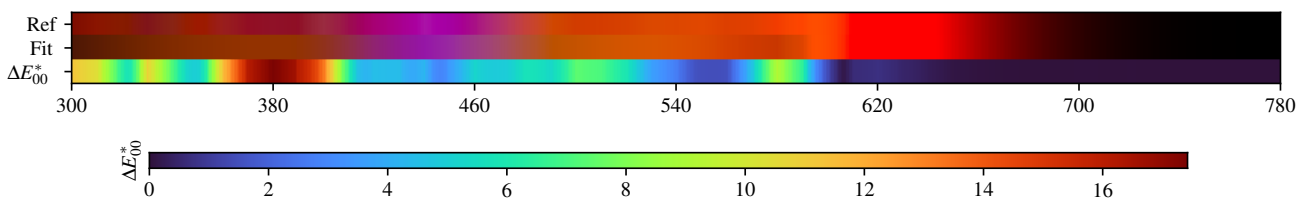
Fitted Material Under CIE Standard Illuminants



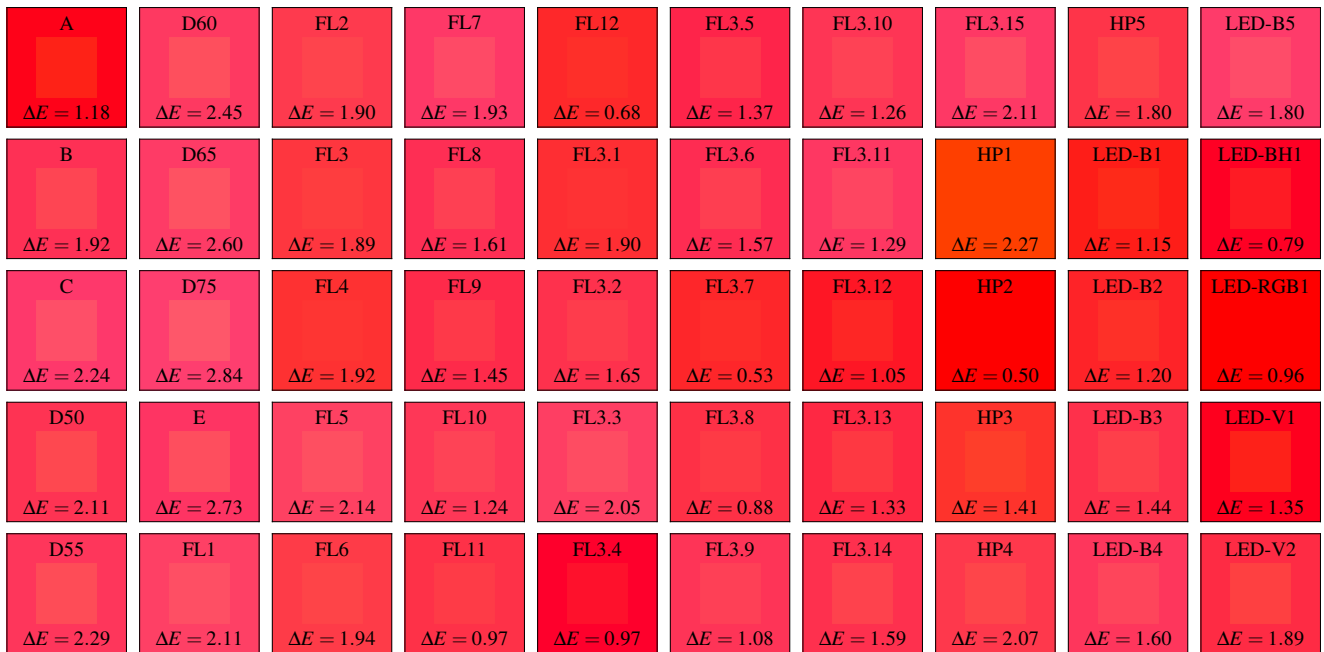
HERPICER - Weighted Expectation-Maximization - 4 Gaussians



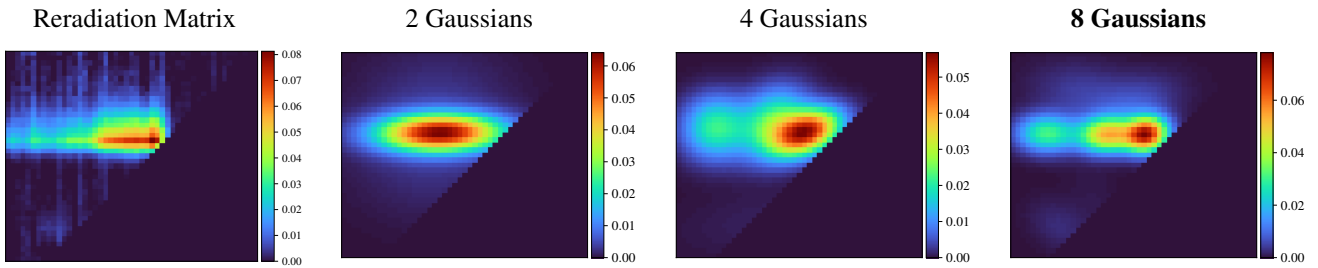
Fitted Material Under Monochromatic Illumination



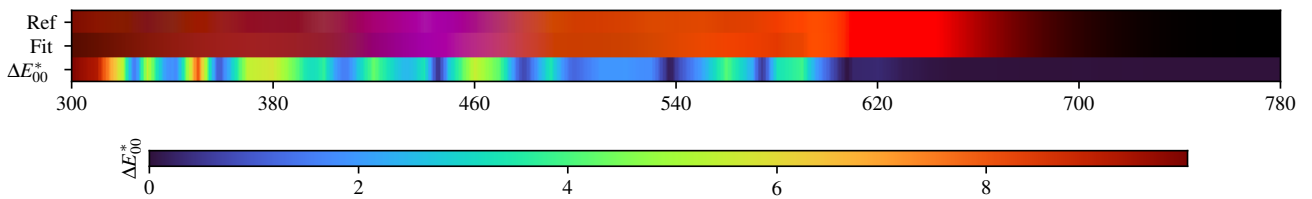
Fitted Material Under CIE Standard Illuminants



HERPICER - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.10$	FL2 $\Delta E = 0.25$	FL7 $\Delta E = 0.18$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.20$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.11$	HP5 $\Delta E = 0.43$	LED-B5 $\Delta E = 0.33$
B $\Delta E = 0.09$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.29$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.34$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.44$	LED-B1 $\Delta E = 0.16$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.08$	D75 $\Delta E = 0.14$	FL4 $\Delta E = 0.34$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.24$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.31$	HP2 $\Delta E = 0.68$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.18$
D50 $\Delta E = 0.08$	E $\Delta E = 0.22$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.25$	HP3 $\Delta E = 0.31$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.29$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.26$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.21$	HP4 $\Delta E = 0.79$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.26$

HERPICER - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.090220	0.090811	0.101662	0.117300	0.147130	0.167079	0.190512	0.184836	0.152704	0.115391	0.076233
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.050510	0.035337	0.027539	0.023686	0.026178	0.024436	0.026226	0.025463	0.032984	0.056050	0.153479
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.421068	0.710296	0.852857	0.899332	0.913106	0.925654	0.927698	0.932477	0.935498	0.939204	0.941598
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.944749	0.942431	0.949229	0.951810	0.953114	0.957701	0.952772	0.955144			

2 Gaussians

Scaling factor: 1068.6108042962653

Gaussians:

Weight	Mean		Covariance			
0.737065996	491.024009937	624.053164246	6843.315015457	67.074975466	67.074975466	627.066568236
0.262934004	476.204251504	630.409467367	10535.814204029	717.786311434	717.786311434	9639.198031779

4 Gaussians

Scaling factor: 1015.5718530728901

Gaussians:

Weight	Mean		Covariance			
0.404145547	556.418586348	625.066428263	2037.845624203	511.603217917	511.603217917	972.663430088
0.246243987	371.754384342	634.484310420	1928.017061461	55.265379441	55.265379441	1799.842067197
0.308982337	489.537464736	643.135858450	2142.496010295	417.224922723	417.224922723	2158.186327345
0.040628129	478.796005104	446.761210493	16581.035225152	1584.578471157	1584.578471157	2150.751961183

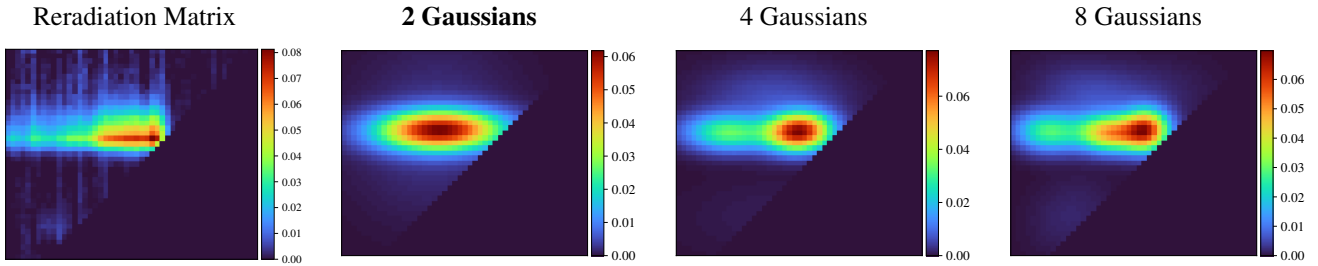
8 Gaussians

Scaling factor: 1004.4725643675108

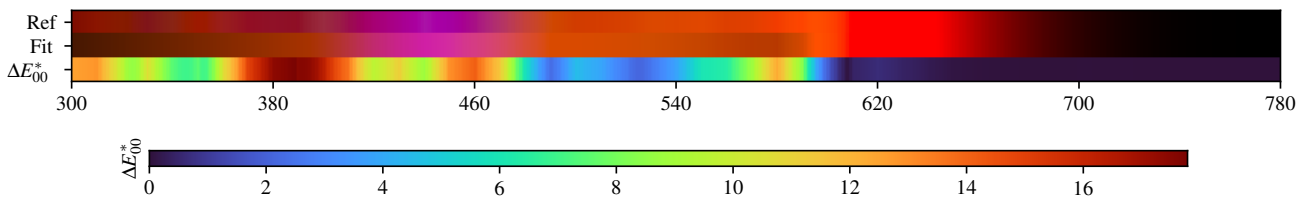
Gaussians:

Weight	Mean		Covariance			
0.087039585	543.610578513	677.566376080	3254.832154849	846.299866005	846.299866005	1626.371665612
0.201391639	367.066406639	622.512727107	1672.287193225	-13.654129369	-13.654129369	648.899496351
0.011541737	460.890258718	494.474512219	1445.868779374	-560.102499371	-560.102499371	3089.989956505
0.280292350	486.720631676	620.097889544	1379.644192044	37.572484160	37.572484160	576.507467528
0.025201556	392.343359511	438.526770085	1705.655132159	-481.801124135	-481.801124135	1284.280433176
0.289830143	565.300670566	620.673141872	786.959066313	60.799149858	60.799149858	555.692180432
0.017169786	691.042480659	551.958185460	3185.580780598	2509.171928192	2509.171928192	14922.236158334
0.087533204	440.406756675	701.977755593	4755.471876970	-447.112790663	-447.112790663	1699.148637288

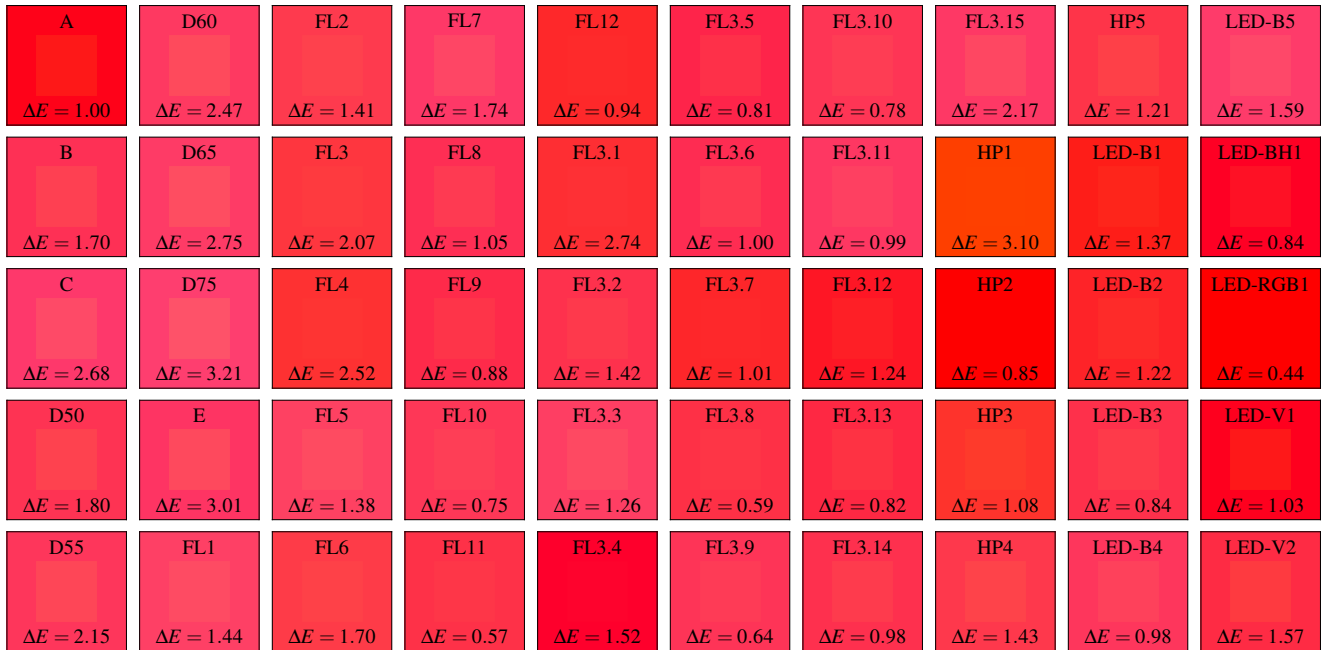
HERPICER - Weighted variational Bayesian inference - 2 Gaussians



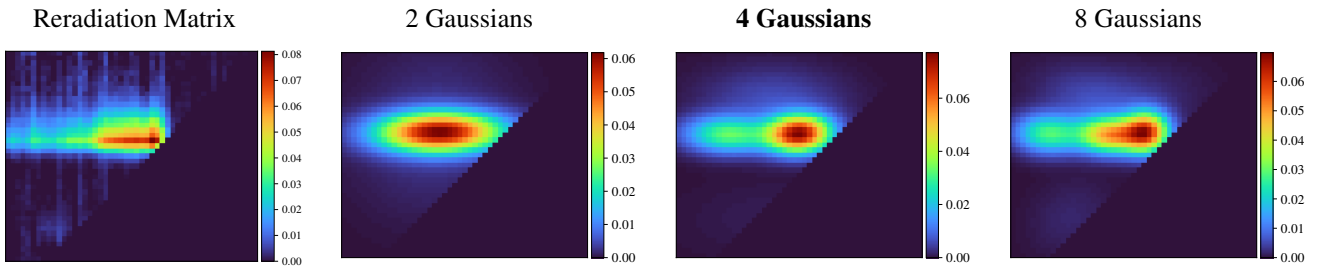
Fitted Material Under Monochromatic Illumination



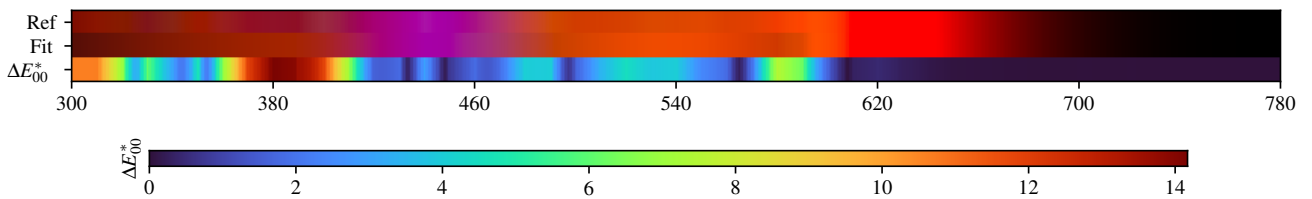
Fitted Material Under CIE Standard Illuminants



HERPICER - Weighted variational Bayesian inference - 4 Gaussians



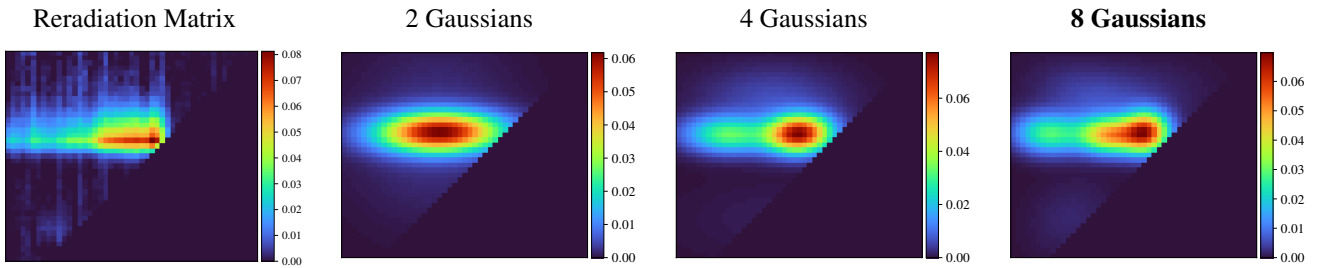
Fitted Material Under Monochromatic Illumination



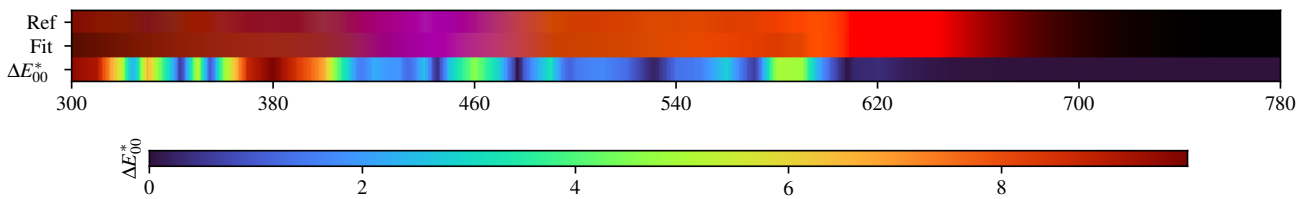
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.33$	D60 $\Delta E = 0.91$	FL2 $\Delta E = 0.67$	FL7 $\Delta E = 0.42$	FL12 $\Delta E = 0.21$	FL3.5 $\Delta E = 0.30$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.63$	HP5 $\Delta E = 0.49$	LED-B5 $\Delta E = 0.30$
B $\Delta E = 0.57$	D65 $\Delta E = 0.99$	FL3 $\Delta E = 0.87$	FL8 $\Delta E = 0.31$	FL3.1 $\Delta E = 1.09$	FL3.6 $\Delta E = 0.29$	FL3.11 $\Delta E = 0.45$	HP1 $\Delta E = 1.70$	LED-B1 $\Delta E = 0.44$	LED-BH1 $\Delta E = 0.21$
C $\Delta E = 0.70$	D75 $\Delta E = 1.13$	FL4 $\Delta E = 1.05$	FL9 $\Delta E = 0.32$	FL3.2 $\Delta E = 0.61$	FL3.7 $\Delta E = 0.21$	FL3.12 $\Delta E = 0.38$	HP2 $\Delta E = 0.38$	LED-B2 $\Delta E = 0.38$	LED-RGB1 $\Delta E = 0.58$
D50 $\Delta E = 0.70$	E $\Delta E = 1.40$	FL5 $\Delta E = 0.43$	FL10 $\Delta E = 0.36$	FL3.3 $\Delta E = 0.44$	FL3.8 $\Delta E = 0.37$	FL3.13 $\Delta E = 0.41$	HP3 $\Delta E = 0.47$	LED-B3 $\Delta E = 0.26$	LED-V1 $\Delta E = 0.59$
D55 $\Delta E = 0.81$	FL1 $\Delta E = 0.43$	FL6 $\Delta E = 0.68$	FL11 $\Delta E = 0.31$	FL3.4 $\Delta E = 0.28$	FL3.9 $\Delta E = 0.42$	FL3.14 $\Delta E = 0.25$	HP4 $\Delta E = 0.77$	LED-B4 $\Delta E = 0.26$	LED-V2 $\Delta E = 0.69$

HERPICER - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.28$	D60 $\Delta E = 0.50$	FL2 $\Delta E = 0.52$	FL7 $\Delta E = 0.29$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.31$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.34$	HP5 $\Delta E = 0.49$	LED-B5 $\Delta E = 0.30$
B $\Delta E = 0.30$	D65 $\Delta E = 0.55$	FL3 $\Delta E = 0.63$	FL8 $\Delta E = 0.26$	FL3.1 $\Delta E = 0.75$	FL3.6 $\Delta E = 0.29$	FL3.11 $\Delta E = 0.16$	HP1 $\Delta E = 1.00$	LED-B1 $\Delta E = 0.38$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.38$	D75 $\Delta E = 0.65$	FL4 $\Delta E = 0.73$	FL9 $\Delta E = 0.33$	FL3.2 $\Delta E = 0.50$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.43$	HP2 $\Delta E = 0.45$	LED-B2 $\Delta E = 0.32$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.38$	E $\Delta E = 0.78$	FL5 $\Delta E = 0.36$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.39$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.39$	HP3 $\Delta E = 0.38$	LED-B3 $\Delta E = 0.26$	LED-V1 $\Delta E = 0.34$
D55 $\Delta E = 0.44$	FL1 $\Delta E = 0.38$	FL6 $\Delta E = 0.53$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.38$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.28$	HP4 $\Delta E = 0.82$	LED-B4 $\Delta E = 0.22$	LED-V2 $\Delta E = 0.35$

HERPICER - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.090220	0.090811	0.101662	0.117300	0.147130	0.167079	0.190512	0.184836	0.152704	0.115391	0.076233
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.050510	0.035337	0.027539	0.023686	0.026178	0.024436	0.026226	0.025463	0.032984	0.056050	0.153479
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.421068	0.710296	0.852857	0.899332	0.913106	0.925654	0.927698	0.932477	0.935498	0.939204	0.941598
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.944749	0.942431	0.949229	0.951810	0.953114	0.957701	0.952772	0.955144			

2 Gaussians max

Scaling factor: 1068.5369758197087

Gaussians:

Weight	Mean		Covariance			
0.220381543	477.163039165	627.508990065	10897.566652926	804.298350563	804.298350563	11094.029695703
0.779618457	490.014208337	625.163227925	6962.585747705	57.305506325	57.305506325	717.315059332

4 Gaussians max

Scaling factor: 1027.320029168322

Gaussians:

Weight	Mean		Covariance			
0.045831674	470.411062176	458.099369099	14429.948549132	686.481862117	686.481862117	2990.906656119
0.492788544	539.632009407	622.026566031	1861.214723750	54.674641515	54.674641515	643.390324954
0.280150283	397.028554587	620.272083272	3370.829812347	-57.865319992	-57.865319992	613.667079930
0.181229499	488.675181405	686.745203523	9331.278888688	-96.372717101	-96.372717101	2197.643319661

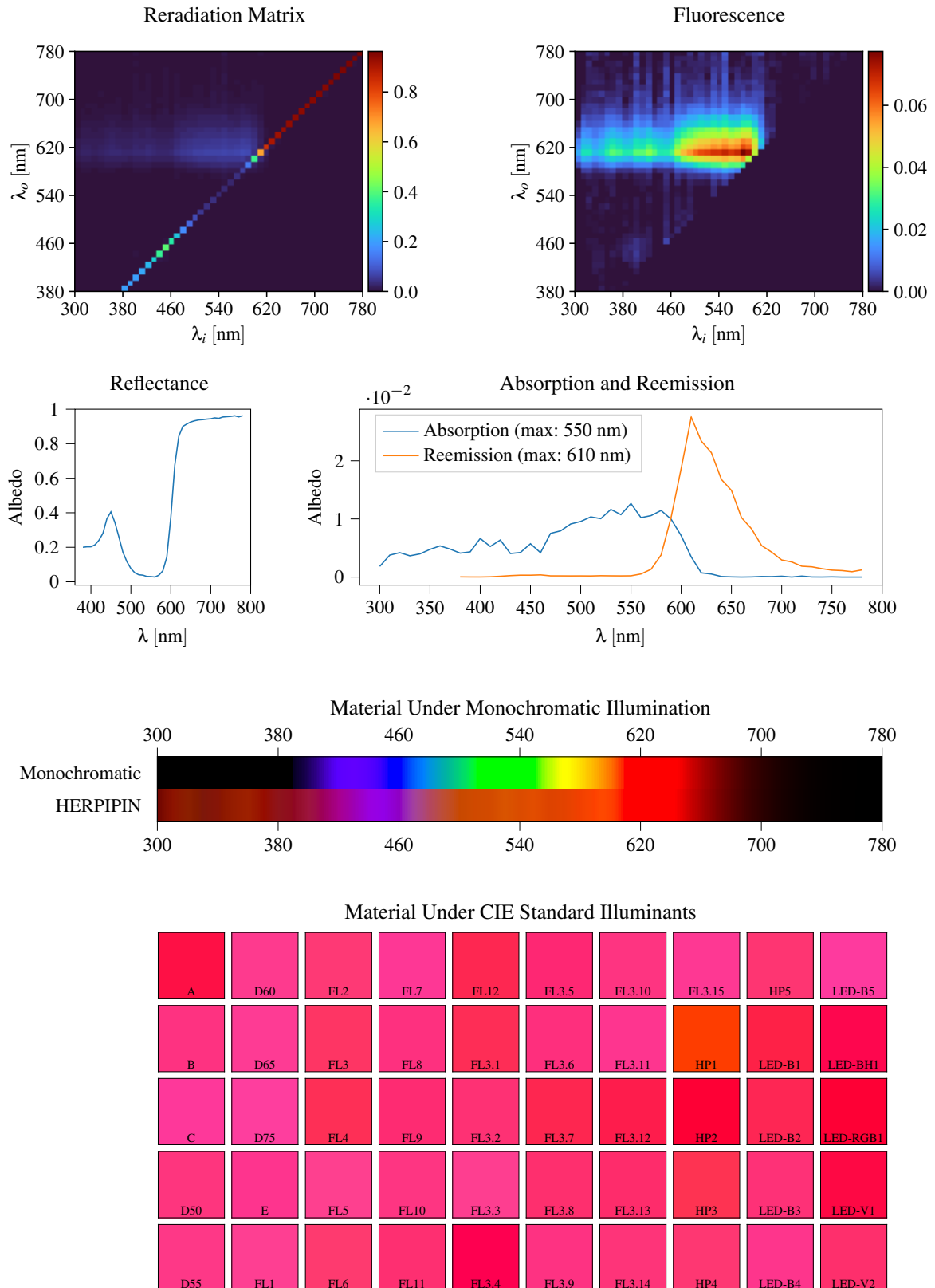
8 Gaussians max

Scaling factor: 1014.1838373049695

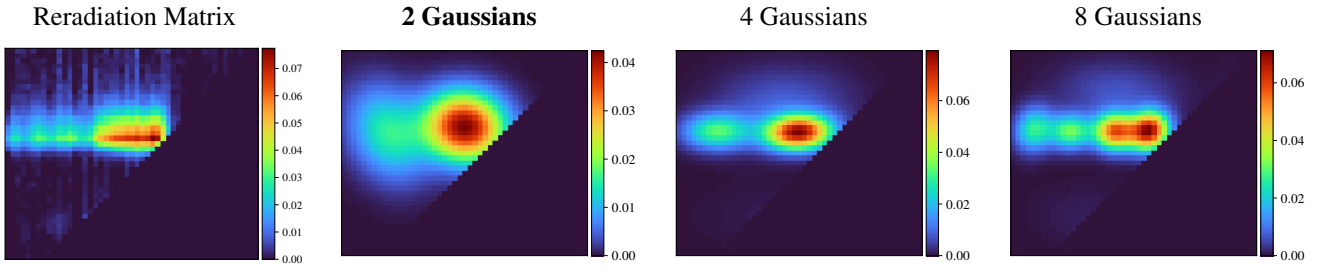
Gaussians:

Weight	Mean		Covariance			
0.036055811	413.797469434	456.399114465	3068.121974542	499.525661676	499.525661676	2792.959275568
0.013316065	655.452642227	495.593207942	6838.849727495	-1113.058527632	-1113.058527632	7030.054000245
0.199326441	369.305391667	622.121842335	1994.314725605	-52.811065499	-52.811065499	701.563835171
0.308505168	493.555814153	619.207028157	1884.416804857	-26.729573284	-26.729573284	593.907207229
0.275638196	565.212449611	625.350498457	884.807086851	11.922986559	11.922986559	731.697366850
0.079471676	529.110582030	685.415983825	8953.669566735	1168.305988238	1168.305988238	2381.520035772
0.086879504	454.005682129	691.410931958	5619.740999123	-1009.454100223	-1009.454100223	2228.956602511

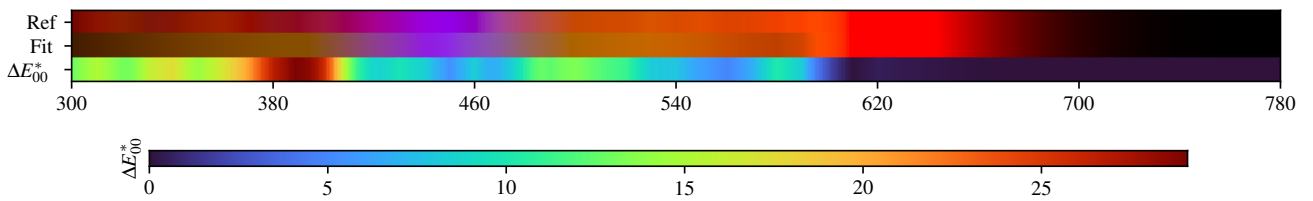
3.7. HERPIPIN



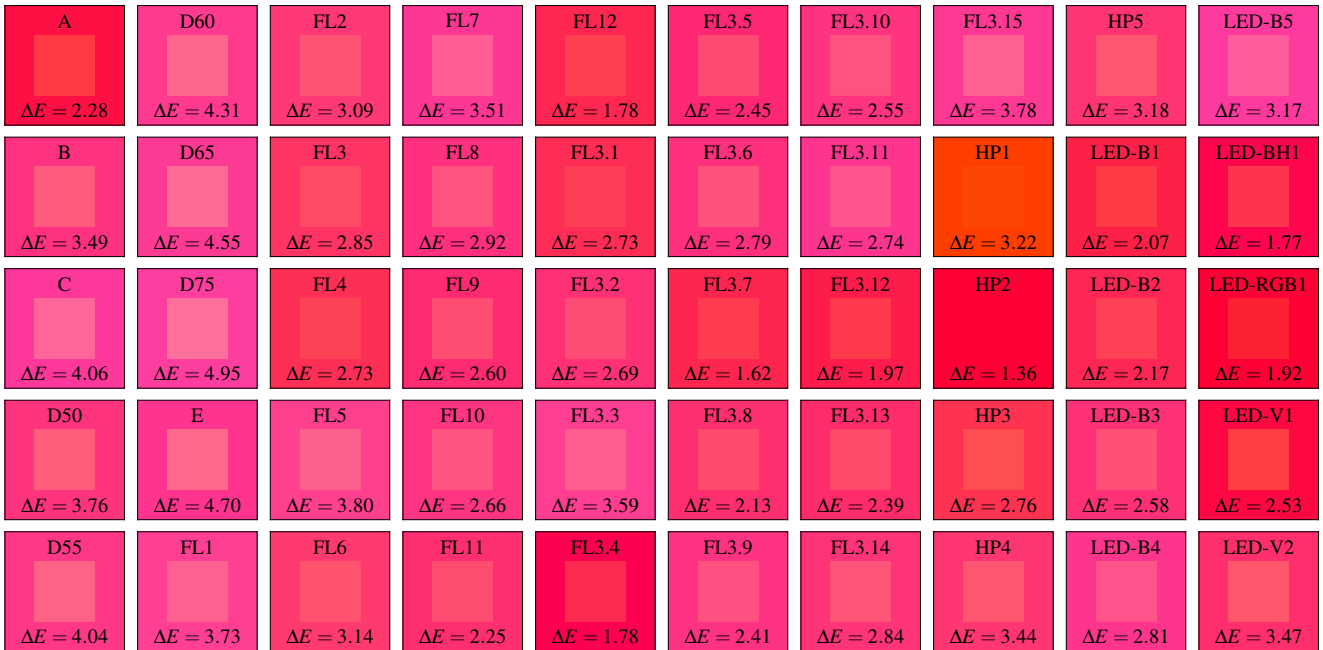
HERPIPIN - Weighted Expectation-Maximization - 2 Gaussians



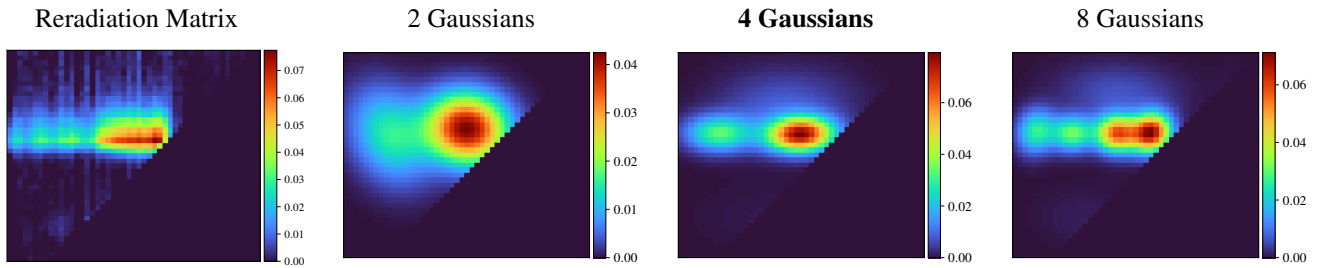
Fitted Material Under Monochromatic Illumination



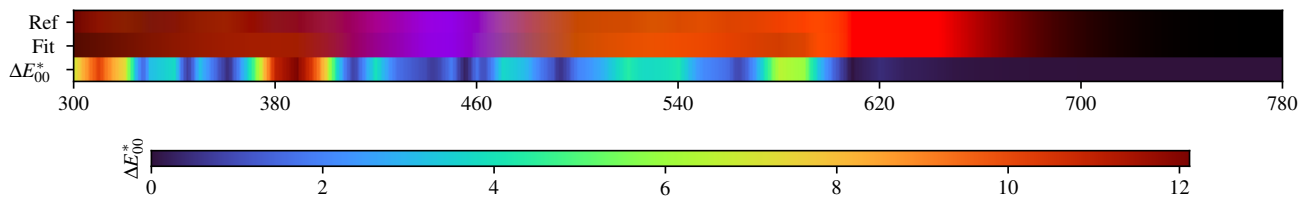
Fitted Material Under CIE Standard Illuminants



HERPIPIN - Weighted Expectation-Maximization - 4 Gaussians



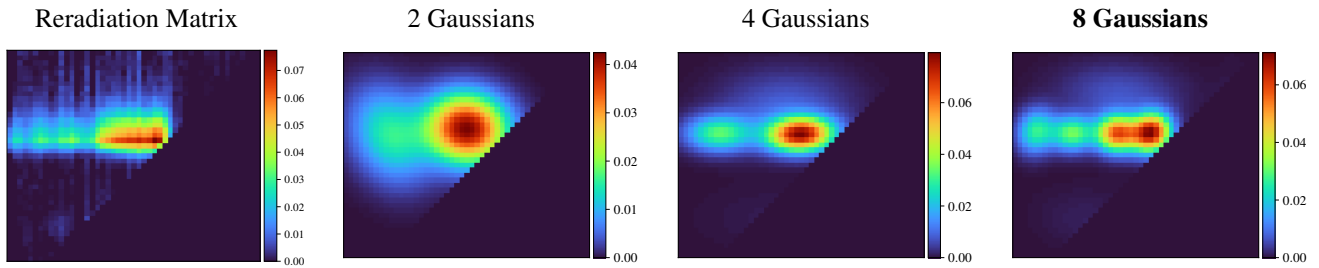
Fitted Material Under Monochromatic Illumination



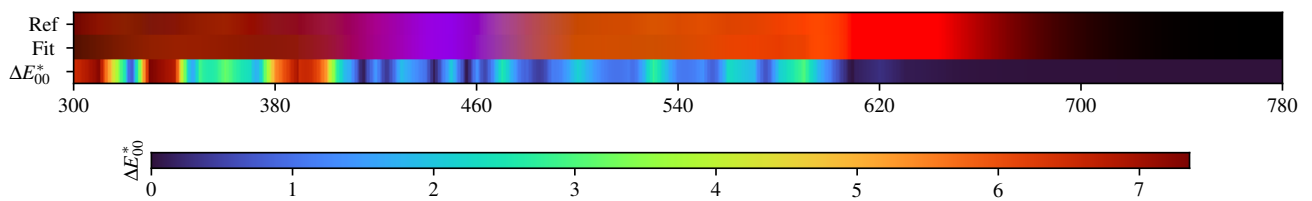
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.27$	$\Delta E = 0.84$	$\Delta E = 0.23$	$\Delta E = 0.08$	$\Delta E = 0.32$	$\Delta E = 0.06$	$\Delta E = 0.24$	$\Delta E = 0.58$	$\Delta E = 0.19$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.30$	$\Delta E = 1.05$	$\Delta E = 0.16$	$\Delta E = 1.28$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 1.80$	$\Delta E = 0.54$	$\Delta E = 0.05$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.35$	$\Delta E = 1.22$	$\Delta E = 0.33$	$\Delta E = 0.77$	$\Delta E = 0.09$	$\Delta E = 0.41$	$\Delta E = 0.16$	$\Delta E = 0.49$	$\Delta E = 0.47$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.46$	$\Delta E = 0.46$	$\Delta E = 0.21$	$\Delta E = 0.53$	$\Delta E = 0.23$	$\Delta E = 0.41$	$\Delta E = 0.29$	$\Delta E = 0.31$	$\Delta E = 0.29$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.48$	$\Delta E = 0.86$	$\Delta E = 0.19$	$\Delta E = 0.37$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.96$	$\Delta E = 0.25$	$\Delta E = 0.25$

HERPIPIN - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.28$	$\Delta E = 0.20$	$\Delta E = 0.44$	$\Delta E = 0.29$	$\Delta E = 0.43$	$\Delta E = 0.30$	$\Delta E = 0.46$	$\Delta E = 0.22$	$\Delta E = 0.48$	$\Delta E = 0.45$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.49$	$\Delta E = 0.30$	$\Delta E = 0.51$	$\Delta E = 0.29$	$\Delta E = 0.48$	$\Delta E = 0.36$	$\Delta E = 0.40$	$\Delta E = 0.30$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.52$	$\Delta E = 0.35$	$\Delta E = 0.41$	$\Delta E = 0.39$	$\Delta E = 0.33$	$\Delta E = 0.28$	$\Delta E = 0.41$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.23$	$\Delta E = 0.28$	$\Delta E = 0.35$	$\Delta E = 0.49$	$\Delta E = 0.35$	$\Delta E = 0.44$	$\Delta E = 0.31$	$\Delta E = 0.46$	$\Delta E = 0.40$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.21$	$\Delta E = 0.35$	$\Delta E = 0.45$	$\Delta E = 0.47$	$\Delta E = 0.36$	$\Delta E = 0.46$	$\Delta E = 0.27$	$\Delta E = 0.76$	$\Delta E = 0.47$	$\Delta E = 0.22$

HERPIPIN - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.199970	0.202777	0.202959	0.214107	0.240493	0.280692	0.365751	0.405121	0.343804	0.259756	0.171909
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.117016	0.077125	0.052045	0.040675	0.038523	0.030992	0.030280	0.027778	0.038185	0.063316	0.143530
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.373678	0.676622	0.843223	0.899955	0.914010	0.926015	0.933023	0.937775	0.939496	0.942446	0.944366
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.949715	0.946720	0.954621	0.956639	0.958356	0.961852	0.955540	0.962375			

2 Gaussians

Scaling factor: 1008.9136843047553

Gaussians:

Weight	Mean		Covariance			
0.308021194	386.804171216	619.299099475	2779.878186328	-712.384783751	-712.384783751	3889.378035018
0.691978806	539.756792959	632.292899552	3036.578696257	-140.314300360	-140.314300360	2273.969674064

4 Gaussians

Scaling factor: 987.5995651503708

Gaussians:

Weight	Mean		Covariance			
0.253735364	504.628561416	672.943367095	7891.804734608	237.283331926	237.283331926	2567.685957250
0.488615496	538.094596508	620.958341503	1960.974058248	57.552807649	57.552807649	539.151669777
0.220563805	376.021618240	622.756123125	2025.519721679	-0.058495895	-0.058495895	584.130760225
0.037085335	505.426605132	452.299417391	13074.127243338	-353.612617898	-353.612617898	2053.847221043

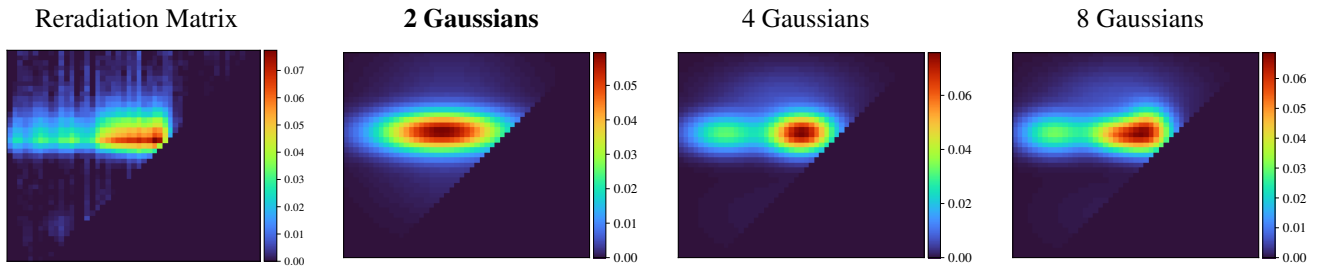
8 Gaussians

Scaling factor: 973.2306127126508

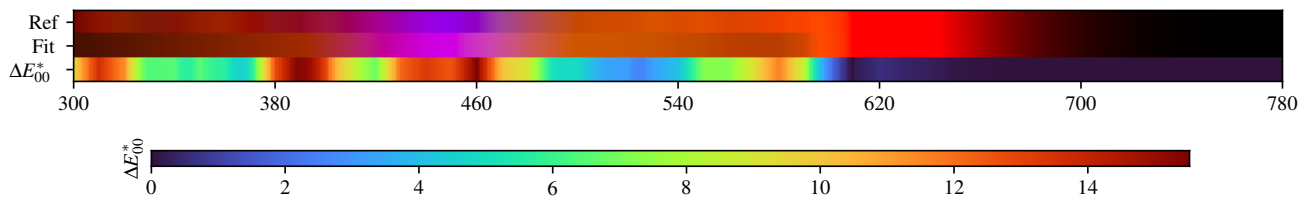
Gaussians:

Weight	Mean		Covariance			
0.134179076	506.736832811	701.936143794	6449.887011463	-252.034495653	-252.034495653	1579.244594224
0.134894930	414.143676402	622.800019807	796.752059229	16.582413831	16.582413831	569.755988665
0.293674043	570.696477238	624.101407868	672.594484780	45.983957402	45.983957402	673.978485341
0.007333538	727.441755055	688.591979358	695.608201052	326.382290752	326.382290752	5193.050237810
0.127392096	342.066771076	626.958974441	662.303567442	66.718902169	66.718902169	853.390991360
0.024262269	439.664878280	453.031863797	4341.721880223	-326.813268967	-326.813268967	1759.050360668
0.014472128	620.530436193	461.680774287	6243.779995221	-715.651653025	-715.651653025	3321.623465838
0.263791920	502.771470226	622.528256953	821.468868672	1.058060314	1.058060314	620.659876931

HERPIPIN - Weighted variational Bayesian inference - 2 Gaussians



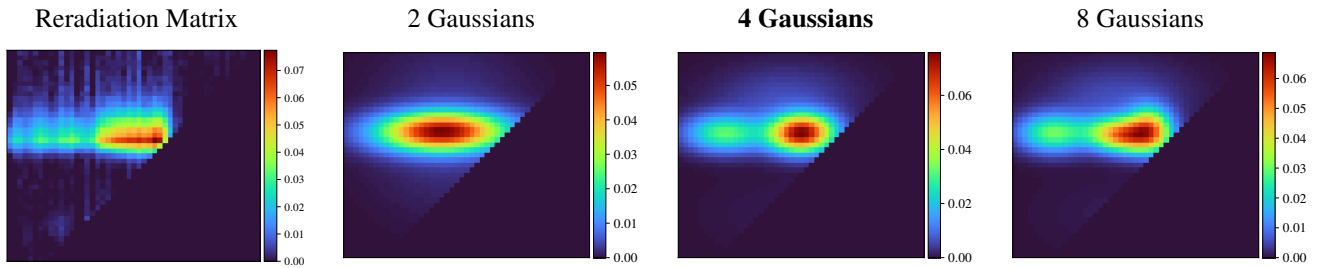
Fitted Material Under Monochromatic Illumination



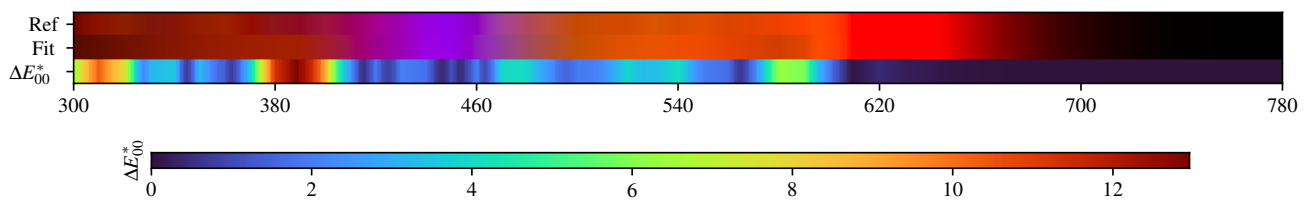
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 1.03$	D60 $\Delta E = 1.81$	FL2 $\Delta E = 1.42$	FL7 $\Delta E = 1.45$	FL12 $\Delta E = 1.07$	FL3.5 $\Delta E = 0.66$	FL3.10 $\Delta E = 0.78$	FL3.15 $\Delta E = 1.87$	HP5 $\Delta E = 0.88$	LED-B5 $\Delta E = 1.39$
B $\Delta E = 1.31$	D65 $\Delta E = 2.03$	FL3 $\Delta E = 2.26$	FL8 $\Delta E = 0.83$	FL3.1 $\Delta E = 3.08$	FL3.6 $\Delta E = 0.78$	FL3.11 $\Delta E = 0.91$	HP1 $\Delta E = 3.35$	LED-B1 $\Delta E = 1.50$	LED-BH1 $\Delta E = 0.95$
C $\Delta E = 2.29$	D75 $\Delta E = 2.38$	FL4 $\Delta E = 2.78$	FL9 $\Delta E = 0.77$	FL3.2 $\Delta E = 1.54$	FL3.7 $\Delta E = 1.22$	FL3.12 $\Delta E = 1.36$	HP2 $\Delta E = 1.10$	LED-B2 $\Delta E = 1.32$	LED-RGB1 $\Delta E = 0.45$
D50 $\Delta E = 1.28$	E $\Delta E = 2.04$	FL5 $\Delta E = 1.02$	FL10 $\Delta E = 0.65$	FL3.3 $\Delta E = 0.90$	FL3.8 $\Delta E = 0.62$	FL3.13 $\Delta E = 0.79$	HP3 $\Delta E = 1.01$	LED-B3 $\Delta E = 0.69$	LED-V1 $\Delta E = 0.83$
D55 $\Delta E = 1.56$	FL1 $\Delta E = 1.11$	FL6 $\Delta E = 1.81$	FL11 $\Delta E = 0.52$	FL3.4 $\Delta E = 1.75$	FL3.9 $\Delta E = 0.54$	FL3.14 $\Delta E = 0.87$	HP4 $\Delta E = 1.07$	LED-B4 $\Delta E = 0.68$	LED-V2 $\Delta E = 1.07$

HERPIPIN - Weighted variational Bayesian inference - 4 Gaussians



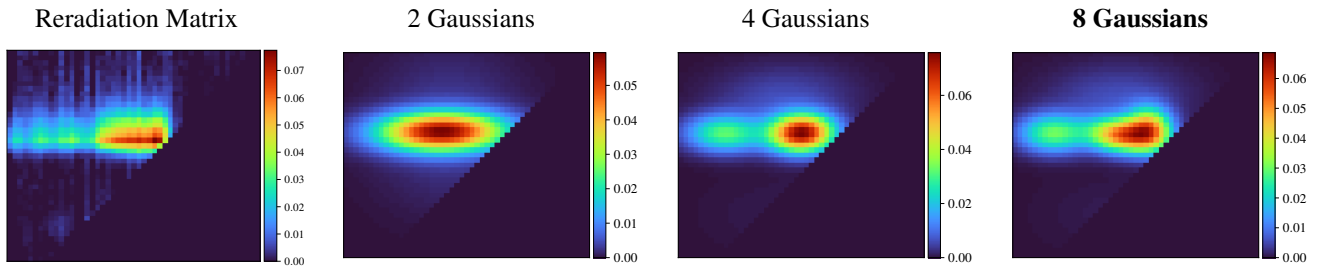
Fitted Material Under Monochromatic Illumination



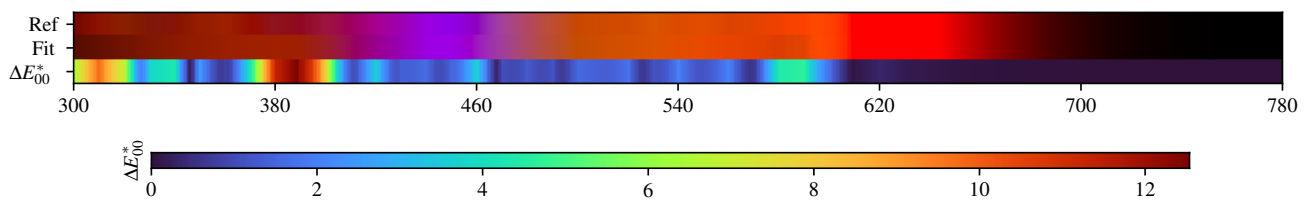
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.27$	$\Delta E = 0.41$	$\Delta E = 0.71$	$\Delta E = 0.26$	$\Delta E = 0.15$	$\Delta E = 0.33$	$\Delta E = 0.12$	$\Delta E = 0.37$	$\Delta E = 0.50$	$\Delta E = 0.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.29$	$\Delta E = 0.45$	$\Delta E = 0.92$	$\Delta E = 0.22$	$\Delta E = 1.18$	$\Delta E = 0.28$	$\Delta E = 0.44$	$\Delta E = 1.74$	$\Delta E = 0.50$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.35$	$\Delta E = 0.50$	$\Delta E = 1.09$	$\Delta E = 0.31$	$\Delta E = 0.70$	$\Delta E = 0.13$	$\Delta E = 0.44$	$\Delta E = 0.19$	$\Delta E = 0.44$	$\Delta E = 0.45$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.33$	$\Delta E = 0.63$	$\Delta E = 0.40$	$\Delta E = 0.37$	$\Delta E = 0.47$	$\Delta E = 0.33$	$\Delta E = 0.47$	$\Delta E = 0.31$	$\Delta E = 0.24$	$\Delta E = 0.30$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.42$	$\Delta E = 0.73$	$\Delta E = 0.31$	$\Delta E = 0.35$	$\Delta E = 0.40$	$\Delta E = 0.28$	$\Delta E = 0.80$	$\Delta E = 0.15$	$\Delta E = 0.32$

HERPIPIN - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.29$	$\Delta E = 0.30$	$\Delta E = 0.57$	$\Delta E = 0.22$	$\Delta E = 0.09$	$\Delta E = 0.32$	$\Delta E = 0.11$	$\Delta E = 0.26$	$\Delta E = 0.52$	$\Delta E = 0.08$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.22$	$\Delta E = 0.33$	$\Delta E = 0.71$	$\Delta E = 0.21$	$\Delta E = 0.89$	$\Delta E = 0.27$	$\Delta E = 0.16$	$\Delta E = 1.16$	$\Delta E = 0.44$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.24$	$\Delta E = 0.38$	$\Delta E = 0.83$	$\Delta E = 0.32$	$\Delta E = 0.57$	$\Delta E = 0.10$	$\Delta E = 0.44$	$\Delta E = 0.24$	$\Delta E = 0.39$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.24$	$\Delta E = 0.48$	$\Delta E = 0.34$	$\Delta E = 0.12$	$\Delta E = 0.40$	$\Delta E = 0.06$	$\Delta E = 0.41$	$\Delta E = 0.38$	$\Delta E = 0.25$	$\Delta E = 0.37$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.35$	$\Delta E = 0.59$	$\Delta E = 0.06$	$\Delta E = 0.41$	$\Delta E = 0.12$	$\Delta E = 0.26$	$\Delta E = 0.85$	$\Delta E = 0.12$	$\Delta E = 0.33$

HERPIPIN - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.199970	0.202777	0.202959	0.214107	0.240493	0.280692	0.365751	0.405121	0.343804	0.259756	0.171909
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.117016	0.077125	0.052045	0.040675	0.038523	0.030992	0.030280	0.027778	0.038185	0.063316	0.143530
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.373678	0.676622	0.843223	0.899955	0.914010	0.926015	0.933023	0.937775	0.939496	0.942446	0.944366
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.949715	0.946720	0.954621	0.956639	0.958356	0.961852	0.955540	0.962375			

2 Gaussians max

Scaling factor: 1036.3256355047674

Gaussians:

Weight	Mean		Covariance			
0.228254772	503.303644711	635.510340751	9792.575812228	178.544314584	178.544314584	9924.511460153
0.771745228	489.564563601	626.104555539	7359.327127480	52.099805932	52.099805932	694.266371201

4 Gaussians max

Scaling factor: 989.1717555965047

Gaussians:

Weight	Mean		Covariance			
0.040519216	508.627342147	464.048836747	13175.585963881	28.900350959	28.900350959	3301.954384810
0.525792623	540.617405463	623.189827993	1887.489127620	44.102959537	44.102959537	660.740815096
0.257979082	387.112416396	622.462433669	2742.377709518	-19.219134960	-19.219134960	623.213174073
0.175709079	501.286602306	690.408054543	9151.026942415	370.427577722	370.427577722	2142.770839815

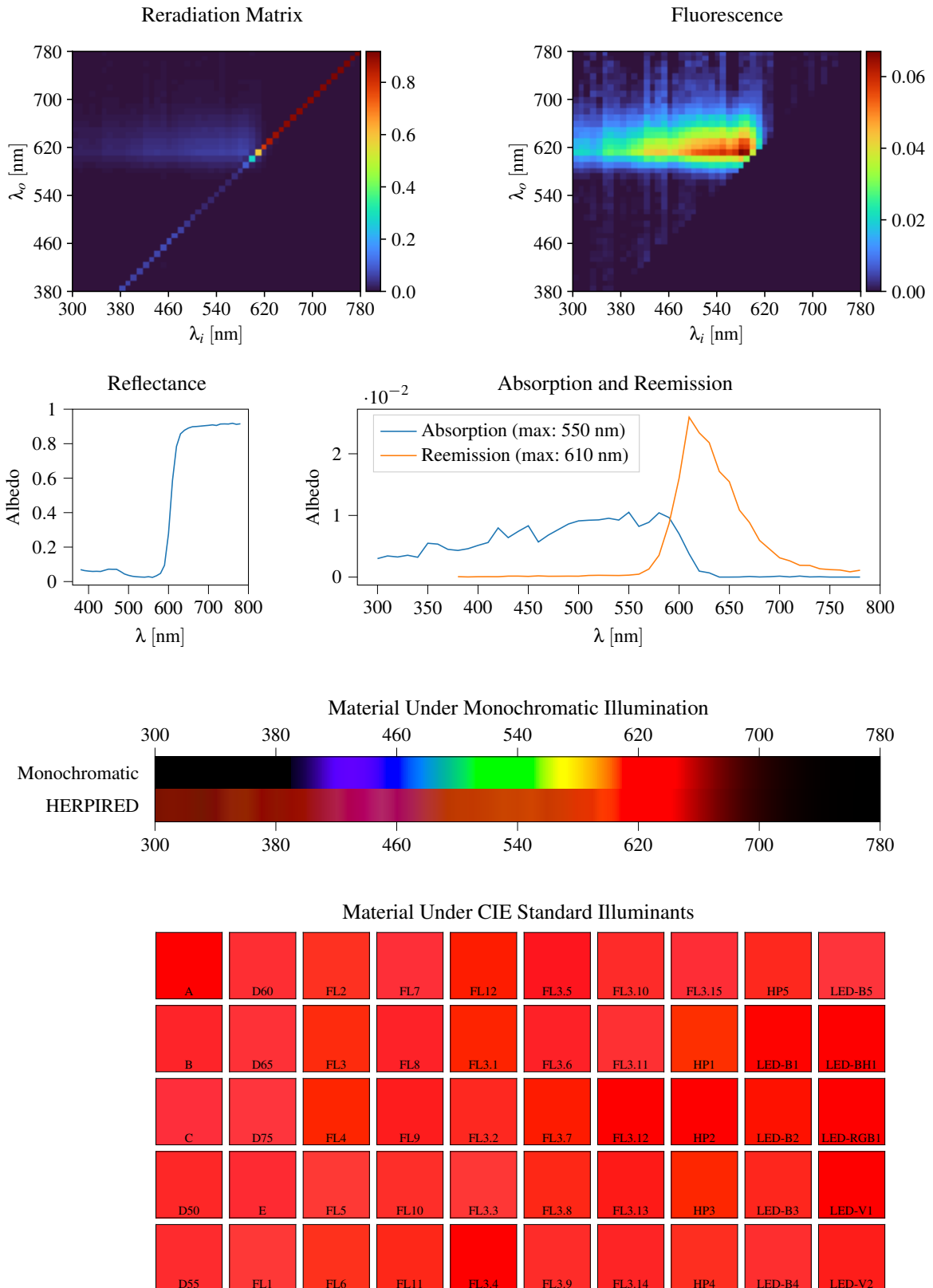
8 Gaussians max

Scaling factor: 990.007501439665

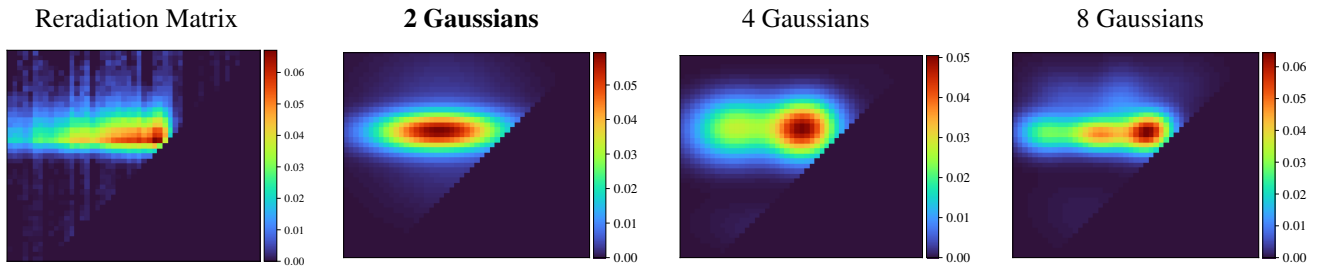
Gaussians:

Weight	Mean		Covariance			
0.041159117	508.521579651	464.200184557	13121.036191015	27.171691477	27.171691477	3327.106697234
0.220841615	375.322345380	622.877166435	2125.568924106	-13.991310579	-13.991310579	666.525141528
0.341181339	512.711011384	618.927042087	2030.380664565	-112.856621408	-112.856621408	539.378153309
0.227660795	568.911104508	631.262838504	873.638791239	-54.474329681	-54.474329681	869.520845105
0.166708489	499.705782350	690.981873538	9209.102330676	354.897590485	354.897590485	2214.100107869

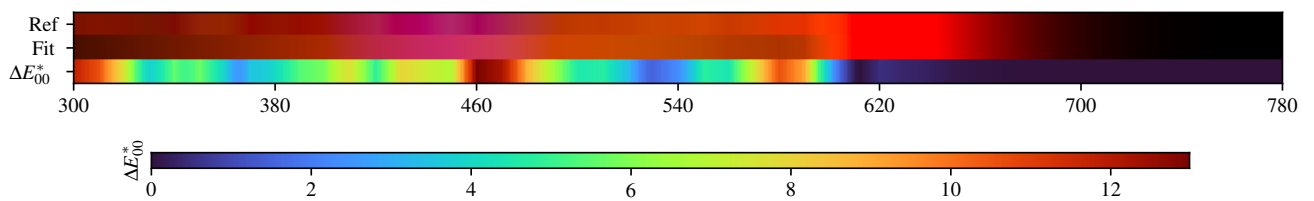
3.8. HERPIRED



HERPIRED - Weighted Expectation-Maximization - 2 Gaussians



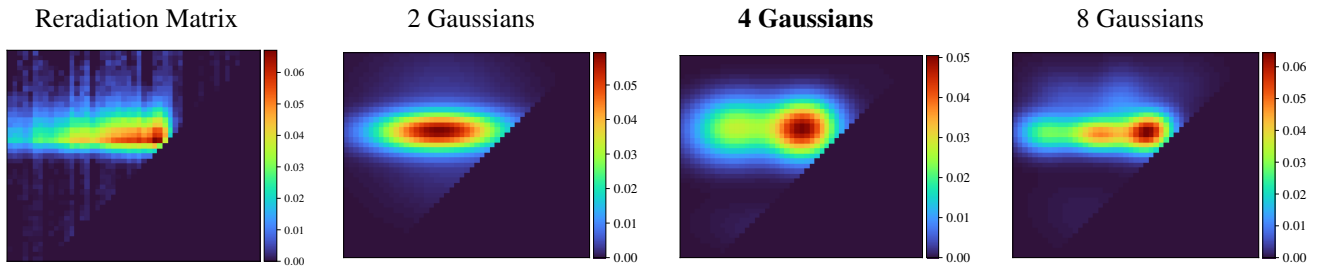
Fitted Material Under Monochromatic Illumination



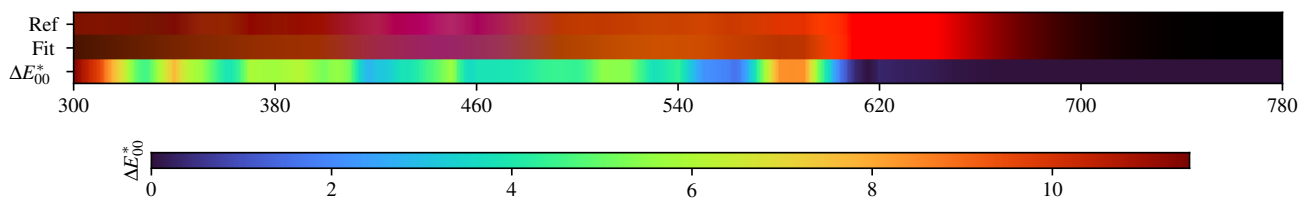
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.87$	$\Delta E = 2.24$	$\Delta E = 1.41$	$\Delta E = 1.96$	$\Delta E = 0.91$	$\Delta E = 0.98$	$\Delta E = 1.22$	$\Delta E = 2.26$	$\Delta E = 1.31$	$\Delta E = 1.68$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.71$	$\Delta E = 2.45$	$\Delta E = 1.94$	$\Delta E = 1.35$	$\Delta E = 2.58$	$\Delta E = 1.31$	$\Delta E = 1.35$	$\Delta E = 3.33$	$\Delta E = 1.27$	$\Delta E = 0.78$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.56$	$\Delta E = 2.77$	$\Delta E = 2.39$	$\Delta E = 0.99$	$\Delta E = 1.33$	$\Delta E = 0.99$	$\Delta E = 1.01$	$\Delta E = 0.64$	$\Delta E = 1.14$	$\Delta E = 0.54$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.74$	$\Delta E = 2.26$	$\Delta E = 1.70$	$\Delta E = 1.11$	$\Delta E = 1.59$	$\Delta E = 0.78$	$\Delta E = 0.92$	$\Delta E = 1.14$	$\Delta E = 0.98$	$\Delta E = 0.94$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 2.01$	$\Delta E = 1.77$	$\Delta E = 1.61$	$\Delta E = 0.79$	$\Delta E = 1.28$	$\Delta E = 0.99$	$\Delta E = 1.47$	$\Delta E = 1.50$	$\Delta E = 1.14$	$\Delta E = 1.53$

HERPIRED - Weighted Expectation-Maximization - 4 Gaussians



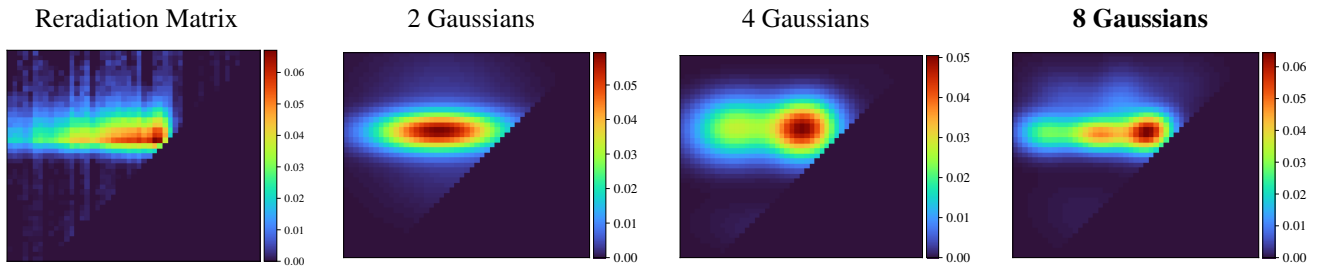
Fitted Material Under Monochromatic Illumination



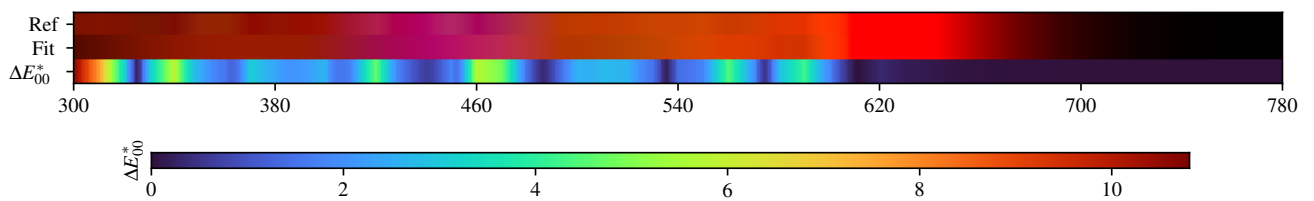
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.31$	$\Delta E = 2.21$	$\Delta E = 2.22$	$\Delta E = 2.09$	$\Delta E = 1.16$	$\Delta E = 1.57$	$\Delta E = 1.66$	$\Delta E = 2.06$	$\Delta E = 2.03$	$\Delta E = 2.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.88$	$\Delta E = 2.32$	$\Delta E = 2.19$	$\Delta E = 1.76$	$\Delta E = 2.18$	$\Delta E = 1.72$	$\Delta E = 1.74$	$\Delta E = 2.96$	$\Delta E = 1.52$	$\Delta E = 1.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.16$	$\Delta E = 2.49$	$\Delta E = 2.20$	$\Delta E = 1.67$	$\Delta E = 1.95$	$\Delta E = 1.13$	$\Delta E = 1.34$	$\Delta E = 0.66$	$\Delta E = 1.57$	$\Delta E = 0.96$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.97$	$\Delta E = 2.15$	$\Delta E = 2.42$	$\Delta E = 1.66$	$\Delta E = 2.33$	$\Delta E = 1.39$	$\Delta E = 1.58$	$\Delta E = 1.70$	$\Delta E = 1.80$	$\Delta E = 1.36$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 2.10$	$\Delta E = 2.39$	$\Delta E = 2.25$	$\Delta E = 1.42$	$\Delta E = 1.21$	$\Delta E = 1.56$	$\Delta E = 1.72$	$\Delta E = 2.39$	$\Delta E = 1.98$	$\Delta E = 1.80$

HERPIRED - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.05$	$\Delta E = 0.21$	$\Delta E = 0.14$	$\Delta E = 0.04$	$\Delta E = 0.19$	$\Delta E = 0.03$	$\Delta E = 0.11$	$\Delta E = 0.43$	$\Delta E = 0.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.26$	$\Delta E = 0.13$	$\Delta E = 0.35$	$\Delta E = 0.17$	$\Delta E = 0.23$	$\Delta E = 0.65$	$\Delta E = 0.20$	$\Delta E = 0.05$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.32$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.06$	$\Delta E = 0.29$	$\Delta E = 0.58$	$\Delta E = 0.16$	$\Delta E = 0.20$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.36$	$\Delta E = 0.16$	$\Delta E = 0.34$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.06$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.26$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.80$	$\Delta E = 0.07$	$\Delta E = 0.29$

HERPIRED - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.069238	0.063626	0.060779	0.058852	0.059635	0.058629	0.065443	0.072038	0.071298	0.071283	0.058356
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.043874	0.036125	0.030687	0.028081	0.026546	0.025568	0.028287	0.024423	0.033863	0.047431	0.094586
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.278055	0.586952	0.784498	0.856836	0.877960	0.890854	0.898382	0.899770	0.901871	0.904170	0.906309
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.909169	0.905770	0.914117	0.914751	0.914073	0.918359	0.912301	0.915464			

2 Gaussians

Scaling factor: 1012.750963842249

Gaussians:

Weight	Mean		Covariance			
0.266641252	500.922935376	636.635480354	10012.734772861	-674.806297453	-674.806297453	8805.858260909
0.733358748	483.379317335	627.327673659	7253.128559542	67.066715228	67.066715228	631.961525843

4 Gaussians

Scaling factor: 970.6215775466255

Gaussians:

Weight	Mean		Covariance			
0.545051977	542.949345940	634.648206569	2024.503918535	83.168547767	83.168547767	1446.155619749
0.409948384	404.951575937	635.990542887	3302.277218779	136.025669805	136.025669805	1646.164259616
0.021935311	473.978131930	431.312581158	7533.631172432	-764.119863280	-764.119863280	1345.936312108
0.023064329	681.374857777	594.380561917	3759.546479222	-896.210489793	-896.210489793	17956.594873172

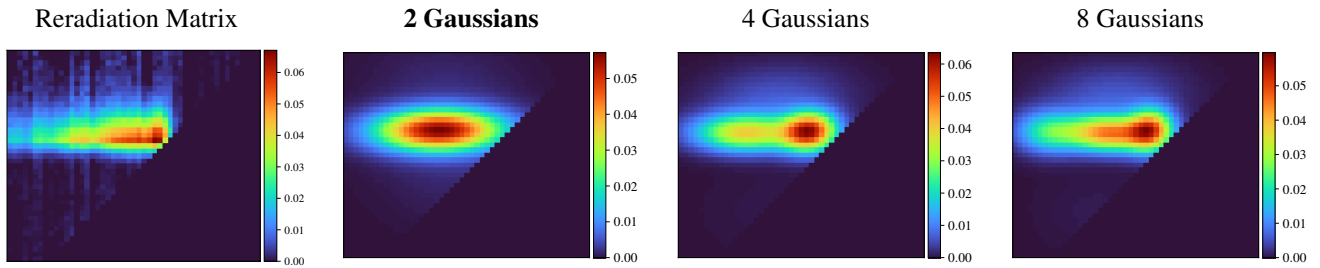
8 Gaussians

Scaling factor: 955.2346039846407

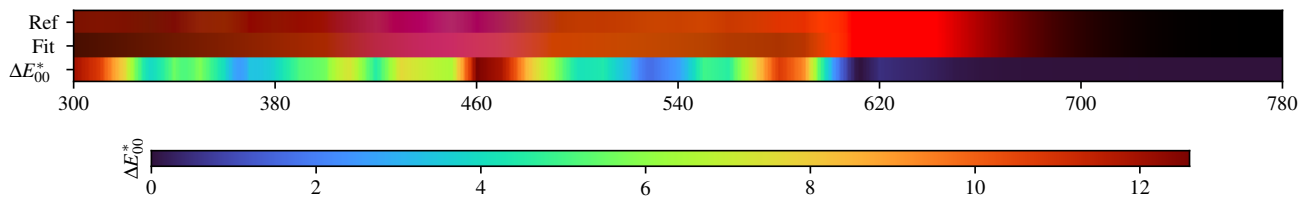
Gaussians:

Weight	Mean		Covariance			
0.060523849	570.987438305	693.328447162	4839.992223130	1177.588274853	1177.588274853	2195.825226330
0.255234588	466.518458926	620.727191987	1786.349387190	-28.867715846	-28.867715846	458.314546966
0.018414326	668.850682311	493.522126123	4349.640406596	1111.735674607	1111.735674607	7157.996091450
0.024877208	446.845066791	455.976221872	5424.319737808	-1008.808462999	-1008.808462999	2843.350297985
0.092216054	414.460172185	676.702839122	2839.687466673	-549.080637212	-549.080637212	1884.123984538
0.301390862	566.003056868	625.341114296	919.843705559	84.316974864	84.316974864	641.018027839
0.088680023	511.299702759	667.809419699	1081.286818548	-95.631217237	-95.631217237	2323.430050407
0.158663089	358.270930615	623.257452109	1388.643280361	-48.226754596	-48.226754596	632.223428846

HERPIRED - Weighted variational Bayesian inference - 2 Gaussians



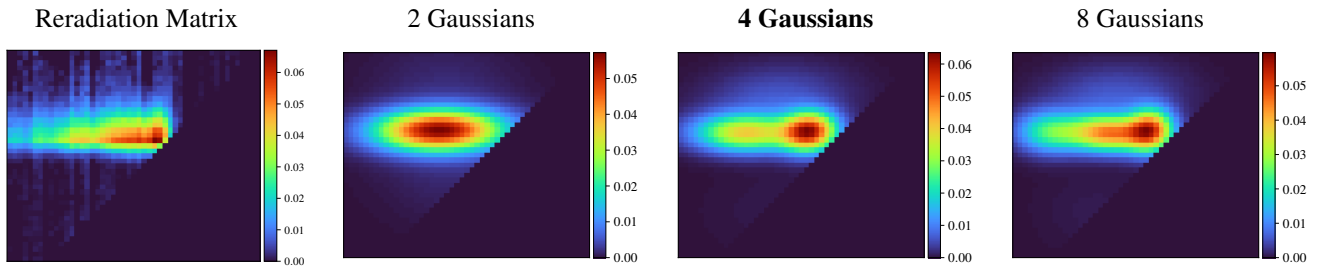
Fitted Material Under Monochromatic Illumination



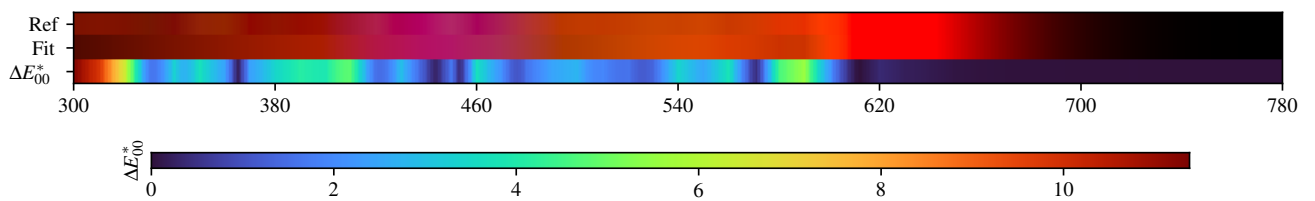
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.94$	$\Delta E = 2.06$	$\Delta E = 1.52$	$\Delta E = 1.79$	$\Delta E = 1.00$	$\Delta E = 0.94$	$\Delta E = 1.12$	$\Delta E = 2.07$	$\Delta E = 1.28$	$\Delta E = 1.54$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.57$	$\Delta E = 2.25$	$\Delta E = 2.08$	$\Delta E = 1.24$	$\Delta E = 2.70$	$\Delta E = 1.20$	$\Delta E = 1.24$	$\Delta E = 3.45$	$\Delta E = 1.37$	$\Delta E = 0.87$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.35$	$\Delta E = 2.56$	$\Delta E = 2.52$	$\Delta E = 0.99$	$\Delta E = 1.44$	$\Delta E = 1.09$	$\Delta E = 1.11$	$\Delta E = 0.72$	$\Delta E = 1.25$	$\Delta E = 0.51$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.60$	$\Delta E = 2.08$	$\Delta E = 1.60$	$\Delta E = 1.04$	$\Delta E = 1.49$	$\Delta E = 0.83$	$\Delta E = 0.91$	$\Delta E = 1.21$	$\Delta E = 1.01$	$\Delta E = 0.96$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.84$	$\Delta E = 1.64$	$\Delta E = 1.75$	$\Delta E = 0.82$	$\Delta E = 1.38$	$\Delta E = 0.94$	$\Delta E = 1.34$	$\Delta E = 1.55$	$\Delta E = 1.10$	$\Delta E = 1.43$

HERPIRED - Weighted variational Bayesian inference - 4 Gaussians



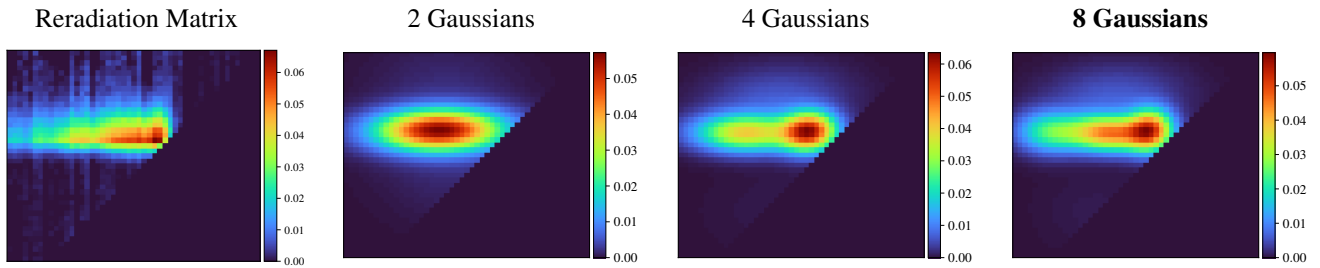
Fitted Material Under Monochromatic Illumination



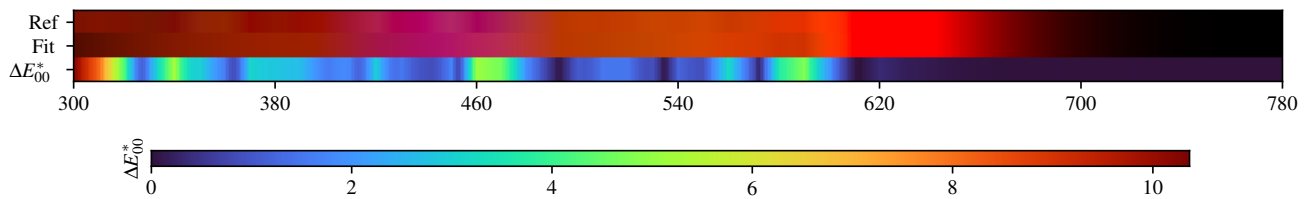
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.27$	$\Delta E = 0.59$	$\Delta E = 0.42$	$\Delta E = 0.47$	$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.33$	$\Delta E = 0.50$	$\Delta E = 0.49$	$\Delta E = 0.39$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.46$	$\Delta E = 0.63$	$\Delta E = 0.48$	$\Delta E = 0.35$	$\Delta E = 0.65$	$\Delta E = 0.35$	$\Delta E = 0.63$	$\Delta E = 1.28$	$\Delta E = 0.36$	$\Delta E = 0.21$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.61$	$\Delta E = 0.71$	$\Delta E = 0.58$	$\Delta E = 0.32$	$\Delta E = 0.41$	$\Delta E = 0.23$	$\Delta E = 0.39$	$\Delta E = 0.53$	$\Delta E = 0.33$	$\Delta E = 0.20$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.48$	$\Delta E = 0.69$	$\Delta E = 0.47$	$\Delta E = 0.55$	$\Delta E = 0.44$	$\Delta E = 0.42$	$\Delta E = 0.41$	$\Delta E = 0.43$	$\Delta E = 0.30$	$\Delta E = 0.43$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.54$	$\Delta E = 0.46$	$\Delta E = 0.40$	$\Delta E = 0.44$	$\Delta E = 0.27$	$\Delta E = 0.54$	$\Delta E = 0.37$	$\Delta E = 0.67$	$\Delta E = 0.33$	$\Delta E = 0.53$

HERPIRED - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.41$	$\Delta E = 0.41$	$\Delta E = 0.31$	$\Delta E = 0.18$	$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.35$	$\Delta E = 0.48$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.29$	$\Delta E = 0.45$	$\Delta E = 0.51$	$\Delta E = 0.25$	$\Delta E = 0.64$	$\Delta E = 0.25$	$\Delta E = 0.29$	$\Delta E = 0.99$	$\Delta E = 0.37$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.39$	$\Delta E = 0.52$	$\Delta E = 0.61$	$\Delta E = 0.26$	$\Delta E = 0.40$	$\Delta E = 0.20$	$\Delta E = 0.35$	$\Delta E = 0.41$	$\Delta E = 0.33$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.33$	$\Delta E = 0.42$	$\Delta E = 0.34$	$\Delta E = 0.25$	$\Delta E = 0.34$	$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.45$	$\Delta E = 0.30$	$\Delta E = 0.37$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.37$	$\Delta E = 0.34$	$\Delta E = 0.42$	$\Delta E = 0.18$	$\Delta E = 0.35$	$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.82$	$\Delta E = 0.21$	$\Delta E = 0.36$

HERPIRED - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.069238	0.063626	0.060779	0.058852	0.059635	0.058629	0.065443	0.072038	0.071298	0.071283	0.058356
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.043874	0.036125	0.030687	0.028081	0.026546	0.025568	0.028287	0.024423	0.033863	0.047431	0.094586
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.278055	0.586952	0.784498	0.856836	0.877960	0.890854	0.898382	0.899770	0.901871	0.904170	0.906309
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.909169	0.905770	0.914117	0.914751	0.914073	0.918359	0.912301	0.915464			

2 Gaussians max

Scaling factor: 1011.3207287202681

Gaussians:

Weight	Mean		Covariance			
0.206165360	504.200625951	633.177685549	10645.036617556	-805.733763679	-805.733763679	10821.862516698
0.793834640	483.932887945	628.872121205	7294.667272476	64.407909439	64.407909439	759.824117311

4 Gaussians max

Scaling factor: 969.8506258434423

Gaussians:

Weight	Mean		Covariance			
0.043482319	530.669789668	470.419207831	15476.875570240	165.876148920	165.876148920	4476.468567335
0.427509637	429.094916836	623.386981704	4787.040744411	-30.131896987	-30.131896987	616.333176028
0.345833387	556.426746013	626.314426499	1339.093858798	58.689326841	58.689326841	709.493464059
0.183174658	487.148891860	688.373836187	9229.260226713	585.417560787	585.417560787	2117.238200758

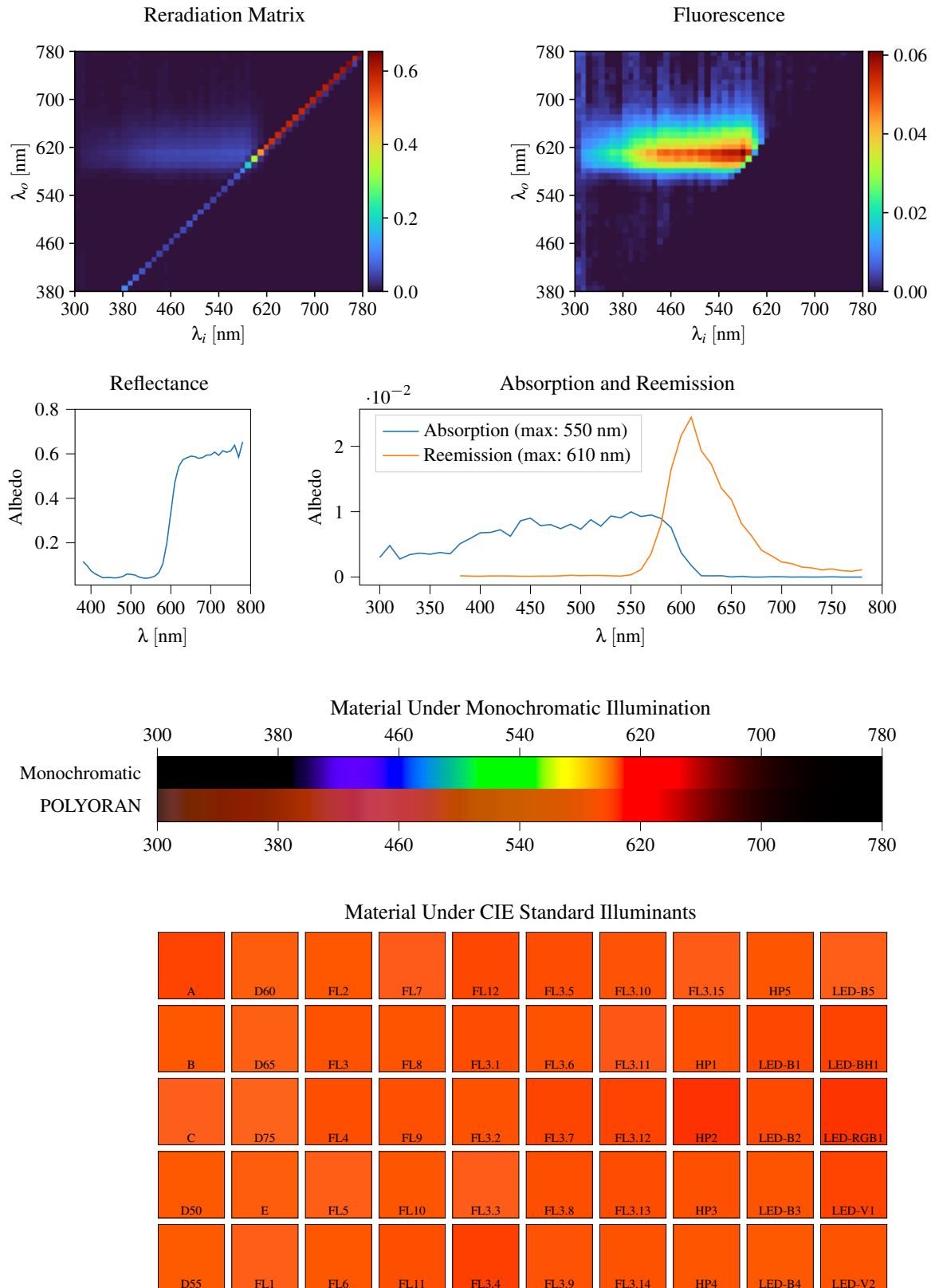
8 Gaussians max

Scaling factor: 966.9927202102126

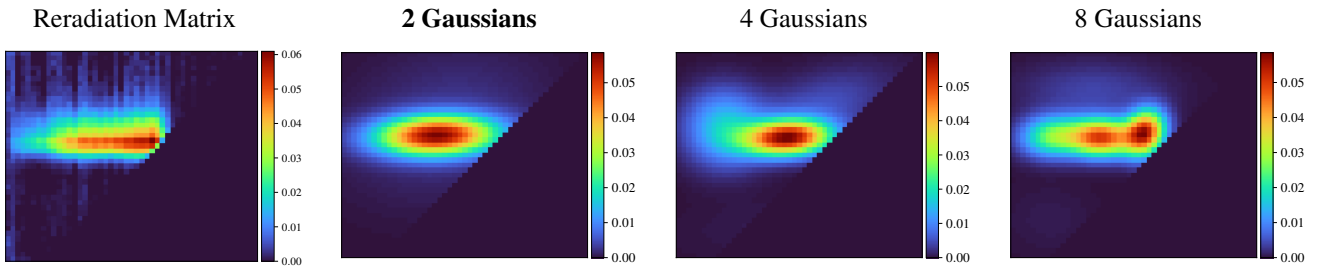
Gaussians:

Weight	Mean		Covariance			
0.027876353	462.443670459	462.788706787	7127.837356593	-590.475082926	-590.475082926	3934.991209508
0.017042942	655.752538219	497.578663605	6687.909216132	-800.602108410	-800.602108410	7033.193277848
0.169097525	366.595151522	624.885254510	1970.228363374	-41.056525092	-41.056525092	787.439456680
0.233757480	569.131585811	629.254340542	888.873387497	34.998001948	34.998001948	795.990397300
0.383454000	486.392654190	622.781227521	3146.108978900	-69.410941959	-69.410941959	588.779817090
0.167199135	490.541754614	692.053753820	8682.792990813	517.084804666	517.084804666	2045.931043393

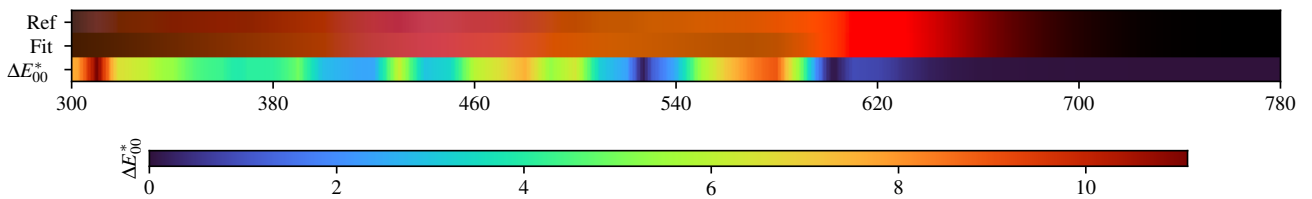
3.9. POLYORAN



POLYORAN - Weighted Expectation-Maximization - 2 Gaussians



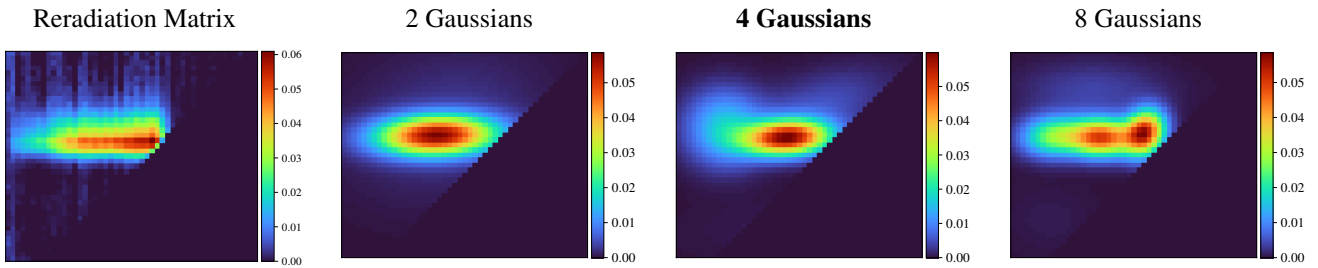
Fitted Material Under Monochromatic Illumination



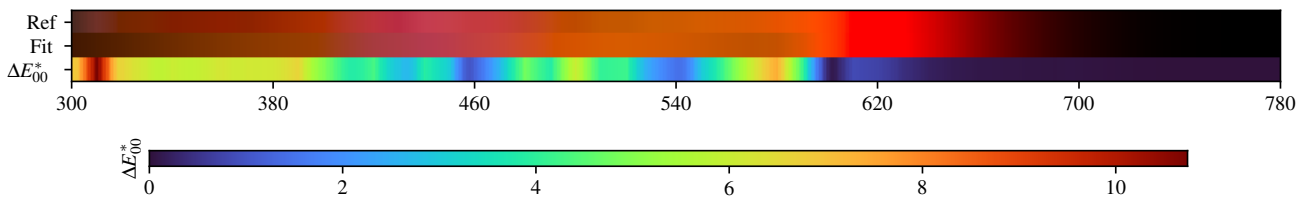
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.72$	$\Delta E = 0.91$	$\Delta E = 1.28$	$\Delta E = 0.70$	$\Delta E = 0.78$	$\Delta E = 0.41$	$\Delta E = 0.26$	$\Delta E = 1.01$	$\Delta E = 0.55$	$\Delta E = 0.37$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.61$	$\Delta E = 1.03$	$\Delta E = 1.85$	$\Delta E = 0.45$	$\Delta E = 2.30$	$\Delta E = 0.49$	$\Delta E = 0.14$	$\Delta E = 2.45$	$\Delta E = 1.19$	$\Delta E = 0.92$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.07$	$\Delta E = 1.23$	$\Delta E = 2.21$	$\Delta E = 0.59$	$\Delta E = 1.22$	$\Delta E = 0.75$	$\Delta E = 0.77$	$\Delta E = 1.36$	$\Delta E = 1.09$	$\Delta E = 0.06$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.63$	$\Delta E = 1.06$	$\Delta E = 0.68$	$\Delta E = 0.21$	$\Delta E = 0.68$	$\Delta E = 0.43$	$\Delta E = 0.41$	$\Delta E = 0.65$	$\Delta E = 0.67$	$\Delta E = 0.51$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.78$	$\Delta E = 0.66$	$\Delta E = 1.56$	$\Delta E = 0.43$	$\Delta E = 1.23$	$\Delta E = 0.15$	$\Delta E = 0.70$	$\Delta E = 0.88$	$\Delta E = 0.67$	$\Delta E = 0.47$

POLYORAN - Weighted Expectation-Maximization - 4 Gaussians



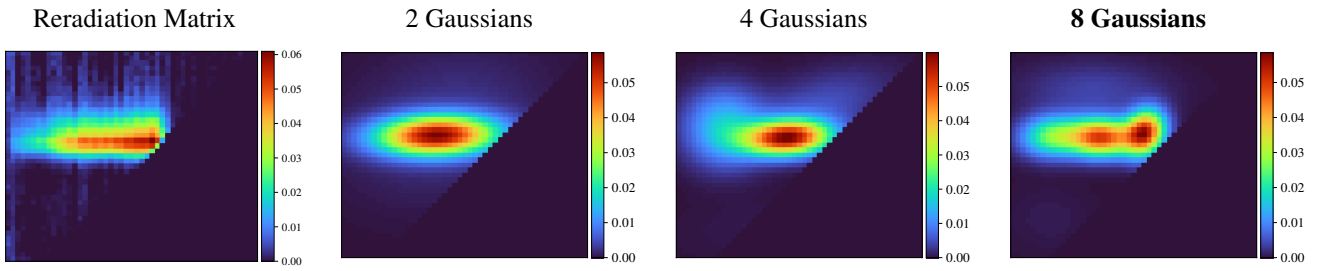
Fitted Material Under Monochromatic Illumination



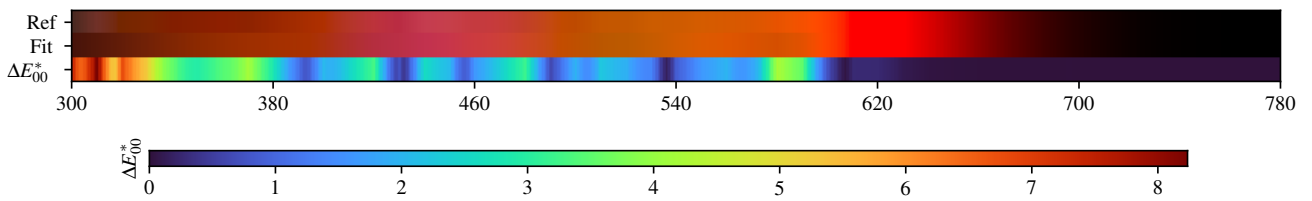
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.58$	$\Delta E = 0.73$	$\Delta E = 1.38$	$\Delta E = 0.63$	$\Delta E = 0.56$	$\Delta E = 0.41$	$\Delta E = 0.25$	$\Delta E = 0.59$	$\Delta E = 0.79$	$\Delta E = 0.89$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.54$	$\Delta E = 0.83$	$\Delta E = 1.69$	$\Delta E = 0.40$	$\Delta E = 1.86$	$\Delta E = 0.33$	$\Delta E = 0.40$	$\Delta E = 2.02$	$\Delta E = 0.96$	$\Delta E = 0.74$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.69$	$\Delta E = 0.99$	$\Delta E = 1.89$	$\Delta E = 0.65$	$\Delta E = 1.19$	$\Delta E = 0.48$	$\Delta E = 0.48$	$\Delta E = 1.05$	$\Delta E = 0.94$	$\Delta E = 0.32$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.55$	$\Delta E = 0.93$	$\Delta E = 0.95$	$\Delta E = 0.50$	$\Delta E = 0.88$	$\Delta E = 0.43$	$\Delta E = 0.27$	$\Delta E = 0.66$	$\Delta E = 0.83$	$\Delta E = 0.57$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.64$	$\Delta E = 0.88$	$\Delta E = 1.53$	$\Delta E = 0.51$	$\Delta E = 0.82$	$\Delta E = 0.40$	$\Delta E = 0.33$	$\Delta E = 1.26$	$\Delta E = 1.07$	$\Delta E = 0.46$

POLYORAN - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.50$	$\Delta E = 0.47$	$\Delta E = 0.75$	$\Delta E = 0.46$	$\Delta E = 0.20$	$\Delta E = 0.45$	$\Delta E = 0.19$	$\Delta E = 0.29$	$\Delta E = 0.65$	$\Delta E = 0.58$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.42$	$\Delta E = 0.49$	$\Delta E = 0.86$	$\Delta E = 0.41$	$\Delta E = 0.95$	$\Delta E = 0.39$	$\Delta E = 0.25$	$\Delta E = 1.08$	$\Delta E = 0.62$	$\Delta E = 0.51$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.41$	$\Delta E = 0.53$	$\Delta E = 0.94$	$\Delta E = 0.51$	$\Delta E = 0.71$	$\Delta E = 0.18$	$\Delta E = 0.49$	$\Delta E = 0.40$	$\Delta E = 0.60$	$\Delta E = 0.32$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.44$	$\Delta E = 0.45$	$\Delta E = 0.57$	$\Delta E = 0.24$	$\Delta E = 0.56$	$\Delta E = 0.20$	$\Delta E = 0.37$	$\Delta E = 0.53$	$\Delta E = 0.61$	$\Delta E = 0.63$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.45$	$\Delta E = 0.56$	$\Delta E = 0.78$	$\Delta E = 0.21$	$\Delta E = 0.61$	$\Delta E = 0.23$	$\Delta E = 0.21$	$\Delta E = 0.94$	$\Delta E = 0.64$	$\Delta E = 0.55$

POLYORAN - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.115502	0.097584	0.074036	0.060732	0.051874	0.042722	0.043855	0.043649	0.042030	0.043932	0.049003
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.059577	0.058065	0.055253	0.046358	0.041757	0.040589	0.043996	0.050148	0.066018	0.105552	0.198148
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.335554	0.470128	0.543347	0.573141	0.582037	0.589609	0.587533	0.579798	0.583695	0.594372	0.595064
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.607851	0.593262	0.613876	0.607080	0.612758	0.638554	0.585321	0.653530			

2 Gaussians

Scaling factor: 982.2959079315923

Gaussians:

Weight	Mean		Covariance			
0.252352729	502.722282843	641.472654044	16947.527078150	2385.413144250	2385.413144250	9680.318525290
0.747647271	483.965012947	618.759979740	6288.261193840	170.103028448	170.103028448	704.937512260

4 Gaussians

Scaling factor: 943.2253887717861

Gaussians:

Weight	Mean		Covariance			
0.285356249	389.575160361	634.802902884	2710.312034670	-10.125644562	-10.125644562	2528.034550060
0.172564977	571.345556989	670.036372134	9583.079661535	2643.931425616	2643.931425616	2921.196945558
0.029655448	482.862349308	435.445864202	18126.956848701	1131.694555403	1131.694555403	1922.216949296
0.512423326	516.403155477	614.352314938	3323.590099837	148.168100547	148.168100547	554.085829154

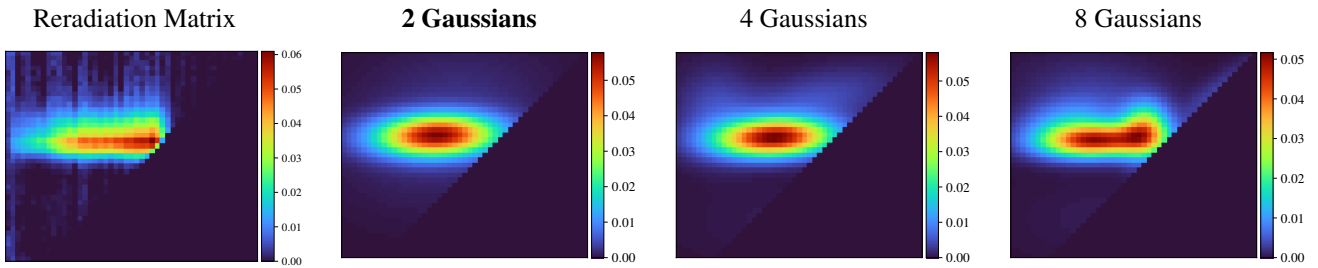
8 Gaussians

Scaling factor: 962.4522656291662

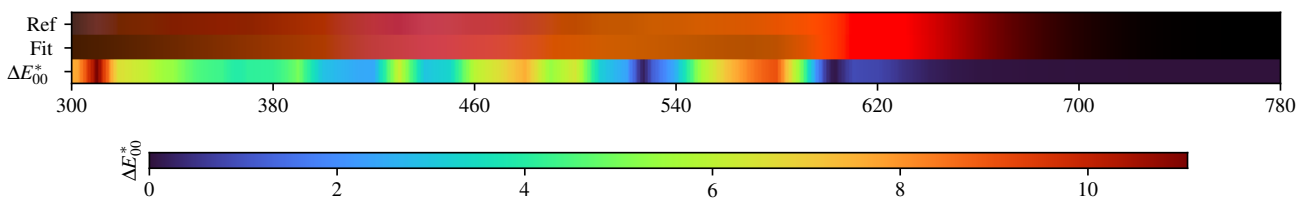
Gaussians:

Weight	Mean		Covariance			
0.106451238	460.259438697	707.135749923	9721.224798139	-43.980230637	-43.980230637	1592.380058835
0.340504625	476.601293073	614.733167144	1804.645802419	-0.100554330	-0.100554330	638.628618581
0.020006281	373.506211450	452.263009288	4766.926341281	-99.833081799	-99.833081799	2787.454565450
0.005787657	721.425330824	527.015011452	1893.532205221	929.155996752	929.155996752	13197.812586763
0.056010059	667.497801203	657.497801203	6637.789243544	6637.789242544	6637.789242544	6637.789243544
0.009386961	579.250125925	448.553139204	1505.429497890	252.726815197	252.726815197	2672.145158668
0.200781415	380.026108331	616.829882239	1877.653913778	47.640245868	47.640245868	748.501552415
0.261071765	561.701217619	624.017392636	693.370977365	124.055166519	124.055166519	879.463844485

POLYORAN - Weighted variational Bayesian inference - 2 Gaussians



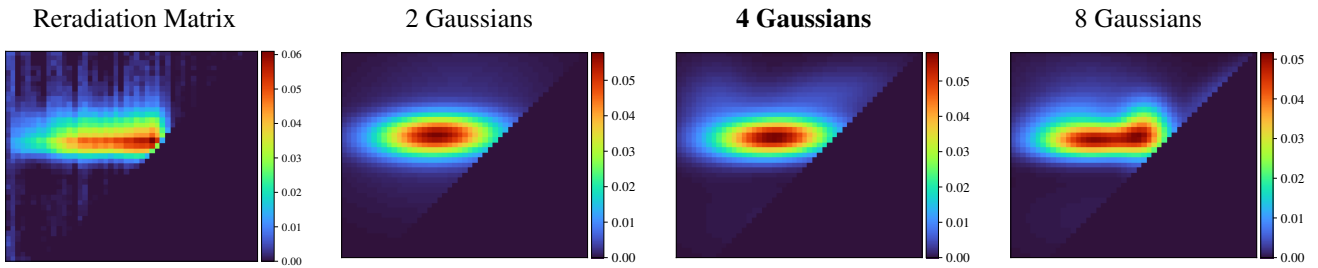
Fitted Material Under Monochromatic Illumination



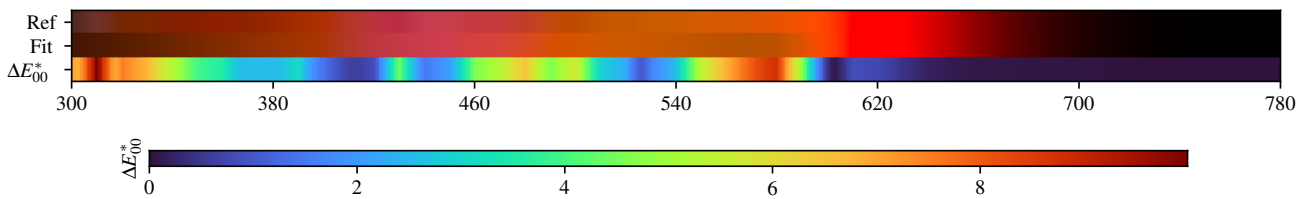
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.75$	$\Delta E = 1.00$	$\Delta E = 1.33$	$\Delta E = 0.80$	$\Delta E = 0.78$	$\Delta E = 0.49$	$\Delta E = 0.34$	$\Delta E = 1.09$	$\Delta E = 0.64$	$\Delta E = 0.49$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.70$	$\Delta E = 1.12$	$\Delta E = 1.88$	$\Delta E = 0.55$	$\Delta E = 2.33$	$\Delta E = 0.58$	$\Delta E = 0.24$	$\Delta E = 2.48$	$\Delta E = 1.21$	$\Delta E = 0.92$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.15$	$\Delta E = 1.32$	$\Delta E = 2.23$	$\Delta E = 0.65$	$\Delta E = 1.26$	$\Delta E = 0.74$	$\Delta E = 0.79$	$\Delta E = 1.36$	$\Delta E = 1.11$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.73$	$\Delta E = 1.14$	$\Delta E = 0.80$	$\Delta E = 0.28$	$\Delta E = 0.80$	$\Delta E = 0.43$	$\Delta E = 0.49$	$\Delta E = 0.69$	$\Delta E = 0.72$	$\Delta E = 0.55$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.87$	$\Delta E = 0.78$	$\Delta E = 1.60$	$\Delta E = 0.44$	$\Delta E = 1.24$	$\Delta E = 0.19$	$\Delta E = 0.76$	$\Delta E = 0.95$	$\Delta E = 0.73$	$\Delta E = 0.56$

POLYORAN - Weighted variational Bayesian inference - 4 Gaussians



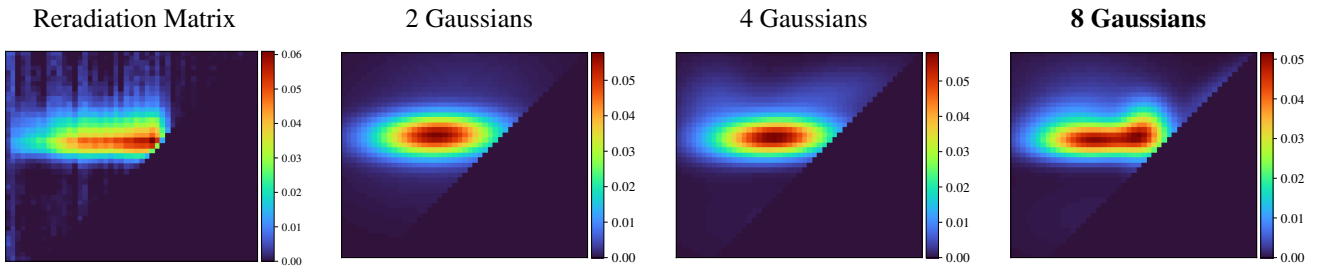
Fitted Material Under Monochromatic Illumination



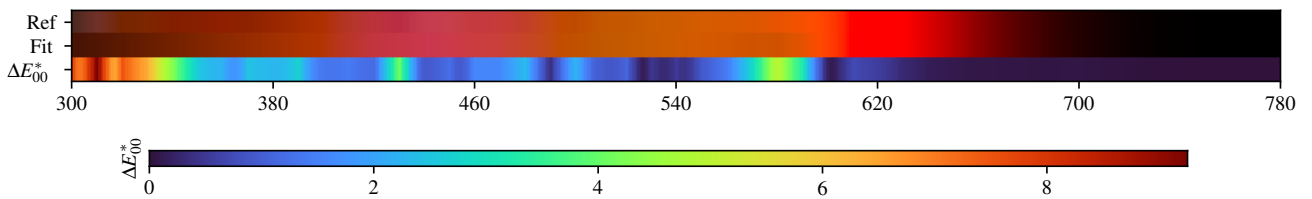
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.93$	$\Delta E = 0.16$	$\Delta E = 1.48$	$\Delta E = 0.18$	$\Delta E = 1.00$	$\Delta E = 0.48$	$\Delta E = 0.30$	$\Delta E = 0.23$	$\Delta E = 0.61$	$\Delta E = 0.58$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.21$	$\Delta E = 0.19$	$\Delta E = 2.01$	$\Delta E = 0.33$	$\Delta E = 2.37$	$\Delta E = 0.24$	$\Delta E = 0.48$	$\Delta E = 2.45$	$\Delta E = 1.34$	$\Delta E = 1.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.24$	$\Delta E = 0.26$	$\Delta E = 2.31$	$\Delta E = 0.78$	$\Delta E = 1.41$	$\Delta E = 0.94$	$\Delta E = 0.91$	$\Delta E = 1.52$	$\Delta E = 1.27$	$\Delta E = 0.29$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.25$	$\Delta E = 0.25$	$\Delta E = 0.65$	$\Delta E = 0.63$	$\Delta E = 0.64$	$\Delta E = 0.78$	$\Delta E = 0.43$	$\Delta E = 0.87$	$\Delta E = 0.93$	$\Delta E = 0.77$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.52$	$\Delta E = 1.75$	$\Delta E = 0.80$	$\Delta E = 1.35$	$\Delta E = 0.60$	$\Delta E = 0.14$	$\Delta E = 1.02$	$\Delta E = 0.99$	$\Delta E = 0.30$

POLYORAN - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.42$	$\Delta E = 0.17$	$\Delta E = 0.69$	$\Delta E = 0.16$	$\Delta E = 0.22$	$\Delta E = 0.32$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.34$	$\Delta E = 0.38$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.89$	$\Delta E = 0.24$	$\Delta E = 1.05$	$\Delta E = 0.25$	$\Delta E = 0.22$	$\Delta E = 1.22$	$\Delta E = 0.62$	$\Delta E = 0.42$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 1.01$	$\Delta E = 0.41$	$\Delta E = 0.67$	$\Delta E = 0.23$	$\Delta E = 0.47$	$\Delta E = 0.47$	$\Delta E = 0.60$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.37$	$\Delta E = 0.18$	$\Delta E = 0.39$	$\Delta E = 0.21$	$\Delta E = 0.35$	$\Delta E = 0.28$	$\Delta E = 0.49$	$\Delta E = 0.33$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.17$	$\Delta E = 0.33$	$\Delta E = 0.77$	$\Delta E = 0.20$	$\Delta E = 0.58$	$\Delta E = 0.22$	$\Delta E = 0.17$	$\Delta E = 0.48$	$\Delta E = 0.50$	$\Delta E = 0.19$

POLYORAN - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.115502	0.097584	0.074036	0.060732	0.051874	0.042722	0.043855	0.043649	0.042030	0.043932	0.049003
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.059577	0.058065	0.055253	0.046358	0.041757	0.040589	0.043996	0.050148	0.066018	0.105552	0.198148
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.335554	0.470128	0.543347	0.573141	0.582037	0.589609	0.587533	0.579798	0.583695	0.594372	0.595064
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.607851	0.593262	0.613876	0.607080	0.612758	0.638554	0.585321	0.653530			

2 Gaussians max

Scaling factor: 982.6491064843832

Gaussians:

Weight	Mean		Covariance			
0.247968805	503.735736937	641.279421237	17022.133142090	2417.019731837	2417.019731837	9818.242174500
0.752031195	483.799009851	618.902489957	6315.095864608	162.324443517	162.324443517	729.677794123

4 Gaussians max

Scaling factor: 956.2313736010639

Gaussians:

Weight	Mean		Covariance			
0.036310324	478.854933859	453.869842344	16981.999446563	879.008467031	879.008467031	3520.755461754
0.103728851	375.213720649	663.582880082	2923.187561573	-70.467280116	-70.467280116	3650.061005521
0.694293465	491.294364966	614.501007924	5803.415464585	191.361171528	191.361171528	610.792285422
0.165667360	551.442765354	678.890466966	12709.797813662	2983.895329685	2983.895329685	2340.992024738

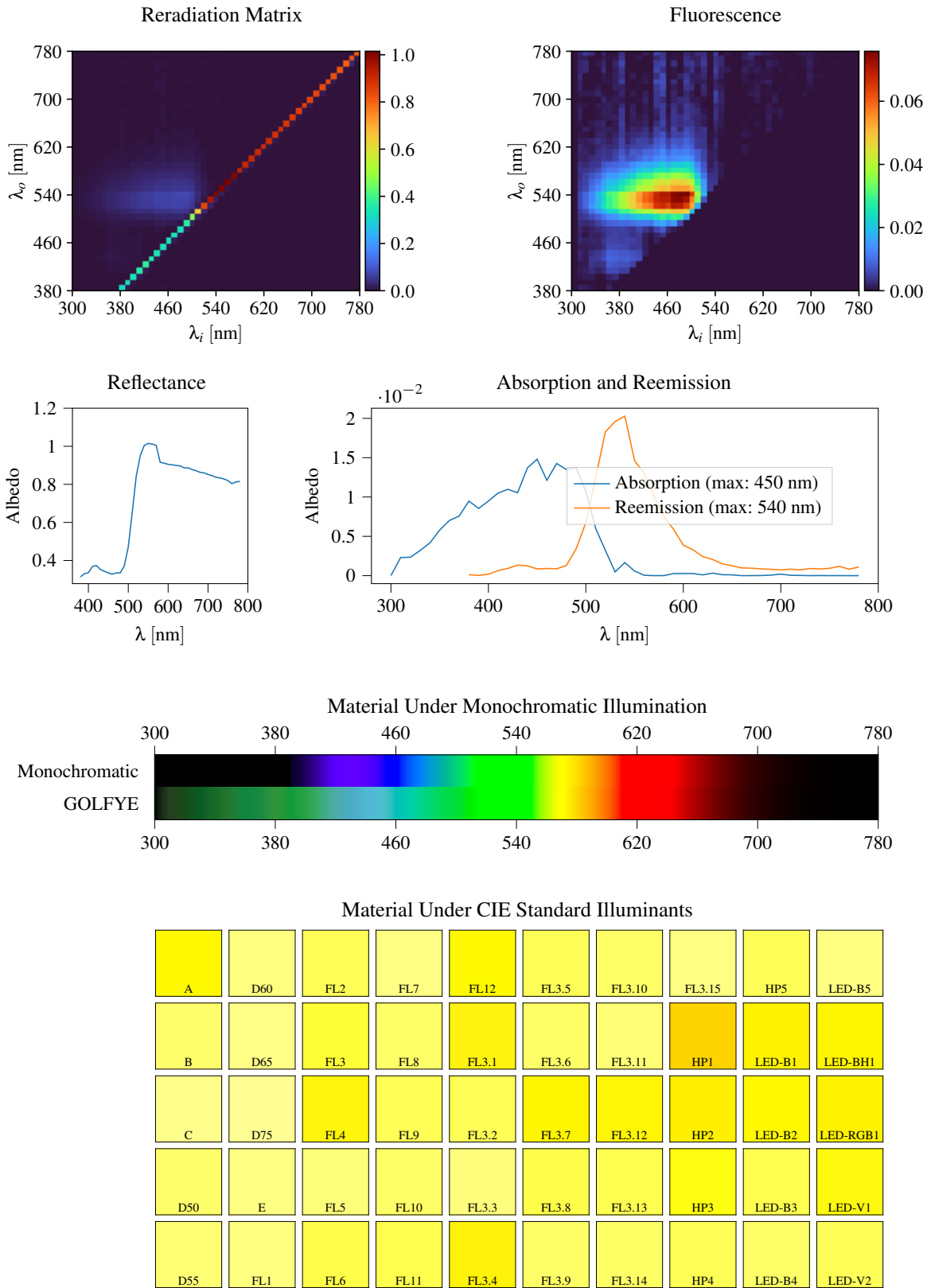
8 Gaussians max

Scaling factor: 956.7766722194855

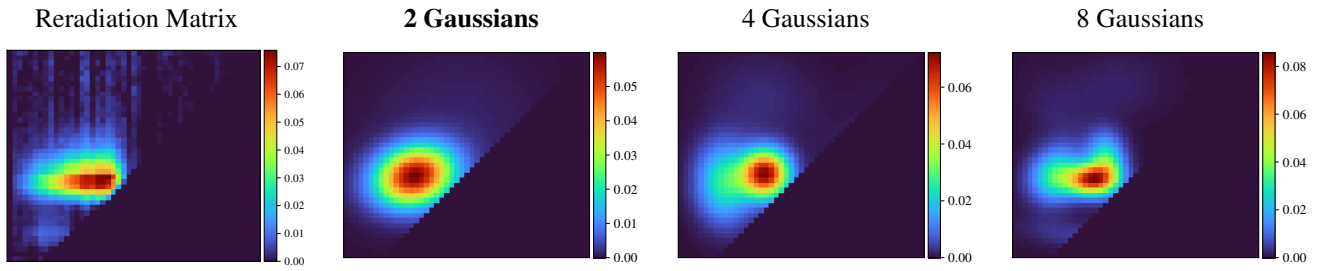
Gaussians:

Weight	Mean		Covariance			
0.038179942	469.804040480	457.641190691	17270.284123501	290.979580567	290.979580567	3695.538612540
0.217696679	560.345843870	628.747571792	965.428566034	60.366174343	60.366174343	1198.315933584
0.179492070	414.457032099	636.570326021	3982.603028820	231.811553890	231.811553890	1121.385761934
0.438371695	470.520894964	608.746795159	5167.275565381	133.301421730	133.301421730	449.330476812
0.085958429	465.723795230	706.941556077	10649.764003524	-647.170825392	-647.170825392	2283.380622708
0.038716742	705.573146823	700.200250786	3770.313286201	2656.346591973	2656.346591973	2617.191679479

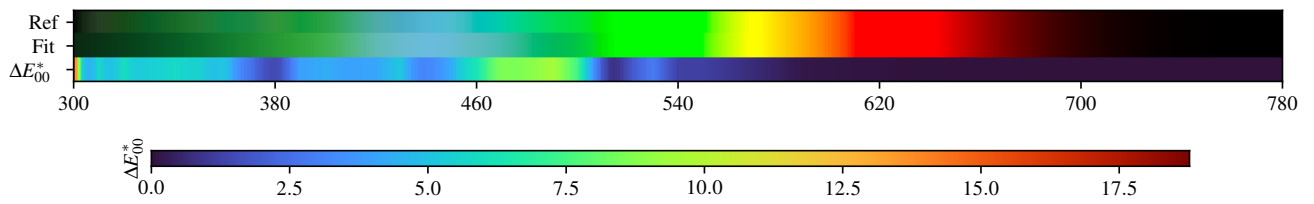
3.10. GOLFYE



GOLFYE - Weighted Expectation-Maximization - 2 Gaussians



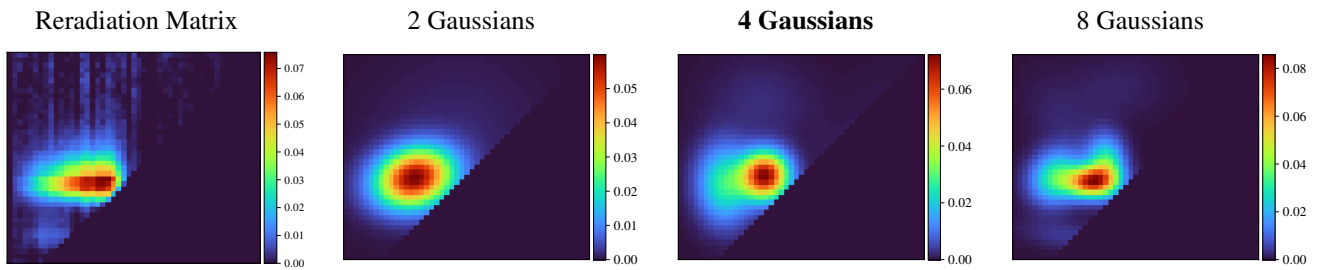
Fitted Material Under Monochromatic Illumination



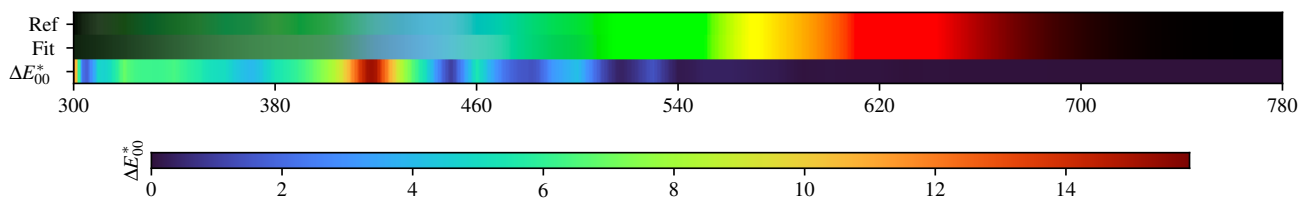
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 1.73$	D60 $\Delta E = 2.37$	FL2 $\Delta E = 1.86$	FL7 $\Delta E = 2.31$	FL12 $\Delta E = 1.32$	FL3.5 $\Delta E = 2.42$	FL3.10 $\Delta E = 2.42$	FL3.15 $\Delta E = 2.52$	HP5 $\Delta E = 2.08$	LED-B5 $\Delta E = 2.18$
B $\Delta E = 2.52$	D65 $\Delta E = 2.34$	FL3 $\Delta E = 1.42$	FL8 $\Delta E = 2.43$	FL3.1 $\Delta E = 0.92$	FL3.6 $\Delta E = 2.52$	FL3.11 $\Delta E = 1.95$	HP1 $\Delta E = 0.97$	LED-B1 $\Delta E = 1.38$	LED-BH1 $\Delta E = 1.06$
C $\Delta E = 2.54$	D75 $\Delta E = 2.30$	FL4 $\Delta E = 1.05$	FL9 $\Delta E = 2.21$	FL3.2 $\Delta E = 1.81$	FL3.7 $\Delta E = 1.20$	FL3.12 $\Delta E = 1.81$	HP2 $\Delta E = 1.30$	LED-B2 $\Delta E = 1.57$	LED-RGB1 $\Delta E = 1.52$
D50 $\Delta E = 2.42$	E $\Delta E = 2.19$	FL5 $\Delta E = 2.07$	FL10 $\Delta E = 2.01$	FL3.3 $\Delta E = 2.05$	FL3.8 $\Delta E = 1.71$	FL3.13 $\Delta E = 2.80$	HP3 $\Delta E = 1.28$	LED-B3 $\Delta E = 2.02$	LED-V1 $\Delta E = 1.63$
D55 $\Delta E = 2.40$	FL1 $\Delta E = 2.20$	FL6 $\Delta E = 1.66$	FL11 $\Delta E = 1.85$	FL3.4 $\Delta E = 1.02$	FL3.9 $\Delta E = 1.91$	FL3.14 $\Delta E = 3.04$	HP4 $\Delta E = 1.43$	LED-B4 $\Delta E = 1.91$	LED-V2 $\Delta E = 2.36$

GOLFYE - Weighted Expectation-Maximization - 4 Gaussians



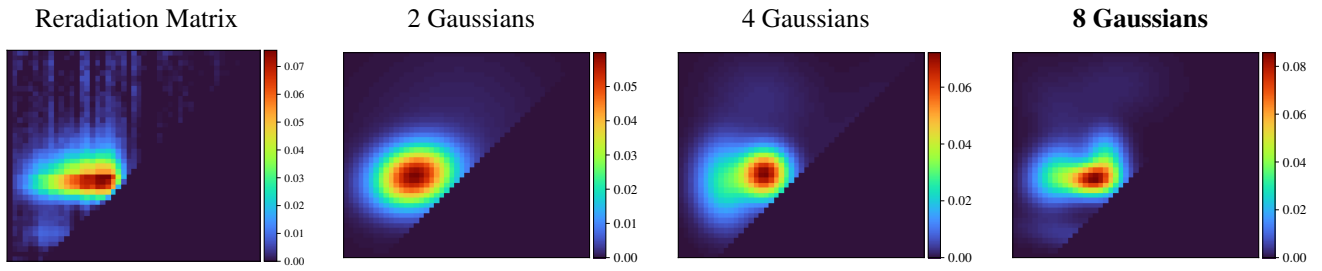
Fitted Material Under Monochromatic Illumination



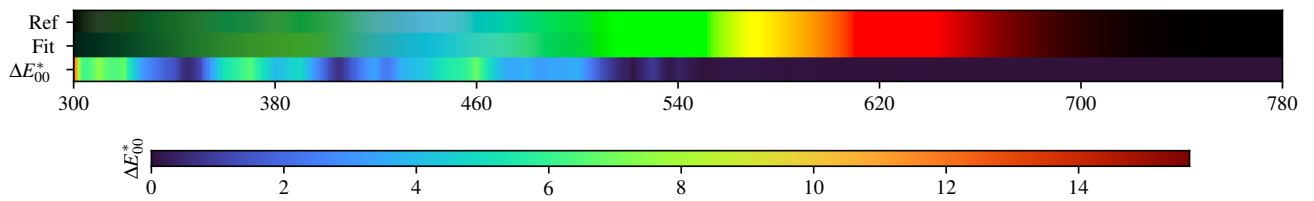
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.75$	$\Delta E = 1.36$	$\Delta E = 0.84$	$\Delta E = 1.03$	$\Delta E = 0.58$	$\Delta E = 0.79$	$\Delta E = 0.73$	$\Delta E = 1.12$	$\Delta E = 1.15$	$\Delta E = 0.54$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.20$	$\Delta E = 1.45$	$\Delta E = 0.72$	$\Delta E = 0.82$	$\Delta E = 0.46$	$\Delta E = 0.78$	$\Delta E = 0.68$	$\Delta E = 0.57$	$\Delta E = 0.32$	$\Delta E = 0.38$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.37$	$\Delta E = 1.59$	$\Delta E = 0.60$	$\Delta E = 0.77$	$\Delta E = 0.77$	$\Delta E = 0.47$	$\Delta E = 0.55$	$\Delta E = 0.58$	$\Delta E = 0.33$	$\Delta E = 0.29$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.18$	$\Delta E = 1.79$	$\Delta E = 0.88$	$\Delta E = 0.72$	$\Delta E = 0.84$	$\Delta E = 0.61$	$\Delta E = 0.74$	$\Delta E = 0.89$	$\Delta E = 0.52$	$\Delta E = 1.51$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.27$	$\Delta E = 0.93$	$\Delta E = 0.75$	$\Delta E = 0.69$	$\Delta E = 0.37$	$\Delta E = 0.67$	$\Delta E = 0.76$	$\Delta E = 1.32$	$\Delta E = 0.47$	$\Delta E = 1.48$

GOLFYE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.21$	D60 $\Delta E = 0.30$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.14$	FL3.5 $\Delta E = 0.33$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.37$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.55$
B $\Delta E = 0.23$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.28$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.38$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.23$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.21$
C $\Delta E = 0.22$	D75 $\Delta E = 0.35$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.21$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.20$	FL3.12 $\Delta E = 0.47$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.30$
D50 $\Delta E = 0.28$	E $\Delta E = 0.39$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.07$	FL3.3 $\Delta E = 0.23$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.62$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.23$	LED-V1 $\Delta E = 0.43$
D55 $\Delta E = 0.29$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.01$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.06$	FL3.14 $\Delta E = 0.70$	HP4 $\Delta E = 0.11$	LED-B4 $\Delta E = 0.57$	LED-V2 $\Delta E = 0.43$

GOLFYE - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.313414	0.330292	0.335773	0.368030	0.373361	0.352791	0.343297	0.334057	0.328179	0.334427	0.334782
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.370980	0.470858	0.653262	0.843527	0.949830	1.004100	1.014750	1.011790	1.004510	0.915901	0.911108
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.904936	0.902908	0.899289	0.896809	0.886676	0.886391	0.878131	0.871600	0.863069	0.860234	0.851935
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.845814	0.837143	0.833778	0.828279	0.819586	0.803581	0.812640	0.815493			

2 Gaussians

Scaling factor: 917.305070513358

Gaussians:

Weight	Mean		Covariance			
0.178537550	503.463372828	612.726236334	14829.932669976	2325.403682263	2325.403682263	14269.604744308
0.821462450	436.080814240	538.434808326	2717.232989032	335.461164117	335.461164117	1577.685764253

4 Gaussians

Scaling factor: 894.1771945841135

Gaussians:

Weight	Mean		Covariance			
0.056527689	643.741603938	589.890828078	7163.930995463	7262.240704522	7262.240704522	16561.181905982
0.084821772	459.938426691	686.924189757	5099.671979443	-175.541505416	-175.541505416	3785.167238864
0.497331394	468.166267307	542.979035111	998.418940664	13.583005905	13.583005905	1015.101346752
0.361319145	387.124051211	525.980446096	1362.946229787	-42.128644788	-42.128644788	2714.381421516

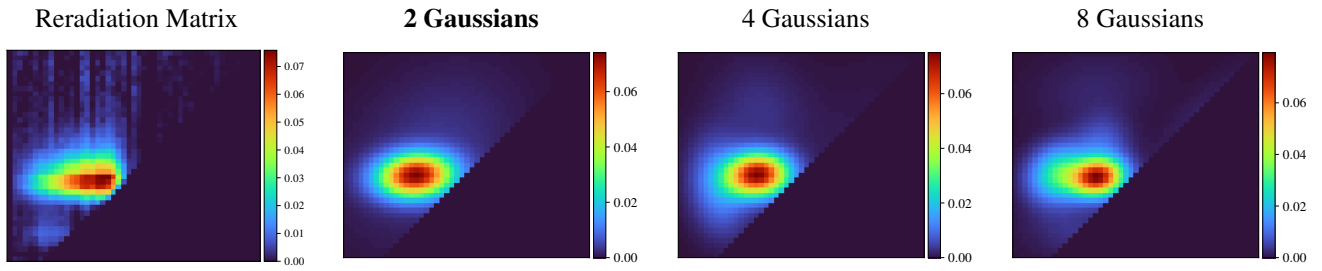
8 Gaussians

Scaling factor: 924.1433532872979

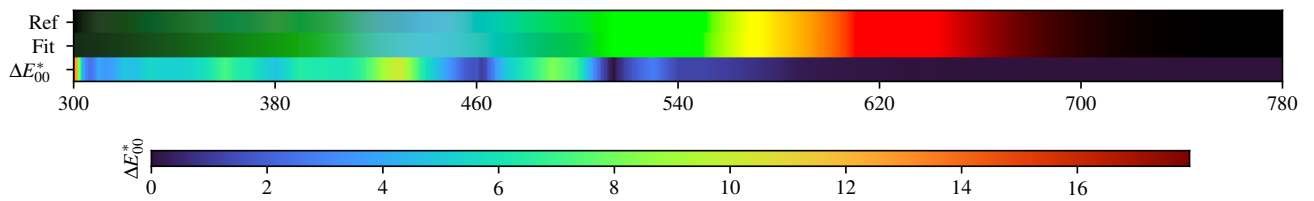
Gaussians:

Weight	Mean		Covariance			
0.053423275	492.184396694	713.886087575	5379.443081995	587.760358432	587.760358432	2193.110296819
0.308459633	452.367467195	531.120448648	985.688701202	25.453898914	25.453898914	411.889266027
0.262309421	381.863236019	539.281514213	1172.199488955	143.936284514	143.936284514	1176.618170838
0.053048399	402.174754465	616.354792854	2493.792629730	-2079.298271540	-2079.298271540	5769.899677083
0.018463049	652.707746555	522.601183992	4380.099817045	1820.087720210	1820.087720210	10707.144474777
0.043172028	406.150314919	423.148508230	4273.914348280	-588.333328564	-588.333328564	503.357636771
0.203769665	481.387088123	565.005999364	607.013361794	-69.122911968	-69.122911968	1345.997204130
0.057354530	577.138044729	567.138044729	12615.790055338	12615.790054338	12615.790054338	12615.790055338

GOLFYE - Weighted variational Bayesian inference - 2 Gaussians



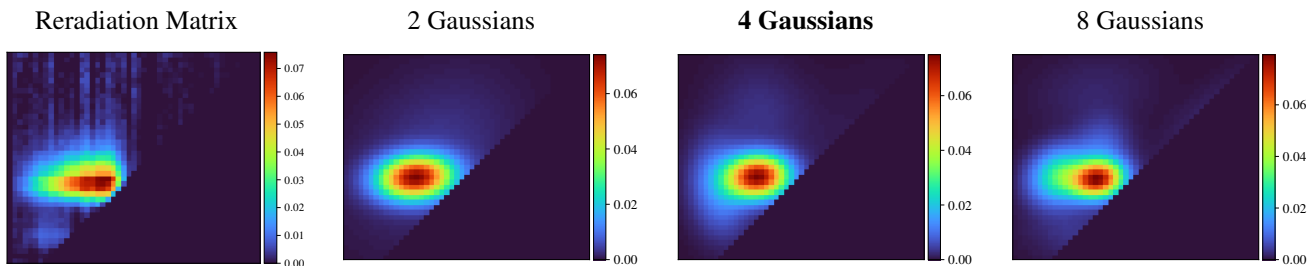
Fitted Material Under Monochromatic Illumination



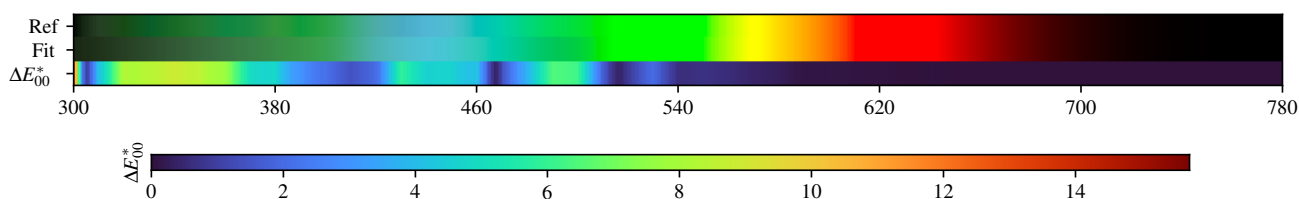
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.60$	D60 $\Delta E = 0.52$	FL2 $\Delta E = 0.61$	FL7 $\Delta E = 0.53$	FL12 $\Delta E = 0.60$	FL3.5 $\Delta E = 0.88$	FL3.10 $\Delta E = 0.90$	FL3.15 $\Delta E = 0.59$	HP5 $\Delta E = 0.43$	LED-B5 $\Delta E = 0.55$
B $\Delta E = 0.57$	D65 $\Delta E = 0.50$	FL3 $\Delta E = 0.54$	FL8 $\Delta E = 0.77$	FL3.1 $\Delta E = 0.48$	FL3.6 $\Delta E = 0.89$	FL3.11 $\Delta E = 0.61$	HP1 $\Delta E = 0.56$	LED-B1 $\Delta E = 0.54$	LED-BH1 $\Delta E = 0.41$
C $\Delta E = 0.43$	D75 $\Delta E = 0.49$	FL4 $\Delta E = 0.45$	FL9 $\Delta E = 0.75$	FL3.2 $\Delta E = 0.65$	FL3.7 $\Delta E = 0.65$	FL3.12 $\Delta E = 0.97$	HP2 $\Delta E = 0.57$	LED-B2 $\Delta E = 0.58$	LED-RGB1 $\Delta E = 0.51$
D50 $\Delta E = 0.61$	E $\Delta E = 0.57$	FL5 $\Delta E = 0.58$	FL10 $\Delta E = 0.66$	FL3.3 $\Delta E = 0.60$	FL3.8 $\Delta E = 0.71$	FL3.13 $\Delta E = 1.38$	HP3 $\Delta E = 0.38$	LED-B3 $\Delta E = 0.56$	LED-V1 $\Delta E = 0.32$
D55 $\Delta E = 0.56$	FL1 $\Delta E = 0.58$	FL6 $\Delta E = 0.61$	FL11 $\Delta E = 0.68$	FL3.4 $\Delta E = 0.46$	FL3.9 $\Delta E = 0.66$	FL3.14 $\Delta E = 1.36$	HP4 $\Delta E = 0.52$	LED-B4 $\Delta E = 0.55$	LED-V2 $\Delta E = 0.48$

GOLFYE - Weighted variational Bayesian inference - 4 Gaussians



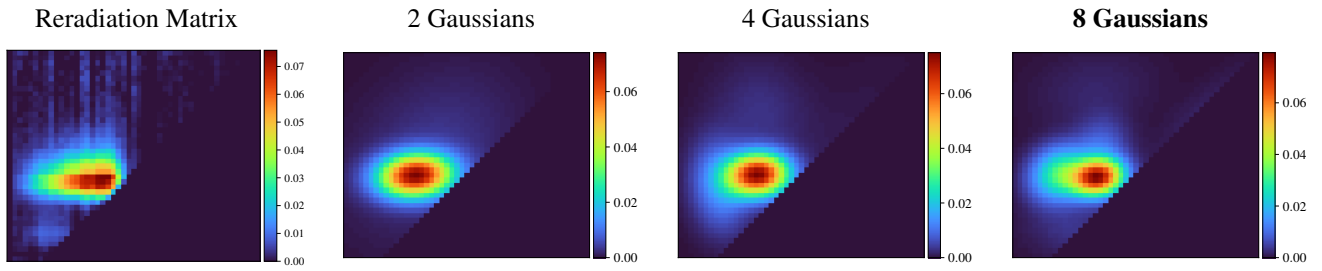
Fitted Material Under Monochromatic Illumination



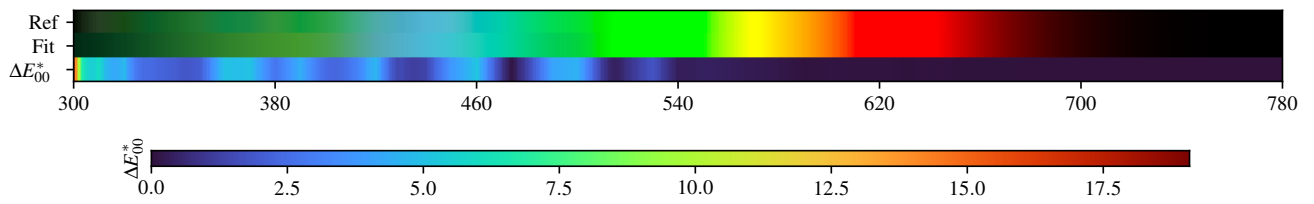
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.42$	D60 $\Delta E = 0.53$	FL2 $\Delta E = 0.30$	FL7 $\Delta E = 0.31$	FL12 $\Delta E = 0.32$	FL3.5 $\Delta E = 0.43$	FL3.10 $\Delta E = 0.35$	FL3.15 $\Delta E = 0.46$	HP5 $\Delta E = 0.30$	LED-B5 $\Delta E = 0.45$
B $\Delta E = 0.41$	D65 $\Delta E = 0.57$	FL3 $\Delta E = 0.28$	FL8 $\Delta E = 0.33$	FL3.1 $\Delta E = 0.26$	FL3.6 $\Delta E = 0.42$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.46$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.34$
C $\Delta E = 0.41$	D75 $\Delta E = 0.64$	FL4 $\Delta E = 0.25$	FL9 $\Delta E = 0.33$	FL3.2 $\Delta E = 0.35$	FL3.7 $\Delta E = 0.36$	FL3.12 $\Delta E = 0.58$	HP2 $\Delta E = 0.35$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.48$	E $\Delta E = 0.66$	FL5 $\Delta E = 0.29$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.30$	FL3.8 $\Delta E = 0.29$	FL3.13 $\Delta E = 0.76$	HP3 $\Delta E = 0.25$	LED-B3 $\Delta E = 0.23$	LED-V1 $\Delta E = 0.52$
D55 $\Delta E = 0.50$	FL1 $\Delta E = 0.30$	FL6 $\Delta E = 0.28$	FL11 $\Delta E = 0.28$	FL3.4 $\Delta E = 0.22$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.70$	HP4 $\Delta E = 0.33$	LED-B4 $\Delta E = 0.47$	LED-V2 $\Delta E = 0.49$

GOLFYE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.21$	FL2 $\Delta E = 0.17$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.20$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.18$	HP5 $\Delta E = 0.22$	LED-B5 $\Delta E = 0.53$
B $\Delta E = 0.19$	D65 $\Delta E = 0.23$	FL3 $\Delta E = 0.17$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.16$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.32$	LED-B1 $\Delta E = 0.16$	LED-BH1 $\Delta E = 0.29$
C $\Delta E = 0.21$	D75 $\Delta E = 0.26$	FL4 $\Delta E = 0.16$	FL9 $\Delta E = 0.14$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.21$	FL3.12 $\Delta E = 0.27$	HP2 $\Delta E = 0.20$	LED-B2 $\Delta E = 0.21$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.18$	E $\Delta E = 0.37$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.15$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.30$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.30$	LED-V1 $\Delta E = 0.48$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.26$	HP4 $\Delta E = 0.26$	LED-B4 $\Delta E = 0.52$	LED-V2 $\Delta E = 0.41$

GOLFYE - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.313414	0.330292	0.335773	0.368030	0.373361	0.352791	0.343297	0.334057	0.328179	0.334427	0.334782
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.370980	0.470858	0.653262	0.843527	0.949830	1.004100	1.014750	1.011790	1.004510	0.915901	0.911108
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.904936	0.902908	0.899289	0.896809	0.886676	0.886391	0.878131	0.871600	0.863069	0.860234	0.851935
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.845814	0.837143	0.833778	0.828279	0.819586	0.803581	0.812640	0.815493			

2 Gaussians max

Scaling factor: 927.4907802454542

Gaussians:

Weight	Mean		Covariance			
0.302610817	471.564120821	580.106773402	11807.726325366	3462.970642043	3462.970642043	12276.898161837
0.697389183	438.081623971	539.441919868	2511.822452068	127.706244891	127.706244891	853.632527038

4 Gaussians max

Scaling factor: 900.9180632985164

Gaussians:

Weight	Mean		Covariance			
0.220633927	376.816857646	518.391352220	1483.461880859	-278.990969068	-278.990969068	3650.539049244
0.068772981	616.392015973	582.726792453	9949.177442407	7638.224073490	7638.224073490	16212.070697192
0.605920537	453.776732297	540.943526457	1717.288930326	50.771436819	50.771436819	835.424275651
0.104672555	457.544359763	664.909119220	4149.441835503	-282.422265488	-282.422265488	4912.071987520

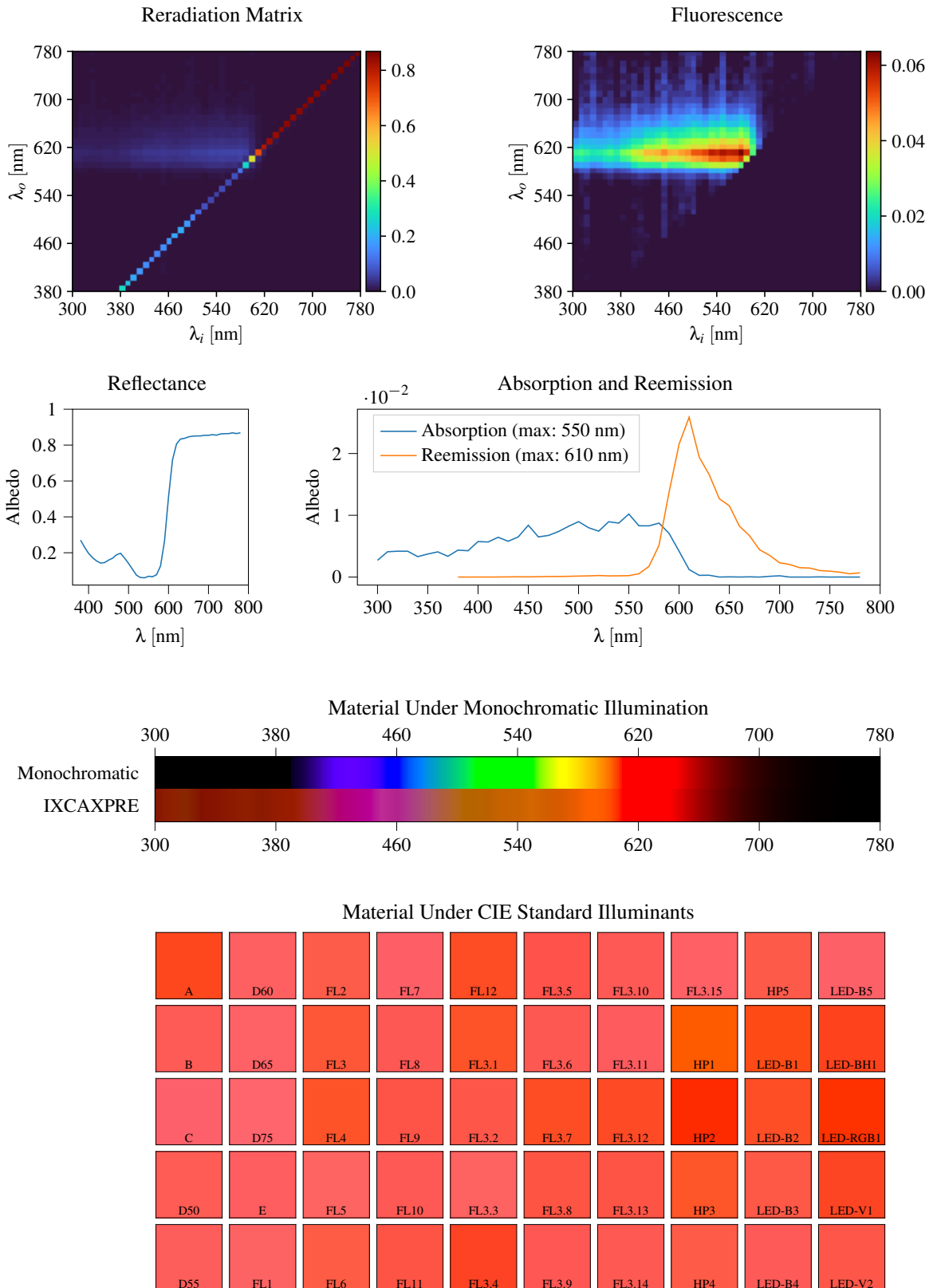
8 Gaussians max

Scaling factor: 903.5425695079266

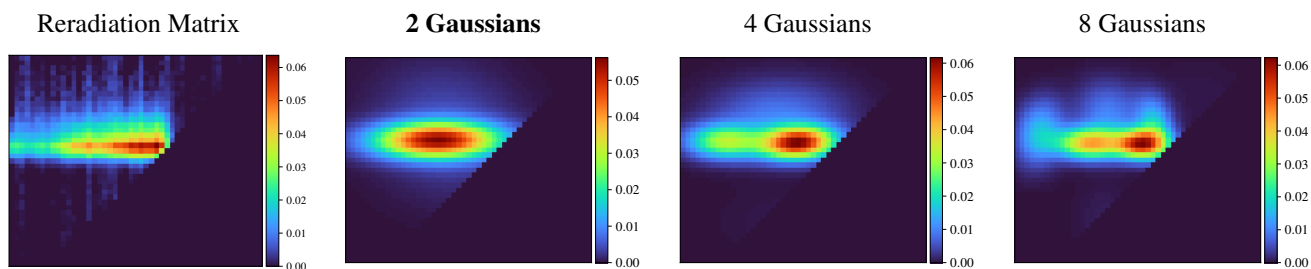
Gaussians:

Weight	Mean		Covariance			
0.062971424	416.144625361	434.132838523	3937.854322054	26.611314454	26.611314454	1466.018931560
0.016334370	619.670799980	490.046206582	7291.160583423	-991.397589573	-991.397589573	5847.470553991
0.300076388	387.992560477	543.182473760	1520.345173483	201.616228432	201.616228432	1335.748807688
0.434590935	464.908591790	535.506761737	1197.666166645	84.716153807	84.716153807	617.700828487
0.031712394	675.503604307	668.302309875	5272.446761134	4259.764824030	4259.764824030	4877.683206529
0.087407324	473.897150121	595.986334269	1211.943444496	26.728114450	26.728114450	1581.672450650
0.066113482	455.555440382	709.864669244	7065.822313224	722.530199942	722.530199942	2780.474926081

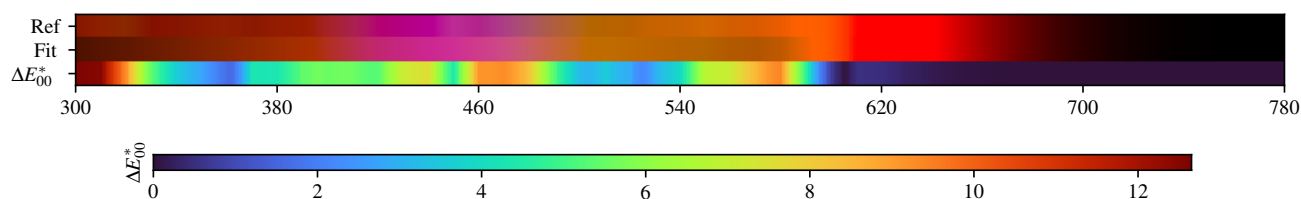
3.11. IXCAXPRE



IXCAXPRE - Weighted Expectation-Maximization - 2 Gaussians



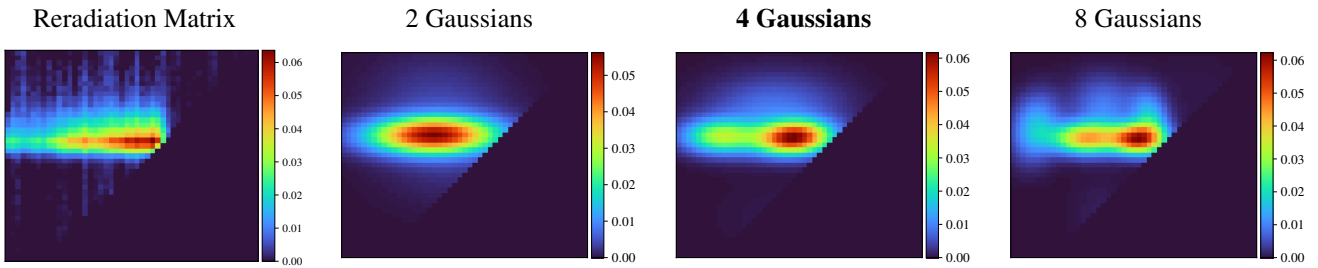
Fitted Material Under Monochromatic Illumination



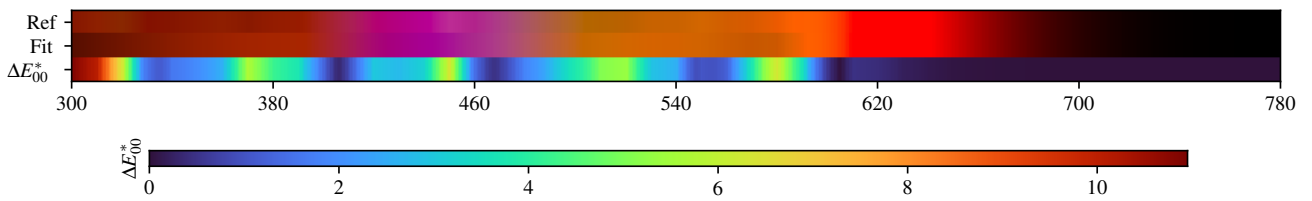
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.70$	$\Delta E = 1.36$	$\Delta E = 1.15$	$\Delta E = 1.10$	$\Delta E = 0.71$	$\Delta E = 0.55$	$\Delta E = 0.51$	$\Delta E = 1.39$	$\Delta E = 0.74$	$\Delta E = 0.81$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.97$	$\Delta E = 1.53$	$\Delta E = 1.64$	$\Delta E = 0.72$	$\Delta E = 2.06$	$\Delta E = 0.69$	$\Delta E = 0.52$	$\Delta E = 2.21$	$\Delta E = 1.09$	$\Delta E = 0.77$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.61$	$\Delta E = 1.80$	$\Delta E = 1.94$	$\Delta E = 0.65$	$\Delta E = 1.13$	$\Delta E = 0.72$	$\Delta E = 0.83$	$\Delta E = 1.03$	$\Delta E = 1.01$	$\Delta E = 0.32$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.98$	$\Delta E = 1.54$	$\Delta E = 0.92$	$\Delta E = 0.42$	$\Delta E = 0.85$	$\Delta E = 0.43$	$\Delta E = 0.53$	$\Delta E = 0.69$	$\Delta E = 0.71$	$\Delta E = 0.54$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.18$	$\Delta E = 0.95$	$\Delta E = 1.40$	$\Delta E = 0.41$	$\Delta E = 1.14$	$\Delta E = 0.34$	$\Delta E = 0.77$	$\Delta E = 0.89$	$\Delta E = 0.70$	$\Delta E = 0.80$

IXCAXPRE - Weighted Expectation-Maximization - 4 Gaussians



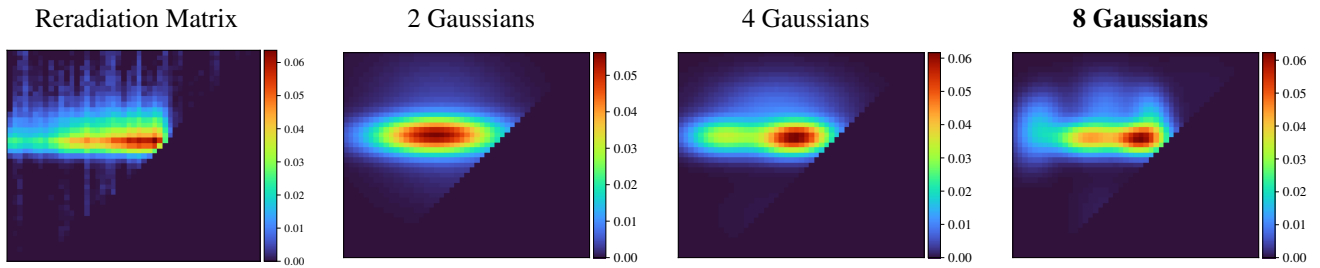
Fitted Material Under Monochromatic Illumination



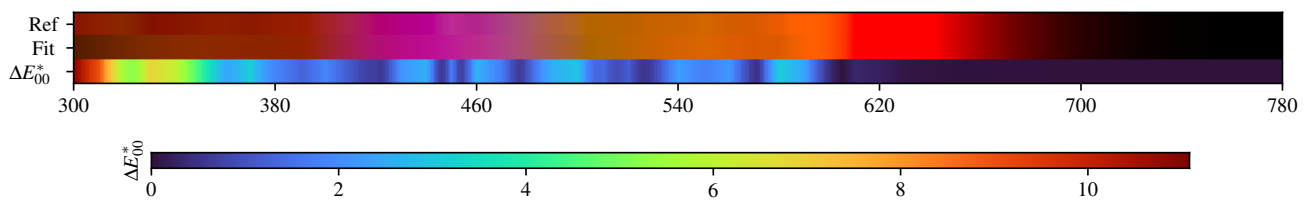
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.04$	$\Delta E = 0.90$	$\Delta E = 0.29$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.26$	$\Delta E = 0.04$	$\Delta E = 0.50$	$\Delta E = 0.79$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.05$	$\Delta E = 1.07$	$\Delta E = 0.17$	$\Delta E = 1.17$	$\Delta E = 0.15$	$\Delta E = 0.27$	$\Delta E = 1.44$	$\Delta E = 0.57$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.18$	$\Delta E = 0.08$	$\Delta E = 1.19$	$\Delta E = 0.37$	$\Delta E = 0.76$	$\Delta E = 0.21$	$\Delta E = 0.27$	$\Delta E = 0.41$	$\Delta E = 0.58$	$\Delta E = 0.43$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.06$	$\Delta E = 0.17$	$\Delta E = 0.58$	$\Delta E = 0.29$	$\Delta E = 0.55$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.28$	$\Delta E = 0.58$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.05$	$\Delta E = 0.55$	$\Delta E = 0.96$	$\Delta E = 0.25$	$\Delta E = 0.36$	$\Delta E = 0.24$	$\Delta E = 0.10$	$\Delta E = 0.79$	$\Delta E = 0.79$	$\Delta E = 0.15$

IXCAXPRE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.05$	$\Delta E = 0.28$	$\Delta E = 0.18$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.25$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.19$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.04$	$\Delta E = 0.31$	$\Delta E = 0.20$	$\Delta E = 0.39$	$\Delta E = 0.25$	$\Delta E = 0.33$	$\Delta E = 0.58$	$\Delta E = 0.22$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.35$	$\Delta E = 0.22$	$\Delta E = 0.31$	$\Delta E = 0.24$	$\Delta E = 0.30$	$\Delta E = 0.27$	$\Delta E = 0.21$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.23$	$\Delta E = 0.30$	$\Delta E = 0.28$	$\Delta E = 0.29$	$\Delta E = 0.33$	$\Delta E = 0.11$	$\Delta E = 0.21$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.08$	$\Delta E = 0.24$	$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.32$	$\Delta E = 0.32$	$\Delta E = 0.38$	$\Delta E = 0.17$	$\Delta E = 0.24$

IXCAXPRE - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.270299	0.230644	0.196638	0.172148	0.154312	0.142574	0.145122	0.158832	0.169582	0.188827	0.197081
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.170585	0.140834	0.107422	0.074750	0.061926	0.060329	0.068937	0.066302	0.077444	0.125965	0.264546
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.509388	0.717056	0.805916	0.833910	0.837685	0.845887	0.849829	0.851100	0.851062	0.854899	0.854617
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.858244	0.855192	0.861906	0.863747	0.863843	0.868454	0.864311	0.868340			

2 Gaussians

Scaling factor: 904.1000086120492

Gaussians:

Weight	Mean		Covariance			
0.277299037	494.827231700	640.004059558	8802.252538544	-652.358239850	-652.358239850	6910.697732577
0.722700963	476.381492424	619.239687749	7161.957475679	50.054327766	50.054327766	572.584342567

4 Gaussians

Scaling factor: 872.87813190559

Gaussians:

Weight	Mean		Covariance			
0.435934770	529.480741111	614.266303519	2365.663746715	91.232071145	91.232071145	466.625330466
0.245141158	383.244497523	616.630870131	2521.256110497	-11.630954982	-11.630954982	506.857525698
0.291368850	488.309376685	664.592258630	8041.138933367	204.730731247	204.730731247	2282.162587898
0.027555221	524.411367569	450.531682071	9372.251848810	-503.202100321	-503.202100321	2214.967842031

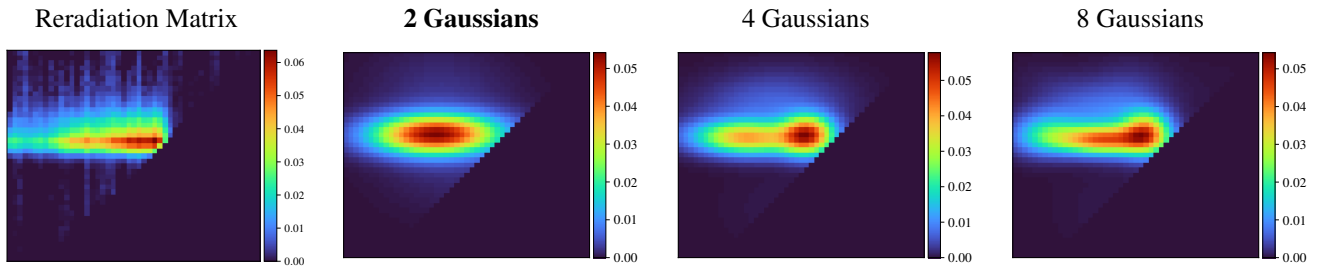
8 Gaussians

Scaling factor: 861.3359753950391

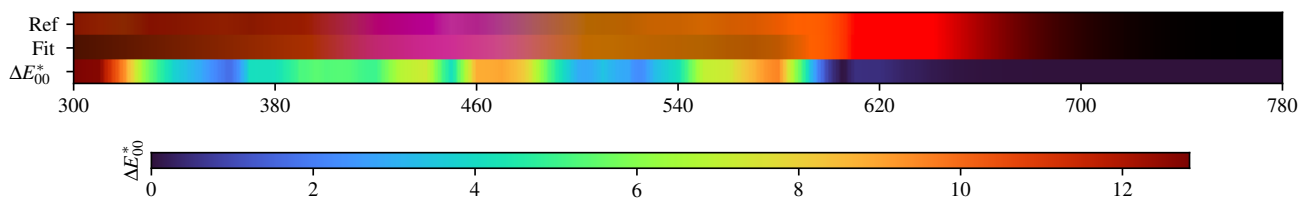
Gaussians:

Weight	Mean		Covariance			
0.016342738	664.613500202	704.068191924	3907.663367687	-301.157558182	-301.157558182	2796.718390732
0.137737123	479.753614232	669.351765617	1840.837734247	-49.072448060	-49.072448060	1905.502779246
0.010692956	625.992158361	449.045536841	4432.659143397	709.190354190	709.190354190	2700.769412813
0.018313893	475.605469979	461.585044629	1707.428459727	-90.496382054	-90.496382054	2756.698040327
0.155533255	344.557668794	634.219338127	988.356606357	186.293845607	186.293845607	1820.949250103
0.109857526	572.685679948	650.879832459	605.969997804	-170.136917300	-170.136917300	1400.869619570
0.284735668	444.266512403	613.337202565	2055.781883695	1.435965117	1.435965117	433.967457124
0.266786841	547.810253747	611.935623632	1173.133338457	-0.186783525	-0.186783525	389.986330737

IXCAXPRE - Weighted variational Bayesian inference - 2 Gaussians



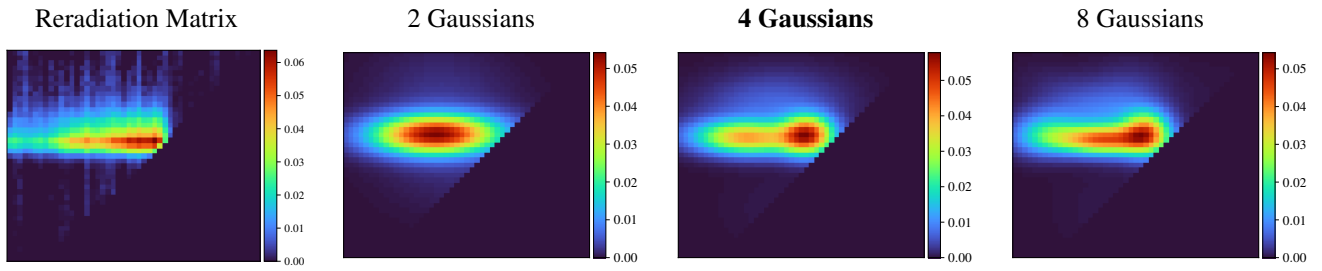
Fitted Material Under Monochromatic Illumination



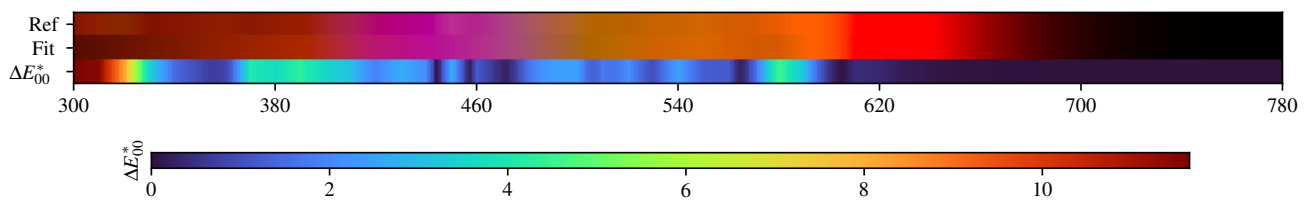
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.77$	$\Delta E = 1.23$	$\Delta E = 1.26$	$\Delta E = 0.98$	$\Delta E = 0.78$	$\Delta E = 0.56$	$\Delta E = 0.45$	$\Delta E = 1.25$	$\Delta E = 0.73$	$\Delta E = 0.74$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.87$	$\Delta E = 1.38$	$\Delta E = 1.74$	$\Delta E = 0.66$	$\Delta E = 2.14$	$\Delta E = 0.63$	$\Delta E = 0.46$	$\Delta E = 2.27$	$\Delta E = 1.16$	$\Delta E = 0.84$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.45$	$\Delta E = 1.63$	$\Delta E = 2.02$	$\Delta E = 0.70$	$\Delta E = 1.22$	$\Delta E = 0.78$	$\Delta E = 0.90$	$\Delta E = 1.09$	$\Delta E = 1.09$	$\Delta E = 0.32$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.89$	$\Delta E = 1.39$	$\Delta E = 0.89$	$\Delta E = 0.43$	$\Delta E = 0.84$	$\Delta E = 0.51$	$\Delta E = 0.56$	$\Delta E = 0.74$	$\Delta E = 0.78$	$\Delta E = 0.58$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.06$	$\Delta E = 0.89$	$\Delta E = 1.51$	$\Delta E = 0.49$	$\Delta E = 1.21$	$\Delta E = 0.35$	$\Delta E = 0.68$	$\Delta E = 0.93$	$\Delta E = 0.76$	$\Delta E = 0.73$

IXCAXPRE - Weighted variational Bayesian inference - 4 Gaussians



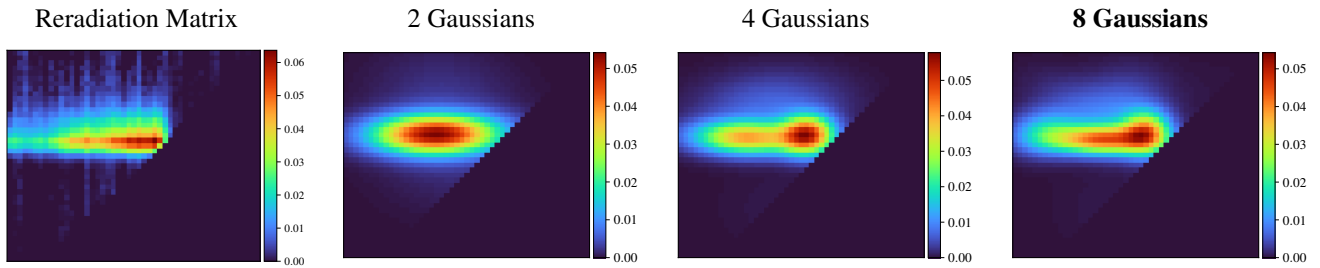
Fitted Material Under Monochromatic Illumination



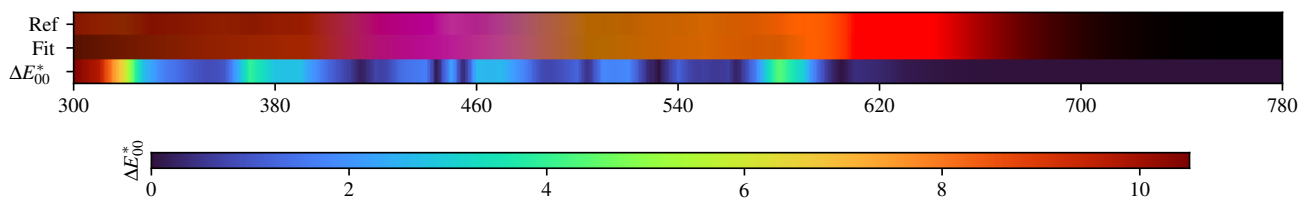
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.14$	$\Delta E = 0.44$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.28$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.26$	$\Delta E = 0.27$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.54$	$\Delta E = 0.18$	$\Delta E = 0.67$	$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.98$	$\Delta E = 0.37$	$\Delta E = 0.04$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.23$	$\Delta E = 0.61$	$\Delta E = 0.26$	$\Delta E = 0.45$	$\Delta E = 0.18$	$\Delta E = 0.35$	$\Delta E = 0.13$	$\Delta E = 0.36$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.09$	$\Delta E = 0.37$	$\Delta E = 0.28$	$\Delta E = 0.17$	$\Delta E = 0.34$	$\Delta E = 0.21$	$\Delta E = 0.39$	$\Delta E = 0.09$	$\Delta E = 0.32$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.11$	$\Delta E = 0.28$	$\Delta E = 0.45$	$\Delta E = 0.17$	$\Delta E = 0.27$	$\Delta E = 0.22$	$\Delta E = 0.29$	$\Delta E = 0.34$	$\Delta E = 0.27$	$\Delta E = 0.09$

IXCAXPRE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.51$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.24$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.32$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.63$	$\Delta E = 0.17$	$\Delta E = 0.76$	$\Delta E = 0.19$	$\Delta E = 0.11$	$\Delta E = 0.95$	$\Delta E = 0.41$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.25$	$\Delta E = 0.72$	$\Delta E = 0.28$	$\Delta E = 0.50$	$\Delta E = 0.14$	$\Delta E = 0.35$	$\Delta E = 0.14$	$\Delta E = 0.39$	$\Delta E = 0.05$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.26$	$\Delta E = 0.29$	$\Delta E = 0.06$	$\Delta E = 0.33$	$\Delta E = 0.11$	$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.34$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.28$	$\Delta E = 0.55$	$\Delta E = 0.08$	$\Delta E = 0.37$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.51$	$\Delta E = 0.31$	$\Delta E = 0.16$

IXCAXPRE - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.270299	0.230644	0.196638	0.172148	0.154312	0.142574	0.145122	0.158832	0.169582	0.188827	0.197081
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.170585	0.140834	0.107422	0.074750	0.061926	0.060329	0.068937	0.066302	0.077444	0.125965	0.264546
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.509388	0.717056	0.805916	0.833910	0.837685	0.845887	0.849829	0.851100	0.851062	0.854899	0.854617
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.858244	0.855192	0.861906	0.863747	0.863843	0.868454	0.864311	0.868340			

2 Gaussians max

Scaling factor: 904.5713009252227

Gaussians:

Weight	Mean		Covariance			
0.223797554	496.797497482	639.272207432	9169.019413876	-772.153719117	-772.153719117	8224.560166592
0.776202446	477.165868821	620.847592155	7174.108324416	50.184781024	50.184781024	679.130373244

4 Gaussians max

Scaling factor: 873.2030175846469

Gaussians:

Weight	Mean		Covariance			
0.031109871	521.734431971	467.321887125	9461.583106826	-678.352008449	-678.352008449	4001.381624045
0.309472996	552.755164035	619.980225590	1230.554752194	12.637933630	12.637933630	686.135015014
0.438095176	430.933765150	614.213437280	5083.818915762	-103.336696782	-103.336696782	494.778551789
0.221321958	476.783888787	675.766323365	9225.136282377	524.784505804	524.784505804	2071.674031118

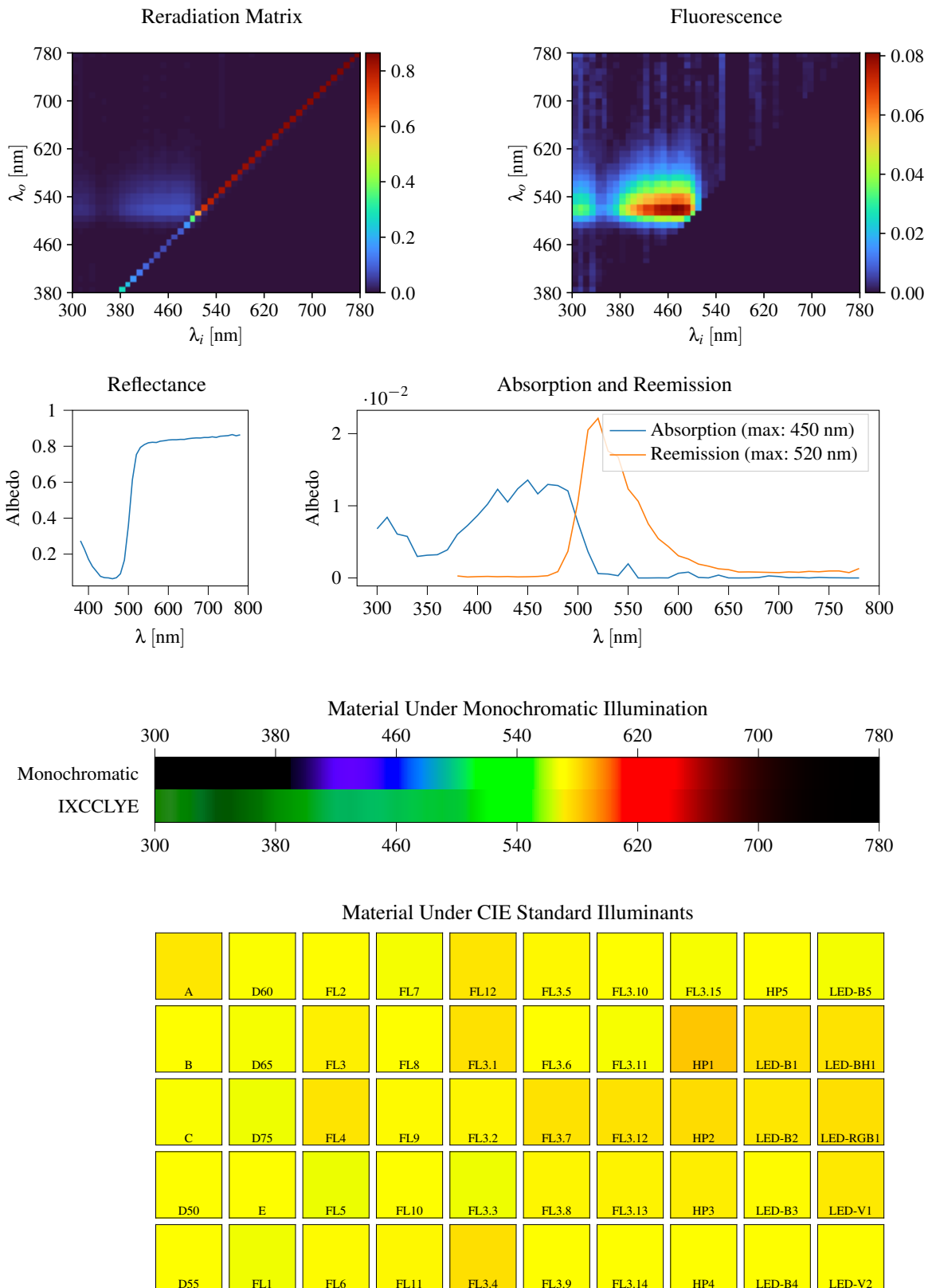
8 Gaussians max

Scaling factor: 873.1500755932476

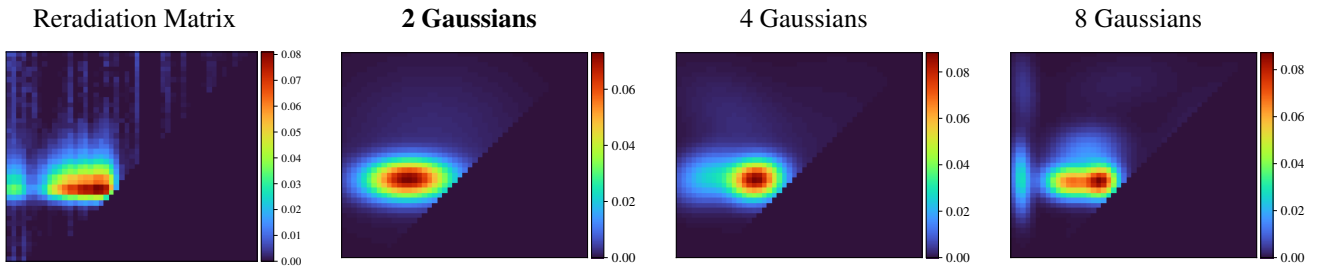
Gaussians:

Weight	Mean		Covariance			
0.031030491	521.613792731	464.829977812	9317.621005617	-721.933490253	-721.933490253	3893.893424757
0.146500270	360.639388842	625.034989646	2058.336632497	101.040192711	101.040192711	840.050266715
0.223339245	560.478335487	624.806121132	973.745789463	7.937264030	7.937264030	810.749707231
0.367286857	472.113819381	610.336220628	4528.474746870	-21.693010944	-21.693010944	371.308745647
0.016418320	639.209618761	681.374074333	7995.216172339	2160.589714617	2160.589714617	3724.906238806
0.100783126	444.886623830	664.129280576	4992.313901984	-1633.287410333	-1633.287410333	2183.863371136
0.113695097	511.916196324	672.817229507	3009.344241342	416.051997337	416.051997337	2467.454566744

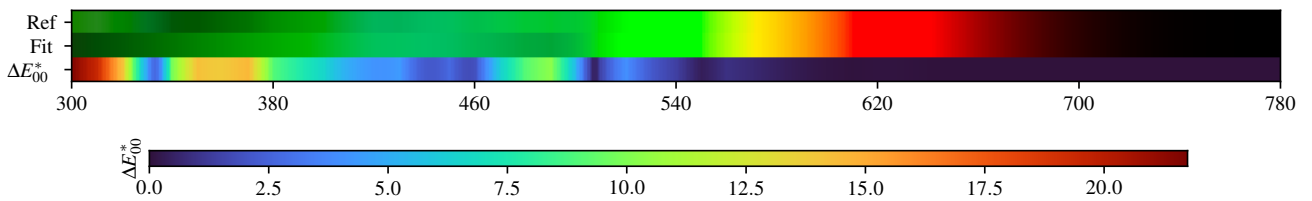
3.12. IXCCLYE



IXCCLYE - Weighted Expectation-Maximization - 2 Gaussians



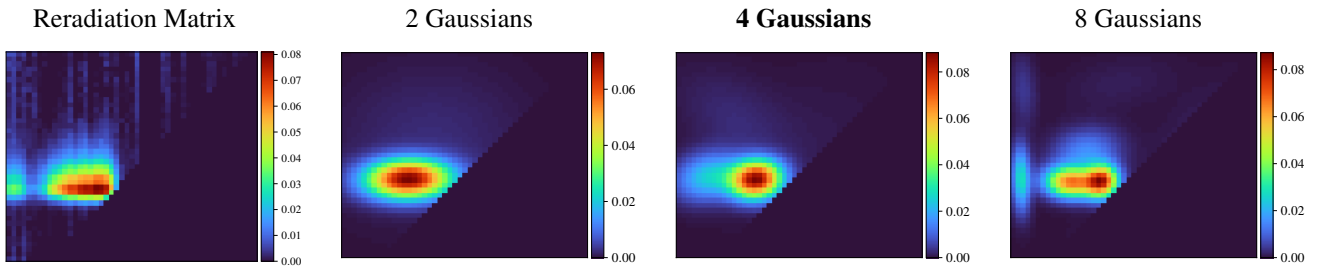
Fitted Material Under Monochromatic Illumination



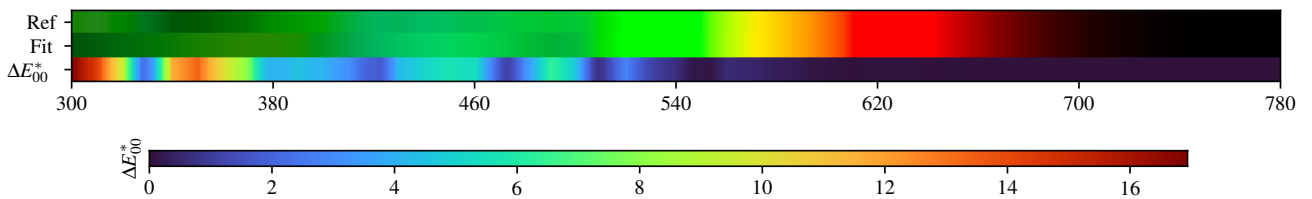
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.26$	$\Delta E = 0.52$	$\Delta E = 0.30$	$\Delta E = 0.24$	$\Delta E = 0.46$	$\Delta E = 0.64$	$\Delta E = 0.97$	$\Delta E = 0.28$	$\Delta E = 0.17$	$\Delta E = 0.30$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.19$	$\Delta E = 0.66$	$\Delta E = 0.29$	$\Delta E = 0.50$	$\Delta E = 0.30$	$\Delta E = 0.67$	$\Delta E = 0.56$	$\Delta E = 0.45$	$\Delta E = 0.35$	$\Delta E = 0.34$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.33$	$\Delta E = 0.89$	$\Delta E = 0.26$	$\Delta E = 0.48$	$\Delta E = 0.37$	$\Delta E = 0.49$	$\Delta E = 0.67$	$\Delta E = 0.37$	$\Delta E = 0.39$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.22$	$\Delta E = 1.36$	$\Delta E = 0.27$	$\Delta E = 0.59$	$\Delta E = 0.33$	$\Delta E = 0.60$	$\Delta E = 1.17$	$\Delta E = 0.27$	$\Delta E = 0.32$	$\Delta E = 0.26$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.37$	$\Delta E = 0.30$	$\Delta E = 0.29$	$\Delta E = 0.60$	$\Delta E = 0.23$	$\Delta E = 0.60$	$\Delta E = 1.23$	$\Delta E = 0.52$	$\Delta E = 0.22$	$\Delta E = 0.16$

IXCCLYE - Weighted Expectation-Maximization - 4 Gaussians



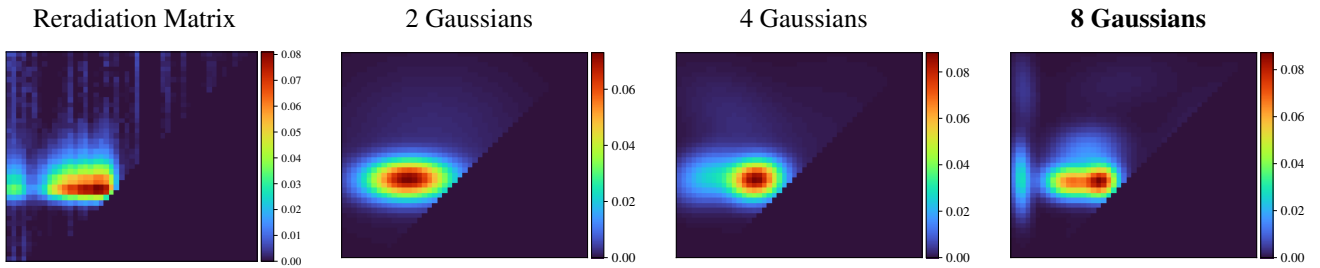
Fitted Material Under Monochromatic Illumination



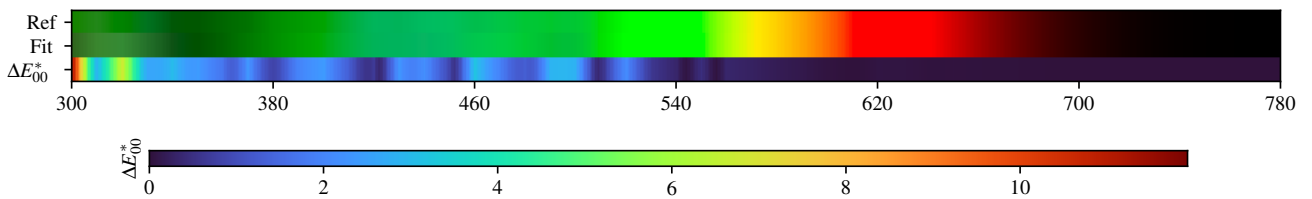
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.35$	D60 $\Delta E = 0.96$	FL2 $\Delta E = 0.59$	FL7 $\Delta E = 0.85$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.47$	FL3.10 $\Delta E = 0.68$	FL3.15 $\Delta E = 0.69$	HP5 $\Delta E = 0.70$	LED-B5 $\Delta E = 1.81$
B $\Delta E = 0.83$	D65 $\Delta E = 0.99$	FL3 $\Delta E = 0.42$	FL8 $\Delta E = 0.71$	FL3.1 $\Delta E = 0.16$	FL3.6 $\Delta E = 0.55$	FL3.11 $\Delta E = 0.83$	HP1 $\Delta E = 0.22$	LED-B1 $\Delta E = 0.62$	LED-BH1 $\Delta E = 0.90$
C $\Delta E = 1.02$	D75 $\Delta E = 1.04$	FL4 $\Delta E = 0.31$	FL9 $\Delta E = 0.60$	FL3.2 $\Delta E = 0.37$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.22$	LED-B2 $\Delta E = 0.80$	LED-RGB1 $\Delta E = 0.69$
D50 $\Delta E = 0.85$	E $\Delta E = 0.85$	FL5 $\Delta E = 0.76$	FL10 $\Delta E = 0.79$	FL3.3 $\Delta E = 0.62$	FL3.8 $\Delta E = 0.36$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.43$	LED-B3 $\Delta E = 1.29$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.91$	FL1 $\Delta E = 0.81$	FL6 $\Delta E = 0.52$	FL11 $\Delta E = 0.53$	FL3.4 $\Delta E = 0.19$	FL3.9 $\Delta E = 0.68$	FL3.14 $\Delta E = 0.28$	HP4 $\Delta E = 0.54$	LED-B4 $\Delta E = 1.70$	LED-V2 $\Delta E = 0.35$

IXCCLYE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.26$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.22$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.23$	$\Delta E = 0.16$

IXCCLYE - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.273952	0.226232	0.171505	0.131016	0.103994	0.076369	0.068935	0.067836	0.063057	0.068797	0.090432
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.166783	0.359790	0.613486	0.753631	0.793416	0.809291	0.819263	0.822136	0.820835	0.828290	0.830801
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.834654	0.836187	0.836206	0.838130	0.837962	0.842178	0.844729	0.846406	0.845978	0.848773	0.848652
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.852489	0.849272	0.855759	0.857333	0.859201	0.864843	0.858222	0.863387			

2 Gaussians

Scaling factor: 888.2103969618431

Gaussians:

Weight	Mean	Covariance				
0.753357147	427.420483342	532.371981197	3260.018245891	54.485095854	54.485095854	681.389321436
0.246642853	472.506543062	605.665733037	16746.817597583	170.200110073	170.200110073	10483.955198655

4 Gaussians

Scaling factor: 866.2305777297728

Gaussians:

Weight	Mean	Covariance				
0.091611362	405.216899221	655.504919020	5790.662664161	-2159.111621872	-2159.111621872	4330.598072236
0.118477667	558.514151361	584.881902481	15230.384084541	4404.657421087	4404.657421087	14359.743862177
0.547175966	453.938398470	531.492058421	1194.061261657	69.969689333	69.969689333	655.451643147
0.242735005	357.849212213	536.727445217	1889.193784117	234.581104589	234.581104589	1016.339224022

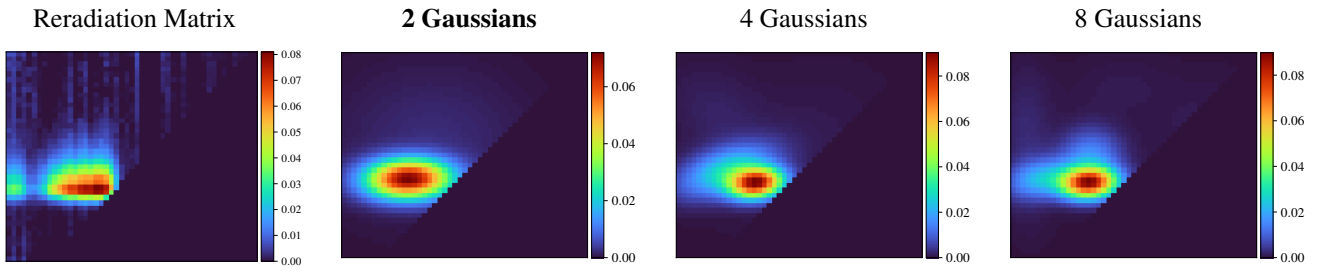
8 Gaussians

Scaling factor: 841.5098990443234

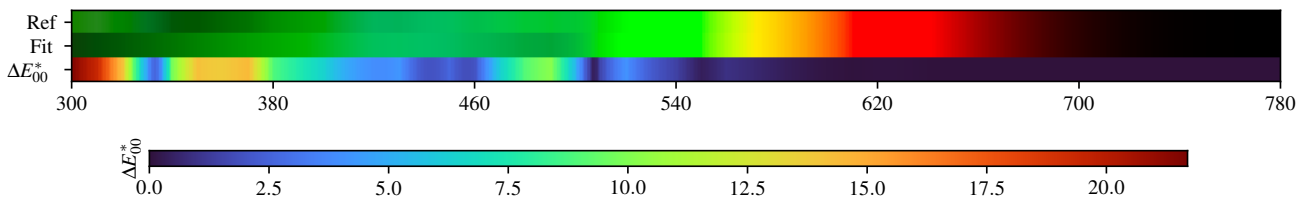
Gaussians:

Weight	Mean	Covariance				
0.028630128	321.211668572	710.273221584	302.167724992	-126.026534292	-126.026534292	2401.061423506
0.039009324	649.667553149	629.337491429	6033.426072917	4479.270818948	4479.270818948	6074.437074532
0.113505564	315.943777408	533.040593576	165.576916283	-42.125992606	-42.125992606	1831.383959691
0.258580494	476.449205972	527.821822888	480.650042515	19.695166248	19.695166248	464.200250409
0.037960532	510.151918647	720.933249418	6929.102461053	1044.262952729	1044.262952729	1712.114878751
0.159222464	445.136681633	584.742724084	1920.628011187	144.832591175	144.832591175	979.343017244
0.030466358	563.641766508	437.357650380	17609.771134730	2200.254499199	2200.254499199	2383.555781409
0.332625138	413.455997739	525.458591538	1122.809069879	-43.186436877	-43.186436877	424.795926969

IXCCLYE - Weighted variational Bayesian inference - 2 Gaussians



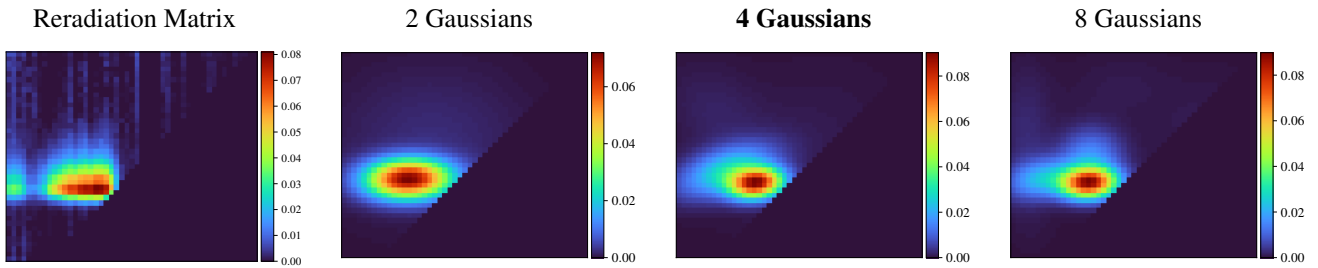
Fitted Material Under Monochromatic Illumination



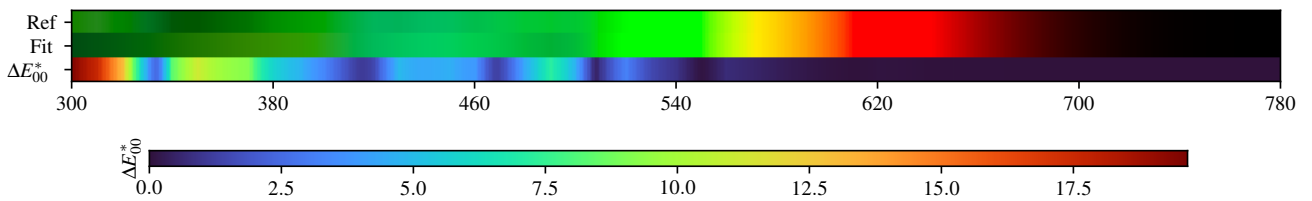
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.30$	$\Delta E = 0.45$	$\Delta E = 0.37$	$\Delta E = 0.31$	$\Delta E = 0.49$	$\Delta E = 0.69$	$\Delta E = 1.03$	$\Delta E = 0.33$	$\Delta E = 0.24$	$\Delta E = 0.38$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.25$	$\Delta E = 0.58$	$\Delta E = 0.33$	$\Delta E = 0.57$	$\Delta E = 0.32$	$\Delta E = 0.73$	$\Delta E = 0.62$	$\Delta E = 0.46$	$\Delta E = 0.37$	$\Delta E = 0.33$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.29$	$\Delta E = 0.79$	$\Delta E = 0.29$	$\Delta E = 0.54$	$\Delta E = 0.42$	$\Delta E = 0.51$	$\Delta E = 0.69$	$\Delta E = 0.40$	$\Delta E = 0.43$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 1.26$	$\Delta E = 0.34$	$\Delta E = 0.65$	$\Delta E = 0.40$	$\Delta E = 0.65$	$\Delta E = 1.21$	$\Delta E = 0.26$	$\Delta E = 0.38$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.31$	$\Delta E = 0.37$	$\Delta E = 0.34$	$\Delta E = 0.65$	$\Delta E = 0.24$	$\Delta E = 0.66$	$\Delta E = 1.29$	$\Delta E = 0.46$	$\Delta E = 0.29$	$\Delta E = 0.22$

IXCCLYE - Weighted variational Bayesian inference - 4 Gaussians



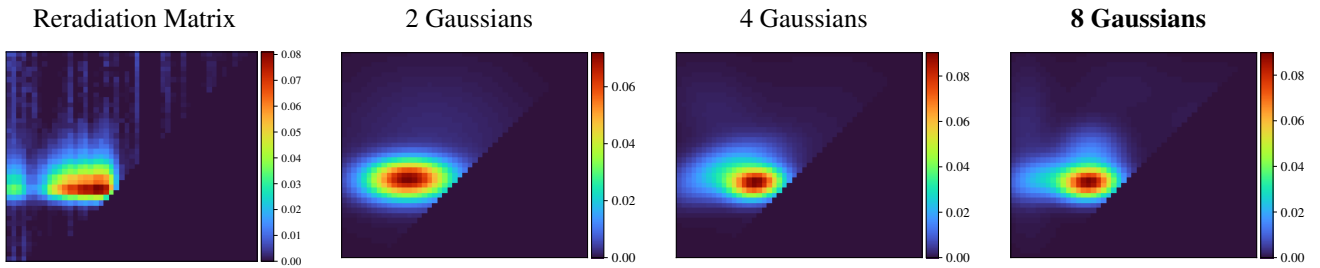
Fitted Material Under Monochromatic Illumination



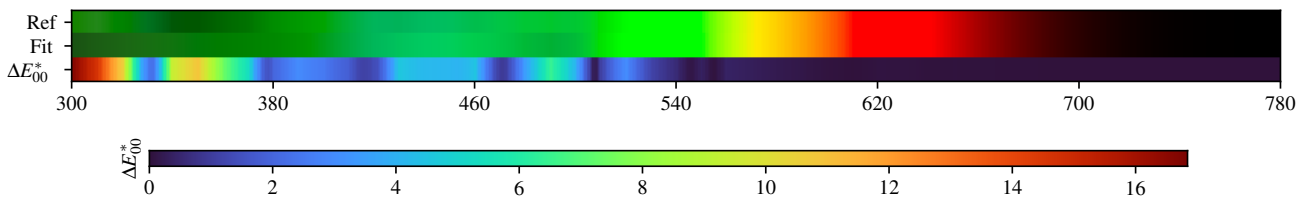
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.23$	D60 $\Delta E = 0.62$	FL2 $\Delta E = 0.37$	FL7 $\Delta E = 0.53$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.21$	FL3.10 $\Delta E = 0.30$	FL3.15 $\Delta E = 0.38$	HP5 $\Delta E = 0.48$	LED-B5 $\Delta E = 1.29$
B $\Delta E = 0.52$	D65 $\Delta E = 0.65$	FL3 $\Delta E = 0.30$	FL8 $\Delta E = 0.39$	FL3.1 $\Delta E = 0.19$	FL3.6 $\Delta E = 0.24$	FL3.11 $\Delta E = 0.46$	HP1 $\Delta E = 0.25$	LED-B1 $\Delta E = 0.41$	LED-BH1 $\Delta E = 0.73$
C $\Delta E = 0.67$	D75 $\Delta E = 0.71$	FL4 $\Delta E = 0.25$	FL9 $\Delta E = 0.33$	FL3.2 $\Delta E = 0.23$	FL3.7 $\Delta E = 0.21$	FL3.12 $\Delta E = 0.24$	HP2 $\Delta E = 0.16$	LED-B2 $\Delta E = 0.53$	LED-RGB1 $\Delta E = 0.55$
D50 $\Delta E = 0.53$	E $\Delta E = 0.72$	FL5 $\Delta E = 0.46$	FL10 $\Delta E = 0.42$	FL3.3 $\Delta E = 0.35$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.21$	HP3 $\Delta E = 0.37$	LED-B3 $\Delta E = 0.89$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.58$	FL1 $\Delta E = 0.48$	FL6 $\Delta E = 0.34$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.19$	FL3.9 $\Delta E = 0.34$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.47$	LED-B4 $\Delta E = 1.22$	LED-V2 $\Delta E = 0.20$

IXCCLYE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.39$	$\Delta E = 0.24$	$\Delta E = 0.28$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.28$	$\Delta E = 0.99$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.28$	$\Delta E = 0.43$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.24$	$\Delta E = 0.23$	$\Delta E = 0.35$	$\Delta E = 0.65$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.36$	$\Delta E = 0.48$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.33$	$\Delta E = 0.11$	$\Delta E = 0.44$	$\Delta E = 0.46$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.32$	$\Delta E = 0.43$	$\Delta E = 0.27$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.09$	$\Delta E = 0.43$	$\Delta E = 0.25$	$\Delta E = 0.71$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.36$	$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.42$	$\Delta E = 0.29$	$\Delta E = 0.99$	$\Delta E = 0.15$

IXCCLYE - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.273952	0.226232	0.171505	0.131016	0.103994	0.076369	0.068935	0.067836	0.063057	0.068797	0.090432
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.166783	0.359790	0.613486	0.753631	0.793416	0.809291	0.819263	0.822136	0.820835	0.828290	0.830801
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.834654	0.836187	0.836206	0.838130	0.837962	0.842178	0.844729	0.846406	0.845978	0.848773	0.848652
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.852489	0.849272	0.855759	0.857333	0.859201	0.864843	0.858222	0.863387			

2 Gaussians max

Scaling factor: 888.8693152366473

Gaussians:

Weight	Mean		Covariance			
0.245899242	472.699551827	605.597664168	16745.441287568	162.863449494	162.863449494	10479.388394620
0.754100758	427.541463027	532.464397564	3288.595555384	59.868415845	59.868415845	698.588528096

4 Gaussians max

Scaling factor: 872.3046304430301

Gaussians:

Weight	Mean		Covariance			
0.136442628	541.192961780	588.412166984	16078.855354259	3621.283385663	3621.283385663	13740.898195604
0.363098327	393.193792728	548.181521064	3814.064044080	977.787976410	977.787976410	1169.430270352
0.435840184	454.772641661	524.093598308	1280.263153606	101.348854889	101.348854889	414.523231934
0.064618861	371.731951320	662.280961823	4532.315630924	-1477.960526060	-1477.960526060	5018.477020037

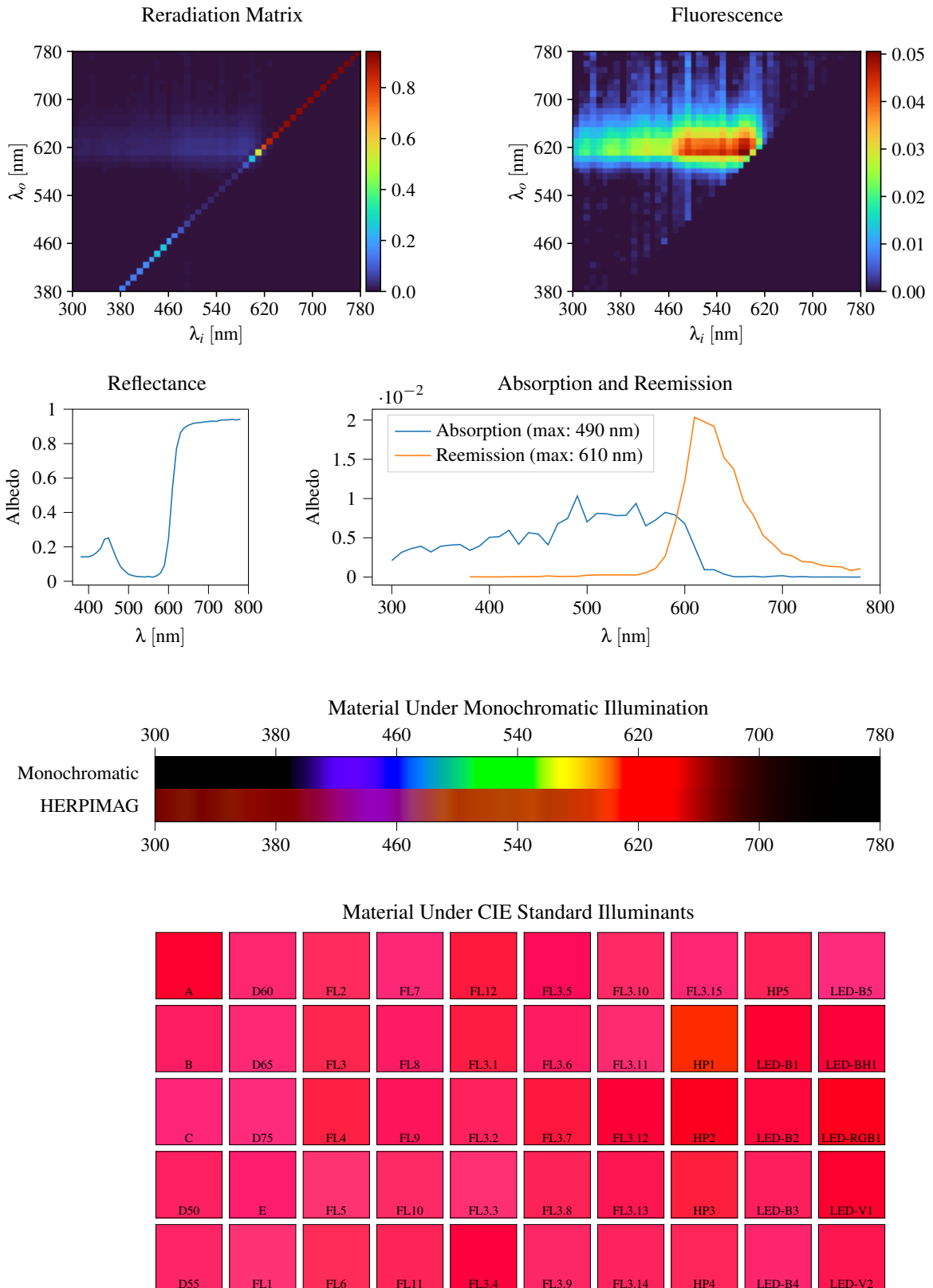
8 Gaussians max

Scaling factor: 867.1533396077991

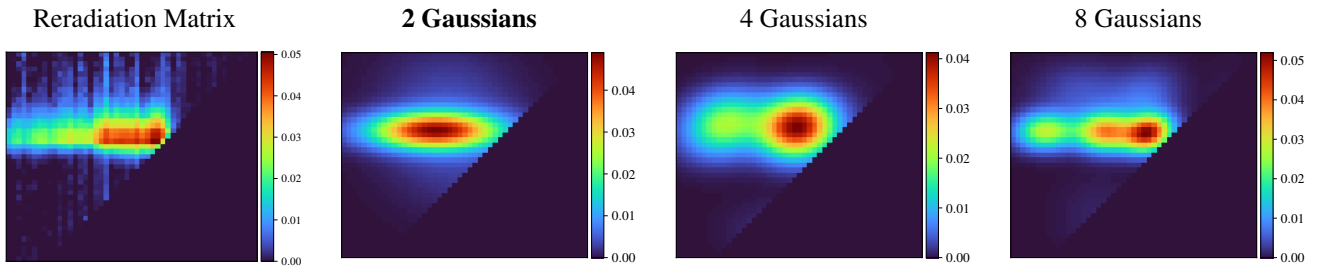
Gaussians:

Weight	Mean		Covariance			
0.081897617	328.067845035	599.693125930	1206.833511144	-182.084850815	-182.084850815	10525.003728116
0.030345629	581.884919153	452.962439704	12601.940246320	579.918162492	579.918162492	3678.287002076
0.458935610	451.321176953	524.414306721	1396.952850665	63.645185776	63.645185776	423.707421223
0.178293672	359.638470002	533.609442284	2140.951784019	272.820833997	272.820833997	674.733698079
0.035533503	656.883717315	645.418016848	6196.911502178	3261.534860484	3261.534860484	5610.314927810
0.174752247	454.859556918	575.336394712	1614.187683709	9.763559184	9.763559184	1348.505253519
0.039456725	510.895733850	710.698448551	7347.279889780	570.821472806	570.821472806	2863.418312811

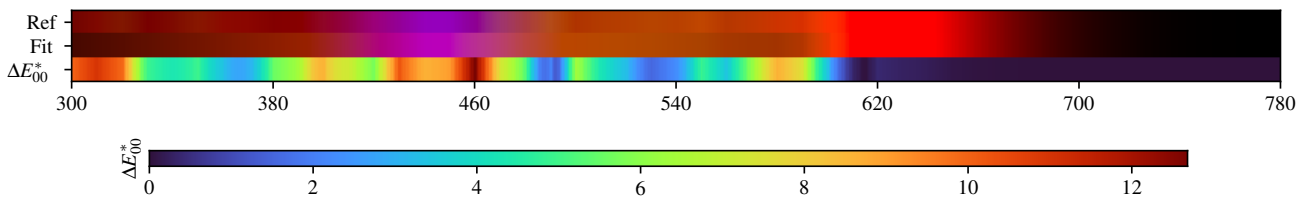
3.13. HERPIMAG



HERPIMAG - Weighted Expectation-Maximization - 2 Gaussians



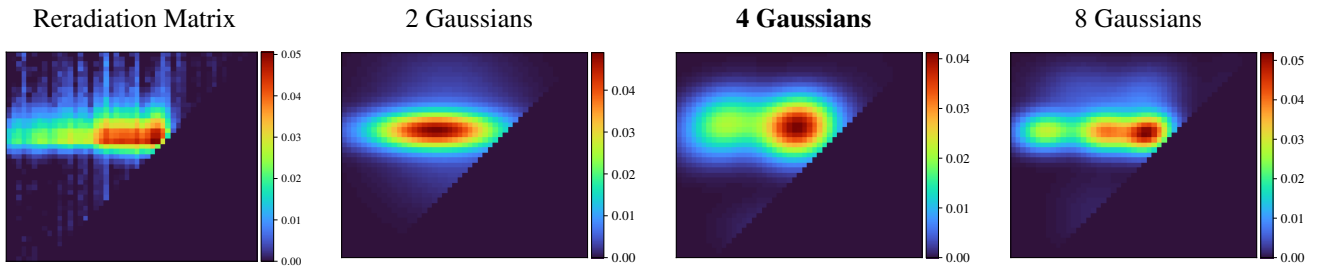
Fitted Material Under Monochromatic Illumination



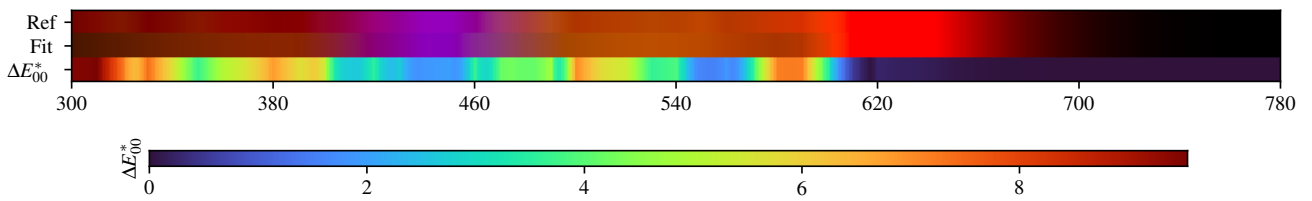
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.72$	D60 $\Delta E = 1.85$	FL2 $\Delta E = 1.03$	FL7 $\Delta E = 1.54$	FL12 $\Delta E = 0.99$	FL3.5 $\Delta E = 0.65$	FL3.10 $\Delta E = 0.63$	FL3.15 $\Delta E = 1.81$	HP5 $\Delta E = 0.94$	LED-B5 $\Delta E = 1.70$
B $\Delta E = 1.39$	D65 $\Delta E = 2.05$	FL3 $\Delta E = 1.65$	FL8 $\Delta E = 0.94$	FL3.1 $\Delta E = 2.33$	FL3.6 $\Delta E = 0.89$	FL3.11 $\Delta E = 0.81$	HP1 $\Delta E = 2.86$	LED-B1 $\Delta E = 1.06$	LED-BH1 $\Delta E = 0.58$
C $\Delta E = 2.25$	D75 $\Delta E = 2.35$	FL4 $\Delta E = 2.10$	FL9 $\Delta E = 0.65$	FL3.2 $\Delta E = 1.07$	FL3.7 $\Delta E = 1.16$	FL3.12 $\Delta E = 1.00$	HP2 $\Delta E = 0.51$	LED-B2 $\Delta E = 0.92$	LED-RGB1 $\Delta E = 0.49$
D50 $\Delta E = 1.38$	E $\Delta E = 2.03$	FL5 $\Delta E = 1.19$	FL10 $\Delta E = 0.59$	FL3.3 $\Delta E = 1.06$	FL3.8 $\Delta E = 0.63$	FL3.13 $\Delta E = 0.65$	HP3 $\Delta E = 0.86$	LED-B3 $\Delta E = 0.73$	LED-V1 $\Delta E = 0.62$
D55 $\Delta E = 1.63$	FL1 $\Delta E = 1.27$	FL6 $\Delta E = 1.27$	FL11 $\Delta E = 0.52$	FL3.4 $\Delta E = 1.18$	FL3.9 $\Delta E = 0.52$	FL3.14 $\Delta E = 0.88$	HP4 $\Delta E = 0.99$	LED-B4 $\Delta E = 1.03$	LED-V2 $\Delta E = 1.12$

HERPIMAG - Weighted Expectation-Maximization - 4 Gaussians



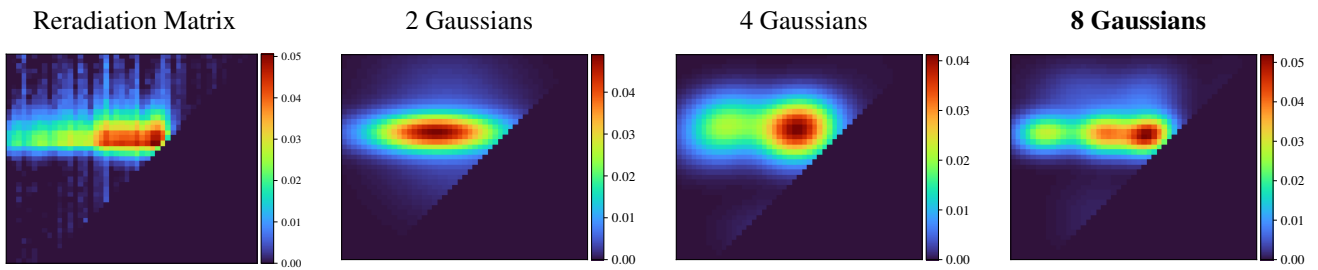
Fitted Material Under Monochromatic Illumination



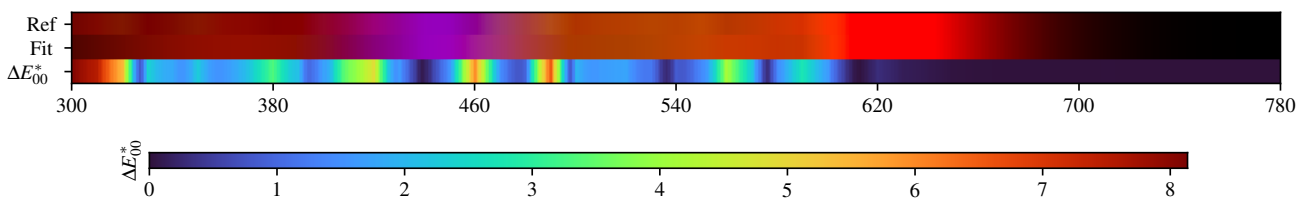
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.04$	$\Delta E = 1.46$	$\Delta E = 1.88$	$\Delta E = 1.46$	$\Delta E = 0.99$	$\Delta E = 1.19$	$\Delta E = 1.27$	$\Delta E = 1.36$	$\Delta E = 1.56$	$\Delta E = 1.47$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.29$	$\Delta E = 1.52$	$\Delta E = 1.96$	$\Delta E = 1.23$	$\Delta E = 2.04$	$\Delta E = 1.24$	$\Delta E = 1.20$	$\Delta E = 2.66$	$\Delta E = 1.24$	$\Delta E = 0.80$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.43$	$\Delta E = 1.61$	$\Delta E = 2.03$	$\Delta E = 1.27$	$\Delta E = 1.68$	$\Delta E = 1.02$	$\Delta E = 1.13$	$\Delta E = 0.51$	$\Delta E = 1.25$	$\Delta E = 0.83$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.34$	$\Delta E = 1.43$	$\Delta E = 1.82$	$\Delta E = 1.15$	$\Delta E = 1.81$	$\Delta E = 1.06$	$\Delta E = 1.27$	$\Delta E = 1.33$	$\Delta E = 1.30$	$\Delta E = 1.03$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.40$	$\Delta E = 1.80$	$\Delta E = 1.92$	$\Delta E = 1.05$	$\Delta E = 1.00$	$\Delta E = 1.12$	$\Delta E = 1.23$	$\Delta E = 1.99$	$\Delta E = 1.38$	$\Delta E = 1.25$

HERPIMAG - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.33$	$\Delta E = 0.19$	$\Delta E = 0.37$	$\Delta E = 0.16$	$\Delta E = 0.38$	$\Delta E = 0.43$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.06$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.30$	$\Delta E = 0.28$	$\Delta E = 0.54$	$\Delta E = 0.01$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.25$	$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.29$	$\Delta E = 0.05$	$\Delta E = 0.38$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.11$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.22$	$\Delta E = 0.32$	$\Delta E = 0.69$	$\Delta E = 0.33$	$\Delta E = 0.41$

HERPIMAG - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.141101	0.142693	0.142121	0.150535	0.166535	0.190921	0.244456	0.251603	0.190051	0.131981	0.084974
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.061414	0.040629	0.033381	0.027641	0.027064	0.024535	0.028249	0.023820	0.031185	0.047711	0.093934
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.246816	0.541993	0.771048	0.863861	0.893310	0.906806	0.916080	0.920832	0.922225	0.926417	0.928594
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.931092	0.928886	0.936573	0.937903	0.938417	0.941462	0.937681	0.942168			

2 Gaussians

Scaling factor: 883.4293494288047

Gaussians:

Weight	Mean		Covariance			
0.683976340	479.271196361	628.689919187	7792.175313953	15.997016283	15.997016283	610.189602836
0.316023660	511.573601662	637.526308790	8351.711925872	-578.681216360	-578.681216360	8629.144157901

4 Gaussians

Scaling factor: 846.4471134518677

Gaussians:

Weight	Mean		Covariance			
0.335565410	390.184965726	641.313119432	2811.462015033	362.866681363	362.866681363	1744.383290311
0.031671478	654.570578315	599.467050469	3989.103650555	374.482791947	374.482791947	17766.153859805
0.608380782	535.989779115	635.604179617	2530.186912944	151.649797355	151.649797355	1577.079899684
0.024382330	481.079698351	434.927759613	3937.348506384	79.813273797	79.813273797	1498.525311149

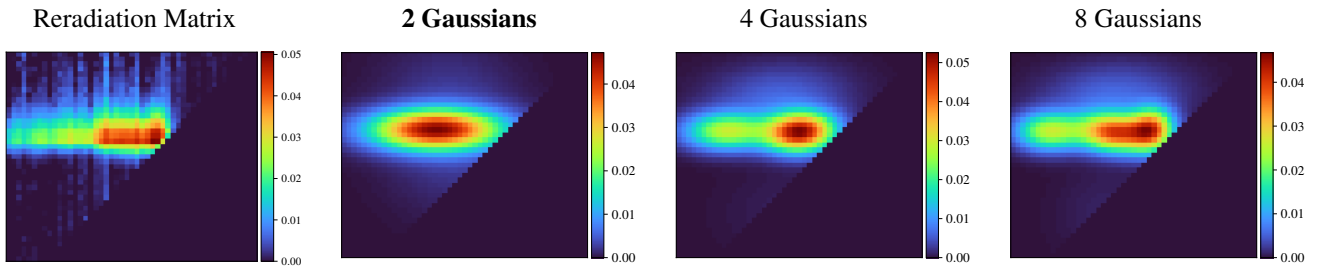
8 Gaussians

Scaling factor: 832.5967290656538

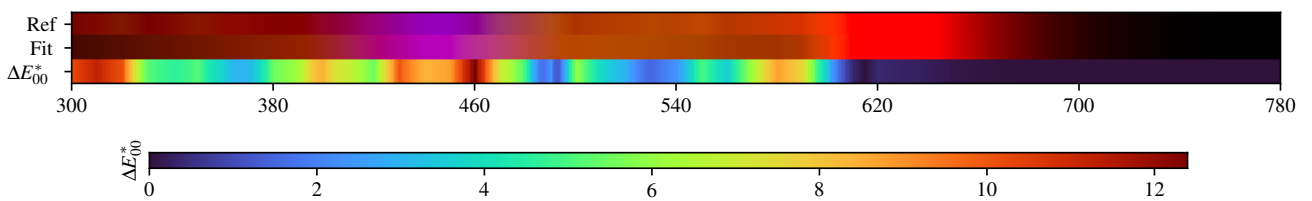
Gaussians:

Weight	Mean		Covariance			
0.098320137	443.194900508	699.415310165	4224.175460490	-152.731729319	-152.731729319	1638.288050533
0.257870036	569.448837987	623.362491707	943.741891622	122.540464266	122.540464266	588.177259760
0.029778649	467.297220116	460.808881567	3027.363100550	2.170188391	2.170188391	3196.284861326
0.098745616	560.251016123	686.310573784	2043.307108644	473.633713456	473.633713456	1925.056279150
0.285602619	482.883419397	625.696362663	1574.310135138	0.541206432	0.541206432	645.532530637
0.019191499	636.198359528	475.771851234	3421.088127833	-361.391053309	-361.391053309	4019.653557317
0.008437312	720.477667859	696.829597938	1145.015962800	420.160984293	420.160984293	3522.442869542
0.202054132	364.366065957	627.387417929	1541.380957108	34.307728958	34.307728958	607.205283576

HERPIMAG - Weighted variational Bayesian inference - 2 Gaussians



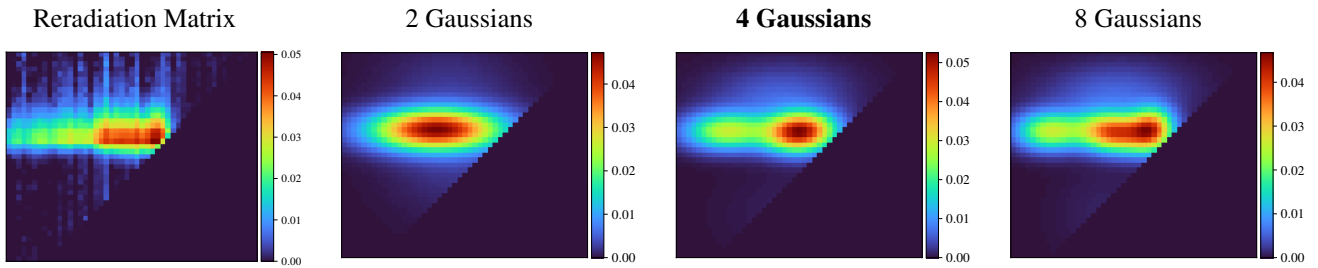
Fitted Material Under Monochromatic Illumination



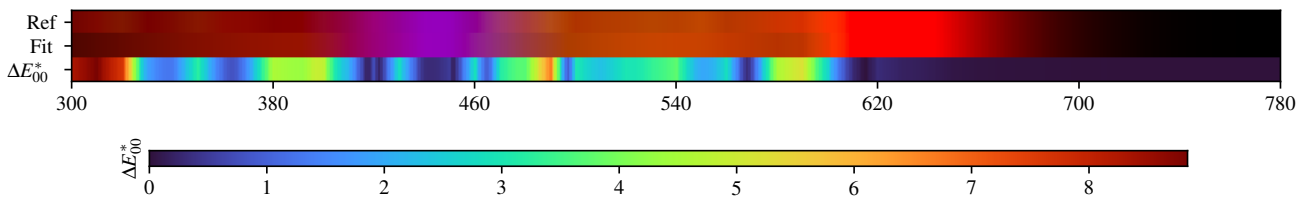
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.76$	D60 $\Delta E = 1.64$	FL2 $\Delta E = 1.11$	FL7 $\Delta E = 1.34$	FL12 $\Delta E = 1.07$	FL3.5 $\Delta E = 0.59$	FL3.10 $\Delta E = 0.52$	FL3.15 $\Delta E = 1.60$	HP5 $\Delta E = 0.85$	LED-B5 $\Delta E = 1.50$
B $\Delta E = 1.21$	D65 $\Delta E = 1.82$	FL3 $\Delta E = 1.76$	FL8 $\Delta E = 0.79$	FL3.1 $\Delta E = 2.42$	FL3.6 $\Delta E = 0.75$	FL3.11 $\Delta E = 0.67$	HP1 $\Delta E = 2.92$	LED-B1 $\Delta E = 1.14$	LED-BH1 $\Delta E = 0.62$
C $\Delta E = 2.02$	D75 $\Delta E = 2.11$	FL4 $\Delta E = 2.20$	FL9 $\Delta E = 0.63$	FL3.2 $\Delta E = 1.17$	FL3.7 $\Delta E = 1.23$	FL3.12 $\Delta E = 1.08$	HP2 $\Delta E = 0.56$	LED-B2 $\Delta E = 0.99$	LED-RGB1 $\Delta E = 0.42$
D50 $\Delta E = 1.20$	E $\Delta E = 1.83$	FL5 $\Delta E = 1.02$	FL10 $\Delta E = 0.50$	FL3.3 $\Delta E = 0.92$	FL3.8 $\Delta E = 0.71$	FL3.13 $\Delta E = 0.67$	HP3 $\Delta E = 0.89$	LED-B3 $\Delta E = 0.67$	LED-V1 $\Delta E = 0.63$
D55 $\Delta E = 1.43$	FL1 $\Delta E = 1.08$	FL6 $\Delta E = 1.38$	FL11 $\Delta E = 0.57$	FL3.4 $\Delta E = 1.25$	FL3.9 $\Delta E = 0.47$	FL3.14 $\Delta E = 0.73$	HP4 $\Delta E = 0.99$	LED-B4 $\Delta E = 0.89$	LED-V2 $\Delta E = 0.96$

HERPIMAG - Weighted variational Bayesian inference - 4 Gaussians



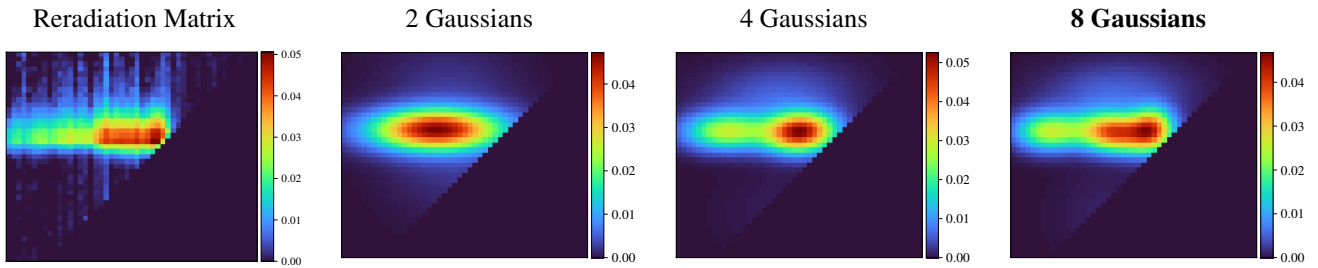
Fitted Material Under Monochromatic Illumination



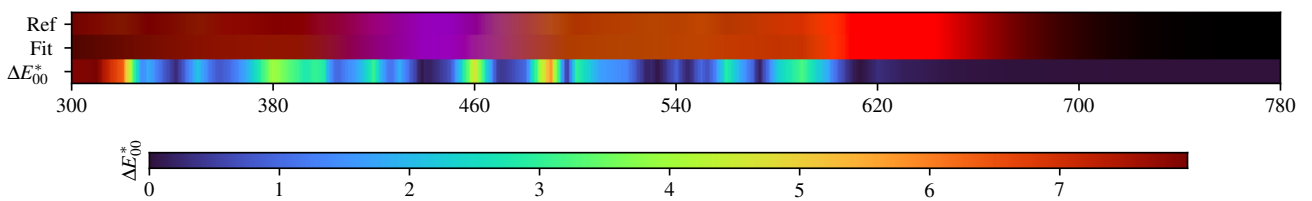
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.56$	$\Delta E = 0.13$	$\Delta E = 0.24$	$\Delta E = 0.29$	$\Delta E = 0.39$	$\Delta E = 0.10$	$\Delta E = 0.40$	$\Delta E = 0.19$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.72$	$\Delta E = 0.14$	$\Delta E = 0.91$	$\Delta E = 0.23$	$\Delta E = 0.04$	$\Delta E = 1.45$	$\Delta E = 0.38$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.24$	$\Delta E = 0.86$	$\Delta E = 0.27$	$\Delta E = 0.54$	$\Delta E = 0.26$	$\Delta E = 0.43$	$\Delta E = 0.32$	$\Delta E = 0.33$	$\Delta E = 0.39$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.39$	$\Delta E = 0.28$	$\Delta E = 0.09$	$\Delta E = 0.34$	$\Delta E = 0.12$	$\Delta E = 0.50$	$\Delta E = 0.27$	$\Delta E = 0.18$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.16$	$\Delta E = 0.32$	$\Delta E = 0.55$	$\Delta E = 0.14$	$\Delta E = 0.26$	$\Delta E = 0.07$	$\Delta E = 0.34$	$\Delta E = 0.66$	$\Delta E = 0.17$	$\Delta E = 0.13$

HERPIMAG - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.35$	$\Delta E = 0.17$	$\Delta E = 0.41$	$\Delta E = 0.20$	$\Delta E = 0.44$	$\Delta E = 0.11$	$\Delta E = 0.37$	$\Delta E = 0.24$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.41$	$\Delta E = 0.17$	$\Delta E = 0.47$	$\Delta E = 0.18$	$\Delta E = 0.29$	$\Delta E = 0.60$	$\Delta E = 0.23$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.47$	$\Delta E = 0.22$	$\Delta E = 0.32$	$\Delta E = 0.40$	$\Delta E = 0.32$	$\Delta E = 0.36$	$\Delta E = 0.19$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.25$	$\Delta E = 0.23$	$\Delta E = 0.34$	$\Delta E = 0.24$	$\Delta E = 0.36$	$\Delta E = 0.31$	$\Delta E = 0.34$	$\Delta E = 0.14$	$\Delta E = 0.27$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.24$	$\Delta E = 0.34$	$\Delta E = 0.38$	$\Delta E = 0.23$	$\Delta E = 0.32$	$\Delta E = 0.25$	$\Delta E = 0.66$	$\Delta E = 0.18$	$\Delta E = 0.25$

HERPIMAG - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.141101	0.142693	0.142121	0.150535	0.166535	0.190921	0.244456	0.251603	0.190051	0.131981	0.084974
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.061414	0.040629	0.033381	0.027641	0.027064	0.024535	0.028249	0.023820	0.031185	0.047711	0.093934
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.246816	0.541993	0.771048	0.863861	0.893310	0.906806	0.916080	0.920832	0.922225	0.926417	0.928594
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.931092	0.928886	0.936573	0.937903	0.938417	0.941462	0.937681	0.942168			

2 Gaussians max

Scaling factor: 881.9549649905398

Gaussians:

Weight	Mean		Covariance			
0.251454225	514.113065012	634.893981955	8706.111089157	-625.809340276	-625.809340276	10349.244249973
0.748545775	481.268994625	630.265670750	7754.597623692	20.036066976	20.036066976	743.765378048

4 Gaussians max

Scaling factor: 844.5256058892171

Gaussians:

Weight	Mean		Covariance			
0.049615626	533.963384626	471.187030245	10169.144050735	461.602118506	461.602118506	4215.489766656
0.296879224	395.234586282	626.988188474	3260.403260039	21.550658843	21.550658843	626.866337078
0.460045175	541.791528317	625.378593350	2152.907776469	90.127023640	90.127023640	704.640246530
0.193459974	498.457990964	694.188204817	8968.422288007	420.633432450	420.633432450	2003.498241805

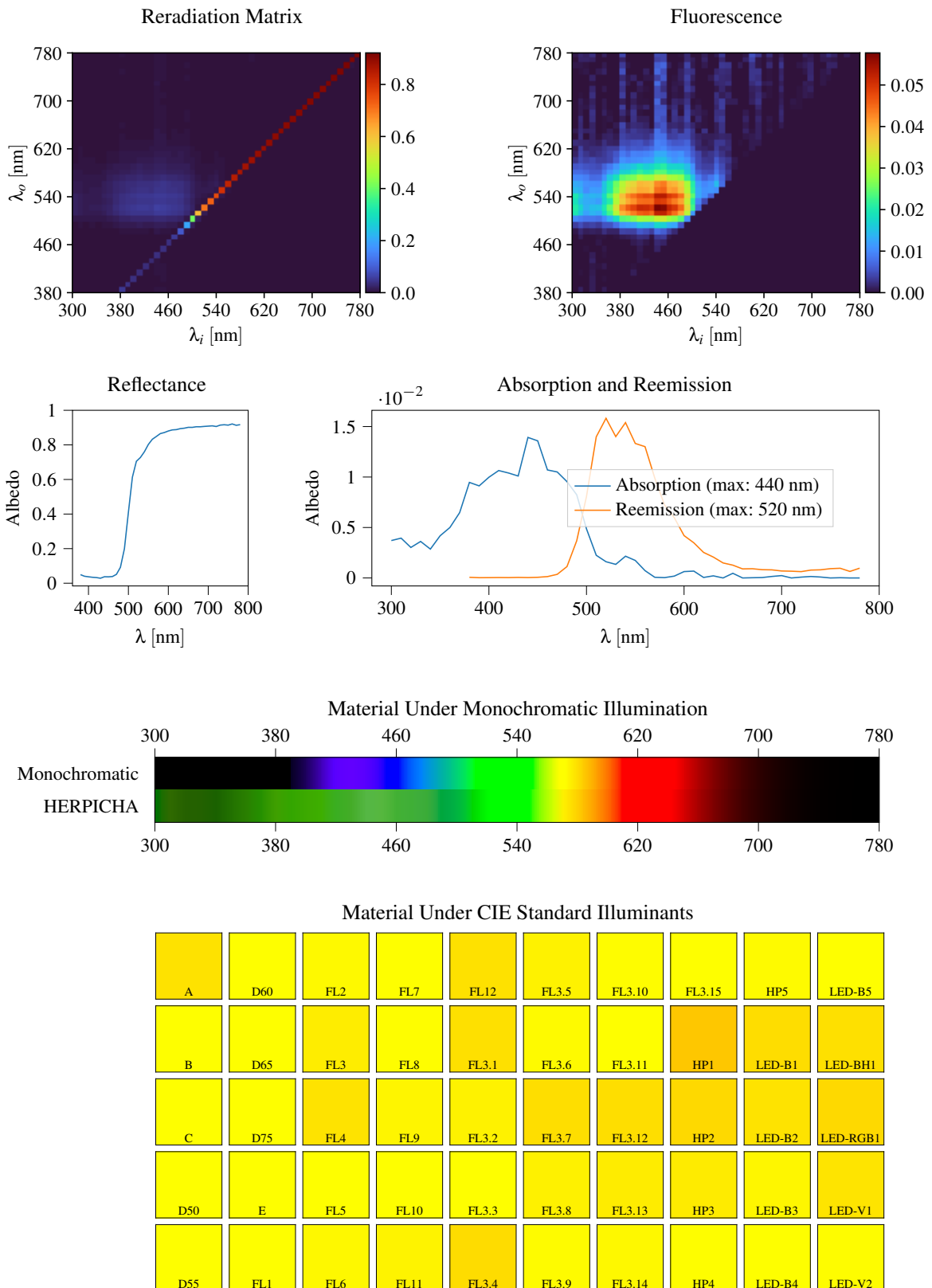
8 Gaussians max

Scaling factor: 841.3918608118281

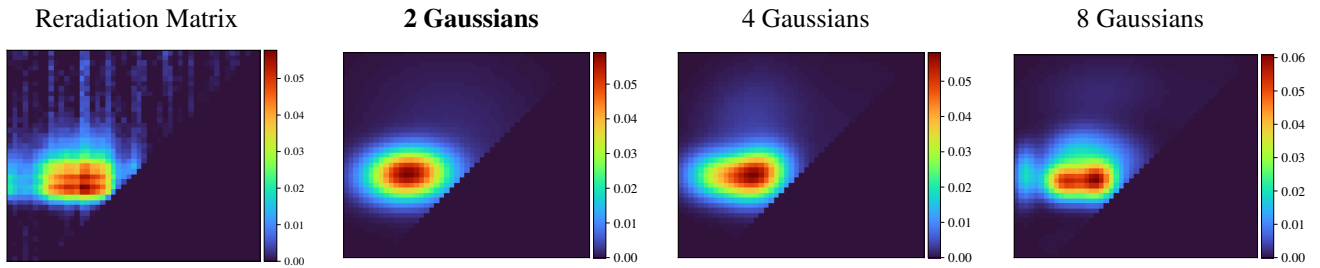
Gaussians:

Weight	Mean		Covariance			
0.032536486	477.129126357	468.330653786	4315.860977453	240.755016717	240.755016717	4241.270638292
0.020332833	628.101140117	493.254441123	5605.814717338	-970.709030040	-970.709030040	5937.824165332
0.213204516	371.900324081	626.696355961	2076.853861855	-5.845774671	-5.845774671	651.945607415
0.348973102	501.149941871	624.240283403	2223.194979313	-118.865192086	-118.865192086	675.931241575
0.201580523	575.891698774	630.242013379	824.229717160	38.642856881	38.642856881	792.121812317
0.181747973	498.714838632	696.580076656	9032.007118867	393.055961998	393.055961998	1968.098252403

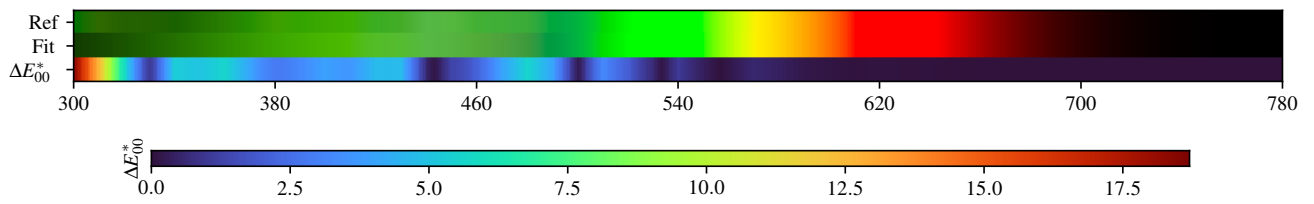
3.14. HERPICHHA



HERPICHA - Weighted Expectation-Maximization - 2 Gaussians



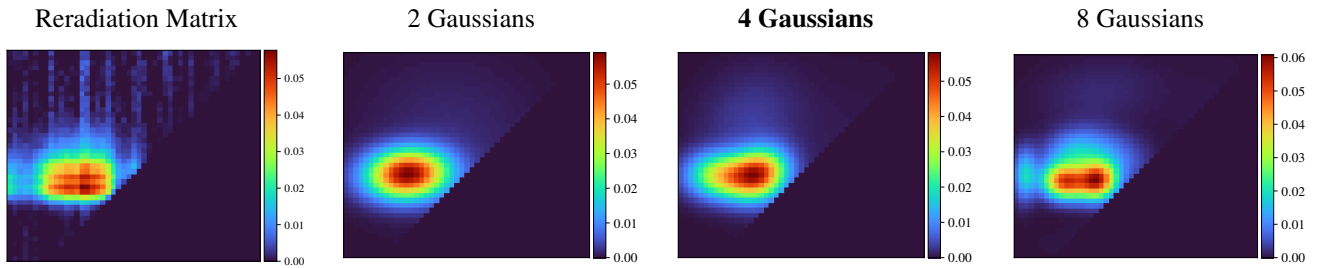
Fitted Material Under Monochromatic Illumination



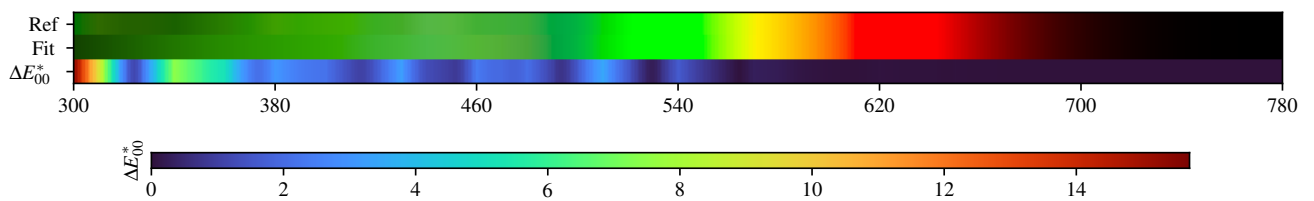
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.32$	$\Delta E = 0.40$	$\Delta E = 0.37$	$\Delta E = 0.42$	$\Delta E = 0.42$	$\Delta E = 0.47$	$\Delta E = 0.60$	$\Delta E = 0.44$	$\Delta E = 0.35$	$\Delta E = 0.61$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.40$	$\Delta E = 0.43$	$\Delta E = 0.32$	$\Delta E = 0.48$	$\Delta E = 0.27$	$\Delta E = 0.52$	$\Delta E = 0.45$	$\Delta E = 0.24$	$\Delta E = 0.35$	$\Delta E = 0.22$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.42$	$\Delta E = 0.49$	$\Delta E = 0.27$	$\Delta E = 0.43$	$\Delta E = 0.37$	$\Delta E = 0.42$	$\Delta E = 0.37$	$\Delta E = 0.26$	$\Delta E = 0.41$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.38$	$\Delta E = 0.55$	$\Delta E = 0.41$	$\Delta E = 0.48$	$\Delta E = 0.42$	$\Delta E = 0.46$	$\Delta E = 0.62$	$\Delta E = 0.26$	$\Delta E = 0.45$	$\Delta E = 0.29$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.43$	$\Delta E = 0.35$	$\Delta E = 0.48$	$\Delta E = 0.22$	$\Delta E = 0.47$	$\Delta E = 0.70$	$\Delta E = 0.35$	$\Delta E = 0.52$	$\Delta E = 0.34$

HERPICHA - Weighted Expectation-Maximization - 4 Gaussians



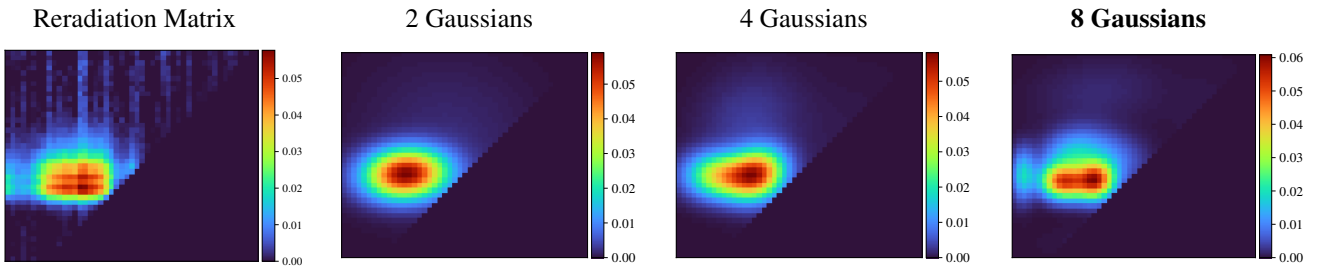
Fitted Material Under Monochromatic Illumination



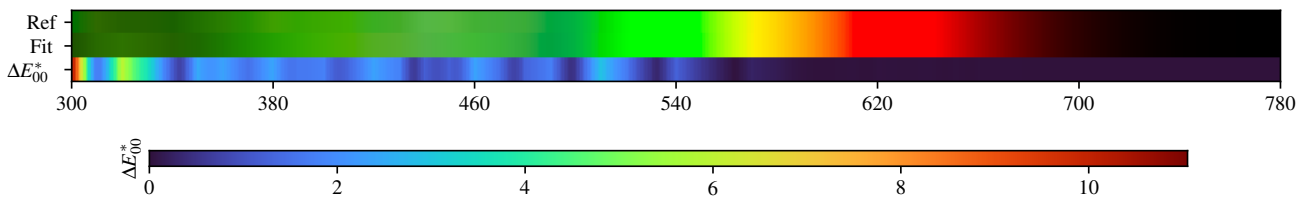
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.13$	$\Delta E = 0.35$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.32$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.22$	$\Delta E = 0.40$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.31$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.29$	$\Delta E = 0.47$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.33$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.25$	$\Delta E = 0.43$	$\Delta E = 0.17$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.28$	$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.18$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.30$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.18$

HERPICHA - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.27$	$\Delta E = 0.06$	$\Delta E = 0.19$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.13$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.27$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.26$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.05$	$\Delta E = 0.26$	$\Delta E = 0.07$	$\Delta E = 0.25$	$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.03$	$\Delta E = 0.15$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.26$	$\Delta E = 0.10$	$\Delta E = 0.26$	$\Delta E = 0.04$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.15$

HERPICHA - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.049575	0.040352	0.037179	0.034361	0.032721	0.028884	0.037445	0.036859	0.038718	0.051216	0.091973
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.199179	0.410119	0.613168	0.705153	0.726937	0.759992	0.802612	0.832603	0.848646	0.865347	0.871408
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.880320	0.886672	0.888232	0.893932	0.896547	0.901488	0.901285	0.904826	0.904724	0.906762	0.908414
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.910182	0.906256	0.914409	0.916464	0.914210	0.921062	0.913344	0.916992			

2 Gaussians

Scaling factor: 808.2686491995454

Gaussians:

Weight	Mean		Covariance			
0.197330299	505.394725080	610.884203141	13811.186416653	-454.267205193	-454.267205193	11703.070830719
0.802669701	422.639814514	542.293391536	2971.255254436	119.836546278	119.836546278	1069.936879165

4 Gaussians

Scaling factor: 793.4190270430123

Gaussians:

Weight	Mean		Covariance			
0.085453586	591.148892839	567.569329559	12695.354616549	4477.455906137	4477.455906137	15701.684153220
0.121363528	436.022539769	647.353028751	4507.737937675	797.699473660	797.699473660	4745.012377658
0.420463735	457.105245032	542.258102609	1327.568087791	165.162283228	165.162283228	1075.255260436
0.372719151	384.580884425	538.643338508	2103.494767928	-21.726881398	-21.726881398	879.214707730

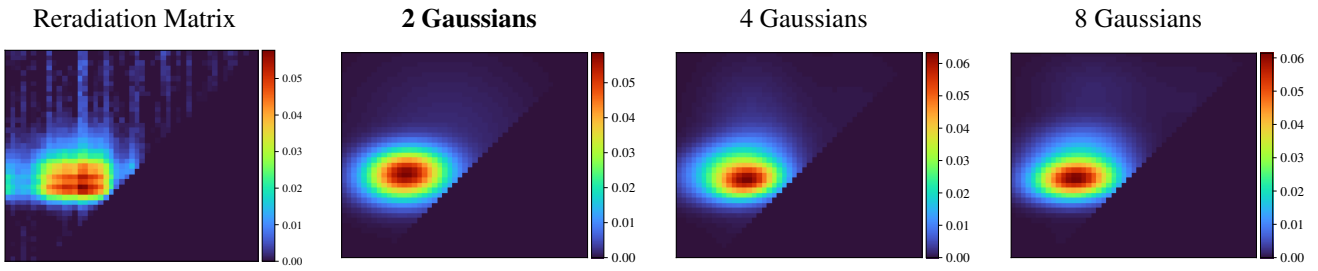
8 Gaussians

Scaling factor: 784.1900104432546

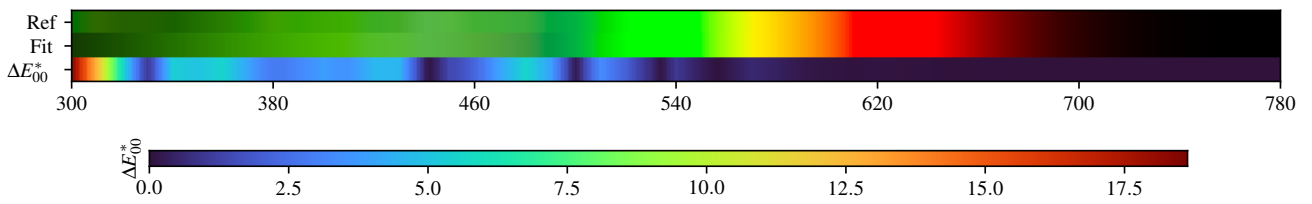
Gaussians:

Weight	Mean		Covariance			
0.032040736	685.171451384	638.620110797	4054.866231384	977.715445502	977.715445502	9621.214906535
0.179800381	413.635183066	579.029141460	1611.092758177	208.640019347	208.640019347	1109.437736471
0.024813898	545.713211272	412.879301078	13770.243935666	461.093157940	461.093157940	669.584966453
0.256540391	396.075145301	527.262041133	882.508080977	-34.464553970	-34.464553970	522.844703520
0.071187585	317.335644321	542.023602996	224.446306422	10.548036817	10.548036817	1142.107859804
0.097352190	496.064343794	577.952203848	1838.327569703	-294.981362436	-294.981362436	1122.441202683
0.064236788	464.883312112	707.796918337	7007.164040802	575.221156499	575.221156499	2218.960741958
0.274028031	462.537502199	530.715409030	671.679635722	31.990116593	31.990116593	625.458687981

HERPICHIA - Weighted variational Bayesian inference - 2 Gaussians



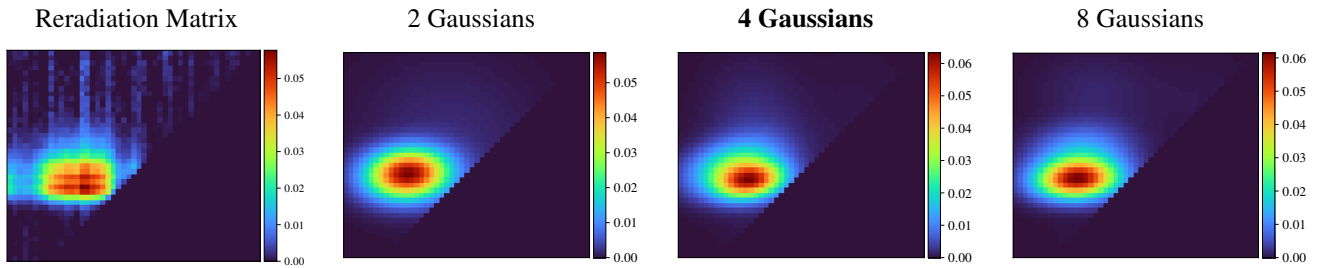
Fitted Material Under Monochromatic Illumination



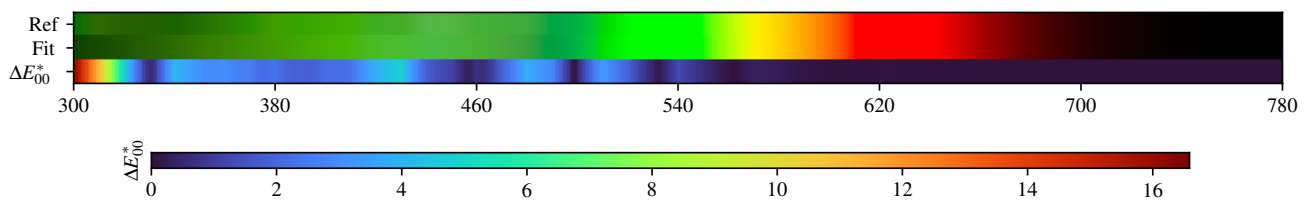
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.34$	$\Delta E = 0.43$	$\Delta E = 0.40$	$\Delta E = 0.47$	$\Delta E = 0.43$	$\Delta E = 0.51$	$\Delta E = 0.64$	$\Delta E = 0.49$	$\Delta E = 0.39$	$\Delta E = 0.65$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.45$	$\Delta E = 0.45$	$\Delta E = 0.34$	$\Delta E = 0.52$	$\Delta E = 0.29$	$\Delta E = 0.55$	$\Delta E = 0.48$	$\Delta E = 0.25$	$\Delta E = 0.37$	$\Delta E = 0.24$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.47$	$\Delta E = 0.50$	$\Delta E = 0.30$	$\Delta E = 0.47$	$\Delta E = 0.40$	$\Delta E = 0.43$	$\Delta E = 0.38$	$\Delta E = 0.28$	$\Delta E = 0.43$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.42$	$\Delta E = 0.54$	$\Delta E = 0.46$	$\Delta E = 0.51$	$\Delta E = 0.46$	$\Delta E = 0.48$	$\Delta E = 0.64$	$\Delta E = 0.29$	$\Delta E = 0.48$	$\Delta E = 0.29$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.42$	$\Delta E = 0.48$	$\Delta E = 0.38$	$\Delta E = 0.50$	$\Delta E = 0.23$	$\Delta E = 0.50$	$\Delta E = 0.73$	$\Delta E = 0.35$	$\Delta E = 0.56$	$\Delta E = 0.38$

HERPICHA - Weighted variational Bayesian inference - 4 Gaussians



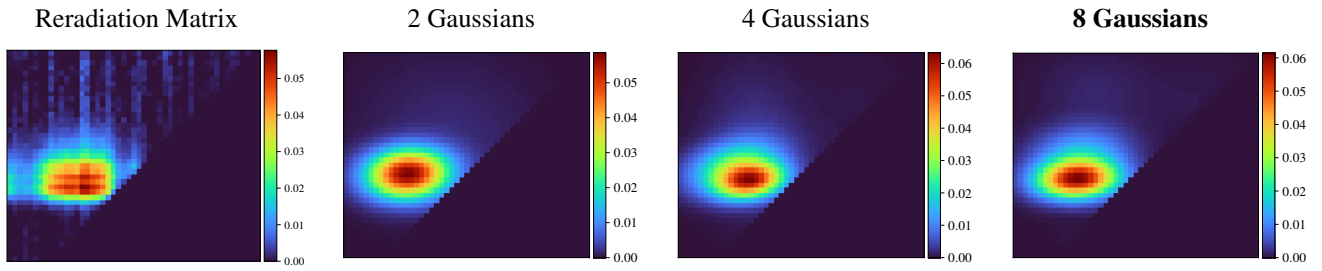
Fitted Material Under Monochromatic Illumination



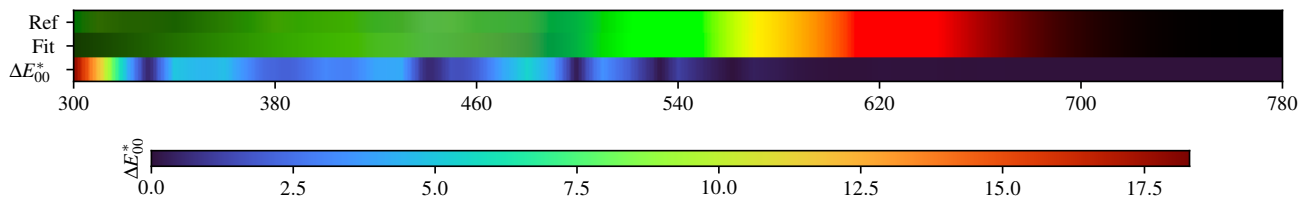
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.30$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.26$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.19$	FL3.15 $\Delta E = 0.14$	HP5 $\Delta E = 0.26$	LED-B5 $\Delta E = 0.14$
B $\Delta E = 0.22$	D65 $\Delta E = 0.34$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.33$	D75 $\Delta E = 0.40$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.29$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.19$
D50 $\Delta E = 0.21$	E $\Delta E = 0.42$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.24$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.27$
D55 $\Delta E = 0.26$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.09$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.36$	LED-B4 $\Delta E = 0.14$	LED-V2 $\Delta E = 0.30$

HERPICHIA - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.19$	D60 $\Delta E = 0.17$	FL2 $\Delta E = 0.22$	FL7 $\Delta E = 0.28$	FL12 $\Delta E = 0.37$	FL3.5 $\Delta E = 0.36$	FL3.10 $\Delta E = 0.54$	FL3.15 $\Delta E = 0.31$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.52$
B $\Delta E = 0.23$	D65 $\Delta E = 0.18$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.37$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.41$	FL3.11 $\Delta E = 0.42$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.25$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.22$	D75 $\Delta E = 0.22$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.32$	FL3.2 $\Delta E = 0.23$	FL3.7 $\Delta E = 0.37$	FL3.12 $\Delta E = 0.29$	HP2 $\Delta E = 0.15$	LED-B2 $\Delta E = 0.30$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.20$	E $\Delta E = 0.31$	FL5 $\Delta E = 0.28$	FL10 $\Delta E = 0.44$	FL3.3 $\Delta E = 0.29$	FL3.8 $\Delta E = 0.41$	FL3.13 $\Delta E = 0.52$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.34$	LED-V1 $\Delta E = 0.18$
D55 $\Delta E = 0.18$	FL1 $\Delta E = 0.30$	FL6 $\Delta E = 0.20$	FL11 $\Delta E = 0.44$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.43$	FL3.14 $\Delta E = 0.61$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.42$	LED-V2 $\Delta E = 0.16$

HERPICHA - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.049575	0.040352	0.037179	0.034361	0.032721	0.028884	0.037445	0.036859	0.038718	0.051216	0.091973
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.199179	0.410119	0.613168	0.705153	0.726937	0.759992	0.802612	0.832603	0.848646	0.865347	0.871408
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.880320	0.886672	0.888232	0.893932	0.896547	0.901488	0.901285	0.904826	0.904724	0.906762	0.908414
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.910182	0.906256	0.914409	0.916464	0.914210	0.921062	0.913344	0.916992			

2 Gaussians max

Scaling factor: 809.0392021070999

Gaussians:

Weight	Mean		Covariance			
0.199852487	504.689022536	610.350917572	13753.168482160	-414.877066373	-414.877066373	11592.365998296
0.800147513	422.741033162	542.272906195	2994.077069550	124.228776478	124.228776478	1076.134364503

4 Gaussians max

Scaling factor: 799.178134812543

Gaussians:

Weight	Mean		Covariance			
0.170073522	446.349703501	601.087545413	4297.092174610	-225.321644705	-225.321644705	9329.846331436
0.055193063	653.540430892	605.329045292	6425.432855709	159.910293375	159.910293375	16075.994273047
0.370383722	403.312175390	558.389299248	3570.859288595	658.516532621	658.516532621	1142.507827163
0.404349692	440.033096679	527.912357611	2040.053721506	245.305130093	245.305130093	557.939871075

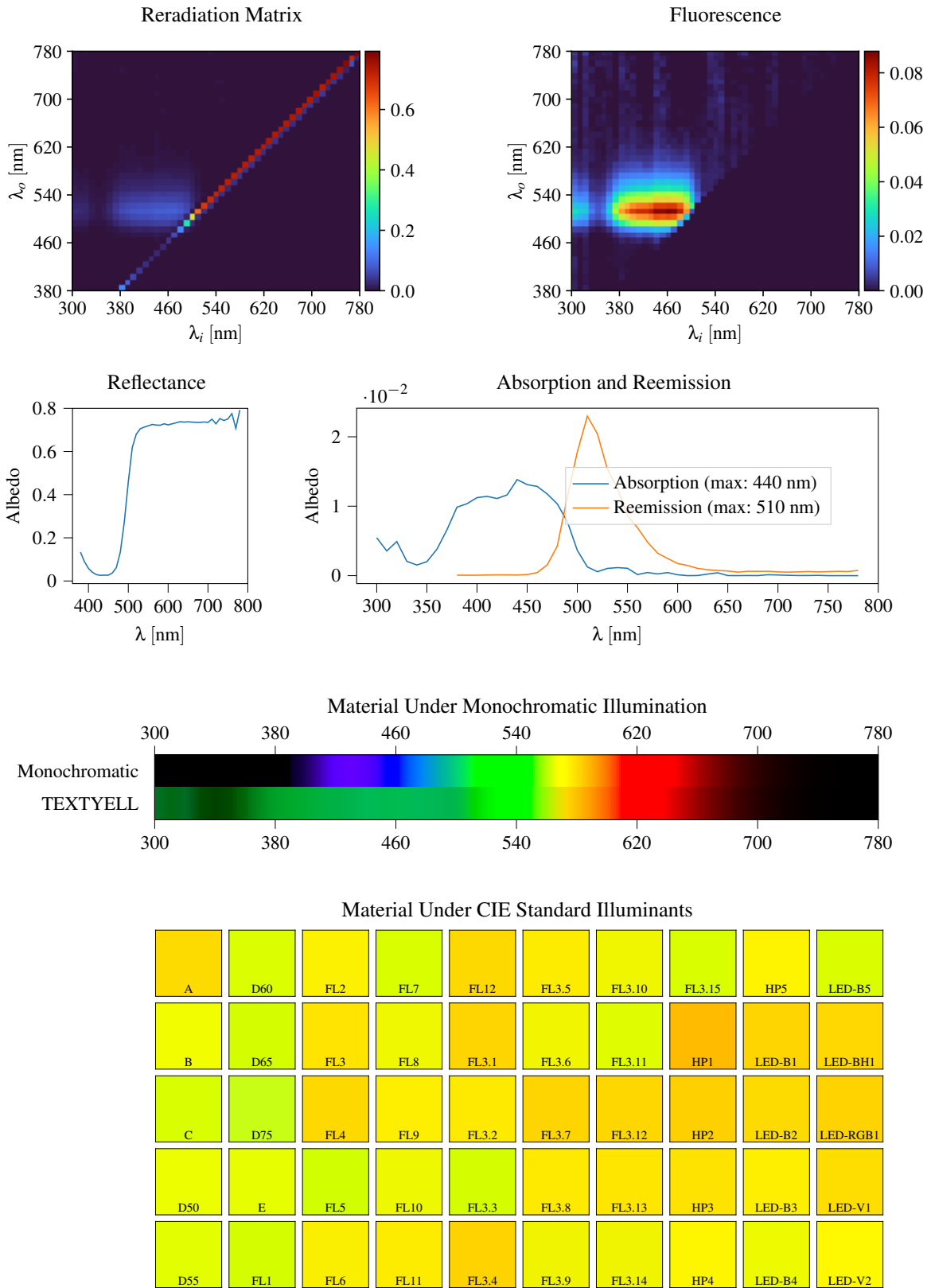
8 Gaussians max

Scaling factor: 798.0685619282574

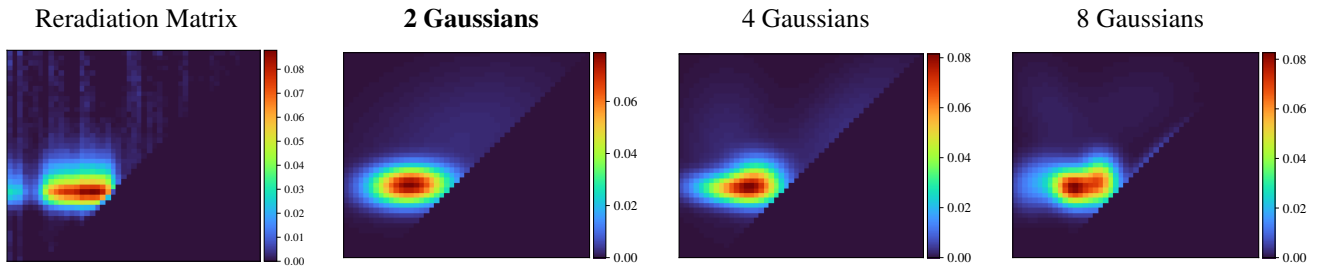
Gaussians:

Weight	Mean		Covariance			
0.036602185	561.042118558	443.520447165	14405.618682217	1245.705191681	1245.705191681	3165.910614646
0.584668273	423.290110028	531.081183190	2958.899995628	117.597286314	117.597286314	635.430851058
0.294310245	428.704400106	577.859848146	3929.529191755	240.048737644	240.048737644	1429.226812049
0.031428858	663.936678809	683.528911741	6430.897974114	474.433521992	474.433521992	5286.600648347
0.051373706	457.661038182	709.003255618	5873.045611892	-50.447497601	-50.447497601	2491.207188655

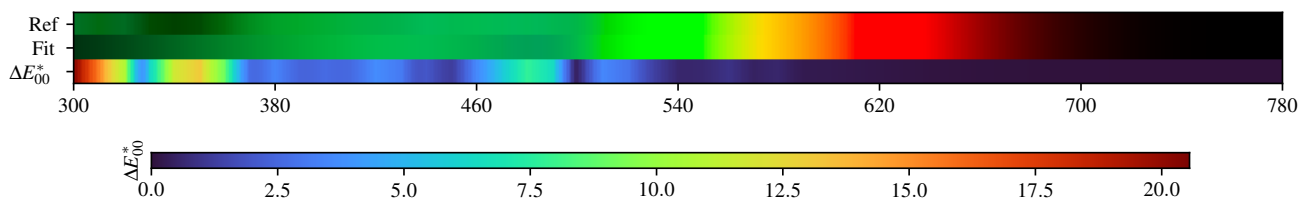
3.15. TEXTYELL



TEXTYELL - Weighted Expectation-Maximization - 2 Gaussians



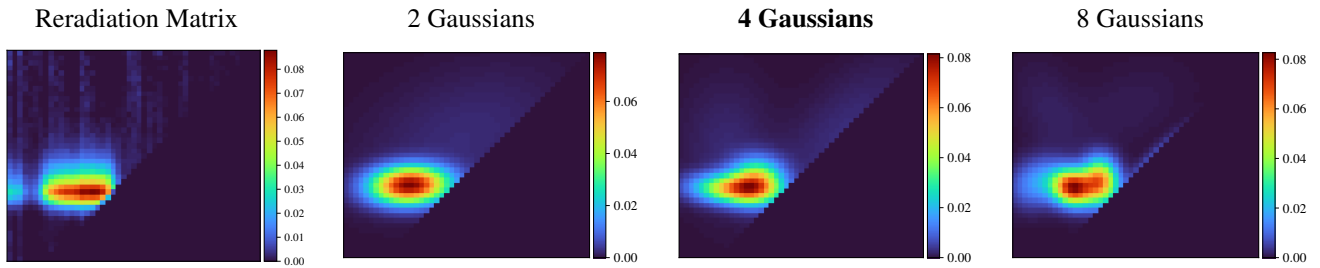
Fitted Material Under Monochromatic Illumination



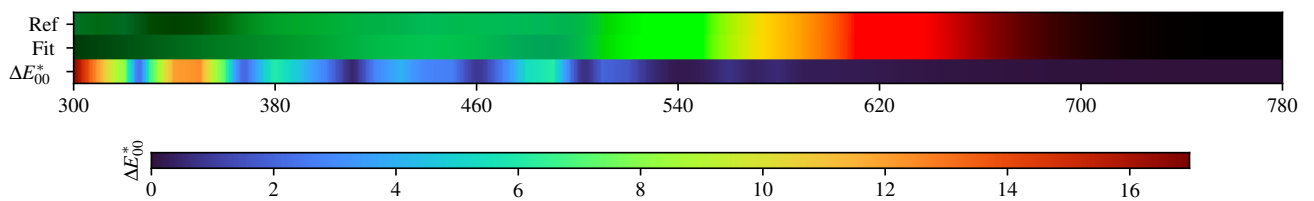
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.41$	$\Delta E = 0.21$	$\Delta E = 0.64$	$\Delta E = 0.62$	$\Delta E = 0.60$	$\Delta E = 0.77$	$\Delta E = 1.09$	$\Delta E = 0.68$	$\Delta E = 0.45$	$\Delta E = 0.92$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.56$	$\Delta E = 0.14$	$\Delta E = 0.53$	$\Delta E = 0.78$	$\Delta E = 0.44$	$\Delta E = 0.84$	$\Delta E = 0.87$	$\Delta E = 0.25$	$\Delta E = 0.47$	$\Delta E = 0.39$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.45$	$\Delta E = 0.14$	$\Delta E = 0.43$	$\Delta E = 0.71$	$\Delta E = 0.62$	$\Delta E = 0.63$	$\Delta E = 0.57$	$\Delta E = 0.37$	$\Delta E = 0.56$	$\Delta E = 0.51$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.41$	$\Delta E = 0.17$	$\Delta E = 0.66$	$\Delta E = 0.90$	$\Delta E = 0.67$	$\Delta E = 0.82$	$\Delta E = 1.05$	$\Delta E = 0.30$	$\Delta E = 0.64$	$\Delta E = 0.30$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.31$	$\Delta E = 0.68$	$\Delta E = 0.61$	$\Delta E = 0.84$	$\Delta E = 0.34$	$\Delta E = 0.88$	$\Delta E = 1.16$	$\Delta E = 0.26$	$\Delta E = 0.81$	$\Delta E = 0.39$

TEXTYELL - Weighted Expectation-Maximization - 4 Gaussians



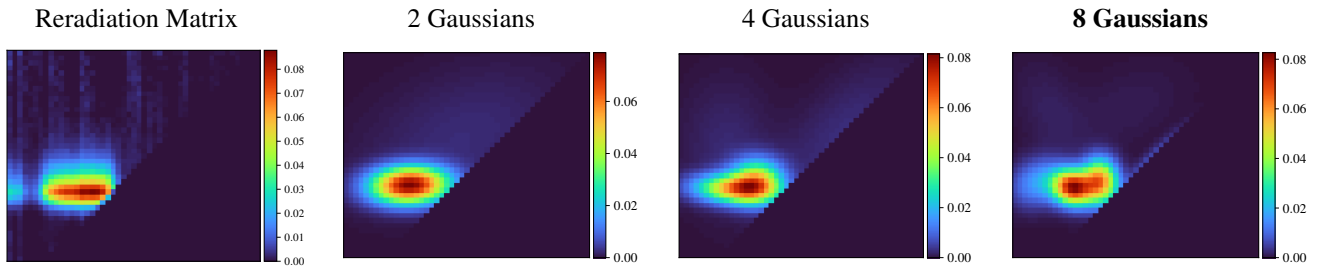
Fitted Material Under Monochromatic Illumination



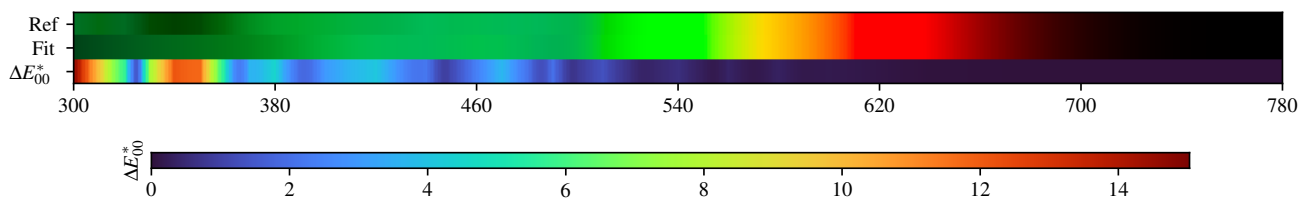
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.34$	D60 $\Delta E = 0.26$	FL2 $\Delta E = 0.44$	FL7 $\Delta E = 0.41$	FL12 $\Delta E = 0.45$	FL3.5 $\Delta E = 0.51$	FL3.10 $\Delta E = 0.55$	FL3.15 $\Delta E = 0.53$	HP5 $\Delta E = 0.34$	LED-B5 $\Delta E = 0.53$
B $\Delta E = 0.40$	D65 $\Delta E = 0.23$	FL3 $\Delta E = 0.39$	FL8 $\Delta E = 0.47$	FL3.1 $\Delta E = 0.39$	FL3.6 $\Delta E = 0.54$	FL3.11 $\Delta E = 0.41$	HP1 $\Delta E = 0.26$	LED-B1 $\Delta E = 0.31$	LED-BH1 $\Delta E = 0.42$
C $\Delta E = 0.35$	D75 $\Delta E = 0.22$	FL4 $\Delta E = 0.35$	FL9 $\Delta E = 0.45$	FL3.2 $\Delta E = 0.47$	FL3.7 $\Delta E = 0.54$	FL3.12 $\Delta E = 0.51$	HP2 $\Delta E = 0.29$	LED-B2 $\Delta E = 0.33$	LED-RGB1 $\Delta E = 0.41$
D50 $\Delta E = 0.32$	E $\Delta E = 0.22$	FL5 $\Delta E = 0.44$	FL10 $\Delta E = 0.43$	FL3.3 $\Delta E = 0.47$	FL3.8 $\Delta E = 0.50$	FL3.13 $\Delta E = 0.77$	HP3 $\Delta E = 0.27$	LED-B3 $\Delta E = 0.41$	LED-V1 $\Delta E = 0.29$
D55 $\Delta E = 0.29$	FL1 $\Delta E = 0.44$	FL6 $\Delta E = 0.43$	FL11 $\Delta E = 0.45$	FL3.4 $\Delta E = 0.31$	FL3.9 $\Delta E = 0.45$	FL3.14 $\Delta E = 0.78$	HP4 $\Delta E = 0.30$	LED-B4 $\Delta E = 0.50$	LED-V2 $\Delta E = 0.40$

TEXTYELL - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.46$	D60 $\Delta E = 0.84$	FL2 $\Delta E = 0.45$	FL7 $\Delta E = 0.60$	FL12 $\Delta E = 0.14$	FL3.5 $\Delta E = 0.46$	FL3.10 $\Delta E = 0.29$	FL3.15 $\Delta E = 0.46$	HP5 $\Delta E = 0.81$	LED-B5 $\Delta E = 0.53$
B $\Delta E = 0.70$	D65 $\Delta E = 0.88$	FL3 $\Delta E = 0.35$	FL8 $\Delta E = 0.49$	FL3.1 $\Delta E = 0.23$	FL3.6 $\Delta E = 0.46$	FL3.11 $\Delta E = 0.42$	HP1 $\Delta E = 0.19$	LED-B1 $\Delta E = 0.37$	LED-BH1 $\Delta E = 0.47$
C $\Delta E = 0.77$	D75 $\Delta E = 0.94$	FL4 $\Delta E = 0.26$	FL9 $\Delta E = 0.45$	FL3.2 $\Delta E = 0.41$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.27$	HP2 $\Delta E = 0.38$	LED-B2 $\Delta E = 0.41$	LED-RGB1 $\Delta E = 0.59$
D50 $\Delta E = 0.75$	E $\Delta E = 0.73$	FL5 $\Delta E = 0.52$	FL10 $\Delta E = 0.38$	FL3.3 $\Delta E = 0.50$	FL3.8 $\Delta E = 0.27$	FL3.13 $\Delta E = 0.33$	HP3 $\Delta E = 0.63$	LED-B3 $\Delta E = 0.50$	LED-V1 $\Delta E = 0.87$
D55 $\Delta E = 0.80$	FL1 $\Delta E = 0.53$	FL6 $\Delta E = 0.41$	FL11 $\Delta E = 0.30$	FL3.4 $\Delta E = 0.29$	FL3.9 $\Delta E = 0.36$	FL3.14 $\Delta E = 0.36$	HP4 $\Delta E = 0.90$	LED-B4 $\Delta E = 0.52$	LED-V2 $\Delta E = 1.05$

TEXTYELL - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.133453	0.089232	0.058275	0.040248	0.029405	0.026158	0.027074	0.026862	0.037270	0.061989	0.133888
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.273394	0.458662	0.618566	0.680491	0.705117	0.713143	0.718986	0.725466	0.722631	0.721719	0.728651
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.723341	0.728246	0.733122	0.738135	0.736410	0.737601	0.736304	0.735201	0.734756	0.736842	0.735035
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.749748	0.728387	0.752529	0.743665	0.750925	0.775458	0.707983	0.792706			

2 Gaussians

Scaling factor: 839.7023857827996

Gaussians:

Weight	Mean		Covariance			
0.259172875	532.526612615	618.321944998	19323.582245896	4702.930994595	4702.930994595	9147.626339739
0.740827125	426.263025587	520.134534817	2682.422978890	87.756009548	87.756009548	612.590043556

4 Gaussians

Scaling factor: 840.7264318618544

Gaussians:

Weight	Mean		Covariance			
0.160055318	621.595935876	623.953119607	8764.736156902	5964.984976176	5964.984976176	9768.771678256
0.105449224	388.992623001	600.832996552	3698.365959949	78.724234623	78.724234623	8287.453565550
0.357755189	450.673896877	528.535055797	1217.635232255	8.653930721	8.653930721	810.822913887
0.376740270	403.630954606	513.009935854	2744.454109094	-108.410192839	-108.410192839	370.375563491

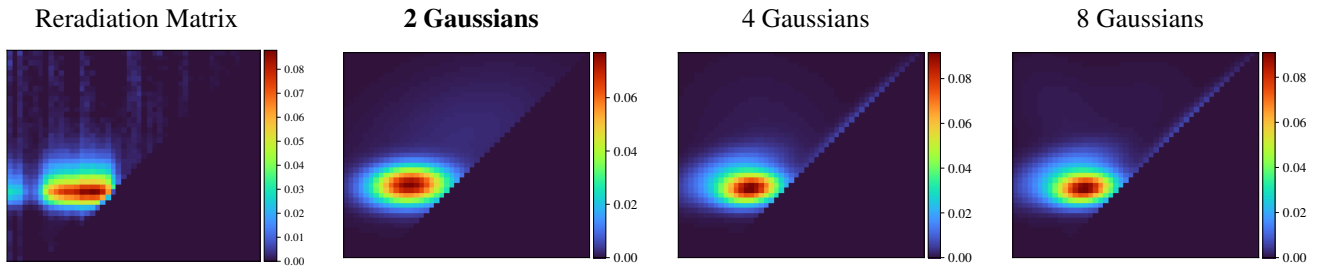
8 Gaussians

Scaling factor: 863.0204173473628

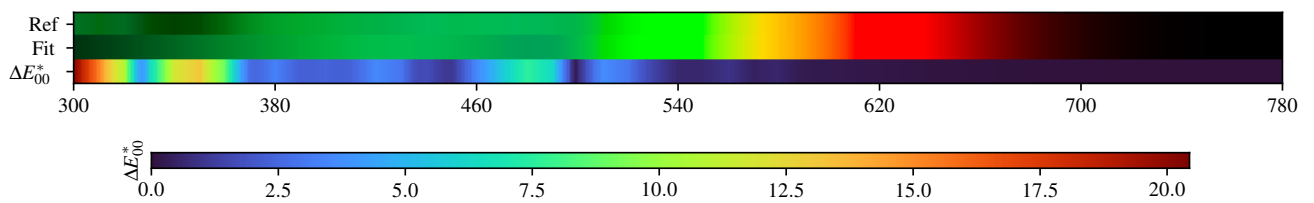
Gaussians:

Weight	Mean		Covariance			
0.060121173	709.823511215	699.798824390	2235.129945018	2234.106806639	2234.106806639	2233.329929078
0.140794565	347.167541423	525.674705504	1331.329204653	213.869048640	213.869048640	991.044291706
0.021531438	547.047058783	434.399443514	13714.454996794	2708.750620789	2708.750620789	2404.156348227
0.043952795	522.125415222	673.928498796	7115.608428332	2020.794126102	2020.794126102	3856.069606497
0.294092277	469.946306979	528.302420467	539.963962750	-25.667484264	-25.667484264	849.395059204
0.051164095	581.944912023	573.569013572	1988.864381507	1679.780835166	1679.780835166	1684.983255838
0.351804154	415.122932261	515.500395316	714.107544093	-57.443924313	-57.443924313	544.124265057
0.036539504	369.384403877	669.191169623	2303.499028632	-1283.806842358	-1283.806842358	4729.978391775

TEXTYELL - Weighted variational Bayesian inference - 2 Gaussians



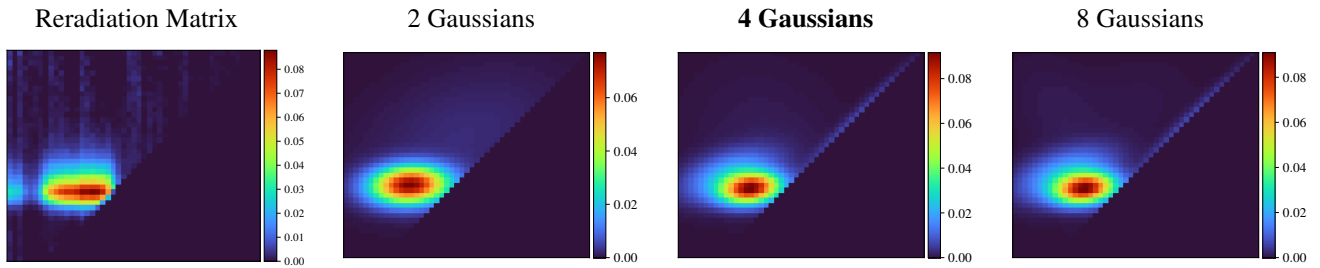
Fitted Material Under Monochromatic Illumination



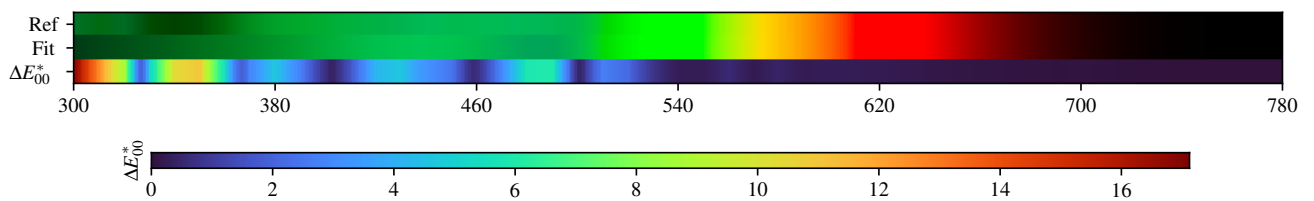
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.43$	D60 $\Delta E = 0.30$	FL2 $\Delta E = 0.68$	FL7 $\Delta E = 0.69$	FL12 $\Delta E = 0.61$	FL3.5 $\Delta E = 0.80$	FL3.10 $\Delta E = 1.13$	FL3.15 $\Delta E = 0.75$	HP5 $\Delta E = 0.50$	LED-B5 $\Delta E = 0.98$
B $\Delta E = 0.63$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.55$	FL8 $\Delta E = 0.83$	FL3.1 $\Delta E = 0.44$	FL3.6 $\Delta E = 0.88$	FL3.11 $\Delta E = 0.92$	HP1 $\Delta E = 0.25$	LED-B1 $\Delta E = 0.48$	LED-BH1 $\Delta E = 0.40$
C $\Delta E = 0.54$	D75 $\Delta E = 0.14$	FL4 $\Delta E = 0.44$	FL9 $\Delta E = 0.75$	FL3.2 $\Delta E = 0.65$	FL3.7 $\Delta E = 0.63$	FL3.12 $\Delta E = 0.56$	HP2 $\Delta E = 0.38$	LED-B2 $\Delta E = 0.57$	LED-RGB1 $\Delta E = 0.54$
D50 $\Delta E = 0.48$	E $\Delta E = 0.15$	FL5 $\Delta E = 0.72$	FL10 $\Delta E = 0.95$	FL3.3 $\Delta E = 0.73$	FL3.8 $\Delta E = 0.84$	FL3.13 $\Delta E = 1.06$	HP3 $\Delta E = 0.32$	LED-B3 $\Delta E = 0.68$	LED-V1 $\Delta E = 0.30$
D55 $\Delta E = 0.39$	FL1 $\Delta E = 0.74$	FL6 $\Delta E = 0.64$	FL11 $\Delta E = 0.87$	FL3.4 $\Delta E = 0.34$	FL3.9 $\Delta E = 0.92$	FL3.14 $\Delta E = 1.19$	HP4 $\Delta E = 0.28$	LED-B4 $\Delta E = 0.85$	LED-V2 $\Delta E = 0.46$

TEXTYELL - Weighted variational Bayesian inference - 4 Gaussians



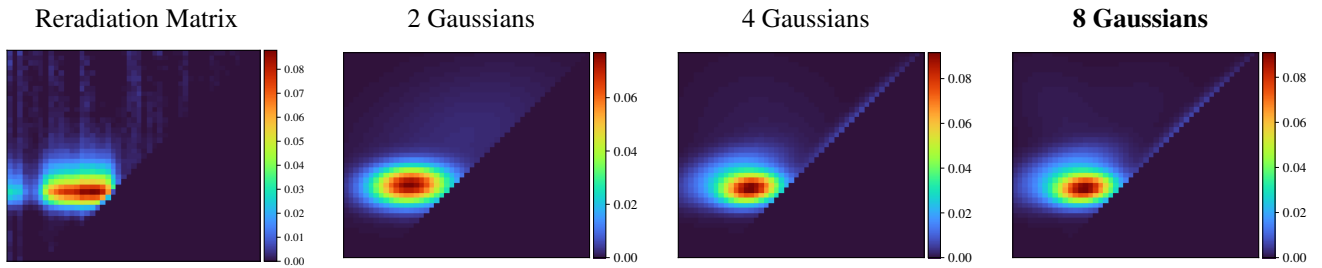
Fitted Material Under Monochromatic Illumination



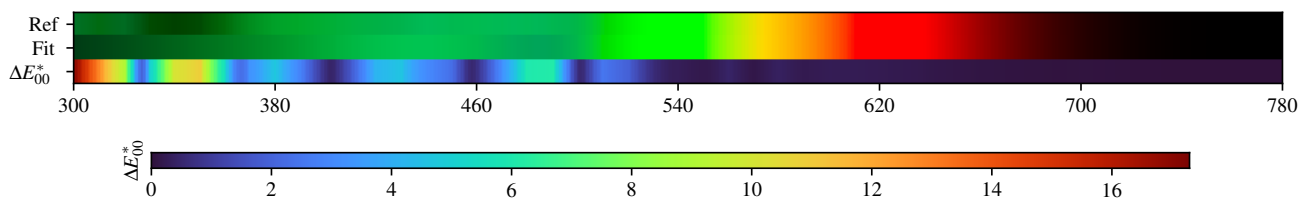
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.28$	$\Delta E = 0.32$	$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.32$	$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.33$	$\Delta E = 0.34$	$\Delta E = 0.49$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.27$	$\Delta E = 0.34$	$\Delta E = 0.28$	$\Delta E = 0.30$	$\Delta E = 0.29$	$\Delta E = 0.36$	$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.30$	$\Delta E = 0.54$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.28$	$\Delta E = 0.38$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.31$	$\Delta E = 0.45$	$\Delta E = 0.41$	$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.55$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.28$	$\Delta E = 0.34$	$\Delta E = 0.63$	$\Delta E = 0.33$	$\Delta E = 0.47$	$\Delta E = 0.35$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.30$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.28$	$\Delta E = 0.25$	$\Delta E = 0.63$	$\Delta E = 0.43$	$\Delta E = 0.52$	$\Delta E = 0.31$

TEXTYELL - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.25$	D60 $\Delta E = 0.28$	FL2 $\Delta E = 0.25$	FL7 $\Delta E = 0.24$	FL12 $\Delta E = 0.30$	FL3.5 $\Delta E = 0.34$	FL3.10 $\Delta E = 0.35$	FL3.15 $\Delta E = 0.36$	HP5 $\Delta E = 0.30$	LED-B5 $\Delta E = 0.44$
B $\Delta E = 0.26$	D65 $\Delta E = 0.29$	FL3 $\Delta E = 0.24$	FL8 $\Delta E = 0.28$	FL3.1 $\Delta E = 0.25$	FL3.6 $\Delta E = 0.35$	FL3.11 $\Delta E = 0.18$	HP1 $\Delta E = 0.19$	LED-B1 $\Delta E = 0.26$	LED-BH1 $\Delta E = 0.51$
C $\Delta E = 0.26$	D75 $\Delta E = 0.33$	FL4 $\Delta E = 0.24$	FL9 $\Delta E = 0.27$	FL3.2 $\Delta E = 0.28$	FL3.7 $\Delta E = 0.42$	FL3.12 $\Delta E = 0.39$	HP2 $\Delta E = 0.22$	LED-B2 $\Delta E = 0.28$	LED-RGB1 $\Delta E = 0.52$
D50 $\Delta E = 0.26$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.25$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.26$	FL3.8 $\Delta E = 0.32$	FL3.13 $\Delta E = 0.62$	HP3 $\Delta E = 0.29$	LED-B3 $\Delta E = 0.43$	LED-V1 $\Delta E = 0.31$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.25$	FL6 $\Delta E = 0.25$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.24$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.63$	HP4 $\Delta E = 0.39$	LED-B4 $\Delta E = 0.48$	LED-V2 $\Delta E = 0.27$

TEXTYELL - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.133453	0.089232	0.058275	0.040248	0.029405	0.026158	0.027074	0.026862	0.037270	0.061989	0.133888
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.273394	0.458662	0.618566	0.680491	0.705117	0.713143	0.718986	0.725466	0.722631	0.721719	0.728651
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.723341	0.728246	0.733122	0.738135	0.736410	0.737601	0.736304	0.735201	0.734756	0.736842	0.735035
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.749748	0.728387	0.752529	0.743665	0.750925	0.775458	0.707983	0.792706			

2 Gaussians max

Scaling factor: 840.2761554670635

Gaussians:

Weight	Mean		Covariance			
0.255754748	533.989709033	619.187531866	19325.282613598	4646.237102328	4646.237102328	9184.896017560
0.744245252	426.399333701	520.385890258	2720.182537324	96.747782524	96.747782524	640.587749017

4 Gaussians max

Scaling factor: 857.2289154892654

Gaussians:

Weight	Mean		Covariance			
0.131876146	468.939294388	599.463831138	11740.977919131	-1624.450501308	-1624.450501308	11898.108830509
0.272769213	395.780638188	540.038626844	3480.223871195	835.265506191	835.265506191	1042.839643376
0.496636102	440.681851309	513.179403703	1572.435961742	158.604246742	158.604246742	415.848713762
0.098718538	662.276985202	653.537183720	6032.009296178	5726.553228184	5726.553228184	5776.306803510

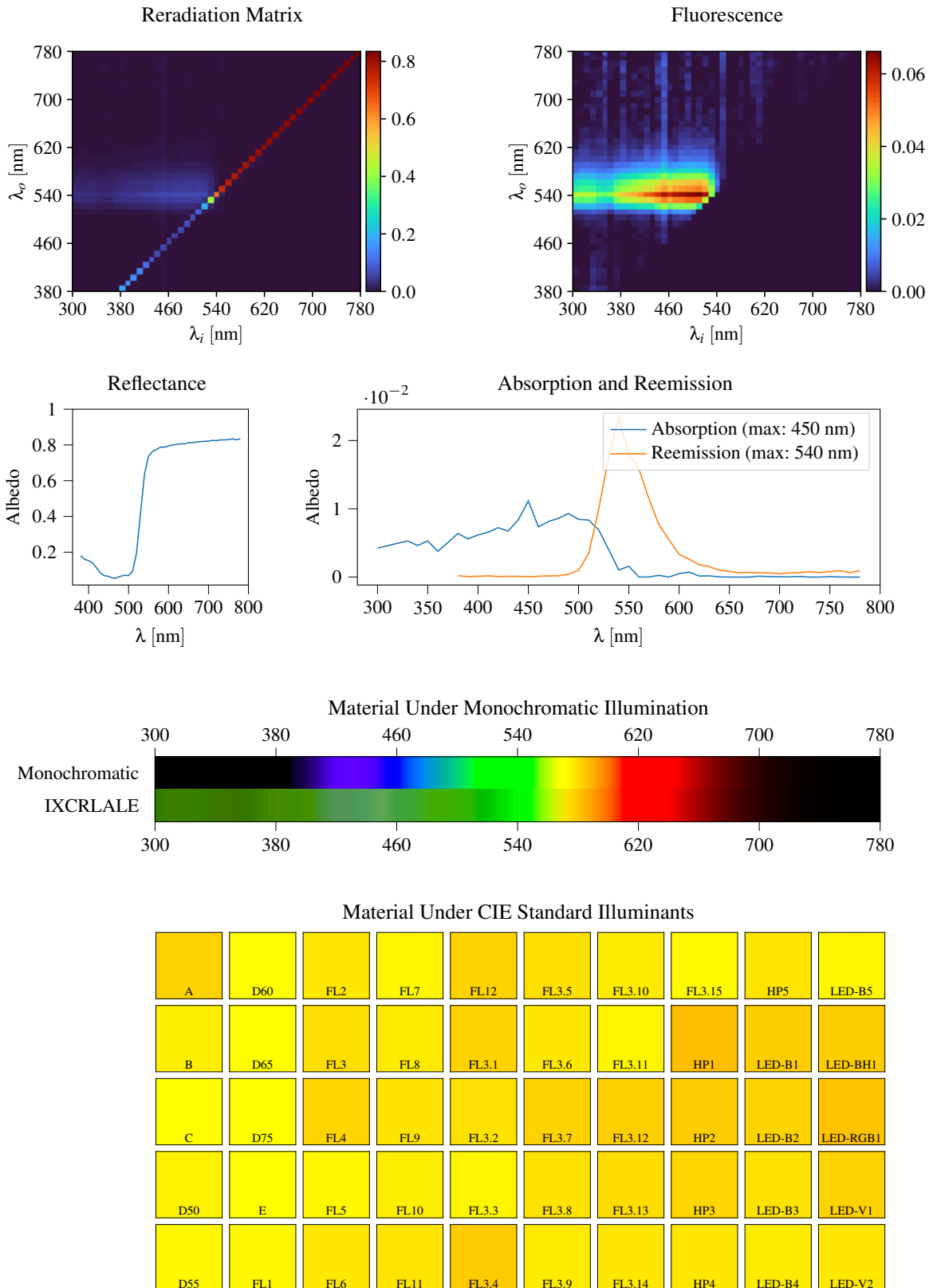
8 Gaussians max

Scaling factor: 854.750167279205

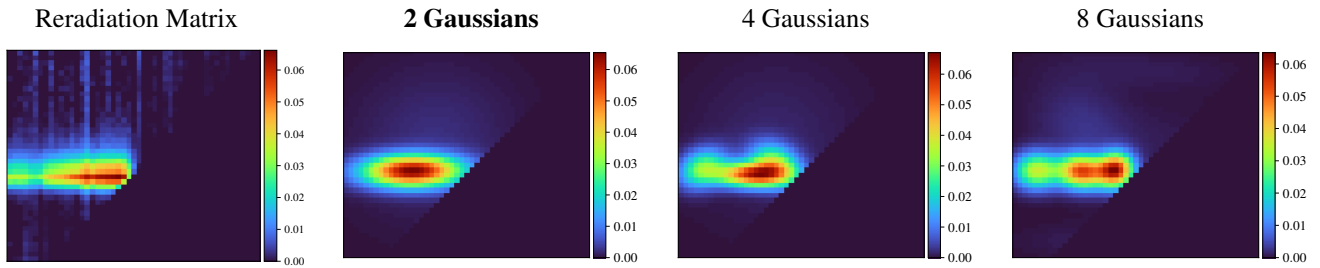
Gaussians:

Weight	Mean		Covariance			
0.028268914	523.245730262	454.441252936	13575.200580005	1034.041020308	1034.041020308	3847.376546710
0.301078900	399.884743562	541.544271957	3762.107715070	876.411858180	876.411858180	1123.178514606
0.492911783	440.456820485	512.986744843	1600.087521131	153.542450118	153.542450118	410.373974543
0.102465889	657.689615770	648.809597037	6320.663140328	6020.396553830	6020.396553830	6065.822669340
0.033703405	547.716624562	682.047932011	7025.908161660	725.180081995	725.180081995	4269.548389451
0.039911815	383.315035510	666.430309445	4071.554967007	-1597.400724153	-1597.400724153	5136.130999854

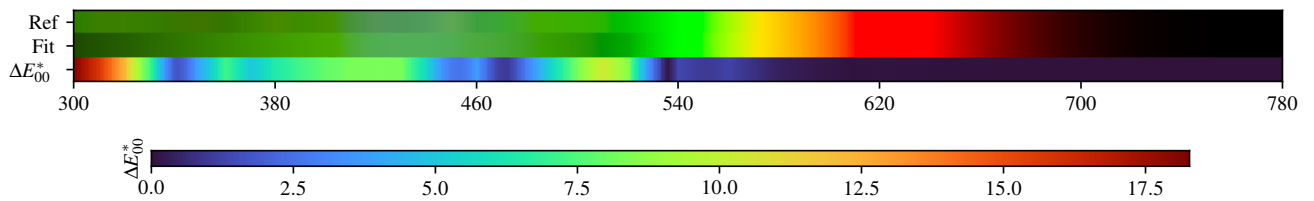
3.16. IXCRLALE



IXCRLALE - Weighted Expectation-Maximization - 2 Gaussians



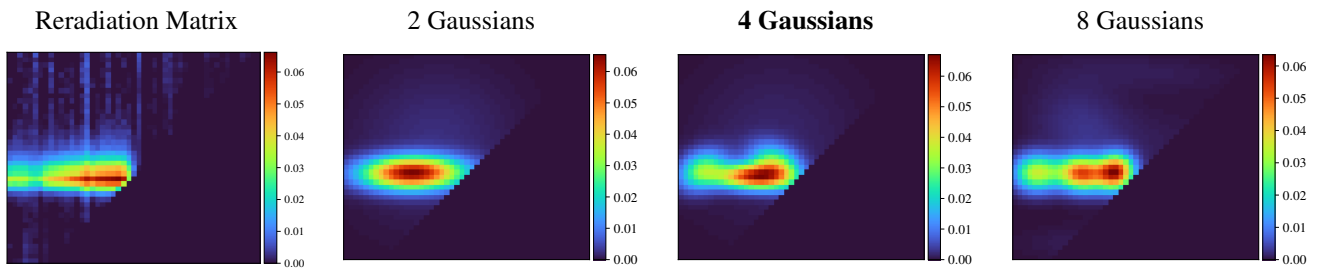
Fitted Material Under Monochromatic Illumination



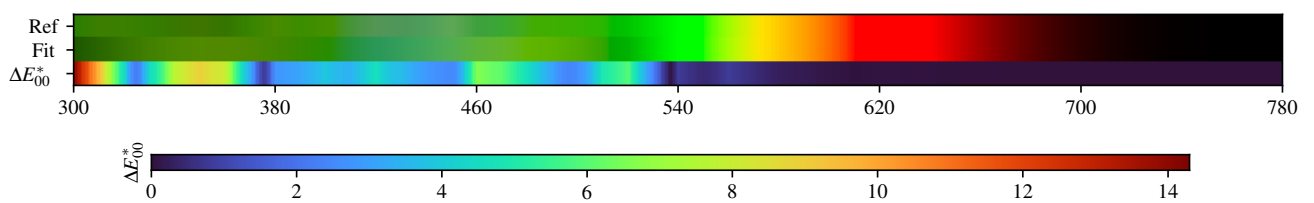
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.75$	$\Delta E = 0.21$	$\Delta E = 0.28$	$\Delta E = 0.22$	$\Delta E = 0.36$	$\Delta E = 0.89$	$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.19$	$\Delta E = 0.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.23$	$\Delta E = 0.35$	$\Delta E = 0.28$	$\Delta E = 0.76$	$\Delta E = 0.29$	$\Delta E = 0.95$	$\Delta E = 0.52$	$\Delta E = 0.37$	$\Delta E = 0.64$	$\Delta E = 0.48$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.33$	$\Delta E = 0.58$	$\Delta E = 0.27$	$\Delta E = 0.68$	$\Delta E = 0.41$	$\Delta E = 0.25$	$\Delta E = 1.08$	$\Delta E = 0.37$	$\Delta E = 0.67$	$\Delta E = 2.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.27$	$\Delta E = 1.01$	$\Delta E = 0.25$	$\Delta E = 0.51$	$\Delta E = 0.34$	$\Delta E = 0.37$	$\Delta E = 1.31$	$\Delta E = 0.25$	$\Delta E = 0.63$	$\Delta E = 0.31$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.26$	$\Delta E = 0.29$	$\Delta E = 0.47$	$\Delta E = 0.74$	$\Delta E = 0.49$	$\Delta E = 1.47$	$\Delta E = 0.72$	$\Delta E = 0.24$	$\Delta E = 0.31$

IXCRLALE - Weighted Expectation-Maximization - 4 Gaussians



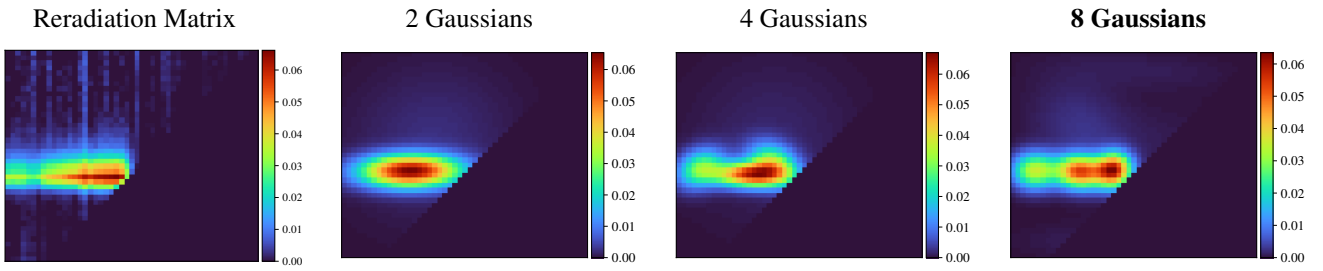
Fitted Material Under Monochromatic Illumination



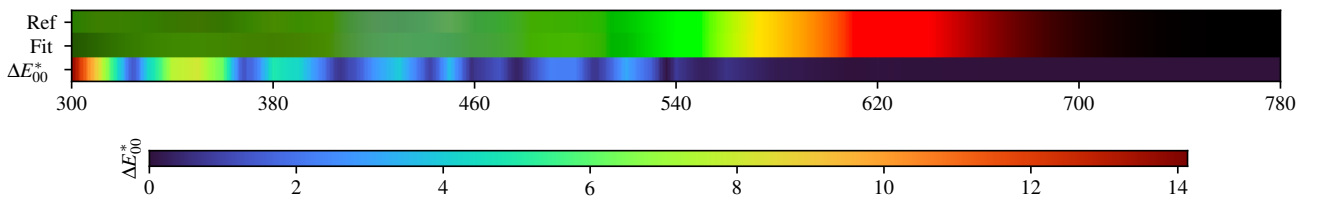
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.31$	D60 $\Delta E = 0.36$	FL2 $\Delta E = 0.27$	FL7 $\Delta E = 0.30$	FL12 $\Delta E = 0.45$	FL3.5 $\Delta E = 0.34$	FL3.10 $\Delta E = 0.60$	FL3.15 $\Delta E = 0.35$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.45$
B $\Delta E = 0.27$	D65 $\Delta E = 0.40$	FL3 $\Delta E = 0.23$	FL8 $\Delta E = 0.34$	FL3.1 $\Delta E = 0.21$	FL3.6 $\Delta E = 0.39$	FL3.11 $\Delta E = 0.72$	HP1 $\Delta E = 0.20$	LED-B1 $\Delta E = 0.22$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 0.37$	D75 $\Delta E = 0.47$	FL4 $\Delta E = 0.20$	FL9 $\Delta E = 0.30$	FL3.2 $\Delta E = 0.27$	FL3.7 $\Delta E = 0.37$	FL3.12 $\Delta E = 0.40$	HP2 $\Delta E = 0.21$	LED-B2 $\Delta E = 0.23$	LED-RGB1 $\Delta E = 1.08$
D50 $\Delta E = 0.30$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.34$	FL10 $\Delta E = 0.70$	FL3.3 $\Delta E = 0.35$	FL3.8 $\Delta E = 0.55$	FL3.13 $\Delta E = 0.42$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.23$	LED-V1 $\Delta E = 0.35$
D55 $\Delta E = 0.32$	FL1 $\Delta E = 0.34$	FL6 $\Delta E = 0.26$	FL11 $\Delta E = 0.64$	FL3.4 $\Delta E = 0.43$	FL3.9 $\Delta E = 0.68$	FL3.14 $\Delta E = 0.52$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.33$	LED-V2 $\Delta E = 0.24$

IXCRLALE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.41$	$\Delta E = 0.11$	$\Delta E = 0.37$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.17$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.40$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.13$	$\Delta E = 0.22$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.37$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.41$	$\Delta E = 0.14$	$\Delta E = 0.41$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.44$	$\Delta E = 0.15$	$\Delta E = 0.42$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.15$

IXCRLALE - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.180566	0.159649	0.152747	0.139604	0.111774	0.082434	0.068225	0.064854	0.054878	0.056079	0.065126
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.071067	0.069279	0.092749	0.194694	0.418620	0.636392	0.736935	0.763738	0.774769	0.788046	0.787944
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.793922	0.800279	0.802756	0.806280	0.806215	0.812564	0.813707	0.816262	0.818632	0.820498	0.821404
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825409	0.824260	0.828090	0.828425	0.829293	0.834442	0.829203	0.834033			

2 Gaussians

Scaling factor: 755.5310716799567

Gaussians:

Weight	Mean		Covariance			
0.235092358	474.239320754	604.958111219	11366.902348326	636.560522591	636.560522591	9977.203501015
0.764907642	431.485957699	548.191150807	4470.843979294	44.702615360	44.702615360	469.868610174

4 Gaussians

Scaling factor: 739.2751145829744

Gaussians:

Weight	Mean		Covariance			
0.192673182	485.153076640	609.373313396	12299.395009694	409.255260960	409.255260960	11758.397268724
0.383500894	441.918856727	541.083300678	2297.342628243	-15.324997282	-15.324997282	276.053942514
0.229842621	487.379237169	562.254507457	1071.680388733	-205.579995100	-205.579995100	735.827881372
0.193983304	343.143769238	553.608239445	1010.540930308	188.937345094	188.937345094	671.618435116

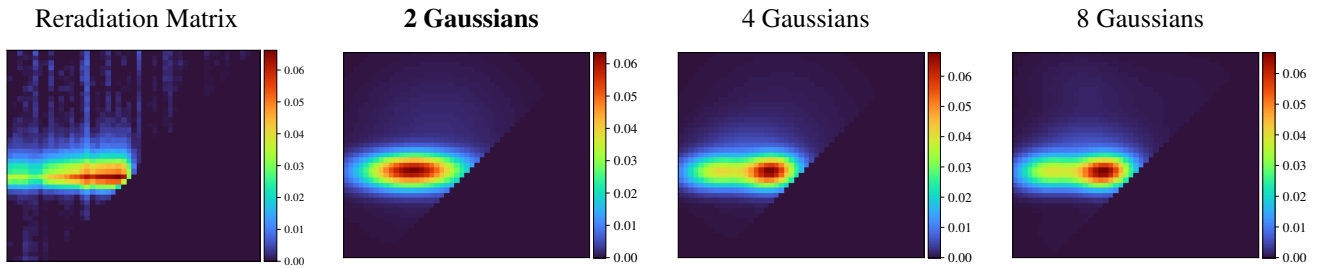
8 Gaussians

Scaling factor: 721.8470610522021

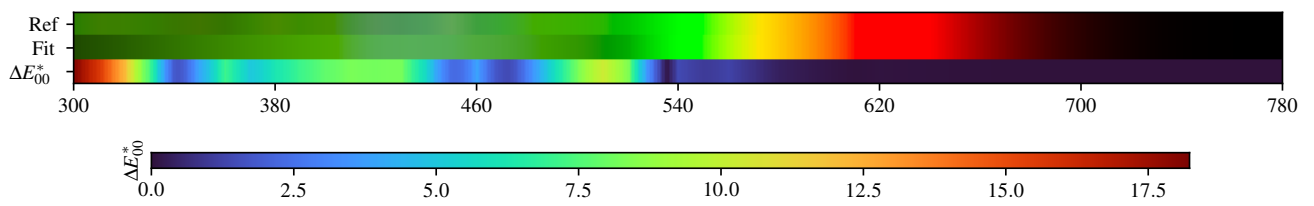
Gaussians:

Weight	Mean		Covariance			
0.028210772	563.180291596	747.344611399	13589.136027649	-719.221520746	-719.221520746	689.301289720
0.318360350	432.293409992	546.984861878	988.614273060	-30.133269013	-30.133269013	497.689636449
0.032482991	576.178849152	606.989561956	7941.301817313	971.494871861	971.494871861	2543.475082451
0.102626959	435.315899910	637.261772347	4318.072785643	-956.816419509	-956.816419509	4118.137504318
0.014064668	416.483534793	409.642408293	5980.656034995	5.322374037	5.322374037	525.318059534
0.221189903	343.224890940	548.536999141	931.499432424	3.857191276	3.857191276	582.090576406
0.014240872	600.717618501	440.638183816	9067.487014821	-120.634952718	-120.634952718	1561.635918735
0.268823485	499.594108865	549.917327835	562.258193168	21.891306840	21.891306840	519.394975781

IXCRLALE - Weighted variational Bayesian inference - 2 Gaussians



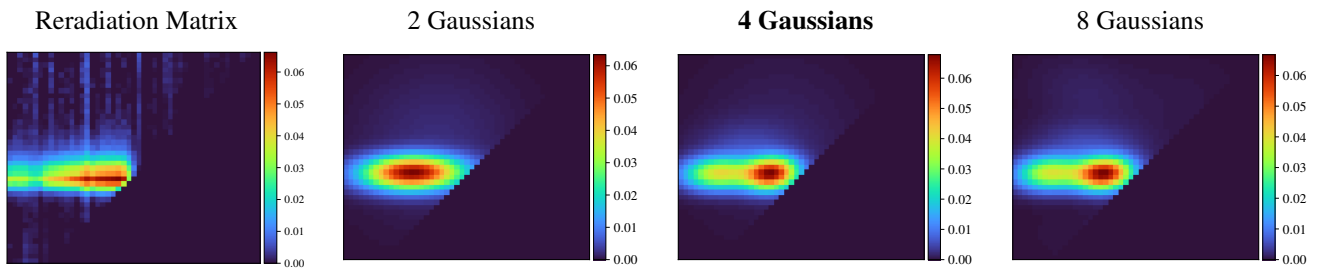
Fitted Material Under Monochromatic Illumination



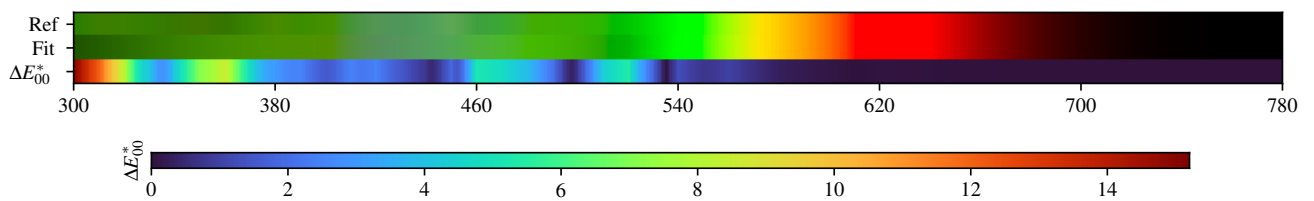
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.82$	$\Delta E = 0.25$	$\Delta E = 0.40$	$\Delta E = 0.43$	$\Delta E = 0.36$	$\Delta E = 1.00$	$\Delta E = 0.36$	$\Delta E = 0.50$	$\Delta E = 0.32$	$\Delta E = 0.43$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.42$	$\Delta E = 0.27$	$\Delta E = 0.34$	$\Delta E = 0.91$	$\Delta E = 0.32$	$\Delta E = 1.09$	$\Delta E = 0.51$	$\Delta E = 0.38$	$\Delta E = 0.69$	$\Delta E = 0.53$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.30$	$\Delta E = 0.41$	$\Delta E = 0.30$	$\Delta E = 0.79$	$\Delta E = 0.51$	$\Delta E = 0.27$	$\Delta E = 1.13$	$\Delta E = 0.41$	$\Delta E = 0.73$	$\Delta E = 2.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.46$	$\Delta E = 0.82$	$\Delta E = 0.44$	$\Delta E = 0.49$	$\Delta E = 0.52$	$\Delta E = 0.38$	$\Delta E = 1.39$	$\Delta E = 0.26$	$\Delta E = 0.75$	$\Delta E = 0.40$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.32$	$\Delta E = 0.46$	$\Delta E = 0.39$	$\Delta E = 0.46$	$\Delta E = 0.77$	$\Delta E = 0.48$	$\Delta E = 1.60$	$\Delta E = 0.64$	$\Delta E = 0.40$	$\Delta E = 0.48$

IXCRLALE - Weighted variational Bayesian inference - 4 Gaussians



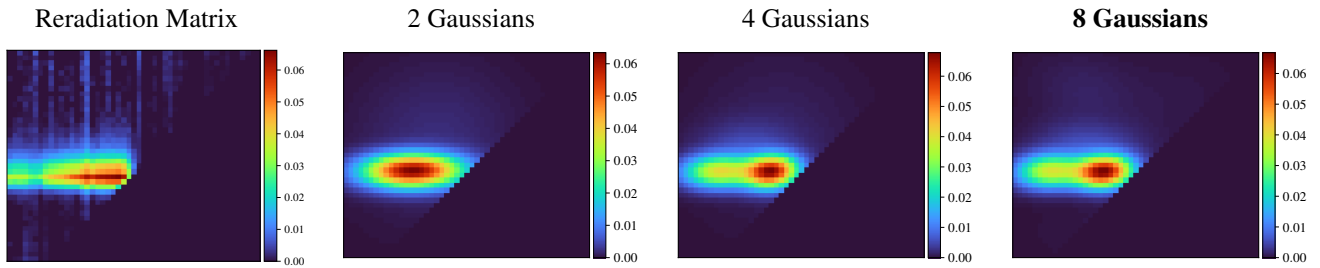
Fitted Material Under Monochromatic Illumination



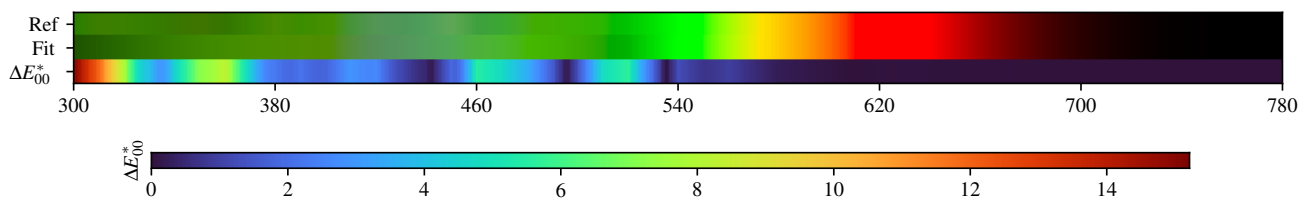
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.22$	D60 $\Delta E = 0.34$	FL2 $\Delta E = 0.30$	FL7 $\Delta E = 0.30$	FL12 $\Delta E = 0.53$	FL3.5 $\Delta E = 0.21$	FL3.10 $\Delta E = 0.60$	FL3.15 $\Delta E = 0.32$	HP5 $\Delta E = 0.29$	LED-B5 $\Delta E = 0.26$
B $\Delta E = 0.28$	D65 $\Delta E = 0.37$	FL3 $\Delta E = 0.28$	FL8 $\Delta E = 0.24$	FL3.1 $\Delta E = 0.24$	FL3.6 $\Delta E = 0.23$	FL3.11 $\Delta E = 0.65$	HP1 $\Delta E = 0.20$	LED-B1 $\Delta E = 0.18$	LED-BH1 $\Delta E = 0.33$
C $\Delta E = 0.35$	D75 $\Delta E = 0.43$	FL4 $\Delta E = 0.26$	FL9 $\Delta E = 0.24$	FL3.2 $\Delta E = 0.27$	FL3.7 $\Delta E = 0.51$	FL3.12 $\Delta E = 0.19$	HP2 $\Delta E = 0.24$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.84$
D50 $\Delta E = 0.28$	E $\Delta E = 0.45$	FL5 $\Delta E = 0.34$	FL10 $\Delta E = 0.66$	FL3.3 $\Delta E = 0.32$	FL3.8 $\Delta E = 0.59$	FL3.13 $\Delta E = 0.24$	HP3 $\Delta E = 0.24$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.45$
D55 $\Delta E = 0.31$	FL1 $\Delta E = 0.33$	FL6 $\Delta E = 0.31$	FL11 $\Delta E = 0.63$	FL3.4 $\Delta E = 0.30$	FL3.9 $\Delta E = 0.65$	FL3.14 $\Delta E = 0.27$	HP4 $\Delta E = 0.34$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.38$

IXCRLALE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.52$	$\Delta E = 0.19$	$\Delta E = 0.59$	$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.28$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.24$	$\Delta E = 0.21$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.66$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.29$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.29$	$\Delta E = 0.35$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.24$	$\Delta E = 0.49$	$\Delta E = 0.19$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.90$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.23$	$\Delta E = 0.35$	$\Delta E = 0.29$	$\Delta E = 0.66$	$\Delta E = 0.28$	$\Delta E = 0.59$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.18$	$\Delta E = 0.52$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.26$	$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.64$	$\Delta E = 0.31$	$\Delta E = 0.65$	$\Delta E = 0.20$	$\Delta E = 0.32$	$\Delta E = 0.21$	$\Delta E = 0.43$

IXCRLALE - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.180566	0.159649	0.152747	0.139604	0.111774	0.082434	0.068225	0.064854	0.054878	0.056079	0.065126
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.071067	0.069279	0.092749	0.194694	0.418620	0.636392	0.736935	0.763738	0.774769	0.788046	0.787944
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.793922	0.800279	0.802756	0.806280	0.806215	0.812564	0.813707	0.816262	0.818632	0.820498	0.821404
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825409	0.824260	0.828090	0.828425	0.829293	0.834442	0.829203	0.834033			

2 Gaussians max

Scaling factor: 755.8730702824002

Gaussians:

Weight	Mean		Covariance			
0.218943211	477.208246611	607.410979147	11703.666496895	572.514304887	572.514304887	10511.136395888
0.781056789	431.711554484	548.734269290	4512.402346062	51.262756138	51.262756138	514.999929774

4 Gaussians max

Scaling factor: 739.9961739810412

Gaussians:

Weight	Mean		Covariance			
0.171927680	491.677091137	609.751905375	12859.226564262	470.132350471	470.132350471	12841.274398620
0.342743656	374.286567375	546.973448155	2309.142723164	50.161496584	50.161496584	473.147139860
0.401699982	480.523404632	546.821856844	1253.345092717	84.207213873	84.207213873	467.654246991
0.083628682	431.188419717	593.886193092	4320.527536752	-16.996848876	-16.996848876	1234.323902795

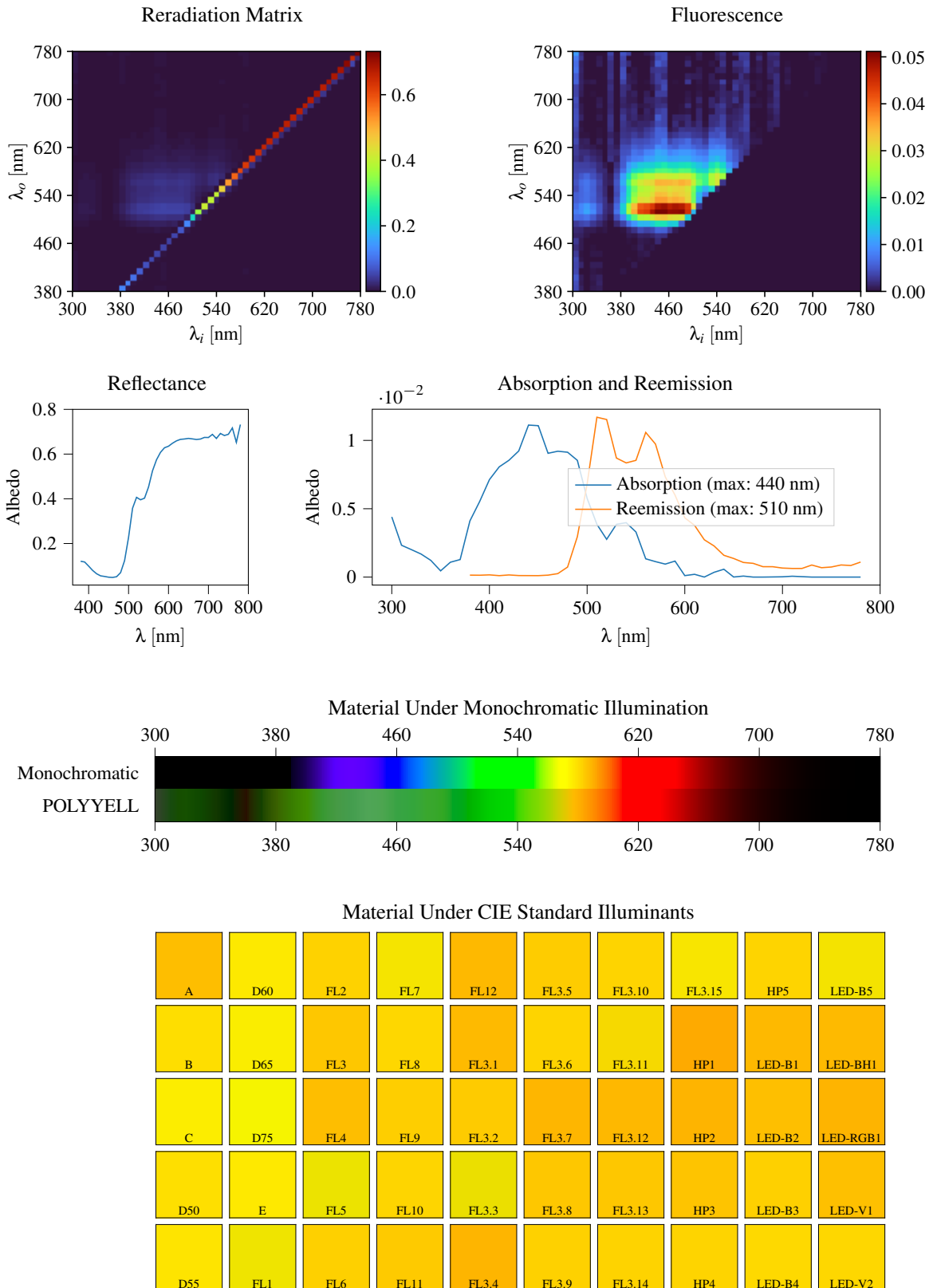
8 Gaussians max

Scaling factor: 734.9002858485019

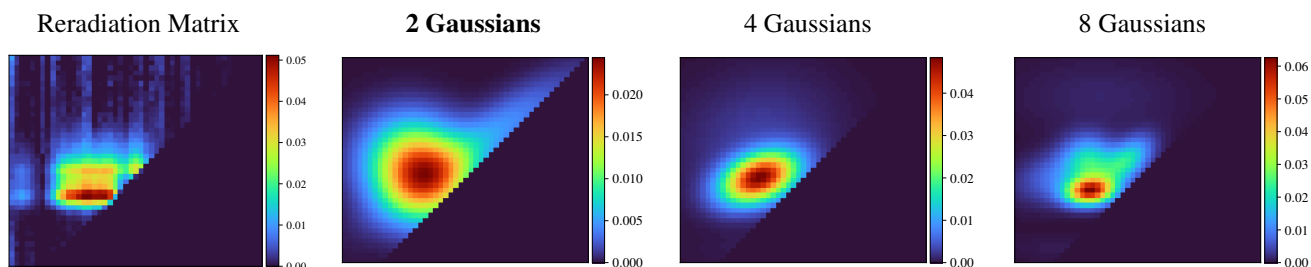
Gaussians:

Weight	Mean		Covariance			
0.035424819	508.332956372	444.264184554	15103.838824925	1314.202736726	1314.202736726	2976.500581905
0.330074236	368.958881728	547.540767657	2087.418409661	56.572966237	56.572966237	508.798309288
0.447734725	477.419682032	546.425354083	1431.856845764	83.173905871	83.173905871	468.444784934
0.099889923	445.826031959	600.029291057	5352.425241617	-162.530164759	-162.530164759	999.976645998
0.033777152	617.234013260	687.723627978	8268.363571429	857.975546246	857.975546246	4544.773968794
0.051326779	435.382517886	707.141643368	5328.877973091	-466.173116246	-466.173116246	2931.703909992

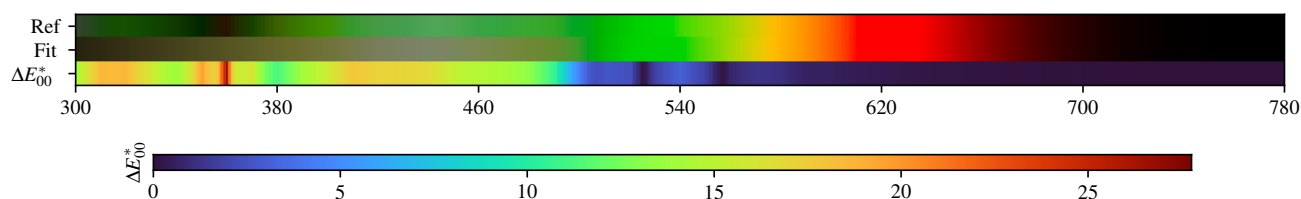
3.17. POLYELL



POLYYELL - Weighted Expectation-Maximization - 2 Gaussians



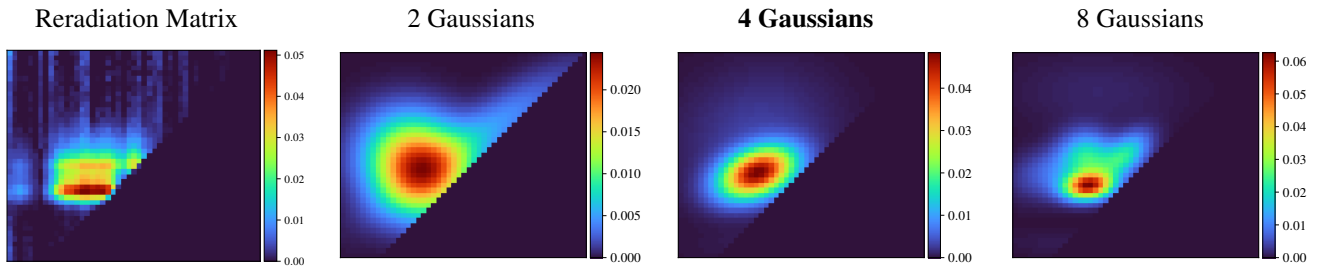
Fitted Material Under Monochromatic Illumination



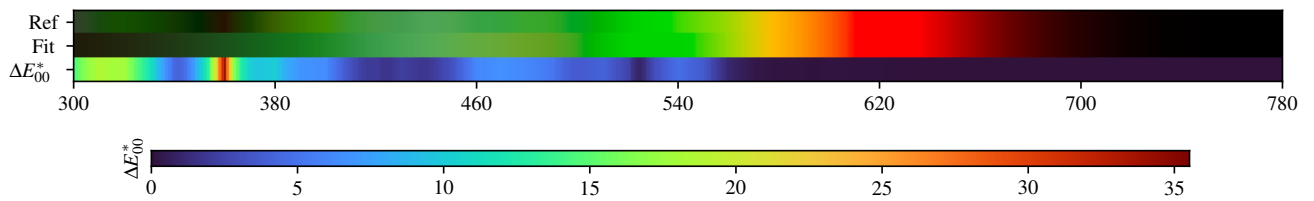
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 3.49$	D60 $\Delta E = 7.90$	FL2 $\Delta E = 4.80$	FL7 $\Delta E = 7.07$	FL12 $\Delta E = 3.19$	FL3.5 $\Delta E = 4.85$	FL3.10 $\Delta E = 5.83$	FL3.15 $\Delta E = 7.52$	HP5 $\Delta E = 6.06$	LED-B5 $\Delta E = 6.43$
B $\Delta E = 7.03$	D65 $\Delta E = 8.30$	FL3 $\Delta E = 3.61$	FL8 $\Delta E = 5.74$	FL3.1 $\Delta E = 2.18$	FL3.6 $\Delta E = 5.47$	FL3.11 $\Delta E = 5.98$	HP1 $\Delta E = 1.52$	LED-B1 $\Delta E = 2.70$	LED-BH1 $\Delta E = 2.86$
C $\Delta E = 8.64$	D75 $\Delta E = 8.91$	FL4 $\Delta E = 2.76$	FL9 $\Delta E = 4.83$	FL3.2 $\Delta E = 4.18$	FL3.7 $\Delta E = 2.69$	FL3.12 $\Delta E = 2.61$	HP2 $\Delta E = 2.46$	LED-B2 $\Delta E = 3.14$	LED-RGB1 $\Delta E = 2.24$
D50 $\Delta E = 6.85$	E $\Delta E = 8.40$	FL5 $\Delta E = 6.23$	FL10 $\Delta E = 5.74$	FL3.3 $\Delta E = 5.89$	FL3.8 $\Delta E = 4.30$	FL3.13 $\Delta E = 4.33$	HP3 $\Delta E = 4.22$	LED-B3 $\Delta E = 4.74$	LED-V1 $\Delta E = 4.59$
D55 $\Delta E = 7.42$	FL1 $\Delta E = 6.54$	FL6 $\Delta E = 4.31$	FL11 $\Delta E = 4.79$	FL3.4 $\Delta E = 2.00$	FL3.9 $\Delta E = 5.37$	FL3.14 $\Delta E = 5.51$	HP4 $\Delta E = 6.05$	LED-B4 $\Delta E = 5.43$	LED-V2 $\Delta E = 6.71$

POLYYELL - Weighted Expectation-Maximization - 4 Gaussians



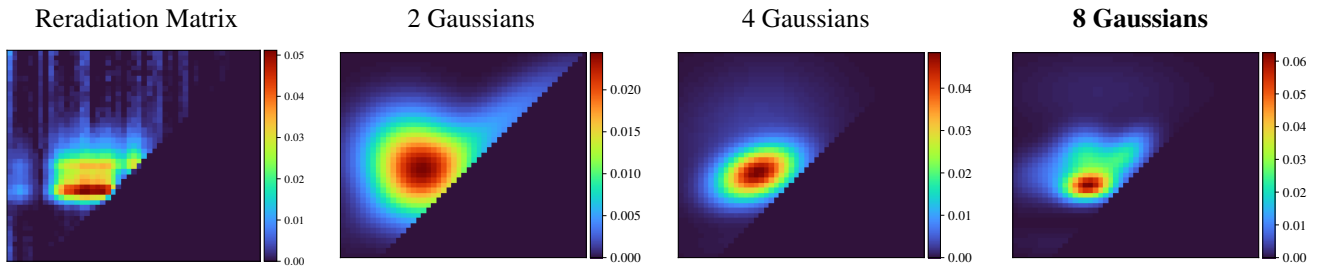
Fitted Material Under Monochromatic Illumination



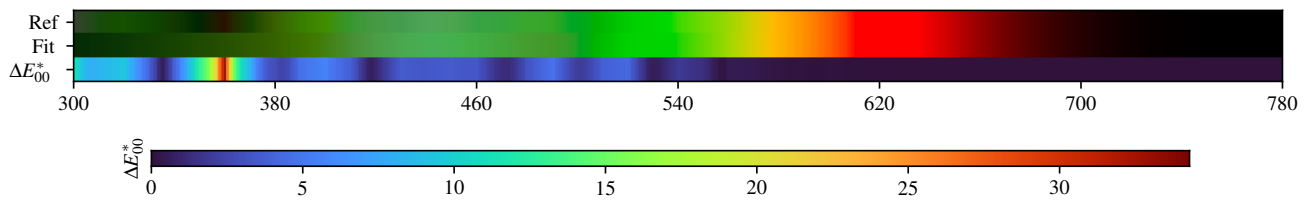
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.29$	D60 $\Delta E = 0.50$	FL2 $\Delta E = 0.29$	FL7 $\Delta E = 0.35$	FL12 $\Delta E = 0.57$	FL3.5 $\Delta E = 0.30$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.37$	HP5 $\Delta E = 0.29$	LED-B5 $\Delta E = 0.64$
B $\Delta E = 0.39$	D65 $\Delta E = 0.53$	FL3 $\Delta E = 0.29$	FL8 $\Delta E = 0.33$	FL3.1 $\Delta E = 0.19$	FL3.6 $\Delta E = 0.34$	FL3.11 $\Delta E = 0.39$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.38$	LED-BH1 $\Delta E = 0.50$
C $\Delta E = 0.46$	D75 $\Delta E = 0.59$	FL4 $\Delta E = 0.25$	FL9 $\Delta E = 0.31$	FL3.2 $\Delta E = 0.23$	FL3.7 $\Delta E = 0.59$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.27$	LED-B2 $\Delta E = 0.44$	LED-RGB1 $\Delta E = 0.75$
D50 $\Delta E = 0.43$	E $\Delta E = 0.92$	FL5 $\Delta E = 0.30$	FL10 $\Delta E = 0.43$	FL3.3 $\Delta E = 0.30$	FL3.8 $\Delta E = 0.50$	FL3.13 $\Delta E = 0.24$	HP3 $\Delta E = 0.25$	LED-B3 $\Delta E = 0.59$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.46$	FL1 $\Delta E = 0.33$	FL6 $\Delta E = 0.32$	FL11 $\Delta E = 0.49$	FL3.4 $\Delta E = 0.25$	FL3.9 $\Delta E = 0.44$	FL3.14 $\Delta E = 0.40$	HP4 $\Delta E = 0.35$	LED-B4 $\Delta E = 0.64$	LED-V2 $\Delta E = 0.18$

POLYYELL - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.28$	D60 $\Delta E = 0.44$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.41$	FL12 $\Delta E = 0.71$	FL3.5 $\Delta E = 0.40$	FL3.10 $\Delta E = 0.39$	FL3.15 $\Delta E = 0.54$	HP5 $\Delta E = 0.32$	LED-B5 $\Delta E = 0.63$
B $\Delta E = 0.40$	D65 $\Delta E = 0.45$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.40$	FL3.1 $\Delta E = 0.20$	FL3.6 $\Delta E = 0.48$	FL3.11 $\Delta E = 0.32$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.20$
C $\Delta E = 0.44$	D75 $\Delta E = 0.47$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.31$	FL3.2 $\Delta E = 0.32$	FL3.7 $\Delta E = 0.80$	FL3.12 $\Delta E = 0.48$	HP2 $\Delta E = 0.16$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.25$
D50 $\Delta E = 0.41$	E $\Delta E = 0.38$	FL5 $\Delta E = 0.37$	FL10 $\Delta E = 0.37$	FL3.3 $\Delta E = 0.44$	FL3.8 $\Delta E = 0.62$	FL3.13 $\Delta E = 0.62$	HP3 $\Delta E = 0.36$	LED-B3 $\Delta E = 0.36$	LED-V1 $\Delta E = 0.59$
D55 $\Delta E = 0.43$	FL1 $\Delta E = 0.38$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.54$	FL3.4 $\Delta E = 0.28$	FL3.9 $\Delta E = 0.44$	FL3.14 $\Delta E = 0.74$	HP4 $\Delta E = 0.30$	LED-B4 $\Delta E = 0.57$	LED-V2 $\Delta E = 0.74$

POLYELL - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.120680	0.117361	0.098998	0.079725	0.064762	0.055401	0.052662	0.049410	0.048325	0.051525	0.069758
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.123333	0.227755	0.357866	0.406484	0.395575	0.402861	0.452685	0.525276	0.574531	0.607841	0.628244
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.635143	0.648502	0.659185	0.665817	0.667511	0.670146	0.667852	0.665288	0.667233	0.674533	0.674081
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.688044	0.669788	0.692273	0.682982	0.688507	0.716885	0.652611	0.732025			

2 Gaussians

Scaling factor: 724.8565741083368

Gaussians:

Weight	Mean		Covariance			
0.213287906	569.614640285	614.798976948	13522.531134899	8741.762571824	8741.762571824	7425.293585965
0.786712094	448.931081389	556.613187838	4426.920742989	-540.965243699	-540.965243699	4050.848076778

4 Gaussians

Scaling factor: 739.4865152466352

Gaussians:

Weight	Mean		Covariance			
0.110007928	640.951870486	630.951870486	8333.188333135	8333.188332135	8333.188332135	8333.188333135
0.637789130	452.453615090	544.504881403	2532.513553749	603.859219877	603.859219877	1159.506533424
0.020647139	521.983024015	409.113864866	15889.831684044	975.576770340	975.576770340	571.674871601
0.231555802	452.651942944	621.394401842	10519.362002503	1028.708435008	1028.708435008	7351.378822898

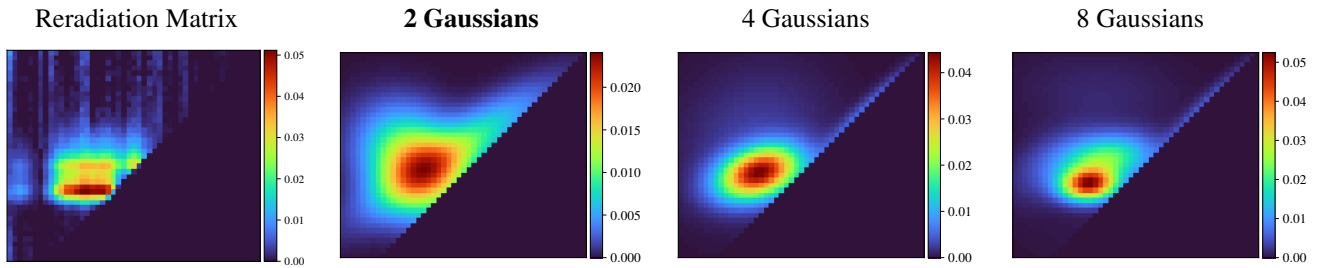
8 Gaussians

Scaling factor: 722.8180648347125

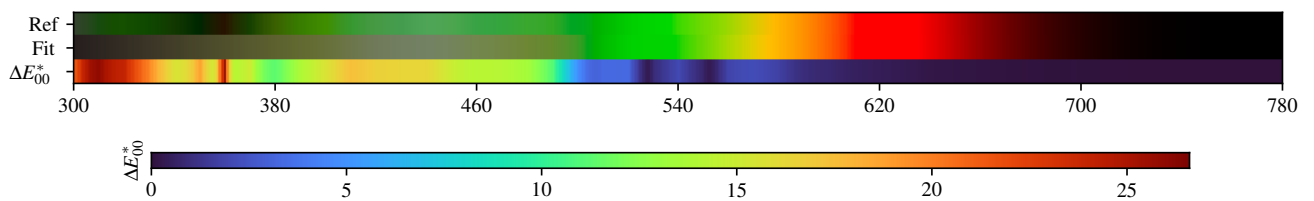
Gaussians:

Weight	Mean		Covariance			
0.110009266	640.950715778	630.950715778	8333.194460968	8333.194459968	8333.194459968	8333.194460968
0.264996752	445.873613550	518.281000457	1008.963674974	72.814423756	72.814423756	318.987939213
0.025463606	600.806084132	470.237103913	3908.766975390	-51.843783824	-51.843783824	3587.622846099
0.089374911	465.622268717	705.034539465	13433.762505842	-249.884052308	-249.884052308	2665.165684531
0.013463946	399.774315199	403.519044633	8365.852694800	-297.339572717	-297.339572717	351.574432855
0.150986724	518.481134888	578.389648183	1017.162655927	486.385261942	486.385261942	924.840393810
0.156002446	390.574475604	546.356095571	3358.494225341	445.150221268	445.150221268	1148.675196634
0.189702349	445.410026764	576.107628657	1220.233363888	-72.149127411	-72.149127411	1088.681136070

POLYYELL - Weighted variational Bayesian inference - 2 Gaussians



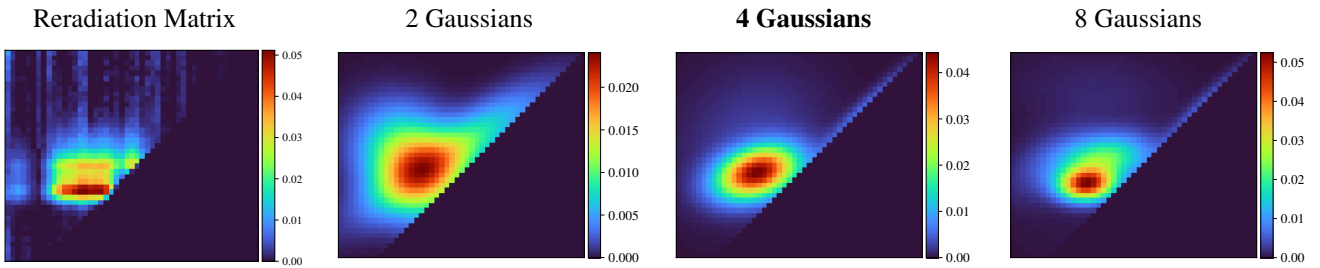
Fitted Material Under Monochromatic Illumination



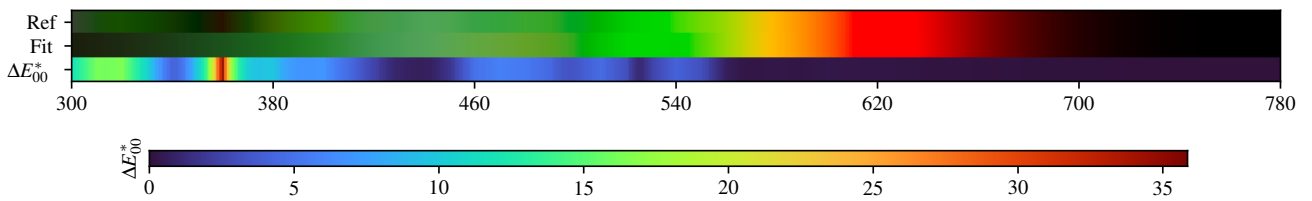
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 3.90$	D60 $\Delta E = 8.49$	FL2 $\Delta E = 5.36$	FL7 $\Delta E = 7.64$	FL12 $\Delta E = 3.55$	FL3.5 $\Delta E = 5.35$	FL3.10 $\Delta E = 6.36$	FL3.15 $\Delta E = 8.09$	HP5 $\Delta E = 6.55$	LED-B5 $\Delta E = 7.00$
B $\Delta E = 7.58$	D65 $\Delta E = 8.88$	FL3 $\Delta E = 4.12$	FL8 $\Delta E = 6.30$	FL3.1 $\Delta E = 2.63$	FL3.6 $\Delta E = 6.02$	FL3.11 $\Delta E = 6.55$	HP1 $\Delta E = 1.82$	LED-B1 $\Delta E = 3.06$	LED-BH1 $\Delta E = 3.20$
C $\Delta E = 9.17$	D75 $\Delta E = 9.46$	FL4 $\Delta E = 3.20$	FL9 $\Delta E = 5.36$	FL3.2 $\Delta E = 4.71$	FL3.7 $\Delta E = 3.07$	FL3.12 $\Delta E = 3.01$	HP2 $\Delta E = 2.76$	LED-B2 $\Delta E = 3.54$	LED-RGB1 $\Delta E = 2.58$
D50 $\Delta E = 7.45$	E $\Delta E = 8.98$	FL5 $\Delta E = 6.83$	FL10 $\Delta E = 6.28$	FL3.3 $\Delta E = 6.49$	FL3.8 $\Delta E = 4.79$	FL3.13 $\Delta E = 4.83$	HP3 $\Delta E = 4.61$	LED-B3 $\Delta E = 5.25$	LED-V1 $\Delta E = 4.94$
D55 $\Delta E = 8.02$	FL1 $\Delta E = 7.14$	FL6 $\Delta E = 4.89$	FL11 $\Delta E = 5.26$	FL3.4 $\Delta E = 2.39$	FL3.9 $\Delta E = 5.90$	FL3.14 $\Delta E = 6.09$	HP4 $\Delta E = 6.54$	LED-B4 $\Delta E = 5.99$	LED-V2 $\Delta E = 7.22$

POLYYELL - Weighted variational Bayesian inference - 4 Gaussians



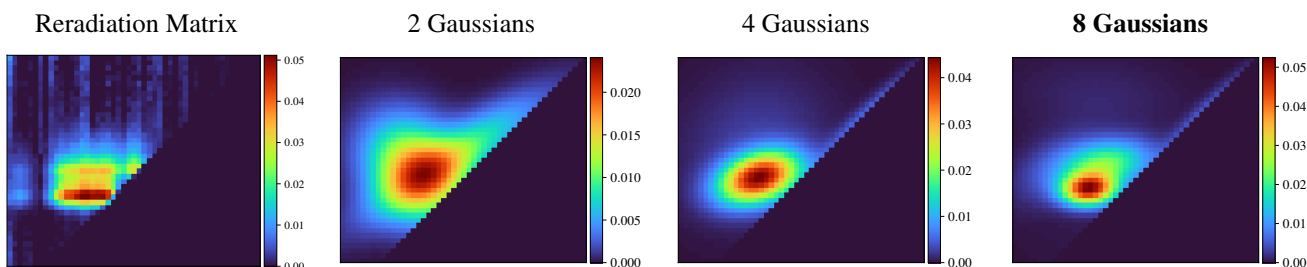
Fitted Material Under Monochromatic Illumination



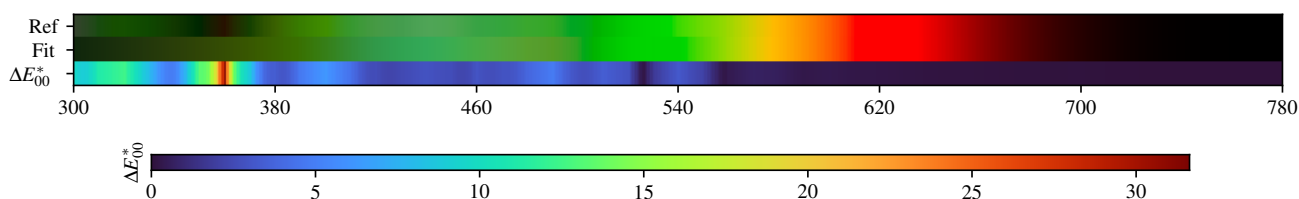
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.21$	D60 $\Delta E = 0.44$	FL2 $\Delta E = 0.20$	FL7 $\Delta E = 0.44$	FL12 $\Delta E = 0.53$	FL3.5 $\Delta E = 0.32$	FL3.10 $\Delta E = 0.45$	FL3.15 $\Delta E = 0.49$	HP5 $\Delta E = 0.33$	LED-B5 $\Delta E = 0.41$
B $\Delta E = 0.38$	D65 $\Delta E = 0.48$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.32$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.41$	FL3.11 $\Delta E = 0.44$	HP1 $\Delta E = 0.25$	LED-B1 $\Delta E = 0.25$	LED-BH1 $\Delta E = 0.28$
C $\Delta E = 0.56$	D75 $\Delta E = 0.54$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.22$	FL3.2 $\Delta E = 0.20$	FL3.7 $\Delta E = 0.52$	FL3.12 $\Delta E = 0.19$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.28$	LED-RGB1 $\Delta E = 0.85$
D50 $\Delta E = 0.36$	E $\Delta E = 0.58$	FL5 $\Delta E = 0.36$	FL10 $\Delta E = 0.45$	FL3.3 $\Delta E = 0.42$	FL3.8 $\Delta E = 0.50$	FL3.13 $\Delta E = 0.37$	HP3 $\Delta E = 0.27$	LED-B3 $\Delta E = 0.31$	LED-V1 $\Delta E = 0.33$
D55 $\Delta E = 0.41$	FL1 $\Delta E = 0.43$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.51$	FL3.4 $\Delta E = 0.19$	FL3.9 $\Delta E = 0.49$	FL3.14 $\Delta E = 0.53$	HP4 $\Delta E = 0.43$	LED-B4 $\Delta E = 0.28$	LED-V2 $\Delta E = 0.44$

POLYYELL - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.37$	D60 $\Delta E = 0.44$	FL2 $\Delta E = 0.31$	FL7 $\Delta E = 0.37$	FL12 $\Delta E = 0.66$	FL3.5 $\Delta E = 0.50$	FL3.10 $\Delta E = 0.44$	FL3.15 $\Delta E = 0.55$	HP5 $\Delta E = 0.40$	LED-B5 $\Delta E = 0.49$
B $\Delta E = 0.43$	D65 $\Delta E = 0.44$	FL3 $\Delta E = 0.28$	FL8 $\Delta E = 0.41$	FL3.1 $\Delta E = 0.32$	FL3.6 $\Delta E = 0.55$	FL3.11 $\Delta E = 0.40$	HP1 $\Delta E = 0.37$	LED-B1 $\Delta E = 0.22$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.39$	D75 $\Delta E = 0.44$	FL4 $\Delta E = 0.26$	FL9 $\Delta E = 0.37$	FL3.2 $\Delta E = 0.41$	FL3.7 $\Delta E = 0.74$	FL3.12 $\Delta E = 0.51$	HP2 $\Delta E = 0.21$	LED-B2 $\Delta E = 0.22$	LED-RGB1 $\Delta E = 0.24$
D50 $\Delta E = 0.44$	E $\Delta E = 0.39$	FL5 $\Delta E = 0.32$	FL10 $\Delta E = 0.43$	FL3.3 $\Delta E = 0.44$	FL3.8 $\Delta E = 0.59$	FL3.13 $\Delta E = 0.70$	HP3 $\Delta E = 0.43$	LED-B3 $\Delta E = 0.26$	LED-V1 $\Delta E = 0.66$
D55 $\Delta E = 0.44$	FL1 $\Delta E = 0.35$	FL6 $\Delta E = 0.27$	FL11 $\Delta E = 0.53$	FL3.4 $\Delta E = 0.31$	FL3.9 $\Delta E = 0.47$	FL3.14 $\Delta E = 0.81$	HP4 $\Delta E = 0.42$	LED-B4 $\Delta E = 0.46$	LED-V2 $\Delta E = 0.74$

POLYELL - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.120680	0.117361	0.098998	0.079725	0.064762	0.055401	0.052662	0.049410	0.048325	0.051525	0.069758
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.123333	0.227755	0.357866	0.406484	0.395575	0.402861	0.452685	0.525276	0.574531	0.607841	0.628244
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.635143	0.648502	0.659185	0.665817	0.667511	0.670146	0.667852	0.665288	0.667233	0.674533	0.674081
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.688044	0.669788	0.692273	0.682982	0.688507	0.716885	0.652611	0.732025			

2 Gaussians max

Scaling factor: 719.5906451799171

Gaussians:

Weight	Mean		Covariance			
0.379490034	522.412878709	586.287736207	12370.618145825	7399.621117559	7399.621117559	6109.724130535
0.620509966	445.607078195	558.503655106	4403.793908671	-1127.524494747	-1127.524494747	4579.169247333

4 Gaussians max

Scaling factor: 711.3952745676949

Gaussians:

Weight	Mean		Covariance			
0.244006091	449.173744627	606.651477469	9634.650637072	1208.917634817	1208.917634817	9446.304031907
0.016362511	588.066827626	451.685149451	7183.809938196	-1116.104187359	-1116.104187359	4084.210687388
0.655705800	455.586334917	544.975846948	2849.495072331	591.283057044	591.283057044	1202.563282086
0.083925598	677.800412983	670.242050351	4949.079304680	4432.375688834	4432.375688834	4376.823906694

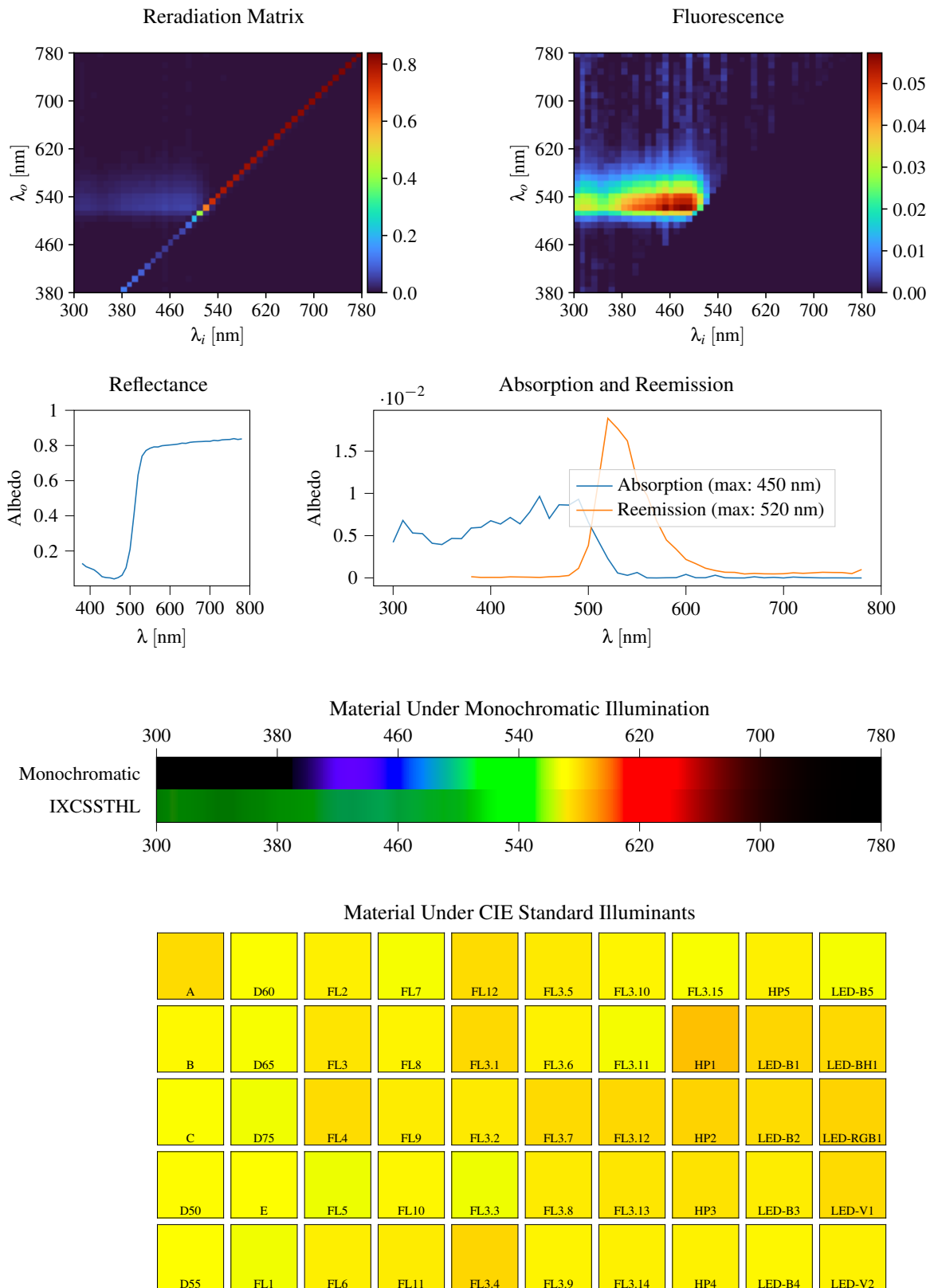
8 Gaussians max

Scaling factor: 703.0899081226694

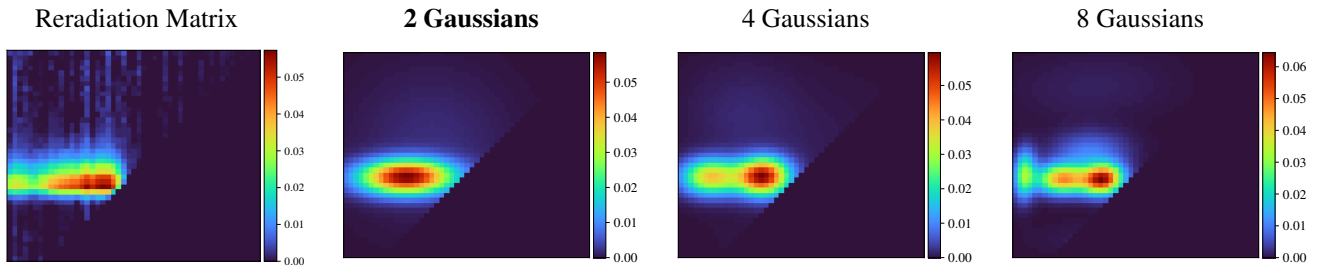
Gaussians:

Weight	Mean		Covariance			
0.040278556	508.032235662	438.135535589	14076.687670304	1383.112244253	1383.112244253	2746.425768172
0.104881172	377.946483222	562.678699325	3440.619293042	1288.875846758	1288.875846758	2464.996954600
0.317471424	446.716081809	521.169526608	1311.007014956	51.907941203	51.907941203	454.435373981
0.370977966	480.892960461	571.883220168	3503.646041199	421.759945712	421.759945712	990.847583202
0.087490383	467.283557352	703.735878836	12753.852578292	-608.433473359	-608.433473359	2990.593625191
0.077986101	683.958215419	675.841539374	4570.762321112	4101.822110179	4101.822110179	4090.195105997

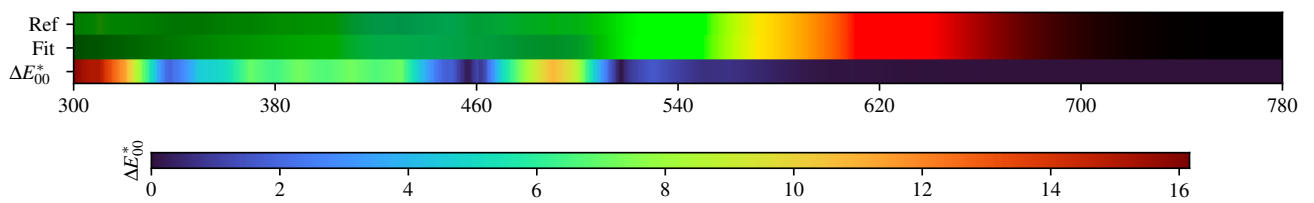
3.18. IXCSSTHL



IXCSSTHL - Weighted Expectation-Maximization - 2 Gaussians



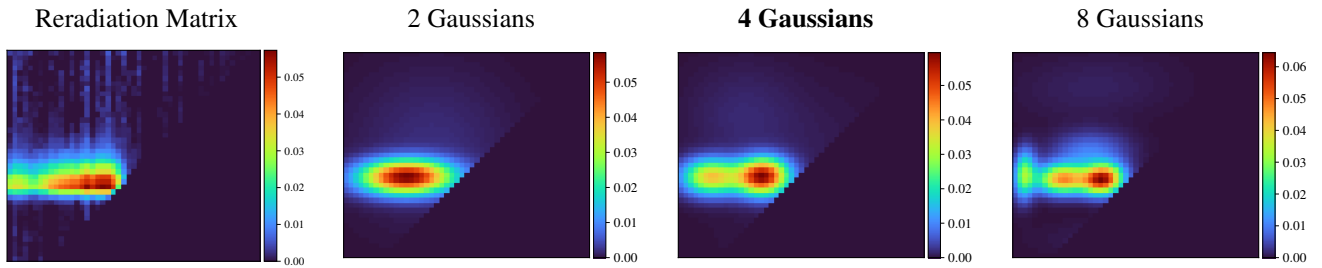
Fitted Material Under Monochromatic Illumination



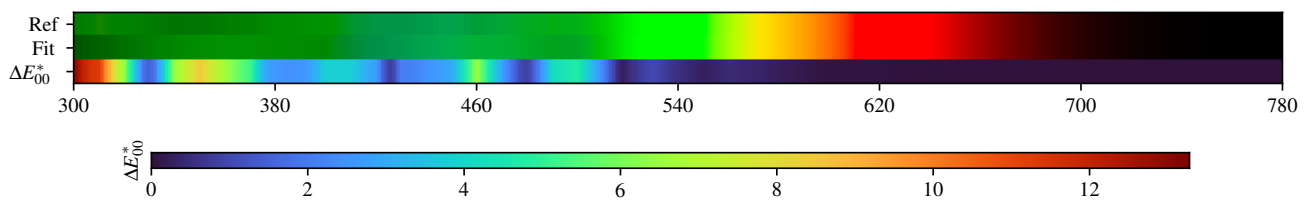
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.41$	D60 $\Delta E = 0.33$	FL2 $\Delta E = 0.25$	FL7 $\Delta E = 0.23$	FL12 $\Delta E = 0.34$	FL3.5 $\Delta E = 0.67$	FL3.10 $\Delta E = 0.73$	FL3.15 $\Delta E = 0.30$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.22$	D65 $\Delta E = 0.44$	FL3 $\Delta E = 0.23$	FL8 $\Delta E = 0.54$	FL3.1 $\Delta E = 0.24$	FL3.6 $\Delta E = 0.71$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.42$	LED-B1 $\Delta E = 0.38$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.30$	D75 $\Delta E = 0.62$	FL4 $\Delta E = 0.21$	FL9 $\Delta E = 0.49$	FL3.2 $\Delta E = 0.33$	FL3.7 $\Delta E = 0.39$	FL3.12 $\Delta E = 0.79$	HP2 $\Delta E = 0.38$	LED-B2 $\Delta E = 0.42$	LED-RGB1 $\Delta E = 0.54$
D50 $\Delta E = 0.20$	E $\Delta E = 1.02$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.34$	FL3.3 $\Delta E = 0.30$	FL3.8 $\Delta E = 0.41$	FL3.13 $\Delta E = 1.18$	HP3 $\Delta E = 0.27$	LED-B3 $\Delta E = 0.38$	LED-V1 $\Delta E = 0.21$
D55 $\Delta E = 0.23$	FL1 $\Delta E = 0.26$	FL6 $\Delta E = 0.24$	FL11 $\Delta E = 0.37$	FL3.4 $\Delta E = 0.26$	FL3.9 $\Delta E = 0.36$	FL3.14 $\Delta E = 1.29$	HP4 $\Delta E = 0.63$	LED-B4 $\Delta E = 0.20$	LED-V2 $\Delta E = 0.20$

IXCSSTHL - Weighted Expectation-Maximization - 4 Gaussians



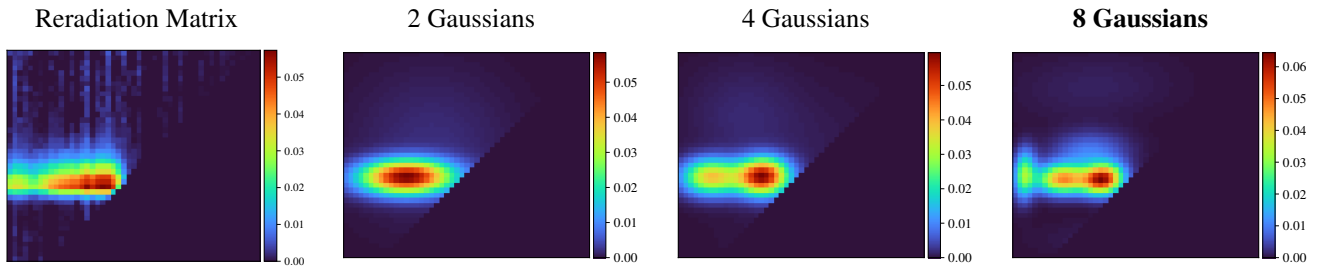
Fitted Material Under Monochromatic Illumination



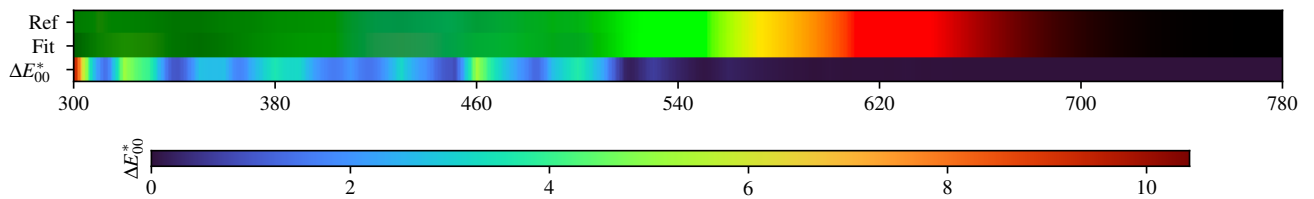
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.43$	FL2 $\Delta E = 0.17$	FL7 $\Delta E = 0.24$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.22$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.81$
B $\Delta E = 0.25$	D65 $\Delta E = 0.47$	FL3 $\Delta E = 0.15$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.32$	HP1 $\Delta E = 0.24$	LED-B1 $\Delta E = 0.23$	LED-BH1 $\Delta E = 0.30$
C $\Delta E = 0.35$	D75 $\Delta E = 0.55$	FL4 $\Delta E = 0.15$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.21$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.30$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.32$	E $\Delta E = 0.43$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.29$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.42$	LED-V1 $\Delta E = 0.45$
D55 $\Delta E = 0.38$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.17$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.72$	LED-V2 $\Delta E = 0.31$

IXCSSTHL - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.14$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.04$	FL3.15 $\Delta E = 0.13$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.09$	D65 $\Delta E = 0.16$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.05$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.13$	D75 $\Delta E = 0.18$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.19$
D50 $\Delta E = 0.10$	E $\Delta E = 0.19$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.12$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.10$

IXCSSTHL - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.129049	0.110783	0.101889	0.092662	0.075007	0.053750	0.048468	0.047139	0.041124	0.048387	0.062228
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.104623	0.209101	0.410345	0.631378	0.739251	0.771430	0.784264	0.791922	0.791458	0.798605	0.800827
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.802978	0.805078	0.807823	0.813094	0.811926	0.817854	0.820307	0.821525	0.822353	0.823789	0.823600
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.828986	0.826937	0.831854	0.833421	0.834182	0.838927	0.834166	0.837474			

2 Gaussians

Scaling factor: 676.3458322480066

Gaussians:

Weight	Mean		Covariance			
0.764844928	419.727088672	536.416820049	3943.169939713	32.814485192	32.814485192	522.560812960
0.235155072	469.893804933	596.268016918	11832.745285820	4.247712970	4.247712970	10737.864998369

4 Gaussians

Scaling factor: 659.4488836919095

Gaussians:

Weight	Mean		Covariance			
0.099016317	421.304294588	659.201727709	6142.354947678	163.007364151	163.007364151	5261.137319387
0.098473448	539.917062360	549.937655295	12233.740690129	5146.461388209	5146.461388209	12867.134336211
0.339089050	360.095943874	536.614005193	1548.710035529	6.808002403	6.808002403	565.263129606
0.463421185	462.939475954	537.535233740	1204.842174000	20.087902297	20.087902297	595.664380257

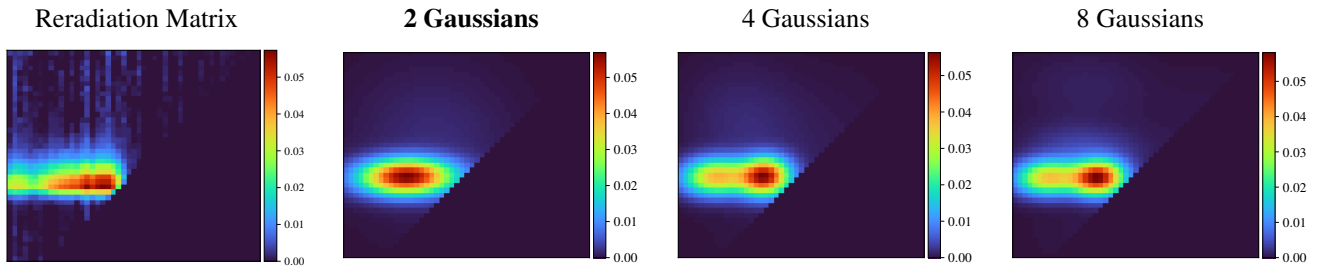
8 Gaussians

Scaling factor: 654.965718038883

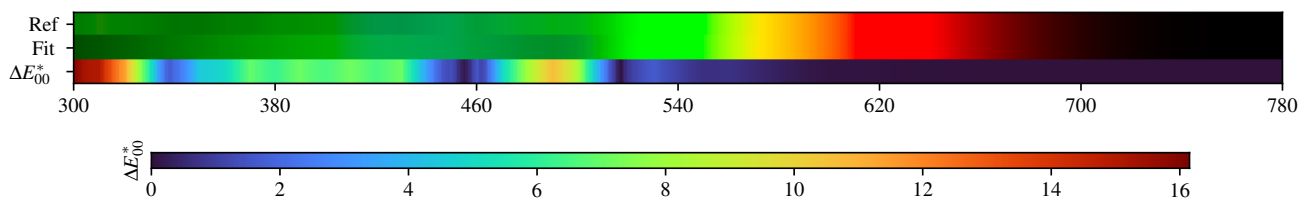
Gaussians:

Weight	Mean		Covariance			
0.066933841	454.698575180	715.198124667	11730.850961434	625.819281682	625.819281682	2138.535473823
0.300379016	474.590919703	531.938218458	706.773559279	46.129631682	46.129631682	393.654021468
0.304419866	394.658690843	532.089369248	1218.867085832	4.607291676	4.607291676	382.308827491
0.028306774	593.238159931	583.230923081	5760.855100790	5761.103396980	5761.103396980	5761.424011305
0.135230397	446.516106172	582.490458900	2374.034311255	87.607461296	87.607461296	755.649273868
0.027777121	491.524302789	414.203938969	10460.961763819	104.710249224	104.710249224	619.377591276
0.011624797	652.358837272	535.622975184	4265.584691204	2238.152388372	2238.152388372	5963.150497022
0.125328188	318.989269842	541.353224076	213.331952331	38.439355725	38.439355725	952.558299096

IXCSSTHL - Weighted variational Bayesian inference - 2 Gaussians



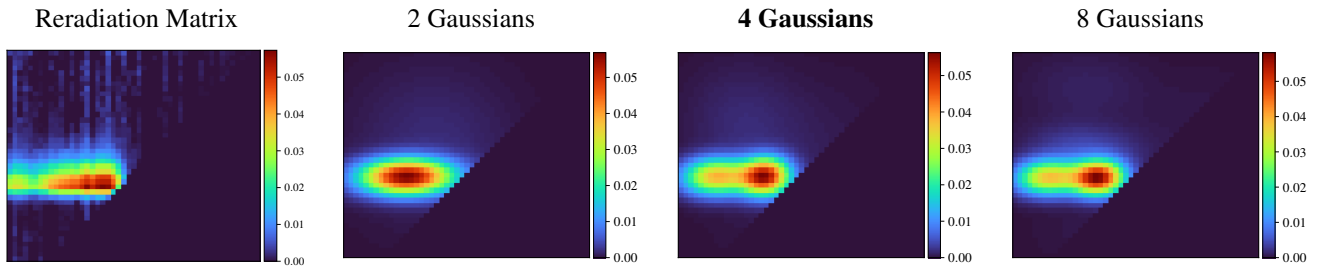
Fitted Material Under Monochromatic Illumination



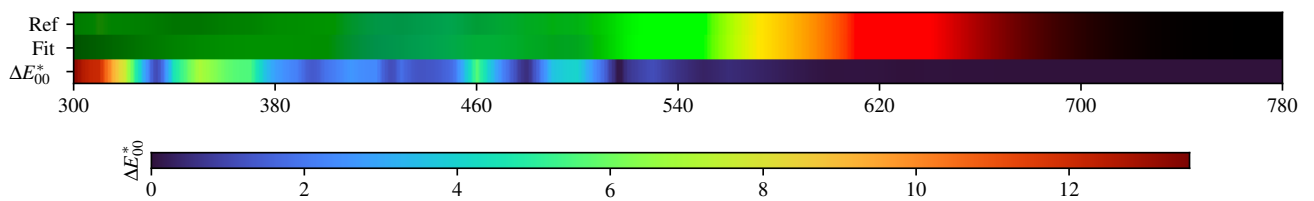
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.44$	D60 $\Delta E = 0.28$	FL2 $\Delta E = 0.30$	FL7 $\Delta E = 0.30$	FL12 $\Delta E = 0.35$	FL3.5 $\Delta E = 0.71$	FL3.10 $\Delta E = 0.78$	FL3.15 $\Delta E = 0.37$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.34$
B $\Delta E = 0.29$	D65 $\Delta E = 0.36$	FL3 $\Delta E = 0.26$	FL8 $\Delta E = 0.60$	FL3.1 $\Delta E = 0.25$	FL3.6 $\Delta E = 0.77$	FL3.11 $\Delta E = 0.38$	HP1 $\Delta E = 0.43$	LED-B1 $\Delta E = 0.40$	LED-BH1 $\Delta E = 0.20$
C $\Delta E = 0.25$	D75 $\Delta E = 0.50$	FL4 $\Delta E = 0.23$	FL9 $\Delta E = 0.54$	FL3.2 $\Delta E = 0.37$	FL3.7 $\Delta E = 0.39$	FL3.12 $\Delta E = 0.79$	HP2 $\Delta E = 0.40$	LED-B2 $\Delta E = 0.44$	LED-RGB1 $\Delta E = 0.54$
D50 $\Delta E = 0.26$	E $\Delta E = 0.90$	FL5 $\Delta E = 0.31$	FL10 $\Delta E = 0.41$	FL3.3 $\Delta E = 0.37$	FL3.8 $\Delta E = 0.44$	FL3.13 $\Delta E = 1.20$	HP3 $\Delta E = 0.28$	LED-B3 $\Delta E = 0.43$	LED-V1 $\Delta E = 0.23$
D55 $\Delta E = 0.23$	FL1 $\Delta E = 0.34$	FL6 $\Delta E = 0.29$	FL11 $\Delta E = 0.41$	FL3.4 $\Delta E = 0.27$	FL3.9 $\Delta E = 0.41$	FL3.14 $\Delta E = 1.33$	HP4 $\Delta E = 0.58$	LED-B4 $\Delta E = 0.27$	LED-V2 $\Delta E = 0.27$

IXCSSTHL - Weighted variational Bayesian inference - 4 Gaussians



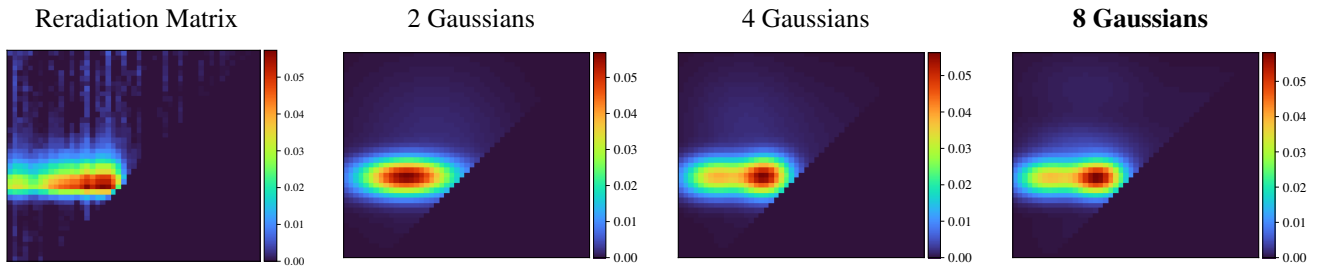
Fitted Material Under Monochromatic Illumination



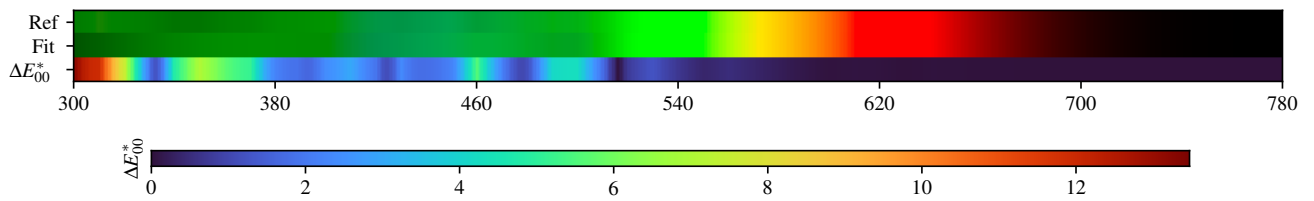
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.17$	D60 $\Delta E = 0.32$	FL2 $\Delta E = 0.20$	FL7 $\Delta E = 0.21$	FL12 $\Delta E = 0.18$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.52$
B $\Delta E = 0.23$	D65 $\Delta E = 0.35$	FL3 $\Delta E = 0.20$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.18$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.27$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.22$
C $\Delta E = 0.27$	D75 $\Delta E = 0.40$	FL4 $\Delta E = 0.19$	FL9 $\Delta E = 0.17$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.18$	FL3.12 $\Delta E = 0.24$	HP2 $\Delta E = 0.19$	LED-B2 $\Delta E = 0.20$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.25$	E $\Delta E = 0.41$	FL5 $\Delta E = 0.21$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.17$	FL3.13 $\Delta E = 0.22$	HP3 $\Delta E = 0.21$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.44$
D55 $\Delta E = 0.28$	FL1 $\Delta E = 0.21$	FL6 $\Delta E = 0.20$	FL11 $\Delta E = 0.17$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.19$	HP4 $\Delta E = 0.27$	LED-B4 $\Delta E = 0.47$	LED-V2 $\Delta E = 0.38$

IXCSSTHL - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.30$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.61$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.21$	$\Delta E = 0.33$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.20$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.26$	$\Delta E = 0.38$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.21$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.24$	$\Delta E = 0.36$	$\Delta E = 0.19$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.30$	$\Delta E = 0.41$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.24$	$\Delta E = 0.56$	$\Delta E = 0.34$

IXCSSTHL - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.129049	0.110783	0.101889	0.092662	0.075007	0.053750	0.048468	0.047139	0.041124	0.048387	0.062228
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.104623	0.209101	0.410345	0.631378	0.739251	0.771430	0.784264	0.791922	0.791458	0.798605	0.800827
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.802978	0.805078	0.807823	0.813094	0.811926	0.817854	0.820307	0.821525	0.822353	0.823789	0.823600
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.828986	0.826937	0.831854	0.833421	0.834182	0.838927	0.834166	0.837474			

2 Gaussians max

Scaling factor: 676.3527470371694

Gaussians:

Weight	Mean		Covariance			
0.221222637	472.449745393	598.260440689	12129.839938906	-79.975060952	-79.975060952	11196.018042137
0.778777363	420.019305927	536.933642941	3986.172394042	40.257945527	40.257945527	567.532135186

4 Gaussians max

Scaling factor: 662.4343502684234

Gaussians:

Weight	Mean		Covariance			
0.100037222	539.013361599	557.369431972	12210.170288017	4621.231444932	4621.231444932	13327.718183290
0.391900288	370.041325521	536.926832307	2075.877773903	37.621901677	37.621901677	595.099352044
0.401902547	468.019681116	537.352051159	1088.853820228	31.476199228	31.476199228	623.778225372
0.106159943	421.266630365	645.094115758	6056.369944947	-247.635227263	-247.635227263	6372.638507215

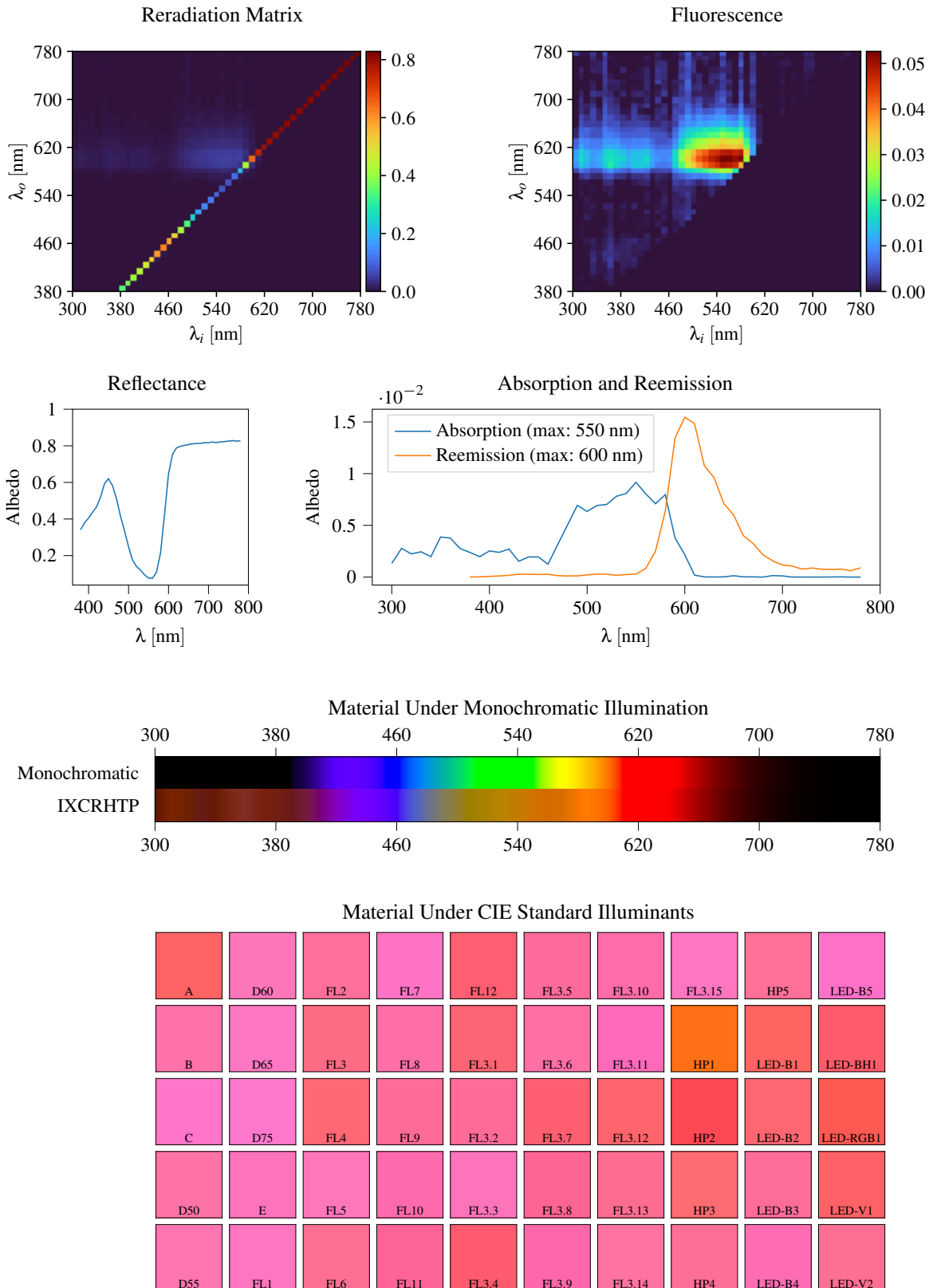
8 Gaussians max

Scaling factor: 661.268292935893

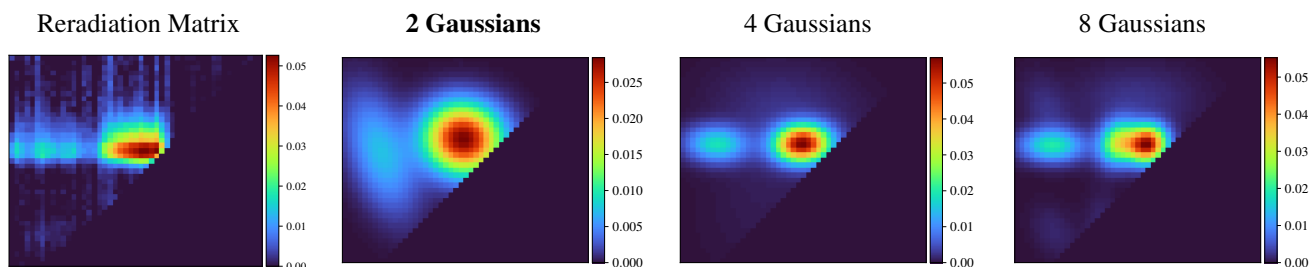
Gaussians:

Weight	Mean		Covariance			
0.038238866	505.201974175	436.290732978	11883.613647121	698.484918240	698.484918240	2473.556836512
0.359830757	365.790905774	535.488392712	1910.817988811	40.554336295	40.554336295	539.334839581
0.419946296	465.779202576	534.915106009	1196.697429651	35.694137474	35.694137474	528.455729002
0.024173429	649.832749845	648.828570173	5838.468938521	2916.497550847	2916.497550847	5493.399141864
0.093708636	439.335595002	593.542984925	5702.430681405	-250.136976102	-250.136976102	958.558433473
0.062273472	443.359172145	710.708180944	8732.642537663	-118.192024240	-118.192024240	2802.967391684

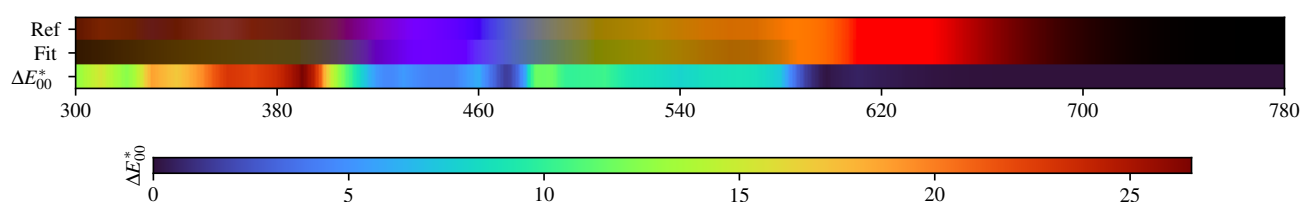
3.19. IXCRHTP



IXCRHTP - Weighted Expectation-Maximization - 2 Gaussians



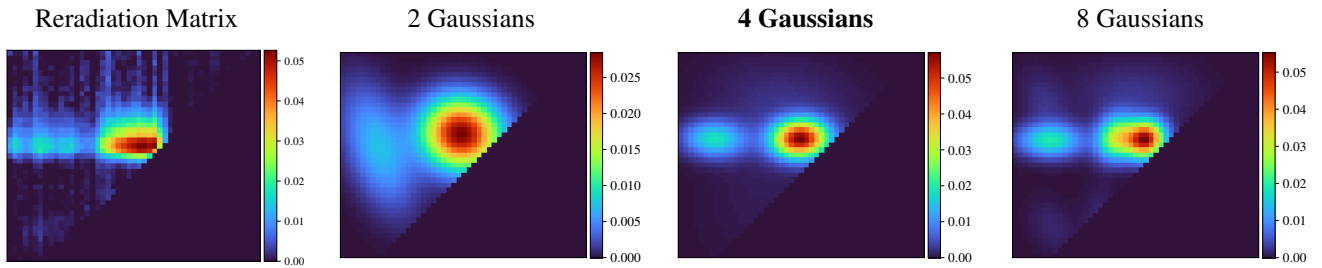
Fitted Material Under Monochromatic Illumination



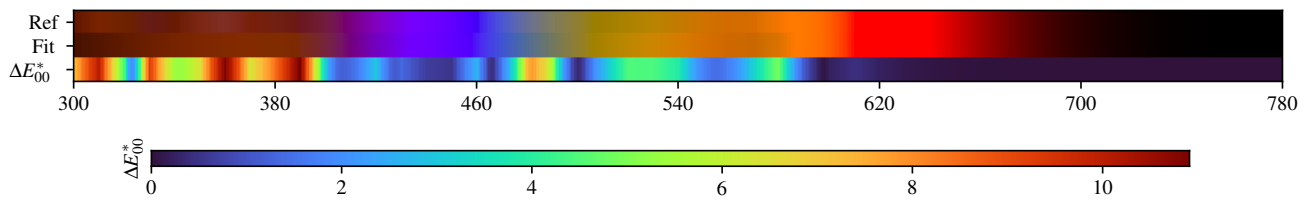
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 1.52$	D60 $\Delta E = 2.61$	FL2 $\Delta E = 2.66$	FL7 $\Delta E = 2.53$	FL12 $\Delta E = 1.27$	FL3.5 $\Delta E = 1.81$	FL3.10 $\Delta E = 1.66$	FL3.15 $\Delta E = 2.40$	HP5 $\Delta E = 1.91$	LED-B5 $\Delta E = 2.32$
B $\Delta E = 2.17$	D65 $\Delta E = 2.77$	FL3 $\Delta E = 2.52$	FL8 $\Delta E = 2.12$	FL3.1 $\Delta E = 2.33$	FL3.6 $\Delta E = 2.01$	FL3.11 $\Delta E = 1.85$	HP1 $\Delta E = 1.84$	LED-B1 $\Delta E = 1.59$	LED-BH1 $\Delta E = 1.44$
C $\Delta E = 2.53$	D75 $\Delta E = 3.05$	FL4 $\Delta E = 2.37$	FL9 $\Delta E = 2.05$	FL3.2 $\Delta E = 2.37$	FL3.7 $\Delta E = 1.15$	FL3.12 $\Delta E = 1.50$	HP2 $\Delta E = 1.93$	LED-B2 $\Delta E = 1.68$	LED-RGB1 $\Delta E = 1.05$
D50 $\Delta E = 2.26$	E $\Delta E = 2.58$	FL5 $\Delta E = 3.06$	FL10 $\Delta E = 1.83$	FL3.3 $\Delta E = 2.91$	FL3.8 $\Delta E = 1.45$	FL3.13 $\Delta E = 1.75$	HP3 $\Delta E = 1.39$	LED-B3 $\Delta E = 1.99$	LED-V1 $\Delta E = 1.47$
D55 $\Delta E = 2.44$	FL1 $\Delta E = 2.91$	FL6 $\Delta E = 2.79$	FL11 $\Delta E = 1.55$	FL3.4 $\Delta E = 1.62$	FL3.9 $\Delta E = 1.61$	FL3.14 $\Delta E = 1.89$	HP4 $\Delta E = 1.98$	LED-B4 $\Delta E = 2.24$	LED-V2 $\Delta E = 1.98$

IXCRHTP - Weighted Expectation-Maximization - 4 Gaussians



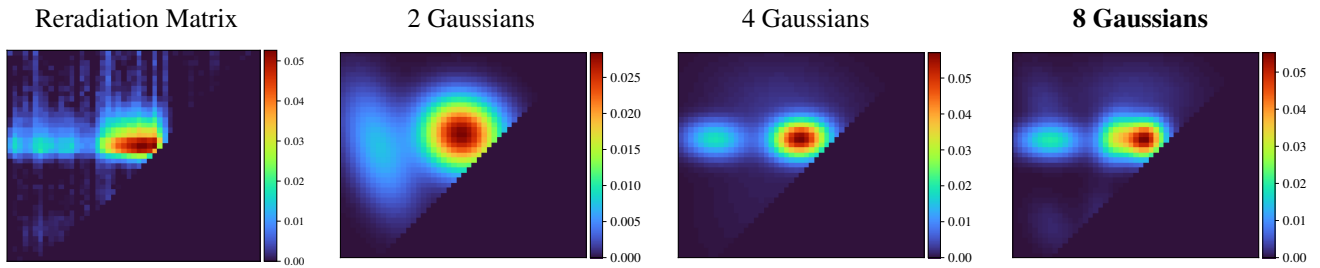
Fitted Material Under Monochromatic Illumination



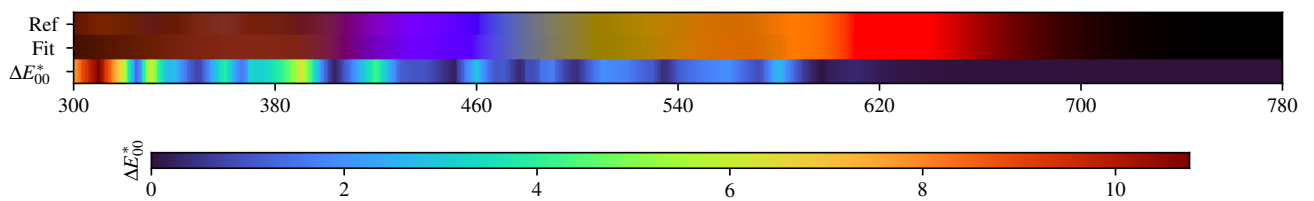
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.61$	$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.18$	$\Delta E = 0.07$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.74$	$\Delta E = 0.09$	$\Delta E = 0.83$	$\Delta E = 0.15$	$\Delta E = 0.36$	$\Delta E = 0.95$	$\Delta E = 0.29$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.25$	$\Delta E = 0.82$	$\Delta E = 0.24$	$\Delta E = 0.54$	$\Delta E = 0.33$	$\Delta E = 0.26$	$\Delta E = 0.50$	$\Delta E = 0.26$	$\Delta E = 0.43$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.07$	$\Delta E = 0.28$	$\Delta E = 0.38$	$\Delta E = 0.29$	$\Delta E = 0.41$	$\Delta E = 0.37$	$\Delta E = 0.28$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.19$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.11$	$\Delta E = 0.37$	$\Delta E = 0.66$	$\Delta E = 0.31$	$\Delta E = 0.21$	$\Delta E = 0.38$	$\Delta E = 0.10$	$\Delta E = 0.23$	$\Delta E = 0.04$	$\Delta E = 0.16$

IXCRHTP - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.29$	$\Delta E = 0.24$	$\Delta E = 0.41$	$\Delta E = 0.32$	$\Delta E = 0.22$	$\Delta E = 0.30$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.36$	$\Delta E = 0.19$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.29$	$\Delta E = 0.22$	$\Delta E = 0.42$	$\Delta E = 0.31$	$\Delta E = 0.41$	$\Delta E = 0.31$	$\Delta E = 0.18$	$\Delta E = 0.39$	$\Delta E = 0.29$	$\Delta E = 0.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.27$	$\Delta E = 0.20$	$\Delta E = 0.43$	$\Delta E = 0.33$	$\Delta E = 0.37$	$\Delta E = 0.23$	$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.28$	$\Delta E = 0.21$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.27$	$\Delta E = 0.16$	$\Delta E = 0.38$	$\Delta E = 0.19$	$\Delta E = 0.38$	$\Delta E = 0.22$	$\Delta E = 0.30$	$\Delta E = 0.24$	$\Delta E = 0.29$	$\Delta E = 0.38$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.25$	$\Delta E = 0.38$	$\Delta E = 0.42$	$\Delta E = 0.20$	$\Delta E = 0.29$	$\Delta E = 0.20$	$\Delta E = 0.28$	$\Delta E = 0.42$	$\Delta E = 0.22$	$\Delta E = 0.42$

IXCRHTP - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.341079	0.379118	0.405775	0.436862	0.467036	0.519927	0.593881	0.620212	0.581446	0.509370	0.413832
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.334995	0.248603	0.175380	0.140457	0.120491	0.095040	0.076733	0.076626	0.109504	0.213900	0.422382
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.645467	0.753101	0.788810	0.797479	0.802156	0.806817	0.810777	0.813073	0.813388	0.817001	0.817096
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.820834	0.817268	0.821842	0.823115	0.825409	0.828592	0.825743	0.827499			

2 Gaussians

Scaling factor: 603.2998415388095

Gaussians:

Weight	Mean		Covariance			
0.748985084	534.459544429	621.871600140	2810.501702447	-117.638632570	-117.638632570	2262.301871660
0.251014916	370.144286405	594.621575369	2169.357746657	-1542.743167537	-1542.743167537	6162.171207797

4 Gaussians

Scaling factor: 590.9928529033782

Gaussians:

Weight	Mean		Covariance			
0.178275652	508.277913152	671.384643375	9971.167998591	-1000.394025982	-1000.394025982	4347.774217434
0.077568062	462.426241342	513.426932915	7178.170391829	1587.304018029	1587.304018029	9942.704177238
0.549004124	537.492156774	612.300948225	1381.068921722	34.667426218	34.667426218	630.865398312
0.195152162	367.126188397	611.618253803	1742.900194261	-45.864699556	-45.864699556	588.576802793

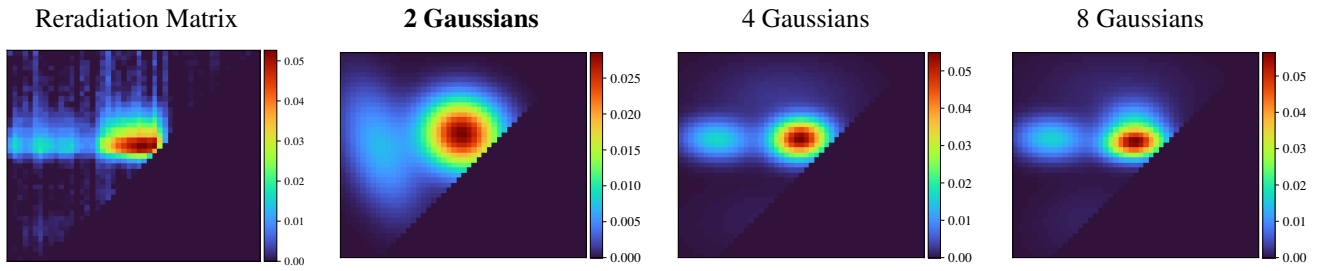
8 Gaussians

Scaling factor: 578.8414739393924

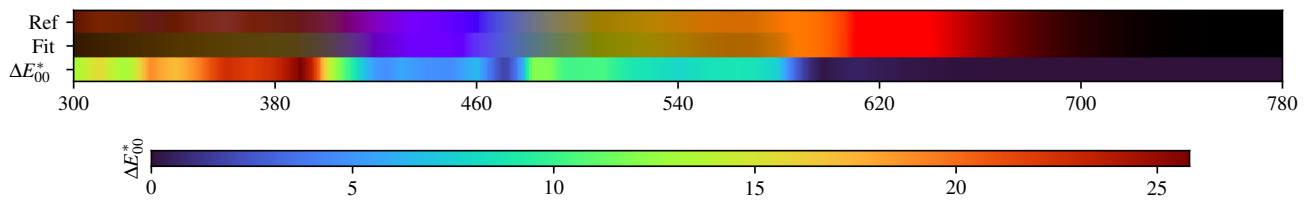
Gaussians:

Weight	Mean		Covariance			
0.111667203	535.066988399	699.101542143	6758.148246139	34.123844677	34.123844677	2107.222176589
0.196997711	370.061943565	608.674784672	1879.559306241	-18.683334175	-18.683334175	503.871733186
0.014766899	635.888599875	483.994072801	6060.642991854	-108.571299111	-108.571299111	4832.175605214
0.236583209	501.255070763	614.140620750	667.481986881	91.842208645	91.842208645	828.492247554
0.020105741	372.941913156	439.263751233	1008.655227786	-344.704536188	-344.704536188	1374.247289749
0.020657456	468.480288370	449.763516885	587.913554748	-22.781638029	-22.781638029	2266.127883516
0.038399949	359.086279510	677.841834389	1065.943062022	-584.050237973	-584.050237973	2372.083970946
0.360821831	558.779267086	611.002243357	652.105577714	44.408544795	44.408544795	608.869198601

IXCRHTP - Weighted variational Bayesian inference - 2 Gaussians



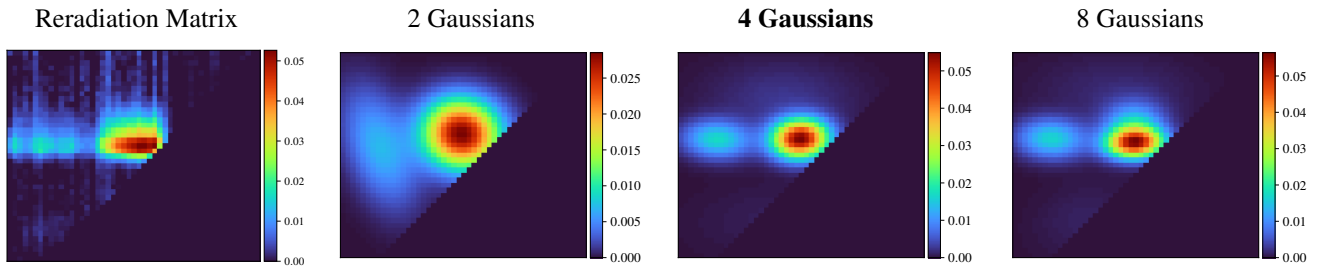
Fitted Material Under Monochromatic Illumination



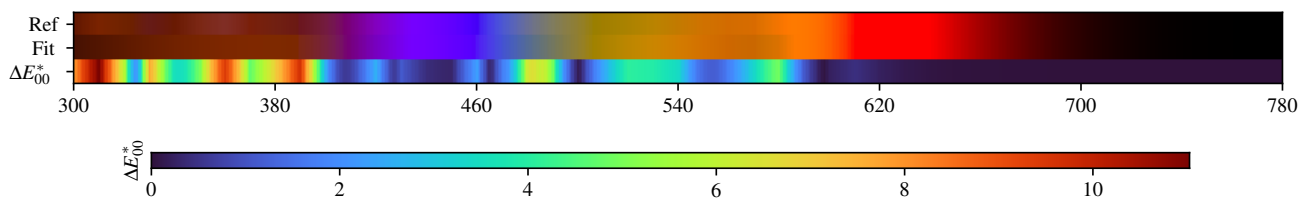
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.50$	$\Delta E = 2.59$	$\Delta E = 2.60$	$\Delta E = 2.49$	$\Delta E = 1.24$	$\Delta E = 1.77$	$\Delta E = 1.62$	$\Delta E = 2.37$	$\Delta E = 1.87$	$\Delta E = 2.28$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 2.14$	$\Delta E = 2.75$	$\Delta E = 2.47$	$\Delta E = 2.08$	$\Delta E = 2.30$	$\Delta E = 1.98$	$\Delta E = 1.80$	$\Delta E = 1.81$	$\Delta E = 1.56$	$\Delta E = 1.40$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.50$	$\Delta E = 3.04$	$\Delta E = 2.32$	$\Delta E = 2.01$	$\Delta E = 2.33$	$\Delta E = 1.12$	$\Delta E = 1.48$	$\Delta E = 1.89$	$\Delta E = 1.64$	$\Delta E = 1.04$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 2.24$	$\Delta E = 2.56$	$\Delta E = 3.01$	$\Delta E = 1.78$	$\Delta E = 2.86$	$\Delta E = 1.41$	$\Delta E = 1.72$	$\Delta E = 1.36$	$\Delta E = 1.94$	$\Delta E = 1.44$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 2.42$	$\Delta E = 2.87$	$\Delta E = 2.74$	$\Delta E = 1.50$	$\Delta E = 1.60$	$\Delta E = 1.56$	$\Delta E = 1.86$	$\Delta E = 1.93$	$\Delta E = 2.19$	$\Delta E = 1.94$

IXCRHTP - Weighted variational Bayesian inference - 4 Gaussians



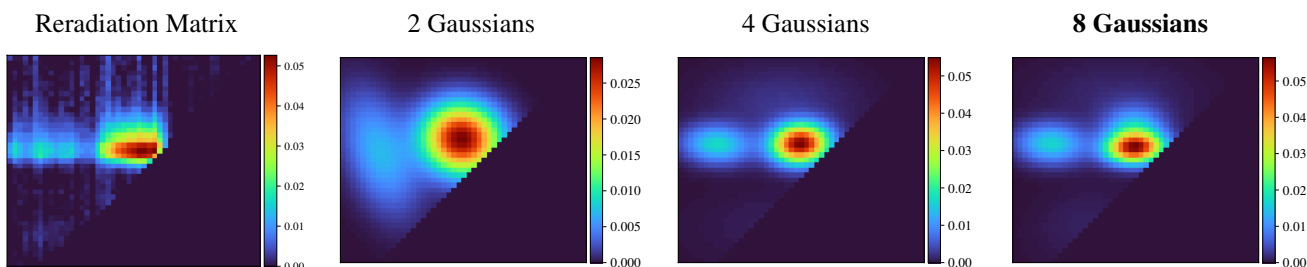
Fitted Material Under Monochromatic Illumination



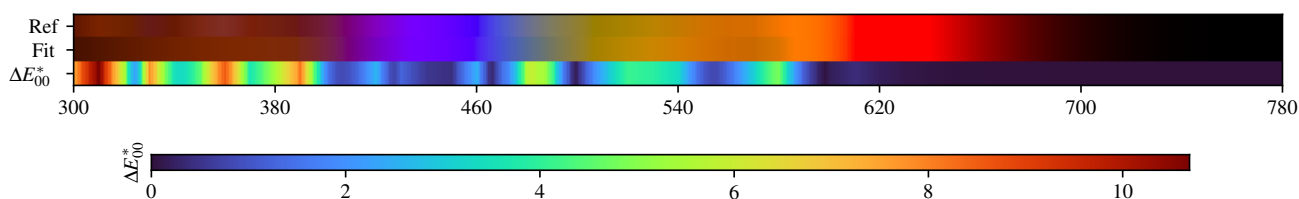
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.24$	$\Delta E = 0.05$	$\Delta E = 0.70$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.30$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.27$	$\Delta E = 0.07$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.03$	$\Delta E = 0.82$	$\Delta E = 0.21$	$\Delta E = 0.89$	$\Delta E = 0.25$	$\Delta E = 0.31$	$\Delta E = 0.99$	$\Delta E = 0.36$	$\Delta E = 0.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.04$	$\Delta E = 0.88$	$\Delta E = 0.34$	$\Delta E = 0.63$	$\Delta E = 0.28$	$\Delta E = 0.33$	$\Delta E = 0.56$	$\Delta E = 0.34$	$\Delta E = 0.35$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.47$	$\Delta E = 0.25$	$\Delta E = 0.49$	$\Delta E = 0.32$	$\Delta E = 0.38$	$\Delta E = 0.09$	$\Delta E = 0.21$	$\Delta E = 0.28$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.07$	$\Delta E = 0.46$	$\Delta E = 0.75$	$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.33$	$\Delta E = 0.23$	$\Delta E = 0.29$	$\Delta E = 0.13$	$\Delta E = 0.27$

IXCRHTP - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.16$	$\Delta E = 0.05$	$\Delta E = 0.61$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.13$	$\Delta E = 0.05$	$\Delta E = 0.22$	$\Delta E = 0.07$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.71$	$\Delta E = 0.13$	$\Delta E = 0.77$	$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.87$	$\Delta E = 0.26$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.76$	$\Delta E = 0.26$	$\Delta E = 0.54$	$\Delta E = 0.25$	$\Delta E = 0.25$	$\Delta E = 0.43$	$\Delta E = 0.24$	$\Delta E = 0.38$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.04$	$\Delta E = 0.13$	$\Delta E = 0.39$	$\Delta E = 0.24$	$\Delta E = 0.41$	$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.04$	$\Delta E = 0.38$	$\Delta E = 0.64$	$\Delta E = 0.24$	$\Delta E = 0.20$	$\Delta E = 0.32$	$\Delta E = 0.14$	$\Delta E = 0.28$	$\Delta E = 0.07$	$\Delta E = 0.22$

IXCRHTP - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.341079	0.379118	0.405775	0.436862	0.467036	0.519927	0.593881	0.620212	0.581446	0.509370	0.413832
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.334995	0.248603	0.175380	0.140457	0.120491	0.095040	0.076733	0.076626	0.109504	0.213900	0.422382
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.645467	0.753101	0.788810	0.797479	0.802156	0.806817	0.810777	0.813073	0.813388	0.817001	0.817096
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.820834	0.817268	0.821842	0.823115	0.825409	0.828592	0.825743	0.827499			

2 Gaussians max

Scaling factor: 604.269633150372

Gaussians:

Weight	Mean		Covariance			
0.256343617	372.418735631	594.876426922	2425.753170455	-1529.693518749	-1529.693518749	6165.446748154
0.743656383	535.039178504	621.953579781	2781.911128148	-109.593744394	-109.593744394	2240.533333963

4 Gaussians max

Scaling factor: 590.3366275295596

Gaussians:

Weight	Mean		Covariance			
0.055085971	472.061942079	453.504794259	11604.939927104	746.509160898	746.509160898	2779.199946793
0.585415309	537.443582183	612.126728305	1462.648002439	42.965923030	42.965923030	697.866584544
0.212450698	372.319237628	610.851956695	2155.041885031	-75.446516560	-75.446516560	663.140318974
0.147048021	500.927564294	692.776960190	10184.677013095	28.068951105	28.068951105	2541.334079246

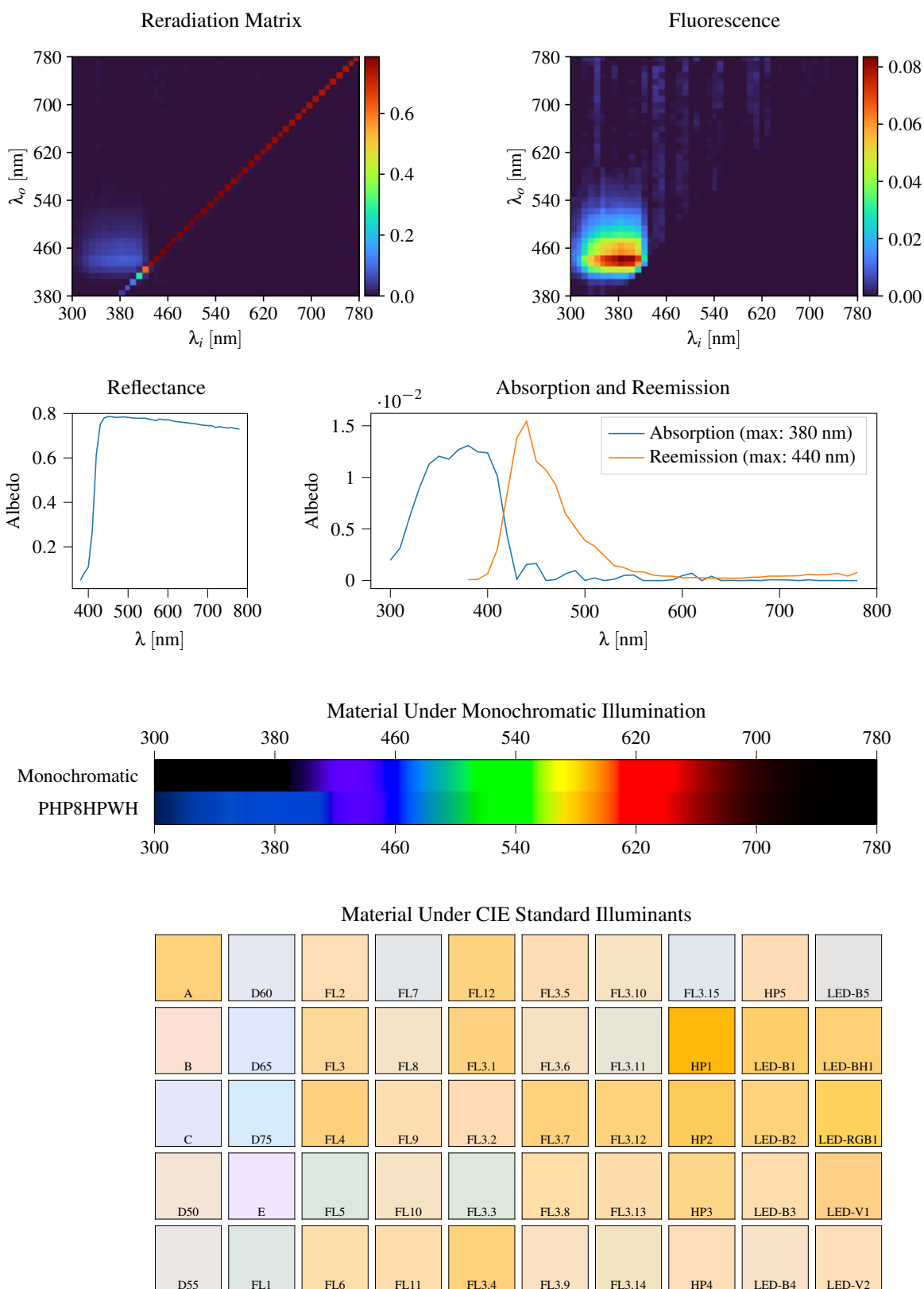
8 Gaussians max

Scaling factor: 588.3183203983896

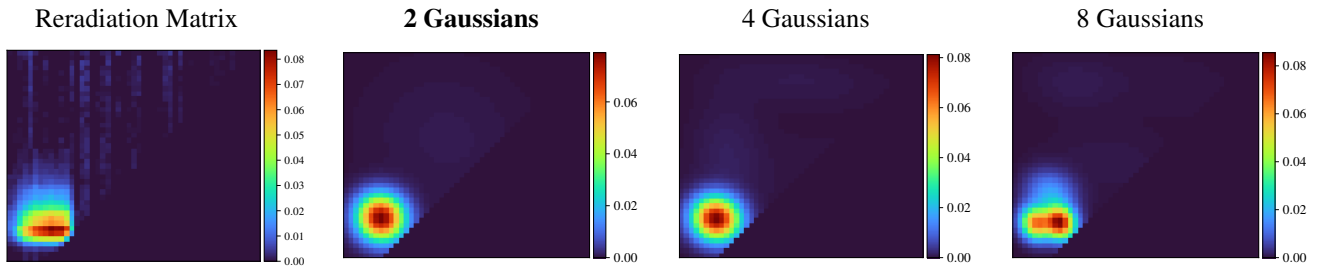
Gaussians:

Weight	Mean		Covariance			
0.045118967	433.217684309	451.809127709	4457.005228372	594.063285237	594.063285237	2741.332848188
0.014421718	622.055733360	501.950604717	8619.905776059	-2527.532335667	-2527.532335667	6293.760105782
0.221242304	372.393388266	612.247271910	2136.432238189	-58.603511662	-58.603511662	721.938642763
0.250185242	535.165932252	633.131038988	1585.101102420	30.463007670	30.463007670	1042.239721694
0.364473149	537.933894925	602.909209448	1486.640581631	51.282497288	51.282497288	389.638202566
0.102789047	499.982790194	707.257254277	11869.278253786	-19.703789214	-19.703789214	2354.969489189

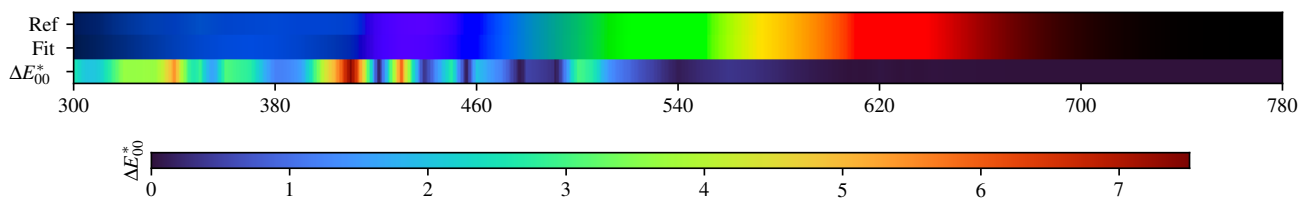
3.20. PHP8HPWH



PHP8HPWH - Weighted Expectation-Maximization - 2 Gaussians



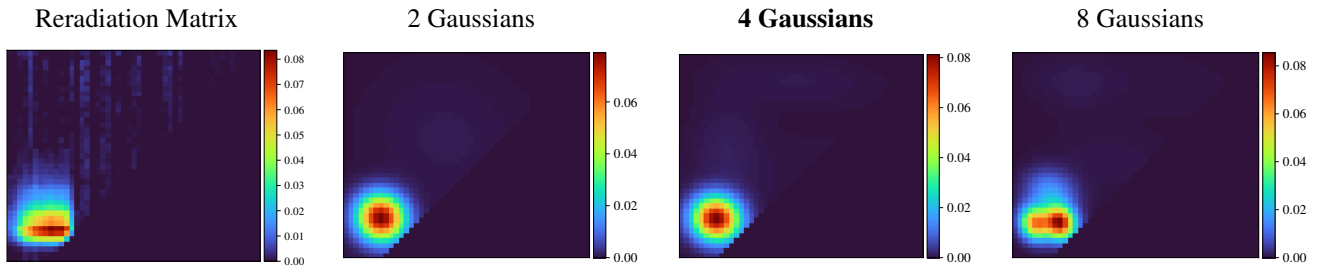
Fitted Material Under Monochromatic Illumination



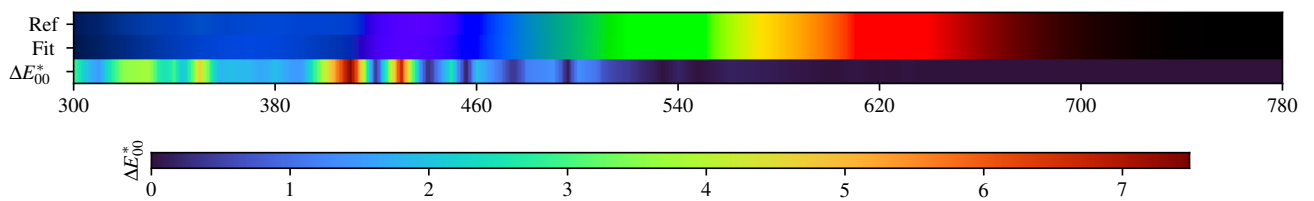
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.67$	FL2 $\Delta E = 0.27$	FL7 $\Delta E = 0.64$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.24$	FL3.10 $\Delta E = 0.30$	FL3.15 $\Delta E = 0.67$	HP5 $\Delta E = 0.38$	LED-B5 $\Delta E = 0.70$
B $\Delta E = 0.42$	D65 $\Delta E = 0.58$	FL3 $\Delta E = 0.19$	FL8 $\Delta E = 0.36$	FL3.1 $\Delta E = 0.17$	FL3.6 $\Delta E = 0.34$	FL3.11 $\Delta E = 0.34$	HP1 $\Delta E = 0.11$	LED-B1 $\Delta E = 0.19$	LED-BH1 $\Delta E = 0.25$
C $\Delta E = 0.52$	D75 $\Delta E = 0.42$	FL4 $\Delta E = 0.15$	FL9 $\Delta E = 0.24$	FL3.2 $\Delta E = 0.28$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.17$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.22$	LED-RGB1 $\Delta E = 0.17$
D50 $\Delta E = 0.52$	E $\Delta E = 0.27$	FL5 $\Delta E = 0.54$	FL10 $\Delta E = 0.29$	FL3.3 $\Delta E = 0.59$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.22$	HP3 $\Delta E = 0.29$	LED-B3 $\Delta E = 0.37$	LED-V1 $\Delta E = 1.11$
D55 $\Delta E = 0.74$	FL1 $\Delta E = 0.56$	FL6 $\Delta E = 0.27$	FL11 $\Delta E = 0.18$	FL3.4 $\Delta E = 0.17$	FL3.9 $\Delta E = 0.28$	FL3.14 $\Delta E = 0.37$	HP4 $\Delta E = 0.65$	LED-B4 $\Delta E = 0.57$	LED-V2 $\Delta E = 1.21$

PHP8HPWH - Weighted Expectation-Maximization - 4 Gaussians



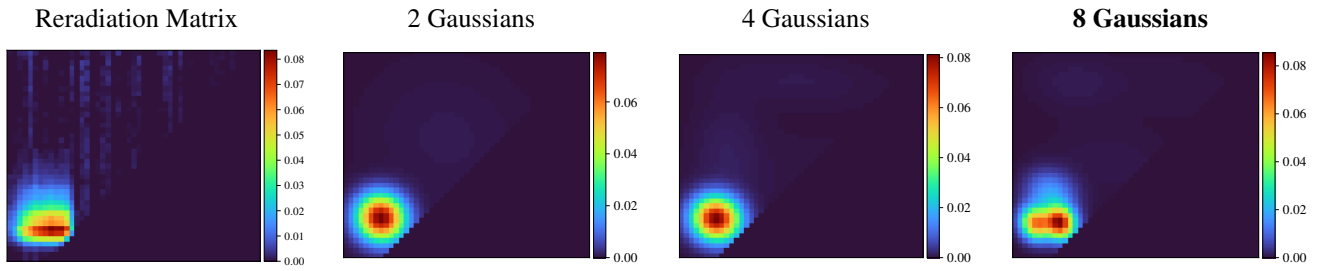
Fitted Material Under Monochromatic Illumination



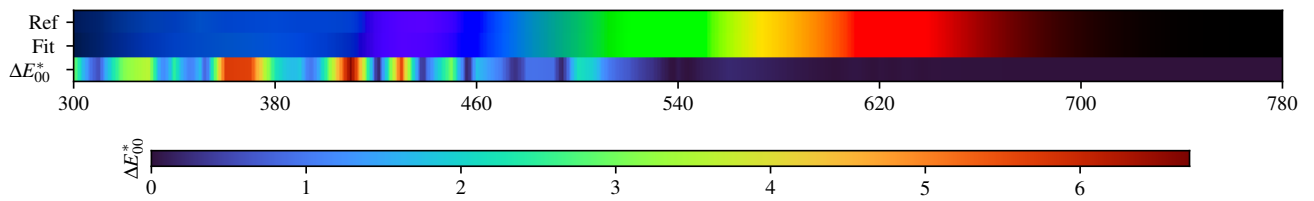
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.43$	FL2 $\Delta E = 0.16$	FL7 $\Delta E = 0.45$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.49$	HP5 $\Delta E = 0.34$	LED-B5 $\Delta E = 0.52$
B $\Delta E = 0.28$	D65 $\Delta E = 0.37$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.32$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.18$
C $\Delta E = 0.31$	D75 $\Delta E = 0.33$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.21$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.33$	E $\Delta E = 0.24$	FL5 $\Delta E = 0.28$	FL10 $\Delta E = 0.23$	FL3.3 $\Delta E = 0.33$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.27$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 1.10$
D55 $\Delta E = 0.47$	FL1 $\Delta E = 0.31$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.13$	FL3.9 $\Delta E = 0.21$	FL3.14 $\Delta E = 0.16$	HP4 $\Delta E = 0.62$	LED-B4 $\Delta E = 0.34$	LED-V2 $\Delta E = 1.19$

PHP8HPWH - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.06$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.11$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.19$
B $\Delta E = 0.08$	D65 $\Delta E = 0.16$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.08$	D75 $\Delta E = 0.15$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.15$	E $\Delta E = 0.38$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.53$
D55 $\Delta E = 0.17$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.55$

PHP8HPWH - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.049042	0.082610	0.108937	0.270864	0.612100	0.751090	0.779896	0.785995	0.784511	0.782405	0.783461
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.784298	0.782393	0.779912	0.778704	0.778246	0.778772	0.776032	0.772236	0.768089	0.775196	0.771082
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.771990	0.767947	0.763300	0.762546	0.759326	0.757735	0.755020	0.753271	0.749566	0.746842	0.745516
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.745041	0.737276	0.740310	0.737479	0.734167	0.736330	0.732196	0.730408			

2 Gaussians

Scaling factor: 585.6552541162539

Gaussians:

Weight	Mean		Covariance			
0.147785954	499.854850876	613.457748033	14739.671287208	-1046.397793992	-1046.397793992	12440.292266639
0.852214046	369.532055913	455.257758443	1024.301209007	-36.259560049	-36.259560049	971.586935037

4 Gaussians

Scaling factor: 579.3226329225096

Gaussians:

Weight	Mean		Covariance			
0.071561336	388.977614835	575.665849997	2450.017111564	107.991107904	107.991107904	7364.872814163
0.054313706	565.707414357	524.246764444	10624.525493468	-247.858953986	-247.858953986	6922.491205297
0.830057700	369.360603284	453.823178687	1017.038920629	-37.718264261	-37.718264261	871.644314245
0.044067257	536.450388812	732.264055175	14058.786467986	-952.682193113	-952.682193113	1350.785251528

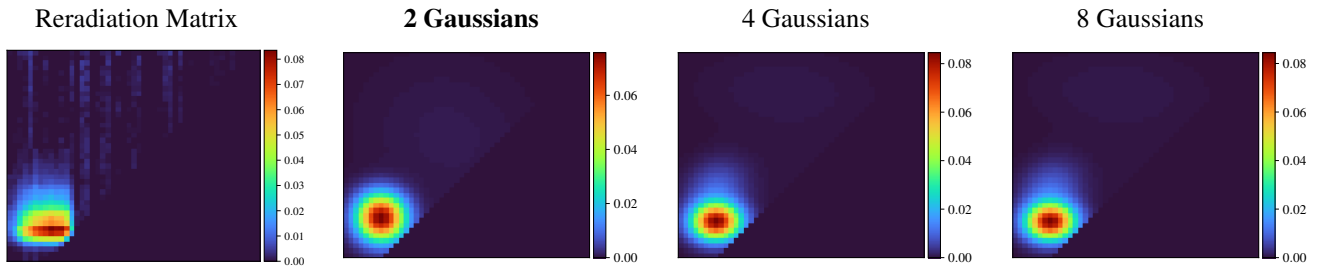
8 Gaussians

Scaling factor: 570.537708372484

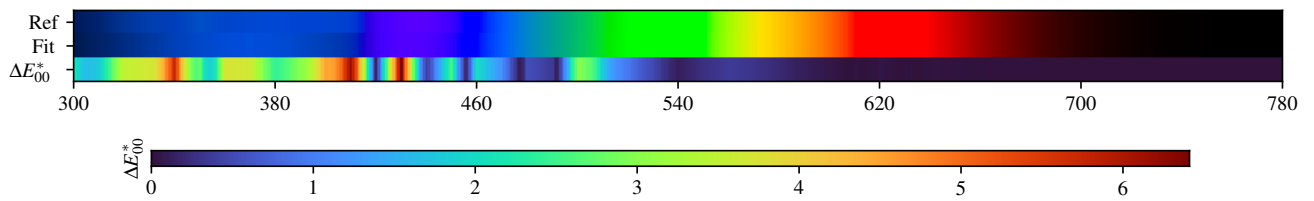
Gaussians:

Weight	Mean		Covariance			
0.035525802	418.888318965	724.482904045	4398.154989156	-178.687048611	-178.687048611	1567.844534298
0.005496096	728.267318617	500.564403819	2110.026236307	-812.118585467	-812.118585467	6532.670905642
0.289475273	340.667615995	443.876651611	390.072048630	-42.833053009	-42.833053009	459.076577918
0.027405195	621.360319638	717.935670252	6687.736758085	-532.104675359	-532.104675359	2227.393569847
0.048783517	490.329311154	568.043041206	9449.748357182	-742.835683176	-742.835683176	2583.701575654
0.383500960	389.668189734	445.201111967	396.829194374	-35.922398629	-35.922398629	465.925893066
0.022242547	513.643468073	426.602007106	8677.832292134	-239.179529441	-239.179529441	967.238620273
0.187570611	370.429886647	501.395822190	1005.441019742	-94.523156572	-94.523156572	862.591060322

PHP8HPWH - Weighted variational Bayesian inference - 2 Gaussians



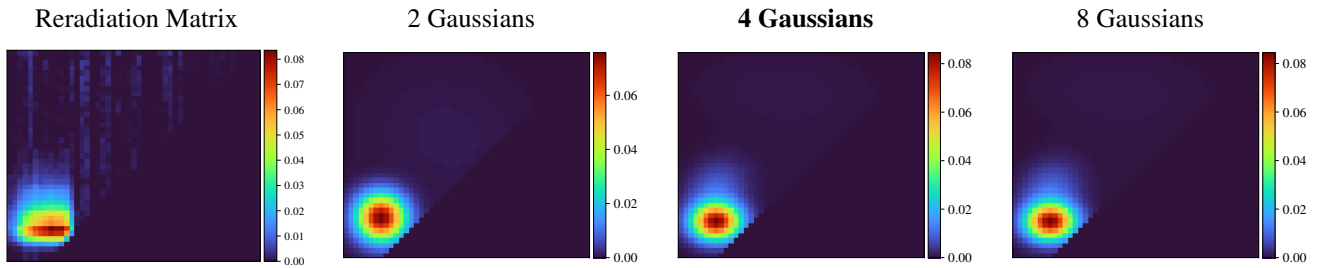
Fitted Material Under Monochromatic Illumination



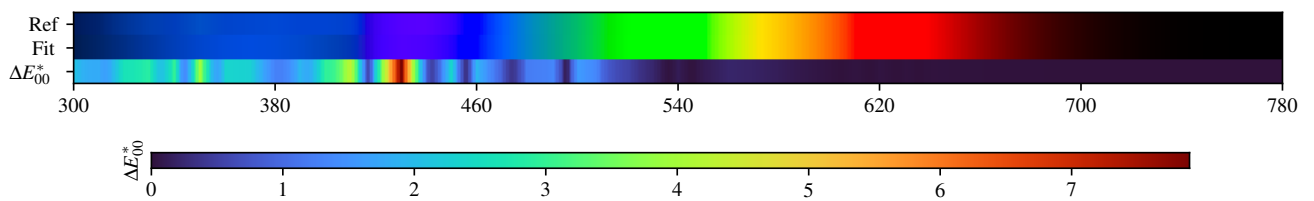
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.17$	D60 $\Delta E = 0.95$	FL2 $\Delta E = 0.24$	FL7 $\Delta E = 0.62$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.22$	FL3.10 $\Delta E = 0.28$	FL3.15 $\Delta E = 0.80$	HP5 $\Delta E = 0.36$	LED-B5 $\Delta E = 0.69$
B $\Delta E = 0.49$	D65 $\Delta E = 0.92$	FL3 $\Delta E = 0.18$	FL8 $\Delta E = 0.30$	FL3.1 $\Delta E = 0.17$	FL3.6 $\Delta E = 0.29$	FL3.11 $\Delta E = 0.29$	HP1 $\Delta E = 0.11$	LED-B1 $\Delta E = 0.20$	LED-BH1 $\Delta E = 0.27$
C $\Delta E = 0.53$	D75 $\Delta E = 0.71$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.21$	FL3.2 $\Delta E = 0.27$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.17$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.22$	LED-RGB1 $\Delta E = 0.17$
D50 $\Delta E = 0.68$	E $\Delta E = 0.67$	FL5 $\Delta E = 0.47$	FL10 $\Delta E = 0.25$	FL3.3 $\Delta E = 0.53$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.22$	HP3 $\Delta E = 0.29$	LED-B3 $\Delta E = 0.38$	LED-V1 $\Delta E = 1.10$
D55 $\Delta E = 0.99$	FL1 $\Delta E = 0.49$	FL6 $\Delta E = 0.24$	FL11 $\Delta E = 0.17$	FL3.4 $\Delta E = 0.17$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.33$	HP4 $\Delta E = 0.68$	LED-B4 $\Delta E = 0.56$	LED-V2 $\Delta E = 1.21$

PHP8HPWH - Weighted variational Bayesian inference - 4 Gaussians



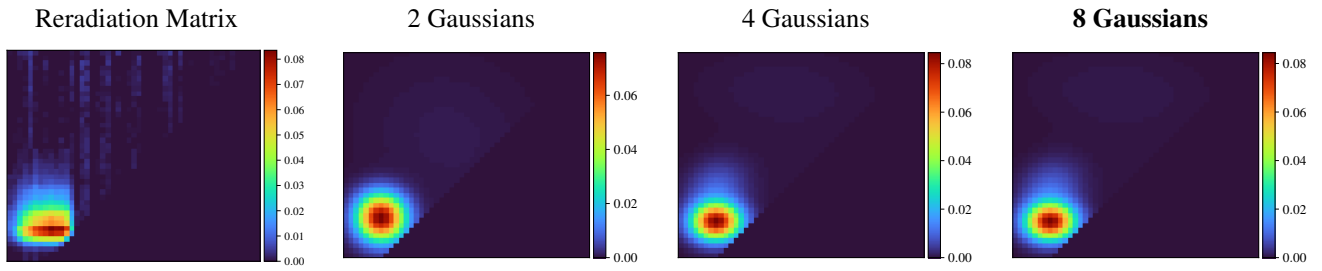
Fitted Material Under Monochromatic Illumination



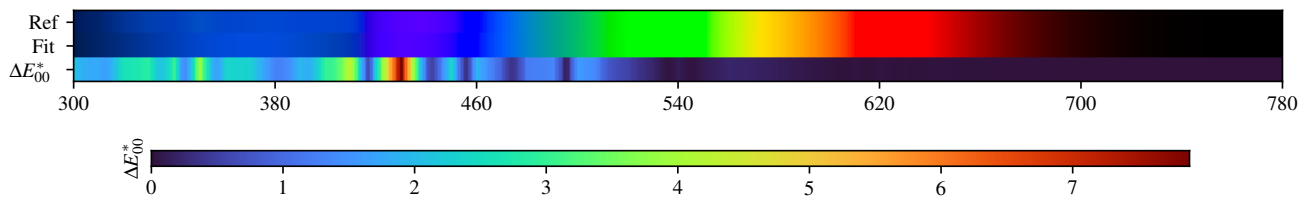
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.55$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.50$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.29$	FL3.15 $\Delta E = 0.60$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.62$
B $\Delta E = 0.33$	D65 $\Delta E = 0.55$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.20$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.46$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.23$
C $\Delta E = 0.50$	D75 $\Delta E = 0.42$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.40$	E $\Delta E = 0.31$	FL5 $\Delta E = 0.25$	FL10 $\Delta E = 0.32$	FL3.3 $\Delta E = 0.27$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.29$	LED-V1 $\Delta E = 0.95$
D55 $\Delta E = 0.53$	FL1 $\Delta E = 0.30$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.18$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.28$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.54$	LED-B4 $\Delta E = 0.38$	LED-V2 $\Delta E = 1.07$

PHP8HPWH - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.55$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.49$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.29$	FL3.15 $\Delta E = 0.60$	HP5 $\Delta E = 0.27$	LED-B5 $\Delta E = 0.62$
B $\Delta E = 0.32$	D65 $\Delta E = 0.55$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.14$	FL3.11 $\Delta E = 0.45$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.23$
C $\Delta E = 0.49$	D75 $\Delta E = 0.42$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.39$	E $\Delta E = 0.31$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.31$	FL3.3 $\Delta E = 0.26$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.30$	LED-V1 $\Delta E = 0.95$
D55 $\Delta E = 0.53$	FL1 $\Delta E = 0.30$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.18$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.27$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.54$	LED-B4 $\Delta E = 0.39$	LED-V2 $\Delta E = 1.06$

PHP8HPWH - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.049042	0.082610	0.108937	0.270864	0.612100	0.751090	0.779896	0.785995	0.784511	0.782405	0.783461
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.784298	0.782393	0.779912	0.778704	0.778246	0.778772	0.776032	0.772236	0.768089	0.775196	0.771082
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.771990	0.767947	0.763300	0.762546	0.759326	0.757735	0.755020	0.753271	0.749566	0.746842	0.745516
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.745041	0.737276	0.740310	0.737479	0.734167	0.736330	0.732196	0.730408			

2 Gaussians max

Scaling factor: 587.2417838087583

Gaussians:

Weight	Mean		Covariance			
0.854479682	369.815791096	455.582834215	1079.231358382	-12.760948430	-12.760948430	1014.829006557
0.145520318	502.042185563	615.344156261	14735.280084460	-1235.503086097	-1235.503086097	12359.950126012

4 Gaussians max

Scaling factor: 579.7841084850094

Gaussians:

Weight	Mean		Covariance			
0.714688658	370.626744032	447.287845419	1079.837513699	12.219575777	12.219575777	605.783139585
0.052592212	553.492665116	519.466525864	11069.332592942	-1640.949263184	-1640.949263184	6710.272182075
0.164252344	369.366563824	506.493516916	1491.704695063	238.796427813	238.796427813	1498.867928446
0.068466786	504.107686929	709.616256659	15053.942848344	-360.906372895	-360.906372895	3123.176948888

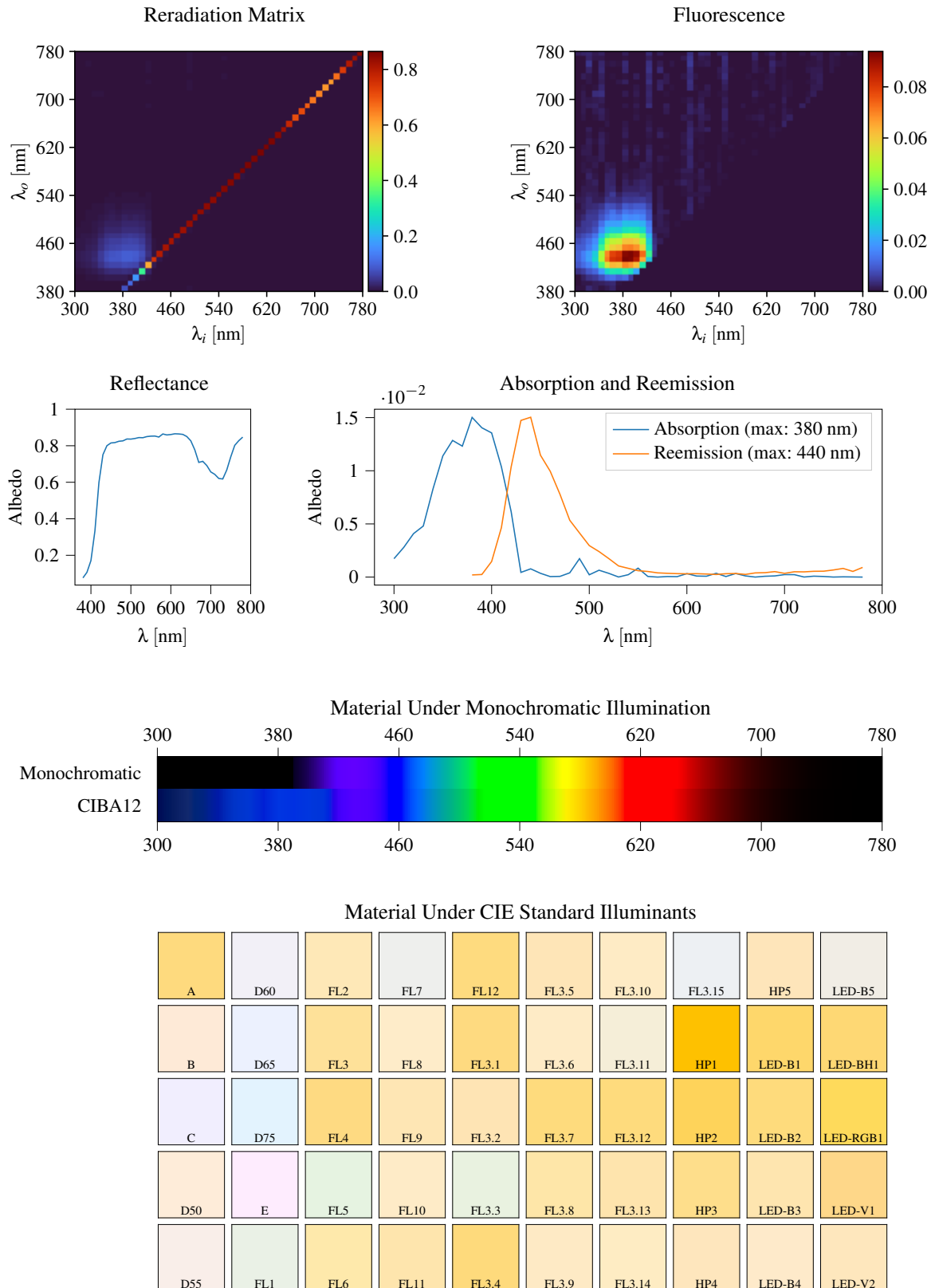
8 Gaussians max

Scaling factor: 581.2316100714412

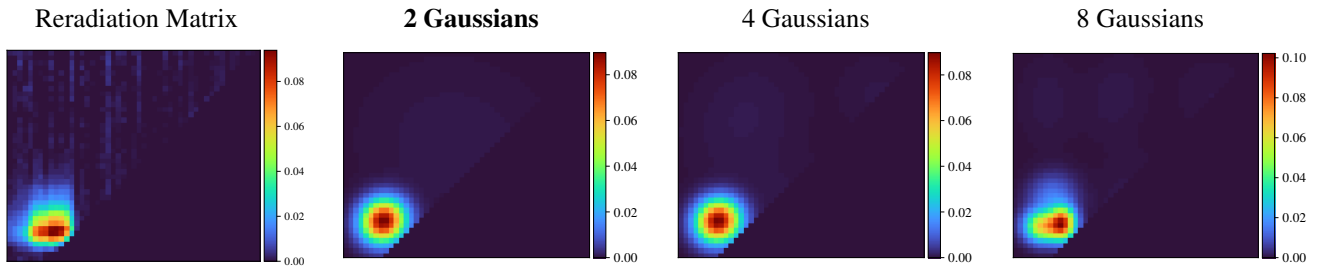
Gaussians:

Weight	Mean		Covariance			
0.708932522	370.645696976	447.174278359	1079.479554639	12.612106750	12.612106750	601.970918532
0.050342585	553.356020609	515.076429457	10905.350850857	-1502.948117692	-1502.948117692	6397.181330539
0.166965638	369.311135197	505.896828837	1484.852517009	239.181272029	239.181272029	1500.038687980
0.071543659	504.290528721	707.447148895	15005.154975336	-384.634068355	-384.634068355	3275.649467401

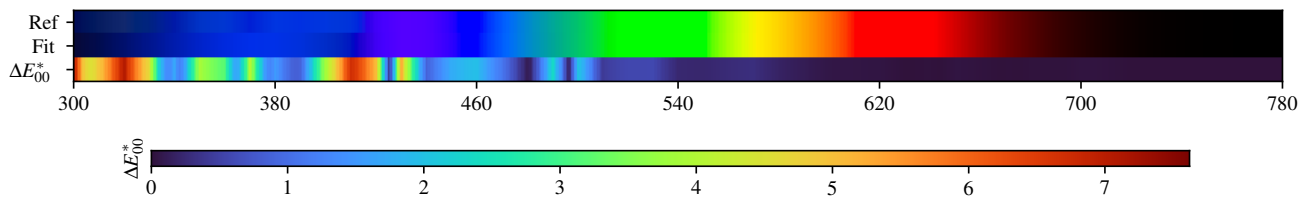
3.21. CIBA12



CIBA12 - Weighted Expectation-Maximization - 2 Gaussians



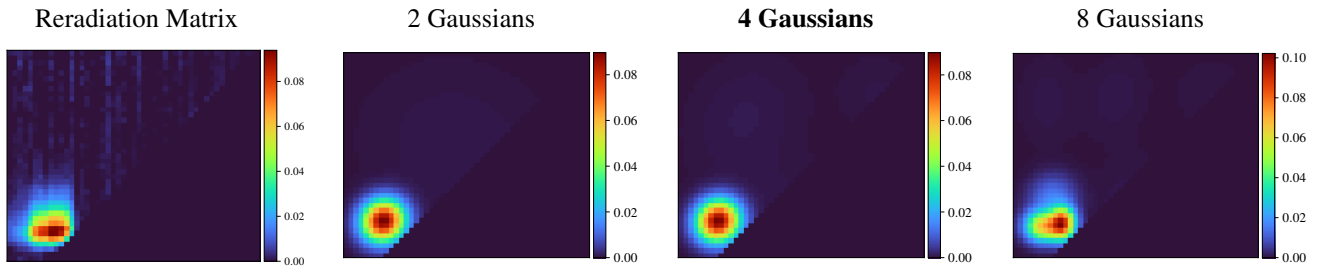
Fitted Material Under Monochromatic Illumination



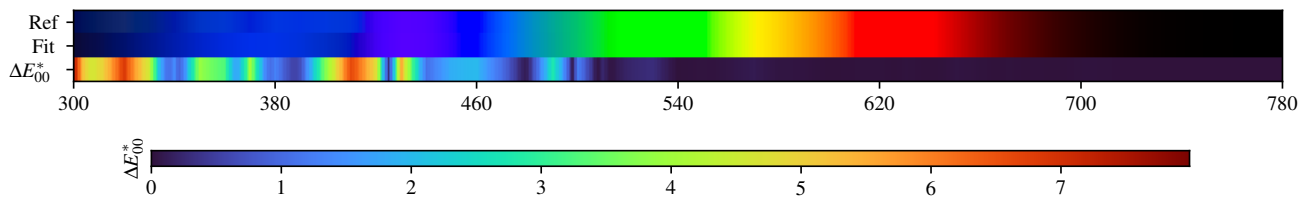
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.59$	FL2 $\Delta E = 0.28$	FL7 $\Delta E = 0.71$	FL12 $\Delta E = 0.14$	FL3.5 $\Delta E = 0.21$	FL3.10 $\Delta E = 0.32$	FL3.15 $\Delta E = 0.64$	HP5 $\Delta E = 0.38$	LED-B5 $\Delta E = 0.63$
B $\Delta E = 0.37$	D65 $\Delta E = 0.59$	FL3 $\Delta E = 0.20$	FL8 $\Delta E = 0.35$	FL3.1 $\Delta E = 0.16$	FL3.6 $\Delta E = 0.32$	FL3.11 $\Delta E = 0.41$	HP1 $\Delta E = 0.11$	LED-B1 $\Delta E = 0.18$	LED-BH1 $\Delta E = 0.23$
C $\Delta E = 0.63$	D75 $\Delta E = 0.52$	FL4 $\Delta E = 0.16$	FL9 $\Delta E = 0.23$	FL3.2 $\Delta E = 0.26$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.20$	LED-RGB1 $\Delta E = 0.16$
D50 $\Delta E = 0.42$	E $\Delta E = 0.32$	FL5 $\Delta E = 0.57$	FL10 $\Delta E = 0.33$	FL3.3 $\Delta E = 0.59$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.30$	LED-B3 $\Delta E = 0.33$	LED-V1 $\Delta E = 0.95$
D55 $\Delta E = 0.51$	FL1 $\Delta E = 0.61$	FL6 $\Delta E = 0.28$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.15$	FL3.9 $\Delta E = 0.30$	FL3.14 $\Delta E = 0.31$	HP4 $\Delta E = 0.61$	LED-B4 $\Delta E = 0.48$	LED-V2 $\Delta E = 1.03$

CIBA12 - Weighted Expectation-Maximization - 4 Gaussians



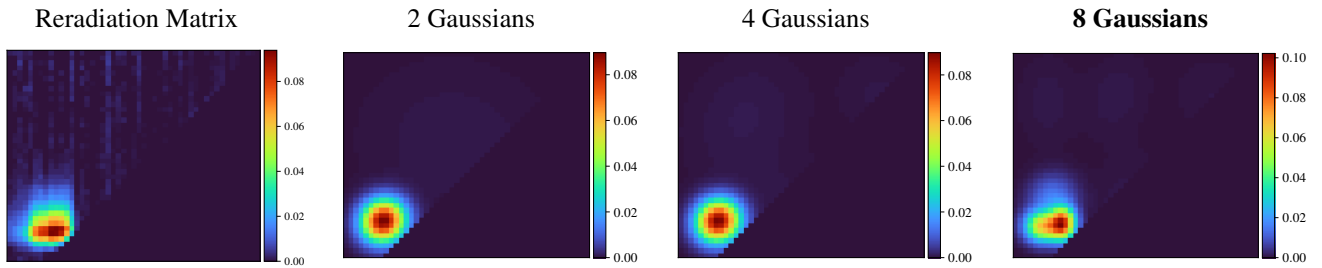
Fitted Material Under Monochromatic Illumination



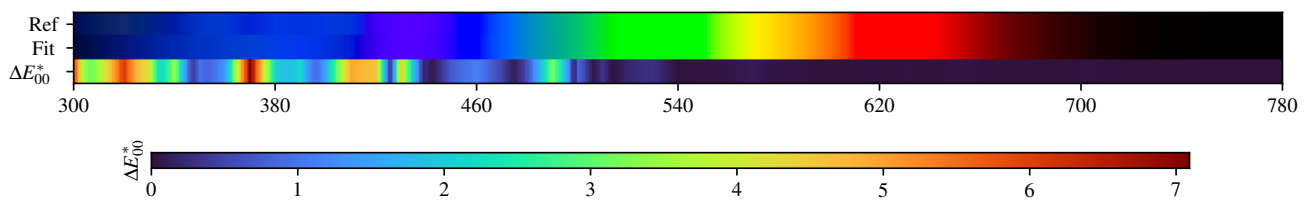
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.35$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.45$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.45$	HP5 $\Delta E = 0.33$	LED-B5 $\Delta E = 0.34$
B $\Delta E = 0.24$	D65 $\Delta E = 0.37$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.40$	D75 $\Delta E = 0.37$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.18$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.20$	E $\Delta E = 0.22$	FL5 $\Delta E = 0.30$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.34$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.29$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.97$
D55 $\Delta E = 0.28$	FL1 $\Delta E = 0.32$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.60$	LED-B4 $\Delta E = 0.28$	LED-V2 $\Delta E = 1.02$

CIBA12 - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.24$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.21$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.41$	HP5 $\Delta E = 0.04$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.12$	D65 $\Delta E = 0.23$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.17$	D75 $\Delta E = 0.22$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.01$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.12$	E $\Delta E = 0.19$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.30$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.01$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.28$

CIBA12 - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.076410	0.106772	0.171001	0.333703	0.598251	0.750727	0.800155	0.815163	0.817210	0.824462	0.826620
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.836858	0.836302	0.839553	0.844713	0.843973	0.850059	0.852434	0.852993	0.847633	0.864434	0.859120
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.861334	0.865451	0.864522	0.862069	0.850463	0.827005	0.777553	0.708717	0.714663	0.691773	0.656660
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.643371	0.620920	0.617880	0.667101	0.738879	0.802090	0.827301	0.847186			

2 Gaussians

Scaling factor: 584.5281141536368

Gaussians:

Weight	Mean		Covariance			
0.822340991	374.241850548	449.067973740	870.874921437	49.898352735	49.898352735	824.855965042
0.177659009	517.507355185	601.006220080	18861.790584106	-1147.022258018	-1147.022258018	14446.368986024

4 Gaussians

Scaling factor: 581.786363356284

Gaussians:

Weight	Mean		Covariance			
0.087078463	428.215954573	656.020049686	6981.688411964	1288.101415368	1288.101415368	7957.400777794
0.029728366	697.266527917	697.281574130	3407.561550400	-422.989074432	-422.989074432	3688.416210680
0.820367991	374.178895562	448.888408648	868.476555322	49.677907276	49.677907276	814.635292418
0.062825181	552.531446650	476.771107837	14948.279986629	-1631.126937338	-1631.126937338	4233.425685379

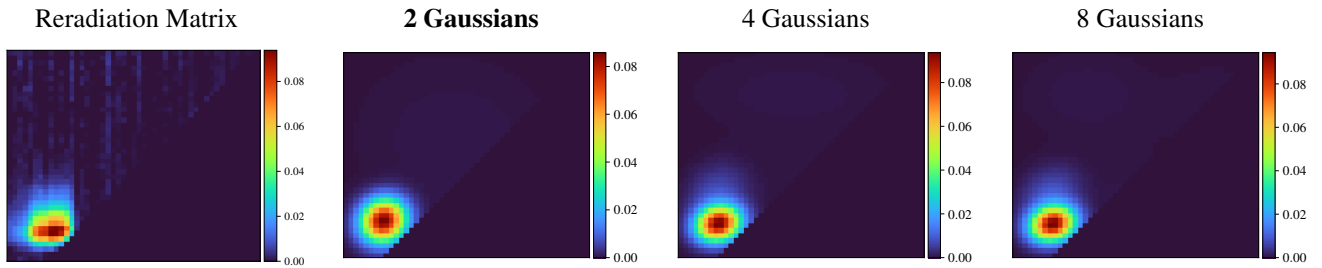
8 Gaussians

Scaling factor: 570.5517491662706

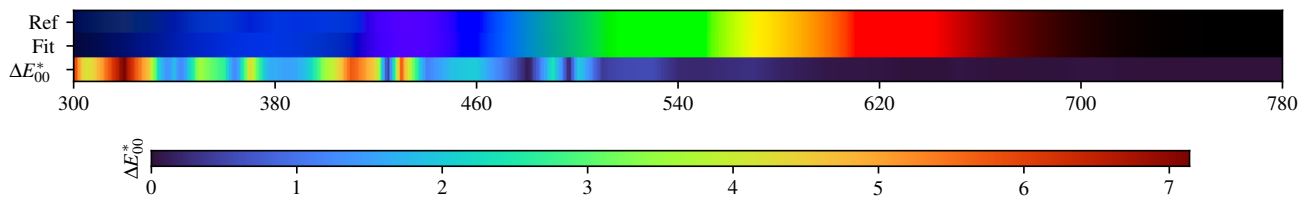
Gaussians:

Weight	Mean		Covariance			
0.033394513	363.043352194	687.624473787	1851.383700899	19.084125772	19.084125772	4727.338188393
0.037910191	512.788023413	484.705740812	2436.489709733	1057.657033947	1057.657033947	5263.858508478
0.334985298	353.052579024	437.903263045	547.455023071	-4.517847033	-4.517847033	426.125797983
0.029724788	695.130072761	699.629244244	3346.779405137	-176.332877163	-176.332877163	3373.535023321
0.031661257	500.640848134	700.100639213	2040.720700814	606.602965448	606.602965448	3713.336215533
0.161277271	373.563136532	496.197337112	993.893548738	47.801895825	47.801895825	896.678906258
0.023264294	687.331794458	464.032198605	3466.817081016	83.895238028	83.895238028	4140.354511427
0.347782388	394.247227344	443.520774976	294.263946963	13.187751896	13.187751896	463.892430055

CIBA12 - Weighted variational Bayesian inference - 2 Gaussians



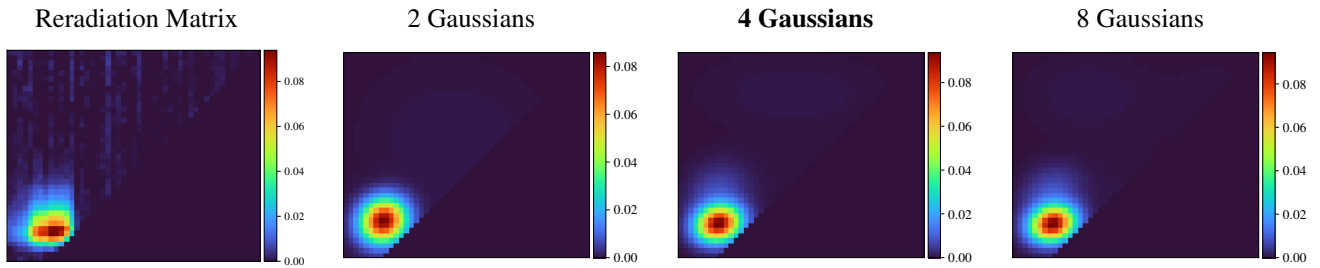
Fitted Material Under Monochromatic Illumination



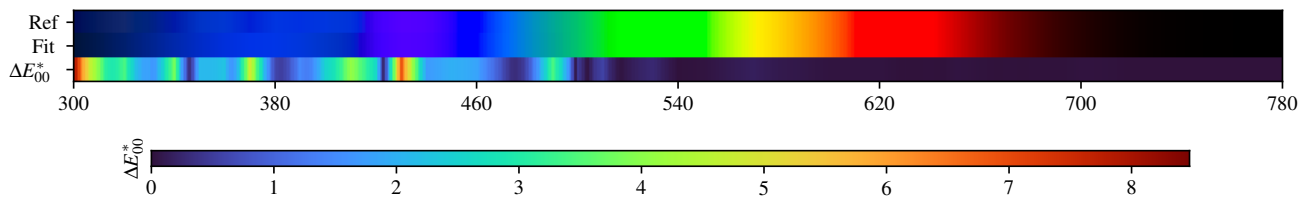
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.52$	FL2 $\Delta E = 0.24$	FL7 $\Delta E = 0.62$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.19$	FL3.10 $\Delta E = 0.31$	FL3.15 $\Delta E = 0.69$	HP5 $\Delta E = 0.34$	LED-B5 $\Delta E = 0.60$
B $\Delta E = 0.36$	D65 $\Delta E = 0.42$	FL3 $\Delta E = 0.18$	FL8 $\Delta E = 0.30$	FL3.1 $\Delta E = 0.15$	FL3.6 $\Delta E = 0.27$	FL3.11 $\Delta E = 0.36$	HP1 $\Delta E = 0.11$	LED-B1 $\Delta E = 0.19$	LED-BH1 $\Delta E = 0.25$
C $\Delta E = 0.54$	D75 $\Delta E = 0.31$	FL4 $\Delta E = 0.15$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.24$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.21$	LED-RGB1 $\Delta E = 0.17$
D50 $\Delta E = 0.36$	E $\Delta E = 0.33$	FL5 $\Delta E = 0.49$	FL10 $\Delta E = 0.30$	FL3.3 $\Delta E = 0.52$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.17$	HP3 $\Delta E = 0.28$	LED-B3 $\Delta E = 0.35$	LED-V1 $\Delta E = 0.92$
D55 $\Delta E = 0.47$	FL1 $\Delta E = 0.51$	FL6 $\Delta E = 0.25$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.28$	FL3.14 $\Delta E = 0.27$	HP4 $\Delta E = 0.59$	LED-B4 $\Delta E = 0.47$	LED-V2 $\Delta E = 0.99$

CIBA12 - Weighted variational Bayesian inference - 4 Gaussians



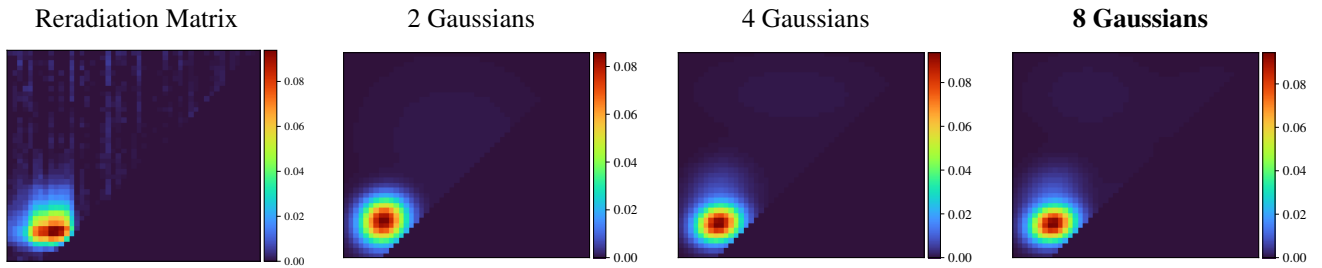
Fitted Material Under Monochromatic Illumination



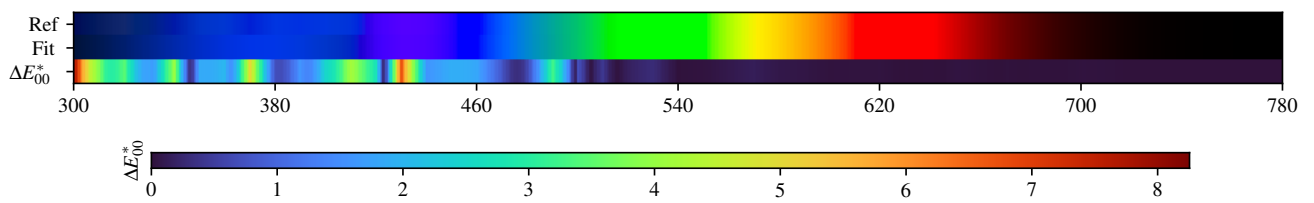
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.26$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.34$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.45$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.38$
B $\Delta E = 0.21$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.21$
C $\Delta E = 0.34$	D75 $\Delta E = 0.24$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.19$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.21$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.81$
D55 $\Delta E = 0.25$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.15$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.48$	LED-B4 $\Delta E = 0.27$	LED-V2 $\Delta E = 0.87$

CIBA12 - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.32$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.39$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.22$	FL3.15 $\Delta E = 0.50$	HP5 $\Delta E = 0.25$	LED-B5 $\Delta E = 0.37$
B $\Delta E = 0.26$	D65 $\Delta E = 0.33$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.36$	D75 $\Delta E = 0.28$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.25$	E $\Delta E = 0.15$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.21$	FL3.3 $\Delta E = 0.22$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.22$	LED-B3 $\Delta E = 0.23$	LED-V1 $\Delta E = 0.83$
D55 $\Delta E = 0.32$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.49$	LED-B4 $\Delta E = 0.26$	LED-V2 $\Delta E = 0.90$

CIBA12 - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.076410	0.106772	0.171001	0.333703	0.598251	0.750727	0.800155	0.815163	0.817210	0.824462	0.826620
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.836858	0.836302	0.839553	0.844713	0.843973	0.850059	0.852434	0.852993	0.847633	0.864434	0.859120
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.861334	0.865451	0.864522	0.862069	0.850463	0.827005	0.777553	0.708717	0.714663	0.691773	0.656660
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.643371	0.620920	0.617880	0.667101	0.738879	0.802090	0.827301	0.847186			

2 Gaussians max

Scaling factor: 585.674108828158

Gaussians:

Weight	Mean		Covariance			
0.825131979	374.466653938	449.346415524	922.640702088	71.059019620	71.059019620	861.650829648
0.174868021	519.435050967	602.350736907	18812.474979110	-1326.834898305	-1326.834898305	14419.450674472

4 Gaussians max

Scaling factor: 576.5832931618729

Gaussians:

Weight	Mean		Covariance			
0.713073926	375.162850543	443.210786367	886.500884909	92.324309837	92.324309837	568.643045027
0.061989115	572.137436885	482.567087759	12581.962868946	-739.635959413	-739.635959413	5263.617360249
0.136229282	371.913698364	499.760255993	1574.751965549	271.034388188	271.034388188	1594.776931764
0.088707678	522.444577826	702.572044381	20044.022299681	-252.839871419	-252.839871419	3504.362048173

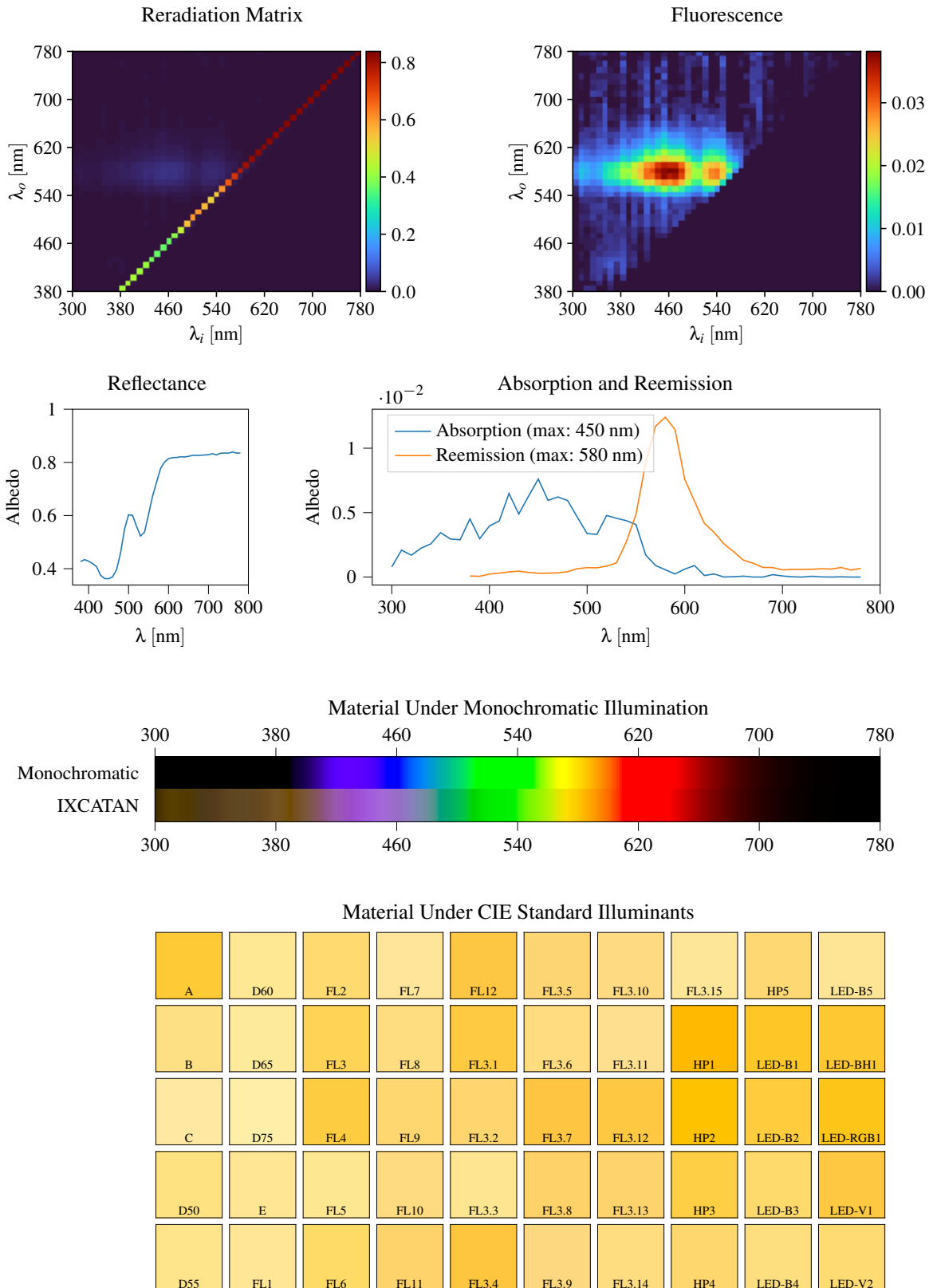
8 Gaussians max

Scaling factor: 579.016229702181

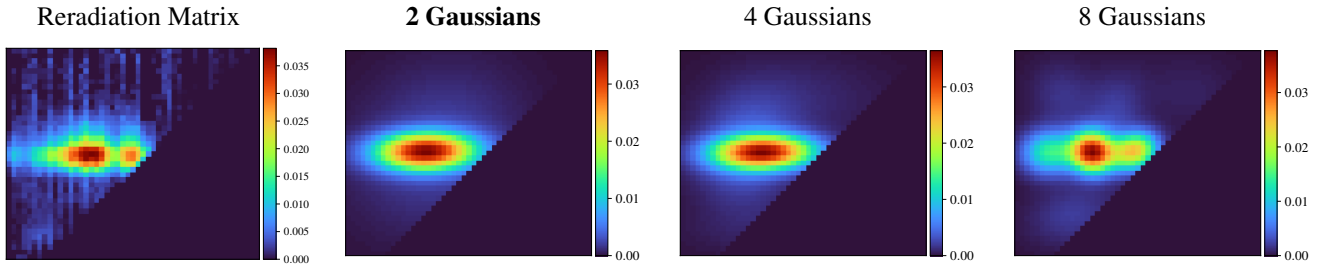
Gaussians:

Weight	Mean		Covariance			
0.697006240	375.311581949	442.672833844	880.613045635	95.545772895	95.545772895	551.476503919
0.030005159	510.130144795	482.808311049	2440.866725255	387.237046878	387.237046878	5472.961577778
0.026076527	662.981650492	467.842616551	6482.532758817	-936.434338438	-936.434338438	4563.895340725
0.150432109	371.150006843	496.722498525	1487.377005276	273.388069734	273.388069734	1512.651952890
0.031571410	686.883526281	683.361087849	5116.621024196	944.500472194	944.500472194	5012.830050213
0.063229321	442.957330434	700.374183600	8370.307540191	104.716264282	104.716264282	3887.231231342

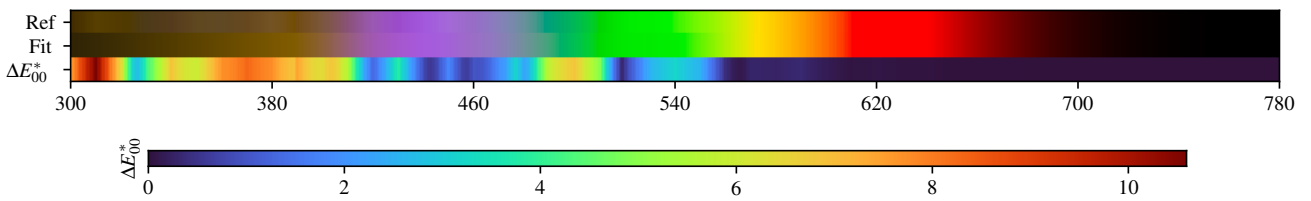
3.22. IXCATAN



IXCATAN - Weighted Expectation-Maximization - 2 Gaussians



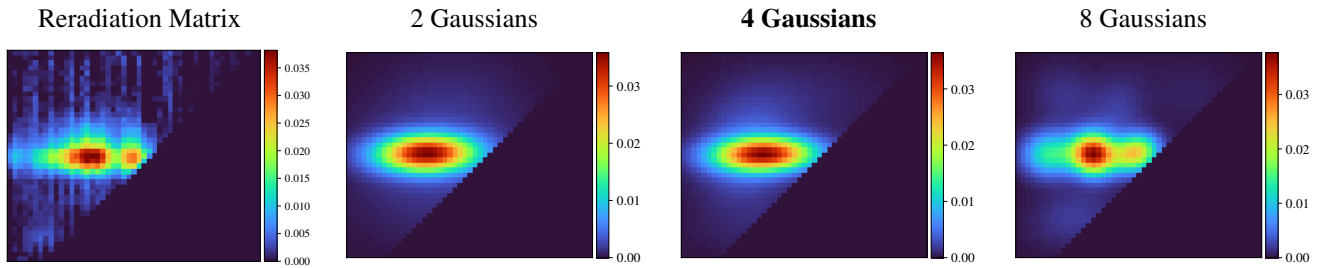
Fitted Material Under Monochromatic Illumination



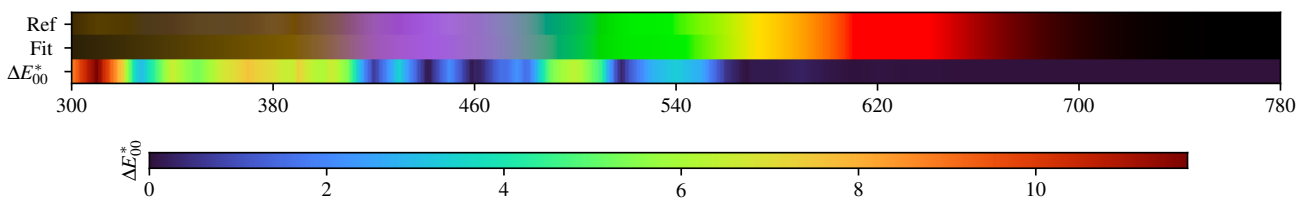
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.31$	$\Delta E = 0.67$	$\Delta E = 0.45$	$\Delta E = 0.70$	$\Delta E = 0.59$	$\Delta E = 0.44$	$\Delta E = 0.54$	$\Delta E = 0.72$	$\Delta E = 0.51$	$\Delta E = 0.79$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.56$	$\Delta E = 0.72$	$\Delta E = 0.37$	$\Delta E = 0.55$	$\Delta E = 0.30$	$\Delta E = 0.55$	$\Delta E = 0.67$	$\Delta E = 0.23$	$\Delta E = 0.40$	$\Delta E = 0.49$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.75$	$\Delta E = 0.82$	$\Delta E = 0.32$	$\Delta E = 0.45$	$\Delta E = 0.41$	$\Delta E = 0.58$	$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.45$	$\Delta E = 0.37$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.56$	$\Delta E = 0.64$	$\Delta E = 0.69$	$\Delta E = 0.65$	$\Delta E = 0.70$	$\Delta E = 0.63$	$\Delta E = 0.42$	$\Delta E = 0.44$	$\Delta E = 0.56$	$\Delta E = 0.28$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.62$	$\Delta E = 0.72$	$\Delta E = 0.42$	$\Delta E = 0.65$	$\Delta E = 0.33$	$\Delta E = 0.67$	$\Delta E = 0.59$	$\Delta E = 0.48$	$\Delta E = 0.70$	$\Delta E = 0.49$

IXCATAN - Weighted Expectation-Maximization - 4 Gaussians



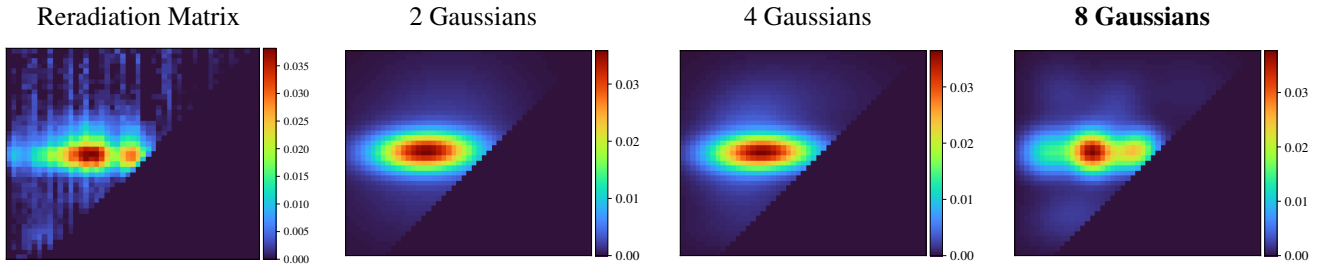
Fitted Material Under Monochromatic Illumination



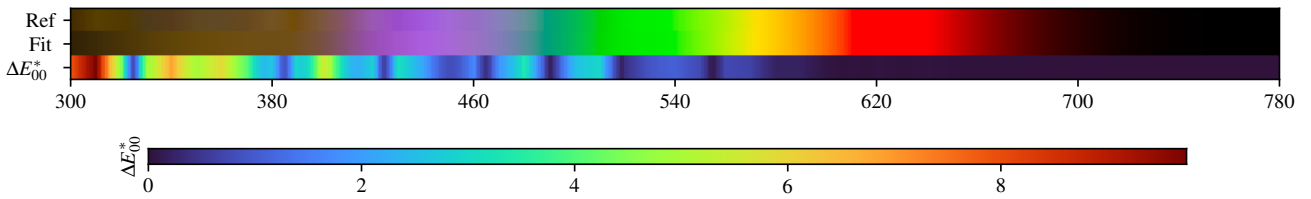
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.21$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.22$	FL7 $\Delta E = 0.31$	FL12 $\Delta E = 0.55$	FL3.5 $\Delta E = 0.26$	FL3.10 $\Delta E = 0.42$	FL3.15 $\Delta E = 0.32$	HP5 $\Delta E = 0.29$	LED-B5 $\Delta E = 0.55$
B $\Delta E = 0.25$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.21$	FL8 $\Delta E = 0.29$	FL3.1 $\Delta E = 0.19$	FL3.6 $\Delta E = 0.31$	FL3.11 $\Delta E = 0.61$	HP1 $\Delta E = 0.16$	LED-B1 $\Delta E = 0.32$	LED-BH1 $\Delta E = 0.43$
C $\Delta E = 0.33$	D75 $\Delta E = 0.32$	FL4 $\Delta E = 0.21$	FL9 $\Delta E = 0.26$	FL3.2 $\Delta E = 0.21$	FL3.7 $\Delta E = 0.53$	FL3.12 $\Delta E = 0.19$	HP2 $\Delta E = 0.20$	LED-B2 $\Delta E = 0.35$	LED-RGB1 $\Delta E = 0.31$
D50 $\Delta E = 0.23$	E $\Delta E = 0.35$	FL5 $\Delta E = 0.28$	FL10 $\Delta E = 0.60$	FL3.3 $\Delta E = 0.31$	FL3.8 $\Delta E = 0.58$	FL3.13 $\Delta E = 0.25$	HP3 $\Delta E = 0.35$	LED-B3 $\Delta E = 0.40$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.24$	FL1 $\Delta E = 0.31$	FL6 $\Delta E = 0.21$	FL11 $\Delta E = 0.60$	FL3.4 $\Delta E = 0.26$	FL3.9 $\Delta E = 0.61$	FL3.14 $\Delta E = 0.34$	HP4 $\Delta E = 0.25$	LED-B4 $\Delta E = 0.52$	LED-V2 $\Delta E = 0.25$

IXCATAN - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.32$	$\Delta E = 0.64$	$\Delta E = 0.46$	$\Delta E = 0.62$	$\Delta E = 0.37$	$\Delta E = 0.40$	$\Delta E = 0.43$	$\Delta E = 0.59$	$\Delta E = 0.55$	$\Delta E = 0.63$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.57$	$\Delta E = 0.68$	$\Delta E = 0.37$	$\Delta E = 0.49$	$\Delta E = 0.28$	$\Delta E = 0.46$	$\Delta E = 0.52$	$\Delta E = 0.20$	$\Delta E = 0.27$	$\Delta E = 0.32$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.72$	$\Delta E = 0.74$	$\Delta E = 0.30$	$\Delta E = 0.42$	$\Delta E = 0.41$	$\Delta E = 0.35$	$\Delta E = 0.25$	$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.25$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.56$	$\Delta E = 0.64$	$\Delta E = 0.60$	$\Delta E = 0.50$	$\Delta E = 0.57$	$\Delta E = 0.43$	$\Delta E = 0.34$	$\Delta E = 0.46$	$\Delta E = 0.44$	$\Delta E = 0.48$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.60$	$\Delta E = 0.61$	$\Delta E = 0.44$	$\Delta E = 0.45$	$\Delta E = 0.27$	$\Delta E = 0.49$	$\Delta E = 0.42$	$\Delta E = 0.60$	$\Delta E = 0.54$	$\Delta E = 0.61$

IXCATAN - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.427160	0.434031	0.428131	0.419396	0.407930	0.375320	0.363005	0.362246	0.368882	0.395727	0.459073
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.548775	0.602819	0.600949	0.559300	0.522892	0.537297	0.603669	0.672005	0.724743	0.776415	0.801249
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.814067	0.817781	0.818464	0.821127	0.820205	0.822721	0.826275	0.826253	0.826557	0.827876	0.828635
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.832608	0.828068	0.834378	0.835274	0.834723	0.839035	0.835082	0.835169			

2 Gaussians

Scaling factor: 531.397163625708

Gaussians:

Weight	Mean		Covariance			
0.654421909	453.974209307	583.132450010	4361.830160036	74.489713432	74.489713432	624.042663715
0.345578091	475.331896164	589.982387209	11541.212346786	1733.718191076	1733.718191076	10863.378498875

4 Gaussians

Scaling factor: 520.0020213276773

Gaussians:

Weight	Mean		Covariance			
0.094244788	537.359979242	689.162408317	14123.736880995	-199.825084740	-199.825084740	3620.923073019
0.050260486	494.450331854	432.985556820	16887.096094607	820.330857570	820.330857570	1348.565037932
0.600537709	461.096641055	581.533241841	4618.609408244	74.850860246	74.850860246	512.652187444
0.254957016	427.343979194	586.588946325	4306.981565253	523.996648220	523.996648220	4960.272747216

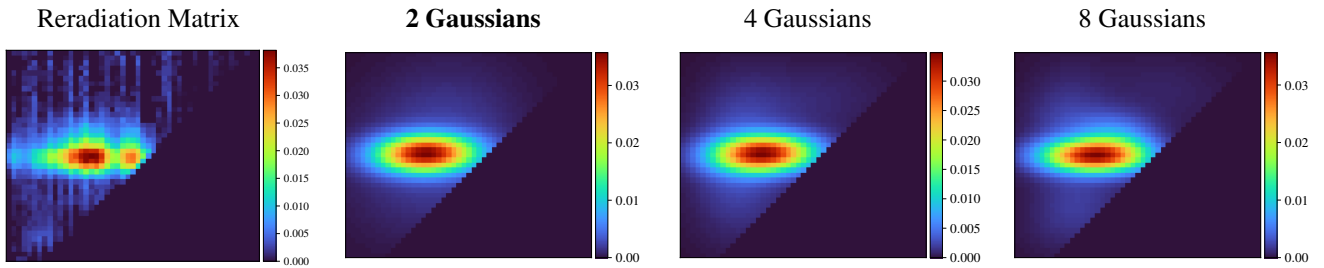
8 Gaussians

Scaling factor: 507.3459024711727

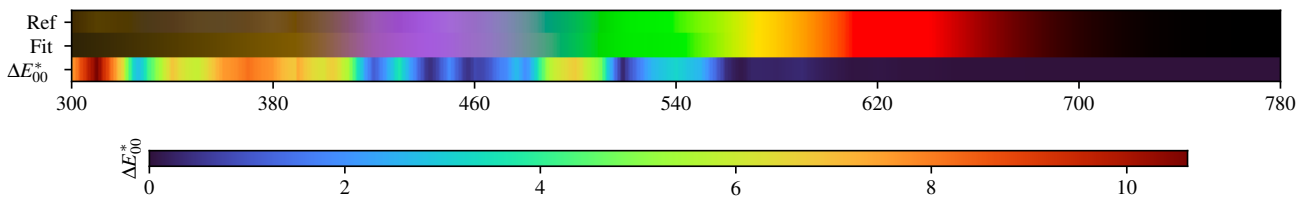
Gaussians:

Weight	Mean		Covariance			
0.051787407	392.166493818	689.914522891	2101.313926732	-194.722348011	-194.722348011	2561.338175175
0.212444817	533.319722345	583.527644640	893.007141665	111.667939613	111.667939613	594.225927624
0.072434109	411.180501139	458.409648707	3743.804966473	447.532963130	447.532963130	1860.069261963
0.041936218	638.521207858	699.589440371	5290.294599103	-264.676668929	-264.676668929	3059.247220294
0.355039806	449.361904079	581.995321821	888.563860559	-23.404621573	-23.404621573	723.728777156
0.177896892	363.517738746	581.283503529	1271.630819118	16.625185792	16.625185792	825.286890036
0.022869321	637.744905765	456.965303896	5955.814275091	564.983820263	564.983820263	3212.102653561
0.065591431	493.801882249	652.069630988	1452.283765998	330.809921678	330.809921678	3304.407887928

IXCATAN - Weighted variational Bayesian inference - 2 Gaussians



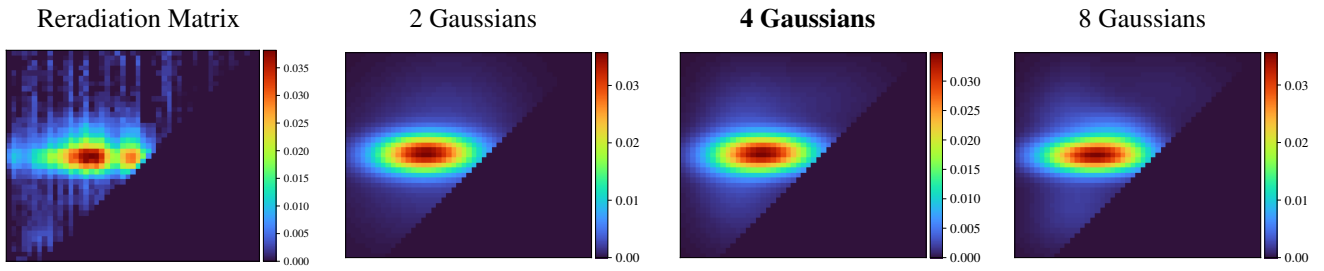
Fitted Material Under Monochromatic Illumination



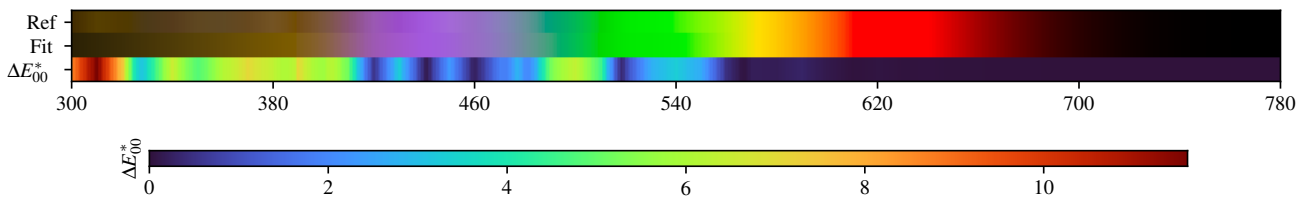
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.29$	$\Delta E = 0.57$	$\Delta E = 0.40$	$\Delta E = 0.60$	$\Delta E = 0.58$	$\Delta E = 0.40$	$\Delta E = 0.50$	$\Delta E = 0.61$	$\Delta E = 0.46$	$\Delta E = 0.72$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.48$	$\Delta E = 0.61$	$\Delta E = 0.34$	$\Delta E = 0.48$	$\Delta E = 0.29$	$\Delta E = 0.49$	$\Delta E = 0.63$	$\Delta E = 0.22$	$\Delta E = 0.39$	$\Delta E = 0.48$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.64$	$\Delta E = 0.69$	$\Delta E = 0.31$	$\Delta E = 0.41$	$\Delta E = 0.37$	$\Delta E = 0.57$	$\Delta E = 0.27$	$\Delta E = 0.25$	$\Delta E = 0.43$	$\Delta E = 0.34$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.48$	$\Delta E = 0.56$	$\Delta E = 0.60$	$\Delta E = 0.63$	$\Delta E = 0.61$	$\Delta E = 0.61$	$\Delta E = 0.37$	$\Delta E = 0.42$	$\Delta E = 0.52$	$\Delta E = 0.26$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.52$	$\Delta E = 0.62$	$\Delta E = 0.38$	$\Delta E = 0.64$	$\Delta E = 0.32$	$\Delta E = 0.64$	$\Delta E = 0.52$	$\Delta E = 0.44$	$\Delta E = 0.65$	$\Delta E = 0.43$

IXCATAN - Weighted variational Bayesian inference - 4 Gaussians



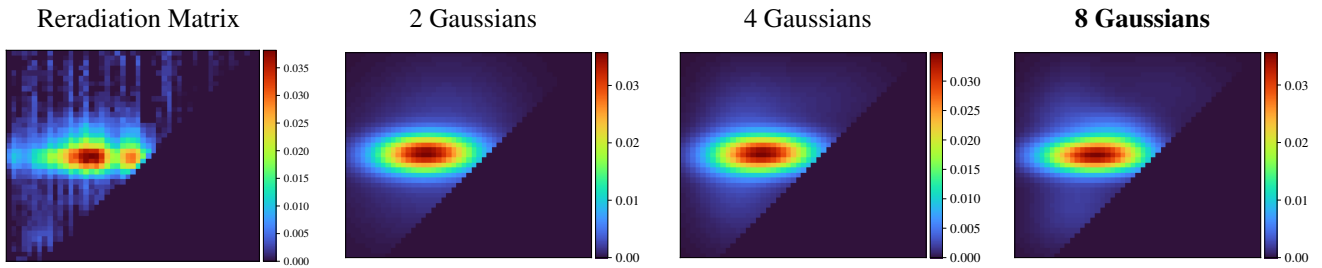
Fitted Material Under Monochromatic Illumination



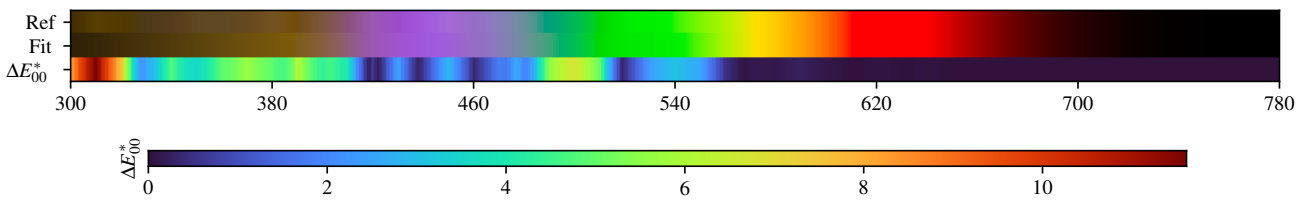
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.33$	D60 $\Delta E = 0.43$	FL2 $\Delta E = 0.37$	FL7 $\Delta E = 0.53$	FL12 $\Delta E = 0.63$	FL3.5 $\Delta E = 0.42$	FL3.10 $\Delta E = 0.57$	FL3.15 $\Delta E = 0.51$	HP5 $\Delta E = 0.46$	LED-B5 $\Delta E = 0.75$
B $\Delta E = 0.45$	D65 $\Delta E = 0.43$	FL3 $\Delta E = 0.33$	FL8 $\Delta E = 0.49$	FL3.1 $\Delta E = 0.27$	FL3.6 $\Delta E = 0.48$	FL3.11 $\Delta E = 0.72$	HP1 $\Delta E = 0.18$	LED-B1 $\Delta E = 0.42$	LED-BH1 $\Delta E = 0.52$
C $\Delta E = 0.53$	D75 $\Delta E = 0.44$	FL4 $\Delta E = 0.30$	FL9 $\Delta E = 0.42$	FL3.2 $\Delta E = 0.35$	FL3.7 $\Delta E = 0.60$	FL3.12 $\Delta E = 0.30$	HP2 $\Delta E = 0.28$	LED-B2 $\Delta E = 0.46$	LED-RGB1 $\Delta E = 0.42$
D50 $\Delta E = 0.42$	E $\Delta E = 0.34$	FL5 $\Delta E = 0.48$	FL10 $\Delta E = 0.71$	FL3.3 $\Delta E = 0.50$	FL3.8 $\Delta E = 0.67$	FL3.13 $\Delta E = 0.39$	HP3 $\Delta E = 0.46$	LED-B3 $\Delta E = 0.55$	LED-V1 $\Delta E = 0.29$
D55 $\Delta E = 0.43$	FL1 $\Delta E = 0.52$	FL6 $\Delta E = 0.35$	FL11 $\Delta E = 0.71$	FL3.4 $\Delta E = 0.34$	FL3.9 $\Delta E = 0.72$	FL3.14 $\Delta E = 0.52$	HP4 $\Delta E = 0.40$	LED-B4 $\Delta E = 0.68$	LED-V2 $\Delta E = 0.42$

IXCATAN - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.31$	$\Delta E = 0.42$	$\Delta E = 0.34$	$\Delta E = 0.47$	$\Delta E = 0.60$	$\Delta E = 0.37$	$\Delta E = 0.54$	$\Delta E = 0.45$	$\Delta E = 0.44$	$\Delta E = 0.71$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.42$	$\Delta E = 0.42$	$\Delta E = 0.31$	$\Delta E = 0.43$	$\Delta E = 0.25$	$\Delta E = 0.43$	$\Delta E = 0.72$	$\Delta E = 0.15$	$\Delta E = 0.38$	$\Delta E = 0.49$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.50$	$\Delta E = 0.42$	$\Delta E = 0.29$	$\Delta E = 0.38$	$\Delta E = 0.32$	$\Delta E = 0.56$	$\Delta E = 0.25$	$\Delta E = 0.27$	$\Delta E = 0.42$	$\Delta E = 0.35$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.41$	$\Delta E = 0.29$	$\Delta E = 0.41$	$\Delta E = 0.70$	$\Delta E = 0.42$	$\Delta E = 0.64$	$\Delta E = 0.34$	$\Delta E = 0.46$	$\Delta E = 0.51$	$\Delta E = 0.30$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.41$	$\Delta E = 0.45$	$\Delta E = 0.33$	$\Delta E = 0.69$	$\Delta E = 0.30$	$\Delta E = 0.71$	$\Delta E = 0.46$	$\Delta E = 0.41$	$\Delta E = 0.65$	$\Delta E = 0.40$

IXCATAN - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.427160	0.434031	0.428131	0.419396	0.407930	0.375320	0.363005	0.362246	0.368882	0.395727	0.459073
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.548775	0.602819	0.600949	0.559300	0.522892	0.537297	0.603669	0.672005	0.724743	0.776415	0.801249
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.814067	0.817781	0.818464	0.821127	0.820205	0.822721	0.826275	0.826253	0.826557	0.827876	0.828635
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.832608	0.828068	0.834378	0.835274	0.834723	0.839035	0.835082	0.835169			

2 Gaussians max

Scaling factor: 531.7730456558687

Gaussians:

Weight	Mean		Covariance			
0.358252268	474.549390261	590.167295936	11335.219197542	1669.155912435	1669.155912435	10512.424105591
0.641747732	454.100665761	582.877882781	4357.671317767	70.871530733	70.871530733	613.339738953

4 Gaussians max

Scaling factor: 516.8394949332859

Gaussians:

Weight	Mean		Covariance			
0.237632361	412.811903197	573.888477246	3886.260480650	426.646176130	426.646176130	8994.908584687
0.028269423	600.967679574	461.694045048	10224.903933333	-360.274485767	-360.274485767	3746.424054616
0.648127178	461.100850143	582.663385682	4538.493165807	91.557264306	91.557264306	603.959839223
0.085971038	554.067735955	679.759776880	11260.367999428	1518.992622561	1518.992622561	3641.422682021

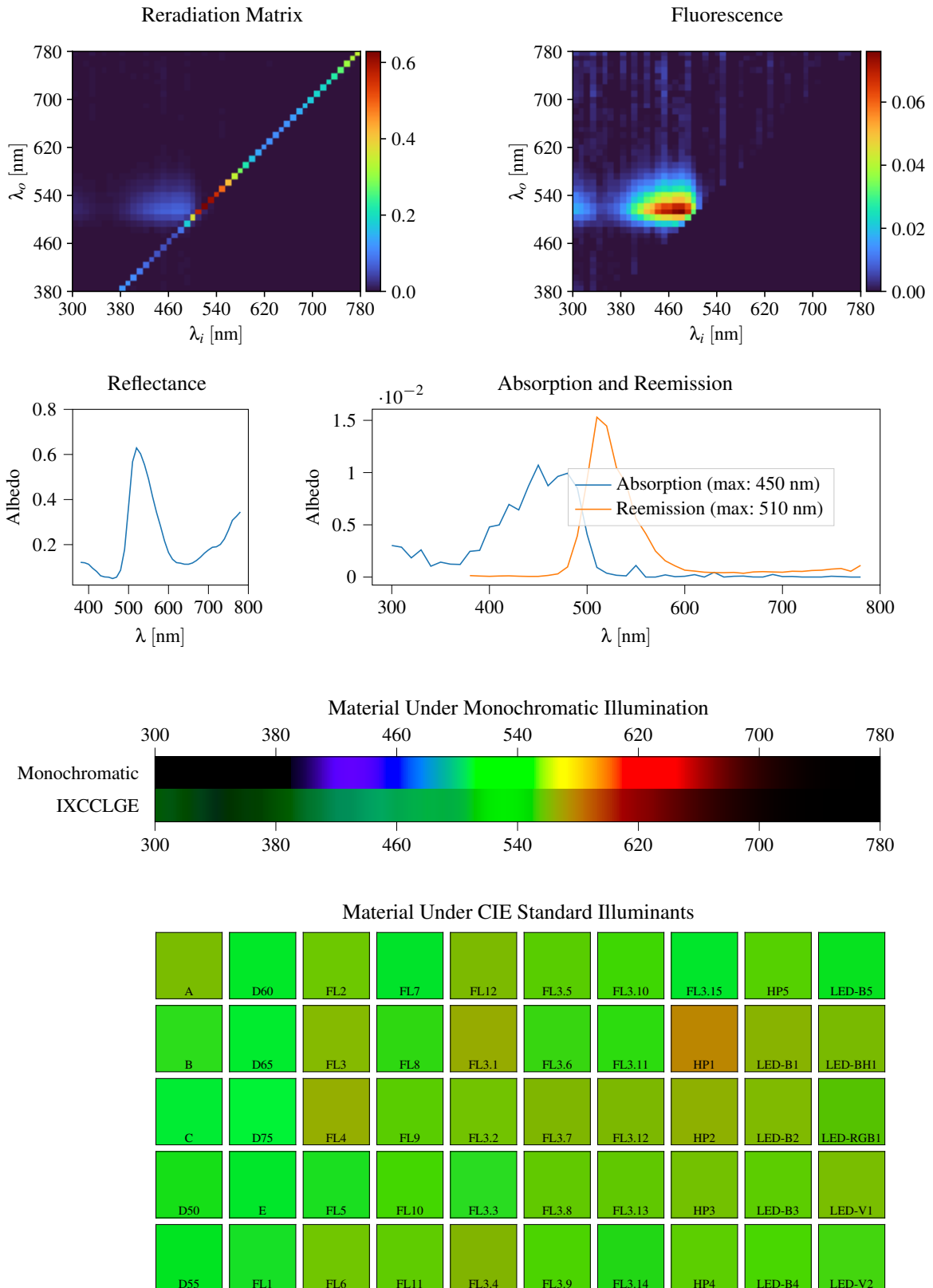
8 Gaussians max

Scaling factor: 515.9426354648768

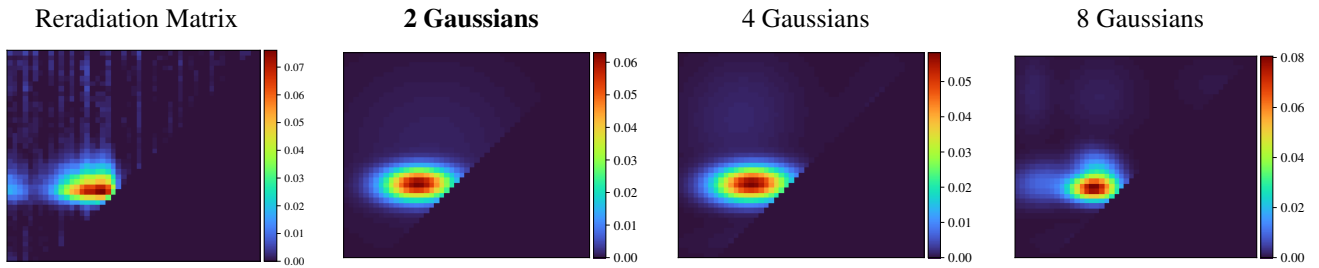
Gaussians:

Weight	Mean		Covariance			
0.074239441	418.406446806	469.314794185	4213.946717516	926.896256954	926.896256954	2866.630464688
0.022277817	623.829852837	459.646455591	8121.125798492	-238.836511672	-238.836511672	3859.002505786
0.131123682	396.929123801	621.388924144	3092.830747519	111.248664761	111.248664761	5696.646608197
0.533862832	450.723500724	578.167566560	4583.201525640	-5.505201552	-5.505201552	463.577703812
0.060187134	585.996977851	704.425477471	10229.770371935	-261.518090915	-261.518090915	3045.895439722
0.177436128	496.150223464	606.190364648	2819.485835952	-131.920157664	-131.920157664	1220.635509282

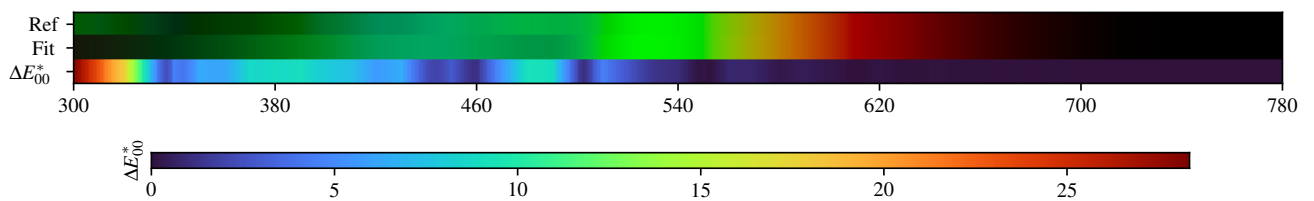
3.23. IXCCLGE



IXCCLGE - Weighted Expectation-Maximization - 2 Gaussians



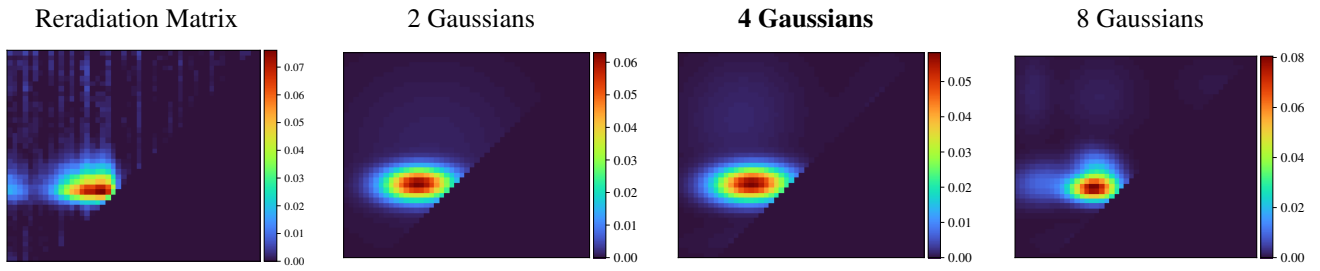
Fitted Material Under Monochromatic Illumination



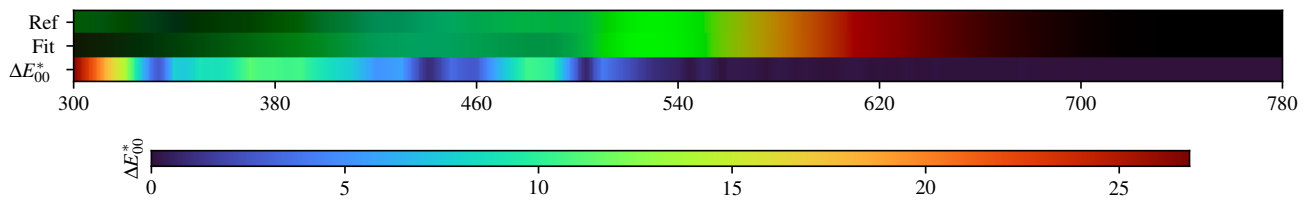
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.42$	$\Delta E = 0.29$	$\Delta E = 0.24$	$\Delta E = 0.13$	$\Delta E = 0.45$	$\Delta E = 0.46$	$\Delta E = 0.72$	$\Delta E = 0.14$	$\Delta E = 0.26$	$\Delta E = 0.21$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.35$	$\Delta E = 0.28$	$\Delta E = 0.35$	$\Delta E = 0.38$	$\Delta E = 0.47$	$\Delta E = 0.43$	$\Delta E = 0.63$	$\Delta E = 0.53$	$\Delta E = 0.46$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.18$	$\Delta E = 0.47$	$\Delta E = 0.30$	$\Delta E = 0.36$	$\Delta E = 0.32$	$\Delta E = 0.54$	$\Delta E = 0.70$	$\Delta E = 0.47$	$\Delta E = 0.51$	$\Delta E = 0.64$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.89$	$\Delta E = 0.18$	$\Delta E = 0.44$	$\Delta E = 0.24$	$\Delta E = 0.46$	$\Delta E = 0.88$	$\Delta E = 0.42$	$\Delta E = 0.30$	$\Delta E = 0.47$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.26$	$\Delta E = 0.45$	$\Delta E = 0.43$	$\Delta E = 0.44$	$\Delta E = 0.86$	$\Delta E = 0.61$	$\Delta E = 0.23$	$\Delta E = 0.24$

IXCCLGE - Weighted Expectation-Maximization - 4 Gaussians



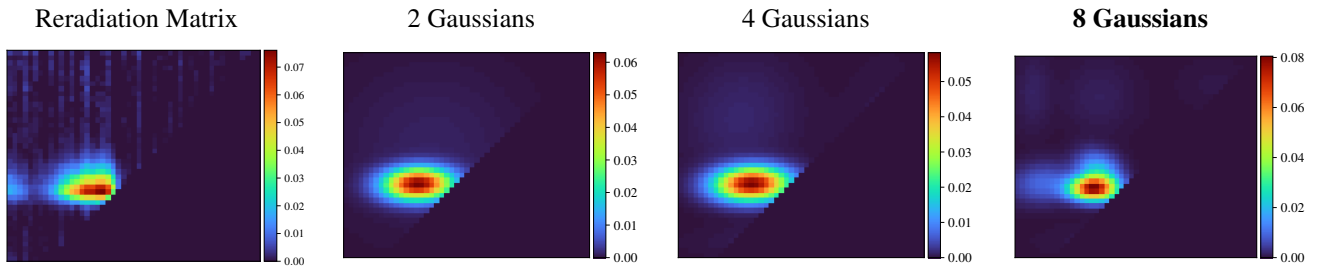
Fitted Material Under Monochromatic Illumination



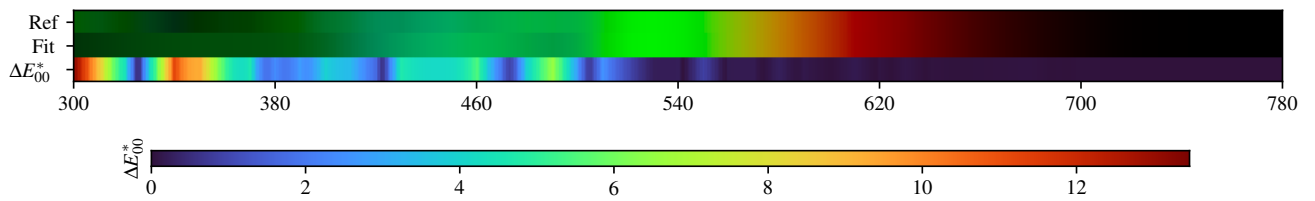
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.25$	$\Delta E = 0.36$	$\Delta E = 0.46$	$\Delta E = 0.54$	$\Delta E = 1.02$	$\Delta E = 0.36$	$\Delta E = 0.13$	$\Delta E = 0.57$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.24$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.50$	$\Delta E = 0.07$	$\Delta E = 0.61$	$\Delta E = 0.74$	$\Delta E = 0.44$	$\Delta E = 0.38$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.25$	$\Delta E = 0.32$	$\Delta E = 0.07$	$\Delta E = 0.42$	$\Delta E = 0.25$	$\Delta E = 0.45$	$\Delta E = 0.56$	$\Delta E = 0.28$	$\Delta E = 0.42$	$\Delta E = 0.30$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.79$	$\Delta E = 0.38$	$\Delta E = 0.73$	$\Delta E = 0.40$	$\Delta E = 0.59$	$\Delta E = 0.96$	$\Delta E = 0.18$	$\Delta E = 0.36$	$\Delta E = 0.37$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.43$	$\Delta E = 0.19$	$\Delta E = 0.65$	$\Delta E = 0.08$	$\Delta E = 0.69$	$\Delta E = 1.04$	$\Delta E = 0.45$	$\Delta E = 0.37$	$\Delta E = 0.14$

IXCCLGE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.05$	$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.04$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.97$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.32$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.37$	$\Delta E = 0.54$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.26$	$\Delta E = 0.37$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.12$	$\Delta E = 0.45$	$\Delta E = 0.26$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.13$	$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.15$	$\Delta E = 0.61$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.03$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.91$	$\Delta E = 0.16$

IXCCLGE - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.121363	0.119590	0.112930	0.095352	0.081021	0.061881	0.056736	0.055692	0.049635	0.055763	0.086528
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.177835	0.369221	0.567571	0.628902	0.602972	0.554042	0.491023	0.413559	0.343231	0.282044	0.216672
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.165194	0.135133	0.120309	0.117748	0.113138	0.112980	0.118594	0.129479	0.144265	0.161998	0.176254
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.188307	0.190435	0.200986	0.225108	0.263372	0.307882	0.325235	0.344919			

2 Gaussians

Scaling factor: 521.7748612085306

Gaussians:

Weight	Mean	Covariance				
0.739682937	442.870660301	522.476962963	2106.487739229	42.882273688	42.882273688	461.827937579
0.260317063	469.782304683	595.176361284	17019.701894857	89.596410636	89.596410636	13873.491658549

4 Gaussians

Scaling factor: 516.3630203702153

Gaussians:

Weight	Mean	Covariance				
0.140590128	418.520185770	654.575526722	6409.353393300	557.516385562	557.516385562	7264.423598402
0.035566608	694.336667395	653.582892545	3275.896561771	1209.447728166	1209.447728166	9625.992617770
0.783604434	440.778392254	522.619821032	2476.447661881	57.834880879	57.834880879	496.644518361
0.040238829	520.524859626	412.588139043	15918.047488832	518.850919054	518.850919054	634.412204845

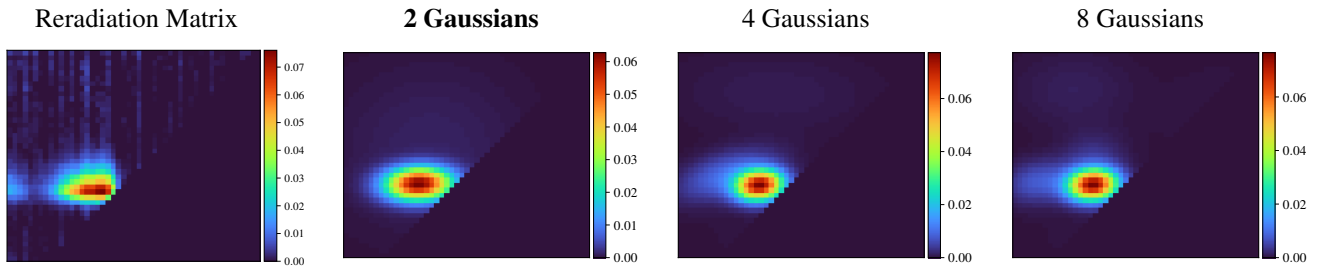
8 Gaussians

Scaling factor: 501.3304959200456

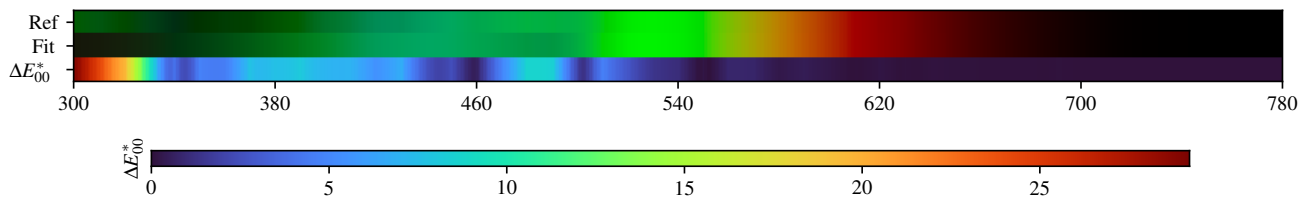
Gaussians:

Weight	Mean	Covariance					
0.056904730	464.255585977	701.794793509	2807.737301797	52.957644091	52.957644091	2930.886181726	
0.020014498	649.826408055	568.343170364	4206.286988491	-1307.757038741	-1307.757038741	4942.522547656	
0.471779967	451.482999673	514.804497240	1045.344188758	-9.653936799	-9.653936799	259.235758673	
0.042529295	518.798829703	414.591472258	15159.284480482	522.719888438	522.719888438	709.193080647	
0.031664493	331.795775299	709.732817000	595.196966066	96.431258444	96.431258444	3153.121476457	
0.220576881	464.065055998	546.102188944	835.989410405	-137.145130983	-137.145130983	692.293570419	
0.021710846	703.742944054	725.843757498	3691.685816880	-278.052292760	-278.052292760	1523.584540245	
0.134819290	350.395901699	525.852413611	1693.528227468	95.229382486	95.229382486	724.082667993	

IXCCLGE - Weighted variational Bayesian inference - 2 Gaussians



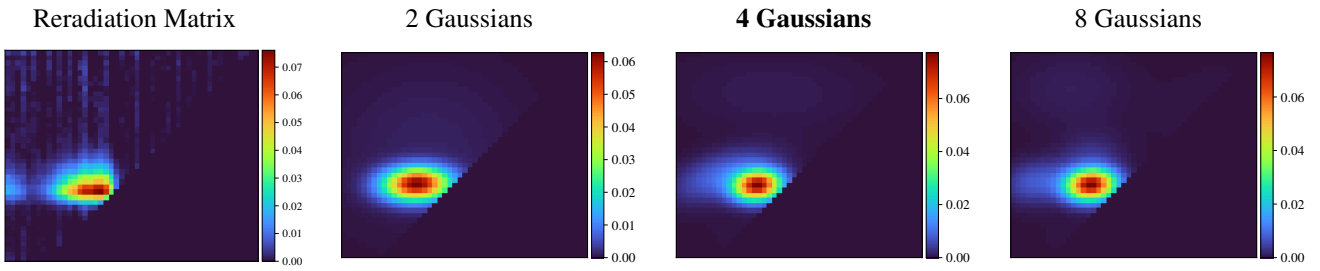
Fitted Material Under Monochromatic Illumination



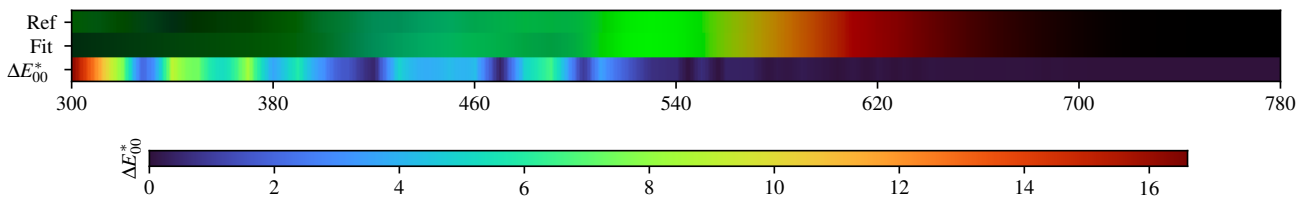
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.46$	$\Delta E = 0.37$	$\Delta E = 0.29$	$\Delta E = 0.22$	$\Delta E = 0.43$	$\Delta E = 0.46$	$\Delta E = 0.62$	$\Delta E = 0.23$	$\Delta E = 0.36$	$\Delta E = 0.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.29$	$\Delta E = 0.41$	$\Delta E = 0.32$	$\Delta E = 0.36$	$\Delta E = 0.39$	$\Delta E = 0.46$	$\Delta E = 0.36$	$\Delta E = 0.62$	$\Delta E = 0.51$	$\Delta E = 0.52$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.29$	$\Delta E = 0.50$	$\Delta E = 0.33$	$\Delta E = 0.38$	$\Delta E = 0.36$	$\Delta E = 0.53$	$\Delta E = 0.70$	$\Delta E = 0.47$	$\Delta E = 0.49$	$\Delta E = 0.70$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.31$	$\Delta E = 0.86$	$\Delta E = 0.24$	$\Delta E = 0.37$	$\Delta E = 0.28$	$\Delta E = 0.43$	$\Delta E = 0.84$	$\Delta E = 0.48$	$\Delta E = 0.34$	$\Delta E = 0.50$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.33$	$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.40$	$\Delta E = 0.46$	$\Delta E = 0.38$	$\Delta E = 0.81$	$\Delta E = 0.65$	$\Delta E = 0.29$	$\Delta E = 0.33$

IXCCLGE - Weighted variational Bayesian inference - 4 Gaussians



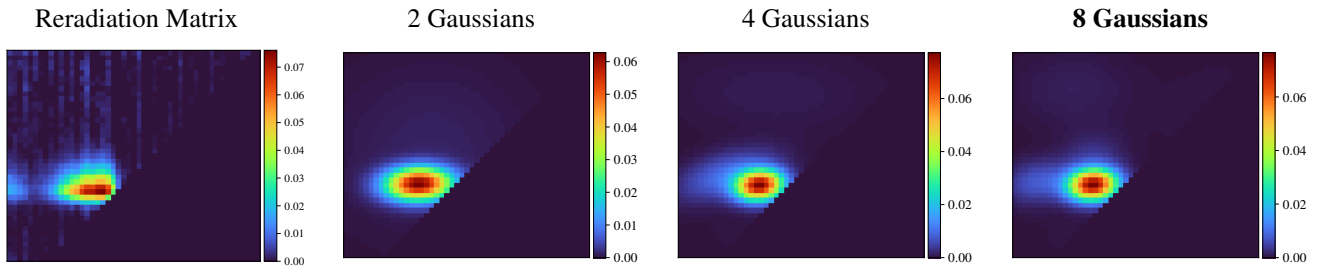
Fitted Material Under Monochromatic Illumination



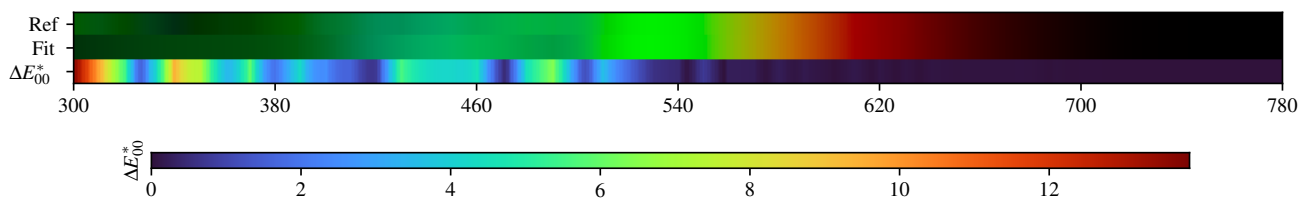
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.44$	$\Delta E = 0.34$	$\Delta E = 0.37$	$\Delta E = 0.20$	$\Delta E = 0.15$	$\Delta E = 0.37$	$\Delta E = 0.28$	$\Delta E = 0.34$	$\Delta E = 1.03$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.35$	$\Delta E = 0.48$	$\Delta E = 0.31$	$\Delta E = 0.26$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.42$	$\Delta E = 0.22$	$\Delta E = 0.43$	$\Delta E = 0.63$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.45$	$\Delta E = 0.54$	$\Delta E = 0.29$	$\Delta E = 0.25$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.52$	$\Delta E = 0.42$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.36$	$\Delta E = 0.55$	$\Delta E = 0.36$	$\Delta E = 0.41$	$\Delta E = 0.27$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.29$	$\Delta E = 0.71$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.40$	$\Delta E = 0.37$	$\Delta E = 0.32$	$\Delta E = 0.33$	$\Delta E = 0.14$	$\Delta E = 0.36$	$\Delta E = 0.17$	$\Delta E = 0.36$	$\Delta E = 0.99$	$\Delta E = 0.12$

IXCCLGE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.43$	$\Delta E = 0.35$	$\Delta E = 0.37$	$\Delta E = 0.22$	$\Delta E = 0.15$	$\Delta E = 0.27$	$\Delta E = 0.24$	$\Delta E = 0.36$	$\Delta E = 1.05$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.34$	$\Delta E = 0.46$	$\Delta E = 0.35$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.37$	$\Delta E = 0.15$	$\Delta E = 0.46$	$\Delta E = 0.69$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.44$	$\Delta E = 0.51$	$\Delta E = 0.35$	$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.20$	$\Delta E = 0.20$	$\Delta E = 0.54$	$\Delta E = 0.45$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.35$	$\Delta E = 0.46$	$\Delta E = 0.36$	$\Delta E = 0.37$	$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.32$	$\Delta E = 0.74$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.39$	$\Delta E = 0.36$	$\Delta E = 0.35$	$\Delta E = 0.31$	$\Delta E = 0.13$	$\Delta E = 0.32$	$\Delta E = 0.16$	$\Delta E = 0.39$	$\Delta E = 1.02$	$\Delta E = 0.13$

IXCCLGE - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.121363	0.119590	0.112930	0.095352	0.081021	0.061881	0.056736	0.055692	0.049635	0.055763	0.086528
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.177835	0.369221	0.567571	0.628902	0.602972	0.554042	0.491023	0.413559	0.343231	0.282044	0.216672
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.165194	0.135133	0.120309	0.117748	0.113138	0.112980	0.118594	0.129479	0.144265	0.161998	0.176254
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.188307	0.190435	0.200986	0.225108	0.263372	0.307882	0.325235	0.344919			

2 Gaussians max

Scaling factor: 522.1611637909439

Gaussians:

Weight	Mean		Covariance			
0.267897969	465.433301892	592.788129481	17179.687257191	404.590848116	404.590848116	13605.792755240
0.732102031	444.329001231	522.618618560	1978.206379273	47.014860740	47.014860740	483.841323550

4 Gaussians max

Scaling factor: 504.8154433931561

Gaussians:

Weight	Mean		Covariance			
0.057976408	537.418003160	441.668651920	15837.835336307	1658.429426568	1658.429426568	2952.020760117
0.231958497	391.924491614	540.213723797	3976.263083108	961.278735166	961.278735166	1076.026705594
0.591916304	456.915014965	519.779839009	1000.121571416	71.617189501	71.617189501	407.916750827
0.118148791	486.625372499	702.843373424	19539.676283946	-340.129291640	-340.129291640	3332.997583433

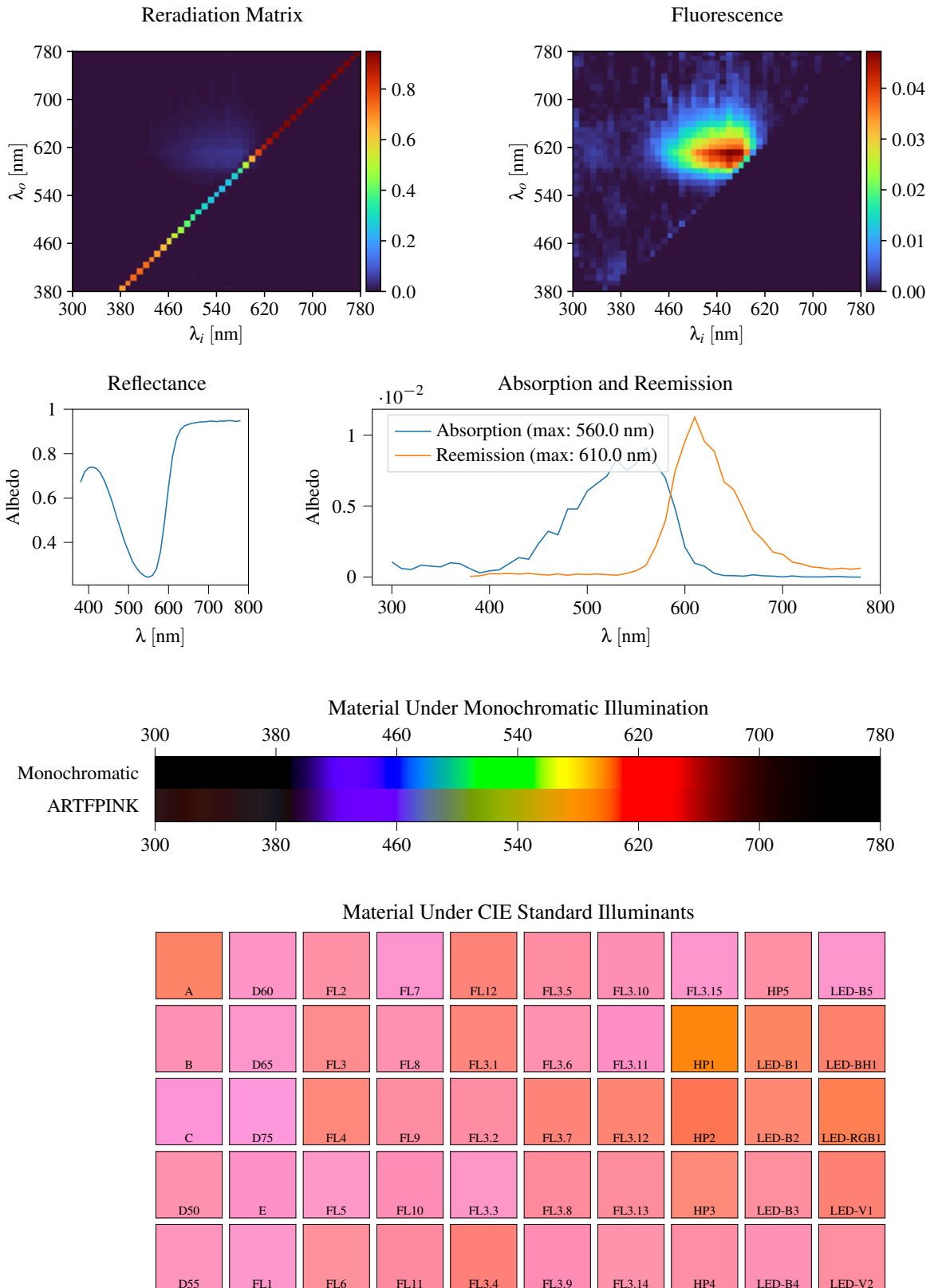
8 Gaussians max

Scaling factor: 507.69154453952405

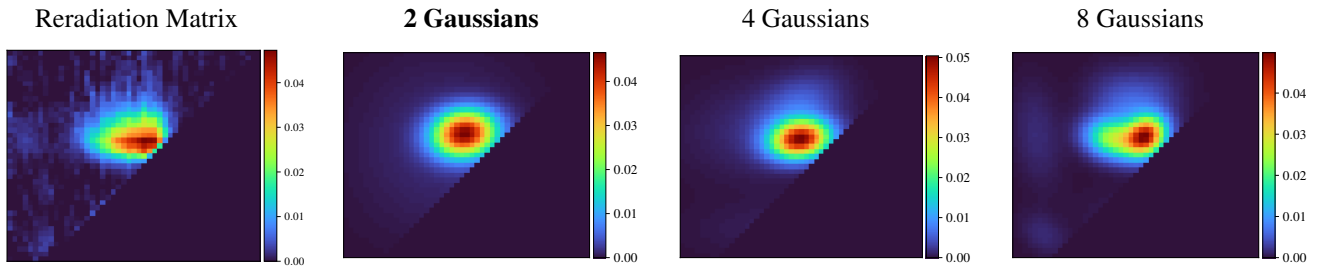
Gaussians:

Weight	Mean		Covariance			
0.053712591	532.960930962	433.417431261	15932.280754903	1248.150796780	1248.150796780	2316.720244779
0.123648104	349.503938501	526.757808520	2070.483118750	187.952484948	187.952484948	788.213114173
0.628812589	454.829752900	520.765437886	1068.144225314	47.448220697	47.448220697	430.629667575
0.033466097	678.288699061	678.299646752	5873.336479654	1733.598109263	1733.598109263	5622.897600949
0.073771961	455.323934729	568.216121600	1690.584521504	83.814842994	83.814842994	1208.822941163
0.084842348	417.668706889	708.610471194	6819.380192851	-45.065473581	-45.065473581	3038.734438305

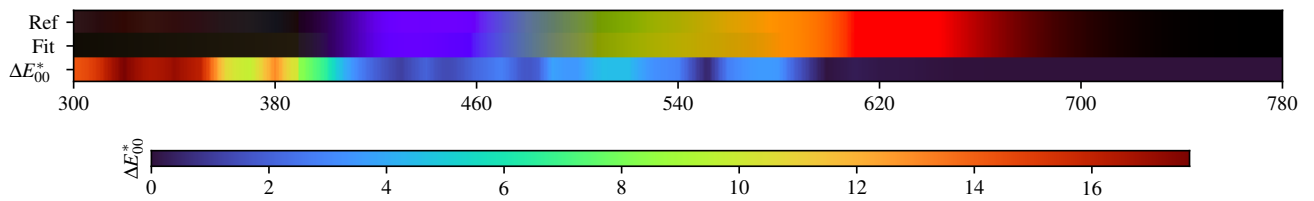
3.24. ARTFPINK



ARTFPINK - Weighted Expectation-Maximization - 2 Gaussians



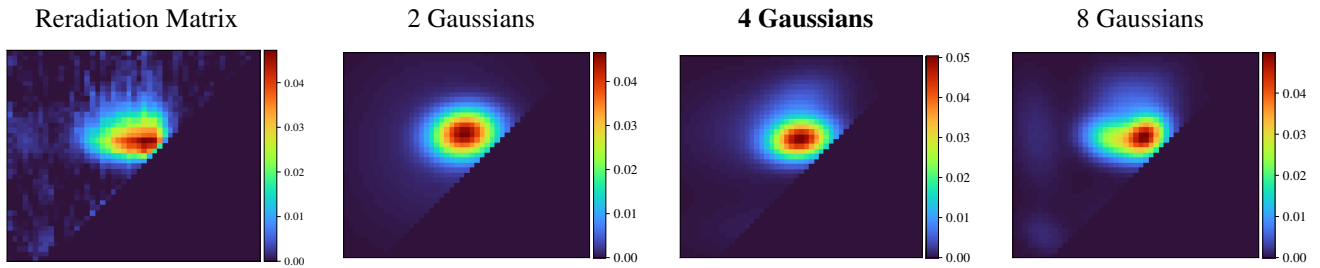
Fitted Material Under Monochromatic Illumination



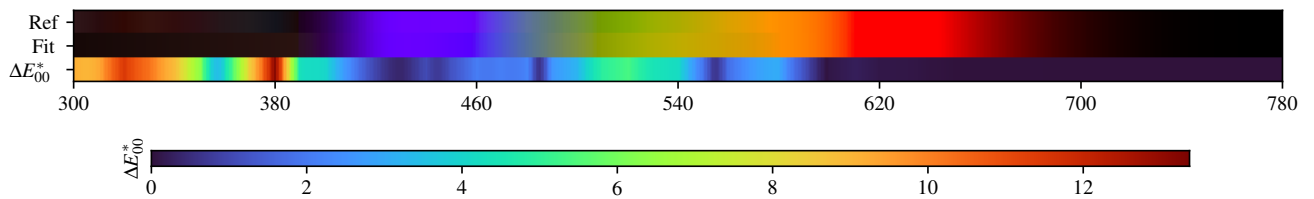
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.20$	D60 $\Delta E = 0.49$	FL2 $\Delta E = 0.59$	FL7 $\Delta E = 0.42$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.25$	FL3.10 $\Delta E = 0.37$	FL3.15 $\Delta E = 0.47$	HP5 $\Delta E = 0.36$	LED-B5 $\Delta E = 0.49$
B $\Delta E = 0.38$	D65 $\Delta E = 0.53$	FL3 $\Delta E = 0.66$	FL8 $\Delta E = 0.31$	FL3.1 $\Delta E = 0.73$	FL3.6 $\Delta E = 0.31$	FL3.11 $\Delta E = 0.39$	HP1 $\Delta E = 0.81$	LED-B1 $\Delta E = 0.32$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.50$	D75 $\Delta E = 0.59$	FL4 $\Delta E = 0.71$	FL9 $\Delta E = 0.28$	FL3.2 $\Delta E = 0.51$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.17$	HP2 $\Delta E = 0.45$	LED-B2 $\Delta E = 0.32$	LED-RGB1 $\Delta E = 0.28$
D50 $\Delta E = 0.41$	E $\Delta E = 0.49$	FL5 $\Delta E = 0.54$	FL10 $\Delta E = 0.35$	FL3.3 $\Delta E = 0.53$	FL3.8 $\Delta E = 0.29$	FL3.13 $\Delta E = 0.24$	HP3 $\Delta E = 0.21$	LED-B3 $\Delta E = 0.32$	LED-V1 $\Delta E = 0.18$
D55 $\Delta E = 0.45$	FL1 $\Delta E = 0.52$	FL6 $\Delta E = 0.64$	FL11 $\Delta E = 0.28$	FL3.4 $\Delta E = 0.24$	FL3.9 $\Delta E = 0.36$	FL3.14 $\Delta E = 0.38$	HP4 $\Delta E = 0.42$	LED-B4 $\Delta E = 0.44$	LED-V2 $\Delta E = 0.36$

ARTFPINK - Weighted Expectation-Maximization - 4 Gaussians



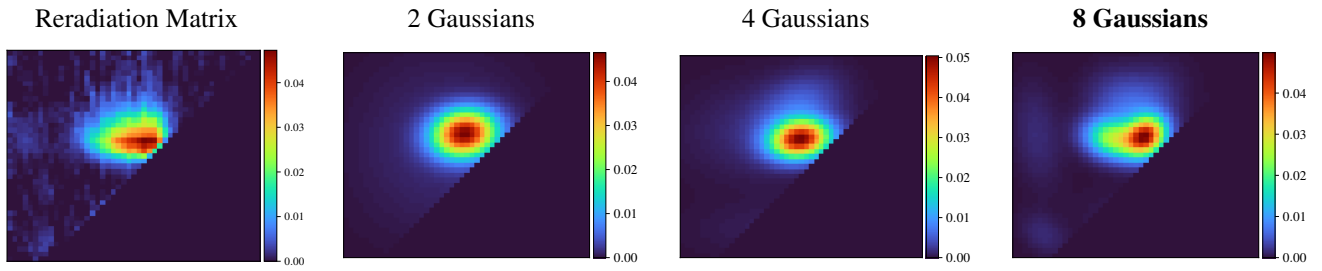
Fitted Material Under Monochromatic Illumination



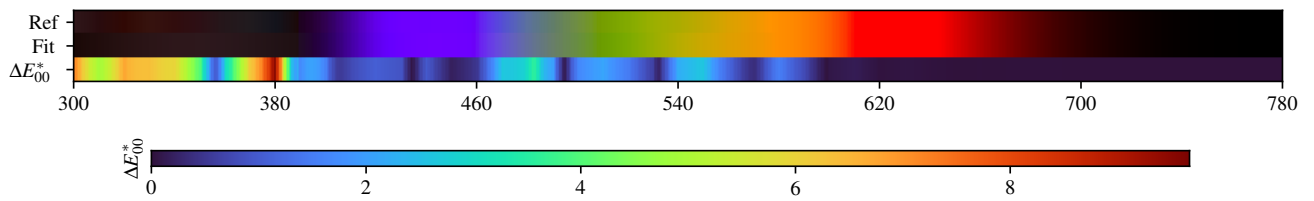
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.14$	FL2 $\Delta E = 0.39$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.25$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.30$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.09$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.07$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.48$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.55$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.43$	HP1 $\Delta E = 0.66$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.13$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.54$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.34$	FL3.7 $\Delta E = 0.27$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.37$	LED-B2 $\Delta E = 0.20$	LED-RGB1 $\Delta E = 0.29$
D50 $\Delta E = 0.10$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.37$	FL3.3 $\Delta E = 0.22$	FL3.8 $\Delta E = 0.37$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.12$	LED-V1 $\Delta E = 0.04$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.43$	FL11 $\Delta E = 0.34$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.42$	FL3.14 $\Delta E = 0.18$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.09$

ARTFPINK - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.29$	$\Delta E = 0.09$	$\Delta E = 0.36$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.07$	$\Delta E = 0.21$	$\Delta E = 0.08$	$\Delta E = 0.53$	$\Delta E = 0.25$	$\Delta E = 0.11$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.18$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.28$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.49$	$\Delta E = 0.10$	$\Delta E = 0.41$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.10$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.43$	$\Delta E = 0.13$	$\Delta E = 0.49$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.09$

ARTFPINK - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.671450	0.717173	0.736495	0.739373	0.732254	0.711614	0.675534	0.629306	0.576570	0.515548	0.460137
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.403414	0.358167	0.313636	0.284462	0.262666	0.248923	0.243088	0.251198	0.280987	0.360106	0.493501
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.650565	0.788013	0.868429	0.908018	0.924989	0.931913	0.937080	0.939840	0.942963	0.942972	0.945485
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.946338	0.944112	0.946750	0.946269	0.948812	0.947316	0.944986	0.948645			

2 Gaussians

Scaling factor: 504.73413525848923

Gaussians:

Weight	Mean		Covariance			
0.734703344	534.997081875	622.431243154	1758.776758965	109.785315096	109.785315096	967.291065086
0.265296656	491.115666249	599.325941531	12677.293745891	395.937733932	395.937733932	12824.793008020

4 Gaussians

Scaling factor: 493.5525788060998

Gaussians:

Weight	Mean		Covariance			
0.175577319	527.892023894	669.527749374	2757.458247167	926.683552733	926.683552733	2158.196148111
0.165182128	470.497401295	635.589708808	11889.218010913	601.033363601	601.033363601	4263.304122958
0.597255431	538.327038935	614.418572947	1571.197422313	132.260864272	132.260864272	634.221465273
0.061985121	507.107385641	432.276414758	16599.792705640	-2.313816746	-2.313816746	1533.117722298

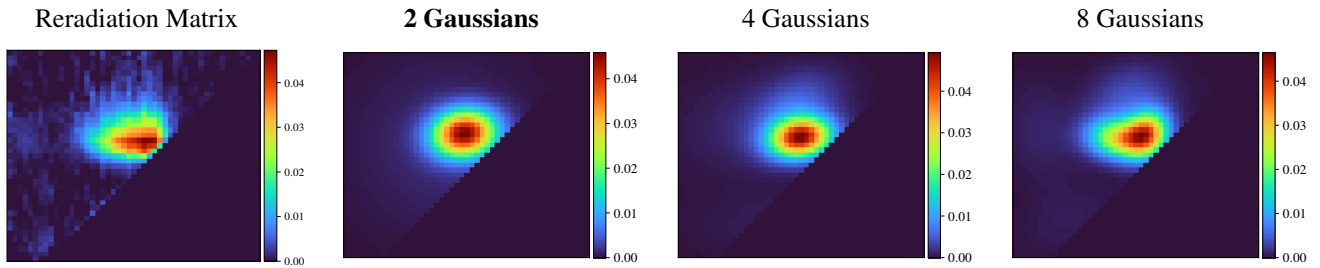
8 Gaussians

Scaling factor: 483.6161607575741

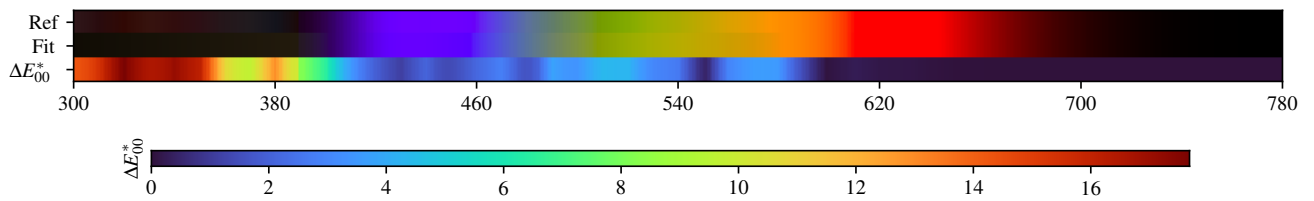
Gaussians:

Weight	Mean		Covariance			
0.090552323	561.281451680	672.558434863	1829.667165328	719.752217108	719.752217108	2596.045771371
0.271474641	492.532738276	611.926167498	1220.741938194	-134.176556502	-134.176556502	667.473545692
0.025359891	687.689805715	545.420246182	2789.379648022	303.011446045	303.011446045	14447.266110557
0.050507522	343.783759347	620.397879486	1075.631135987	-489.992983884	-489.992983884	4702.261350517
0.017548223	356.425624890	423.290707066	893.116698539	-271.105953102	-271.105953102	789.774136278
0.382066465	559.379075834	616.476920100	704.073550172	117.195172183	117.195172183	660.863436767
0.036789881	527.121061939	443.743127645	4814.067813237	-417.579278007	-417.579278007	2091.645573313
0.125701056	514.309558749	674.794236143	1985.011627062	-220.128505647	-220.128505647	2023.174295099

ARTFPINK - Weighted variational Bayesian inference - 2 Gaussians



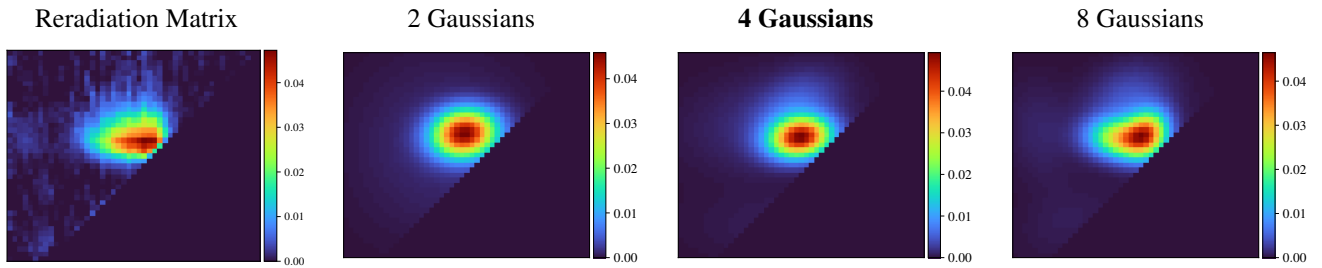
Fitted Material Under Monochromatic Illumination



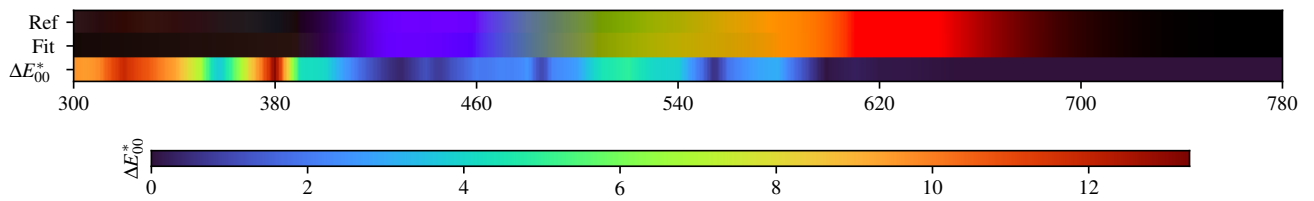
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.23$	D60 $\Delta E = 0.52$	FL2 $\Delta E = 0.62$	FL7 $\Delta E = 0.45$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.28$	FL3.10 $\Delta E = 0.38$	FL3.15 $\Delta E = 0.49$	HP5 $\Delta E = 0.38$	LED-B5 $\Delta E = 0.53$
B $\Delta E = 0.41$	D65 $\Delta E = 0.55$	FL3 $\Delta E = 0.69$	FL8 $\Delta E = 0.34$	FL3.1 $\Delta E = 0.75$	FL3.6 $\Delta E = 0.34$	FL3.11 $\Delta E = 0.39$	HP1 $\Delta E = 0.83$	LED-B1 $\Delta E = 0.33$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.52$	D75 $\Delta E = 0.61$	FL4 $\Delta E = 0.73$	FL9 $\Delta E = 0.31$	FL3.2 $\Delta E = 0.53$	FL3.7 $\Delta E = 0.13$	FL3.12 $\Delta E = 0.19$	HP2 $\Delta E = 0.45$	LED-B2 $\Delta E = 0.34$	LED-RGB1 $\Delta E = 0.28$
D50 $\Delta E = 0.44$	E $\Delta E = 0.51$	FL5 $\Delta E = 0.59$	FL10 $\Delta E = 0.35$	FL3.3 $\Delta E = 0.57$	FL3.8 $\Delta E = 0.28$	FL3.13 $\Delta E = 0.27$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.35$	LED-V1 $\Delta E = 0.20$
D55 $\Delta E = 0.48$	FL1 $\Delta E = 0.57$	FL6 $\Delta E = 0.67$	FL11 $\Delta E = 0.28$	FL3.4 $\Delta E = 0.26$	FL3.9 $\Delta E = 0.35$	FL3.14 $\Delta E = 0.41$	HP4 $\Delta E = 0.44$	LED-B4 $\Delta E = 0.47$	LED-V2 $\Delta E = 0.38$

ARTFPINK - Weighted variational Bayesian inference - 4 Gaussians



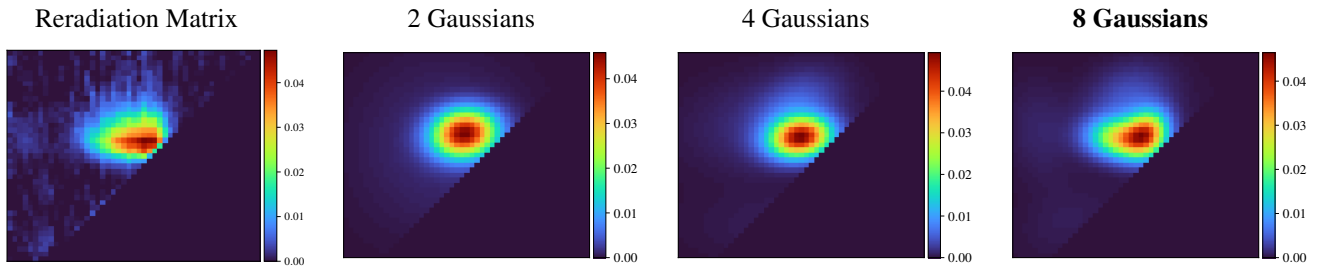
Fitted Material Under Monochromatic Illumination



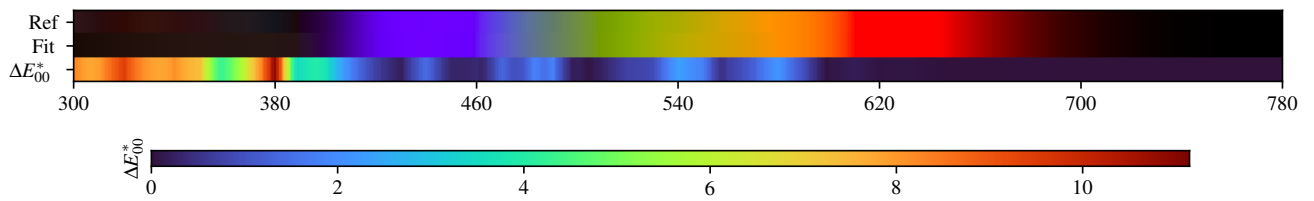
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.41$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.23$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.29$	FL3.15 $\Delta E = 0.19$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.23$
B $\Delta E = 0.11$	D65 $\Delta E = 0.18$	FL3 $\Delta E = 0.49$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.56$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.41$	HP1 $\Delta E = 0.66$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.17$	D75 $\Delta E = 0.20$	FL4 $\Delta E = 0.54$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.36$	FL3.7 $\Delta E = 0.25$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.35$	LED-B2 $\Delta E = 0.20$	LED-RGB1 $\Delta E = 0.26$
D50 $\Delta E = 0.13$	E $\Delta E = 0.17$	FL5 $\Delta E = 0.26$	FL10 $\Delta E = 0.35$	FL3.3 $\Delta E = 0.28$	FL3.8 $\Delta E = 0.35$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.25$	FL6 $\Delta E = 0.45$	FL11 $\Delta E = 0.33$	FL3.4 $\Delta E = 0.15$	FL3.9 $\Delta E = 0.40$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.20$	LED-B4 $\Delta E = 0.22$	LED-V2 $\Delta E = 0.11$

ARTFPINK - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.04$	FL2 $\Delta E = 0.27$	FL7 $\Delta E = 0.06$	FL12 $\Delta E = 0.23$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.03$	HP5 $\Delta E = 0.12$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.05$	D65 $\Delta E = 0.04$	FL3 $\Delta E = 0.32$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.37$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.41$	HP1 $\Delta E = 0.44$	LED-B1 $\Delta E = 0.18$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.03$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.35$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.27$	FL3.7 $\Delta E = 0.22$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.21$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.04$	E $\Delta E = 0.04$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.37$	FL3.3 $\Delta E = 0.20$	FL3.8 $\Delta E = 0.33$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.29$	FL11 $\Delta E = 0.33$	FL3.4 $\Delta E = 0.17$	FL3.9 $\Delta E = 0.39$	FL3.14 $\Delta E = 0.02$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.06$

ARTFPINK - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.671450	0.717173	0.736495	0.739373	0.732254	0.711614	0.675534	0.629306	0.576570	0.515548	0.460137
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.403414	0.358167	0.313636	0.284462	0.262666	0.248923	0.243088	0.251198	0.280987	0.360106	0.493501
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.650565	0.788013	0.868429	0.908018	0.924989	0.931913	0.937080	0.939840	0.942963	0.942972	0.945485
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.946338	0.944112	0.946750	0.946269	0.948812	0.947316	0.944986	0.948645			

2 Gaussians max

Scaling factor: 504.9930536175712

Gaussians:

Weight	Mean		Covariance			
0.261378183	490.828530280	598.589660643	12769.966791053	372.484055626	372.484055626	12888.136215965
0.738621817	534.888397897	622.535395174	1785.712897184	109.632455723	109.632455723	993.703397094

4 Gaussians max

Scaling factor: 494.0923533688196

Gaussians:

Weight	Mean		Covariance			
0.067518259	507.659450303	441.184190259	16209.722491335	107.391130555	107.391130555	2403.701741815
0.159450727	471.812339030	645.949290254	12077.093184263	1245.943519584	1245.943519584	4094.582881753
0.605981316	539.009165228	614.809913805	1587.059409313	140.739379482	140.739379482	684.555579173
0.167049697	522.021792301	664.678731530	2780.467403791	1019.782221260	1019.782221260	2291.159907459

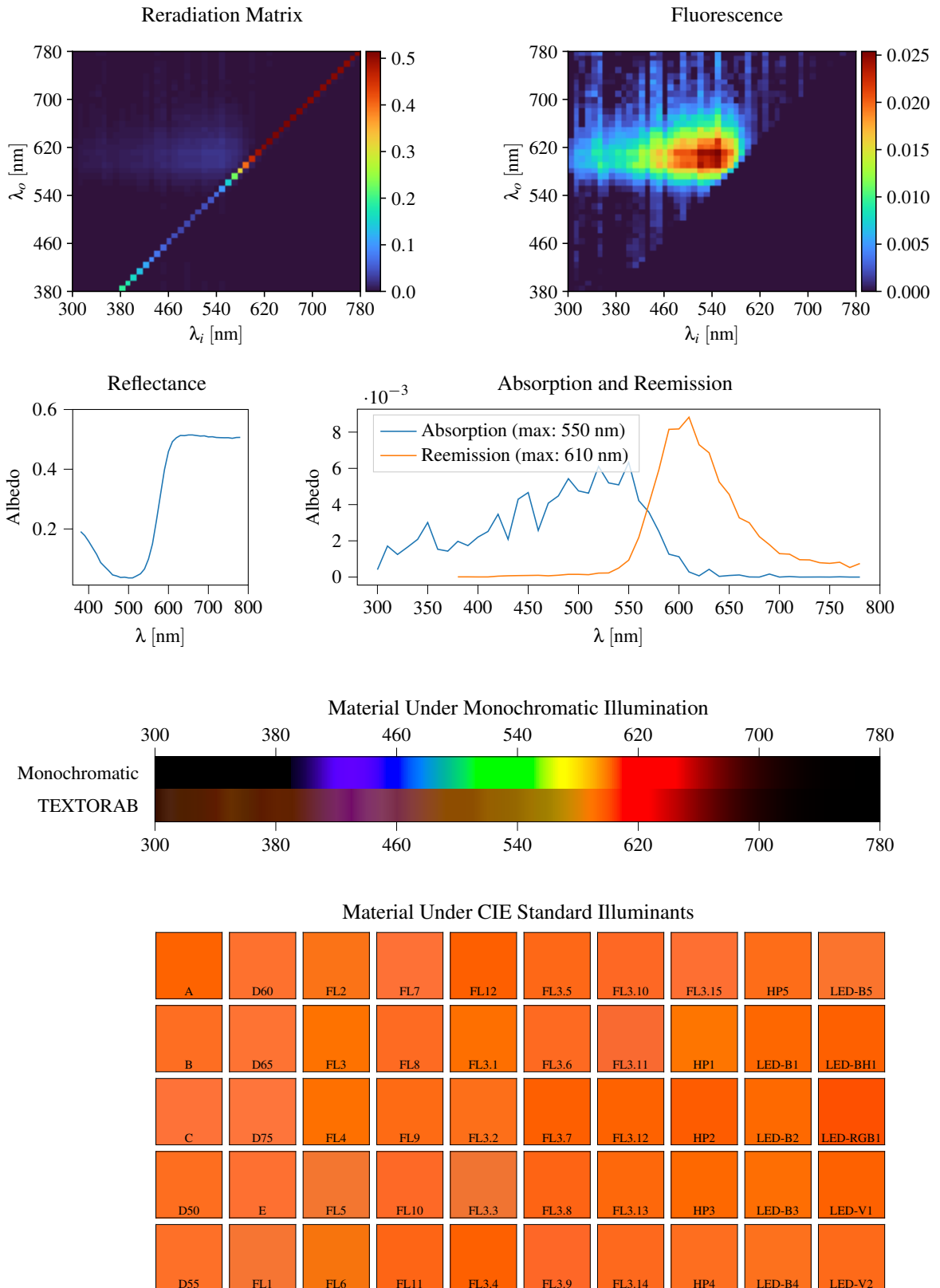
8 Gaussians max

Scaling factor: 489.55610621317885

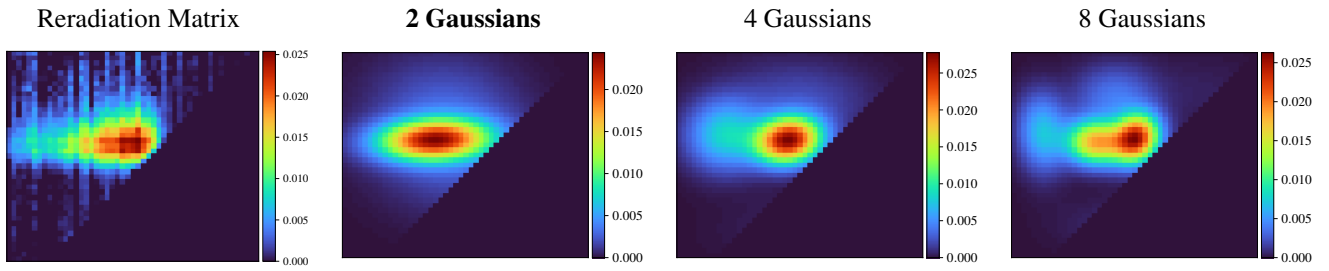
Gaussians:

Weight	Mean		Covariance			
0.026957337	391.452229519	445.335586027	3974.324755623	1030.628396987	1030.628396987	2829.418193405
0.042911538	581.341431647	445.778588089	9023.683951832	-445.443139232	-445.443139232	3079.253660352
0.052262855	351.824575307	625.551370564	2247.580029461	-325.225589256	-325.225589256	4629.099032593
0.388824890	511.476116723	612.425266218	1784.054867191	-91.397848392	-91.397848392	687.821741290
0.316290704	561.672839266	622.546358372	761.731322507	145.368290548	145.368290548	882.149065069
0.019019055	646.761499051	644.880653109	6760.912657502	1505.830609072	1505.830609072	6782.984036597
0.152896291	524.013376989	683.166679094	2865.345987269	539.399583552	539.399583552	2279.383890418

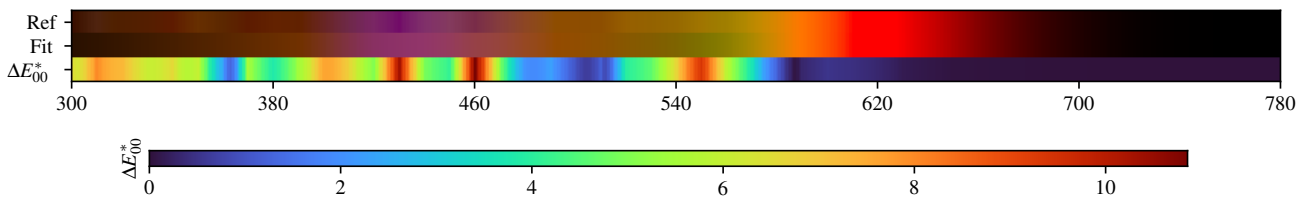
3.25. TEXTORAB



TEXTORAB - Weighted Expectation-Maximization - 2 Gaussians



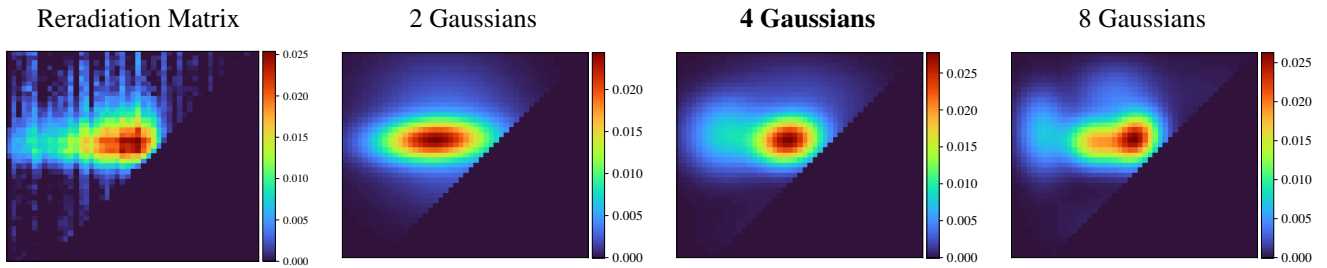
Fitted Material Under Monochromatic Illumination



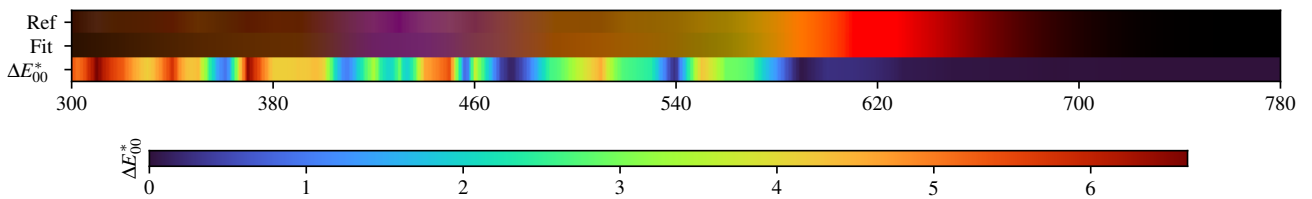
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.41$	$\Delta E = 0.36$	$\Delta E = 0.33$	$\Delta E = 0.23$	$\Delta E = 0.75$	$\Delta E = 0.17$	$\Delta E = 0.30$	$\Delta E = 0.35$	$\Delta E = 0.15$	$\Delta E = 0.06$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.19$	$\Delta E = 0.47$	$\Delta E = 0.46$	$\Delta E = 0.17$	$\Delta E = 0.50$	$\Delta E = 0.10$	$\Delta E = 0.33$	$\Delta E = 0.25$	$\Delta E = 0.47$	$\Delta E = 0.59$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.64$	$\Delta E = 0.67$	$\Delta E = 0.49$	$\Delta E = 0.30$	$\Delta E = 0.32$	$\Delta E = 0.72$	$\Delta E = 0.47$	$\Delta E = 0.78$	$\Delta E = 0.46$	$\Delta E = 0.70$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.69$	$\Delta E = 0.18$	$\Delta E = 0.48$	$\Delta E = 0.16$	$\Delta E = 0.64$	$\Delta E = 0.28$	$\Delta E = 0.19$	$\Delta E = 0.35$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.18$	$\Delta E = 0.46$	$\Delta E = 0.64$	$\Delta E = 0.60$	$\Delta E = 0.46$	$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.24$	$\Delta E = 0.12$

TEXTORAB - Weighted Expectation-Maximization - 4 Gaussians



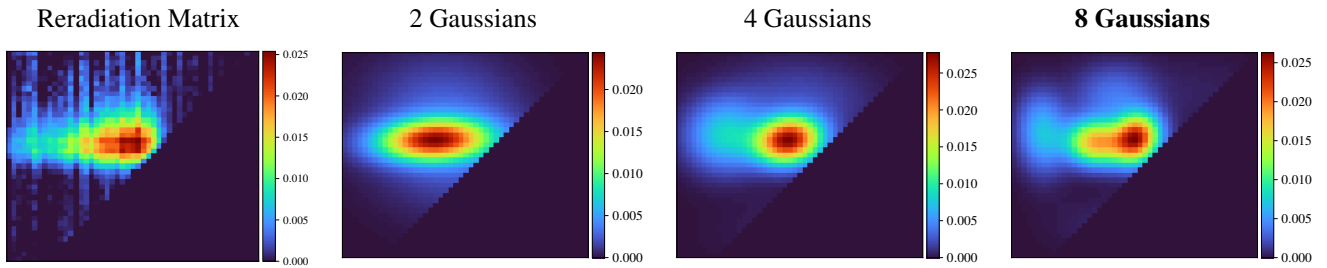
Fitted Material Under Monochromatic Illumination



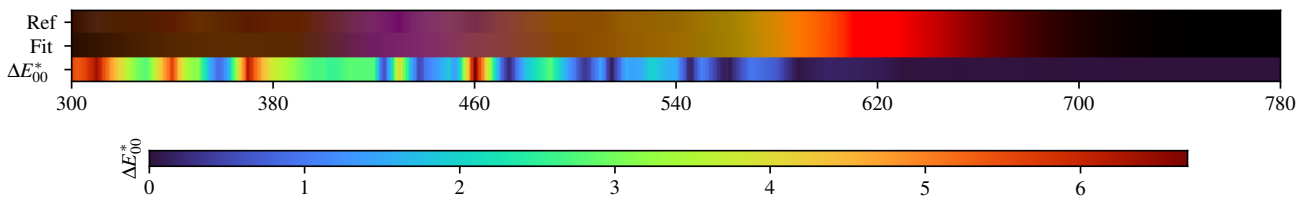
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.38$	$\Delta E = 0.18$	$\Delta E = 0.35$	$\Delta E = 0.06$	$\Delta E = 0.34$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.47$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.23$	$\Delta E = 0.42$	$\Delta E = 0.13$	$\Delta E = 0.34$	$\Delta E = 0.04$	$\Delta E = 0.44$	$\Delta E = 0.28$	$\Delta E = 0.22$	$\Delta E = 0.26$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.30$	$\Delta E = 0.42$	$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.26$	$\Delta E = 0.08$	$\Delta E = 0.44$	$\Delta E = 0.24$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.27$	$\Delta E = 0.31$	$\Delta E = 0.48$	$\Delta E = 0.21$	$\Delta E = 0.34$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.33$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.27$	$\Delta E = 0.43$	$\Delta E = 0.44$	$\Delta E = 0.15$	$\Delta E = 0.40$	$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.47$	$\Delta E = 0.13$

TEXTORAB - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.24$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.06$	$\Delta E = 0.20$	$\Delta E = 0.21$

TEXTORAB - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.191115	0.178030	0.158499	0.136592	0.114866	0.087575	0.073913	0.060610	0.046108	0.042623	0.037628
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.038517	0.036027	0.036076	0.042696	0.049966	0.066038	0.099391	0.150269	0.228967	0.314438	0.398389
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.459221	0.492398	0.505504	0.513032	0.512498	0.514705	0.514746	0.512886	0.511090	0.511775	0.508261
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.508724	0.506302	0.505709	0.505409	0.505516	0.503557	0.506184	0.506566			

2 Gaussians

Scaling factor: 472.6960234888258

Gaussians:

Weight	Mean		Covariance			
0.553903037	476.700721966	609.942939193	5457.811654557	183.250881983	183.250881983	736.911639553
0.446096963	502.476488112	625.382149148	10070.454435452	-601.938290330	-601.938290330	8249.262993494

4 Gaussians

Scaling factor: 448.4746703628875

Gaussians:

Weight	Mean		Covariance			
0.158993290	544.369731240	691.721192633	9333.812408403	-417.740317799	-417.740317799	2792.600201586
0.509694594	517.296963313	609.123580867	1910.444399214	143.510284168	143.510284168	971.719533236
0.280227678	391.179890910	620.025961596	2584.829258887	35.278041124	35.278041124	2233.622915186
0.051084438	555.260689050	443.106840378	13642.582880181	825.885637976	825.885637976	2256.050592079

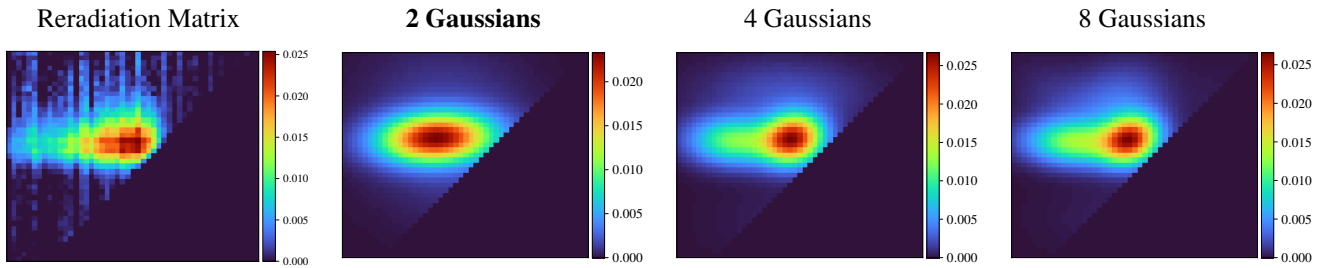
8 Gaussians

Scaling factor: 444.12257050641256

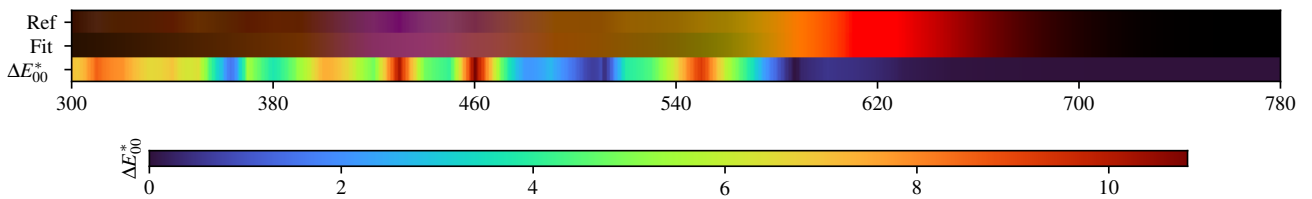
Gaussians:

Weight	Mean		Covariance			
0.130984110	499.214245127	695.194232110	3017.387294902	44.440835603	44.440835603	1915.373144255
0.031484293	673.660729802	702.135753812	5975.769787691	108.580790336	108.580790336	2619.534314238
0.023511629	521.216845793	437.768635063	3667.017889423	-89.875289061	-89.875289061	2064.153824170
0.288447150	461.175737596	604.754966458	1481.078926934	-29.730811388	-29.730811388	894.302092281
0.013099287	437.628597298	438.446508406	4620.816121391	-444.942876521	-444.942876521	1565.889071663
0.019467302	686.226805925	480.760868760	5003.709544942	-582.539909829	-582.539909829	4593.178018531
0.162450206	356.174340727	624.061026479	1049.573491560	-94.778048444	-94.778048444	2671.806961566
0.330556023	542.627114876	612.455583746	942.573218971	118.625100634	118.625100634	1033.906674188

TEXTORAB - Weighted variational Bayesian inference - 2 Gaussians



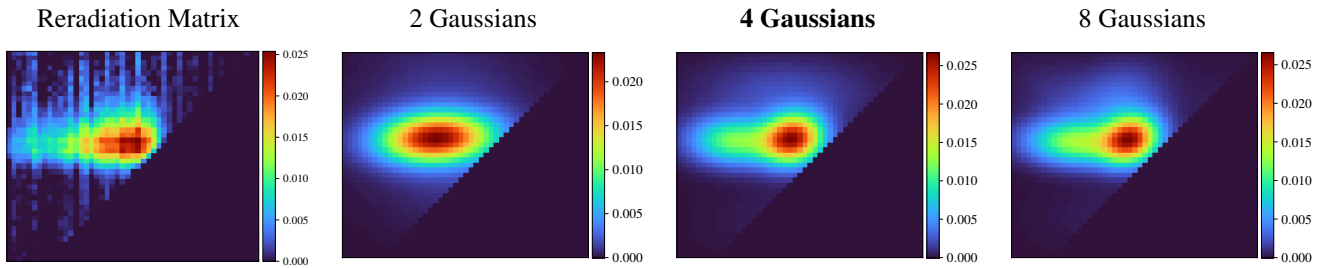
Fitted Material Under Monochromatic Illumination



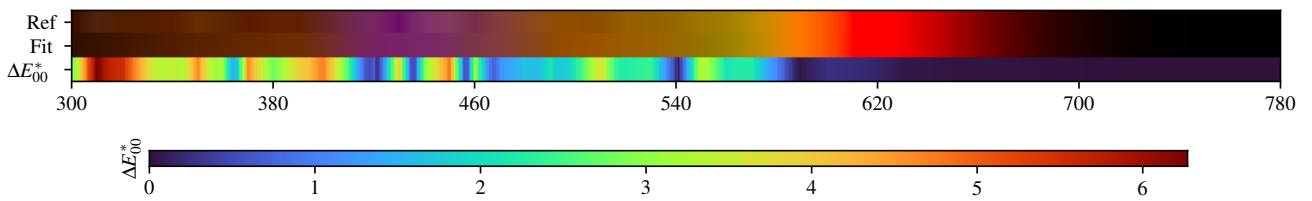
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.45$	$\Delta E = 0.26$	$\Delta E = 0.33$	$\Delta E = 0.15$	$\Delta E = 0.79$	$\Delta E = 0.22$	$\Delta E = 0.36$	$\Delta E = 0.27$	$\Delta E = 0.10$	$\Delta E = 0.08$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.36$	$\Delta E = 0.47$	$\Delta E = 0.22$	$\Delta E = 0.51$	$\Delta E = 0.17$	$\Delta E = 0.38$	$\Delta E = 0.26$	$\Delta E = 0.49$	$\Delta E = 0.62$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.56$	$\Delta E = 0.55$	$\Delta E = 0.51$	$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.76$	$\Delta E = 0.51$	$\Delta E = 0.80$	$\Delta E = 0.49$	$\Delta E = 0.74$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.01$	$\Delta E = 0.59$	$\Delta E = 0.08$	$\Delta E = 0.52$	$\Delta E = 0.05$	$\Delta E = 0.68$	$\Delta E = 0.33$	$\Delta E = 0.22$	$\Delta E = 0.39$	$\Delta E = 0.21$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.47$	$\Delta E = 0.68$	$\Delta E = 0.63$	$\Delta E = 0.51$	$\Delta E = 0.27$	$\Delta E = 0.25$	$\Delta E = 0.28$	$\Delta E = 0.08$

TEXTORAB - Weighted variational Bayesian inference - 4 Gaussians



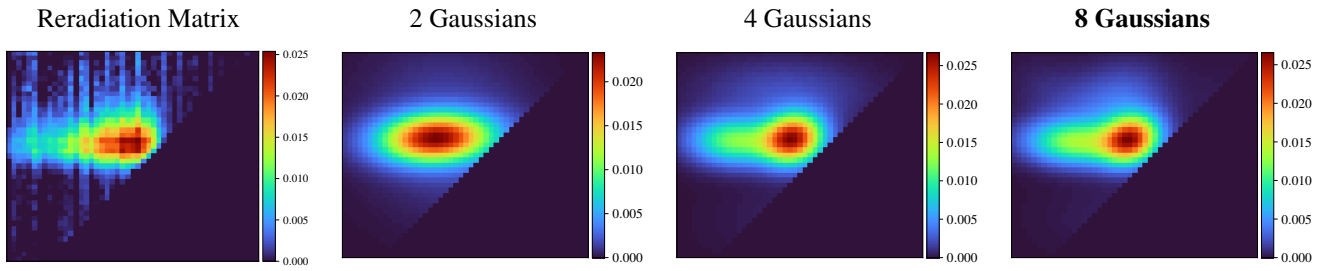
Fitted Material Under Monochromatic Illumination



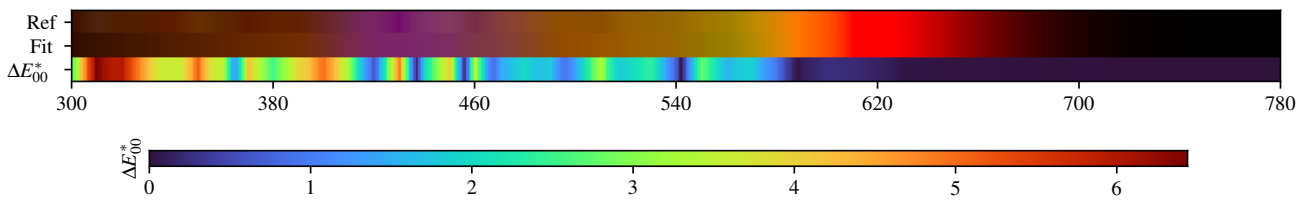
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.28$	$\Delta E = 0.16$	$\Delta E = 0.29$	$\Delta E = 0.12$	$\Delta E = 0.37$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.44$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.30$	$\Delta E = 0.18$	$\Delta E = 0.26$	$\Delta E = 0.13$	$\Delta E = 0.38$	$\Delta E = 0.23$	$\Delta E = 0.21$	$\Delta E = 0.20$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.31$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.11$	$\Delta E = 0.37$	$\Delta E = 0.23$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.42$	$\Delta E = 0.16$	$\Delta E = 0.29$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.31$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.10$	$\Delta E = 0.21$	$\Delta E = 0.31$	$\Delta E = 0.37$	$\Delta E = 0.13$	$\Delta E = 0.34$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.41$	$\Delta E = 0.11$

TEXTORAB - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.18$	$\Delta E = 0.06$	$\Delta E = 0.21$	$\Delta E = 0.07$	$\Delta E = 0.27$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.30$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.21$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.22$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.05$	$\Delta E = 0.29$	$\Delta E = 0.12$	$\Delta E = 0.29$	$\Delta E = 0.07$	$\Delta E = 0.20$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.22$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.08$	$\Delta E = 0.23$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.28$	$\Delta E = 0.14$

TEXTORAB - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.191115	0.178030	0.158499	0.136592	0.114866	0.087575	0.073913	0.060610	0.046108	0.042623	0.037628
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.038517	0.036027	0.036076	0.042696	0.049966	0.066038	0.099391	0.150269	0.228967	0.314438	0.398389
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.459221	0.492398	0.505504	0.513032	0.512498	0.514705	0.514746	0.512886	0.511090	0.511775	0.508261
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.508724	0.506302	0.505709	0.505409	0.505516	0.503557	0.506184	0.506566			

2 Gaussians max

Scaling factor: 470.16948405567086

Gaussians:

Weight	Mean		Covariance			
0.310749897	506.914096175	623.928009304	11987.616428566	-896.978190030	-896.978190030	10927.573511842
0.689250103	479.843118455	613.570166400	5513.823648985	213.915800320	213.915800320	1053.703654805

4 Gaussians max

Scaling factor: 449.7001550476299

Gaussians:

Weight	Mean		Covariance			
0.060210412	546.822298258	459.469626579	14554.811459464	519.758255517	519.758255517	3649.460276755
0.312576480	410.651189633	607.712802680	3510.489315051	-62.862083437	-62.862083437	992.646258008
0.454623374	526.427176274	612.250406271	1617.011172114	125.332068830	125.332068830	1101.395222556
0.172589734	508.322727824	700.826040222	12488.882830194	-87.131968140	-87.131968140	2156.192257139

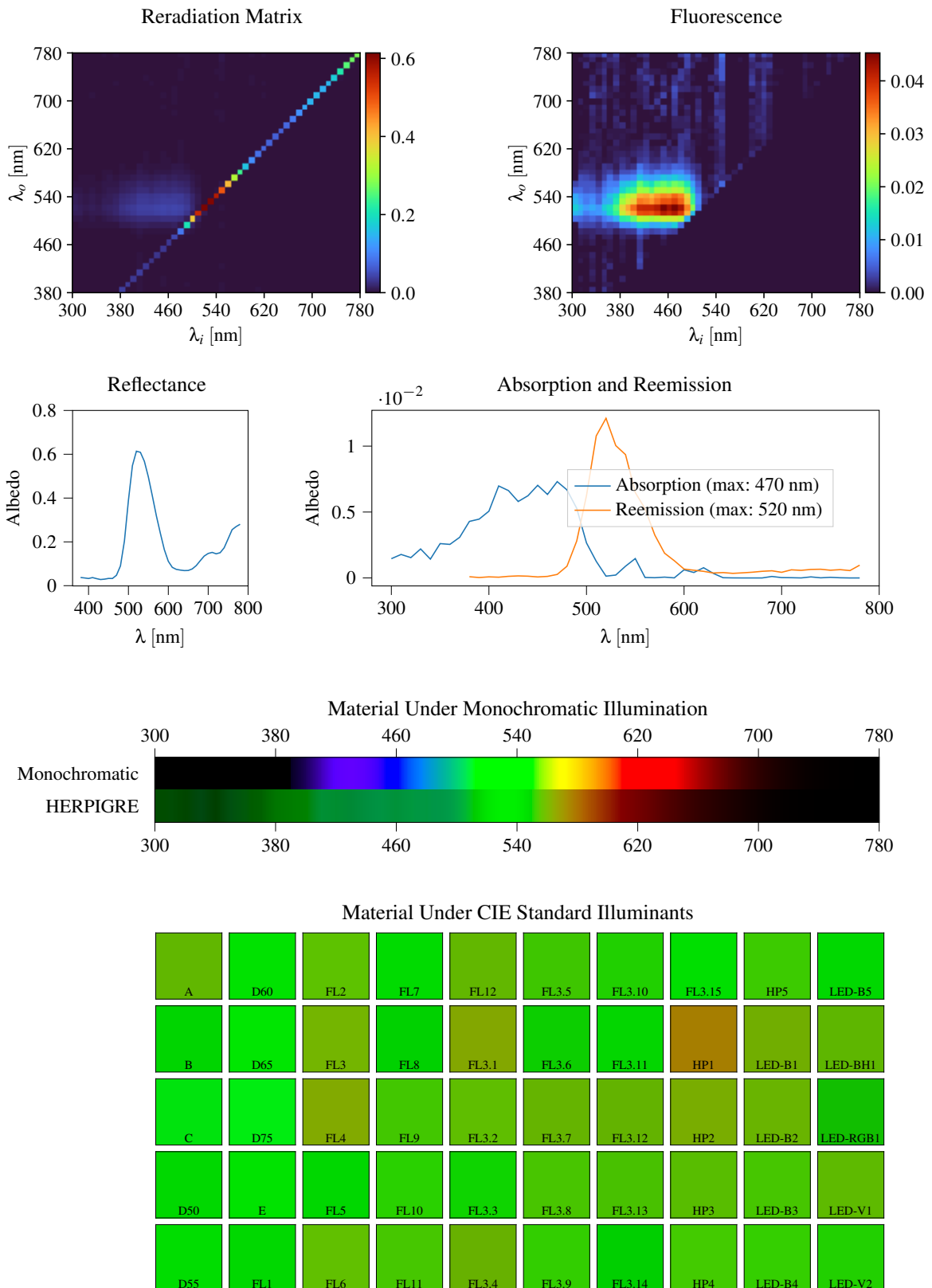
8 Gaussians max

Scaling factor: 451.4360545041244

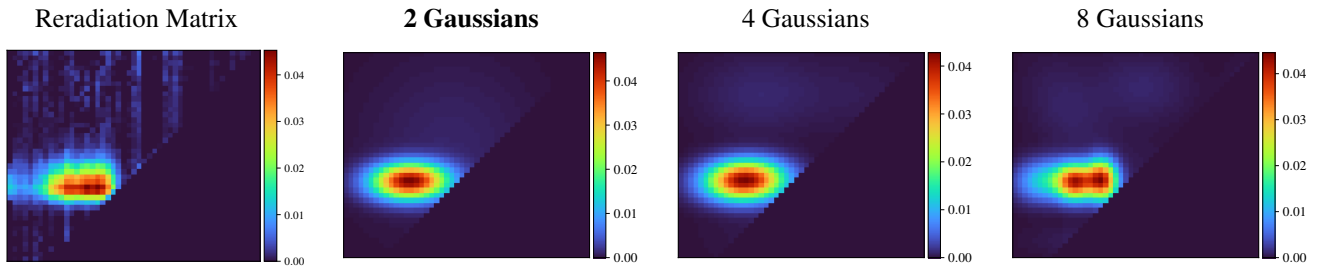
Gaussians:

Weight	Mean		Covariance			
0.058339842	539.918489777	454.174442032	14080.368967930	-186.858541251	-186.858541251	3153.486807370
0.319676357	418.696538380	604.672263673	4073.062704999	-123.218413635	-123.218413635	867.420792700
0.368705196	531.777570553	610.579982358	1412.074834460	167.549152020	167.549152020	1003.554399842
0.027263148	691.752213039	678.620278064	6024.009930146	1269.695576481	1269.695576481	4455.841001699
0.156743772	509.820957641	680.413162675	3476.332123024	435.310354377	435.310354377	2770.355305312
0.067605435	404.419032544	675.160204626	4161.474481833	-1437.061047593	-1437.061047593	3199.006004129

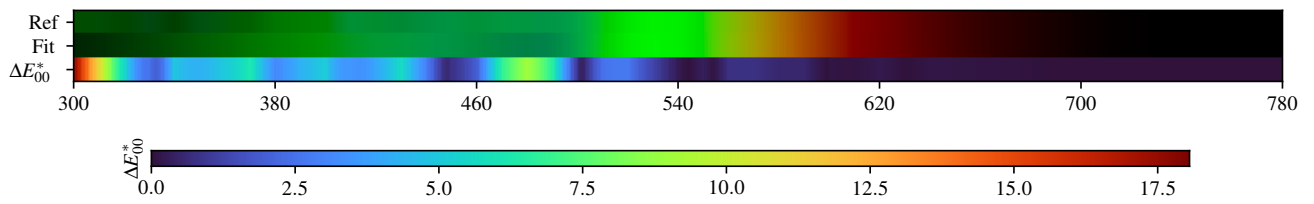
3.26. HERPIGRE



HERPIGRE - Weighted Expectation-Maximization - 2 Gaussians



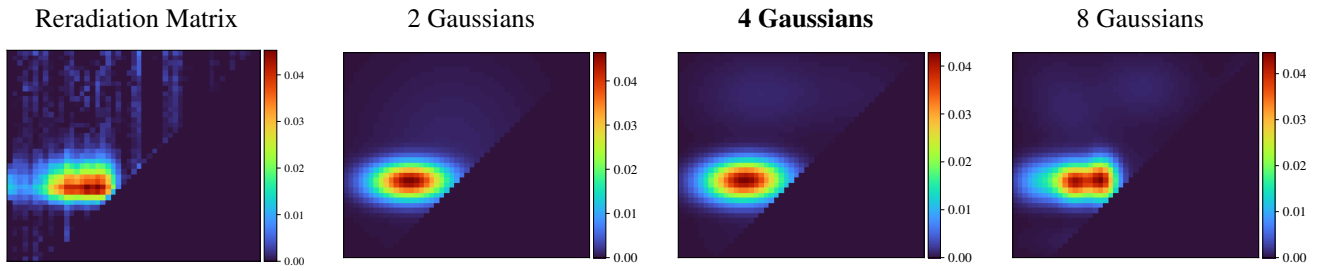
Fitted Material Under Monochromatic Illumination



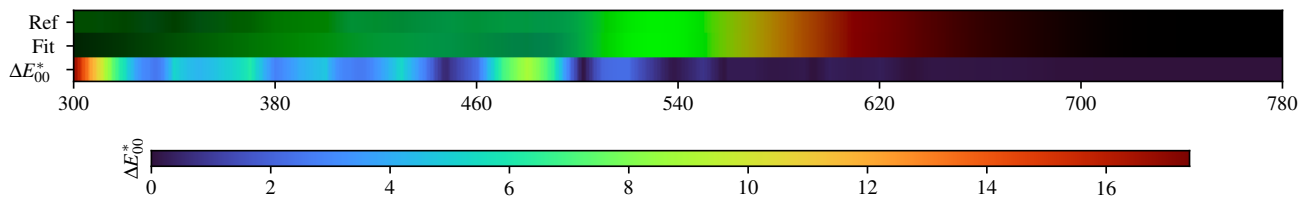
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.32$	$\Delta E = 0.24$	$\Delta E = 0.27$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.36$	$\Delta E = 0.50$	$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.32$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.20$	$\Delta E = 0.28$	$\Delta E = 0.29$	$\Delta E = 0.30$	$\Delta E = 0.37$	$\Delta E = 0.37$	$\Delta E = 0.35$	$\Delta E = 0.55$	$\Delta E = 0.42$	$\Delta E = 0.37$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.18$	$\Delta E = 0.37$	$\Delta E = 0.30$	$\Delta E = 0.31$	$\Delta E = 0.31$	$\Delta E = 0.28$	$\Delta E = 0.45$	$\Delta E = 0.35$	$\Delta E = 0.41$	$\Delta E = 0.52$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 0.59$	$\Delta E = 0.23$	$\Delta E = 0.35$	$\Delta E = 0.26$	$\Delta E = 0.30$	$\Delta E = 0.60$	$\Delta E = 0.25$	$\Delta E = 0.32$	$\Delta E = 0.35$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.31$	$\Delta E = 0.36$	$\Delta E = 0.33$	$\Delta E = 0.61$	$\Delta E = 0.36$	$\Delta E = 0.31$	$\Delta E = 0.22$

HERPIGRE - Weighted Expectation-Maximization - 4 Gaussians



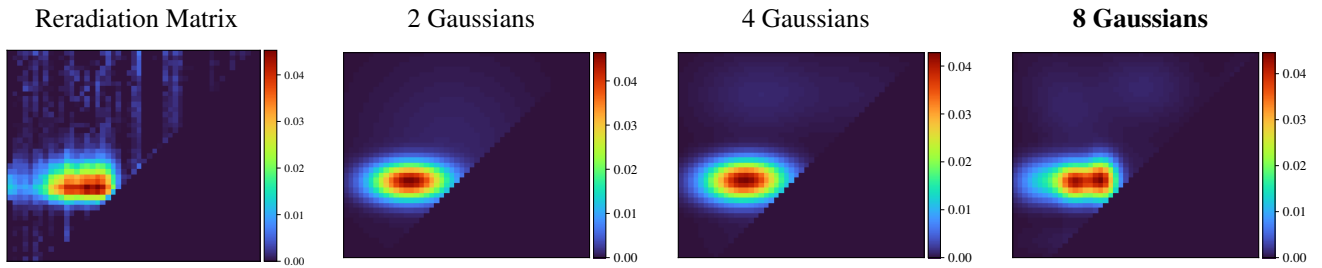
Fitted Material Under Monochromatic Illumination



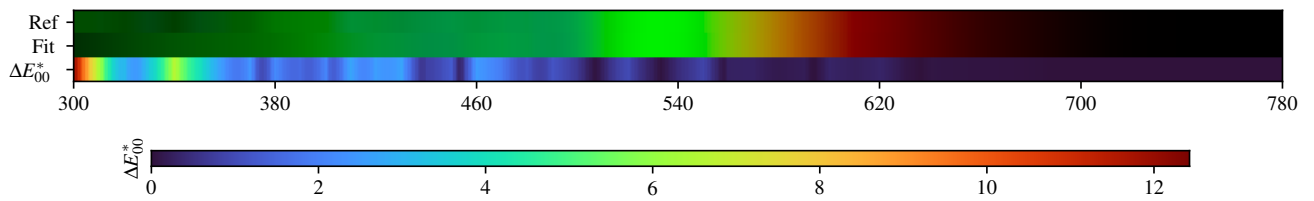
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.46$	$\Delta E = 0.29$	$\Delta E = 0.63$	$\Delta E = 0.27$	$\Delta E = 0.12$	$\Delta E = 0.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.09$	$\Delta E = 0.34$	$\Delta E = 0.52$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.24$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.43$	$\Delta E = 0.28$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.24$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.47$	$\Delta E = 0.24$	$\Delta E = 0.54$	$\Delta E = 0.24$	$\Delta E = 0.48$	$\Delta E = 0.55$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.52$	$\Delta E = 0.06$	$\Delta E = 0.51$	$\Delta E = 0.61$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.10$

HERPIGRE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.22$	$\Delta E = 0.34$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.51$	$\Delta E = 0.19$	$\Delta E = 0.39$	$\Delta E = 0.22$	$\Delta E = 0.30$	$\Delta E = 0.17$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.28$	$\Delta E = 0.36$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.43$	$\Delta E = 0.05$	$\Delta E = 0.17$	$\Delta E = 0.23$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.32$	$\Delta E = 0.40$	$\Delta E = 0.20$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.47$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.33$	$\Delta E = 0.24$	$\Delta E = 0.46$	$\Delta E = 0.22$	$\Delta E = 0.46$	$\Delta E = 0.19$	$\Delta E = 0.31$	$\Delta E = 0.17$	$\Delta E = 0.33$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.31$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.49$	$\Delta E = 0.14$	$\Delta E = 0.45$	$\Delta E = 0.20$	$\Delta E = 0.33$	$\Delta E = 0.17$	$\Delta E = 0.33$

HERPIGRE - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.037354	0.035281	0.032787	0.036977	0.032179	0.028129	0.029791	0.033046	0.032880	0.047519	0.090181
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.204528	0.389484	0.548027	0.613964	0.608954	0.567639	0.496299	0.409479	0.319525	0.239702	0.164633
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.111315	0.083699	0.074448	0.071298	0.068885	0.069411	0.076458	0.091602	0.113911	0.135206	0.147132
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.151912	0.145485	0.150539	0.172919	0.214059	0.255730	0.269724	0.280329			

2 Gaussians

Scaling factor: 462.516958119781

Gaussians:

Weight	Mean		Covariance			
0.758037515	426.509885400	528.161511978	2583.982933521	39.263857513	39.263857513	575.949635017
0.241962485	505.608674700	599.558258477	14300.845863391	248.289819467	248.289819467	14847.625893682

4 Gaussians

Scaling factor: 455.5356344973355

Gaussians:

Weight	Mean		Covariance			
0.085709965	455.808914440	700.263803177	7249.831085804	47.302604210	47.302604210	3083.878721357
0.038044599	656.347173109	701.035503201	6456.016790045	-186.091210120	-186.091210120	3314.158857666
0.815363520	427.267130129	529.774664706	2778.409974047	70.661643168	70.661643168	688.992185327
0.060881915	545.859343669	439.994529980	13953.260868975	1602.208141086	1602.208141086	2617.476734775

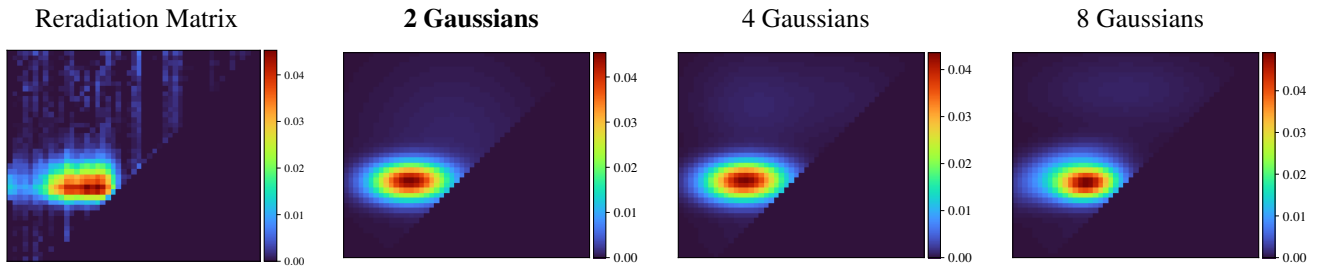
8 Gaussians

Scaling factor: 450.2917395214418

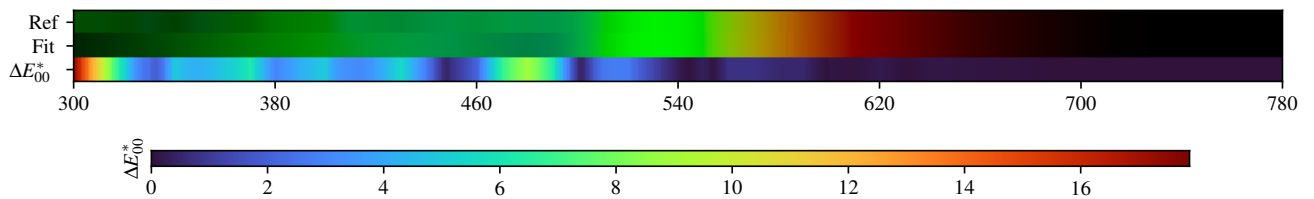
Gaussians:

Weight	Mean		Covariance			
0.052042700	398.988690593	676.330403082	2932.472330057	-1079.437777049	-1079.437777049	4533.440001756
0.290840767	473.638474105	530.657894535	404.687513109	-26.335859640	-26.335859640	690.982055901
0.191793860	360.680498560	529.098788451	1403.212985917	51.870897999	51.870897999	697.747728423
0.015545026	742.655424860	684.782369449	639.301043583	530.492386041	530.492386041	4426.752955935
0.059291513	552.566977331	714.903683172	4612.196669138	-83.710392342	-83.710392342	2368.839632581
0.313060767	420.584010231	526.423058544	623.323290790	-5.521437742	-5.521437742	555.804654800
0.044123951	585.560328855	520.587582908	8155.174141448	-4086.662958097	-4086.662958097	5033.993670298
0.033301415	484.723416806	408.945659077	9087.146098382	-168.726793828	-168.726793828	485.964781413

HERPIGRE - Weighted variational Bayesian inference - 2 Gaussians



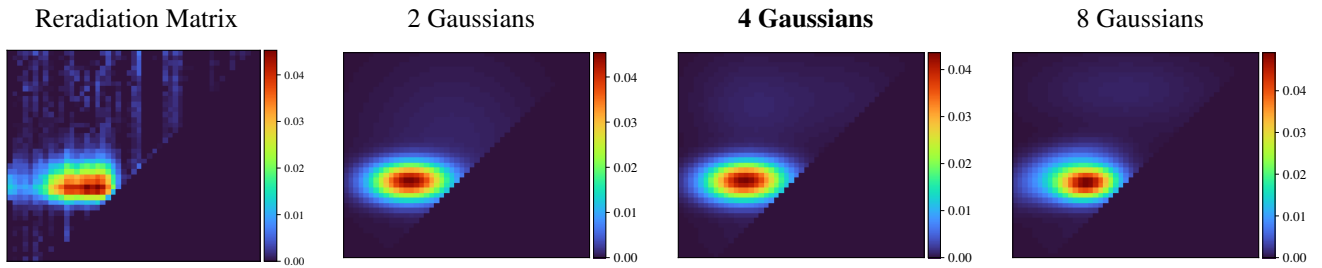
Fitted Material Under Monochromatic Illumination



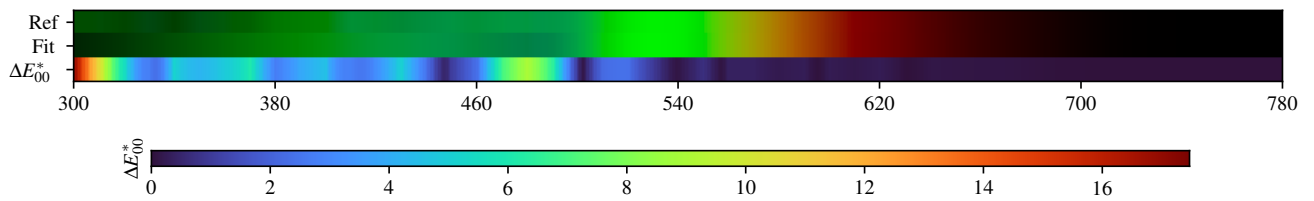
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.36$	$\Delta E = 0.28$	$\Delta E = 0.32$	$\Delta E = 0.27$	$\Delta E = 0.25$	$\Delta E = 0.40$	$\Delta E = 0.52$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.39$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.27$	$\Delta E = 0.31$	$\Delta E = 0.33$	$\Delta E = 0.35$	$\Delta E = 0.39$	$\Delta E = 0.41$	$\Delta E = 0.37$	$\Delta E = 0.57$	$\Delta E = 0.44$	$\Delta E = 0.39$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.25$	$\Delta E = 0.37$	$\Delta E = 0.33$	$\Delta E = 0.35$	$\Delta E = 0.35$	$\Delta E = 0.29$	$\Delta E = 0.47$	$\Delta E = 0.38$	$\Delta E = 0.44$	$\Delta E = 0.55$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.27$	$\Delta E = 0.58$	$\Delta E = 0.30$	$\Delta E = 0.37$	$\Delta E = 0.32$	$\Delta E = 0.31$	$\Delta E = 0.62$	$\Delta E = 0.27$	$\Delta E = 0.37$	$\Delta E = 0.36$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.30$	$\Delta E = 0.32$	$\Delta E = 0.33$	$\Delta E = 0.37$	$\Delta E = 0.35$	$\Delta E = 0.63$	$\Delta E = 0.35$	$\Delta E = 0.37$	$\Delta E = 0.28$

HERPIGRE - Weighted variational Bayesian inference - 4 Gaussians



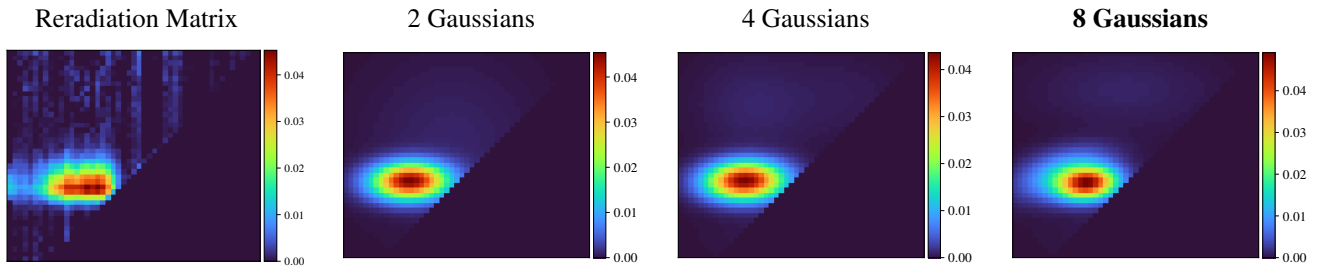
Fitted Material Under Monochromatic Illumination



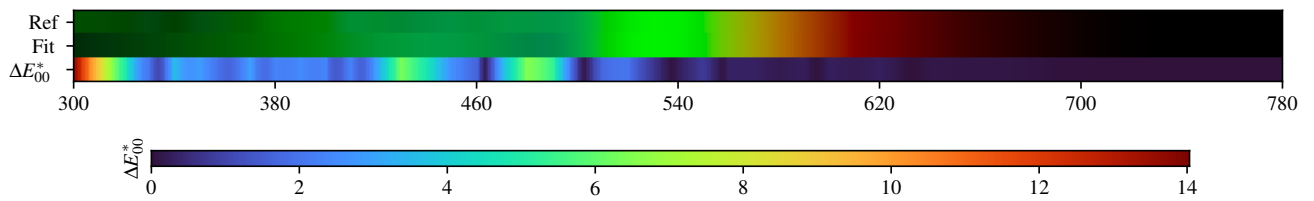
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.39$	$\Delta E = 0.33$	$\Delta E = 0.62$	$\Delta E = 0.29$	$\Delta E = 0.13$	$\Delta E = 0.33$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.30$	$\Delta E = 0.11$	$\Delta E = 0.37$	$\Delta E = 0.51$	$\Delta E = 0.29$	$\Delta E = 0.20$	$\Delta E = 0.20$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.11$	$\Delta E = 0.25$	$\Delta E = 0.19$	$\Delta E = 0.37$	$\Delta E = 0.31$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.29$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.43$	$\Delta E = 0.25$	$\Delta E = 0.52$	$\Delta E = 0.27$	$\Delta E = 0.44$	$\Delta E = 0.57$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.28$	$\Delta E = 0.16$	$\Delta E = 0.48$	$\Delta E = 0.08$	$\Delta E = 0.49$	$\Delta E = 0.63$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.14$

HERPIGRE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.25$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.43$	$\Delta E = 0.09$	$\Delta E = 0.40$	$\Delta E = 0.15$	$\Delta E = 0.28$	$\Delta E = 0.53$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.42$	$\Delta E = 0.09$	$\Delta E = 0.23$	$\Delta E = 0.47$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.30$	$\Delta E = 0.32$	$\Delta E = 0.25$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.39$	$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.25$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.34$	$\Delta E = 0.24$	$\Delta E = 0.45$	$\Delta E = 0.15$	$\Delta E = 0.41$	$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.43$	$\Delta E = 0.15$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.23$	$\Delta E = 0.46$	$\Delta E = 0.06$	$\Delta E = 0.43$	$\Delta E = 0.29$	$\Delta E = 0.35$	$\Delta E = 0.53$	$\Delta E = 0.10$

HERPIGRE - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.037354	0.035281	0.032787	0.036977	0.032179	0.028129	0.029791	0.033046	0.032880	0.047519	0.090181
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.204528	0.389484	0.548027	0.613964	0.608954	0.567639	0.496299	0.409479	0.319525	0.239702	0.164633
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.111315	0.083699	0.074448	0.071298	0.068885	0.069411	0.076458	0.091602	0.113911	0.135206	0.147132
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.151912	0.145485	0.150539	0.172919	0.214059	0.255730	0.269724	0.280329			

2 Gaussians max

Scaling factor: 462.67708581843914

Gaussians:

Weight	Mean		Covariance			
0.238418779	506.699862259	600.188234037	14331.398597001	192.164692159	192.164692159	14930.397725447
0.761581221	426.637311723	528.306255050	2619.214015478	45.210028956	45.210028956	600.702233417

4 Gaussians max

Scaling factor: 456.52182907112245

Gaussians:

Weight	Mean		Covariance			
0.060056127	537.564126204	438.352202445	14008.816898817	922.481565045	922.481565045	2525.747630713
0.796815610	427.197952435	528.991684073	2770.958687962	61.849948738	61.849948738	641.318296722
0.056524741	620.110319514	697.005688008	9131.564637231	-227.631482578	-227.631482578	4172.771386627
0.086603522	439.950232007	674.565396194	6073.534799902	-412.703417975	-412.703417975	5006.093595021

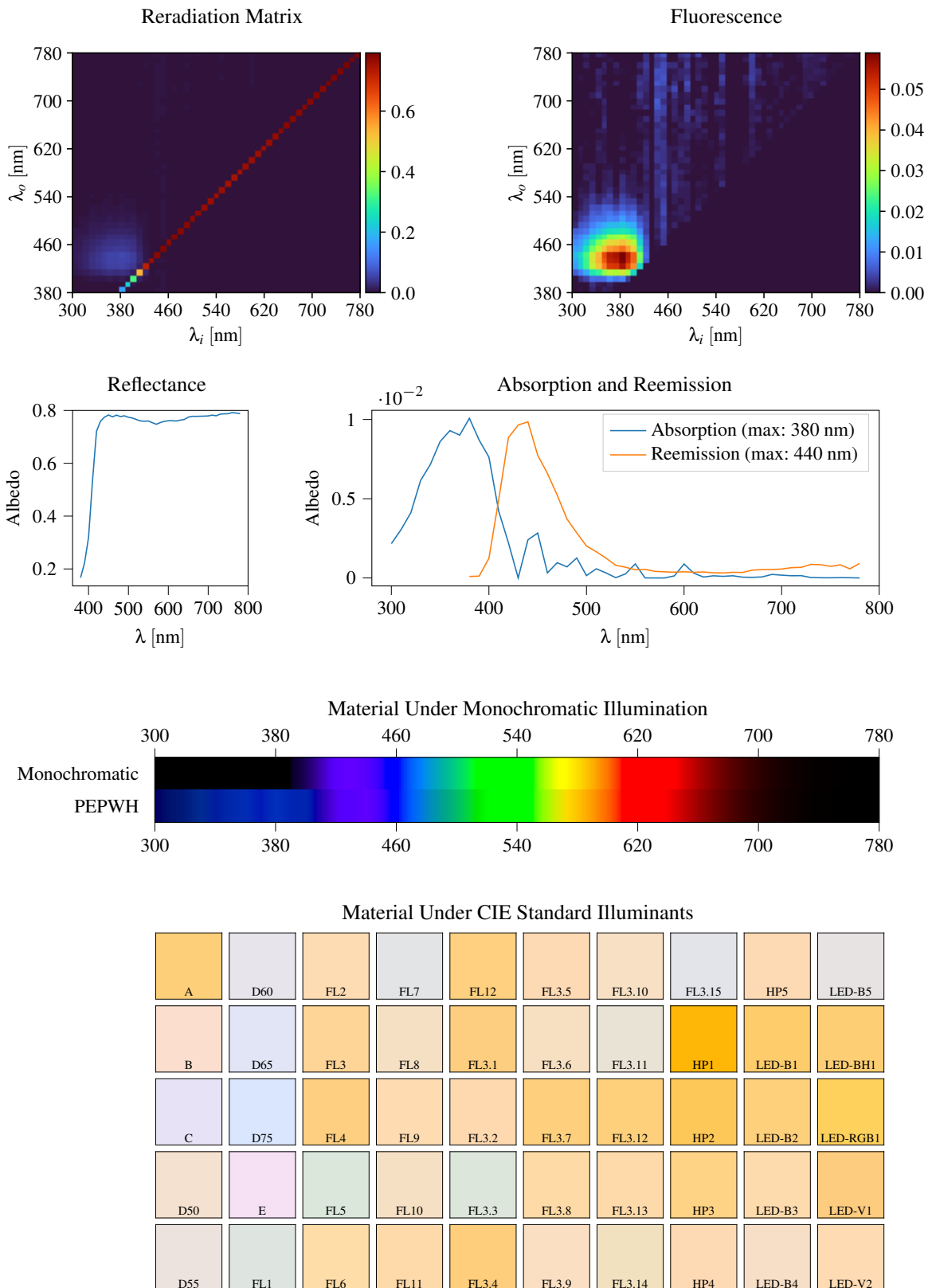
8 Gaussians max

Scaling factor: 453.84159542841945

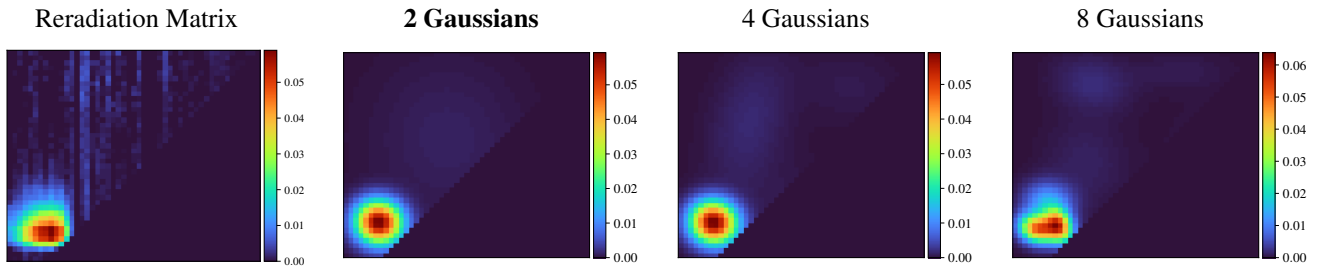
Gaussians:

Weight	Mean		Covariance			
0.055262125	530.053445156	432.834698845	13283.400312576	453.017463831	453.017463831	2111.505184859
0.307409568	396.289648534	543.153991257	3272.709335989	667.740958638	667.740958638	995.223307747
0.506877300	445.616772237	523.112440894	1511.244855286	105.176326834	105.176326834	457.254502849
0.016964103	617.748390505	563.153063685	8528.855892251	-70.539798307	-70.539798307	3494.612316087
0.110920923	515.994728348	709.501779234	15455.908315919	150.263357018	150.263357018	2653.903105312

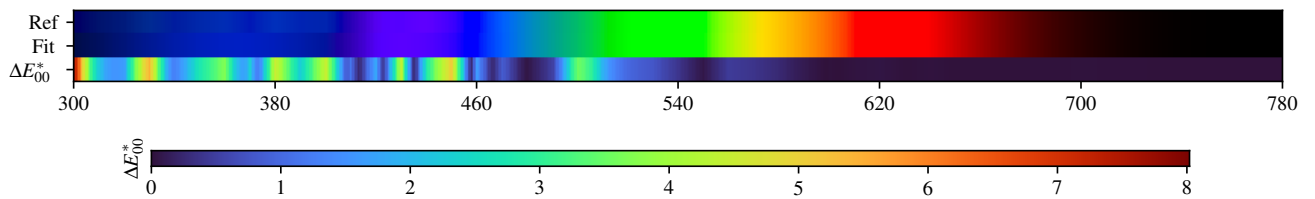
3.27. PEPWH



PEPWH - Weighted Expectation-Maximization - 2 Gaussians



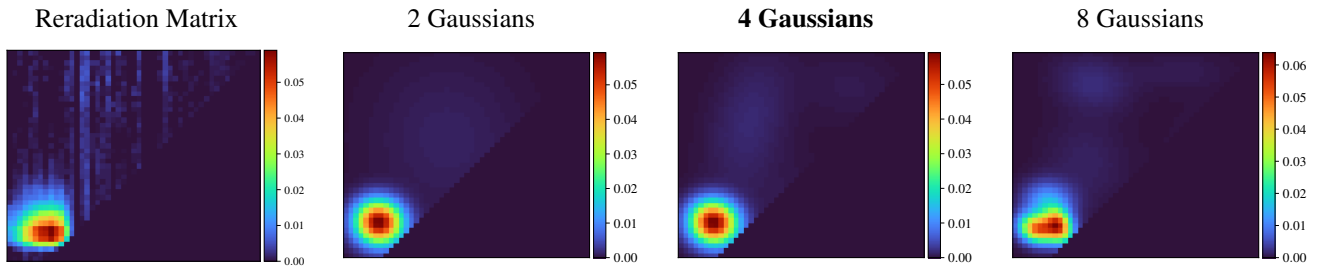
Fitted Material Under Monochromatic Illumination



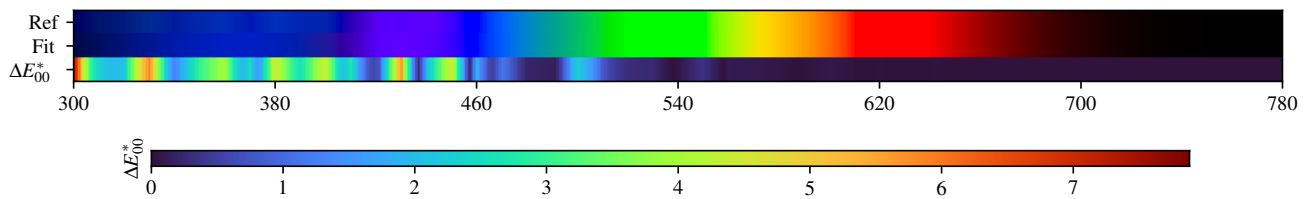
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.25$	D60 $\Delta E = 1.16$	FL2 $\Delta E = 0.41$	FL7 $\Delta E = 0.87$	FL12 $\Delta E = 0.18$	FL3.5 $\Delta E = 0.32$	FL3.10 $\Delta E = 0.52$	FL3.15 $\Delta E = 0.89$	HP5 $\Delta E = 0.48$	LED-B5 $\Delta E = 0.98$
B $\Delta E = 0.71$	D65 $\Delta E = 1.29$	FL3 $\Delta E = 0.28$	FL8 $\Delta E = 0.58$	FL3.1 $\Delta E = 0.20$	FL3.6 $\Delta E = 0.55$	FL3.11 $\Delta E = 0.73$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.27$
C $\Delta E = 0.87$	D75 $\Delta E = 1.17$	FL4 $\Delta E = 0.21$	FL9 $\Delta E = 0.34$	FL3.2 $\Delta E = 0.33$	FL3.7 $\Delta E = 0.17$	FL3.12 $\Delta E = 0.18$	HP2 $\Delta E = 0.20$	LED-B2 $\Delta E = 0.24$	LED-RGB1 $\Delta E = 0.20$
D50 $\Delta E = 0.96$	E $\Delta E = 0.85$	FL5 $\Delta E = 0.68$	FL10 $\Delta E = 0.57$	FL3.3 $\Delta E = 0.72$	FL3.8 $\Delta E = 0.32$	FL3.13 $\Delta E = 0.27$	HP3 $\Delta E = 0.27$	LED-B3 $\Delta E = 0.45$	LED-V1 $\Delta E = 0.23$
D55 $\Delta E = 1.11$	FL1 $\Delta E = 0.76$	FL6 $\Delta E = 0.39$	FL11 $\Delta E = 0.32$	FL3.4 $\Delta E = 0.17$	FL3.9 $\Delta E = 0.55$	FL3.14 $\Delta E = 0.53$	HP4 $\Delta E = 0.50$	LED-B4 $\Delta E = 0.77$	LED-V2 $\Delta E = 0.44$

PEPWH - Weighted Expectation-Maximization - 4 Gaussians



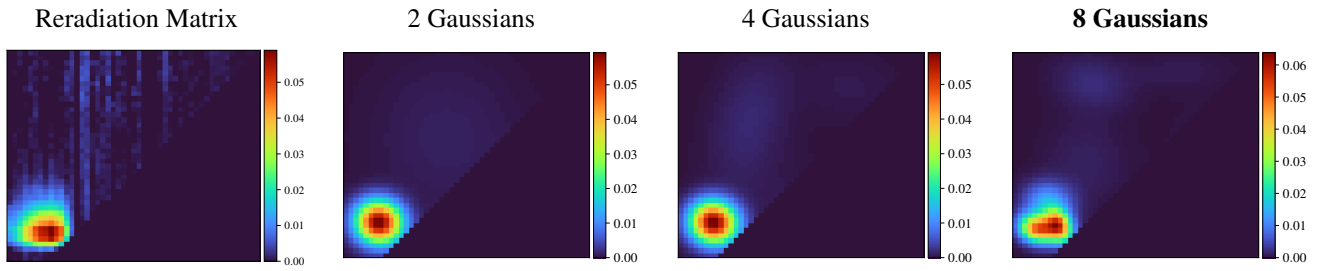
Fitted Material Under Monochromatic Illumination



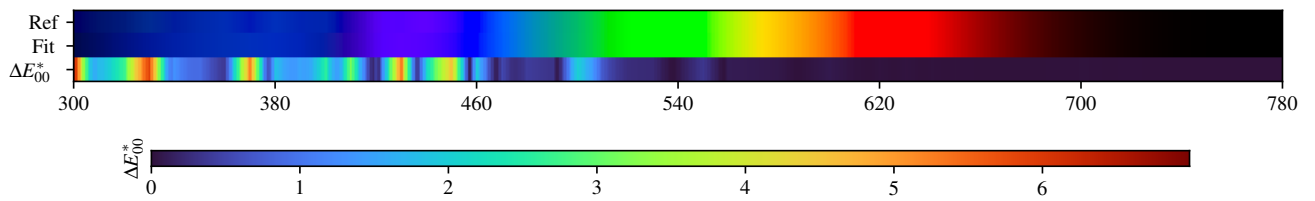
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 1.02$	FL2 $\Delta E = 0.20$	FL7 $\Delta E = 0.58$	FL12 $\Delta E = 0.10$	FL3.5 $\Delta E = 0.18$	FL3.10 $\Delta E = 0.35$	FL3.15 $\Delta E = 0.63$	HP5 $\Delta E = 0.35$	LED-B5 $\Delta E = 0.77$
B $\Delta E = 0.56$	D65 $\Delta E = 1.16$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.32$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.31$	FL3.11 $\Delta E = 0.49$	HP1 $\Delta E = 0.01$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.73$	D75 $\Delta E = 1.11$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.17$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.79$	E $\Delta E = 0.78$	FL5 $\Delta E = 0.38$	FL10 $\Delta E = 0.38$	FL3.3 $\Delta E = 0.39$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.33$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.96$	FL1 $\Delta E = 0.46$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.23$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.37$	FL3.14 $\Delta E = 0.24$	HP4 $\Delta E = 0.33$	LED-B4 $\Delta E = 0.56$	LED-V2 $\Delta E = 0.28$

PEPWH - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.19$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.19$	FL3.15 $\Delta E = 0.09$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.26$
B $\Delta E = 0.06$	D65 $\Delta E = 0.19$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.11$	D75 $\Delta E = 0.18$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.02$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.01$
D50 $\Delta E = 0.10$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.11$	FL10 $\Delta E = 0.22$	FL3.3 $\Delta E = 0.05$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.10$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.16$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.22$

PEPWH - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.166913	0.222915	0.319352	0.534952	0.721305	0.759511	0.774640	0.782741	0.775848	0.782172	0.776921
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.779661	0.774169	0.771383	0.765694	0.760218	0.759279	0.759998	0.753632	0.747664	0.754159	0.758696
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.760966	0.761063	0.760031	0.763399	0.765714	0.774643	0.777790	0.777630	0.778084	0.778475	0.779209
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.782298	0.779760	0.786060	0.787110	0.787661	0.792147	0.790322	0.787760			

2 Gaussians

Scaling factor: 449.4390438311513

Gaussians:

Weight	Mean	Covariance
0.234819956	501.315809887	611.376346891
0.765180044	365.560001392	446.025126006

4 Gaussians

Scaling factor: 443.73494561200135

Gaussians:

Weight	Mean	Covariance
0.038846982	637.722390258	713.834770477
0.132976282	436.279309478	647.217808293
0.070502775	537.482515409	474.020668762
0.757673961	365.270273338	445.624626180

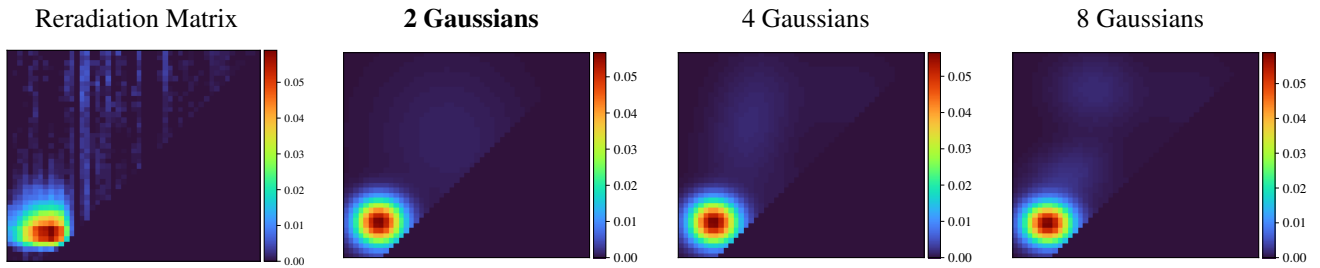
8 Gaussians

Scaling factor: 435.75779424651165

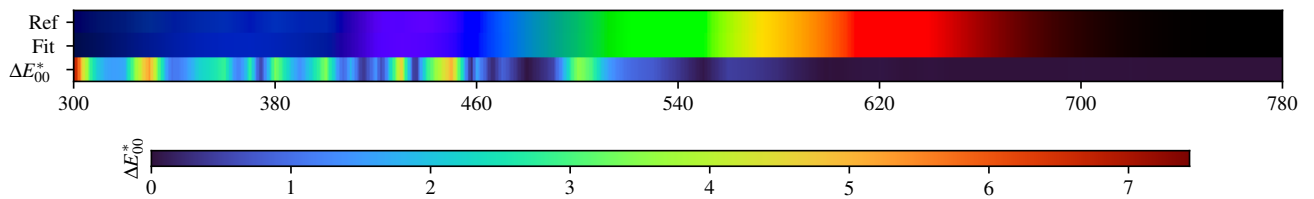
Gaussians:

Weight	Mean	Covariance
0.024219195	625.527653984	745.685866383
0.184975853	365.565754241	483.488155339
0.041206157	520.801800305	415.107582947
0.066569118	453.207907281	722.932865378
0.318454354	345.428287255	433.218086746
0.258177285	387.296841604	439.242932102
0.077717166	440.099172371	564.190234831
0.028680872	656.884490691	589.917767722

PEPWH - Weighted variational Bayesian inference - 2 Gaussians



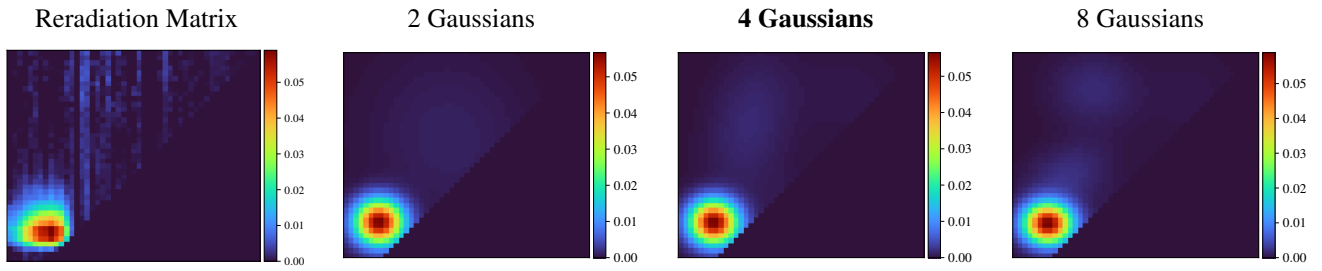
Fitted Material Under Monochromatic Illumination



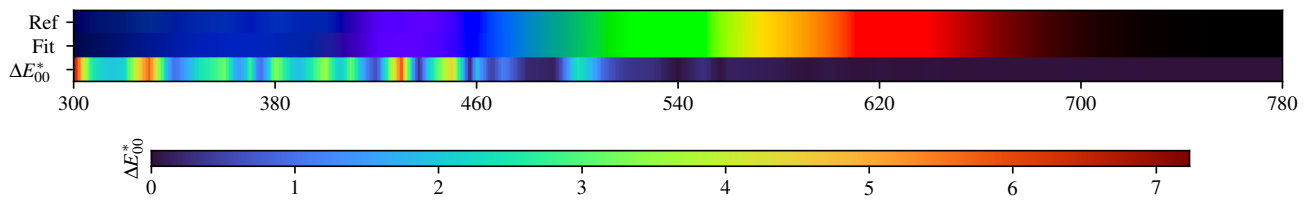
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.23$	D60 $\Delta E = 0.95$	FL2 $\Delta E = 0.40$	FL7 $\Delta E = 0.80$	FL12 $\Delta E = 0.18$	FL3.5 $\Delta E = 0.32$	FL3.10 $\Delta E = 0.54$	FL3.15 $\Delta E = 0.76$	HP5 $\Delta E = 0.51$	LED-B5 $\Delta E = 0.99$
B $\Delta E = 0.65$	D65 $\Delta E = 1.03$	FL3 $\Delta E = 0.28$	FL8 $\Delta E = 0.56$	FL3.1 $\Delta E = 0.20$	FL3.6 $\Delta E = 0.53$	FL3.11 $\Delta E = 0.74$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.29$
C $\Delta E = 0.75$	D75 $\Delta E = 0.91$	FL4 $\Delta E = 0.21$	FL9 $\Delta E = 0.34$	FL3.2 $\Delta E = 0.32$	FL3.7 $\Delta E = 0.17$	FL3.12 $\Delta E = 0.17$	HP2 $\Delta E = 0.20$	LED-B2 $\Delta E = 0.25$	LED-RGB1 $\Delta E = 0.20$
D50 $\Delta E = 0.82$	E $\Delta E = 0.61$	FL5 $\Delta E = 0.63$	FL10 $\Delta E = 0.58$	FL3.3 $\Delta E = 0.67$	FL3.8 $\Delta E = 0.32$	FL3.13 $\Delta E = 0.26$	HP3 $\Delta E = 0.29$	LED-B3 $\Delta E = 0.47$	LED-V1 $\Delta E = 0.27$
D55 $\Delta E = 0.92$	FL1 $\Delta E = 0.71$	FL6 $\Delta E = 0.38$	FL11 $\Delta E = 0.33$	FL3.4 $\Delta E = 0.17$	FL3.9 $\Delta E = 0.56$	FL3.14 $\Delta E = 0.52$	HP4 $\Delta E = 0.51$	LED-B4 $\Delta E = 0.79$	LED-V2 $\Delta E = 0.45$

PEPWH - Weighted variational Bayesian inference - 4 Gaussians



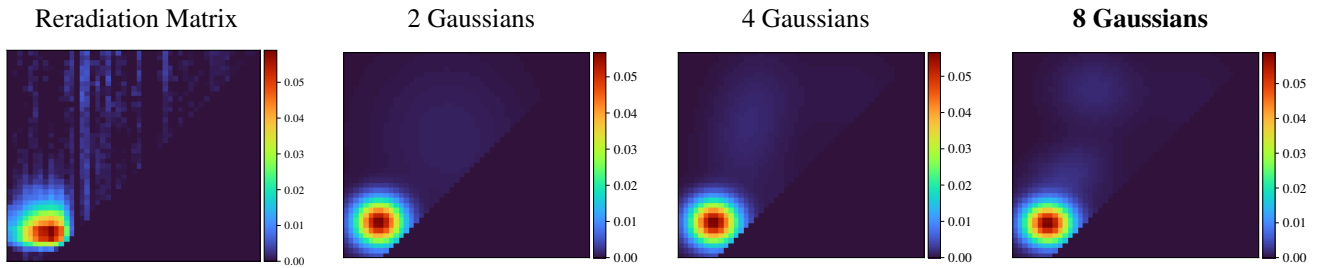
Fitted Material Under Monochromatic Illumination



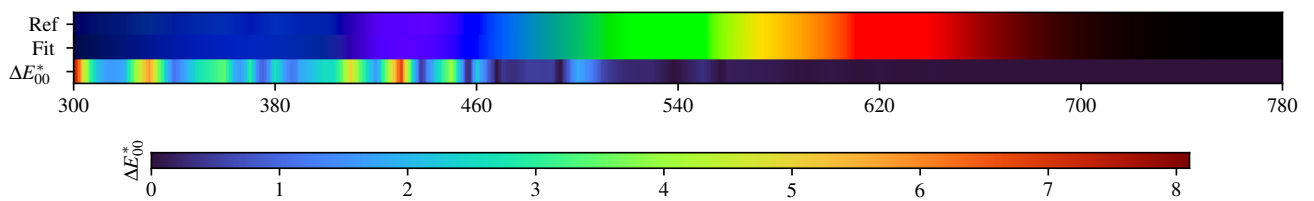
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.90$	FL2 $\Delta E = 0.25$	FL7 $\Delta E = 0.63$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.24$	FL3.10 $\Delta E = 0.43$	FL3.15 $\Delta E = 0.62$	HP5 $\Delta E = 0.44$	LED-B5 $\Delta E = 0.88$
B $\Delta E = 0.57$	D65 $\Delta E = 1.00$	FL3 $\Delta E = 0.15$	FL8 $\Delta E = 0.39$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.38$	FL3.11 $\Delta E = 0.59$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.15$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 0.70$	D75 $\Delta E = 0.94$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.23$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.73$	E $\Delta E = 0.61$	FL5 $\Delta E = 0.44$	FL10 $\Delta E = 0.45$	FL3.3 $\Delta E = 0.46$	FL3.8 $\Delta E = 0.24$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.21$	LED-B3 $\Delta E = 0.40$	LED-V1 $\Delta E = 0.20$
D55 $\Delta E = 0.85$	FL1 $\Delta E = 0.53$	FL6 $\Delta E = 0.21$	FL11 $\Delta E = 0.27$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.45$	FL3.14 $\Delta E = 0.33$	HP4 $\Delta E = 0.40$	LED-B4 $\Delta E = 0.65$	LED-V2 $\Delta E = 0.36$

PEPWH - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.28$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.22$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.24$	FL3.15 $\Delta E = 0.37$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.41$
B $\Delta E = 0.12$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.01$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.39$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.22$	D75 $\Delta E = 0.23$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.01$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.20$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.27$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.01$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.26$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.26$	LED-V2 $\Delta E = 0.12$

PEPWH - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.166913	0.222915	0.319352	0.534952	0.721305	0.759511	0.774640	0.782741	0.775848	0.782172	0.776921
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.779661	0.774169	0.771383	0.765694	0.760218	0.759279	0.759998	0.753632	0.747664	0.754159	0.758696
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.760966	0.761063	0.760031	0.763399	0.765714	0.774643	0.777790	0.777630	0.778084	0.778475	0.779209
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.782298	0.779760	0.786060	0.787110	0.787661	0.792147	0.790322	0.787760			

2 Gaussians max

Scaling factor: 450.8673234033456

Gaussians:

Weight	Mean		Covariance			
0.767823121	365.925603460	446.367472329	1047.147412216	-4.356497353	-4.356497353	882.222904683
0.232176879	502.714542430	612.879489652	11697.687433375	-377.613595012	-377.613595012	13914.487670207

4 Gaussians max

Scaling factor: 445.68209336712886

Gaussians:

Weight	Mean		Covariance			
0.758573207	365.644368140	445.933885866	1036.117716301	-9.917473465	-9.917473465	853.183875923
0.062300582	541.844558721	467.449809494	11830.437313976	-477.212787163	-477.212787163	3935.251522049
0.134033190	436.438878138	643.738043874	3284.843309275	1390.223796746	1390.223796746	8705.254953191
0.045093021	627.744334893	699.265380584	6127.914288266	-1.304210521	-1.304210521	4260.756811193

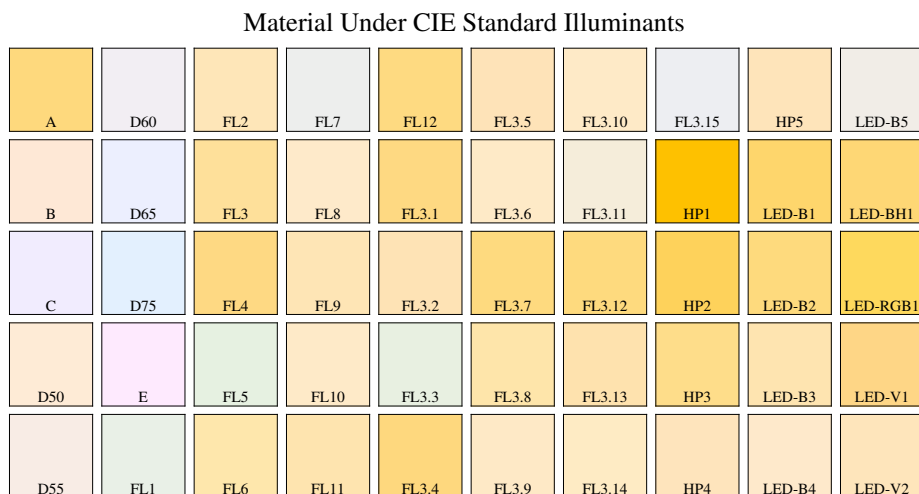
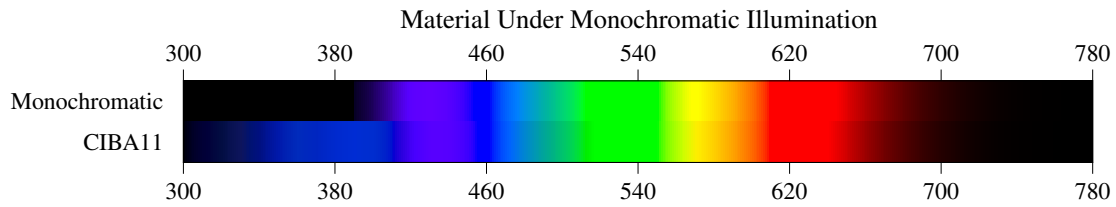
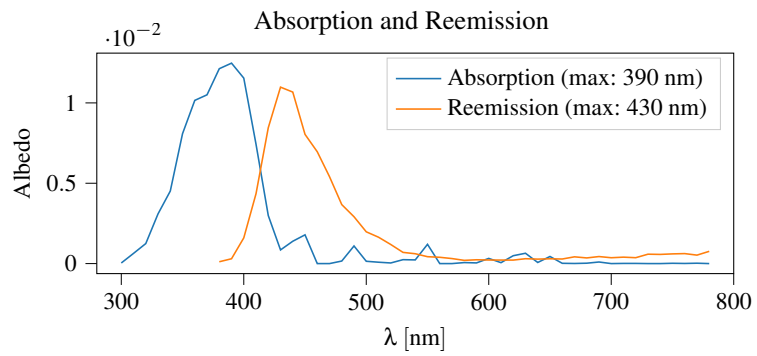
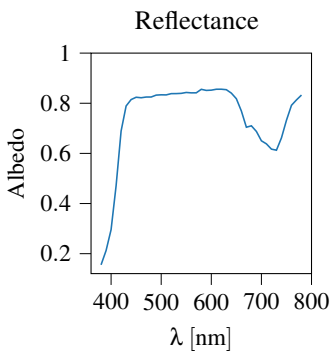
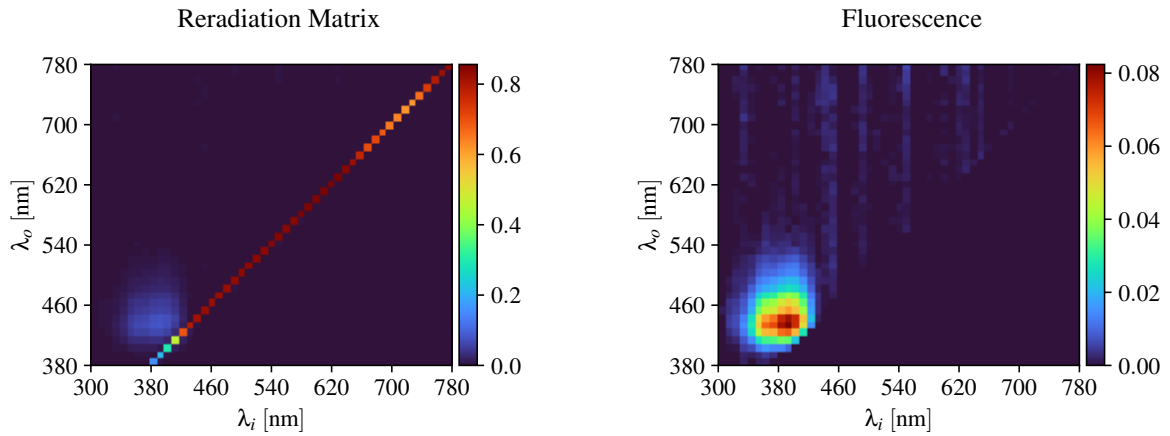
8 Gaussians max

Scaling factor: 442.83735217224466

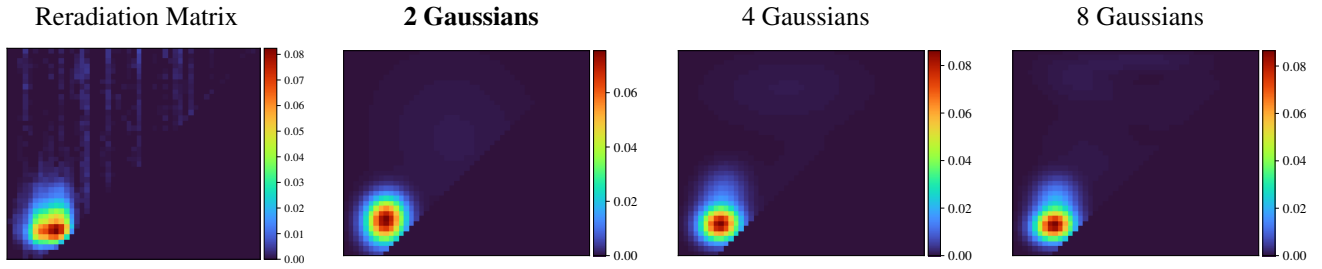
Gaussians:

Weight	Mean		Covariance			
0.727762349	365.588566802	443.707670847	1020.718965814	-3.200352917	-3.200352917	726.597266785
0.025870697	492.797453819	439.959072538	3125.541400735	503.699592381	503.699592381	3028.499934627
0.029693898	634.310084287	481.612145991	5635.572931456	-902.871859964	-902.871859964	5084.825618611
0.093823810	399.195401523	532.761502902	3211.699890615	950.933331695	950.933331695	2268.534148483
0.037568924	642.225355651	699.830902984	4971.468734565	497.910167199	497.910167199	4224.070805052
0.085179635	455.572824580	709.790191017	3412.904944357	-7.603448534	-7.603448534	2573.648429027

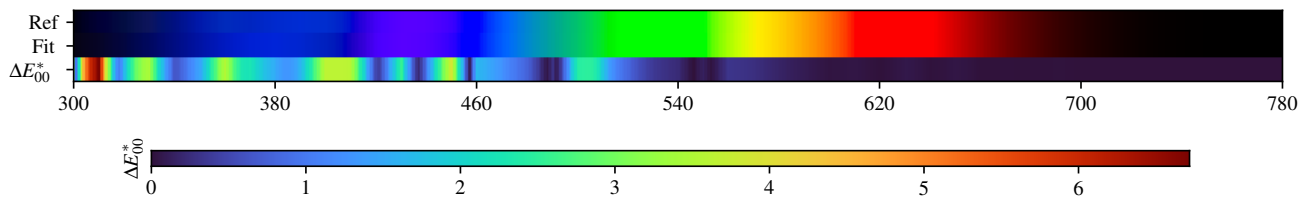
3.28. CIBA11



CIBA11 - Weighted Expectation-Maximization - 2 Gaussians



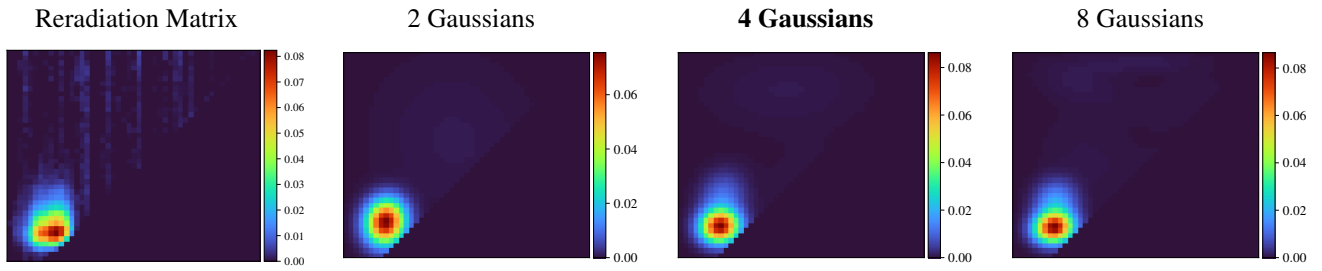
Fitted Material Under Monochromatic Illumination



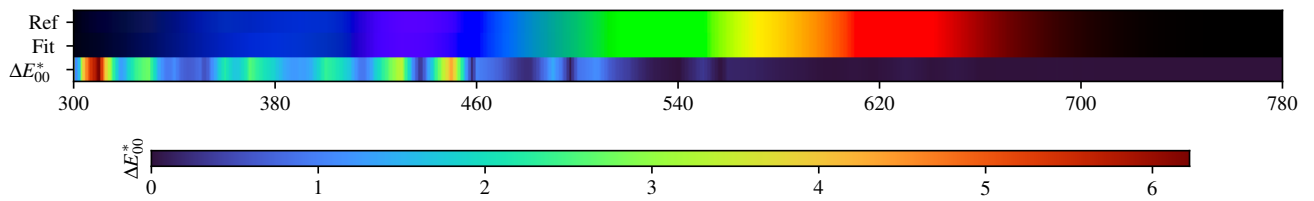
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.59$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.54$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.17$	FL3.10 $\Delta E = 0.31$	FL3.15 $\Delta E = 0.50$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.69$
B $\Delta E = 0.35$	D65 $\Delta E = 0.68$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.31$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.29$	FL3.11 $\Delta E = 0.44$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.54$	D75 $\Delta E = 0.64$	FL4 $\Delta E = 0.13$	FL9 $\Delta E = 0.19$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.44$	E $\Delta E = 0.58$	FL5 $\Delta E = 0.46$	FL10 $\Delta E = 0.35$	FL3.3 $\Delta E = 0.48$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.31$	LED-V1 $\Delta E = 0.44$
D55 $\Delta E = 0.52$	FL1 $\Delta E = 0.50$	FL6 $\Delta E = 0.24$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.33$	FL3.14 $\Delta E = 0.29$	HP4 $\Delta E = 0.25$	LED-B4 $\Delta E = 0.50$	LED-V2 $\Delta E = 0.50$

CIBA11 - Weighted Expectation-Maximization - 4 Gaussians



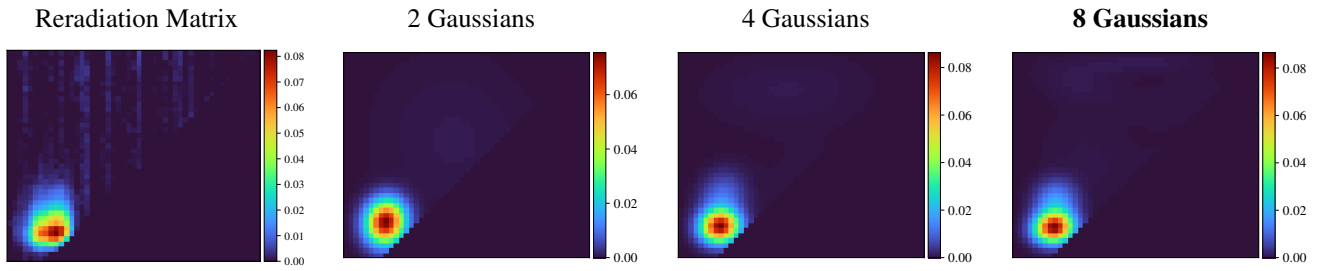
Fitted Material Under Monochromatic Illumination



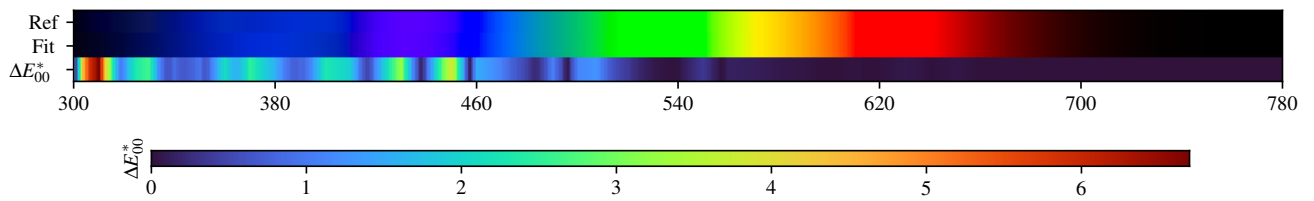
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.26$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.32$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.19$	FL3.15 $\Delta E = 0.35$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.44$
B $\Delta E = 0.16$	D65 $\Delta E = 0.30$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.29$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.29$	D75 $\Delta E = 0.30$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.01$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.17$	E $\Delta E = 0.38$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.22$	FL3.3 $\Delta E = 0.15$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.56$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.31$	LED-B4 $\Delta E = 0.28$	LED-V2 $\Delta E = 0.64$

CIBA11 - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.36$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.38$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.31$
B $\Delta E = 0.21$	D65 $\Delta E = 0.23$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.23$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.21$	E $\Delta E = 0.19$	FL5 $\Delta E = 0.18$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.20$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.60$
D55 $\Delta E = 0.26$	FL1 $\Delta E = 0.21$	FL6 $\Delta E = 0.09$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.35$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.69$

CIBA11 - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.155523	0.212407	0.295811	0.470617	0.689232	0.789131	0.814669	0.823945	0.821924	0.824777	0.824886
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.832450	0.833637	0.833291	0.838302	0.838475	0.839435	0.843016	0.841435	0.841575	0.855577	0.851221
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.852203	0.855842	0.855959	0.854073	0.840362	0.818058	0.769089	0.704372	0.709970	0.687528	0.650220
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.637970	0.616997	0.612710	0.661800	0.732234	0.791836	0.813327	0.832677			

2 Gaussians

Scaling factor: 436.79670961004985

Gaussians:

Weight	Mean		Covariance			
0.185786358	515.813966154	608.610846284	12990.616018713	-1039.680310948	-1039.680310948	14375.028638103
0.814213642	378.507197332	446.584188955	654.996222163	46.476005407	46.476005407	852.165954744

4 Gaussians

Scaling factor: 428.68011314909984

Gaussians:

Weight	Mean		Covariance			
0.094221493	510.596520457	709.387374400	13348.508948417	546.928351540	546.928351540	2890.288326342
0.657742803	378.016712221	437.805772365	639.208336419	26.032626202	26.032626202	463.276581752
0.067331926	567.468441474	494.484441297	8460.292557338	-356.099811963	-356.099811963	5853.793166396
0.180703779	382.179284084	490.243255191	835.261023108	117.648161739	117.648161739	1182.307537220

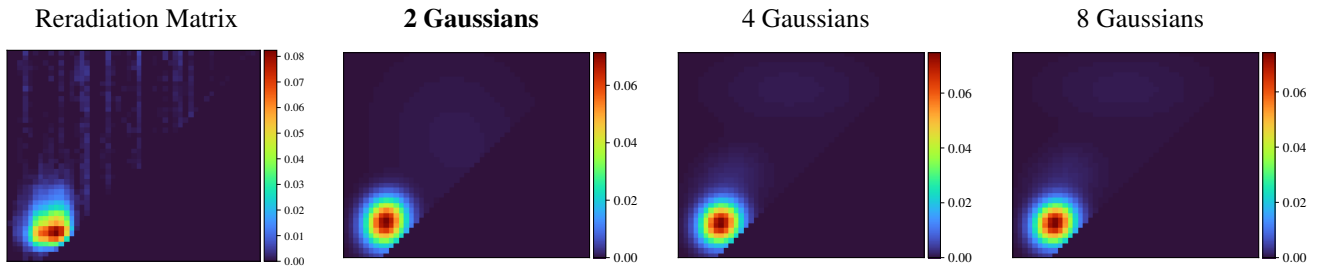
8 Gaussians

Scaling factor: 425.44930919947893

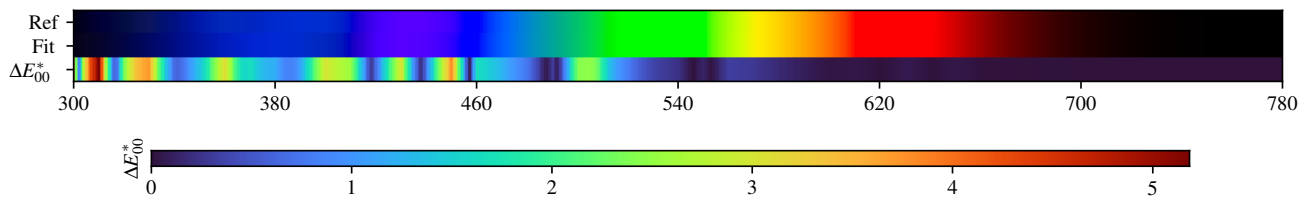
Gaussians:

Weight	Mean		Covariance			
0.021318800	546.353152309	762.716493738	6037.932626440	146.109810928	146.109810928	214.741670063
0.602816197	377.529466692	435.440797500	634.392898587	30.272781244	30.272781244	391.587381654
0.029374280	622.847807178	530.570716912	4725.436767586	-247.450591104	-247.450591104	4176.571020475
0.025896340	632.199406818	692.744289579	6539.293809230	1406.773382757	1406.773382757	1956.608678980
0.042396038	442.533130802	571.983746679	4736.951597235	-1463.955849131	-1463.955849131	3668.769097206
0.222002389	381.013412480	482.078993082	719.335575409	26.486097485	26.486097485	850.227473117
0.032519107	427.678048388	722.200209989	3783.856489592	-762.206984856	-762.206984856	1190.217719492
0.023676848	543.393532074	407.700033321	9607.815101885	66.251414946	66.251414946	449.128761684

CIBA11 - Weighted variational Bayesian inference - 2 Gaussians



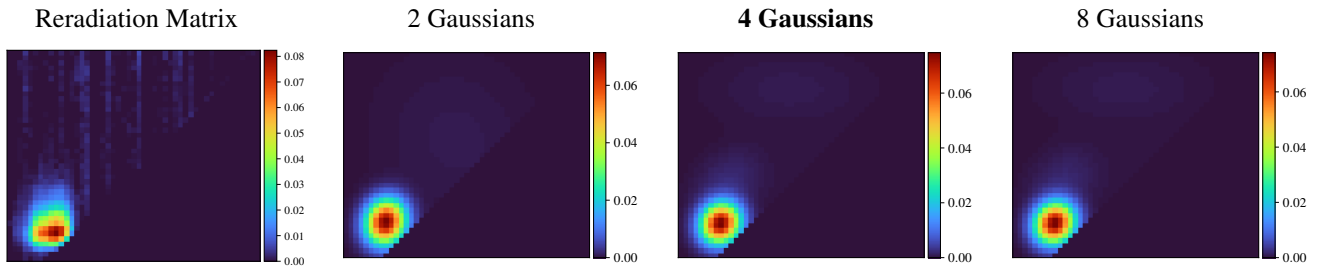
Fitted Material Under Monochromatic Illumination



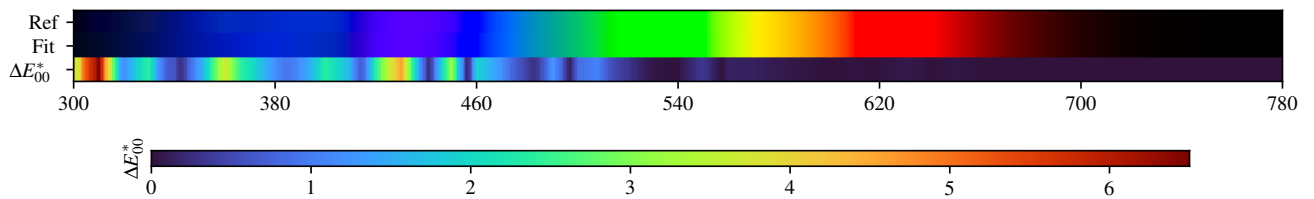
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.40$	FL2 $\Delta E = 0.20$	FL7 $\Delta E = 0.41$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.31$	FL3.15 $\Delta E = 0.39$	HP5 $\Delta E = 0.19$	LED-B5 $\Delta E = 0.70$
B $\Delta E = 0.24$	D65 $\Delta E = 0.41$	FL3 $\Delta E = 0.15$	FL8 $\Delta E = 0.26$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.25$	FL3.11 $\Delta E = 0.42$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.37$	D75 $\Delta E = 0.36$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.30$	E $\Delta E = 0.22$	FL5 $\Delta E = 0.37$	FL10 $\Delta E = 0.33$	FL3.3 $\Delta E = 0.40$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.32$	LED-V1 $\Delta E = 0.40$
D55 $\Delta E = 0.35$	FL1 $\Delta E = 0.40$	FL6 $\Delta E = 0.20$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.33$	FL3.14 $\Delta E = 0.26$	HP4 $\Delta E = 0.20$	LED-B4 $\Delta E = 0.51$	LED-V2 $\Delta E = 0.44$

CIBA11 - Weighted variational Bayesian inference - 4 Gaussians



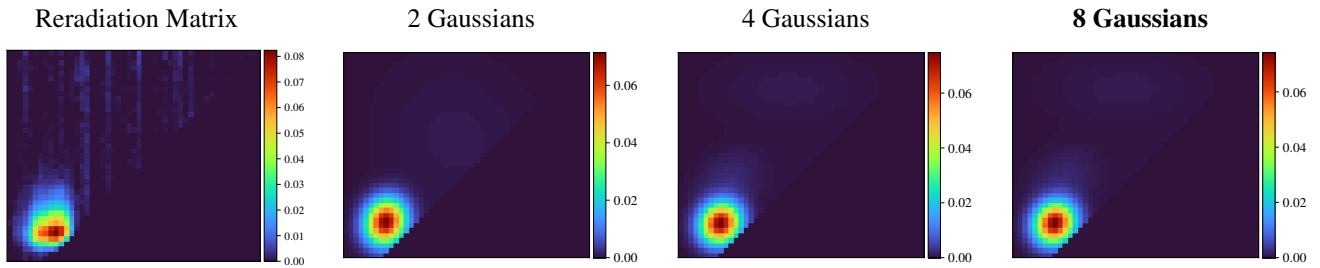
Fitted Material Under Monochromatic Illumination



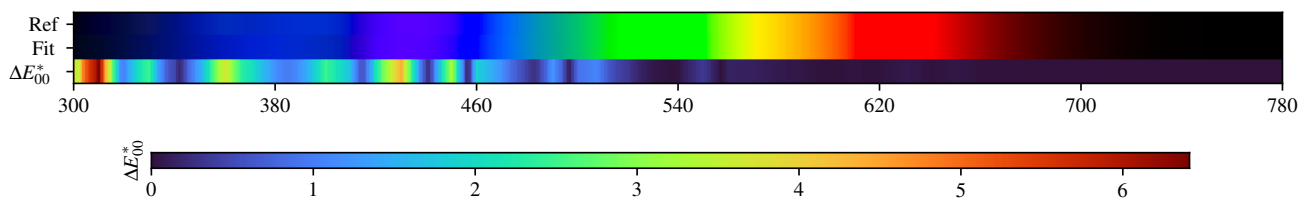
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.21$	FL3.15 $\Delta E = 0.29$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.38$
B $\Delta E = 0.11$	D65 $\Delta E = 0.10$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.18$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.01$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.11$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.13$	FL10 $\Delta E = 0.23$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.40$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.04$	FL11 $\Delta E = 0.15$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.24$	LED-V2 $\Delta E = 0.46$

CIBA11 - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.22$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.26$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.38$
B $\Delta E = 0.09$	D65 $\Delta E = 0.06$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.14$	D75 $\Delta E = 0.03$	FL4 $\Delta E = 0.01$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.08$	E $\Delta E = 0.24$	FL5 $\Delta E = 0.11$	FL10 $\Delta E = 0.23$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.39$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.15$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.25$	LED-V2 $\Delta E = 0.44$

CIBA11 - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.155523	0.212407	0.295811	0.470617	0.689232	0.789131	0.814669	0.823945	0.821924	0.824777	0.824886
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.832450	0.833637	0.833291	0.838302	0.838475	0.839435	0.843016	0.841435	0.841575	0.855577	0.851221
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.852203	0.855842	0.855959	0.854073	0.840362	0.818058	0.769089	0.704372	0.709970	0.687528	0.650220
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.637970	0.616997	0.612710	0.661800	0.732234	0.791836	0.813327	0.832677			

2 Gaussians max

Scaling factor: 437.87953652432077

Gaussians:

Weight	Mean		Covariance			
0.816529448	378.778565105	446.933358812	707.334721193	72.558626142	72.558626142	899.715479175
0.183470552	517.710597566	610.216572718	12938.722899333	-1232.910656771	-1232.910656771	14315.940032122

4 Gaussians max

Scaling factor: 432.100099613899

Gaussians:

Weight	Mean		Covariance			
0.778039310	378.846479811	443.962292069	698.683456047	71.538449096	71.538449096	730.209753536
0.059752790	581.066416307	488.202659278	7417.667806933	307.952928639	307.952928639	5655.092562975
0.070031364	392.056780140	525.678766173	2086.181022544	608.538030370	608.538030370	1879.328604770
0.092176536	515.180332887	711.440671975	13314.077520202	94.631334741	94.631334741	2888.168347840

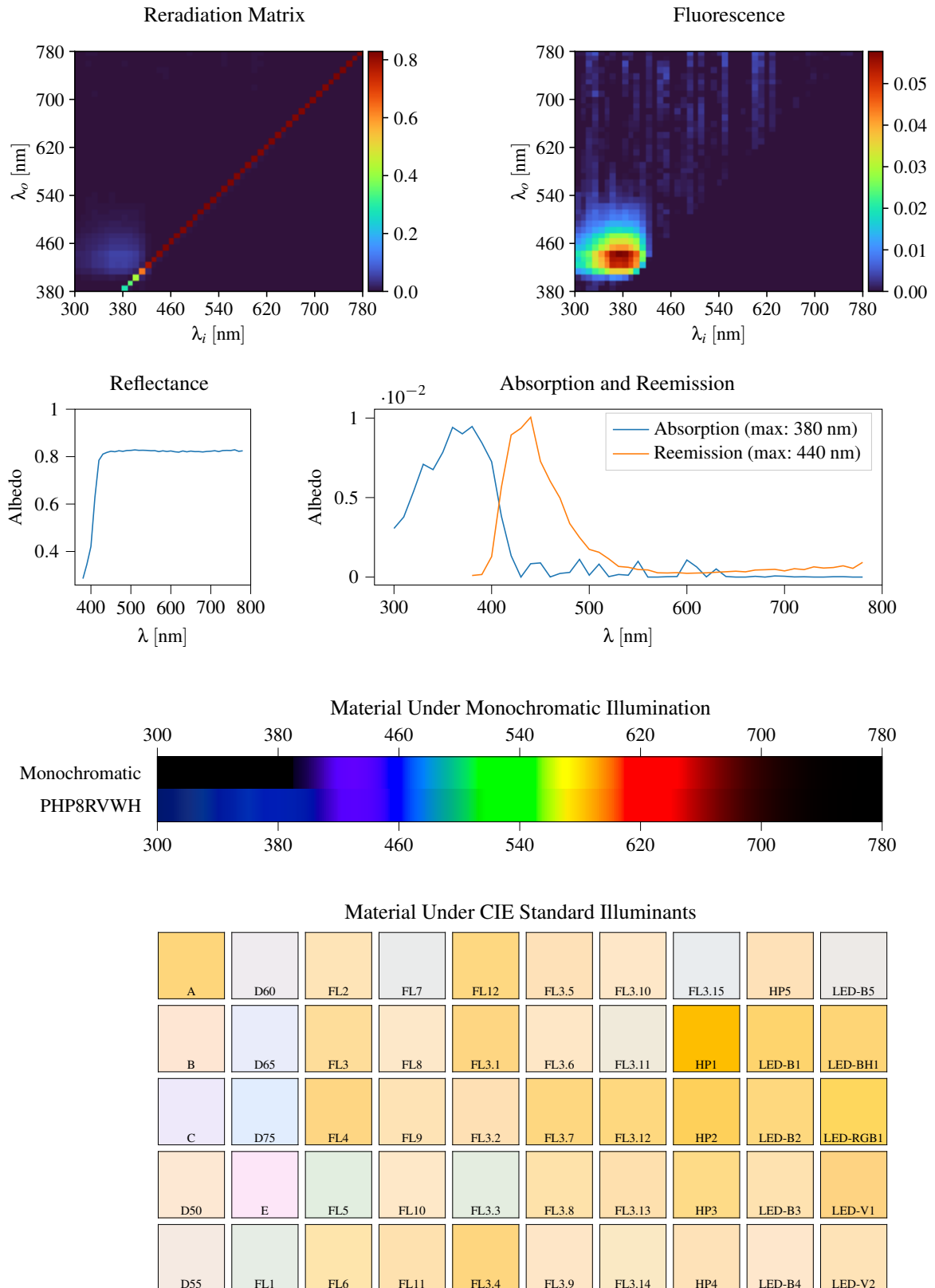
8 Gaussians max

Scaling factor: 433.29080548415607

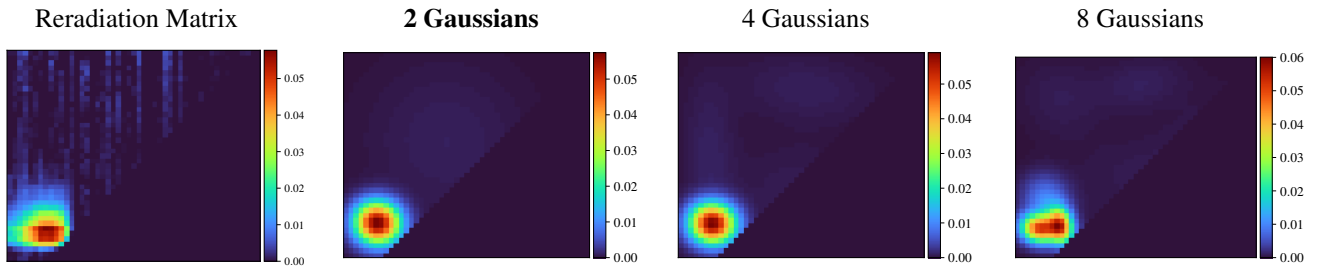
Gaussians:

Weight	Mean		Covariance			
0.785314267	378.828466365	444.398780113	700.862919344	71.487660183	71.487660183	751.238559041
0.060472308	580.556659696	489.250889162	7494.132392017	284.809029076	284.809029076	5740.158747611
0.061923549	393.962369207	530.272389083	2212.202424140	607.826945289	607.826945289	1902.814932613
0.090138651	515.337271559	712.401792286	13324.715137801	80.209622663	80.209622663	2818.564799307

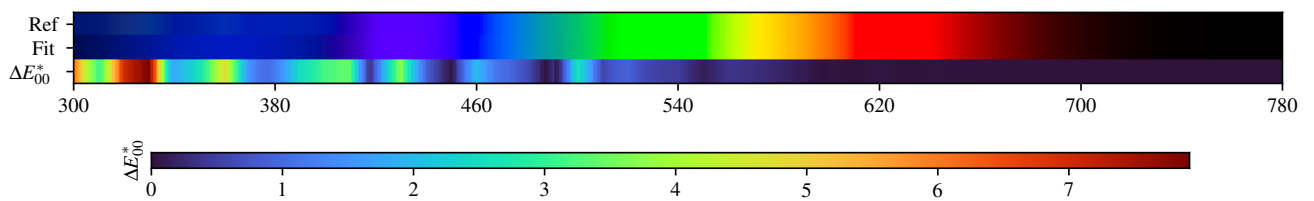
3.29. PHP8RVWH



PHP8RVWH - Weighted Expectation-Maximization - 2 Gaussians



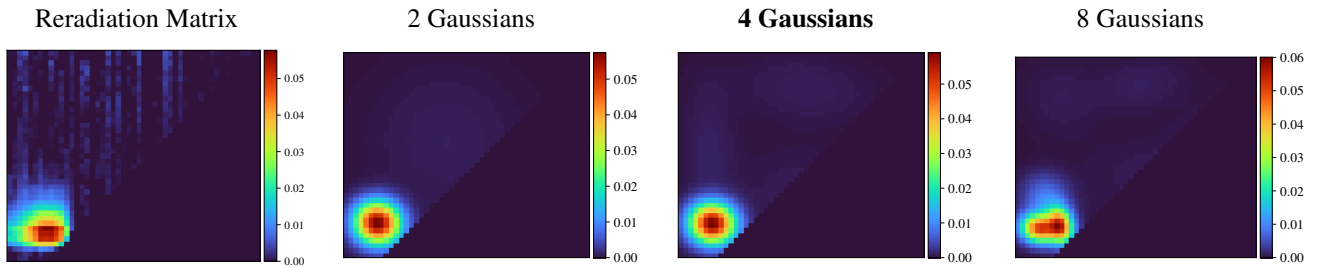
Fitted Material Under Monochromatic Illumination



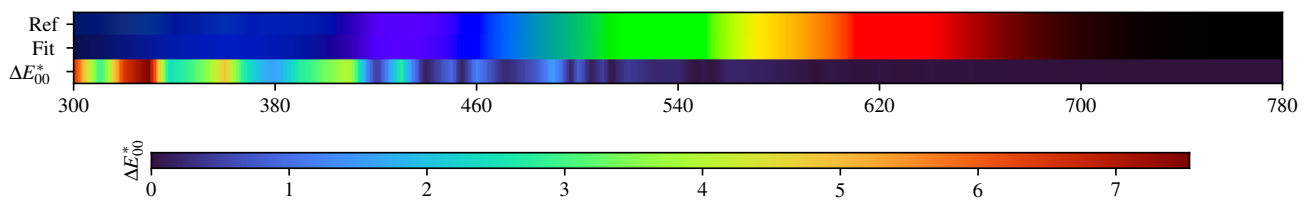
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.81$	FL2 $\Delta E = 0.28$	FL7 $\Delta E = 0.72$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.23$	FL3.10 $\Delta E = 0.33$	FL3.15 $\Delta E = 0.88$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.58$
B $\Delta E = 0.40$	D65 $\Delta E = 0.94$	FL3 $\Delta E = 0.20$	FL8 $\Delta E = 0.39$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.36$	FL3.11 $\Delta E = 0.51$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.69$	D75 $\Delta E = 0.95$	FL4 $\Delta E = 0.15$	FL9 $\Delta E = 0.25$	FL3.2 $\Delta E = 0.23$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.15$
D50 $\Delta E = 0.58$	E $\Delta E = 0.58$	FL5 $\Delta E = 0.61$	FL10 $\Delta E = 0.37$	FL3.3 $\Delta E = 0.60$	FL3.8 $\Delta E = 0.21$	FL3.13 $\Delta E = 0.21$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.71$	FL1 $\Delta E = 0.64$	FL6 $\Delta E = 0.29$	FL11 $\Delta E = 0.20$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.34$	FL3.14 $\Delta E = 0.37$	HP4 $\Delta E = 0.29$	LED-B4 $\Delta E = 0.39$	LED-V2 $\Delta E = 0.31$

PHP8RVWH - Weighted Expectation-Maximization - 4 Gaussians



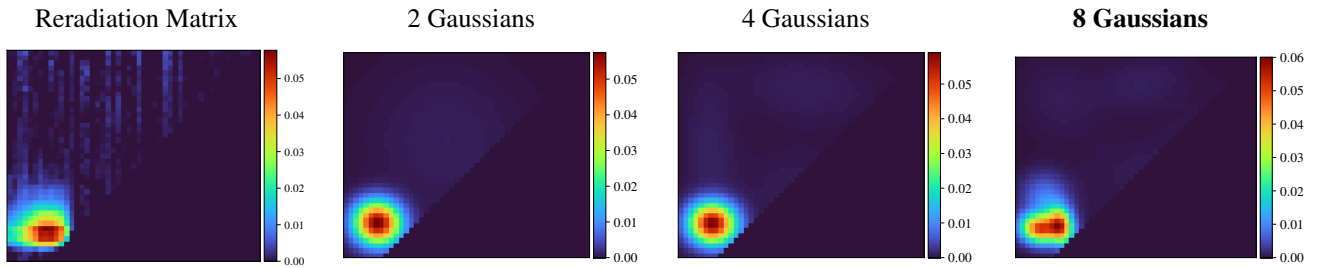
Fitted Material Under Monochromatic Illumination



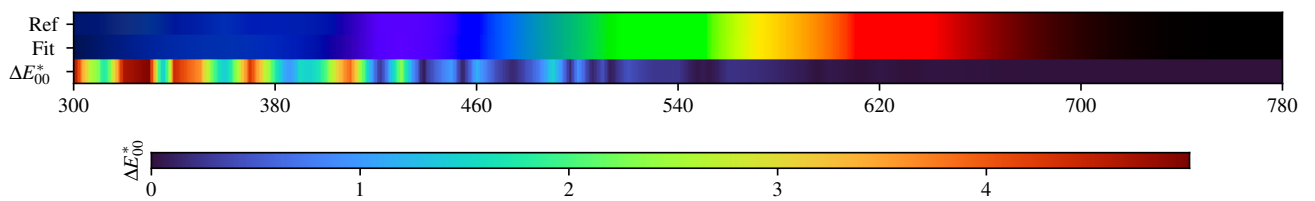
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.49$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.46$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.19$
B $\Delta E = 0.06$	D65 $\Delta E = 0.58$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.07$	D75 $\Delta E = 0.64$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.28$	E $\Delta E = 0.33$	FL5 $\Delta E = 0.08$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.07$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.04$
D55 $\Delta E = 0.41$	FL1 $\Delta E = 0.08$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.11$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.05$

PHP8RVWH - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.04$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.07$	D65 $\Delta E = 0.17$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.05$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.08$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.08$	E $\Delta E = 0.08$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.04$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.03$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.04$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.09$

PHP8RVWH - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.285549	0.346784	0.421115	0.628960	0.784622	0.810719	0.817842	0.822712	0.820716	0.824824	0.822338
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.825891	0.826386	0.828445	0.826555	0.826925	0.826291	0.824913	0.825270	0.821235	0.824571	0.821822
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.824008	0.820542	0.818874	0.823975	0.820342	0.823431	0.821217	0.821356	0.819740	0.821941	0.822856
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825011	0.821428	0.825613	0.826336	0.825848	0.828880	0.822387	0.824584			

2 Gaussians

Scaling factor: 426.71213432362975

Gaussians:

Weight	Mean		Covariance			
0.227228576	498.908941832	606.341277232	13864.207554923	-362.778848800	-362.778848800	13589.778076809
0.772771424	362.846350958	444.822306462	976.117813515	-29.996527651	-29.996527651	831.699708286

4 Gaussians

Scaling factor: 422.3723087477412

Gaussians:

Weight	Mean		Covariance			
0.083213786	548.240751339	712.691100687	10832.115655342	-774.129523941	-774.129523941	2418.439396831
0.754271202	362.884807831	443.628265925	969.877334082	-20.977518035	-20.977518035	754.553464886
0.093983392	532.411136999	503.774946318	8699.635528631	-130.697935307	-130.697935307	5553.438531069
0.068531619	355.910253031	587.404817373	1387.958569123	-343.552326435	-343.552326435	9843.238945407

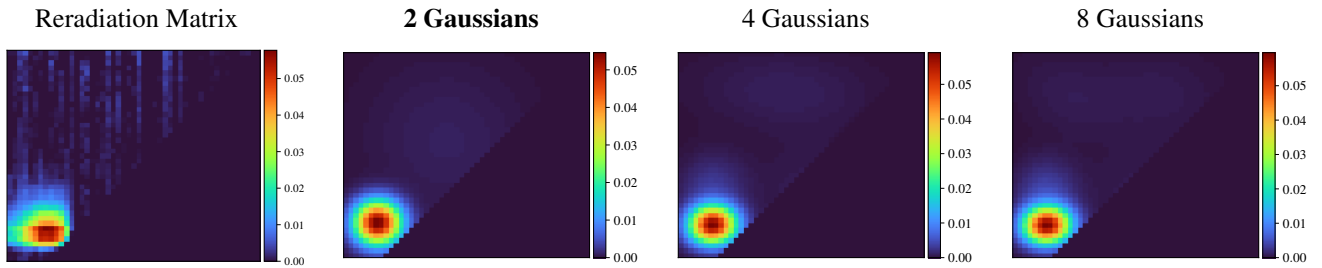
8 Gaussians

Scaling factor: 419.48201951153993

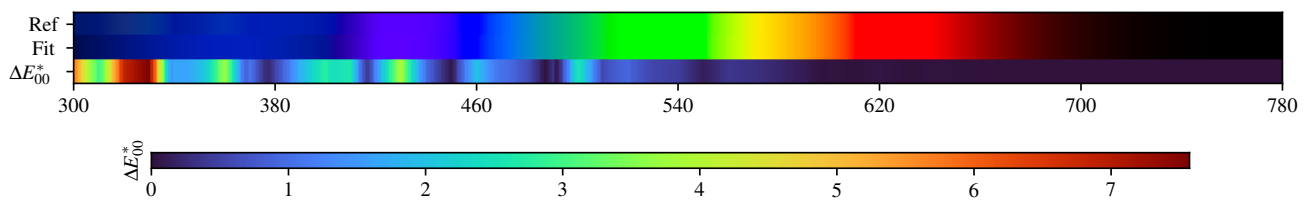
Gaussians:

Weight	Mean		Covariance			
0.021076642	656.969144515	648.052333565	4936.670689236	3131.393396110	3131.393396110	4099.890721032
0.165161331	359.250286172	489.952502742	1003.045553462	-127.178477500	-127.178477500	1127.762027336
0.030529800	533.291828841	419.691430729	8703.949682003	-204.650936009	-204.650936009	842.380256399
0.046438197	382.773741827	699.327481283	3249.666907437	-340.069396015	-340.069396015	3529.924057741
0.062536789	528.587372717	541.388825478	8387.817522689	269.074477542	269.074477542	3962.876541149
0.271261749	387.883528339	439.845219727	286.469430910	-65.754267473	-65.754267473	556.824276510
0.356870630	344.055898071	433.948954785	611.658558017	-41.987527257	-41.987527257	382.748514314
0.046124862	552.164668068	728.932597985	4477.405754017	486.150790433	486.150790433	1552.568790743

PHP8RVWH - Weighted variational Bayesian inference - 2 Gaussians



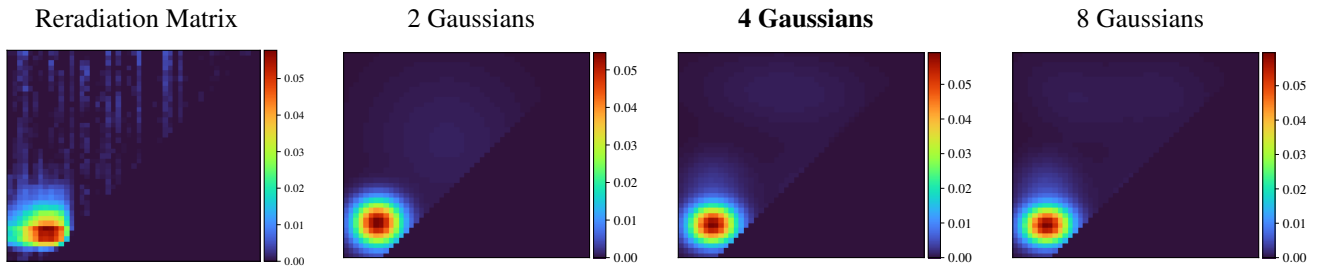
Fitted Material Under Monochromatic Illumination



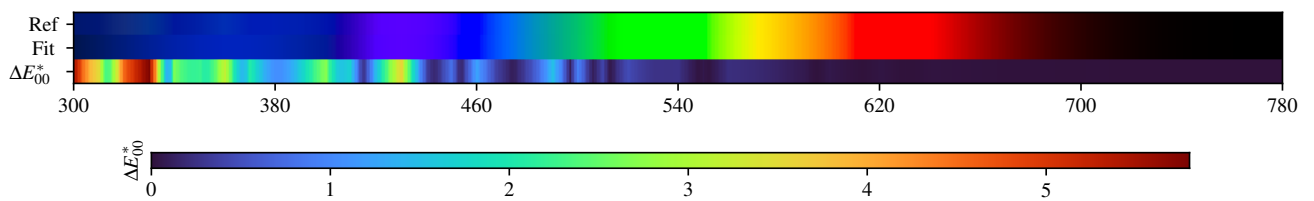
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.63$	FL2 $\Delta E = 0.27$	FL7 $\Delta E = 0.64$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.22$	FL3.10 $\Delta E = 0.33$	FL3.15 $\Delta E = 0.83$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.56$
B $\Delta E = 0.36$	D65 $\Delta E = 0.71$	FL3 $\Delta E = 0.19$	FL8 $\Delta E = 0.37$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.34$	FL3.11 $\Delta E = 0.50$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.18$
C $\Delta E = 0.59$	D75 $\Delta E = 0.69$	FL4 $\Delta E = 0.15$	FL9 $\Delta E = 0.24$	FL3.2 $\Delta E = 0.22$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.15$
D50 $\Delta E = 0.47$	E $\Delta E = 0.51$	FL5 $\Delta E = 0.55$	FL10 $\Delta E = 0.36$	FL3.3 $\Delta E = 0.55$	FL3.8 $\Delta E = 0.21$	FL3.13 $\Delta E = 0.20$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.55$	FL1 $\Delta E = 0.58$	FL6 $\Delta E = 0.27$	FL11 $\Delta E = 0.20$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.34$	FL3.14 $\Delta E = 0.36$	HP4 $\Delta E = 0.28$	LED-B4 $\Delta E = 0.39$	LED-V2 $\Delta E = 0.29$

PHP8RVWH - Weighted variational Bayesian inference - 4 Gaussians



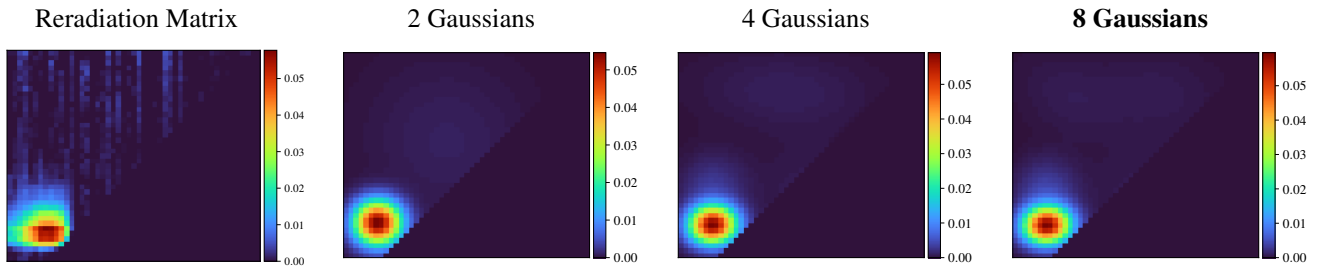
Fitted Material Under Monochromatic Illumination



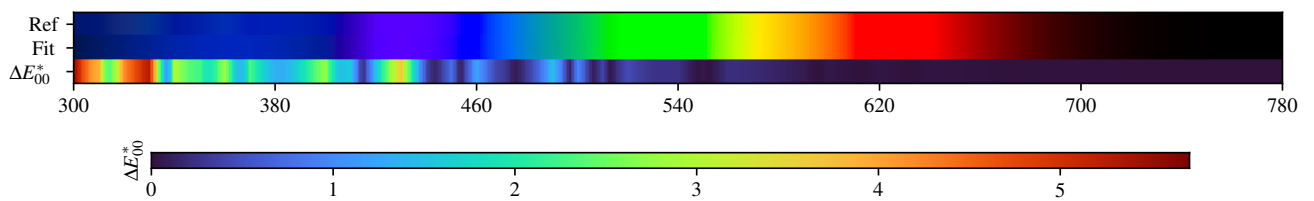
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.27$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.46$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.08$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.12$	D75 $\Delta E = 0.26$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.17$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.07$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.12$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.23$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.17$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.14$	LED-V2 $\Delta E = 0.09$

PHP8RVWH - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.44$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.19$
B $\Delta E = 0.10$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.23$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.10$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.18$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.08$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.23$	FL1 $\Delta E = 0.08$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.12$

PHP8RVWH - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.285549	0.346784	0.421115	0.628960	0.784622	0.810719	0.817842	0.822712	0.820716	0.824824	0.822338
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.825891	0.826386	0.828445	0.826555	0.826925	0.826291	0.824913	0.825270	0.821235	0.824571	0.821822
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.824008	0.820542	0.818874	0.823975	0.820342	0.823431	0.821217	0.821356	0.819740	0.821941	0.822856
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825011	0.821428	0.825613	0.826336	0.825848	0.828880	0.822387	0.824584			

2 Gaussians max

Scaling factor: 428.16928449250514

Gaussians:

Weight	Mean		Covariance			
0.775649434	363.139860853	445.232529188	1033.184557139	-3.413990304	-3.413990304	883.371387128
0.224350566	500.719468071	607.890134443	13819.470832620	-536.384290683	-536.384290683	13548.191799593

4 Gaussians max

Scaling factor: 424.3347717514063

Gaussians:

Weight	Mean		Covariance			
0.718527759	363.475968708	441.168688176	1025.892697508	18.076799825	18.076799825	667.170883283
0.080424136	551.634719196	500.443534272	7018.816682359	233.180965432	233.180965432	5863.823832656
0.090833862	362.444253405	513.526137360	1824.444888071	42.884711135	42.884711135	1950.127740823
0.110214244	505.604202647	707.212671377	14789.002484516	-474.076573125	-474.076573125	2999.398062191

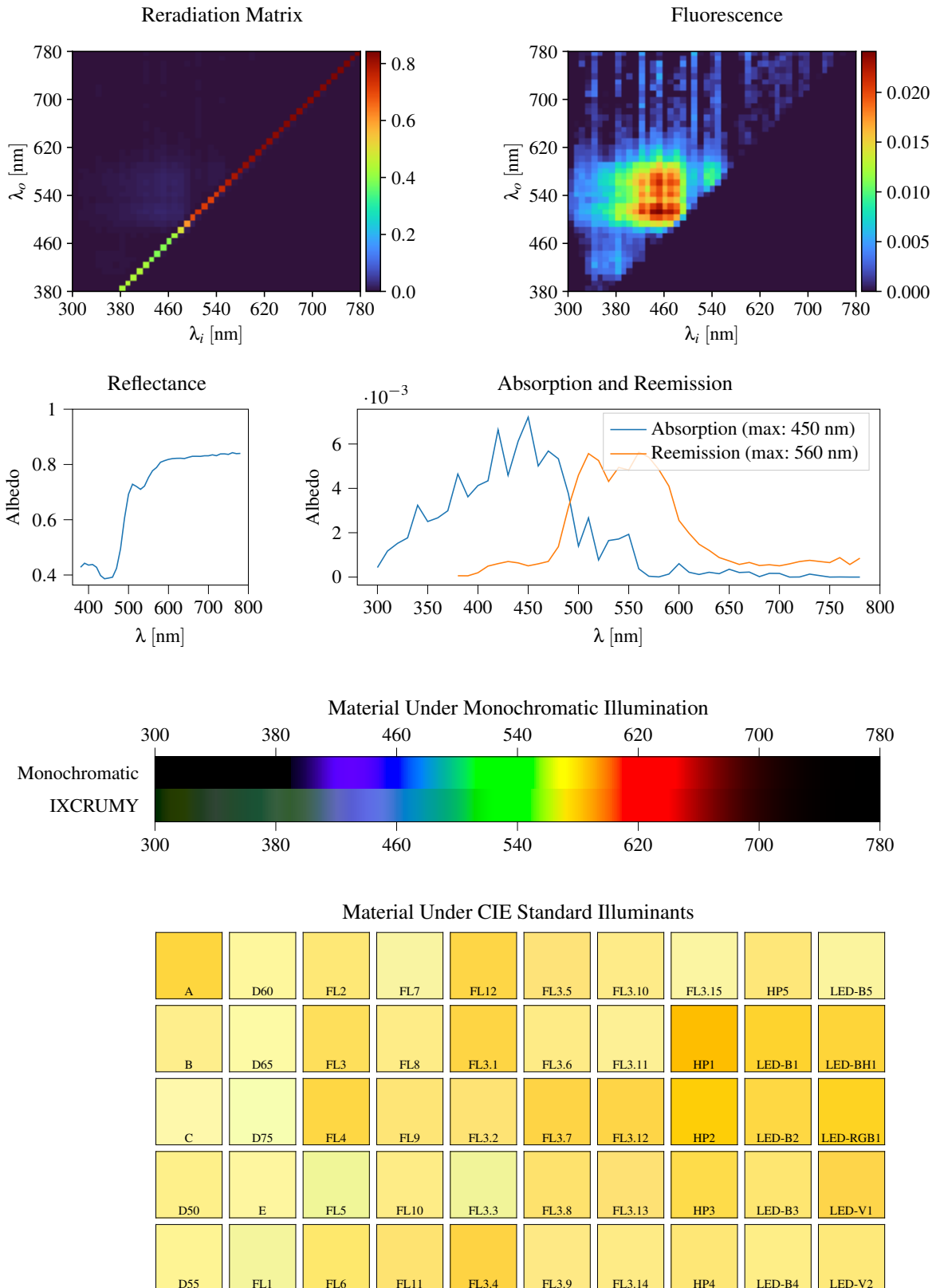
8 Gaussians max

Scaling factor: 425.2563896289877

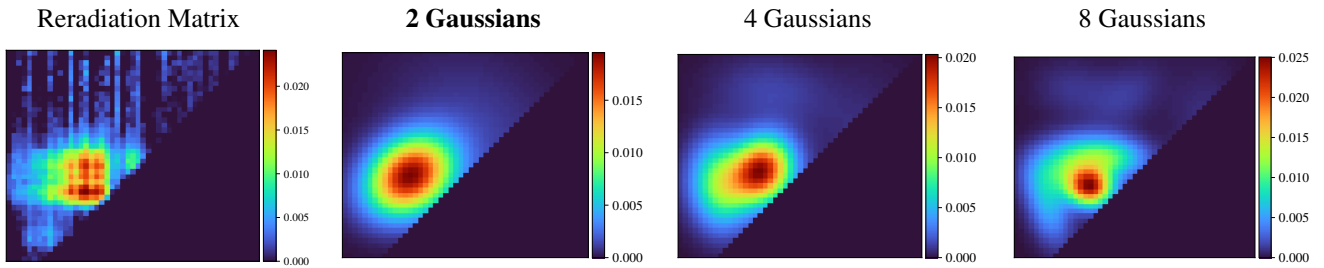
Gaussians:

Weight	Mean		Covariance			
0.696686155	363.532742280	440.261555682	1024.933297536	20.825009885	20.825009885	631.254655155
0.076892602	551.831344648	495.451827075	6863.077824514	206.046529077	206.046529077	5528.324779373
0.108126639	361.812748003	505.493446604	1663.921124548	15.024968973	15.024968973	1792.702918797
0.048127316	399.280963523	698.700564592	4811.214400789	-1093.768051868	-1093.768051868	3747.232098335
0.067169861	579.565227171	702.853141471	8397.742717205	-180.718414762	-180.718414762	3497.237404382

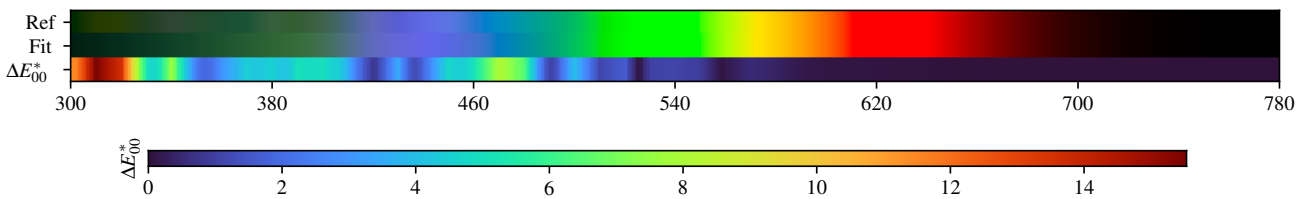
3.30. IXCRUMY



IXCRUMY - Weighted Expectation-Maximization - 2 Gaussians



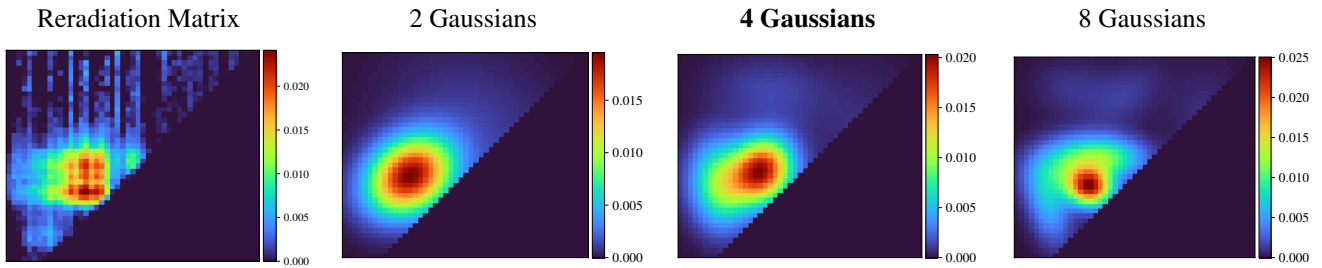
Fitted Material Under Monochromatic Illumination



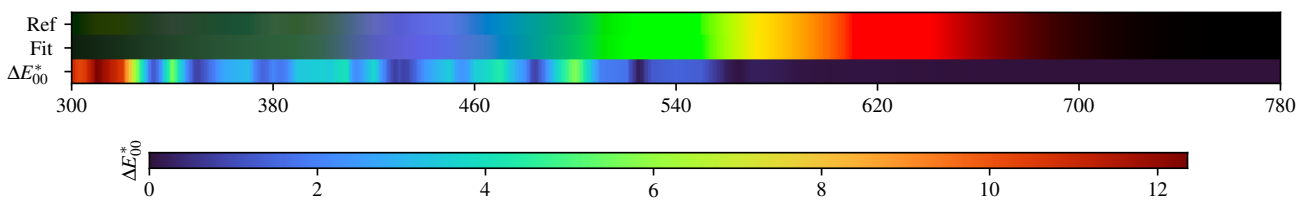
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.50$	$\Delta E = 0.87$	$\Delta E = 0.74$	$\Delta E = 0.94$	$\Delta E = 0.57$	$\Delta E = 0.78$	$\Delta E = 0.99$	$\Delta E = 0.90$	$\Delta E = 0.87$	$\Delta E = 1.27$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.95$	$\Delta E = 0.86$	$\Delta E = 0.59$	$\Delta E = 0.86$	$\Delta E = 0.40$	$\Delta E = 0.86$	$\Delta E = 0.94$	$\Delta E = 0.24$	$\Delta E = 0.53$	$\Delta E = 0.51$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.14$	$\Delta E = 0.85$	$\Delta E = 0.48$	$\Delta E = 0.76$	$\Delta E = 0.66$	$\Delta E = 0.50$	$\Delta E = 0.39$	$\Delta E = 0.39$	$\Delta E = 0.63$	$\Delta E = 0.26$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.85$	$\Delta E = 0.70$	$\Delta E = 0.81$	$\Delta E = 0.93$	$\Delta E = 0.79$	$\Delta E = 0.73$	$\Delta E = 0.75$	$\Delta E = 0.58$	$\Delta E = 0.88$	$\Delta E = 0.50$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.86$	$\Delta E = 0.89$	$\Delta E = 0.66$	$\Delta E = 0.83$	$\Delta E = 0.30$	$\Delta E = 0.90$	$\Delta E = 0.90$	$\Delta E = 0.70$	$\Delta E = 1.09$	$\Delta E = 0.80$

IXCRUMY - Weighted Expectation-Maximization - 4 Gaussians



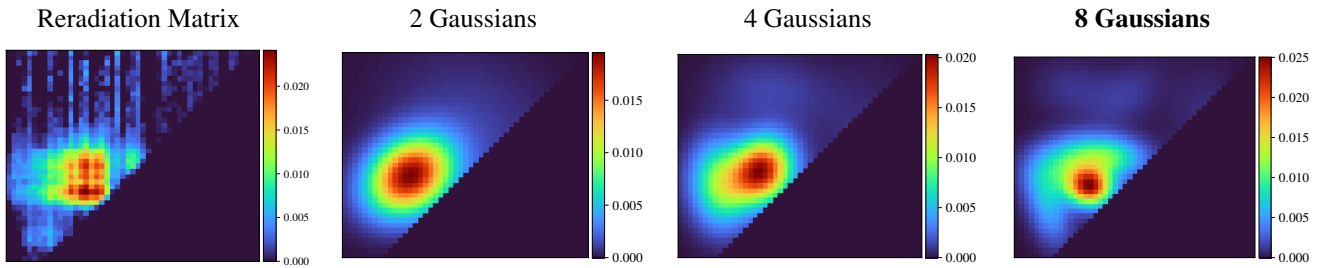
Fitted Material Under Monochromatic Illumination



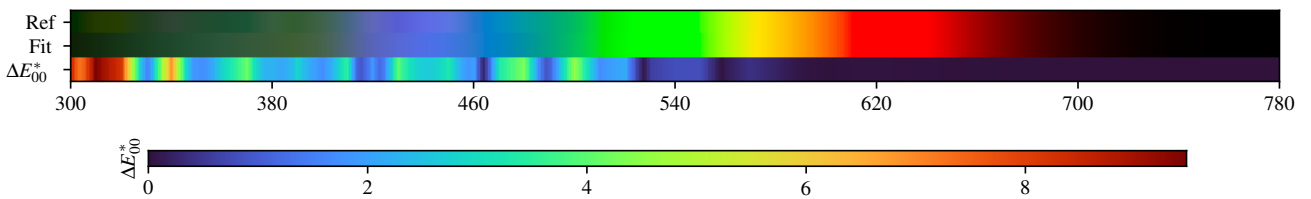
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.28$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.30$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.27$	FL3.15 $\Delta E = 0.20$	HP5 $\Delta E = 0.32$	LED-B5 $\Delta E = 0.40$
B $\Delta E = 0.25$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.22$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.15$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.44$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.39$	D75 $\Delta E = 0.36$	FL4 $\Delta E = 0.21$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.25$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.29$
D50 $\Delta E = 0.21$	E $\Delta E = 0.32$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.42$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.33$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.30$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.24$
D55 $\Delta E = 0.25$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.20$	FL11 $\Delta E = 0.39$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.40$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.42$	LED-B4 $\Delta E = 0.35$	LED-V2 $\Delta E = 0.27$

IXCRUMY - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.33$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.35$	$\Delta E = 0.13$	$\Delta E = 0.04$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.05$	$\Delta E = 0.30$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.10$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.21$	$\Delta E = 0.07$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.05$	$\Delta E = 0.25$	$\Delta E = 0.16$

IXCRUMY - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.428186	0.442623	0.435758	0.438078	0.427903	0.398123	0.386387	0.388896	0.392144	0.424151	0.494743
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.605821	0.692415	0.728560	0.720380	0.710012	0.721755	0.752831	0.777096	0.788911	0.807996	0.813727
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.818419	0.821213	0.822289	0.822567	0.821470	0.825940	0.829585	0.829615	0.829345	0.831458	0.831498
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.834934	0.831782	0.838110	0.838434	0.836499	0.842642	0.839208	0.839987			

2 Gaussians

Scaling factor: 438.0934075821169

Gaussians:

Weight	Mean		Covariance			
0.230411577	550.393614731	624.452637013	13854.757922657	-2063.763335889	-2063.763335889	12294.694136003
0.769588423	428.613309928	538.415356424	3149.022943023	674.623571279	674.623571279	2659.813213494

4 Gaussians

Scaling factor: 429.1087985379794

Gaussians:

Weight	Mean		Covariance			
0.090009633	479.667740061	706.845105436	6735.614540840	-393.409185914	-393.409185914	2599.760792427
0.500246906	462.095766912	549.369596772	1683.338605162	226.847343511	226.847343511	1870.998561470
0.097982408	655.779696148	584.642214777	4790.417598772	1822.844211012	1822.844211012	14802.706579604
0.311761053	378.755884342	521.269025537	1566.549198969	-166.034757028	-166.034757028	3369.642161624

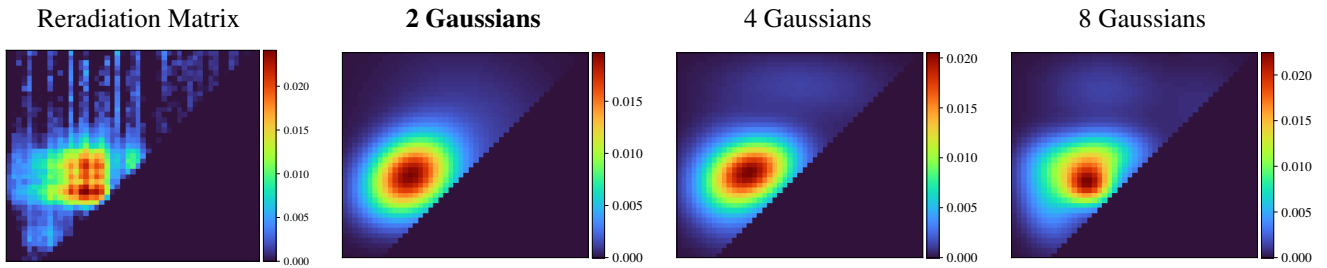
8 Gaussians

Scaling factor: 424.0898906337644

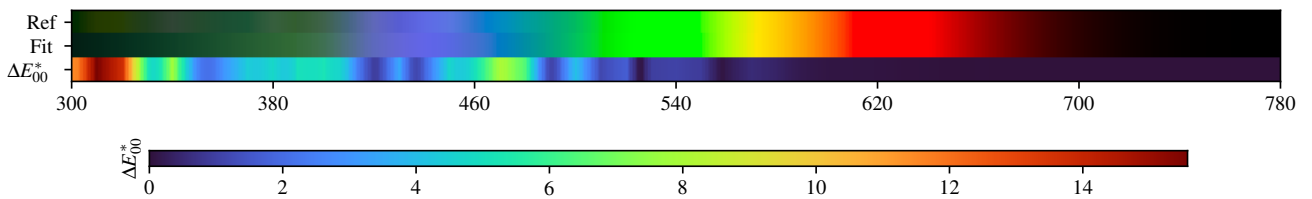
Gaussians:

Weight	Mean		Covariance			
0.048573589	519.696690015	702.169025142	2669.333756749	1085.659543600	1085.659543600	2420.173662163
0.225402224	481.929075314	580.394666351	2704.095524592	-111.931984969	-111.931984969	784.695665096
0.042459151	594.421593626	433.593950027	10845.346854147	753.026739619	753.026739619	1625.482730161
0.059323072	678.022661011	663.228912900	2826.878982202	328.820581697	328.820581697	5934.162823581
0.187794318	392.238142564	559.027779165	1996.629052366	162.202869551	162.202869551	1362.463555736
0.124295862	363.208698283	483.021229436	903.343543718	-544.614369470	-544.614369470	2781.780653187
0.270320489	448.569467552	519.636046700	944.221514513	-29.745889311	-29.745889311	689.157512574
0.041831296	413.028319229	718.776816800	2960.098623229	-101.209832254	-101.209832254	1775.851978872

IXCRUMY - Weighted variational Bayesian inference - 2 Gaussians



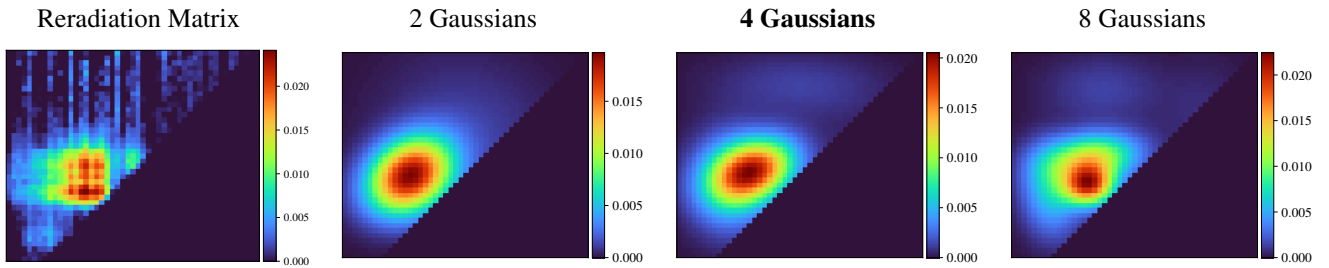
Fitted Material Under Monochromatic Illumination



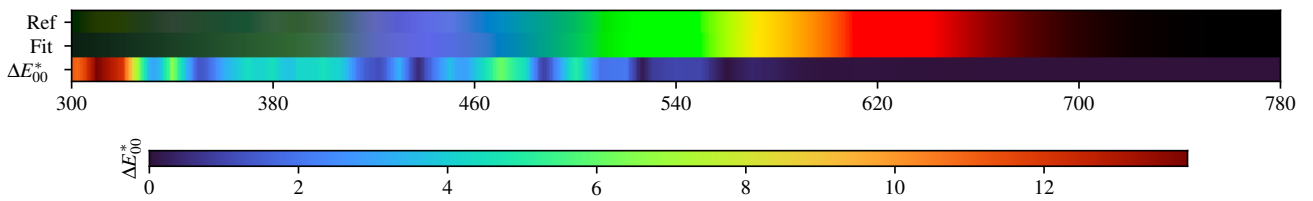
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.48$	D60 $\Delta E = 0.82$	FL2 $\Delta E = 0.73$	FL7 $\Delta E = 0.91$	FL12 $\Delta E = 0.55$	FL3.5 $\Delta E = 0.76$	FL3.10 $\Delta E = 0.97$	FL3.15 $\Delta E = 0.87$	HP5 $\Delta E = 0.83$	LED-B5 $\Delta E = 1.25$
B $\Delta E = 0.91$	D65 $\Delta E = 0.81$	FL3 $\Delta E = 0.58$	FL8 $\Delta E = 0.84$	FL3.1 $\Delta E = 0.39$	FL3.6 $\Delta E = 0.84$	FL3.11 $\Delta E = 0.92$	HP1 $\Delta E = 0.24$	LED-B1 $\Delta E = 0.52$	LED-BH1 $\Delta E = 0.50$
C $\Delta E = 1.09$	D75 $\Delta E = 0.79$	FL4 $\Delta E = 0.47$	FL9 $\Delta E = 0.74$	FL3.2 $\Delta E = 0.64$	FL3.7 $\Delta E = 0.49$	FL3.12 $\Delta E = 0.39$	HP2 $\Delta E = 0.38$	LED-B2 $\Delta E = 0.62$	LED-RGB1 $\Delta E = 0.24$
D50 $\Delta E = 0.81$	E $\Delta E = 0.63$	FL5 $\Delta E = 0.79$	FL10 $\Delta E = 0.91$	FL3.3 $\Delta E = 0.77$	FL3.8 $\Delta E = 0.71$	FL3.13 $\Delta E = 0.74$	HP3 $\Delta E = 0.56$	LED-B3 $\Delta E = 0.86$	LED-V1 $\Delta E = 0.47$
D55 $\Delta E = 0.82$	FL1 $\Delta E = 0.86$	FL6 $\Delta E = 0.64$	FL11 $\Delta E = 0.81$	FL3.4 $\Delta E = 0.29$	FL3.9 $\Delta E = 0.88$	FL3.14 $\Delta E = 0.89$	HP4 $\Delta E = 0.66$	LED-B4 $\Delta E = 1.07$	LED-V2 $\Delta E = 0.76$

IXCRUMY - Weighted variational Bayesian inference - 4 Gaussians



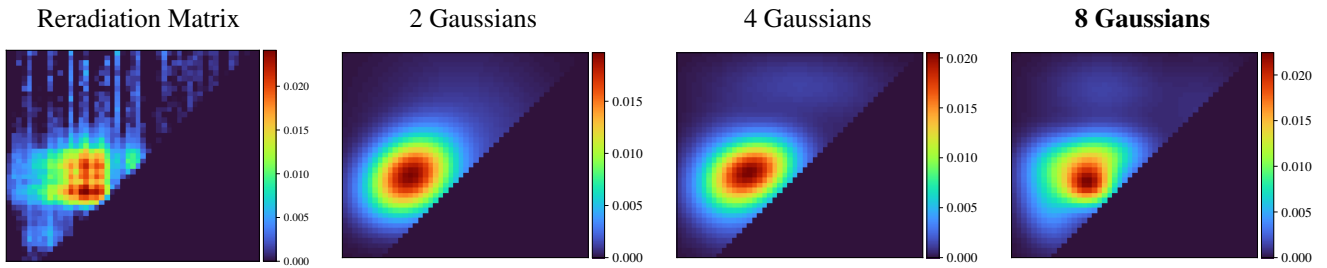
Fitted Material Under Monochromatic Illumination



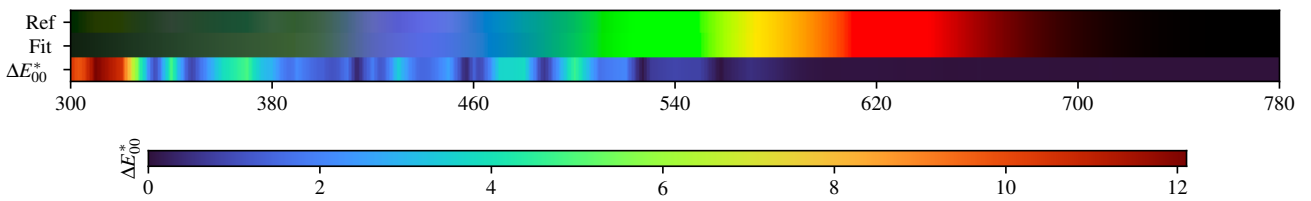
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.11$	D60 $\Delta E = 0.27$	FL2 $\Delta E = 0.27$	FL7 $\Delta E = 0.33$	FL12 $\Delta E = 0.26$	FL3.5 $\Delta E = 0.25$	FL3.10 $\Delta E = 0.41$	FL3.15 $\Delta E = 0.29$	HP5 $\Delta E = 0.29$	LED-B5 $\Delta E = 0.59$
B $\Delta E = 0.30$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.22$	FL8 $\Delta E = 0.28$	FL3.1 $\Delta E = 0.16$	FL3.6 $\Delta E = 0.30$	FL3.11 $\Delta E = 0.43$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.18$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.40$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.19$	FL9 $\Delta E = 0.24$	FL3.2 $\Delta E = 0.22$	FL3.7 $\Delta E = 0.22$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.22$	LED-RGB1 $\Delta E = 0.21$
D50 $\Delta E = 0.25$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.30$	FL10 $\Delta E = 0.42$	FL3.3 $\Delta E = 0.31$	FL3.8 $\Delta E = 0.32$	FL3.13 $\Delta E = 0.23$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.31$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.26$	FL1 $\Delta E = 0.33$	FL6 $\Delta E = 0.23$	FL11 $\Delta E = 0.38$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.41$	FL3.14 $\Delta E = 0.32$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.48$	LED-V2 $\Delta E = 0.23$

IXCRUMY - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.18$	FL2 $\Delta E = 0.18$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.23$	FL3.5 $\Delta E = 0.17$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.14$
B $\Delta E = 0.17$	D65 $\Delta E = 0.18$	FL3 $\Delta E = 0.18$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.17$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.29$	HP1 $\Delta E = 0.16$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.17$	D75 $\Delta E = 0.18$	FL4 $\Delta E = 0.17$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.22$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.15$
D50 $\Delta E = 0.17$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.27$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.24$	FL3.13 $\Delta E = 0.20$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.10$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.17$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.17$	FL11 $\Delta E = 0.25$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.26$	FL3.14 $\Delta E = 0.22$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.20$

IXCRUMY - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.428186	0.442623	0.435758	0.438078	0.427903	0.398123	0.386387	0.388896	0.392144	0.424151	0.494743
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.605821	0.692415	0.728560	0.720380	0.710012	0.721755	0.752831	0.777096	0.788911	0.807996	0.813727
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.818419	0.821213	0.822289	0.822567	0.821470	0.825940	0.829585	0.829615	0.829345	0.831458	0.831498
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.834934	0.831782	0.838110	0.838434	0.836499	0.842642	0.839208	0.839987			

2 Gaussians max

Scaling factor: 438.80522560453

Gaussians:

Weight	Mean		Covariance			
0.752307732	428.583669143	538.344325506	3135.355078346	697.086032616	697.086032616	2576.824176925
0.247692268	542.550006199	618.809316554	14065.542493592	-1332.408912986	-1332.408912986	12304.424563713

4 Gaussians max

Scaling factor: 430.34606658792273

Gaussians:

Weight	Mean		Covariance			
0.284645257	401.179282542	524.574740938	2979.975333350	-6.040580974	-6.040580974	4491.749292729
0.064968966	650.450308398	530.273956241	5453.942418753	644.619638559	644.619638559	9888.752467397
0.545744147	448.183281282	548.644875181	3039.055442285	665.478396945	665.478396945	1756.409597033
0.104641630	534.375155116	718.207992017	13680.845902906	-231.045189408	-231.045189408	2081.581297183

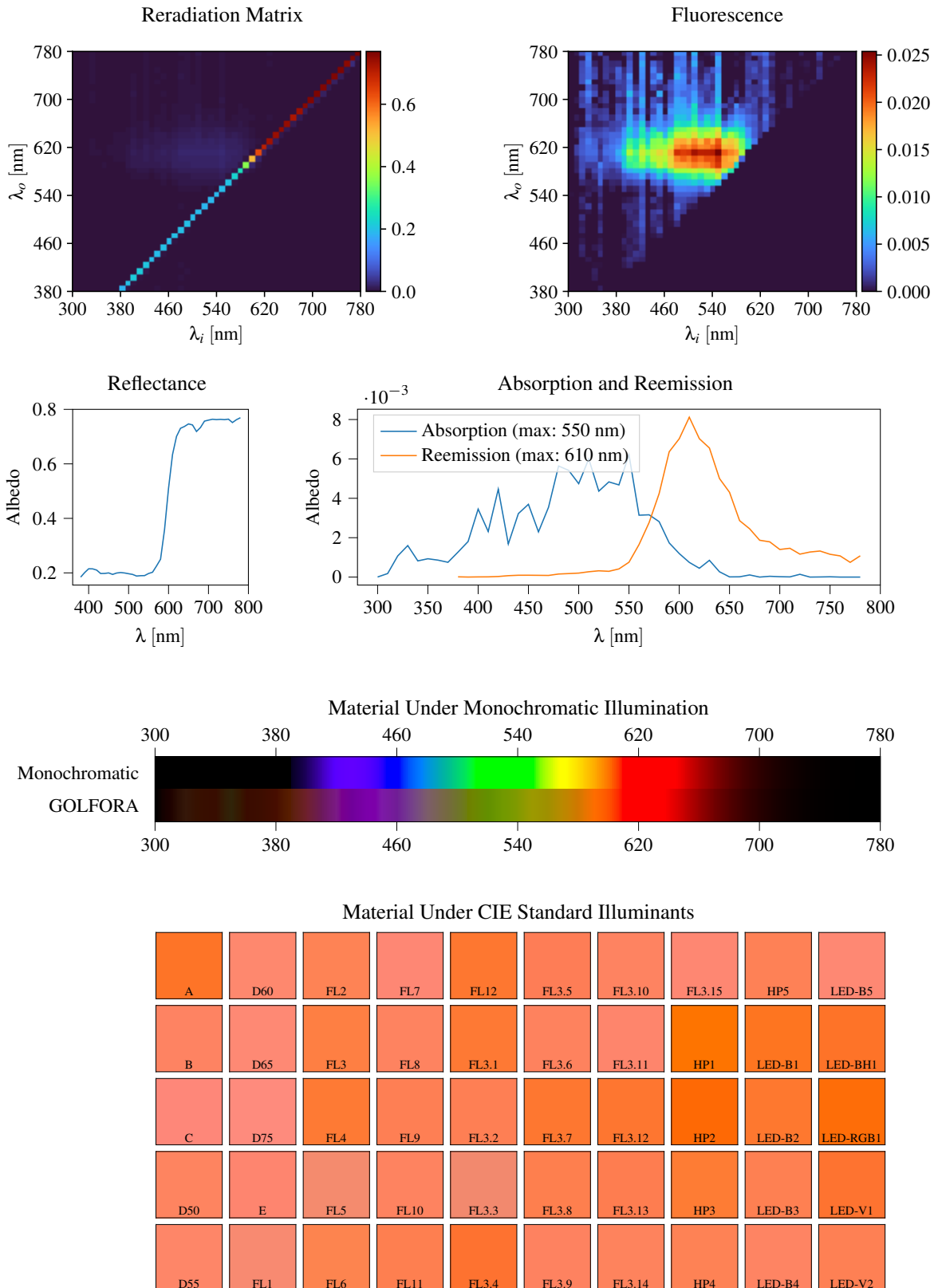
8 Gaussians max

Scaling factor: 427.2809650603865

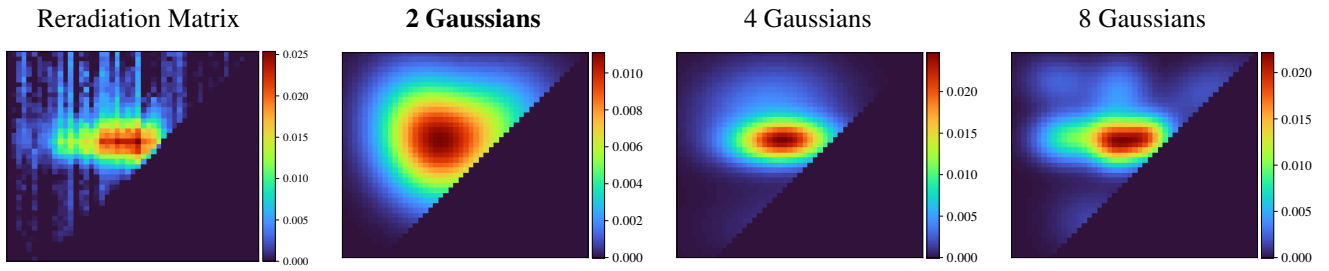
Gaussians:

Weight	Mean		Covariance			
0.199165389	371.158904803	506.142876949	1489.721347319	-241.887768950	-241.887768950	3484.671762888
0.043957481	596.229888609	442.716100424	10609.487040661	292.872123293	292.872123293	2532.632630450
0.243398754	448.727771046	519.166935709	1150.869161564	16.198324055	16.198324055	726.871940777
0.365723143	454.368514660	573.584443531	3772.471801463	306.152901909	306.152901909	1063.102916492
0.056771133	675.231608472	662.799414773	3608.494176071	510.137930446	510.137930446	6244.949457923
0.090126433	475.504599466	709.458523995	6699.089594804	-55.625553162	-55.625553162	2410.858675983

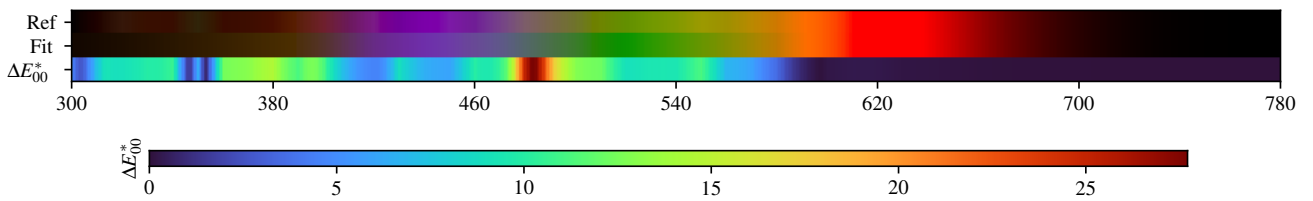
3.31. GOLFORA



GOLFORA - Weighted Expectation-Maximization - 2 Gaussians



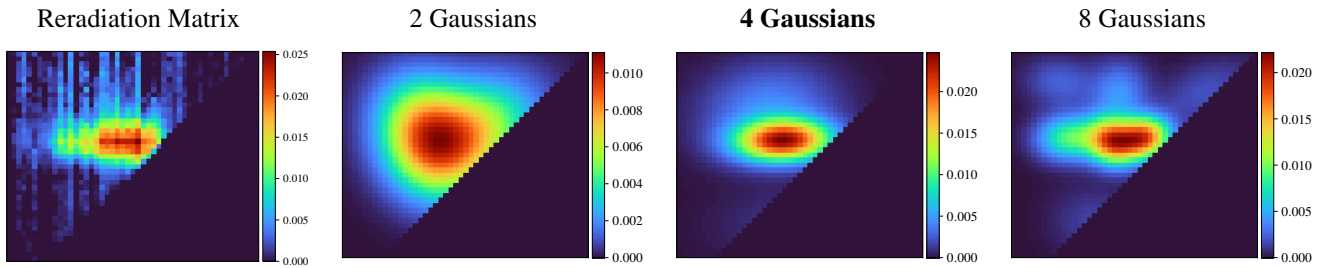
Fitted Material Under Monochromatic Illumination



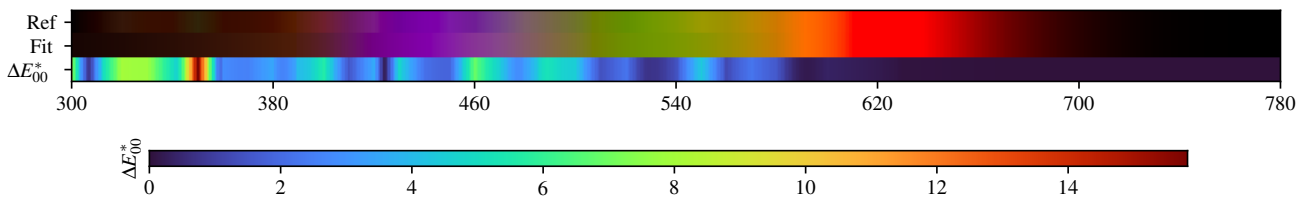
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.58$	$\Delta E = 4.25$	$\Delta E = 3.03$	$\Delta E = 4.05$	$\Delta E = 1.35$	$\Delta E = 2.32$	$\Delta E = 2.69$	$\Delta E = 4.12$	$\Delta E = 2.80$	$\Delta E = 4.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 3.36$	$\Delta E = 4.50$	$\Delta E = 2.23$	$\Delta E = 3.13$	$\Delta E = 1.49$	$\Delta E = 2.97$	$\Delta E = 3.04$	$\Delta E = 1.09$	$\Delta E = 1.43$	$\Delta E = 1.35$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 4.24$	$\Delta E = 4.90$	$\Delta E = 1.68$	$\Delta E = 2.53$	$\Delta E = 2.39$	$\Delta E = 1.19$	$\Delta E = 1.43$	$\Delta E = 1.24$	$\Delta E = 1.67$	$\Delta E = 1.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 3.58$	$\Delta E = 3.90$	$\Delta E = 4.92$	$\Delta E = 2.75$	$\Delta E = 4.50$	$\Delta E = 1.89$	$\Delta E = 2.19$	$\Delta E = 1.82$	$\Delta E = 2.64$	$\Delta E = 1.56$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 3.94$	$\Delta E = 4.67$	$\Delta E = 3.07$	$\Delta E = 2.01$	$\Delta E = 1.25$	$\Delta E = 2.40$	$\Delta E = 3.07$	$\Delta E = 2.77$	$\Delta E = 3.34$	$\Delta E = 2.88$

GOLFORA - Weighted Expectation-Maximization - 4 Gaussians



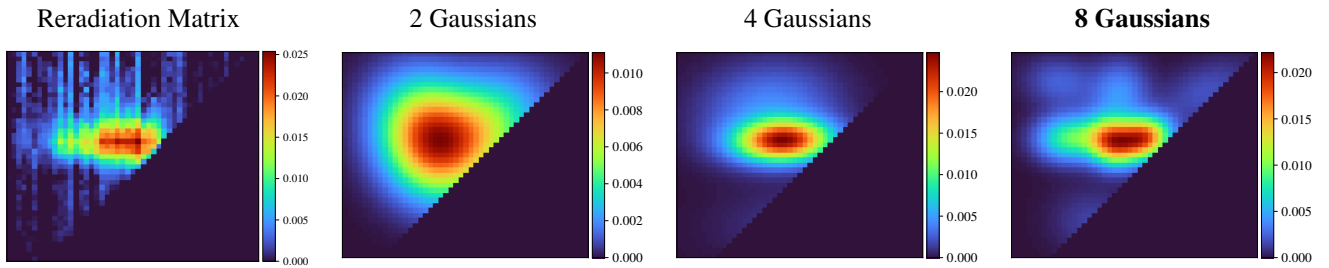
Fitted Material Under Monochromatic Illumination



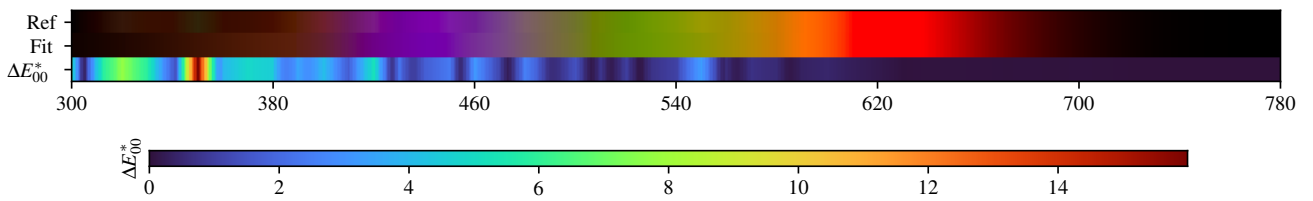
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.25$	$\Delta E = 0.25$	$\Delta E = 0.51$	$\Delta E = 0.23$	$\Delta E = 0.39$	$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.32$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.25$	$\Delta E = 0.27$	$\Delta E = 0.30$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.43$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.28$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.31$	$\Delta E = 0.26$	$\Delta E = 0.24$	$\Delta E = 0.48$	$\Delta E = 0.28$	$\Delta E = 0.39$	$\Delta E = 0.22$	$\Delta E = 0.29$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.48$	$\Delta E = 0.24$	$\Delta E = 0.50$	$\Delta E = 0.27$	$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.28$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.30$	$\Delta E = 0.51$	$\Delta E = 0.29$	$\Delta E = 0.46$	$\Delta E = 0.36$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.29$

GOLFORA - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.31$	$\Delta E = 0.56$	$\Delta E = 0.43$	$\Delta E = 0.54$	$\Delta E = 0.53$	$\Delta E = 0.31$	$\Delta E = 0.59$	$\Delta E = 0.48$	$\Delta E = 0.41$	$\Delta E = 0.49$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.47$	$\Delta E = 0.59$	$\Delta E = 0.38$	$\Delta E = 0.42$	$\Delta E = 0.25$	$\Delta E = 0.33$	$\Delta E = 0.72$	$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.35$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.57$	$\Delta E = 0.65$	$\Delta E = 0.33$	$\Delta E = 0.39$	$\Delta E = 0.34$	$\Delta E = 0.46$	$\Delta E = 0.24$	$\Delta E = 0.38$	$\Delta E = 0.30$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.48$	$\Delta E = 0.51$	$\Delta E = 0.54$	$\Delta E = 0.74$	$\Delta E = 0.44$	$\Delta E = 0.59$	$\Delta E = 0.27$	$\Delta E = 0.38$	$\Delta E = 0.41$	$\Delta E = 0.38$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.52$	$\Delta E = 0.53$	$\Delta E = 0.43$	$\Delta E = 0.66$	$\Delta E = 0.24$	$\Delta E = 0.66$	$\Delta E = 0.32$	$\Delta E = 0.45$	$\Delta E = 0.46$	$\Delta E = 0.49$

GOLFORA - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.184494	0.201114	0.214980	0.214739	0.210288	0.197685	0.197972	0.199874	0.194411	0.199428	0.201234
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.199630	0.196889	0.194324	0.188421	0.189682	0.190001	0.197698	0.202427	0.225519	0.250092	0.358833
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.510188	0.634206	0.700722	0.730546	0.737314	0.746581	0.742813	0.718803	0.733399	0.756842	0.760472
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.763706	0.762431	0.763372	0.762353	0.764048	0.751600	0.762002	0.769339			

2 Gaussians

Scaling factor: 458.58288302376684

Gaussians:

Weight	Mean		Covariance			
0.540127499	462.460319963	616.692304609	4449.781664845	-843.401586134	-843.401586134	5926.516732102
0.459872501	561.230955620	623.947942135	6871.860142494	1529.777328818	1529.777328818	5356.128131887

4 Gaussians

Scaling factor: 453.12300596852396

Gaussians:

Weight	Mean		Covariance			
0.354231300	479.081030576	666.365630635	7861.150862821	410.552227041	410.552227041	4007.260514991
0.519674394	507.682380543	608.574702211	3926.758989918	105.867116300	105.867116300	747.235819324
0.045010934	711.326937358	701.182373000	2178.126228350	2176.454500048	2176.454500048	2176.207554383
0.081083371	522.051545187	445.958832433	10980.789336615	690.053710270	690.053710270	2336.791405263

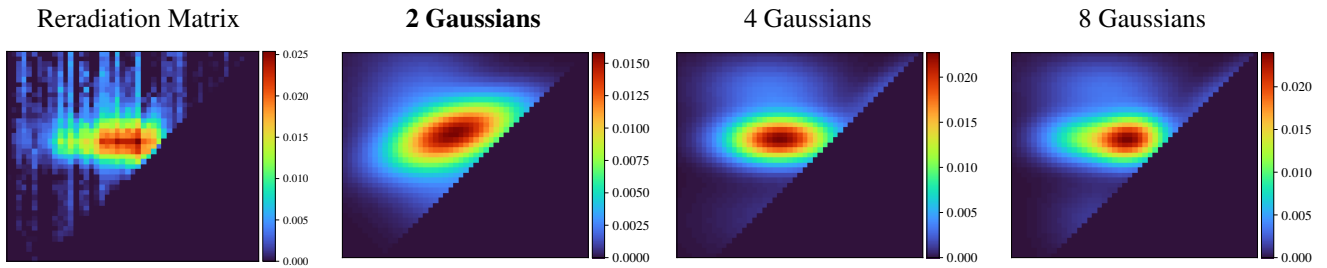
8 Gaussians

Scaling factor: 430.0278062968019

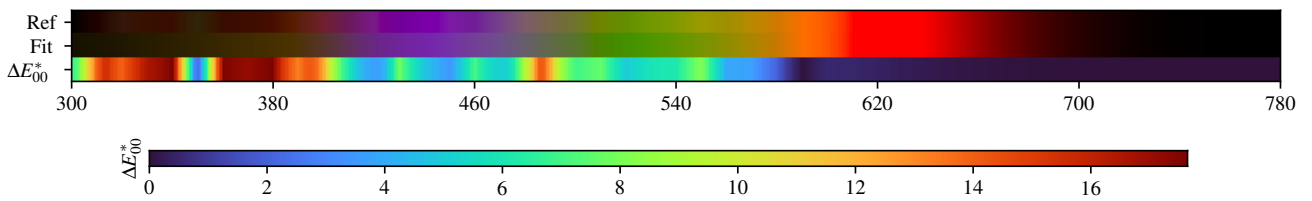
Gaussians:

Weight	Mean		Covariance			
0.059418965	391.820567350	723.677160990	2223.965938575	-143.573305859	-143.573305859	1172.536668922
0.244809475	493.707594953	606.891890690	1056.076176207	-106.547401142	-106.547401142	998.603473338
0.252496343	558.305890342	613.871669520	1199.541728087	80.676345348	80.676345348	791.011620139
0.075910371	678.590551687	705.291712126	4049.648752433	1188.367129975	1188.367129975	2024.434585953
0.175012634	409.796833373	613.625402497	1885.579976520	19.938635316	19.938635316	942.977839814
0.060216378	457.932885140	446.562228109	3223.940250474	-175.296054746	-175.296054746	2307.013609164
0.032182842	653.447209016	480.476535914	3128.119125990	124.999017155	124.999017155	4714.821212169
0.099952992	509.535744345	702.039757216	1412.362264057	42.911181556	42.911181556	1939.935015567

GOLFORA - Weighted variational Bayesian inference - 2 Gaussians



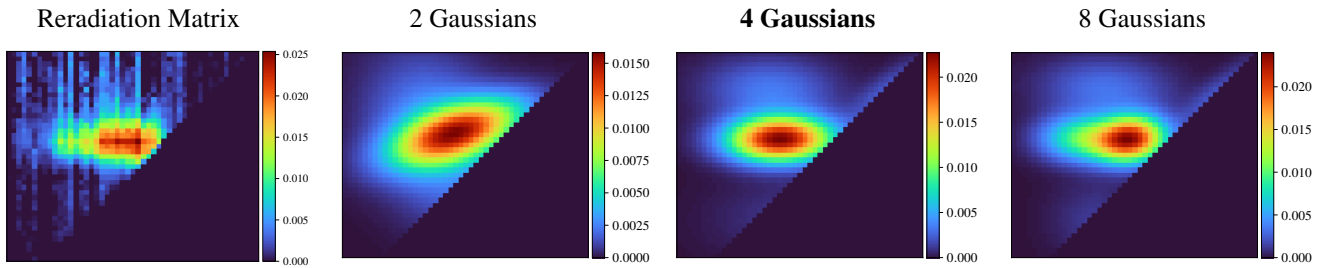
Fitted Material Under Monochromatic Illumination



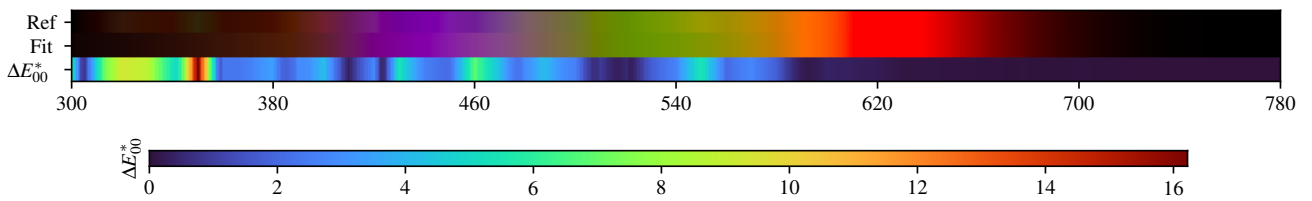
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.76$	$\Delta E = 1.97$	$\Delta E = 1.34$	$\Delta E = 1.79$	$\Delta E = 0.94$	$\Delta E = 0.95$	$\Delta E = 1.13$	$\Delta E = 1.81$	$\Delta E = 1.15$	$\Delta E = 1.71$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.44$	$\Delta E = 2.16$	$\Delta E = 1.04$	$\Delta E = 1.31$	$\Delta E = 0.79$	$\Delta E = 1.20$	$\Delta E = 1.35$	$\Delta E = 0.53$	$\Delta E = 0.72$	$\Delta E = 0.75$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.94$	$\Delta E = 2.47$	$\Delta E = 0.86$	$\Delta E = 1.10$	$\Delta E = 1.06$	$\Delta E = 0.88$	$\Delta E = 0.75$	$\Delta E = 0.93$	$\Delta E = 0.78$	$\Delta E = 0.76$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.56$	$\Delta E = 1.98$	$\Delta E = 2.17$	$\Delta E = 1.29$	$\Delta E = 1.96$	$\Delta E = 0.99$	$\Delta E = 0.91$	$\Delta E = 0.74$	$\Delta E = 1.08$	$\Delta E = 0.72$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.77$	$\Delta E = 2.05$	$\Delta E = 1.38$	$\Delta E = 1.07$	$\Delta E = 0.77$	$\Delta E = 1.11$	$\Delta E = 1.20$	$\Delta E = 1.21$	$\Delta E = 1.38$	$\Delta E = 1.23$

GOLFORA - Weighted variational Bayesian inference - 4 Gaussians



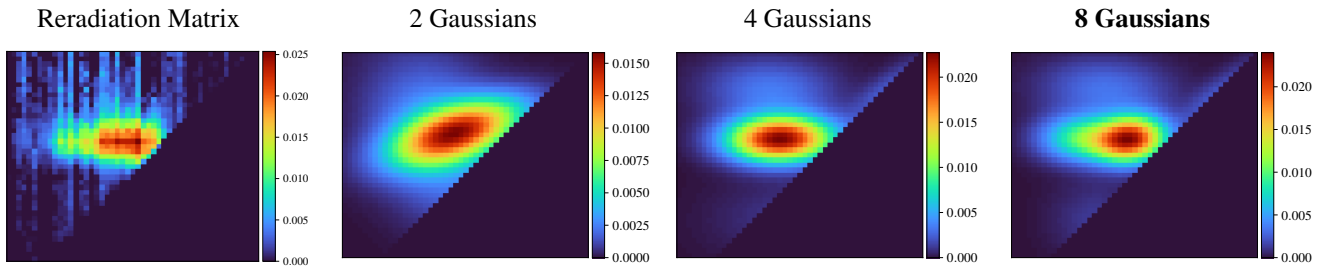
Fitted Material Under Monochromatic Illumination



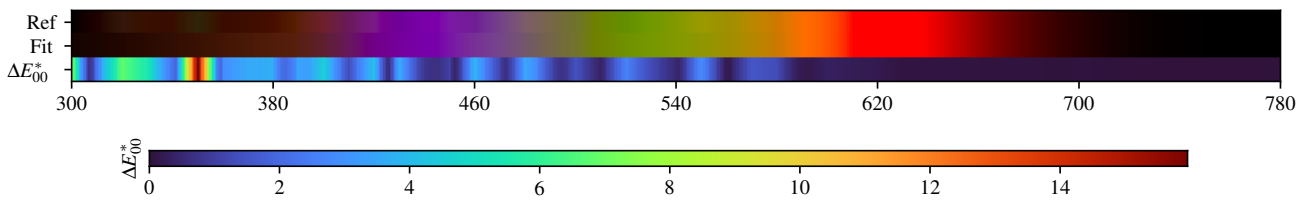
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.41$	$\Delta E = 0.37$	$\Delta E = 0.43$	$\Delta E = 0.33$	$\Delta E = 0.64$	$\Delta E = 0.34$	$\Delta E = 0.51$	$\Delta E = 0.32$	$\Delta E = 0.29$	$\Delta E = 0.19$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.34$	$\Delta E = 0.35$	$\Delta E = 0.46$	$\Delta E = 0.40$	$\Delta E = 0.42$	$\Delta E = 0.35$	$\Delta E = 0.58$	$\Delta E = 0.27$	$\Delta E = 0.35$	$\Delta E = 0.41$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.25$	$\Delta E = 0.33$	$\Delta E = 0.45$	$\Delta E = 0.41$	$\Delta E = 0.40$	$\Delta E = 0.59$	$\Delta E = 0.41$	$\Delta E = 0.55$	$\Delta E = 0.35$	$\Delta E = 0.42$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.39$	$\Delta E = 0.28$	$\Delta E = 0.39$	$\Delta E = 0.64$	$\Delta E = 0.34$	$\Delta E = 0.64$	$\Delta E = 0.39$	$\Delta E = 0.35$	$\Delta E = 0.35$	$\Delta E = 0.41$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.35$	$\Delta E = 0.48$	$\Delta E = 0.66$	$\Delta E = 0.42$	$\Delta E = 0.60$	$\Delta E = 0.42$	$\Delta E = 0.27$	$\Delta E = 0.26$	$\Delta E = 0.42$

GOLFORA - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.27$	$\Delta E = 0.40$	$\Delta E = 0.34$	$\Delta E = 0.38$	$\Delta E = 0.44$	$\Delta E = 0.26$	$\Delta E = 0.45$	$\Delta E = 0.36$	$\Delta E = 0.28$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.34$	$\Delta E = 0.42$	$\Delta E = 0.31$	$\Delta E = 0.33$	$\Delta E = 0.23$	$\Delta E = 0.28$	$\Delta E = 0.49$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.38$	$\Delta E = 0.45$	$\Delta E = 0.28$	$\Delta E = 0.31$	$\Delta E = 0.28$	$\Delta E = 0.39$	$\Delta E = 0.24$	$\Delta E = 0.35$	$\Delta E = 0.22$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.36$	$\Delta E = 0.36$	$\Delta E = 0.40$	$\Delta E = 0.53$	$\Delta E = 0.34$	$\Delta E = 0.46$	$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.31$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.39$	$\Delta E = 0.35$	$\Delta E = 0.50$	$\Delta E = 0.21$	$\Delta E = 0.47$	$\Delta E = 0.32$	$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.38$

GOLFORA - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.184494	0.201114	0.214980	0.214739	0.210288	0.197685	0.197972	0.199874	0.194411	0.199428	0.201234
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.199630	0.196889	0.194324	0.188421	0.189682	0.190001	0.197698	0.202427	0.225519	0.250092	0.358833
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.510188	0.634206	0.700722	0.730546	0.737314	0.746581	0.742813	0.718803	0.733399	0.756842	0.760472
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.763706	0.762431	0.763372	0.762353	0.764048	0.751600	0.762002	0.769339			

2 Gaussians max

Scaling factor: 447.60534407719194

Gaussians:

Weight	Mean		Covariance			
0.434367681	485.275368349	612.026820017	7697.440355288	-2089.545248896	-2089.545248896	10445.387068458
0.565632319	525.267238326	626.086431710	7516.336003106	2104.526160999	2104.526160999	1938.521683563

4 Gaussians max

Scaling factor: 443.9867145184697

Gaussians:

Weight	Mean		Covariance			
0.089920595	516.356356849	456.053352186	10922.752996244	256.703579613	256.703579613	3116.144471971
0.675248697	500.344990560	611.412419722	4890.992262381	65.713963711	65.713963711	926.217077832
0.045647097	711.754412062	706.994329339	2951.228229647	2030.936670514	2030.936670514	2150.893592801
0.189183611	481.485392962	708.371267687	7848.410398720	-179.109156655	-179.109156655	1948.652957758

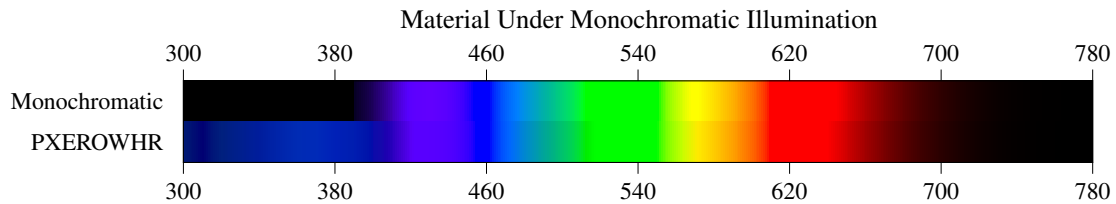
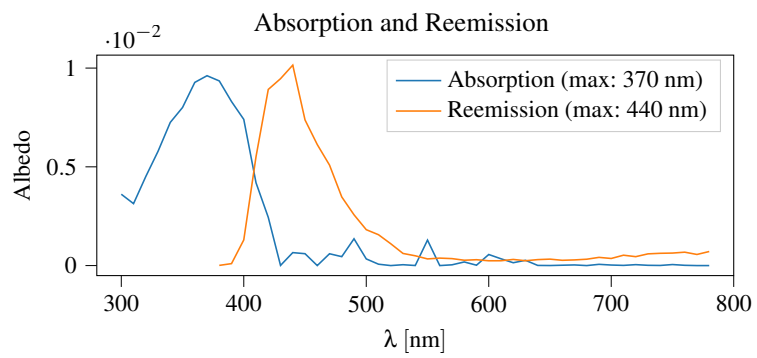
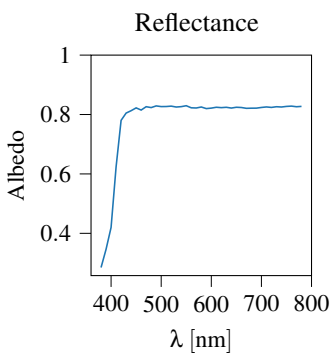
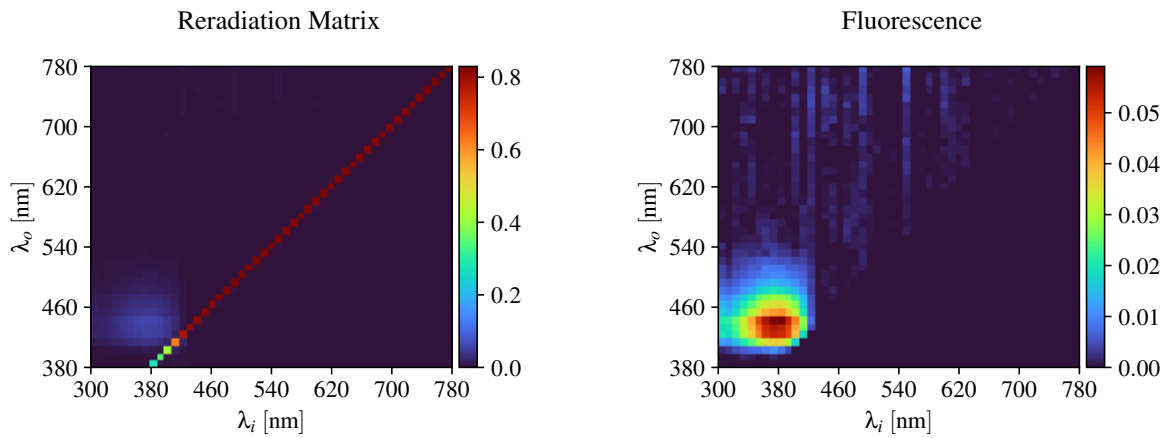
8 Gaussians max

Scaling factor: 436.9371274410605

Gaussians:

Weight	Mean		Covariance			
0.062666648	460.610619427	452.836821139	3601.398213203	9.076694078	9.076694078	3046.275102267
0.033454674	644.658279256	489.839251856	4472.627086312	-504.210399012	-504.210399012	5704.104356040
0.423767457	532.264466104	611.297248890	2072.689943829	132.326915112	132.326915112	943.709185669
0.246551319	436.970523735	612.897729452	3232.748914381	9.365680149	9.365680149	961.592747456
0.051843432	703.199997547	697.965794452	3328.335468249	2457.180894179	2457.180894179	2603.917576228
0.180778796	482.498719019	710.961370942	7764.176960019	-266.905163560	-266.905163560	1847.398189365

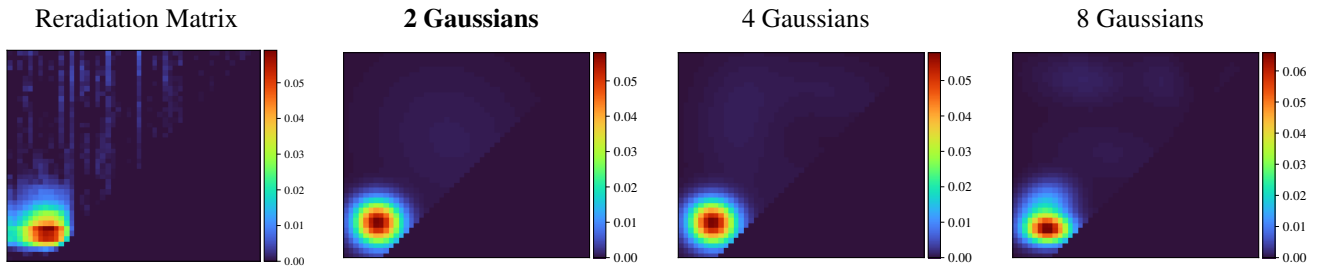
3.32. PXEROWHR



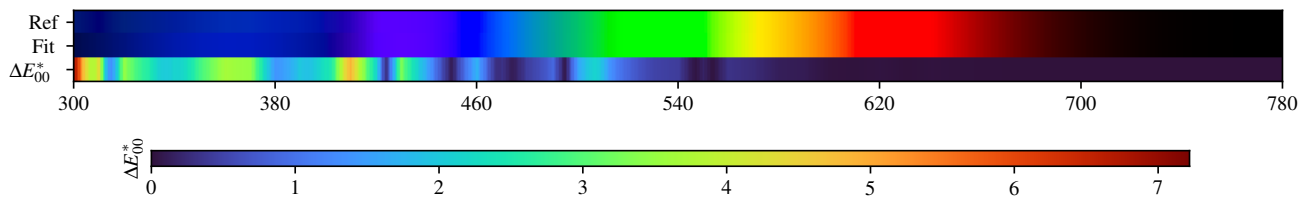
Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2

PXEROWHR - Weighted Expectation-Maximization - 2 Gaussians



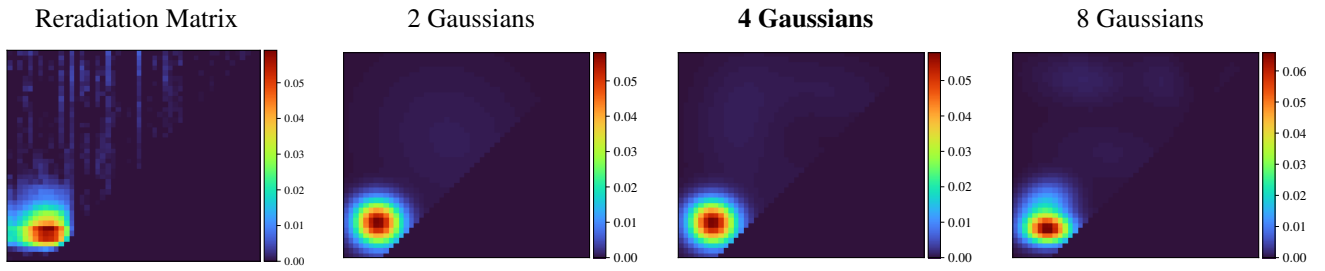
Fitted Material Under Monochromatic Illumination



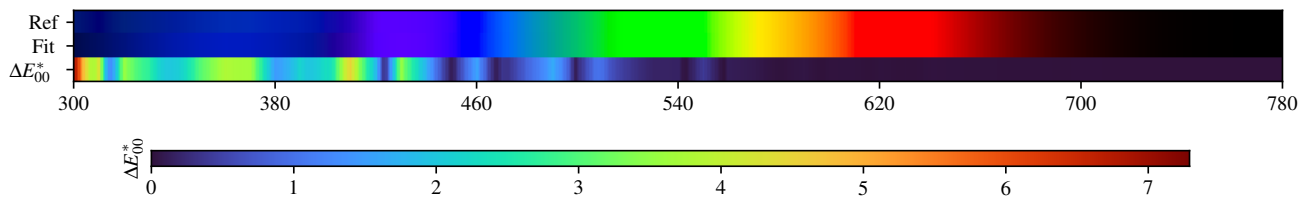
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.64$	FL2 $\Delta E = 0.19$	FL7 $\Delta E = 0.44$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.57$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.40$
B $\Delta E = 0.29$	D65 $\Delta E = 0.73$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.26$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.25$	FL3.11 $\Delta E = 0.27$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.43$	D75 $\Delta E = 0.72$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.17$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.47$	E $\Delta E = 0.43$	FL5 $\Delta E = 0.37$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.39$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.58$	FL1 $\Delta E = 0.39$	FL6 $\Delta E = 0.19$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.25$	HP4 $\Delta E = 0.24$	LED-B4 $\Delta E = 0.29$	LED-V2 $\Delta E = 0.24$

PXEROWHR - Weighted Expectation-Maximization - 4 Gaussians



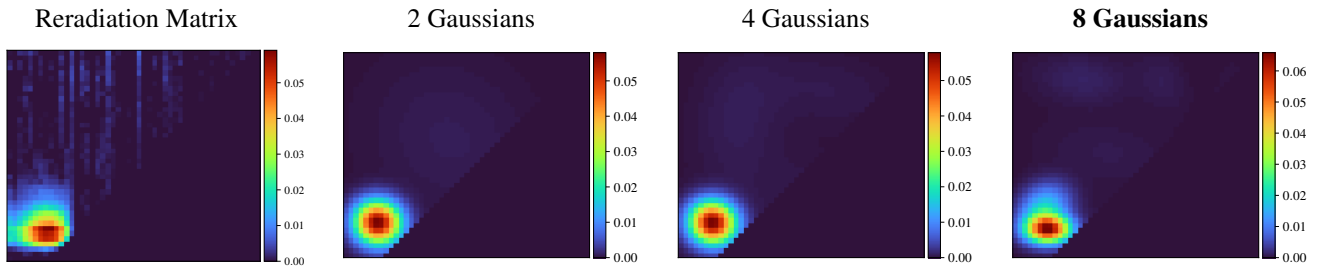
Fitted Material Under Monochromatic Illumination



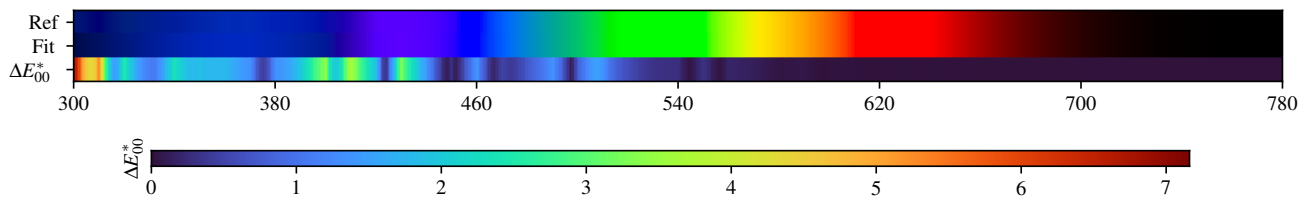
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.46$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.40$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.14$
B $\Delta E = 0.07$	D65 $\Delta E = 0.51$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.10$	D75 $\Delta E = 0.53$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.27$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.06$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.05$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.38$	FL1 $\Delta E = 0.06$	FL6 $\Delta E = 0.04$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.10$	LED-B4 $\Delta E = 0.10$	LED-V2 $\Delta E = 0.08$

PXEROWHR - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.34$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.67$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.17$	D65 $\Delta E = 0.09$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.12$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.20$	D75 $\Delta E = 0.12$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.06$	E $\Delta E = 0.17$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.19$

PXEROWHR - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.284928	0.346396	0.419889	0.623722	0.780383	0.804856	0.812883	0.822317	0.814997	0.826299	0.823343
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.828968	0.826684	0.826922	0.828202	0.825209	0.826516	0.829603	0.822604	0.821975	0.825307	0.819928
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.821555	0.824434	0.823138	0.824325	0.821760	0.824428	0.823590	0.820852	0.821312	0.821458	0.823785
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825499	0.823921	0.826229	0.825284	0.827297	0.828253	0.826204	0.827383			

2 Gaussians

Scaling factor: 420.6687602811338

Gaussians:

Weight	Mean		Covariance			
0.199248040	505.940896588	612.252026543	14109.364370746	-1604.075373131	-1604.075373131	13999.218736979
0.800751960	363.360443723	445.590436104	986.063635007	-27.880268296	-27.880268296	843.700495078

4 Gaussians

Scaling factor: 416.8014691348926

Gaussians:

Weight	Mean		Covariance			
0.079476497	413.846542287	657.508961984	3861.213188268	655.389311022	655.389311022	7478.321296331
0.072448227	537.941763508	488.349716370	12820.267549723	-1104.290634421	-1104.290634421	4812.507617012
0.796990641	363.246250117	445.340222303	980.425935947	-29.843032962	-29.843032962	827.507732480
0.051084635	595.119398144	709.192929822	9391.444570054	-1323.310273714	-1323.310273714	2843.894285970

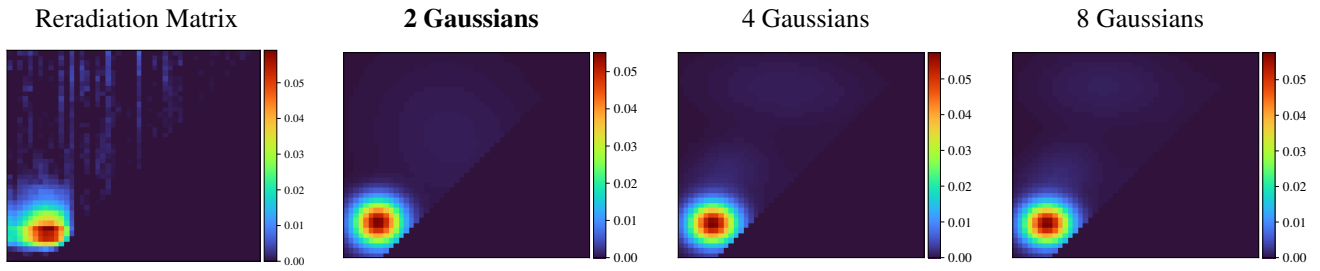
8 Gaussians

Scaling factor: 411.31926763293467

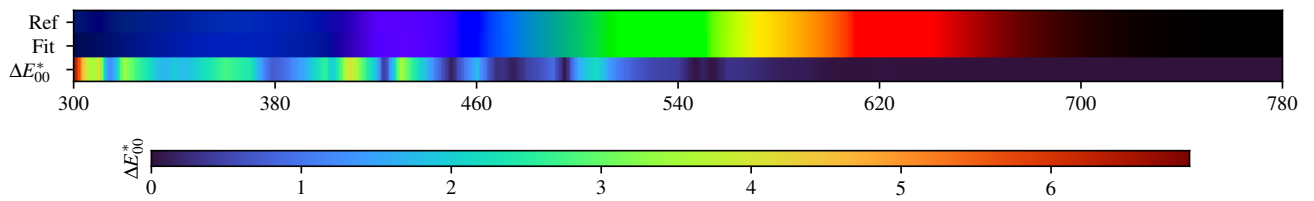
Gaussians:

Weight	Mean		Covariance			
0.052392597	433.628413646	730.593850858	4212.162817732	-277.795209338	-277.795209338	1158.993436769
0.032648903	525.807372007	433.669418211	5458.989394635	-157.756291727	-157.756291727	1668.632200551
0.302808386	357.905040186	471.952188089	1046.171314703	186.660631681	186.660631681	1009.589880747
0.011012575	732.619476792	698.710380947	636.400913519	-34.703748660	-34.703748660	2381.315980376
0.059429109	484.368516777	585.649503592	9683.831860801	-1122.924061647	-1122.924061647	2477.776003588
0.008551673	737.057724044	467.592158338	670.320845833	-10.468059472	-10.468059472	4398.982411323
0.511246176	366.476381854	432.397613936	911.496673492	-2.641666151	-2.641666151	343.340241644
0.021910581	592.881478095	725.232273500	1228.888929866	-462.222038000	-462.222038000	1964.852552313

PXEROWHR - Weighted variational Bayesian inference - 2 Gaussians



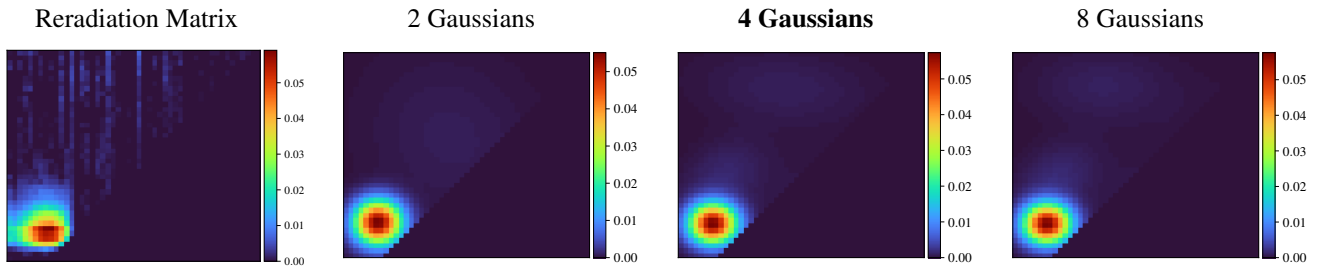
Fitted Material Under Monochromatic Illumination



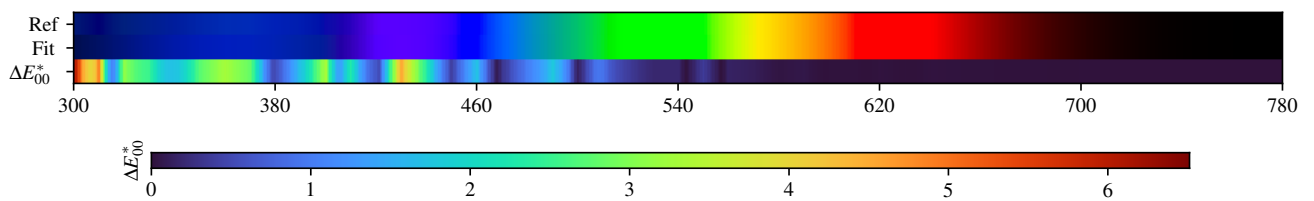
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.43$	FL2 $\Delta E = 0.18$	FL7 $\Delta E = 0.36$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.53$	HP5 $\Delta E = 0.25$	LED-B5 $\Delta E = 0.39$
B $\Delta E = 0.24$	D65 $\Delta E = 0.48$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.23$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.24$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.32$	D75 $\Delta E = 0.45$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.35$	E $\Delta E = 0.26$	FL5 $\Delta E = 0.32$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.34$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.16$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.41$	FL1 $\Delta E = 0.33$	FL6 $\Delta E = 0.18$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.21$	FL3.14 $\Delta E = 0.23$	HP4 $\Delta E = 0.24$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.22$

PXEROWHR - Weighted variational Bayesian inference - 4 Gaussians



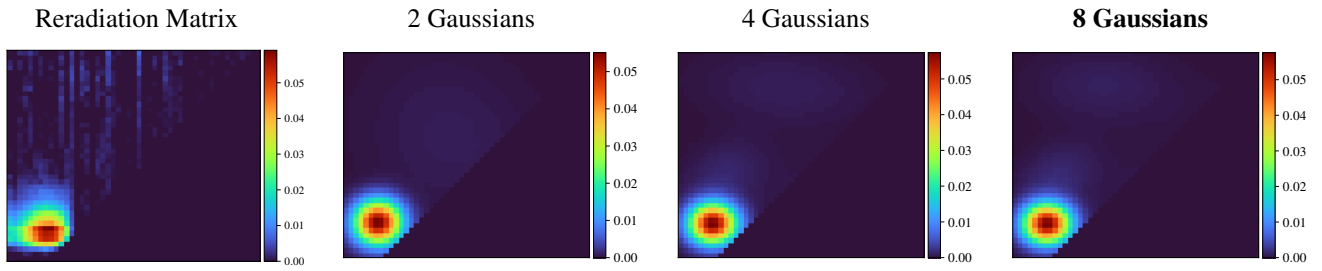
Fitted Material Under Monochromatic Illumination



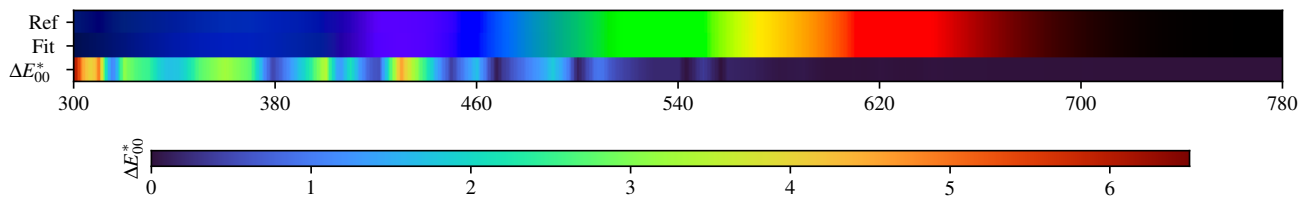
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.32$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.60$	HP5 $\Delta E = 0.12$	LED-B5 $\Delta E = 0.28$
B $\Delta E = 0.14$	D65 $\Delta E = 0.24$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.32$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.24$	D75 $\Delta E = 0.23$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.14$	E $\Delta E = 0.06$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.25$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.01$
D55 $\Delta E = 0.19$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.07$	LED-B4 $\Delta E = 0.17$	LED-V2 $\Delta E = 0.04$

PXEROWHR - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.23$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.34$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.62$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.28$
B $\Delta E = 0.15$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.25$	D75 $\Delta E = 0.22$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.13$	E $\Delta E = 0.08$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.25$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.18$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.07$	LED-B4 $\Delta E = 0.17$	LED-V2 $\Delta E = 0.05$

PXEROWHR - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.284928	0.346396	0.419889	0.623722	0.780383	0.804856	0.812883	0.822317	0.814997	0.826299	0.823343
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.828968	0.826684	0.826922	0.828202	0.825209	0.826516	0.829603	0.822604	0.821975	0.825307	0.819928
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.821555	0.824434	0.823138	0.824325	0.821760	0.824428	0.823590	0.820852	0.821312	0.821458	0.823785
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825499	0.823921	0.826229	0.825284	0.827297	0.828253	0.826204	0.827383			

2 Gaussians max

Scaling factor: 422.28924942474254

Gaussians:

Weight	Mean	Covariance				
0.803037589	363.678699694	445.936263517	1049.821582597	0.743396983	0.743396983	890.048748098
0.196962411	507.723093150	613.785321884	14074.687363287	-1784.487868798	-1784.487868798	13928.302632940

4 Gaussians max

Scaling factor: 417.02230338123263

Gaussians:

Weight	Mean	Covariance				
0.769867011	363.802248594	443.512772122	1042.657131806	6.046421233	6.046421233	748.356338937
0.066014981	566.141035452	492.126685160	10432.559918236	-96.612546988	-96.612546988	5980.378788019
0.067168989	381.266945118	533.793391834	2990.756623990	854.917317135	854.917317135	2529.444173045
0.096949019	506.635537718	713.094470412	13789.965650486	-742.240725995	-742.240725995	2622.942162029

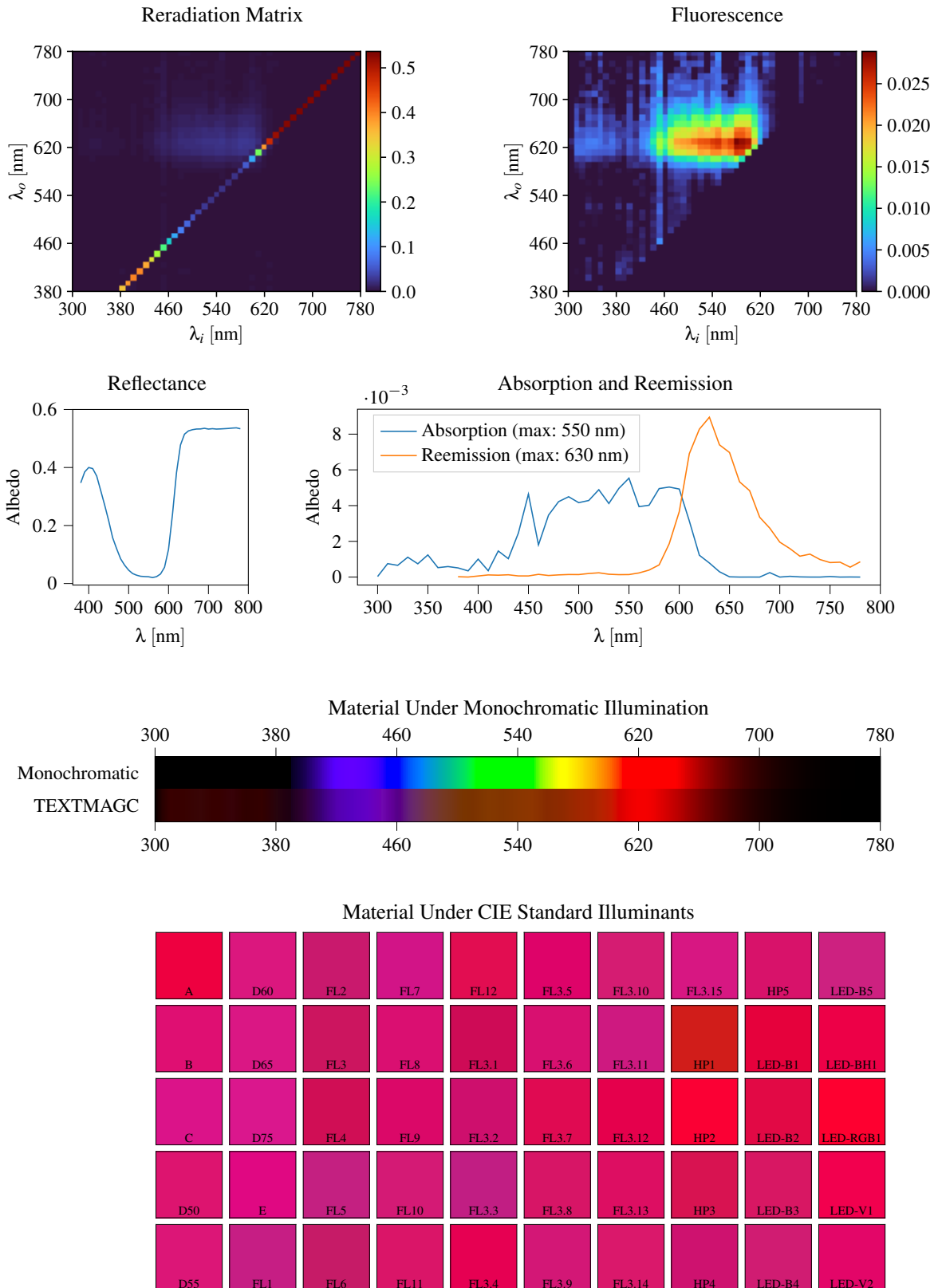
8 Gaussians max

Scaling factor: 418.52406069635754

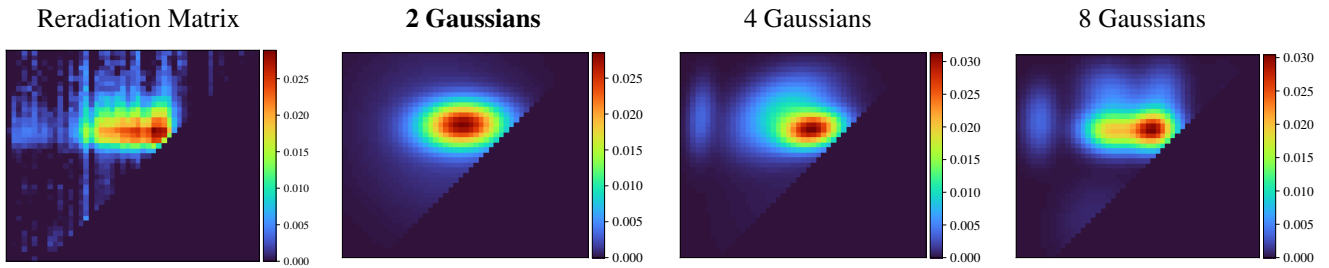
Gaussians:

Weight	Mean	Covariance				
0.763645581	363.845008050	443.283774424	1040.490482908	7.695349640	7.695349640	737.179787368
0.035053063	532.606461526	467.864144355	4509.044227415	33.001739025	33.001739025	4608.688558140
0.018975248	647.607905243	492.782334946	9286.738147612	-2304.707974974	-2304.707974974	6043.185582923
0.072138375	380.329956612	531.383468286	2927.273533187	893.861997350	893.861997350	2369.390329573
0.023997833	645.219495149	639.376160624	8361.393765376	3478.598500635	3478.598500635	5823.840173999
0.085077716	475.516144539	716.853097535	9186.237166793	14.486446239	14.486446239	2516.253367766

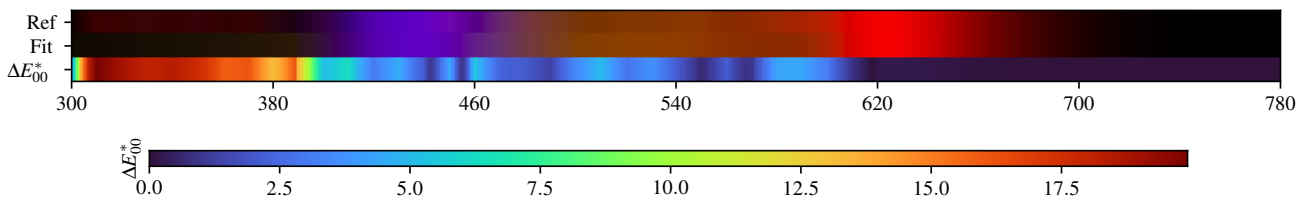
3.33. TEXTMAGC



TEXTMAGC - Weighted Expectation-Maximization - 2 Gaussians



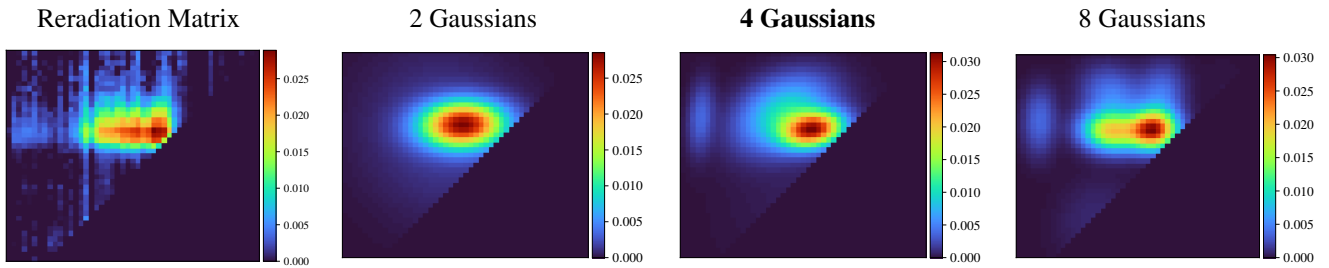
Fitted Material Under Monochromatic Illumination



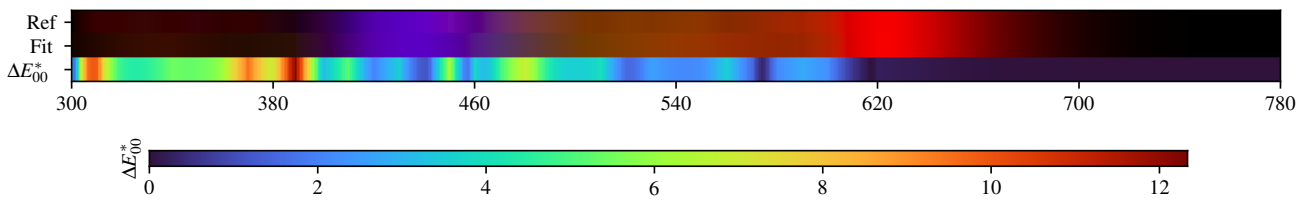
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.73$	$\Delta E = 1.47$	$\Delta E = 0.86$	$\Delta E = 1.18$	$\Delta E = 0.59$	$\Delta E = 0.75$	$\Delta E = 0.70$	$\Delta E = 1.35$	$\Delta E = 0.93$	$\Delta E = 0.87$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.21$	$\Delta E = 1.55$	$\Delta E = 0.91$	$\Delta E = 1.00$	$\Delta E = 1.10$	$\Delta E = 0.93$	$\Delta E = 0.75$	$\Delta E = 1.66$	$\Delta E = 0.69$	$\Delta E = 0.63$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.46$	$\Delta E = 1.69$	$\Delta E = 1.05$	$\Delta E = 0.78$	$\Delta E = 0.74$	$\Delta E = 0.66$	$\Delta E = 0.55$	$\Delta E = 0.69$	$\Delta E = 0.69$	$\Delta E = 1.06$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.29$	$\Delta E = 1.58$	$\Delta E = 1.12$	$\Delta E = 0.72$	$\Delta E = 1.03$	$\Delta E = 0.60$	$\Delta E = 0.69$	$\Delta E = 0.83$	$\Delta E = 0.72$	$\Delta E = 0.78$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.38$	$\Delta E = 1.11$	$\Delta E = 0.87$	$\Delta E = 0.61$	$\Delta E = 0.48$	$\Delta E = 0.65$	$\Delta E = 0.98$	$\Delta E = 1.02$	$\Delta E = 0.76$	$\Delta E = 1.20$

TEXTMAGC - Weighted Expectation-Maximization - 4 Gaussians



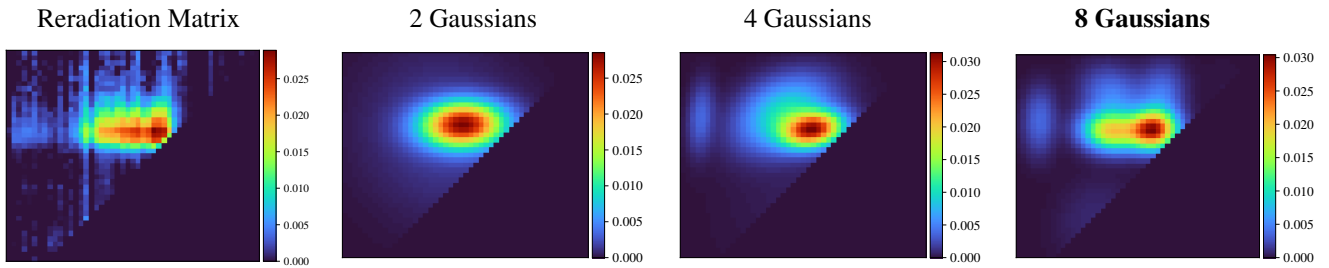
Fitted Material Under Monochromatic Illumination



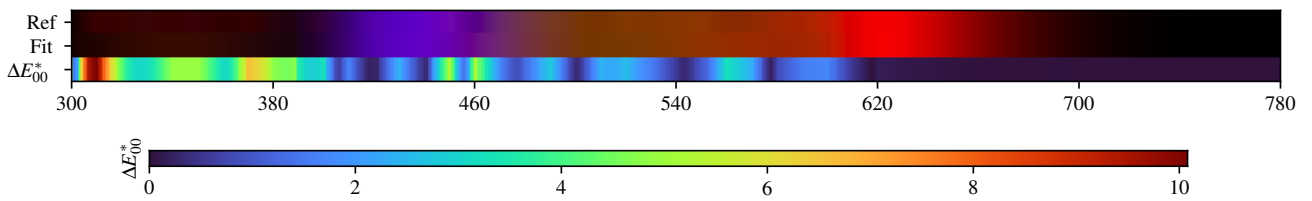
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.35$	D60 $\Delta E = 0.57$	FL2 $\Delta E = 0.42$	FL7 $\Delta E = 0.50$	FL12 $\Delta E = 0.26$	FL3.5 $\Delta E = 0.38$	FL3.10 $\Delta E = 0.53$	FL3.15 $\Delta E = 0.55$	HP5 $\Delta E = 0.50$	LED-B5 $\Delta E = 0.53$
B $\Delta E = 0.46$	D65 $\Delta E = 0.61$	FL3 $\Delta E = 0.37$	FL8 $\Delta E = 0.41$	FL3.1 $\Delta E = 0.39$	FL3.6 $\Delta E = 0.43$	FL3.11 $\Delta E = 0.35$	HP1 $\Delta E = 0.80$	LED-B1 $\Delta E = 0.35$	LED-BH1 $\Delta E = 0.37$
C $\Delta E = 0.55$	D75 $\Delta E = 0.67$	FL4 $\Delta E = 0.38$	FL9 $\Delta E = 0.35$	FL3.2 $\Delta E = 0.37$	FL3.7 $\Delta E = 0.32$	FL3.12 $\Delta E = 0.33$	HP2 $\Delta E = 0.69$	LED-B2 $\Delta E = 0.35$	LED-RGB1 $\Delta E = 0.47$
D50 $\Delta E = 0.50$	E $\Delta E = 0.62$	FL5 $\Delta E = 0.53$	FL10 $\Delta E = 0.31$	FL3.3 $\Delta E = 0.53$	FL3.8 $\Delta E = 0.29$	FL3.13 $\Delta E = 0.47$	HP3 $\Delta E = 0.44$	LED-B3 $\Delta E = 0.40$	LED-V1 $\Delta E = 0.38$
D55 $\Delta E = 0.54$	FL1 $\Delta E = 0.57$	FL6 $\Delta E = 0.37$	FL11 $\Delta E = 0.27$	FL3.4 $\Delta E = 0.20$	FL3.9 $\Delta E = 0.32$	FL3.14 $\Delta E = 0.52$	HP4 $\Delta E = 0.63$	LED-B4 $\Delta E = 0.39$	LED-V2 $\Delta E = 0.47$

TEXTMAGC - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.52$	$\Delta E = 0.15$	$\Delta E = 0.47$	$\Delta E = 0.15$	$\Delta E = 0.23$	$\Delta E = 0.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.44$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.57$	$\Delta E = 0.24$	$\Delta E = 0.53$	$\Delta E = 0.18$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.43$	$\Delta E = 0.07$	$\Delta E = 0.52$	$\Delta E = 0.21$	$\Delta E = 0.36$	$\Delta E = 0.29$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.03$	$\Delta E = 0.48$	$\Delta E = 0.16$	$\Delta E = 0.48$	$\Delta E = 0.22$	$\Delta E = 0.48$	$\Delta E = 0.25$	$\Delta E = 0.13$

TEXTMAGC - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.346946	0.384873	0.399952	0.396230	0.370670	0.320709	0.270386	0.216661	0.157849	0.119879	0.085014
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.063156	0.046155	0.034372	0.028669	0.024927	0.023864	0.023225	0.020407	0.023669	0.032866	0.055885
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.117901	0.239188	0.382409	0.477815	0.514865	0.526245	0.530383	0.532670	0.532933	0.535160	0.532495
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.533864	0.532526	0.533060	0.533842	0.534688	0.535960	0.536765	0.533605			

2 Gaussians

Scaling factor: 417.7791773949594

Gaussians:

Weight	Mean		Covariance			
0.318159625	493.582153323	621.706085356	11427.243930718	-630.192950048	-630.192950048	12057.914482822
0.681840375	534.337139955	640.081409536	3026.771855154	60.890668448	60.890668448	936.051247711

4 Gaussians

Scaling factor: 400.2823394736497

Gaussians:

Weight	Mean		Covariance			
0.448590723	501.218375644	663.340776587	3692.854816049	913.587454001	913.587454001	2311.393006166
0.389338008	559.932482615	630.235871556	1563.936377533	183.701608357	183.701608357	552.100894952
0.115554795	544.502638880	526.283444643	11680.499762106	2667.982777420	2667.982777420	12464.927198564
0.046516474	335.488605887	655.192616732	308.699161583	145.242166115	145.242166115	2199.652774308

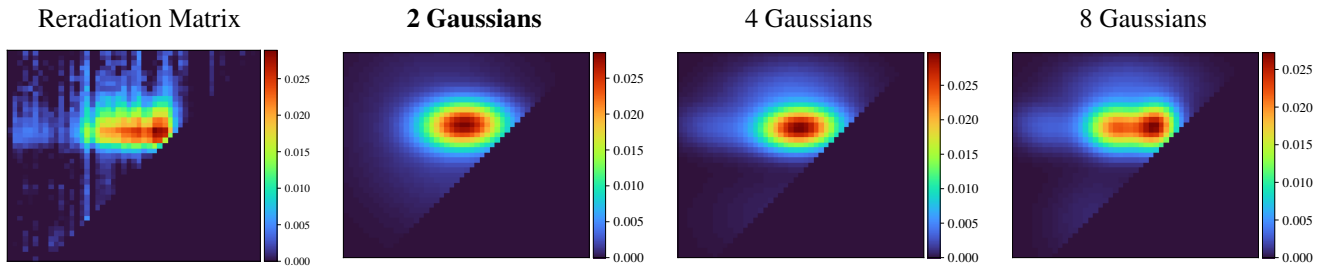
8 Gaussians

Scaling factor: 398.6645112019534

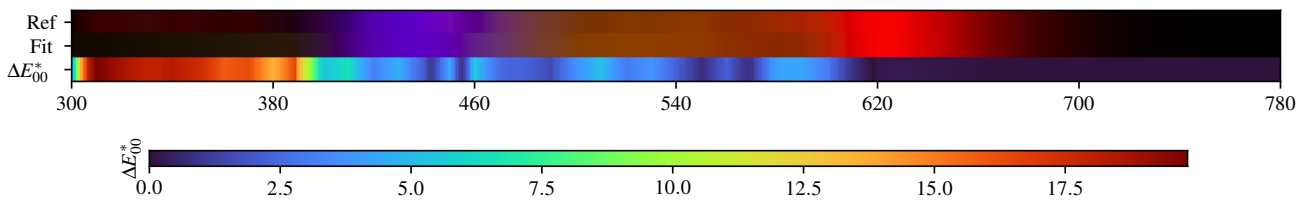
Gaussians:

Weight	Mean		Covariance			
0.060309285	342.214674837	649.874809535	506.798544573	34.799938945	34.799938945	2062.319834256
0.342867788	570.212809525	631.964955656	1004.519203762	23.975787817	23.975787817	628.405604293
0.278932716	483.795859733	629.308304769	1426.190982955	-54.515844106	-54.515844106	676.556192159
0.131693077	489.150663306	695.677658972	1675.239586440	-255.970584751	-255.970584751	1667.277347703
0.099964775	585.991899144	695.238286264	945.304084323	136.860891243	136.860891243	1975.525832184
0.042854272	446.408865271	459.127865178	2526.188630906	637.461205298	637.461205298	3453.747628924
0.033821800	628.413000990	456.717044550	4088.028870881	81.577369634	81.577369634	3378.521474045
0.009556287	721.706922500	689.460651732	1238.030273841	-549.692682217	-549.692682217	4029.269635290

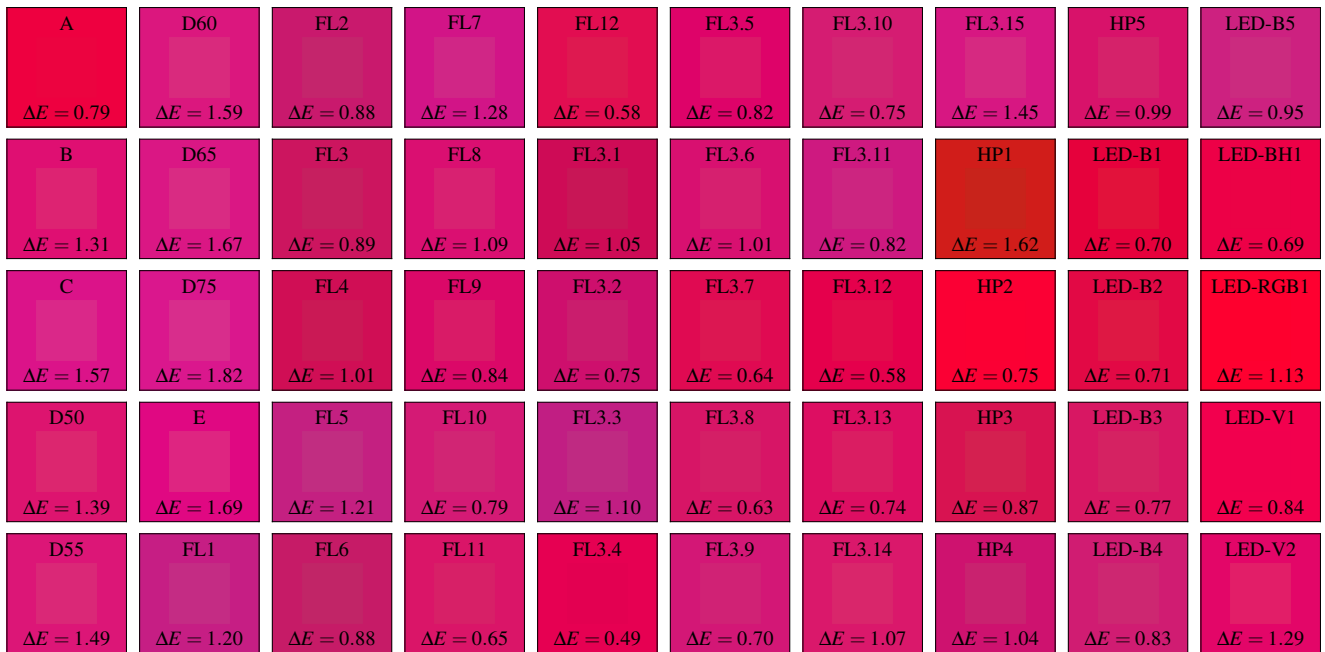
TEXTMAGC - Weighted variational Bayesian inference - 2 Gaussians



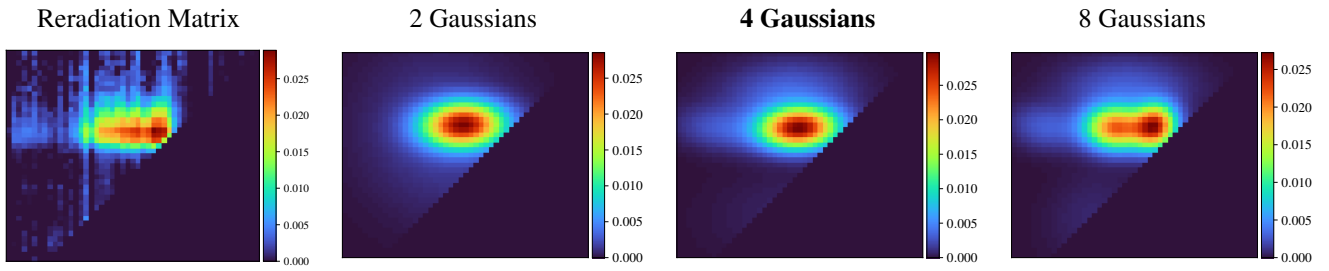
Fitted Material Under Monochromatic Illumination



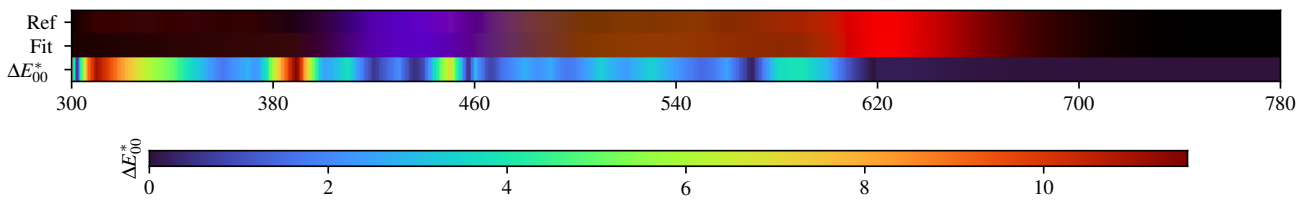
Fitted Material Under CIE Standard Illuminants



TEXTMAGC - Weighted variational Bayesian inference - 4 Gaussians



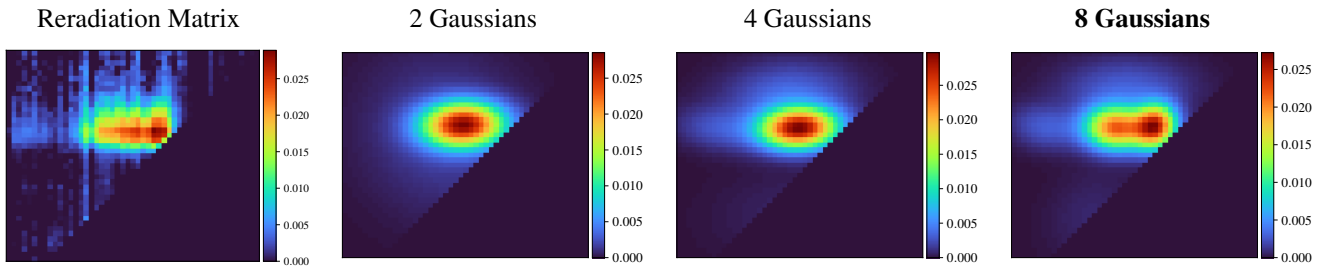
Fitted Material Under Monochromatic Illumination



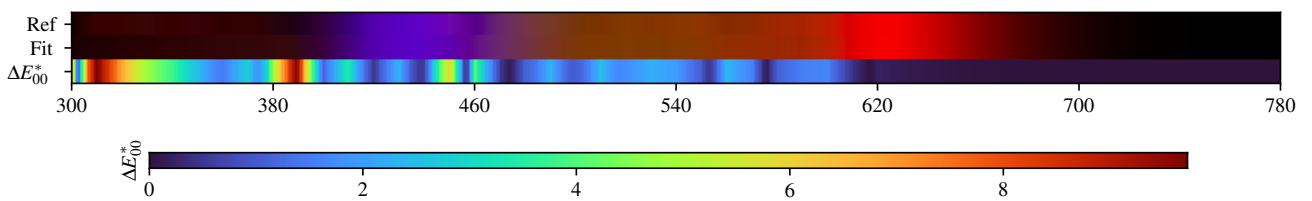
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.14$	$\Delta E = 0.57$	$\Delta E = 0.12$	$\Delta E = 0.46$	$\Delta E = 0.23$	$\Delta E = 0.48$	$\Delta E = 0.10$	$\Delta E = 0.40$	$\Delta E = 0.53$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.75$	$\Delta E = 0.11$	$\Delta E = 0.92$	$\Delta E = 0.14$	$\Delta E = 0.33$	$\Delta E = 1.43$	$\Delta E = 0.51$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.90$	$\Delta E = 0.23$	$\Delta E = 0.52$	$\Delta E = 0.56$	$\Delta E = 0.36$	$\Delta E = 0.39$	$\Delta E = 0.48$	$\Delta E = 0.48$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.32$	$\Delta E = 0.28$	$\Delta E = 0.40$	$\Delta E = 0.33$	$\Delta E = 0.41$	$\Delta E = 0.45$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.29$	$\Delta E = 0.56$	$\Delta E = 0.37$	$\Delta E = 0.27$	$\Delta E = 0.38$	$\Delta E = 0.12$	$\Delta E = 0.76$	$\Delta E = 0.49$	$\Delta E = 0.17$

TEXTMAGC - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.18$	$\Delta E = 0.62$	$\Delta E = 0.17$	$\Delta E = 0.59$	$\Delta E = 0.16$	$\Delta E = 0.28$	$\Delta E = 0.48$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.29$	$\Delta E = 0.19$	$\Delta E = 0.30$	$\Delta E = 0.17$	$\Delta E = 0.66$	$\Delta E = 0.32$	$\Delta E = 0.29$	$\Delta E = 0.20$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.32$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.64$	$\Delta E = 0.22$	$\Delta E = 0.43$	$\Delta E = 0.30$	$\Delta E = 0.21$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.25$	$\Delta E = 0.23$	$\Delta E = 0.64$	$\Delta E = 0.20$	$\Delta E = 0.66$	$\Delta E = 0.19$	$\Delta E = 0.39$	$\Delta E = 0.39$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.65$	$\Delta E = 0.20$	$\Delta E = 0.68$	$\Delta E = 0.17$	$\Delta E = 0.48$	$\Delta E = 0.45$	$\Delta E = 0.18$

TEXTMAGC - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.346946	0.384873	0.399952	0.396230	0.370670	0.320709	0.270386	0.216661	0.157849	0.119879	0.085014
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.063156	0.046155	0.034372	0.028669	0.024927	0.023864	0.023225	0.020407	0.023669	0.032866	0.055885
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.117901	0.239188	0.382409	0.477815	0.514865	0.526245	0.530383	0.532670	0.532933	0.535160	0.532495
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.533864	0.532526	0.533060	0.533842	0.534688	0.535960	0.536765	0.533605			

2 Gaussians max

Scaling factor: 418.41756279891405

Gaussians:

Weight	Mean		Covariance			
0.332000677	494.521026793	623.211471807	11180.518257392	-556.195878839	-556.195878839	11695.542552963
0.667999323	534.722243573	639.609900741	2989.981049762	59.474782928	59.474782928	919.294645602

4 Gaussians max

Scaling factor: 407.267704893318

Gaussians:

Weight	Mean		Covariance			
0.078624372	527.840247423	462.208649001	11979.747470665	476.506117212	476.506117212	3971.994287765
0.631752997	537.856989609	633.009762017	2703.900303859	81.680352528	81.680352528	750.605161474
0.067451785	377.358370084	632.058893293	3251.776916974	-300.521542798	-300.521542798	885.245087393
0.222170846	516.874678420	699.122591477	7202.657803361	330.230792309	330.230792309	2054.077469570

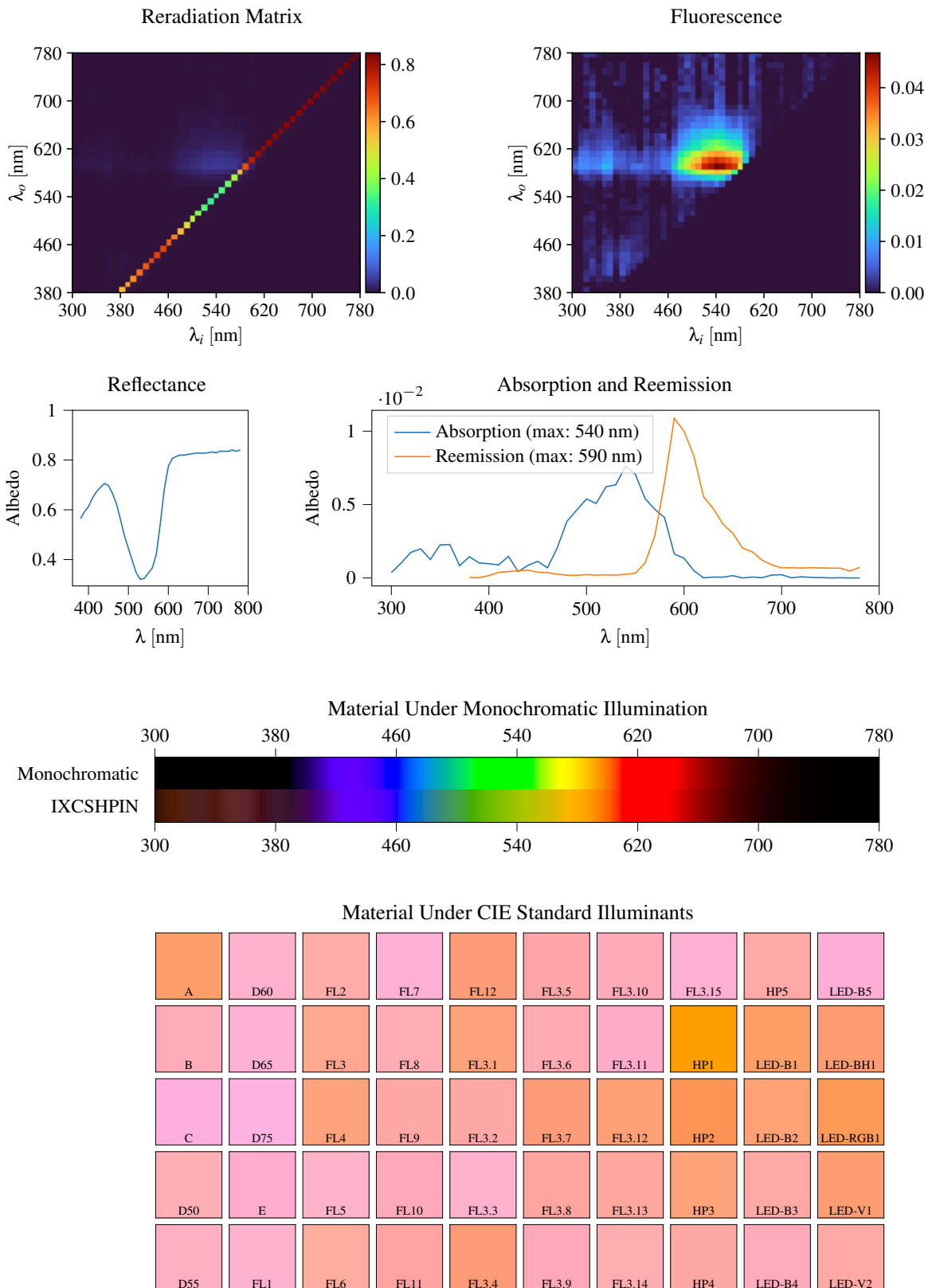
8 Gaussians max

Scaling factor: 401.56132897637667

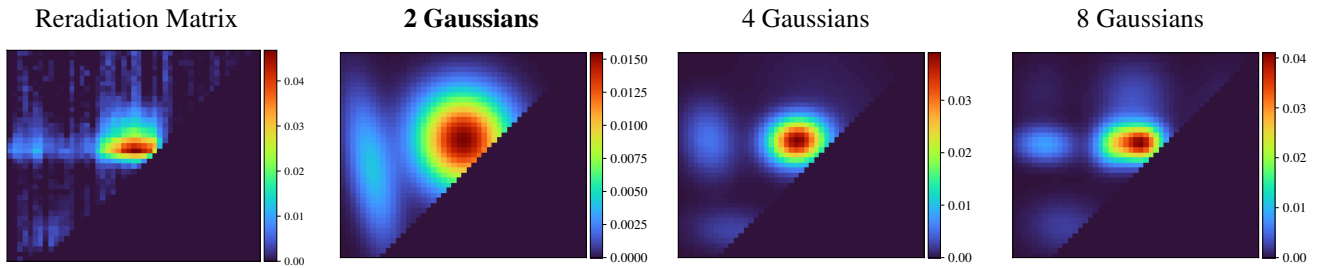
Gaussians:

Weight	Mean		Covariance			
0.042878709	447.839221804	462.994973970	3306.446464942	708.437909616	708.437909616	4101.200496747
0.035652371	627.378306250	471.072027097	5408.192884421	204.909707920	204.909707920	5158.251192268
0.065274655	363.706301756	634.798510231	2368.687708074	-233.407203487	-233.407203487	942.633455367
0.396589146	501.588454691	633.663238884	1693.734328922	-32.783833631	-32.783833631	843.913566676
0.292816342	580.495395406	636.675045179	767.898129307	57.737185825	57.737185825	841.880163158
0.165779189	522.201406089	711.903684054	7529.617920787	59.495656239	59.495656239	1727.738902041

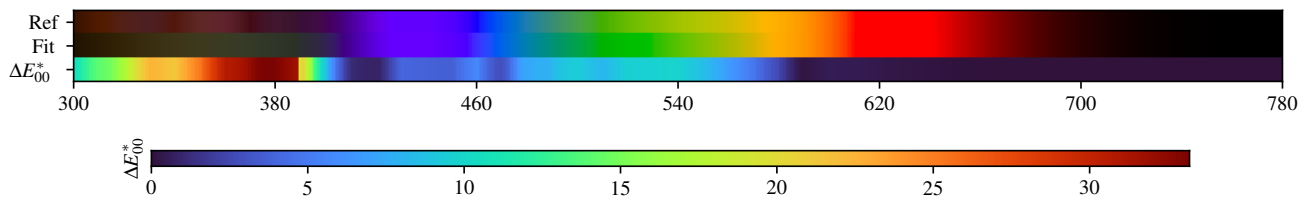
3.34. IXCSHPIN



IXCSHPIN - Weighted Expectation-Maximization - 2 Gaussians



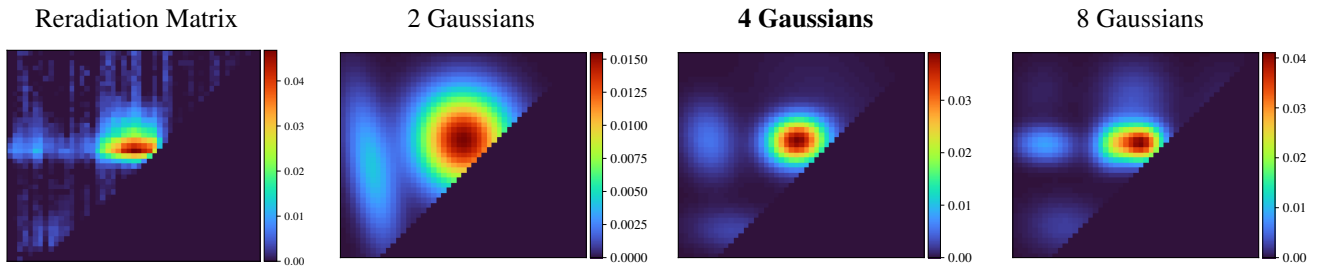
Fitted Material Under Monochromatic Illumination



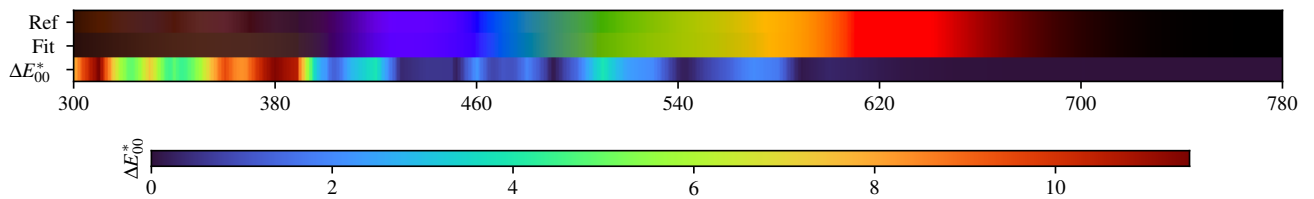
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 1.35$	D60 $\Delta E = 2.93$	FL2 $\Delta E = 2.07$	FL7 $\Delta E = 2.89$	FL12 $\Delta E = 1.29$	FL3.5 $\Delta E = 1.72$	FL3.10 $\Delta E = 2.02$	FL3.15 $\Delta E = 2.86$	HP5 $\Delta E = 1.70$	LED-B5 $\Delta E = 2.77$
B $\Delta E = 2.29$	D65 $\Delta E = 3.13$	FL3 $\Delta E = 1.65$	FL8 $\Delta E = 2.30$	FL3.1 $\Delta E = 1.29$	FL3.6 $\Delta E = 2.14$	FL3.11 $\Delta E = 2.50$	HP1 $\Delta E = 0.85$	LED-B1 $\Delta E = 1.21$	LED-BH1 $\Delta E = 1.28$
C $\Delta E = 2.86$	D75 $\Delta E = 3.44$	FL4 $\Delta E = 1.36$	FL9 $\Delta E = 1.90$	FL3.2 $\Delta E = 1.81$	FL3.7 $\Delta E = 1.19$	FL3.12 $\Delta E = 1.23$	HP2 $\Delta E = 1.46$	LED-B2 $\Delta E = 1.34$	LED-RGB1 $\Delta E = 1.34$
D50 $\Delta E = 2.46$	E $\Delta E = 2.59$	FL5 $\Delta E = 3.32$	FL10 $\Delta E = 2.28$	FL3.3 $\Delta E = 3.08$	FL3.8 $\Delta E = 1.69$	FL3.13 $\Delta E = 1.63$	HP3 $\Delta E = 1.28$	LED-B3 $\Delta E = 1.88$	LED-V1 $\Delta E = 1.25$
D55 $\Delta E = 2.71$	FL1 $\Delta E = 3.15$	FL6 $\Delta E = 2.11$	FL11 $\Delta E = 1.78$	FL3.4 $\Delta E = 1.23$	FL3.9 $\Delta E = 2.06$	FL3.14 $\Delta E = 2.21$	HP4 $\Delta E = 1.50$	LED-B4 $\Delta E = 2.34$	LED-V2 $\Delta E = 1.95$

IXCSHPIN - Weighted Expectation-Maximization - 4 Gaussians



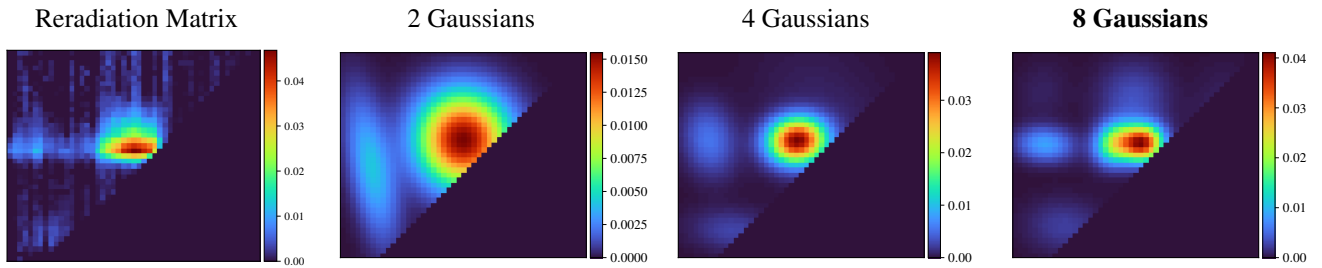
Fitted Material Under Monochromatic Illumination



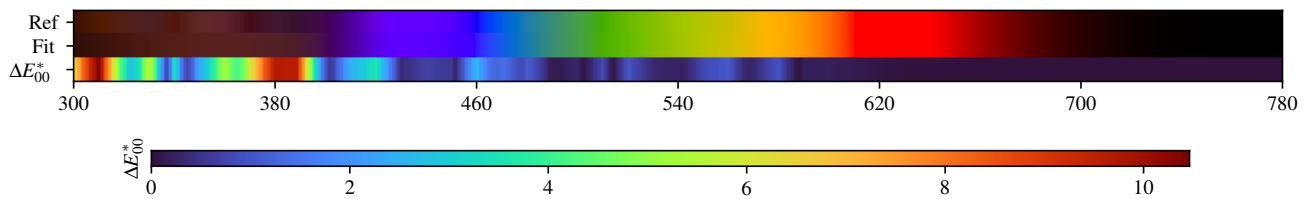
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.20$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.47$	FL7 $\Delta E = 0.21$	FL12 $\Delta E = 0.32$	FL3.5 $\Delta E = 0.19$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.07$	HP5 $\Delta E = 0.29$	LED-B5 $\Delta E = 0.16$
B $\Delta E = 0.21$	D65 $\Delta E = 0.12$	FL3 $\Delta E = 0.49$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.47$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.29$	HP1 $\Delta E = 0.46$	LED-B1 $\Delta E = 0.25$	LED-BH1 $\Delta E = 0.21$
C $\Delta E = 0.19$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.49$	FL9 $\Delta E = 0.26$	FL3.2 $\Delta E = 0.39$	FL3.7 $\Delta E = 0.31$	FL3.12 $\Delta E = 0.21$	HP2 $\Delta E = 0.52$	LED-B2 $\Delta E = 0.25$	LED-RGB1 $\Delta E = 0.19$
D50 $\Delta E = 0.15$	E $\Delta E = 0.07$	FL5 $\Delta E = 0.37$	FL10 $\Delta E = 0.33$	FL3.3 $\Delta E = 0.33$	FL3.8 $\Delta E = 0.32$	FL3.13 $\Delta E = 0.21$	HP3 $\Delta E = 0.27$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.33$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.34$	FL6 $\Delta E = 0.50$	FL11 $\Delta E = 0.34$	FL3.4 $\Delta E = 0.21$	FL3.9 $\Delta E = 0.30$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.31$	LED-B4 $\Delta E = 0.23$	LED-V2 $\Delta E = 0.33$

IXCSHPIN - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.20$	D60 $\Delta E = 0.20$	FL2 $\Delta E = 0.26$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.23$	FL3.5 $\Delta E = 0.20$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.14$	HP5 $\Delta E = 0.30$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.23$	D65 $\Delta E = 0.19$	FL3 $\Delta E = 0.25$	FL8 $\Delta E = 0.21$	FL3.1 $\Delta E = 0.21$	FL3.6 $\Delta E = 0.20$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.20$	LED-B1 $\Delta E = 0.18$	LED-BH1 $\Delta E = 0.20$
C $\Delta E = 0.20$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.23$	FL9 $\Delta E = 0.22$	FL3.2 $\Delta E = 0.22$	FL3.7 $\Delta E = 0.22$	FL3.12 $\Delta E = 0.18$	HP2 $\Delta E = 0.24$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.23$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.25$	FL10 $\Delta E = 0.23$	FL3.3 $\Delta E = 0.22$	FL3.8 $\Delta E = 0.24$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.29$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.34$
D55 $\Delta E = 0.21$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.28$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.17$	FL3.9 $\Delta E = 0.22$	FL3.14 $\Delta E = 0.20$	HP4 $\Delta E = 0.33$	LED-B4 $\Delta E = 0.15$	LED-V2 $\Delta E = 0.39$

IXCSHPIN - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.564615	0.592484	0.612787	0.647282	0.673157	0.690162	0.705637	0.697740	0.666172	0.624403	0.561878
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.495993	0.444701	0.394016	0.345519	0.320033	0.324403	0.345989	0.366306	0.422069	0.545545	0.684732
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.774045	0.806514	0.814837	0.820032	0.819882	0.822868	0.825114	0.828345	0.827736	0.827640	0.829463
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.832564	0.829379	0.835742	0.835454	0.834638	0.840830	0.835359	0.840610			

2 Gaussians

Scaling factor: 452.11444548634154

Gaussians:

Weight	Mean		Covariance			
0.838237741	538.462875880	610.327871278	3793.178334350	-67.794197776	-67.794197776	3996.602660709
0.161762259	356.932221511	554.339893932	1161.724005621	-1563.573767118	-1563.573767118	9183.930363592

4 Gaussians

Scaling factor: 423.68589942245575

Gaussians:

Weight	Mean		Covariance			
0.636683714	531.263605234	608.402094240	1430.594538104	55.380722496	55.380722496	879.655034052
0.065799390	404.043915273	429.778141984	3238.938020383	-214.686071641	-214.686071641	821.400732807
0.131965465	356.278526607	609.835220964	1241.032786429	-218.452982521	-218.452982521	2182.358940256
0.165551432	587.423959708	635.180836552	8526.397348827	-2881.333093395	-2881.333093395	13235.089950652

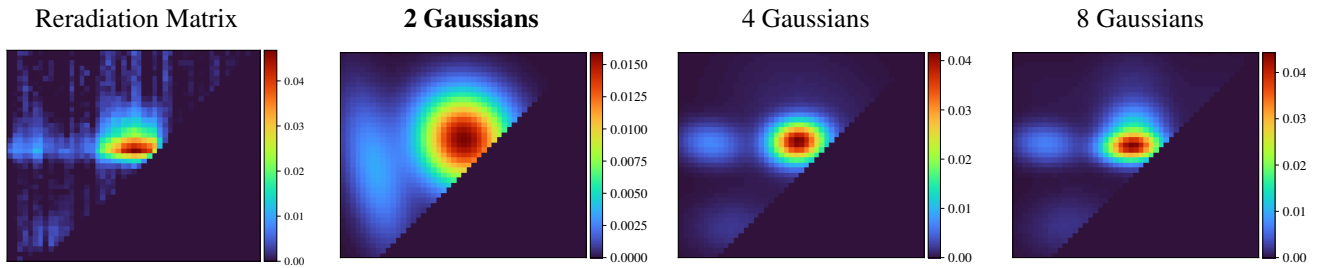
8 Gaussians

Scaling factor: 413.0817954859161

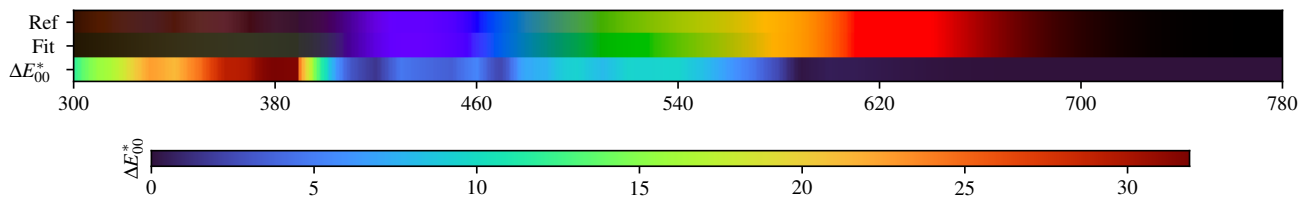
Gaussians:

Weight	Mean		Covariance			
0.132843451	535.263329141	687.017470612	2144.329060934	-21.498116587	-21.498116587	2523.002641825
0.241135219	500.792956254	603.616982069	730.451047910	81.766480671	81.766480671	725.270660005
0.114235024	359.763446276	600.946925883	1422.950418497	-54.298216470	-54.298216470	523.845632415
0.039311836	624.673969424	450.906677629	5858.629995087	-228.756258280	-228.756258280	2658.567031002
0.069409917	397.089419733	438.171775998	2530.489301183	-118.204082510	-118.204082510	1276.531082904
0.033190722	701.680189585	674.664681309	1531.606140019	611.027673239	611.027673239	4329.020321381
0.021054109	354.619127939	705.420469655	1279.298442974	119.016680912	119.016680912	1773.341924447
0.348819722	554.042491703	603.230843103	686.573260049	20.920810233	20.920810233	558.874655061

IXCSHPIN - Weighted variational Bayesian inference - 2 Gaussians



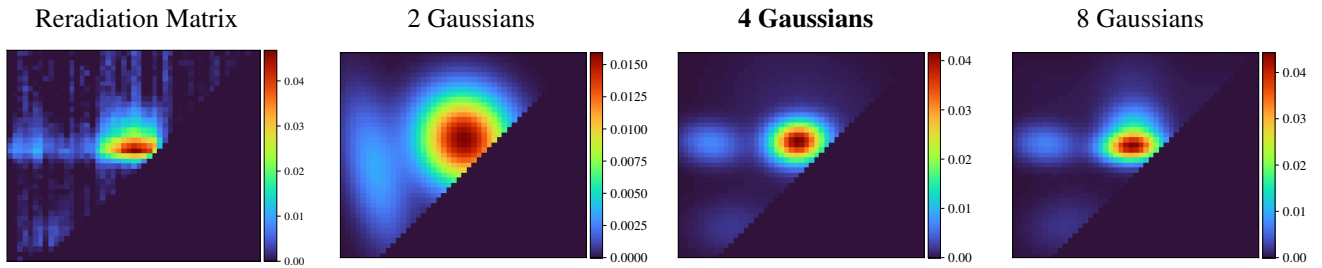
Fitted Material Under Monochromatic Illumination



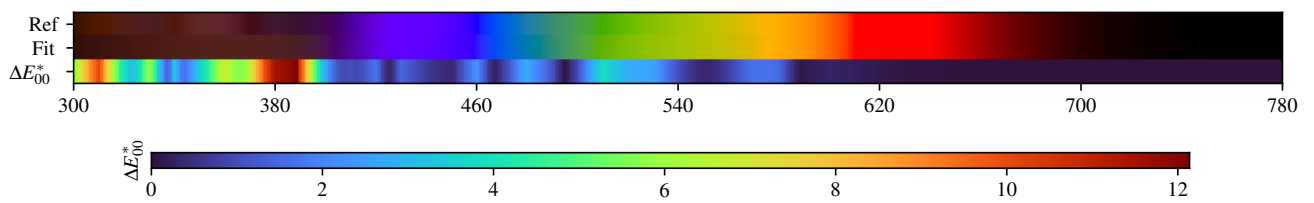
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 1.30$	D60 $\Delta E = 2.85$	FL2 $\Delta E = 2.00$	FL7 $\Delta E = 2.80$	FL12 $\Delta E = 1.26$	FL3.5 $\Delta E = 1.67$	FL3.10 $\Delta E = 1.97$	FL3.15 $\Delta E = 2.77$	HP5 $\Delta E = 1.64$	LED-B5 $\Delta E = 2.69$
B $\Delta E = 2.22$	D65 $\Delta E = 3.04$	FL3 $\Delta E = 1.58$	FL8 $\Delta E = 2.24$	FL3.1 $\Delta E = 1.24$	FL3.6 $\Delta E = 2.08$	FL3.11 $\Delta E = 2.43$	HP1 $\Delta E = 0.81$	LED-B1 $\Delta E = 1.16$	LED-BH1 $\Delta E = 1.25$
C $\Delta E = 2.77$	D75 $\Delta E = 3.34$	FL4 $\Delta E = 1.31$	FL9 $\Delta E = 1.85$	FL3.2 $\Delta E = 1.75$	FL3.7 $\Delta E = 1.16$	FL3.12 $\Delta E = 1.19$	HP2 $\Delta E = 1.43$	LED-B2 $\Delta E = 1.29$	LED-RGB1 $\Delta E = 1.29$
D50 $\Delta E = 2.38$	E $\Delta E = 2.49$	FL5 $\Delta E = 3.21$	FL10 $\Delta E = 2.23$	FL3.3 $\Delta E = 2.97$	FL3.8 $\Delta E = 1.65$	FL3.13 $\Delta E = 1.58$	HP3 $\Delta E = 1.22$	LED-B3 $\Delta E = 1.82$	LED-V1 $\Delta E = 1.20$
D55 $\Delta E = 2.63$	FL1 $\Delta E = 3.05$	FL6 $\Delta E = 2.03$	FL11 $\Delta E = 1.74$	FL3.4 $\Delta E = 1.19$	FL3.9 $\Delta E = 2.01$	FL3.14 $\Delta E = 2.14$	HP4 $\Delta E = 1.43$	LED-B4 $\Delta E = 2.28$	LED-V2 $\Delta E = 1.88$

IXCSHPIN - Weighted variational Bayesian inference - 4 Gaussians



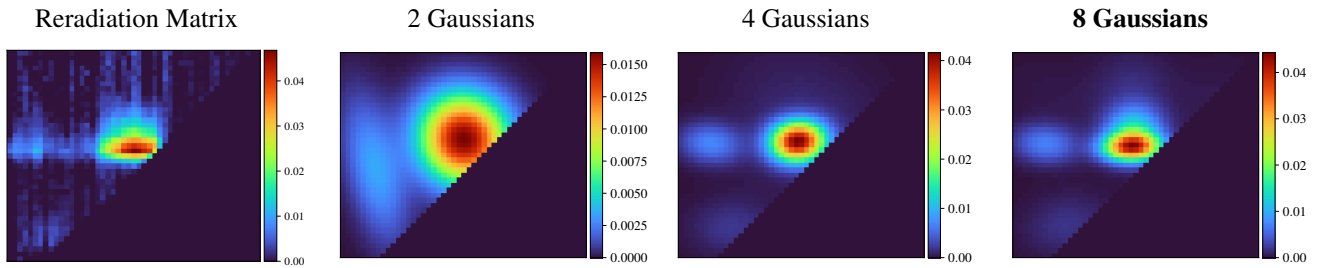
Fitted Material Under Monochromatic Illumination



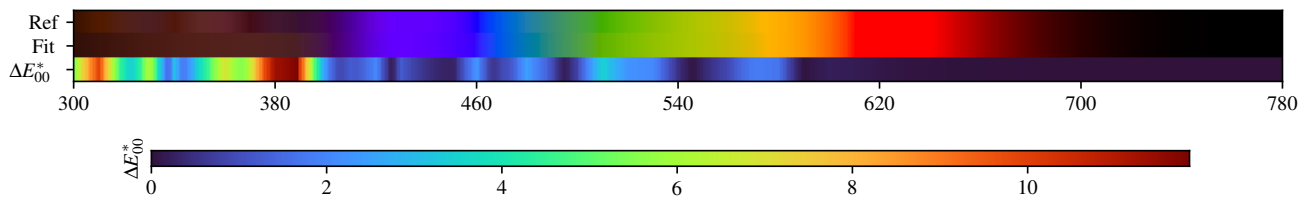
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.30$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.26$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.07$
B $\Delta E = 0.10$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.35$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.35$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.40$	LED-B1 $\Delta E = 0.18$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.10$	D75 $\Delta E = 0.15$	FL4 $\Delta E = 0.36$	FL9 $\Delta E = 0.14$	FL3.2 $\Delta E = 0.25$	FL3.7 $\Delta E = 0.27$	FL3.12 $\Delta E = 0.16$	HP2 $\Delta E = 0.41$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.26$
D50 $\Delta E = 0.10$	E $\Delta E = 0.23$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.21$	FL3.3 $\Delta E = 0.15$	FL3.8 $\Delta E = 0.25$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.21$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.23$
D55 $\Delta E = 0.11$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.33$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.21$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.21$

IXCSHPIN - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.04$	FL2 $\Delta E = 0.27$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.14$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.06$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.08$	D65 $\Delta E = 0.05$	FL3 $\Delta E = 0.28$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.27$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.32$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.07$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.28$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.22$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.27$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.20$
D50 $\Delta E = 0.04$	E $\Delta E = 0.15$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.20$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.20$	FL6 $\Delta E = 0.28$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.10$	LED-V2 $\Delta E = 0.17$

IXCSHPIN - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.564615	0.592484	0.612787	0.647282	0.673157	0.690162	0.705637	0.697740	0.666172	0.624403	0.561878
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.495993	0.444701	0.394016	0.345519	0.320033	0.324403	0.345989	0.366306	0.422069	0.545545	0.684732
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.774045	0.806514	0.814837	0.820032	0.819882	0.822868	0.825114	0.828345	0.827736	0.827640	0.829463
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.832564	0.829379	0.835742	0.835454	0.834638	0.840830	0.835359	0.840610			

2 Gaussians max

Scaling factor: 453.92102394923387

Gaussians:

Weight	Mean		Covariance			
0.172834670	363.148051360	551.906680393	1801.143734921	-1800.204106473	-1800.204106473	9267.125474615
0.827165330	539.777065512	611.592181127	3706.245477768	-158.739274614	-158.739274614	3804.311793769

4 Gaussians max

Scaling factor: 426.8129043057739

Gaussians:

Weight	Mean		Covariance			
0.067231886	400.298098078	436.260302601	3189.821389334	19.211950705	19.211950705	1462.559643499
0.235324619	553.210141051	633.587831177	10851.732777522	-2301.283750541	-2301.283750541	10890.513798169
0.112787777	359.579073049	602.866787615	1748.454008874	-113.691048628	-113.691048628	721.305293846
0.584655718	532.840081883	606.756620178	1317.271313950	50.950672209	50.950672209	727.085514978

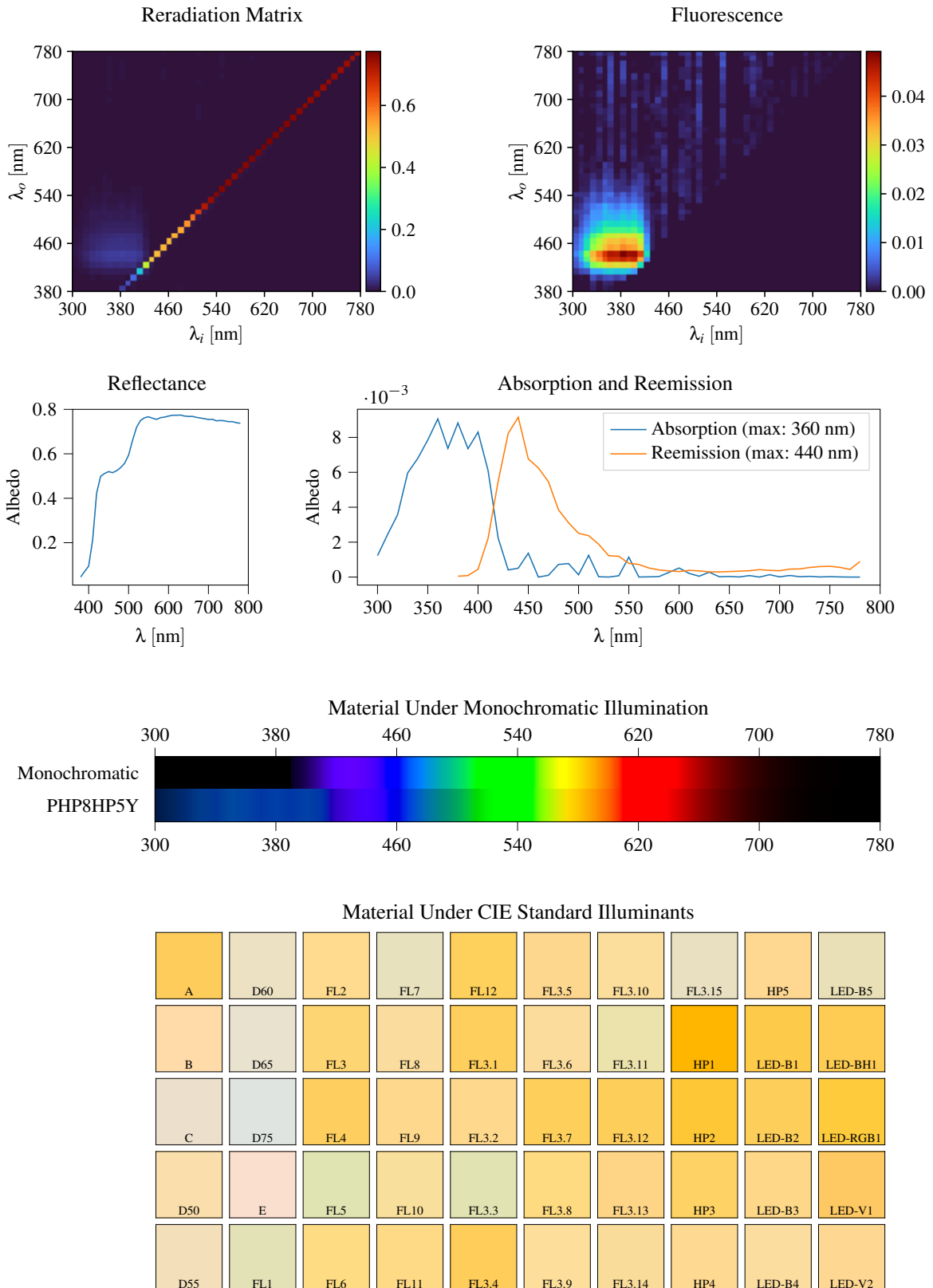
8 Gaussians max

Scaling factor: 418.31007471829025

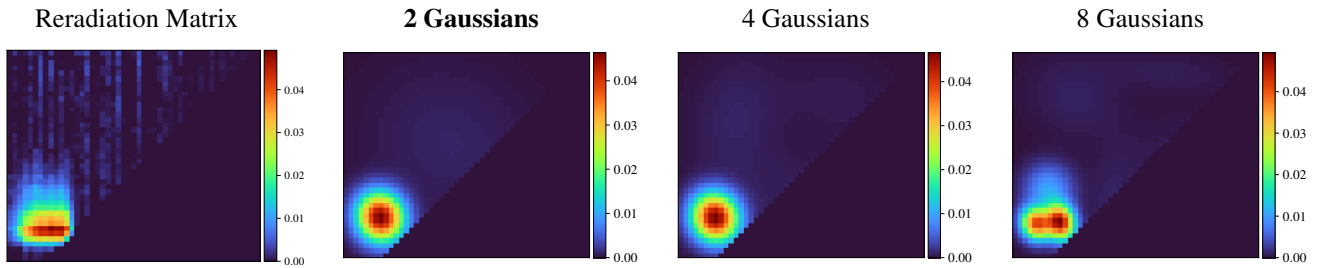
Gaussians:

Weight	Mean		Covariance			
0.071789774	401.709995527	441.447789514	3115.058884119	247.793280638	247.793280638	1712.211548505
0.041453401	624.012113500	459.888557248	6253.511682339	-505.335396588	-505.335396588	3716.576276595
0.115100397	360.825465551	601.750283237	1802.284888326	-97.297267811	-97.297267811	674.839667962
0.284549007	534.750403753	625.240869832	1376.161815679	49.753784576	49.753784576	1157.617146664
0.358587880	531.986738236	595.605720346	1486.828457051	34.447470008	34.447470008	336.897616489
0.035994312	686.145622456	673.268349144	3497.277989403	1218.290621546	1218.290621546	4419.555857772
0.025940335	385.387638915	681.778148362	4500.560437474	-1864.993382812	-1864.993382812	3834.431105394
0.066584895	530.720233174	717.476447261	2976.992523598	131.343092278	131.343092278	2238.170106265

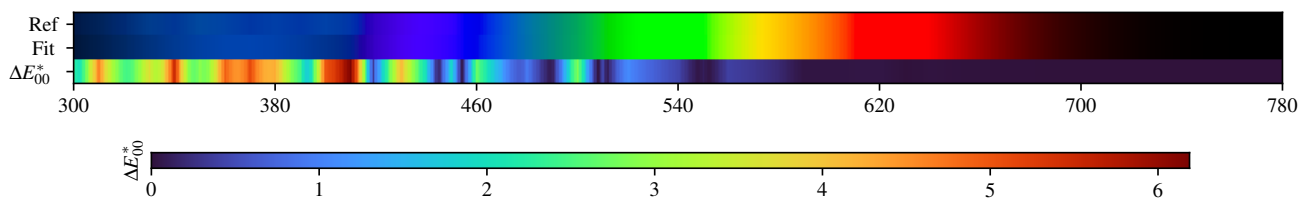
3.35. PHP8HP5Y



PHP8HP5Y - Weighted Expectation-Maximization - 2 Gaussians



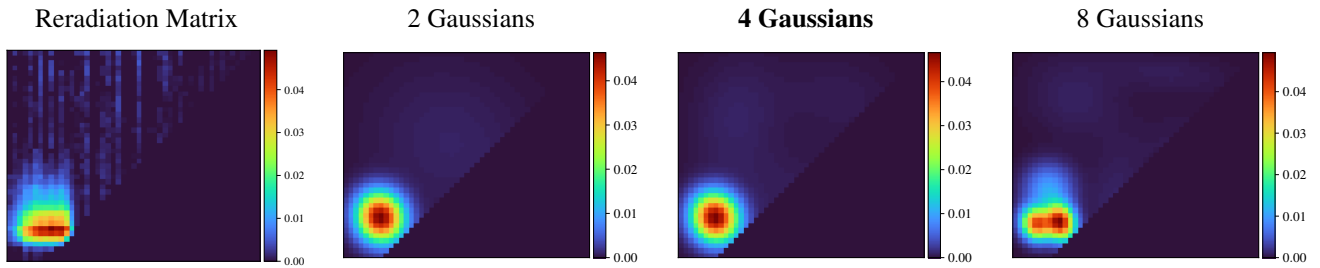
Fitted Material Under Monochromatic Illumination



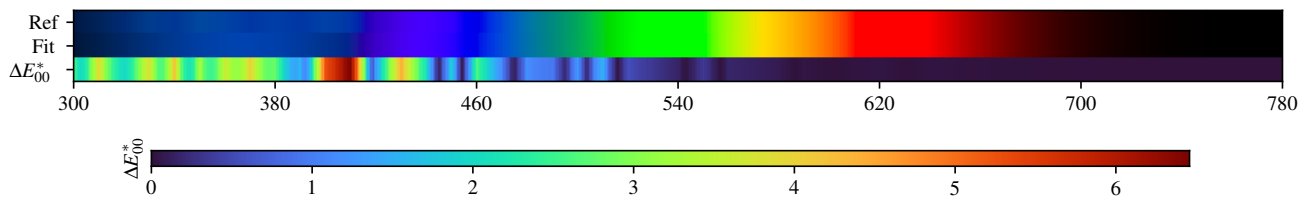
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.54$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.48$	FL12 $\Delta E = 0.10$	FL3.5 $\Delta E = 0.20$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.49$	HP5 $\Delta E = 0.29$	LED-B5 $\Delta E = 0.40$
B $\Delta E = 0.31$	D65 $\Delta E = 0.65$	FL3 $\Delta E = 0.17$	FL8 $\Delta E = 0.27$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.27$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.15$	LED-BH1 $\Delta E = 0.18$
C $\Delta E = 0.52$	D75 $\Delta E = 0.92$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.21$	FL3.2 $\Delta E = 0.22$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.36$	E $\Delta E = 0.54$	FL5 $\Delta E = 0.44$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.45$	FL3.8 $\Delta E = 0.16$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.24$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.74$
D55 $\Delta E = 0.44$	FL1 $\Delta E = 0.44$	FL6 $\Delta E = 0.23$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.27$	HP4 $\Delta E = 0.41$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.72$

PHP8HP5Y - Weighted Expectation-Maximization - 4 Gaussians



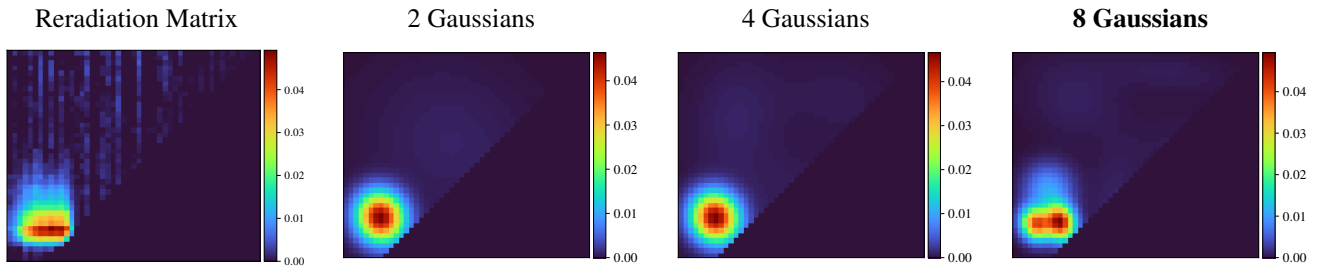
Fitted Material Under Monochromatic Illumination



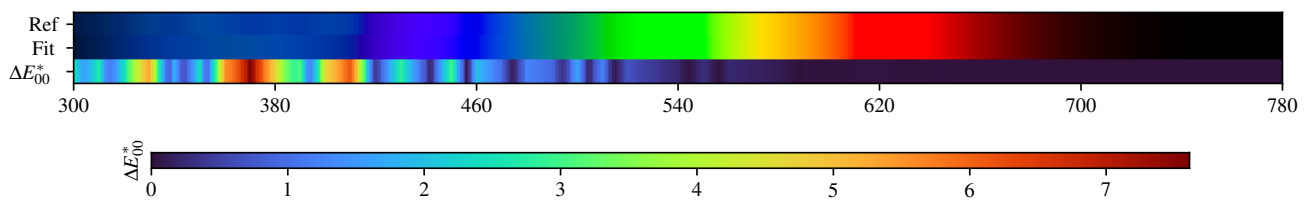
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.43$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.36$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.22$	D65 $\Delta E = 0.52$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.39$	D75 $\Delta E = 0.75$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.26$	E $\Delta E = 0.43$	FL5 $\Delta E = 0.18$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.20$	FL3.8 $\Delta E = 0.04$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.21$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.74$
D55 $\Delta E = 0.34$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.11$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.07$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.38$	LED-B4 $\Delta E = 0.14$	LED-V2 $\Delta E = 0.70$

PHP8HP5Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.10$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.05$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.06$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.05$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.08$	D75 $\Delta E = 0.14$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.07$	E $\Delta E = 0.56$	FL5 $\Delta E = 0.04$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.04$	FL3.8 $\Delta E = 0.04$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.29$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.04$	FL6 $\Delta E = 0.04$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.07$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.07$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.26$

PHP8HP5Y - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.045807	0.070575	0.094660	0.211844	0.423314	0.498734	0.511673	0.519998	0.515118	0.523929	0.537801
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.557020	0.593741	0.660433	0.719334	0.750174	0.762214	0.766641	0.760124	0.754943	0.762759	0.765039
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.769787	0.773537	0.773449	0.774442	0.770063	0.768323	0.768313	0.763978	0.761128	0.757994	0.754370
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.755411	0.748338	0.749852	0.748559	0.744597	0.744889	0.739910	0.737300			

2 Gaussians

Scaling factor: 403.2927703727365

Gaussians:

Weight	Mean	Covariance				
0.235416922	506.071909101	603.688993770	14167.244822341	-1393.347551004	-1393.347551004	13212.616465211
0.764583078	368.492792100	456.327143628	1000.905141651	-59.960960048	-59.960960048	1117.774456770

4 Gaussians

Scaling factor: 400.72463115277355

Gaussians:

Weight	Mean	Covariance				
0.056583104	613.524066168	694.007557821	7201.028051338	-788.982795526	-788.982795526	4057.542332189
0.089992691	408.748079451	657.165781429	3944.799448192	562.595403348	562.595403348	7043.238121267
0.758289361	368.351504751	455.775913115	993.629329404	-60.729975148	-60.729975148	1079.718422854
0.095134844	526.250735112	494.029002128	11875.256120028	-1574.611540420	-1574.611540420	4553.835336529

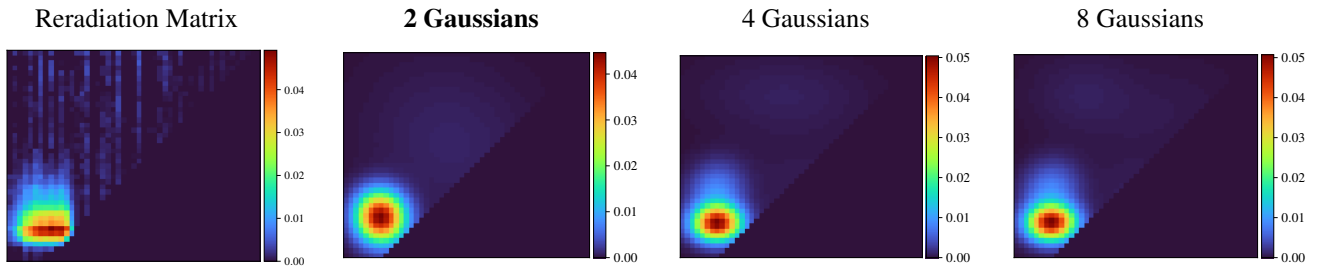
8 Gaussians

Scaling factor: 392.1581772941921

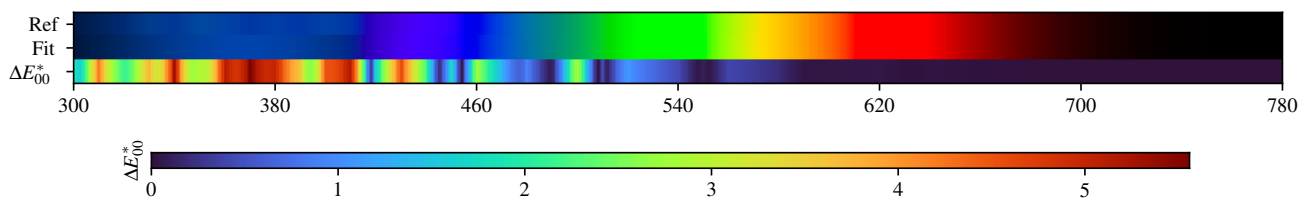
Gaussians:

Weight	Mean	Covariance				
0.034060644	600.717881894	743.357852638	8657.561479552	-831.643177289	-831.643177289	843.727076200
0.335218647	390.687519811	446.289270509	367.217450037	-49.904366340	-49.904366340	558.937127249
0.025013666	643.331330903	445.207397679	6181.443991676	159.734247012	159.734247012	2165.513506412
0.066385316	417.695706677	692.611298580	4327.853777835	-426.161870127	-426.161870127	3271.652676510
0.277272727	342.210928470	442.952112087	404.613628496	-41.485876009	-41.485876009	470.654545744
0.179913801	366.247167749	511.122229312	1011.907182236	-3.610215859	-3.610215859	1080.618469225
0.047317988	494.520211754	489.068692580	1441.495451798	361.624274670	361.624274670	4717.942644545
0.034817211	616.228258506	604.906742141	5777.848637716	580.433347779	580.433347779	2390.371823131

PHP8HP5Y - Weighted variational Bayesian inference - 2 Gaussians



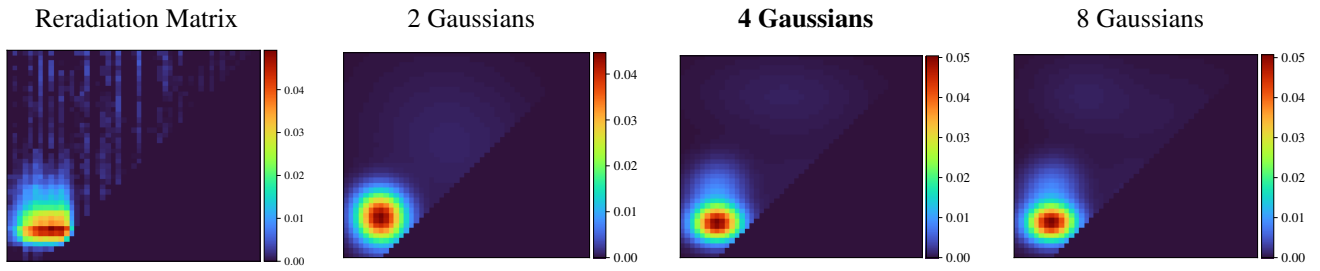
Fitted Material Under Monochromatic Illumination



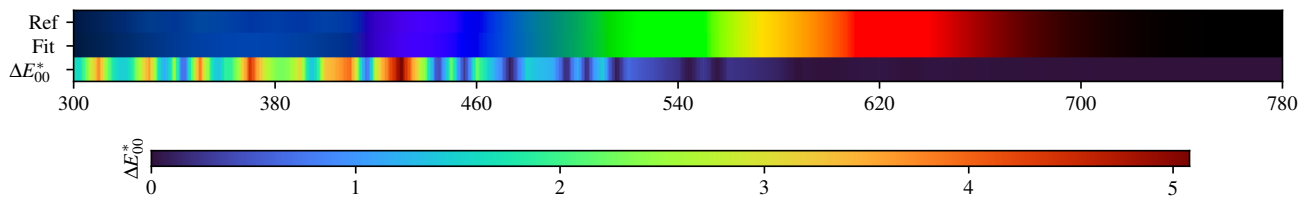
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.62$	FL2 $\Delta E = 0.21$	FL7 $\Delta E = 0.43$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.19$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.50$	HP5 $\Delta E = 0.26$	LED-B5 $\Delta E = 0.38$
B $\Delta E = 0.31$	D65 $\Delta E = 0.77$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.25$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.25$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.15$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.53$	D75 $\Delta E = 1.14$	FL4 $\Delta E = 0.13$	FL9 $\Delta E = 0.19$	FL3.2 $\Delta E = 0.21$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.39$	E $\Delta E = 0.89$	FL5 $\Delta E = 0.39$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.41$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.18$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 0.71$
D55 $\Delta E = 0.49$	FL1 $\Delta E = 0.40$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.25$	HP4 $\Delta E = 0.39$	LED-B4 $\Delta E = 0.29$	LED-V2 $\Delta E = 0.69$

PHP8HP5Y - Weighted variational Bayesian inference - 4 Gaussians



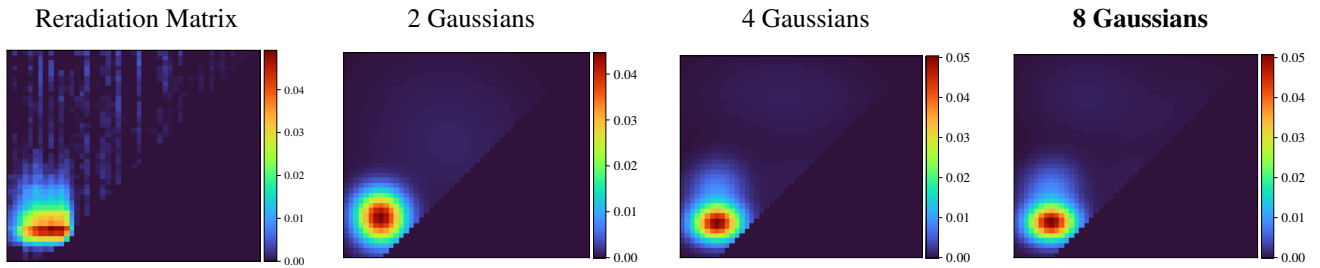
Fitted Material Under Monochromatic Illumination



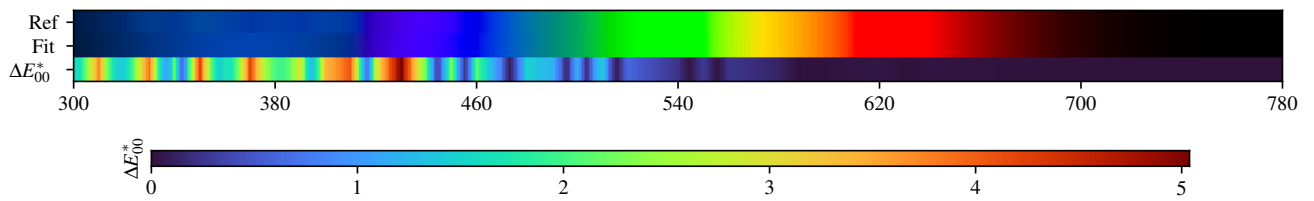
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.27$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.30$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.26$
B $\Delta E = 0.13$	D65 $\Delta E = 0.33$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.32$	D75 $\Delta E = 0.44$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.15$	E $\Delta E = 0.31$	FL5 $\Delta E = 0.11$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.56$
D55 $\Delta E = 0.21$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.25$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.52$

PHP8HP5Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.18$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.10$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.18$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.23$	D75 $\Delta E = 0.30$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.10$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.56$
D55 $\Delta E = 0.14$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.52$

PHP8HP5Y - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.045807	0.070575	0.094660	0.211844	0.423314	0.498734	0.511673	0.519998	0.515118	0.523929	0.537801
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.557020	0.593741	0.660433	0.719334	0.750174	0.762214	0.766641	0.760124	0.754943	0.762759	0.765039
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.769787	0.773537	0.773449	0.774442	0.770063	0.768323	0.768313	0.763978	0.761128	0.757994	0.754370
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.755411	0.748338	0.749852	0.748559	0.744597	0.744889	0.739910	0.737300			

2 Gaussians max

Scaling factor: 404.44342112375995

Gaussians:

Weight	Mean	Covariance				
0.764877932	368.786165545	456.509790620	1058.231746382	-35.375476240	-35.375476240	1147.662723462
0.235122068	506.331768011	603.944351658	14197.996666141	-1397.916600698	-1397.916600698	13173.904259732

4 Gaussians max

Scaling factor: 397.8201429523598

Gaussians:

Weight	Mean	Covariance				
0.590469380	369.762663230	444.906368999	1057.428065749	14.946421403	14.946421403	574.919364940
0.099018179	542.660054036	505.098335436	10722.176123687	-847.969142612	-847.969142612	5949.727687605
0.201348570	367.092144923	504.770678926	1306.530409114	107.062643500	107.062643500	1593.995991342
0.109163871	505.958622247	705.014787276	14862.776156990	-414.123702615	-414.123702615	3190.280775306

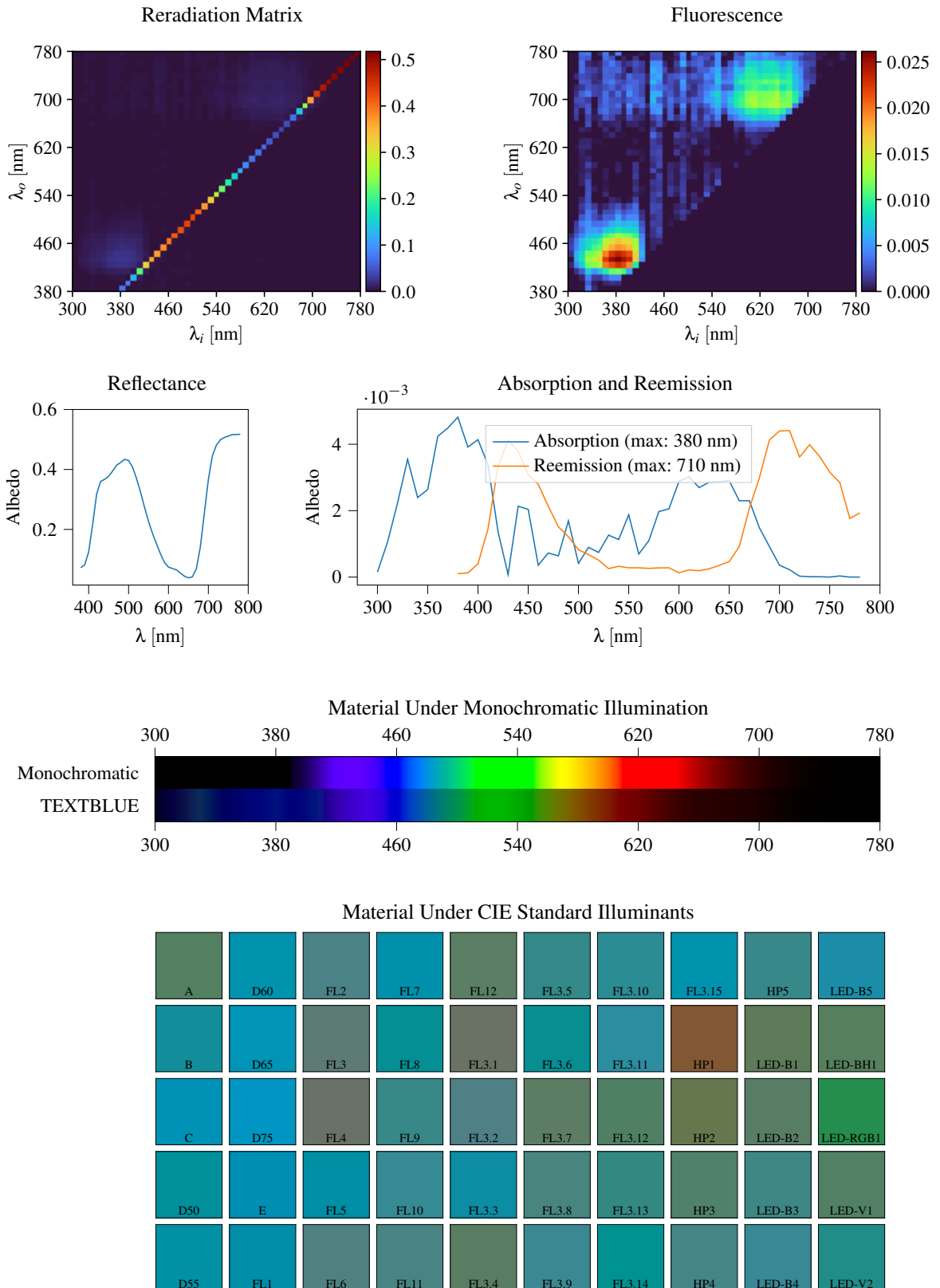
8 Gaussians max

Scaling factor: 398.3630424138819

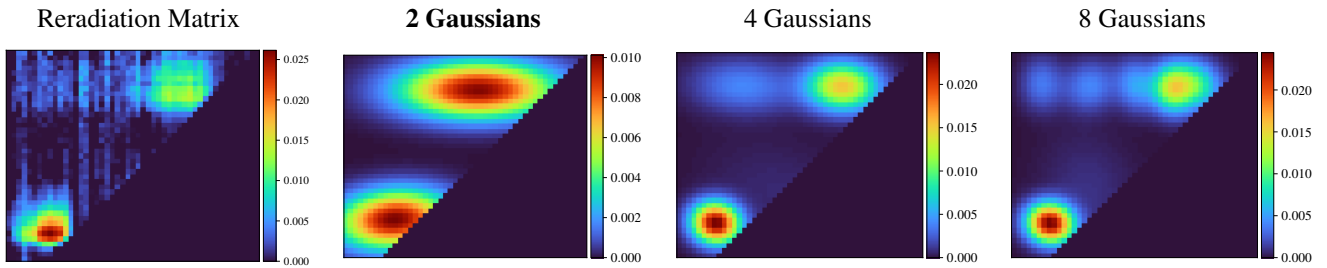
Gaussians:

Weight	Mean	Covariance				
0.608647092	369.667948823	445.456427043	1051.829850863	15.496105558	15.496105558	591.723486890
0.025575953	504.672517221	479.647953639	2726.373669163	687.254773176	687.254773176	4784.330398868
0.050789627	577.349663706	489.261324078	10854.063367144	-1881.957093947	-1881.957093947	4968.308614758
0.187111356	367.510900023	508.500267891	1357.294882295	129.977261154	129.977261154	1494.550227103
0.053745263	617.713370999	669.732321238	7561.383601274	1081.774275224	1081.774275224	5604.031638031
0.073169152	434.383037922	703.214547277	5922.349070326	-31.674215793	-31.674215793	3465.217016289

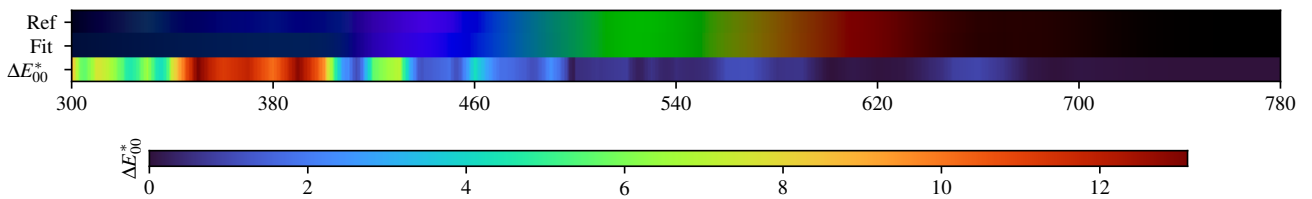
3.36. TEXTBLUE



TEXTBLUE - Weighted Expectation-Maximization - 2 Gaussians



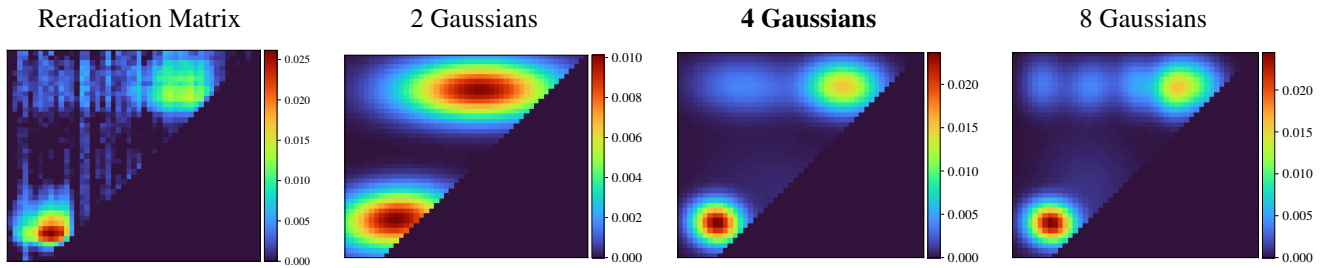
Fitted Material Under Monochromatic Illumination



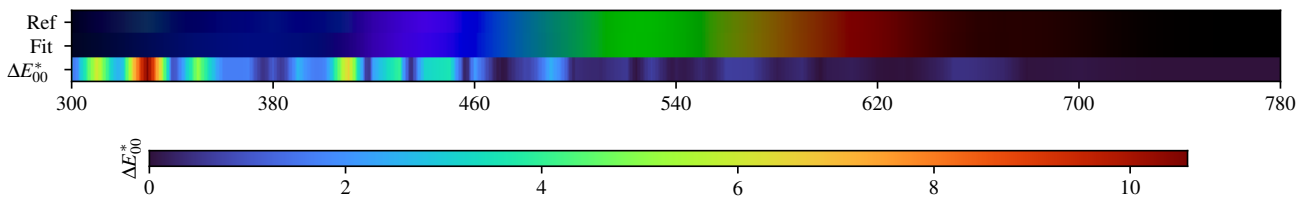
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 1.41$	$\Delta E = 0.41$	$\Delta E = 0.32$	$\Delta E = 0.50$	$\Delta E = 0.34$	$\Delta E = 0.90$	$\Delta E = 0.77$	$\Delta E = 0.58$	$\Delta E = 0.82$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.43$	$\Delta E = 1.65$	$\Delta E = 0.50$	$\Delta E = 0.41$	$\Delta E = 0.66$	$\Delta E = 0.34$	$\Delta E = 0.75$	$\Delta E = 0.49$	$\Delta E = 0.63$	$\Delta E = 0.85$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.74$	$\Delta E = 2.07$	$\Delta E = 0.61$	$\Delta E = 0.45$	$\Delta E = 0.25$	$\Delta E = 0.37$	$\Delta E = 0.21$	$\Delta E = 0.37$	$\Delta E = 0.72$	$\Delta E = 0.44$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.83$	$\Delta E = 2.73$	$\Delta E = 0.31$	$\Delta E = 0.85$	$\Delta E = 0.22$	$\Delta E = 0.73$	$\Delta E = 0.27$	$\Delta E = 0.30$	$\Delta E = 1.19$	$\Delta E = 0.03$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.13$	$\Delta E = 0.31$	$\Delta E = 0.45$	$\Delta E = 0.89$	$\Delta E = 0.26$	$\Delta E = 0.83$	$\Delta E = 0.33$	$\Delta E = 0.26$	$\Delta E = 1.04$	$\Delta E = 0.22$

TEXTBLUE - Weighted Expectation-Maximization - 4 Gaussians



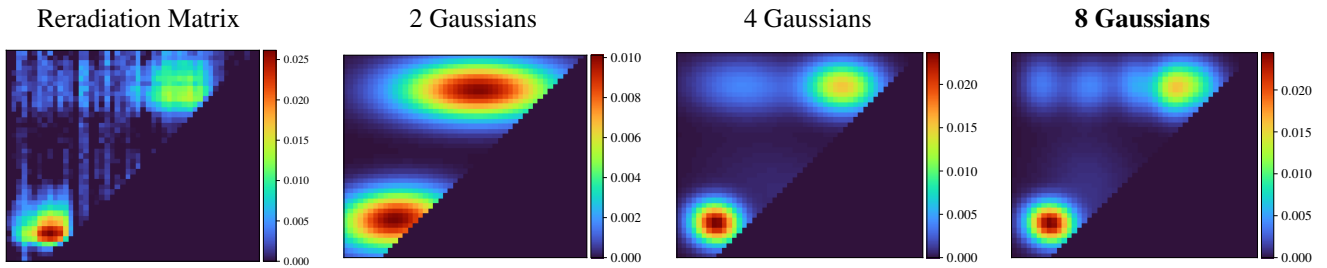
Fitted Material Under Monochromatic Illumination



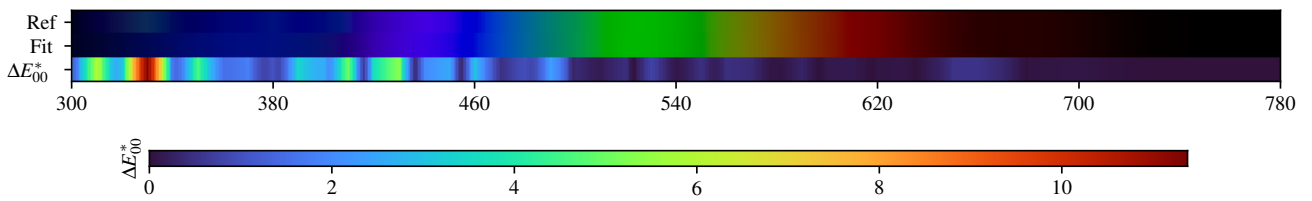
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.20$	$\Delta E = 0.41$	$\Delta E = 0.38$	$\Delta E = 0.32$	$\Delta E = 0.38$	$\Delta E = 0.24$	$\Delta E = 0.53$	$\Delta E = 0.25$	$\Delta E = 0.40$	$\Delta E = 0.46$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.36$	$\Delta E = 0.42$	$\Delta E = 0.36$	$\Delta E = 0.31$	$\Delta E = 0.34$	$\Delta E = 0.25$	$\Delta E = 0.51$	$\Delta E = 0.19$	$\Delta E = 0.21$	$\Delta E = 0.32$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.36$	$\Delta E = 0.45$	$\Delta E = 0.37$	$\Delta E = 0.30$	$\Delta E = 0.28$	$\Delta E = 0.29$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.25$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.38$	$\Delta E = 0.34$	$\Delta E = 0.34$	$\Delta E = 0.57$	$\Delta E = 0.27$	$\Delta E = 0.46$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.51$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.39$	$\Delta E = 0.34$	$\Delta E = 0.36$	$\Delta E = 0.56$	$\Delta E = 0.10$	$\Delta E = 0.52$	$\Delta E = 0.21$	$\Delta E = 0.40$	$\Delta E = 0.50$	$\Delta E = 0.26$

TEXTBLUE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.37$	$\Delta E = 0.12$	$\Delta E = 0.39$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.28$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.33$	$\Delta E = 0.06$	$\Delta E = 0.21$	$\Delta E = 0.29$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.29$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.24$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.40$	$\Delta E = 0.07$	$\Delta E = 0.38$	$\Delta E = 0.12$	$\Delta E = 0.05$	$\Delta E = 0.40$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.45$	$\Delta E = 0.08$	$\Delta E = 0.37$	$\Delta E = 0.14$	$\Delta E = 0.05$	$\Delta E = 0.33$	$\Delta E = 0.18$

TEXTBLUE - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.072358	0.081749	0.125154	0.217039	0.318536	0.359979	0.367219	0.377345	0.394410	0.414238	0.423227
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.433767	0.429873	0.407778	0.369692	0.324461	0.273886	0.227172	0.186606	0.152007	0.118274	0.089936
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.074327	0.069660	0.065257	0.054325	0.044216	0.038431	0.042091	0.068907	0.142368	0.254662	0.365721
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.444834	0.480617	0.498746	0.506674	0.511183	0.516403	0.516360	0.517656			

2 Gaussians

Scaling factor: 444.59410665916744

Gaussians:

Weight	Mean		Covariance			
0.575177042	565.697804765	713.297332563	11079.878507736	41.993052542	41.993052542	1490.451479307
0.424822958	398.238724545	452.130365384	5731.570438207	322.096433798	322.096433798	1551.827960046

4 Gaussians

Scaling factor: 387.5464908115561

Gaussians:

Weight	Mean		Covariance			
0.396943605	624.126993411	716.279108331	2353.808614887	-42.033927896	-42.033927896	1086.278920617
0.160405327	428.036679575	717.277674233	4653.475355952	-147.818512885	-147.818512885	1315.250772607
0.097897624	505.454460019	507.042684475	11880.189008148	-2225.715202603	-2225.715202603	5674.070187261
0.344753444	373.228961436	444.757742606	1031.861580766	-51.137073898	-51.137073898	763.365723898

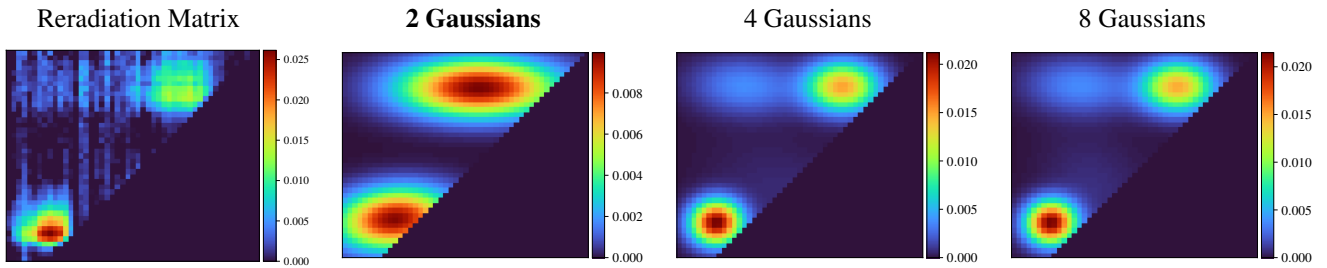
8 Gaussians

Scaling factor: 382.4671230991036

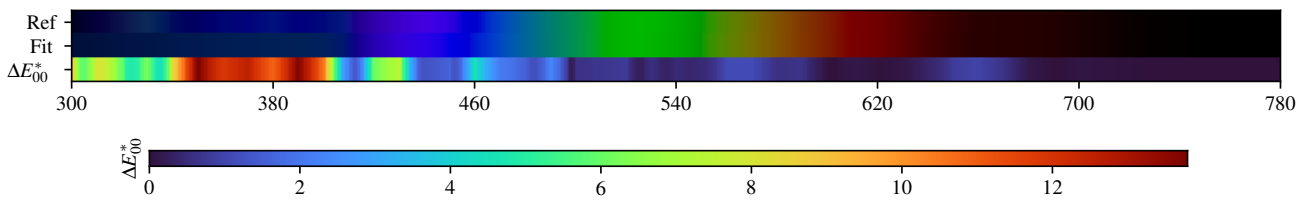
Gaussians:

Weight	Mean		Covariance			
0.191347914	613.019389784	711.872232949	796.619852223	-39.535702399	-39.535702399	1059.977861203
0.087774832	447.271015177	513.931075600	4265.701587929	-500.714723529	-500.714723529	6017.992333877
0.056973997	355.169396372	721.375407499	752.858039485	0.780284990	0.780284990	1264.893397070
0.156701218	662.712748949	720.487829341	1133.502898275	-154.090135695	-154.090135695	1079.902607596
0.070121875	540.627549146	719.010307929	645.278068700	-66.034009289	-66.034009289	1172.784546937
0.332285715	371.827157047	444.290719958	959.405756624	-43.192409604	-43.192409604	711.283976607
0.025665231	653.622365127	476.505660089	3073.681472153	297.011642399	297.011642399	4774.523417575
0.079129219	450.868465271	717.076834203	1212.183386332	60.677926216	60.677926216	1141.043027937

TEXTBLUE - Weighted variational Bayesian inference - 2 Gaussians



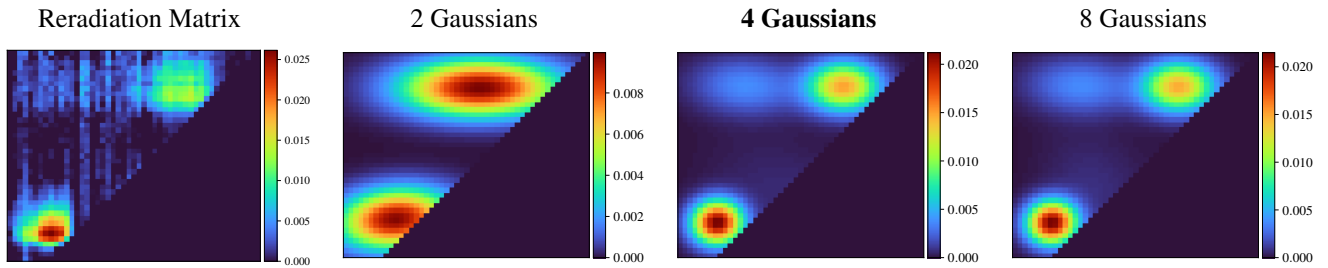
Fitted Material Under Monochromatic Illumination



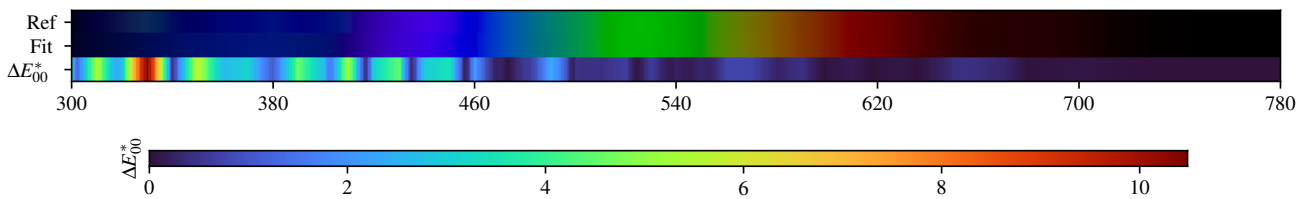
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 1.65$	$\Delta E = 0.29$	$\Delta E = 0.41$	$\Delta E = 0.45$	$\Delta E = 0.26$	$\Delta E = 0.80$	$\Delta E = 0.96$	$\Delta E = 0.47$	$\Delta E = 0.73$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.61$	$\Delta E = 1.91$	$\Delta E = 0.39$	$\Delta E = 0.33$	$\Delta E = 0.60$	$\Delta E = 0.27$	$\Delta E = 0.65$	$\Delta E = 0.44$	$\Delta E = 0.58$	$\Delta E = 0.80$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.95$	$\Delta E = 2.35$	$\Delta E = 0.51$	$\Delta E = 0.36$	$\Delta E = 0.15$	$\Delta E = 0.32$	$\Delta E = 0.17$	$\Delta E = 0.32$	$\Delta E = 0.67$	$\Delta E = 0.41$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.04$	$\Delta E = 3.02$	$\Delta E = 0.30$	$\Delta E = 0.75$	$\Delta E = 0.24$	$\Delta E = 0.65$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 1.09$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.36$	$\Delta E = 0.32$	$\Delta E = 0.33$	$\Delta E = 0.79$	$\Delta E = 0.23$	$\Delta E = 0.73$	$\Delta E = 0.25$	$\Delta E = 0.39$	$\Delta E = 0.94$	$\Delta E = 0.23$

TEXTBLUE - Weighted variational Bayesian inference - 4 Gaussians



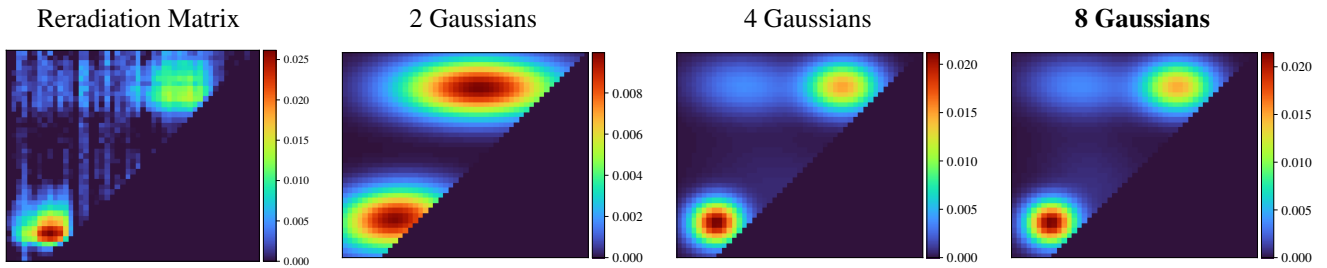
Fitted Material Under Monochromatic Illumination



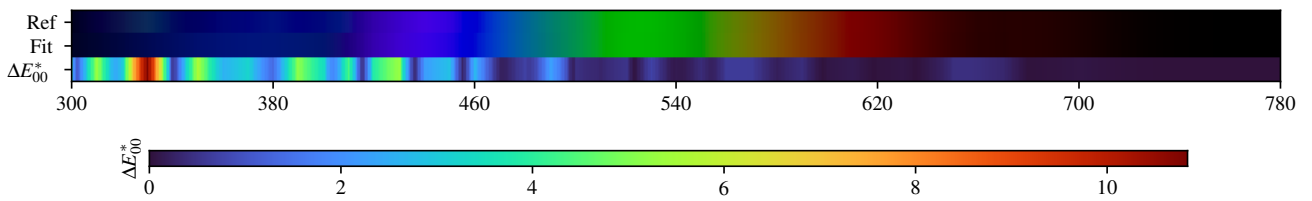
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.45$	$\Delta E = 0.32$	$\Delta E = 0.36$	$\Delta E = 0.27$	$\Delta E = 0.59$	$\Delta E = 0.17$	$\Delta E = 0.48$	$\Delta E = 0.54$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.32$	$\Delta E = 0.21$	$\Delta E = 0.46$	$\Delta E = 0.33$	$\Delta E = 0.52$	$\Delta E = 0.28$	$\Delta E = 0.57$	$\Delta E = 0.31$	$\Delta E = 0.29$	$\Delta E = 0.38$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.29$	$\Delta E = 0.20$	$\Delta E = 0.53$	$\Delta E = 0.33$	$\Delta E = 0.36$	$\Delta E = 0.26$	$\Delta E = 0.15$	$\Delta E = 0.29$	$\Delta E = 0.31$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.26$	$\Delta E = 0.07$	$\Delta E = 0.37$	$\Delta E = 0.62$	$\Delta E = 0.31$	$\Delta E = 0.49$	$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.59$	$\Delta E = 0.26$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.24$	$\Delta E = 0.36$	$\Delta E = 0.43$	$\Delta E = 0.59$	$\Delta E = 0.19$	$\Delta E = 0.58$	$\Delta E = 0.23$	$\Delta E = 0.44$	$\Delta E = 0.60$	$\Delta E = 0.29$

TEXTBLUE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.35$	$\Delta E = 0.18$	$\Delta E = 0.49$	$\Delta E = 0.11$	$\Delta E = 0.31$	$\Delta E = 0.40$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.05$	$\Delta E = 0.32$	$\Delta E = 0.22$	$\Delta E = 0.38$	$\Delta E = 0.18$	$\Delta E = 0.45$	$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.35$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.38$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.26$	$\Delta E = 0.10$	$\Delta E = 0.20$	$\Delta E = 0.27$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.51$	$\Delta E = 0.16$	$\Delta E = 0.43$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.51$	$\Delta E = 0.19$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.08$	$\Delta E = 0.20$	$\Delta E = 0.29$	$\Delta E = 0.52$	$\Delta E = 0.12$	$\Delta E = 0.48$	$\Delta E = 0.16$	$\Delta E = 0.23$	$\Delta E = 0.48$	$\Delta E = 0.12$

TEXTBLUE - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.072358	0.081749	0.125154	0.217039	0.318536	0.359979	0.367219	0.377345	0.394410	0.414238	0.423227
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.433767	0.429873	0.407778	0.369692	0.324461	0.273886	0.227172	0.186606	0.152007	0.118274	0.089936
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.074327	0.069660	0.065257	0.054325	0.044216	0.038431	0.042091	0.068907	0.142368	0.254662	0.365721
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.444834	0.480617	0.498746	0.506674	0.511183	0.516403	0.516360	0.517656			

2 Gaussians max

Scaling factor: 445.19263476916365

Gaussians:

Weight	Mean		Covariance			
0.425497361	398.712577486	452.692368142	5809.429559879	383.793305337	383.793305337	1646.347936537
0.574502639	565.757033400	713.371341820	11069.789039754	37.431105211	37.431105211	1496.716746101

4 Gaussians max

Scaling factor: 389.30407337087865

Gaussians:

Weight	Mean		Covariance			
0.347611312	374.102775771	445.638317926	1155.140847447	16.436467799	16.436467799	874.985456673
0.094570810	509.447600911	509.632491924	11933.822238691	-2310.858267185	-2310.858267185	6157.724333510
0.393728173	624.550998094	715.940818165	2360.776244398	-2.776811751	-2.776811751	1138.690737073
0.164089705	431.220268141	716.829918676	5004.035178176	-171.940457795	-171.940457795	1460.829054588

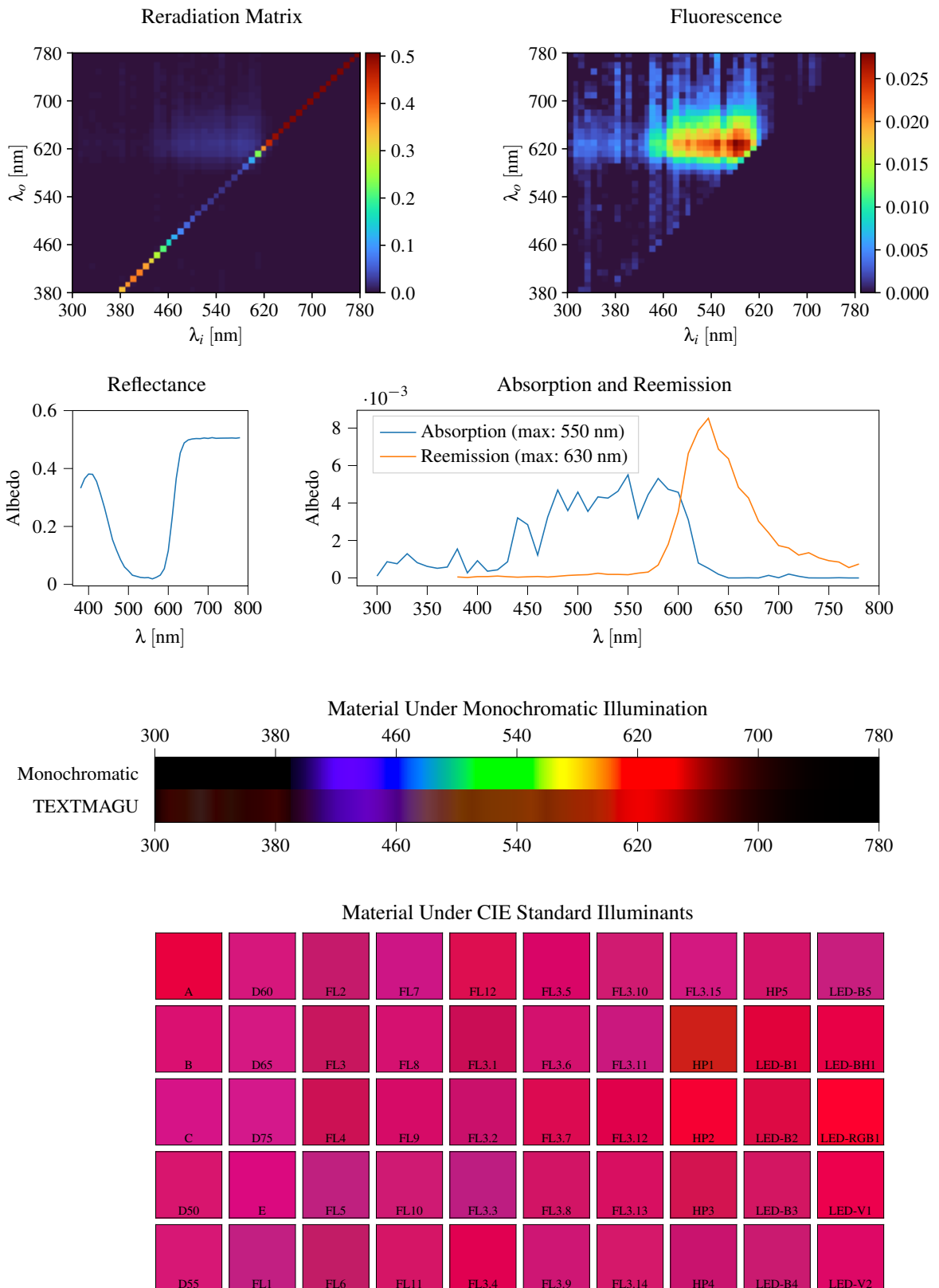
8 Gaussians max

Scaling factor: 387.6804106888548

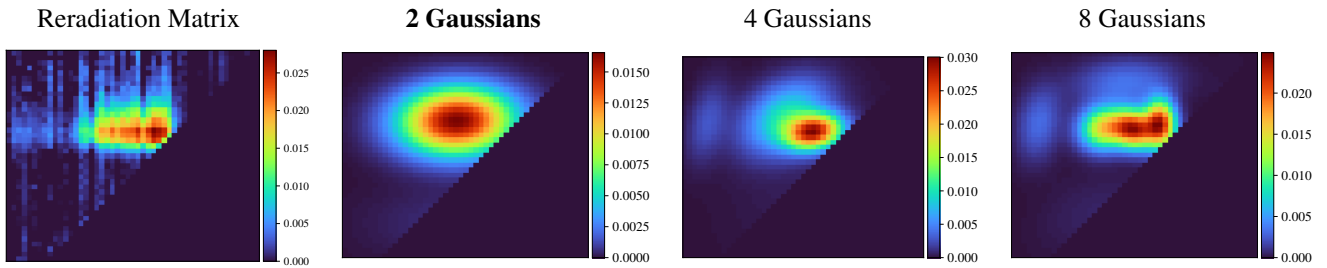
Gaussians:

Weight	Mean		Covariance			
0.339602116	373.211934346	445.437568490	1108.374110112	21.512200063	21.512200063	849.099096739
0.076637153	453.817928589	516.209480757	5001.559972515	-998.168170193	-998.168170193	6340.516487775
0.025661131	643.539397486	485.648382235	4720.913516365	-578.631864874	-578.631864874	5641.417002602
0.393488811	624.538606787	715.873710003	2354.741695853	6.936999065	6.936999065	1139.579361036
0.162875673	431.542856826	717.435729583	5063.979321972	-160.258575197	-160.258575197	1427.588172983

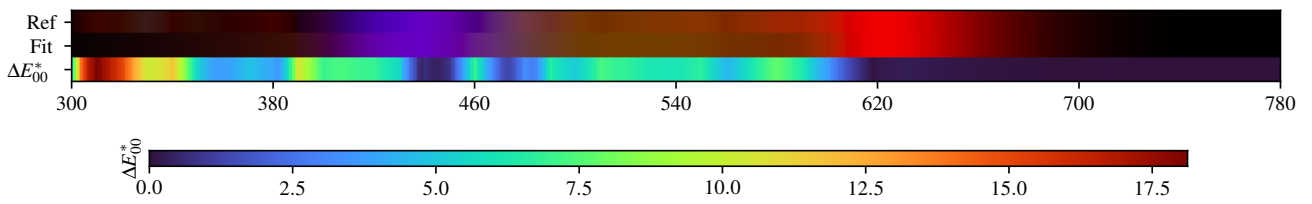
3.37. TEXTMAGU



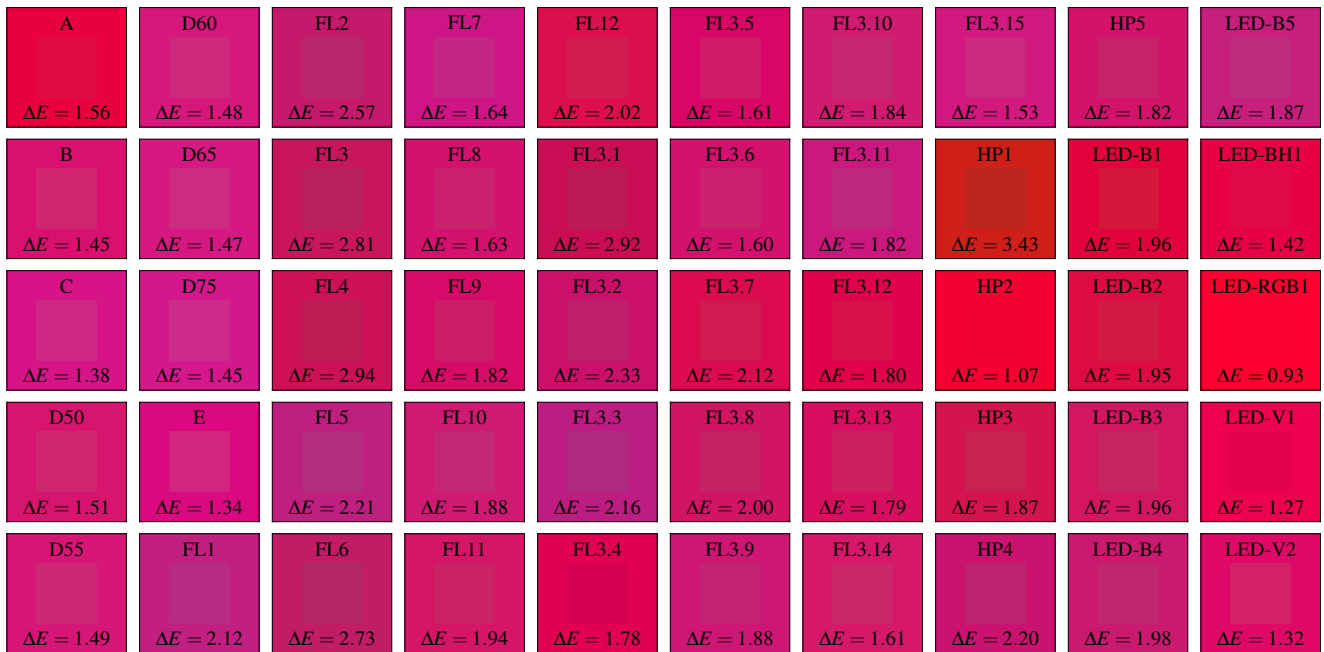
TEXTMAGU - Weighted Expectation-Maximization - 2 Gaussians



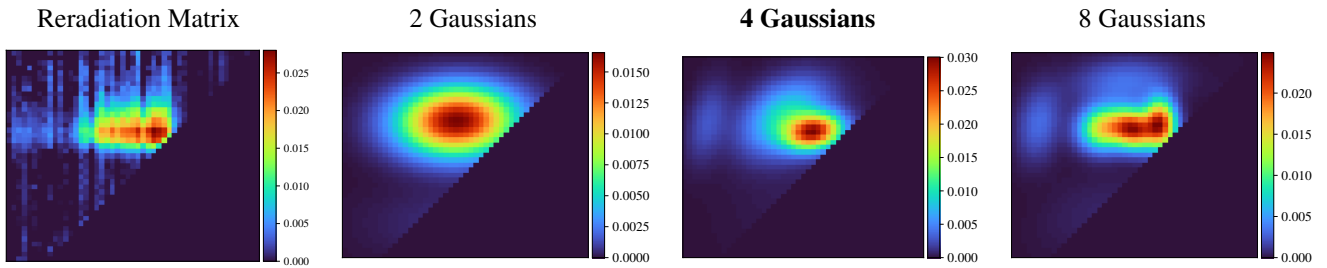
Fitted Material Under Monochromatic Illumination



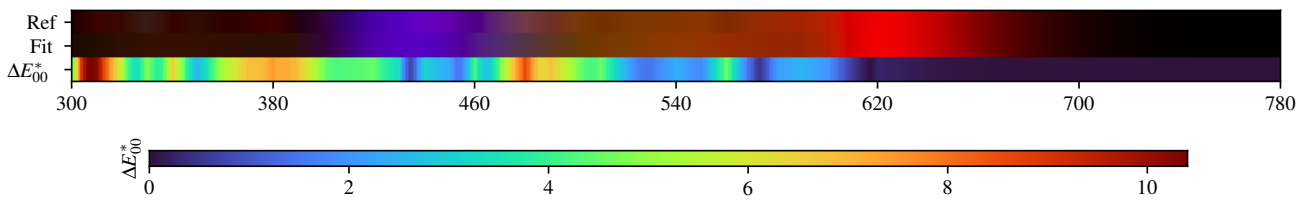
Fitted Material Under CIE Standard Illuminants



TEXTMAGU - Weighted Expectation-Maximization - 4 Gaussians



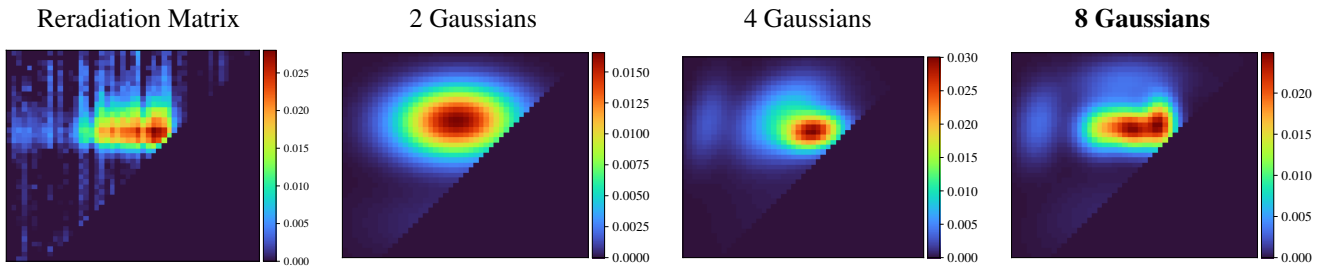
Fitted Material Under Monochromatic Illumination



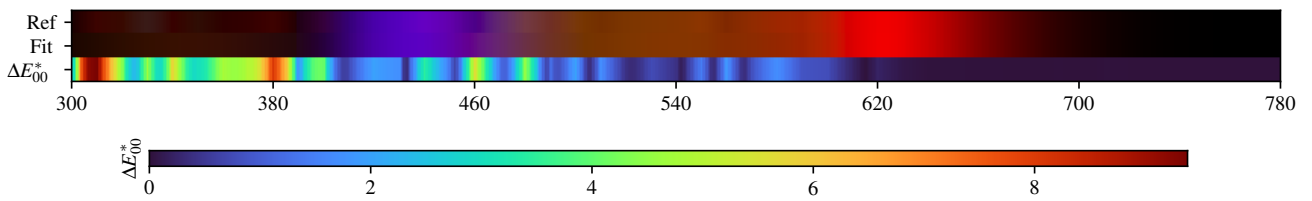
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.32$	$\Delta E = 0.60$	$\Delta E = 0.44$	$\Delta E = 0.55$	$\Delta E = 0.27$	$\Delta E = 0.40$	$\Delta E = 0.53$	$\Delta E = 0.64$	$\Delta E = 0.50$	$\Delta E = 0.48$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.49$	$\Delta E = 0.64$	$\Delta E = 0.38$	$\Delta E = 0.44$	$\Delta E = 0.36$	$\Delta E = 0.47$	$\Delta E = 0.39$	$\Delta E = 0.91$	$\Delta E = 0.30$	$\Delta E = 0.36$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.61$	$\Delta E = 0.71$	$\Delta E = 0.39$	$\Delta E = 0.37$	$\Delta E = 0.38$	$\Delta E = 0.30$	$\Delta E = 0.34$	$\Delta E = 0.62$	$\Delta E = 0.31$	$\Delta E = 0.46$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.52$	$\Delta E = 0.65$	$\Delta E = 0.58$	$\Delta E = 0.34$	$\Delta E = 0.58$	$\Delta E = 0.31$	$\Delta E = 0.50$	$\Delta E = 0.40$	$\Delta E = 0.37$	$\Delta E = 0.38$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.56$	$\Delta E = 0.63$	$\Delta E = 0.38$	$\Delta E = 0.29$	$\Delta E = 0.19$	$\Delta E = 0.35$	$\Delta E = 0.57$	$\Delta E = 0.62$	$\Delta E = 0.39$	$\Delta E = 0.49$

TEXTMAGU - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.30$	D60 $\Delta E = 0.29$	FL2 $\Delta E = 0.56$	FL7 $\Delta E = 0.45$	FL12 $\Delta E = 0.54$	FL3.5 $\Delta E = 0.33$	FL3.10 $\Delta E = 0.53$	FL3.15 $\Delta E = 0.50$	HP5 $\Delta E = 0.35$	LED-B5 $\Delta E = 0.22$
B $\Delta E = 0.32$	D65 $\Delta E = 0.28$	FL3 $\Delta E = 0.58$	FL8 $\Delta E = 0.41$	FL3.1 $\Delta E = 0.50$	FL3.6 $\Delta E = 0.33$	FL3.11 $\Delta E = 0.43$	HP1 $\Delta E = 0.76$	LED-B1 $\Delta E = 0.32$	LED-BH1 $\Delta E = 0.20$
C $\Delta E = 0.32$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.60$	FL9 $\Delta E = 0.44$	FL3.2 $\Delta E = 0.43$	FL3.7 $\Delta E = 0.46$	FL3.12 $\Delta E = 0.37$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.31$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.30$	E $\Delta E = 0.29$	FL5 $\Delta E = 0.51$	FL10 $\Delta E = 0.54$	FL3.3 $\Delta E = 0.41$	FL3.8 $\Delta E = 0.45$	FL3.13 $\Delta E = 0.39$	HP3 $\Delta E = 0.34$	LED-B3 $\Delta E = 0.38$	LED-V1 $\Delta E = 0.26$
D55 $\Delta E = 0.29$	FL1 $\Delta E = 0.52$	FL6 $\Delta E = 0.56$	FL11 $\Delta E = 0.55$	FL3.4 $\Delta E = 0.30$	FL3.9 $\Delta E = 0.44$	FL3.14 $\Delta E = 0.37$	HP4 $\Delta E = 0.45$	LED-B4 $\Delta E = 0.25$	LED-V2 $\Delta E = 0.26$

TEXTMAGU - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.332055	0.364928	0.380896	0.379881	0.355585	0.311996	0.264426	0.210163	0.154566	0.118444	0.085817
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.060187	0.046850	0.031604	0.027957	0.024117	0.022803	0.023432	0.019001	0.024408	0.032016	0.054033
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.116032	0.232750	0.365942	0.453517	0.488328	0.498627	0.502050	0.503474	0.503051	0.505453	0.503885
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.506633	0.504278	0.504774	0.504985	0.505061	0.505497	0.504637	0.506433			

2 Gaussians

Scaling factor: 390.9703471830702

Gaussians:

Weight	Mean		Covariance			
0.938506915	521.771730245	647.567588292	5969.257641139	138.391355877	138.391355877	2080.802918684
0.061493085	522.619501286	445.322978760	14051.010922377	129.331388546	129.331388546	2520.681043538

4 Gaussians

Scaling factor: 377.8526896690018

Gaussians:

Weight	Mean		Covariance			
0.428947949	503.476702745	662.464342192	3122.901314591	923.863860018	923.863860018	2391.788862238
0.118870635	555.258898750	541.491177148	13321.812308328	4116.346064245	4116.346064245	13753.435327732
0.385522649	562.206295938	630.642348816	1399.841089103	162.297838649	162.297838649	573.698074445
0.066658767	346.710956785	652.185981428	801.717850417	540.167463987	540.167463987	2947.618832861

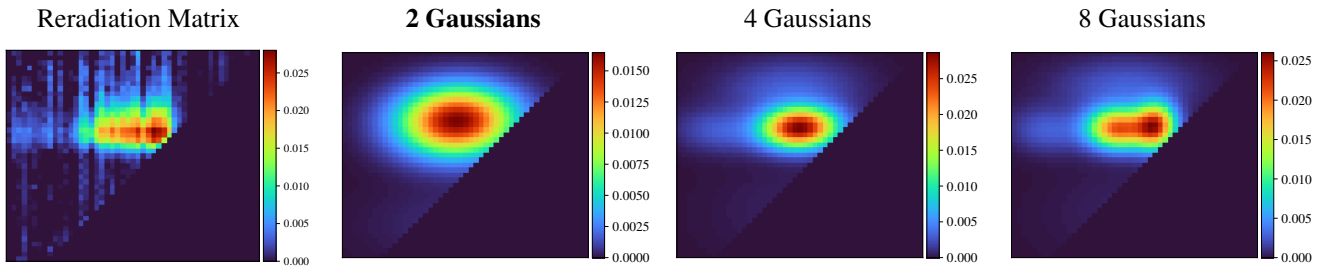
8 Gaussians

Scaling factor: 376.9340669516992

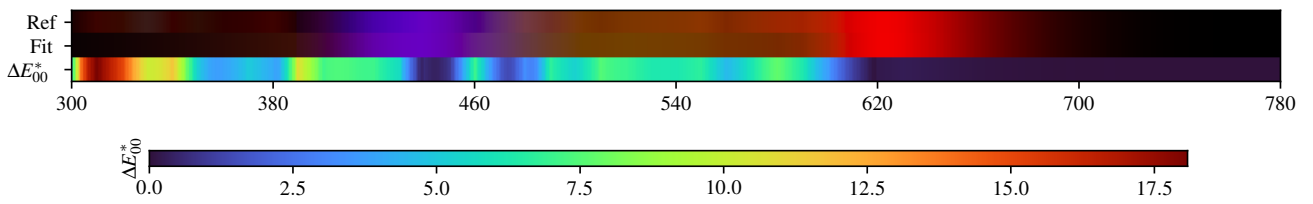
Gaussians:

Weight	Mean		Covariance			
0.126072858	520.360740460	724.063508081	4547.065407849	213.359070390	213.359070390	1047.973533357
0.221966403	476.417067100	633.043976948	977.274030679	48.786331761	48.786331761	830.765005051
0.229727303	591.033892551	642.246494513	407.848519492	-26.669518320	-26.669518320	1011.807773897
0.075093824	349.914794476	642.837788170	870.558478247	252.392828324	252.392828324	2382.774377758
0.263445582	538.007839902	631.476353584	791.551014155	-76.613589939	-76.613589939	667.316503821
0.044035827	550.545673169	457.540584013	6435.567250005	-316.146635263	-316.146635263	3184.265659306
0.021111895	420.209991744	455.757997369	3892.805216725	1207.765249369	1207.765249369	3406.985499764
0.018546309	731.568771351	613.989679128	1409.604225930	288.619151981	288.619151981	13939.146709578

TEXTMAGU - Weighted variational Bayesian inference - 2 Gaussians



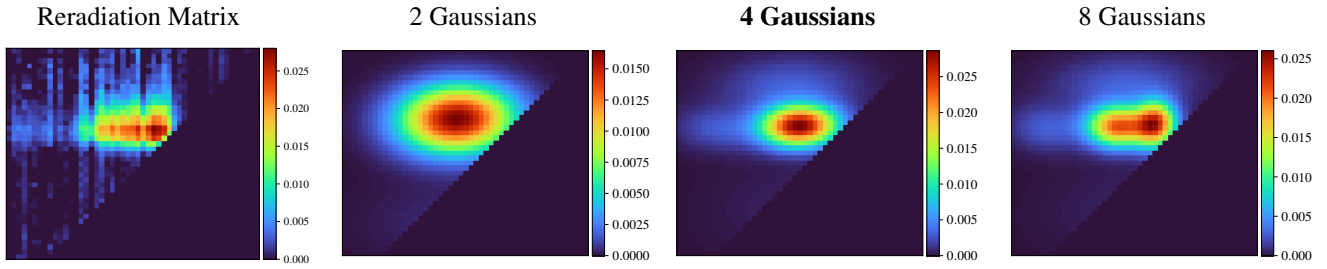
Fitted Material Under Monochromatic Illumination



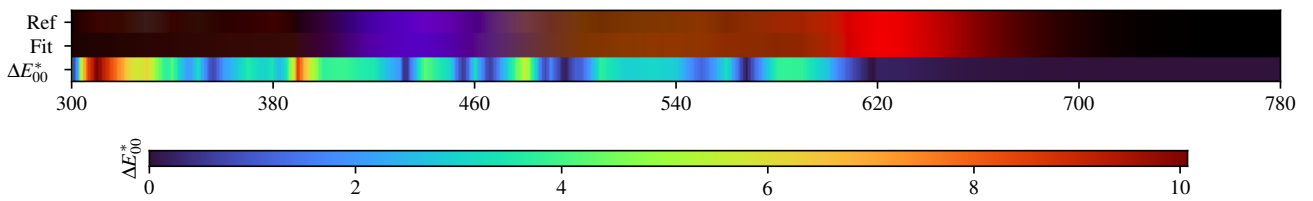
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.54$	$\Delta E = 1.49$	$\Delta E = 2.55$	$\Delta E = 1.64$	$\Delta E = 2.00$	$\Delta E = 1.59$	$\Delta E = 1.82$	$\Delta E = 1.53$	$\Delta E = 1.80$	$\Delta E = 1.86$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.46$	$\Delta E = 1.49$	$\Delta E = 2.79$	$\Delta E = 1.61$	$\Delta E = 2.90$	$\Delta E = 1.59$	$\Delta E = 1.80$	$\Delta E = 3.42$	$\Delta E = 1.94$	$\Delta E = 1.40$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.41$	$\Delta E = 1.49$	$\Delta E = 2.92$	$\Delta E = 1.80$	$\Delta E = 2.31$	$\Delta E = 2.11$	$\Delta E = 1.78$	$\Delta E = 1.06$	$\Delta E = 1.93$	$\Delta E = 0.95$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.51$	$\Delta E = 1.37$	$\Delta E = 2.20$	$\Delta E = 1.87$	$\Delta E = 2.15$	$\Delta E = 1.98$	$\Delta E = 1.78$	$\Delta E = 1.86$	$\Delta E = 1.94$	$\Delta E = 1.26$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.50$	$\Delta E = 2.12$	$\Delta E = 2.70$	$\Delta E = 1.91$	$\Delta E = 1.76$	$\Delta E = 1.87$	$\Delta E = 1.60$	$\Delta E = 2.18$	$\Delta E = 1.96$	$\Delta E = 1.33$

TEXTMAGU - Weighted variational Bayesian inference - 4 Gaussians



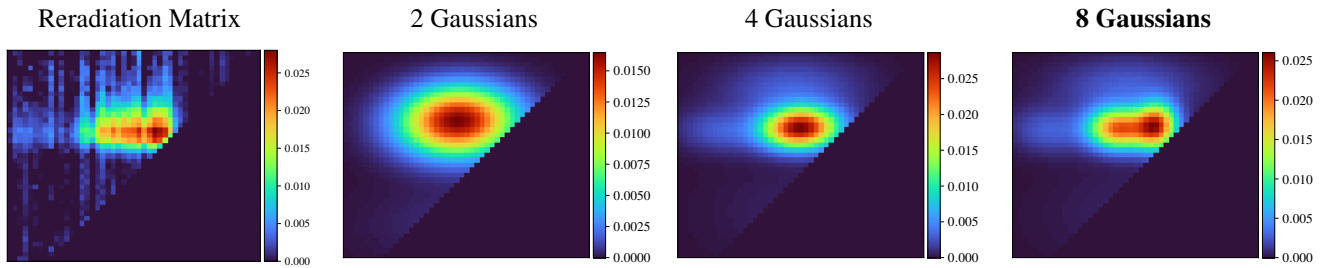
Fitted Material Under Monochromatic Illumination



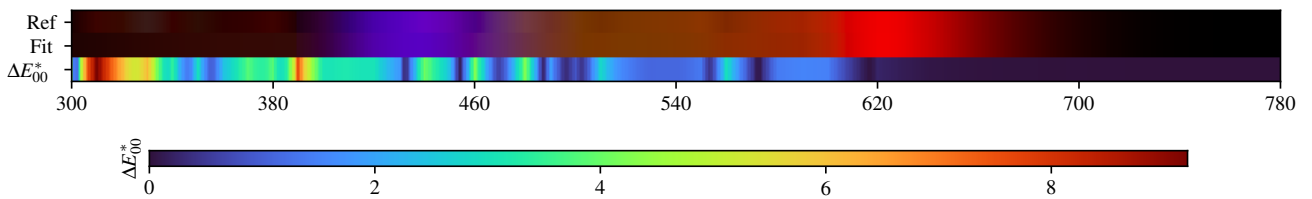
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.23$	$\Delta E = 0.10$	$\Delta E = 0.70$	$\Delta E = 0.23$	$\Delta E = 0.46$	$\Delta E = 0.28$	$\Delta E = 0.48$	$\Delta E = 0.20$	$\Delta E = 0.43$	$\Delta E = 0.33$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.87$	$\Delta E = 0.19$	$\Delta E = 0.97$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 1.65$	$\Delta E = 0.50$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 1.02$	$\Delta E = 0.34$	$\Delta E = 0.58$	$\Delta E = 0.50$	$\Delta E = 0.40$	$\Delta E = 0.26$	$\Delta E = 0.45$	$\Delta E = 0.48$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.10$	$\Delta E = 0.24$	$\Delta E = 0.40$	$\Delta E = 0.31$	$\Delta E = 0.36$	$\Delta E = 0.34$	$\Delta E = 0.40$	$\Delta E = 0.39$	$\Delta E = 0.40$	$\Delta E = 0.15$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.10$	$\Delta E = 0.44$	$\Delta E = 0.69$	$\Delta E = 0.37$	$\Delta E = 0.29$	$\Delta E = 0.30$	$\Delta E = 0.19$	$\Delta E = 0.76$	$\Delta E = 0.34$	$\Delta E = 0.19$

TEXTMAGU - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.39$	$\Delta E = 0.25$	$\Delta E = 0.65$	$\Delta E = 0.20$	$\Delta E = 0.62$	$\Delta E = 0.25$	$\Delta E = 0.28$	$\Delta E = 0.33$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.44$	$\Delta E = 0.25$	$\Delta E = 0.39$	$\Delta E = 0.17$	$\Delta E = 0.61$	$\Delta E = 0.58$	$\Delta E = 0.29$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.47$	$\Delta E = 0.29$	$\Delta E = 0.28$	$\Delta E = 0.62$	$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.28$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.31$	$\Delta E = 0.67$	$\Delta E = 0.22$	$\Delta E = 0.62$	$\Delta E = 0.24$	$\Delta E = 0.38$	$\Delta E = 0.36$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.32$	$\Delta E = 0.39$	$\Delta E = 0.68$	$\Delta E = 0.22$	$\Delta E = 0.63$	$\Delta E = 0.19$	$\Delta E = 0.47$	$\Delta E = 0.34$	$\Delta E = 0.14$

TEXTMAGU - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.332055	0.364928	0.380896	0.379881	0.355585	0.311996	0.264426	0.210163	0.154566	0.118444	0.085817
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.060187	0.046850	0.031604	0.027957	0.024117	0.022803	0.023432	0.019001	0.024408	0.032016	0.054033
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.116032	0.232750	0.365942	0.453517	0.488328	0.498627	0.502050	0.503474	0.503051	0.505453	0.503885
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.506633	0.504278	0.504774	0.504985	0.505061	0.505497	0.504637	0.506433			

2 Gaussians max

Scaling factor: 390.93671294648396

Gaussians:

Weight	Mean		Covariance			
0.060554131	523.700598466	446.382854767	13954.228535955	216.254158936	216.254158936	2891.387475147
0.939445869	521.731459738	647.396958199	5979.960048398	142.271163515	142.271163515	2105.001088632

4 Gaussians max

Scaling factor: 383.29259708770627

Gaussians:

Weight	Mean		Covariance			
0.082112690	527.020854771	474.014572836	13642.095143905	739.995290143	739.995290143	4778.431779055
0.080880055	381.597653308	627.721498688	3437.243964911	-126.206365683	-126.206365683	854.476217797
0.639895898	539.157602994	633.594661431	2553.276380117	61.443168663	61.443168663	746.529763100
0.197111357	521.824436533	709.716298787	8387.245615781	158.273261275	158.273261275	1661.275237687

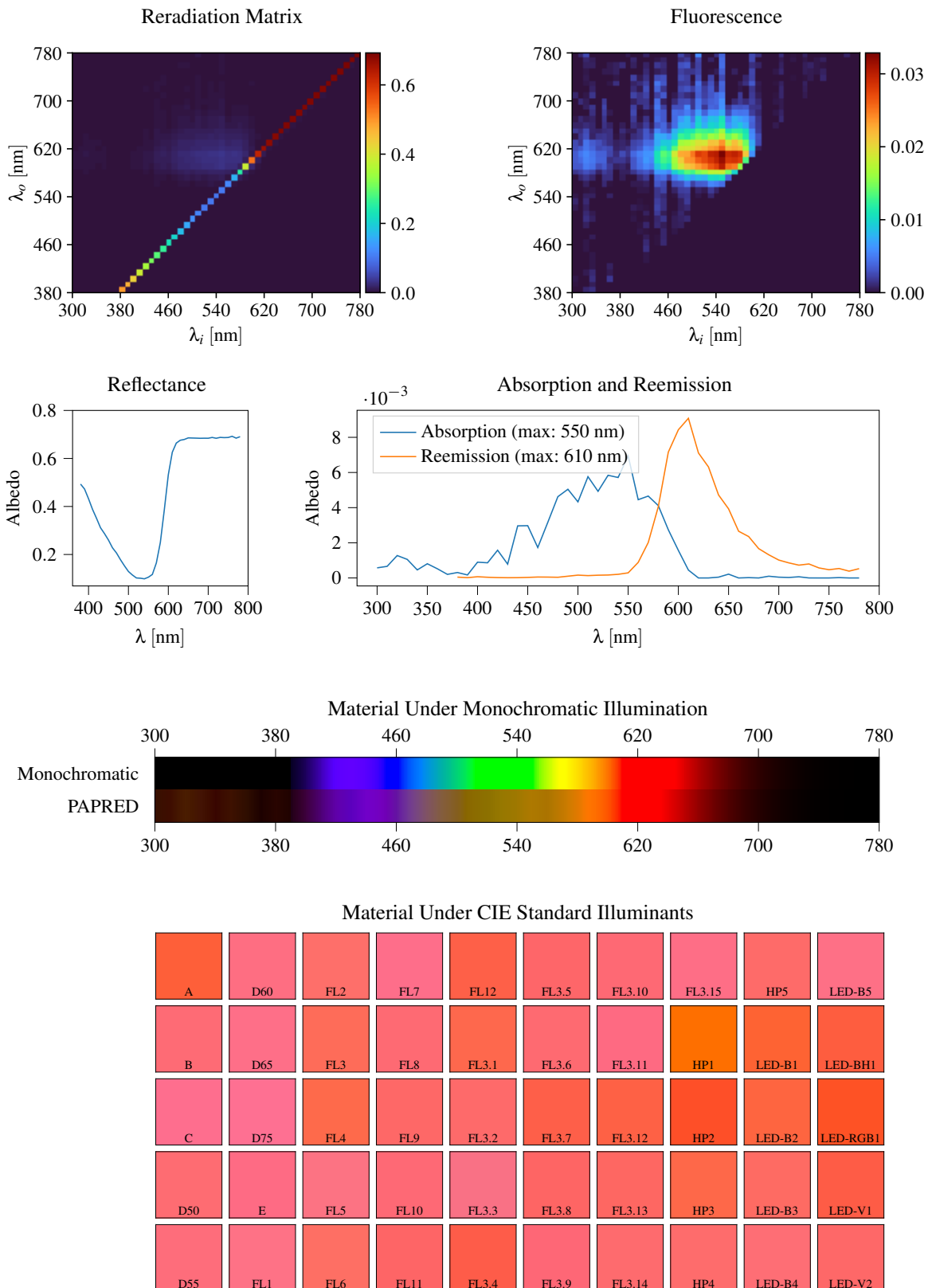
8 Gaussians max

Scaling factor: 380.55267054002763

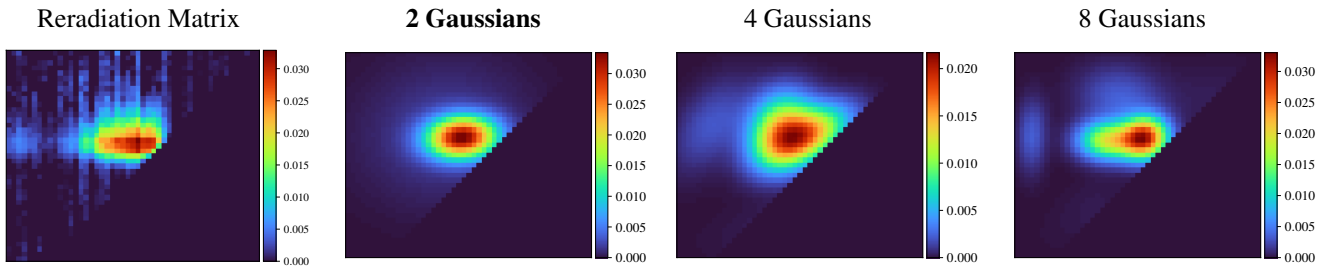
Gaussians:

Weight	Mean		Covariance			
0.081614088	530.060902118	475.800977020	13889.017012516	1142.758481142	1142.758481142	5037.801724321
0.070826198	366.258067049	628.718639462	2529.390497541	-124.705303211	-124.705303211	940.514913936
0.392576850	506.044168996	632.692923631	1702.218969791	-15.509260528	-15.509260528	761.256658319
0.282746351	580.928837690	637.638782343	723.494419464	24.751516519	24.751516519	889.210754065
0.171209393	521.398833088	715.461097546	8713.226253735	106.312193251	106.312193251	1527.744105096

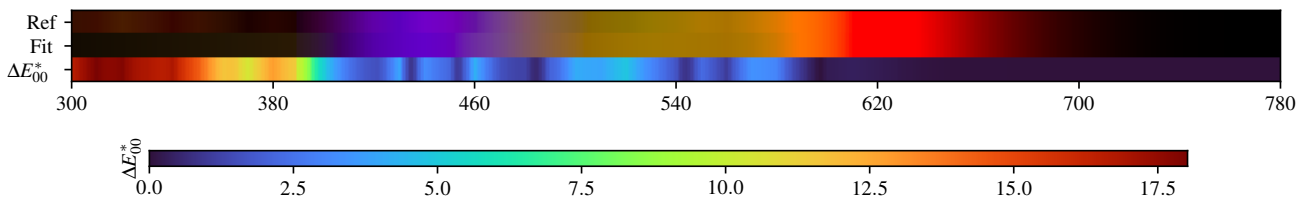
3.38. PAPRED



PAPRED - Weighted Expectation-Maximization - 2 Gaussians



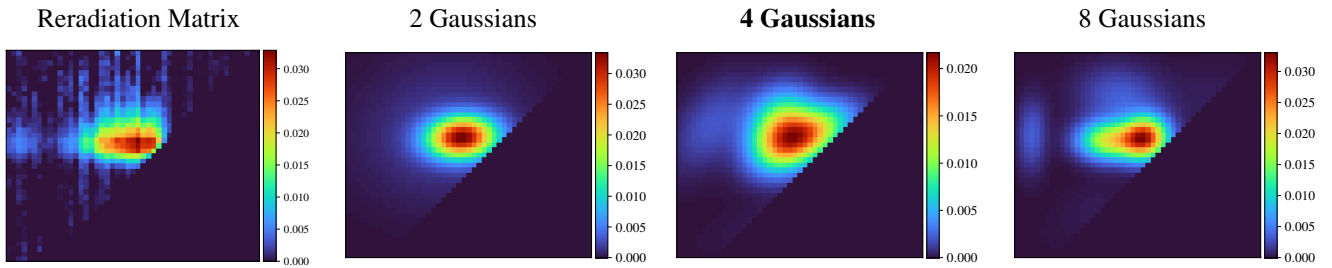
Fitted Material Under Monochromatic Illumination



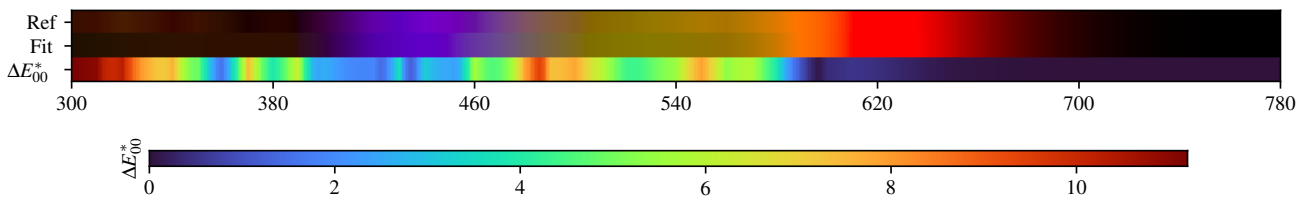
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.06$	$\Delta E = 0.44$	$\Delta E = 0.41$	$\Delta E = 0.27$	$\Delta E = 0.33$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.39$	$\Delta E = 0.24$	$\Delta E = 0.21$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.32$	$\Delta E = 0.47$	$\Delta E = 0.52$	$\Delta E = 0.20$	$\Delta E = 0.53$	$\Delta E = 0.28$	$\Delta E = 0.11$	$\Delta E = 0.55$	$\Delta E = 0.18$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.44$	$\Delta E = 0.53$	$\Delta E = 0.59$	$\Delta E = 0.13$	$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.04$	$\Delta E = 0.32$	$\Delta E = 0.16$	$\Delta E = 0.39$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.35$	$\Delta E = 0.53$	$\Delta E = 0.29$	$\Delta E = 0.24$	$\Delta E = 0.28$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.40$	$\Delta E = 0.28$	$\Delta E = 0.47$	$\Delta E = 0.29$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.39$	$\Delta E = 0.26$	$\Delta E = 0.21$	$\Delta E = 0.33$

PAPRED - Weighted Expectation-Maximization - 4 Gaussians



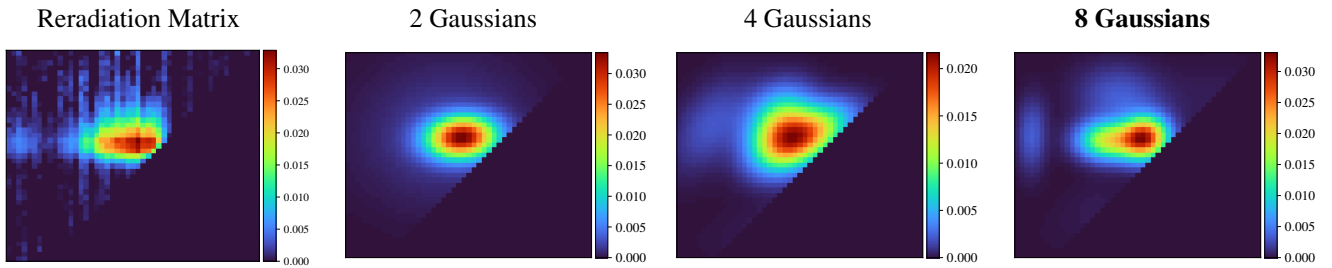
Fitted Material Under Monochromatic Illumination



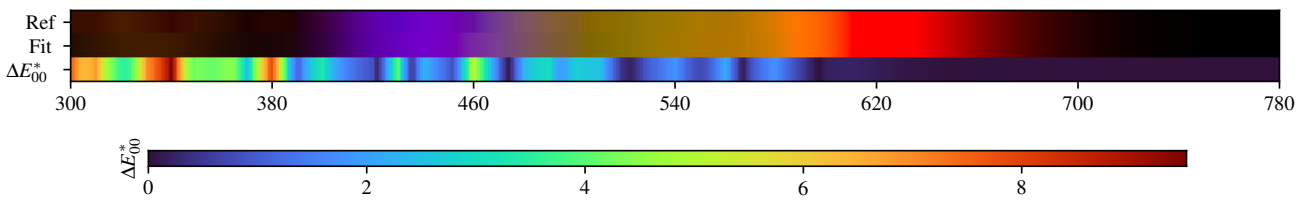
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.80$	$\Delta E = 1.42$	$\Delta E = 1.49$	$\Delta E = 1.49$	$\Delta E = 0.91$	$\Delta E = 0.95$	$\Delta E = 1.08$	$\Delta E = 1.38$	$\Delta E = 1.08$	$\Delta E = 1.62$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.22$	$\Delta E = 1.48$	$\Delta E = 1.39$	$\Delta E = 1.20$	$\Delta E = 1.20$	$\Delta E = 1.11$	$\Delta E = 1.32$	$\Delta E = 0.95$	$\Delta E = 0.85$	$\Delta E = 0.80$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.45$	$\Delta E = 1.59$	$\Delta E = 1.31$	$\Delta E = 1.13$	$\Delta E = 1.24$	$\Delta E = 0.74$	$\Delta E = 0.71$	$\Delta E = 1.02$	$\Delta E = 0.92$	$\Delta E = 0.55$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.27$	$\Delta E = 1.23$	$\Delta E = 1.82$	$\Delta E = 1.31$	$\Delta E = 1.67$	$\Delta E = 0.96$	$\Delta E = 0.90$	$\Delta E = 0.78$	$\Delta E = 1.18$	$\Delta E = 0.73$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.34$	$\Delta E = 1.74$	$\Delta E = 1.57$	$\Delta E = 1.11$	$\Delta E = 0.80$	$\Delta E = 1.12$	$\Delta E = 1.11$	$\Delta E = 1.09$	$\Delta E = 1.45$	$\Delta E = 1.07$

PAPRED - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.20$	D60 $\Delta E = 0.23$	FL2 $\Delta E = 0.33$	FL7 $\Delta E = 0.30$	FL12 $\Delta E = 0.33$	FL3.5 $\Delta E = 0.22$	FL3.10 $\Delta E = 0.34$	FL3.15 $\Delta E = 0.34$	HP5 $\Delta E = 0.19$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.24$	D65 $\Delta E = 0.23$	FL3 $\Delta E = 0.32$	FL8 $\Delta E = 0.29$	FL3.1 $\Delta E = 0.24$	FL3.6 $\Delta E = 0.23$	FL3.11 $\Delta E = 0.29$	HP1 $\Delta E = 0.24$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.23$	D75 $\Delta E = 0.22$	FL4 $\Delta E = 0.30$	FL9 $\Delta E = 0.29$	FL3.2 $\Delta E = 0.26$	FL3.7 $\Delta E = 0.27$	FL3.12 $\Delta E = 0.22$	HP2 $\Delta E = 0.15$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.24$	E $\Delta E = 0.28$	FL5 $\Delta E = 0.34$	FL10 $\Delta E = 0.35$	FL3.3 $\Delta E = 0.27$	FL3.8 $\Delta E = 0.30$	FL3.13 $\Delta E = 0.25$	HP3 $\Delta E = 0.16$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.22$
D55 $\Delta E = 0.24$	FL1 $\Delta E = 0.34$	FL6 $\Delta E = 0.34$	FL11 $\Delta E = 0.35$	FL3.4 $\Delta E = 0.19$	FL3.9 $\Delta E = 0.29$	FL3.14 $\Delta E = 0.27$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.25$

PAPRED - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.493274	0.472602	0.432139	0.387903	0.350678	0.311379	0.286897	0.259942	0.227899	0.206416	0.178422
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.152815	0.129222	0.114443	0.102283	0.101169	0.098619	0.105361	0.116824	0.164808	0.249934	0.386513
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.532067	0.625947	0.664043	0.675848	0.679095	0.685702	0.685156	0.684657	0.684036	0.684370	0.684227
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.687546	0.684103	0.687756	0.686806	0.687353	0.692293	0.684688	0.690721			

2 Gaussians

Scaling factor: 386.1574129098066

Gaussians:

Weight	Mean		Covariance			
0.659158026	526.176251123	615.030446871	2079.806865855	83.407411619	83.407411619	770.216753683
0.340841974	491.033969203	625.473277840	12009.269034364	628.359542931	628.359542931	8701.006023896

4 Gaussians

Scaling factor: 378.87413492013343

Gaussians:

Weight	Mean		Covariance			
0.441887450	554.099678819	617.578836758	3112.389158657	1064.881635252	1064.881635252	1547.754000227
0.090762571	362.994461151	640.047889225	2499.627474859	1376.968978016	1376.968978016	3582.810762628
0.038084635	544.824350626	434.744499392	12223.485320579	1572.491850285	1572.491850285	2007.155333139
0.429265343	502.376556194	631.404307080	1862.719804516	286.649670723	286.649670723	2358.316753300

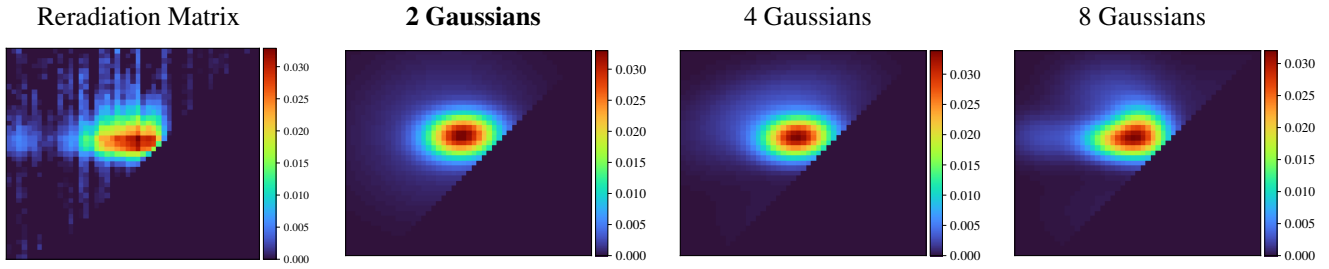
8 Gaussians

Scaling factor: 373.4588506786345

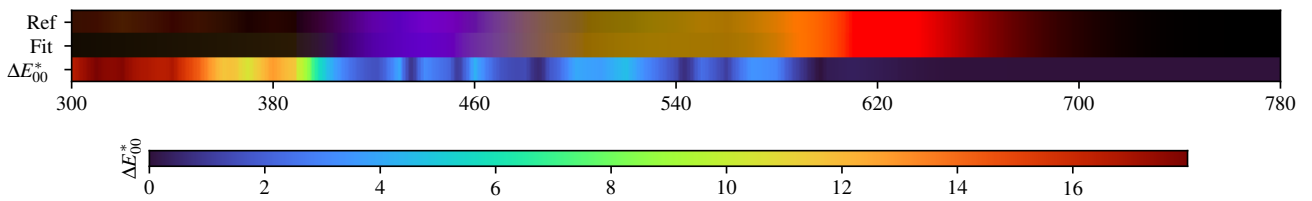
Gaussians:

Weight	Mean		Covariance			
0.029239352	678.810134029	697.545759877	4426.240711536	795.446411369	795.446411369	2561.060846449
0.056824467	329.791971307	619.257027697	392.827225323	39.609958295	39.609958295	2310.903234145
0.414578798	552.827522724	613.551439324	941.889419429	41.391386464	41.391386464	752.368502321
0.149695520	505.825820588	691.382047762	3145.742980859	-227.789528460	-227.789528460	1908.691866950
0.017798018	447.185441021	486.840897804	4422.613039694	2757.444125891	2757.444125891	3539.333459983
0.022214082	530.907072827	425.058967773	3159.383821566	197.562002030	197.562002030	1245.915976456
0.012049043	675.149878561	491.485658300	2935.711242695	-1484.283865302	-1484.283865302	5004.409882907
0.297600720	479.878201089	608.579919910	1484.050403268	1.303327059	1.303327059	643.861276534

PAPRED - Weighted variational Bayesian inference - 2 Gaussians



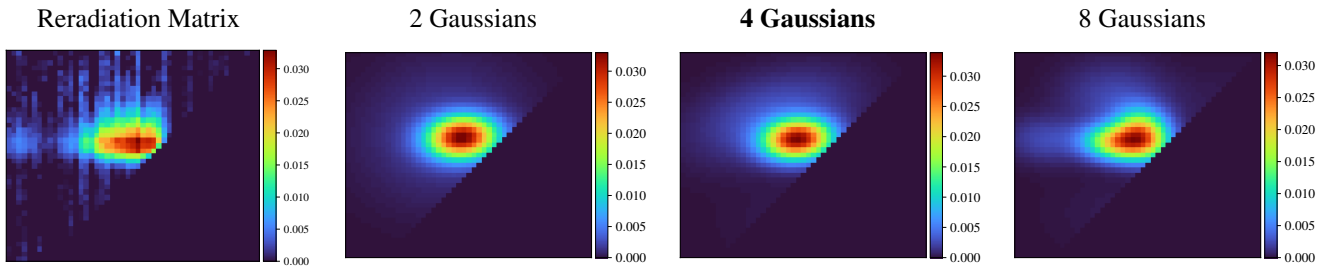
Fitted Material Under Monochromatic Illumination



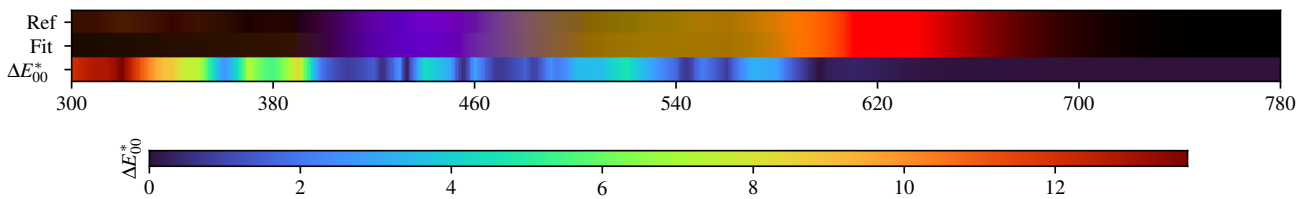
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.48$	$\Delta E = 0.42$	$\Delta E = 0.31$	$\Delta E = 0.31$	$\Delta E = 0.21$	$\Delta E = 0.08$	$\Delta E = 0.42$	$\Delta E = 0.28$	$\Delta E = 0.25$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.36$	$\Delta E = 0.51$	$\Delta E = 0.53$	$\Delta E = 0.23$	$\Delta E = 0.53$	$\Delta E = 0.31$	$\Delta E = 0.11$	$\Delta E = 0.55$	$\Delta E = 0.18$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.48$	$\Delta E = 0.57$	$\Delta E = 0.59$	$\Delta E = 0.16$	$\Delta E = 0.31$	$\Delta E = 0.24$	$\Delta E = 0.06$	$\Delta E = 0.31$	$\Delta E = 0.17$	$\Delta E = 0.40$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.39$	$\Delta E = 0.56$	$\Delta E = 0.34$	$\Delta E = 0.23$	$\Delta E = 0.33$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.44$	$\Delta E = 0.33$	$\Delta E = 0.48$	$\Delta E = 0.27$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.41$	$\Delta E = 0.29$	$\Delta E = 0.24$	$\Delta E = 0.36$

PAPRED - Weighted variational Bayesian inference - 4 Gaussians



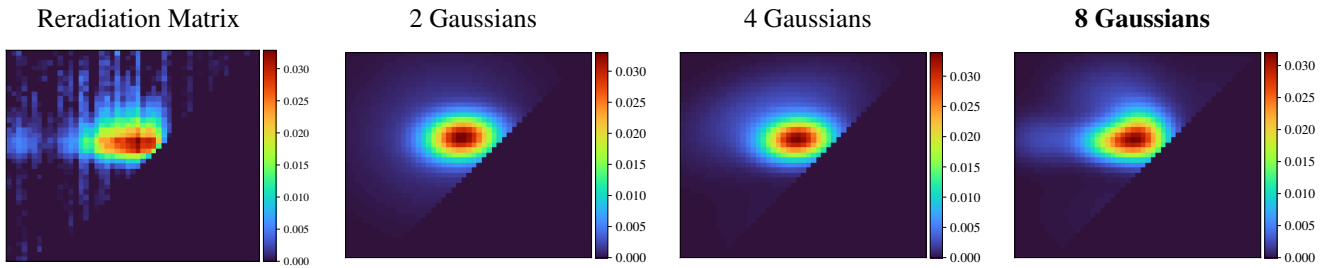
Fitted Material Under Monochromatic Illumination



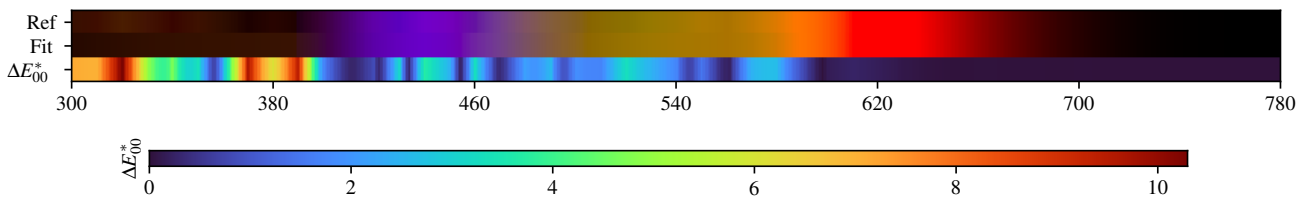
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.52$	$\Delta E = 0.20$	$\Delta E = 0.39$	$\Delta E = 0.09$	$\Delta E = 0.36$	$\Delta E = 0.05$	$\Delta E = 0.14$	$\Delta E = 0.35$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.59$	$\Delta E = 0.13$	$\Delta E = 0.53$	$\Delta E = 0.03$	$\Delta E = 0.37$	$\Delta E = 0.54$	$\Delta E = 0.24$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.61$	$\Delta E = 0.24$	$\Delta E = 0.38$	$\Delta E = 0.30$	$\Delta E = 0.11$	$\Delta E = 0.35$	$\Delta E = 0.25$	$\Delta E = 0.28$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.39$	$\Delta E = 0.47$	$\Delta E = 0.28$	$\Delta E = 0.34$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.29$	$\Delta E = 0.07$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.07$	$\Delta E = 0.36$	$\Delta E = 0.57$	$\Delta E = 0.45$	$\Delta E = 0.17$	$\Delta E = 0.36$	$\Delta E = 0.08$	$\Delta E = 0.25$	$\Delta E = 0.39$	$\Delta E = 0.03$

PAPRED - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.51$	$\Delta E = 0.31$	$\Delta E = 0.40$	$\Delta E = 0.21$	$\Delta E = 0.44$	$\Delta E = 0.23$	$\Delta E = 0.21$	$\Delta E = 0.37$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.54$	$\Delta E = 0.27$	$\Delta E = 0.47$	$\Delta E = 0.19$	$\Delta E = 0.41$	$\Delta E = 0.48$	$\Delta E = 0.27$	$\Delta E = 0.22$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.54$	$\Delta E = 0.33$	$\Delta E = 0.39$	$\Delta E = 0.31$	$\Delta E = 0.21$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.44$	$\Delta E = 0.49$	$\Delta E = 0.35$	$\Delta E = 0.37$	$\Delta E = 0.22$	$\Delta E = 0.15$	$\Delta E = 0.35$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.17$	$\Delta E = 0.43$	$\Delta E = 0.54$	$\Delta E = 0.46$	$\Delta E = 0.22$	$\Delta E = 0.39$	$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.39$	$\Delta E = 0.16$

PAPRED - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.493274	0.472602	0.432139	0.387903	0.350678	0.311379	0.286897	0.259942	0.227899	0.206416	0.178422
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.152815	0.129222	0.114443	0.102283	0.101169	0.098619	0.105361	0.116824	0.164808	0.249934	0.386513
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.532067	0.625947	0.664043	0.675848	0.679095	0.685702	0.685156	0.684657	0.684036	0.684370	0.684227
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.687546	0.684103	0.687756	0.686806	0.687353	0.692293	0.684688	0.690721			

2 Gaussians max

Scaling factor: 386.50822087832864

Gaussians:

Weight	Mean		Covariance			
0.344125100	491.320768551	625.398551631	11906.936251012	618.228915612	618.228915612	8608.464119018
0.655874900	526.280491182	614.939995582	2089.835315607	81.084661797	81.084661797	783.030750502

4 Gaussians max

Scaling factor: 379.1194640371402

Gaussians:

Weight	Mean		Covariance			
0.046698994	535.559523065	454.104159000	11333.678523897	743.540759744	743.540759744	3538.175875362
0.318605859	482.963345947	657.791503399	10857.337405845	2220.376468119	2220.376468119	3411.252547180
0.634514533	528.387192111	611.124311112	2034.435066170	97.594112491	97.594112491	700.959696661

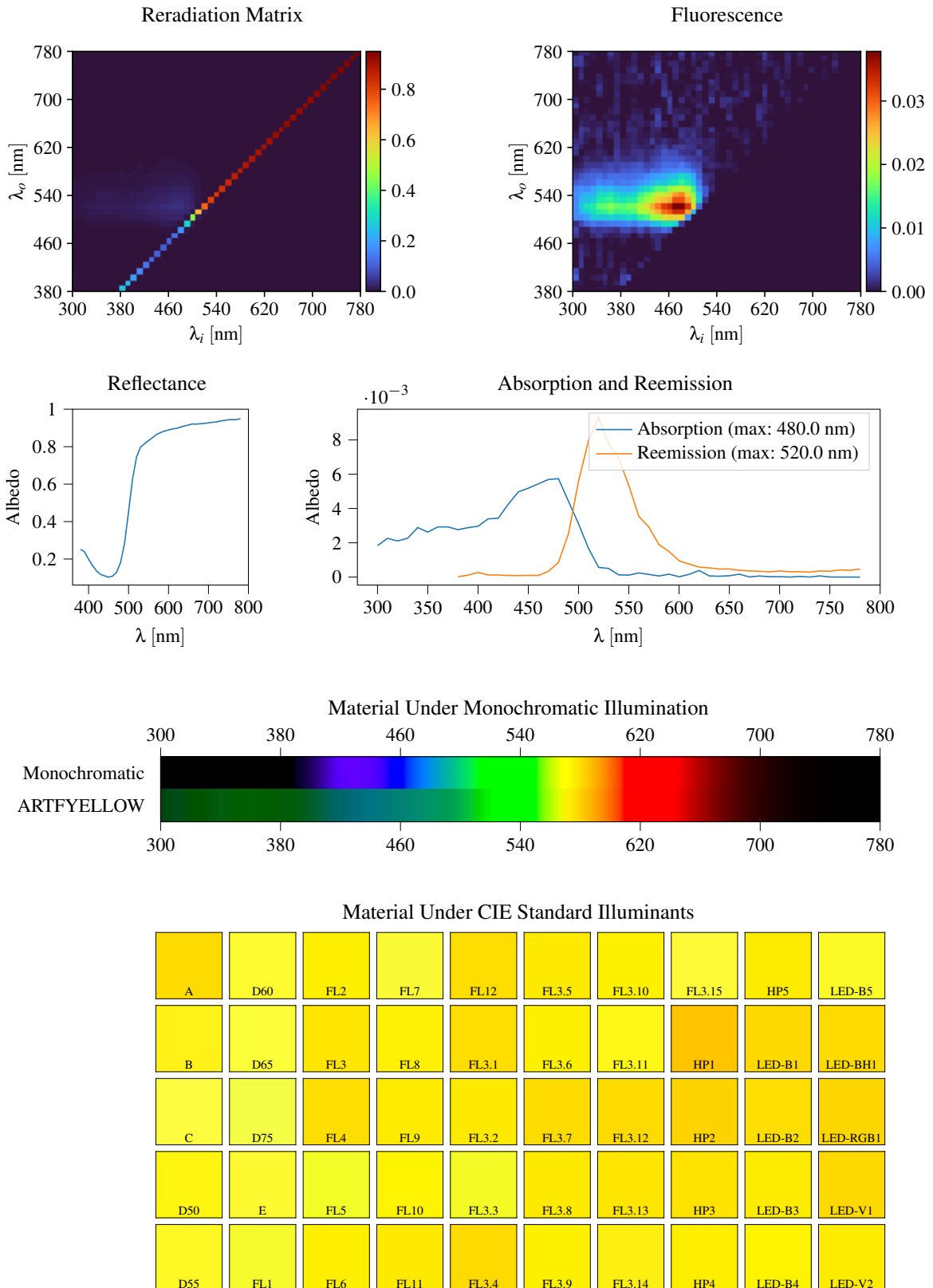
8 Gaussians max

Scaling factor: 381.22666110302885

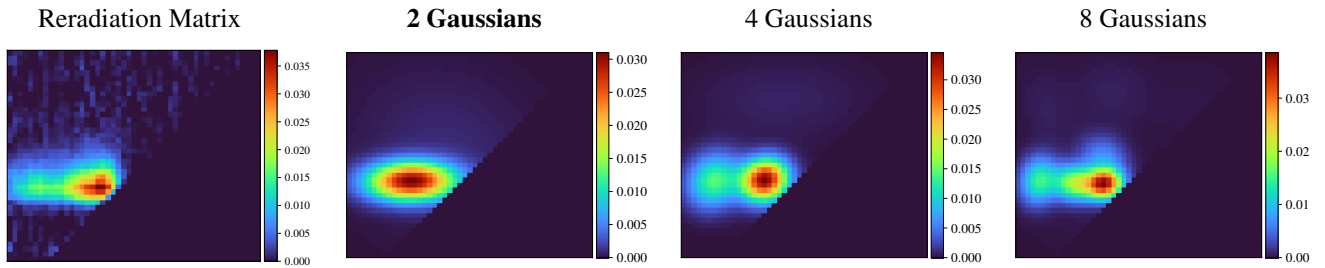
Gaussians:

Weight	Mean		Covariance			
0.053155113	521.972424143	462.387530007	11581.676173007	-212.928395695	-212.928395695	3846.135198227
0.062969500	353.266320771	610.093171126	2549.531560293	-109.020199472	-109.020199472	976.715336788
0.372227204	503.981429370	604.412297949	2172.907915890	-75.271947555	-75.271947555	540.855387522
0.339113422	549.337636709	623.764850979	1233.336774408	-125.196605614	-125.196605614	990.657449747
0.026010096	680.762179994	683.608750622	5612.248694132	2090.716980067	2090.716980067	3801.174835088
0.144566097	496.253671919	692.127038463	5351.600203365	-95.467184146	-95.467184146	2425.415848233

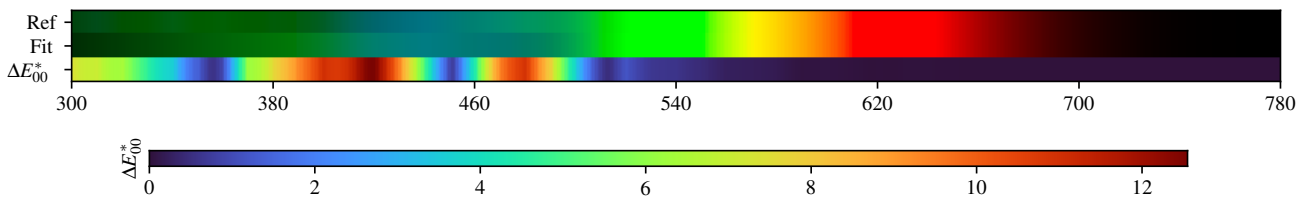
3.39. ARTFYELLOW



ARTFYELLOW - Weighted Expectation-Maximization - 2 Gaussians



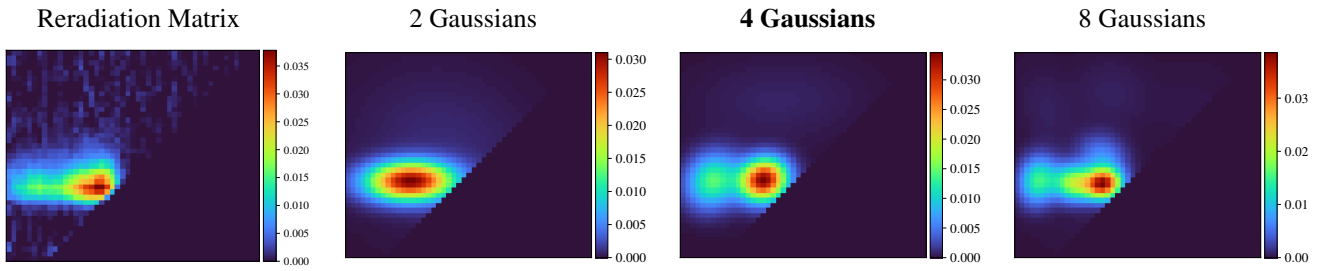
Fitted Material Under Monochromatic Illumination



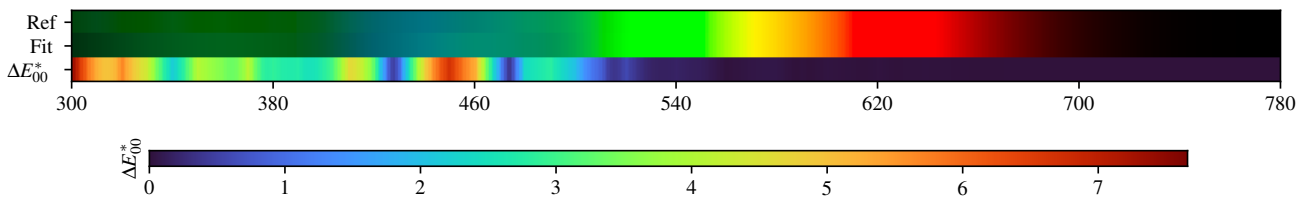
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.28$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.20$	FL3.5 $\Delta E = 0.37$	FL3.10 $\Delta E = 0.63$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.29$
B $\Delta E = 0.09$	D65 $\Delta E = 0.37$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.31$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.42$	FL3.11 $\Delta E = 0.35$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.19$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.25$	D75 $\Delta E = 0.52$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.26$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.23$	FL3.12 $\Delta E = 0.36$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.23$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.09$	E $\Delta E = 1.03$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.36$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.32$	FL3.13 $\Delta E = 0.71$	HP3 $\Delta E = 0.24$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.34$
D55 $\Delta E = 0.18$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.09$	FL11 $\Delta E = 0.32$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.36$	FL3.14 $\Delta E = 0.83$	HP4 $\Delta E = 0.60$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.23$

ARTFYELLOW - Weighted Expectation-Maximization - 4 Gaussians



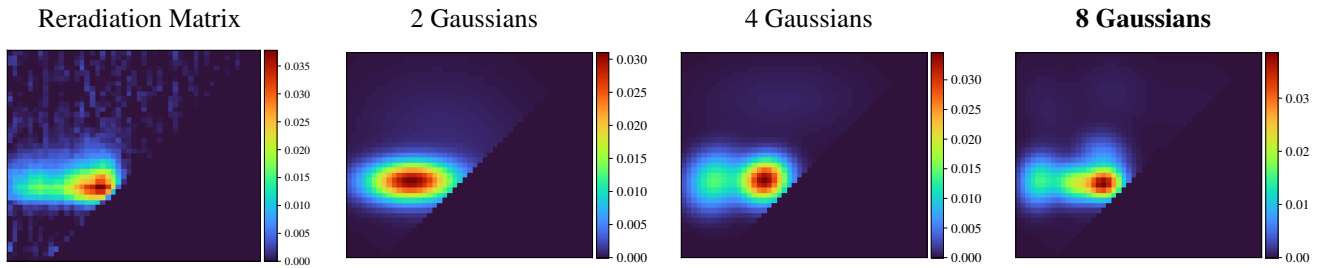
Fitted Material Under Monochromatic Illumination



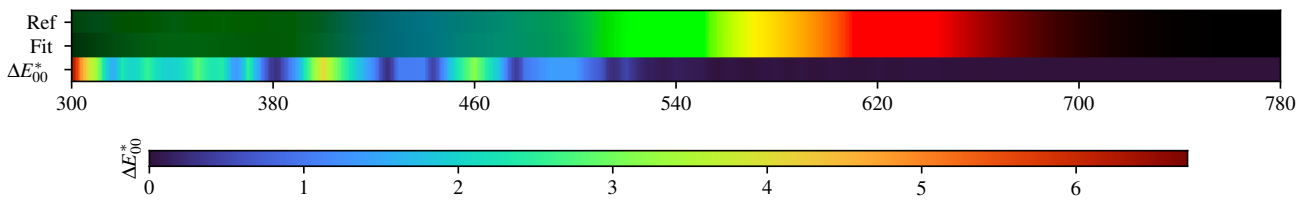
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.29$	FL2 $\Delta E = 0.16$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.23$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.72$
B $\Delta E = 0.23$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.21$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.20$	LED-BH1 $\Delta E = 0.27$
C $\Delta E = 0.31$	D75 $\Delta E = 0.34$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.18$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.27$	LED-RGB1 $\Delta E = 0.24$
D50 $\Delta E = 0.25$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.46$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.16$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.64$	LED-V2 $\Delta E = 0.10$

ARTFYELLOW - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.22$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.04$	FL3.15 $\Delta E = 0.13$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.14$	D65 $\Delta E = 0.24$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.05$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.18$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.17$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.05$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.04$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.04$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.05$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.17$	LED-V2 $\Delta E = 0.18$

ARTFYELLOW - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.251802	0.237902	0.198483	0.164998	0.136079	0.117879	0.110220	0.103342	0.108618	0.128719	0.180956
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.283659	0.451972	0.626861	0.744390	0.797878	0.815382	0.832425	0.847905	0.865282	0.875036	0.883590
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.888921	0.895147	0.897296	0.905015	0.910574	0.915840	0.921174	0.920152	0.922864	0.924012	0.927151
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.930180	0.931631	0.937673	0.939735	0.944006	0.944611	0.944389	0.949699			

2 Gaussians

Scaling factor: 380.8474660809146

Gaussians:

Weight	Mean	Covariance				
0.752473202	423.782173820	528.113912076	3413.342727830	48.506567398	48.506567398	663.165307272
0.247526798	489.862709611	583.366836945	15060.369781450	-1397.778117087	-1397.778117087	12628.641372888

4 Gaussians

Scaling factor: 363.0651033389571

Gaussians:

Weight	Mean	Covariance				
0.102795178	489.473070866	688.355513981	14162.611853021	447.671623280	447.671623280	3333.886755718
0.520546997	460.979084675	530.505576202	980.119362430	77.574557626	77.574557626	794.041301200
0.315686530	359.623771812	528.841606798	1270.136300676	142.481232333	142.481232333	1303.137449173
0.060971295	595.915618911	458.077981386	12141.475803520	1382.533480042	1382.533480042	4452.345927380

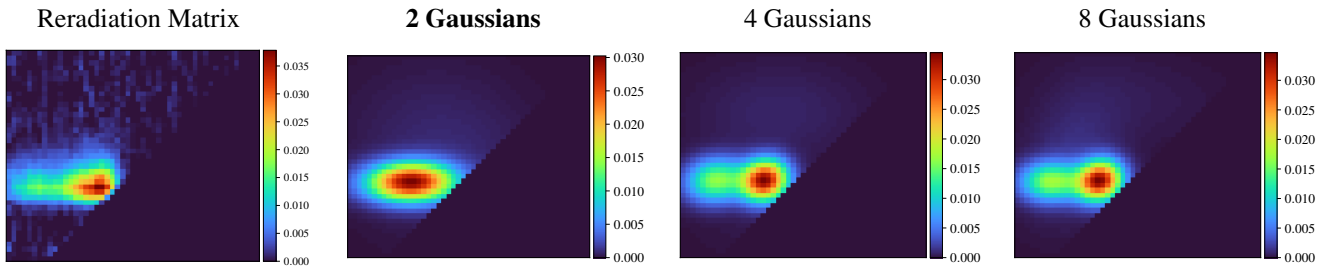
8 Gaussians

Scaling factor: 360.24752181113183

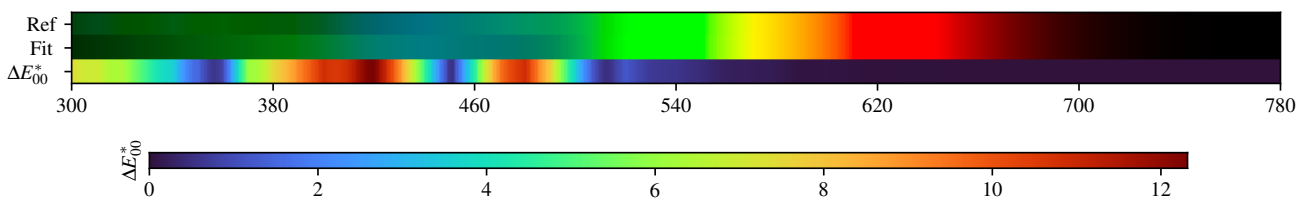
Gaussians:

Weight	Mean	Covariance					
0.035482064	358.522473878	666.394995925	1756.222940959	-774.905006106	-774.905006106	4316.470498420	
0.118842381	470.254819903	571.569983493	976.722234961	-124.387193609	-124.387193609	933.683143953	
0.199824485	341.361938061	529.273543994	636.123629216	67.949873978	67.949873978	989.402636266	
0.060028235	555.942054790	435.271886352	16348.257380615	597.021774671	597.021774671	1918.234571437	
0.034227619	654.416756948	665.088464026	5000.319269343	-161.273893402	-161.273893402	5990.367144535	
0.225460968	413.012087292	524.465367618	772.899267877	-14.551285376	-14.551285376	566.740728210	
0.287796821	471.843270156	522.339556236	570.243336478	26.256664573	26.256664573	396.628253228	
0.038337427	486.069086265	704.004985491	2785.610785939	-158.591558814	-158.591558814	2484.176270723	

ARTFYELLOW - Weighted variational Bayesian inference - 2 Gaussians



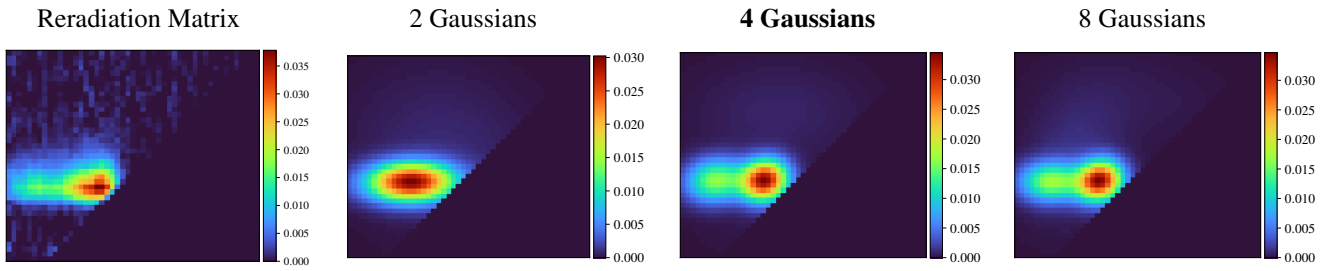
Fitted Material Under Monochromatic Illumination



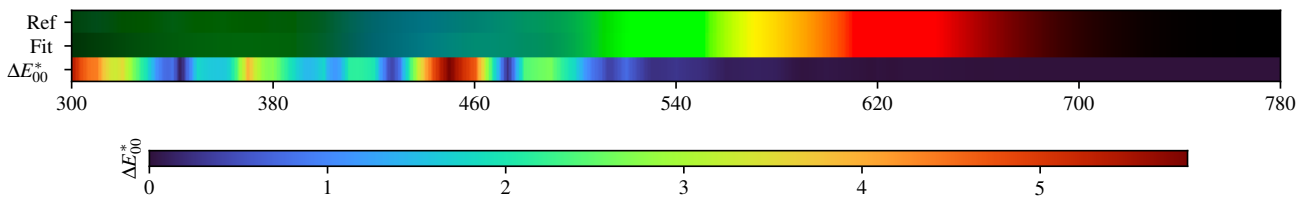
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.39$	$\Delta E = 0.66$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.34$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.31$	$\Delta E = 0.10$	$\Delta E = 0.34$	$\Delta E = 0.10$	$\Delta E = 0.45$	$\Delta E = 0.39$	$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.19$	$\Delta E = 0.44$	$\Delta E = 0.10$	$\Delta E = 0.28$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.36$	$\Delta E = 0.15$	$\Delta E = 0.24$	$\Delta E = 0.06$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.10$	$\Delta E = 0.94$	$\Delta E = 0.15$	$\Delta E = 0.40$	$\Delta E = 0.18$	$\Delta E = 0.34$	$\Delta E = 0.73$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.32$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.35$	$\Delta E = 0.08$	$\Delta E = 0.39$	$\Delta E = 0.86$	$\Delta E = 0.56$	$\Delta E = 0.22$	$\Delta E = 0.20$

ARTFYELLOW - Weighted variational Bayesian inference - 4 Gaussians



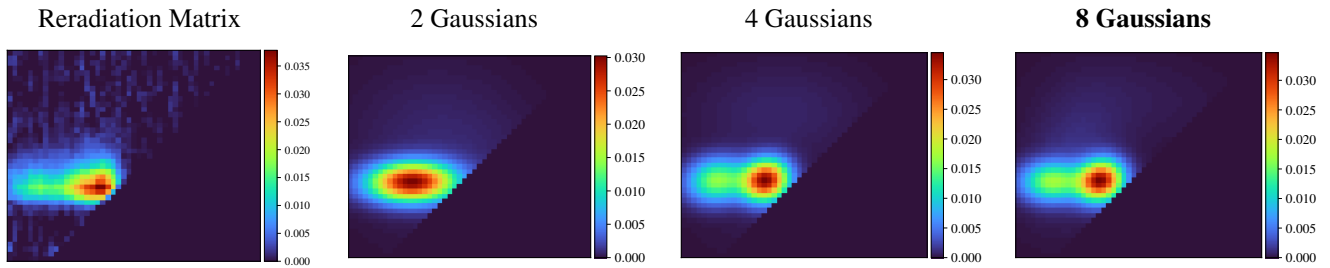
Fitted Material Under Monochromatic Illumination



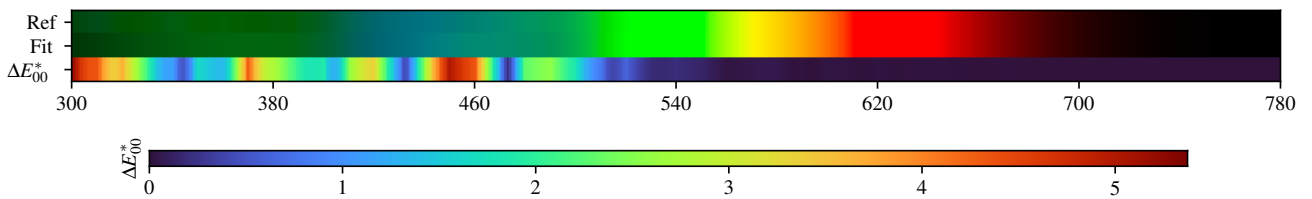
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.36$	$\Delta E = 0.15$	$\Delta E = 0.27$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.29$	$\Delta E = 0.18$	$\Delta E = 0.61$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.27$	$\Delta E = 0.38$	$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.06$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.23$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.37$	$\Delta E = 0.43$	$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.22$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.48$	$\Delta E = 0.22$	$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.13$	$\Delta E = 0.38$	$\Delta E = 0.10$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.33$	$\Delta E = 0.23$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.17$	$\Delta E = 0.54$	$\Delta E = 0.10$

ARTFYELLOW - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.34$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.28$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.56$
B $\Delta E = 0.25$	D65 $\Delta E = 0.36$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.14$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.16$	LED-BH1 $\Delta E = 0.21$
C $\Delta E = 0.32$	D75 $\Delta E = 0.40$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.21$	LED-RGB1 $\Delta E = 0.22$
D50 $\Delta E = 0.27$	E $\Delta E = 0.45$	FL5 $\Delta E = 0.21$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.34$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.31$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.49$	LED-V2 $\Delta E = 0.11$

ARTFYELLOW - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.251802	0.237902	0.198483	0.164998	0.136079	0.117879	0.110220	0.103342	0.108618	0.128719	0.180956
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.283659	0.451972	0.626861	0.744390	0.797878	0.815382	0.832425	0.847905	0.865282	0.875036	0.883590
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.888921	0.895147	0.897296	0.905015	0.910574	0.915840	0.921174	0.920152	0.922864	0.924012	0.927151
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.930180	0.931631	0.937673	0.939735	0.944006	0.944611	0.944389	0.949699			

2 Gaussians max

Scaling factor: 380.65044564522935

Gaussians:

Weight	Mean	Covariance				
0.238328798	492.171882411	584.448714788	15273.476662185	-1513.474910624	-1513.474910624	12938.804922460
0.761671202	423.956054410	528.474618204	3451.056247723	55.593905432	55.593905432	704.553106277

4 Gaussians max

Scaling factor: 366.61349806188923

Gaussians:

Weight	Mean	Covariance				
0.062659680	548.915600535	440.881138148	17836.683426261	413.784593280	413.784593280	2618.209847715
0.321755627	365.448702477	529.484691125	1583.622824677	88.577139725	88.577139725	847.565802730
0.480608405	462.909663163	529.692493760	940.980528307	75.541500489	75.541500489	750.931324190
0.134976288	488.012561034	662.837170261	14392.140936660	287.410047547	287.410047547	5042.696903502

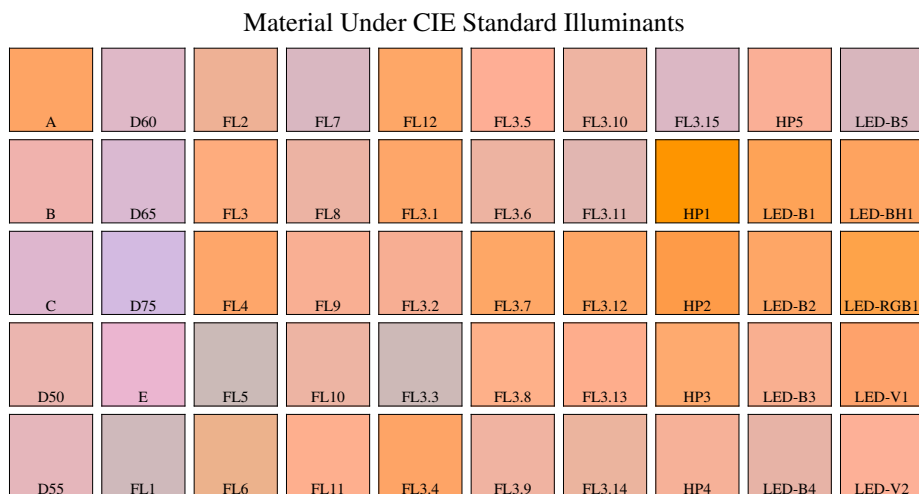
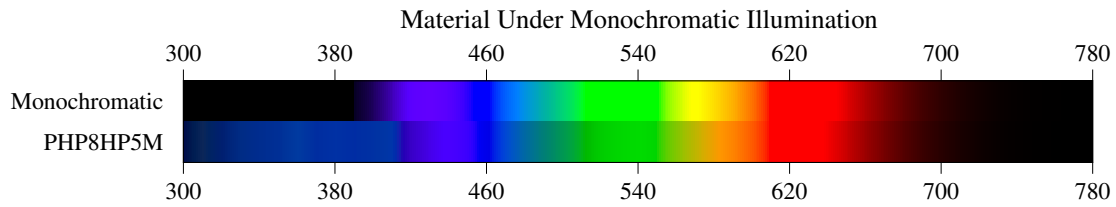
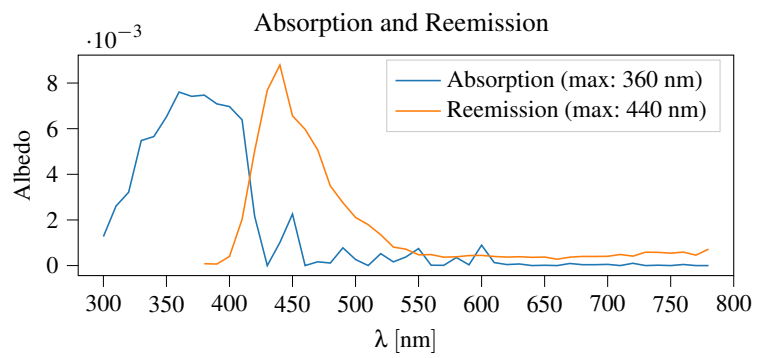
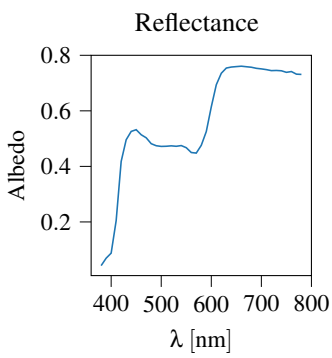
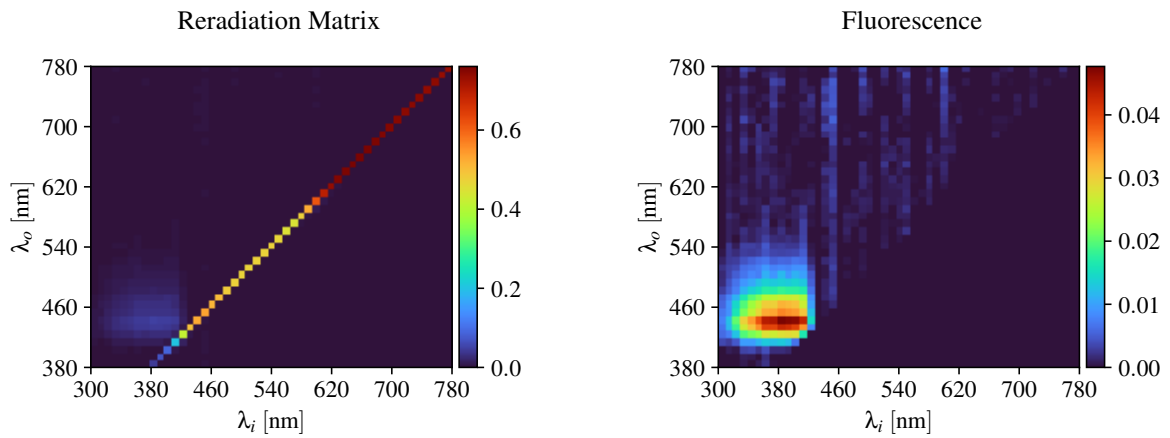
8 Gaussians max

Scaling factor: 366.3318156065255

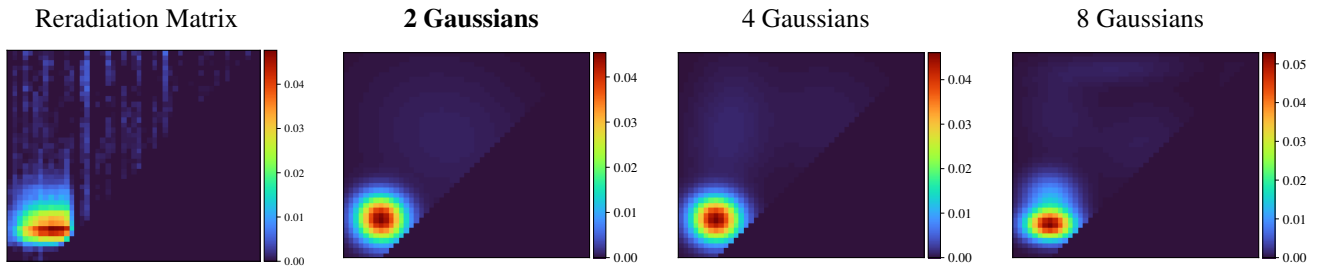
Gaussians:

Weight	Mean	Covariance					
0.136651510	407.553851628	571.463399692	4281.462138754	1325.510877287	1325.510877287	6896.114513462	
0.053695639	599.459246188	454.242643158	9805.523605878	-776.133510356	-776.133510356	3557.585106314	
0.441512906	464.645350325	529.211671287	879.656918169	77.175751684	77.175751684	705.360012966	
0.294957626	367.698367050	527.155434946	1690.828010682	22.338697507	22.338697507	669.260104560	
0.071298994	534.792937601	692.267774669	16743.828323898	-1536.190849429	-1536.190849429	4247.710562116	

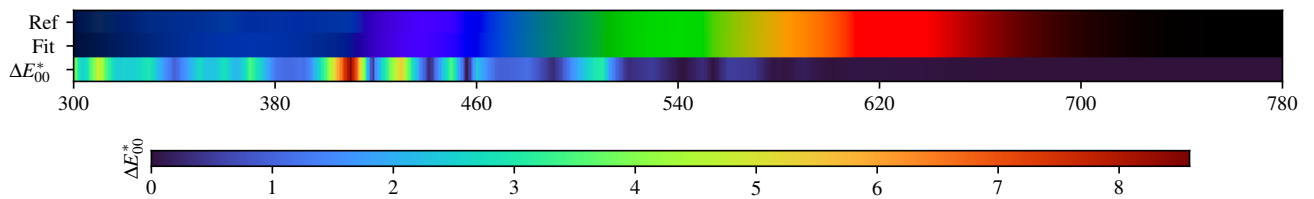
3.40. PHP8HP5M



PHP8HP5M - Weighted Expectation-Maximization - 2 Gaussians



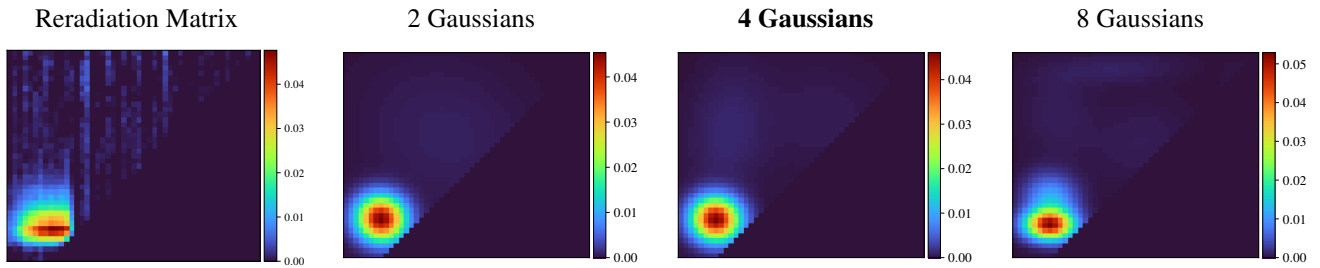
Fitted Material Under Monochromatic Illumination



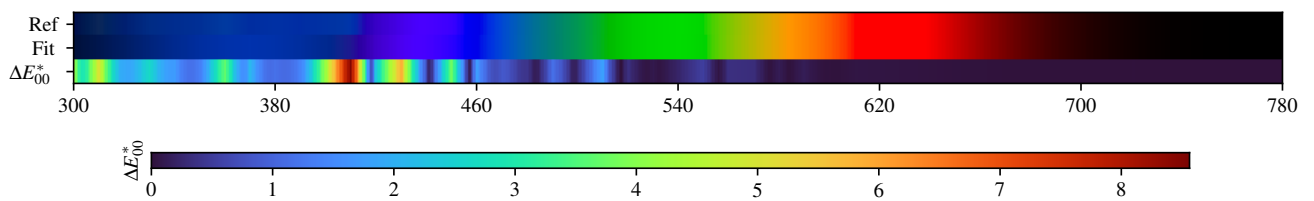
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.31$	FL2 $\Delta E = 0.20$	FL7 $\Delta E = 0.38$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.23$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.44$	HP5 $\Delta E = 0.32$	LED-B5 $\Delta E = 0.20$
B $\Delta E = 0.30$	D65 $\Delta E = 0.28$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.27$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.27$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.31$	D75 $\Delta E = 0.24$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.21$	FL3.2 $\Delta E = 0.24$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.19$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.31$	E $\Delta E = 0.08$	FL5 $\Delta E = 0.38$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.41$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.25$	HP3 $\Delta E = 0.25$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.91$
D55 $\Delta E = 0.32$	FL1 $\Delta E = 0.36$	FL6 $\Delta E = 0.17$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.30$	HP4 $\Delta E = 0.48$	LED-B4 $\Delta E = 0.23$	LED-V2 $\Delta E = 1.02$

PHP8HP5M - Weighted Expectation-Maximization - 4 Gaussians



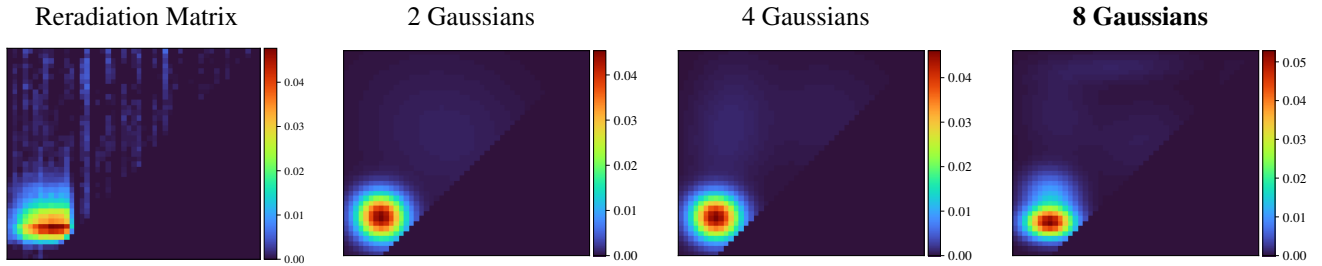
Fitted Material Under Monochromatic Illumination



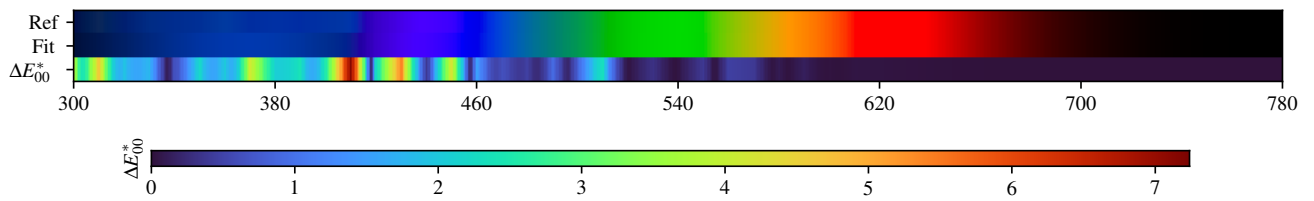
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.31$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.23$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.28$	FL3.15 $\Delta E = 0.28$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.40$
B $\Delta E = 0.15$	D65 $\Delta E = 0.35$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.34$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.23$
C $\Delta E = 0.26$	D75 $\Delta E = 0.43$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.19$	E $\Delta E = 0.28$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.31$	FL3.3 $\Delta E = 0.26$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.16$	LED-B3 $\Delta E = 0.32$	LED-V1 $\Delta E = 0.81$
D55 $\Delta E = 0.25$	FL1 $\Delta E = 0.21$	FL6 $\Delta E = 0.09$	FL11 $\Delta E = 0.23$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.29$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.38$	LED-B4 $\Delta E = 0.41$	LED-V2 $\Delta E = 0.85$

PHP8HP5M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.15$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.31$	HP5 $\Delta E = 0.27$	LED-B5 $\Delta E = 0.28$
B $\Delta E = 0.17$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.16$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.18$	D75 $\Delta E = 0.10$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.16$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.26$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.29$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.89$
D55 $\Delta E = 0.16$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.16$	HP4 $\Delta E = 0.47$	LED-B4 $\Delta E = 0.28$	LED-V2 $\Delta E = 0.97$

PHP8HP5M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.042671	0.069481	0.087615	0.204736	0.417849	0.495905	0.525862	0.532153	0.513911	0.502970	0.481688
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.474378	0.471928	0.472470	0.473968	0.472378	0.474936	0.467309	0.449946	0.447883	0.475852	0.525379
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.614413	0.694001	0.735369	0.754091	0.757693	0.759286	0.760764	0.758827	0.757007	0.753124	0.751063
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.748421	0.744791	0.745398	0.744262	0.738680	0.741442	0.732114	0.731154			

2 Gaussians

Scaling factor: 366.4530198640774

Gaussians:

Weight	Mean		Covariance			
0.229295152	498.994788487	618.929495818	15576.495014871	-1860.284929496	-1860.284929496	11955.078673890
0.770704848	369.635248300	453.335240117	1050.812018498	-36.367630475	-36.367630475	929.968812518

4 Gaussians

Scaling factor: 360.6808061854182

Gaussians:

Weight	Mean		Covariance			
0.097483387	581.823463820	652.548217843	8784.115373475	2.483148985	2.483148985	7146.285760342
0.755482576	369.676818815	452.348172676	1046.556074007	-21.740429861	-21.740429861	852.273234638
0.028099986	597.317901464	424.394970153	11666.619172439	820.040216441	820.040216441	1339.817968875
0.118934051	391.053877639	622.411610480	2887.003429928	707.354831290	707.354831290	9034.295964245

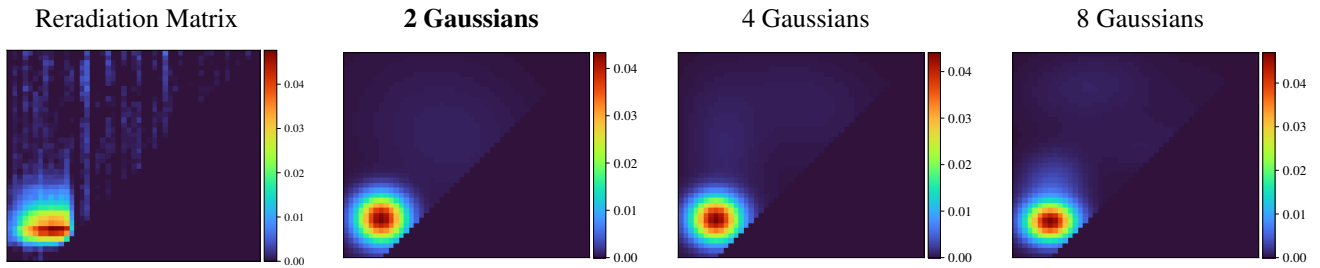
8 Gaussians

Scaling factor: 355.73407500262607

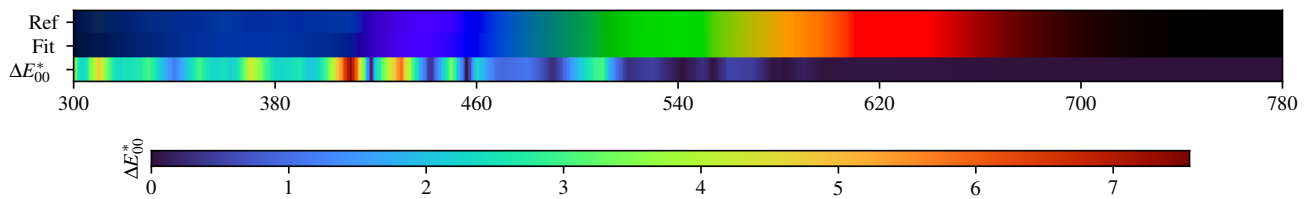
Gaussians:

Weight	Mean		Covariance			
0.068990181	546.919269268	605.581473832	5505.818893082	729.514783660	729.514783660	4014.577917385
0.238949929	371.386043089	489.916668152	1120.306385774	-67.054907804	-67.054907804	1022.200302143
0.020686661	519.717071718	407.439608212	6016.534890448	724.383383955	724.383383955	528.123241708
0.056478741	382.130684103	659.928805566	2574.093263415	-67.129392663	-67.129392663	4272.884352582
0.040692683	496.793400158	750.726725198	8435.599571792	449.702059427	449.702059427	473.903344969
0.550562414	368.739774311	441.096189591	1023.201226162	-10.673408736	-10.673408736	391.310278583
0.013792765	724.638379301	469.343378670	1002.103687592	157.446164727	157.446164727	4303.551771478
0.009846626	737.682279226	699.361171843	643.854240378	156.477942183	156.477942183	2444.043080651

PHP8HP5M - Weighted variational Bayesian inference - 2 Gaussians



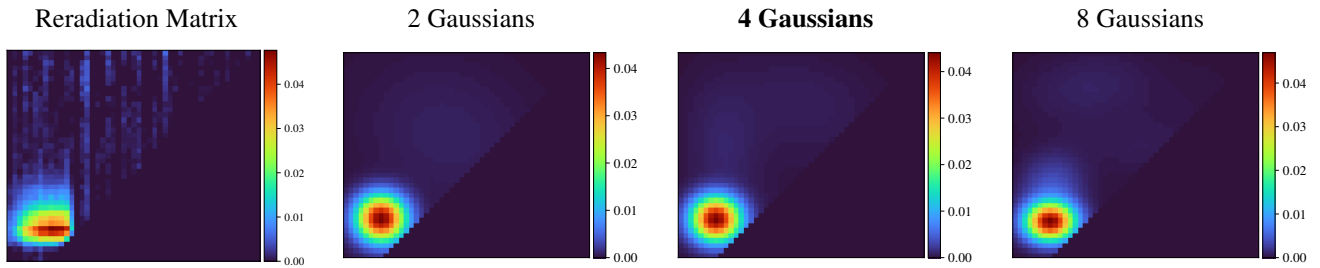
Fitted Material Under Monochromatic Illumination



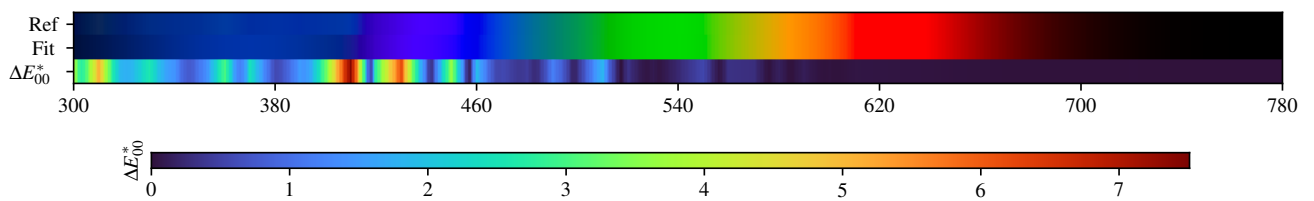
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.45$	FL2 $\Delta E = 0.21$	FL7 $\Delta E = 0.39$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.24$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.52$	HP5 $\Delta E = 0.31$	LED-B5 $\Delta E = 0.23$
B $\Delta E = 0.36$	D65 $\Delta E = 0.44$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.28$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.28$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.18$
C $\Delta E = 0.36$	D75 $\Delta E = 0.42$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.21$	FL3.2 $\Delta E = 0.25$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.19$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.43$	E $\Delta E = 0.32$	FL5 $\Delta E = 0.39$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.42$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.25$	HP3 $\Delta E = 0.25$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.90$
D55 $\Delta E = 0.46$	FL1 $\Delta E = 0.36$	FL6 $\Delta E = 0.18$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.17$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.31$	HP4 $\Delta E = 0.50$	LED-B4 $\Delta E = 0.26$	LED-V2 $\Delta E = 1.01$

PHP8HP5M - Weighted variational Bayesian inference - 4 Gaussians



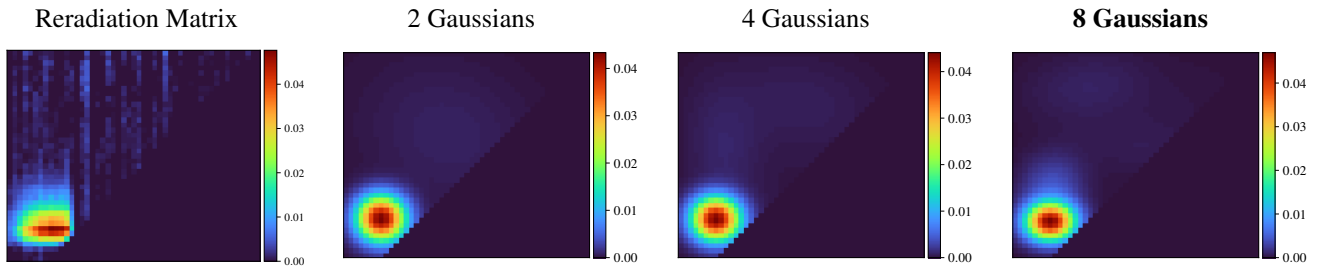
Fitted Material Under Monochromatic Illumination



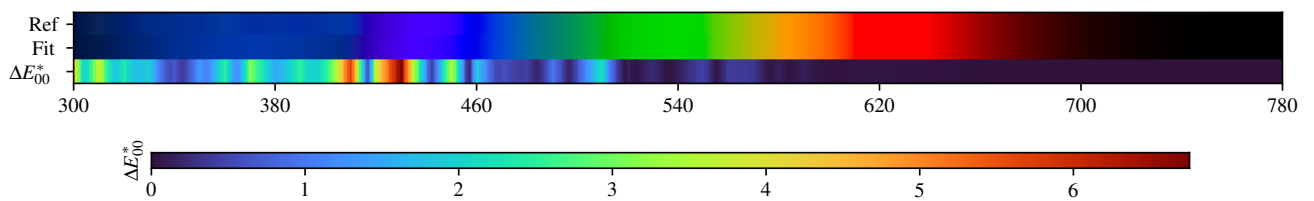
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.28$	FL3.15 $\Delta E = 0.29$	HP5 $\Delta E = 0.15$	LED-B5 $\Delta E = 0.42$
B $\Delta E = 0.13$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.34$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 0.15$	D75 $\Delta E = 0.28$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.20$	E $\Delta E = 0.17$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.30$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.17$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.16$	LED-B3 $\Delta E = 0.32$	LED-V1 $\Delta E = 0.80$
D55 $\Delta E = 0.23$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.22$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.29$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.40$	LED-B4 $\Delta E = 0.41$	LED-V2 $\Delta E = 0.86$

PHP8HP5M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.27$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.34$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.35$
B $\Delta E = 0.19$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.29$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.20$
C $\Delta E = 0.23$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.23$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.26$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.26$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 0.80$
D55 $\Delta E = 0.26$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.11$	FL11 $\Delta E = 0.17$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.43$	LED-B4 $\Delta E = 0.32$	LED-V2 $\Delta E = 0.88$

PHP8HP5M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.042671	0.069481	0.087615	0.204736	0.417849	0.495905	0.525862	0.532153	0.513911	0.502970	0.481688
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.474378	0.471928	0.472470	0.473968	0.472378	0.474936	0.467309	0.449946	0.447883	0.475852	0.525379
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.614413	0.694001	0.735369	0.754091	0.757693	0.759286	0.760764	0.758827	0.757007	0.753124	0.751063
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.748421	0.744791	0.745398	0.744262	0.738680	0.741442	0.732114	0.731154			

2 Gaussians max

Scaling factor: 367.40551218764807

Gaussians:

Weight	Mean	Covariance				
0.773097480	369.917077917	453.695152205	1105.436452851	-13.162102856	-13.162102856	976.976436910
0.226902520	500.420168555	620.238649188	15580.422070413	-2008.909725183	-2008.909725183	11886.797007214

4 Gaussians max

Scaling factor: 361.4623320152231

Gaussians:

Weight	Mean	Covariance				
0.753099215	369.770353592	452.399972909	1100.480253431	-7.566911758	-7.566911758	886.953680951
0.042762636	592.840053673	473.995068420	11054.792681388	-945.173378611	-945.173378611	5153.590342260
0.089793446	383.753493926	584.252952343	2688.084778566	-643.035760542	-643.035760542	8167.873201656
0.114344703	537.021298366	682.553207891	12396.989219670	-1136.123836756	-1136.123836756	5128.499863297

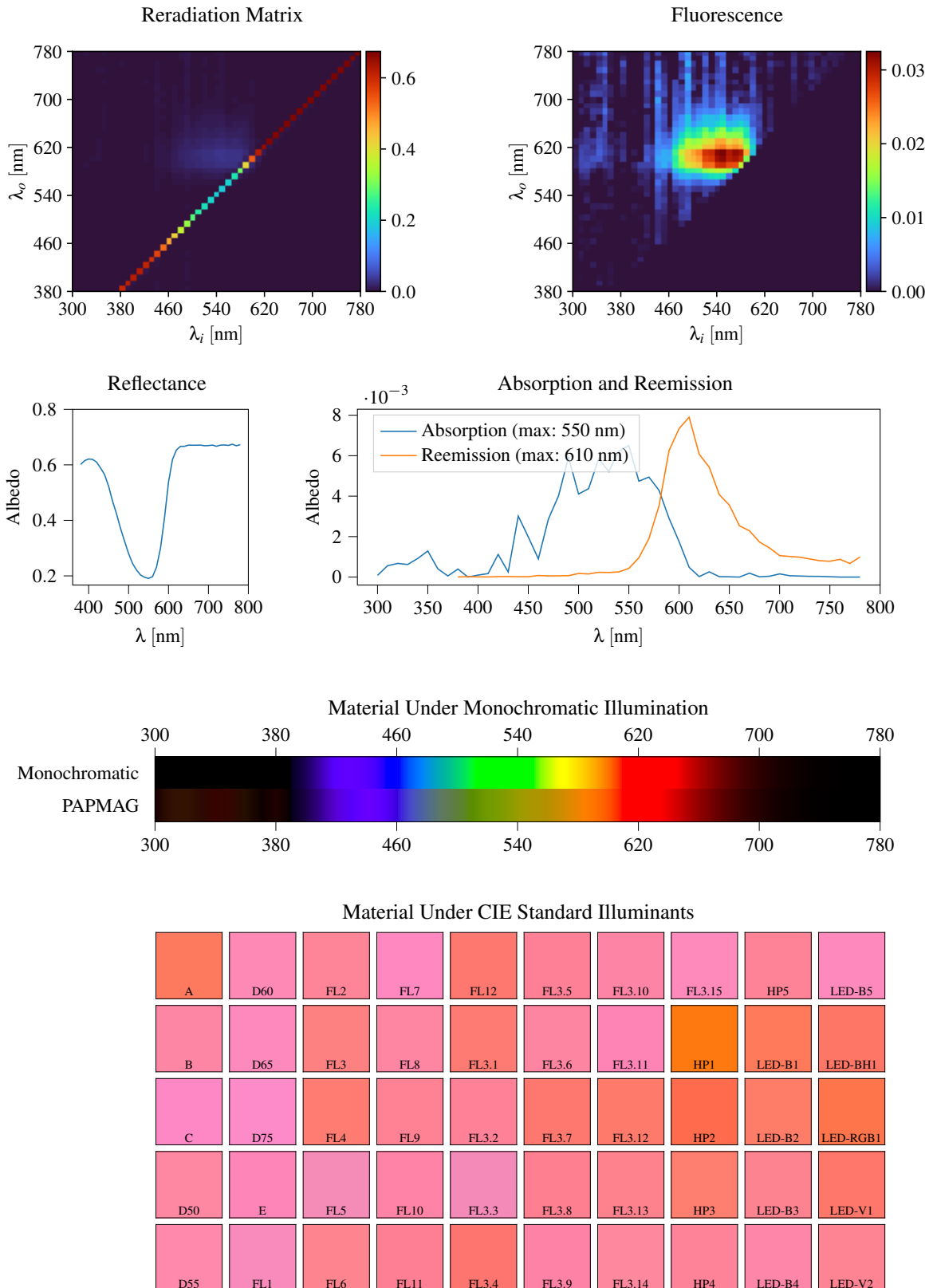
8 Gaussians max

Scaling factor: 360.68801410113474

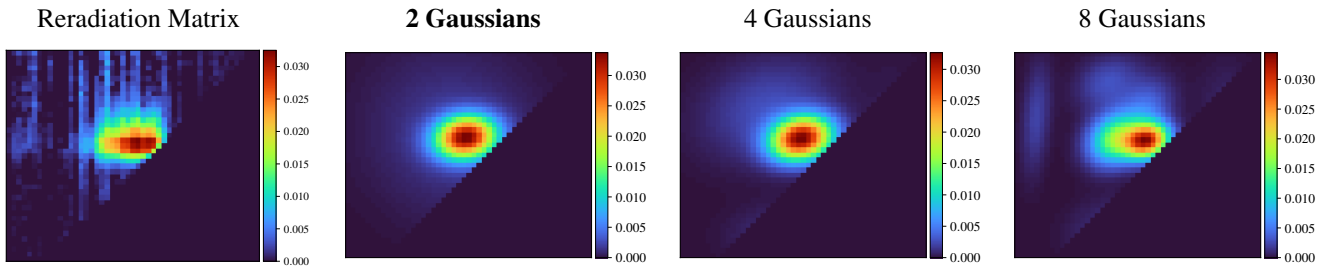
Gaussians:

Weight	Mean	Covariance				
0.669202914	370.229522485	447.354346759	1093.786270384	10.314696962	10.314696962	650.882508367
0.035909168	594.505268813	445.468024004	11786.125720523	319.336761884	319.336761884	3247.333089192
0.137849709	372.327240829	511.907249749	1690.908237745	153.791882405	153.791882405	1937.946802684
0.039429776	533.200577847	595.415614248	9881.638909447	-833.366405152	-833.366405152	1830.202999141
0.032539618	633.684182450	662.693572571	8538.983509468	2914.572542840	2914.572542840	5184.688921099
0.084956521	445.490489679	715.625786261	8140.513746866	807.100177880	807.100177880	2505.111878708

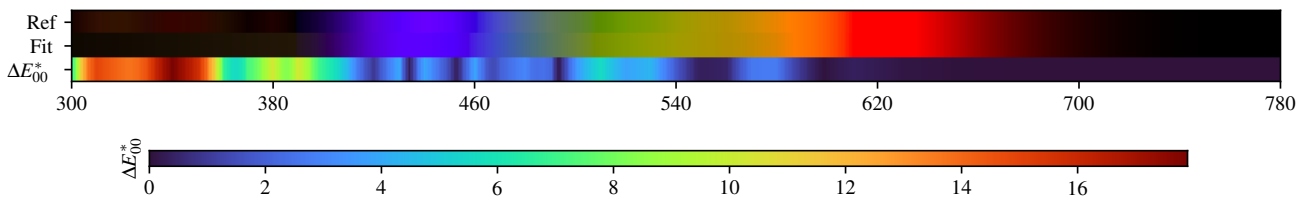
3.41. PPMAG



PAPMAG - Weighted Expectation-Maximization - 2 Gaussians



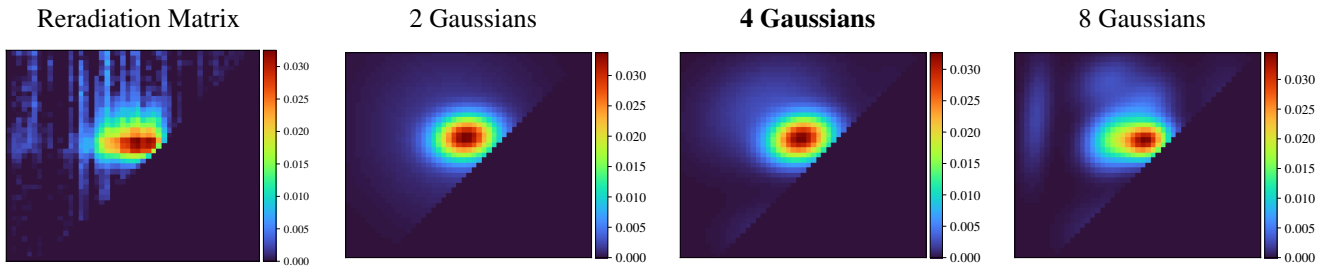
Fitted Material Under Monochromatic Illumination



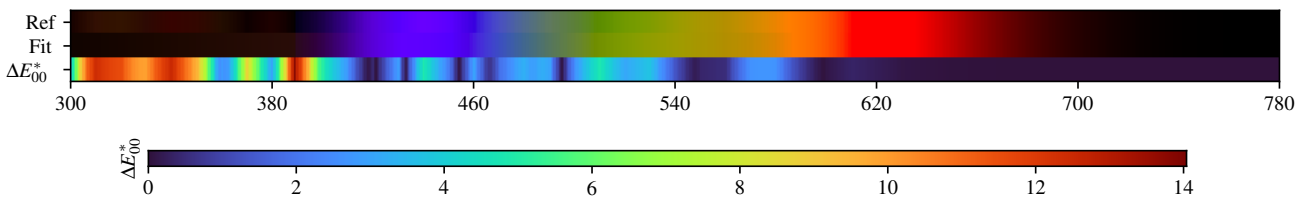
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.26$	FL2 $\Delta E = 0.35$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.21$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.18$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.07$
B $\Delta E = 0.16$	D65 $\Delta E = 0.28$	FL3 $\Delta E = 0.44$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.45$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.56$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.22$	D75 $\Delta E = 0.32$	FL4 $\Delta E = 0.50$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.25$	FL3.7 $\Delta E = 0.20$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.22$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.38$
D50 $\Delta E = 0.21$	E $\Delta E = 0.35$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.16$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.24$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.39$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.23$

PAPMAG - Weighted Expectation-Maximization - 4 Gaussians



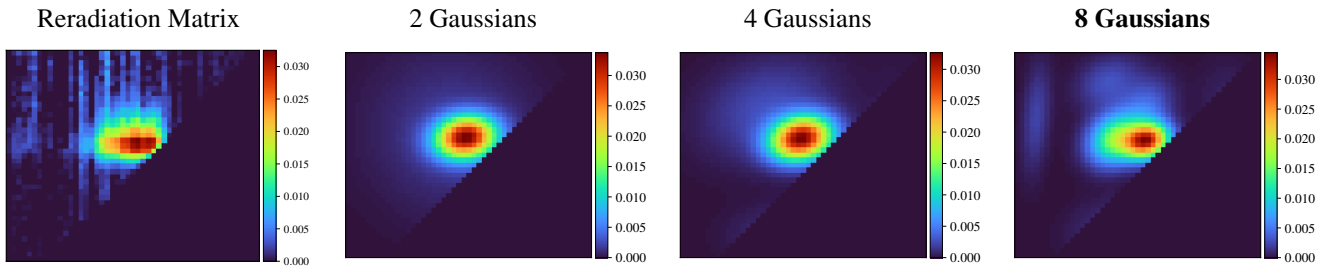
Fitted Material Under Monochromatic Illumination



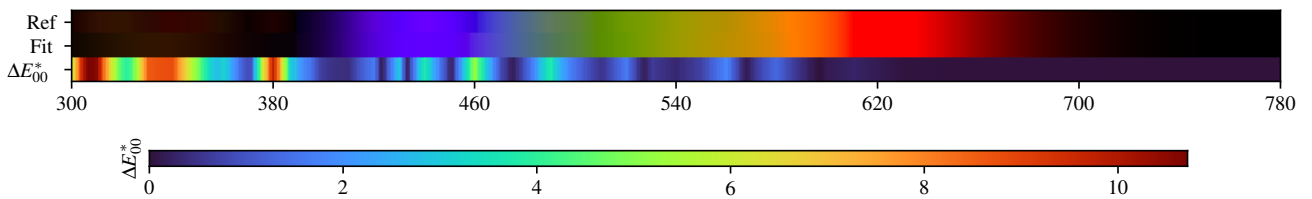
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.52$	$\Delta E = 0.21$	$\Delta E = 0.27$	$\Delta E = 0.15$	$\Delta E = 0.29$	$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.25$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.57$	$\Delta E = 0.16$	$\Delta E = 0.52$	$\Delta E = 0.12$	$\Delta E = 0.24$	$\Delta E = 0.59$	$\Delta E = 0.23$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.58$	$\Delta E = 0.25$	$\Delta E = 0.39$	$\Delta E = 0.21$	$\Delta E = 0.14$	$\Delta E = 0.31$	$\Delta E = 0.22$	$\Delta E = 0.27$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.38$	$\Delta E = 0.31$	$\Delta E = 0.31$	$\Delta E = 0.23$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.26$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.10$	$\Delta E = 0.36$	$\Delta E = 0.54$	$\Delta E = 0.30$	$\Delta E = 0.14$	$\Delta E = 0.24$	$\Delta E = 0.07$	$\Delta E = 0.25$	$\Delta E = 0.28$	$\Delta E = 0.07$

PAPMAG - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.10$	$\Delta E = 0.09$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.05$	$\Delta E = 0.06$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.06$	$\Delta E = 0.11$

PAPMAG - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.601539	0.615103	0.621187	0.619744	0.609735	0.588188	0.564553	0.522828	0.468825	0.422783	0.370298
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.324928	0.280672	0.244482	0.221036	0.203145	0.194807	0.190961	0.196849	0.231332	0.300056	0.408598
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.537079	0.619471	0.653870	0.666777	0.666738	0.671130	0.670776	0.670811	0.671306	0.668848	0.669474
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.671207	0.666979	0.671003	0.671600	0.670137	0.674188	0.668774	0.672877			

2 Gaussians

Scaling factor: 380.8426643830256

Gaussians:

Weight	Mean		Covariance			
0.610202103	533.880298229	615.091744878	1622.923641945	106.467775465	106.467775465	807.958945734
0.389797897	509.658575295	622.684819106	12196.565591698	-618.788933099	-618.788933099	11745.323007938

4 Gaussians

Scaling factor: 371.6619858510521

Gaussians:

Weight	Mean		Covariance			
0.644740835	535.713631147	612.748292749	1690.946623771	191.323320586	191.323320586	868.769851565
0.046918661	481.022908655	428.612600976	4047.806477327	380.812324869	380.812324869	1473.848733279
0.260163103	470.223951040	672.096132349	7480.730038952	1187.678010321	1187.678010321	4405.932755254
0.048177402	708.597678975	581.665222311	1841.299117416	1402.764337612	1402.764337612	16271.280447838

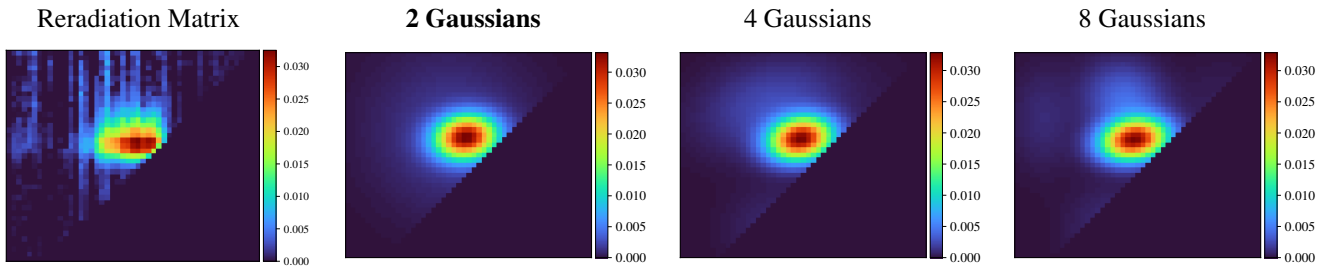
8 Gaussians

Scaling factor: 364.3392632591205

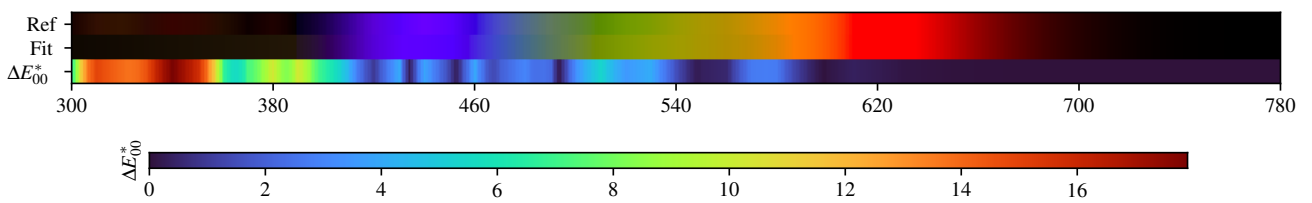
Gaussians:

Weight	Mean		Covariance			
0.120404728	552.796385547	664.675996407	1259.947394698	419.713043701	419.713043701	1819.077436466
0.045169370	470.145497684	434.151079213	2408.381361702	397.801102448	397.801102448	1849.253477234
0.344856112	557.804449292	607.970788671	844.957038472	109.198875190	109.198875190	533.281667462
0.078054795	480.748877031	724.561850381	1732.598903390	374.409331256	374.409331256	1328.188359616
0.054243562	338.554354659	655.388962435	357.736931255	374.810032844	374.810032844	5169.851143465
0.028520083	673.604175873	459.602126063	3643.067761576	-75.526118339	-75.526118339	3414.606626013
0.032064716	711.626486453	687.873816085	1495.952704653	164.589405456	164.589405456	3674.727154248
0.296686633	493.323458162	611.682680850	1156.647741571	211.933629979	211.933629979	1110.184359672

PAPMAG - Weighted variational Bayesian inference - 2 Gaussians



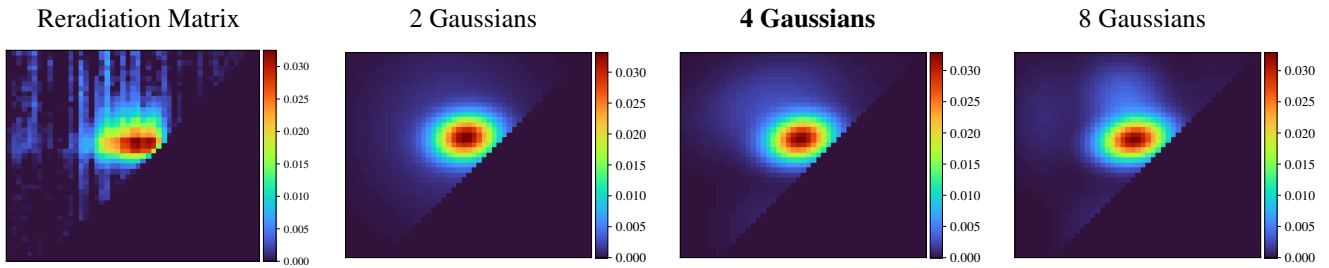
Fitted Material Under Monochromatic Illumination



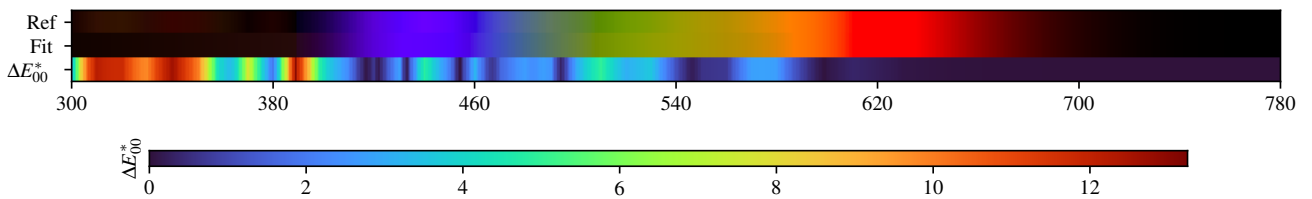
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.27$	FL2 $\Delta E = 0.38$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.19$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.08$	FL3.15 $\Delta E = 0.18$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.17$	D65 $\Delta E = 0.30$	FL3 $\Delta E = 0.46$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.46$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.07$	HP1 $\Delta E = 0.57$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.23$	D75 $\Delta E = 0.34$	FL4 $\Delta E = 0.50$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.27$	FL3.7 $\Delta E = 0.17$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.21$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.37$
D50 $\Delta E = 0.22$	E $\Delta E = 0.35$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.21$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.25$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.41$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.12$	LED-V2 $\Delta E = 0.23$

PAPMAG - Weighted variational Bayesian inference - 4 Gaussians



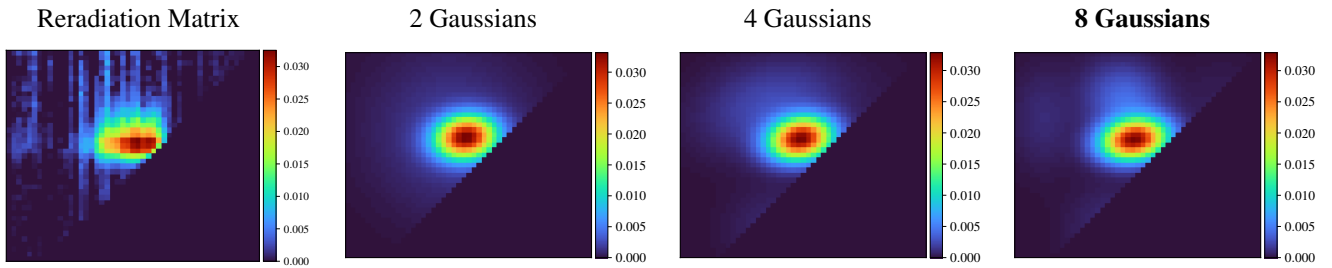
Fitted Material Under Monochromatic Illumination



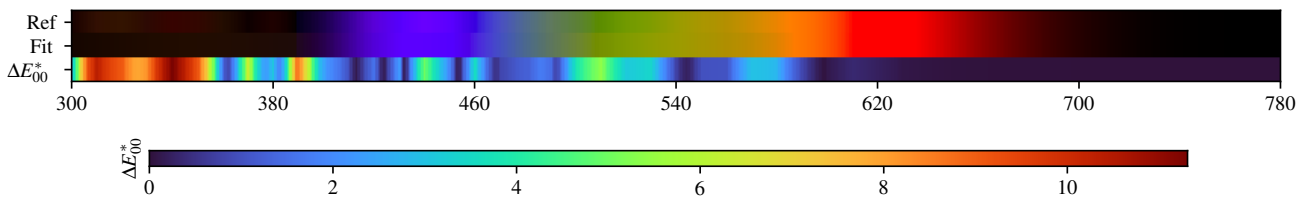
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.56$	$\Delta E = 0.24$	$\Delta E = 0.30$	$\Delta E = 0.17$	$\Delta E = 0.31$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.28$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.61$	$\Delta E = 0.19$	$\Delta E = 0.55$	$\Delta E = 0.14$	$\Delta E = 0.27$	$\Delta E = 0.61$	$\Delta E = 0.25$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.62$	$\Delta E = 0.29$	$\Delta E = 0.42$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.34$	$\Delta E = 0.25$	$\Delta E = 0.25$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.42$	$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.26$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.30$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.40$	$\Delta E = 0.59$	$\Delta E = 0.33$	$\Delta E = 0.17$	$\Delta E = 0.26$	$\Delta E = 0.08$	$\Delta E = 0.30$	$\Delta E = 0.32$	$\Delta E = 0.11$

PAPMAG - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.59$	$\Delta E = 0.25$	$\Delta E = 0.34$	$\Delta E = 0.16$	$\Delta E = 0.31$	$\Delta E = 0.15$	$\Delta E = 0.24$	$\Delta E = 0.28$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.64$	$\Delta E = 0.19$	$\Delta E = 0.58$	$\Delta E = 0.12$	$\Delta E = 0.30$	$\Delta E = 0.61$	$\Delta E = 0.27$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.65$	$\Delta E = 0.29$	$\Delta E = 0.44$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.37$	$\Delta E = 0.27$	$\Delta E = 0.23$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.43$	$\Delta E = 0.38$	$\Delta E = 0.35$	$\Delta E = 0.28$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.31$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.40$	$\Delta E = 0.63$	$\Delta E = 0.37$	$\Delta E = 0.20$	$\Delta E = 0.29$	$\Delta E = 0.05$	$\Delta E = 0.36$	$\Delta E = 0.34$	$\Delta E = 0.12$

PAPMAG - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.601539	0.615103	0.621187	0.619744	0.609735	0.588188	0.564553	0.522828	0.468825	0.422783	0.370298
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.324928	0.280672	0.244482	0.221036	0.203145	0.194807	0.190961	0.196849	0.231332	0.300056	0.408598
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.537079	0.619471	0.653870	0.666777	0.666738	0.671130	0.670776	0.670811	0.671306	0.668848	0.669474
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.671207	0.666979	0.671003	0.671600	0.670137	0.674188	0.668774	0.672877			

2 Gaussians max

Scaling factor: 381.34627554106424

Gaussians:

Weight	Mean		Covariance			
0.388572407	509.744126950	622.552005657	12202.532942609	-623.566897840	-623.566897840	11738.937591658
0.611427593	533.860395494	615.111048884	1650.275416501	102.063728695	102.063728695	830.762458035

4 Gaussians max

Scaling factor: 370.76521553539607

Gaussians:

Weight	Mean		Covariance			
0.054373094	477.778492994	445.209079602	4068.235400612	447.248422080	447.248422080	2971.951939605
0.044676675	699.340349972	562.168052120	3188.164526731	1511.456797544	1511.456797544	15169.671807388
0.262951860	479.520456542	677.673118564	8831.065451594	1212.372186983	1212.372186983	3771.945643602
0.637998371	534.613473698	611.983068021	1738.419483051	173.427261197	173.427261197	814.279023348

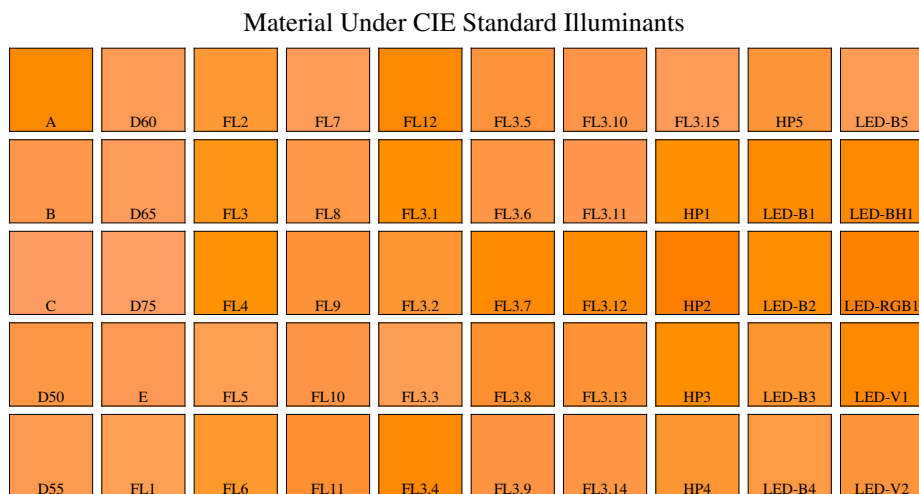
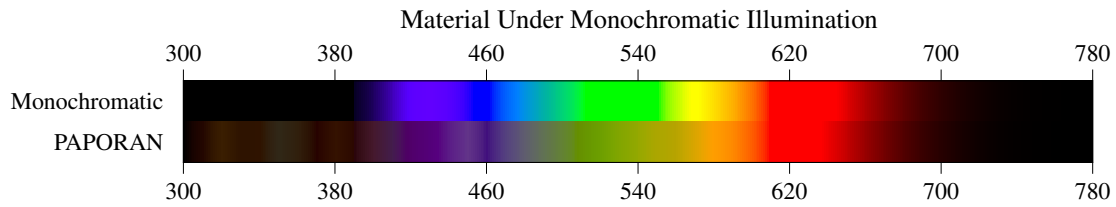
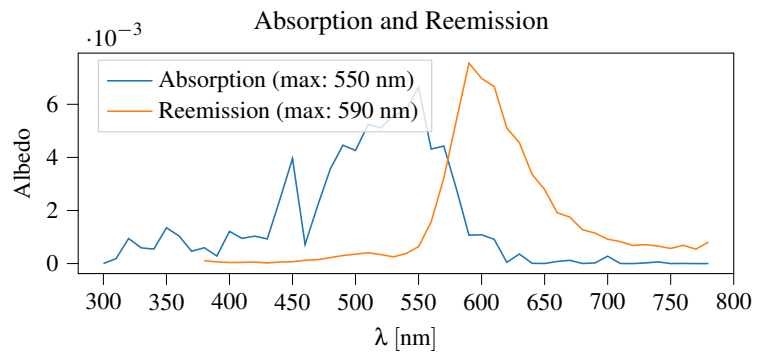
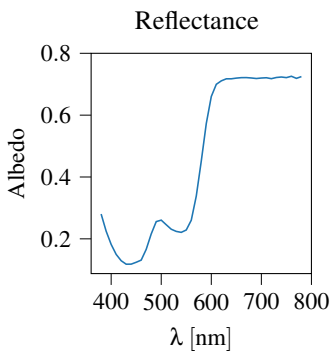
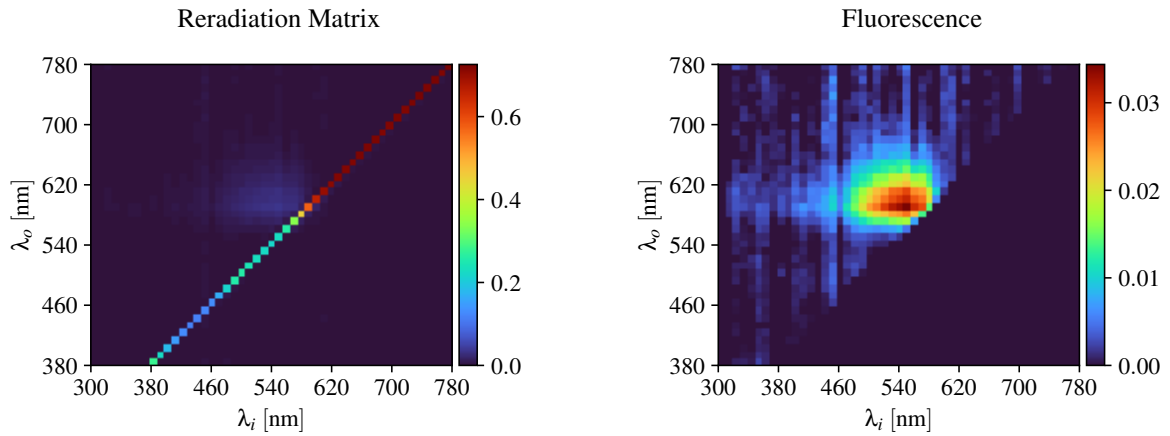
8 Gaussians max

Scaling factor: 370.2178057263872

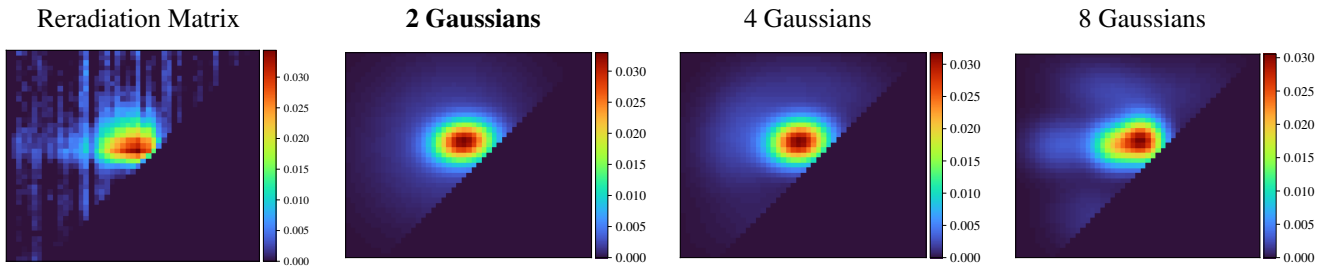
Gaussians:

Weight	Mean		Covariance			
0.052298666	472.376616130	448.608193930	2910.622768917	561.590574422	561.590574422	3280.512834261
0.029224734	670.479163351	468.281753643	4682.667332972	-573.467472413	-573.467472413	4571.345671538
0.060611428	351.471544308	654.054469410	1887.179127412	49.938523890	49.938523890	5074.674636808
0.626605317	532.529928635	610.148723406	1910.834707223	185.306440240	185.306440240	739.099770037
0.032082043	697.755801658	690.381397121	3536.052040871	510.230147948	510.230147948	3866.356553785
0.198191364	515.116170715	686.052488109	2741.881445458	-308.338778458	-308.338778458	2639.239613767

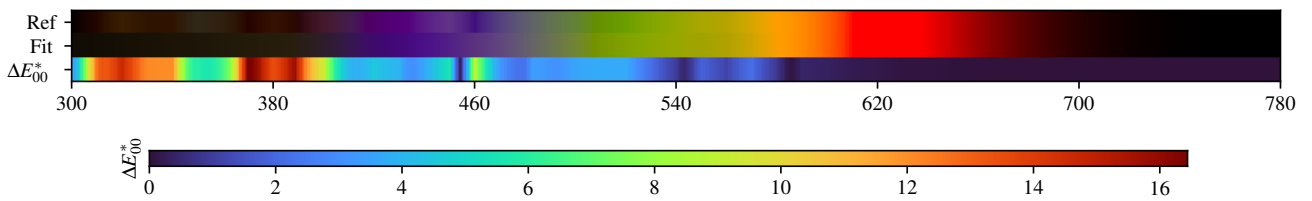
3.42. PAPORAN



PAPORAN - Weighted Expectation-Maximization - 2 Gaussians



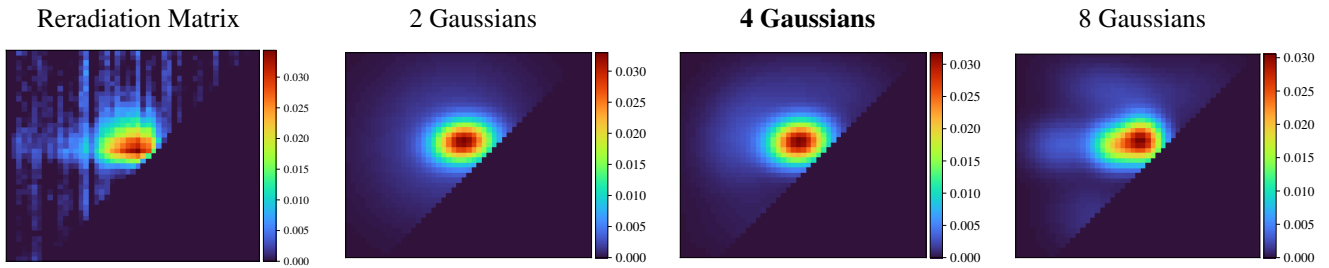
Fitted Material Under Monochromatic Illumination



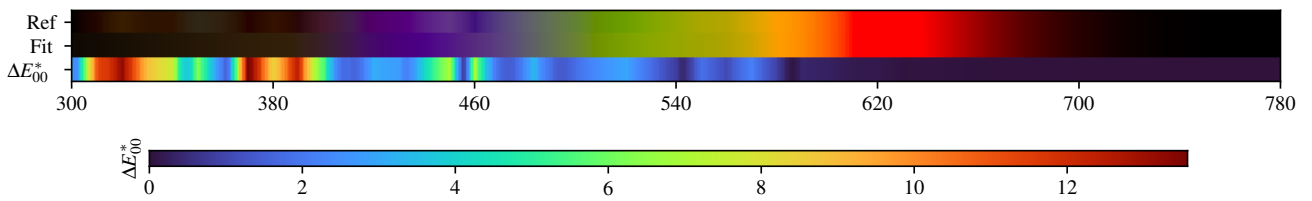
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.35$	$\Delta E = 0.15$	$\Delta E = 0.24$	$\Delta E = 0.23$	$\Delta E = 0.14$	$\Delta E = 0.08$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.15$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.31$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.24$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.34$	$\Delta E = 0.15$	$\Delta E = 0.33$	$\Delta E = 0.11$	$\Delta E = 0.29$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.26$	$\Delta E = 0.06$	$\Delta E = 0.33$	$\Delta E = 0.09$	$\Delta E = 0.35$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.17$	$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.36$	$\Delta E = 0.12$	$\Delta E = 0.34$	$\Delta E = 0.30$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.14$

PAPORAN - Weighted Expectation-Maximization - 4 Gaussians



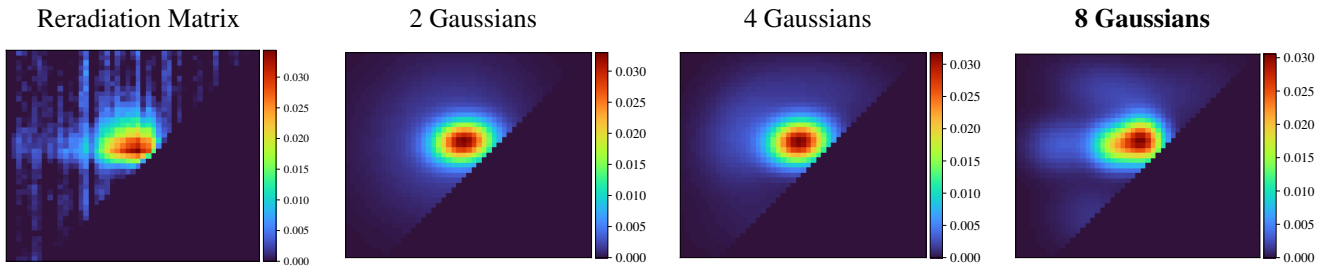
Fitted Material Under Monochromatic Illumination



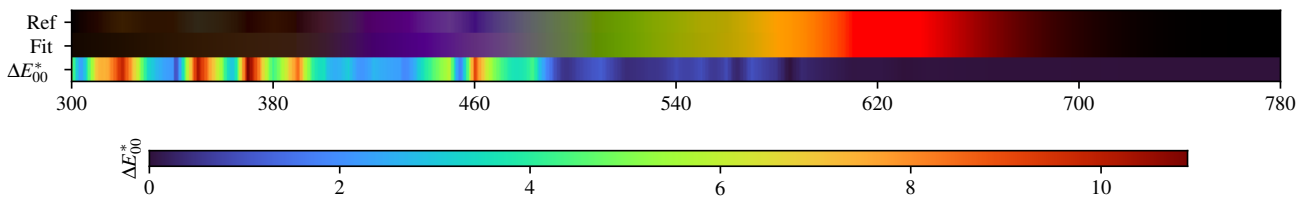
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.33$	$\Delta E = 0.33$	$\Delta E = 0.43$	$\Delta E = 0.24$	$\Delta E = 0.52$	$\Delta E = 0.30$	$\Delta E = 0.24$	$\Delta E = 0.43$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.33$	$\Delta E = 0.30$	$\Delta E = 0.27$	$\Delta E = 0.26$	$\Delta E = 0.59$	$\Delta E = 0.26$	$\Delta E = 0.23$	$\Delta E = 0.23$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.31$	$\Delta E = 0.28$	$\Delta E = 0.32$	$\Delta E = 0.29$	$\Delta E = 0.27$	$\Delta E = 0.39$	$\Delta E = 0.22$	$\Delta E = 0.43$	$\Delta E = 0.24$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.27$	$\Delta E = 0.17$	$\Delta E = 0.34$	$\Delta E = 0.59$	$\Delta E = 0.29$	$\Delta E = 0.49$	$\Delta E = 0.26$	$\Delta E = 0.24$	$\Delta E = 0.35$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.53$	$\Delta E = 0.19$	$\Delta E = 0.55$	$\Delta E = 0.31$	$\Delta E = 0.23$	$\Delta E = 0.38$	$\Delta E = 0.26$

PAPORAN - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.38$	$\Delta E = 0.64$	$\Delta E = 0.49$	$\Delta E = 0.63$	$\Delta E = 0.55$	$\Delta E = 0.41$	$\Delta E = 0.67$	$\Delta E = 0.60$	$\Delta E = 0.50$	$\Delta E = 0.68$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.57$	$\Delta E = 0.67$	$\Delta E = 0.42$	$\Delta E = 0.53$	$\Delta E = 0.30$	$\Delta E = 0.45$	$\Delta E = 0.81$	$\Delta E = 0.18$	$\Delta E = 0.32$	$\Delta E = 0.41$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.67$	$\Delta E = 0.71$	$\Delta E = 0.37$	$\Delta E = 0.47$	$\Delta E = 0.41$	$\Delta E = 0.48$	$\Delta E = 0.31$	$\Delta E = 0.41$	$\Delta E = 0.36$	$\Delta E = 0.33$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.57$	$\Delta E = 0.61$	$\Delta E = 0.62$	$\Delta E = 0.79$	$\Delta E = 0.54$	$\Delta E = 0.64$	$\Delta E = 0.37$	$\Delta E = 0.46$	$\Delta E = 0.54$	$\Delta E = 0.48$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.61$	$\Delta E = 0.61$	$\Delta E = 0.48$	$\Delta E = 0.69$	$\Delta E = 0.31$	$\Delta E = 0.73$	$\Delta E = 0.45$	$\Delta E = 0.53$	$\Delta E = 0.60$	$\Delta E = 0.57$

PAPORAN - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.280219	0.224770	0.182025	0.149754	0.129255	0.118016	0.118210	0.124243	0.131215	0.166000	0.215795
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.255758	0.260498	0.245628	0.231124	0.224069	0.220978	0.228611	0.260184	0.338256	0.451453	0.572919
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.660348	0.699711	0.710924	0.717491	0.717526	0.719755	0.721250	0.721431	0.720200	0.718474	0.720034
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.720957	0.717967	0.721787	0.723313	0.721366	0.725750	0.718951	0.724653			

2 Gaussians

Scaling factor: 370.68925615039865

Gaussians:

Weight	Mean		Covariance			
0.540962762	529.360536293	606.513245993	1505.493385322	93.251435022	93.251435022	723.165501389
0.459037238	501.085448796	609.166935066	10758.101621413	879.379330439	879.379330439	10034.556367476

4 Gaussians

Scaling factor: 358.537524328893

Gaussians:

Weight	Mean		Covariance			
0.122626108	574.227268387	703.441224475	9293.183569067	-656.747176205	-656.747176205	2543.914631193
0.188720565	421.968758514	617.423039101	3604.647830805	576.585357913	576.585357913	4557.635371361
0.079126006	531.927458767	449.228147421	12176.581767483	748.365786750	748.365786750	2439.684733602
0.609527322	531.957262852	606.051708997	1490.401282904	86.428233702	86.428233702	825.928017795

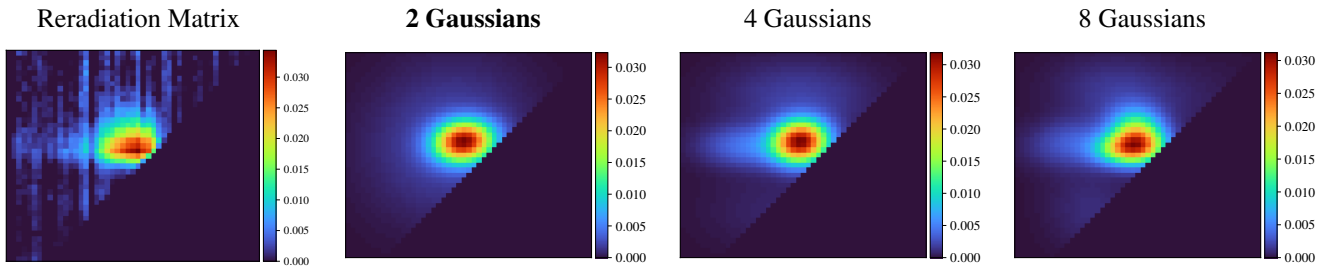
8 Gaussians

Scaling factor: 356.3595458492293

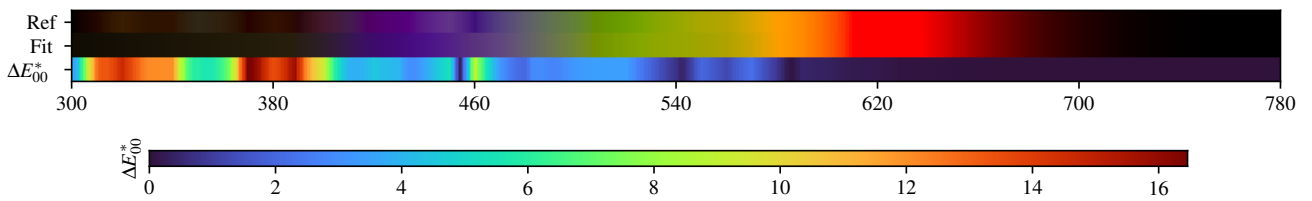
Gaussians:

Weight	Mean		Covariance			
0.051510206	638.956030029	710.784547792	5938.955413049	214.121058352	214.121058352	2212.582662207
0.089318952	386.915081565	601.058561489	2120.671070289	98.327415428	98.327415428	1244.238577485
0.017999241	662.449664032	545.521260259	3307.636407295	649.133053186	649.133053186	3425.429192505
0.114596815	490.221884487	704.596176417	5333.535204645	-869.550226880	-869.550226880	1814.496153380
0.348424789	552.840722895	610.748836460	737.912006526	-92.113177073	-92.113177073	843.555094898
0.065501208	448.005434941	460.302636543	3119.704526177	-45.971098150	-45.971098150	2467.013567781
0.292765227	498.722038793	599.380388546	1112.663215083	-20.061206009	-20.061206009	737.100016000
0.019883562	645.325713409	424.532283942	3684.511239672	-69.016436781	-69.016436781	1140.400265889

PAPORAN - Weighted variational Bayesian inference - 2 Gaussians



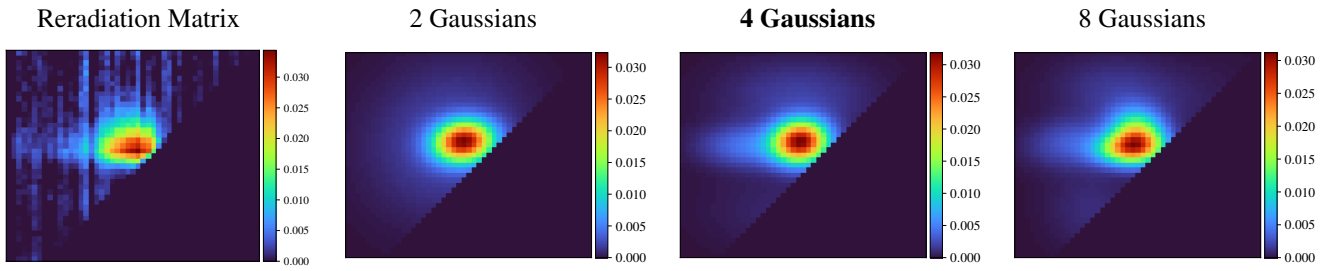
Fitted Material Under Monochromatic Illumination



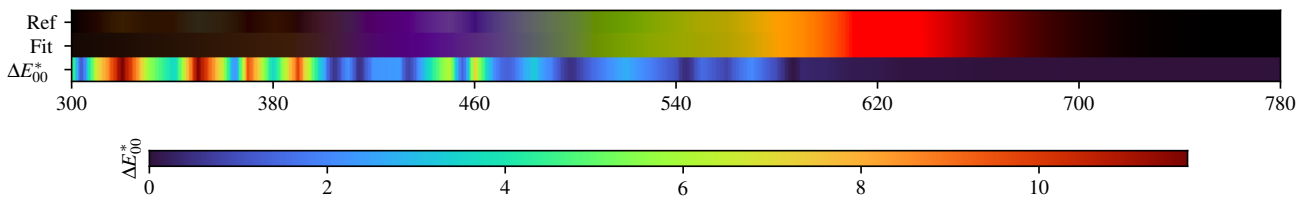
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.24$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.33$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.12$	$\Delta E = 0.08$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.09$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.28$	$\Delta E = 0.34$	$\Delta E = 0.24$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.32$	$\Delta E = 0.12$	$\Delta E = 0.33$	$\Delta E = 0.08$	$\Delta E = 0.27$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.17$	$\Delta E = 0.30$	$\Delta E = 0.13$	$\Delta E = 0.29$	$\Delta E = 0.13$	$\Delta E = 0.32$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.08$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.33$	$\Delta E = 0.10$	$\Delta E = 0.29$	$\Delta E = 0.27$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.13$

PAPORAN - Weighted variational Bayesian inference - 4 Gaussians



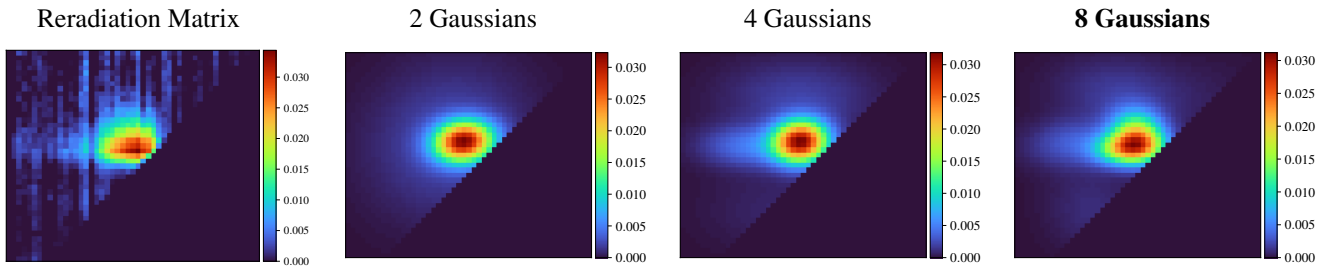
Fitted Material Under Monochromatic Illumination



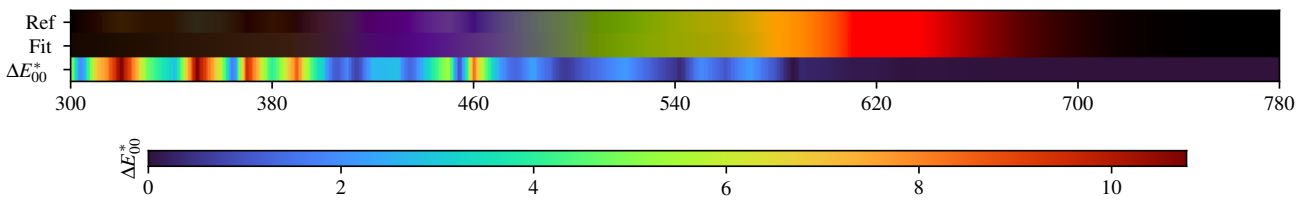
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.23$	$\Delta E = 0.41$	$\Delta E = 0.34$	$\Delta E = 0.40$	$\Delta E = 0.41$	$\Delta E = 0.27$	$\Delta E = 0.54$	$\Delta E = 0.40$	$\Delta E = 0.29$	$\Delta E = 0.45$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.35$	$\Delta E = 0.43$	$\Delta E = 0.31$	$\Delta E = 0.35$	$\Delta E = 0.25$	$\Delta E = 0.31$	$\Delta E = 0.60$	$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.22$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.42$	$\Delta E = 0.46$	$\Delta E = 0.30$	$\Delta E = 0.31$	$\Delta E = 0.28$	$\Delta E = 0.37$	$\Delta E = 0.23$	$\Delta E = 0.40$	$\Delta E = 0.24$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.36$	$\Delta E = 0.33$	$\Delta E = 0.40$	$\Delta E = 0.58$	$\Delta E = 0.35$	$\Delta E = 0.48$	$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.35$	$\Delta E = 0.25$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.40$	$\Delta E = 0.33$	$\Delta E = 0.52$	$\Delta E = 0.19$	$\Delta E = 0.55$	$\Delta E = 0.36$	$\Delta E = 0.30$	$\Delta E = 0.39$	$\Delta E = 0.32$

PAPORAN - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.37$	$\Delta E = 0.18$	$\Delta E = 0.41$	$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.27$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.25$	$\Delta E = 0.29$	$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.47$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.20$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.29$	$\Delta E = 0.32$	$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.32$	$\Delta E = 0.17$	$\Delta E = 0.37$	$\Delta E = 0.18$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.25$	$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.48$	$\Delta E = 0.22$	$\Delta E = 0.40$	$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.26$	$\Delta E = 0.26$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.45$	$\Delta E = 0.16$	$\Delta E = 0.45$	$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.27$

PAPORAN - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.280219	0.224770	0.182025	0.149754	0.129255	0.118016	0.118210	0.124243	0.131215	0.166000	0.215795
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.255758	0.260498	0.245628	0.231124	0.224069	0.220978	0.228611	0.260184	0.338256	0.451453	0.572919
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.660348	0.699711	0.710924	0.717491	0.717526	0.719755	0.721250	0.721431	0.720200	0.718474	0.720034
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.720957	0.717967	0.721787	0.723313	0.721366	0.725750	0.718951	0.724653			

2 Gaussians max

Scaling factor: 371.1163040336083

Gaussians:

Weight	Mean		Covariance			
0.459738658	501.080791241	609.062566958	10728.870643059	872.748979863	872.748979863	9990.560176883
0.540261342	529.455246516	606.540039781	1522.998791429	92.425618834	92.425618834	747.656984413

4 Gaussians max

Scaling factor: 361.2622109684399

Gaussians:

Weight	Mean		Covariance			
0.106195165	508.057984931	468.041358338	12237.057203380	-419.317742076	-419.317742076	3412.936466532
0.535656735	534.670807320	606.499296859	1314.641662233	43.820242991	43.820242991	808.705222483
0.157333336	441.880253081	597.112172663	4668.127724490	-54.847062877	-54.847062877	792.306061354
0.200814765	530.401822178	693.107101226	10624.961940989	-58.164716207	-58.164716207	2732.893251981

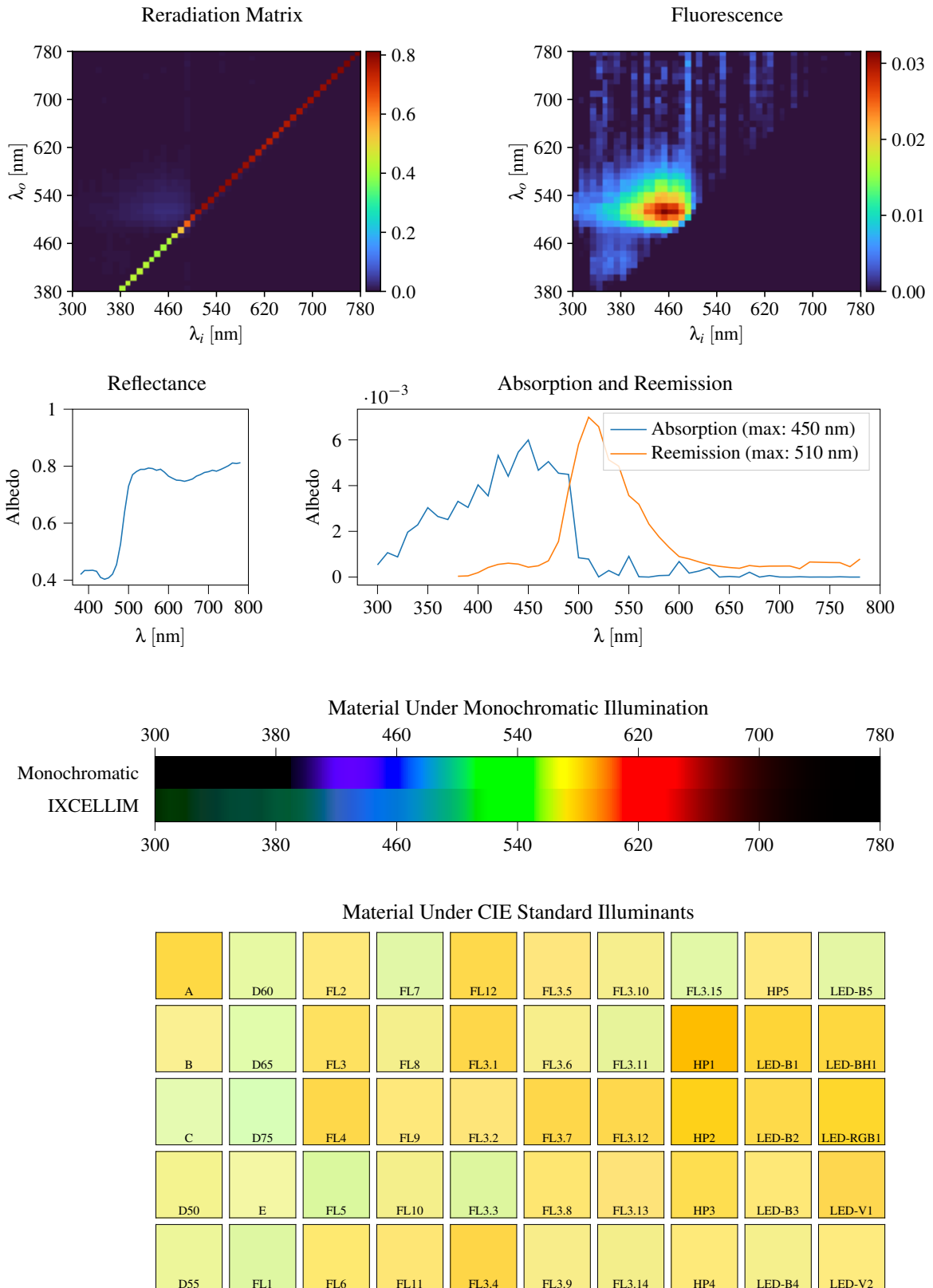
8 Gaussians max

Scaling factor: 359.62345754503644

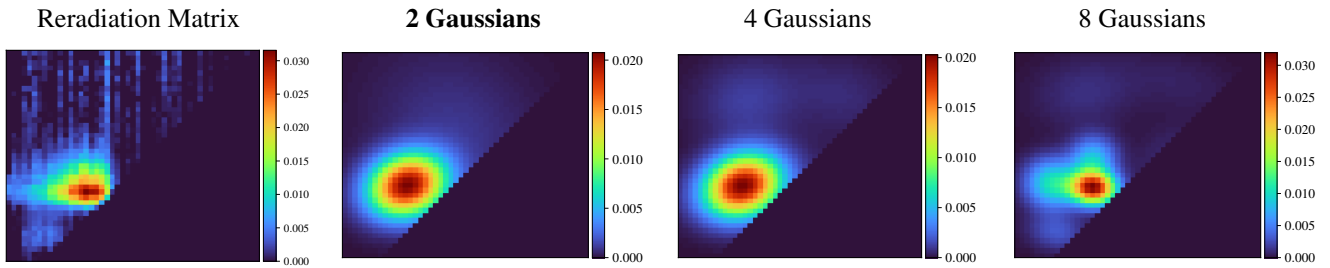
Gaussians:

Weight	Mean		Covariance			
0.076376590	448.893061518	473.330292330	3817.887848618	-119.756088576	-119.756088576	3567.177660511
0.032350296	643.073836015	468.779740085	4737.024056562	-456.658872570	-456.658872570	4339.574017705
0.111100376	414.240803988	603.899454349	3779.117269982	203.077503165	203.077503165	1029.231087328
0.315734662	539.579218008	620.056245728	1193.790700125	-104.646093700	-104.646093700	1034.965729707
0.294208221	522.000845031	593.485967189	1806.056600916	64.330249899	64.330249899	448.349483253
0.035951016	661.909948108	680.260006861	6192.618374459	1860.653015126	1860.653015126	4148.643096246
0.133351283	502.182076880	705.074392059	7453.512588516	-221.965174910	-221.965174910	2314.984862740

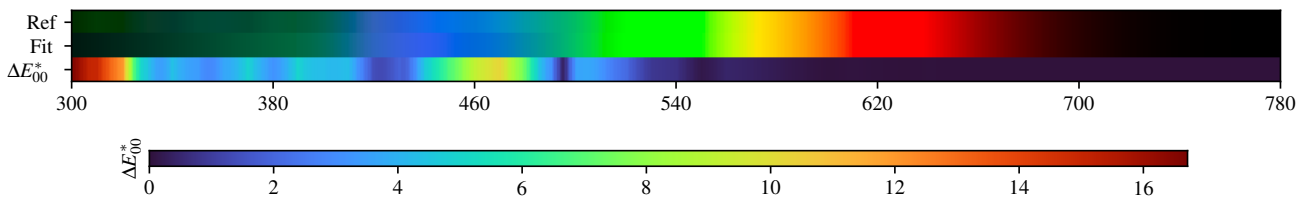
3.43. IXCELLIM



IXCELLIM - Weighted Expectation-Maximization - 2 Gaussians



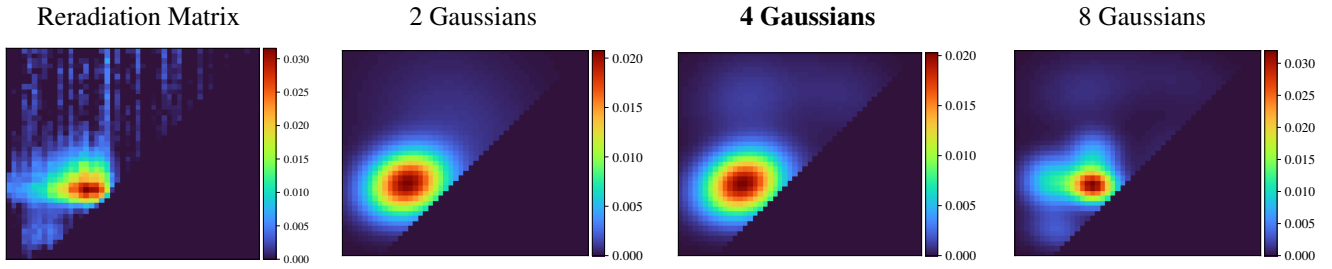
Fitted Material Under Monochromatic Illumination



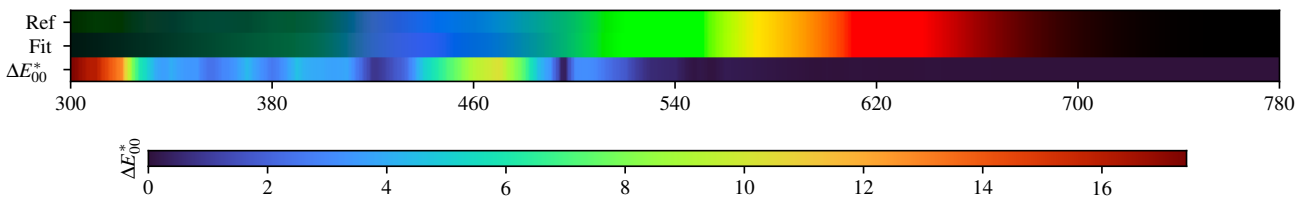
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.55$	D60 $\Delta E = 1.15$	FL2 $\Delta E = 0.95$	FL7 $\Delta E = 1.20$	FL12 $\Delta E = 0.54$	FL3.5 $\Delta E = 0.99$	FL3.10 $\Delta E = 1.28$	FL3.15 $\Delta E = 1.19$	HP5 $\Delta E = 1.09$	LED-B5 $\Delta E = 1.61$
B $\Delta E = 1.25$	D65 $\Delta E = 1.15$	FL3 $\Delta E = 0.71$	FL8 $\Delta E = 1.11$	FL3.1 $\Delta E = 0.39$	FL3.6 $\Delta E = 1.08$	FL3.11 $\Delta E = 1.20$	HP1 $\Delta E = 0.24$	LED-B1 $\Delta E = 0.56$	LED-BH1 $\Delta E = 0.50$
C $\Delta E = 1.44$	D75 $\Delta E = 1.18$	FL4 $\Delta E = 0.52$	FL9 $\Delta E = 0.98$	FL3.2 $\Delta E = 0.81$	FL3.7 $\Delta E = 0.43$	FL3.12 $\Delta E = 0.41$	HP2 $\Delta E = 0.43$	LED-B2 $\Delta E = 0.70$	LED-RGB1 $\Delta E = 0.29$
D50 $\Delta E = 1.12$	E $\Delta E = 1.02$	FL5 $\Delta E = 1.05$	FL10 $\Delta E = 1.20$	FL3.3 $\Delta E = 0.99$	FL3.8 $\Delta E = 0.85$	FL3.13 $\Delta E = 0.93$	HP3 $\Delta E = 0.64$	LED-B3 $\Delta E = 1.12$	LED-V1 $\Delta E = 0.57$
D55 $\Delta E = 1.14$	FL1 $\Delta E = 1.13$	FL6 $\Delta E = 0.83$	FL11 $\Delta E = 1.00$	FL3.4 $\Delta E = 0.27$	FL3.9 $\Delta E = 1.13$	FL3.14 $\Delta E = 1.14$	HP4 $\Delta E = 0.86$	LED-B4 $\Delta E = 1.41$	LED-V2 $\Delta E = 0.99$

IXCELLIM - Weighted Expectation-Maximization - 4 Gaussians



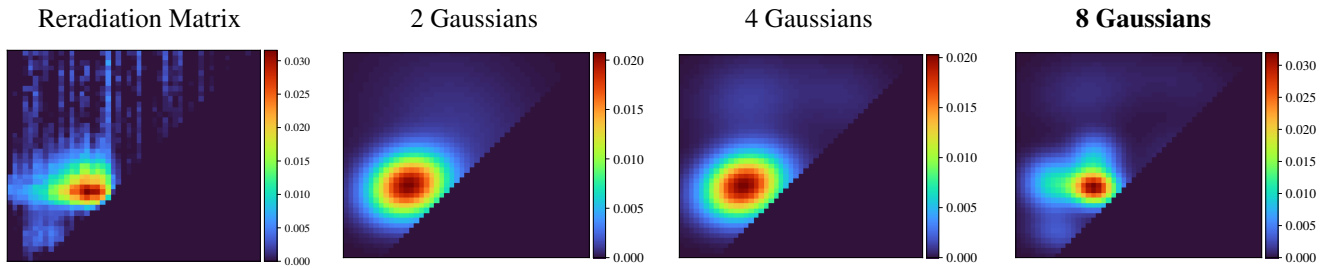
Fitted Material Under Monochromatic Illumination



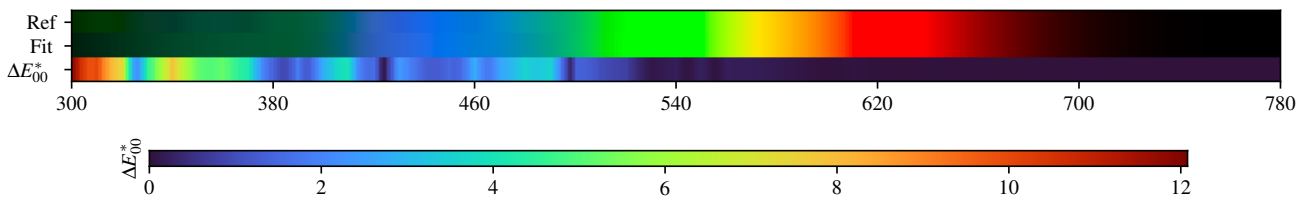
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.47$	$\Delta E = 1.06$	$\Delta E = 0.81$	$\Delta E = 1.08$	$\Delta E = 0.46$	$\Delta E = 0.86$	$\Delta E = 1.14$	$\Delta E = 1.08$	$\Delta E = 0.99$	$\Delta E = 1.46$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.13$	$\Delta E = 1.08$	$\Delta E = 0.59$	$\Delta E = 0.96$	$\Delta E = 0.30$	$\Delta E = 0.93$	$\Delta E = 1.06$	$\Delta E = 0.19$	$\Delta E = 0.47$	$\Delta E = 0.42$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.35$	$\Delta E = 1.14$	$\Delta E = 0.43$	$\Delta E = 0.84$	$\Delta E = 0.68$	$\Delta E = 0.33$	$\Delta E = 0.31$	$\Delta E = 0.36$	$\Delta E = 0.60$	$\Delta E = 0.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.00$	$\Delta E = 0.97$	$\Delta E = 0.91$	$\Delta E = 1.06$	$\Delta E = 0.85$	$\Delta E = 0.72$	$\Delta E = 0.80$	$\Delta E = 0.56$	$\Delta E = 0.97$	$\Delta E = 0.53$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.03$	$\Delta E = 1.00$	$\Delta E = 0.69$	$\Delta E = 0.88$	$\Delta E = 0.17$	$\Delta E = 0.99$	$\Delta E = 0.96$	$\Delta E = 0.78$	$\Delta E = 1.25$	$\Delta E = 0.89$

IXCELLIM - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.08$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.14$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.13$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.16$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.17$
D50 $\Delta E = 0.09$	E $\Delta E = 0.09$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.13$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.12$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.09$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.15$	LED-V2 $\Delta E = 0.23$

IXCELLIM - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.419941	0.433864	0.433806	0.434729	0.431033	0.409493	0.403137	0.407886	0.421113	0.454528	0.526732
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.638393	0.729687	0.770016	0.781343	0.788735	0.788855	0.793477	0.791706	0.785578	0.789378	0.778782
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.764985	0.757661	0.750978	0.750140	0.746939	0.750436	0.755047	0.765132	0.770488	0.777905	0.780639
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.785811	0.782491	0.788132	0.794666	0.801662	0.811259	0.809340	0.812193			

2 Gaussians

Scaling factor: 352.722752481962

Gaussians:

Weight	Mean		Covariance			
0.233590794	516.834430464	625.484225433	12781.769476880	-1909.080970869	-1909.080970869	12667.223511675
0.766409206	423.536740431	519.618840315	2631.583043354	332.887777661	332.887777661	1732.323749849

4 Gaussians

Scaling factor: 347.85900362770496

Gaussians:

Weight	Mean		Covariance			
0.051752763	622.409380292	705.720005613	5686.068721299	-661.390573651	-661.390573651	2978.047816898
0.796247770	424.572529693	520.106727368	2736.227328288	395.100316586	395.100316586	1780.442535223
0.056759163	596.701981034	491.747132216	6150.527519817	363.035677656	363.035677656	6437.531380199
0.095240303	432.438578611	690.674843463	4793.552939126	299.351049055	299.351049055	3611.711160714

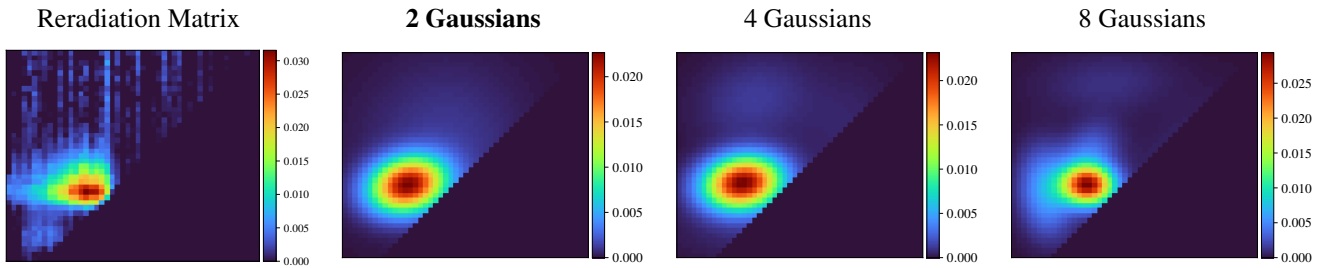
8 Gaussians

Scaling factor: 343.0640102096808

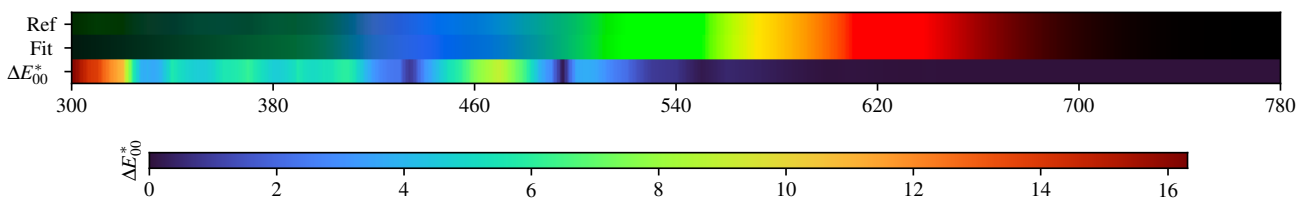
Gaussians:

Weight	Mean		Covariance			
0.145774243	450.964667752	570.210543283	932.115945009	20.186446902	20.186446902	909.569474789
0.363734974	451.845912451	514.510116514	922.416669815	-24.771075339	-24.771075339	481.092134069
0.033543481	588.901733371	427.687791271	8140.700611216	781.909311572	781.909311572	1516.069080626
0.085668972	433.615398627	702.897391623	5059.324135130	358.815932131	358.815932131	2512.993084640
0.054291507	378.684241746	427.657715675	1432.357676057	-108.542398780	-108.542398780	632.522835021
0.043003069	598.304740553	572.446530796	2594.071819009	762.969956387	762.969956387	2437.947471995
0.232216011	370.195470973	523.015875122	1286.544713911	-30.919588342	-30.919588342	1077.170464539
0.041767744	624.506671688	723.770291044	6521.364361650	-1072.913877437	-1072.913877437	1798.682007142

IXCELLIM - Weighted variational Bayesian inference - 2 Gaussians



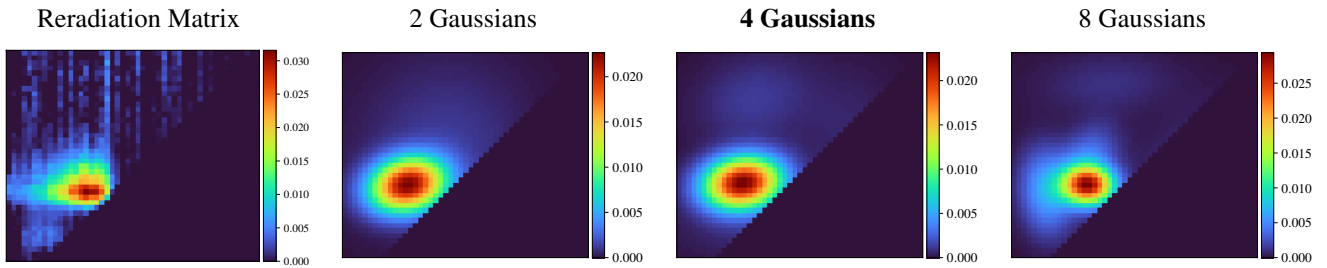
Fitted Material Under Monochromatic Illumination



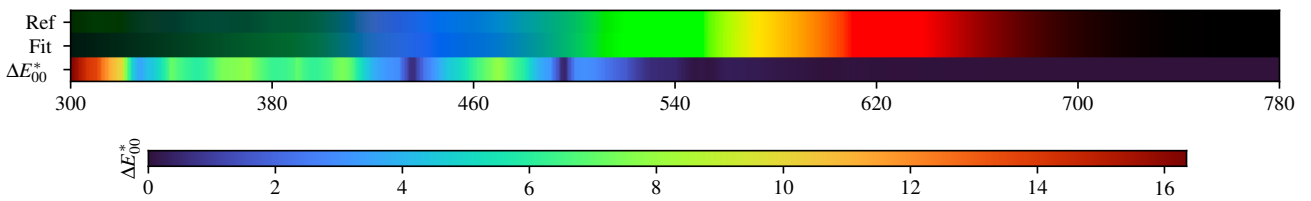
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.34$	D60 $\Delta E = 0.66$	FL2 $\Delta E = 0.66$	FL7 $\Delta E = 0.78$	FL12 $\Delta E = 0.39$	FL3.5 $\Delta E = 0.69$	FL3.10 $\Delta E = 0.96$	FL3.15 $\Delta E = 0.75$	HP5 $\Delta E = 0.67$	LED-B5 $\Delta E = 1.22$
B $\Delta E = 0.78$	D65 $\Delta E = 0.64$	FL3 $\Delta E = 0.50$	FL8 $\Delta E = 0.78$	FL3.1 $\Delta E = 0.30$	FL3.6 $\Delta E = 0.77$	FL3.11 $\Delta E = 0.88$	HP1 $\Delta E = 0.18$	LED-B1 $\Delta E = 0.41$	LED-BH1 $\Delta E = 0.34$
C $\Delta E = 0.86$	D75 $\Delta E = 0.60$	FL4 $\Delta E = 0.37$	FL9 $\Delta E = 0.68$	FL3.2 $\Delta E = 0.56$	FL3.7 $\Delta E = 0.32$	FL3.12 $\Delta E = 0.29$	HP2 $\Delta E = 0.30$	LED-B2 $\Delta E = 0.53$	LED-RGB1 $\Delta E = 0.27$
D50 $\Delta E = 0.69$	E $\Delta E = 0.44$	FL5 $\Delta E = 0.72$	FL10 $\Delta E = 0.88$	FL3.3 $\Delta E = 0.69$	FL3.8 $\Delta E = 0.64$	FL3.13 $\Delta E = 0.69$	HP3 $\Delta E = 0.38$	LED-B3 $\Delta E = 0.82$	LED-V1 $\Delta E = 0.31$
D55 $\Delta E = 0.68$	FL1 $\Delta E = 0.77$	FL6 $\Delta E = 0.59$	FL11 $\Delta E = 0.74$	FL3.4 $\Delta E = 0.21$	FL3.9 $\Delta E = 0.84$	FL3.14 $\Delta E = 0.84$	HP4 $\Delta E = 0.46$	LED-B4 $\Delta E = 1.07$	LED-V2 $\Delta E = 0.54$

IXCELLIM - Weighted variational Bayesian inference - 4 Gaussians



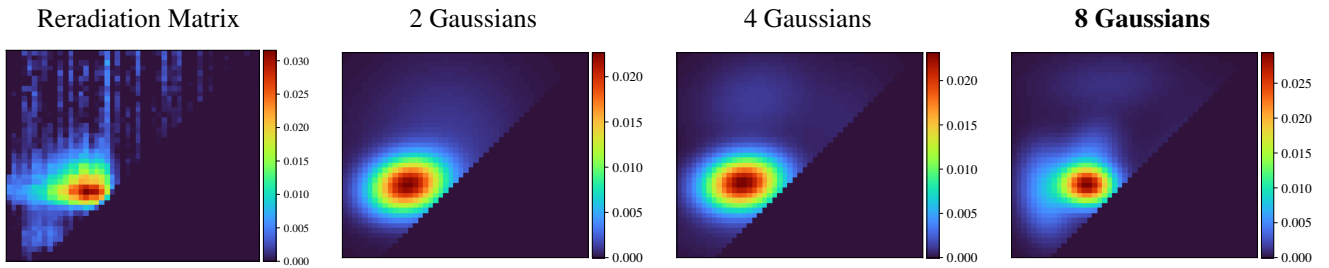
Fitted Material Under Monochromatic Illumination



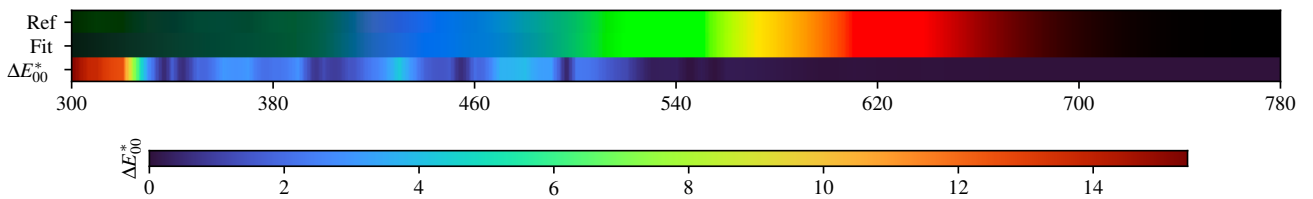
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.18$	FL2 $\Delta E = 0.31$	FL7 $\Delta E = 0.34$	FL12 $\Delta E = 0.21$	FL3.5 $\Delta E = 0.33$	FL3.10 $\Delta E = 0.59$	FL3.15 $\Delta E = 0.28$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.77$
B $\Delta E = 0.29$	D65 $\Delta E = 0.17$	FL3 $\Delta E = 0.24$	FL8 $\Delta E = 0.36$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.37$	FL3.11 $\Delta E = 0.52$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.23$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.33$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.19$	FL9 $\Delta E = 0.32$	FL3.2 $\Delta E = 0.25$	FL3.7 $\Delta E = 0.17$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.31$	LED-RGB1 $\Delta E = 0.26$
D50 $\Delta E = 0.22$	E $\Delta E = 0.36$	FL5 $\Delta E = 0.32$	FL10 $\Delta E = 0.52$	FL3.3 $\Delta E = 0.31$	FL3.8 $\Delta E = 0.36$	FL3.13 $\Delta E = 0.36$	HP3 $\Delta E = 0.16$	LED-B3 $\Delta E = 0.46$	LED-V1 $\Delta E = 0.25$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.36$	FL6 $\Delta E = 0.27$	FL11 $\Delta E = 0.43$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.50$	FL3.14 $\Delta E = 0.43$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.67$	LED-V2 $\Delta E = 0.19$

IXCELLIM - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.09$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.10$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.14$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.26$
D50 $\Delta E = 0.10$	E $\Delta E = 0.14$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.09$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.11$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.13$

IXCELLIM - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.419941	0.433864	0.433806	0.434729	0.431033	0.409493	0.403137	0.407886	0.421113	0.454528	0.526732
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.638393	0.729687	0.770016	0.781343	0.788735	0.788855	0.793477	0.791706	0.785578	0.789378	0.778782
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.764985	0.757661	0.750978	0.750140	0.746939	0.750436	0.755047	0.765132	0.770488	0.777905	0.780639
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.785811	0.782491	0.788132	0.794666	0.801662	0.811259	0.809340	0.812193			

2 Gaussians max

Scaling factor: 355.03016723986536

Gaussians:

Weight	Mean		Covariance			
0.301219059	493.896106204	599.040916447	12644.899492027	779.091880162	779.091880162	13554.469527055
0.698780941	424.579710940	520.879856502	2515.057261673	292.637053313	292.637053313	1327.213457811

4 Gaussians max

Scaling factor: 353.64936488401185

Gaussians:

Weight	Mean		Covariance			
0.070744505	472.183197916	427.633579798	13968.083187964	214.168745006	214.168745006	1554.418382347
0.747707014	426.497484878	524.465784846	2695.795515416	214.638456546	214.638456546	1223.297552858
0.064843563	630.724926966	636.809200015	4795.329523196	1267.632935275	1267.632935275	7507.756308450
0.116704918	448.572676806	690.617266450	6247.786618179	855.482016549	855.482016549	3887.026929872

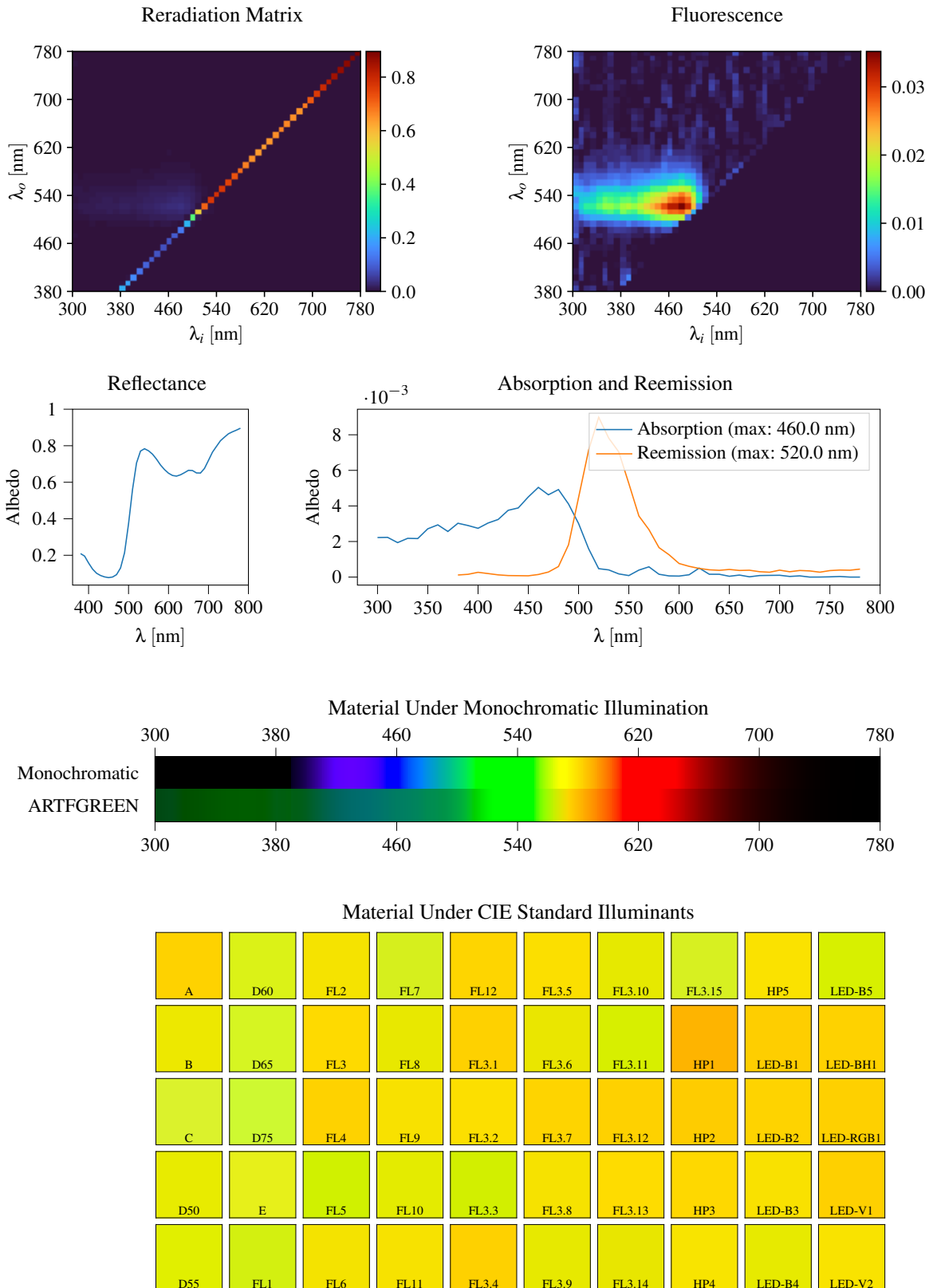
8 Gaussians max

Scaling factor: 345.13129393277325

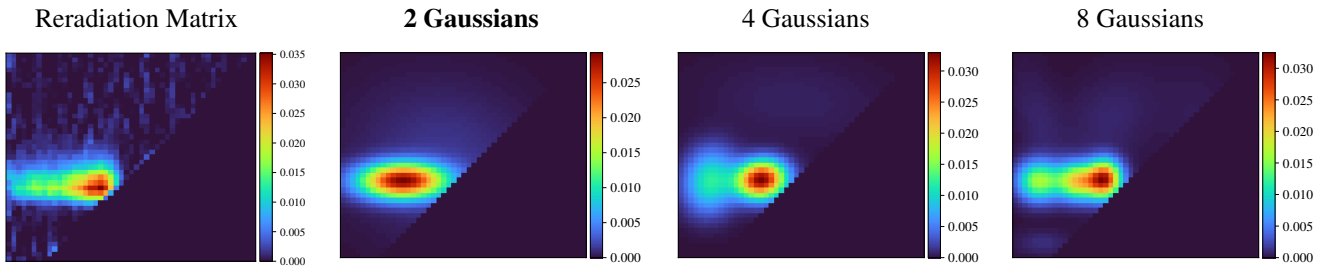
Gaussians:

Weight	Mean		Covariance			
0.228225330	363.545814533	507.389950112	1226.291812436	-184.500716410	-184.500716410	3220.838155889
0.024190496	486.678120812	454.178870890	3112.080728664	24.596514008	24.596514008	3929.783503920
0.040284366	609.546750099	484.917130780	6376.727485051	-1052.024695742	-1052.024695742	5227.359688411
0.448861368	446.808123226	520.083689169	1190.203843174	-4.284766871	-4.284766871	680.385381091
0.037430891	627.417641902	619.146841830	5823.648180974	3784.210524139	3784.210524139	4800.414517449
0.121729188	445.815197550	574.919018130	1577.914358614	507.708221904	507.708221904	1777.030493111
0.098333268	484.594969232	722.625916804	9803.598575635	467.076007252	467.076007252	1953.380335776

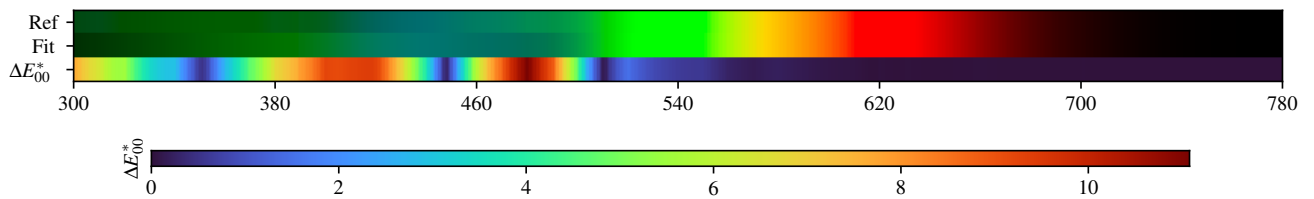
3.44. ARTFGREEN



ARTFGREEN - Weighted Expectation-Maximization - 2 Gaussians



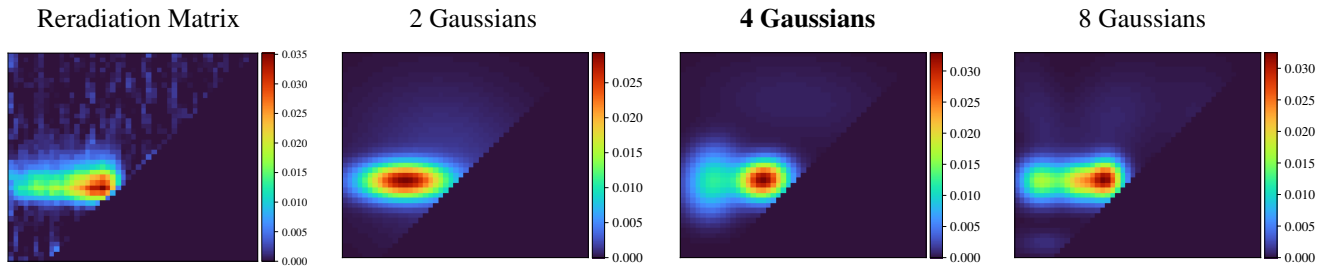
Fitted Material Under Monochromatic Illumination



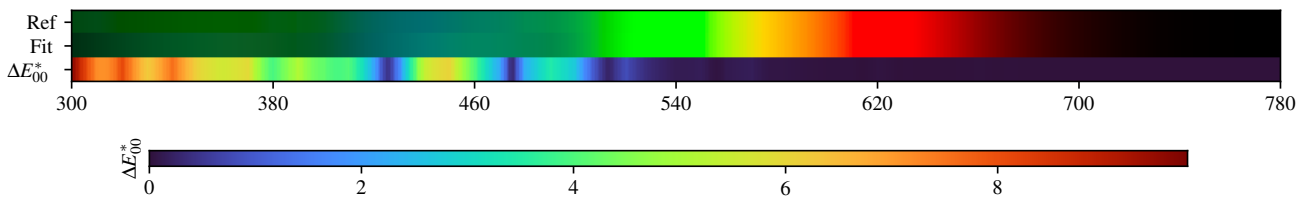
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.49$	$\Delta E = 0.35$	$\Delta E = 0.46$	$\Delta E = 0.55$	$\Delta E = 0.49$	$\Delta E = 0.79$	$\Delta E = 1.00$	$\Delta E = 0.60$	$\Delta E = 0.39$	$\Delta E = 0.71$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.55$	$\Delta E = 0.30$	$\Delta E = 0.34$	$\Delta E = 0.76$	$\Delta E = 0.26$	$\Delta E = 0.86$	$\Delta E = 0.70$	$\Delta E = 0.32$	$\Delta E = 0.49$	$\Delta E = 0.23$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.44$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.68$	$\Delta E = 0.47$	$\Delta E = 0.49$	$\Delta E = 0.69$	$\Delta E = 0.38$	$\Delta E = 0.56$	$\Delta E = 0.44$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.50$	$\Delta E = 0.40$	$\Delta E = 0.54$	$\Delta E = 0.73$	$\Delta E = 0.55$	$\Delta E = 0.64$	$\Delta E = 1.14$	$\Delta E = 0.20$	$\Delta E = 0.63$	$\Delta E = 0.20$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.42$	$\Delta E = 0.58$	$\Delta E = 0.41$	$\Delta E = 0.67$	$\Delta E = 0.28$	$\Delta E = 0.70$	$\Delta E = 1.27$	$\Delta E = 0.28$	$\Delta E = 0.58$	$\Delta E = 0.37$

ARTFGREEN - Weighted Expectation-Maximization - 4 Gaussians



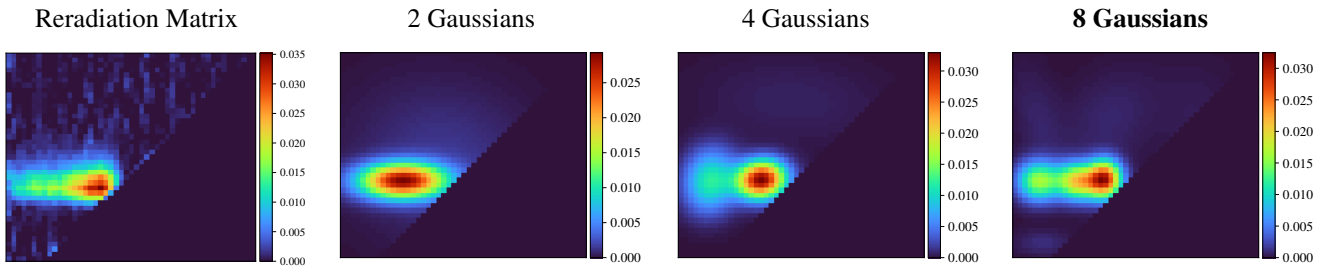
Fitted Material Under Monochromatic Illumination



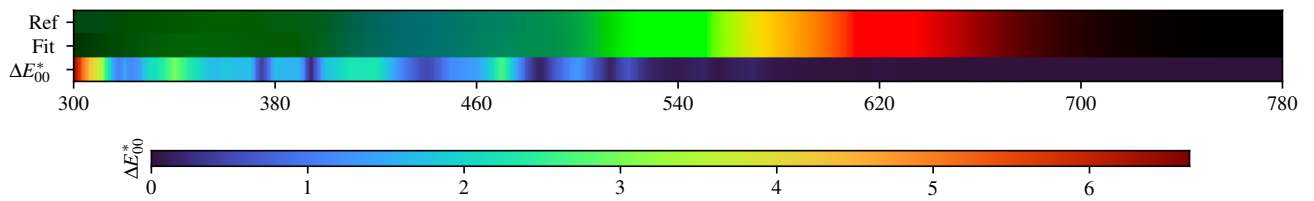
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.33$	FL2 $\Delta E = 0.18$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.20$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.70$
B $\Delta E = 0.23$	D65 $\Delta E = 0.37$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.20$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.29$
C $\Delta E = 0.31$	D75 $\Delta E = 0.43$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.17$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.28$	LED-RGB1 $\Delta E = 0.21$
D50 $\Delta E = 0.26$	E $\Delta E = 0.36$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.46$	LED-V1 $\Delta E = 0.21$
D55 $\Delta E = 0.30$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.17$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.64$	LED-V2 $\Delta E = 0.16$

ARTFGREEN - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.11$	D60 $\Delta E = 0.35$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.23$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.20$	HP5 $\Delta E = 0.24$	LED-B5 $\Delta E = 0.25$
B $\Delta E = 0.26$	D65 $\Delta E = 0.37$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.33$	D75 $\Delta E = 0.41$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.14$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.29$	E $\Delta E = 0.34$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.09$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.04$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.32$	FL1 $\Delta E = 0.21$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.05$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.24$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.31$

ARTFGREEN - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.209079	0.195551	0.157700	0.124283	0.101556	0.089170	0.081567	0.077666	0.080889	0.093886	0.130556
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.213608	0.372238	0.560675	0.705601	0.770878	0.783552	0.772282	0.753831	0.726501	0.694471	0.669333
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.649552	0.637142	0.633506	0.640739	0.652400	0.665347	0.664089	0.650972	0.650431	0.675475	0.719538
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.764665	0.796259	0.827297	0.846930	0.865471	0.876217	0.885346	0.895847			

2 Gaussians

Scaling factor: 368.7181964773863

Gaussians:

Weight	Mean		Covariance			
0.661319701	418.606133426	528.965052258	3399.825932298	20.375842523	20.375842523	558.692202067
0.338680299	498.978645619	564.318308896	14564.219382617	-922.664870829	-922.664870829	11277.882813870

4 Gaussians

Scaling factor: 345.79282704466544

Gaussians:

Weight	Mean		Covariance			
0.106835458	523.159867360	686.596740087	16435.746944082	-863.103094075	-863.103094075	3584.548379079
0.498104096	460.235002537	531.043053881	1089.268921391	66.459522591	66.459522591	649.452702597
0.072951820	619.071758332	450.669982055	7444.104294981	235.263170322	235.263170322	3244.441456068
0.322108626	358.659579888	528.373651394	1263.406981701	108.715576529	108.715576529	1754.514108112

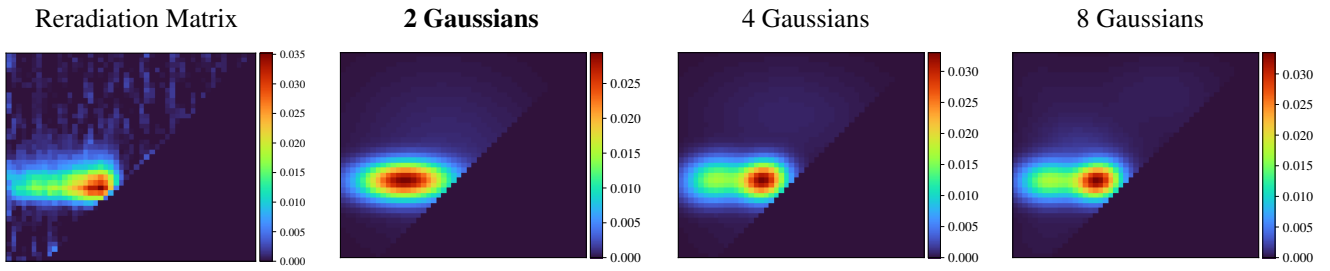
8 Gaussians

Scaling factor: 345.0426615966479

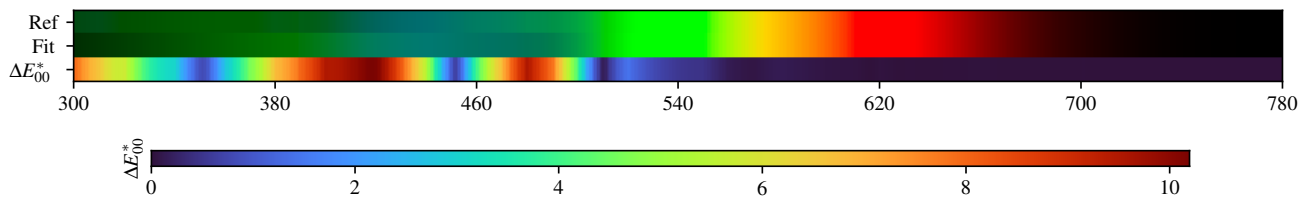
Gaussians:

Weight	Mean		Covariance			
0.038533847	346.191899173	651.627721747	1424.198620126	-1370.831653716	-1370.831653716	6011.059755352
0.063974492	615.513121339	439.528012626	7042.215448275	-525.875881141	-525.875881141	2117.602556928
0.043388808	662.957756366	656.000579220	3380.994126354	-285.836983819	-285.836983819	6685.821771828
0.293172694	477.761247504	531.997547993	509.038443769	5.471118787	5.471118787	613.762283728
0.015224701	355.514432084	405.445208760	1458.466676498	-45.910327016	-45.910327016	297.922241697
0.221892208	346.659114215	528.063084733	833.481633733	-5.072741337	-5.072741337	698.842730980
0.074161904	486.237724781	649.405695972	4206.060123506	1358.829327239	1358.829327239	4907.292249698
0.249651345	424.127908790	527.827849612	774.155349572	-17.837655238	-17.837655238	595.646932343

ARTFGREEN - Weighted variational Bayesian inference - 2 Gaussians



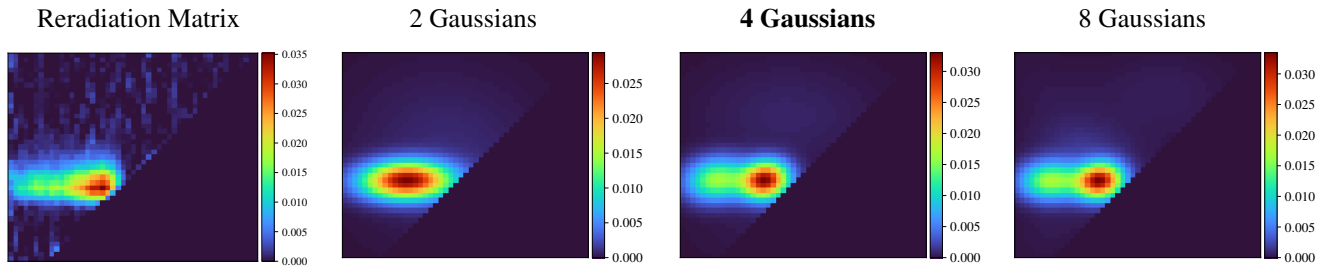
Fitted Material Under Monochromatic Illumination



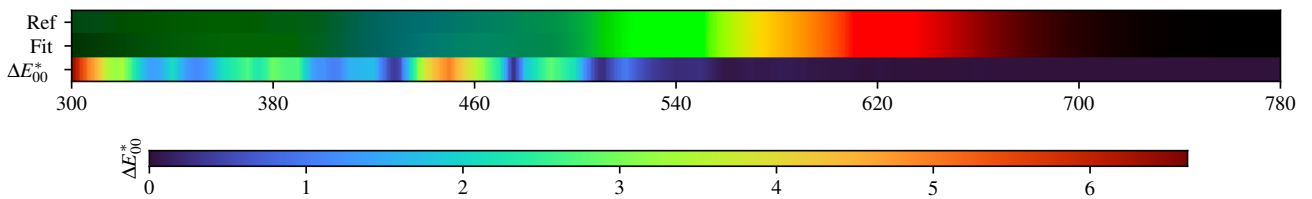
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.20$	D60 $\Delta E = 0.21$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.28$	FL3.5 $\Delta E = 0.42$	FL3.10 $\Delta E = 0.62$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.15$	LED-B5 $\Delta E = 0.28$
B $\Delta E = 0.14$	D65 $\Delta E = 0.28$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.36$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.45$	FL3.11 $\Delta E = 0.36$	HP1 $\Delta E = 0.22$	LED-B1 $\Delta E = 0.25$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.19$	D75 $\Delta E = 0.39$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.31$	FL3.2 $\Delta E = 0.18$	FL3.7 $\Delta E = 0.31$	FL3.12 $\Delta E = 0.45$	HP2 $\Delta E = 0.19$	LED-B2 $\Delta E = 0.29$	LED-RGB1 $\Delta E = 0.15$
D50 $\Delta E = 0.13$	E $\Delta E = 0.81$	FL5 $\Delta E = 0.18$	FL10 $\Delta E = 0.39$	FL3.3 $\Delta E = 0.20$	FL3.8 $\Delta E = 0.37$	FL3.13 $\Delta E = 0.77$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 0.32$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.37$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.38$	FL3.14 $\Delta E = 0.84$	HP4 $\Delta E = 0.54$	LED-B4 $\Delta E = 0.20$	LED-V2 $\Delta E = 0.21$

ARTFGREEN - Weighted variational Bayesian inference - 4 Gaussians



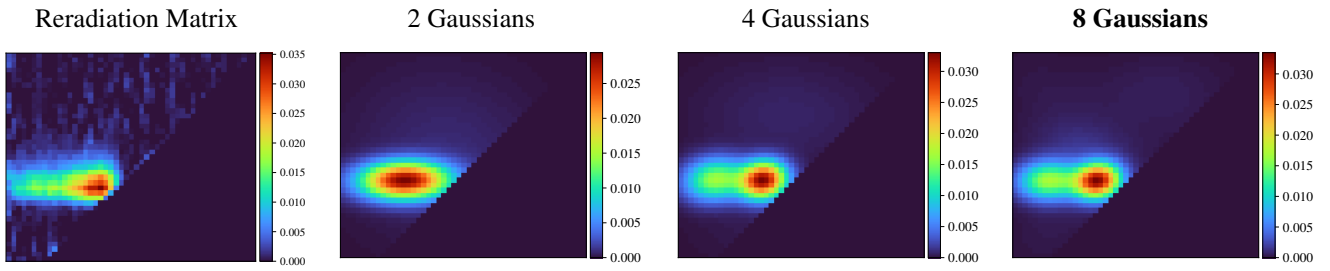
Fitted Material Under Monochromatic Illumination



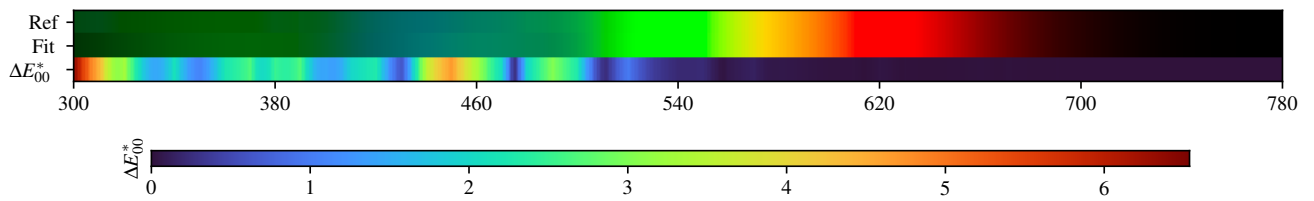
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.35$	FL2 $\Delta E = 0.16$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.26$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.58$
B $\Delta E = 0.27$	D65 $\Delta E = 0.37$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.16$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.16$	LED-BH1 $\Delta E = 0.22$
C $\Delta E = 0.36$	D75 $\Delta E = 0.41$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.21$	LED-RGB1 $\Delta E = 0.18$
D50 $\Delta E = 0.29$	E $\Delta E = 0.45$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.36$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.32$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.51$	LED-V2 $\Delta E = 0.15$

ARTFGREEN - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.28$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.19$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.52$
B $\Delta E = 0.21$	D65 $\Delta E = 0.29$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.16$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.11$	LED-B1 $\Delta E = 0.16$	LED-BH1 $\Delta E = 0.22$
C $\Delta E = 0.26$	D75 $\Delta E = 0.32$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.21$	LED-RGB1 $\Delta E = 0.18$
D50 $\Delta E = 0.23$	E $\Delta E = 0.35$	FL5 $\Delta E = 0.18$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.15$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.33$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.26$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.48$	LED-V2 $\Delta E = 0.12$

ARTFGREEN - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.209079	0.195551	0.157700	0.124283	0.101556	0.089170	0.081567	0.077666	0.080889	0.093886	0.130556
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.213608	0.372238	0.560675	0.705601	0.770878	0.783552	0.772282	0.753831	0.726501	0.694471	0.669333
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.649552	0.637142	0.633506	0.640739	0.652400	0.665347	0.664089	0.650972	0.650431	0.675475	0.719538
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.764665	0.796259	0.827297	0.846930	0.865471	0.876217	0.885346	0.895847			

2 Gaussians max

Scaling factor: 364.25812883848147

Gaussians:

Weight	Mean		Covariance			
0.266714605	510.023307837	572.394159954	16962.289728729	-1592.009935907	-1592.009935907	13693.378527653
0.733285395	422.562849992	529.542203156	3553.912115599	45.836848356	45.836848356	616.937769953

4 Gaussians max

Scaling factor: 351.24552424768484

Gaussians:

Weight	Mean		Covariance			
0.083675259	559.828868309	437.095685501	17326.970325920	580.081459372	580.081459372	2310.768907934
0.337271286	367.863070564	531.133893557	1715.197618911	102.515976542	102.515976542	801.609965936
0.435842225	464.313085525	530.036491096	960.056535554	74.196492541	74.196492541	618.890059313
0.143211230	508.908479680	659.029045812	16373.122439803	-111.309143963	-111.309143963	5445.138495754

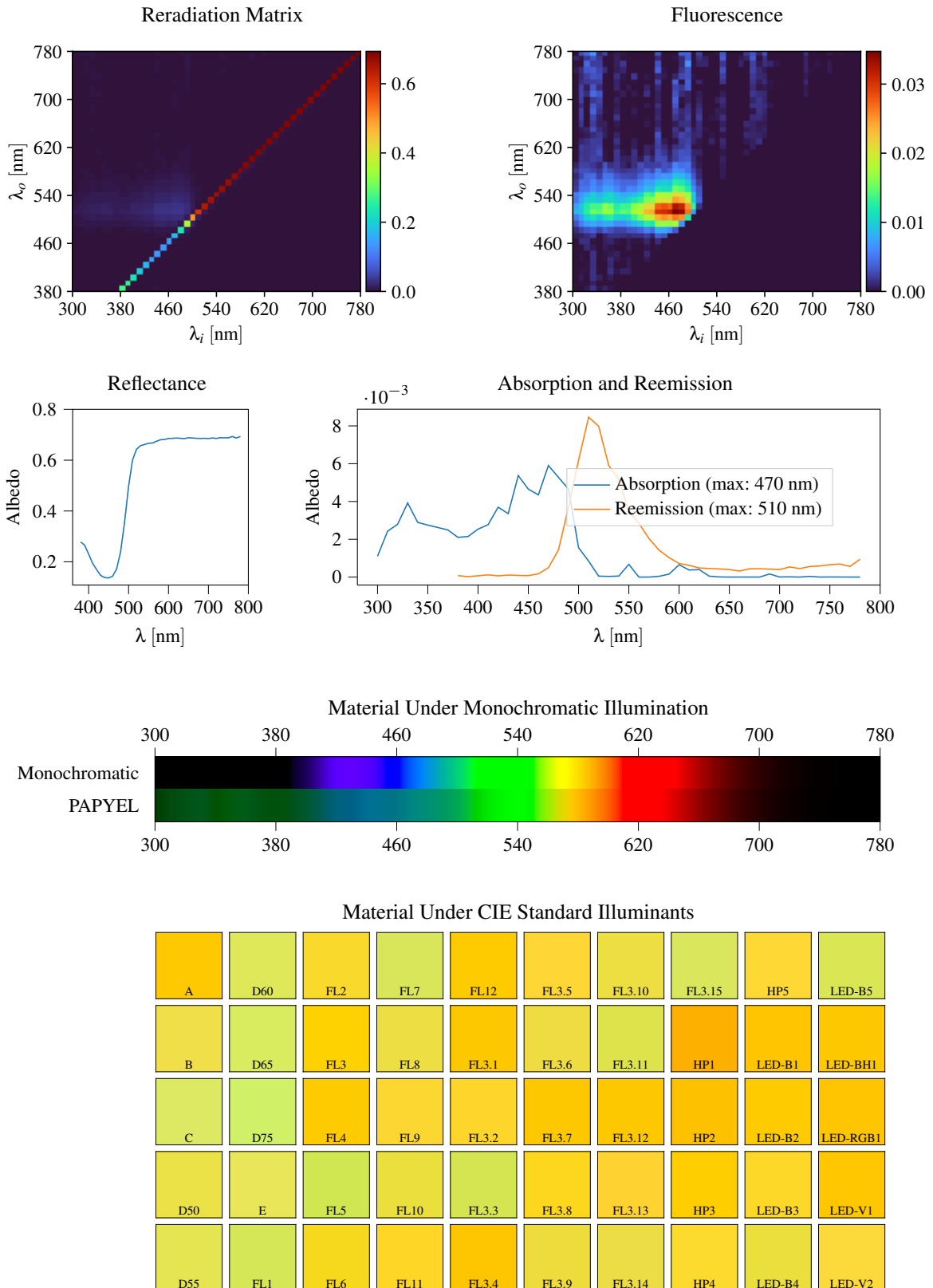
8 Gaussians max

Scaling factor: 349.3598892738092

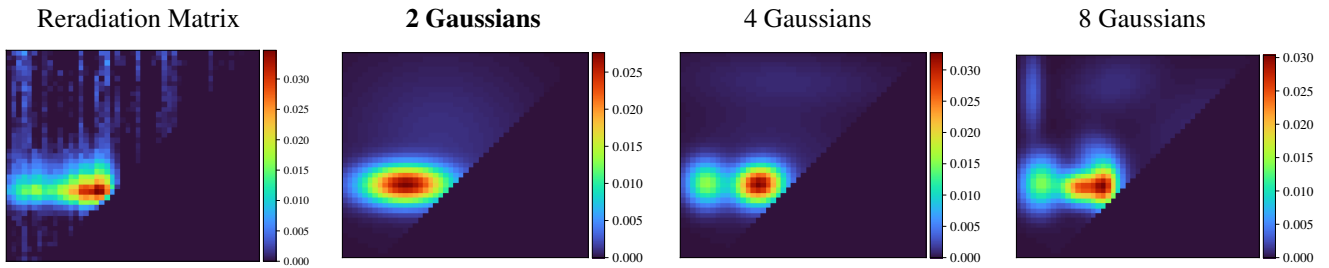
Gaussians:

Weight	Mean		Covariance			
0.027488493	382.206391688	449.684116659	4062.226938991	1799.483878901	1799.483878901	3708.569087312
0.062886280	615.516786944	440.510165136	7352.087175700	-694.086018764	-694.086018764	2484.799321362
0.312812696	366.308881785	528.840096553	1667.894907630	39.109885777	39.109885777	656.893572851
0.421759588	464.175345586	528.833093553	958.006251504	66.002214196	66.002214196	565.232778873
0.018332671	650.494790661	573.841193413	6248.025575806	-84.576166778	-84.576166778	3445.193933069
0.064165918	432.352015878	590.867621548	4825.515194577	-303.439577083	-303.439577083	1432.240110728
0.058677719	583.755645190	701.396695943	8750.952752749	285.226203024	285.226203024	3026.026136386
0.033876634	383.214045732	679.590596943	5557.708527200	-2416.458963890	-2416.458963890	4957.607730662

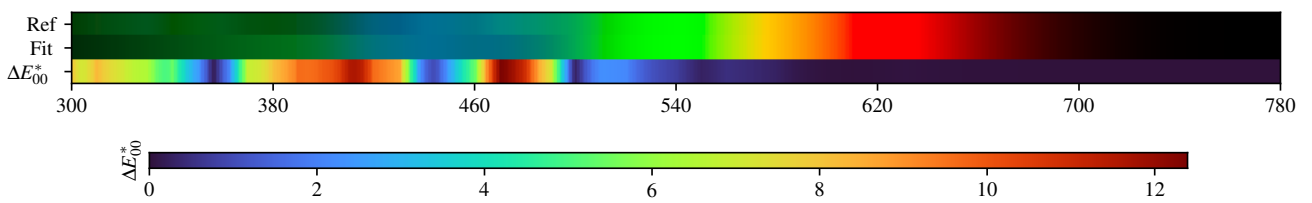
3.45. POPYEL



PAPYEL - Weighted Expectation-Maximization - 2 Gaussians



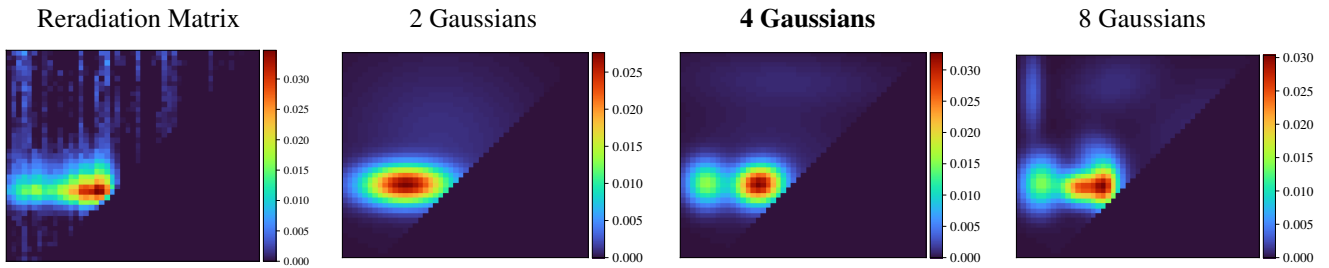
Fitted Material Under Monochromatic Illumination



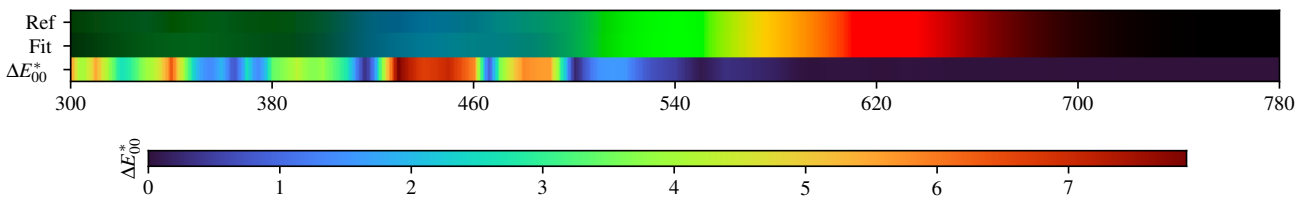
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.19$	D60 $\Delta E = 0.14$	FL2 $\Delta E = 0.29$	FL7 $\Delta E = 0.27$	FL12 $\Delta E = 0.28$	FL3.5 $\Delta E = 0.47$	FL3.10 $\Delta E = 0.79$	FL3.15 $\Delta E = 0.20$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.74$
B $\Delta E = 0.22$	D65 $\Delta E = 0.18$	FL3 $\Delta E = 0.22$	FL8 $\Delta E = 0.47$	FL3.1 $\Delta E = 0.18$	FL3.6 $\Delta E = 0.54$	FL3.11 $\Delta E = 0.58$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.29$	LED-BH1 $\Delta E = 0.18$
C $\Delta E = 0.15$	D75 $\Delta E = 0.28$	FL4 $\Delta E = 0.17$	FL9 $\Delta E = 0.41$	FL3.2 $\Delta E = 0.28$	FL3.7 $\Delta E = 0.27$	FL3.12 $\Delta E = 0.33$	HP2 $\Delta E = 0.19$	LED-B2 $\Delta E = 0.37$	LED-RGB1 $\Delta E = 0.22$
D50 $\Delta E = 0.20$	E $\Delta E = 0.86$	FL5 $\Delta E = 0.32$	FL10 $\Delta E = 0.58$	FL3.3 $\Delta E = 0.33$	FL3.8 $\Delta E = 0.45$	FL3.13 $\Delta E = 0.73$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.46$	LED-V1 $\Delta E = 0.38$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.34$	FL6 $\Delta E = 0.27$	FL11 $\Delta E = 0.49$	FL3.4 $\Delta E = 0.15$	FL3.9 $\Delta E = 0.55$	FL3.14 $\Delta E = 0.85$	HP4 $\Delta E = 0.43$	LED-B4 $\Delta E = 0.60$	LED-V2 $\Delta E = 0.19$

PAPYEL - Weighted Expectation-Maximization - 4 Gaussians



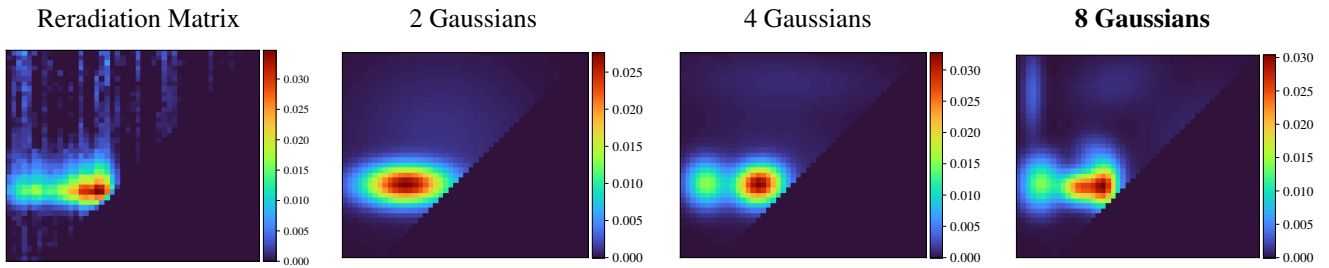
Fitted Material Under Monochromatic Illumination



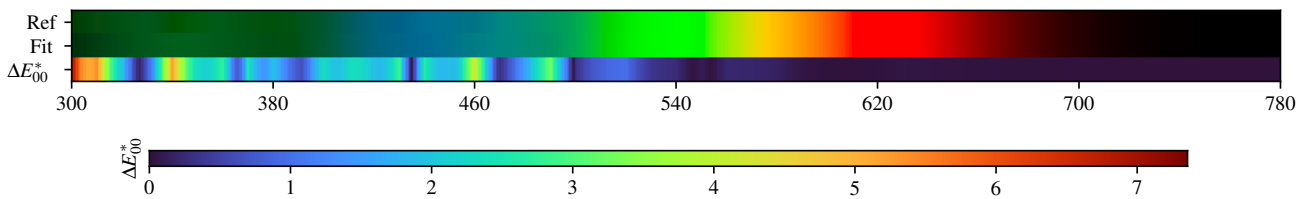
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.43$	FL2 $\Delta E = 0.22$	FL7 $\Delta E = 0.36$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.27$	HP5 $\Delta E = 0.30$	LED-B5 $\Delta E = 0.81$
B $\Delta E = 0.34$	D65 $\Delta E = 0.47$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.26$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.18$	FL3.11 $\Delta E = 0.33$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.26$	LED-BH1 $\Delta E = 0.41$
C $\Delta E = 0.46$	D75 $\Delta E = 0.52$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.22$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.33$	LED-RGB1 $\Delta E = 0.40$
D50 $\Delta E = 0.35$	E $\Delta E = 0.34$	FL5 $\Delta E = 0.30$	FL10 $\Delta E = 0.30$	FL3.3 $\Delta E = 0.23$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.59$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.39$	FL1 $\Delta E = 0.32$	FL6 $\Delta E = 0.19$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.26$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.26$	LED-B4 $\Delta E = 0.75$	LED-V2 $\Delta E = 0.13$

PAPYEL - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.09$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.09$	HP5 $\Delta E = 0.09$	LED-B5 $\Delta E = 0.25$
B $\Delta E = 0.09$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.09$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.10$	D75 $\Delta E = 0.15$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.10$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.11$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.11$

PAPYEL - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.278209	0.265281	0.230452	0.194074	0.169372	0.146383	0.138098	0.136220	0.143085	0.171329	0.238791
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.355797	0.497135	0.600971	0.643265	0.657153	0.661547	0.666559	0.667513	0.674350	0.680381	0.681391
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.685634	0.685786	0.687217	0.686045	0.684872	0.688353	0.687200	0.686022	0.685498	0.686133	0.684975
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.687394	0.685510	0.688519	0.687926	0.688152	0.693073	0.687178	0.693389			

2 Gaussians

Scaling factor: 359.7631119975317

Gaussians:

Weight	Mean		Covariance			
0.306267371	488.552781943	611.135116212	16711.404653957	-203.250180493	-203.250180493	12799.071458078
0.693732629	420.690678498	521.428134465	3346.143575726	24.354387599	24.354387599	651.327722498

4 Gaussians

Scaling factor: 345.1162999399808

Gaussians:

Weight	Mean		Covariance			
0.097010989	511.900673491	729.337518938	22046.692754005	-1088.826027446	-1088.826027446	1500.656465339
0.485036827	451.237041767	521.847610479	1045.419382167	56.764192053	56.764192053	667.900093387
0.199551618	487.925054743	554.599159159	13364.890659060	-1780.706952941	-1780.706952941	8862.612961257
0.218400565	346.069701625	523.635241627	729.320821661	-10.994804145	-10.994804145	843.368173582

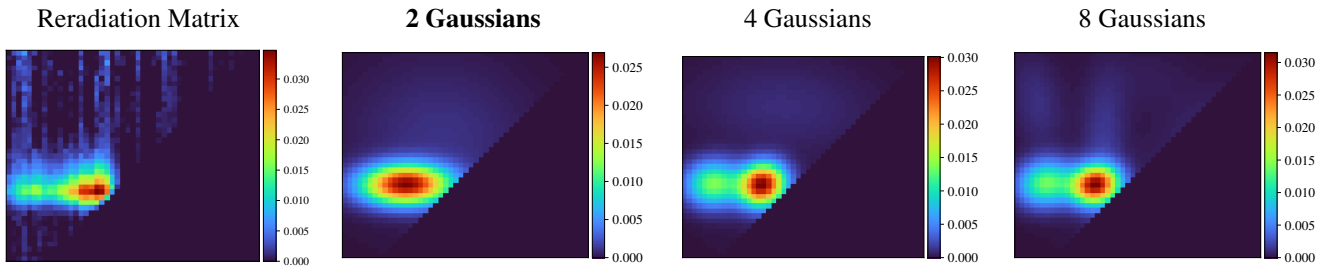
8 Gaussians

Scaling factor: 340.2395353602323

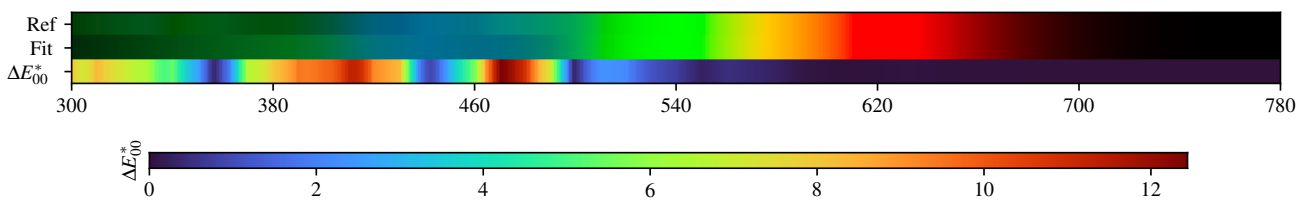
Gaussians:

Weight	Mean		Covariance			
0.057799239	492.642697443	725.845505093	4052.501032104	703.324590831	703.324590831	1834.823016773
0.242554536	424.567049441	516.098840710	728.153866967	-13.101466347	-13.101466347	415.798077077
0.050873349	554.138920428	443.223155067	14928.087427217	2007.419692854	2007.419692854	2991.096736678
0.043338253	328.207375627	707.910821790	171.107788449	10.893907163	10.893907163	2935.655692350
0.135729990	465.779436913	554.094886226	909.276536760	-276.453376600	-276.453376600	1376.950653424
0.224496011	343.918768289	525.534149429	672.736397497	31.510809714	31.510809714	1148.064300772
0.178752627	473.493470645	516.830923340	309.872856050	30.908379588	30.908379588	706.994767375
0.066455995	640.091554371	646.543021346	7018.127703837	3419.099528143	3419.099528143	5207.247563894

PAPYEL - Weighted variational Bayesian inference - 2 Gaussians



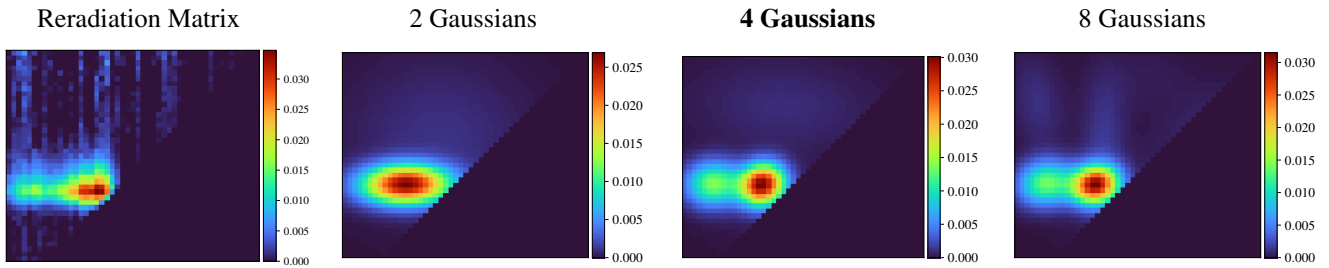
Fitted Material Under Monochromatic Illumination



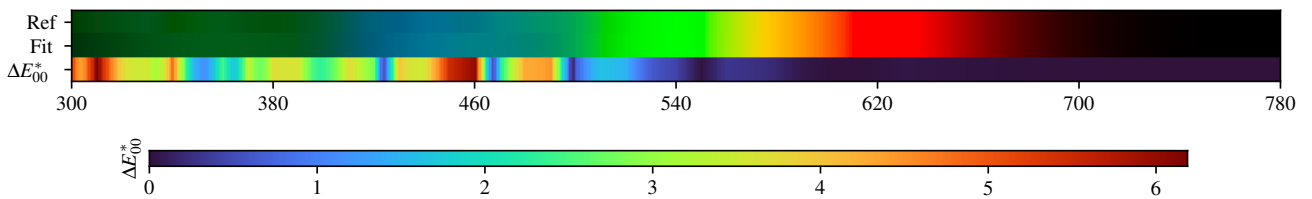
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.21$	D60 $\Delta E = 0.18$	FL2 $\Delta E = 0.32$	FL7 $\Delta E = 0.34$	FL12 $\Delta E = 0.29$	FL3.5 $\Delta E = 0.50$	FL3.10 $\Delta E = 0.82$	FL3.15 $\Delta E = 0.27$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.79$
B $\Delta E = 0.28$	D65 $\Delta E = 0.18$	FL3 $\Delta E = 0.24$	FL8 $\Delta E = 0.51$	FL3.1 $\Delta E = 0.19$	FL3.6 $\Delta E = 0.57$	FL3.11 $\Delta E = 0.62$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.30$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.22$	D75 $\Delta E = 0.24$	FL4 $\Delta E = 0.18$	FL9 $\Delta E = 0.44$	FL3.2 $\Delta E = 0.31$	FL3.7 $\Delta E = 0.28$	FL3.12 $\Delta E = 0.33$	HP2 $\Delta E = 0.20$	LED-B2 $\Delta E = 0.38$	LED-RGB1 $\Delta E = 0.23$
D50 $\Delta E = 0.26$	E $\Delta E = 0.78$	FL5 $\Delta E = 0.37$	FL10 $\Delta E = 0.62$	FL3.3 $\Delta E = 0.38$	FL3.8 $\Delta E = 0.47$	FL3.13 $\Delta E = 0.74$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.49$	LED-V1 $\Delta E = 0.36$
D55 $\Delta E = 0.21$	FL1 $\Delta E = 0.39$	FL6 $\Delta E = 0.30$	FL11 $\Delta E = 0.52$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.59$	FL3.14 $\Delta E = 0.87$	HP4 $\Delta E = 0.40$	LED-B4 $\Delta E = 0.64$	LED-V2 $\Delta E = 0.19$

PAPYEL - Weighted variational Bayesian inference - 4 Gaussians



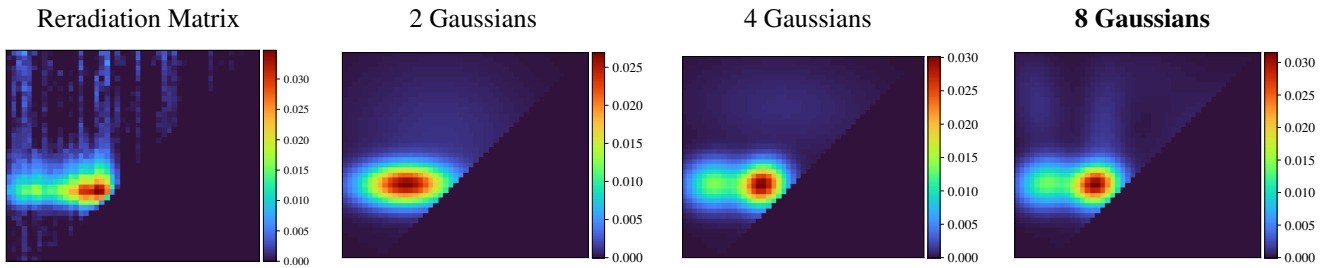
Fitted Material Under Monochromatic Illumination



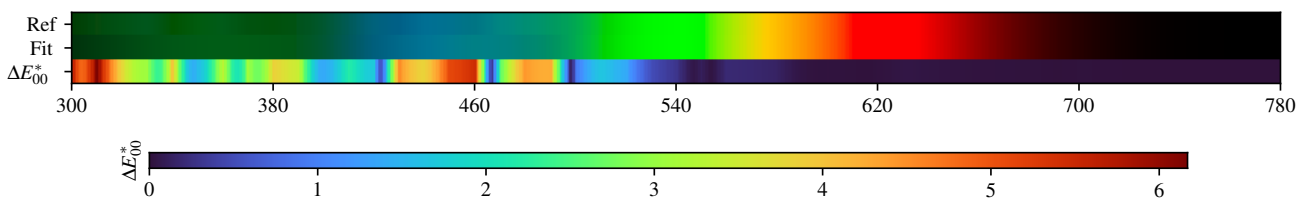
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.29$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.23$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.59$
B $\Delta E = 0.24$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.14$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.19$	LED-BH1 $\Delta E = 0.27$
C $\Delta E = 0.30$	D75 $\Delta E = 0.33$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.25$	LED-RGB1 $\Delta E = 0.34$
D50 $\Delta E = 0.24$	E $\Delta E = 0.36$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.16$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.41$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.20$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.53$	LED-V2 $\Delta E = 0.13$

PAPYEL - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.29$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.19$	LED-B5 $\Delta E = 0.57$
B $\Delta E = 0.25$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.20$	LED-BH1 $\Delta E = 0.30$
C $\Delta E = 0.32$	D75 $\Delta E = 0.33$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.25$	LED-RGB1 $\Delta E = 0.36$
D50 $\Delta E = 0.25$	E $\Delta E = 0.39$	FL5 $\Delta E = 0.21$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.16$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.42$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.54$	LED-V2 $\Delta E = 0.10$

PAPYEL - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.278209	0.265281	0.230452	0.194074	0.169372	0.146383	0.138098	0.136220	0.143085	0.171329	0.238791
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.355797	0.497135	0.600971	0.643265	0.657153	0.661547	0.666559	0.667513	0.674350	0.680381	0.681391
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.685634	0.685786	0.687217	0.686045	0.684872	0.688353	0.687200	0.686022	0.685498	0.686133	0.684975
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.687394	0.685510	0.688519	0.687926	0.688152	0.693073	0.687178	0.693389			

2 Gaussians max

Scaling factor: 360.08404944007856

Gaussians:

Weight	Mean		Covariance			
0.304287776	489.088340032	611.525748273	16747.389124247	-233.171438267	-233.171438267	12817.347325103
0.695712224	420.864747705	521.622434670	3385.203217725	34.557870858	34.557870858	683.180536726

4 Gaussians max

Scaling factor: 347.18164132844606

Gaussians:

Weight	Mean		Covariance			
0.062256461	530.976590557	453.917451164	14546.580961954	859.394135984	859.394135984	3684.801539944
0.280077607	357.750643794	524.656802651	1367.714134334	31.083538221	31.083538221	931.823411298
0.468039005	456.928822467	523.138764794	946.218929926	71.506082026	71.506082026	794.145922687
0.189626928	499.715603480	680.478091383	18473.691716168	-775.854660955	-775.854660955	4886.199383123

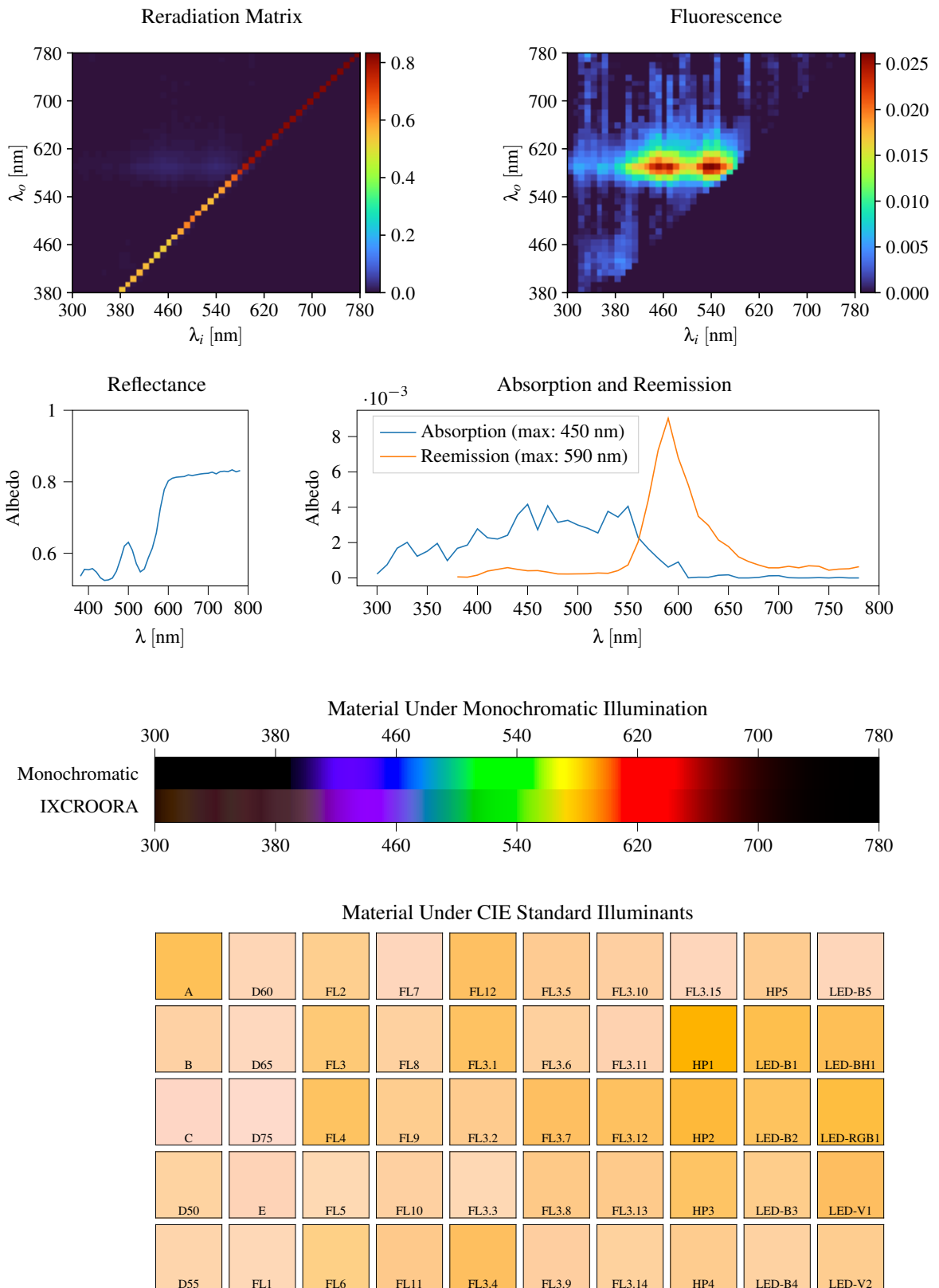
8 Gaussians max

Scaling factor: 347.91139804045224

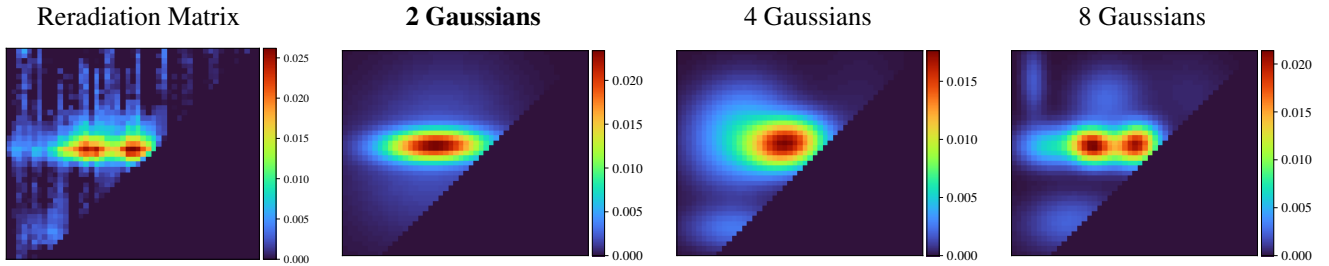
Gaussians:

Weight	Mean		Covariance			
0.052595665	550.913717340	457.080836541	17038.617106533	1575.241495697	1575.241495697	3984.935020996
0.091180996	470.687622294	593.079525115	937.347350656	255.929397483	255.929397483	8886.300965850
0.272359789	357.664391532	524.012004086	1372.627423833	81.553414357	81.553414357	883.309349225
0.431123045	455.442521407	521.132200280	976.077242380	71.611558423	71.611558423	649.326298104
0.049547988	644.530213947	632.189229745	7829.270158697	4938.490233378	4938.490233378	5499.740074599
0.061153820	341.262679598	681.903788613	1476.052350317	-682.720468523	-682.720468523	5153.419471628
0.041044093	556.733092704	727.046127520	6534.677255977	16.848132982	16.848132982	2610.895927659

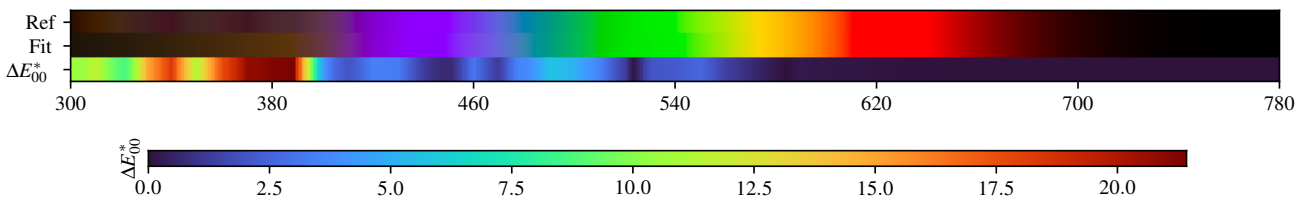
3.46. IXCROORA



IXCROORA - Weighted Expectation-Maximization - 2 Gaussians



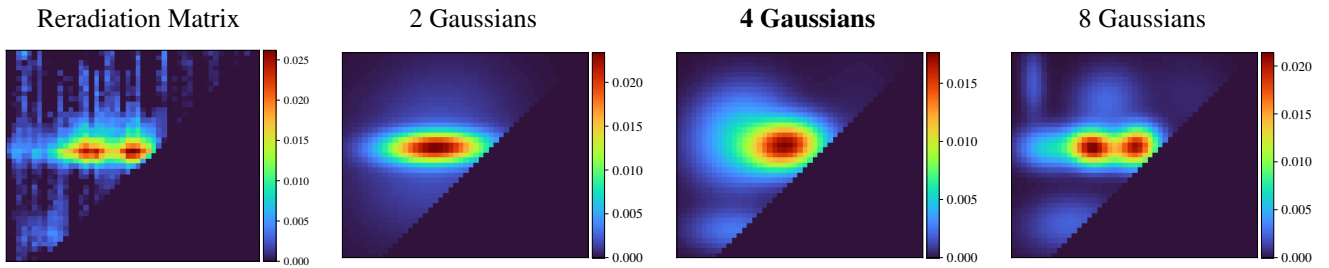
Fitted Material Under Monochromatic Illumination



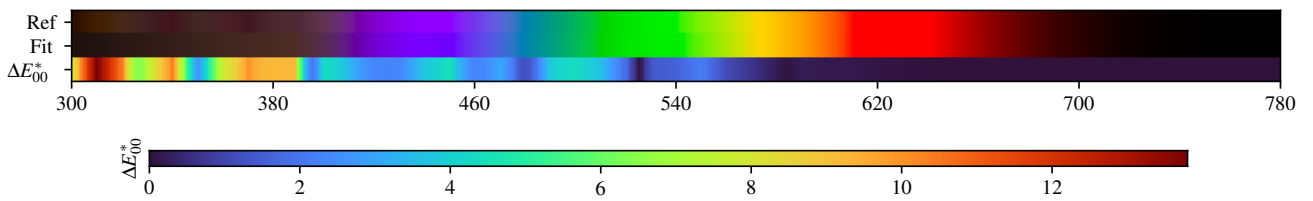
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.82$	$\Delta E = 0.24$	$\Delta E = 0.51$	$\Delta E = 0.23$	$\Delta E = 0.20$	$\Delta E = 0.20$	$\Delta E = 0.69$	$\Delta E = 0.26$	$\Delta E = 0.45$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.47$	$\Delta E = 0.98$	$\Delta E = 0.19$	$\Delta E = 0.27$	$\Delta E = 0.13$	$\Delta E = 0.27$	$\Delta E = 0.39$	$\Delta E = 0.01$	$\Delta E = 0.09$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.80$	$\Delta E = 1.26$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.21$	$\Delta E = 0.03$	$\Delta E = 0.21$	$\Delta E = 0.10$	$\Delta E = 0.05$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.52$	$\Delta E = 1.15$	$\Delta E = 0.43$	$\Delta E = 0.37$	$\Delta E = 0.37$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.20$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.66$	$\Delta E = 0.45$	$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.07$	$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.27$	$\Delta E = 0.37$	$\Delta E = 0.30$

IXCROORA - Weighted Expectation-Maximization - 4 Gaussians



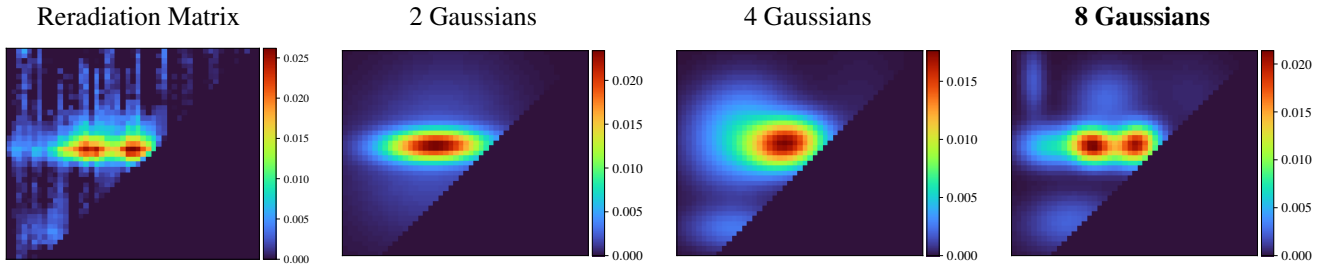
Fitted Material Under Monochromatic Illumination



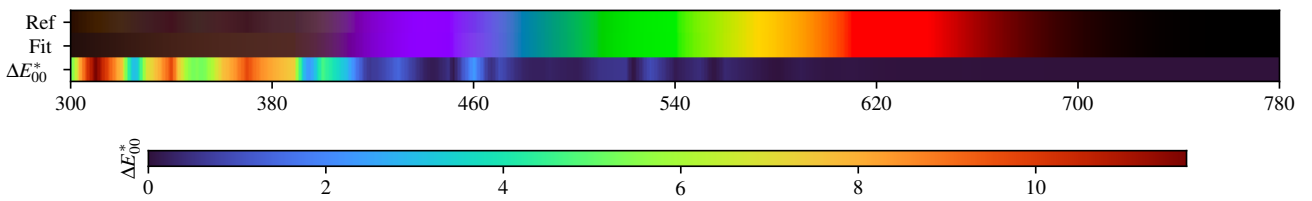
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.17$	D60 $\Delta E = 0.91$	FL2 $\Delta E = 0.49$	FL7 $\Delta E = 0.85$	FL12 $\Delta E = 0.33$	FL3.5 $\Delta E = 0.26$	FL3.10 $\Delta E = 0.56$	FL3.15 $\Delta E = 0.79$	HP5 $\Delta E = 0.40$	LED-B5 $\Delta E = 1.13$
B $\Delta E = 0.58$	D65 $\Delta E = 1.03$	FL3 $\Delta E = 0.35$	FL8 $\Delta E = 0.49$	FL3.1 $\Delta E = 0.23$	FL3.6 $\Delta E = 0.38$	FL3.11 $\Delta E = 0.90$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.28$
C $\Delta E = 0.93$	D75 $\Delta E = 1.26$	FL4 $\Delta E = 0.29$	FL9 $\Delta E = 0.36$	FL3.2 $\Delta E = 0.32$	FL3.7 $\Delta E = 0.28$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.33$	LED-B2 $\Delta E = 0.25$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.65$	E $\Delta E = 0.79$	FL5 $\Delta E = 1.06$	FL10 $\Delta E = 0.76$	FL3.3 $\Delta E = 0.86$	FL3.8 $\Delta E = 0.43$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.28$	LED-B3 $\Delta E = 0.48$	LED-V1 $\Delta E = 0.23$
D55 $\Delta E = 0.78$	FL1 $\Delta E = 0.97$	FL6 $\Delta E = 0.51$	FL11 $\Delta E = 0.52$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.64$	FL3.14 $\Delta E = 0.29$	HP4 $\Delta E = 0.44$	LED-B4 $\Delta E = 0.83$	LED-V2 $\Delta E = 0.37$

IXCROORA - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.30$	FL2 $\Delta E = 0.24$	FL7 $\Delta E = 0.35$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.21$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.29$	HP5 $\Delta E = 0.32$	LED-B5 $\Delta E = 0.26$
B $\Delta E = 0.30$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.20$	FL8 $\Delta E = 0.25$	FL3.1 $\Delta E = 0.15$	FL3.6 $\Delta E = 0.24$	FL3.11 $\Delta E = 0.27$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.15$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.38$	D75 $\Delta E = 0.31$	FL4 $\Delta E = 0.17$	FL9 $\Delta E = 0.22$	FL3.2 $\Delta E = 0.21$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.19$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.27$	E $\Delta E = 0.22$	FL5 $\Delta E = 0.34$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.33$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.21$	LED-V1 $\Delta E = 0.33$
D55 $\Delta E = 0.29$	FL1 $\Delta E = 0.35$	FL6 $\Delta E = 0.23$	FL11 $\Delta E = 0.20$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.23$	HP4 $\Delta E = 0.34$	LED-B4 $\Delta E = 0.22$	LED-V2 $\Delta E = 0.42$

IXCROORA - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.535990	0.555040	0.553800	0.557079	0.547187	0.531303	0.524085	0.525463	0.530556	0.549508	0.582305
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.620286	0.630726	0.608392	0.570625	0.547977	0.555997	0.587387	0.614301	0.656326	0.725507	0.778483
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.802452	0.809898	0.812805	0.813825	0.814686	0.819393	0.817485	0.819629	0.821740	0.823073	0.823765
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.826982	0.822117	0.828426	0.829649	0.828494	0.833455	0.828028	0.831298			

2 Gaussians

Scaling factor: 351.10743582191895

Gaussians:

Weight	Mean		Covariance			
0.543027844	479.967098546	595.080164255	4574.856100666	72.865113857	72.865113857	428.186600170
0.456972156	475.327523046	589.366783339	10789.178189353	1919.247228779	1919.247228779	11818.664733070

4 Gaussians

Scaling factor: 337.7303822938776

Gaussians:

Weight	Mean		Covariance			
0.461369246	515.364690445	598.868353258	2394.081789700	178.851585407	178.851585407	1036.159269664
0.394543949	421.738002773	616.567706044	4067.460010492	290.987308527	290.987308527	4111.145836949
0.060769981	653.622812681	609.362626701	3679.027760414	396.559825546	396.559825546	16826.150343651
0.083316825	407.585149447	430.595565455	3679.848836311	-42.994010937	-42.994010937	843.699826925

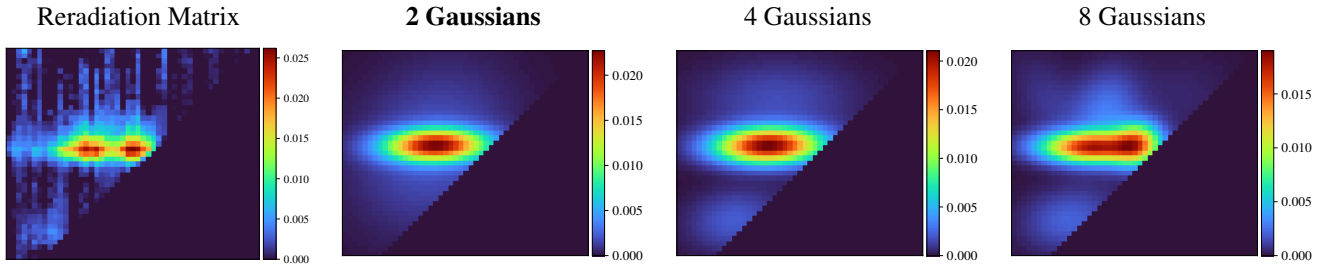
8 Gaussians

Scaling factor: 332.20281273667604

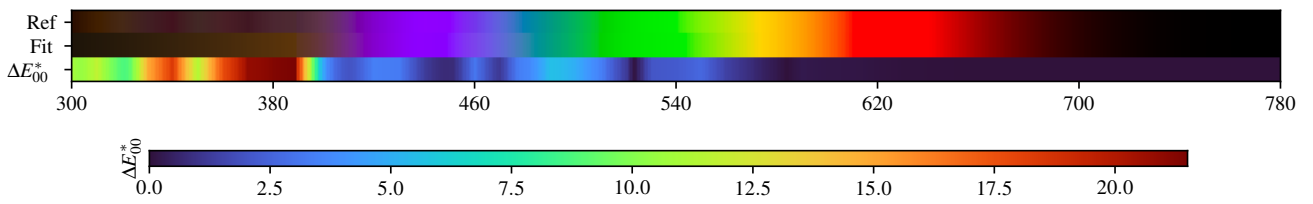
Gaussians:

Weight	Mean		Covariance			
0.096795629	482.966751719	686.365992576	1984.016594754	111.257491114	111.257491114	1924.270665454
0.129696426	370.322507060	593.036046427	1638.968118977	-28.617009384	-28.617009384	695.899194650
0.030112192	621.566385607	468.388741752	5141.949770928	-273.043423215	-273.043423215	3506.415451287
0.282491358	543.010122747	596.612072382	846.675527265	59.629025375	59.629025375	654.115630058
0.027719332	338.978747196	722.032639384	227.863395363	-30.371426281	-30.371426281	2043.854814017
0.104018787	409.230063481	444.168747534	3522.635357538	215.927832175	215.927832175	1422.065818627
0.283856680	456.581585192	594.506393394	943.685764438	-52.409575694	-52.409575694	557.851211235
0.045309597	648.612271496	695.320489177	4045.128339396	-449.985731287	-449.985731287	3447.807662361

IXCROORA - Weighted variational Bayesian inference - 2 Gaussians



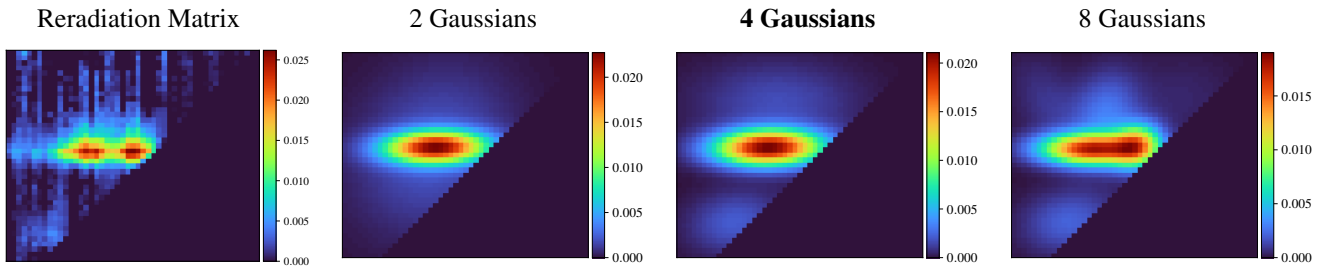
Fitted Material Under Monochromatic Illumination



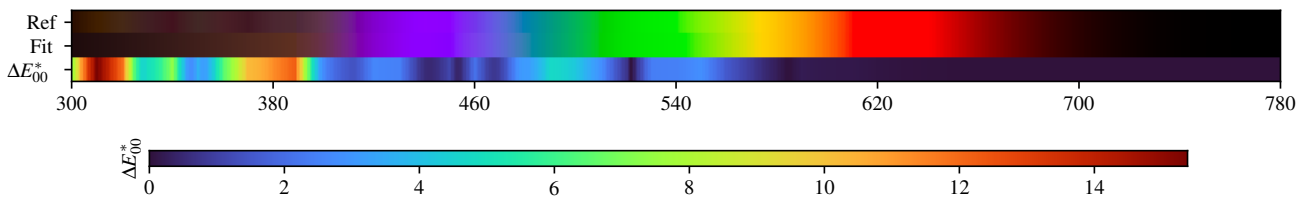
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.85$	$\Delta E = 0.26$	$\Delta E = 0.54$	$\Delta E = 0.23$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.71$	$\Delta E = 0.27$	$\Delta E = 0.49$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.49$	$\Delta E = 1.01$	$\Delta E = 0.20$	$\Delta E = 0.29$	$\Delta E = 0.13$	$\Delta E = 0.28$	$\Delta E = 0.43$	$\Delta E = 0.02$	$\Delta E = 0.10$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.82$	$\Delta E = 1.29$	$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.03$	$\Delta E = 0.21$	$\Delta E = 0.11$	$\Delta E = 0.05$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.55$	$\Delta E = 1.17$	$\Delta E = 0.47$	$\Delta E = 0.40$	$\Delta E = 0.40$	$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.69$	$\Delta E = 0.48$	$\Delta E = 0.29$	$\Delta E = 0.29$	$\Delta E = 0.08$	$\Delta E = 0.32$	$\Delta E = 0.30$	$\Delta E = 0.29$	$\Delta E = 0.40$	$\Delta E = 0.31$

IXCROORA - Weighted variational Bayesian inference - 4 Gaussians



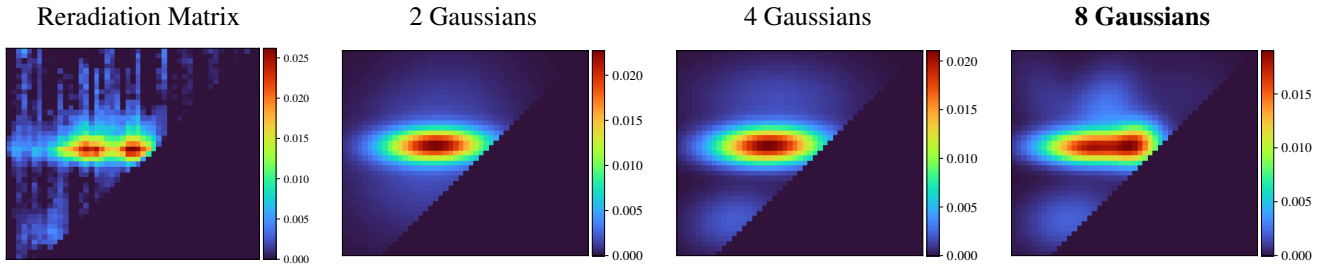
Fitted Material Under Monochromatic Illumination



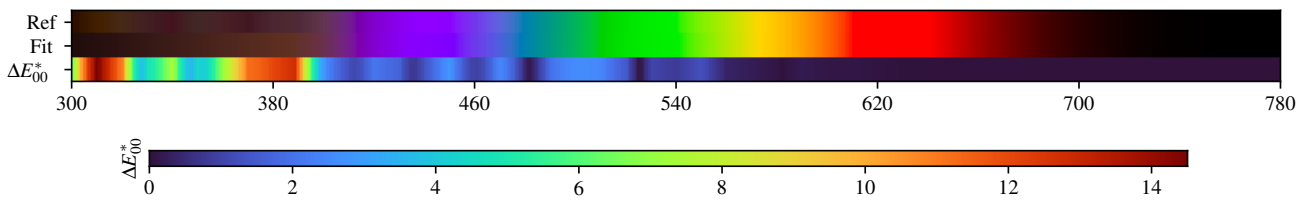
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.18$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.25$	FL7 $\Delta E = 0.19$	FL12 $\Delta E = 0.38$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.31$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.45$
B $\Delta E = 0.17$	D65 $\Delta E = 0.10$	FL3 $\Delta E = 0.26$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.22$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.52$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.23$	LED-BH1 $\Delta E = 0.31$
C $\Delta E = 0.16$	D75 $\Delta E = 0.09$	FL4 $\Delta E = 0.26$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.20$	FL3.7 $\Delta E = 0.35$	FL3.12 $\Delta E = 0.16$	HP2 $\Delta E = 0.34$	LED-B2 $\Delta E = 0.24$	LED-RGB1 $\Delta E = 0.19$
D50 $\Delta E = 0.14$	E $\Delta E = 0.14$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.49$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.40$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.26$	LED-B3 $\Delta E = 0.28$	LED-V1 $\Delta E = 0.27$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.20$	FL6 $\Delta E = 0.29$	FL11 $\Delta E = 0.44$	FL3.4 $\Delta E = 0.21$	FL3.9 $\Delta E = 0.46$	FL3.14 $\Delta E = 0.22$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.43$	LED-V2 $\Delta E = 0.29$

IXCROORA - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.09$	FL2 $\Delta E = 0.16$	FL7 $\Delta E = 0.21$	FL12 $\Delta E = 0.18$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.08$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.48$
B $\Delta E = 0.14$	D65 $\Delta E = 0.09$	FL3 $\Delta E = 0.15$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.39$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.21$	D75 $\Delta E = 0.09$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.16$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.18$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.10$	E $\Delta E = 0.12$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.34$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.22$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.20$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.26$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.30$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.35$	LED-V2 $\Delta E = 0.23$

IXCROORA - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.535990	0.555040	0.553800	0.557079	0.547187	0.531303	0.524085	0.525463	0.530556	0.549508	0.582305
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.620286	0.630726	0.608392	0.570625	0.547977	0.555997	0.587387	0.614301	0.656326	0.725507	0.778483
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.802452	0.809898	0.812805	0.813825	0.814686	0.819393	0.817485	0.819629	0.821740	0.823073	0.823765
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.826982	0.822117	0.828426	0.829649	0.828494	0.833455	0.828028	0.831298			

2 Gaussians max

Scaling factor: 351.1300191282958

Gaussians:

Weight	Mean		Covariance			
0.449854296	475.214854838	588.929739311	10864.592458142	1935.472077981	1935.472077981	11932.956530421
0.550145704	480.104290382	595.335882593	4596.805981863	75.690077503	75.690077503	468.558261213

4 Gaussians max

Scaling factor: 340.53849879038535

Gaussians:

Weight	Mean		Covariance			
0.102824161	408.557636351	446.677745857	3685.284181733	304.666115497	304.666115497	1787.884562573
0.036522916	596.135080660	481.200434029	7304.592057236	-1517.801719953	-1517.801719953	4493.663400137
0.667686896	477.256946811	594.628763347	5108.716466344	91.186854613	91.186854613	582.669405199
0.192966027	495.396785261	684.860328692	11936.056601371	21.284962053	21.284962053	3066.478880915

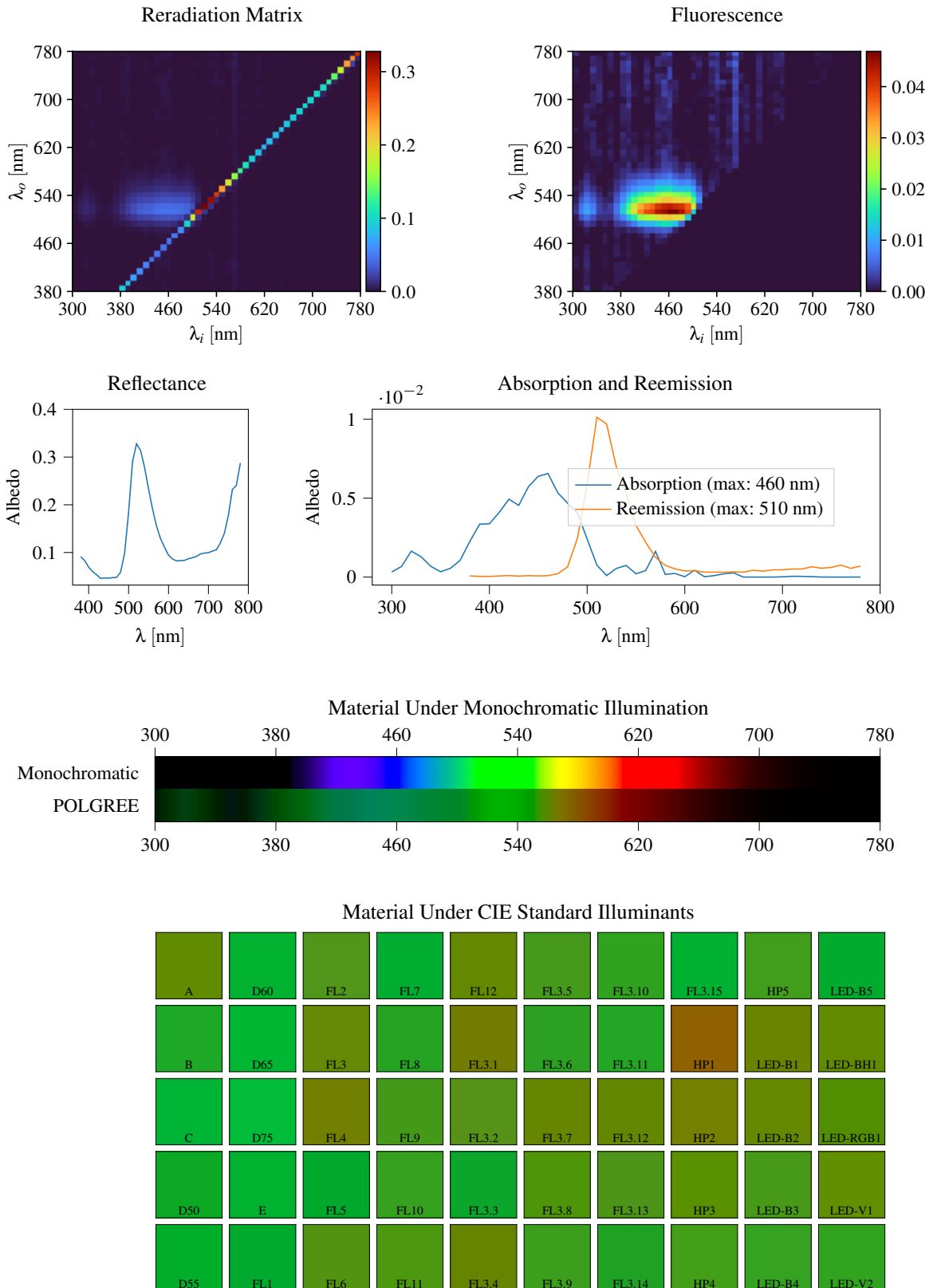
8 Gaussians max

Scaling factor: 336.5110823377045

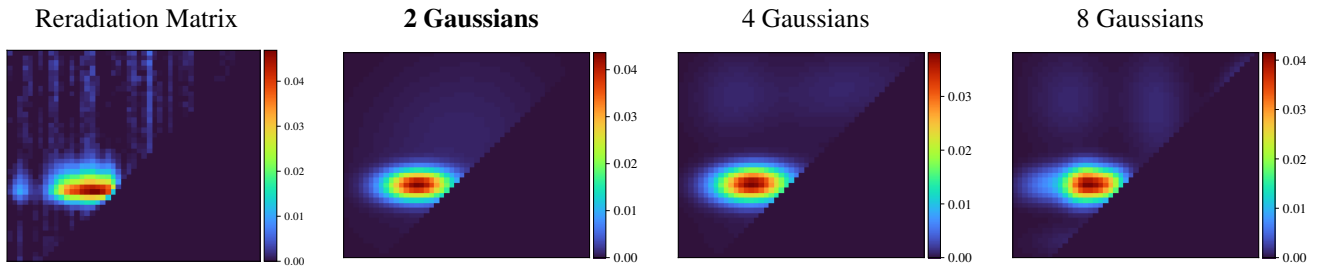
Gaussians:

Weight	Mean		Covariance			
0.104813067	408.359968341	447.109427984	3698.052886664	258.540531455	258.540531455	1824.709339451
0.034295345	606.541131102	478.821249970	6827.525890862	-1016.774510829	-1016.774510829	4550.590690145
0.187023088	543.950781062	598.570539639	970.180783292	92.187426798	92.187426798	806.473101981
0.132856065	481.768737800	657.497115537	1918.405972168	357.784582485	357.784582485	3295.308791863
0.436976692	451.337445376	591.859906461	4503.609088790	-8.012034956	-8.012034956	447.805970179
0.048762625	631.776251552	690.951901476	5888.858539983	361.173596886	361.173596886	3805.168955642
0.054325686	370.604601774	679.083243646	2570.774768472	-1364.599698904	-1364.599698904	4258.903433027

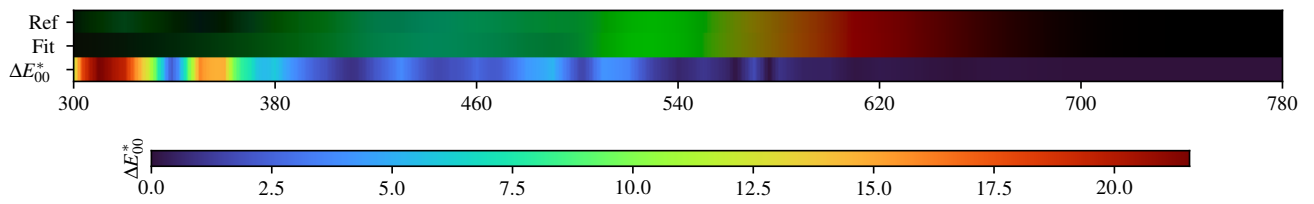
3.47. POLGREE



POLGREE - Weighted Expectation-Maximization - 2 Gaussians



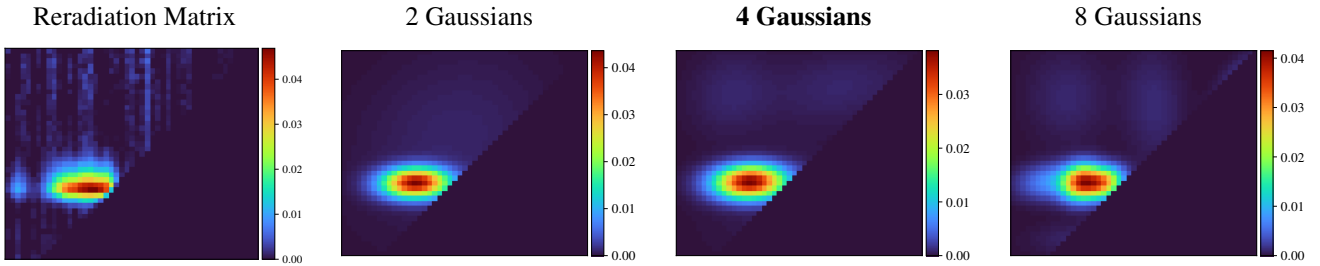
Fitted Material Under Monochromatic Illumination



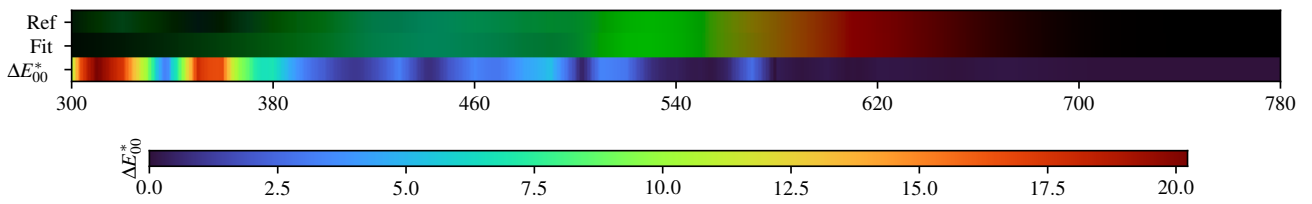
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.69$	$\Delta E = 0.48$	$\Delta E = 0.52$	$\Delta E = 0.52$	$\Delta E = 0.83$	$\Delta E = 0.70$	$\Delta E = 0.81$	$\Delta E = 0.51$	$\Delta E = 0.51$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.52$	$\Delta E = 0.46$	$\Delta E = 0.52$	$\Delta E = 0.66$	$\Delta E = 0.53$	$\Delta E = 0.69$	$\Delta E = 0.59$	$\Delta E = 0.23$	$\Delta E = 0.64$	$\Delta E = 0.65$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.43$	$\Delta E = 0.44$	$\Delta E = 0.50$	$\Delta E = 0.66$	$\Delta E = 0.57$	$\Delta E = 0.89$	$\Delta E = 0.92$	$\Delta E = 0.29$	$\Delta E = 0.61$	$\Delta E = 0.92$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.54$	$\Delta E = 0.62$	$\Delta E = 0.51$	$\Delta E = 0.64$	$\Delta E = 0.52$	$\Delta E = 0.74$	$\Delta E = 0.98$	$\Delta E = 0.48$	$\Delta E = 0.51$	$\Delta E = 0.67$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.50$	$\Delta E = 0.52$	$\Delta E = 0.51$	$\Delta E = 0.72$	$\Delta E = 0.66$	$\Delta E = 0.65$	$\Delta E = 0.95$	$\Delta E = 0.47$	$\Delta E = 0.38$	$\Delta E = 0.64$

POLGREE - Weighted Expectation-Maximization - 4 Gaussians



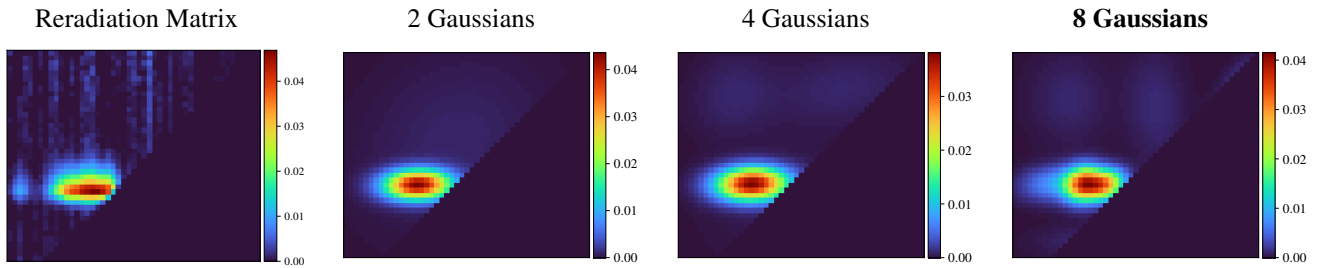
Fitted Material Under Monochromatic Illumination



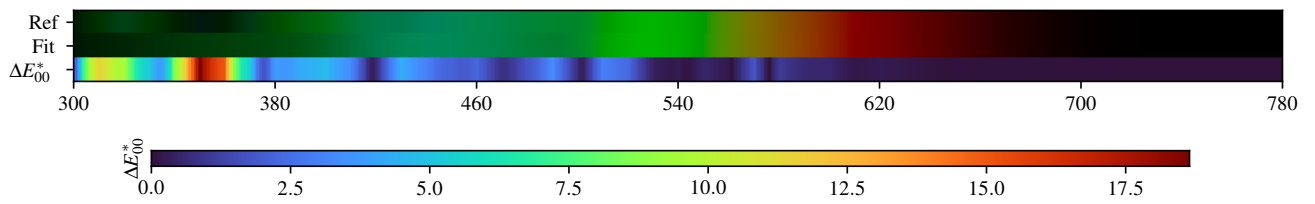
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.23$	$\Delta E = 0.64$	$\Delta E = 0.21$	$\Delta E = 0.11$	$\Delta E = 0.34$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.28$	$\Delta E = 0.47$	$\Delta E = 0.47$	$\Delta E = 0.12$	$\Delta E = 0.40$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.32$	$\Delta E = 0.26$	$\Delta E = 0.44$	$\Delta E = 0.14$	$\Delta E = 0.48$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.61$	$\Delta E = 0.20$	$\Delta E = 0.46$	$\Delta E = 0.22$	$\Delta E = 0.39$	$\Delta E = 0.53$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.15$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.41$	$\Delta E = 0.22$	$\Delta E = 0.45$	$\Delta E = 0.58$	$\Delta E = 0.25$	$\Delta E = 0.28$	$\Delta E = 0.14$

POLGREE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.26$	$\Delta E = 0.28$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.30$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.23$	$\Delta E = 0.61$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.24$	$\Delta E = 0.29$	$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.27$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.33$	$\Delta E = 0.56$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.25$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.39$	$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.35$	$\Delta E = 0.64$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.26$	$\Delta E = 0.33$	$\Delta E = 0.23$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.54$	$\Delta E = 0.30$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.13$	$\Delta E = 0.28$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.61$	$\Delta E = 0.19$

POLGREE - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.091493	0.083243	0.069429	0.060113	0.053320	0.045845	0.046475	0.046363	0.047336	0.047867	0.058661
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.097980	0.183529	0.291216	0.327679	0.314026	0.278611	0.233881	0.191206	0.155463	0.129133	0.111063
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.094544	0.086489	0.082476	0.083002	0.083559	0.086900	0.089103	0.091531	0.096891	0.098791	0.099568
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.103013	0.105722	0.120489	0.140316	0.177743	0.232178	0.240488	0.287746			

2 Gaussians

Scaling factor: 347.55396938931113

Gaussians:

Weight	Mean		Covariance			
0.317749852	515.399814734	604.993043795	15802.467384724	2821.691753040	2821.691753040	14676.622336953
0.682250148	442.354889002	520.900113315	1973.414979855	38.719868426	38.719868426	392.801961274

4 Gaussians

Scaling factor: 341.12489513097694

Gaussians:

Weight	Mean		Covariance			
0.061903096	403.282244556	699.761189616	2989.955718616	304.108688326	304.108688326	3318.828690092
0.098539095	620.230004482	711.409272518	10035.583892039	1168.557912073	1168.557912073	2609.978259309
0.103213451	527.771529564	478.806489428	12154.332587198	1599.470125289	1599.470125289	5946.729393170
0.736344358	441.383784722	522.557612097	2265.942053059	56.320043884	56.320043884	489.528048685

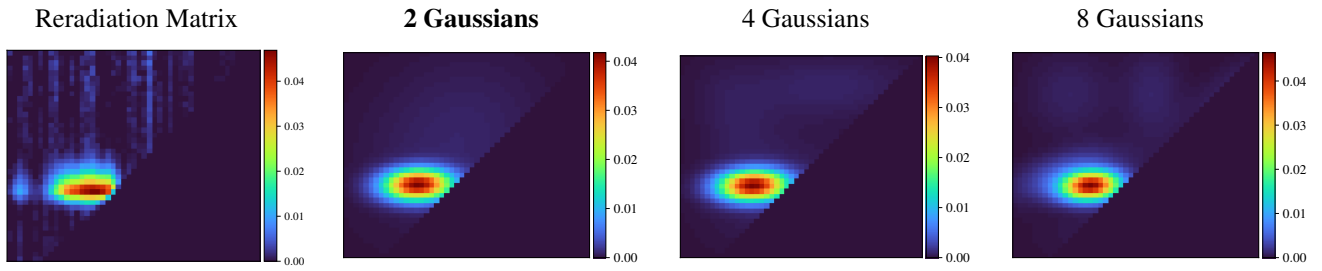
8 Gaussians

Scaling factor: 336.77448817111576

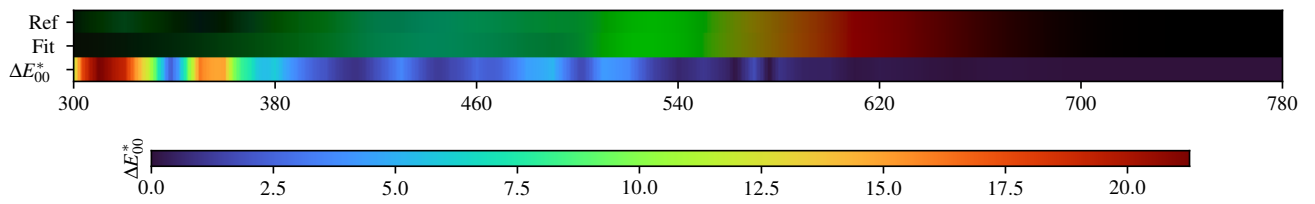
Gaussians:

Weight	Mean		Covariance			
0.073758653	408.141502972	691.349781584	2737.494023597	-47.842533877	-47.842533877	3738.232535362
0.047801678	604.273653669	459.699664800	6951.815270844	1090.102147084	1090.102147084	3601.408283940
0.350922257	435.803508655	522.733313898	632.116751297	62.573364450	62.573364450	536.258471284
0.079443816	579.671693478	676.266760136	1572.728955237	-282.082348166	-282.082348166	5587.235847823
0.254717352	480.919311460	521.054265961	639.094080223	84.278622629	84.278622629	411.401286794
0.024113333	417.301624626	408.988912032	3334.405794943	52.249206852	52.249206852	490.803939090
0.138626019	376.525114245	523.600125690	1755.421136910	119.511426174	119.511426174	520.363698327
0.030616892	745.795975163	729.040995434	947.513294236	729.507291836	729.507291836	1292.019704245

POLGREE - Weighted variational Bayesian inference - 2 Gaussians



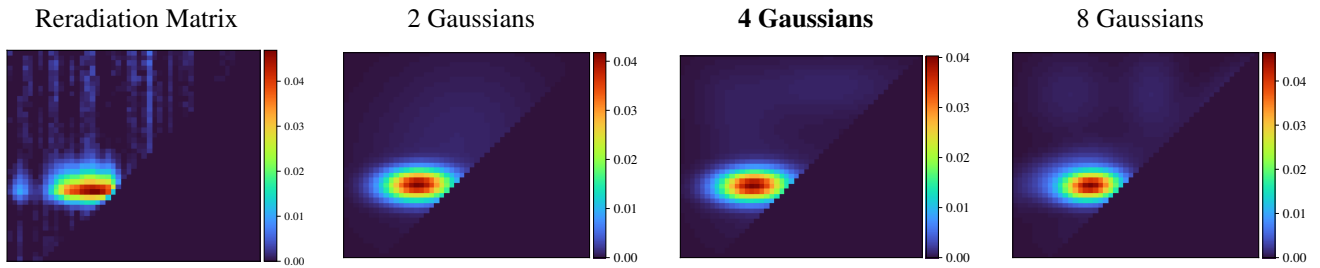
Fitted Material Under Monochromatic Illumination



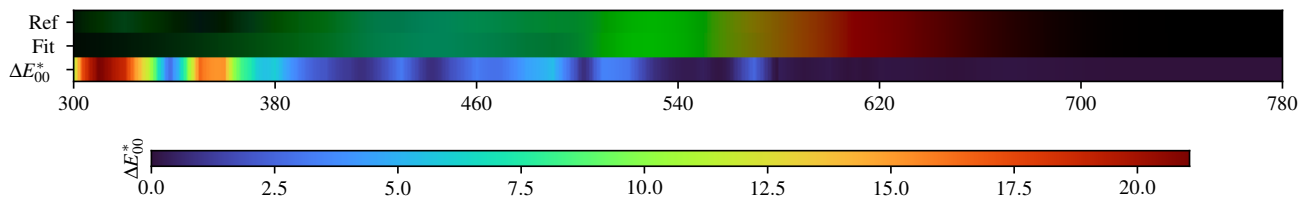
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.73$	$\Delta E = 0.58$	$\Delta E = 0.59$	$\Delta E = 0.63$	$\Delta E = 0.87$	$\Delta E = 0.77$	$\Delta E = 0.90$	$\Delta E = 0.63$	$\Delta E = 0.59$	$\Delta E = 0.40$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.63$	$\Delta E = 0.56$	$\Delta E = 0.57$	$\Delta E = 0.75$	$\Delta E = 0.55$	$\Delta E = 0.78$	$\Delta E = 0.68$	$\Delta E = 0.25$	$\Delta E = 0.68$	$\Delta E = 0.68$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.56$	$\Delta E = 0.54$	$\Delta E = 0.53$	$\Delta E = 0.73$	$\Delta E = 0.63$	$\Delta E = 0.91$	$\Delta E = 0.95$	$\Delta E = 0.33$	$\Delta E = 0.65$	$\Delta E = 0.97$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.63$	$\Delta E = 0.65$	$\Delta E = 0.61$	$\Delta E = 0.74$	$\Delta E = 0.61$	$\Delta E = 0.80$	$\Delta E = 1.04$	$\Delta E = 0.53$	$\Delta E = 0.57$	$\Delta E = 0.73$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.60$	$\Delta E = 0.62$	$\Delta E = 0.58$	$\Delta E = 0.80$	$\Delta E = 0.68$	$\Delta E = 0.73$	$\Delta E = 1.03$	$\Delta E = 0.52$	$\Delta E = 0.44$	$\Delta E = 0.74$

POLGREE - Weighted variational Bayesian inference - 4 Gaussians



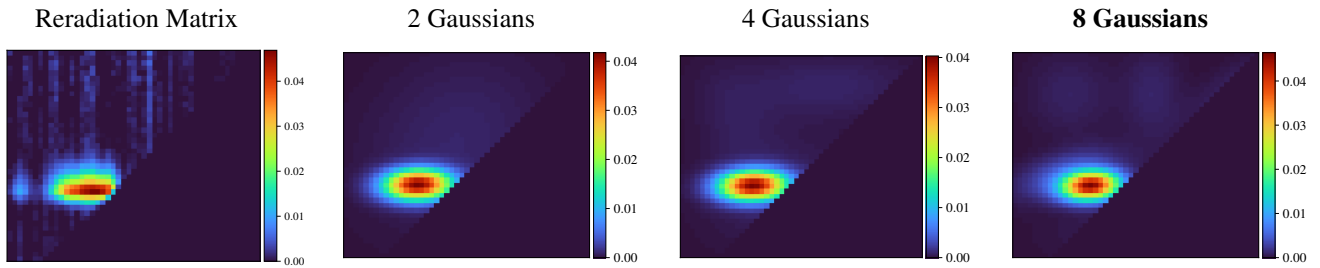
Fitted Material Under Monochromatic Illumination



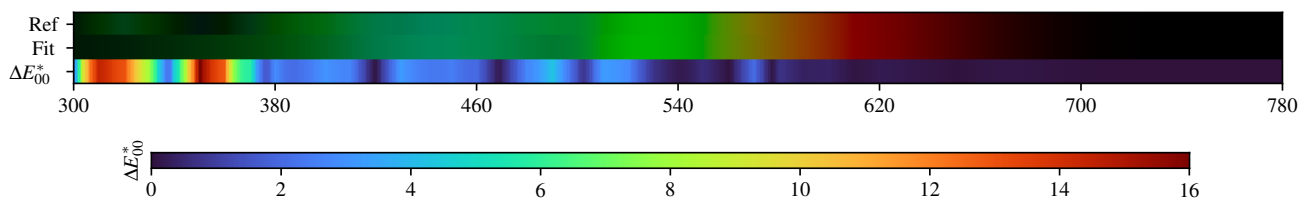
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.26$	$\Delta E = 0.36$	$\Delta E = 0.33$	$\Delta E = 0.68$	$\Delta E = 0.31$	$\Delta E = 0.13$	$\Delta E = 0.25$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.10$	$\Delta E = 0.30$	$\Delta E = 0.13$	$\Delta E = 0.37$	$\Delta E = 0.49$	$\Delta E = 0.42$	$\Delta E = 0.05$	$\Delta E = 0.34$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.36$	$\Delta E = 0.36$	$\Delta E = 0.33$	$\Delta E = 0.07$	$\Delta E = 0.48$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.41$	$\Delta E = 0.24$	$\Delta E = 0.48$	$\Delta E = 0.27$	$\Delta E = 0.42$	$\Delta E = 0.63$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.27$	$\Delta E = 0.10$	$\Delta E = 0.45$	$\Delta E = 0.16$	$\Delta E = 0.47$	$\Delta E = 0.68$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.28$

POLGREE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.29$	$\Delta E = 0.25$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.38$	$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.58$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.16$	$\Delta E = 0.26$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.30$	$\Delta E = 0.53$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.45$	$\Delta E = 0.44$	$\Delta E = 0.23$	$\Delta E = 0.33$	$\Delta E = 0.61$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.26$	$\Delta E = 0.43$	$\Delta E = 0.19$	$\Delta E = 0.46$	$\Delta E = 0.43$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.25$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.31$	$\Delta E = 0.16$	$\Delta E = 0.40$	$\Delta E = 0.22$	$\Delta E = 0.59$	$\Delta E = 0.36$

POLGREE - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.091493	0.083243	0.069429	0.060113	0.053320	0.045845	0.046475	0.046363	0.047336	0.047867	0.058661
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.097980	0.183529	0.291216	0.327679	0.314026	0.278611	0.233881	0.191206	0.155463	0.129133	0.111063
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.094544	0.086489	0.082476	0.083002	0.083559	0.086900	0.089103	0.091531	0.096891	0.098791	0.099568
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.103013	0.105722	0.120489	0.140316	0.177743	0.232178	0.240488	0.287746			

2 Gaussians max

Scaling factor: 347.8967612358827

Gaussians:

Weight	Mean		Covariance			
0.312759294	516.801140296	606.060556761	15846.104254246	2761.409182486	2761.409182486	14793.596317811
0.687240706	442.416602219	521.137114354	2024.587834665	46.970995888	46.970995888	425.207647371

4 Gaussians max

Scaling factor: 342.4750158063561

Gaussians:

Weight	Mean		Covariance			
0.151534856	505.523573203	506.577868248	12106.393806696	393.028884800	393.028884800	6824.940793608
0.688684905	441.969609851	521.465761079	2108.175684778	57.562203299	57.562203299	429.107219057
0.052137561	406.833084731	655.102306593	3399.489681019	-1346.036382964	-1346.036382964	6282.052776323
0.107642678	590.767464552	722.168597132	14806.188030896	270.672227435	270.672227435	2047.842142882

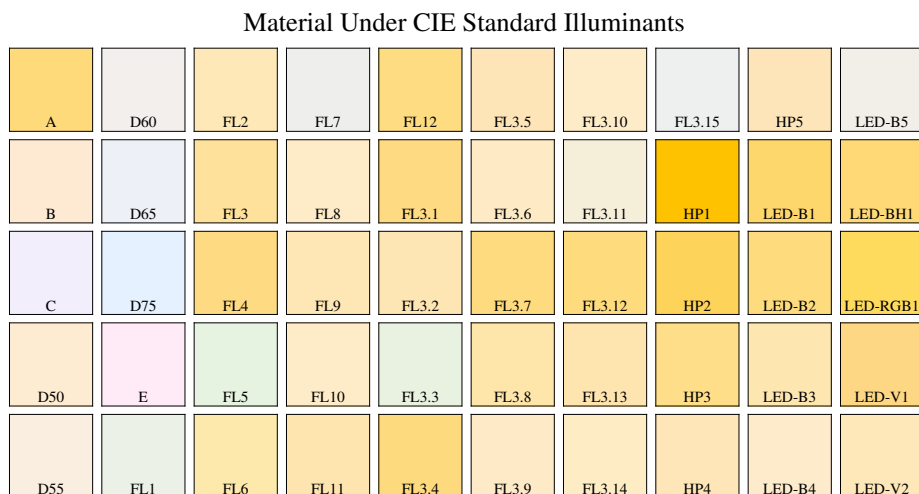
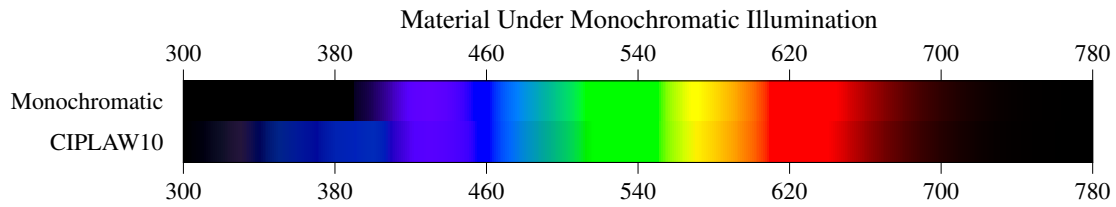
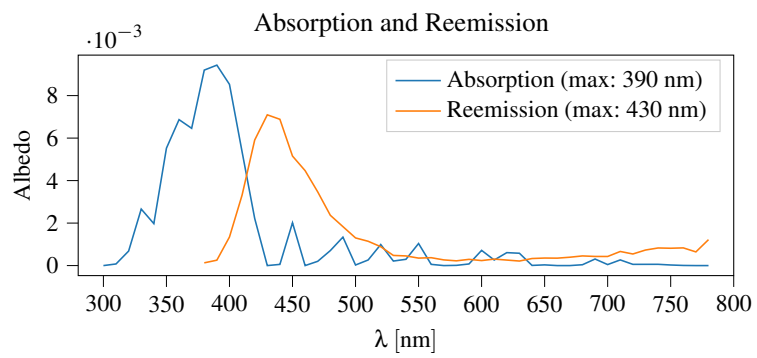
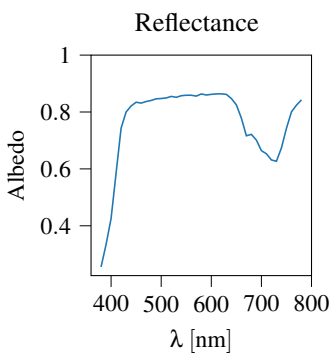
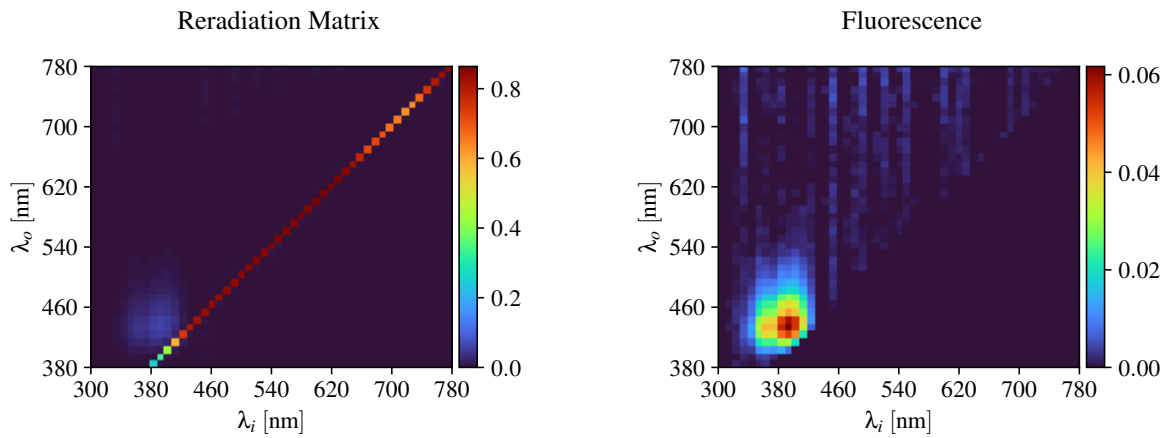
8 Gaussians max

Scaling factor: 340.1313517109202

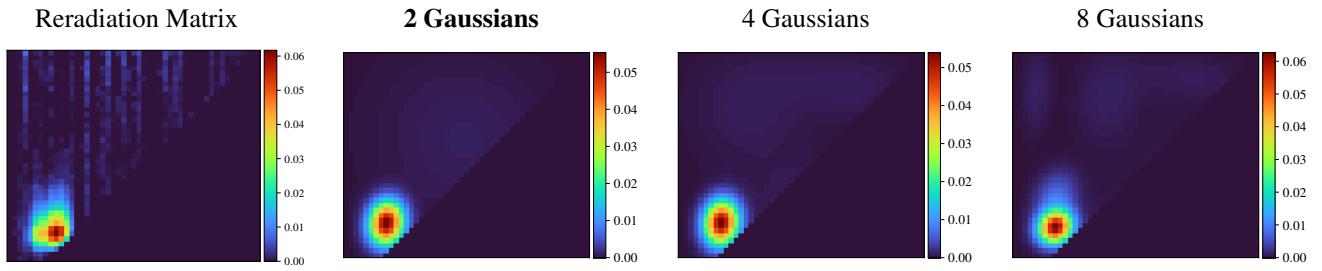
Gaussians:

Weight	Mean		Covariance			
0.066875794	518.772031280	432.614018681	12500.511070750	759.996177402	759.996177402	2047.624729110
0.146455906	402.092289068	542.293606865	3821.864224832	916.384955545	916.384955545	981.547643192
0.597559192	450.601704126	518.911197142	1450.425683340	85.260339682	85.260339682	366.314655127
0.027286698	581.514340237	562.925376691	9131.034483656	794.957836499	794.957836499	2416.014552246
0.067406769	409.462185370	701.149383424	3379.697390921	2.418282317	2.418282317	3281.491643667
0.057533293	572.462280942	703.731268384	1634.447094955	47.251091152	47.251091152	3818.612600827
0.035970356	721.148517899	712.241384381	4016.389456803	2669.291853015	2669.291853015	2924.006449861

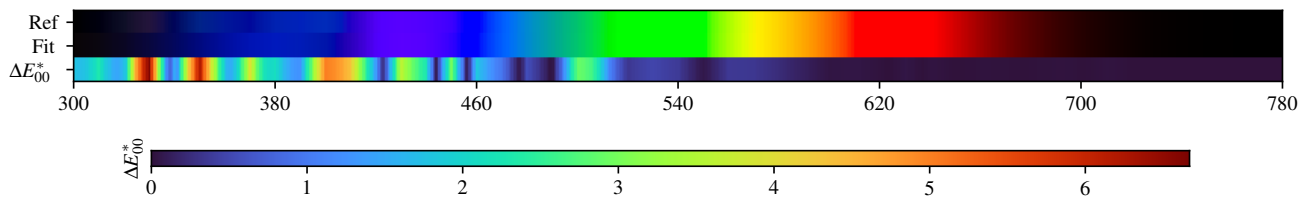
3.48. CIPLAW10



CIPLAW10 - Weighted Expectation-Maximization - 2 Gaussians



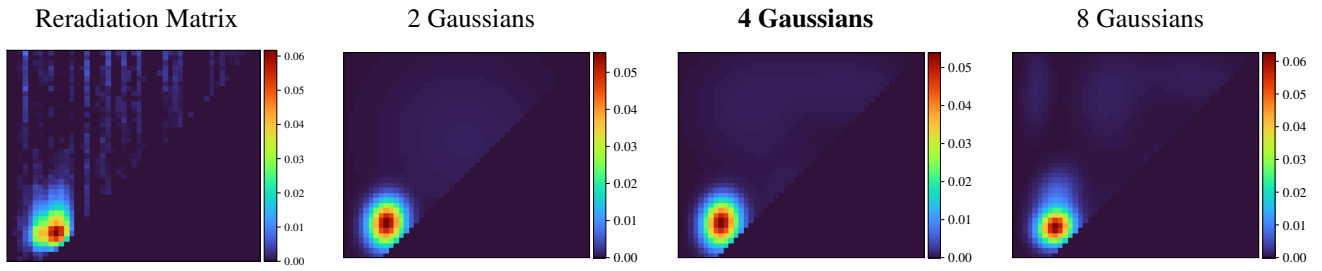
Fitted Material Under Monochromatic Illumination



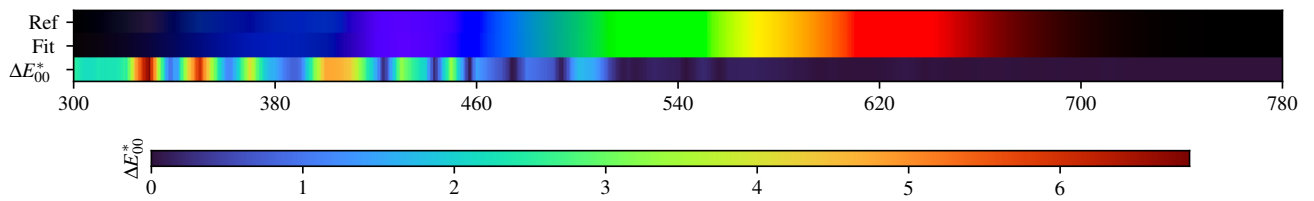
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.17$	D60 $\Delta E = 0.79$	FL2 $\Delta E = 0.30$	FL7 $\Delta E = 0.66$	FL12 $\Delta E = 0.14$	FL3.5 $\Delta E = 0.22$	FL3.10 $\Delta E = 0.31$	FL3.15 $\Delta E = 0.68$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.62$
B $\Delta E = 0.44$	D65 $\Delta E = 0.89$	FL3 $\Delta E = 0.22$	FL8 $\Delta E = 0.38$	FL3.1 $\Delta E = 0.17$	FL3.6 $\Delta E = 0.36$	FL3.11 $\Delta E = 0.50$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.15$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.66$	D75 $\Delta E = 0.91$	FL4 $\Delta E = 0.17$	FL9 $\Delta E = 0.25$	FL3.2 $\Delta E = 0.24$	FL3.7 $\Delta E = 0.15$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.55$	E $\Delta E = 0.71$	FL5 $\Delta E = 0.57$	FL10 $\Delta E = 0.36$	FL3.3 $\Delta E = 0.57$	FL3.8 $\Delta E = 0.23$	FL3.13 $\Delta E = 0.20$	HP3 $\Delta E = 0.19$	LED-B3 $\Delta E = 0.26$	LED-V1 $\Delta E = 0.24$
D55 $\Delta E = 0.69$	FL1 $\Delta E = 0.62$	FL6 $\Delta E = 0.30$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.34$	FL3.14 $\Delta E = 0.35$	HP4 $\Delta E = 0.32$	LED-B4 $\Delta E = 0.43$	LED-V2 $\Delta E = 0.35$

CIPLAW10 - Weighted Expectation-Maximization - 4 Gaussians



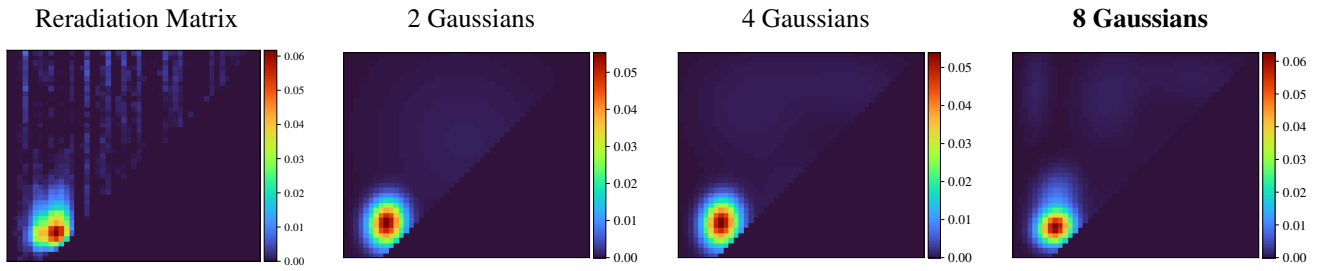
Fitted Material Under Monochromatic Illumination



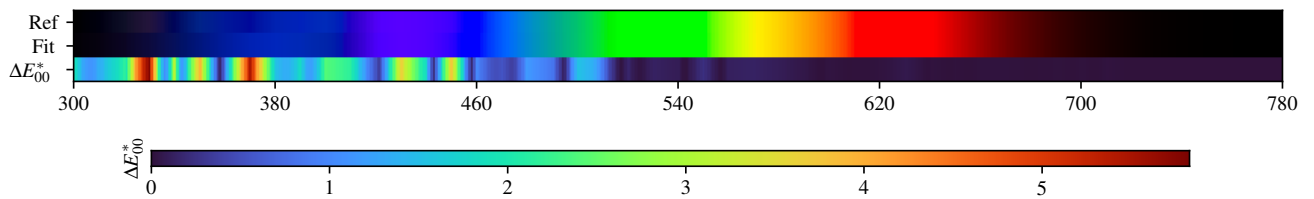
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.35$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.09$	LED-B5 $\Delta E = 0.26$
B $\Delta E = 0.16$	D65 $\Delta E = 0.40$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.24$	D75 $\Delta E = 0.45$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.20$	E $\Delta E = 0.50$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.15$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.23$
D55 $\Delta E = 0.28$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.24$

CIPLAW10 - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.07$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.02$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.08$	HP5 $\Delta E = 0.02$	LED-B5 $\Delta E = 0.31$
B $\Delta E = 0.05$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.01$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.07$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.02$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.01$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.02$
D50 $\Delta E = 0.04$	E $\Delta E = 0.35$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.04$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.28$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.03$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.28$

CIPLAW10 - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.255292	0.334354	0.425844	0.585465	0.743440	0.800196	0.821183	0.834423	0.831315	0.836804	0.840625
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.846269	0.847439	0.849377	0.854838	0.851634	0.857175	0.858930	0.858966	0.855872	0.863417	0.859792
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.862011	0.863646	0.863855	0.861954	0.847581	0.825222	0.778486	0.716476	0.721352	0.701103	0.664150
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.653062	0.631394	0.626901	0.673961	0.742954	0.800629	0.824257	0.842589			

2 Gaussians

Scaling factor: 346.2008793847085

Gaussians:

Weight	Mean		Covariance			
0.317110818	534.417681185	609.557867399	15703.285525146	-1013.058910795	-1013.058910795	15363.190329837
0.682889182	380.597938230	444.738795889	535.838396256	52.989356149	52.989356149	852.685189424

4 Gaussians

Scaling factor: 342.58306208706875

Gaussians:

Weight	Mean		Covariance			
0.076301323	639.367774208	716.939467084	7963.506582868	-723.137490687	-723.137490687	2502.238727472
0.113982286	437.038565274	677.043785163	6308.617528736	111.074836337	111.074836337	6155.913280910
0.122048340	566.283614523	482.852011361	12061.425919141	226.610795416	226.610795416	4772.743487099
0.687668051	380.507143771	445.271510694	537.073240464	53.333950379	53.333950379	889.135360647

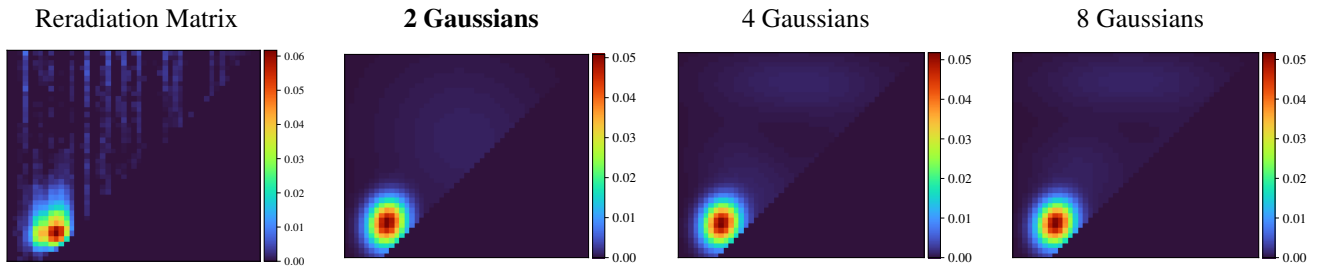
8 Gaussians

Scaling factor: 336.62337278376606

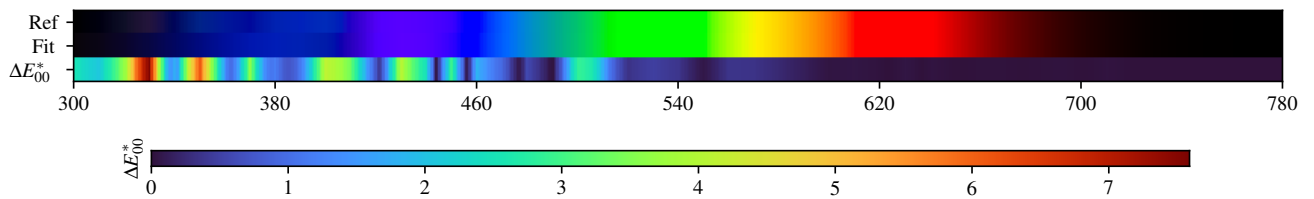
Gaussians:

Weight	Mean		Covariance			
0.058048782	652.938631868	730.548301631	6298.067463077	-322.036157999	-322.036157999	1419.370276196
0.160227141	381.159409766	489.574978057	727.173281982	172.980468695	172.980468695	1287.570927699
0.066304129	525.969321617	446.654769591	5655.984210059	-213.648126090	-213.648126090	2351.655157236
0.547523102	380.533048540	436.063683760	508.713447433	54.557213533	54.557213533	474.057532886
0.074831835	484.833119297	694.624728792	2004.958834591	352.118303677	352.118303677	4125.088366518
0.044127028	628.411531454	579.282010384	6726.981955155	1019.575142260	1019.575142260	2323.301466683
0.031970711	342.323040967	708.562875468	378.499252623	189.376151812	189.376151812	3444.999176346
0.016967272	720.310190907	447.259680035	1142.653858403	-55.708715972	-55.708715972	2402.040553980

CIPLAW10 - Weighted variational Bayesian inference - 2 Gaussians



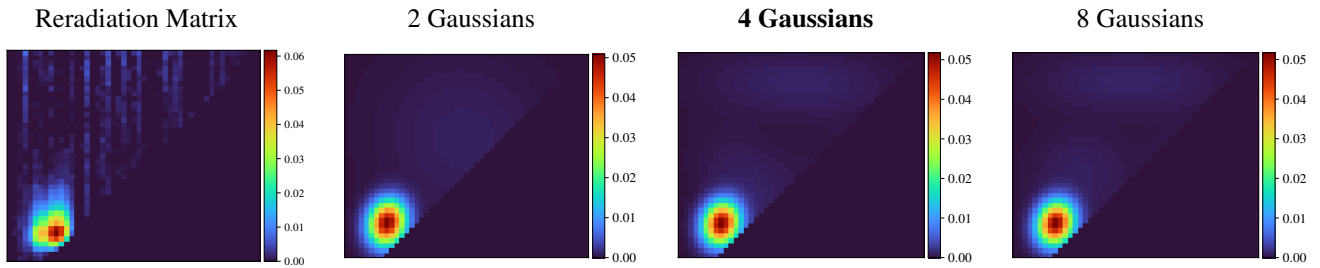
Fitted Material Under Monochromatic Illumination



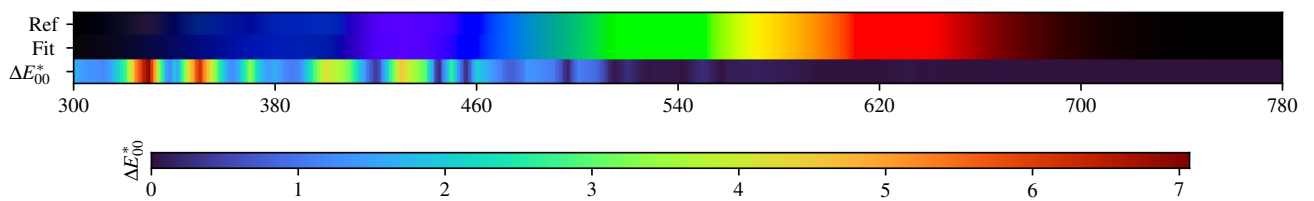
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.62$	FL2 $\Delta E = 0.28$	FL7 $\Delta E = 0.57$	FL12 $\Delta E = 0.14$	FL3.5 $\Delta E = 0.21$	FL3.10 $\Delta E = 0.32$	FL3.15 $\Delta E = 0.61$	HP5 $\Delta E = 0.27$	LED-B5 $\Delta E = 0.61$
B $\Delta E = 0.37$	D65 $\Delta E = 0.69$	FL3 $\Delta E = 0.21$	FL8 $\Delta E = 0.35$	FL3.1 $\Delta E = 0.16$	FL3.6 $\Delta E = 0.33$	FL3.11 $\Delta E = 0.48$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.15$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.53$	D75 $\Delta E = 0.67$	FL4 $\Delta E = 0.17$	FL9 $\Delta E = 0.23$	FL3.2 $\Delta E = 0.23$	FL3.7 $\Delta E = 0.15$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.46$	E $\Delta E = 0.41$	FL5 $\Delta E = 0.51$	FL10 $\Delta E = 0.35$	FL3.3 $\Delta E = 0.51$	FL3.8 $\Delta E = 0.23$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.19$	LED-B3 $\Delta E = 0.27$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.55$	FL1 $\Delta E = 0.54$	FL6 $\Delta E = 0.29$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.13$	FL3.9 $\Delta E = 0.35$	FL3.14 $\Delta E = 0.33$	HP4 $\Delta E = 0.29$	LED-B4 $\Delta E = 0.44$	LED-V2 $\Delta E = 0.28$

CIPLAW10 - Weighted variational Bayesian inference - 4 Gaussians



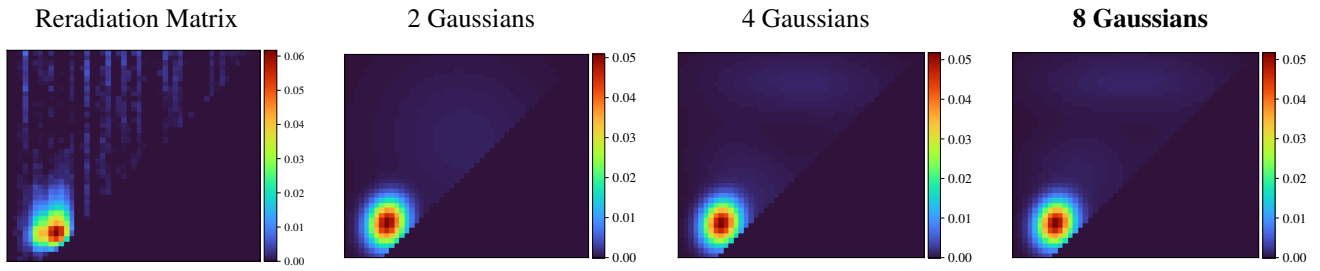
Fitted Material Under Monochromatic Illumination



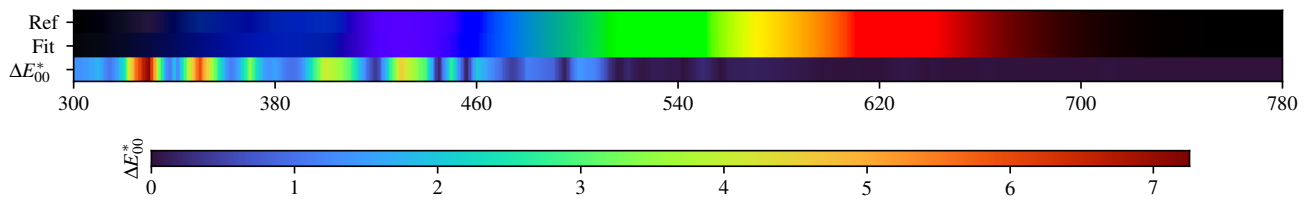
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.32$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.46$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.28$	FL3.15 $\Delta E = 0.56$	HP5 $\Delta E = 0.12$	LED-B5 $\Delta E = 0.45$
B $\Delta E = 0.26$	D65 $\Delta E = 0.32$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.30$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.24$	FL3.11 $\Delta E = 0.37$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.40$	D75 $\Delta E = 0.28$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.17$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.26$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.27$	FL10 $\Delta E = 0.27$	FL3.3 $\Delta E = 0.24$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.22$
D55 $\Delta E = 0.30$	FL1 $\Delta E = 0.33$	FL6 $\Delta E = 0.11$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.21$	FL3.14 $\Delta E = 0.28$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.24$	LED-V2 $\Delta E = 0.29$

CIPLAW10 - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.39$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.12$	D65 $\Delta E = 0.09$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.17$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.11$	E $\Delta E = 0.14$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.18$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.22$

CIPLAW10 - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.255292	0.334354	0.425844	0.585465	0.743440	0.800196	0.821183	0.834423	0.831315	0.836804	0.840625
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.846269	0.847439	0.849377	0.854838	0.851634	0.857175	0.858930	0.858966	0.855872	0.863417	0.859792
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.862011	0.863646	0.863855	0.861954	0.847581	0.825222	0.778486	0.716476	0.721352	0.701103	0.664150
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.653062	0.631394	0.626901	0.673961	0.742954	0.800629	0.824257	0.842589			

2 Gaussians max

Scaling factor: 347.22296237176516

Gaussians:

Weight	Mean	Covariance
0.686308357	380.992379565 445.103691940	611.172360786 83.046565552 83.046565552 902.363803617
0.313691643	536.028855935 611.069846443	15657.471456771 -1213.257614169 -1213.257614169 15277.036410411

4 Gaussians max

Scaling factor: 341.0959013466712

Gaussians:

Weight	Mean	Covariance
0.668665994	380.548792037 443.992602658	593.133351444 80.436783054 80.436783054 833.839034751
0.108737257	440.334049919 513.299246324	4988.866235316 -2116.568241489 -2116.568241489 5878.263653743
0.080450526	641.048646925 519.015372417	6153.434647536 -709.475202638 -709.475202638 7606.878604587
0.142146223	534.337623411 723.910332762	16406.415999183 -330.829456957 -330.829456957 2049.151940206

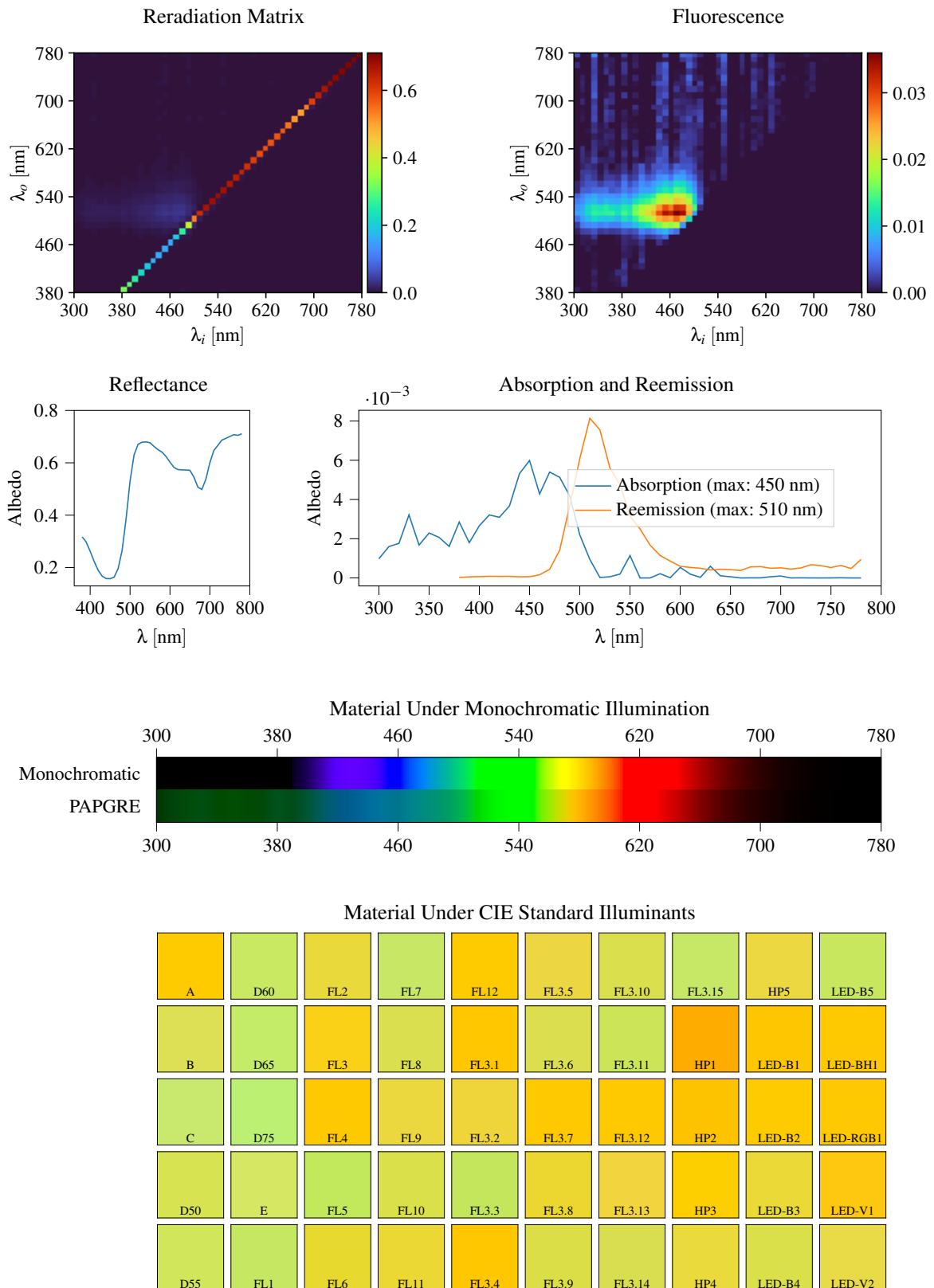
8 Gaussians max

Scaling factor: 341.3964752955953

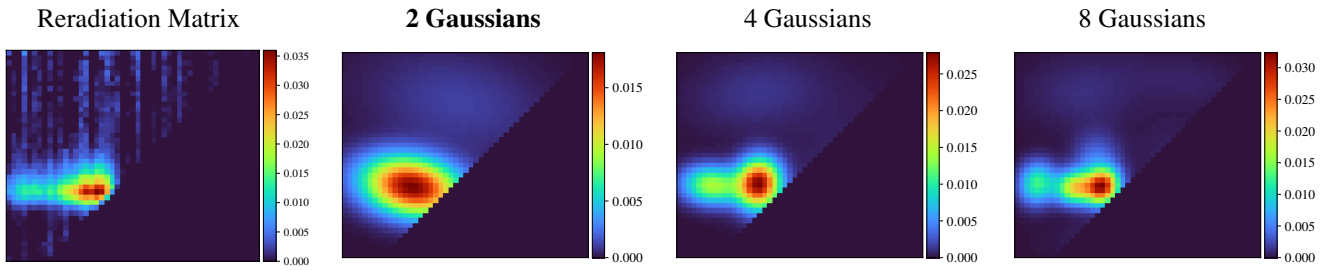
Gaussians:

Weight	Mean	Covariance
0.670914285	380.786708326 444.077339271	597.514215154 84.742316333 84.742316333 836.779284485
0.065686611	570.800976967 436.845818076	10936.976123399 -129.469003628 -129.469003628 2134.314928894
0.075701361	423.802145114 550.547705677	4433.814613032 245.930400838 245.930400838 3455.211396513
0.052357163	640.671184707 580.364747401	6699.940013083 746.969826733 746.969826733 4415.728965004
0.135235662	526.604696953 727.400569379	16391.891755443 52.654012312 52.654012312 1818.930756474

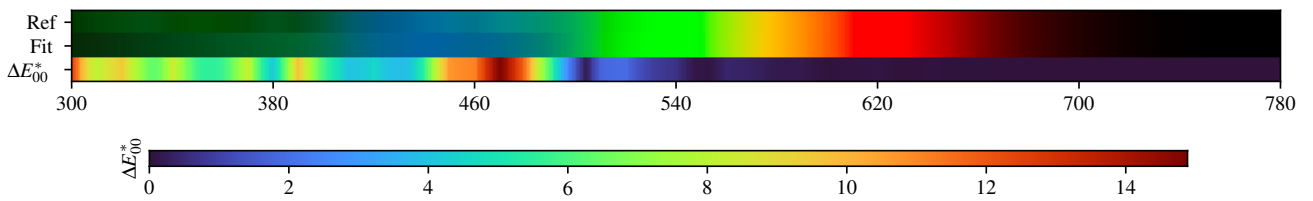
3.49. PAPGRE



PAPGRE - Weighted Expectation-Maximization - 2 Gaussians



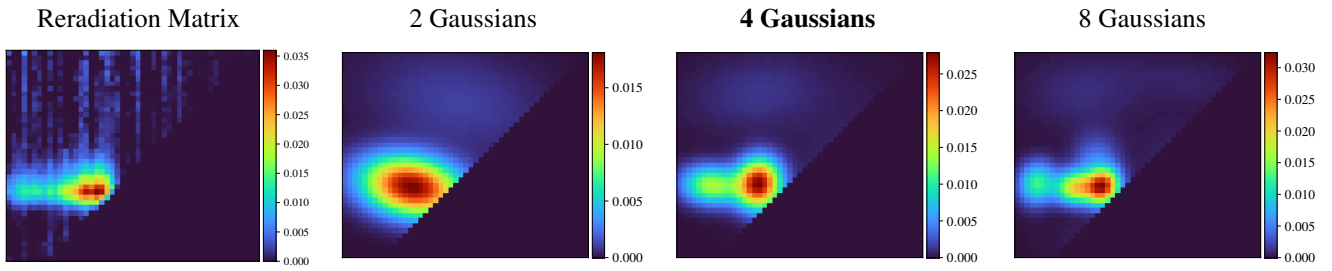
Fitted Material Under Monochromatic Illumination



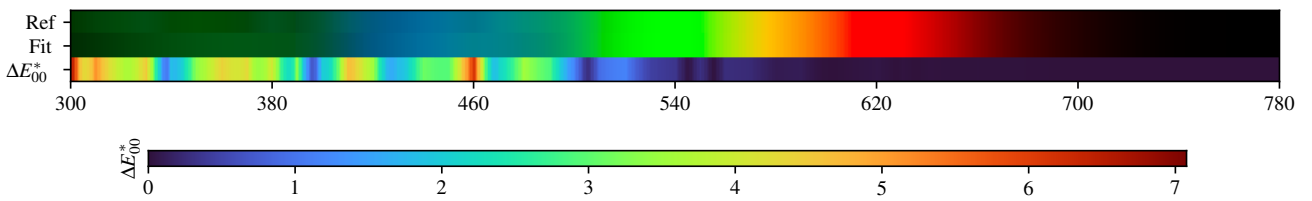
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.80$	D60 $\Delta E = 1.37$	FL2 $\Delta E = 0.99$	FL7 $\Delta E = 1.23$	FL12 $\Delta E = 0.67$	FL3.5 $\Delta E = 1.15$	FL3.10 $\Delta E = 1.36$	FL3.15 $\Delta E = 1.28$	HP5 $\Delta E = 1.21$	LED-B5 $\Delta E = 1.49$
B $\Delta E = 1.37$	D65 $\Delta E = 1.41$	FL3 $\Delta E = 0.77$	FL8 $\Delta E = 1.16$	FL3.1 $\Delta E = 0.47$	FL3.6 $\Delta E = 1.18$	FL3.11 $\Delta E = 1.21$	HP1 $\Delta E = 0.42$	LED-B1 $\Delta E = 0.73$	LED-BH1 $\Delta E = 0.58$
C $\Delta E = 1.53$	D75 $\Delta E = 1.49$	FL4 $\Delta E = 0.60$	FL9 $\Delta E = 1.06$	FL3.2 $\Delta E = 0.90$	FL3.7 $\Delta E = 0.56$	FL3.12 $\Delta E = 0.63$	HP2 $\Delta E = 0.64$	LED-B2 $\Delta E = 0.87$	LED-RGB1 $\Delta E = 0.33$
D50 $\Delta E = 1.29$	E $\Delta E = 1.23$	FL5 $\Delta E = 1.10$	FL10 $\Delta E = 1.21$	FL3.3 $\Delta E = 1.06$	FL3.8 $\Delta E = 0.93$	FL3.13 $\Delta E = 1.21$	HP3 $\Delta E = 0.76$	LED-B3 $\Delta E = 1.14$	LED-V1 $\Delta E = 0.74$
D55 $\Delta E = 1.33$	FL1 $\Delta E = 1.18$	FL6 $\Delta E = 0.86$	FL11 $\Delta E = 1.07$	FL3.4 $\Delta E = 0.35$	FL3.9 $\Delta E = 1.15$	FL3.14 $\Delta E = 1.33$	HP4 $\Delta E = 0.92$	LED-B4 $\Delta E = 1.29$	LED-V2 $\Delta E = 1.18$

PAPGRE - Weighted Expectation-Maximization - 4 Gaussians



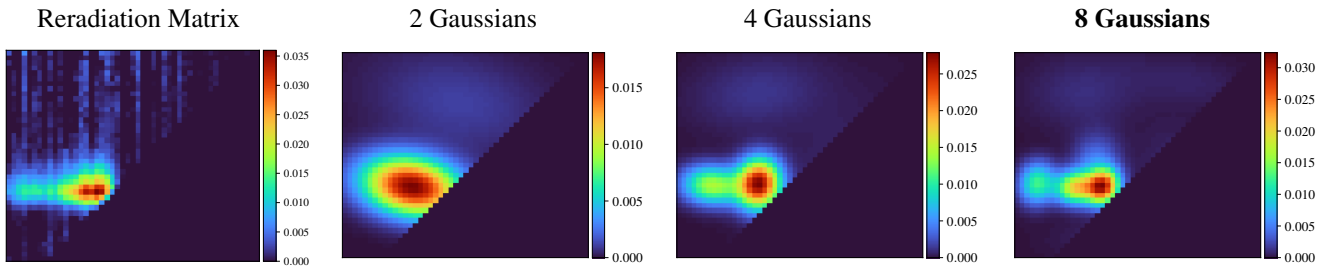
Fitted Material Under Monochromatic Illumination



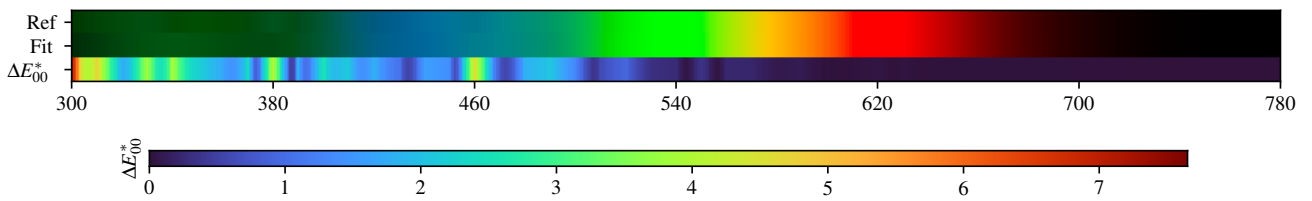
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.21$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.18$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.16$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.38$
B $\Delta E = 0.19$	D65 $\Delta E = 0.23$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.20$
C $\Delta E = 0.23$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.20$
D50 $\Delta E = 0.18$	E $\Delta E = 0.31$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.21$	HP3 $\Delta E = 0.16$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 0.24$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.21$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.35$	LED-V2 $\Delta E = 0.30$

PAPGRE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.06$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.04$	FL3.15 $\Delta E = 0.04$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.08$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.05$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.03$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.08$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.11$	E $\Delta E = 0.09$	FL5 $\Delta E = 0.05$	FL10 $\Delta E = 0.03$	FL3.3 $\Delta E = 0.07$	FL3.8 $\Delta E = 0.02$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.05$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.03$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.11$

PAPGRE - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.317024	0.297673	0.261835	0.223355	0.189626	0.167201	0.157777	0.157351	0.162946	0.195774	0.264980
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.385908	0.530879	0.630152	0.670882	0.678722	0.679759	0.676690	0.662493	0.650170	0.640959	0.624222
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.602530	0.582695	0.574105	0.573067	0.572445	0.571343	0.545004	0.506841	0.498294	0.537754	0.600685
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.647440	0.666563	0.686691	0.693346	0.700641	0.707351	0.704842	0.710964			

2 Gaussians

Scaling factor: 357.83675288708065

Gaussians:

Weight	Mean		Covariance			
0.183631931	524.322024251	684.115157135	15369.658031775	-2083.569357244	-2083.569357244	5445.530006952
0.816368069	433.118460359	516.932028298	4353.401966925	-523.169428657	-523.169428657	1576.211087836

4 Gaussians

Scaling factor: 335.84311419420123

Gaussians:

Weight	Mean		Covariance			
0.123744740	592.074933604	540.915704103	9960.184117424	6609.182747265	6609.182747265	14304.314475749
0.127900940	457.143762716	704.170680450	8690.038995403	853.212165978	853.212165978	2927.758262210
0.480049414	458.596597959	523.106364636	828.262075454	28.523731547	28.523731547	1086.437756860
0.268304907	365.189159729	519.989448842	1535.674088638	-64.576412718	-64.576412718	660.517517556

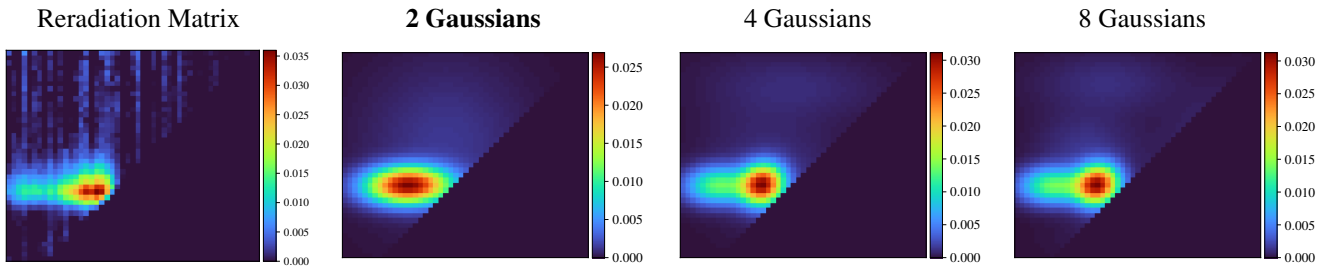
8 Gaussians

Scaling factor: 328.79758024190517

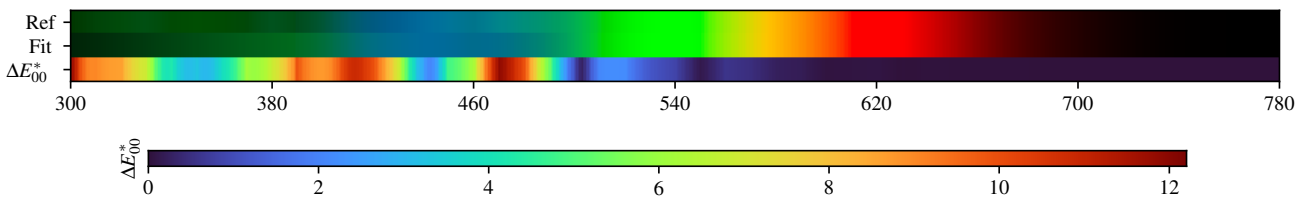
Gaussians:

Weight	Mean		Covariance			
0.048231536	636.622155264	728.071241317	8087.257622165	-1049.405970244	-1049.405970244	1372.418658616
0.115148566	456.572628567	560.825040481	937.332460872	45.440641515	45.440641515	1433.776431162
0.058139083	526.174653500	420.113310349	9922.635994519	527.493071695	527.493071695	926.418243357
0.213339761	416.230199223	515.298366800	702.552926110	14.380146616	14.380146616	473.298431363
0.096048736	431.305209619	702.963893570	6084.896444907	-7.698693118	-7.698693118	2589.050846485
0.161898135	339.987110281	523.866793082	598.281611171	42.067558426	42.067558426	766.978629388
0.262587480	470.993472511	516.855519873	466.898538077	43.297938977	43.297938977	534.381653663
0.044606703	606.434589520	572.284481511	2889.718852465	476.060132682	476.060132682	3002.787822344

PAPGRE - Weighted variational Bayesian inference - 2 Gaussians



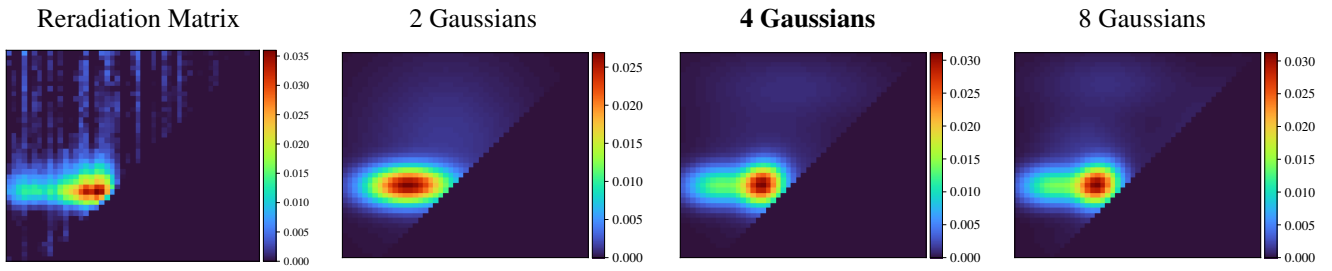
Fitted Material Under Monochromatic Illumination



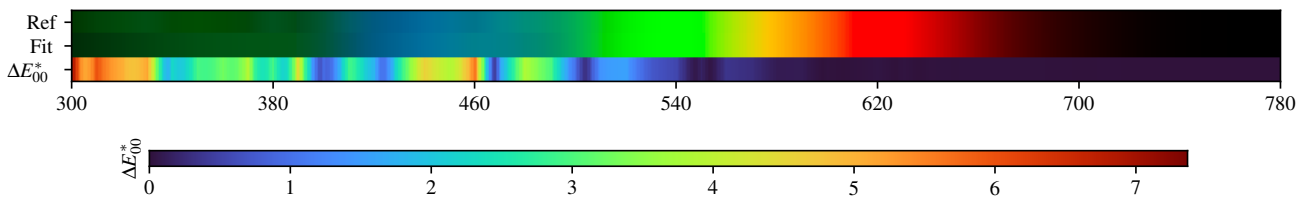
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.30$	D60 $\Delta E = 0.24$	FL2 $\Delta E = 0.40$	FL7 $\Delta E = 0.38$	FL12 $\Delta E = 0.34$	FL3.5 $\Delta E = 0.58$	FL3.10 $\Delta E = 0.80$	FL3.15 $\Delta E = 0.32$	HP5 $\Delta E = 0.33$	LED-B5 $\Delta E = 0.82$
B $\Delta E = 0.37$	D65 $\Delta E = 0.20$	FL3 $\Delta E = 0.32$	FL8 $\Delta E = 0.55$	FL3.1 $\Delta E = 0.26$	FL3.6 $\Delta E = 0.62$	FL3.11 $\Delta E = 0.62$	HP1 $\Delta E = 0.19$	LED-B1 $\Delta E = 0.40$	LED-BH1 $\Delta E = 0.23$
C $\Delta E = 0.28$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.24$	FL9 $\Delta E = 0.50$	FL3.2 $\Delta E = 0.41$	FL3.7 $\Delta E = 0.36$	FL3.12 $\Delta E = 0.41$	HP2 $\Delta E = 0.29$	LED-B2 $\Delta E = 0.49$	LED-RGB1 $\Delta E = 0.24$
D50 $\Delta E = 0.35$	E $\Delta E = 0.57$	FL5 $\Delta E = 0.41$	FL10 $\Delta E = 0.62$	FL3.3 $\Delta E = 0.44$	FL3.8 $\Delta E = 0.54$	FL3.13 $\Delta E = 0.80$	HP3 $\Delta E = 0.22$	LED-B3 $\Delta E = 0.58$	LED-V1 $\Delta E = 0.30$
D55 $\Delta E = 0.29$	FL1 $\Delta E = 0.43$	FL6 $\Delta E = 0.37$	FL11 $\Delta E = 0.55$	FL3.4 $\Delta E = 0.22$	FL3.9 $\Delta E = 0.62$	FL3.14 $\Delta E = 0.86$	HP4 $\Delta E = 0.29$	LED-B4 $\Delta E = 0.71$	LED-V2 $\Delta E = 0.25$

PAPGRE - Weighted variational Bayesian inference - 4 Gaussians



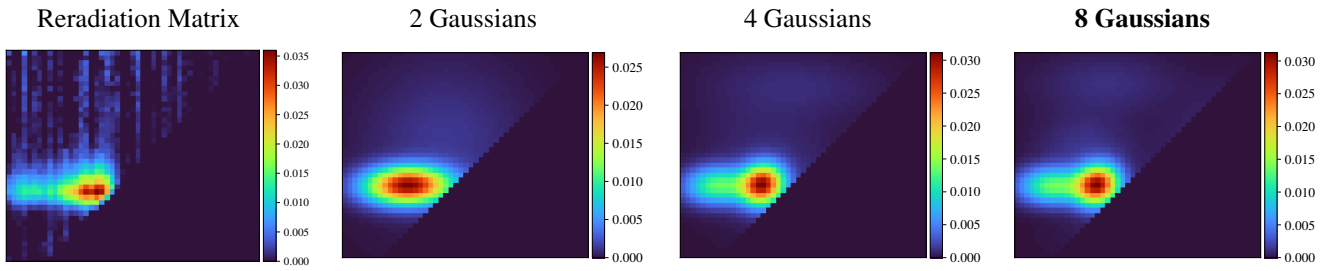
Fitted Material Under Monochromatic Illumination



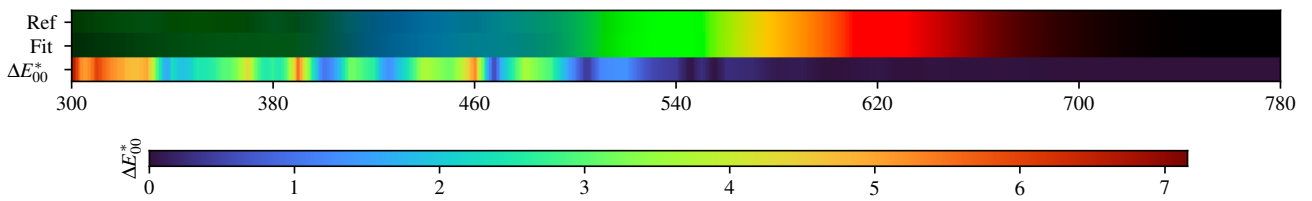
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.21$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.48$
B $\Delta E = 0.21$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.16$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.18$	LED-BH1 $\Delta E = 0.26$
C $\Delta E = 0.27$	D75 $\Delta E = 0.29$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.22$	LED-RGB1 $\Delta E = 0.31$
D50 $\Delta E = 0.21$	E $\Delta E = 0.40$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.13$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.35$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.23$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.44$	LED-V2 $\Delta E = 0.10$

PAPGRE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.11$	D60 $\Delta E = 0.20$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.19$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.41$
B $\Delta E = 0.18$	D65 $\Delta E = 0.21$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.15$	LED-BH1 $\Delta E = 0.22$
C $\Delta E = 0.21$	D75 $\Delta E = 0.23$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.19$	LED-RGB1 $\Delta E = 0.29$
D50 $\Delta E = 0.18$	E $\Delta E = 0.35$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.04$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.30$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.19$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.38$	LED-V2 $\Delta E = 0.11$

PAPGRE - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.317024	0.297673	0.261835	0.223355	0.189626	0.167201	0.157777	0.157351	0.162946	0.195774	0.264980
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.385908	0.530879	0.630152	0.670882	0.678722	0.679759	0.676690	0.662493	0.650170	0.640959	0.624222
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.602530	0.582695	0.574105	0.573067	0.572445	0.571343	0.545004	0.506841	0.498294	0.537754	0.600685
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.647440	0.666563	0.686691	0.693346	0.700641	0.707351	0.704842	0.710964			

2 Gaussians max

Scaling factor: 344.5426729893535

Gaussians:

Weight	Mean		Covariance			
0.340498969	498.331405337	601.829803066	12737.608096904	272.345827103	272.345827103	13416.260367719
0.659501031	425.059061636	519.759730563	3179.126465839	52.211672414	52.211672414	606.721623141

4 Gaussians max

Scaling factor: 334.2568437300351

Gaussians:

Weight	Mean		Covariance			
0.223425941	485.511366407	539.030474871	9911.723749475	-2161.680009279	-2161.680009279	8563.208568685
0.255222687	369.106278976	519.611132045	1859.311400809	35.374505729	35.374505729	594.743441223
0.404568009	458.757836489	521.229559523	801.859237181	64.348236261	64.348236261	712.724941214
0.116783363	530.289294342	718.006195074	16318.091803874	-742.289776727	-742.289776727	2201.238673957

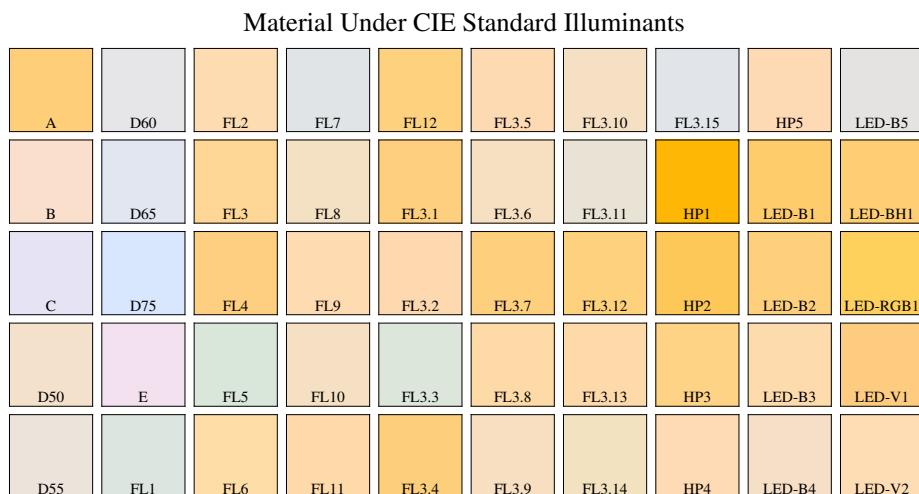
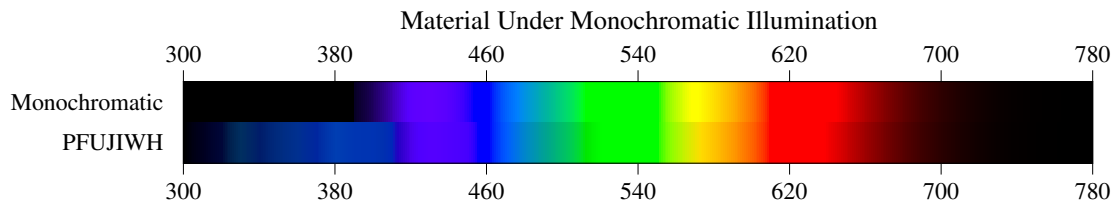
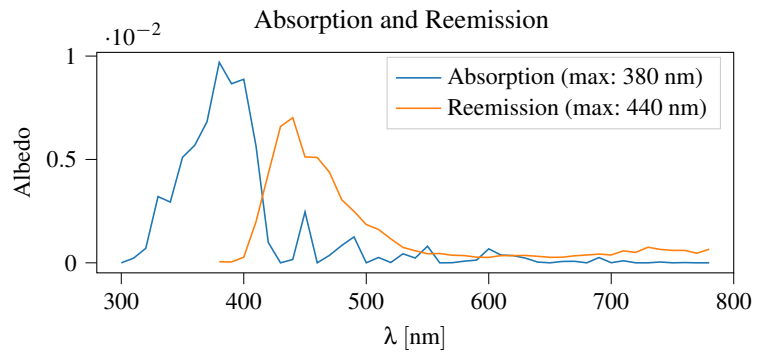
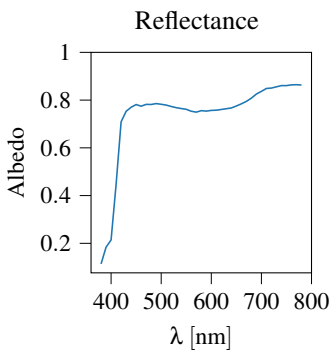
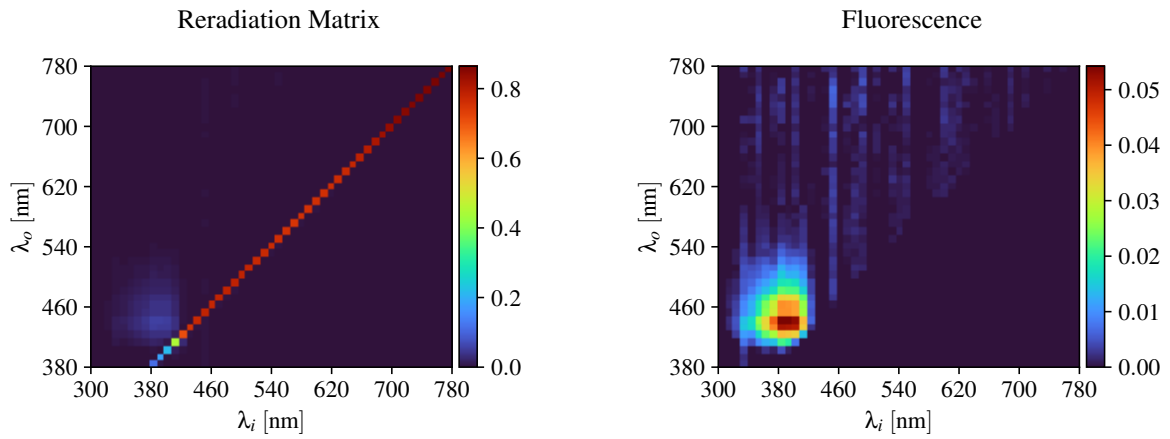
8 Gaussians max

Scaling factor: 335.24746279491006

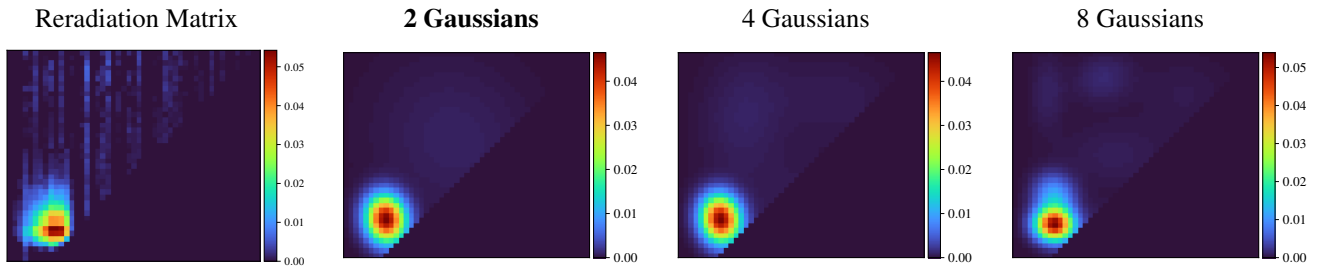
Gaussians:

Weight	Mean		Covariance			
0.073765938	530.543663345	440.363213743	10106.434018389	814.240327774	814.240327774	2491.103804673
0.268832075	370.598069076	518.852057023	1935.910880689	20.476482759	20.476482759	579.370869757
0.412475838	459.899700984	520.725560699	832.962331046	71.125391403	71.125391403	696.575362094
0.048911945	647.995104972	630.681803029	5955.733535070	4386.550506969	4386.550506969	6232.264993105
0.087293198	435.349010894	593.968164563	4662.779973174	45.645943570	45.645943570	2023.201585631
0.107694558	479.233372546	722.254614719	10544.070104234	32.241334779	32.241334779	1999.681455300

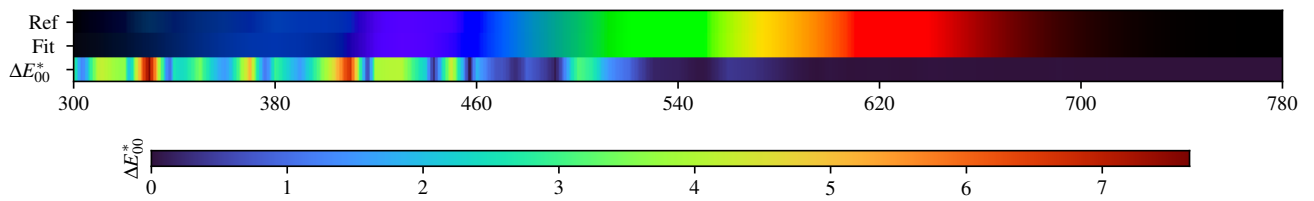
3.50. PFUJIWH



PFUJIWH - Weighted Expectation-Maximization - 2 Gaussians



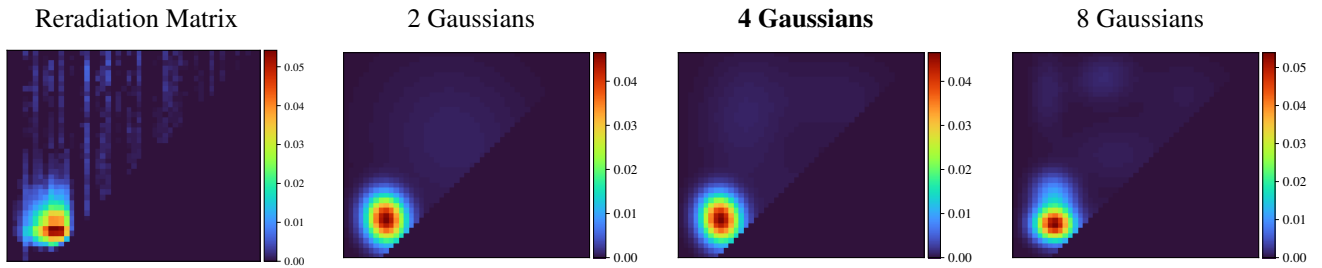
Fitted Material Under Monochromatic Illumination



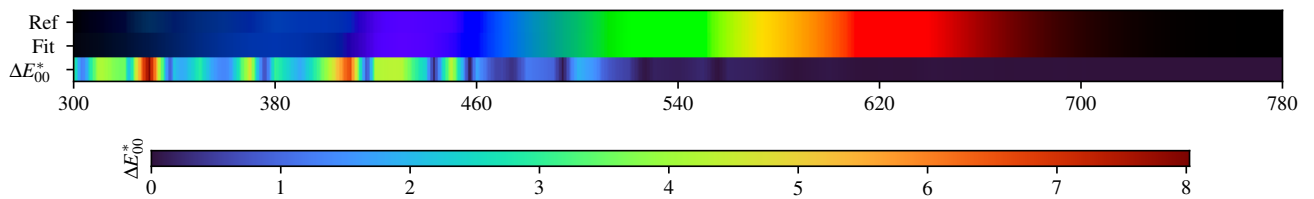
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.42$	FL2 $\Delta E = 0.20$	FL7 $\Delta E = 0.44$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.53$	HP5 $\Delta E = 0.25$	LED-B5 $\Delta E = 0.41$
B $\Delta E = 0.27$	D65 $\Delta E = 0.40$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.27$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.27$	FL3.11 $\Delta E = 0.30$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.41$	D75 $\Delta E = 0.35$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.17$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.30$	E $\Delta E = 0.24$	FL5 $\Delta E = 0.38$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.40$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.36$	FL1 $\Delta E = 0.41$	FL6 $\Delta E = 0.20$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.27$	HP4 $\Delta E = 0.22$	LED-B4 $\Delta E = 0.33$	LED-V2 $\Delta E = 0.28$

PFUJIWH - Weighted Expectation-Maximization - 4 Gaussians



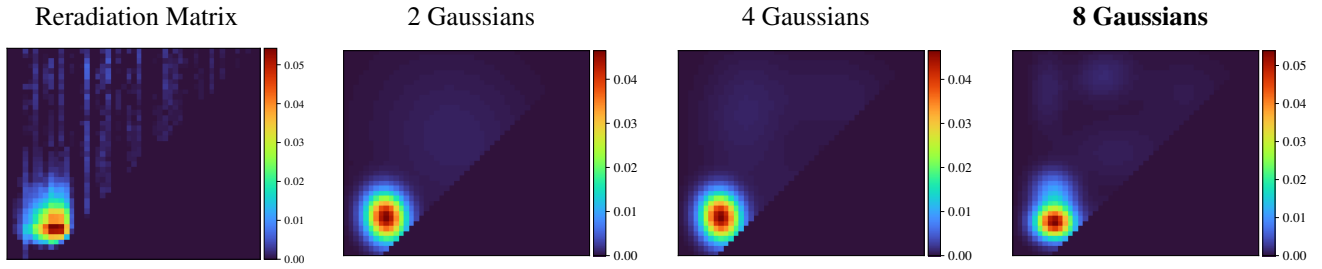
Fitted Material Under Monochromatic Illumination



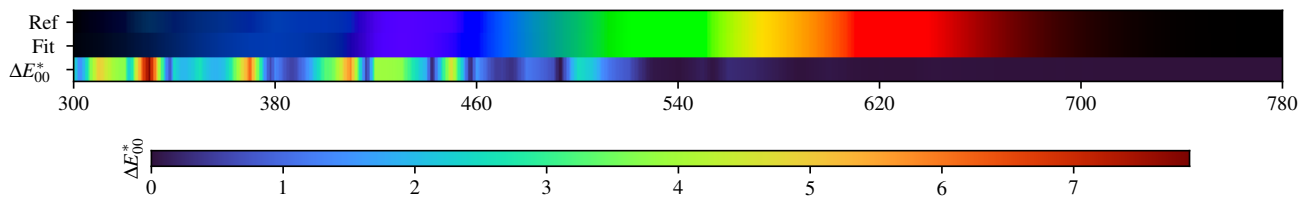
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.01$	D60 $\Delta E = 0.17$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.31$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.37$
B $\Delta E = 0.11$	D65 $\Delta E = 0.18$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.03$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.30$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.19$	D75 $\Delta E = 0.19$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.02$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.09$	E $\Delta E = 0.14$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.02$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.21$	FL3.14 $\Delta E = 0.02$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.24$	LED-V2 $\Delta E = 0.18$

PFUJIWH - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.41$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.29$
B $\Delta E = 0.06$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.06$	D75 $\Delta E = 0.10$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.08$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.27$
D55 $\Delta E = 0.11$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.28$

PFUJIWH - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.113875	0.183921	0.214214	0.446668	0.708982	0.753002	0.770130	0.781381	0.774545	0.782093	0.781674
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.785384	0.782481	0.779130	0.773256	0.768381	0.764621	0.761419	0.753323	0.749609	0.755772	0.753874
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.756838	0.757752	0.760706	0.763954	0.767036	0.775294	0.784377	0.794624	0.808248	0.825426	0.836623
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.848735	0.850436	0.855576	0.860780	0.860724	0.863804	0.864489	0.863223			

2 Gaussians

Scaling factor: 323.08487980549444

Gaussians:

Weight	Mean	Covariance				
0.736225438	379.368393235	452.703704461	678.965660905	-59.328159279	-59.328159279	981.775691140
0.263774562	513.102320871	612.087637973	12773.015952168	-1059.505995206	-1059.505995206	13197.981649309

4 Gaussians

Scaling factor: 319.986002041689

Gaussians:

Weight	Mean	Covariance				
0.107048483	425.261831297	660.316869771	3560.191087947	423.932404686	423.932404686	7003.750714496
0.070520485	609.066991483	692.148844644	6651.962758944	-541.513630623	-541.513630623	3930.787944204
0.731549196	379.176932164	452.566937034	668.107862256	-56.856729533	-56.856729533	967.224399533
0.090881836	536.763891860	486.054896000	11552.856763598	-463.024962955	-463.024962955	4531.790588586

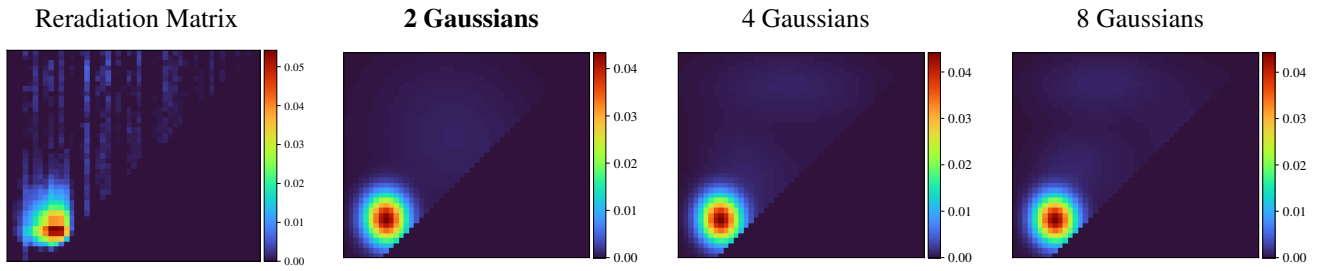
8 Gaussians

Scaling factor: 314.8528024925055

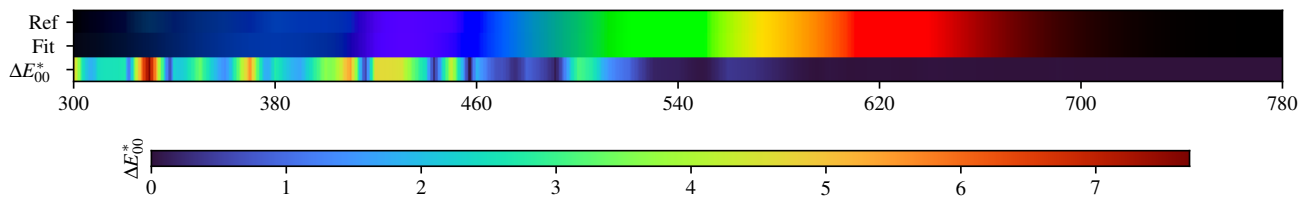
Gaussians:

Weight	Mean	Covariance				
0.029524385	365.126645251	704.728066925	537.643478354	52.407188153	52.407188153	2663.811215608
0.050859459	636.361145897	699.698118966	4812.339560703	-376.266254674	-376.266254674	3191.040485738
0.041966126	446.575663909	426.774913002	1795.105554136	247.485883974	247.485883974	1126.575800388
0.031738467	638.604695251	454.981733067	6467.916563184	883.004256262	883.004256262	3009.529259879
0.187104174	378.247899235	495.301908831	671.592377126	-53.843554443	-53.843554443	810.634011352
0.071801527	496.955251378	580.228186272	6235.222971250	25.677452713	25.677452713	2364.551875763
0.544422550	378.014496214	441.714094280	617.073734142	-11.061213646	-11.061213646	447.174422340
0.042583312	475.208948554	732.405471606	1489.069179313	171.232507079	171.232507079	1066.570976678

PFUJIWH - Weighted variational Bayesian inference - 2 Gaussians



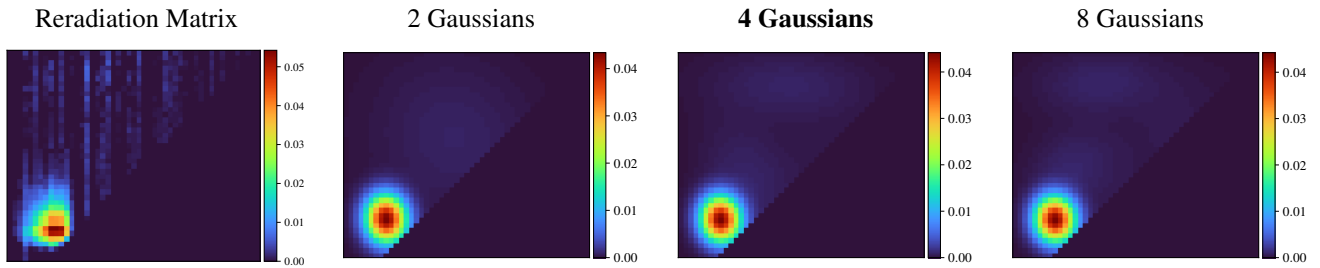
Fitted Material Under Monochromatic Illumination



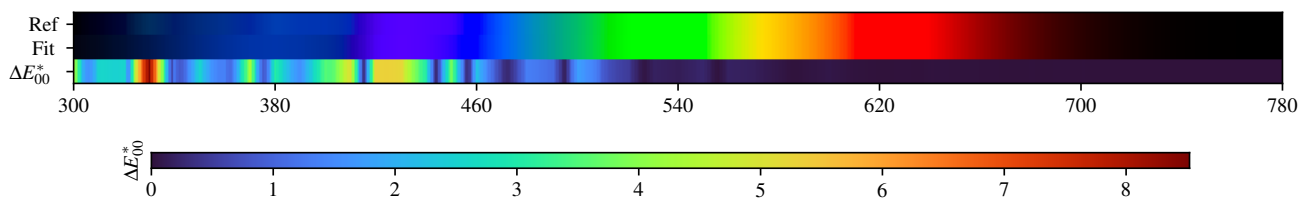
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.36$	FL2 $\Delta E = 0.17$	FL7 $\Delta E = 0.33$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.21$	FL3.15 $\Delta E = 0.58$	HP5 $\Delta E = 0.24$	LED-B5 $\Delta E = 0.43$
B $\Delta E = 0.19$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.23$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.23$	FL3.11 $\Delta E = 0.30$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.18$
C $\Delta E = 0.26$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.22$	E $\Delta E = 0.37$	FL5 $\Delta E = 0.30$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.32$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.28$	FL1 $\Delta E = 0.32$	FL6 $\Delta E = 0.17$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.24$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.34$	LED-V2 $\Delta E = 0.22$

PFUJIWH - Weighted variational Bayesian inference - 4 Gaussians



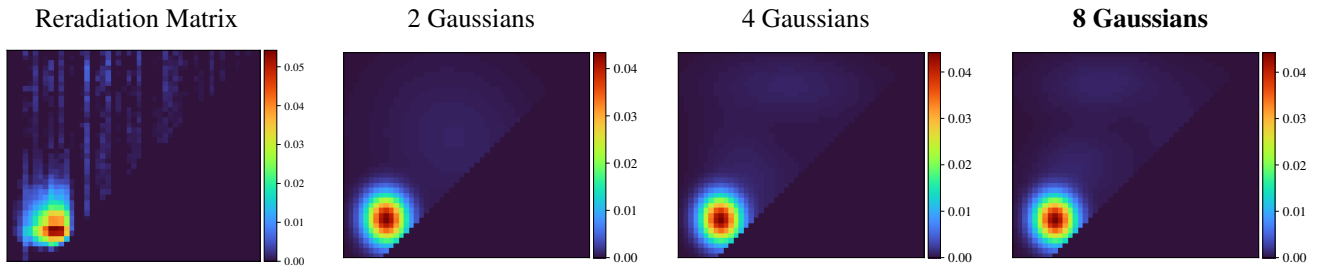
Fitted Material Under Monochromatic Illumination



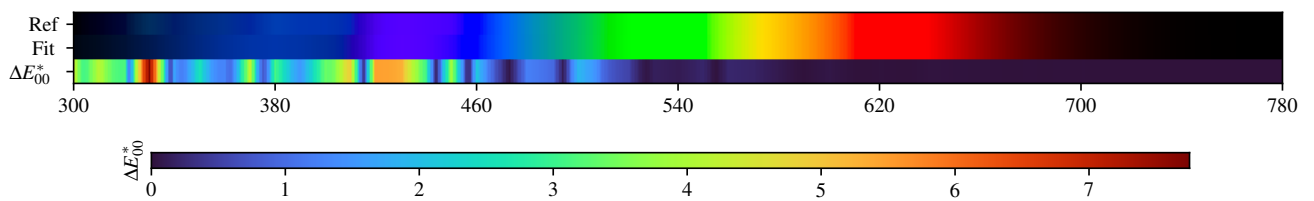
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.11$	D60 $\Delta E = 0.60$	FL2 $\Delta E = 0.19$	FL7 $\Delta E = 0.51$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.36$	FL3.15 $\Delta E = 0.80$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.55$
B $\Delta E = 0.35$	D65 $\Delta E = 0.62$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.33$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.25$	FL3.11 $\Delta E = 0.53$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.47$	D75 $\Delta E = 0.58$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.43$	E $\Delta E = 0.46$	FL5 $\Delta E = 0.30$	FL10 $\Delta E = 0.40$	FL3.3 $\Delta E = 0.26$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.21$
D55 $\Delta E = 0.54$	FL1 $\Delta E = 0.36$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.20$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.32$	FL3.14 $\Delta E = 0.27$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.31$	LED-V2 $\Delta E = 0.27$

PFUJIWH - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.38$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.29$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.24$	FL3.15 $\Delta E = 0.62$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.38$
B $\Delta E = 0.19$	D65 $\Delta E = 0.40$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.38$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.24$	D75 $\Delta E = 0.37$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.25$	E $\Delta E = 0.35$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.27$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.33$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.07$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.15$

PFUJIWH - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.113875	0.183921	0.214214	0.446668	0.708982	0.753002	0.770130	0.781381	0.774545	0.782093	0.781674
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.785384	0.782481	0.779130	0.773256	0.768381	0.764621	0.761419	0.753323	0.749609	0.755772	0.753874
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.756838	0.757752	0.760706	0.763954	0.767036	0.775294	0.784377	0.794624	0.808248	0.825426	0.836623
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.848735	0.850436	0.855576	0.860780	0.860724	0.863804	0.864489	0.863223			

2 Gaussians max

Scaling factor: 323.73378146962665

Gaussians:

Weight	Mean		Covariance			
0.740726631	379.794806821	453.052967795	749.765950620	-31.768848339	-31.768848339	1032.118834636
0.259273369	514.728141157	613.985737000	12775.953017851	-1245.989611931	-1245.989611931	13063.408096519

4 Gaussians max

Scaling factor: 318.44534211315727

Gaussians:

Weight	Mean		Covariance			
0.719123139	379.159491768	452.151944801	717.702144924	-24.590416490	-24.590416490	959.883583883
0.105204867	430.910602809	531.795794771	3901.970657584	-1448.751850218	-1448.751850218	6699.182354644
0.069173554	609.199427994	538.918954133	7318.199829215	-1192.015865459	-1192.015865459	8184.370355948
0.106498439	514.562471064	719.799390092	12544.911108693	-413.907551845	-413.907551845	2099.695544605

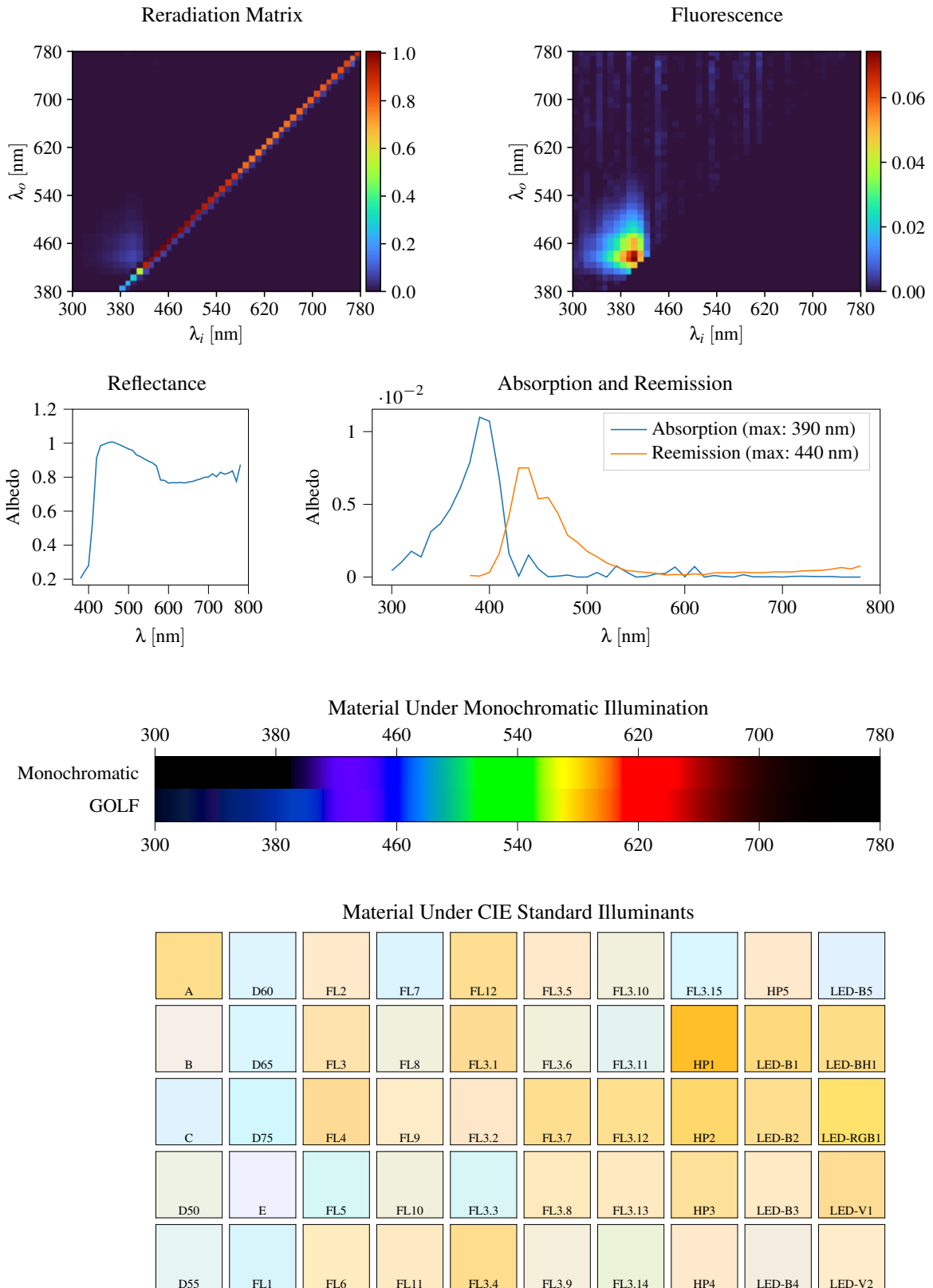
8 Gaussians max

Scaling factor: 320.3213609704309

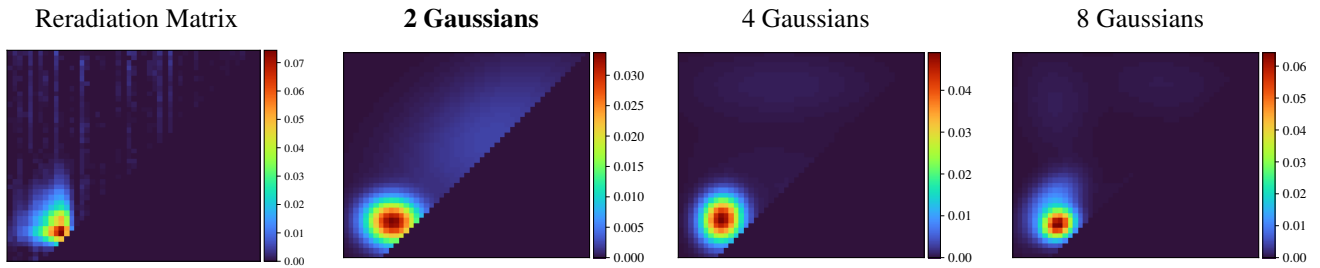
Gaussians:

Weight	Mean		Covariance			
0.718803986	379.646935746	451.776870701	734.819907635	-23.670114639	-23.670114639	942.702126526
0.058662018	558.734877473	457.319739006	11520.817390471	325.269174859	325.269174859	3316.784935488
0.069210725	415.686149759	558.776181682	3538.332883856	479.498026704	479.498026704	2651.572718854
0.061752282	616.399309101	634.537936857	6899.189756688	2644.934814916	2644.934814916	5939.374957034
0.088462118	468.653815300	723.074947796	7719.870052586	331.290053783	331.290053783	1907.207818471

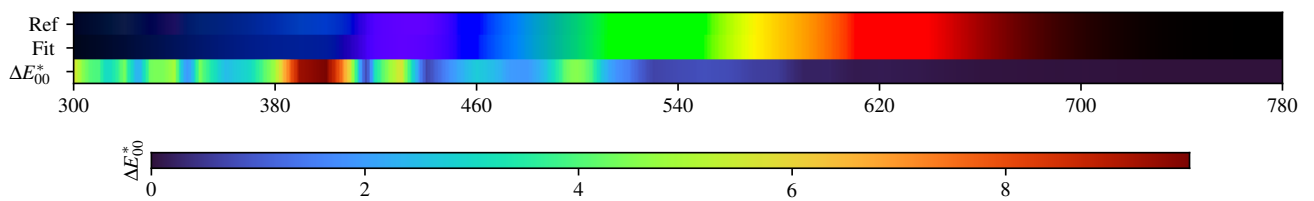
3.51. GOLF



GOLF - Weighted Expectation-Maximization - 2 Gaussians



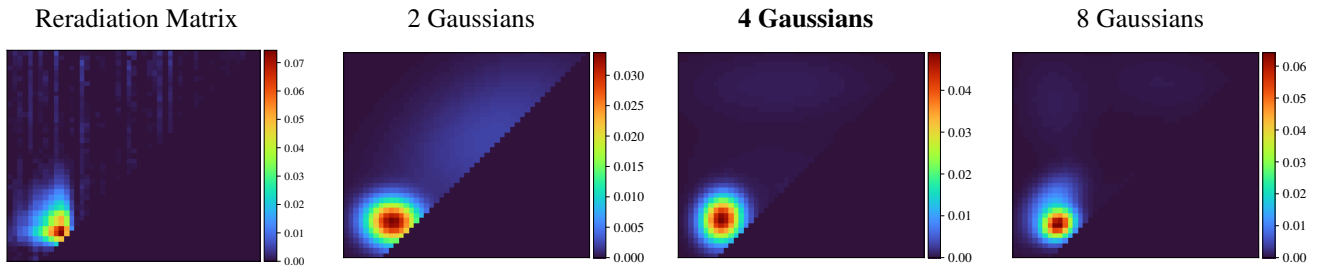
Fitted Material Under Monochromatic Illumination



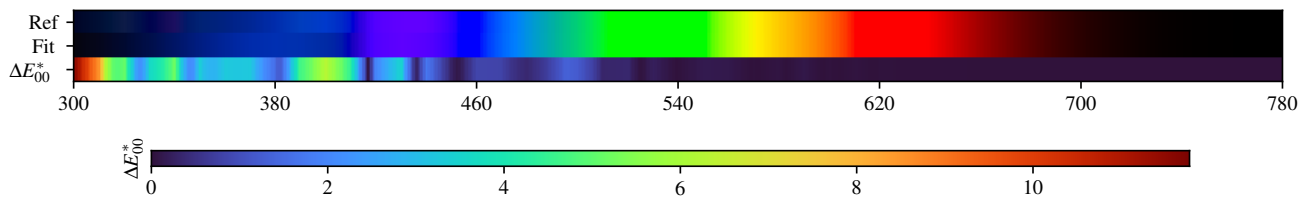
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.51$	D60 $\Delta E = 1.59$	FL2 $\Delta E = 1.04$	FL7 $\Delta E = 1.18$	FL12 $\Delta E = 0.53$	FL3.5 $\Delta E = 0.86$	FL3.10 $\Delta E = 1.25$	FL3.15 $\Delta E = 1.46$	HP5 $\Delta E = 1.02$	LED-B5 $\Delta E = 1.22$
B $\Delta E = 1.50$	D65 $\Delta E = 1.45$	FL3 $\Delta E = 0.65$	FL8 $\Delta E = 1.36$	FL3.1 $\Delta E = 0.49$	FL3.6 $\Delta E = 1.31$	FL3.11 $\Delta E = 1.25$	HP1 $\Delta E = 0.31$	LED-B1 $\Delta E = 0.52$	LED-BH1 $\Delta E = 0.64$
C $\Delta E = 1.38$	D75 $\Delta E = 1.31$	FL4 $\Delta E = 0.51$	FL9 $\Delta E = 0.95$	FL3.2 $\Delta E = 0.81$	FL3.7 $\Delta E = 0.53$	FL3.12 $\Delta E = 0.51$	HP2 $\Delta E = 0.46$	LED-B2 $\Delta E = 0.57$	LED-RGB1 $\Delta E = 0.53$
D50 $\Delta E = 1.73$	E $\Delta E = 2.35$	FL5 $\Delta E = 1.17$	FL10 $\Delta E = 1.35$	FL3.3 $\Delta E = 1.17$	FL3.8 $\Delta E = 0.89$	FL3.13 $\Delta E = 0.78$	HP3 $\Delta E = 0.60$	LED-B3 $\Delta E = 0.97$	LED-V1 $\Delta E = 0.53$
D55 $\Delta E = 1.85$	FL1 $\Delta E = 1.16$	FL6 $\Delta E = 0.99$	FL11 $\Delta E = 0.88$	FL3.4 $\Delta E = 0.47$	FL3.9 $\Delta E = 1.37$	FL3.14 $\Delta E = 1.27$	HP4 $\Delta E = 0.99$	LED-B4 $\Delta E = 1.38$	LED-V2 $\Delta E = 1.20$

GOLF - Weighted Expectation-Maximization - 4 Gaussians



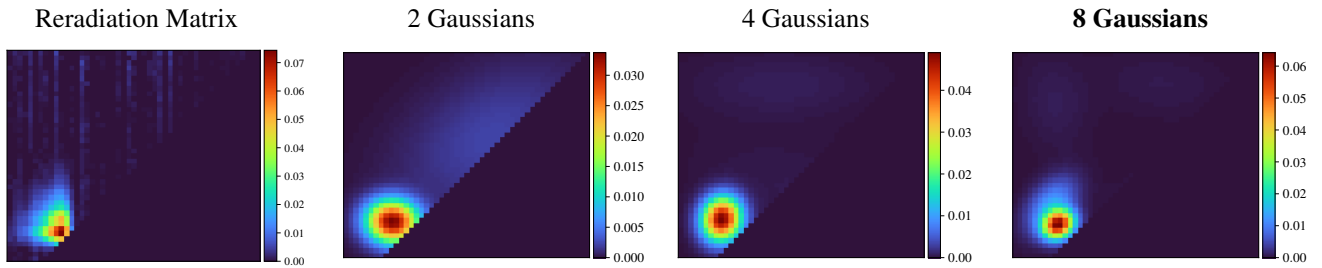
Fitted Material Under Monochromatic Illumination



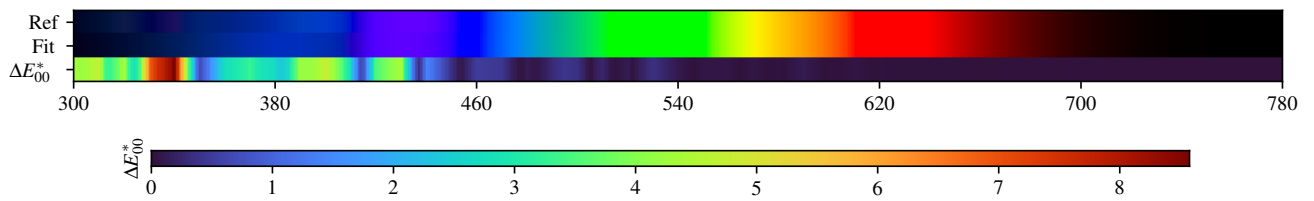
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.11$	D60 $\Delta E = 0.48$	FL2 $\Delta E = 0.26$	FL7 $\Delta E = 0.47$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.22$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.70$	HP5 $\Delta E = 0.26$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.43$	D65 $\Delta E = 0.46$	FL3 $\Delta E = 0.17$	FL8 $\Delta E = 0.25$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.21$	FL3.11 $\Delta E = 0.18$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.42$	D75 $\Delta E = 0.38$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.22$	FL3.2 $\Delta E = 0.26$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.35$	E $\Delta E = 0.39$	FL5 $\Delta E = 0.36$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.36$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.61$
D55 $\Delta E = 0.47$	FL1 $\Delta E = 0.39$	FL6 $\Delta E = 0.19$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.13$	FL3.9 $\Delta E = 0.16$	FL3.14 $\Delta E = 0.19$	HP4 $\Delta E = 0.45$	LED-B4 $\Delta E = 0.24$	LED-V2 $\Delta E = 0.76$

GOLF - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.23$	FL2 $\Delta E = 0.20$	FL7 $\Delta E = 0.28$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.19$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.29$
B $\Delta E = 0.23$	D65 $\Delta E = 0.21$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.20$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.25$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.24$	D75 $\Delta E = 0.18$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.17$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.21$	E $\Delta E = 0.33$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.20$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.49$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.25$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.27$	LED-B4 $\Delta E = 0.32$	LED-V2 $\Delta E = 0.61$

GOLF - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.205374	0.244926	0.280153	0.541788	0.913680	0.985578	0.994681	1.004680	1.007170	0.998772	0.988534
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.977278	0.966361	0.958015	0.930984	0.921199	0.906828	0.894186	0.884086	0.865609	0.783700	0.781041
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.765114	0.768023	0.766819	0.769413	0.765969	0.771541	0.774890	0.782963	0.789362	0.799470	0.800835
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.819771	0.802896	0.828924	0.818103	0.823858	0.837037	0.775270	0.873639			

2 Gaussians

Scaling factor: 384.4363770724219

Gaussians:

Weight	Mean		Covariance			
0.443266852	585.792062313	616.019051892	15652.726884135	5647.795431423	5647.795431423	10717.572258480
0.556733148	392.460695157	447.351797381	1229.203208962	-36.008930881	-36.008930881	840.995558161

4 Gaussians

Scaling factor: 512.445342030704

Gaussians:

Weight	Mean		Covariance			
0.393072610	581.821606559	571.821606559	13611.643489239	13611.643488239	13611.643488239	13611.643489239
0.067865018	500.055088296	719.551850760	17124.534238201	7.586735376	7.586735376	2170.421868712
0.072383924	517.916509369	514.071056347	17669.830983328	-3668.291933017	-3668.291933017	6515.294834961
0.466678448	381.493656294	452.787374859	693.143634506	47.525604180	47.525604180	869.864385274

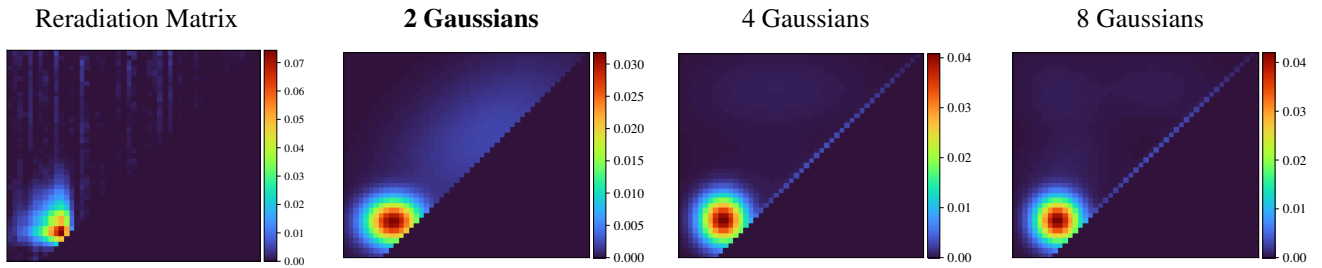
8 Gaussians

Scaling factor: 501.5610431442608

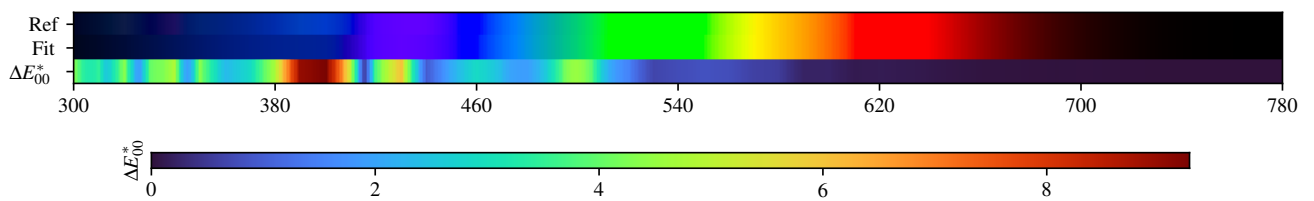
Gaussians:

Weight	Mean		Covariance			
0.122843249	719.857688311	709.857688311	1815.126665118	1815.126664118	1815.126664118	1815.126665118
0.176638954	371.893286361	479.061690265	1053.934556609	490.746347419	490.746347419	1290.644822091
0.046859308	588.711221970	473.586892109	11105.643244027	1386.153238769	1386.153238769	5202.923209723
0.301777340	386.730202422	441.546446932	430.930207876	62.004804129	62.004804129	367.576644503
0.040508885	589.841792594	721.699293395	8478.627314069	-635.791075713	-635.791075713	2122.291424702
0.199623280	549.102876632	539.102876632	4980.724735958	4980.724734958	4980.724734958	4980.724735958
0.041140028	378.731607446	681.840400663	2194.019482096	-463.033182857	-463.033182857	4603.590473891
0.070608956	434.165769690	424.165769690	558.129612971	558.129611971	558.129611971	558.129612971

GOLF - Weighted variational Bayesian inference - 2 Gaussians



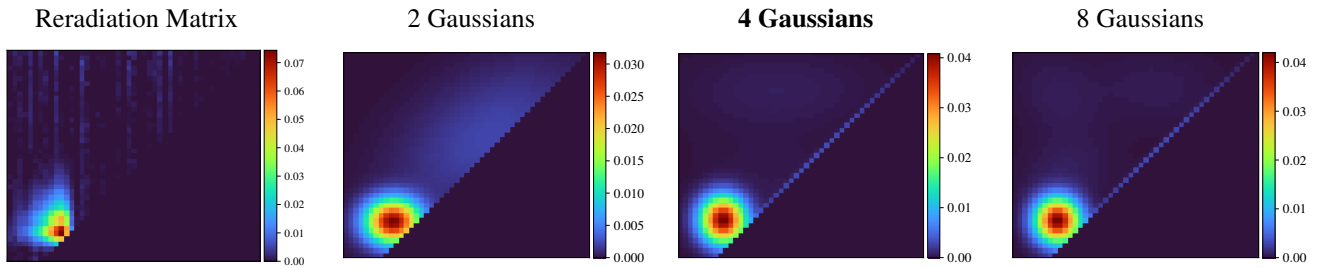
Fitted Material Under Monochromatic Illumination



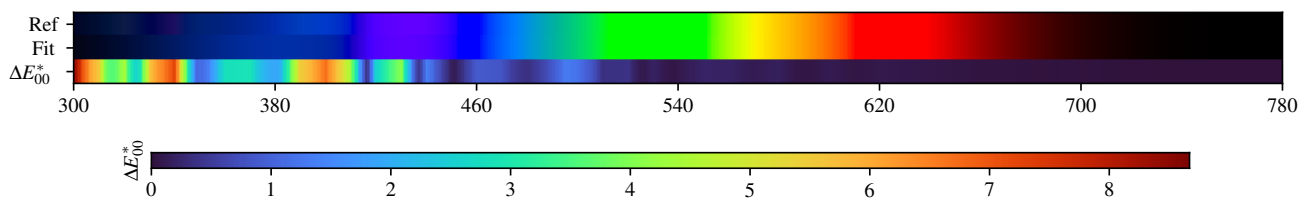
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.50$	D60 $\Delta E = 1.63$	FL2 $\Delta E = 0.98$	FL7 $\Delta E = 1.12$	FL12 $\Delta E = 0.51$	FL3.5 $\Delta E = 0.82$	FL3.10 $\Delta E = 1.19$	FL3.15 $\Delta E = 1.50$	HP5 $\Delta E = 0.92$	LED-B5 $\Delta E = 1.15$
B $\Delta E = 1.42$	D65 $\Delta E = 1.49$	FL3 $\Delta E = 0.62$	FL8 $\Delta E = 1.30$	FL3.1 $\Delta E = 0.48$	FL3.6 $\Delta E = 1.25$	FL3.11 $\Delta E = 1.17$	HP1 $\Delta E = 0.31$	LED-B1 $\Delta E = 0.52$	LED-BH1 $\Delta E = 0.64$
C $\Delta E = 1.26$	D75 $\Delta E = 1.30$	FL4 $\Delta E = 0.49$	FL9 $\Delta E = 0.90$	FL3.2 $\Delta E = 0.78$	FL3.7 $\Delta E = 0.52$	FL3.12 $\Delta E = 0.50$	HP2 $\Delta E = 0.45$	LED-B2 $\Delta E = 0.57$	LED-RGB1 $\Delta E = 0.52$
D50 $\Delta E = 1.69$	E $\Delta E = 2.41$	FL5 $\Delta E = 1.12$	FL10 $\Delta E = 1.27$	FL3.3 $\Delta E = 1.13$	FL3.8 $\Delta E = 0.85$	FL3.13 $\Delta E = 0.76$	HP3 $\Delta E = 0.56$	LED-B3 $\Delta E = 0.94$	LED-V1 $\Delta E = 0.53$
D55 $\Delta E = 1.88$	FL1 $\Delta E = 1.10$	FL6 $\Delta E = 0.94$	FL11 $\Delta E = 0.85$	FL3.4 $\Delta E = 0.46$	FL3.9 $\Delta E = 1.30$	FL3.14 $\Delta E = 1.23$	HP4 $\Delta E = 0.88$	LED-B4 $\Delta E = 1.31$	LED-V2 $\Delta E = 1.12$

GOLF - Weighted variational Bayesian inference - 4 Gaussians



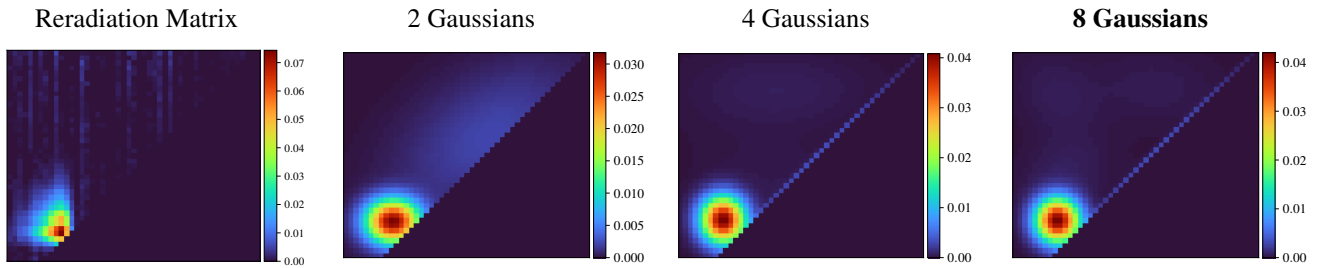
Fitted Material Under Monochromatic Illumination



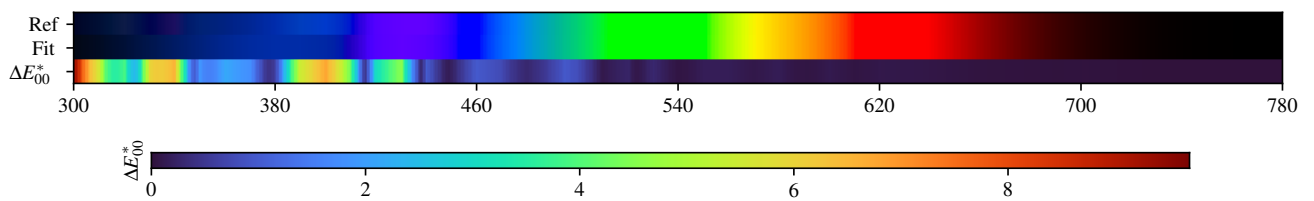
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.59$	FL2 $\Delta E = 0.16$	FL7 $\Delta E = 0.32$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.75$	HP5 $\Delta E = 0.12$	LED-B5 $\Delta E = 0.32$
B $\Delta E = 0.33$	D65 $\Delta E = 0.59$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.30$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.22$
C $\Delta E = 0.31$	D75 $\Delta E = 0.50$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.20$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.15$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.39$	E $\Delta E = 0.68$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.25$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.36$
D55 $\Delta E = 0.56$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.15$	FL3.9 $\Delta E = 0.22$	FL3.14 $\Delta E = 0.20$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.33$	LED-V2 $\Delta E = 0.43$

GOLF - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.38$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.21$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.22$	FL3.15 $\Delta E = 0.60$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.33$
B $\Delta E = 0.19$	D65 $\Delta E = 0.36$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.34$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.23$
C $\Delta E = 0.15$	D75 $\Delta E = 0.28$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.27$	E $\Delta E = 0.46$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.22$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 0.29$
D55 $\Delta E = 0.39$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.11$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.16$	HP4 $\Delta E = 0.11$	LED-B4 $\Delta E = 0.34$	LED-V2 $\Delta E = 0.35$

GOLF - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.205374	0.244926	0.280153	0.541788	0.913680	0.985578	0.994681	1.004680	1.007170	0.998772	0.988534
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.977278	0.966361	0.958015	0.930984	0.921199	0.906828	0.894186	0.884086	0.865609	0.783700	0.781041
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.765114	0.768023	0.766819	0.769413	0.765969	0.771541	0.774890	0.782963	0.789362	0.799470	0.800835
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.819771	0.802896	0.828924	0.818103	0.823858	0.837037	0.775270	0.873639			

2 Gaussians max

Scaling factor: 385.7457705702437

Gaussians:

Weight	Mean		Covariance			
0.559402225	393.053163975	447.800797615	1324.659036229	5.167866305	5.167866305	894.122146148
0.440597775	586.594098009	616.798332281	15618.480428898	5567.221359553	5567.221359553	10670.293739755

4 Gaussians max

Scaling factor: 486.81401091982076

Gaussians:

Weight	Mean		Covariance			
0.504091168	384.639776074	450.998401827	887.006468387	-11.608759640	-11.608759640	1011.526269450
0.363334893	596.799843936	586.617421211	12360.572730658	12305.662506845	12305.662506845	12345.525768648
0.061749774	531.277096739	509.648765205	17150.745851785	-4300.614280674	-4300.614280674	6398.436813253
0.070824165	494.409911876	712.634935983	16111.850138751	13.281810402	13.281810402	3005.542843114

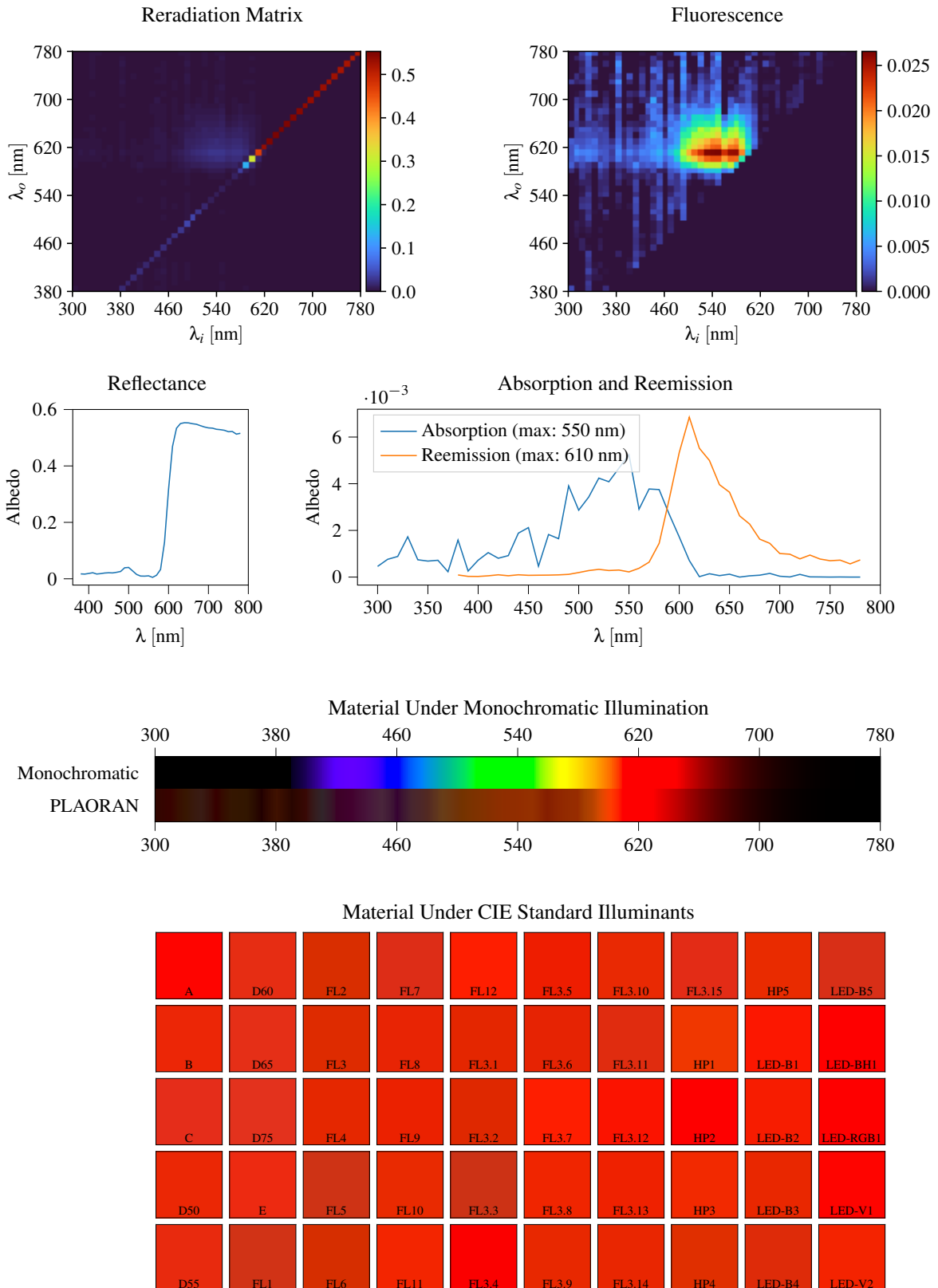
8 Gaussians max

Scaling factor: 485.6170299221849

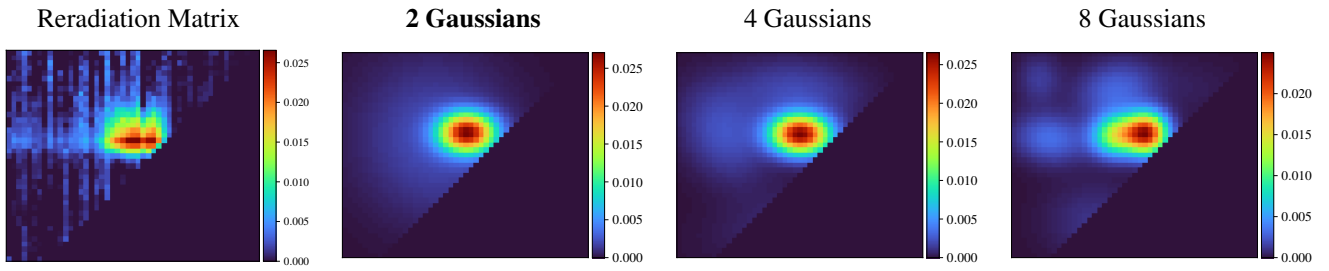
Gaussians:

Weight	Mean		Covariance			
0.495731669	384.814969785	449.722050995	887.128453899	-6.061873890	-6.061873890	919.371345161
0.365059005	596.177685128	585.989278321	12366.244033989	12312.315037473	12312.315037473	12353.195762677
0.035530321	619.553413134	470.275780651	8387.596063714	627.594265371	627.594265371	4673.807749911
0.028956982	396.541115335	546.461874368	3472.265858468	504.885359480	504.885359480	2252.645367493
0.041875116	578.033028967	714.524335850	9263.060351986	-406.259295605	-406.259295605	3161.465161366
0.031875527	382.795944182	695.861723906	3500.605905491	-984.232287691	-984.232287691	4019.204319293

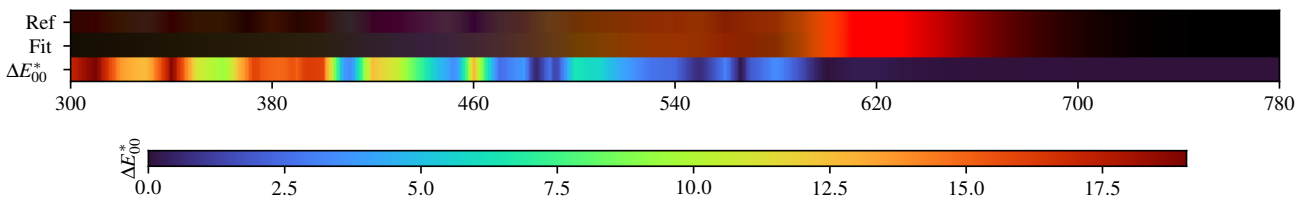
3.52. PLAORAN



PLAORAN - Weighted Expectation-Maximization - 2 Gaussians



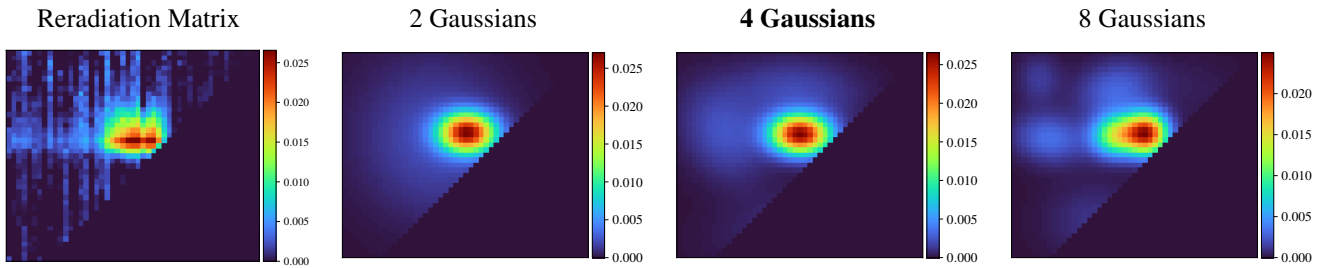
Fitted Material Under Monochromatic Illumination



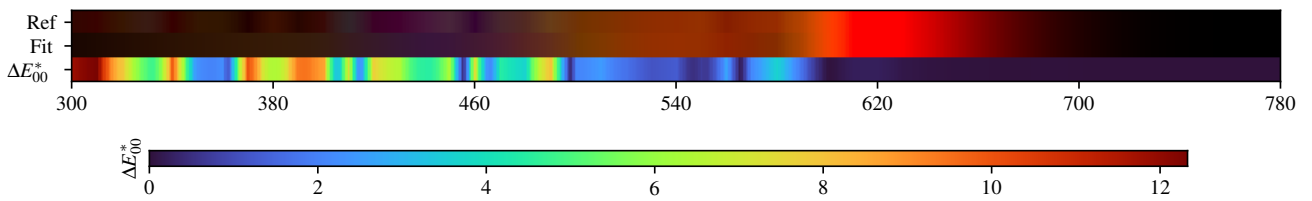
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.57$	$\Delta E = 1.55$	$\Delta E = 0.76$	$\Delta E = 1.42$	$\Delta E = 0.33$	$\Delta E = 0.84$	$\Delta E = 0.71$	$\Delta E = 1.44$	$\Delta E = 1.01$	$\Delta E = 1.43$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.24$	$\Delta E = 1.66$	$\Delta E = 0.47$	$\Delta E = 1.11$	$\Delta E = 0.29$	$\Delta E = 1.07$	$\Delta E = 0.91$	$\Delta E = 0.59$	$\Delta E = 0.44$	$\Delta E = 0.58$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.64$	$\Delta E = 1.85$	$\Delta E = 0.32$	$\Delta E = 0.84$	$\Delta E = 0.66$	$\Delta E = 0.36$	$\Delta E = 0.47$	$\Delta E = 0.44$	$\Delta E = 0.54$	$\Delta E = 0.87$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.30$	$\Delta E = 1.49$	$\Delta E = 1.39$	$\Delta E = 0.76$	$\Delta E = 1.31$	$\Delta E = 0.57$	$\Delta E = 0.73$	$\Delta E = 0.70$	$\Delta E = 0.88$	$\Delta E = 0.84$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.43$	$\Delta E = 1.39$	$\Delta E = 0.70$	$\Delta E = 0.55$	$\Delta E = 0.42$	$\Delta E = 0.74$	$\Delta E = 1.07$	$\Delta E = 0.97$	$\Delta E = 1.12$	$\Delta E = 1.25$

PLAORAN - Weighted Expectation-Maximization - 4 Gaussians



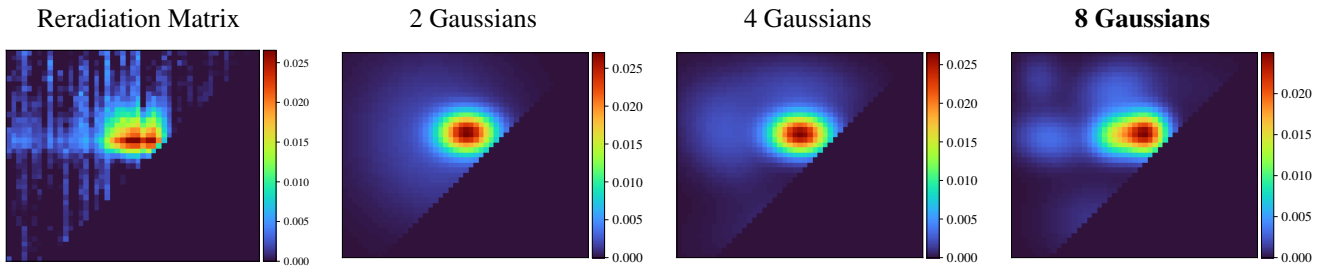
Fitted Material Under Monochromatic Illumination



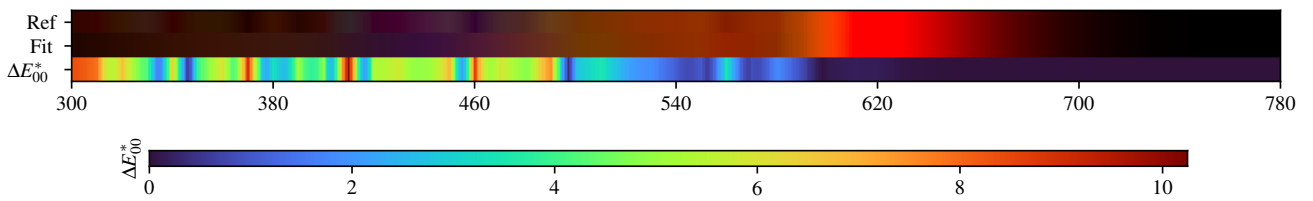
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.38$	$\Delta E = 0.21$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.41$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.24$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.41$	$\Delta E = 0.16$	$\Delta E = 0.42$	$\Delta E = 0.16$	$\Delta E = 0.28$	$\Delta E = 0.74$	$\Delta E = 0.18$	$\Delta E = 0.05$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.44$	$\Delta E = 0.20$	$\Delta E = 0.31$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.06$	$\Delta E = 0.18$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.22$	$\Delta E = 0.31$	$\Delta E = 0.29$	$\Delta E = 0.29$	$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.11$	$\Delta E = 0.23$	$\Delta E = 0.36$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.32$	$\Delta E = 0.38$	$\Delta E = 0.23$	$\Delta E = 0.11$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.34$	$\Delta E = 0.21$	$\Delta E = 0.29$

PLAORAN - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.32$	$\Delta E = 0.72$	$\Delta E = 0.50$	$\Delta E = 0.66$	$\Delta E = 0.45$	$\Delta E = 0.36$	$\Delta E = 0.73$	$\Delta E = 0.72$	$\Delta E = 0.53$	$\Delta E = 0.58$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.62$	$\Delta E = 0.77$	$\Delta E = 0.41$	$\Delta E = 0.48$	$\Delta E = 0.22$	$\Delta E = 0.41$	$\Delta E = 0.80$	$\Delta E = 0.24$	$\Delta E = 0.21$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.79$	$\Delta E = 0.86$	$\Delta E = 0.34$	$\Delta E = 0.42$	$\Delta E = 0.37$	$\Delta E = 0.34$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.24$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.59$	$\Delta E = 0.94$	$\Delta E = 0.66$	$\Delta E = 0.78$	$\Delta E = 0.56$	$\Delta E = 0.56$	$\Delta E = 0.29$	$\Delta E = 0.42$	$\Delta E = 0.44$	$\Delta E = 0.21$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.66$	$\Delta E = 0.67$	$\Delta E = 0.47$	$\Delta E = 0.64$	$\Delta E = 0.18$	$\Delta E = 0.69$	$\Delta E = 0.38$	$\Delta E = 0.64$	$\Delta E = 0.50$	$\Delta E = 0.38$

PLAORAN - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.017409	0.016645	0.018933	0.021489	0.016910	0.018362	0.020500	0.021370	0.020850	0.023090	0.025980
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.039054	0.040243	0.028050	0.015466	0.009731	0.009428	0.010502	0.005150	0.012668	0.032939	0.130545
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.315587	0.469114	0.533623	0.550187	0.553073	0.552501	0.549615	0.547700	0.542563	0.538001	0.534818
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.533916	0.529924	0.528478	0.526273	0.521243	0.521934	0.512690	0.515680			

2 Gaussians

Scaling factor: 316.7897574742705

Gaussians:

Weight	Mean		Covariance			
0.498136332	542.345735970	624.046965181	1382.698637668	-3.135819638	-3.135819638	703.442864374
0.501863668	480.082137282	611.847737878	10799.688929063	-434.465687944	-434.465687944	11278.123937850

4 Gaussians

Scaling factor: 306.2434671955798

Gaussians:

Weight	Mean		Covariance			
0.168941162	532.397052528	705.502600281	7712.279995163	-383.894984907	-383.894984907	2002.417122022
0.175937644	389.557346276	622.710733349	3328.262191157	-849.645209449	-849.645209449	3963.343238535
0.556551765	540.748666538	620.993392260	1552.687127666	-22.788543753	-22.788543753	692.430039228
0.098569429	524.114782215	441.952031314	11602.644949093	1619.802731664	1619.802731664	2732.707527010

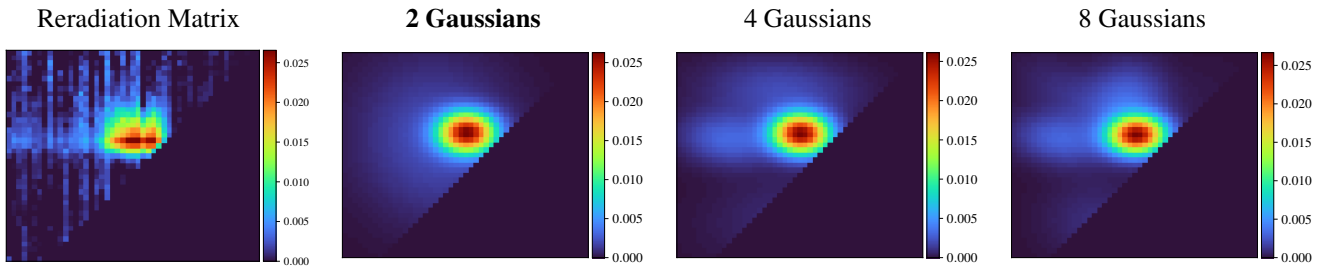
8 Gaussians

Scaling factor: 303.3080381482474

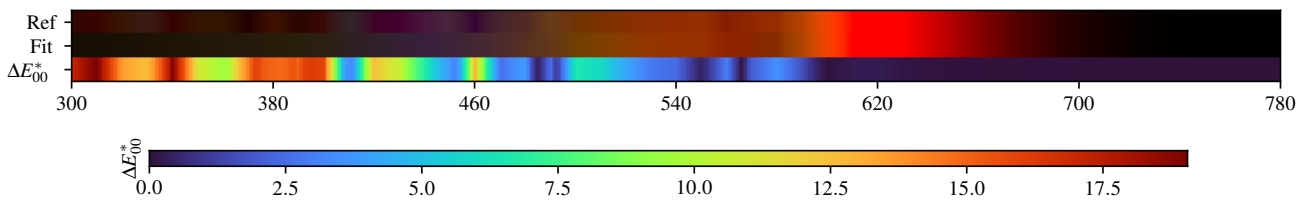
Gaussians:

Weight	Mean		Covariance			
0.030659840	645.205589430	712.731106379	5728.460986805	-12.271787723	-12.271787723	1882.731274124
0.031264221	350.699192535	730.287032051	872.736607397	15.918553335	15.918553335	1179.091954821
0.031125713	662.777630695	476.171678252	2943.056952870	463.525102756	463.525102756	4905.485983085
0.265510679	507.457832731	619.565317302	1119.683429934	50.056126107	50.056126107	739.853893491
0.105119703	370.908781255	612.869361602	2190.314289414	-167.342950655	-167.342950655	1096.116861063
0.321951457	565.023594292	622.581688645	721.718618030	-3.194843042	-3.194843042	743.847389680
0.086860503	461.569339550	448.943895768	4462.103904133	-74.086657012	-74.086657012	2947.857346466
0.127507885	501.887595451	706.285178215	2623.335851109	262.120558284	262.120558284	1657.291732005

PLAORAN - Weighted variational Bayesian inference - 2 Gaussians



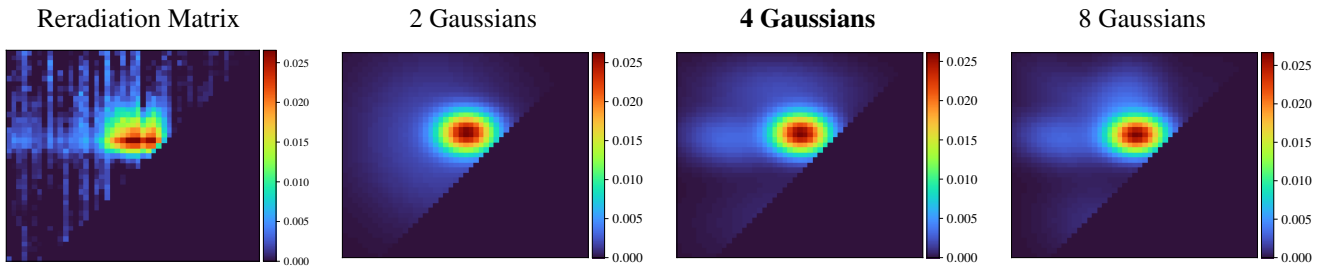
Fitted Material Under Monochromatic Illumination



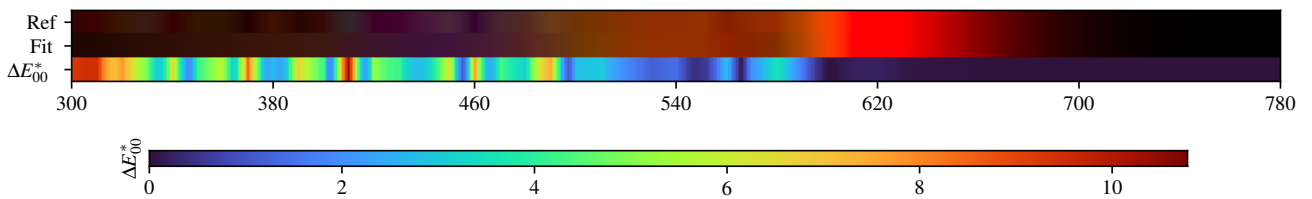
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.59$	$\Delta E = 1.60$	$\Delta E = 0.81$	$\Delta E = 1.47$	$\Delta E = 0.34$	$\Delta E = 0.88$	$\Delta E = 0.74$	$\Delta E = 1.49$	$\Delta E = 1.05$	$\Delta E = 1.47$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.28$	$\Delta E = 1.71$	$\Delta E = 0.51$	$\Delta E = 1.15$	$\Delta E = 0.34$	$\Delta E = 1.11$	$\Delta E = 0.94$	$\Delta E = 0.61$	$\Delta E = 0.47$	$\Delta E = 0.59$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.69$	$\Delta E = 1.90$	$\Delta E = 0.36$	$\Delta E = 0.87$	$\Delta E = 0.69$	$\Delta E = 0.36$	$\Delta E = 0.49$	$\Delta E = 0.43$	$\Delta E = 0.56$	$\Delta E = 0.89$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.34$	$\Delta E = 1.53$	$\Delta E = 1.45$	$\Delta E = 0.79$	$\Delta E = 1.37$	$\Delta E = 0.59$	$\Delta E = 0.76$	$\Delta E = 0.72$	$\Delta E = 0.92$	$\Delta E = 0.86$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.48$	$\Delta E = 1.45$	$\Delta E = 0.75$	$\Delta E = 0.57$	$\Delta E = 0.44$	$\Delta E = 0.76$	$\Delta E = 1.12$	$\Delta E = 1.00$	$\Delta E = 1.16$	$\Delta E = 1.29$

PLAORAN - Weighted variational Bayesian inference - 4 Gaussians



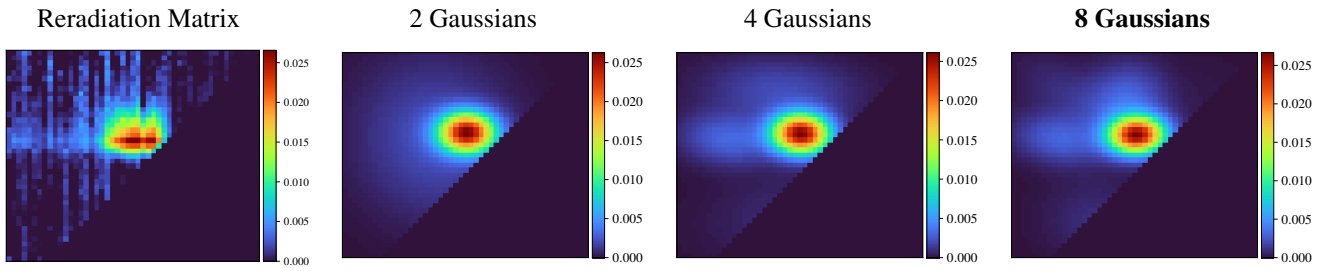
Fitted Material Under Monochromatic Illumination



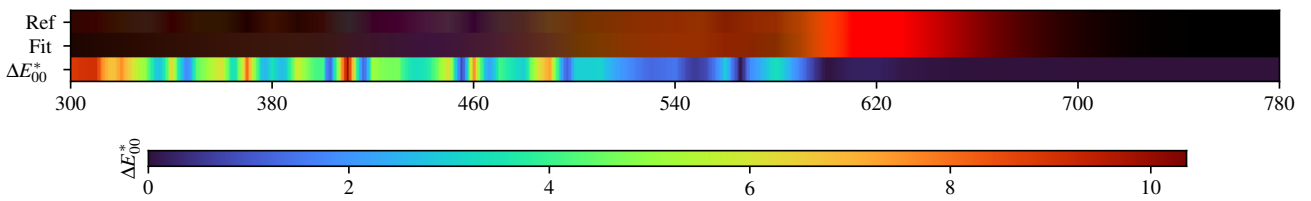
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.35$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.37$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.17$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.38$	$\Delta E = 0.14$	$\Delta E = 0.39$	$\Delta E = 0.15$	$\Delta E = 0.25$	$\Delta E = 0.72$	$\Delta E = 0.16$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.41$	$\Delta E = 0.18$	$\Delta E = 0.28$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.24$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.15$	$\Delta E = 0.22$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.32$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.10$	$\Delta E = 0.30$	$\Delta E = 0.34$	$\Delta E = 0.21$	$\Delta E = 0.11$	$\Delta E = 0.21$	$\Delta E = 0.19$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.24$

PLAORAN - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.16$	$\Delta E = 0.38$	$\Delta E = 0.37$	$\Delta E = 0.33$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.43$	$\Delta E = 0.40$	$\Delta E = 0.25$	$\Delta E = 0.20$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.32$	$\Delta E = 0.42$	$\Delta E = 0.38$	$\Delta E = 0.21$	$\Delta E = 0.35$	$\Delta E = 0.20$	$\Delta E = 0.37$	$\Delta E = 0.67$	$\Delta E = 0.13$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.42$	$\Delta E = 0.48$	$\Delta E = 0.39$	$\Delta E = 0.22$	$\Delta E = 0.29$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.23$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.30$	$\Delta E = 0.62$	$\Delta E = 0.37$	$\Delta E = 0.37$	$\Delta E = 0.33$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.08$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.34$	$\Delta E = 0.39$	$\Delta E = 0.36$	$\Delta E = 0.30$	$\Delta E = 0.07$	$\Delta E = 0.31$	$\Delta E = 0.21$	$\Delta E = 0.33$	$\Delta E = 0.16$	$\Delta E = 0.04$

PLAORAN - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.017409	0.016645	0.018933	0.021489	0.016910	0.018362	0.020500	0.021370	0.020850	0.023090	0.025980
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.039054	0.040243	0.028050	0.015466	0.009731	0.009428	0.010502	0.005150	0.012668	0.032939	0.130545
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.315587	0.469114	0.533623	0.550187	0.553073	0.552501	0.549615	0.547700	0.542563	0.538001	0.534818
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.533916	0.529924	0.528478	0.526273	0.521243	0.521934	0.512690	0.515680			

2 Gaussians max

Scaling factor: 317.1252057949972

Gaussians:

Weight	Mean		Covariance			
0.498093871	479.912858539	611.574630866	10835.981946031	-451.066773639	-451.066773639	11311.869296604
0.501906129	542.157822060	624.156188626	1426.363993063	-4.420188002	-4.420188002	738.320202412

4 Gaussians max

Scaling factor: 308.0390624599122

Gaussians:

Weight	Mean		Covariance			
0.116227125	512.550504736	455.933948808	11578.055855264	757.224609978	757.224609978	3665.658331383
0.139650138	398.047536144	611.169110758	3982.143555543	-272.629843676	-272.629843676	1230.731362902
0.549254127	542.246252338	622.026556048	1492.204046171	-27.210061905	-27.210061905	736.303884932
0.194868610	503.637673003	708.296170493	10470.748889602	-449.448972601	-449.448972601	1979.247034736

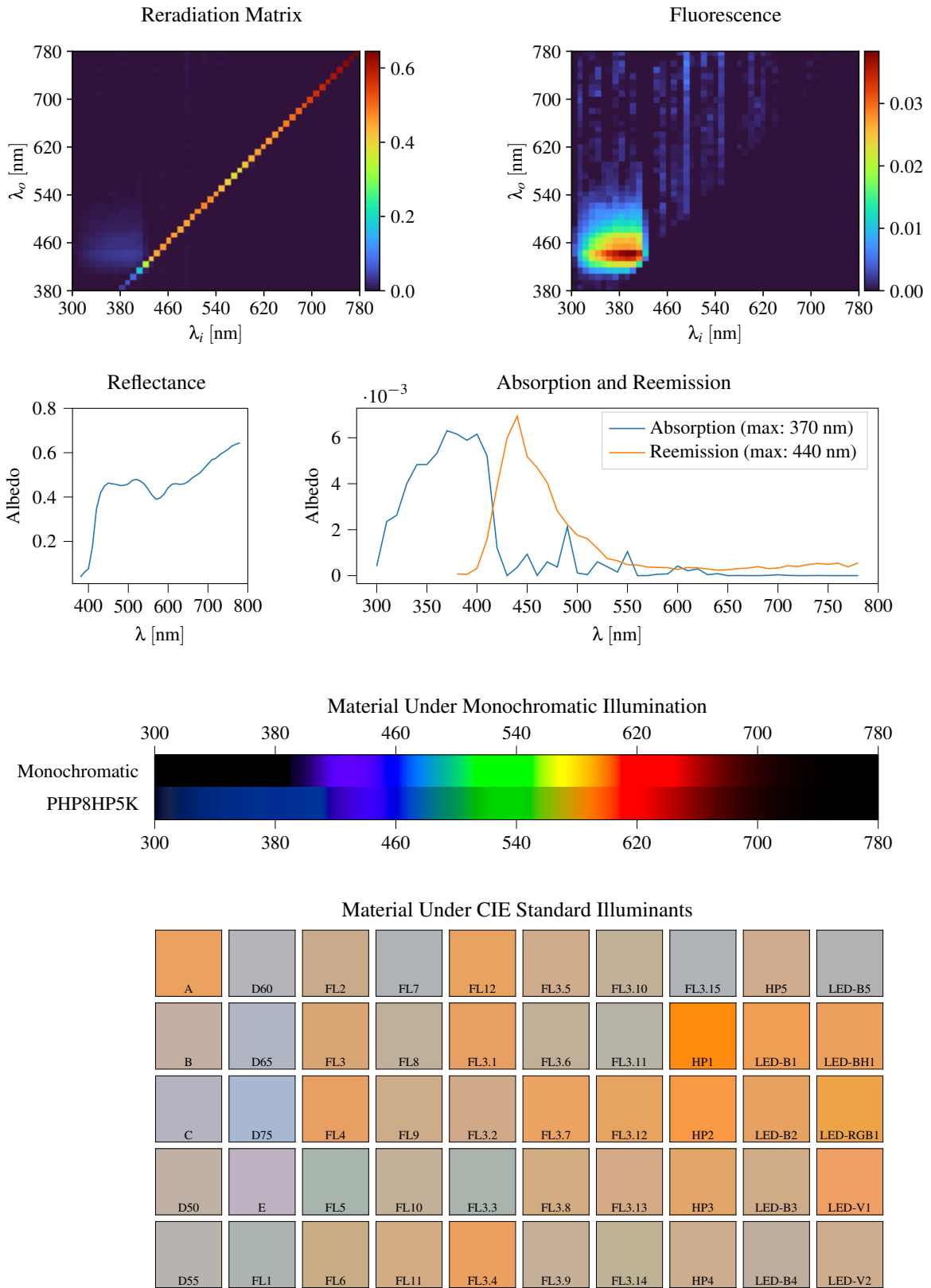
8 Gaussians max

Scaling factor: 306.8843529187797

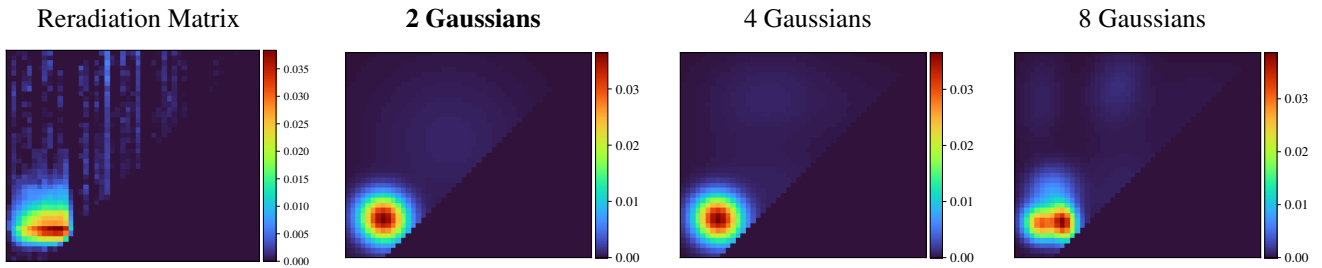
Gaussians:

Weight	Mean		Covariance			
0.087210576	463.937667157	449.252515111	5141.109297257	-213.743928319	-213.743928319	3285.701874739
0.029945783	650.642469286	481.762580919	4365.207766346	-1218.010520533	-1218.010520533	5047.761168043
0.126249663	389.747010821	611.340323071	3655.980204199	-357.161259405	-357.161259405	1184.934612283
0.485174099	543.858141687	619.295872897	1425.935568495	26.414922212	26.414922212	631.155581346
0.026070901	659.913342029	684.713968830	6411.899846526	1406.720750492	1406.720750492	4193.193949227
0.182654016	523.644509112	683.065714987	2603.071482932	122.970306848	122.970306848	2714.605276766
0.062603798	404.430977084	703.562453992	4368.385258956	-1600.104757268	-1600.104757268	2552.968136020

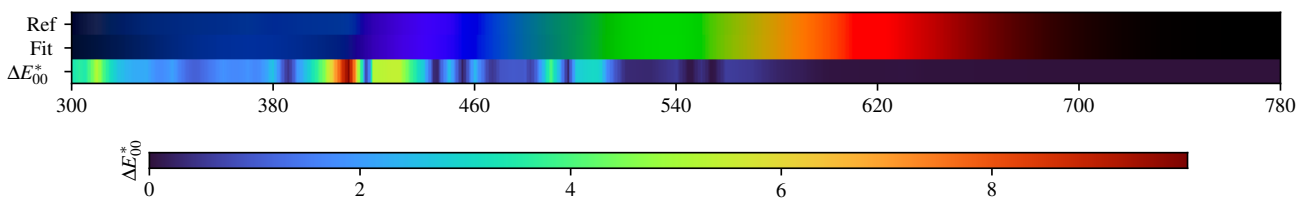
3.53. PHP8HP5K



PHP8HP5K - Weighted Expectation-Maximization - 2 Gaussians



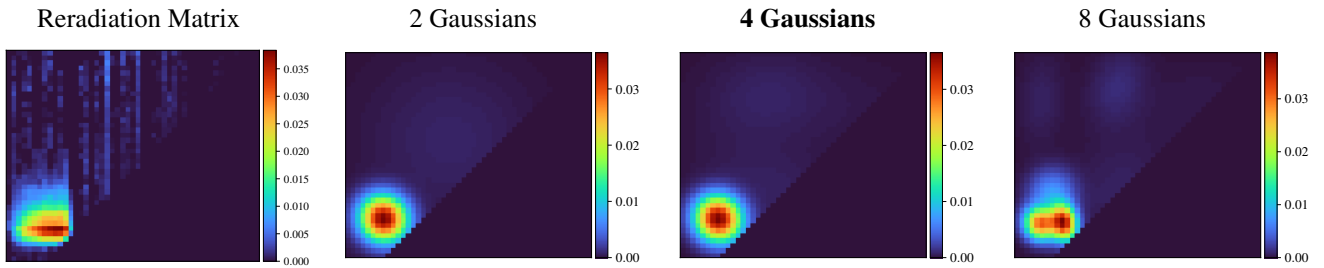
Fitted Material Under Monochromatic Illumination



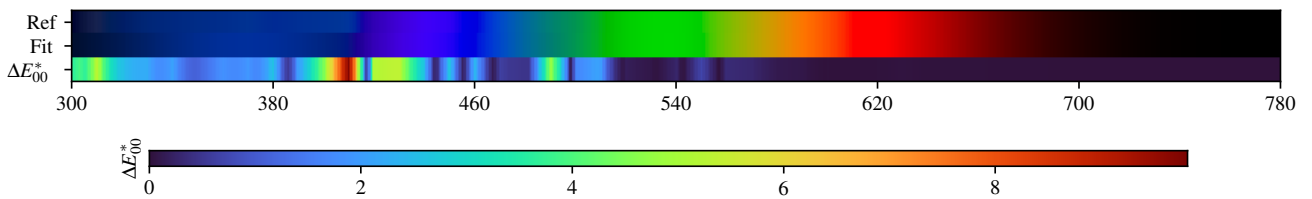
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.68$	FL2 $\Delta E = 0.33$	FL7 $\Delta E = 0.60$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.26$	FL3.10 $\Delta E = 0.33$	FL3.15 $\Delta E = 0.55$	HP5 $\Delta E = 0.34$	LED-B5 $\Delta E = 0.67$
B $\Delta E = 0.43$	D65 $\Delta E = 0.63$	FL3 $\Delta E = 0.22$	FL8 $\Delta E = 0.41$	FL3.1 $\Delta E = 0.18$	FL3.6 $\Delta E = 0.43$	FL3.11 $\Delta E = 0.40$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.19$	LED-BH1 $\Delta E = 0.22$
C $\Delta E = 0.67$	D75 $\Delta E = 0.56$	FL4 $\Delta E = 0.17$	FL9 $\Delta E = 0.26$	FL3.2 $\Delta E = 0.29$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.15$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.22$	LED-RGB1 $\Delta E = 0.16$
D50 $\Delta E = 0.50$	E $\Delta E = 0.46$	FL5 $\Delta E = 0.54$	FL10 $\Delta E = 0.31$	FL3.3 $\Delta E = 0.59$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.23$	HP3 $\Delta E = 0.24$	LED-B3 $\Delta E = 0.37$	LED-V1 $\Delta E = 0.73$
D55 $\Delta E = 0.59$	FL1 $\Delta E = 0.56$	FL6 $\Delta E = 0.32$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.33$	FL3.14 $\Delta E = 0.42$	HP4 $\Delta E = 0.45$	LED-B4 $\Delta E = 0.54$	LED-V2 $\Delta E = 0.78$

PHP8HP5K - Weighted Expectation-Maximization - 4 Gaussians



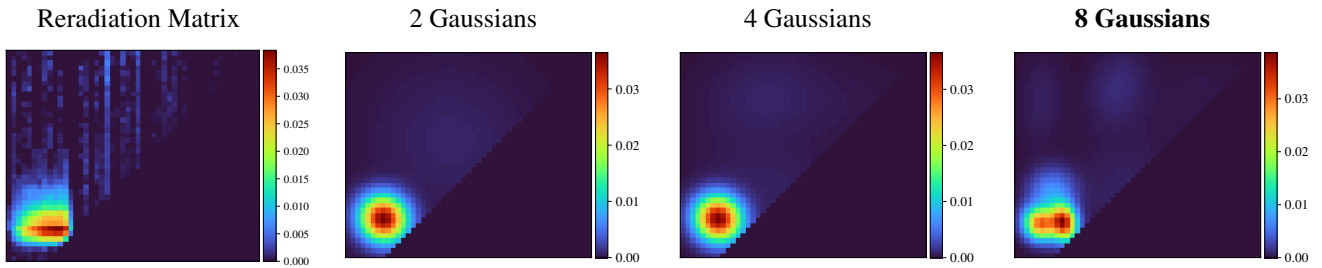
Fitted Material Under Monochromatic Illumination



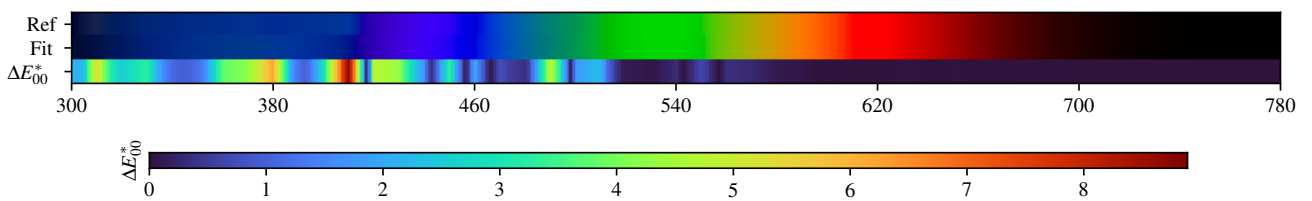
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.01$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.18$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.30$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.15$	LED-B5 $\Delta E = 0.43$
B $\Delta E = 0.05$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.02$	FL3.11 $\Delta E = 0.36$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.07$	D75 $\Delta E = 0.15$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.11$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.29$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.23$	LED-V1 $\Delta E = 0.75$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.18$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.36$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.74$

PHP8HP5K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.30$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.10$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.34$	FL3.15 $\Delta E = 0.37$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.34$
B $\Delta E = 0.17$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.43$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.31$	D75 $\Delta E = 0.32$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.01$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.20$	E $\Delta E = 0.48$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.36$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.37$
D55 $\Delta E = 0.25$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.20$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.27$	FL3.14 $\Delta E = 0.14$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.33$

PHP8HP5K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.039796	0.060684	0.076631	0.175495	0.344202	0.417964	0.449714	0.463142	0.459589	0.457147	0.451662
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.453143	0.459229	0.474749	0.479843	0.472202	0.459033	0.434736	0.407589	0.389802	0.396326	0.413351
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.442257	0.457811	0.460211	0.457167	0.459604	0.469629	0.485625	0.496922	0.509405	0.528617	0.548975
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.568248	0.574895	0.591356	0.603154	0.614385	0.630219	0.637604	0.644960			

2 Gaussians

Scaling factor: 299.5266707451955

Gaussians:

Weight	Mean		Covariance			
0.737724713	370.561151259	453.517481823	988.976524609	-43.077356969	-43.077356969	940.269420118
0.262275287	502.162188780	609.026414893	13909.410296636	-59.540383104	-59.540383104	12882.957656749

4 Gaussians

Scaling factor: 297.89545595603295

Gaussians:

Weight	Mean		Covariance			
0.734071703	370.298511460	453.306355170	975.258798017	-44.421778262	-44.421778262	932.573563416
0.037144930	660.856836311	665.584855271	8035.060134077	1211.620734073	1211.620734073	4726.091554898
0.110782051	466.533951889	696.526440117	8141.111210979	470.609186487	470.609186487	4024.053466462
0.118001316	483.215994122	505.575151531	11486.808329414	-2600.856455795	-2600.856455795	4888.605778392

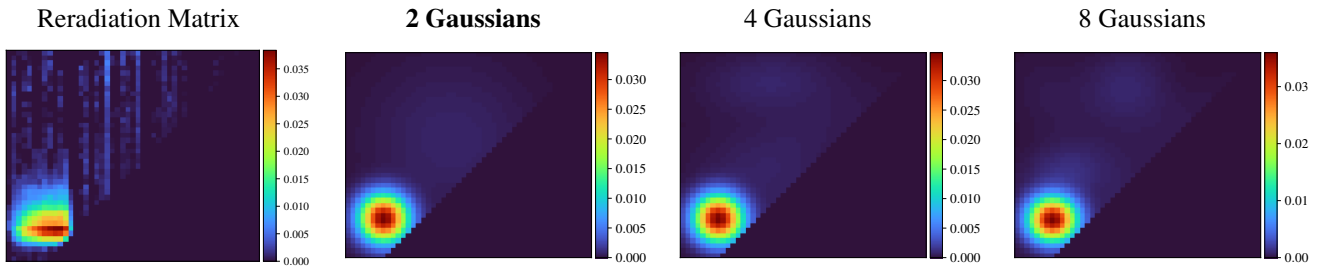
8 Gaussians

Scaling factor: 291.4903014846735

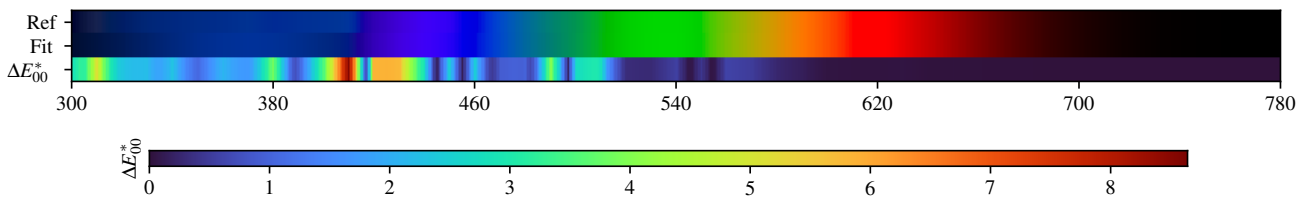
Gaussians:

Weight	Mean		Covariance			
0.299672367	346.364899018	443.056384608	469.531199568	-34.482220143	-34.482220143	463.684583749
0.057087098	498.875438892	716.085544129	1501.281864480	437.336943890	437.336943890	2586.341396349
0.008719133	760.518477340	474.653135890	437.976152818	31.357356730	31.357356730	5109.868229735
0.100652137	508.046001238	506.742340527	4495.203777342	477.338867488	477.338867488	6225.263363245
0.040606466	649.680760281	688.028553023	7019.693879275	1109.704187491	1109.704187491	3045.292282307
0.155496064	368.948357505	503.736011652	947.847171834	24.248211032	24.248211032	981.643341880
0.301950668	393.453373201	445.776836883	292.596733999	-45.458359598	-45.458359598	559.888654909
0.035816067	348.440469927	687.942050950	921.815487754	232.558877382	232.558877382	3988.539468636

PHP8HP5K - Weighted variational Bayesian inference - 2 Gaussians



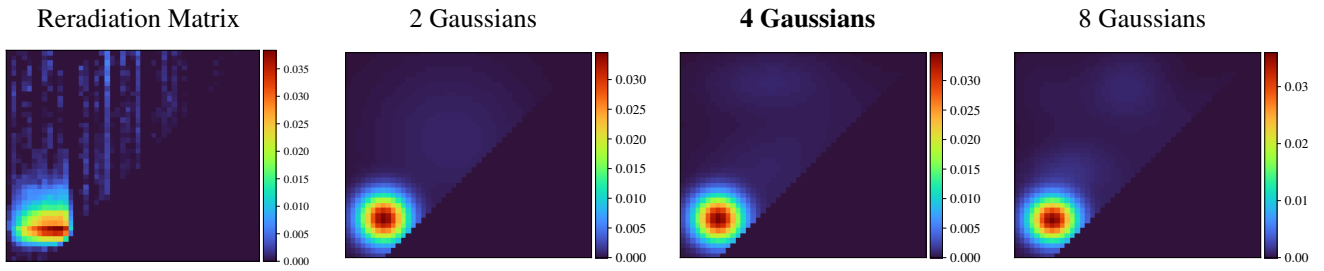
Fitted Material Under Monochromatic Illumination



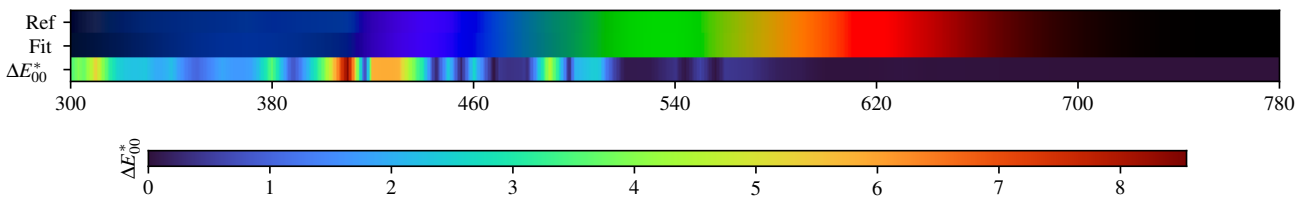
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.55$	FL2 $\Delta E = 0.28$	FL7 $\Delta E = 0.48$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.23$	FL3.10 $\Delta E = 0.33$	FL3.15 $\Delta E = 0.47$	HP5 $\Delta E = 0.29$	LED-B5 $\Delta E = 0.65$
B $\Delta E = 0.33$	D65 $\Delta E = 0.47$	FL3 $\Delta E = 0.20$	FL8 $\Delta E = 0.34$	FL3.1 $\Delta E = 0.17$	FL3.6 $\Delta E = 0.37$	FL3.11 $\Delta E = 0.37$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.20$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 0.49$	D75 $\Delta E = 0.39$	FL4 $\Delta E = 0.16$	FL9 $\Delta E = 0.23$	FL3.2 $\Delta E = 0.26$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.15$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.22$	LED-RGB1 $\Delta E = 0.16$
D50 $\Delta E = 0.39$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.44$	FL10 $\Delta E = 0.29$	FL3.3 $\Delta E = 0.50$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.22$	HP3 $\Delta E = 0.22$	LED-B3 $\Delta E = 0.38$	LED-V1 $\Delta E = 0.70$
D55 $\Delta E = 0.50$	FL1 $\Delta E = 0.46$	FL6 $\Delta E = 0.28$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.15$	FL3.9 $\Delta E = 0.31$	FL3.14 $\Delta E = 0.38$	HP4 $\Delta E = 0.40$	LED-B4 $\Delta E = 0.54$	LED-V2 $\Delta E = 0.73$

PHP8HP5K - Weighted variational Bayesian inference - 4 Gaussians



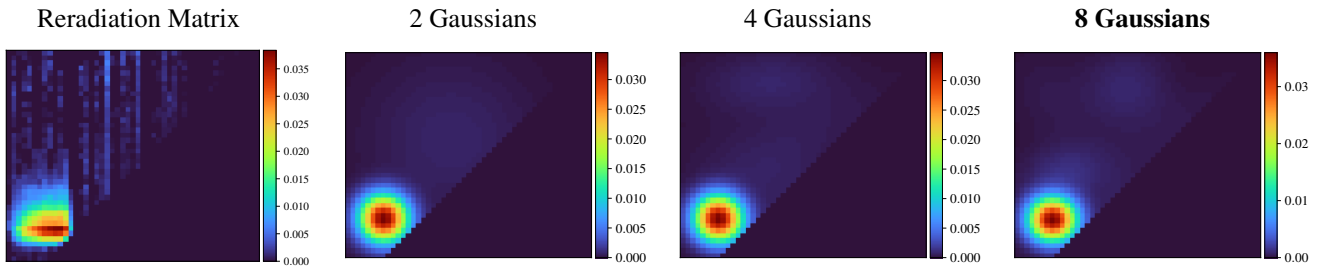
Fitted Material Under Monochromatic Illumination



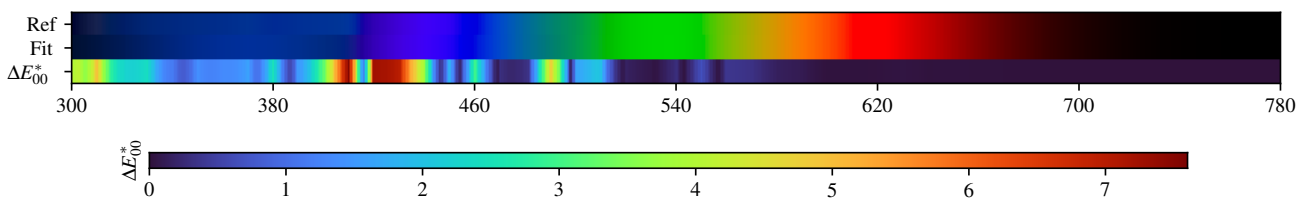
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.51$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.34$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.50$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.36$
B $\Delta E = 0.23$	D65 $\Delta E = 0.52$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.32$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.29$	D75 $\Delta E = 0.51$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.34$	E $\Delta E = 0.28$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.21$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.75$
D55 $\Delta E = 0.46$	FL1 $\Delta E = 0.21$	FL6 $\Delta E = 0.11$	FL11 $\Delta E = 0.15$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.42$	LED-B4 $\Delta E = 0.27$	LED-V2 $\Delta E = 0.78$

PHP8HP5K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.54$	FL2 $\Delta E = 0.19$	FL7 $\Delta E = 0.50$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.32$	FL3.15 $\Delta E = 0.60$	HP5 $\Delta E = 0.30$	LED-B5 $\Delta E = 0.39$
B $\Delta E = 0.34$	D65 $\Delta E = 0.53$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.25$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.40$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.44$	D75 $\Delta E = 0.48$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.18$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.38$	E $\Delta E = 0.28$	FL5 $\Delta E = 0.29$	FL10 $\Delta E = 0.34$	FL3.3 $\Delta E = 0.27$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.79$
D55 $\Delta E = 0.50$	FL1 $\Delta E = 0.34$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.18$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.52$	LED-B4 $\Delta E = 0.25$	LED-V2 $\Delta E = 0.85$

PHP8HP5K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.039796	0.060684	0.076631	0.175495	0.344202	0.417964	0.449714	0.463142	0.459589	0.457147	0.451662
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.453143	0.459229	0.474749	0.479843	0.472202	0.459033	0.434736	0.407589	0.389802	0.396326	0.413351
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.442257	0.457811	0.460211	0.457167	0.459604	0.469629	0.485625	0.496922	0.509405	0.528617	0.548975
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.568248	0.574895	0.591356	0.603154	0.614385	0.630219	0.637604	0.644960			

2 Gaussians max

Scaling factor: 300.2183505279856

Gaussians:

Weight	Mean		Covariance			
0.741938064	370.943302432	453.919076072	1054.436885180	-14.553414425	-14.553414425	993.535753615
0.258061936	503.645586416	610.549251084	13910.817919191	-196.308479603	-196.308479603	12814.894469779

4 Gaussians max

Scaling factor: 297.34621353324167

Gaussians:

Weight	Mean		Covariance			
0.735036817	370.770350529	453.399405648	1040.669580349	-13.600497416	-13.600497416	963.665854175
0.119161632	487.024841953	514.148012180	12983.045454881	-2808.400766823	-2808.400766823	5860.628272371
0.060780950	567.480791474	628.924785713	16925.402007830	5992.210521295	5992.210521295	4629.146957445
0.085020601	472.671697196	724.620445854	8782.295574033	394.174201063	394.174201063	2023.172601144

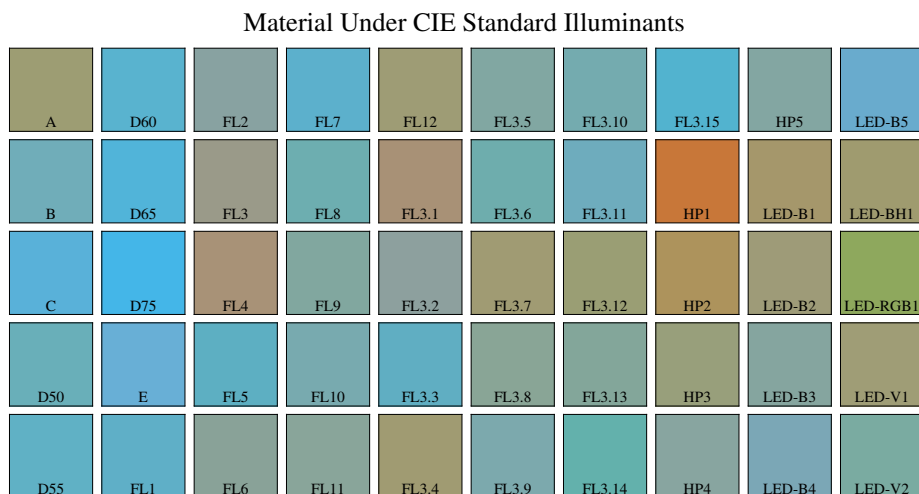
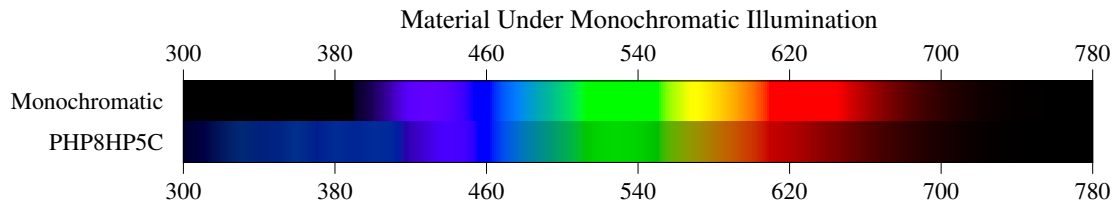
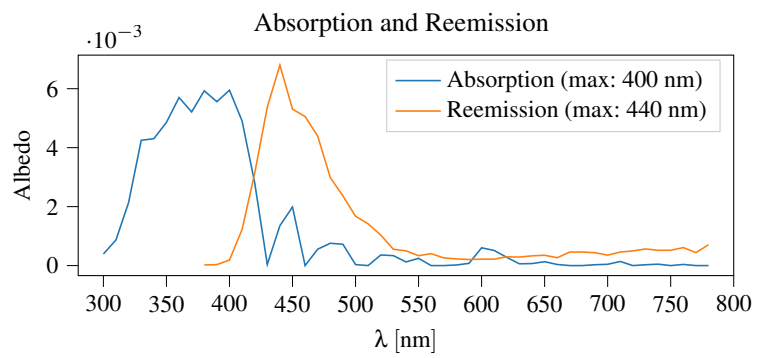
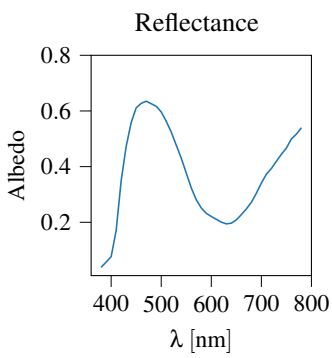
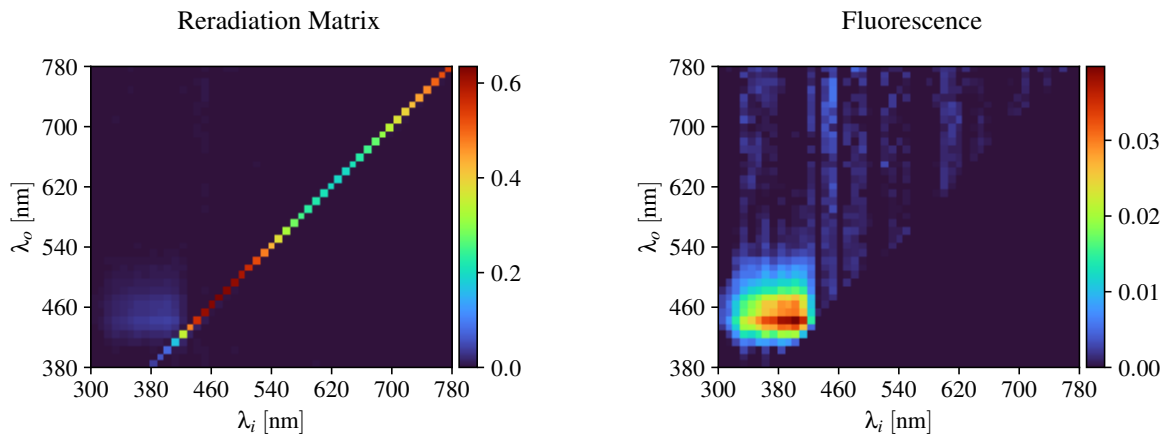
8 Gaussians max

Scaling factor: 297.093648161417

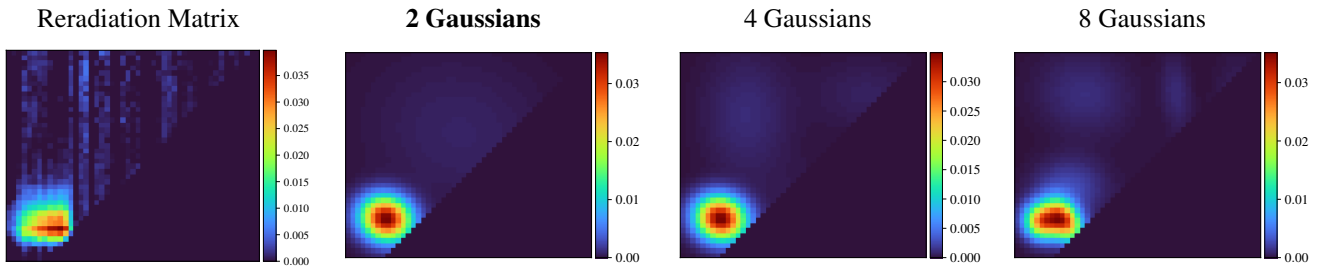
Gaussians:

Weight	Mean		Covariance			
0.711216869	370.692387821	451.657767636	1029.290461158	-3.417722000	-3.417722000	854.121621270
0.048801057	508.146583186	464.746308498	3455.726886076	210.516288950	210.516288950	3955.642053257
0.019195505	660.676883145	502.938209497	10966.340392514	-3085.126783947	-3085.126783947	6157.298032675
0.073552909	394.752621098	544.267531745	3443.455452759	527.145355304	527.145355304	1734.624315272
0.040484000	636.043894740	642.192996057	10200.992685069	5036.522537542	5036.522537542	5176.520044479
0.033308594	366.692059592	692.960942340	3350.268921569	-718.038217963	-718.038217963	3980.752398780
0.072361438	516.822232651	712.565218455	3322.672775122	177.266119800	177.266119800	3010.537636092

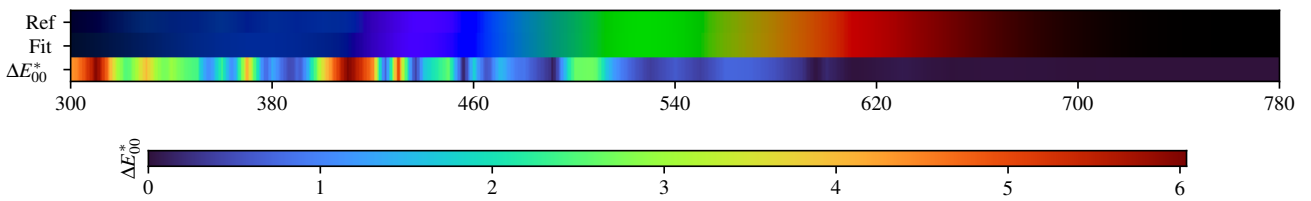
3.54. PHP8HP5C



PHP8HP5C - Weighted Expectation-Maximization - 2 Gaussians



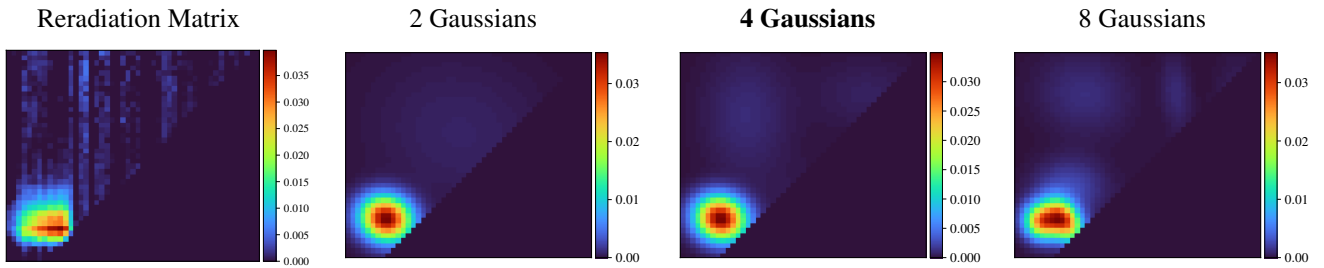
Fitted Material Under Monochromatic Illumination



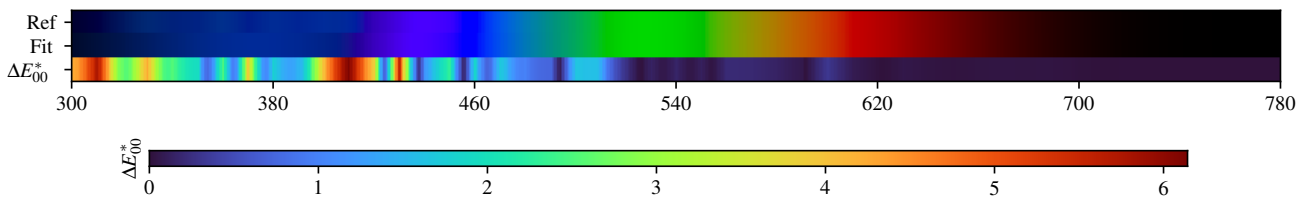
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.62$	$\Delta E = 0.55$	$\Delta E = 0.82$	$\Delta E = 0.61$	$\Delta E = 0.57$	$\Delta E = 0.58$	$\Delta E = 0.64$	$\Delta E = 0.54$	$\Delta E = 0.80$	$\Delta E = 0.59$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.75$	$\Delta E = 0.54$	$\Delta E = 0.97$	$\Delta E = 0.55$	$\Delta E = 0.64$	$\Delta E = 0.52$	$\Delta E = 0.72$	$\Delta E = 0.26$	$\Delta E = 0.55$	$\Delta E = 0.59$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.72$	$\Delta E = 0.54$	$\Delta E = 0.75$	$\Delta E = 0.61$	$\Delta E = 0.78$	$\Delta E = 0.53$	$\Delta E = 0.57$	$\Delta E = 0.58$	$\Delta E = 0.63$	$\Delta E = 0.42$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.58$	$\Delta E = 0.83$	$\Delta E = 0.64$	$\Delta E = 0.77$	$\Delta E = 0.58$	$\Delta E = 0.57$	$\Delta E = 0.56$	$\Delta E = 0.65$	$\Delta E = 0.67$	$\Delta E = 0.97$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.57$	$\Delta E = 0.64$	$\Delta E = 0.76$	$\Delta E = 0.66$	$\Delta E = 0.58$	$\Delta E = 0.73$	$\Delta E = 0.42$	$\Delta E = 0.87$	$\Delta E = 0.73$	$\Delta E = 0.75$

PHP8HP5C - Weighted Expectation-Maximization - 4 Gaussians



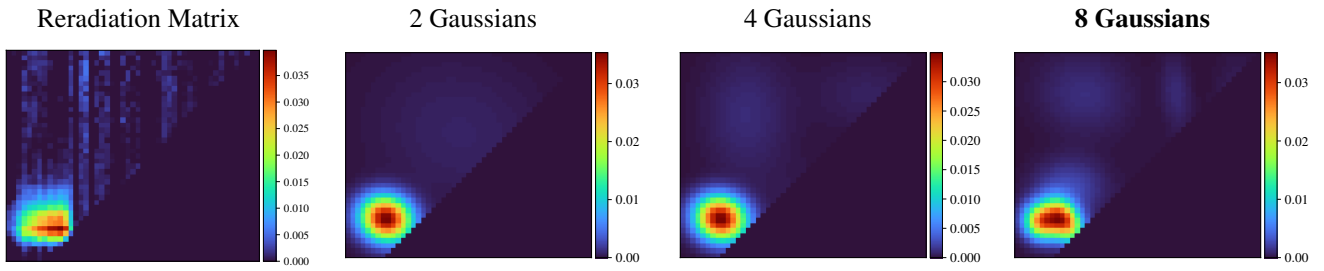
Fitted Material Under Monochromatic Illumination



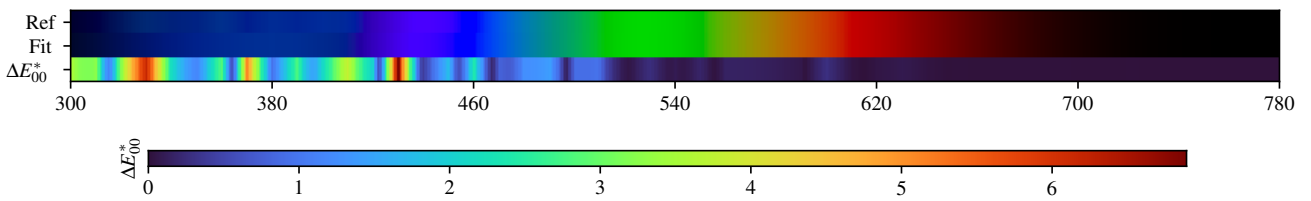
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.41$	$\Delta E = 0.45$	$\Delta E = 0.44$	$\Delta E = 0.20$	$\Delta E = 0.30$	$\Delta E = 0.52$	$\Delta E = 0.39$	$\Delta E = 0.54$	$\Delta E = 0.44$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.55$	$\Delta E = 0.42$	$\Delta E = 0.37$	$\Delta E = 0.36$	$\Delta E = 0.14$	$\Delta E = 0.32$	$\Delta E = 0.57$	$\Delta E = 0.04$	$\Delta E = 0.19$	$\Delta E = 0.31$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.58$	$\Delta E = 0.45$	$\Delta E = 0.27$	$\Delta E = 0.33$	$\Delta E = 0.33$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.39$	$\Delta E = 0.70$	$\Delta E = 0.45$	$\Delta E = 0.61$	$\Delta E = 0.38$	$\Delta E = 0.34$	$\Delta E = 0.19$	$\Delta E = 0.27$	$\Delta E = 0.54$	$\Delta E = 0.65$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.40$	$\Delta E = 0.45$	$\Delta E = 0.36$	$\Delta E = 0.47$	$\Delta E = 0.12$	$\Delta E = 0.56$	$\Delta E = 0.21$	$\Delta E = 0.57$	$\Delta E = 0.54$	$\Delta E = 0.53$

PHP8HP5C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.30$	$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.38$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.04$	$\Delta E = 0.14$	$\Delta E = 0.26$	$\Delta E = 0.05$	$\Delta E = 0.18$	$\Delta E = 0.24$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.27$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.31$	$\Delta E = 0.11$	$\Delta E = 0.27$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.42$	$\Delta E = 0.31$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.33$	$\Delta E = 0.03$	$\Delta E = 0.30$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.39$	$\Delta E = 0.25$

PHP8HP5C - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.038294	0.057108	0.076431	0.170396	0.349571	0.472725	0.558433	0.611387	0.627326	0.634991	0.626058
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.616603	0.596571	0.562961	0.524055	0.477241	0.430242	0.377075	0.323512	0.281006	0.251250	0.232087
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.220892	0.210783	0.200693	0.194342	0.196789	0.208596	0.227487	0.248079	0.271609	0.304304	0.340790
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.372737	0.393125	0.419119	0.444258	0.466694	0.499558	0.516835	0.539822			

2 Gaussians

Scaling factor: 299.22881382811636

Gaussians:

Weight	Mean		Covariance			
0.265953948	521.666924315	623.335571694	16943.727495393	-1501.037197825	-1501.037197825	13041.512309004
0.734046052	375.442082925	453.696660962	1125.588833192	-76.535715791	-76.535715791	853.897723937

4 Gaussians

Scaling factor: 293.66474758240685

Gaussians:

Weight	Mean		Covariance			
0.062042249	664.329980743	701.156100276	5869.228879548	-42.172980782	-42.172980782	2633.253902750
0.731676182	375.063949342	453.757387908	1104.049889353	-72.847213580	-72.847213580	847.767142961
0.070232576	579.000550013	476.766343883	13125.906975859	172.949052132	172.949052132	4502.440042297
0.136048993	426.497622565	660.229039495	3546.585355739	-104.213971282	-104.213971282	7416.054110036

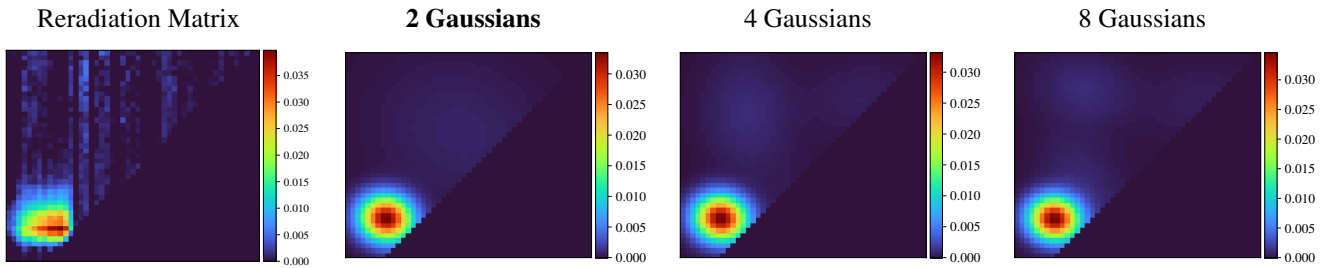
8 Gaussians

Scaling factor: 293.1621353041088

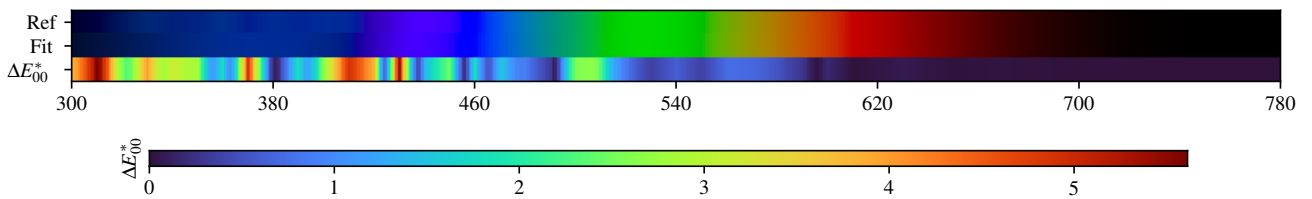
Gaussians:

Weight	Mean		Covariance			
0.032740804	736.431308183	685.320664342	966.640554069	125.016490699	125.016490699	4510.990695257
0.306858013	350.388923934	447.786755099	546.788195978	-31.306019619	-31.306019619	529.168316422
0.122954328	399.726188366	508.976367654	2185.518441765	135.700481133	135.700481133	1609.310888288
0.107218067	432.961231393	700.280557840	4101.608543475	-242.949924796	-242.949924796	3177.277673524
0.022410442	594.397191559	539.411917402	4039.060832935	1270.613239307	1270.613239307	3091.877608868
0.344740595	393.938272392	450.390400516	537.396985633	-218.356083340	-218.356083340	724.443637701
0.037297586	593.608975866	424.016160168	13073.125340882	999.408999336	999.408999336	1257.610899544
0.025780164	615.334441498	703.379023884	394.272524960	-186.712321749	-186.712321749	2462.131334353

PHP8HP5C - Weighted variational Bayesian inference - 2 Gaussians



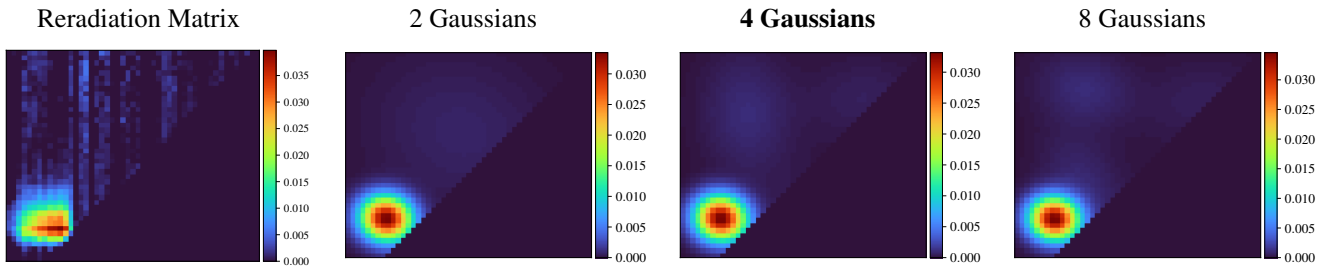
Fitted Material Under Monochromatic Illumination



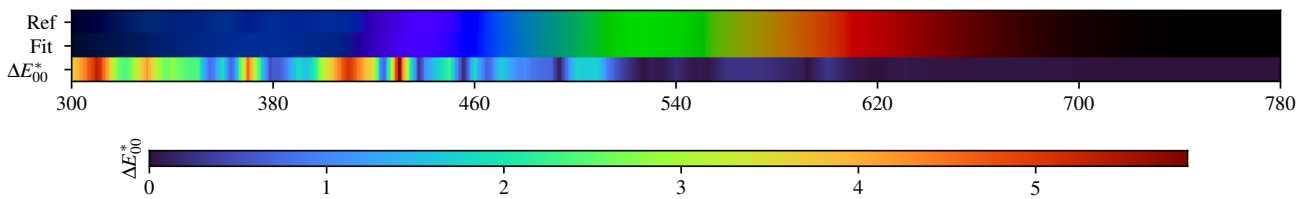
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.57$	$\Delta E = 0.37$	$\Delta E = 0.75$	$\Delta E = 0.53$	$\Delta E = 0.54$	$\Delta E = 0.54$	$\Delta E = 0.65$	$\Delta E = 0.42$	$\Delta E = 0.73$	$\Delta E = 0.57$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.63$	$\Delta E = 0.35$	$\Delta E = 0.90$	$\Delta E = 0.51$	$\Delta E = 0.61$	$\Delta E = 0.48$	$\Delta E = 0.71$	$\Delta E = 0.26$	$\Delta E = 0.54$	$\Delta E = 0.58$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.58$	$\Delta E = 0.31$	$\Delta E = 0.70$	$\Delta E = 0.57$	$\Delta E = 0.71$	$\Delta E = 0.51$	$\Delta E = 0.55$	$\Delta E = 0.56$	$\Delta E = 0.62$	$\Delta E = 0.41$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.45$	$\Delta E = 0.50$	$\Delta E = 0.57$	$\Delta E = 0.75$	$\Delta E = 0.52$	$\Delta E = 0.54$	$\Delta E = 0.54$	$\Delta E = 0.58$	$\Delta E = 0.68$	$\Delta E = 0.88$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.41$	$\Delta E = 0.58$	$\Delta E = 0.70$	$\Delta E = 0.64$	$\Delta E = 0.56$	$\Delta E = 0.72$	$\Delta E = 0.40$	$\Delta E = 0.74$	$\Delta E = 0.73$	$\Delta E = 0.67$

PHP8HP5C - Weighted variational Bayesian inference - 4 Gaussians



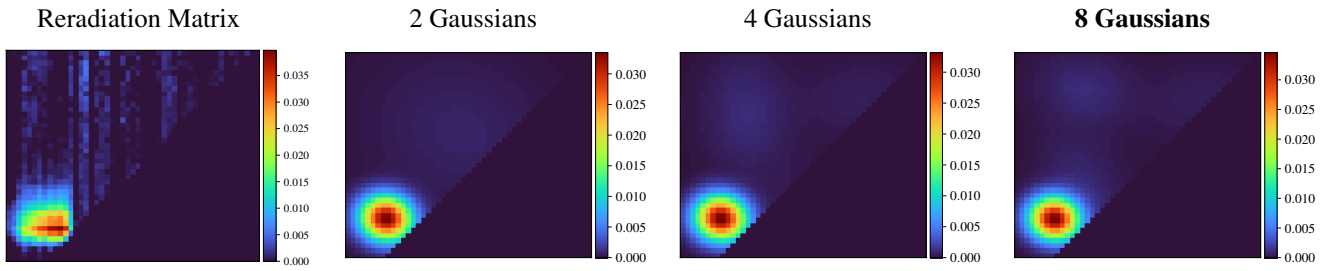
Fitted Material Under Monochromatic Illumination



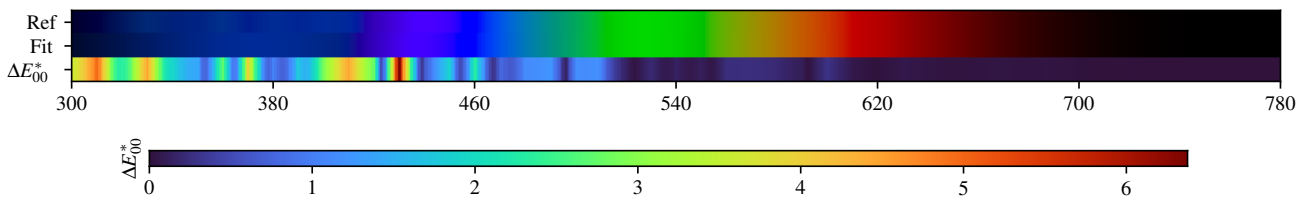
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.45$	$\Delta E = 0.41$	$\Delta E = 0.22$	$\Delta E = 0.32$	$\Delta E = 0.57$	$\Delta E = 0.30$	$\Delta E = 0.53$	$\Delta E = 0.48$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.47$	$\Delta E = 0.26$	$\Delta E = 0.40$	$\Delta E = 0.37$	$\Delta E = 0.20$	$\Delta E = 0.32$	$\Delta E = 0.59$	$\Delta E = 0.07$	$\Delta E = 0.24$	$\Delta E = 0.36$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.48$	$\Delta E = 0.26$	$\Delta E = 0.31$	$\Delta E = 0.34$	$\Delta E = 0.34$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.41$	$\Delta E = 0.43$	$\Delta E = 0.64$	$\Delta E = 0.36$	$\Delta E = 0.36$	$\Delta E = 0.22$	$\Delta E = 0.27$	$\Delta E = 0.59$	$\Delta E = 0.62$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.43$	$\Delta E = 0.37$	$\Delta E = 0.50$	$\Delta E = 0.17$	$\Delta E = 0.60$	$\Delta E = 0.23$	$\Delta E = 0.50$	$\Delta E = 0.60$	$\Delta E = 0.49$

PHP8HP5C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.10$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.18$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.38$	FL3.15 $\Delta E = 0.06$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.30$
B $\Delta E = 0.12$	D65 $\Delta E = 0.12$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.35$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.29$
C $\Delta E = 0.09$	D75 $\Delta E = 0.15$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.14$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.23$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.06$	E $\Delta E = 0.05$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.42$	FL3.3 $\Delta E = 0.06$	FL3.8 $\Delta E = 0.30$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.50$	LED-V1 $\Delta E = 0.54$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.40$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.39$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.11$	LED-B4 $\Delta E = 0.39$	LED-V2 $\Delta E = 0.48$

PHP8HP5C - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.038294	0.057108	0.076431	0.170396	0.349571	0.472725	0.558433	0.611387	0.627326	0.634991	0.626058
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.616603	0.596571	0.562961	0.524055	0.477241	0.430242	0.377075	0.323512	0.281006	0.251250	0.232087
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.220892	0.210783	0.200693	0.194342	0.196789	0.208596	0.227487	0.248079	0.271609	0.304304	0.340790
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.372737	0.393125	0.419119	0.444258	0.466694	0.499558	0.516835	0.539822			

2 Gaussians max

Scaling factor: 300.1254552281036

Gaussians:

Weight	Mean		Covariance			
0.738029822	375.944131643	454.060224822	1201.772641363	-49.576818468	-49.576818468	904.243857304
0.261970178	523.419705506	625.537561770	16987.773341988	-1726.965439645	-1726.965439645	12867.964774173

4 Gaussians max

Scaling factor: 295.0129072937288

Gaussians:

Weight	Mean		Covariance			
0.735786830	375.569774951	454.136238895	1178.568636019	-44.624361203	-44.624361203	898.520692037
0.066583098	576.270104283	474.451627065	13279.562761228	-393.767976203	-393.767976203	4391.404259575
0.130179418	427.096381244	663.267974906	3747.076809396	-231.466349337	-231.466349337	7130.011779479
0.067450654	658.183216443	693.286252330	6759.577656168	307.927053608	307.927053608	3518.057368593

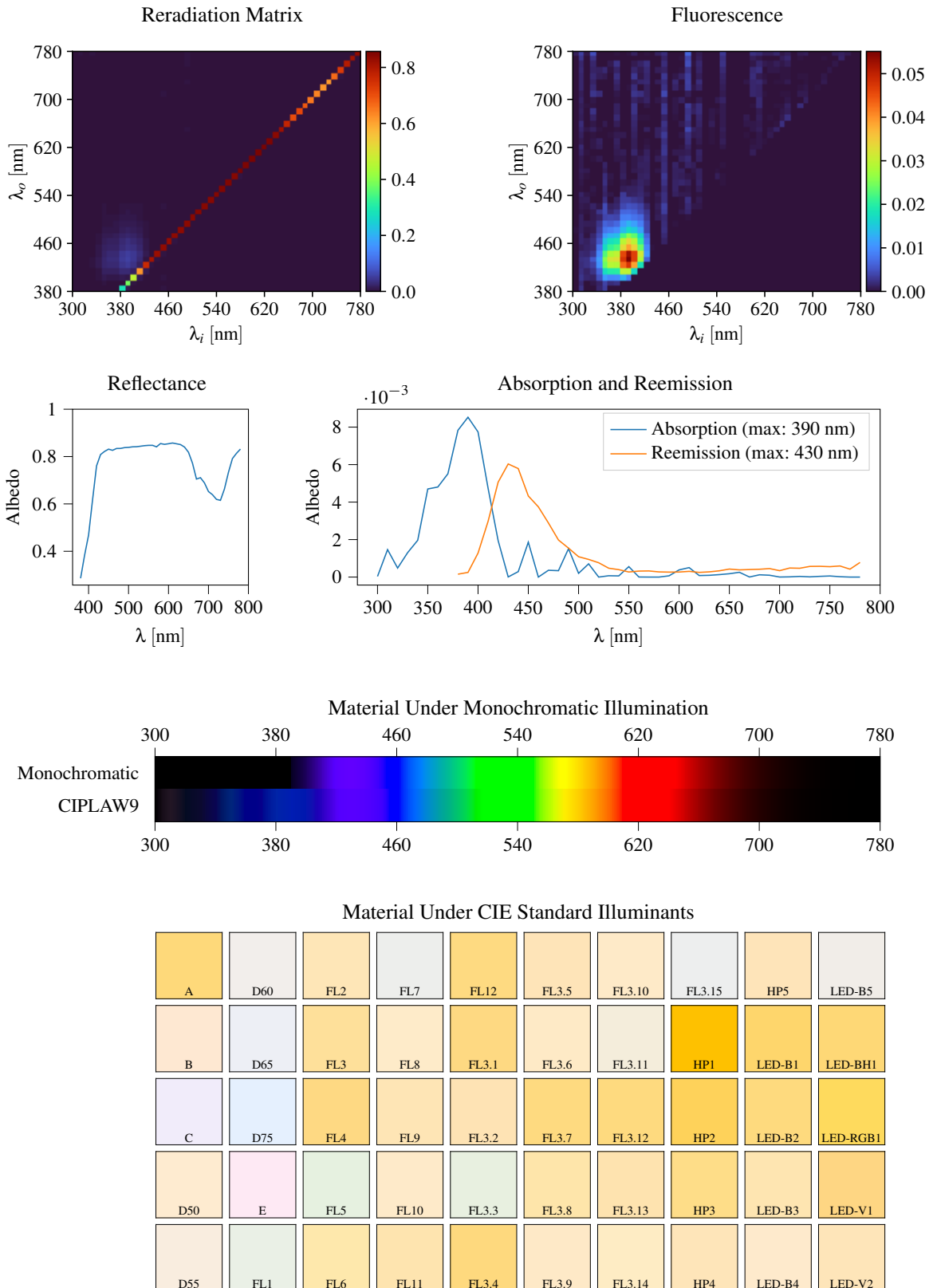
8 Gaussians max

Scaling factor: 293.25824102764955

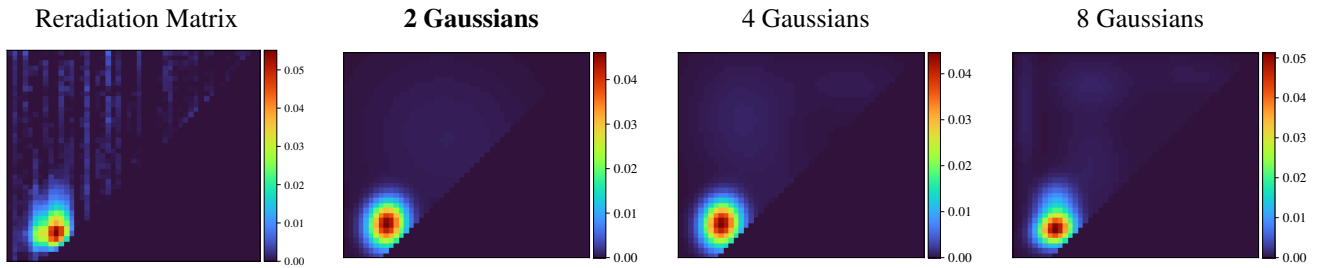
Gaussians:

Weight	Mean		Covariance			
0.704860395	374.075686370	453.121077100	1101.484366357	-41.211624165	-41.211624165	815.623056931
0.100640109	428.216880943	517.172130779	3288.490841080	-1145.521865448	-1145.521865448	5516.988854559
0.039499162	648.337985550	480.480713956	6688.618981181	-941.380221257	-941.380221257	4802.362619770
0.064591407	662.477758219	690.362752234	6363.532402181	749.900630998	749.900630998	3653.572016680
0.088389487	434.593510785	712.410668052	4409.328630005	-447.273755197	-447.273755197	2634.948201558

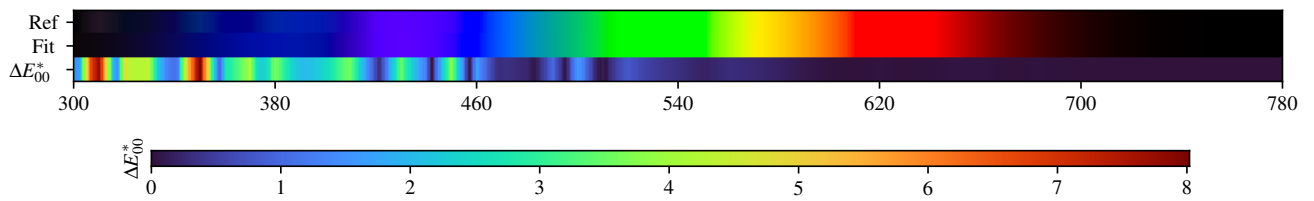
3.55. CIPLAW9



CIPLAW9 - Weighted Expectation-Maximization - 2 Gaussians



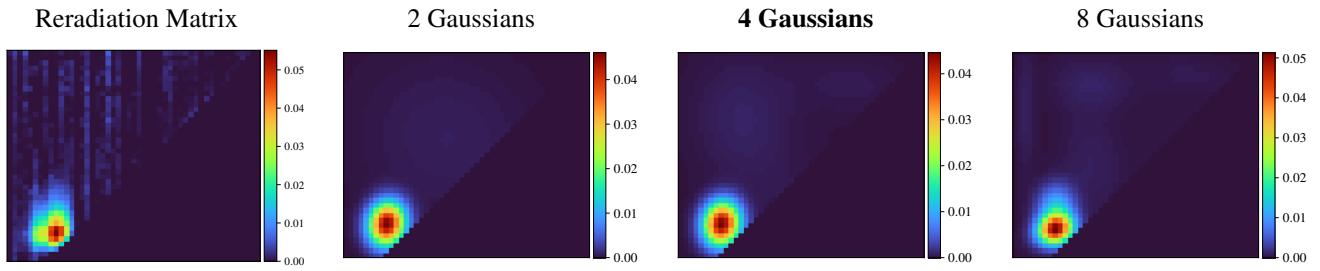
Fitted Material Under Monochromatic Illumination



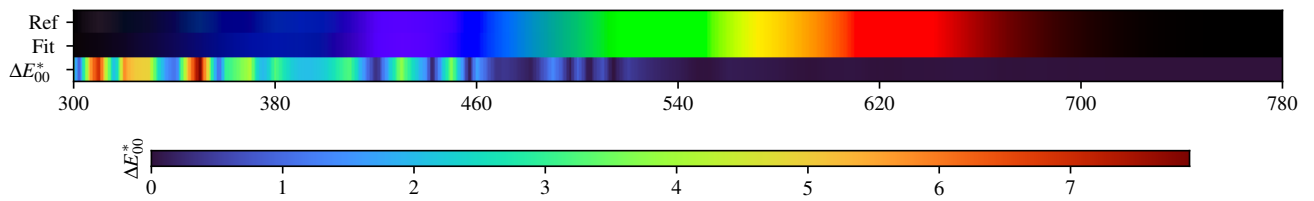
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.78$	FL2 $\Delta E = 0.26$	FL7 $\Delta E = 0.55$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.19$	FL3.10 $\Delta E = 0.31$	FL3.15 $\Delta E = 0.57$	HP5 $\Delta E = 0.27$	LED-B5 $\Delta E = 0.63$
B $\Delta E = 0.44$	D65 $\Delta E = 0.85$	FL3 $\Delta E = 0.18$	FL8 $\Delta E = 0.34$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.31$	FL3.11 $\Delta E = 0.47$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.56$	D75 $\Delta E = 0.88$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.21$	FL3.2 $\Delta E = 0.20$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.54$	E $\Delta E = 0.67$	FL5 $\Delta E = 0.45$	FL10 $\Delta E = 0.36$	FL3.3 $\Delta E = 0.45$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.27$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.68$	FL1 $\Delta E = 0.50$	FL6 $\Delta E = 0.26$	FL11 $\Delta E = 0.20$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.33$	FL3.14 $\Delta E = 0.28$	HP4 $\Delta E = 0.29$	LED-B4 $\Delta E = 0.45$	LED-V2 $\Delta E = 0.25$

CIPLAW9 - Weighted Expectation-Maximization - 4 Gaussians



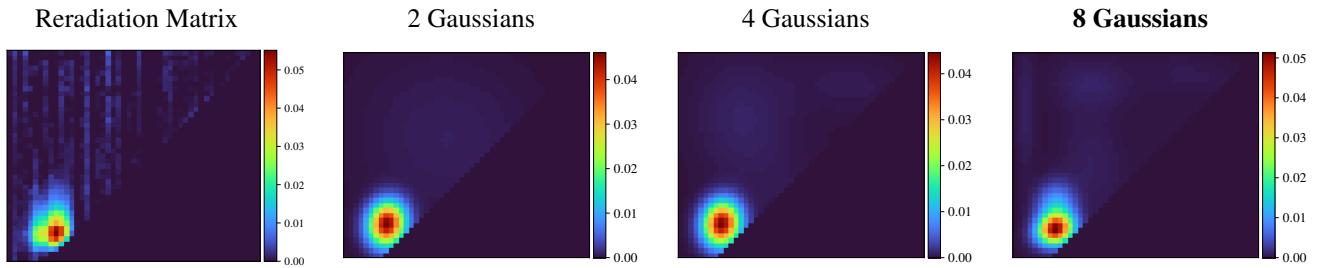
Fitted Material Under Monochromatic Illumination



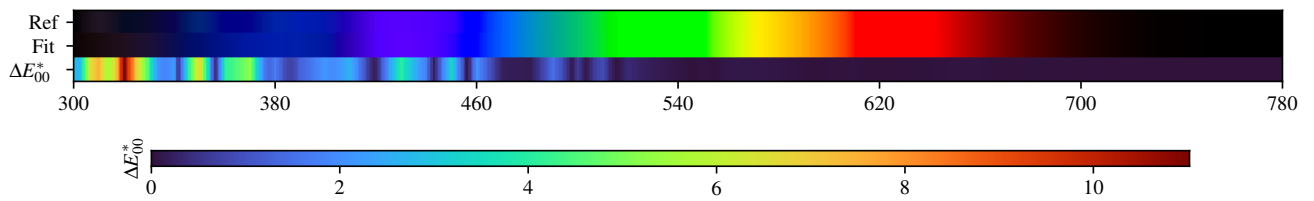
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.55$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.29$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.32$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.44$
B $\Delta E = 0.27$	D65 $\Delta E = 0.61$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.27$	HP1 $\Delta E = 0.01$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.37$	D75 $\Delta E = 0.67$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.34$	E $\Delta E = 0.48$	FL5 $\Delta E = 0.21$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.21$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.45$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.09$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.13$

CIPLAW9 - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.15$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.22$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.36$	HP5 $\Delta E = 0.07$	LED-B5 $\Delta E = 0.14$
B $\Delta E = 0.11$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.14$	D75 $\Delta E = 0.12$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.02$
D50 $\Delta E = 0.11$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.21$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.05$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.10$	LED-V2 $\Delta E = 0.24$

CIPLAW9 - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.285809	0.382967	0.468457	0.617815	0.761020	0.808535	0.821738	0.831259	0.826415	0.834181	0.834376
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.837792	0.838778	0.841093	0.841535	0.843751	0.846036	0.847354	0.847469	0.841052	0.854906	0.851640
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.854196	0.857205	0.854011	0.850674	0.840260	0.818284	0.772096	0.705060	0.710728	0.688649	0.652409
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.639009	0.619265	0.615129	0.663192	0.733216	0.791553	0.813416	0.831611			

2 Gaussians

Scaling factor: 288.2526233269682

Gaussians:

Weight	Mean		Covariance			
0.292906304	501.247877780	611.771450492	15905.685963711	-1062.446098852	-1062.446098852	13935.279836815
0.707093696	381.401353044	443.145725834	588.573180875	54.262558089	54.262558089	842.330846156

4 Gaussians

Scaling factor: 282.73599784096757

Gaussians:

Weight	Mean		Covariance			
0.053324917	639.164129982	719.456666165	7455.496543313	-579.730465095	-579.730465095	2142.149366049
0.150854413	423.630407297	650.784314552	5143.571405846	-505.845999459	-505.845999459	7595.374919267
0.084237114	560.244842020	480.875034911	13960.344403949	336.159178589	336.159178589	5223.553070684
0.711583556	381.293038822	443.364778612	599.089983042	51.160025385	51.160025385	858.496929413

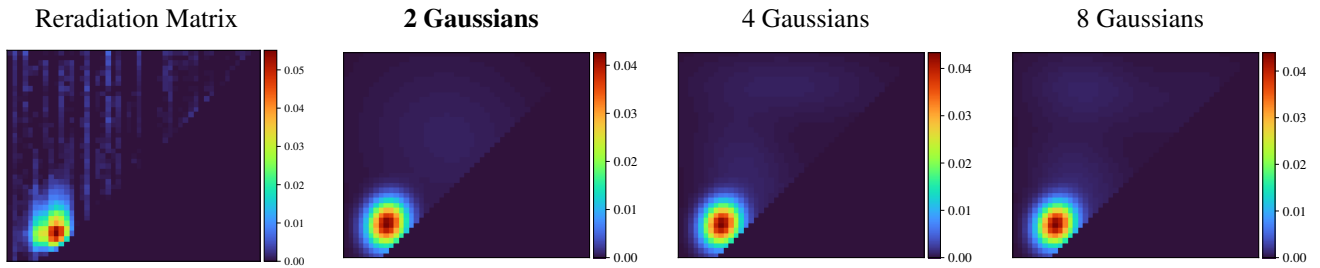
8 Gaussians

Scaling factor: 276.52034500258856

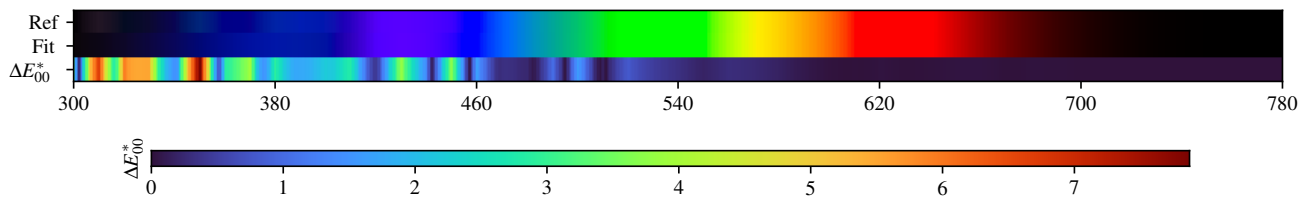
Gaussians:

Weight	Mean		Covariance			
0.036221328	649.945186077	738.825729871	6953.264099681	-609.492074117	-609.492074117	1034.582259110
0.085506014	450.839295385	558.699531678	2366.481727388	-414.006208112	-414.006208112	6029.333443604
0.226979593	381.841152206	472.088599364	567.565718019	13.448817572	13.448817572	922.829944633
0.036904105	512.425002831	404.484515515	15752.127022064	216.729259996	216.729259996	375.342390560
0.029993795	322.033855630	664.305284524	177.427354398	-29.956424065	-29.956424065	8648.293576609
0.049753302	641.377864265	575.724589425	5781.354751774	-1688.252358127	-1688.252358127	7528.135888038
0.477957664	380.450208210	432.027312773	543.374041653	56.630173856	56.630173856	390.709573100
0.056684200	448.525254320	720.875075024	3225.745421134	-178.596384057	-178.596384057	1452.836019452

CIPLAW9 - Weighted variational Bayesian inference - 2 Gaussians



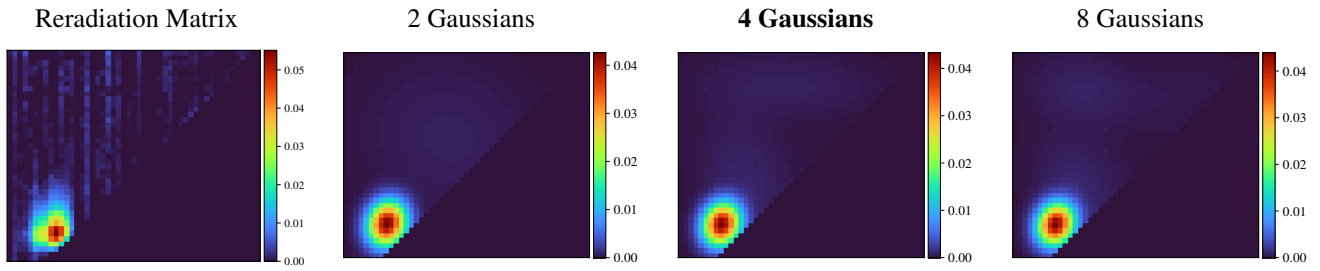
Fitted Material Under Monochromatic Illumination



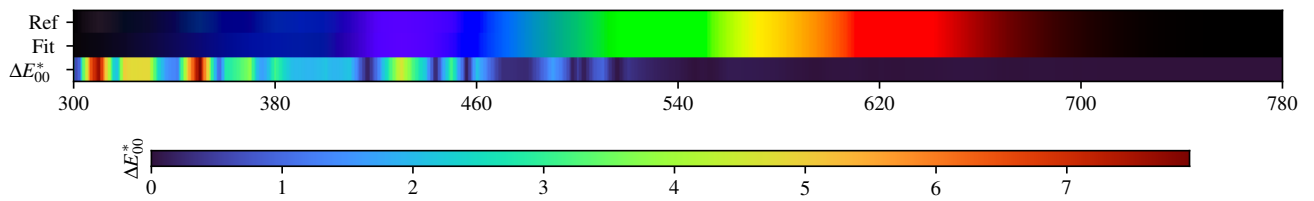
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.60$	FL2 $\Delta E = 0.24$	FL7 $\Delta E = 0.47$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.18$	FL3.10 $\Delta E = 0.32$	FL3.15 $\Delta E = 0.47$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.64$
B $\Delta E = 0.37$	D65 $\Delta E = 0.64$	FL3 $\Delta E = 0.18$	FL8 $\Delta E = 0.32$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.29$	FL3.11 $\Delta E = 0.47$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.44$	D75 $\Delta E = 0.65$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.44$	E $\Delta E = 0.37$	FL5 $\Delta E = 0.40$	FL10 $\Delta E = 0.36$	FL3.3 $\Delta E = 0.40$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.29$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.54$	FL1 $\Delta E = 0.44$	FL6 $\Delta E = 0.24$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.34$	FL3.14 $\Delta E = 0.27$	HP4 $\Delta E = 0.27$	LED-B4 $\Delta E = 0.47$	LED-V2 $\Delta E = 0.23$

CIPLAW9 - Weighted variational Bayesian inference - 4 Gaussians



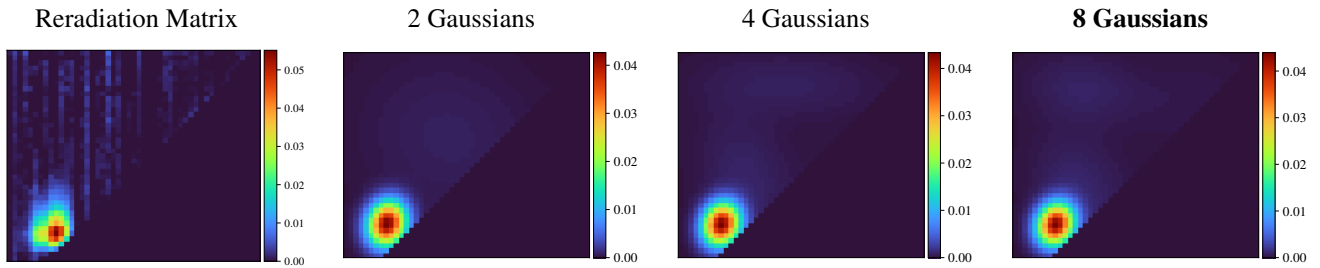
Fitted Material Under Monochromatic Illumination



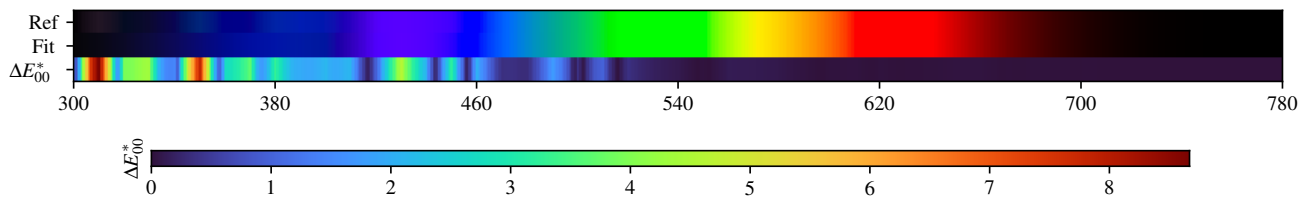
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.08$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.38$	HP5 $\Delta E = 0.07$	LED-B5 $\Delta E = 0.26$
B $\Delta E = 0.10$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.23$	HP1 $\Delta E = 0.01$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.16$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.08$	E $\Delta E = 0.09$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.12$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.04$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.12$

CIPLAW9 - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.34$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.30$
B $\Delta E = 0.10$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.20$	D75 $\Delta E = 0.12$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.09$	E $\Delta E = 0.15$	FL5 $\Delta E = 0.11$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.11$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.17$	LED-V2 $\Delta E = 0.11$

CIPLAW9 - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.285809	0.382967	0.468457	0.617815	0.761020	0.808535	0.821738	0.831259	0.826415	0.834181	0.834376
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.837792	0.838778	0.841093	0.841535	0.843751	0.846036	0.847354	0.847469	0.841052	0.854906	0.851640
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.854196	0.857205	0.854011	0.850674	0.840260	0.818284	0.772096	0.705060	0.710728	0.688649	0.652409
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.639009	0.619265	0.615129	0.663192	0.733216	0.791553	0.813416	0.831611			

2 Gaussians max

Scaling factor: 289.1132311492847

Gaussians:

Weight	Mean		Covariance			
0.711290770	381.756680445	443.515222304	659.349391997	82.943485794	82.943485794	896.851903391
0.288709230	502.916282937	613.950210112	15943.804812538	-1290.570716654	-1290.570716654	13765.119211310

4 Gaussians max

Scaling factor: 281.51632986709274

Gaussians:

Weight	Mean		Covariance			
0.687845222	381.135253915	442.465089765	629.088369069	86.692941639	86.692941639	822.900007985
0.143366364	428.004609679	537.231139964	4465.137608860	-1441.987079624	-1441.987079624	7897.237827211
0.048267950	648.104934996	512.778605465	6709.560173824	-1908.844846696	-1908.844846696	7596.581612376
0.120520465	515.754473902	720.304338615	17206.571689556	-488.849142941	-488.849142941	2112.970686599

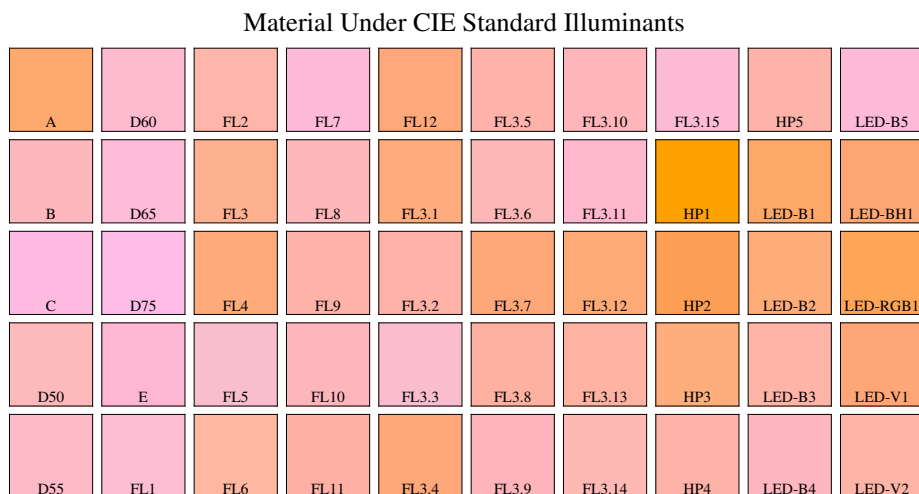
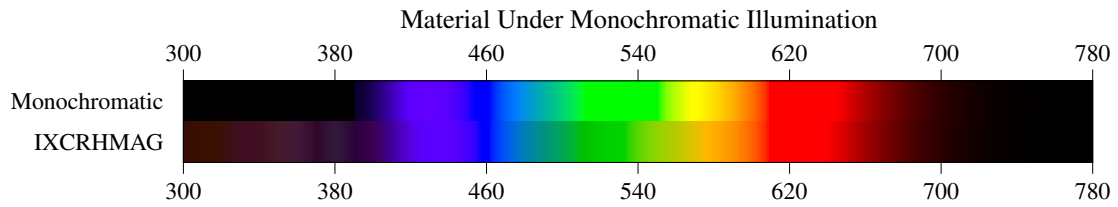
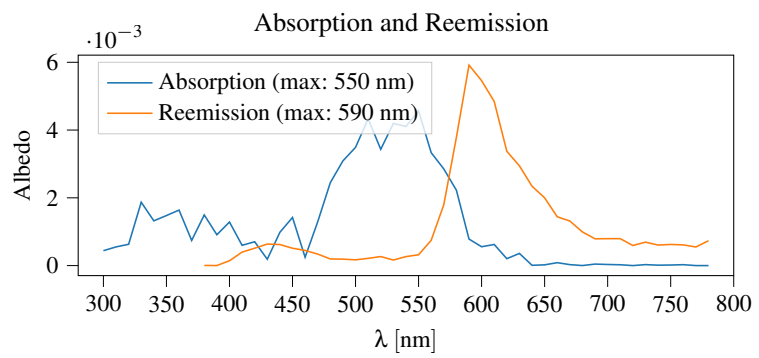
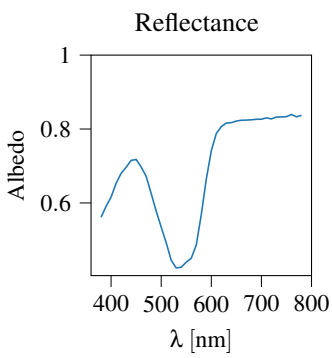
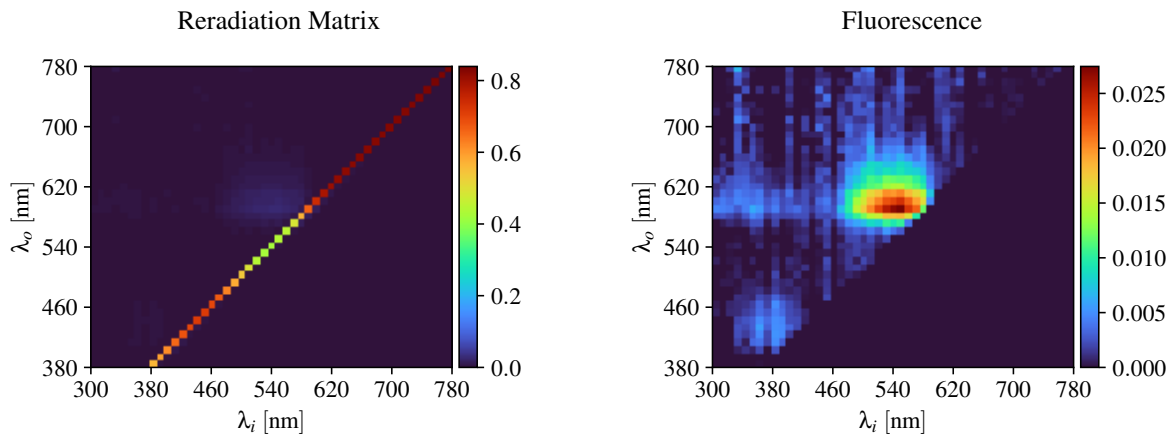
8 Gaussians max

Scaling factor: 282.64073710785857

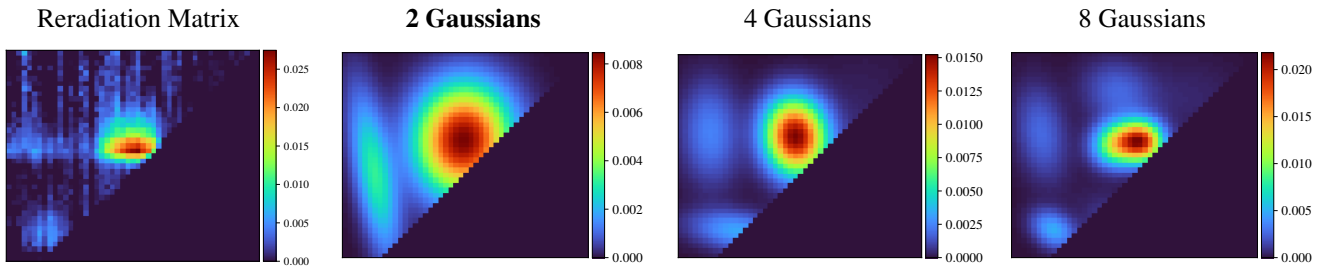
Gaussians:

Weight	Mean		Covariance			
0.676728853	381.058460105	442.051099010	620.073324406	89.584713883	89.584713883	799.774678081
0.131700397	425.093572042	514.331732426	4195.945326814	-1114.178339231	-1114.178339231	5604.885075499
0.041091262	645.808083692	492.275844173	7155.481944804	-2231.499198400	-2231.499198400	6033.259257544
0.052544526	648.898236909	697.697600367	6907.453461542	732.656310863	732.656310863	4102.243732003
0.095934648	435.612487340	711.485561452	6515.321177197	-563.131527330	-563.131527330	2597.977171069

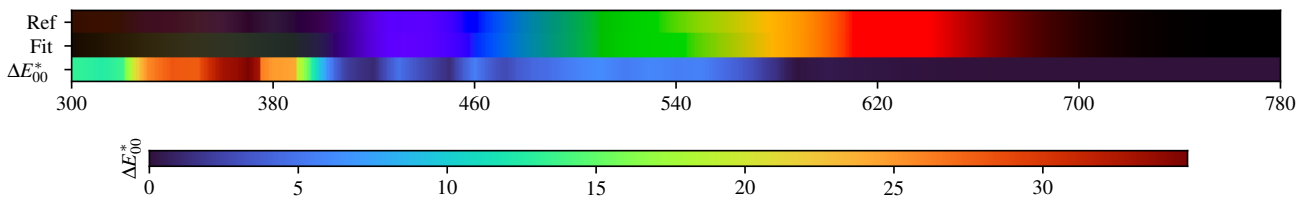
3.56. IXCRHMAG



IXCRHMAG - Weighted Expectation-Maximization - 2 Gaussians



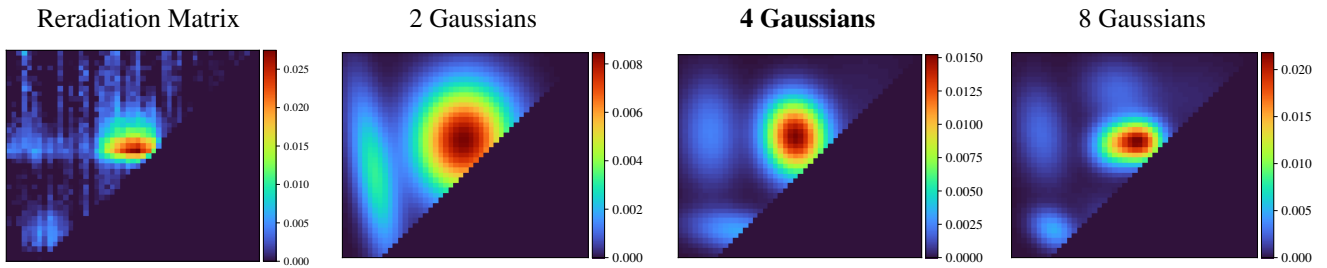
Fitted Material Under Monochromatic Illumination



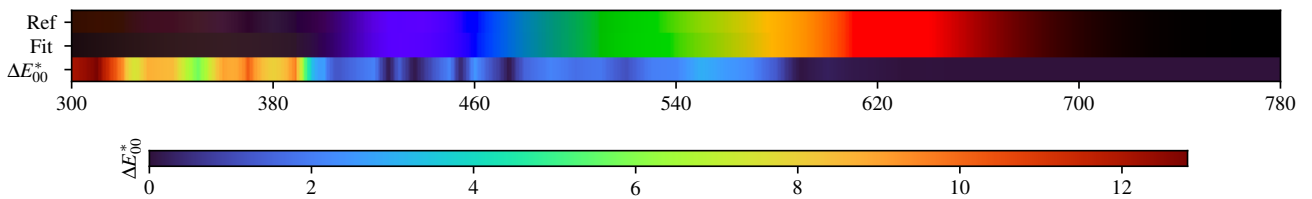
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.97$	D60 $\Delta E = 2.36$	FL2 $\Delta E = 1.48$	FL7 $\Delta E = 2.28$	FL12 $\Delta E = 0.83$	FL3.5 $\Delta E = 1.22$	FL3.10 $\Delta E = 1.46$	FL3.15 $\Delta E = 2.31$	HP5 $\Delta E = 1.23$	LED-B5 $\Delta E = 2.14$
B $\Delta E = 1.72$	D65 $\Delta E = 2.53$	FL3 $\Delta E = 1.13$	FL8 $\Delta E = 1.74$	FL3.1 $\Delta E = 0.80$	FL3.6 $\Delta E = 1.60$	FL3.11 $\Delta E = 1.86$	HP1 $\Delta E = 0.49$	LED-B1 $\Delta E = 0.81$	LED-BH1 $\Delta E = 0.86$
C $\Delta E = 2.21$	D75 $\Delta E = 2.80$	FL4 $\Delta E = 0.87$	FL9 $\Delta E = 1.37$	FL3.2 $\Delta E = 1.23$	FL3.7 $\Delta E = 0.75$	FL3.12 $\Delta E = 0.85$	HP2 $\Delta E = 0.92$	LED-B2 $\Delta E = 0.93$	LED-RGB1 $\Delta E = 0.99$
D50 $\Delta E = 1.95$	E $\Delta E = 2.00$	FL5 $\Delta E = 2.86$	FL10 $\Delta E = 1.63$	FL3.3 $\Delta E = 2.56$	FL3.8 $\Delta E = 1.13$	FL3.13 $\Delta E = 1.17$	HP3 $\Delta E = 0.91$	LED-B3 $\Delta E = 1.35$	LED-V1 $\Delta E = 0.85$
D55 $\Delta E = 2.15$	FL1 $\Delta E = 2.60$	FL6 $\Delta E = 1.57$	FL11 $\Delta E = 1.20$	FL3.4 $\Delta E = 0.80$	FL3.9 $\Delta E = 1.44$	FL3.14 $\Delta E = 1.72$	HP4 $\Delta E = 1.07$	LED-B4 $\Delta E = 1.71$	LED-V2 $\Delta E = 1.46$

IXCRHMAG - Weighted Expectation-Maximization - 4 Gaussians



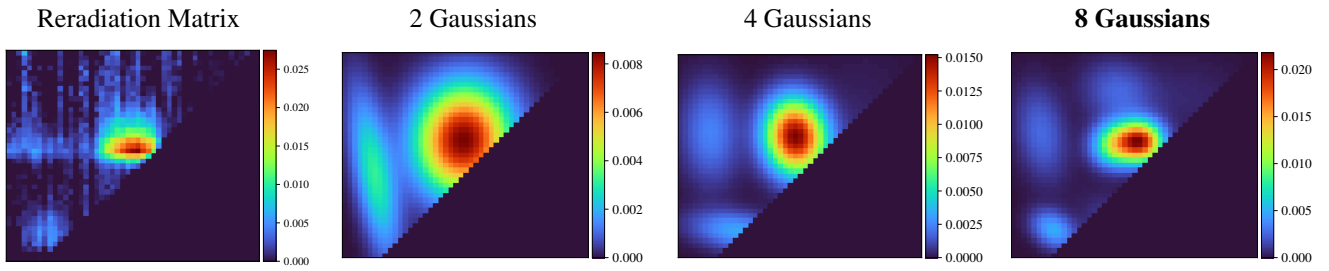
Fitted Material Under Monochromatic Illumination



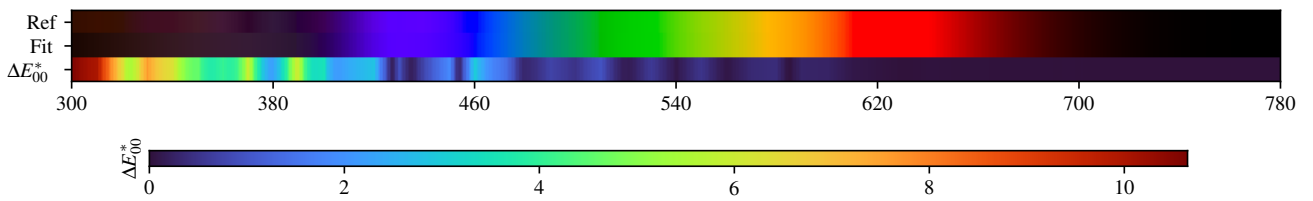
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.46$	D60 $\Delta E = 1.06$	FL2 $\Delta E = 0.85$	FL7 $\Delta E = 1.11$	FL12 $\Delta E = 0.48$	FL3.5 $\Delta E = 0.62$	FL3.10 $\Delta E = 0.79$	FL3.15 $\Delta E = 1.02$	HP5 $\Delta E = 0.67$	LED-B5 $\Delta E = 1.07$
B $\Delta E = 0.86$	D65 $\Delta E = 1.12$	FL3 $\Delta E = 0.68$	FL8 $\Delta E = 0.85$	FL3.1 $\Delta E = 0.53$	FL3.6 $\Delta E = 0.76$	FL3.11 $\Delta E = 0.97$	HP1 $\Delta E = 0.40$	LED-B1 $\Delta E = 0.44$	LED-BH1 $\Delta E = 0.47$
C $\Delta E = 1.06$	D75 $\Delta E = 1.21$	FL4 $\Delta E = 0.58$	FL9 $\Delta E = 0.71$	FL3.2 $\Delta E = 0.72$	FL3.7 $\Delta E = 0.41$	FL3.12 $\Delta E = 0.42$	HP2 $\Delta E = 0.61$	LED-B2 $\Delta E = 0.49$	LED-RGB1 $\Delta E = 0.40$
D50 $\Delta E = 0.87$	E $\Delta E = 0.84$	FL5 $\Delta E = 1.36$	FL10 $\Delta E = 0.91$	FL3.3 $\Delta E = 1.22$	FL3.8 $\Delta E = 0.62$	FL3.13 $\Delta E = 0.56$	HP3 $\Delta E = 0.43$	LED-B3 $\Delta E = 0.72$	LED-V1 $\Delta E = 0.52$
D55 $\Delta E = 0.98$	FL1 $\Delta E = 1.27$	FL6 $\Delta E = 0.85$	FL11 $\Delta E = 0.69$	FL3.4 $\Delta E = 0.43$	FL3.9 $\Delta E = 0.80$	FL3.14 $\Delta E = 0.73$	HP4 $\Delta E = 0.62$	LED-B4 $\Delta E = 0.94$	LED-V2 $\Delta E = 0.77$

IXCRHMAG - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.21$	FL2 $\Delta E = 0.20$	FL7 $\Delta E = 0.19$	FL12 $\Delta E = 0.18$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.20$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.18$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.19$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.16$	FL9 $\Delta E = 0.17$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.16$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.17$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.20$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.21$	FL10 $\Delta E = 0.21$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.24$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.20$	FL6 $\Delta E = 0.20$	FL11 $\Delta E = 0.20$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.22$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.29$

IXCRHMAG - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.561245	0.590629	0.616001	0.652949	0.679978	0.696421	0.715055	0.717616	0.697500	0.672085	0.625770
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.578058	0.534699	0.492328	0.444785	0.424118	0.426149	0.439725	0.450221	0.486242	0.568058	0.664447
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.741097	0.788048	0.806518	0.816090	0.817261	0.821584	0.823736	0.824156	0.824941	0.826321	0.826534
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.830049	0.827409	0.832426	0.832742	0.833493	0.839339	0.833022	0.836910			

2 Gaussians

Scaling factor: 309.4633157827249

Gaussians:

Weight	Mean		Covariance			
0.819256216	534.672466516	609.711478090	4099.276922456	129.253381028	129.253381028	5521.654153103
0.180743784	358.852516648	541.282828381	1056.862706333	-2021.871545524	-2021.871545524	11936.304512609

4 Gaussians

Scaling factor: 297.3171286381826

Gaussians:

Weight	Mean		Covariance			
0.138255104	359.657938905	626.542615968	1485.881210800	-139.297736551	-139.297736551	4757.008139638
0.079143167	652.363179317	601.586855738	4827.849615249	1584.682835592	1584.682835592	15901.029145799
0.669766305	529.761405103	619.138945075	1684.907879364	-124.569365788	-124.569365788	2609.966197250
0.112835425	414.082115010	429.216432945	3834.231556348	-440.935839702	-440.935839702	737.925072422

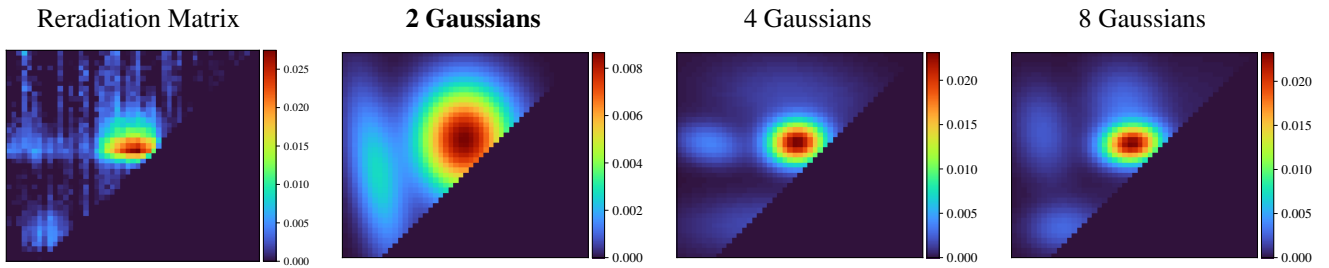
8 Gaussians

Scaling factor: 283.5974474638543

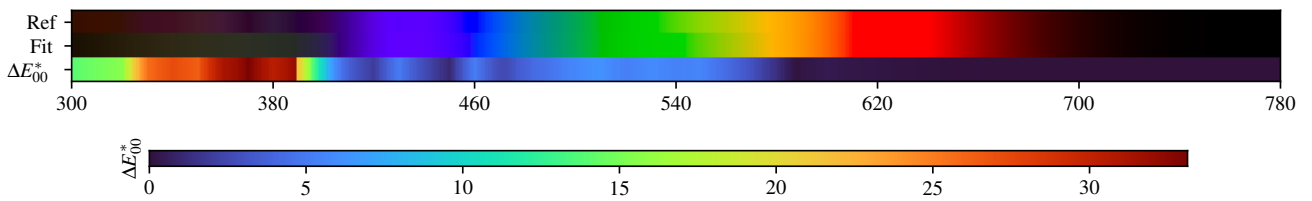
Gaussians:

Weight	Mean		Covariance			
0.111653361	506.231971685	704.610523973	2167.473348372	-256.089438980	-256.089438980	1790.573038492
0.045111902	487.131079520	443.582025072	1627.101964904	-490.890148325	-490.890148325	1883.889436011
0.036342339	630.712417155	467.129445483	4582.837968022	378.771808378	378.771808378	3465.612337292
0.078351519	378.428267136	431.593178759	829.713867659	-211.911111936	-211.911111936	664.589495767
0.127023411	354.329042963	623.114788782	1170.038187275	-491.413008196	-491.413008196	4048.367477366
0.298487132	554.711612307	606.266954706	778.628748668	-26.262755890	-26.262755890	735.027694864
0.059257107	646.587385940	693.439678535	5291.784598295	53.910087792	53.910087792	3235.769861846
0.243773230	504.267591469	601.639589532	968.780629225	42.608046163	42.608046163	846.007521550

IXCRHMAG - Weighted variational Bayesian inference - 2 Gaussians



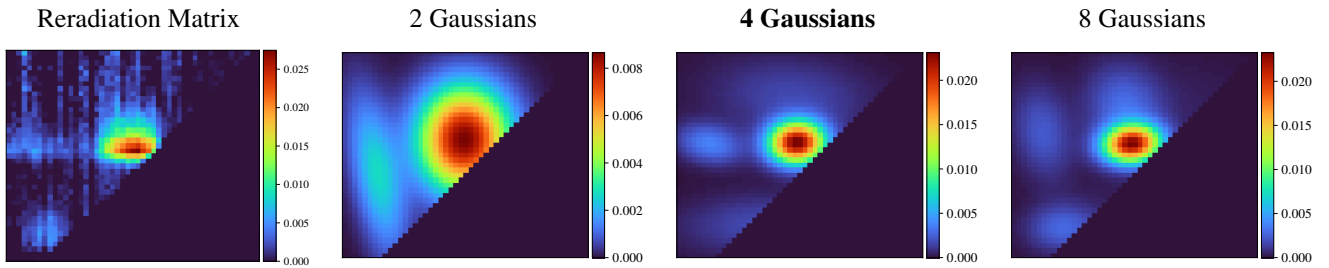
Fitted Material Under Monochromatic Illumination



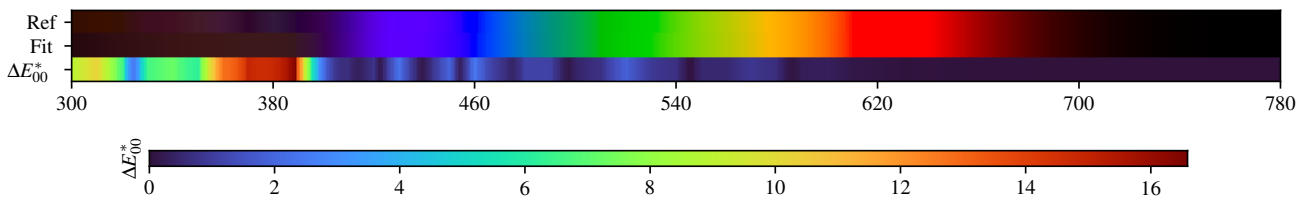
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.93$	D60 $\Delta E = 2.29$	FL2 $\Delta E = 1.43$	FL7 $\Delta E = 2.22$	FL12 $\Delta E = 0.81$	FL3.5 $\Delta E = 1.18$	FL3.10 $\Delta E = 1.43$	FL3.15 $\Delta E = 2.25$	HP5 $\Delta E = 1.19$	LED-B5 $\Delta E = 2.09$
B $\Delta E = 1.67$	D65 $\Delta E = 2.47$	FL3 $\Delta E = 1.09$	FL8 $\Delta E = 1.69$	FL3.1 $\Delta E = 0.76$	FL3.6 $\Delta E = 1.55$	FL3.11 $\Delta E = 1.82$	HP1 $\Delta E = 0.46$	LED-B1 $\Delta E = 0.78$	LED-BH1 $\Delta E = 0.84$
C $\Delta E = 2.16$	D75 $\Delta E = 2.73$	FL4 $\Delta E = 0.84$	FL9 $\Delta E = 1.33$	FL3.2 $\Delta E = 1.19$	FL3.7 $\Delta E = 0.72$	FL3.12 $\Delta E = 0.81$	HP2 $\Delta E = 0.89$	LED-B2 $\Delta E = 0.89$	LED-RGB1 $\Delta E = 0.95$
D50 $\Delta E = 1.89$	E $\Delta E = 1.94$	FL5 $\Delta E = 2.78$	FL10 $\Delta E = 1.60$	FL3.3 $\Delta E = 2.49$	FL3.8 $\Delta E = 1.10$	FL3.13 $\Delta E = 1.13$	HP3 $\Delta E = 0.87$	LED-B3 $\Delta E = 1.31$	LED-V1 $\Delta E = 0.82$
D55 $\Delta E = 2.09$	FL1 $\Delta E = 2.53$	FL6 $\Delta E = 1.52$	FL11 $\Delta E = 1.17$	FL3.4 $\Delta E = 0.77$	FL3.9 $\Delta E = 1.40$	FL3.14 $\Delta E = 1.67$	HP4 $\Delta E = 1.04$	LED-B4 $\Delta E = 1.67$	LED-V2 $\Delta E = 1.41$

IXCRHMAG - Weighted variational Bayesian inference - 4 Gaussians



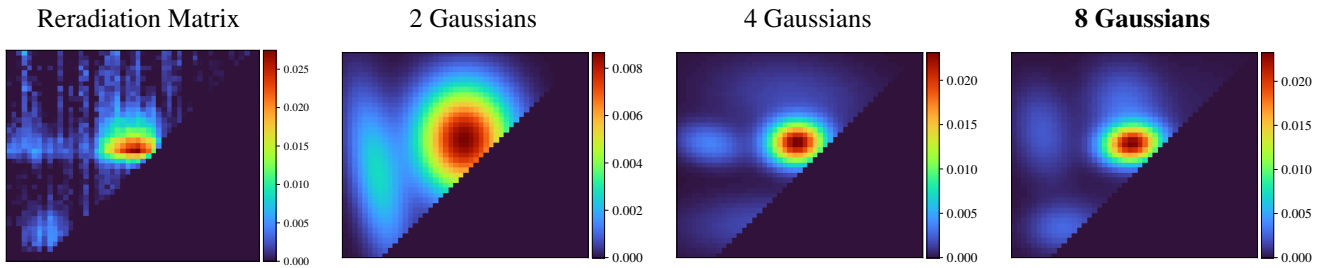
Fitted Material Under Monochromatic Illumination



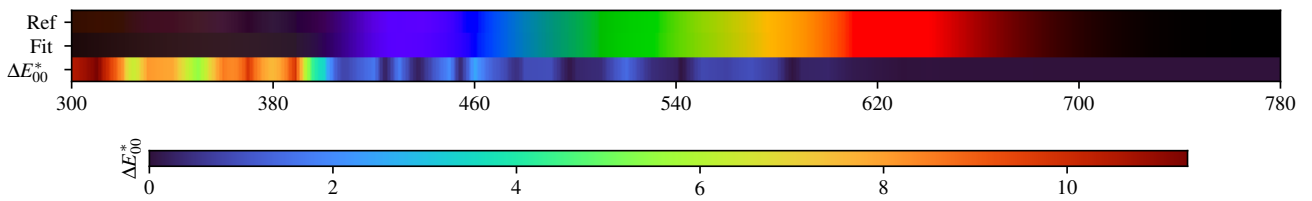
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.23$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.19$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.12$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.16$	D75 $\Delta E = 0.30$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.15$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.16$	E $\Delta E = 0.44$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.16$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.11$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.15$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.16$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.15$	LED-V2 $\Delta E = 0.18$

IXCRHMAG - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.18$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.09$	HP5 $\Delta E = 0.24$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.17$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.20$	FL8 $\Delta E = 0.16$	FL3.1 $\Delta E = 0.15$	FL3.6 $\Delta E = 0.14$	FL3.11 $\Delta E = 0.18$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.17$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.18$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.21$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.13$	E $\Delta E = 0.07$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.21$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.19$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.27$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.25$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.33$

IXCRHMAG - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.561245	0.590629	0.616001	0.652949	0.679978	0.696421	0.715055	0.717616	0.697500	0.672085	0.625770
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.578058	0.534699	0.492328	0.444785	0.424118	0.426149	0.439725	0.450221	0.486242	0.568058	0.664447
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.741097	0.788048	0.806518	0.816090	0.817261	0.821584	0.823736	0.824156	0.824941	0.826321	0.826534
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.830049	0.827409	0.832426	0.832742	0.833493	0.839339	0.833022	0.836910			

2 Gaussians max

Scaling factor: 310.4614736572912

Gaussians:

Weight	Mean		Covariance			
0.193034751	363.812120170	540.622030259	1501.004330044	-2048.833352897	-2048.833352897	11877.256116683
0.806965249	536.353928130	610.935693058	3967.524400915	28.672047587	28.672047587	5329.795020824

4 Gaussians max

Scaling factor: 296.3898719112903

Gaussians:

Weight	Mean		Covariance			
0.162553756	457.456439650	442.962687728	10860.712101598	373.677517021	373.677517021	1681.812750120
0.524544571	533.806032016	604.291390385	1412.720687667	30.123241759	30.123241759	813.639439007
0.095321249	361.876345719	601.993463743	2044.949783408	-254.045441910	-254.045441910	758.665814017
0.217580424	524.572221989	694.331377338	11961.910626777	-864.835631255	-864.835631255	2997.998579876

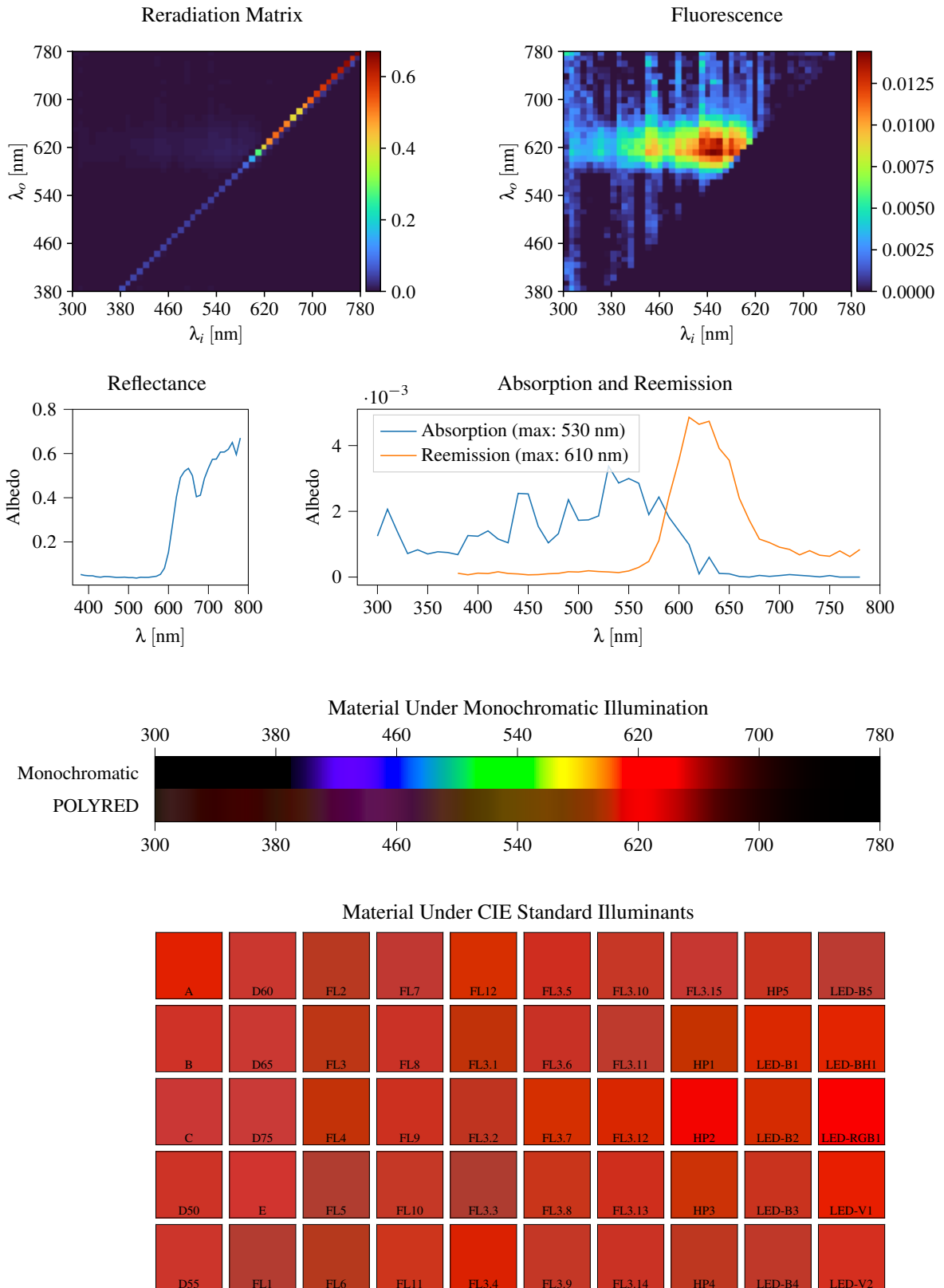
8 Gaussians max

Scaling factor: 288.1449079344829

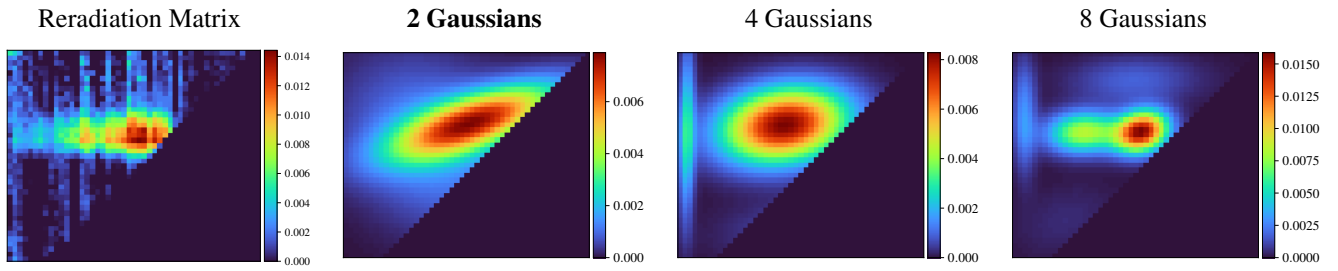
Gaussians:

Weight	Mean		Covariance			
0.097615691	397.381597344	435.229456816	2367.735100324	25.812338209	25.812338209	1107.296556236
0.065939647	564.239831931	461.313023576	8065.988242030	-85.938161780	-85.938161780	3384.119848580
0.127656208	356.858191265	624.660538891	1598.932812205	-488.428939057	-488.428939057	4041.878563521
0.466445935	533.733610959	601.894189491	1466.994411224	79.215228371	79.215228371	648.110294125
0.049752443	653.032821330	680.869777236	6333.673023760	890.792477955	890.792477955	4346.074979415
0.191665989	518.748145411	675.062464629	2591.277078984	-255.817096819	-255.817096819	3278.822785994

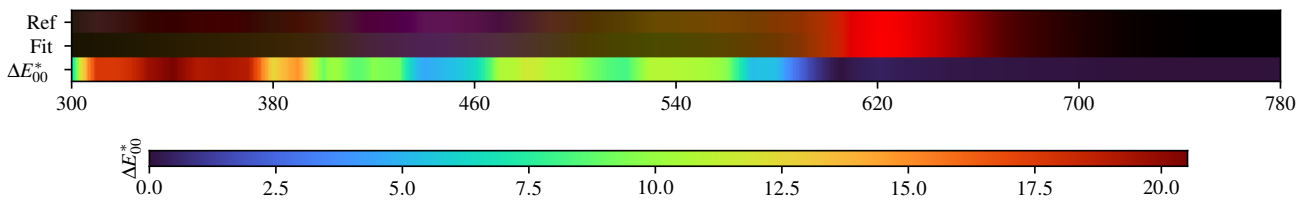
3.57. POLYRED



POLYRED - Weighted Expectation-Maximization - 2 Gaussians



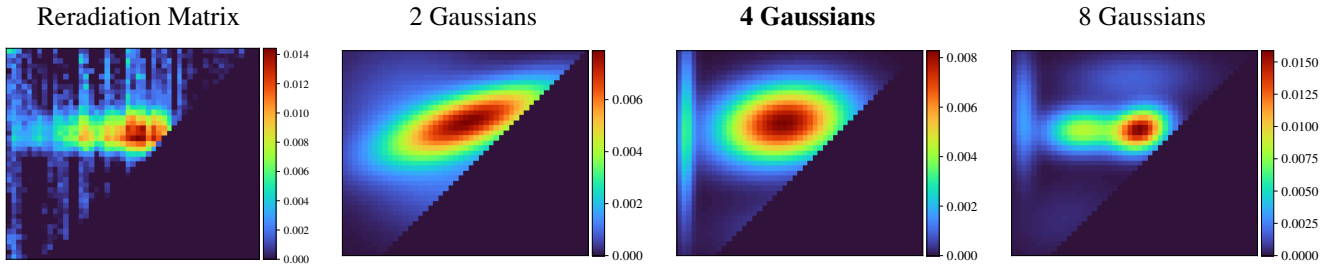
Fitted Material Under Monochromatic Illumination



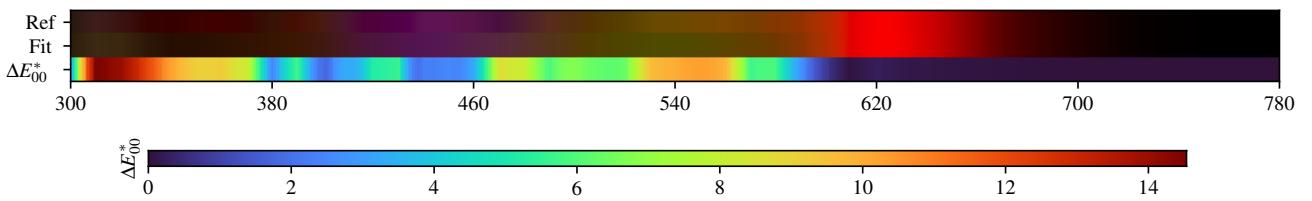
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.06$	$\Delta E = 3.12$	$\Delta E = 2.21$	$\Delta E = 2.69$	$\Delta E = 1.14$	$\Delta E = 1.47$	$\Delta E = 1.78$	$\Delta E = 2.75$	$\Delta E = 2.02$	$\Delta E = 2.70$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 2.27$	$\Delta E = 3.43$	$\Delta E = 1.83$	$\Delta E = 1.92$	$\Delta E = 1.47$	$\Delta E = 1.85$	$\Delta E = 2.06$	$\Delta E = 1.30$	$\Delta E = 1.15$	$\Delta E = 1.02$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 3.09$	$\Delta E = 3.96$	$\Delta E = 1.59$	$\Delta E = 1.60$	$\Delta E = 1.74$	$\Delta E = 1.02$	$\Delta E = 0.96$	$\Delta E = 0.89$	$\Delta E = 1.27$	$\Delta E = 0.67$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 2.45$	$\Delta E = 3.11$	$\Delta E = 3.28$	$\Delta E = 1.88$	$\Delta E = 3.05$	$\Delta E = 1.38$	$\Delta E = 1.40$	$\Delta E = 1.41$	$\Delta E = 1.77$	$\Delta E = 1.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 2.80$	$\Delta E = 3.17$	$\Delta E = 2.26$	$\Delta E = 1.47$	$\Delta E = 0.97$	$\Delta E = 1.68$	$\Delta E = 1.89$	$\Delta E = 2.25$	$\Delta E = 2.23$	$\Delta E = 2.01$

POLYRED - Weighted Expectation-Maximization - 4 Gaussians



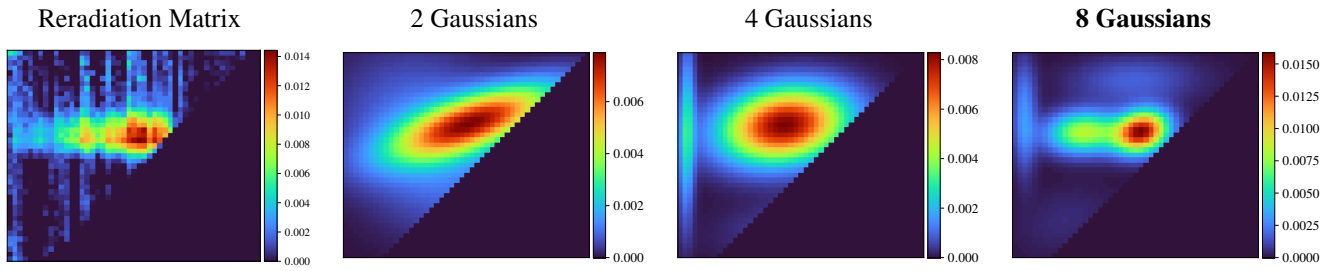
Fitted Material Under Monochromatic Illumination



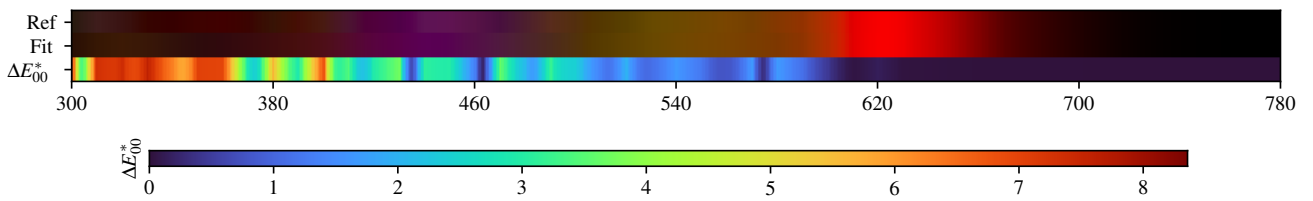
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.09$	$\Delta E = 2.08$	$\Delta E = 1.98$	$\Delta E = 1.94$	$\Delta E = 1.24$	$\Delta E = 1.26$	$\Delta E = 1.49$	$\Delta E = 1.88$	$\Delta E = 1.63$	$\Delta E = 2.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.67$	$\Delta E = 2.21$	$\Delta E = 1.82$	$\Delta E = 1.54$	$\Delta E = 1.59$	$\Delta E = 1.47$	$\Delta E = 1.73$	$\Delta E = 1.47$	$\Delta E = 1.23$	$\Delta E = 1.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.03$	$\Delta E = 2.43$	$\Delta E = 1.70$	$\Delta E = 1.42$	$\Delta E = 1.62$	$\Delta E = 1.16$	$\Delta E = 1.02$	$\Delta E = 0.99$	$\Delta E = 1.31$	$\Delta E = 0.71$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.78$	$\Delta E = 1.93$	$\Delta E = 2.47$	$\Delta E = 1.65$	$\Delta E = 2.32$	$\Delta E = 1.39$	$\Delta E = 1.23$	$\Delta E = 1.35$	$\Delta E = 1.61$	$\Delta E = 1.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.93$	$\Delta E = 2.36$	$\Delta E = 2.08$	$\Delta E = 1.43$	$\Delta E = 1.07$	$\Delta E = 1.53$	$\Delta E = 1.49$	$\Delta E = 1.83$	$\Delta E = 1.92$	$\Delta E = 1.56$

POLYRED - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.11$	$\Delta E = 0.27$	$\Delta E = 0.25$	$\Delta E = 0.12$	$\Delta E = 0.43$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.19$	$\Delta E = 0.29$	$\Delta E = 0.30$	$\Delta E = 0.16$	$\Delta E = 0.25$	$\Delta E = 0.10$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.33$	$\Delta E = 0.30$	$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.03$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.22$	$\Delta E = 0.45$	$\Delta E = 0.27$	$\Delta E = 0.32$	$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.29$	$\Delta E = 0.03$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.25$	$\Delta E = 0.26$	$\Delta E = 0.30$	$\Delta E = 0.29$	$\Delta E = 0.13$	$\Delta E = 0.26$	$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.39$	$\Delta E = 0.04$

POLYRED - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.052442	0.048437	0.046808	0.046600	0.042141	0.040385	0.043383	0.042911	0.041172	0.039178	0.039549
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.040412	0.038272	0.038408	0.036308	0.040008	0.039487	0.039597	0.042079	0.044669	0.053460	0.081133
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.152974	0.276529	0.404207	0.491082	0.519551	0.532875	0.500113	0.404365	0.411436	0.486594	0.533558
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.573580	0.575142	0.606493	0.606857	0.619401	0.650012	0.595623	0.670405			

2 Gaussians

Scaling factor: 288.45809069522267

Gaussians:

Weight	Mean	Covariance				
0.595566626	559.133178341	647.606697223	11833.224967818	3688.034164956	3688.034164956	2494.840863868
0.404433374	472.541555586	601.673219192	12735.658469442	-2566.520803371	-2566.520803371	11954.417679993

4 Gaussians

Scaling factor: 308.6528011098757

Gaussians:

Weight	Mean	Covariance				
0.710340438	507.304252502	639.584866178	7126.536734010	730.940473898	730.940473898	2564.059203858
0.069597281	555.371154747	434.110933072	13214.036121848	930.577293258	930.577293258	1877.949988909
0.066913467	313.451326896	626.148174758	117.034091167	114.231004529	114.231004529	12522.965459078
0.153148813	679.910417434	669.910417434	6914.357047588	6914.357046588	6914.357046588	6914.357047588

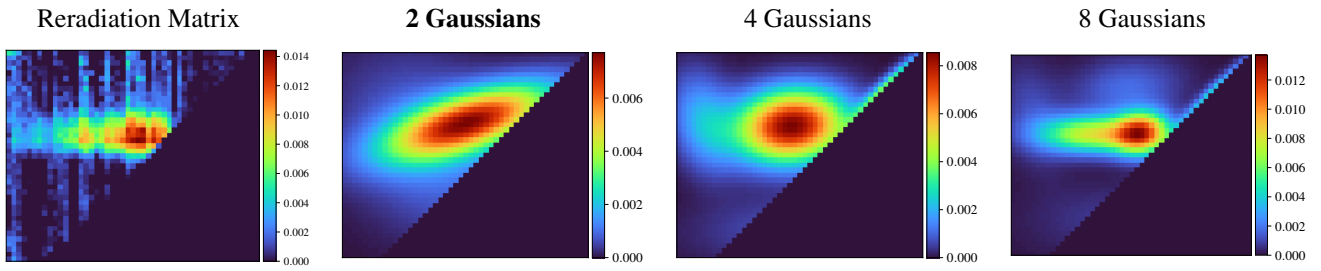
8 Gaussians

Scaling factor: 299.5485310056851

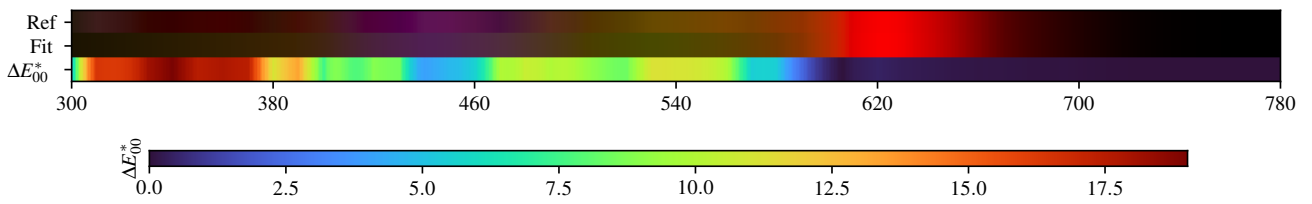
Gaussians:

Weight	Mean	Covariance					
0.106680009	534.643688894	728.152353756	7286.602792606	188.810992195	188.810992195	1090.201701423	
0.032971406	555.981213455	444.253806947	1767.572719092	842.971191940	842.971191940	2577.573932564	
0.240939979	436.088416868	624.788765102	2375.982961131	86.051068317	86.051068317	777.647819125	
0.153149301	679.911321748	669.911321748	6913.977150605	6913.977149605	6913.977149605	6913.977150605	
0.314306294	550.978836994	626.038526179	1253.450077323	178.342552002	178.342552002	773.317105930	
0.040651861	399.140809152	451.581196127	4643.785331958	1182.529882777	1182.529882777	2869.386935591	
0.037825930	705.910022424	534.368077531	2780.607307287	2413.066777154	2413.066777154	13616.308571490	
0.073475220	319.055139323	656.428335145	249.146937096	-20.492176250	-20.492176250	5381.349137312	

POLYRED - Weighted variational Bayesian inference - 2 Gaussians



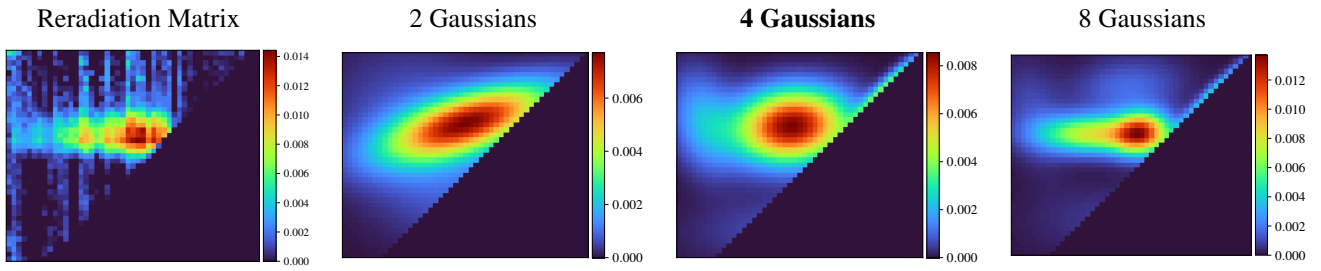
Fitted Material Under Monochromatic Illumination



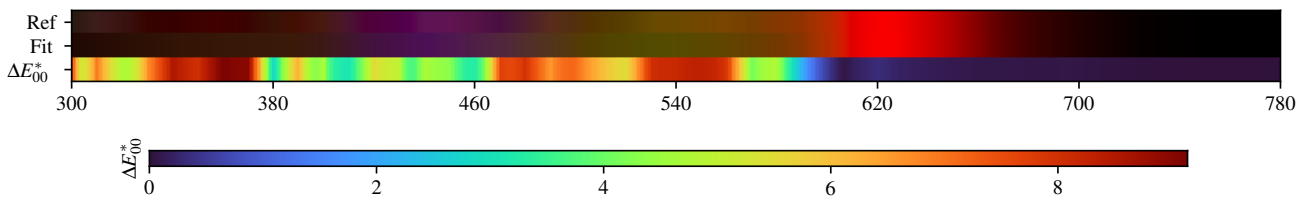
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.07$	$\Delta E = 2.85$	$\Delta E = 2.16$	$\Delta E = 2.48$	$\Delta E = 1.20$	$\Delta E = 1.40$	$\Delta E = 1.69$	$\Delta E = 2.50$	$\Delta E = 1.89$	$\Delta E = 2.56$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 2.08$	$\Delta E = 3.12$	$\Delta E = 1.85$	$\Delta E = 1.80$	$\Delta E = 1.52$	$\Delta E = 1.72$	$\Delta E = 1.98$	$\Delta E = 1.34$	$\Delta E = 1.20$	$\Delta E = 1.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.79$	$\Delta E = 3.60$	$\Delta E = 1.64$	$\Delta E = 1.55$	$\Delta E = 1.72$	$\Delta E = 1.09$	$\Delta E = 0.99$	$\Delta E = 0.97$	$\Delta E = 1.31$	$\Delta E = 0.68$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 2.26$	$\Delta E = 2.83$	$\Delta E = 3.08$	$\Delta E = 1.84$	$\Delta E = 2.86$	$\Delta E = 1.40$	$\Delta E = 1.33$	$\Delta E = 1.39$	$\Delta E = 1.75$	$\Delta E = 1.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 2.56$	$\Delta E = 2.96$	$\Delta E = 2.23$	$\Delta E = 1.48$	$\Delta E = 1.03$	$\Delta E = 1.65$	$\Delta E = 1.74$	$\Delta E = 2.13$	$\Delta E = 2.17$	$\Delta E = 1.85$

POLYRED - Weighted variational Bayesian inference - 4 Gaussians



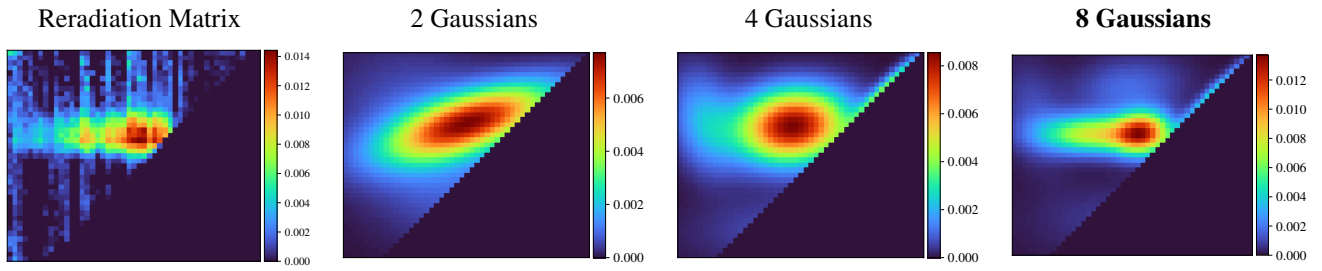
Fitted Material Under Monochromatic Illumination



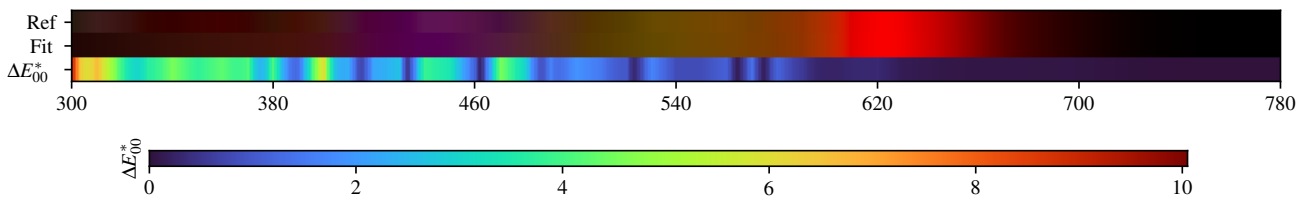
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.88$	$\Delta E = 1.93$	$\Delta E = 1.76$	$\Delta E = 1.84$	$\Delta E = 0.96$	$\Delta E = 1.15$	$\Delta E = 1.38$	$\Delta E = 1.79$	$\Delta E = 1.48$	$\Delta E = 2.02$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.55$	$\Delta E = 2.05$	$\Delta E = 1.54$	$\Delta E = 1.44$	$\Delta E = 1.25$	$\Delta E = 1.39$	$\Delta E = 1.60$	$\Delta E = 1.11$	$\Delta E = 0.99$	$\Delta E = 0.86$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.91$	$\Delta E = 2.24$	$\Delta E = 1.37$	$\Delta E = 1.27$	$\Delta E = 1.41$	$\Delta E = 0.86$	$\Delta E = 0.82$	$\Delta E = 0.71$	$\Delta E = 1.08$	$\Delta E = 0.62$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.64$	$\Delta E = 1.77$	$\Delta E = 2.35$	$\Delta E = 1.51$	$\Delta E = 2.20$	$\Delta E = 1.17$	$\Delta E = 1.14$	$\Delta E = 1.15$	$\Delta E = 1.45$	$\Delta E = 0.90$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.79$	$\Delta E = 2.24$	$\Delta E = 1.83$	$\Delta E = 1.23$	$\Delta E = 0.80$	$\Delta E = 1.36$	$\Delta E = 1.47$	$\Delta E = 1.64$	$\Delta E = 1.78$	$\Delta E = 1.42$

POLYRED - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.35$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.01$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.23$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.02$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.27$	$\Delta E = 0.13$	$\Delta E = 0.25$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.15$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.06$	$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.30$	$\Delta E = 0.15$

POLYRED - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.052442	0.048437	0.046808	0.046600	0.042141	0.040385	0.043383	0.042911	0.041172	0.039178	0.039549
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.040412	0.038272	0.038408	0.036308	0.040008	0.039487	0.039597	0.042079	0.044669	0.053460	0.081133
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.152974	0.276529	0.404207	0.491082	0.519551	0.532875	0.500113	0.404365	0.411436	0.486594	0.533558
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.573580	0.575142	0.606493	0.606857	0.619401	0.650012	0.595623	0.670405			

2 Gaussians max

Scaling factor: 287.49859923596927

Gaussians:

Weight	Mean	Covariance				
0.343283527	472.825242645	594.318642890	13292.611983541	-3178.280365860	-3178.280365860	13205.551900553
0.656716473	551.004791909	647.130568884	12260.916566511	3462.744012568	3462.744012568	2528.445764388

4 Gaussians max

Scaling factor: 292.50673318473326

Gaussians:

Weight	Mean	Covariance				
0.090504159	514.993986505	436.185073613	16998.668441750	966.066972807	966.066972807	2192.666565884
0.119922619	347.884740981	646.931048374	1903.480397687	-653.683624520	-653.683624520	4493.352247774
0.678237988	523.778456977	637.650512865	5647.993528945	363.915718513	363.915718513	2427.780812400
0.111335233	722.310297487	712.250335431	2236.987535249	1928.445795463	1928.445795463	2018.750029099

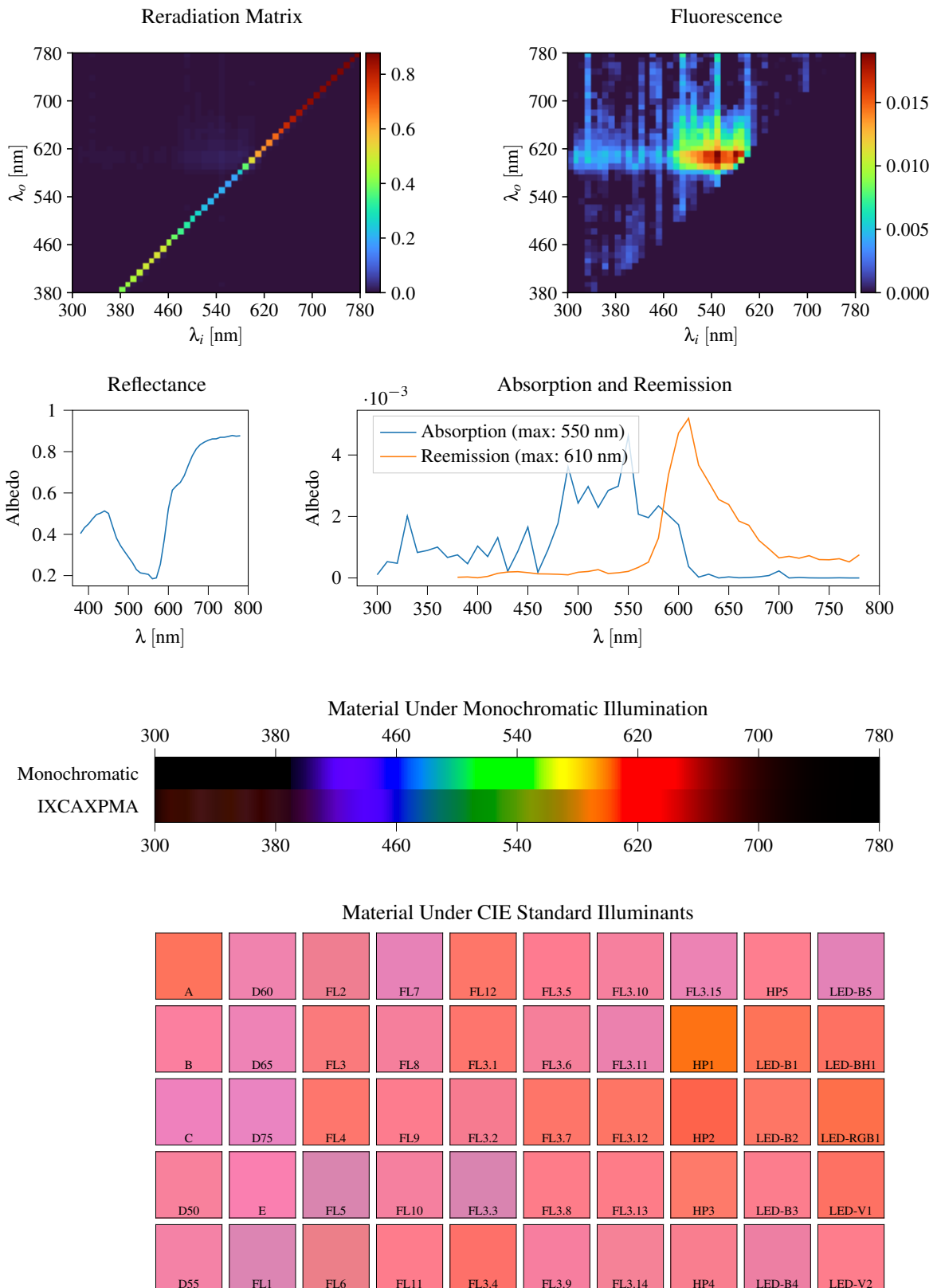
8 Gaussians max

Scaling factor: 293.26736865530313

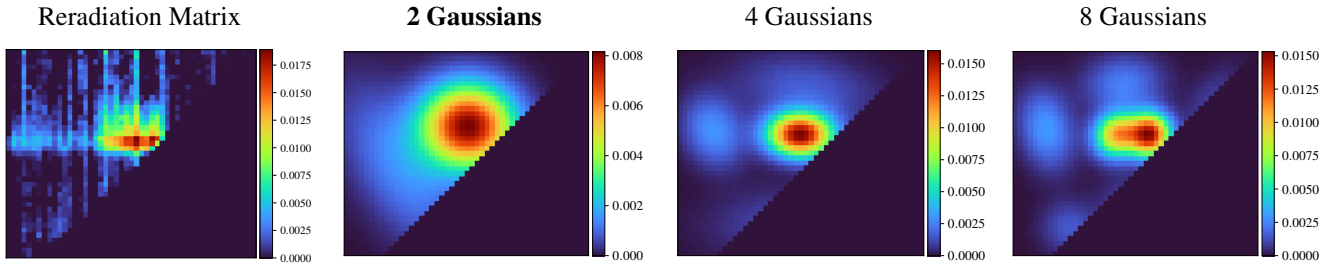
Gaussians:

Weight	Mean	Covariance				
0.105882336	507.527145359	448.770731847	15879.480179457	370.852952692	370.852952692	2918.718724263
0.074999155	340.775242806	661.948158642	1936.511765835	-875.562577525	-875.562577525	5283.991095694
0.014967261	683.742153545	616.401514469	7149.797666077	796.855742463	796.855742463	4220.187474785
0.303807624	457.905081018	622.271796053	5006.835430112	1.876233671	1.876233671	682.963848190
0.250504221	559.415281404	624.554085971	1436.715556594	85.371219770	85.371219770	838.049466207
0.128057151	711.542627908	701.229346919	2811.125942884	2542.809957552	2542.809957552	2610.691707791
0.120989264	530.204506287	715.531487054	5724.230013518	456.340253659	456.340253659	1843.953029049

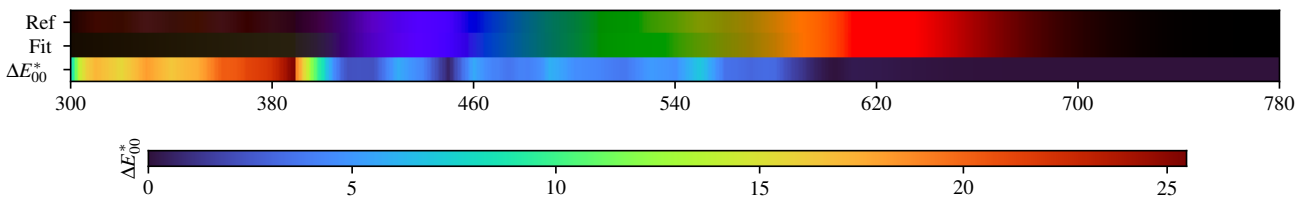
3.58. IXCAXPMA



IXCAXPMA - Weighted Expectation-Maximization - 2 Gaussians



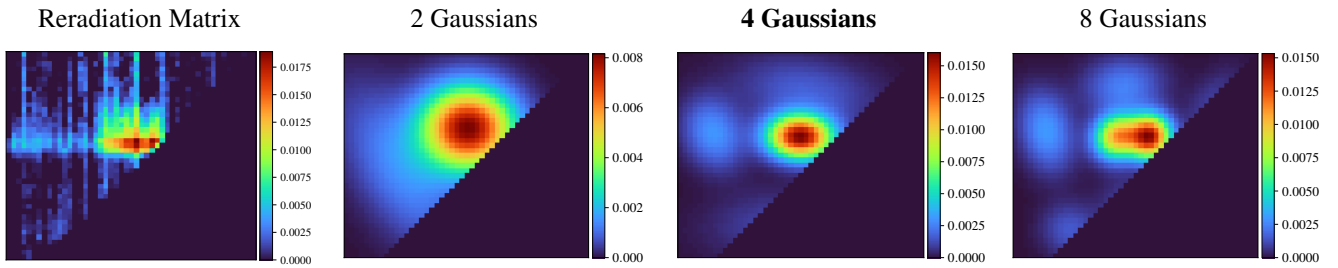
Fitted Material Under Monochromatic Illumination



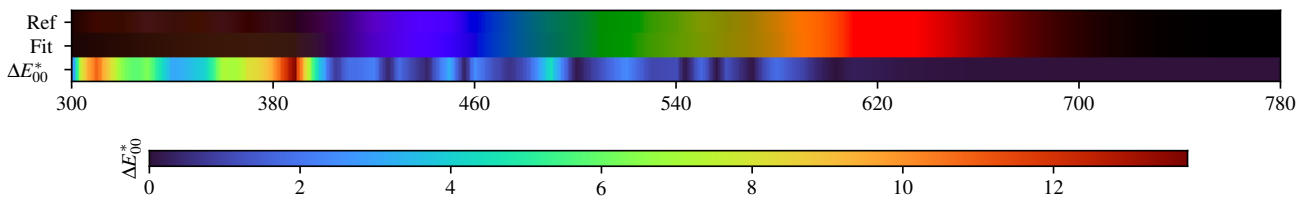
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.78$	D60 $\Delta E = 1.71$	FL2 $\Delta E = 1.36$	FL7 $\Delta E = 1.63$	FL12 $\Delta E = 0.70$	FL3.5 $\Delta E = 0.95$	FL3.10 $\Delta E = 1.13$	FL3.15 $\Delta E = 1.61$	HP5 $\Delta E = 1.11$	LED-B5 $\Delta E = 1.57$
B $\Delta E = 1.30$	D65 $\Delta E = 1.83$	FL3 $\Delta E = 1.11$	FL8 $\Delta E = 1.27$	FL3.1 $\Delta E = 0.89$	FL3.6 $\Delta E = 1.18$	FL3.11 $\Delta E = 1.30$	HP1 $\Delta E = 0.71$	LED-B1 $\Delta E = 0.74$	LED-BH1 $\Delta E = 0.65$
C $\Delta E = 1.61$	D75 $\Delta E = 2.04$	FL4 $\Delta E = 0.95$	FL9 $\Delta E = 1.09$	FL3.2 $\Delta E = 1.12$	FL3.7 $\Delta E = 0.61$	FL3.12 $\Delta E = 0.72$	HP2 $\Delta E = 0.52$	LED-B2 $\Delta E = 0.81$	LED-RGB1 $\Delta E = 0.66$
D50 $\Delta E = 1.42$	E $\Delta E = 1.55$	FL5 $\Delta E = 2.03$	FL10 $\Delta E = 1.23$	FL3.3 $\Delta E = 1.85$	FL3.8 $\Delta E = 0.87$	FL3.13 $\Delta E = 0.94$	HP3 $\Delta E = 0.85$	LED-B3 $\Delta E = 1.10$	LED-V1 $\Delta E = 0.72$
D55 $\Delta E = 1.57$	FL1 $\Delta E = 1.91$	FL6 $\Delta E = 1.40$	FL11 $\Delta E = 0.95$	FL3.4 $\Delta E = 0.68$	FL3.9 $\Delta E = 1.06$	FL3.14 $\Delta E = 1.21$	HP4 $\Delta E = 1.18$	LED-B4 $\Delta E = 1.35$	LED-V2 $\Delta E = 1.11$

IXCAXPMA - Weighted Expectation-Maximization - 4 Gaussians



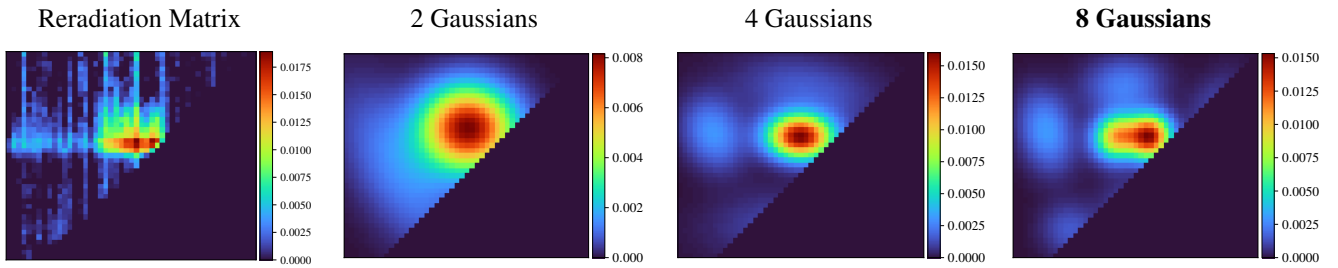
Fitted Material Under Monochromatic Illumination



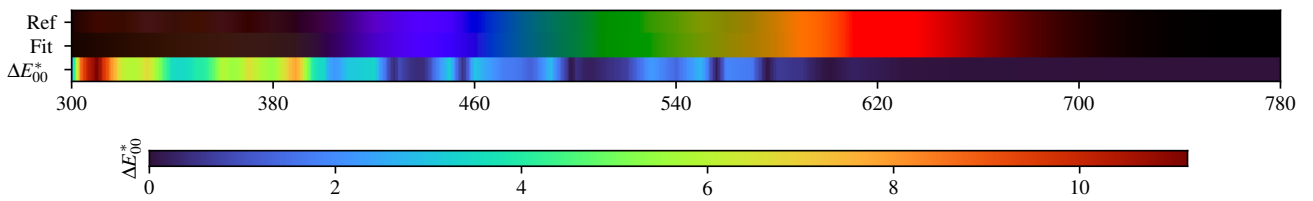
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.18$	FL2 $\Delta E = 0.28$	FL7 $\Delta E = 0.22$	FL12 $\Delta E = 0.20$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.34$	FL3.15 $\Delta E = 0.16$	HP5 $\Delta E = 0.19$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.13$	D65 $\Delta E = 0.20$	FL3 $\Delta E = 0.26$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.22$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.25$	HP1 $\Delta E = 0.23$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.17$	D75 $\Delta E = 0.24$	FL4 $\Delta E = 0.25$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.21$	FL3.7 $\Delta E = 0.16$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.13$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.31$	FL10 $\Delta E = 0.29$	FL3.3 $\Delta E = 0.27$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.17$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.31$	FL6 $\Delta E = 0.28$	FL11 $\Delta E = 0.26$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.22$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.29$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.13$

IXCAXPMA - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.27$	FL2 $\Delta E = 0.19$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.35$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.43$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.20$	D65 $\Delta E = 0.30$	FL3 $\Delta E = 0.15$	FL8 $\Delta E = 0.20$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.14$	FL3.11 $\Delta E = 0.46$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.25$	D75 $\Delta E = 0.36$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.17$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.29$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.21$	E $\Delta E = 0.23$	FL5 $\Delta E = 0.28$	FL10 $\Delta E = 0.49$	FL3.3 $\Delta E = 0.21$	FL3.8 $\Delta E = 0.39$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.20$
D55 $\Delta E = 0.24$	FL1 $\Delta E = 0.27$	FL6 $\Delta E = 0.19$	FL11 $\Delta E = 0.45$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.42$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.34$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.27$

IXCAXPMA - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.403352	0.432013	0.449803	0.474129	0.495225	0.502177	0.512923	0.500956	0.439887	0.381791	0.345614
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.317254	0.289966	0.262518	0.228853	0.213084	0.209683	0.205805	0.184617	0.188836	0.255027	0.376880
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.522394	0.613462	0.634318	0.650927	0.684155	0.734101	0.779721	0.813234	0.833876	0.845782	0.855082
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.861393	0.861895	0.869169	0.869478	0.873375	0.878056	0.874709	0.876626			

2 Gaussians

Scaling factor: 251.54845010265117

Gaussians:

Weight	Mean		Covariance			
0.257944467	410.743917366	549.716884553	6536.343054166	-4925.349805072	-4925.349805072	11796.236204930
0.742055533	542.792533915	634.554210602	4008.872248989	-82.588157048	-82.588157048	3330.566192970

4 Gaussians

Scaling factor: 243.71097338833889

Gaussians:

Weight	Mean		Covariance			
0.127597728	490.173744761	443.652963330	9165.624140553	619.766399920	619.766399920	2228.011319628
0.193938858	549.802174019	706.477194416	8715.729025562	-962.065956945	-962.065956945	2274.133439689
0.528649505	538.474420818	616.173516452	1920.093715089	-29.358429074	-29.358429074	869.352978131
0.149813909	366.414749522	622.829866580	1671.518983104	-335.901253629	-335.901253629	2225.017820906

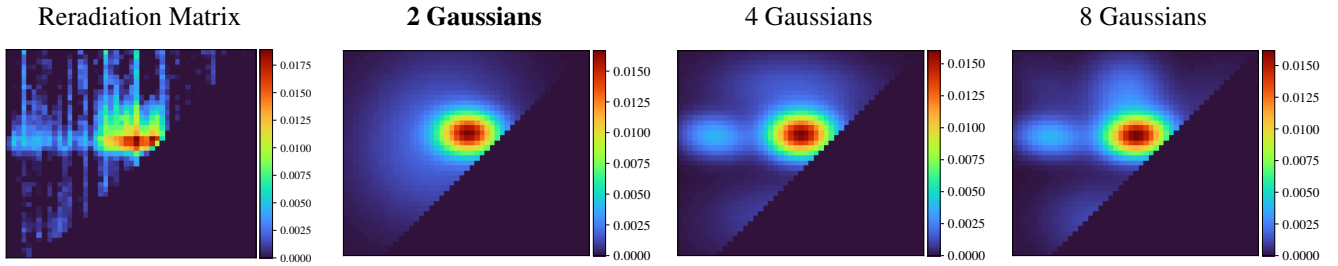
8 Gaussians

Scaling factor: 241.31969287950207

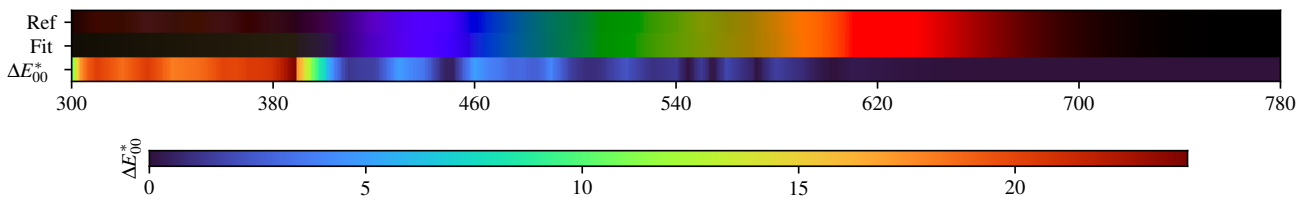
Gaussians:

Weight	Mean		Covariance			
0.056642159	408.545564611	431.668523900	1494.889753544	-19.691521223	-19.691521223	1350.896992399
0.131734738	515.487307393	718.662198455	2796.648175058	93.741870211	93.741870211	1544.530949571
0.024427442	643.836046985	453.283808250	3407.437434726	677.261773637	677.261773637	3227.579888121
0.152151693	361.907951688	628.818406880	1347.090020458	-354.552888671	-354.552888671	2821.972172746
0.296314146	568.424805808	617.124648337	753.851781725	17.507872738	17.507872738	861.123065717
0.247376882	502.842012033	617.406440951	935.807136008	68.599609858	68.599609858	874.672241903
0.051031567	515.224688495	462.585733133	1254.671603495	-105.191478938	-105.191478938	3223.600451169
0.040321374	688.819231955	684.446205310	1576.059962800	1087.625603170	1087.625603170	2557.376968230

IXCAXPMA - Weighted variational Bayesian inference - 2 Gaussians



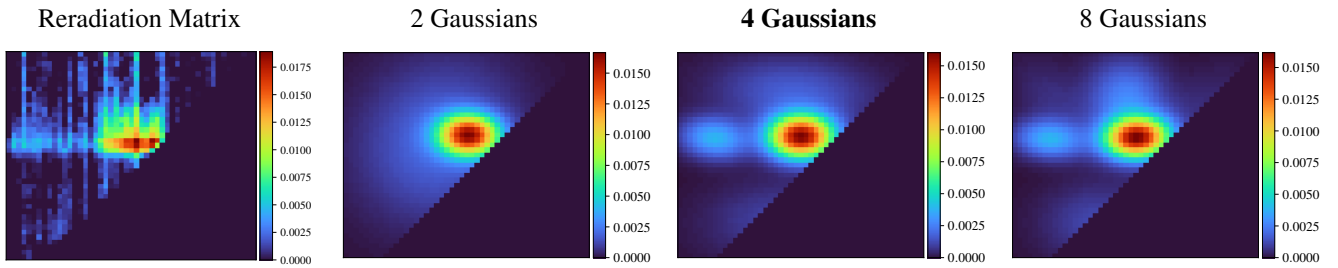
Fitted Material Under Monochromatic Illumination



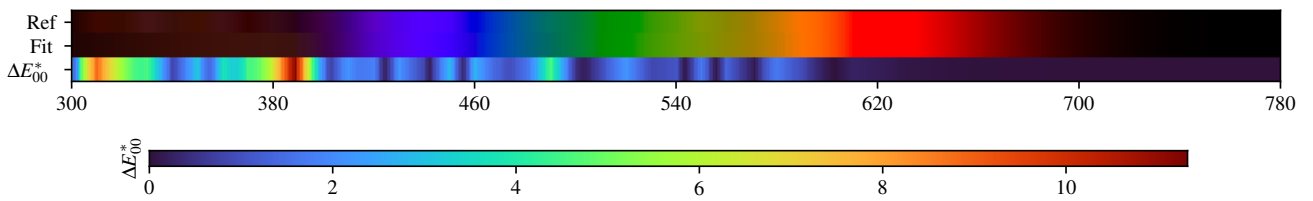
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.42$	D60 $\Delta E = 0.91$	FL2 $\Delta E = 0.49$	FL7 $\Delta E = 0.73$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.49$	FL3.10 $\Delta E = 0.33$	FL3.15 $\Delta E = 0.81$	HP5 $\Delta E = 0.64$	LED-B5 $\Delta E = 0.71$
B $\Delta E = 0.74$	D65 $\Delta E = 0.97$	FL3 $\Delta E = 0.36$	FL8 $\Delta E = 0.61$	FL3.1 $\Delta E = 0.19$	FL3.6 $\Delta E = 0.57$	FL3.11 $\Delta E = 0.38$	HP1 $\Delta E = 0.17$	LED-B1 $\Delta E = 0.30$	LED-BH1 $\Delta E = 0.37$
C $\Delta E = 0.88$	D75 $\Delta E = 1.08$	FL4 $\Delta E = 0.25$	FL9 $\Delta E = 0.50$	FL3.2 $\Delta E = 0.39$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.26$	HP2 $\Delta E = 0.30$	LED-B2 $\Delta E = 0.36$	LED-RGB1 $\Delta E = 0.47$
D50 $\Delta E = 0.80$	E $\Delta E = 0.97$	FL5 $\Delta E = 0.74$	FL10 $\Delta E = 0.34$	FL3.3 $\Delta E = 0.66$	FL3.8 $\Delta E = 0.22$	FL3.13 $\Delta E = 0.40$	HP3 $\Delta E = 0.51$	LED-B3 $\Delta E = 0.51$	LED-V1 $\Delta E = 0.44$
D55 $\Delta E = 0.86$	FL1 $\Delta E = 0.73$	FL6 $\Delta E = 0.48$	FL11 $\Delta E = 0.23$	FL3.4 $\Delta E = 0.24$	FL3.9 $\Delta E = 0.30$	FL3.14 $\Delta E = 0.54$	HP4 $\Delta E = 0.62$	LED-B4 $\Delta E = 0.60$	LED-V2 $\Delta E = 0.68$

IXCAXPMA - Weighted variational Bayesian inference - 4 Gaussians



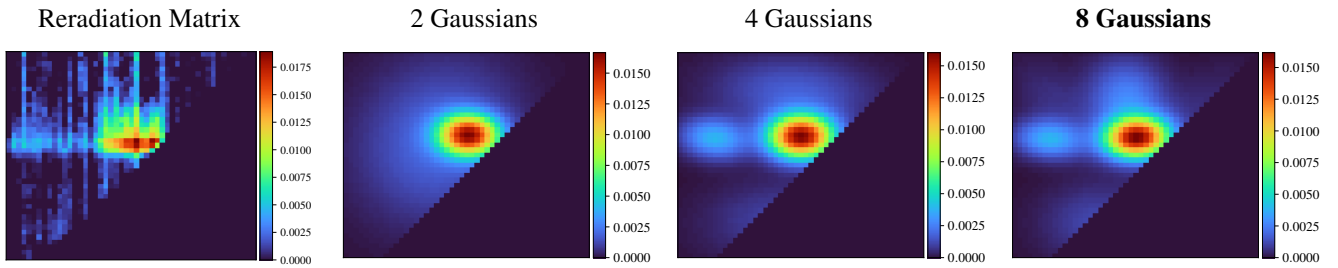
Fitted Material Under Monochromatic Illumination



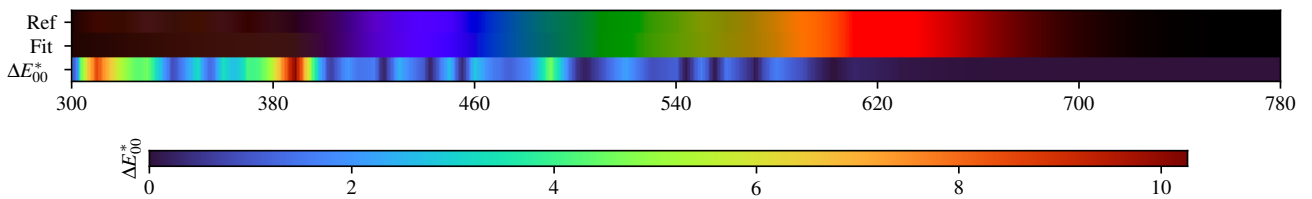
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.10$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.20$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.30$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.09$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.22$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.19$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.19$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.10$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.21$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.17$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.08$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.25$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.22$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.09$	FL1 $\Delta E = 0.25$	FL6 $\Delta E = 0.23$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.10$

IXCAXPMA - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 0.09$	$\Delta E = 0.20$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.08$	$\Delta E = 0.28$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.19$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.06$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.06$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.04$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.09$	$\Delta E = 0.08$

IXCAXPMA - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.403352	0.432013	0.449803	0.474129	0.495225	0.502177	0.512923	0.500956	0.439887	0.381791	0.345614
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.317254	0.289966	0.262518	0.228853	0.213084	0.209683	0.205805	0.184617	0.188836	0.255027	0.376880
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.522394	0.613462	0.634318	0.650927	0.684155	0.734101	0.779721	0.813234	0.833876	0.845782	0.855082
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.861393	0.861895	0.869169	0.869478	0.873375	0.878056	0.874709	0.876626			

2 Gaussians max

Scaling factor: 251.39193865662008

Gaussians:

Weight	Mean		Covariance			
0.583954946	483.777727437	607.815713914	11061.134597994	1110.889635497	1110.889635497	11208.708203589
0.416045054	543.705215264	619.357970452	1619.808981669	-17.071757412	-17.071757412	770.418332065

4 Gaussians max

Scaling factor: 244.87254465877714

Gaussians:

Weight	Mean		Covariance			
0.139543185	487.821535239	451.954280509	9236.001142481	485.439877448	485.439877448	2927.846346194
0.120764033	369.049143035	612.895778442	2043.456137763	-138.506580353	-138.506580353	751.113397665
0.515128529	540.288167774	616.346708493	1906.310018530	4.686429862	4.686429862	852.337620337
0.224564253	525.167824197	703.444835660	11061.012574049	-460.184748312	-460.184748312	2337.145274550

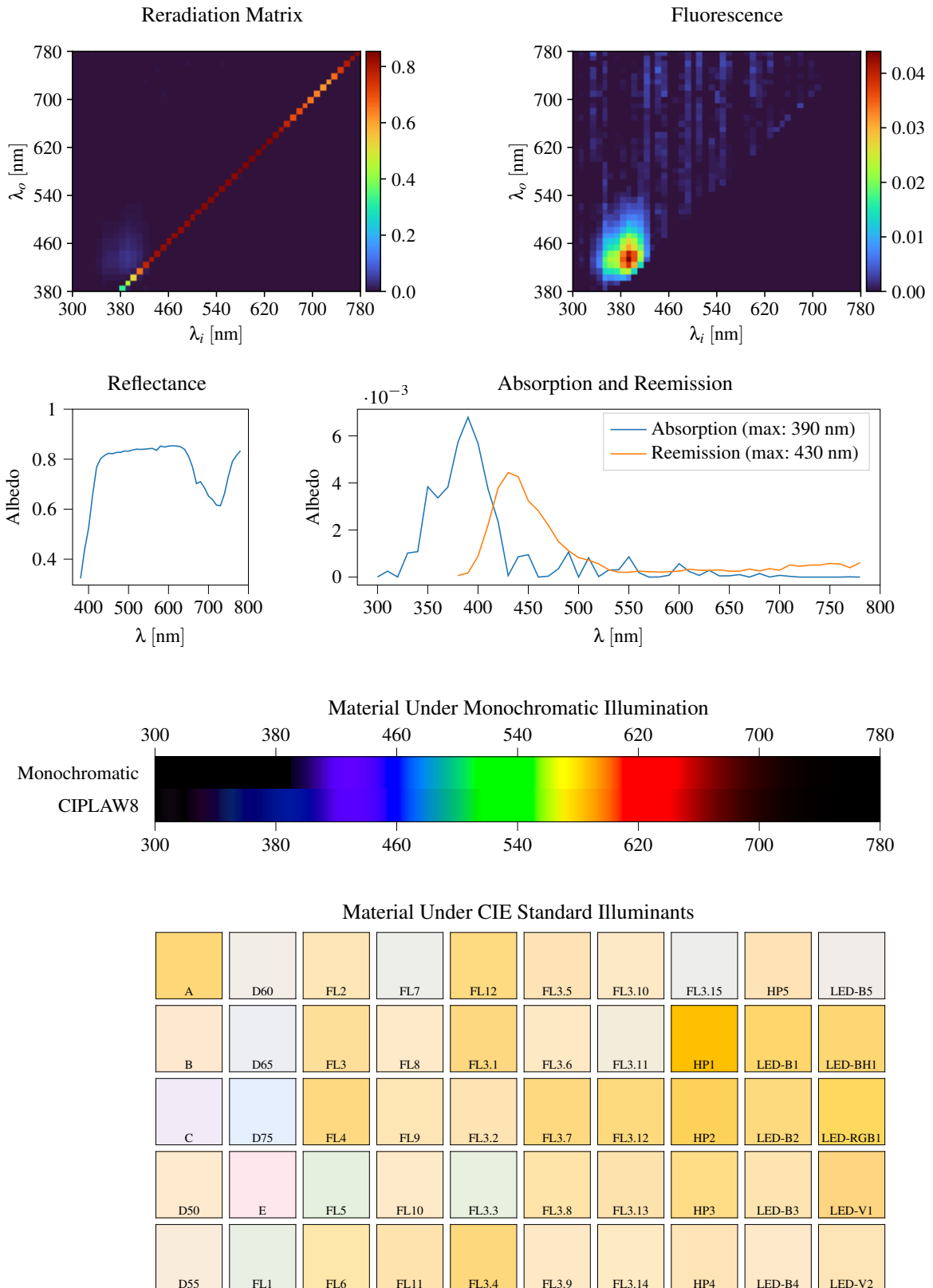
8 Gaussians max

Scaling factor: 244.79758170610347

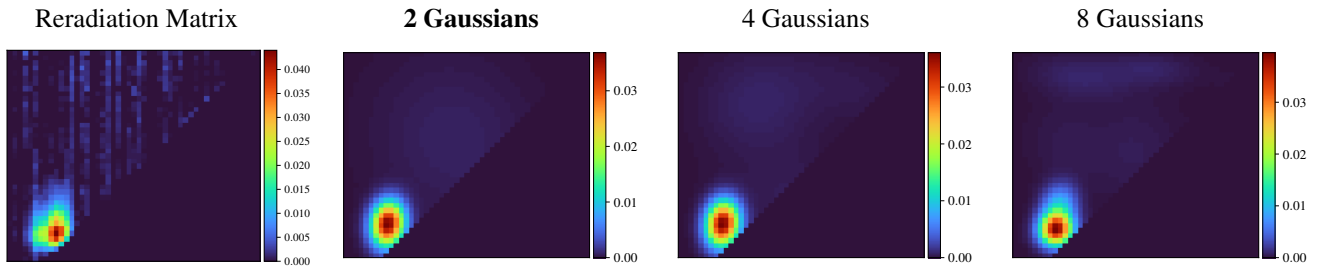
Gaussians:

Weight	Mean		Covariance			
0.114594201	459.405047504	447.615150809	5359.643855277	167.350612890	167.350612890	2689.522965783
0.030054267	612.018179298	494.587716218	6846.032026155	-1793.288684197	-1793.288684197	5803.652577047
0.111617548	368.466215965	611.263749190	2080.170766213	-103.882740201	-103.882740201	664.552240221
0.452825960	541.854712763	614.122649869	1846.403011909	55.424486251	55.424486251	730.268126005
0.040533146	671.015321947	682.097711043	3938.595454796	1908.870813429	1908.870813429	3128.892951086
0.202751896	521.853885899	688.565478610	2667.872177508	-126.601060801	-126.601060801	2984.147828385
0.046607697	374.371405524	685.800103595	2792.702886153	-1299.060280017	-1299.060280017	3314.752116974

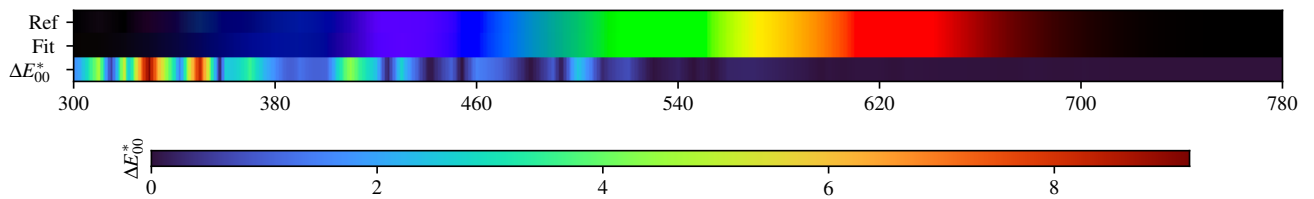
3.59. CIPLAW8



CIPLAW8 - Weighted Expectation-Maximization - 2 Gaussians



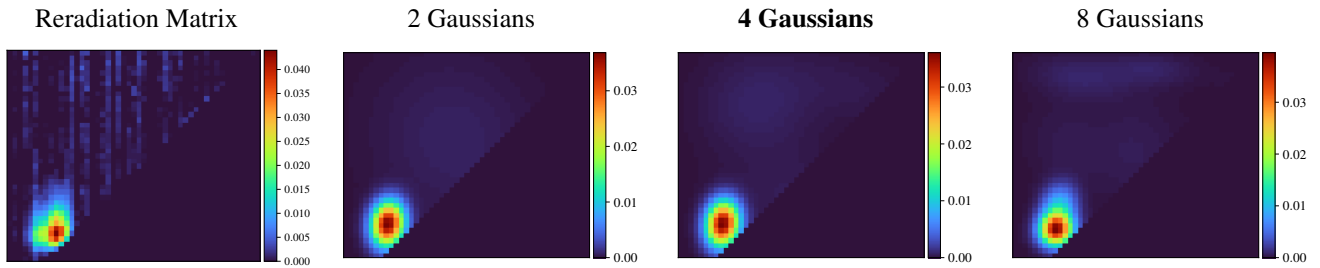
Fitted Material Under Monochromatic Illumination



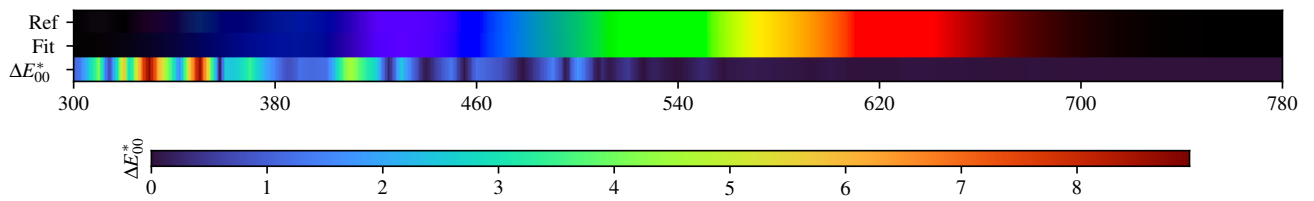
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.38$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.31$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.32$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.22$	D65 $\Delta E = 0.42$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.18$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.31$	D75 $\Delta E = 0.44$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.26$	E $\Delta E = 0.51$	FL5 $\Delta E = 0.28$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.30$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.33$	FL1 $\Delta E = 0.30$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.18$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.17$	LED-V2 $\Delta E = 0.18$

CIPLAW8 - Weighted Expectation-Maximization - 4 Gaussians



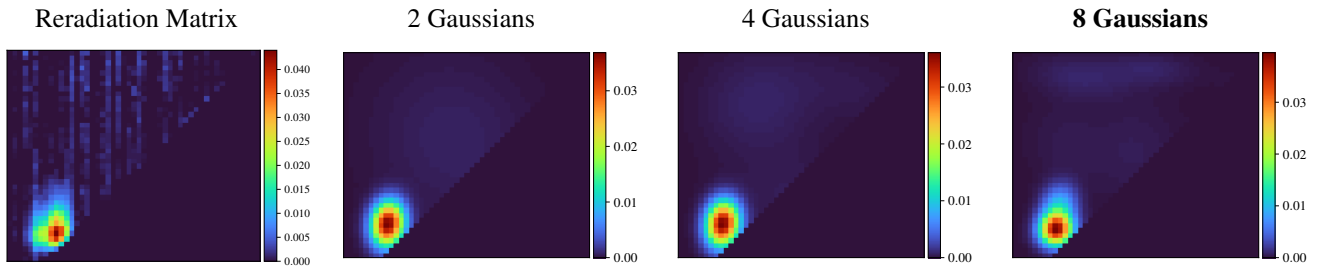
Fitted Material Under Monochromatic Illumination



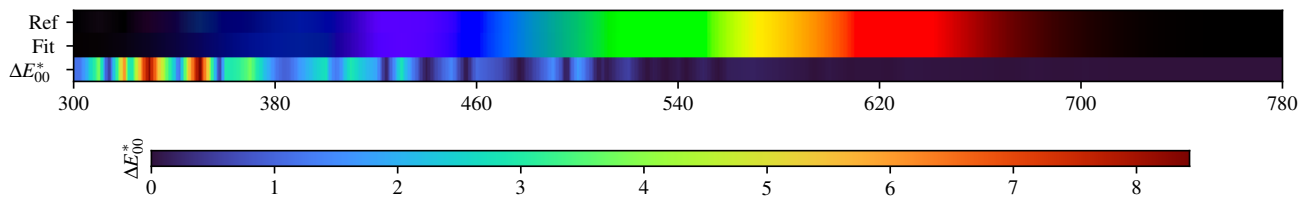
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.22$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.05$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.02$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.04$	HP5 $\Delta E = 0.07$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.13$	D65 $\Delta E = 0.24$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.02$	FL3.1 $\Delta E = 0.01$	FL3.6 $\Delta E = 0.02$	FL3.11 $\Delta E = 0.16$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.17$	D75 $\Delta E = 0.26$	FL4 $\Delta E = 0.01$	FL9 $\Delta E = 0.02$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.01$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.11$	E $\Delta E = 0.47$	FL5 $\Delta E = 0.05$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.06$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.00$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.16$	FL1 $\Delta E = 0.06$	FL6 $\Delta E = 0.02$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.01$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.01$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.08$

CIPLAW8 - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.15$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.19$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.05$	FL3.15 $\Delta E = 0.26$	HP5 $\Delta E = 0.09$	LED-B5 $\Delta E = 0.04$
B $\Delta E = 0.10$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.06$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.13$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.10$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.11$	FL10 $\Delta E = 0.05$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.03$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.03$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.05$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.03$	LED-V2 $\Delta E = 0.22$

CIPLAW8 - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.322826	0.437698	0.523422	0.655488	0.767662	0.801891	0.815099	0.823617	0.821997	0.827050	0.827444
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.832706	0.832175	0.836720	0.840124	0.839156	0.839993	0.841893	0.843145	0.835414	0.852392	0.848763
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.852196	0.853624	0.852785	0.850109	0.839559	0.812967	0.769264	0.702424	0.710019	0.685543	0.652594
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.638297	0.616232	0.614075	0.661456	0.732417	0.791420	0.814452	0.833727			

2 Gaussians

Scaling factor: 224.11742916382246

Gaussians:

Weight	Mean		Covariance			
0.672637782	383.452472526	442.964520955	476.732700905	57.962393819	57.962393819	874.530762299
0.327362218	513.635105493	608.467284179	12744.005963041	-1156.683288433	-1156.683288433	14802.790775163

4 Gaussians

Scaling factor: 221.53870156135764

Gaussians:

Weight	Mean		Covariance			
0.127786393	534.000518183	482.830358182	11002.233539619	-542.369887973	-542.369887973	4823.136356104
0.145674378	453.247102200	682.553351407	6131.101247571	165.739418801	165.739418801	4894.956400372
0.675042745	383.390416743	443.340063434	477.289819727	59.461324600	59.461324600	898.964030707
0.051496484	640.819262994	713.460252184	7814.256343025	-1346.391008432	-1346.391008432	2553.864080303

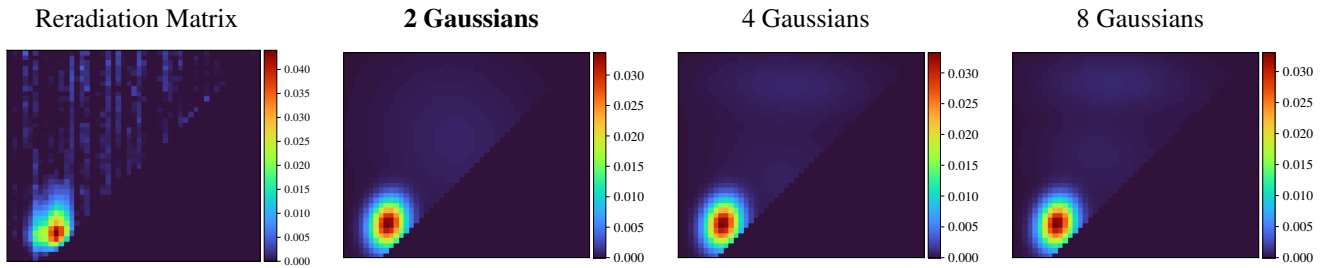
8 Gaussians

Scaling factor: 217.5191985568574

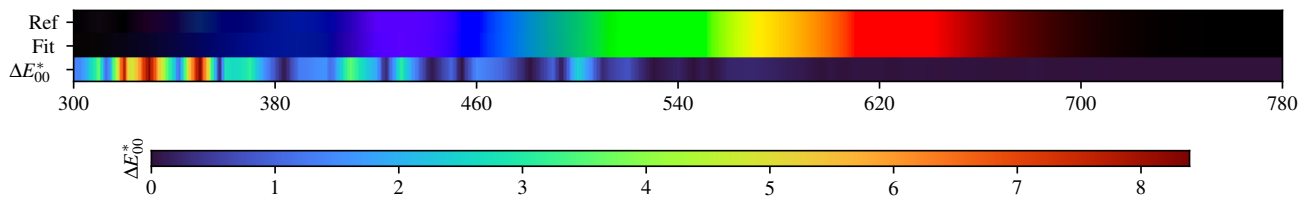
Gaussians:

Weight	Mean		Covariance			
0.058329825	536.009417728	417.671202939	11048.871852980	34.860140887	34.860140887	879.009541910
0.056423342	427.400336371	733.992630409	3940.411854473	-396.520604255	-396.520604255	880.278307428
0.201220493	387.237183287	475.288403865	514.310751661	72.521503007	72.521503007	818.863488869
0.024151462	735.770152703	648.851155977	1633.407714084	395.685031394	395.685031394	7090.957953057
0.048070614	399.142272405	603.199020450	3009.588190630	-315.717234178	-315.717234178	3692.649723935
0.093649922	540.299074148	585.955563125	4335.747956028	-60.572082752	-60.572082752	6176.570646433
0.478771854	381.945309773	431.626304252	462.092202671	14.442099070	14.442099070	445.336824257
0.039382488	567.461122955	750.004169869	3588.657981339	-97.210586208	-97.210586208	540.813640228

CIPLAW8 - Weighted variational Bayesian inference - 2 Gaussians



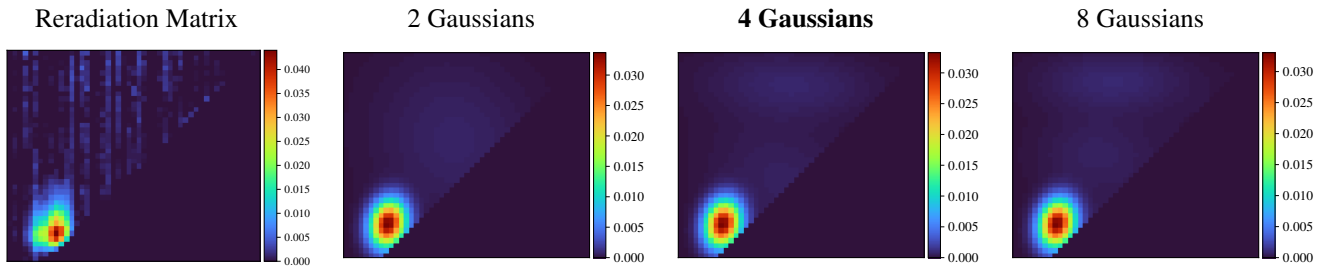
Fitted Material Under Monochromatic Illumination



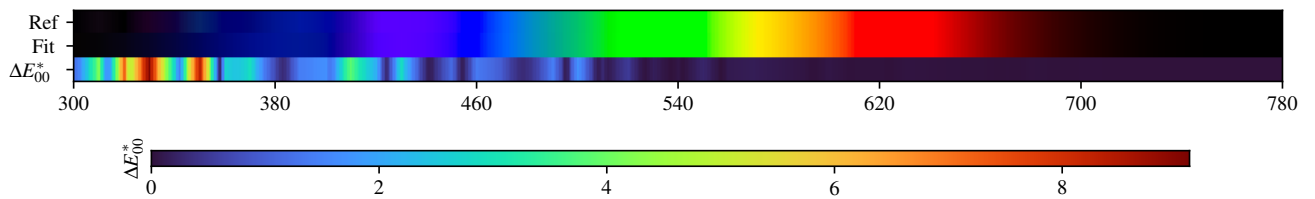
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.24$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.24$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.28$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.23$
B $\Delta E = 0.17$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.21$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.19$	E $\Delta E = 0.23$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.25$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.12$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.16$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.15$

CIPLAW8 - Weighted variational Bayesian inference - 4 Gaussians



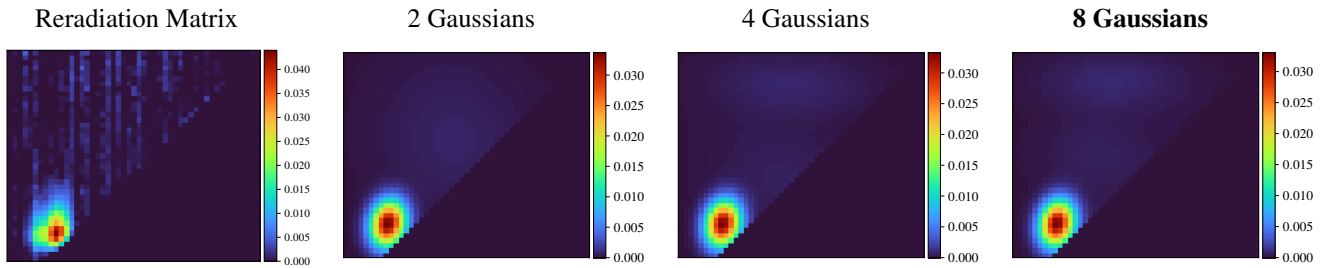
Fitted Material Under Monochromatic Illumination



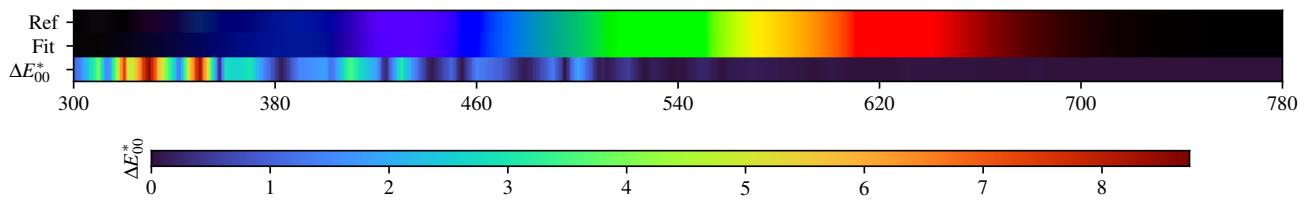
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.26$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.37$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.15$	D65 $\Delta E = 0.29$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.16$	FL3.1 $\Delta E = 0.01$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.24$	D75 $\Delta E = 0.29$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.18$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.14$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.14$	LED-V2 $\Delta E = 0.06$

CIPLAW8 - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.10$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.26$	HP5 $\Delta E = 0.04$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.06$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.01$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.01$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.08$	D75 $\Delta E = 0.10$	FL4 $\Delta E = 0.01$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.02$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.07$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.05$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.04$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.09$	FL1 $\Delta E = 0.06$	FL6 $\Delta E = 0.02$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.02$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.03$

CIPLAW8 - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.322826	0.437698	0.523422	0.655488	0.767662	0.801891	0.815099	0.823617	0.821997	0.827050	0.827444
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.832706	0.832175	0.836720	0.840124	0.839156	0.839993	0.841893	0.843145	0.835414	0.852392	0.848763
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.852196	0.853624	0.852785	0.850109	0.839559	0.812967	0.769264	0.702424	0.710019	0.685543	0.652594
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.638297	0.616232	0.614075	0.661456	0.732417	0.791420	0.814452	0.833727			

2 Gaussians max

Scaling factor: 224.75236129086483

Gaussians:

Weight	Mean	Covariance				
0.677387537	383.817371129	443.412882001	547.414037323	91.195887356	91.195887356	935.408293742
0.322612463	515.166093440	610.053728490	12714.126613244	-1347.954523368	-1347.954523368	14714.507288113

4 Gaussians max

Scaling factor: 221.53107240021018

Gaussians:

Weight	Mean	Covariance				
0.672932207	383.729626828	443.240124107	544.236257706	89.670304081	89.670304081	926.306247564
0.187695803	509.496947957	526.261961473	11676.591789112	-2580.566282008	-2580.566282008	8044.458212938
0.139173840	520.980581848	720.455373020	13985.302054331	-695.426608079	-695.426608079	2110.111853169

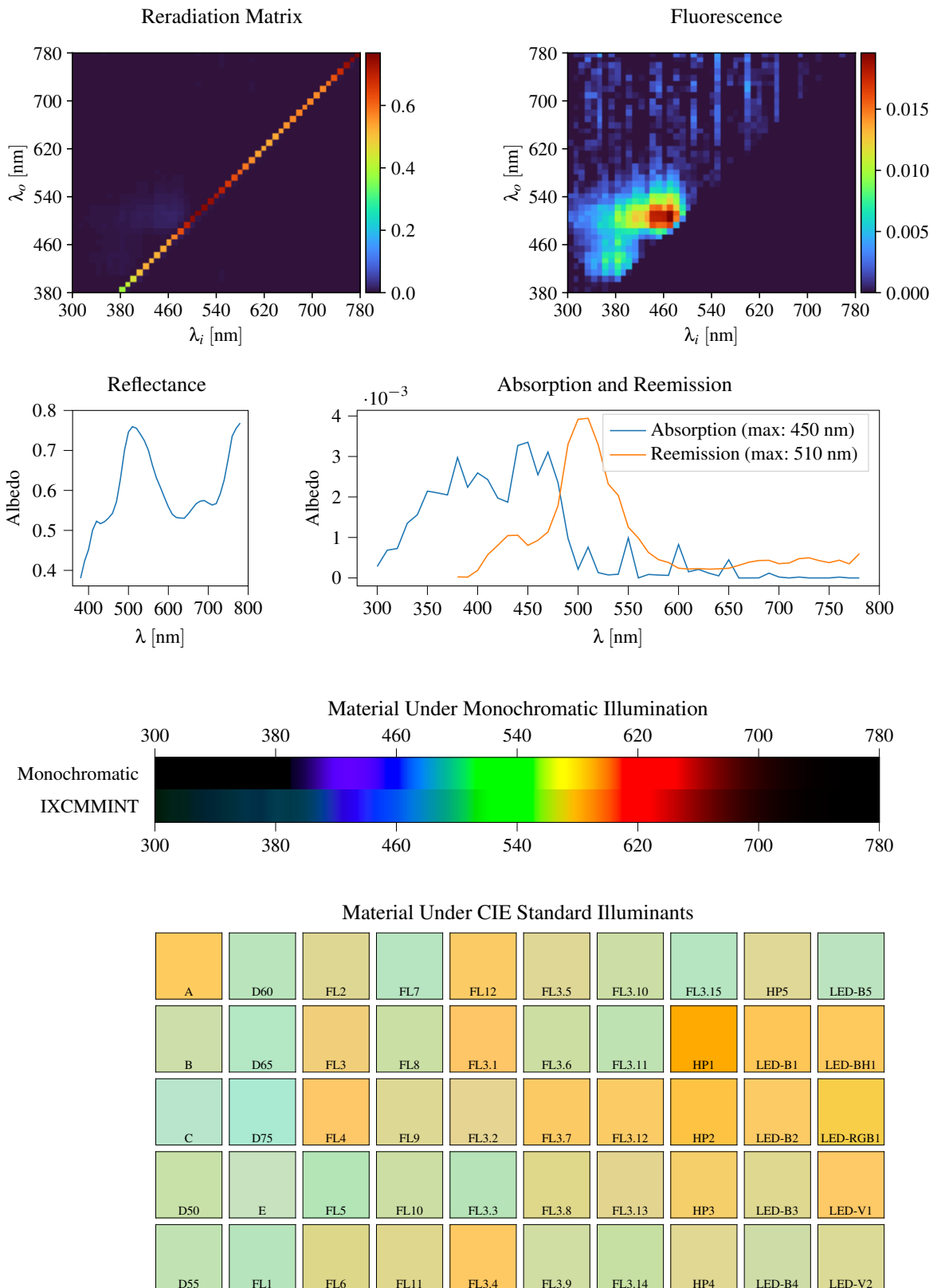
8 Gaussians max

Scaling factor: 221.8419822097497

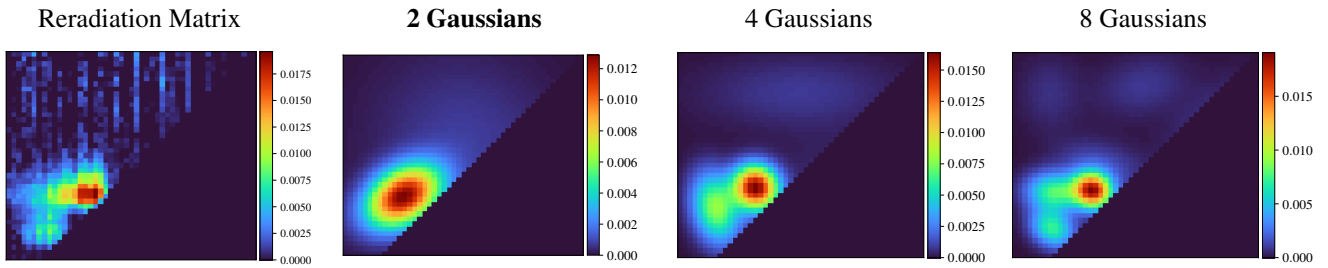
Gaussians:

Weight	Mean	Covariance				
0.670873798	383.712179465	443.526779915	545.033876637	93.874052472	93.874052472	935.099585303
0.077527463	548.519582397	443.058737112	10170.094163637	-9.086420638	-9.086420638	2610.661706061
0.091687224	459.726772414	583.718697566	6745.180380835	50.070225890	50.070225890	3193.202234883
0.033320845	665.306913477	622.331338986	8114.698303870	3075.350158428	3075.350158428	6245.938302356
0.124364720	494.907393348	727.302035029	10396.380912227	31.347489655	31.347489655	1722.861388912

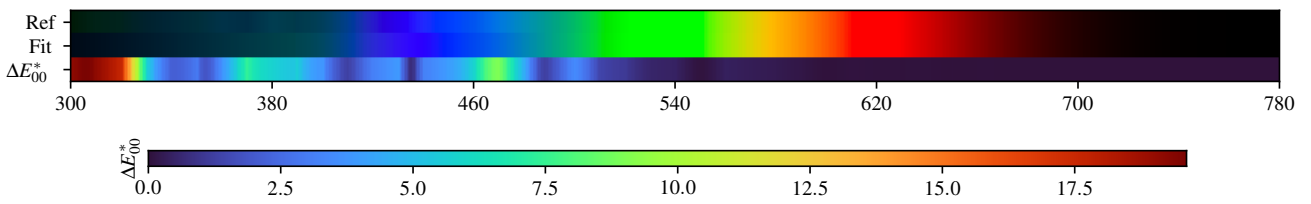
3.60. IXCMINT



IXCMMINT - Weighted Expectation-Maximization - 2 Gaussians



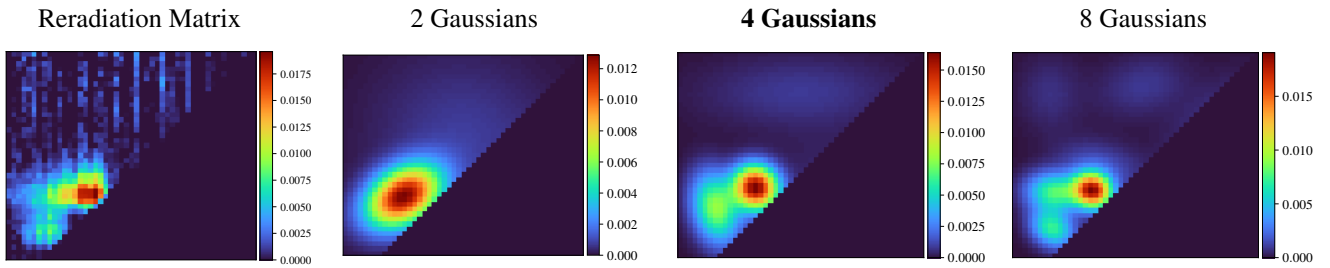
Fitted Material Under Monochromatic Illumination



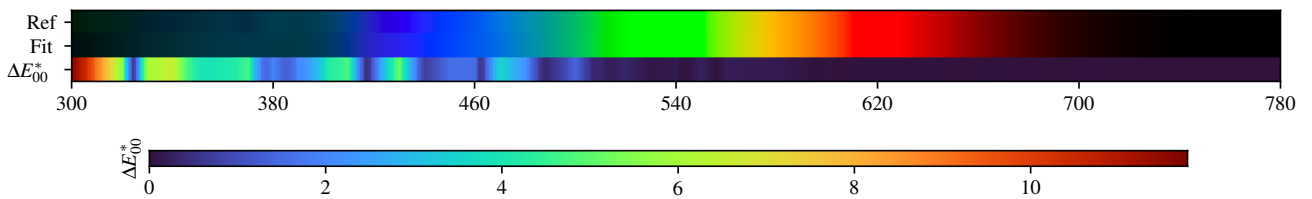
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.50$	D60 $\Delta E = 1.04$	FL2 $\Delta E = 0.83$	FL7 $\Delta E = 1.04$	FL12 $\Delta E = 0.43$	FL3.5 $\Delta E = 0.83$	FL3.10 $\Delta E = 0.90$	FL3.15 $\Delta E = 0.99$	HP5 $\Delta E = 0.96$	LED-B5 $\Delta E = 1.36$
B $\Delta E = 1.04$	D65 $\Delta E = 1.10$	FL3 $\Delta E = 0.65$	FL8 $\Delta E = 0.84$	FL3.1 $\Delta E = 0.38$	FL3.6 $\Delta E = 0.82$	FL3.11 $\Delta E = 0.91$	HP1 $\Delta E = 0.21$	LED-B1 $\Delta E = 0.50$	LED-BH1 $\Delta E = 0.47$
C $\Delta E = 1.40$	D75 $\Delta E = 1.25$	FL4 $\Delta E = 0.49$	FL9 $\Delta E = 0.81$	FL3.2 $\Delta E = 0.73$	FL3.7 $\Delta E = 0.35$	FL3.12 $\Delta E = 0.36$	HP2 $\Delta E = 0.39$	LED-B2 $\Delta E = 0.61$	LED-RGB1 $\Delta E = 0.28$
D50 $\Delta E = 0.90$	E $\Delta E = 1.07$	FL5 $\Delta E = 0.88$	FL10 $\Delta E = 0.87$	FL3.3 $\Delta E = 0.83$	FL3.8 $\Delta E = 0.65$	FL3.13 $\Delta E = 0.77$	HP3 $\Delta E = 0.61$	LED-B3 $\Delta E = 0.90$	LED-V1 $\Delta E = 0.62$
D55 $\Delta E = 0.97$	FL1 $\Delta E = 0.97$	FL6 $\Delta E = 0.72$	FL11 $\Delta E = 0.76$	FL3.4 $\Delta E = 0.27$	FL3.9 $\Delta E = 0.83$	FL3.14 $\Delta E = 0.80$	HP4 $\Delta E = 0.84$	LED-B4 $\Delta E = 1.14$	LED-V2 $\Delta E = 0.89$

IXCMMINT - Weighted Expectation-Maximization - 4 Gaussians



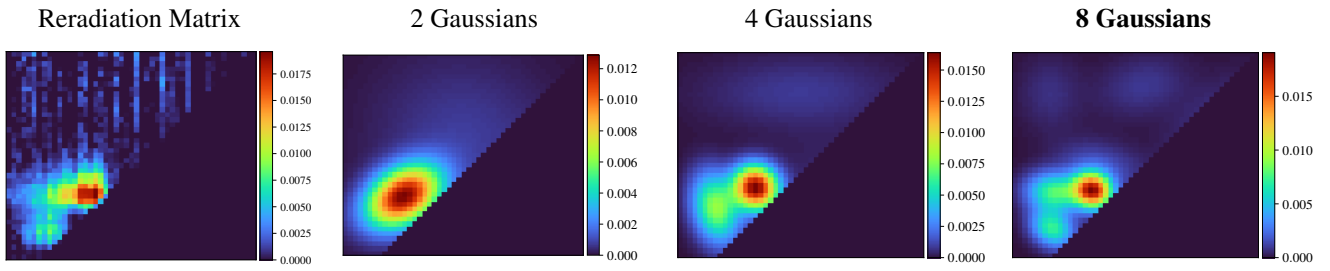
Fitted Material Under Monochromatic Illumination



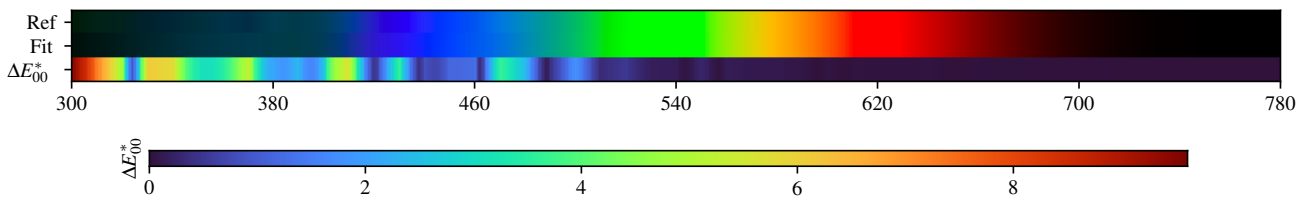
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.14$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.08$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.20$
B $\Delta E = 0.12$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.16$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.16$
D50 $\Delta E = 0.12$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.11$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.14$

IXCMMINT - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.09$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.05$	HP5 $\Delta E = 0.09$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.07$	D65 $\Delta E = 0.09$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.12$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.13$	D75 $\Delta E = 0.11$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.19$
D50 $\Delta E = 0.07$	E $\Delta E = 0.05$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.06$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.04$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.15$

IXCMMINT - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.380438	0.423044	0.452128	0.500274	0.522985	0.516830	0.521834	0.530836	0.542753	0.571497	0.629642
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.699962	0.746102	0.759511	0.755444	0.740560	0.724106	0.700290	0.663317	0.631572	0.607981	0.582994
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.559091	0.540110	0.532301	0.530864	0.530369	0.541261	0.554429	0.566971	0.573062	0.574693	0.568593
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.563472	0.566941	0.591212	0.626254	0.678711	0.735741	0.755281	0.768383			

2 Gaussians

Scaling factor: 233.05235639377813

Gaussians:

Weight	Mean		Covariance			
0.317367598	540.121156726	610.775072250	16280.323369744	-895.497460384	-895.497460384	14278.673270694
0.682632402	417.135718655	495.885317078	2539.423572085	734.718620778	734.718620778	1794.228938817

4 Gaussians

Scaling factor: 226.30400149419498

Gaussians:

Weight	Mean		Covariance			
0.167118423	533.344912223	705.847439031	18481.820819572	380.078620696	380.078620696	2488.375598649
0.399855525	450.337606468	515.561325793	886.993324086	-44.787002015	-44.787002015	879.894332731
0.118081005	594.181479053	497.921471883	7375.434875898	466.562004891	466.562004891	6966.756591592
0.314945047	370.871128214	474.503031350	995.098271884	-292.063484731	-292.063484731	2186.588314554

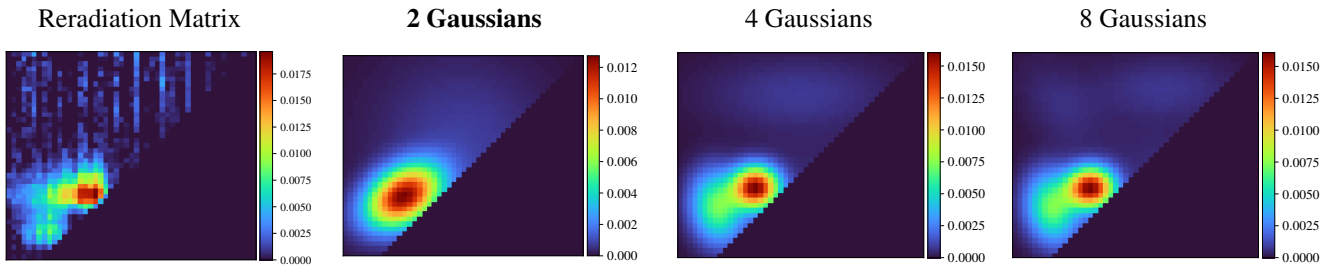
8 Gaussians

Scaling factor: 225.0071076686818

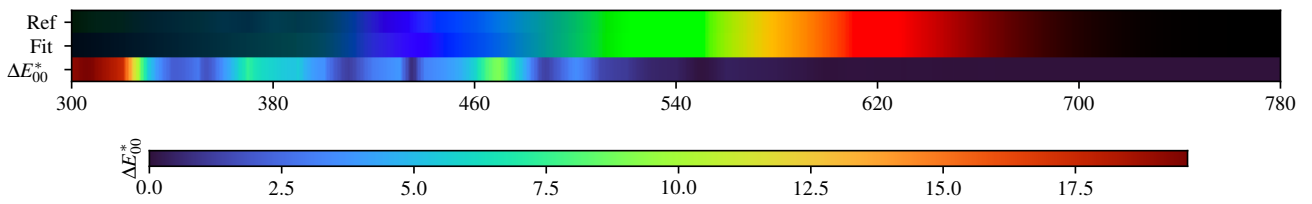
Gaussians:

Weight	Mean		Covariance			
0.076617878	553.371534120	716.606185150	4029.007766002	579.601819934	579.601819934	1959.743579985
0.089209476	466.414860691	557.734315372	3153.046315181	-445.407916354	-445.407916354	1171.744767985
0.075087068	598.009835464	445.145690524	8951.939498218	1453.261458974	1453.261458974	3004.953726719
0.142371862	374.117902047	434.543489601	810.321433019	-145.838872442	-145.838872442	662.661569338
0.050916502	368.979433191	702.151285574	1837.810227359	-10.611758946	-10.611758946	2787.356184545
0.062680984	677.716620768	654.298021291	4876.767239051	3528.339654985	3528.339654985	4847.955638870
0.208944183	378.780533794	505.798113964	1386.331563186	-66.172025361	-66.172025361	679.996904475
0.294172047	454.097497445	509.733734763	652.772218051	-45.366917023	-45.366917023	557.101608419

IXCMMINT - Weighted variational Bayesian inference - 2 Gaussians



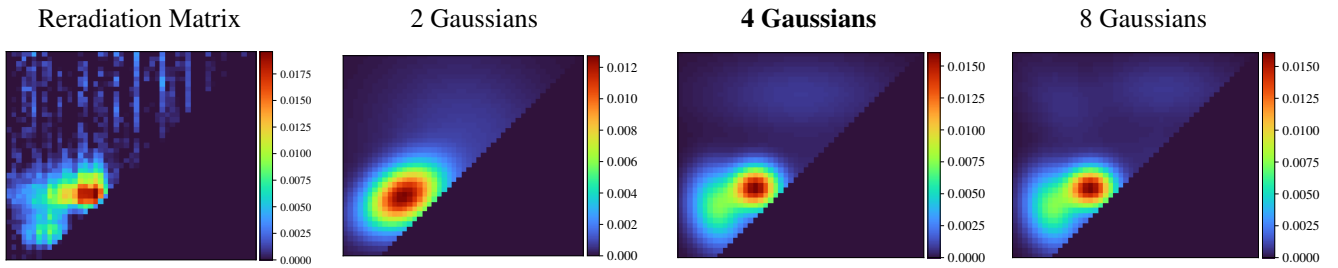
Fitted Material Under Monochromatic Illumination



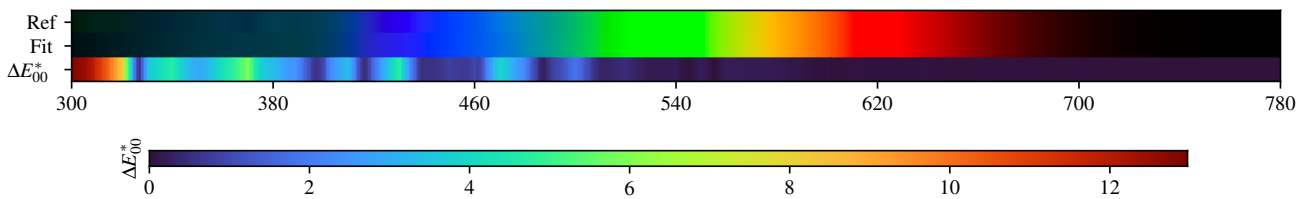
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.50$	D60 $\Delta E = 1.04$	FL2 $\Delta E = 0.84$	FL7 $\Delta E = 1.05$	FL12 $\Delta E = 0.43$	FL3.5 $\Delta E = 0.83$	FL3.10 $\Delta E = 0.90$	FL3.15 $\Delta E = 0.99$	HP5 $\Delta E = 0.97$	LED-B5 $\Delta E = 1.37$
B $\Delta E = 1.05$	D65 $\Delta E = 1.11$	FL3 $\Delta E = 0.65$	FL8 $\Delta E = 0.84$	FL3.1 $\Delta E = 0.38$	FL3.6 $\Delta E = 0.82$	FL3.11 $\Delta E = 0.91$	HP1 $\Delta E = 0.21$	LED-B1 $\Delta E = 0.50$	LED-BH1 $\Delta E = 0.47$
C $\Delta E = 1.41$	D75 $\Delta E = 1.25$	FL4 $\Delta E = 0.50$	FL9 $\Delta E = 0.81$	FL3.2 $\Delta E = 0.74$	FL3.7 $\Delta E = 0.35$	FL3.12 $\Delta E = 0.36$	HP2 $\Delta E = 0.39$	LED-B2 $\Delta E = 0.62$	LED-RGB1 $\Delta E = 0.28$
D50 $\Delta E = 0.91$	E $\Delta E = 1.08$	FL5 $\Delta E = 0.88$	FL10 $\Delta E = 0.88$	FL3.3 $\Delta E = 0.83$	FL3.8 $\Delta E = 0.65$	FL3.13 $\Delta E = 0.77$	HP3 $\Delta E = 0.61$	LED-B3 $\Delta E = 0.90$	LED-V1 $\Delta E = 0.62$
D55 $\Delta E = 0.98$	FL1 $\Delta E = 0.98$	FL6 $\Delta E = 0.72$	FL11 $\Delta E = 0.76$	FL3.4 $\Delta E = 0.28$	FL3.9 $\Delta E = 0.84$	FL3.14 $\Delta E = 0.80$	HP4 $\Delta E = 0.85$	LED-B4 $\Delta E = 1.15$	LED-V2 $\Delta E = 0.89$

IXCMMINT - Weighted variational Bayesian inference - 4 Gaussians



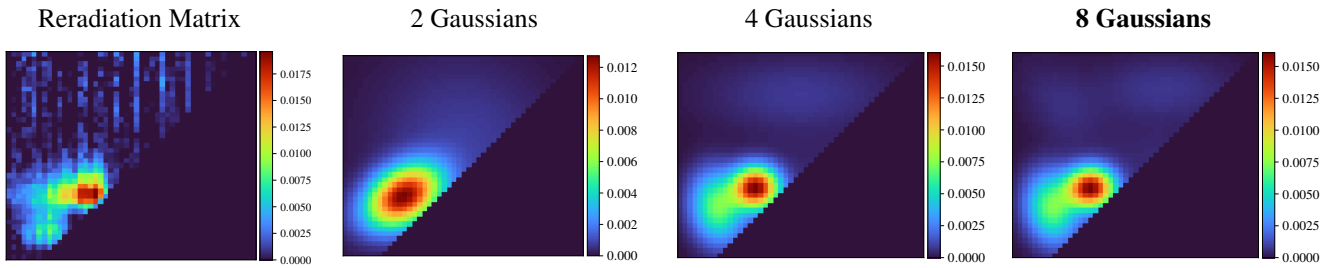
Fitted Material Under Monochromatic Illumination



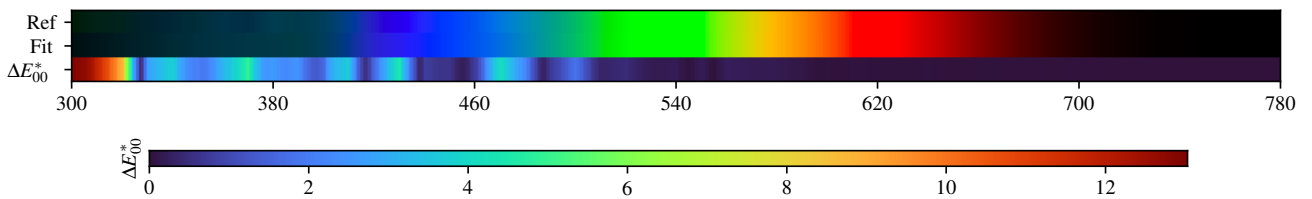
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.10$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.05$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.11$
B $\Delta E = 0.10$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.15$	D75 $\Delta E = 0.12$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.17$
D50 $\Delta E = 0.09$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.12$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.11$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.09$	LED-V2 $\Delta E = 0.15$

IXCMINT - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.10$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.08$	FL3.15 $\Delta E = 0.07$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.10$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.16$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.17$
D50 $\Delta E = 0.08$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.11$	FL10 $\Delta E = 0.09$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.09$	FL1 $\Delta E = 0.11$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.17$

IXCMMINT - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.380438	0.423044	0.452128	0.500274	0.522985	0.516830	0.521834	0.530836	0.542753	0.571497	0.629642
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.699962	0.746102	0.759511	0.755444	0.740560	0.724106	0.700290	0.663317	0.631572	0.607981	0.582994
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.559091	0.540110	0.532301	0.530864	0.530369	0.541261	0.554429	0.566971	0.573062	0.574693	0.568593
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.563472	0.566941	0.591212	0.626254	0.678711	0.735741	0.755281	0.768383			

2 Gaussians max

Scaling factor: 233.4749915738537

Gaussians:

Weight	Mean	Covariance
0.680475701	417.310754112	495.996335686
0.319524299	539.380890075	610.053129438

4 Gaussians max

Scaling factor: 227.25644630730363

Gaussians:

Weight	Mean	Covariance
0.320281304	373.605254018	475.953344180
0.131074560	569.494913580	496.876405512
0.375508057	450.552366228	515.186878608
0.173136079	537.223008235	702.160832700

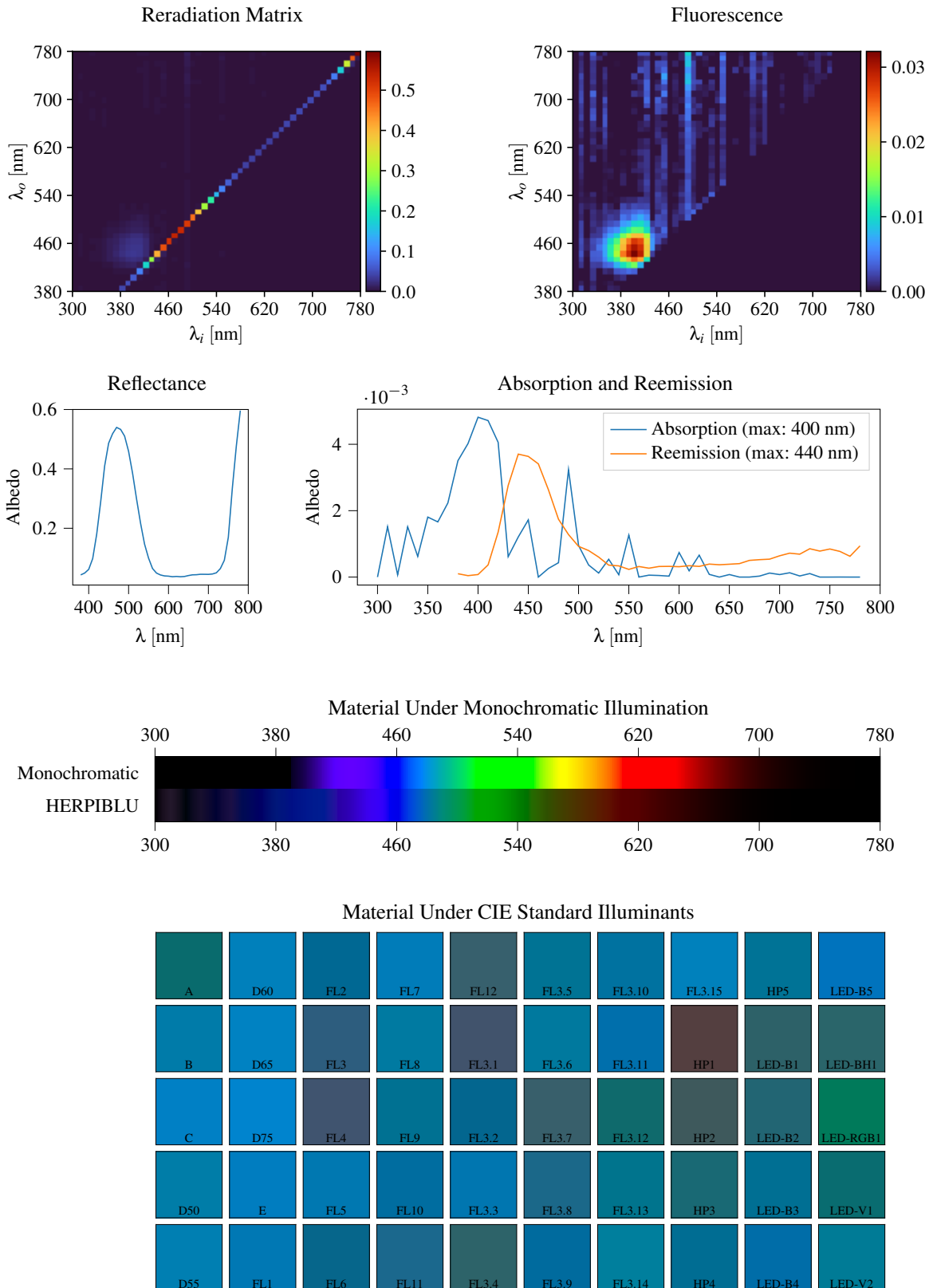
8 Gaussians max

Scaling factor: 226.86099963612278

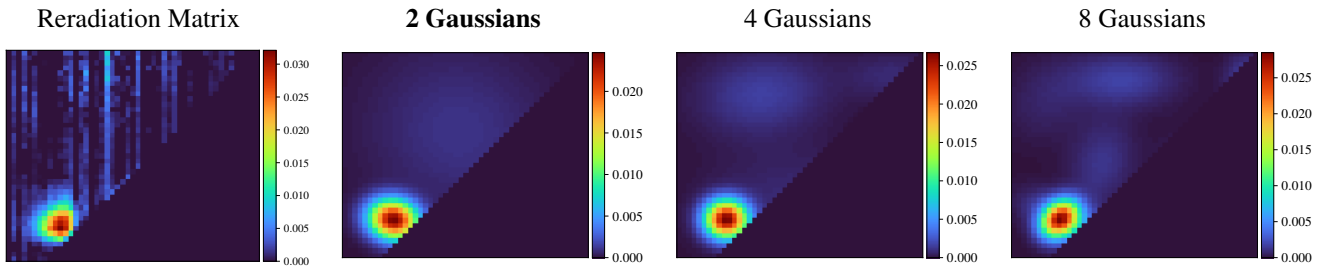
Gaussians:

Weight	Mean	Covariance
0.314781250	372.995966196	474.917469057
0.063244600	576.835225697	429.978272675
0.377774080	450.492685768	514.481071200
0.067759273	580.903523207	567.057626314
0.056626527	388.043670273	676.335325217
0.117963924	596.360857743	711.071617843

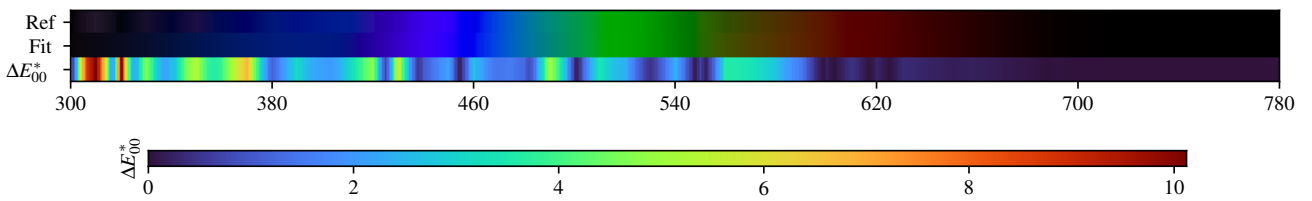
3.61. HERPIBLU



HERPIBLU - Weighted Expectation-Maximization - 2 Gaussians



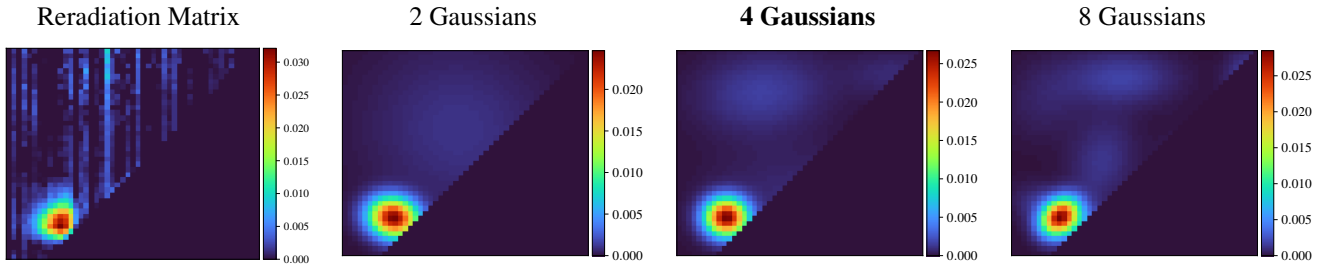
Fitted Material Under Monochromatic Illumination



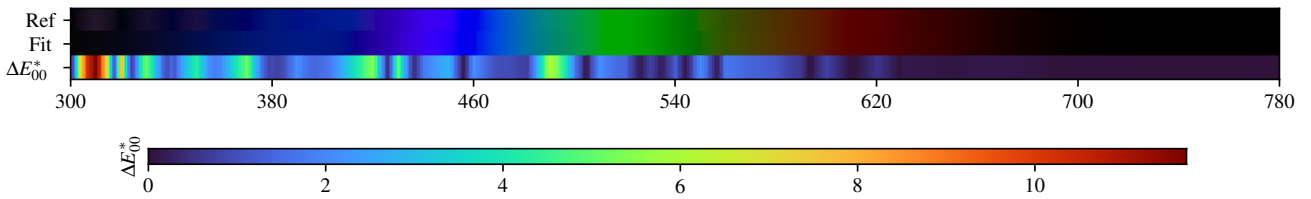
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.38$	$\Delta E = 1.22$	$\Delta E = 1.70$	$\Delta E = 1.32$	$\Delta E = 1.82$	$\Delta E = 1.20$	$\Delta E = 1.27$	$\Delta E = 1.15$	$\Delta E = 1.41$	$\Delta E = 1.50$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.31$	$\Delta E = 1.23$	$\Delta E = 2.13$	$\Delta E = 1.22$	$\Delta E = 2.56$	$\Delta E = 1.14$	$\Delta E = 1.30$	$\Delta E = 1.92$	$\Delta E = 1.90$	$\Delta E = 1.85$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.36$	$\Delta E = 1.24$	$\Delta E = 2.70$	$\Delta E = 1.33$	$\Delta E = 1.57$	$\Delta E = 1.78$	$\Delta E = 1.15$	$\Delta E = 2.21$	$\Delta E = 1.80$	$\Delta E = 1.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.21$	$\Delta E = 1.32$	$\Delta E = 1.41$	$\Delta E = 1.37$	$\Delta E = 1.32$	$\Delta E = 1.46$	$\Delta E = 1.06$	$\Delta E = 1.49$	$\Delta E = 1.60$	$\Delta E = 1.21$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.21$	$\Delta E = 1.41$	$\Delta E = 1.75$	$\Delta E = 1.49$	$\Delta E = 1.51$	$\Delta E = 1.36$	$\Delta E = 0.96$	$\Delta E = 1.51$	$\Delta E = 1.62$	$\Delta E = 1.00$

HERPIBLU - Weighted Expectation-Maximization - 4 Gaussians



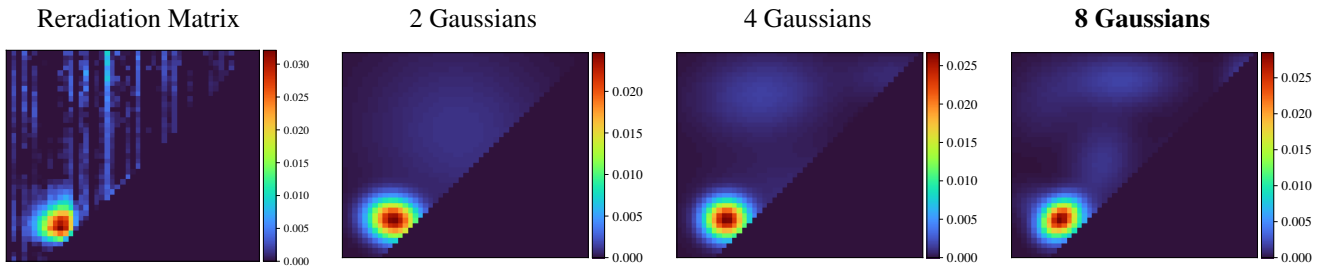
Fitted Material Under Monochromatic Illumination



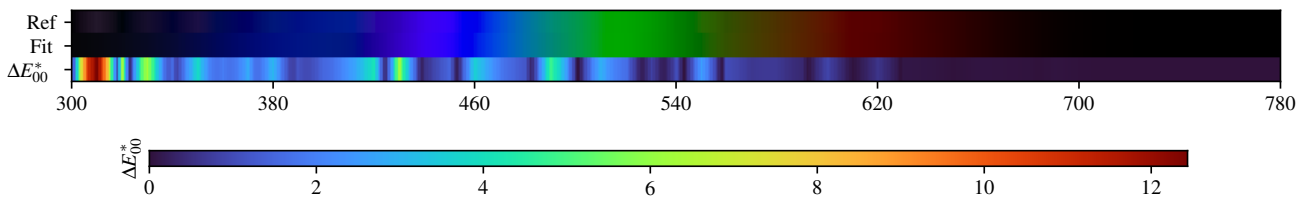
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.50$	$\Delta E = 0.59$	$\Delta E = 0.60$	$\Delta E = 0.64$	$\Delta E = 0.83$	$\Delta E = 0.50$	$\Delta E = 0.79$	$\Delta E = 0.62$	$\Delta E = 0.56$	$\Delta E = 0.56$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.62$	$\Delta E = 0.60$	$\Delta E = 0.64$	$\Delta E = 0.60$	$\Delta E = 0.55$	$\Delta E = 0.53$	$\Delta E = 0.58$	$\Delta E = 0.41$	$\Delta E = 0.64$	$\Delta E = 0.75$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.68$	$\Delta E = 0.61$	$\Delta E = 0.72$	$\Delta E = 0.58$	$\Delta E = 0.47$	$\Delta E = 0.60$	$\Delta E = 0.36$	$\Delta E = 0.62$	$\Delta E = 0.64$	$\Delta E = 0.32$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.57$	$\Delta E = 0.59$	$\Delta E = 0.65$	$\Delta E = 0.68$	$\Delta E = 0.55$	$\Delta E = 0.64$	$\Delta E = 0.46$	$\Delta E = 0.36$	$\Delta E = 0.75$	$\Delta E = 0.47$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.58$	$\Delta E = 0.65$	$\Delta E = 0.62$	$\Delta E = 0.73$	$\Delta E = 0.33$	$\Delta E = 0.58$	$\Delta E = 0.54$	$\Delta E = 0.53$	$\Delta E = 0.57$	$\Delta E = 0.50$

HERPIBLU - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.04$	$\Delta E = 0.57$	$\Delta E = 0.03$	$\Delta E = 0.34$	$\Delta E = 0.11$	$\Delta E = 0.18$	$\Delta E = 0.21$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.28$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.03$	$\Delta E = 0.41$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.04$	$\Delta E = 0.20$	$\Delta E = 0.05$	$\Delta E = 0.32$	$\Delta E = 0.05$	$\Delta E = 0.33$	$\Delta E = 0.05$	$\Delta E = 0.33$	$\Delta E = 0.25$	$\Delta E = 1.04$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.41$	$\Delta E = 0.04$	$\Delta E = 0.28$	$\Delta E = 0.04$	$\Delta E = 0.32$	$\Delta E = 0.18$	$\Delta E = 0.68$

HERPIBLU - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.042883	0.049164	0.061409	0.097709	0.179521	0.288604	0.409963	0.486619	0.518705	0.539620	0.532934
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.510371	0.458991	0.385012	0.298292	0.216906	0.146662	0.099551	0.064347	0.048998	0.042636	0.039476
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.038623	0.036722	0.037689	0.036609	0.037530	0.040673	0.043058	0.043473	0.044971	0.044891	0.044674
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.045889	0.049947	0.064097	0.092110	0.169503	0.333961	0.476127	0.596357			

2 Gaussians

Scaling factor: 240.9538547762494

Gaussians:

Weight	Mean		Covariance			
0.454503612	524.736208819	627.505542371	16210.944313066	-604.654734594	-604.654734594	14142.825867911
0.545496388	396.320443966	451.607247381	1051.448753560	-75.342209257	-75.342209257	691.784943446

4 Gaussians

Scaling factor: 231.0796776302745

Gaussians:

Weight	Mean		Covariance			
0.052153302	722.833660583	737.274415003	4032.024501579	64.647301780	64.647301780	1123.300752316
0.512151734	393.986455593	452.409445907	793.115247282	-3.469874746	-3.469874746	628.832367589
0.210487994	524.633569570	491.157118009	14291.555470792	128.043917641	128.043917641	5238.901428025
0.225206970	465.251126960	701.654144054	7607.981914653	481.777611256	481.777611256	3188.636494558

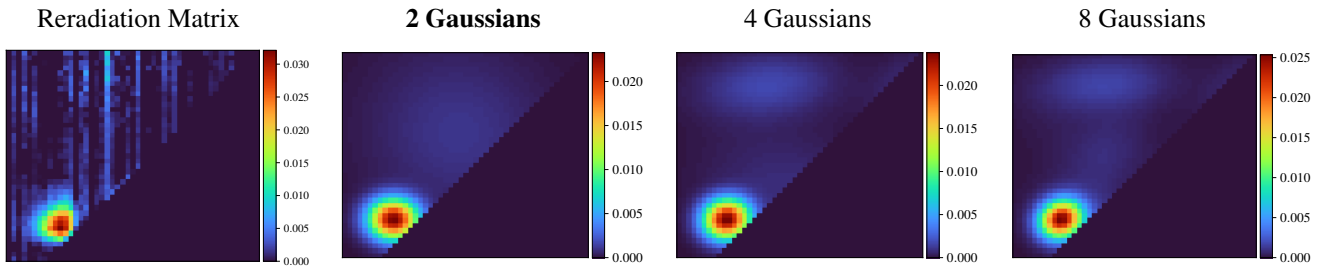
8 Gaussians

Scaling factor: 228.65757115233495

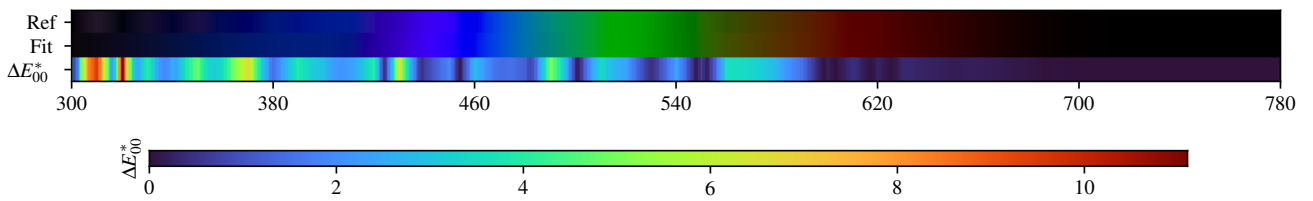
Gaussians:

Weight	Mean		Covariance			
0.037451308	755.849124568	739.889045102	727.546656165	140.507859434	140.507859434	954.004552960
0.104664321	474.667614036	563.448885219	1928.078727586	538.522426613	538.522426613	3891.527993554
0.042665553	605.604890645	503.939585691	1044.417373498	575.692495904	575.692495904	6341.521683125
0.066098615	365.261112971	688.644229789	2964.858512279	475.429391008	475.429391008	3236.926663967
0.383077607	391.385940845	452.717658585	598.307963145	160.981617143	160.981617143	582.521036432
0.036267654	728.021751135	504.401640917	1168.608203017	84.374290294	84.374290294	8098.204738080
0.192003495	413.328549943	445.860306251	2824.356728119	-984.031237443	-984.031237443	1203.587965115
0.137771446	515.495007071	729.653082005	5263.561233386	-13.239387151	-13.239387151	1313.674501280

HERPIBLU - Weighted variational Bayesian inference - 2 Gaussians



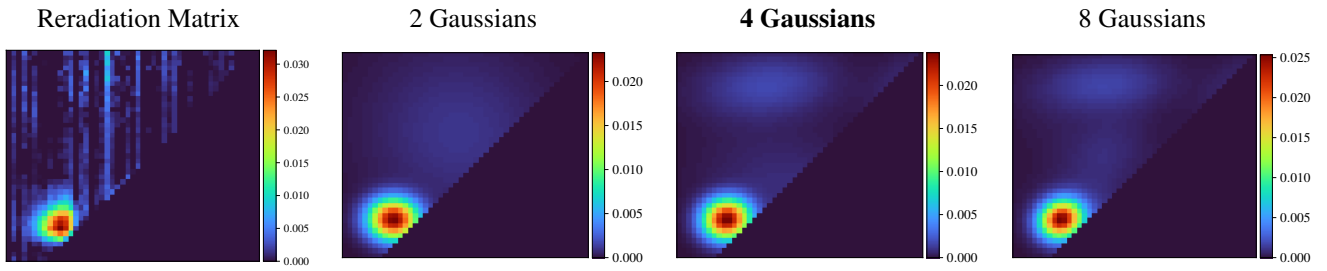
Fitted Material Under Monochromatic Illumination



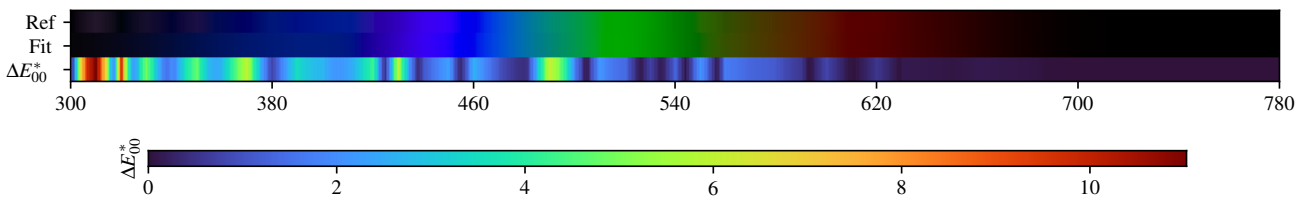
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 1.29$	D60 $\Delta E = 1.00$	FL2 $\Delta E = 1.53$	FL7 $\Delta E = 1.12$	FL12 $\Delta E = 1.70$	FL3.5 $\Delta E = 1.09$	FL3.10 $\Delta E = 1.16$	FL3.15 $\Delta E = 0.96$	HP5 $\Delta E = 1.20$	LED-B5 $\Delta E = 1.39$
B $\Delta E = 1.10$	D65 $\Delta E = 1.00$	FL3 $\Delta E = 1.96$	FL8 $\Delta E = 1.10$	FL3.1 $\Delta E = 2.44$	FL3.6 $\Delta E = 1.03$	FL3.11 $\Delta E = 1.15$	HP1 $\Delta E = 1.86$	LED-B1 $\Delta E = 1.83$	LED-BH1 $\Delta E = 1.76$
C $\Delta E = 1.11$	D75 $\Delta E = 0.98$	FL4 $\Delta E = 2.53$	FL9 $\Delta E = 1.21$	FL3.2 $\Delta E = 1.44$	FL3.7 $\Delta E = 1.69$	FL3.12 $\Delta E = 1.11$	HP2 $\Delta E = 2.09$	LED-B2 $\Delta E = 1.73$	LED-RGB1 $\Delta E = 1.06$
D50 $\Delta E = 1.03$	E $\Delta E = 1.05$	FL5 $\Delta E = 1.23$	FL10 $\Delta E = 1.23$	FL3.3 $\Delta E = 1.16$	FL3.8 $\Delta E = 1.34$	FL3.13 $\Delta E = 0.99$	HP3 $\Delta E = 1.31$	LED-B3 $\Delta E = 1.51$	LED-V1 $\Delta E = 1.16$
D55 $\Delta E = 1.01$	FL1 $\Delta E = 1.23$	FL6 $\Delta E = 1.59$	FL11 $\Delta E = 1.36$	FL3.4 $\Delta E = 1.44$	FL3.9 $\Delta E = 1.23$	FL3.14 $\Delta E = 0.89$	HP4 $\Delta E = 1.23$	LED-B4 $\Delta E = 1.51$	LED-V2 $\Delta E = 0.80$

HERIBLU - Weighted variational Bayesian inference - 4 Gaussians



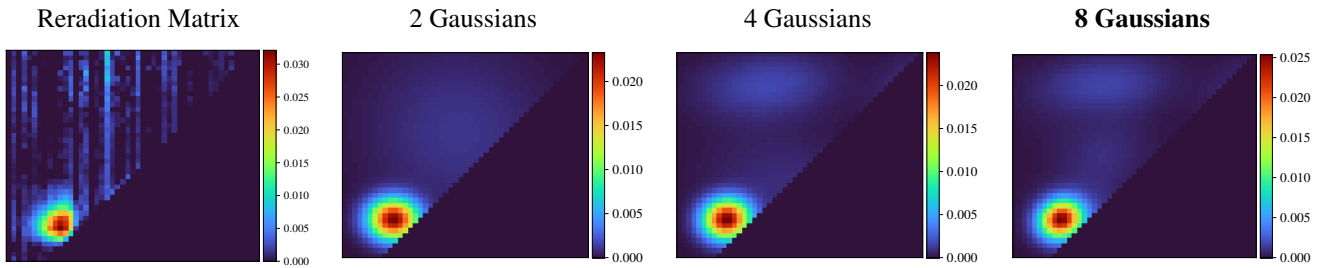
Fitted Material Under Monochromatic Illumination



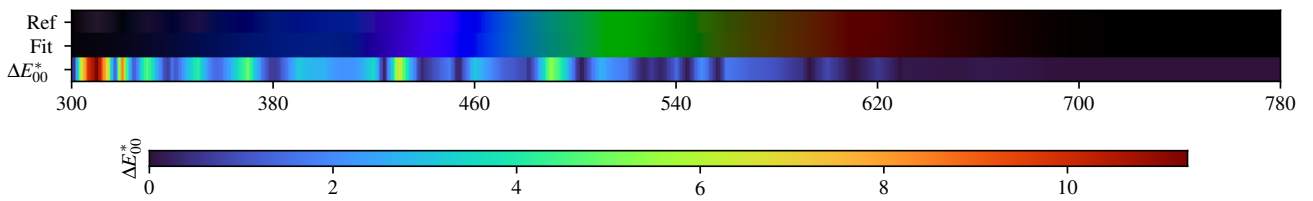
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.64$	$\Delta E = 0.21$	$\Delta E = 0.61$	$\Delta E = 0.26$	$\Delta E = 0.17$	$\Delta E = 0.20$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.23$	$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.29$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.42$	$\Delta E = 0.14$	$\Delta E = 0.43$	$\Delta E = 0.56$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.27$	$\Delta E = 0.32$	$\Delta E = 0.29$	$\Delta E = 0.28$	$\Delta E = 0.12$	$\Delta E = 0.42$	$\Delta E = 0.21$	$\Delta E = 0.28$	$\Delta E = 0.41$	$\Delta E = 0.26$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 0.27$	$\Delta E = 0.25$	$\Delta E = 0.50$	$\Delta E = 0.19$	$\Delta E = 0.46$	$\Delta E = 0.28$	$\Delta E = 0.15$	$\Delta E = 0.50$	$\Delta E = 0.82$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.26$	$\Delta E = 0.23$	$\Delta E = 0.55$	$\Delta E = 0.06$	$\Delta E = 0.43$	$\Delta E = 0.34$	$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.58$

HERPIBLU - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.04$	$\Delta E = 0.22$	$\Delta E = 0.15$	$\Delta E = 0.58$	$\Delta E = 0.19$	$\Delta E = 0.46$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.04$	$\Delta E = 0.26$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.10$	$\Delta E = 0.43$	$\Delta E = 0.52$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.30$	$\Delta E = 0.25$	$\Delta E = 0.16$	$\Delta E = 0.39$	$\Delta E = 0.16$	$\Delta E = 0.28$	$\Delta E = 0.42$	$\Delta E = 0.27$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.35$	$\Delta E = 0.15$	$\Delta E = 0.37$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.48$	$\Delta E = 0.90$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.06$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.44$	$\Delta E = 0.18$	$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.32$	$\Delta E = 0.53$

HERPIBLU - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.042883	0.049164	0.061409	0.097709	0.179521	0.288604	0.409963	0.486619	0.518705	0.539620	0.532934
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.510371	0.458991	0.385012	0.298292	0.216906	0.146662	0.099551	0.064347	0.048998	0.042636	0.039476
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.038623	0.036722	0.037689	0.036609	0.037530	0.040673	0.043058	0.043473	0.044971	0.044891	0.044674
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.045889	0.049947	0.064097	0.092110	0.169503	0.333961	0.476127	0.596357			

2 Gaussians max

Scaling factor: 240.39716380380784

Gaussians:

Weight	Mean		Covariance			
0.458148882	524.261289167	625.745733583	16139.725873370	-499.412416121	-499.412416121	14392.545038224
0.541851118	396.235648697	452.173783512	1080.165395200	-6.892960138	-6.892960138	735.202848988

4 Gaussians max

Scaling factor: 233.13587589770165

Gaussians:

Weight	Mean		Covariance			
0.233330528	515.816178055	514.320624622	13326.105649553	-1945.856936023	-1945.856936023	7032.436341371
0.524627668	394.664855763	452.344363901	948.791898992	32.648313377	32.648313377	703.107825289
0.046090309	742.134105761	720.599152191	2620.599316043	1299.467652686	1299.467652686	2900.945607171
0.195951495	476.283163259	719.195970162	8557.854982533	605.252903524	605.252903524	2002.338420119

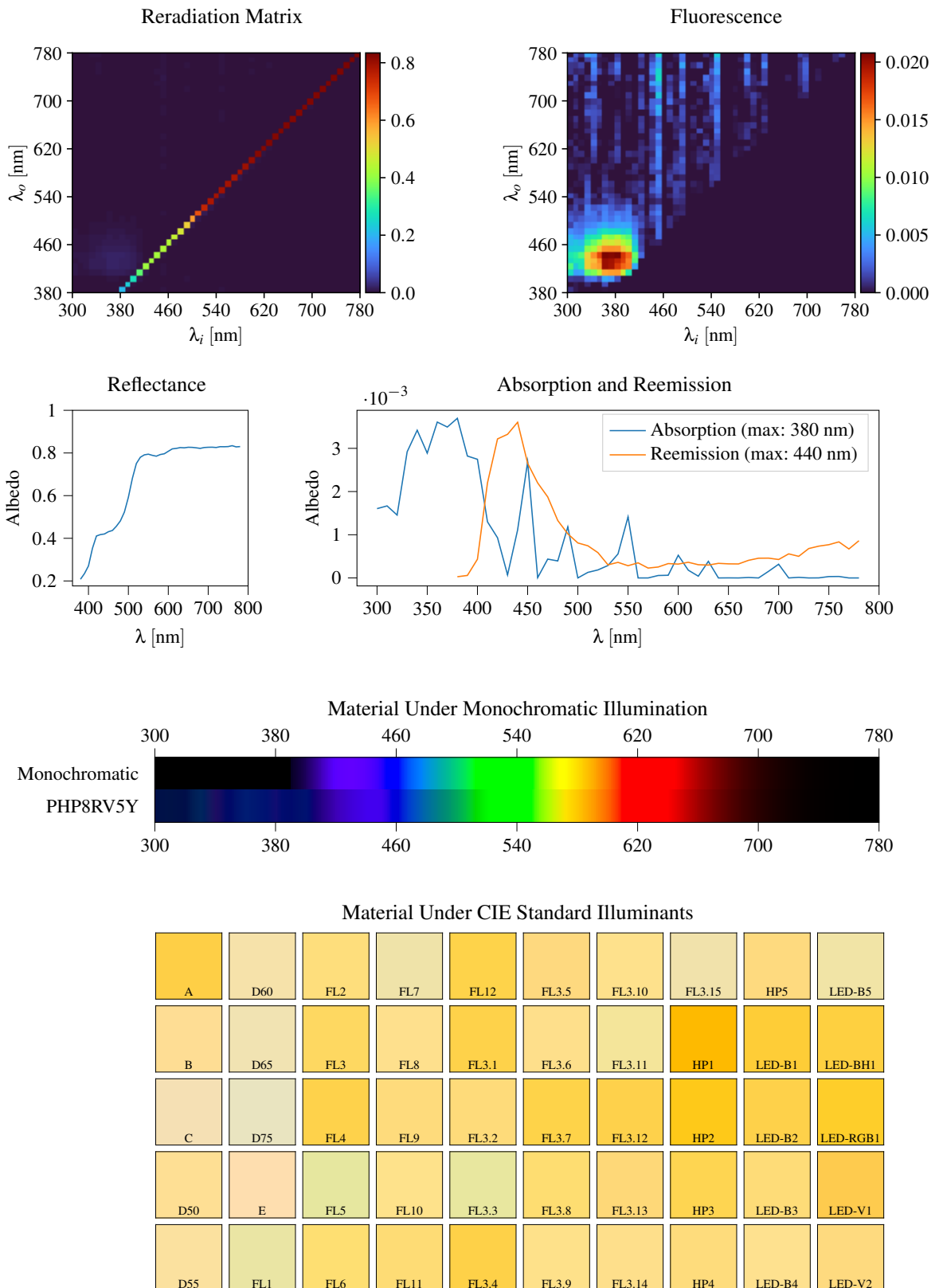
8 Gaussians max

Scaling factor: 229.46527982426716

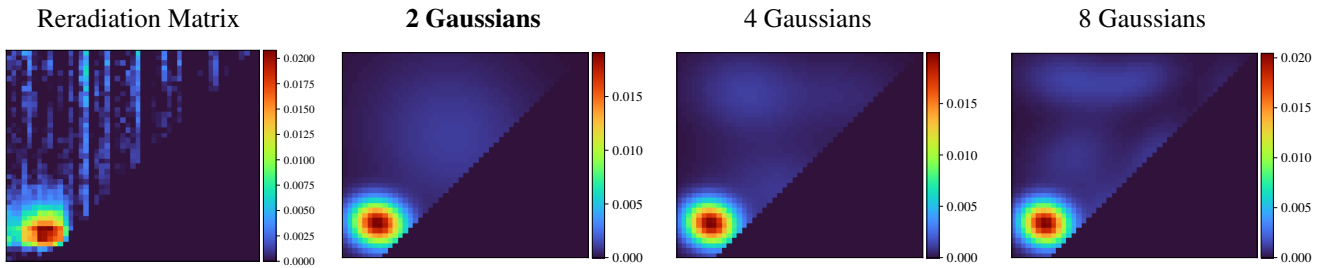
Gaussians:

Weight	Mean		Covariance			
0.126818989	446.413090355	449.683879358	5236.196605299	-834.375503924	-834.375503924	2289.564435514
0.473758522	393.185074361	452.660656179	790.358747458	83.929425520	83.929425520	637.359653430
0.062065580	663.498202333	498.265980590	5731.735793060	-1280.956301662	-1280.956301662	5650.495180426
0.072483692	485.861180604	583.817073377	3337.448982698	1209.620302690	1209.620302690	3942.516522196
0.042841235	403.463790906	608.694624222	6108.097241467	-1564.821886985	-1564.821886985	4372.018644328
0.046769701	739.668795749	719.933542354	2867.837097581	1446.450601891	1446.450601891	2884.238292498
0.174278664	479.581820634	726.124821334	8448.925747181	512.002581601	512.002581601	1618.075666124

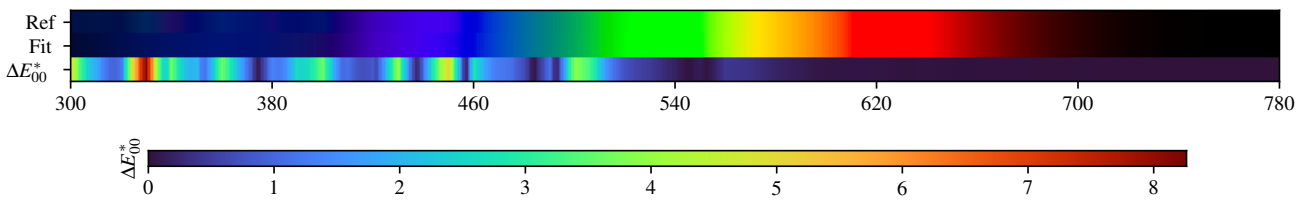
3.62. PHP8RV5Y



PHP8RV5Y - Weighted Expectation-Maximization - 2 Gaussians



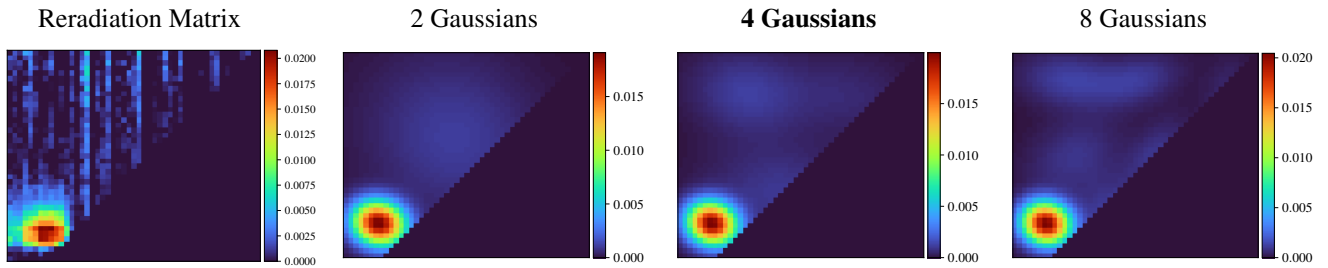
Fitted Material Under Monochromatic Illumination



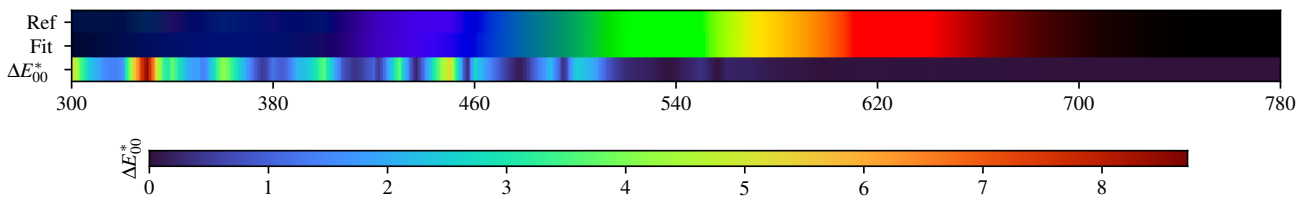
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.49$	$\Delta E = 0.29$	$\Delta E = 0.39$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.18$	$\Delta E = 0.39$	$\Delta E = 0.35$	$\Delta E = 0.30$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.35$	$\Delta E = 0.57$	$\Delta E = 0.23$	$\Delta E = 0.28$	$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.17$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.55$	$\Delta E = 0.75$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.25$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.37$	$\Delta E = 0.50$	$\Delta E = 0.37$	$\Delta E = 0.20$	$\Delta E = 0.36$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.23$	$\Delta E = 0.28$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.42$	$\Delta E = 0.38$	$\Delta E = 0.28$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.25$	$\Delta E = 0.40$	$\Delta E = 0.27$	$\Delta E = 0.37$

PHP8RV5Y - Weighted Expectation-Maximization - 4 Gaussians



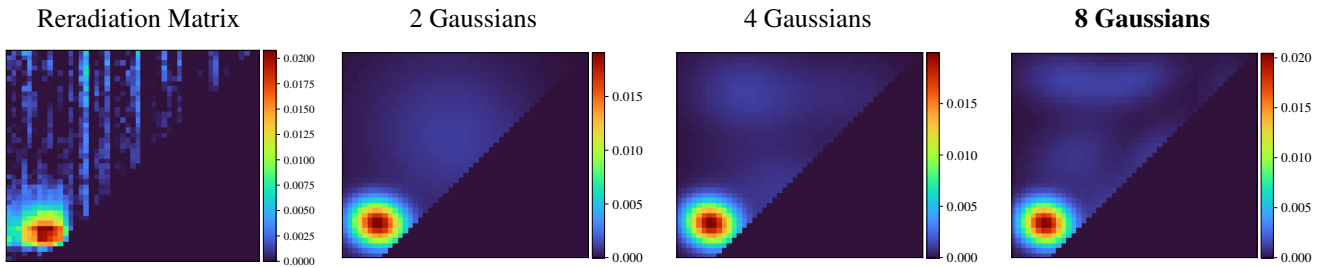
Fitted Material Under Monochromatic Illumination



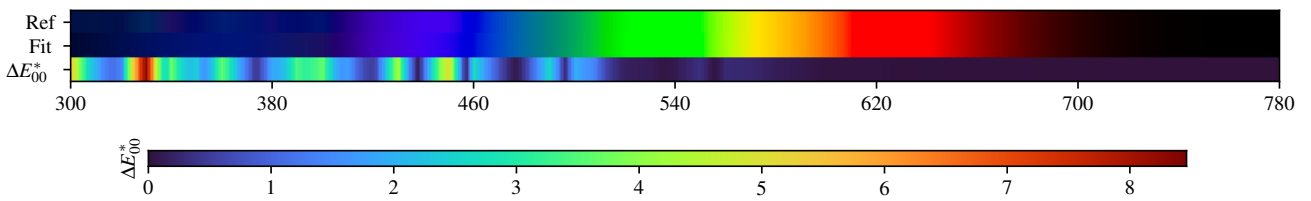
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 0.12$	$\Delta E = 0.03$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.17$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.03$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.21$	$\Delta E = 0.05$	$\Delta E = 0.02$	$\Delta E = 0.05$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.04$	$\Delta E = 0.02$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.10$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.03$	$\Delta E = 0.11$	$\Delta E = 0.04$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.09$

PHP8RV5Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.13$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.03$	$\Delta E = 0.05$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.02$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.15$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.07$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.07$

PHP8RV5Y - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.208002	0.234637	0.270439	0.353090	0.410835	0.417424	0.420183	0.430848	0.436637	0.456616	0.481695
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.522877	0.592361	0.680919	0.750523	0.779929	0.791204	0.794344	0.788896	0.784948	0.792706	0.796250
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.807856	0.819221	0.821465	0.825273	0.824144	0.826767	0.826237	0.824135	0.821539	0.825526	0.826747
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.827063	0.825656	0.829482	0.829232	0.829956	0.834105	0.828567	0.829970			

2 Gaussians

Scaling factor: 225.90005034449214

Gaussians:

Weight	Mean		Covariance			
0.447768544	513.259872959	615.209219171	14304.017071373	-1259.196665846	-1259.196665846	13424.959107030
0.552231456	365.231278121	444.225170734	1238.173915788	-95.338658738	-95.338658738	864.176641421

4 Gaussians

Scaling factor: 222.91865296419823

Gaussians:

Weight	Mean		Covariance			
0.144379699	428.391508152	703.281083135	5601.681004333	-533.379019703	-533.379019703	3349.746178160
0.104949081	626.099522520	699.830894312	9078.759677859	-714.079710710	-714.079710710	3546.292532975
0.532999131	363.311103927	443.758583498	1091.719301669	-90.185759787	-90.185759787	823.280951268
0.217672090	506.770150531	502.027568347	11376.153885944	-1032.759438372	-1032.759438372	4645.335359793

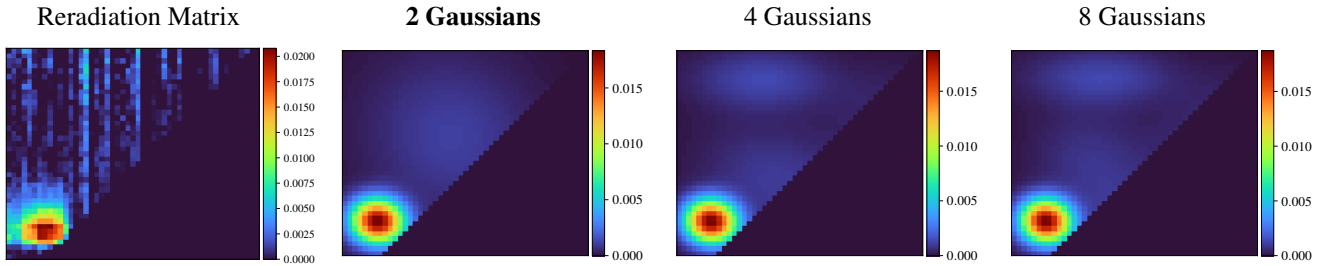
8 Gaussians

Scaling factor: 221.68178060942734

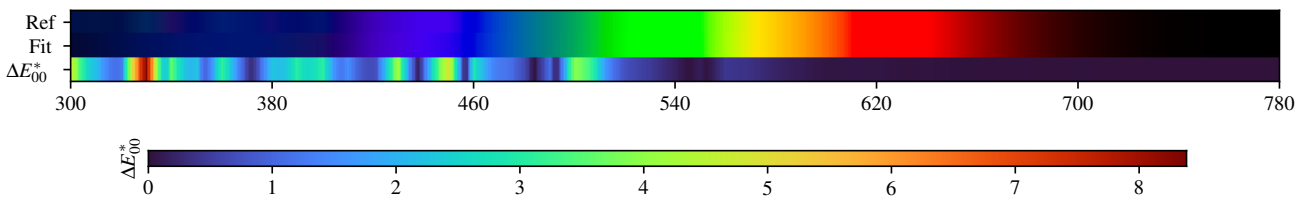
Gaussians:

Weight	Mean		Covariance			
0.094803040	408.508869687	729.660637324	4481.207457136	-276.614351164	-276.614351164	1426.023897148
0.053627392	580.803575171	579.343594927	1890.529423410	1126.079578611	1126.079578611	2562.366271361
0.534677462	362.788782299	443.777647430	1044.809323593	-65.911676522	-65.911676522	801.832042760
0.031539623	679.868206984	460.834327873	4092.027759995	511.716747619	511.716747619	3222.632241422
0.098745234	418.658193204	577.265496726	4348.652901772	921.409342537	921.409342537	3100.062038388
0.040706753	725.976534260	688.798993855	1268.499939411	172.134229377	172.134229377	3773.030718627
0.082986166	493.296993625	455.300454064	2271.664357122	-49.762563843	-49.762563843	2433.381431395
0.062914330	546.643597897	729.669111154	3350.303681503	640.866909256	640.866909256	1332.270307603

PHP8RV5Y - Weighted variational Bayesian inference - 2 Gaussians



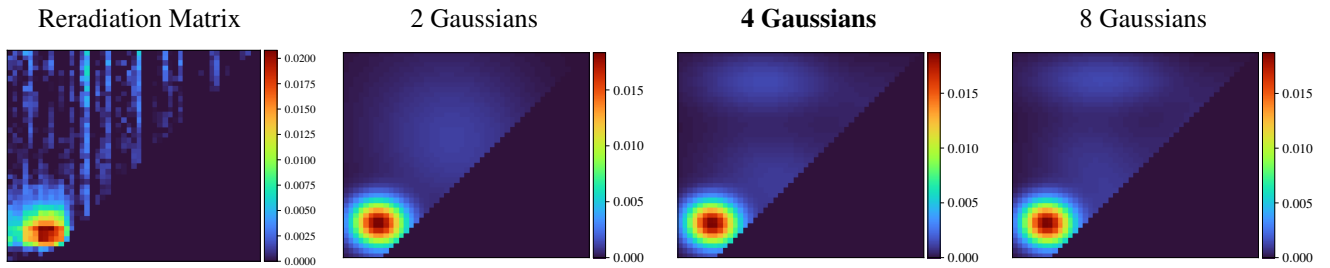
Fitted Material Under Monochromatic Illumination



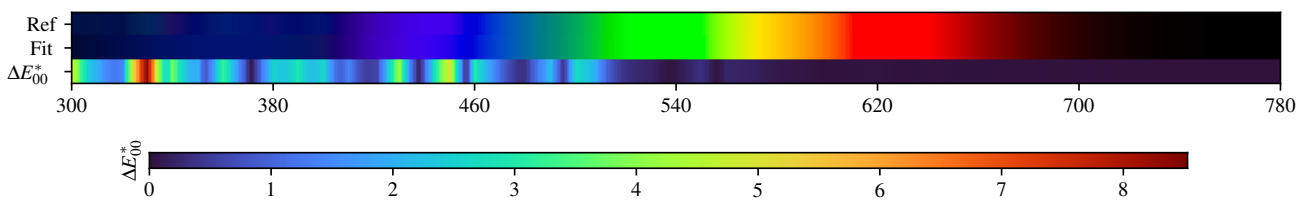
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.43$	FL2 $\Delta E = 0.28$	FL7 $\Delta E = 0.37$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.21$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.36$	HP5 $\Delta E = 0.34$	LED-B5 $\Delta E = 0.29$
B $\Delta E = 0.32$	D65 $\Delta E = 0.49$	FL3 $\Delta E = 0.23$	FL8 $\Delta E = 0.27$	FL3.1 $\Delta E = 0.18$	FL3.6 $\Delta E = 0.26$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.49$	D75 $\Delta E = 0.64$	FL4 $\Delta E = 0.19$	FL9 $\Delta E = 0.23$	FL3.2 $\Delta E = 0.24$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.15$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.33$	E $\Delta E = 0.39$	FL5 $\Delta E = 0.35$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.35$	FL3.8 $\Delta E = 0.16$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.24$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.27$
D55 $\Delta E = 0.38$	FL1 $\Delta E = 0.37$	FL6 $\Delta E = 0.27$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.25$	HP4 $\Delta E = 0.37$	LED-B4 $\Delta E = 0.26$	LED-V2 $\Delta E = 0.35$

PHP8RV5Y - Weighted variational Bayesian inference - 4 Gaussians



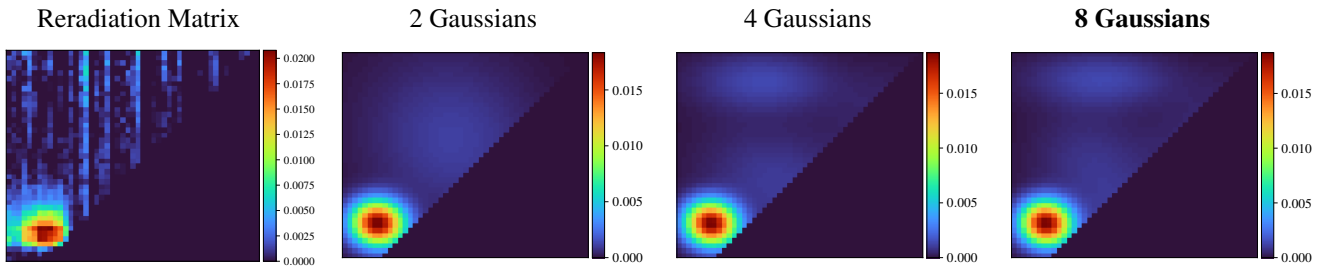
Fitted Material Under Monochromatic Illumination



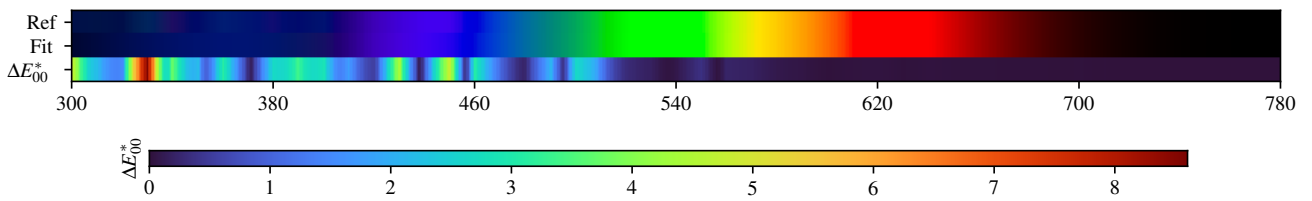
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.19$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.21$	FL3.15 $\Delta E = 0.28$	HP5 $\Delta E = 0.12$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.16$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.16$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.26$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.26$	D75 $\Delta E = 0.28$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.16$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.22$	FL3.3 $\Delta E = 0.13$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.10$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.18$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.19$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.15$	LED-V2 $\Delta E = 0.13$

PHP8RV5Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.14$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.15$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.19$
B $\Delta E = 0.13$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.19$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.12$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.11$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.16$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.11$

PHP8RV5Y - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.208002	0.234637	0.270439	0.353090	0.410835	0.417424	0.420183	0.430848	0.436637	0.456616	0.481695
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.522877	0.592361	0.680919	0.750523	0.779929	0.791204	0.794344	0.788896	0.784948	0.792706	0.796250
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.807856	0.819221	0.821465	0.825273	0.824144	0.826767	0.826237	0.824135	0.821539	0.825526	0.826747
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.827063	0.825656	0.829482	0.829232	0.829956	0.834105	0.828567	0.829970			

2 Gaussians max

Scaling factor: 226.48601503187197

Gaussians:

Weight	Mean		Covariance			
0.545708509	365.054530142	444.403013705	1264.592798710	-43.153602099	-43.153602099	893.363197537
0.454291491	511.824992120	612.876766962	14308.104976839	-1021.386675398	-1021.386675398	13628.141618215

4 Gaussians max

Scaling factor: 224.21237843396366

Gaussians:

Weight	Mean		Covariance			
0.534460668	364.049836353	443.857622757	1196.302764942	-45.292699074	-45.292699074	860.097968974
0.252082073	496.740099570	522.935241981	11144.514186627	-1989.852002801	-1989.852002801	6469.328351377
0.055805407	687.493407532	670.192709930	4971.038723632	1641.302966557	1641.302966557	4686.137105109
0.157651852	467.151648543	726.840872090	9251.666839036	-108.957869216	-108.957869216	1750.360896855

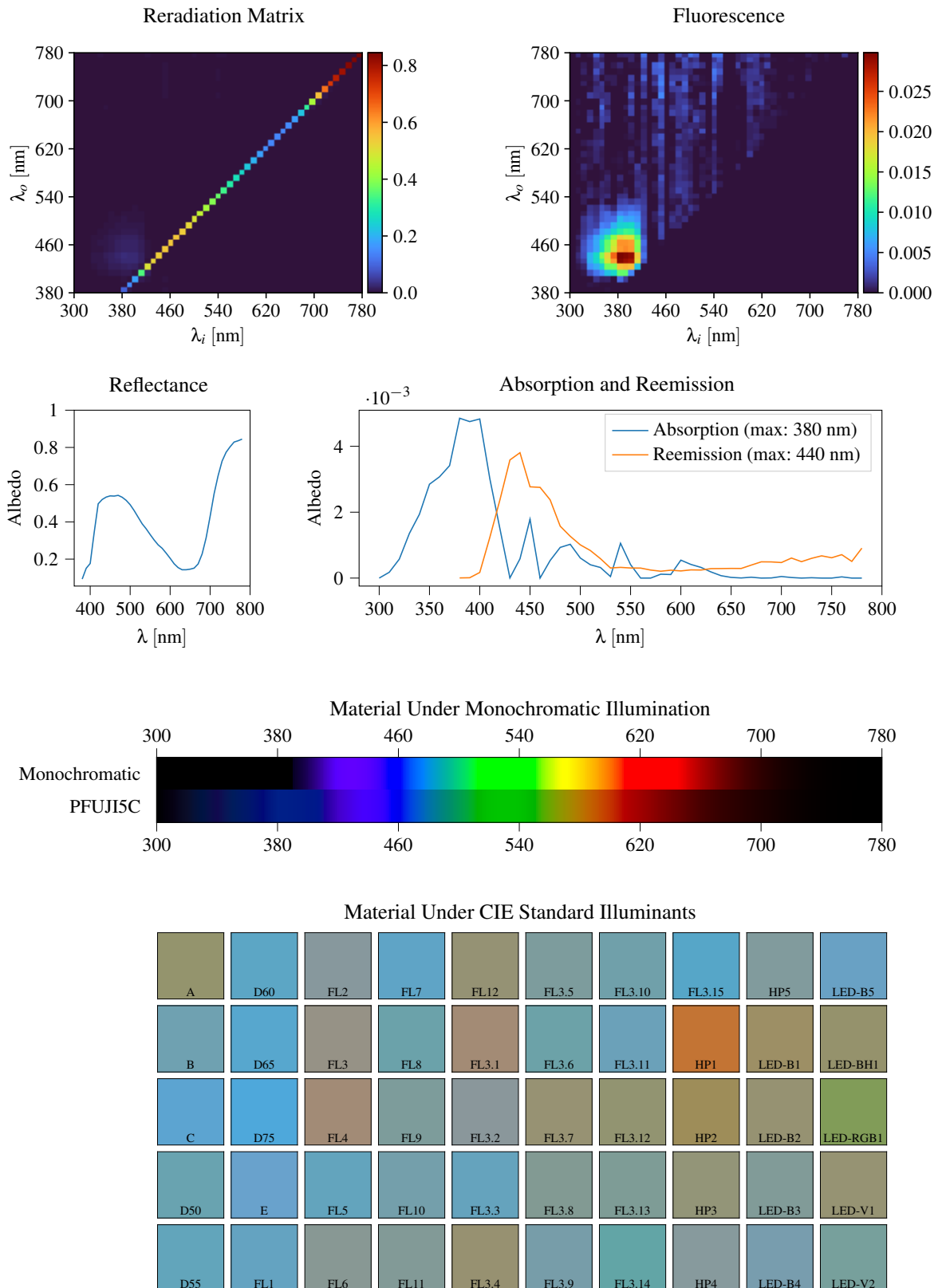
8 Gaussians max

Scaling factor: 222.54762120346513

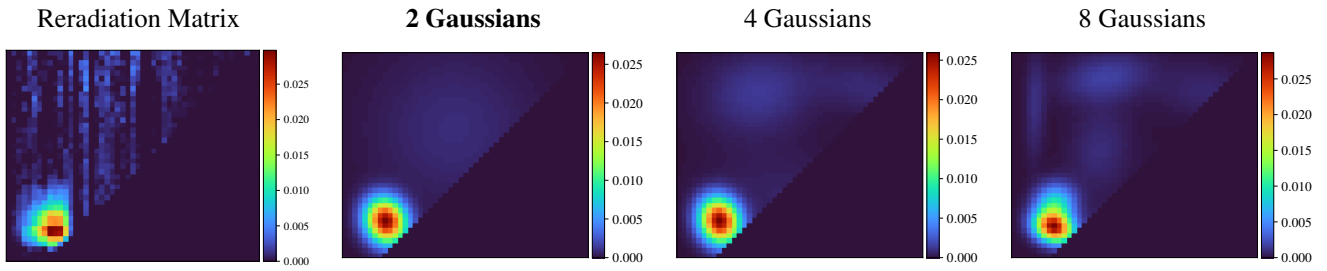
Gaussians:

Weight	Mean		Covariance			
0.535297580	363.469477642	444.231402517	1159.249380784	-37.007306940	-37.007306940	870.288420250
0.063241115	502.105014841	453.687763083	3239.866744468	13.946698600	13.946698600	2980.284058960
0.040609634	657.481510693	495.213249697	7139.144158544	-1330.909774275	-1330.909774275	5566.425504015
0.145705577	447.291038001	566.279330056	6424.065645210	-189.114550118	-189.114550118	5378.496792852
0.060932661	664.251548688	648.490131766	6578.327868699	3652.542384647	3652.542384647	5349.833850390
0.153179424	473.573497166	730.654983027	10433.663485793	-65.022984349	-65.022984349	1550.701151647

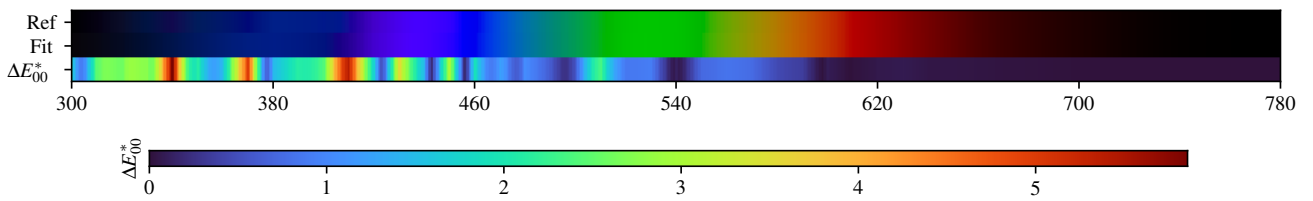
3.63. PFUJ15C



PFUJ15C - Weighted Expectation-Maximization - 2 Gaussians



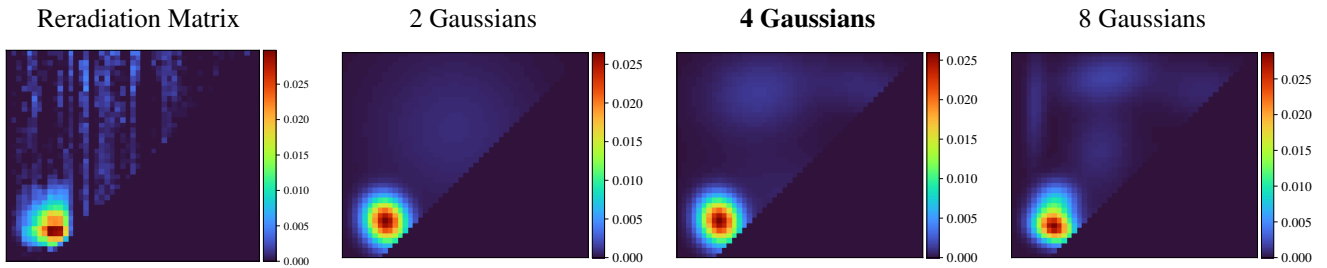
Fitted Material Under Monochromatic Illumination



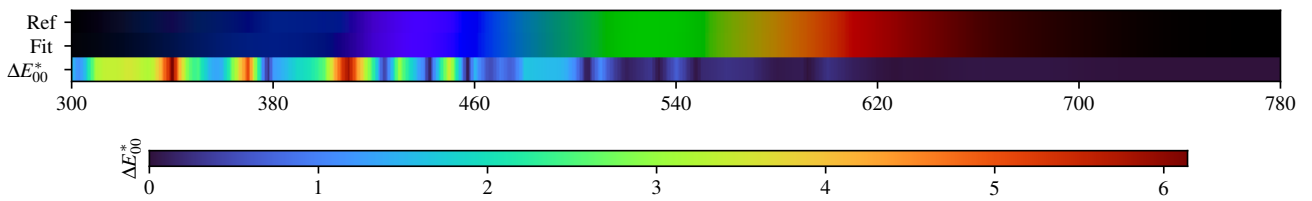
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.85$	$\Delta E = 0.85$	$\Delta E = 1.11$	$\Delta E = 0.79$	$\Delta E = 0.66$	$\Delta E = 0.82$	$\Delta E = 0.70$	$\Delta E = 0.69$	$\Delta E = 1.19$	$\Delta E = 0.80$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.99$	$\Delta E = 0.86$	$\Delta E = 1.22$	$\Delta E = 0.74$	$\Delta E = 0.78$	$\Delta E = 0.73$	$\Delta E = 0.72$	$\Delta E = 0.35$	$\Delta E = 0.74$	$\Delta E = 0.80$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.96$	$\Delta E = 0.88$	$\Delta E = 0.82$	$\Delta E = 0.84$	$\Delta E = 1.11$	$\Delta E = 0.62$	$\Delta E = 0.75$	$\Delta E = 0.78$	$\Delta E = 0.91$	$\Delta E = 0.56$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.87$	$\Delta E = 1.07$	$\Delta E = 0.81$	$\Delta E = 0.76$	$\Delta E = 0.79$	$\Delta E = 0.64$	$\Delta E = 0.75$	$\Delta E = 0.85$	$\Delta E = 0.87$	$\Delta E = 1.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.86$	$\Delta E = 0.82$	$\Delta E = 1.04$	$\Delta E = 0.71$	$\Delta E = 0.81$	$\Delta E = 0.77$	$\Delta E = 0.58$	$\Delta E = 1.38$	$\Delta E = 0.91$	$\Delta E = 1.07$

PFUJ15C - Weighted Expectation-Maximization - 4 Gaussians



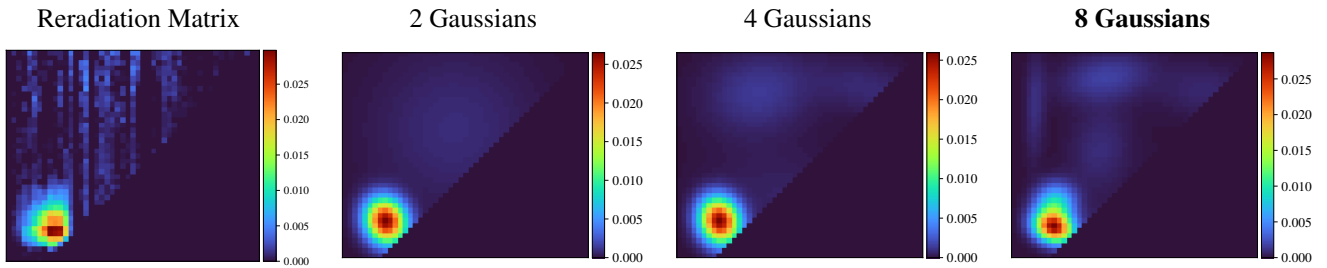
Fitted Material Under Monochromatic Illumination



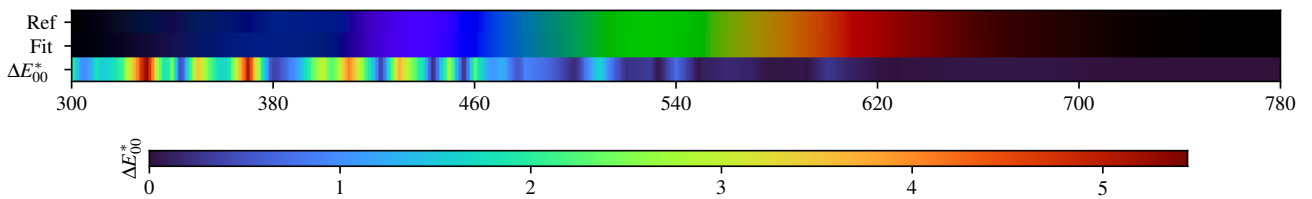
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.39$	$\Delta E = 0.35$	$\Delta E = 0.33$	$\Delta E = 0.33$	$\Delta E = 0.32$	$\Delta E = 0.46$	$\Delta E = 0.24$	$\Delta E = 0.67$	$\Delta E = 0.34$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.47$	$\Delta E = 0.38$	$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.14$	$\Delta E = 0.33$	$\Delta E = 0.47$	$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.22$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.43$	$\Delta E = 0.37$	$\Delta E = 0.15$	$\Delta E = 0.27$	$\Delta E = 0.32$	$\Delta E = 0.36$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.40$	$\Delta E = 0.41$	$\Delta E = 0.34$	$\Delta E = 0.49$	$\Delta E = 0.34$	$\Delta E = 0.51$	$\Delta E = 0.26$	$\Delta E = 0.35$	$\Delta E = 0.42$	$\Delta E = 0.45$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.39$	$\Delta E = 0.34$	$\Delta E = 0.28$	$\Delta E = 0.51$	$\Delta E = 0.07$	$\Delta E = 0.51$	$\Delta E = 0.31$	$\Delta E = 0.74$	$\Delta E = 0.39$	$\Delta E = 0.58$

PFUJ15C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.30$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.13$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.25$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.15$	D75 $\Delta E = 0.14$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.35$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.12$	E $\Delta E = 0.07$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.34$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.21$	LED-V1 $\Delta E = 0.24$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.30$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.29$	FL3.14 $\Delta E = 0.14$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.22$

PFUJ15C - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.092803	0.150696	0.176579	0.343276	0.497090	0.520319	0.533309	0.539751	0.538678	0.542513	0.532408
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.515824	0.492334	0.460708	0.425062	0.389820	0.363006	0.332067	0.302707	0.276653	0.258287	0.232343
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.204542	0.175009	0.154343	0.142835	0.142891	0.145989	0.151494	0.173927	0.227380	0.314003	0.429338
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.551292	0.647982	0.726768	0.773983	0.803451	0.828894	0.835818	0.844700			

2 Gaussians

Scaling factor: 211.68948145445904

Gaussians:

Weight	Mean		Covariance			
0.607532234	381.172632847	448.825383216	698.514538631	-83.967323185	-83.967323185	870.954472685
0.392467766	516.780161112	632.470130102	13851.963808308	205.500477010	205.500477010	13518.439033285

4 Gaussians

Scaling factor: 206.48918117774718

Gaussians:

Weight	Mean		Covariance			
0.178851765	457.163271928	704.331277452	5333.369168264	360.364952069	360.364952069	3176.237276014
0.142115572	509.987960430	495.831687850	11290.465142841	-1242.524678325	-1242.524678325	4993.440742691
0.605422268	380.805668201	449.199768050	679.016531139	-78.154244507	-78.154244507	887.373541989
0.073610394	673.876246030	713.325726625	5581.923164815	-937.680191544	-937.680191544	1574.684385464

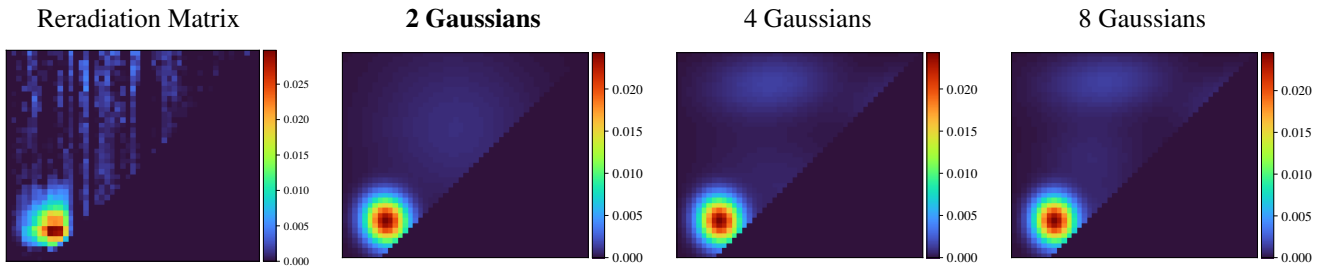
8 Gaussians

Scaling factor: 202.87269141478507

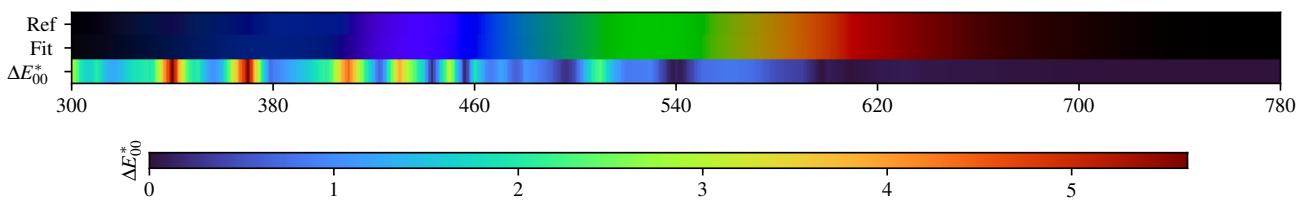
Gaussians:

Weight	Mean		Covariance			
0.034956016	342.213406230	676.058669534	183.724574320	120.778210176	120.778210176	5241.192109442
0.043123366	476.021287039	421.661077586	1114.681868687	159.439948748	159.439948748	1046.419928341
0.044925503	639.450609795	492.594379932	6027.545876450	-739.494100983	-739.494100983	5384.221789633
0.070391439	679.105187885	707.614165093	4840.637914793	-198.005480056	-198.005480056	1426.780934045
0.226662500	381.004703000	477.357632074	651.853387364	37.838226261	37.838226261	738.574946337
0.385271716	379.584580013	435.339165712	635.993183960	-83.506910505	-83.506910505	392.130721159
0.111968412	481.112608678	734.951803372	3639.884211698	471.144997732	471.144997732	1129.687723289
0.082701049	470.383780333	591.647961133	1791.034222004	400.737487431	400.737487431	3747.132463342

PFUJ15C - Weighted variational Bayesian inference - 2 Gaussians



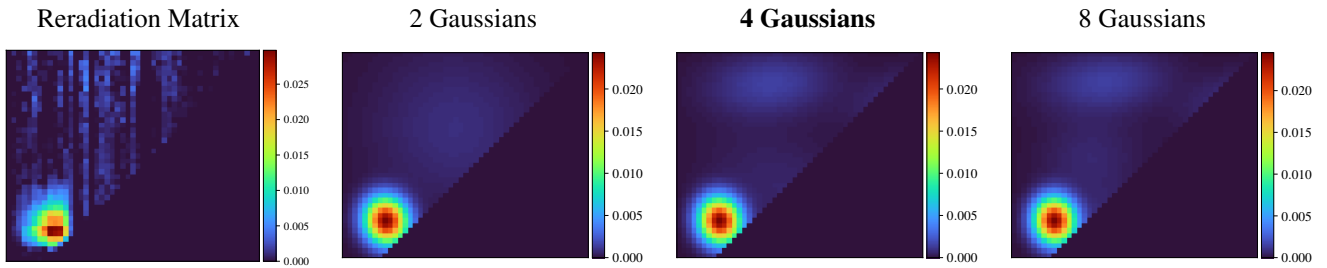
Fitted Material Under Monochromatic Illumination



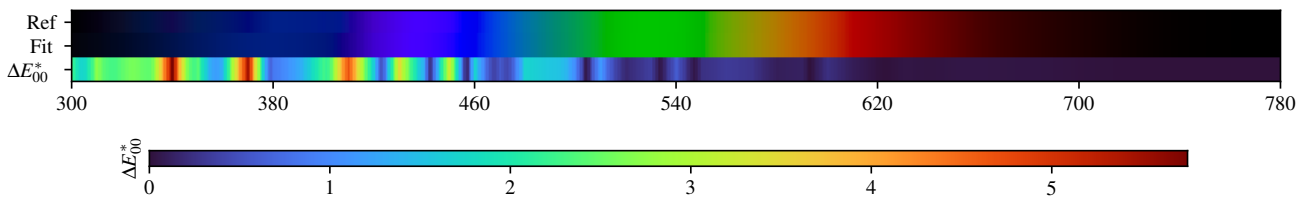
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.81$	D60 $\Delta E = 0.71$	FL2 $\Delta E = 1.05$	FL7 $\Delta E = 0.73$	FL12 $\Delta E = 0.64$	FL3.5 $\Delta E = 0.79$	FL3.10 $\Delta E = 0.72$	FL3.15 $\Delta E = 0.59$	HP5 $\Delta E = 1.16$	LED-B5 $\Delta E = 0.80$
B $\Delta E = 0.90$	D65 $\Delta E = 0.70$	FL3 $\Delta E = 1.17$	FL8 $\Delta E = 0.71$	FL3.1 $\Delta E = 0.75$	FL3.6 $\Delta E = 0.70$	FL3.11 $\Delta E = 0.72$	HP1 $\Delta E = 0.35$	LED-B1 $\Delta E = 0.74$	LED-BH1 $\Delta E = 0.79$
C $\Delta E = 0.84$	D75 $\Delta E = 0.71$	FL4 $\Delta E = 0.80$	FL9 $\Delta E = 0.80$	FL3.2 $\Delta E = 1.06$	FL3.7 $\Delta E = 0.61$	FL3.12 $\Delta E = 0.74$	HP2 $\Delta E = 0.76$	LED-B2 $\Delta E = 0.90$	LED-RGB1 $\Delta E = 0.55$
D50 $\Delta E = 0.77$	E $\Delta E = 0.81$	FL5 $\Delta E = 0.76$	FL10 $\Delta E = 0.76$	FL3.3 $\Delta E = 0.75$	FL3.8 $\Delta E = 0.63$	FL3.13 $\Delta E = 0.73$	HP3 $\Delta E = 0.79$	LED-B3 $\Delta E = 0.88$	LED-V1 $\Delta E = 1.16$
D55 $\Delta E = 0.74$	FL1 $\Delta E = 0.77$	FL6 $\Delta E = 0.99$	FL11 $\Delta E = 0.70$	FL3.4 $\Delta E = 0.79$	FL3.9 $\Delta E = 0.77$	FL3.14 $\Delta E = 0.57$	HP4 $\Delta E = 1.28$	LED-B4 $\Delta E = 0.91$	LED-V2 $\Delta E = 1.02$

PFUJ15C - Weighted variational Bayesian inference - 4 Gaussians



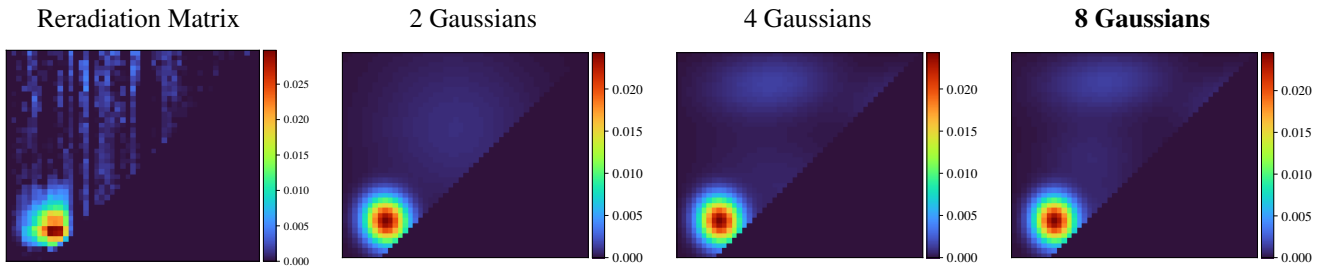
Fitted Material Under Monochromatic Illumination



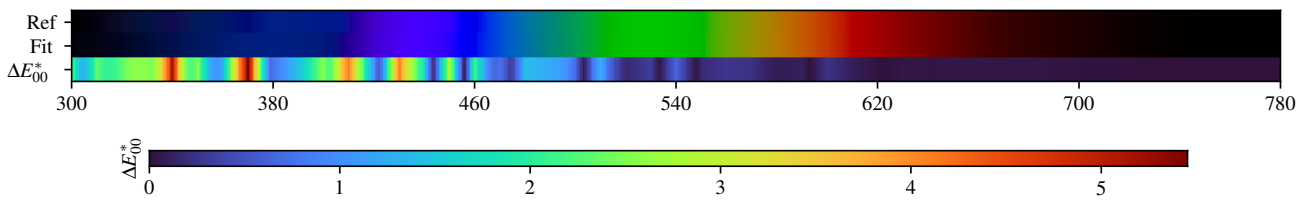
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.30$	$\Delta E = 0.20$	$\Delta E = 0.39$	$\Delta E = 0.11$	$\Delta E = 0.55$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.21$	$\Delta E = 0.40$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.21$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.32$	$\Delta E = 0.07$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.41$	$\Delta E = 0.20$	$\Delta E = 0.47$	$\Delta E = 0.17$	$\Delta E = 0.33$	$\Delta E = 0.36$	$\Delta E = 0.33$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.17$	$\Delta E = 0.46$	$\Delta E = 0.03$	$\Delta E = 0.44$	$\Delta E = 0.21$	$\Delta E = 0.57$	$\Delta E = 0.29$	$\Delta E = 0.45$

PFUJ15C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.08$	FL2 $\Delta E = 0.16$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.27$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.33$	FL3.15 $\Delta E = 0.09$	HP5 $\Delta E = 0.44$	LED-B5 $\Delta E = 0.20$
B $\Delta E = 0.20$	D65 $\Delta E = 0.07$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.34$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.17$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.30$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.17$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.12$	E $\Delta E = 0.07$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.35$	FL3.3 $\Delta E = 0.16$	FL3.8 $\Delta E = 0.41$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.24$	LED-B3 $\Delta E = 0.32$	LED-V1 $\Delta E = 0.30$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.39$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.39$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.42$	LED-B4 $\Delta E = 0.27$	LED-V2 $\Delta E = 0.32$

PFUJ15C - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.092803	0.150696	0.176579	0.343276	0.497090	0.520319	0.533309	0.539751	0.538678	0.542513	0.532408
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.515824	0.492334	0.460708	0.425062	0.389820	0.363006	0.332067	0.302707	0.276653	0.258287	0.232343
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.204542	0.175009	0.154343	0.142835	0.142891	0.145989	0.151494	0.173927	0.227380	0.314003	0.429338
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.551292	0.647982	0.726768	0.773983	0.803451	0.828894	0.835818	0.844700			

2 Gaussians max

Scaling factor: 212.1529486390124

Gaussians:

Weight	Mean		Covariance			
0.614000978	381.798258099	449.311935601	785.046255325	-51.766992346	-51.766992346	936.638668883
0.385999022	518.285043306	634.760471399	13875.821861284	-8.895967643	-8.895967643	13293.511605728

4 Gaussians max

Scaling factor: 208.30169753233

Gaussians:

Weight	Mean		Covariance			
0.604649156	381.251380790	449.230978611	750.289967804	-44.716533105	-44.716533105	920.990218191
0.171508522	498.583583520	519.024356257	11185.149598090	-2228.538340719	-2228.538340719	6875.933205429
0.046009762	713.061227776	694.863191740	3259.558677352	1172.246345186	1172.246345186	1857.047924689
0.177832560	481.706432283	722.110186473	7398.248693910	429.576993436	429.576993436	1974.110894859

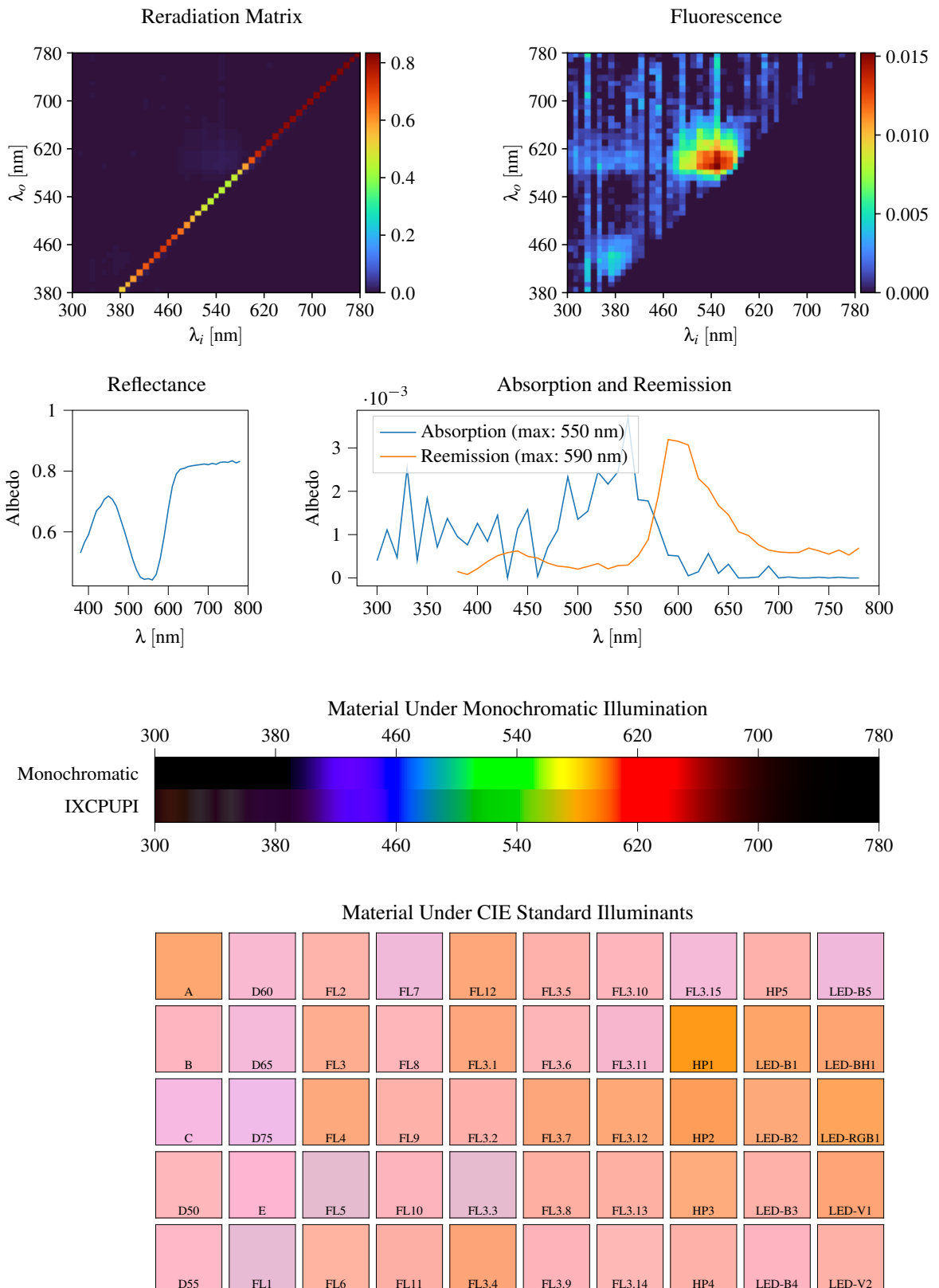
8 Gaussians max

Scaling factor: 206.42105320558815

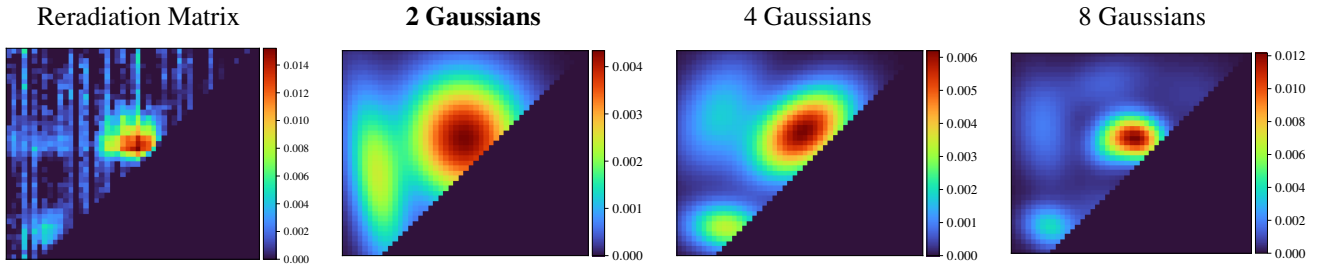
Gaussians:

Weight	Mean		Covariance			
0.600530978	380.494095939	449.643026189	716.504254455	-26.190818545	-26.190818545	910.558017443
0.052044993	477.612307094	444.860541769	1961.067810926	3.797747790	3.797747790	2910.556349617
0.040991547	641.461662058	487.899616990	7302.120119653	-608.185366038	-608.185366038	5204.975091522
0.054573688	446.802586774	570.896513431	4436.332878467	732.338326758	732.338326758	2953.152361073
0.038479195	442.452521492	606.967339458	5589.994211814	-503.995196005	-503.995196005	4621.157095930
0.048190466	708.825289920	693.602964737	3548.953256440	1374.897236073	1374.897236073	1869.149970959
0.165088105	482.973620945	726.341087625	7541.512599914	392.029812540	392.029812540	1726.612922185

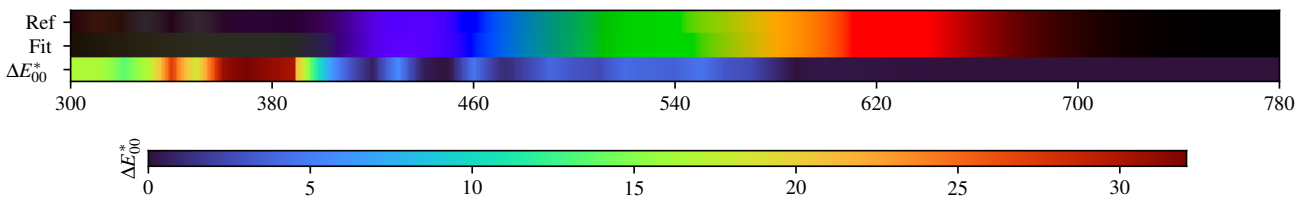
3.64. IXCPUPI



IXCPUPI - Weighted Expectation-Maximization - 2 Gaussians



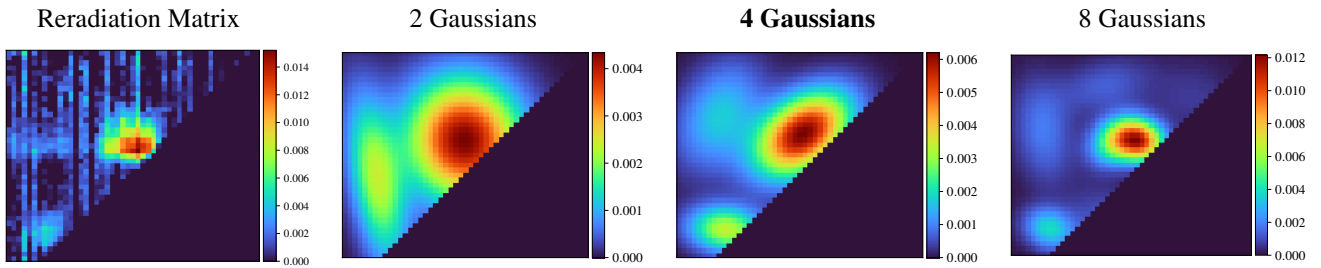
Fitted Material Under Monochromatic Illumination



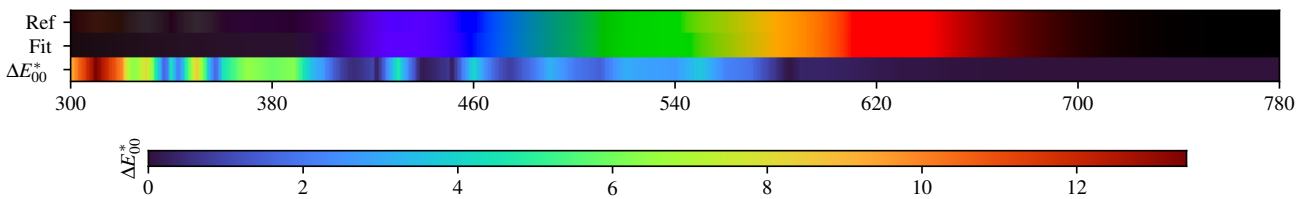
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.75$	D60 $\Delta E = 1.91$	FL2 $\Delta E = 1.17$	FL7 $\Delta E = 1.80$	FL12 $\Delta E = 0.61$	FL3.5 $\Delta E = 0.90$	FL3.10 $\Delta E = 1.12$	FL3.15 $\Delta E = 1.86$	HP5 $\Delta E = 0.95$	LED-B5 $\Delta E = 1.65$
B $\Delta E = 1.33$	D65 $\Delta E = 2.03$	FL3 $\Delta E = 0.88$	FL8 $\Delta E = 1.35$	FL3.1 $\Delta E = 0.60$	FL3.6 $\Delta E = 1.23$	FL3.11 $\Delta E = 1.45$	HP1 $\Delta E = 0.37$	LED-B1 $\Delta E = 0.60$	LED-BH1 $\Delta E = 0.62$
C $\Delta E = 1.70$	D75 $\Delta E = 2.23$	FL4 $\Delta E = 0.66$	FL9 $\Delta E = 1.04$	FL3.2 $\Delta E = 0.93$	FL3.7 $\Delta E = 0.53$	FL3.12 $\Delta E = 0.64$	HP2 $\Delta E = 0.64$	LED-B2 $\Delta E = 0.69$	LED-RGB1 $\Delta E = 0.74$
D50 $\Delta E = 1.56$	E $\Delta E = 1.64$	FL5 $\Delta E = 2.47$	FL10 $\Delta E = 1.27$	FL3.3 $\Delta E = 2.16$	FL3.8 $\Delta E = 0.84$	FL3.13 $\Delta E = 0.88$	HP3 $\Delta E = 0.73$	LED-B3 $\Delta E = 1.01$	LED-V1 $\Delta E = 0.65$
D55 $\Delta E = 1.74$	FL1 $\Delta E = 2.18$	FL6 $\Delta E = 1.27$	FL11 $\Delta E = 0.90$	FL3.4 $\Delta E = 0.58$	FL3.9 $\Delta E = 1.09$	FL3.14 $\Delta E = 1.35$	HP4 $\Delta E = 0.87$	LED-B4 $\Delta E = 1.32$	LED-V2 $\Delta E = 1.15$

IXCPUPI - Weighted Expectation-Maximization - 4 Gaussians



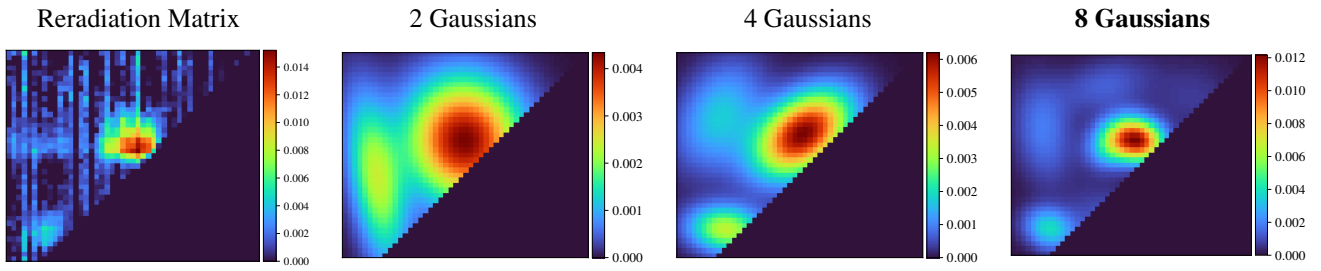
Fitted Material Under Monochromatic Illumination



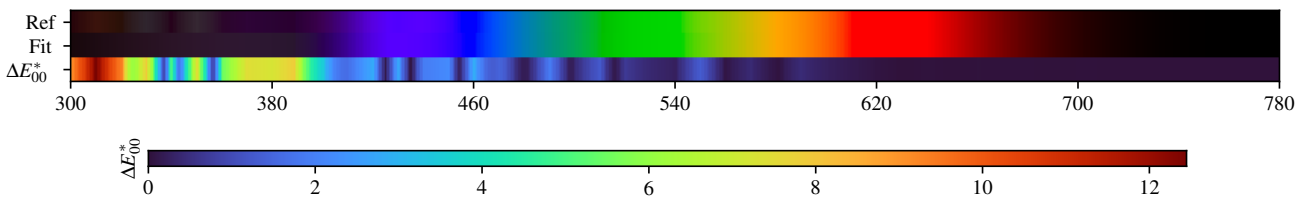
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.38$	D60 $\Delta E = 1.09$	FL2 $\Delta E = 0.71$	FL7 $\Delta E = 1.13$	FL12 $\Delta E = 0.42$	FL3.5 $\Delta E = 0.52$	FL3.10 $\Delta E = 0.72$	FL3.15 $\Delta E = 1.11$	HP5 $\Delta E = 0.52$	LED-B5 $\Delta E = 1.02$
B $\Delta E = 0.80$	D65 $\Delta E = 1.16$	FL3 $\Delta E = 0.52$	FL8 $\Delta E = 0.83$	FL3.1 $\Delta E = 0.35$	FL3.6 $\Delta E = 0.73$	FL3.11 $\Delta E = 0.95$	HP1 $\Delta E = 0.20$	LED-B1 $\Delta E = 0.32$	LED-BH1 $\Delta E = 0.37$
C $\Delta E = 1.04$	D75 $\Delta E = 1.27$	FL4 $\Delta E = 0.40$	FL9 $\Delta E = 0.63$	FL3.2 $\Delta E = 0.56$	FL3.7 $\Delta E = 0.35$	FL3.12 $\Delta E = 0.33$	HP2 $\Delta E = 0.46$	LED-B2 $\Delta E = 0.37$	LED-RGB1 $\Delta E = 0.42$
D50 $\Delta E = 0.88$	E $\Delta E = 0.87$	FL5 $\Delta E = 1.50$	FL10 $\Delta E = 0.88$	FL3.3 $\Delta E = 1.29$	FL3.8 $\Delta E = 0.55$	FL3.13 $\Delta E = 0.49$	HP3 $\Delta E = 0.35$	LED-B3 $\Delta E = 0.61$	LED-V1 $\Delta E = 0.40$
D55 $\Delta E = 1.00$	FL1 $\Delta E = 1.33$	FL6 $\Delta E = 0.74$	FL11 $\Delta E = 0.63$	FL3.4 $\Delta E = 0.33$	FL3.9 $\Delta E = 0.74$	FL3.14 $\Delta E = 0.79$	HP4 $\Delta E = 0.46$	LED-B4 $\Delta E = 0.84$	LED-V2 $\Delta E = 0.67$

IXCPUPI - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.21$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.24$	FL3.15 $\Delta E = 0.13$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.14$
B $\Delta E = 0.14$	D65 $\Delta E = 0.17$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.25$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.16$	D75 $\Delta E = 0.20$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.18$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.14$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.18$	FL10 $\Delta E = 0.29$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.23$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.27$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.23$

IXCPUPI - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.530702	0.565341	0.590257	0.631203	0.669242	0.683241	0.707179	0.717725	0.706939	0.683898	0.643330
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.602989	0.558355	0.513138	0.476029	0.451083	0.443728	0.446191	0.441681	0.460639	0.513086	0.587909
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.673924	0.748677	0.790261	0.806111	0.809102	0.814993	0.817483	0.819507	0.821181	0.823250	0.820949
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825251	0.822280	0.828776	0.829975	0.828796	0.833969	0.826936	0.832227			

2 Gaussians

Scaling factor: 236.65259637373916

Gaussians:

Weight	Mean		Covariance			
0.761689584	536.526211712	609.085088888	6156.707725775	-219.920628406	-219.920628406	7095.960464242
0.238310416	362.848426139	527.294466075	1594.312926496	-2017.810034056	-2017.810034056	13159.483755996

4 Gaussians

Scaling factor: 219.3698504514434

Gaussians:

Weight	Mean		Covariance			
0.196427651	380.607205963	657.629161402	3313.648725204	1228.271899860	1228.271899860	5197.998832205
0.062371780	624.319651981	453.482217440	6857.204419998	1404.399430025	1404.399430025	3564.558582542
0.152395760	393.440229171	432.380124834	2533.329304314	-154.214420542	-154.214420542	1011.539095387
0.588804810	545.981709708	622.005091872	4015.588807849	1435.472540555	1435.472540555	3240.184263873

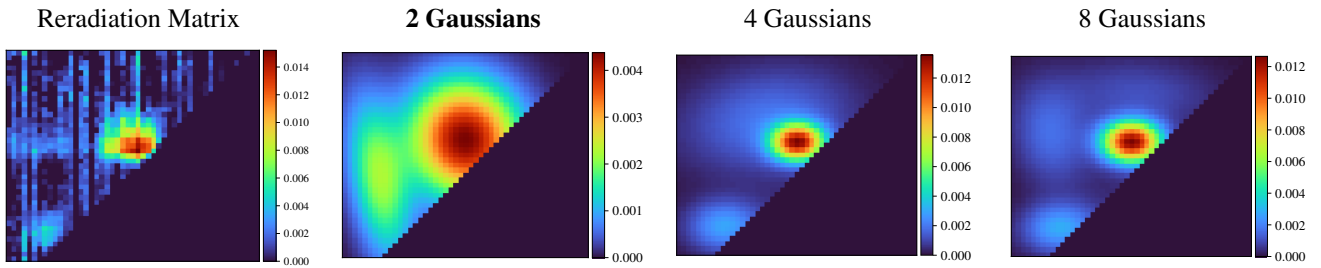
8 Gaussians

Scaling factor: 215.29264787918987

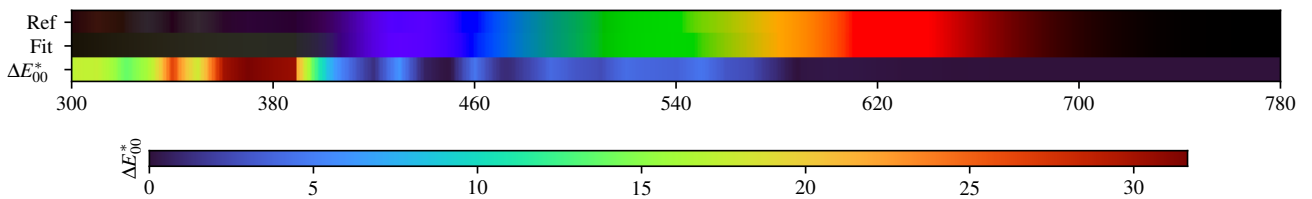
Gaussians:

Weight	Mean		Covariance			
0.092466880	483.889145095	720.645982438	3966.344489984	671.231744669	671.231744669	1528.780151228
0.050916517	644.365926301	461.856784117	4267.614446957	-42.030699569	-42.030699569	3418.009656684
0.071980066	476.428542221	452.243843716	2275.736528082	-84.099509071	-84.099509071	2291.612099132
0.158274293	359.720966730	627.941726331	1695.444488795	-518.970044656	-518.970044656	5321.442383478
0.067282171	661.822890530	696.944763001	3930.337774202	5.308703839	5.308703839	2811.107059510
0.197868126	508.429779717	610.060588049	1231.402233269	256.195391947	256.195391947	1091.728418629
0.109797381	372.575906776	430.104068102	1216.435298300	-150.350953759	-150.350953759	845.298978395
0.251414565	558.112736015	607.260481824	1046.291431725	-63.818996514	-63.818996514	777.707586161

IXCPUPI - Weighted variational Bayesian inference - 2 Gaussians



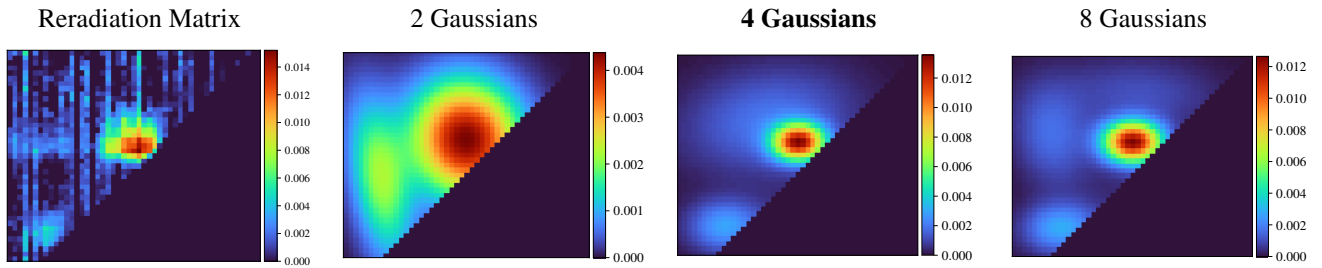
Fitted Material Under Monochromatic Illumination



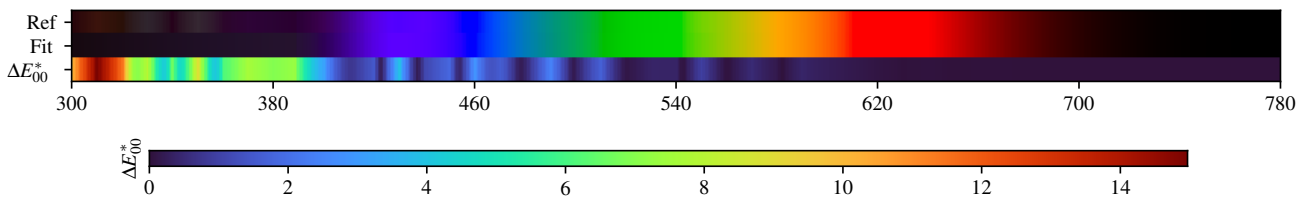
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.74$	D60 $\Delta E = 1.88$	FL2 $\Delta E = 1.15$	FL7 $\Delta E = 1.78$	FL12 $\Delta E = 0.60$	FL3.5 $\Delta E = 0.89$	FL3.10 $\Delta E = 1.11$	FL3.15 $\Delta E = 1.83$	HP5 $\Delta E = 0.93$	LED-B5 $\Delta E = 1.63$
B $\Delta E = 1.31$	D65 $\Delta E = 2.00$	FL3 $\Delta E = 0.86$	FL8 $\Delta E = 1.33$	FL3.1 $\Delta E = 0.58$	FL3.6 $\Delta E = 1.21$	FL3.11 $\Delta E = 1.44$	HP1 $\Delta E = 0.35$	LED-B1 $\Delta E = 0.58$	LED-BH1 $\Delta E = 0.61$
C $\Delta E = 1.68$	D75 $\Delta E = 2.19$	FL4 $\Delta E = 0.65$	FL9 $\Delta E = 1.03$	FL3.2 $\Delta E = 0.91$	FL3.7 $\Delta E = 0.52$	FL3.12 $\Delta E = 0.62$	HP2 $\Delta E = 0.63$	LED-B2 $\Delta E = 0.67$	LED-RGB1 $\Delta E = 0.72$
D50 $\Delta E = 1.53$	E $\Delta E = 1.62$	FL5 $\Delta E = 2.44$	FL10 $\Delta E = 1.26$	FL3.3 $\Delta E = 2.13$	FL3.8 $\Delta E = 0.83$	FL3.13 $\Delta E = 0.86$	HP3 $\Delta E = 0.71$	LED-B3 $\Delta E = 1.00$	LED-V1 $\Delta E = 0.64$
D55 $\Delta E = 1.71$	FL1 $\Delta E = 2.15$	FL6 $\Delta E = 1.25$	FL11 $\Delta E = 0.89$	FL3.4 $\Delta E = 0.57$	FL3.9 $\Delta E = 1.08$	FL3.14 $\Delta E = 1.32$	HP4 $\Delta E = 0.86$	LED-B4 $\Delta E = 1.31$	LED-V2 $\Delta E = 1.13$

IXCPUPI - Weighted variational Bayesian inference - 4 Gaussians



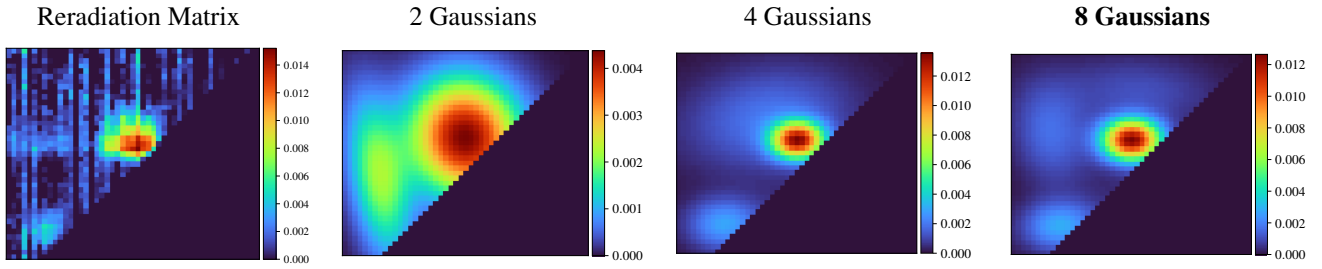
Fitted Material Under Monochromatic Illumination



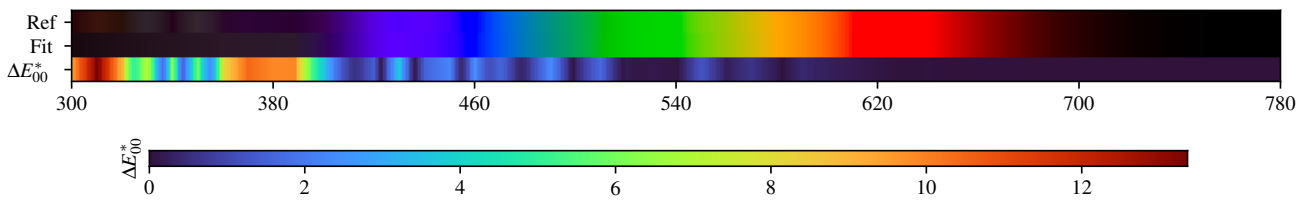
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.16$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.18$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.21$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.23$
B $\Delta E = 0.14$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.14$	D75 $\Delta E = 0.10$	FL4 $\Delta E = 0.13$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.17$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.12$	E $\Delta E = 0.09$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.22$	FL3.3 $\Delta E = 0.16$	FL3.8 $\Delta E = 0.21$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.22$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.24$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.21$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.29$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.28$

IXCPUPI - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.19$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.20$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.27$	FL3.15 $\Delta E = 0.11$	HP5 $\Delta E = 0.24$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.16$	D65 $\Delta E = 0.12$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.16$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.25$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.16$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.17$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.13$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.29$	FL3.3 $\Delta E = 0.15$	FL3.8 $\Delta E = 0.23$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.25$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.18$	FL11 $\Delta E = 0.27$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.27$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.31$

IXCPUPI - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.530702	0.565341	0.590257	0.631203	0.669242	0.683241	0.707179	0.717725	0.706939	0.683898	0.643330
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.602989	0.558355	0.513138	0.476029	0.451083	0.443728	0.446191	0.441681	0.460639	0.513086	0.587909
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.673924	0.748677	0.790261	0.806111	0.809102	0.814993	0.817483	0.819507	0.821181	0.823250	0.820949
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825251	0.822280	0.828776	0.829975	0.828796	0.833969	0.826936	0.832227			

2 Gaussians max

Scaling factor: 237.31338993544315

Gaussians:

Weight	Mean		Covariance			
0.251495740	367.321319193	527.252879537	1977.081401707	-1979.113016472	-1979.113016472	13035.263204021
0.748504260	538.284034933	610.586497916	6074.682167217	-346.576100850	-346.576100850	6882.892098945

4 Gaussians max

Scaling factor: 221.4978639125325

Gaussians:

Weight	Mean		Covariance			
0.150977188	393.101971683	434.691096023	2616.790272314	7.160060249	7.160060249	1293.615757384
0.070639176	588.296770990	452.026452343	8512.142066218	-713.410088451	-713.410088451	2853.472921226
0.463261114	482.652404765	650.036375054	13438.826944348	1287.399209277	1287.399209277	5249.628836784
0.315122523	541.614649894	605.877652618	1283.133333111	5.437419041	5.437419041	635.647261265

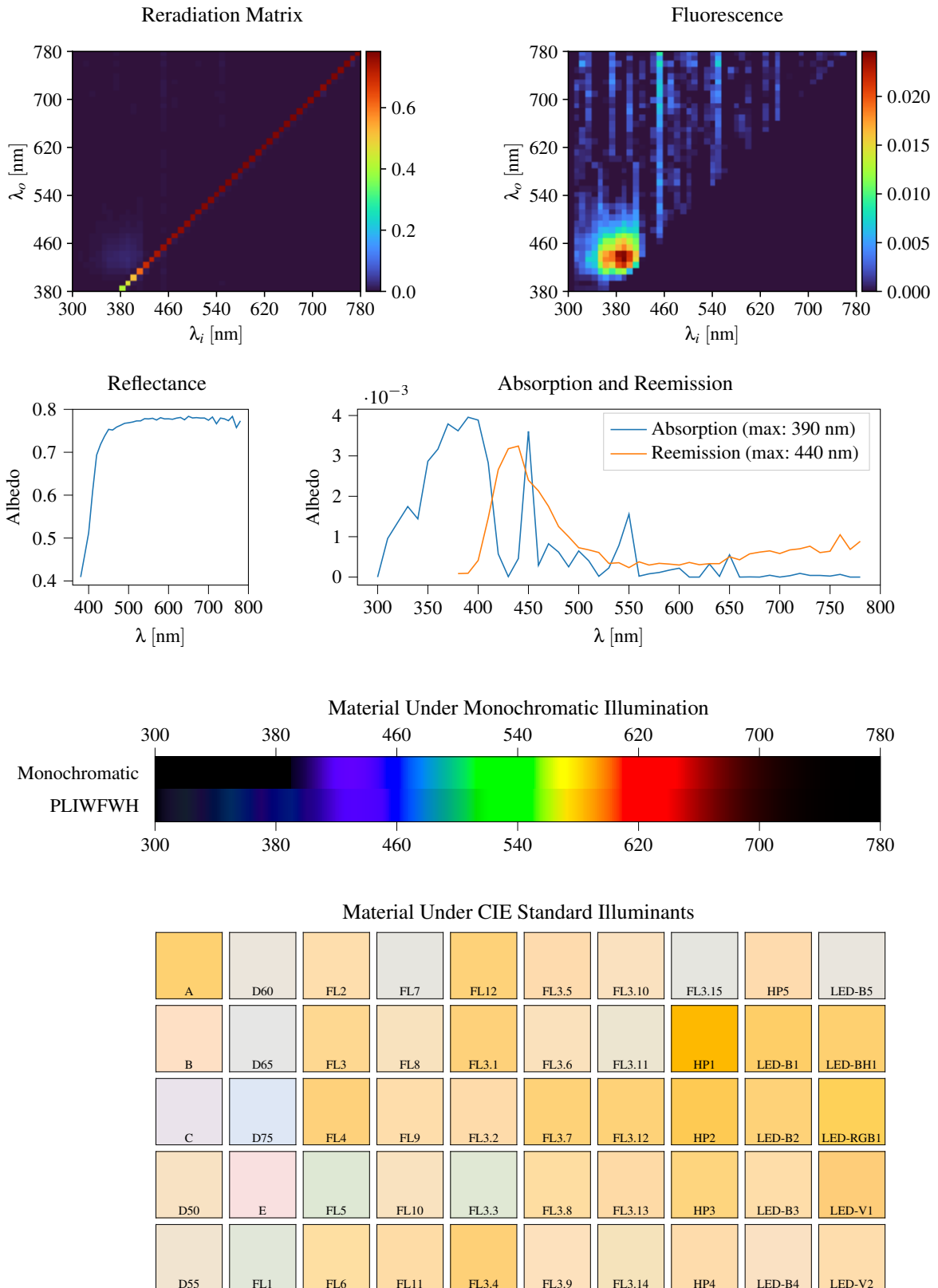
8 Gaussians max

Scaling factor: 218.68597500875714

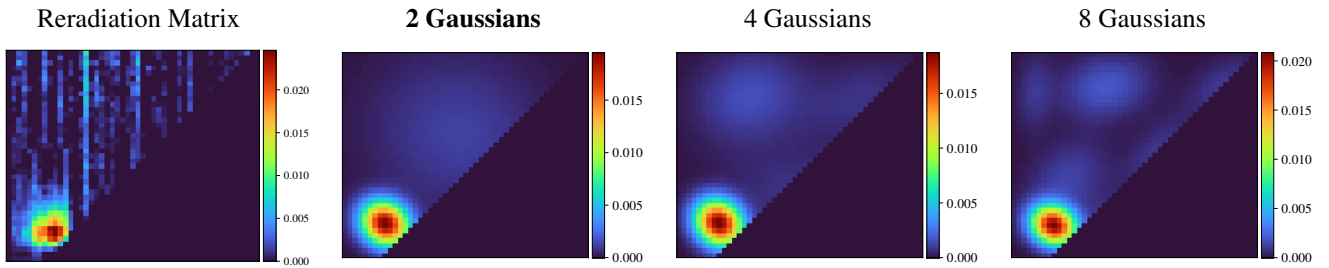
Gaussians:

Weight	Mean		Covariance			
0.145528183	393.855554688	432.961032585	2665.800133839	40.333174850	40.333174850	1205.862212409
0.095208562	581.036078933	475.887787208	8935.348291611	-815.399121967	-815.399121967	4273.435858518
0.176590844	375.308176353	622.978263671	2773.977212230	-484.106508426	-484.106508426	5085.237622803
0.408126884	539.373499088	608.187102878	1630.543831494	-1.832621828	-1.832621828	800.098503365
0.171824253	551.981466971	707.096474879	12058.060002228	-507.182337892	-507.182337892	2502.331044275

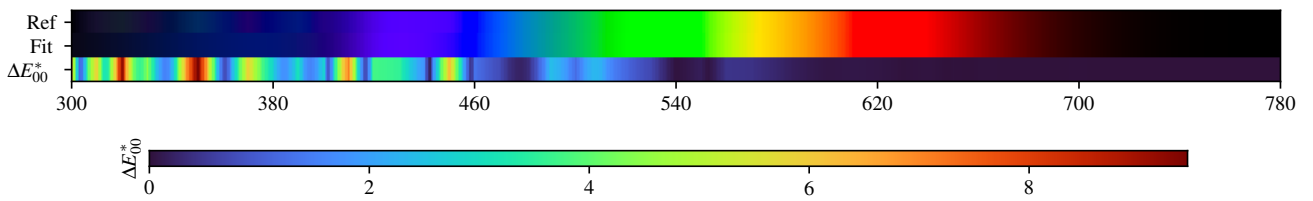
3.65. PLIWFWH



PLIWFWH - Weighted Expectation-Maximization - 2 Gaussians



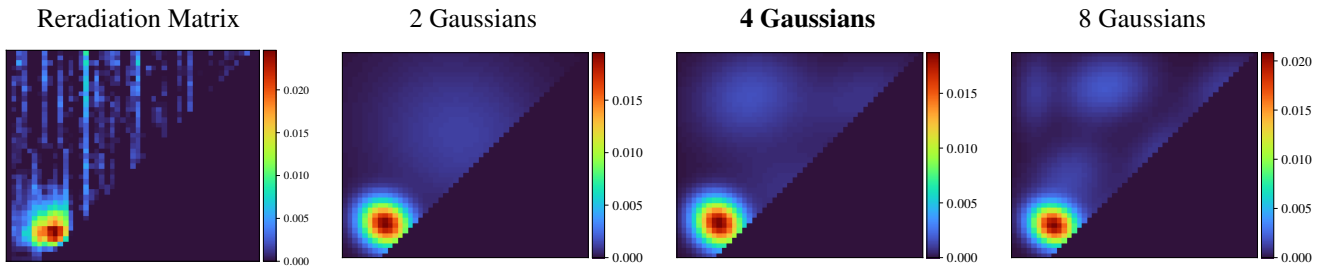
Fitted Material Under Monochromatic Illumination



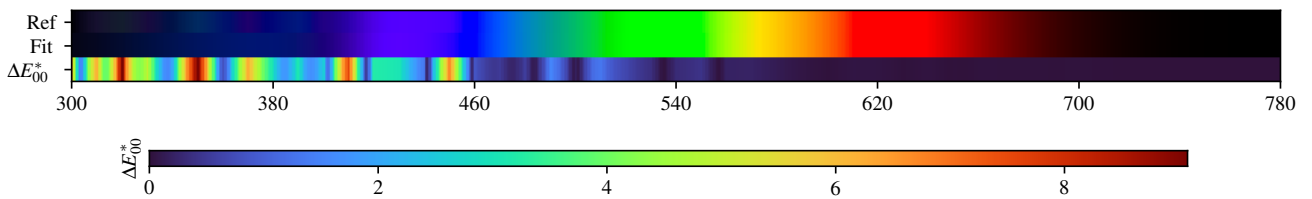
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.21$	D60 $\Delta E = 0.94$	FL2 $\Delta E = 0.39$	FL7 $\Delta E = 0.82$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.32$	FL3.10 $\Delta E = 0.39$	FL3.15 $\Delta E = 0.78$	HP5 $\Delta E = 0.48$	LED-B5 $\Delta E = 0.91$
B $\Delta E = 0.59$	D65 $\Delta E = 1.03$	FL3 $\Delta E = 0.28$	FL8 $\Delta E = 0.50$	FL3.1 $\Delta E = 0.22$	FL3.6 $\Delta E = 0.50$	FL3.11 $\Delta E = 0.55$	HP1 $\Delta E = 0.16$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 0.81$	D75 $\Delta E = 1.04$	FL4 $\Delta E = 0.22$	FL9 $\Delta E = 0.32$	FL3.2 $\Delta E = 0.34$	FL3.7 $\Delta E = 0.18$	FL3.12 $\Delta E = 0.19$	HP2 $\Delta E = 0.19$	LED-B2 $\Delta E = 0.24$	LED-RGB1 $\Delta E = 0.19$
D50 $\Delta E = 0.66$	E $\Delta E = 0.53$	FL5 $\Delta E = 0.66$	FL10 $\Delta E = 0.38$	FL3.3 $\Delta E = 0.70$	FL3.8 $\Delta E = 0.27$	FL3.13 $\Delta E = 0.27$	HP3 $\Delta E = 0.31$	LED-B3 $\Delta E = 0.39$	LED-V1 $\Delta E = 0.32$
D55 $\Delta E = 0.82$	FL1 $\Delta E = 0.73$	FL6 $\Delta E = 0.38$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.18$	FL3.9 $\Delta E = 0.41$	FL3.14 $\Delta E = 0.47$	HP4 $\Delta E = 0.52$	LED-B4 $\Delta E = 0.65$	LED-V2 $\Delta E = 0.55$

PLIWFWH - Weighted Expectation-Maximization - 4 Gaussians



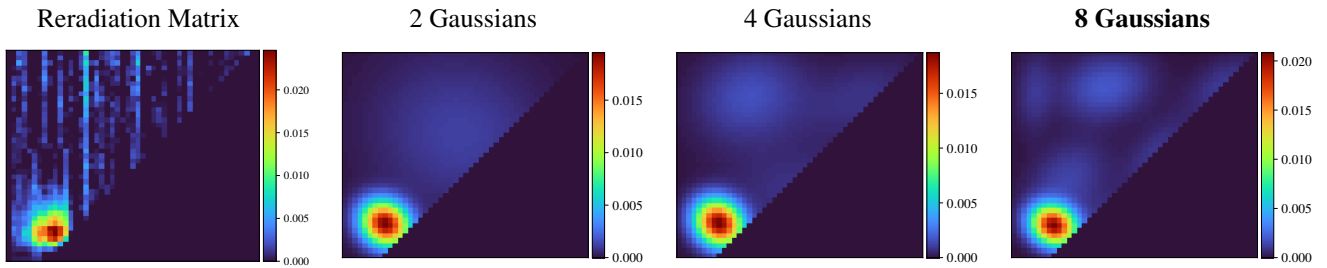
Fitted Material Under Monochromatic Illumination



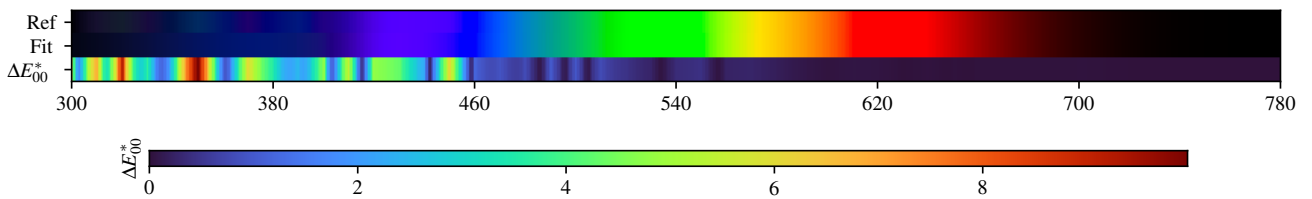
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.47$	FL2 $\Delta E = 0.17$	FL7 $\Delta E = 0.35$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.21$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.35$	LED-B5 $\Delta E = 0.63$
B $\Delta E = 0.34$	D65 $\Delta E = 0.53$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.21$	FL3.11 $\Delta E = 0.34$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.46$	D75 $\Delta E = 0.54$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.32$	E $\Delta E = 0.19$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.28$	FL3.8 $\Delta E = 0.16$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.27$	LED-V1 $\Delta E = 0.24$
D55 $\Delta E = 0.40$	FL1 $\Delta E = 0.29$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.27$	FL3.14 $\Delta E = 0.14$	HP4 $\Delta E = 0.37$	LED-B4 $\Delta E = 0.44$	LED-V2 $\Delta E = 0.38$

PLIWFWH - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.29$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.32$
B $\Delta E = 0.06$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.03$	FL3.11 $\Delta E = 0.33$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.12$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.04$	E $\Delta E = 0.23$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.04$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.08$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.20$	LED-V2 $\Delta E = 0.11$

PLIWFWH - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.409142	0.460166	0.512125	0.609466	0.693609	0.718730	0.737674	0.753439	0.751855	0.758684	0.762875
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.767449	0.768731	0.770418	0.773048	0.773138	0.778255	0.777739	0.779183	0.775174	0.780592	0.777770
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.777942	0.776843	0.779553	0.781104	0.775679	0.783742	0.779990	0.780715	0.779744	0.779774	0.774668
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.782192	0.766387	0.779654	0.777939	0.773594	0.783481	0.757534	0.773179			

2 Gaussians

Scaling factor: 230.66574861213113

Gaussians:

Weight	Mean		Covariance			
0.497256463	525.612369283	621.912789656	15645.421672145	-1016.718760224	-1016.718760224	13206.515859120
0.502743537	379.888694240	443.586016498	1009.886122219	-129.794646464	-129.794646464	903.623293588

4 Gaussians

Scaling factor: 225.5448274816391

Gaussians:

Weight	Mean		Covariance			
0.111384975	660.392370703	692.523902050	7223.443467851	1497.269625881	1497.269625881	3415.611098367
0.197907778	438.894760371	698.037242489	5299.545450510	583.896813740	583.896813740	3824.914919198
0.181441925	544.102563671	499.351464351	11782.587208058	-1484.772325597	-1484.772325597	5085.343047071
0.509265322	379.388177697	444.509176406	1000.782545645	-142.075436093	-142.075436093	968.707559514

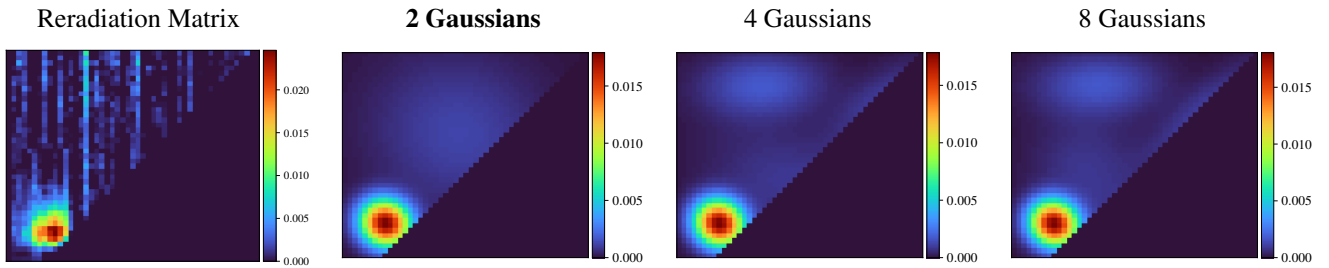
8 Gaussians

Scaling factor: 222.54119709298973

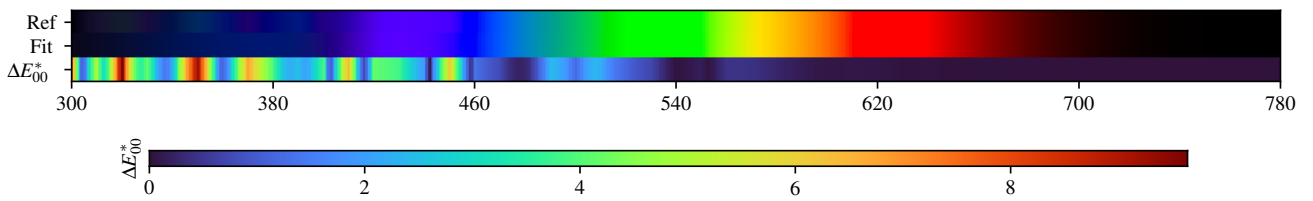
Gaussians:

Weight	Mean		Covariance			
0.060245792	716.200944833	716.933780194	2373.149796453	803.412585299	803.412585299	1771.730372925
0.108088201	405.927586054	534.183658466	2929.999465292	938.607438992	938.607438992	2789.081423485
0.069506333	516.820499754	441.787093764	4227.984878857	-747.373219740	-747.373219740	1828.181855599
0.460951508	378.802040091	440.059129443	900.189707196	-111.734822943	-111.734822943	719.738690443
0.156161204	482.129465311	715.278346987	3723.705849120	409.673356899	409.673356899	2010.176321463
0.065324566	585.370982662	582.601686027	2444.686343053	1435.790518832	1435.790518832	2742.513031920
0.038050178	711.129289705	489.577974204	2367.045435174	71.049870352	71.049870352	5845.914261294
0.041672219	340.931444283	705.280040702	653.504242054	179.779615685	179.779615685	3191.951131918

PLIWFWH - Weighted variational Bayesian inference - 2 Gaussians



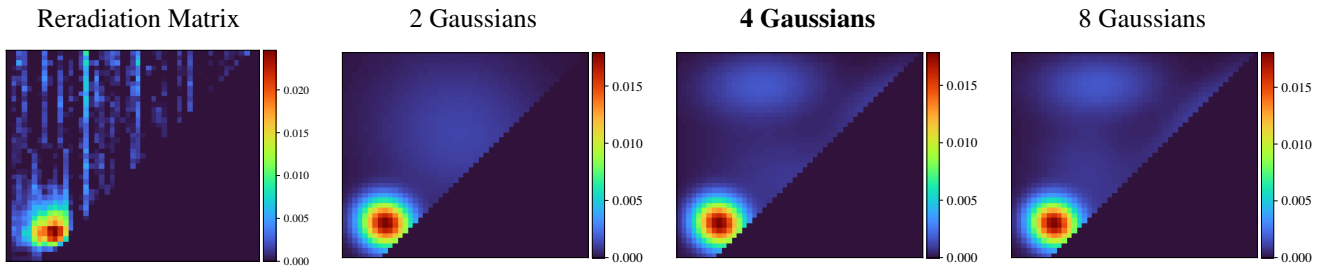
Fitted Material Under Monochromatic Illumination



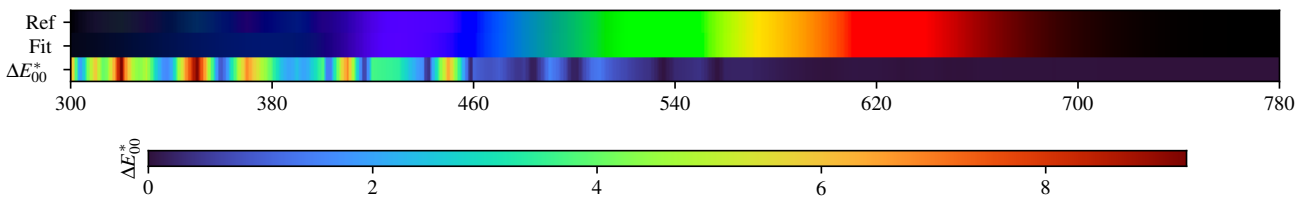
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.20$	D60 $\Delta E = 0.79$	FL2 $\Delta E = 0.37$	FL7 $\Delta E = 0.75$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.31$	FL3.10 $\Delta E = 0.39$	FL3.15 $\Delta E = 0.70$	HP5 $\Delta E = 0.47$	LED-B5 $\Delta E = 0.91$
B $\Delta E = 0.53$	D65 $\Delta E = 0.86$	FL3 $\Delta E = 0.28$	FL8 $\Delta E = 0.48$	FL3.1 $\Delta E = 0.22$	FL3.6 $\Delta E = 0.47$	FL3.11 $\Delta E = 0.53$	HP1 $\Delta E = 0.16$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.25$
C $\Delta E = 0.71$	D75 $\Delta E = 0.83$	FL4 $\Delta E = 0.22$	FL9 $\Delta E = 0.31$	FL3.2 $\Delta E = 0.32$	FL3.7 $\Delta E = 0.17$	FL3.12 $\Delta E = 0.18$	HP2 $\Delta E = 0.19$	LED-B2 $\Delta E = 0.24$	LED-RGB1 $\Delta E = 0.19$
D50 $\Delta E = 0.58$	E $\Delta E = 0.48$	FL5 $\Delta E = 0.61$	FL10 $\Delta E = 0.38$	FL3.3 $\Delta E = 0.65$	FL3.8 $\Delta E = 0.27$	FL3.13 $\Delta E = 0.26$	HP3 $\Delta E = 0.30$	LED-B3 $\Delta E = 0.40$	LED-V1 $\Delta E = 0.32$
D55 $\Delta E = 0.70$	FL1 $\Delta E = 0.68$	FL6 $\Delta E = 0.36$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.18$	FL3.9 $\Delta E = 0.41$	FL3.14 $\Delta E = 0.46$	HP4 $\Delta E = 0.49$	LED-B4 $\Delta E = 0.66$	LED-V2 $\Delta E = 0.53$

PLIWFH - Weighted variational Bayesian inference - 4 Gaussians



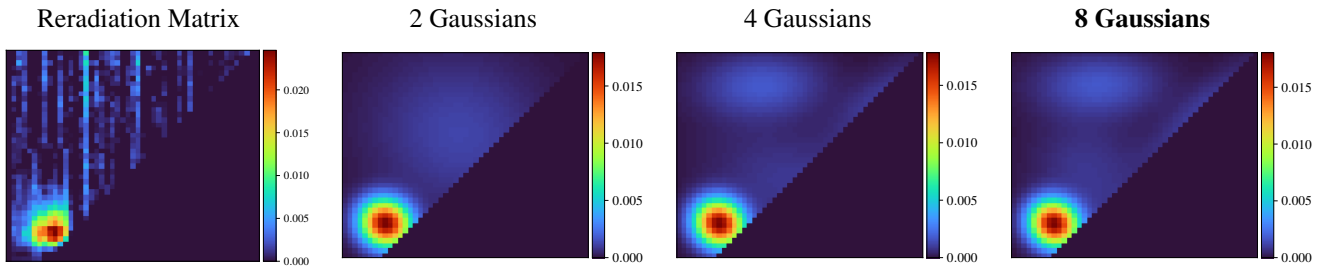
Fitted Material Under Monochromatic Illumination



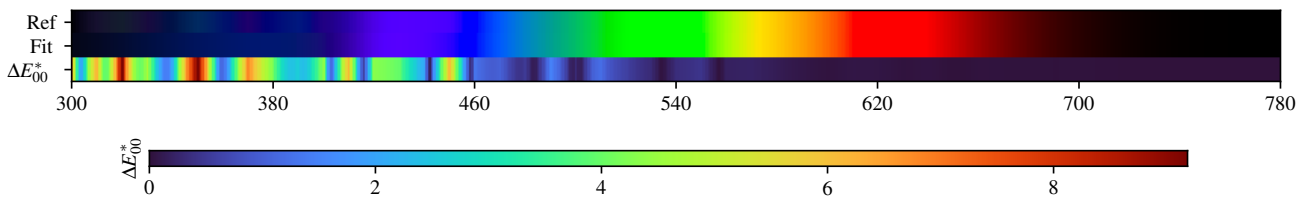
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.08$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.28$	HP5 $\Delta E = 0.22$	LED-B5 $\Delta E = 0.41$
B $\Delta E = 0.09$	D65 $\Delta E = 0.10$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.33$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.17$	D75 $\Delta E = 0.10$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.05$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.11$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.21$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.24$	LED-B4 $\Delta E = 0.28$	LED-V2 $\Delta E = 0.21$

PLIWFWH - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.06$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.30$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.39$
B $\Delta E = 0.07$	D65 $\Delta E = 0.07$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.10$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.05$	E $\Delta E = 0.37$	FL5 $\Delta E = 0.08$	FL10 $\Delta E = 0.22$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.08$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.20$	LED-B4 $\Delta E = 0.27$	LED-V2 $\Delta E = 0.19$

PLIWFH - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.409142	0.460166	0.512125	0.609466	0.693609	0.718730	0.737674	0.753439	0.751855	0.758684	0.762875
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.767449	0.768731	0.770418	0.773048	0.773138	0.778255	0.777739	0.779183	0.775174	0.780592	0.777770
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.777942	0.776843	0.779553	0.781104	0.775679	0.783742	0.779990	0.780715	0.779744	0.779774	0.774668
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.782192	0.766387	0.779654	0.777939	0.773594	0.783481	0.757534	0.773179			

2 Gaussians max

Scaling factor: 231.4233359742642

Gaussians:

Weight	Mean	Covariance				
0.505613027	380.572947740	444.149221178	1112.785120632	-76.999261170	-76.999261170	976.071717194
0.494386973	526.180126127	622.700570481	15673.253576030	-1084.674874533	-1084.674874533	13152.755161610

4 Gaussians max

Scaling factor: 227.72516701477537

Gaussians:

Weight	Mean	Covariance				
0.499265869	379.924357858	443.924703463	1073.803128756	-81.094124461	-81.094124461	966.878756580
0.238708798	517.460003067	523.585226060	13472.813892518	-2807.443093767	-2807.443093767	6735.488434634
0.077298738	694.967652660	687.129161018	4338.735142302	2841.206407468	2841.206407468	3780.516771851
0.184726595	464.576875515	719.105947900	7239.250355531	163.614341047	163.614341047	2032.680754772

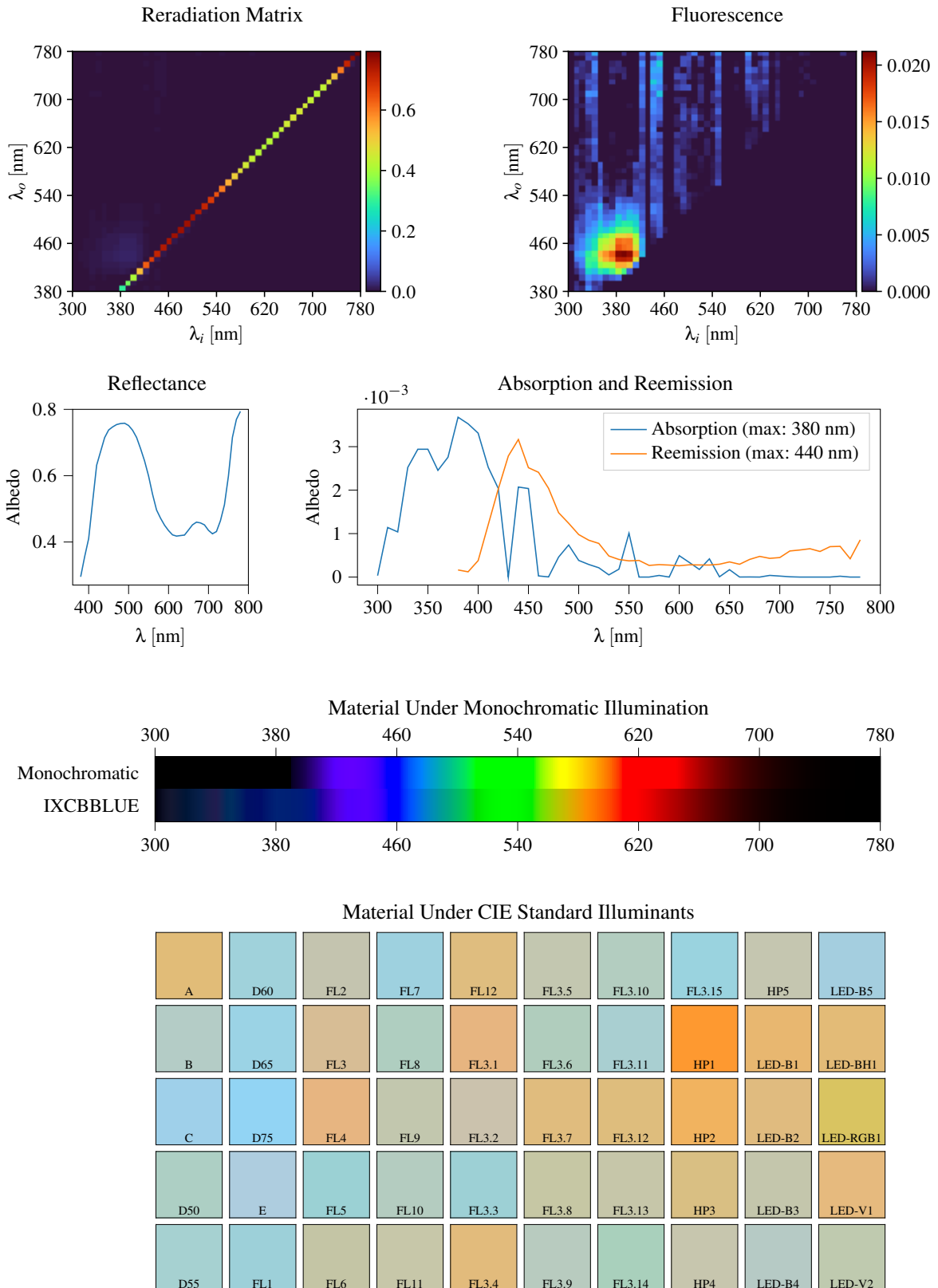
8 Gaussians max

Scaling factor: 225.2976247259295

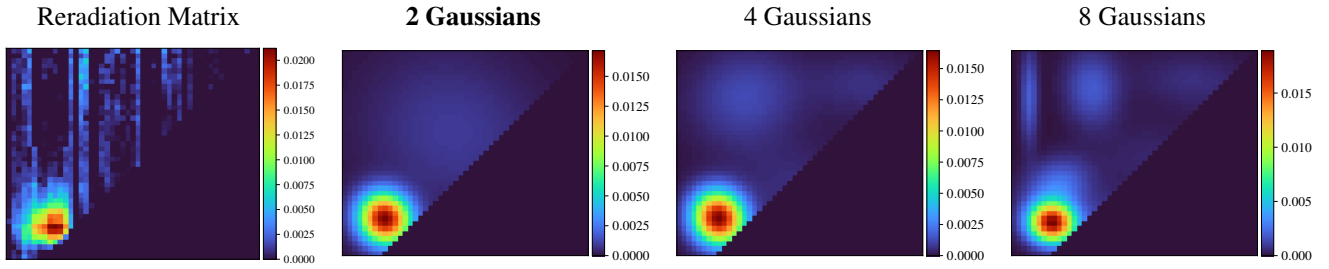
Gaussians:

Weight	Mean	Covariance				
0.491654358	379.344230664	443.393998834	1039.083834684	-75.723648320	-75.723648320	932.615621320
0.081860647	516.474145532	455.863451326	6712.776916375	-1281.301078387	-1281.301078387	3052.419762166
0.029408084	686.041250212	483.059337596	5840.530369422	-1964.093202838	-1964.093202838	5293.475424086
0.101323038	433.424676295	569.034768671	5463.948728009	23.582119631	23.582119631	3853.164231426
0.025164995	610.422169932	576.657137124	10927.955330716	554.338229342	554.338229342	2830.720515642
0.083984428	679.456509477	672.243388669	5678.857507039	4434.224553878	4434.224553878	5051.639560313
0.186503064	466.963938000	720.033146262	7654.725809138	131.783877280	131.783877280	1951.216016899

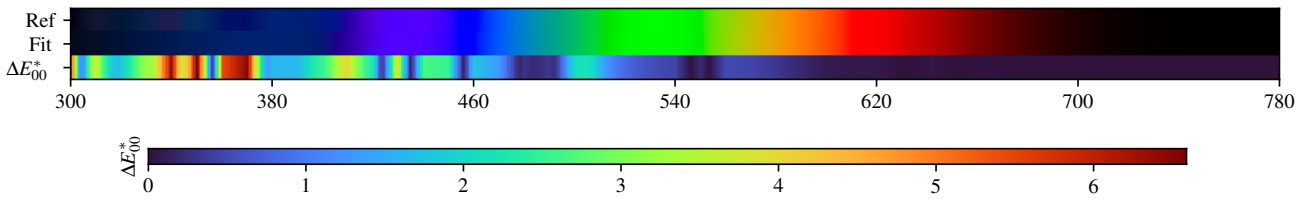
3.66. IXCBBBLUE



IXCBBLUE - Weighted Expectation-Maximization - 2 Gaussians



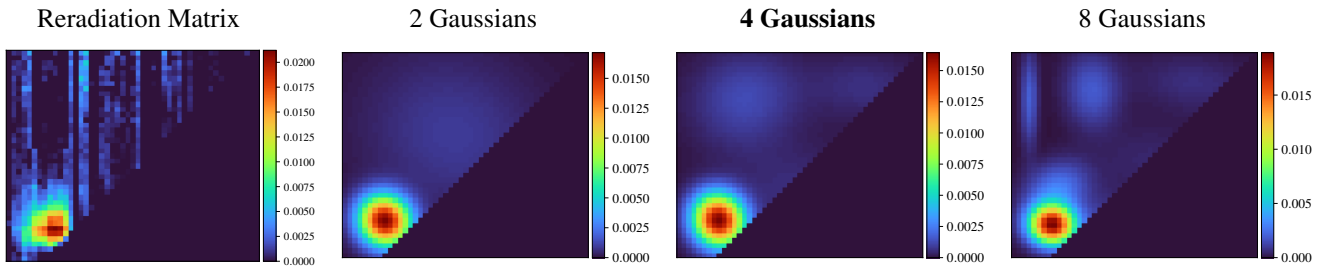
Fitted Material Under Monochromatic Illumination



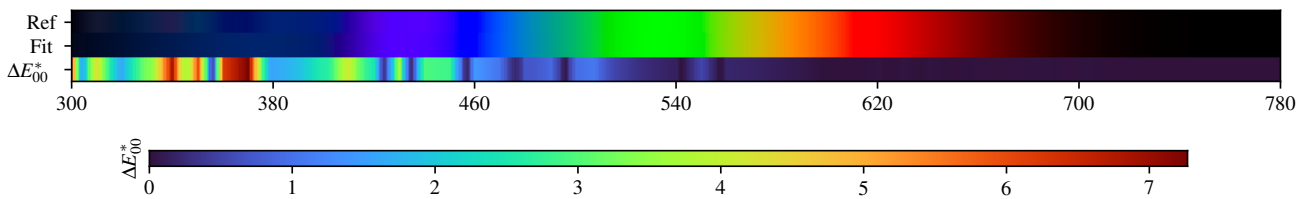
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.37$	D60 $\Delta E = 0.60$	FL2 $\Delta E = 0.76$	FL7 $\Delta E = 0.58$	FL12 $\Delta E = 0.31$	FL3.5 $\Delta E = 0.64$	FL3.10 $\Delta E = 0.46$	FL3.15 $\Delta E = 0.49$	HP5 $\Delta E = 0.80$	LED-B5 $\Delta E = 0.70$
B $\Delta E = 0.67$	D65 $\Delta E = 0.59$	FL3 $\Delta E = 0.54$	FL8 $\Delta E = 0.51$	FL3.1 $\Delta E = 0.34$	FL3.6 $\Delta E = 0.53$	FL3.11 $\Delta E = 0.56$	HP1 $\Delta E = 0.23$	LED-B1 $\Delta E = 0.35$	LED-BH1 $\Delta E = 0.39$
C $\Delta E = 0.68$	D75 $\Delta E = 0.55$	FL4 $\Delta E = 0.38$	FL9 $\Delta E = 0.61$	FL3.2 $\Delta E = 0.75$	FL3.7 $\Delta E = 0.31$	FL3.12 $\Delta E = 0.34$	HP2 $\Delta E = 0.30$	LED-B2 $\Delta E = 0.41$	LED-RGB1 $\Delta E = 0.34$
D50 $\Delta E = 0.57$	E $\Delta E = 0.68$	FL5 $\Delta E = 0.54$	FL10 $\Delta E = 0.50$	FL3.3 $\Delta E = 0.53$	FL3.8 $\Delta E = 0.47$	FL3.13 $\Delta E = 0.60$	HP3 $\Delta E = 0.47$	LED-B3 $\Delta E = 0.72$	LED-V1 $\Delta E = 0.46$
D55 $\Delta E = 0.58$	FL1 $\Delta E = 0.59$	FL6 $\Delta E = 0.66$	FL11 $\Delta E = 0.51$	FL3.4 $\Delta E = 0.32$	FL3.9 $\Delta E = 0.52$	FL3.14 $\Delta E = 0.47$	HP4 $\Delta E = 0.86$	LED-B4 $\Delta E = 0.72$	LED-V2 $\Delta E = 0.73$

IXCBBLUE - Weighted Expectation-Maximization - 4 Gaussians



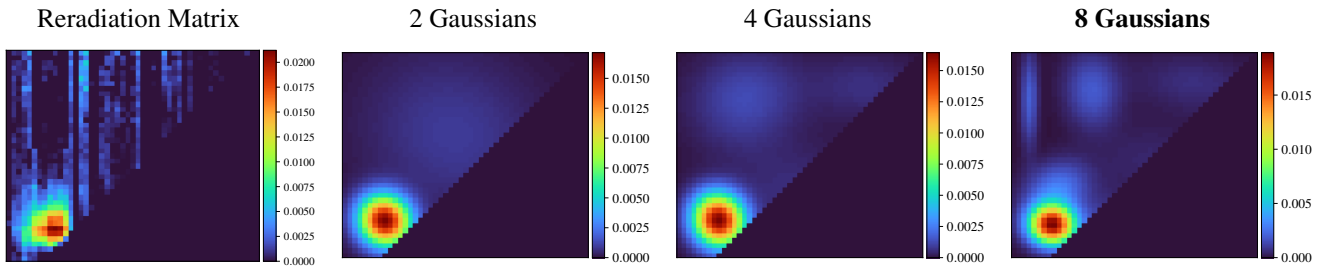
Fitted Material Under Monochromatic Illumination



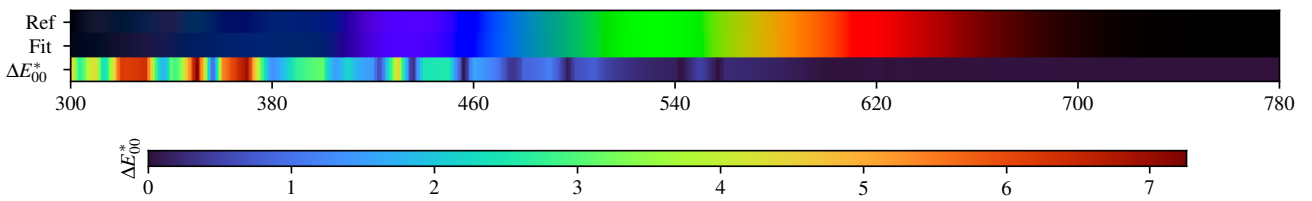
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.26$	FL7 $\Delta E = 0.32$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.18$	FL3.10 $\Delta E = 0.36$	FL3.15 $\Delta E = 0.16$	HP5 $\Delta E = 0.39$	LED-B5 $\Delta E = 0.46$
B $\Delta E = 0.31$	D65 $\Delta E = 0.25$	FL3 $\Delta E = 0.20$	FL8 $\Delta E = 0.20$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.44$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.18$
C $\Delta E = 0.37$	D75 $\Delta E = 0.22$	FL4 $\Delta E = 0.15$	FL9 $\Delta E = 0.18$	FL3.2 $\Delta E = 0.23$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.21$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.31$	FL10 $\Delta E = 0.41$	FL3.3 $\Delta E = 0.26$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.19$	LED-B3 $\Delta E = 0.32$	LED-V1 $\Delta E = 0.22$
D55 $\Delta E = 0.24$	FL1 $\Delta E = 0.34$	FL6 $\Delta E = 0.20$	FL11 $\Delta E = 0.27$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.37$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.42$	LED-B4 $\Delta E = 0.46$	LED-V2 $\Delta E = 0.31$

IXCBBLUE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.06$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.28$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.07$	D65 $\Delta E = 0.06$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.27$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.09$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.04$	E $\Delta E = 0.29$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.31$	FL3.3 $\Delta E = 0.03$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.08$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.23$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.26$	FL3.14 $\Delta E = 0.02$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.26$	LED-V2 $\Delta E = 0.05$

IXCBBLUE - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.295086	0.355865	0.410232	0.521943	0.631595	0.673203	0.714755	0.737744	0.747064	0.754141	0.757270
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.758192	0.751340	0.737038	0.715378	0.681483	0.644463	0.599218	0.543961	0.496615	0.471777	0.450696
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.434469	0.421523	0.417816	0.419427	0.420890	0.436114	0.451801	0.459884	0.457574	0.451648	0.435245
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.424773	0.431546	0.464236	0.512239	0.598916	0.715569	0.769841	0.793994			

2 Gaussians

Scaling factor: 213.15366120839641

Gaussians:

Weight	Mean		Covariance			
0.425174709	513.807147379	622.678356216	16120.616425822	-1287.325324844	-1287.325324844	13502.120179570
0.574825291	378.998728256	449.516878262	1162.462524789	-73.350308758	-73.350308758	1137.242045112

4 Gaussians

Scaling factor: 208.29710908797827

Gaussians:

Weight	Mean		Covariance			
0.184689190	430.672837128	692.212896596	5324.572149297	306.187863413	306.187863413	4306.662593007
0.154874808	546.072185150	500.119793248	12013.388735723	-1115.217378587	-1115.217378587	5194.084704179
0.584275170	378.658750940	450.702912266	1157.160415716	-76.112451517	-76.112451517	1223.323200642
0.076160831	669.130169708	715.670261353	6588.636270791	-133.737612563	-133.737612563	2072.091037710

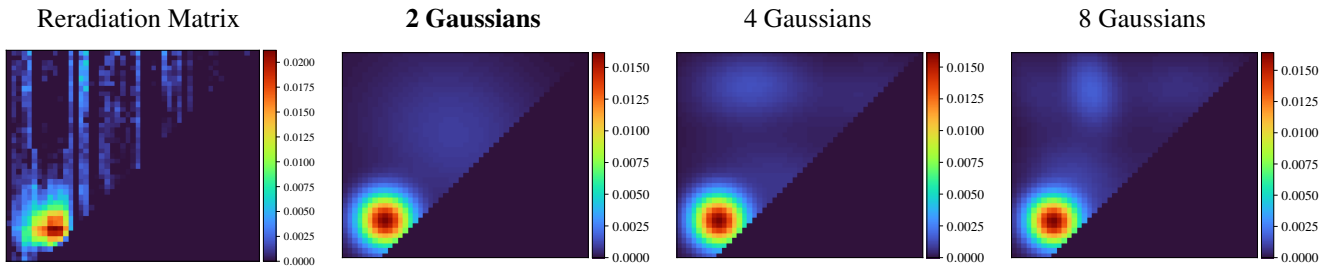
8 Gaussians

Scaling factor: 203.87308193471918

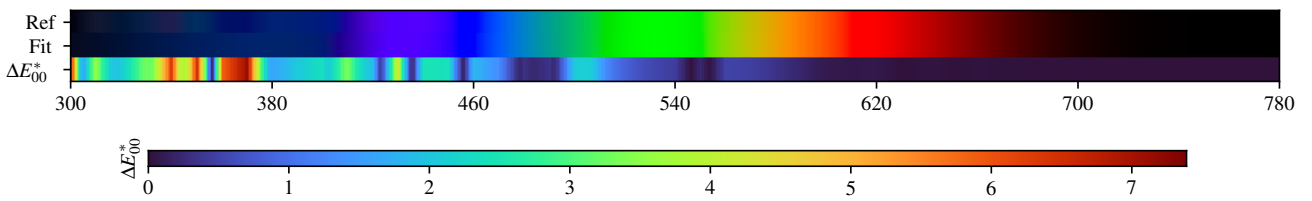
Gaussians:

Weight	Mean		Covariance			
0.109472666	454.921338917	707.615467808	1332.522237076	-91.227699213	-91.227699213	2625.968764466
0.060984941	473.779322732	439.648598093	1662.876876580	372.200427389	372.200427389	1706.123478222
0.142737558	384.620492566	508.433045533	1719.102495878	301.062309457	301.062309457	1462.165058058
0.081685095	657.771290406	723.092632631	7453.874768059	-531.235319681	-531.235319681	1699.581420936
0.046556551	331.076634331	690.873317098	127.935378080	15.783832258	15.783832258	4078.657143918
0.454883437	375.826659415	441.204795244	925.405730064	-18.206941732	-18.206941732	692.735152611
0.041956956	662.118661473	449.012703553	5443.106670359	518.636584730	518.636584730	2790.501006018
0.061722796	564.451264418	575.561149227	5887.336015407	545.249267682	545.249267682	2439.005192422

IXCBBBLUE - Weighted variational Bayesian inference - 2 Gaussians



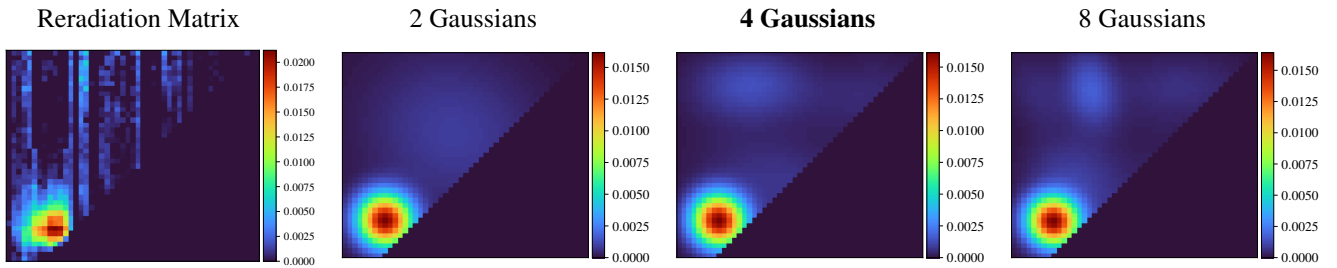
Fitted Material Under Monochromatic Illumination



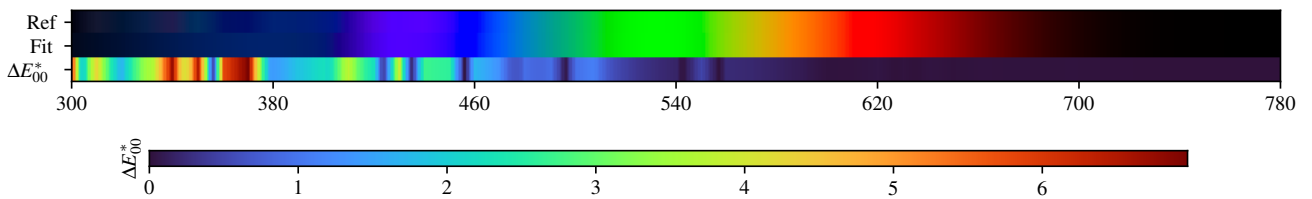
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.35$	D60 $\Delta E = 0.49$	FL2 $\Delta E = 0.71$	FL7 $\Delta E = 0.52$	FL12 $\Delta E = 0.30$	FL3.5 $\Delta E = 0.61$	FL3.10 $\Delta E = 0.45$	FL3.15 $\Delta E = 0.42$	HP5 $\Delta E = 0.74$	LED-B5 $\Delta E = 0.68$
B $\Delta E = 0.60$	D65 $\Delta E = 0.47$	FL3 $\Delta E = 0.52$	FL8 $\Delta E = 0.48$	FL3.1 $\Delta E = 0.33$	FL3.6 $\Delta E = 0.50$	FL3.11 $\Delta E = 0.54$	HP1 $\Delta E = 0.23$	LED-B1 $\Delta E = 0.35$	LED-BH1 $\Delta E = 0.38$
C $\Delta E = 0.58$	D75 $\Delta E = 0.42$	FL4 $\Delta E = 0.37$	FL9 $\Delta E = 0.58$	FL3.2 $\Delta E = 0.71$	FL3.7 $\Delta E = 0.30$	FL3.12 $\Delta E = 0.34$	HP2 $\Delta E = 0.29$	LED-B2 $\Delta E = 0.40$	LED-RGB1 $\Delta E = 0.33$
D50 $\Delta E = 0.51$	E $\Delta E = 0.50$	FL5 $\Delta E = 0.50$	FL10 $\Delta E = 0.47$	FL3.3 $\Delta E = 0.49$	FL3.8 $\Delta E = 0.45$	FL3.13 $\Delta E = 0.58$	HP3 $\Delta E = 0.44$	LED-B3 $\Delta E = 0.69$	LED-V1 $\Delta E = 0.43$
D55 $\Delta E = 0.50$	FL1 $\Delta E = 0.54$	FL6 $\Delta E = 0.62$	FL11 $\Delta E = 0.48$	FL3.4 $\Delta E = 0.31$	FL3.9 $\Delta E = 0.49$	FL3.14 $\Delta E = 0.45$	HP4 $\Delta E = 0.77$	LED-B4 $\Delta E = 0.70$	LED-V2 $\Delta E = 0.66$

IXCBBLUE - Weighted variational Bayesian inference - 4 Gaussians



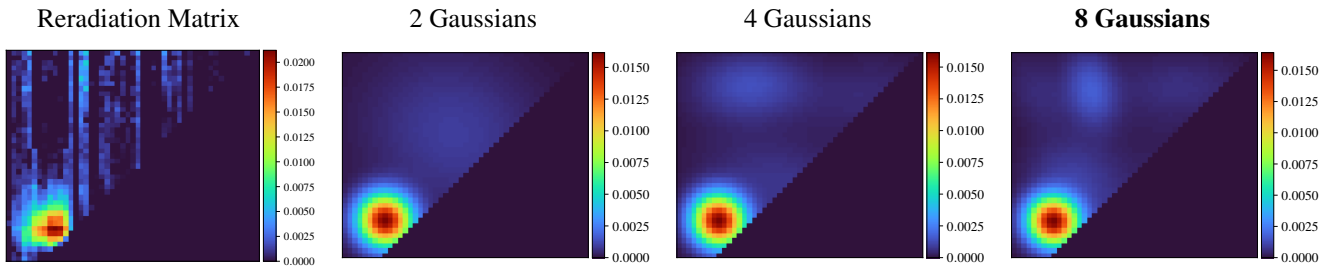
Fitted Material Under Monochromatic Illumination



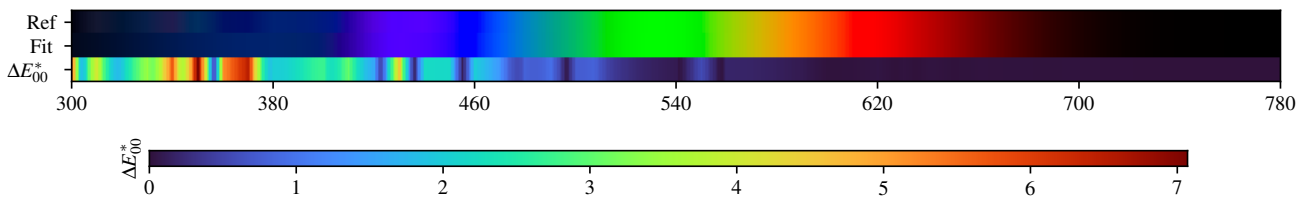
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.10$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.32$	FL3.15 $\Delta E = 0.09$	HP5 $\Delta E = 0.25$	LED-B5 $\Delta E = 0.27$
B $\Delta E = 0.15$	D65 $\Delta E = 0.07$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.35$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.14$	D75 $\Delta E = 0.09$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.08$	E $\Delta E = 0.23$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.37$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.07$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.11$	FL11 $\Delta E = 0.26$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.32$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.27$	LED-B4 $\Delta E = 0.32$	LED-V2 $\Delta E = 0.14$

IXCBBLUE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.03$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.31$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.11$	D65 $\Delta E = 0.03$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.33$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.10$	D75 $\Delta E = 0.04$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.05$	E $\Delta E = 0.23$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.36$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.27$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.32$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.10$

IXCBBBLUE - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.295086	0.355865	0.410232	0.521943	0.631595	0.673203	0.714755	0.737744	0.747064	0.754141	0.757270
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.758192	0.751340	0.737038	0.715378	0.681483	0.644463	0.599218	0.543961	0.496615	0.471777	0.450696
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.434469	0.421523	0.417816	0.419427	0.420890	0.436114	0.451801	0.459884	0.457574	0.451648	0.435245
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.424773	0.431546	0.464236	0.512239	0.598916	0.715569	0.769841	0.793994			

2 Gaussians max

Scaling factor: 213.89658403362932

Gaussians:

Weight	Mean	Covariance				
0.579008978	379.714622461	450.040007186	1263.466017886	-31.448369794	-31.448369794	1200.610163011
0.420991022	514.683912953	624.043228952	16184.927251214	-1397.116783473	-1397.116783473	13406.332165041

4 Gaussians max

Scaling factor: 209.48790730829413

Gaussians:

Weight	Mean	Covariance				
0.569284471	378.774412390	449.490339680	1200.804319834	-41.230627722	-41.230627722	1178.403639812
0.202594634	506.441667315	517.712422230	13561.937259361	-3161.040123611	-3161.040123611	5879.502758648
0.076054194	670.384426511	699.503306933	6889.683256833	1066.366737105	1066.366737105	3313.538232520
0.152066700	442.124071996	718.393709514	6212.665913082	95.165936461	95.165936461	2208.988373601

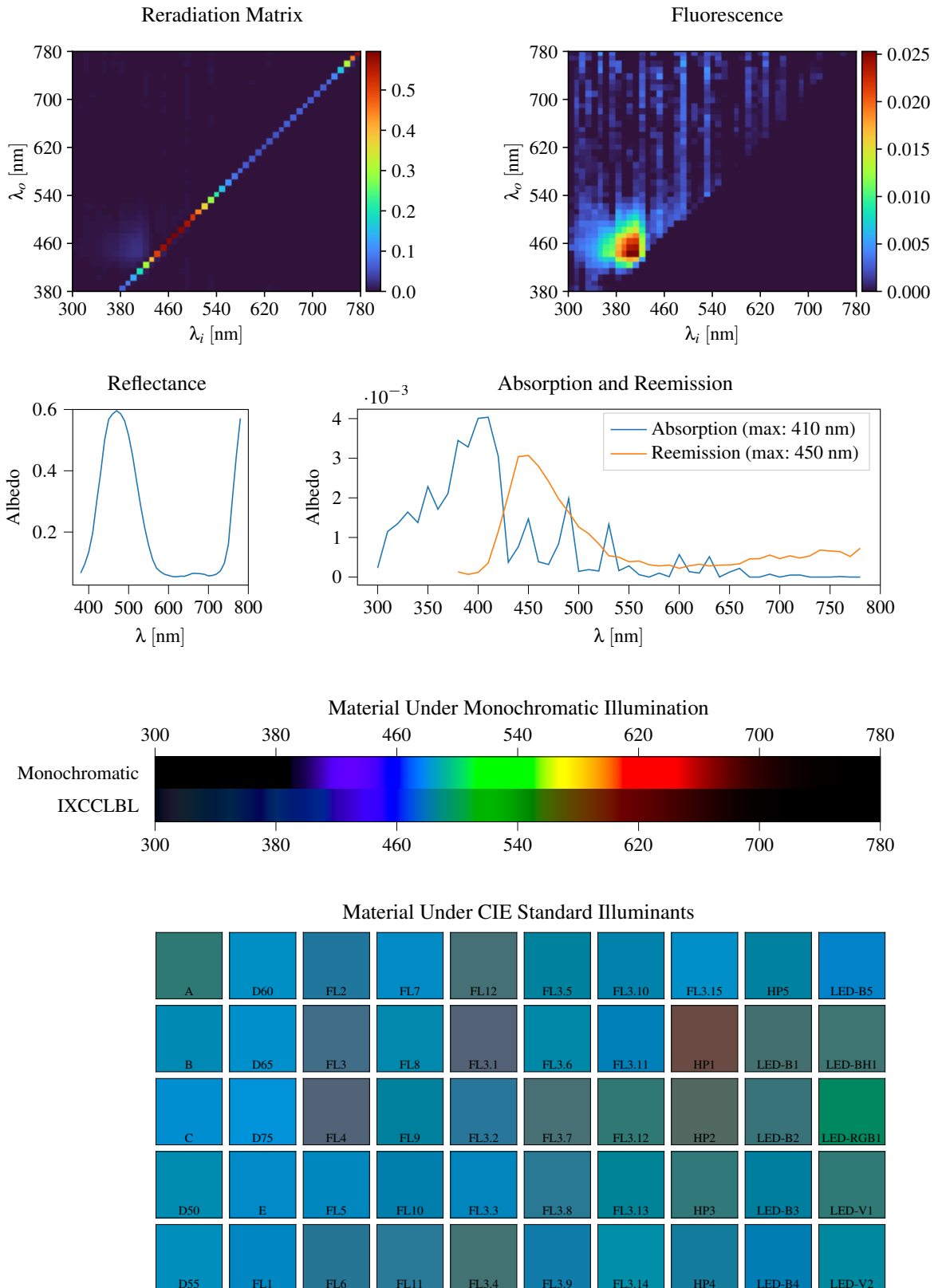
8 Gaussians max

Scaling factor: 207.1211294614745

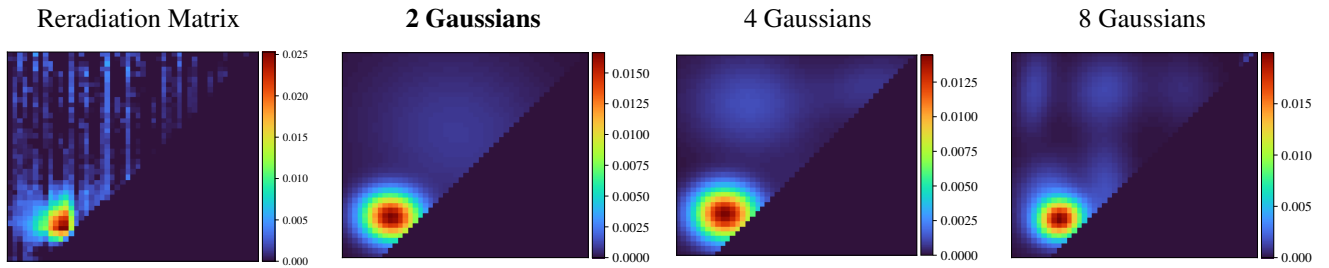
Gaussians:

Weight	Mean	Covariance				
0.546539145	377.932074347	447.948382860	1149.429947040	-33.397286308	-33.397286308	1075.079762886
0.076750602	488.050825006	464.715792655	5931.054748072	-1107.196609891	-1107.196609891	3337.325214298
0.067978560	631.534004906	530.456508979	6955.819154494	-3206.247427244	-3206.247427244	7279.068348975
0.075450630	412.510453795	547.982183654	4233.507044497	-78.844646758	-78.844646758	2225.483335466
0.084630916	453.036955448	709.612829980	1166.863174108	-304.549276914	-304.549276914	2722.422400739
0.100799833	631.065529255	715.283861352	10175.526712693	-2.176539005	-2.176539005	2494.333217729
0.047747467	350.177081012	701.120077777	2281.414643773	-863.913280279	-863.913280279	3500.397472783

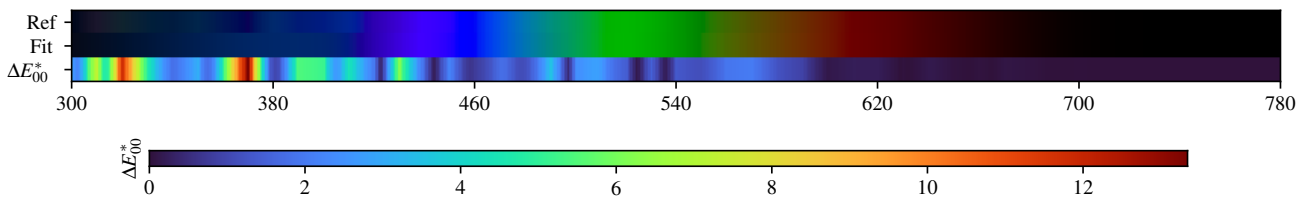
3.67. IXCCLBL



IXCCLBL - Weighted Expectation-Maximization - 2 Gaussians



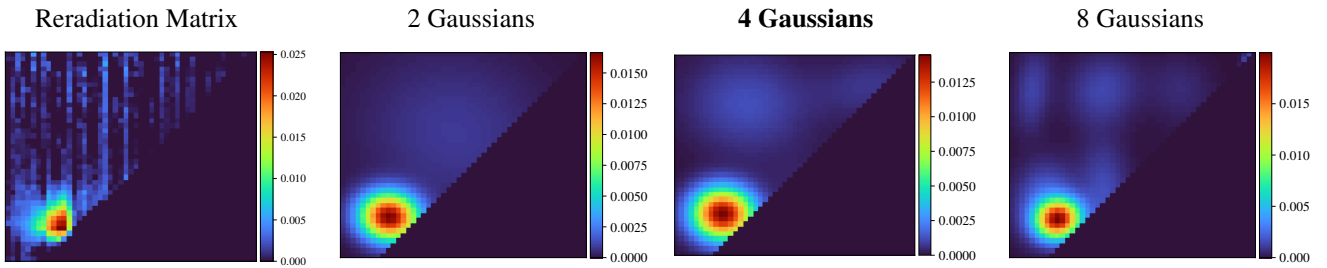
Fitted Material Under Monochromatic Illumination



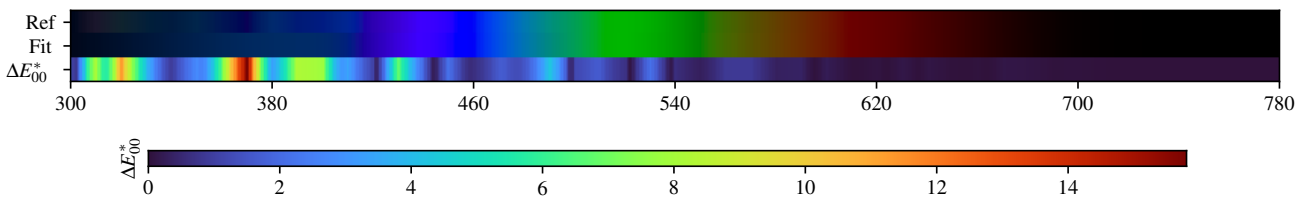
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.97$	$\Delta E = 0.83$	$\Delta E = 1.25$	$\Delta E = 0.97$	$\Delta E = 1.43$	$\Delta E = 0.93$	$\Delta E = 1.19$	$\Delta E = 0.82$	$\Delta E = 1.03$	$\Delta E = 1.32$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.94$	$\Delta E = 0.82$	$\Delta E = 1.58$	$\Delta E = 0.94$	$\Delta E = 1.97$	$\Delta E = 0.89$	$\Delta E = 1.24$	$\Delta E = 1.28$	$\Delta E = 1.45$	$\Delta E = 1.30$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.97$	$\Delta E = 0.80$	$\Delta E = 2.06$	$\Delta E = 1.02$	$\Delta E = 1.16$	$\Delta E = 1.37$	$\Delta E = 0.91$	$\Delta E = 1.80$	$\Delta E = 1.47$	$\Delta E = 0.68$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.86$	$\Delta E = 0.70$	$\Delta E = 1.05$	$\Delta E = 1.29$	$\Delta E = 0.98$	$\Delta E = 1.25$	$\Delta E = 0.90$	$\Delta E = 1.03$	$\Delta E = 1.31$	$\Delta E = 1.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.84$	$\Delta E = 1.06$	$\Delta E = 1.27$	$\Delta E = 1.32$	$\Delta E = 1.03$	$\Delta E = 1.27$	$\Delta E = 0.84$	$\Delta E = 0.97$	$\Delta E = 1.36$	$\Delta E = 0.75$

IXCCLBL - Weighted Expectation-Maximization - 4 Gaussians



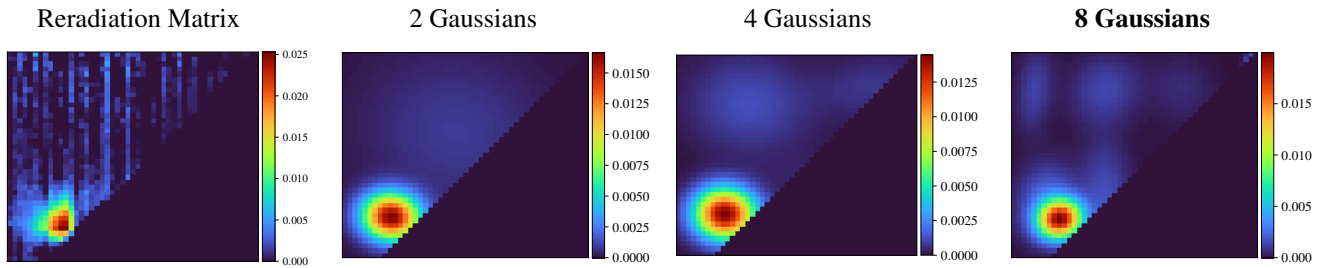
Fitted Material Under Monochromatic Illumination



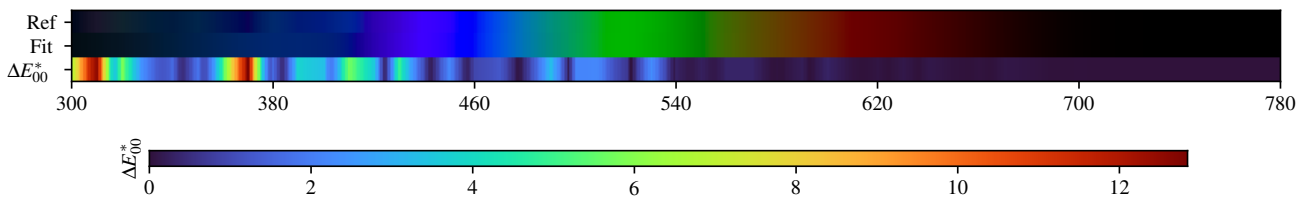
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.37$	$\Delta E = 0.20$	$\Delta E = 0.48$	$\Delta E = 0.42$	$\Delta E = 0.74$	$\Delta E = 0.52$	$\Delta E = 0.84$	$\Delta E = 0.28$	$\Delta E = 0.41$	$\Delta E = 0.77$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.35$	$\Delta E = 0.18$	$\Delta E = 0.56$	$\Delta E = 0.55$	$\Delta E = 0.61$	$\Delta E = 0.54$	$\Delta E = 0.68$	$\Delta E = 0.44$	$\Delta E = 0.87$	$\Delta E = 0.86$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.30$	$\Delta E = 0.20$	$\Delta E = 0.66$	$\Delta E = 0.54$	$\Delta E = 0.43$	$\Delta E = 0.61$	$\Delta E = 0.41$	$\Delta E = 0.74$	$\Delta E = 0.95$	$\Delta E = 0.42$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.28$	$\Delta E = 0.46$	$\Delta E = 0.47$	$\Delta E = 0.74$	$\Delta E = 0.44$	$\Delta E = 0.71$	$\Delta E = 0.59$	$\Delta E = 0.25$	$\Delta E = 0.91$	$\Delta E = 0.79$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.48$	$\Delta E = 0.49$	$\Delta E = 0.78$	$\Delta E = 0.32$	$\Delta E = 0.70$	$\Delta E = 0.63$	$\Delta E = 0.21$	$\Delta E = 0.78$	$\Delta E = 0.42$

IXCCLBL - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.40$	$\Delta E = 0.13$	$\Delta E = 0.34$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.30$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.30$	$\Delta E = 0.08$	$\Delta E = 0.33$	$\Delta E = 0.46$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.29$	$\Delta E = 0.08$	$\Delta E = 0.24$	$\Delta E = 0.35$	$\Delta E = 0.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.35$	$\Delta E = 0.13$	$\Delta E = 0.34$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.38$	$\Delta E = 0.62$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.38$	$\Delta E = 0.10$	$\Delta E = 0.32$	$\Delta E = 0.11$	$\Delta E = 0.18$	$\Delta E = 0.32$	$\Delta E = 0.38$

IXCCLBL - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.066471	0.095232	0.134467	0.197288	0.299680	0.394413	0.501439	0.567999	0.585842	0.595835	0.585884
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.563151	0.515467	0.448845	0.367300	0.286888	0.216050	0.157656	0.110981	0.081929	0.070357	0.062195
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.058546	0.054805	0.054038	0.055934	0.055646	0.060042	0.065033	0.065042	0.064042	0.061915	0.056993
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.058280	0.062617	0.073085	0.098648	0.159315	0.307828	0.449275	0.571014			

2 Gaussians

Scaling factor: 219.16373979455938

Gaussians:

Weight	Mean		Covariance			
0.419289461	520.397068186	624.801241130	18100.980331189	-1134.154946580	-1134.154946580	13785.963348635
0.580710539	391.820189069	457.152836202	1498.518512824	-56.828976107	-56.828976107	1004.070115728

4 Gaussians

Scaling factor: 213.06881273354657

Gaussians:

Weight	Mean		Covariance			
0.073928217	689.826496285	720.385969424	6140.736622330	794.324630993	794.324630993	2130.183788493
0.626090112	393.891516919	460.090370169	1736.128878286	-29.608590050	-29.608590050	1240.172561892
0.096408222	606.806254518	483.677434804	9845.403464239	-897.715588808	-897.715588808	4840.734030611
0.203573449	440.238060286	685.259708580	6877.699944669	-124.437774074	-124.437774074	4710.701066458

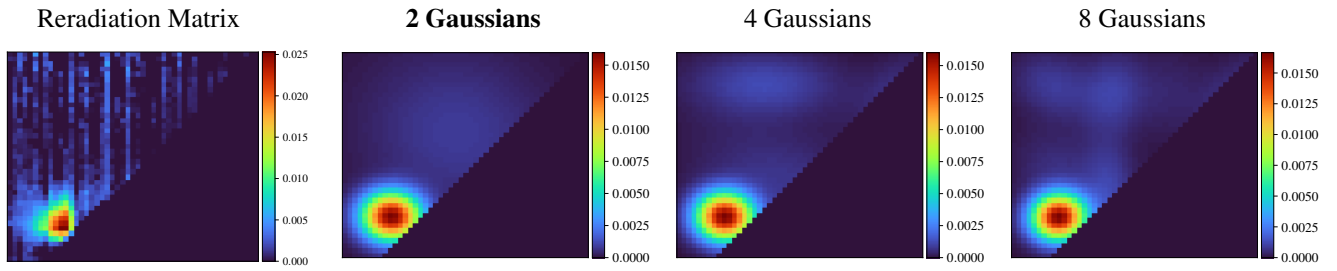
8 Gaussians

Scaling factor: 207.28830838612674

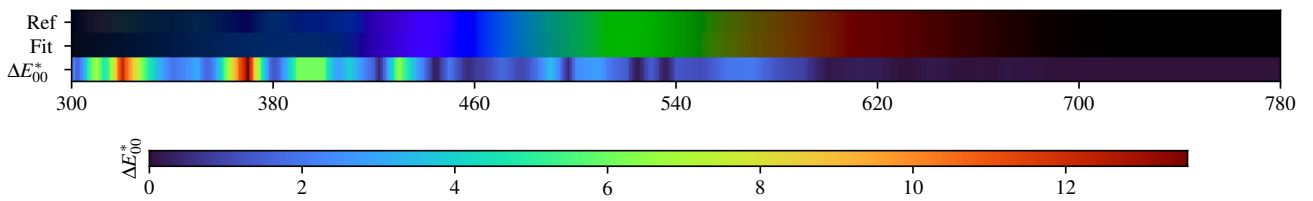
Gaussians:

Weight	Mean		Covariance			
0.028671576	767.695668371	744.389229341	101.358696190	84.247019234	84.247019234	640.643360713
0.431792384	391.754119773	452.548150884	860.256798290	48.166047377	48.166047377	677.475675471
0.102811455	480.180256527	709.599895486	2343.107257772	197.726687758	197.726687758	2340.959164017
0.056738863	340.724940405	708.208818781	603.168965293	267.338393158	267.338393158	3245.203146755
0.143899779	365.043952140	489.978340537	1568.778732462	181.484963234	181.484963234	2433.423102653
0.044551182	634.017661917	711.632887084	2043.120909706	-125.829342462	-125.829342462	2161.226894278
0.123782820	481.536258351	500.224253963	1103.074570434	-49.017273176	-49.017273176	5345.627098835
0.067751942	671.292301307	493.379184813	4168.870181420	170.580781306	170.580781306	6528.373205725

IXCCLBL - Weighted variational Bayesian inference - 2 Gaussians



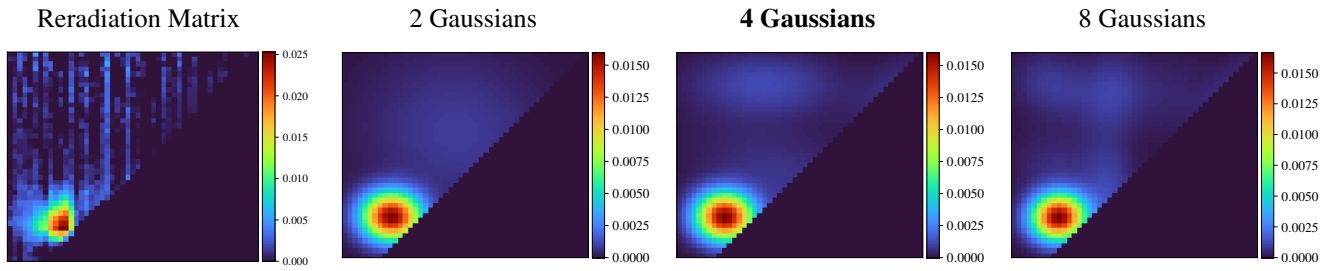
Fitted Material Under Monochromatic Illumination



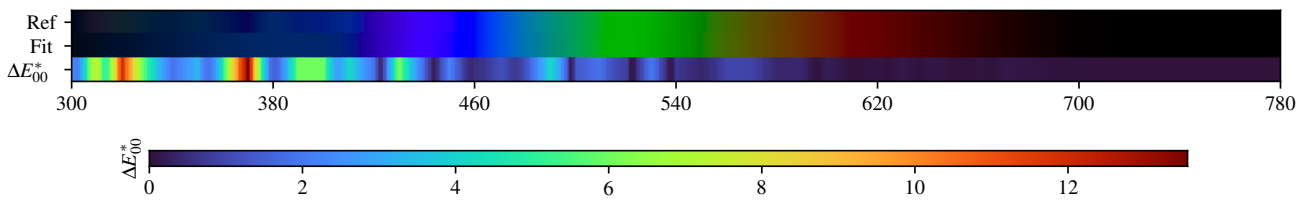
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.92$	$\Delta E = 0.68$	$\Delta E = 1.15$	$\Delta E = 0.86$	$\Delta E = 1.37$	$\Delta E = 0.86$	$\Delta E = 1.12$	$\Delta E = 0.70$	$\Delta E = 0.92$	$\Delta E = 1.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.82$	$\Delta E = 0.66$	$\Delta E = 1.48$	$\Delta E = 0.87$	$\Delta E = 1.90$	$\Delta E = 0.82$	$\Delta E = 1.15$	$\Delta E = 1.25$	$\Delta E = 1.40$	$\Delta E = 1.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.82$	$\Delta E = 0.63$	$\Delta E = 1.96$	$\Delta E = 0.95$	$\Delta E = 1.08$	$\Delta E = 1.32$	$\Delta E = 0.88$	$\Delta E = 1.75$	$\Delta E = 1.42$	$\Delta E = 0.67$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.74$	$\Delta E = 0.58$	$\Delta E = 0.94$	$\Delta E = 1.20$	$\Delta E = 0.88$	$\Delta E = 1.18$	$\Delta E = 0.85$	$\Delta E = 0.95$	$\Delta E = 1.24$	$\Delta E = 1.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.71$	$\Delta E = 0.95$	$\Delta E = 1.18$	$\Delta E = 1.25$	$\Delta E = 1.00$	$\Delta E = 1.19$	$\Delta E = 0.79$	$\Delta E = 0.84$	$\Delta E = 1.27$	$\Delta E = 0.67$

IXCCLBL - Weighted variational Bayesian inference - 4 Gaussians



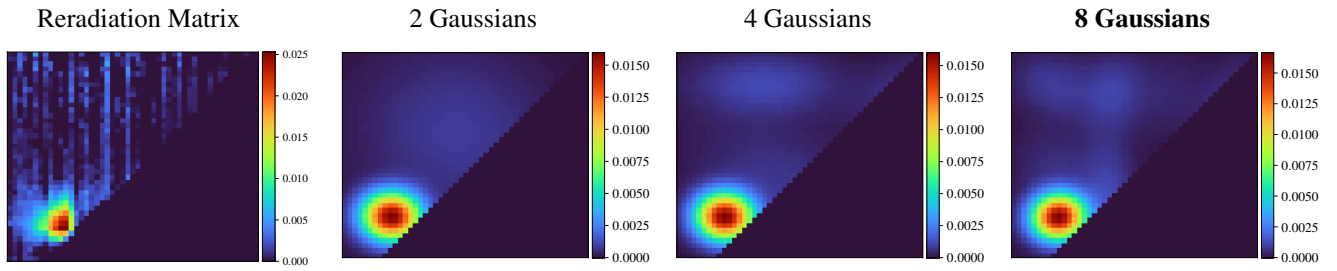
Fitted Material Under Monochromatic Illumination



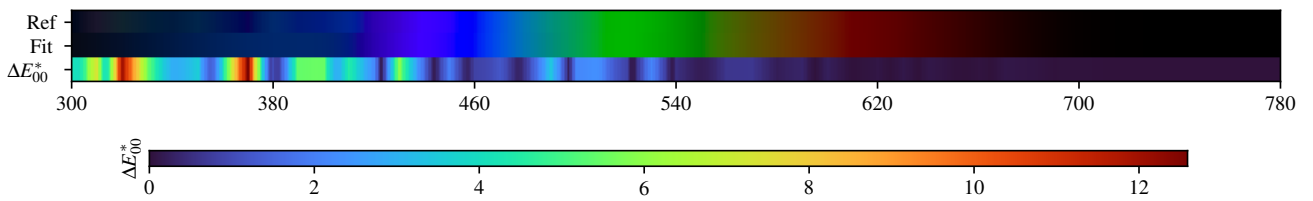
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.32$	$\Delta E = 0.23$	$\Delta E = 0.53$	$\Delta E = 0.29$	$\Delta E = 0.58$	$\Delta E = 0.13$	$\Delta E = 0.24$	$\Delta E = 0.51$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.42$	$\Delta E = 0.31$	$\Delta E = 0.52$	$\Delta E = 0.30$	$\Delta E = 0.47$	$\Delta E = 0.38$	$\Delta E = 0.58$	$\Delta E = 0.61$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.55$	$\Delta E = 0.32$	$\Delta E = 0.27$	$\Delta E = 0.42$	$\Delta E = 0.20$	$\Delta E = 0.59$	$\Delta E = 0.64$	$\Delta E = 0.23$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.16$	$\Delta E = 0.31$	$\Delta E = 0.28$	$\Delta E = 0.53$	$\Delta E = 0.25$	$\Delta E = 0.50$	$\Delta E = 0.31$	$\Delta E = 0.19$	$\Delta E = 0.62$	$\Delta E = 0.79$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.28$	$\Delta E = 0.34$	$\Delta E = 0.56$	$\Delta E = 0.19$	$\Delta E = 0.50$	$\Delta E = 0.34$	$\Delta E = 0.18$	$\Delta E = 0.54$	$\Delta E = 0.40$

IXCCLBL - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.06$	$\Delta E = 0.23$	$\Delta E = 0.14$	$\Delta E = 0.47$	$\Delta E = 0.19$	$\Delta E = 0.46$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.44$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.30$	$\Delta E = 0.20$	$\Delta E = 0.37$	$\Delta E = 0.19$	$\Delta E = 0.40$	$\Delta E = 0.26$	$\Delta E = 0.48$	$\Delta E = 0.53$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.40$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.38$	$\Delta E = 0.14$	$\Delta E = 0.46$	$\Delta E = 0.53$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.09$	$\Delta E = 0.31$	$\Delta E = 0.19$	$\Delta E = 0.44$	$\Delta E = 0.16$	$\Delta E = 0.43$	$\Delta E = 0.19$	$\Delta E = 0.21$	$\Delta E = 0.52$	$\Delta E = 0.92$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.47$	$\Delta E = 0.15$	$\Delta E = 0.42$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.46$	$\Delta E = 0.49$

IXCCLBL - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.066471	0.095232	0.134467	0.197288	0.299680	0.394413	0.501439	0.567999	0.585842	0.595835	0.585884
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.563151	0.515467	0.448845	0.367300	0.286888	0.216050	0.157656	0.110981	0.081929	0.070357	0.062195
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.058546	0.054805	0.054038	0.055934	0.055646	0.060042	0.065033	0.065042	0.064042	0.061915	0.056993
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.058280	0.062617	0.073085	0.098648	0.159315	0.307828	0.449275	0.571014			

2 Gaussians max

Scaling factor: 219.56155910904008

Gaussians:

Weight	Mean		Covariance			
0.581936564	392.248127013	457.551290376	1565.983289809	-16.022438671	-16.022438671	1051.825868726
0.418063436	520.614271720	625.060888545	18131.247986916	-1150.681486318	-1150.681486318	13790.794352810

4 Gaussians max

Scaling factor: 214.66693001368387

Gaussians:

Weight	Mean		Covariance			
0.571244862	390.880004900	457.075519414	1478.102365555	-16.697404117	-16.697404117	1025.658951249
0.217367635	509.903396117	525.117045994	14895.407007954	-3757.008727655	-3757.008727655	6819.887175655
0.047992277	728.994336613	714.854006075	3882.220754162	1922.034954617	1922.034954617	2993.399248873
0.163395226	470.279573885	721.012062264	10277.750323289	-99.477079727	-99.477079727	1991.065925998

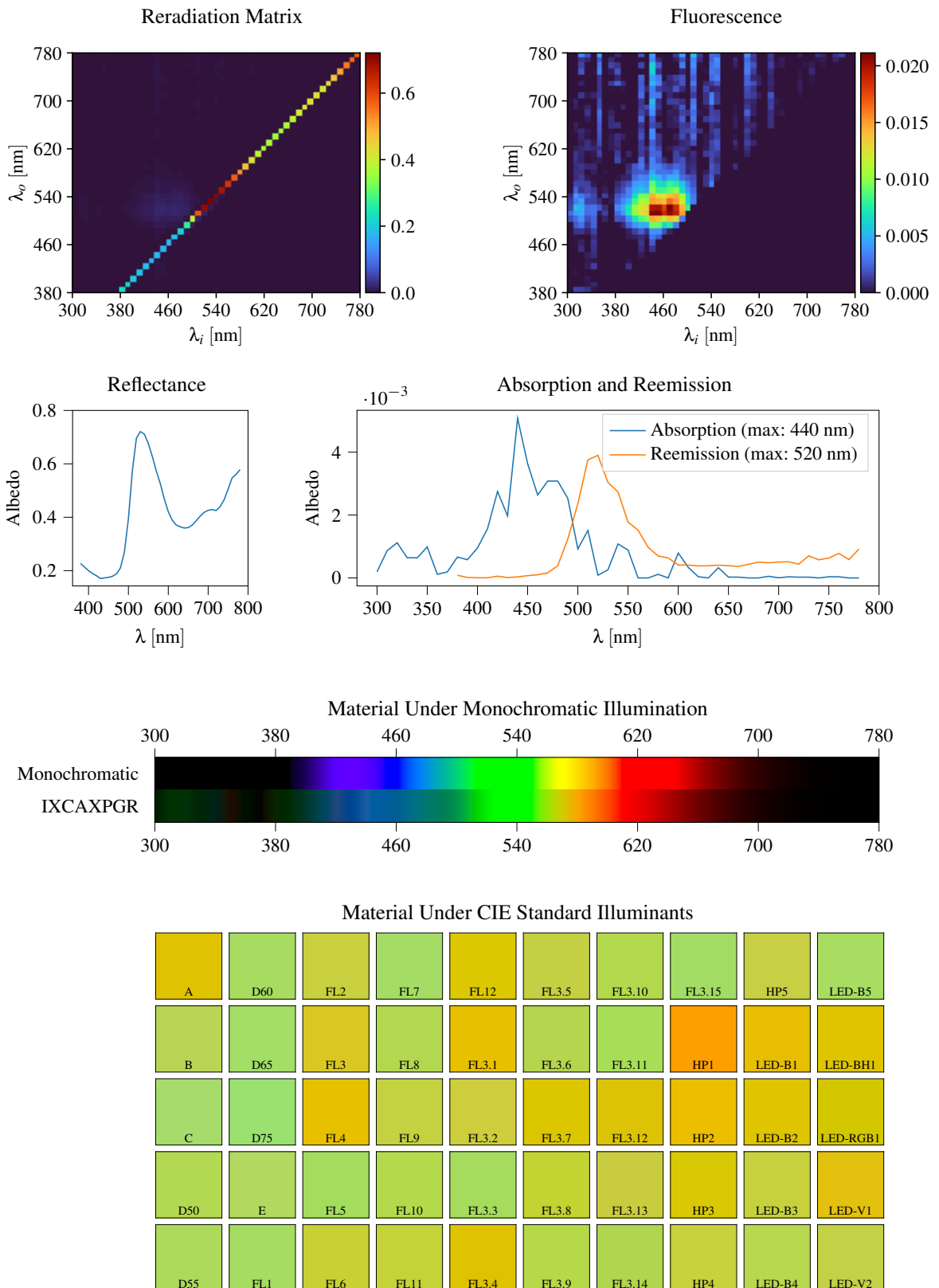
8 Gaussians max

Scaling factor: 209.8065194739179

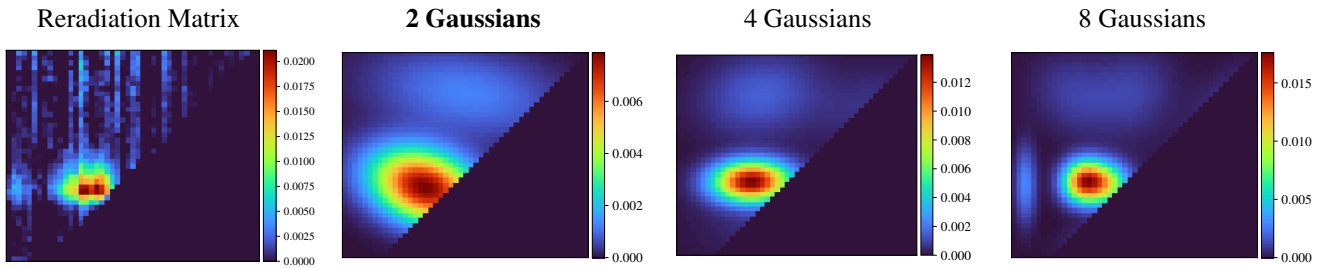
Gaussians:

Weight	Mean		Covariance			
0.552514844	388.788243069	456.483556194	1296.629429221	32.280448835	32.280448835	952.359293490
0.090741181	487.980321321	499.285977602	1218.376441482	-98.453570219	-98.453570219	5644.237131798
0.060835851	665.478902043	480.527520702	4918.973039468	-334.411434598	-334.411434598	5076.117023255
0.061946765	382.577634206	554.448641770	3631.356812808	-415.715774062	-415.715774062	2853.920635304
0.072111162	497.521265367	706.280636100	1776.504673897	203.320906818	203.320906818	3139.839965814
0.038874243	604.136789516	707.584664957	2535.885508509	620.460012120	620.460012120	3303.353964670
0.046783712	732.898650752	715.589317561	3632.814051719	2037.636365315	2037.636365315	3023.383576977
0.076192243	378.248057582	717.591423460	3182.071061884	-533.404206512	-533.404206512	2264.313679529

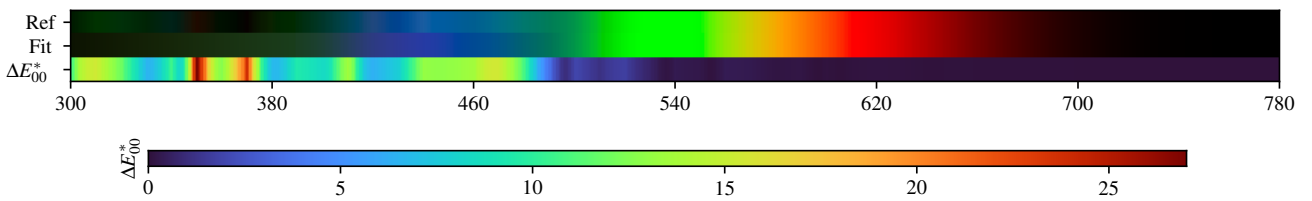
3.68. IXCAXPGR



IXCAXPGR - Weighted Expectation-Maximization - 2 Gaussians



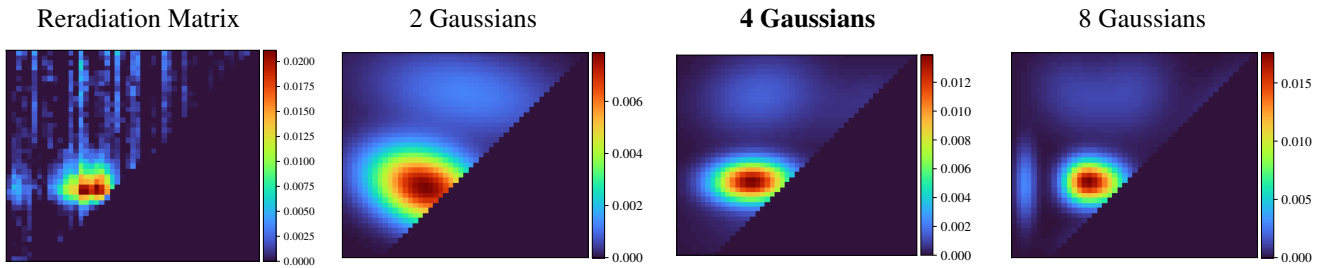
Fitted Material Under Monochromatic Illumination



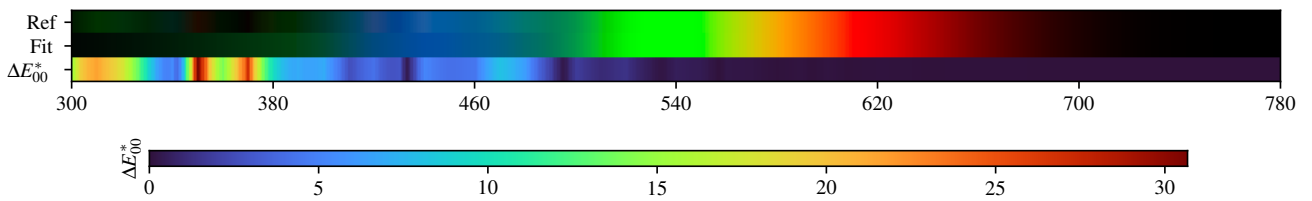
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.75$	D60 $\Delta E = 1.42$	FL2 $\Delta E = 1.05$	FL7 $\Delta E = 1.34$	FL12 $\Delta E = 0.55$	FL3.5 $\Delta E = 1.04$	FL3.10 $\Delta E = 1.12$	FL3.15 $\Delta E = 1.37$	HP5 $\Delta E = 1.27$	LED-B5 $\Delta E = 1.49$
B $\Delta E = 1.41$	D65 $\Delta E = 1.49$	FL3 $\Delta E = 0.84$	FL8 $\Delta E = 1.10$	FL3.1 $\Delta E = 0.48$	FL3.6 $\Delta E = 1.06$	FL3.11 $\Delta E = 1.05$	HP1 $\Delta E = 0.38$	LED-B1 $\Delta E = 0.71$	LED-BH1 $\Delta E = 0.61$
C $\Delta E = 1.74$	D75 $\Delta E = 1.61$	FL4 $\Delta E = 0.66$	FL9 $\Delta E = 1.01$	FL3.2 $\Delta E = 0.89$	FL3.7 $\Delta E = 0.41$	FL3.12 $\Delta E = 0.52$	HP2 $\Delta E = 0.63$	LED-B2 $\Delta E = 0.83$	LED-RGB1 $\Delta E = 0.34$
D50 $\Delta E = 1.26$	E $\Delta E = 1.45$	FL5 $\Delta E = 1.20$	FL10 $\Delta E = 1.04$	FL3.3 $\Delta E = 1.10$	FL3.8 $\Delta E = 0.71$	FL3.13 $\Delta E = 0.98$	HP3 $\Delta E = 0.76$	LED-B3 $\Delta E = 1.11$	LED-V1 $\Delta E = 0.91$
D55 $\Delta E = 1.35$	FL1 $\Delta E = 1.29$	FL6 $\Delta E = 0.90$	FL11 $\Delta E = 0.87$	FL3.4 $\Delta E = 0.33$	FL3.9 $\Delta E = 0.93$	FL3.14 $\Delta E = 1.06$	HP4 $\Delta E = 1.08$	LED-B4 $\Delta E = 1.26$	LED-V2 $\Delta E = 1.29$

IXCAXPGR - Weighted Expectation-Maximization - 4 Gaussians



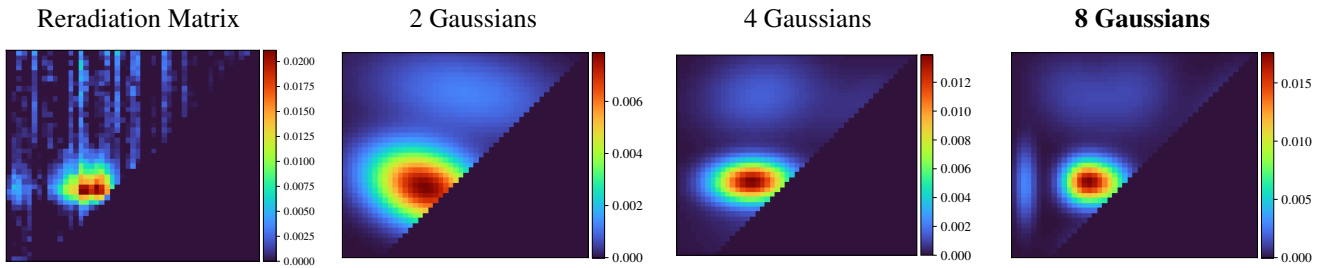
Fitted Material Under Monochromatic Illumination



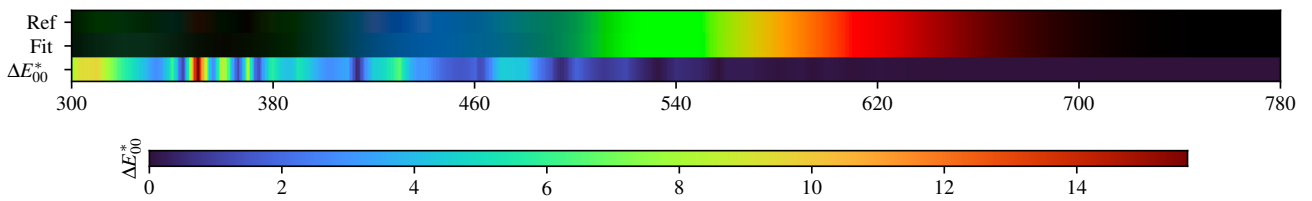
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.18$	FL12 $\Delta E = 0.19$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.32$	FL3.15 $\Delta E = 0.16$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.32$
B $\Delta E = 0.12$	D65 $\Delta E = 0.18$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.35$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.19$	D75 $\Delta E = 0.21$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.15$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.29$
D50 $\Delta E = 0.11$	E $\Delta E = 0.39$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.34$	FL3.3 $\Delta E = 0.13$	FL3.8 $\Delta E = 0.23$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.14$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.28$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.30$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.23$	LED-V2 $\Delta E = 0.11$

IXCAXPGR - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.17$	D60 $\Delta E = 0.20$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.19$	FL12 $\Delta E = 0.23$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.27$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.21$	D65 $\Delta E = 0.21$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.33$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.16$	LED-BH1 $\Delta E = 0.25$
C $\Delta E = 0.22$	D75 $\Delta E = 0.21$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.19$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.38$
D50 $\Delta E = 0.20$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.34$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.28$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.22$	LED-B3 $\Delta E = 0.27$	LED-V1 $\Delta E = 0.20$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.31$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.32$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.24$	LED-V2 $\Delta E = 0.20$

IXCAXPGR - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.226996	0.213164	0.199880	0.189264	0.180846	0.170221	0.172816	0.174874	0.178765	0.187809	0.210020
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.269756	0.394495	0.575212	0.696099	0.720856	0.711264	0.675941	0.627902	0.573197	0.525794	0.468639
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.420603	0.388567	0.370787	0.364153	0.359585	0.361291	0.370462	0.386712	0.404067	0.418206	0.425984
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.428743	0.425035	0.439948	0.465615	0.505092	0.547161	0.560631	0.578359			

2 Gaussians

Scaling factor: 232.2410493933473

Gaussians:

Weight	Mean		Covariance			
0.254465244	541.248353891	702.437195338	15835.985840056	-1915.931480785	-1915.931480785	3670.953090306
0.745534756	458.780286501	516.200073426	5148.966279178	-979.848669659	-979.848669659	2553.285884410

4 Gaussians

Scaling factor: 211.83832253145698

Gaussians:

Weight	Mean		Covariance			
0.071293128	684.376526580	684.471231995	5845.648474792	1612.814852150	1612.814852150	3509.766097240
0.207001714	466.696326621	702.158813043	6515.927775684	603.743152453	603.743152453	3267.980974817
0.143573849	526.295099342	452.846545139	13488.609364219	659.687697803	659.687697803	3366.254508528
0.578131309	447.657899498	526.572162598	2645.724074906	43.613787844	43.613787844	758.031290383

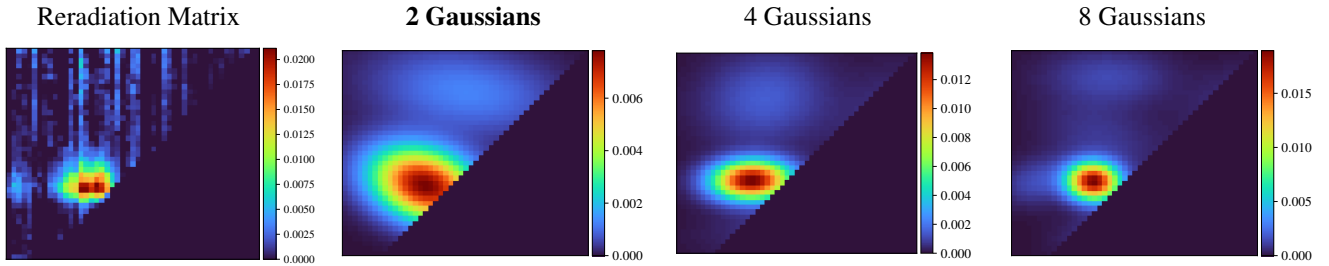
8 Gaussians

Scaling factor: 209.76401418311002

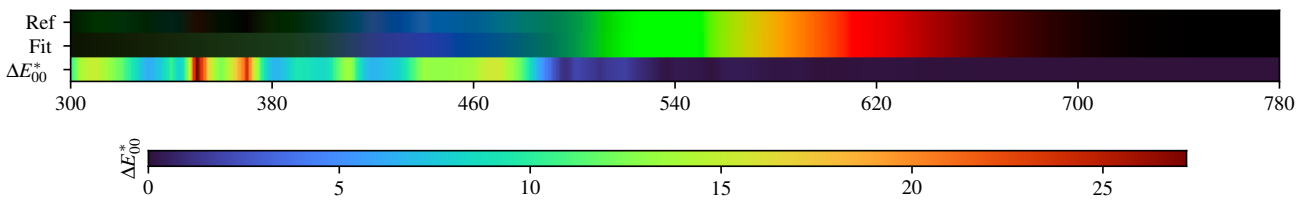
Gaussians:

Weight	Mean		Covariance			
0.049281326	719.474518691	693.260006385	2870.232812985	1591.867700645	1591.867700645	2831.928966452
0.234008956	483.554825607	523.558527723	911.119261429	-39.313184505	-39.313184505	807.874883481
0.057845781	648.768708646	496.497864795	6661.619901189	-1745.219518132	-1745.219518132	5220.881548199
0.318062694	438.141368274	526.943183743	736.345774278	14.076088672	14.076088672	773.964787230
0.061910482	323.289550227	521.862826705	190.995587355	-9.055381312	-9.055381312	2435.213133647
0.061023258	485.430853870	411.038296335	2470.203960822	249.796852924	249.796852924	501.156841543
0.102906651	417.376485837	700.738378052	3168.558315668	-484.406459014	-484.406459014	3060.226384321
0.114960852	536.524974005	705.328811649	3207.634902948	318.824378042	318.824378042	3308.866738646

IXCAXPGR - Weighted variational Bayesian inference - 2 Gaussians



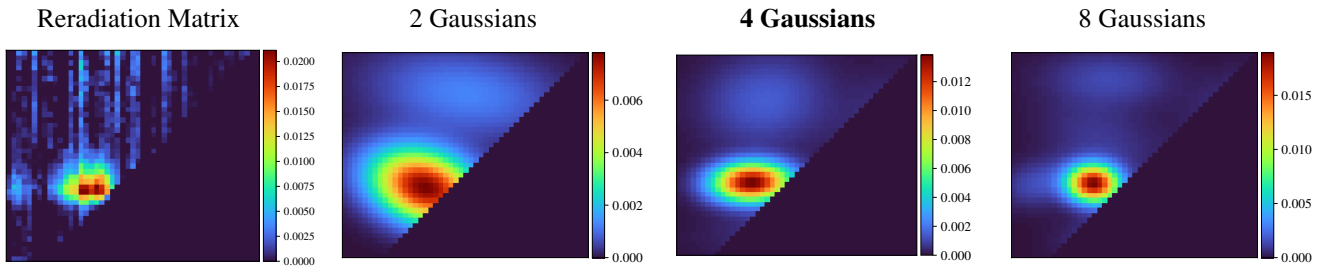
Fitted Material Under Monochromatic Illumination



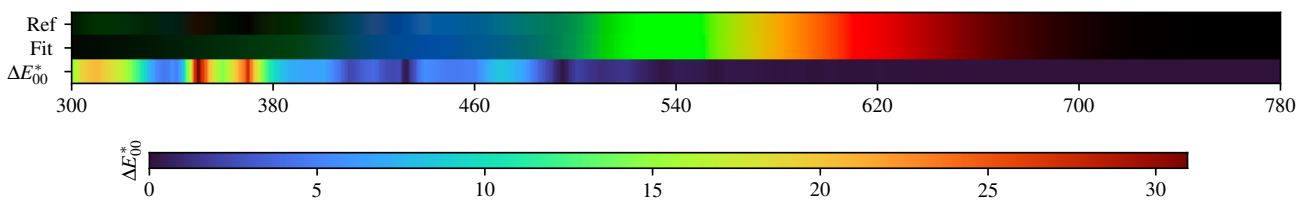
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.76$	D60 $\Delta E = 1.43$	FL2 $\Delta E = 1.06$	FL7 $\Delta E = 1.35$	FL12 $\Delta E = 0.56$	FL3.5 $\Delta E = 1.05$	FL3.10 $\Delta E = 1.13$	FL3.15 $\Delta E = 1.39$	HP5 $\Delta E = 1.28$	LED-B5 $\Delta E = 1.50$
B $\Delta E = 1.42$	D65 $\Delta E = 1.50$	FL3 $\Delta E = 0.85$	FL8 $\Delta E = 1.11$	FL3.1 $\Delta E = 0.49$	FL3.6 $\Delta E = 1.07$	FL3.11 $\Delta E = 1.06$	HP1 $\Delta E = 0.38$	LED-B1 $\Delta E = 0.72$	LED-BH1 $\Delta E = 0.62$
C $\Delta E = 1.76$	D75 $\Delta E = 1.62$	FL4 $\Delta E = 0.67$	FL9 $\Delta E = 1.02$	FL3.2 $\Delta E = 0.90$	FL3.7 $\Delta E = 0.41$	FL3.12 $\Delta E = 0.53$	HP2 $\Delta E = 0.63$	LED-B2 $\Delta E = 0.84$	LED-RGB1 $\Delta E = 0.34$
D50 $\Delta E = 1.28$	E $\Delta E = 1.47$	FL5 $\Delta E = 1.21$	FL10 $\Delta E = 1.05$	FL3.3 $\Delta E = 1.11$	FL3.8 $\Delta E = 0.72$	FL3.13 $\Delta E = 0.99$	HP3 $\Delta E = 0.77$	LED-B3 $\Delta E = 1.12$	LED-V1 $\Delta E = 0.92$
D55 $\Delta E = 1.36$	FL1 $\Delta E = 1.30$	FL6 $\Delta E = 0.91$	FL11 $\Delta E = 0.88$	FL3.4 $\Delta E = 0.34$	FL3.9 $\Delta E = 0.94$	FL3.14 $\Delta E = 1.07$	HP4 $\Delta E = 1.09$	LED-B4 $\Delta E = 1.27$	LED-V2 $\Delta E = 1.31$

IXCAXPGR - Weighted variational Bayesian inference - 4 Gaussians



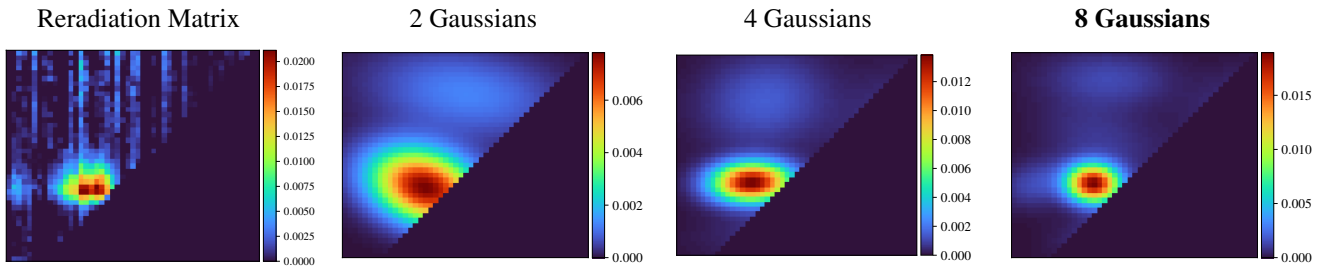
Fitted Material Under Monochromatic Illumination



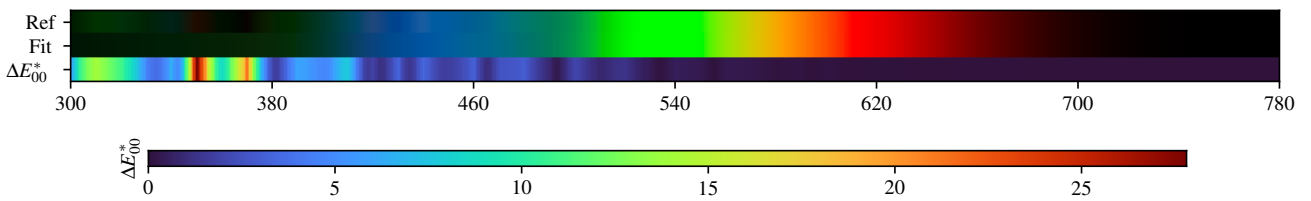
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.17$	FL7 $\Delta E = 0.21$	FL12 $\Delta E = 0.16$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.34$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.39$
B $\Delta E = 0.14$	D65 $\Delta E = 0.12$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.35$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.02$
C $\Delta E = 0.22$	D75 $\Delta E = 0.14$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.25$
D50 $\Delta E = 0.09$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.34$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.22$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.27$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.30$	FL3.14 $\Delta E = 0.20$	HP4 $\Delta E = 0.11$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.08$

IXCAXPGR - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.21$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.04$	$\Delta E = 0.13$	$\Delta E = 0.04$	$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.01$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.30$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.22$	$\Delta E = 0.10$	$\Delta E = 0.28$	$\Delta E = 0.09$	$\Delta E = 0.22$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.07$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.25$	$\Delta E = 0.10$	$\Delta E = 0.26$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.20$	$\Delta E = 0.09$

IXCAXPGR - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.226996	0.213164	0.199880	0.189264	0.180846	0.170221	0.172816	0.174874	0.178765	0.187809	0.210020
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.269756	0.394495	0.575212	0.696099	0.720856	0.711264	0.675941	0.627902	0.573197	0.525794	0.468639
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.420603	0.388567	0.370787	0.364153	0.359585	0.361291	0.370462	0.386712	0.404067	0.418206	0.425984
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.428743	0.425035	0.439948	0.465615	0.505092	0.547161	0.560631	0.578359			

2 Gaussians max

Scaling factor: 232.63305620540777

Gaussians:

Weight	Mean	Covariance				
0.743458942	459.402188992	515.888663150	5247.386206138	-955.418557776	-955.418557776	2526.919010195
0.256541058	539.260264123	702.058287826	15786.856732771	-1670.716517826	-1670.716517826	3637.724461228

4 Gaussians max

Scaling factor: 213.4371855920241

Gaussians:

Weight	Mean	Covariance				
0.106838793	530.917105486	427.523003429	12617.207139941	841.286676192	841.286676192	1652.804137750
0.586448437	448.168502760	524.899823782	2855.952771830	57.436971830	57.436971830	710.040287924
0.063810642	703.631752171	664.879786076	4599.473771761	2212.017953726	2212.017953726	5714.328562048
0.242902128	475.850087256	690.734606845	7453.947860891	518.364145228	518.364145228	4259.257870060

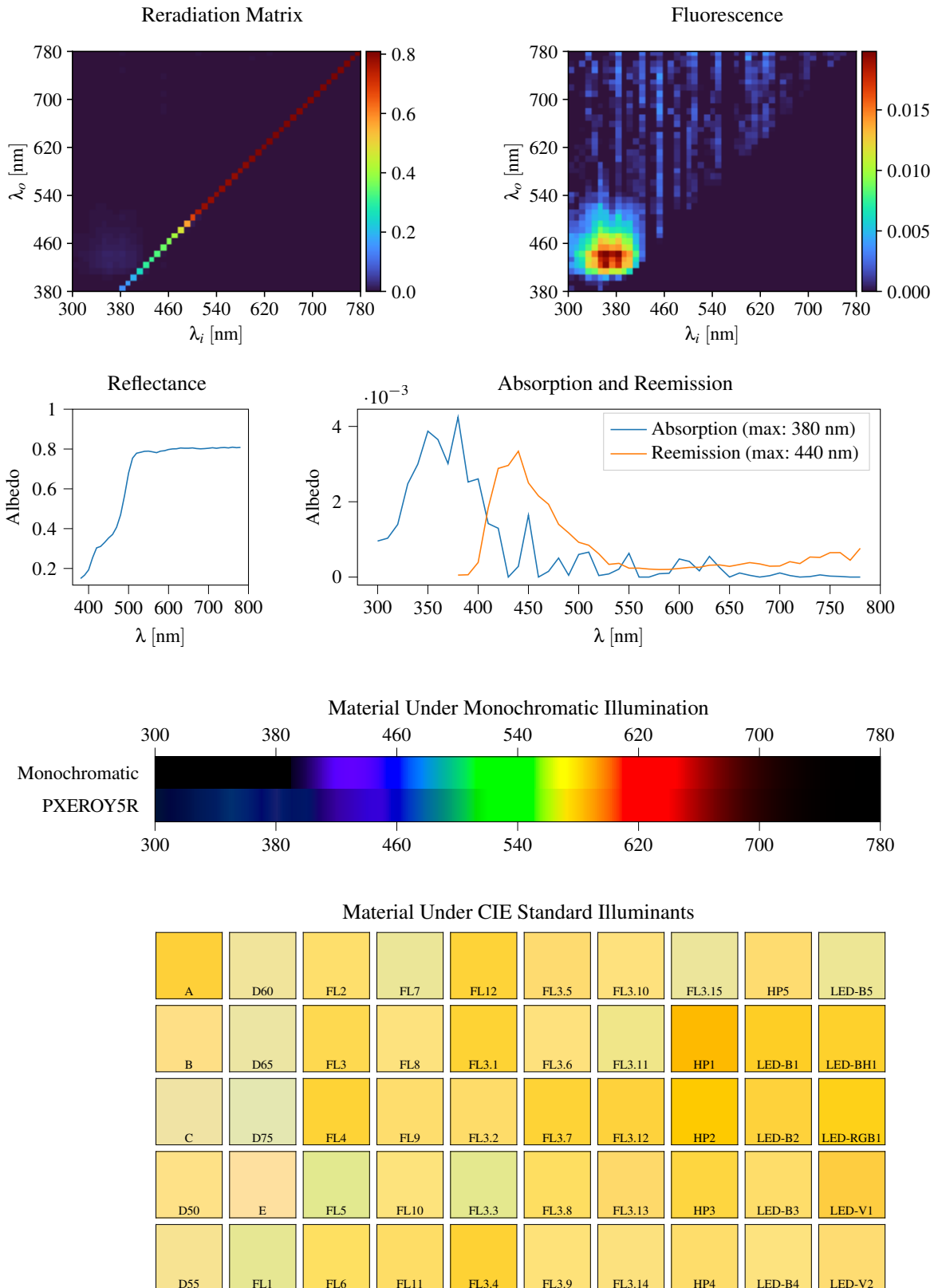
8 Gaussians max

Scaling factor: 210.61303412824827

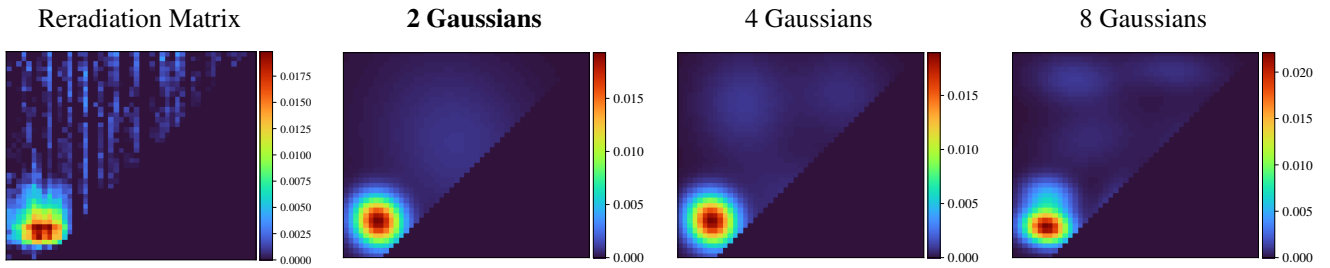
Gaussians:

Weight	Mean	Covariance				
0.083151428	490.210438771	423.776717535	4710.771199010	687.719557074	687.719557074	1481.157938969
0.037520732	681.490214325	489.948860234	6312.487738393	-1614.220751499	-1614.220751499	5795.365210855
0.070315193	347.874525565	523.217293158	2380.531745486	303.177892588	303.177892588	968.288077352
0.481158575	457.706702628	523.356718607	1179.021809188	-22.825403720	-22.825403720	627.575685745
0.132995788	471.237646316	606.950331747	6353.030249664	-1191.120656061	-1191.120656061	3130.905978361
0.049944093	711.569385069	689.192873256	4177.091382462	2072.527079708	2072.527079708	3243.473930288
0.143977756	489.548314392	732.062849739	7650.753979708	-197.856964337	-197.856964337	1515.761939672

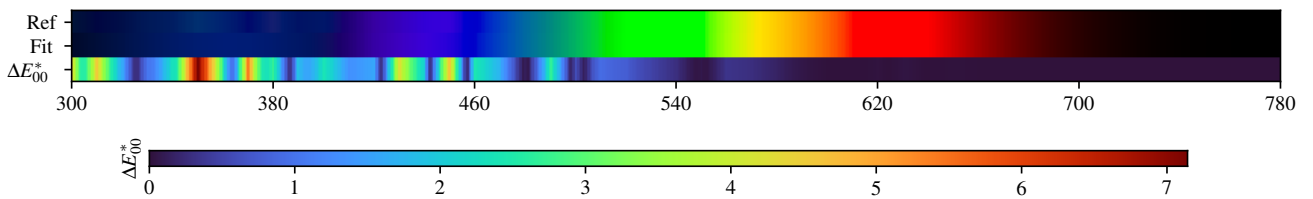
3.69. PXEROY5R



PXEROY5R - Weighted Expectation-Maximization - 2 Gaussians



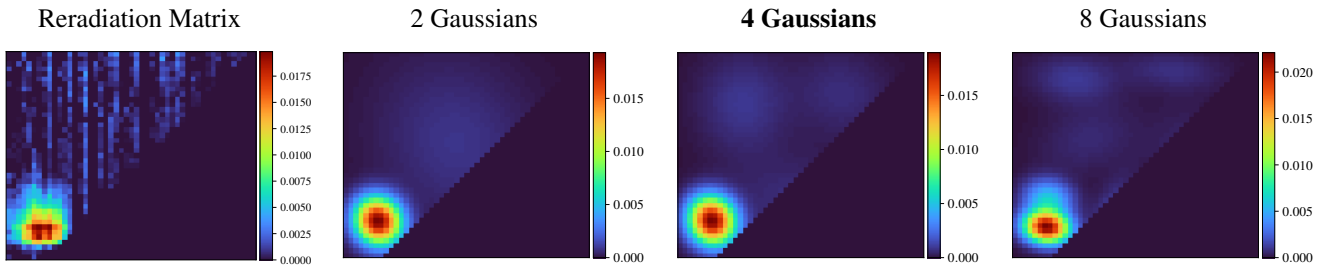
Fitted Material Under Monochromatic Illumination



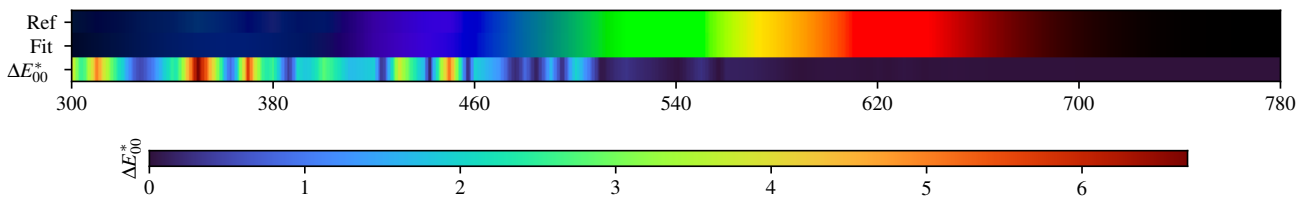
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.26$	FL2 $\Delta E = 0.18$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.25$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.23$
B $\Delta E = 0.20$	D65 $\Delta E = 0.28$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.18$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.28$	D75 $\Delta E = 0.32$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.22$	E $\Delta E = 0.26$	FL5 $\Delta E = 0.26$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.25$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.24$	FL1 $\Delta E = 0.26$	FL6 $\Delta E = 0.18$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.18$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.20$	LED-V2 $\Delta E = 0.17$

PXEROY5R - Weighted Expectation-Maximization - 4 Gaussians



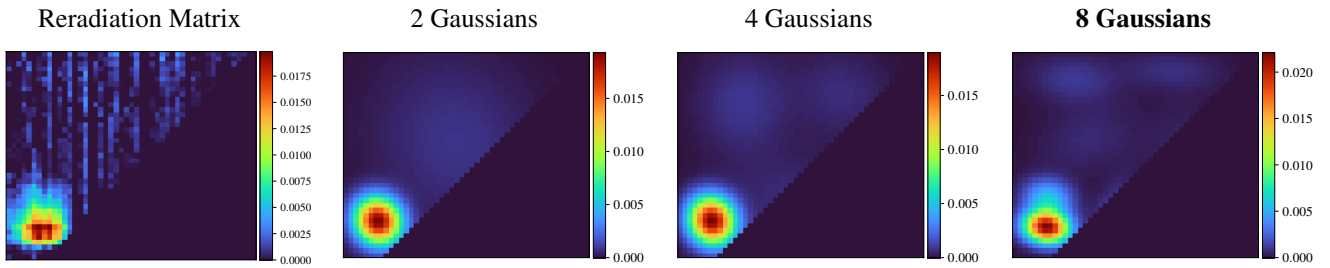
Fitted Material Under Monochromatic Illumination



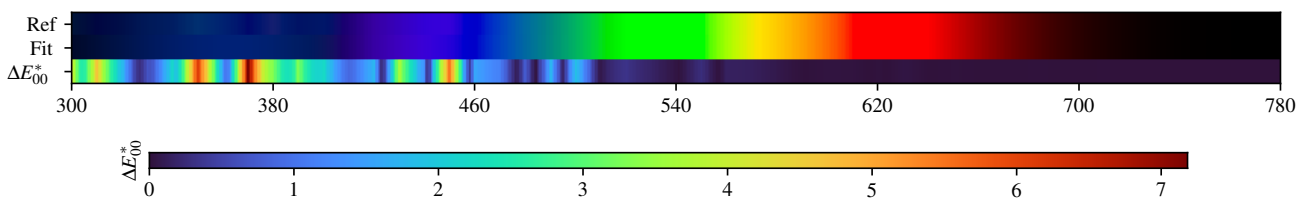
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.08$	FL2 $\Delta E = 0.02$	FL7 $\Delta E = 0.03$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.05$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.08$
B $\Delta E = 0.05$	D65 $\Delta E = 0.10$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.04$	FL3.1 $\Delta E = 0.01$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.07$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.02$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.05$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.03$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.03$	FL6 $\Delta E = 0.02$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.06$	LED-V2 $\Delta E = 0.03$

PXEROY5R - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.05$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.02$	FL3.10 $\Delta E = 0.05$	FL3.15 $\Delta E = 0.07$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.11$
B $\Delta E = 0.04$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.02$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.02$	FL3.11 $\Delta E = 0.06$	HP1 $\Delta E = 0.01$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.07$	D75 $\Delta E = 0.11$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.02$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.01$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.05$	E $\Delta E = 0.07$	FL5 $\Delta E = 0.05$	FL10 $\Delta E = 0.05$	FL3.3 $\Delta E = 0.05$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.04$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.05$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.05$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.05$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.10$	LED-V2 $\Delta E = 0.04$

PXEROY5R - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.149564	0.166522	0.192714	0.254034	0.303471	0.310638	0.330468	0.353028	0.370861	0.406962	0.469170
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.566929	0.679403	0.754200	0.778943	0.783541	0.788655	0.789400	0.785847	0.781686	0.789368	0.791585
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.797676	0.800595	0.801229	0.805186	0.804140	0.804121	0.805637	0.802437	0.800980	0.802096	0.803895
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.806478	0.803837	0.806714	0.807565	0.805666	0.809258	0.806740	0.808083			

2 Gaussians

Scaling factor: 198.27044904178058

Gaussians:

Weight	Mean		Covariance			
0.394053831	517.475024081	605.678853088	12568.369469428	-1645.706799477	-1645.706799477	14753.100887594
0.605946169	363.892385475	448.820422489	978.898358731	-77.474479581	-77.474479581	1004.679307628

4 Gaussians

Scaling factor: 196.06100118077902

Gaussians:

Weight	Mean		Covariance			
0.139340005	425.061667873	682.474199358	3861.507920045	-35.733613564	-35.733613564	5003.168633569
0.157782527	543.414912619	482.670372745	10016.587582944	-770.454053938	-770.454053938	4281.581772685
0.610038151	363.609901323	449.441589055	967.207318331	-78.827118120	-78.827118120	1047.521226439
0.092839316	620.715766641	702.306575685	4330.367047206	-236.244776449	-236.244776449	3797.050954922

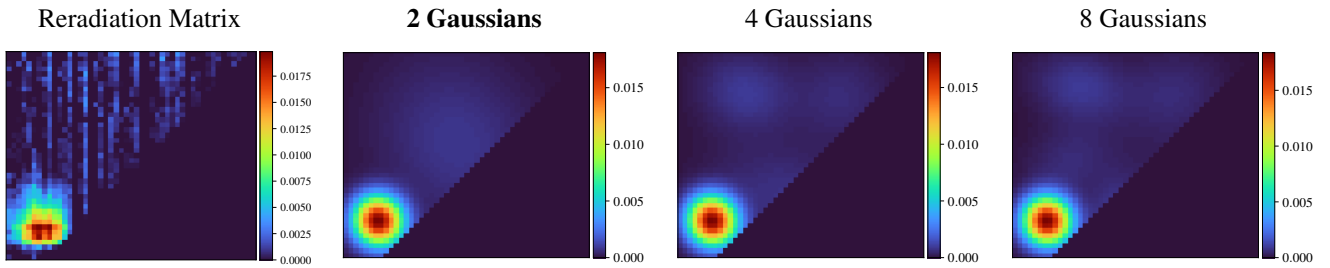
8 Gaussians

Scaling factor: 193.27556170136452

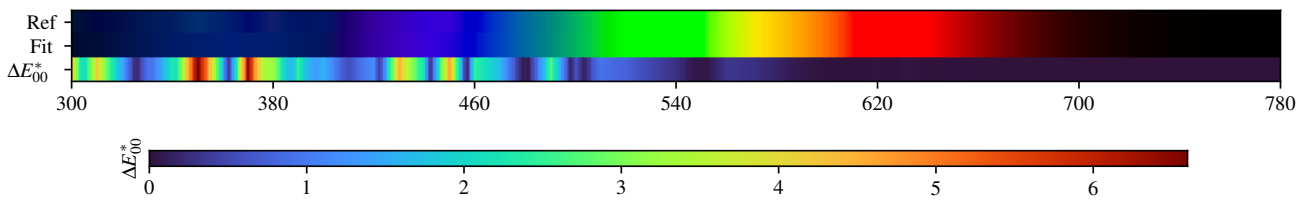
Gaussians:

Weight	Mean		Covariance			
0.077025817	416.514891595	730.403007145	3338.257843908	-154.147872548	-154.147872548	1154.885070629
0.067074012	632.953119336	586.155011983	2722.967087303	496.603034675	496.603034675	4958.038592924
0.461933909	362.995742285	436.371657435	931.067117711	-58.740346867	-58.740346867	460.840578395
0.056132651	612.100921196	747.830000427	4995.164620308	-265.256781730	-265.256781730	782.997927150
0.160646001	365.891202770	492.534984365	1024.689574967	-67.525741559	-67.525741559	657.282306081
0.081189228	446.512357652	611.456982286	4999.740788115	860.768861699	860.768861699	2392.654683268
0.055374029	487.813486742	461.618887557	923.094735842	778.849252767	778.849252767	2335.509792914
0.040624354	634.916395437	422.743769258	3738.023330545	477.116320311	477.116320311	1391.830621701

PXEROY5R - Weighted variational Bayesian inference - 2 Gaussians



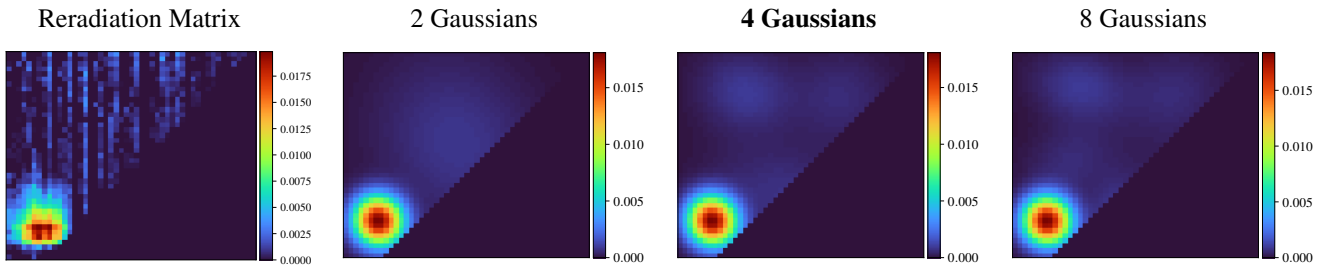
Fitted Material Under Monochromatic Illumination



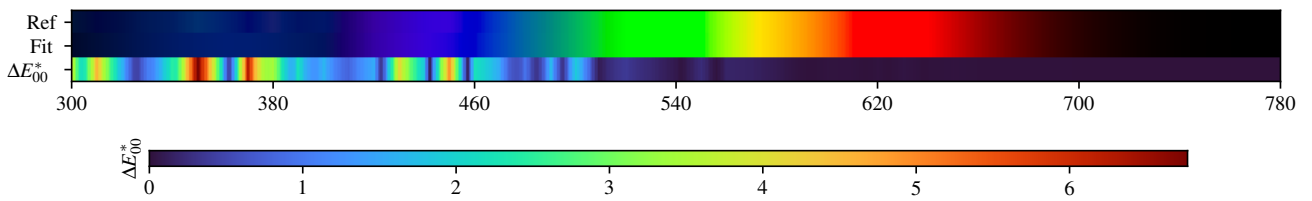
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.22$	FL2 $\Delta E = 0.17$	FL7 $\Delta E = 0.23$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.23$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.23$
B $\Delta E = 0.19$	D65 $\Delta E = 0.23$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.14$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.25$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.19$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.23$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.21$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.18$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.20$	LED-V2 $\Delta E = 0.17$

PXEROY5R - Weighted variational Bayesian inference - 4 Gaussians



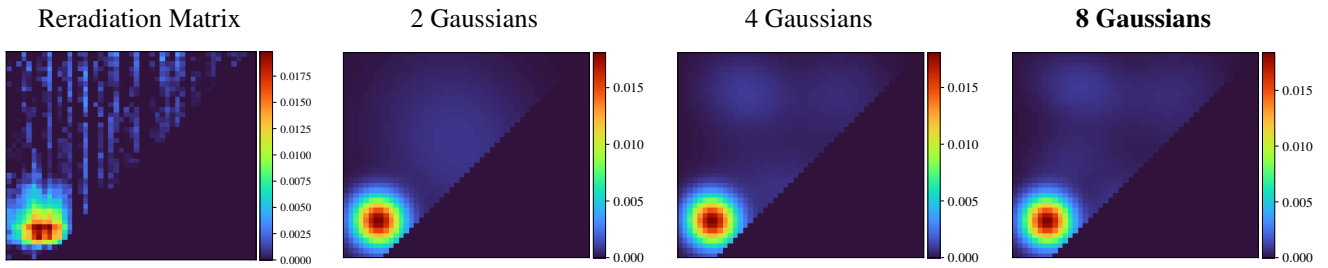
Fitted Material Under Monochromatic Illumination



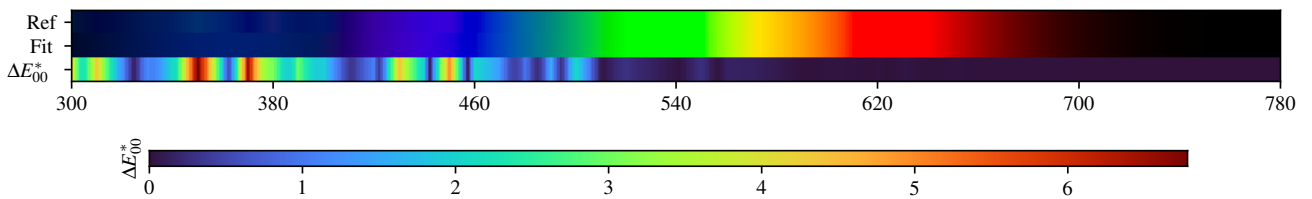
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.16$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.11$
B $\Delta E = 0.11$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.15$	D75 $\Delta E = 0.18$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.10$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.05$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.07$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.08$

PXEROY5R - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.09$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.07$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.07$	D65 $\Delta E = 0.09$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.10$	D75 $\Delta E = 0.11$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.07$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.06$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.05$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.05$

PXEROY5R - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.149564	0.166522	0.192714	0.254034	0.303471	0.310638	0.330468	0.353028	0.370861	0.406962	0.469170
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.566929	0.679403	0.754200	0.778943	0.783541	0.788655	0.789400	0.785847	0.781686	0.789368	0.791585
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.797676	0.800595	0.801229	0.805186	0.804140	0.804121	0.805637	0.802437	0.800980	0.802096	0.803895
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.806478	0.803837	0.806714	0.807565	0.805666	0.809258	0.806740	0.808083			

2 Gaussians max

Scaling factor: 198.98036949287885

Gaussians:

Weight	Mean		Covariance			
0.609482203	364.455705777	449.266928098	1064.137479480	-40.207939495	-40.207939495	1064.373257763
0.390517797	518.582116884	606.835908435	12545.456977352	-1769.815852840	-1769.815852840	14701.954522045

4 Gaussians max

Scaling factor: 196.64099008841885

Gaussians:

Weight	Mean		Covariance			
0.602513789	364.030158821	448.951676593	1036.911509979	-41.505706059	-41.505706059	1050.881507246
0.188889984	517.072894076	497.530411841	11713.921301249	-2380.028784075	-2380.028784075	5149.030185245
0.094744752	619.971267339	695.176289008	4613.170371517	57.428736221	57.428736221	4526.548146124
0.113851475	429.221857885	706.116367203	4137.481143574	-306.632467927	-306.632467927	3069.516000359

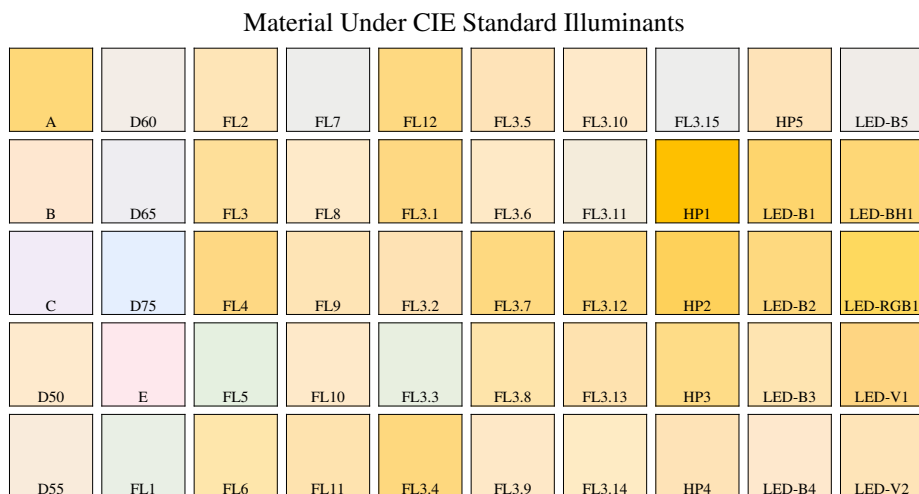
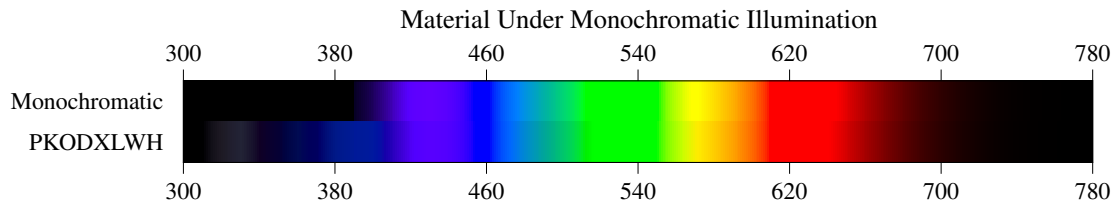
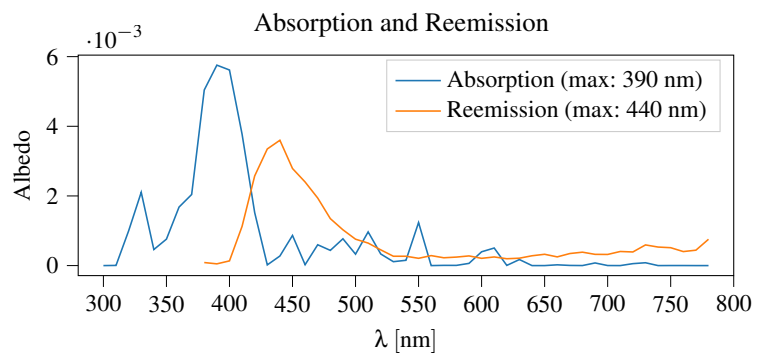
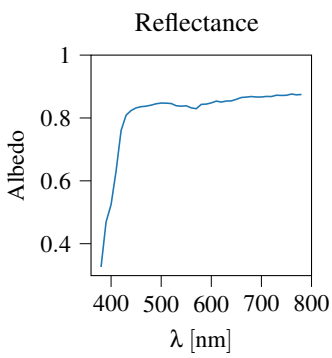
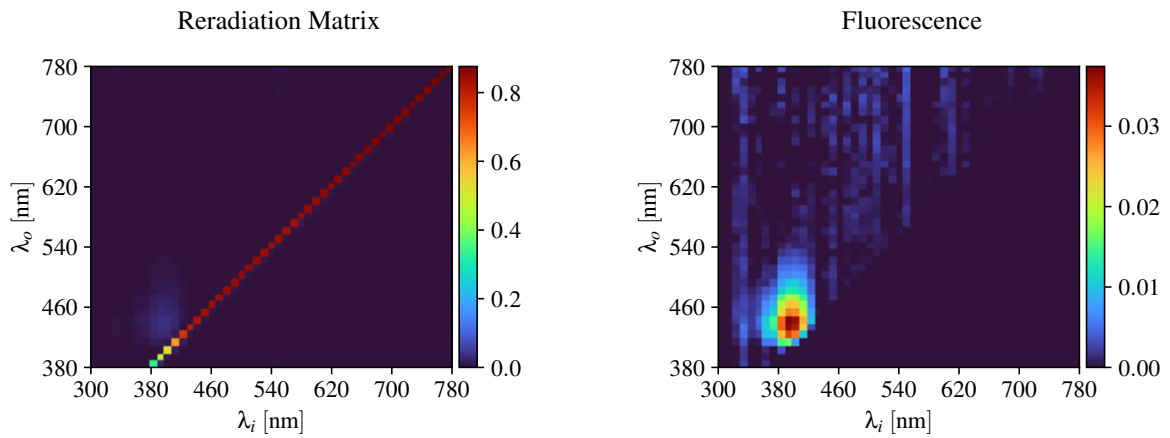
8 Gaussians max

Scaling factor: 195.9493866971126

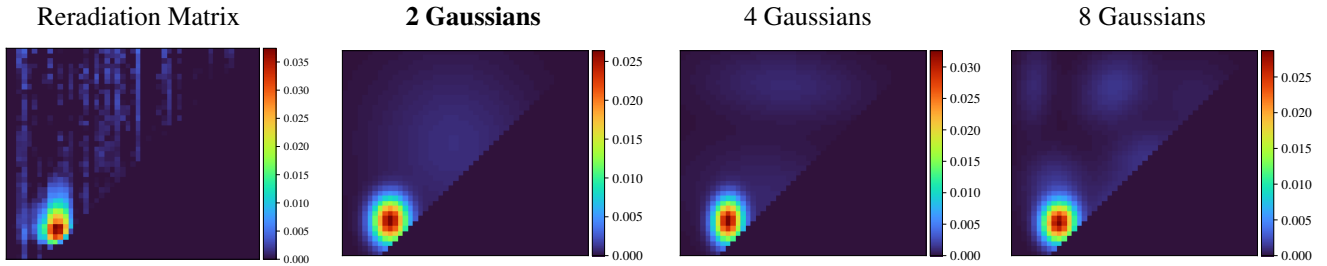
Gaussians:

Weight	Mean		Covariance			
0.603164080	363.980566266	448.743386260	1019.636766527	-19.667555566	-19.667555566	1017.156768182
0.049741429	487.813473633	462.720799997	1364.528643065	644.004937813	644.004937813	2980.239647391
0.083674650	624.764613446	486.563742949	3986.883050080	-433.130512879	-433.130512879	5692.291020374
0.070466511	411.162877469	567.081279396	3964.203646254	593.601219200	593.601219200	2843.885095925
0.092726545	613.157181101	701.637446858	5064.772970641	385.308718695	385.308718695	3926.938617095
0.099165899	427.328207732	716.372349231	4085.097339148	-397.769017111	-397.769017111	2354.912349781

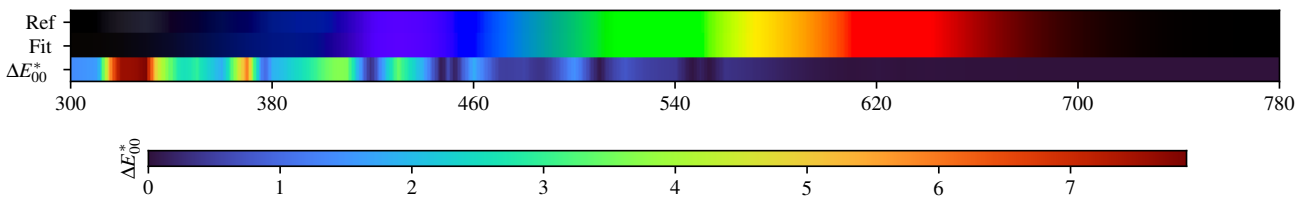
3.70. PKODXLWH



PKODXLWH - Weighted Expectation-Maximization - 2 Gaussians



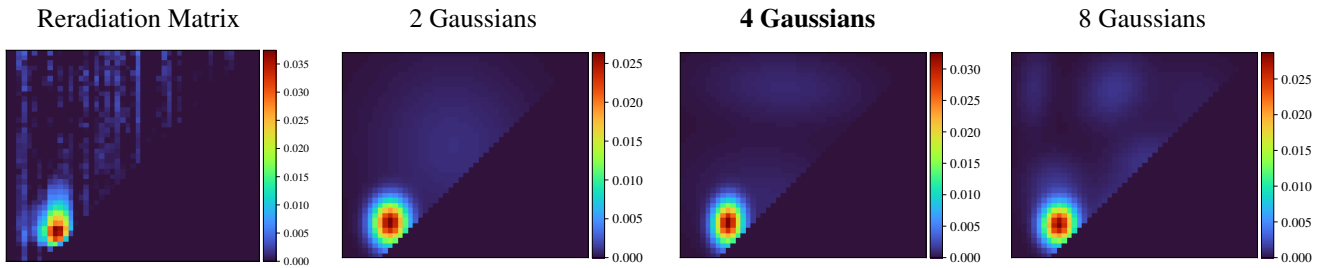
Fitted Material Under Monochromatic Illumination



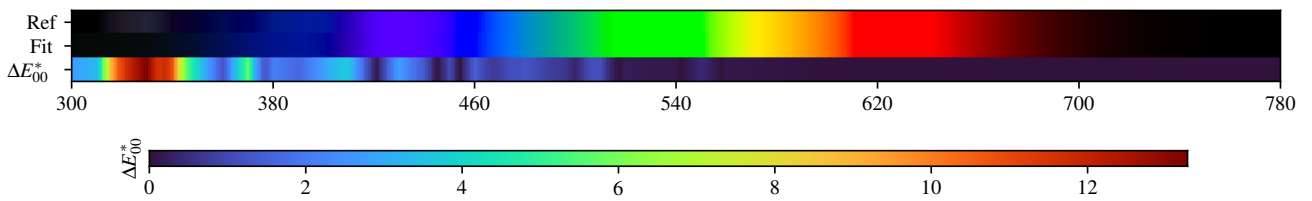
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.55$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.55$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.19$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.74$	HP5 $\Delta E = 0.22$	LED-B5 $\Delta E = 0.50$
B $\Delta E = 0.31$	D65 $\Delta E = 0.66$	FL3 $\Delta E = 0.17$	FL8 $\Delta E = 0.28$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.26$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.55$	D75 $\Delta E = 0.58$	FL4 $\Delta E = 0.13$	FL9 $\Delta E = 0.19$	FL3.2 $\Delta E = 0.20$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.35$	E $\Delta E = 0.56$	FL5 $\Delta E = 0.47$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.48$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.17$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.44$	FL1 $\Delta E = 0.50$	FL6 $\Delta E = 0.23$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.25$	HP4 $\Delta E = 0.26$	LED-B4 $\Delta E = 0.35$	LED-V2 $\Delta E = 0.27$

PKODXLWH - Weighted Expectation-Maximization - 4 Gaussians



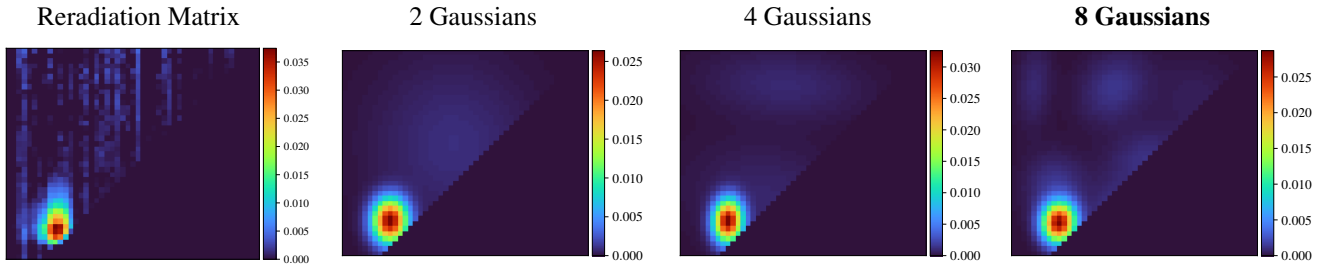
Fitted Material Under Monochromatic Illumination



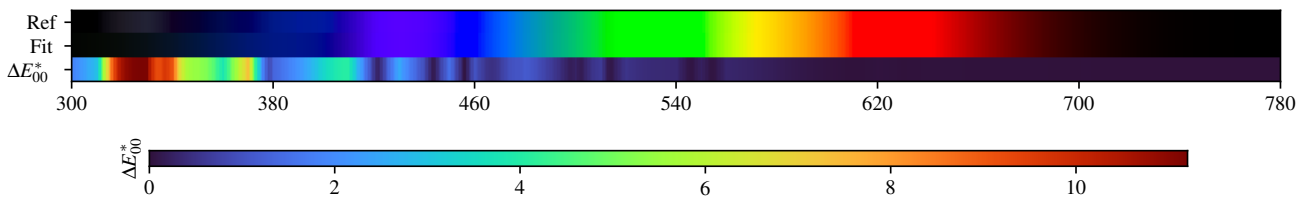
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.36$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.39$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.33$	FL3.15 $\Delta E = 0.43$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.33$
B $\Delta E = 0.21$	D65 $\Delta E = 0.40$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.28$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.23$	FL3.11 $\Delta E = 0.39$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.33$	D75 $\Delta E = 0.38$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.26$	E $\Delta E = 0.24$	FL5 $\Delta E = 0.27$	FL10 $\Delta E = 0.31$	FL3.3 $\Delta E = 0.23$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.32$	FL1 $\Delta E = 0.31$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.31$	HP4 $\Delta E = 0.03$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.15$

PKODXLWH - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.35$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.29$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.54$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.08$
B $\Delta E = 0.20$	D65 $\Delta E = 0.38$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.14$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.22$	D75 $\Delta E = 0.37$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.22$	E $\Delta E = 0.32$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.16$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.28$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.09$	LED-V2 $\Delta E = 0.19$

PKODXLWH - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.325958	0.468883	0.524287	0.631372	0.760412	0.808940	0.823736	0.832136	0.835863	0.837575	0.840820
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.845198	0.847453	0.847061	0.845967	0.838929	0.837531	0.838687	0.832115	0.829428	0.843232	0.844127
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.848016	0.853617	0.850682	0.853813	0.854341	0.859315	0.865168	0.866372	0.868203	0.866653	0.866721
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.868547	0.868211	0.872415	0.871649	0.872191	0.876107	0.873603	0.874723			

2 Gaussians

Scaling factor: 195.13090280525677

Gaussians:

Weight	Mean		Covariance			
0.570531205	389.558108892	445.396618530	527.949763028	9.041405545	9.041405545	849.014772044
0.429468795	514.747012985	596.585921742	11908.526525474	-159.148683262	-159.148683262	13846.630126730

4 Gaussians

Scaling factor: 207.61739491833544

Gaussians:

Weight	Mean		Covariance			
0.521992886	389.975898533	444.981417335	359.914880486	21.196338075	21.196338075	780.578656042
0.163204400	503.045914298	715.501817337	12062.997792427	-697.731619012	-697.731619012	2225.322395523
0.092408254	569.424667516	558.839169970	7356.500843800	7343.489231190	7343.489231190	7337.958940171
0.222394460	472.310982777	492.980694092	12119.259182295	-1233.493998694	-1233.493998694	5393.584843862

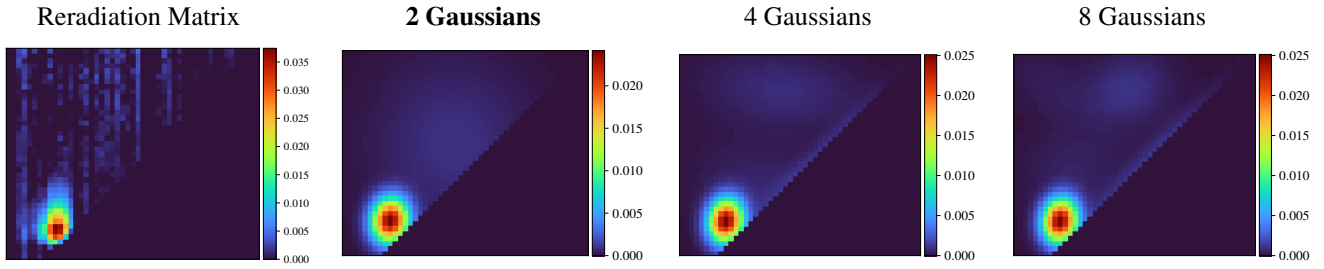
8 Gaussians

Scaling factor: 193.62885752599843

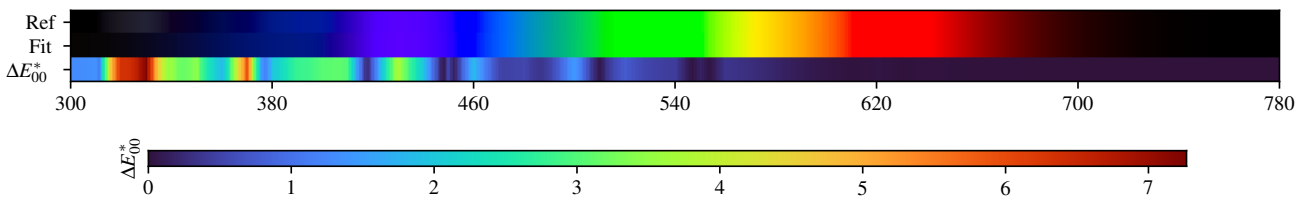
Gaussians:

Weight	Mean		Covariance			
0.530050993	389.390851074	441.834295291	477.213145426	22.671185322	22.671185322	699.216674612
0.095742080	497.473587539	709.686766435	1987.521496986	427.267730672	427.267730672	2360.626438314
0.073380097	499.704375334	452.893668424	1103.436784661	-31.431486660	-31.431486660	1888.308557418
0.038201544	340.675471260	714.285661582	526.461505171	198.935896896	198.935896896	3268.640361143
0.083885203	559.324134955	567.911612742	2736.299474035	485.237851077	485.237851077	1732.536698293
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0.028549546	640.219003612	428.767622074	6078.220614970	852.076544494	852.076544494	1466.444144460
0.061193083	660.006304410	692.389393091	4432.463990290	-265.779394240	-265.779394240	3023.775093125

PKODXLWH - Weighted variational Bayesian inference - 2 Gaussians



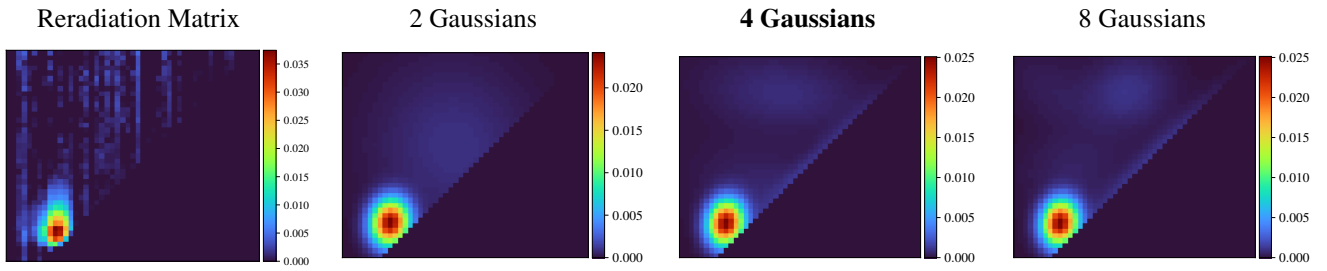
Fitted Material Under Monochromatic Illumination



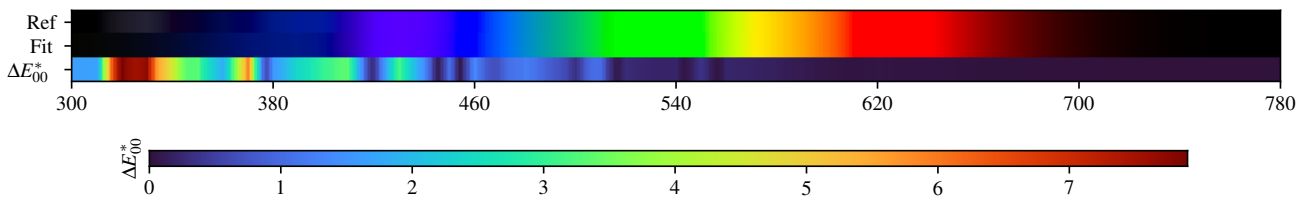
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.55$	FL2 $\Delta E = 0.21$	FL7 $\Delta E = 0.52$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.18$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.82$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.47$
B $\Delta E = 0.31$	D65 $\Delta E = 0.67$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.26$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.25$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.52$	D75 $\Delta E = 0.55$	FL4 $\Delta E = 0.13$	FL9 $\Delta E = 0.19$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.33$	E $\Delta E = 0.71$	FL5 $\Delta E = 0.44$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.45$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.17$	HP3 $\Delta E = 0.16$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.43$	FL1 $\Delta E = 0.46$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.13$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.24$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.35$	LED-V2 $\Delta E = 0.26$

PKODXLWH - Weighted variational Bayesian inference - 4 Gaussians



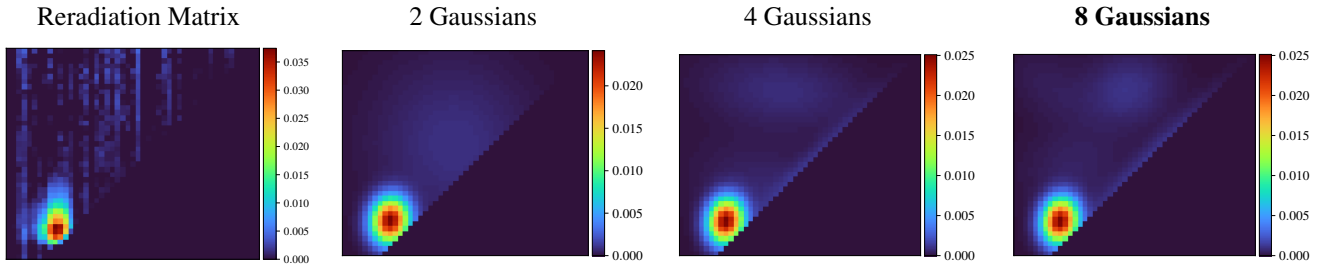
Fitted Material Under Monochromatic Illumination



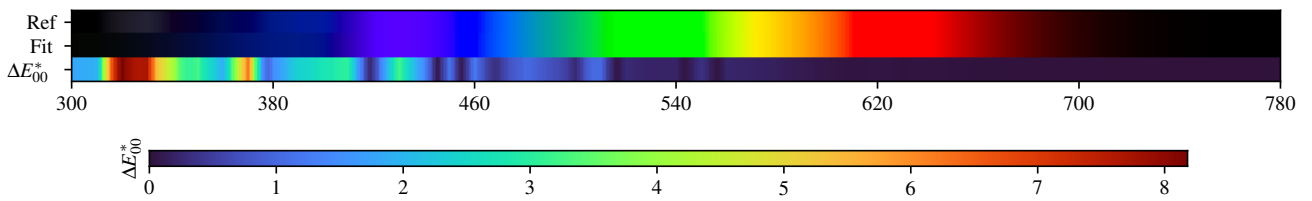
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.49$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.44$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.75$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.29$	D65 $\Delta E = 0.53$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.26$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.21$	FL3.11 $\Delta E = 0.27$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.37$	D75 $\Delta E = 0.54$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.31$	E $\Delta E = 0.45$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.23$	FL3.3 $\Delta E = 0.20$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.41$	FL1 $\Delta E = 0.28$	FL6 $\Delta E = 0.09$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.26$	HP4 $\Delta E = 0.10$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.20$

PKODXLWH - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.29$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.24$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.58$	HP5 $\Delta E = 0.07$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.15$	D65 $\Delta E = 0.32$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.18$	D75 $\Delta E = 0.32$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.17$	E $\Delta E = 0.39$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.23$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.10$	LED-B4 $\Delta E = 0.15$	LED-V2 $\Delta E = 0.14$

PKODXLWH - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.325958	0.468883	0.524287	0.631372	0.760412	0.808940	0.823736	0.832136	0.835863	0.837575	0.840820
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.845198	0.847453	0.847061	0.845967	0.838929	0.837531	0.838687	0.832115	0.829428	0.843232	0.844127
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.848016	0.853617	0.850682	0.853813	0.854341	0.859315	0.865168	0.866372	0.868203	0.866653	0.866721
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.868547	0.868211	0.872415	0.871649	0.872191	0.876107	0.873603	0.874723			

2 Gaussians max

Scaling factor: 195.67032610477887

Gaussians:

Weight	Mean		Covariance			
0.573139984	389.965574143	445.743828094	605.936730294	48.234629884	48.234629884	906.061508605
0.426860016	515.171848783	597.119546473	11909.982384649	-208.039928146	-208.039928146	13806.459732958

4 Gaussians max

Scaling factor: 199.03346856630915

Gaussians:

Weight	Mean		Covariance			
0.562111440	389.457186058	445.525254401	567.047627613	57.823934070	57.823934070	896.665445182
0.178936827	487.631883619	494.661730810	11336.493448917	-2685.802822265	-2685.802822265	5273.906588975
0.086633133	581.890796386	570.538773253	6808.538290168	6471.818129829	6471.818129829	6924.042848108
0.172318600	504.119335132	708.654418525	11883.926993659	-960.980160117	-960.980160117	2881.782440418

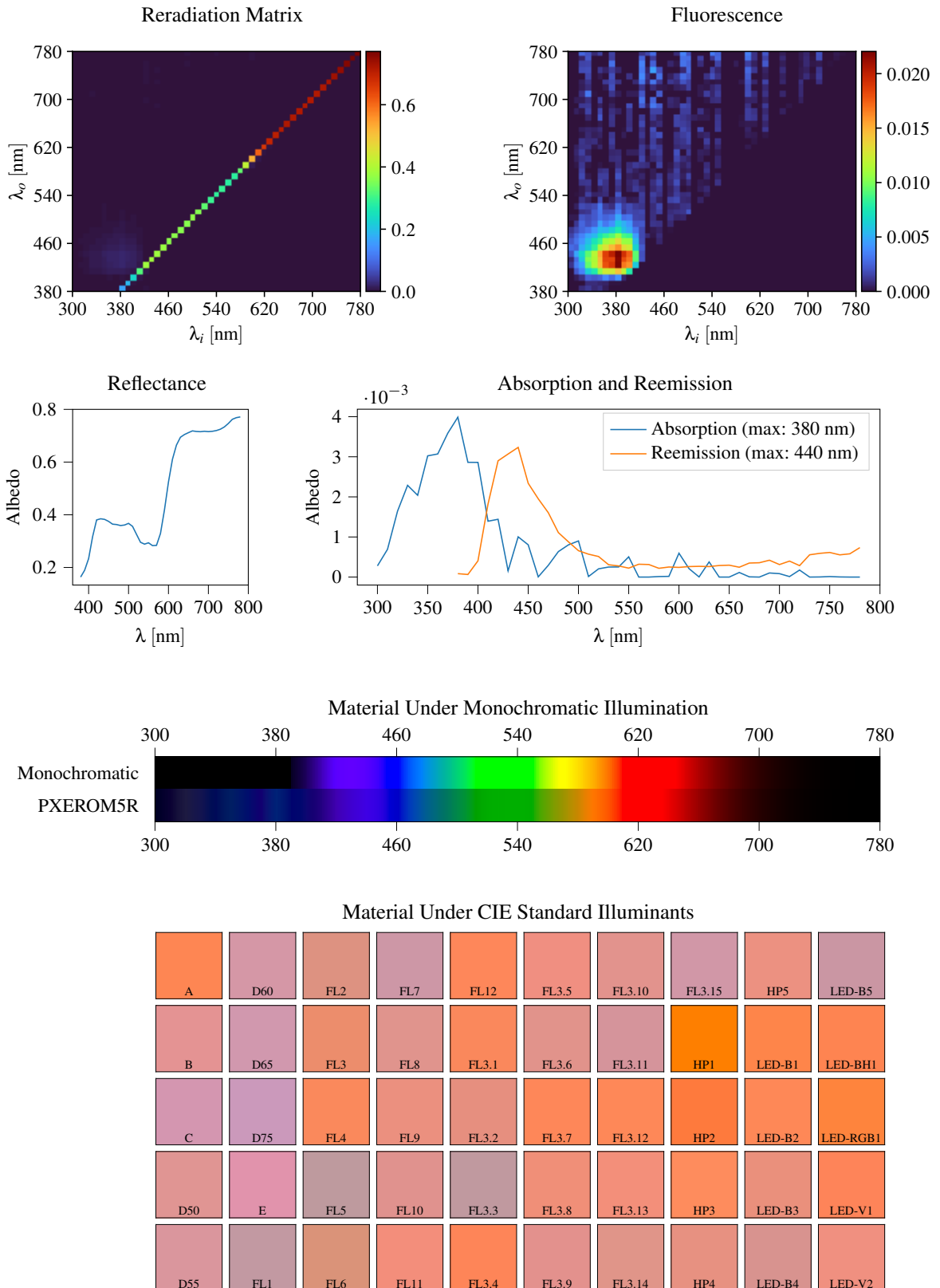
8 Gaussians max

Scaling factor: 198.86314496683303

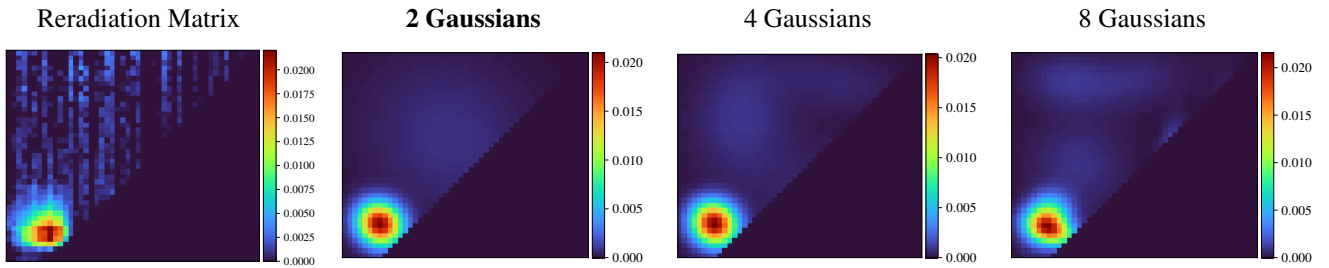
Gaussians:

Weight	Mean		Covariance			
0.562392961	389.481123633	445.959247126	562.776060125	63.230968683	63.230968683	905.444954362
0.096574209	525.806670435	443.456949390	10486.296362799	-431.366095390	-431.366095390	2255.723933039
0.112489318	585.520489810	574.216768027	7403.766283279	7060.088995579	7060.088995579	7664.263949590
0.062944799	415.355475785	559.972695243	5539.625956702	479.759448765	479.759448765	2412.688605812
0.008229070	678.615967412	592.290999399	9602.657057550	1297.053817538	1297.053817538	4536.519404266
0.116110409	524.136629471	710.245602120	3695.394210218	423.463119588	423.463119588	2696.335604277
0.041161613	365.629183136	716.138755916	3186.735690225	-1183.526388799	-1183.526388799	3260.342095260

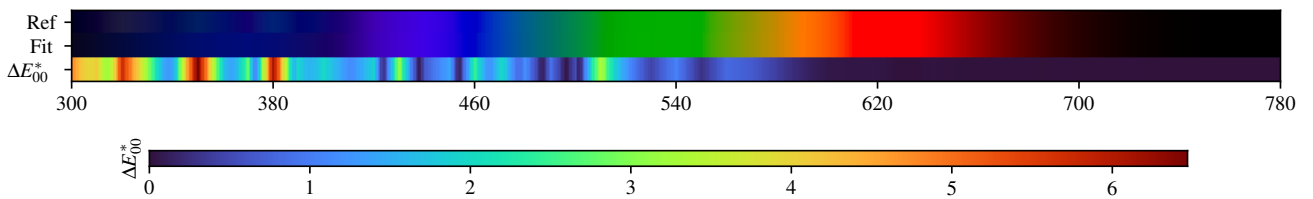
3.71. PXEROM5R



PXEROM5R - Weighted Expectation-Maximization - 2 Gaussians



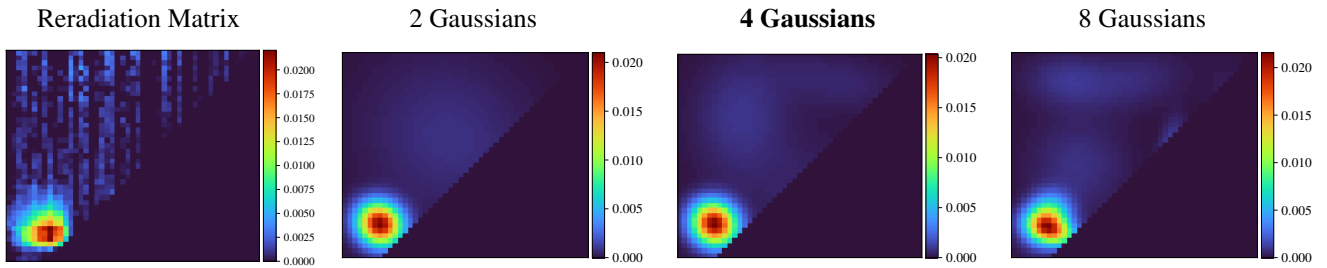
Fitted Material Under Monochromatic Illumination



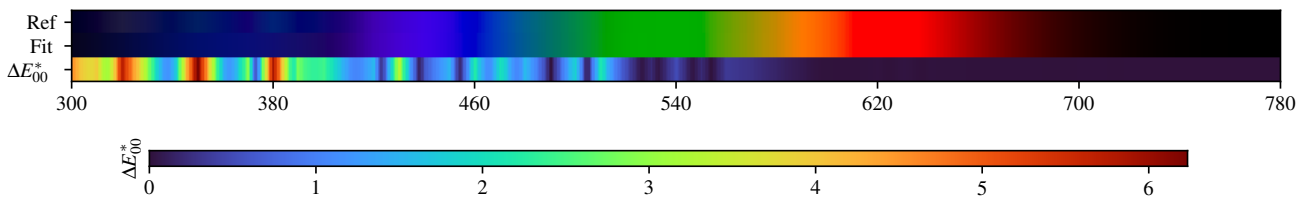
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.17$	D60 $\Delta E = 0.38$	FL2 $\Delta E = 0.28$	FL7 $\Delta E = 0.38$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.21$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.40$	HP5 $\Delta E = 0.26$	LED-B5 $\Delta E = 0.40$
B $\Delta E = 0.27$	D65 $\Delta E = 0.41$	FL3 $\Delta E = 0.23$	FL8 $\Delta E = 0.26$	FL3.1 $\Delta E = 0.18$	FL3.6 $\Delta E = 0.25$	FL3.11 $\Delta E = 0.29$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.36$	D75 $\Delta E = 0.46$	FL4 $\Delta E = 0.19$	FL9 $\Delta E = 0.22$	FL3.2 $\Delta E = 0.24$	FL3.7 $\Delta E = 0.16$	FL3.12 $\Delta E = 0.16$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.17$
D50 $\Delta E = 0.31$	E $\Delta E = 0.33$	FL5 $\Delta E = 0.53$	FL10 $\Delta E = 0.25$	FL3.3 $\Delta E = 0.48$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.20$	HP3 $\Delta E = 0.21$	LED-B3 $\Delta E = 0.23$	LED-V1 $\Delta E = 0.18$
D55 $\Delta E = 0.34$	FL1 $\Delta E = 0.48$	FL6 $\Delta E = 0.29$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.25$	HP4 $\Delta E = 0.29$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.25$

PXEROM5R - Weighted Expectation-Maximization - 4 Gaussians



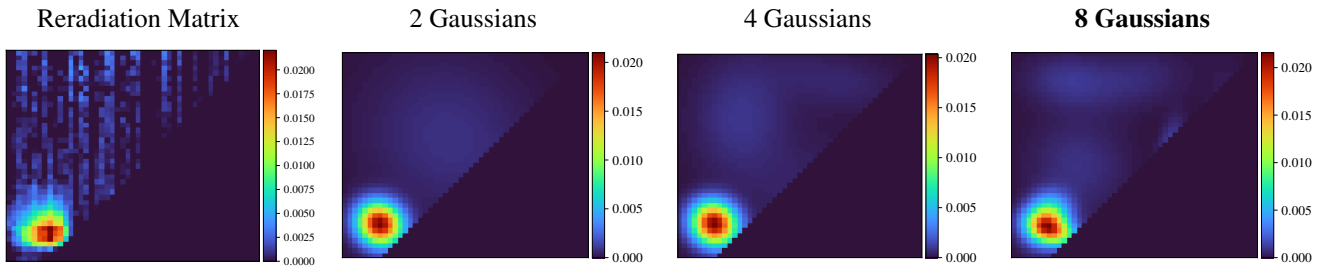
Fitted Material Under Monochromatic Illumination



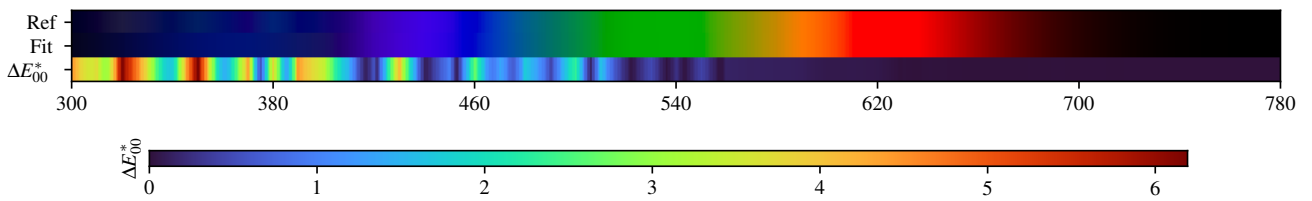
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.30$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.21$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.23$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.20$
B $\Delta E = 0.19$	D65 $\Delta E = 0.33$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.24$	D75 $\Delta E = 0.38$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.25$	E $\Delta E = 0.25$	FL5 $\Delta E = 0.30$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.27$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.27$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.20$

PXEROM5R - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.06$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.07$	LED-B5 $\Delta E = 0.06$
B $\Delta E = 0.09$	D65 $\Delta E = 0.06$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.06$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.13$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.04$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.04$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.11$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.04$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.06$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.05$	LED-V2 $\Delta E = 0.11$

PXEROM5R - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.163623	0.189465	0.233656	0.317037	0.380354	0.384779	0.382519	0.374937	0.364354	0.362898	0.359081
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.361091	0.367368	0.356092	0.325603	0.295559	0.288592	0.293614	0.282980	0.283851	0.329038	0.418659
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.524067	0.610516	0.664359	0.694194	0.704418	0.711591	0.718307	0.716148	0.715222	0.716868	0.715498
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.716784	0.719607	0.724639	0.733288	0.746474	0.762252	0.768475	0.771320			

2 Gaussians

Scaling factor: 187.98817299546482

Gaussians:

Weight	Mean		Covariance			
0.420606733	507.166344385	613.610669538	14531.662002932	-1468.892969699	-1468.892969699	13823.672173577
0.579393267	369.231585754	443.032598443	859.711490656	-70.048957785	-70.048957785	799.435079212

4 Gaussians

Scaling factor: 183.94531494065376

Gaussians:

Weight	Mean		Covariance			
0.074763703	614.165987927	729.331967650	8277.590907839	-1121.100227336	-1121.100227336	1783.464844595
0.584150898	369.176929465	443.380048104	864.983145526	-71.070725927	-71.070725927	819.654702054
0.153872544	564.931004776	505.506598631	11666.733559539	770.598539774	770.598539774	7045.770397773
0.187212856	420.634281566	659.500039722	4381.924483643	200.352910544	200.352910544	7041.738111604

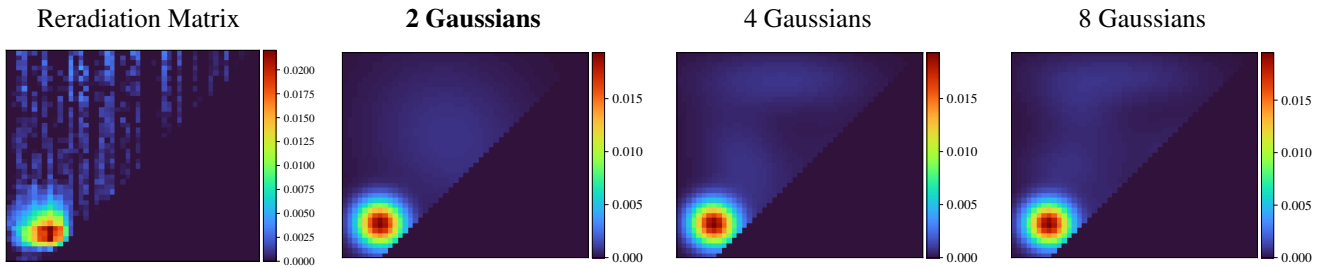
8 Gaussians

Scaling factor: 184.02296786321375

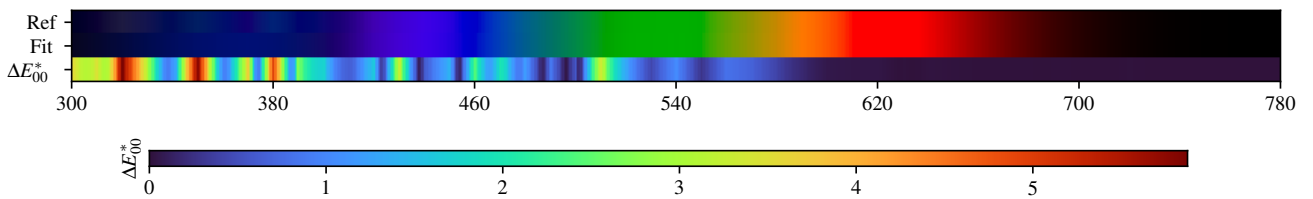
Gaussians:

Weight	Mean		Covariance			
0.080551979	537.461088941	727.919655628	5494.480134957	690.729732335	690.729732335	1782.614301827
0.214248819	377.651861590	429.164012687	1022.373227750	-247.012934520	-247.012934520	386.300634086
0.033365842	610.585962904	592.776928635	289.942434429	269.443641435	269.443641435	1681.857281603
0.073101659	402.747382273	729.097413188	3317.568394785	-82.782627370	-82.782627370	1369.024154664
0.035501444	724.619671476	656.805974832	1046.096881207	-207.814607457	-207.814607457	6773.296599299
0.361932618	364.813168462	450.136597026	759.901871236	105.612036900	105.612036900	866.033423535
0.060674560	581.848203040	428.587134514	11457.960561137	143.860925745	143.860925745	1345.045696568
0.140623080	427.827527425	560.917079125	4652.464334396	-145.301529681	-145.301529681	4132.401364958

PXEROM5R - Weighted variational Bayesian inference - 2 Gaussians



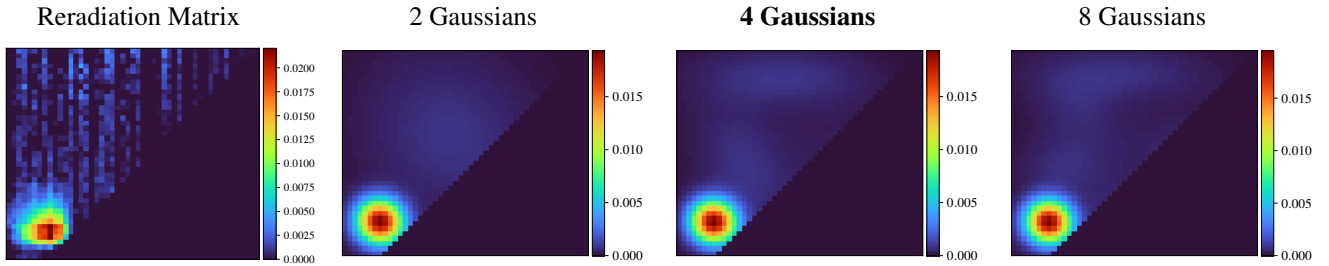
Fitted Material Under Monochromatic Illumination



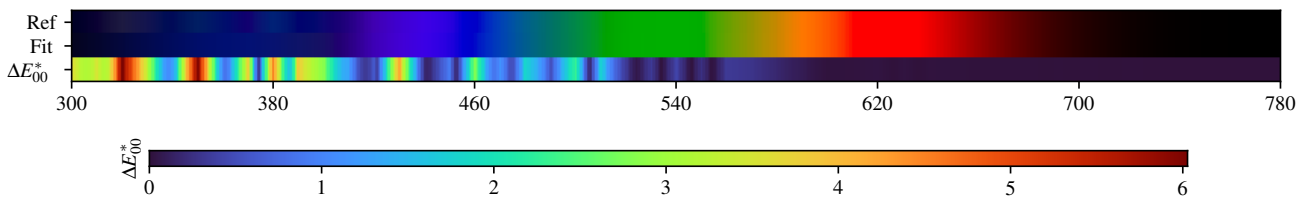
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.17$	D60 $\Delta E = 0.33$	FL2 $\Delta E = 0.28$	FL7 $\Delta E = 0.35$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.20$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.38$	HP5 $\Delta E = 0.29$	LED-B5 $\Delta E = 0.39$
B $\Delta E = 0.26$	D65 $\Delta E = 0.35$	FL3 $\Delta E = 0.23$	FL8 $\Delta E = 0.25$	FL3.1 $\Delta E = 0.18$	FL3.6 $\Delta E = 0.25$	FL3.11 $\Delta E = 0.29$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.33$	D75 $\Delta E = 0.38$	FL4 $\Delta E = 0.19$	FL9 $\Delta E = 0.22$	FL3.2 $\Delta E = 0.23$	FL3.7 $\Delta E = 0.16$	FL3.12 $\Delta E = 0.16$	HP2 $\Delta E = 0.15$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.17$
D50 $\Delta E = 0.28$	E $\Delta E = 0.27$	FL5 $\Delta E = 0.50$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.46$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.20$	HP3 $\Delta E = 0.22$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.23$
D55 $\Delta E = 0.30$	FL1 $\Delta E = 0.45$	FL6 $\Delta E = 0.29$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.25$	HP4 $\Delta E = 0.32$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.29$

PXEROM5R - Weighted variational Bayesian inference - 4 Gaussians



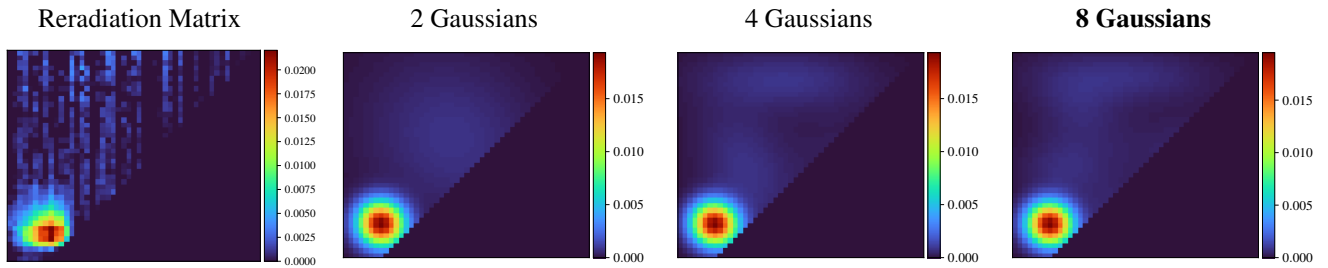
Fitted Material Under Monochromatic Illumination



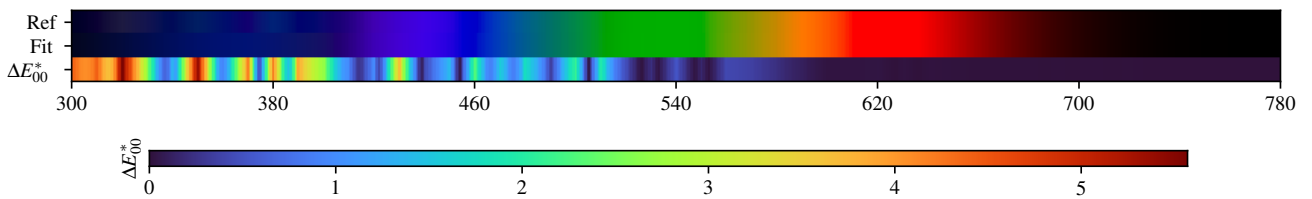
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.04$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.03$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.03$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.11$

PXEROM5R - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.14$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.16$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.12$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.12$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.14$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.14$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.15$	LED-V2 $\Delta E = 0.17$

PXEROM5R - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.163623	0.189465	0.233656	0.317037	0.380354	0.384779	0.382519	0.374937	0.364354	0.362898	0.359081
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.361091	0.367368	0.356092	0.325603	0.295559	0.288592	0.293614	0.282980	0.283851	0.329038	0.418659
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.524067	0.610516	0.664359	0.694194	0.704418	0.711591	0.718307	0.716148	0.715222	0.716868	0.715498
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.716784	0.719607	0.724639	0.733288	0.746474	0.762252	0.768475	0.771320			

2 Gaussians max

Scaling factor: 188.56968188384667

Gaussians:

Weight	Mean		Covariance			
0.583357554	369.744819354	443.583030838	942.657941664	-31.323828112	-31.323828112	868.671605264
0.416642446	508.286711926	614.872370400	14534.536080069	-1604.727210472	-1604.727210472	13753.575054908

4 Gaussians max

Scaling factor: 182.82906256757

Gaussians:

Weight	Mean		Covariance			
0.569121850	368.869825958	442.866695829	908.737070267	-31.500615604	-31.500615604	815.452181701
0.178390160	428.312656763	549.948482255	4466.836262194	-1996.950113197	-1996.950113197	8967.529754015
0.107369419	628.373441338	547.403350760	7187.241037898	-1253.104053140	-1253.104053140	9536.188471561
0.145118571	507.958511775	730.662992724	13582.168923162	-159.373115053	-159.373115053	1681.883146624

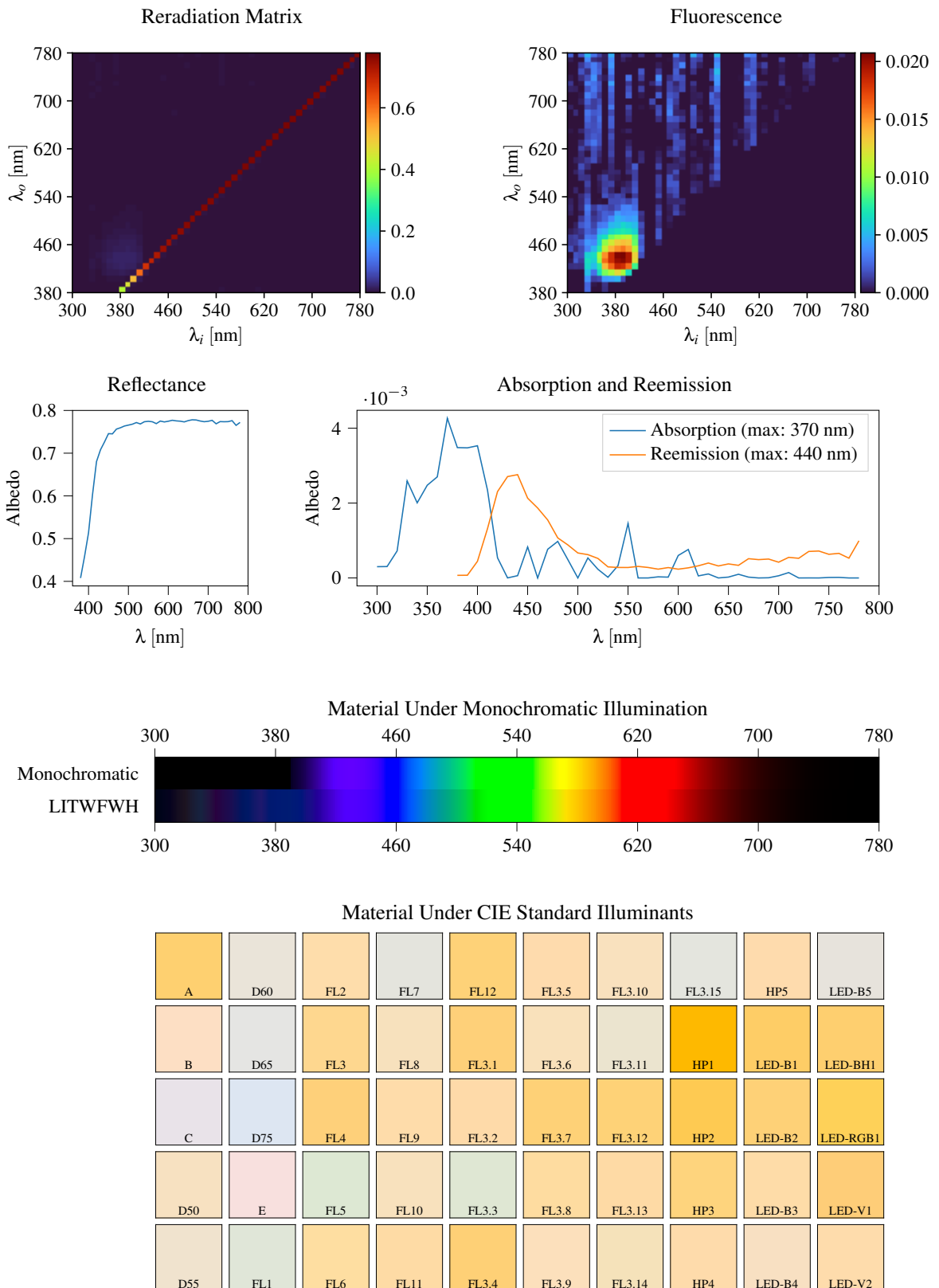
8 Gaussians max

Scaling factor: 183.63424682294485

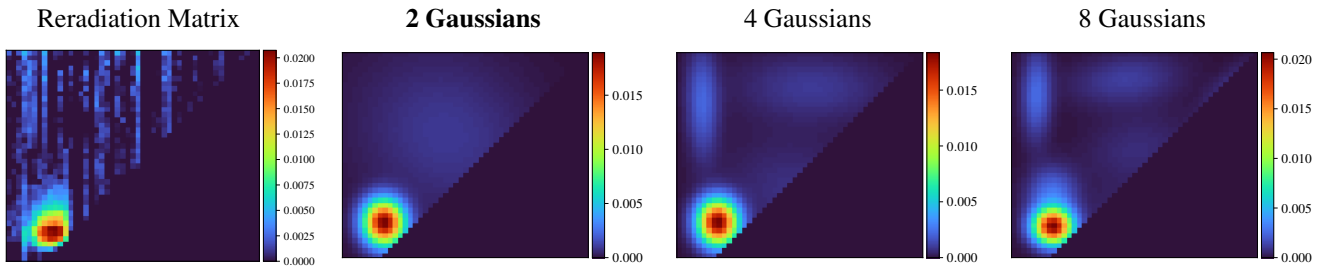
Gaussians:

Weight	Mean		Covariance			
0.572182848	369.194246282	442.800531399	906.596338475	-15.467475499	-15.467475499	806.612850887
0.043949715	484.369144042	442.970229529	1613.272855222	226.936491399	226.936491399	3001.956312727
0.043389375	647.670431366	451.835412541	6891.247953457	-910.748844226	-910.748844226	3230.603496921
0.071417428	396.055831336	549.488250268	3424.069441725	-70.276549623	-70.276549623	2346.078618295
0.063283100	619.036025646	600.121955718	7194.441529260	1460.089683394	1460.089683394	2670.446164579
0.085480695	427.970559353	669.768404684	4662.417373226	-1454.283018501	-1454.283018501	3885.234179841
0.119303357	526.243957787	736.515799311	13248.021904404	-107.077724346	-107.077724346	1468.649075166

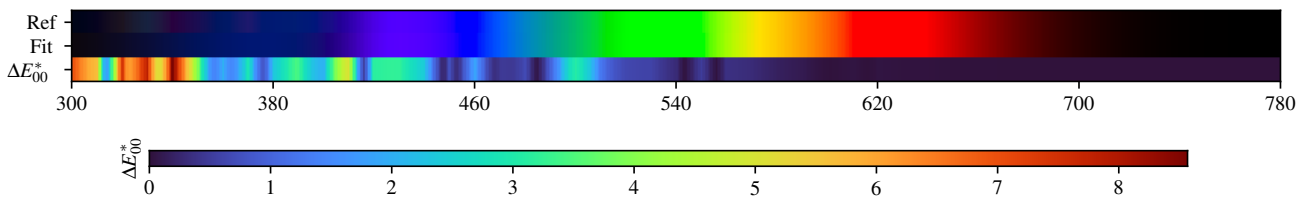
3.72. LITFWFH



LITFWFH - Weighted Expectation-Maximization - 2 Gaussians



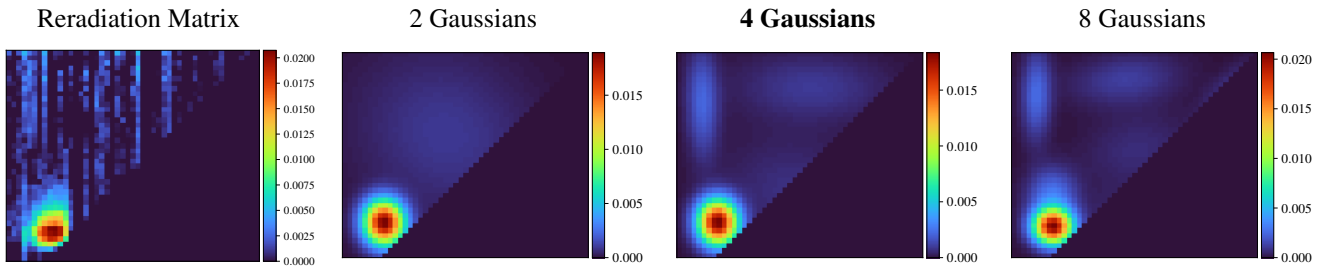
Fitted Material Under Monochromatic Illumination



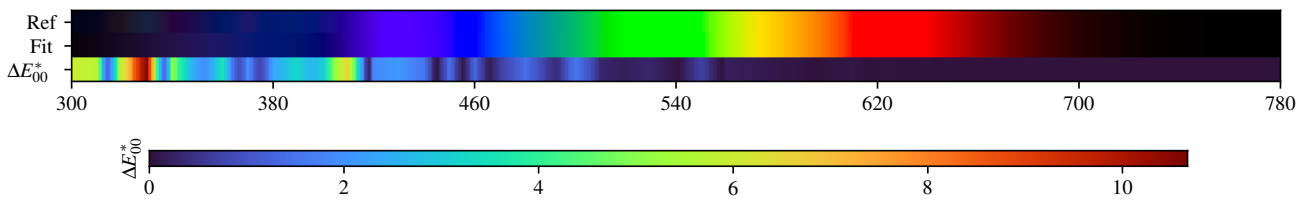
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.67$	FL2 $\Delta E = 0.24$	FL7 $\Delta E = 0.62$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.20$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.65$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.67$
B $\Delta E = 0.39$	D65 $\Delta E = 0.76$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.34$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.33$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.67$	D75 $\Delta E = 0.76$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.20$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.44$	E $\Delta E = 0.51$	FL5 $\Delta E = 0.51$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.53$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.57$	FL1 $\Delta E = 0.55$	FL6 $\Delta E = 0.23$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.30$	HP4 $\Delta E = 0.31$	LED-B4 $\Delta E = 0.42$	LED-V2 $\Delta E = 0.30$

LITWFWH - Weighted Expectation-Maximization - 4 Gaussians



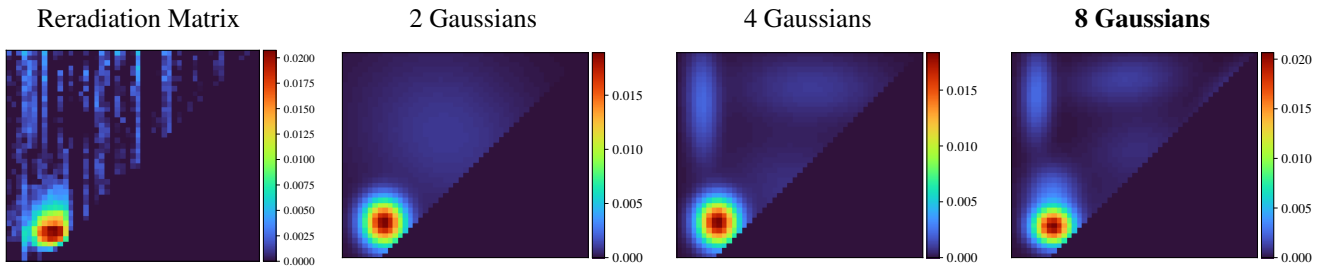
Fitted Material Under Monochromatic Illumination



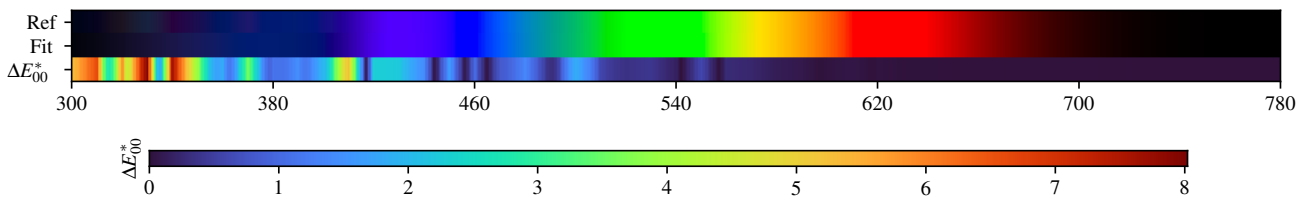
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.19$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.34$	FL3.15 $\Delta E = 0.23$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.11$
B $\Delta E = 0.08$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.01$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.42$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.12$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.07$	E $\Delta E = 0.04$	FL5 $\Delta E = 0.13$	FL10 $\Delta E = 0.35$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.07$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.22$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.30$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.05$	LED-B4 $\Delta E = 0.06$	LED-V2 $\Delta E = 0.04$

LITWFWH - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.06$	FL12 $\Delta E = 0.10$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.13$	HP5 $\Delta E = 0.09$	LED-B5 $\Delta E = 0.20$
B $\Delta E = 0.05$	D65 $\Delta E = 0.04$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.04$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.23$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.06$	D75 $\Delta E = 0.03$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.05$	E $\Delta E = 0.06$	FL5 $\Delta E = 0.06$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.05$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.06$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.17$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.14$	LED-V2 $\Delta E = 0.06$

LITWFWH - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.407768	0.458173	0.513684	0.602865	0.680309	0.707939	0.726156	0.745721	0.745236	0.756348	0.759502
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.763544	0.765678	0.767859	0.771661	0.768371	0.773573	0.774593	0.773522	0.769155	0.775187	0.773124
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.774737	0.776986	0.775597	0.774893	0.773206	0.776211	0.778125	0.777669	0.775297	0.773644	0.774629
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.776851	0.768788	0.773914	0.773575	0.773829	0.776131	0.765119	0.772027			

2 Gaussians

Scaling factor: 190.99177441855733

Gaussians:

Weight	Mean	Covariance				
0.517712659	377.716859307	445.575752617	743.556246573	-17.777855528	-17.777855528	920.930370824
0.482287341	499.085180099	622.429884218	15435.322604014	-1761.940190664	-1761.940190664	13647.143963276

4 Gaussians

Scaling factor: 184.36607285908516

Gaussians:

Weight	Mean	Covariance				
0.517154563	377.232044284	445.827327254	724.280378490	-13.591100143	-13.591100143	934.157420112
0.201480589	527.869383983	508.885530656	9937.061312571	-805.512428022	-805.512428022	5952.468529231
0.109742687	346.861717010	684.049937642	449.349251503	-84.997864321	-84.997864321	5203.146847378
0.171622161	563.697714237	714.992688824	11211.097378364	-206.045759499	-206.045759499	2237.241196359

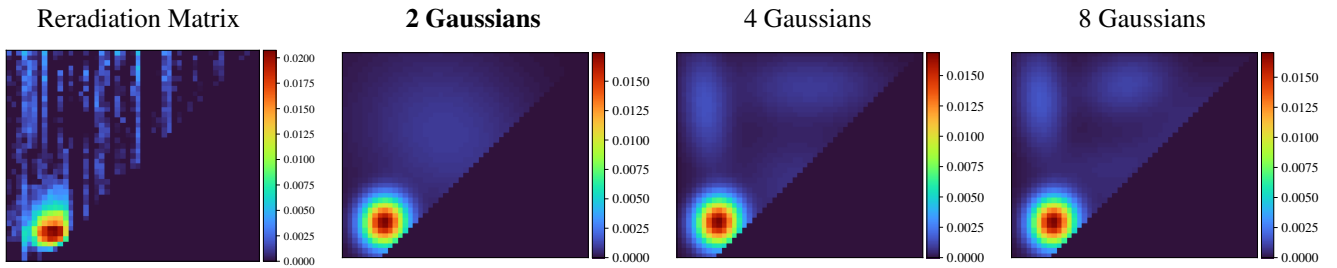
8 Gaussians

Scaling factor: 182.85561071191623

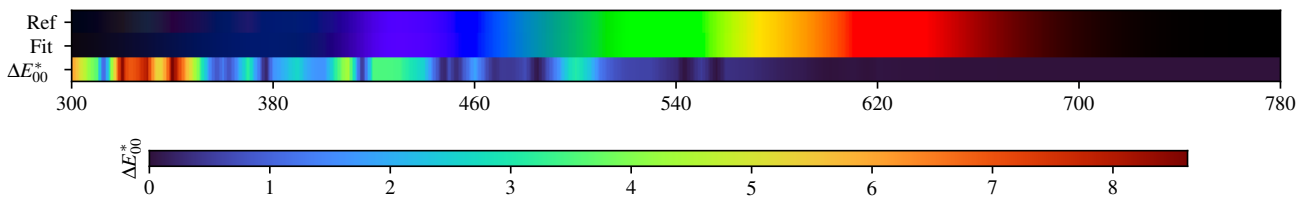
Gaussians:

Weight	Mean	Covariance					
0.427456239	377.458155928	437.491109871	690.197235007	-0.782899332	-0.782899332	568.637741261	
0.115168615	522.126918237	730.507960541	5579.463351267	511.412301373	511.412301373	1290.062736303	
0.104841053	542.189752957	590.600224795	5628.162287597	644.708507567	644.708507567	2857.009926248	
0.101883753	344.984643828	699.272951732	382.268494401	50.830764338	50.830764338	3491.387592031	
0.029614807	722.653956951	712.664766827	1656.413506682	1333.899797230	1333.899797230	1778.433151092	
0.125055490	375.828826970	497.091911576	1040.931807704	-3.942985329	-3.942985329	1404.672937365	
0.081294250	535.912854561	442.823058431	4669.585283374	-273.288852608	-273.288852608	1802.984800287	
0.014685793	736.246400507	496.956093355	997.452196110	-55.639875721	-55.639875721	6609.719332284	

LITWFWH - Weighted variational Bayesian inference - 2 Gaussians



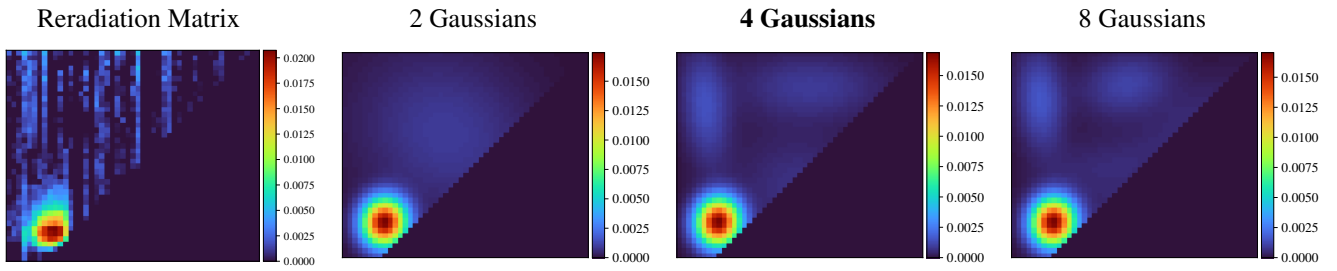
Fitted Material Under Monochromatic Illumination



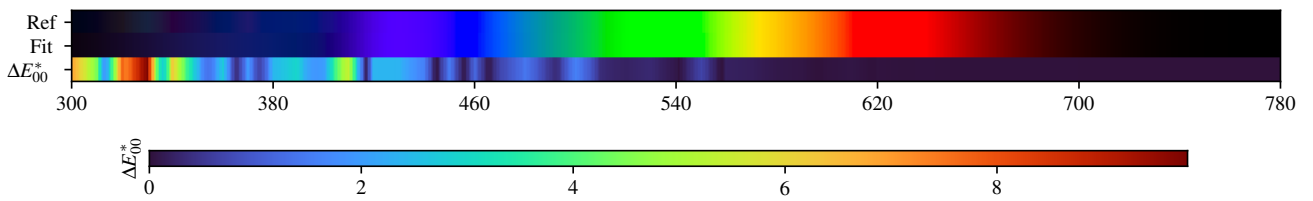
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.57$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.56$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.20$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.60$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.65$
B $\Delta E = 0.35$	D65 $\Delta E = 0.63$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.32$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.32$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.59$	D75 $\Delta E = 0.60$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.20$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.39$	E $\Delta E = 0.44$	FL5 $\Delta E = 0.47$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.49$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.49$	FL1 $\Delta E = 0.51$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.29$	HP4 $\Delta E = 0.30$	LED-B4 $\Delta E = 0.41$	LED-V2 $\Delta E = 0.29$

LITWFWH - Weighted variational Bayesian inference - 4 Gaussians



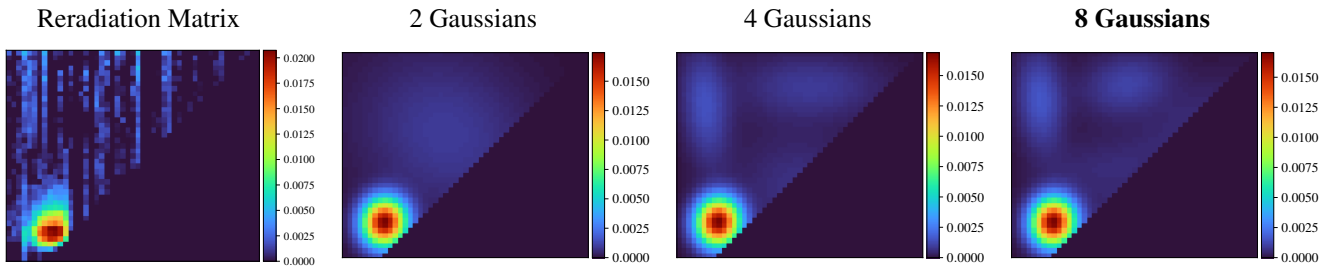
Fitted Material Under Monochromatic Illumination



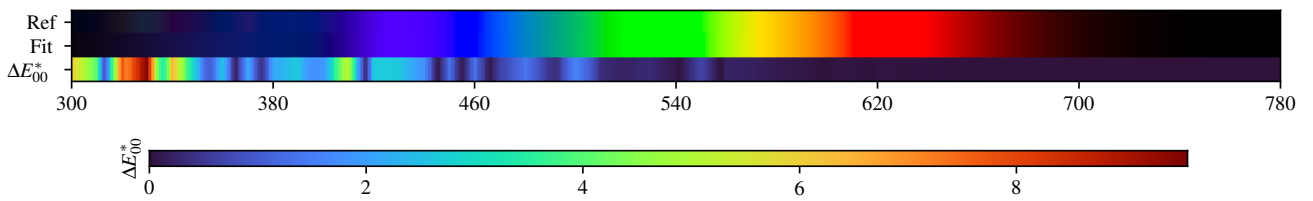
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.14$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.29$	FL3.15 $\Delta E = 0.21$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.05$	D65 $\Delta E = 0.04$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.01$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.38$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.07$	D75 $\Delta E = 0.02$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.02$	FL3.7 $\Delta E = 0.13$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.06$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.31$	FL3.3 $\Delta E = 0.04$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.04$	FL11 $\Delta E = 0.20$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.26$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.10$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.04$

LITWFWH - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.25$	FL3.15 $\Delta E = 0.21$	HP5 $\Delta E = 0.09$	LED-B5 $\Delta E = 0.08$
B $\Delta E = 0.05$	D65 $\Delta E = 0.05$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.33$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.06$	D75 $\Delta E = 0.03$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.04$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.06$	FL10 $\Delta E = 0.28$	FL3.3 $\Delta E = 0.03$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.17$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.10$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.03$

LITWFWH - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.407768	0.458173	0.513684	0.602865	0.680309	0.707939	0.726156	0.745721	0.745236	0.756348	0.759502
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.763544	0.765678	0.767859	0.771661	0.768371	0.773573	0.774593	0.773522	0.769155	0.775187	0.773124
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.774737	0.776986	0.775597	0.774893	0.773206	0.776211	0.778125	0.777669	0.775297	0.773644	0.774629
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.776851	0.768788	0.773914	0.773575	0.773829	0.776131	0.765119	0.772027			

2 Gaussians max

Scaling factor: 191.52287404842468

Gaussians:

Weight	Mean		Covariance			
0.522156938	378.296400036	446.105113001	842.232982752	22.249931695	22.249931695	992.432416255
0.477843062	499.786771935	623.474931695	15469.618345558	-1854.814904698	-1854.814904698	13561.308454058

4 Gaussians max

Scaling factor: 185.82320813400207

Gaussians:

Weight	Mean		Covariance			
0.525601416	377.951517324	446.468702693	837.824188495	23.055837289	23.055837289	1011.541464295
0.194615197	539.425073523	514.957137211	9077.224364250	-654.926957718	-654.926957718	6824.846000461
0.116713199	351.818321937	674.778954740	1041.804338116	-448.723660131	-448.723660131	6082.016956658
0.163070187	562.053570071	717.192139762	11752.296556652	-152.403807992	-152.403807992	2249.631109193

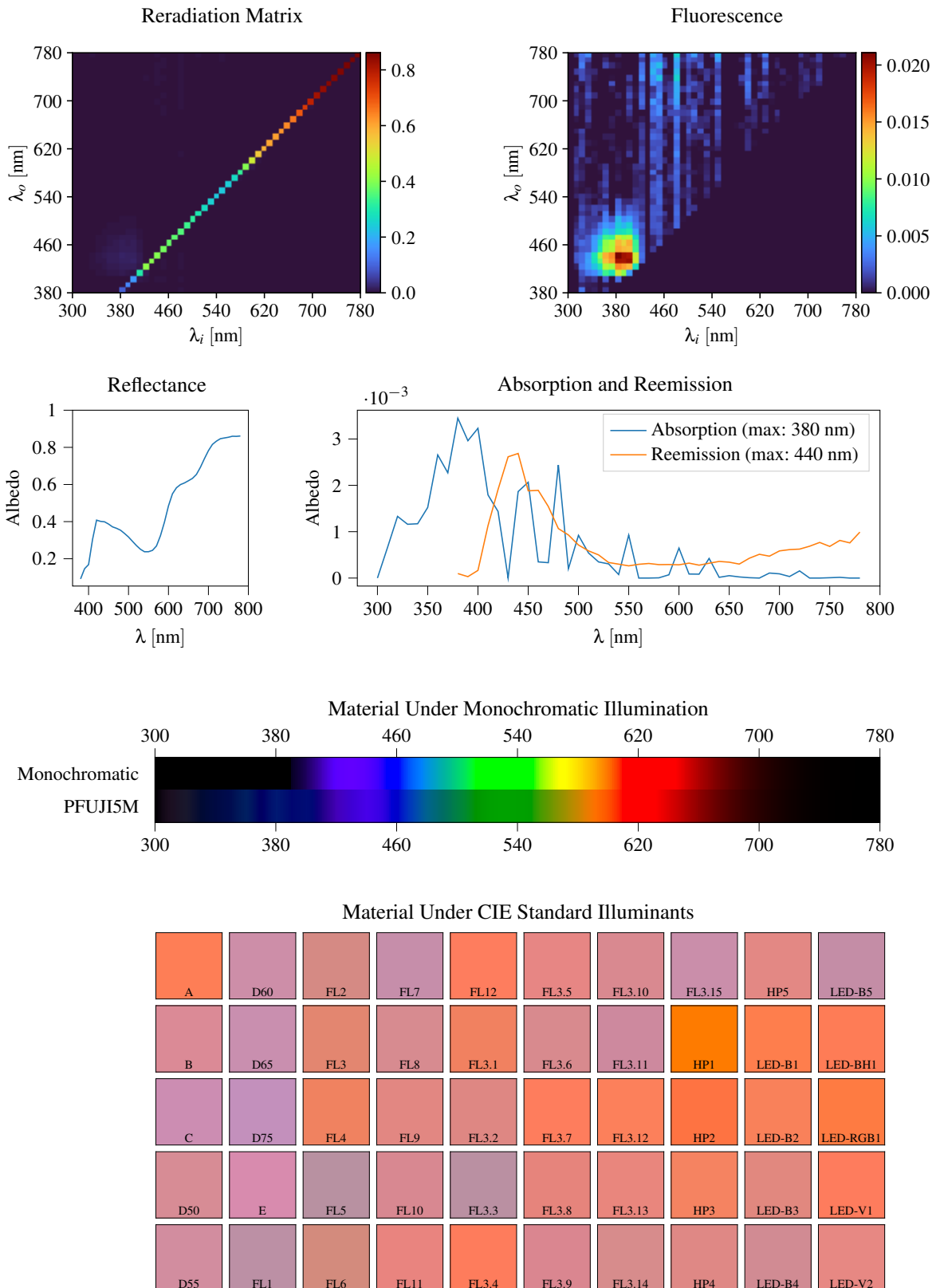
8 Gaussians max

Scaling factor: 186.19005511012978

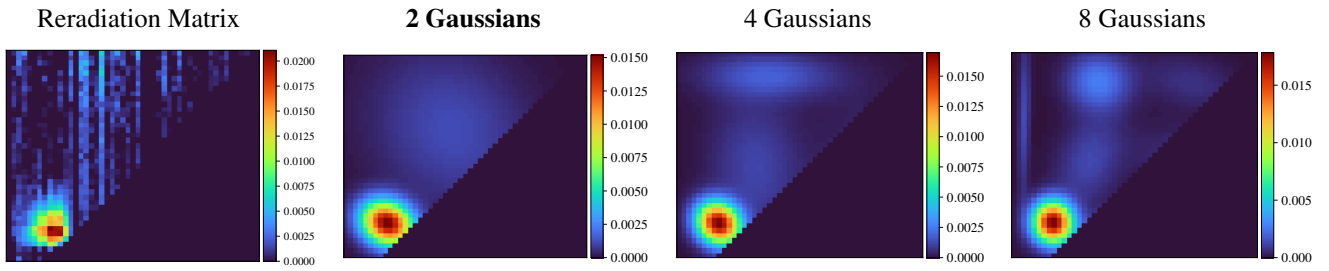
Gaussians:

Weight	Mean		Covariance			
0.522180988	377.917241392	446.246423810	827.078376632	27.253146715	27.253146715	996.266446034
0.103406806	554.797263201	457.476647570	9575.183469031	-24.003554373	-24.003554373	2995.772020653
0.060976416	460.912487632	561.412043586	7198.948091160	1437.099776887	1437.099776887	2132.321039189
0.074681623	649.676155022	647.761542550	7087.438817539	4863.466296916	4863.466296916	6102.685298126
0.116903268	351.339907966	689.154415968	1010.792847029	-275.460529257	-275.460529257	4730.426908243
0.120687638	524.651995391	719.838948774	4399.036589169	453.418980551	453.418980551	2179.657259950

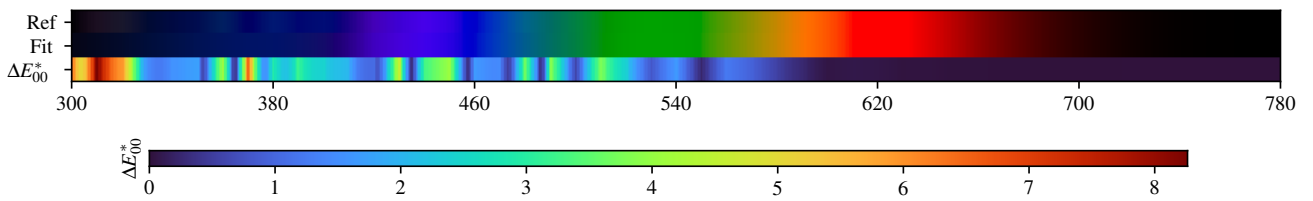
3.73. PFUJI5M



PFUJ15M - Weighted Expectation-Maximization - 2 Gaussians



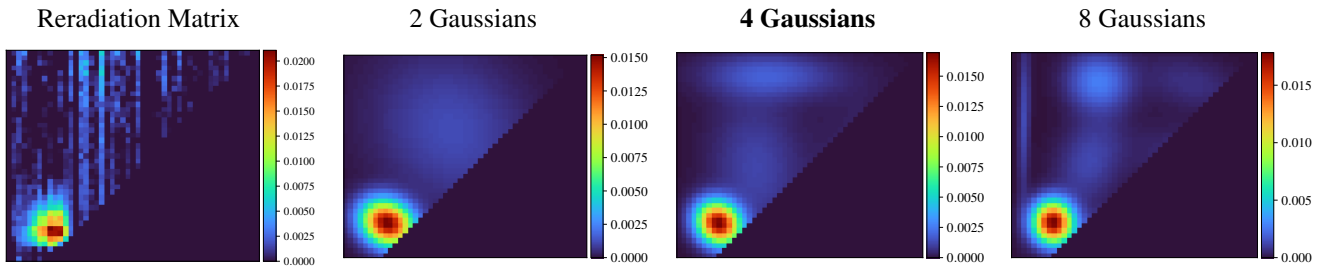
Fitted Material Under Monochromatic Illumination



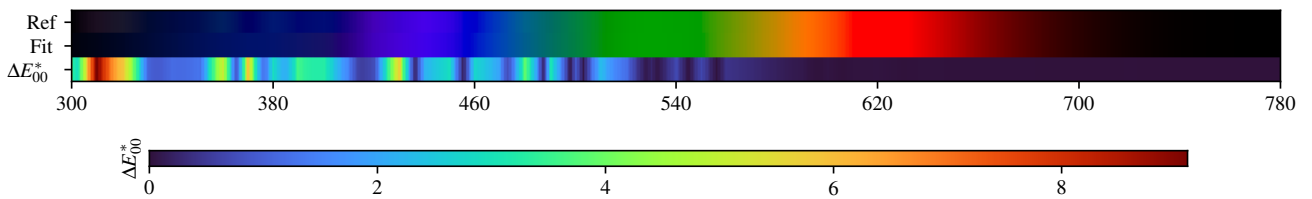
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.25$	D60 $\Delta E = 0.48$	FL2 $\Delta E = 0.43$	FL7 $\Delta E = 0.48$	FL12 $\Delta E = 0.22$	FL3.5 $\Delta E = 0.29$	FL3.10 $\Delta E = 0.35$	FL3.15 $\Delta E = 0.48$	HP5 $\Delta E = 0.57$	LED-B5 $\Delta E = 0.51$
B $\Delta E = 0.41$	D65 $\Delta E = 0.50$	FL3 $\Delta E = 0.36$	FL8 $\Delta E = 0.36$	FL3.1 $\Delta E = 0.27$	FL3.6 $\Delta E = 0.35$	FL3.11 $\Delta E = 0.41$	HP1 $\Delta E = 0.24$	LED-B1 $\Delta E = 0.24$	LED-BH1 $\Delta E = 0.30$
C $\Delta E = 0.49$	D75 $\Delta E = 0.55$	FL4 $\Delta E = 0.29$	FL9 $\Delta E = 0.32$	FL3.2 $\Delta E = 0.33$	FL3.7 $\Delta E = 0.24$	FL3.12 $\Delta E = 0.23$	HP2 $\Delta E = 0.23$	LED-B2 $\Delta E = 0.26$	LED-RGB1 $\Delta E = 0.23$
D50 $\Delta E = 0.42$	E $\Delta E = 0.43$	FL5 $\Delta E = 0.68$	FL10 $\Delta E = 0.37$	FL3.3 $\Delta E = 0.62$	FL3.8 $\Delta E = 0.31$	FL3.13 $\Delta E = 0.27$	HP3 $\Delta E = 0.43$	LED-B3 $\Delta E = 0.40$	LED-V1 $\Delta E = 0.53$
D55 $\Delta E = 0.45$	FL1 $\Delta E = 0.61$	FL6 $\Delta E = 0.46$	FL11 $\Delta E = 0.30$	FL3.4 $\Delta E = 0.22$	FL3.9 $\Delta E = 0.35$	FL3.14 $\Delta E = 0.34$	HP4 $\Delta E = 0.63$	LED-B4 $\Delta E = 0.44$	LED-V2 $\Delta E = 0.62$

PFUJ15M - Weighted Expectation-Maximization - 4 Gaussians



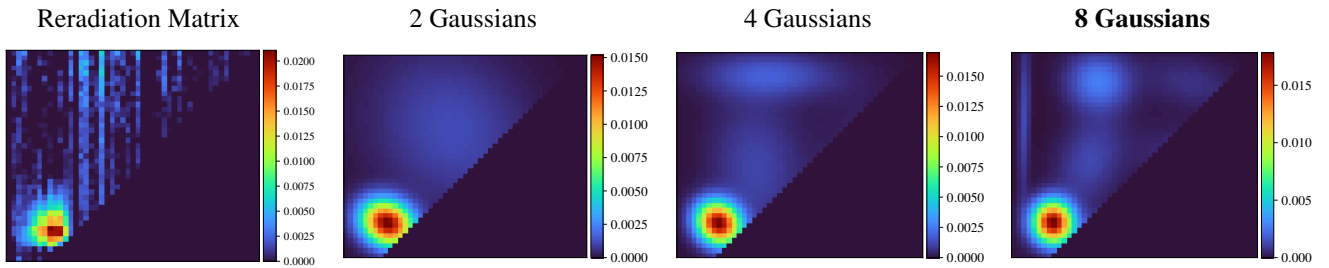
Fitted Material Under Monochromatic Illumination



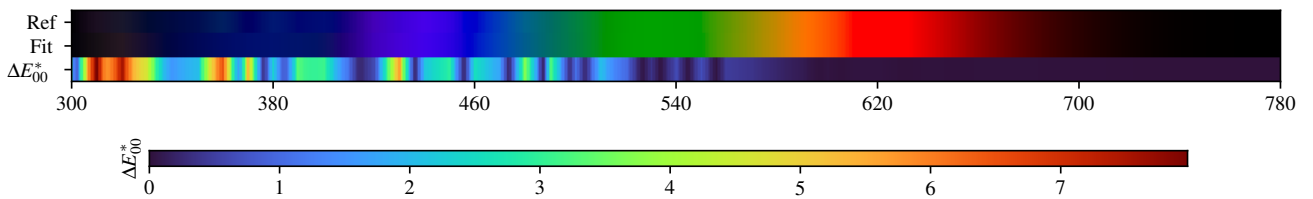
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.25$	$\Delta E = 0.14$	$\Delta E = 0.07$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.24$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.11$

PFUJ15M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.14$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.23$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.16$
B $\Delta E = 0.10$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.09$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.13$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.11$	E $\Delta E = 0.12$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.11$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.13$

PFUJ15M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.091411	0.146256	0.168470	0.304353	0.407998	0.401379	0.398980	0.386857	0.371738	0.363966	0.353740
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.336237	0.317086	0.293683	0.270667	0.250895	0.237741	0.237826	0.245203	0.268813	0.324553	0.397620
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.484601	0.549808	0.582395	0.599411	0.608303	0.620179	0.632737	0.654210	0.692876	0.739002	0.782081
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.815807	0.833385	0.846639	0.850605	0.854377	0.859844	0.859230	0.861231			

2 Gaussians

Scaling factor: 193.27943014316256

Gaussians:

Weight	Mean	Covariance				
0.516247622	383.565366553	444.715222928	1190.957227317	-172.053481875	-172.053481875	924.572298070
0.483752378	511.337626975	633.223692608	12017.079570861	-1843.880621273	-1843.880621273	12576.460900569

4 Gaussians

Scaling factor: 183.08226116621557

Gaussians:

Weight	Mean	Covariance				
0.256424174	452.529425616	555.470456377	3939.333911894	-350.449214908	-350.449214908	9773.827266032
0.111026525	657.727528106	578.234025752	4391.274368395	1015.887903531	1015.887903531	13114.000253440
0.468263053	378.655465795	444.261007777	837.626068104	-107.159750964	-107.159750964	796.595590483
0.164286248	480.870747949	737.981794236	7938.314401742	-84.116685256	-84.116685256	985.638838236

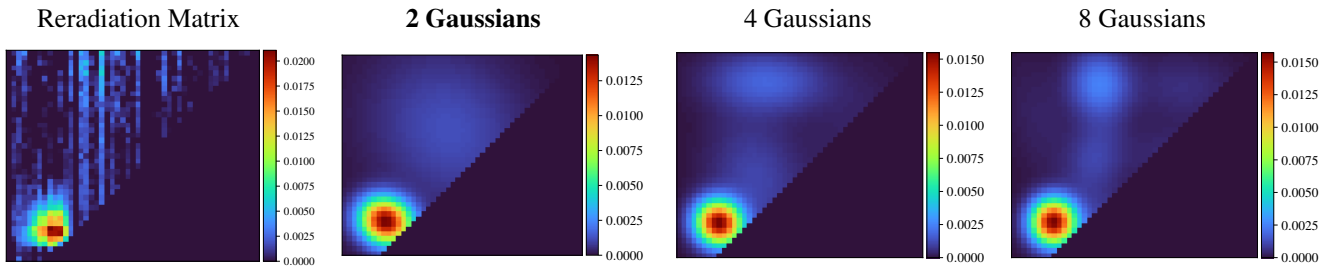
8 Gaussians

Scaling factor: 182.57453470202162

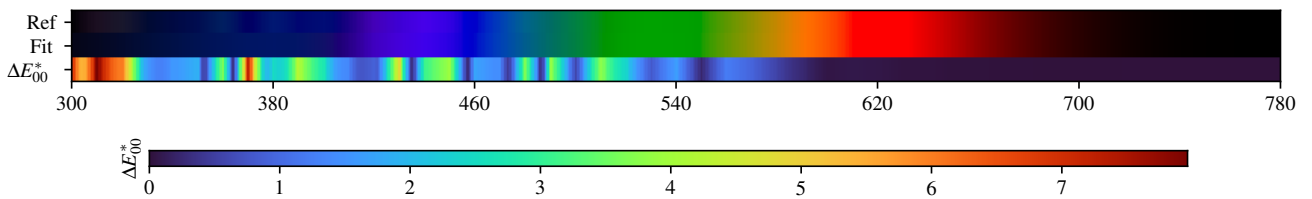
Gaussians:

Weight	Mean	Covariance					
0.039310965	320.705665429	654.252159202	62.475078516	213.148496583	213.148496583	11189.010515362	
0.052143106	613.076979987	585.222603507	3884.486134894	-103.427765223	-103.427765223	1643.000064477	
0.464703666	377.620885797	445.804727951	706.061211452	-15.227881093	-15.227881093	799.877009964	
0.068881055	649.602596057	723.428894126	4838.081885699	-880.947184189	-880.947184189	1580.407638995	
0.125477946	450.053343794	569.951587979	2063.054487783	799.935817700	799.935817700	3951.085766154	
0.040681690	646.388543365	439.370632237	5425.764322939	-121.482535830	-121.482535830	1830.204588386	
0.059807734	471.299866986	419.793266850	1008.303158857	228.445059267	228.445059267	857.524887997	
0.148993837	467.254675831	726.048954607	1726.361504578	-43.170261038	-43.170261038	1464.756520894	

PFUJ15M - Weighted variational Bayesian inference - 2 Gaussians



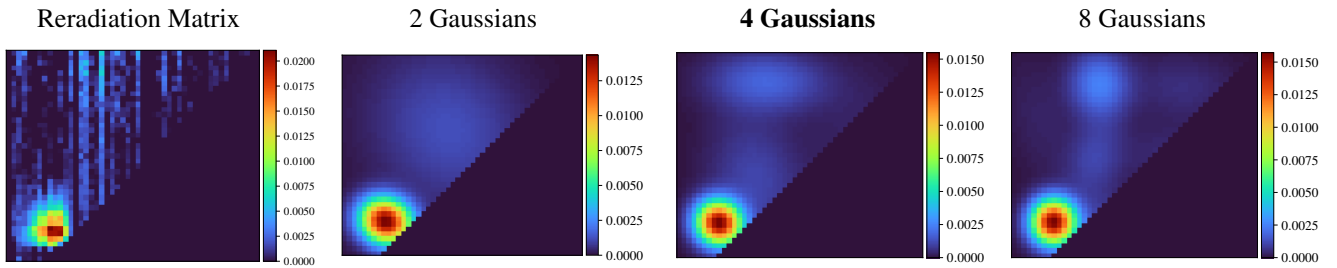
Fitted Material Under Monochromatic Illumination



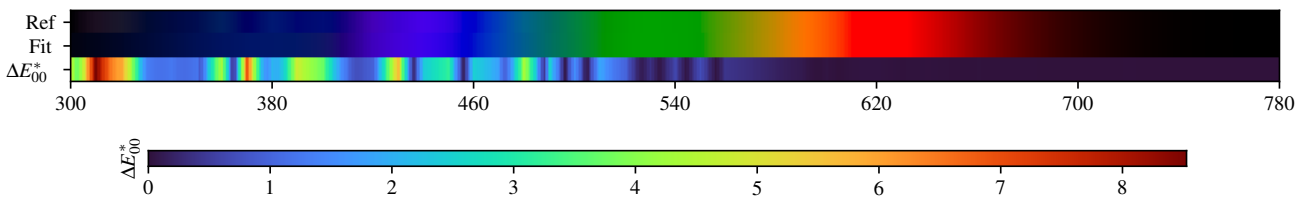
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.24$	D60 $\Delta E = 0.42$	FL2 $\Delta E = 0.40$	FL7 $\Delta E = 0.43$	FL12 $\Delta E = 0.22$	FL3.5 $\Delta E = 0.28$	FL3.10 $\Delta E = 0.34$	FL3.15 $\Delta E = 0.46$	HP5 $\Delta E = 0.54$	LED-B5 $\Delta E = 0.49$
B $\Delta E = 0.37$	D65 $\Delta E = 0.45$	FL3 $\Delta E = 0.34$	FL8 $\Delta E = 0.34$	FL3.1 $\Delta E = 0.26$	FL3.6 $\Delta E = 0.33$	FL3.11 $\Delta E = 0.40$	HP1 $\Delta E = 0.24$	LED-B1 $\Delta E = 0.25$	LED-BH1 $\Delta E = 0.31$
C $\Delta E = 0.43$	D75 $\Delta E = 0.48$	FL4 $\Delta E = 0.28$	FL9 $\Delta E = 0.30$	FL3.2 $\Delta E = 0.32$	FL3.7 $\Delta E = 0.24$	FL3.12 $\Delta E = 0.22$	HP2 $\Delta E = 0.23$	LED-B2 $\Delta E = 0.27$	LED-RGB1 $\Delta E = 0.23$
D50 $\Delta E = 0.37$	E $\Delta E = 0.45$	FL5 $\Delta E = 0.63$	FL10 $\Delta E = 0.36$	FL3.3 $\Delta E = 0.57$	FL3.8 $\Delta E = 0.30$	FL3.13 $\Delta E = 0.27$	HP3 $\Delta E = 0.40$	LED-B3 $\Delta E = 0.40$	LED-V1 $\Delta E = 0.48$
D55 $\Delta E = 0.40$	FL1 $\Delta E = 0.56$	FL6 $\Delta E = 0.43$	FL11 $\Delta E = 0.29$	FL3.4 $\Delta E = 0.23$	FL3.9 $\Delta E = 0.35$	FL3.14 $\Delta E = 0.33$	HP4 $\Delta E = 0.57$	LED-B4 $\Delta E = 0.43$	LED-V2 $\Delta E = 0.56$

PFUJ15M - Weighted variational Bayesian inference - 4 Gaussians



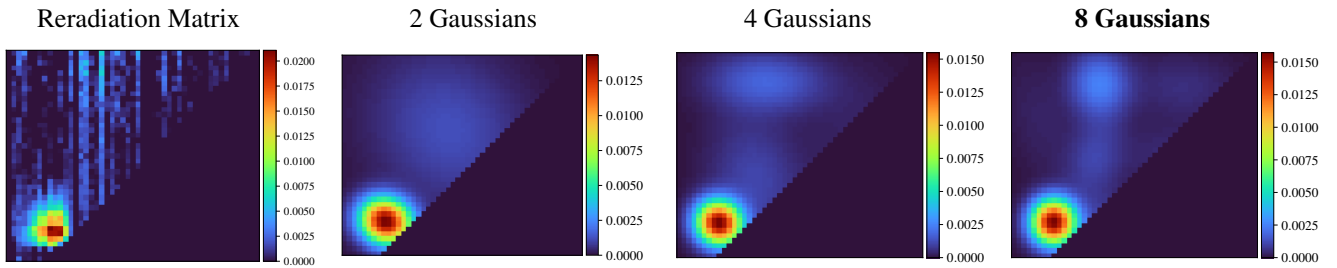
Fitted Material Under Monochromatic Illumination



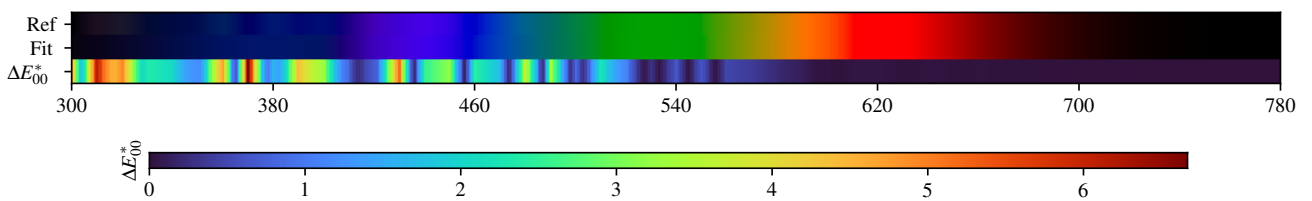
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.19$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.22$
B $\Delta E = 0.09$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.18$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.14$	D75 $\Delta E = 0.15$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.08$	E $\Delta E = 0.26$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.14$

PFUJ15M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.20$	HP5 $\Delta E = 0.22$	LED-B5 $\Delta E = 0.23$
B $\Delta E = 0.09$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.17$
C $\Delta E = 0.10$	D75 $\Delta E = 0.12$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.10$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.16$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.23$	LED-V2 $\Delta E = 0.15$

PFUJ15M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.091411	0.146256	0.168470	0.304353	0.407998	0.401379	0.398980	0.386857	0.371738	0.363966	0.353740
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.336237	0.317086	0.293683	0.270667	0.250895	0.237741	0.237826	0.245203	0.268813	0.324553	0.397620
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.484601	0.549808	0.582395	0.599411	0.608303	0.620179	0.632737	0.654210	0.692876	0.739002	0.782081
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.815807	0.833385	0.846639	0.850605	0.854377	0.859844	0.859230	0.861231			

2 Gaussians max

Scaling factor: 193.34120346422634

Gaussians:

Weight	Mean	Covariance				
0.515842558	383.686261289	445.311770939	1236.368068059	-109.961185641	-109.961185641	987.162246804
0.484157442	511.268391597	632.400700956	12003.444310725	-1792.995285049	-1792.995285049	12735.482887275

4 Gaussians max

Scaling factor: 184.96586146762365

Gaussians:

Weight	Mean	Covariance				
0.469038096	379.232021340	444.915796557	925.713442424	-40.848118969	-40.848118969	873.073392848
0.219692642	451.661828056	531.794552966	4282.292775728	-779.818293186	-779.818293186	7921.931553900
0.113807882	658.675017809	588.003802385	4510.065081410	809.711455919	809.711455919	13428.715476152
0.197461380	474.054693721	726.486319936	6386.792568096	-157.031703466	-157.031703466	1735.074944028

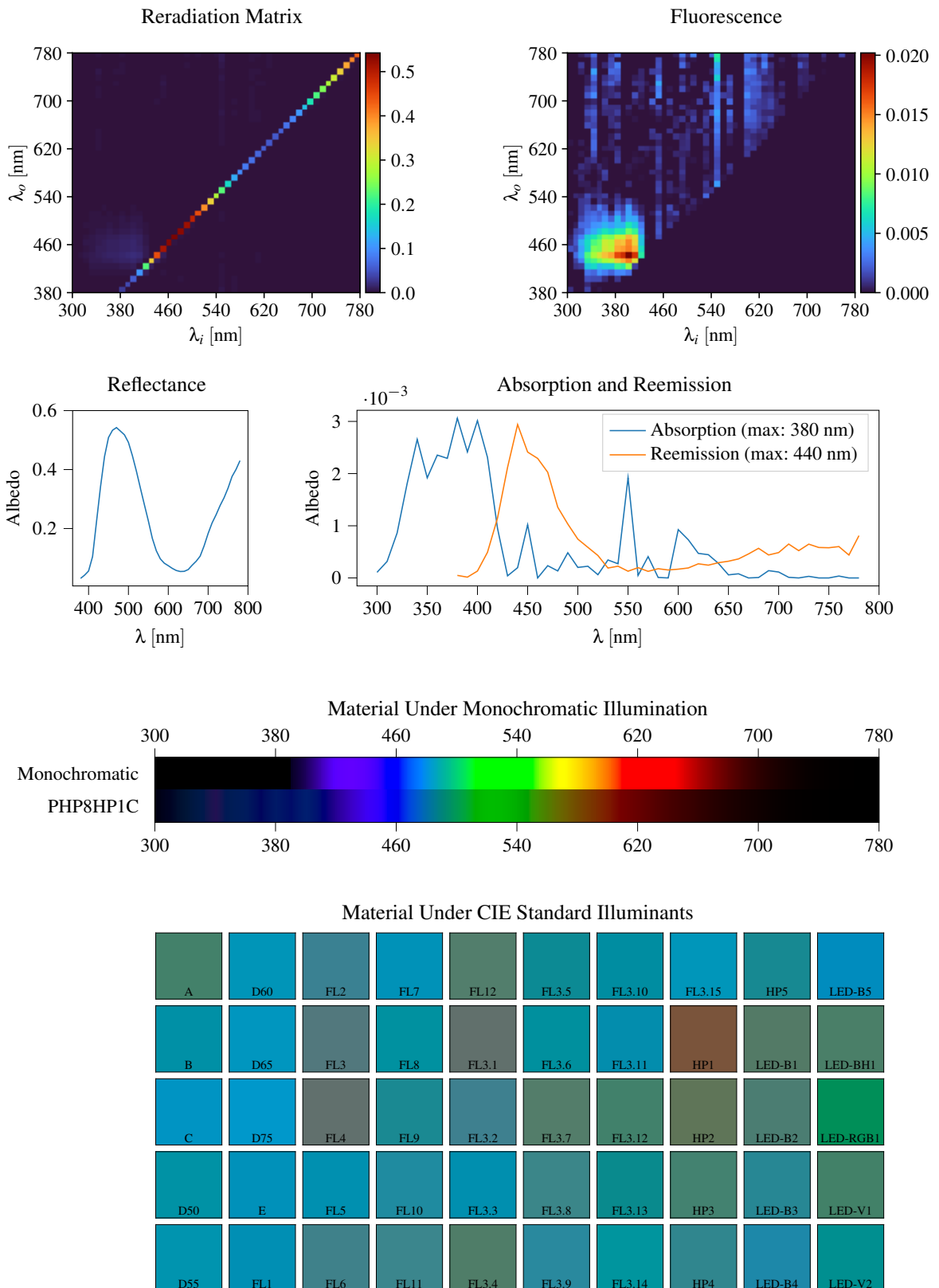
8 Gaussians max

Scaling factor: 184.99465887391113

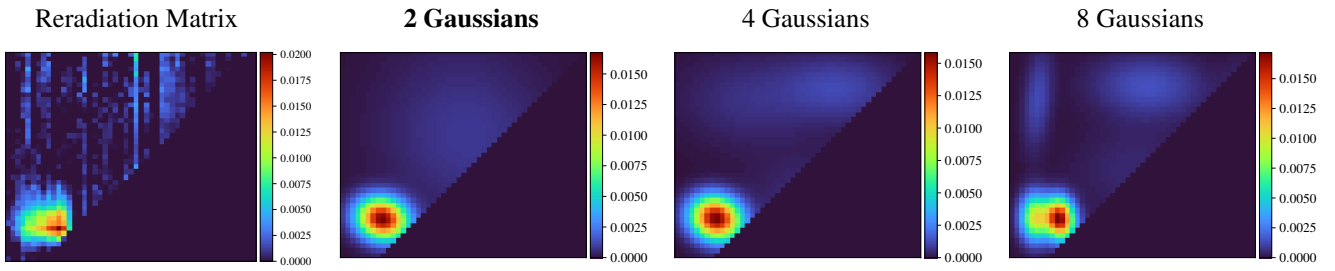
Gaussians:

Weight	Mean	Covariance				
0.480218092	378.420571295	446.679775677	875.078697278	1.426123560	1.426123560	926.677104564
0.065330669	475.991962427	432.399094123	1701.438574167	217.958958050	217.958958050	1994.423543066
0.044499471	646.350008556	458.299072539	5768.517631262	-946.547113223	-946.547113223	3506.825906566
0.085309460	459.640155369	574.287921671	1582.968932347	607.196624424	607.196624424	3644.554099334
0.044667308	601.191754398	584.908681645	4986.432565855	242.405547503	242.405547503	1566.124314207
0.055708944	349.485986619	651.148720999	2320.434186318	-1224.255451571	-1224.255451571	8902.525205558
0.081389799	634.285253233	714.516757698	6197.519063003	-279.408496716	-279.408496716	2393.020679658
0.142876257	468.845034546	721.448929756	1527.507463127	-38.924888759	-38.924888759	1950.004185405

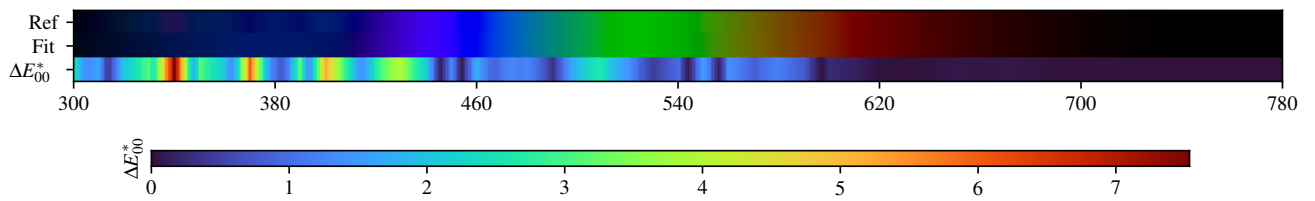
3.74. PHP8HP1C



PHP8HP1C - Weighted Expectation-Maximization - 2 Gaussians



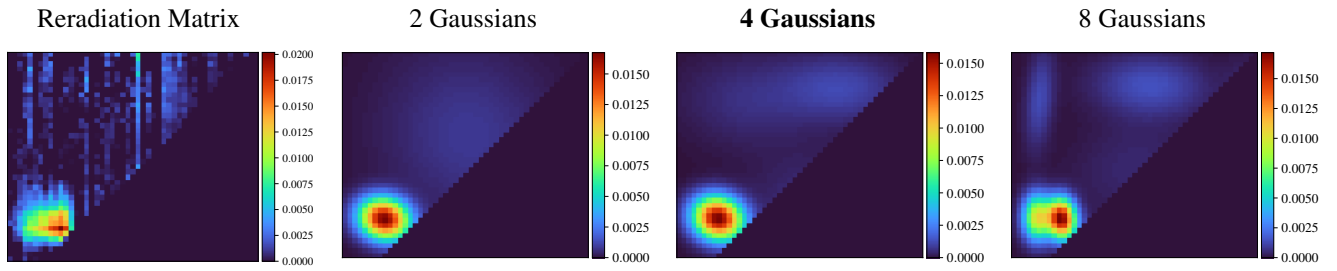
Fitted Material Under Monochromatic Illumination



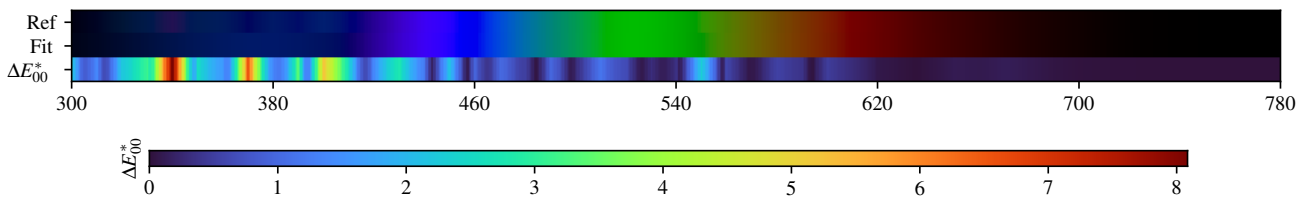
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.67$	$\Delta E = 0.70$	$\Delta E = 0.70$	$\Delta E = 0.65$	$\Delta E = 0.16$	$\Delta E = 0.61$	$\Delta E = 0.35$	$\Delta E = 0.64$	$\Delta E = 0.76$	$\Delta E = 0.71$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.72$	$\Delta E = 0.70$	$\Delta E = 0.77$	$\Delta E = 0.60$	$\Delta E = 0.93$	$\Delta E = 0.62$	$\Delta E = 0.40$	$\Delta E = 0.52$	$\Delta E = 0.70$	$\Delta E = 0.58$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.79$	$\Delta E = 0.72$	$\Delta E = 0.89$	$\Delta E = 0.59$	$\Delta E = 0.69$	$\Delta E = 0.19$	$\Delta E = 0.59$	$\Delta E = 0.54$	$\Delta E = 0.68$	$\Delta E = 0.60$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.68$	$\Delta E = 0.83$	$\Delta E = 0.67$	$\Delta E = 0.36$	$\Delta E = 0.66$	$\Delta E = 0.28$	$\Delta E = 0.58$	$\Delta E = 0.72$	$\Delta E = 0.66$	$\Delta E = 0.91$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.69$	$\Delta E = 0.67$	$\Delta E = 0.69$	$\Delta E = 0.29$	$\Delta E = 0.62$	$\Delta E = 0.35$	$\Delta E = 0.58$	$\Delta E = 0.80$	$\Delta E = 0.68$	$\Delta E = 0.78$

PHP8HP1C - Weighted Expectation-Maximization - 4 Gaussians



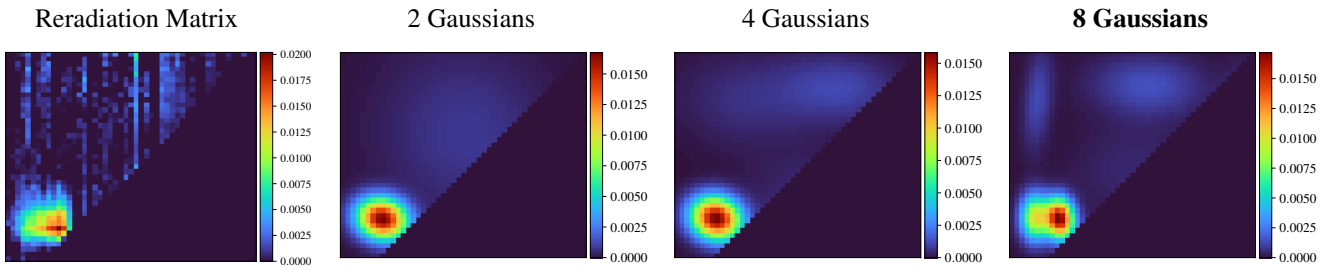
Fitted Material Under Monochromatic Illumination



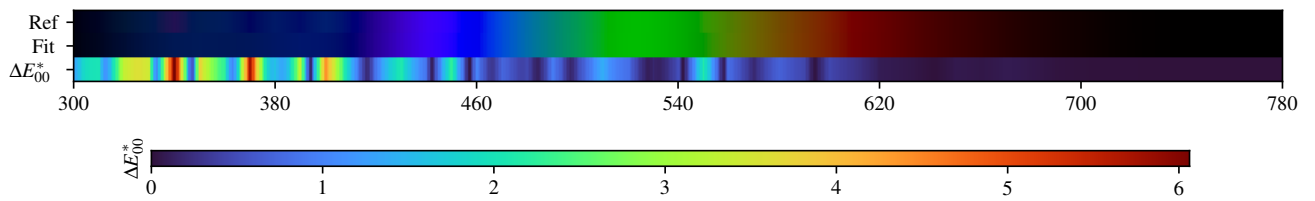
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.70$	$\Delta E = 0.13$	$\Delta E = 0.37$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.35$	$\Delta E = 0.11$	$\Delta E = 0.28$	$\Delta E = 0.38$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.27$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.62$	$\Delta E = 0.14$	$\Delta E = 0.40$	$\Delta E = 0.30$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.44$	$\Delta E = 0.13$	$\Delta E = 0.49$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.34$	$\Delta E = 0.30$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.21$	$\Delta E = 0.54$	$\Delta E = 0.12$	$\Delta E = 0.40$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.33$	$\Delta E = 0.21$

PHP8HP1C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.05$	$\Delta E = 0.02$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.59$	$\Delta E = 0.04$	$\Delta E = 0.29$	$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.13$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.06$	$\Delta E = 0.02$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.28$	$\Delta E = 0.02$	$\Delta E = 0.11$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.06$	$\Delta E = 0.02$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.51$	$\Delta E = 0.05$	$\Delta E = 0.28$	$\Delta E = 0.12$	$\Delta E = 0.03$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.02$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.35$	$\Delta E = 0.07$	$\Delta E = 0.39$	$\Delta E = 0.02$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.02$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.44$	$\Delta E = 0.03$	$\Delta E = 0.33$	$\Delta E = 0.02$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.08$

PHP8HP1C - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.030917	0.041946	0.056039	0.104878	0.224308	0.342098	0.444117	0.508696	0.533217	0.542347	0.530298
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.517853	0.492168	0.446968	0.394617	0.337214	0.281089	0.225959	0.166712	0.124614	0.097212	0.082464
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.074002	0.064948	0.057789	0.054315	0.054827	0.060828	0.075696	0.089024	0.106374	0.141542	0.183212
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.219172	0.246669	0.277783	0.304372	0.337053	0.376347	0.400392	0.430254			

2 Gaussians

Scaling factor: 179.0511002460333

Gaussians:

Weight	Mean		Covariance			
0.463427462	544.375929844	620.164030411	14058.693262356	-754.450063344	-754.450063344	15217.978889744
0.536572538	378.036577464	453.172410526	1104.267679368	-96.139490815	-96.139490815	763.747344703

4 Gaussians

Scaling factor: 173.72069280958877

Gaussians:

Weight	Mean		Covariance			
0.156220357	623.021324013	713.179599795	6523.463983806	-181.250278402	-181.250278402	2128.237138792
0.139264665	438.499610295	687.744132432	8583.704987098	-256.810957498	-256.810957498	3942.973716122
0.157786499	572.231351893	475.360527249	8125.411445384	-109.814997302	-109.814997302	4741.042618931
0.546728479	377.584692734	454.272681041	1093.810228390	-96.448442794	-96.448442794	829.473782775

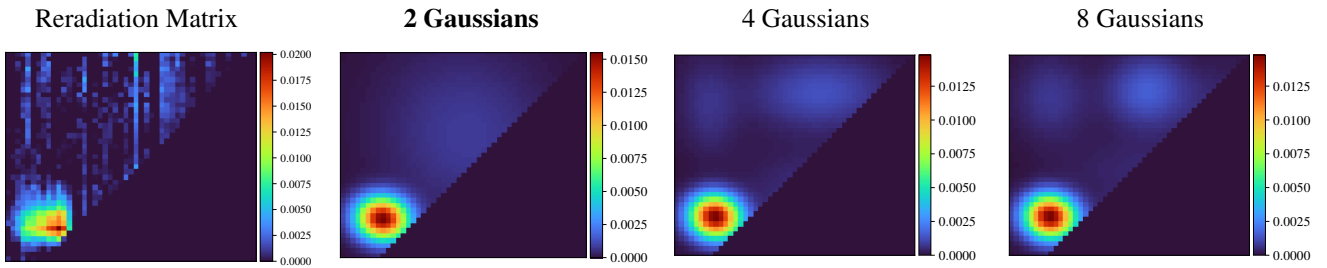
8 Gaussians

Scaling factor: 171.34750165445448

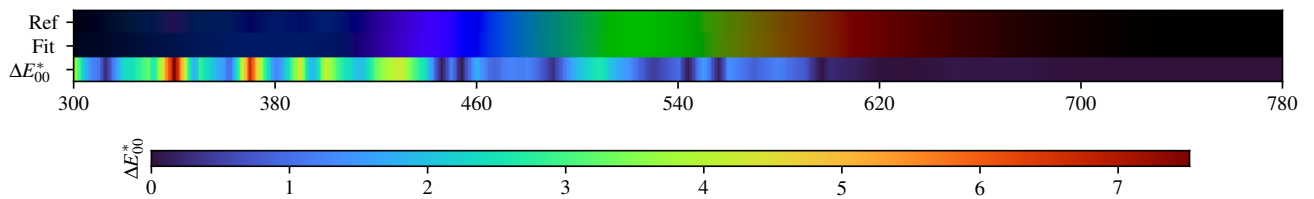
Gaussians:

Weight	Mean		Covariance			
0.025549235	753.675691732	706.397578463	737.976306860	234.208514780	234.208514780	2773.952987591
0.061614907	351.271012387	690.784170794	385.975866676	337.216247098	337.216247098	4249.694159427
0.080094437	525.190270944	415.310380994	8006.482322429	-795.024260350	-795.024260350	592.429861787
0.171570332	570.013407012	718.440289899	5816.459785225	-130.739009822	-130.739009822	1727.165271259
0.204861271	345.588346767	456.050381985	342.372267602	-5.316013910	-5.316013910	917.803520349
0.046092434	638.530895304	504.963282084	5690.440211848	-1416.399630386	-1416.399630386	3779.086841118
0.310254915	394.153394360	454.140265642	358.131451611	-32.718510232	-32.718510232	697.364686960
0.099962470	518.635508294	558.429640160	6981.188323108	1911.406297163	1911.406297163	5927.609198589

PHP8HP1C - Weighted variational Bayesian inference - 2 Gaussians



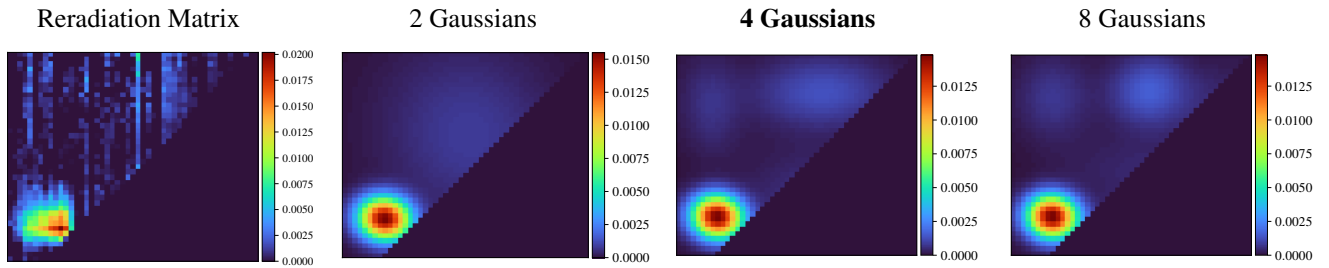
Fitted Material Under Monochromatic Illumination



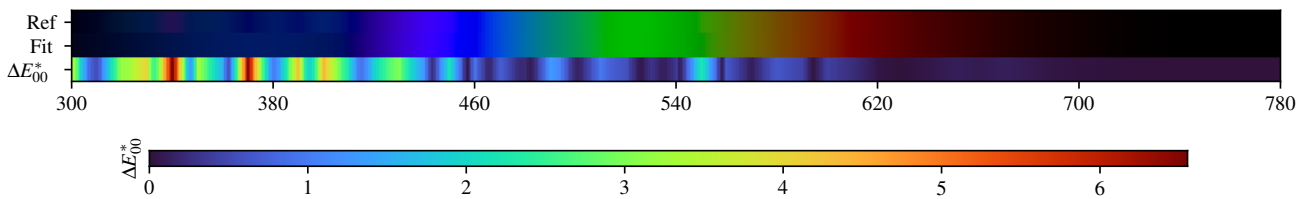
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.66$	$\Delta E = 0.65$	$\Delta E = 0.67$	$\Delta E = 0.63$	$\Delta E = 0.16$	$\Delta E = 0.60$	$\Delta E = 0.35$	$\Delta E = 0.61$	$\Delta E = 0.74$	$\Delta E = 0.70$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.69$	$\Delta E = 0.65$	$\Delta E = 0.74$	$\Delta E = 0.58$	$\Delta E = 0.90$	$\Delta E = 0.61$	$\Delta E = 0.39$	$\Delta E = 0.51$	$\Delta E = 0.69$	$\Delta E = 0.57$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.74$	$\Delta E = 0.65$	$\Delta E = 0.86$	$\Delta E = 0.57$	$\Delta E = 0.66$	$\Delta E = 0.18$	$\Delta E = 0.59$	$\Delta E = 0.53$	$\Delta E = 0.67$	$\Delta E = 0.59$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.64$	$\Delta E = 0.72$	$\Delta E = 0.64$	$\Delta E = 0.35$	$\Delta E = 0.64$	$\Delta E = 0.28$	$\Delta E = 0.57$	$\Delta E = 0.70$	$\Delta E = 0.66$	$\Delta E = 0.89$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.65$	$\Delta E = 0.65$	$\Delta E = 0.66$	$\Delta E = 0.28$	$\Delta E = 0.61$	$\Delta E = 0.34$	$\Delta E = 0.57$	$\Delta E = 0.76$	$\Delta E = 0.67$	$\Delta E = 0.77$

PHP8HP1C - Weighted variational Bayesian inference - 4 Gaussians



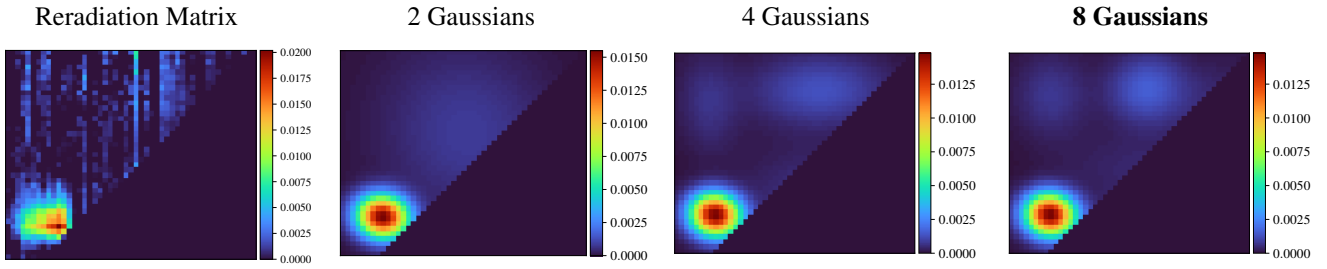
Fitted Material Under Monochromatic Illumination



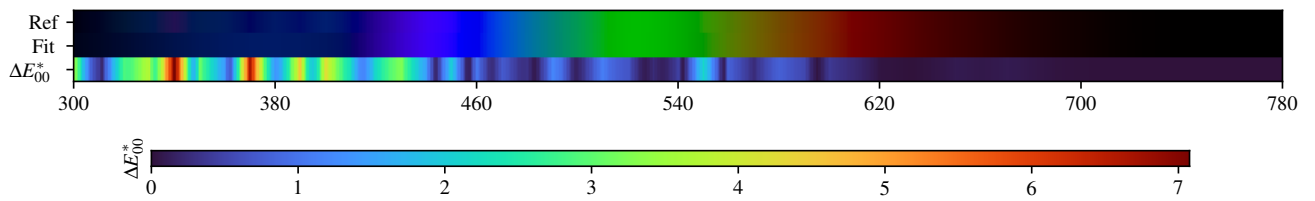
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.69$	$\Delta E = 0.12$	$\Delta E = 0.42$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.26$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.39$	$\Delta E = 0.08$	$\Delta E = 0.30$	$\Delta E = 0.41$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.59$	$\Delta E = 0.14$	$\Delta E = 0.40$	$\Delta E = 0.32$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.47$	$\Delta E = 0.09$	$\Delta E = 0.50$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.36$	$\Delta E = 0.30$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.20$	$\Delta E = 0.56$	$\Delta E = 0.10$	$\Delta E = 0.44$	$\Delta E = 0.12$	$\Delta E = 0.03$	$\Delta E = 0.32$	$\Delta E = 0.24$

PHP8HP1C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.04$	$\Delta E = 0.57$	$\Delta E = 0.08$	$\Delta E = 0.33$	$\Delta E = 0.06$	$\Delta E = 0.14$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.30$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.32$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.46$	$\Delta E = 0.04$	$\Delta E = 0.27$	$\Delta E = 0.25$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.02$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.38$	$\Delta E = 0.07$	$\Delta E = 0.40$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.32$	$\Delta E = 0.37$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.46$	$\Delta E = 0.05$	$\Delta E = 0.35$	$\Delta E = 0.05$	$\Delta E = 0.14$	$\Delta E = 0.29$	$\Delta E = 0.27$

PHP8HP1C - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.030917	0.041946	0.056039	0.104878	0.224308	0.342098	0.444117	0.508696	0.533217	0.542347	0.530298
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.517853	0.492168	0.446968	0.394617	0.337214	0.281089	0.225959	0.166712	0.124614	0.097212	0.082464
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.074002	0.064948	0.057789	0.054315	0.054827	0.060828	0.075696	0.089024	0.106374	0.141542	0.183212
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.219172	0.246669	0.277783	0.304372	0.337053	0.376347	0.400392	0.430254			

2 Gaussians max

Scaling factor: 179.59298880131482

Gaussians:

Weight	Mean		Covariance			
0.539994467	378.633782055	453.575361258	1205.759619235	-55.745581165	-55.745581165	824.296888680
0.460005533	545.404962766	621.252593596	14009.171414709	-894.839640748	-894.839640748	15133.869564552

4 Gaussians max

Scaling factor: 173.65295815554214

Gaussians:

Weight	Mean		Covariance			
0.545576950	378.322387837	454.217548759	1194.119646434	-51.267753937	-51.267753937	858.981549839
0.162352261	570.982932164	481.384648389	7907.918245287	-500.749382727	-500.749382727	5335.449690245
0.070922205	364.560640889	681.739951872	1786.595084299	-158.883596349	-158.883596349	4967.390347749
0.221148584	590.603395661	708.027371662	8729.333837173	44.047907520	44.047907520	2539.376278417

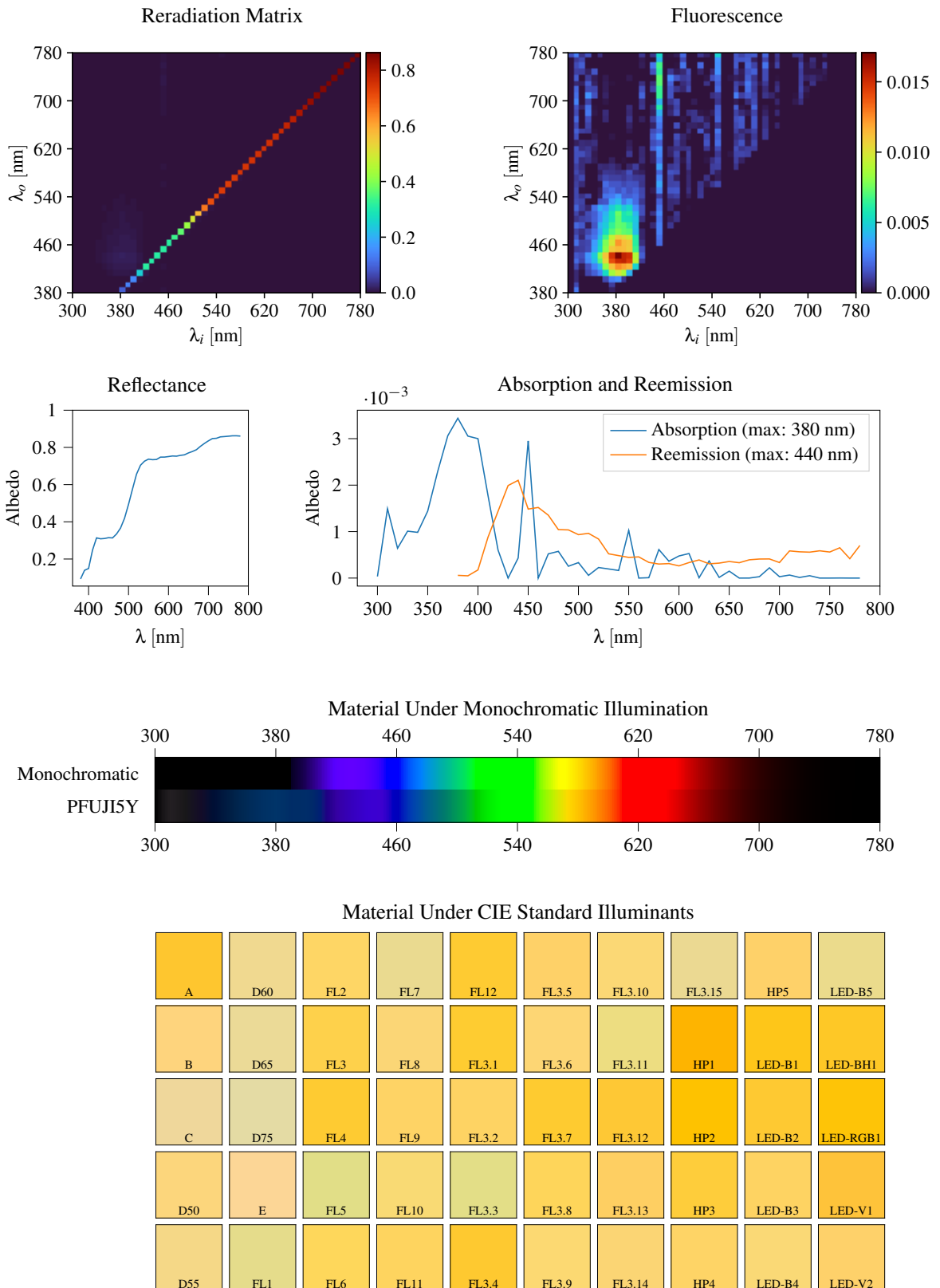
8 Gaussians max

Scaling factor: 174.0900158017242

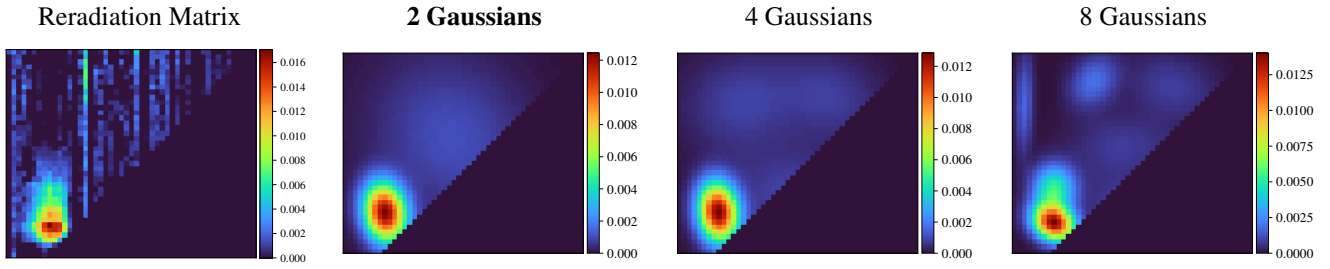
Gaussians:

Weight	Mean		Covariance			
0.542211588	378.145415271	454.422904611	1183.649538585	-41.268787439	-41.268787439	858.959358013
0.097786116	574.325680622	433.192404434	7635.269624578	-176.546060243	-176.546060243	1949.561254046
0.073381728	549.102437204	552.759974250	11135.832115992	7.867463081	7.867463081	2203.652323665
0.086040478	381.096390273	696.717459128	2664.010412890	20.195539065	20.195539065	3563.714009985
0.049922977	705.182791904	696.347664206	4579.235083113	1682.170747545	1682.170747545	3208.280752006
0.149558763	573.781021882	711.512379809	2861.180721985	175.321237904	175.321237904	2446.749218850

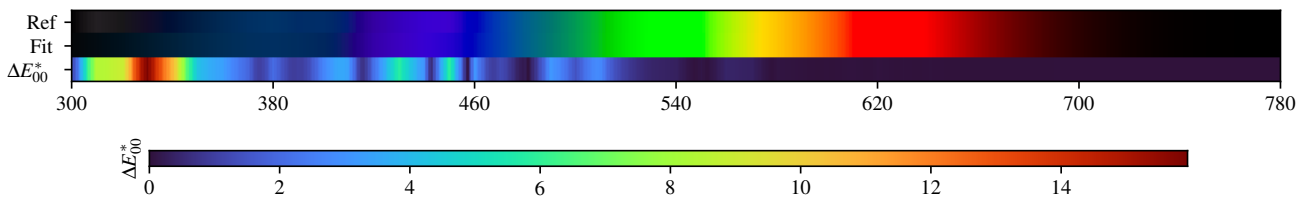
3.75. PFUJ15Y



PFUJ15Y - Weighted Expectation-Maximization - 2 Gaussians



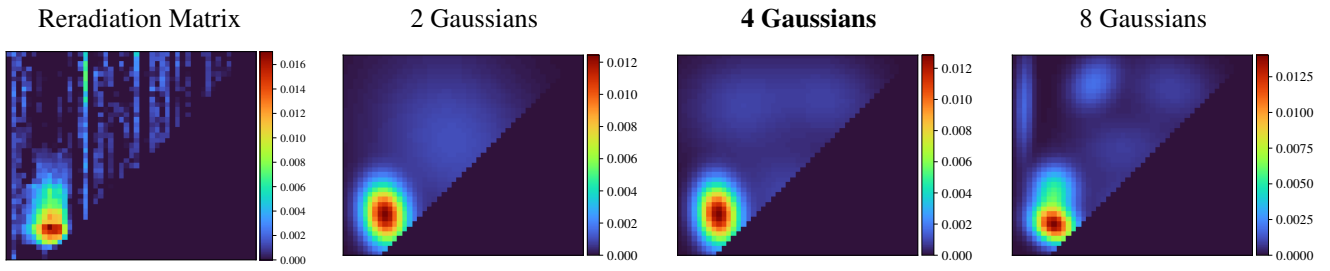
Fitted Material Under Monochromatic Illumination



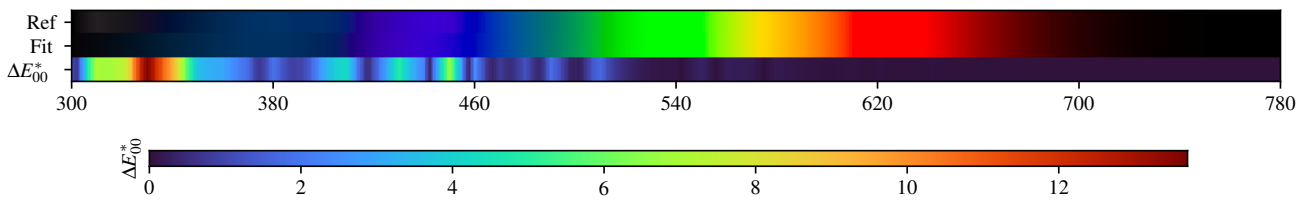
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.20$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.19$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.19$	LED-B5 $\Delta E = 0.13$
B $\Delta E = 0.17$	D65 $\Delta E = 0.21$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.09$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.23$	D75 $\Delta E = 0.23$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.17$	E $\Delta E = 0.23$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.18$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.16$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.22$

PFUJ15Y - Weighted Expectation-Maximization - 4 Gaussians



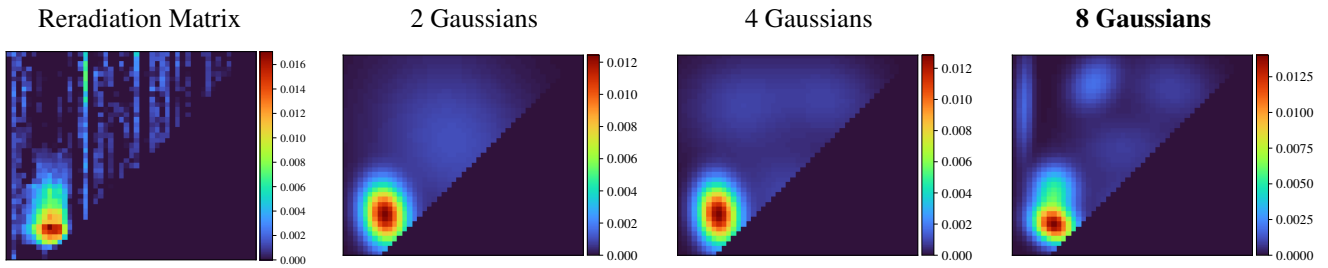
Fitted Material Under Monochromatic Illumination



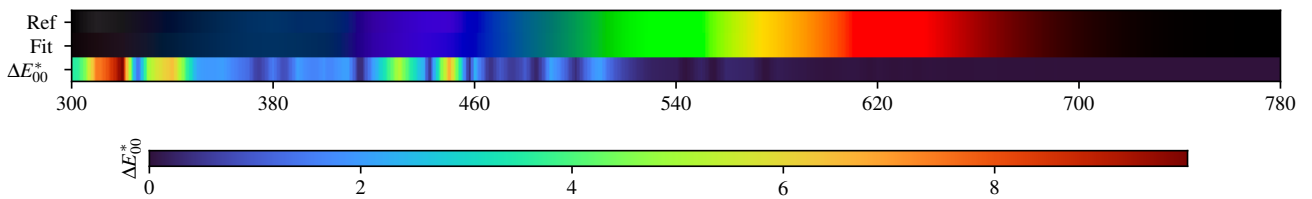
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.14$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.07$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.01$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.09$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.09$	E $\Delta E = 0.15$	FL5 $\Delta E = 0.11$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.12$	LED-V2 $\Delta E = 0.07$

PFUJ15Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.09$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.18$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.10$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.14$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.10$	E $\Delta E = 0.24$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.07$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.05$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.11$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.17$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.10$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.06$

PFUJ15Y - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.093078	0.139531	0.149003	0.248590	0.313804	0.308676	0.310355	0.314758	0.313453	0.334521	0.366442
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.418946	0.493776	0.576292	0.656001	0.704231	0.725986	0.736981	0.733996	0.735165	0.747855	0.747981
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.750829	0.753922	0.752898	0.757340	0.760148	0.770361	0.778180	0.787690	0.805800	0.821500	0.835386
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.847545	0.849064	0.856723	0.858357	0.860282	0.862407	0.862548	0.860978			

2 Gaussians

Scaling factor: 173.12078910848564

Gaussians:

Weight	Mean		Covariance			
0.485087960	515.581994326	609.856061101	11947.371450434	-1667.917973839	-1667.917973839	13577.041007570
0.514912040	380.099165564	458.799214488	839.759739014	-146.432134293	-146.432134293	1615.457907286

4 Gaussians

Scaling factor: 172.03084897301923

Gaussians:

Weight	Mean		Covariance			
0.127696722	606.233268833	693.798037590	5342.566850255	-647.850678651	-647.850678651	3955.950145936
0.507914035	378.581079403	459.481733784	745.816679248	-117.802704522	-117.802704522	1626.300221339
0.199051165	533.588295282	488.770033622	7776.818510885	-800.212446900	-800.212446900	4543.284358072
0.165338078	422.819950102	682.310283658	6052.150220036	393.896693681	393.896693681	4598.619771236

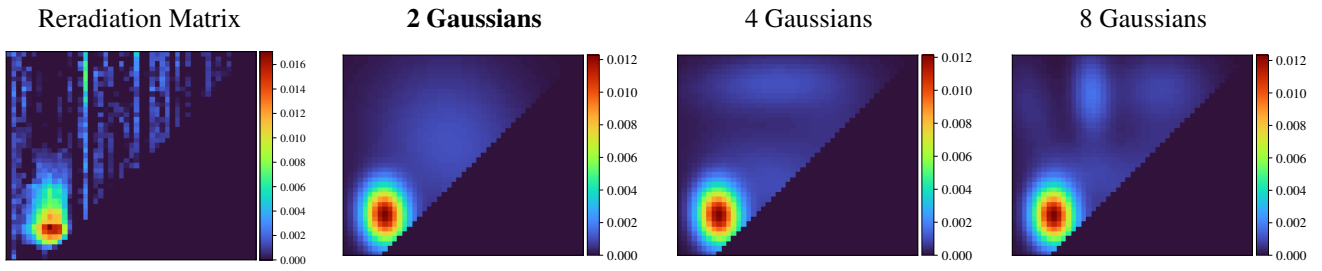
8 Gaussians

Scaling factor: 167.41466932962166

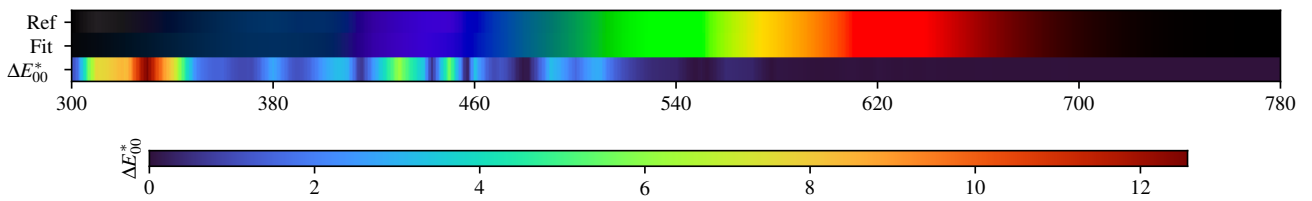
Gaussians:

Weight	Mean		Covariance			
0.094661803	619.156418575	716.106745042	3915.147485996	-529.521410620	-529.521410620	2283.963102111
0.184165616	380.232056602	507.129504275	815.124819352	6.199899828	6.199899828	1023.302121791
0.042043994	657.444124232	505.511382523	2887.011484873	-568.179708092	-568.179708092	5237.851498825
0.079009814	459.993407618	725.878789245	1046.051188444	264.943282083	264.943282083	1263.328297030
0.099976299	515.768048285	594.897634821	5259.550263601	-102.607491390	-102.607491390	2105.034060857
0.352219894	379.969974413	437.855542411	811.872222922	-142.299082464	-142.299082464	623.815068277
0.099157290	526.340128883	457.533837849	3073.243409338	-823.289618891	-823.289618891	2687.462234090
0.048765291	320.115496391	681.245226060	129.970668883	94.456122391	94.456122391	4526.577347668

PFUJ15Y - Weighted variational Bayesian inference - 2 Gaussians



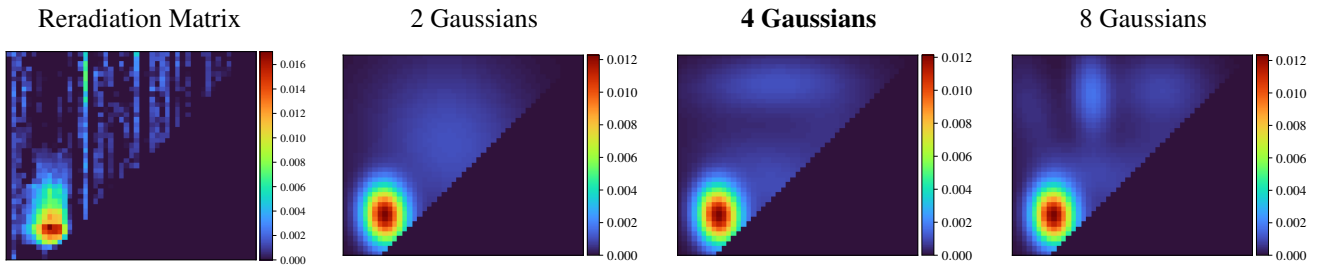
Fitted Material Under Monochromatic Illumination



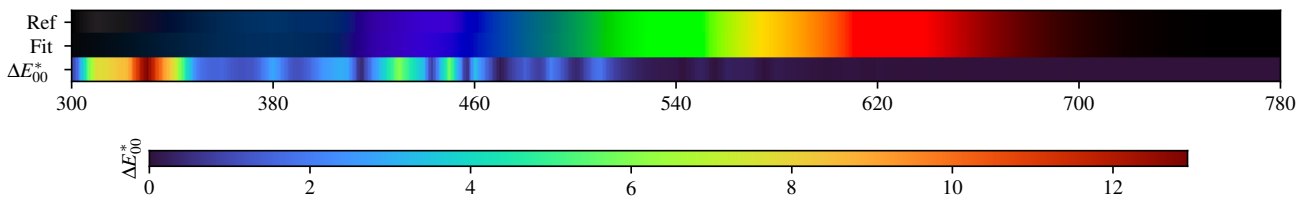
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.22$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.27$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.17$	D65 $\Delta E = 0.24$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.16$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.23$	D75 $\Delta E = 0.29$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.18$	E $\Delta E = 0.29$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.20$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.20$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.19$

PFUJ15Y - Weighted variational Bayesian inference - 4 Gaussians



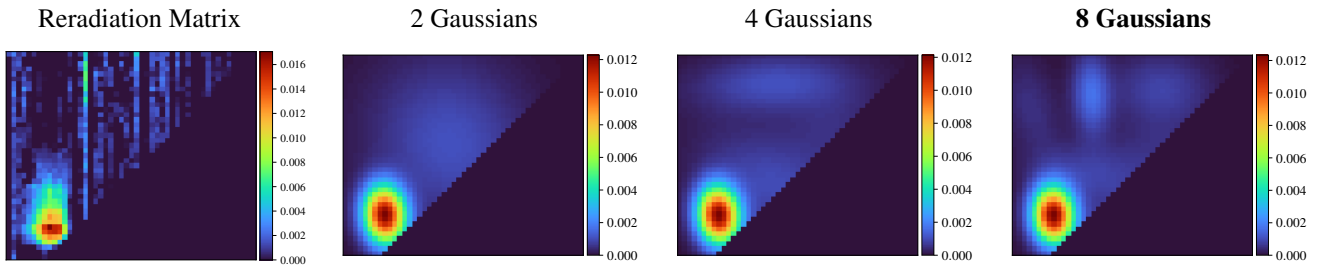
Fitted Material Under Monochromatic Illumination



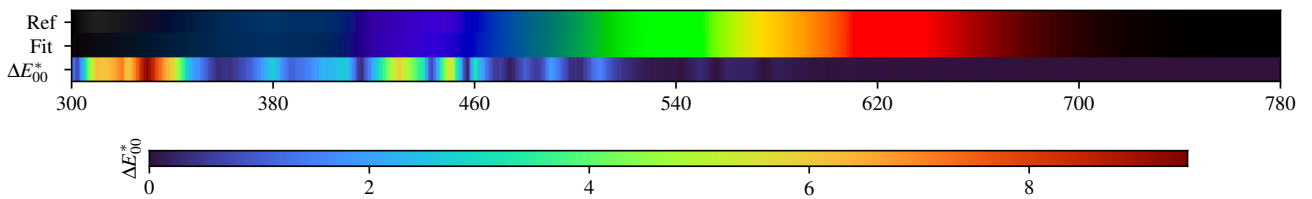
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.31$	FL2 $\Delta E = 0.18$	FL7 $\Delta E = 0.29$	FL12 $\Delta E = 0.17$	FL3.5 $\Delta E = 0.18$	FL3.10 $\Delta E = 0.32$	FL3.15 $\Delta E = 0.33$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.30$
B $\Delta E = 0.24$	D65 $\Delta E = 0.34$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.24$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.21$	FL3.11 $\Delta E = 0.32$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.34$	D75 $\Delta E = 0.39$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.19$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.15$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.25$	E $\Delta E = 0.37$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.30$	FL3.3 $\Delta E = 0.20$	FL3.8 $\Delta E = 0.21$	FL3.13 $\Delta E = 0.18$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.28$	FL1 $\Delta E = 0.27$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.27$	FL3.14 $\Delta E = 0.24$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.22$	LED-V2 $\Delta E = 0.15$

PFUJ15Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.23$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.22$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.27$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.18$	D65 $\Delta E = 0.24$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.27$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.25$	D75 $\Delta E = 0.28$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.19$	E $\Delta E = 0.31$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.15$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.21$	FL1 $\Delta E = 0.21$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.18$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.11$

PFUJ15Y - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.093078	0.139531	0.149003	0.248590	0.313804	0.308676	0.310355	0.314758	0.313453	0.334521	0.366442
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.418946	0.493776	0.576292	0.656001	0.704231	0.725986	0.736981	0.733996	0.735165	0.747855	0.747981
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.750829	0.753922	0.752898	0.757340	0.760148	0.770361	0.778180	0.787690	0.805800	0.821500	0.835386
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.847545	0.849064	0.856723	0.858357	0.860282	0.862407	0.862548	0.860978			

2 Gaussians max

Scaling factor: 173.38804956575328

Gaussians:

Weight	Mean	Covariance				
0.495512812	379.702424904	458.224832249	827.134785788	-71.224874557	-71.224874557	1557.304435992
0.504487188	511.178520889	604.895348606	12094.349212114	-1101.767736715	-1101.767736715	13802.168723334

4 Gaussians max

Scaling factor: 170.76096723130834

Gaussians:

Weight	Mean	Covariance				
0.492969699	379.242101825	457.332536097	822.676344788	-78.497225028	-78.497225028	1534.572253225
0.253652887	491.004640794	515.077003703	10193.131380079	-3735.978004009	-3735.978004009	6533.040602369
0.086294210	612.776143228	631.538484095	5551.153648357	471.882254332	471.882254332	4544.506133020
0.167083205	488.811470940	726.522651268	11670.078987927	541.885904412	541.885904412	1655.433491507

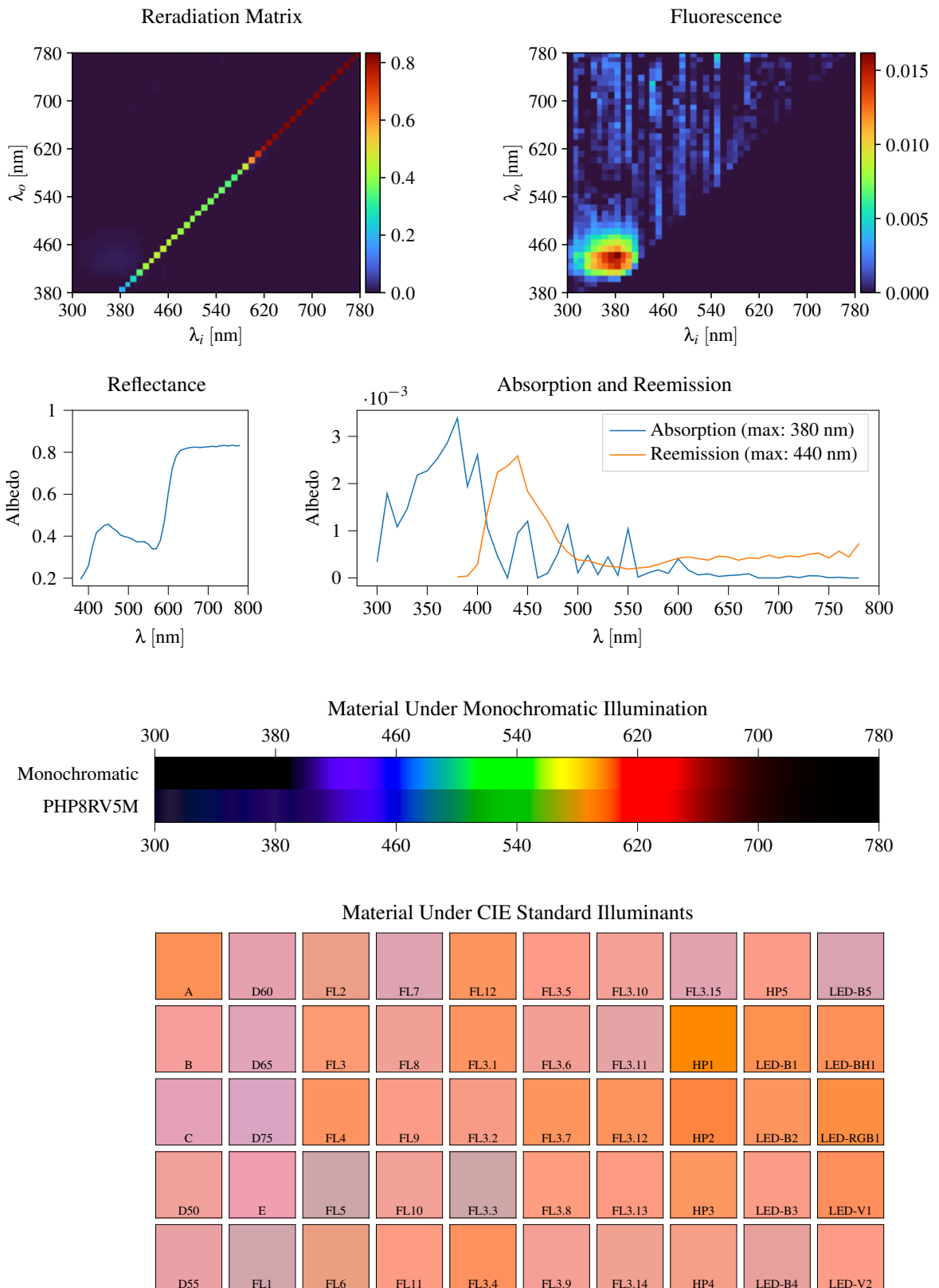
8 Gaussians max

Scaling factor: 171.40939740663188

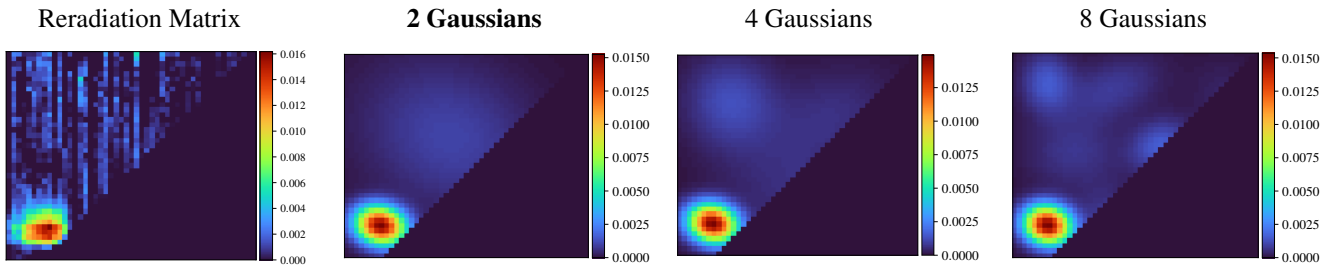
Gaussians:

Weight	Mean	Covariance				
0.485615761	378.970937992	457.520533578	797.488735558	-46.200340791	-46.200340791	1485.345916169
0.106133193	543.104853558	439.892227949	8231.104214931	-25.647295391	-25.647295391	2149.063950071
0.083780809	441.943638511	543.497441811	5649.803466686	-497.579754202	-497.579754202	1736.520870791
0.081355213	590.427995609	579.579365001	5970.728853076	859.157877380	859.157877380	3413.643790826
0.051175615	333.496986390	678.126937219	1661.384295867	-941.357718777	-941.357718777	4860.088218093
0.082388347	456.001338521	702.501530634	648.176892492	-100.865509511	-100.865509511	3027.709256393
0.108552051	596.089170782	715.909588702	4856.316610974	42.854695906	42.854695906	2572.213170326

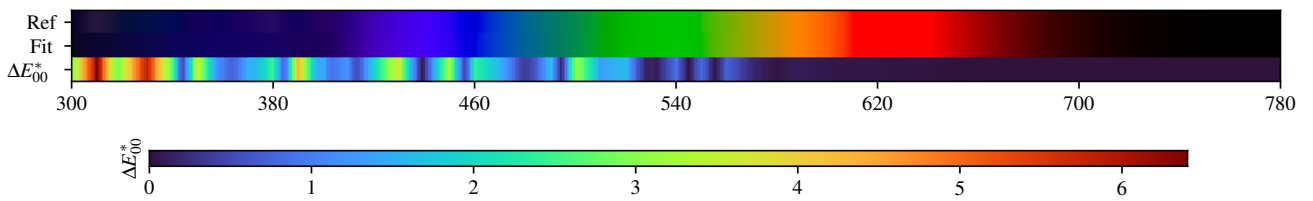
3.76. PHP8RV5M



PHP8RV5M - Weighted Expectation-Maximization - 2 Gaussians



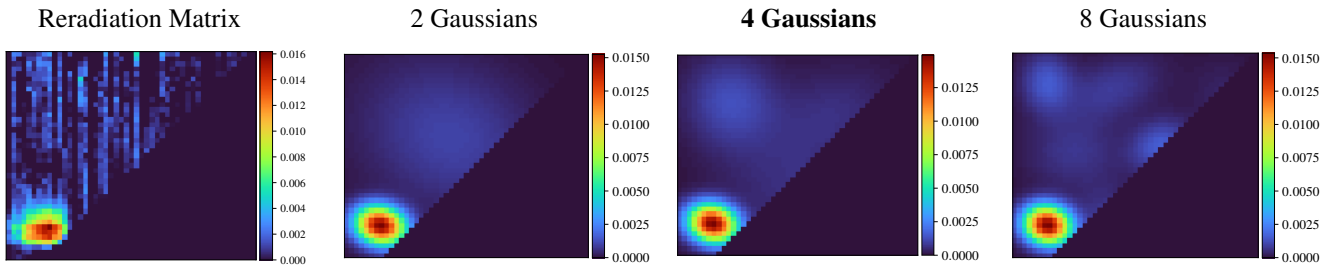
Fitted Material Under Monochromatic Illumination



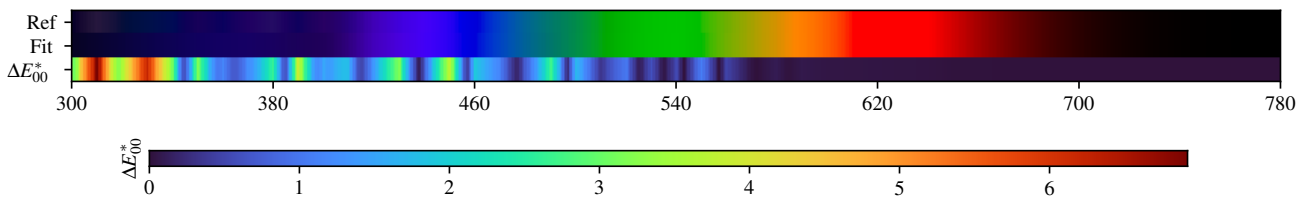
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.11$	D60 $\Delta E = 0.21$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.19$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.27$
B $\Delta E = 0.17$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.22$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.15$
D50 $\Delta E = 0.17$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.25$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.19$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.17$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.24$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.20$

PHP8RV5M - Weighted Expectation-Maximization - 4 Gaussians



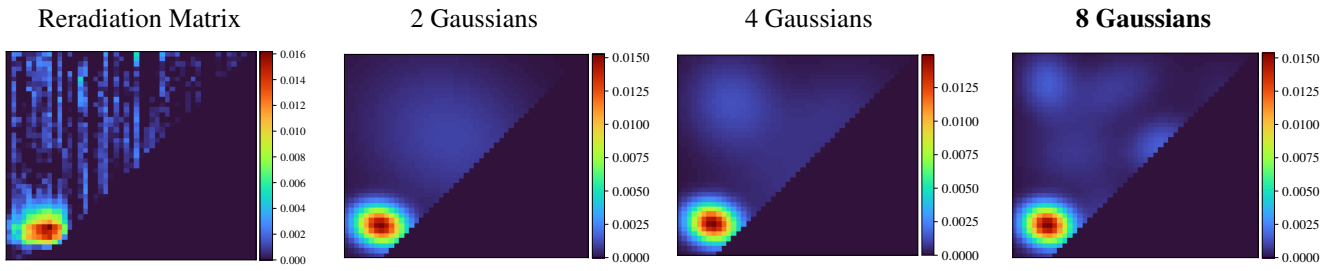
Fitted Material Under Monochromatic Illumination



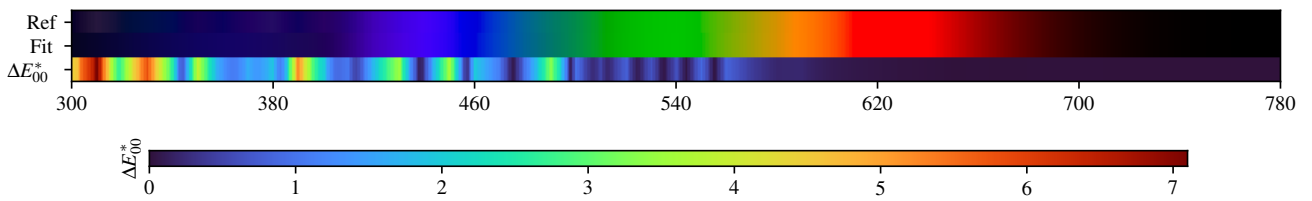
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.19$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.03$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.23$
B $\Delta E = 0.15$	D65 $\Delta E = 0.20$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.27$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.16$	D75 $\Delta E = 0.21$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.17$	E $\Delta E = 0.14$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.18$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.20$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.24$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.21$

PHP8RV5M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.10$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.09$	HP5 $\Delta E = 0.15$	LED-B5 $\Delta E = 0.23$
B $\Delta E = 0.09$	D65 $\Delta E = 0.12$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.07$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.10$	D75 $\Delta E = 0.12$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.11$	E $\Delta E = 0.08$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.16$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.11$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.11$

PHP8RV5M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.194815	0.223655	0.259613	0.350605	0.417622	0.434136	0.451731	0.457408	0.438873	0.426775	0.405737
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.398015	0.393774	0.386427	0.373747	0.372403	0.374336	0.361715	0.340017	0.340066	0.379117	0.468612
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.606599	0.723628	0.782586	0.808289	0.815388	0.820646	0.823706	0.824390	0.822534	0.824800	0.825881
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.828791	0.826227	0.830916	0.832563	0.829755	0.833624	0.830579	0.831672			

2 Gaussians

Scaling factor: 168.56365341801654

Gaussians:

Weight	Mean	Covariance				
0.517762646	505.363981572	618.304992816	15342.948744118	-2208.610178130	-2208.610178130	11586.771623058
0.482237354	367.813696414	439.958727498	1126.155143673	-113.935618159	-113.935618159	656.761967755

4 Gaussians

Scaling factor: 165.48988577531188

Gaussians:

Weight	Mean	Covariance				
0.188312913	403.171922327	688.915625592	3892.642709344	-120.378758421	-120.378758421	4125.876839196
0.189292774	530.833817594	511.881038491	12059.786075297	-952.190591335	-952.190591335	6382.161898579
0.483361933	367.155140365	440.638207322	1085.342287435	-109.927978691	-109.927978691	686.296122048
0.139032380	612.503308058	666.642807341	8287.460819472	1226.349578208	1226.349578208	4837.642852315

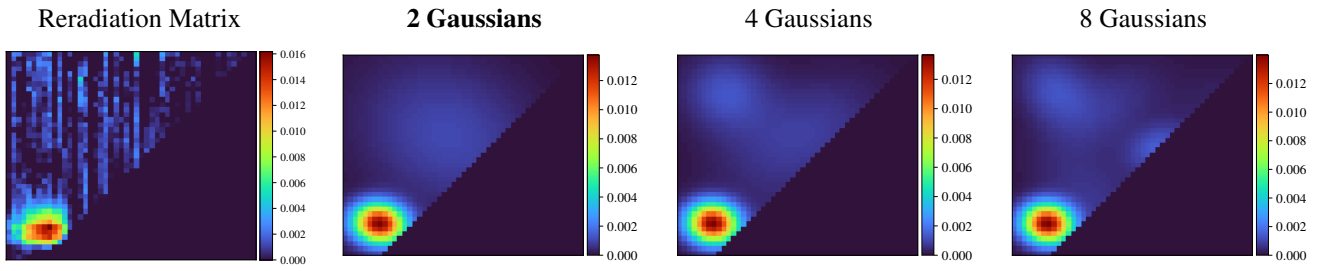
8 Gaussians

Scaling factor: 163.4662452078493

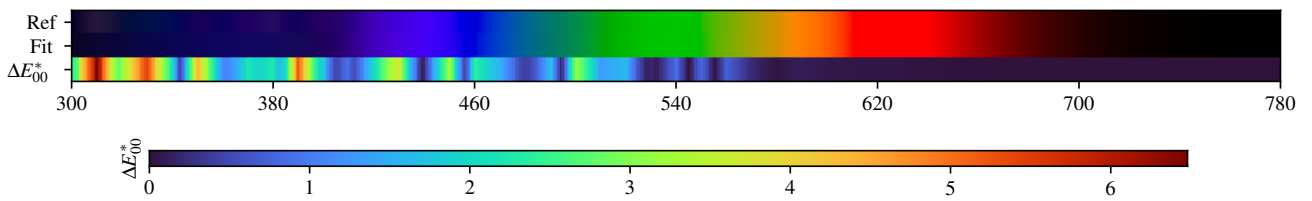
Gaussians:

Weight	Mean	Covariance				
0.101399067	495.629366849	711.886868539	4743.388688209	1089.820975244	1089.820975244	2154.020680326
0.063239318	481.965024296	448.303598769	1757.563236878	-22.709151155	-22.709151155	2328.351087824
0.476570183	365.593113699	440.887531208	969.412679216	-74.460677353	-74.460677353	667.610342354
0.044789644	718.908810859	692.424634297	2518.670858041	-148.991679165	-148.991679165	3163.699046984
0.082239388	364.199903592	724.199359470	1188.122475405	-38.280809031	-38.280809031	1726.635216366
0.085207078	589.050743199	598.142181179	1570.847293671	261.926343342	261.926343342	1244.659719951
0.042338100	664.600609260	454.085036617	5619.334105733	412.325169538	412.325169537	2639.895216299
0.104217221	418.216457674	584.247216610	4578.282384639	124.449457296	124.449457296	2754.613144040

PHP8RV5M - Weighted variational Bayesian inference - 2 Gaussians



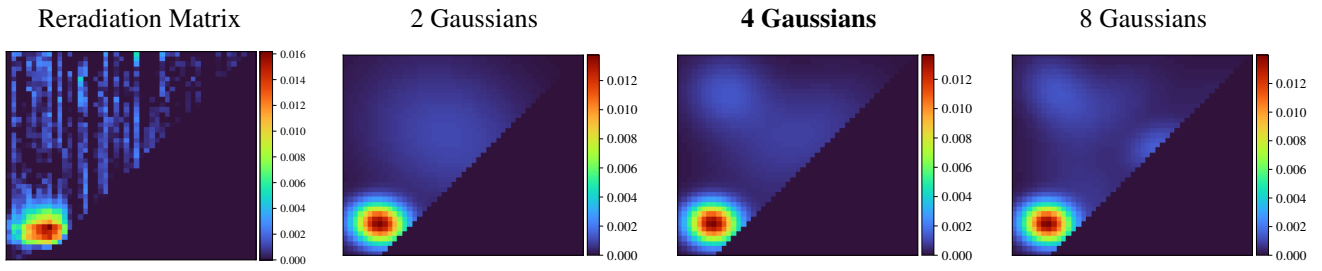
Fitted Material Under Monochromatic Illumination



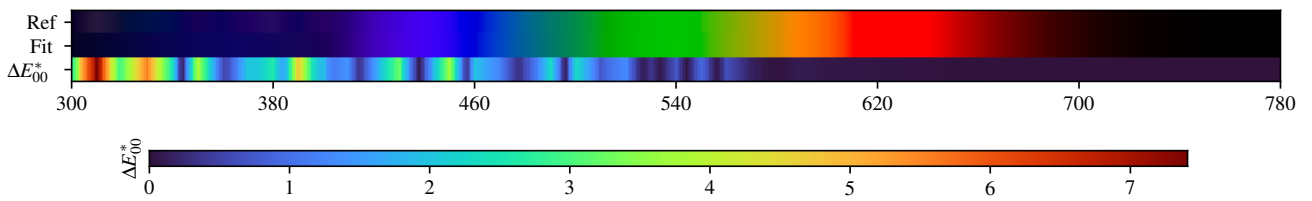
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.27$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.23$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.21$	$\Delta E = 0.16$	$\Delta E = 0.29$	$\Delta E = 0.21$	$\Delta E = 0.26$

PHP8RV5M - Weighted variational Bayesian inference - 4 Gaussians



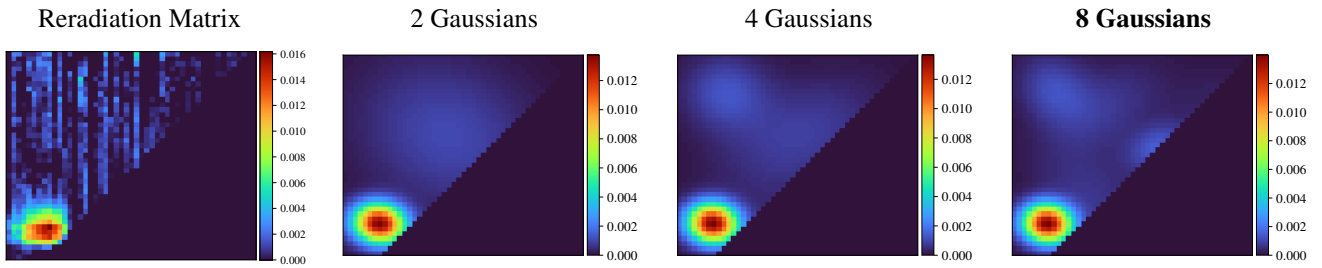
Fitted Material Under Monochromatic Illumination



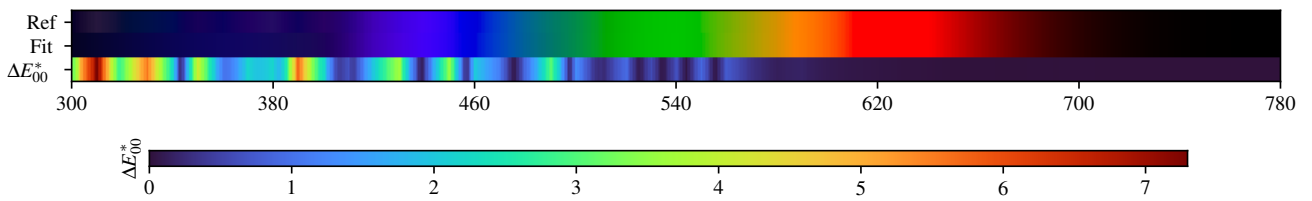
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.24$	FL3.15 $\Delta E = 0.08$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.27$
B $\Delta E = 0.14$	D65 $\Delta E = 0.12$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.15$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.12$	E $\Delta E = 0.07$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.26$	LED-B4 $\Delta E = 0.24$	LED-V2 $\Delta E = 0.24$

PHP8RV5M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.08$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.22$	FL3.15 $\Delta E = 0.06$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.22$
B $\Delta E = 0.11$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.11$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.11$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.09$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.22$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.17$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.09$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.18$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.22$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.22$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.19$

PHP8RV5M - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.194815	0.223655	0.259613	0.350605	0.417622	0.434136	0.451731	0.457408	0.438873	0.426775	0.405737
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.398015	0.393774	0.386427	0.373747	0.372403	0.374336	0.361715	0.340017	0.340066	0.379117	0.468612
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.606599	0.723628	0.782586	0.808289	0.815388	0.820646	0.823706	0.824390	0.822534	0.824800	0.825881
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.828791	0.826227	0.830916	0.832563	0.829755	0.833624	0.830579	0.831672			

2 Gaussians max

Scaling factor: 169.34443377731006

Gaussians:

Weight	Mean		Covariance			
0.488231785	368.711499869	440.637381639	1257.375879738	-69.608616661	-69.608616661	740.548674206
0.511768215	506.539052873	620.059529776	15378.040732695	-2378.705045230	-2378.705045230	11426.834812941

4 Gaussians max

Scaling factor: 164.5162520178435

Gaussians:

Weight	Mean		Covariance			
0.477981734	367.466980414	441.097760278	1156.096211632	-43.102260172	-43.102260172	741.212763333
0.076520892	558.851398794	440.775997423	13438.780358015	4.282202617	4.282202617	2284.357844696
0.306187974	542.540464225	618.147701942	13283.385373098	3507.204543180	3507.204543180	7134.324780360
0.139309401	392.763784048	707.712103581	3265.579924708	-89.754079488	-89.754079488	2738.605244007

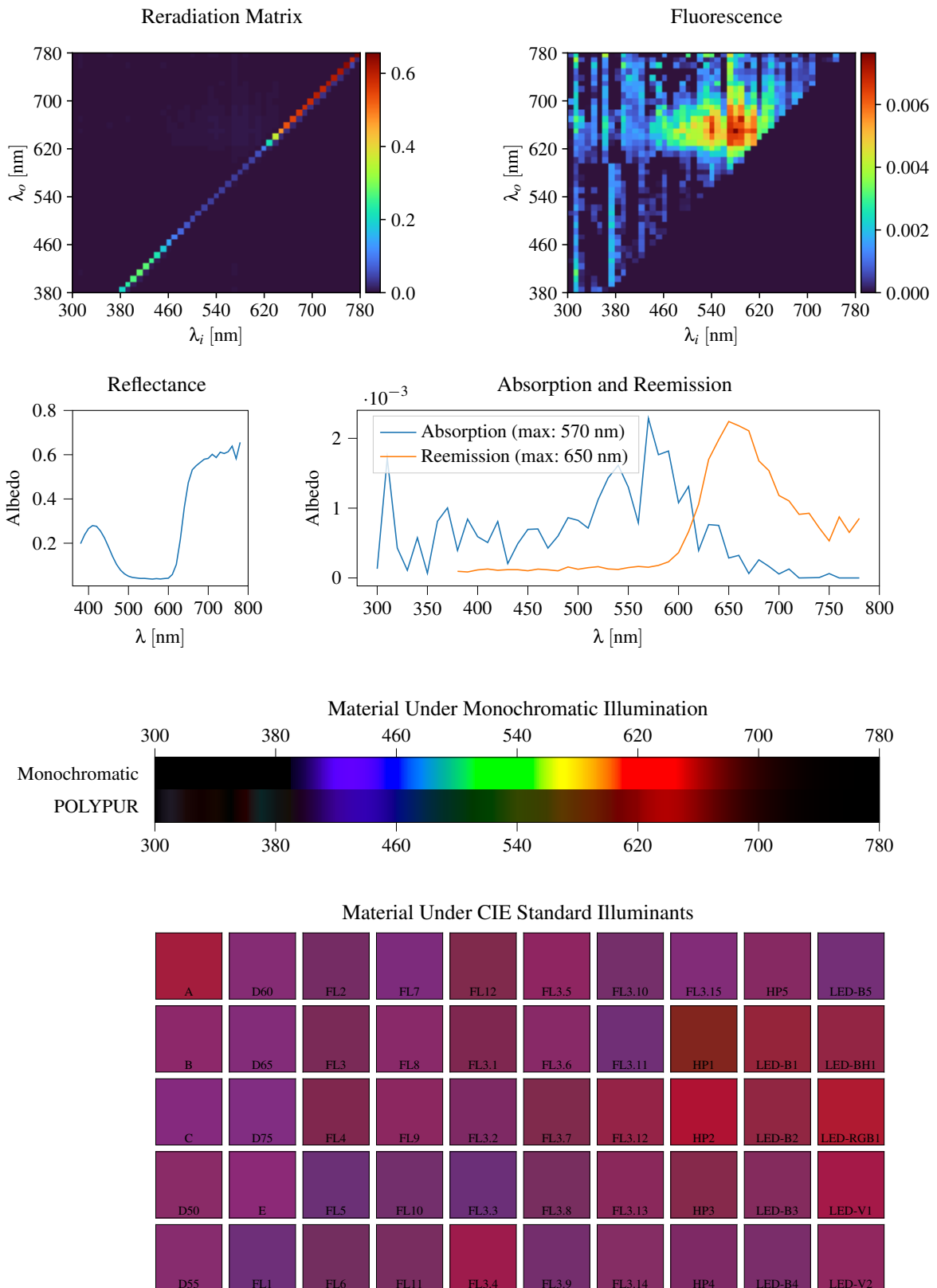
8 Gaussians max

Scaling factor: 164.63902294013076

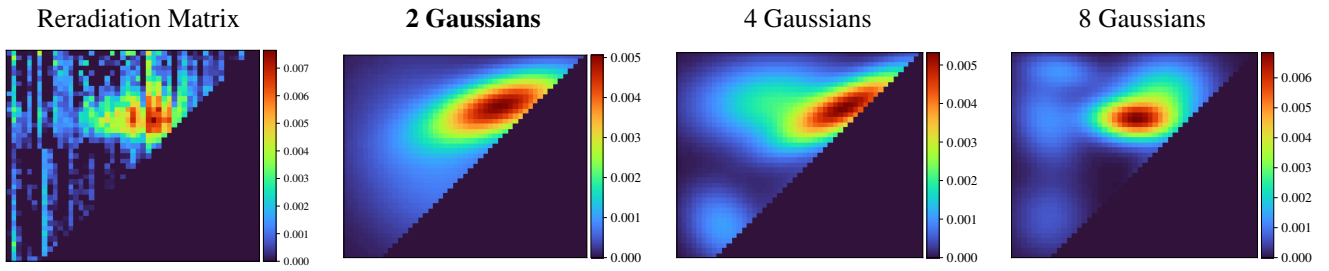
Gaussians:

Weight	Mean		Covariance			
0.470178591	366.690532387	440.437881861	1117.654454784	-42.246521522	-42.246521522	706.083418617
0.127818047	459.395767522	490.084426694	6259.425267414	-1917.018636710	-1917.018636710	4735.851357977
0.036190950	671.756745941	474.497878667	6550.966720092	-999.119482139	-999.119482139	3962.816364427
0.065963901	589.810679063	595.532108737	1813.503965035	409.470110959	409.470110959	1029.376110857
0.047908249	703.955868866	681.592846583	4544.005684953	1161.590790911	1161.590790911	3790.557892967
0.147882212	483.242077517	671.859582134	7115.667332531	2499.343702958	2499.343702958	4777.971770723
0.103963294	379.955974097	713.874812070	2417.034882300	-422.503731459	-422.503731459	2441.453492196

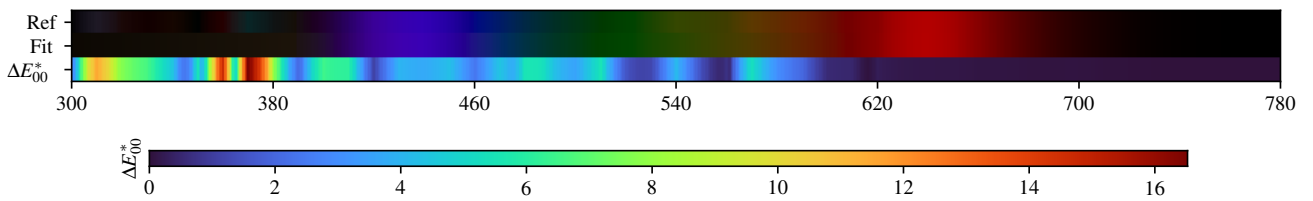
3.77. POLYPUR



POLYPUR - Weighted Expectation-Maximization - 2 Gaussians



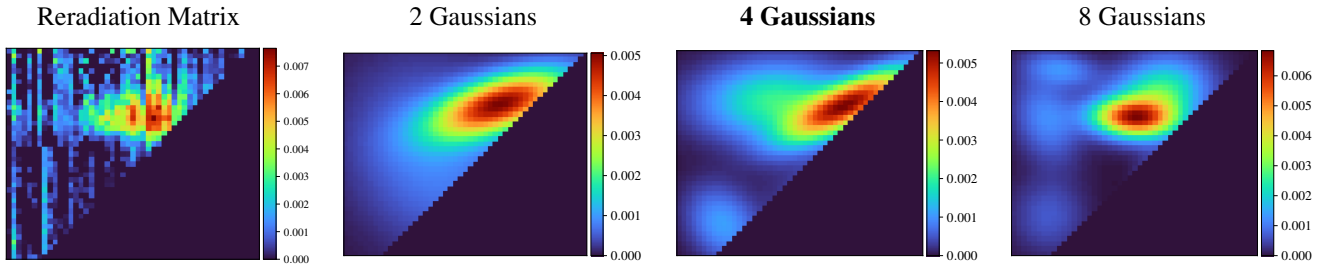
Fitted Material Under Monochromatic Illumination



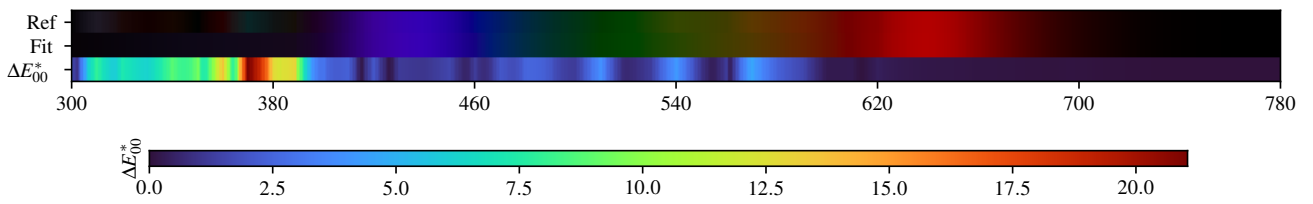
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.93$	$\Delta E = 1.90$	$\Delta E = 1.32$	$\Delta E = 1.72$	$\Delta E = 0.87$	$\Delta E = 1.14$	$\Delta E = 1.40$	$\Delta E = 1.85$	$\Delta E = 1.31$	$\Delta E = 1.71$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.59$	$\Delta E = 2.00$	$\Delta E = 1.06$	$\Delta E = 1.42$	$\Delta E = 0.80$	$\Delta E = 1.35$	$\Delta E = 1.38$	$\Delta E = 1.12$	$\Delta E = 0.84$	$\Delta E = 0.82$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.95$	$\Delta E = 2.16$	$\Delta E = 0.88$	$\Delta E = 1.17$	$\Delta E = 1.05$	$\Delta E = 0.84$	$\Delta E = 0.78$	$\Delta E = 0.58$	$\Delta E = 0.94$	$\Delta E = 1.04$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.67$	$\Delta E = 1.73$	$\Delta E = 1.81$	$\Delta E = 1.35$	$\Delta E = 1.66$	$\Delta E = 1.07$	$\Delta E = 1.14$	$\Delta E = 0.97$	$\Delta E = 1.28$	$\Delta E = 0.97$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.79$	$\Delta E = 1.81$	$\Delta E = 1.30$	$\Delta E = 1.13$	$\Delta E = 0.53$	$\Delta E = 1.22$	$\Delta E = 1.49$	$\Delta E = 1.22$	$\Delta E = 1.42$	$\Delta E = 1.52$

POLYPUR - Weighted Expectation-Maximization - 4 Gaussians



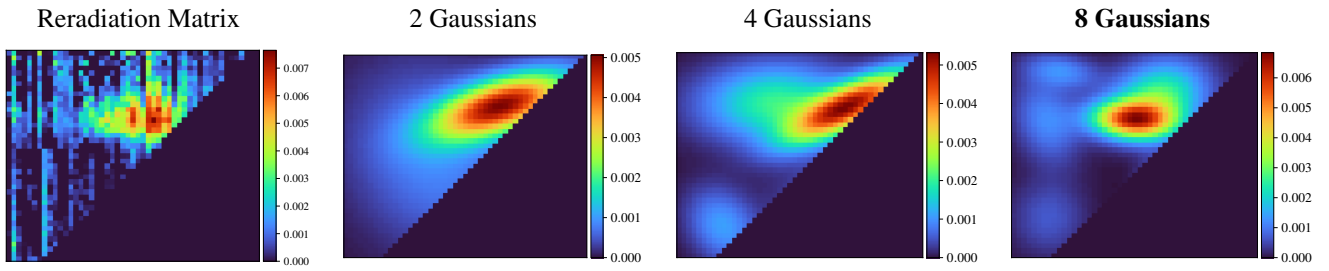
Fitted Material Under Monochromatic Illumination



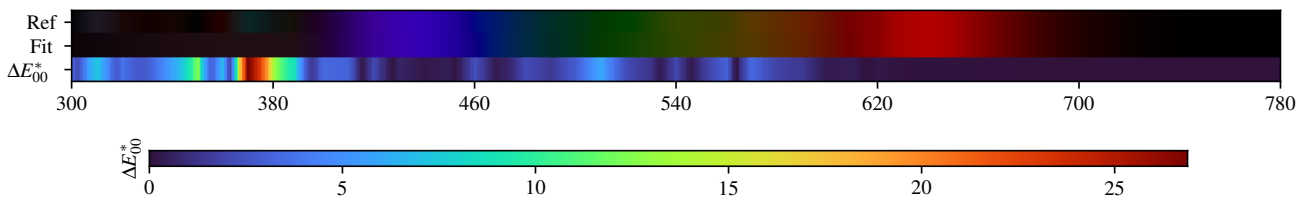
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.23$	D60 $\Delta E = 0.47$	FL2 $\Delta E = 0.62$	FL7 $\Delta E = 0.53$	FL12 $\Delta E = 0.49$	FL3.5 $\Delta E = 0.36$	FL3.10 $\Delta E = 0.53$	FL3.15 $\Delta E = 0.53$	HP5 $\Delta E = 0.45$	LED-B5 $\Delta E = 0.56$
B $\Delta E = 0.41$	D65 $\Delta E = 0.48$	FL3 $\Delta E = 0.59$	FL8 $\Delta E = 0.45$	FL3.1 $\Delta E = 0.53$	FL3.6 $\Delta E = 0.43$	FL3.11 $\Delta E = 0.59$	HP1 $\Delta E = 0.81$	LED-B1 $\Delta E = 0.31$	LED-BH1 $\Delta E = 0.25$
C $\Delta E = 0.49$	D75 $\Delta E = 0.50$	FL4 $\Delta E = 0.54$	FL9 $\Delta E = 0.39$	FL3.2 $\Delta E = 0.48$	FL3.7 $\Delta E = 0.52$	FL3.12 $\Delta E = 0.29$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.34$	LED-RGB1 $\Delta E = 0.39$
D50 $\Delta E = 0.43$	E $\Delta E = 0.36$	FL5 $\Delta E = 0.71$	FL10 $\Delta E = 0.58$	FL3.3 $\Delta E = 0.67$	FL3.8 $\Delta E = 0.57$	FL3.13 $\Delta E = 0.40$	HP3 $\Delta E = 0.47$	LED-B3 $\Delta E = 0.45$	LED-V1 $\Delta E = 0.27$
D55 $\Delta E = 0.45$	FL1 $\Delta E = 0.68$	FL6 $\Delta E = 0.66$	FL11 $\Delta E = 0.54$	FL3.4 $\Delta E = 0.20$	FL3.9 $\Delta E = 0.57$	FL3.14 $\Delta E = 0.50$	HP4 $\Delta E = 0.60$	LED-B4 $\Delta E = 0.50$	LED-V2 $\Delta E = 0.43$

POLYPUR - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.26$	$\Delta E = 0.07$	$\Delta E = 0.43$	$\Delta E = 0.11$	$\Delta E = 0.29$	$\Delta E = 0.11$	$\Delta E = 0.27$	$\Delta E = 0.18$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.34$	$\Delta E = 0.09$	$\Delta E = 0.39$	$\Delta E = 0.09$	$\Delta E = 0.38$	$\Delta E = 0.70$	$\Delta E = 0.22$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.38$	$\Delta E = 0.12$	$\Delta E = 0.23$	$\Delta E = 0.49$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.22$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.36$	$\Delta E = 0.13$	$\Delta E = 0.45$	$\Delta E = 0.13$	$\Delta E = 0.40$	$\Delta E = 0.17$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.30$	$\Delta E = 0.40$	$\Delta E = 0.16$	$\Delta E = 0.42$	$\Delta E = 0.11$	$\Delta E = 0.41$	$\Delta E = 0.20$	$\Delta E = 0.09$

POLYPUR - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.198001	0.237839	0.266437	0.279512	0.276383	0.254970	0.223532	0.183329	0.140943	0.104625	0.078565
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.061523	0.050881	0.045263	0.043052	0.040818	0.041013	0.039324	0.037830	0.039955	0.038286	0.040355
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.041796	0.058706	0.103921	0.217080	0.361900	0.473338	0.531854	0.550549	0.565216	0.579548	0.583326
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.601815	0.587154	0.611222	0.605493	0.613471	0.638733	0.582254	0.655786			

2 Gaussians

Scaling factor: 182.72167875072537

Gaussians:

Weight	Mean	Covariance				
0.569566637	615.287323444	682.505364773	8285.598567953	2311.543630454	2311.543630454	2085.203164211
0.430433363	478.217156204	576.233725253	13390.016403366	-2071.145155652	-2071.145155652	15799.706467135

4 Gaussians

Scaling factor: 178.97572453227997

Gaussians:

Weight	Mean	Covariance				
0.411077330	642.832970475	680.015268867	6780.045923462	3067.684599203	3067.684599203	2351.052260940
0.091672150	386.412953234	439.156896167	2264.716812009	-575.094970007	-575.094970007	2628.545071825
0.389949203	493.103100008	682.465905997	10192.234689042	111.349291034	111.349291034	2848.527639701
0.107301317	599.482132302	473.788700468	5948.083346774	91.989428857	91.989428857	3968.058486584

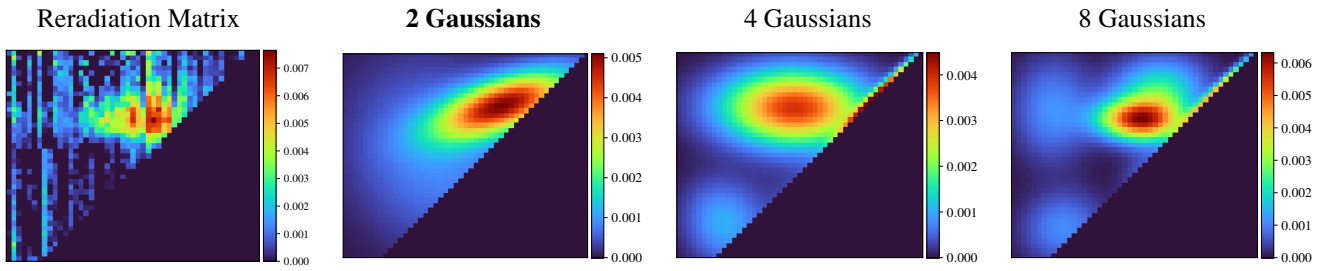
8 Gaussians

Scaling factor: 212.10521663583188

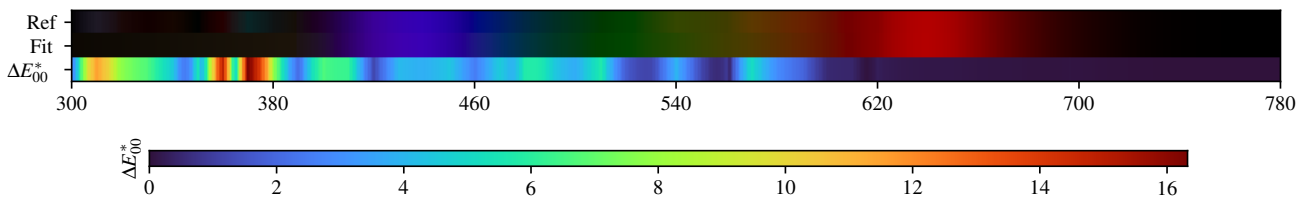
Gaussians:

Weight	Mean	Covariance				
0.262222979	588.024439390	694.026893971	3955.601935357	521.443373098	521.443373098	2472.485013188
0.050694233	564.200490029	466.527881134	545.589991122	384.947210031	384.947210031	3652.375590797
0.086443618	364.508217221	648.033198262	1929.210807211	-555.865678641	-555.865678641	3257.877594747
0.242338097	655.083880386	645.083880386	13724.294151812	13724.294150812	13724.294150812	13724.294151812
0.218898260	534.498263422	650.264767216	3064.818319122	-119.758799211	-119.758799211	647.078914152
0.053635876	368.938105766	455.718268169	2536.022327651	8.217659701	8.217659701	2758.054800691
0.044638503	676.117329302	476.752708482	2685.434857267	174.632653734	174.632653734	4642.320099046
0.041128434	395.381097505	746.673131711	2433.468829026	-294.707078956	-294.707078956	605.018035152

POLYPUR - Weighted variational Bayesian inference - 2 Gaussians



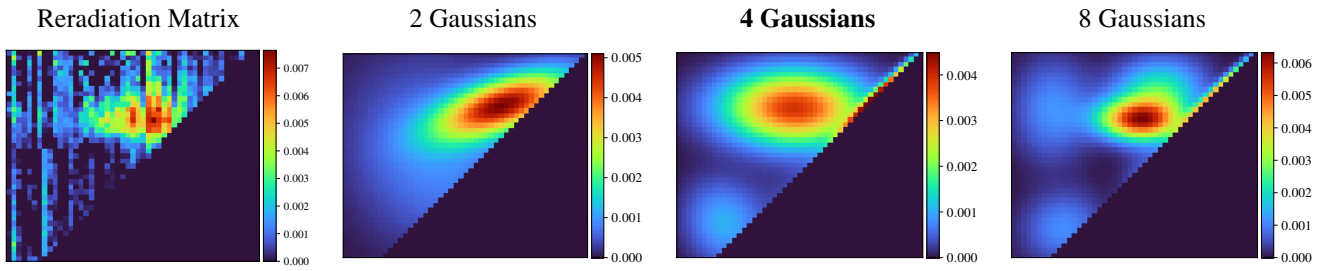
Fitted Material Under Monochromatic Illumination



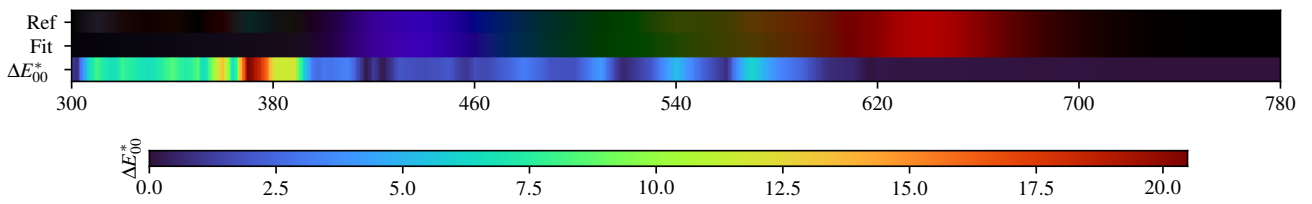
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.00$	$\Delta E = 2.01$	$\Delta E = 1.36$	$\Delta E = 1.81$	$\Delta E = 0.89$	$\Delta E = 1.21$	$\Delta E = 1.46$	$\Delta E = 1.95$	$\Delta E = 1.39$	$\Delta E = 1.80$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.69$	$\Delta E = 2.11$	$\Delta E = 1.08$	$\Delta E = 1.50$	$\Delta E = 0.78$	$\Delta E = 1.43$	$\Delta E = 1.44$	$\Delta E = 1.09$	$\Delta E = 0.89$	$\Delta E = 0.88$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.06$	$\Delta E = 2.28$	$\Delta E = 0.87$	$\Delta E = 1.24$	$\Delta E = 1.09$	$\Delta E = 0.83$	$\Delta E = 0.83$	$\Delta E = 0.64$	$\Delta E = 1.00$	$\Delta E = 1.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.76$	$\Delta E = 1.84$	$\Delta E = 1.89$	$\Delta E = 1.41$	$\Delta E = 1.73$	$\Delta E = 1.10$	$\Delta E = 1.21$	$\Delta E = 1.02$	$\Delta E = 1.35$	$\Delta E = 1.04$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.89$	$\Delta E = 1.89$	$\Delta E = 1.34$	$\Delta E = 1.17$	$\Delta E = 0.57$	$\Delta E = 1.26$	$\Delta E = 1.58$	$\Delta E = 1.27$	$\Delta E = 1.49$	$\Delta E = 1.61$

POLYPUR - Weighted variational Bayesian inference - 4 Gaussians



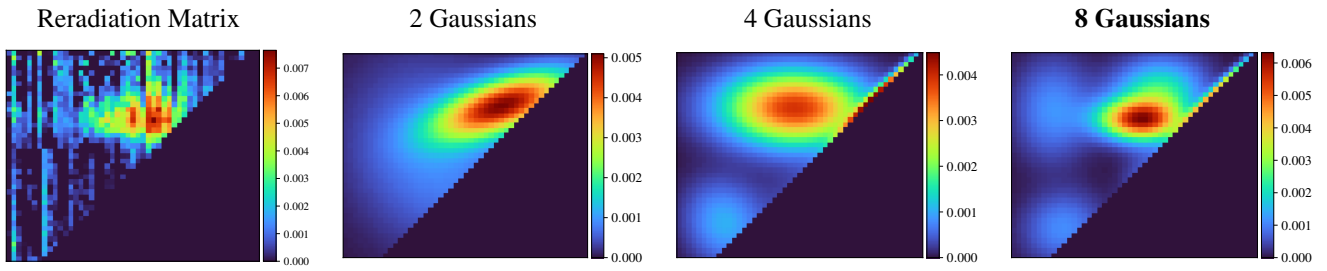
Fitted Material Under Monochromatic Illumination



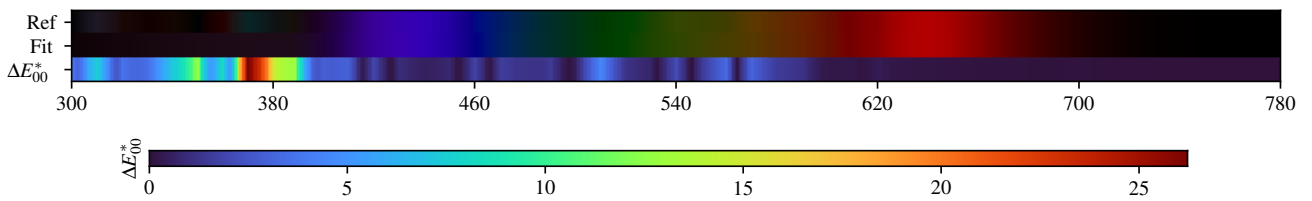
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.39$	$\Delta E = 0.60$	$\Delta E = 0.96$	$\Delta E = 0.65$	$\Delta E = 0.91$	$\Delta E = 0.48$	$\Delta E = 0.78$	$\Delta E = 0.62$	$\Delta E = 0.67$	$\Delta E = 0.72$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.53$	$\Delta E = 0.61$	$\Delta E = 0.99$	$\Delta E = 0.55$	$\Delta E = 0.96$	$\Delta E = 0.53$	$\Delta E = 0.88$	$\Delta E = 1.26$	$\Delta E = 0.54$	$\Delta E = 0.47$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.59$	$\Delta E = 0.63$	$\Delta E = 0.97$	$\Delta E = 0.55$	$\Delta E = 0.78$	$\Delta E = 0.99$	$\Delta E = 0.48$	$\Delta E = 0.29$	$\Delta E = 0.57$	$\Delta E = 0.34$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.56$	$\Delta E = 0.48$	$\Delta E = 0.93$	$\Delta E = 0.89$	$\Delta E = 0.89$	$\Delta E = 0.98$	$\Delta E = 0.55$	$\Delta E = 0.78$	$\Delta E = 0.65$	$\Delta E = 0.43$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.58$	$\Delta E = 0.87$	$\Delta E = 1.05$	$\Delta E = 0.90$	$\Delta E = 0.42$	$\Delta E = 0.92$	$\Delta E = 0.58$	$\Delta E = 0.89$	$\Delta E = 0.71$	$\Delta E = 0.56$

POLYPUR - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.23$	$\Delta E = 0.26$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.27$	$\Delta E = 0.18$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.25$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.14$	$\Delta E = 0.29$	$\Delta E = 0.53$	$\Delta E = 0.09$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.26$	$\Delta E = 0.29$	$\Delta E = 0.12$	$\Delta E = 0.33$	$\Delta E = 0.15$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.22$	$\Delta E = 0.26$	$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.07$	$\Delta E = 0.29$	$\Delta E = 0.14$	$\Delta E = 0.41$	$\Delta E = 0.17$	$\Delta E = 0.24$

POLYPUR - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.198001	0.237839	0.266437	0.279512	0.276383	0.254970	0.223532	0.183329	0.140943	0.104625	0.078565
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.061523	0.050881	0.045263	0.043052	0.040818	0.041013	0.039324	0.037830	0.039955	0.038286	0.040355
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.041796	0.058706	0.103921	0.217080	0.361900	0.473338	0.531854	0.550549	0.565216	0.579548	0.583326
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.601815	0.587154	0.611222	0.605493	0.613471	0.638733	0.582254	0.655786			

2 Gaussians max

Scaling factor: 183.4600359053043

Gaussians:

Weight	Mean		Covariance			
0.449930007	480.658030913	580.923340721	13231.834859695	-1702.673510462	-1702.673510462	15666.073218712
0.550069993	618.203216205	682.394446027	8064.620232863	2368.484254337	2368.484254337	2083.885642605

4 Gaussians max

Scaling factor: 199.17156268900737

Gaussians:

Weight	Mean		Covariance			
0.097528991	389.778256331	444.728399311	2747.904772024	-345.721561114	-345.721561114	3257.052605900
0.094780857	598.837823785	465.173575002	5917.190017304	-267.368475535	-267.368475535	3484.736586642
0.622680756	529.714207271	673.555614737	9690.797637679	-102.209262646	-102.209262646	2635.203297953
0.185009396	711.390863702	702.112169195	2499.706359889	2318.236688474	2318.236688474	2359.941445870

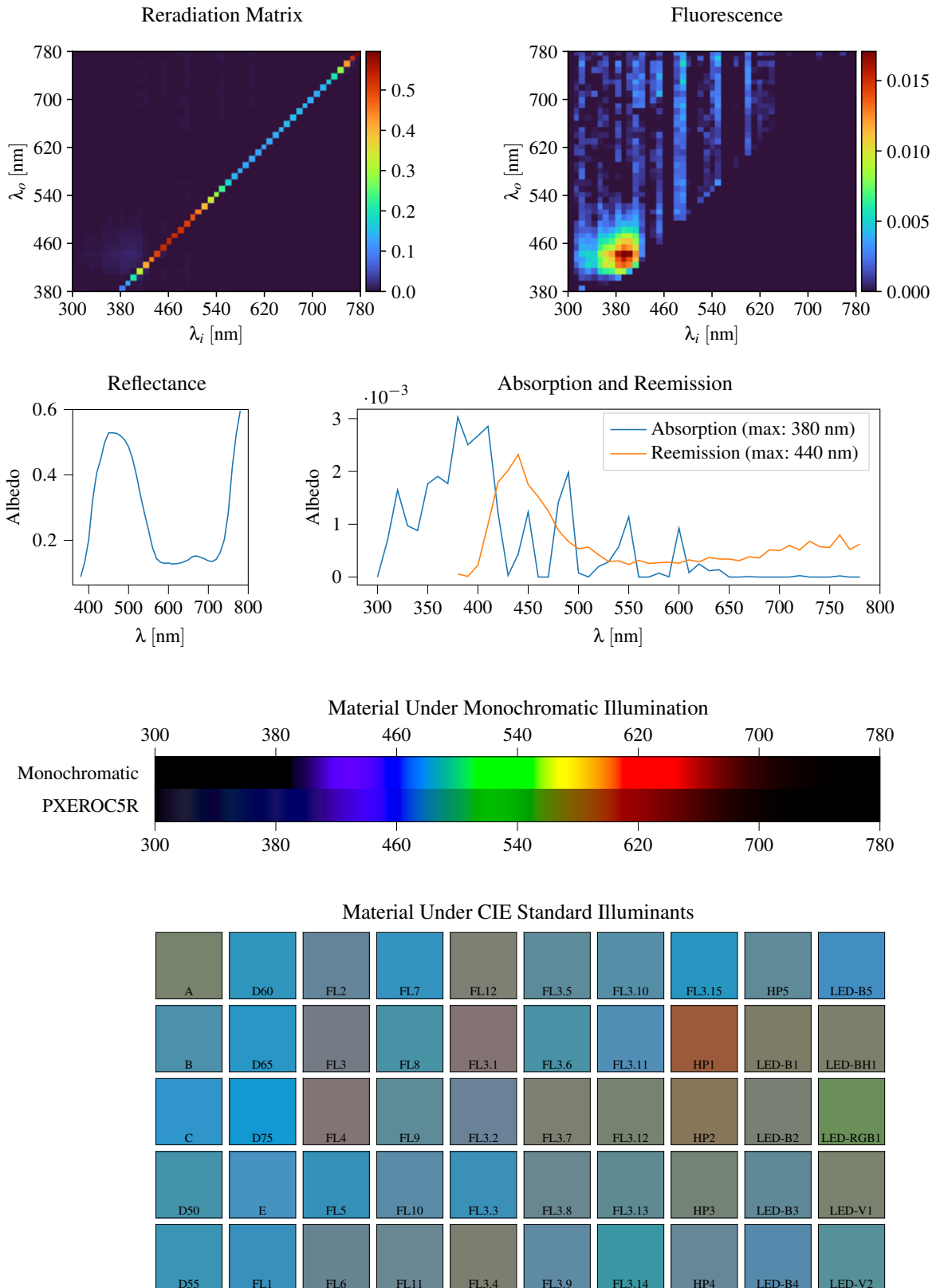
8 Gaussians max

Scaling factor: 200.88783907753898

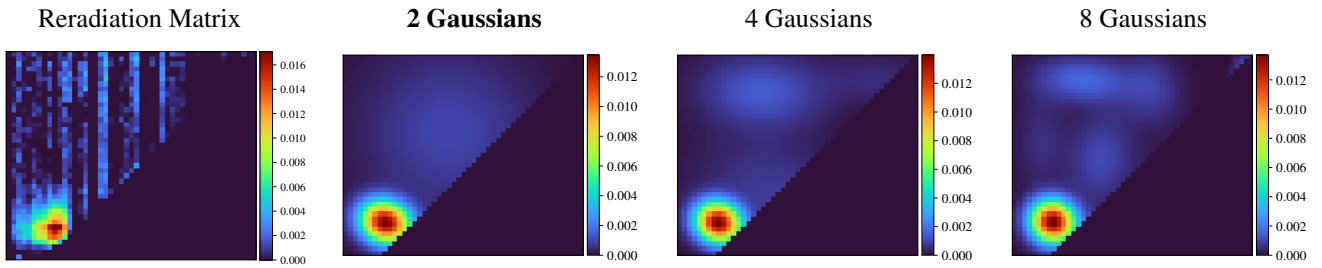
Gaussians:

Weight	Mean		Covariance			
0.092094085	397.580711098	434.933611728	2934.711573632	108.206437864	108.206437864	2347.530186112
0.060864065	562.869745944	488.641366383	1085.541277805	8.460874946	8.460874946	5303.249845445
0.049105335	660.561813724	486.944040169	4312.040026198	-723.812836787	-723.812836787	5359.899372548
0.129271144	376.922377758	669.935005026	2655.086360335	34.394056550	34.394056550	4707.272693863
0.227382610	547.235229238	649.118362848	3085.063091719	-53.483780466	-53.483780466	715.398839186
0.189332251	711.798303772	702.232199288	2410.111379067	2237.189274405	2237.189274405	2290.464229705
0.235488272	585.176240334	698.733429470	3771.160107185	214.359006789	214.359006789	2267.597120939

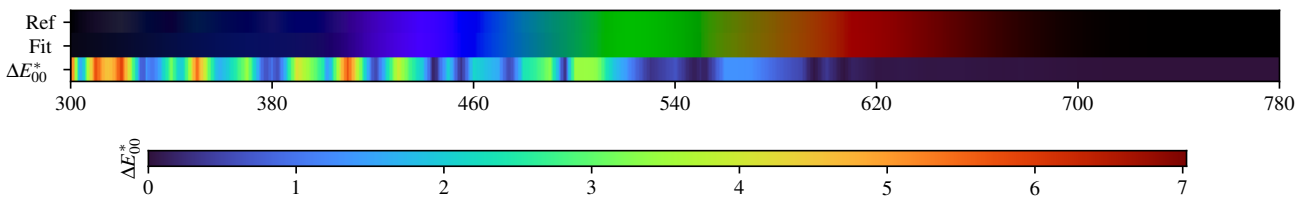
3.78. PXEROC5R



PXEROC5R - Weighted Expectation-Maximization - 2 Gaussians



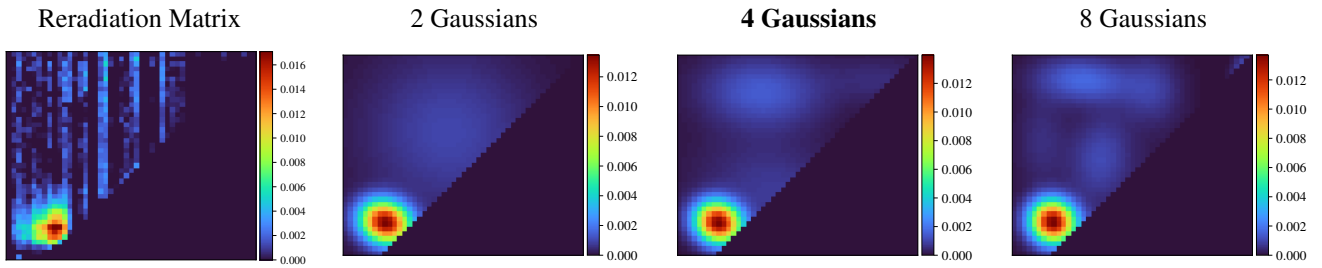
Fitted Material Under Monochromatic Illumination



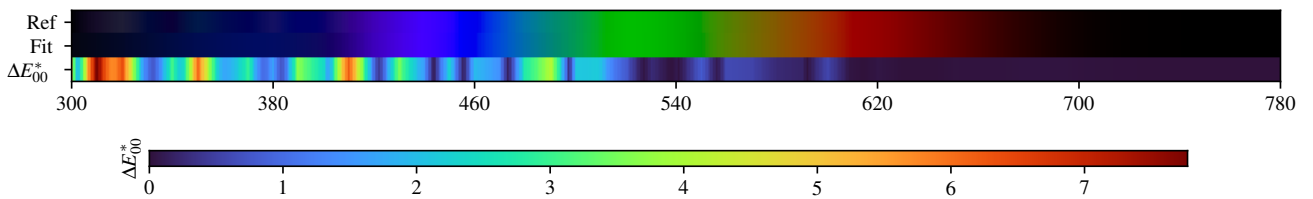
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.03$	$\Delta E = 0.90$	$\Delta E = 1.11$	$\Delta E = 0.81$	$\Delta E = 1.04$	$\Delta E = 0.89$	$\Delta E = 0.85$	$\Delta E = 0.69$	$\Delta E = 1.11$	$\Delta E = 0.98$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.93$	$\Delta E = 0.92$	$\Delta E = 1.40$	$\Delta E = 0.77$	$\Delta E = 0.87$	$\Delta E = 0.76$	$\Delta E = 0.84$	$\Delta E = 0.41$	$\Delta E = 1.22$	$\Delta E = 1.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.95$	$\Delta E = 0.96$	$\Delta E = 0.93$	$\Delta E = 0.91$	$\Delta E = 1.11$	$\Delta E = 1.10$	$\Delta E = 0.88$	$\Delta E = 1.13$	$\Delta E = 1.21$	$\Delta E = 0.71$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.89$	$\Delta E = 0.99$	$\Delta E = 0.82$	$\Delta E = 0.90$	$\Delta E = 0.80$	$\Delta E = 1.01$	$\Delta E = 0.81$	$\Delta E = 0.88$	$\Delta E = 1.08$	$\Delta E = 1.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.88$	$\Delta E = 0.84$	$\Delta E = 1.11$	$\Delta E = 1.03$	$\Delta E = 1.03$	$\Delta E = 0.95$	$\Delta E = 0.65$	$\Delta E = 1.15$	$\Delta E = 1.04$	$\Delta E = 0.98$

PXEROC5R - Weighted Expectation-Maximization - 4 Gaussians



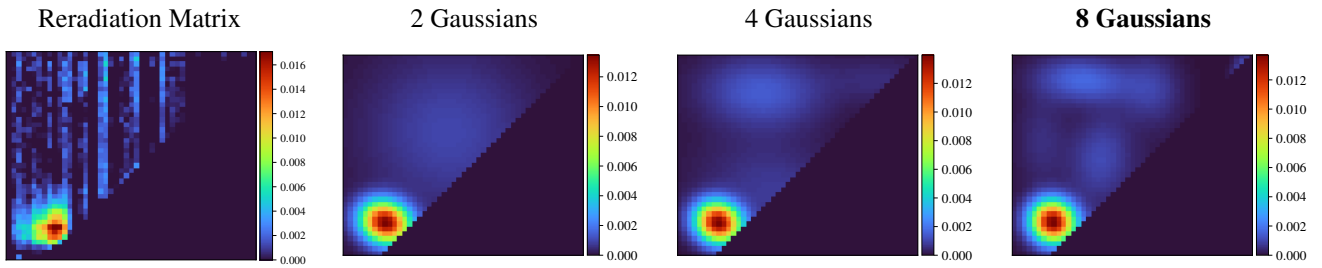
Fitted Material Under Monochromatic Illumination



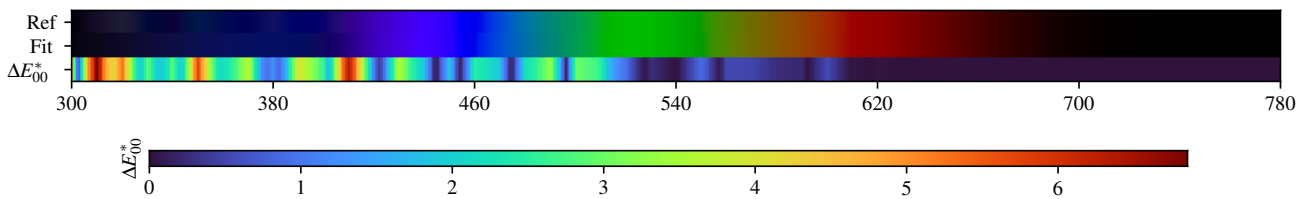
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.28$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.41$	$\Delta E = 0.22$	$\Delta E = 0.43$	$\Delta E = 0.15$	$\Delta E = 0.30$	$\Delta E = 0.17$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.34$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.22$	$\Delta E = 0.27$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.36$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.19$	$\Delta E = 0.41$	$\Delta E = 0.19$	$\Delta E = 0.46$	$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.27$	$\Delta E = 0.27$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.47$	$\Delta E = 0.07$	$\Delta E = 0.40$	$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.36$

PXEROC5R - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.22$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.34$	$\Delta E = 0.18$	$\Delta E = 0.34$	$\Delta E = 0.07$	$\Delta E = 0.22$	$\Delta E = 0.27$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.27$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.25$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.32$	$\Delta E = 0.11$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.15$	$\Delta E = 0.32$	$\Delta E = 0.16$	$\Delta E = 0.39$	$\Delta E = 0.19$	$\Delta E = 0.08$	$\Delta E = 0.27$	$\Delta E = 0.21$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.39$	$\Delta E = 0.10$	$\Delta E = 0.33$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.26$	$\Delta E = 0.22$

PXEROC5R - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.088485	0.132960	0.201045	0.323570	0.405290	0.447225	0.498678	0.528701	0.528561	0.527086	0.519388
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.507514	0.486192	0.448910	0.398086	0.336630	0.282026	0.231414	0.177830	0.144134	0.133091	0.129443
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.130612	0.127481	0.128400	0.130624	0.134690	0.140269	0.150136	0.152215	0.148344	0.143542	0.137077
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.135310	0.142276	0.163504	0.202038	0.283641	0.423452	0.525117	0.595995			

2 Gaussians

Scaling factor: 169.09500946383653

Gaussians:

Weight	Mean		Covariance			
0.486679356	381.015458477	442.995444091	1159.916664681	-127.234294896	-127.234294896	838.795131995
0.513320644	508.217003772	626.605860915	14315.531916643	-34.705247777	-34.705247777	13721.743591480

4 Gaussians

Scaling factor: 162.12421428502591

Gaussians:

Weight	Mean		Covariance			
0.462786845	378.629464194	442.623910903	965.318778395	-87.257815762	-87.257815762	782.943453759
0.057183701	706.072990918	732.642980495	6837.960932161	-228.529480569	-228.529480569	1267.081283415
0.234287420	465.988412923	708.513117408	6970.563816995	-261.428697469	-261.428697469	2540.391118750
0.245742034	494.562573099	506.689835630	11568.841875668	-1724.466278708	-1724.466278708	5760.902531933

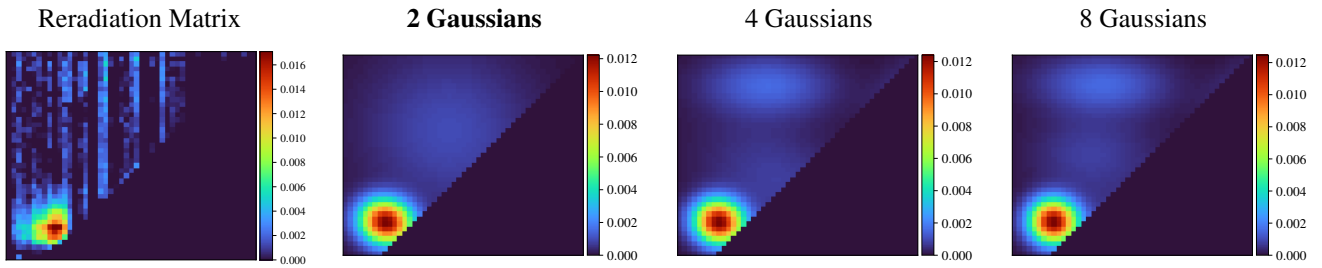
8 Gaussians

Scaling factor: 159.88761502157476

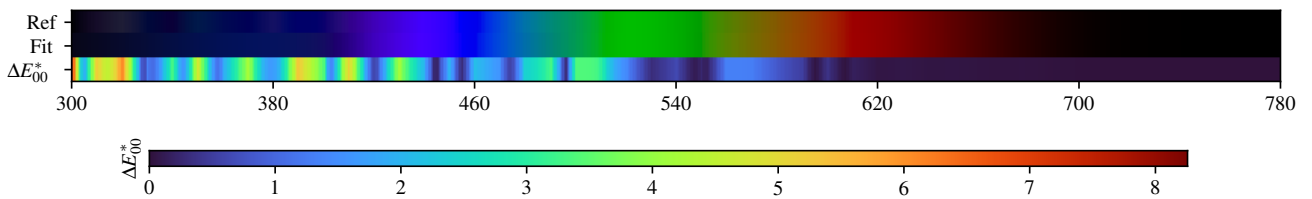
Gaussians:

Weight	Mean		Covariance			
0.475276804	377.780317752	444.329991016	919.921732209	-38.403647396	-38.403647396	837.946700096
0.067739045	626.591296186	495.268449170	6362.700316153	-577.252793245	-577.252793245	5568.495853784
0.127569765	440.102994502	732.517489108	3902.885559660	-211.017573368	-211.017573368	977.923353345
0.074077297	577.044602893	713.492472750	1793.936523078	-83.367862023	-83.367862023	2467.780863449
0.056935367	353.782936438	610.149432391	1327.703988972	51.789004850	51.789004850	5266.575532927
0.051617232	486.361340461	415.929536275	1907.321089811	-114.152350316	-114.152350316	711.528090410
0.109960876	473.360461196	573.632993431	1865.264498811	326.816471215	326.816471215	3880.818046797
0.036823613	763.843042450	731.368579100	239.219057723	90.732902608	90.732902608	1200.487830308

PXEROC5R - Weighted variational Bayesian inference - 2 Gaussians



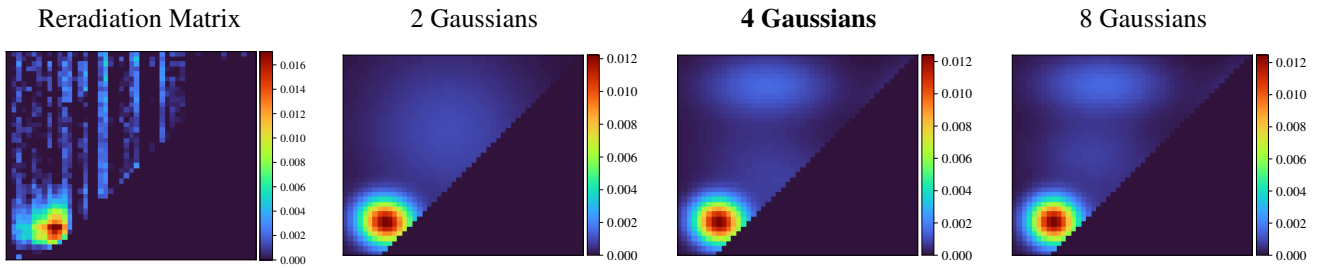
Fitted Material Under Monochromatic Illumination



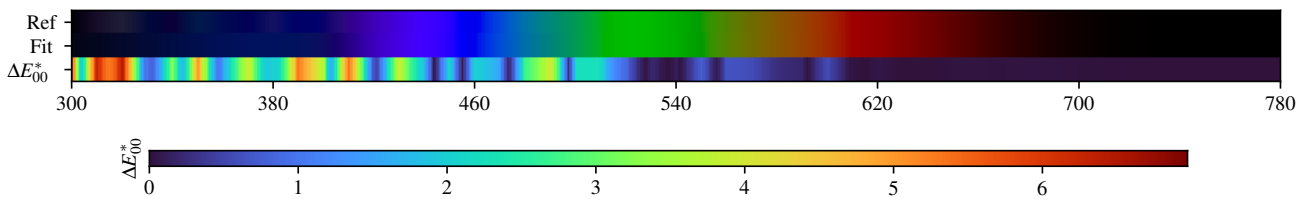
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.99$	$\Delta E = 0.78$	$\Delta E = 1.07$	$\Delta E = 0.76$	$\Delta E = 1.02$	$\Delta E = 0.87$	$\Delta E = 0.86$	$\Delta E = 0.61$	$\Delta E = 1.07$	$\Delta E = 0.96$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.86$	$\Delta E = 0.79$	$\Delta E = 1.35$	$\Delta E = 0.74$	$\Delta E = 0.85$	$\Delta E = 0.74$	$\Delta E = 0.82$	$\Delta E = 0.41$	$\Delta E = 1.21$	$\Delta E = 1.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.86$	$\Delta E = 0.80$	$\Delta E = 0.90$	$\Delta E = 0.88$	$\Delta E = 1.07$	$\Delta E = 1.09$	$\Delta E = 0.87$	$\Delta E = 1.11$	$\Delta E = 1.19$	$\Delta E = 0.70$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.80$	$\Delta E = 0.79$	$\Delta E = 0.79$	$\Delta E = 0.89$	$\Delta E = 0.77$	$\Delta E = 1.01$	$\Delta E = 0.80$	$\Delta E = 0.83$	$\Delta E = 1.08$	$\Delta E = 1.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.78$	$\Delta E = 0.80$	$\Delta E = 1.07$	$\Delta E = 1.02$	$\Delta E = 1.01$	$\Delta E = 0.93$	$\Delta E = 0.64$	$\Delta E = 1.06$	$\Delta E = 1.03$	$\Delta E = 0.93$

PXEROC5R - Weighted variational Bayesian inference - 4 Gaussians



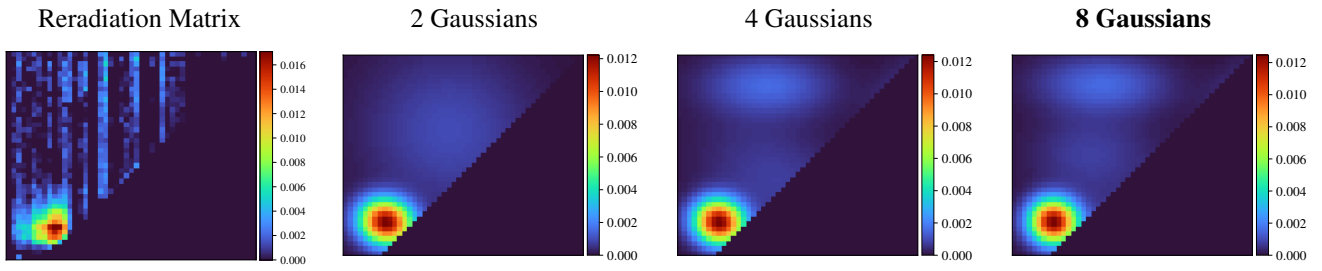
Fitted Material Under Monochromatic Illumination



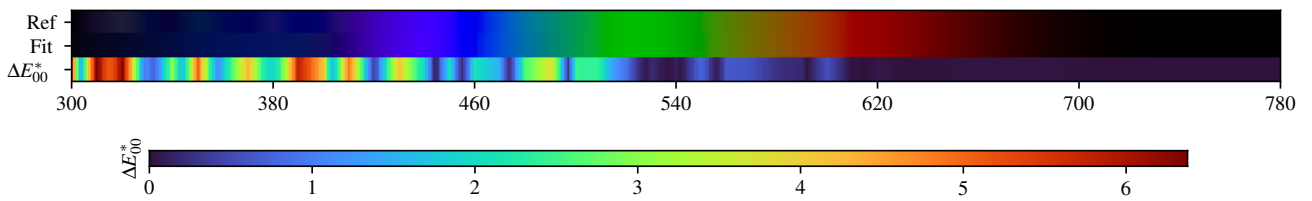
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.38$	$\Delta E = 0.15$	$\Delta E = 0.38$	$\Delta E = 0.11$	$\Delta E = 0.26$	$\Delta E = 0.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.29$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.32$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.36$	$\Delta E = 0.11$	$\Delta E = 0.41$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.42$	$\Delta E = 0.01$	$\Delta E = 0.36$	$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.31$

PXEROC5R - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.20$	$\Delta E = 0.37$	$\Delta E = 0.26$	$\Delta E = 0.45$	$\Delta E = 0.08$	$\Delta E = 0.34$	$\Delta E = 0.34$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.12$	$\Delta E = 0.25$	$\Delta E = 0.34$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.11$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.33$	$\Delta E = 0.15$	$\Delta E = 0.31$	$\Delta E = 0.25$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.24$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.41$	$\Delta E = 0.22$	$\Delta E = 0.46$	$\Delta E = 0.28$	$\Delta E = 0.13$	$\Delta E = 0.39$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.46$	$\Delta E = 0.11$	$\Delta E = 0.41$	$\Delta E = 0.29$	$\Delta E = 0.22$	$\Delta E = 0.35$	$\Delta E = 0.32$

PXEROC5R - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.088485	0.132960	0.201045	0.323570	0.405290	0.447225	0.498678	0.528701	0.528561	0.527086	0.519388
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.507514	0.486192	0.448910	0.398086	0.336630	0.282026	0.231414	0.177830	0.144134	0.133091	0.129443
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.130612	0.127481	0.128400	0.130624	0.134690	0.140269	0.150136	0.152215	0.148344	0.143542	0.137077
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.135310	0.142276	0.163504	0.202038	0.283641	0.423452	0.525117	0.595995			

2 Gaussians max

Scaling factor: 169.8384395838535

Gaussians:

Weight	Mean		Covariance			
0.494831089	382.030699023	443.755394551	1294.551771168	-83.628300832	-83.628300832	934.593301034
0.505168911	509.424453245	628.788781182	14375.519932388	-202.187218737	-202.187218737	13523.730290354

4 Gaussians max

Scaling factor: 163.85213981559957

Gaussians:

Weight	Mean		Covariance			
0.482418938	380.048037323	443.727191563	1145.423250021	-57.444619093	-57.444619093	910.848175612
0.264697685	494.046944371	531.024332452	11111.407829393	-2793.070975815	-2793.070975815	7783.862692161
0.040247119	751.663807886	720.640753270	2752.383053237	1353.227117619	1353.227117619	2598.289323260
0.212636259	480.014101979	722.392527727	7799.228993226	-100.978382007	-100.978382007	1790.755609543

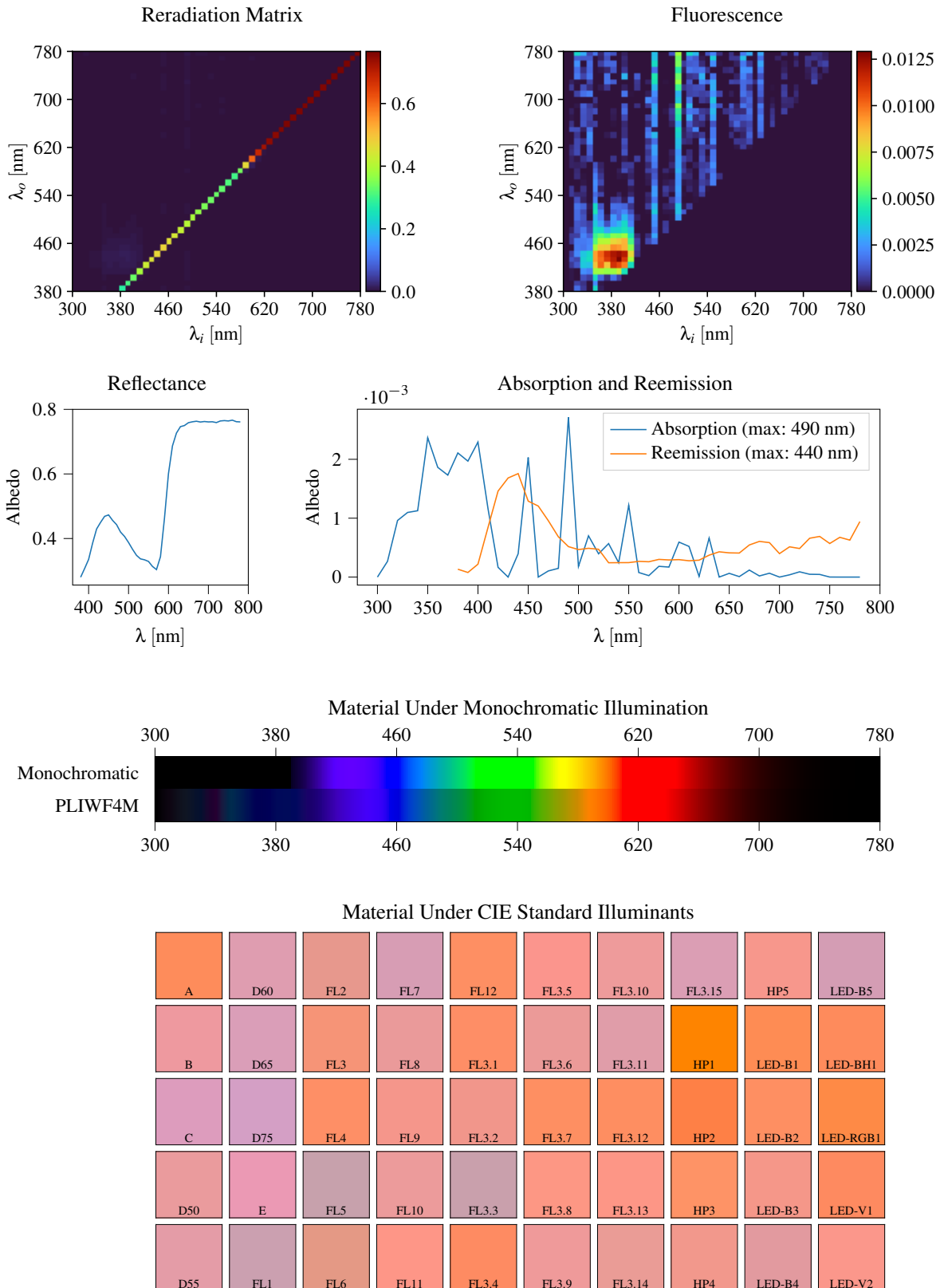
8 Gaussians max

Scaling factor: 161.96201956083834

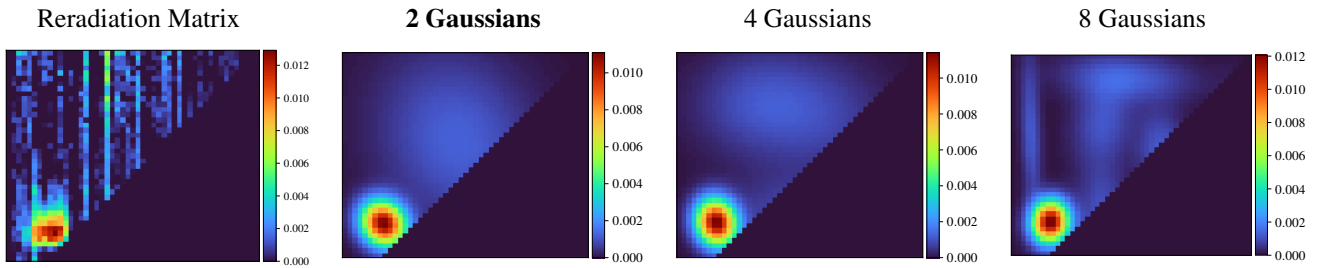
Gaussians:

Weight	Mean		Covariance			
0.478887032	378.953190921	444.473327539	1073.939792530	-24.025312745	-24.025312745	917.406447063
0.079832229	504.723482039	436.412899140	5169.495331201	-350.938809074	-350.938809074	2169.680769371
0.048503855	621.563907458	528.766771304	10075.431004585	-3952.789711404	-3952.789711404	7197.662019991
0.142461858	449.689283179	580.278477842	6616.179201181	-40.412499943	-40.412499943	3474.414942369
0.036970443	751.839903896	721.779053373	2762.313105404	1365.439162176	1365.439162176	2492.713734940
0.211220084	478.215897152	724.626980351	8027.298852754	-83.848106195	-83.848106195	1639.672918918

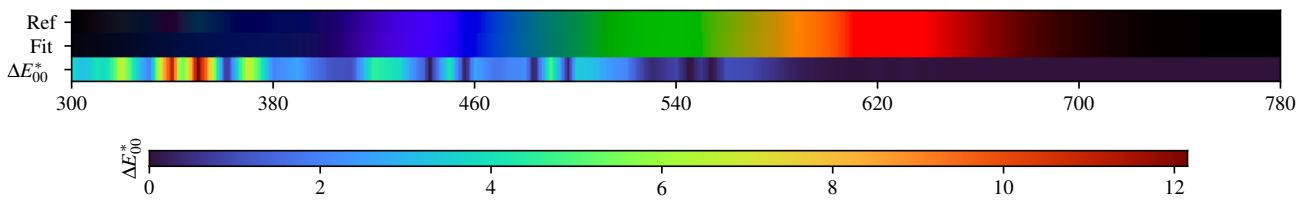
3.79. PLIWF4M



PLIWF4M - Weighted Expectation-Maximization - 2 Gaussians



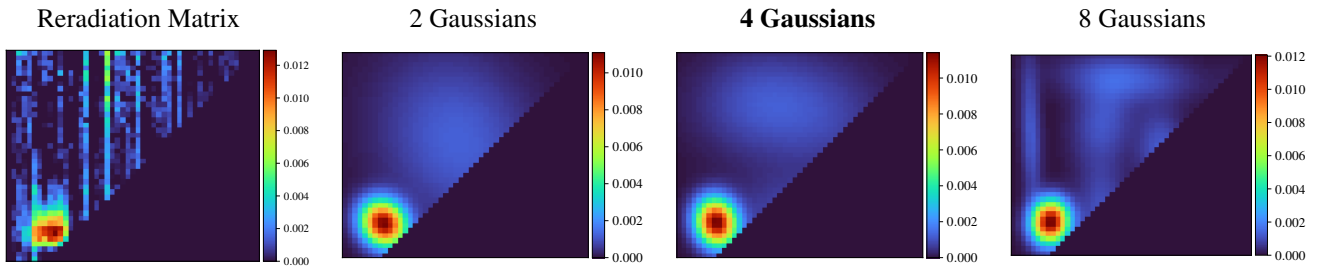
Fitted Material Under Monochromatic Illumination



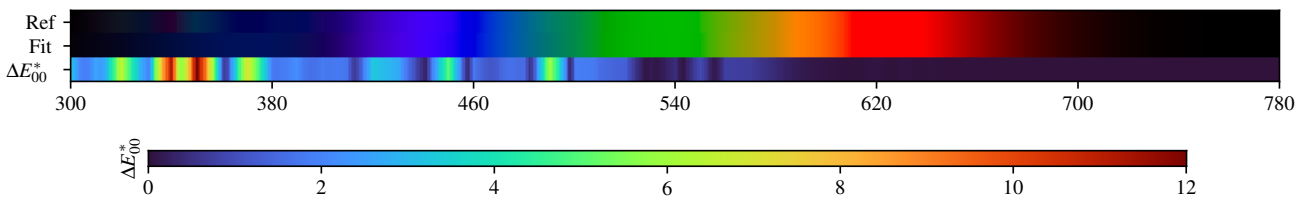
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.18$	D60 $\Delta E = 0.38$	FL2 $\Delta E = 0.28$	FL7 $\Delta E = 0.39$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.24$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.43$	HP5 $\Delta E = 0.27$	LED-B5 $\Delta E = 0.38$
B $\Delta E = 0.32$	D65 $\Delta E = 0.41$	FL3 $\Delta E = 0.22$	FL8 $\Delta E = 0.30$	FL3.1 $\Delta E = 0.18$	FL3.6 $\Delta E = 0.29$	FL3.11 $\Delta E = 0.16$	HP1 $\Delta E = 0.18$	LED-B1 $\Delta E = 0.16$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.41$	D75 $\Delta E = 0.44$	FL4 $\Delta E = 0.18$	FL9 $\Delta E = 0.25$	FL3.2 $\Delta E = 0.25$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.15$	HP2 $\Delta E = 0.15$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.20$
D50 $\Delta E = 0.32$	E $\Delta E = 0.43$	FL5 $\Delta E = 0.48$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.47$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.21$	HP3 $\Delta E = 0.21$	LED-B3 $\Delta E = 0.21$	LED-V1 $\Delta E = 0.18$
D55 $\Delta E = 0.36$	FL1 $\Delta E = 0.45$	FL6 $\Delta E = 0.27$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.26$	HP4 $\Delta E = 0.28$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.27$

PLIWF4M - Weighted Expectation-Maximization - 4 Gaussians



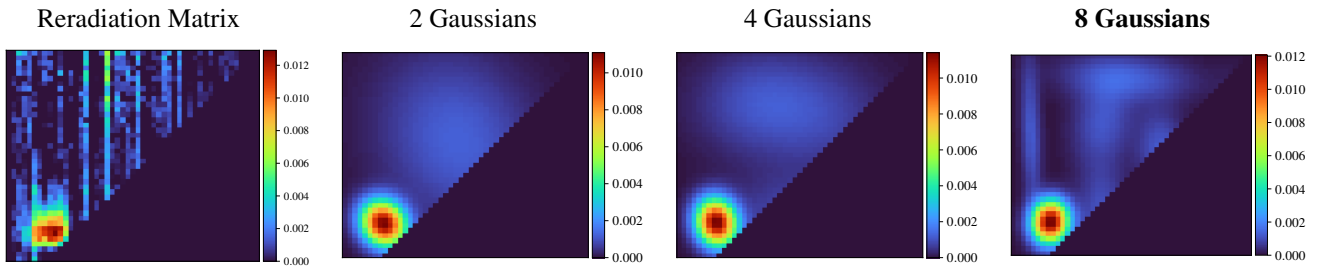
Fitted Material Under Monochromatic Illumination



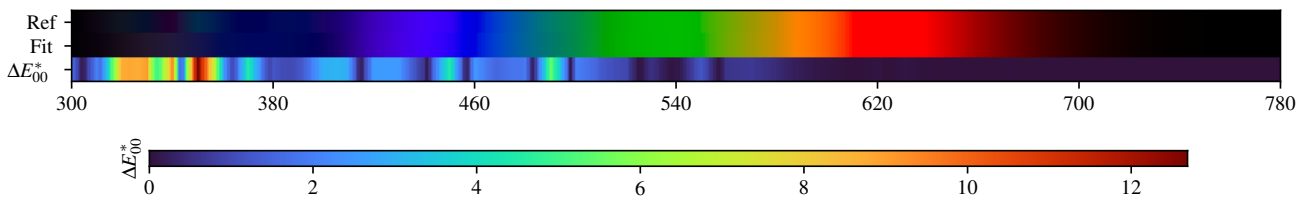
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.30$	FL2 $\Delta E = 0.22$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.22$	FL3.5 $\Delta E = 0.18$	FL3.10 $\Delta E = 0.40$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.37$
B $\Delta E = 0.23$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.18$	FL8 $\Delta E = 0.21$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.22$	FL3.11 $\Delta E = 0.38$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.15$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.27$	D75 $\Delta E = 0.34$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.18$	FL3.2 $\Delta E = 0.18$	FL3.7 $\Delta E = 0.20$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.27$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.39$	FL10 $\Delta E = 0.38$	FL3.3 $\Delta E = 0.38$	FL3.8 $\Delta E = 0.31$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.29$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.28$	FL1 $\Delta E = 0.35$	FL6 $\Delta E = 0.24$	FL11 $\Delta E = 0.33$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.36$	FL3.14 $\Delta E = 0.25$	HP4 $\Delta E = 0.22$	LED-B4 $\Delta E = 0.32$	LED-V2 $\Delta E = 0.21$

PLIWF4M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.18$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.21$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.31$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.14$	D65 $\Delta E = 0.20$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.15$	D75 $\Delta E = 0.22$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.18$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.16$	E $\Delta E = 0.15$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.32$	FL3.3 $\Delta E = 0.24$	FL3.8 $\Delta E = 0.27$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.17$	FL1 $\Delta E = 0.20$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.29$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.31$	FL3.14 $\Delta E = 0.14$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.11$

PLIWF4M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.280087	0.307099	0.335306	0.385589	0.429514	0.450074	0.468558	0.473132	0.456204	0.443034	0.419913
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.406399	0.387648	0.366641	0.347805	0.336889	0.334060	0.328948	0.313453	0.303751	0.343835	0.462745
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.600805	0.686808	0.726567	0.746471	0.749891	0.758714	0.761494	0.763232	0.760779	0.762352	0.761115
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.761555	0.759032	0.764087	0.765194	0.764075	0.766525	0.761809	0.761132			

2 Gaussians

Scaling factor: 162.73902259533244

Gaussians:

Weight	Mean		Covariance			
0.390967564	376.711873321	444.019266557	898.102837895	-115.090348974	-115.090348974	940.998494159
0.609032436	523.216148860	610.049865939	11387.904307062	-1942.067656432	-1942.067656432	14302.168117369

4 Gaussians

Scaling factor: 160.45394777855685

Gaussians:

Weight	Mean		Covariance			
0.244637343	458.247424929	686.098343512	7627.144052861	305.950691626	305.950691626	5093.107495335
0.191880648	591.653703056	649.814651695	7790.278545704	401.607527360	401.607527360	6351.105770563
0.180425562	537.421919171	453.508657758	8659.527934566	-699.701493875	-699.701493875	2989.655862871
0.383056447	374.205290600	445.836642639	736.135926872	-75.579973538	-75.579973538	999.182211660

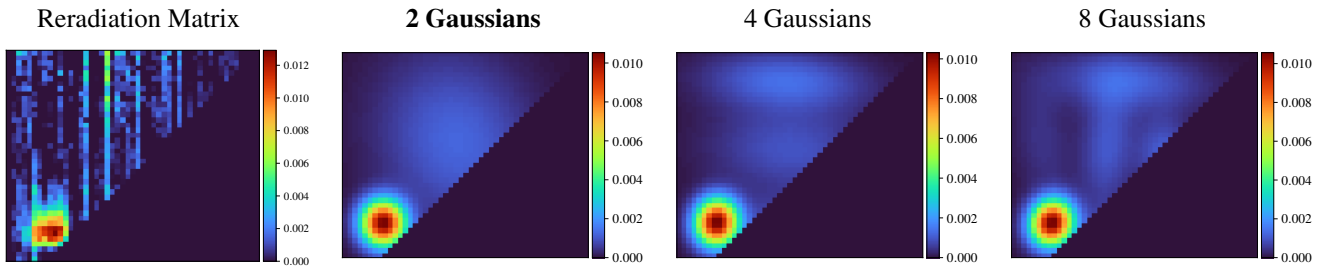
8 Gaussians

Scaling factor: 156.05819643374792

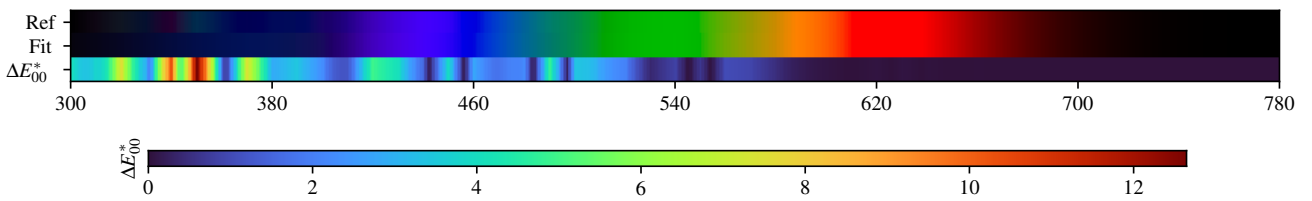
Gaussians:

Weight	Mean		Covariance			
0.071030890	335.774446095	622.730060365	205.505899852	-338.141455880	-338.141455880	10596.256080751
0.102925934	600.375367803	583.217296015	1103.901785337	-175.823645048	-175.823645048	3771.492809306
0.369594289	374.912280175	444.376790561	641.316075161	33.775446806	33.775446806	861.098364109
0.030358986	740.142495597	610.753009819	609.625535264	-15.951513846	-15.951513846	9332.840915908
0.148271686	529.847561826	737.789219354	8439.309008577	-438.482194993	-438.482194993	1043.860894280
0.072824368	581.882737925	414.347041777	5670.983802084	107.735014243	107.735014243	646.349289645
0.080752274	477.414201115	472.142565214	1146.323365499	81.930358312	81.930358312	3381.864622250
0.124241573	481.069621378	647.131752106	1807.049291669	433.481572700	433.481572700	3970.580715965

PLIWF4M - Weighted variational Bayesian inference - 2 Gaussians



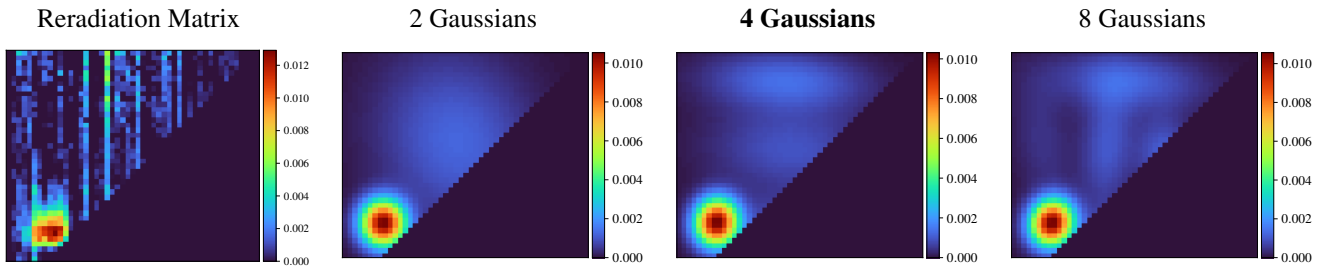
Fitted Material Under Monochromatic Illumination



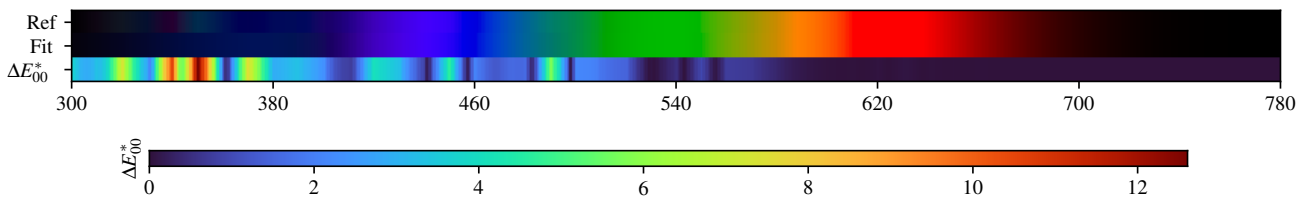
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.19$	D60 $\Delta E = 0.43$	FL2 $\Delta E = 0.29$	FL7 $\Delta E = 0.41$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.26$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.47$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.37$
B $\Delta E = 0.36$	D65 $\Delta E = 0.45$	FL3 $\Delta E = 0.22$	FL8 $\Delta E = 0.32$	FL3.1 $\Delta E = 0.18$	FL3.6 $\Delta E = 0.31$	FL3.11 $\Delta E = 0.14$	HP1 $\Delta E = 0.18$	LED-B1 $\Delta E = 0.16$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.45$	D75 $\Delta E = 0.49$	FL4 $\Delta E = 0.18$	FL9 $\Delta E = 0.26$	FL3.2 $\Delta E = 0.26$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.16$	HP2 $\Delta E = 0.16$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.20$
D50 $\Delta E = 0.36$	E $\Delta E = 0.53$	FL5 $\Delta E = 0.48$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.47$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.22$	HP3 $\Delta E = 0.21$	LED-B3 $\Delta E = 0.21$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.40$	FL1 $\Delta E = 0.46$	FL6 $\Delta E = 0.28$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.17$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.28$	HP4 $\Delta E = 0.28$	LED-B4 $\Delta E = 0.29$	LED-V2 $\Delta E = 0.30$

PLIWF4M - Weighted variational Bayesian inference - 4 Gaussians



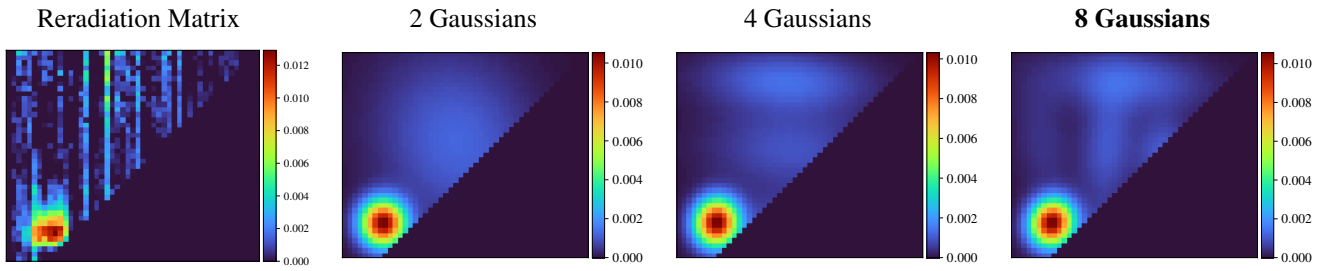
Fitted Material Under Monochromatic Illumination



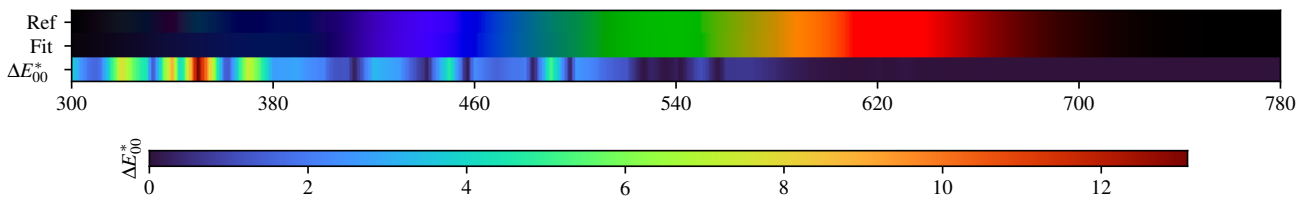
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.27$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.25$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.06$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.27$	$\Delta E = 0.22$	$\Delta E = 0.25$	$\Delta E = 0.23$	$\Delta E = 0.20$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.08$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.07$	$\Delta E = 0.25$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.11$

PLIWF4M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.17$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.28$	FL3.15 $\Delta E = 0.16$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.20$
B $\Delta E = 0.10$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.12$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.15$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.11$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.18$	FL10 $\Delta E = 0.28$	FL3.3 $\Delta E = 0.21$	FL3.8 $\Delta E = 0.23$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.27$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.17$	LED-V2 $\Delta E = 0.10$

PLIWF4M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.280087	0.307099	0.335306	0.385589	0.429514	0.450074	0.468558	0.473132	0.456204	0.443034	0.419913
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.406399	0.387648	0.366641	0.347805	0.336889	0.334060	0.328948	0.313453	0.303751	0.343835	0.462745
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.600805	0.686808	0.726567	0.746471	0.749891	0.758714	0.761494	0.763232	0.760779	0.762352	0.761115
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.761555	0.759032	0.764087	0.765194	0.764075	0.766525	0.761809	0.761132			

2 Gaussians max

Scaling factor: 162.49791077087863

Gaussians:

Weight	Mean	Covariance				
0.381337987	376.012198435	444.537669392	893.900002449	-4.836825852	-4.836825852	972.120514243
0.618662013	521.481435440	607.130001914	11429.340087424	-1637.791627365	-1637.791627365	14573.287246933

4 Gaussians max

Scaling factor: 158.5304235319119

Gaussians:

Weight	Mean	Covariance				
0.370654990	374.723682922	445.694439605	823.364927461	26.865602311	26.865602311	1005.840627805
0.151120713	530.818028955	435.091563351	9119.406325753	-678.509648675	-678.509648675	1850.241763469
0.245608201	521.775683056	591.663669483	12298.851943945	-435.036434470	-435.036434470	3462.041666650
0.232616096	511.807680163	727.365810505	11745.416670119	-472.288829863	-472.288829863	1675.044794519

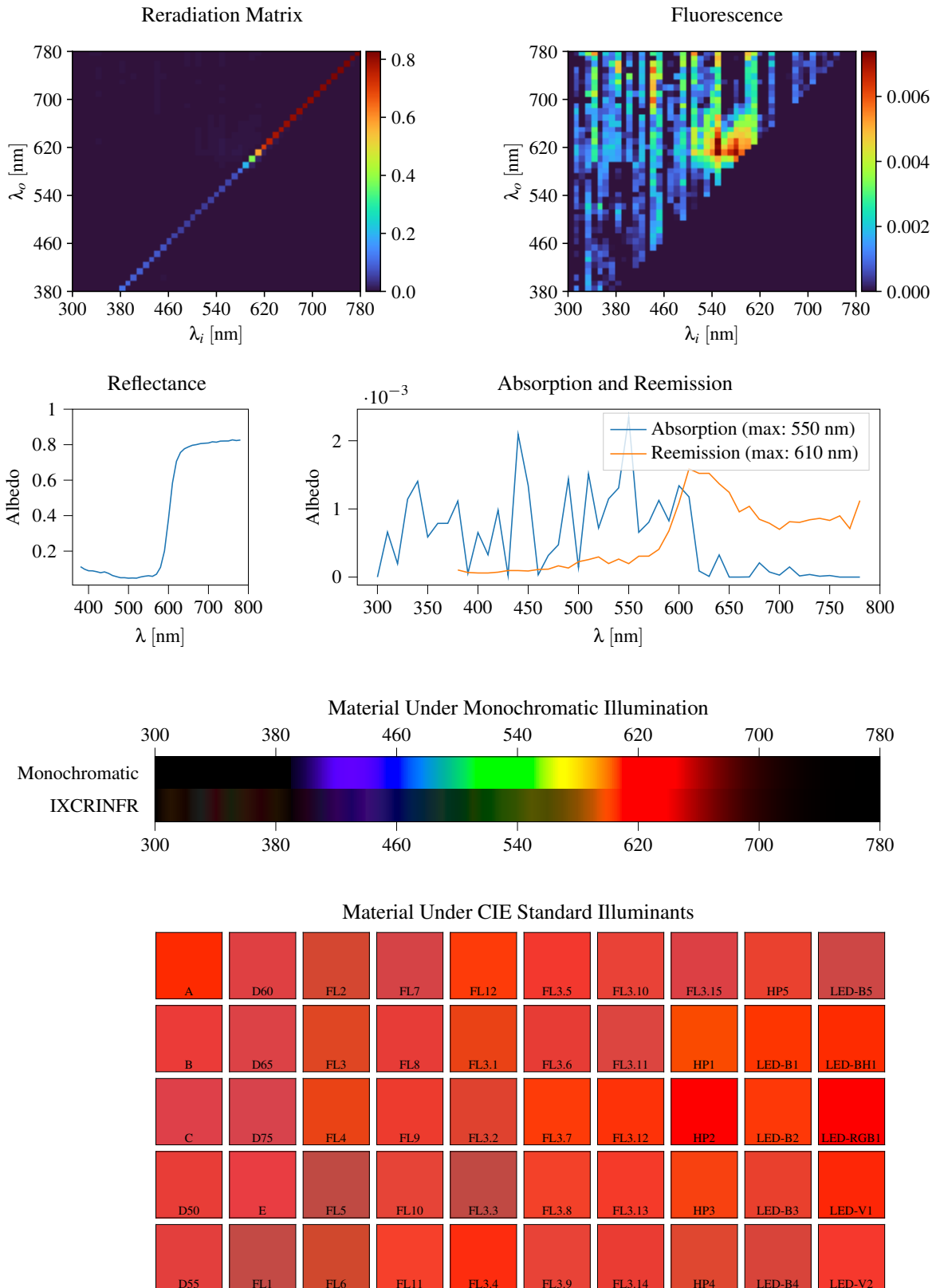
8 Gaussians max

Scaling factor: 158.20426276066968

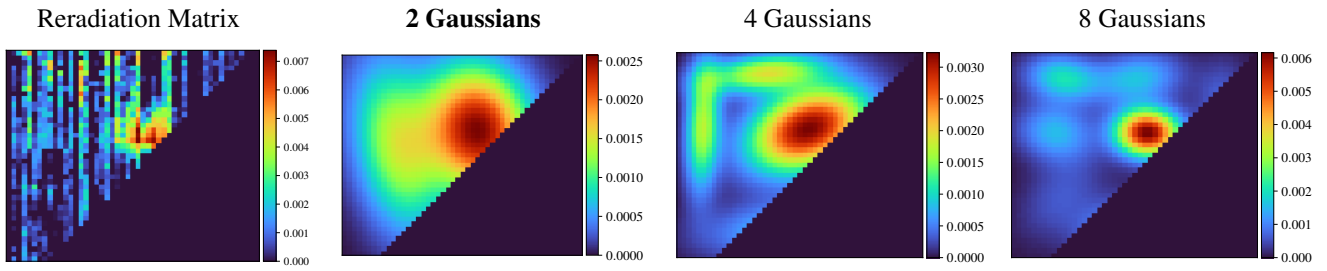
Gaussians:

Weight	Mean	Covariance				
0.368629504	375.116603932	445.151674700	816.043395057	62.716844866	62.716844866	950.536085653
0.118962052	544.749846268	424.318189051	8096.488717582	-131.244722544	-131.244722544	1324.925948835
0.033564088	689.878468977	573.538962963	5386.220575658	724.291930545	724.291930545	5845.685108930
0.127822620	485.235522408	598.519219225	1319.833780224	483.407554437	483.407554437	7317.560031864
0.080046112	595.445645309	582.358616321	1304.628322252	-65.689584765	-65.689584765	2724.574294571
0.074599575	356.471158007	607.991162783	1774.845612010	-861.495470248	-861.495470248	8650.042336999
0.195413847	528.093694119	728.219296078	10747.534446951	-596.832469908	-596.832469908	1647.745561420

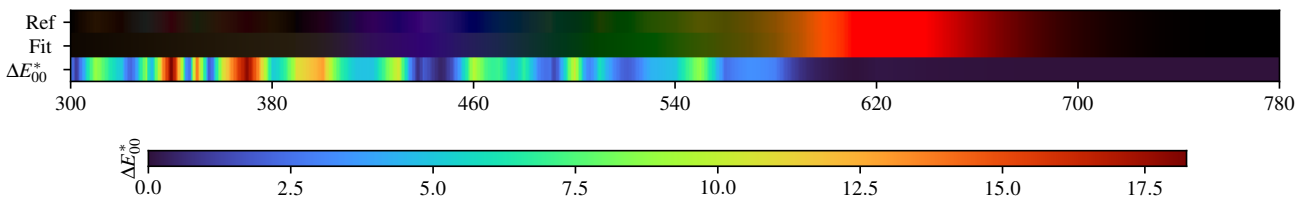
3.80. IXCRINFR



IXCRINFR - Weighted Expectation-Maximization - 2 Gaussians



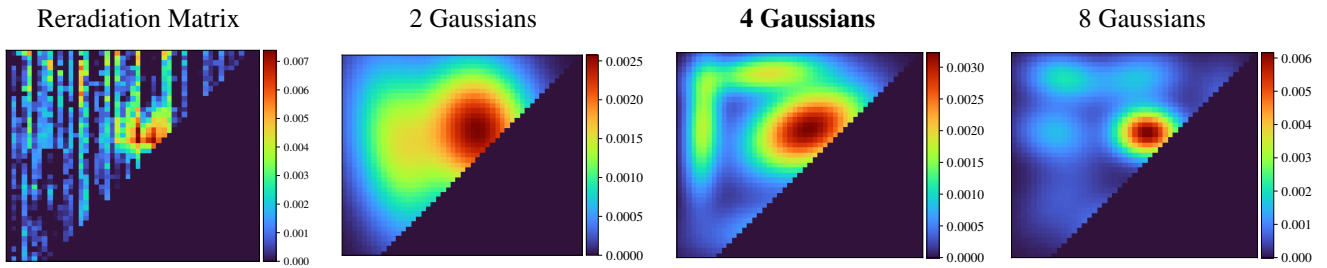
Fitted Material Under Monochromatic Illumination



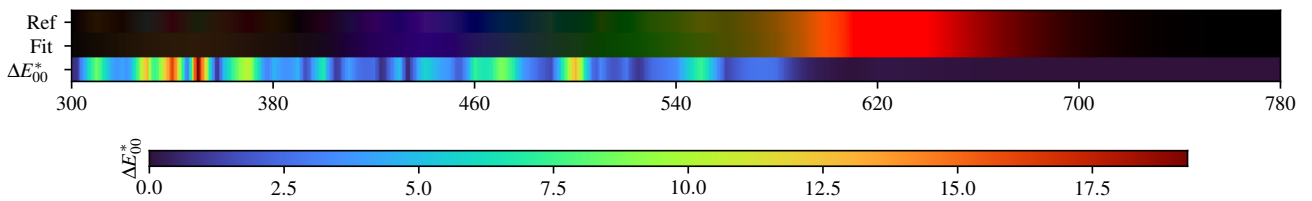
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.48$	$\Delta E = 1.48$	$\Delta E = 0.89$	$\Delta E = 1.25$	$\Delta E = 0.40$	$\Delta E = 0.72$	$\Delta E = 0.70$	$\Delta E = 1.32$	$\Delta E = 0.94$	$\Delta E = 1.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.12$	$\Delta E = 1.61$	$\Delta E = 0.67$	$\Delta E = 0.92$	$\Delta E = 0.47$	$\Delta E = 0.92$	$\Delta E = 0.84$	$\Delta E = 0.43$	$\Delta E = 0.45$	$\Delta E = 0.41$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.53$	$\Delta E = 1.83$	$\Delta E = 0.53$	$\Delta E = 0.73$	$\Delta E = 0.72$	$\Delta E = 0.37$	$\Delta E = 0.42$	$\Delta E = 0.28$	$\Delta E = 0.52$	$\Delta E = 0.47$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.18$	$\Delta E = 1.52$	$\Delta E = 1.43$	$\Delta E = 0.74$	$\Delta E = 1.35$	$\Delta E = 0.55$	$\Delta E = 0.67$	$\Delta E = 0.64$	$\Delta E = 0.78$	$\Delta E = 0.48$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.33$	$\Delta E = 1.39$	$\Delta E = 0.89$	$\Delta E = 0.56$	$\Delta E = 0.35$	$\Delta E = 0.68$	$\Delta E = 0.94$	$\Delta E = 0.95$	$\Delta E = 0.97$	$\Delta E = 0.95$

IXCRINFR - Weighted Expectation-Maximization - 4 Gaussians



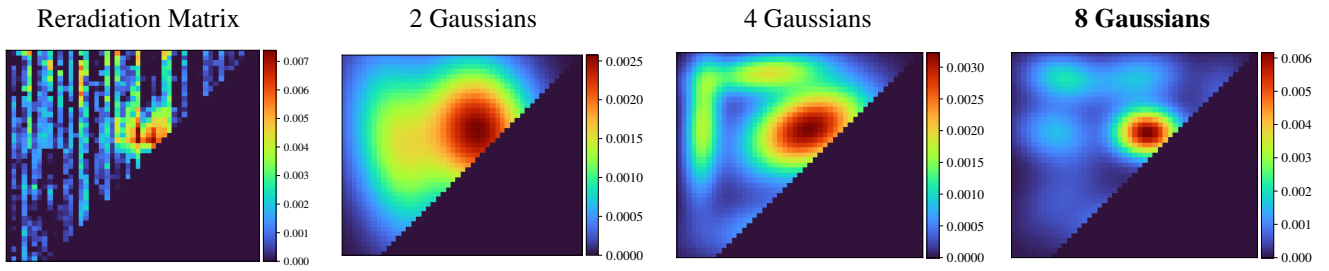
Fitted Material Under Monochromatic Illumination



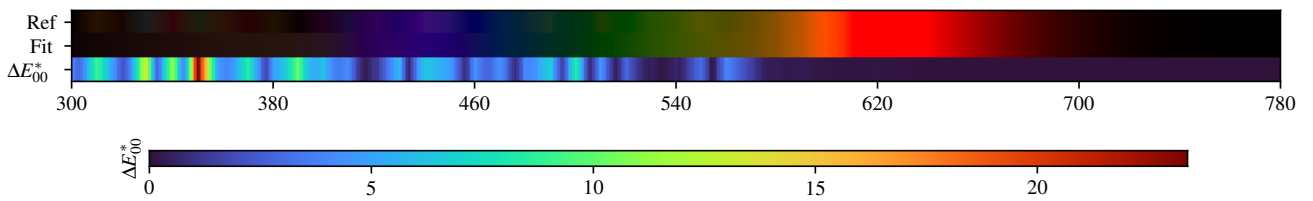
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.29$	$\Delta E = 0.61$	$\Delta E = 0.46$	$\Delta E = 0.48$	$\Delta E = 0.28$	$\Delta E = 0.39$	$\Delta E = 0.34$	$\Delta E = 0.50$	$\Delta E = 0.44$	$\Delta E = 0.54$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.48$	$\Delta E = 0.64$	$\Delta E = 0.42$	$\Delta E = 0.45$	$\Delta E = 0.33$	$\Delta E = 0.48$	$\Delta E = 0.39$	$\Delta E = 0.33$	$\Delta E = 0.31$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.54$	$\Delta E = 0.69$	$\Delta E = 0.38$	$\Delta E = 0.38$	$\Delta E = 0.38$	$\Delta E = 0.24$	$\Delta E = 0.27$	$\Delta E = 0.18$	$\Delta E = 0.34$	$\Delta E = 0.38$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.54$	$\Delta E = 0.49$	$\Delta E = 0.61$	$\Delta E = 0.38$	$\Delta E = 0.60$	$\Delta E = 0.32$	$\Delta E = 0.40$	$\Delta E = 0.36$	$\Delta E = 0.44$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.58$	$\Delta E = 0.57$	$\Delta E = 0.50$	$\Delta E = 0.34$	$\Delta E = 0.22$	$\Delta E = 0.35$	$\Delta E = 0.55$	$\Delta E = 0.40$	$\Delta E = 0.48$	$\Delta E = 0.40$

IXCRINFR - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.21$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.28$	$\Delta E = 0.15$	$\Delta E = 0.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.04$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.14$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.26$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.15$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.15$

IXCRINFR - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.112282	0.098117	0.089399	0.088883	0.084317	0.078328	0.082868	0.074708	0.062560	0.056242	0.050144
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.050260	0.047671	0.048614	0.047684	0.054151	0.058352	0.061335	0.057998	0.070088	0.108511	0.200740
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.380886	0.583916	0.706234	0.755994	0.777041	0.787790	0.796804	0.800469	0.806072	0.808096	0.809635
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.816272	0.814108	0.820208	0.820762	0.820953	0.827175	0.823276	0.826256			

2 Gaussians

Scaling factor: 170.79091869375807

Gaussians:

Weight	Mean	Covariance				
0.362548141	404.330529446	597.458376374	3982.959117224	-2180.508665921	-2180.508665921	14970.067203688
0.637451859	570.893125916	630.491629141	5479.300957026	-708.563233118	-708.563233118	8515.725631786

4 Gaussians

Scaling factor: 158.0927863628288

Gaussians:

Weight	Mean	Covariance				
0.147680949	469.621070067	743.311547654	6370.505158033	634.997697425	634.997697425	723.632913353
0.569362678	556.802472145	631.730052877	6404.542940150	1452.100629599	1452.100629599	3392.892356202
0.152081893	517.055141753	430.083271696	11474.748947663	665.207270505	665.207270505	1569.123008892
0.130874479	347.621701416	639.170732012	534.968963648	311.911998999	311.911998999	7453.334513566

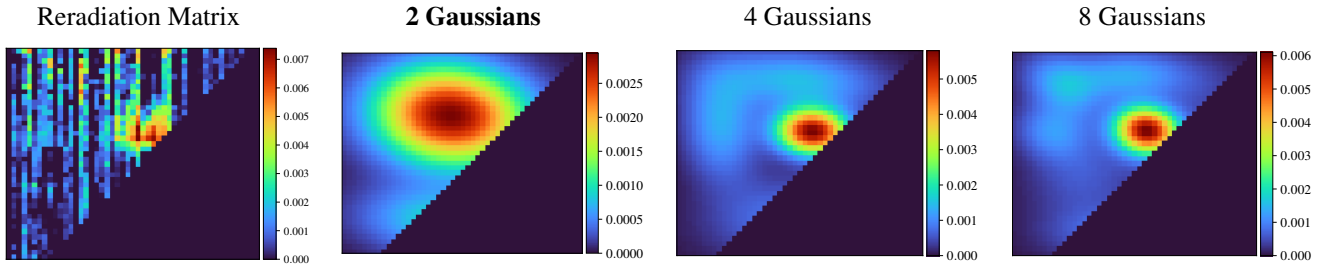
8 Gaussians

Scaling factor: 157.4702647496056

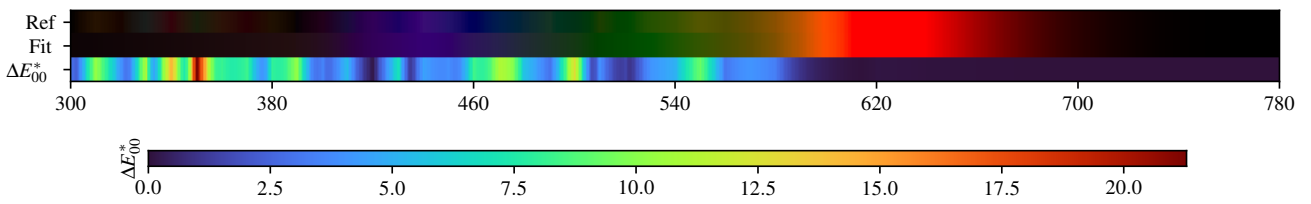
Gaussians:

Weight	Mean	Covariance					
0.124622473	396.928908099	733.131846403	2468.910159527	-217.651973763	-217.651973763	1029.554588221	
0.339170095	564.826544083	623.966025845	1845.013797789	-35.442374711	-35.442374711	1012.204637930	
0.081155222	393.678185936	498.950620285	3388.486825816	1414.492584338	1414.492584338	3874.220695794	
0.049837392	708.008727046	694.882362728	1310.488025653	350.111889385	350.111889385	2969.323938106	
0.134602980	544.236518115	732.069304216	3512.542099164	310.138286335	310.138286335	1245.082005903	
0.088953057	491.216125056	431.279602484	2510.681189331	396.850349043	396.850349043	1779.904678759	
0.063301970	633.606367548	465.199719975	4900.887902828	-255.508273581	-255.508273581	3513.324444449	
0.118356809	381.674003001	625.618276512	2520.043857673	-184.504087358	-184.504087358	1516.754263687	

IXCRINFR - Weighted variational Bayesian inference - 2 Gaussians



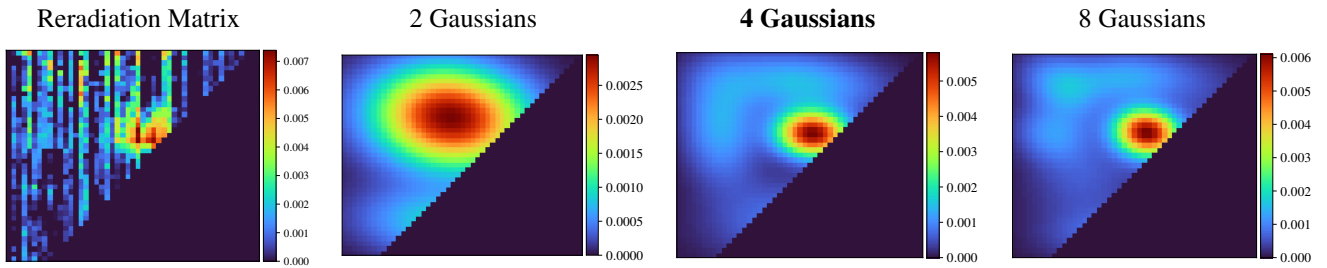
Fitted Material Under Monochromatic Illumination



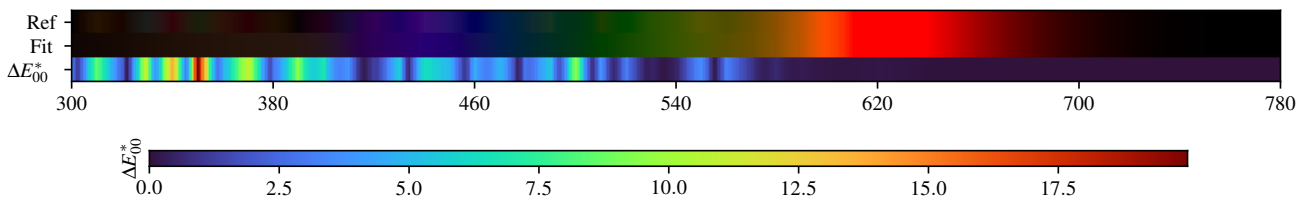
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.49$	$\Delta E = 0.28$	$\Delta E = 0.41$	$\Delta E = 0.23$	$\Delta E = 0.34$	$\Delta E = 0.25$	$\Delta E = 0.28$	$\Delta E = 0.35$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.52$	$\Delta E = 0.27$	$\Delta E = 0.47$	$\Delta E = 0.27$	$\Delta E = 0.40$	$\Delta E = 0.44$	$\Delta E = 0.30$	$\Delta E = 0.24$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.52$	$\Delta E = 0.30$	$\Delta E = 0.38$	$\Delta E = 0.36$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.31$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.24$	$\Delta E = 0.26$	$\Delta E = 0.45$	$\Delta E = 0.45$	$\Delta E = 0.42$	$\Delta E = 0.40$	$\Delta E = 0.25$	$\Delta E = 0.28$	$\Delta E = 0.35$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.41$	$\Delta E = 0.55$	$\Delta E = 0.44$	$\Delta E = 0.26$	$\Delta E = 0.40$	$\Delta E = 0.30$	$\Delta E = 0.33$	$\Delta E = 0.38$	$\Delta E = 0.20$

IXCRINFR - Weighted variational Bayesian inference - 4 Gaussians



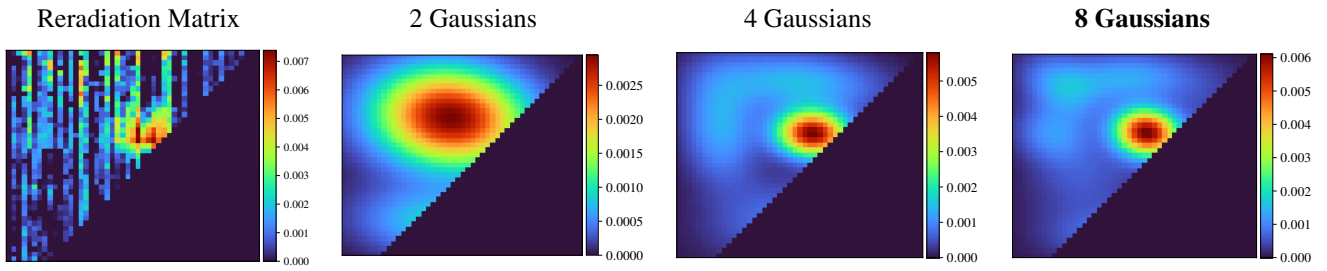
Fitted Material Under Monochromatic Illumination



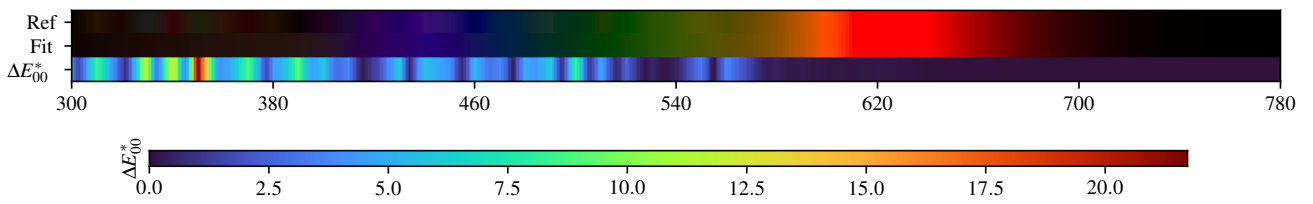
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.14$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.16$	$\Delta E = 0.03$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.26$	$\Delta E = 0.07$	$\Delta E = 0.21$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.15$

IXCRINFR - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.04$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.24$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.19$	$\Delta E = 0.06$	$\Delta E = 0.27$	$\Delta E = 0.19$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.22$	$\Delta E = 0.04$	$\Delta E = 0.15$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.19$	$\Delta E = 0.30$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.25$	$\Delta E = 0.01$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.04$	$\Delta E = 0.16$	$\Delta E = 0.23$	$\Delta E = 0.17$	$\Delta E = 0.21$

IXCRINFR - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.112282	0.098117	0.089399	0.088883	0.084317	0.078328	0.082868	0.074708	0.062560	0.056242	0.050144
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.050260	0.047671	0.048614	0.047684	0.054151	0.058352	0.061335	0.057998	0.070088	0.108511	0.200740
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.380886	0.583916	0.706234	0.755994	0.777041	0.787790	0.796804	0.800469	0.806072	0.808096	0.809635
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.816272	0.814108	0.820208	0.820762	0.820953	0.827175	0.823276	0.826256			

2 Gaussians max

Scaling factor: 164.32824577435125

Gaussians:

Weight	Mean		Covariance			
0.176144658	491.954927587	441.000775942	11703.025847218	-793.750013407	-793.750013407	2379.425564648
0.823855342	514.505116181	656.361693098	11174.721532127	-649.827797885	-649.827797885	4808.205185596

4 Gaussians max

Scaling factor: 159.14506900933787

Gaussians:

Weight	Mean		Covariance			
0.200154662	516.056733891	453.232429644	11776.369788441	901.034284596	901.034284596	3244.807742938
0.203821716	383.543873271	637.317204649	2568.808216925	-245.432821260	-245.432821260	5822.882835886
0.330604878	565.044633531	622.126684710	2257.528330403	-70.039482385	-70.039482385	935.499083741
0.265418744	536.761593826	724.103821929	12263.101203213	-780.946763752	-780.946763752	1723.877495633

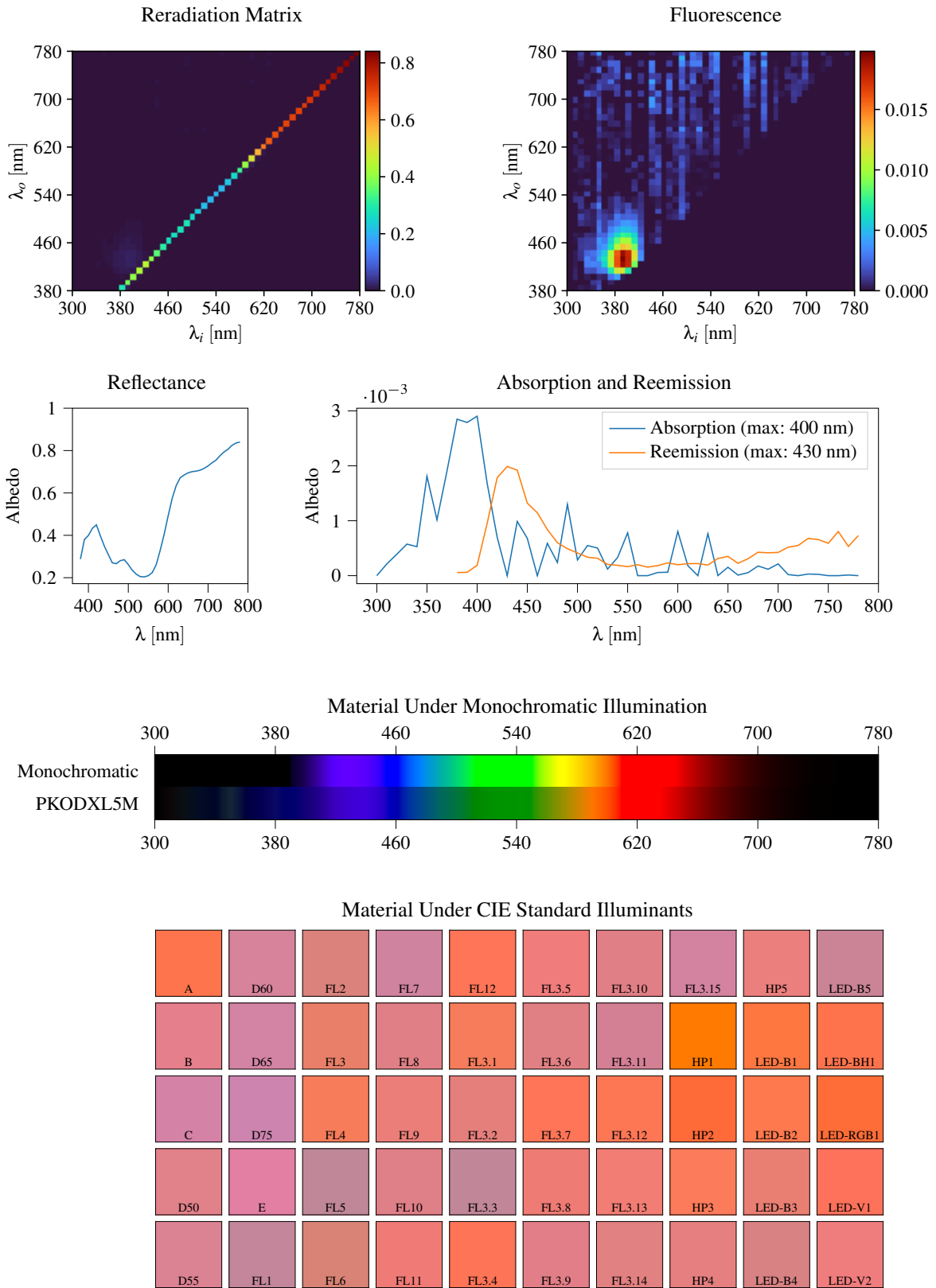
8 Gaussians max

Scaling factor: 158.0381986726907

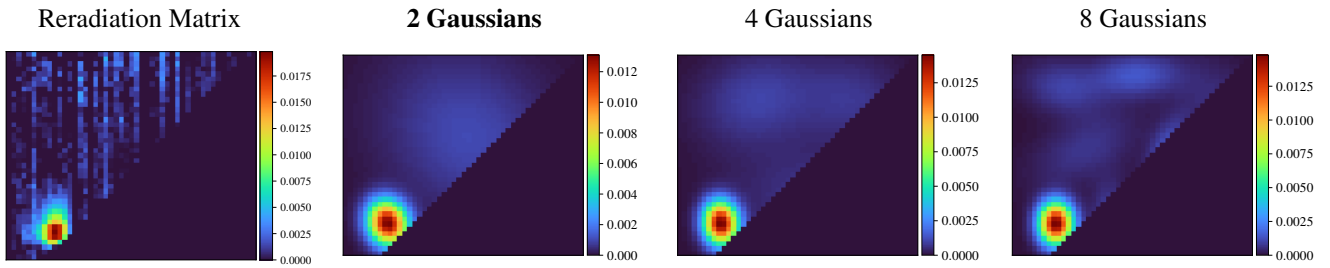
Gaussians:

Weight	Mean		Covariance			
0.120779119	495.711406112	423.441731638	8852.203280842	264.477342635	264.477342635	1509.663037778
0.039808130	630.540524166	507.333836043	7111.215238784	-2410.821804287	-2410.821804287	4698.701582178
0.096729056	435.005826684	533.573723338	5854.813461563	608.515361538	608.515361538	3031.464579582
0.311085236	564.036749702	626.033275013	1759.471448112	-106.249077508	-106.249077508	983.752731465
0.086800805	374.548098668	622.637894168	2551.129971776	-251.796535897	-251.796535897	1546.419068770
0.056910007	668.279574481	658.975272594	4480.214069382	1766.523125144	1766.523125144	4081.445896576
0.105508642	396.817570495	712.663351521	2891.466302987	-976.219903170	-976.219903170	2202.743497258
0.182379005	525.842523388	734.860559454	8877.246616792	88.247109002	88.247109002	1242.273901553

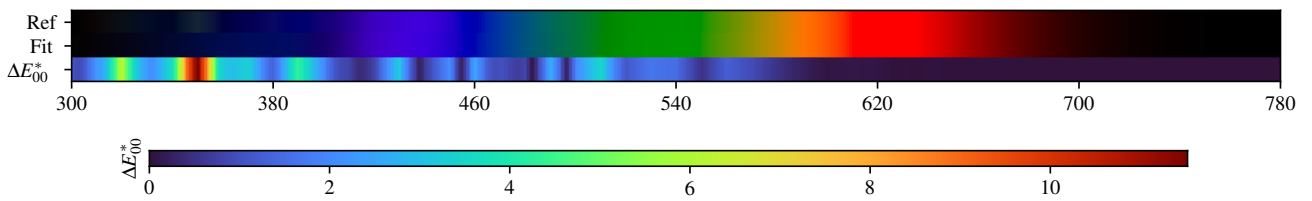
3.81. PKODXL5M



PKODXL5M - Weighted Expectation-Maximization - 2 Gaussians



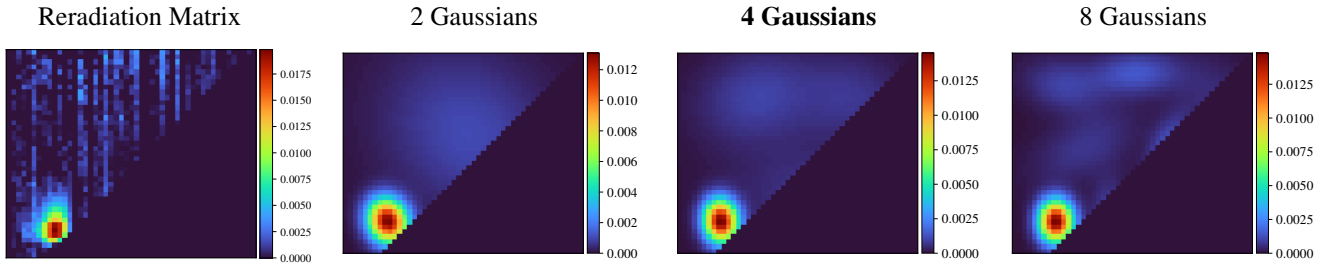
Fitted Material Under Monochromatic Illumination



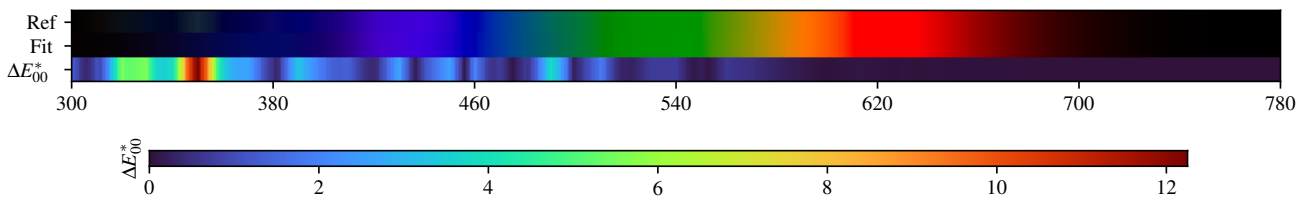
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.26$	D60 $\Delta E = 0.43$	FL2 $\Delta E = 0.36$	FL7 $\Delta E = 0.46$	FL12 $\Delta E = 0.19$	FL3.5 $\Delta E = 0.32$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.55$	HP5 $\Delta E = 0.32$	LED-B5 $\Delta E = 0.40$
B $\Delta E = 0.40$	D65 $\Delta E = 0.43$	FL3 $\Delta E = 0.30$	FL8 $\Delta E = 0.38$	FL3.1 $\Delta E = 0.26$	FL3.6 $\Delta E = 0.36$	FL3.11 $\Delta E = 0.30$	HP1 $\Delta E = 0.20$	LED-B1 $\Delta E = 0.23$	LED-BH1 $\Delta E = 0.23$
C $\Delta E = 0.45$	D75 $\Delta E = 0.44$	FL4 $\Delta E = 0.26$	FL9 $\Delta E = 0.34$	FL3.2 $\Delta E = 0.35$	FL3.7 $\Delta E = 0.20$	FL3.12 $\Delta E = 0.24$	HP2 $\Delta E = 0.23$	LED-B2 $\Delta E = 0.24$	LED-RGB1 $\Delta E = 0.27$
D50 $\Delta E = 0.39$	E $\Delta E = 0.48$	FL5 $\Delta E = 0.51$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.50$	FL3.8 $\Delta E = 0.24$	FL3.13 $\Delta E = 0.29$	HP3 $\Delta E = 0.28$	LED-B3 $\Delta E = 0.28$	LED-V1 $\Delta E = 0.28$
D55 $\Delta E = 0.42$	FL1 $\Delta E = 0.48$	FL6 $\Delta E = 0.36$	FL11 $\Delta E = 0.22$	FL3.4 $\Delta E = 0.27$	FL3.9 $\Delta E = 0.26$	FL3.14 $\Delta E = 0.34$	HP4 $\Delta E = 0.35$	LED-B4 $\Delta E = 0.35$	LED-V2 $\Delta E = 0.38$

PKODXL5M - Weighted Expectation-Maximization - 4 Gaussians



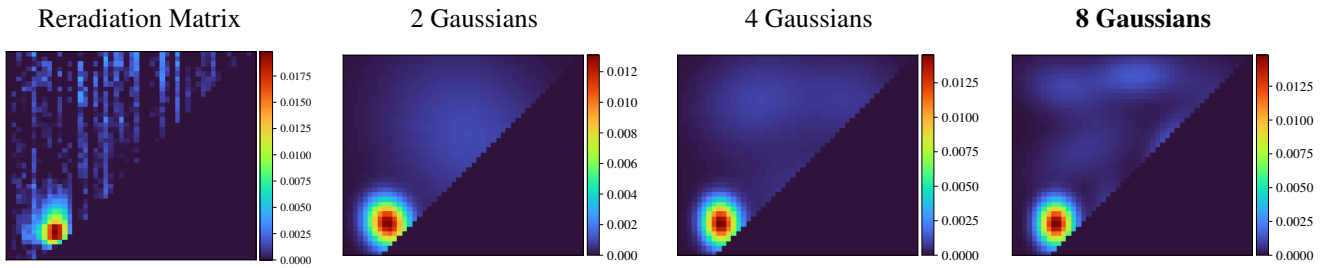
Fitted Material Under Monochromatic Illumination



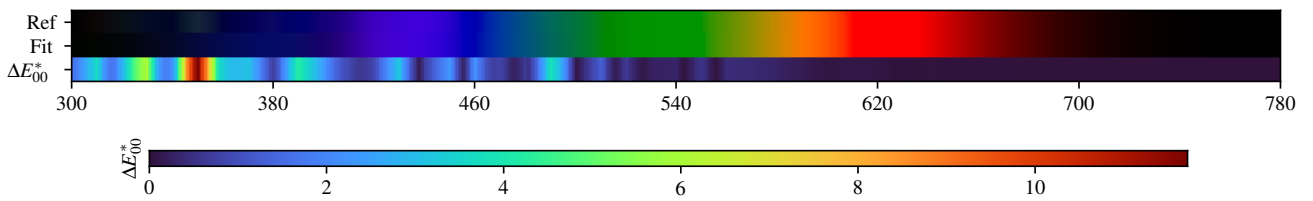
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.14$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.25$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.21$	$\Delta E = 0.10$	$\Delta E = 0.26$

PKODXL5M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.15$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.21$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.11$
B $\Delta E = 0.12$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.11$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.16$	D75 $\Delta E = 0.15$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.11$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.10$	LED-V1 $\Delta E = 0.24$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.24$	LED-B4 $\Delta E = 0.10$	LED-V2 $\Delta E = 0.26$

PKODXL5M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.287819	0.380268	0.399467	0.433120	0.449473	0.397347	0.348868	0.308647	0.270020	0.266213	0.280467
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.285061	0.261951	0.235013	0.216516	0.205134	0.203846	0.209441	0.223872	0.261474	0.329375	0.405794
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.492544	0.574225	0.634273	0.671513	0.684852	0.694952	0.700550	0.702977	0.707226	0.716021	0.727449
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.742631	0.754840	0.776185	0.793331	0.806183	0.824819	0.835502	0.840607			

2 Gaussians

Scaling factor: 156.3520190041638

Gaussians:

Weight	Mean		Covariance			
0.564691418	549.585928708	619.803678900	14086.363741731	-2438.442012988	-2438.442012988	13729.383058361
0.435308582	385.863638753	441.551477697	737.565393664	-92.558893285	-92.558893285	929.685186265

4 Gaussians

Scaling factor: 151.25529291226024

Gaussians:

Weight	Mean		Covariance			
0.215208490	456.830293172	694.757810035	6525.878438546	747.365847936	747.365847936	4235.077625786
0.230784273	567.515399025	492.773415167	12350.346498704	-709.010927494	-709.010927494	5367.574325655
0.136436582	649.840195039	693.568434701	5298.609767625	-83.508311544	-83.508311544	3790.887755682
0.417570654	384.047219986	441.455172484	542.560285498	-34.492909113	-34.492909113	871.442880663

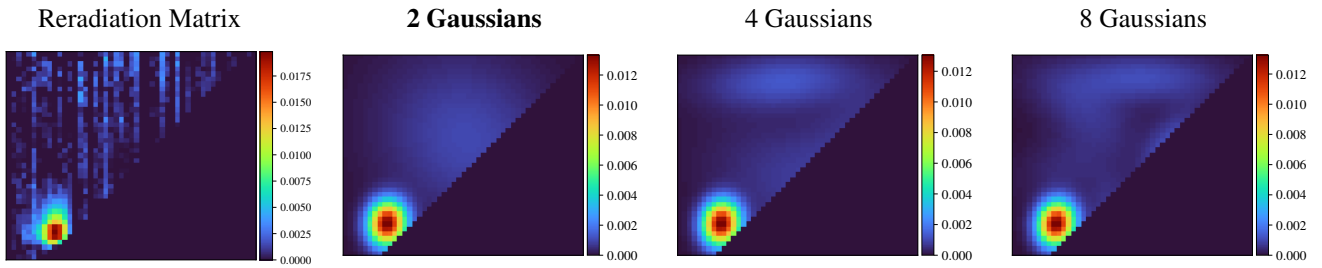
8 Gaussians

Scaling factor: 150.38987651047896

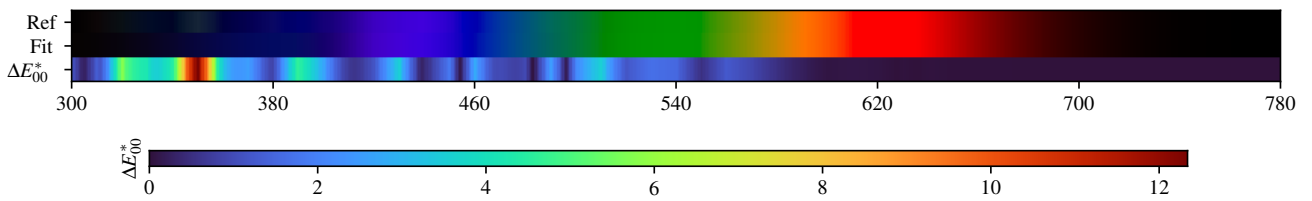
Gaussians:

Weight	Mean		Covariance			
0.081245509	399.034054606	716.280992044	2924.094682308	-420.652268767	-420.652268767	1419.075294860
0.056440397	492.714810961	450.198431064	672.326439515	41.989741002	41.989741002	2592.702745086
0.076765142	610.947391758	584.233497915	826.187835391	532.817105150	532.817105150	2150.516708956
0.420378831	384.270275439	440.930239180	536.523166890	-4.079954235	-4.079954235	832.491249353
0.069597663	705.282845874	693.670626984	2902.635349685	-326.791264345	-326.791264345	3227.755175386
0.104730926	443.845971476	593.112701297	5370.928748434	1914.202059078	1914.202059078	2818.215545378
0.080643137	668.499620613	448.995609536	4921.798301514	601.301435901	601.301435901	2597.144740476
0.110198395	546.002236283	742.251795987	3778.903416871	143.550232661	143.550232661	875.085918222

PKODXL5M - Weighted variational Bayesian inference - 2 Gaussians



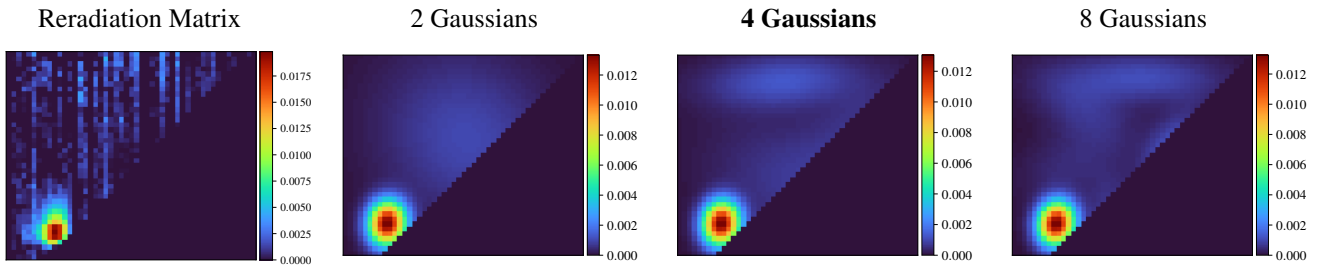
Fitted Material Under Monochromatic Illumination



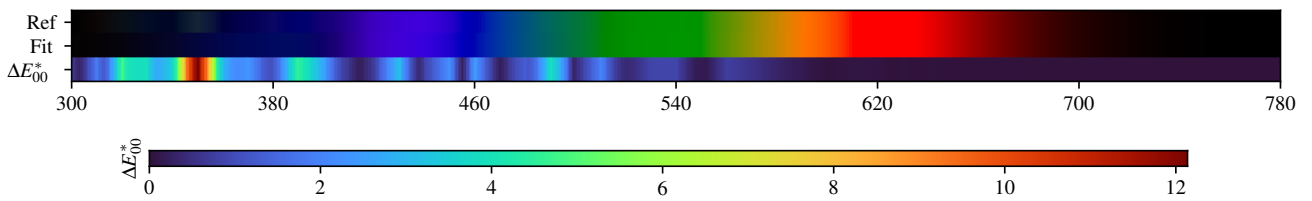
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.29$	D60 $\Delta E = 0.52$	FL2 $\Delta E = 0.41$	FL7 $\Delta E = 0.53$	FL12 $\Delta E = 0.21$	FL3.5 $\Delta E = 0.37$	FL3.10 $\Delta E = 0.25$	FL3.15 $\Delta E = 0.63$	HP5 $\Delta E = 0.39$	LED-B5 $\Delta E = 0.45$
B $\Delta E = 0.48$	D65 $\Delta E = 0.53$	FL3 $\Delta E = 0.33$	FL8 $\Delta E = 0.44$	FL3.1 $\Delta E = 0.27$	FL3.6 $\Delta E = 0.42$	FL3.11 $\Delta E = 0.33$	HP1 $\Delta E = 0.20$	LED-B1 $\Delta E = 0.24$	LED-BH1 $\Delta E = 0.25$
C $\Delta E = 0.54$	D75 $\Delta E = 0.54$	FL4 $\Delta E = 0.27$	FL9 $\Delta E = 0.39$	FL3.2 $\Delta E = 0.39$	FL3.7 $\Delta E = 0.21$	FL3.12 $\Delta E = 0.26$	HP2 $\Delta E = 0.25$	LED-B2 $\Delta E = 0.26$	LED-RGB1 $\Delta E = 0.30$
D50 $\Delta E = 0.48$	E $\Delta E = 0.57$	FL5 $\Delta E = 0.56$	FL10 $\Delta E = 0.29$	FL3.3 $\Delta E = 0.55$	FL3.8 $\Delta E = 0.26$	FL3.13 $\Delta E = 0.33$	HP3 $\Delta E = 0.33$	LED-B3 $\Delta E = 0.30$	LED-V1 $\Delta E = 0.37$
D55 $\Delta E = 0.51$	FL1 $\Delta E = 0.54$	FL6 $\Delta E = 0.40$	FL11 $\Delta E = 0.25$	FL3.4 $\Delta E = 0.29$	FL3.9 $\Delta E = 0.29$	FL3.14 $\Delta E = 0.39$	HP4 $\Delta E = 0.43$	LED-B4 $\Delta E = 0.39$	LED-V2 $\Delta E = 0.50$

PKODXL5M - Weighted variational Bayesian inference - 4 Gaussians



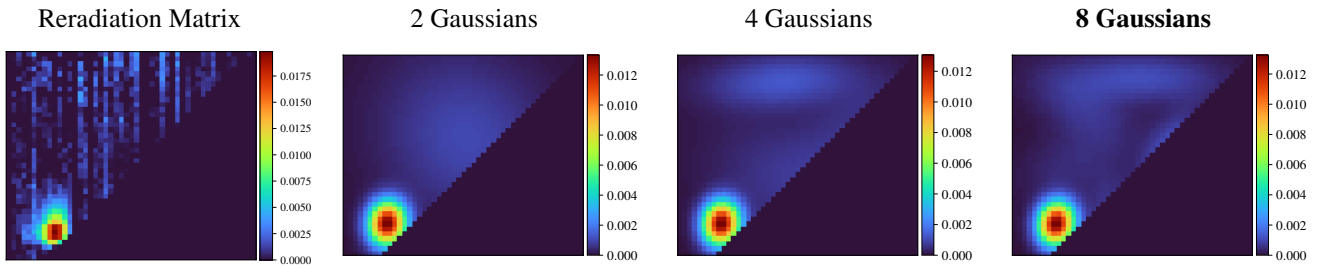
Fitted Material Under Monochromatic Illumination



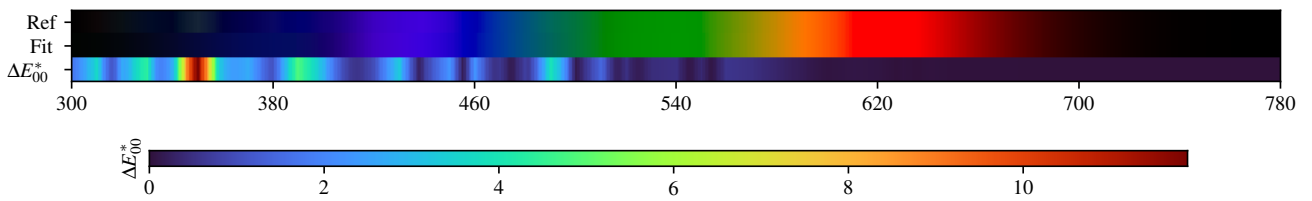
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.27$	$\Delta E = 0.08$	$\Delta E = 0.21$	$\Delta E = 0.06$	$\Delta E = 0.40$	$\Delta E = 0.22$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.20$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.23$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.27$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.28$	$\Delta E = 0.37$	$\Delta E = 0.28$	$\Delta E = 0.08$	$\Delta E = 0.27$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.23$	$\Delta E = 0.12$	$\Delta E = 0.29$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.24$	$\Delta E = 0.07$	$\Delta E = 0.20$	$\Delta E = 0.08$	$\Delta E = 0.20$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.34$

PKODXL5M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.29$	$\Delta E = 0.14$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.16$	$\Delta E = 0.30$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.10$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.23$	$\Delta E = 0.10$	$\Delta E = 0.23$

PKODXL5M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.287819	0.380268	0.399467	0.433120	0.449473	0.397347	0.348868	0.308647	0.270020	0.266213	0.280467
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.285061	0.261951	0.235013	0.216516	0.205134	0.203846	0.209441	0.223872	0.261474	0.329375	0.405794
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.492544	0.574225	0.634273	0.671513	0.684852	0.694952	0.700550	0.702977	0.707226	0.716021	0.727449
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.742631	0.754840	0.776185	0.793331	0.806183	0.824819	0.835502	0.840607			

2 Gaussians max

Scaling factor: 155.24699594445866

Gaussians:

Weight	Mean		Covariance			
0.415284159	384.910324228	441.188187485	642.453785108	34.896018873	34.896018873	903.832348352
0.584715841	544.976774793	614.225574448	14333.469869663	-1692.994908499	-1692.994908499	14213.449868083

4 Gaussians max

Scaling factor: 150.93696150010214

Gaussians:

Weight	Mean		Covariance			
0.410415897	384.840658688	440.893409264	631.929303685	40.867317235	40.867317235	888.096206107
0.305549414	537.545699793	524.373141031	14323.581195600	-2925.667026628	-2925.667026628	7973.048990380
0.073783383	661.837639582	646.602061474	5226.464227762	2393.958998364	2393.958998364	3639.302948463
0.210251306	511.940857462	730.841819894	11725.227674912	611.201866639	611.201866639	1430.081413992

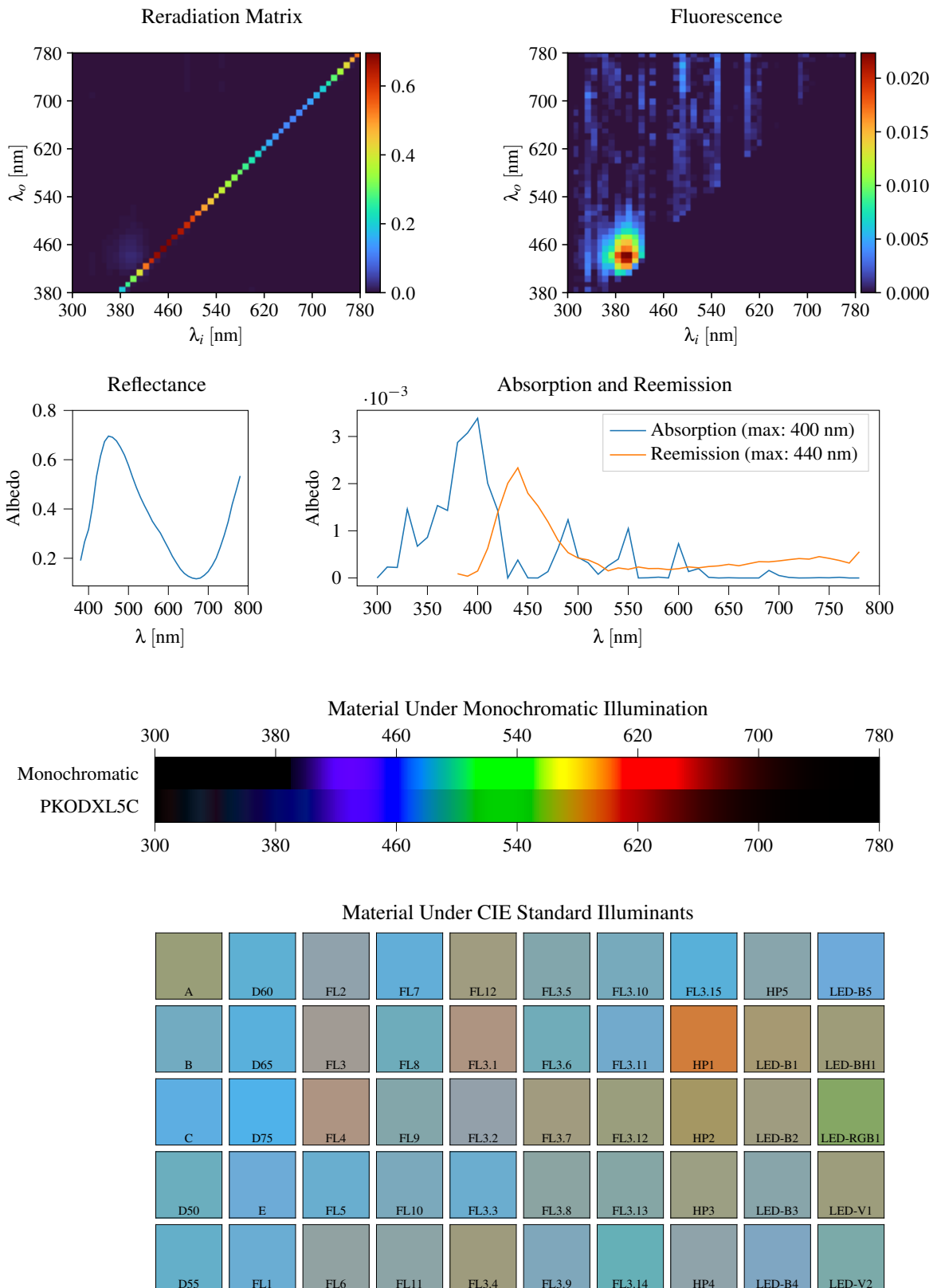
8 Gaussians max

Scaling factor: 149.772998738252

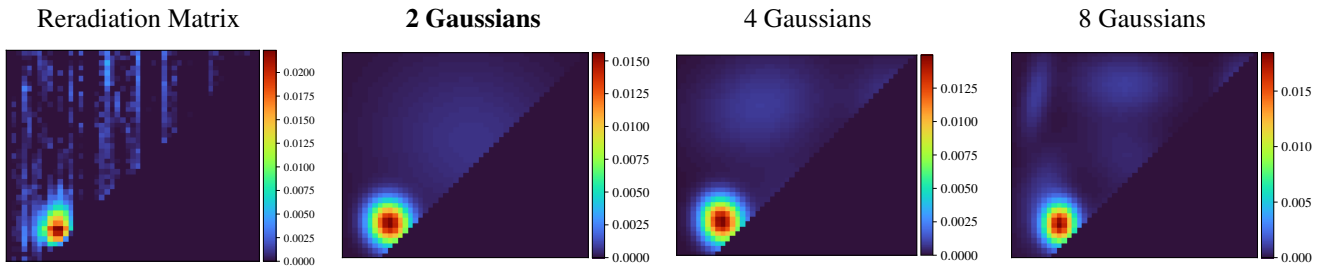
Gaussians:

Weight	Mean		Covariance			
0.413623209	384.895481403	440.655010021	620.873224826	62.287185066	62.287185066	868.149056779
0.056036978	492.020305438	454.800802800	1173.062963984	94.043858044	94.043858044	3547.917104698
0.080708300	651.760982851	448.893194732	5867.534565235	-429.092176707	-429.092176707	2654.075106715
0.064701836	407.389257367	557.070012705	4568.130813865	927.018366415	927.018366415	2527.953039938
0.068964829	613.872268322	596.634520443	1502.431738201	936.332200911	936.332200911	2234.390006102
0.042296931	696.637933671	610.428976705	5229.490685040	830.353515755	830.353515755	5359.675561605
0.101851349	441.458984411	672.257580011	5385.167992029	-2029.770418063	-2029.770418063	3187.882409319
0.171816570	558.139869974	736.905149528	11641.629987995	-149.348762475	-149.348762475	1184.099398317

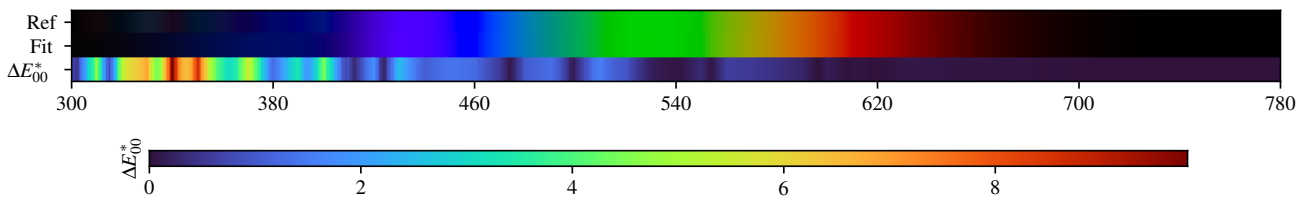
3.82. PKODXL5C



PKODXL5C - Weighted Expectation-Maximization - 2 Gaussians



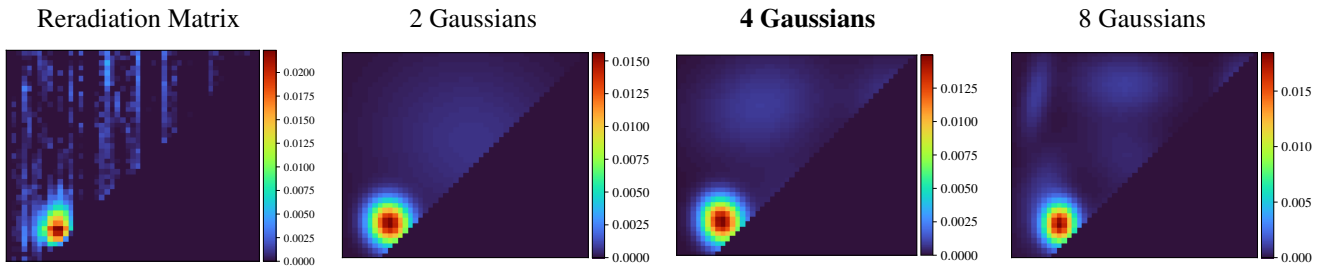
Fitted Material Under Monochromatic Illumination



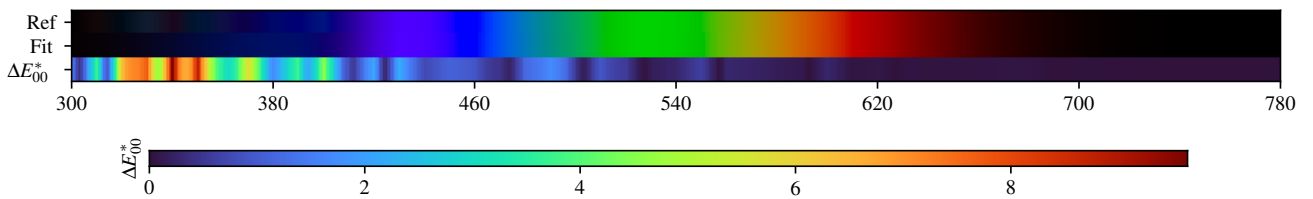
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.37$	$\Delta E = 0.28$	$\Delta E = 0.45$	$\Delta E = 0.27$	$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.43$	$\Delta E = 0.41$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.31$	$\Delta E = 0.29$	$\Delta E = 0.55$	$\Delta E = 0.26$	$\Delta E = 0.38$	$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.39$	$\Delta E = 0.41$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.32$	$\Delta E = 0.30$	$\Delta E = 0.39$	$\Delta E = 0.32$	$\Delta E = 0.46$	$\Delta E = 0.27$	$\Delta E = 0.33$	$\Delta E = 0.41$	$\Delta E = 0.46$	$\Delta E = 0.30$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.30$	$\Delta E = 0.29$	$\Delta E = 0.24$	$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.35$	$\Delta E = 0.43$	$\Delta E = 0.45$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.29$	$\Delta E = 0.46$	$\Delta E = 0.27$	$\Delta E = 0.40$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.47$	$\Delta E = 0.42$	$\Delta E = 0.34$

PKODXL5C - Weighted Expectation-Maximization - 4 Gaussians



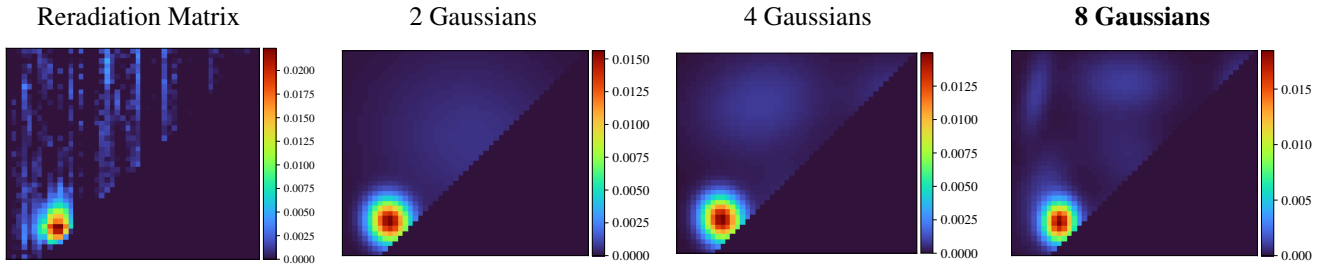
Fitted Material Under Monochromatic Illumination



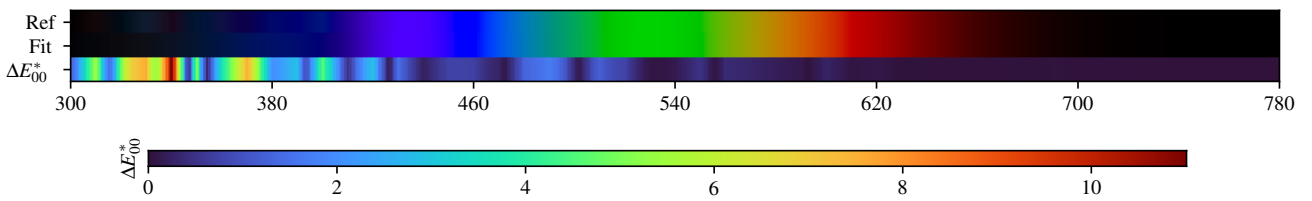
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.28$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.27$	FL3.15 $\Delta E = 0.07$	HP5 $\Delta E = 0.25$	LED-B5 $\Delta E = 0.20$
B $\Delta E = 0.16$	D65 $\Delta E = 0.17$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.23$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.16$	D75 $\Delta E = 0.18$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.25$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.16$	E $\Delta E = 0.09$	FL5 $\Delta E = 0.13$	FL10 $\Delta E = 0.28$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.34$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.16$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.36$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.28$	FL3.14 $\Delta E = 0.14$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.22$	LED-V2 $\Delta E = 0.12$

PKODXL5C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.27$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.21$	FL3.15 $\Delta E = 0.03$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.11$	D65 $\Delta E = 0.04$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.09$	D75 $\Delta E = 0.03$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.24$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.07$	E $\Delta E = 0.04$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.29$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.31$	FL3.4 $\Delta E = 0.01$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.20$	LED-B4 $\Delta E = 0.12$	LED-V2 $\Delta E = 0.09$

PKODXL5C - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.190640	0.266411	0.316970	0.410355	0.532794	0.614898	0.673670	0.695925	0.691073	0.676403	0.650215
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.618734	0.577332	0.530418	0.486714	0.448031	0.414033	0.383000	0.350050	0.325539	0.302531	0.271096
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.240692	0.208338	0.181812	0.156651	0.138629	0.127012	0.119688	0.116560	0.119541	0.130789	0.146234
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.170558	0.200666	0.244277	0.292803	0.348398	0.418017	0.474774	0.533974			

2 Gaussians

Scaling factor: 148.4042624693561

Gaussians:

Weight	Mean		Covariance			
0.499197647	550.528080933	607.056572129	18436.312669355	-1313.109208487	-1313.109208487	15167.996116502
0.500802353	388.390472058	444.582533904	692.831587814	-44.690185048	-44.690185048	819.865461451

4 Gaussians

Scaling factor: 145.7139762828836

Gaussians:

Weight	Mean		Covariance			
0.080017823	730.775568741	702.871815215	3340.157764352	308.216580864	308.216580864	2707.900719464
0.508973772	387.729891178	445.573463605	691.021957414	-54.806158685	-54.806158685	889.621594881
0.174832685	590.711966790	467.870583189	12520.711385133	-199.447410576	-199.447410576	3839.062654049
0.236175720	466.745735854	681.114224089	7953.418771058	989.714992210	989.714992210	4964.618270896

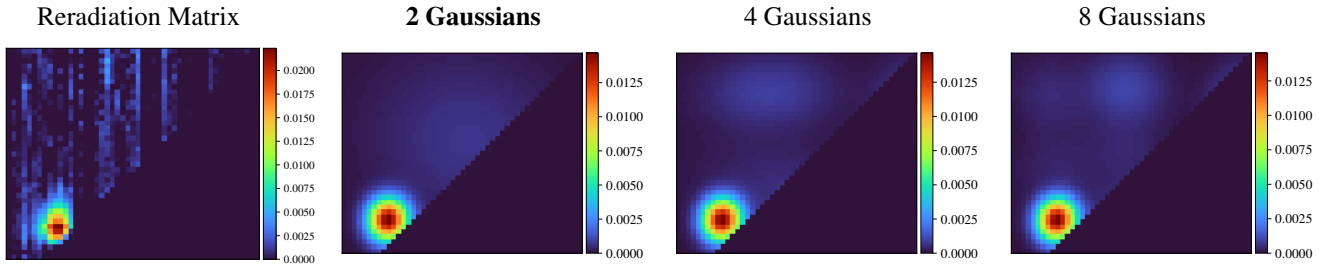
8 Gaussians

Scaling factor: 142.47839693160395

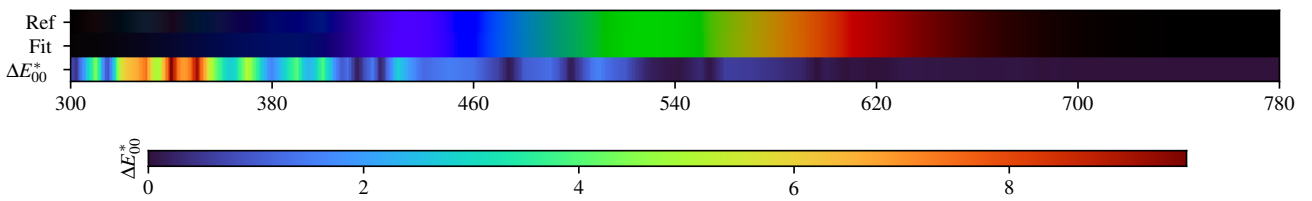
Gaussians:

Weight	Mean		Covariance			
0.061712487	751.625043072	714.876192043	936.995115034	150.700035254	150.700035254	1697.038738151
0.083964041	521.130753407	430.735724648	4450.292887087	-531.347749145	-531.347749145	1250.101954626
0.087192032	359.357785517	493.404283093	1026.958495003	451.421327436	451.421327436	3462.099301906
0.098350887	524.811048368	578.236720346	4093.533508659	-1299.793780384	-1299.793780384	4053.461768666
0.127448674	520.038214490	722.023081594	4346.175471826	-134.513324013	-134.513324013	1649.638022256
0.437397454	390.832174601	442.592614510	438.426401165	7.632105011	7.632105011	685.335917845
0.060041820	731.124843222	486.301194629	1867.719323653	-78.617459937	-78.617459937	5830.304152371
0.043892604	344.346778782	699.591641432	386.679386384	506.291413364	506.291413364	2955.348710841

PKODXL5C - Weighted variational Bayesian inference - 2 Gaussians



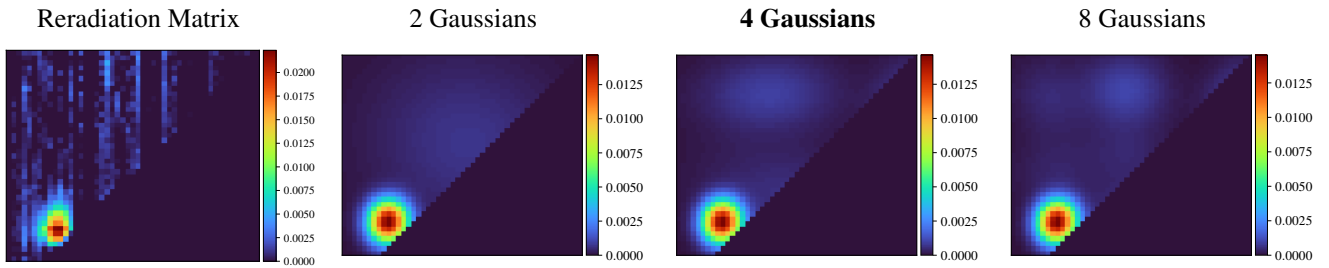
Fitted Material Under Monochromatic Illumination



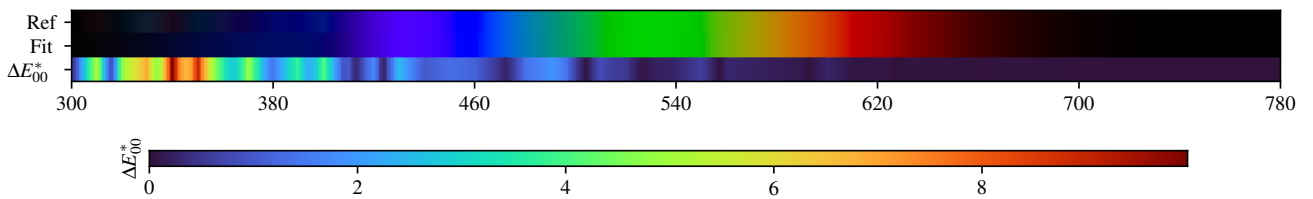
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.36$	D60 $\Delta E = 0.26$	FL2 $\Delta E = 0.42$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.23$	FL3.5 $\Delta E = 0.30$	FL3.10 $\Delta E = 0.22$	FL3.15 $\Delta E = 0.25$	HP5 $\Delta E = 0.39$	LED-B5 $\Delta E = 0.41$
B $\Delta E = 0.29$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.53$	FL8 $\Delta E = 0.25$	FL3.1 $\Delta E = 0.36$	FL3.6 $\Delta E = 0.26$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.21$	LED-B1 $\Delta E = 0.39$	LED-BH1 $\Delta E = 0.40$
C $\Delta E = 0.29$	D75 $\Delta E = 0.26$	FL4 $\Delta E = 0.37$	FL9 $\Delta E = 0.31$	FL3.2 $\Delta E = 0.43$	FL3.7 $\Delta E = 0.26$	FL3.12 $\Delta E = 0.33$	HP2 $\Delta E = 0.40$	LED-B2 $\Delta E = 0.46$	LED-RGB1 $\Delta E = 0.30$
D50 $\Delta E = 0.27$	E $\Delta E = 0.28$	FL5 $\Delta E = 0.27$	FL10 $\Delta E = 0.22$	FL3.3 $\Delta E = 0.27$	FL3.8 $\Delta E = 0.24$	FL3.13 $\Delta E = 0.27$	HP3 $\Delta E = 0.32$	LED-B3 $\Delta E = 0.42$	LED-V1 $\Delta E = 0.42$
D55 $\Delta E = 0.26$	FL1 $\Delta E = 0.28$	FL6 $\Delta E = 0.43$	FL11 $\Delta E = 0.25$	FL3.4 $\Delta E = 0.40$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.19$	HP4 $\Delta E = 0.40$	LED-B4 $\Delta E = 0.42$	LED-V2 $\Delta E = 0.33$

PKODXL5C - Weighted variational Bayesian inference - 4 Gaussians



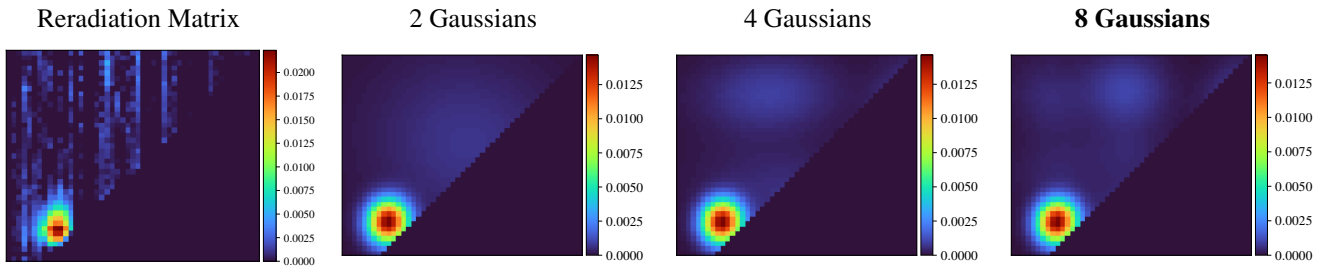
Fitted Material Under Monochromatic Illumination



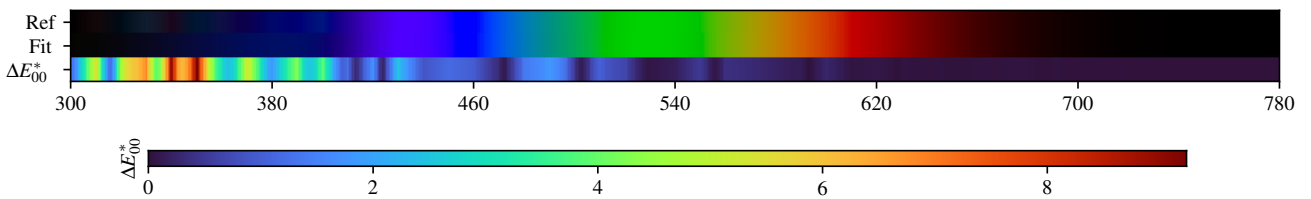
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.15$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.40$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.28$	FL3.15 $\Delta E = 0.27$	HP5 $\Delta E = 0.15$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.16$	D65 $\Delta E = 0.16$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.25$	HP1 $\Delta E = 0.01$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.20$
C $\Delta E = 0.18$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.35$	FL3.12 $\Delta E = 0.17$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.14$	E $\Delta E = 0.28$	FL5 $\Delta E = 0.13$	FL10 $\Delta E = 0.31$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.39$	FL3.13 $\Delta E = 0.18$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.41$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.30$	FL3.14 $\Delta E = 0.16$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.19$

PKODXL5C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.02$	FL7 $\Delta E = 0.05$	FL12 $\Delta E = 0.26$	FL3.5 $\Delta E = 0.02$	FL3.10 $\Delta E = 0.22$	FL3.15 $\Delta E = 0.19$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.04$	D65 $\Delta E = 0.06$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.03$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.02$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.06$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.23$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.03$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.02$	FL10 $\Delta E = 0.23$	FL3.3 $\Delta E = 0.02$	FL3.8 $\Delta E = 0.30$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.03$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.32$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.12$

PKODXL5C - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.190640	0.266411	0.316970	0.410355	0.532794	0.614898	0.673670	0.695925	0.691073	0.676403	0.650215
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.618734	0.577332	0.530418	0.486714	0.448031	0.414033	0.383000	0.350050	0.325539	0.302531	0.271096
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.240692	0.208338	0.181812	0.156651	0.138629	0.127012	0.119688	0.116560	0.119541	0.130789	0.146234
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.170558	0.200666	0.244277	0.292803	0.348398	0.418017	0.474774	0.533974			

2 Gaussians max

Scaling factor: 148.67846017139956

Gaussians:

Weight	Mean		Covariance			
0.506549314	548.396347994	604.989381583	18529.046785683	-1009.994450536	-1009.994450536	15252.354057305
0.493450686	388.597111387	444.605176387	738.889610751	19.537016314	19.537016314	850.303072016

4 Gaussians max

Scaling factor: 146.3922175329374

Gaussians:

Weight	Mean		Covariance			
0.488412758	388.323612291	444.241579130	718.224741290	27.443646872	27.443646872	840.845195793
0.240068816	541.328472259	490.992639936	16545.458847115	-2832.463531724	-2832.463531724	5318.173968863
0.070588343	746.956981574	696.431774527	1949.316785643	726.011718148	726.011718148	3620.781830029
0.200930083	483.848983445	704.850564853	8740.007878033	194.099879819	194.099879819	2844.634080243

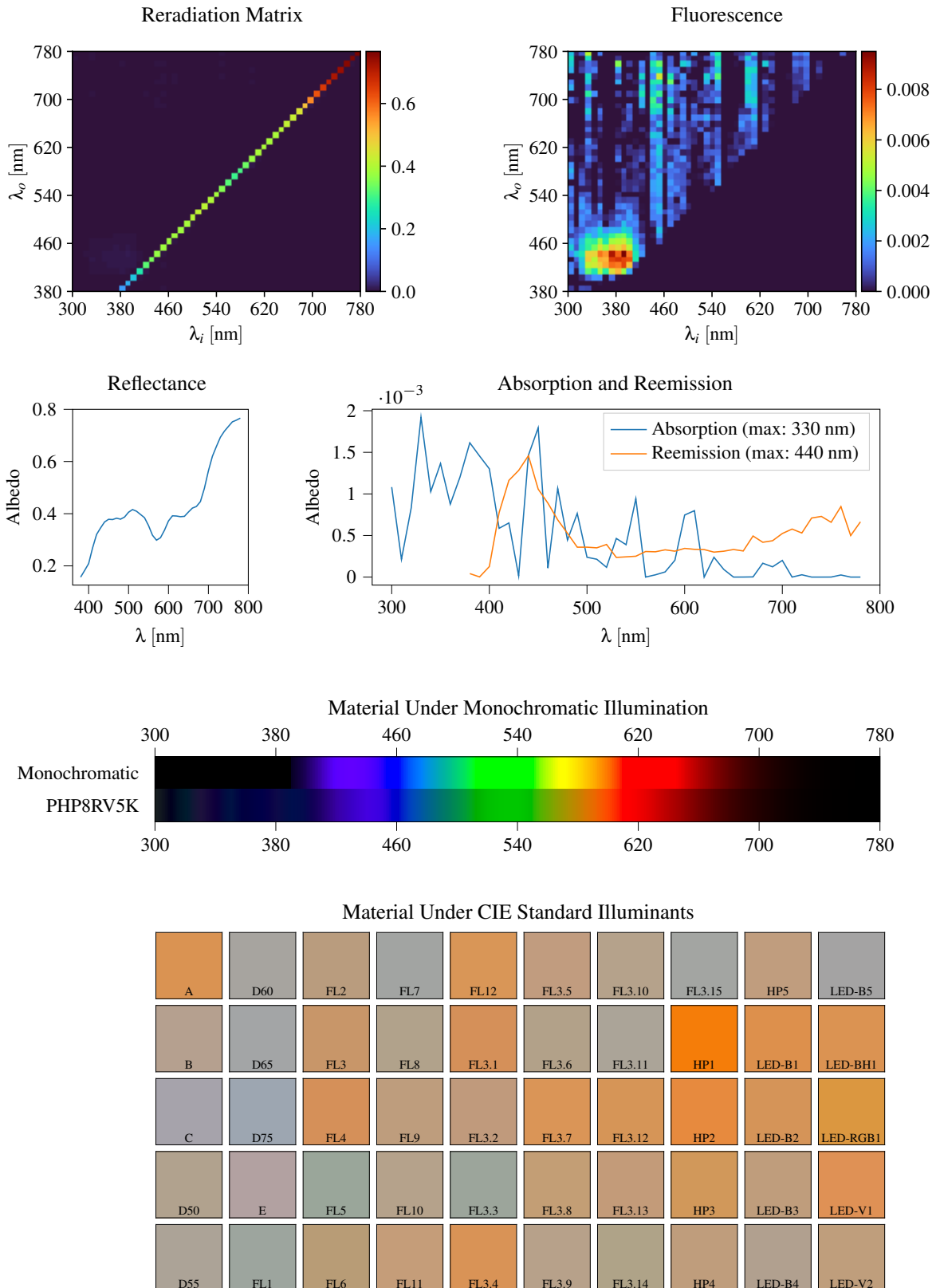
8 Gaussians max

Scaling factor: 145.1729989337041

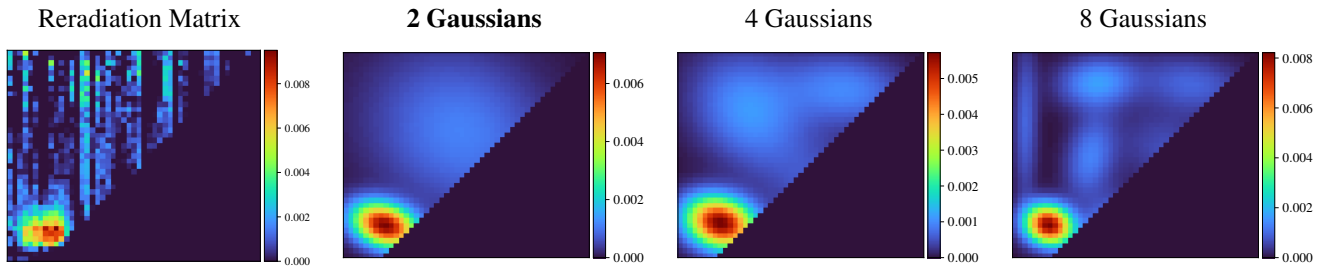
Gaussians:

Weight	Mean		Covariance			
0.491326590	388.191940918	444.181789485	719.049859179	40.785757114	40.785757114	839.710509355
0.084867020	527.302980676	441.308241547	3561.792350574	-260.641412795	-260.641412795	2210.289861795
0.064450388	711.836284622	476.661911200	4011.730298056	-596.317017212	-596.317017212	4701.160041028
0.048754391	386.309009253	547.293335896	4010.239560636	247.372452948	247.372452948	2334.829079157
0.052011353	532.782845492	576.926987860	3254.290697501	-352.055546458	-352.055546458	2800.289374714
0.070071986	745.057261348	704.430842369	2028.632195494	698.804322162	698.804322162	2817.340539709
0.061940621	372.747773082	696.908470560	2569.258678069	-240.391865403	-240.391865403	3270.701386411
0.126577652	528.073294852	713.001807375	3220.297076279	-90.547139643	-90.547139643	2481.911129560

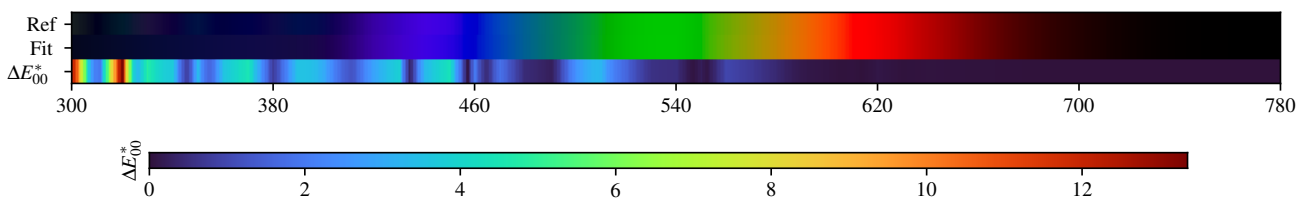
3.83. PHP8RV5K



PHP8RV5K - Weighted Expectation-Maximization - 2 Gaussians



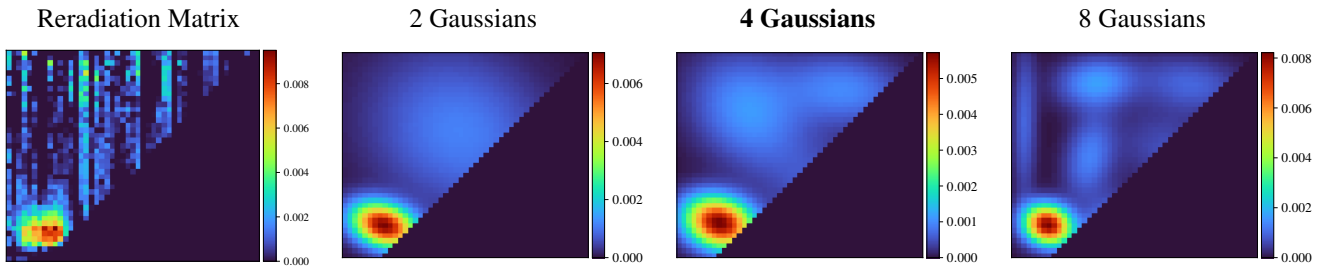
Fitted Material Under Monochromatic Illumination



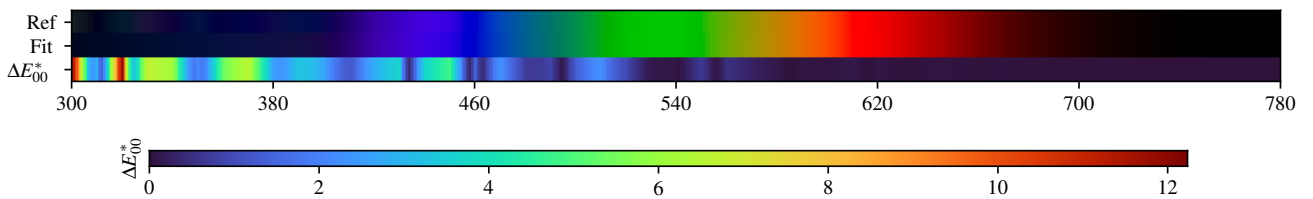
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.30$	D60 $\Delta E = 1.28$	FL2 $\Delta E = 0.71$	FL7 $\Delta E = 1.19$	FL12 $\Delta E = 0.22$	FL3.5 $\Delta E = 0.49$	FL3.10 $\Delta E = 0.62$	FL3.15 $\Delta E = 1.15$	HP5 $\Delta E = 0.70$	LED-B5 $\Delta E = 1.07$
B $\Delta E = 0.92$	D65 $\Delta E = 1.36$	FL3 $\Delta E = 0.45$	FL8 $\Delta E = 0.84$	FL3.1 $\Delta E = 0.30$	FL3.6 $\Delta E = 0.77$	FL3.11 $\Delta E = 0.78$	HP1 $\Delta E = 0.21$	LED-B1 $\Delta E = 0.25$	LED-BH1 $\Delta E = 0.29$
C $\Delta E = 1.19$	D75 $\Delta E = 1.36$	FL4 $\Delta E = 0.35$	FL9 $\Delta E = 0.56$	FL3.2 $\Delta E = 0.52$	FL3.7 $\Delta E = 0.16$	FL3.12 $\Delta E = 0.25$	HP2 $\Delta E = 0.28$	LED-B2 $\Delta E = 0.29$	LED-RGB1 $\Delta E = 0.26$
D50 $\Delta E = 0.98$	E $\Delta E = 0.90$	FL5 $\Delta E = 0.95$	FL10 $\Delta E = 0.68$	FL3.3 $\Delta E = 0.94$	FL3.8 $\Delta E = 0.33$	FL3.13 $\Delta E = 0.40$	HP3 $\Delta E = 0.41$	LED-B3 $\Delta E = 0.55$	LED-V1 $\Delta E = 0.52$
D55 $\Delta E = 1.15$	FL1 $\Delta E = 1.04$	FL6 $\Delta E = 0.65$	FL11 $\Delta E = 0.41$	FL3.4 $\Delta E = 0.24$	FL3.9 $\Delta E = 0.58$	FL3.14 $\Delta E = 0.73$	HP4 $\Delta E = 0.76$	LED-B4 $\Delta E = 0.85$	LED-V2 $\Delta E = 0.84$

PHP8RV5K - Weighted Expectation-Maximization - 4 Gaussians



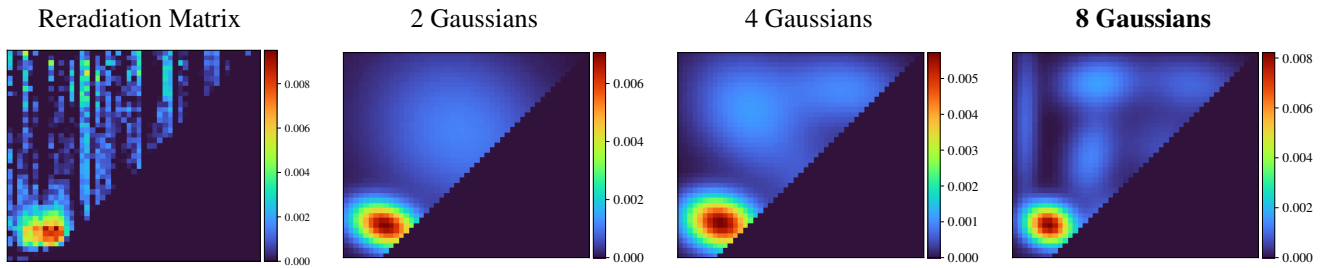
Fitted Material Under Monochromatic Illumination



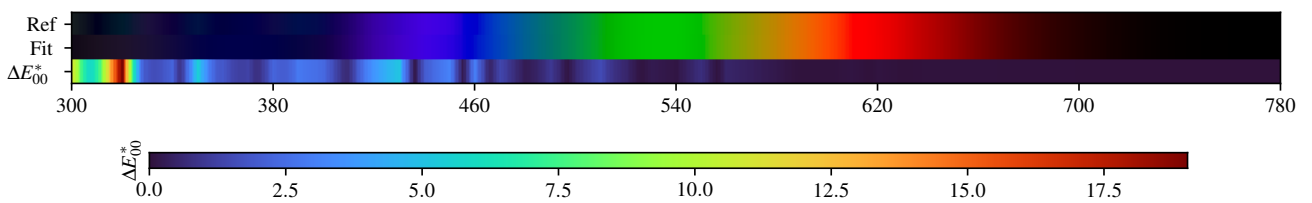
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.79$	$\Delta E = 0.50$	$\Delta E = 0.95$	$\Delta E = 0.23$	$\Delta E = 0.38$	$\Delta E = 0.58$	$\Delta E = 0.80$	$\Delta E = 0.64$	$\Delta E = 0.96$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.76$	$\Delta E = 0.82$	$\Delta E = 0.32$	$\Delta E = 0.58$	$\Delta E = 0.15$	$\Delta E = 0.51$	$\Delta E = 0.69$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.24$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.97$	$\Delta E = 0.79$	$\Delta E = 0.24$	$\Delta E = 0.43$	$\Delta E = 0.35$	$\Delta E = 0.15$	$\Delta E = 0.10$	$\Delta E = 0.21$	$\Delta E = 0.21$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.62$	$\Delta E = 0.50$	$\Delta E = 0.67$	$\Delta E = 0.62$	$\Delta E = 0.60$	$\Delta E = 0.31$	$\Delta E = 0.25$	$\Delta E = 0.32$	$\Delta E = 0.48$	$\Delta E = 0.50$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.71$	$\Delta E = 0.78$	$\Delta E = 0.41$	$\Delta E = 0.43$	$\Delta E = 0.08$	$\Delta E = 0.53$	$\Delta E = 0.41$	$\Delta E = 0.64$	$\Delta E = 0.72$	$\Delta E = 0.77$

PHP8RV5K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.23$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.24$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.15$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.18$	D75 $\Delta E = 0.28$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.17$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.27$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.18$	LED-V2 $\Delta E = 0.13$

PHP8RV5K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.156848	0.182259	0.208587	0.269157	0.320570	0.345635	0.368301	0.378506	0.377502	0.382770	0.379039
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.387122	0.405622	0.415855	0.409440	0.397092	0.384682	0.354802	0.317371	0.298494	0.307863	0.336622
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.372084	0.391931	0.391089	0.388525	0.389853	0.406422	0.421528	0.427662	0.446295	0.497237	0.563913
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.619746	0.657355	0.692858	0.716093	0.734218	0.752087	0.758483	0.766396			

2 Gaussians

Scaling factor: 149.68306279646788

Gaussians:

Weight	Mean		Covariance			
0.632723286	525.604767602	626.429964655	14647.273692148	-1785.005365603	-1785.005365603	12266.801935136
0.367276714	377.122309637	440.259267812	1868.051741843	-351.179430021	-351.179430021	907.055923450

4 Gaussians

Scaling factor: 143.4222090846663

Gaussians:

Weight	Mean		Covariance			
0.167479435	628.214525923	709.940793684	6700.332500622	-553.535874453	-553.535874453	2355.412185597
0.266402266	434.926919453	669.423246515	5581.890002460	-1076.326726515	-1076.326726515	5667.661747065
0.158802961	598.200645327	501.410071215	7462.230124273	-1794.513963395	-1794.513963395	5331.568239124
0.407315338	380.530855344	444.844643193	2193.916394963	-310.857807976	-310.857807976	1228.081117501

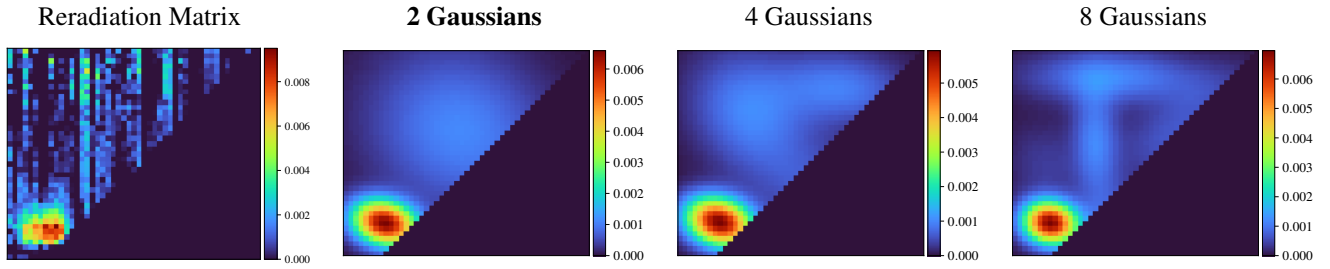
8 Gaussians

Scaling factor: 137.9666422653865

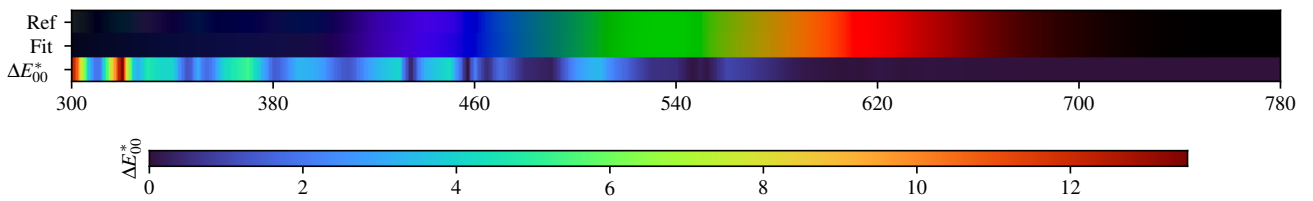
Gaussians:

Weight	Mean		Covariance			
0.120753262	649.825463402	721.142833419	5181.012015942	-523.143293634	-523.143293634	1527.524758526
0.072338125	471.631543901	436.337292561	1128.322615985	580.893010526	580.893010526	1725.198905411
0.105106246	598.952614974	595.298792872	4420.723461389	-398.363756438	-398.363756438	2654.271555774
0.131144589	462.296657271	723.967204026	2601.017334479	120.033313986	120.033313986	1177.193256997
0.110727478	448.994425805	575.278490955	1125.561281271	465.324860639	465.324860639	3353.891946555
0.071924830	640.992861766	442.816168159	4805.525672430	-399.560499949	-399.560499949	1889.392016693
0.074791383	321.550956039	643.739470526	263.410783600	75.083327243	75.083327243	11016.409684698
0.313214089	367.273401006	441.234464521	987.996145390	-95.650575298	-95.650575298	716.301240794

PHP8RV5K - Weighted variational Bayesian inference - 2 Gaussians



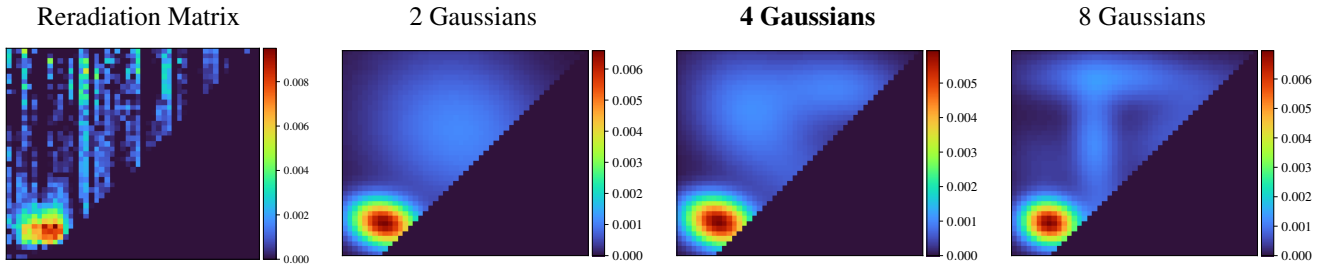
Fitted Material Under Monochromatic Illumination



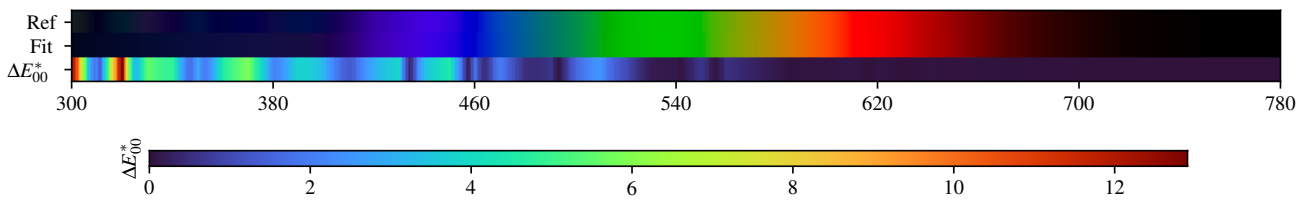
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.29$	$\Delta E = 1.14$	$\Delta E = 0.68$	$\Delta E = 1.11$	$\Delta E = 0.21$	$\Delta E = 0.47$	$\Delta E = 0.59$	$\Delta E = 1.05$	$\Delta E = 0.66$	$\Delta E = 1.03$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.85$	$\Delta E = 1.21$	$\Delta E = 0.44$	$\Delta E = 0.80$	$\Delta E = 0.29$	$\Delta E = 0.73$	$\Delta E = 0.74$	$\Delta E = 0.21$	$\Delta E = 0.25$	$\Delta E = 0.29$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.10$	$\Delta E = 1.17$	$\Delta E = 0.34$	$\Delta E = 0.54$	$\Delta E = 0.50$	$\Delta E = 0.15$	$\Delta E = 0.25$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.26$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.89$	$\Delta E = 0.77$	$\Delta E = 0.90$	$\Delta E = 0.65$	$\Delta E = 0.90$	$\Delta E = 0.32$	$\Delta E = 0.39$	$\Delta E = 0.39$	$\Delta E = 0.54$	$\Delta E = 0.49$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.04$	$\Delta E = 0.99$	$\Delta E = 0.63$	$\Delta E = 0.39$	$\Delta E = 0.24$	$\Delta E = 0.55$	$\Delta E = 0.70$	$\Delta E = 0.71$	$\Delta E = 0.83$	$\Delta E = 0.79$

PHP8RV5K - Weighted variational Bayesian inference - 4 Gaussians



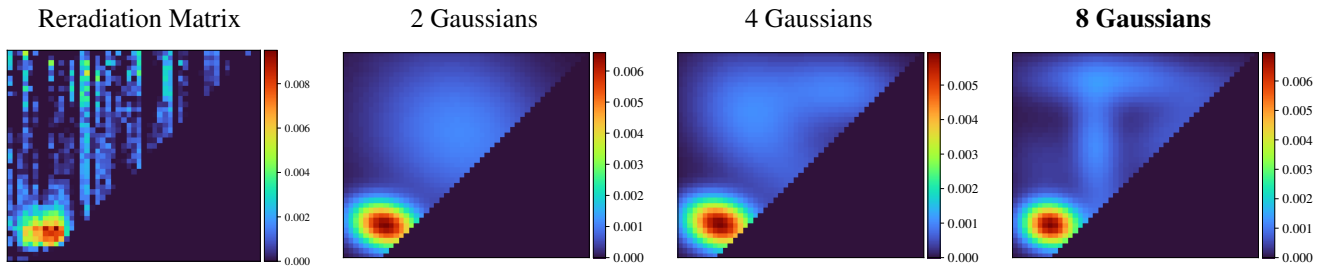
Fitted Material Under Monochromatic Illumination



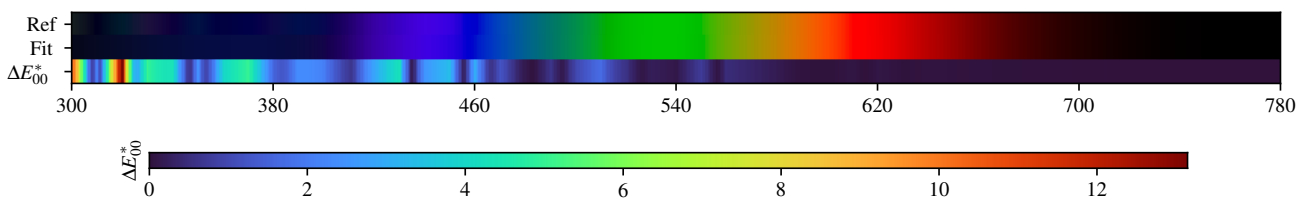
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.68$	FL2 $\Delta E = 0.41$	FL7 $\Delta E = 0.76$	FL12 $\Delta E = 0.18$	FL3.5 $\Delta E = 0.28$	FL3.10 $\Delta E = 0.45$	FL3.15 $\Delta E = 0.64$	HP5 $\Delta E = 0.51$	LED-B5 $\Delta E = 0.77$
B $\Delta E = 0.60$	D65 $\Delta E = 0.72$	FL3 $\Delta E = 0.26$	FL8 $\Delta E = 0.46$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.40$	FL3.11 $\Delta E = 0.55$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.18$
C $\Delta E = 0.80$	D75 $\Delta E = 0.72$	FL4 $\Delta E = 0.20$	FL9 $\Delta E = 0.33$	FL3.2 $\Delta E = 0.28$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.17$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.51$	E $\Delta E = 0.44$	FL5 $\Delta E = 0.54$	FL10 $\Delta E = 0.50$	FL3.3 $\Delta E = 0.49$	FL3.8 $\Delta E = 0.24$	FL3.13 $\Delta E = 0.17$	HP3 $\Delta E = 0.25$	LED-B3 $\Delta E = 0.37$	LED-V1 $\Delta E = 0.42$
D55 $\Delta E = 0.61$	FL1 $\Delta E = 0.63$	FL6 $\Delta E = 0.34$	FL11 $\Delta E = 0.34$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.42$	FL3.14 $\Delta E = 0.31$	HP4 $\Delta E = 0.53$	LED-B4 $\Delta E = 0.58$	LED-V2 $\Delta E = 0.63$

PHP8RV5K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.19$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.25$	FL3.15 $\Delta E = 0.13$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.33$
B $\Delta E = 0.18$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.34$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.24$	D75 $\Delta E = 0.12$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.12$	E $\Delta E = 0.12$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.30$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.21$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.23$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.26$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.26$	LED-V2 $\Delta E = 0.26$

PHP8RV5K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.156848	0.182259	0.208587	0.269157	0.320570	0.345635	0.368301	0.378506	0.377502	0.382770	0.379039
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.387122	0.405622	0.415855	0.409440	0.397092	0.384682	0.354802	0.317371	0.298494	0.307863	0.336622
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.372084	0.391931	0.391089	0.388525	0.389853	0.406422	0.421528	0.427662	0.446295	0.497237	0.563913
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.619746	0.657355	0.692858	0.716093	0.734218	0.752087	0.758483	0.766396			

2 Gaussians max

Scaling factor: 149.89849035819182

Gaussians:

Weight	Mean		Covariance			
0.362127560	377.044718092	440.589533123	1906.668450157	-266.605884053	-266.605884053	964.802225573
0.637872440	524.735250872	624.950226960	14657.280485765	-1624.138681166	-1624.138681166	12437.513640215

4 Gaussians max

Scaling factor: 143.40405681164242

Gaussians:

Weight	Mean		Covariance			
0.383688198	378.152438393	442.593211822	2046.739216881	-307.554225401	-307.554225401	1113.970087007
0.173756277	582.447647666	501.153394582	9405.550087207	-1780.842898691	-1780.842898691	5329.421306544
0.266441218	435.800501288	662.085333566	6125.126612485	-1194.517789405	-1194.517789405	6486.112422974
0.176114306	618.867296507	709.927281928	7883.196484746	-496.109326504	-496.109326504	2433.609230495

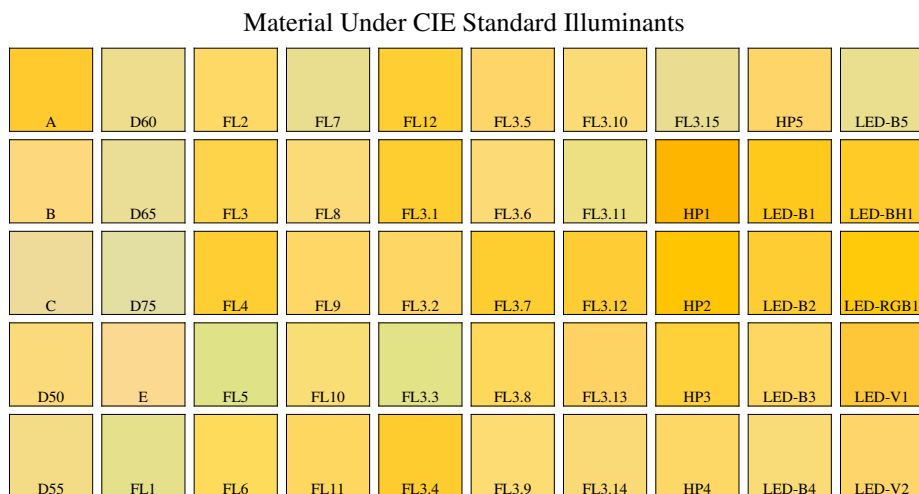
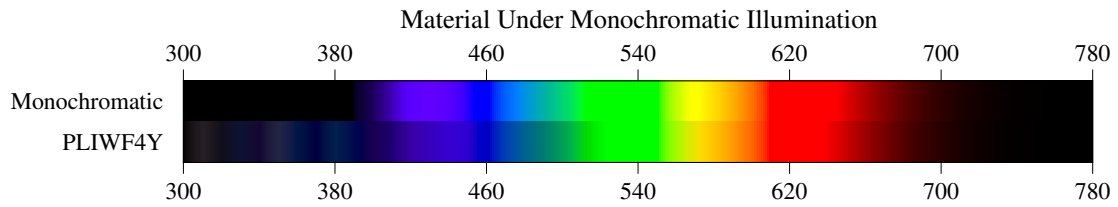
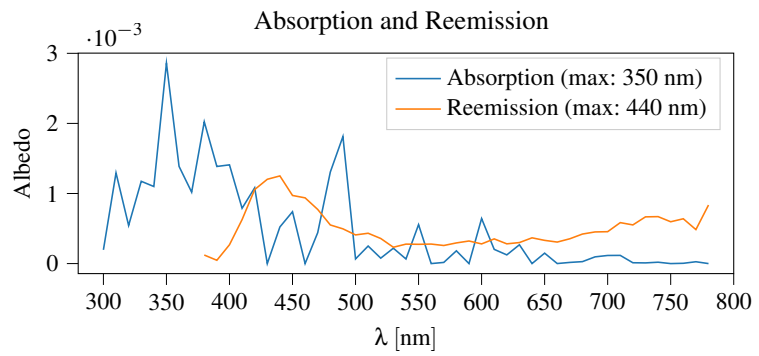
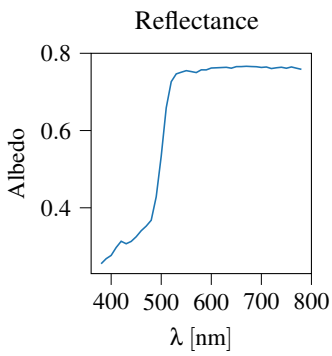
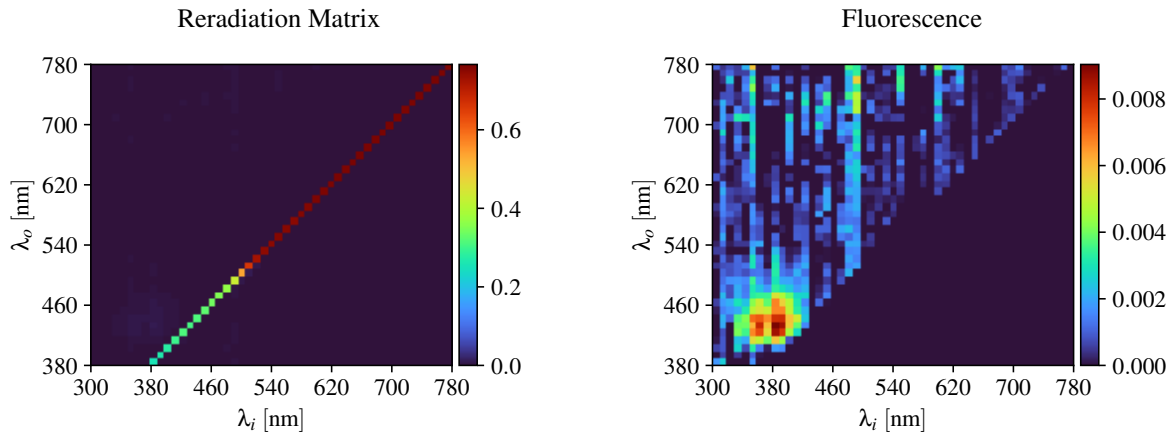
8 Gaussians max

Scaling factor: 140.90545265601435

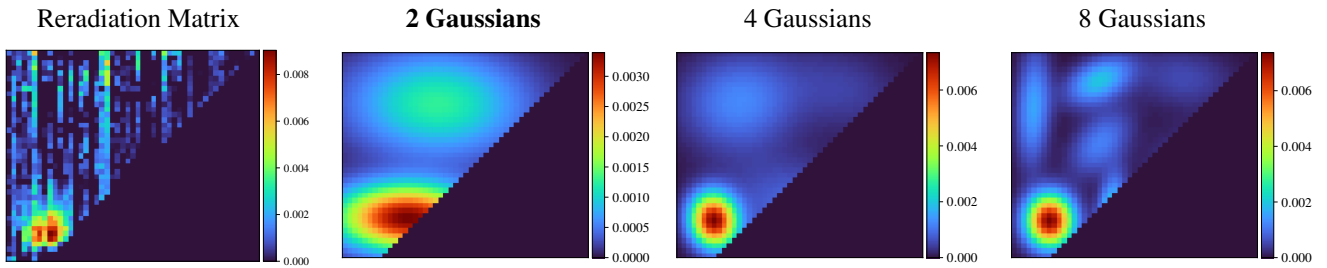
Gaussians:

Weight	Mean		Covariance			
0.322583267	369.948640530	441.072122215	1324.911411539	-89.891966431	-89.891966431	842.549296962
0.060330694	476.348843219	443.736911919	1791.650270755	541.747467806	541.747467806	2568.233726810
0.076066790	634.036429458	451.410802958	5317.058088123	-1028.349286316	-1028.349286316	2657.445083986
0.113269439	459.759868992	602.890113287	910.230770674	-176.364242879	-176.364242879	5996.698860561
0.061589268	360.239116366	556.154328969	3046.596456606	-306.915109022	-306.915109022	3789.979459135
0.049598637	602.318377637	578.056737674	6335.636076915	-1393.549326842	-1393.549326842	2763.577205718
0.097694458	645.193679640	654.230187803	5836.357567042	2883.153288254	2883.153288254	3965.545071498
0.218867446	494.931105906	731.094193573	13513.027079914	-195.294868383	-195.294868383	1286.537091052

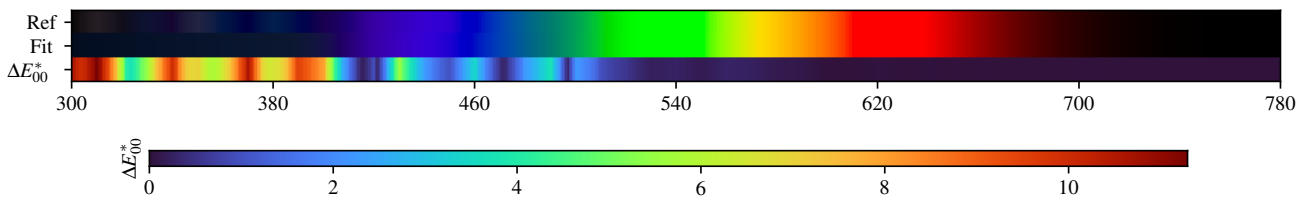
3.84. PLIWF4Y



PLIWF4Y - Weighted Expectation-Maximization - 2 Gaussians



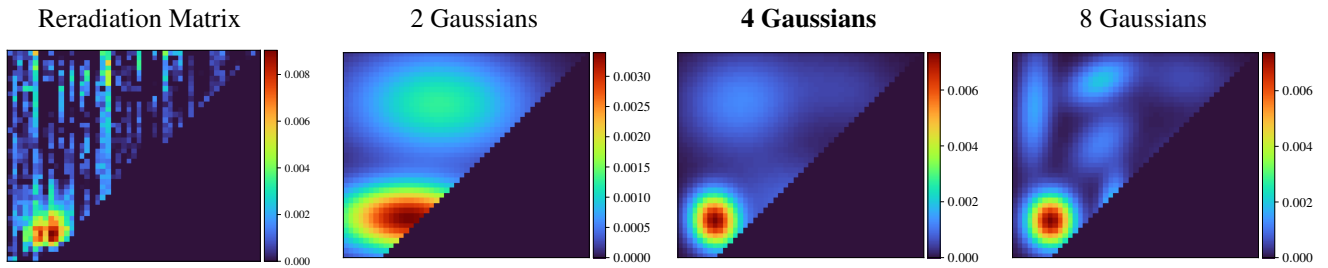
Fitted Material Under Monochromatic Illumination



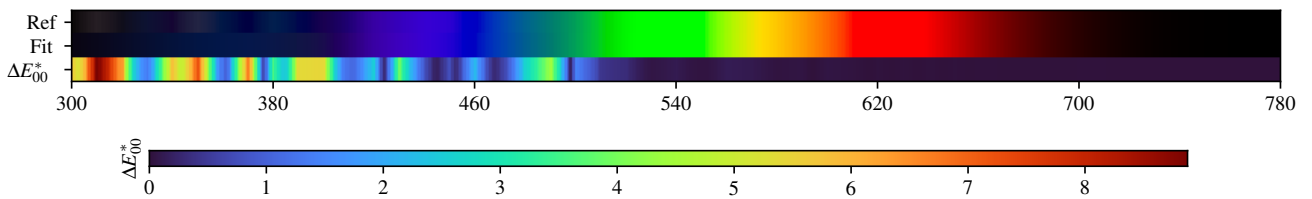
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.21$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.21$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.09$	$\Delta E = 0.27$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.38$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.52$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.14$

PLIWF4Y - Weighted Expectation-Maximization - 4 Gaussians



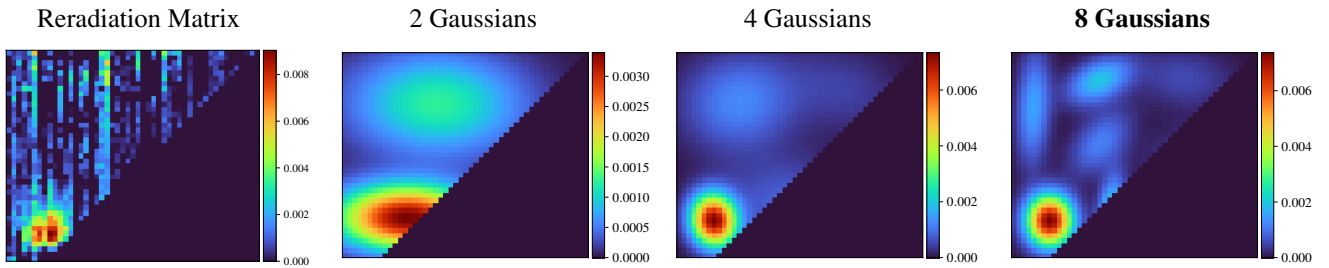
Fitted Material Under Monochromatic Illumination



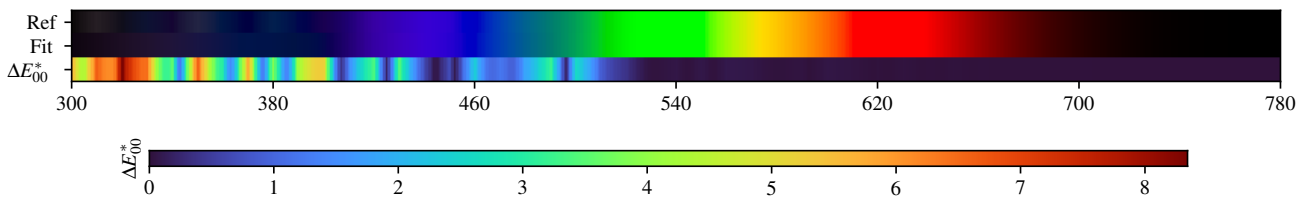
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.02$	FL7 $\Delta E = 0.04$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.02$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.06$	HP5 $\Delta E = 0.02$	LED-B5 $\Delta E = 0.07$
B $\Delta E = 0.03$	D65 $\Delta E = 0.06$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.04$	FL3.1 $\Delta E = 0.01$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.08$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.04$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.01$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.04$	E $\Delta E = 0.06$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.07$	FL3.3 $\Delta E = 0.02$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.03$	FL6 $\Delta E = 0.02$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.07$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.06$	LED-V2 $\Delta E = 0.01$

PLIWF4Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.02$	$\Delta E = 0.06$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.04$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.04$	$\Delta E = 0.02$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.03$	$\Delta E = 0.04$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.03$	$\Delta E = 0.04$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.03$	$\Delta E = 0.07$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.05$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.03$

PLIWF4Y - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.255170	0.268194	0.276708	0.297170	0.313346	0.306923	0.312941	0.325036	0.340607	0.352557	0.367736
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.428472	0.533741	0.658878	0.726503	0.746643	0.750988	0.755031	0.752669	0.750097	0.757150	0.757047
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.761864	0.762455	0.763074	0.763725	0.761454	0.765458	0.765552	0.766351	0.765682	0.765239	0.763395
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.764512	0.760493	0.762481	0.763899	0.761309	0.764637	0.761454	0.758478			

2 Gaussians

Scaling factor: 160.44333562682738

Gaussians:

Weight	Mean		Covariance			
0.568942567	425.221673663	454.911983093	9257.501573365	-110.705191098	-110.705191098	1964.320602935
0.431057433	483.124297761	681.678807024	14467.880176452	-174.129745717	-174.129745717	5184.213816535

4 Gaussians

Scaling factor: 135.4455243034715

Gaussians:

Weight	Mean		Covariance			
0.286288618	418.757667946	685.786711613	5770.535752960	258.141344409	258.141344409	4188.675676330
0.356946195	369.223108242	449.865637437	933.990297789	-66.135383440	-66.135383440	1243.388918818
0.249556837	527.089387845	478.984043655	9118.683004646	-741.966021482	-741.966021482	4200.745123456
0.107208349	624.614894681	710.924176457	6569.765507907	-946.498250794	-946.498250794	3608.430851972

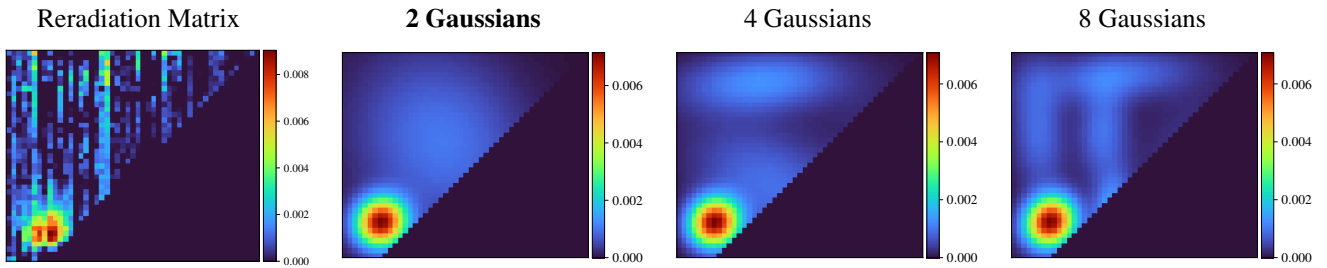
8 Gaussians

Scaling factor: 132.10647781836653

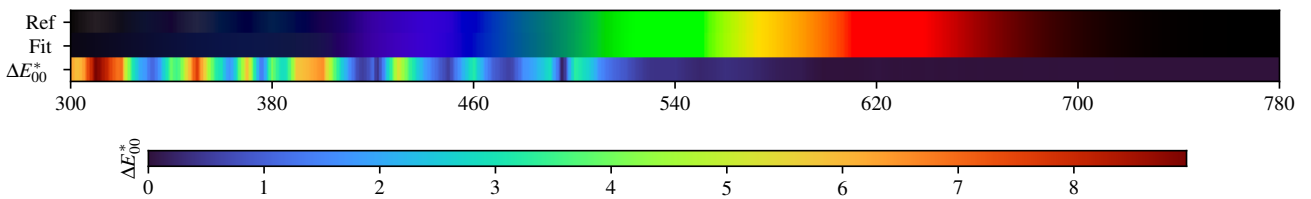
Gaussians:

Weight	Mean		Covariance			
0.126625795	338.759856905	673.589835855	507.668222520	229.314695800	229.314695800	5729.671543674
0.056037175	630.146789279	423.233804127	4407.068379042	231.373009098	231.373009098	1355.981123657
0.374281169	371.060352742	449.552675841	957.291645601	4.683493245	4.683493245	1192.364903868
0.075514904	635.045343432	733.482535017	4734.393228657	-286.744682510	-286.744682510	1638.315426922
0.088512499	471.208139507	604.448833601	1656.541461713	807.404869591	807.404869591	1942.839865993
0.098303768	490.697598564	461.797544108	342.068840527	304.308974698	304.308974698	2462.254322978
0.116361469	468.648508047	727.477434565	1801.393383692	544.281592489	544.281592489	1019.720767914
0.064363220	631.719406416	566.391952553	3678.569336149	908.775022417	908.775022417	3163.697823184

PLIWF4Y - Weighted variational Bayesian inference - 2 Gaussians



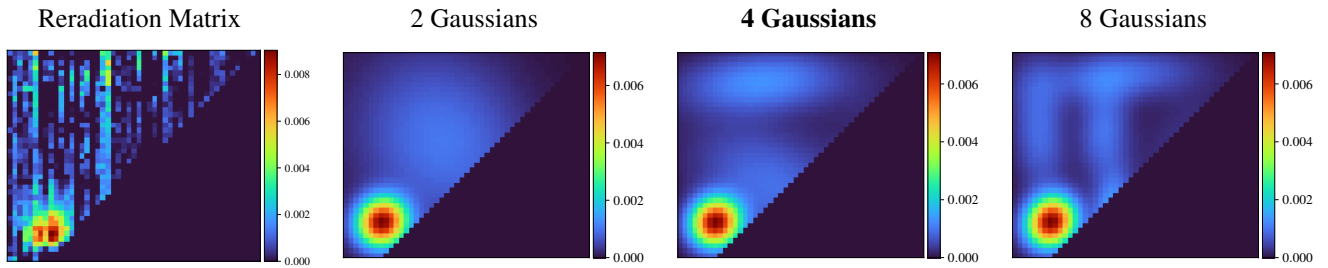
Fitted Material Under Monochromatic Illumination



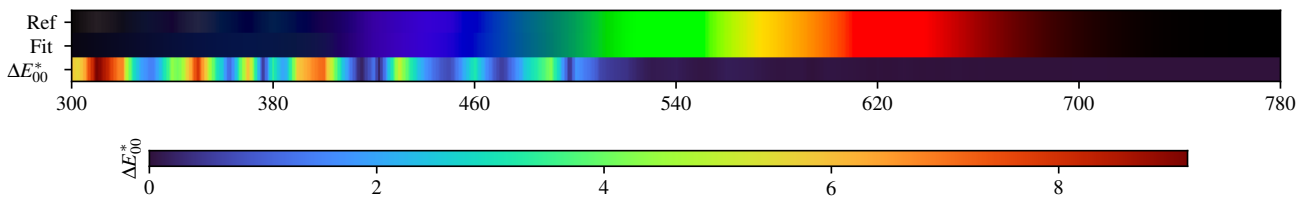
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.29$	FL2 $\Delta E = 0.21$	FL7 $\Delta E = 0.29$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.30$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.30$
B $\Delta E = 0.23$	D65 $\Delta E = 0.32$	FL3 $\Delta E = 0.17$	FL8 $\Delta E = 0.22$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.20$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.31$	D75 $\Delta E = 0.36$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.18$	FL3.2 $\Delta E = 0.18$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.24$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.31$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.29$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.30$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.17$	FL3.14 $\Delta E = 0.19$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.25$	LED-V2 $\Delta E = 0.21$

PLIWF4Y - Weighted variational Bayesian inference - 4 Gaussians



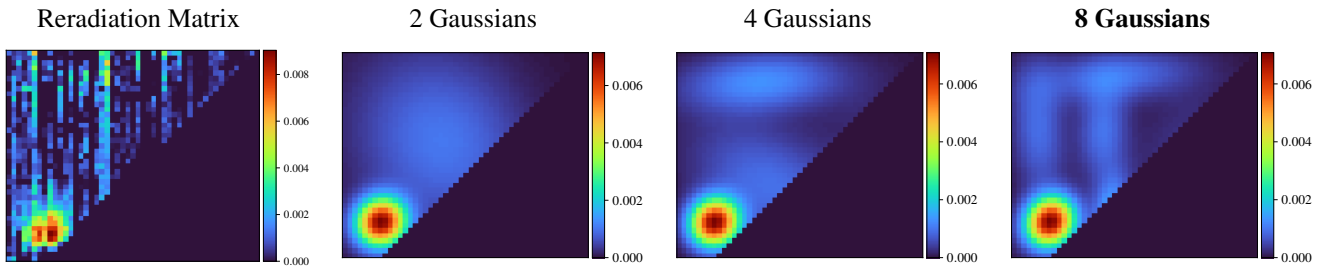
Fitted Material Under Monochromatic Illumination



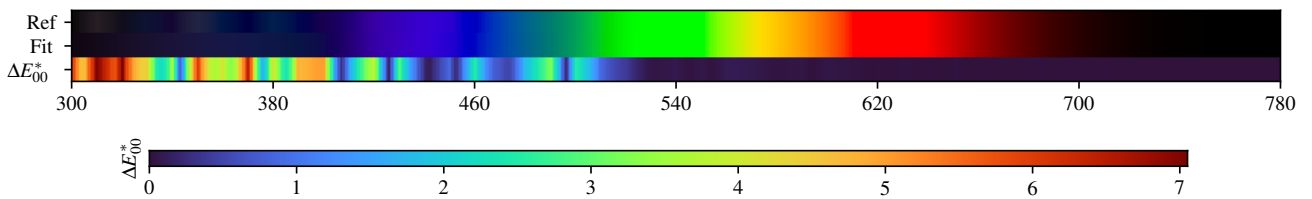
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.11$	D60 $\Delta E = 0.29$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.10$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.22$	FL3.15 $\Delta E = 0.30$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.27$
B $\Delta E = 0.24$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.21$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.34$	D75 $\Delta E = 0.35$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.15$
D50 $\Delta E = 0.24$	E $\Delta E = 0.34$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.21$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.20$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.22$	LED-V2 $\Delta E = 0.18$

PLIWF4Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.06$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.09$	HP5 $\Delta E = 0.03$	LED-B5 $\Delta E = 0.07$
B $\Delta E = 0.06$	D65 $\Delta E = 0.05$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.06$	D75 $\Delta E = 0.05$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.05$	E $\Delta E = 0.09$	FL5 $\Delta E = 0.05$	FL10 $\Delta E = 0.09$	FL3.3 $\Delta E = 0.04$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.05$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.01$	LED-B4 $\Delta E = 0.06$	LED-V2 $\Delta E = 0.02$

PLIWF4Y - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.255170	0.268194	0.276708	0.297170	0.313346	0.306923	0.312941	0.325036	0.340607	0.352557	0.367736
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.428472	0.533741	0.658878	0.726503	0.746643	0.750988	0.755031	0.752669	0.750097	0.757150	0.757047
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.761864	0.762455	0.763074	0.763725	0.761454	0.765458	0.765552	0.766351	0.765682	0.765239	0.763395
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.764512	0.760493	0.762481	0.763899	0.761309	0.764637	0.761454	0.758478			

2 Gaussians max

Scaling factor: 137.75842853241397

Gaussians:

Weight	Mean	Covariance				
0.339731573	371.694511575	446.482512253	1092.888524473	55.497634567	55.497634567	1043.246319228
0.660268427	490.702933539	607.273377864	13305.096100430	-1857.459734298	-1857.459734298	14828.454076091

4 Gaussians max

Scaling factor: 134.3617392260508

Gaussians:

Weight	Mean	Covariance				
0.333912040	370.586494610	445.615783058	1045.278114203	58.556469006	58.556469006	1018.571300989
0.365665987	482.646900236	518.911642229	10941.204953266	-3590.403371257	-3590.403371257	7349.933016137
0.049242245	672.429844856	647.034924356	4895.886377958	1401.117876927	1401.117876927	6074.456900862
0.251179728	465.172764793	725.828831735	10837.389897485	643.994263671	643.994263671	1653.772074629

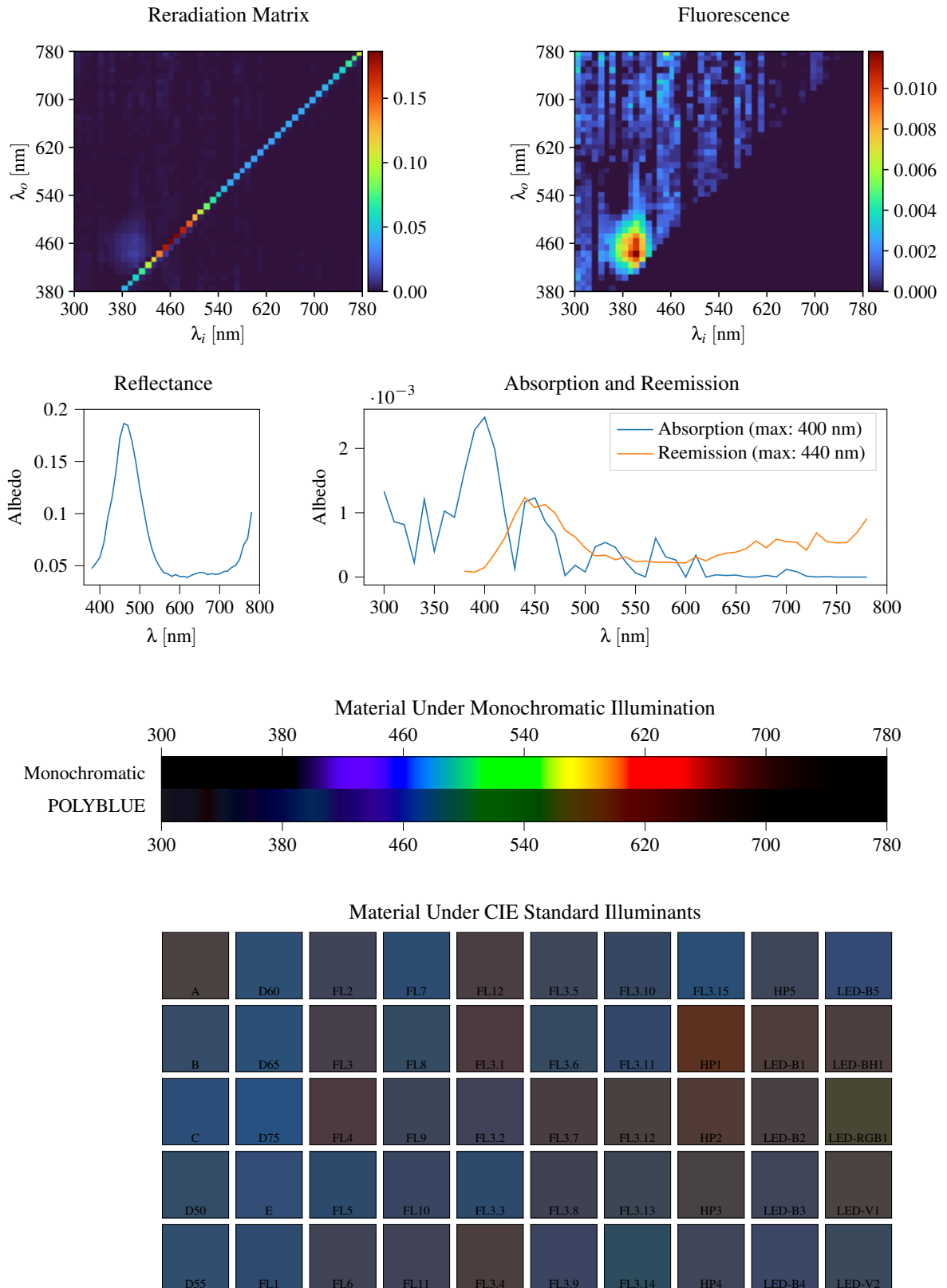
8 Gaussians max

Scaling factor: 133.4767836687454

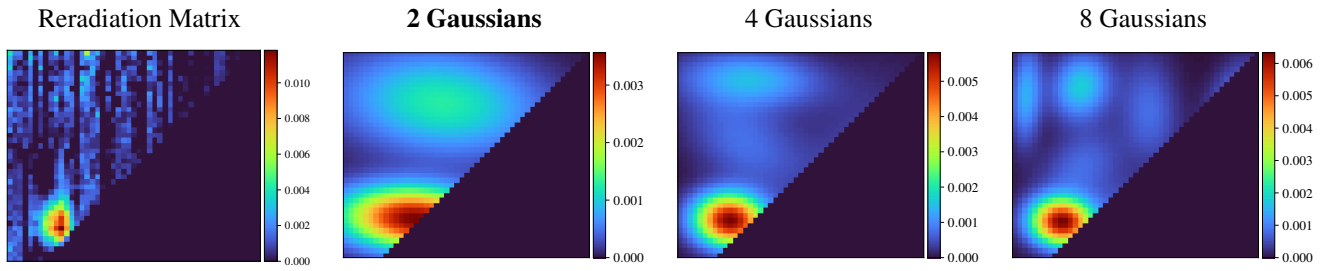
Gaussians:

Weight	Mean	Covariance				
0.352530006	372.190107491	447.123617866	1056.681082275	111.995039542	111.995039542	1093.557518629
0.092412342	490.275345336	459.905214915	616.989760606	305.069610858	305.069610858	2823.224579486
0.080413584	620.550880317	454.962695110	4908.796471343	-465.919519090	-465.919519090	3623.206582551
0.141122688	348.884958116	631.537173008	1293.456298843	-422.810704316	-422.810704316	8230.255211204
0.101644614	476.360961632	628.107294410	1099.880813326	194.205352884	194.205352884	4464.784266603
0.071716151	639.430223268	622.500382395	5861.647400055	2079.194310820	2079.194310820	5429.757738207
0.160058186	502.598379333	737.415097049	10611.911987825	779.586638138	779.586638138	1179.250897507

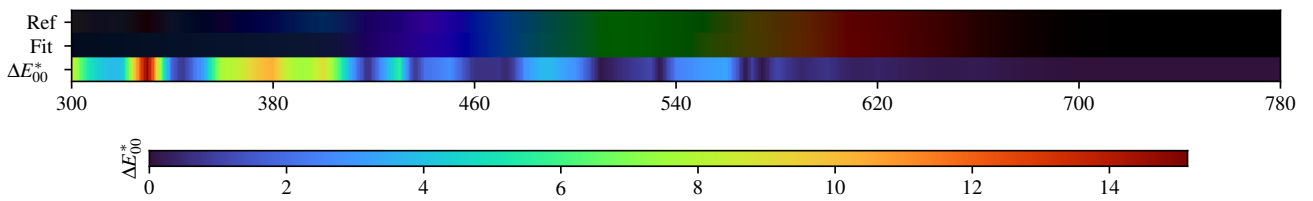
3.85. POLYBLUE



POLYBLUE - Weighted Expectation-Maximization - 2 Gaussians



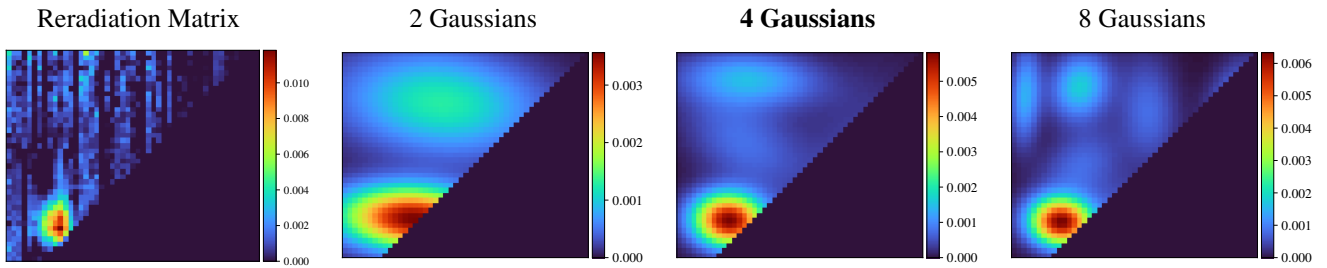
Fitted Material Under Monochromatic Illumination



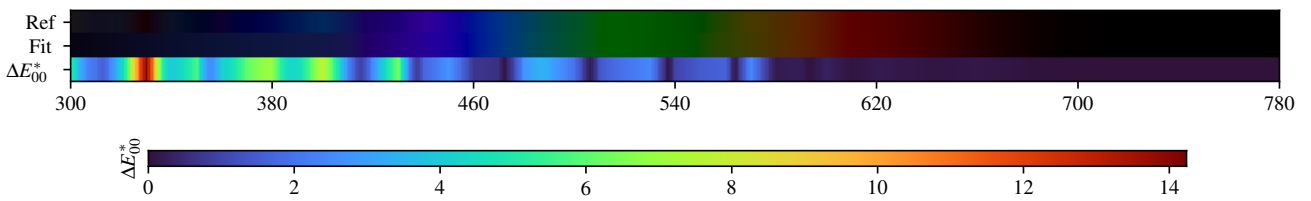
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.49$	$\Delta E = 0.95$	$\Delta E = 1.52$	$\Delta E = 1.00$	$\Delta E = 1.83$	$\Delta E = 1.45$	$\Delta E = 1.91$	$\Delta E = 0.93$	$\Delta E = 1.46$	$\Delta E = 0.86$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.20$	$\Delta E = 0.90$	$\Delta E = 1.36$	$\Delta E = 1.24$	$\Delta E = 1.13$	$\Delta E = 1.22$	$\Delta E = 1.77$	$\Delta E = 0.42$	$\Delta E = 1.44$	$\Delta E = 1.60$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.97$	$\Delta E = 0.82$	$\Delta E = 1.14$	$\Delta E = 1.53$	$\Delta E = 1.46$	$\Delta E = 1.84$	$\Delta E = 1.61$	$\Delta E = 1.11$	$\Delta E = 1.53$	$\Delta E = 1.57$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.06$	$\Delta E = 1.44$	$\Delta E = 1.10$	$\Delta E = 2.04$	$\Delta E = 1.09$	$\Delta E = 2.38$	$\Delta E = 1.59$	$\Delta E = 1.61$	$\Delta E = 1.80$	$\Delta E = 1.98$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.00$	$\Delta E = 1.06$	$\Delta E = 1.65$	$\Delta E = 2.24$	$\Delta E = 1.26$	$\Delta E = 2.06$	$\Delta E = 1.22$	$\Delta E = 1.59$	$\Delta E = 1.27$	$\Delta E = 1.47$

POLYBLUE - Weighted Expectation-Maximization - 4 Gaussians



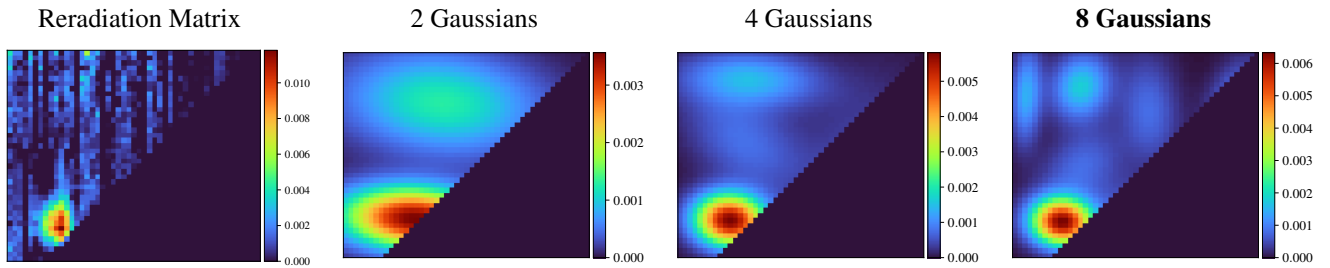
Fitted Material Under Monochromatic Illumination



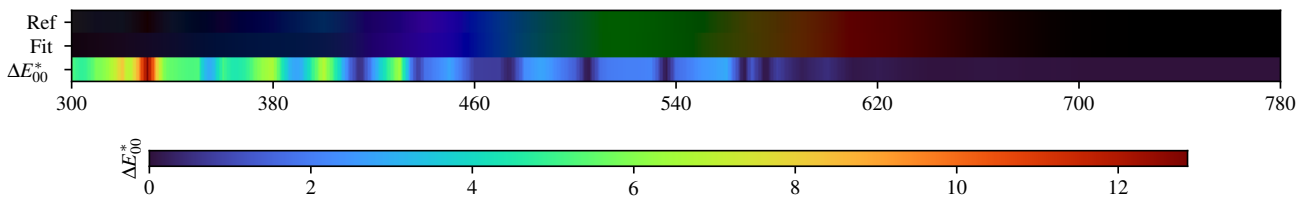
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.46$	$\Delta E = 0.15$	$\Delta E = 0.68$	$\Delta E = 0.20$	$\Delta E = 0.39$	$\Delta E = 0.50$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.25$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.69$	$\Delta E = 0.28$	$\Delta E = 0.49$	$\Delta E = 0.83$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.31$	$\Delta E = 0.34$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.49$	$\Delta E = 0.35$	$\Delta E = 0.22$	$\Delta E = 0.56$	$\Delta E = 0.47$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 0.50$	$\Delta E = 0.20$	$\Delta E = 0.77$	$\Delta E = 0.18$	$\Delta E = 0.74$	$\Delta E = 0.27$	$\Delta E = 0.30$	$\Delta E = 0.68$	$\Delta E = 0.31$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.73$	$\Delta E = 0.23$	$\Delta E = 0.75$	$\Delta E = 0.27$	$\Delta E = 0.34$	$\Delta E = 0.65$	$\Delta E = 0.33$

POLYBLUE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.58$	$\Delta E = 0.35$	$\Delta E = 0.75$	$\Delta E = 0.35$	$\Delta E = 1.03$	$\Delta E = 0.54$	$\Delta E = 1.06$	$\Delta E = 0.23$	$\Delta E = 0.71$	$\Delta E = 0.46$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.47$	$\Delta E = 0.32$	$\Delta E = 0.70$	$\Delta E = 0.47$	$\Delta E = 0.60$	$\Delta E = 0.44$	$\Delta E = 1.05$	$\Delta E = 0.16$	$\Delta E = 0.75$	$\Delta E = 0.93$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.33$	$\Delta E = 0.29$	$\Delta E = 0.61$	$\Delta E = 0.62$	$\Delta E = 0.67$	$\Delta E = 1.02$	$\Delta E = 0.69$	$\Delta E = 0.56$	$\Delta E = 0.80$	$\Delta E = 0.33$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.45$	$\Delta E = 0.33$	$\Delta E = 0.49$	$\Delta E = 1.23$	$\Delta E = 0.47$	$\Delta E = 1.39$	$\Delta E = 0.61$	$\Delta E = 0.77$	$\Delta E = 0.93$	$\Delta E = 0.67$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.39$	$\Delta E = 0.43$	$\Delta E = 0.85$	$\Delta E = 1.32$	$\Delta E = 0.51$	$\Delta E = 1.23$	$\Delta E = 0.44$	$\Delta E = 0.76$	$\Delta E = 0.72$	$\Delta E = 0.63$

POLYBLUE - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.047299	0.052275	0.057826	0.071701	0.096447	0.113912	0.139233	0.172040	0.186426	0.184796	0.170176
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.149700	0.124762	0.103537	0.082105	0.066732	0.055818	0.048766	0.043272	0.042204	0.039704	0.041495
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.039590	0.039613	0.038769	0.040911	0.042345	0.043491	0.043289	0.041443	0.042340	0.041665	0.042107
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.044192	0.044883	0.048269	0.050306	0.056094	0.069869	0.075860	0.101339			

2 Gaussians

Scaling factor: 169.37098939722785

Gaussians:

Weight	Mean	Covariance				
0.448519405	490.729641810	683.513598318	18118.213079894	-1251.165134582	-1251.165134582	4992.645680615
0.551480595	437.972149593	453.482508686	9814.837277536	-468.362527912	-468.362527912	1787.435950682

4 Gaussians

Scaling factor: 143.26932330558034

Gaussians:

Weight	Mean	Covariance				
0.205652331	441.261048388	730.945033383	8213.035515658	-360.881013244	-360.881013244	1389.782087858
0.427518777	399.515614792	450.075227426	2293.943252150	-87.396631233	-87.396631233	1243.864338164
0.194546888	650.877901944	561.530932988	8006.287124911	3514.441442538	3514.441442538	16055.115682803
0.172282004	426.404653313	607.583250243	6291.969270930	-2091.939250001	-2091.939250001	4744.820949513

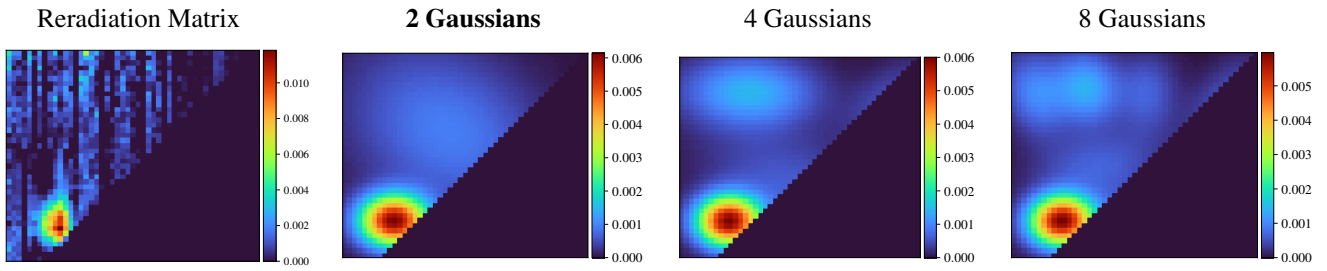
8 Gaussians

Scaling factor: 139.39212412587887

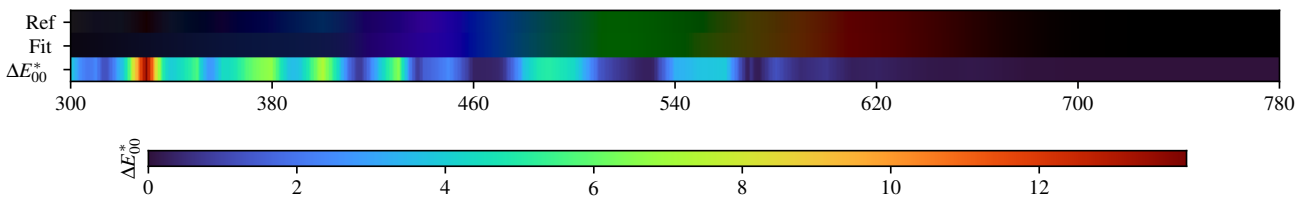
Gaussians:

Weight	Mean	Covariance				
0.140387420	431.034918442	716.049732142	1518.140120041	173.997252352	173.997252352	1973.024464294
0.096379435	430.843799705	557.506342856	3023.008764226	947.343705051	947.343705051	2727.541854164
0.047083563	724.160278314	472.882881800	1519.707503106	-61.562389502	-61.562389502	4899.726777250
0.085618453	322.586147041	699.980652234	432.346403887	167.618768760	167.618768760	3981.784060997
0.377033045	393.571310928	446.758286696	1739.593241076	-60.692646851	-60.692646851	1026.016567901
0.052668041	731.686755536	708.980923287	1459.251603318	934.569320258	934.569320258	2453.983309833
0.092132810	536.288956012	451.756603682	3188.558182720	-641.258368250	-641.258368250	2645.173164169
0.108697234	566.228463582	669.734112841	1605.499602157	-311.818618759	-311.818618759	5581.876179682

POLYBLUE - Weighted variational Bayesian inference - 2 Gaussians



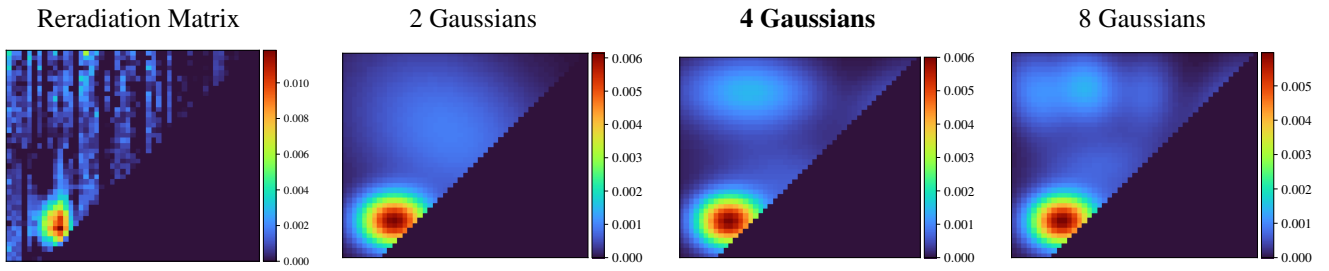
Fitted Material Under Monochromatic Illumination



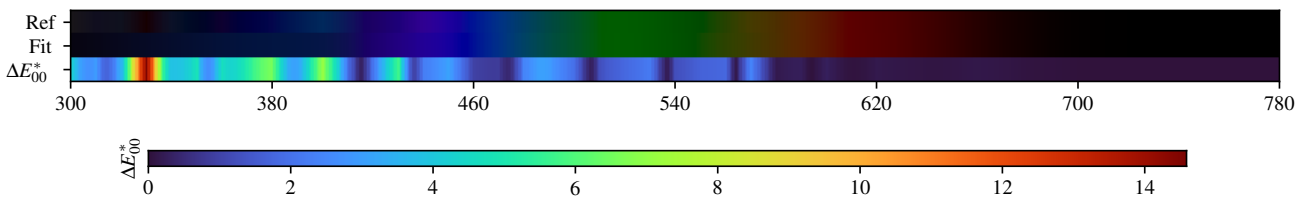
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.80$	$\Delta E = 1.90$	$\Delta E = 2.10$	$\Delta E = 1.79$	$\Delta E = 2.03$	$\Delta E = 2.04$	$\Delta E = 2.50$	$\Delta E = 1.76$	$\Delta E = 2.19$	$\Delta E = 1.45$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 2.08$	$\Delta E = 1.85$	$\Delta E = 1.68$	$\Delta E = 1.94$	$\Delta E = 1.30$	$\Delta E = 1.89$	$\Delta E = 2.38$	$\Delta E = 0.52$	$\Delta E = 1.48$	$\Delta E = 1.55$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.85$	$\Delta E = 1.78$	$\Delta E = 1.33$	$\Delta E = 2.14$	$\Delta E = 1.92$	$\Delta E = 2.01$	$\Delta E = 1.89$	$\Delta E = 1.24$	$\Delta E = 1.67$	$\Delta E = 1.70$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 2.01$	$\Delta E = 1.86$	$\Delta E = 1.92$	$\Delta E = 2.64$	$\Delta E = 1.85$	$\Delta E = 2.77$	$\Delta E = 2.16$	$\Delta E = 1.89$	$\Delta E = 2.16$	$\Delta E = 1.87$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.96$	$\Delta E = 1.86$	$\Delta E = 2.23$	$\Delta E = 2.67$	$\Delta E = 1.42$	$\Delta E = 2.58$	$\Delta E = 1.84$	$\Delta E = 2.09$	$\Delta E = 1.71$	$\Delta E = 2.28$

POLYBLUE - Weighted variational Bayesian inference - 4 Gaussians



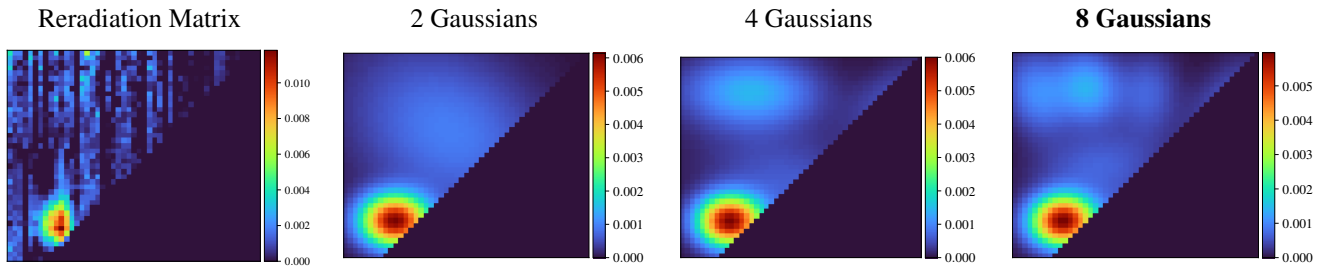
Fitted Material Under Monochromatic Illumination



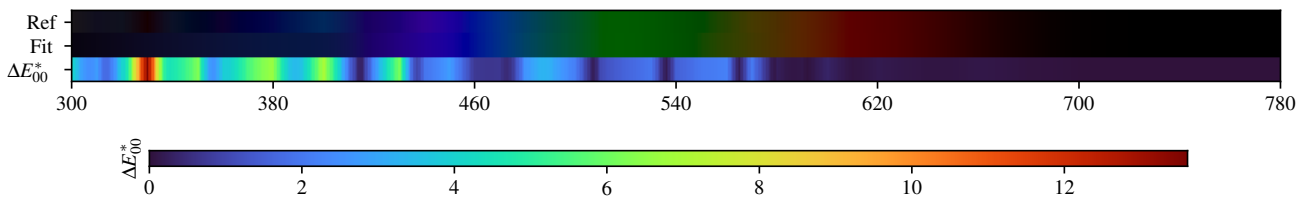
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.41$	$\Delta E = 0.47$	$\Delta E = 0.41$	$\Delta E = 0.40$	$\Delta E = 0.33$	$\Delta E = 0.43$	$\Delta E = 0.34$	$\Delta E = 0.50$	$\Delta E = 0.50$	$\Delta E = 0.72$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.43$	$\Delta E = 0.47$	$\Delta E = 0.31$	$\Delta E = 0.40$	$\Delta E = 0.18$	$\Delta E = 0.40$	$\Delta E = 0.38$	$\Delta E = 0.35$	$\Delta E = 0.45$	$\Delta E = 0.77$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.40$	$\Delta E = 0.49$	$\Delta E = 0.21$	$\Delta E = 0.43$	$\Delta E = 0.34$	$\Delta E = 0.42$	$\Delta E = 0.51$	$\Delta E = 0.21$	$\Delta E = 0.55$	$\Delta E = 0.63$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.45$	$\Delta E = 0.62$	$\Delta E = 0.39$	$\Delta E = 0.42$	$\Delta E = 0.37$	$\Delta E = 0.45$	$\Delta E = 0.49$	$\Delta E = 0.30$	$\Delta E = 0.71$	$\Delta E = 0.35$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.46$	$\Delta E = 0.41$	$\Delta E = 0.39$	$\Delta E = 0.43$	$\Delta E = 0.36$	$\Delta E = 0.44$	$\Delta E = 0.42$	$\Delta E = 0.35$	$\Delta E = 0.77$	$\Delta E = 0.33$

POLYBLUE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.14$	$\Delta E = 0.23$	$\Delta E = 0.58$	$\Delta E = 0.28$	$\Delta E = 0.53$	$\Delta E = 0.39$	$\Delta E = 0.27$	$\Delta E = 0.47$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.12$	$\Delta E = 0.25$	$\Delta E = 0.20$	$\Delta E = 0.30$	$\Delta E = 0.60$	$\Delta E = 0.21$	$\Delta E = 0.33$	$\Delta E = 0.63$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.27$	$\Delta E = 0.31$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.64$	$\Delta E = 0.50$	$\Delta E = 0.17$	$\Delta E = 0.38$	$\Delta E = 0.38$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.31$	$\Delta E = 0.54$	$\Delta E = 0.21$	$\Delta E = 0.65$	$\Delta E = 0.23$	$\Delta E = 0.76$	$\Delta E = 0.45$	$\Delta E = 0.18$	$\Delta E = 0.51$	$\Delta E = 0.49$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.31$	$\Delta E = 0.22$	$\Delta E = 0.13$	$\Delta E = 0.71$	$\Delta E = 0.33$	$\Delta E = 0.68$	$\Delta E = 0.44$	$\Delta E = 0.14$	$\Delta E = 0.54$	$\Delta E = 0.35$

POLYBLUE - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.047299	0.052275	0.057826	0.071701	0.096447	0.113912	0.139233	0.172040	0.186426	0.184796	0.170176
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.149700	0.124762	0.103537	0.082105	0.066732	0.055818	0.048766	0.043272	0.042204	0.039704	0.041495
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.039590	0.039613	0.038769	0.040911	0.042345	0.043491	0.043289	0.041443	0.042340	0.041665	0.042107
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.044192	0.044883	0.048269	0.050306	0.056094	0.069869	0.075860	0.101339			

2 Gaussians max

Scaling factor: 149.56555881753252

Gaussians:

Weight	Mean		Covariance			
0.397731422	398.058495515	448.974266664	2075.069642819	-12.606666678	-12.606666678	1198.730940062
0.602268578	503.855611126	627.966307362	17809.789983372	-3904.698513074	-3904.698513074	13532.603554222

4 Gaussians max

Scaling factor: 144.0572376516212

Gaussians:

Weight	Mean		Covariance			
0.389544817	395.711605711	449.134312048	1918.062066764	-1.284247770	-1.284247770	1208.017144769
0.264532496	525.899158089	514.922578595	15001.297063119	-3961.752304767	-3961.752304767	6857.522028233
0.060763746	715.693237067	696.802888681	3596.954519372	1839.149783977	1839.149783977	3410.552895607
0.285158941	438.075115429	712.931455456	8475.197313058	-151.475931323	-151.475931323	2443.027027582

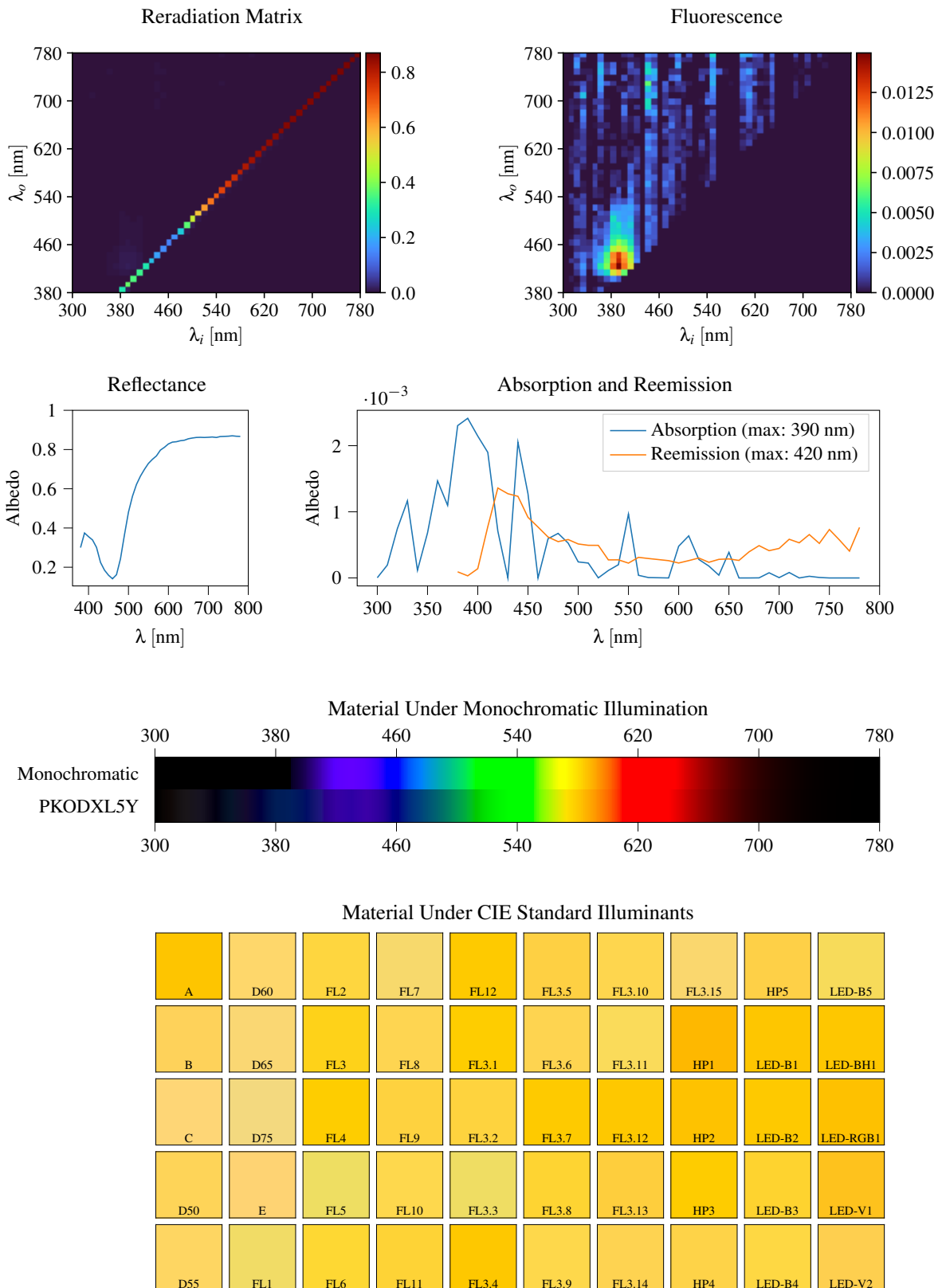
8 Gaussians max

Scaling factor: 140.9283981376784

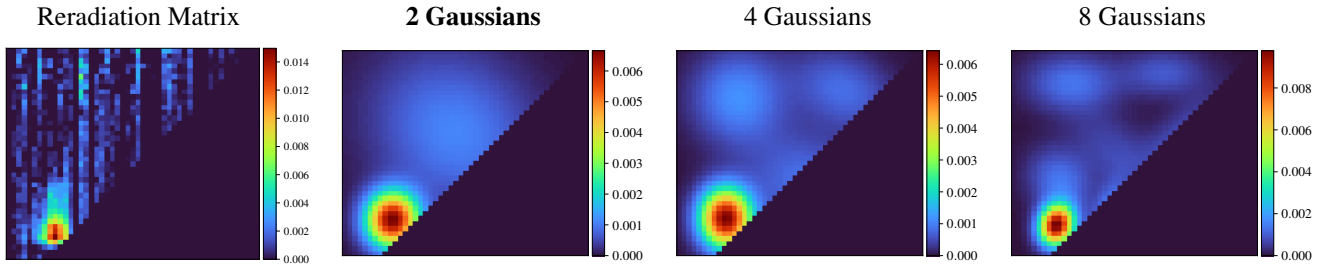
Gaussians:

Weight	Mean		Covariance			
0.392034314	395.282913114	448.880998765	1874.954467445	29.393925525	29.393925525	1170.227855347
0.076172455	538.420123554	445.775230644	3219.856298229	-489.421412745	-489.421412745	2723.752836047
0.051667213	708.248205501	472.589166539	3573.213267123	-688.466361492	-688.466361492	4947.080459464
0.113867981	463.835399933	560.647622734	7356.222359479	732.288633054	732.288633054	2181.563878674
0.059199876	718.807325264	699.272926730	3209.066903673	1789.092611256	1789.092611256	3314.293546394
0.106136966	342.470749366	701.910154221	1808.526318553	-417.081022528	-417.081022528	3207.089311250
0.068214687	564.257569076	702.502373667	1635.117454595	67.923766136	67.923766136	3208.483111412
0.132706507	444.236226265	713.734703512	1976.656862878	-163.599261553	-163.599261553	2415.764403508

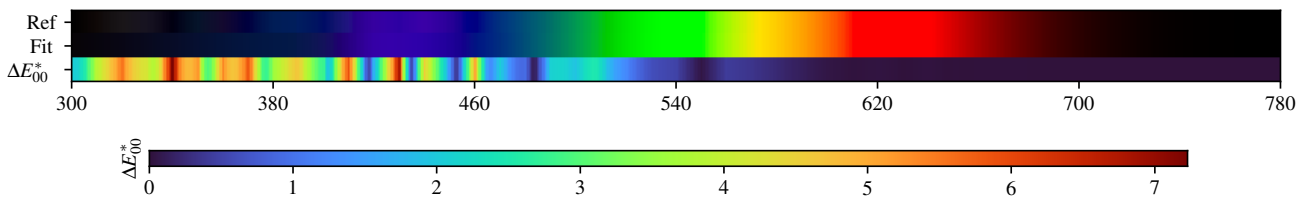
3.86. PKODXL5Y



PKODXL5Y - Weighted Expectation-Maximization - 2 Gaussians



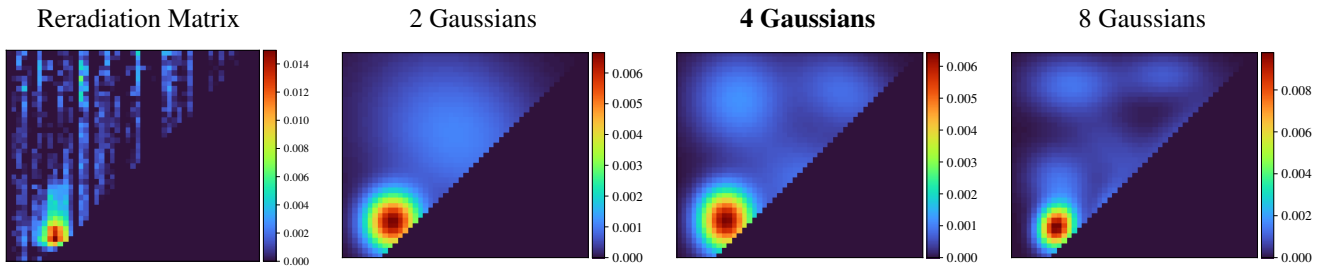
Fitted Material Under Monochromatic Illumination



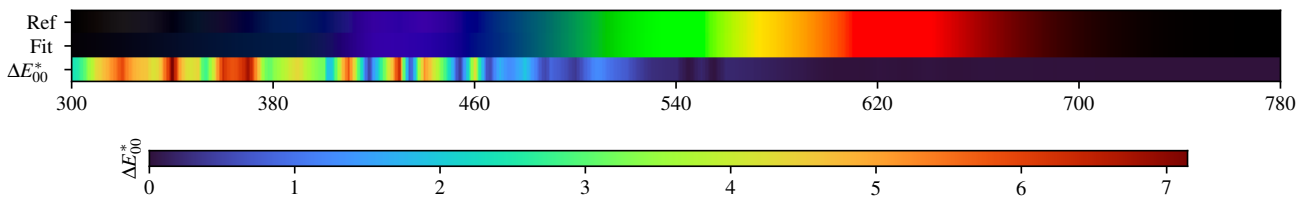
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.32$	$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.11$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.33$	$\Delta E = 0.31$	$\Delta E = 0.30$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.27$	$\Delta E = 0.34$	$\Delta E = 0.21$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.25$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.34$	$\Delta E = 0.37$	$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.28$	$\Delta E = 0.29$	$\Delta E = 0.33$	$\Delta E = 0.22$	$\Delta E = 0.34$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.30$	$\Delta E = 0.33$	$\Delta E = 0.26$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.27$	$\Delta E = 0.32$

PKODXL5Y - Weighted Expectation-Maximization - 4 Gaussians



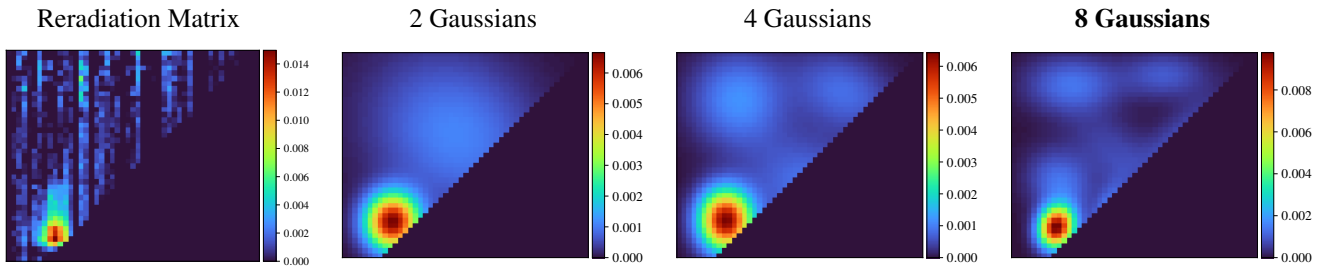
Fitted Material Under Monochromatic Illumination



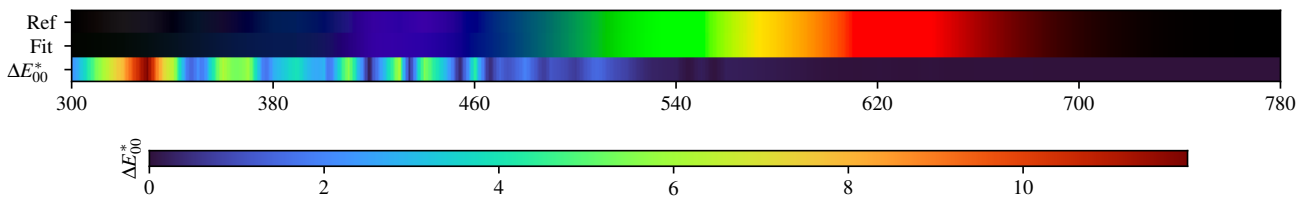
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.02$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.05$	$\Delta E = 0.22$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.13$

PKODXL5Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.07$	$\Delta E = 0.07$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.11$

PKODXL5Y - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.300125	0.374495	0.355851	0.339184	0.301225	0.224662	0.185062	0.159414	0.141085	0.161666	0.242808
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.365440	0.480630	0.561592	0.621709	0.664449	0.698819	0.729237	0.750070	0.767379	0.797147	0.811322
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.828508	0.837798	0.839791	0.844956	0.847463	0.854865	0.858707	0.861565	0.862279	0.861467	0.862505
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.863908	0.861502	0.866247	0.867046	0.867999	0.869984	0.867774	0.866996			

2 Gaussians

Scaling factor: 139.42992131035254

Gaussians:

Weight	Mean		Covariance			
0.602856022	518.207684272	621.431510391	12561.927195423	-1914.981819486	-1914.981819486	11841.135491285
0.397143978	394.054406612	447.176971625	1255.471974637	17.740925894	17.740925894	1419.622215246

4 Gaussians

Scaling factor: 137.6528821547774

Gaussians:

Weight	Mean		Covariance			
0.207774226	417.305003051	690.747272813	3828.987602731	4.844061397	4.844061397	3917.170980091
0.240498095	553.603090050	519.136414428	7285.289309464	-877.373854203	-877.373854203	4988.728015369
0.412815276	392.968211829	449.954012521	1223.220198488	-20.508219158	-20.508219158	1640.013838184
0.138912404	625.084314586	706.262932390	4766.708041158	-993.426334302	-993.426334302	3005.538365579

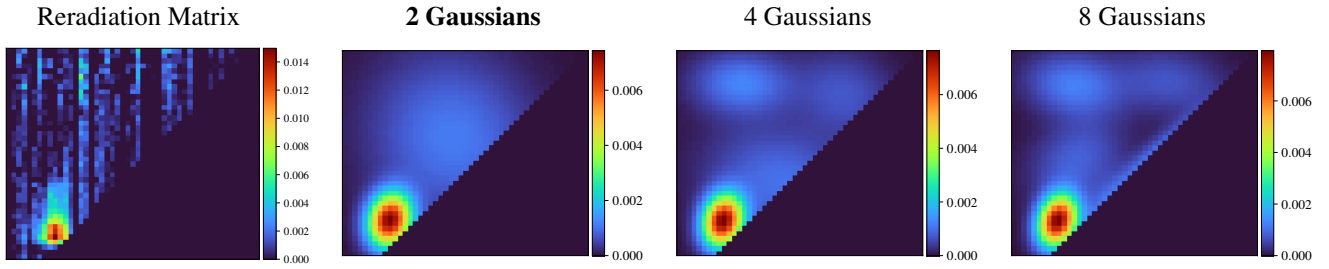
8 Gaussians

Scaling factor: 134.57348737863484

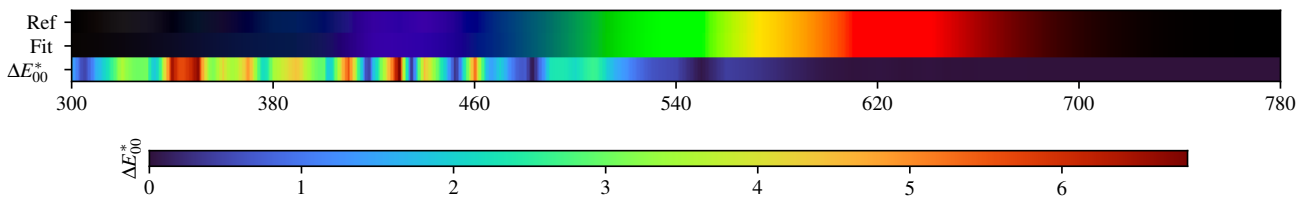
Gaussians:

Weight	Mean		Covariance			
0.152836505	414.711655481	719.458523062	3728.005477372	-17.492267939	-17.492267939	1543.349933434
0.099790899	494.563806228	585.770765700	3532.273508968	-1304.604484110	-1304.604484110	2965.634041448
0.060482554	641.874862069	453.944286899	3812.828445065	815.275293093	815.275293093	2949.151275485
0.086495419	598.026956535	738.528370817	3394.264838891	0.653358962	0.653358962	1044.985097571
0.291112205	384.660689877	436.392172595	544.460956182	66.318575974	66.318575974	748.304959925
0.127128719	391.401826653	521.421873050	1833.848246011	-333.844128211	-333.844128211	2037.523136119
0.077347502	483.305196441	451.969087466	603.852159767	586.598554008	586.598554008	2161.212782696
0.104806198	634.464424551	612.490110832	3746.034171520	2499.557821194	2499.557821194	3529.533698070

PKODXL5Y - Weighted variational Bayesian inference - 2 Gaussians



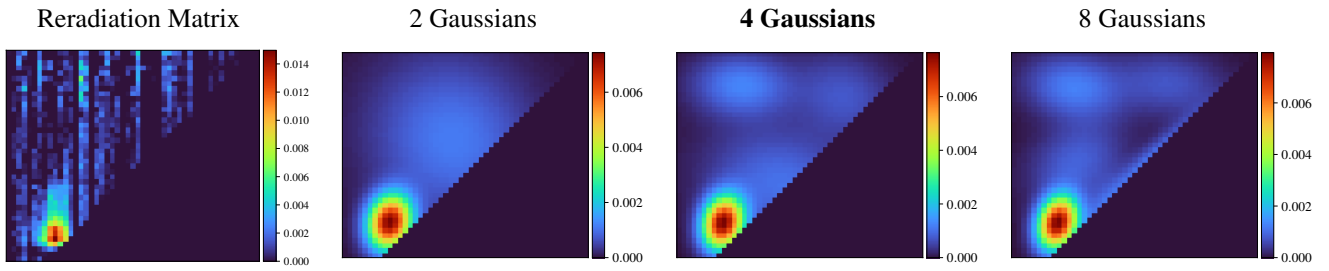
Fitted Material Under Monochromatic Illumination



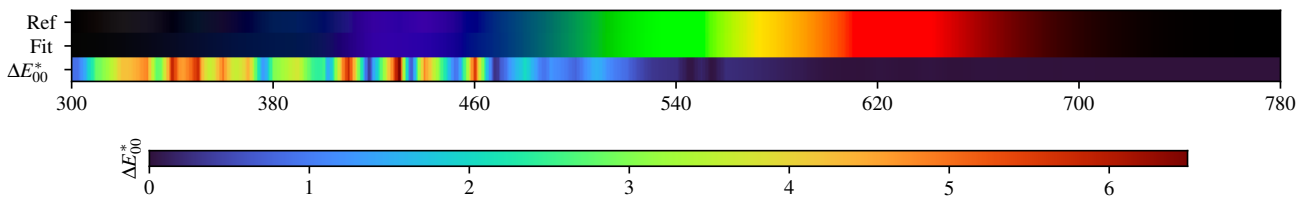
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.33$	$\Delta E = 0.24$	$\Delta E = 0.32$	$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.35$	$\Delta E = 0.25$	$\Delta E = 0.30$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.36$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.23$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.34$	$\Delta E = 0.41$	$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.28$	$\Delta E = 0.32$	$\Delta E = 0.35$	$\Delta E = 0.19$	$\Delta E = 0.35$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.31$	$\Delta E = 0.34$	$\Delta E = 0.25$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.26$

PKODXL5Y - Weighted variational Bayesian inference - 4 Gaussians



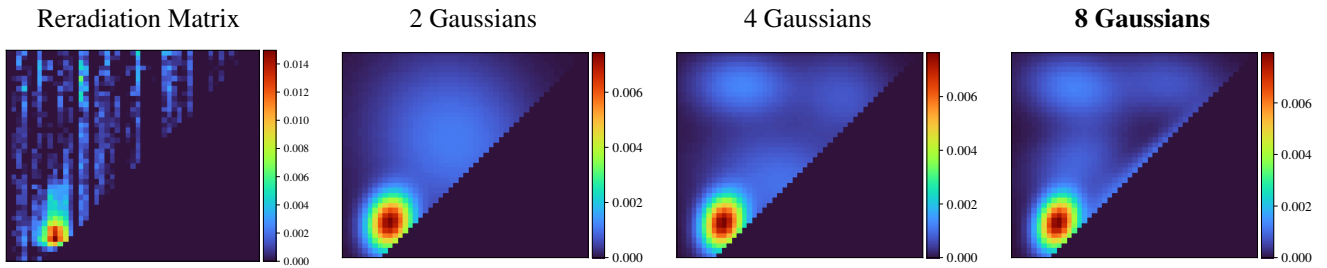
Fitted Material Under Monochromatic Illumination



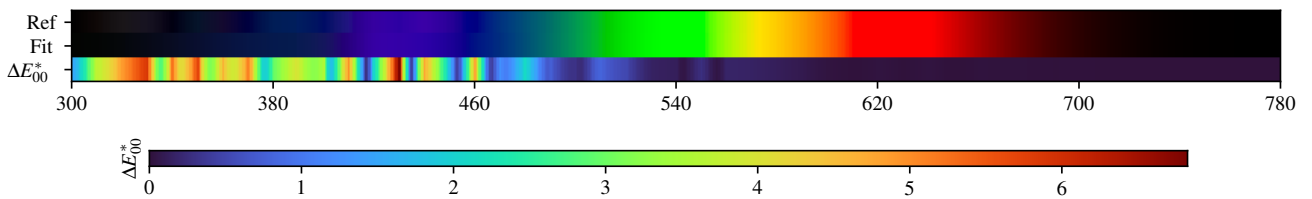
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.17$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.13$
B $\Delta E = 0.15$	D65 $\Delta E = 0.18$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.18$	D75 $\Delta E = 0.19$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.15$	E $\Delta E = 0.25$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.16$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.09$	LED-V2 $\Delta E = 0.08$

PKODXL5Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.18$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.10$	D65 $\Delta E = 0.12$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.11$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.10$	E $\Delta E = 0.19$	FL5 $\Delta E = 0.06$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.06$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.04$
D55 $\Delta E = 0.11$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.04$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.05$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.05$

PKODXL5Y - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.300125	0.374495	0.355851	0.339184	0.301225	0.224662	0.185062	0.159414	0.141085	0.161666	0.242808
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.365440	0.480630	0.561592	0.621709	0.664449	0.698819	0.729237	0.750070	0.767379	0.797147	0.811322
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.828508	0.837798	0.839791	0.844956	0.847463	0.854865	0.858707	0.861565	0.862279	0.861467	0.862505
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.863908	0.861502	0.866247	0.867046	0.867999	0.869984	0.867774	0.866996			

2 Gaussians max

Scaling factor: 137.83329638062818

Gaussians:

Weight	Mean		Covariance			
0.352806763	388.886480653	446.085446278	860.103769136	129.830250683	129.830250683	1333.230876042
0.647193237	512.790890618	610.314837443	12305.268888302	-1030.401307705	-1030.401307705	12871.834346097

4 Gaussians max

Scaling factor: 135.39398232838423

Gaussians:

Weight	Mean		Covariance			
0.333699643	387.417924396	444.497596828	756.330729370	132.638537163	132.638537163	1251.472709975
0.368151764	503.685832263	522.590967583	10147.069579260	-1246.567175399	-1246.567175399	5821.145085381
0.136128430	628.351828649	698.199778609	4529.871796482	-556.830042022	-556.830042022	3656.460394733
0.162020162	424.016084856	718.890410588	4367.381230672	-105.762715165	-105.762715165	1811.837476792

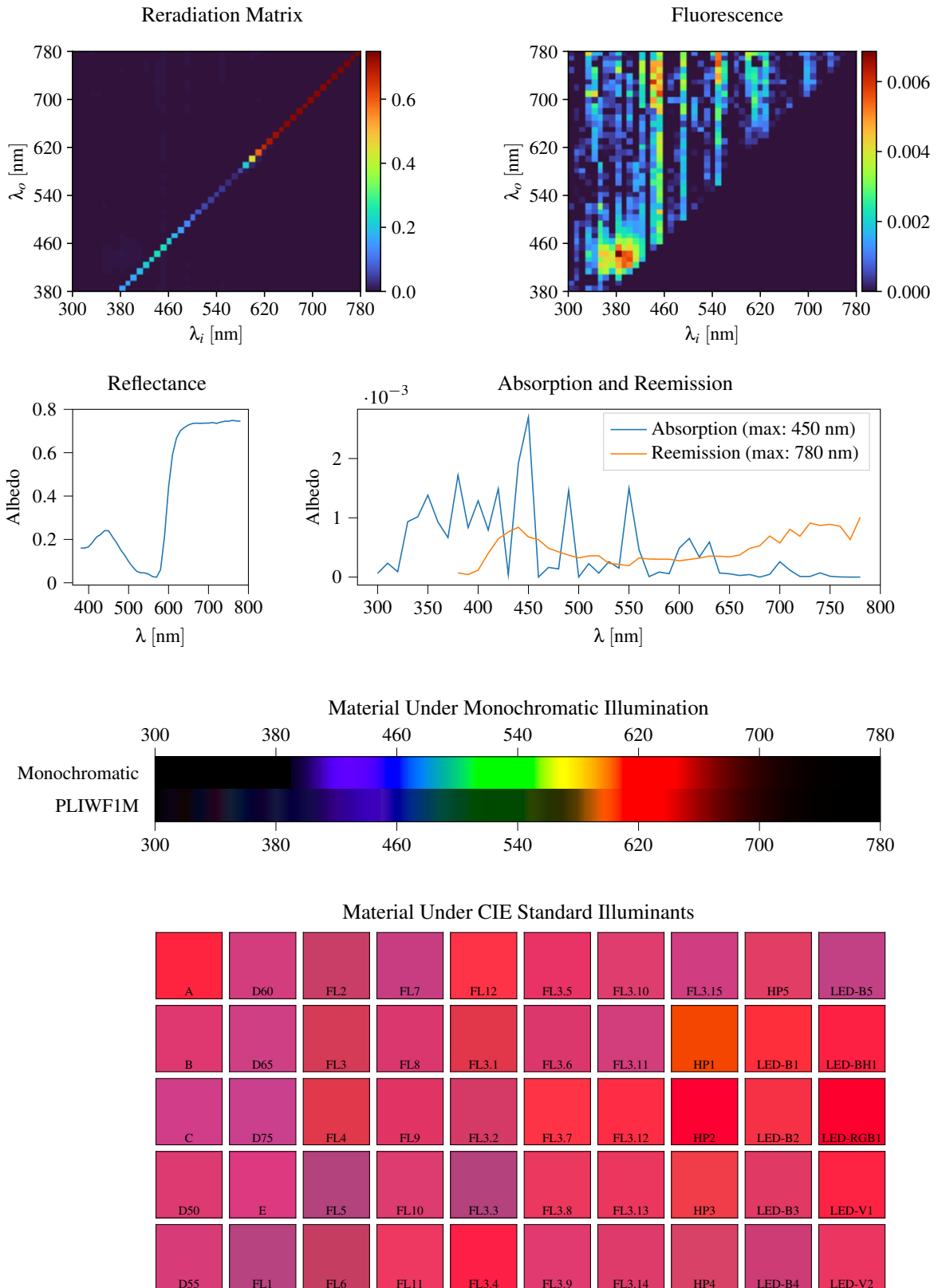
8 Gaussians max

Scaling factor: 137.02740021496555

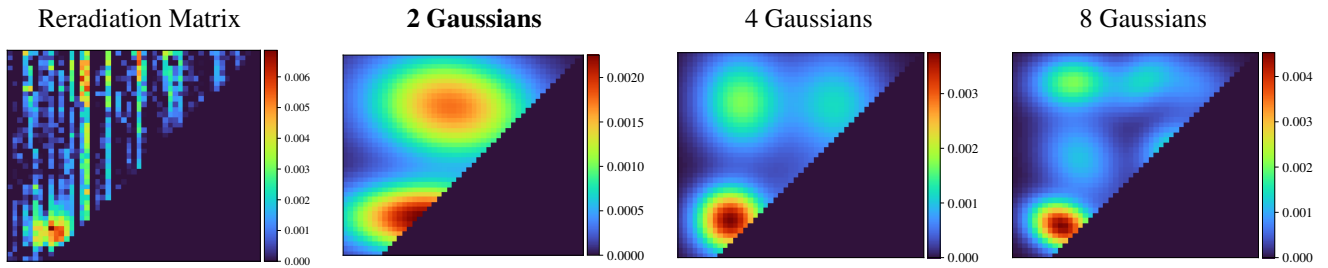
Gaussians:

Weight	Mean		Covariance			
0.339684308	386.946398193	445.105730752	729.236644471	186.724494113	186.724494113	1238.696558108
0.062299780	479.382577179	448.172050807	1020.496142989	431.785517282	431.785517282	2806.732189034
0.084270386	633.871048565	481.452553419	4291.081298909	390.089605755	390.089605755	4734.180226330
0.134731580	422.535777988	567.164677859	3944.502580109	879.867061907	879.867061907	2930.138023235
0.101034663	578.919894821	565.798185833	4387.878944575	3786.236557431	3786.236557431	4001.934484829
0.119817809	607.930667803	721.503819087	5778.541263783	-539.468394934	-539.468394934	2174.759062048
0.157135371	417.543460868	714.450610950	4015.272222379	-348.117462644	-348.117462644	1943.331728452

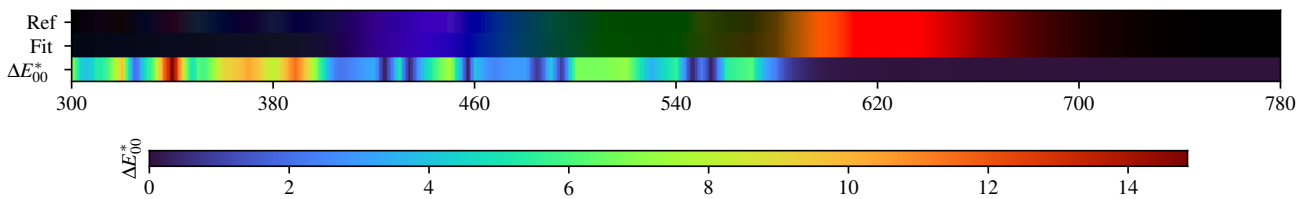
3.87. PLIWFI1M



PLIWF1M - Weighted Expectation-Maximization - 2 Gaussians



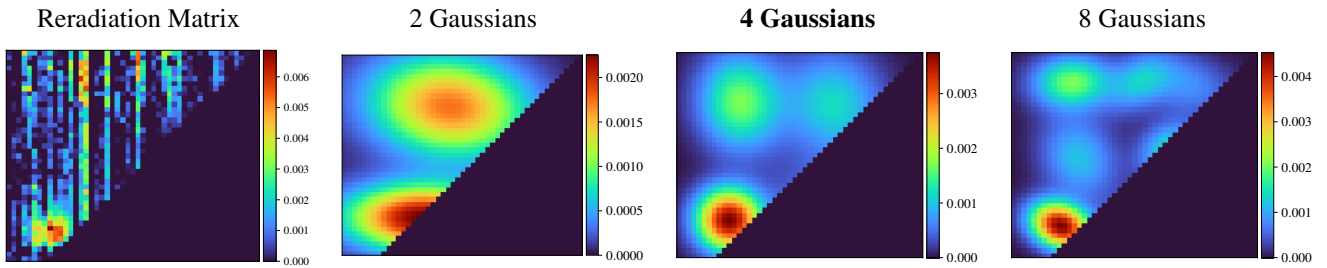
Fitted Material Under Monochromatic Illumination



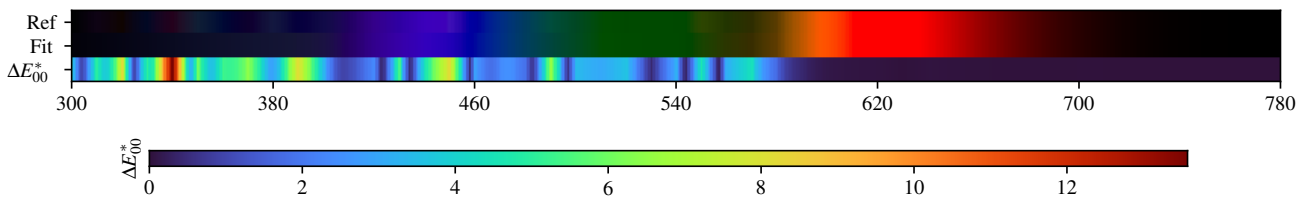
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.36$	D60 $\Delta E = 0.58$	FL2 $\Delta E = 0.36$	FL7 $\Delta E = 0.37$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.36$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.50$	HP5 $\Delta E = 0.36$	LED-B5 $\Delta E = 0.36$
B $\Delta E = 0.42$	D65 $\Delta E = 0.61$	FL3 $\Delta E = 0.32$	FL8 $\Delta E = 0.34$	FL3.1 $\Delta E = 0.34$	FL3.6 $\Delta E = 0.40$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.32$	LED-B1 $\Delta E = 0.22$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.41$	D75 $\Delta E = 0.65$	FL4 $\Delta E = 0.28$	FL9 $\Delta E = 0.32$	FL3.2 $\Delta E = 0.40$	FL3.7 $\Delta E = 0.15$	FL3.12 $\Delta E = 0.32$	HP2 $\Delta E = 0.22$	LED-B2 $\Delta E = 0.22$	LED-RGB1 $\Delta E = 0.26$
D50 $\Delta E = 0.51$	E $\Delta E = 0.86$	FL5 $\Delta E = 0.45$	FL10 $\Delta E = 0.23$	FL3.3 $\Delta E = 0.49$	FL3.8 $\Delta E = 0.17$	FL3.13 $\Delta E = 0.39$	HP3 $\Delta E = 0.35$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 0.36$
D55 $\Delta E = 0.55$	FL1 $\Delta E = 0.42$	FL6 $\Delta E = 0.37$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.33$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.43$	HP4 $\Delta E = 0.41$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.41$

PLIWF1M - Weighted Expectation-Maximization - 4 Gaussians



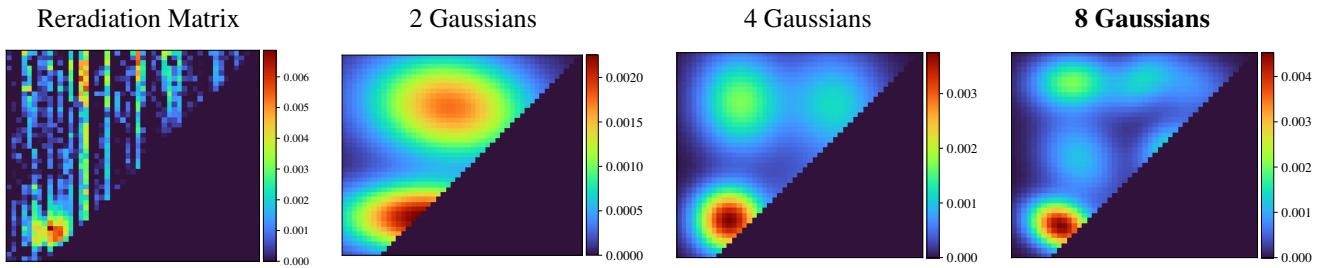
Fitted Material Under Monochromatic Illumination



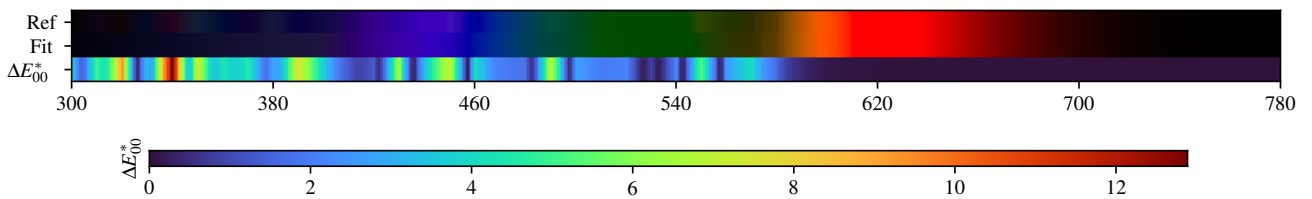
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.25$	$\Delta E = 0.27$	$\Delta E = 0.34$	$\Delta E = 0.28$	$\Delta E = 0.17$	$\Delta E = 0.53$	$\Delta E = 0.25$	$\Delta E = 0.32$	$\Delta E = 0.70$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.27$	$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.54$	$\Delta E = 0.22$	$\Delta E = 0.18$	$\Delta E = 0.23$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.35$	$\Delta E = 0.28$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.37$	$\Delta E = 0.55$	$\Delta E = 0.29$	$\Delta E = 0.35$	$\Delta E = 0.14$	$\Delta E = 0.24$	$\Delta E = 0.47$	$\Delta E = 0.27$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.24$	$\Delta E = 0.37$	$\Delta E = 0.26$	$\Delta E = 0.45$	$\Delta E = 0.12$	$\Delta E = 0.46$	$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.57$	$\Delta E = 0.32$

PLIWF1M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.35$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.25$	$\Delta E = 0.08$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.12$	$\Delta E = 0.30$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.25$	$\Delta E = 0.15$	$\Delta E = 0.24$	$\Delta E = 0.11$	$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.16$

PLIWF1M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.160108	0.160202	0.165807	0.187744	0.211241	0.222753	0.240644	0.239992	0.210691	0.184719	0.152463
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.127708	0.098003	0.073979	0.053409	0.046289	0.045397	0.040140	0.028399	0.025556	0.060299	0.215217
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.439146	0.591443	0.668066	0.701975	0.716852	0.727904	0.734839	0.736362	0.735407	0.736495	0.736425
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.739317	0.735032	0.740993	0.744784	0.745320	0.749045	0.746552	0.745054			

2 Gaussians

Scaling factor: 159.46260761838204

Gaussians:

Weight	Mean		Covariance			
0.551152123	512.904752386	678.352573798	12569.504941880	-876.897579152	-876.897579152	5238.404386010
0.448847877	460.652112508	450.966282188	11536.062970139	-194.722444896	-194.722444896	2151.820303979

4 Gaussians

Scaling factor: 142.52307364534212

Gaussians:

Weight	Mean		Covariance			
0.279191204	420.633497801	685.236845992	3176.011949198	-120.227782917	-120.227782917	4452.304435549
0.252297074	606.956720940	679.786959234	4497.202912053	-288.344562048	-288.344562048	5303.553647553
0.308333905	399.692576523	450.245763393	1964.026160783	-39.438604011	-39.438604011	1803.611142989
0.160177816	597.098384078	466.009124430	6293.590550390	-467.120443384	-467.120443384	4018.387893956

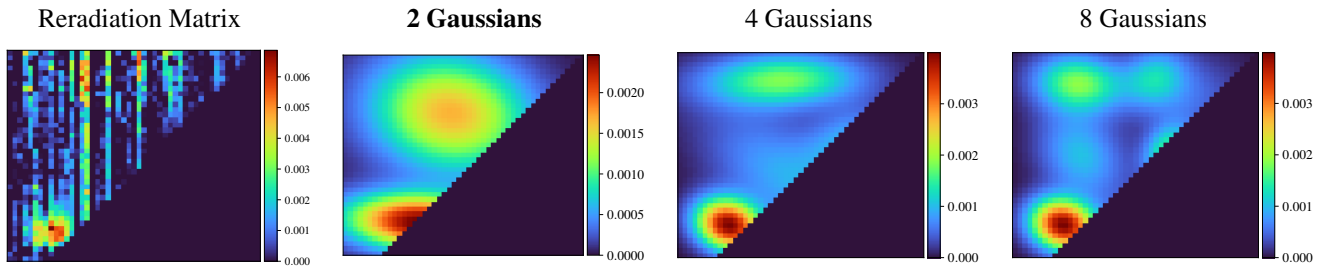
8 Gaussians

Scaling factor: 140.35991989091926

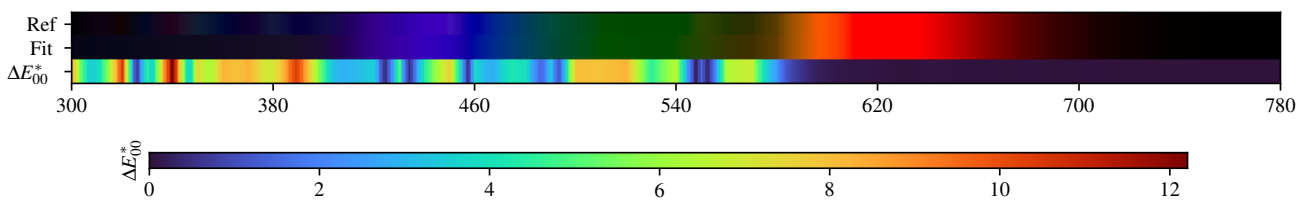
Gaussians:

Weight	Mean		Covariance			
0.178899994	415.375848287	724.752113463	2901.103735488	36.790853188	36.790853188	1333.689130232
0.102052161	608.647315744	590.018031869	1708.385878946	309.066079431	309.066079431	1431.301933907
0.253955900	392.486642378	439.089438207	1650.541221807	-294.258329952	-294.258329952	1020.980496960
0.154554797	427.978432769	574.253272794	2702.786545506	-474.691180629	-474.691180629	3185.619138480
0.099968710	642.367564035	721.050914440	3993.475624899	-597.037773455	-597.037773455	1836.392980083
0.044295537	692.624511387	457.568069830	2576.261086559	379.126433313	379.126433313	3333.653694901
0.092636946	560.743464320	436.704980905	3402.734925601	187.805584770	187.805584770	1804.211627713
0.073635956	548.155362885	724.526968650	1741.404505230	586.826990840	586.826990840	1675.796432239

PLIWF1M - Weighted variational Bayesian inference - 2 Gaussians



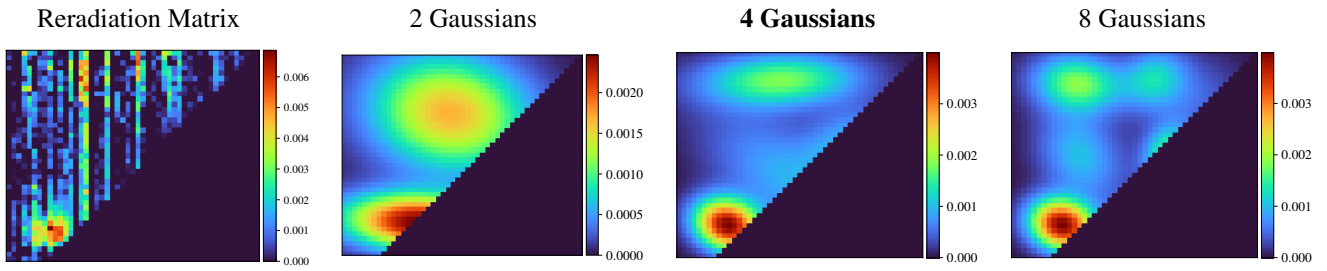
Fitted Material Under Monochromatic Illumination



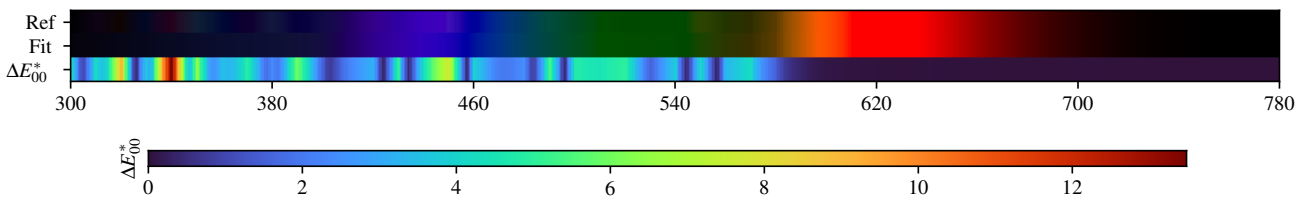
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.45$	D60 $\Delta E = 0.73$	FL2 $\Delta E = 0.51$	FL7 $\Delta E = 0.56$	FL12 $\Delta E = 0.18$	FL3.5 $\Delta E = 0.49$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.67$	HP5 $\Delta E = 0.49$	LED-B5 $\Delta E = 0.42$
B $\Delta E = 0.58$	D65 $\Delta E = 0.76$	FL3 $\Delta E = 0.44$	FL8 $\Delta E = 0.51$	FL3.1 $\Delta E = 0.43$	FL3.6 $\Delta E = 0.55$	FL3.11 $\Delta E = 0.29$	HP1 $\Delta E = 0.38$	LED-B1 $\Delta E = 0.31$	LED-BH1 $\Delta E = 0.26$
C $\Delta E = 0.60$	D75 $\Delta E = 0.81$	FL4 $\Delta E = 0.38$	FL9 $\Delta E = 0.46$	FL3.2 $\Delta E = 0.53$	FL3.7 $\Delta E = 0.23$	FL3.12 $\Delta E = 0.42$	HP2 $\Delta E = 0.31$	LED-B2 $\Delta E = 0.31$	LED-RGB1 $\Delta E = 0.36$
D50 $\Delta E = 0.66$	E $\Delta E = 0.95$	FL5 $\Delta E = 0.66$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.69$	FL3.8 $\Delta E = 0.24$	FL3.13 $\Delta E = 0.51$	HP3 $\Delta E = 0.45$	LED-B3 $\Delta E = 0.31$	LED-V1 $\Delta E = 0.42$
D55 $\Delta E = 0.70$	FL1 $\Delta E = 0.63$	FL6 $\Delta E = 0.53$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.42$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.59$	HP4 $\Delta E = 0.52$	LED-B4 $\Delta E = 0.35$	LED-V2 $\Delta E = 0.54$

PLIWF1M - Weighted variational Bayesian inference - 4 Gaussians



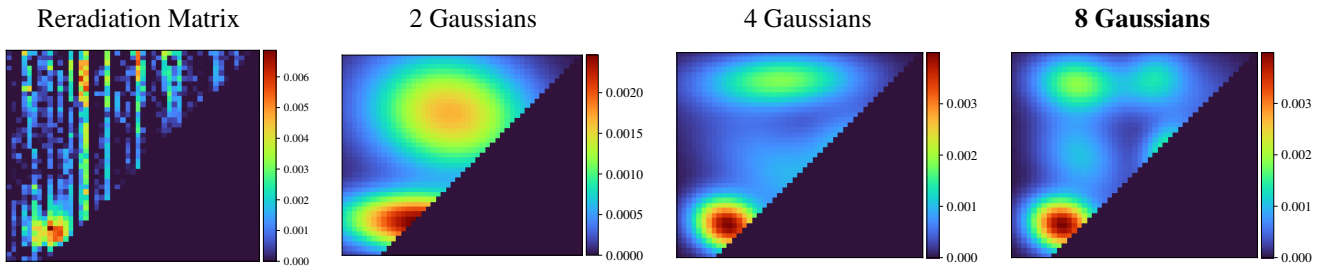
Fitted Material Under Monochromatic Illumination



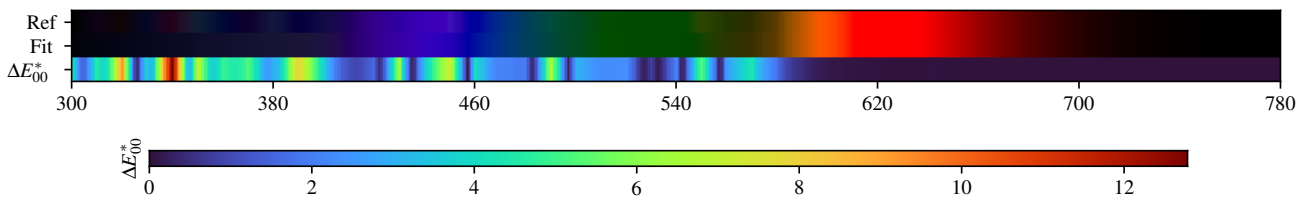
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.05$	$\Delta E = 0.28$	$\Delta E = 0.15$	$\Delta E = 0.25$	$\Delta E = 0.24$	$\Delta E = 0.21$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.23$	$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.17$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.27$	$\Delta E = 0.07$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.25$	$\Delta E = 0.30$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.27$	$\Delta E = 0.07$	$\Delta E = 0.35$	$\Delta E = 0.23$	$\Delta E = 0.07$	$\Delta E = 0.19$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.28$	$\Delta E = 0.14$	$\Delta E = 0.38$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.23$

PLIWF1M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.17$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.31$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.19$	LED-B5 $\Delta E = 0.38$
B $\Delta E = 0.13$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.15$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.21$	FL3.6 $\Delta E = 0.14$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.26$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.12$	D75 $\Delta E = 0.14$	FL4 $\Delta E = 0.16$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.15$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.13$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.33$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.17$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.28$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.27$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.22$	LED-B4 $\Delta E = 0.29$	LED-V2 $\Delta E = 0.17$

PLIWF1M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.160108	0.160202	0.165807	0.187744	0.211241	0.222753	0.240644	0.239992	0.210691	0.184719	0.152463
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.127708	0.098003	0.073979	0.053409	0.046289	0.045397	0.040140	0.028399	0.025556	0.060299	0.215217
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.439146	0.591443	0.668066	0.701975	0.716852	0.727904	0.734839	0.736362	0.735407	0.736495	0.736425
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.739317	0.735032	0.740993	0.744784	0.745320	0.749045	0.746552	0.745054			

2 Gaussians max

Scaling factor: 160.57674978394465

Gaussians:

Weight	Mean		Covariance			
0.397400416	453.282208688	442.196594721	10857.139789696	-600.604979194	-600.604979194	1571.244111633
0.602599584	513.480255232	664.917272790	12599.723250893	-1007.192216455	-1007.192216455	6848.592460414

4 Gaussians max

Scaling factor: 143.7930684296501

Gaussians:

Weight	Mean		Covariance			
0.267882071	396.446632575	440.649043984	1990.018617169	-262.770054704	-262.770054704	1259.104695141
0.331815308	513.887519350	533.009013605	12063.676961806	-5634.364175425	-5634.364175425	8304.975294399
0.086767534	632.612779067	611.606870166	3174.496618278	746.068925186	746.068925186	1894.032957269
0.313535087	503.939114914	728.765179618	11524.870354957	287.652214493	287.652214493	1374.978129465

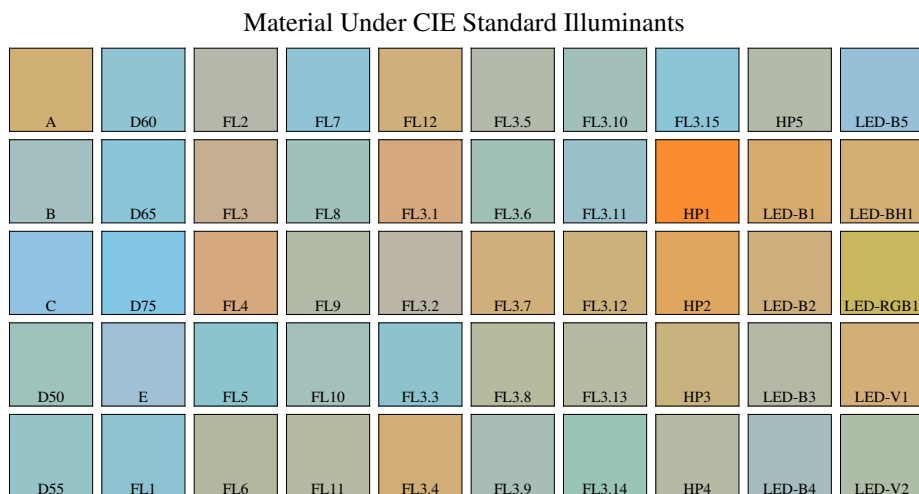
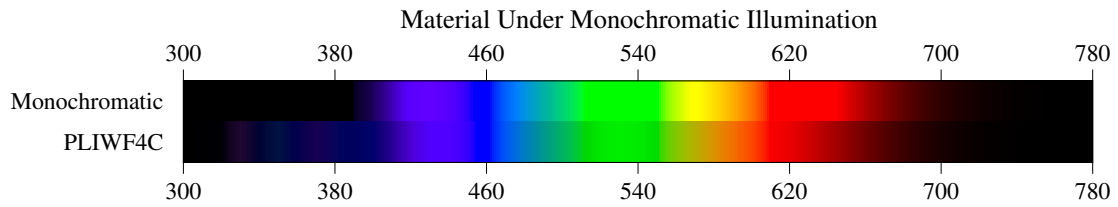
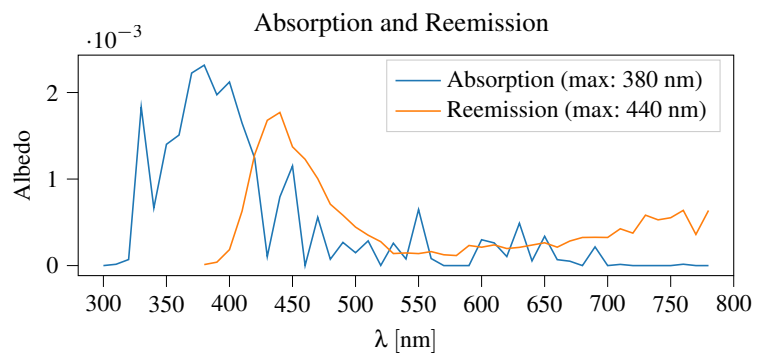
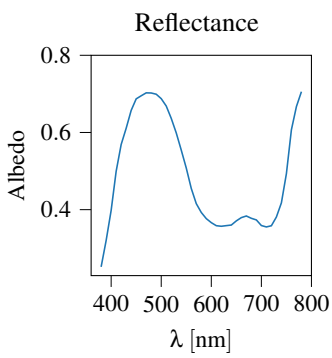
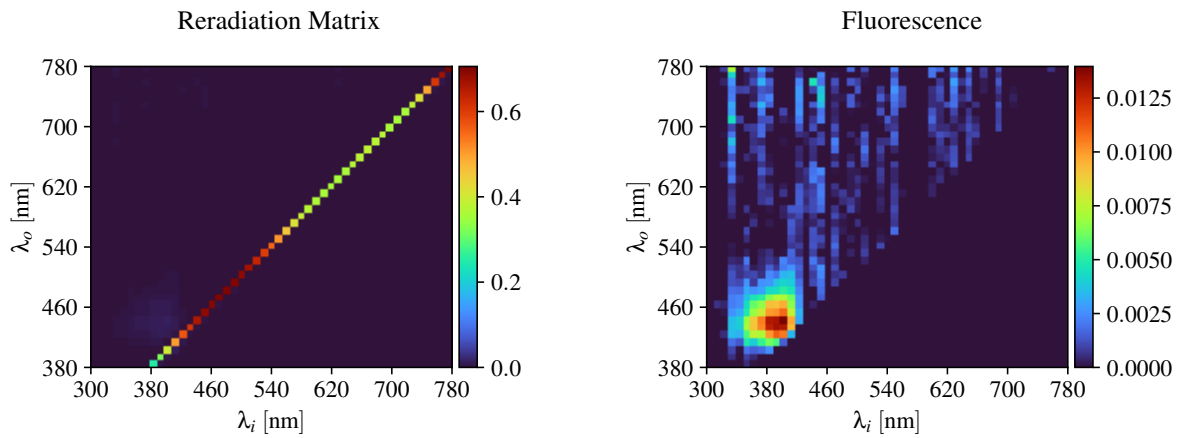
8 Gaussians max

Scaling factor: 141.7833701807376

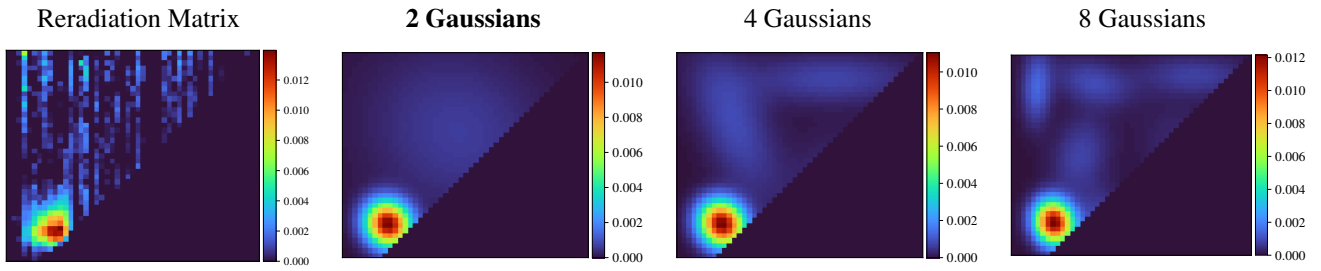
Gaussians:

Weight	Mean		Covariance			
0.262794491	395.130840600	440.963641212	1901.762046123	-206.163953405	-206.163953405	1222.898643447
0.115736682	592.895030471	437.272320589	6790.921332127	-104.134352605	-104.134352605	2067.715478177
0.156536134	430.312895553	579.947735804	3305.113886041	-743.812720264	-743.812720264	3669.109855941
0.031961148	655.109525055	542.253290249	5689.627352466	-58.398611043	-58.398611043	4974.514833642
0.072963557	602.600411895	586.202873629	1045.044782406	262.725543837	262.725543837	1293.725233109
0.080156637	652.069063131	694.115231025	4678.830486793	528.554899125	528.554899125	3260.956121665
0.193388333	426.255152545	722.697368469	3641.251946757	-226.833794139	-226.833794139	1570.197572507
0.086463018	577.105809269	733.738739415	1920.435706999	213.248073392	213.248073392	1656.952253270

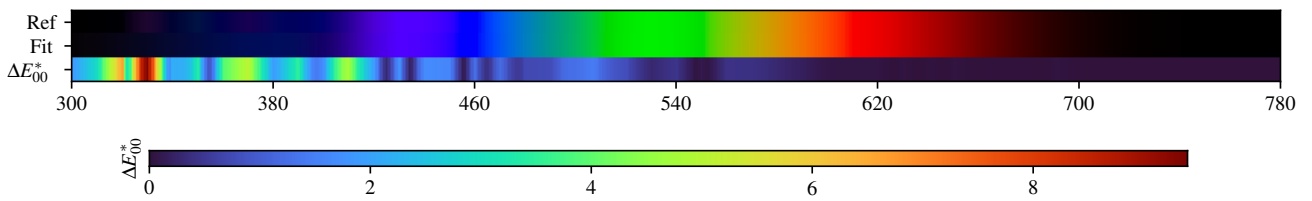
3.88. PLIWF4C



PLIWF4C - Weighted Expectation-Maximization - 2 Gaussians



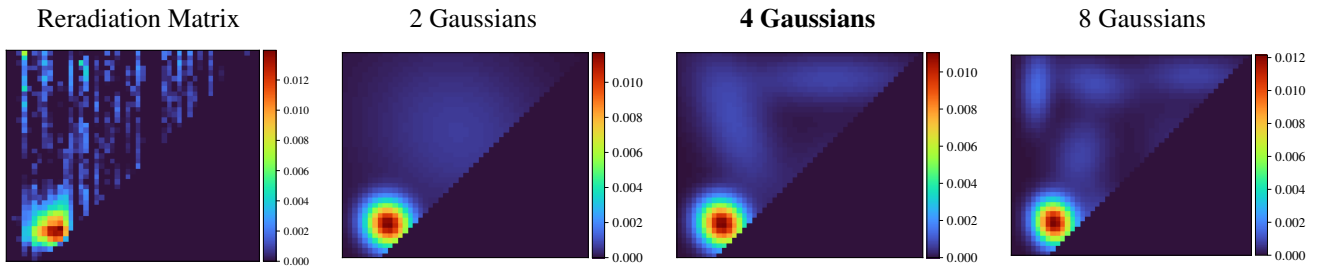
Fitted Material Under Monochromatic Illumination



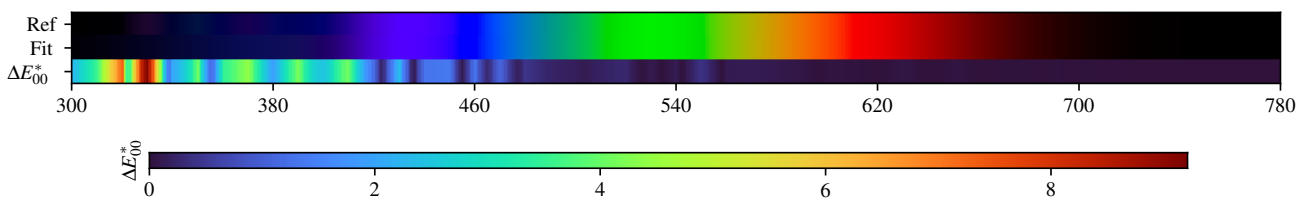
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.31$	D60 $\Delta E = 0.46$	FL2 $\Delta E = 0.63$	FL7 $\Delta E = 0.46$	FL12 $\Delta E = 0.26$	FL3.5 $\Delta E = 0.51$	FL3.10 $\Delta E = 0.35$	FL3.15 $\Delta E = 0.39$	HP5 $\Delta E = 0.66$	LED-B5 $\Delta E = 0.41$
B $\Delta E = 0.53$	D65 $\Delta E = 0.44$	FL3 $\Delta E = 0.51$	FL8 $\Delta E = 0.41$	FL3.1 $\Delta E = 0.30$	FL3.6 $\Delta E = 0.41$	FL3.11 $\Delta E = 0.41$	HP1 $\Delta E = 0.18$	LED-B1 $\Delta E = 0.27$	LED-BH1 $\Delta E = 0.29$
C $\Delta E = 0.51$	D75 $\Delta E = 0.41$	FL4 $\Delta E = 0.33$	FL9 $\Delta E = 0.50$	FL3.2 $\Delta E = 0.64$	FL3.7 $\Delta E = 0.25$	FL3.12 $\Delta E = 0.29$	HP2 $\Delta E = 0.24$	LED-B2 $\Delta E = 0.32$	LED-RGB1 $\Delta E = 0.26$
D50 $\Delta E = 0.44$	E $\Delta E = 0.52$	FL5 $\Delta E = 0.45$	FL10 $\Delta E = 0.39$	FL3.3 $\Delta E = 0.44$	FL3.8 $\Delta E = 0.40$	FL3.13 $\Delta E = 0.50$	HP3 $\Delta E = 0.41$	LED-B3 $\Delta E = 0.49$	LED-V1 $\Delta E = 0.45$
D55 $\Delta E = 0.46$	FL1 $\Delta E = 0.47$	FL6 $\Delta E = 0.57$	FL11 $\Delta E = 0.43$	FL3.4 $\Delta E = 0.27$	FL3.9 $\Delta E = 0.40$	FL3.14 $\Delta E = 0.37$	HP4 $\Delta E = 0.75$	LED-B4 $\Delta E = 0.48$	LED-V2 $\Delta E = 0.64$

PLIWF4C - Weighted Expectation-Maximization - 4 Gaussians



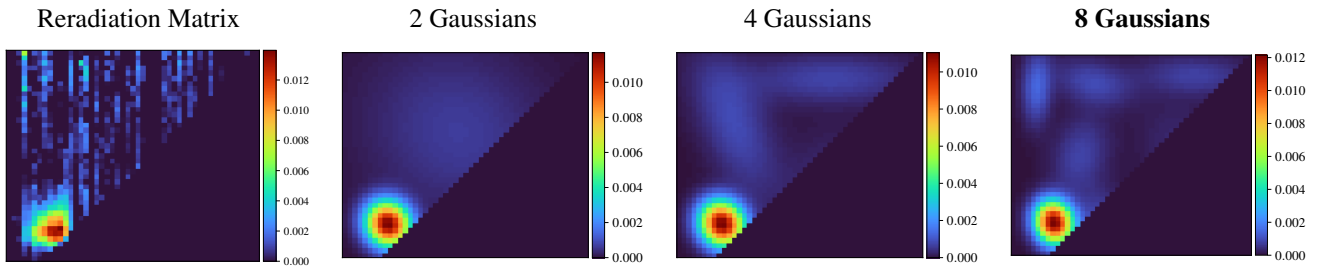
Fitted Material Under Monochromatic Illumination



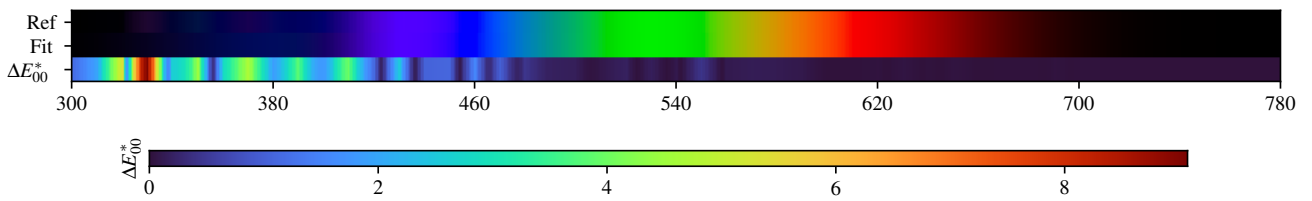
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.29$	$\Delta E = 0.14$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.21$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.01$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.05$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.02$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.01$	$\Delta E = 0.20$	$\Delta E = 0.03$	$\Delta E = 0.38$	$\Delta E = 0.18$	$\Delta E = 0.29$

PLIWF4C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.14$	$\Delta E = 0.03$	$\Delta E = 0.15$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.04$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.13$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.08$	$\Delta E = 0.03$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.04$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.03$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.04$	$\Delta E = 0.15$	$\Delta E = 0.03$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.16$

PLIWF4C - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.251795	0.320124	0.398130	0.499376	0.568859	0.610927	0.657221	0.687104	0.695081	0.702650	0.702311
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.699142	0.687633	0.668553	0.636598	0.598876	0.554317	0.507934	0.455042	0.415618	0.392751	0.376757
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.366356	0.358451	0.356973	0.358597	0.360122	0.370931	0.379390	0.383594	0.377582	0.373385	0.358850
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.355233	0.358310	0.380922	0.417604	0.493316	0.607046	0.667128	0.705698			

2 Gaussians

Scaling factor: 131.8438853690958

Gaussians:

Weight	Mean		Covariance			
0.491422308	385.649053769	442.896786027	860.838907068	-66.845614651	-66.845614651	898.316441948
0.508577692	522.821700200	626.417265181	16449.597917507	-1738.292257875	-1738.292257875	14509.095170751

4 Gaussians

Scaling factor: 126.10069611587664

Gaussians:

Weight	Mean		Covariance			
0.502058107	385.671074774	443.239737967	884.463286046	-83.743375577	-83.743375577	927.378681192
0.154397798	599.303579227	731.839445087	13895.862735849	108.928799811	108.928799811	1192.622654985
0.145157256	607.547256612	503.147580183	5790.353687344	581.523907439	581.523907439	7515.121497712
0.198386839	408.604052006	643.536555049	3168.304829871	-2818.432112863	-2818.432112863	9098.153091866

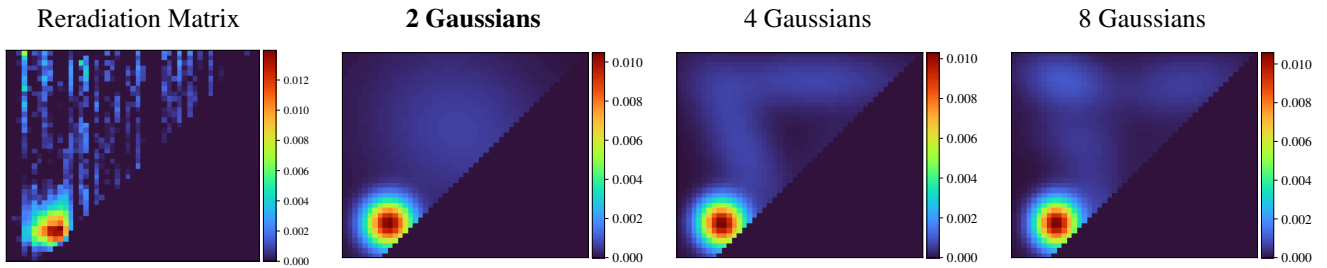
8 Gaussians

Scaling factor: 124.17646481494491

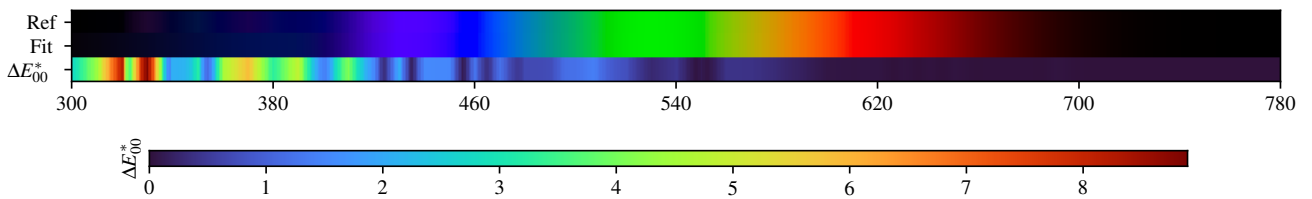
Gaussians:

Weight	Mean		Covariance			
0.468970750	382.014934808	442.939731042	676.348731168	-66.532358913	-66.532358913	860.495300983
0.090046613	667.677711438	741.779258638	6736.901071009	-152.684515147	-152.684515147	789.984631187
0.079136926	460.215994621	727.492791811	2921.946163315	-551.841238335	-551.841238335	1094.594969631
0.071613419	347.101878094	716.403779364	396.537904919	65.688433613	65.688433613	2487.637343043
0.094812618	435.669999154	578.304203110	1595.966475934	500.875303593	500.875303593	3298.776566164
0.065032431	472.067555036	446.938810406	1297.082076777	122.128973313	122.128973313	1812.625187185
0.063907213	640.705764582	445.032731747	2190.429904381	-67.938606481	-67.938606481	2213.080982696
0.066480031	630.360570211	609.178399014	3355.282607125	-9.884422952	-9.884422952	3746.421361943

PLIWF4C - Weighted variational Bayesian inference - 2 Gaussians



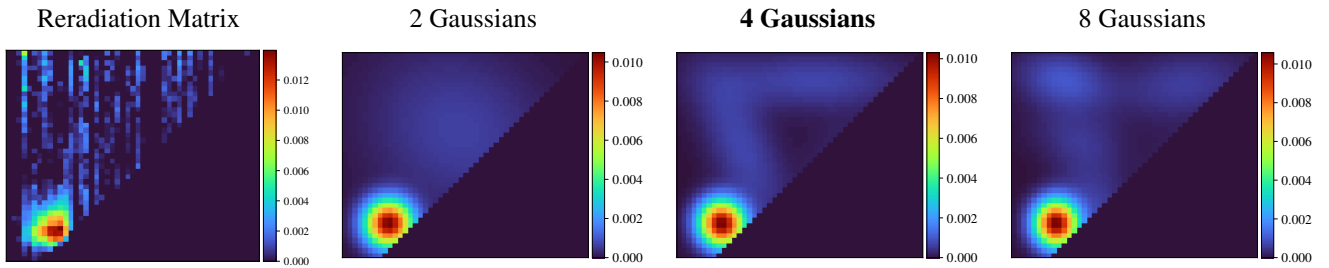
Fitted Material Under Monochromatic Illumination



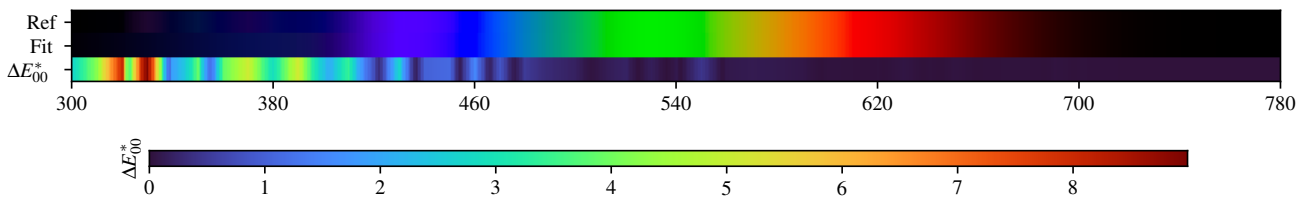
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.29$	D60 $\Delta E = 0.36$	FL2 $\Delta E = 0.59$	FL7 $\Delta E = 0.42$	FL12 $\Delta E = 0.25$	FL3.5 $\Delta E = 0.47$	FL3.10 $\Delta E = 0.35$	FL3.15 $\Delta E = 0.32$	HP5 $\Delta E = 0.62$	LED-B5 $\Delta E = 0.41$
B $\Delta E = 0.46$	D65 $\Delta E = 0.33$	FL3 $\Delta E = 0.49$	FL8 $\Delta E = 0.38$	FL3.1 $\Delta E = 0.29$	FL3.6 $\Delta E = 0.38$	FL3.11 $\Delta E = 0.41$	HP1 $\Delta E = 0.18$	LED-B1 $\Delta E = 0.27$	LED-BH1 $\Delta E = 0.30$
C $\Delta E = 0.43$	D75 $\Delta E = 0.29$	FL4 $\Delta E = 0.32$	FL9 $\Delta E = 0.47$	FL3.2 $\Delta E = 0.60$	FL3.7 $\Delta E = 0.24$	FL3.12 $\Delta E = 0.29$	HP2 $\Delta E = 0.23$	LED-B2 $\Delta E = 0.31$	LED-RGB1 $\Delta E = 0.25$
D50 $\Delta E = 0.38$	E $\Delta E = 0.31$	FL5 $\Delta E = 0.42$	FL10 $\Delta E = 0.39$	FL3.3 $\Delta E = 0.41$	FL3.8 $\Delta E = 0.38$	FL3.13 $\Delta E = 0.48$	HP3 $\Delta E = 0.39$	LED-B3 $\Delta E = 0.47$	LED-V1 $\Delta E = 0.43$
D55 $\Delta E = 0.37$	FL1 $\Delta E = 0.44$	FL6 $\Delta E = 0.53$	FL11 $\Delta E = 0.40$	FL3.4 $\Delta E = 0.26$	FL3.9 $\Delta E = 0.39$	FL3.14 $\Delta E = 0.35$	HP4 $\Delta E = 0.67$	LED-B4 $\Delta E = 0.48$	LED-V2 $\Delta E = 0.58$

PLIWF4C - Weighted variational Bayesian inference - 4 Gaussians



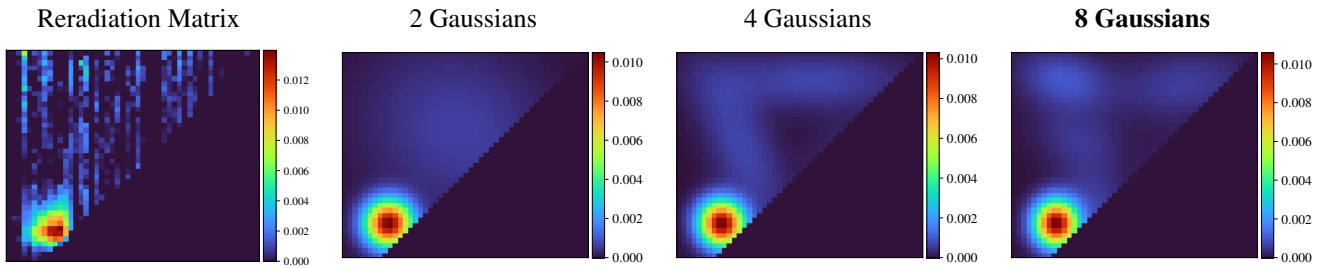
Fitted Material Under Monochromatic Illumination



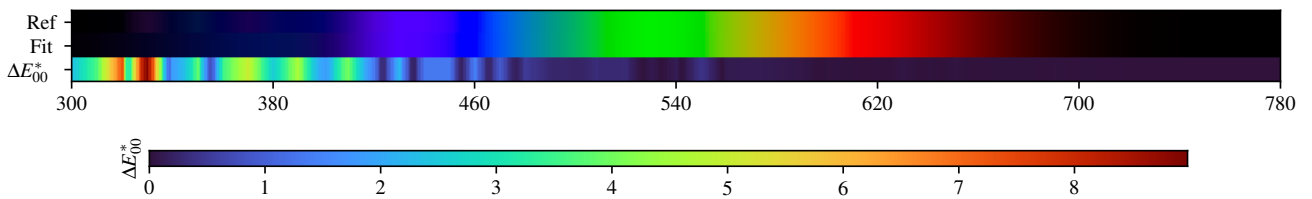
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.21$	FL3.15 $\Delta E = 0.07$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.13$
B $\Delta E = 0.10$	D65 $\Delta E = 0.06$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.08$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.06$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.11$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.17$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.09$	FL11 $\Delta E = 0.22$	FL3.4 $\Delta E = 0.01$	FL3.9 $\Delta E = 0.22$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.17$

PLIWF4C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.03$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.14$
B $\Delta E = 0.12$	D65 $\Delta E = 0.05$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.10$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.01$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.06$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.13$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.02$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.20$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.22$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.20$	LED-V2 $\Delta E = 0.17$

PLIWF4C - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.251795	0.320124	0.398130	0.499376	0.568859	0.610927	0.657221	0.687104	0.695081	0.702650	0.702311
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.699142	0.687633	0.668553	0.636598	0.598876	0.554317	0.507934	0.455042	0.415618	0.392751	0.376757
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.366356	0.358451	0.356973	0.358597	0.360122	0.370931	0.379390	0.383594	0.377582	0.373385	0.358850
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.355233	0.358310	0.380922	0.417604	0.493316	0.607046	0.667128	0.705698			

2 Gaussians max

Scaling factor: 132.2950556188369

Gaussians:

Weight	Mean		Covariance			
0.501958010	387.041664466	443.839340359	1008.511013546	-0.172508162	-0.172508162	1003.268753107
0.498041990	524.484838380	629.315192534	16577.538387445	-2002.968784460	-2002.968784460	14274.319900026

4 Gaussians max

Scaling factor: 126.15511696750255

Gaussians:

Weight	Mean		Covariance			
0.496201367	385.363506678	443.456004979	928.957090806	-32.449821377	-32.449821377	982.052697197
0.196274776	425.145293787	595.211224630	3902.157906601	-4291.328335218	-4291.328335218	11812.862883946
0.112808036	635.034483528	509.937838156	2831.998222601	-548.919855584	-548.919855584	7814.215270189
0.194715820	561.499049220	728.302760297	18038.798438726	58.692551003	58.692551003	1575.928527086

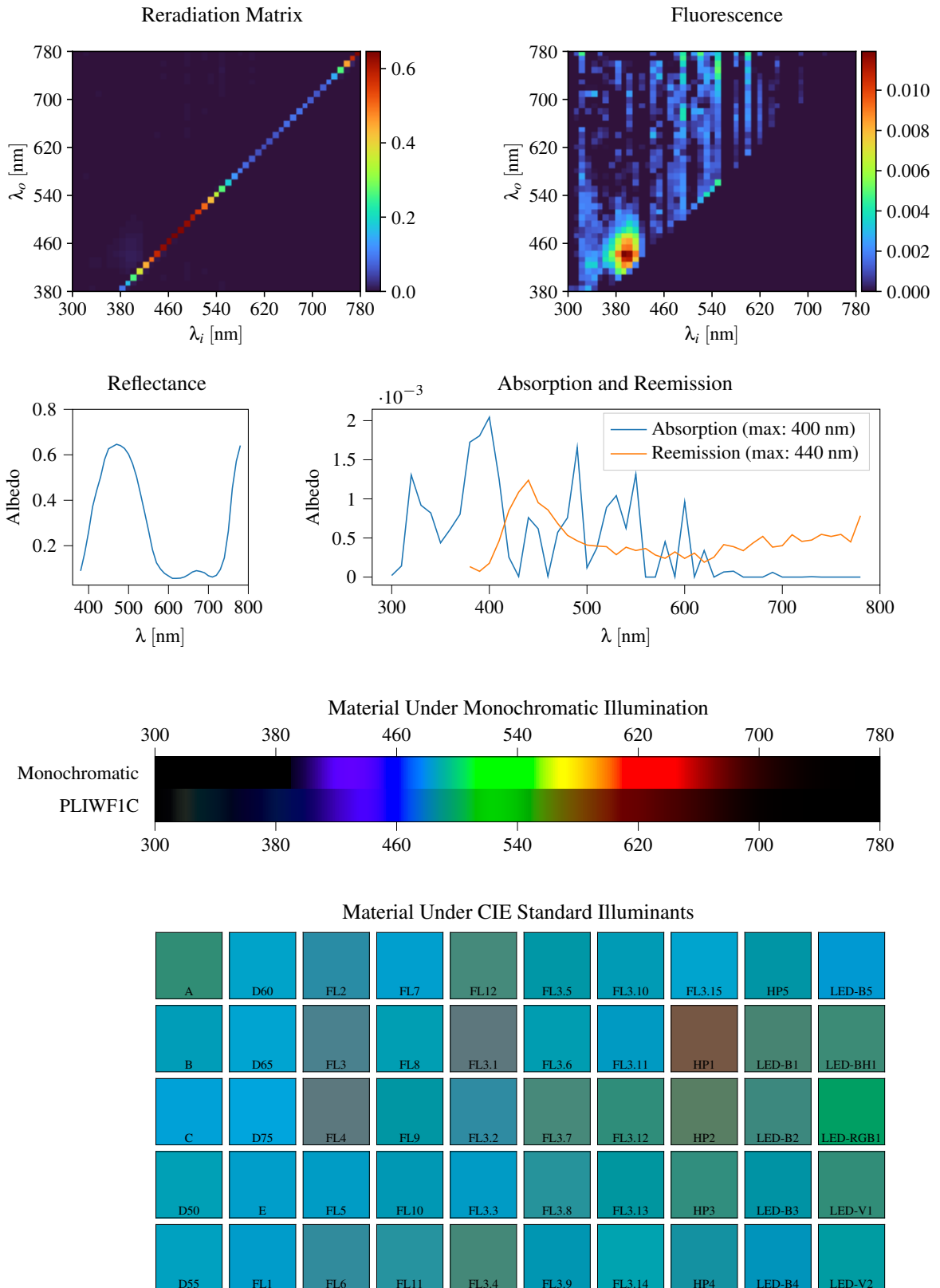
8 Gaussians max

Scaling factor: 125.80547715824018

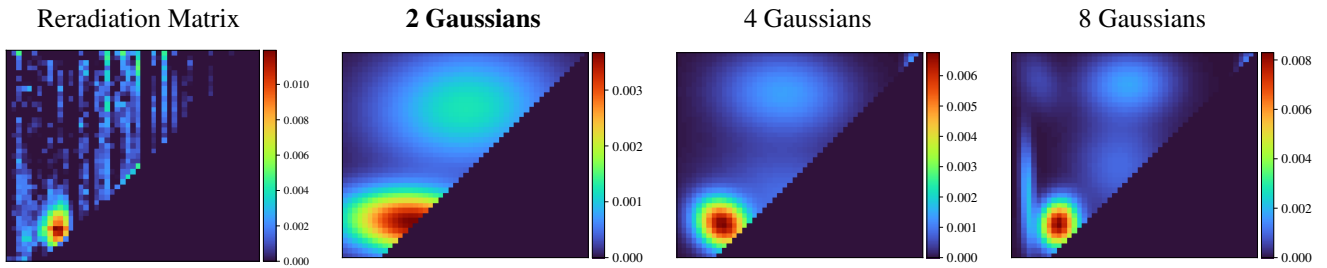
Gaussians:

Weight	Mean		Covariance			
0.480047103	383.710865493	443.702591573	837.487929612	-14.123630819	-14.123630819	973.142020660
0.094827157	459.525756401	481.450402339	2318.611979609	-610.877822811	-610.877822811	3809.783287545
0.097175170	638.916056798	493.587499594	2488.775557869	-343.649981552	-343.649981552	6288.836316266
0.067451847	428.261198796	612.371768603	4151.975859673	-660.392640966	-660.392640966	1878.603961047
0.137963106	635.851056661	720.230198874	8859.314651165	761.442827301	761.442827301	2197.657982891
0.121266145	398.558808361	729.169713662	3566.802279233	-433.515438396	-433.515438396	1630.026001867

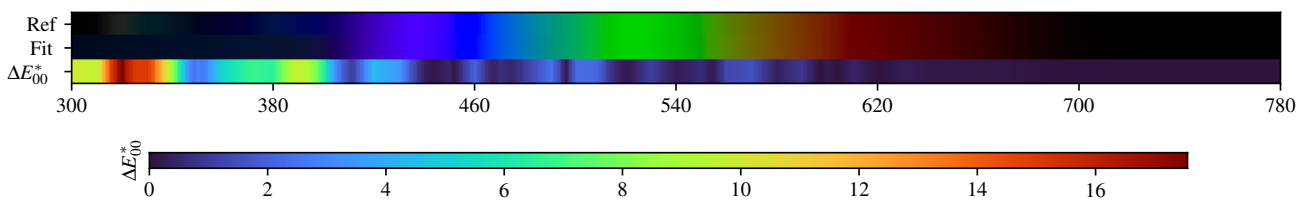
3.89. PLIWFC



PLIWF1C - Weighted Expectation-Maximization - 2 Gaussians



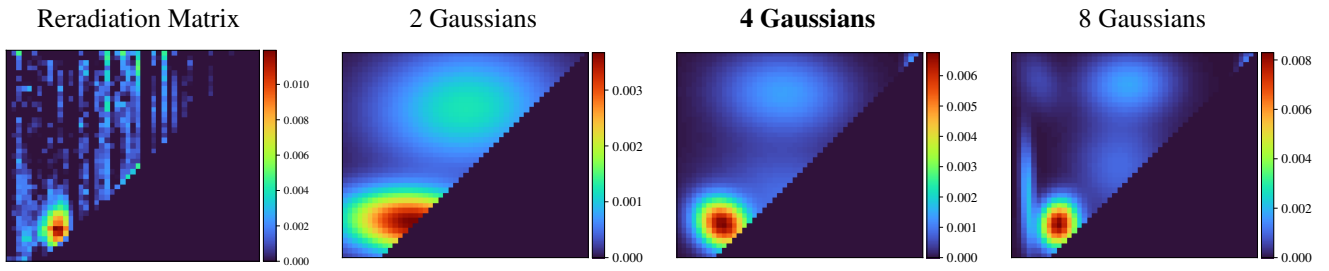
Fitted Material Under Monochromatic Illumination



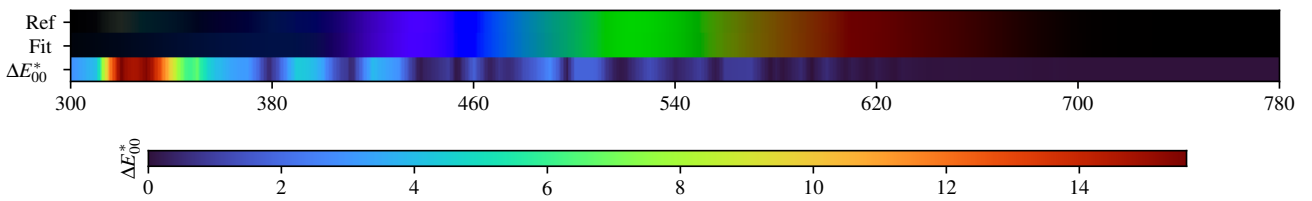
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.42$	$\Delta E = 0.24$	$\Delta E = 0.51$	$\Delta E = 0.34$	$\Delta E = 0.60$	$\Delta E = 0.45$	$\Delta E = 0.66$	$\Delta E = 0.20$	$\Delta E = 0.50$	$\Delta E = 0.63$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.35$	$\Delta E = 0.22$	$\Delta E = 0.68$	$\Delta E = 0.43$	$\Delta E = 0.90$	$\Delta E = 0.43$	$\Delta E = 0.63$	$\Delta E = 0.89$	$\Delta E = 0.62$	$\Delta E = 0.57$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.30$	$\Delta E = 0.20$	$\Delta E = 0.89$	$\Delta E = 0.46$	$\Delta E = 0.50$	$\Delta E = 0.62$	$\Delta E = 0.40$	$\Delta E = 0.85$	$\Delta E = 0.65$	$\Delta E = 0.35$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.30$	$\Delta E = 0.39$	$\Delta E = 0.39$	$\Delta E = 0.65$	$\Delta E = 0.39$	$\Delta E = 0.71$	$\Delta E = 0.46$	$\Delta E = 0.37$	$\Delta E = 0.73$	$\Delta E = 0.46$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.39$	$\Delta E = 0.53$	$\Delta E = 0.72$	$\Delta E = 0.44$	$\Delta E = 0.69$	$\Delta E = 0.44$	$\Delta E = 0.39$	$\Delta E = 0.68$	$\Delta E = 0.34$

PLIWF1C - Weighted Expectation-Maximization - 4 Gaussians



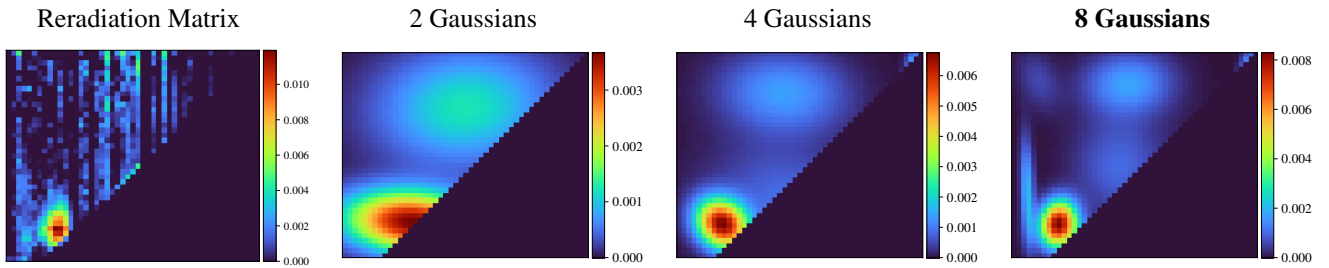
Fitted Material Under Monochromatic Illumination



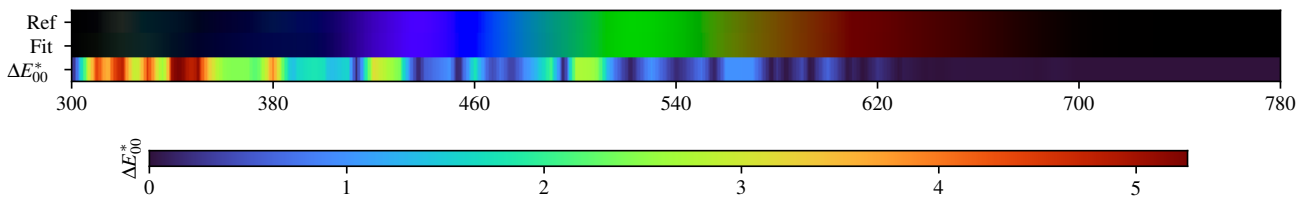
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.22$	$\Delta E = 0.55$	$\Delta E = 0.27$	$\Delta E = 0.49$	$\Delta E = 0.21$	$\Delta E = 0.29$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.25$	$\Delta E = 0.25$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.47$	$\Delta E = 0.22$	$\Delta E = 0.32$	$\Delta E = 0.39$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.29$	$\Delta E = 0.29$	$\Delta E = 0.23$	$\Delta E = 0.48$	$\Delta E = 0.26$	$\Delta E = 0.29$	$\Delta E = 0.35$	$\Delta E = 0.24$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.28$	$\Delta E = 0.09$	$\Delta E = 0.24$	$\Delta E = 0.52$	$\Delta E = 0.21$	$\Delta E = 0.55$	$\Delta E = 0.29$	$\Delta E = 0.28$	$\Delta E = 0.39$	$\Delta E = 0.19$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.57$	$\Delta E = 0.22$	$\Delta E = 0.50$	$\Delta E = 0.31$	$\Delta E = 0.21$	$\Delta E = 0.35$	$\Delta E = 0.24$

PLIWF1C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.40$	$\Delta E = 0.14$	$\Delta E = 0.33$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.34$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.20$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.34$	$\Delta E = 0.10$	$\Delta E = 0.32$	$\Delta E = 0.18$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.37$	$\Delta E = 0.15$	$\Delta E = 0.40$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.23$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.42$	$\Delta E = 0.10$	$\Delta E = 0.37$	$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.23$	$\Delta E = 0.13$

PLIWF1C - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.089238	0.166195	0.261489	0.371774	0.441633	0.502583	0.579169	0.626658	0.636402	0.646262	0.640381
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.627785	0.602726	0.561379	0.504171	0.428099	0.348972	0.267766	0.182213	0.124863	0.097562	0.078419
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.067023	0.056260	0.056227	0.057336	0.062432	0.072295	0.084292	0.090205	0.086728	0.080992	0.067774
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.062212	0.069527	0.095569	0.146662	0.264003	0.452089	0.571777	0.640883			

2 Gaussians

Scaling factor: 161.82810296942003

Gaussians:

Weight	Mean		Covariance			
0.456829022	539.268206683	674.253614305	14211.413773839	527.724701396	527.724701396	6411.083572350
0.543170978	434.731210582	446.378449383	8387.002692532	-505.751909075	-505.751909075	1765.225317763

4 Gaussians

Scaling factor: 138.7631306368454

Gaussians:

Weight	Mean		Covariance			
0.304295708	507.442642601	703.079519397	7400.079971349	-250.607642331	-250.607642331	3110.962369967
0.306989944	521.266358553	490.844505535	11192.839113591	-1513.016375428	-1513.016375428	5303.570998389
0.341352626	385.959655217	442.499048474	1211.623435324	-204.498851123	-204.498851123	1127.437628579
0.047361723	766.489314088	734.808976183	128.654574409	34.987318712	34.987318712	966.819476701

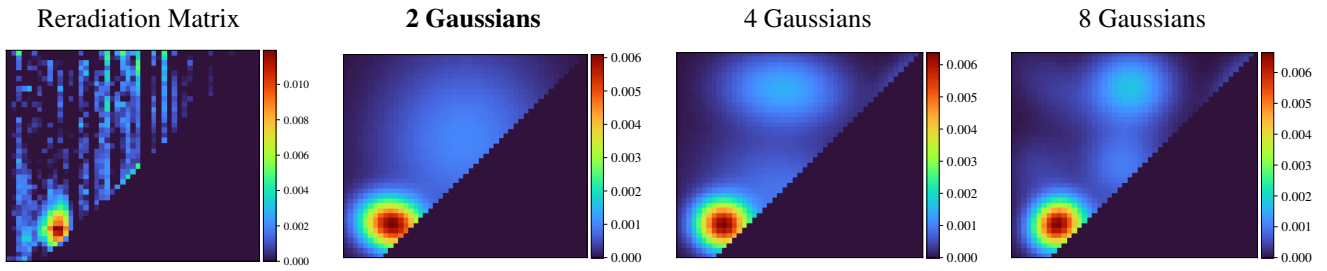
8 Gaussians

Scaling factor: 134.3078110071419

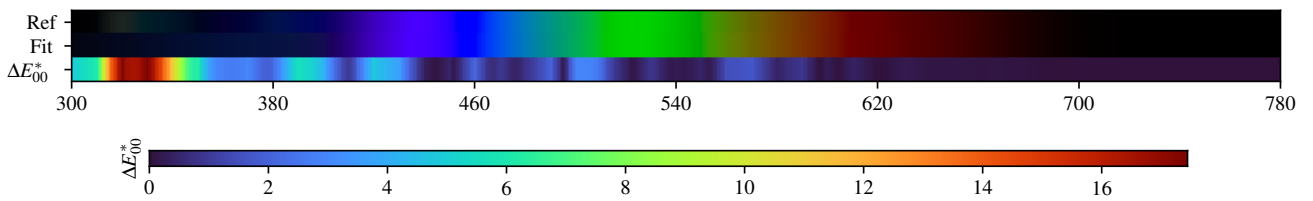
Gaussians:

Weight	Mean		Covariance			
0.202627567	527.137811915	722.001884627	3475.434688867	68.626741164	68.626741164	1766.922812568
0.204643380	508.180103025	558.836360758	3644.462105282	62.913098338	62.913098338	4936.347988322
0.285086156	388.418581310	443.853175029	608.475155937	63.318951194	63.318951194	945.365409803
0.046906126	766.062020545	737.028807100	140.751950711	42.946285584	42.946285584	766.335594662
0.047096211	698.657905906	524.215522742	3965.958600152	-1350.483707263	-1350.483707263	8084.391205241
0.119604830	506.907057880	412.534325400	6203.255480874	-209.532222910	-209.532222910	515.231582772
0.032259189	349.414645921	727.479191654	846.319248487	-385.606883447	-385.606883447	1717.927516272
0.061776541	327.116573955	505.267498656	79.276033340	-143.696521383	-143.696521383	4963.500898934

PLIWF1C - Weighted variational Bayesian inference - 2 Gaussians



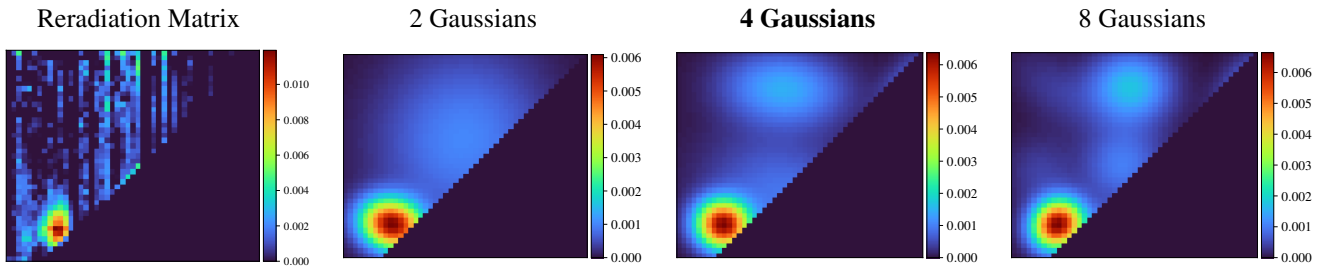
Fitted Material Under Monochromatic Illumination



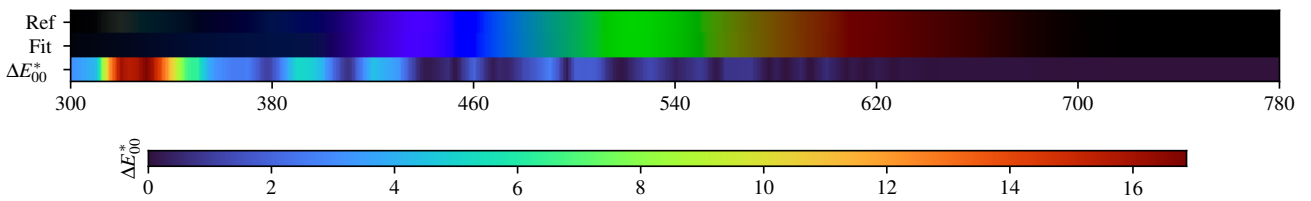
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.53$	$\Delta E = 0.54$	$\Delta E = 0.62$	$\Delta E = 0.48$	$\Delta E = 0.55$	$\Delta E = 0.49$	$\Delta E = 0.58$	$\Delta E = 0.38$	$\Delta E = 0.65$	$\Delta E = 0.66$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.55$	$\Delta E = 0.55$	$\Delta E = 0.79$	$\Delta E = 0.47$	$\Delta E = 0.98$	$\Delta E = 0.48$	$\Delta E = 0.62$	$\Delta E = 0.93$	$\Delta E = 0.65$	$\Delta E = 0.54$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.56$	$\Delta E = 0.57$	$\Delta E = 0.99$	$\Delta E = 0.50$	$\Delta E = 0.60$	$\Delta E = 0.60$	$\Delta E = 0.45$	$\Delta E = 0.97$	$\Delta E = 0.63$	$\Delta E = 0.39$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.54$	$\Delta E = 0.51$	$\Delta E = 0.52$	$\Delta E = 0.61$	$\Delta E = 0.52$	$\Delta E = 0.65$	$\Delta E = 0.46$	$\Delta E = 0.50$	$\Delta E = 0.66$	$\Delta E = 0.58$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.54$	$\Delta E = 0.52$	$\Delta E = 0.64$	$\Delta E = 0.65$	$\Delta E = 0.50$	$\Delta E = 0.65$	$\Delta E = 0.42$	$\Delta E = 0.63$	$\Delta E = 0.66$	$\Delta E = 0.54$

PLIWF1C - Weighted variational Bayesian inference - 4 Gaussians



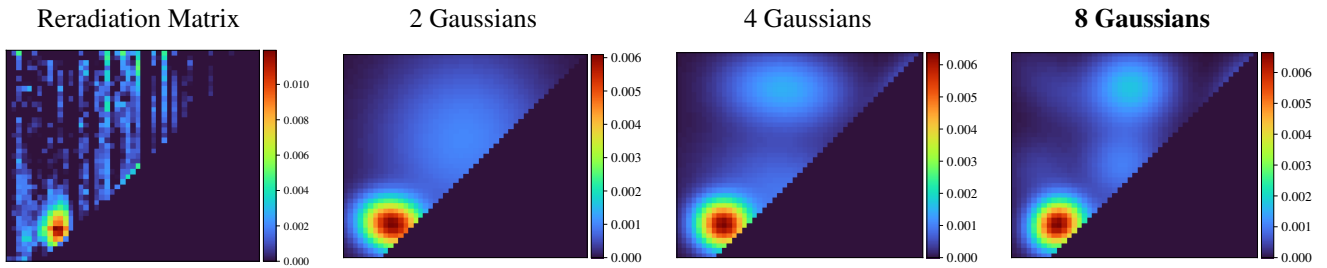
Fitted Material Under Monochromatic Illumination



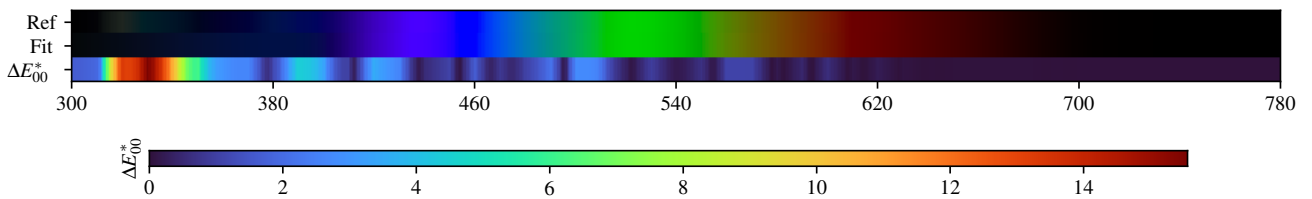
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.54$	$\Delta E = 0.20$	$\Delta E = 0.43$	$\Delta E = 0.20$	$\Delta E = 0.20$	$\Delta E = 0.20$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.39$	$\Delta E = 0.13$	$\Delta E = 0.30$	$\Delta E = 0.39$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.15$	$\Delta E = 0.46$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.32$	$\Delta E = 0.24$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.45$	$\Delta E = 0.13$	$\Delta E = 0.49$	$\Delta E = 0.24$	$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.52$	$\Delta E = 0.21$	$\Delta E = 0.44$	$\Delta E = 0.26$	$\Delta E = 0.11$	$\Delta E = 0.25$	$\Delta E = 0.16$

PLIWF1C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.40$	$\Delta E = 0.19$	$\Delta E = 0.40$	$\Delta E = 0.09$	$\Delta E = 0.25$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.40$	$\Delta E = 0.25$	$\Delta E = 0.22$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.35$	$\Delta E = 0.12$	$\Delta E = 0.38$	$\Delta E = 0.26$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.08$	$\Delta E = 0.19$	$\Delta E = 0.43$	$\Delta E = 0.18$	$\Delta E = 0.45$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.33$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.47$	$\Delta E = 0.12$	$\Delta E = 0.43$	$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.33$	$\Delta E = 0.15$

PLIWF1C - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.089238	0.166195	0.261489	0.371774	0.441633	0.502583	0.579169	0.626658	0.636402	0.646262	0.640381
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.627785	0.602726	0.561379	0.504171	0.428099	0.348972	0.267766	0.182213	0.124863	0.097562	0.078419
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.067023	0.056260	0.056227	0.057336	0.062432	0.072295	0.084292	0.090205	0.086728	0.080992	0.067774
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.062212	0.069527	0.095569	0.146662	0.264003	0.452089	0.571777	0.640883			

2 Gaussians max

Scaling factor: 145.1641095759338

Gaussians:

Weight	Mean	Covariance				
0.365141207	392.461167576	442.090917535	1746.777369718	-168.630818496	-168.630818496	1173.975925724
0.634858793	534.544895564	613.032620458	13302.217073374	468.649557530	468.649557530	15047.371353854

4 Gaussians max

Scaling factor: 138.4442670630739

Gaussians:

Weight	Mean	Covariance				
0.331286662	387.585138822	441.325692118	1309.200645498	-40.967303220	-40.967303220	1087.797275966
0.345216474	512.927778992	501.975556757	11575.864772235	-1839.229103723	-1839.229103723	6250.192272219
0.272112152	507.365255518	711.726205071	6698.464279801	-332.293327273	-332.293327273	2536.871960703
0.051384713	757.434767805	726.531350854	1724.030310850	972.266233064	972.266233064	2045.614173348

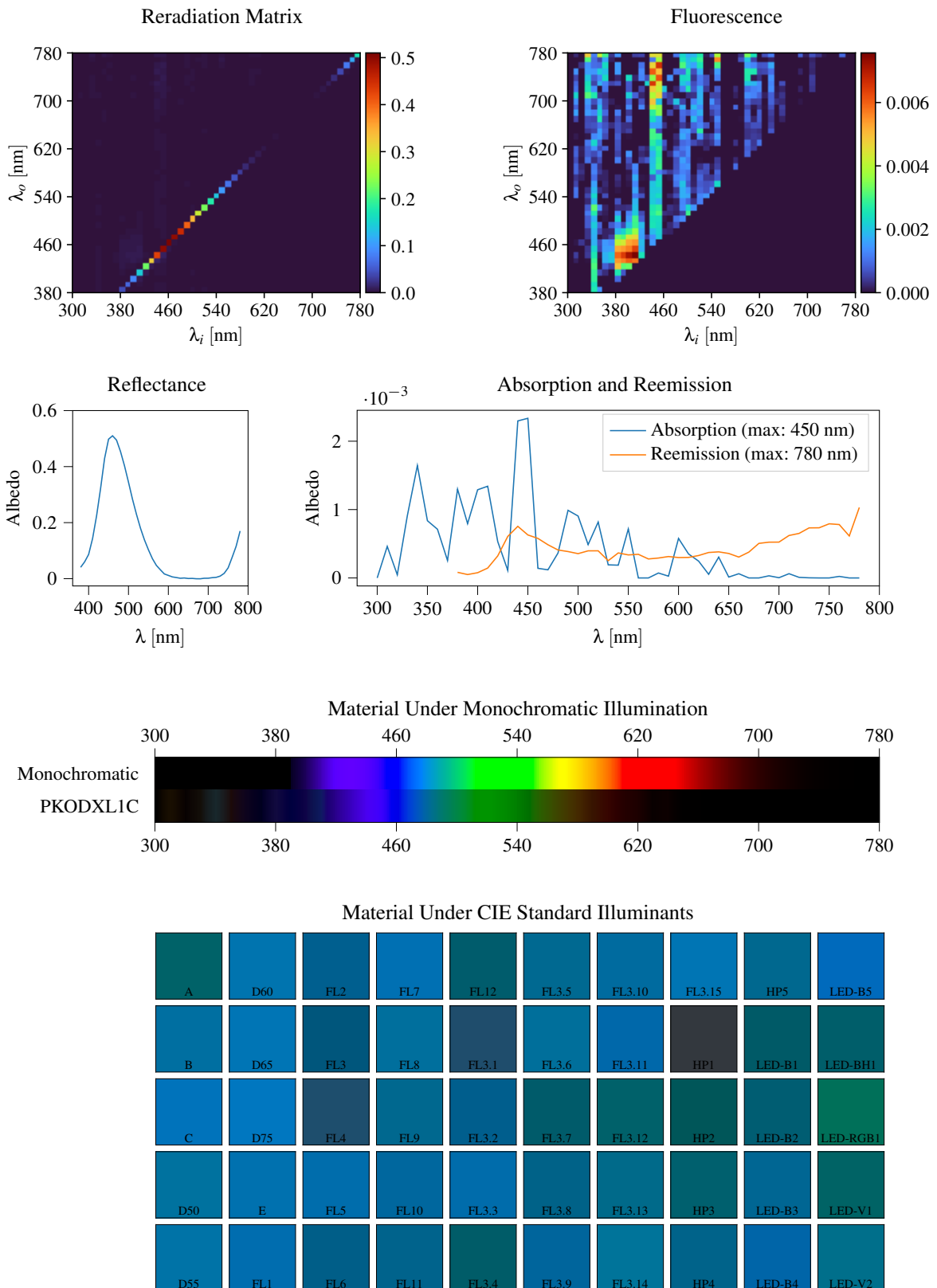
8 Gaussians max

Scaling factor: 136.5618604378533

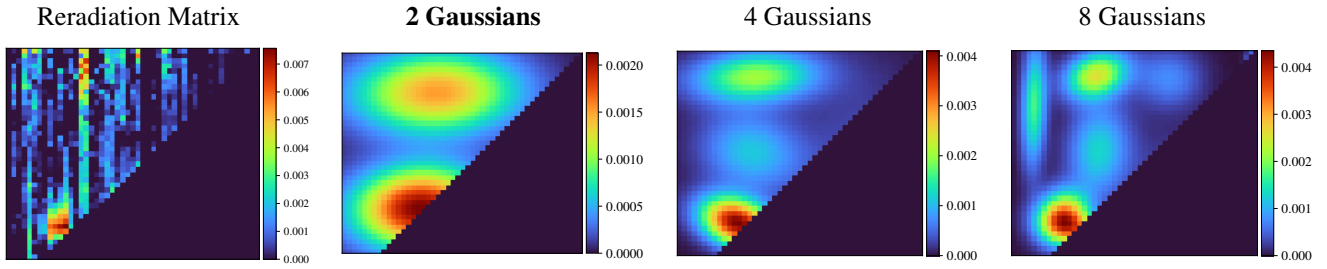
Gaussians:

Weight	Mean	Covariance				
0.327349826	386.263722961	442.116712526	1134.346310974	110.407804443	110.407804443	1073.189732367
0.119944213	518.959911702	422.156744970	4241.425497918	-236.214351795	-236.214351795	1209.353351323
0.054894386	669.403863948	505.908945713	6571.605626672	-2062.950328573	-2062.950328573	5698.961987674
0.127479854	512.608177320	560.501847987	2691.411841841	138.358763190	138.358763190	2880.478153678
0.051845096	353.944048271	542.494315699	2309.106313103	-145.658773602	-145.658773602	2893.676434244
0.054277531	755.671363321	725.754132184	1808.233850744	997.622186530	997.622186530	2053.366663984
0.049245326	382.012424706	708.619909730	3716.210487553	-1632.968935818	-1632.968935818	3056.502741640
0.214963768	530.891552465	715.057276538	3013.241776152	21.773232152	21.773232152	2319.637296536

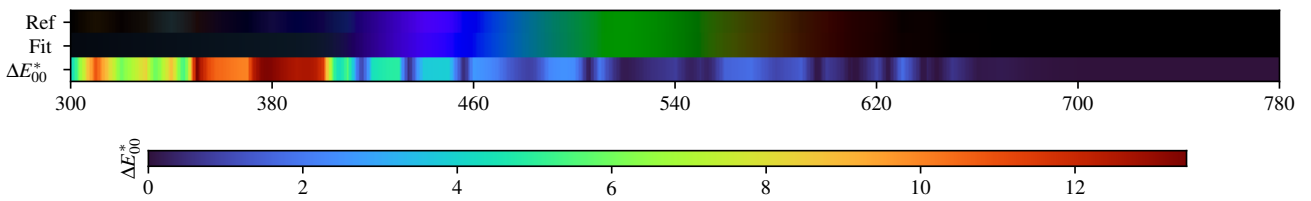
3.90. PKODXL1C



PKODXLIC - Weighted Expectation-Maximization - 2 Gaussians



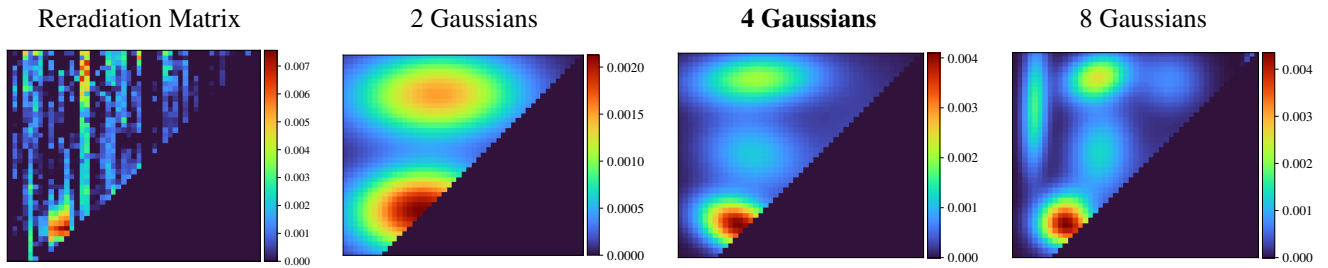
Fitted Material Under Monochromatic Illumination



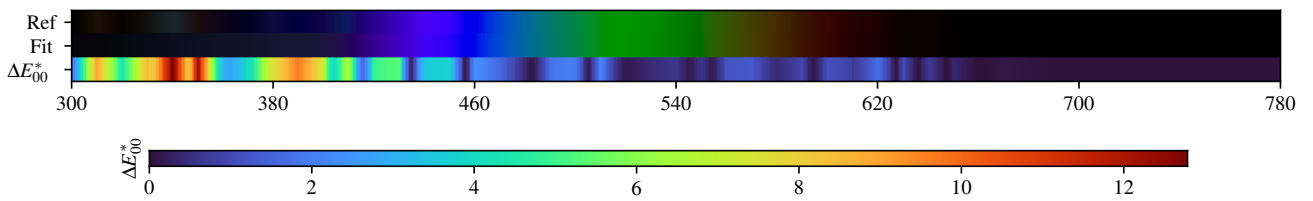
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.57$	$\Delta E = 0.09$	$\Delta E = 0.35$	$\Delta E = 0.38$	$\Delta E = 0.04$	$\Delta E = 0.36$	$\Delta E = 0.56$	$\Delta E = 0.11$	$\Delta E = 0.45$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.32$	$\Delta E = 0.65$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.52$	$\Delta E = 0.09$	$\Delta E = 0.29$	$\Delta E = 1.28$	$\Delta E = 0.38$	$\Delta E = 0.42$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.52$	$\Delta E = 0.79$	$\Delta E = 0.41$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.34$	$\Delta E = 0.17$	$\Delta E = 0.39$	$\Delta E = 0.35$	$\Delta E = 0.24$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.37$	$\Delta E = 0.96$	$\Delta E = 0.26$	$\Delta E = 0.34$	$\Delta E = 0.17$	$\Delta E = 0.26$	$\Delta E = 0.03$	$\Delta E = 0.17$	$\Delta E = 0.41$	$\Delta E = 0.47$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.47$	$\Delta E = 0.29$	$\Delta E = 0.11$	$\Delta E = 0.34$	$\Delta E = 0.29$	$\Delta E = 0.25$	$\Delta E = 0.09$	$\Delta E = 0.28$	$\Delta E = 0.35$	$\Delta E = 0.30$

PKODXLIC - Weighted Expectation-Maximization - 4 Gaussians



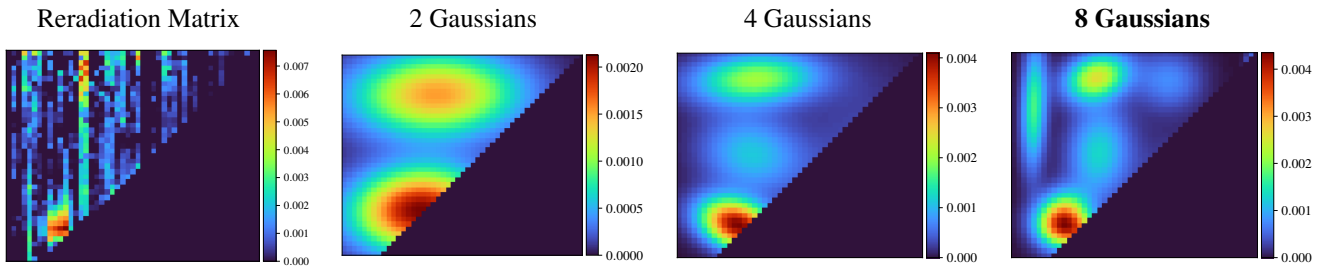
Fitted Material Under Monochromatic Illumination



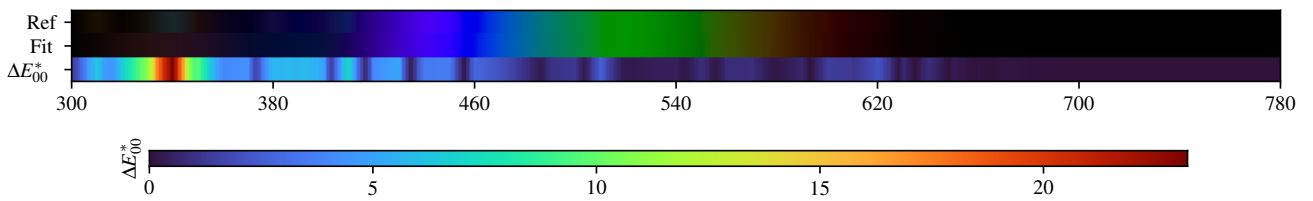
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.39$	$\Delta E = 0.51$	$\Delta E = 0.49$	$\Delta E = 0.48$	$\Delta E = 0.49$	$\Delta E = 0.39$	$\Delta E = 0.49$	$\Delta E = 0.33$	$\Delta E = 0.62$	$\Delta E = 0.47$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.51$	$\Delta E = 0.53$	$\Delta E = 0.51$	$\Delta E = 0.43$	$\Delta E = 0.50$	$\Delta E = 0.40$	$\Delta E = 0.43$	$\Delta E = 0.98$	$\Delta E = 0.46$	$\Delta E = 0.57$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.56$	$\Delta E = 0.55$	$\Delta E = 0.54$	$\Delta E = 0.43$	$\Delta E = 0.46$	$\Delta E = 0.37$	$\Delta E = 0.29$	$\Delta E = 0.51$	$\Delta E = 0.47$	$\Delta E = 0.30$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.48$	$\Delta E = 0.56$	$\Delta E = 0.50$	$\Delta E = 0.48$	$\Delta E = 0.48$	$\Delta E = 0.45$	$\Delta E = 0.33$	$\Delta E = 0.51$	$\Delta E = 0.60$	$\Delta E = 0.58$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.50$	$\Delta E = 0.49$	$\Delta E = 0.51$	$\Delta E = 0.51$	$\Delta E = 0.33$	$\Delta E = 0.44$	$\Delta E = 0.35$	$\Delta E = 0.68$	$\Delta E = 0.47$	$\Delta E = 0.65$

PKODXLIC - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.30$	$\Delta E = 0.48$	$\Delta E = 0.31$	$\Delta E = 0.35$	$\Delta E = 0.44$	$\Delta E = 0.30$	$\Delta E = 0.38$	$\Delta E = 0.23$	$\Delta E = 0.44$	$\Delta E = 0.36$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.38$	$\Delta E = 0.51$	$\Delta E = 0.29$	$\Delta E = 0.33$	$\Delta E = 0.22$	$\Delta E = 0.33$	$\Delta E = 0.31$	$\Delta E = 0.42$	$\Delta E = 0.32$	$\Delta E = 0.42$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.40$	$\Delta E = 0.56$	$\Delta E = 0.28$	$\Delta E = 0.32$	$\Delta E = 0.29$	$\Delta E = 0.31$	$\Delta E = 0.21$	$\Delta E = 0.33$	$\Delta E = 0.33$	$\Delta E = 0.25$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.42$	$\Delta E = 0.31$	$\Delta E = 0.36$	$\Delta E = 0.37$	$\Delta E = 0.36$	$\Delta E = 0.34$	$\Delta E = 0.28$	$\Delta E = 0.32$	$\Delta E = 0.47$	$\Delta E = 0.39$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.45$	$\Delta E = 0.35$	$\Delta E = 0.32$	$\Delta E = 0.41$	$\Delta E = 0.21$	$\Delta E = 0.32$	$\Delta E = 0.32$	$\Delta E = 0.40$	$\Delta E = 0.36$	$\Delta E = 0.48$

PKODXLIC - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.040542	0.059953	0.086359	0.143580	0.224455	0.321868	0.428694	0.497875	0.509988	0.494693	0.453811
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.402892	0.344503	0.283949	0.229831	0.180527	0.138666	0.103167	0.071462	0.047263	0.031605	0.016774
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.011578	0.006258	0.003986	0.001447	0.002421	0.000543	0.000881	0.000000	0.000000	0.001394	0.001538
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.003505	0.004611	0.009101	0.018821	0.038509	0.075955	0.115381	0.170061			

2 Gaussians

Scaling factor: 137.58128936773326

Gaussians:

Weight	Mean		Covariance			
0.479850737	486.140773916	703.067979084	13778.905681169	229.318369194	229.318369194	3497.742929390
0.520149263	453.727253668	467.512369314	8684.836650481	226.788857812	226.788857812	3296.957317339

4 Gaussians

Scaling factor: 126.33871780109033

Gaussians:

Weight	Mean		Covariance			
0.300106089	451.614659008	731.490119487	7179.703578604	333.637524449	333.637524449	1269.159473720
0.206868388	443.209699639	581.975958346	4764.517203650	-421.955657492	-421.955657492	2932.105186933
0.157870638	649.772803126	587.892558178	6897.701828513	2584.142987359	2584.142987359	15731.823833133
0.335154885	416.173176452	441.037467770	2505.290292212	-512.032361734	-512.032361734	1198.725342863

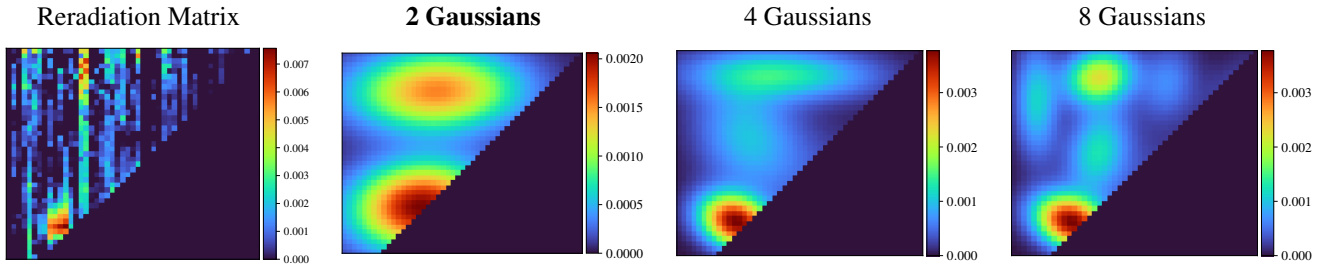
8 Gaussians

Scaling factor: 121.03024768742272

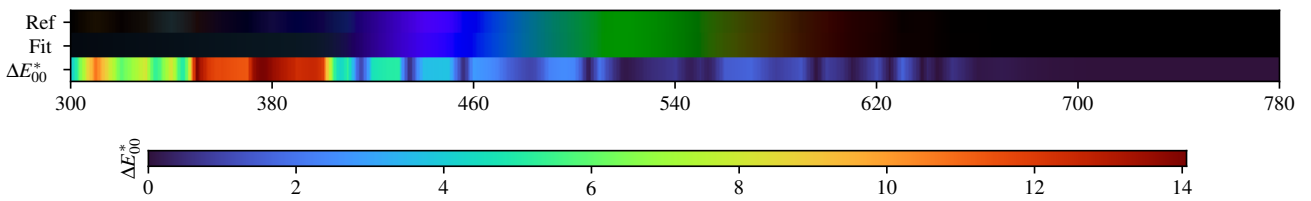
Gaussians:

Weight	Mean		Covariance			
0.172012125	463.919955368	734.499354375	1784.224685903	297.174944089	297.174944089	1031.213120212
0.174353610	467.420023367	584.693485809	1707.152362845	181.202037409	181.202037409	3966.799404440
0.100257074	628.323675377	515.494516656	5221.934315932	-1502.964779341	-1502.964779341	6285.994831404
0.116543519	457.856651606	419.302837051	3143.822036769	-584.832527682	-584.832527682	565.103947876
0.025844588	770.855555068	728.730768588	90.968550604	54.369215339	54.369215339	1256.919880549
0.121447428	339.792570896	674.510371268	277.592542205	187.552740705	187.552740705	6921.138449851
0.215823138	397.235050725	450.683011948	1162.972718998	103.381135182	103.381135182	1214.651496177
0.073718518	606.478109528	728.305056317	2150.113593536	-23.695898455	-23.695898455	1611.833386999

PKODXLIC - Weighted variational Bayesian inference - 2 Gaussians



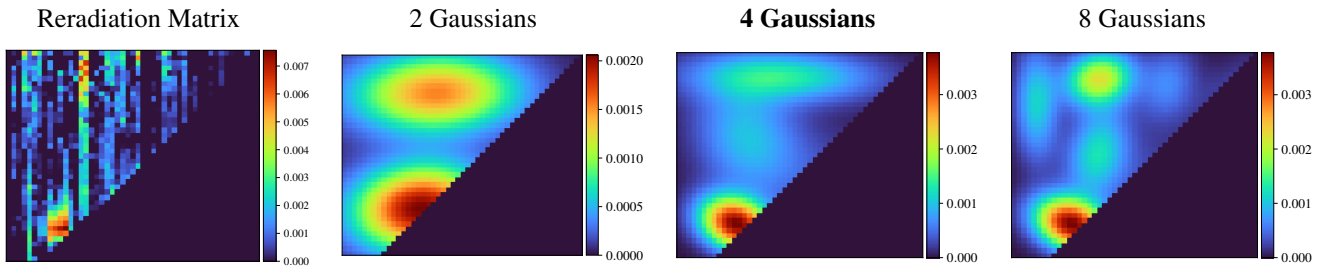
Fitted Material Under Monochromatic Illumination



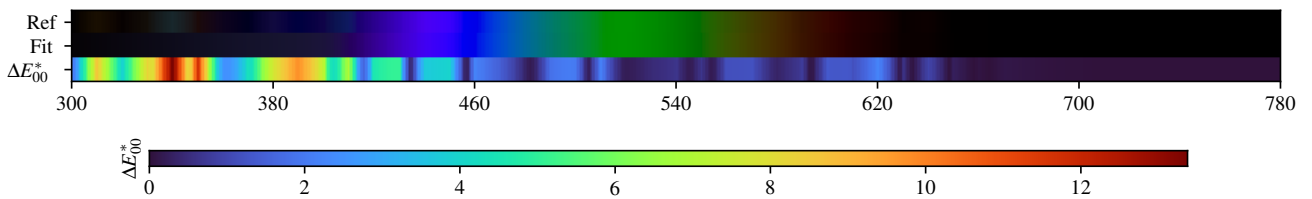
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.16$	$\Delta E = 0.77$	$\Delta E = 0.19$	$\Delta E = 0.50$	$\Delta E = 0.29$	$\Delta E = 0.18$	$\Delta E = 0.39$	$\Delta E = 0.73$	$\Delta E = 0.28$	$\Delta E = 0.53$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.51$	$\Delta E = 0.86$	$\Delta E = 0.05$	$\Delta E = 0.28$	$\Delta E = 0.35$	$\Delta E = 0.23$	$\Delta E = 0.37$	$\Delta E = 0.91$	$\Delta E = 0.24$	$\Delta E = 0.29$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.73$	$\Delta E = 1.01$	$\Delta E = 0.21$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.21$	$\Delta E = 0.06$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.55$	$\Delta E = 1.20$	$\Delta E = 0.40$	$\Delta E = 0.39$	$\Delta E = 0.33$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.27$	$\Delta E = 0.36$	$\Delta E = 0.57$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.66$	$\Delta E = 0.44$	$\Delta E = 0.11$	$\Delta E = 0.32$	$\Delta E = 0.19$	$\Delta E = 0.29$	$\Delta E = 0.21$	$\Delta E = 0.45$	$\Delta E = 0.40$	$\Delta E = 0.46$

PKODXLIC - Weighted variational Bayesian inference - 4 Gaussians



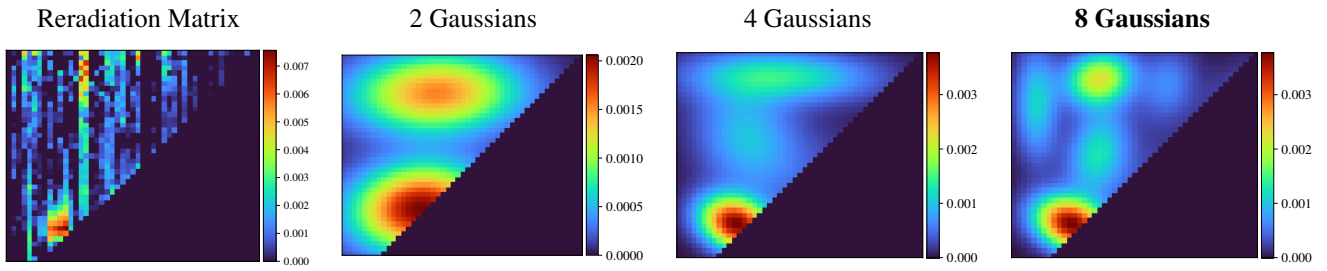
Fitted Material Under Monochromatic Illumination



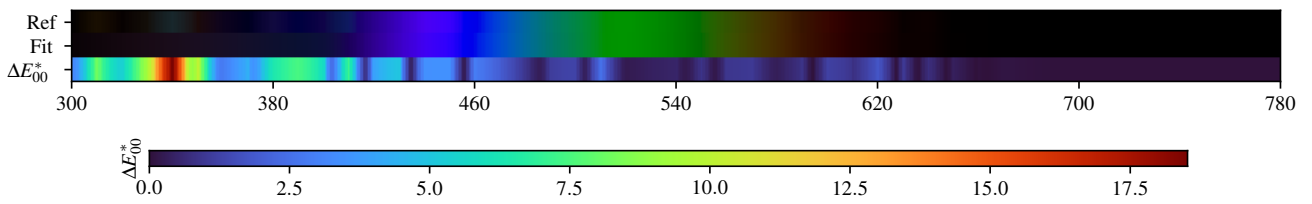
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.39$	$\Delta E = 0.57$	$\Delta E = 0.52$	$\Delta E = 0.55$	$\Delta E = 0.52$	$\Delta E = 0.43$	$\Delta E = 0.56$	$\Delta E = 0.41$	$\Delta E = 0.64$	$\Delta E = 0.56$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.55$	$\Delta E = 0.59$	$\Delta E = 0.50$	$\Delta E = 0.50$	$\Delta E = 0.43$	$\Delta E = 0.45$	$\Delta E = 0.49$	$\Delta E = 0.79$	$\Delta E = 0.49$	$\Delta E = 0.59$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.62$	$\Delta E = 0.62$	$\Delta E = 0.50$	$\Delta E = 0.48$	$\Delta E = 0.46$	$\Delta E = 0.37$	$\Delta E = 0.29$	$\Delta E = 0.50$	$\Delta E = 0.51$	$\Delta E = 0.33$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.53$	$\Delta E = 0.56$	$\Delta E = 0.56$	$\Delta E = 0.55$	$\Delta E = 0.53$	$\Delta E = 0.48$	$\Delta E = 0.36$	$\Delta E = 0.49$	$\Delta E = 0.67$	$\Delta E = 0.54$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.55$	$\Delta E = 0.56$	$\Delta E = 0.53$	$\Delta E = 0.56$	$\Delta E = 0.30$	$\Delta E = 0.48$	$\Delta E = 0.40$	$\Delta E = 0.66$	$\Delta E = 0.55$	$\Delta E = 0.66$

PKODXLIC - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.35$	$\Delta E = 0.43$	$\Delta E = 0.37$	$\Delta E = 0.37$	$\Delta E = 0.47$	$\Delta E = 0.35$	$\Delta E = 0.42$	$\Delta E = 0.24$	$\Delta E = 0.49$	$\Delta E = 0.36$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.40$	$\Delta E = 0.45$	$\Delta E = 0.37$	$\Delta E = 0.37$	$\Delta E = 0.35$	$\Delta E = 0.37$	$\Delta E = 0.34$	$\Delta E = 0.70$	$\Delta E = 0.41$	$\Delta E = 0.52$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.42$	$\Delta E = 0.47$	$\Delta E = 0.38$	$\Delta E = 0.37$	$\Delta E = 0.35$	$\Delta E = 0.35$	$\Delta E = 0.28$	$\Delta E = 0.42$	$\Delta E = 0.42$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.41$	$\Delta E = 0.35$	$\Delta E = 0.39$	$\Delta E = 0.40$	$\Delta E = 0.39$	$\Delta E = 0.39$	$\Delta E = 0.33$	$\Delta E = 0.37$	$\Delta E = 0.53$	$\Delta E = 0.42$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.42$	$\Delta E = 0.38$	$\Delta E = 0.38$	$\Delta E = 0.45$	$\Delta E = 0.28$	$\Delta E = 0.36$	$\Delta E = 0.36$	$\Delta E = 0.44$	$\Delta E = 0.38$	$\Delta E = 0.50$

PKODXLIC - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.040542	0.059953	0.086359	0.143580	0.224455	0.321868	0.428694	0.497875	0.509988	0.494693	0.453811
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.402892	0.344503	0.283949	0.229831	0.180527	0.138666	0.103167	0.071462	0.047263	0.031605	0.016774
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.011578	0.006258	0.003986	0.001447	0.002421	0.000543	0.000881	0.000000	0.000000	0.001394	0.001538
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.003505	0.004611	0.009101	0.018821	0.038509	0.075955	0.115381	0.170061			

2 Gaussians max

Scaling factor: 137.30791055272394

Gaussians:

Weight	Mean		Covariance			
0.533638897	455.106447385	470.839011655	8844.128155147	357.871479702	357.871479702	3631.117587228
0.466361103	485.732314368	706.299474802	13800.991616477	307.383330505	307.383330505	3206.784304452

4 Gaussians max

Scaling factor: 124.19047231596879

Gaussians:

Weight	Mean		Covariance			
0.323327431	413.725825798	442.847218891	2315.988326637	-397.964367336	-397.964367336	1342.956180665
0.117765746	610.375999358	509.893959414	7395.328357367	-642.105535535	-642.105535535	7236.523081805
0.275704960	436.401692384	613.178833303	4994.850528942	-971.579144849	-971.579144849	6170.303462949
0.283201863	506.957677149	736.429081552	15414.783772057	-252.072659758	-252.072659758	1173.539518481

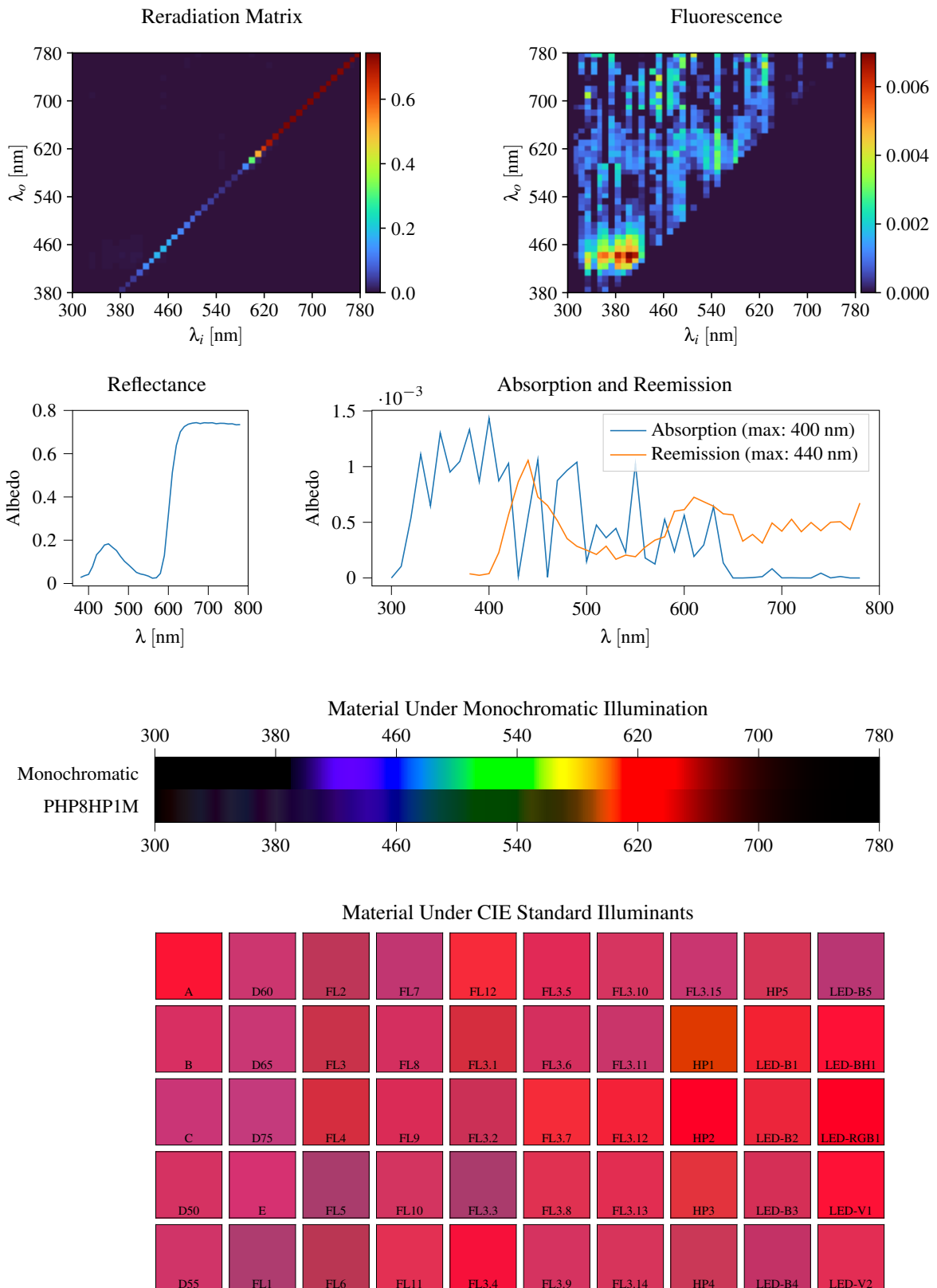
8 Gaussians max

Scaling factor: 124.4101487785859

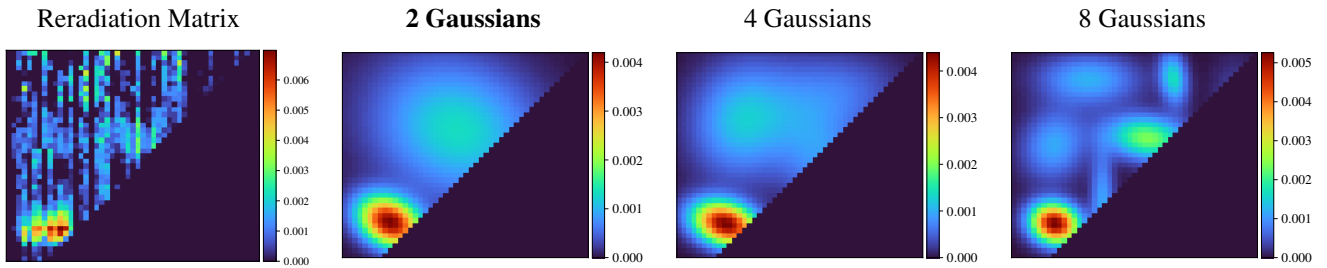
Gaussians:

Weight	Mean		Covariance			
0.325072812	413.952375093	442.420504730	2384.698448749	-446.892938227	-446.892938227	1334.173418077
0.115871527	605.986878641	500.766946289	7083.480605486	-1069.503097172	-1069.503097172	5899.627418859
0.152417655	465.812239993	583.479629687	1766.327823598	523.078689294	523.078689294	3705.978988940
0.120742455	344.824322539	681.095987880	827.450724268	-79.086160555	-79.086160555	5705.598333885
0.037644730	736.222671160	713.118147801	4083.099141888	1796.979086256	1796.979086256	2917.305830638
0.059238123	604.643644322	720.779319755	1394.904259476	316.648987473	316.648987473	2513.725884176
0.188000600	469.046000690	731.642234636	2148.446439719	195.406703406	195.406703406	1366.565158867

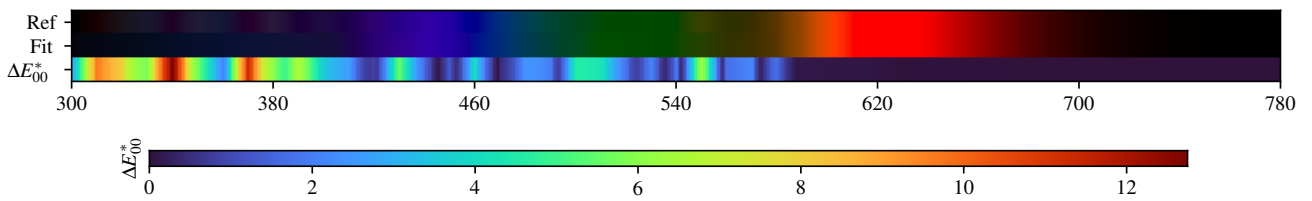
3.91. PHP8HP1M



PHP8HP1M - Weighted Expectation-Maximization - 2 Gaussians



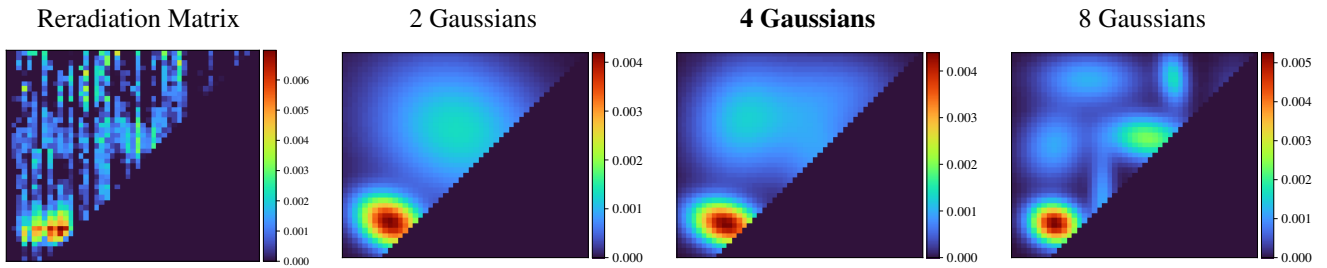
Fitted Material Under Monochromatic Illumination



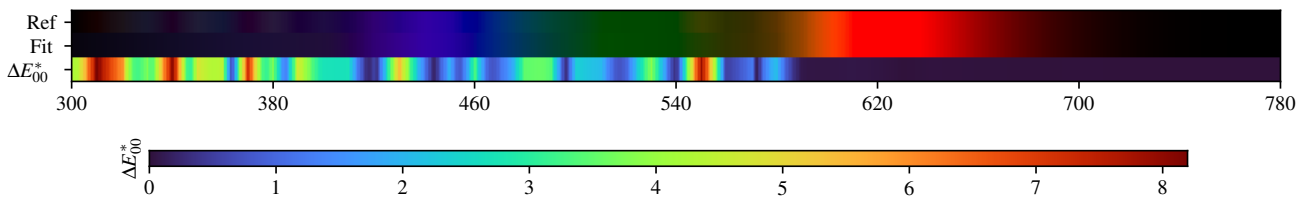
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.32$	$\Delta E = 0.20$	$\Delta E = 0.29$	$\Delta E = 0.05$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.29$	$\Delta E = 0.35$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.28$	$\Delta E = 0.33$	$\Delta E = 0.14$	$\Delta E = 0.23$	$\Delta E = 0.12$	$\Delta E = 0.24$	$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.17$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.04$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.25$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.30$	$\Delta E = 0.36$	$\Delta E = 0.30$	$\Delta E = 0.13$	$\Delta E = 0.29$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.26$	$\Delta E = 0.24$	$\Delta E = 0.25$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.31$	$\Delta E = 0.29$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.29$	$\Delta E = 0.30$	$\Delta E = 0.31$

PHP8HP1M - Weighted Expectation-Maximization - 4 Gaussians



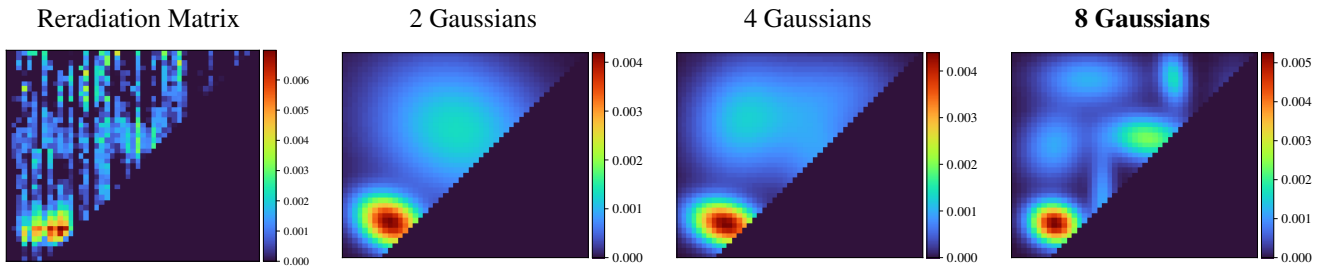
Fitted Material Under Monochromatic Illumination



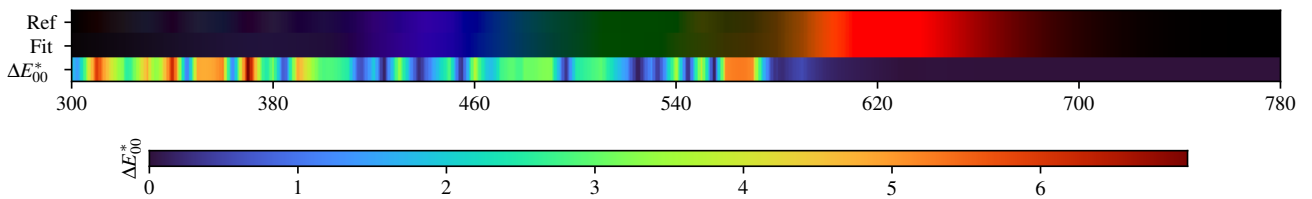
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.38$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.33$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.05$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.25$	$\Delta E = 0.38$	$\Delta E = 0.19$	$\Delta E = 0.27$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.03$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.24$	$\Delta E = 0.21$	$\Delta E = 0.33$	$\Delta E = 0.05$	$\Delta E = 0.31$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.09$

PHP8HP1M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.21$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.08$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.16$
B $\Delta E = 0.14$	D65 $\Delta E = 0.16$	FL3 $\Delta E = 0.23$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.28$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.12$	HP1 $\Delta E = 0.38$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.13$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.24$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.23$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.19$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.15$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.21$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.27$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.31$
D55 $\Delta E = 0.16$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.23$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.18$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.31$	LED-B4 $\Delta E = 0.17$	LED-V2 $\Delta E = 0.27$

PHP8HP1M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.027800	0.035981	0.041937	0.078065	0.132746	0.152888	0.177881	0.183214	0.167179	0.152208	0.125463
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.102640	0.086397	0.069045	0.051226	0.044007	0.040073	0.034006	0.024494	0.026285	0.046521	0.129195
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.316509	0.512704	0.638527	0.701218	0.725409	0.736463	0.741260	0.743582	0.739252	0.743202	0.742187
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.743093	0.738582	0.740702	0.740324	0.737596	0.738281	0.733565	0.734422			

2 Gaussians

Scaling factor: 124.57501855641577

Gaussians:

Weight	Mean		Covariance			
0.699098791	522.068722862	631.000511663	12451.575580777	-1571.592451662	-1571.592451662	9041.277890947
0.300901209	389.375356934	446.299330681	1830.952054500	-420.813528148	-420.813528148	1224.864248060

4 Gaussians

Scaling factor: 121.86326212921904

Gaussians:

Weight	Mean		Covariance			
0.136535559	621.562324432	705.836569494	6629.115712428	-101.756018610	-101.756018610	3065.534340487
0.300214096	392.633338205	442.794020923	1998.878710885	-350.440884068	-350.440884068	938.518178743
0.313783040	424.058226341	648.146833239	4437.381982467	302.987859875	302.987859875	5912.608330055
0.249467305	586.607639936	572.184887944	4897.817539928	-2735.197976933	-2735.197976933	8196.865006873

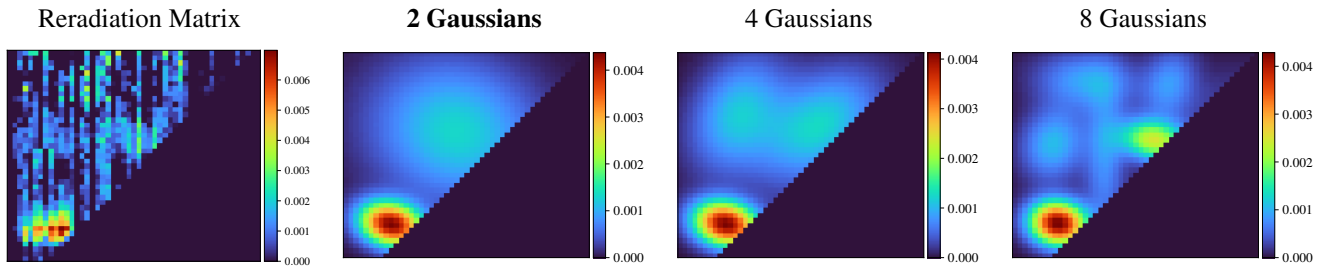
8 Gaussians

Scaling factor: 114.68908043858873

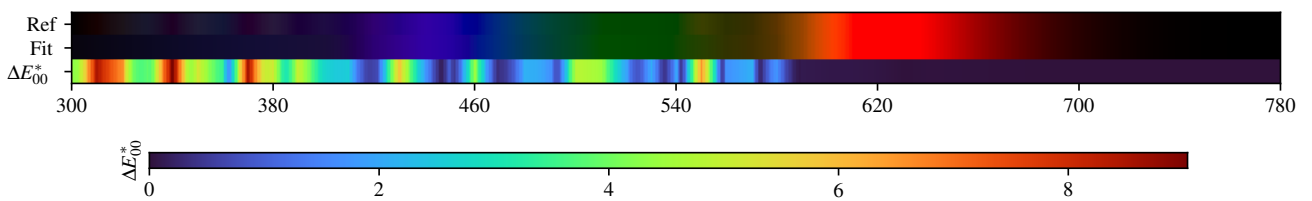
Gaussians:

Weight	Mean		Covariance			
0.059871451	616.176059670	732.291418220	356.981097668	-116.985080496	-116.985080496	1290.928467485
0.067620104	475.431666641	485.403047768	245.035642540	-33.370561668	-33.370561668	4963.560952209
0.133173848	379.842059956	599.429644869	1871.895469923	195.810378886	195.810378886	2322.127350609
0.033367821	737.102271803	702.217927273	1168.113333365	18.879644153	18.879644153	2744.139776406
0.215035021	564.497862897	613.714029781	3016.467238291	-260.462068783	-260.462068783	901.845098026
0.074951744	631.638950690	454.429967043	5500.454071788	17.218907850	17.218907850	2498.236553841
0.259075205	381.301811356	443.658159615	1074.772069732	-102.329368104	-102.329368104	748.281610754
0.156904806	448.714196594	729.909812007	4520.954388286	-74.717296494	-74.717296494	1192.348018283

PHP8HP1M - Weighted variational Bayesian inference - 2 Gaussians



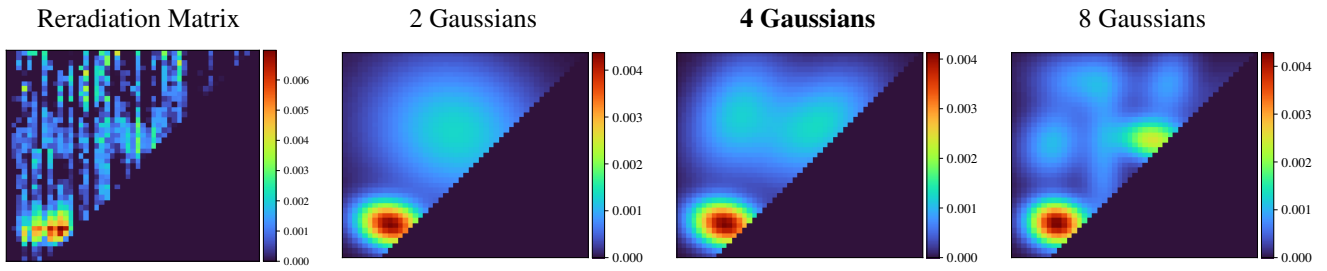
Fitted Material Under Monochromatic Illumination



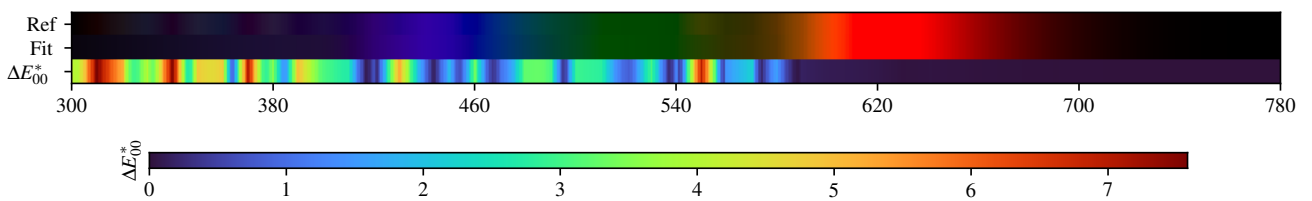
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.39$	$\Delta E = 0.25$	$\Delta E = 0.39$	$\Delta E = 0.05$	$\Delta E = 0.27$	$\Delta E = 0.14$	$\Delta E = 0.37$	$\Delta E = 0.36$	$\Delta E = 0.46$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.37$	$\Delta E = 0.40$	$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.14$	$\Delta E = 0.32$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.20$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.45$	$\Delta E = 0.40$	$\Delta E = 0.13$	$\Delta E = 0.26$	$\Delta E = 0.24$	$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.22$	$\Delta E = 0.29$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.37$	$\Delta E = 0.41$	$\Delta E = 0.39$	$\Delta E = 0.16$	$\Delta E = 0.38$	$\Delta E = 0.11$	$\Delta E = 0.23$	$\Delta E = 0.30$	$\Delta E = 0.31$	$\Delta E = 0.28$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.39$	$\Delta E = 0.24$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.29$	$\Delta E = 0.34$	$\Delta E = 0.38$	$\Delta E = 0.39$

PHP8HP1M - Weighted variational Bayesian inference - 4 Gaussians



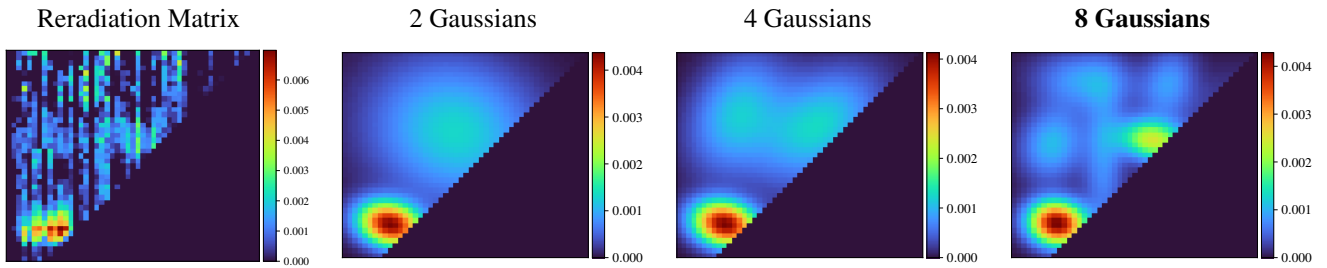
Fitted Material Under Monochromatic Illumination



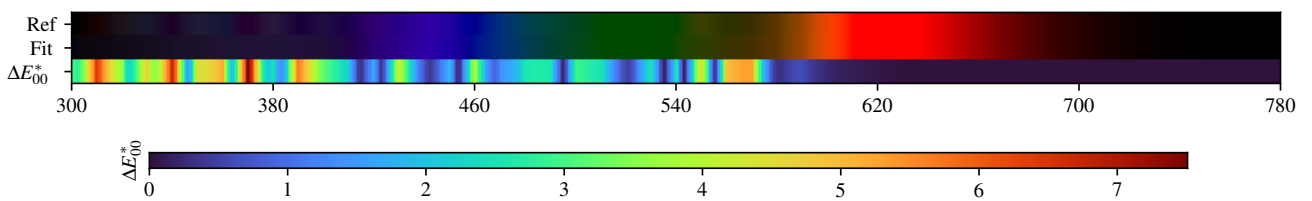
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.05$	$\Delta E = 0.27$	$\Delta E = 0.03$	$\Delta E = 0.12$	$\Delta E = 0.12$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.03$	$\Delta E = 0.08$	$\Delta E = 0.02$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.03$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.26$	$\Delta E = 0.06$	$\Delta E = 0.16$	$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.23$	$\Delta E = 0.06$	$\Delta E = 0.20$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.09$

PHP8HP1M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.26$	$\Delta E = 0.24$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.21$	$\Delta E = 0.27$	$\Delta E = 0.26$	$\Delta E = 0.14$	$\Delta E = 0.30$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.43$	$\Delta E = 0.20$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.29$	$\Delta E = 0.27$	$\Delta E = 0.17$	$\Delta E = 0.26$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.21$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.23$	$\Delta E = 0.34$	$\Delta E = 0.22$	$\Delta E = 0.13$	$\Delta E = 0.25$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.20$	$\Delta E = 0.28$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.32$	$\Delta E = 0.23$	$\Delta E = 0.27$

PHP8HP1M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.027800	0.035981	0.041937	0.078065	0.132746	0.152888	0.177881	0.183214	0.167179	0.152208	0.125463
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.102640	0.086397	0.069045	0.051226	0.044007	0.040073	0.034006	0.024494	0.026285	0.046521	0.129195
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.316509	0.512704	0.638527	0.701218	0.725409	0.736463	0.741260	0.743582	0.739252	0.743202	0.742187
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.743093	0.738582	0.740702	0.740324	0.737596	0.738281	0.733565	0.734422			

2 Gaussians max

Scaling factor: 124.94718584453581

Gaussians:

Weight	Mean	Covariance
0.276756660	389.773702430	442.062117788
0.723243340	517.711506372	626.641446321
		1844.715416628
		-237.045269342
		-237.045269342
		920.096209056
		12684.713992418
		-1025.360504575
		-1025.360504575
		9368.211555016

4 Gaussians max

Scaling factor: 118.9897335182254

Gaussians:

Weight	Mean	Covariance
0.287012975	390.951471097	442.723574118
0.066376376	625.151924435	445.364779143
0.374929255	576.533566595	637.205987068
0.271681394	413.621392200	662.611142502
		1893.011126746
		-210.077256431
		-210.077256431
		947.316325325
		7488.092552092
		197.559053147
		197.559053147
		2534.494594402
		6605.799948578
		2215.468250305
		2215.468250305
		5566.011864779
		3961.915929498
		1351.370864766
		1351.370864766
		6033.038529827

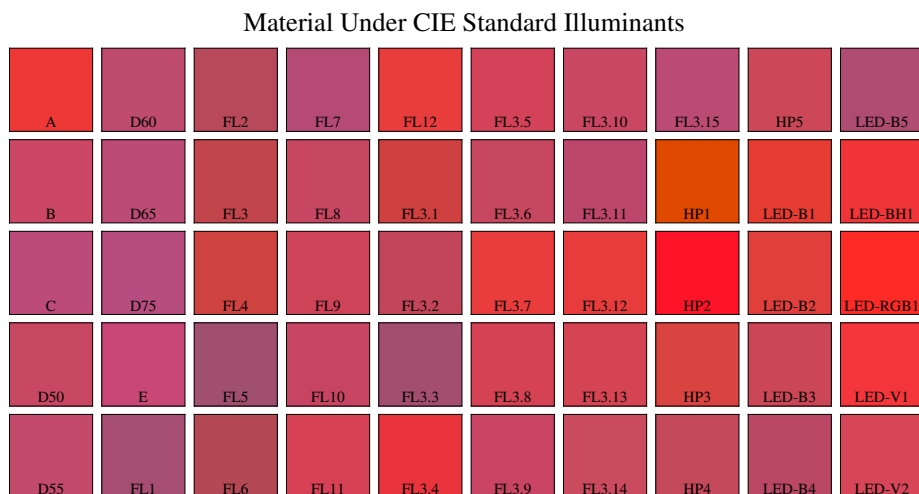
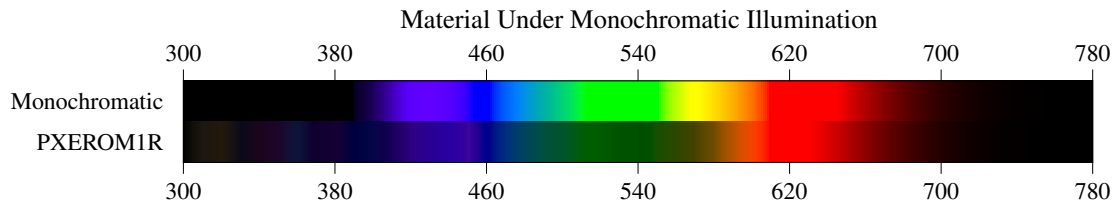
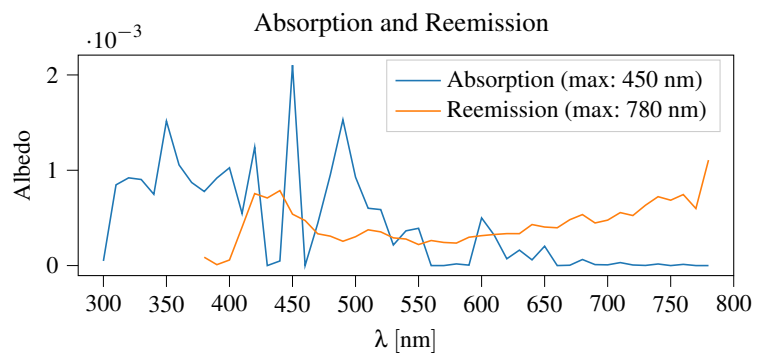
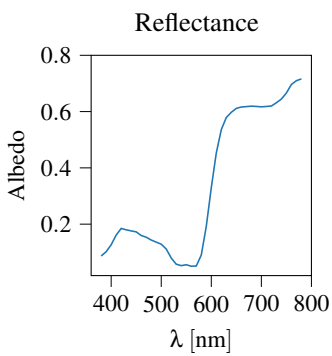
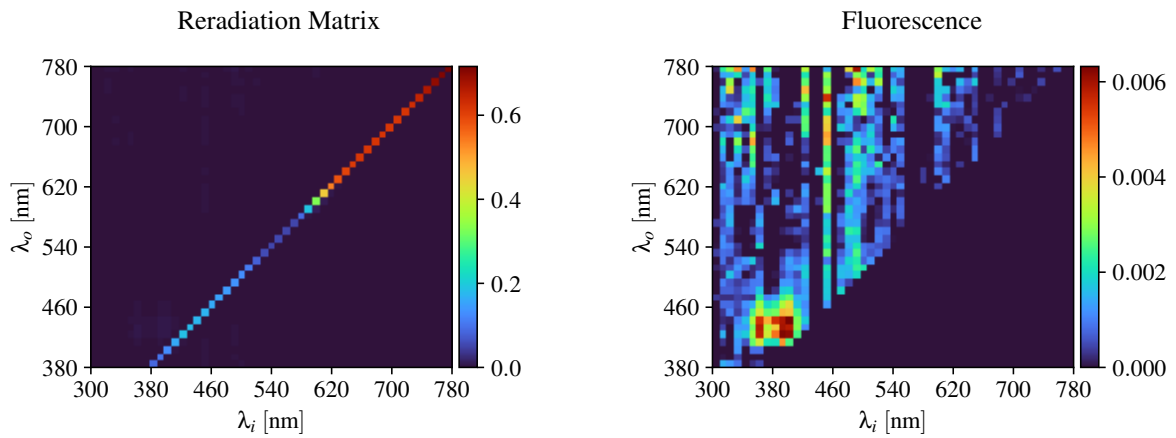
8 Gaussians max

Scaling factor: 116.55036427983097

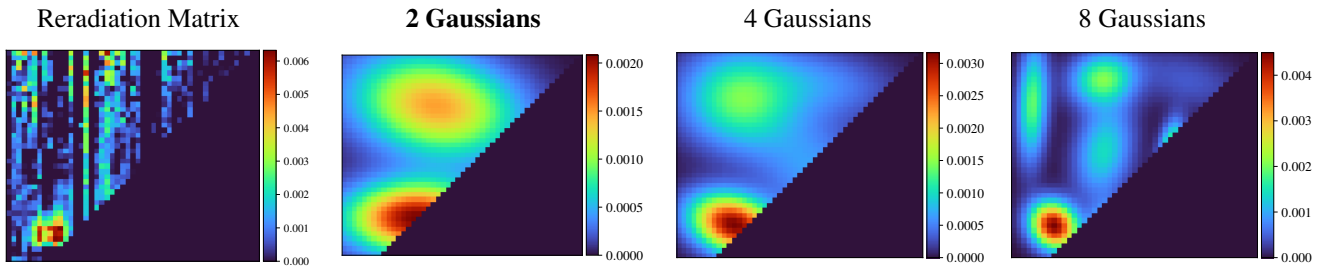
Gaussians:

Weight	Mean	Covariance
0.270109382	385.522745446	444.039260114
0.111700154	477.954996967	576.950382569
0.080636110	625.725045095	458.771996731
0.124224259	376.240061847	601.681962214
0.159419765	574.897699990	609.178934867
0.046962505	696.072235699	683.322784653
0.073564655	606.148849296	721.642074963
0.133383171	442.084972524	727.620804055
		1482.254253539
		-89.358082742
		-89.358082742
		905.974996159
		718.443743387
		101.612367282
		101.612367282
		9925.943589979
		6728.092936909
		198.554142196
		198.554142196
		3153.801824261
		1889.377306715
		212.412215179
		212.412215179
		2412.415277743
		2069.008227667
		-219.719105891
		-219.719105891
		782.280885176
		5042.020324166
		2078.843053833
		2078.843053833
		3460.734288406
		1272.884972703
		339.269610475
		339.269610475
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		4742.412956323
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		-226.837272682
		1572.781094650

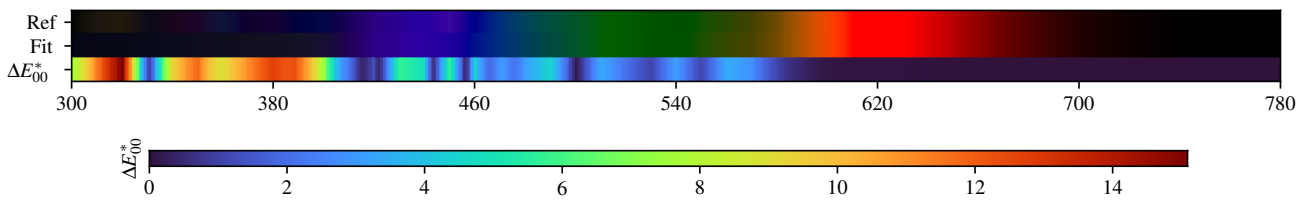
3.92. PXEROMIR



PXEROMIR - Weighted Expectation-Maximization - 2 Gaussians



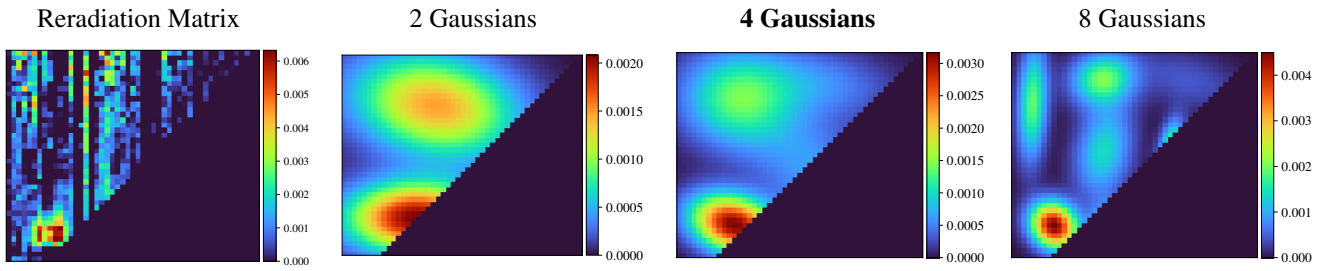
Fitted Material Under Monochromatic Illumination



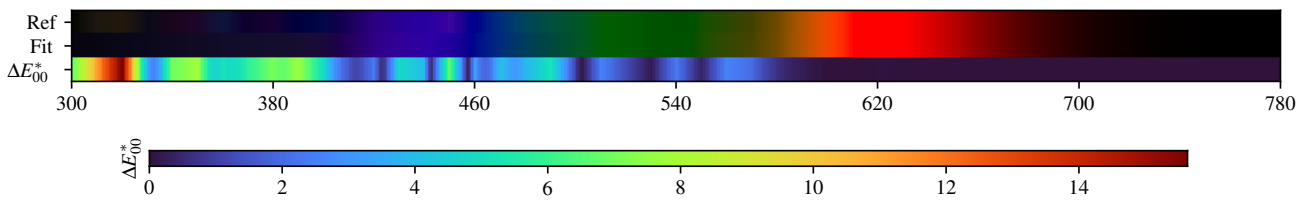
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.45$	$\Delta E = 0.33$	$\Delta E = 0.30$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.31$	$\Delta E = 0.38$	$\Delta E = 0.27$	$\Delta E = 0.33$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.51$	$\Delta E = 0.32$	$\Delta E = 0.23$	$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.24$	$\Delta E = 0.23$	$\Delta E = 0.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.31$	$\Delta E = 0.59$	$\Delta E = 0.30$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.25$	$\Delta E = 0.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.33$	$\Delta E = 0.94$	$\Delta E = 0.39$	$\Delta E = 0.24$	$\Delta E = 0.36$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.33$	$\Delta E = 0.18$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.39$	$\Delta E = 0.36$	$\Delta E = 0.34$	$\Delta E = 0.21$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.28$	$\Delta E = 0.36$	$\Delta E = 0.31$	$\Delta E = 0.23$

PXEROMIR - Weighted Expectation-Maximization - 4 Gaussians



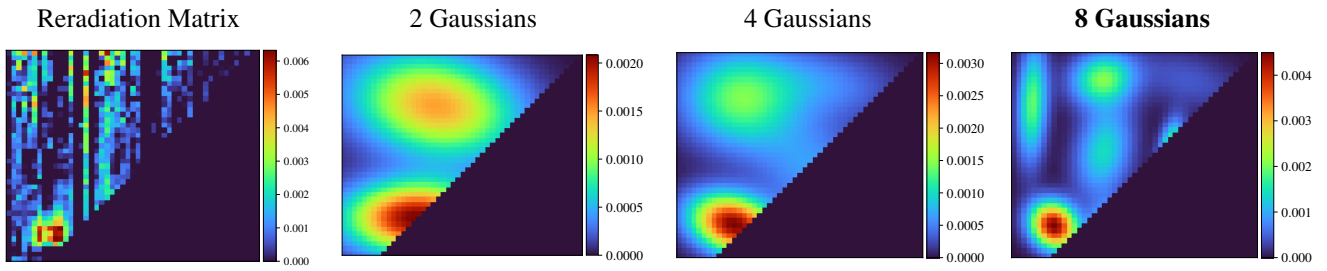
Fitted Material Under Monochromatic Illumination



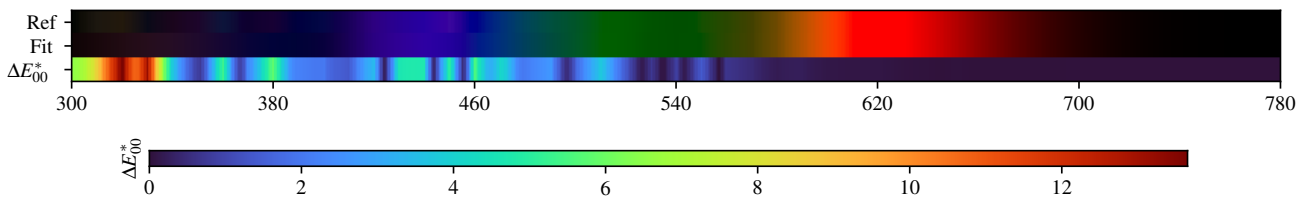
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.33$	$\Delta E = 0.30$	$\Delta E = 0.38$	$\Delta E = 0.16$	$\Delta E = 0.30$	$\Delta E = 0.48$	$\Delta E = 0.30$	$\Delta E = 0.47$	$\Delta E = 0.52$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.38$	$\Delta E = 0.33$	$\Delta E = 0.24$	$\Delta E = 0.35$	$\Delta E = 0.17$	$\Delta E = 0.37$	$\Delta E = 0.41$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.26$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.44$	$\Delta E = 0.34$	$\Delta E = 0.20$	$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.24$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.33$	$\Delta E = 0.25$	$\Delta E = 0.44$	$\Delta E = 0.38$	$\Delta E = 0.42$	$\Delta E = 0.27$	$\Delta E = 0.31$	$\Delta E = 0.28$	$\Delta E = 0.44$	$\Delta E = 0.41$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.33$	$\Delta E = 0.44$	$\Delta E = 0.29$	$\Delta E = 0.30$	$\Delta E = 0.11$	$\Delta E = 0.36$	$\Delta E = 0.46$	$\Delta E = 0.39$	$\Delta E = 0.43$	$\Delta E = 0.56$

PXEROMIR - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.25$	$\Delta E = 0.16$	$\Delta E = 0.12$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.25$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.10$	$\Delta E = 0.22$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.10$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.14$

PXEROMIR - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.086824	0.102017	0.126737	0.161104	0.184703	0.179882	0.176021	0.172585	0.159612	0.153625	0.143557
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.136082	0.128853	0.111621	0.079579	0.057596	0.052620	0.055814	0.050460	0.051342	0.090178	0.192285
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.329734	0.453177	0.535963	0.579048	0.597464	0.611410	0.616307	0.617683	0.619295	0.618305	0.616894
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.618172	0.619817	0.631346	0.644559	0.666076	0.696358	0.709866	0.716074			

2 Gaussians

Scaling factor: 137.453170345875

Gaussians:

Weight	Mean		Covariance			
0.451307326	446.239466429	451.305705632	9284.401031518	-59.638342053	-59.638342053	2423.952494973
0.548692674	484.414953017	680.237346444	13099.014218989	-1567.613011190	-1567.613011190	5283.819234202

4 Gaussians

Scaling factor: 129.67141828027607

Gaussians:

Weight	Mean		Covariance			
0.324635541	417.399515868	690.479142120	5898.387094116	-211.191018525	-211.191018525	4301.119409864
0.209805652	573.871208945	541.872323922	7469.757046057	-2129.505130428	-2129.505130428	6446.342663704
0.347187648	409.638075729	441.593081268	3371.969218216	-592.240554541	-592.240554541	1638.189664166
0.118371160	583.424677916	724.511030219	9662.971863864	-985.194292504	-985.194292504	2306.217908652

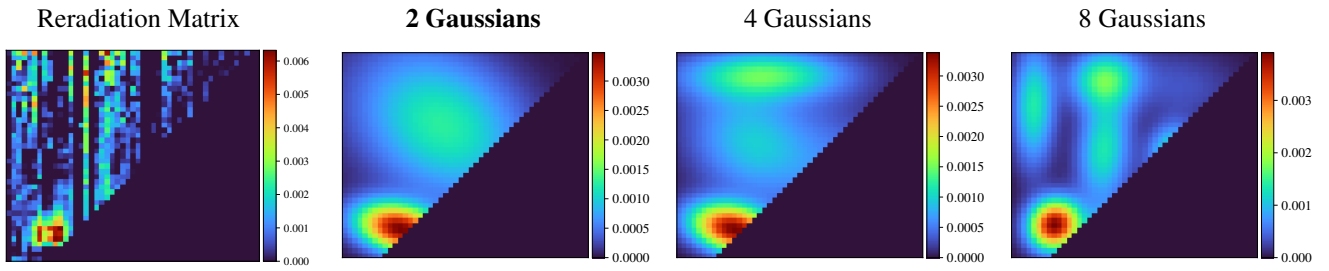
8 Gaussians

Scaling factor: 122.38236454734044

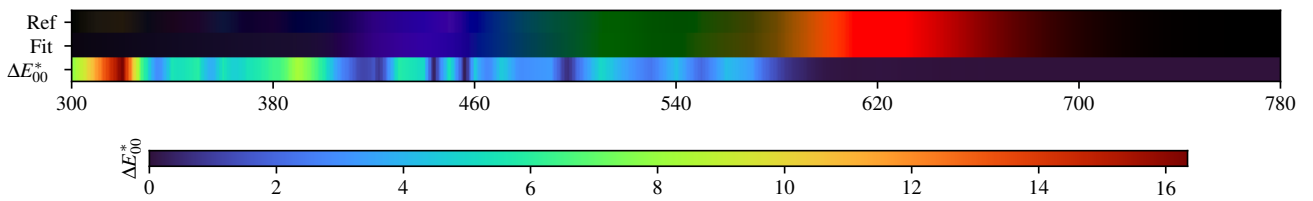
Gaussians:

Weight	Mean		Covariance			
0.150102913	336.962990180	682.595771852	401.050464060	223.092500887	223.092500887	5878.178062737
0.067607807	612.341612989	590.648010158	274.531016927	188.352965850	188.352965850	1407.484944391
0.225601661	379.367882404	439.583725879	988.167321521	-139.430276450	-139.430276450	990.838530392
0.069361499	644.341330754	728.728863689	5560.809778445	-1179.721451158	-1179.721451158	1875.110830672
0.169782753	478.037365500	588.191651401	1480.359620731	519.942829910	519.942829910	3843.061234193
0.067835812	647.201622589	459.839238718	4543.055377502	875.334854818	875.334854818	3619.599876864
0.093594732	486.700693832	423.220481742	587.382528675	-4.322992957	-4.322992957	1281.085183125
0.156112822	476.007039220	731.142187434	1817.626362148	120.872275257	120.872275257	1307.425779994

PXEROMIR - Weighted variational Bayesian inference - 2 Gaussians



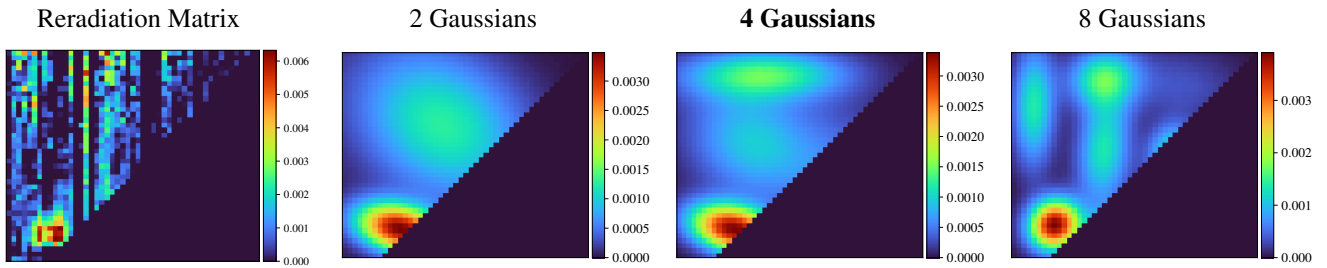
Fitted Material Under Monochromatic Illumination



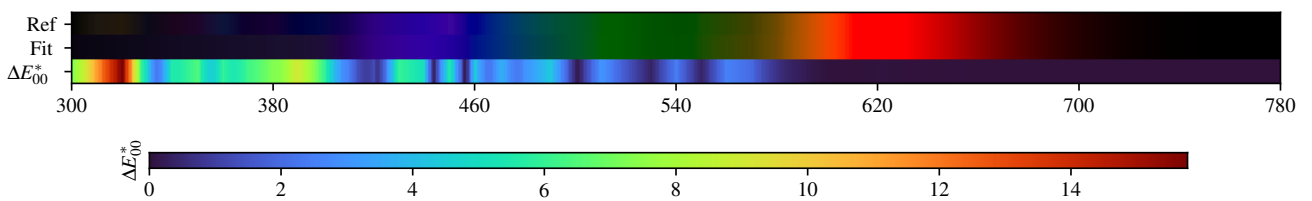
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.36$	$\Delta E = 0.65$	$\Delta E = 0.57$	$\Delta E = 0.63$	$\Delta E = 0.31$	$\Delta E = 0.39$	$\Delta E = 0.36$	$\Delta E = 0.68$	$\Delta E = 0.49$	$\Delta E = 0.51$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.53$	$\Delta E = 0.69$	$\Delta E = 0.51$	$\Delta E = 0.49$	$\Delta E = 0.42$	$\Delta E = 0.43$	$\Delta E = 0.45$	$\Delta E = 0.33$	$\Delta E = 0.33$	$\Delta E = 0.36$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.65$	$\Delta E = 0.76$	$\Delta E = 0.46$	$\Delta E = 0.46$	$\Delta E = 0.48$	$\Delta E = 0.29$	$\Delta E = 0.30$	$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.30$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.55$	$\Delta E = 0.87$	$\Delta E = 0.74$	$\Delta E = 0.44$	$\Delta E = 0.67$	$\Delta E = 0.36$	$\Delta E = 0.34$	$\Delta E = 0.43$	$\Delta E = 0.39$	$\Delta E = 0.37$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.60$	$\Delta E = 0.71$	$\Delta E = 0.59$	$\Delta E = 0.38$	$\Delta E = 0.36$	$\Delta E = 0.39$	$\Delta E = 0.38$	$\Delta E = 0.54$	$\Delta E = 0.47$	$\Delta E = 0.46$

PXEROMIR - Weighted variational Bayesian inference - 4 Gaussians



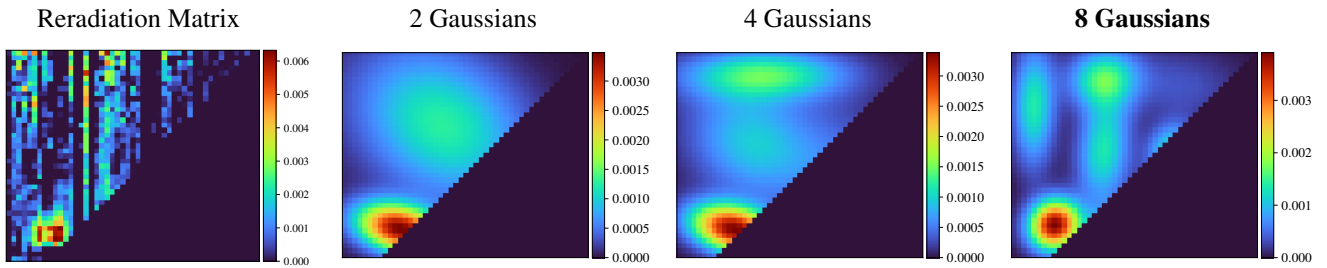
Fitted Material Under Monochromatic Illumination



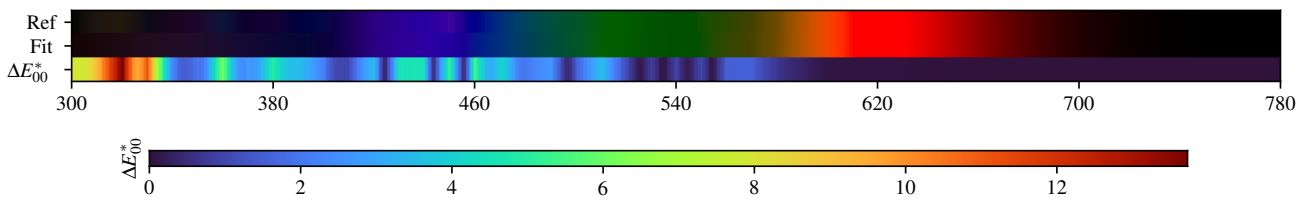
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.32$	$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.21$	$\Delta E = 0.33$	$\Delta E = 0.28$	$\Delta E = 0.20$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.24$	$\Delta E = 0.36$	$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.30$	$\Delta E = 0.42$	$\Delta E = 0.25$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.24$	$\Delta E = 0.63$	$\Delta E = 0.34$	$\Delta E = 0.19$	$\Delta E = 0.30$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.25$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.32$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.32$	$\Delta E = 0.19$	$\Delta E = 0.29$

PXEROMIR - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.25$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.29$	$\Delta E = 0.19$	$\Delta E = 0.14$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.19$	$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.30$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 0.33$	$\Delta E = 0.29$	$\Delta E = 0.11$	$\Delta E = 0.26$	$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.16$

PXEROMIR - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.086824	0.102017	0.126737	0.161104	0.184703	0.179882	0.176021	0.172585	0.159612	0.153625	0.143557
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.136082	0.128853	0.111621	0.079579	0.057596	0.052620	0.055814	0.050460	0.051342	0.090178	0.192285
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.329734	0.453177	0.535963	0.579048	0.597464	0.611410	0.616307	0.617683	0.619295	0.618305	0.616894
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.618172	0.619817	0.631346	0.644559	0.666076	0.696358	0.709866	0.716074			

2 Gaussians max

Scaling factor: 134.23937922942216

Gaussians:

Weight	Mean		Covariance			
0.304840474	409.682547712	433.480363970	3405.306191713	-564.967959333	-564.967959333	1155.638652991
0.695159526	492.500670150	639.728935109	13301.946950472	-3115.907961582	-3115.907961582	10918.818932709

4 Gaussians max

Scaling factor: 128.10860498460153

Gaussians:

Weight	Mean		Covariance			
0.302117328	409.507317916	432.794448016	3329.179310172	-538.705902132	-538.705902132	1111.332612316
0.151055425	620.509445712	547.900439041	5899.062345318	-356.302542513	-356.302542513	9334.665211386
0.305562745	445.794718774	604.830295538	7302.762943747	-1118.392120424	-1118.392120424	6117.759775872
0.241264502	471.335170251	739.628113276	12100.286101878	41.768875083	41.768875083	1162.998353711

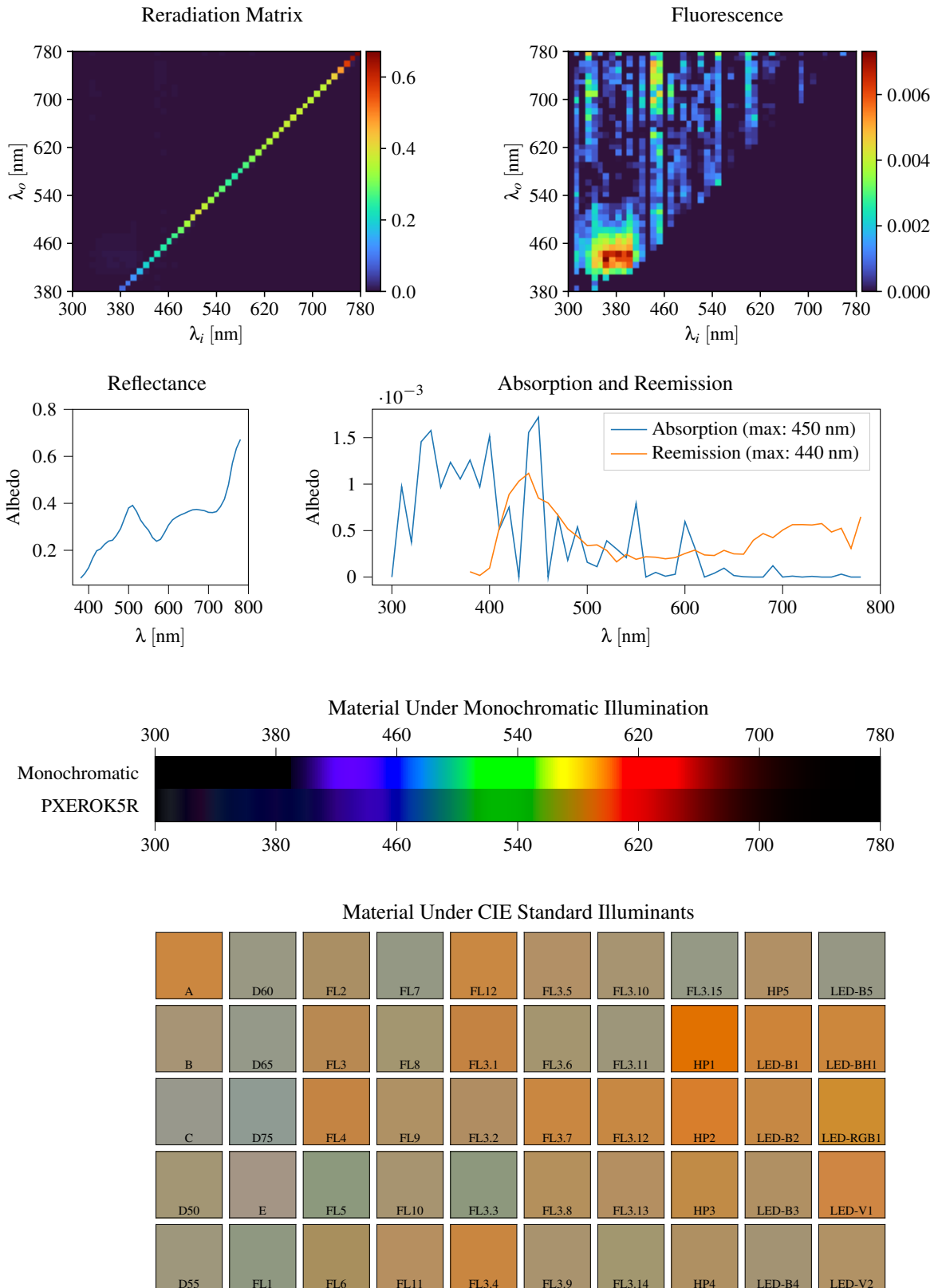
8 Gaussians max

Scaling factor: 123.59208724840954

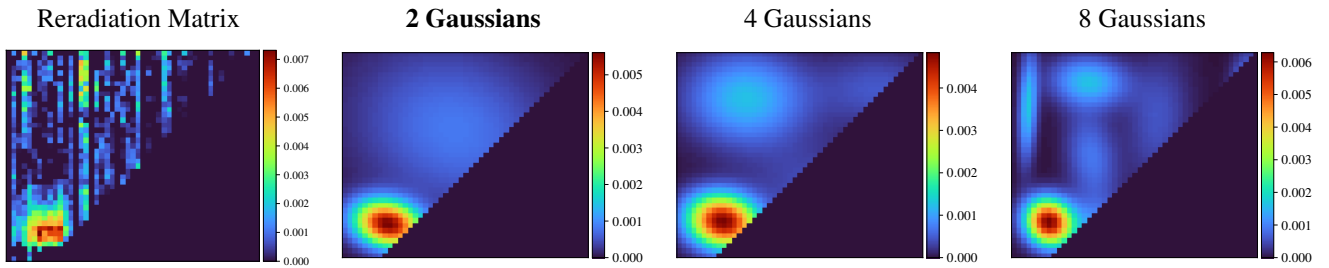
Gaussians:

Weight	Mean		Covariance			
0.223853313	380.937536979	441.258333811	1152.472031096	68.659707213	68.659707213	1111.520719329
0.086127870	486.641576130	417.512916018	973.493711405	144.581207159	144.581207159	1291.299672838
0.071481152	638.849809715	465.462143979	5181.781161336	42.448276258	42.448276258	3926.204134000
0.177566948	478.335871223	591.052628948	1262.074873691	391.767808331	391.767808331	5516.323825312
0.157446708	339.581513128	676.944790831	785.442218303	49.133000469	49.133000469	6528.540416251
0.065224706	609.399434901	590.383244752	917.863080089	202.913029700	202.913029700	1278.205937459
0.080802259	628.437185283	718.681044420	7197.143330055	-508.623763757	-508.623763757	2704.850463243
0.137497044	476.953033404	731.776222592	2145.865673450	89.758007714	89.758007714	1560.988550151

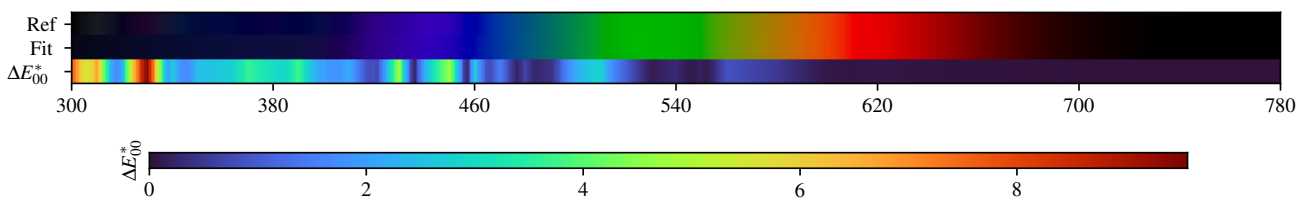
3.93. PXEROK5R



PXEROK5R - Weighted Expectation-Maximization - 2 Gaussians



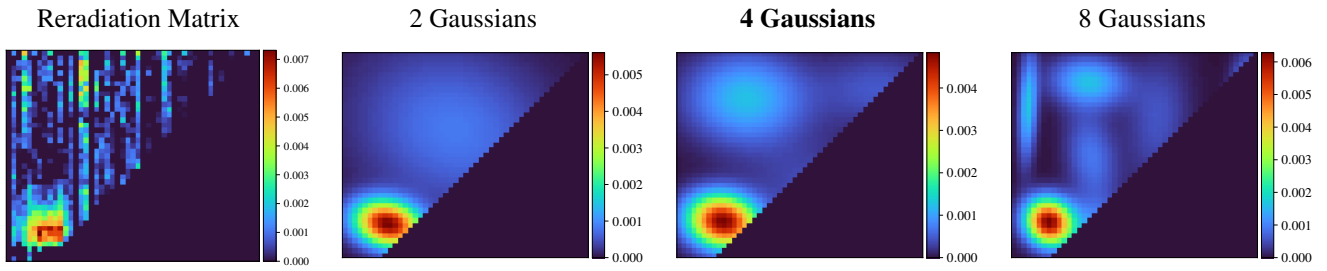
Fitted Material Under Monochromatic Illumination



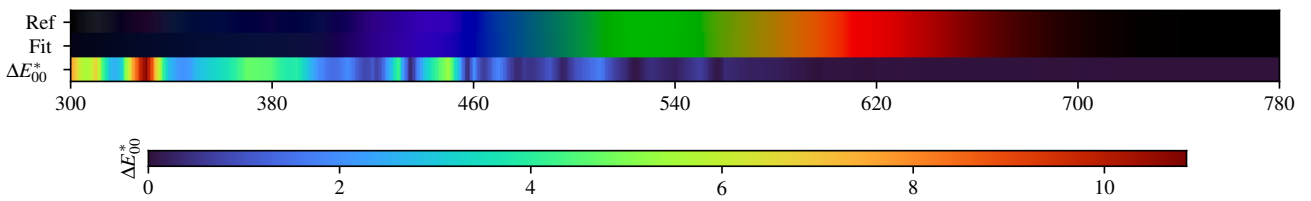
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.38$	D60 $\Delta E = 1.11$	FL2 $\Delta E = 0.70$	FL7 $\Delta E = 1.01$	FL12 $\Delta E = 0.34$	FL3.5 $\Delta E = 0.57$	FL3.10 $\Delta E = 0.69$	FL3.15 $\Delta E = 0.97$	HP5 $\Delta E = 0.81$	LED-B5 $\Delta E = 1.01$
B $\Delta E = 1.00$	D65 $\Delta E = 1.12$	FL3 $\Delta E = 0.52$	FL8 $\Delta E = 0.79$	FL3.1 $\Delta E = 0.38$	FL3.6 $\Delta E = 0.75$	FL3.11 $\Delta E = 0.84$	HP1 $\Delta E = 0.27$	LED-B1 $\Delta E = 0.33$	LED-BH1 $\Delta E = 0.39$
C $\Delta E = 1.40$	D75 $\Delta E = 1.13$	FL4 $\Delta E = 0.41$	FL9 $\Delta E = 0.59$	FL3.2 $\Delta E = 0.59$	FL3.7 $\Delta E = 0.31$	FL3.12 $\Delta E = 0.33$	HP2 $\Delta E = 0.32$	LED-B2 $\Delta E = 0.38$	LED-RGB1 $\Delta E = 0.31$
D50 $\Delta E = 0.93$	E $\Delta E = 1.18$	FL5 $\Delta E = 0.84$	FL10 $\Delta E = 0.72$	FL3.3 $\Delta E = 0.85$	FL3.8 $\Delta E = 0.48$	FL3.13 $\Delta E = 0.48$	HP3 $\Delta E = 0.54$	LED-B3 $\Delta E = 0.61$	LED-V1 $\Delta E = 0.67$
D55 $\Delta E = 1.06$	FL1 $\Delta E = 0.92$	FL6 $\Delta E = 0.65$	FL11 $\Delta E = 0.50$	FL3.4 $\Delta E = 0.31$	FL3.9 $\Delta E = 0.68$	FL3.14 $\Delta E = 0.71$	HP4 $\Delta E = 0.87$	LED-B4 $\Delta E = 0.87$	LED-V2 $\Delta E = 0.91$

PXEROK5R - Weighted Expectation-Maximization - 4 Gaussians



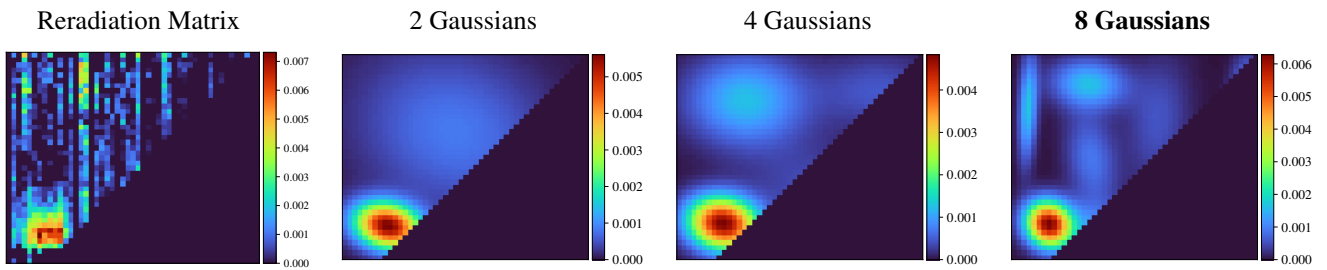
Fitted Material Under Monochromatic Illumination



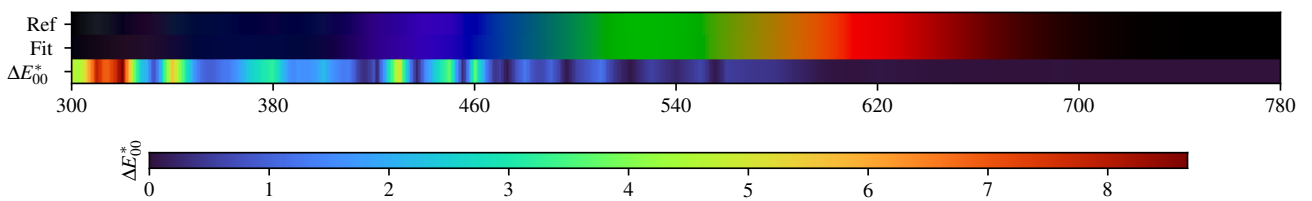
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.27$	D60 $\Delta E = 0.58$	FL2 $\Delta E = 0.45$	FL7 $\Delta E = 0.68$	FL12 $\Delta E = 0.30$	FL3.5 $\Delta E = 0.41$	FL3.10 $\Delta E = 0.55$	FL3.15 $\Delta E = 0.54$	HP5 $\Delta E = 0.67$	LED-B5 $\Delta E = 0.74$
B $\Delta E = 0.70$	D65 $\Delta E = 0.59$	FL3 $\Delta E = 0.34$	FL8 $\Delta E = 0.49$	FL3.1 $\Delta E = 0.21$	FL3.6 $\Delta E = 0.46$	FL3.11 $\Delta E = 0.64$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.25$	LED-BH1 $\Delta E = 0.34$
C $\Delta E = 1.01$	D75 $\Delta E = 0.63$	FL4 $\Delta E = 0.27$	FL9 $\Delta E = 0.41$	FL3.2 $\Delta E = 0.38$	FL3.7 $\Delta E = 0.23$	FL3.12 $\Delta E = 0.19$	HP2 $\Delta E = 0.27$	LED-B2 $\Delta E = 0.29$	LED-RGB1 $\Delta E = 0.21$
D50 $\Delta E = 0.52$	E $\Delta E = 0.60$	FL5 $\Delta E = 0.54$	FL10 $\Delta E = 0.59$	FL3.3 $\Delta E = 0.50$	FL3.8 $\Delta E = 0.39$	FL3.13 $\Delta E = 0.31$	HP3 $\Delta E = 0.43$	LED-B3 $\Delta E = 0.48$	LED-V1 $\Delta E = 0.60$
D55 $\Delta E = 0.56$	FL1 $\Delta E = 0.59$	FL6 $\Delta E = 0.38$	FL11 $\Delta E = 0.46$	FL3.4 $\Delta E = 0.17$	FL3.9 $\Delta E = 0.55$	FL3.14 $\Delta E = 0.38$	HP4 $\Delta E = 0.68$	LED-B4 $\Delta E = 0.62$	LED-V2 $\Delta E = 0.75$

PXEROK5R - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.27$	FL2 $\Delta E = 0.26$	FL7 $\Delta E = 0.23$	FL12 $\Delta E = 0.19$	FL3.5 $\Delta E = 0.19$	FL3.10 $\Delta E = 0.22$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.27$	LED-B5 $\Delta E = 0.29$
B $\Delta E = 0.27$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.22$	FL8 $\Delta E = 0.21$	FL3.1 $\Delta E = 0.19$	FL3.6 $\Delta E = 0.22$	FL3.11 $\Delta E = 0.26$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.16$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.31$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.19$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.23$	FL3.7 $\Delta E = 0.18$	FL3.12 $\Delta E = 0.14$	HP2 $\Delta E = 0.15$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.25$	E $\Delta E = 0.23$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.25$	FL3.8 $\Delta E = 0.21$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 0.22$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.25$	FL11 $\Delta E = 0.23$	FL3.4 $\Delta E = 0.15$	FL3.9 $\Delta E = 0.25$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.30$	LED-B4 $\Delta E = 0.31$	LED-V2 $\Delta E = 0.27$

PXEROK5R - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.081516	0.100119	0.126266	0.166265	0.197747	0.206228	0.225690	0.239179	0.243170	0.264482	0.292464
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.336638	0.380236	0.391064	0.365272	0.328690	0.304965	0.284960	0.253922	0.238494	0.246750	0.275015
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.307175	0.329511	0.341335	0.350346	0.357327	0.365392	0.372148	0.374025	0.371437	0.368548	0.361632
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.360596	0.364687	0.385747	0.417756	0.477934	0.571424	0.634016	0.671770			

2 Gaussians

Scaling factor: 126.80042207365744

Gaussians:

Weight	Mean		Covariance			
0.619120537	516.212578024	630.546212170	17938.833062152	-2250.003313137	-2250.003313137	12935.820565748
0.380879463	385.190212247	442.881974751	2015.107717510	-258.563451871	-258.563451871	984.165058675

4 Gaussians

Scaling factor: 120.82049288370865

Gaussians:

Weight	Mean		Covariance			
0.304892315	432.262178435	693.209465795	6128.222027516	-7.112435865	-7.112435865	3602.062416130
0.170182079	581.637023023	498.616164977	10564.506770130	-2099.853042084	-2099.853042084	5871.577114980
0.419309831	387.407578073	447.668708175	2216.728134932	-186.461741955	-186.461741955	1281.699611235
0.105615776	692.012432450	711.513913166	6802.872159423	35.723198450	35.723198450	2720.634915341

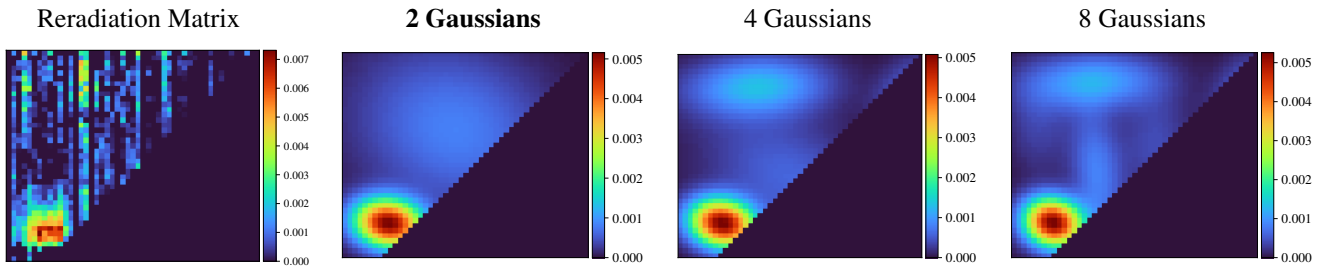
8 Gaussians

Scaling factor: 116.20259386870663

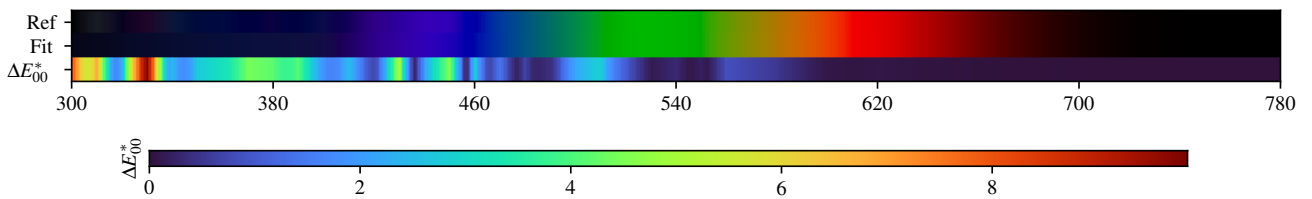
Gaussians:

Weight	Mean		Covariance			
0.146345884	448.888286853	725.321864187	2525.152164782	-112.132028531	-112.132028531	1131.351339119
0.111802679	463.280318404	435.247968431	2441.219480921	-319.198942826	-319.198942826	1484.320343299
0.310828527	368.625211434	446.554936769	934.906537788	-87.020547540	-87.020547540	944.897630626
0.058542169	758.591456684	713.836276562	451.659474751	200.093897144	200.093897144	2204.993398009
0.119470420	584.884121928	652.271703121	1950.785196665	627.930229120	627.930229120	7532.906443142
0.104355938	453.124979291	576.103795708	1191.493392453	-447.520617432	-447.520617432	4004.715249864
0.079510819	328.175209425	676.052921287	155.272812133	196.128567522	196.128567522	5002.735652790
0.069143564	673.598216481	460.880423135	5698.422224123	620.541919849	620.541919849	4329.401747086

PXEROK5R - Weighted variational Bayesian inference - 2 Gaussians



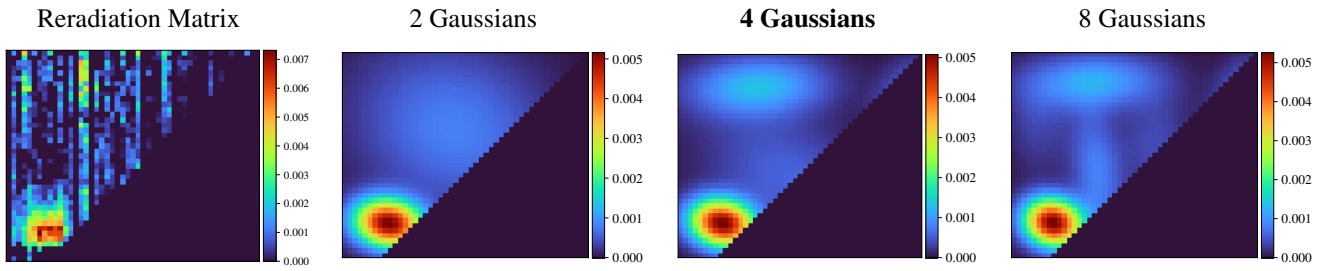
Fitted Material Under Monochromatic Illumination



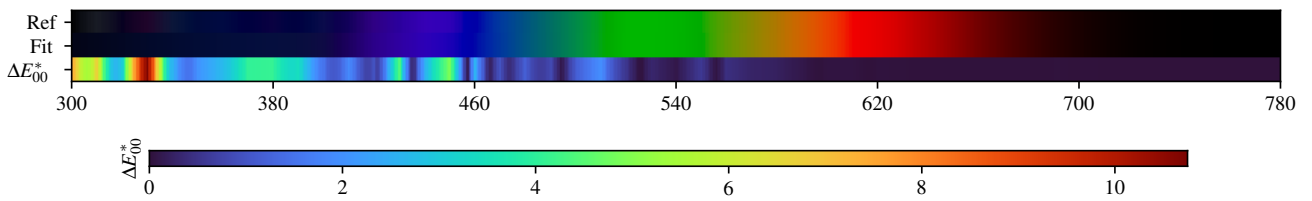
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.36$	$\Delta E = 0.97$	$\Delta E = 0.67$	$\Delta E = 0.94$	$\Delta E = 0.33$	$\Delta E = 0.54$	$\Delta E = 0.67$	$\Delta E = 0.87$	$\Delta E = 0.77$	$\Delta E = 0.96$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.91$	$\Delta E = 0.96$	$\Delta E = 0.50$	$\Delta E = 0.75$	$\Delta E = 0.37$	$\Delta E = 0.72$	$\Delta E = 0.80$	$\Delta E = 0.27$	$\Delta E = 0.33$	$\Delta E = 0.39$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.25$	$\Delta E = 0.94$	$\Delta E = 0.41$	$\Delta E = 0.57$	$\Delta E = 0.57$	$\Delta E = 0.31$	$\Delta E = 0.32$	$\Delta E = 0.32$	$\Delta E = 0.38$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.83$	$\Delta E = 0.94$	$\Delta E = 0.79$	$\Delta E = 0.69$	$\Delta E = 0.80$	$\Delta E = 0.47$	$\Delta E = 0.47$	$\Delta E = 0.52$	$\Delta E = 0.60$	$\Delta E = 0.64$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.94$	$\Delta E = 0.86$	$\Delta E = 0.63$	$\Delta E = 0.49$	$\Delta E = 0.31$	$\Delta E = 0.66$	$\Delta E = 0.68$	$\Delta E = 0.81$	$\Delta E = 0.85$	$\Delta E = 0.86$

PXEROK5R - Weighted variational Bayesian inference - 4 Gaussians



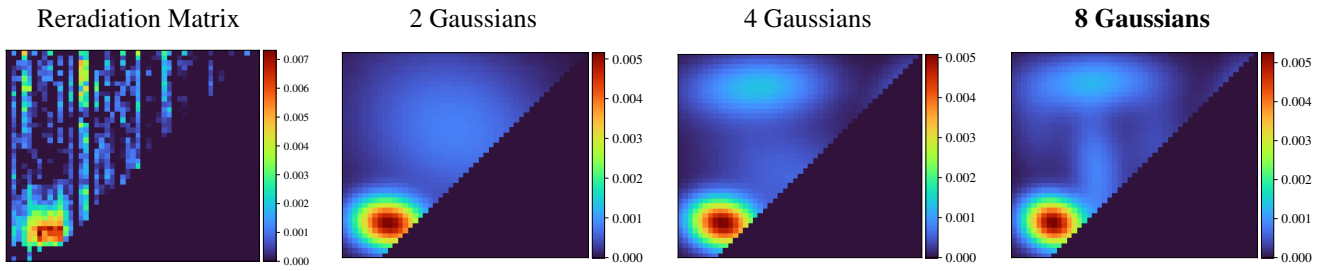
Fitted Material Under Monochromatic Illumination



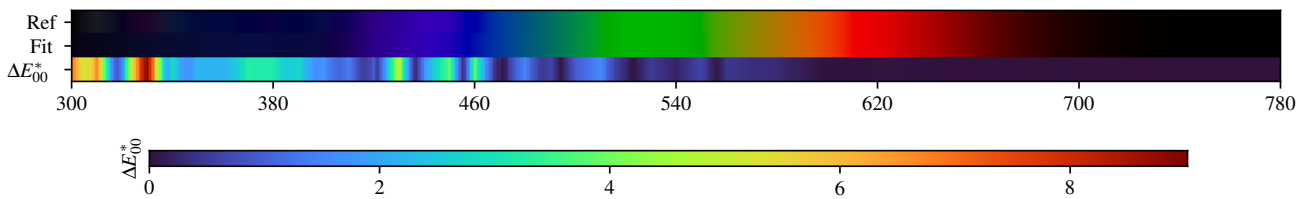
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.33$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.29$	$\Delta E = 0.20$	$\Delta E = 0.39$	$\Delta E = 0.37$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.30$	$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.41$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.48$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.05$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.29$	$\Delta E = 0.35$	$\Delta E = 0.25$	$\Delta E = 0.23$	$\Delta E = 0.09$	$\Delta E = 0.27$	$\Delta E = 0.22$	$\Delta E = 0.42$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.31$	$\Delta E = 0.20$	$\Delta E = 0.28$	$\Delta E = 0.08$	$\Delta E = 0.33$	$\Delta E = 0.10$	$\Delta E = 0.45$	$\Delta E = 0.29$	$\Delta E = 0.45$

PXEROK5R - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.08$	FL2 $\Delta E = 0.17$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.16$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.19$	FL3.15 $\Delta E = 0.07$	HP5 $\Delta E = 0.27$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.16$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.14$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.11$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.23$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.15$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.09$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.15$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.21$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.32$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.33$	LED-B4 $\Delta E = 0.17$	LED-V2 $\Delta E = 0.31$

PXEROK5R - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.081516	0.100119	0.126266	0.166265	0.197747	0.206228	0.225690	0.239179	0.243170	0.264482	0.292464
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.336638	0.380236	0.391064	0.365272	0.328690	0.304965	0.284960	0.253922	0.238494	0.246750	0.275015
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.307175	0.329511	0.341335	0.350346	0.357327	0.365392	0.372148	0.374025	0.371437	0.368548	0.361632
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.360596	0.364687	0.385747	0.417756	0.477934	0.571424	0.634016	0.671770			

2 Gaussians max

Scaling factor: 127.20263928479338

Gaussians:

Weight	Mean		Covariance			
0.386442541	386.459742651	443.993118996	2173.340414432	-176.222359237	-176.222359237	1093.093420969
0.613557459	516.915626569	631.764829556	18012.424991828	-2349.437839244	-2349.437839244	12858.730413981

4 Gaussians max

Scaling factor: 122.12899296642729

Gaussians:

Weight	Mean		Covariance			
0.377471148	383.554955174	443.983009267	1961.410244721	-192.716761251	-192.716761251	1089.810219189
0.306928292	519.511319031	537.337888845	14108.809387781	-4063.174886402	-4063.174886402	8191.422122277
0.061803236	749.218925840	708.156160240	1944.335605269	926.129074264	926.129074264	2868.749686492
0.253797324	456.141318131	720.346526136	8848.624616806	322.524921315	322.524921315	1726.725857736

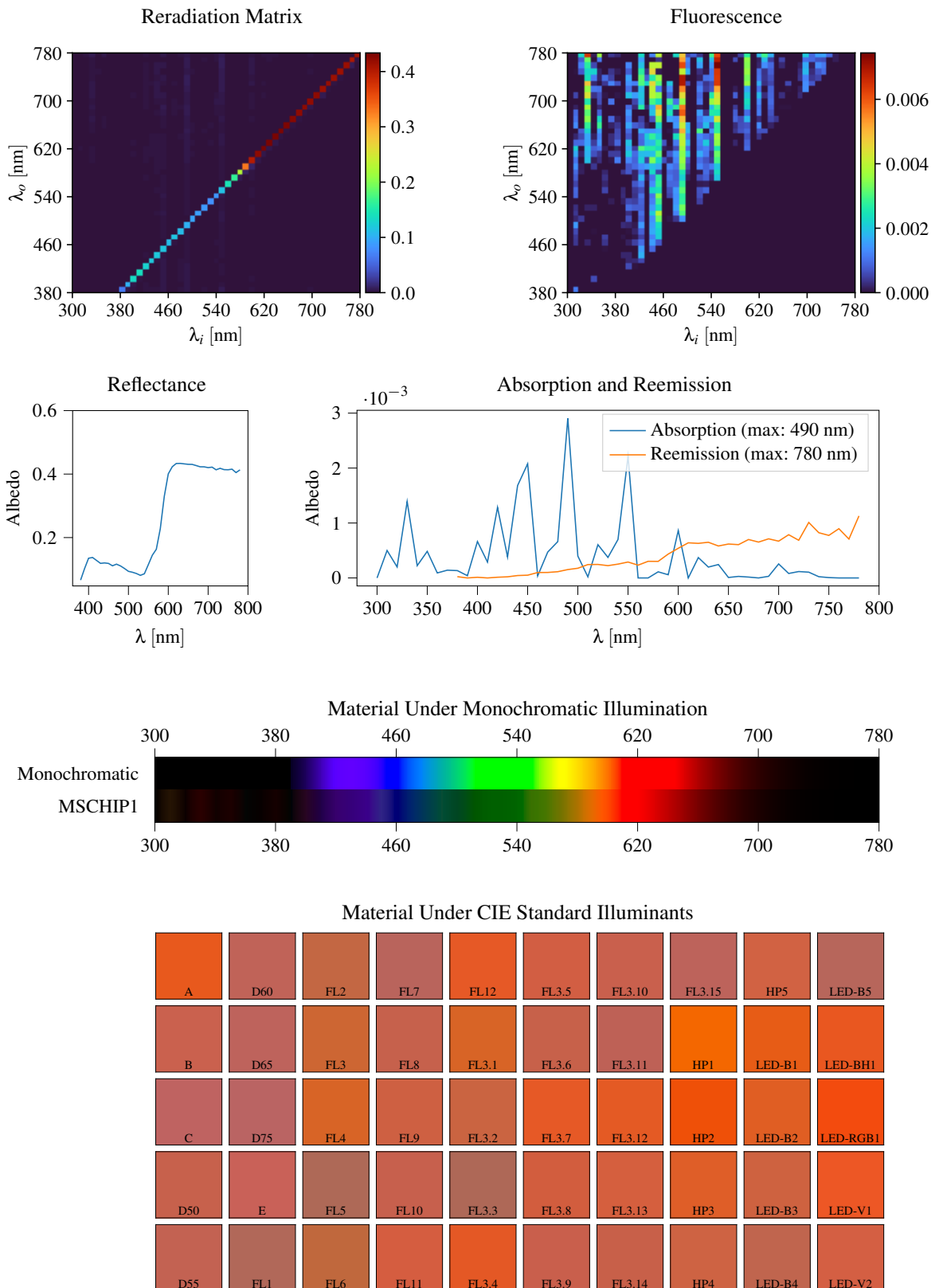
8 Gaussians max

Scaling factor: 118.31082179738067

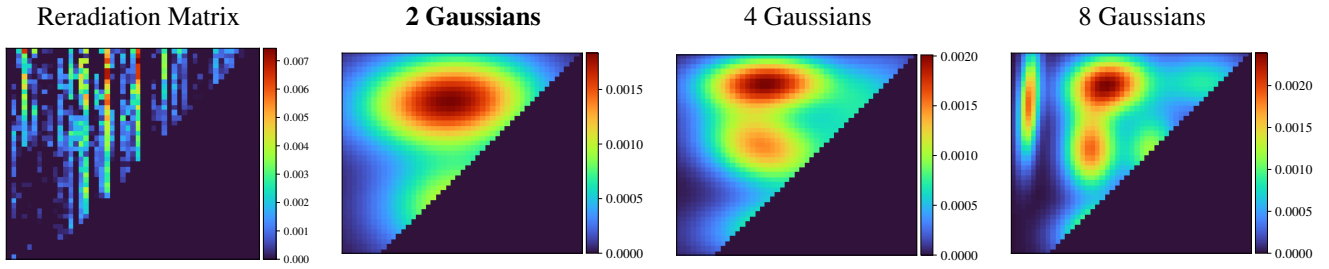
Gaussians:

Weight	Mean		Covariance			
0.356746802	377.463762437	445.297554035	1528.353192961	-142.308602104	-142.308602104	1080.737414410
0.127933962	464.087918250	547.819957685	1205.252727336	-660.122885134	-660.122885134	7517.245232254
0.085758578	594.967031518	430.843421850	11739.501214634	-355.289208665	-355.289208665	1970.984640713
0.073454509	577.957955033	609.091531952	2377.565917670	313.730189196	313.730189196	5293.559099662
0.020700545	674.071696680	553.766184346	8073.211229530	-888.480002474	-888.480002474	2679.655048865
0.064880226	348.121322686	641.667957437	2004.684932975	-273.366342780	-273.366342780	5603.457385803
0.062809967	749.594694581	708.795676712	1875.864774141	895.563180534	895.563180534	2842.370138611
0.207715411	459.492101380	726.255732154	7773.883056654	252.609009860	252.609009860	1435.476834522

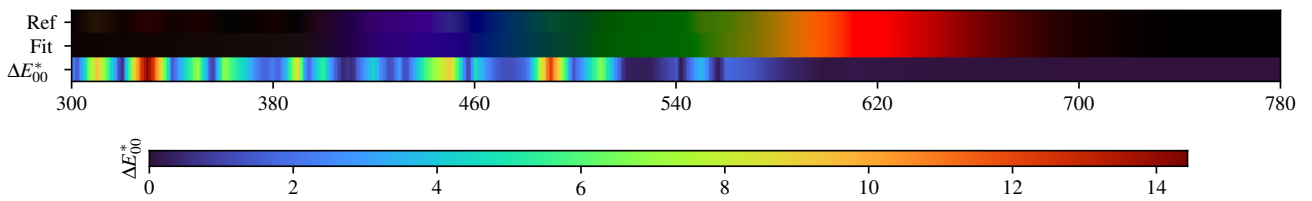
3.94. MSCHIP1



MSCHIP1 - Weighted Expectation-Maximization - 2 Gaussians



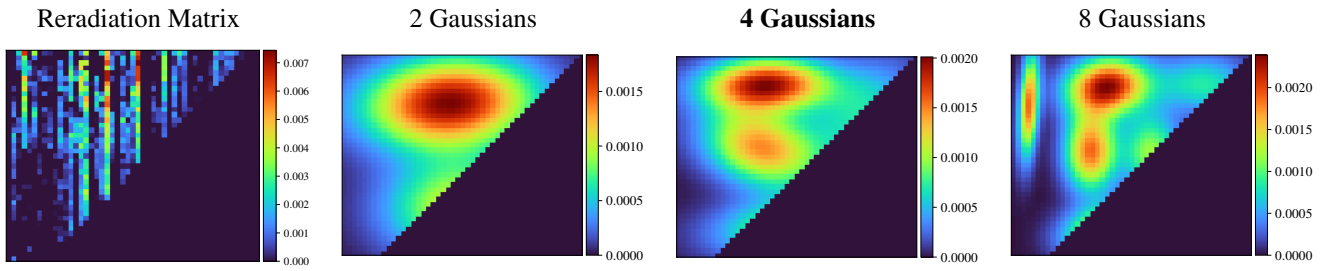
Fitted Material Under Monochromatic Illumination



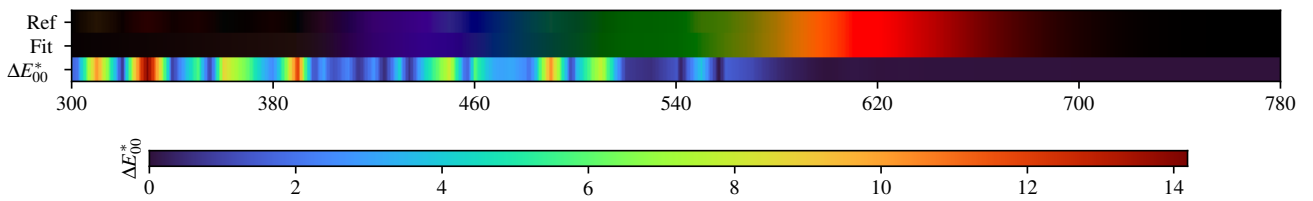
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.47$	$\Delta E = 0.29$	$\Delta E = 0.49$	$\Delta E = 0.31$	$\Delta E = 0.22$	$\Delta E = 0.69$	$\Delta E = 0.51$	$\Delta E = 0.23$	$\Delta E = 0.69$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.38$	$\Delta E = 0.52$	$\Delta E = 0.22$	$\Delta E = 0.32$	$\Delta E = 0.20$	$\Delta E = 0.27$	$\Delta E = 0.71$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.58$	$\Delta E = 0.59$	$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.37$	$\Delta E = 0.44$	$\Delta E = 0.48$	$\Delta E = 0.68$	$\Delta E = 0.40$	$\Delta E = 0.42$	$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.40$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.42$	$\Delta E = 0.49$	$\Delta E = 0.27$	$\Delta E = 0.52$	$\Delta E = 0.12$	$\Delta E = 0.58$	$\Delta E = 0.31$	$\Delta E = 0.22$	$\Delta E = 0.52$	$\Delta E = 0.27$

MSCHIP1 - Weighted Expectation-Maximization - 4 Gaussians



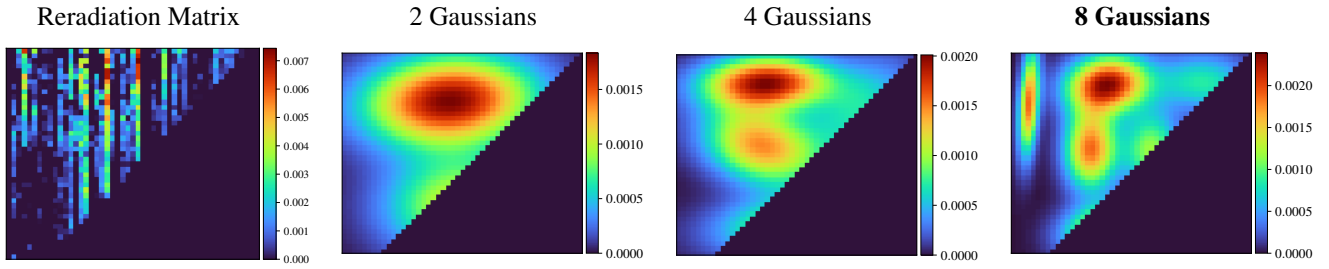
Fitted Material Under Monochromatic Illumination



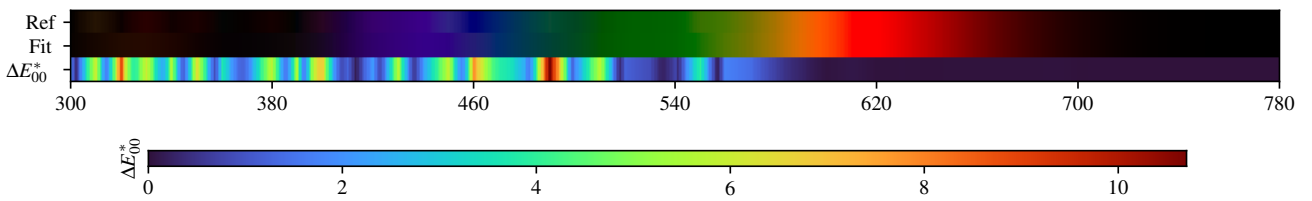
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.32$	$\Delta E = 0.10$	$\Delta E = 0.20$	$\Delta E = 0.28$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.30$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.17$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.30$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.13$	$\Delta E = 0.31$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.14$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.18$

MSCHIP1 - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.22$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.14$	$\Delta E = 0.25$	$\Delta E = 0.27$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.17$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.21$	$\Delta E = 0.18$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.17$

MSCHIP1 - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.066038	0.102521	0.134952	0.137258	0.127981	0.118739	0.120149	0.118555	0.111101	0.116263	0.110734
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.102718	0.093655	0.090786	0.086824	0.080974	0.085945	0.114942	0.144459	0.163165	0.228264	0.329907
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.400632	0.423073	0.433320	0.433678	0.432161	0.430797	0.430492	0.426824	0.422942	0.422814	0.420379
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.421882	0.413472	0.418199	0.414020	0.413589	0.415430	0.404723	0.413249			

2 Gaussians

Scaling factor: 134.74008771671095

Gaussians:

Weight	Mean	Covariance				
0.640583657	512.823101314	686.213635233	14135.440722958	700.441648887	700.441648887	4024.074059178
0.359416343	532.657403619	473.114606128	10718.920016378	223.634301105	223.634301105	4813.642681009

4 Gaussians

Scaling factor: 132.00737841237626

Gaussians:

Weight	Mean	Covariance				
0.305173375	478.499772776	727.228387206	7855.159744405	158.111386022	158.111386022	1397.310870302
0.165230203	668.895345983	662.368146075	5773.993201387	2270.035131735	2270.035131735	5830.651438556
0.293761127	466.464045579	599.414185746	6204.582601769	-1036.814163596	-1036.814163596	3042.543886208
0.235835295	535.864513065	433.199832121	11593.500106402	544.916450715	544.916450715	1814.812927915

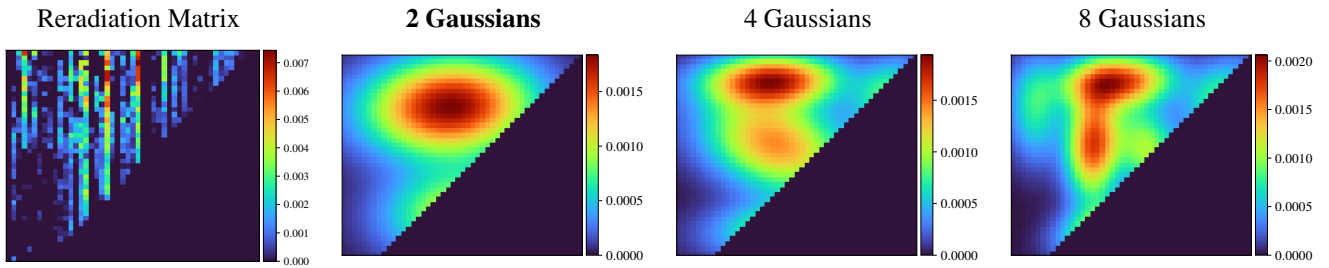
8 Gaussians

Scaling factor: 129.66170697169161

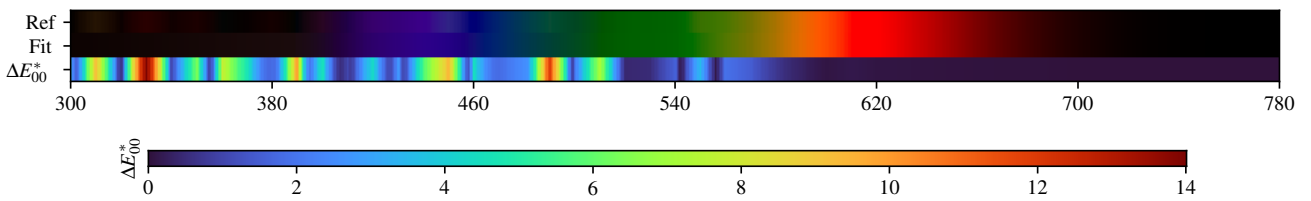
Gaussians:

Weight	Mean	Covariance				
0.251511032	489.748113453	719.613233338	3165.841811144	216.708722446	216.708722446	1627.415063929
0.036280902	724.084123800	577.906746143	1105.770453564	72.345259279	72.345259279	4795.123936570
0.177977999	456.103492667	587.867723884	1271.960030173	32.697115170	32.697115170	3098.198841896
0.111732991	681.889883257	724.788024937	4517.020871007	-0.690417679	-0.690417679	1681.189228569
0.088114904	331.596716200	681.500727301	204.581826633	328.736886746	328.736886746	5286.182404755
0.155050923	482.834216770	423.284074668	3136.923428611	318.458546623	318.458546623	1285.972660767
0.056620086	671.947906709	431.785349123	4475.911541609	-530.577798077	-530.577798077	1517.257232007
0.122711162	578.677264074	586.138852294	1669.672936159	36.378951794	36.378951794	2826.493287998

MSCHIP1 - Weighted variational Bayesian inference - 2 Gaussians



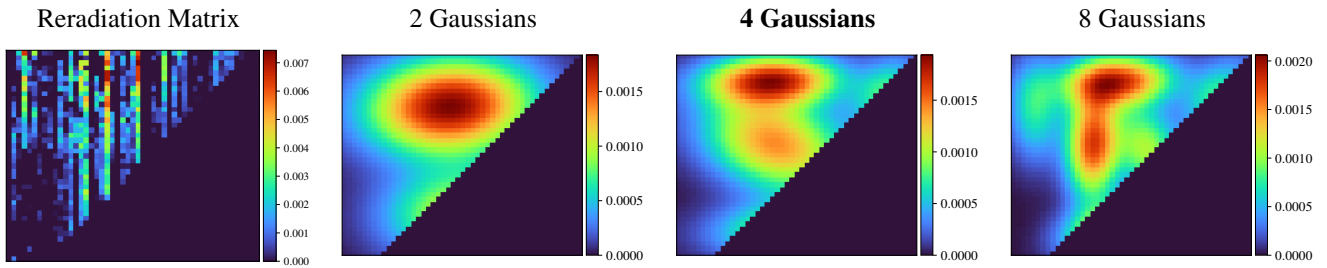
Fitted Material Under Monochromatic Illumination



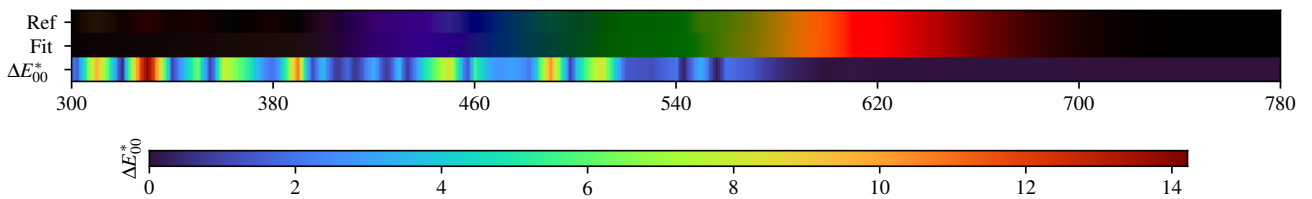
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.20$	D60 $\Delta E = 0.58$	FL2 $\Delta E = 0.38$	FL7 $\Delta E = 0.58$	FL12 $\Delta E = 0.33$	FL3.5 $\Delta E = 0.29$	FL3.10 $\Delta E = 0.74$	FL3.15 $\Delta E = 0.60$	HP5 $\Delta E = 0.31$	LED-B5 $\Delta E = 0.79$
B $\Delta E = 0.48$	D65 $\Delta E = 0.62$	FL3 $\Delta E = 0.29$	FL8 $\Delta E = 0.41$	FL3.1 $\Delta E = 0.24$	FL3.6 $\Delta E = 0.36$	FL3.11 $\Delta E = 0.76$	HP1 $\Delta E = 0.25$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.67$	D75 $\Delta E = 0.69$	FL4 $\Delta E = 0.24$	FL9 $\Delta E = 0.32$	FL3.2 $\Delta E = 0.30$	FL3.7 $\Delta E = 0.26$	FL3.12 $\Delta E = 0.18$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.24$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.47$	E $\Delta E = 0.54$	FL5 $\Delta E = 0.61$	FL10 $\Delta E = 0.72$	FL3.3 $\Delta E = 0.52$	FL3.8 $\Delta E = 0.46$	FL3.13 $\Delta E = 0.29$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.47$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.53$	FL1 $\Delta E = 0.61$	FL6 $\Delta E = 0.37$	FL11 $\Delta E = 0.55$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.62$	FL3.14 $\Delta E = 0.40$	HP4 $\Delta E = 0.30$	LED-B4 $\Delta E = 0.61$	LED-V2 $\Delta E = 0.36$

MSCHIP1 - Weighted variational Bayesian inference - 4 Gaussians



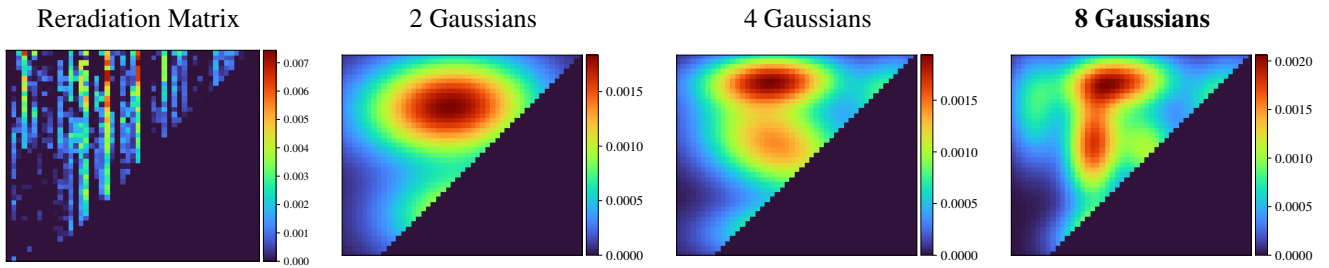
Fitted Material Under Monochromatic Illumination



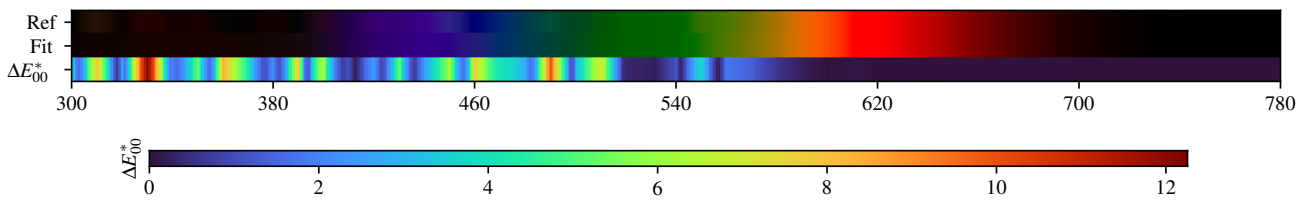
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.20$	$\Delta E = 0.29$	$\Delta E = 0.14$	$\Delta E = 0.23$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.25$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.23$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.03$	$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.37$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.25$	$\Delta E = 0.19$	$\Delta E = 0.26$	$\Delta E = 0.24$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.26$	$\Delta E = 0.17$	$\Delta E = 0.21$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.22$

MSCHIP1 - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.30$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.27$	$\Delta E = 0.28$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.25$	$\Delta E = 0.31$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.23$	$\Delta E = 0.18$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.27$	$\Delta E = 0.33$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.06$	$\Delta E = 0.14$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.25$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.27$	$\Delta E = 0.30$	$\Delta E = 0.23$	$\Delta E = 0.17$	$\Delta E = 0.28$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.23$	$\Delta E = 0.22$

MSCHIP1 - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.066038	0.102521	0.134952	0.137258	0.127981	0.118739	0.120149	0.118555	0.111101	0.116263	0.110734
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.102718	0.093655	0.090786	0.086824	0.080974	0.085945	0.114942	0.144459	0.163165	0.228264	0.329907
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.400632	0.423073	0.433320	0.433678	0.432161	0.430797	0.430492	0.426824	0.422942	0.422814	0.420379
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.421882	0.413472	0.418199	0.414020	0.413589	0.415430	0.404723	0.413249			

2 Gaussians max

Scaling factor: 135.08046786782458

Gaussians:

Weight	Mean		Covariance			
0.316822087	533.524157086	460.269287339	10806.689668847	308.218458143	308.218458143	3817.539622904
0.683177913	513.719543418	679.031131328	13876.017537796	576.724111538	576.724111538	4647.096510115

4 Gaussians max

Scaling factor: 133.56004421941543

Gaussians:

Weight	Mean		Covariance			
0.203664718	530.966882964	425.543772856	11131.763884404	298.687169587	298.687169587	1530.296010265
0.448247603	495.472839536	603.538678362	10025.141599576	-1927.746634892	-1927.746634892	4844.916852527
0.080231492	719.978998283	701.978233884	2180.815889637	916.048257828	916.048257828	2956.695566348
0.267856188	493.010480076	732.824185383	8811.096991542	134.743653886	134.743653886	1279.083742129

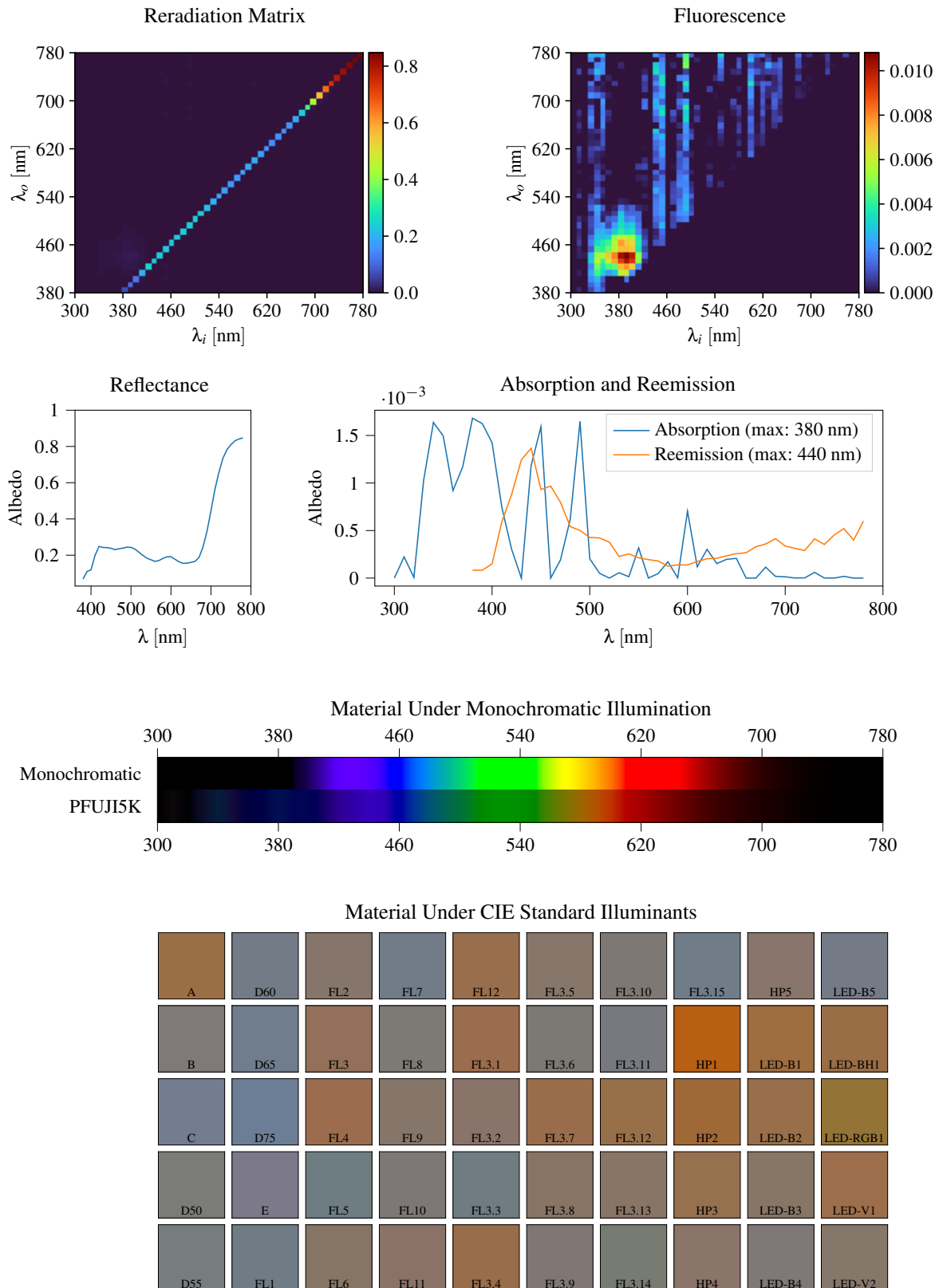
8 Gaussians max

Scaling factor: 132.33205897033054

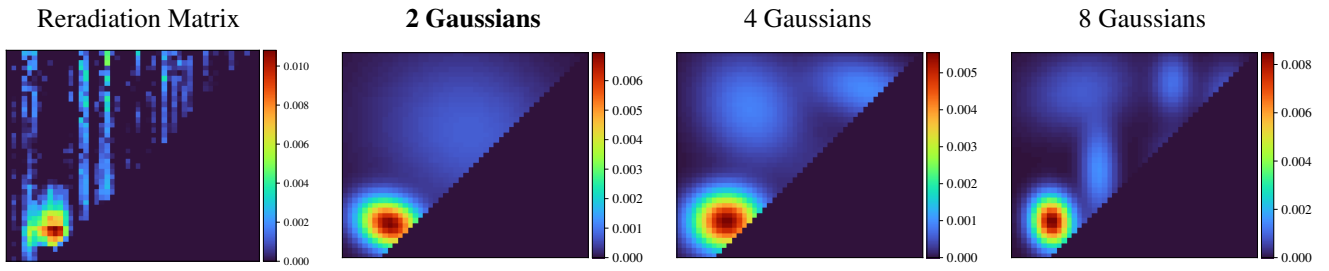
Gaussians:

Weight	Mean		Covariance			
0.157057112	494.325080002	423.227149159	4101.252679038	517.318048464	517.318048464	1485.679097102
0.067835465	697.892735171	471.511554894	3249.577535890	-571.762472003	-571.762472003	4602.573449707
0.093940170	342.592172472	672.978416264	1370.918204223	-78.297304306	-78.297304306	5288.167262920
0.230770185	461.008418530	601.890122024	1362.420295731	154.161035857	154.161035857	5750.439397972
0.121266236	569.361660386	594.174661732	1876.650711415	-477.319928027	-477.319928027	3387.328746409
0.093428987	713.712792515	696.466167959	2450.052630085	1129.783130546	1129.783130546	3182.864430231
0.234691023	511.909875812	730.919474031	6016.839793275	262.426543888	262.426543888	1335.919646095

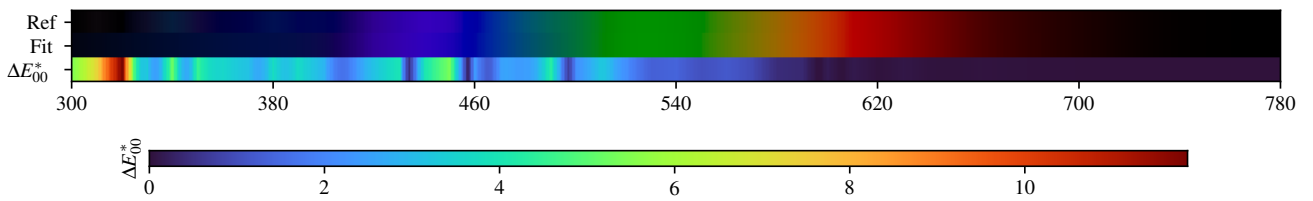
3.95. PFUJI5K



PFUJ15K - Weighted Expectation-Maximization - 2 Gaussians



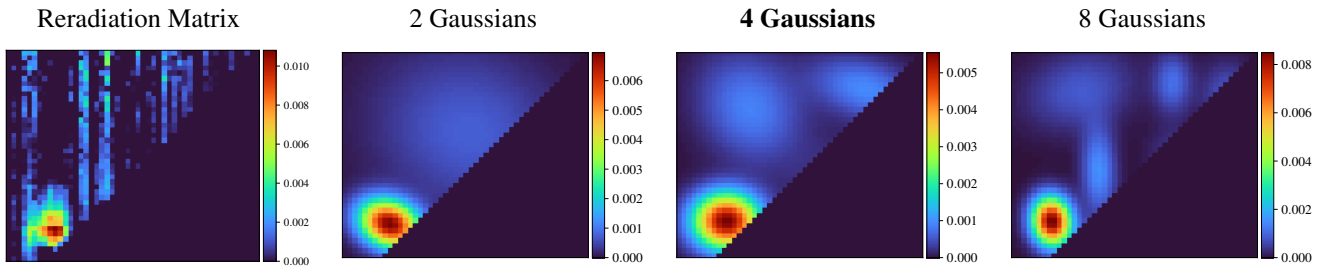
Fitted Material Under Monochromatic Illumination



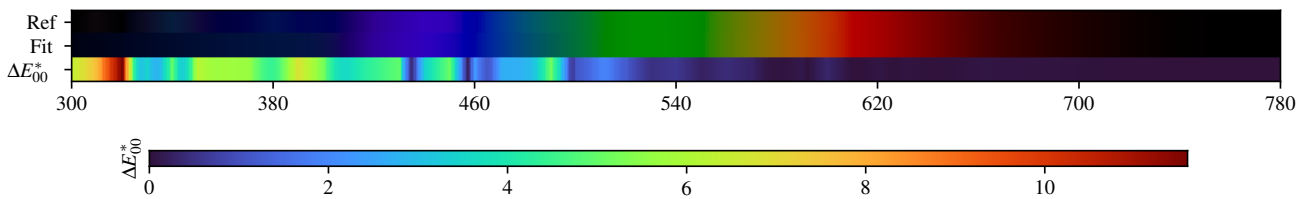
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.73$	$\Delta E = 2.28$	$\Delta E = 1.51$	$\Delta E = 2.24$	$\Delta E = 0.79$	$\Delta E = 1.42$	$\Delta E = 2.08$	$\Delta E = 2.11$	$\Delta E = 1.71$	$\Delta E = 2.14$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 2.00$	$\Delta E = 2.25$	$\Delta E = 0.98$	$\Delta E = 2.08$	$\Delta E = 0.54$	$\Delta E = 1.95$	$\Delta E = 2.14$	$\Delta E = 0.35$	$\Delta E = 0.62$	$\Delta E = 0.73$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.35$	$\Delta E = 2.12$	$\Delta E = 0.65$	$\Delta E = 1.56$	$\Delta E = 1.14$	$\Delta E = 0.69$	$\Delta E = 0.67$	$\Delta E = 0.65$	$\Delta E = 0.74$	$\Delta E = 0.70$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 2.24$	$\Delta E = 1.75$	$\Delta E = 2.07$	$\Delta E = 1.97$	$\Delta E = 1.95$	$\Delta E = 1.43$	$\Delta E = 1.35$	$\Delta E = 0.88$	$\Delta E = 1.59$	$\Delta E = 1.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 2.30$	$\Delta E = 2.17$	$\Delta E = 1.53$	$\Delta E = 1.49$	$\Delta E = 0.53$	$\Delta E = 1.70$	$\Delta E = 1.80$	$\Delta E = 1.56$	$\Delta E = 1.75$	$\Delta E = 2.17$

PFUJ15K - Weighted Expectation-Maximization - 4 Gaussians



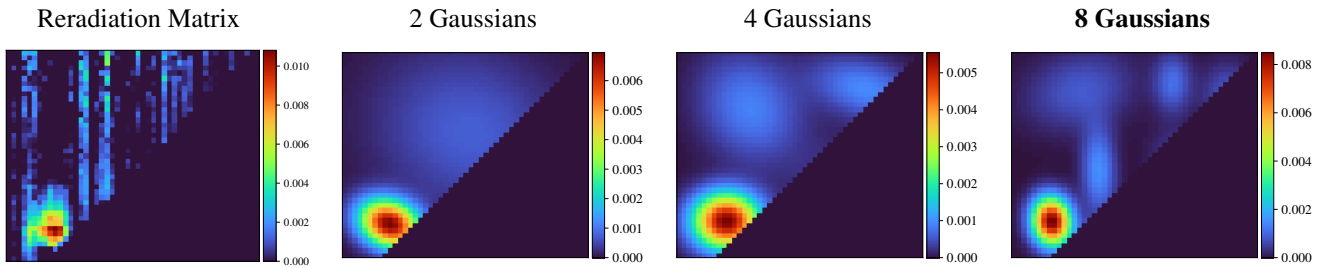
Fitted Material Under Monochromatic Illumination



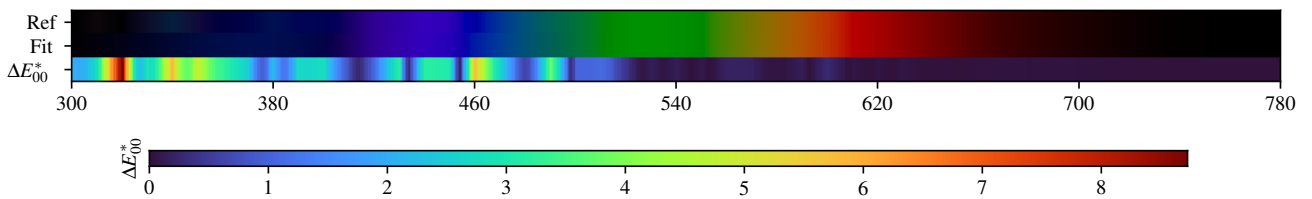
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.45$	$\Delta E = 1.20$	$\Delta E = 1.02$	$\Delta E = 1.52$	$\Delta E = 0.59$	$\Delta E = 1.07$	$\Delta E = 1.79$	$\Delta E = 1.30$	$\Delta E = 1.36$	$\Delta E = 1.61$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.39$	$\Delta E = 1.13$	$\Delta E = 0.62$	$\Delta E = 1.43$	$\Delta E = 0.23$	$\Delta E = 1.35$	$\Delta E = 1.58$	$\Delta E = 0.17$	$\Delta E = 0.46$	$\Delta E = 0.57$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.48$	$\Delta E = 0.98$	$\Delta E = 0.38$	$\Delta E = 1.12$	$\Delta E = 0.74$	$\Delta E = 0.44$	$\Delta E = 0.42$	$\Delta E = 0.43$	$\Delta E = 0.56$	$\Delta E = 0.45$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.29$	$\Delta E = 0.64$	$\Delta E = 1.45$	$\Delta E = 1.61$	$\Delta E = 1.29$	$\Delta E = 1.05$	$\Delta E = 1.02$	$\Delta E = 0.60$	$\Delta E = 1.31$	$\Delta E = 0.85$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.27$	$\Delta E = 1.51$	$\Delta E = 0.90$	$\Delta E = 1.22$	$\Delta E = 0.22$	$\Delta E = 1.39$	$\Delta E = 1.27$	$\Delta E = 1.07$	$\Delta E = 1.44$	$\Delta E = 1.60$

PFUJ15K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.05$	$\Delta E = 0.24$	$\Delta E = 0.13$	$\Delta E = 0.27$	$\Delta E = 0.22$	$\Delta E = 0.13$	$\Delta E = 0.43$	$\Delta E = 0.31$	$\Delta E = 0.14$	$\Delta E = 0.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.25$	$\Delta E = 0.24$	$\Delta E = 0.06$	$\Delta E = 0.25$	$\Delta E = 0.05$	$\Delta E = 0.23$	$\Delta E = 0.36$	$\Delta E = 0.05$	$\Delta E = 0.02$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.32$	$\Delta E = 0.23$	$\Delta E = 0.04$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.03$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.37$	$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.21$	$\Delta E = 0.07$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.25$	$\Delta E = 0.24$	$\Delta E = 0.12$	$\Delta E = 0.33$	$\Delta E = 0.04$	$\Delta E = 0.32$	$\Delta E = 0.24$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.22$

PFUJ15K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.068602	0.110044	0.119312	0.198782	0.248446	0.242463	0.241980	0.238048	0.230893	0.235288	0.239310
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.244296	0.243052	0.233536	0.215966	0.198767	0.183453	0.174674	0.165904	0.170702	0.182468	0.191215
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.191612	0.177678	0.163817	0.155067	0.155923	0.160398	0.165879	0.186981	0.244489	0.330892	0.444475
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.563775	0.658182	0.735275	0.782090	0.809778	0.831283	0.841097	0.847031			

2 Gaussians

Scaling factor: 124.62560061859924

Gaussians:

Weight	Mean		Covariance			
0.549980437	545.494690964	625.899717291	16331.437816129	-1707.821271340	-1707.821271340	12783.867893224
0.450019563	388.660414979	443.037301131	1628.678983075	-268.812842972	-268.812842972	1069.690063741

4 Gaussians

Scaling factor: 119.00493829846863

Gaussians:

Weight	Mean		Covariance			
0.123408275	641.199386546	492.086059578	5735.435124958	-508.093209417	-508.093209417	5703.215142103
0.231451583	441.117141495	673.863644355	4645.770358848	-815.578439216	-815.578439216	5375.778262282
0.502218650	394.433716901	448.355605740	2025.694295073	-21.310651393	-21.310651393	1439.484490242
0.142921492	668.882317490	711.867790220	4865.908448720	-967.429177905	-967.429177905	1818.767710199

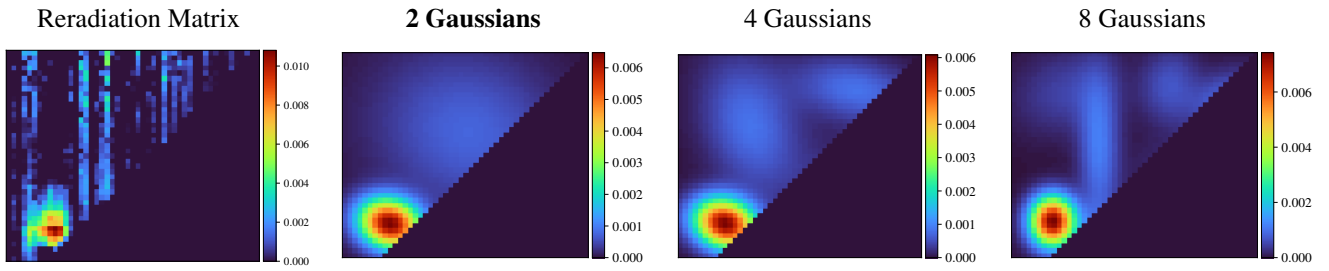
8 Gaussians

Scaling factor: 117.06928082842639

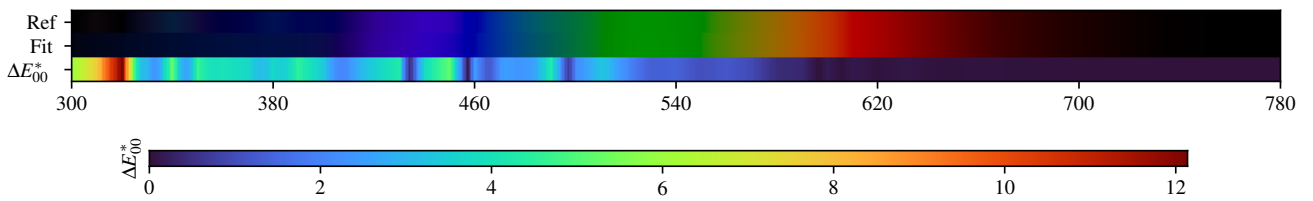
Gaussians:

Weight	Mean		Covariance			
0.066723408	665.103838789	438.571743199	4778.746343296	910.446061177	910.446061177	2149.316583032
0.060190181	614.444266128	723.503454777	629.780184282	-1.731003282	-1.731003282	1627.976702309
0.396587801	375.121527808	447.975042186	686.344355135	-53.526503210	-53.526503210	1064.792126041
0.174748803	431.007451929	708.340407404	5191.074132278	708.002675780	708.002675780	2864.410075078
0.080781455	726.974986873	691.115329798	1219.679443201	-154.461404735	-154.461404735	2253.716202346
0.048654543	619.094931801	562.831579673	1212.997893606	-90.275943730	-90.275943730	2189.584738033
0.060309398	467.168076128	409.600802562	471.705016417	48.634478318	48.634478318	477.937781875
0.112004411	468.245223995	548.529997628	504.391191334	-66.083429843	-66.083429843	3501.072605757

PFUJ15K - Weighted variational Bayesian inference - 2 Gaussians



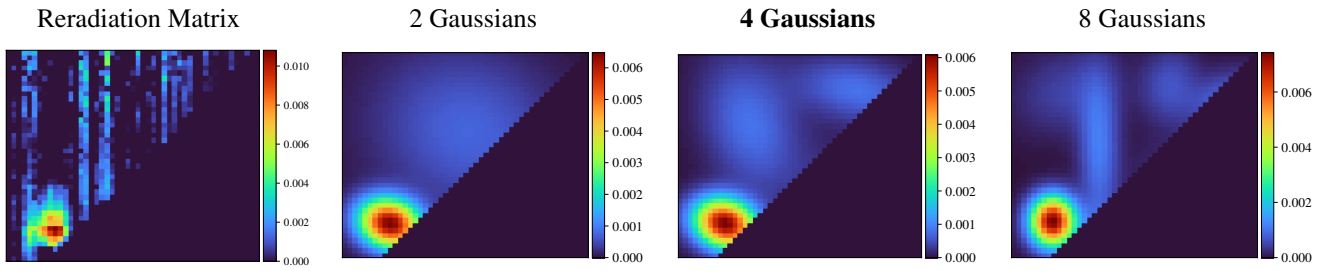
Fitted Material Under Monochromatic Illumination



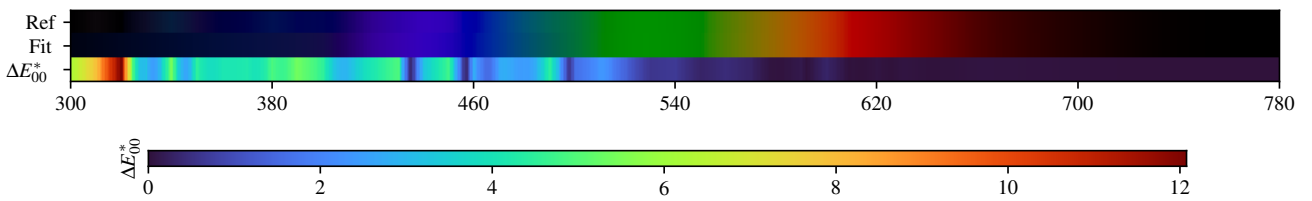
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.70$	D60 $\Delta E = 2.07$	FL2 $\Delta E = 1.45$	FL7 $\Delta E = 2.11$	FL12 $\Delta E = 0.77$	FL3.5 $\Delta E = 1.36$	FL3.10 $\Delta E = 2.04$	FL3.15 $\Delta E = 1.95$	HP5 $\Delta E = 1.62$	LED-B5 $\Delta E = 2.07$
B $\Delta E = 1.87$	D65 $\Delta E = 2.02$	FL3 $\Delta E = 0.95$	FL8 $\Delta E = 2.00$	FL3.1 $\Delta E = 0.53$	FL3.6 $\Delta E = 1.88$	FL3.11 $\Delta E = 2.07$	HP1 $\Delta E = 0.34$	LED-B1 $\Delta E = 0.61$	LED-BH1 $\Delta E = 0.72$
C $\Delta E = 2.17$	D75 $\Delta E = 1.89$	FL4 $\Delta E = 0.63$	FL9 $\Delta E = 1.50$	FL3.2 $\Delta E = 1.09$	FL3.7 $\Delta E = 0.68$	FL3.12 $\Delta E = 0.65$	HP2 $\Delta E = 0.64$	LED-B2 $\Delta E = 0.73$	LED-RGB1 $\Delta E = 0.70$
D50 $\Delta E = 2.08$	E $\Delta E = 1.58$	FL5 $\Delta E = 1.96$	FL10 $\Delta E = 1.92$	FL3.3 $\Delta E = 1.84$	FL3.8 $\Delta E = 1.39$	FL3.13 $\Delta E = 1.31$	HP3 $\Delta E = 0.83$	LED-B3 $\Delta E = 1.56$	LED-V1 $\Delta E = 1.02$
D55 $\Delta E = 2.11$	FL1 $\Delta E = 2.05$	FL6 $\Delta E = 1.47$	FL11 $\Delta E = 1.45$	FL3.4 $\Delta E = 0.52$	FL3.9 $\Delta E = 1.66$	FL3.14 $\Delta E = 1.75$	HP4 $\Delta E = 1.43$	LED-B4 $\Delta E = 1.70$	LED-V2 $\Delta E = 2.03$

PFUJ15K - Weighted variational Bayesian inference - 4 Gaussians



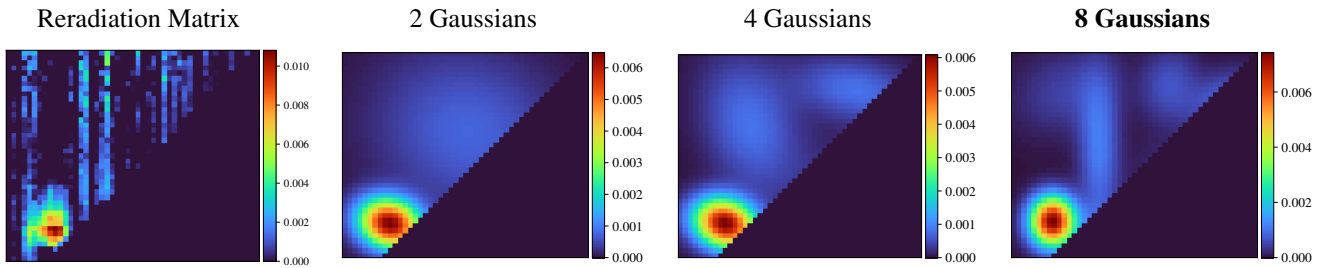
Fitted Material Under Monochromatic Illumination



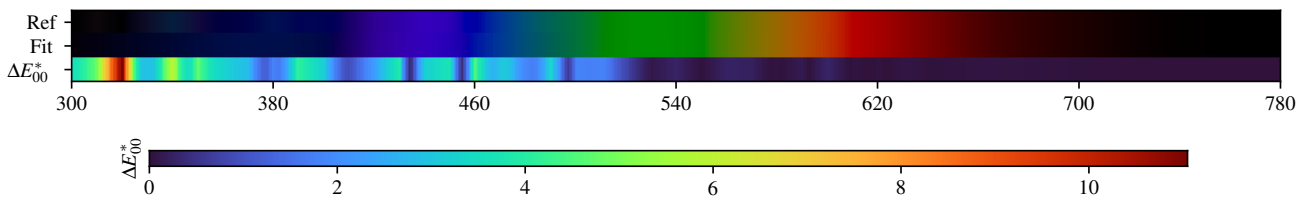
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.39$	$\Delta E = 1.55$	$\Delta E = 0.95$	$\Delta E = 1.60$	$\Delta E = 0.50$	$\Delta E = 0.95$	$\Delta E = 1.60$	$\Delta E = 1.47$	$\Delta E = 1.25$	$\Delta E = 1.53$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.41$	$\Delta E = 1.55$	$\Delta E = 0.55$	$\Delta E = 1.39$	$\Delta E = 0.20$	$\Delta E = 1.30$	$\Delta E = 1.53$	$\Delta E = 0.12$	$\Delta E = 0.34$	$\Delta E = 0.45$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.75$	$\Delta E = 1.51$	$\Delta E = 0.32$	$\Delta E = 1.02$	$\Delta E = 0.67$	$\Delta E = 0.38$	$\Delta E = 0.34$	$\Delta E = 0.36$	$\Delta E = 0.43$	$\Delta E = 0.37$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.48$	$\Delta E = 1.24$	$\Delta E = 1.44$	$\Delta E = 1.47$	$\Delta E = 1.30$	$\Delta E = 0.95$	$\Delta E = 0.87$	$\Delta E = 0.53$	$\Delta E = 1.12$	$\Delta E = 0.78$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.53$	$\Delta E = 1.52$	$\Delta E = 0.87$	$\Delta E = 1.08$	$\Delta E = 0.19$	$\Delta E = 1.25$	$\Delta E = 1.18$	$\Delta E = 1.05$	$\Delta E = 1.24$	$\Delta E = 1.58$

PFUJ15K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.22$	$\Delta E = 0.86$	$\Delta E = 0.49$	$\Delta E = 0.92$	$\Delta E = 0.35$	$\Delta E = 0.55$	$\Delta E = 1.06$	$\Delta E = 0.86$	$\Delta E = 0.58$	$\Delta E = 0.98$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.80$	$\Delta E = 0.86$	$\Delta E = 0.26$	$\Delta E = 0.86$	$\Delta E = 0.08$	$\Delta E = 0.82$	$\Delta E = 0.98$	$\Delta E = 0.03$	$\Delta E = 0.19$	$\Delta E = 0.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.03$	$\Delta E = 0.83$	$\Delta E = 0.14$	$\Delta E = 0.60$	$\Delta E = 0.33$	$\Delta E = 0.27$	$\Delta E = 0.21$	$\Delta E = 0.21$	$\Delta E = 0.24$	$\Delta E = 0.25$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.86$	$\Delta E = 0.64$	$\Delta E = 0.80$	$\Delta E = 0.93$	$\Delta E = 0.74$	$\Delta E = 0.61$	$\Delta E = 0.55$	$\Delta E = 0.18$	$\Delta E = 0.69$	$\Delta E = 0.28$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.87$	$\Delta E = 0.87$	$\Delta E = 0.46$	$\Delta E = 0.69$	$\Delta E = 0.10$	$\Delta E = 0.78$	$\Delta E = 0.82$	$\Delta E = 0.39$	$\Delta E = 0.74$	$\Delta E = 0.74$

PFUJ15K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.068602	0.110044	0.119312	0.198782	0.248446	0.242463	0.241980	0.238048	0.230893	0.235288	0.239310
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.244296	0.243052	0.233536	0.215966	0.198767	0.183453	0.174674	0.165904	0.170702	0.182468	0.191215
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.191612	0.177678	0.163817	0.155067	0.155923	0.160398	0.165879	0.186981	0.244489	0.330892	0.444475
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.563775	0.658182	0.735275	0.782090	0.809778	0.831283	0.841097	0.847031			

2 Gaussians max

Scaling factor: 124.97202928211425

Gaussians:

Weight	Mean		Covariance			
0.448651185	389.093132833	443.537365700	1726.375811236	-194.120465106	-194.120465106	1134.280364021
0.551348815	545.191747407	625.303857016	16345.591833101	-1632.222498933	-1632.222498933	12867.949095342

4 Gaussians max

Scaling factor: 119.02131763601523

Gaussians:

Weight	Mean		Covariance			
0.459132054	389.586655737	443.733011675	1792.008222839	-229.509472422	-229.509472422	1169.076915458
0.125165941	639.631019750	492.950756806	6442.127467005	-167.651303062	-167.651303062	6037.832623660
0.259934026	440.244680841	642.607437050	4344.522726108	-1544.023408057	-1544.023408057	8524.774393129
0.155767980	653.054832516	713.151223050	6774.912767465	-1005.392579566	-1005.392579566	2018.036666993

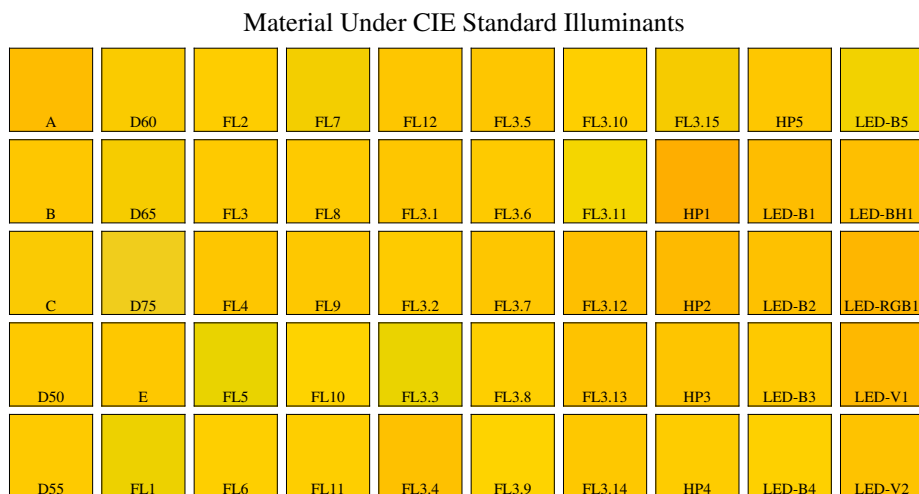
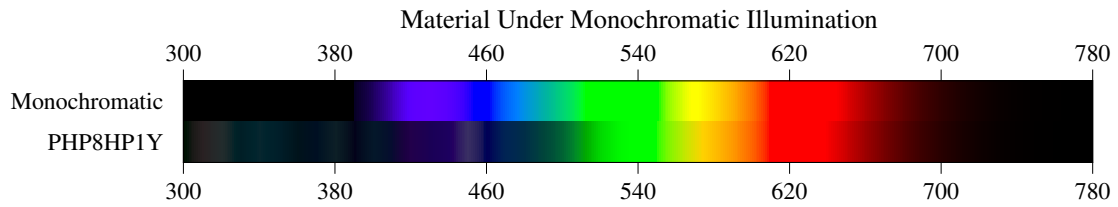
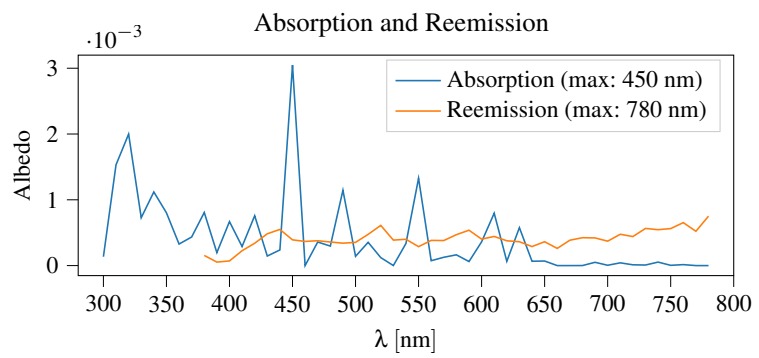
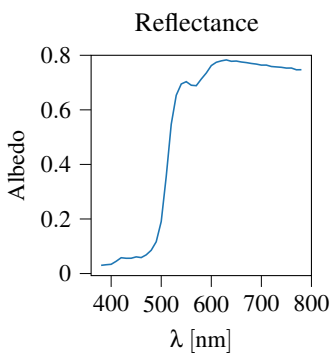
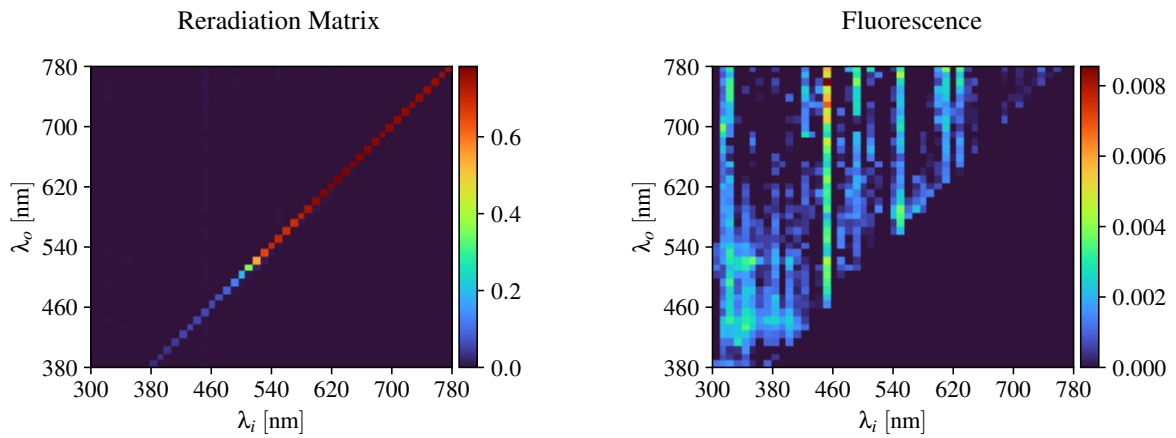
8 Gaussians max

Scaling factor: 118.06893704390089

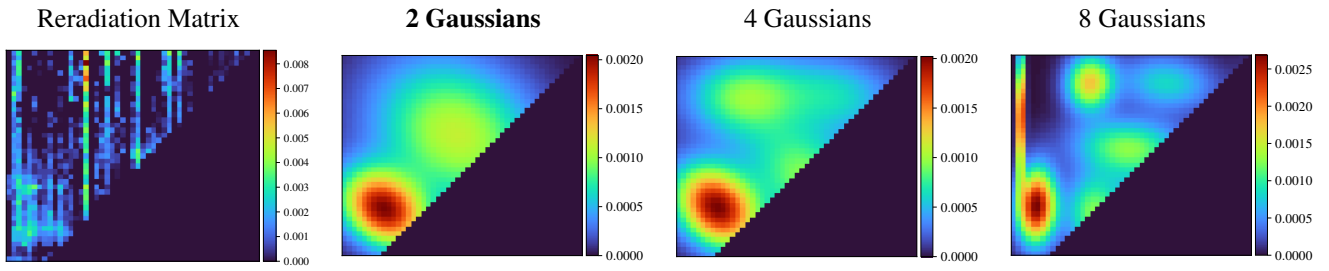
Gaussians:

Weight	Mean		Covariance			
0.400387962	376.784115812	448.134269805	896.158950606	1.045829401	1.045829401	1134.015850393
0.054351301	468.514501129	422.257741295	1194.958819922	338.337096576	338.337096576	1737.958050801
0.073042551	652.700494819	444.758290232	4999.934206088	-65.300924282	-65.300924282	2674.731909126
0.157940856	468.510461327	592.461687672	703.145985318	-7.923099126	-7.923099126	9948.047719700
0.048423918	644.638655817	565.134781046	6095.138644532	549.172384627	549.172384627	1643.586879648
0.116172696	405.365128789	705.470138173	5161.138027085	700.449688037	700.449688037	3565.878568509
0.073820666	608.622926954	719.324250300	1549.976753865	228.680767077	228.680767077	2667.540503337
0.075860050	714.734618349	695.405363429	2467.580955118	835.681739226	835.681739226	1621.590729357

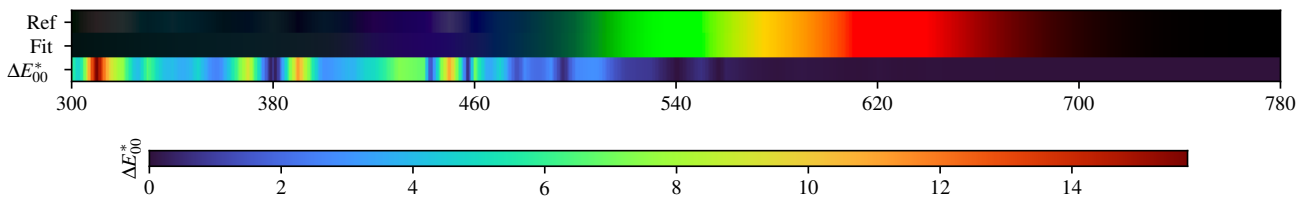
3.96. PHP8HP1Y



PHP8HP1Y - Weighted Expectation-Maximization - 2 Gaussians



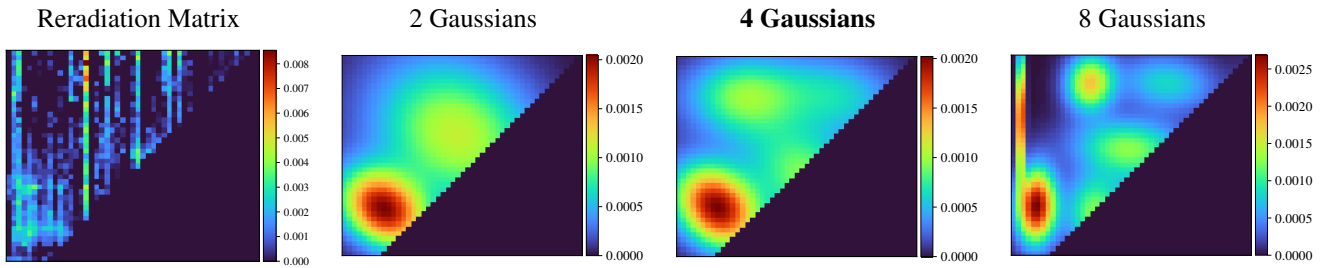
Fitted Material Under Monochromatic Illumination



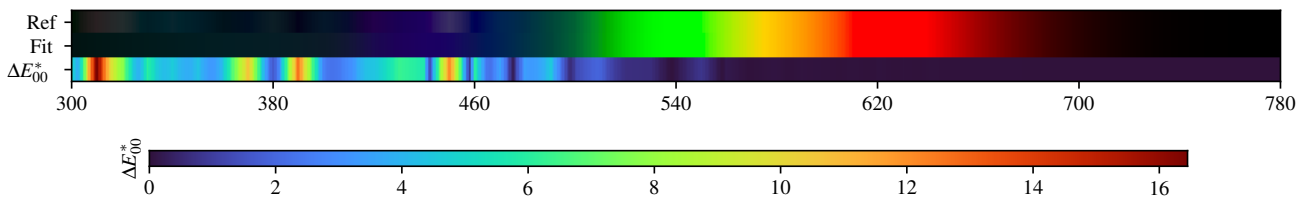
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.22$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.29$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.23$	$\Delta E = 0.11$	$\Delta E = 0.21$

PHP8HP1Y - Weighted Expectation-Maximization - 4 Gaussians



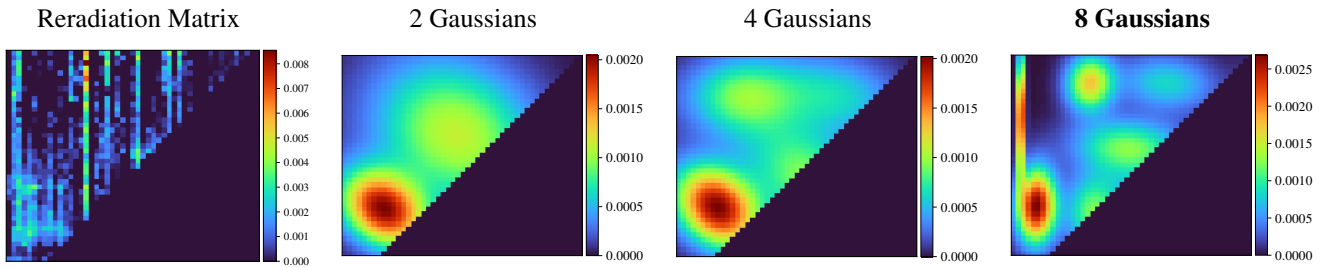
Fitted Material Under Monochromatic Illumination



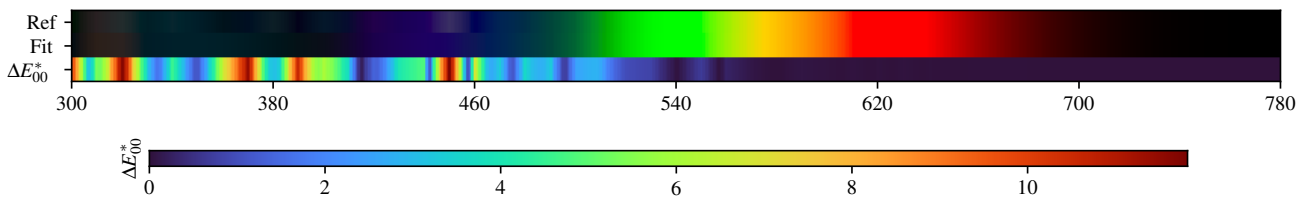
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.24$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.12$	$\Delta E = 0.31$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.06$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.30$	$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.18$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.04$	$\Delta E = 0.25$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.18$

PHP8HP1Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.07$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.02$	$\Delta E = 0.08$	$\Delta E = 0.02$	$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.02$	$\Delta E = 0.02$	$\Delta E = 0.04$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.02$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.01$	$\Delta E = 0.02$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.18$	$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.03$	$\Delta E = 0.14$	$\Delta E = 0.04$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.09$

PHP8HP1Y - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.030083	0.032288	0.033882	0.044910	0.057985	0.055979	0.056102	0.061135	0.058514	0.068506	0.085320
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.116467	0.190631	0.355838	0.547160	0.653480	0.694855	0.703288	0.690221	0.688606	0.712905	0.735017
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.762281	0.774421	0.779560	0.783044	0.777997	0.778892	0.775412	0.773215	0.770054	0.767754	0.763975
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.764075	0.758881	0.757381	0.755952	0.753116	0.753307	0.746867	0.747118			

2 Gaussians

Scaling factor: 124.89979338635901

Gaussians:

Weight	Mean		Covariance			
0.699167516	526.256045305	621.713503561	13717.429178212	-2468.349760618	-2468.349760618	11684.442658694
0.300832484	377.885259942	469.415295961	3535.100689999	-862.523660193	-862.523660193	2954.898874866

4 Gaussians

Scaling factor: 123.2754801324464

Gaussians:

Weight	Mean		Covariance			
0.214147051	430.443817908	702.568587578	6623.461753118	64.622978108	64.622978108	3288.164616924
0.298802352	562.417436148	534.228328524	7665.608448938	-2375.515600465	-2375.515600465	5803.193248213
0.336669677	377.794259433	475.125762938	3472.608493449	-942.491395415	-942.491395415	3399.082747782
0.150380920	626.405896757	703.913408549	7403.277712449	-896.026178596	-896.026178596	3432.270151957

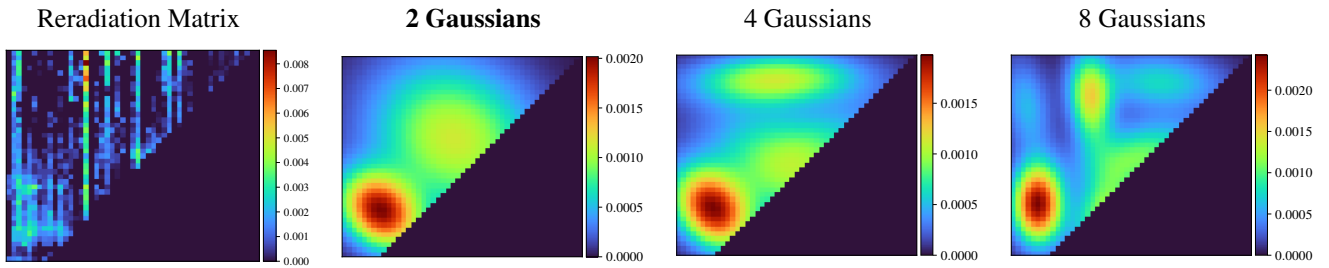
8 Gaussians

Scaling factor: 115.68057096977073

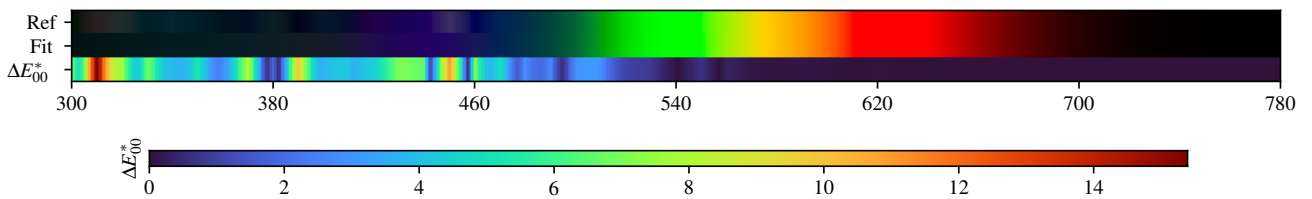
Gaussians:

Weight	Mean		Covariance			
0.118006481	454.345592516	726.083258615	1080.944190293	40.964946234	40.964946234	1554.290300074
0.107630305	580.878180635	488.516665555	3582.843780774	-1904.942314665	-1904.942314665	4004.549587455
0.206607975	346.115935508	476.419049529	732.873738554	57.199450278	57.199450278	2715.346659777
0.122094305	610.019635522	726.466766265	4746.627616641	-286.899859413	-286.899859413	1599.293386610
0.077037351	315.324275418	660.112489796	26.333249146	32.860740325	32.860740325	6967.094535262
0.037497805	758.272144526	559.670486316	421.050547309	496.761551813	496.761551813	14526.124982877
0.143136812	461.744666255	462.861250152	1534.395885665	-21.252076703	-21.252076703	3042.788806412
0.187988966	535.548930634	597.981273746	6620.529157732	-287.336321428	-287.336321428	1469.898131784

PHP8HP1Y - Weighted variational Bayesian inference - 2 Gaussians



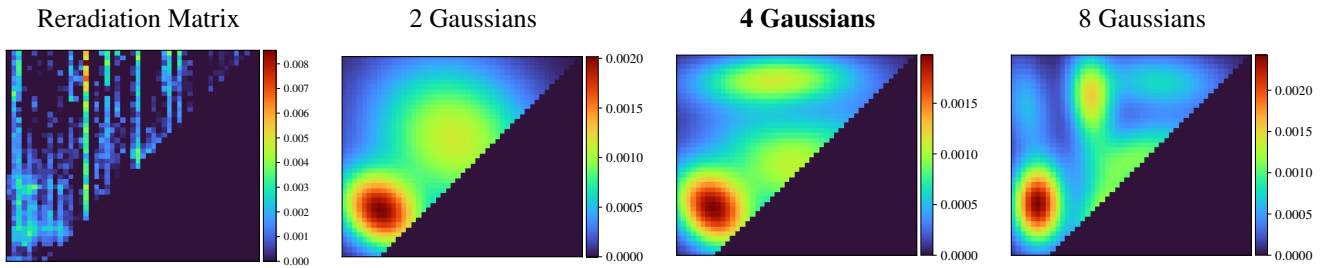
Fitted Material Under Monochromatic Illumination



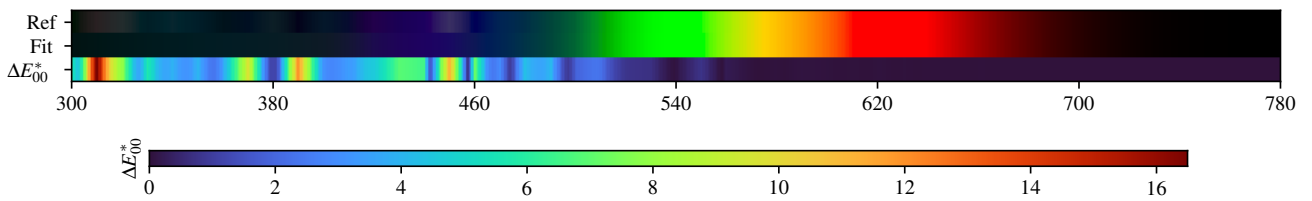
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.26$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.18$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.18$

PHP8HP1Y - Weighted variational Bayesian inference - 4 Gaussians



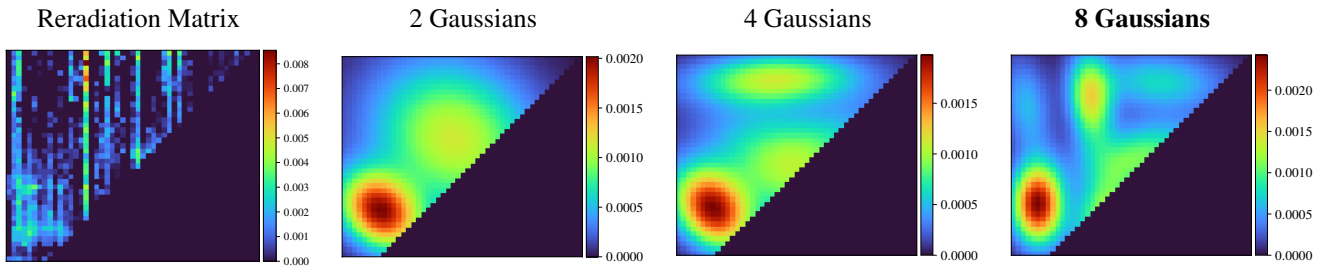
Fitted Material Under Monochromatic Illumination



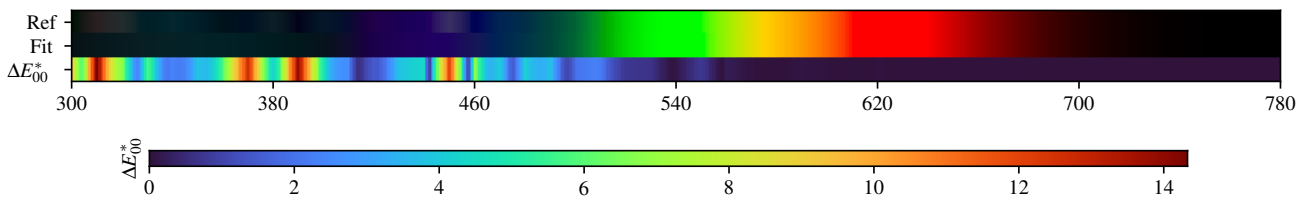
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.22$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.15$	$\Delta E = 0.12$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.04$	$\Delta E = 0.15$	$\Delta E = 0.28$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.05$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.06$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.30$	$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.05$	$\Delta E = 0.23$	$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.17$

PHP8HP1Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.20$	$\Delta E = 0.10$	$\Delta E = 0.07$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.21$	$\Delta E = 0.05$	$\Delta E = 0.14$	$\Delta E = 0.02$	$\Delta E = 0.13$	$\Delta E = 0.23$	$\Delta E = 0.02$	$\Delta E = 0.03$	$\Delta E = 0.04$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.03$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.17$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.22$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.16$

PHP8HP1Y - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.030083	0.032288	0.033882	0.044910	0.057985	0.055979	0.056102	0.061135	0.058514	0.068506	0.085320
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.116467	0.190631	0.355838	0.547160	0.653480	0.694855	0.703288	0.690221	0.688606	0.712905	0.735017
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.762281	0.774421	0.779560	0.783044	0.777997	0.778892	0.775412	0.773215	0.770054	0.767754	0.763975
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.764075	0.758881	0.757381	0.755952	0.753116	0.753307	0.746867	0.747118			

2 Gaussians max

Scaling factor: 124.69170828500624

Gaussians:

Weight	Mean		Covariance			
0.264253750	370.736373895	467.914654321	3013.969654313	-737.054915516	-737.054915516	2814.353004066
0.735746250	521.717300886	614.802175001	13669.250339031	-1844.242004672	-1844.242004672	12207.952273683

4 Gaussians max

Scaling factor: 121.19359179382214

Gaussians:

Weight	Mean		Covariance			
0.271584589	367.781719410	469.952191104	2817.665640024	-820.521694832	-820.521694832	3061.453477710
0.409538084	515.355538417	548.945373724	11980.807202482	-3758.256502345	-3758.256502345	7919.840339551
0.092547532	616.262905112	617.559318038	8313.981994797	2812.464083778	2812.464083778	3570.828489161
0.226329794	502.645191034	734.959801577	13542.599969018	332.828529744	332.828529744	1297.130269203

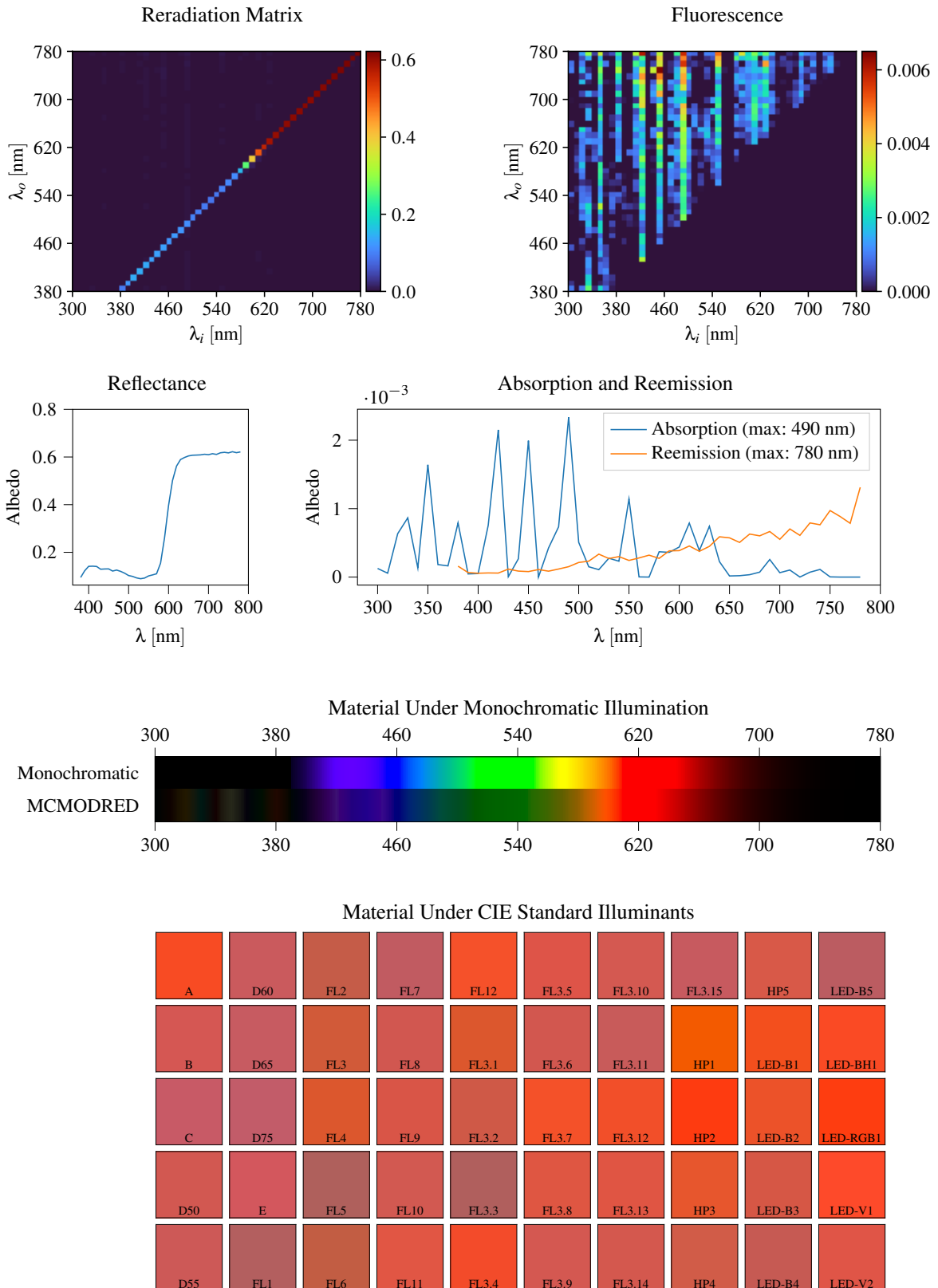
8 Gaussians max

Scaling factor: 121.04236880740666

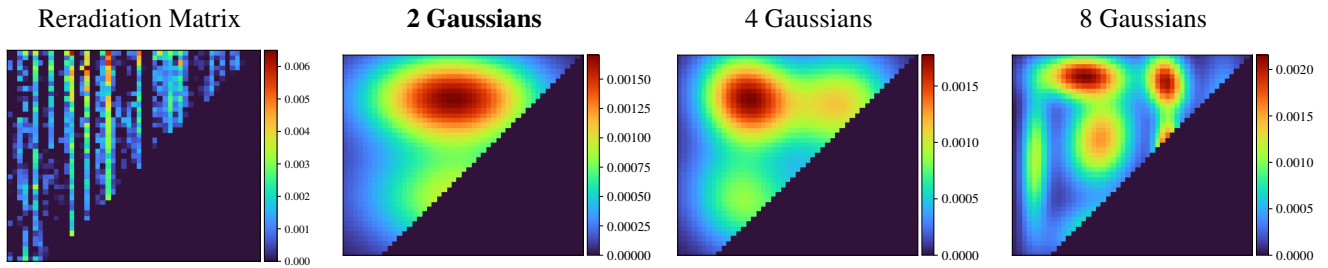
Gaussians:

Weight	Mean		Covariance			
0.233012252	348.791540968	479.830555678	1197.196226280	-32.211797806	-32.211797806	2950.797961483
0.115484664	477.798680903	459.869231760	1661.585026472	753.165709875	753.165709875	3039.438379218
0.083980259	632.298779354	451.246563221	7289.516350344	-424.614079788	-424.614079788	2947.505478516
0.214007743	560.478099685	580.047798504	7742.258530994	1406.287317687	1406.287317687	2339.170393882
0.074300350	327.033360259	677.313834876	1272.126351611	-653.264561844	-653.264561844	4867.970585000
0.129010042	456.230180541	692.040345290	866.620865495	-203.404279970	-203.404279970	3847.362292311
0.149207473	593.849861312	729.206389858	8568.229774826	-324.065013013	-324.065013013	1724.179223831

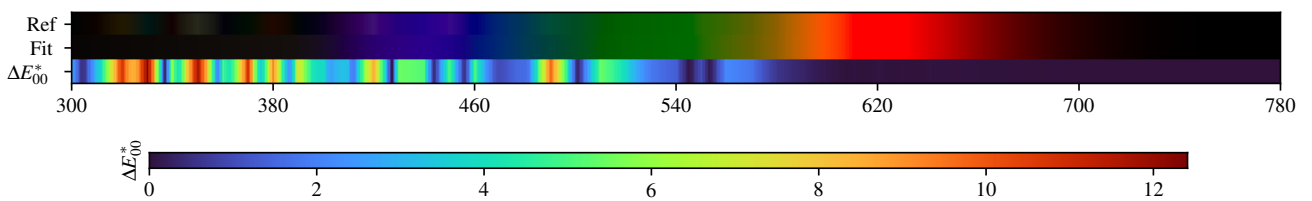
3.97. MCMODRED



MCMODRED - Weighted Expectation-Maximization - 2 Gaussians



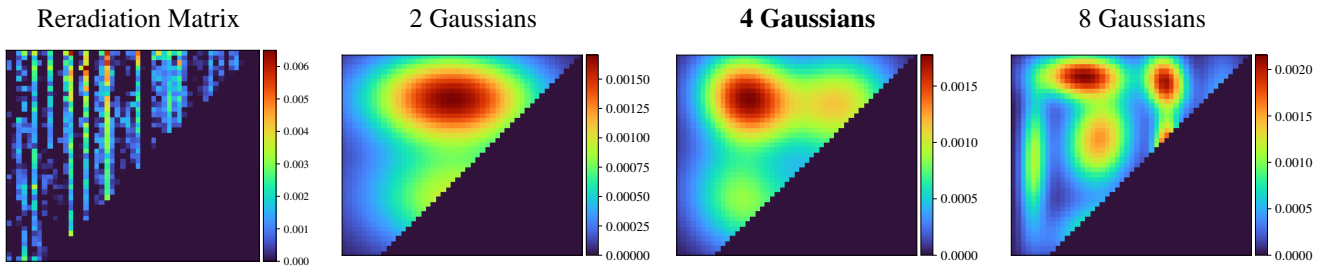
Fitted Material Under Monochromatic Illumination



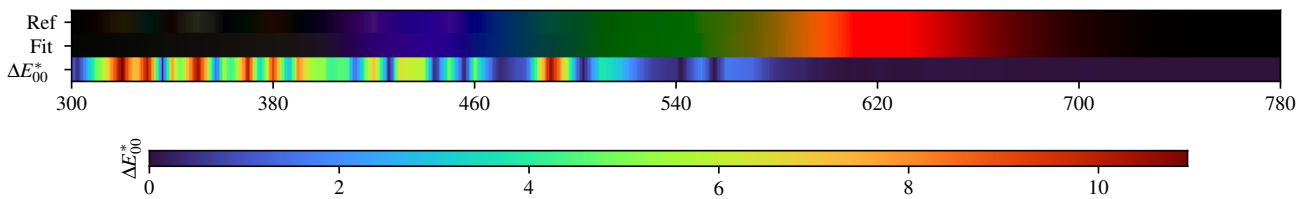
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.25$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.23$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.23$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.26$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.10$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.20$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.26$	$\Delta E = 0.08$

MCMODRED - Weighted Expectation-Maximization - 4 Gaussians



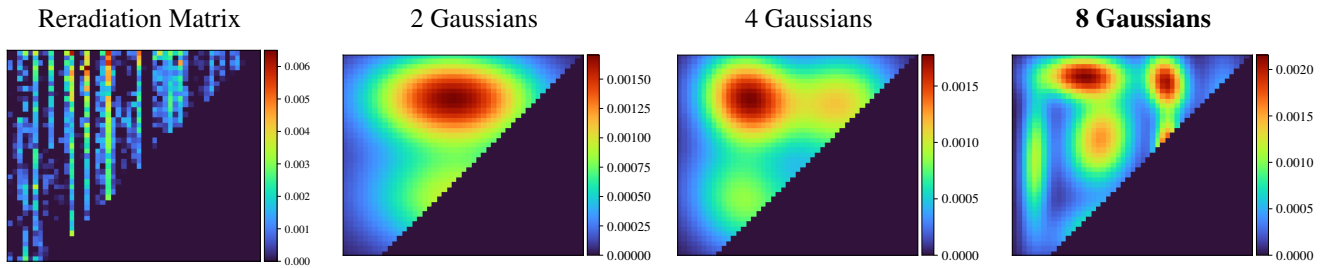
Fitted Material Under Monochromatic Illumination



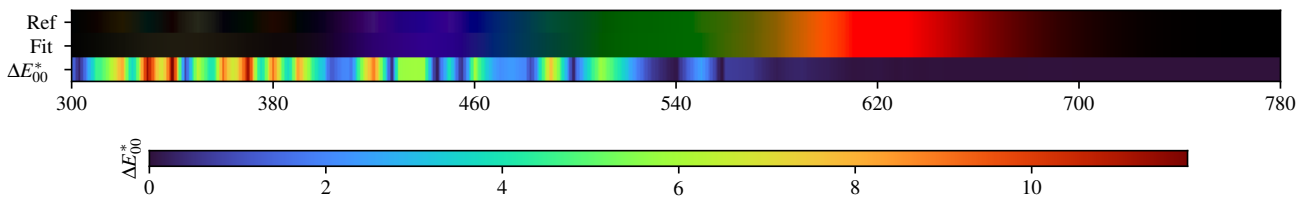
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.22$	$\Delta E = 0.12$	$\Delta E = 0.40$	$\Delta E = 0.22$	$\Delta E = 0.10$	$\Delta E = 0.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.24$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.38$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.19$	$\Delta E = 0.27$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.20$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.17$	$\Delta E = 0.35$	$\Delta E = 0.16$	$\Delta E = 0.29$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.30$	$\Delta E = 0.09$	$\Delta E = 0.34$	$\Delta E = 0.24$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.17$

MCMODRED - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.21$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.13$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.06$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.10$	$\Delta E = 0.22$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.24$	$\Delta E = 0.09$

MCMODRED - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.094518	0.122432	0.141117	0.141826	0.140541	0.129023	0.130034	0.130378	0.121336	0.125474	0.120029
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.112425	0.102541	0.098797	0.092642	0.089128	0.091936	0.100851	0.105142	0.109869	0.154078	0.260876
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.395800	0.501530	0.561743	0.589360	0.598011	0.604545	0.607498	0.608151	0.608955	0.611496	0.609712
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.613861	0.610863	0.617731	0.619725	0.617320	0.622175	0.618179	0.621393			

2 Gaussians

Scaling factor: 135.18936297893032

Gaussians:

Weight	Mean		Covariance			
0.564704188	518.108673125	695.890194488	13670.286073552	-157.180656447	-157.180656447	3820.091515394
0.435295812	533.235446666	488.917077761	15999.326789532	-741.903000786	-741.903000786	5856.523617838

4 Gaussians

Scaling factor: 131.56373660133517

Gaussians:

Weight	Mean		Covariance			
0.274105762	624.080761174	684.594936726	5690.037384909	56.897588542	56.897588542	4688.372955085
0.321940761	437.622136430	695.367360982	4105.334341054	-387.504207450	-387.504207450	3844.330549055
0.189642616	639.224136563	471.087928932	5485.518934277	-297.109409649	-297.109409649	4748.251145516
0.214310861	427.027450359	489.656948401	5312.614256041	-731.171974452	-731.171974452	5583.051654458

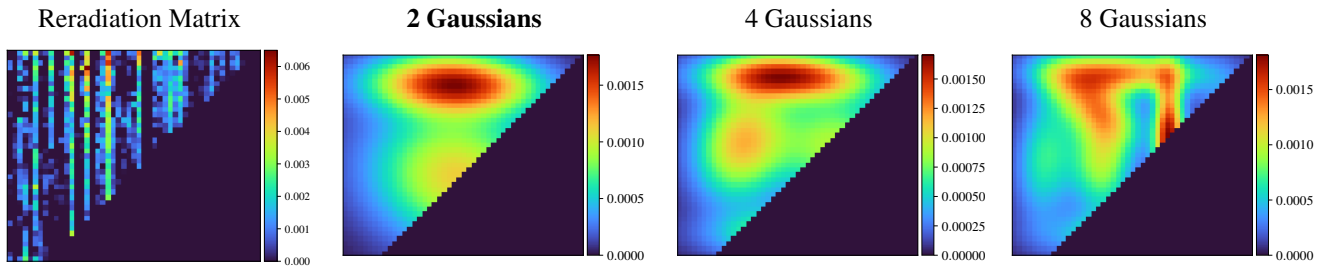
8 Gaussians

Scaling factor: 129.91256908438308

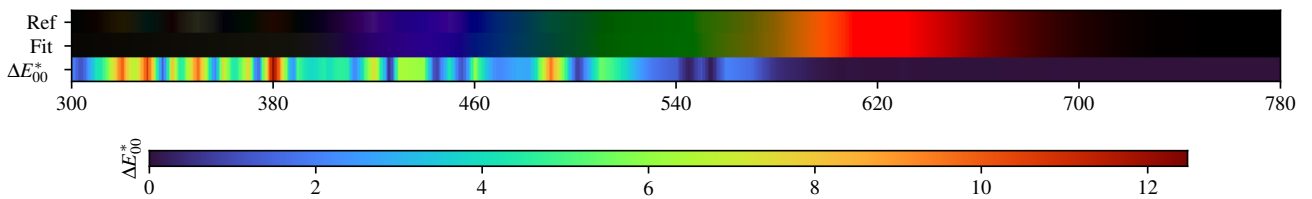
Gaussians:

Weight	Mean		Covariance			
0.106724048	607.933265358	728.641015814	798.604032395	-158.734325233	-158.734325233	1558.801481984
0.098918559	612.922837382	577.620255733	316.810564022	-84.529772093	-84.529772093	2435.578064267
0.103769137	647.057305851	420.029651335	4797.184539838	168.042399793	168.042399793	1009.392933557
0.100577117	469.442006957	431.430031602	4668.694687425	853.444304717	853.444304717	1582.386945785
0.220624626	473.720097462	612.833567355	2186.570212795	396.448321054	396.448321054	4007.309418340
0.095070523	727.984875218	646.993378075	1072.142483620	-314.142820411	-314.142820411	8256.463250874
0.179913332	438.131500830	740.969020220	3686.886210181	-29.175824912	-29.175824912	909.641514567
0.094402658	341.866742785	570.855722462	346.246075754	188.511936689	188.511936689	8791.450475700

MCMODRED - Weighted variational Bayesian inference - 2 Gaussians



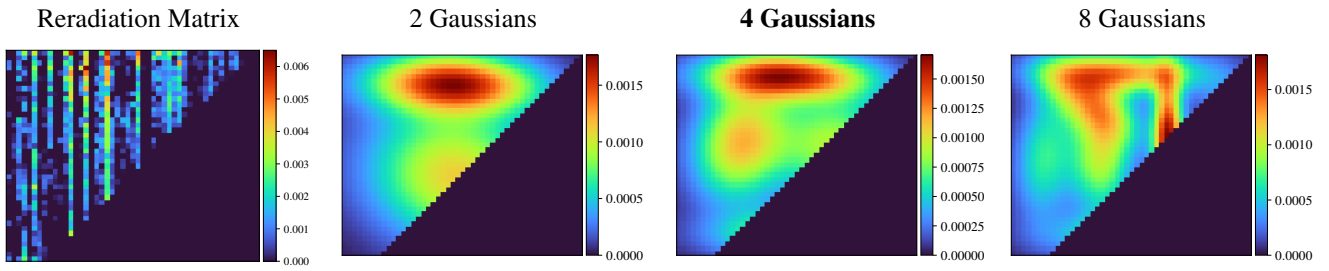
Fitted Material Under Monochromatic Illumination



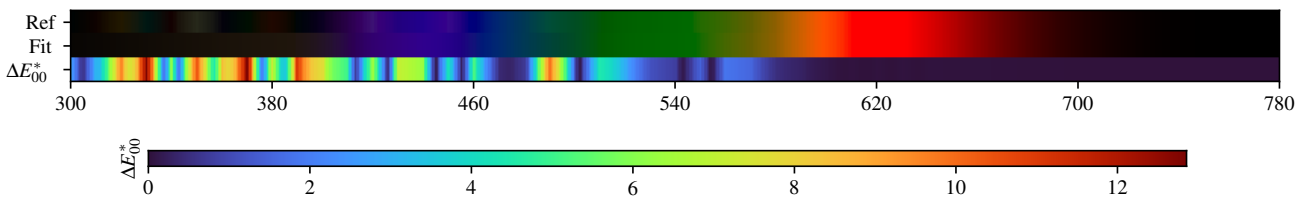
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.32$	$\Delta E = 0.56$	$\Delta E = 0.45$	$\Delta E = 0.60$	$\Delta E = 0.08$	$\Delta E = 0.38$	$\Delta E = 0.16$	$\Delta E = 0.63$	$\Delta E = 0.46$	$\Delta E = 0.61$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.51$	$\Delta E = 0.57$	$\Delta E = 0.36$	$\Delta E = 0.51$	$\Delta E = 0.25$	$\Delta E = 0.45$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.29$	$\Delta E = 0.37$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.58$	$\Delta E = 0.57$	$\Delta E = 0.29$	$\Delta E = 0.44$	$\Delta E = 0.38$	$\Delta E = 0.07$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.32$	$\Delta E = 0.42$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.53$	$\Delta E = 0.66$	$\Delta E = 0.64$	$\Delta E = 0.21$	$\Delta E = 0.56$	$\Delta E = 0.13$	$\Delta E = 0.29$	$\Delta E = 0.37$	$\Delta E = 0.43$	$\Delta E = 0.30$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.55$	$\Delta E = 0.62$	$\Delta E = 0.44$	$\Delta E = 0.14$	$\Delta E = 0.30$	$\Delta E = 0.17$	$\Delta E = 0.36$	$\Delta E = 0.42$	$\Delta E = 0.55$	$\Delta E = 0.41$

MCMODRED - Weighted variational Bayesian inference - 4 Gaussians



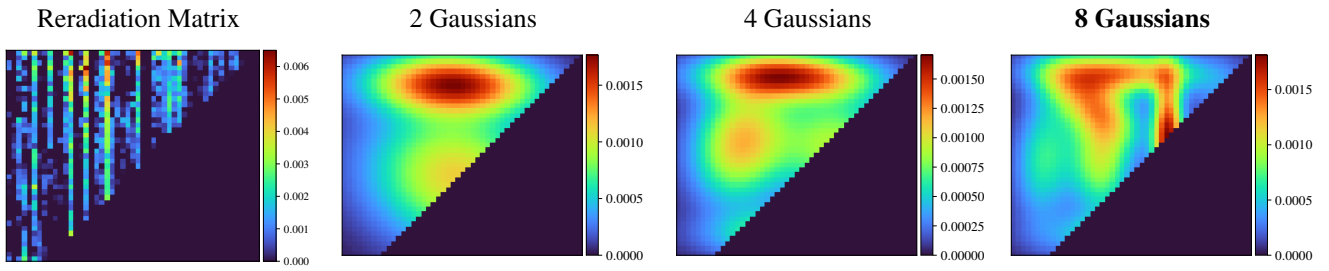
Fitted Material Under Monochromatic Illumination



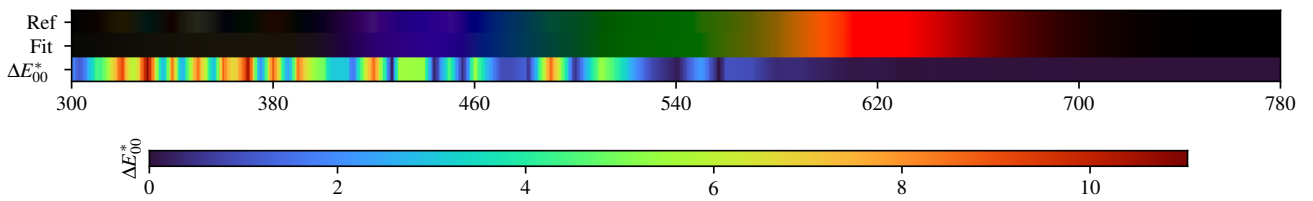
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.17$	D60 $\Delta E = 0.32$	FL2 $\Delta E = 0.28$	FL7 $\Delta E = 0.32$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.33$	HP5 $\Delta E = 0.26$	LED-B5 $\Delta E = 0.33$
B $\Delta E = 0.26$	D65 $\Delta E = 0.34$	FL3 $\Delta E = 0.25$	FL8 $\Delta E = 0.23$	FL3.1 $\Delta E = 0.19$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.09$	HP1 $\Delta E = 0.18$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 0.33$	D75 $\Delta E = 0.37$	FL4 $\Delta E = 0.23$	FL9 $\Delta E = 0.22$	FL3.2 $\Delta E = 0.22$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.15$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.20$
D50 $\Delta E = 0.26$	E $\Delta E = 0.52$	FL5 $\Delta E = 0.34$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.28$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.21$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.29$	FL1 $\Delta E = 0.33$	FL6 $\Delta E = 0.28$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.17$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.30$	LED-B4 $\Delta E = 0.31$	LED-V2 $\Delta E = 0.17$

MCMODRED - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.24$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.20$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.19$	$\Delta E = 0.35$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.10$

MCMODRED - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.094518	0.122432	0.141117	0.141826	0.140541	0.129023	0.130034	0.130378	0.121336	0.125474	0.120029
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.112425	0.102541	0.098797	0.092642	0.089128	0.091936	0.100851	0.105142	0.109869	0.154078	0.260876
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.395800	0.501530	0.561743	0.589360	0.598011	0.604545	0.607498	0.608151	0.608955	0.611496	0.609712
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.613861	0.610863	0.617731	0.619725	0.617320	0.622175	0.618179	0.621393			

2 Gaussians max

Scaling factor: 134.05198172503444

Gaussians:

Weight	Mean		Covariance			
0.635698895	526.861853554	536.879092892	15329.300333430	-1249.968857023	-1249.968857023	9883.046319523
0.364301105	521.038717712	726.129558692	13644.956413663	-354.303017282	-354.303017282	1780.182471936

4 Gaussians max

Scaling factor: 131.67506854428257

Gaussians:

Weight	Mean		Covariance			
0.185075032	555.248738982	419.879969293	14602.527478928	232.230057268	232.230057268	1174.700419080
0.287469331	424.726903249	605.759059929	4464.594717504	836.943407781	836.943407781	6864.737346510
0.260410131	618.787729540	599.367882787	6855.057087354	-95.984501633	-95.984501633	5599.675231005
0.267045507	520.321047575	740.942858588	13468.378195876	-278.461981220	-278.461981220	1079.388122371

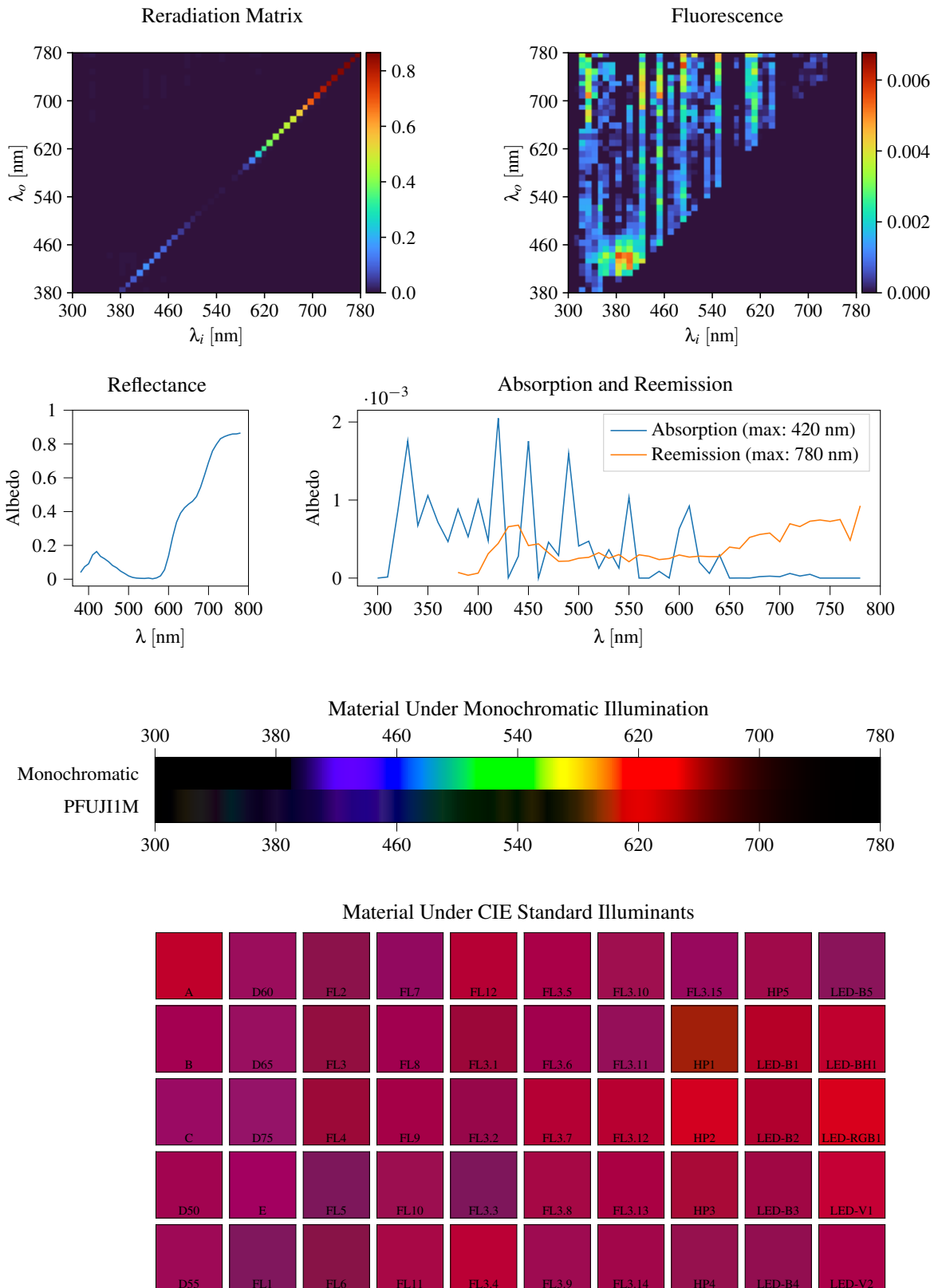
8 Gaussians max

Scaling factor: 131.3059047763852

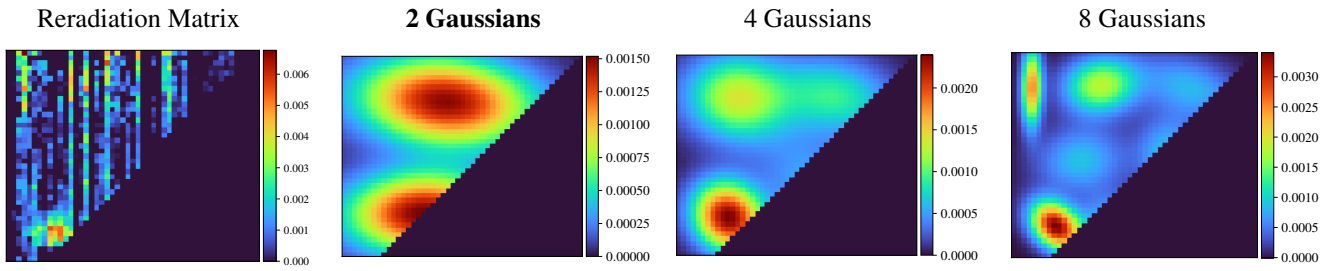
Gaussians:

Weight	Mean		Covariance			
0.157992246	557.974121125	416.987162228	13549.347424004	189.965572918	189.965572918	1078.945293230
0.117185442	361.113482764	574.445582213	1752.094716232	488.008862031	488.008862031	7988.401590648
0.141060252	476.489859072	567.484700866	1906.244386672	-8.607316830	-8.607316830	5182.971140613
0.155206940	613.180362567	607.107473894	421.833008722	-42.964136990	-42.964136990	8003.710122351
0.088840343	723.840765000	604.692629233	1798.680780499	181.033387435	181.033387435	9266.958637843
0.143454850	460.605920890	682.603798681	4049.051675620	-1805.357210246	-1805.357210246	2844.697076913
0.195347463	519.484983994	747.699229120	11797.723004944	-188.551125398	-188.551125398	873.711782863

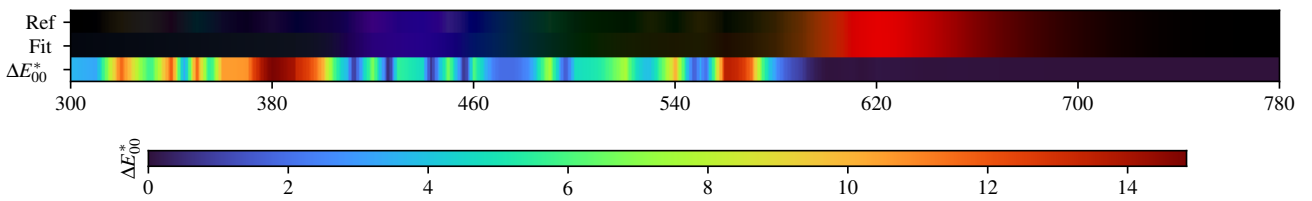
3.98. PFUJI1M



PFUJIM - Weighted Expectation-Maximization - 2 Gaussians



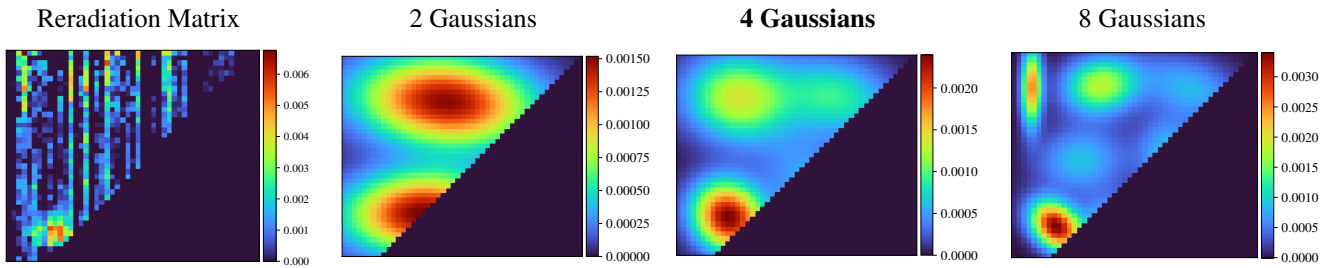
Fitted Material Under Monochromatic Illumination



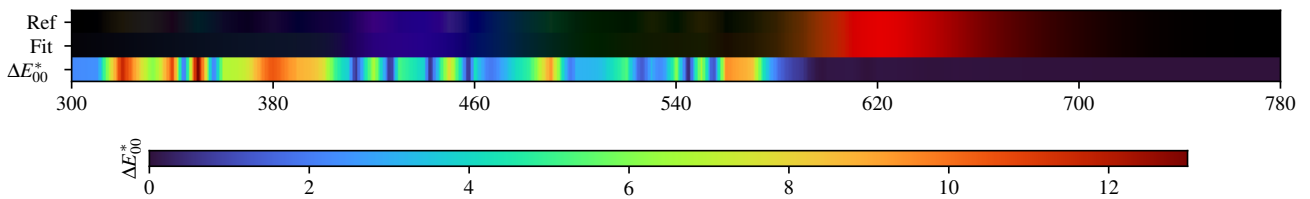
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.39$	$\Delta E = 0.68$	$\Delta E = 0.47$	$\Delta E = 0.45$	$\Delta E = 0.09$	$\Delta E = 0.29$	$\Delta E = 0.22$	$\Delta E = 0.69$	$\Delta E = 0.38$	$\Delta E = 0.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.49$	$\Delta E = 0.71$	$\Delta E = 0.44$	$\Delta E = 0.35$	$\Delta E = 0.37$	$\Delta E = 0.31$	$\Delta E = 0.17$	$\Delta E = 0.40$	$\Delta E = 0.19$	$\Delta E = 0.20$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.50$	$\Delta E = 0.76$	$\Delta E = 0.41$	$\Delta E = 0.34$	$\Delta E = 0.41$	$\Delta E = 0.09$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.58$	$\Delta E = 1.16$	$\Delta E = 0.50$	$\Delta E = 0.15$	$\Delta E = 0.46$	$\Delta E = 0.14$	$\Delta E = 0.24$	$\Delta E = 0.49$	$\Delta E = 0.20$	$\Delta E = 0.52$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.63$	$\Delta E = 0.47$	$\Delta E = 0.48$	$\Delta E = 0.13$	$\Delta E = 0.31$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.58$	$\Delta E = 0.21$	$\Delta E = 0.48$

PFUJIIM - Weighted Expectation-Maximization - 4 Gaussians



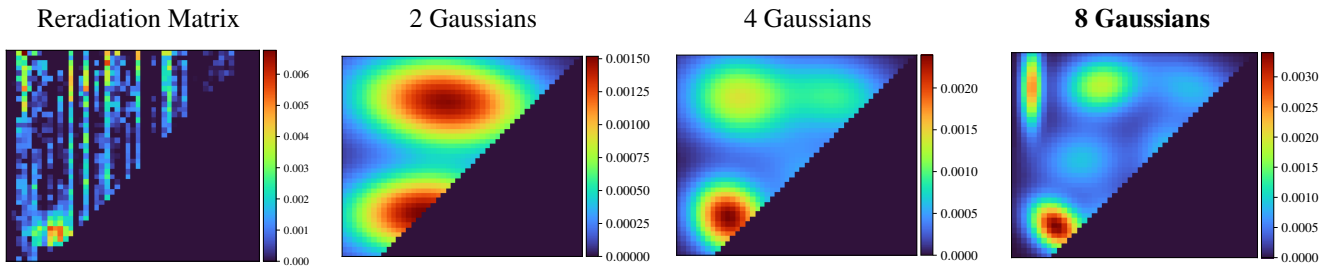
Fitted Material Under Monochromatic Illumination



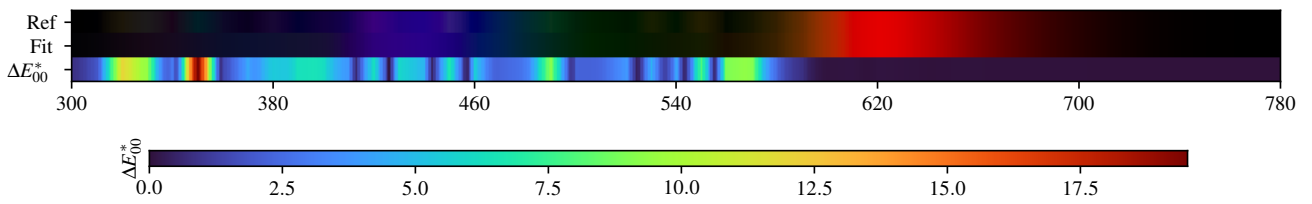
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.20$	$\Delta E = 0.60$	$\Delta E = 0.13$	$\Delta E = 0.25$	$\Delta E = 0.63$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.22$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.26$	$\Delta E = 0.55$	$\Delta E = 0.19$	$\Delta E = 0.21$	$\Delta E = 0.21$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.23$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.26$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.51$	$\Delta E = 0.29$	$\Delta E = 0.40$	$\Delta E = 0.25$	$\Delta E = 0.09$	$\Delta E = 0.44$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.16$	$\Delta E = 0.42$	$\Delta E = 0.10$	$\Delta E = 0.49$	$\Delta E = 0.37$	$\Delta E = 0.14$	$\Delta E = 0.50$	$\Delta E = 0.28$

PFUJIIM - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.28$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.31$	$\Delta E = 0.28$	$\Delta E = 0.20$	$\Delta E = 0.24$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.30$	$\Delta E = 0.14$	$\Delta E = 0.26$	$\Delta E = 0.13$	$\Delta E = 0.27$	$\Delta E = 0.36$	$\Delta E = 0.10$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.16$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.06$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.36$	$\Delta E = 0.25$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.27$	$\Delta E = 0.15$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.30$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.32$	$\Delta E = 0.17$	$\Delta E = 0.21$

PFUJIM - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.040044	0.073723	0.091210	0.143685	0.163608	0.134892	0.120817	0.103498	0.080964	0.067828	0.047865
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.034342	0.019528	0.010646	0.006616	0.005111	0.004541	0.006888	0.002497	0.007610	0.019774	0.055603
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.137350	0.246459	0.337172	0.390888	0.422500	0.443972	0.461100	0.488989	0.543637	0.615680	0.691288
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.758791	0.798563	0.831534	0.844021	0.852845	0.859139	0.859751	0.864874			

2 Gaussians

Scaling factor: 129.17081568542307

Gaussians:

Weight	Mean		Covariance			
0.556840201	505.357343984	690.372617957	15069.376687791	-964.649676187	-964.649676187	3980.193927144
0.443159799	460.250681302	463.084193145	11320.441377118	150.294326615	150.294326615	3148.371307192

4 Gaussians

Scaling factor: 118.81869270984973

Gaussians:

Weight	Mean		Covariance			
0.310399148	418.575050628	696.584096069	5276.524696356	-208.128067017	-208.128067017	3592.644409834
0.185332852	583.656480676	508.106590151	6557.041555030	-2088.264065651	-2088.264065651	5781.567696181
0.205970585	619.533668368	699.574653957	6519.558855603	-774.020460600	-774.020460600	3090.792942825
0.298297414	401.163761506	453.130883160	2401.530263111	-314.815680624	-314.815680624	2367.851591271

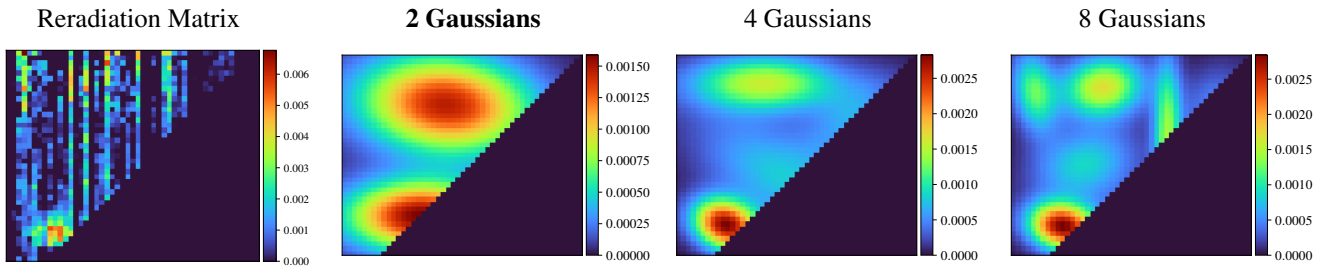
8 Gaussians

Scaling factor: 114.91079979826779

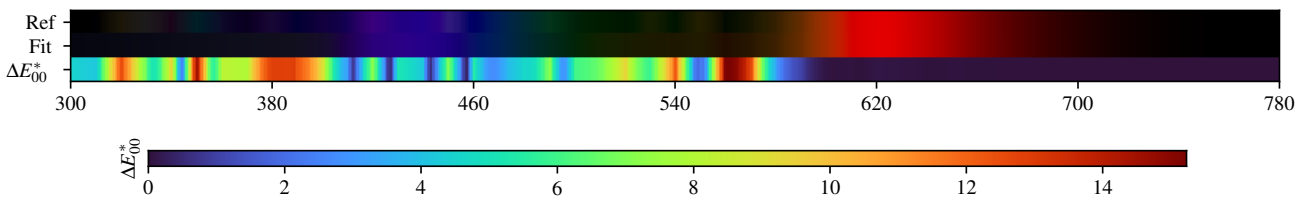
Gaussians:

Weight	Mean		Covariance			
0.194124290	471.967000353	718.152648557	2549.535666314	144.906497830	144.906497830	1523.094778390
0.069852920	478.458418246	442.014887103	1500.348169388	193.832983309	193.832983309	1719.309069320
0.069472095	634.721159804	434.980697903	5113.172784391	-30.720314445	-30.720314445	1547.797018998
0.135340913	650.502757758	713.760918544	4911.517437556	-1140.511053188	-1140.511053188	2080.999330403
0.097435277	335.251134376	714.655260875	184.031891972	32.728915863	32.728915863	2700.014875311
0.103002804	604.699081340	584.817419969	1805.845737917	77.463541501	77.463541501	2488.389676286
0.197265461	382.853793013	438.832076704	1136.134207880	-339.981238027	-339.981238027	1110.994409689
0.133506240	432.309711168	570.038281780	3538.354720767	173.220135601	173.220135601	2083.014559496

PFUJIIM - Weighted variational Bayesian inference - 2 Gaussians



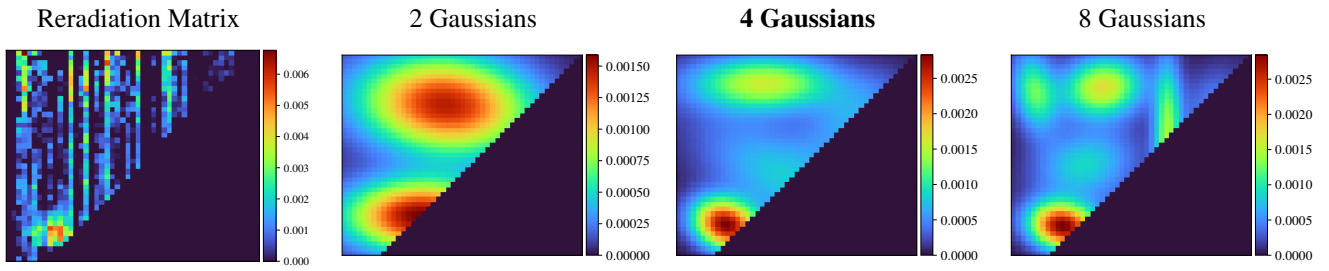
Fitted Material Under Monochromatic Illumination



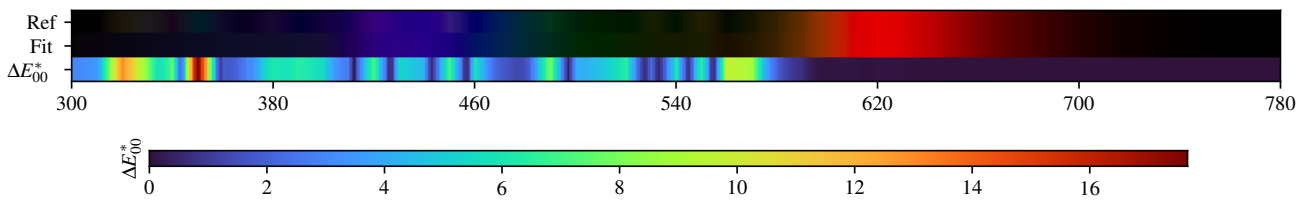
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.39$	$\Delta E = 0.69$	$\Delta E = 0.55$	$\Delta E = 0.52$	$\Delta E = 0.15$	$\Delta E = 0.34$	$\Delta E = 0.31$	$\Delta E = 0.71$	$\Delta E = 0.43$	$\Delta E = 0.40$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.51$	$\Delta E = 0.73$	$\Delta E = 0.51$	$\Delta E = 0.40$	$\Delta E = 0.44$	$\Delta E = 0.37$	$\Delta E = 0.30$	$\Delta E = 0.44$	$\Delta E = 0.25$	$\Delta E = 0.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.55$	$\Delta E = 0.79$	$\Delta E = 0.47$	$\Delta E = 0.39$	$\Delta E = 0.47$	$\Delta E = 0.15$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.25$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.59$	$\Delta E = 1.10$	$\Delta E = 0.63$	$\Delta E = 0.26$	$\Delta E = 0.59$	$\Delta E = 0.21$	$\Delta E = 0.31$	$\Delta E = 0.50$	$\Delta E = 0.30$	$\Delta E = 0.49$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.65$	$\Delta E = 0.60$	$\Delta E = 0.57$	$\Delta E = 0.21$	$\Delta E = 0.35$	$\Delta E = 0.25$	$\Delta E = 0.33$	$\Delta E = 0.61$	$\Delta E = 0.35$	$\Delta E = 0.49$

PFUJIIM - Weighted variational Bayesian inference - 4 Gaussians



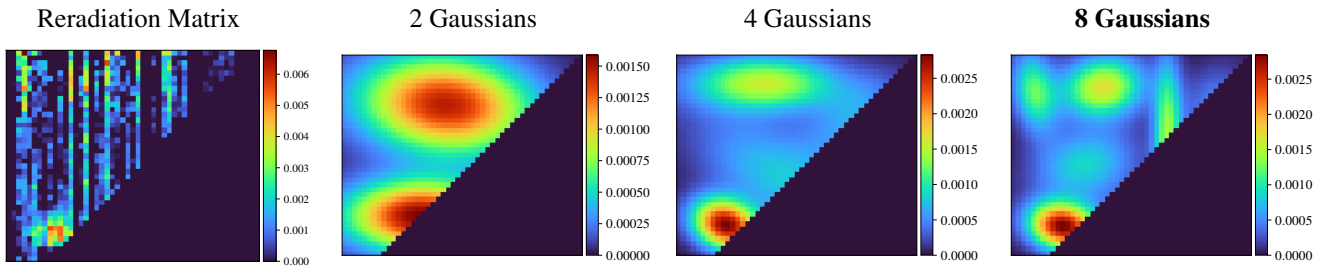
Fitted Material Under Monochromatic Illumination



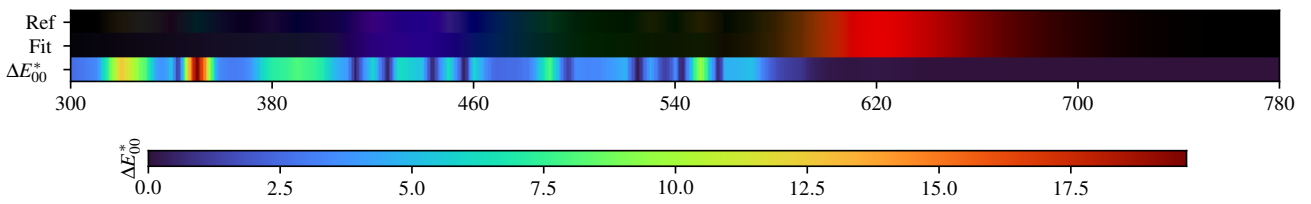
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.23$	$\Delta E = 0.33$	$\Delta E = 0.31$	$\Delta E = 0.03$	$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.47$	$\Delta E = 0.20$	$\Delta E = 0.07$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.21$	$\Delta E = 0.33$	$\Delta E = 0.29$	$\Delta E = 0.28$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.32$	$\Delta E = 0.18$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.29$	$\Delta E = 0.29$	$\Delta E = 0.01$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.29$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.25$	$\Delta E = 0.51$	$\Delta E = 0.35$	$\Delta E = 0.10$	$\Delta E = 0.30$	$\Delta E = 0.08$	$\Delta E = 0.21$	$\Delta E = 0.29$	$\Delta E = 0.10$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.24$	$\Delta E = 0.33$	$\Delta E = 0.35$	$\Delta E = 0.08$	$\Delta E = 0.27$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.09$	$\Delta E = 0.16$

PFUJIIM - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.29$	$\Delta E = 0.37$	$\Delta E = 0.16$	$\Delta E = 0.19$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.21$	$\Delta E = 0.13$	$\Delta E = 0.26$	$\Delta E = 0.29$	$\Delta E = 0.12$	$\Delta E = 0.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.57$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.25$	$\Delta E = 0.14$	$\Delta E = 0.25$	$\Delta E = 0.16$	$\Delta E = 0.11$

PFUJIM - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.040044	0.073723	0.091210	0.143685	0.163608	0.134892	0.120817	0.103498	0.080964	0.067828	0.047865
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.034342	0.019528	0.010646	0.006616	0.005111	0.004541	0.006888	0.002497	0.007610	0.019774	0.055603
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.137350	0.246459	0.337172	0.390888	0.422500	0.443972	0.461100	0.488989	0.543637	0.615680	0.691288
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.758791	0.798563	0.831534	0.844021	0.852845	0.859139	0.859751	0.864874			

2 Gaussians max

Scaling factor: 129.87447521569524

Gaussians:

Weight	Mean		Covariance			
0.406172768	456.793040423	454.797357713	11143.316408301	-108.323816802	-108.323816802	2495.294271997
0.593827232	505.103847843	682.056976741	14839.568240001	-925.750334968	-925.750334968	4839.263175108

4 Gaussians max

Scaling factor: 119.739656956387

Gaussians:

Weight	Mean		Covariance			
0.231722356	396.356745171	437.407722604	2062.822448516	-353.476560009	-353.476560009	1288.922672360
0.322003928	499.490401013	539.036655932	12714.335598508	-5313.822677003	-5313.822677003	7334.397938966
0.117664576	653.194356951	648.788708639	4907.472976772	2007.431204624	2007.431204624	3724.290746801
0.328609141	474.977535113	726.131363720	10677.227972277	-70.923360433	-70.923360433	1530.471704984

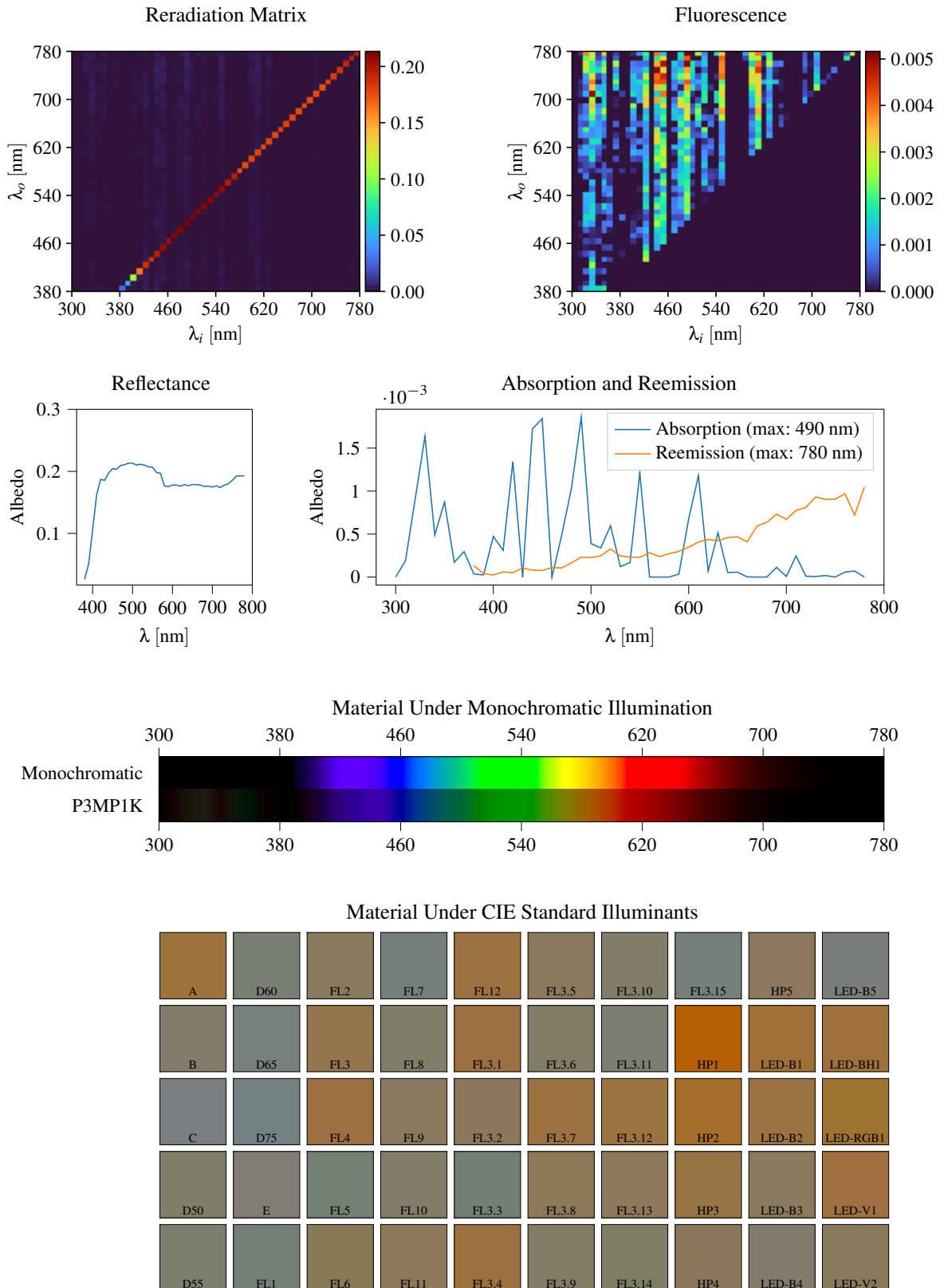
8 Gaussians max

Scaling factor: 119.03698050444663

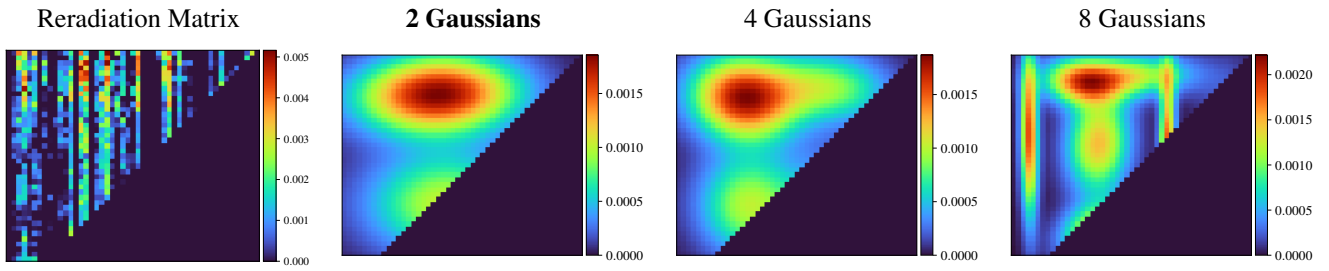
Gaussians:

Weight	Mean		Covariance			
0.224385905	400.279762242	434.247933412	2191.042720680	-218.034673782	-218.034673782	1083.096642615
0.078091026	588.098614468	447.877598155	11320.498133125	-1156.927450395	-1156.927450395	2375.624426884
0.143745701	611.754982938	615.350039508	361.168431089	65.706038905	65.706038905	11526.784140692
0.158789395	444.510985264	561.722073012	5071.123092662	672.885726650	672.885726650	2522.778619343
0.071696743	707.015498510	680.723462770	2661.075378264	524.356286705	524.356286705	3292.487960385
0.105397764	342.223257990	708.855160594	956.815487912	-378.178953376	-378.178953376	3190.220639262
0.216867160	480.942428793	717.882276373	3269.552675434	226.198379685	226.198379685	1830.789754478

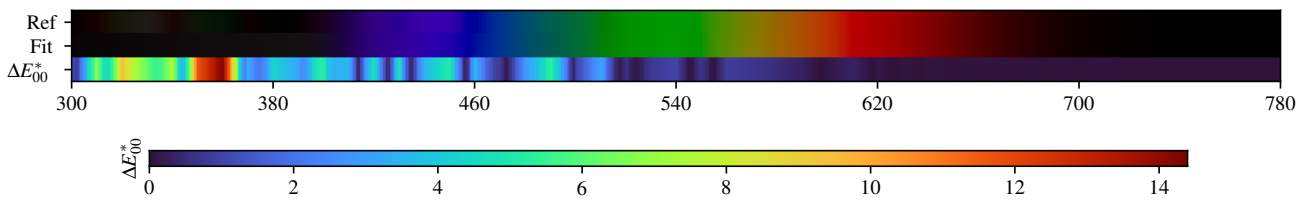
3.99. P3MP1K



P3MP1K - Weighted Expectation-Maximization - 2 Gaussians



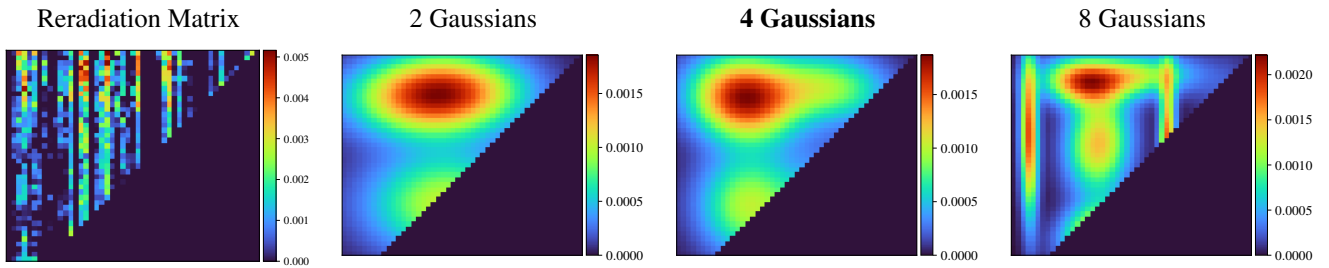
Fitted Material Under Monochromatic Illumination



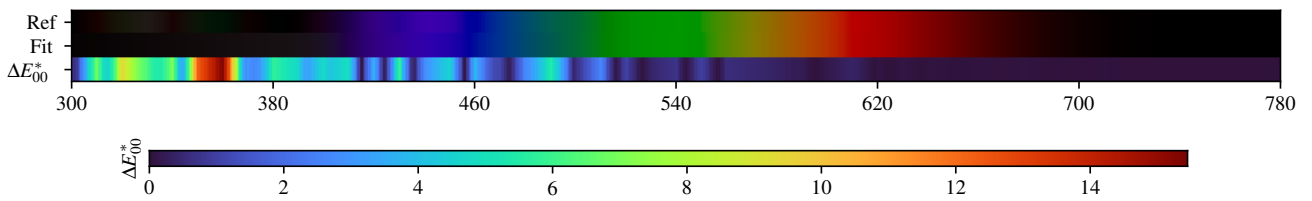
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.27$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.27$	FL12 $\Delta E = 0.31$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.63$	FL3.15 $\Delta E = 0.34$	HP5 $\Delta E = 0.09$	LED-B5 $\Delta E = 0.27$
B $\Delta E = 0.13$	D65 $\Delta E = 0.33$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.17$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.58$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.30$	D75 $\Delta E = 0.38$	FL4 $\Delta E = 0.13$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.33$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.15$	E $\Delta E = 0.23$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.58$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.44$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.21$	FL1 $\Delta E = 0.20$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.45$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.57$	FL3.14 $\Delta E = 0.16$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.05$

P3MP1K - Weighted Expectation-Maximization - 4 Gaussians



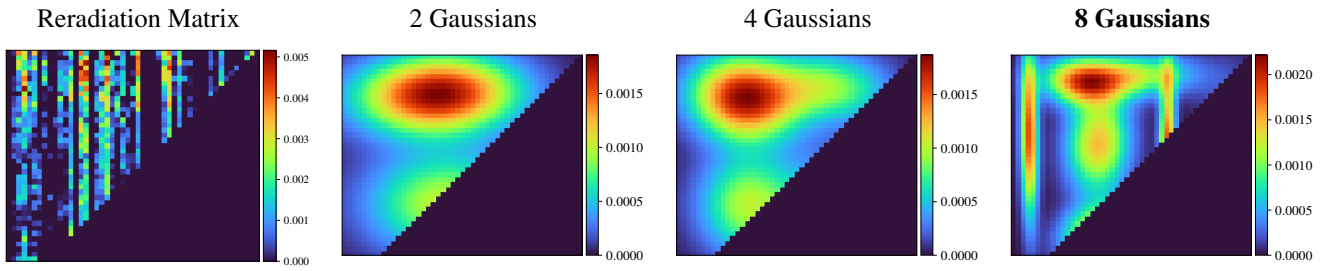
Fitted Material Under Monochromatic Illumination



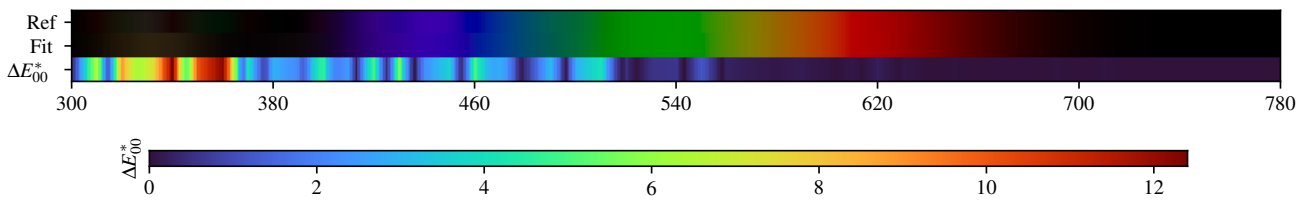
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.39$	$\Delta E = 0.15$	$\Delta E = 0.41$	$\Delta E = 0.45$	$\Delta E = 0.16$	$\Delta E = 0.82$	$\Delta E = 0.46$	$\Delta E = 0.09$	$\Delta E = 0.40$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.27$	$\Delta E = 0.43$	$\Delta E = 0.08$	$\Delta E = 0.34$	$\Delta E = 0.04$	$\Delta E = 0.23$	$\Delta E = 0.79$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.39$	$\Delta E = 0.45$	$\Delta E = 0.05$	$\Delta E = 0.21$	$\Delta E = 0.09$	$\Delta E = 0.48$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.30$	$\Delta E = 0.35$	$\Delta E = 0.32$	$\Delta E = 0.80$	$\Delta E = 0.21$	$\Delta E = 0.65$	$\Delta E = 0.18$	$\Delta E = 0.06$	$\Delta E = 0.24$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.35$	$\Delta E = 0.36$	$\Delta E = 0.12$	$\Delta E = 0.65$	$\Delta E = 0.04$	$\Delta E = 0.81$	$\Delta E = 0.34$	$\Delta E = 0.06$	$\Delta E = 0.27$	$\Delta E = 0.19$

P3MP1K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.58$	$\Delta E = 0.18$	$\Delta E = 0.34$	$\Delta E = 0.15$	$\Delta E = 0.28$	$\Delta E = 0.18$	$\Delta E = 0.36$	$\Delta E = 0.35$	$\Delta E = 0.43$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.43$	$\Delta E = 0.62$	$\Delta E = 0.09$	$\Delta E = 0.30$	$\Delta E = 0.10$	$\Delta E = 0.40$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.54$	$\Delta E = 0.65$	$\Delta E = 0.06$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.13$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.48$	$\Delta E = 0.54$	$\Delta E = 0.29$	$\Delta E = 0.15$	$\Delta E = 0.39$	$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.54$	$\Delta E = 0.31$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.43$	$\Delta E = 0.33$	$\Delta E = 0.34$	$\Delta E = 0.33$

P3MP1K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.026011	0.050461	0.105532	0.161739	0.187171	0.185477	0.197135	0.204428	0.203508	0.209532	0.210617
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.213362	0.213212	0.210191	0.211448	0.210020	0.207226	0.206767	0.198212	0.196953	0.176387	0.175354
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.178029	0.177820	0.176282	0.178651	0.176977	0.178662	0.178676	0.177843	0.175870	0.176146	0.174692
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.176571	0.174060	0.177733	0.180116	0.185417	0.192327	0.192929	0.192531			

2 Gaussians

Scaling factor: 123.93688651101733

Gaussians:

Weight	Mean		Covariance			
0.583356175	488.760806247	703.623722087	12720.490885645	388.411262968	388.411262968	3050.195880165
0.416643825	507.512965014	480.565456366	12408.011355306	-29.480293230	-29.480293230	5145.515587934

4 Gaussians

Scaling factor: 119.47109652397612

Gaussians:

Weight	Mean		Covariance			
0.392619869	430.628525991	695.086778932	5409.723002248	-385.606434514	-385.606434514	3366.788602772
0.156217202	619.515599624	483.234887761	5592.240082176	-47.157696054	-47.157696054	5086.823742940
0.256114540	442.068966571	477.298883121	4897.310368871	-104.639722429	-104.639722429	5070.080726098
0.195048389	602.420655697	718.028011651	7225.071758481	-317.172033979	-317.172033979	2371.638790095

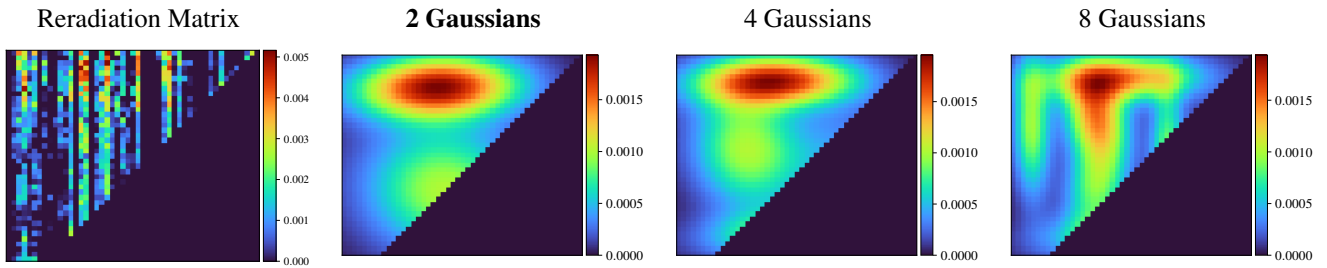
8 Gaussians

Scaling factor: 118.18920378932759

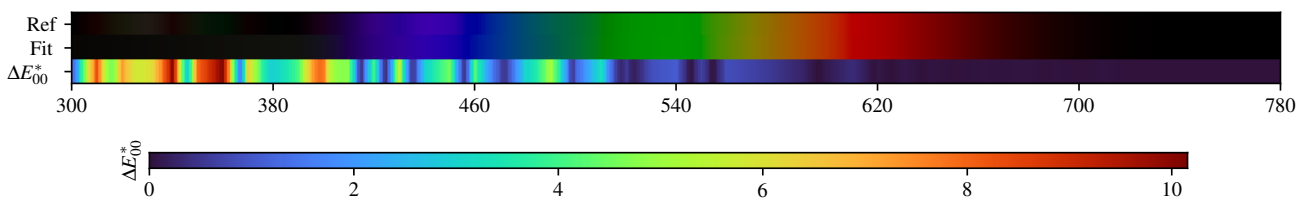
Gaussians:

Weight	Mean		Covariance			
0.123097539	436.610384899	727.737531139	2748.137914462	-200.448684657	-200.448684657	1062.962778509
0.112605383	461.503360088	427.556355717	2169.691748861	515.511374492	515.511374492	1526.651769506
0.233520989	471.907635015	602.900585648	1908.379318968	225.275995145	225.275995145	4735.593113708
0.050761148	724.812871162	637.258084292	1679.443408578	944.612341716	944.612341716	8292.868441727
0.116165541	611.739312203	591.384925642	117.076502206	87.994536372	87.994536372	12172.159629240
0.137346160	332.328675354	622.340568815	148.379112447	-114.420701561	-114.420701561	13309.243963030
0.157330870	538.701117789	740.892344596	7317.495474482	189.802129532	189.802129532	842.859455982
0.069172369	613.052129357	420.431730793	7893.349768702	267.073981128	267.073981128	955.082713843

P3MP1K - Weighted variational Bayesian inference - 2 Gaussians



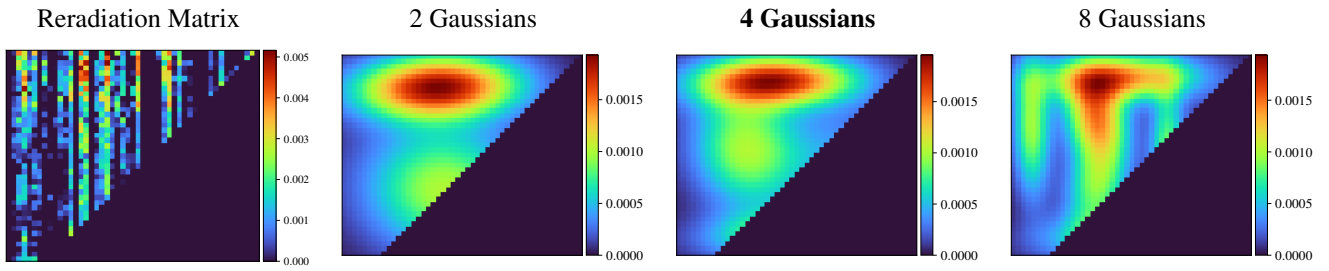
Fitted Material Under Monochromatic Illumination



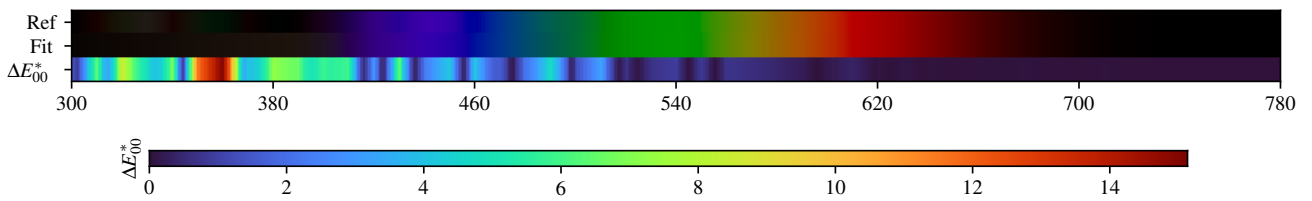
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.24$	D60 $\Delta E = 0.79$	FL2 $\Delta E = 0.31$	FL7 $\Delta E = 0.73$	FL12 $\Delta E = 0.45$	FL3.5 $\Delta E = 0.42$	FL3.10 $\Delta E = 0.96$	FL3.15 $\Delta E = 0.82$	HP5 $\Delta E = 0.46$	LED-B5 $\Delta E = 0.61$
B $\Delta E = 0.72$	D65 $\Delta E = 0.84$	FL3 $\Delta E = 0.16$	FL8 $\Delta E = 0.59$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.49$	FL3.11 $\Delta E = 0.88$	HP1 $\Delta E = 0.16$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 0.98$	D75 $\Delta E = 0.96$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.43$	FL3.2 $\Delta E = 0.24$	FL3.7 $\Delta E = 0.48$	FL3.12 $\Delta E = 0.19$	HP2 $\Delta E = 0.20$	LED-B2 $\Delta E = 0.19$	LED-RGB1 $\Delta E = 0.35$
D50 $\Delta E = 0.66$	E $\Delta E = 0.98$	FL5 $\Delta E = 0.49$	FL10 $\Delta E = 0.92$	FL3.3 $\Delta E = 0.39$	FL3.8 $\Delta E = 0.71$	FL3.13 $\Delta E = 0.34$	HP3 $\Delta E = 0.29$	LED-B3 $\Delta E = 0.39$	LED-V1 $\Delta E = 0.32$
D55 $\Delta E = 0.73$	FL1 $\Delta E = 0.57$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.74$	FL3.4 $\Delta E = 0.18$	FL3.9 $\Delta E = 0.94$	FL3.14 $\Delta E = 0.51$	HP4 $\Delta E = 0.39$	LED-B4 $\Delta E = 0.47$	LED-V2 $\Delta E = 0.60$

P3MP1K - Weighted variational Bayesian inference - 4 Gaussians



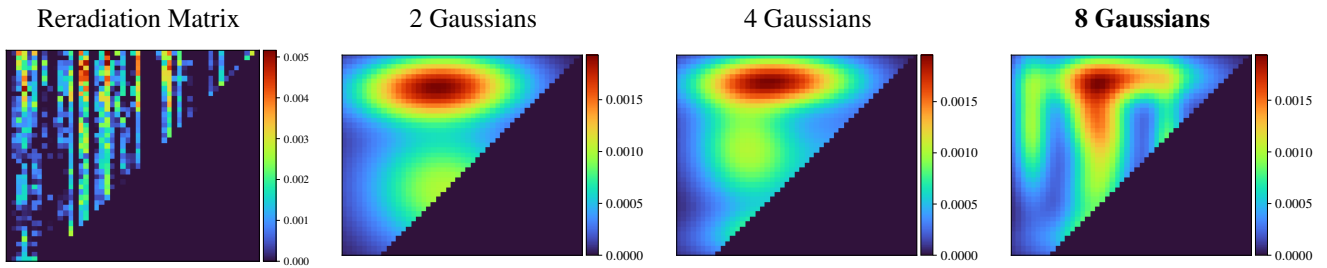
Fitted Material Under Monochromatic Illumination



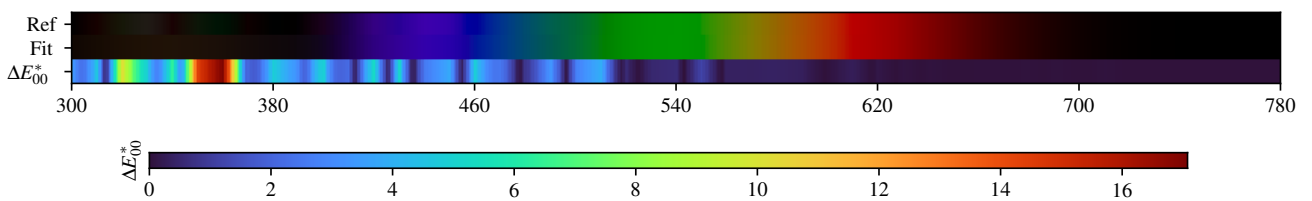
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.39$	$\Delta E = 0.11$	$\Delta E = 0.54$	$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.20$	$\Delta E = 0.32$	$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.45$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.31$	$\Delta E = 0.35$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.43$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.49$	$\Delta E = 0.17$	$\Delta E = 0.51$	$\Delta E = 0.23$	$\Delta E = 0.52$	$\Delta E = 0.05$	$\Delta E = 0.20$	$\Delta E = 0.11$	$\Delta E = 0.19$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.50$	$\Delta E = 0.11$	$\Delta E = 0.58$	$\Delta E = 0.06$	$\Delta E = 0.27$	$\Delta E = 0.14$	$\Delta E = 0.21$

P3MP1K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.38$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.30$	FL3.5 $\Delta E = 0.17$	FL3.10 $\Delta E = 0.31$	FL3.15 $\Delta E = 0.18$	HP5 $\Delta E = 0.25$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.25$	D65 $\Delta E = 0.41$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.25$	FL3.11 $\Delta E = 0.32$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.30$	D75 $\Delta E = 0.44$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.31$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.30$	E $\Delta E = 0.43$	FL5 $\Delta E = 0.18$	FL10 $\Delta E = 0.39$	FL3.3 $\Delta E = 0.28$	FL3.8 $\Delta E = 0.37$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.34$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.38$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.40$	FL3.14 $\Delta E = 0.24$	HP4 $\Delta E = 0.26$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.17$

P3MP1K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.026011	0.050461	0.105532	0.161739	0.187171	0.185477	0.197135	0.204428	0.203508	0.209532	0.210617
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.213362	0.213212	0.210191	0.211448	0.210020	0.207226	0.206767	0.198212	0.196953	0.176387	0.175354
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.178029	0.177820	0.176282	0.178651	0.176977	0.178662	0.178676	0.177843	0.175870	0.176146	0.174692
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.176571	0.174060	0.177733	0.180116	0.185417	0.192327	0.192929	0.192531			

2 Gaussians max

Scaling factor: 122.04852670826476

Gaussians:

Weight	Mean	Covariance				
0.514687419	503.555861633	509.252119618	12407.075124047	-467.113932264	-467.113932264	7992.233527028
0.485312581	489.273925652	718.352698635	12833.860925147	375.238204440	375.238204440	1993.105344099

4 Gaussians max

Scaling factor: 120.27221271820176

Gaussians:

Weight	Mean	Covariance				
0.184236554	517.872433917	420.110524765	12144.512671901	635.445452313	635.445452313	1246.057018247
0.318538239	436.435228365	593.223693567	5476.423040031	-366.071322583	-366.071322583	6842.106452458
0.125906151	620.456081630	576.521312436	6581.155982554	760.539056617	760.539056617	6153.662133921
0.371319055	495.812709616	731.146941300	12622.908362586	204.170182108	204.170182108	1289.437904918

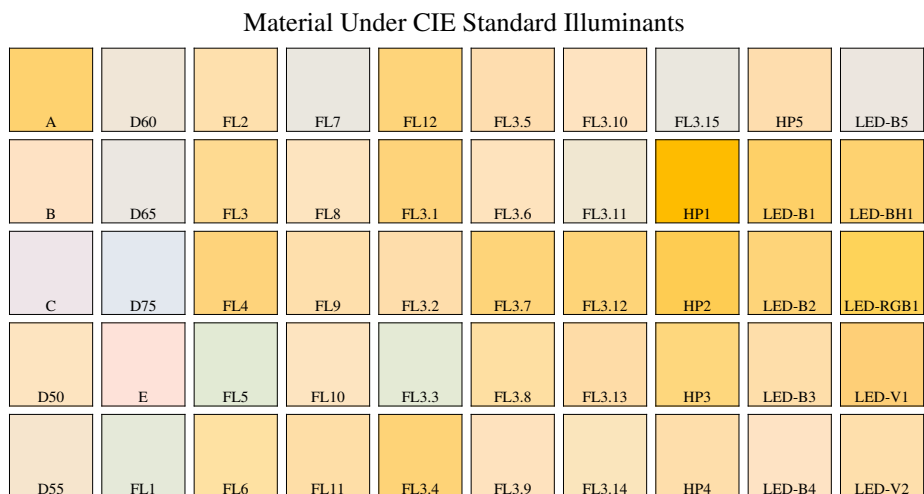
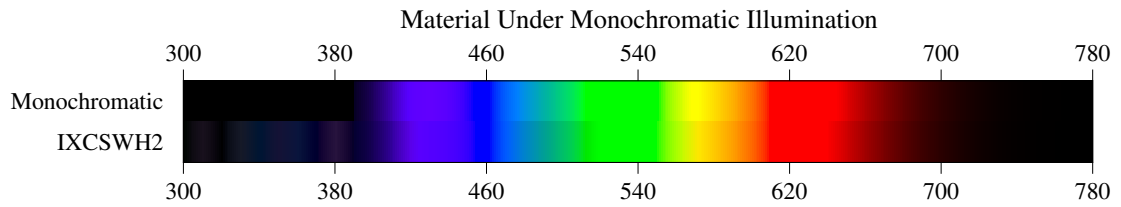
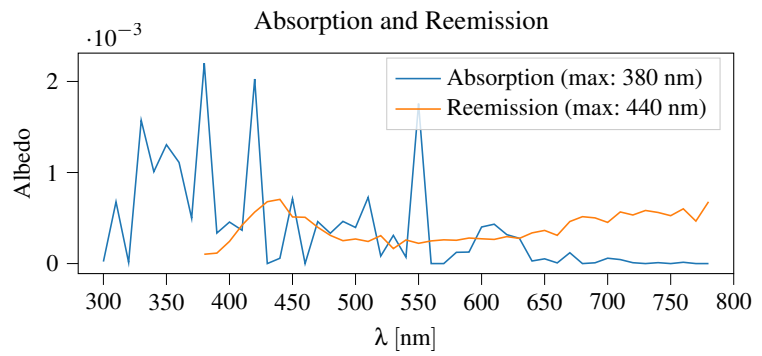
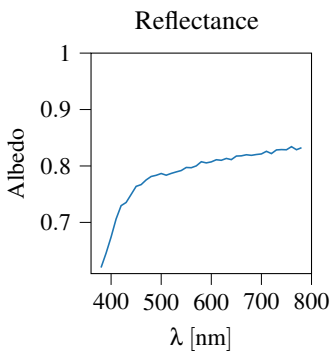
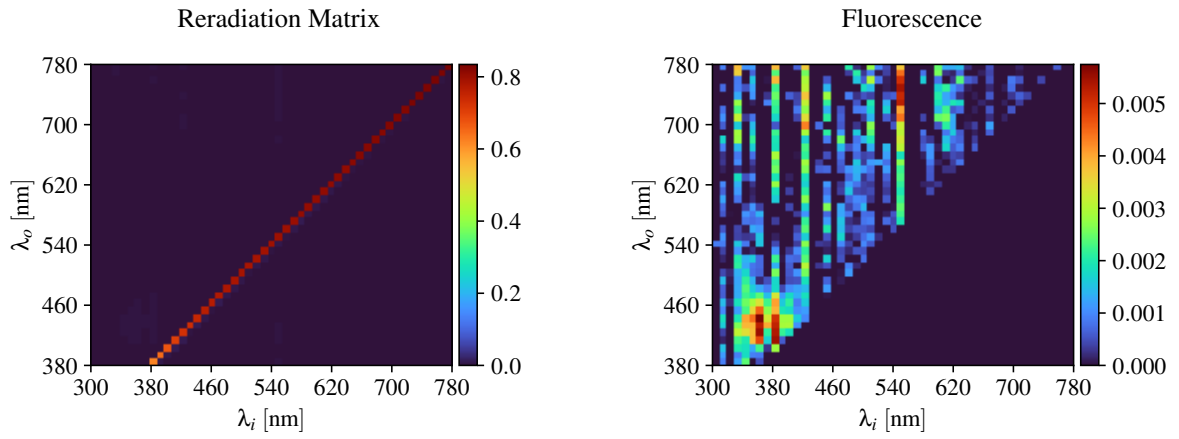
8 Gaussians max

Scaling factor: 118.91452148470468

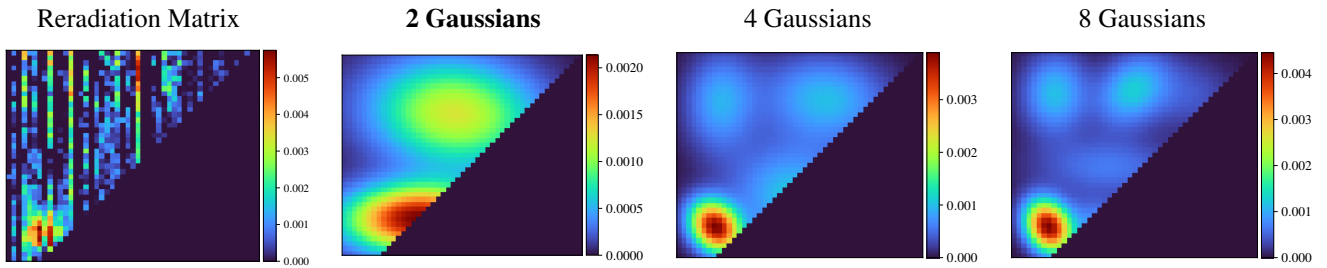
Gaussians:

Weight	Mean	Covariance					
0.158037129	521.780077243	416.985576141	12276.726845740	703.446351873	703.446351873	1134.008491745	
0.128697445	336.951094699	639.092682620	680.075702749	-126.686876724	-126.686876724	9595.321630611	
0.129428276	468.364317978	518.840474822	1855.934679717	626.114772839	626.114772839	4496.827693661	
0.096970830	610.930979209	584.571759536	533.851266011	52.988975197	52.988975197	9507.891031975	
0.046523663	705.579544370	602.491920082	3993.082652098	634.196778263	634.196778263	8014.424499140	
0.188811696	466.758211544	659.545047054	1833.365468543	-376.572002660	-376.572002660	3749.795399601	
0.251425674	517.399061891	737.910690982	10988.772586492	158.807577449	158.807577449	1039.095046159	

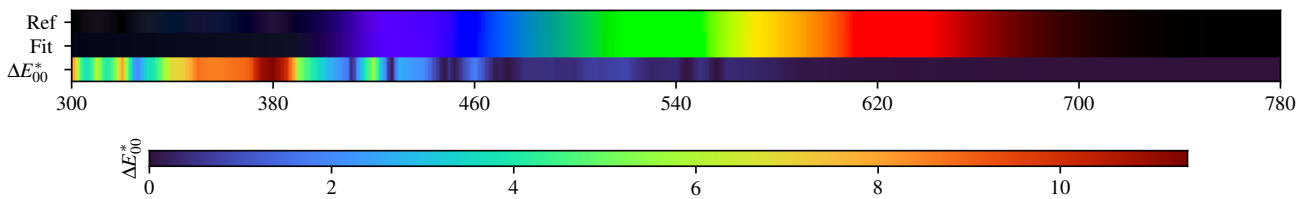
3.100. IXCSWH2



IXCSWH2 - Weighted Expectation-Maximization - 2 Gaussians



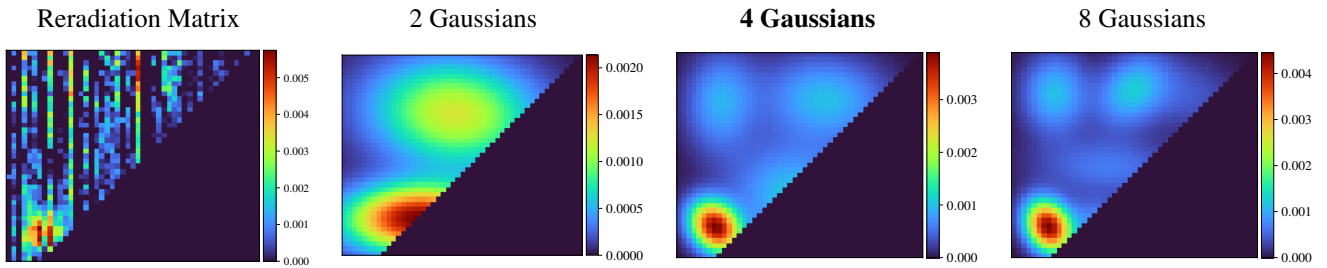
Fitted Material Under Monochromatic Illumination



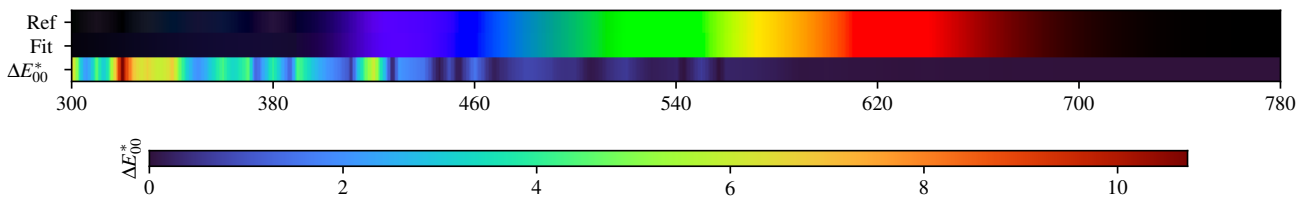
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.33$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.37$	FL12 $\Delta E = 0.10$	FL3.5 $\Delta E = 0.18$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.28$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.41$
B $\Delta E = 0.25$	D65 $\Delta E = 0.36$	FL3 $\Delta E = 0.19$	FL8 $\Delta E = 0.25$	FL3.1 $\Delta E = 0.16$	FL3.6 $\Delta E = 0.26$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.15$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.30$	D75 $\Delta E = 0.35$	FL4 $\Delta E = 0.16$	FL9 $\Delta E = 0.19$	FL3.2 $\Delta E = 0.20$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.25$	E $\Delta E = 0.31$	FL5 $\Delta E = 0.32$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.35$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.22$
D55 $\Delta E = 0.30$	FL1 $\Delta E = 0.35$	FL6 $\Delta E = 0.23$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.13$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.23$	HP4 $\Delta E = 0.30$	LED-B4 $\Delta E = 0.32$	LED-V2 $\Delta E = 0.30$

IXCSWH2 - Weighted Expectation-Maximization - 4 Gaussians



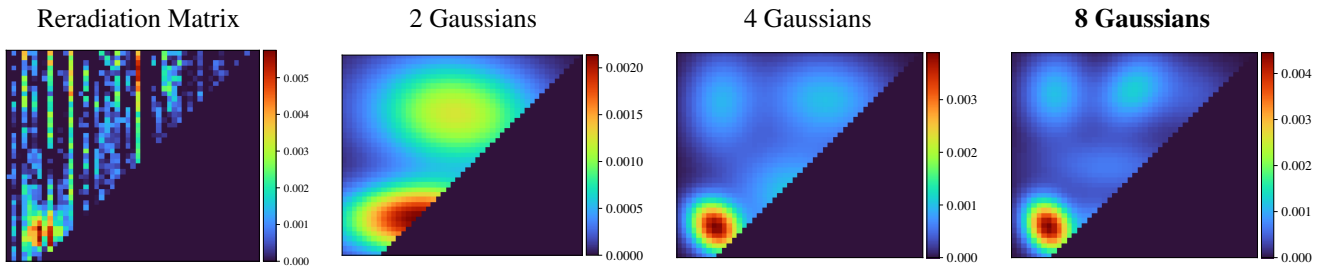
Fitted Material Under Monochromatic Illumination



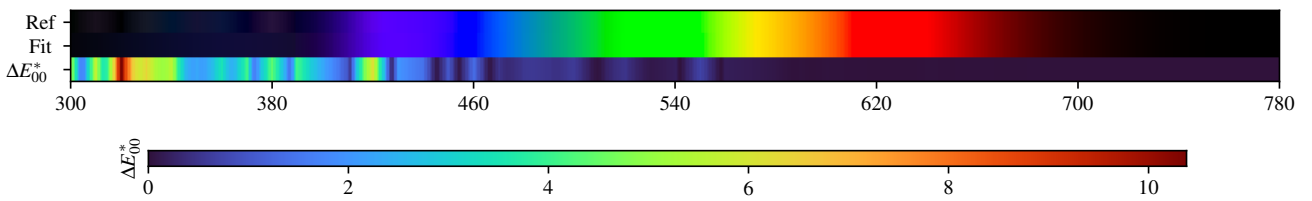
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.06$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.19$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.16$
B $\Delta E = 0.07$	D65 $\Delta E = 0.05$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.10$	D75 $\Delta E = 0.05$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.06$	E $\Delta E = 0.06$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.06$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.08$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.09$	LED-V2 $\Delta E = 0.09$

IXCSWH2 - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.07$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.07$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.01$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.27$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.14$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.07$	E $\Delta E = 0.14$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.24$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.09$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.17$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.11$	LED-B4 $\Delta E = 0.10$	LED-V2 $\Delta E = 0.09$

IXCSWH2 - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.619973	0.645456	0.674067	0.706059	0.729659	0.735291	0.749485	0.763852	0.766968	0.775285	0.781373
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.783461	0.786625	0.783647	0.786809	0.789456	0.791903	0.797327	0.796896	0.800125	0.807484	0.805440
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.807248	0.811032	0.810057	0.813344	0.811250	0.817561	0.817947	0.819873	0.818839	0.820316	0.821312
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825982	0.821941	0.828446	0.829017	0.828714	0.834212	0.828788	0.832330			

2 Gaussians

Scaling factor: 132.47674758913263

Gaussians:

Weight	Mean		Covariance			
0.477930288	449.148244157	450.127434045	10242.639246618	124.386416608	124.386416608	2187.587514961
0.522069712	523.137807444	664.393565827	13808.070710177	-771.498769307	-771.498769307	5804.186331767

4 Gaussians

Scaling factor: 118.07890915223616

Gaussians:

Weight	Mean		Covariance			
0.147059507	381.778638661	686.230899538	2239.591656514	154.037821405	154.037821405	4441.081903434
0.356268064	530.068918488	496.081075204	7683.710206414	-533.466185887	-533.466185887	5074.013909328
0.231877549	372.199828400	436.949609802	1161.376607870	-260.393997795	-260.393997795	1202.692402377
0.264794880	590.949358606	691.160891110	7282.197600578	-415.780348140	-415.780348140	3512.074162952

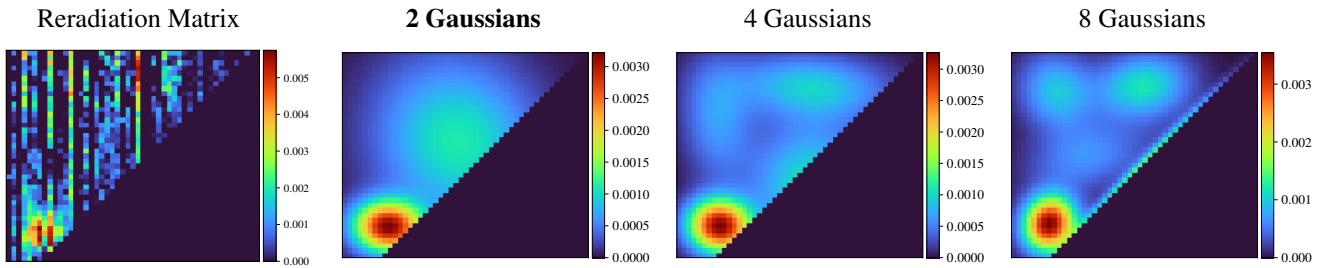
8 Gaussians

Scaling factor: 130.15334532017525

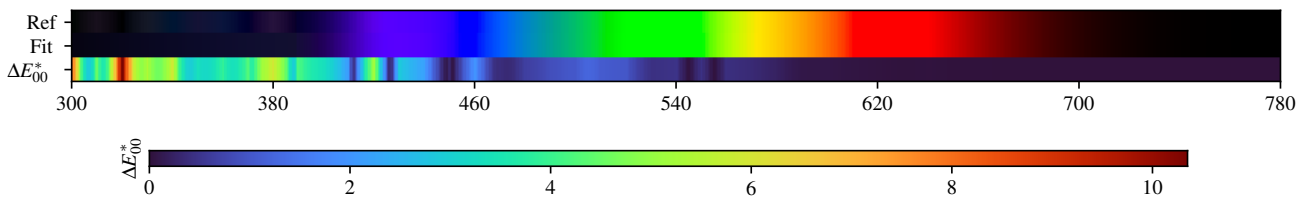
Gaussians:

Weight	Mean		Covariance			
0.125545366	531.835868295	707.634778523	2201.464744503	576.379214520	576.379214520	2481.019826694
0.134940298	487.516341578	555.372326621	10424.784644184	-267.785605810	-267.785605810	1700.080969332
0.222811960	368.198392628	437.414356674	942.735348801	-234.199599147	-234.199599147	1222.522427222
0.079392014	643.595210462	700.692505733	4824.953841093	-437.643568471	-437.643568471	2759.023535604
0.133261883	381.084857265	702.274232939	1930.374641842	57.067208267	57.067208267	2986.686168242
0.079861220	482.430505672	434.378998608	2596.320965668	-666.606568313	-666.606568313	1318.529204060
0.076143902	621.165616266	433.206057398	3756.501377387	466.699716716	466.699716716	1710.530498095
0.148043357	577.371069359	566.414842654	6913.265876528	6901.224769117	6901.224769117	6902.624635167

IXCSWH2 - Weighted variational Bayesian inference - 2 Gaussians



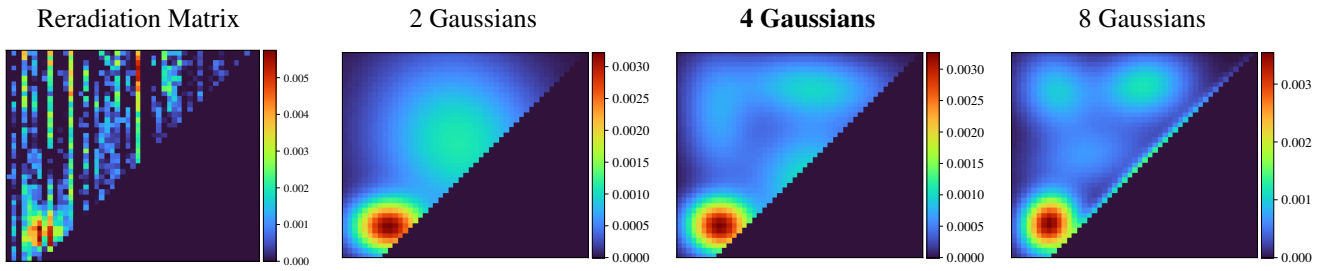
Fitted Material Under Monochromatic Illumination



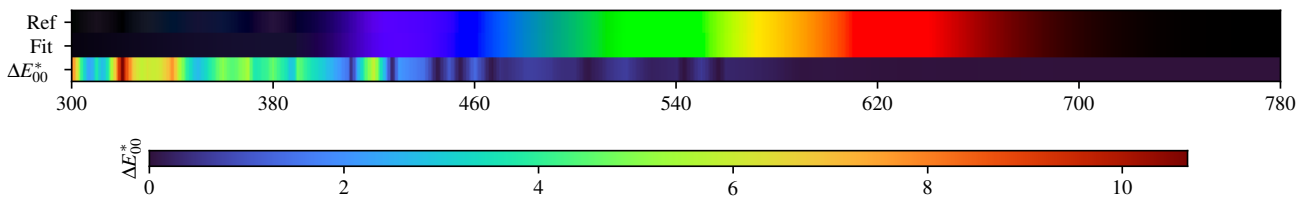
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.49$	FL2 $\Delta E = 0.25$	FL7 $\Delta E = 0.48$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.20$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.43$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.48$
B $\Delta E = 0.30$	D65 $\Delta E = 0.55$	FL3 $\Delta E = 0.19$	FL8 $\Delta E = 0.29$	FL3.1 $\Delta E = 0.16$	FL3.6 $\Delta E = 0.29$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.45$	D75 $\Delta E = 0.56$	FL4 $\Delta E = 0.16$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.21$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.34$	E $\Delta E = 0.32$	FL5 $\Delta E = 0.44$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.46$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.18$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.22$
D55 $\Delta E = 0.43$	FL1 $\Delta E = 0.47$	FL6 $\Delta E = 0.25$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.13$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.28$	HP4 $\Delta E = 0.33$	LED-B4 $\Delta E = 0.33$	LED-V2 $\Delta E = 0.31$

IXCSWH2 - Weighted variational Bayesian inference - 4 Gaussians



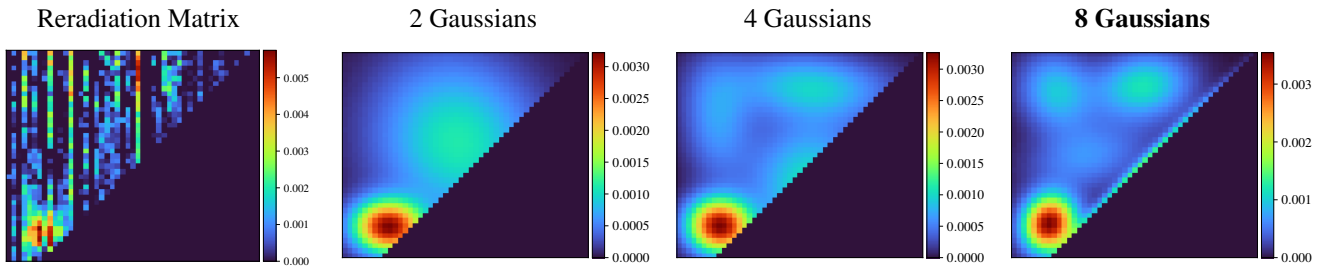
Fitted Material Under Monochromatic Illumination



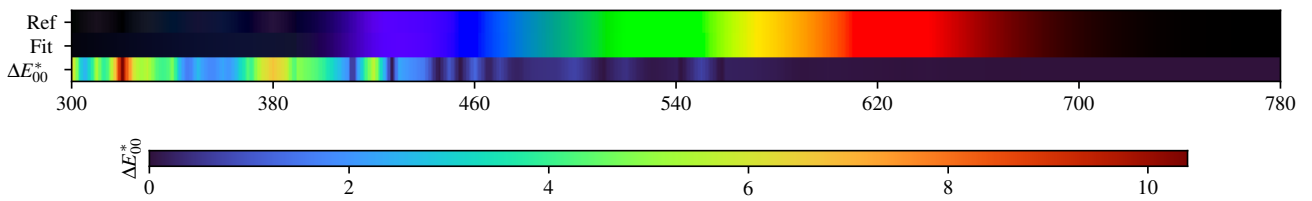
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.06$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.08$	D65 $\Delta E = 0.07$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.12$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.06$	E $\Delta E = 0.07$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.07$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.08$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.16$

IXCSWH2 - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.05$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.06$
B $\Delta E = 0.06$	D65 $\Delta E = 0.06$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.04$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.12$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.09$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.04$	E $\Delta E = 0.06$	FL5 $\Delta E = 0.05$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.07$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.04$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.05$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.07$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.05$	LED-V2 $\Delta E = 0.13$

IXCSWH2 - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.619973	0.645456	0.674067	0.706059	0.729659	0.735291	0.749485	0.763852	0.766968	0.775285	0.781373
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.783461	0.786625	0.783647	0.786809	0.789456	0.791903	0.797327	0.796896	0.800125	0.807484	0.805440
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.807248	0.811032	0.810057	0.813344	0.811250	0.817561	0.817947	0.819873	0.818839	0.820316	0.821312
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825982	0.821941	0.828446	0.829017	0.828714	0.834212	0.828788	0.832330			

2 Gaussians max

Scaling factor: 121.87068279036812

Gaussians:

Weight	Mean		Covariance			
0.260773238	385.717304687	437.176268103	2190.104094349	-43.777897309	-43.777897309	1230.946981988
0.739226762	523.842448345	605.982199667	12471.570134144	-1177.116219314	-1177.116219314	13122.610172987

4 Gaussians max

Scaling factor: 119.43181561798578

Gaussians:

Weight	Mean		Covariance			
0.259005549	380.749738147	438.700600533	1815.850141178	-59.794942308	-59.794942308	1325.666535955
0.381229932	556.042620904	522.862179342	6354.789709708	351.879665195	351.879665195	7442.184895848
0.133019173	375.707793108	650.543418653	2219.914466568	-254.600028725	-254.600028725	6787.675628671
0.226745345	561.428400250	716.165360522	11629.598531337	-660.125215667	-660.125215667	2012.618676365

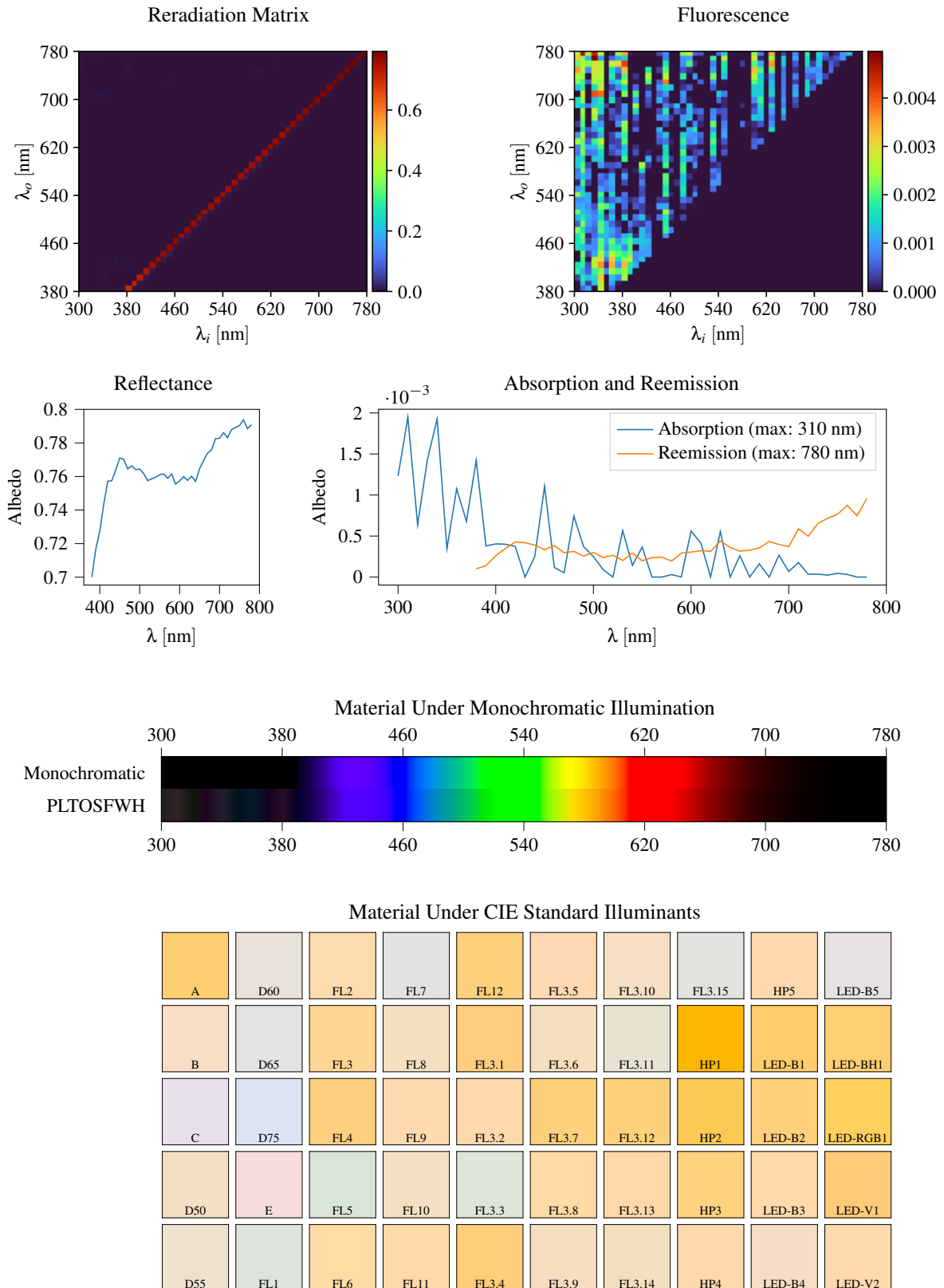
8 Gaussians max

Scaling factor: 127.7860697758622

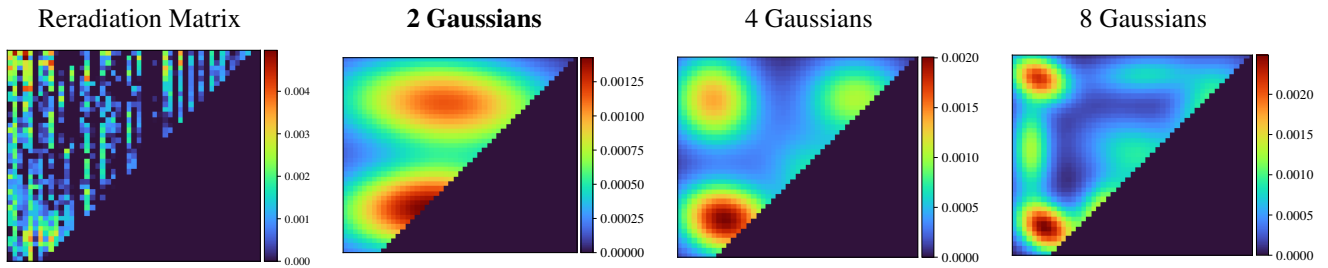
Gaussians:

Weight	Mean		Covariance			
0.222380523	369.908230575	443.403187499	1194.272492041	96.944464395	96.944464395	1401.336874649
0.119213657	564.708531495	424.845309220	6927.839559367	266.661995083	266.661995083	1459.133832545
0.196920035	565.017304906	553.285745786	9281.355754150	9153.317733053	9153.317733053	9309.342809782
0.057398493	635.775090645	554.164173497	5527.183185531	2292.883443552	2292.883443552	5252.234242258
0.115167792	443.576288889	577.046462768	6033.636599637	905.699068324	905.699068324	2228.297904920
0.122755098	383.540790858	706.262091752	2452.930321502	-226.628181058	-226.628181058	2772.970495183
0.165144434	555.828286012	717.196319531	4079.636499180	334.472569189	334.472569189	2019.701399758

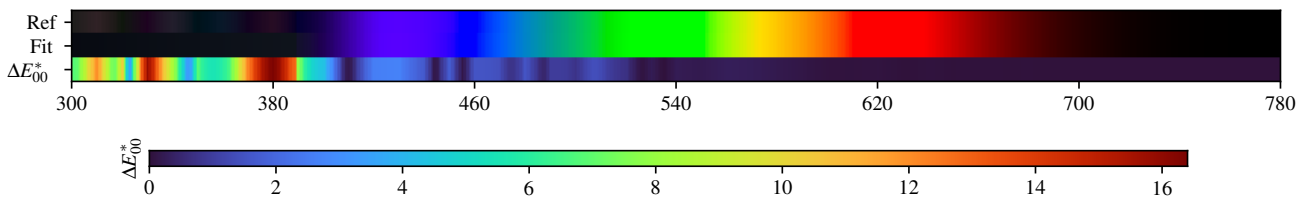
3.101. PLTOSFWH



PLTOSFWH - Weighted Expectation-Maximization - 2 Gaussians



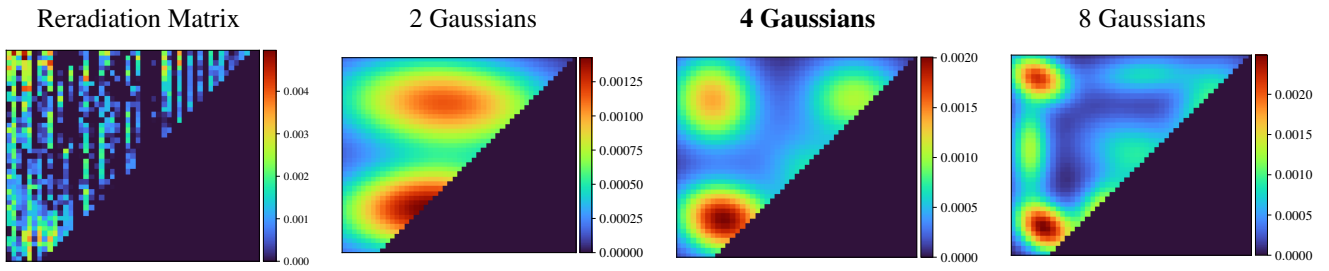
Fitted Material Under Monochromatic Illumination



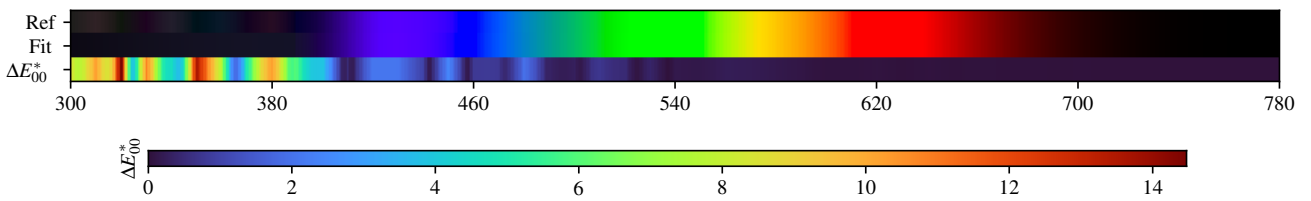
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.34$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.33$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.22$
B $\Delta E = 0.22$	D65 $\Delta E = 0.43$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.16$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.23$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.31$	D75 $\Delta E = 0.47$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.21$	E $\Delta E = 0.47$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.22$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.16$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.15$

PLTOSFWH - Weighted Expectation-Maximization - 4 Gaussians



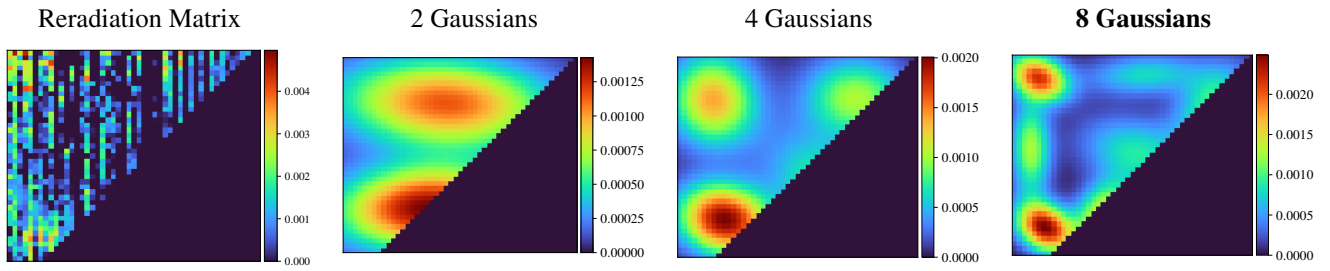
Fitted Material Under Monochromatic Illumination



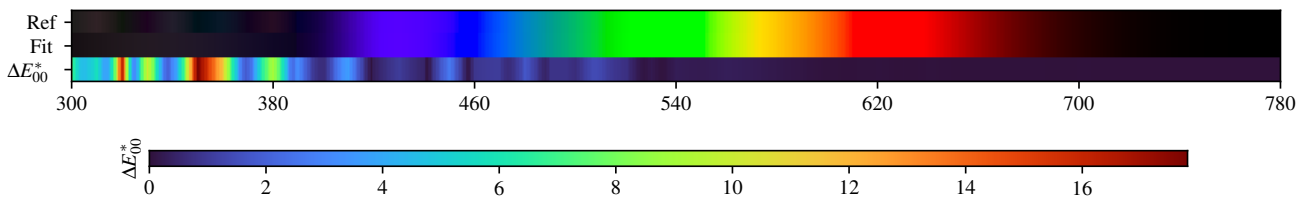
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.08$	FL3.15 $\Delta E = 0.13$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.09$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.13$	D75 $\Delta E = 0.14$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.08$	E $\Delta E = 0.14$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.11$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.11$

PLTOSFWH - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.15$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.15$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.14$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.11$	D65 $\Delta E = 0.16$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.11$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.12$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.14$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.09$

PLTOSFWH - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.699993	0.716641	0.727365	0.743556	0.757183	0.757460	0.763812	0.771091	0.770181	0.764535	0.766354
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.764054	0.764455	0.761740	0.757538	0.758586	0.759584	0.760991	0.761630	0.758930	0.761471	0.755484
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.757371	0.759934	0.757688	0.760147	0.757098	0.764653	0.769488	0.773878	0.775889	0.782488	0.782796
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.786105	0.783119	0.787919	0.789206	0.790389	0.793774	0.788511	0.790849			

2 Gaussians

Scaling factor: 142.7183067576873

Gaussians:

Weight	Mean	Covariance
0.511891539	508.586700726	688.668348126
0.488108461	472.342120199	468.395905945

4 Gaussians

Scaling factor: 131.92655885971254

Gaussians:

Weight	Mean	Covariance
0.208077670	658.049479203	699.360457534
0.297679510	391.512295827	452.474752059
0.256024082	367.942637159	696.175770427
0.238218738	601.223265859	515.072772541

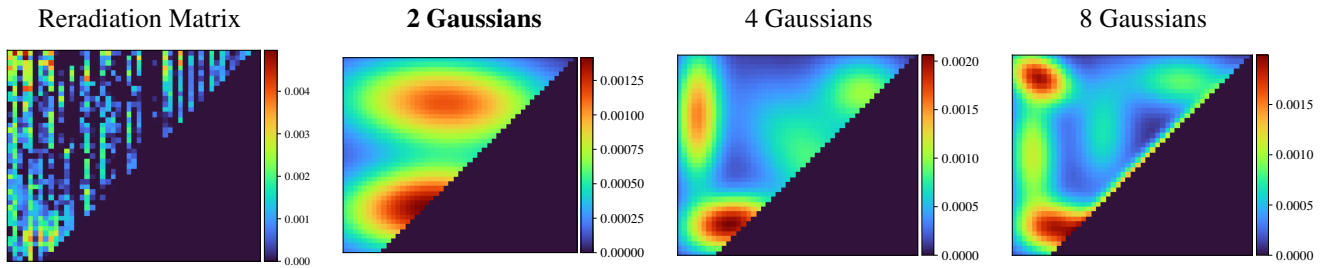
8 Gaussians

Scaling factor: 125.56936763912667

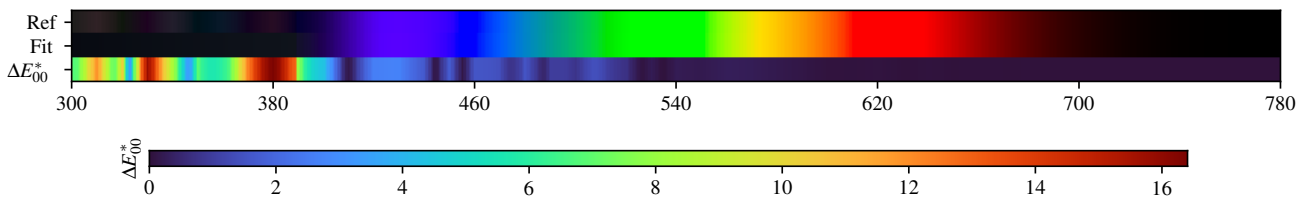
Gaussians:

Weight	Mean	Covariance
0.095678590	565.392215694	743.111551135
0.122453841	476.817743701	462.261312826
0.112363722	333.254226125	591.481658459
0.126101419	696.651999181	681.363581183
0.162741747	546.000502082	585.754252311
0.090221487	674.395480787	442.943078970
0.131692801	349.237244038	737.271271915
0.158746392	361.726388526	432.646044655

PLTOSFWH - Weighted variational Bayesian inference - 2 Gaussians



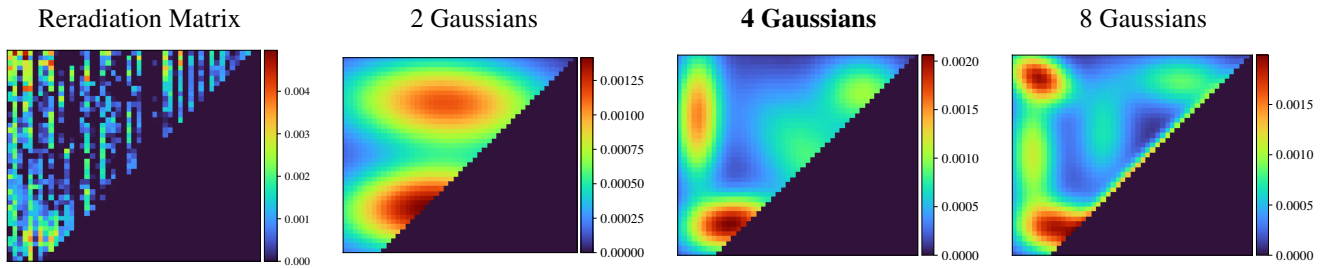
Fitted Material Under Monochromatic Illumination



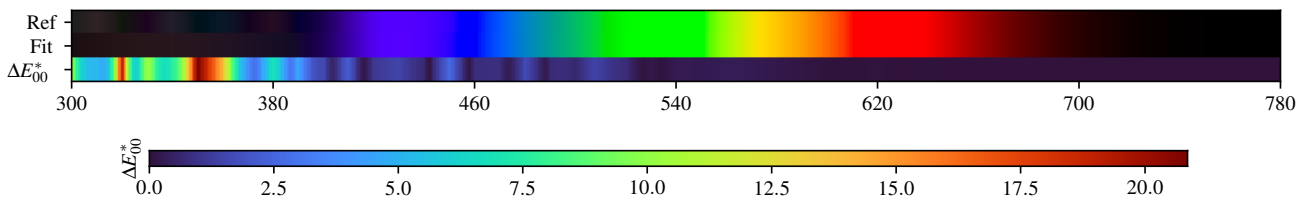
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.36$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.28$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.35$	HP5 $\Delta E = 0.15$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.23$	D65 $\Delta E = 0.45$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.23$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.32$	D75 $\Delta E = 0.49$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.14$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.22$	E $\Delta E = 0.49$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.23$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.29$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.17$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.16$

PLTOSFWH - Weighted variational Bayesian inference - 4 Gaussians



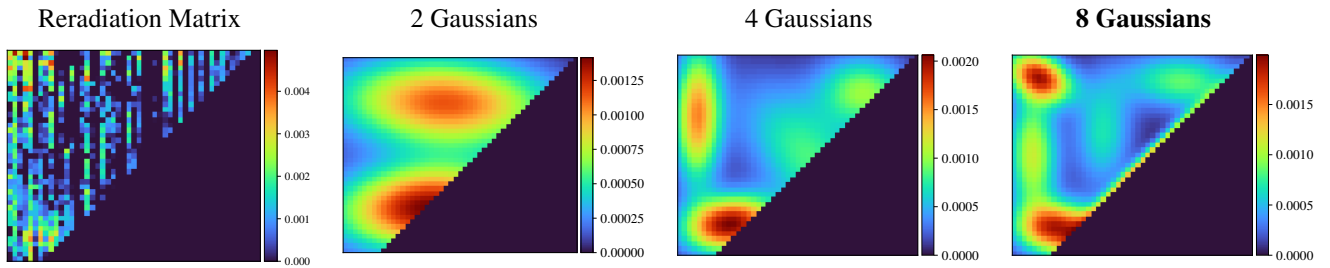
Fitted Material Under Monochromatic Illumination



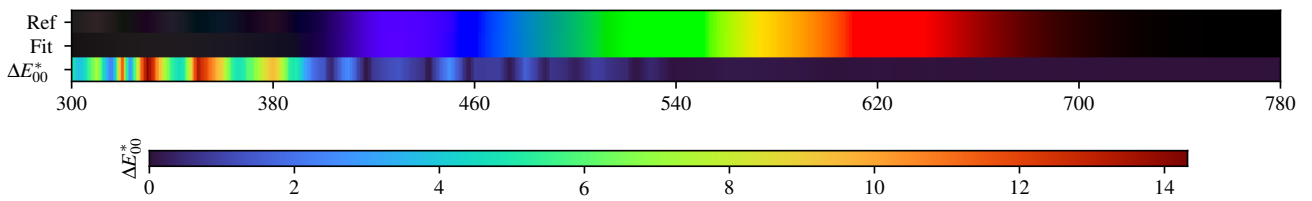
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.43$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.35$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.28$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.44$
B $\Delta E = 0.27$	D65 $\Delta E = 0.47$	FL3 $\Delta E = 0.19$	FL8 $\Delta E = 0.24$	FL3.1 $\Delta E = 0.15$	FL3.6 $\Delta E = 0.22$	FL3.11 $\Delta E = 0.39$	HP1 $\Delta E = 0.11$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.30$	D75 $\Delta E = 0.48$	FL4 $\Delta E = 0.16$	FL9 $\Delta E = 0.18$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.13$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.31$	E $\Delta E = 0.28$	FL5 $\Delta E = 0.31$	FL10 $\Delta E = 0.31$	FL3.3 $\Delta E = 0.31$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.21$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.38$	FL1 $\Delta E = 0.33$	FL6 $\Delta E = 0.23$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.29$	FL3.14 $\Delta E = 0.20$	HP4 $\Delta E = 0.25$	LED-B4 $\Delta E = 0.36$	LED-V2 $\Delta E = 0.22$

PLTOSFWH - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.07$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.06$	FL3.15 $\Delta E = 0.07$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.07$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.05$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.09$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.06$	E $\Delta E = 0.08$	FL5 $\Delta E = 0.08$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.07$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.07$	FL1 $\Delta E = 0.08$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.05$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.11$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.08$

PLTOSFWH - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.699993	0.716641	0.727365	0.743556	0.757183	0.757460	0.763812	0.771091	0.770181	0.764535	0.766354
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.764054	0.764455	0.761740	0.757538	0.758586	0.759584	0.760991	0.761630	0.758930	0.761471	0.755484
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.757371	0.759934	0.757688	0.760147	0.757098	0.764653	0.769488	0.773878	0.775889	0.782488	0.782796
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.786105	0.783119	0.787919	0.789206	0.790389	0.793774	0.788511	0.790849			

2 Gaussians max

Scaling factor: 142.76830556307652

Gaussians:

Weight	Mean		Covariance			
0.490748282	473.527206105	469.238698762	16753.713507893	613.309957288	613.309957288	3706.497262766
0.509251718	507.824309639	689.161529958	23652.989319894	-936.502818008	-936.502818008	4348.697271515

4 Gaussians max

Scaling factor: 129.4461148594028

Gaussians:

Weight	Mean		Covariance			
0.246933415	403.089236219	439.226548190	4078.857892020	365.199068800	365.199068800	1552.914440131
0.365423499	562.941937216	573.164608096	10684.977404407	-6451.125114537	-6451.125114537	11675.643260637
0.224246790	336.202369014	658.023819931	1065.586775226	90.422474949	90.422474949	9190.027006531
0.163396295	675.672897424	707.911635703	4266.461248927	-301.719998341	-301.719998341	2760.595329544

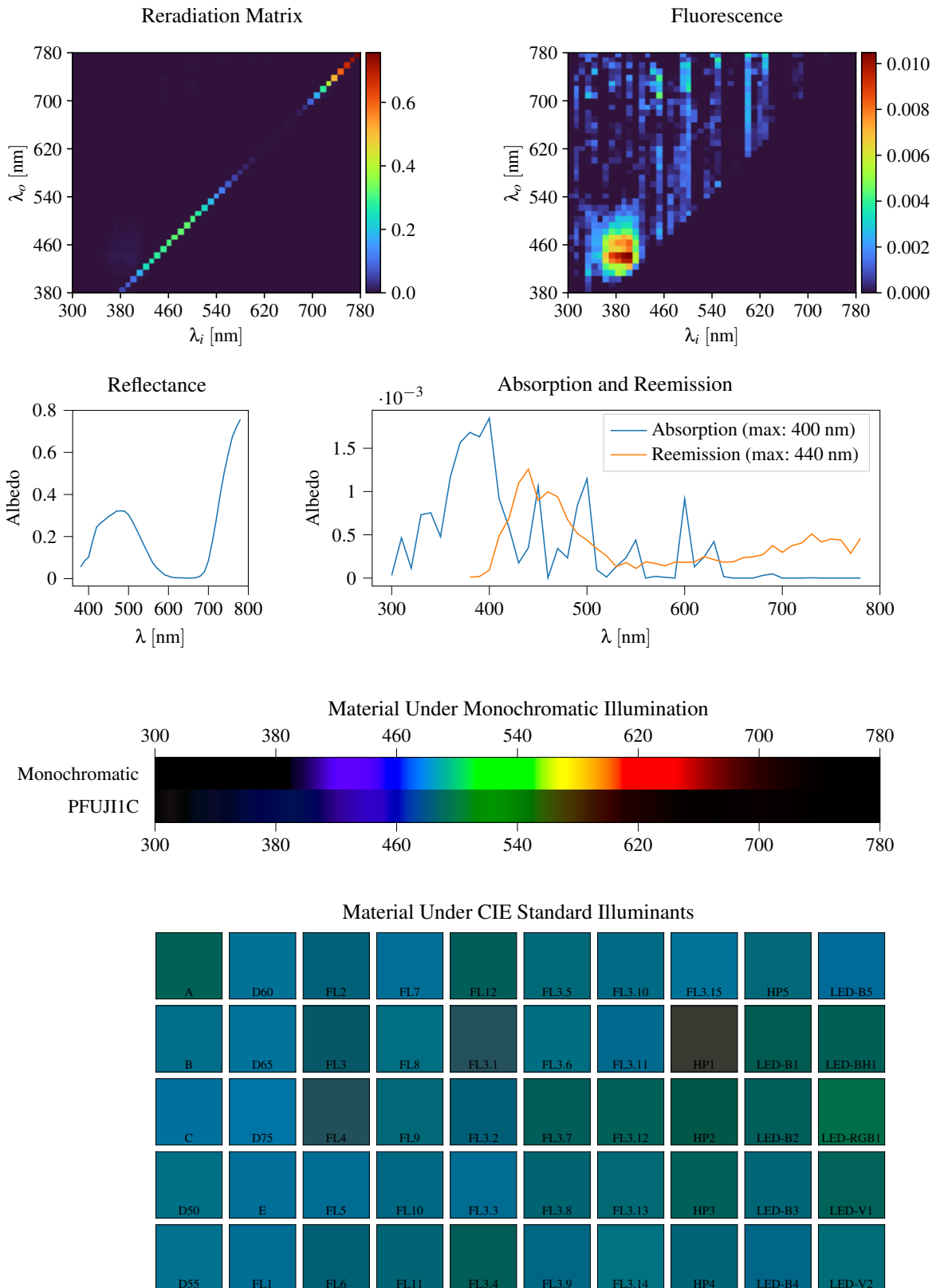
8 Gaussians max

Scaling factor: 136.74687987211993

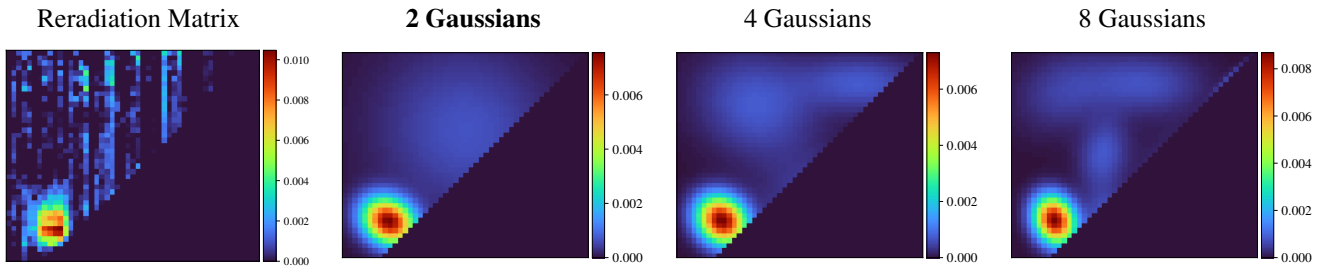
Gaussians:

Weight	Mean		Covariance			
0.171796605	393.138360432	430.811512036	3507.560996891	-40.617163162	-40.617163162	1264.125841672
0.083242667	657.636160485	437.671021922	5008.331272071	-239.633432800	-239.633432800	2324.308402764
0.171738373	575.203964224	562.953659467	8267.399815420	7927.599849314	7927.599849314	7984.628681411
0.160403193	337.197947576	579.137515477	1216.325278840	-123.419106020	-123.419106020	8145.305431398
0.104089571	479.044263977	625.191029691	1773.720371840	189.005149517	189.005149517	6520.729470384
0.064451268	685.925532123	572.914776074	3839.078691549	1261.861952130	1261.861952130	5440.560694988
0.127689066	637.189502438	730.418423756	6829.593429057	-280.325797006	-280.325797006	1629.419104737
0.116589257	351.352947257	738.484720345	2041.672790375	-547.464729838	-547.464729838	1237.511772225

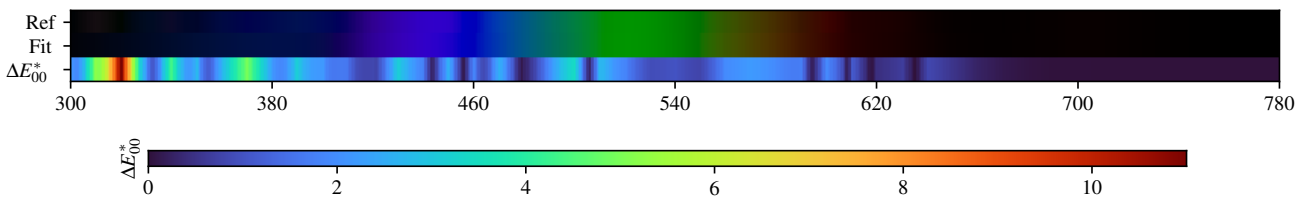
3.102. PFUJI1C



PFUJIIC - Weighted Expectation-Maximization - 2 Gaussians



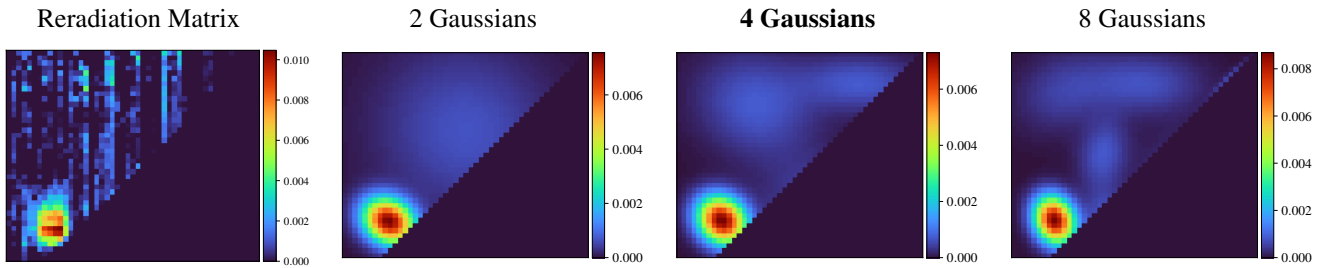
Fitted Material Under Monochromatic Illumination



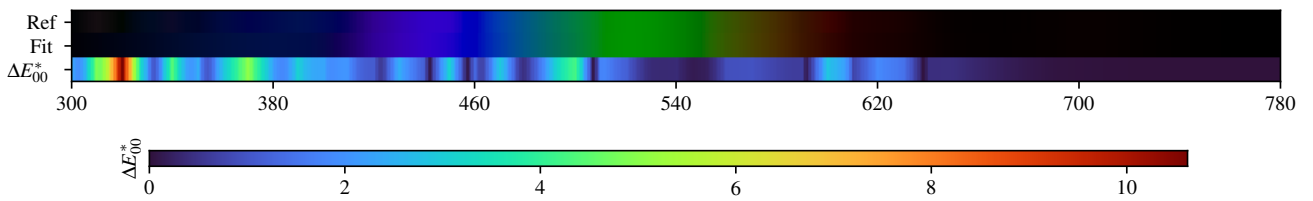
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.77$	$\Delta E = 0.79$	$\Delta E = 0.98$	$\Delta E = 0.80$	$\Delta E = 0.70$	$\Delta E = 0.71$	$\Delta E = 0.66$	$\Delta E = 0.65$	$\Delta E = 1.02$	$\Delta E = 0.73$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.84$	$\Delta E = 0.79$	$\Delta E = 1.15$	$\Delta E = 0.74$	$\Delta E = 1.27$	$\Delta E = 0.69$	$\Delta E = 0.73$	$\Delta E = 1.99$	$\Delta E = 0.81$	$\Delta E = 0.82$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.87$	$\Delta E = 0.80$	$\Delta E = 1.33$	$\Delta E = 0.78$	$\Delta E = 0.91$	$\Delta E = 0.69$	$\Delta E = 0.60$	$\Delta E = 1.08$	$\Delta E = 0.78$	$\Delta E = 0.68$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.79$	$\Delta E = 0.70$	$\Delta E = 0.86$	$\Delta E = 0.74$	$\Delta E = 0.82$	$\Delta E = 0.72$	$\Delta E = 0.60$	$\Delta E = 0.76$	$\Delta E = 0.73$	$\Delta E = 1.03$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.79$	$\Delta E = 0.85$	$\Delta E = 1.03$	$\Delta E = 0.74$	$\Delta E = 0.76$	$\Delta E = 0.73$	$\Delta E = 0.56$	$\Delta E = 1.13$	$\Delta E = 0.77$	$\Delta E = 1.09$

PFUJIIC - Weighted Expectation-Maximization - 4 Gaussians



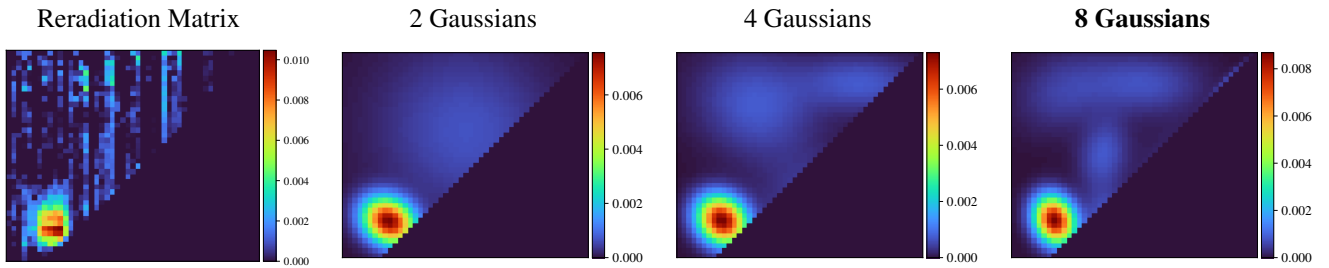
Fitted Material Under Monochromatic Illumination



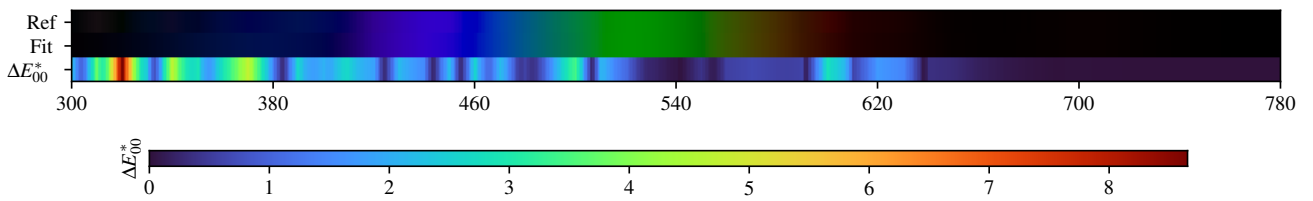
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.47$	$\Delta E = 0.44$	$\Delta E = 0.51$	$\Delta E = 0.30$	$\Delta E = 0.38$	$\Delta E = 0.47$	$\Delta E = 0.38$	$\Delta E = 0.65$	$\Delta E = 0.45$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.51$	$\Delta E = 0.48$	$\Delta E = 0.38$	$\Delta E = 0.42$	$\Delta E = 0.25$	$\Delta E = 0.41$	$\Delta E = 0.47$	$\Delta E = 0.65$	$\Delta E = 0.24$	$\Delta E = 0.29$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.60$	$\Delta E = 0.49$	$\Delta E = 0.30$	$\Delta E = 0.38$	$\Delta E = 0.38$	$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.35$	$\Delta E = 0.27$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.45$	$\Delta E = 0.28$	$\Delta E = 0.52$	$\Delta E = 0.46$	$\Delta E = 0.49$	$\Delta E = 0.38$	$\Delta E = 0.34$	$\Delta E = 0.43$	$\Delta E = 0.39$	$\Delta E = 0.65$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.46$	$\Delta E = 0.52$	$\Delta E = 0.43$	$\Delta E = 0.40$	$\Delta E = 0.13$	$\Delta E = 0.43$	$\Delta E = 0.40$	$\Delta E = 0.67$	$\Delta E = 0.41$	$\Delta E = 0.75$

PFUJIIC - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.27$	$\Delta E = 0.06$	$\Delta E = 0.15$	$\Delta E = 0.03$	$\Delta E = 0.19$	$\Delta E = 0.04$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.94$	$\Delta E = 0.15$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.03$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.21$	$\Delta E = 0.09$	$\Delta E = 0.24$	$\Delta E = 0.12$	$\Delta E = 0.25$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.07$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.22$	$\Delta E = 0.05$	$\Delta E = 0.24$

PFUJIC - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.055210	0.084967	0.102130	0.178548	0.244885	0.264786	0.278875	0.294986	0.307026	0.321085	0.322103
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.320483	0.303412	0.271553	0.233077	0.194031	0.153467	0.115404	0.077093	0.052651	0.035168	0.018587
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.012021	0.005521	0.004232	0.004114	0.003110	0.002313	0.003067	0.004898	0.012084	0.032675	0.084090
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.175755	0.283386	0.403976	0.507923	0.595576	0.673377	0.719261	0.756203			

2 Gaussians

Scaling factor: 109.60962372041195

Gaussians:

Weight	Mean		Covariance			
0.444913125	386.899348921	448.301065458	1166.270640989	-201.307533840	-201.307533840	949.496368437
0.555086875	539.186067596	627.541998074	14317.714039082	-697.348578467	-697.348578467	13885.742543500

4 Gaussians

Scaling factor: 104.51409794985278

Gaussians:

Weight	Mean		Covariance			
0.453222739	385.494184622	449.990730868	1060.382322745	-164.906171565	-164.906171565	1021.413276829
0.139716576	659.827143695	722.112822433	6870.124818490	-189.744636611	-189.744636611	1454.871224548
0.239098998	451.093377872	678.979356805	5935.632140118	-700.311452874	-700.311452874	4800.840687615
0.167961686	575.561101744	479.960100414	6596.933756538	-239.281746171	-239.281746171	4655.635375202

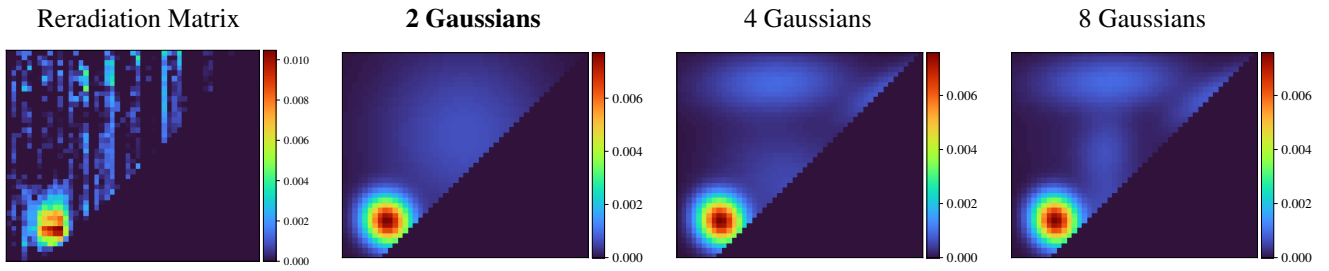
8 Gaussians

Scaling factor: 106.51714384619149

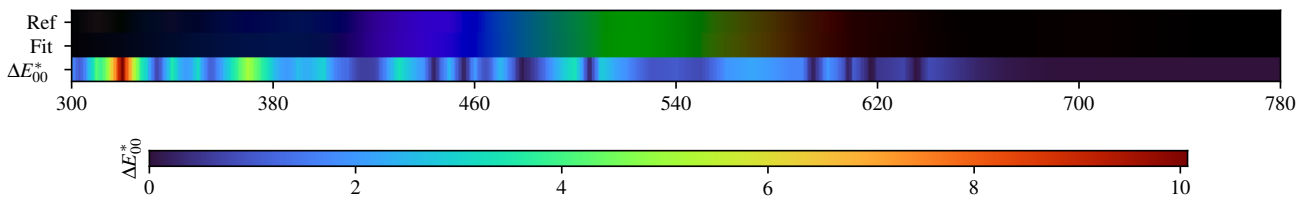
Gaussians:

Weight	Mean		Covariance			
0.063324939	480.110259058	449.537154716	851.721420190	-22.417301412	-22.417301412	1914.256504630
0.148234631	555.158533779	721.961737956	6254.791687152	-99.994453149	-99.994453149	1677.148715122
0.054953110	738.852471698	723.054479092	557.042699939	463.312967392	463.312967392	554.610313001
0.106486090	395.059494965	704.162159160	3765.914721634	586.029236942	586.029236942	2947.696283220
0.073477412	476.813081135	582.406467700	1047.707779535	260.027526725	260.027526725	2140.384538121
0.048926392	622.648436466	412.499355334	3468.882617728	424.367616056	424.367616056	734.338124686
0.427507302	380.624157165	450.538742148	718.905501635	-136.384949319	-136.384949319	994.963351322
0.077090125	620.649062372	544.903979984	3496.919963824	581.331896365	581.331896365	3947.828235547

PFUJIIC - Weighted variational Bayesian inference - 2 Gaussians



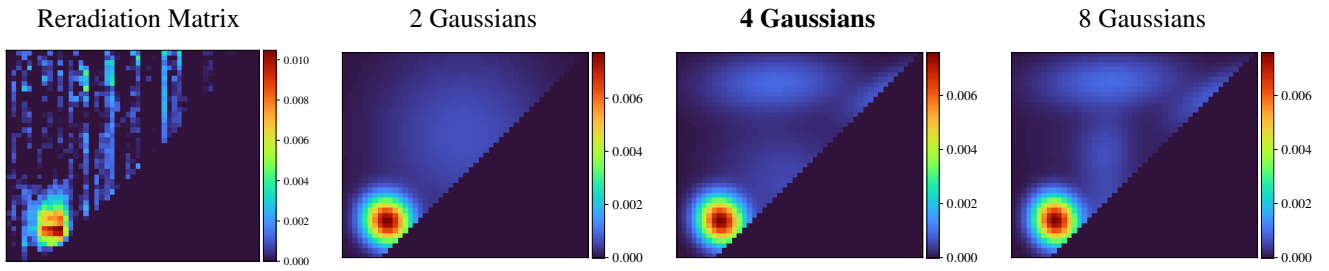
Fitted Material Under Monochromatic Illumination



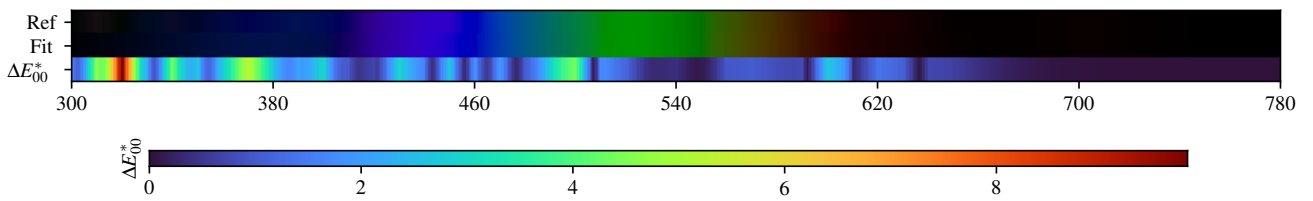
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.77$	$\Delta E = 0.69$	$\Delta E = 0.89$	$\Delta E = 0.69$	$\Delta E = 0.67$	$\Delta E = 0.65$	$\Delta E = 0.58$	$\Delta E = 0.58$	$\Delta E = 0.86$	$\Delta E = 0.67$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.73$	$\Delta E = 0.68$	$\Delta E = 1.06$	$\Delta E = 0.67$	$\Delta E = 1.20$	$\Delta E = 0.63$	$\Delta E = 0.64$	$\Delta E = 1.89$	$\Delta E = 0.81$	$\Delta E = 0.81$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.73$	$\Delta E = 0.69$	$\Delta E = 1.24$	$\Delta E = 0.72$	$\Delta E = 0.83$	$\Delta E = 0.67$	$\Delta E = 0.60$	$\Delta E = 1.07$	$\Delta E = 0.77$	$\Delta E = 0.71$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.70$	$\Delta E = 0.64$	$\Delta E = 0.76$	$\Delta E = 0.66$	$\Delta E = 0.73$	$\Delta E = 0.66$	$\Delta E = 0.56$	$\Delta E = 0.66$	$\Delta E = 0.67$	$\Delta E = 0.87$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.69$	$\Delta E = 0.74$	$\Delta E = 0.95$	$\Delta E = 0.67$	$\Delta E = 0.76$	$\Delta E = 0.65$	$\Delta E = 0.51$	$\Delta E = 0.93$	$\Delta E = 0.72$	$\Delta E = 0.88$

PFUJIIC - Weighted variational Bayesian inference - 4 Gaussians



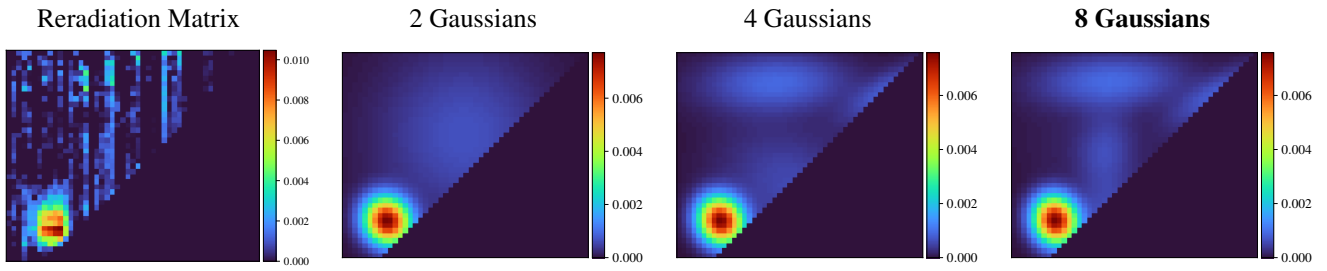
Fitted Material Under Monochromatic Illumination



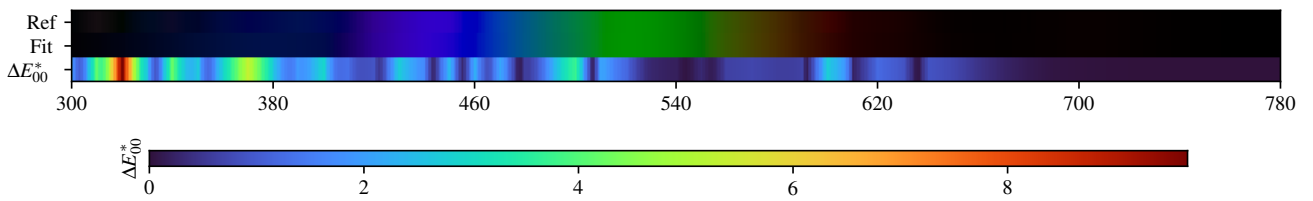
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.05$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.25$	$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.20$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.04$	$\Delta E = 0.11$	$\Delta E = 0.04$	$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.66$	$\Delta E = 0.13$	$\Delta E = 0.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.25$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.04$	$\Delta E = 0.18$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.16$	$\Delta E = 0.40$	$\Delta E = 0.09$	$\Delta E = 0.20$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.27$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.04$	$\Delta E = 0.20$	$\Delta E = 0.05$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.23$

PFUJIIC - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.22$	$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.08$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.87$	$\Delta E = 0.13$	$\Delta E = 0.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.04$	$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.03$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.05$	$\Delta E = 0.31$	$\Delta E = 0.06$	$\Delta E = 0.17$	$\Delta E = 0.07$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.19$	$\Delta E = 0.01$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.07$	$\Delta E = 0.23$

PFUJIC - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.055210	0.084967	0.102130	0.178548	0.244885	0.264786	0.278875	0.294986	0.307026	0.321085	0.322103
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.320483	0.303412	0.271553	0.233077	0.194031	0.153467	0.115404	0.077093	0.052651	0.035168	0.018587
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.012021	0.005521	0.004232	0.004114	0.003110	0.002313	0.003067	0.004898	0.012084	0.032675	0.084090
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.175755	0.283386	0.403976	0.507923	0.595576	0.673377	0.719261	0.756203			

2 Gaussians max

Scaling factor: 108.45018036949243

Gaussians:

Weight	Mean		Covariance			
0.421501744	383.838515152	449.036455307	927.612909742	-76.407154870	-76.407154870	977.940583770
0.578498256	535.315442393	619.701787121	14176.064655218	-23.840346750	-23.840346750	14737.229510548

4 Gaussians max

Scaling factor: 105.02309163867396

Gaussians:

Weight	Mean		Covariance			
0.420685552	382.931437790	449.117108771	893.123769975	-81.857979709	-81.857979709	985.547024836
0.288136556	523.777009731	517.887926224	10059.644767091	-2451.734454093	-2451.734454093	7455.387885900
0.072038292	714.512944216	705.947357968	3599.479632528	1909.660159663	1909.660159663	1792.086884933
0.219139600	492.779929840	724.510243490	10129.773531441	238.944730588	238.944730588	1620.336064000

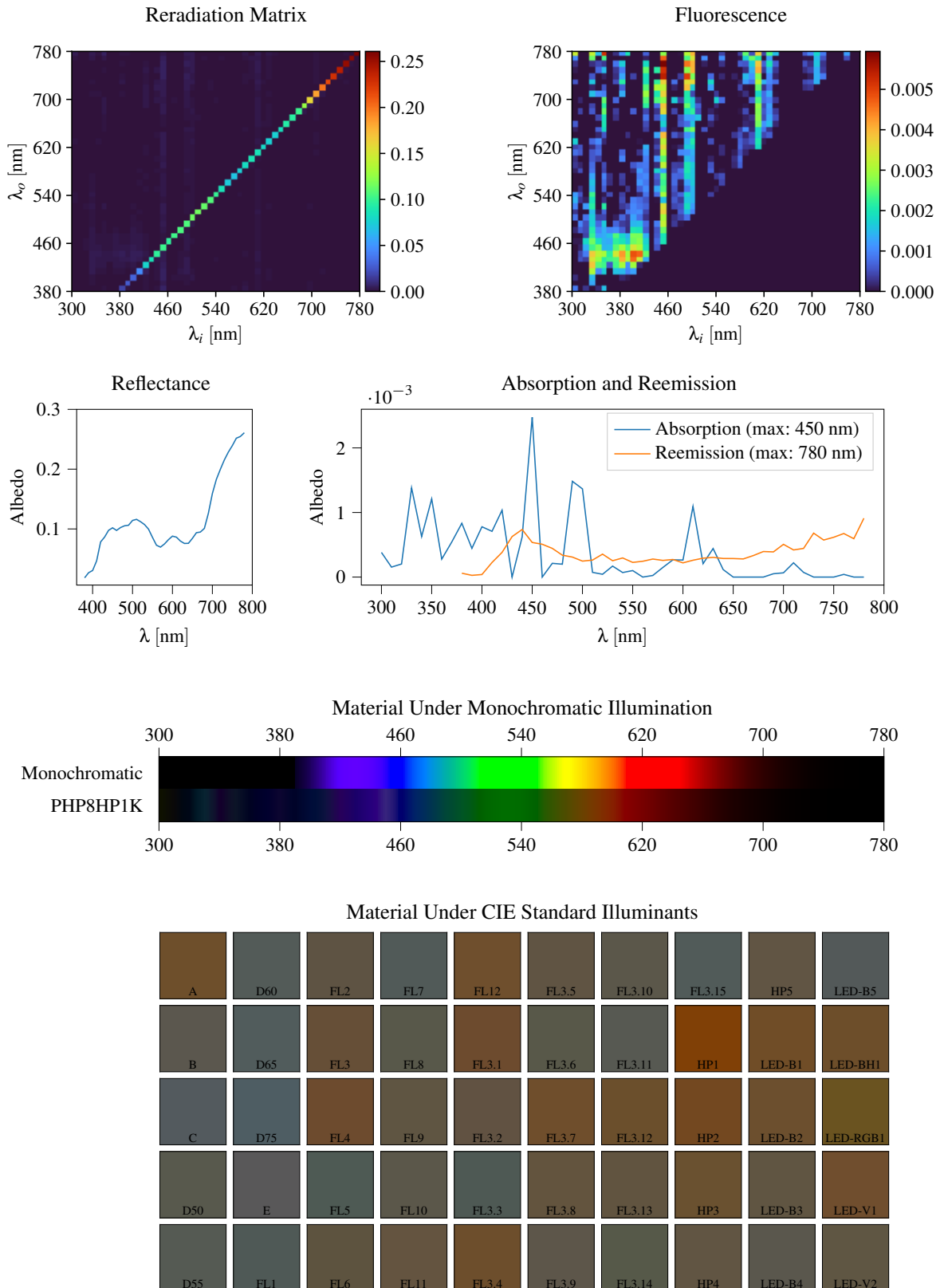
8 Gaussians max

Scaling factor: 104.68706636007454

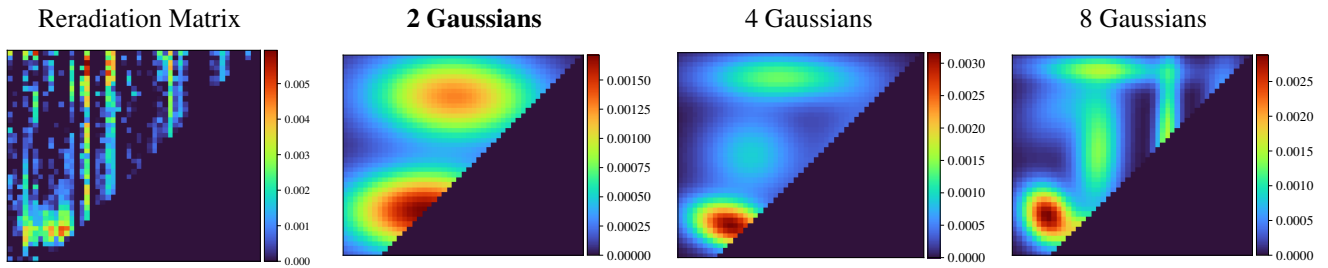
Gaussians:

Weight	Mean		Covariance			
0.423651821	382.059711487	450.261790301	850.058880907	-66.426136983	-66.426136983	1024.080629682
0.070657198	483.242474290	463.382005993	1404.250301306	-26.835586712	-26.835586712	3434.287830066
0.112688245	620.555094101	480.568165789	3895.917957968	285.924532505	285.924532505	5252.293037638
0.035232883	398.474064604	596.432432612	5678.524878803	-245.773620855	-245.773620855	3114.152707981
0.062476035	482.535225492	595.428990092	1539.107481818	230.746885632	230.746885632	2709.120521872
0.080491026	702.807517257	699.939541697	4468.157248758	2336.264018834	2336.264018834	2008.085857052
0.214681877	490.407806023	727.170281869	10177.646987163	327.610340949	327.610340949	1462.446923061

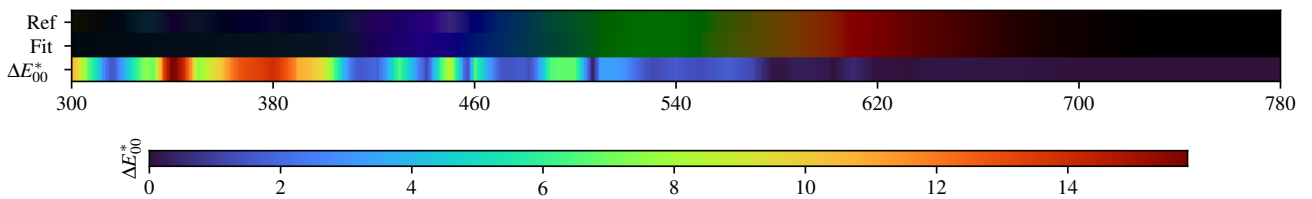
3.103. PHP8HP1K



PHP8HP1K - Weighted Expectation-Maximization - 2 Gaussians



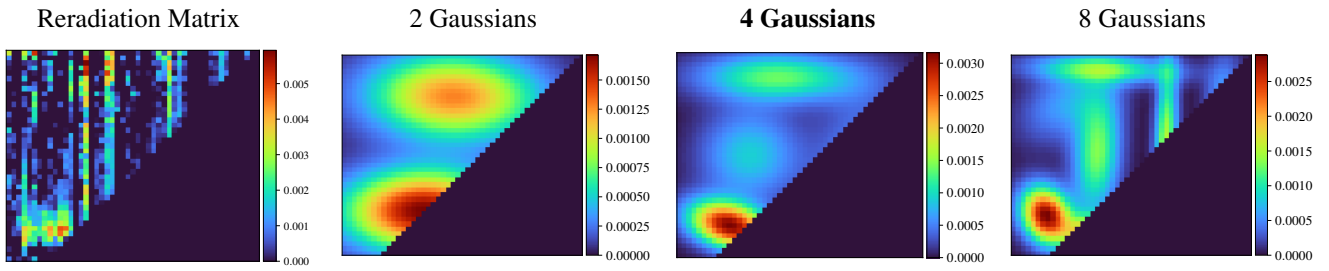
Fitted Material Under Monochromatic Illumination



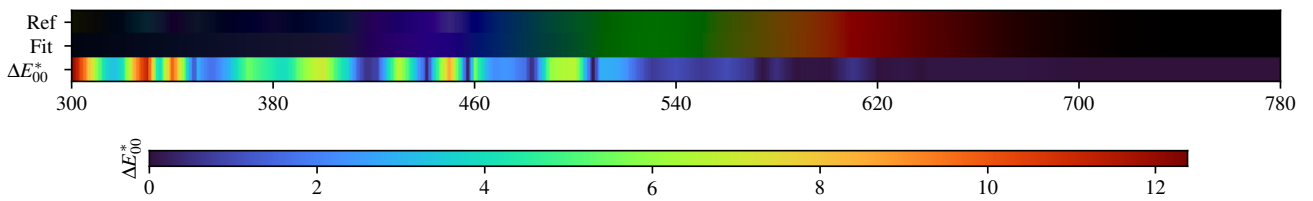
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.26$	$\Delta E = 1.57$	$\Delta E = 0.18$	$\Delta E = 0.68$	$\Delta E = 0.32$	$\Delta E = 0.24$	$\Delta E = 0.95$	$\Delta E = 1.05$	$\Delta E = 0.38$	$\Delta E = 0.86$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.81$	$\Delta E = 1.92$	$\Delta E = 0.17$	$\Delta E = 0.33$	$\Delta E = 0.19$	$\Delta E = 0.33$	$\Delta E = 0.89$	$\Delta E = 0.21$	$\Delta E = 0.19$	$\Delta E = 0.20$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.31$	$\Delta E = 2.43$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.44$	$\Delta E = 0.07$	$\Delta E = 0.17$	$\Delta E = 0.24$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.96$	$\Delta E = 2.83$	$\Delta E = 0.41$	$\Delta E = 0.72$	$\Delta E = 0.38$	$\Delta E = 0.62$	$\Delta E = 0.15$	$\Delta E = 0.27$	$\Delta E = 0.43$	$\Delta E = 0.60$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.24$	$\Delta E = 0.50$	$\Delta E = 0.17$	$\Delta E = 0.52$	$\Delta E = 0.22$	$\Delta E = 0.83$	$\Delta E = 0.37$	$\Delta E = 0.67$	$\Delta E = 0.55$	$\Delta E = 0.71$

PHP8HP1K - Weighted Expectation-Maximization - 4 Gaussians



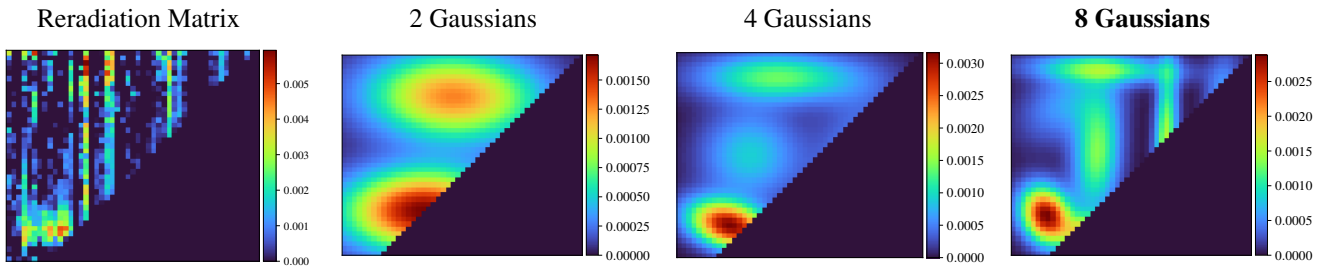
Fitted Material Under Monochromatic Illumination



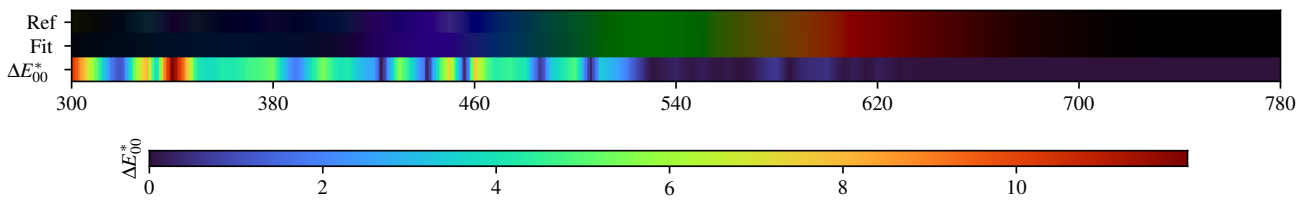
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.49$	$\Delta E = 0.30$	$\Delta E = 0.55$	$\Delta E = 0.51$	$\Delta E = 0.26$	$\Delta E = 0.76$	$\Delta E = 0.42$	$\Delta E = 0.51$	$\Delta E = 0.89$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.53$	$\Delta E = 0.53$	$\Delta E = 0.17$	$\Delta E = 0.32$	$\Delta E = 0.06$	$\Delta E = 0.30$	$\Delta E = 0.76$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.78$	$\Delta E = 0.58$	$\Delta E = 0.10$	$\Delta E = 0.25$	$\Delta E = 0.22$	$\Delta E = 0.68$	$\Delta E = 0.11$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.05$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.39$	$\Delta E = 0.57$	$\Delta E = 0.48$	$\Delta E = 0.61$	$\Delta E = 0.43$	$\Delta E = 0.74$	$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.53$	$\Delta E = 0.18$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.44$	$\Delta E = 0.51$	$\Delta E = 0.27$	$\Delta E = 0.57$	$\Delta E = 0.07$	$\Delta E = 0.76$	$\Delta E = 0.29$	$\Delta E = 0.45$	$\Delta E = 0.63$	$\Delta E = 0.47$

PHP8HP1K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.82$	$\Delta E = 0.46$	$\Delta E = 0.75$	$\Delta E = 0.11$	$\Delta E = 0.50$	$\Delta E = 0.32$	$\Delta E = 0.83$	$\Delta E = 0.71$	$\Delta E = 0.69$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.75$	$\Delta E = 0.81$	$\Delta E = 0.27$	$\Delta E = 0.67$	$\Delta E = 0.17$	$\Delta E = 0.65$	$\Delta E = 0.32$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.85$	$\Delta E = 0.75$	$\Delta E = 0.18$	$\Delta E = 0.50$	$\Delta E = 0.39$	$\Delta E = 0.13$	$\Delta E = 0.25$	$\Delta E = 0.10$	$\Delta E = 0.30$	$\Delta E = 0.26$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.73$	$\Delta E = 0.87$	$\Delta E = 0.67$	$\Delta E = 0.30$	$\Delta E = 0.64$	$\Delta E = 0.14$	$\Delta E = 0.48$	$\Delta E = 0.43$	$\Delta E = 0.58$	$\Delta E = 0.46$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.78$	$\Delta E = 0.70$	$\Delta E = 0.43$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.67$	$\Delta E = 0.71$	$\Delta E = 0.66$	$\Delta E = 0.81$

PHP8HP1K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.018255	0.026834	0.030467	0.046459	0.078261	0.086384	0.097709	0.101874	0.097548	0.102353	0.105279
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.106197	0.114212	0.116038	0.112135	0.107349	0.099722	0.085852	0.072750	0.069615	0.074844	0.082077
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.087962	0.086247	0.079696	0.075725	0.075967	0.084255	0.093697	0.094803	0.100954	0.126228	0.159138
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.182893	0.199737	0.215412	0.228470	0.239330	0.251763	0.254615	0.260908			

2 Gaussians

Scaling factor: 125.7479216720181

Gaussians:

Weight	Mean		Covariance			
0.532559065	460.021741803	466.302631549	12104.536696516	51.119515541	51.119515541	3188.503076924
0.467440935	520.698649456	698.750626895	14278.841806326	-336.239641254	-336.239641254	3770.215561553

4 Gaussians

Scaling factor: 112.62270680475021

Gaussians:

Weight	Mean		Covariance			
0.299843890	401.244275250	439.814274677	3024.293215050	-564.929084596	-564.929084596	1100.182521950
0.273245515	497.305773413	734.966852245	11559.388712909	-130.960902653	-130.960902653	1130.727000855
0.213140988	647.598867830	554.970892903	3850.688653414	1806.867255817	1806.867255817	13447.084256406
0.213769607	440.462676150	579.920026956	4485.397894027	42.848466328	42.848466328	3946.389445341

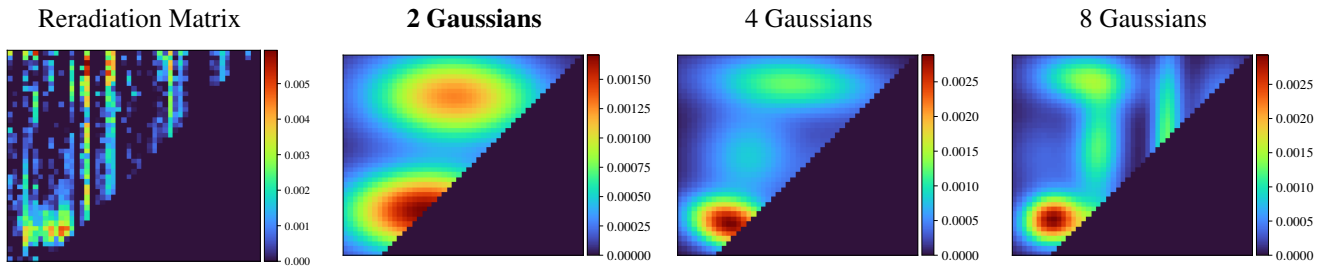
8 Gaussians

Scaling factor: 113.34372743246752

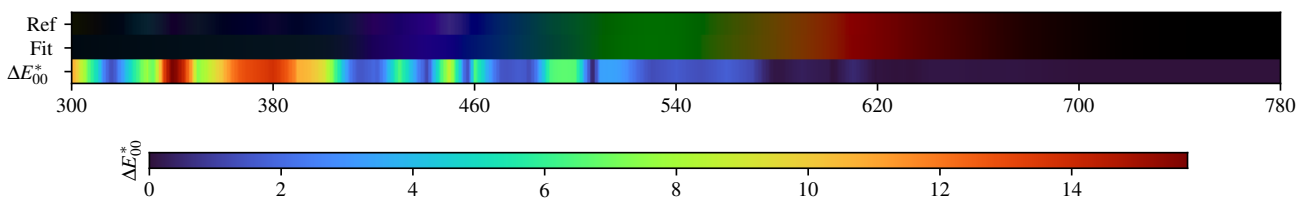
Gaussians:

Weight	Mean		Covariance			
0.089115201	458.697637589	418.164917409	1020.440790868	8.976221000	8.976221000	618.771423914
0.127053250	482.667710222	754.744661315	10249.204397693	-351.124580296	-351.124580296	407.761439934
0.147528237	608.572553832	596.652124765	247.453315101	431.230073653	431.230073653	13169.742515870
0.071589213	720.040178177	668.077997451	646.085120428	534.583681686	534.583681686	6124.938294862
0.193122918	469.231398102	582.019109000	1043.249809939	433.429031322	433.429031322	6961.071188511
0.044263233	668.437253230	424.930708298	3594.917600230	410.219681706	410.219681706	1113.319010796
0.216838628	366.575916000	456.811190530	1211.284870151	-279.787828719	-279.787828719	1575.151570529
0.110489320	408.728045546	685.008879540	4149.997580686	1253.352122462	1253.352122462	2977.672313446

PHP8HP1K - Weighted variational Bayesian inference - 2 Gaussians



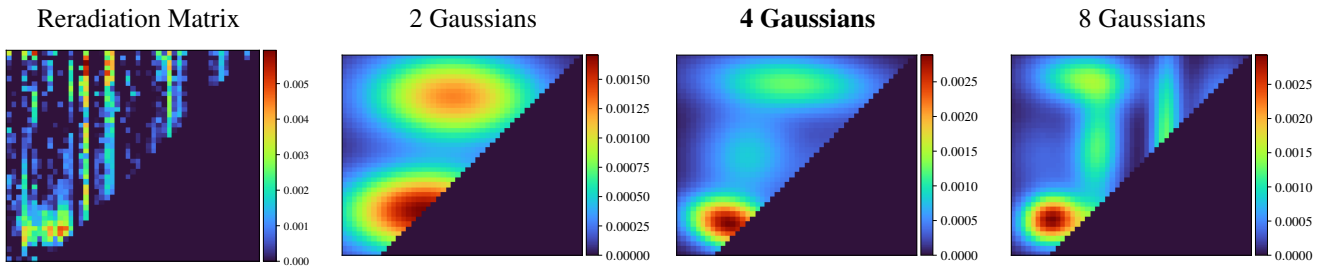
Fitted Material Under Monochromatic Illumination



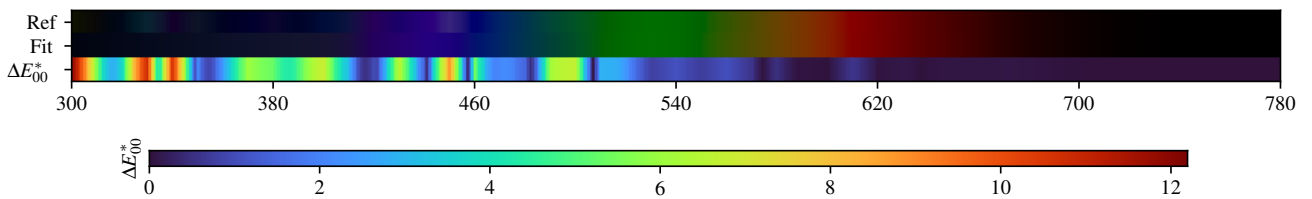
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.27$	$\Delta E = 1.55$	$\Delta E = 0.18$	$\Delta E = 0.65$	$\Delta E = 0.31$	$\Delta E = 0.22$	$\Delta E = 0.91$	$\Delta E = 1.03$	$\Delta E = 0.36$	$\Delta E = 0.82$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.79$	$\Delta E = 1.91$	$\Delta E = 0.18$	$\Delta E = 0.30$	$\Delta E = 0.21$	$\Delta E = 0.30$	$\Delta E = 0.84$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.20$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.28$	$\Delta E = 2.41$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.43$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.24$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.94$	$\Delta E = 2.81$	$\Delta E = 0.38$	$\Delta E = 0.67$	$\Delta E = 0.35$	$\Delta E = 0.60$	$\Delta E = 0.13$	$\Delta E = 0.28$	$\Delta E = 0.42$	$\Delta E = 0.61$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.22$	$\Delta E = 0.47$	$\Delta E = 0.20$	$\Delta E = 0.50$	$\Delta E = 0.23$	$\Delta E = 0.79$	$\Delta E = 0.33$	$\Delta E = 0.66$	$\Delta E = 0.52$	$\Delta E = 0.70$

PHP8HP1K - Weighted variational Bayesian inference - 4 Gaussians



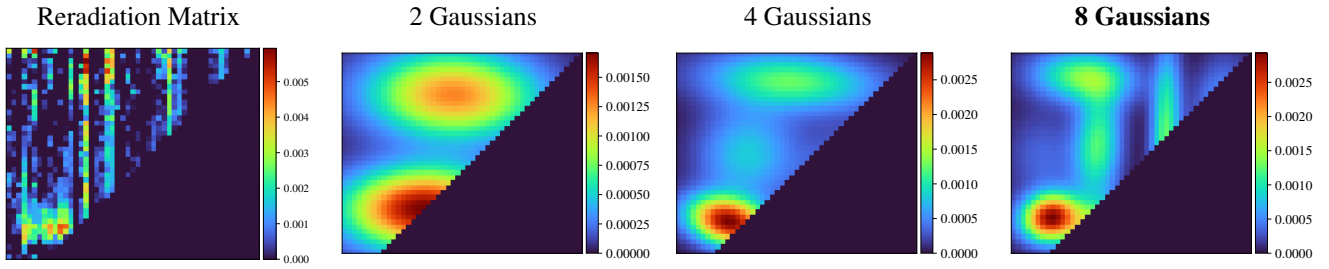
Fitted Material Under Monochromatic Illumination



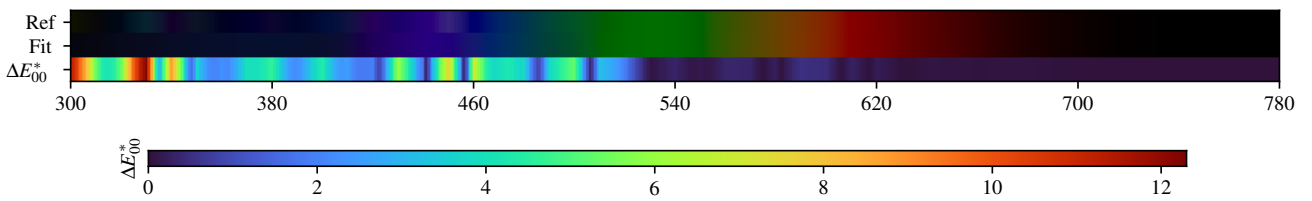
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.50$	$\Delta E = 0.54$	$\Delta E = 0.26$	$\Delta E = 0.87$	$\Delta E = 0.32$	$\Delta E = 0.43$	$\Delta E = 0.99$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.43$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.31$	$\Delta E = 0.08$	$\Delta E = 0.31$	$\Delta E = 0.87$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.63$	$\Delta E = 0.26$	$\Delta E = 0.11$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.72$	$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.24$	$\Delta E = 0.27$	$\Delta E = 0.44$	$\Delta E = 0.70$	$\Delta E = 0.40$	$\Delta E = 0.81$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.58$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.26$	$\Delta E = 0.49$	$\Delta E = 0.23$	$\Delta E = 0.63$	$\Delta E = 0.08$	$\Delta E = 0.86$	$\Delta E = 0.35$	$\Delta E = 0.31$	$\Delta E = 0.69$	$\Delta E = 0.34$

PHP8HP1K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.36$	$\Delta E = 0.72$	$\Delta E = 0.63$	$\Delta E = 0.69$	$\Delta E = 0.21$	$\Delta E = 0.65$	$\Delta E = 0.49$	$\Delta E = 0.68$	$\Delta E = 0.81$	$\Delta E = 0.96$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.78$	$\Delta E = 0.70$	$\Delta E = 0.45$	$\Delta E = 0.71$	$\Delta E = 0.31$	$\Delta E = 0.72$	$\Delta E = 0.49$	$\Delta E = 0.34$	$\Delta E = 0.39$	$\Delta E = 0.39$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.79$	$\Delta E = 0.66$	$\Delta E = 0.32$	$\Delta E = 0.65$	$\Delta E = 0.56$	$\Delta E = 0.19$	$\Delta E = 0.37$	$\Delta E = 0.24$	$\Delta E = 0.47$	$\Delta E = 0.35$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.74$	$\Delta E = 0.63$	$\Delta E = 0.65$	$\Delta E = 0.44$	$\Delta E = 0.65$	$\Delta E = 0.29$	$\Delta E = 0.66$	$\Delta E = 0.48$	$\Delta E = 0.83$	$\Delta E = 0.34$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.73$	$\Delta E = 0.69$	$\Delta E = 0.61$	$\Delta E = 0.35$	$\Delta E = 0.29$	$\Delta E = 0.40$	$\Delta E = 0.72$	$\Delta E = 0.74$	$\Delta E = 0.90$	$\Delta E = 0.73$

PHP8HP1K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.018255	0.026834	0.030467	0.046459	0.078261	0.086384	0.097709	0.101874	0.097548	0.102353	0.105279
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.106197	0.114212	0.116038	0.112135	0.107349	0.099722	0.085852	0.072750	0.069615	0.074844	0.082077
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.087962	0.086247	0.079696	0.075725	0.075967	0.084255	0.093697	0.094803	0.100954	0.126228	0.159138
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.182893	0.199737	0.215412	0.228470	0.239330	0.251763	0.254615	0.260908			

2 Gaussians max

Scaling factor: 125.91402779794376

Gaussians:

Weight	Mean		Covariance			
0.532212401	460.483188682	466.321790080	12150.392383014	103.339157756	103.339157756	3205.524801328
0.467787599	520.249922030	698.284280223	14256.653022106	-278.058768727	-278.058768727	3834.933474839

4 Gaussians max

Scaling factor: 111.99332664722405

Gaussians:

Weight	Mean		Covariance			
0.295549930	402.106518210	440.348494453	3118.492228890	-464.683705215	-464.683705215	1209.983462255
0.154948403	634.642001025	500.618422431	3800.996589884	-28.484211857	-28.484211857	6914.935763554
0.215813689	439.394142541	577.746488006	4801.490071506	157.345880561	157.345880561	4684.881020000
0.333687978	529.039490405	726.771694564	14727.579344432	-847.233259630	-847.233259630	1683.833221255

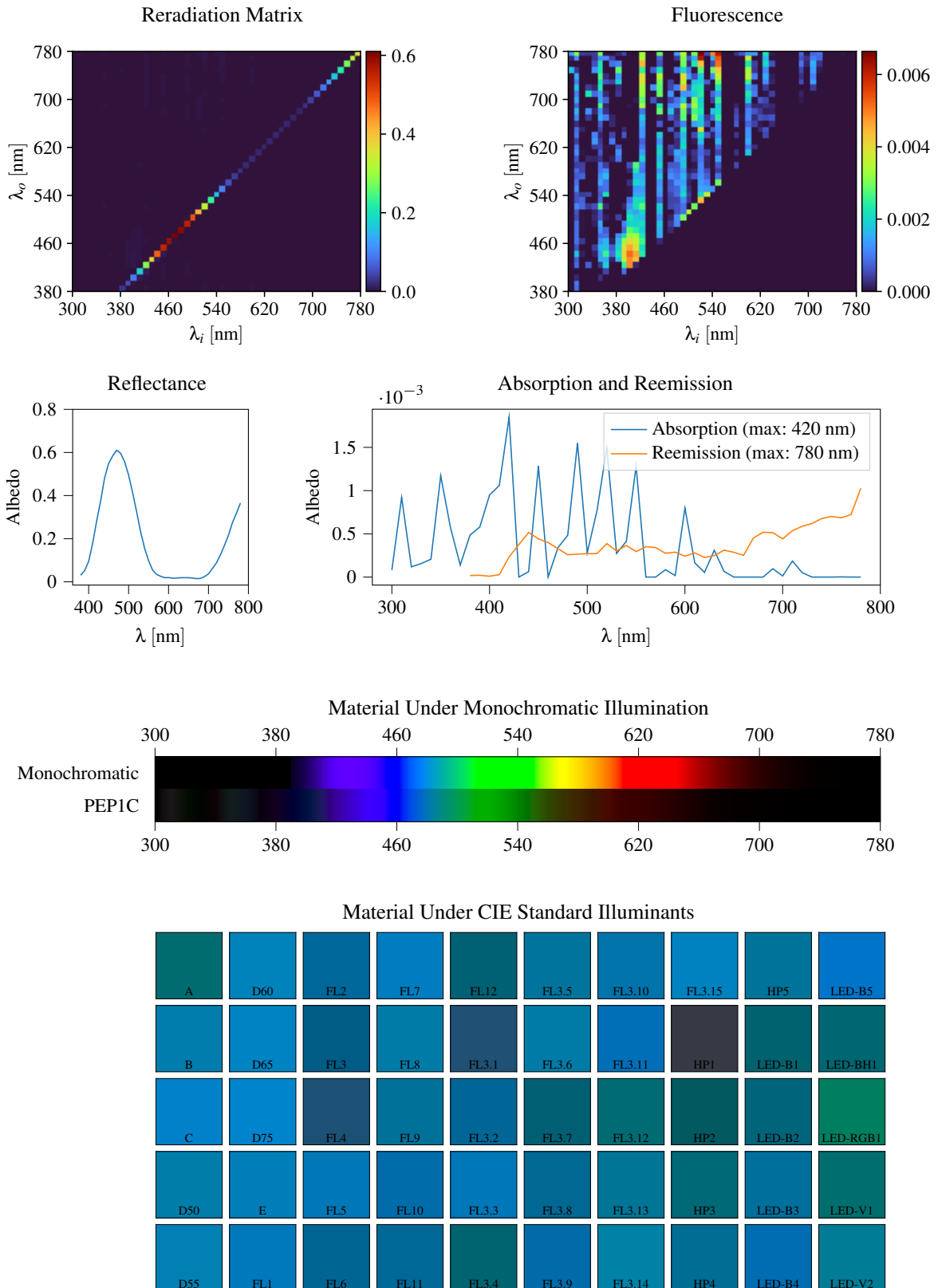
8 Gaussians max

Scaling factor: 114.93234602130154

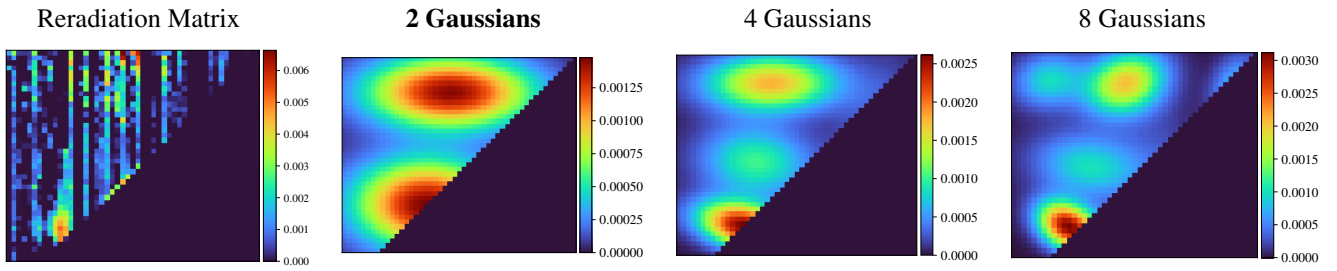
Gaussians:

Weight	Mean		Covariance			
0.205842882	377.073841880	448.354983861	1647.320761597	109.223994627	109.223994627	1073.348378134
0.091084968	466.990288380	424.980128634	1208.803602583	355.627963136	355.627963136	1426.790595850
0.168772505	607.761256033	608.442855150	406.410612576	436.470647964	436.470647964	15533.320424222
0.048435503	676.402496594	451.485818179	3737.917178725	-326.771637342	-326.771637342	2977.850291342
0.164366484	470.589850450	596.572257028	1063.248828495	313.455771124	313.455771124	6132.203531182
0.067932745	360.409556913	570.024494593	2741.956014080	-202.374791980	-202.374791980	4420.220067606
0.071960414	715.541306195	686.770165036	1603.656158421	635.802621777	635.802621777	4389.386883236
0.181604498	442.054156618	734.958030812	5000.631171864	-284.092424699	-284.092424699	1299.223607931

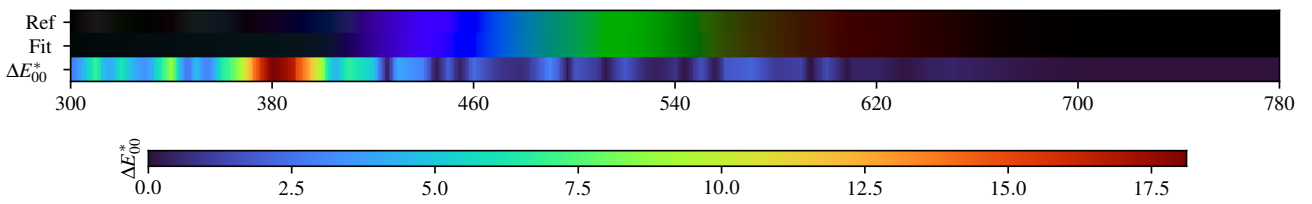
3.104. PEPIC



PEPIC - Weighted Expectation-Maximization - 2 Gaussians



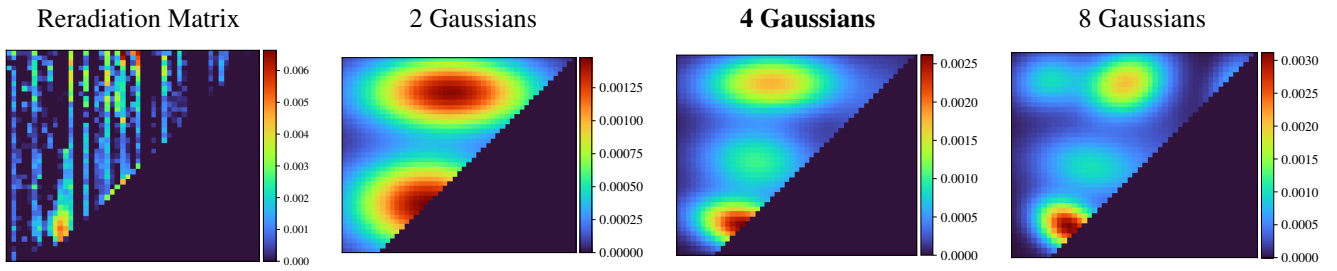
Fitted Material Under Monochromatic Illumination



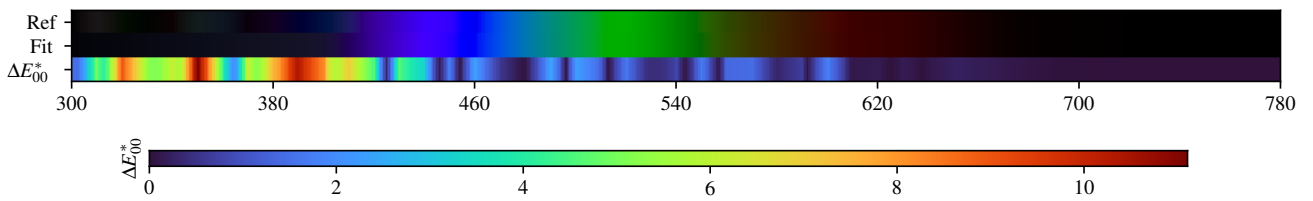
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.41$	$\Delta E = 0.09$	$\Delta E = 0.28$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.24$	$\Delta E = 0.39$	$\Delta E = 0.17$	$\Delta E = 0.26$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.27$	$\Delta E = 0.46$	$\Delta E = 0.04$	$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.15$	$\Delta E = 0.26$	$\Delta E = 0.70$	$\Delta E = 0.20$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.40$	$\Delta E = 0.55$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.38$	$\Delta E = 0.17$	$\Delta E = 0.24$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.30$	$\Delta E = 0.62$	$\Delta E = 0.23$	$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.35$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.36$	$\Delta E = 0.24$	$\Delta E = 0.05$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.42$

PEPIC - Weighted Expectation-Maximization - 4 Gaussians



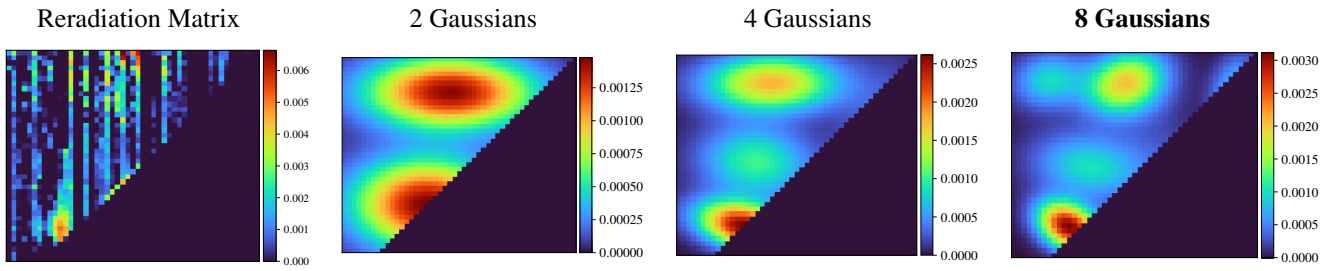
Fitted Material Under Monochromatic Illumination



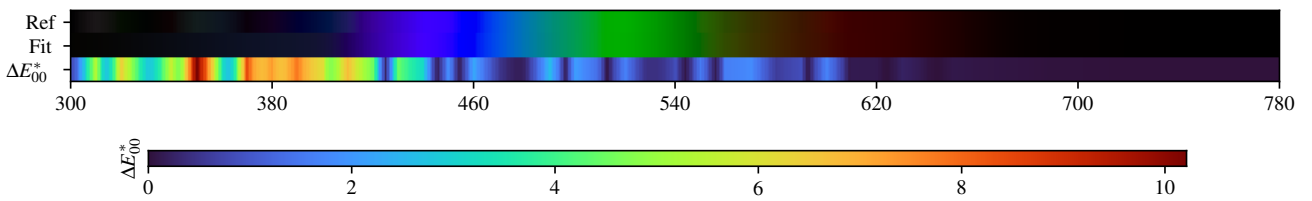
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.26$	$\Delta E = 0.14$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.21$	$\Delta E = 0.25$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.29$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.25$	$\Delta E = 0.28$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.36$	$\Delta E = 0.17$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.20$	$\Delta E = 0.06$	$\Delta E = 0.20$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.36$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.06$	$\Delta E = 0.18$	$\Delta E = 0.06$	$\Delta E = 0.13$	$\Delta E = 0.29$	$\Delta E = 0.14$	$\Delta E = 0.37$

PEPIC - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.24$	$\Delta E = 0.05$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.13$	$\Delta E = 0.03$	$\Delta E = 0.37$	$\Delta E = 0.16$	$\Delta E = 0.26$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.37$	$\Delta E = 0.15$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.05$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.42$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.06$	$\Delta E = 0.20$	$\Delta E = 0.04$	$\Delta E = 0.12$	$\Delta E = 0.29$	$\Delta E = 0.08$	$\Delta E = 0.39$

PEPIC - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.030564	0.051673	0.094929	0.178138	0.281563	0.374886	0.482691	0.548619	0.583842	0.610128	0.596335
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.557097	0.495118	0.414716	0.325864	0.232805	0.156469	0.097892	0.054455	0.034284	0.025775	0.019132
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.019278	0.016730	0.017162	0.018941	0.018758	0.018935	0.017240	0.014522	0.015463	0.023987	0.036619
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.061619	0.087673	0.124923	0.168617	0.215478	0.273879	0.317861	0.365078			

2 Gaussians

Scaling factor: 123.4579105354483

Gaussians:

Weight	Mean		Covariance			
0.528416211	476.099647578	474.694415558	11421.342679096	-300.866893295	-300.866893295	4290.072650274
0.471583789	520.917271660	711.200575923	14788.502372253	-102.711204075	-102.711204075	2763.406109507

4 Gaussians

Scaling factor: 117.10408377759786

Gaussians:

Weight	Mean		Covariance			
0.291010152	436.178477949	434.326699299	4163.920410396	-730.723836533	-730.723836533	1163.840681186
0.348246568	487.844444073	726.523066790	8458.715977123	43.353786774	43.353786774	1597.752722635
0.214615765	457.116500499	566.112538509	6033.734456985	-308.406626924	-308.406626924	2565.343751712
0.146127516	700.128147757	583.925401440	3975.688323366	2412.607807704	2412.607807704	16466.862352571

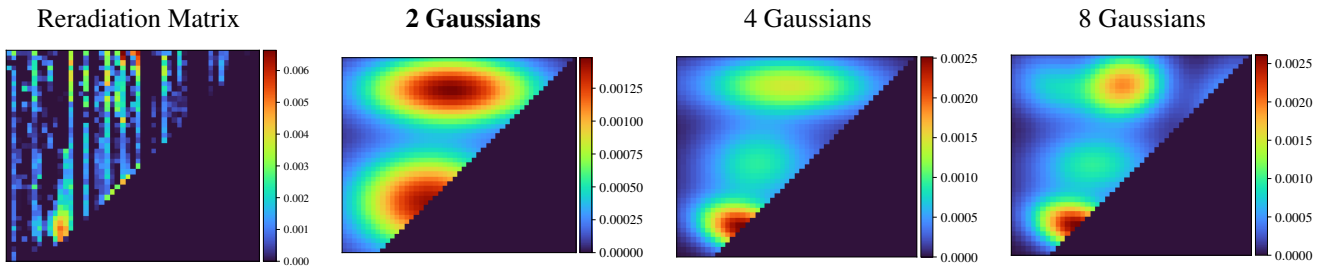
8 Gaussians

Scaling factor: 113.82392126846547

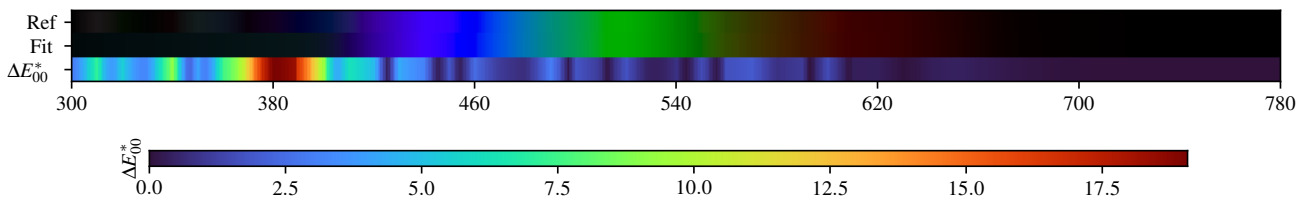
Gaussians:

Weight	Mean		Covariance			
0.209456435	406.780206443	438.906309682	1617.698681877	-396.431056546	-396.431056546	1091.193725264
0.256190908	521.578114199	722.900162940	2954.470495827	454.886120125	454.886120125	1863.262977658
0.057307792	590.789905703	586.256112860	4100.586735761	-268.924500875	-268.924500875	4474.536921207
0.064958751	738.035407043	713.614437744	1078.783908101	375.122696155	375.122696155	2061.886338881
0.094496951	369.211400271	728.737479441	2215.930485071	165.235642959	165.235642959	1437.703237990
0.044583895	723.879008398	461.696167301	1448.685224130	110.260798400	110.260798400	3858.780504983
0.184164073	448.764053573	556.530672746	5557.198781024	-554.762090645	-554.762090645	2048.752772193
0.088841196	526.793605913	418.741577825	3696.986255391	-68.146940881	-68.146940881	862.333130591

PEPIC - Weighted variational Bayesian inference - 2 Gaussians



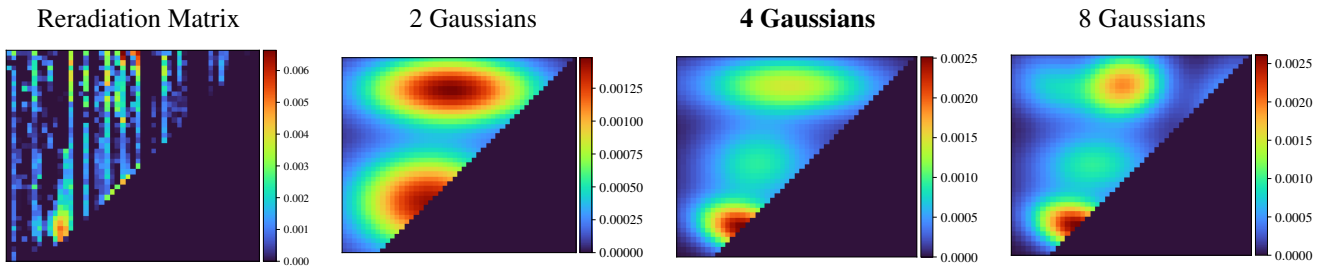
Fitted Material Under Monochromatic Illumination



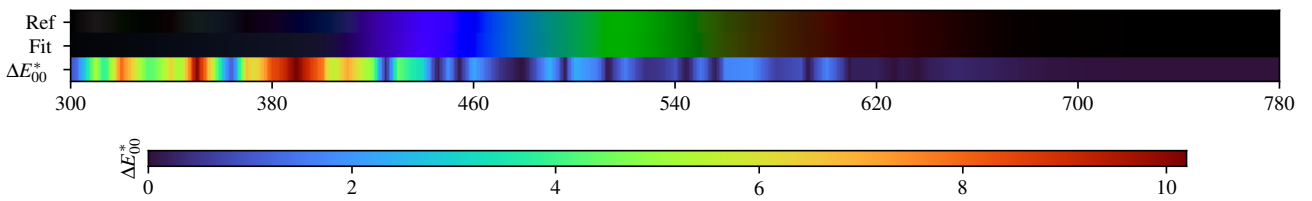
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.53$	$\Delta E = 0.23$	$\Delta E = 0.39$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.33$	$\Delta E = 0.52$	$\Delta E = 0.25$	$\Delta E = 0.37$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.38$	$\Delta E = 0.59$	$\Delta E = 0.13$	$\Delta E = 0.25$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.37$	$\Delta E = 0.43$	$\Delta E = 0.08$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.53$	$\Delta E = 0.69$	$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.25$	$\Delta E = 0.08$	$\Delta E = 0.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.40$	$\Delta E = 0.78$	$\Delta E = 0.35$	$\Delta E = 0.37$	$\Delta E = 0.30$	$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.16$	$\Delta E = 0.38$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.47$	$\Delta E = 0.36$	$\Delta E = 0.18$	$\Delta E = 0.28$	$\Delta E = 0.09$	$\Delta E = 0.30$	$\Delta E = 0.24$	$\Delta E = 0.33$	$\Delta E = 0.27$	$\Delta E = 0.44$

PEPIC - Weighted variational Bayesian inference - 4 Gaussians



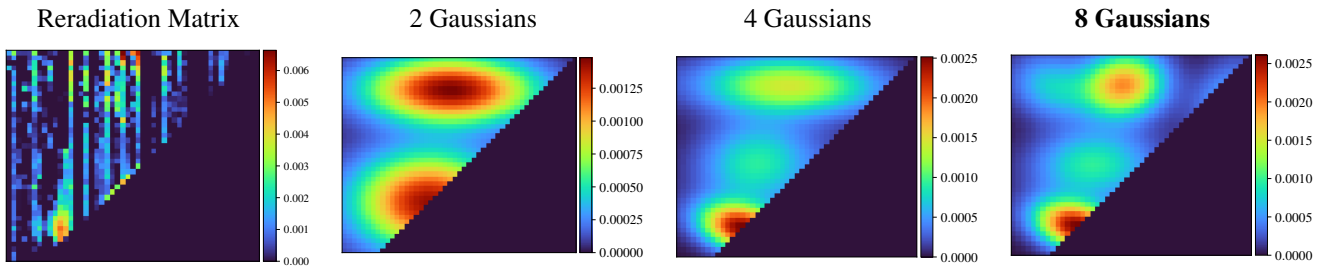
Fitted Material Under Monochromatic Illumination



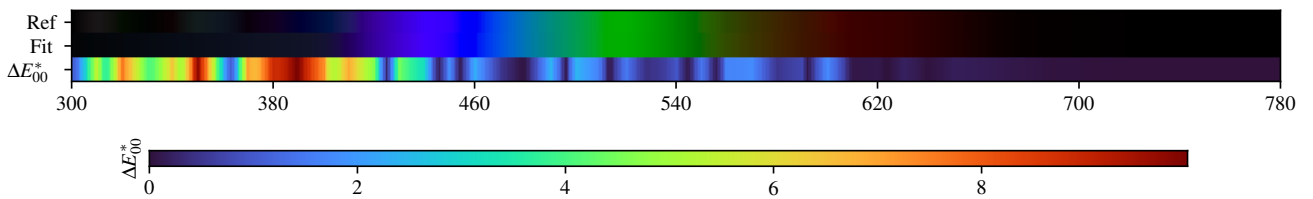
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.27$	$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.28$	$\Delta E = 0.19$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.21$	$\Delta E = 0.35$	$\Delta E = 0.24$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.29$	$\Delta E = 0.31$	$\Delta E = 0.32$	$\Delta E = 0.25$	$\Delta E = 0.34$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.58$	$\Delta E = 0.30$	$\Delta E = 0.40$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.32$	$\Delta E = 0.32$	$\Delta E = 0.33$	$\Delta E = 0.26$	$\Delta E = 0.30$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.55$	$\Delta E = 0.30$	$\Delta E = 0.25$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.29$	$\Delta E = 0.19$	$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.30$	$\Delta E = 0.41$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.29$	$\Delta E = 0.29$	$\Delta E = 0.31$	$\Delta E = 0.16$	$\Delta E = 0.29$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.38$	$\Delta E = 0.27$	$\Delta E = 0.44$

PEPIC - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.28$	$\Delta E = 0.17$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.32$	$\Delta E = 0.22$	$\Delta E = 0.33$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.24$	$\Delta E = 0.23$	$\Delta E = 0.21$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.45$	$\Delta E = 0.22$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.09$	$\Delta E = 0.22$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.37$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.09$	$\Delta E = 0.22$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.29$	$\Delta E = 0.19$	$\Delta E = 0.38$

PEPIC - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.030564	0.051673	0.094929	0.178138	0.281563	0.374886	0.482691	0.548619	0.583842	0.610128	0.596335
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.557097	0.495118	0.414716	0.325864	0.232805	0.156469	0.097892	0.054455	0.034284	0.025775	0.019132
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.019278	0.016730	0.017162	0.018941	0.018758	0.018935	0.017240	0.014522	0.015463	0.023987	0.036619
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.061619	0.087673	0.124923	0.168617	0.215478	0.273879	0.317861	0.365078			

2 Gaussians max

Scaling factor: 122.87512701615269

Gaussians:

Weight	Mean		Covariance			
0.553073663	477.582541070	480.840504924	11558.648444413	-132.954735020	-132.954735020	4953.101629437
0.446926337	521.672989179	716.305943536	14819.298975771	-145.946545439	-145.946545439	2346.809231121

4 Gaussians max

Scaling factor: 114.07114831941597

Gaussians:

Weight	Mean		Covariance			
0.262773423	431.830330241	432.881301883	3498.090393664	-610.259045719	-610.259045719	1182.457673027
0.097949265	662.734190881	483.828139216	5846.481503828	-163.908996112	-163.908996112	5851.093571733
0.242538533	457.764567395	565.692415116	6244.180073070	358.595880769	358.595880769	3739.310895957
0.396738779	523.690054316	725.753025288	15165.813616273	-243.012124501	-243.012124501	1698.948036657

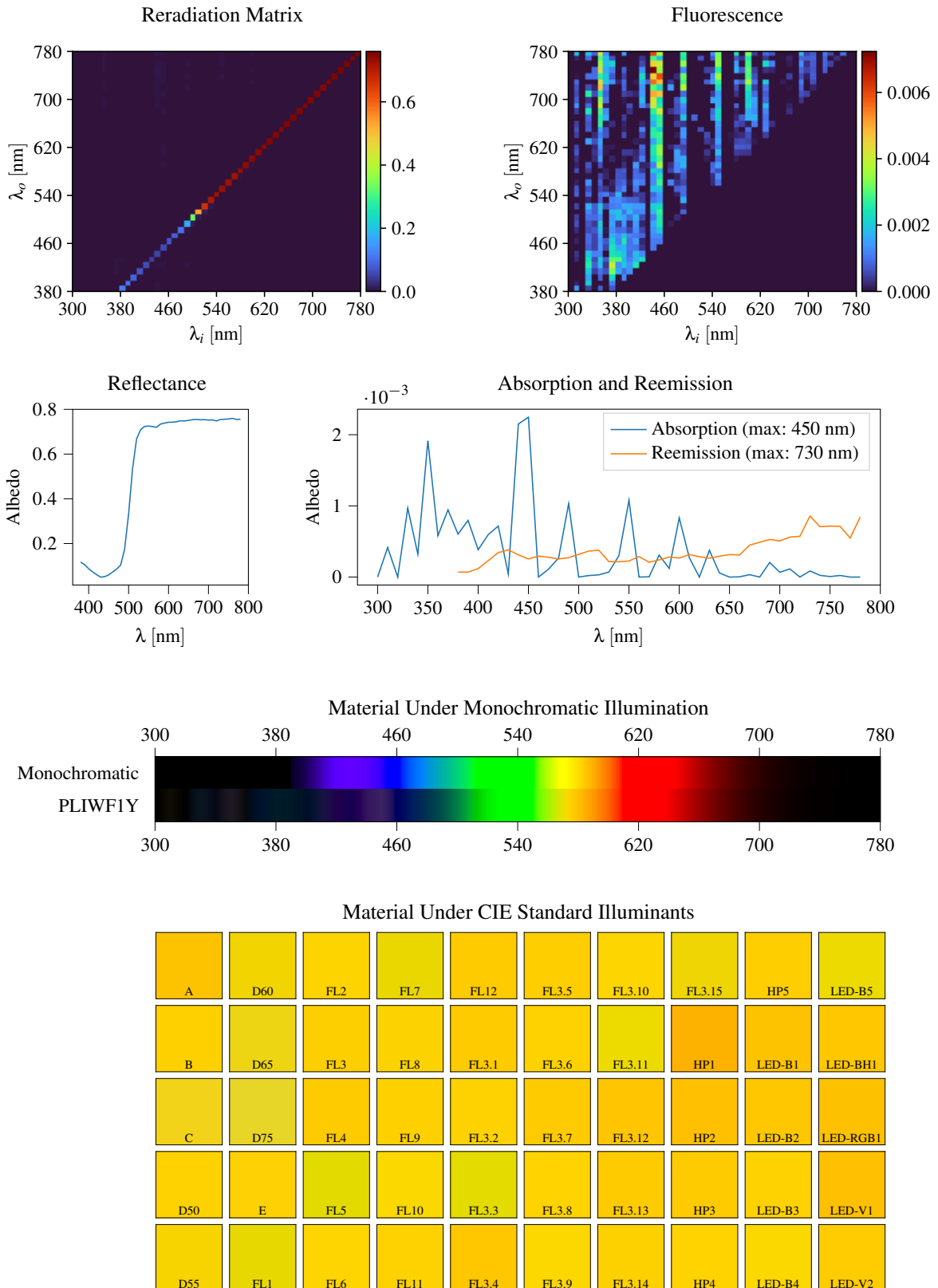
8 Gaussians max

Scaling factor: 116.88856265696384

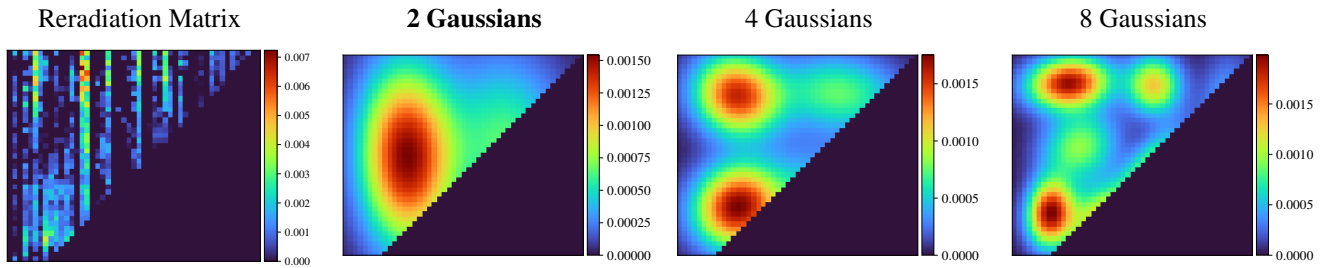
Gaussians:

Weight	Mean		Covariance			
0.271098295	430.175527474	434.209110465	3370.434969977	-594.781604591	-594.781604591	1221.230253431
0.090533655	653.318544403	464.083394683	6572.377836121	-443.092946702	-443.092946702	3861.587050522
0.201273720	459.282740666	560.217662466	6539.060738647	229.179135856	229.179135856	2340.120439092
0.075279436	726.814801370	700.508407359	2524.885471720	1090.892113624	1090.892113624	3311.700299390
0.099474617	375.297439807	719.894900935	3102.390246038	-416.366012106	-416.366012106	2130.258254374
0.261157326	522.959675376	722.362314520	3208.175527020	207.945013223	207.945013223	2043.025682984

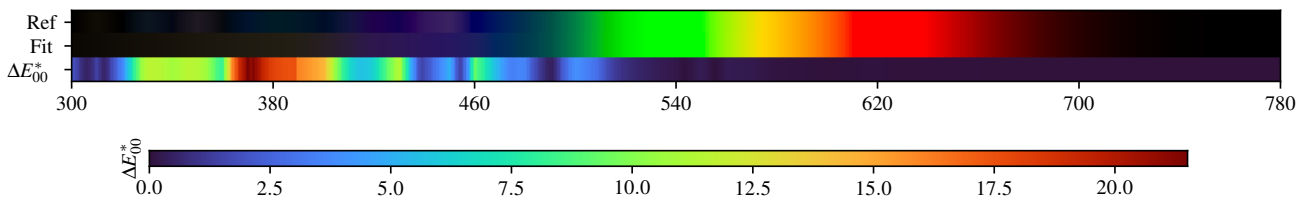
3.105. PLIWF1Y



PLIWF1Y - Weighted Expectation-Maximization - 2 Gaussians



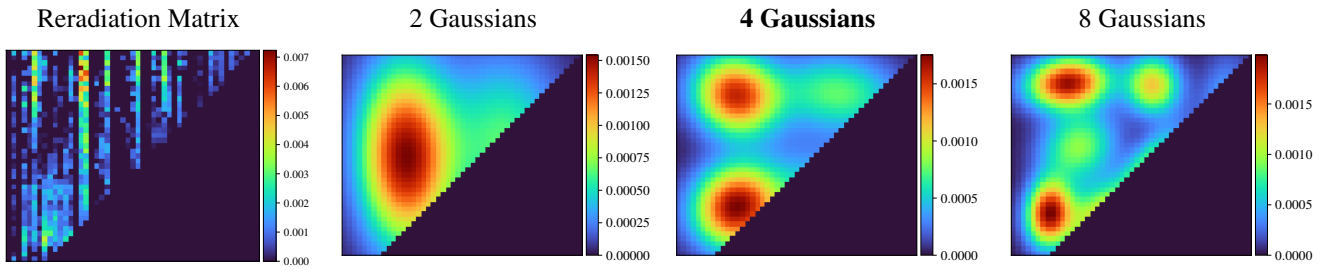
Fitted Material Under Monochromatic Illumination



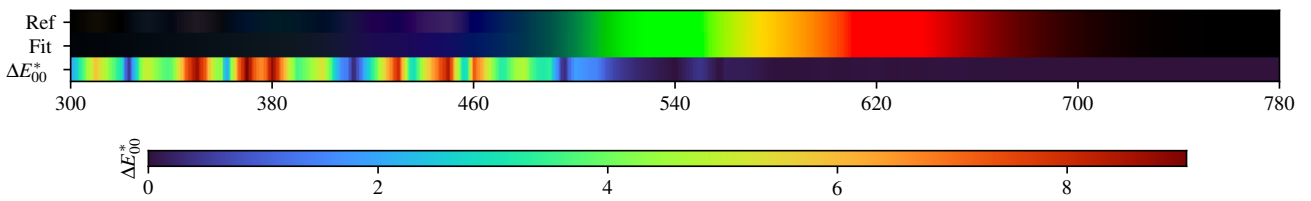
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.42$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.17$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.32$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.28$	D65 $\Delta E = 0.47$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.20$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.20$	FL3.11 $\Delta E = 0.12$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.37$	D75 $\Delta E = 0.58$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.31$	E $\Delta E = 0.52$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.24$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.21$
D55 $\Delta E = 0.36$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.20$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.12$	LED-V2 $\Delta E = 0.27$

PLIWF1Y - Weighted Expectation-Maximization - 4 Gaussians



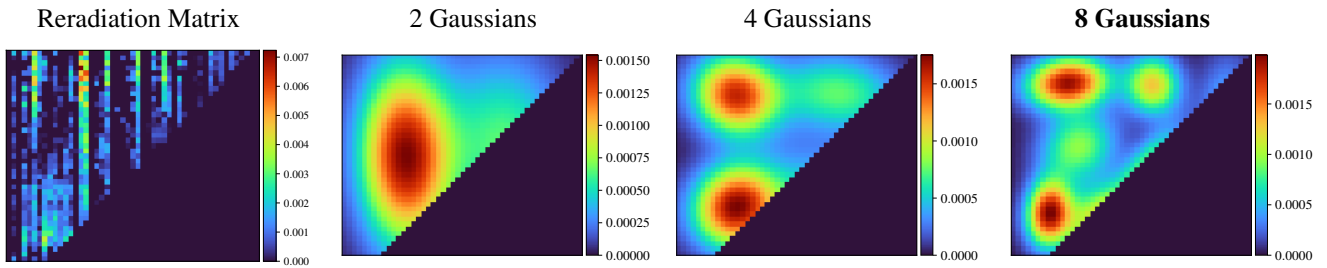
Fitted Material Under Monochromatic Illumination



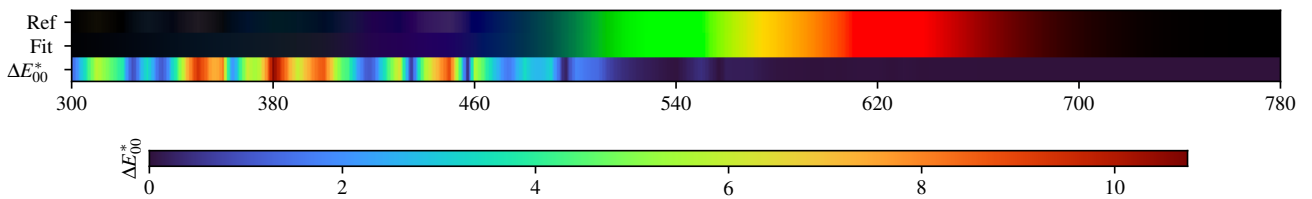
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.27$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.25$	FL3.15 $\Delta E = 0.26$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.32$
B $\Delta E = 0.21$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.29$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.31$	D75 $\Delta E = 0.30$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.14$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.20$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.26$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.21$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.23$	FL1 $\Delta E = 0.27$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.18$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.22$	FL3.14 $\Delta E = 0.18$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.23$	LED-V2 $\Delta E = 0.16$

PLIWF1Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.14$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.02$	$\Delta E = 0.08$	$\Delta E = 0.02$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.03$	$\Delta E = 0.02$	$\Delta E = 0.03$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.01$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.05$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.11$	$\Delta E = 0.04$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.06$

PLIWF1Y - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.117229	0.105220	0.087324	0.073087	0.060680	0.049719	0.051889	0.059611	0.072522	0.085519	0.103176
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.174643	0.332018	0.536024	0.667597	0.708878	0.723794	0.725299	0.723074	0.719996	0.734284	0.738614
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.742317	0.742601	0.744659	0.749020	0.748229	0.750634	0.753881	0.754739	0.753374	0.754075	0.752103
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.752659	0.748312	0.754630	0.755763	0.756928	0.759671	0.755108	0.755622			

2 Gaussians

Scaling factor: 118.80584828779612

Gaussians:

Weight	Mean	Covariance				
0.646397572	423.409742490	576.564188811	4124.132352472	-321.216015627	-321.216015627	15874.249265714
0.353602428	626.958575992	601.999383585	6974.157625073	-557.181102294	-557.181102294	15694.890875630

4 Gaussians

Scaling factor: 113.93485052704574

Gaussians:

Weight	Mean	Covariance				
0.277090092	415.573777643	701.385897135	3461.745560656	-272.612382422	-272.612382422	3097.500356649
0.209107746	603.122077594	490.473527915	8039.857906944	-1087.021925697	-1087.021925697	4925.057618734
0.319054558	416.095932943	473.800985627	3514.518811232	196.203280955	196.203280955	3318.259058900
0.194747604	623.160045726	705.943857323	7510.617555496	-514.733122163	-514.733122163	3063.004501447

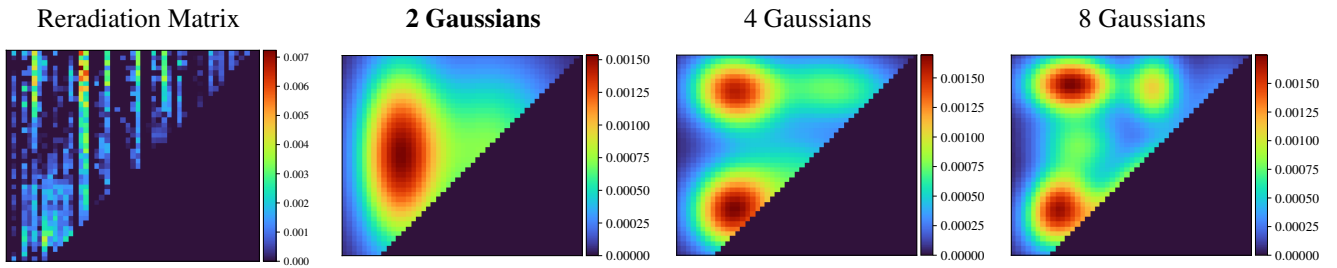
8 Gaussians

Scaling factor: 113.81103957593805

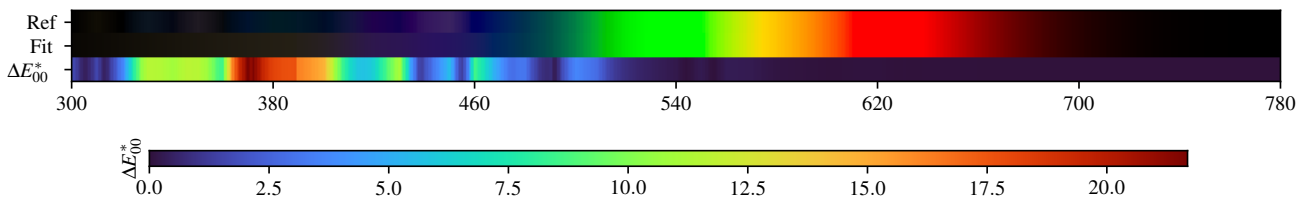
Gaussians:

Weight	Mean	Covariance					
0.213823567	410.343472864	726.855305082	3248.758195128	199.337739196	199.337739196	1293.113021490	
0.081697612	573.635695320	559.245575025	2064.848877336	1683.093432268	1683.093432268	2821.696914897	
0.145485945	477.769982743	451.964720214	2473.730000386	485.370724162	485.370724162	2112.229392574	
0.107687791	582.624361069	721.907939338	1423.616164483	-14.725084291	-14.725084291	1703.049894262	
0.073778938	728.562740427	674.514503749	1349.682376222	216.254494190	216.254494190	5909.247831889	
0.148186686	371.977757025	462.445511165	989.204640773	119.159401407	119.159401407	2066.022010921	
0.092022135	655.916005544	441.242986655	5200.130915695	244.647011295	244.647011295	2022.758024182	
0.137317326	431.813370116	597.577719313	2874.313818665	310.900426153	310.900426153	2493.371170219	

PLIWF1Y - Weighted variational Bayesian inference - 2 Gaussians



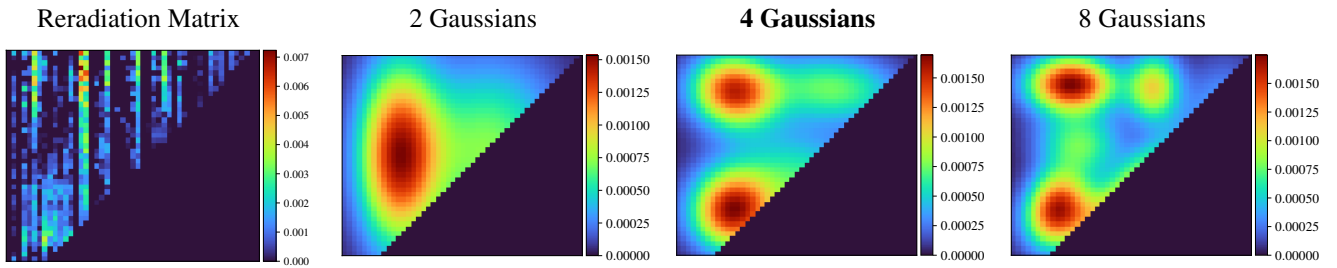
Fitted Material Under Monochromatic Illumination



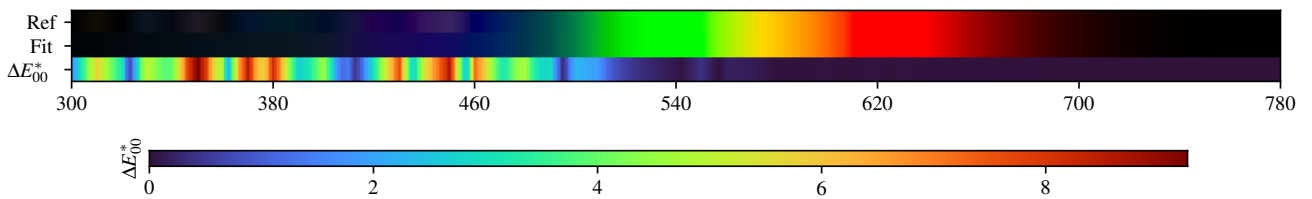
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.41$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.31$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.13$
B $\Delta E = 0.27$	D65 $\Delta E = 0.47$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.36$	D75 $\Delta E = 0.57$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.31$	E $\Delta E = 0.51$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.09$	FL3.3 $\Delta E = 0.24$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.10$	LED-V1 $\Delta E = 0.21$
D55 $\Delta E = 0.36$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.19$	HP4 $\Delta E = 0.22$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.26$

PLIWF1Y - Weighted variational Bayesian inference - 4 Gaussians



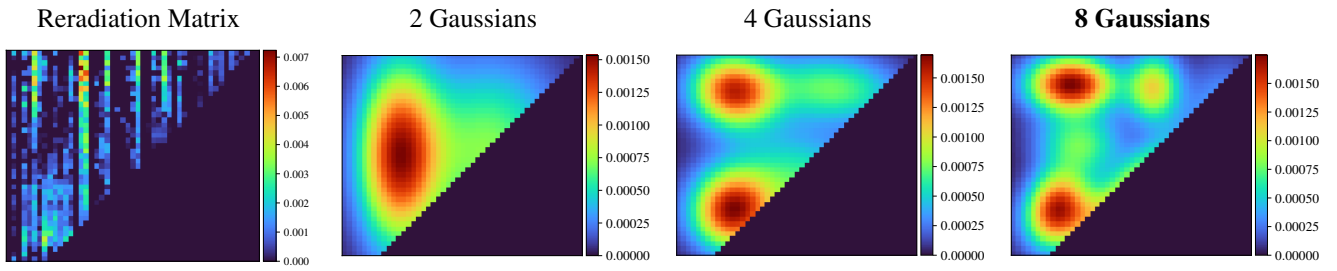
Fitted Material Under Monochromatic Illumination



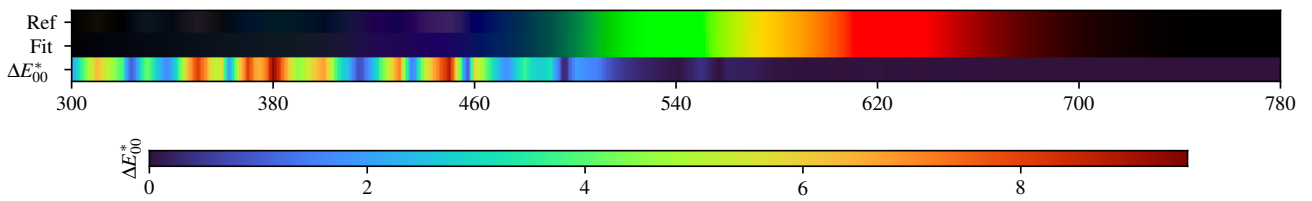
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.26$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.16$	$\Delta E = 0.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.08$	$\Delta E = 0.19$	$\Delta E = 0.04$	$\Delta E = 0.17$	$\Delta E = 0.27$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.30$	$\Delta E = 0.29$	$\Delta E = 0.05$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.05$	$\Delta E = 0.21$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.21$	$\Delta E = 0.17$

PLIWF1Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.15$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.14$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.12$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.16$	D75 $\Delta E = 0.15$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.11$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.10$

PLIWF1Y - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.117229	0.105220	0.087324	0.073087	0.060680	0.049719	0.051889	0.059611	0.072522	0.085519	0.103176
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.174643	0.332018	0.536024	0.667597	0.708878	0.723794	0.725299	0.723074	0.719996	0.734284	0.738614
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.742317	0.742601	0.744659	0.749020	0.748229	0.750634	0.753881	0.754739	0.753374	0.754075	0.752103
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.752659	0.748312	0.754630	0.755763	0.756928	0.759671	0.755108	0.755622			

2 Gaussians max

Scaling factor: 118.44820478169328

Gaussians:

Weight	Mean	Covariance				
0.527407582	409.821879880	579.900148117	3191.272515517	30.971295230	30.971295230	16073.743637078
0.472592418	590.859171992	591.819522174	10048.978445305	471.249707605	471.249707605	15684.024364779

4 Gaussians max

Scaling factor: 113.53350070227754

Gaussians:

Weight	Mean	Covariance				
0.262074792	408.313789967	466.316116619	3150.556945180	46.748713716	46.748713716	3014.322370599
0.318584062	561.223100890	515.841103964	11721.099406540	-2330.763943417	-2330.763943417	6462.783676912
0.235288828	411.480995600	710.064255580	3450.858536456	-192.522476058	-192.522476058	2467.960064007
0.184052318	612.855891229	716.260942409	9031.781137894	-537.982182314	-537.982182314	2372.020055497

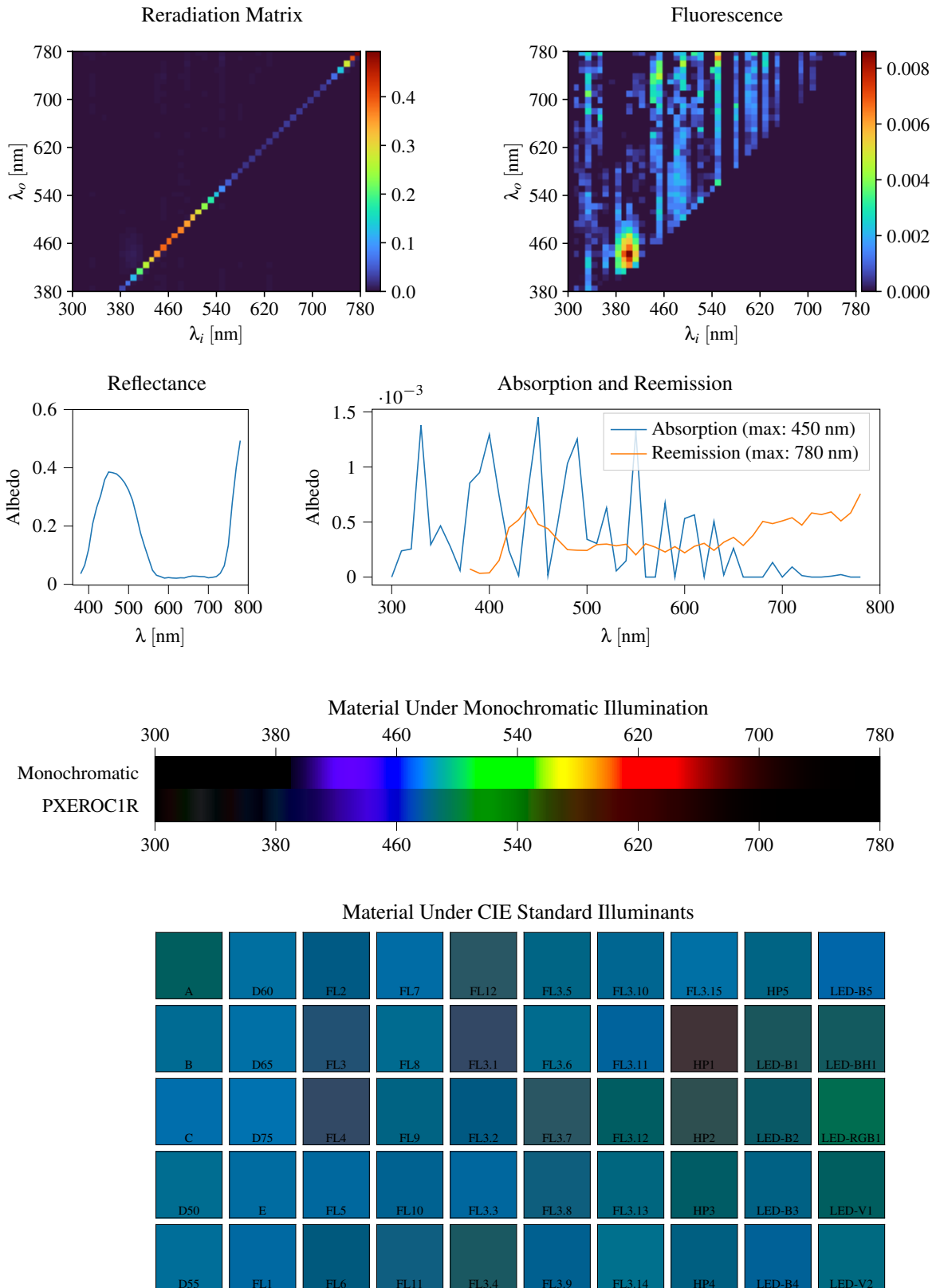
8 Gaussians max

Scaling factor: 114.6277702057599

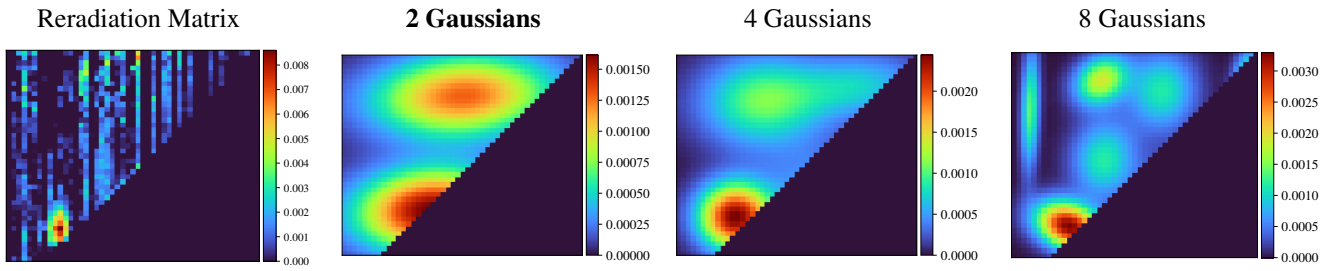
Gaussians:

Weight	Mean	Covariance				
0.178765035	385.772534925	472.864890897	1896.603668728	404.523214512	404.523214512	2743.554338524
0.122116576	478.099334796	447.837791629	4327.784261591	544.209486171	544.209486171	2291.613207913
0.090757044	646.619234943	444.250602416	6620.703404340	-331.983852118	-331.983852118	2364.058880070
0.083340510	554.118244106	538.890505358	3040.258927667	2305.838967023	2305.838967023	3302.522029258
0.085408985	715.076162832	666.082563444	2794.264445355	754.368774894	754.368774894	6619.297877216
0.109023144	435.001216578	603.666614918	3745.363574301	-215.102913129	-215.102913129	2052.296752897
0.101987870	584.179415378	715.969883135	1359.494774421	45.768397696	45.768397696	2371.255905078
0.228600836	417.344550277	724.248200357	3744.364892537	-25.211840742	-25.211840742	1548.366184405

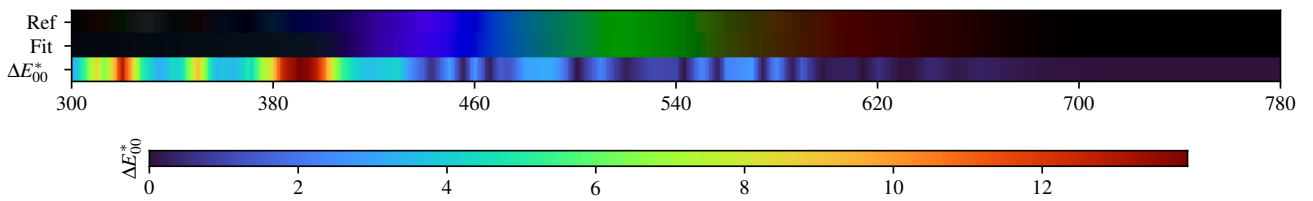
3.106. PXEROC1R



PXEROC1R - Weighted Expectation-Maximization - 2 Gaussians



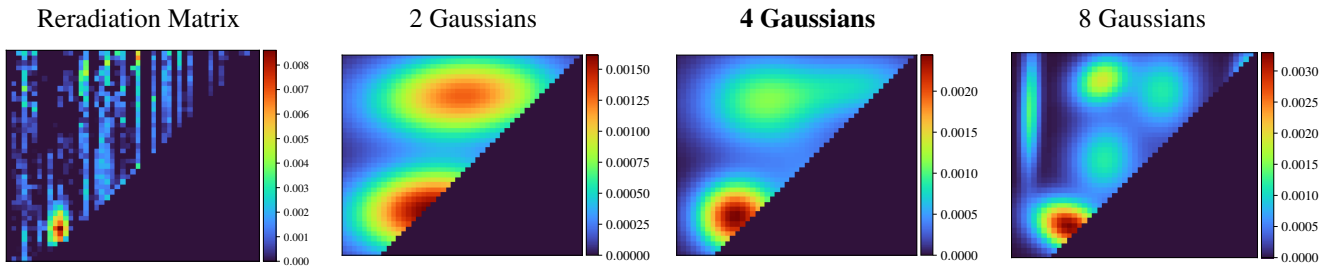
Fitted Material Under Monochromatic Illumination



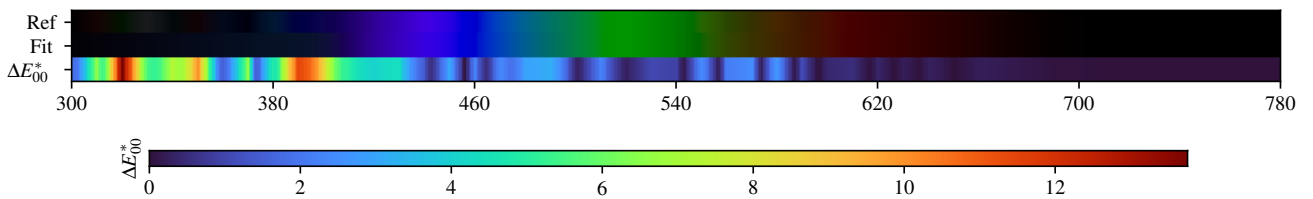
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.56$	$\Delta E = 0.37$	$\Delta E = 0.49$	$\Delta E = 0.64$	$\Delta E = 0.18$	$\Delta E = 0.62$	$\Delta E = 0.64$	$\Delta E = 0.14$	$\Delta E = 0.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.36$	$\Delta E = 0.64$	$\Delta E = 0.33$	$\Delta E = 0.30$	$\Delta E = 0.06$	$\Delta E = 0.21$	$\Delta E = 0.56$	$\Delta E = 0.58$	$\Delta E = 0.34$	$\Delta E = 0.26$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.53$	$\Delta E = 0.75$	$\Delta E = 0.30$	$\Delta E = 0.26$	$\Delta E = 0.17$	$\Delta E = 0.48$	$\Delta E = 0.20$	$\Delta E = 0.48$	$\Delta E = 0.34$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.39$	$\Delta E = 0.91$	$\Delta E = 0.44$	$\Delta E = 0.65$	$\Delta E = 0.30$	$\Delta E = 0.48$	$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.54$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.48$	$\Delta E = 0.47$	$\Delta E = 0.33$	$\Delta E = 0.63$	$\Delta E = 0.11$	$\Delta E = 0.54$	$\Delta E = 0.34$	$\Delta E = 0.47$	$\Delta E = 0.18$	$\Delta E = 0.43$

PXEROC1R - Weighted Expectation-Maximization - 4 Gaussians



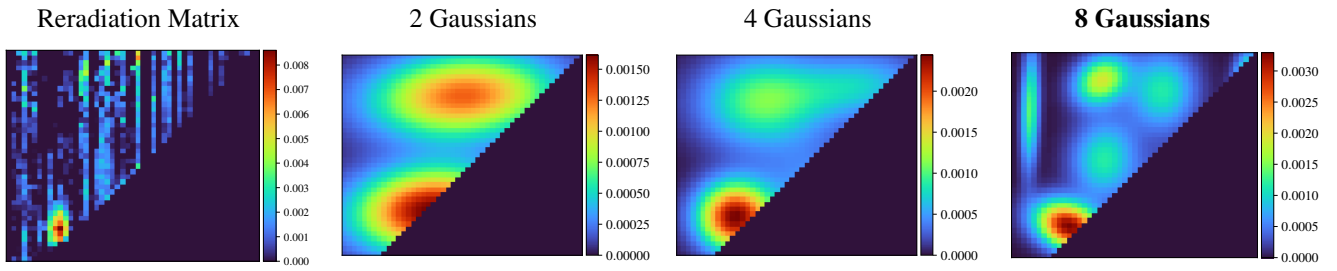
Fitted Material Under Monochromatic Illumination



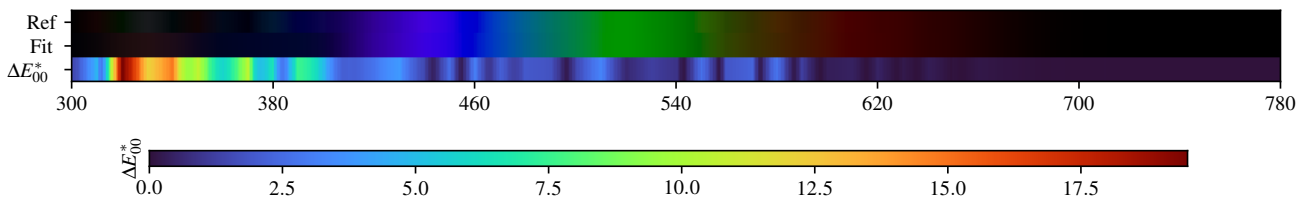
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.35$	$\Delta E = 0.26$	$\Delta E = 0.29$	$\Delta E = 0.32$	$\Delta E = 0.75$	$\Delta E = 0.41$	$\Delta E = 0.68$	$\Delta E = 0.40$	$\Delta E = 0.30$	$\Delta E = 0.40$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.31$	$\Delta E = 0.25$	$\Delta E = 0.30$	$\Delta E = 0.41$	$\Delta E = 0.19$	$\Delta E = 0.45$	$\Delta E = 0.52$	$\Delta E = 0.41$	$\Delta E = 0.54$	$\Delta E = 0.46$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.39$	$\Delta E = 0.37$	$\Delta E = 0.23$	$\Delta E = 0.64$	$\Delta E = 0.42$	$\Delta E = 0.63$	$\Delta E = 0.56$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.31$	$\Delta E = 0.23$	$\Delta E = 0.32$	$\Delta E = 0.62$	$\Delta E = 0.30$	$\Delta E = 0.58$	$\Delta E = 0.54$	$\Delta E = 0.21$	$\Delta E = 0.52$	$\Delta E = 0.07$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.33$	$\Delta E = 0.27$	$\Delta E = 0.66$	$\Delta E = 0.22$	$\Delta E = 0.55$	$\Delta E = 0.61$	$\Delta E = 0.06$	$\Delta E = 0.37$	$\Delta E = 0.21$

PXEROC1R - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.58$	$\Delta E = 0.22$	$\Delta E = 0.33$	$\Delta E = 0.08$	$\Delta E = 0.37$	$\Delta E = 0.32$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.23$	$\Delta E = 0.30$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.39$	$\Delta E = 0.28$	$\Delta E = 0.31$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.34$	$\Delta E = 0.28$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.47$	$\Delta E = 0.16$	$\Delta E = 0.50$	$\Delta E = 0.31$	$\Delta E = 0.38$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.27$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.36$	$\Delta E = 0.18$	$\Delta E = 0.35$	$\Delta E = 0.24$	$\Delta E = 0.33$	$\Delta E = 0.29$	$\Delta E = 0.20$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.43$	$\Delta E = 0.12$	$\Delta E = 0.29$	$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.24$

PXEROC1R - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.036221	0.065726	0.120998	0.207877	0.263423	0.304455	0.358565	0.385472	0.383081	0.378714	0.366260
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.348851	0.323395	0.288128	0.234713	0.176002	0.131127	0.089539	0.048338	0.031082	0.026539	0.021237
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.023171	0.021656	0.020969	0.022350	0.021905	0.026085	0.028247	0.027765	0.026566	0.026134	0.022337
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.023863	0.026562	0.037758	0.063959	0.133138	0.280307	0.401801	0.493176			

2 Gaussians

Scaling factor: 126.06625547370243

Gaussians:

Weight	Mean		Covariance			
0.514881618	478.383388616	466.563999460	11626.816324560	423.962779870	423.962779870	3422.950110392
0.485118382	540.238959954	700.174148854	16642.038445955	814.362208476	814.362208476	3525.010089955

4 Gaussians

Scaling factor: 114.61173783304646

Gaussians:

Weight	Mean		Covariance			
0.318924253	415.067058446	453.647467292	2646.510264531	-36.891359393	-36.891359393	2208.314850642
0.158358627	667.070563551	720.103921622	8492.419509359	518.406566956	518.406566956	2138.154485590
0.324009000	468.258930526	689.935150301	7562.453417280	164.771816896	164.771816896	4112.513556661
0.198708120	597.153378996	491.341425796	7669.035056792	-951.293433249	-951.293433249	5287.083526746

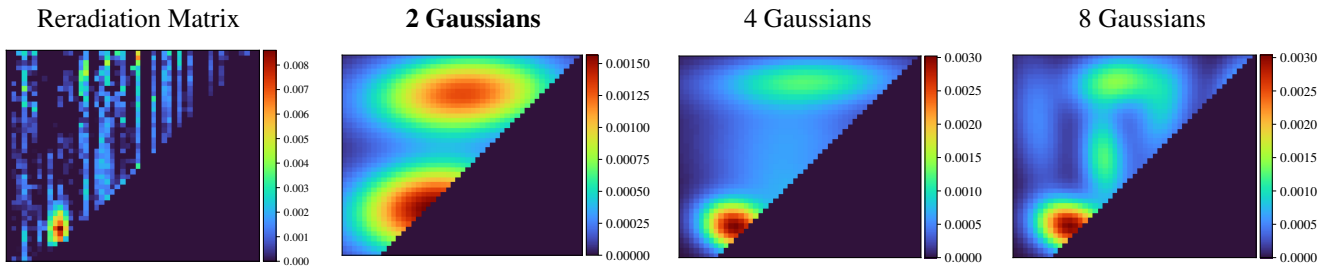
8 Gaussians

Scaling factor: 112.38677930067085

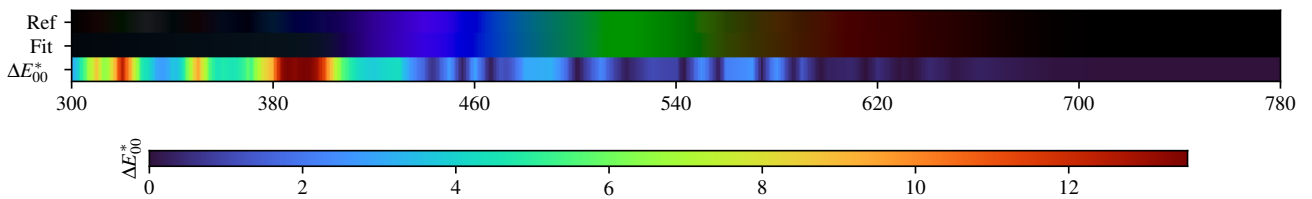
Gaussians:

Weight	Mean		Covariance			
0.266069584	409.301827258	438.429289967	2031.410959576	-408.941339102	-408.941339102	1120.037488186
0.158492196	594.011547735	707.155539540	2117.125844935	66.251331536	66.251331536	2802.127800562
0.075138883	332.404582928	670.760035578	145.974602213	172.415058990	172.415058990	6531.351648239
0.032682152	751.892710229	498.824526350	551.552254259	-267.863565125	-267.863565125	6839.013391999
0.125774808	472.955888007	728.610620167	1315.144038529	271.750516660	271.750516660	1171.281059619
0.063151129	762.593786719	730.426720296	365.952942518	166.636048425	166.636048425	1445.864803753
0.124896408	596.889148833	471.241616376	1890.000193068	413.697990272	413.697990272	4337.199608113
0.153794841	478.545415347	571.110884213	1903.096624690	113.224051488	113.224051488	2869.660036771

PXEROC1R - Weighted variational Bayesian inference - 2 Gaussians



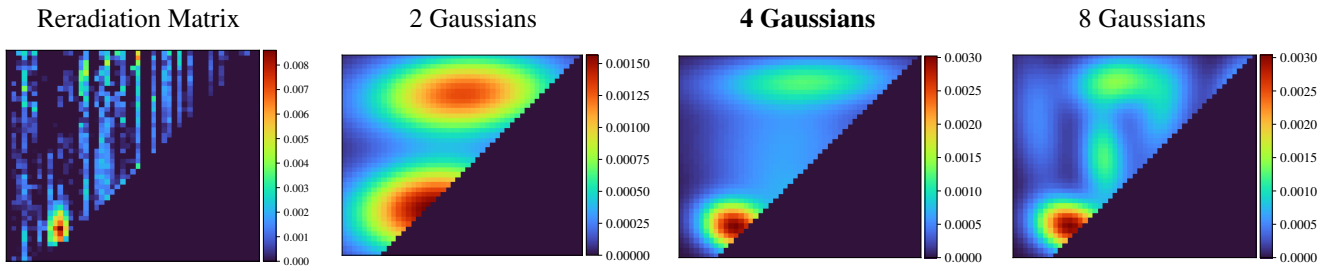
Fitted Material Under Monochromatic Illumination



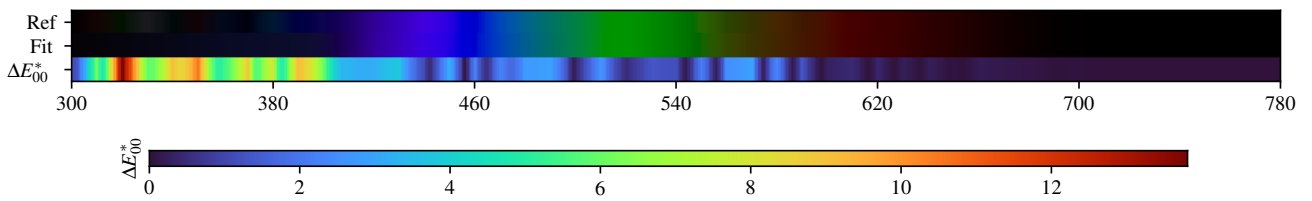
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.22$	$\Delta E = 0.79$	$\Delta E = 0.58$	$\Delta E = 0.68$	$\Delta E = 0.80$	$\Delta E = 0.28$	$\Delta E = 0.72$	$\Delta E = 0.83$	$\Delta E = 0.36$	$\Delta E = 0.35$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.56$	$\Delta E = 0.87$	$\Delta E = 0.57$	$\Delta E = 0.44$	$\Delta E = 0.26$	$\Delta E = 0.31$	$\Delta E = 0.70$	$\Delta E = 0.31$	$\Delta E = 0.21$	$\Delta E = 0.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.76$	$\Delta E = 1.00$	$\Delta E = 0.60$	$\Delta E = 0.41$	$\Delta E = 0.36$	$\Delta E = 0.62$	$\Delta E = 0.21$	$\Delta E = 0.21$	$\Delta E = 0.21$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.59$	$\Delta E = 1.17$	$\Delta E = 0.63$	$\Delta E = 0.80$	$\Delta E = 0.48$	$\Delta E = 0.60$	$\Delta E = 0.31$	$\Delta E = 0.40$	$\Delta E = 0.25$	$\Delta E = 0.71$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.70$	$\Delta E = 0.66$	$\Delta E = 0.54$	$\Delta E = 0.77$	$\Delta E = 0.12$	$\Delta E = 0.68$	$\Delta E = 0.36$	$\Delta E = 0.69$	$\Delta E = 0.28$	$\Delta E = 0.64$

PXEROC1R - Weighted variational Bayesian inference - 4 Gaussians



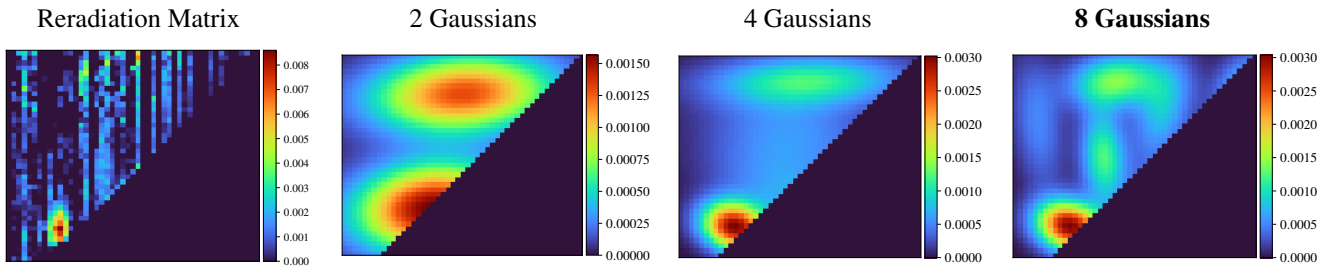
Fitted Material Under Monochromatic Illumination



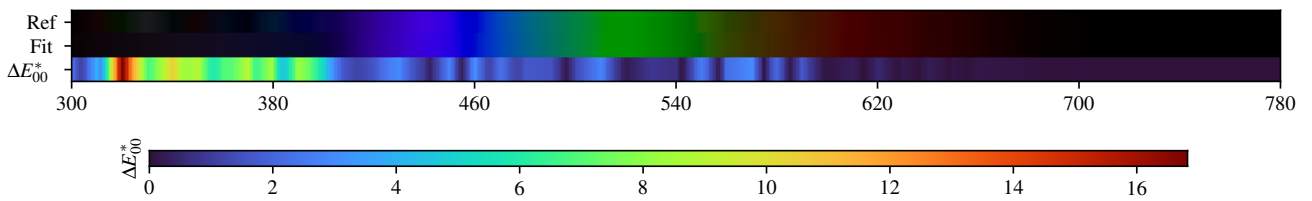
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.31$	$\Delta E = 0.30$	$\Delta E = 0.16$	$\Delta E = 0.21$	$\Delta E = 0.53$	$\Delta E = 0.33$	$\Delta E = 0.51$	$\Delta E = 0.25$	$\Delta E = 0.42$	$\Delta E = 0.39$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.31$	$\Delta E = 0.29$	$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.22$	$\Delta E = 0.35$	$\Delta E = 0.36$	$\Delta E = 0.68$	$\Delta E = 0.44$	$\Delta E = 0.42$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.28$	$\Delta E = 0.29$	$\Delta E = 0.08$	$\Delta E = 0.25$	$\Delta E = 0.24$	$\Delta E = 0.43$	$\Delta E = 0.27$	$\Delta E = 0.70$	$\Delta E = 0.47$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.31$	$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.45$	$\Delta E = 0.27$	$\Delta E = 0.41$	$\Delta E = 0.39$	$\Delta E = 0.40$	$\Delta E = 0.43$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.30$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.48$	$\Delta E = 0.24$	$\Delta E = 0.38$	$\Delta E = 0.44$	$\Delta E = 0.32$	$\Delta E = 0.39$	$\Delta E = 0.26$

PXEROC1R - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.39$	$\Delta E = 0.41$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.48$	$\Delta E = 0.37$	$\Delta E = 0.36$	$\Delta E = 0.19$	$\Delta E = 0.54$	$\Delta E = 0.52$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.39$	$\Delta E = 0.43$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.43$	$\Delta E = 0.37$	$\Delta E = 0.27$	$\Delta E = 1.02$	$\Delta E = 0.55$	$\Delta E = 0.50$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.40$	$\Delta E = 0.46$	$\Delta E = 0.23$	$\Delta E = 0.26$	$\Delta E = 0.36$	$\Delta E = 0.38$	$\Delta E = 0.30$	$\Delta E = 0.77$	$\Delta E = 0.56$	$\Delta E = 0.36$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.40$	$\Delta E = 0.38$	$\Delta E = 0.26$	$\Delta E = 0.34$	$\Delta E = 0.36$	$\Delta E = 0.36$	$\Delta E = 0.37$	$\Delta E = 0.50$	$\Delta E = 0.49$	$\Delta E = 0.32$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.40$	$\Delta E = 0.26$	$\Delta E = 0.24$	$\Delta E = 0.40$	$\Delta E = 0.31$	$\Delta E = 0.30$	$\Delta E = 0.38$	$\Delta E = 0.45$	$\Delta E = 0.51$	$\Delta E = 0.35$

PXEROC1R - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.036221	0.065726	0.120998	0.207877	0.263423	0.304455	0.358565	0.385472	0.383081	0.378714	0.366260
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.348851	0.323395	0.288128	0.234713	0.176002	0.131127	0.089539	0.048338	0.031082	0.026539	0.021237
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.023171	0.021656	0.020969	0.022350	0.021905	0.026085	0.028247	0.027765	0.026566	0.026134	0.022337
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.023863	0.026562	0.037758	0.063959	0.133138	0.280307	0.401801	0.493176			

2 Gaussians max

Scaling factor: 125.72144207542239

Gaussians:

Weight	Mean		Covariance			
0.534540212	480.668622979	471.062647182	11796.305295496	655.721122035	655.721122035	3861.787437604
0.465459788	540.294369735	704.596847485	16768.572674702	857.161413150	857.161413150	3125.300722122

4 Gaussians max

Scaling factor: 113.21850435106651

Gaussians:

Weight	Mean		Covariance			
0.241484847	406.938912480	437.577188760	1999.689466812	-264.498989209	-264.498989209	1153.893006885
0.240201004	534.872580643	488.431083381	11844.547102435	-3422.152904418	-3422.152904418	4668.305581492
0.216636484	526.440555221	626.476382589	13298.744605672	-1203.363435801	-1203.363435801	3829.766912313
0.301677665	555.703629601	733.373815134	17857.375992727	342.383833928	342.383833928	1277.485740669

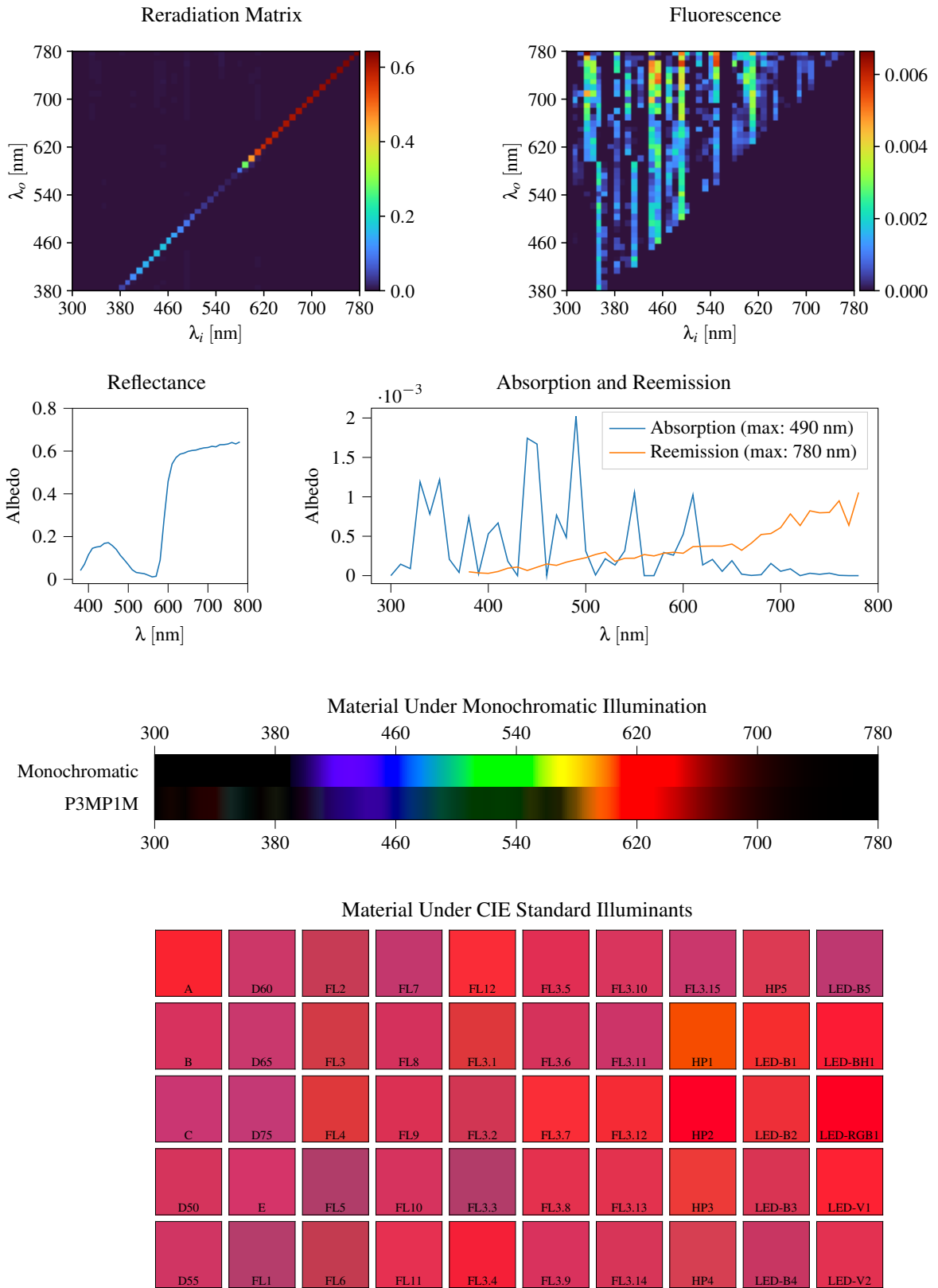
8 Gaussians max

Scaling factor: 114.11291584992215

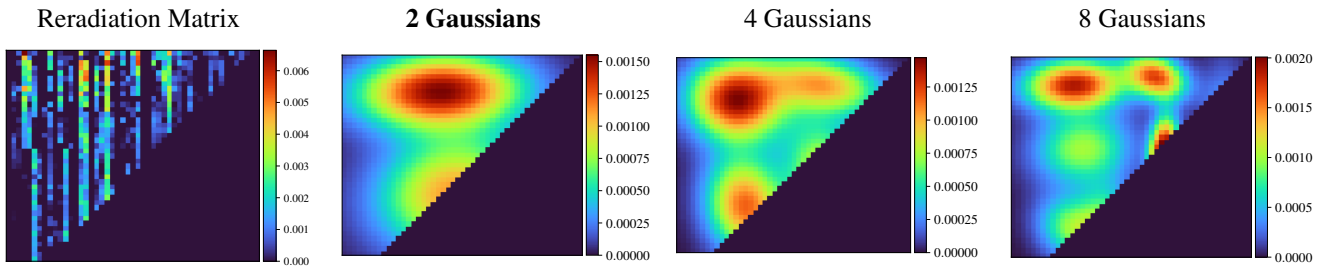
Gaussians:

Weight	Mean		Covariance			
0.260433119	409.847875851	438.611135644	2113.988317222	-275.241113495	-275.241113495	1199.388699952
0.109414846	587.327536492	465.081589871	2067.416150964	-25.844471002	-25.844471002	3963.744776348
0.047832488	706.383035620	502.615421087	4960.470820963	-1479.357688391	-1479.357688391	6249.696977101
0.132744029	476.671930011	577.225358893	919.642428087	-252.571874041	-252.571874041	4292.654551785
0.089396609	344.671362232	644.201311271	1289.490892541	-865.412473047	-865.412473047	8421.148957683
0.109873384	595.885089018	672.428478233	1688.347618928	933.605240575	933.605240575	4318.056930861
0.072587915	752.406345177	723.071715161	1659.094141489	742.442624788	742.442624788	2309.122231596
0.177717611	503.406269643	731.578235141	4034.870214785	321.746484583	321.746484583	1386.051882055

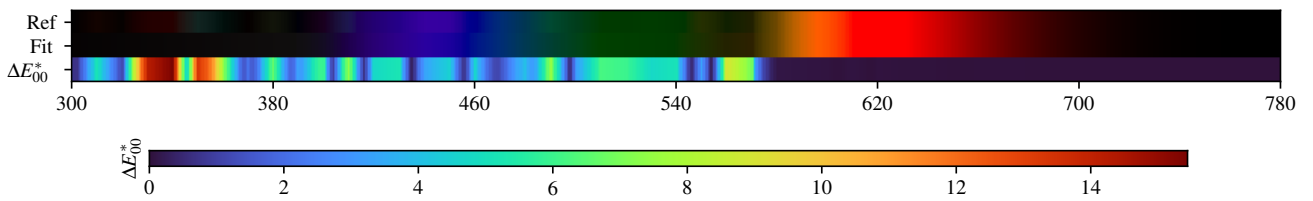
3.107. P3MP1M



P3MP1M - Weighted Expectation-Maximization - 2 Gaussians



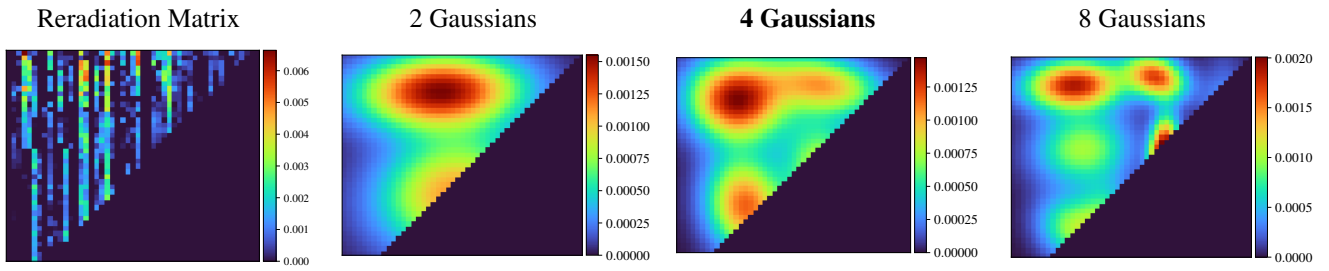
Fitted Material Under Monochromatic Illumination



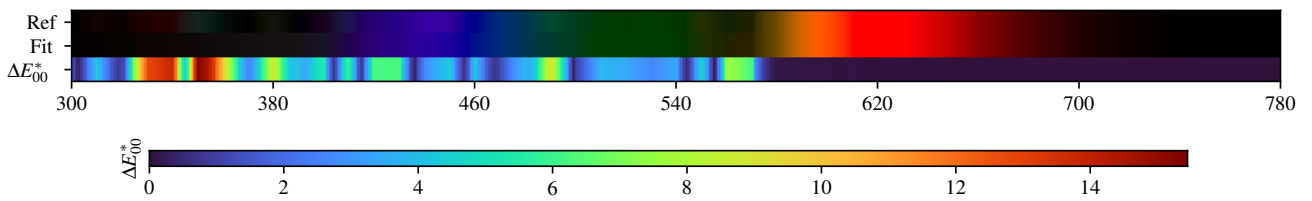
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.05$	$\Delta E = 0.26$	$\Delta E = 0.13$	$\Delta E = 0.20$	$\Delta E = 0.33$	$\Delta E = 0.21$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.28$	$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.25$	$\Delta E = 0.29$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.25$	$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.25$	$\Delta E = 0.04$	$\Delta E = 0.20$	$\Delta E = 0.25$	$\Delta E = 0.26$	$\Delta E = 0.41$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.31$	$\Delta E = 0.25$	$\Delta E = 0.09$	$\Delta E = 0.28$	$\Delta E = 0.04$	$\Delta E = 0.21$	$\Delta E = 0.31$	$\Delta E = 0.24$	$\Delta E = 0.26$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.07$	$\Delta E = 0.26$	$\Delta E = 0.06$	$\Delta E = 0.23$	$\Delta E = 0.30$	$\Delta E = 0.25$	$\Delta E = 0.29$

P3MP1M - Weighted Expectation-Maximization - 4 Gaussians



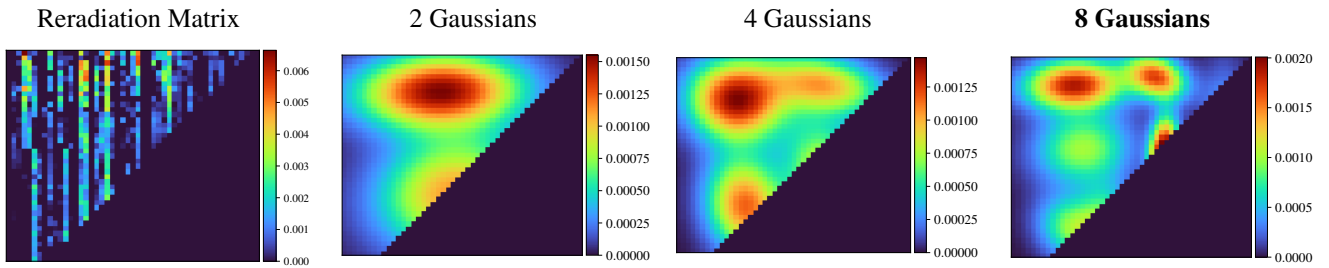
Fitted Material Under Monochromatic Illumination



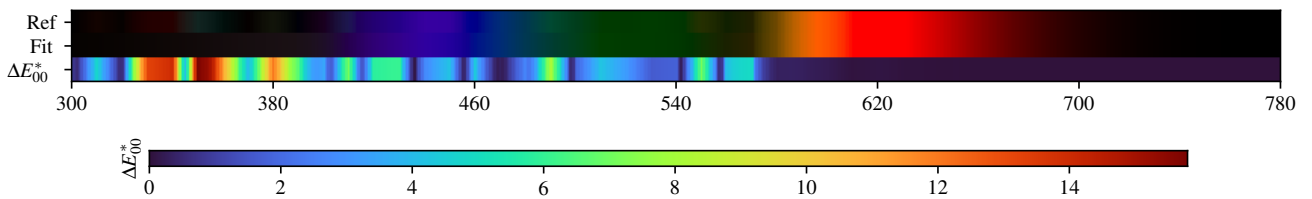
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.05$	$\Delta E = 0.41$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.12$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.32$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.14$	$\Delta E = 0.03$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.11$	$\Delta E = 0.33$	$\Delta E = 0.07$	$\Delta E = 0.23$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.08$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.05$	$\Delta E = 0.28$	$\Delta E = 0.09$	$\Delta E = 0.28$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.04$	$\Delta E = 0.10$

P3MP1M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.09$	$\Delta E = 0.35$	$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.29$	$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.26$	$\Delta E = 0.13$	$\Delta E = 0.32$	$\Delta E = 0.14$	$\Delta E = 0.22$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.09$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.28$	$\Delta E = 0.13$	$\Delta E = 0.26$	$\Delta E = 0.12$	$\Delta E = 0.25$	$\Delta E = 0.09$	$\Delta E = 0.14$

P3MP1M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.041313	0.070698	0.114862	0.145223	0.151160	0.153897	0.168360	0.171436	0.157718	0.139598	0.112539
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.091294	0.068675	0.044629	0.032216	0.029167	0.026510	0.019290	0.011485	0.014294	0.089521	0.283493
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.457905	0.539793	0.569969	0.585762	0.590463	0.598680	0.602765	0.604817	0.610757	0.615059	0.616781
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.622522	0.620041	0.629800	0.630381	0.633071	0.640114	0.633690	0.642771			

2 Gaussians

Scaling factor: 116.94927391469463

Gaussians:

Weight	Mean	Covariance				
0.491530929	493.559907864	710.432991929	13171.807659649	402.812424676	402.812424676	2773.881830459
0.508469071	521.446454392	501.678800835	11231.135051113	805.202102601	805.202102601	6496.763217444

4 Gaussians

Scaling factor: 113.78825701645961

Gaussians:

Weight	Mean	Covariance				
0.313472500	419.993054679	695.129617584	4660.936829359	-210.249840117	-210.249840117	3391.183678259
0.244320570	439.270361908	473.836021472	3065.526538419	-429.571607410	-429.571607410	4791.173708913
0.188191247	602.236290936	728.155391988	6884.017837567	-977.312192751	-977.312192751	1897.134055017
0.254015682	611.870479544	525.887077806	3464.567060824	-1201.961726561	-1201.961726561	6984.751873147

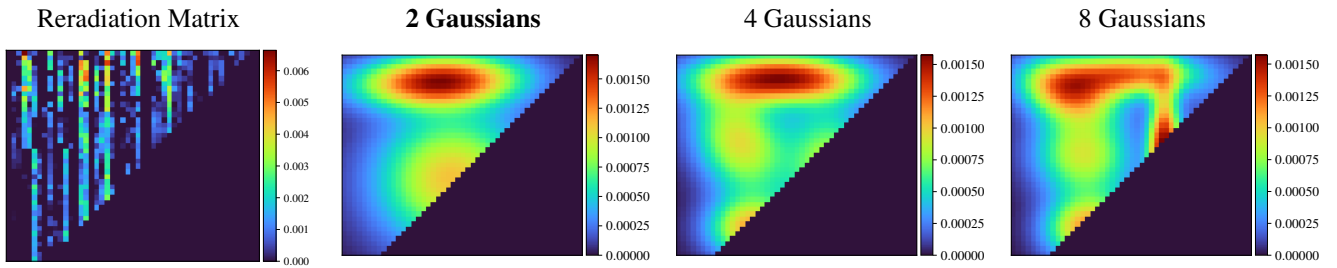
8 Gaussians

Scaling factor: 114.128221373591

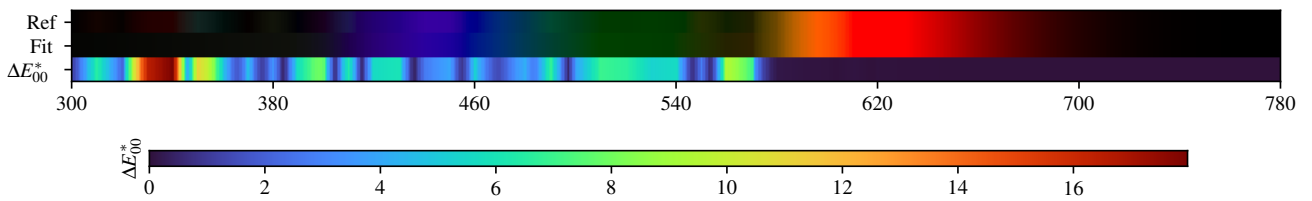
Gaussians:

Weight	Mean	Covariance					
0.245357745	422.877153324	726.845853033	4753.440793119	126.707608937	126.707608937	1227.213552130	
0.076325134	485.341777258	455.781402126	1454.257693860	100.031428522	100.031428522	2602.554760599	
0.132435514	605.165146353	580.209567196	380.484697201	138.188481932	138.188481932	2548.934989135	
0.112112038	589.843747205	742.336360812	1723.679283469	-340.481317981	-340.481317981	993.523382718	
0.188004807	440.005075250	597.646852994	4523.751729293	228.479482365	228.479482365	2566.310521036	
0.102362626	416.635812797	435.259118748	2222.673263208	-297.661493101	-297.661493101	1998.233413227	
0.094847141	633.937923680	434.568992682	4328.240412295	391.295590744	391.295590744	1677.397457492	
0.048554994	724.276605767	678.931954980	1081.656114843	159.620863746	159.620863746	5067.242009475	

P3MP1M - Weighted variational Bayesian inference - 2 Gaussians



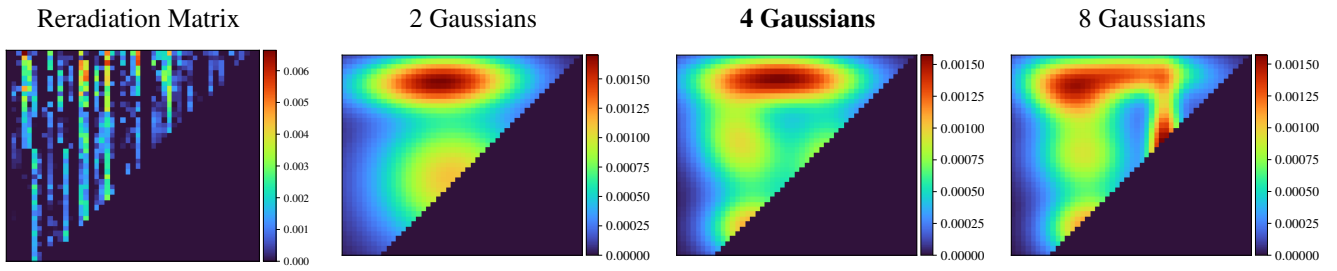
Fitted Material Under Monochromatic Illumination



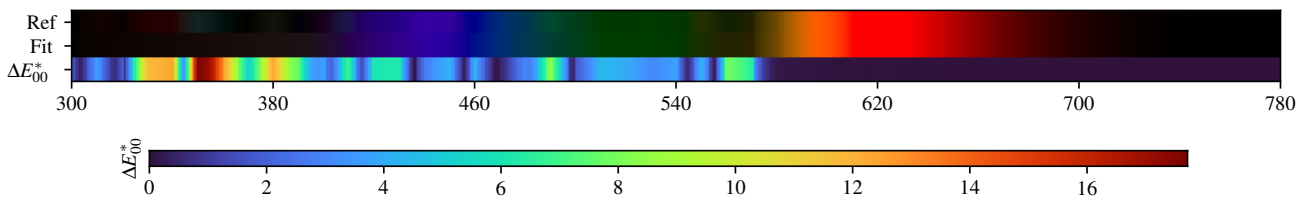
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.42$	D60 $\Delta E = 0.61$	FL2 $\Delta E = 0.45$	FL7 $\Delta E = 0.52$	FL12 $\Delta E = 0.12$	FL3.5 $\Delta E = 0.45$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.51$	HP5 $\Delta E = 0.57$	LED-B5 $\Delta E = 0.48$
B $\Delta E = 0.57$	D65 $\Delta E = 0.61$	FL3 $\Delta E = 0.37$	FL8 $\Delta E = 0.50$	FL3.1 $\Delta E = 0.30$	FL3.6 $\Delta E = 0.51$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.22$	LED-B1 $\Delta E = 0.37$	LED-BH1 $\Delta E = 0.43$
C $\Delta E = 0.59$	D75 $\Delta E = 0.60$	FL4 $\Delta E = 0.30$	FL9 $\Delta E = 0.45$	FL3.2 $\Delta E = 0.43$	FL3.7 $\Delta E = 0.13$	FL3.12 $\Delta E = 0.32$	HP2 $\Delta E = 0.37$	LED-B2 $\Delta E = 0.41$	LED-RGB1 $\Delta E = 0.54$
D50 $\Delta E = 0.60$	E $\Delta E = 0.67$	FL5 $\Delta E = 0.55$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.55$	FL3.8 $\Delta E = 0.17$	FL3.13 $\Delta E = 0.38$	HP3 $\Delta E = 0.48$	LED-B3 $\Delta E = 0.45$	LED-V1 $\Delta E = 0.43$
D55 $\Delta E = 0.60$	FL1 $\Delta E = 0.52$	FL6 $\Delta E = 0.46$	FL11 $\Delta E = 0.15$	FL3.4 $\Delta E = 0.36$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.46$	HP4 $\Delta E = 0.53$	LED-B4 $\Delta E = 0.49$	LED-V2 $\Delta E = 0.56$

P3MP1M - Weighted variational Bayesian inference - 4 Gaussians



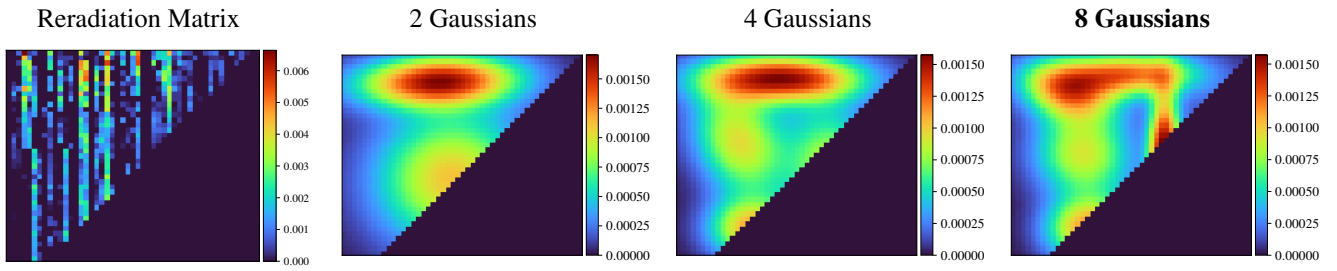
Fitted Material Under Monochromatic Illumination



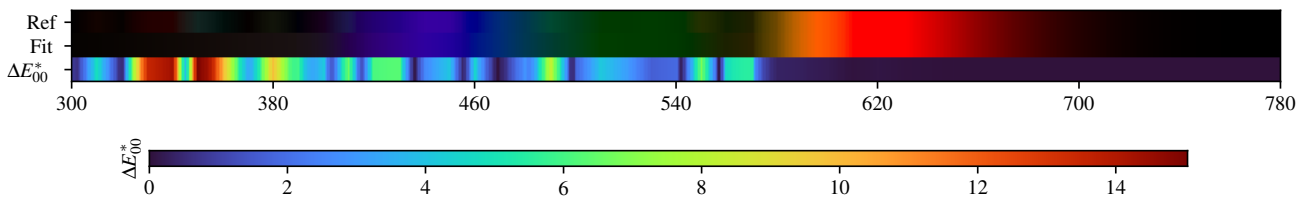
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.29$	$\Delta E = 0.07$	$\Delta E = 0.20$	$\Delta E = 0.09$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.29$	$\Delta E = 0.10$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.04$	$\Delta E = 0.20$	$\Delta E = 0.09$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.05$	$\Delta E = 0.24$	$\Delta E = 0.12$	$\Delta E = 0.12$

P3MP1M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.33$	$\Delta E = 0.09$	$\Delta E = 0.20$	$\Delta E = 0.09$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.10$	$\Delta E = 0.25$	$\Delta E = 0.10$	$\Delta E = 0.29$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.08$	$\Delta E = 0.19$	$\Delta E = 0.08$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.23$	$\Delta E = 0.10$	$\Delta E = 0.26$	$\Delta E = 0.09$	$\Delta E = 0.12$

P3MP1M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.041313	0.070698	0.114862	0.145223	0.151160	0.153897	0.168360	0.171436	0.157718	0.139598	0.112539
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.091294	0.068675	0.044629	0.032216	0.029167	0.026510	0.019290	0.011485	0.014294	0.089521	0.283493
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.457905	0.539793	0.569969	0.585762	0.590463	0.598680	0.602765	0.604817	0.610757	0.615059	0.616781
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.622522	0.620041	0.629800	0.630381	0.633071	0.640114	0.633690	0.642771			

2 Gaussians max

Scaling factor: 113.95302575354978

Gaussians:

Weight	Mean		Covariance			
0.637181590	517.160355395	532.283106273	11717.004555980	270.986983591	270.986983591	9327.953860494
0.362818410	491.402952295	730.829882149	13094.292229005	441.325989525	441.325989525	1351.622613888

4 Gaussians max

Scaling factor: 114.13560562317146

Gaussians:

Weight	Mean		Covariance			
0.145815225	448.830856435	428.802171092	3684.781601792	-30.998445687	-30.998445687	1763.709322470
0.280712552	614.673384458	545.842918135	3906.764124204	-908.236988126	-908.236988126	8562.184815566
0.259862492	423.307781010	606.666554687	4290.503923457	-1275.589529459	-1275.589529459	6264.635138836
0.313609731	509.341410171	736.040133578	12947.652338133	-47.708843002	-47.708843002	1132.355270931

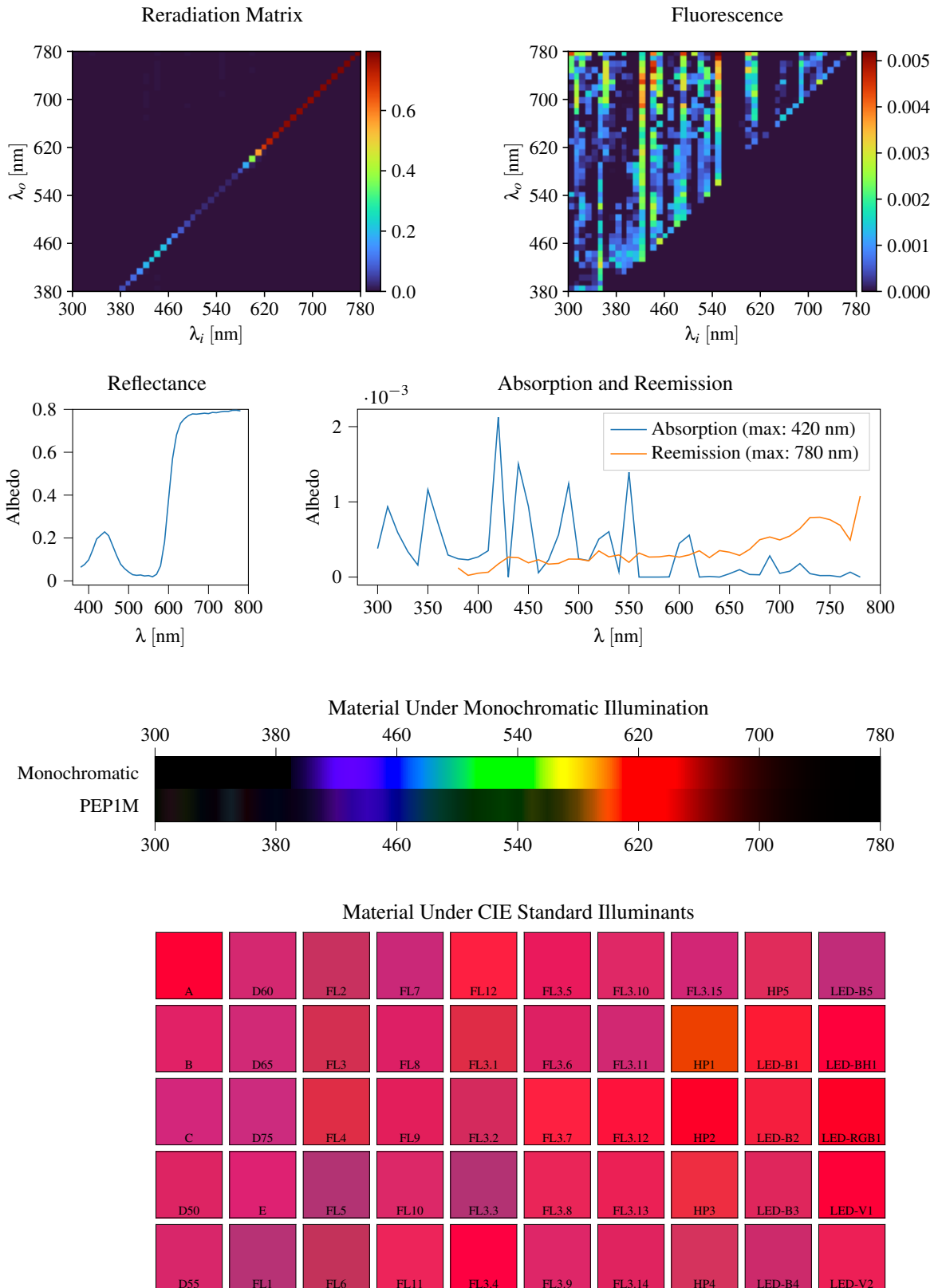
8 Gaussians max

Scaling factor: 113.95562653976506

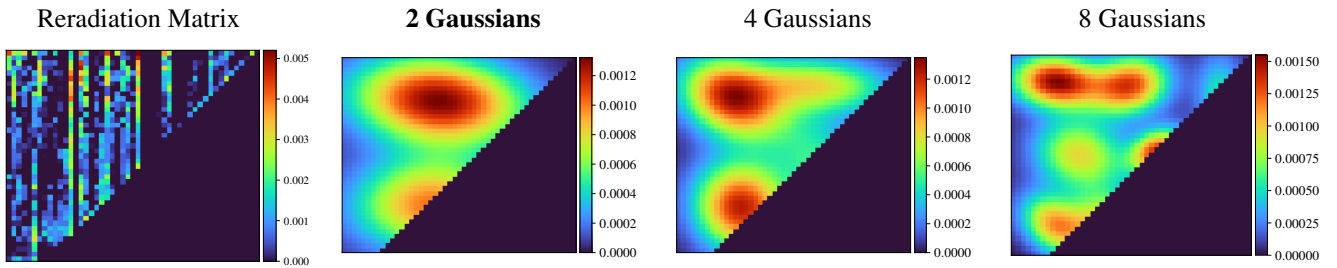
Gaussians:

Weight	Mean		Covariance			
0.152795176	450.395614904	431.320645337	3421.129995313	158.017826938	158.017826938	1865.593575649
0.179043185	604.830295883	570.594427643	444.623382348	109.449062586	109.449062586	8732.450286144
0.056113946	660.091468313	446.344561753	5148.079076982	-232.627201412	-232.627201412	2797.910241527
0.209363719	441.099378972	580.926893843	4774.709660421	-161.387524671	-161.387524671	3790.145383652
0.040894588	700.505040569	642.742182725	3511.497508725	1095.292637294	1095.292637294	4416.097107583
0.171757911	408.149840413	710.647055451	4557.690169200	-765.112902819	-765.112902819	1891.483442143
0.189004992	538.935182811	744.758597045	8926.387398771	52.192650114	52.192650114	949.346811035

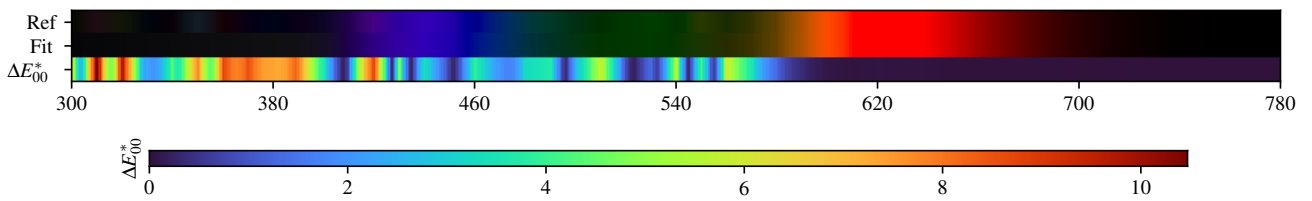
3.108. PEP1M



PEP1M - Weighted Expectation-Maximization - 2 Gaussians



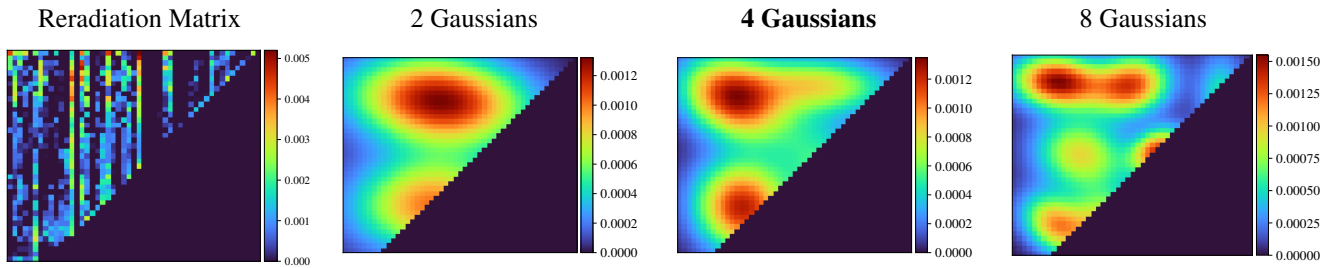
Fitted Material Under Monochromatic Illumination



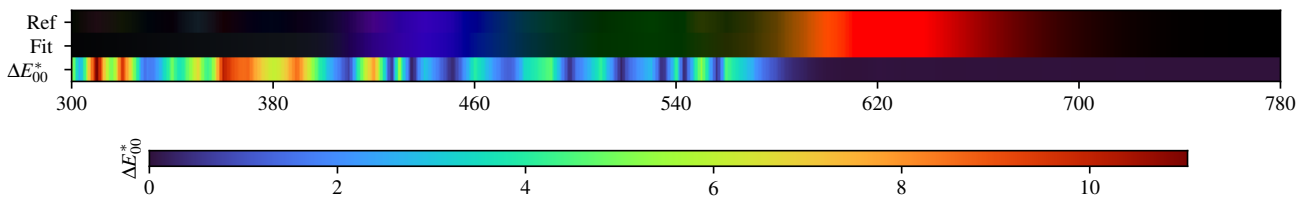
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.12$	LED-B5 $\Delta E = 0.22$
B $\Delta E = 0.13$	D65 $\Delta E = 0.16$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.17$	FL3.6 $\Delta E = 0.14$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.22$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.12$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.15$	E $\Delta E = 0.22$	FL5 $\Delta E = 0.18$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.14$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.20$	LED-V2 $\Delta E = 0.13$

PEP1M - Weighted Expectation-Maximization - 4 Gaussians



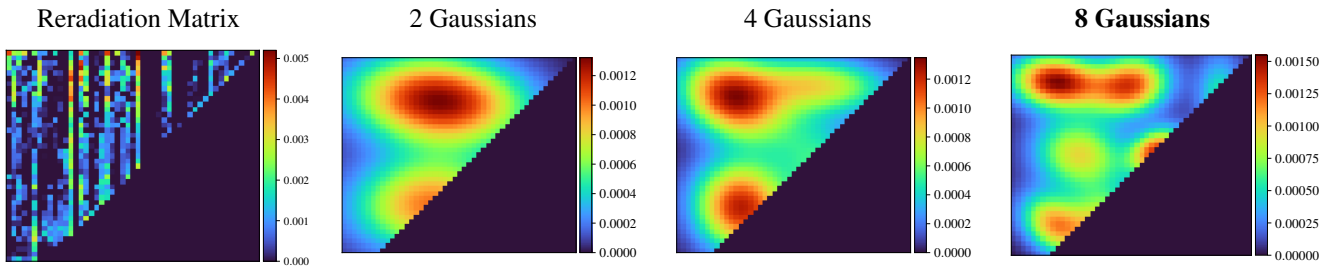
Fitted Material Under Monochromatic Illumination



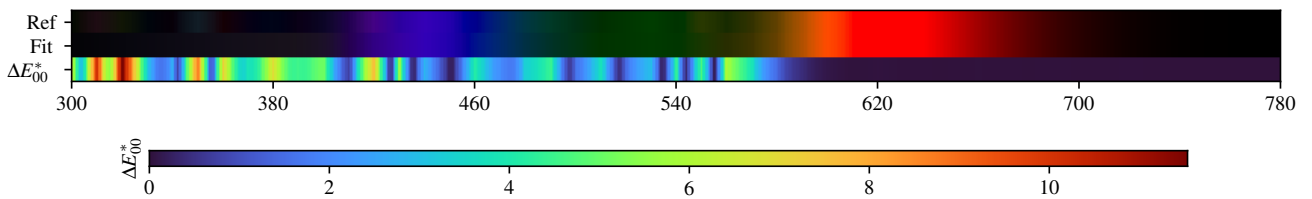
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.11$	FL7 $\Delta E = 0.15$	FL12 $\Delta E = 0.17$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.24$	FL3.15 $\Delta E = 0.08$	HP5 $\Delta E = 0.12$	LED-B5 $\Delta E = 0.05$
B $\Delta E = 0.09$	D65 $\Delta E = 0.07$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.12$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.07$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.25$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.07$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.11$	FL11 $\Delta E = 0.22$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.17$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.05$	LED-V2 $\Delta E = 0.21$

PEP1M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.05$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.11$	$\Delta E = 0.24$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.30$	$\Delta E = 0.19$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.22$	$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.16$	$\Delta E = 0.30$	$\Delta E = 0.19$	$\Delta E = 0.07$	$\Delta E = 0.23$	$\Delta E = 0.05$	$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.06$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.06$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.29$	$\Delta E = 0.08$

PEP1M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.063619	0.076890	0.098146	0.143501	0.195199	0.212187	0.228464	0.210772	0.164931	0.118611	0.078062
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.057168	0.041703	0.028992	0.025852	0.027508	0.022879	0.024763	0.019279	0.030645	0.069814	0.181428
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.378544	0.569900	0.680961	0.735030	0.756669	0.771028	0.778867	0.777609	0.779807	0.782125	0.780112
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.785774	0.784465	0.788370	0.790640	0.790403	0.795549	0.795942	0.792884			

2 Gaussians

Scaling factor: 112.87899615007649

Gaussians:

Weight	Mean		Covariance			
0.421570815	480.756417491	476.365620742	12298.683255553	156.379830736	156.379830736	4569.061800452
0.578429185	496.870775887	693.932247402	15240.555759146	-1021.627196303	-1021.627196303	4149.424311561

4 Gaussians

Scaling factor: 106.16940705601729

Gaussians:

Weight	Mean		Covariance			
0.318045096	430.762071524	470.112198243	4507.833437624	-337.289470902	-337.289470902	4242.362506140
0.186722638	593.677409175	727.566091864	10263.517050770	-558.935190343	-558.935190343	1692.344108592
0.198717143	607.143574443	552.176613622	7052.136833919	-3119.507668375	-3119.507668375	7318.234948349
0.296515123	410.005461546	698.499310180	5276.855380705	-1030.088292062	-1030.088292062	3435.909612613

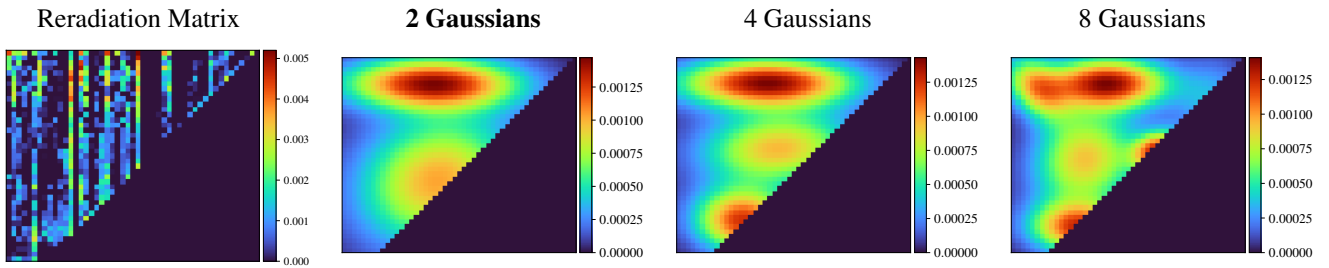
8 Gaussians

Scaling factor: 106.14092532202248

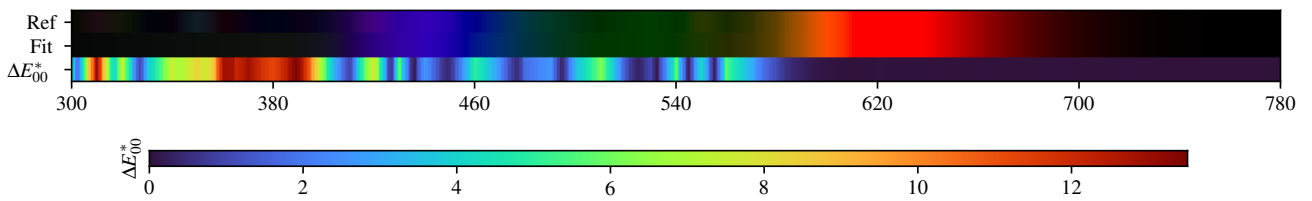
Gaussians:

Weight	Mean		Covariance			
0.111374843	380.820480365	438.330640524	2117.897440059	-585.900661721	-585.900661721	1778.914121360
0.167827013	537.114313149	721.944034273	2880.424335471	300.189549622	300.189549622	1742.243139839
0.089254982	591.781864039	587.508543603	1441.468155751	331.852730244	331.852730244	982.720770498
0.198849299	386.711232156	729.148363315	3726.867331582	-222.119213959	-222.119213959	1335.182252253
0.181370034	433.357480328	580.976140706	4134.867311450	-379.281647372	-379.281647372	2625.000334042
0.124378259	482.831311040	442.107486590	2632.798788364	22.813635041	22.813635041	2113.879324448
0.056053830	681.150394298	446.674527869	3805.553083869	-20.584201973	-20.584201973	2111.854231108
0.070891738	719.007839450	696.908343357	1176.343363938	-57.904752322	-57.904752322	4028.548147201

PEP1M - Weighted variational Bayesian inference - 2 Gaussians



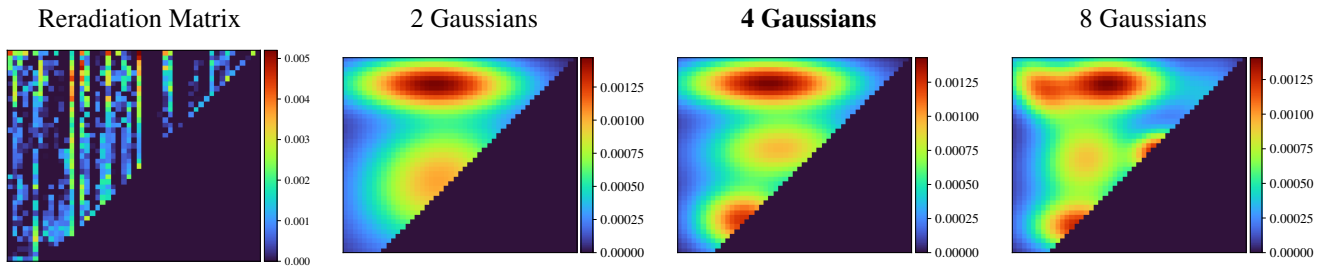
Fitted Material Under Monochromatic Illumination



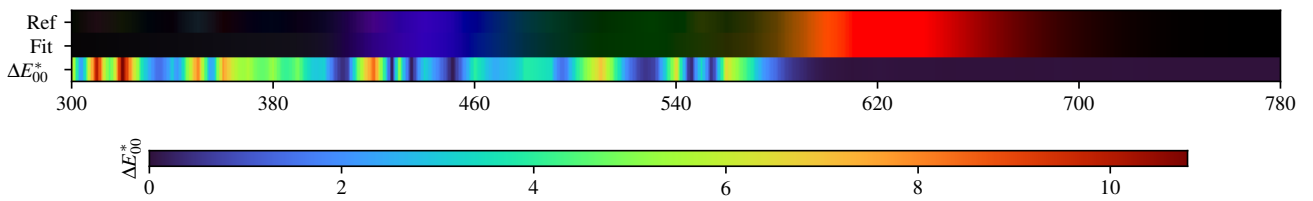
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.32$	D60 $\Delta E = 0.56$	FL2 $\Delta E = 0.32$	FL7 $\Delta E = 0.37$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.35$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.50$	HP5 $\Delta E = 0.35$	LED-B5 $\Delta E = 0.53$
B $\Delta E = 0.45$	D65 $\Delta E = 0.58$	FL3 $\Delta E = 0.26$	FL8 $\Delta E = 0.35$	FL3.1 $\Delta E = 0.25$	FL3.6 $\Delta E = 0.40$	FL3.11 $\Delta E = 0.23$	HP1 $\Delta E = 0.27$	LED-B1 $\Delta E = 0.28$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 0.47$	D75 $\Delta E = 0.61$	FL4 $\Delta E = 0.21$	FL9 $\Delta E = 0.31$	FL3.2 $\Delta E = 0.34$	FL3.7 $\Delta E = 0.13$	FL3.12 $\Delta E = 0.25$	HP2 $\Delta E = 0.24$	LED-B2 $\Delta E = 0.33$	LED-RGB1 $\Delta E = 0.31$
D50 $\Delta E = 0.51$	E $\Delta E = 0.67$	FL5 $\Delta E = 0.39$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.44$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.33$	HP3 $\Delta E = 0.36$	LED-B3 $\Delta E = 0.38$	LED-V1 $\Delta E = 0.28$
D55 $\Delta E = 0.54$	FL1 $\Delta E = 0.38$	FL6 $\Delta E = 0.31$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.23$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.40$	HP4 $\Delta E = 0.31$	LED-B4 $\Delta E = 0.46$	LED-V2 $\Delta E = 0.35$

PEP1M - Weighted variational Bayesian inference - 4 Gaussians



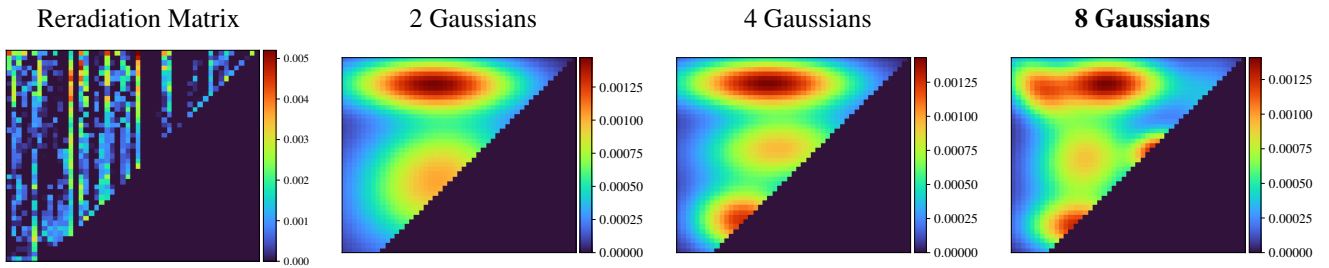
Fitted Material Under Monochromatic Illumination



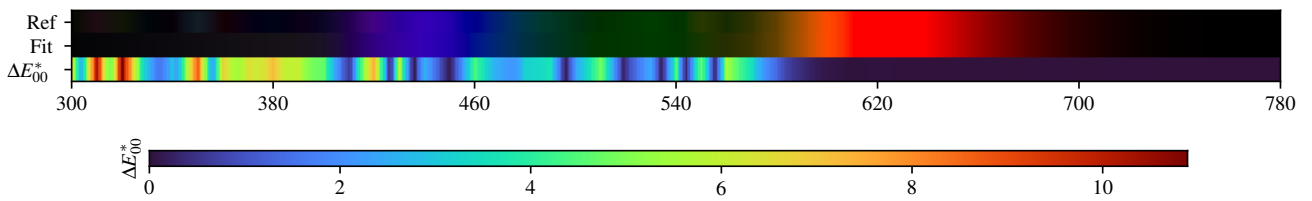
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.18$	D60 $\Delta E = 0.23$	FL2 $\Delta E = 0.22$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.22$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.26$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.37$
B $\Delta E = 0.21$	D65 $\Delta E = 0.24$	FL3 $\Delta E = 0.20$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.22$	FL3.6 $\Delta E = 0.24$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.25$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.21$	D75 $\Delta E = 0.24$	FL4 $\Delta E = 0.18$	FL9 $\Delta E = 0.18$	FL3.2 $\Delta E = 0.24$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.18$	HP2 $\Delta E = 0.17$	LED-B2 $\Delta E = 0.24$	LED-RGB1 $\Delta E = 0.20$
D50 $\Delta E = 0.23$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.26$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.29$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.22$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.25$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.23$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.18$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.24$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.33$	LED-V2 $\Delta E = 0.11$

PEP1M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.27$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.05$	$\Delta E = 0.20$	$\Delta E = 0.06$	$\Delta E = 0.27$	$\Delta E = 0.17$	$\Delta E = 0.38$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.23$	$\Delta E = 0.29$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.09$	$\Delta E = 0.29$	$\Delta E = 0.20$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.06$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.24$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.24$	$\Delta E = 0.39$	$\Delta E = 0.23$	$\Delta E = 0.05$	$\Delta E = 0.28$	$\Delta E = 0.06$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.07$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.05$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.33$	$\Delta E = 0.09$

PEP1M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.063619	0.076890	0.098146	0.143501	0.195199	0.212187	0.228464	0.210772	0.164931	0.118611	0.078062
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.057168	0.041703	0.028992	0.025852	0.027508	0.022879	0.024763	0.019279	0.030645	0.069814	0.181428
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.378544	0.569900	0.680961	0.735030	0.756669	0.771028	0.778867	0.777609	0.779807	0.782125	0.780112
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.785774	0.784465	0.788370	0.790640	0.790403	0.795549	0.795942	0.792884			

2 Gaussians max

Scaling factor: 110.3835959732421

Gaussians:

Weight	Mean	Covariance				
0.627630164	494.233341142	526.281402480	13005.666365925	1381.789810979	1381.789810979	8996.931927340
0.372369836	483.267181357	729.722429247	15729.588326745	-51.849856756	-51.849856756	1437.434720322

4 Gaussians max

Scaling factor: 105.85145336988188

Gaussians:

Weight	Mean	Covariance				
0.240703405	436.021015847	441.513970048	4923.393171370	-182.429091365	-182.429091365	2149.759229037
0.052179024	675.743943470	448.257055419	5019.029031570	-970.211418654	-970.211418654	2568.559034969
0.325170176	507.174365249	594.052441091	12139.477654513	471.562507651	471.562507651	2757.530164253
0.381947395	484.373709216	731.168544121	15837.204857442	-3.325978825	-3.325978825	1332.003184887

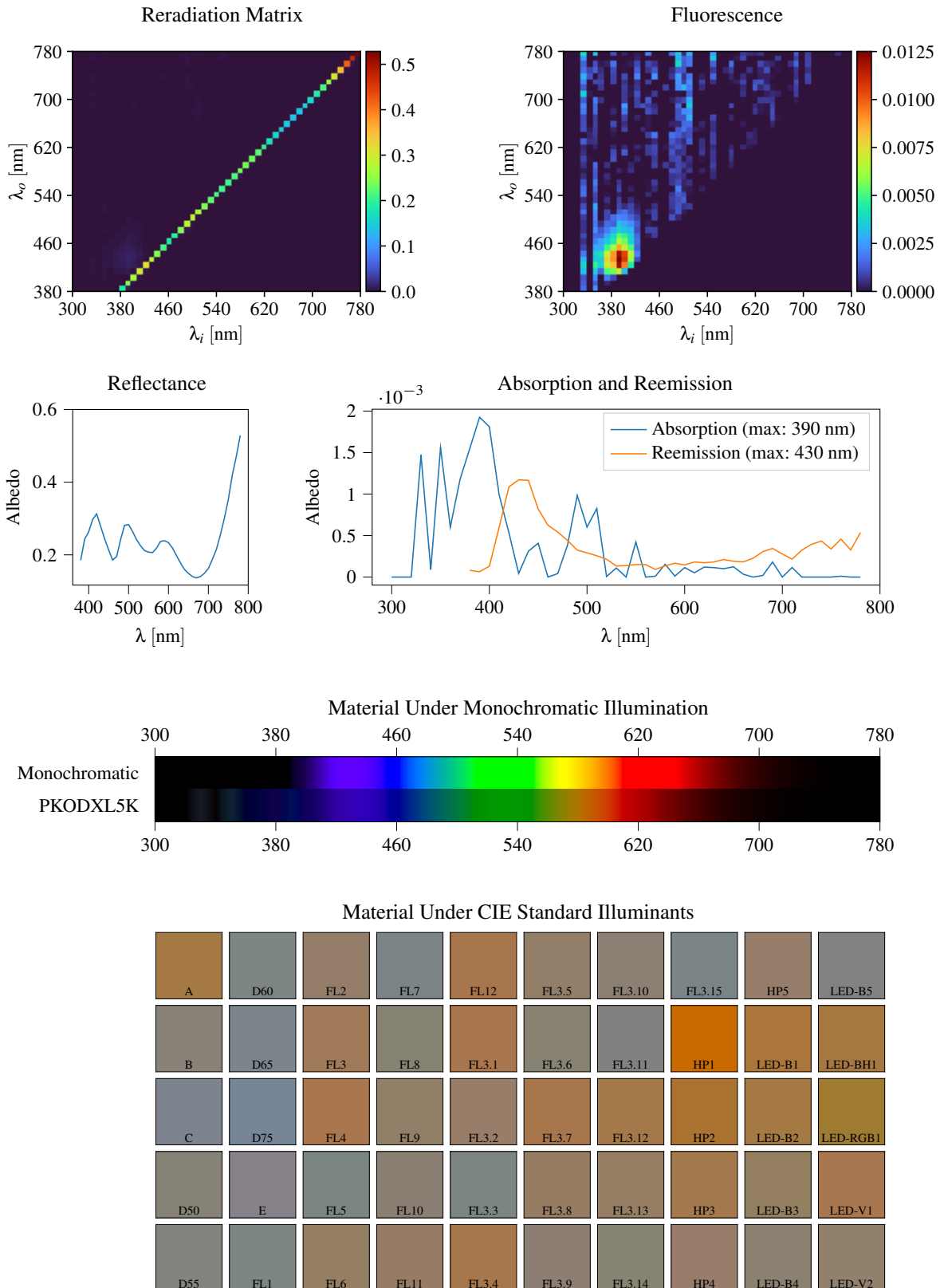
8 Gaussians max

Scaling factor: 106.84269667758961

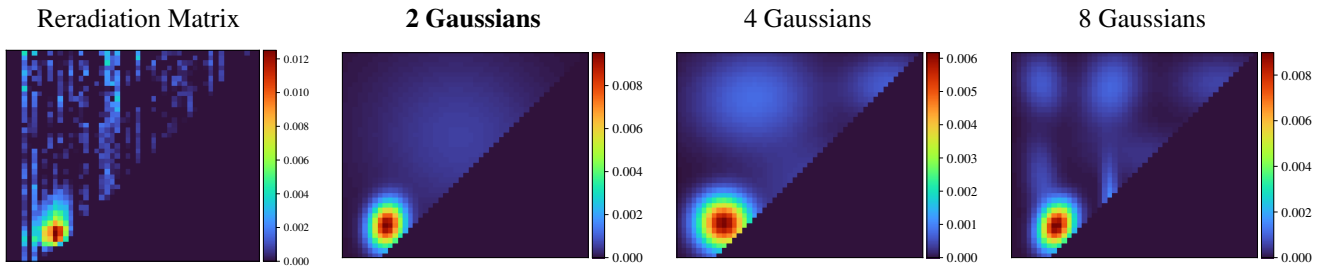
Gaussians:

Weight	Mean	Covariance				
0.182572574	438.559537440	426.529927715	5082.184254765	-134.353176342	-134.353176342	1396.961522353
0.056740096	672.700176641	456.703966601	5172.173330046	-1140.060297646	-1140.060297646	2903.336224797
0.279126791	450.236346142	570.816515089	5651.284451972	637.580349100	637.580349100	4918.223854379
0.061640220	599.407417599	589.850906508	1172.538943687	208.380308210	208.380308210	734.556548167
0.066656018	710.890674133	684.880035550	2602.598851092	579.944724064	579.944724064	4834.784397493
0.092855917	347.261474161	719.873677650	2136.863692714	-932.961952068	-932.961952068	2313.637213040
0.259358163	495.920081336	730.239869664	7723.256002523	-1.103176302	-1.103176302	1397.466035689

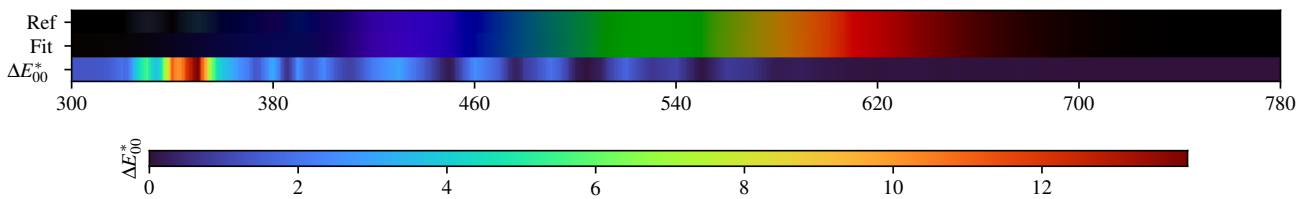
3.109. PKODXL5K



PKODXL5K - Weighted Expectation-Maximization - 2 Gaussians



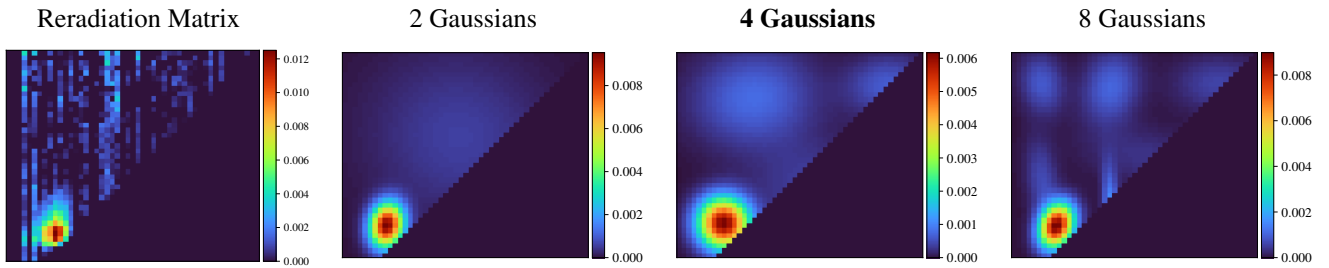
Fitted Material Under Monochromatic Illumination



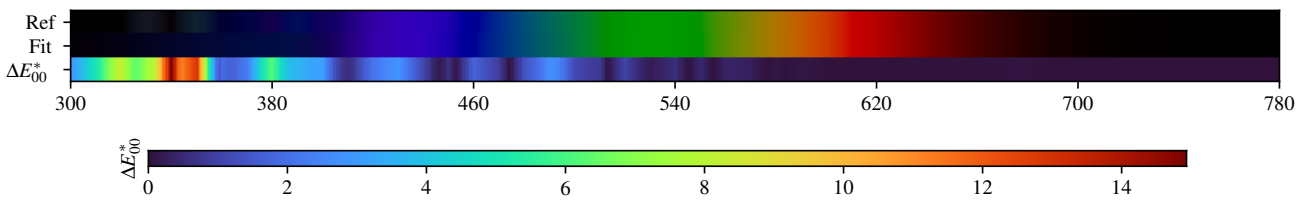
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.30$	$\Delta E = 0.77$	$\Delta E = 0.47$	$\Delta E = 0.65$	$\Delta E = 0.24$	$\Delta E = 0.43$	$\Delta E = 0.49$	$\Delta E = 0.60$	$\Delta E = 0.51$	$\Delta E = 0.75$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.65$	$\Delta E = 0.75$	$\Delta E = 0.34$	$\Delta E = 0.61$	$\Delta E = 0.27$	$\Delta E = 0.59$	$\Delta E = 0.64$	$\Delta E = 0.21$	$\Delta E = 0.28$	$\Delta E = 0.30$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.74$	$\Delta E = 0.75$	$\Delta E = 0.28$	$\Delta E = 0.46$	$\Delta E = 0.41$	$\Delta E = 0.25$	$\Delta E = 0.26$	$\Delta E = 0.28$	$\Delta E = 0.30$	$\Delta E = 0.30$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.73$	$\Delta E = 0.69$	$\Delta E = 0.69$	$\Delta E = 0.51$	$\Delta E = 0.68$	$\Delta E = 0.40$	$\Delta E = 0.40$	$\Delta E = 0.36$	$\Delta E = 0.46$	$\Delta E = 0.32$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.78$	$\Delta E = 0.68$	$\Delta E = 0.48$	$\Delta E = 0.36$	$\Delta E = 0.27$	$\Delta E = 0.49$	$\Delta E = 0.56$	$\Delta E = 0.50$	$\Delta E = 0.62$	$\Delta E = 0.58$

PKODXL5K - Weighted Expectation-Maximization - 4 Gaussians



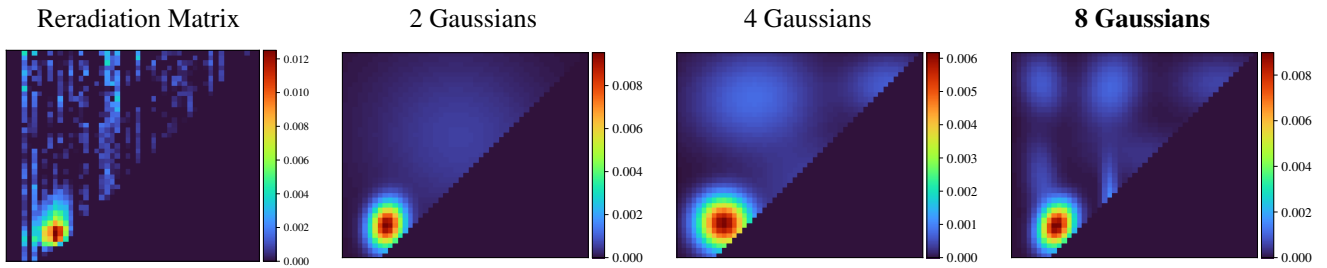
Fitted Material Under Monochromatic Illumination



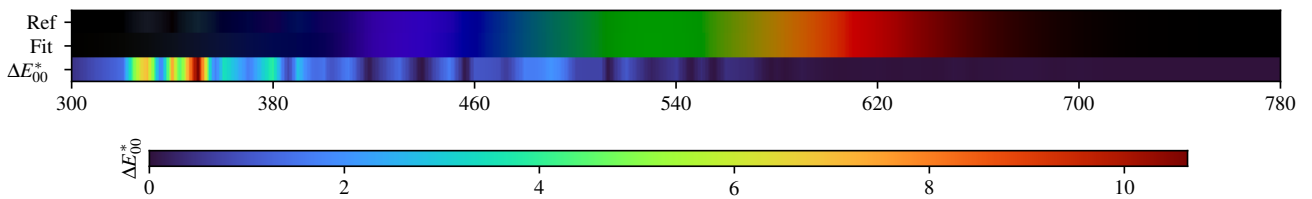
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.10$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.39$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.35$	LED-B5 $\Delta E = 0.32$
B $\Delta E = 0.15$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.44$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.18$
C $\Delta E = 0.16$	D75 $\Delta E = 0.10$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.13$	E $\Delta E = 0.49$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.33$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.22$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.20$	FL6 $\Delta E = 0.11$	FL11 $\Delta E = 0.24$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.35$	FL3.14 $\Delta E = 0.18$	HP4 $\Delta E = 0.24$	LED-B4 $\Delta E = 0.26$	LED-V2 $\Delta E = 0.33$

PKODXL5K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.23$	$\Delta E = 0.10$	$\Delta E = 0.23$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.38$	$\Delta E = 0.07$	$\Delta E = 0.06$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.10$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.14$

PKODXL5K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.184971	0.243598	0.263264	0.297406	0.312719	0.278710	0.244107	0.213657	0.185775	0.195203	0.241965
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.281397	0.283232	0.264320	0.241889	0.224933	0.211901	0.207557	0.206223	0.218325	0.237046	0.238926
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.233761	0.218999	0.198255	0.178131	0.159972	0.149247	0.140379	0.136428	0.140133	0.149082	0.162410
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.187375	0.214333	0.254757	0.299850	0.352063	0.419450	0.470574	0.528364			

2 Gaussians

Scaling factor: 97.72015261184735

Gaussians:

Weight	Mean		Covariance			
0.397998193	383.234582724	440.519269356	497.428667153	72.688253453	72.688253453	859.458627240
0.602001807	525.504224207	615.817593372	16190.038248897	-545.583158326	-545.583158326	14681.680899491

4 Gaussians

Scaling factor: 98.10420351947757

Gaussians:

Weight	Mean		Covariance			
0.458361098	388.704544724	444.256761937	1150.666847054	-18.973504472	-18.973504472	1161.367244383
0.186877565	578.525801052	501.339868897	8637.032193741	-1122.655242191	-1122.655242191	5592.239778545
0.264439052	447.616818986	694.860806857	6670.701211330	361.258331953	361.258331953	4235.921150034
0.090322285	711.156296716	719.442082814	3035.197783403	183.556592825	183.556592825	1672.965683001

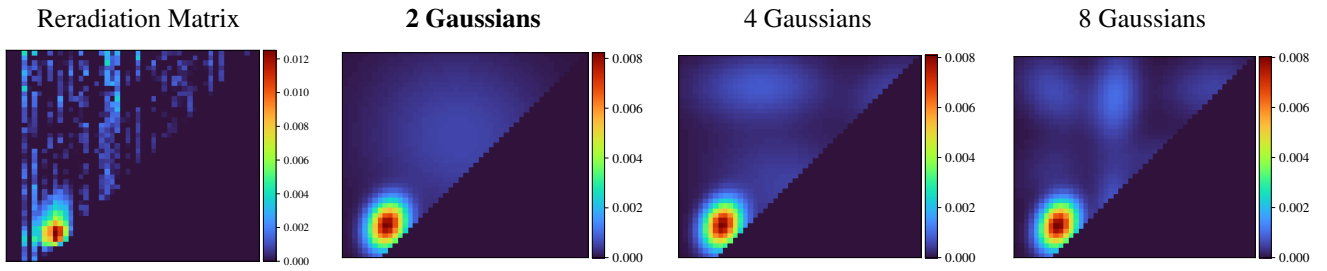
8 Gaussians

Scaling factor: 93.19239142676139

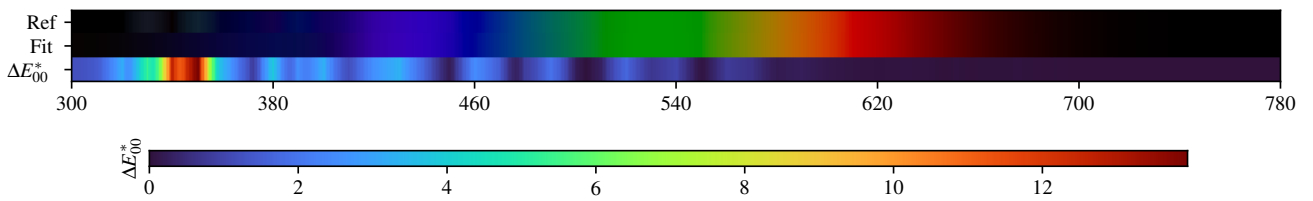
Gaussians:

Weight	Mean		Covariance			
0.394930287	384.947572517	439.513396894	524.782786590	146.978938979	146.978938979	843.006182953
0.104246594	562.912897734	576.968671530	8211.773027801	-857.842552780	-857.842552780	1787.701269144
0.133993876	492.415538307	714.285124484	1460.286129953	271.940042597	271.940042597	2427.568613645
0.073542080	356.107241198	721.321253291	861.791728363	-159.828700837	-159.828700837	1719.818290117
0.097966487	702.399069672	721.886174803	3675.504518309	45.685995235	45.685995235	1507.104553394
0.060123311	355.970581063	527.877716555	519.668949434	-353.620405327	-353.620405327	3288.520092688
0.066068404	631.682785995	438.099950537	6969.285655475	-802.572003193	-802.572003193	1528.763452637
0.069128962	492.622039299	465.285968180	110.440420832	-163.545513659	-163.545513659	3215.364724192

PKODXL5K - Weighted variational Bayesian inference - 2 Gaussians



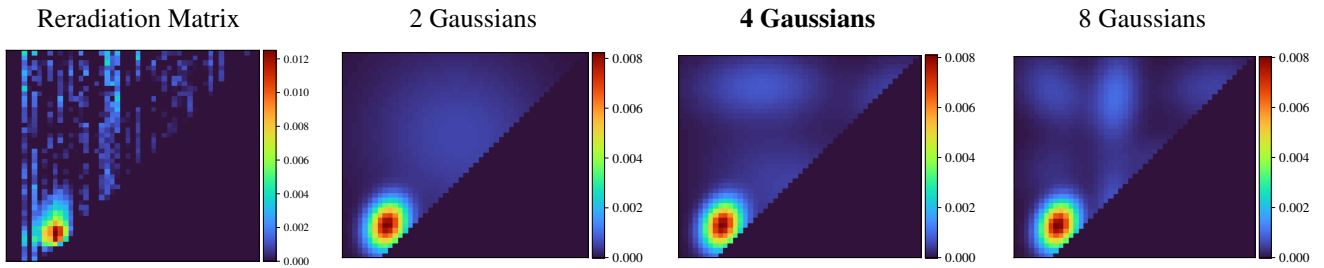
Fitted Material Under Monochromatic Illumination



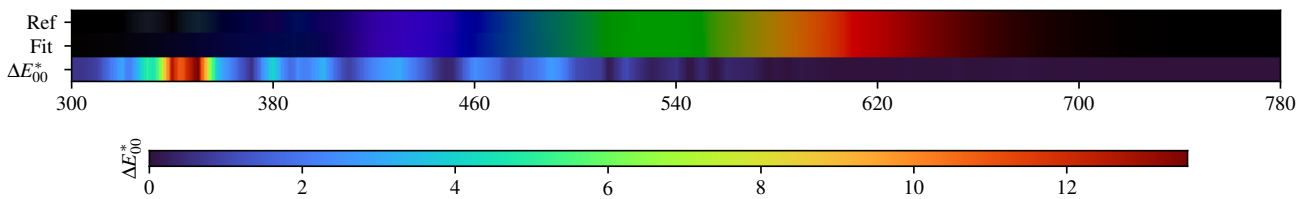
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.29$	D60 $\Delta E = 0.71$	FL2 $\Delta E = 0.45$	FL7 $\Delta E = 0.61$	FL12 $\Delta E = 0.23$	FL3.5 $\Delta E = 0.42$	FL3.10 $\Delta E = 0.48$	FL3.15 $\Delta E = 0.62$	HP5 $\Delta E = 0.48$	LED-B5 $\Delta E = 0.71$
B $\Delta E = 0.60$	D65 $\Delta E = 0.67$	FL3 $\Delta E = 0.33$	FL8 $\Delta E = 0.58$	FL3.1 $\Delta E = 0.27$	FL3.6 $\Delta E = 0.56$	FL3.11 $\Delta E = 0.61$	HP1 $\Delta E = 0.21$	LED-B1 $\Delta E = 0.28$	LED-BH1 $\Delta E = 0.30$
C $\Delta E = 0.67$	D75 $\Delta E = 0.64$	FL4 $\Delta E = 0.27$	FL9 $\Delta E = 0.44$	FL3.2 $\Delta E = 0.39$	FL3.7 $\Delta E = 0.25$	FL3.12 $\Delta E = 0.26$	HP2 $\Delta E = 0.28$	LED-B2 $\Delta E = 0.30$	LED-RGB1 $\Delta E = 0.30$
D50 $\Delta E = 0.67$	E $\Delta E = 0.71$	FL5 $\Delta E = 0.65$	FL10 $\Delta E = 0.49$	FL3.3 $\Delta E = 0.64$	FL3.8 $\Delta E = 0.40$	FL3.13 $\Delta E = 0.39$	HP3 $\Delta E = 0.35$	LED-B3 $\Delta E = 0.45$	LED-V1 $\Delta E = 0.30$
D55 $\Delta E = 0.72$	FL1 $\Delta E = 0.64$	FL6 $\Delta E = 0.46$	FL11 $\Delta E = 0.35$	FL3.4 $\Delta E = 0.26$	FL3.9 $\Delta E = 0.48$	FL3.14 $\Delta E = 0.54$	HP4 $\Delta E = 0.47$	LED-B4 $\Delta E = 0.60$	LED-V2 $\Delta E = 0.53$

PKODXL5K - Weighted variational Bayesian inference - 4 Gaussians



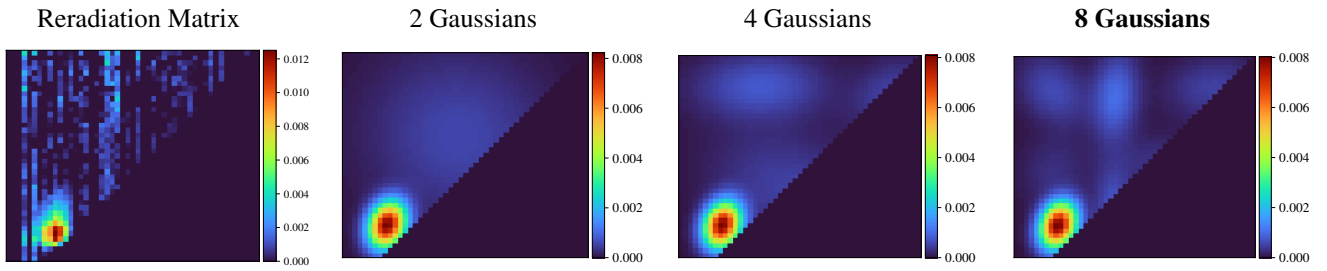
Fitted Material Under Monochromatic Illumination



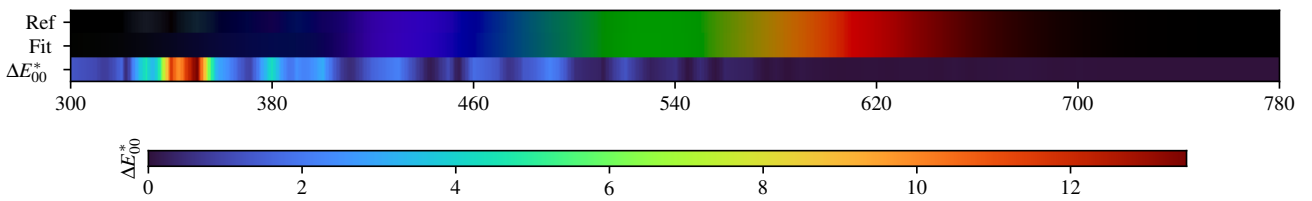
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.54$	$\Delta E = 0.29$	$\Delta E = 0.59$	$\Delta E = 0.08$	$\Delta E = 0.29$	$\Delta E = 0.32$	$\Delta E = 0.76$	$\Delta E = 0.29$	$\Delta E = 0.49$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.52$	$\Delta E = 0.56$	$\Delta E = 0.17$	$\Delta E = 0.41$	$\Delta E = 0.09$	$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.69$	$\Delta E = 0.56$	$\Delta E = 0.12$	$\Delta E = 0.32$	$\Delta E = 0.23$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.43$	$\Delta E = 0.71$	$\Delta E = 0.42$	$\Delta E = 0.33$	$\Delta E = 0.38$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.26$	$\Delta E = 0.21$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.48$	$\Delta E = 0.49$	$\Delta E = 0.25$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.34$	$\Delta E = 0.40$	$\Delta E = 0.40$

PKODXL5K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.26$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.29$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.48$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.24$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.16$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.32$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.19$	E $\Delta E = 0.48$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.15$	LED-V2 $\Delta E = 0.18$

PKODXL5K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.184971	0.243598	0.263264	0.297406	0.312719	0.278710	0.244107	0.213657	0.185775	0.195203	0.241965
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.281397	0.283232	0.264320	0.241889	0.224933	0.211901	0.207557	0.206223	0.218325	0.237046	0.238926
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.233761	0.218999	0.198255	0.178131	0.159972	0.149247	0.140379	0.136428	0.140133	0.149082	0.162410
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.187375	0.214333	0.254757	0.299850	0.352063	0.419450	0.470574	0.528364			

2 Gaussians max

Scaling factor: 98.07160388021389

Gaussians:

Weight	Mean		Covariance			
0.400776119	383.881261272	441.058140567	630.306482265	142.782827853	142.782827853	950.088265419
0.599223881	525.890009172	616.232567713	16177.340048637	-600.626682050	-600.626682050	14632.900279929

4 Gaussians max

Scaling factor: 96.07925313645543

Gaussians:

Weight	Mean		Covariance			
0.399545134	383.614881541	440.777909757	627.275071852	137.640449141	137.640449141	945.730281389
0.307344189	519.285821516	517.433348330	12341.675934387	-2341.117610852	-2341.117610852	6726.309518096
0.081328600	717.859588256	711.239301619	2932.644851050	997.664846690	997.664846690	2504.147641403
0.211782076	460.585837334	721.176474130	8087.345195211	109.883035229	109.883035229	2096.940943956

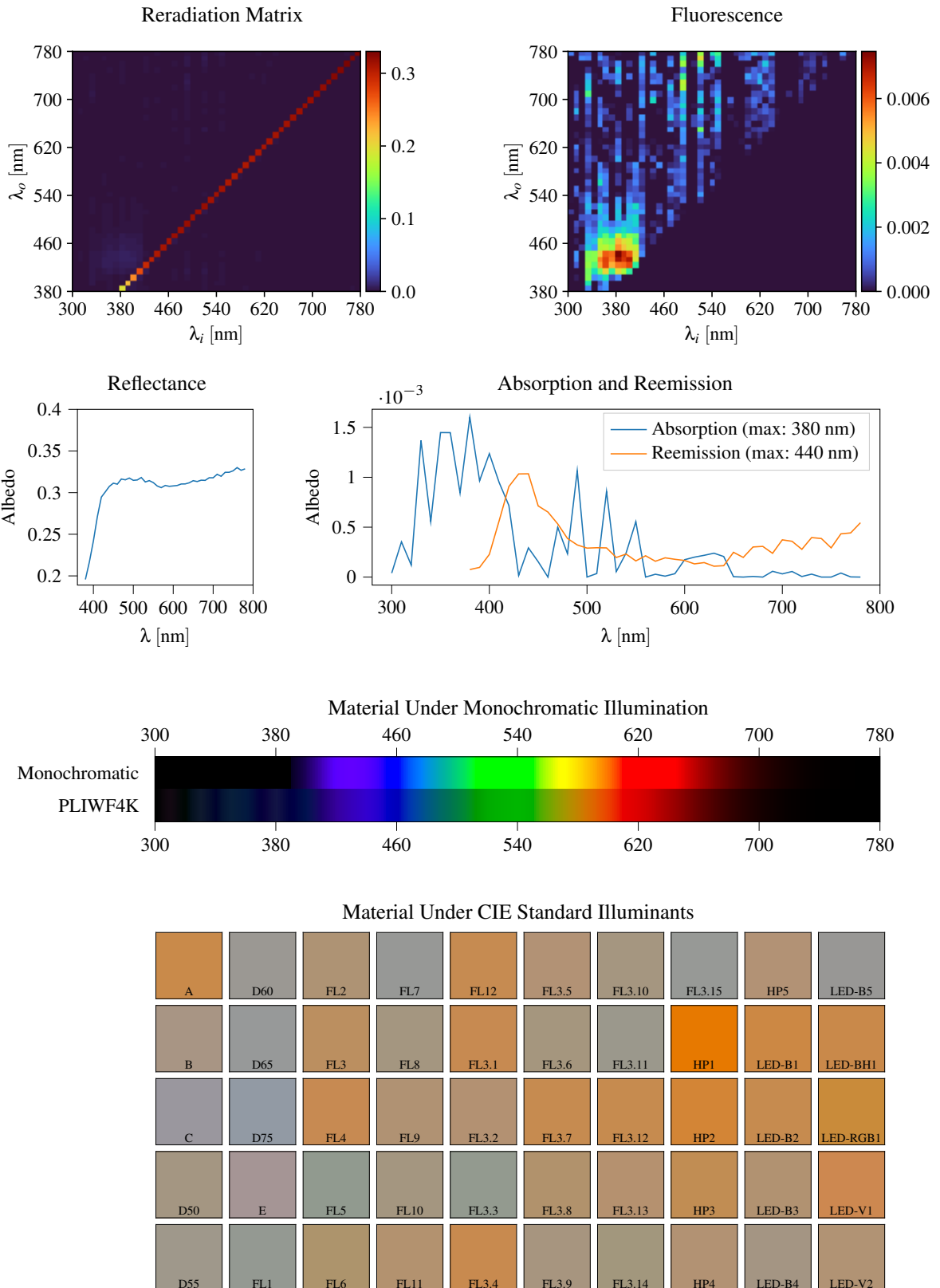
8 Gaussians max

Scaling factor: 95.13566395415363

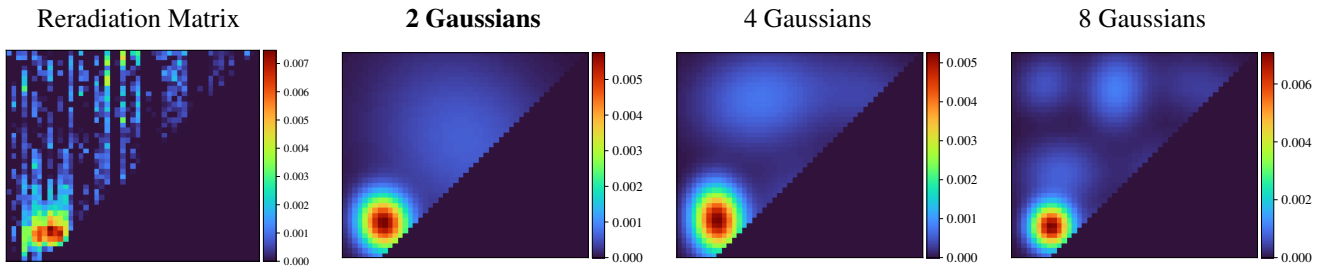
Gaussians:

Weight	Mean		Covariance			
0.409885199	384.140804355	440.934950326	635.630266342	155.547765171	155.547765171	957.830987089
0.079690371	496.734752867	467.089950195	703.903193184	-55.642005247	-55.642005247	3431.293364334
0.063030295	645.060601202	446.528562659	6124.310421597	-946.895014129	-946.895014129	2427.427727290
0.052092815	372.601029269	551.735365635	2488.239712627	200.691954397	200.691954397	2433.038197659
0.066121354	598.014972702	570.909427093	5230.731519879	186.646250535	186.646250535	1464.161999448
0.128205116	500.271377375	700.547806701	986.719554076	217.121402606	217.121402606	3691.098584203
0.098428678	375.000288551	712.459253565	2360.446242940	-586.658707774	-586.658707774	2499.812397078
0.102546173	695.694599234	719.043853741	4524.276150373	344.134408418	344.134408418	1996.928370723

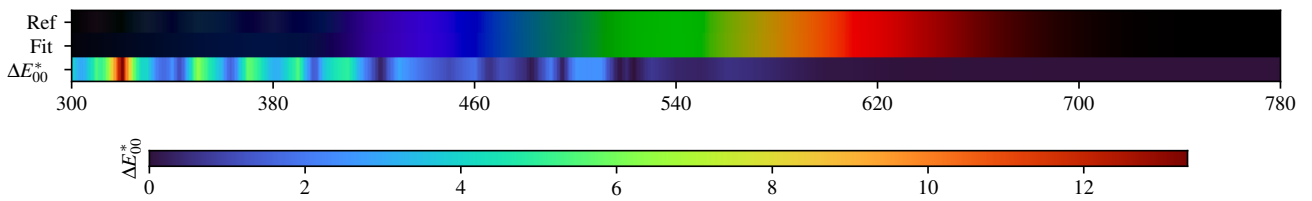
3.110. PLIWF4K



PLIWF4K - Weighted Expectation-Maximization - 2 Gaussians



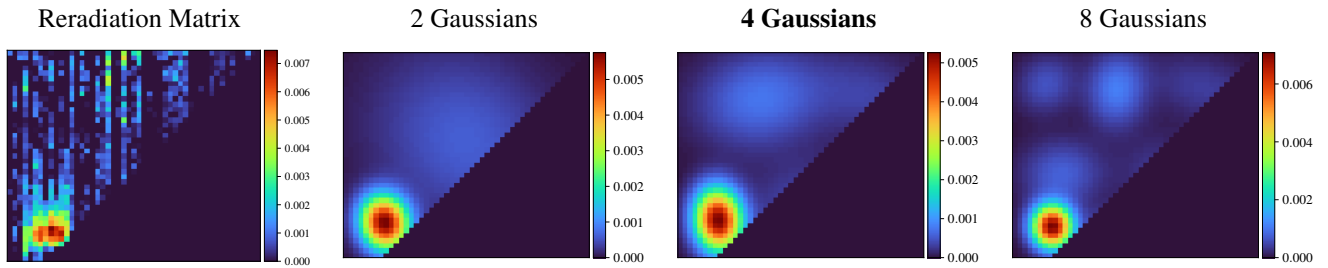
Fitted Material Under Monochromatic Illumination



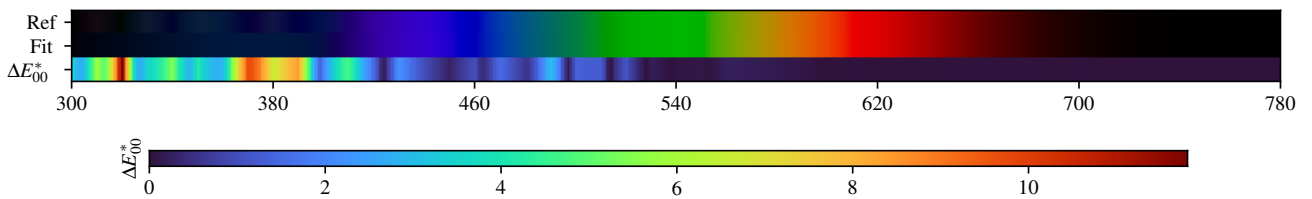
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.23$	D60 $\Delta E = 0.75$	FL2 $\Delta E = 0.46$	FL7 $\Delta E = 0.73$	FL12 $\Delta E = 0.20$	FL3.5 $\Delta E = 0.34$	FL3.10 $\Delta E = 0.42$	FL3.15 $\Delta E = 0.67$	HP5 $\Delta E = 0.45$	LED-B5 $\Delta E = 0.78$
B $\Delta E = 0.52$	D65 $\Delta E = 0.78$	FL3 $\Delta E = 0.32$	FL8 $\Delta E = 0.54$	FL3.1 $\Delta E = 0.26$	FL3.6 $\Delta E = 0.51$	FL3.11 $\Delta E = 0.56$	HP1 $\Delta E = 0.20$	LED-B1 $\Delta E = 0.23$	LED-BH1 $\Delta E = 0.23$
C $\Delta E = 0.70$	D75 $\Delta E = 0.74$	FL4 $\Delta E = 0.27$	FL9 $\Delta E = 0.38$	FL3.2 $\Delta E = 0.37$	FL3.7 $\Delta E = 0.21$	FL3.12 $\Delta E = 0.21$	HP2 $\Delta E = 0.22$	LED-B2 $\Delta E = 0.26$	LED-RGB1 $\Delta E = 0.20$
D50 $\Delta E = 0.61$	E $\Delta E = 0.45$	FL5 $\Delta E = 0.68$	FL10 $\Delta E = 0.46$	FL3.3 $\Delta E = 0.68$	FL3.8 $\Delta E = 0.31$	FL3.13 $\Delta E = 0.30$	HP3 $\Delta E = 0.29$	LED-B3 $\Delta E = 0.39$	LED-V1 $\Delta E = 0.28$
D55 $\Delta E = 0.69$	FL1 $\Delta E = 0.72$	FL6 $\Delta E = 0.45$	FL11 $\Delta E = 0.29$	FL3.4 $\Delta E = 0.21$	FL3.9 $\Delta E = 0.44$	FL3.14 $\Delta E = 0.50$	HP4 $\Delta E = 0.50$	LED-B4 $\Delta E = 0.58$	LED-V2 $\Delta E = 0.52$

PLIWF4K - Weighted Expectation-Maximization - 4 Gaussians



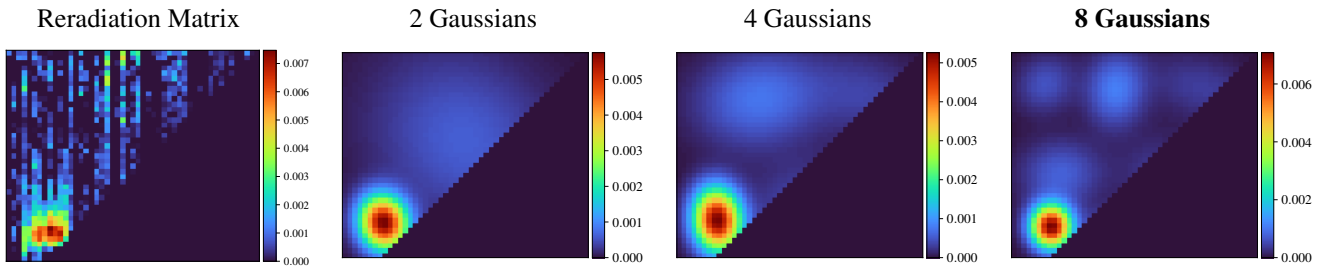
Fitted Material Under Monochromatic Illumination



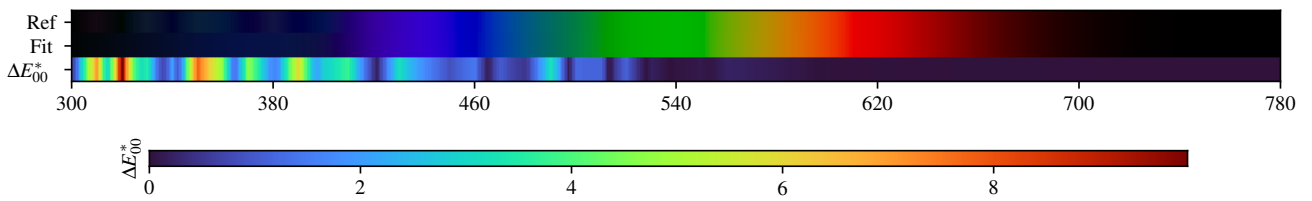
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.18$	FL7 $\Delta E = 0.28$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.17$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.11$	HP5 $\Delta E = 0.29$	LED-B5 $\Delta E = 0.37$
B $\Delta E = 0.23$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.22$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.23$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.26$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.18$	E $\Delta E = 0.14$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.24$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.17$	FL1 $\Delta E = 0.26$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.20$	FL3.14 $\Delta E = 0.21$	HP4 $\Delta E = 0.27$	LED-B4 $\Delta E = 0.28$	LED-V2 $\Delta E = 0.35$

PLIWF4K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.04$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.02$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.03$	LED-B5 $\Delta E = 0.16$
B $\Delta E = 0.05$	D65 $\Delta E = 0.05$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.05$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.01$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.09$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.02$
D50 $\Delta E = 0.03$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.06$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.05$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.03$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.12$	LED-V2 $\Delta E = 0.08$

PLIWF4K - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.195696	0.216858	0.241880	0.271223	0.294637	0.300973	0.307504	0.311333	0.310163	0.316356	0.315352
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.317508	0.314770	0.315210	0.318147	0.312829	0.314416	0.312085	0.307965	0.305981	0.308614	0.307560
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.308057	0.308576	0.310372	0.310456	0.311797	0.314342	0.313312	0.314942	0.314727	0.317841	0.317832
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.322014	0.319632	0.324384	0.324425	0.326213	0.330097	0.326827	0.328532			

2 Gaussians

Scaling factor: 102.07270446805073

Gaussians:

Weight	Mean		Covariance			
0.586113082	536.079311427	609.257690016	15850.038616514	-2518.713329624	-2518.713329624	15198.126721183
0.413886918	376.678401603	445.235892432	1036.222782627	-89.438990641	-89.438990641	1329.801142997

4 Gaussians

Scaling factor: 99.83387347525104

Gaussians:

Weight	Mean		Covariance			
0.097189572	676.453529098	699.455529946	6142.157291968	-841.265052226	-841.265052226	3490.474693515
0.438839419	375.916529475	450.711463219	1001.819203240	-83.979750576	-83.979750576	1770.815150084
0.205310937	587.593124736	470.736992973	10124.940306458	102.523782371	102.523782371	4158.741651676
0.258660073	459.115487124	691.850191669	7231.474479228	543.627867695	543.627867695	4241.744734552

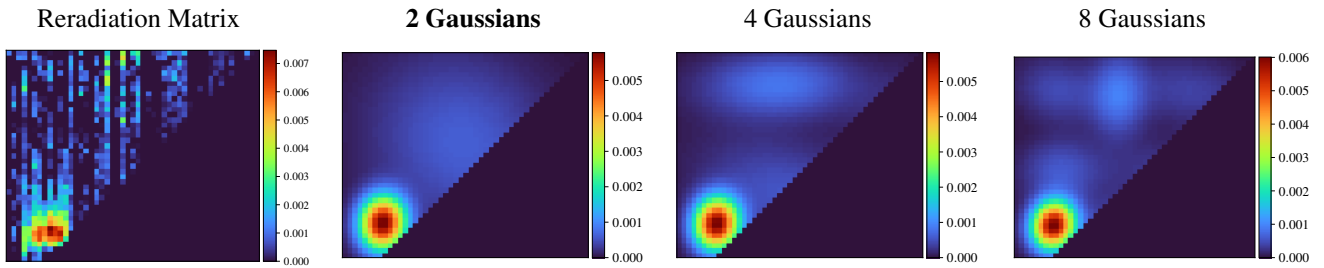
8 Gaussians

Scaling factor: 97.19746388495528

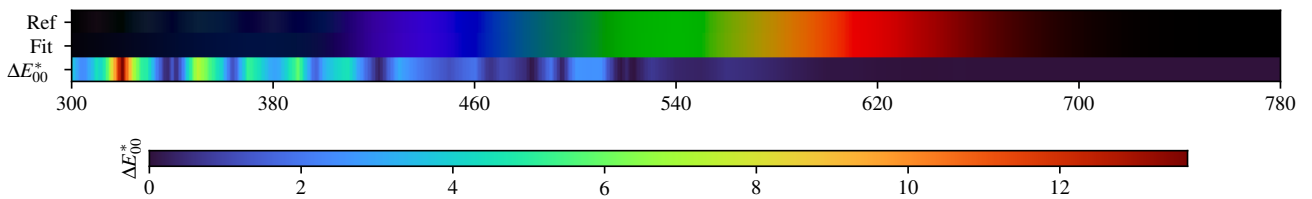
Gaussians:

Weight	Mean		Covariance			
0.098712307	672.592198487	713.912975133	5766.698439447	-1082.556156659	-1082.556156659	2369.285777693
0.079981986	513.323919003	421.872540561	2176.196029898	-415.259638302	-415.259638302	923.153276933
0.077486828	589.468500768	546.368933521	3762.522248117	91.577581216	91.577581216	2695.269128601
0.133263774	501.351834522	709.979801895	1481.511778000	62.991462436	62.991462436	2448.846074280
0.123958923	392.516164404	543.109100419	2863.305769676	28.051110420	28.051110420	2075.802277965
0.060347705	710.047888550	459.794669377	3106.745658737	398.395311056	398.395311056	3559.823771238
0.360787710	373.942591670	437.759290630	728.074397989	-7.380936039	-7.380936039	846.017113356
0.065460767	362.781442617	720.998055306	1580.334970710	153.561488023	153.561488023	1612.432485816

PLIWF4K - Weighted variational Bayesian inference - 2 Gaussians



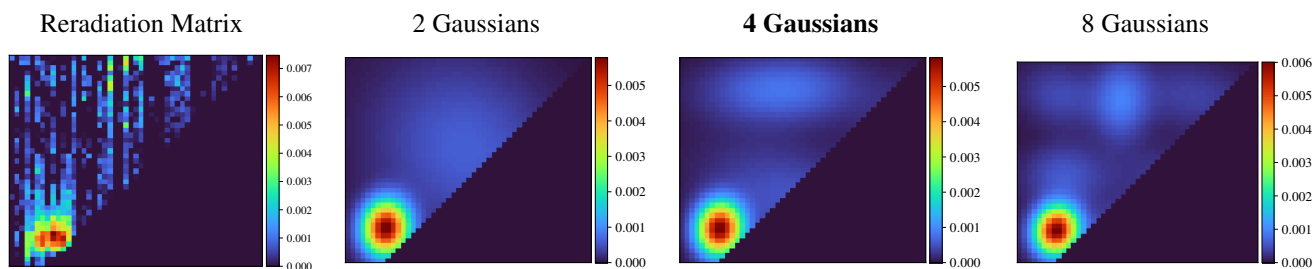
Fitted Material Under Monochromatic Illumination



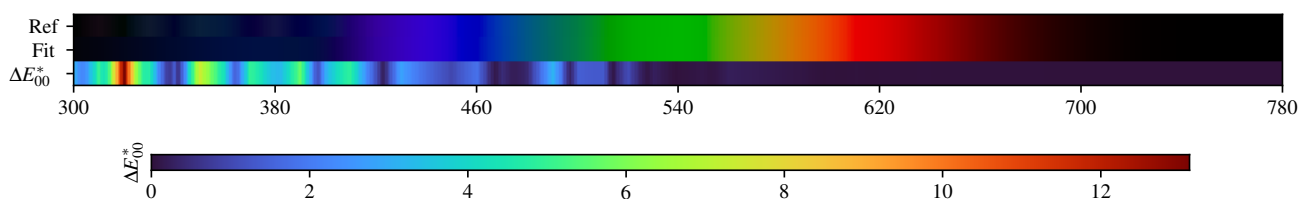
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.23$	$\Delta E = 0.74$	$\Delta E = 0.44$	$\Delta E = 0.72$	$\Delta E = 0.19$	$\Delta E = 0.33$	$\Delta E = 0.40$	$\Delta E = 0.68$	$\Delta E = 0.40$	$\Delta E = 0.78$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.49$	$\Delta E = 0.77$	$\Delta E = 0.32$	$\Delta E = 0.52$	$\Delta E = 0.25$	$\Delta E = 0.49$	$\Delta E = 0.54$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.23$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.69$	$\Delta E = 0.73$	$\Delta E = 0.26$	$\Delta E = 0.37$	$\Delta E = 0.36$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.26$	$\Delta E = 0.21$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.58$	$\Delta E = 0.48$	$\Delta E = 0.69$	$\Delta E = 0.44$	$\Delta E = 0.67$	$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.27$	$\Delta E = 0.38$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.67$	$\Delta E = 0.71$	$\Delta E = 0.44$	$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.41$	$\Delta E = 0.49$	$\Delta E = 0.43$	$\Delta E = 0.57$	$\Delta E = 0.46$

PLIWF4K - Weighted variational Bayesian inference - 4 Gaussians



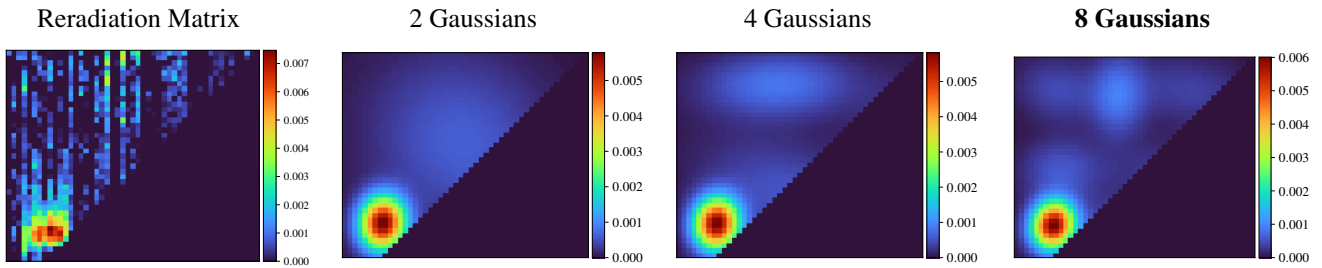
Fitted Material Under Monochromatic Illumination



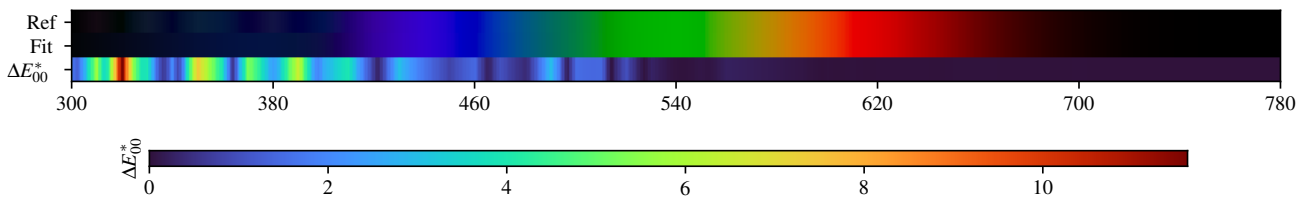
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.30$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.32$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.30$	FL3.15 $\Delta E = 0.45$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.36$
B $\Delta E = 0.26$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.26$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.22$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.36$	D75 $\Delta E = 0.30$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.24$	E $\Delta E = 0.32$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.29$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.13$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.01$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.09$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.26$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.26$	LED-V2 $\Delta E = 0.05$

PLIWF4K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.07$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.08$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.12$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.07$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.08$	D75 $\Delta E = 0.11$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.09$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.04$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.05$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.07$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.10$	LED-V2 $\Delta E = 0.16$

PLIWF4K - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.195696	0.216858	0.241880	0.271223	0.294637	0.300973	0.307504	0.311333	0.310163	0.316356	0.315352
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.317508	0.314770	0.315210	0.318147	0.312829	0.314416	0.312085	0.307965	0.305981	0.308614	0.307560
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.308057	0.308576	0.310372	0.310456	0.311797	0.314342	0.313312	0.314942	0.314727	0.317841	0.317832
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.322014	0.319632	0.324384	0.324425	0.326213	0.330097	0.326827	0.328532			

2 Gaussians max

Scaling factor: 101.82781035929344

Gaussians:

Weight	Mean		Covariance			
0.392894536	375.062044608	444.606713757	933.164841180	38.504050900	38.504050900	1291.384799858
0.607105464	532.002659962	604.244202569	15898.580453720	-1921.365609118	-1921.365609118	15457.568095927

4 Gaussians max

Scaling factor: 99.44898215046325

Gaussians:

Weight	Mean		Covariance			
0.382797374	374.674687174	443.156482081	901.834033155	46.206052628	46.206052628	1214.433022078
0.314521011	520.490850170	501.012765252	14907.418290543	-3370.432590888	-3370.432590888	6144.584794430
0.058539705	718.274257002	654.461673012	3940.495237074	1545.574327174	1545.574327174	5402.463520480
0.244141910	496.307335897	719.838892955	10581.185976807	215.029919830	215.029919830	2050.982677158

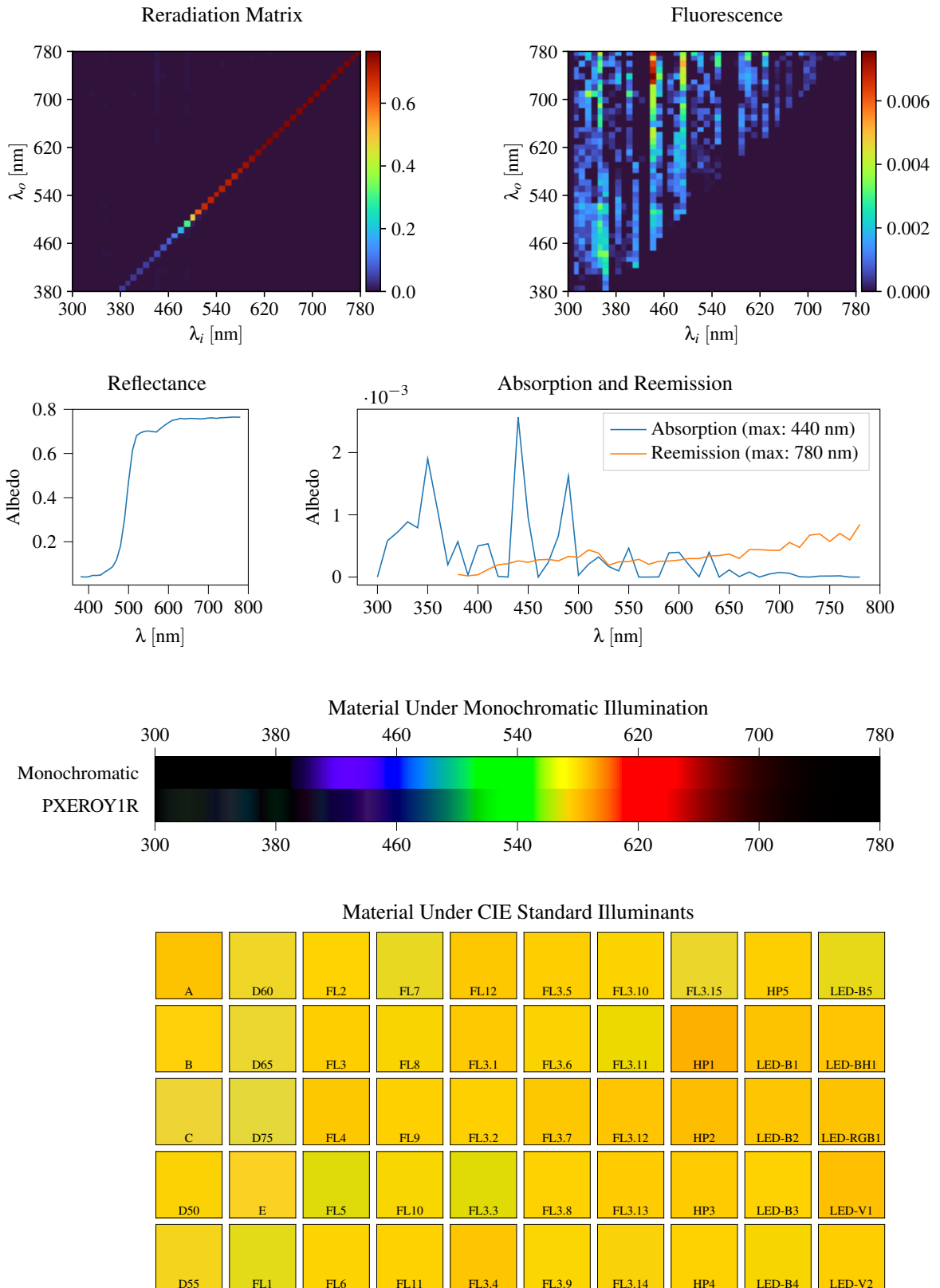
8 Gaussians max

Scaling factor: 98.4954147828171

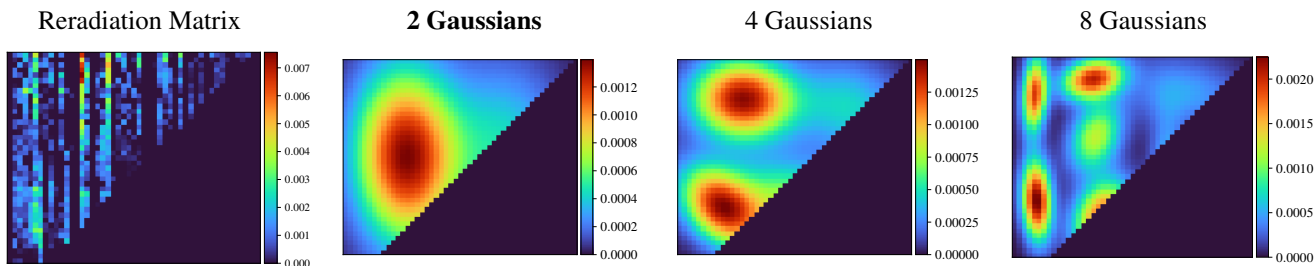
Gaussians:

Weight	Mean		Covariance			
0.376157500	374.875046167	441.189701335	889.359593277	78.035436782	78.035436782	1074.560602189
0.090034646	514.395262700	429.108324292	2821.317534454	-284.178365926	-284.178365926	1654.362828192
0.067763232	680.214207402	460.918609971	5201.022503715	-1415.984747318	-1415.984747318	3116.171041425
0.092585884	388.064878793	552.707757844	3184.913373386	62.023338370	62.023338370	1978.186167425
0.072095531	596.143844060	559.419638813	9660.755423629	873.741817115	873.741817115	1901.336525333
0.107731131	505.871596639	704.104003349	1341.721631599	14.435285838	14.435285838	3125.729192935
0.112571111	649.464360073	714.649374807	7940.133853721	-675.011117857	-675.011117857	2488.654670554
0.081060965	383.925624004	715.533946055	3420.522623690	-363.949351246	-363.949351246	2144.970738537

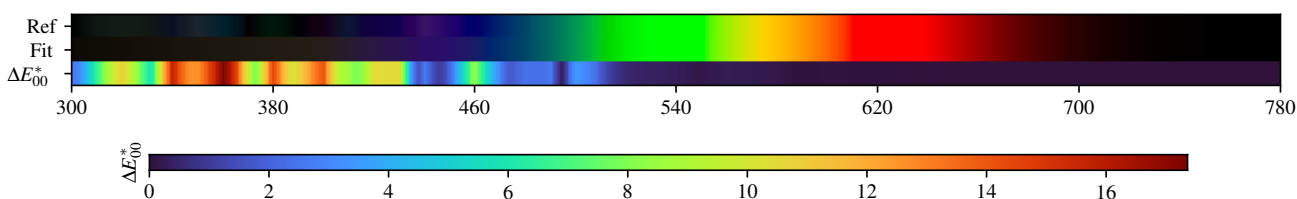
3.111. PXEROY1R



PXEROY1R - Weighted Expectation-Maximization - 2 Gaussians



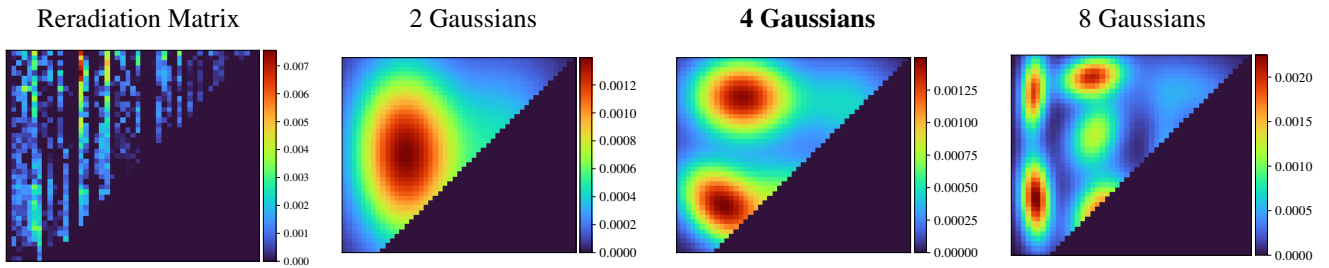
Fitted Material Under Monochromatic Illumination



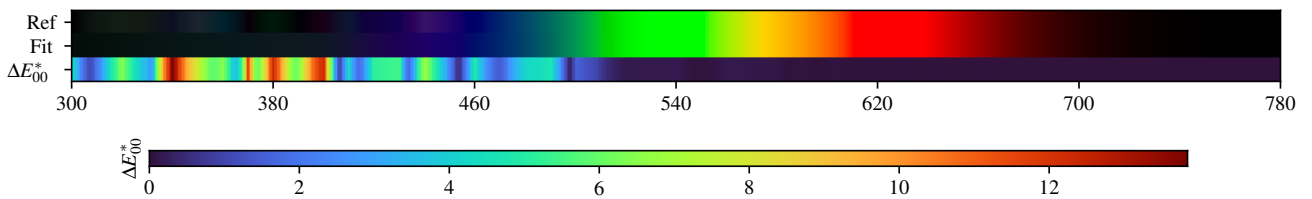
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.35$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.26$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.26$	D65 $\Delta E = 0.39$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.34$	D75 $\Delta E = 0.48$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.15$
D50 $\Delta E = 0.28$	E $\Delta E = 0.39$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.23$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.15$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.18$
D55 $\Delta E = 0.31$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.18$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.19$	LED-V2 $\Delta E = 0.25$

PXEROY1R - Weighted Expectation-Maximization - 4 Gaussians



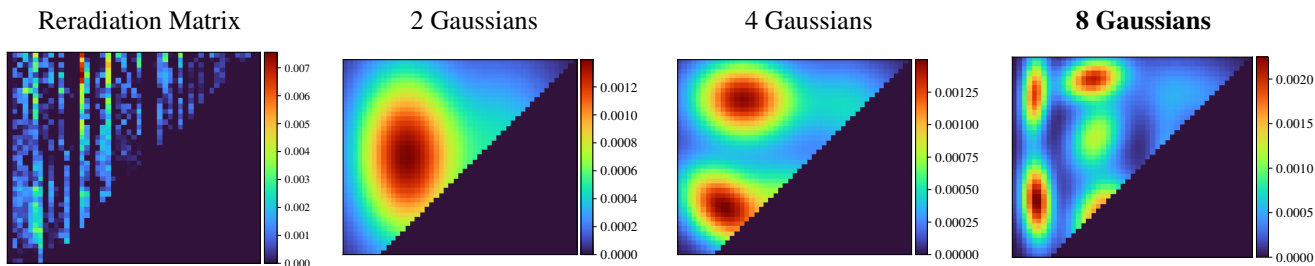
Fitted Material Under Monochromatic Illumination



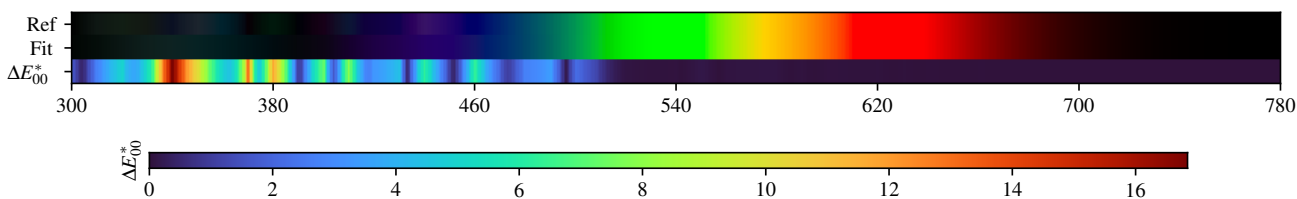
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.19$	FL2 $\Delta E = 0.09$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.16$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.14$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.26$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.14$	E $\Delta E = 0.26$	FL5 $\Delta E = 0.18$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.15$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.17$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.12$

PXEROY1R - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.03$	$\Delta E = 0.07$	$\Delta E = 0.02$	$\Delta E = 0.06$	$\Delta E = 0.02$	$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.07$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.01$	$\Delta E = 0.05$	$\Delta E = 0.02$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.03$	$\Delta E = 0.03$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.01$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.02$	$\Delta E = 0.02$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.05$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.04$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.02$	$\Delta E = 0.05$	$\Delta E = 0.02$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.03$

PXEROY1R - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.041913	0.040100	0.041337	0.047720	0.047487	0.049047	0.062451	0.073353	0.086709	0.118386	0.182196
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.304291	0.472434	0.615627	0.680853	0.693943	0.700186	0.702077	0.699104	0.697556	0.712885	0.727040
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.739575	0.750677	0.753467	0.759286	0.756623	0.758668	0.758912	0.757855	0.756527	0.758269	0.760736
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.761566	0.759070	0.761980	0.762527	0.763543	0.765141	0.764757	0.764620			

2 Gaussians

Scaling factor: 108.3622931504368

Gaussians:

Weight	Mean		Covariance			
0.280747937	631.393246012	598.793068705	7506.971528578	-274.537171510	-274.537171510	15637.298882277
0.719252063	426.063056190	581.309449686	5316.236447141	-302.001506229	-302.001506229	15495.328944598

4 Gaussians

Scaling factor: 107.76047721517672

Gaussians:

Weight	Mean		Covariance			
0.147011150	652.011600574	684.144784650	6327.344153855	-607.081122142	-607.081122142	4916.558180432
0.229058899	386.004903446	474.346308319	3263.210590378	-1251.220830960	-1251.220830960	3378.268706472
0.275294068	541.298584663	481.485556074	10059.017127809	-1176.213856485	-1176.213856485	3840.967720597
0.348635882	431.458630330	701.125958691	5111.865786546	-122.525344828	-122.525344828	3279.588351191

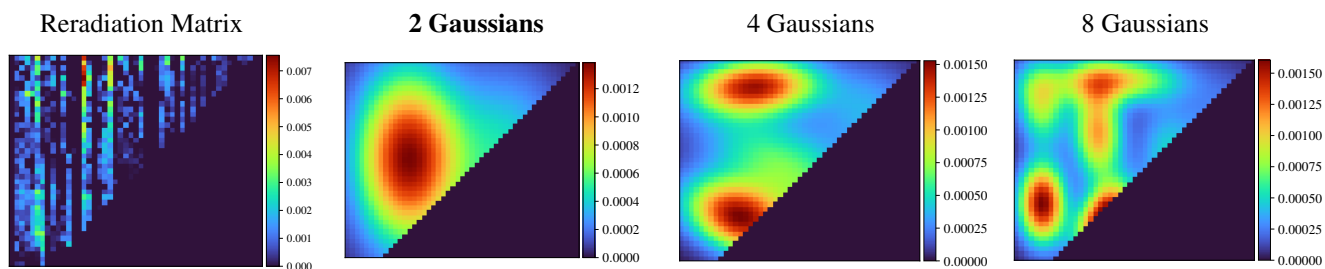
8 Gaussians

Scaling factor: 104.14839845415406

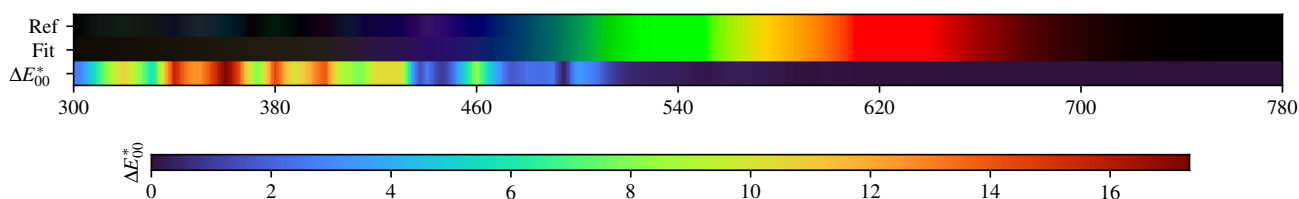
Gaussians:

Weight	Mean		Covariance			
0.121620403	644.793504182	712.131809619	6852.071733539	-574.439445393	-574.439445393	2565.005787651
0.218304028	478.361700191	459.139019547	1625.008029900	507.998826598	507.998826598	2474.749962671
0.050128288	722.300408491	485.162620481	1854.607270584	194.254686585	194.254686585	5922.678790848
0.139537811	457.978115801	739.032124127	1763.229222174	258.602080253	258.602080253	800.659399841
0.124493504	463.736088838	620.493190751	1331.626399620	486.660520659	486.660520659	2327.646141785
0.153320983	345.024230452	492.099040831	410.151244416	-118.206098688	-118.206098688	2984.577457160
0.091101636	609.258990521	521.519422018	547.587267162	-11.792158042	-11.792158042	8040.914270173
0.101493347	341.024610633	706.698886694	296.749598255	130.450704085	130.450704085	2691.037024096

PXEROY1R - Weighted variational Bayesian inference - 2 Gaussians



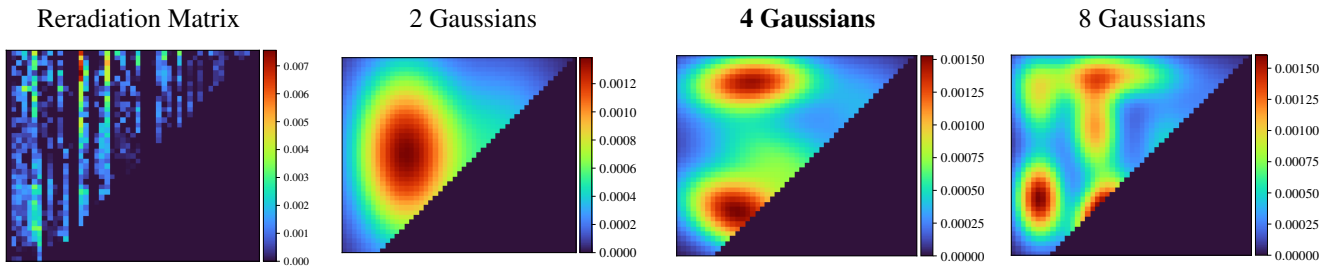
Fitted Material Under Monochromatic Illumination



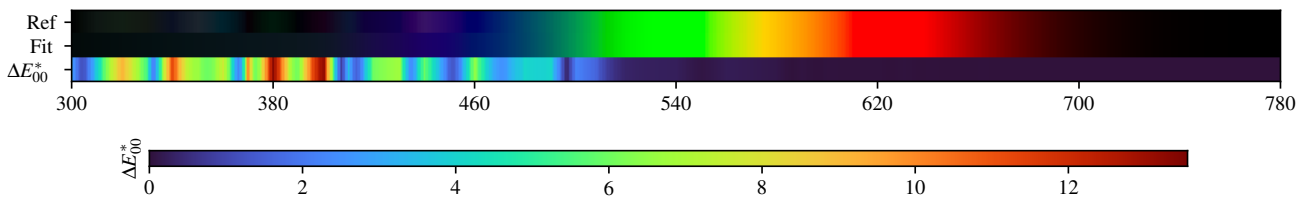
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.36$	FL2 $\Delta E = 0.16$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.27$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.24$
B $\Delta E = 0.26$	D65 $\Delta E = 0.40$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.34$	D75 $\Delta E = 0.48$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.15$
D50 $\Delta E = 0.28$	E $\Delta E = 0.39$	FL5 $\Delta E = 0.24$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.24$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.16$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.18$
D55 $\Delta E = 0.32$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.18$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.20$	LED-V2 $\Delta E = 0.25$

PXEROY1R - Weighted variational Bayesian inference - 4 Gaussians



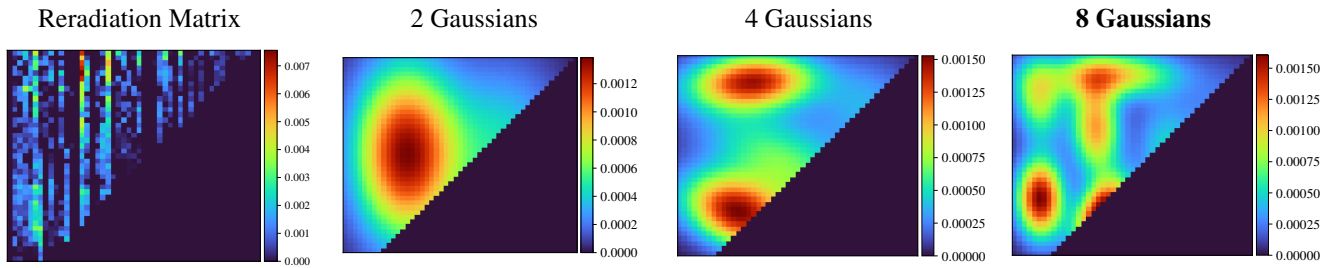
Fitted Material Under Monochromatic Illumination



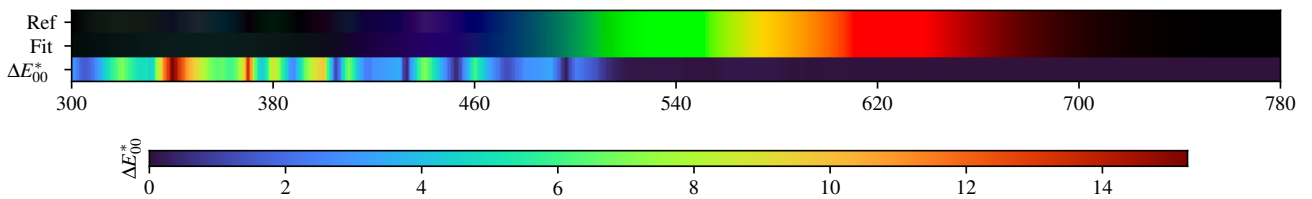
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.28$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.22$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.32$	D75 $\Delta E = 0.30$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.20$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.21$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.16$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.14$	LED-V2 $\Delta E = 0.17$

PXEROY1R - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.09$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.07$	FL12 $\Delta E = 0.01$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.06$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.05$
B $\Delta E = 0.08$	D65 $\Delta E = 0.09$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.06$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.09$	D75 $\Delta E = 0.10$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.08$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.06$	FL10 $\Delta E = 0.06$	FL3.3 $\Delta E = 0.06$	FL3.8 $\Delta E = 0.03$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.03$	LED-V1 $\Delta E = 0.05$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.06$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.04$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.05$	LED-B4 $\Delta E = 0.04$	LED-V2 $\Delta E = 0.06$

PXEROY1R - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.041913	0.040100	0.041337	0.047720	0.047487	0.049047	0.062451	0.073353	0.086709	0.118386	0.182196
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.304291	0.472434	0.615627	0.680853	0.693943	0.700186	0.702077	0.699104	0.697556	0.712885	0.727040
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.739575	0.750677	0.753467	0.759286	0.756623	0.758668	0.758912	0.757855	0.756527	0.758269	0.760736
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.761566	0.759070	0.761980	0.762527	0.763543	0.765141	0.764757	0.764620			

2 Gaussians max

Scaling factor: 108.5077532522321

Gaussians:

Weight	Mean		Covariance			
0.709792641	425.537680263	582.869348439	5347.970362805	-152.531197027	-152.531197027	15489.297193849
0.290207359	626.517550357	594.343897052	8064.033371610	212.355133489	212.355133489	15657.789446020

4 Gaussians max

Scaling factor: 108.00640164945278

Gaussians:

Weight	Mean		Covariance			
0.304839318	415.512543143	462.913355293	5347.309217278	-1251.474153964	-1251.474153964	2708.992948706
0.326309658	513.993618773	555.148886493	13603.013147180	-6339.739969900	-6339.739969900	7945.201914916
0.104008618	676.530825707	676.370032122	5609.166706557	236.537321573	236.537321573	4527.943510598
0.264842405	450.117071058	730.230012363	7284.564320380	327.696594879	327.696594879	1482.457523934

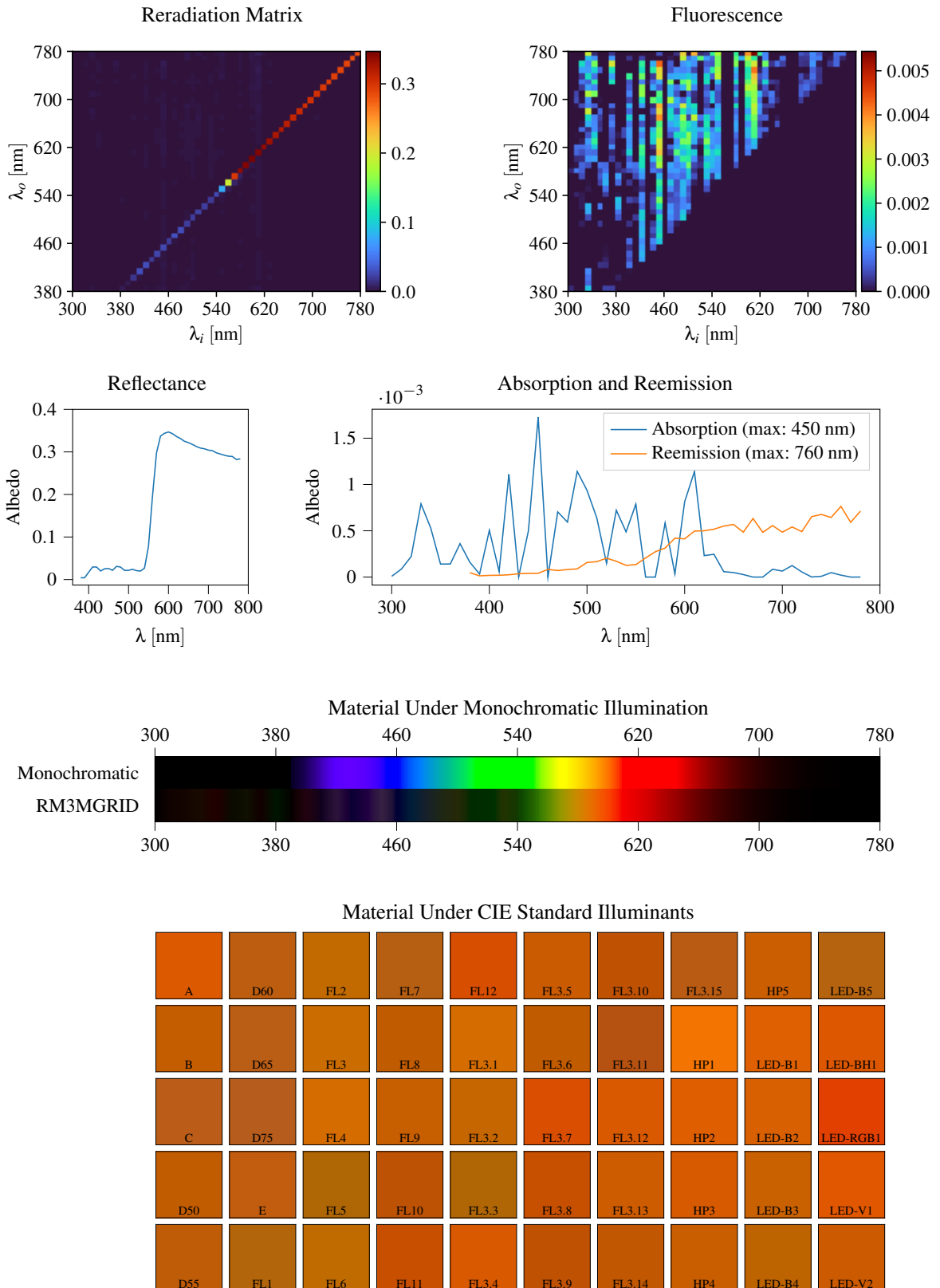
8 Gaussians max

Scaling factor: 107.23584034824094

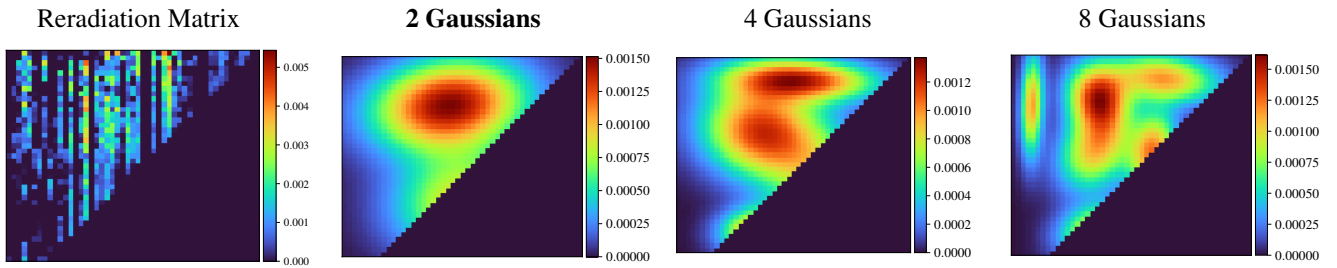
Gaussians:

Weight	Mean		Covariance			
0.167209877	352.177847046	491.608189688	1052.823452018	-27.449170829	-27.449170829	2998.392664014
0.178831181	479.339282447	456.960763441	1431.221968730	697.986848686	697.986848686	2448.947128707
0.079548999	633.863746575	435.502660812	7683.353541721	-87.996450881	-87.996450881	2142.589050931
0.070085796	601.591746754	587.119881730	1573.792280378	-124.312357305	-124.312357305	5589.156166035
0.078852817	702.521719303	651.250268709	4365.723900011	1127.666239997	1127.666239997	5847.594695193
0.152640350	465.081692742	635.676332176	1131.662936361	-135.409290652	-135.409290652	4629.463192596
0.093366753	348.736144153	692.093497102	1195.039080622	-262.215304965	-262.215304965	3235.773465758
0.179464227	492.148676942	742.317049420	8387.186385465	111.463395061	111.463395061	1033.762976449

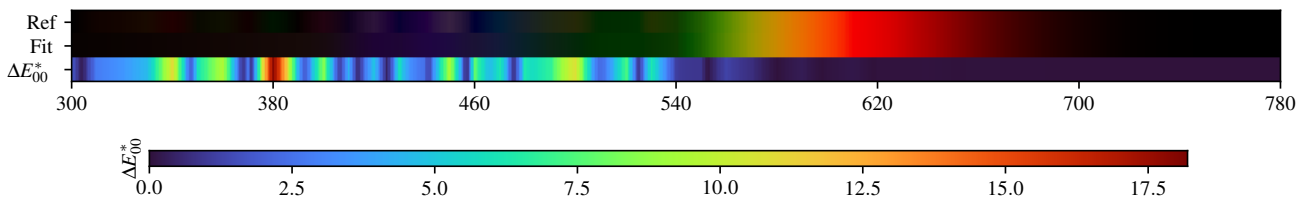
3.112. RM3MGRID



RM3MGRID - Weighted Expectation-Maximization - 2 Gaussians



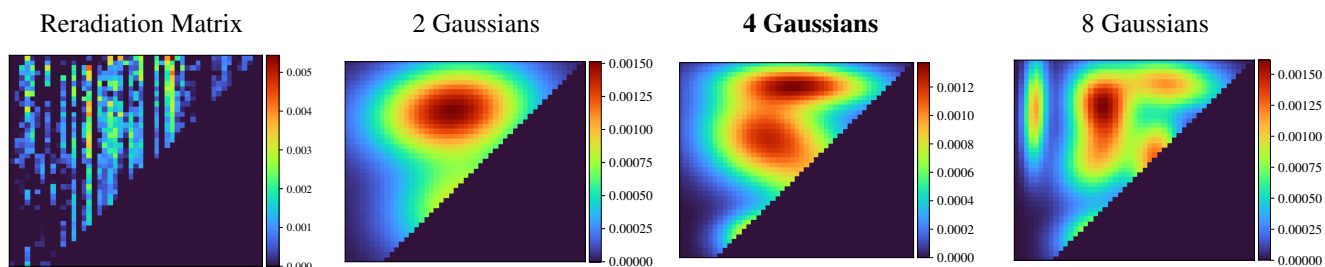
Fitted Material Under Monochromatic Illumination



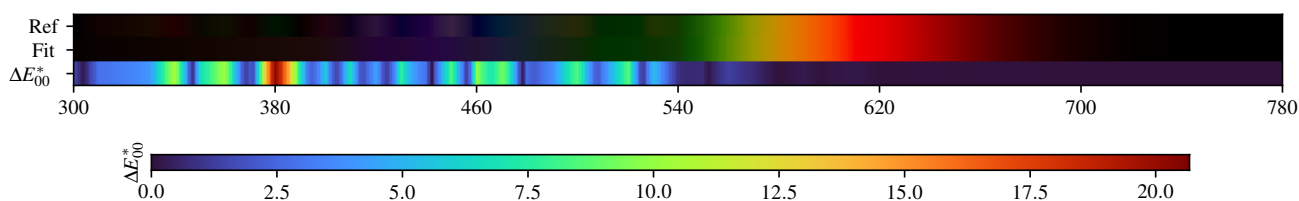
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.17$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.23$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.21$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.16$

RM3MGRID - Weighted Expectation-Maximization - 4 Gaussians



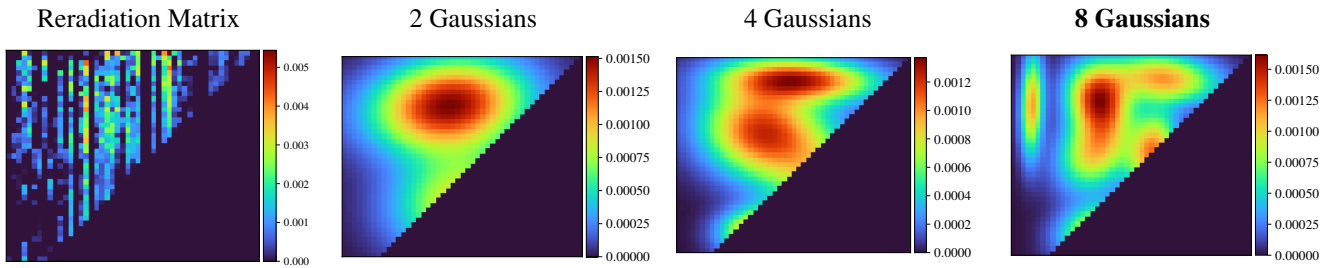
Fitted Material Under Monochromatic Illumination



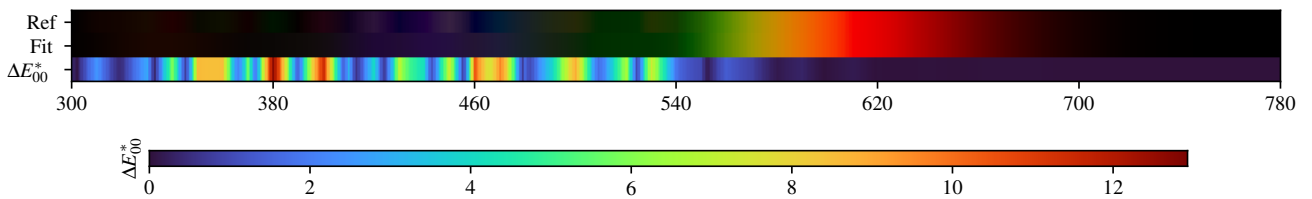
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.27$	$\Delta E = 0.21$	$\Delta E = 0.31$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.17$	$\Delta E = 0.30$	$\Delta E = 0.13$	$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.09$	$\Delta E = 0.21$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.30$	$\Delta E = 0.26$	$\Delta E = 0.15$	$\Delta E = 0.26$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.23$	$\Delta E = 0.37$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.24$	$\Delta E = 0.25$	$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.20$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.20$	$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.26$	$\Delta E = 0.28$	$\Delta E = 0.27$

RM3MGRID - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.29$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.24$	$\Delta E = 0.26$	$\Delta E = 0.28$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.24$	$\Delta E = 0.25$	$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.28$	$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.23$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.24$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.23$	$\Delta E = 0.18$	$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.13$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.24$	$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.14$	$\Delta E = 0.25$	$\Delta E = 0.16$	$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.22$

RM3MGRID - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.004148	0.004144	0.017053	0.029521	0.029350	0.020118	0.025242	0.025874	0.021670	0.031022	0.029314
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.021556	0.021654	0.024036	0.020932	0.019963	0.026898	0.078494	0.196033	0.297392	0.337060	0.343749
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.346901	0.342914	0.336352	0.331438	0.324973	0.321777	0.317538	0.312665	0.309051	0.307350	0.304190
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.303019	0.297956	0.295033	0.292227	0.289963	0.289305	0.282188	0.283629			

2 Gaussians

Scaling factor: 106.11087256033524

Gaussians:

Weight	Mean		Covariance			
0.606278833	511.890126906	684.014634096	11480.044940965	983.273568796	983.273568796	4150.361608773
0.393721167	542.959107903	482.612129952	9620.169819646	441.151894656	441.151894656	5045.696909021

4 Gaussians

Scaling factor: 103.7250121257808

Gaussians:

Weight	Mean		Covariance			
0.408983318	470.464722785	630.264387560	7126.674850903	-569.265328126	-569.265328126	4749.694485491
0.252443020	606.040660072	513.191388320	5912.465902712	-623.561614676	-623.561614676	7245.273672526
0.102926730	461.749035378	421.173683337	2609.995258229	155.002973926	155.002973926	1068.200064069
0.235646932	556.737001240	738.600622739	11795.792099648	-439.167054316	-439.167054316	980.143454465

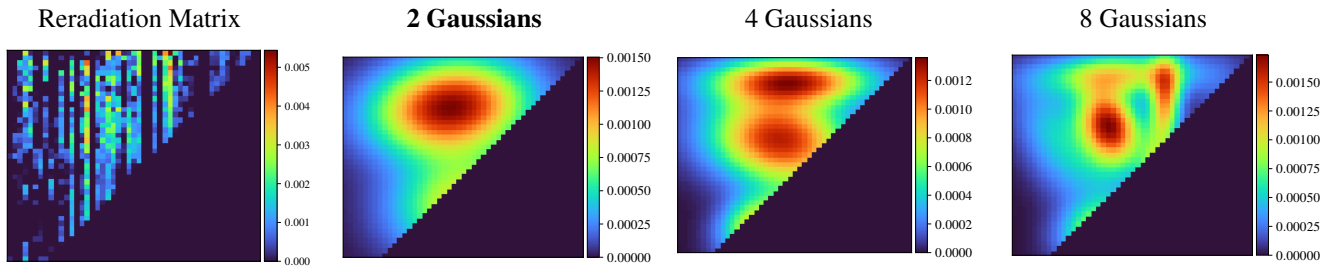
8 Gaussians

Scaling factor: 102.05226260364253

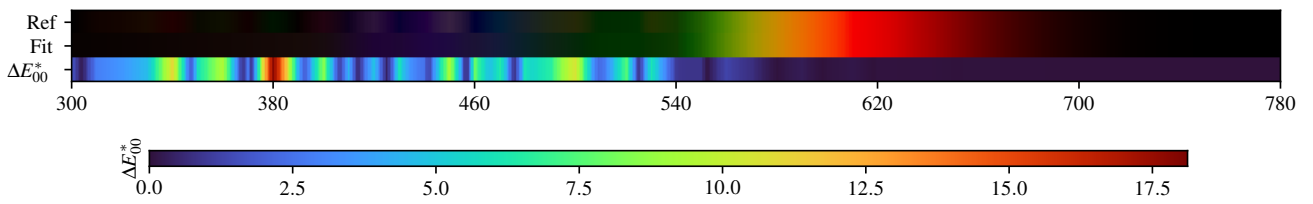
Gaussians:

Weight	Mean		Covariance			
0.170514163	471.000497066	695.749027360	1844.202706511	-215.820685754	-215.820685754	2188.982708444
0.082774102	608.286576693	455.521843928	243.054908377	24.678947611	24.678947611	2812.227464866
0.180959785	465.636294210	588.376809308	2650.400483838	666.567047178	666.567047178	3091.210180754
0.179014935	605.093357171	736.333476195	5564.928128357	-497.435411825	-497.435411825	1221.386590312
0.125696078	582.365700590	586.179542869	1080.023899149	401.707666285	401.707666285	2986.382952591
0.124167459	470.820406588	425.794233080	2735.159784955	340.434819310	340.434819310	1273.815774381
0.060131257	720.396002804	519.329287340	729.234493949	349.758097231	349.758097231	9486.359768352
0.076742221	337.465405684	681.662833686	247.416537634	134.119823881	134.119823881	4971.704876873

RM3MGRID - Weighted variational Bayesian inference - 2 Gaussians



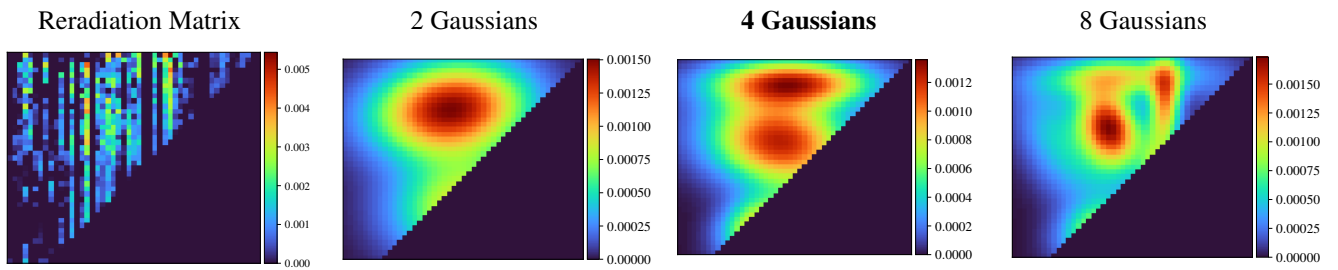
Fitted Material Under Monochromatic Illumination



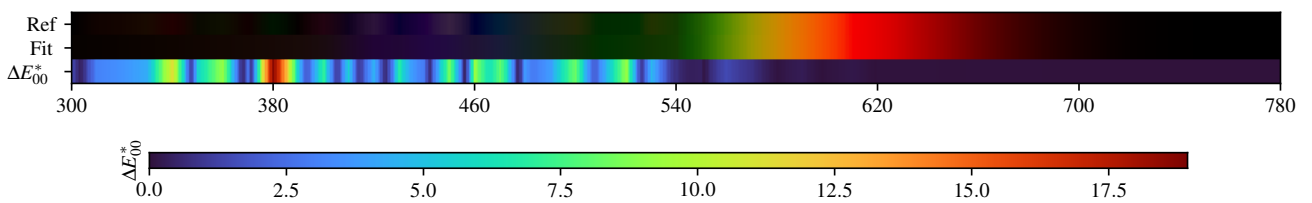
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.16$

RM3MGRID - Weighted variational Bayesian inference - 4 Gaussians



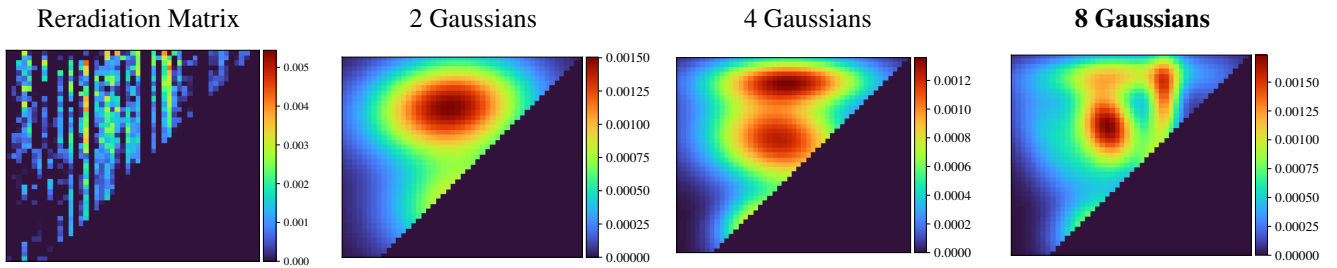
Fitted Material Under Monochromatic Illumination



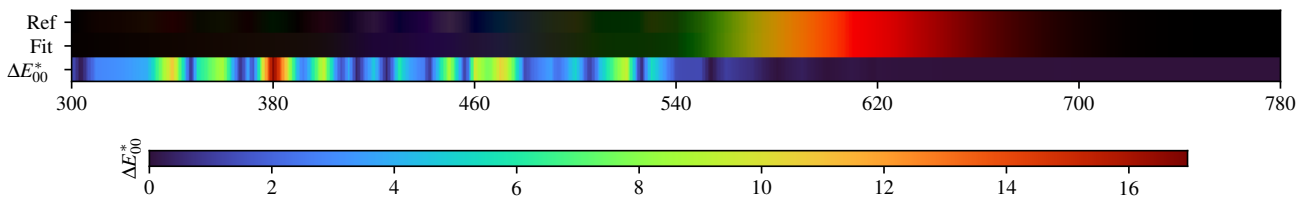
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.21$	$\Delta E = 0.30$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.29$	$\Delta E = 0.15$	$\Delta E = 0.25$	$\Delta E = 0.22$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.24$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.28$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.25$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.36$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.27$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.19$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.21$	$\Delta E = 0.25$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.25$

RM3MGRID - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.21$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.13$

RM3MGRID - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.004148	0.004144	0.017053	0.029521	0.029350	0.020118	0.025242	0.025874	0.021670	0.031022	0.029314
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.021556	0.021654	0.024036	0.020932	0.019963	0.026898	0.078494	0.196033	0.297392	0.337060	0.343749
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.346901	0.342914	0.336352	0.331438	0.324973	0.321777	0.317538	0.312665	0.309051	0.307350	0.304190
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.303019	0.297956	0.295033	0.292227	0.289963	0.289305	0.282188	0.283629			

2 Gaussians max

Scaling factor: 106.03446478337601

Gaussians:

Weight	Mean		Covariance			
0.383844376	542.390816179	480.498654208	9633.942151678	368.946528632	368.946528632	4928.963012260
0.616155624	512.792069814	682.235698832	11468.939620327	886.425040576	886.425040576	4306.487220341

4 Gaussians max

Scaling factor: 102.9490886194117

Gaussians:

Weight	Mean		Covariance			
0.110617602	460.606869078	430.708725458	2548.341413728	386.437817913	386.437817913	1887.463238040
0.130819796	616.284074193	448.190653742	5049.360846286	-306.886774535	-306.886774535	2515.882370923
0.486398085	508.031617192	612.603141459	9912.553402601	-775.889276268	-775.889276268	4197.436650633
0.272164517	534.693629743	735.800939149	12838.213642729	-25.172292247	-25.172292247	1156.174398779

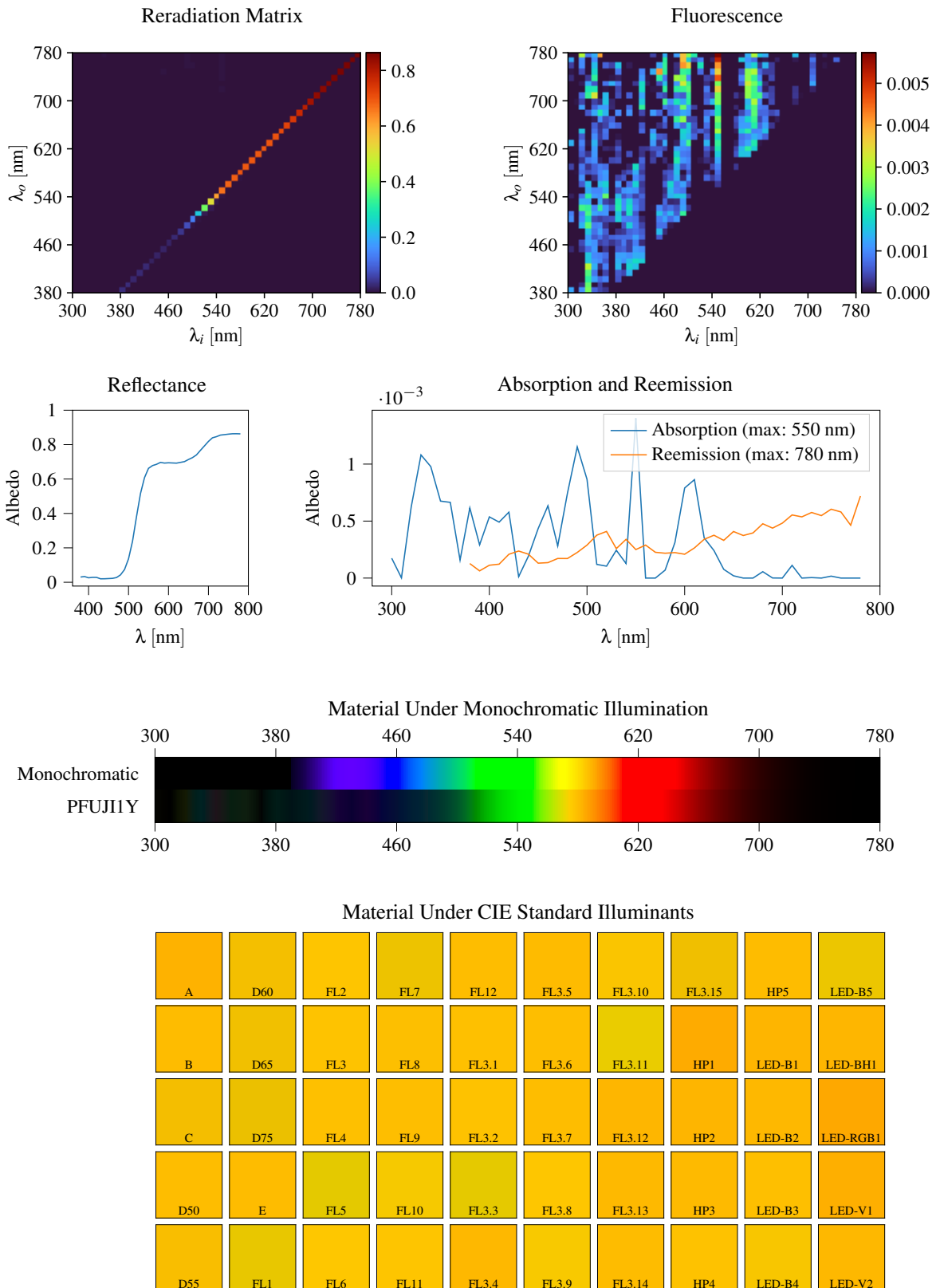
8 Gaussians max

Scaling factor: 103.59558283297115

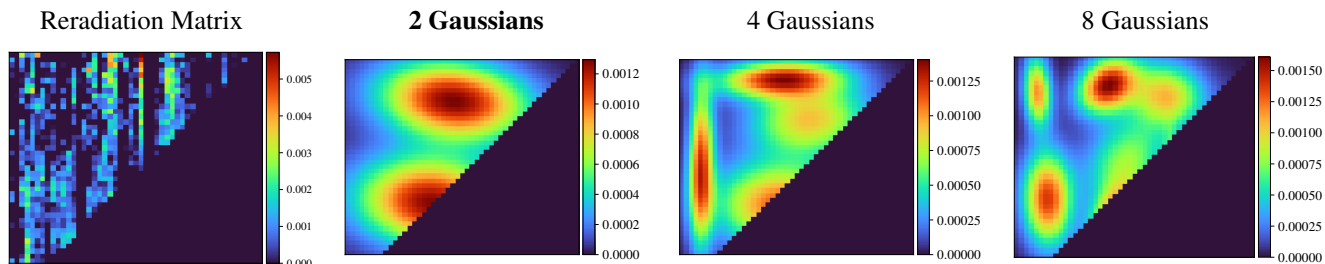
Gaussians:

Weight	Mean		Covariance			
0.126811122	471.635228918	430.526915851	2927.183327027	453.901409380	453.901409380	1813.465697567
0.139249846	598.406471878	497.841956629	675.278871017	-509.893797344	-509.893797344	5153.527062976
0.080148744	717.915746297	564.316735374	1467.058238830	492.049339201	492.049339201	13587.592765665
0.066864557	477.137640535	550.025500129	4482.821710565	342.379395966	342.379395966	2704.263831211
0.101362933	380.054826418	625.882337806	2913.116175572	-1284.777299295	-1284.777299295	4918.433759004
0.205054081	491.754951445	642.007416868	1746.632537167	-460.358424508	-460.358424508	2596.051125807
0.092202932	605.636732476	689.932050244	462.682639407	74.268101327	74.268101327	3580.228705619
0.188305786	513.352378441	743.666999568	11376.642396871	232.193997170	232.193997170	873.275754085

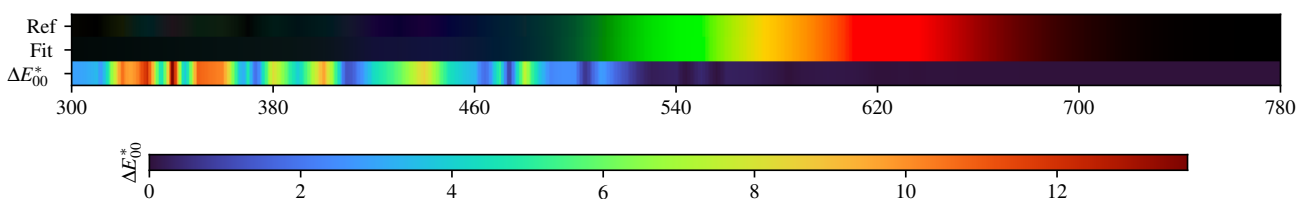
3.113. PFUJI1Y



PFUJIIY - Weighted Expectation-Maximization - 2 Gaussians



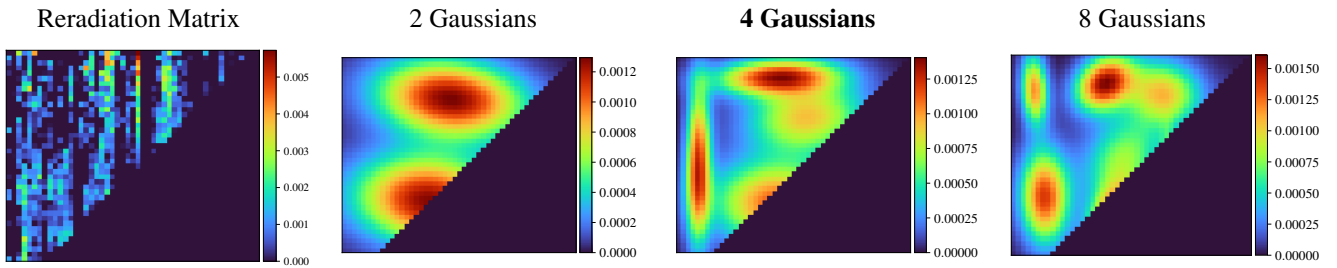
Fitted Material Under Monochromatic Illumination



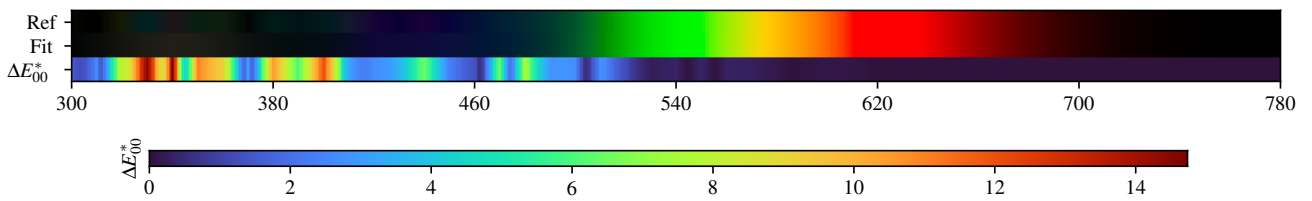
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.19$	FL2 $\Delta E = 0.16$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.28$
B $\Delta E = 0.21$	D65 $\Delta E = 0.20$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.20$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.28$	D75 $\Delta E = 0.20$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.12$	LED-RGB1 $\Delta E = 0.13$
D50 $\Delta E = 0.18$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.27$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.19$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.22$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.23$	LED-V2 $\Delta E = 0.17$

PFUJIIY - Weighted Expectation-Maximization - 4 Gaussians



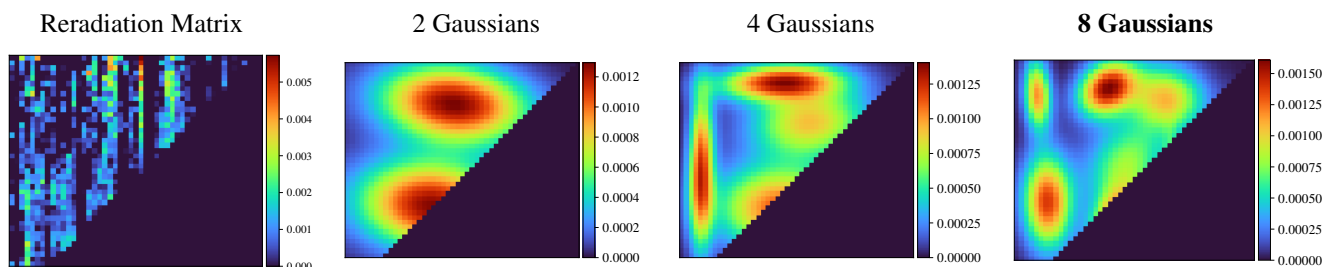
Fitted Material Under Monochromatic Illumination



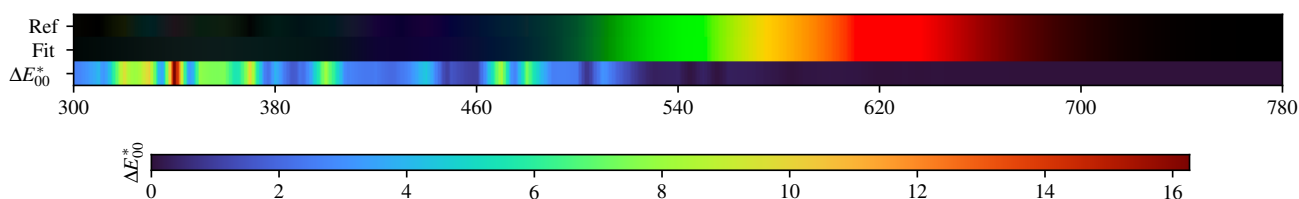
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.19$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.18$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.03$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.02$	$\Delta E = 0.07$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.05$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.14$

PFUJIIY - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.27$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.24$

PFUJIIY - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.030400	0.033212	0.025966	0.028456	0.028338	0.020049	0.020313	0.021520	0.022683	0.027447	0.043003
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.073664	0.136109	0.237881	0.381206	0.515915	0.607848	0.662059	0.678099	0.685535	0.696670	0.692741
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.694424	0.693410	0.692335	0.696753	0.701171	0.713441	0.724378	0.739980	0.766701	0.792440	0.818502
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.839503	0.846213	0.855346	0.858032	0.860881	0.863109	0.863318	0.862601			

2 Gaussians

Scaling factor: 104.6328262947255

Gaussians:

Weight	Mean		Covariance			
0.465735417	522.143611844	697.667986602	11378.163252123	-976.991813825	-976.991813825	3255.212268505
0.534264583	477.955820116	484.297677437	11599.746268054	-734.445758713	-734.445758713	4221.487221803

4 Gaussians

Scaling factor: 100.31364954727898

Gaussians:

Weight	Mean		Covariance			
0.176512962	503.306469357	744.174932117	7815.453796815	282.445992582	282.445992582	701.465362095
0.144993383	341.100020511	563.164925103	314.367154159	100.241643787	100.241643787	12331.802296232
0.256712898	567.164723709	659.661469103	7313.662838659	346.135951246	346.135951246	2820.284191254
0.421780757	508.889451687	477.301221841	9074.934748226	-313.357781185	-313.357781185	3795.848010887

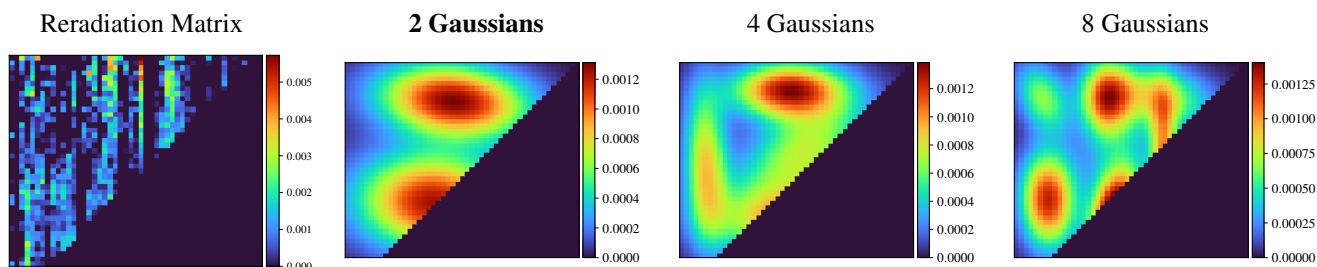
8 Gaussians

Scaling factor: 99.88301130650751

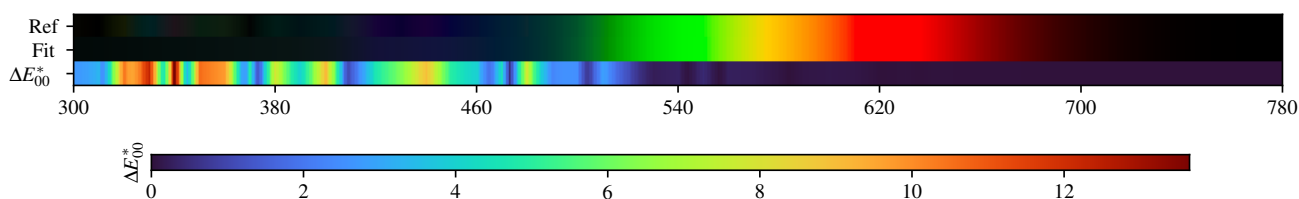
Gaussians:

Weight	Mean		Covariance			
0.144041031	483.446592934	726.207669175	1603.858568293	398.676173129	398.676173129	1527.237504975
0.140536160	499.434220974	448.779279027	1134.376546936	518.323164942	518.323164942	2344.301335331
0.036144734	734.917738611	534.423380987	1047.507827015	555.060442796	555.060442796	12797.694948233
0.067887863	342.720600110	712.217928722	353.813657847	-115.683810556	-115.683810556	2427.592205745
0.173324202	522.176751383	573.497943209	3509.566318163	960.578468918	960.578468918	3969.973613706
0.194095733	362.705405620	494.780703832	1168.772477014	-82.174024640	-82.174024640	4369.544663029
0.085455222	611.180020128	478.181725557	126.874614399	41.645583688	41.645583688	5233.481578956
0.158515056	604.024560768	706.758123931	2884.003409203	-222.022928442	-222.022928442	2159.515147932

PFUJIIY - Weighted variational Bayesian inference - 2 Gaussians



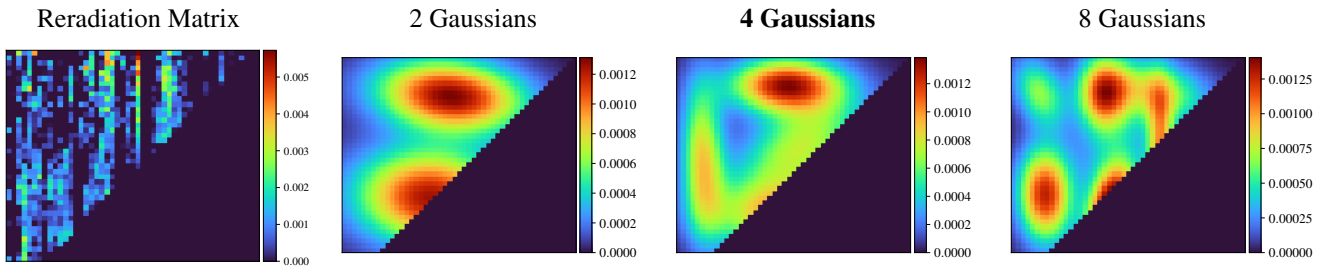
Fitted Material Under Monochromatic Illumination



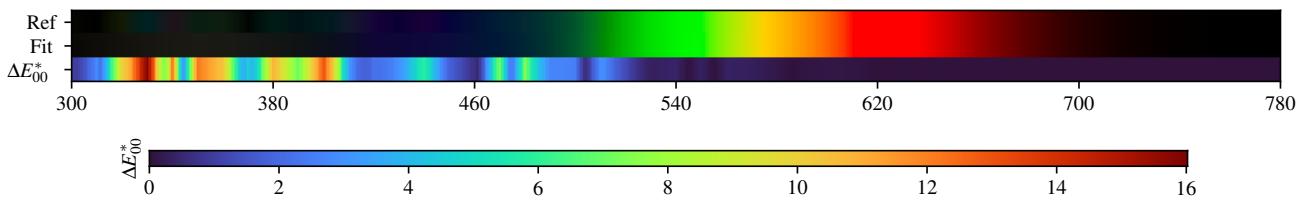
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.29$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.29$	$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.24$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.23$	$\Delta E = 0.07$	$\Delta E = 0.20$	$\Delta E = 0.30$	$\Delta E = 0.04$	$\Delta E = 0.11$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.32$	$\Delta E = 0.25$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.26$	$\Delta E = 0.29$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.22$	$\Delta E = 0.17$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.24$	$\Delta E = 0.27$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.09$	$\Delta E = 0.27$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.22$

PFUJIIY - Weighted variational Bayesian inference - 4 Gaussians



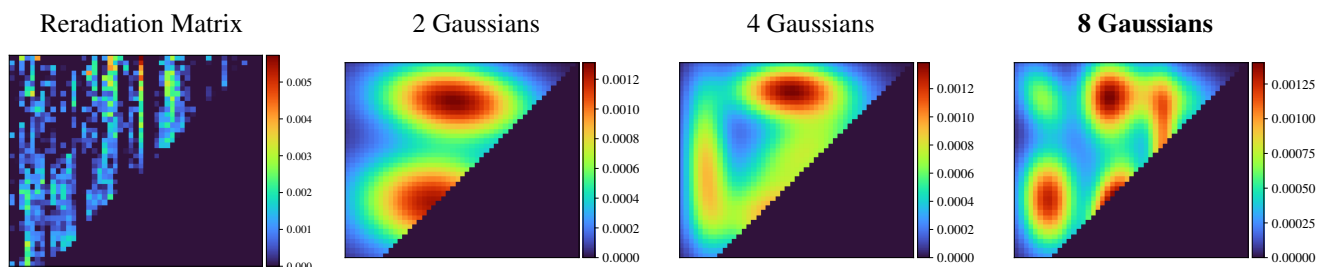
Fitted Material Under Monochromatic Illumination



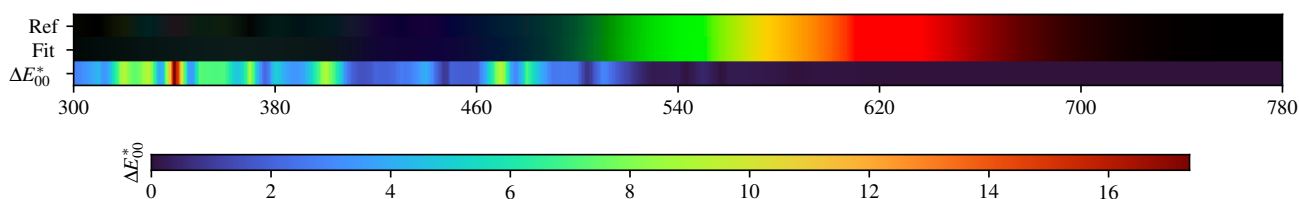
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.04$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.03$	$\Delta E = 0.07$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.06$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.13$

PFUJIIY - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.12$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.20$

PFUJIY - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.030400	0.033212	0.025966	0.028456	0.028338	0.020049	0.020313	0.021520	0.022683	0.027447	0.043003
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.073664	0.136109	0.237881	0.381206	0.515915	0.607848	0.662059	0.678099	0.685535	0.696670	0.692741
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.694424	0.693410	0.692335	0.696753	0.701171	0.713441	0.724378	0.739980	0.766701	0.792440	0.818502
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.839503	0.846213	0.855346	0.858032	0.860881	0.863109	0.863318	0.862601			

2 Gaussians max

Scaling factor: 104.3201481911694

Gaussians:

Weight	Mean		Covariance			
0.563801184	480.512948552	490.894211184	11719.584158642	-468.933082751	-468.933082751	4835.644290511
0.436198816	521.959238551	703.753205644	11329.108385083	-932.130697735	-932.130697735	2801.077008385

4 Gaussians max

Scaling factor: 101.41564551017426

Gaussians:

Weight	Mean		Covariance			
0.179035338	350.336055957	572.487886057	965.346355168	-350.353449841	-350.353449841	12257.827690382
0.293632949	514.992266470	453.191890022	9932.977818804	-75.796953244	-75.796953244	2610.809900096
0.271549387	555.328437685	598.532170636	8217.422098502	2896.026940361	2896.026940361	5254.773957956
0.255782326	523.217947691	726.275725067	6326.266620522	3.889754229	3.889754229	1570.510314571

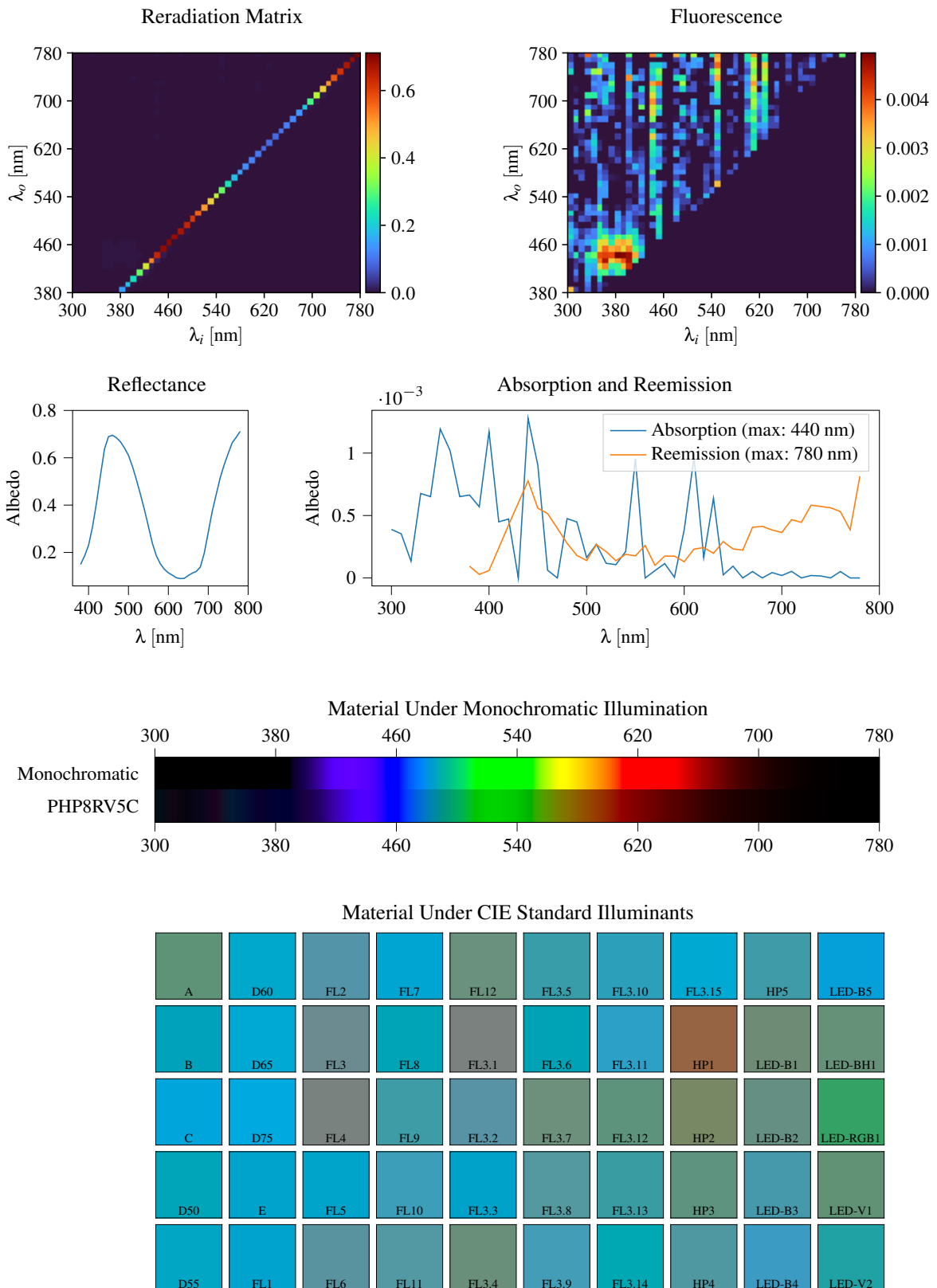
8 Gaussians max

Scaling factor: 102.70743699438748

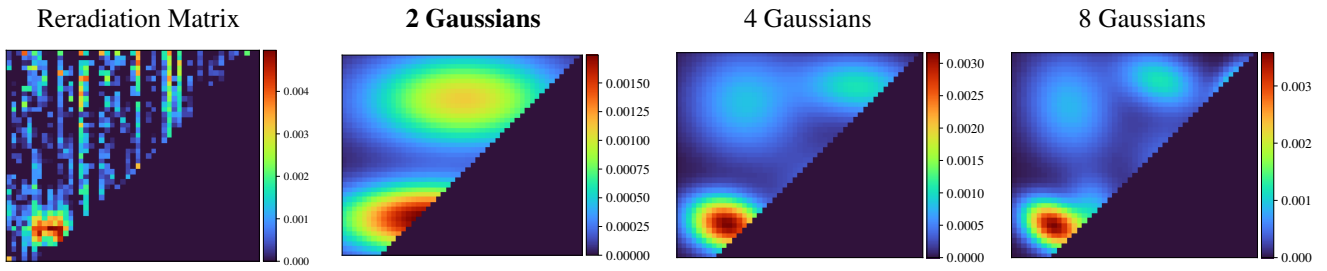
Gaussians:

Weight	Mean		Covariance			
0.204604947	365.825909060	496.518875127	1511.134350501	-104.732637441	-104.732637441	4640.947378847
0.196651008	505.077609088	472.686472651	1227.559442776	653.294657329	653.294657329	3473.879805039
0.138587797	607.898728354	546.950255874	368.711876889	-128.726176026	-128.726176026	11502.705677563
0.030784058	704.488782850	475.720581959	4843.614166668	-534.432367445	-534.432367445	5100.943040166
0.057580876	508.553139969	595.163365410	3971.446217186	1427.010077609	1427.010077609	3597.990384811
0.171757391	591.143616448	714.196341872	6513.438182380	-1030.873301926	-1030.873301926	2281.193283370
0.125483864	487.288235245	705.801060855	1278.255076570	9.286251071	9.286251071	2862.304582408
0.074550058	354.450269396	709.788438041	1494.851917781	-678.331414570	-678.331414570	2629.458843308

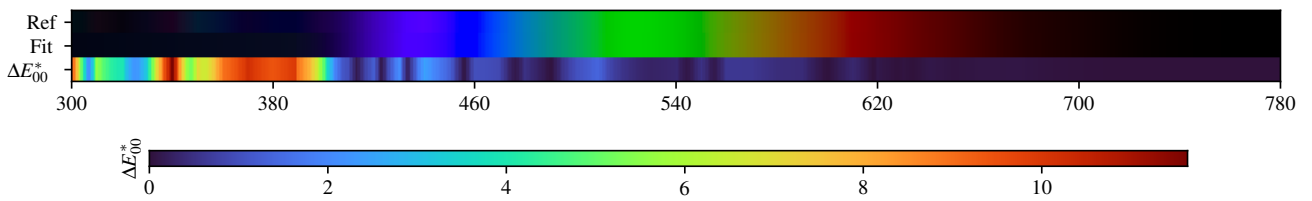
3.114. PHP8RV5C



PHP8RV5C - Weighted Expectation-Maximization - 2 Gaussians



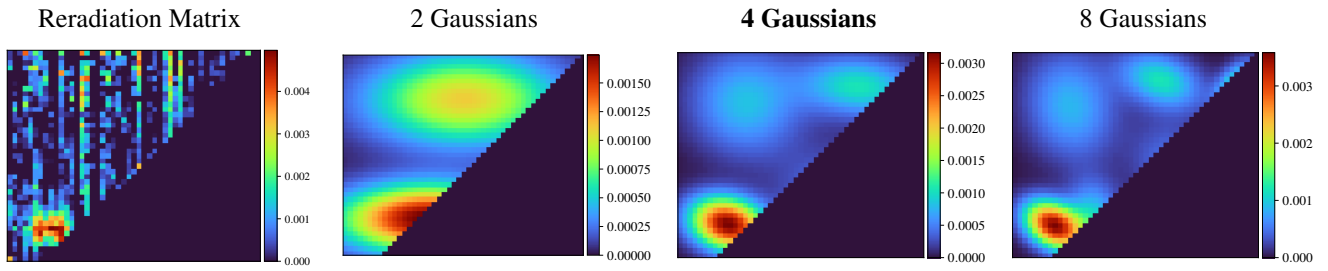
Fitted Material Under Monochromatic Illumination



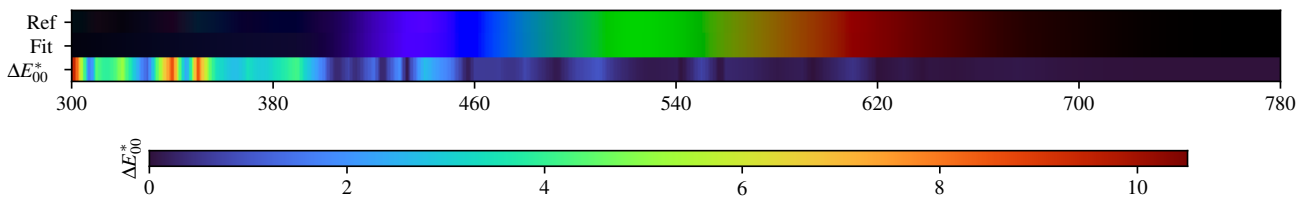
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.08$	$\Delta E = 0.27$	$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.06$	$\Delta E = 0.29$	$\Delta E = 0.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.37$	$\Delta E = 0.20$	$\Delta E = 0.50$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.31$	$\Delta E = 0.33$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.46$	$\Delta E = 0.22$	$\Delta E = 0.29$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.30$	$\Delta E = 0.33$	$\Delta E = 0.22$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.25$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.36$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.30$	$\Delta E = 0.25$	$\Delta E = 0.28$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.25$	$\Delta E = 0.33$	$\Delta E = 0.21$

PHP8RV5C - Weighted Expectation-Maximization - 4 Gaussians



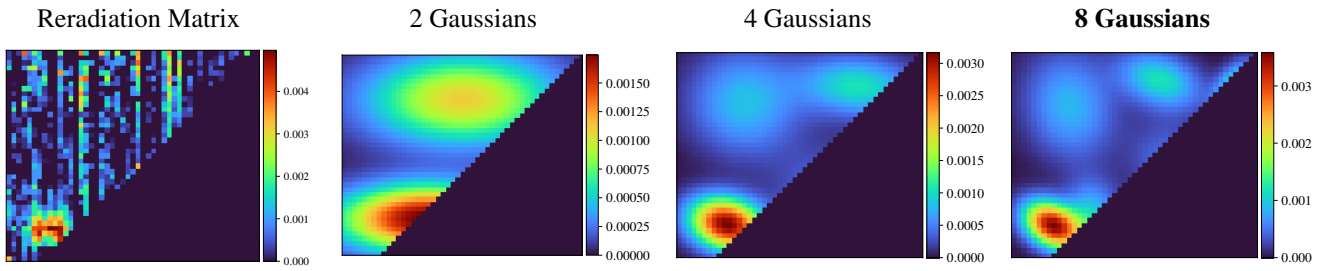
Fitted Material Under Monochromatic Illumination



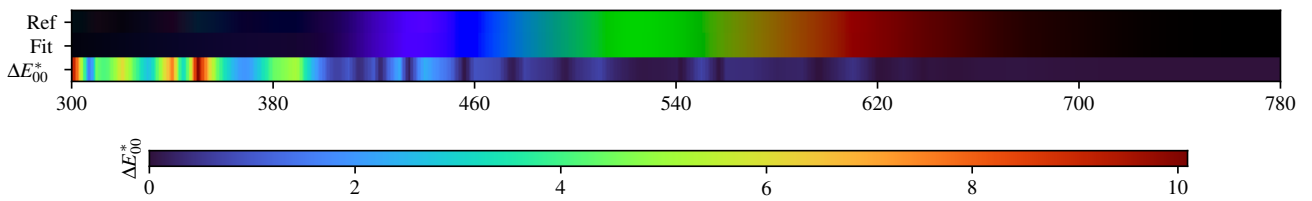
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.16$	$\Delta E = 0.31$	$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.59$	$\Delta E = 0.22$	$\Delta E = 0.31$	$\Delta E = 0.25$	$\Delta E = 0.40$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.32$	$\Delta E = 0.31$	$\Delta E = 0.31$	$\Delta E = 0.27$	$\Delta E = 0.18$	$\Delta E = 0.23$	$\Delta E = 0.28$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.35$	$\Delta E = 0.32$	$\Delta E = 0.32$	$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.60$	$\Delta E = 0.11$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.25$	$\Delta E = 0.30$	$\Delta E = 0.35$	$\Delta E = 0.27$	$\Delta E = 0.37$	$\Delta E = 0.16$	$\Delta E = 0.26$	$\Delta E = 0.33$	$\Delta E = 0.31$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.31$	$\Delta E = 0.41$	$\Delta E = 0.10$	$\Delta E = 0.31$	$\Delta E = 0.19$	$\Delta E = 0.45$	$\Delta E = 0.32$	$\Delta E = 0.41$

PHP8RV5C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.54$	$\Delta E = 0.15$	$\Delta E = 0.26$	$\Delta E = 0.16$	$\Delta E = 0.28$	$\Delta E = 0.20$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.23$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.24$	$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.55$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.21$	$\Delta E = 0.29$	$\Delta E = 0.18$	$\Delta E = 0.34$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.24$	$\Delta E = 0.19$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.37$	$\Delta E = 0.06$	$\Delta E = 0.27$	$\Delta E = 0.12$	$\Delta E = 0.33$	$\Delta E = 0.21$	$\Delta E = 0.27$

PHP8RV5C - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.149399	0.185216	0.230329	0.308715	0.411042	0.527278	0.637574	0.689383	0.695288	0.684391	0.667403
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.641571	0.610386	0.563416	0.507139	0.445506	0.380956	0.310043	0.238365	0.185586	0.151973	0.128887
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.114091	0.104022	0.093117	0.089614	0.090613	0.102632	0.112721	0.119543	0.137922	0.196850	0.284960
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.373599	0.445371	0.515593	0.570912	0.618158	0.663462	0.686306	0.711612			

2 Gaussians

Scaling factor: 122.27788659320078

Gaussians:

Weight	Mean		Covariance			
0.488604203	540.284276415	692.881338132	18046.076209810	59.263435959	59.263435959	4142.222440606
0.511395797	466.318455314	450.343652387	14395.155562196	77.671258971	77.671258971	2162.446352962

4 Gaussians

Scaling factor: 105.33207895395992

Gaussians:

Weight	Mean		Covariance			
0.203383384	655.177786736	716.081269805	6259.449063271	-379.012332379	-379.012332379	1706.298455692
0.202689577	618.408678337	481.974561359	6679.814815832	-522.199910442	-522.199910442	5132.757729836
0.333955031	395.493267897	442.501824646	2514.658149093	-339.227286353	-339.227286353	1287.990924680
0.259972008	429.985642858	683.699079556	5478.430941471	-128.496814505	-128.496814505	5046.327443996

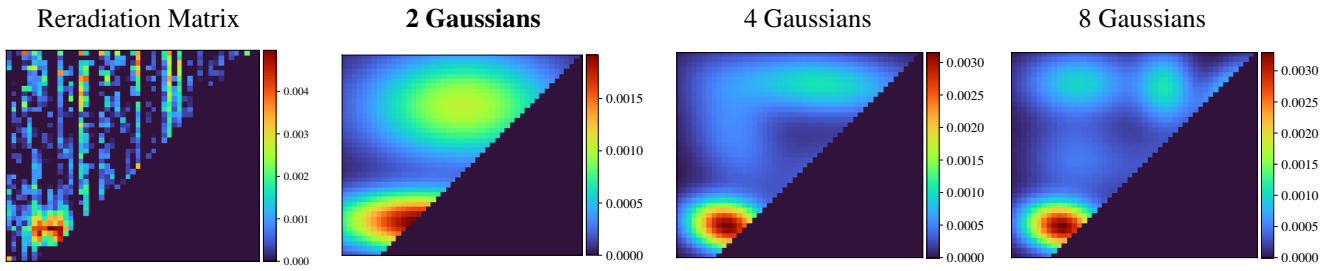
8 Gaussians

Scaling factor: 105.90783469581423

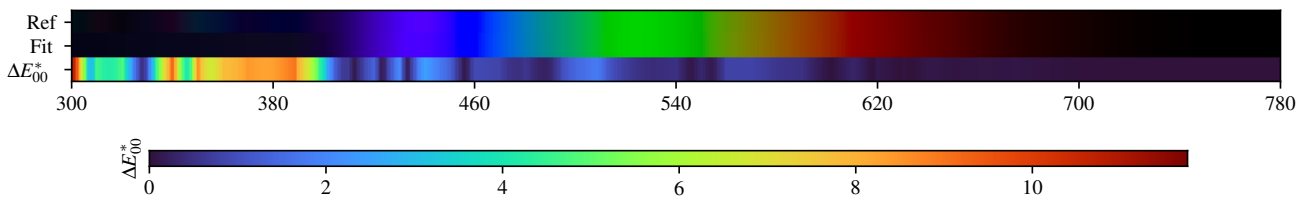
Gaussians:

Weight	Mean		Covariance			
0.074022639	739.117807555	715.329258801	796.830908126	414.741240605	414.741240605	1129.728412901
0.105361612	608.884259660	559.157111534	2958.369756295	-423.992227286	-423.992227286	4122.588441687
0.247277762	376.852610381	440.087067846	1500.165310004	-405.736745325	-405.736745325	1056.120845284
0.226945403	410.670324356	677.274607427	3619.736677706	-433.103776556	-433.103776556	5303.892700342
0.025950444	764.077737032	493.920745001	45.507370156	-139.156367714	-139.156367714	7072.528857775
0.077161485	616.869227630	418.225919517	2527.640851805	220.553603971	220.553603971	841.657638636
0.140784830	589.716039357	728.682957976	3016.359031213	-642.796946183	-642.796946183	1497.836994526
0.102495824	456.186401975	456.412005271	1287.571114210	-151.146647351	-151.146647351	2258.544857551

PHP8RV5C - Weighted variational Bayesian inference - 2 Gaussians



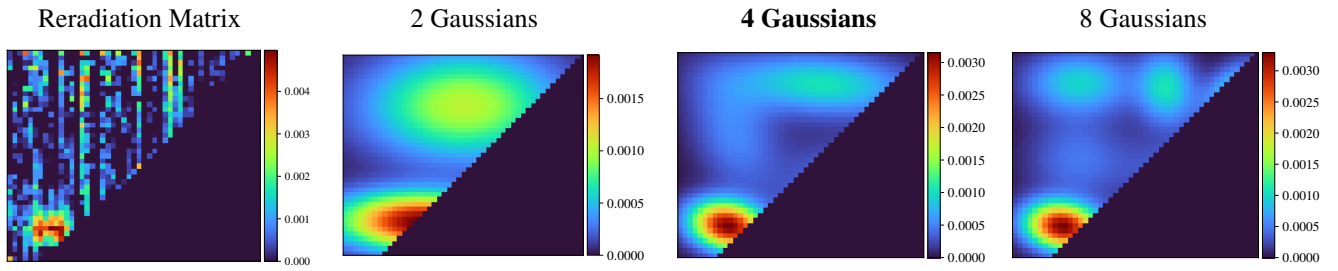
Fitted Material Under Monochromatic Illumination



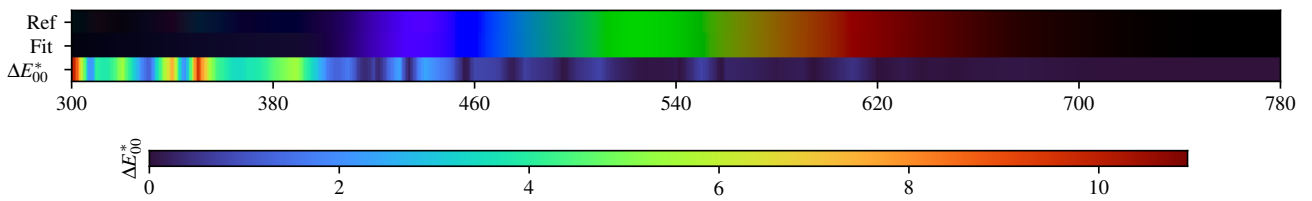
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.49$	$\Delta E = 0.35$	$\Delta E = 0.55$	$\Delta E = 0.41$	$\Delta E = 0.17$	$\Delta E = 0.44$	$\Delta E = 0.31$	$\Delta E = 0.33$	$\Delta E = 0.55$	$\Delta E = 0.56$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.44$	$\Delta E = 0.33$	$\Delta E = 0.69$	$\Delta E = 0.41$	$\Delta E = 0.85$	$\Delta E = 0.42$	$\Delta E = 0.31$	$\Delta E = 0.47$	$\Delta E = 0.59$	$\Delta E = 0.47$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.44$	$\Delta E = 0.31$	$\Delta E = 0.83$	$\Delta E = 0.44$	$\Delta E = 0.56$	$\Delta E = 0.09$	$\Delta E = 0.43$	$\Delta E = 0.57$	$\Delta E = 0.57$	$\Delta E = 0.39$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.38$	$\Delta E = 0.32$	$\Delta E = 0.44$	$\Delta E = 0.33$	$\Delta E = 0.44$	$\Delta E = 0.24$	$\Delta E = 0.41$	$\Delta E = 0.45$	$\Delta E = 0.57$	$\Delta E = 0.50$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.36$	$\Delta E = 0.44$	$\Delta E = 0.56$	$\Delta E = 0.31$	$\Delta E = 0.50$	$\Delta E = 0.28$	$\Delta E = 0.38$	$\Delta E = 0.53$	$\Delta E = 0.57$	$\Delta E = 0.46$

PHP8RV5C - Weighted variational Bayesian inference - 4 Gaussians



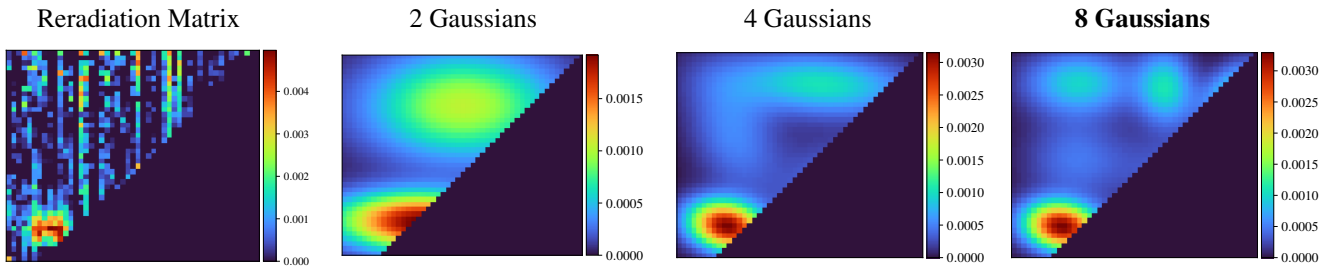
Fitted Material Under Monochromatic Illumination



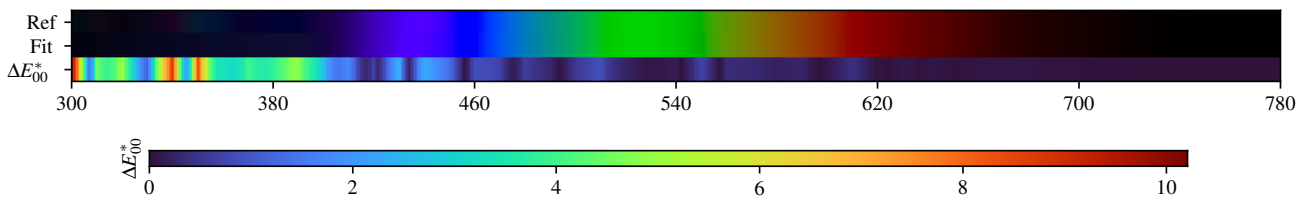
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.64$	$\Delta E = 0.13$	$\Delta E = 0.30$	$\Delta E = 0.12$	$\Delta E = 0.27$	$\Delta E = 0.19$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.27$	$\Delta E = 0.08$	$\Delta E = 0.19$	$\Delta E = 0.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.30$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.65$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.19$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.33$	$\Delta E = 0.14$	$\Delta E = 0.40$	$\Delta E = 0.10$	$\Delta E = 0.21$	$\Delta E = 0.24$	$\Delta E = 0.26$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.43$	$\Delta E = 0.12$	$\Delta E = 0.32$	$\Delta E = 0.10$	$\Delta E = 0.31$	$\Delta E = 0.21$	$\Delta E = 0.28$

PHP8RV5C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.53$	$\Delta E = 0.12$	$\Delta E = 0.25$	$\Delta E = 0.10$	$\Delta E = 0.27$	$\Delta E = 0.17$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.52$	$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.04$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.17$	$\Delta E = 0.28$	$\Delta E = 0.14$	$\Delta E = 0.33$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.21$	$\Delta E = 0.36$	$\Delta E = 0.05$	$\Delta E = 0.26$	$\Delta E = 0.09$	$\Delta E = 0.32$	$\Delta E = 0.19$	$\Delta E = 0.27$

PHP8RV5C - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.149399	0.185216	0.230329	0.308715	0.411042	0.527278	0.637574	0.689383	0.695288	0.684391	0.667403
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.641571	0.610386	0.563416	0.507139	0.445506	0.380956	0.310043	0.238365	0.185586	0.151973	0.128887
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.114091	0.104022	0.093117	0.089614	0.090613	0.102632	0.112721	0.119543	0.137922	0.196850	0.284960
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.373599	0.445371	0.515593	0.570912	0.618158	0.663462	0.686306	0.711612			

2 Gaussians max

Scaling factor: 123.41570729740829

Gaussians:

Weight	Mean		Covariance			
0.469173600	460.450032557	442.875312560	13796.169147106	-366.132325607	-366.132325607	1602.928385688
0.530826400	539.775610284	680.439018419	17871.833486554	43.811821006	43.811821006	5666.356478942

4 Gaussians max

Scaling factor: 104.3805103169731

Gaussians:

Weight	Mean		Covariance			
0.312384572	395.040926919	438.828952726	2579.765222089	-316.066334748	-316.066334748	1110.137775756
0.207771412	621.127053285	489.111986821	6302.728408448	-525.384497547	-525.384497547	6078.417462067
0.164663069	407.272151805	625.574544974	3782.377599146	-1584.210919242	-1584.210919242	7505.486499563
0.315180947	581.503137480	720.964241708	15283.323678164	-873.788760928	-873.788760928	1718.610069651

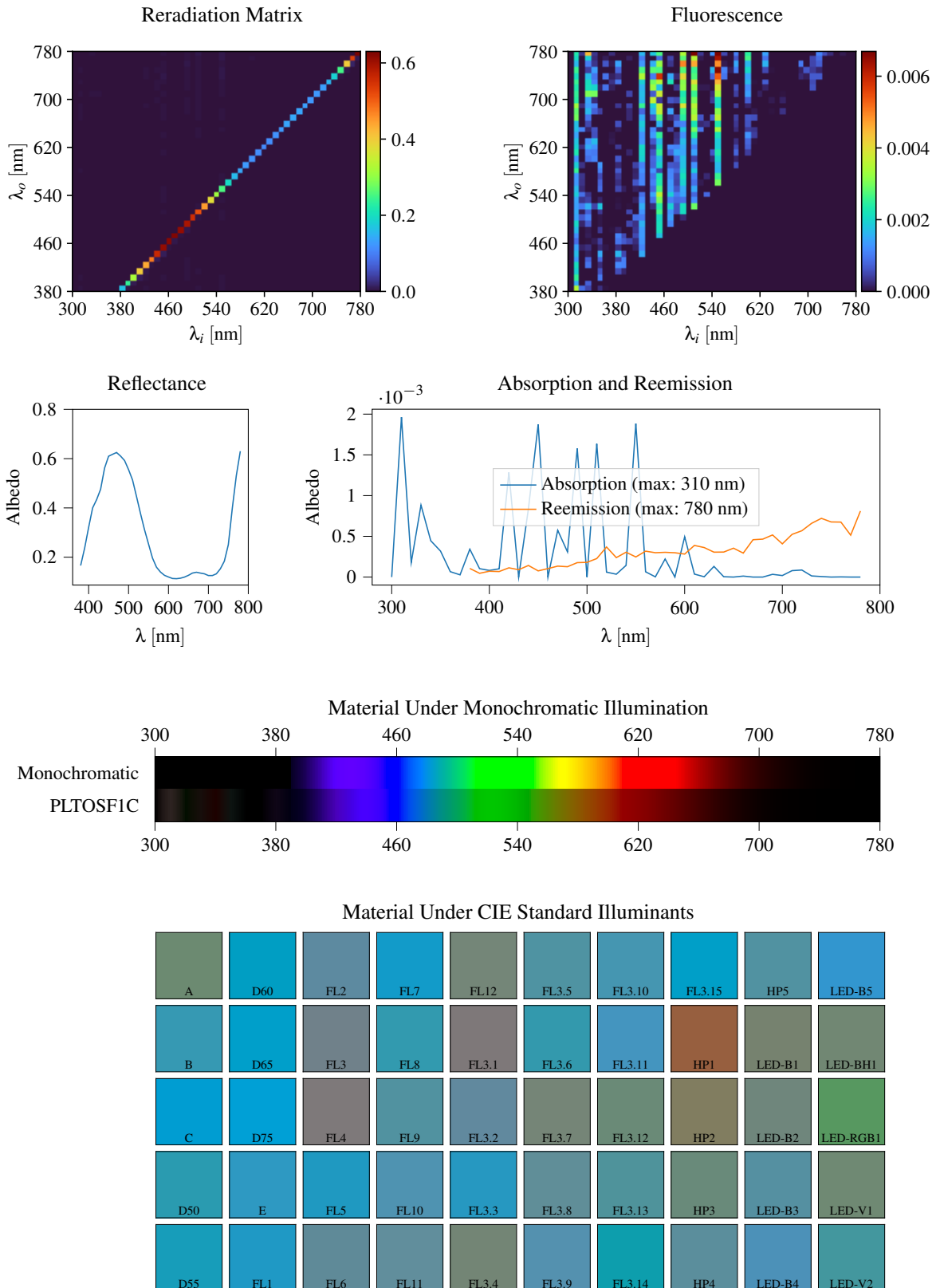
8 Gaussians max

Scaling factor: 106.1187361001469

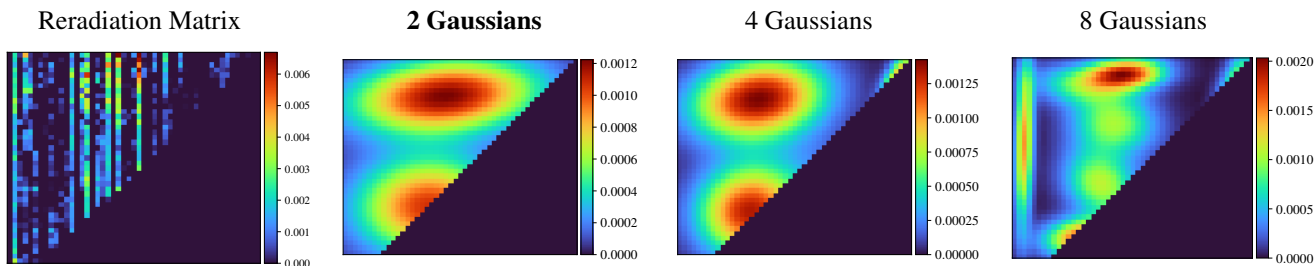
Gaussians:

Weight	Mean		Covariance			
0.303882775	395.017018674	437.817968747	2457.937980968	-221.751457660	-221.751457660	1024.710066640
0.113017803	619.087924607	429.172145338	6414.562576410	-148.545324161	-148.545324161	1648.989731196
0.110511110	420.006485841	572.656837671	4487.920893238	-3.264149060	-3.264149060	3604.416729574
0.087252245	619.541280590	547.858218902	7302.020429345	-619.400293500	-619.400293500	2425.796302428
0.119036369	600.242689015	713.677755613	1465.541754516	-74.266098356	-74.266098356	2489.757580545
0.087844552	730.978278777	708.355663990	1812.383234304	799.671131082	799.671131082	1721.959278705
0.177448106	428.340685246	723.652243871	5222.595670155	-59.293399823	-59.293399823	1814.938594522

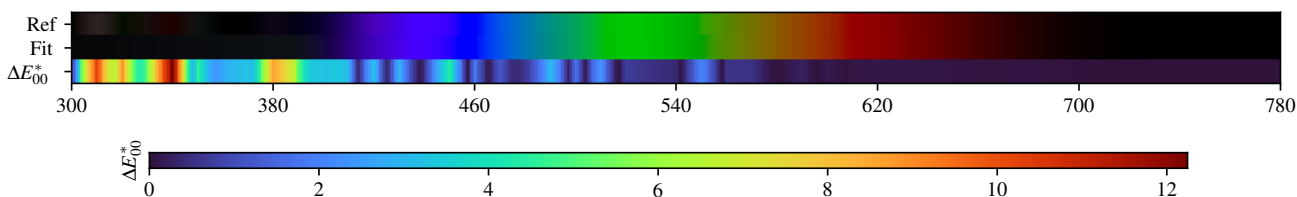
3.115. PLTOSFIC



PLTOSFIC - Weighted Expectation-Maximization - 2 Gaussians



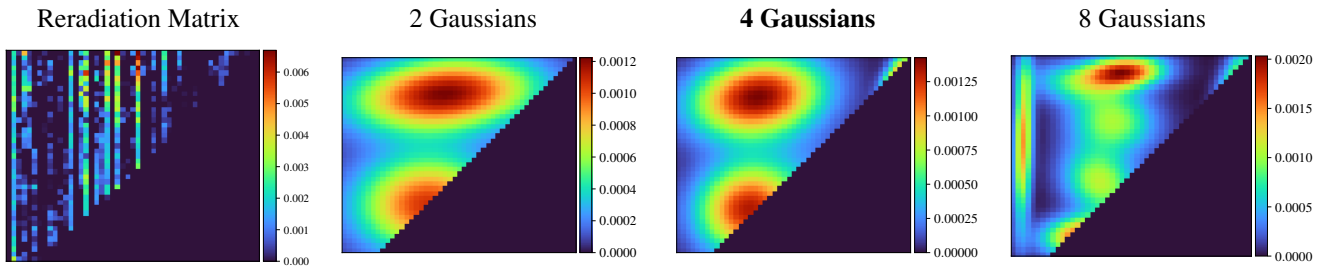
Fitted Material Under Monochromatic Illumination



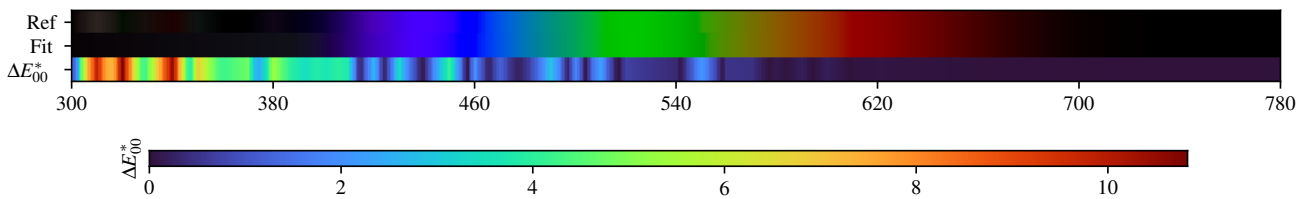
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.58$	$\Delta E = 0.22$	$\Delta E = 0.48$	$\Delta E = 0.26$	$\Delta E = 0.22$	$\Delta E = 0.37$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.18$	$\Delta E = 0.23$	$\Delta E = 0.44$	$\Delta E = 0.13$	$\Delta E = 0.23$	$\Delta E = 0.21$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.19$	$\Delta E = 0.40$	$\Delta E = 0.19$	$\Delta E = 0.20$	$\Delta E = 0.30$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.27$	$\Delta E = 0.19$	$\Delta E = 0.28$	$\Delta E = 0.51$	$\Delta E = 0.22$	$\Delta E = 0.44$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.39$	$\Delta E = 0.25$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.54$	$\Delta E = 0.10$	$\Delta E = 0.43$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.36$	$\Delta E = 0.30$

PLTOSFIC - Weighted Expectation-Maximization - 4 Gaussians



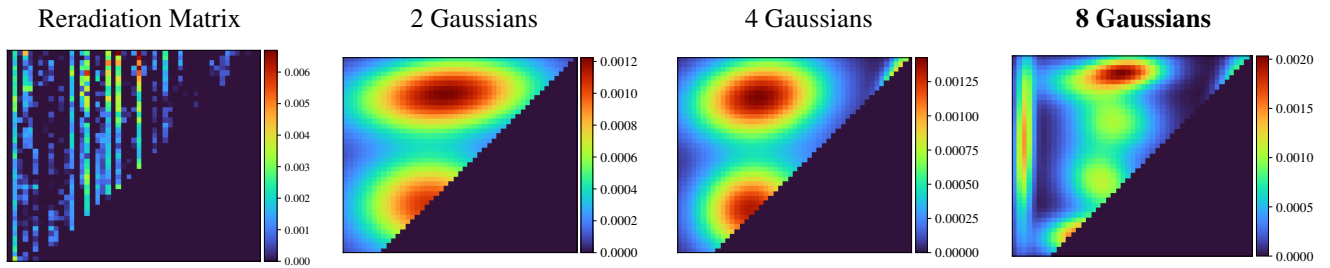
Fitted Material Under Monochromatic Illumination



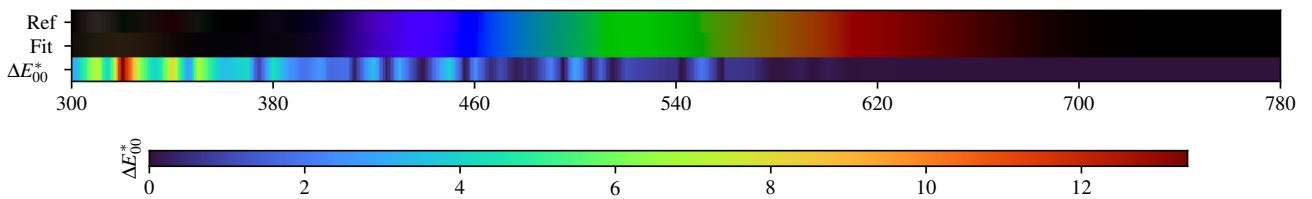
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.25$	$\Delta E = 0.67$	$\Delta E = 0.24$	$\Delta E = 0.48$	$\Delta E = 0.24$	$\Delta E = 0.26$	$\Delta E = 0.35$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.28$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.43$	$\Delta E = 0.09$	$\Delta E = 0.27$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.36$	$\Delta E = 0.29$	$\Delta E = 0.21$	$\Delta E = 0.49$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.34$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.30$	$\Delta E = 0.21$	$\Delta E = 0.27$	$\Delta E = 0.50$	$\Delta E = 0.21$	$\Delta E = 0.47$	$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.41$	$\Delta E = 0.33$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.30$	$\Delta E = 0.56$	$\Delta E = 0.16$	$\Delta E = 0.44$	$\Delta E = 0.27$	$\Delta E = 0.24$	$\Delta E = 0.36$	$\Delta E = 0.34$

PLTOSFIC - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.44$	$\Delta E = 0.10$	$\Delta E = 0.28$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.25$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.29$	$\Delta E = 0.05$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.31$	$\Delta E = 0.10$	$\Delta E = 0.28$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.25$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.36$	$\Delta E = 0.09$	$\Delta E = 0.26$	$\Delta E = 0.06$	$\Delta E = 0.13$	$\Delta E = 0.25$	$\Delta E = 0.15$

PLTOSFIC - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.166041	0.236523	0.320796	0.399934	0.433488	0.475586	0.561934	0.609772	0.617606	0.624938	0.610430
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.592436	0.555561	0.513446	0.446141	0.376973	0.311634	0.253824	0.196468	0.159384	0.139705	0.126418
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.119647	0.113555	0.112736	0.114686	0.119190	0.126342	0.135452	0.138850	0.135486	0.132521	0.125523
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.125467	0.132475	0.152812	0.183766	0.250916	0.399349	0.531222	0.630270			

2 Gaussians

Scaling factor: 104.03984673934309

Gaussians:

Weight	Mean		Covariance			
0.476028093	475.215505196	476.313748434	10902.709016339	108.058903283	108.058903283	4989.652247025
0.523971907	508.757952867	707.754762308	17662.377529357	1255.252100809	1255.252100809	2951.992970889

4 Gaussians

Scaling factor: 102.75075338871304

Gaussians:

Weight	Mean		Covariance			
0.097792931	613.253865253	515.580772574	12012.503777207	-3372.989178222	-3372.989178222	6758.875571219
0.458257822	464.226485900	701.973866924	8719.022309762	906.322814905	906.322814905	3321.827696772
0.072032336	754.109404373	729.319078767	573.829600939	579.727166277	579.727166277	1747.723756850
0.371916911	445.699637162	465.003353091	5315.474178901	131.737770867	131.737770867	4125.866654089

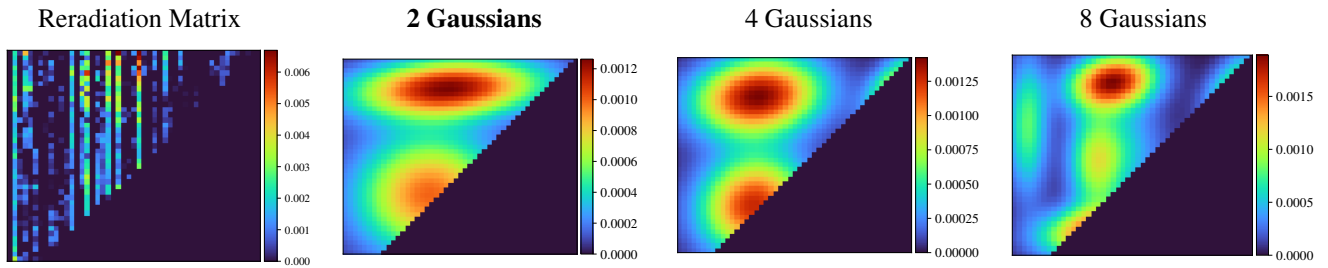
8 Gaussians

Scaling factor: 98.99467932790338

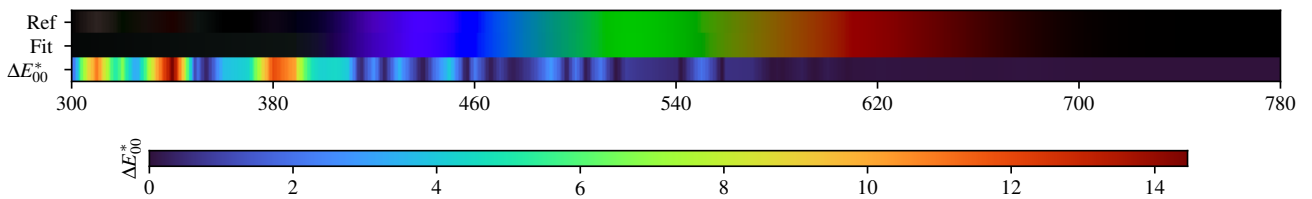
Gaussians:

Weight	Mean		Covariance			
0.058365875	676.129454976	469.545597740	5204.063485646	59.708738627	59.708738627	4102.648699016
0.078710469	424.275886818	727.057871004	4088.939997921	-416.402803671	-416.402803671	860.602814732
0.081038096	750.019435530	723.970938047	701.285657605	668.780510421	668.780510421	2346.270419563
0.187578223	451.896668605	416.802868864	3453.787995534	122.245622357	122.245622357	711.218600346
0.143802016	523.642759347	750.785991751	3008.516419346	172.287312009	172.287312009	504.713994219
0.124597165	319.588456801	610.498048493	150.073534461	278.312188988	278.312188988	12530.017642267
0.160138344	474.891083933	526.767738879	2568.978212826	-464.086989924	-464.086989924	2190.151034677
0.165769813	502.008600516	649.761766071	3529.620256264	-146.024849312	-146.024849312	1904.297747824

PLTOSFIC - Weighted variational Bayesian inference - 2 Gaussians



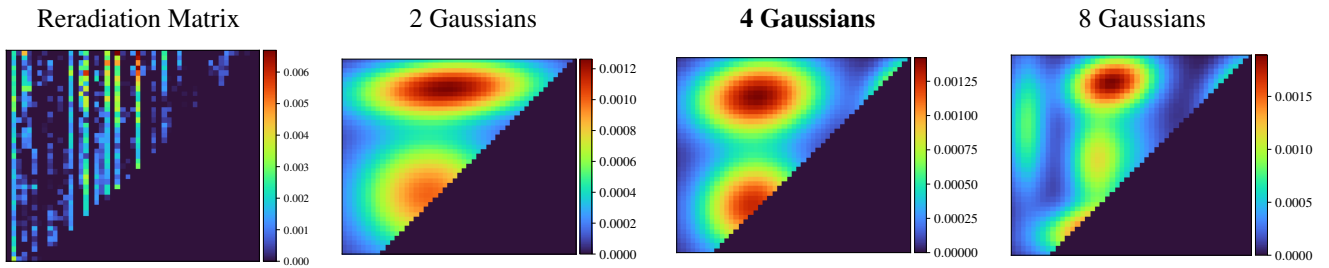
Fitted Material Under Monochromatic Illumination



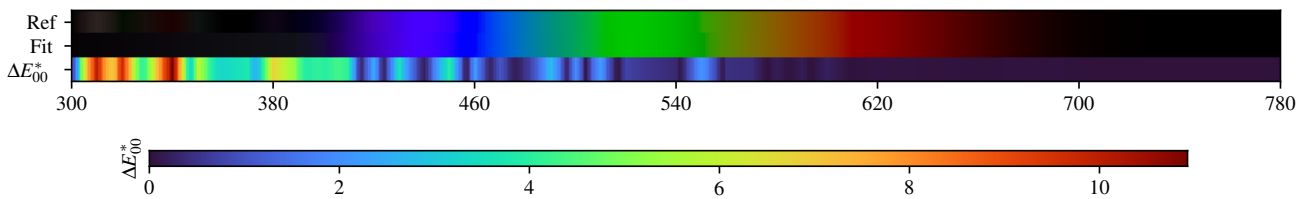
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.25$	$\Delta E = 0.59$	$\Delta E = 0.16$	$\Delta E = 0.43$	$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.26$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.21$	$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.21$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.42$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.27$	$\Delta E = 0.31$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.42$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.19$	$\Delta E = 0.06$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 0.31$	$\Delta E = 0.24$	$\Delta E = 0.47$	$\Delta E = 0.18$	$\Delta E = 0.41$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.24$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.22$	$\Delta E = 0.25$	$\Delta E = 0.24$	$\Delta E = 0.52$	$\Delta E = 0.09$	$\Delta E = 0.41$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.21$

PLTOSFIC - Weighted variational Bayesian inference - 4 Gaussians



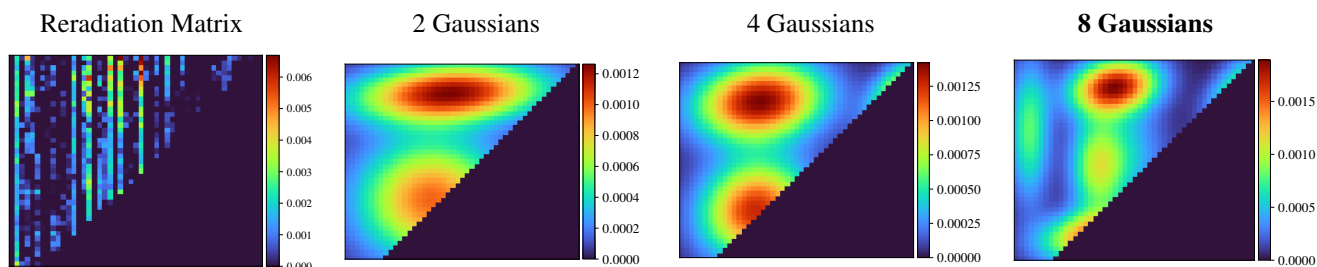
Fitted Material Under Monochromatic Illumination



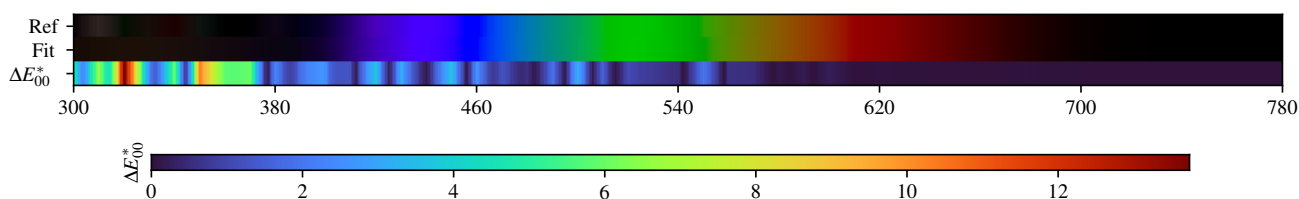
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.27$	$\Delta E = 0.20$	$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.70$	$\Delta E = 0.20$	$\Delta E = 0.46$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.30$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.34$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.19$	$\Delta E = 0.43$	$\Delta E = 0.04$	$\Delta E = 0.28$	$\Delta E = 0.26$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.39$	$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.54$	$\Delta E = 0.26$	$\Delta E = 0.23$	$\Delta E = 0.32$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.23$	$\Delta E = 0.17$	$\Delta E = 0.24$	$\Delta E = 0.51$	$\Delta E = 0.18$	$\Delta E = 0.48$	$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.34$	$\Delta E = 0.33$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.21$	$\Delta E = 0.24$	$\Delta E = 0.29$	$\Delta E = 0.57$	$\Delta E = 0.18$	$\Delta E = 0.44$	$\Delta E = 0.23$	$\Delta E = 0.20$	$\Delta E = 0.31$	$\Delta E = 0.27$

PLTOSFIC - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.23$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.46$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.13$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.25$
B $\Delta E = 0.19$	D65 $\Delta E = 0.25$	FL3 $\Delta E = 0.15$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.20$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.18$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.32$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.20$	E $\Delta E = 0.27$	FL5 $\Delta E = 0.13$	FL10 $\Delta E = 0.27$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.26$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.24$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.33$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.25$	LED-V2 $\Delta E = 0.20$

PLTOSFIC - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.166041	0.236523	0.320796	0.399934	0.433488	0.475586	0.561934	0.609772	0.617606	0.624938	0.610430
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.592436	0.555561	0.513446	0.446141	0.376973	0.311634	0.253824	0.196468	0.159384	0.139705	0.126418
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.119647	0.113555	0.112736	0.114686	0.119190	0.126342	0.135452	0.138850	0.135486	0.132521	0.125523
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.125467	0.132475	0.152812	0.183766	0.250916	0.399349	0.531222	0.630270			

2 Gaussians max

Scaling factor: 101.97178099894231

Gaussians:

Weight	Mean		Covariance			
0.564608821	475.688496222	500.592780499	11160.943952468	147.644088628	147.644088628	7629.383188057
0.435391179	515.115049933	722.928156473	18420.174816322	912.059539449	912.059539449	1850.924647914

4 Gaussians max

Scaling factor: 101.52229889130312

Gaussians:

Weight	Mean		Covariance			
0.428189136	454.899906507	475.360099377	6008.842484726	442.193016071	442.193016071	4958.327864931
0.045967092	711.351883586	490.984176102	2762.713332911	-751.199188891	-751.199188891	6368.505559139
0.448735900	463.421274649	703.179323695	8321.850419985	706.263438068	706.263438068	3204.845206128
0.077107872	746.766700653	727.208879153	1827.721656725	1110.082638724	1110.082638724	2252.679336736

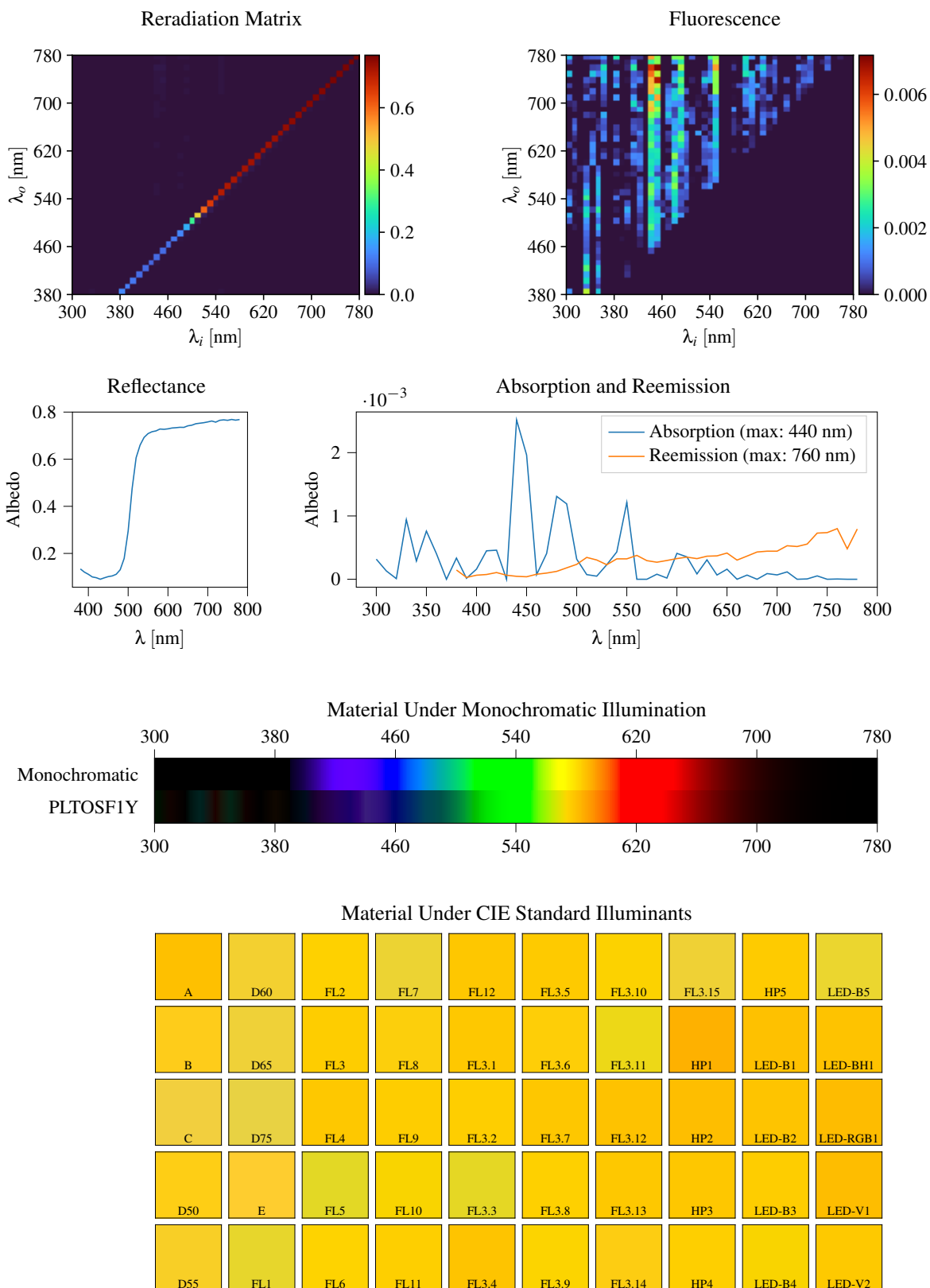
8 Gaussians max

Scaling factor: 102.59569343321027

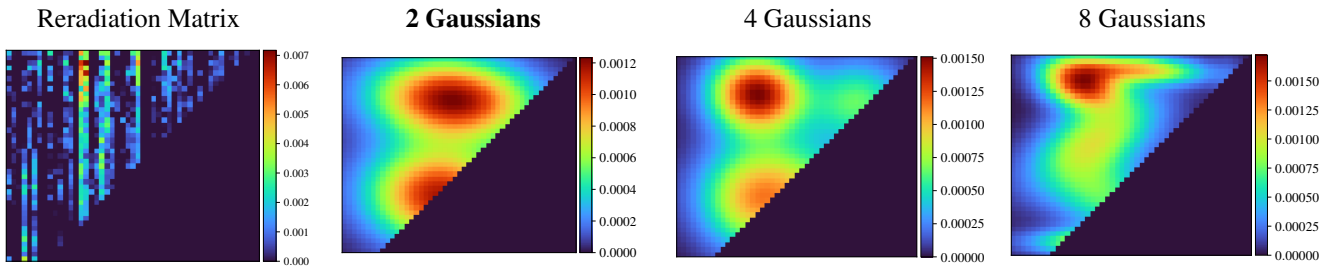
Gaussians:

Weight	Mean		Covariance			
0.223406002	455.368032154	423.763149263	5228.722286579	480.775008233	480.775008233	1270.129085387
0.047781103	709.134234766	492.194917413	2880.478062069	-774.611853388	-774.611853388	6449.000879868
0.138245434	326.346235235	638.933123505	836.904794359	26.483901091	26.483901091	9657.824386881
0.147735177	462.848786225	564.614241389	1396.185368240	-37.069534455	-37.069534455	5025.147325587
0.113650851	528.497962429	593.361165775	2752.306885109	-84.279065053	-84.279065053	5674.966696283
0.080618936	744.878720848	726.136102397	1894.639876104	1143.742268909	1143.742268909	2304.531937216
0.248436759	499.518999096	730.192308115	3652.708849997	404.636962900	404.636962900	1474.586251040

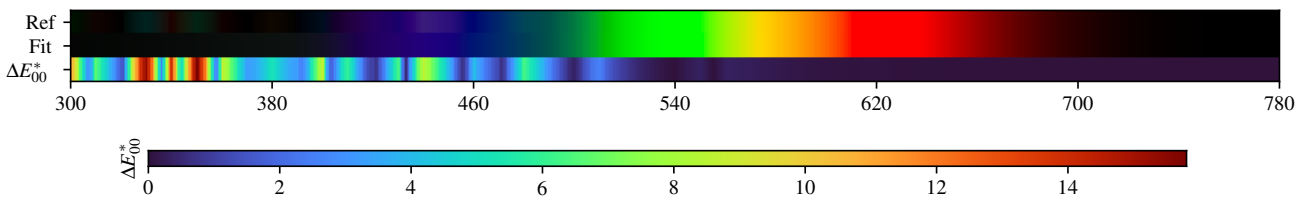
3.116. PLTOSFIY



PLTOSF1Y - Weighted Expectation-Maximization - 2 Gaussians



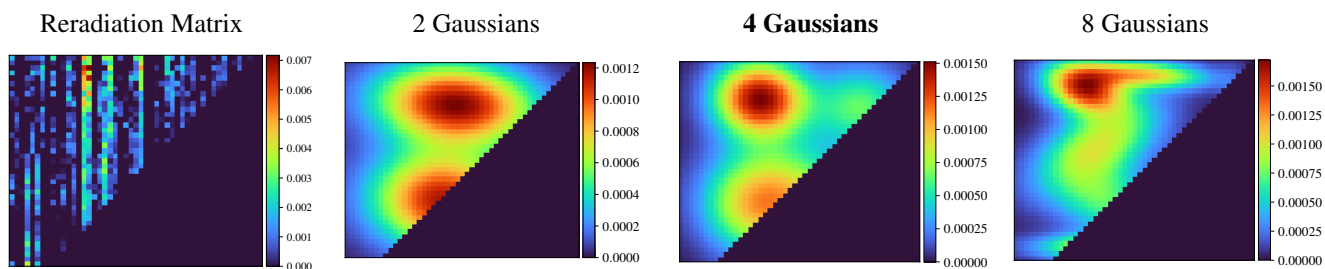
Fitted Material Under Monochromatic Illumination



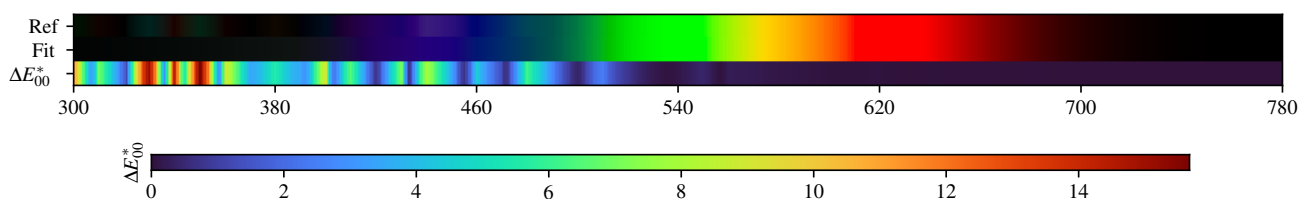
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.03$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.04$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.19$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.04$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.12$	$\Delta E = 0.03$	$\Delta E = 0.11$

PLTOSF1Y - Weighted Expectation-Maximization - 4 Gaussians



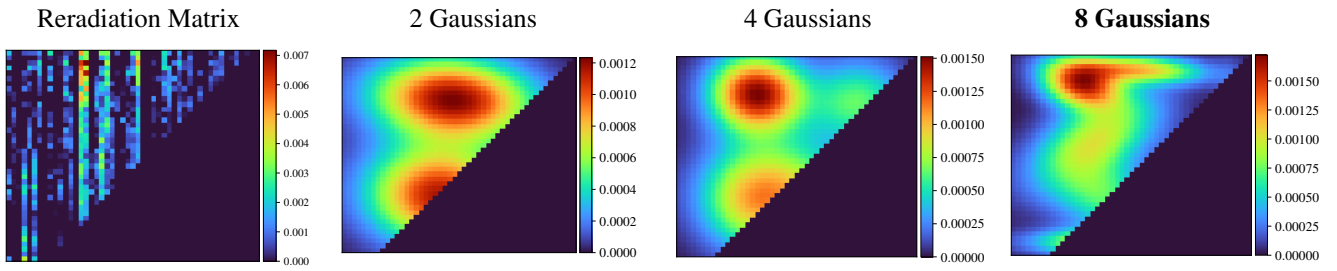
Fitted Material Under Monochromatic Illumination



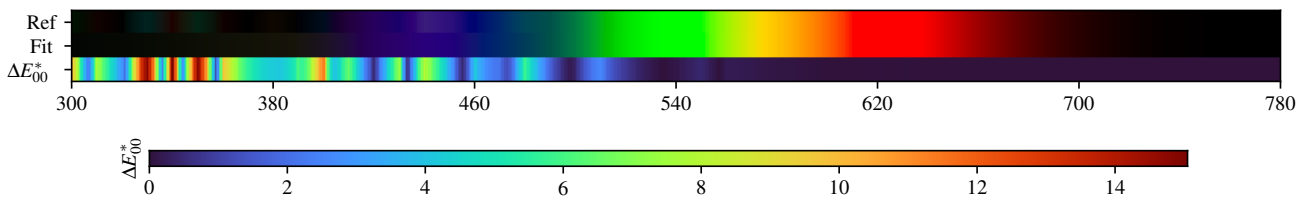
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.17$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.18$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.13$	D65 $\Delta E = 0.20$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.02$
C $\Delta E = 0.20$	D75 $\Delta E = 0.23$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.13$	E $\Delta E = 0.25$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.03$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.16$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.05$	LED-V2 $\Delta E = 0.15$

PLTOSF1Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.05$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.05$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.05$	D65 $\Delta E = 0.07$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.04$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.06$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.05$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.05$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.05$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.05$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.05$

PLTOSFIY - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.134162	0.120691	0.111442	0.100165	0.096893	0.090401	0.096374	0.101593	0.104465	0.111454	0.130663
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.178876	0.294946	0.475305	0.606139	0.659918	0.692377	0.708682	0.716629	0.720095	0.728051	0.726882
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.728846	0.732337	0.733675	0.735396	0.735029	0.741612	0.744316	0.750492	0.752722	0.754903	0.758171
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.762072	0.757263	0.765089	0.767001	0.764976	0.768697	0.765732	0.768293			

2 Gaussians

Scaling factor: 106.29463918822185

Gaussians:

Weight	Mean		Covariance			
0.509654189	501.380284422	493.499692065	10839.238641439	-530.269700246	-530.269700246	5126.021575273
0.490345811	525.946315389	697.412669822	13249.091806827	-779.181700879	-779.181700879	3543.917531012

4 Gaussians

Scaling factor: 104.6589393423754

Gaussians:

Weight	Mean		Covariance			
0.232263553	568.829822839	512.504742967	8726.061716174	-2369.083012834	-2369.083012834	5583.941678728
0.315418940	459.324335244	707.166996261	4257.884522230	-112.439591670	-112.439591670	2944.439825549
0.297431860	449.248080831	486.056280842	5833.639740324	-410.679313807	-410.679313807	5016.659082302
0.154885647	663.763323963	689.727602400	4551.611695430	-14.475749857	-14.475749857	3595.722627948

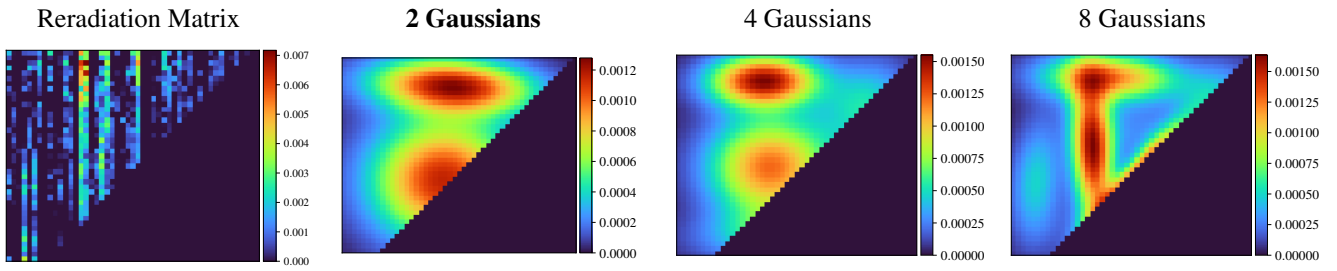
8 Gaussians

Scaling factor: 113.85110933458905

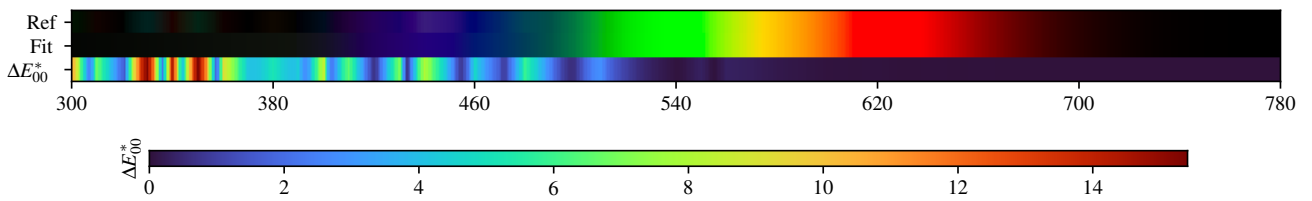
Gaussians:

Weight	Mean		Covariance			
0.111366572	486.770980111	402.496358385	9669.843784274	-9.021762851	-9.021762851	361.109302977
0.102452954	552.109450725	754.768654237	8492.348157100	-441.352936684	-441.352936684	397.260212339
0.049543816	749.455957841	578.690853414	528.784680862	-657.898651866	-657.898651866	12165.019781416
0.154786780	437.259384641	725.120629491	3016.802437386	-398.554348556	-398.554348556	1158.379419345
0.150432749	582.449344302	572.449344302	6987.470709250	6987.470708250	6987.470708250	6987.470709250
0.044041200	631.230341178	490.769576395	886.767153639	-44.323521618	-44.323521618	3451.059359764
0.115484062	485.046598222	492.547428122	4538.729816221	-213.830404332	-213.830404332	2285.348428101
0.271891867	464.902636865	609.854287954	7965.171283435	3202.812644044	3202.812644044	4452.277845642

PLTOSF1Y - Weighted variational Bayesian inference - 2 Gaussians



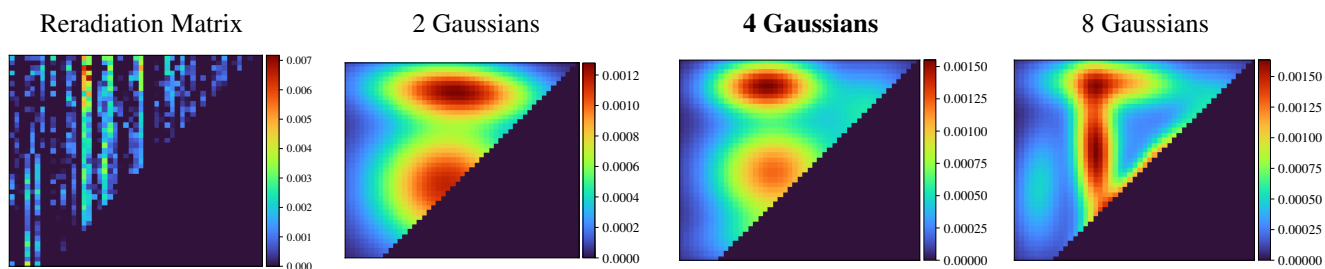
Fitted Material Under Monochromatic Illumination



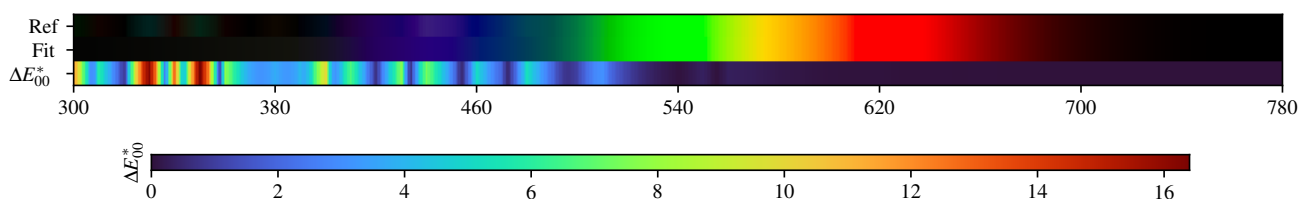
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.04$	$\Delta E = 0.12$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.07$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.15$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.15$

PLTOSF1Y - Weighted variational Bayesian inference - 4 Gaussians



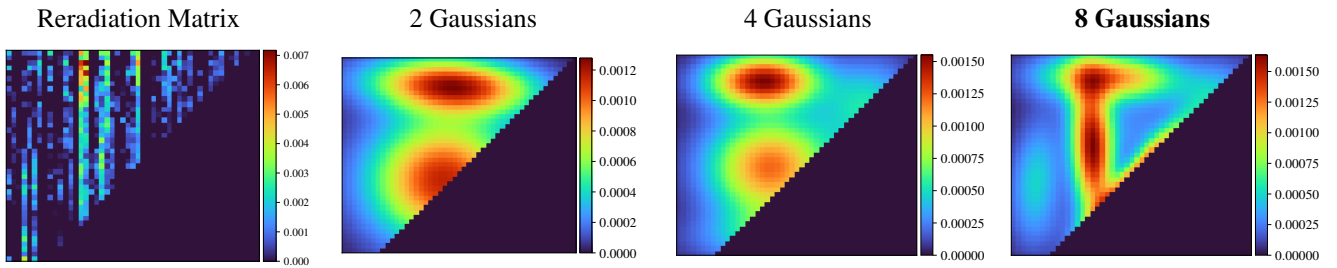
Fitted Material Under Monochromatic Illumination



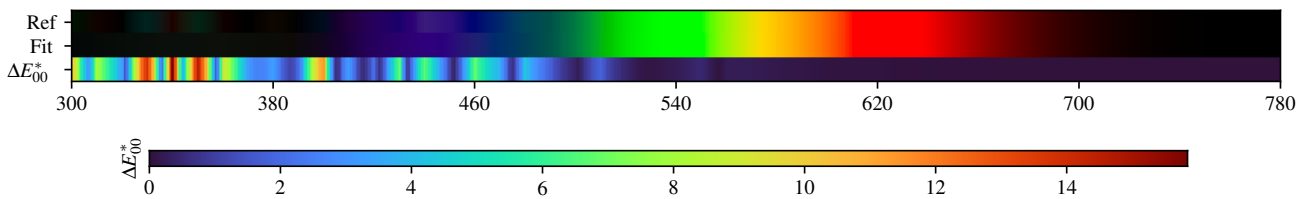
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.09$	LED-B5 $\Delta E = 0.08$
B $\Delta E = 0.12$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.15$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.16$
D50 $\Delta E = 0.11$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.15$

PLTOSF1Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.05$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.08$	FL3.15 $\Delta E = 0.05$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.07$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.05$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.08$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.07$	E $\Delta E = 0.12$	FL5 $\Delta E = 0.05$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.07$	FL1 $\Delta E = 0.06$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.08$

PLTOSFIY - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.134162	0.120691	0.111442	0.100165	0.096893	0.090401	0.096374	0.101593	0.104465	0.111454	0.130663
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.178876	0.294946	0.475305	0.606139	0.659918	0.692377	0.708682	0.716629	0.720095	0.728051	0.726882
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.728846	0.732337	0.733675	0.735396	0.735029	0.741612	0.744316	0.750492	0.752722	0.754903	0.758171
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.762072	0.757263	0.765089	0.767001	0.764976	0.768697	0.765732	0.768293			

2 Gaussians max

Scaling factor: 104.51305182822368

Gaussians:

Weight	Mean		Covariance			
0.666472616	507.010976528	527.318892083	11172.804480652	3.310368504	3.310368504	8198.641331269
0.333527384	526.420522620	725.249827747	13879.162933792	-776.039602776	-776.039602776	1659.462413904

4 Gaussians max

Scaling factor: 104.06566053317933

Gaussians:

Weight	Mean		Covariance			
0.168510001	529.095462737	423.395687150	14416.151265009	925.121699817	925.121699817	1549.614033386
0.454277339	485.433221663	555.697224195	7526.015345662	48.547781243	48.547781243	5150.968685847
0.121327585	682.841850861	678.140029186	3948.519067724	573.087748779	573.087748779	4083.971206716
0.255885075	472.346913238	731.849558809	5896.612286408	40.988589199	40.988589199	1372.938235861

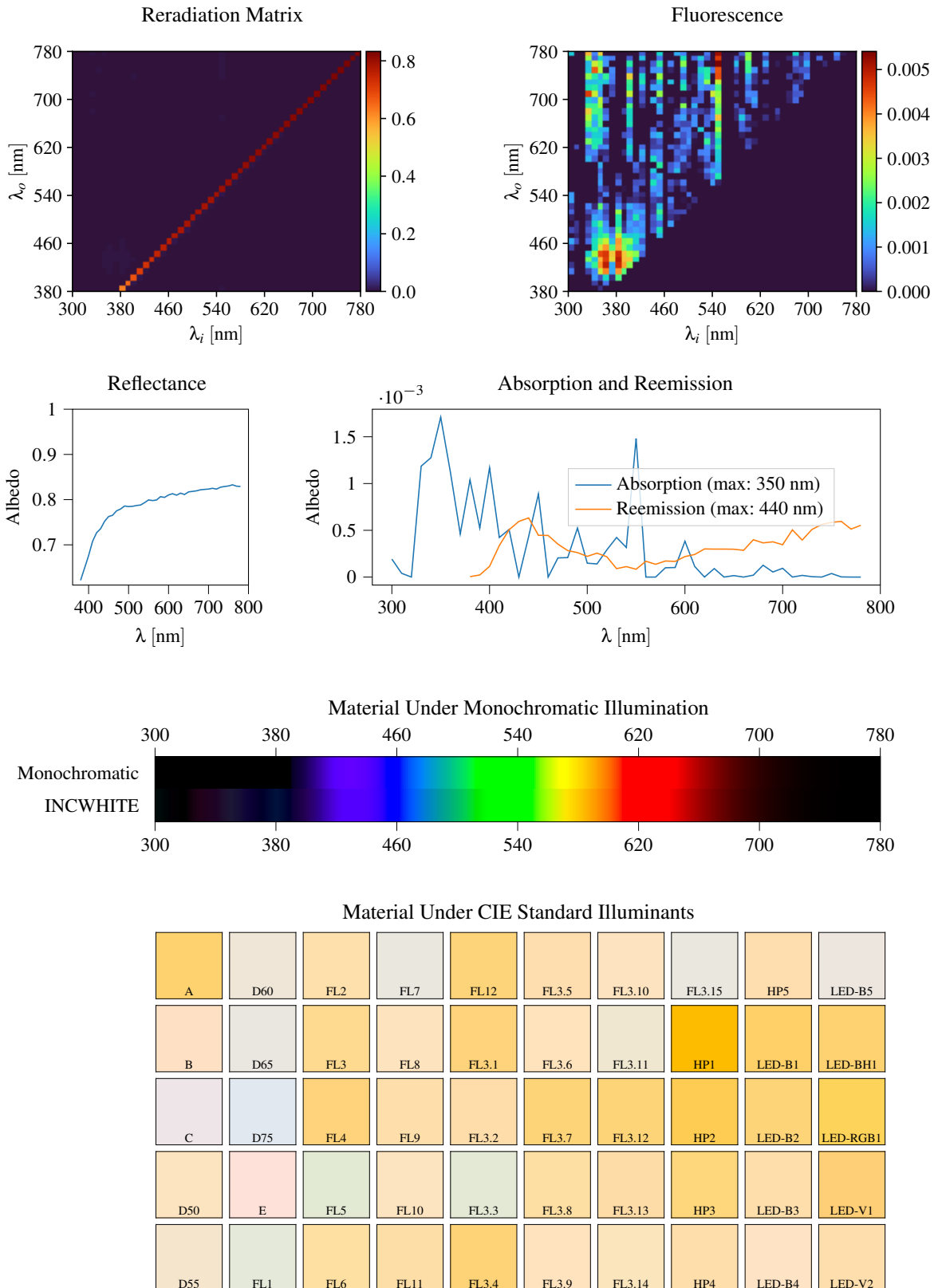
8 Gaussians max

Scaling factor: 108.5867127472382

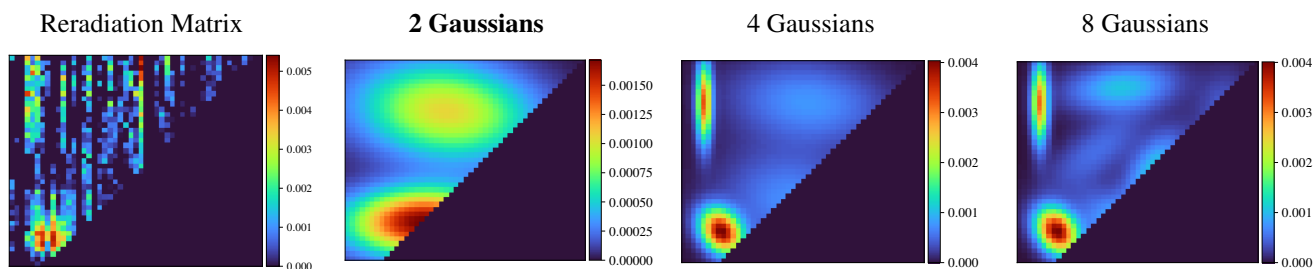
Gaussians:

Weight	Mean		Covariance			
0.089338682	345.819442569	526.371940505	1371.089152951	527.498332133	527.498332133	7500.314540641
0.154858839	545.631865401	528.246983971	3740.153500540	3940.862556317	3940.862556317	4994.321278954
0.136340925	578.729918254	431.874613888	10001.039732814	695.904716986	695.904716986	2013.430998899
0.247308096	460.294202968	587.849720974	824.806849151	-443.119753681	-443.119753681	9537.222630325
0.088867172	568.288957418	615.522872607	10162.935041799	-3485.953934796	-3485.953934796	4150.063680679
0.068725855	705.141022875	690.266128340	3252.105101864	739.431904691	739.431904691	2963.130156517
0.213524667	497.901036898	738.961193301	9139.031350729	-221.778320865	-221.778320865	1084.798084678

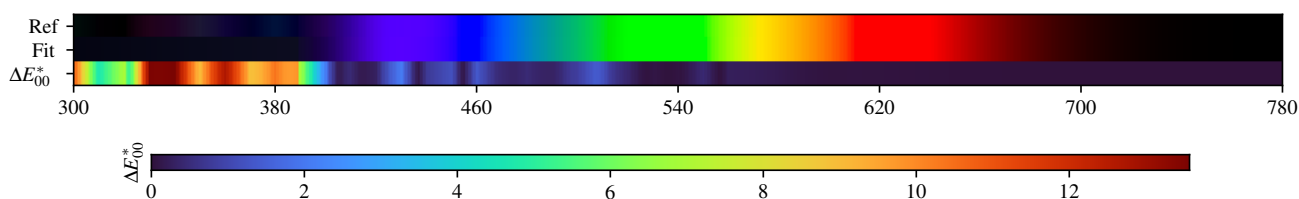
3.117. INCWHITE



INCWHITE - Weighted Expectation-Maximization - 2 Gaussians



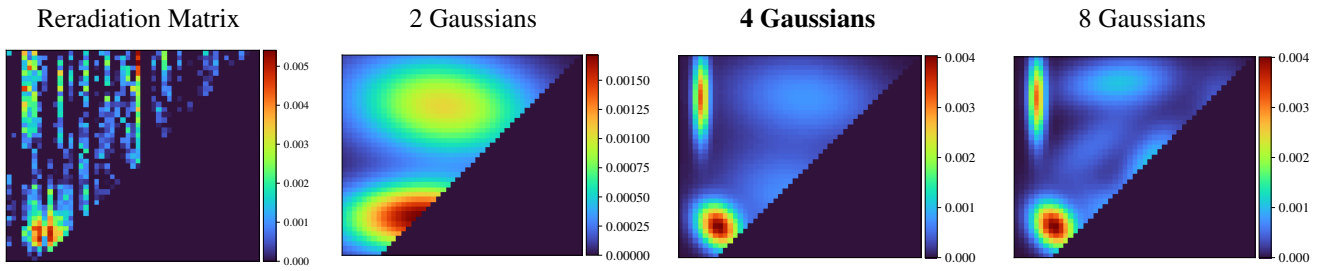
Fitted Material Under Monochromatic Illumination



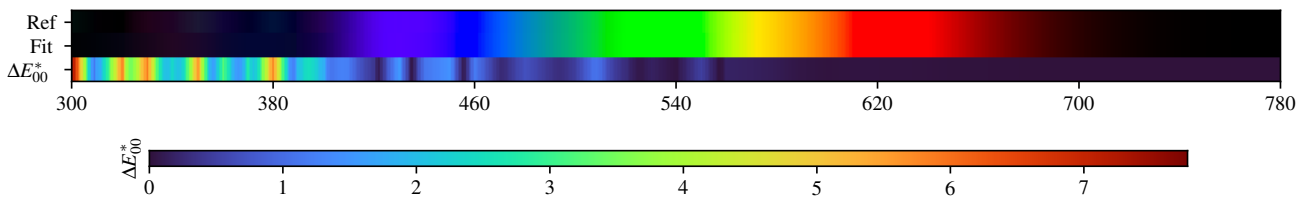
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.21$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.15$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.31$
B $\Delta E = 0.11$	D65 $\Delta E = 0.28$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.15$	D75 $\Delta E = 0.37$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.12$	E $\Delta E = 0.46$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.24$	LED-V2 $\Delta E = 0.13$

INCWHITE - Weighted Expectation-Maximization - 4 Gaussians



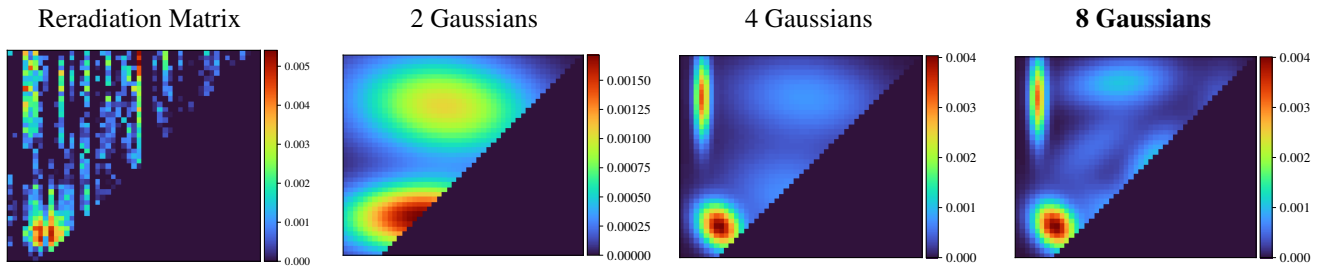
Fitted Material Under Monochromatic Illumination



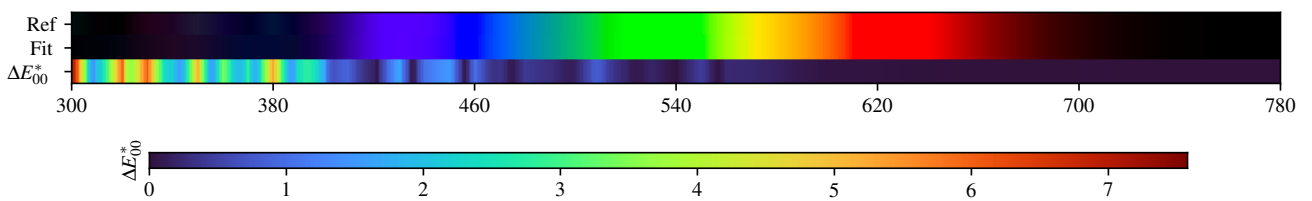
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.23$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.22$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.26$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.11$
B $\Delta E = 0.14$	D65 $\Delta E = 0.25$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.02$
C $\Delta E = 0.20$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.15$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.13$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.04$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.03$	LED-B4 $\Delta E = 0.05$	LED-V2 $\Delta E = 0.07$

INCWHITE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.04$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.08$	FL3.15 $\Delta E = 0.07$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.04$	D65 $\Delta E = 0.05$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.04$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.04$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.04$	E $\Delta E = 0.06$	FL5 $\Delta E = 0.04$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.07$	FL3.8 $\Delta E = 0.03$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.04$	LED-V1 $\Delta E = 0.04$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.04$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.06$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.04$

INCWHITE - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.621563	0.648844	0.676171	0.707914	0.726755	0.735594	0.752088	0.762524	0.765361	0.775266	0.779227
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.785866	0.784668	0.785220	0.787034	0.788079	0.793274	0.799338	0.797900	0.799205	0.806570	0.804914
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.810314	0.813105	0.809871	0.814325	0.811346	0.817048	0.818220	0.819465	0.821776	0.822664	0.823322
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825066	0.823324	0.827439	0.829065	0.830201	0.832788	0.829777	0.829104			

2 Gaussians

Scaling factor: 108.51603383213671

Gaussians:

Weight	Mean		Covariance			
0.478935998	453.063809776	453.656621530	10815.517158536	139.622352312	139.622352312	2120.264118860
0.521064002	499.266867493	679.574678312	15469.334337927	-1168.690863649	-1168.690863649	4844.166816992

4 Gaussians

Scaling factor: 93.26325730807154

Gaussians:

Weight	Mean		Covariance			
0.223672815	375.819873098	438.395399296	809.644918044	-225.172022511	-225.172022511	934.737371046
0.314838004	549.637510448	699.987750563	11149.248919840	-833.727170980	-833.727170980	3305.685811329
0.116137634	341.536480530	698.718643783	101.621301248	1.277133092	1.277133092	2823.951532400
0.345351548	522.267402447	497.426406484	9498.372933986	-1203.885458836	-1203.885458836	5107.524342403

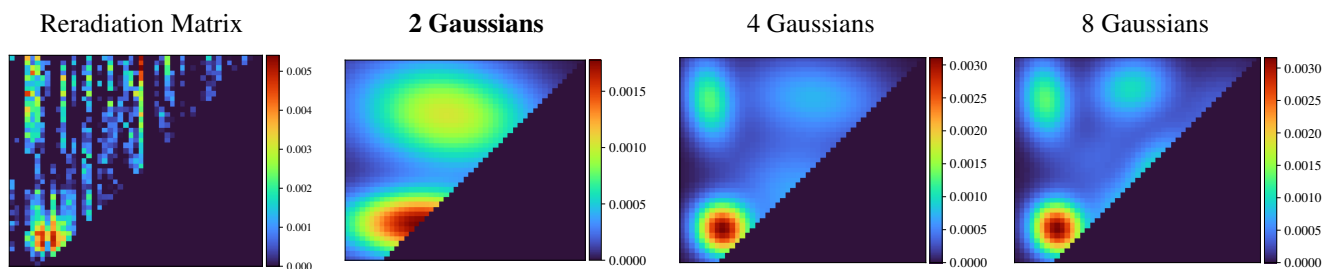
8 Gaussians

Scaling factor: 94.03108930248925

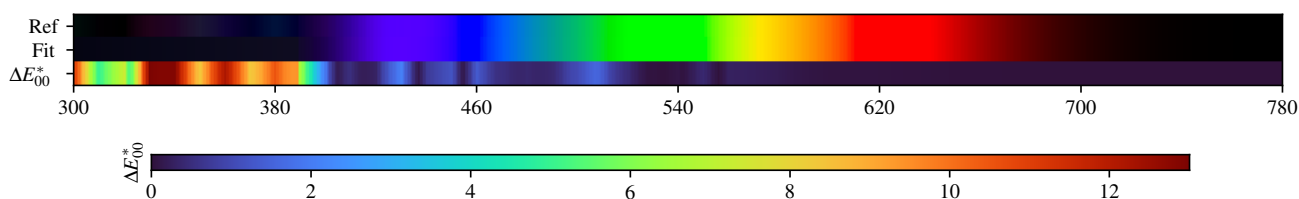
Gaussians:

Weight	Mean		Covariance			
0.147695433	501.686888940	452.079718522	3266.853813672	-1148.358070409	-1148.358070409	2084.148401863
0.062893663	708.615012161	679.510589555	1357.077093743	499.647980139	499.647980139	3772.365143905
0.097313979	457.997731861	604.268725540	4587.995304572	2516.540566738	2516.540566738	3041.545405961
0.034630517	711.909709633	440.365196574	1127.249347593	134.511171628	134.511171628	2300.544110709
0.176729944	505.182690058	732.162477296	5669.887974084	491.110758770	491.110758770	1146.386044425
0.120241378	571.412364333	565.965718919	1600.636011688	1083.446731414	1083.446731414	2467.786813261
0.123329841	341.547331574	698.994679411	121.878844761	-5.965249419	-5.965249419	2894.849641776
0.237165245	375.854497641	439.183514997	838.850602995	-240.736665828	-240.736665828	999.832576779

INCWHITE - Weighted variational Bayesian inference - 2 Gaussians



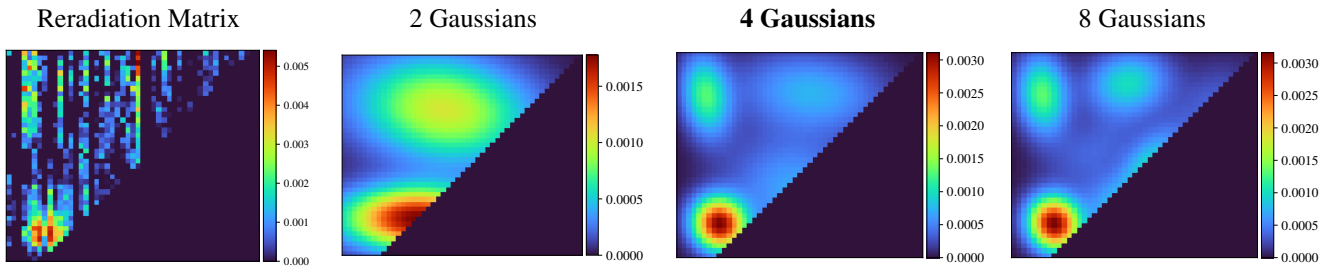
Fitted Material Under Monochromatic Illumination



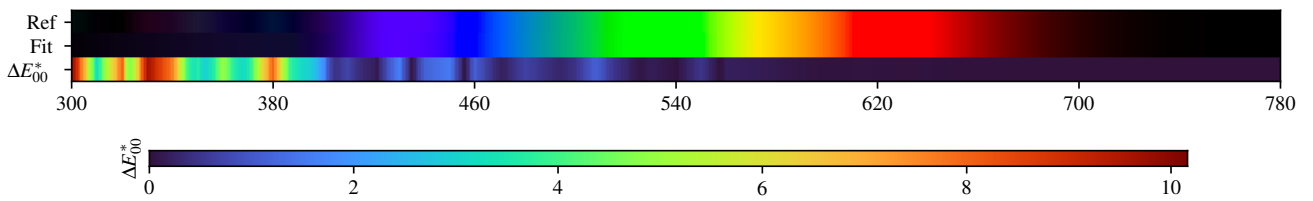
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.26$	FL2 $\Delta E = 0.17$	FL7 $\Delta E = 0.29$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.16$	FL3.15 $\Delta E = 0.27$	HP5 $\Delta E = 0.19$	LED-B5 $\Delta E = 0.43$
B $\Delta E = 0.18$	D65 $\Delta E = 0.31$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.20$	FL3.11 $\Delta E = 0.23$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.27$	D75 $\Delta E = 0.35$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.14$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.18$	E $\Delta E = 0.43$	FL5 $\Delta E = 0.25$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.28$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.21$	FL1 $\Delta E = 0.28$	FL6 $\Delta E = 0.17$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.18$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.32$	LED-V2 $\Delta E = 0.18$

INCWHITE - Weighted variational Bayesian inference - 4 Gaussians



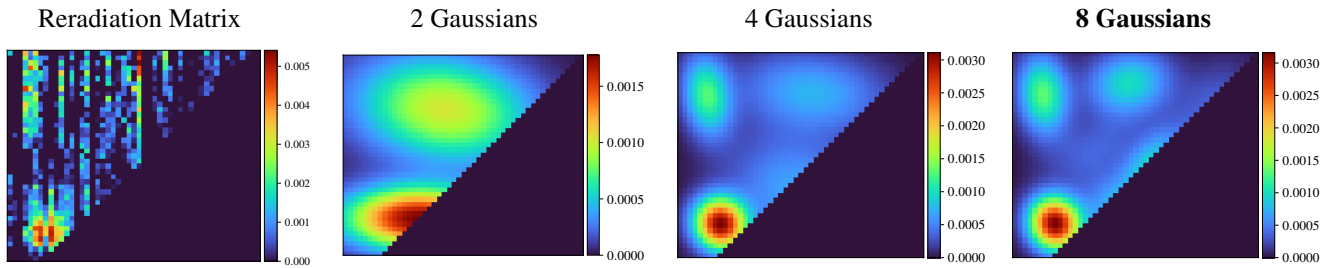
Fitted Material Under Monochromatic Illumination



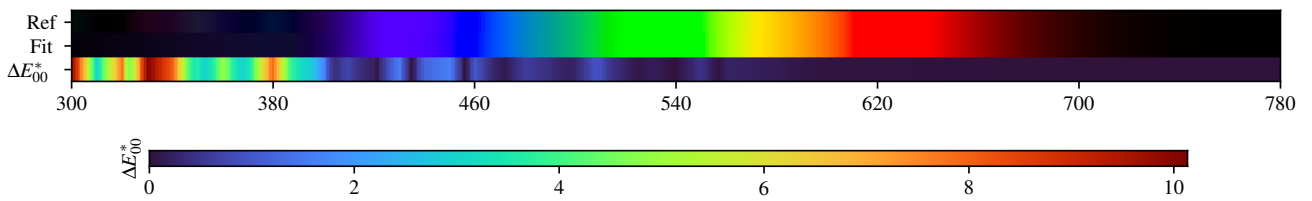
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.24$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.24$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.12$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.21$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.02$
C $\Delta E = 0.18$	D75 $\Delta E = 0.31$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.15$	E $\Delta E = 0.19$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.03$	LED-V1 $\Delta E = 0.05$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.07$	LED-B4 $\Delta E = 0.04$	LED-V2 $\Delta E = 0.06$

INCWHITE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.19$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.19$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.04$
B $\Delta E = 0.09$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.12$	D75 $\Delta E = 0.24$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.12$	E $\Delta E = 0.17$	FL5 $\Delta E = 0.08$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.05$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.02$	LED-V1 $\Delta E = 0.05$
D55 $\Delta E = 0.16$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.07$	LED-B4 $\Delta E = 0.02$	LED-V2 $\Delta E = 0.05$

INCWHITE - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.621563	0.648844	0.676171	0.707914	0.726755	0.735594	0.752088	0.762524	0.765361	0.775266	0.779227
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.785866	0.784668	0.785220	0.787034	0.788079	0.793274	0.799338	0.797900	0.799205	0.806570	0.804914
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.810314	0.813105	0.809871	0.814325	0.811346	0.817048	0.818220	0.819465	0.821776	0.822664	0.823322
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.825066	0.823324	0.827439	0.829065	0.830201	0.832788	0.829777	0.829104			

2 Gaussians max

Scaling factor: 108.78058086187416

Gaussians:

Weight	Mean		Covariance			
0.454991160	448.682870377	449.879854327	10395.012627001	-126.916199110	-126.916199110	1896.730019054
0.545008840	501.058539915	672.610624231	15323.107826948	-1418.140852084	-1418.140852084	5687.668469363

4 Gaussians max

Scaling factor: 93.90354195587405

Gaussians:

Weight	Mean		Covariance			
0.249968349	380.183792519	442.616126263	1243.875568439	-75.118204585	-75.118204585	1235.311856663
0.339044285	533.762339615	506.993846462	8942.809142202	-1136.669986821	-1136.669986821	6038.502124916
0.142861141	353.205168557	697.451471767	1040.113191682	-281.308068737	-281.308068737	3036.644789839
0.268126225	562.450816301	705.793060147	10117.288595950	-755.629269539	-755.629269539	3020.018527996

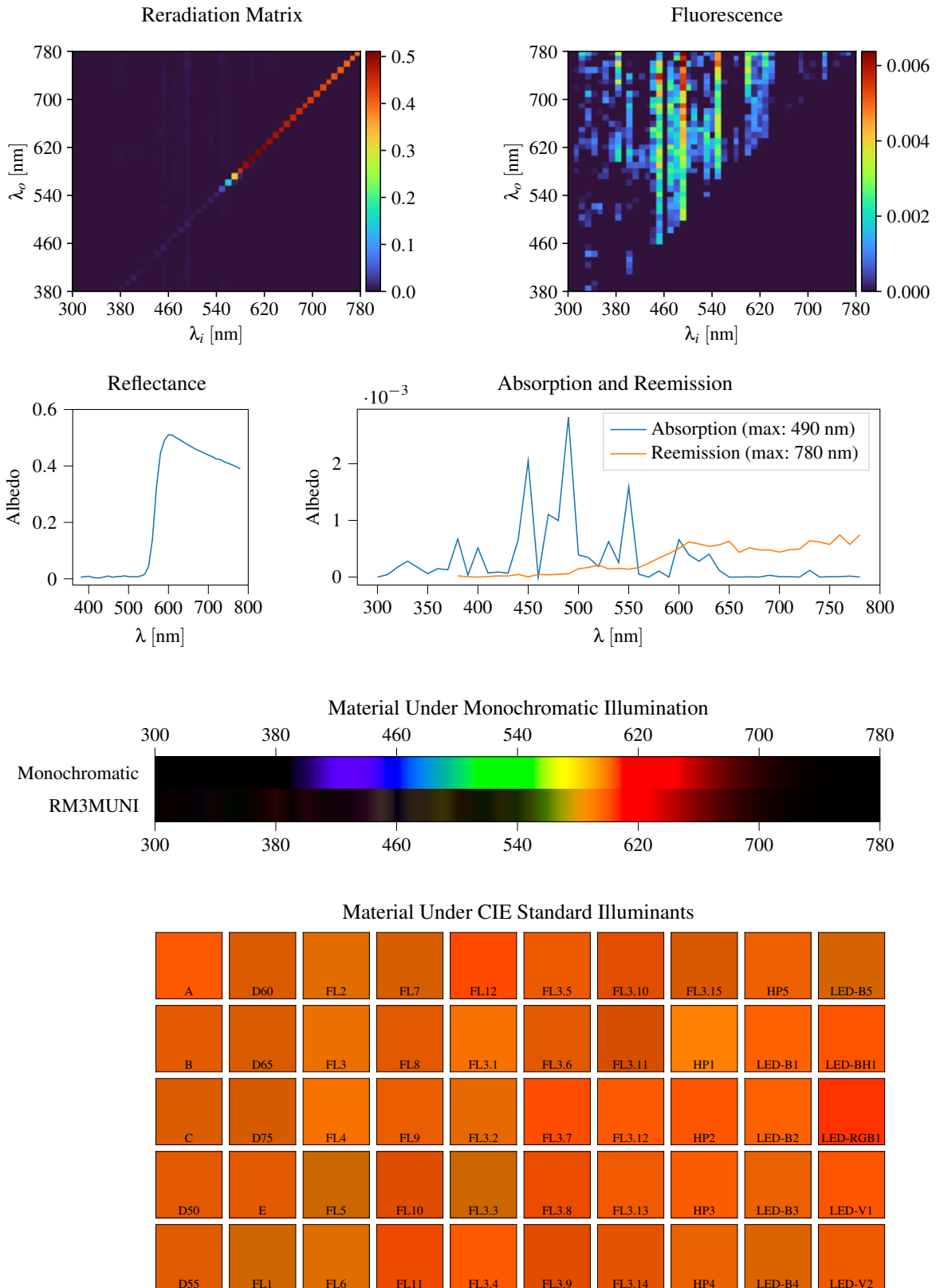
8 Gaussians max

Scaling factor: 95.58238449453627

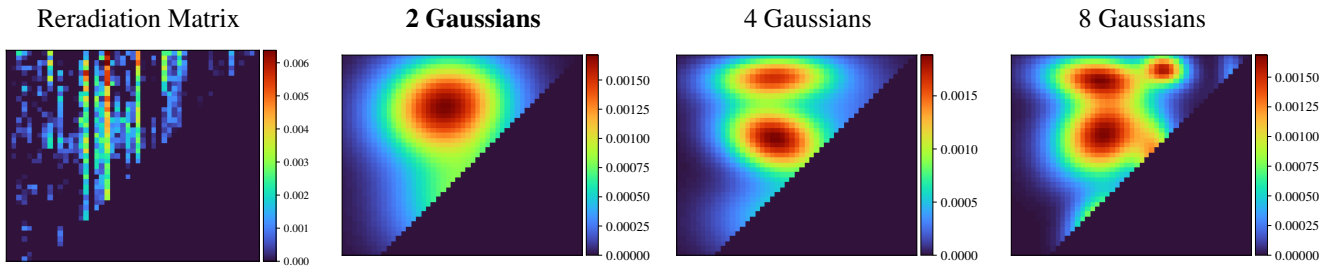
Gaussians:

Weight	Mean		Covariance			
0.256993684	379.676544322	443.500247905	1191.271703685	-85.583611441	-85.583611441	1294.885913432
0.133252586	510.704113973	455.043100214	2574.843121883	-809.833972140	-809.833972140	2645.788980231
0.043734759	689.518892728	451.536657779	3663.642279686	-789.859529026	-789.859529026	3493.735347518
0.095547633	567.700881649	561.459013331	1848.524899436	1140.141544451	1140.141544451	2210.966608933
0.073834586	460.680869069	593.356049524	5116.294473326	1637.869065841	1637.869065841	2570.927475990
0.073604463	693.844900696	676.761370377	2894.520930519	1112.706673822	1112.706673822	4111.967650184
0.158581147	355.857099858	699.787655515	1137.082735478	-183.739642060	-183.739642060	2924.989288074
0.164451143	525.699392237	723.178895755	3221.138057482	231.575085840	231.575085840	1971.571995274

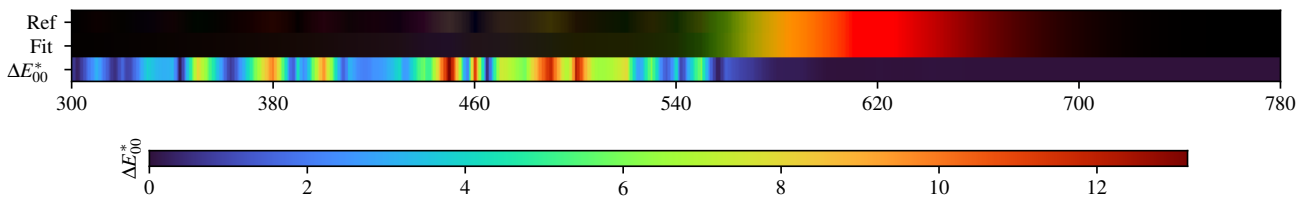
3.118. RM3MUNI



RM3MUNI - Weighted Expectation-Maximization - 2 Gaussians



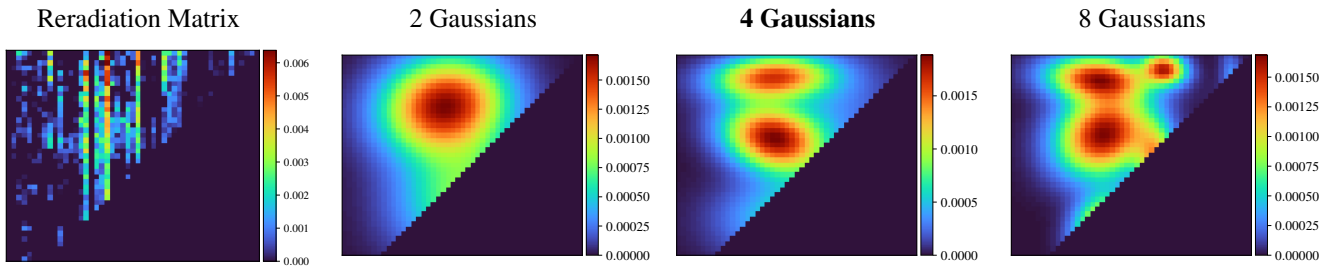
Fitted Material Under Monochromatic Illumination



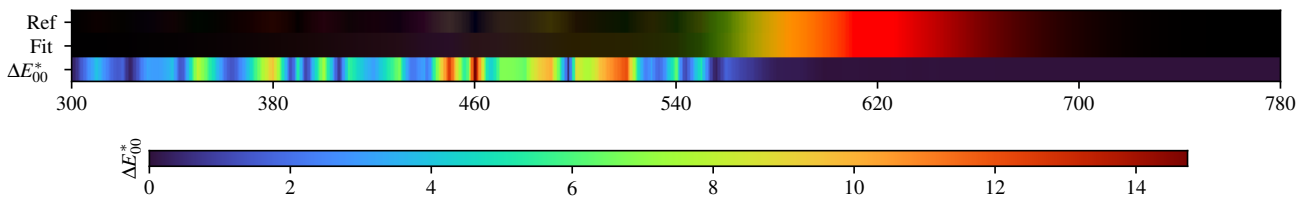
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 0.21$	$\Delta E = 0.06$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.05$	$\Delta E = 0.38$	$\Delta E = 0.23$	$\Delta E = 0.14$	$\Delta E = 0.21$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.25$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.35$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.01$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.20$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.36$	$\Delta E = 0.13$	$\Delta E = 0.33$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.15$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.25$	$\Delta E = 0.08$	$\Delta E = 0.28$	$\Delta E = 0.17$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.20$

RM3MUNI - Weighted Expectation-Maximization - 4 Gaussians



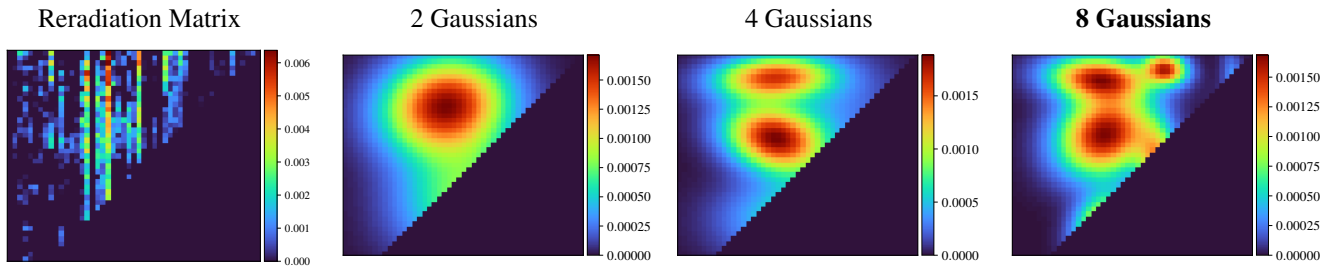
Fitted Material Under Monochromatic Illumination



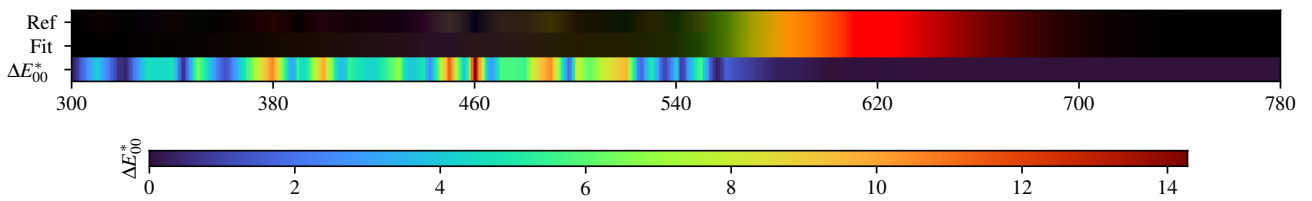
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.03$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.21$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.21$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.28$	$\Delta E = 0.33$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.03$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.37$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.17$	$\Delta E = 0.41$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.03$	$\Delta E = 0.09$	$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.20$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.28$	$\Delta E = 0.21$	$\Delta E = 0.24$

RM3MUNI - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.28$	$\Delta E = 0.10$	$\Delta E = 0.20$	$\Delta E = 0.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.24$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.21$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.10$	$\Delta E = 0.20$	$\Delta E = 0.16$	$\Delta E = 0.22$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.25$	$\Delta E = 0.10$	$\Delta E = 0.19$

RM3MUNI - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.005910	0.007483	0.009131	0.005034	0.003221	0.003563	0.007319	0.009733	0.005419	0.007848	0.008248
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.010578	0.007656	0.007462	0.007013	0.009997	0.015244	0.042598	0.141755	0.325700	0.445867	0.490688
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.510614	0.508597	0.499601	0.491495	0.482297	0.473866	0.466206	0.457861	0.452032	0.445187	0.438543
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.432770	0.424747	0.422734	0.414414	0.409472	0.403421	0.397604	0.389685			

2 Gaussians

Scaling factor: 95.42389323111718

Gaussians:

Weight	Mean		Covariance			
0.373158608	541.841447633	492.984009110	8556.458791317	569.426200369	569.426200369	6075.933117411
0.626841392	503.108146737	681.300637373	7323.064794289	544.583200878	544.583200878	4433.345417575

4 Gaussians

Scaling factor: 92.16540677145149

Gaussians:

Weight	Mean		Covariance			
0.259522572	538.336987772	454.410385872	9473.823360505	303.999354243	303.999354243	3103.124390085
0.350146961	491.265747346	613.458003739	4488.629187917	-729.505580386	-729.505580386	2052.703551858
0.134694178	598.519241693	664.879479994	7849.471830917	1107.718744243	1107.718744243	5067.214537463
0.255636289	489.832435248	738.326566439	6310.219609343	222.815728880	222.815728880	914.676630347

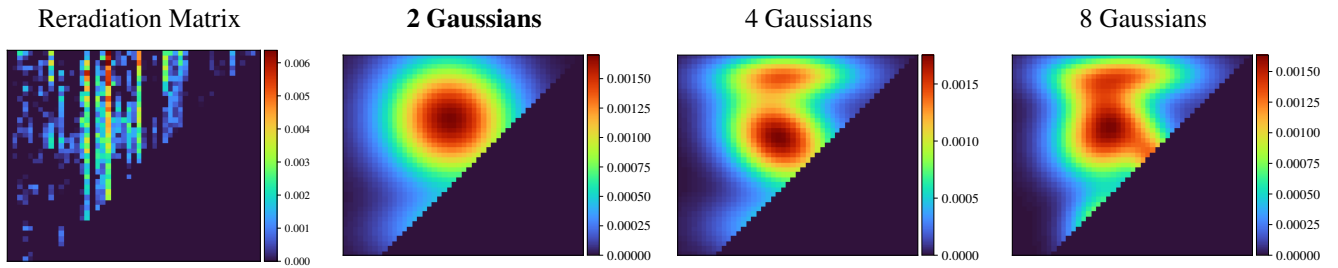
8 Gaussians

Scaling factor: 93.61147641397791

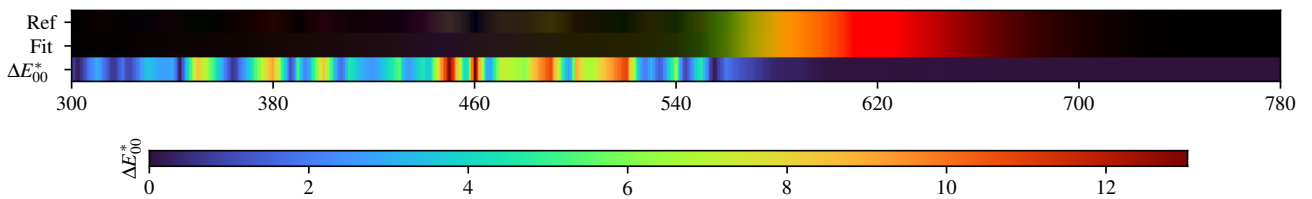
Gaussians:

Weight	Mean		Covariance			
0.055847584	619.718951124	412.380434691	5097.201354693	372.919040041	372.919040041	715.116482660
0.405174424	482.913098529	621.689543013	4104.088464690	584.870694610	584.870694610	3235.093825312
0.057885085	606.751205762	755.153616922	825.880905930	-57.405620432	-57.405620432	454.120494245
0.204607137	469.587036081	736.536655638	4741.638887615	-223.438929638	-223.438929638	911.589788153
0.026358084	732.115124025	549.811817688	566.597721557	-689.770816728	-689.770816728	7819.100994017
0.121784744	476.772639878	436.971457866	1384.352189555	340.058254187	340.058254187	1809.350673920
0.113124788	595.743295543	556.468523075	788.915190850	-349.605922200	-349.605922200	2865.337475948
0.015218154	744.580764237	725.048425355	235.860337118	-241.264194825	-241.264194825	1918.205190394

RM3MUNI - Weighted variational Bayesian inference - 2 Gaussians



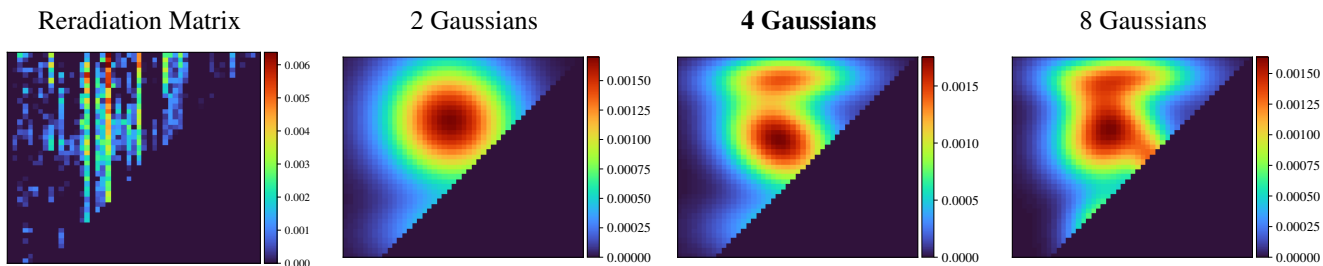
Fitted Material Under Monochromatic Illumination



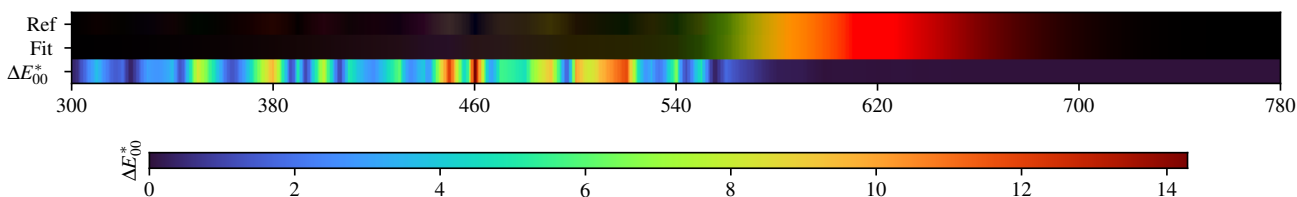
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.26$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.23$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.21$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.25$	$\Delta E = 0.27$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.28$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.35$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.20$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.27$	$\Delta E = 0.20$	$\Delta E = 0.22$

RM3MUNI - Weighted variational Bayesian inference - 4 Gaussians



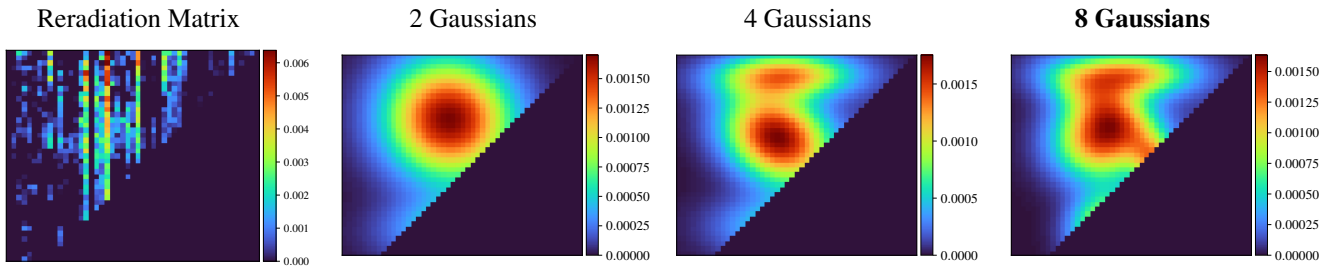
Fitted Material Under Monochromatic Illumination



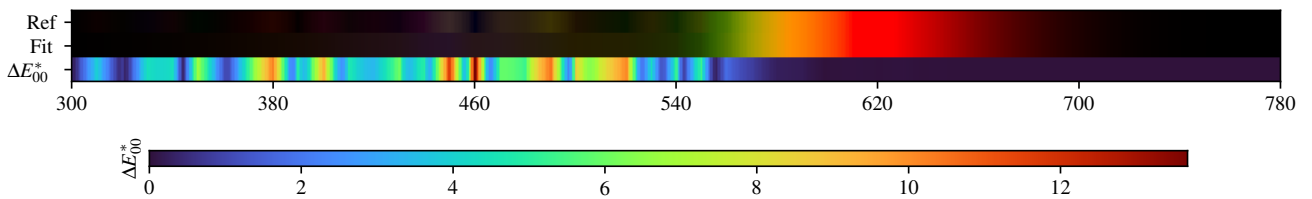
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.07$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.33$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.26$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.43$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.22$	$\Delta E = 0.26$	$\Delta E = 0.20$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.07$	$\Delta E = 0.20$	$\Delta E = 0.06$	$\Delta E = 0.14$	$\Delta E = 0.26$	$\Delta E = 0.30$	$\Delta E = 0.22$

RM3MUNI - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.24$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.25$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.26$	$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.18$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.27$	$\Delta E = 0.12$	$\Delta E = 0.22$

RM3MUNI - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.005910	0.007483	0.009131	0.005034	0.003221	0.003563	0.007319	0.009733	0.005419	0.007848	0.008248
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.010578	0.007656	0.007462	0.007013	0.009997	0.015244	0.042598	0.141755	0.325700	0.445867	0.490688
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.510614	0.508597	0.499601	0.491495	0.482297	0.473866	0.466206	0.457861	0.452032	0.445187	0.438543
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.432770	0.424747	0.422734	0.414414	0.409472	0.403421	0.397604	0.389685			

2 Gaussians max

Scaling factor: 95.05094217268737

Gaussians:

Weight	Mean		Covariance			
0.191162378	542.085630384	433.070626821	9592.538391682	449.162606368	449.162606368	1893.661691912
0.808837622	511.862115313	652.968428540	7615.692632380	-266.246025617	-266.246025617	6798.950595380

4 Gaussians max

Scaling factor: 92.00439735232902

Gaussians:

Weight	Mean		Covariance			
0.192009264	530.885450469	432.307437251	9119.353592664	-99.910113066	-99.910113066	1813.292787690
0.036755177	692.155134739	592.339024354	4906.104960457	354.940820862	354.940820862	7561.181174217
0.523276457	500.917400131	614.944845257	5177.540424098	-1044.739035688	-1044.739035688	3887.374790806
0.247959102	516.980190837	742.222091888	8857.051041321	85.682559373	85.682559373	971.759233456

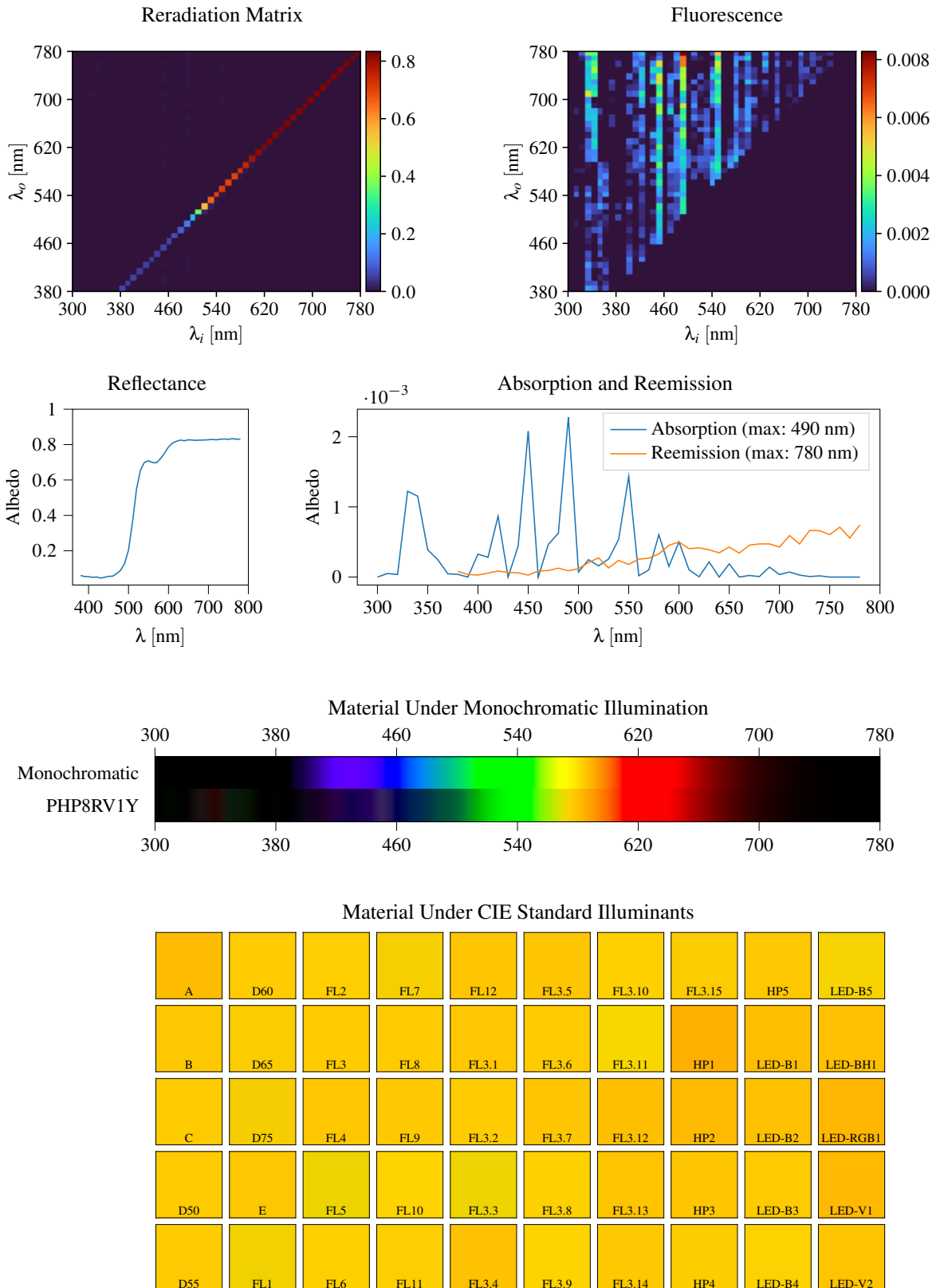
8 Gaussians max

Scaling factor: 93.37705294267761

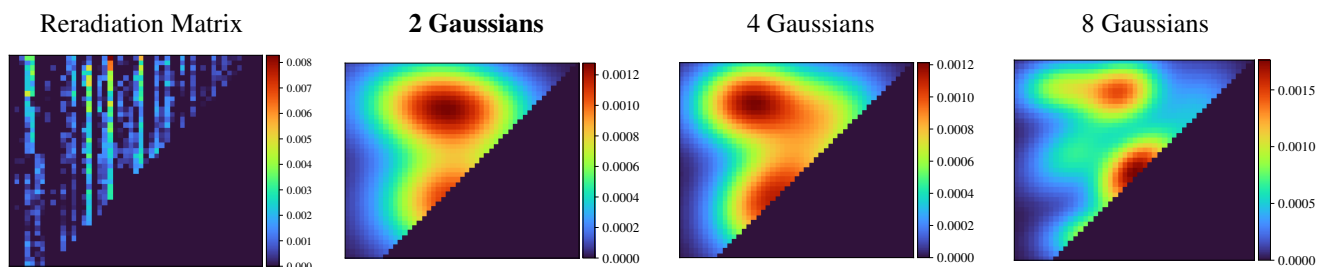
Gaussians:

Weight	Mean		Covariance			
0.125308379	478.621229427	436.349825987	1948.266244586	276.659553268	276.659553268	2181.167522450
0.086966039	631.016849060	444.570162967	5564.909461740	-305.663535697	-305.663535697	2635.618157534
0.359182577	480.950869635	617.127176472	4278.721033633	301.371027043	301.371027043	3249.438560702
0.074341059	588.053236176	565.008463323	1005.254651767	-294.921578664	-294.921578664	1446.487731560
0.026698480	696.743449575	622.615269217	4722.487250413	342.778051647	342.778051647	4246.237446424
0.226283930	526.938815532	743.112584355	8539.884911910	145.192204629	145.192204629	972.972591719
0.100002028	476.524487841	686.247986187	5153.460448300	-2329.451586483	-2329.451586483	2773.337599509

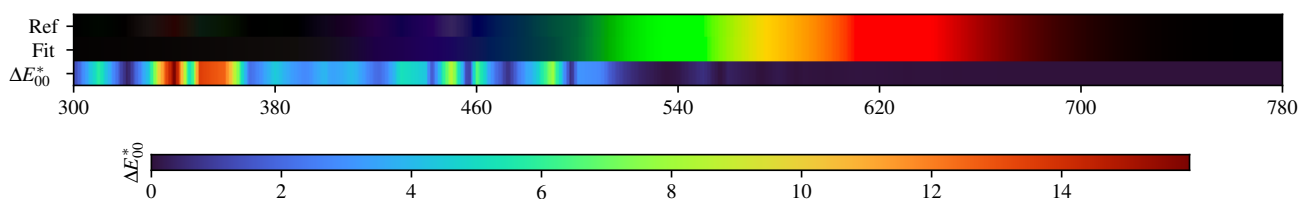
3.119. PHP8RV1Y



PHP8RV1Y - Weighted Expectation-Maximization - 2 Gaussians



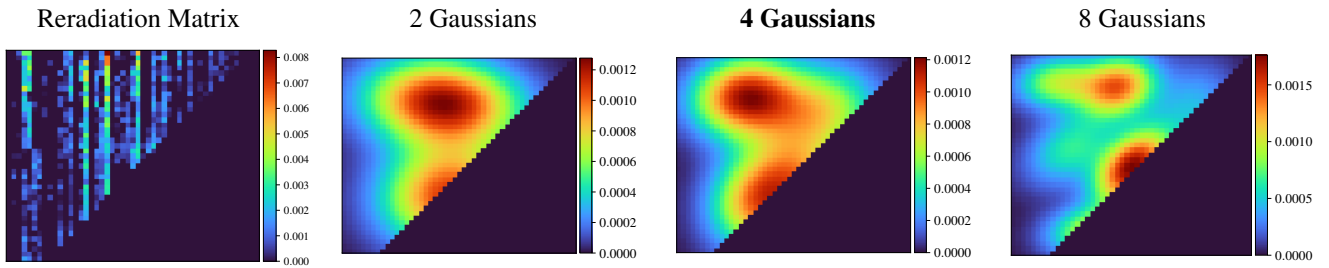
Fitted Material Under Monochromatic Illumination



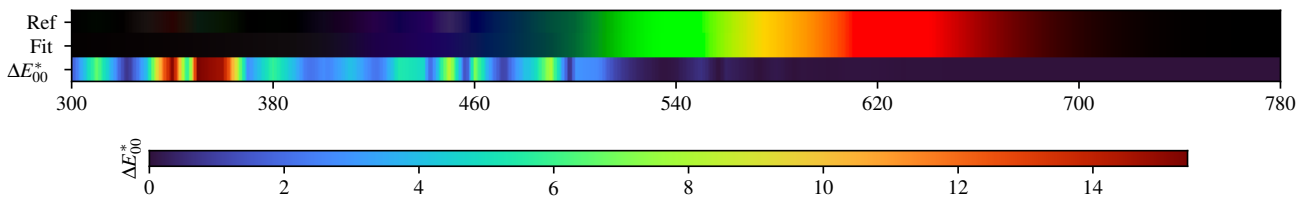
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.08$	$\Delta E = 0.13$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.05$	$\Delta E = 0.12$	$\Delta E = 0.02$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.02$	$\Delta E = 0.02$	$\Delta E = 0.03$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.03$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.02$	$\Delta E = 0.02$	$\Delta E = 0.03$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.06$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.03$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.11$

PHP8RV1Y - Weighted Expectation-Maximization - 4 Gaussians



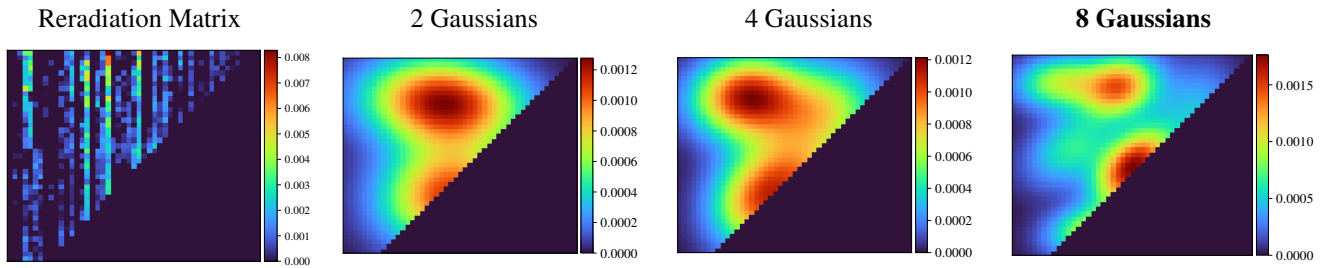
Fitted Material Under Monochromatic Illumination



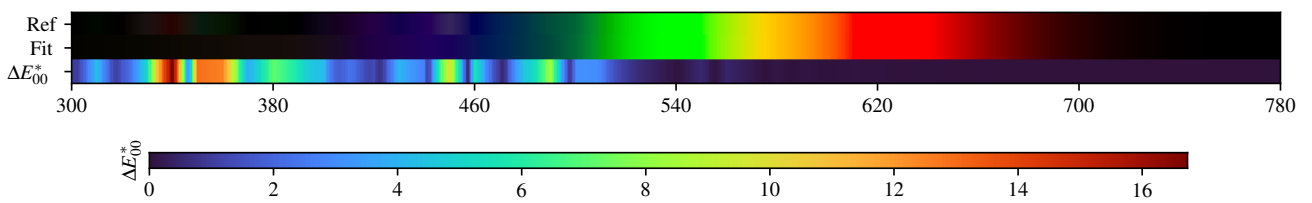
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.05$	$\Delta E = 0.20$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.11$	$\Delta E = 0.17$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.22$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.03$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.04$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.04$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.03$	$\Delta E = 0.04$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.04$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.14$

PHP8RV1Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.13$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.22$	$\Delta E = 0.08$	$\Delta E = 0.20$	$\Delta E = 0.05$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.06$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.23$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.18$

PHP8RV1Y - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.060917	0.054323	0.054122	0.049897	0.052130	0.045688	0.050122	0.055645	0.056023	0.070533	0.089385
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.126366	0.203754	0.362906	0.548108	0.656320	0.700494	0.708574	0.698881	0.697231	0.720605	0.750789
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.786827	0.809111	0.818960	0.825559	0.821817	0.827071	0.825656	0.824256	0.825535	0.826033	0.827327
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.829124	0.827151	0.830424	0.831738	0.829838	0.833682	0.830362	0.831111			

2 Gaussians

Scaling factor: 102.38794745756032

Gaussians:

Weight	Mean		Covariance			
0.476463194	518.705466418	495.485067943	9382.356837537	255.054103173	255.054103173	5335.953959594
0.523536806	505.110829894	690.647525210	11963.491612804	-642.522470222	-642.522470222	3946.786600953

4 Gaussians

Scaling factor: 100.5217306374106

Gaussians:

Weight	Mean		Covariance			
0.292744026	471.496773279	484.658077205	4908.761653871	526.859880931	526.859880931	4776.387162085
0.241144645	597.162621419	666.370941078	6536.253781378	628.172794329	628.172794329	4873.649506117
0.301460655	437.817792543	702.544982446	5730.439539843	306.770921168	306.770921168	3344.791135586
0.164650674	592.605550688	505.904919758	6567.498554907	-2809.193715916	-2809.193715916	5761.578352493

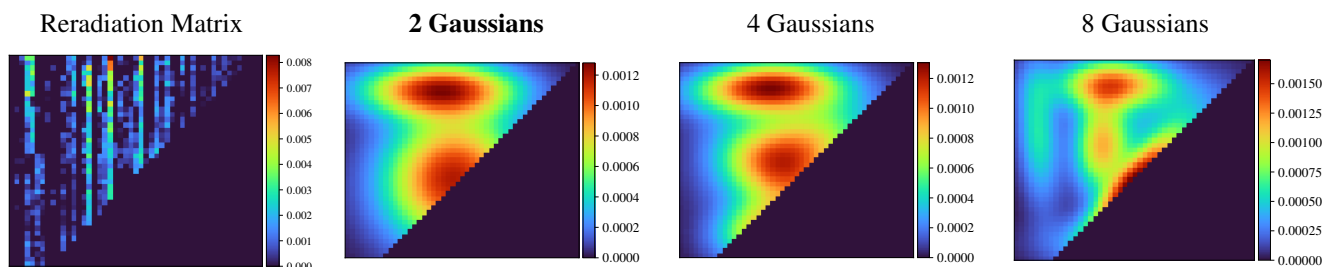
8 Gaussians

Scaling factor: 100.59203144771502

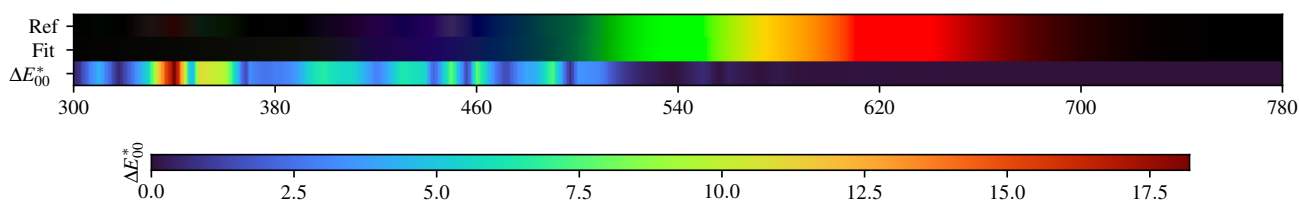
Gaussians:

Weight	Mean		Covariance			
0.124464745	456.881859554	424.260963213	3814.989618538	302.628535683	302.628535683	1208.813241612
0.184700717	514.112781982	718.932337900	2751.947684781	392.885078162	392.885078162	1898.863318992
0.050028551	685.543837492	450.589087307	1864.513441457	-236.887523806	-236.887523806	2303.839356700
0.126069180	390.464997562	728.361932530	3615.549330834	213.942270194	213.942270194	1391.419681859
0.097678614	668.974187718	676.087422537	3277.899415423	431.975778867	431.975778867	4195.035130004
0.258142944	540.700577100	554.465115217	2663.622248688	1200.469905573	1200.469905573	2684.656764063
0.033386591	574.811512521	420.136288543	2015.631616007	-422.703775933	-422.703775933	999.465235343
0.125528658	415.280597776	593.515291056	3977.792006008	1131.517178204	1131.517178204	2791.704280155

PHP8RV1Y - Weighted variational Bayesian inference - 2 Gaussians



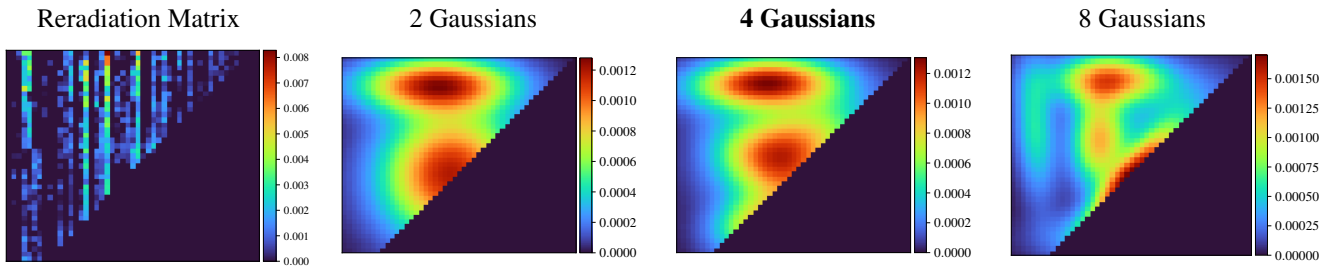
Fitted Material Under Monochromatic Illumination



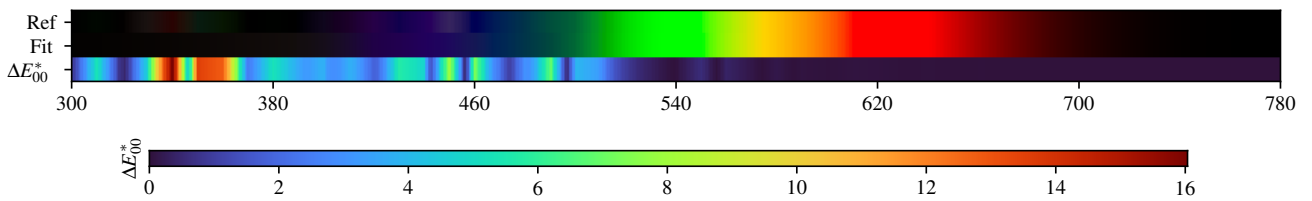
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.30$	$\Delta E = 0.16$	$\Delta E = 0.28$	$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.21$	$\Delta E = 0.30$	$\Delta E = 0.18$	$\Delta E = 0.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.24$	$\Delta E = 0.32$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.05$	$\Delta E = 0.19$	$\Delta E = 0.23$	$\Delta E = 0.04$	$\Delta E = 0.09$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.32$	$\Delta E = 0.36$	$\Delta E = 0.07$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.24$	$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.27$	$\Delta E = 0.25$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.22$

PHP8RV1Y - Weighted variational Bayesian inference - 4 Gaussians



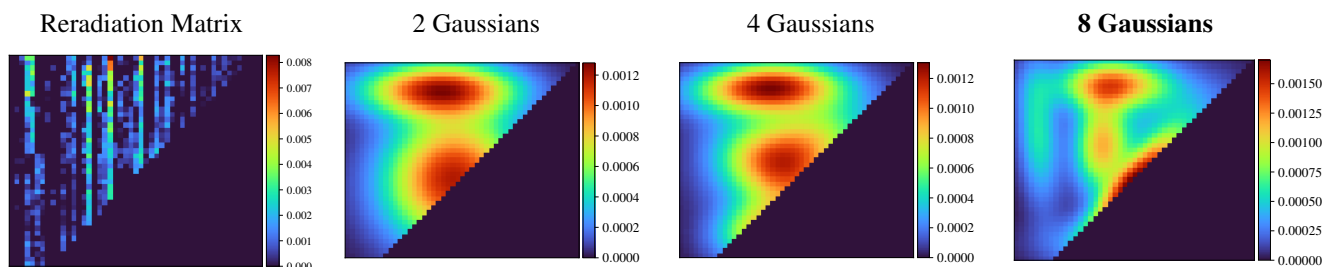
Fitted Material Under Monochromatic Illumination



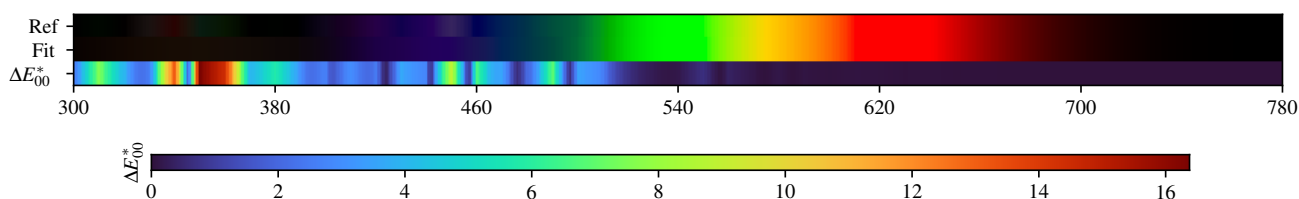
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.06$	$\Delta E = 0.13$	$\Delta E = 0.03$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.04$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.13$

PHP8RV1Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.04$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.14$	$\Delta E = 0.05$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.03$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.10$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.14$

PHP8RV1Y - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.060917	0.054323	0.054122	0.049897	0.052130	0.045688	0.050122	0.055645	0.056023	0.070533	0.089385
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.126366	0.203754	0.362906	0.548108	0.656320	0.700494	0.708574	0.698881	0.697231	0.720605	0.750789
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.786827	0.809111	0.818960	0.825559	0.821817	0.827071	0.825656	0.824256	0.825535	0.826033	0.827327
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.829124	0.827151	0.830424	0.831738	0.829838	0.833682	0.830362	0.831111			

2 Gaussians max

Scaling factor: 100.51973769659939

Gaussians:

Weight	Mean		Covariance			
0.697848449	520.481356854	541.055337434	9877.128239920	373.415661738	373.415661738	8990.519771388
0.302151551	491.361151505	727.825435675	12238.319905005	37.448213008	37.448213008	1539.685970287

4 Gaussians max

Scaling factor: 99.94658616486241

Gaussians:

Weight	Mean		Covariance			
0.158459652	473.692651756	434.429077324	4670.053103922	526.059649017	526.059649017	1988.574097601
0.219572687	537.306860625	529.947894336	11802.437662735	-6025.556909829	-6025.556909829	6831.758631374
0.331285350	540.062629706	602.697629428	10768.098850415	2563.861629615	2563.861629615	4306.063275854
0.290682311	480.783152376	731.741026128	10149.074634045	294.695014227	294.695014227	1355.539226290

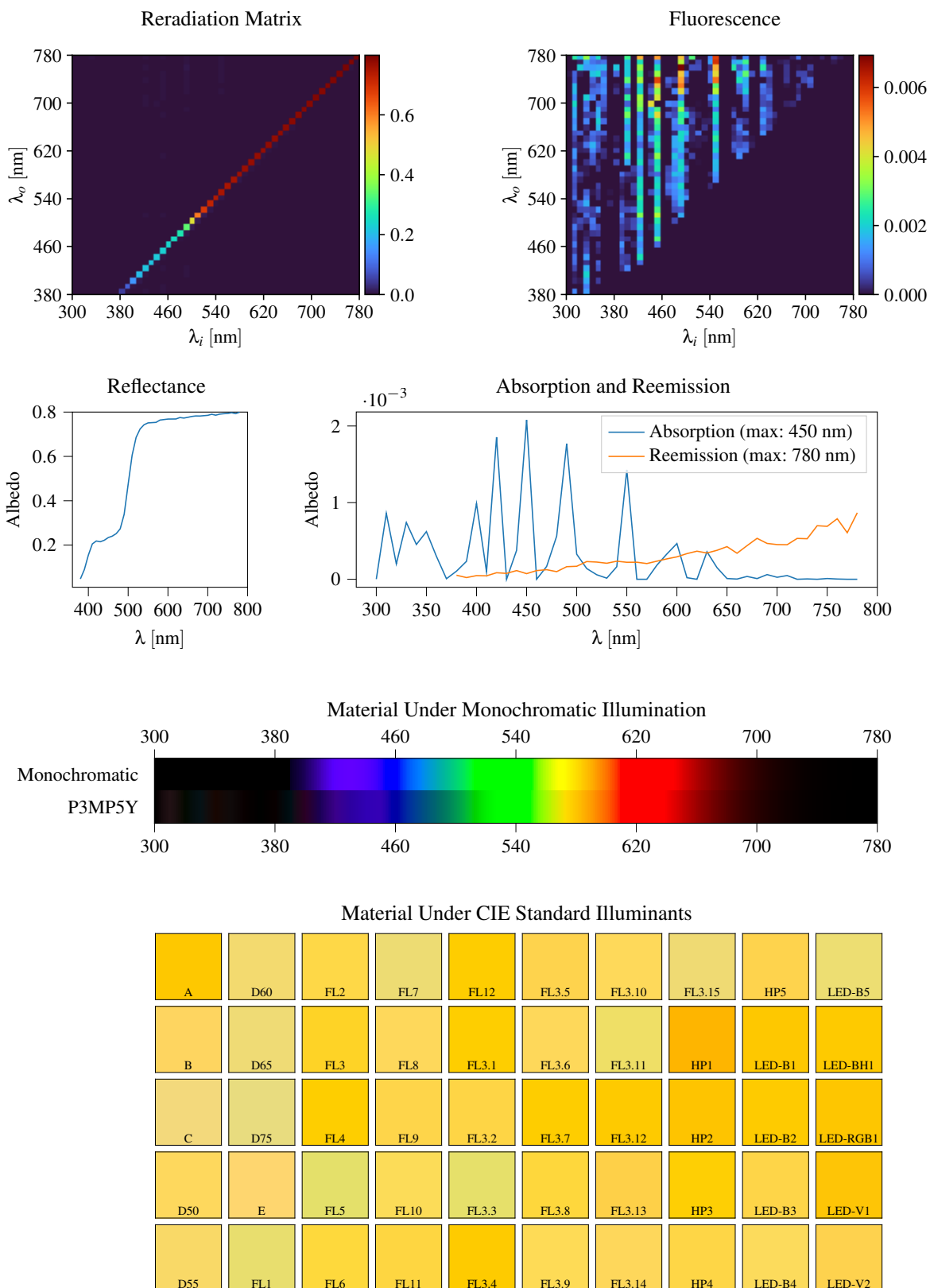
8 Gaussians max

Scaling factor: 102.58440541274528

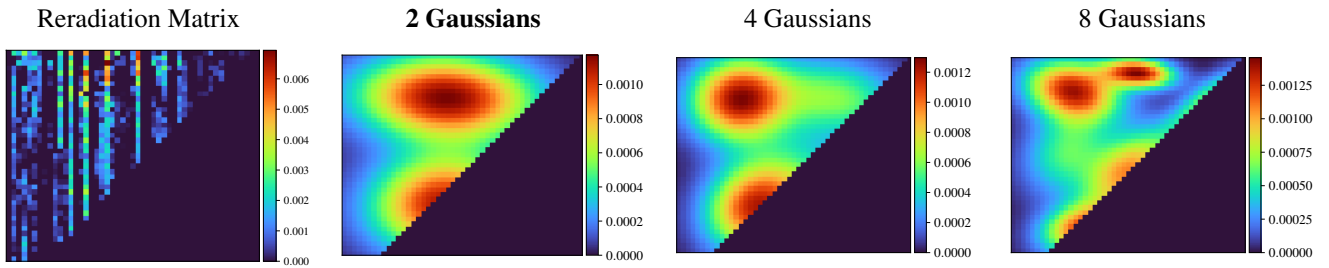
Gaussians:

Weight	Mean		Covariance			
0.144093258	530.031533261	419.571186264	11259.578480838	530.587078113	530.587078113	1225.683412395
0.189029584	535.928068861	527.430274558	3005.380322090	2815.158012829	2815.158012829	3937.700086319
0.104931183	343.985188258	634.326742176	876.957057918	-595.768313404	-595.768313404	9816.757296602
0.049129447	640.013431721	533.061671777	5236.753195058	-2315.725458544	-2315.725458544	5573.417393424
0.172312176	472.208025072	610.578747571	1469.802860590	89.636814974	89.636814974	4604.469259528
0.123229737	625.922766125	648.232594812	6601.504542123	2372.481378566	2372.481378566	4597.168167279
0.216198222	497.912749360	734.854054011	6302.965150441	18.988781538	18.988781538	1233.697490764

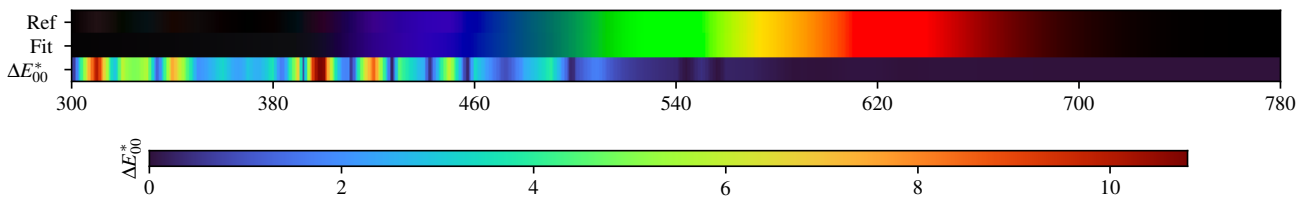
3.120. P3MP5Y



P3MP5Y - Weighted Expectation-Maximization - 2 Gaussians



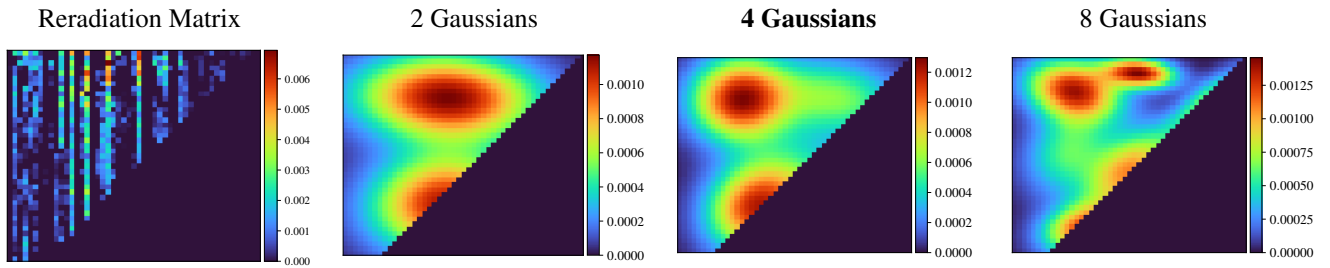
Fitted Material Under Monochromatic Illumination



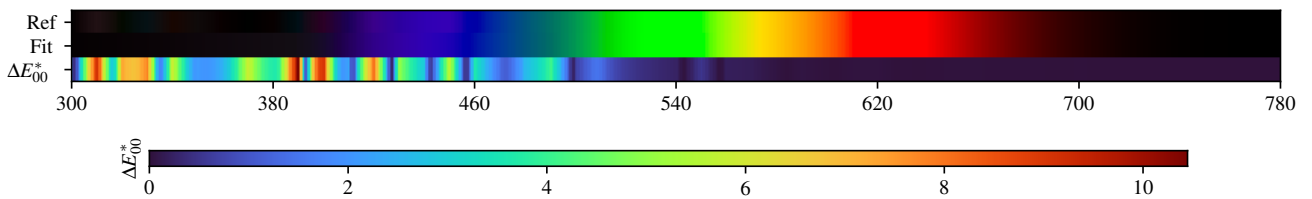
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.03$	$\Delta E = 0.03$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.06$	$\Delta E = 0.12$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.04$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.04$	$\Delta E = 0.05$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.04$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.02$	$\Delta E = 0.05$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.02$	$\Delta E = 0.04$

P3MP5Y - Weighted Expectation-Maximization - 4 Gaussians



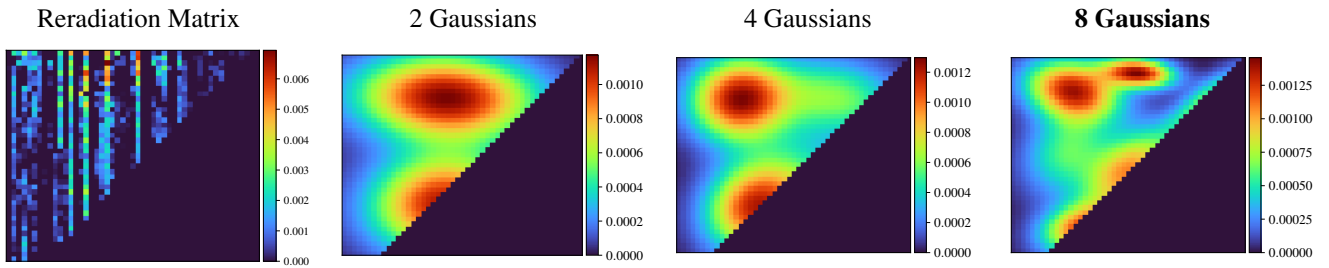
Fitted Material Under Monochromatic Illumination



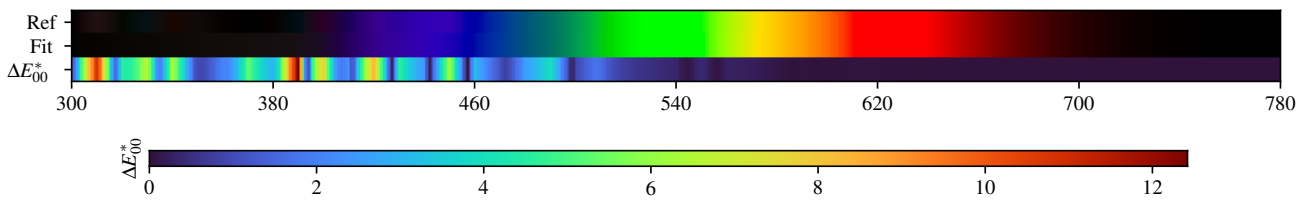
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.17$	FL2 $\Delta E = 0.09$	FL7 $\Delta E = 0.18$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.13$
B $\Delta E = 0.12$	D65 $\Delta E = 0.19$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.19$	D75 $\Delta E = 0.22$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.13$	E $\Delta E = 0.17$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.18$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.08$

P3MP5Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.10$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.04$	LED-B5 $\Delta E = 0.05$
B $\Delta E = 0.08$	D65 $\Delta E = 0.10$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.11$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.10$	D75 $\Delta E = 0.11$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.09$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.09$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.06$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.05$
D55 $\Delta E = 0.09$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.04$	LED-V2 $\Delta E = 0.05$

P3MP5Y - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.047388	0.089719	0.154625	0.205203	0.218431	0.215038	0.221768	0.233819	0.240298	0.251666	0.273158
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.339078	0.474280	0.605456	0.685797	0.723782	0.742939	0.751140	0.752326	0.753441	0.763942	0.766237
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.768456	0.768659	0.768825	0.775310	0.772961	0.776324	0.780292	0.782498	0.782117	0.783732	0.785237
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.790108	0.785944	0.790689	0.792591	0.793733	0.796981	0.792806	0.799171			

2 Gaussians

Scaling factor: 102.97670323447979

Gaussians:

Weight	Mean		Covariance			
0.534864479	506.570079109	696.766359699	15603.375525735	-480.400032548	-480.400032548	3626.292894020
0.465135521	499.981472432	481.309776873	10277.867700038	396.981683890	396.981683890	4711.055101587

4 Gaussians

Scaling factor: 100.28602817353985

Gaussians:

Weight	Mean		Covariance			
0.176123690	585.880722275	513.015762206	8399.595863100	-2107.058398892	-2107.058398892	5888.801908057
0.302522347	456.939518780	468.879258973	4805.877431505	502.275466402	502.275466402	3983.932683819
0.198711764	627.422796786	700.940859127	8860.633044401	-816.383294988	-816.383294988	3348.046319786
0.322642200	425.881374160	697.565206297	4948.584250467	108.644479999	108.644479999	3577.861187365

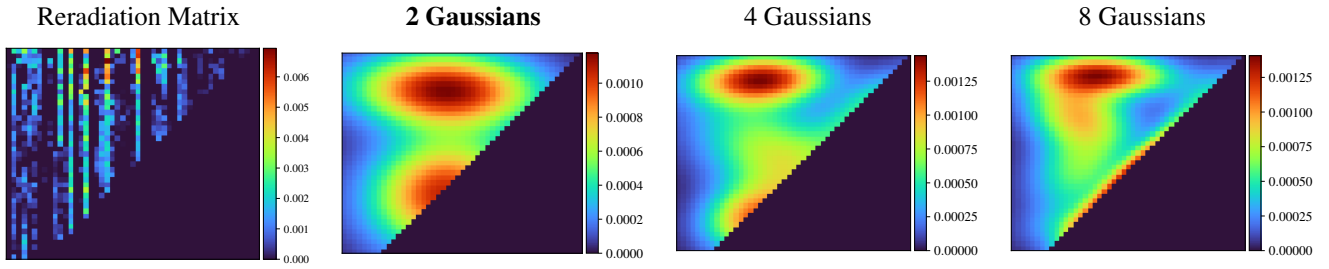
8 Gaussians

Scaling factor: 100.62268313589514

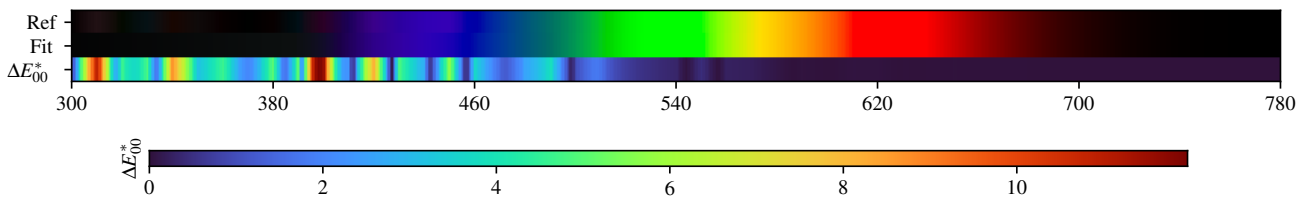
Gaussians:

Weight	Mean		Covariance			
0.045512904	603.236013931	421.431270341	2412.259630507	640.379528600	640.379528600	1207.892423192
0.146236501	412.192112278	586.790811440	3972.194869112	781.331520167	781.331520167	4045.626514544
0.092444503	561.297502169	752.260808875	2571.524465209	-194.845235261	-194.845235261	463.994945443
0.076546692	702.678879427	689.700697159	3243.416108822	2103.798685380	2103.798685380	2394.930651591
0.238086755	423.287044597	716.097413431	4574.551974721	-586.517349328	-586.517349328	1902.084036333
0.157898232	447.584266940	425.298756147	3723.286049678	502.172817319	502.172817319	1299.663139228
0.210772050	540.862992134	545.346104192	3867.647965566	1616.252419324	1616.252419324	3452.003635193
0.032502364	758.274453269	511.698888487	650.906514758	107.590102917	107.590102917	8804.201182365

P3MP5Y - Weighted variational Bayesian inference - 2 Gaussians



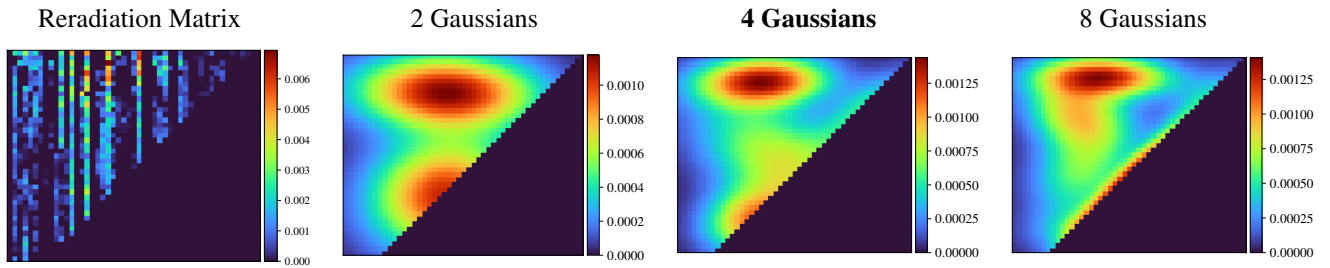
Fitted Material Under Monochromatic Illumination



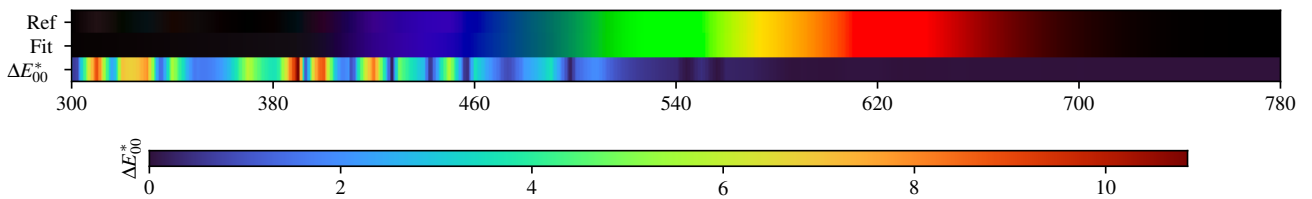
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.18$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.07$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.13$	D65 $\Delta E = 0.20$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.20$	D75 $\Delta E = 0.24$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.14$	E $\Delta E = 0.19$	FL5 $\Delta E = 0.13$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.16$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.06$	LED-V2 $\Delta E = 0.07$

P3MP5Y - Weighted variational Bayesian inference - 4 Gaussians



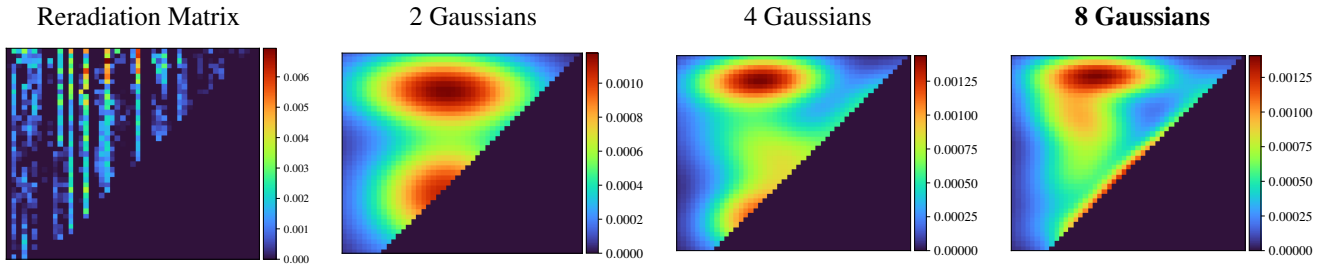
Fitted Material Under Monochromatic Illumination



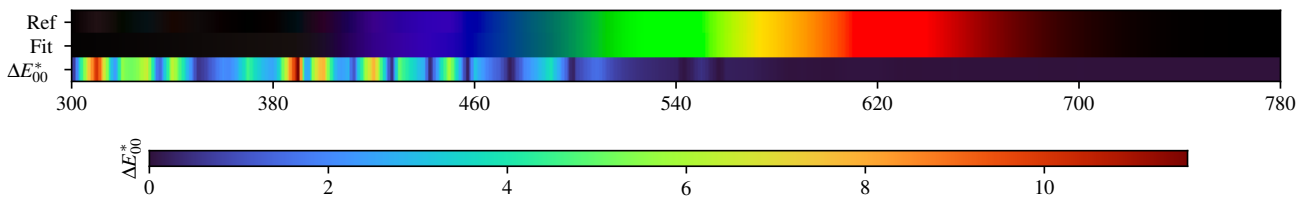
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.06$	D60 $\Delta E = 0.09$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.13$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.04$
B $\Delta E = 0.07$	D65 $\Delta E = 0.10$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.08$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.09$	D75 $\Delta E = 0.11$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.08$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.08$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.06$	FL3.8 $\Delta E = 0.04$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.04$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.08$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.06$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.04$	LED-V2 $\Delta E = 0.06$

P3MP5Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.05$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.08$	HP5 $\Delta E = 0.04$	LED-B5 $\Delta E = 0.02$
B $\Delta E = 0.04$	D65 $\Delta E = 0.05$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.07$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.04$	D75 $\Delta E = 0.05$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.05$	E $\Delta E = 0.08$	FL5 $\Delta E = 0.05$	FL10 $\Delta E = 0.09$	FL3.3 $\Delta E = 0.04$	FL3.8 $\Delta E = 0.04$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.02$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.05$	FL6 $\Delta E = 0.04$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.05$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.03$	LED-V2 $\Delta E = 0.04$

P3MP5Y - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.047388	0.089719	0.154625	0.205203	0.218431	0.215038	0.221768	0.233819	0.240298	0.251666	0.273158
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.339078	0.474280	0.605456	0.685797	0.723782	0.742939	0.751140	0.752326	0.753441	0.763942	0.766237
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.768456	0.768659	0.768825	0.775310	0.772961	0.776324	0.780292	0.782498	0.782117	0.783732	0.785237
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.790108	0.785944	0.790689	0.792591	0.793733	0.796981	0.792806	0.799171			

2 Gaussians max

Scaling factor: 101.86928806445191

Gaussians:

Weight	Mean		Covariance			
0.530627423	502.202598680	497.605596882	10680.972167241	548.477314438	548.477314438	6193.043406457
0.469372577	505.131108703	708.566512201	15892.155168135	-355.431173460	-355.431173460	2760.851705026

4 Gaussians max

Scaling factor: 103.84681975286398

Gaussians:

Weight	Mean		Covariance			
0.212281342	457.637355840	439.328950225	5046.789986452	330.116581257	330.116581257	2260.465461781
0.426539618	504.638450979	570.361077810	12734.405690781	-4357.757316009	-4357.757316009	7646.288403400
0.093900253	687.804798393	671.826807305	5005.644639481	2917.654373508	2917.654373508	3438.418784129
0.267278787	473.921649375	735.499029613	8583.255030305	259.189149542	259.189149542	1302.437813233

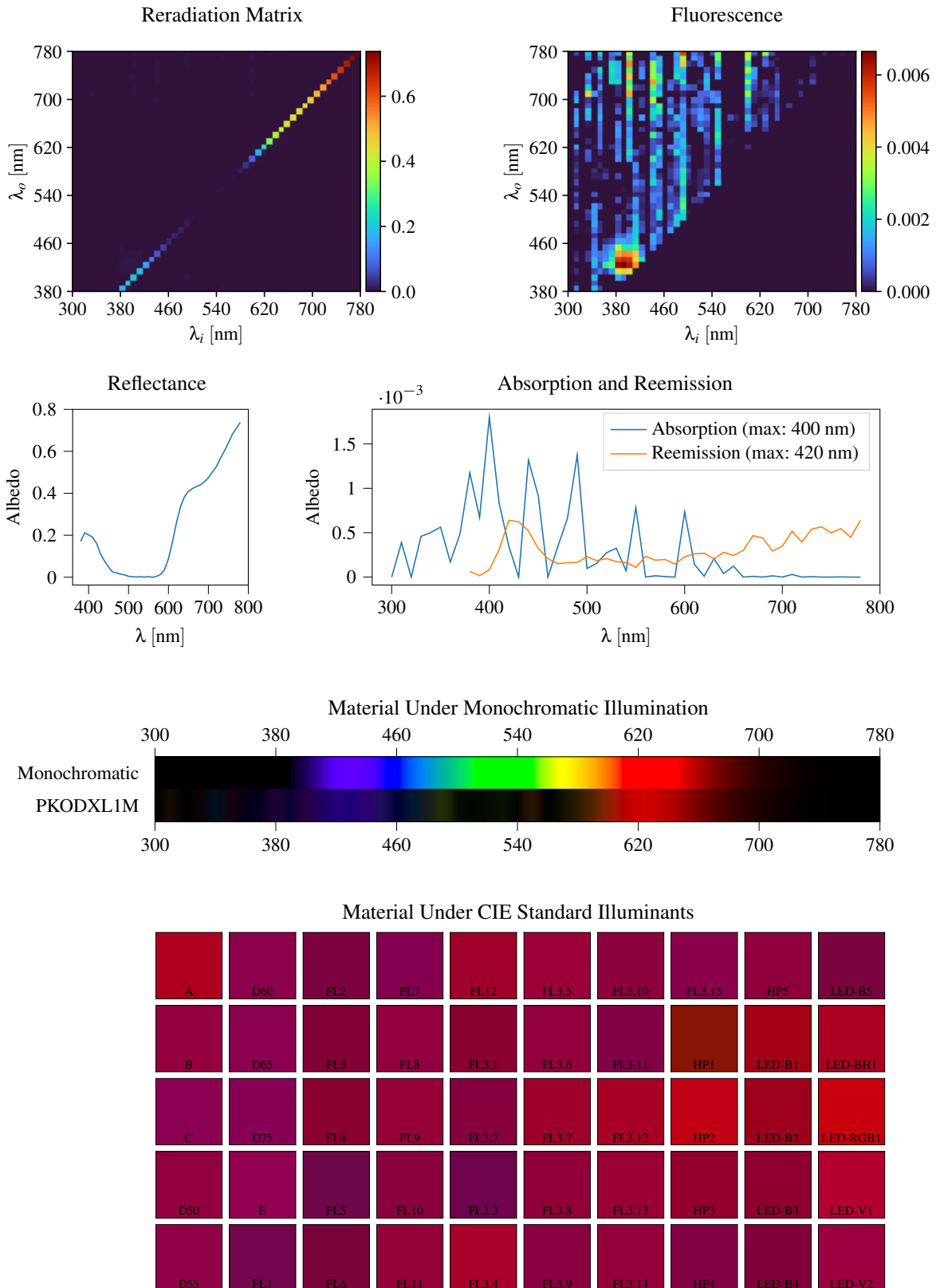
8 Gaussians max

Scaling factor: 104.48929687009415

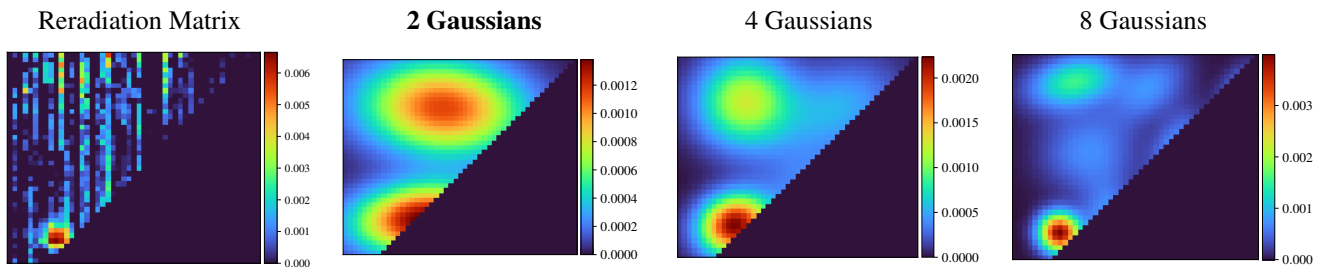
Gaussians:

Weight	Mean		Covariance			
0.146508795	492.811800383	420.804880090	8360.621241806	368.776020146	368.776020146	1370.193418733
0.047996287	667.674357101	489.751359034	7913.954060903	-2476.093499186	-2476.093499186	4791.961808160
0.162216922	538.374572161	523.868477072	5763.607261144	5673.435335037	5673.435335037	6305.605438318
0.162232934	437.635298624	544.887405450	5089.628978052	861.255421809	861.255421809	4098.929528674
0.011121808	687.316897515	585.662701003	9246.031502780	-4.619032042	-4.619032042	3268.934463537
0.066916052	704.848909070	687.041740627	4603.741379837	1850.128476838	1850.128476838	2862.774244845
0.183636288	430.617990534	665.653714060	5451.001563063	-840.520279973	-840.520279973	2562.101600161
0.219370914	488.111350013	745.064509434	9229.783327125	-218.529012473	-218.529012473	928.121527198

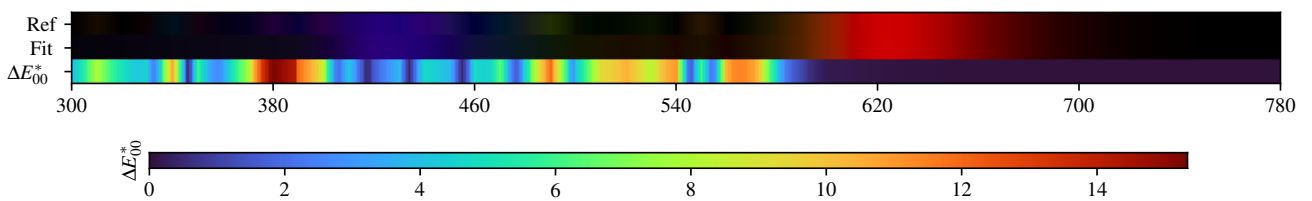
3.121. PKODXL1M



PKODXLIM - Weighted Expectation-Maximization - 2 Gaussians



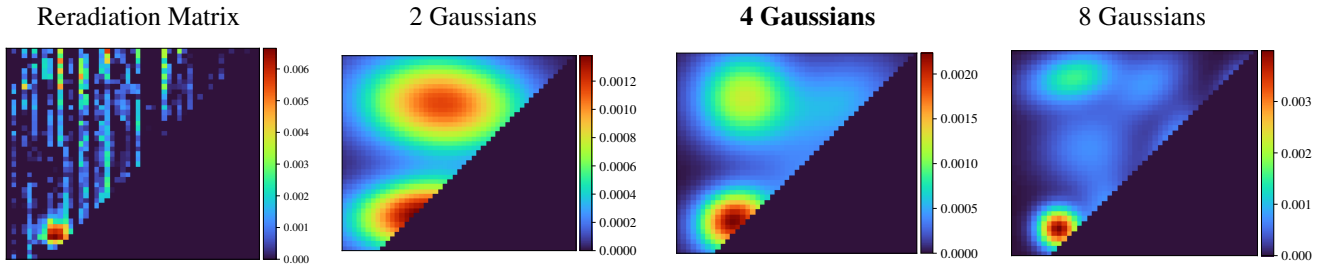
Fitted Material Under Monochromatic Illumination



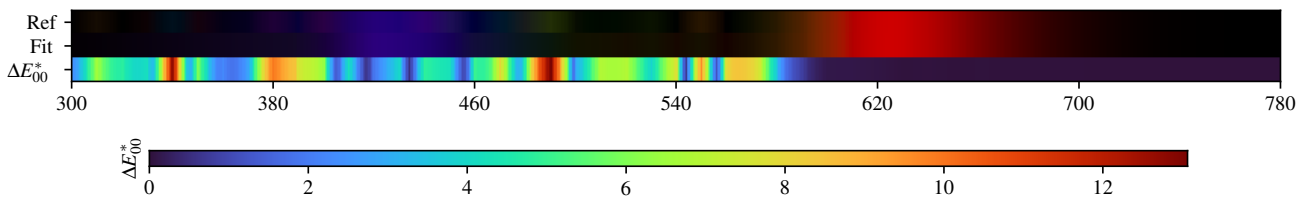
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.36$	$\Delta E = 0.66$	$\Delta E = 0.41$	$\Delta E = 0.43$	$\Delta E = 0.39$	$\Delta E = 0.26$	$\Delta E = 0.83$	$\Delta E = 0.60$	$\Delta E = 0.39$	$\Delta E = 0.50$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.44$	$\Delta E = 0.71$	$\Delta E = 0.37$	$\Delta E = 0.31$	$\Delta E = 0.41$	$\Delta E = 0.30$	$\Delta E = 0.64$	$\Delta E = 0.47$	$\Delta E = 0.27$	$\Delta E = 0.24$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.49$	$\Delta E = 0.77$	$\Delta E = 0.34$	$\Delta E = 0.27$	$\Delta E = 0.40$	$\Delta E = 0.29$	$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.29$	$\Delta E = 0.20$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.54$	$\Delta E = 1.16$	$\Delta E = 0.53$	$\Delta E = 0.68$	$\Delta E = 0.51$	$\Delta E = 0.45$	$\Delta E = 0.28$	$\Delta E = 0.55$	$\Delta E = 0.42$	$\Delta E = 0.57$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.61$	$\Delta E = 0.51$	$\Delta E = 0.43$	$\Delta E = 0.58$	$\Delta E = 0.31$	$\Delta E = 0.56$	$\Delta E = 0.36$	$\Delta E = 0.66$	$\Delta E = 0.41$	$\Delta E = 0.54$

PKODXLIM - Weighted Expectation-Maximization - 4 Gaussians



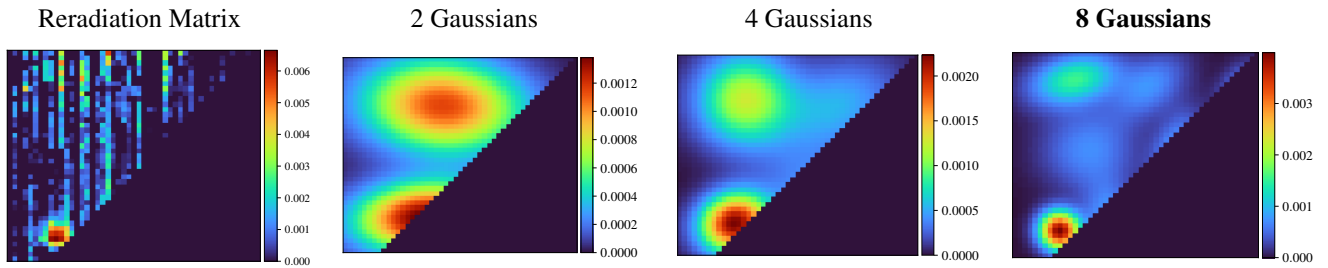
Fitted Material Under Monochromatic Illumination



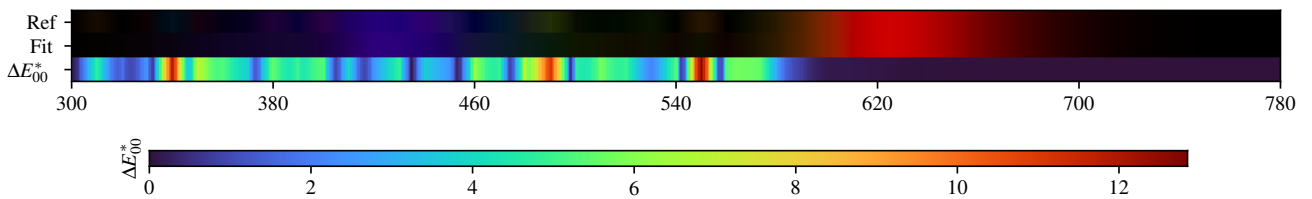
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.38$	$\Delta E = 0.40$	$\Delta E = 0.56$	$\Delta E = 0.55$	$\Delta E = 0.32$	$\Delta E = 1.09$	$\Delta E = 0.49$	$\Delta E = 0.35$	$\Delta E = 0.73$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.39$	$\Delta E = 0.40$	$\Delta E = 0.28$	$\Delta E = 0.49$	$\Delta E = 0.21$	$\Delta E = 0.41$	$\Delta E = 0.90$	$\Delta E = 0.28$	$\Delta E = 0.33$	$\Delta E = 0.35$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.50$	$\Delta E = 0.42$	$\Delta E = 0.21$	$\Delta E = 0.39$	$\Delta E = 0.25$	$\Delta E = 0.38$	$\Delta E = 0.20$	$\Delta E = 0.15$	$\Delta E = 0.38$	$\Delta E = 0.23$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.65$	$\Delta E = 0.96$	$\Delta E = 0.51$	$\Delta E = 0.65$	$\Delta E = 0.39$	$\Delta E = 0.20$	$\Delta E = 0.63$	$\Delta E = 0.19$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.37$	$\Delta E = 0.66$	$\Delta E = 0.38$	$\Delta E = 0.82$	$\Delta E = 0.14$	$\Delta E = 0.80$	$\Delta E = 0.58$	$\Delta E = 0.25$	$\Delta E = 0.61$	$\Delta E = 0.39$

PKODXLIM - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.41$	$\Delta E = 0.12$	$\Delta E = 0.65$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.49$	$\Delta E = 0.34$	$\Delta E = 0.11$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.30$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.30$	$\Delta E = 0.22$	$\Delta E = 0.58$	$\Delta E = 0.21$	$\Delta E = 0.41$	$\Delta E = 0.15$	$\Delta E = 0.30$	$\Delta E = 0.14$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.16$	$\Delta E = 0.22$	$\Delta E = 0.17$	$\Delta E = 0.53$	$\Delta E = 0.14$	$\Delta E = 0.46$	$\Delta E = 0.22$	$\Delta E = 0.36$	$\Delta E = 0.13$	$\Delta E = 0.24$

PKODXL1M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.170874	0.211379	0.201991	0.189627	0.161288	0.110524	0.076657	0.048258	0.025052	0.020329	0.014581
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.011177	0.004121	0.002196	0.000932	0.002592	0.000420	0.003058	0.000000	0.004284	0.013181	0.035081
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.088128	0.168072	0.259532	0.335057	0.383029	0.408962	0.422497	0.432269	0.440123	0.455056	0.474201
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.501535	0.526830	0.565621	0.601480	0.639107	0.681143	0.709397	0.737725			

2 Gaussians

Scaling factor: 101.5222394272376

Gaussians:

Weight	Mean	Covariance				
0.434250154	467.144844032	448.615338541	9893.117637025	402.755016430	402.755016430	2444.522796852
0.565749846	503.994918540	682.972566410	13413.276727573	-631.342583868	-631.342583868	4695.660370247

4 Gaussians

Scaling factor: 93.84697913898495

Gaussians:

Weight	Mean	Covariance				
0.290403354	411.578031166	441.499820104	2285.826682803	182.370270208	182.370270208	1691.302590588
0.171602457	582.546913275	481.956244433	5683.983662864	-1143.407181789	-1143.407181789	5188.567598507
0.189807267	622.273509201	679.048801146	6943.223040635	1368.604893162	1368.604893162	4452.780231569
0.348186922	431.924929112	693.296007376	4348.855655544	79.016142721	79.016142721	4120.308142826

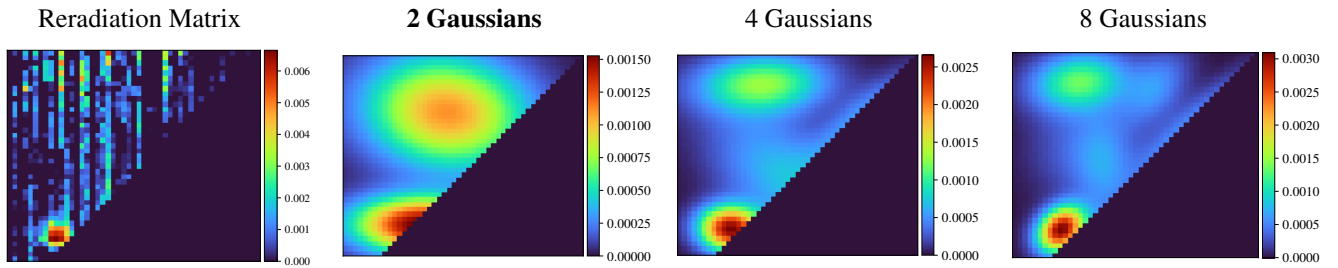
8 Gaussians

Scaling factor: 91.52316162434128

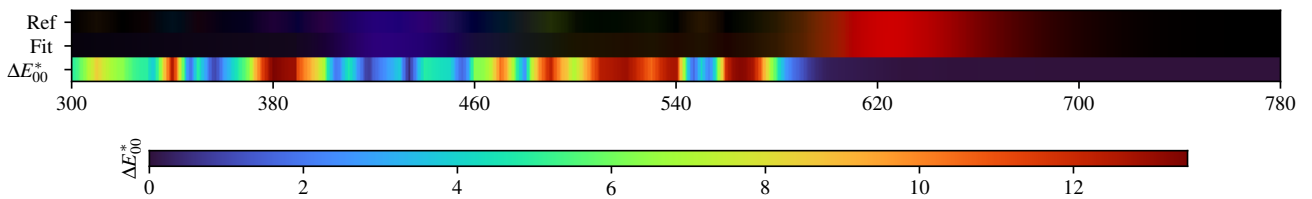
Gaussians:

Weight	Mean	Covariance					
0.192739429	388.584641287	429.477217425	725.337950119	-12.243447589	-12.243447589	689.415757896	
0.101561883	567.739587385	716.372372601	2458.762840865	957.498015134	957.498015134	2041.233492092	
0.072454503	630.947952994	428.979950731	4167.459677850	561.714230695	561.714230695	1745.132270740	
0.215623868	418.231099078	730.549043288	3562.509628443	564.647169250	564.647169250	1280.844306007	
0.176936786	445.697303360	590.562841399	4117.241271145	80.416567716	80.416567716	3187.428629921	
0.097857350	620.876332263	590.241447565	1228.770229499	698.597353389	698.597353389	2820.745998813	
0.103055560	488.226691327	449.533702335	1281.594788620	-170.000235647	-170.000235647	2561.840250902	
0.039770621	744.489780999	716.245823166	909.657757673	414.389195912	414.389195912	1216.838251409	

PKODXLIM - Weighted variational Bayesian inference - 2 Gaussians



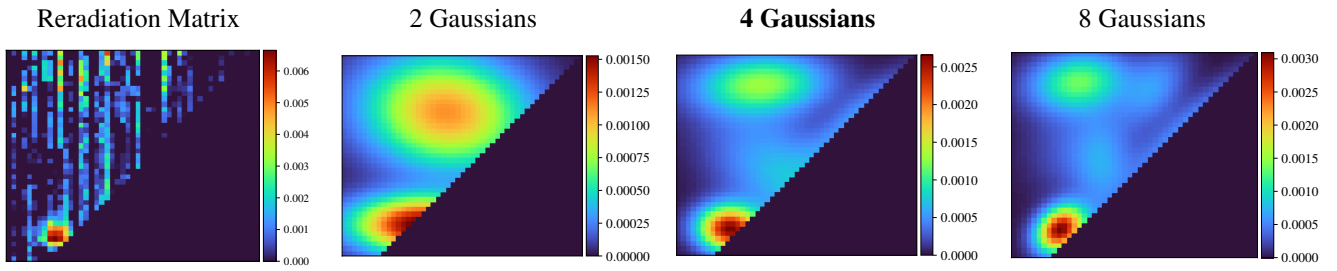
Fitted Material Under Monochromatic Illumination



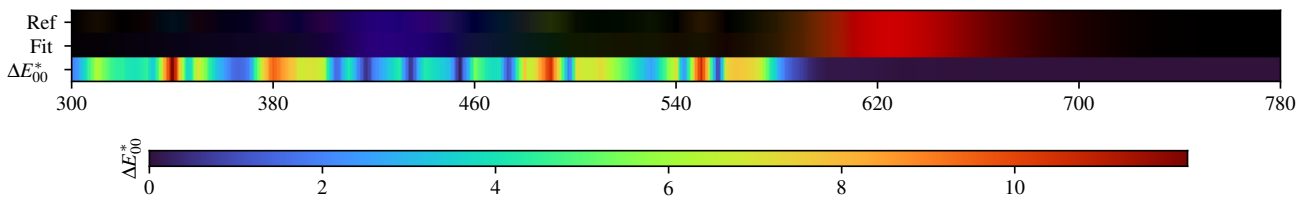
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.49$	$\Delta E = 0.88$	$\Delta E = 0.63$	$\Delta E = 0.62$	$\Delta E = 0.32$	$\Delta E = 0.42$	$\Delta E = 0.71$	$\Delta E = 0.79$	$\Delta E = 0.60$	$\Delta E = 0.61$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.65$	$\Delta E = 0.93$	$\Delta E = 0.57$	$\Delta E = 0.45$	$\Delta E = 0.58$	$\Delta E = 0.46$	$\Delta E = 0.59$	$\Delta E = 0.60$	$\Delta E = 0.33$	$\Delta E = 0.31$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.72$	$\Delta E = 1.01$	$\Delta E = 0.51$	$\Delta E = 0.42$	$\Delta E = 0.60$	$\Delta E = 0.30$	$\Delta E = 0.34$	$\Delta E = 0.34$	$\Delta E = 0.35$	$\Delta E = 0.30$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.74$	$\Delta E = 1.31$	$\Delta E = 0.79$	$\Delta E = 0.59$	$\Delta E = 0.79$	$\Delta E = 0.41$	$\Delta E = 0.38$	$\Delta E = 0.71$	$\Delta E = 0.43$	$\Delta E = 0.67$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.82$	$\Delta E = 0.75$	$\Delta E = 0.65$	$\Delta E = 0.48$	$\Delta E = 0.45$	$\Delta E = 0.50$	$\Delta E = 0.43$	$\Delta E = 0.86$	$\Delta E = 0.51$	$\Delta E = 0.69$

PKODXLIM - Weighted variational Bayesian inference - 4 Gaussians



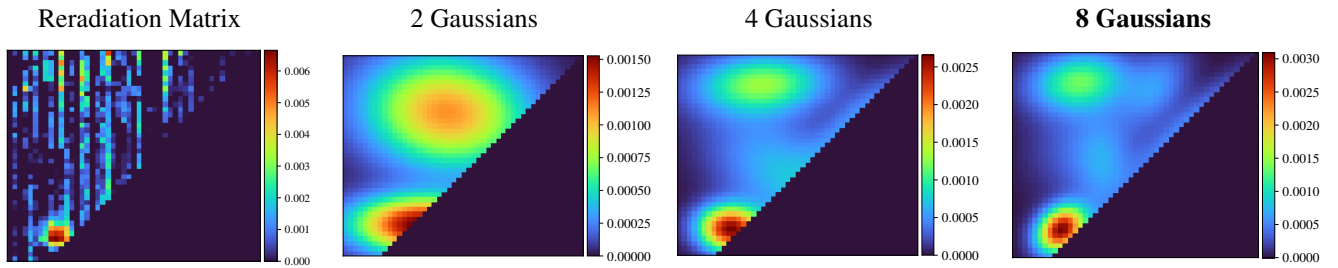
Fitted Material Under Monochromatic Illumination



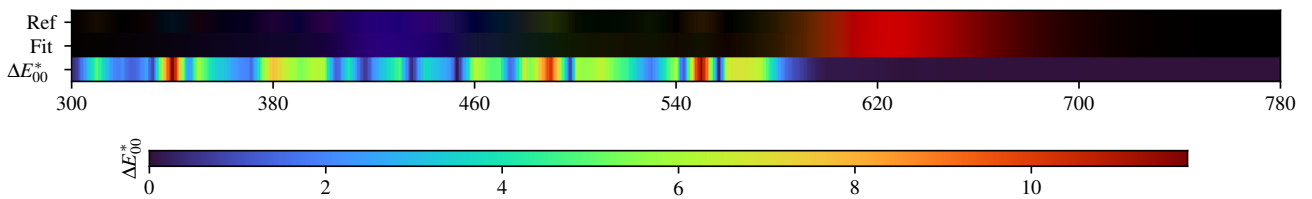
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.32$	$\Delta E = 0.39$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.20$	$\Delta E = 0.25$	$\Delta E = 0.48$	$\Delta E = 0.37$	$\Delta E = 0.32$	$\Delta E = 0.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.30$	$\Delta E = 0.40$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.34$	$\Delta E = 0.24$	$\Delta E = 0.31$	$\Delta E = 0.43$	$\Delta E = 0.22$	$\Delta E = 0.22$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.26$	$\Delta E = 0.41$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.32$	$\Delta E = 0.10$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.33$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.36$	$\Delta E = 0.68$	$\Delta E = 0.18$	$\Delta E = 0.38$	$\Delta E = 0.30$	$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.46$	$\Delta E = 0.15$	$\Delta E = 0.31$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.15$	$\Delta E = 0.25$	$\Delta E = 0.33$	$\Delta E = 0.34$	$\Delta E = 0.27$	$\Delta E = 0.14$	$\Delta E = 0.43$	$\Delta E = 0.24$	$\Delta E = 0.28$

PKODXLIM - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.20$	$\Delta E = 0.30$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.32$	$\Delta E = 0.17$	$\Delta E = 0.52$	$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.21$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.21$	$\Delta E = 0.31$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.36$	$\Delta E = 0.37$	$\Delta E = 0.16$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.34$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.24$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.21$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.26$	$\Delta E = 0.50$	$\Delta E = 0.13$	$\Delta E = 0.45$	$\Delta E = 0.24$	$\Delta E = 0.30$	$\Delta E = 0.12$	$\Delta E = 0.34$	$\Delta E = 0.11$	$\Delta E = 0.20$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.42$	$\Delta E = 0.22$	$\Delta E = 0.35$	$\Delta E = 0.10$	$\Delta E = 0.35$	$\Delta E = 0.20$	$\Delta E = 0.20$

PKODXLIM - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.170874	0.211379	0.201991	0.189627	0.161288	0.110524	0.076657	0.048258	0.025052	0.020329	0.014581
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.011177	0.004121	0.002196	0.000932	0.002592	0.000420	0.003058	0.000000	0.004284	0.013181	0.035081
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.088128	0.168072	0.259532	0.335057	0.383029	0.408962	0.422497	0.432269	0.440123	0.455056	0.474201
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.501535	0.526830	0.565621	0.601480	0.639107	0.681143	0.709397	0.737725			

2 Gaussians max

Scaling factor: 102.1452736291006

Gaussians:

Weight	Mean		Covariance			
0.375398025	458.680605410	436.502810151	9385.004166915	-185.677714578	-185.677714578	1580.979927812
0.624601975	505.710187573	667.997815491	13070.941671177	-871.403499106	-871.403499106	6468.919152087

4 Gaussians max

Scaling factor: 95.22426460330563

Gaussians:

Weight	Mean		Covariance			
0.231322149	403.498782097	429.400112801	1869.018365451	-56.072971864	-56.072971864	973.524592265
0.372270794	510.218952598	537.795991743	10097.883496524	-4233.636224860	-4233.636224860	8502.482730847
0.092355084	672.176966097	657.771231716	5135.201288382	3713.570851442	3713.570851442	4023.583912944
0.304051974	469.527284920	725.348460305	8154.087394041	283.719110533	283.719110533	1717.248801702

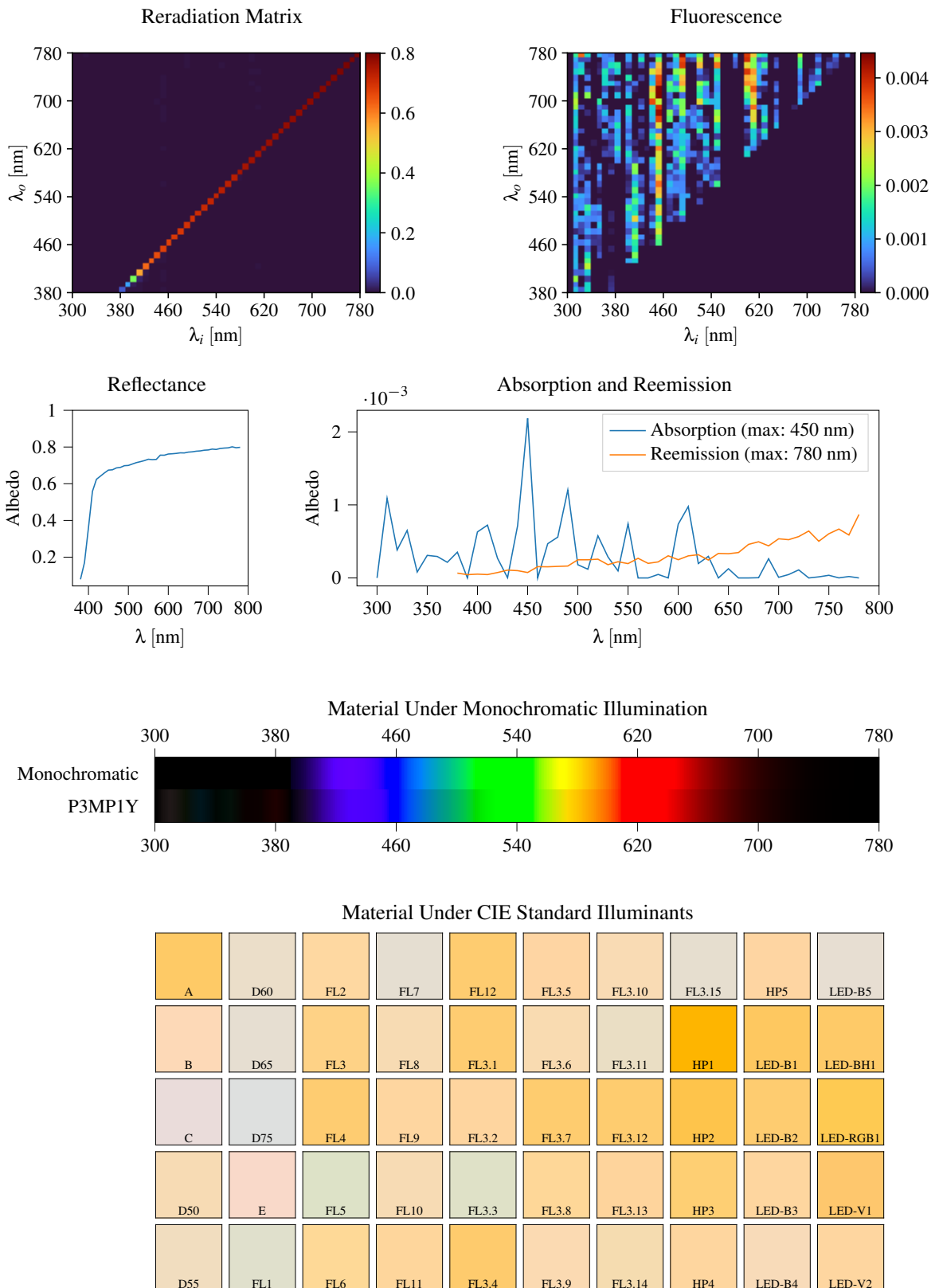
8 Gaussians max

Scaling factor: 91.75786343751045

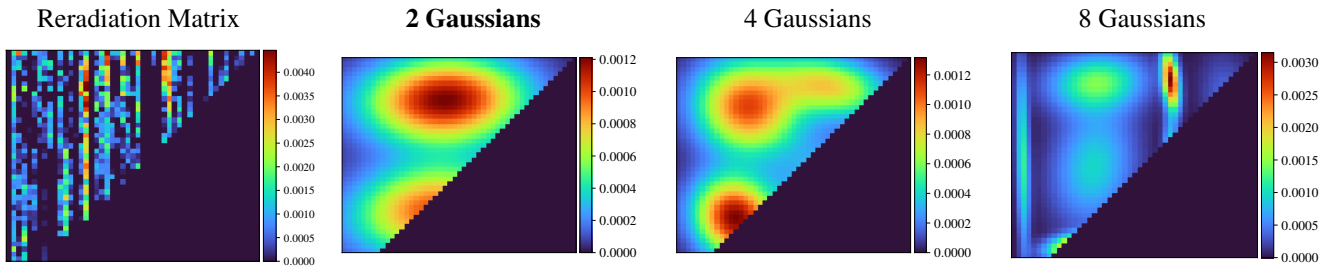
Gaussians:

Weight	Mean		Covariance			
0.183344959	391.502339896	432.241381410	965.944487224	247.560737904	247.560737904	931.167064316
0.131684405	543.830876074	420.165128961	8865.372705556	-120.155361400	-120.155361400	1317.545073810
0.089547813	475.406017227	554.924340867	1492.495334368	-44.817419097	-44.817419097	5401.074333806
0.112082650	421.036942501	592.908063313	4461.361294042	223.608509507	223.608509507	4942.909632890
0.062187307	607.493155891	538.944131127	4901.437244104	-98.712671609	-98.712671609	2922.820028327
0.100109236	662.760511020	647.112284308	5821.014509030	4679.952547312	4679.952547312	5000.026148854
0.088421236	577.660013092	710.713367532	2169.978671218	1043.987940777	1043.987940777	2790.003013415
0.232622394	427.625797106	726.707225078	4255.789981057	351.321149816	351.321149816	1643.898728779

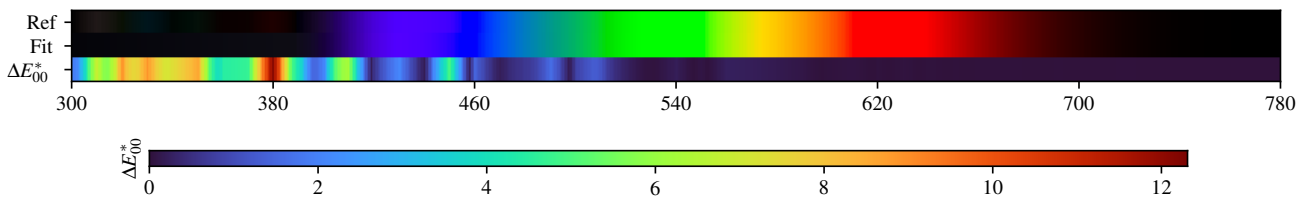
3.122. P3MPIY



P3MP1Y - Weighted Expectation-Maximization - 2 Gaussians



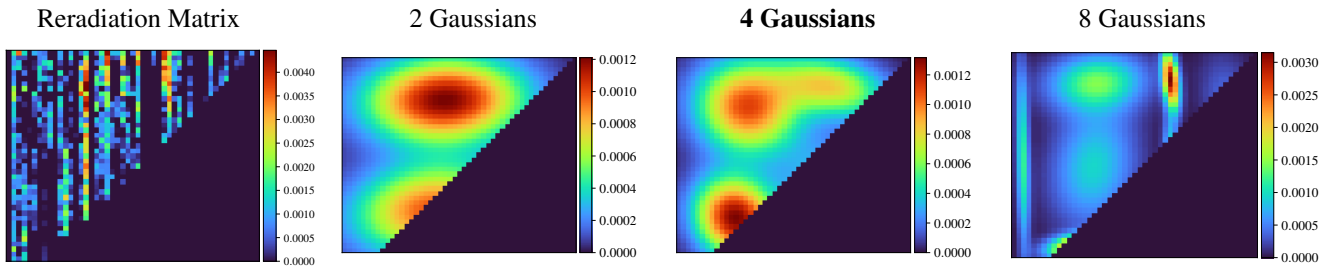
Fitted Material Under Monochromatic Illumination



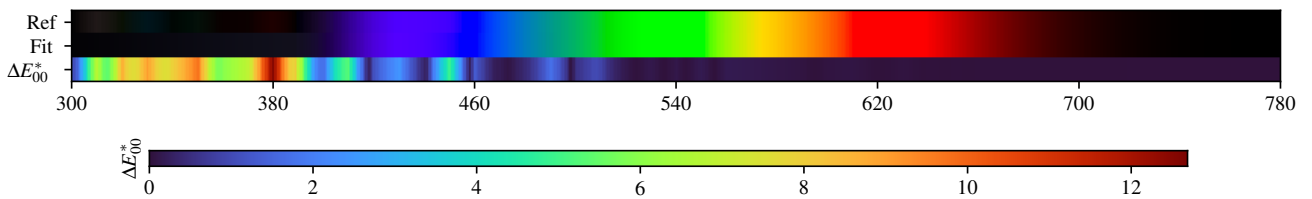
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.19$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.08$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.22$
B $\Delta E = 0.11$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.05$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.20$	D75 $\Delta E = 0.31$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.02$
D50 $\Delta E = 0.11$	E $\Delta E = 0.22$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.09$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.10$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.11$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.08$	FL3.14 $\Delta E = 0.01$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.17$	LED-V2 $\Delta E = 0.13$

P3MP1Y - Weighted Expectation-Maximization - 4 Gaussians



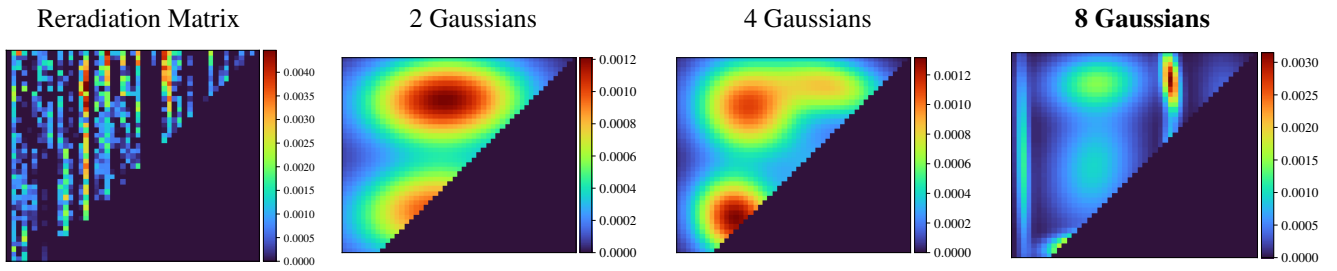
Fitted Material Under Monochromatic Illumination



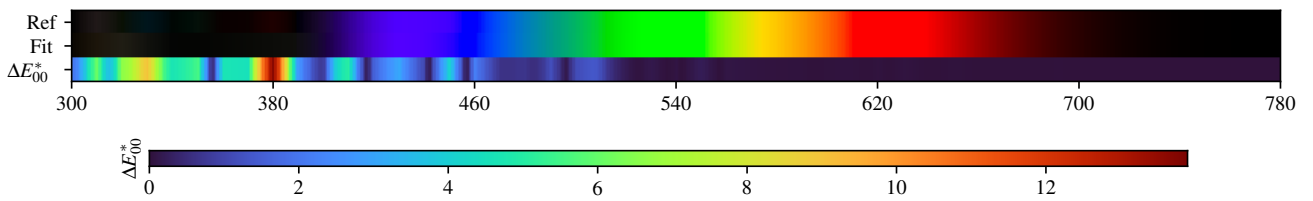
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.37$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.25$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.32$
B $\Delta E = 0.24$	D65 $\Delta E = 0.45$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.42$	D75 $\Delta E = 0.61$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.02$
D50 $\Delta E = 0.23$	E $\Delta E = 0.46$	FL5 $\Delta E = 0.17$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.30$	FL1 $\Delta E = 0.20$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.14$	FL3.14 $\Delta E = 0.08$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.21$	LED-V2 $\Delta E = 0.22$

P3MP1Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.09$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.34$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.19$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.27$	D75 $\Delta E = 0.31$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.17$	E $\Delta E = 0.28$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.17$	HP4 $\Delta E = 0.07$	LED-B4 $\Delta E = 0.12$	LED-V2 $\Delta E = 0.10$

P3MP1Y - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.079364	0.170456	0.360599	0.558514	0.624141	0.641441	0.658819	0.674303	0.675912	0.686147	0.688974
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.698244	0.699645	0.707429	0.715039	0.720120	0.725936	0.733395	0.731271	0.732541	0.755702	0.755350
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.761861	0.763250	0.765228	0.768263	0.767730	0.772167	0.773762	0.777222	0.778847	0.782620	0.783961
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.788651	0.786749	0.792061	0.794252	0.795440	0.801139	0.796028	0.798362			

2 Gaussians

Scaling factor: 100.95227911070849

Gaussians:

Weight	Mean	Covariance				
0.461315873	483.950177675	464.649260236	13111.347064473	842.832120108	842.832120108	4380.429940616
0.538684127	509.662602557	695.396119157	13245.018780576	361.877941895	361.877941895	3860.956995063

4 Gaussians

Scaling factor: 94.30424087149179

Gaussians:

Weight	Mean	Covariance				
0.167933632	625.034721957	500.828269038	5898.483816339	-630.689884032	-630.689884032	5469.542394965
0.353873208	441.927702689	679.565877433	5406.114764455	-344.457721497	-344.457721497	4443.907341082
0.296134145	418.875442162	447.478729362	3451.027039848	-416.849245072	-416.849245072	3399.562473234
0.182059015	617.420714160	724.210950337	6311.056165372	-924.451903382	-924.451903382	2013.507578006

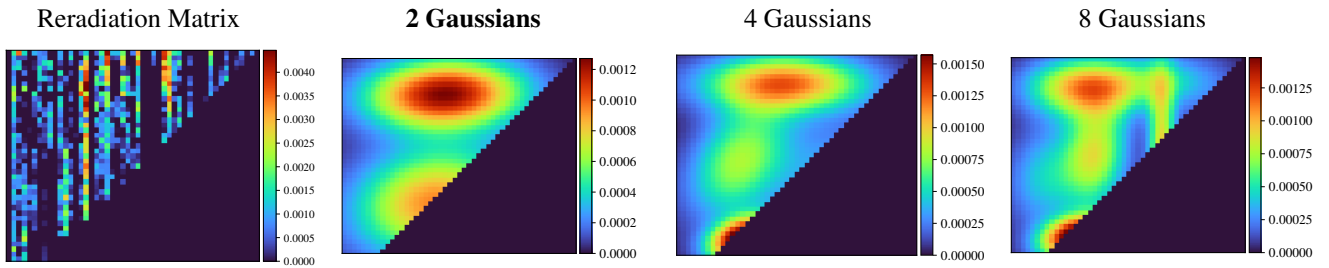
8 Gaussians

Scaling factor: 96.06316443203572

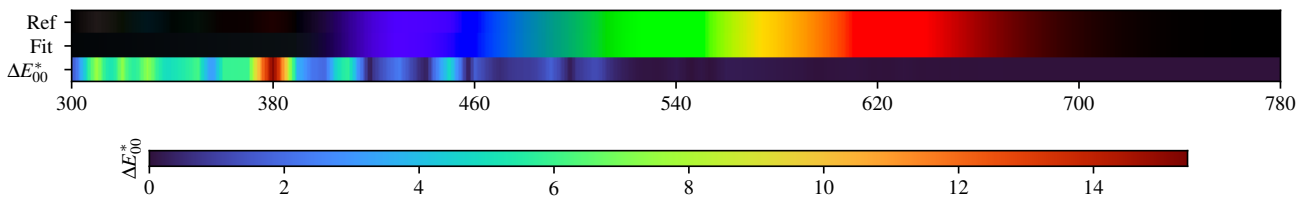
Gaussians:

Weight	Mean	Covariance				
0.096585769	610.977984429	511.705652217	91.561897886	-50.269545455	-50.269545455	7097.249650622
0.225090454	463.767578345	724.850555062	4237.151051678	213.756713706	213.756713706	1548.535063580
0.281593986	458.173465910	557.725947118	3186.321704158	643.980650762	643.980650762	6558.775155907
0.058604086	721.528792353	692.879010586	1365.159554596	-384.886362169	-384.886362169	4025.091655743
0.082557303	317.745854503	572.248412824	83.581256953	-314.363068750	-314.363068750	15303.515520503
0.080349238	610.754392204	729.085000717	131.557798703	-158.279931914	-158.279931914	1488.206845228
0.039009844	724.132521679	471.231097499	1587.275542999	-74.017388555	-74.017388555	4037.980978047
0.136209319	437.136047757	400.143916039	1862.781571467	228.837592789	228.837592789	268.034185899

P3MP1Y - Weighted variational Bayesian inference - 2 Gaussians



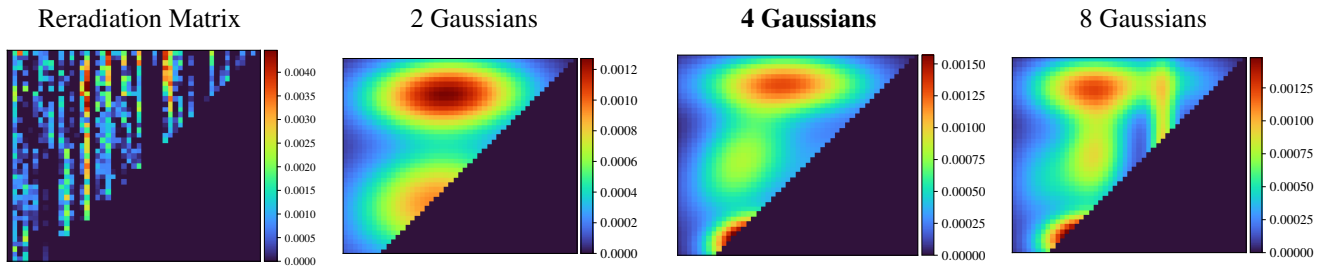
Fitted Material Under Monochromatic Illumination



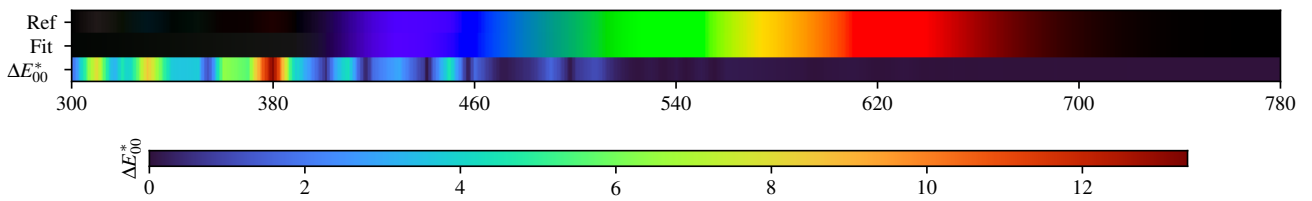
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.24$	FL2 $\Delta E = 0.04$	FL7 $\Delta E = 0.25$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.19$	FL3.15 $\Delta E = 0.36$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.22$
B $\Delta E = 0.14$	D65 $\Delta E = 0.28$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.25$	D75 $\Delta E = 0.33$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.02$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.15$	E $\Delta E = 0.22$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.18$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.18$	HP4 $\Delta E = 0.03$	LED-B4 $\Delta E = 0.10$	LED-V2 $\Delta E = 0.04$

P3MP1Y - Weighted variational Bayesian inference - 4 Gaussians



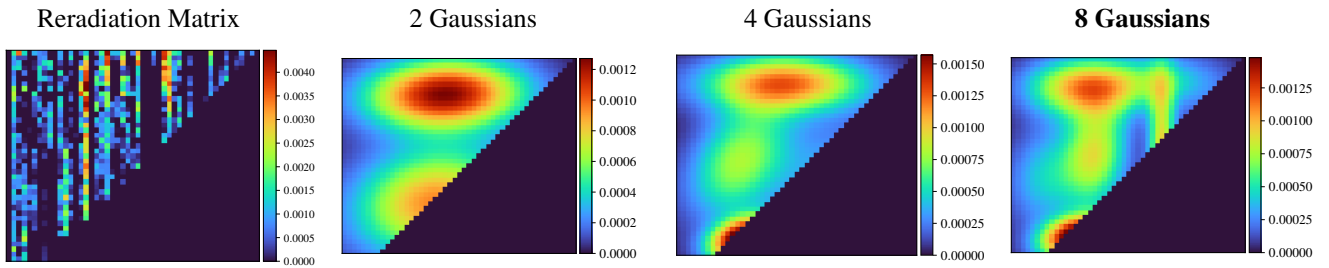
Fitted Material Under Monochromatic Illumination



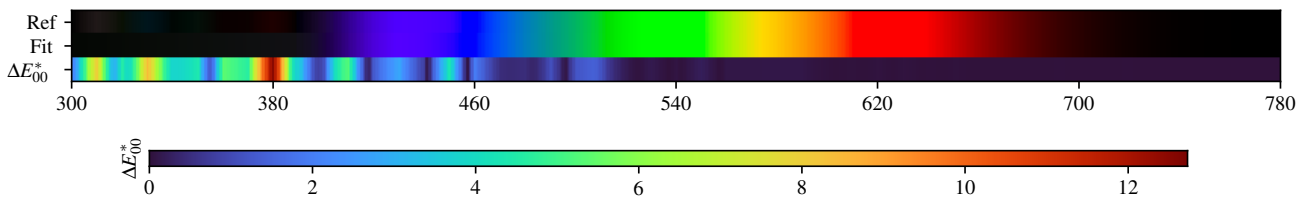
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.02$	FL7 $\Delta E = 0.04$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.02$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.04$	LED-B5 $\Delta E = 0.13$
B $\Delta E = 0.03$	D65 $\Delta E = 0.06$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.03$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.02$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.01$	LED-BH1 $\Delta E = 0.01$
C $\Delta E = 0.07$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.02$	FL3.2 $\Delta E = 0.02$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.01$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.05$
D50 $\Delta E = 0.03$	E $\Delta E = 0.09$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.03$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.03$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.06$

P3MP1Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.09$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.06$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.04$	FL3.15 $\Delta E = 0.05$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.05$	D65 $\Delta E = 0.10$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.03$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.06$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.02$
C $\Delta E = 0.08$	D75 $\Delta E = 0.12$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.01$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.05$	E $\Delta E = 0.09$	FL5 $\Delta E = 0.06$	FL10 $\Delta E = 0.05$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.03$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.07$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.04$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.05$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.09$

P3MP1Y - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.079364	0.170456	0.360599	0.558514	0.624141	0.641441	0.658819	0.674303	0.675912	0.686147	0.688974
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.698244	0.699645	0.707429	0.715039	0.720120	0.725936	0.733395	0.731271	0.732541	0.755702	0.755350
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.761861	0.763250	0.765228	0.768263	0.767730	0.772167	0.773762	0.777222	0.778847	0.782620	0.783961
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.788651	0.786749	0.792061	0.794252	0.795440	0.801139	0.796028	0.798362			

2 Gaussians max

Scaling factor: 99.8586437101588

Gaussians:

Weight	Mean		Covariance			
0.534216965	487.669077286	483.332147807	13345.945585362	1193.342192858	1193.342192858	6198.685420556
0.465783035	509.545433831	709.799065919	13067.045798631	391.096179688	391.096179688	2667.200355658

4 Gaussians max

Scaling factor: 97.17348657817703

Gaussians:

Weight	Mean		Covariance			
0.166667839	434.234746904	409.965667518	2310.343601375	475.535393490	475.535393490	929.666406312
0.194570192	625.930946924	516.422329329	6358.257059756	33.017838309	33.017838309	7414.428658191
0.277850561	424.152436848	568.137066090	5092.112033808	2029.696845981	2029.696845981	6556.562521789
0.360911407	515.226194825	726.132950823	13386.051121985	38.379809919	38.379809919	1646.441603195

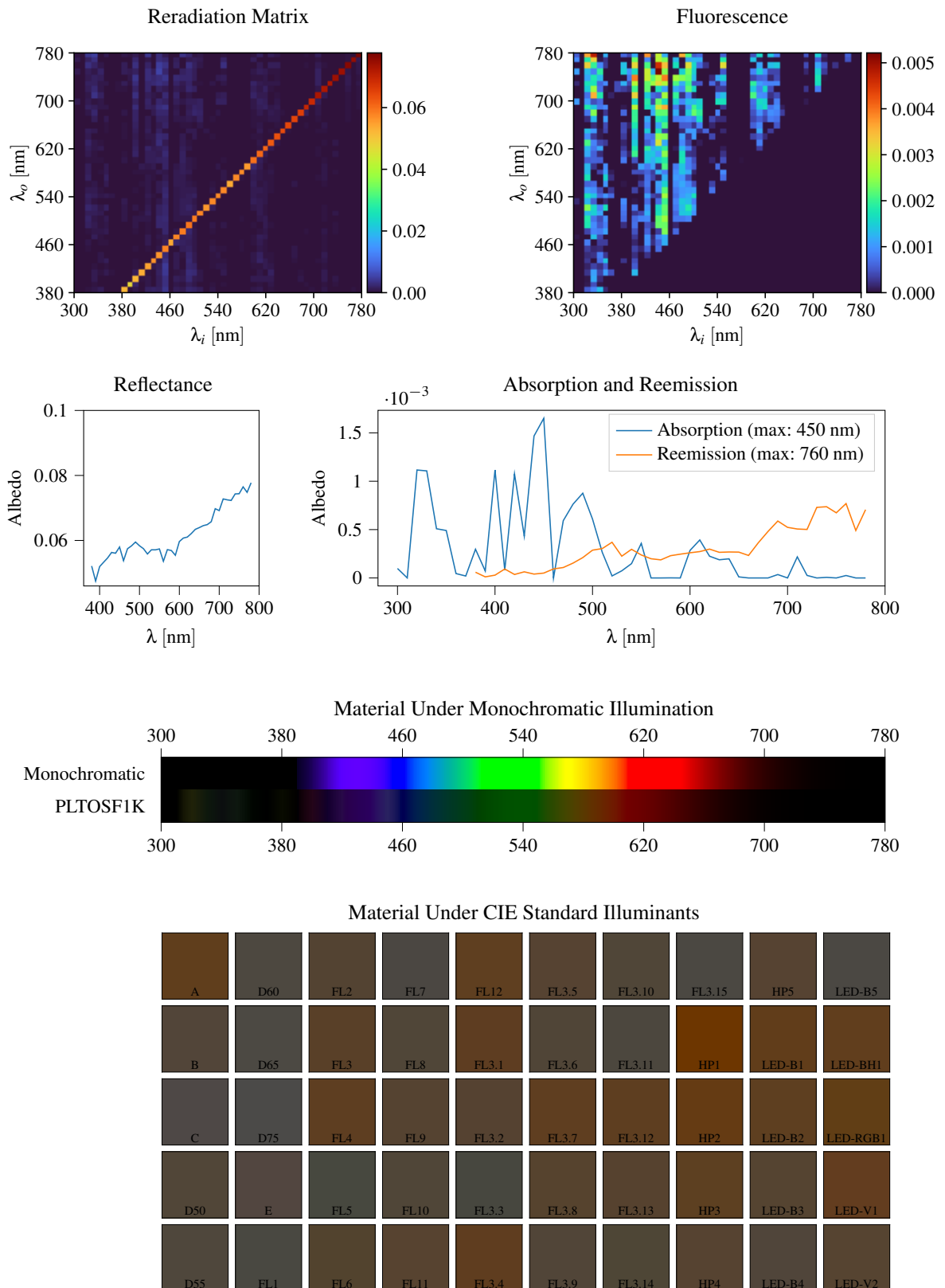
8 Gaussians max

Scaling factor: 97.20221509166548

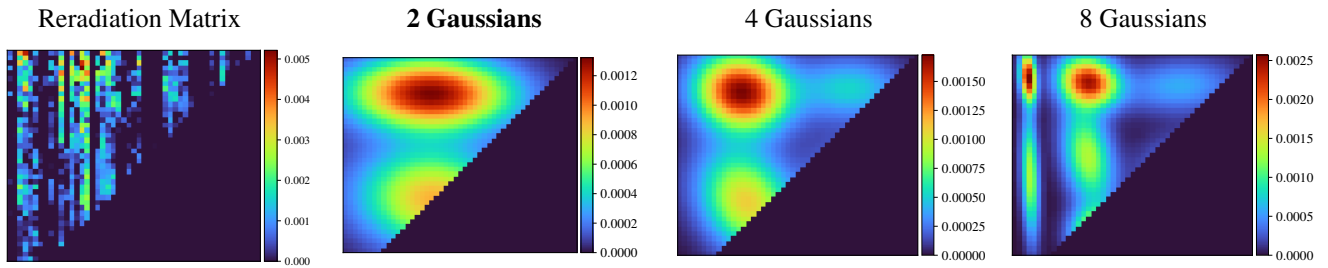
Gaussians:

Weight	Mean		Covariance			
0.171738689	436.435935101	409.816980840	2834.586110458	433.901225645	433.901225645	906.489918509
0.135028523	610.094317139	571.508455898	358.785299842	-55.749164727	-55.749164727	13746.601535372
0.033593679	697.096286031	455.070543595	4962.034419890	-1394.232259455	-1394.232259455	3231.609838285
0.108050277	365.361724447	534.679740240	3013.095663354	439.180536670	439.180536670	5423.848286497
0.189236785	471.442091979	582.764799314	2122.693857331	513.470279960	513.470279960	6062.951818400
0.041797575	719.143470612	617.537144247	3261.194310611	51.957003348	51.957003348	5547.972972386
0.223045415	444.966741101	722.190700138	6577.933805280	2.358973163	2.358973163	1811.049573821
0.097509056	609.431426581	735.574889085	7581.475029656	118.833710270	118.833710270	1556.587654833

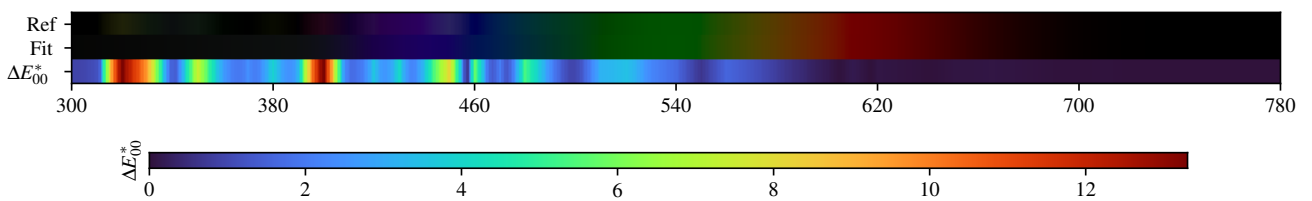
3.123. PLTOSF1K



PLTOSFIK - Weighted Expectation-Maximization - 2 Gaussians



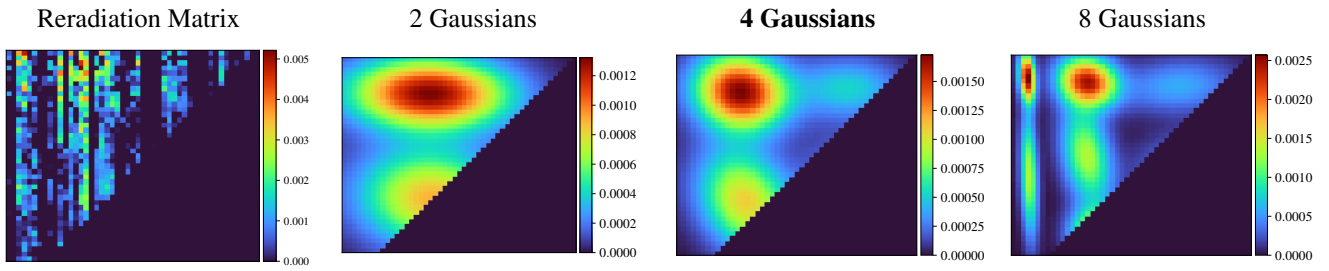
Fitted Material Under Monochromatic Illumination



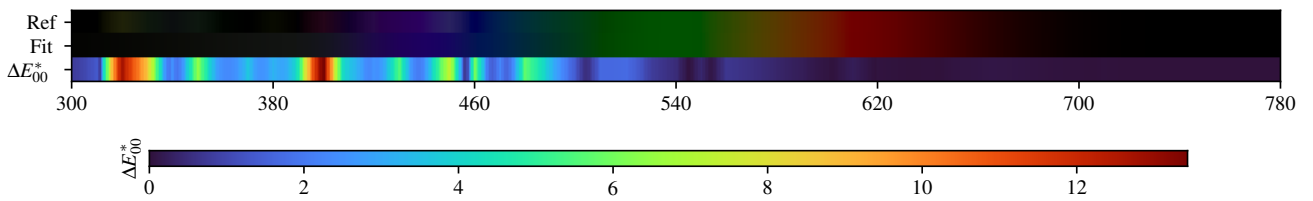
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.43$	$\Delta E = 0.76$	$\Delta E = 0.69$	$\Delta E = 0.60$	$\Delta E = 0.29$	$\Delta E = 0.63$	$\Delta E = 0.74$	$\Delta E = 0.59$	$\Delta E = 0.52$	$\Delta E = 1.13$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.62$	$\Delta E = 0.83$	$\Delta E = 0.59$	$\Delta E = 0.69$	$\Delta E = 0.50$	$\Delta E = 0.75$	$\Delta E = 0.65$	$\Delta E = 0.44$	$\Delta E = 0.45$	$\Delta E = 0.35$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.75$	$\Delta E = 1.04$	$\Delta E = 0.48$	$\Delta E = 0.64$	$\Delta E = 0.67$	$\Delta E = 0.24$	$\Delta E = 0.47$	$\Delta E = 0.42$	$\Delta E = 0.54$	$\Delta E = 0.38$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.70$	$\Delta E = 0.69$	$\Delta E = 0.59$	$\Delta E = 0.64$	$\Delta E = 0.68$	$\Delta E = 0.46$	$\Delta E = 0.74$	$\Delta E = 0.35$	$\Delta E = 0.89$	$\Delta E = 0.41$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.71$	$\Delta E = 0.62$	$\Delta E = 0.73$	$\Delta E = 0.52$	$\Delta E = 0.40$	$\Delta E = 0.58$	$\Delta E = 0.91$	$\Delta E = 0.44$	$\Delta E = 1.01$	$\Delta E = 0.60$

PLTOSFIK - Weighted Expectation-Maximization - 4 Gaussians



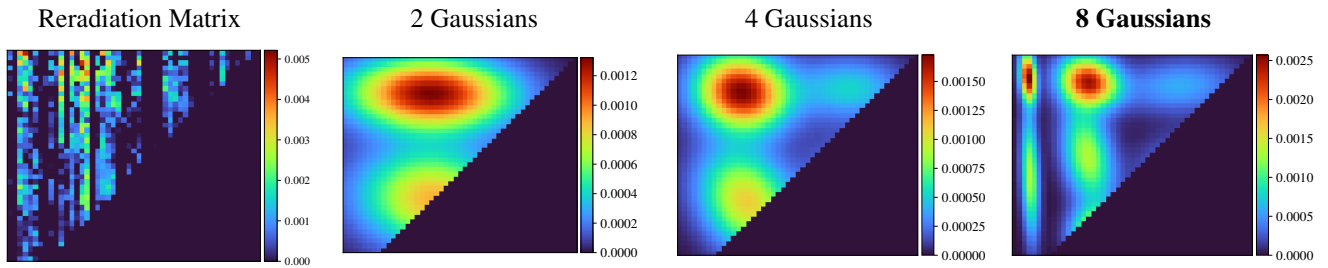
Fitted Material Under Monochromatic Illumination



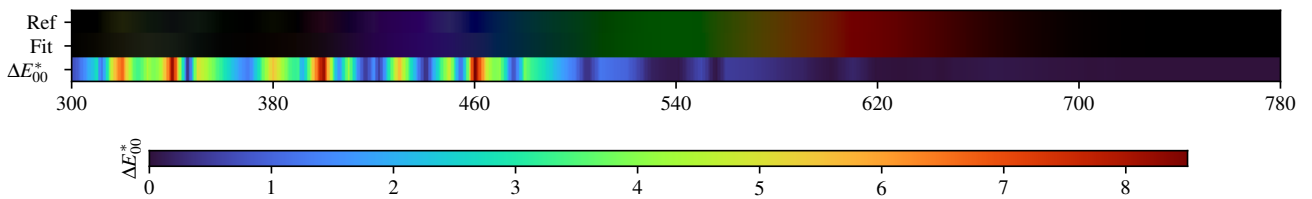
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.44$	$\Delta E = 1.09$	$\Delta E = 0.52$	$\Delta E = 0.97$	$\Delta E = 0.38$	$\Delta E = 0.63$	$\Delta E = 0.85$	$\Delta E = 1.02$	$\Delta E = 0.64$	$\Delta E = 1.09$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.85$	$\Delta E = 1.24$	$\Delta E = 0.38$	$\Delta E = 0.68$	$\Delta E = 0.26$	$\Delta E = 0.70$	$\Delta E = 0.94$	$\Delta E = 0.31$	$\Delta E = 0.35$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.32$	$\Delta E = 1.54$	$\Delta E = 0.29$	$\Delta E = 0.58$	$\Delta E = 0.49$	$\Delta E = 0.30$	$\Delta E = 0.40$	$\Delta E = 0.37$	$\Delta E = 0.43$	$\Delta E = 0.24$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.83$	$\Delta E = 1.18$	$\Delta E = 0.85$	$\Delta E = 0.82$	$\Delta E = 0.74$	$\Delta E = 0.52$	$\Delta E = 0.71$	$\Delta E = 0.39$	$\Delta E = 0.78$	$\Delta E = 0.60$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.95$	$\Delta E = 0.91$	$\Delta E = 0.45$	$\Delta E = 0.62$	$\Delta E = 0.23$	$\Delta E = 0.74$	$\Delta E = 0.83$	$\Delta E = 0.61$	$\Delta E = 0.82$	$\Delta E = 0.78$

PLTOSFIK - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.54$	$\Delta E = 0.27$	$\Delta E = 0.45$	$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.29$	$\Delta E = 0.48$	$\Delta E = 0.28$	$\Delta E = 0.75$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.39$	$\Delta E = 0.58$	$\Delta E = 0.16$	$\Delta E = 0.38$	$\Delta E = 0.13$	$\Delta E = 0.44$	$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.47$	$\Delta E = 0.65$	$\Delta E = 0.10$	$\Delta E = 0.27$	$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.18$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.45$	$\Delta E = 0.40$	$\Delta E = 0.45$	$\Delta E = 0.17$	$\Delta E = 0.51$	$\Delta E = 0.19$	$\Delta E = 0.39$	$\Delta E = 0.11$	$\Delta E = 0.43$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.49$	$\Delta E = 0.47$	$\Delta E = 0.26$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.56$	$\Delta E = 0.24$	$\Delta E = 0.52$	$\Delta E = 0.44$

PLTOSFIK - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.052133	0.047510	0.051943	0.053291	0.054606	0.056308	0.056062	0.057976	0.053776	0.057452	0.058332
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.059510	0.058365	0.057465	0.055831	0.057120	0.057108	0.057383	0.053608	0.057174	0.056897	0.055436
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.059655	0.060731	0.061033	0.062124	0.063409	0.063949	0.064551	0.064868	0.065761	0.069759	0.069187
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.072777	0.072495	0.072304	0.074312	0.074376	0.076485	0.074800	0.077741			

2 Gaussians

Scaling factor: 93.12493861498001

Gaussians:

Weight	Mean	Covariance
0.468085211	486.319678551	487.204422737
0.531914789	477.755411540	708.676813214
		11517.526383049
		-701.242244333
		-701.242244333
		5177.457631782
		13291.723662620
		-214.947232109
		-214.947232109
		2704.372482061

4 Gaussians

Scaling factor: 88.55131855000549

Gaussians:

Weight	Mean	Covariance
0.352768596	436.408447125	485.380162182
0.118456927	645.074062260	715.695912920
0.406241806	425.810914542	708.293095747
0.122532671	639.970846179	499.985668584
		4299.429431646
		-1109.740470093
		-1109.740470093
		5172.926956396
		5736.044479157
		-108.953387596
		-108.953387596
		1872.269786505
		4004.628159292
		-296.019215352
		-296.019215352
		2798.521315234
		3531.854662818
		-505.035501044
		-505.035501044
		5762.527516066

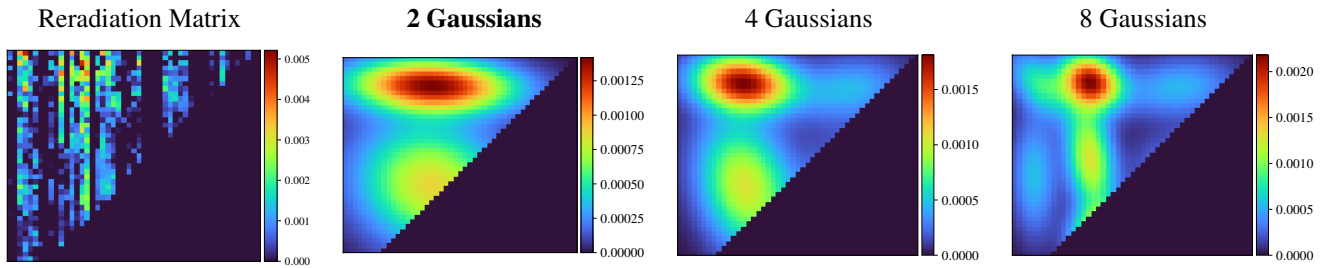
8 Gaussians

Scaling factor: 87.85387081879398

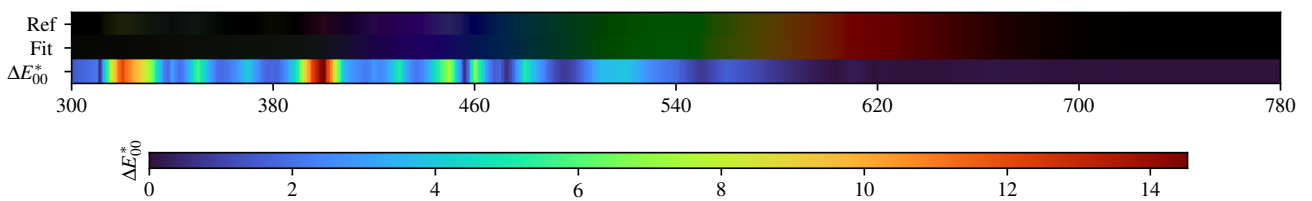
Gaussians:

Weight	Mean	Covariance
0.132995815	464.624897744	421.551293928
0.122163167	633.866622421	720.430304470
0.210583765	447.939257908	578.050794092
0.067959989	639.067286202	432.151557699
0.230372306	450.155459292	729.303389805
0.077346357	629.590780441	564.835316638
0.094149823	332.023590894	537.276222722
0.064428778	327.746232754	738.077175097
		1125.278916192
		28.159847235
		28.159847235
		1149.686198110
		6136.736631079
		281.904607450
		281.904607450
		1384.715635888
		1167.672939921
		-610.725428922
		-610.725428922
		4517.289426751
		3974.210929979
		5.796761201
		5.796761201
		1180.550081459
		1617.173593586
		-165.058448906
		-165.058448906
		1184.649438607
		4170.412479306
		810.081288477
		810.081288477
		2120.622977530
		146.640479468
		-230.909348759
		-230.909348759
		7098.417843368
		117.723773432
		-72.813136691
		-72.813136691
		1113.284655889

PLTOSFIK - Weighted variational Bayesian inference - 2 Gaussians



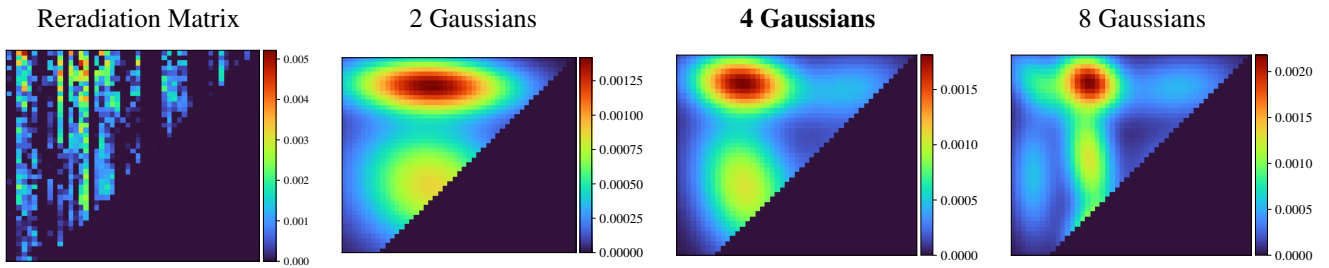
Fitted Material Under Monochromatic Illumination



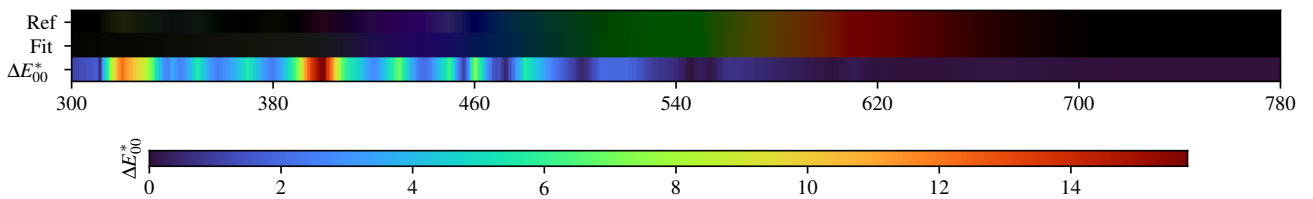
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.33$	$\Delta E = 0.57$	$\Delta E = 0.29$	$\Delta E = 0.49$	$\Delta E = 0.14$	$\Delta E = 0.32$	$\Delta E = 0.04$	$\Delta E = 0.59$	$\Delta E = 0.38$	$\Delta E = 0.28$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.46$	$\Delta E = 0.68$	$\Delta E = 0.31$	$\Delta E = 0.33$	$\Delta E = 0.34$	$\Delta E = 0.34$	$\Delta E = 0.22$	$\Delta E = 0.30$	$\Delta E = 0.31$	$\Delta E = 0.35$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.81$	$\Delta E = 0.87$	$\Delta E = 0.29$	$\Delta E = 0.32$	$\Delta E = 0.34$	$\Delta E = 0.18$	$\Delta E = 0.32$	$\Delta E = 0.27$	$\Delta E = 0.33$	$\Delta E = 0.55$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.39$	$\Delta E = 1.10$	$\Delta E = 0.29$	$\Delta E = 0.16$	$\Delta E = 0.33$	$\Delta E = 0.15$	$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.33$	$\Delta E = 0.37$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.48$	$\Delta E = 0.31$	$\Delta E = 0.35$	$\Delta E = 0.13$	$\Delta E = 0.37$	$\Delta E = 0.17$	$\Delta E = 0.40$	$\Delta E = 0.43$	$\Delta E = 0.35$	$\Delta E = 0.44$

PLTOSFIK - Weighted variational Bayesian inference - 4 Gaussians



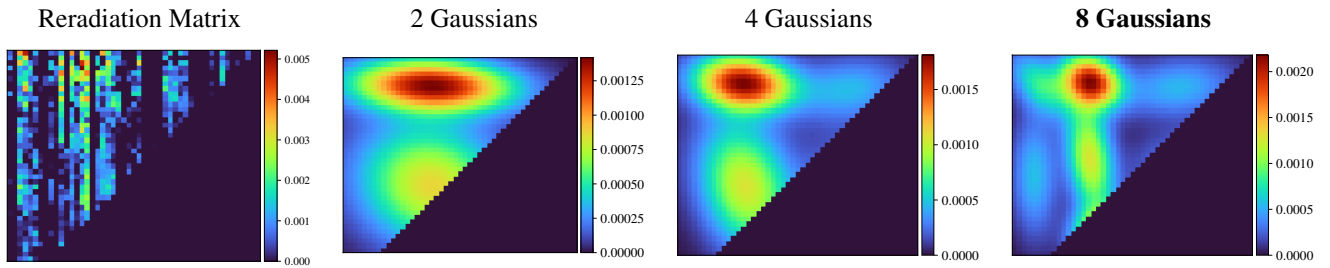
Fitted Material Under Monochromatic Illumination



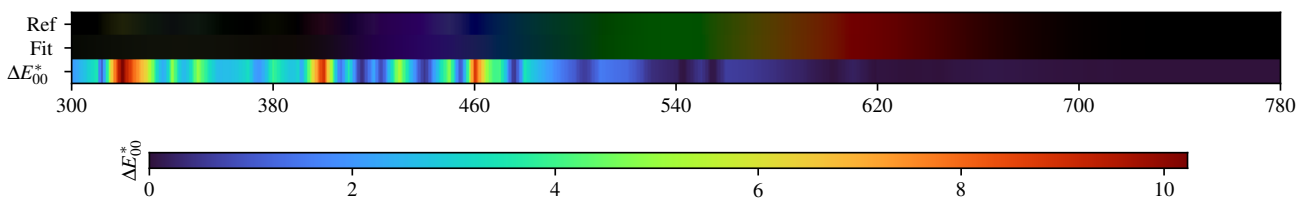
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.14$	$\Delta E = 1.18$	$\Delta E = 0.36$	$\Delta E = 1.07$	$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.61$	$\Delta E = 1.14$	$\Delta E = 0.57$	$\Delta E = 0.60$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.81$	$\Delta E = 1.35$	$\Delta E = 0.16$	$\Delta E = 0.48$	$\Delta E = 0.10$	$\Delta E = 0.32$	$\Delta E = 0.95$	$\Delta E = 0.20$	$\Delta E = 0.06$	$\Delta E = 0.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.45$	$\Delta E = 1.60$	$\Delta E = 0.09$	$\Delta E = 0.27$	$\Delta E = 0.19$	$\Delta E = 0.22$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.77$	$\Delta E = 1.63$	$\Delta E = 0.82$	$\Delta E = 0.78$	$\Delta E = 0.63$	$\Delta E = 0.45$	$\Delta E = 0.16$	$\Delta E = 0.33$	$\Delta E = 0.21$	$\Delta E = 0.34$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.99$	$\Delta E = 0.90$	$\Delta E = 0.29$	$\Delta E = 0.50$	$\Delta E = 0.10$	$\Delta E = 0.69$	$\Delta E = 0.22$	$\Delta E = 0.77$	$\Delta E = 0.34$	$\Delta E = 0.62$

PLTOSFIK - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.53$	$\Delta E = 0.31$	$\Delta E = 0.44$	$\Delta E = 0.13$	$\Delta E = 0.33$	$\Delta E = 0.26$	$\Delta E = 0.45$	$\Delta E = 0.29$	$\Delta E = 0.77$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.37$	$\Delta E = 0.57$	$\Delta E = 0.21$	$\Delta E = 0.41$	$\Delta E = 0.18$	$\Delta E = 0.47$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.18$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.41$	$\Delta E = 0.63$	$\Delta E = 0.15$	$\Delta E = 0.31$	$\Delta E = 0.31$	$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.23$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.46$	$\Delta E = 0.39$	$\Delta E = 0.48$	$\Delta E = 0.12$	$\Delta E = 0.55$	$\Delta E = 0.12$	$\Delta E = 0.40$	$\Delta E = 0.14$	$\Delta E = 0.46$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.50$	$\Delta E = 0.49$	$\Delta E = 0.31$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.59$	$\Delta E = 0.24$	$\Delta E = 0.56$	$\Delta E = 0.42$

PLTOSFIK - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.052133	0.047510	0.051943	0.053291	0.054606	0.056308	0.056062	0.057976	0.053776	0.057452	0.058332
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.059510	0.058365	0.057465	0.055831	0.057120	0.057108	0.057383	0.053608	0.057174	0.056897	0.055436
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.059655	0.060731	0.061033	0.062124	0.063409	0.063949	0.064551	0.064868	0.065761	0.069759	0.069187
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.072777	0.072495	0.072304	0.074312	0.074376	0.076485	0.074800	0.077741			

2 Gaussians max

Scaling factor: 90.98263888376519

Gaussians:

Weight	Mean		Covariance			
0.575250729	481.741483792	515.658234032	11484.199427622	-1247.100560371	-1247.100560371	8103.979747087
0.424749271	481.996731386	725.623508106	13800.096434629	-494.137941801	-494.137941801	1479.235418582

4 Gaussians max

Scaling factor: 87.0233969037128

Gaussians:

Weight	Mean		Covariance			
0.439821256	433.856596874	516.110640179	4252.836926234	-1300.326890007	-1300.326890007	8250.349027949
0.125697515	640.394086229	504.480151457	3837.932135721	-294.183751954	-294.183751954	6537.949872342
0.107990552	647.775783156	714.807190943	5751.886255972	453.715998580	453.715998580	2040.919428890
0.326490676	430.208225276	726.787856314	4530.169374441	-351.233709068	-351.233709068	1495.609570197

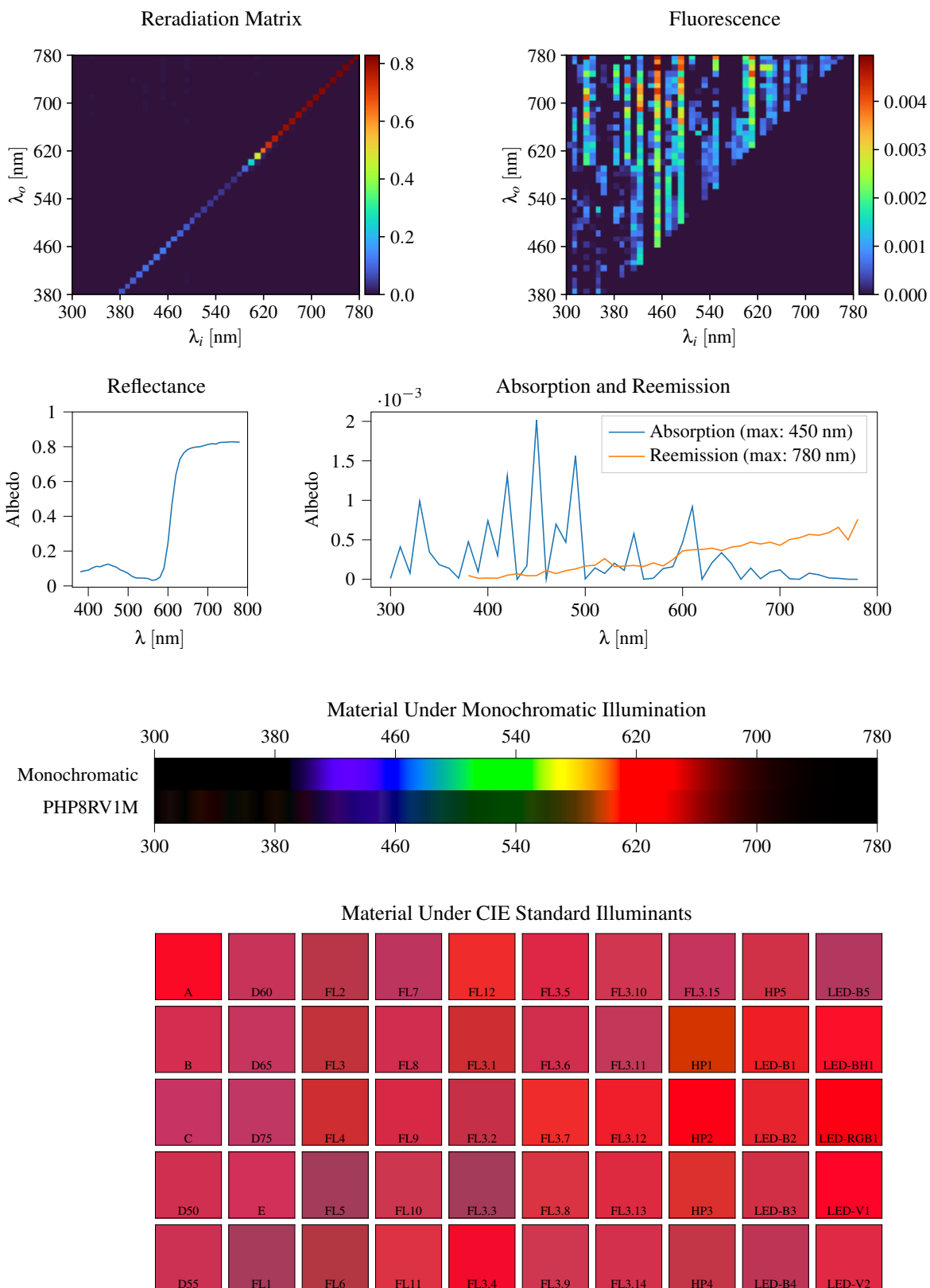
8 Gaussians max

Scaling factor: 90.19569527630925

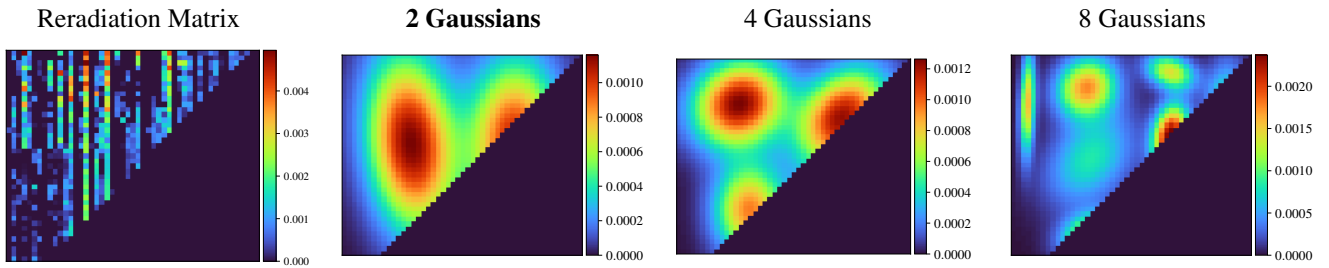
Gaussians:

Weight	Mean		Covariance			
0.103778356	340.279407619	538.399796870	984.951228199	-70.195283658	-70.195283658	7057.101335058
0.123245110	468.018963165	420.659469428	1351.955662844	203.705032167	203.705032167	1386.836174039
0.081509896	634.726173635	449.902898027	4167.551153397	-617.269498935	-617.269498935	2581.184950333
0.209156838	452.840883295	572.363572943	1062.044250704	-569.547025278	-569.547025278	5666.781126499
0.060885748	629.832721595	574.229263994	4811.645536429	612.369640988	612.369640988	1800.031413294
0.087783712	350.216373658	724.321338371	1869.853833701	-965.283002322	-965.283002322	2057.252723842
0.126696068	631.171363169	716.927709743	6598.786211200	452.397498445	452.397498445	1788.426506473
0.206944272	454.420609515	730.025163064	1678.924087630	-252.775733335	-252.775733335	1341.488637108

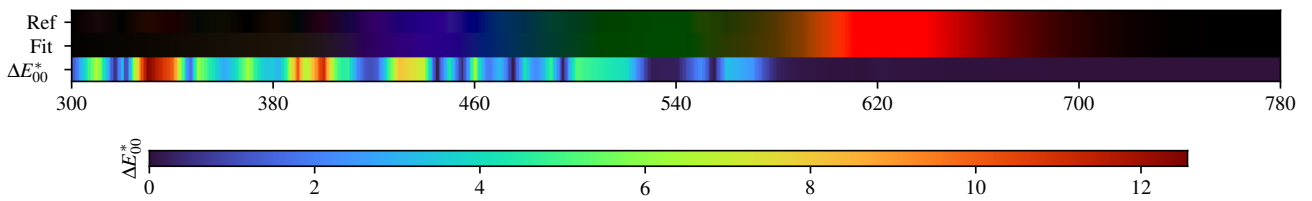
3.124. PHP8RV1M



PHP8RV1M - Weighted Expectation-Maximization - 2 Gaussians



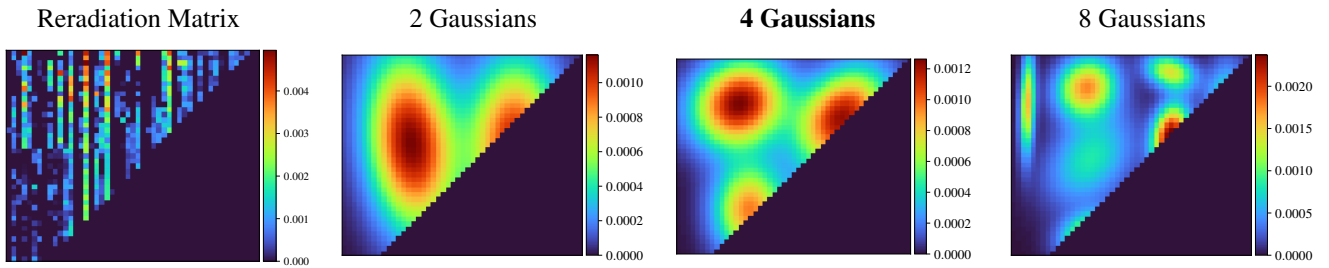
Fitted Material Under Monochromatic Illumination



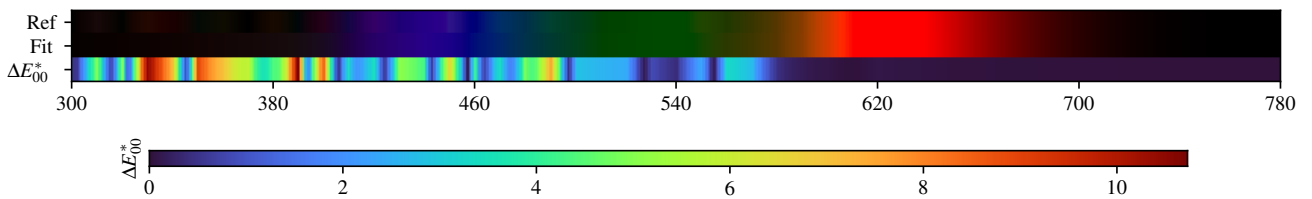
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.33$	$\Delta E = 0.85$	$\Delta E = 0.54$	$\Delta E = 0.74$	$\Delta E = 0.06$	$\Delta E = 0.42$	$\Delta E = 0.19$	$\Delta E = 0.77$	$\Delta E = 0.60$	$\Delta E = 0.54$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.67$	$\Delta E = 0.91$	$\Delta E = 0.41$	$\Delta E = 0.54$	$\Delta E = 0.25$	$\Delta E = 0.49$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.26$	$\Delta E = 0.30$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.87$	$\Delta E = 1.03$	$\Delta E = 0.32$	$\Delta E = 0.46$	$\Delta E = 0.42$	$\Delta E = 0.03$	$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.29$	$\Delta E = 0.31$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.69$	$\Delta E = 0.98$	$\Delta E = 0.76$	$\Delta E = 0.23$	$\Delta E = 0.67$	$\Delta E = 0.10$	$\Delta E = 0.32$	$\Delta E = 0.43$	$\Delta E = 0.42$	$\Delta E = 0.41$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.77$	$\Delta E = 0.76$	$\Delta E = 0.52$	$\Delta E = 0.14$	$\Delta E = 0.24$	$\Delta E = 0.16$	$\Delta E = 0.40$	$\Delta E = 0.65$	$\Delta E = 0.47$	$\Delta E = 0.60$

PHP8RV1M - Weighted Expectation-Maximization - 4 Gaussians



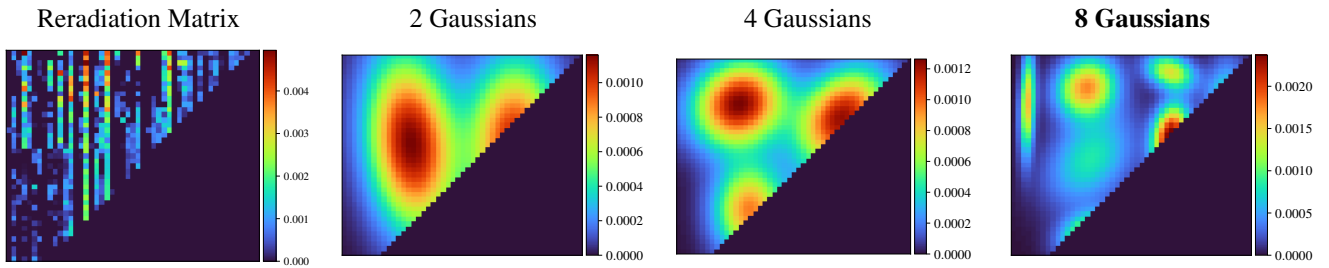
Fitted Material Under Monochromatic Illumination



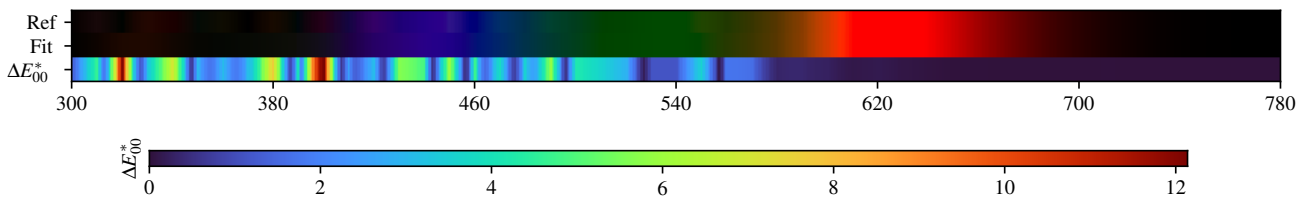
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.28$	$\Delta E = 0.13$	$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.12$	$\Delta E = 0.41$	$\Delta E = 0.24$	$\Delta E = 0.14$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.21$	$\Delta E = 0.31$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.43$	$\Delta E = 0.17$	$\Delta E = 0.06$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.27$	$\Delta E = 0.34$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.23$	$\Delta E = 0.29$	$\Delta E = 0.20$	$\Delta E = 0.40$	$\Delta E = 0.19$	$\Delta E = 0.31$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.26$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.32$	$\Delta E = 0.07$	$\Delta E = 0.38$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.22$	$\Delta E = 0.19$

PHP8RV1M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.14$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.20$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.12$

PHP8RV1M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.080649	0.086723	0.090157	0.103050	0.112230	0.110210	0.118968	0.125238	0.115975	0.107978	0.092490
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.083487	0.071630	0.054771	0.045521	0.045014	0.044896	0.042281	0.032039	0.035060	0.049843	0.101675
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.245194	0.468237	0.640054	0.728149	0.764941	0.784533	0.793478	0.798230	0.799797	0.806136	0.812614
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.817746	0.815006	0.824389	0.825609	0.826276	0.828611	0.826845	0.826796			

2 Gaussians

Scaling factor: 101.22391512394944

Gaussians:

Weight	Mean		Covariance			
0.539391669	435.008899784	603.311880889	3782.239636143	-1184.773340994	-1184.773340994	15250.145609434
0.460608331	643.779412145	608.905576785	3933.800751338	147.360765829	147.360765829	12854.112037572

4 Gaussians

Scaling factor: 95.57976881006151

Gaussians:

Weight	Mean		Covariance			
0.199646321	447.536510196	466.542694352	2456.402383533	0.904935717	0.904935717	4185.377380927
0.334246267	639.601383668	660.581900755	4011.504229748	1351.613506395	1351.613506395	4831.122989996
0.129358686	652.473238354	462.107985442	3774.940210801	-59.376980700	-59.376980700	3770.328953732
0.336748726	426.531275564	689.446216955	4288.800233900	493.662436742	493.662436742	3903.178860684

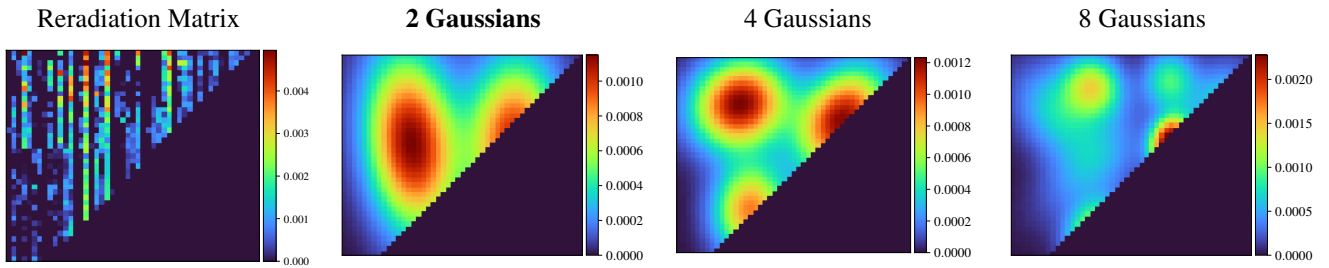
8 Gaussians

Scaling factor: 96.93579341500912

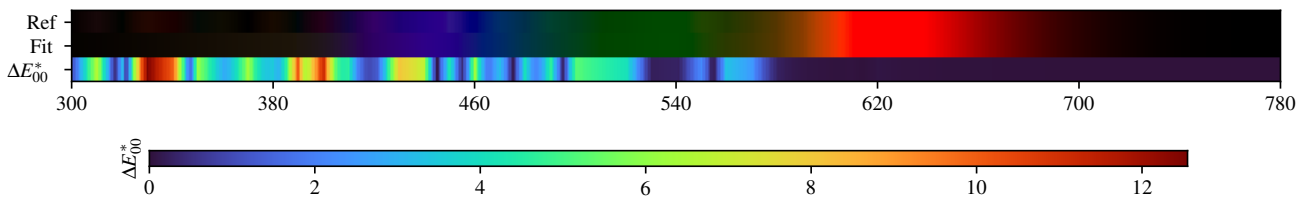
Gaussians:

Weight	Mean		Covariance			
0.106128851	455.173543934	418.737574871	1561.381591542	289.280847897	289.280847897	896.653566705
0.071640698	618.180070525	748.627361640	1124.999144250	-213.622946253	-213.622946253	607.566375425
0.162246801	618.552748246	616.398377987	583.435475590	214.524458756	214.524458756	1841.882424568
0.067852196	328.167750570	683.563929132	103.071454324	138.474382020	138.474382020	4602.488000259
0.085677945	727.665184385	688.418038017	751.493942134	232.731015253	232.731015253	3371.965471436
0.122251560	654.352672964	452.599077907	3772.350217844	301.287977959	301.287977959	2829.696457174
0.196938609	455.764903350	572.361765181	3635.429161955	1310.486910125	1310.486910125	4199.750778968
0.187263341	447.781899298	717.667242325	1686.516985646	175.286587877	175.286587877	1714.550164388

PHP8RV1M - Weighted variational Bayesian inference - 2 Gaussians



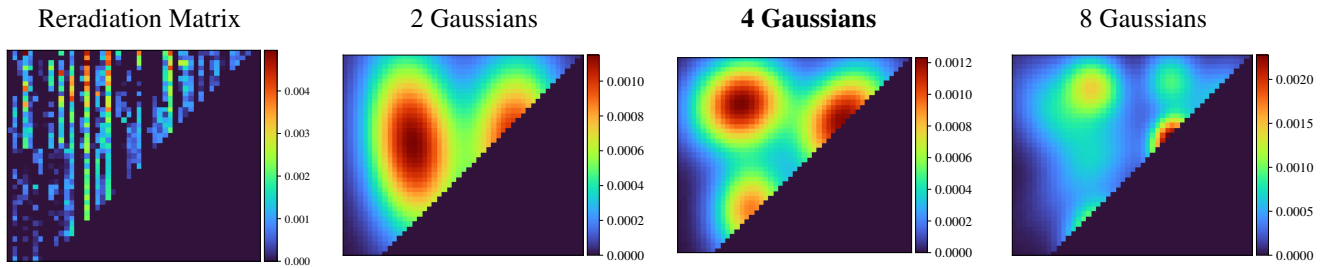
Fitted Material Under Monochromatic Illumination



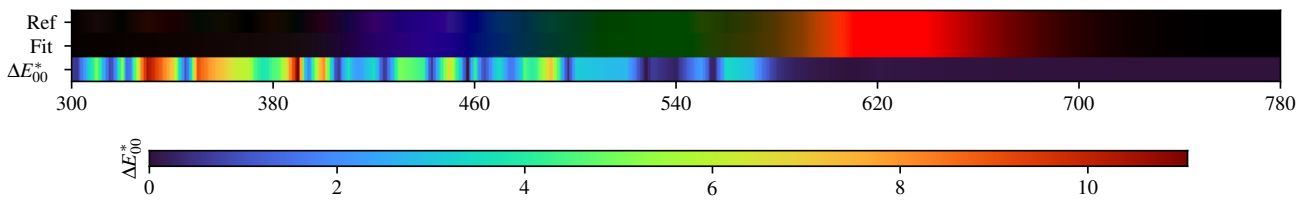
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.33$	$\Delta E = 0.86$	$\Delta E = 0.55$	$\Delta E = 0.75$	$\Delta E = 0.06$	$\Delta E = 0.43$	$\Delta E = 0.20$	$\Delta E = 0.78$	$\Delta E = 0.61$	$\Delta E = 0.55$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.68$	$\Delta E = 0.92$	$\Delta E = 0.42$	$\Delta E = 0.56$	$\Delta E = 0.26$	$\Delta E = 0.50$	$\Delta E = 0.24$	$\Delta E = 0.27$	$\Delta E = 0.27$	$\Delta E = 0.31$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.87$	$\Delta E = 1.04$	$\Delta E = 0.32$	$\Delta E = 0.47$	$\Delta E = 0.43$	$\Delta E = 0.04$	$\Delta E = 0.24$	$\Delta E = 0.25$	$\Delta E = 0.30$	$\Delta E = 0.32$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.70$	$\Delta E = 0.99$	$\Delta E = 0.78$	$\Delta E = 0.23$	$\Delta E = 0.68$	$\Delta E = 0.11$	$\Delta E = 0.33$	$\Delta E = 0.43$	$\Delta E = 0.43$	$\Delta E = 0.42$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.78$	$\Delta E = 0.77$	$\Delta E = 0.53$	$\Delta E = 0.15$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.41$	$\Delta E = 0.65$	$\Delta E = 0.48$	$\Delta E = 0.61$

PHP8RV1M - Weighted variational Bayesian inference - 4 Gaussians



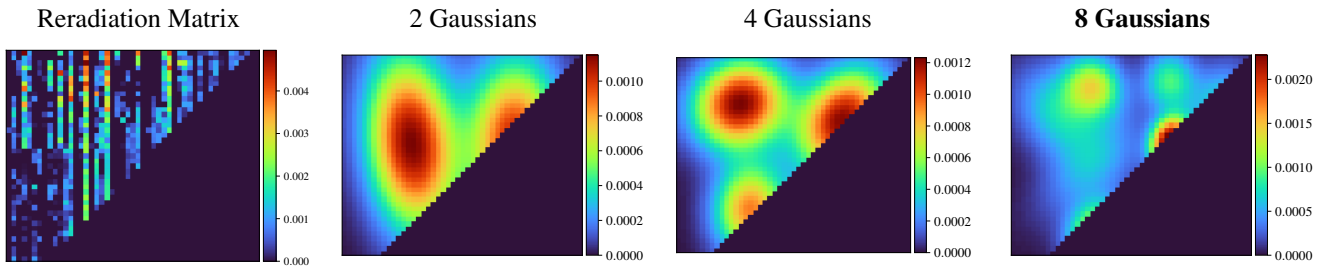
Fitted Material Under Monochromatic Illumination



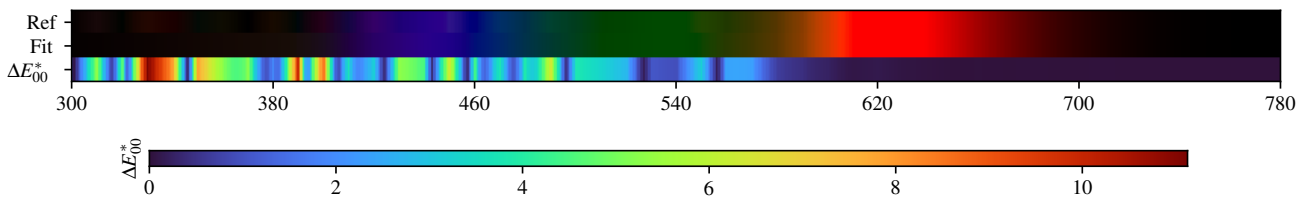
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.25$	$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.37$	$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.27$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.39$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.30$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.17$	$\Delta E = 0.36$	$\Delta E = 0.16$	$\Delta E = 0.28$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.08$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.29$	$\Delta E = 0.08$	$\Delta E = 0.35$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.16$

PHP8RV1M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.26$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.18$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.12$	$\Delta E = 0.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.26$	$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.21$	$\Delta E = 0.14$	$\Delta E = 0.25$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.10$

PHP8RV1M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.080649	0.086723	0.090157	0.103050	0.112230	0.110210	0.118968	0.125238	0.115975	0.107978	0.092490
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.083487	0.071630	0.054771	0.045521	0.045014	0.044896	0.042281	0.032039	0.035060	0.049843	0.101675
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.245194	0.468237	0.640054	0.728149	0.764941	0.784533	0.793478	0.798230	0.799797	0.806136	0.812614
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.817746	0.815006	0.824389	0.825609	0.826276	0.828611	0.826845	0.826796			

2 Gaussians max

Scaling factor: 101.22865986296661

Gaussians:

Weight	Mean		Covariance			
0.542488220	435.912903175	603.185360022	3913.082716726	-1197.978796697	-1197.978796697	15214.437110675
0.457511780	643.996254765	608.979935722	3961.555001147	149.364274660	149.364274660	12821.779839948

4 Gaussians max

Scaling factor: 96.51944144389975

Gaussians:

Weight	Mean		Covariance			
0.195364453	448.612240004	465.074745210	2601.127219757	125.527016114	125.527016114	4112.197879207
0.107462614	654.649471486	445.839017072	4055.224727357	139.301090218	139.301090218	2692.129209447
0.353235296	639.981297888	652.696017980	3977.327415081	1350.541991826	1350.541991826	5546.923984134
0.343937637	428.414015878	687.129125472	4511.189918601	414.539134630	414.539134630	4129.923404437

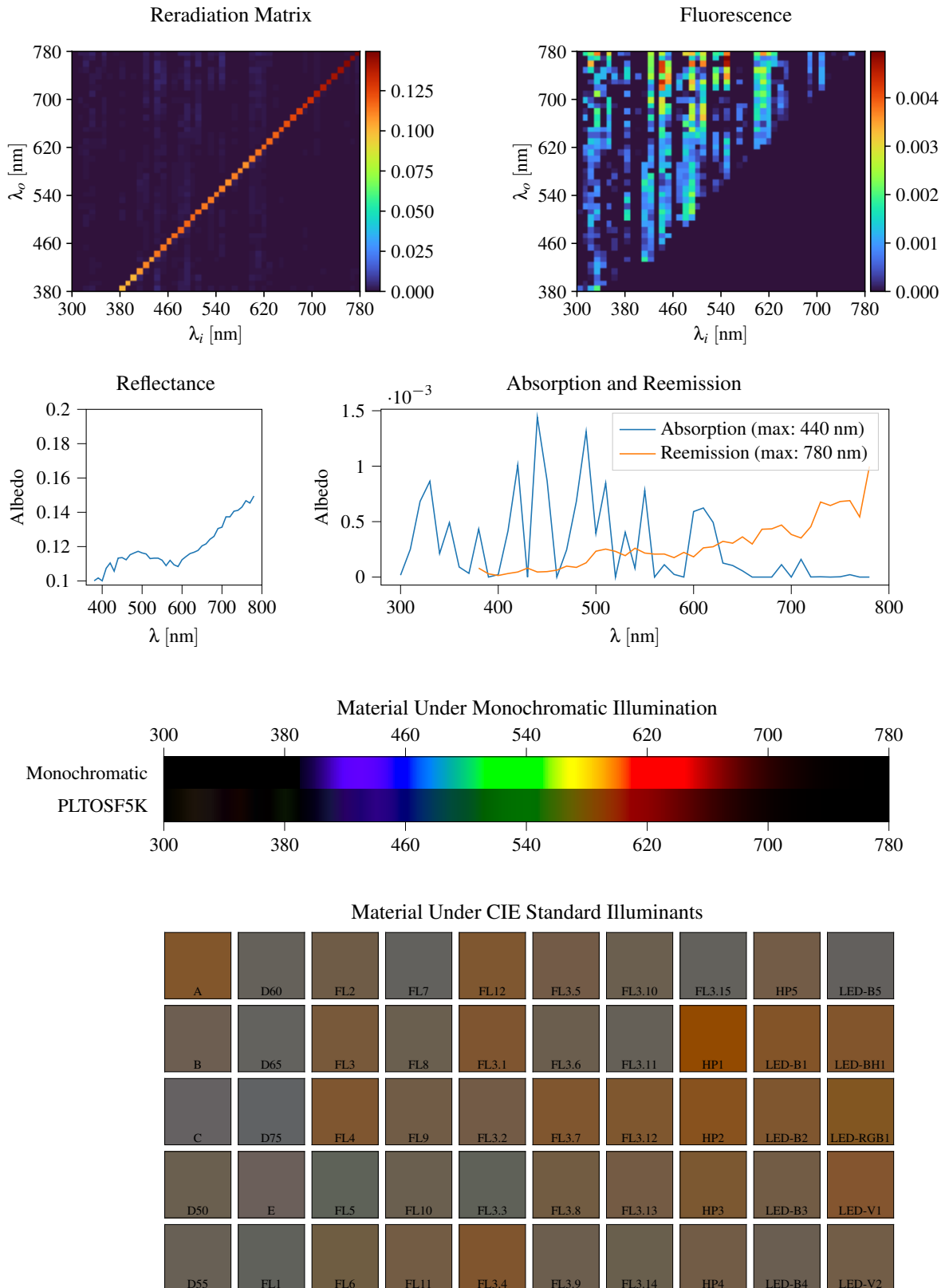
8 Gaussians max

Scaling factor: 99.74243211119307

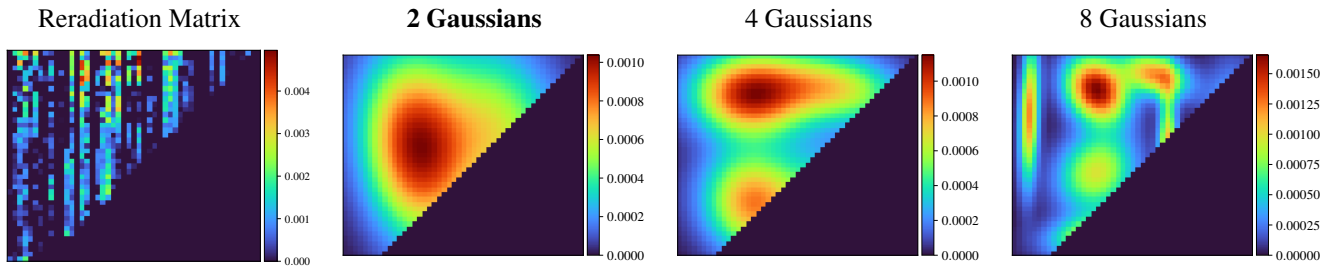
Gaussians:

Weight	Mean		Covariance			
0.128607318	460.672854482	556.160992279	5551.427032495	3197.065002180	3197.065002180	5084.972488287
0.112074576	460.498770068	427.825208365	1371.028868347	430.155484845	430.155484845	1681.234390958
0.136034902	651.154949955	462.445239432	4073.906732819	139.780996457	139.780996457	3609.065425248
0.122673102	615.993584067	608.877655385	668.369528721	174.005910212	174.005910212	1040.737166640
0.177064019	391.323559039	663.034579175	3673.377082956	-1243.243763232	-1243.243763232	4588.457467859
0.094833993	715.579654837	688.308587790	1848.858744641	658.130755253	658.130755253	3114.924554525
0.140227088	462.306689654	720.686030474	1664.269967661	-155.646101814	-155.646101814	1922.340620565
0.088485001	616.131641949	731.409183635	1340.169742431	17.141833045	17.141833045	1844.544466704

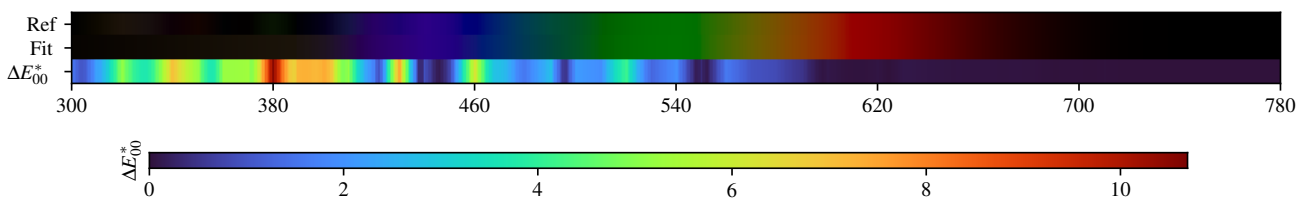
3.125. PLTOSF5K



PLTOSF5K - Weighted Expectation-Maximization - 2 Gaussians



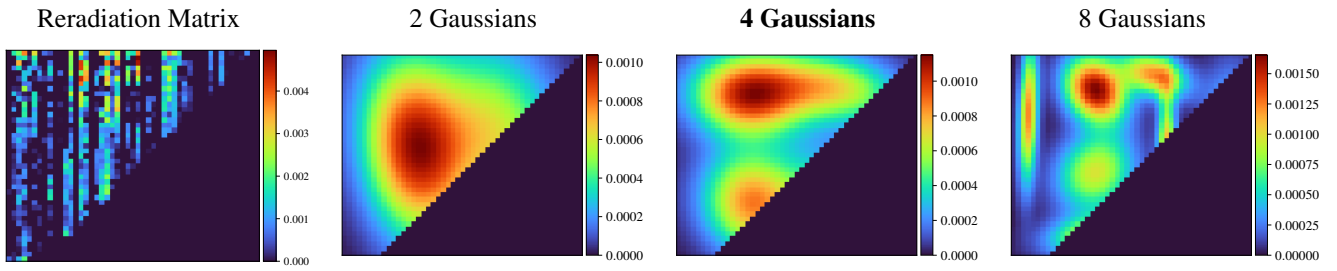
Fitted Material Under Monochromatic Illumination



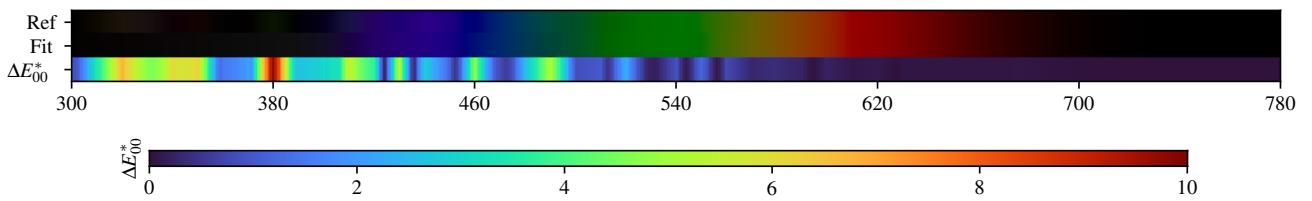
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.56$	D60 $\Delta E = 1.88$	FL2 $\Delta E = 1.00$	FL7 $\Delta E = 1.75$	FL12 $\Delta E = 0.39$	FL3.5 $\Delta E = 0.82$	FL3.10 $\Delta E = 1.01$	FL3.15 $\Delta E = 1.81$	HP5 $\Delta E = 1.01$	LED-B5 $\Delta E = 1.61$
B $\Delta E = 1.31$	D65 $\Delta E = 2.09$	FL3 $\Delta E = 0.68$	FL8 $\Delta E = 1.18$	FL3.1 $\Delta E = 0.51$	FL3.6 $\Delta E = 1.16$	FL3.11 $\Delta E = 1.37$	HP1 $\Delta E = 0.35$	LED-B1 $\Delta E = 0.50$	LED-BH1 $\Delta E = 0.55$
C $\Delta E = 1.96$	D75 $\Delta E = 2.44$	FL4 $\Delta E = 0.52$	FL9 $\Delta E = 0.86$	FL3.2 $\Delta E = 0.85$	FL3.7 $\Delta E = 0.40$	FL3.12 $\Delta E = 0.46$	HP2 $\Delta E = 0.45$	LED-B2 $\Delta E = 0.57$	LED-RGB1 $\Delta E = 0.59$
D50 $\Delta E = 1.43$	E $\Delta E = 1.78$	FL5 $\Delta E = 1.76$	FL10 $\Delta E = 1.07$	FL3.3 $\Delta E = 1.75$	FL3.8 $\Delta E = 0.73$	FL3.13 $\Delta E = 0.74$	HP3 $\Delta E = 0.65$	LED-B3 $\Delta E = 0.84$	LED-V1 $\Delta E = 0.59$
D55 $\Delta E = 1.66$	FL1 $\Delta E = 1.80$	FL6 $\Delta E = 1.00$	FL11 $\Delta E = 0.68$	FL3.4 $\Delta E = 0.47$	FL3.9 $\Delta E = 1.00$	FL3.14 $\Delta E = 1.20$	HP4 $\Delta E = 1.10$	LED-B4 $\Delta E = 1.18$	LED-V2 $\Delta E = 1.14$

PLTOSF5K - Weighted Expectation-Maximization - 4 Gaussians



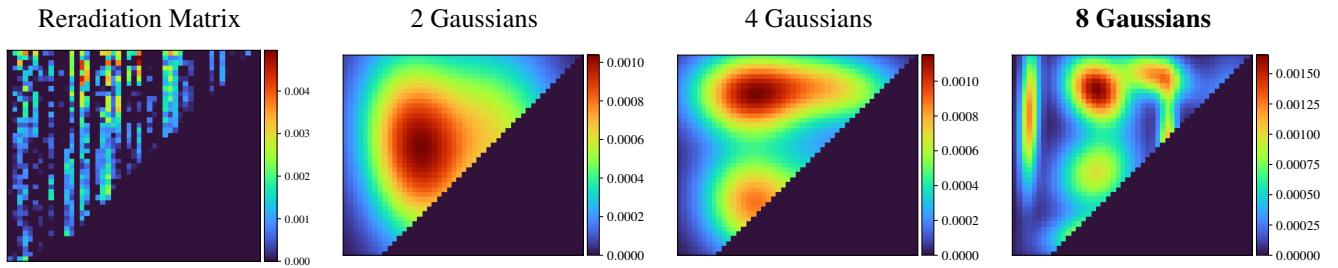
Fitted Material Under Monochromatic Illumination



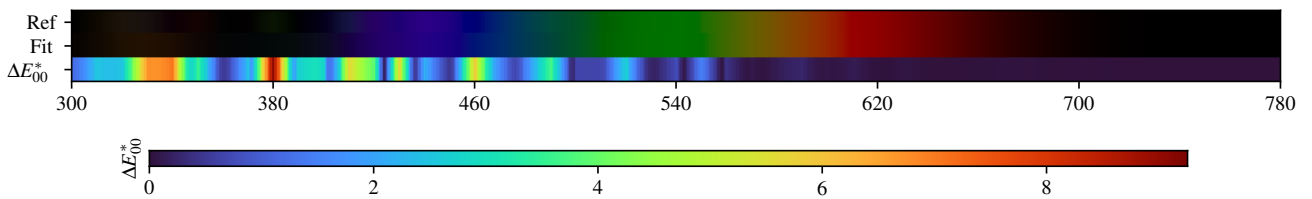
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.43$	$\Delta E = 0.18$	$\Delta E = 0.40$	$\Delta E = 0.22$	$\Delta E = 0.16$	$\Delta E = 0.44$	$\Delta E = 0.48$	$\Delta E = 0.24$	$\Delta E = 0.39$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.33$	$\Delta E = 0.50$	$\Delta E = 0.12$	$\Delta E = 0.24$	$\Delta E = 0.06$	$\Delta E = 0.20$	$\Delta E = 0.42$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.52$	$\Delta E = 0.58$	$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.21$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.58$	$\Delta E = 0.33$	$\Delta E = 0.41$	$\Delta E = 0.26$	$\Delta E = 0.25$	$\Delta E = 0.20$	$\Delta E = 0.10$	$\Delta E = 0.19$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.36$	$\Delta E = 0.36$	$\Delta E = 0.14$	$\Delta E = 0.33$	$\Delta E = 0.05$	$\Delta E = 0.34$	$\Delta E = 0.27$	$\Delta E = 0.36$	$\Delta E = 0.30$	$\Delta E = 0.43$

PLTOSF5K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.31$	$\Delta E = 0.17$	$\Delta E = 0.34$	$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.09$	$\Delta E = 0.29$	$\Delta E = 0.17$	$\Delta E = 0.83$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.10$	$\Delta E = 0.31$	$\Delta E = 0.06$	$\Delta E = 0.22$	$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.20$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.30$	$\Delta E = 0.33$	$\Delta E = 0.06$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.16$	$\Delta E = 0.24$	$\Delta E = 0.36$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.20$	$\Delta E = 0.26$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.42$	$\Delta E = 0.07$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.30$	$\Delta E = 0.28$	$\Delta E = 0.16$	$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.67$	$\Delta E = 0.07$

PLTOSF5K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.100085	0.101719	0.100038	0.107354	0.110451	0.105670	0.113314	0.113576	0.112308	0.115252	0.116293
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.117240	0.116299	0.115716	0.112996	0.113264	0.113261	0.112072	0.108898	0.111984	0.109372	0.108375
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.112340	0.114202	0.115925	0.116705	0.117764	0.120417	0.121564	0.124273	0.125942	0.130527	0.131317
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.137339	0.137356	0.140620	0.141135	0.143036	0.146739	0.145382	0.149482			

2 Gaussians

Scaling factor: 94.38215369077916

Gaussians:

Weight	Mean		Covariance			
0.583878808	440.724071394	592.112257812	5432.268643267	-1581.315599215	-1581.315599215	16417.297164219
0.416121192	608.040079339	626.294499257	8003.660464772	-1696.295930262	-1696.295930262	15426.335626726

4 Gaussians

Scaling factor: 89.6832400031052

Gaussians:

Weight	Mean		Covariance			
0.288909523	448.439245754	482.306491603	4719.628645231	-414.723303101	-414.723303101	5089.857374204
0.211003566	615.054859016	716.987472787	8400.772775535	-853.799833229	-853.799833229	2479.846074518
0.330486932	440.948249443	702.432924422	6205.308648990	-150.992472939	-150.992472939	3329.081121447
0.169599978	620.772699469	492.697340848	6112.347037557	-1300.202823128	-1300.202823128	5453.342429198

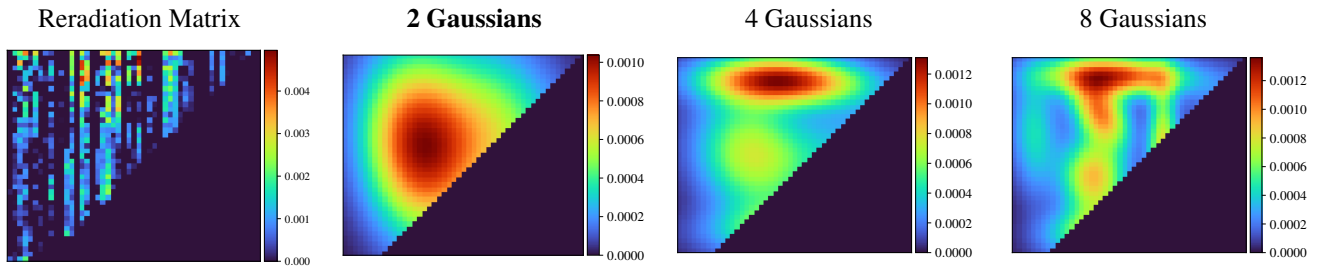
8 Gaussians

Scaling factor: 89.36590053201466

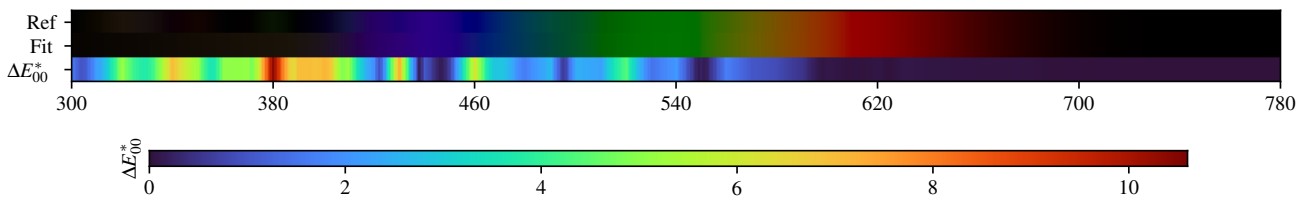
Gaussians:

Weight	Mean		Covariance			
0.120169890	460.850186753	415.604771050	4011.862318027	413.128975052	413.128975052	867.130326496
0.112237397	584.860974537	743.301186693	2058.291460054	-452.311947311	-452.311947311	971.110692610
0.196972647	465.881548252	545.561072777	2918.140732473	431.571444523	431.571444523	2956.474624399
0.063150562	655.824318870	428.807928949	7117.849074561	142.597477980	142.597477980	1309.580990749
0.225919576	466.325373668	712.798873008	1850.148331449	-378.953257875	-378.953257875	2138.968376310
0.105713063	330.295087551	663.685619058	179.050962003	288.041110893	288.041110893	8975.806850942
0.106862964	611.181990282	565.715305747	162.391734316	-7.478521483	-7.478521483	9115.861771453
0.068973901	733.050710834	678.188393884	1398.115107087	385.319241126	385.319241126	5345.053091088

PLTOSF5K - Weighted variational Bayesian inference - 2 Gaussians



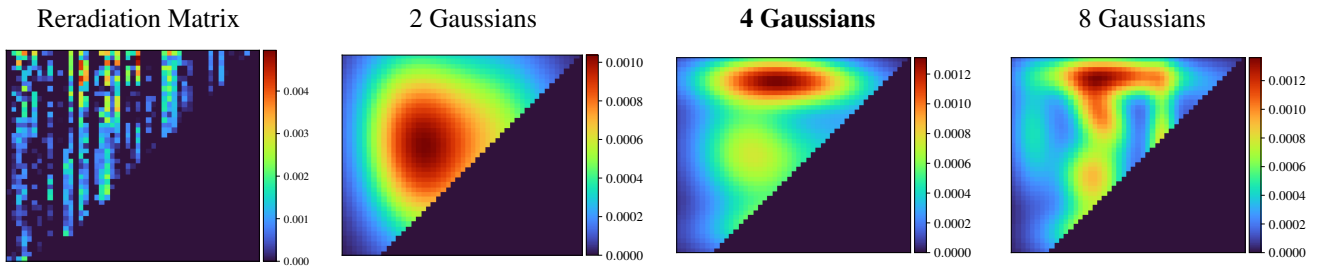
Fitted Material Under Monochromatic Illumination



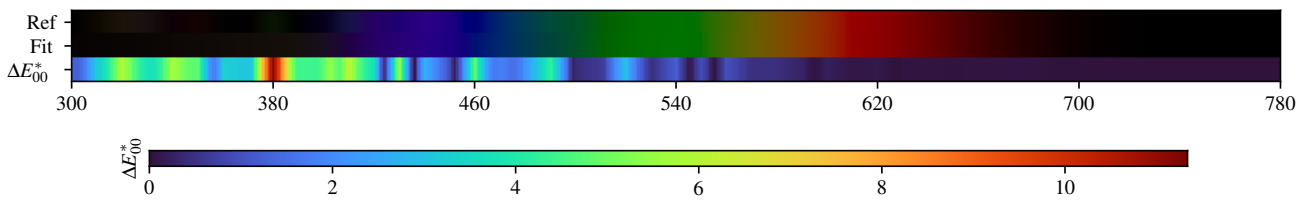
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.60$	D60 $\Delta E = 1.98$	FL2 $\Delta E = 1.06$	FL7 $\Delta E = 1.85$	FL12 $\Delta E = 0.42$	FL3.5 $\Delta E = 0.88$	FL3.10 $\Delta E = 1.09$	FL3.15 $\Delta E = 1.92$	HP5 $\Delta E = 1.06$	LED-B5 $\Delta E = 1.71$
B $\Delta E = 1.38$	D65 $\Delta E = 2.19$	FL3 $\Delta E = 0.72$	FL8 $\Delta E = 1.26$	FL3.1 $\Delta E = 0.53$	FL3.6 $\Delta E = 1.23$	FL3.11 $\Delta E = 1.46$	HP1 $\Delta E = 0.36$	LED-B1 $\Delta E = 0.53$	LED-BH1 $\Delta E = 0.58$
C $\Delta E = 2.06$	D75 $\Delta E = 2.55$	FL4 $\Delta E = 0.55$	FL9 $\Delta E = 0.92$	FL3.2 $\Delta E = 0.89$	FL3.7 $\Delta E = 0.43$	FL3.12 $\Delta E = 0.50$	HP2 $\Delta E = 0.48$	LED-B2 $\Delta E = 0.60$	LED-RGB1 $\Delta E = 0.64$
D50 $\Delta E = 1.51$	E $\Delta E = 1.84$	FL5 $\Delta E = 1.87$	FL10 $\Delta E = 1.15$	FL3.3 $\Delta E = 1.86$	FL3.8 $\Delta E = 0.78$	FL3.13 $\Delta E = 0.79$	HP3 $\Delta E = 0.68$	LED-B3 $\Delta E = 0.90$	LED-V1 $\Delta E = 0.62$
D55 $\Delta E = 1.75$	FL1 $\Delta E = 1.91$	FL6 $\Delta E = 1.06$	FL11 $\Delta E = 0.74$	FL3.4 $\Delta E = 0.50$	FL3.9 $\Delta E = 1.07$	FL3.14 $\Delta E = 1.28$	HP4 $\Delta E = 1.14$	LED-B4 $\Delta E = 1.26$	LED-V2 $\Delta E = 1.20$

PLTOSF5K - Weighted variational Bayesian inference - 4 Gaussians



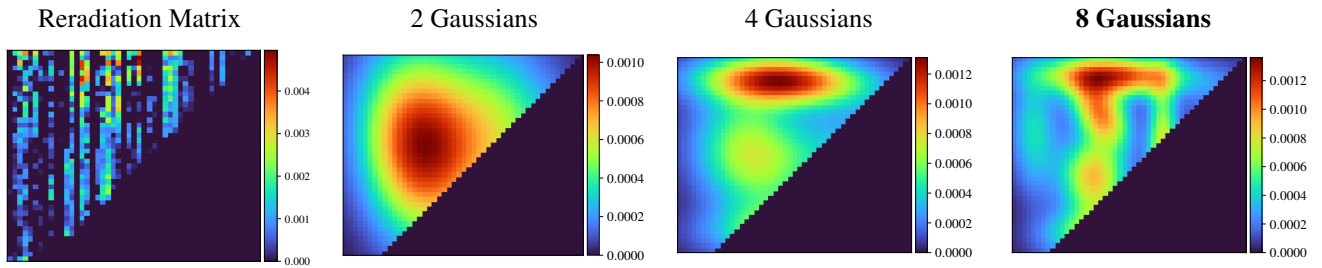
Fitted Material Under Monochromatic Illumination



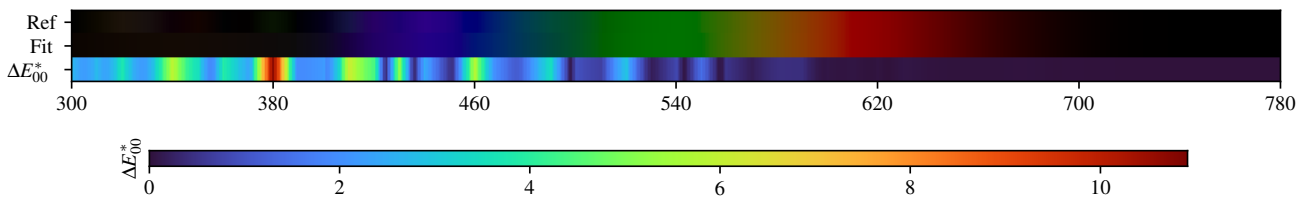
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.75$	FL2 $\Delta E = 0.34$	FL7 $\Delta E = 0.64$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.25$	FL3.10 $\Delta E = 0.38$	FL3.15 $\Delta E = 0.69$	HP5 $\Delta E = 0.40$	LED-B5 $\Delta E = 0.46$
B $\Delta E = 0.52$	D65 $\Delta E = 0.85$	FL3 $\Delta E = 0.20$	FL8 $\Delta E = 0.35$	FL3.1 $\Delta E = 0.16$	FL3.6 $\Delta E = 0.39$	FL3.11 $\Delta E = 0.45$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 0.81$	D75 $\Delta E = 0.98$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.24$	FL3.2 $\Delta E = 0.30$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.15$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.31$
D50 $\Delta E = 0.53$	E $\Delta E = 0.82$	FL5 $\Delta E = 0.59$	FL10 $\Delta E = 0.35$	FL3.3 $\Delta E = 0.64$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.24$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.21$
D55 $\Delta E = 0.65$	FL1 $\Delta E = 0.61$	FL6 $\Delta E = 0.33$	FL11 $\Delta E = 0.21$	FL3.4 $\Delta E = 0.16$	FL3.9 $\Delta E = 0.32$	FL3.14 $\Delta E = 0.40$	HP4 $\Delta E = 0.54$	LED-B4 $\Delta E = 0.35$	LED-V2 $\Delta E = 0.57$

PLTOSF5K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.15$	D60 $\Delta E = 0.41$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.29$	FL12 $\Delta E = 0.23$	FL3.5 $\Delta E = 0.23$	FL3.10 $\Delta E = 0.34$	FL3.15 $\Delta E = 0.38$	HP5 $\Delta E = 0.31$	LED-B5 $\Delta E = 0.40$
B $\Delta E = 0.31$	D65 $\Delta E = 0.44$	FL3 $\Delta E = 0.17$	FL8 $\Delta E = 0.22$	FL3.1 $\Delta E = 0.17$	FL3.6 $\Delta E = 0.31$	FL3.11 $\Delta E = 0.32$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.38$	D75 $\Delta E = 0.48$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.17$	FL3.2 $\Delta E = 0.25$	FL3.7 $\Delta E = 0.24$	FL3.12 $\Delta E = 0.16$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.16$	LED-RGB1 $\Delta E = 0.22$
D50 $\Delta E = 0.32$	E $\Delta E = 0.51$	FL5 $\Delta E = 0.27$	FL10 $\Delta E = 0.27$	FL3.3 $\Delta E = 0.38$	FL3.8 $\Delta E = 0.31$	FL3.13 $\Delta E = 0.28$	HP3 $\Delta E = 0.20$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.25$
D55 $\Delta E = 0.37$	FL1 $\Delta E = 0.29$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.28$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.33$	FL3.14 $\Delta E = 0.40$	HP4 $\Delta E = 0.48$	LED-B4 $\Delta E = 0.31$	LED-V2 $\Delta E = 0.48$

PLTOSF5K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.100085	0.101719	0.100038	0.107354	0.110451	0.105670	0.113314	0.113576	0.112308	0.115252	0.116293
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.117240	0.116299	0.115716	0.112996	0.113264	0.113261	0.112072	0.108898	0.111984	0.109372	0.108375
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.112340	0.114202	0.115925	0.116705	0.117764	0.120417	0.121564	0.124273	0.125942	0.130527	0.131317
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.137339	0.137356	0.140620	0.141135	0.143036	0.146739	0.145382	0.149482			

2 Gaussians max

Scaling factor: 94.51445893685772

Gaussians:

Weight	Mean		Covariance			
0.565692108	443.027935281	594.266342013	5888.169145776	-1364.730544391	-1364.730544391	16414.290231441
0.434307892	597.967146660	621.896792839	9370.053011784	-1196.135380408	-1196.135380408	15611.764483070

4 Gaussians max

Scaling factor: 90.00482488574887

Gaussians:

Weight	Mean		Covariance			
0.199810260	535.260302081	426.465079266	13508.230894973	661.384671307	661.384671307	1507.819846870
0.333198456	447.994878751	583.796316174	6266.416557905	-547.295711970	-547.295711970	7097.967758599
0.124168633	627.568511827	595.799078748	7515.964155069	2633.722408064	2633.722408064	5916.631064929
0.342822651	514.040349208	736.537102074	12928.037886449	-326.201800222	-326.201800222	1256.263911680

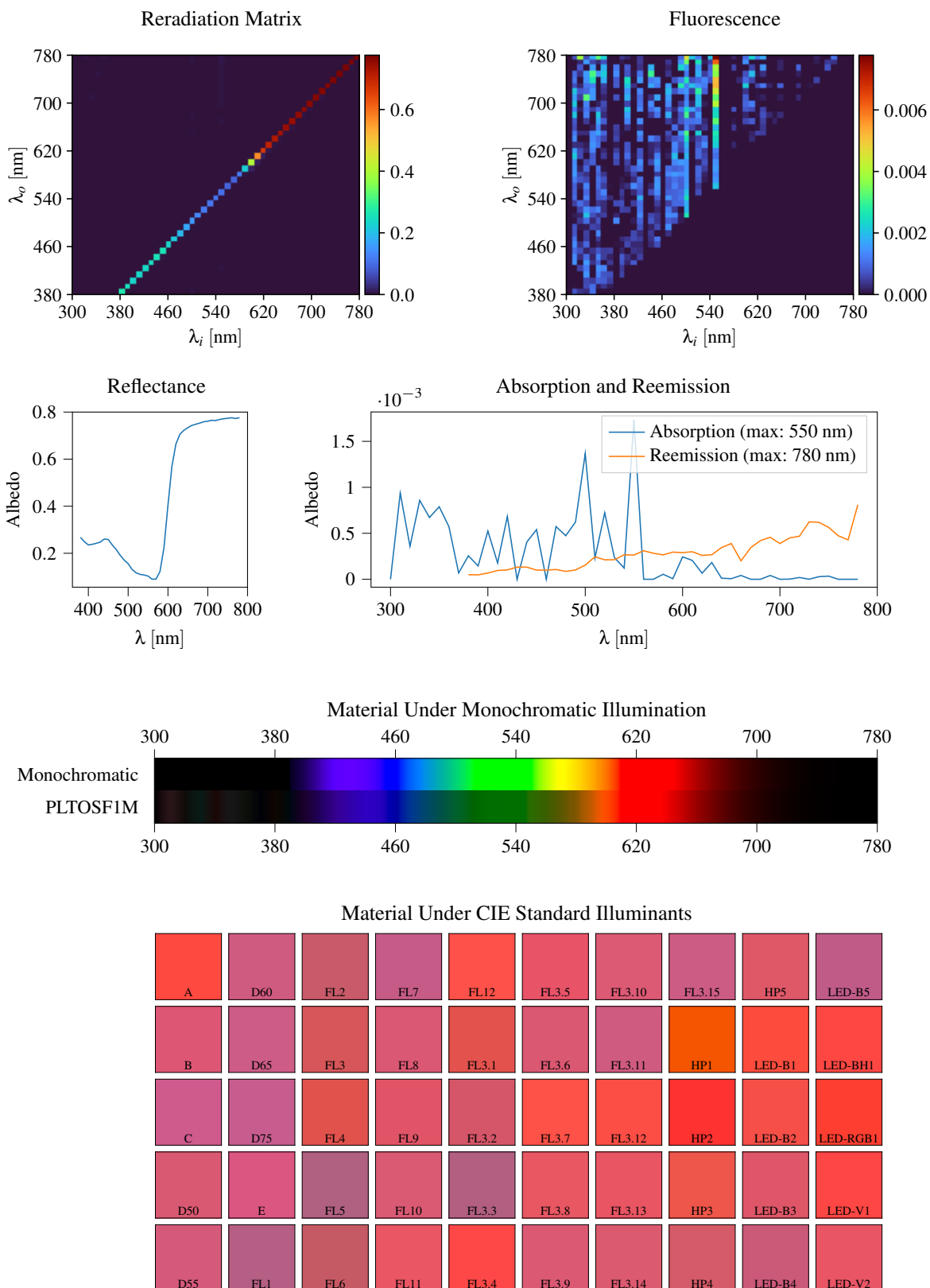
8 Gaussians max

Scaling factor: 90.07128160443618

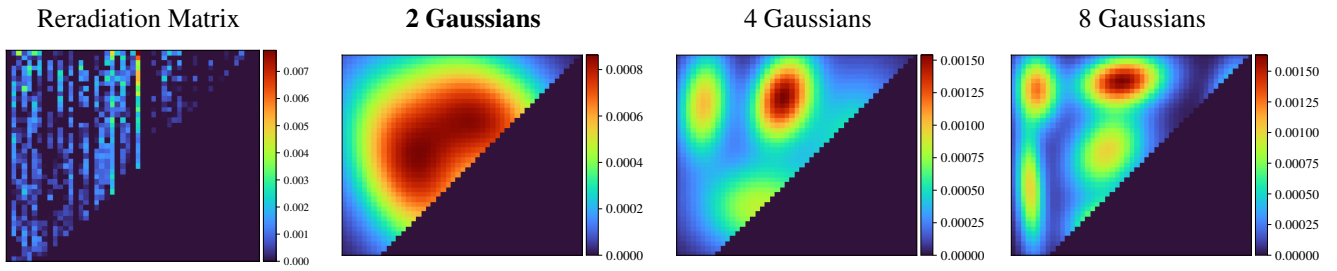
Gaussians:

Weight	Mean		Covariance			
0.136914450	473.713183049	420.065144429	5658.054530051	446.401878891	446.401878891	1370.161436353
0.130754803	609.482040072	577.602692989	450.710504208	-29.871562652	-29.871562652	11506.506790694
0.044834226	692.189398509	448.833179158	5362.057391219	-1256.812198572	-1256.812198572	2897.660778831
0.099431020	340.940295088	628.640186083	1260.245804672	-140.869512719	-140.869512719	8406.945468752
0.161288414	464.780365422	534.013505335	2135.195204555	-93.339851896	-93.339851896	3128.135117984
0.055481286	724.278260437	665.090610551	3004.643745944	931.872099969	931.872099969	4662.035186894
0.128605647	478.818288697	669.398492293	1771.763393489	-804.153749017	-804.153749017	2352.646705235
0.242690153	510.720939994	746.738830517	10350.942537528	-268.207492631	-268.207492631	857.918883754

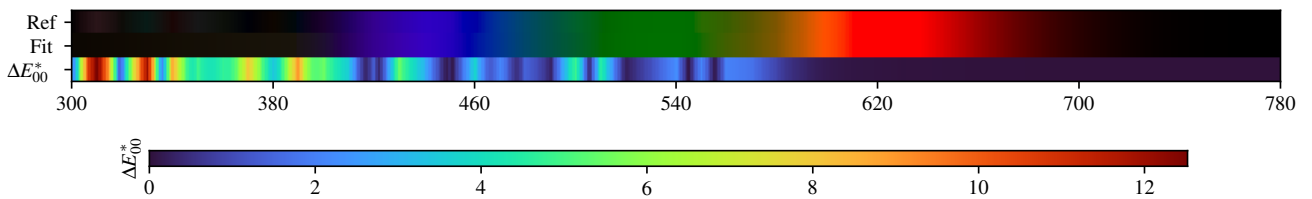
3.126. PLTOSFIM



PLTOSF1M - Weighted Expectation-Maximization - 2 Gaussians



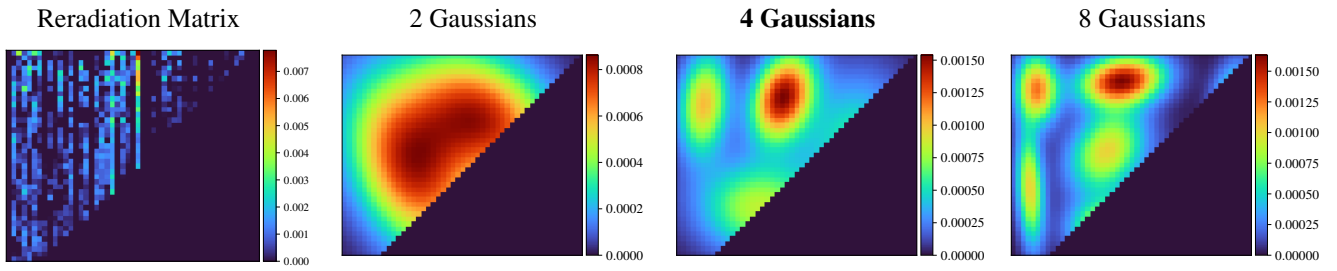
Fitted Material Under Monochromatic Illumination



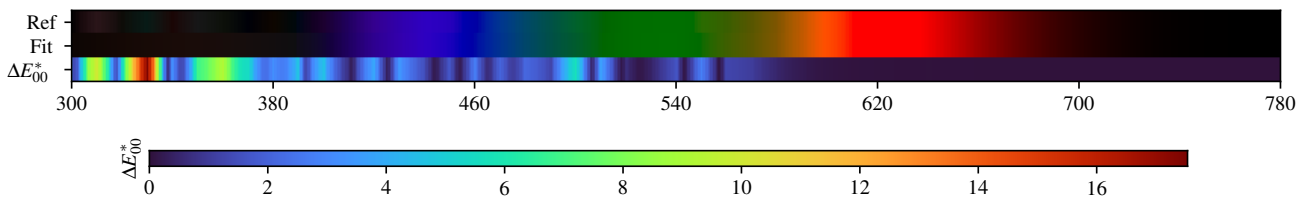
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.21$	D60 $\Delta E = 0.49$	FL2 $\Delta E = 0.36$	FL7 $\Delta E = 0.42$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.25$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.42$	HP5 $\Delta E = 0.35$	LED-B5 $\Delta E = 0.51$
B $\Delta E = 0.39$	D65 $\Delta E = 0.53$	FL3 $\Delta E = 0.30$	FL8 $\Delta E = 0.30$	FL3.1 $\Delta E = 0.24$	FL3.6 $\Delta E = 0.28$	FL3.11 $\Delta E = 0.31$	HP1 $\Delta E = 0.21$	LED-B1 $\Delta E = 0.21$	LED-BH1 $\Delta E = 0.24$
C $\Delta E = 0.50$	D75 $\Delta E = 0.59$	FL4 $\Delta E = 0.26$	FL9 $\Delta E = 0.27$	FL3.2 $\Delta E = 0.31$	FL3.7 $\Delta E = 0.15$	FL3.12 $\Delta E = 0.15$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.24$	LED-RGB1 $\Delta E = 0.18$
D50 $\Delta E = 0.40$	E $\Delta E = 0.61$	FL5 $\Delta E = 0.46$	FL10 $\Delta E = 0.25$	FL3.3 $\Delta E = 0.44$	FL3.8 $\Delta E = 0.21$	FL3.13 $\Delta E = 0.18$	HP3 $\Delta E = 0.30$	LED-B3 $\Delta E = 0.33$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.45$	FL1 $\Delta E = 0.45$	FL6 $\Delta E = 0.36$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.19$	FL3.9 $\Delta E = 0.26$	FL3.14 $\Delta E = 0.19$	HP4 $\Delta E = 0.41$	LED-B4 $\Delta E = 0.46$	LED-V2 $\Delta E = 0.28$

PLTOSF1M - Weighted Expectation-Maximization - 4 Gaussians



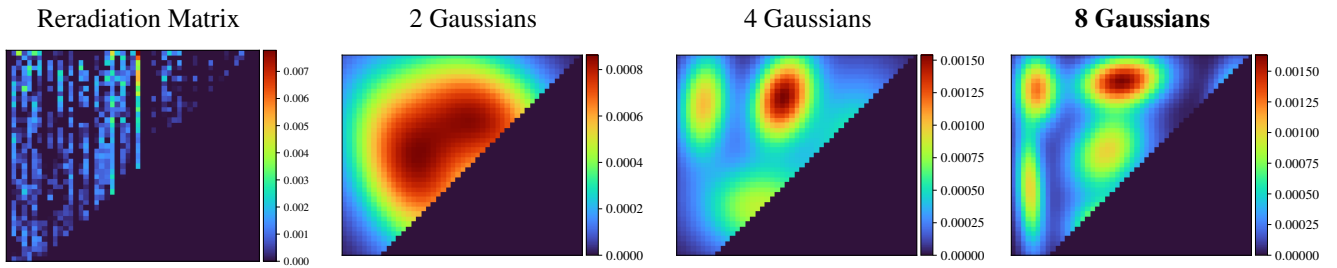
Fitted Material Under Monochromatic Illumination



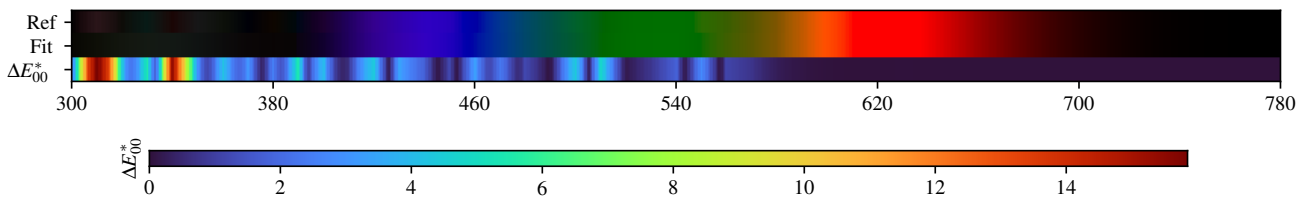
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.22$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.19$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.22$	FL3.15 $\Delta E = 0.21$	HP5 $\Delta E = 0.19$	LED-B5 $\Delta E = 0.08$
B $\Delta E = 0.20$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.17$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.21$	D75 $\Delta E = 0.22$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.15$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.21$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.14$	FL3.13 $\Delta E = 0.18$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.20$
D55 $\Delta E = 0.21$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.17$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.24$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.28$

PLTOSF1M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.06$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.06$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.04$	FL3.10 $\Delta E = 0.05$	FL3.15 $\Delta E = 0.05$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.18$
B $\Delta E = 0.05$	D65 $\Delta E = 0.07$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.04$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.03$	HP1 $\Delta E = 0.10$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.07$	D75 $\Delta E = 0.08$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.04$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.06$	E $\Delta E = 0.06$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.04$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.03$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.05$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.04$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.03$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.07$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.07$

PLTOSF1M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.267516	0.249327	0.235335	0.238185	0.242360	0.247545	0.260656	0.258379	0.235826	0.216139	0.191471
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.171144	0.155895	0.131018	0.117012	0.110340	0.107791	0.103240	0.090036	0.090274	0.122430	0.223913
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.403661	0.569832	0.664035	0.705757	0.722483	0.733915	0.743363	0.748453	0.753199	0.758887	0.761236
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.765069	0.764116	0.768662	0.771603	0.773655	0.775762	0.772752	0.776119			

2 Gaussians

Scaling factor: 91.71818565430006

Gaussians:

Weight	Mean		Covariance			
0.506973604	432.730054590	551.561782581	7734.015706160	-3791.688803593	-3791.688803593	14282.493996615
0.493026396	579.918518724	656.722960273	10647.004735146	-2904.540538907	-2904.540538907	8905.801364962

4 Gaussians

Scaling factor: 92.76368541621963

Gaussians:

Weight	Mean		Covariance			
0.308760234	462.027042193	472.893897976	7238.852268408	-200.081830637	-200.081830637	4273.883863315
0.257451998	510.963864888	698.442855589	1870.169454789	713.097819139	713.097819139	3725.771329976
0.262604744	650.925633332	610.970166951	5519.129575281	1108.636316002	1108.636316002	9593.372294145
0.171183024	351.421808392	684.291075330	1230.017778180	354.202651787	354.202651787	5130.335097677

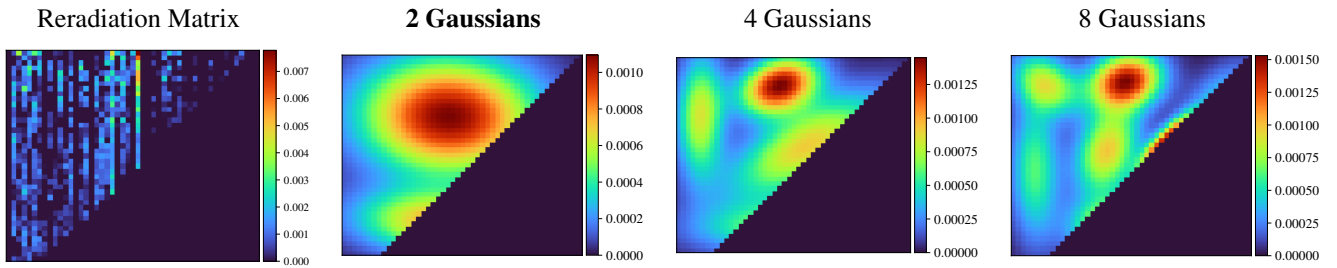
8 Gaussians

Scaling factor: 94.32236411171445

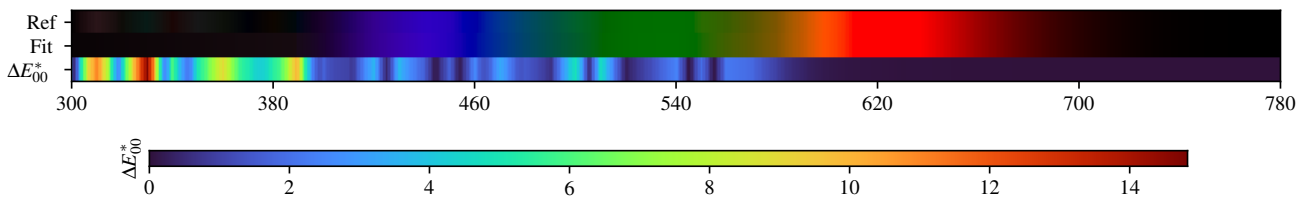
Gaussians:

Weight	Mean		Covariance			
0.152419207	496.803911368	431.954899609	2749.280744645	84.136896809	84.136896809	1403.369611397
0.213311736	519.221368828	731.565885070	3463.948243735	359.234505253	359.234505253	1224.819817912
0.097447456	625.554264038	615.250081652	1123.128029328	1129.272335455	1129.272335455	1138.365943946
0.113071573	347.505463010	714.494734679	834.791402712	-64.992409085	-64.992409085	2335.987115363
0.198983979	489.294625417	588.233740753	2777.660919709	864.352391696	864.352391696	3447.751953164
0.072085886	675.181525367	490.360450169	4365.467677982	-1169.526421457	-1169.526421457	5003.835044657
0.099716849	333.912267720	512.135781880	360.140226386	-317.044529845	-317.044529845	6386.128427826
0.052963313	740.856079057	704.447686889	832.103141383	427.456108764	427.456108764	2464.023865544

PLTOSF1M - Weighted variational Bayesian inference - 2 Gaussians



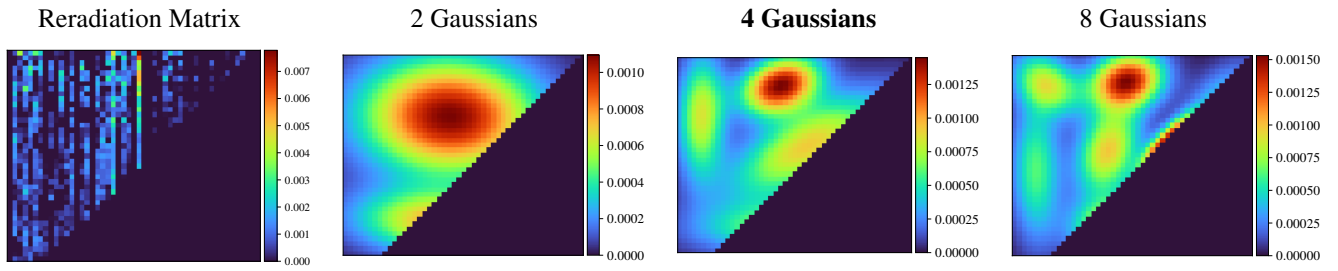
Fitted Material Under Monochromatic Illumination



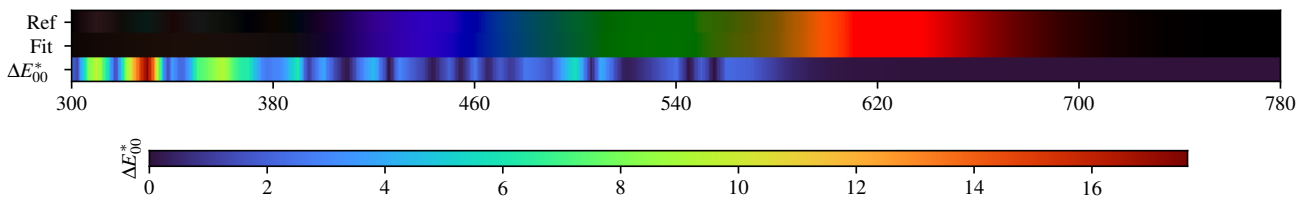
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.31$	FL2 $\Delta E = 0.27$	FL7 $\Delta E = 0.28$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.19$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.27$	HP5 $\Delta E = 0.26$	LED-B5 $\Delta E = 0.34$
B $\Delta E = 0.25$	D65 $\Delta E = 0.33$	FL3 $\Delta E = 0.24$	FL8 $\Delta E = 0.21$	FL3.1 $\Delta E = 0.21$	FL3.6 $\Delta E = 0.22$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.24$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.16$
C $\Delta E = 0.31$	D75 $\Delta E = 0.37$	FL4 $\Delta E = 0.22$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.23$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.15$	HP2 $\Delta E = 0.13$	LED-B2 $\Delta E = 0.18$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.26$	E $\Delta E = 0.30$	FL5 $\Delta E = 0.38$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.37$	FL3.8 $\Delta E = 0.17$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.28$	FL1 $\Delta E = 0.36$	FL6 $\Delta E = 0.28$	FL11 $\Delta E = 0.16$	FL3.4 $\Delta E = 0.15$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.24$	HP4 $\Delta E = 0.29$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.26$

PLTOSF1M - Weighted variational Bayesian inference - 4 Gaussians



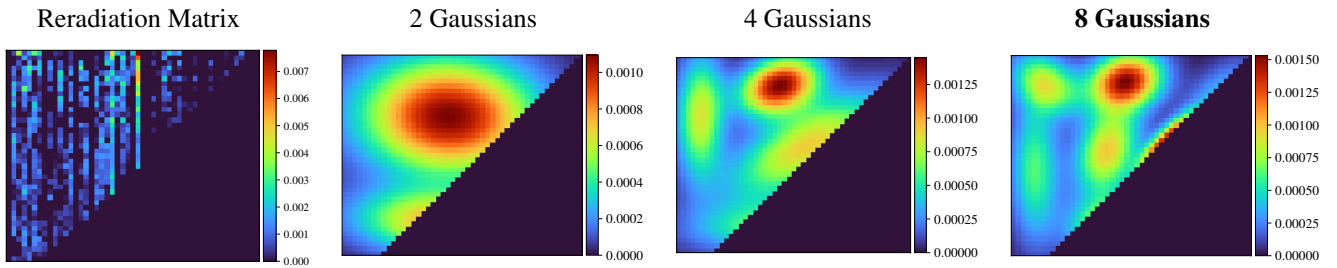
Fitted Material Under Monochromatic Illumination



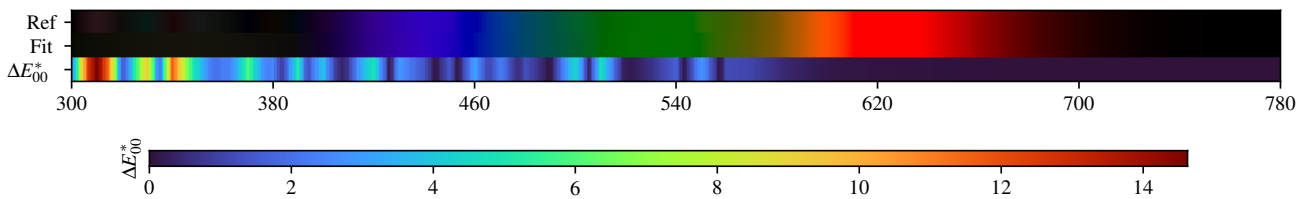
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.21$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.10$	$\Delta E = 0.22$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.16$	$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.17$	$\Delta E = 0.10$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.21$	$\Delta E = 0.09$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.23$	$\Delta E = 0.11$

PLTOSF1M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.06$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.21$
B $\Delta E = 0.11$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.15$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.08$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.12$	D75 $\Delta E = 0.14$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.13$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.11$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.05$	FL3.3 $\Delta E = 0.16$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.05$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.07$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.20$	LED-V2 $\Delta E = 0.09$

PLTOSF1M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.267516	0.249327	0.235335	0.238185	0.242360	0.247545	0.260656	0.258379	0.235826	0.216139	0.191471
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.171144	0.155895	0.131018	0.117012	0.110340	0.107791	0.103240	0.090036	0.090274	0.122430	0.223913
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.403661	0.569832	0.664035	0.705757	0.722483	0.733915	0.743363	0.748453	0.753199	0.758887	0.761236
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.765069	0.764116	0.768662	0.771603	0.773655	0.775762	0.772752	0.776119			

2 Gaussians max

Scaling factor: 92.3454621709083

Gaussians:

Weight	Mean		Covariance			
0.254147774	488.145951720	441.896169127	12867.015301529	-702.499280280	-702.499280280	2081.338447876
0.745852226	511.189475881	658.304471344	15015.075288093	-339.674367337	-339.674367337	6683.594518134

4 Gaussians max

Scaling factor: 90.22039912172897

Gaussians:

Weight	Mean		Covariance			
0.203694488	515.452822859	429.287549582	13656.468490513	492.705092888	492.705092888	1391.706094975
0.401928950	567.058340646	598.643449072	12233.526226865	5494.164733658	5494.164733658	5698.112648071
0.172984188	345.357802658	661.810333077	1153.347741186	157.480345707	157.480345707	7816.352448236
0.221392374	509.911022485	725.658288794	3078.774737141	653.608159450	653.608159450	1732.820239098

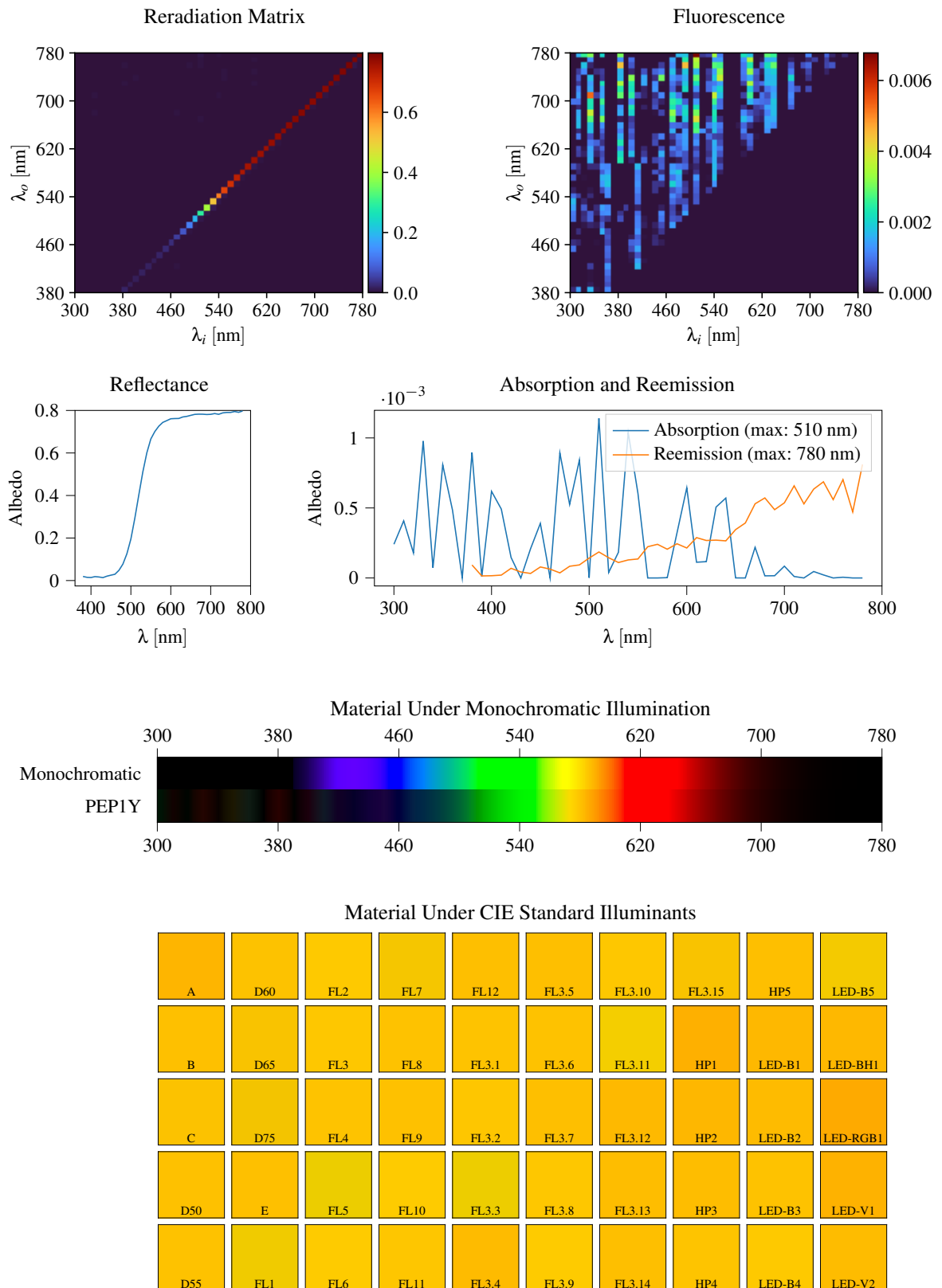
8 Gaussians max

Scaling factor: 92.62609718526386

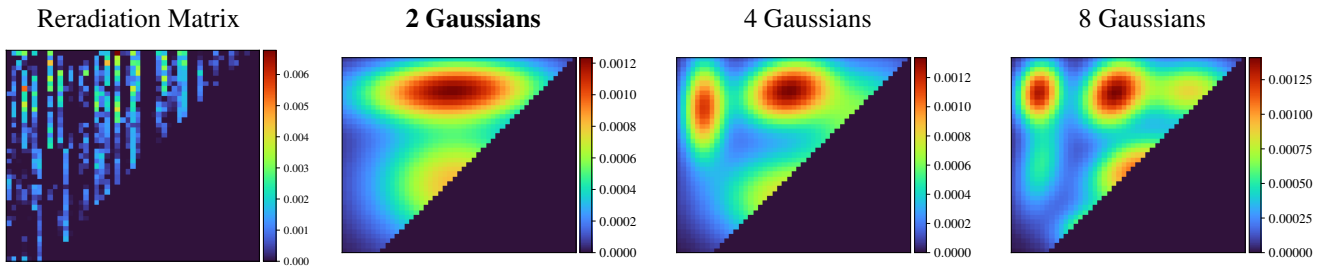
Gaussians:

Weight	Mean		Covariance			
0.142254198	343.196643271	550.606713507	1144.178182936	-54.345393353	-54.345393353	9580.756230801
0.155092421	499.468585427	433.216983078	3183.758429928	104.334920243	104.334920243	1661.705108762
0.062512756	686.572997019	487.716900586	4669.082161215	-823.231438578	-823.231438578	5272.385312630
0.169322536	489.679006422	588.751790907	1953.434041567	764.815770070	764.815770070	3644.027439582
0.108586905	614.364766086	602.388248392	1299.038798908	1035.869850549	1035.869850549	1378.049289240
0.062808124	722.972144439	699.671146808	2617.430702416	1170.694948903	1170.694948903	2553.055435932
0.105189618	367.165804797	724.183431336	2210.758698601	-617.248646318	-617.248646318	1801.933573893
0.194233442	527.501215651	730.650913136	2532.674770349	307.444493433	307.444493433	1533.256762025

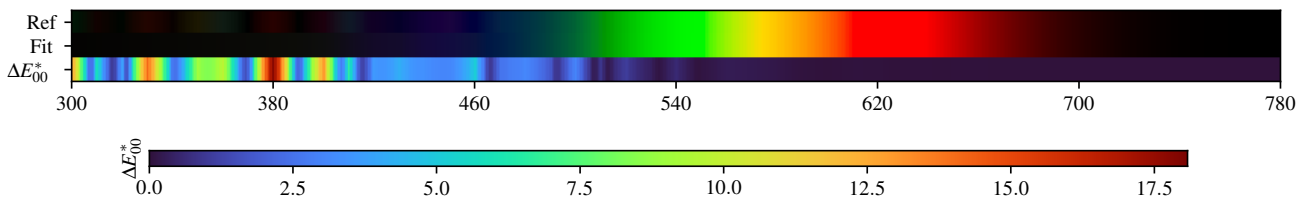
3.127. PEPIY



PEP1Y - Weighted Expectation-Maximization - 2 Gaussians



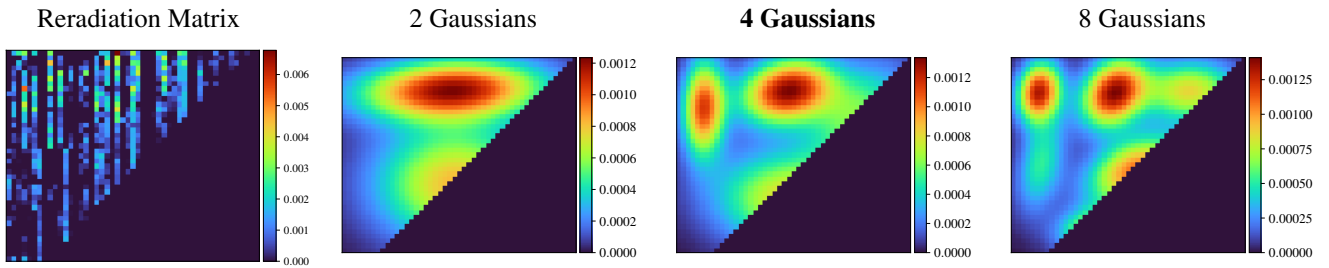
Fitted Material Under Monochromatic Illumination



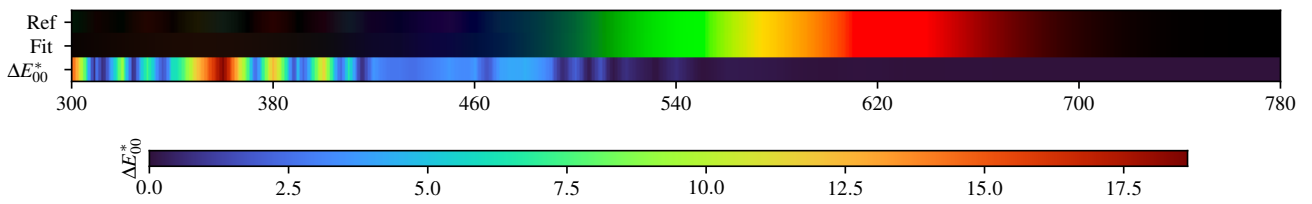
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.18$	$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.14$

PEP1Y - Weighted Expectation-Maximization - 4 Gaussians



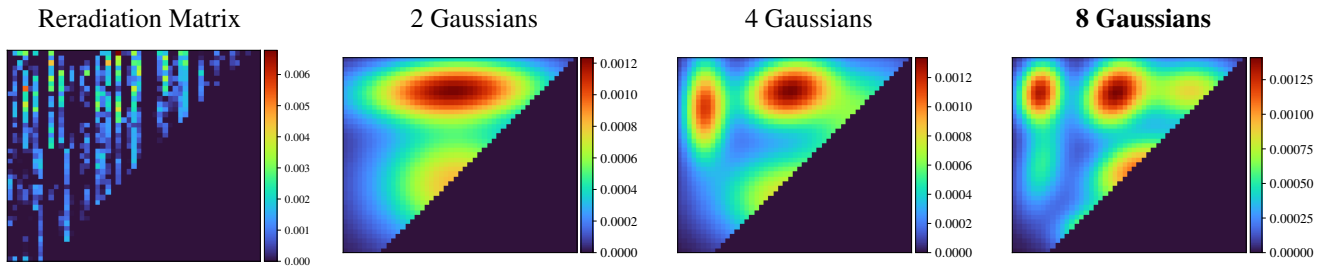
Fitted Material Under Monochromatic Illumination



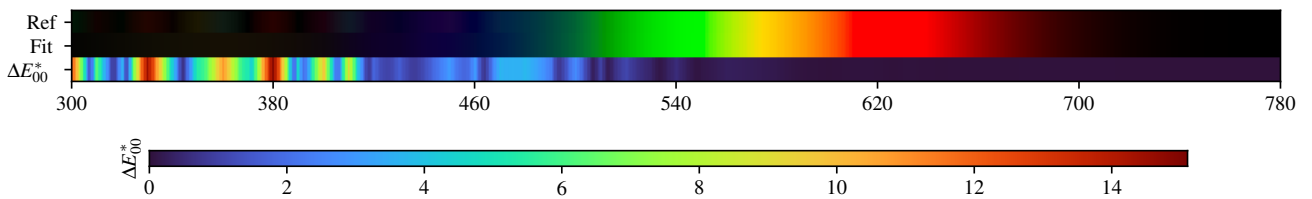
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.04$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.14$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.14$	$\Delta E = 0.18$	$\Delta E = 0.07$	$\Delta E = 0.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.20$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.17$	$\Delta E = 0.17$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.02$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.06$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.08$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.03$	$\Delta E = 0.15$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.09$

PEP1Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.11$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.11$

PEP1Y - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.019245	0.015130	0.014274	0.018411	0.016762	0.013769	0.020631	0.025275	0.029549	0.047784	0.077310
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.125852	0.195197	0.294078	0.403848	0.511264	0.600709	0.665817	0.700687	0.726041	0.743808	0.752183
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.760865	0.761883	0.762238	0.769283	0.772062	0.776932	0.781492	0.782505	0.782291	0.780932	0.781711
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.785388	0.781806	0.788403	0.790592	0.790692	0.794904	0.791183	0.797417			

2 Gaussians

Scaling factor: 95.20752695430947

Gaussians:

Weight	Mean	Covariance				
0.550480031	536.251086291	518.857887872	13723.011456593	-66.282049654	-66.282049654	7381.029756671
0.449519969	523.979996847	716.633377294	17586.556919992	638.769157594	638.769157594	1921.506972177

4 Gaussians

Scaling factor: 98.10254910304609

Gaussians:

Weight	Mean	Covariance				
0.398794018	532.991195734	485.771718355	11733.902830391	-506.675948733	-506.675948733	4876.824281732
0.148336575	352.098671506	678.909268519	924.146155890	83.306729608	83.306729608	4811.665270666
0.269795570	528.190043767	714.599532589	4639.362568247	602.748743425	602.748743425	2270.349998333
0.183073837	674.311759650	658.402109881	5011.999652682	2264.151267062	2264.151267062	6010.050151817

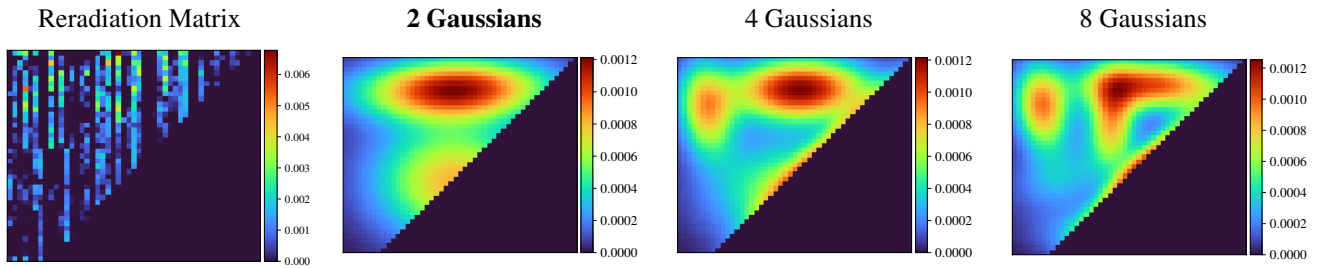
8 Gaussians

Scaling factor: 95.28596671369398

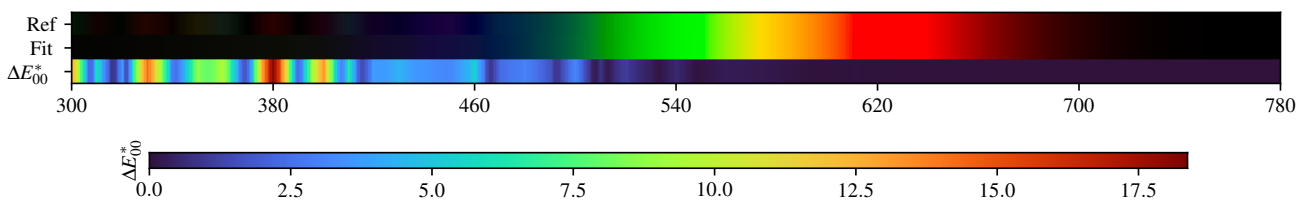
Gaussians:

Weight	Mean	Covariance					
0.044895905	631.222672986	426.244463961	1200.909893270	162.365597061	162.365597061	1284.254206583	
0.079464508	357.305559819	562.683349538	1262.678793121	852.601886296	852.601886296	4912.788975319	
0.171077530	668.410471968	714.346205696	4742.470911012	100.982054090	100.982054090	1937.972397512	
0.202671755	508.865153602	709.973969428	2176.197394300	554.732184837	554.732184837	2530.950336418	
0.115706937	353.313487714	712.260741501	1017.786154601	190.294073934	190.294073934	1867.288619209	
0.103931996	477.322179727	422.446361718	3026.798999827	242.681653055	242.681653055	1045.295087797	
0.050008135	741.170629692	483.203647648	1140.282083751	64.998543265	64.998543265	5553.112979466	
0.232243233	555.303700800	548.254347603	4841.592080135	1300.430813416	1300.430813416	2490.652166094	

PEP1Y - Weighted variational Bayesian inference - 2 Gaussians



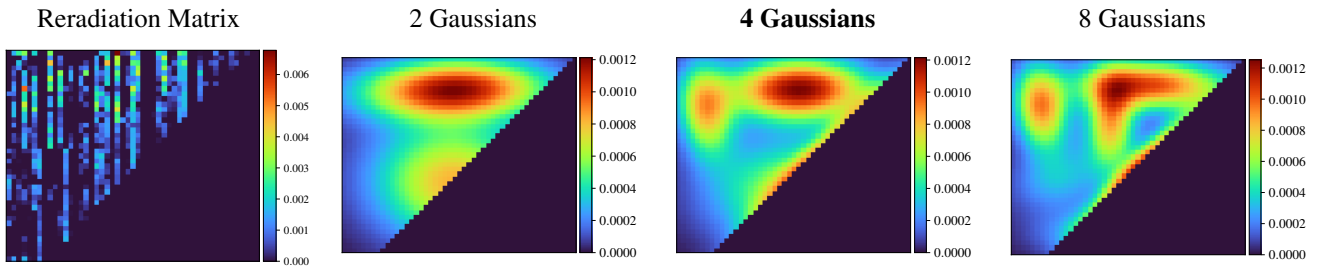
Fitted Material Under Monochromatic Illumination



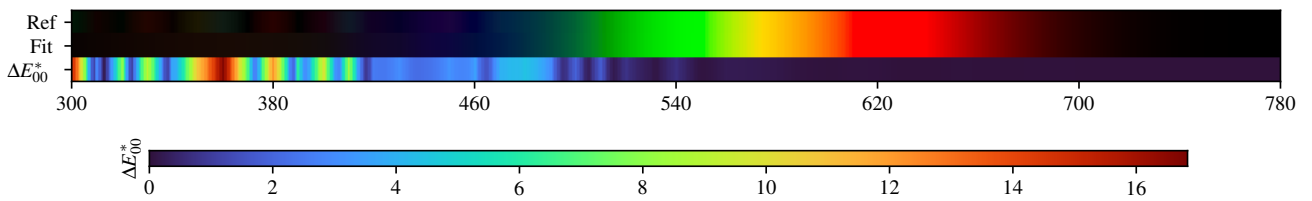
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.19$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.13$	FL3.15 $\Delta E = 0.20$	HP5 $\Delta E = 0.11$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.15$	D65 $\Delta E = 0.20$	FL3 $\Delta E = 0.07$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.11$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.21$	D75 $\Delta E = 0.24$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.07$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.15$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.13$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.09$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.17$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.08$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.12$	LED-V2 $\Delta E = 0.15$

PEP1Y - Weighted variational Bayesian inference - 4 Gaussians



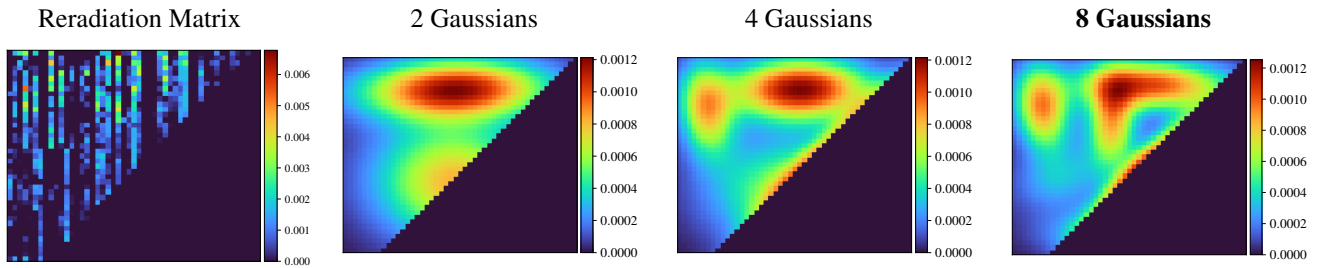
Fitted Material Under Monochromatic Illumination



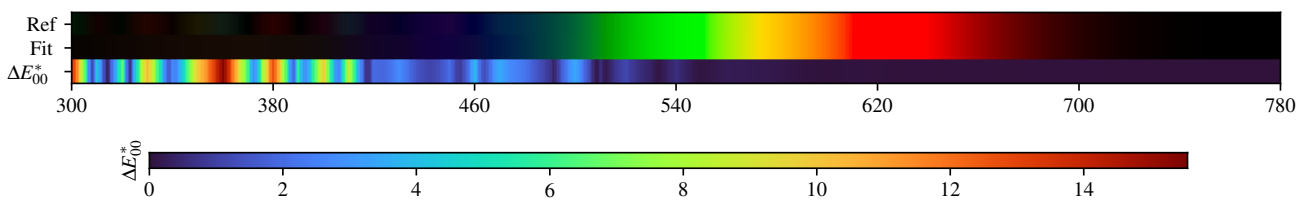
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.14$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.18$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.11$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.16$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.11$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.17$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.10$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.07$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.11$

PEP1Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.06$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.06$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.06$	FL3.15 $\Delta E = 0.07$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.07$
B $\Delta E = 0.06$	D65 $\Delta E = 0.06$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.05$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.07$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.06$	E $\Delta E = 0.07$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.06$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.04$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.06$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.09$

PEP1Y - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.019245	0.015130	0.014274	0.018411	0.016762	0.013769	0.020631	0.025275	0.029549	0.047784	0.077310
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.125852	0.195197	0.294078	0.403848	0.511264	0.600709	0.665817	0.700687	0.726041	0.743808	0.752183
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.760865	0.761883	0.762238	0.769283	0.772062	0.776932	0.781492	0.782505	0.782291	0.780932	0.781711
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.785388	0.781806	0.788403	0.790592	0.790692	0.794904	0.791183	0.797417			

2 Gaussians max

Scaling factor: 94.85465797334439

Gaussians:

Weight	Mean		Covariance			
0.559605066	532.755164324	521.038020264	13789.552767475	-546.161687146	-546.161687146	7573.786478546
0.440394934	528.293103314	717.596336475	17601.193911077	384.633242832	384.633242832	1900.973317581

4 Gaussians max

Scaling factor: 99.40744633940344

Gaussians:

Weight	Mean		Covariance			
0.400238704	544.323544868	498.407879260	14238.555783329	-156.294981951	-156.294981951	6227.344809030
0.131084396	607.424268136	589.273647772	9635.456725600	9389.846288114	9389.846288114	10119.625228840
0.127210320	355.589586755	674.638153207	1561.681649946	-401.408238193	-401.408238193	4568.423796175
0.341466580	550.628878983	717.442347660	10074.504342829	94.169953092	94.169953092	2000.695315718

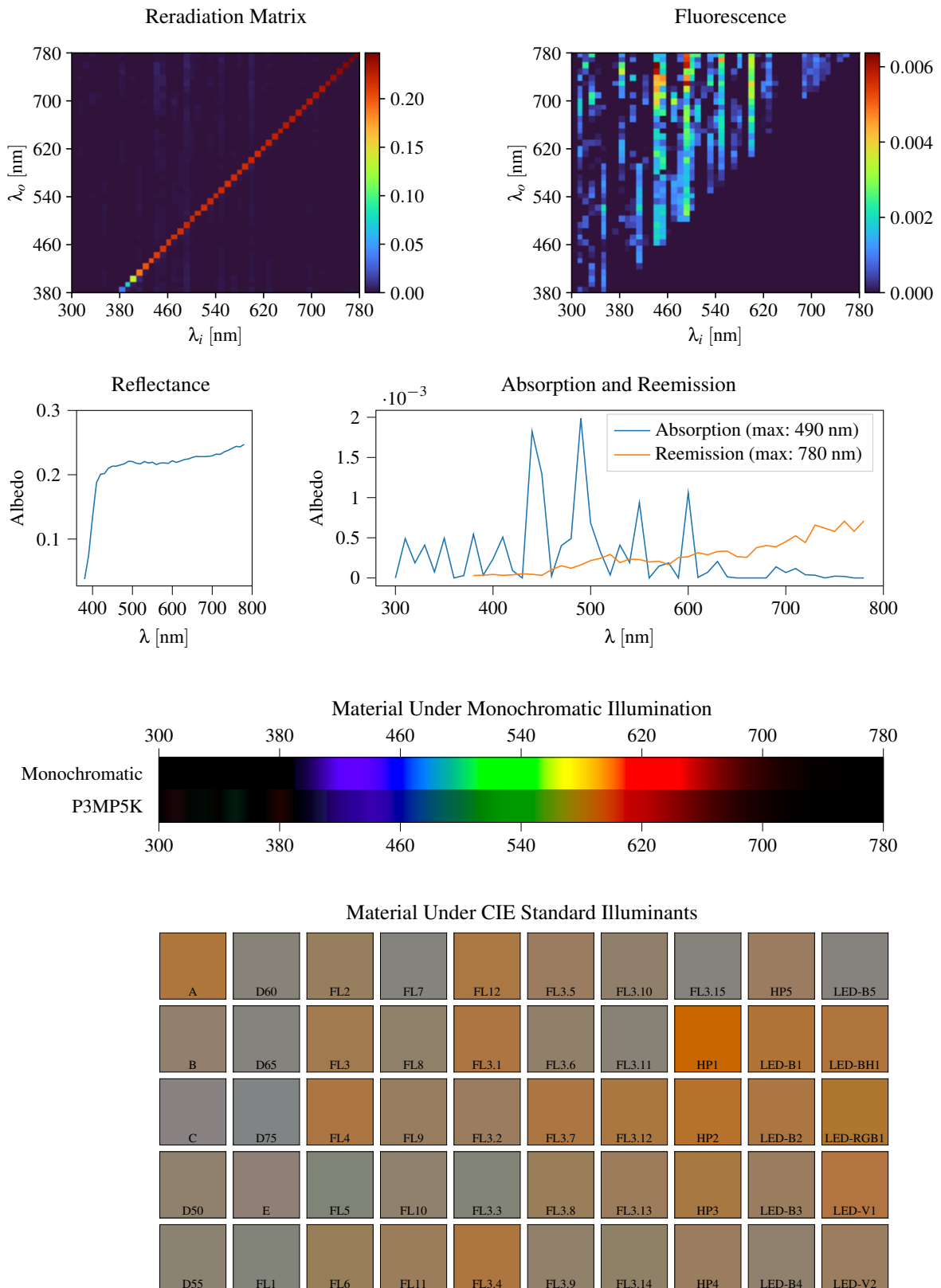
8 Gaussians max

Scaling factor: 97.80609071192296

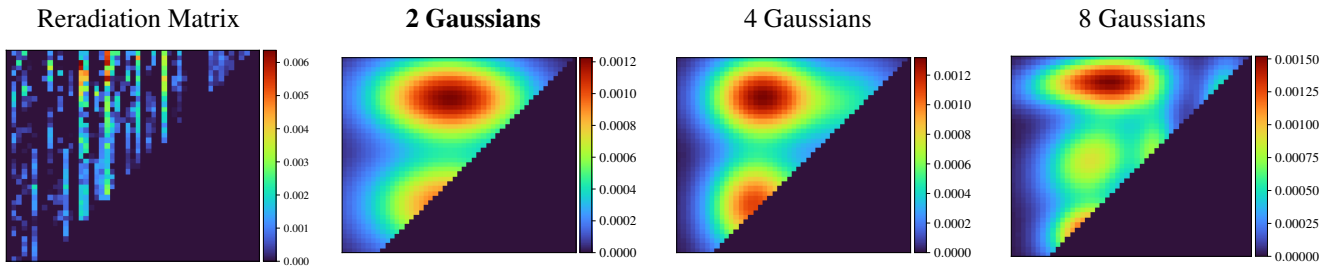
Gaussians:

Weight	Mean		Covariance			
0.130002507	524.748610399	420.135498003	10130.347555907	142.917764819	142.917764819	1305.463665999
0.075861247	667.938355105	493.889982824	5359.442705406	-2161.906182496	-2161.906182496	4157.510958759
0.068587324	398.021247090	535.197395683	4983.323549230	694.213033795	694.213033795	2392.660285176
0.156746334	562.760753241	546.910055773	4827.143263022	4590.261084970	4590.261084970	5304.088224565
0.123820492	502.665239204	653.588635407	1213.360418334	79.691450527	79.691450527	4463.015984741
0.050404206	693.509474548	606.005687822	4834.943268195	799.416099956	799.416099956	5028.602844157
0.140607037	357.857415816	683.498839835	1549.153947389	-324.110007144	-324.110007144	3712.889552350
0.253970853	586.542626682	731.221724298	11208.112999991	-176.509156006	-176.509156006	1322.142397741

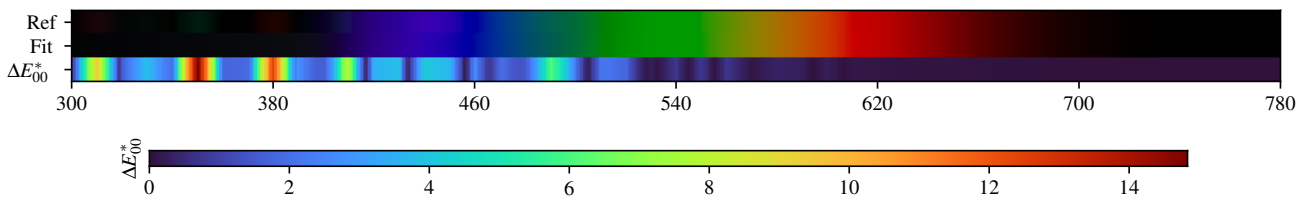
3.128. P3MP5K



P3MP5K - Weighted Expectation-Maximization - 2 Gaussians



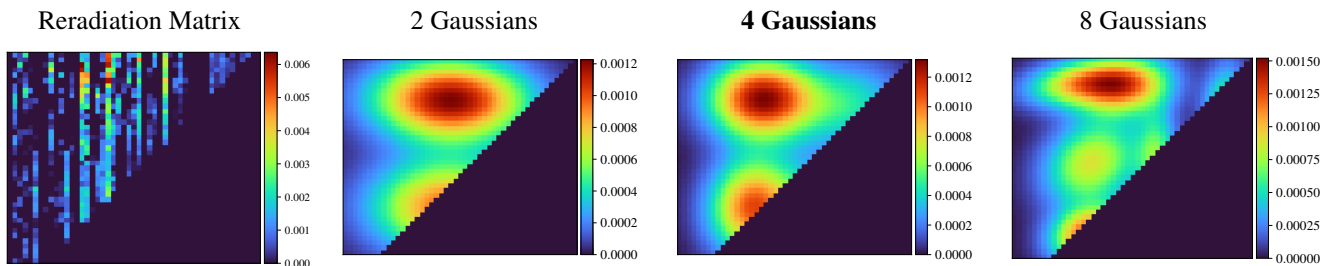
Fitted Material Under Monochromatic Illumination



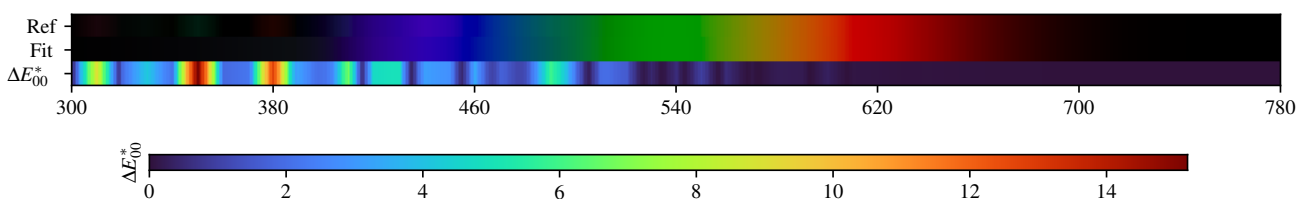
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.45$	FL2 $\Delta E = 0.20$	FL7 $\Delta E = 0.37$	FL12 $\Delta E = 0.19$	FL3.5 $\Delta E = 0.22$	FL3.10 $\Delta E = 0.41$	FL3.15 $\Delta E = 0.43$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.25$
B $\Delta E = 0.34$	D65 $\Delta E = 0.52$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.23$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.25$	FL3.11 $\Delta E = 0.37$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.51$	D75 $\Delta E = 0.64$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.18$	FL3.2 $\Delta E = 0.20$	FL3.7 $\Delta E = 0.21$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.33$	E $\Delta E = 0.44$	FL5 $\Delta E = 0.28$	FL10 $\Delta E = 0.34$	FL3.3 $\Delta E = 0.26$	FL3.8 $\Delta E = 0.27$	FL3.13 $\Delta E = 0.25$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.22$
D55 $\Delta E = 0.39$	FL1 $\Delta E = 0.32$	FL6 $\Delta E = 0.16$	FL11 $\Delta E = 0.28$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.35$	FL3.14 $\Delta E = 0.29$	HP4 $\Delta E = 0.26$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.41$

P3MP5K - Weighted Expectation-Maximization - 4 Gaussians



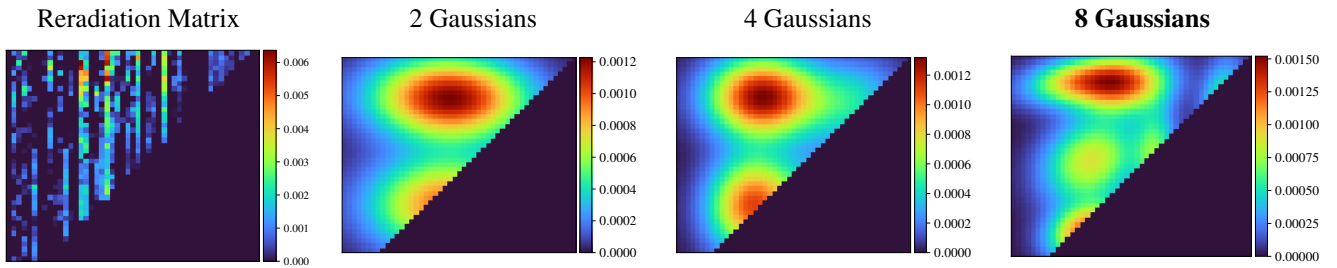
Fitted Material Under Monochromatic Illumination



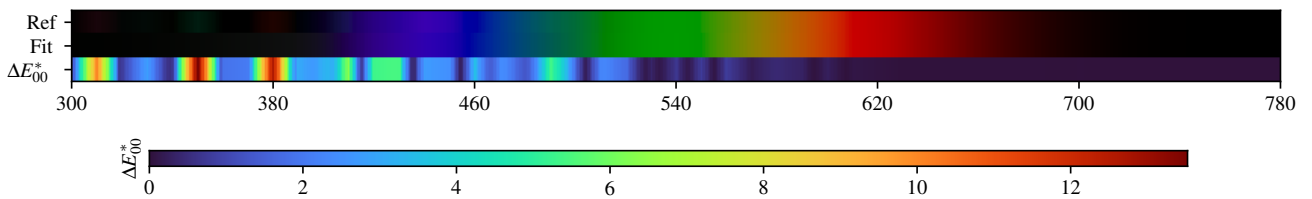
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.41$	FL2 $\Delta E = 0.17$	FL7 $\Delta E = 0.45$	FL12 $\Delta E = 0.17$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.37$	FL3.15 $\Delta E = 0.55$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.47$
B $\Delta E = 0.28$	D65 $\Delta E = 0.49$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.25$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.38$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.51$	D75 $\Delta E = 0.57$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.14$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.27$	E $\Delta E = 0.46$	FL5 $\Delta E = 0.40$	FL10 $\Delta E = 0.35$	FL3.3 $\Delta E = 0.29$	FL3.8 $\Delta E = 0.19$	FL3.13 $\Delta E = 0.17$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.34$	FL1 $\Delta E = 0.43$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.25$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.27$	FL3.14 $\Delta E = 0.24$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.30$	LED-V2 $\Delta E = 0.28$

P3MP5K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.38$	$\Delta E = 0.18$	$\Delta E = 0.24$	$\Delta E = 0.11$	$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.21$	$\Delta E = 0.22$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.42$	$\Delta E = 0.13$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.33$	$\Delta E = 0.48$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.29$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.31$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.19$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.34$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.28$	$\Delta E = 0.10$	$\Delta E = 0.37$

P3MP5K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.037543	0.073955	0.134272	0.187899	0.200713	0.201894	0.210237	0.213339	0.213364	0.215293	0.217039
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.220946	0.220497	0.217879	0.216933	0.220559	0.218276	0.219444	0.215923	0.218213	0.218325	0.217716
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.221796	0.219148	0.221191	0.223657	0.224532	0.226920	0.228433	0.228155	0.228197	0.228579	0.229442
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.232026	0.231616	0.235579	0.238027	0.241141	0.244136	0.243417	0.247233			

2 Gaussians

Scaling factor: 96.46387897786371

Gaussians:

Weight	Mean	Covariance				
0.481675197	516.638093065	474.435912355	12077.057754992	-117.562793426	-117.562793426	4683.432059369
0.518324803	520.082371426	699.530698495	12293.473851782	-175.892450299	-175.892450299	3454.161810875

4 Gaussians

Scaling factor: 92.90312996062251

Gaussians:

Weight	Mean	Covariance				
0.302620541	452.116506476	475.317047842	3843.895499299	166.175287919	166.175287919	4763.707779647
0.177406250	623.970445282	471.948504439	7025.743348344	-524.098141536	-524.098141536	4461.654911254
0.382229103	472.213167614	702.004904163	5772.432113291	31.531348557	31.531348557	3329.696965497
0.137744106	656.389130326	691.239025619	6034.426310429	290.846712163	290.846712163	3863.709098788

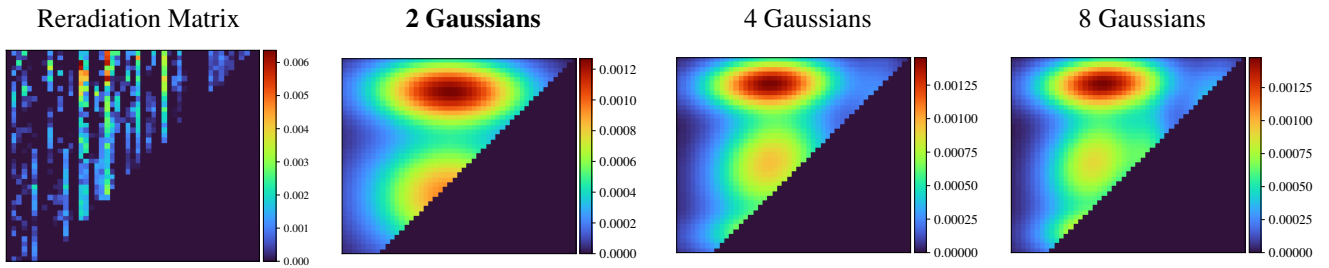
8 Gaussians

Scaling factor: 93.13397147115862

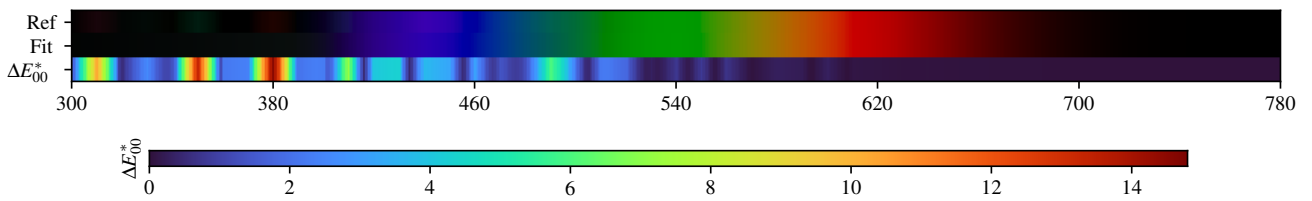
Gaussians:

Weight	Mean	Covariance				
0.166542677	453.185795658	425.013329057	2834.997329180	396.135770450	396.135770450	1373.857576981
0.185261443	525.498304598	725.576153592	4073.240110410	371.526033837	371.526033837	1568.143631692
0.062481554	588.851449682	427.558266351	1071.779697703	67.956063443	67.956063443	1681.585474601
0.136504765	426.358551227	733.174630006	5123.796091964	583.750831206	583.750831206	1080.425669637
0.238469962	456.560615202	570.449875888	4389.400952872	893.480516869	893.480516869	3766.035060791
0.076775165	587.993093324	584.529071569	838.390038858	107.050896087	107.050896087	4171.141942074
0.061663558	719.988658800	460.515645386	949.556808124	226.945070552	226.945070552	3538.260084674
0.072300877	721.780311472	688.762542886	898.238511306	466.609866327	466.609866327	3746.780072643

P3MP5K - Weighted variational Bayesian inference - 2 Gaussians



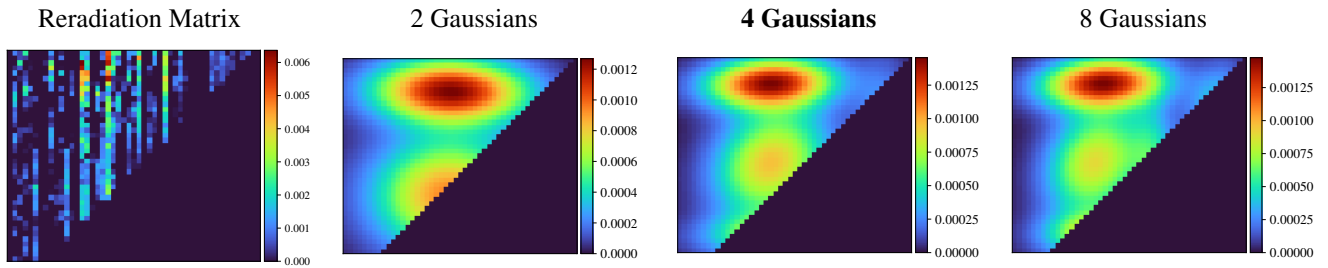
Fitted Material Under Monochromatic Illumination



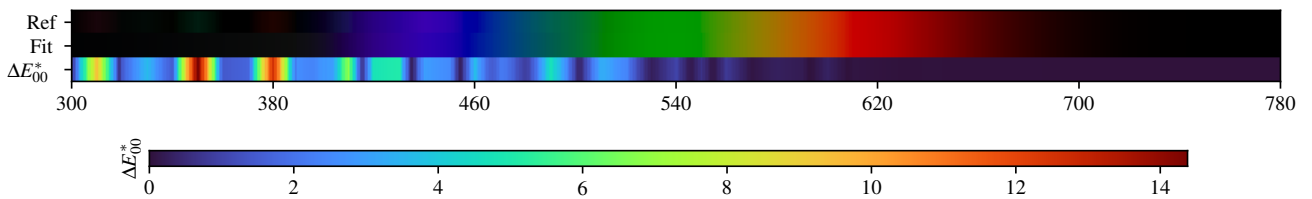
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.46$	$\Delta E = 0.18$	$\Delta E = 0.54$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.34$	$\Delta E = 0.67$	$\Delta E = 0.18$	$\Delta E = 0.63$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.32$	$\Delta E = 0.51$	$\Delta E = 0.09$	$\Delta E = 0.37$	$\Delta E = 0.06$	$\Delta E = 0.26$	$\Delta E = 0.37$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.52$	$\Delta E = 0.53$	$\Delta E = 0.06$	$\Delta E = 0.21$	$\Delta E = 0.10$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.26$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.35$	$\Delta E = 0.48$	$\Delta E = 0.43$	$\Delta E = 0.36$	$\Delta E = 0.30$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.28$	$\Delta E = 0.03$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.41$	$\Delta E = 0.47$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.21$	$\Delta E = 0.28$	$\Delta E = 0.13$	$\Delta E = 0.44$	$\Delta E = 0.07$

P3MP5K - Weighted variational Bayesian inference - 4 Gaussians



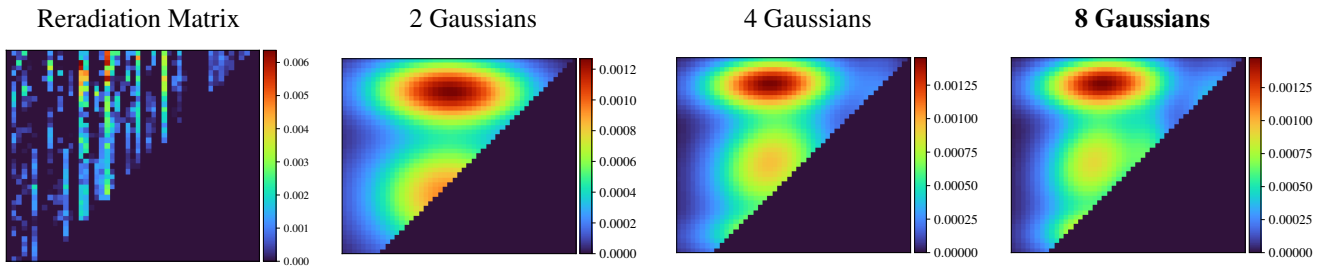
Fitted Material Under Monochromatic Illumination



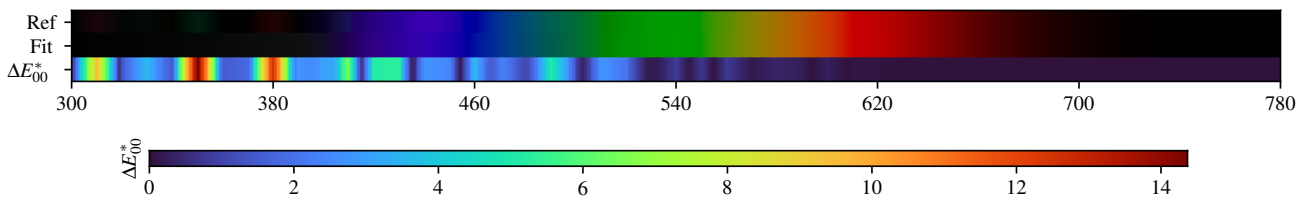
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.19$	D60 $\Delta E = 0.25$	FL2 $\Delta E = 0.16$	FL7 $\Delta E = 0.24$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.19$	FL3.10 $\Delta E = 0.05$	FL3.15 $\Delta E = 0.25$	HP5 $\Delta E = 0.24$	LED-B5 $\Delta E = 0.42$
B $\Delta E = 0.24$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.22$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.08$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.19$	LED-BH1 $\Delta E = 0.26$
C $\Delta E = 0.29$	D75 $\Delta E = 0.28$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.19$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.16$	LED-B2 $\Delta E = 0.20$	LED-RGB1 $\Delta E = 0.33$
D50 $\Delta E = 0.23$	E $\Delta E = 0.36$	FL5 $\Delta E = 0.20$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.23$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.23$	LED-B3 $\Delta E = 0.26$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.24$	FL1 $\Delta E = 0.20$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.18$	FL3.9 $\Delta E = 0.07$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.23$	LED-B4 $\Delta E = 0.36$	LED-V2 $\Delta E = 0.20$

P3MP5K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.03$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.07$	$\Delta E = 0.17$	$\Delta E = 0.27$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.24$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.23$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.17$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.04$	$\Delta E = 0.22$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.03$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.20$	$\Delta E = 0.24$	$\Delta E = 0.22$

P3MP5K - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.037543	0.073955	0.134272	0.187899	0.200713	0.201894	0.210237	0.213339	0.213364	0.215293	0.217039
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.220946	0.220497	0.217879	0.216933	0.220559	0.218276	0.219444	0.215923	0.218213	0.218325	0.217716
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.221796	0.219148	0.221191	0.223657	0.224532	0.226920	0.228433	0.228155	0.228197	0.228579	0.229442
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.232026	0.231616	0.235579	0.238027	0.241141	0.244136	0.243417	0.247233			

2 Gaussians max

Scaling factor: 95.3607773204818

Gaussians:

Weight	Mean		Covariance			
0.571971545	517.389651318	497.160297611	11992.660101760	-18.811405060	-18.811405060	6964.019103416
0.428028455	519.982286547	716.282110788	12433.844956123	-195.292557923	-195.292557923	2202.345437343

4 Gaussians max

Scaling factor: 93.13398631773

Gaussians:

Weight	Mean		Covariance			
0.191148968	523.108797309	414.423059940	11576.168548592	404.266053838	404.266053838	997.086927762
0.407534481	490.263786537	563.292582343	6664.485921142	1198.155449071	1198.155449071	6295.345705788
0.097192454	720.464361158	614.255115869	1525.095212650	454.237456320	454.237456320	12158.353987801
0.304124097	488.329156924	731.321998035	8251.957284236	318.289087386	318.289087386	1344.295828796

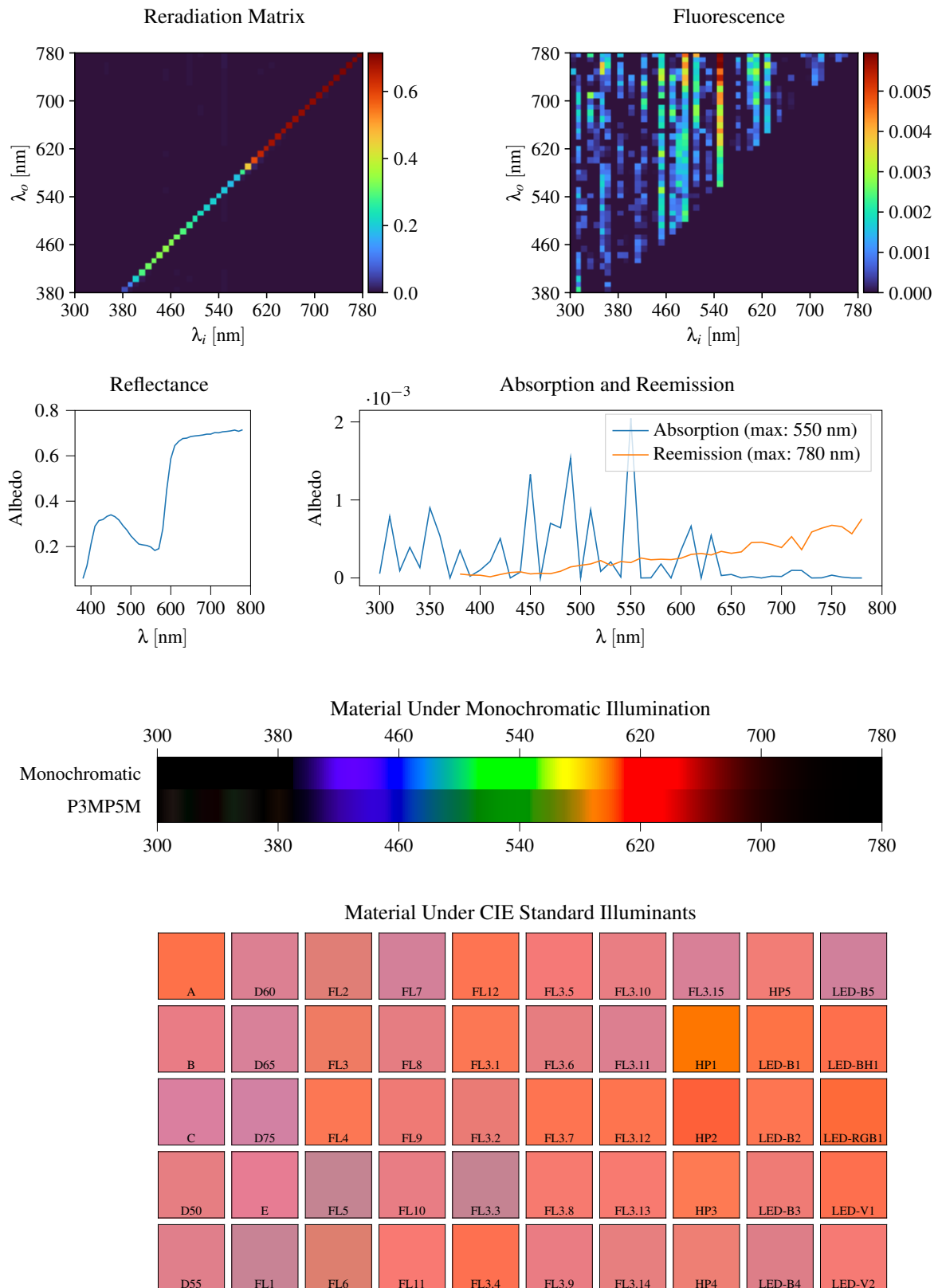
8 Gaussians max

Scaling factor: 93.12885454346792

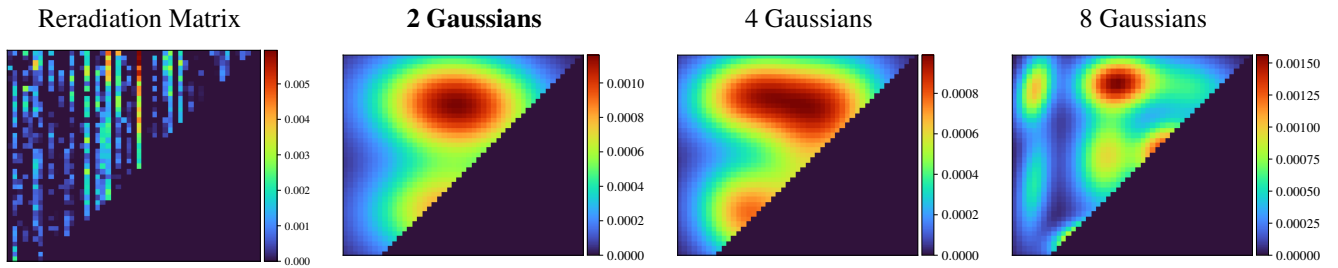
Gaussians:

Weight	Mean		Covariance			
0.176112628	492.459070204	415.165364232	6980.778911484	247.915704739	247.915704739	1063.158625033
0.063289569	711.367225628	469.934779970	2166.039074833	-197.283804624	-197.283804624	4314.692763533
0.320299425	467.940636242	564.515904645	4917.368926840	1106.965620889	1106.965620889	5998.612802388
0.070062601	589.248635535	569.675107070	1055.718925925	-117.346995905	-117.346995905	6428.191253352
0.066918012	716.733627024	685.010561087	1873.306493782	880.944354887	880.944354887	3854.261093707
0.301157945	484.732369078	731.420713394	7743.078055702	374.891571152	374.891571152	1351.001679570

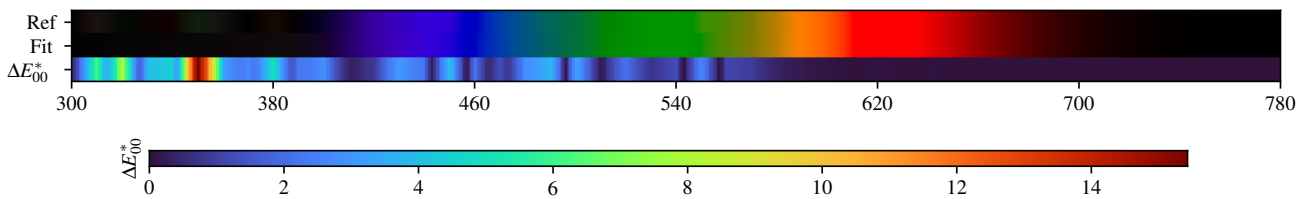
3.129. P3MP5M



P3MP5M - Weighted Expectation-Maximization - 2 Gaussians



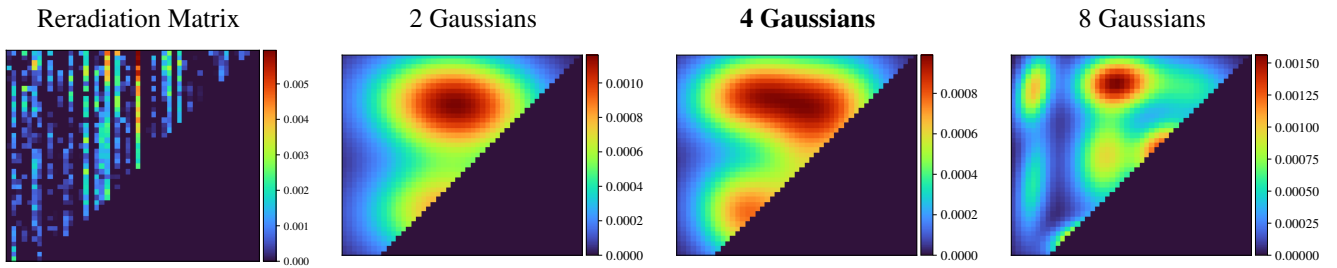
Fitted Material Under Monochromatic Illumination



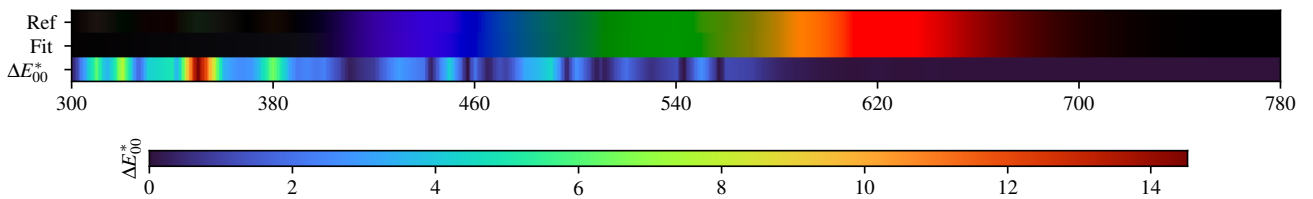
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.15$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.10$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.23$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.12$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.12$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.20$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.12$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.13$	E $\Delta E = 0.14$	FL5 $\Delta E = 0.13$	FL10 $\Delta E = 0.22$	FL3.3 $\Delta E = 0.13$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.12$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.14$	FL1 $\Delta E = 0.12$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.19$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.15$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.10$

P3MP5M - Weighted Expectation-Maximization - 4 Gaussians



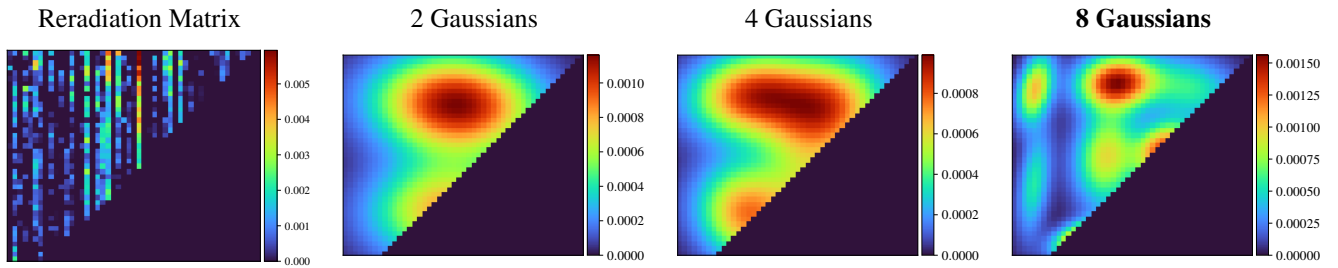
Fitted Material Under Monochromatic Illumination



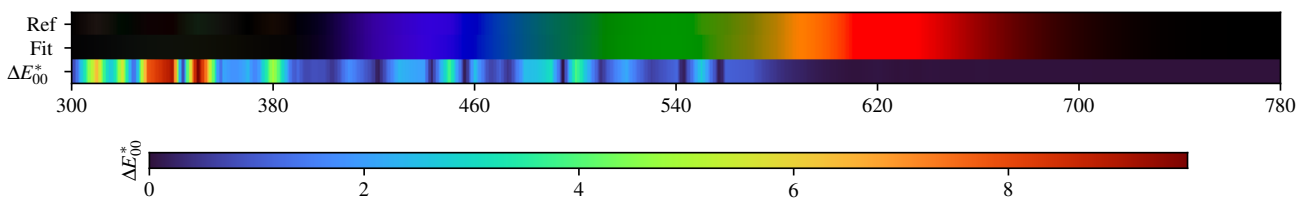
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.21$	FL2 $\Delta E = 0.13$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.14$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.28$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.17$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.12$	FL3.11 $\Delta E = 0.25$	HP1 $\Delta E = 0.14$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.18$	D75 $\Delta E = 0.24$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.10$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.19$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.27$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.22$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.23$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.15$	LED-V2 $\Delta E = 0.15$

P3MP5M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.14$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.13$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.07$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.13$
B $\Delta E = 0.14$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.13$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.14$	FL3.11 $\Delta E = 0.06$	HP1 $\Delta E = 0.16$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.13$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.19$
D50 $\Delta E = 0.14$	E $\Delta E = 0.15$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.03$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.12$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.14$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.13$	FL3.9 $\Delta E = 0.05$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.17$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.13$

P3MP5M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.059066	0.115994	0.210263	0.289605	0.314602	0.319133	0.332993	0.339852	0.331753	0.316906	0.292647
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.272705	0.247103	0.228409	0.210843	0.207256	0.204729	0.197866	0.182755	0.190619	0.277387	0.452681
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.586975	0.644756	0.663728	0.676053	0.677964	0.685118	0.687487	0.689275	0.691643	0.695489	0.695582
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.702202	0.701481	0.705860	0.707421	0.709749	0.713427	0.708134	0.714806			

2 Gaussians

Scaling factor: 91.17685127616731

Gaussians:

Weight	Mean		Covariance			
0.390170782	501.279068857	468.830150575	10578.741794843	323.292982878	323.292982878	4716.999361543
0.609829218	524.303492238	683.298064698	12594.712167913	-469.491019827	-469.491019827	4664.537536194

4 Gaussians

Scaling factor: 89.82830355979745

Gaussians:

Weight	Mean		Covariance			
0.169186019	589.165759288	492.741165532	4990.533355300	-1507.761667657	-1507.761667657	5465.512270810
0.282086137	444.409101643	702.604936562	7071.671109182	427.909485322	427.909485322	3406.821724273
0.311509257	599.077748927	670.484265567	6397.064065762	733.693756703	733.693756703	5072.171227859
0.237218587	436.987319176	460.321715252	4723.168227940	-512.039106826	-512.039106826	4518.401345066

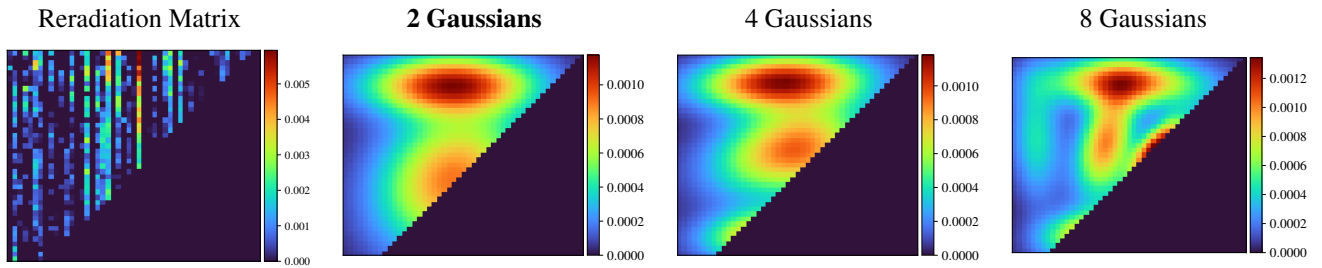
8 Gaussians

Scaling factor: 90.59340345399238

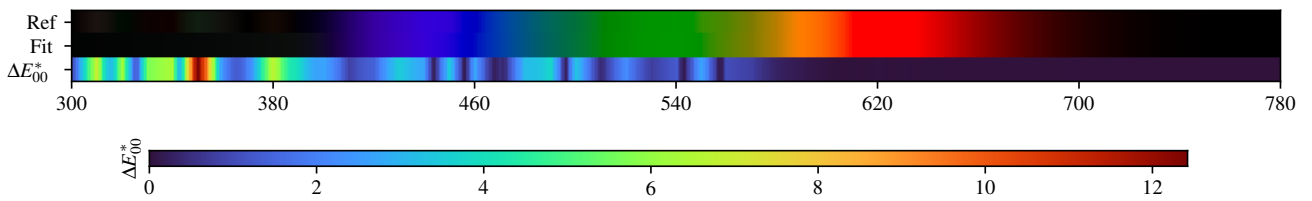
Gaussians:

Weight	Mean		Covariance			
0.124833956	598.735911646	444.000247822	5482.980896181	81.675594442	81.675594442	2214.869779941
0.198300433	505.385752309	727.755705289	2773.267203863	127.316694227	127.316694227	1409.432626978
0.129200283	604.155824061	591.186270120	1544.639421574	336.243843012	336.243843012	1344.648160053
0.078619978	341.661050637	714.941938405	628.077315674	399.225708304	399.225708304	2237.219122718
0.062672183	339.904027007	523.190260990	557.147664431	642.692360316	642.692360316	5529.370033964
0.177559514	485.243187997	578.867187031	1899.657472668	396.659597626	396.659597626	4102.345355010
0.124069892	655.067276188	717.056963309	4817.686244985	-632.061655296	-632.061655296	2094.232192906
0.104743759	445.893506660	408.140649576	1768.354966923	350.660187197	350.660187197	583.325564389

P3MP5M - Weighted variational Bayesian inference - 2 Gaussians



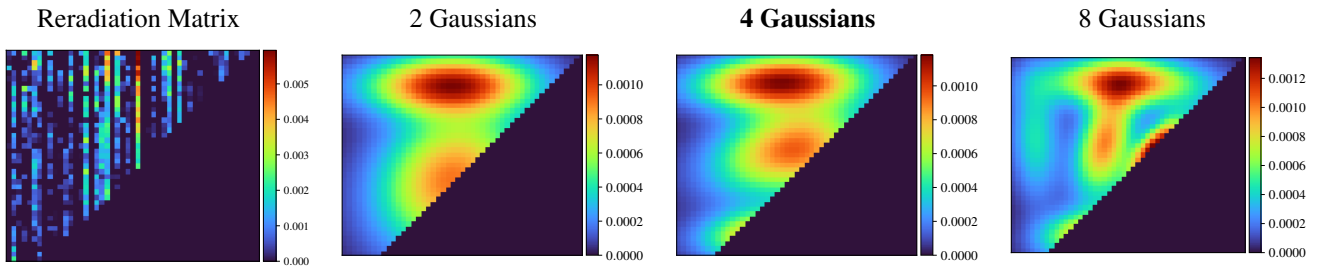
Fitted Material Under Monochromatic Illumination



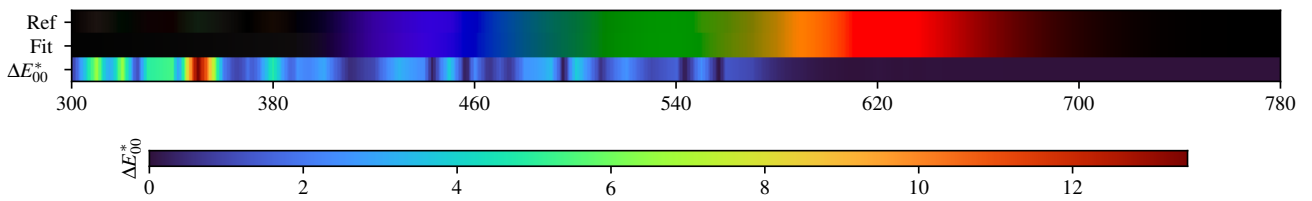
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.13$	D60 $\Delta E = 0.21$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.21$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.20$	D65 $\Delta E = 0.21$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.17$	FL3.11 $\Delta E = 0.13$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.22$	D75 $\Delta E = 0.23$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.10$	LED-RGB1 $\Delta E = 0.22$
D50 $\Delta E = 0.20$	E $\Delta E = 0.25$	FL5 $\Delta E = 0.21$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.19$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.12$	HP3 $\Delta E = 0.19$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.20$	FL1 $\Delta E = 0.21$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.13$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.15$	HP4 $\Delta E = 0.22$	LED-B4 $\Delta E = 0.12$	LED-V2 $\Delta E = 0.20$

P3MP5M - Weighted variational Bayesian inference - 4 Gaussians



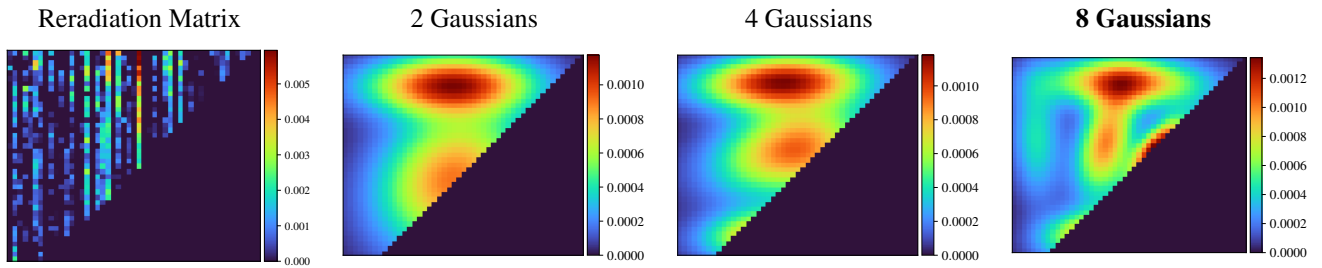
Fitted Material Under Monochromatic Illumination



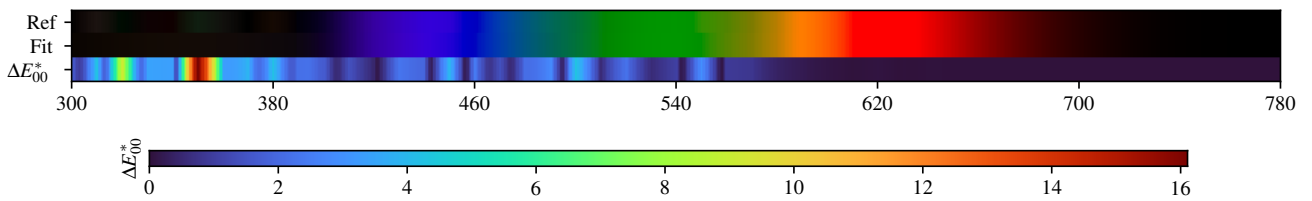
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.17$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.07$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.19$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.16$	D65 $\Delta E = 0.17$	FL3 $\Delta E = 0.13$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.04$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.11$	LED-BH1 $\Delta E = 0.14$
C $\Delta E = 0.18$	D75 $\Delta E = 0.17$	FL4 $\Delta E = 0.12$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.15$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.10$	HP2 $\Delta E = 0.10$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.20$
D50 $\Delta E = 0.16$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.05$	FL3.3 $\Delta E = 0.20$	FL3.8 $\Delta E = 0.02$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.19$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.16$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.04$	FL3.4 $\Delta E = 0.13$	FL3.9 $\Delta E = 0.03$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.16$

P3MP5M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.10$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.10$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.08$	HP5 $\Delta E = 0.13$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.09$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.12$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.10$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.10$	E $\Delta E = 0.12$	FL5 $\Delta E = 0.11$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.11$	FL6 $\Delta E = 0.10$	FL11 $\Delta E = 0.11$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.09$	LED-V2 $\Delta E = 0.08$

P3MP5M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.059066	0.115994	0.210263	0.289605	0.314602	0.319133	0.332993	0.339852	0.331753	0.316906	0.292647
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.272705	0.247103	0.228409	0.210843	0.207256	0.204729	0.197866	0.182755	0.190619	0.277387	0.452681
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.586975	0.644756	0.663728	0.676053	0.677964	0.685118	0.687487	0.689275	0.691643	0.695489	0.695582
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.702202	0.701481	0.705860	0.707421	0.709749	0.713427	0.708134	0.714806			

2 Gaussians max

Scaling factor: 89.89815409021232

Gaussians:

Weight	Mean		Covariance			
0.643797581	517.115240553	530.354561640	10979.662519732	1815.144519547	1815.144519547	9873.841511097
0.356202419	512.186997791	724.332857352	13602.967941389	175.843249072	175.843249072	1753.463822565

4 Gaussians max

Scaling factor: 89.61658101390569

Gaussians:

Weight	Mean		Covariance			
0.193889775	484.522362201	417.986481698	7972.244275893	481.243098074	481.243098074	1215.319392018
0.064681719	617.054863995	505.507102557	5382.812409173	-2957.648799482	-2957.648799482	5888.609944171
0.401798846	523.609346970	592.717876631	11645.669454188	2390.126334207	2390.126334207	4257.369971284
0.339629659	504.071741254	730.001951056	13040.723033850	572.163998547	572.163998547	1467.212918875

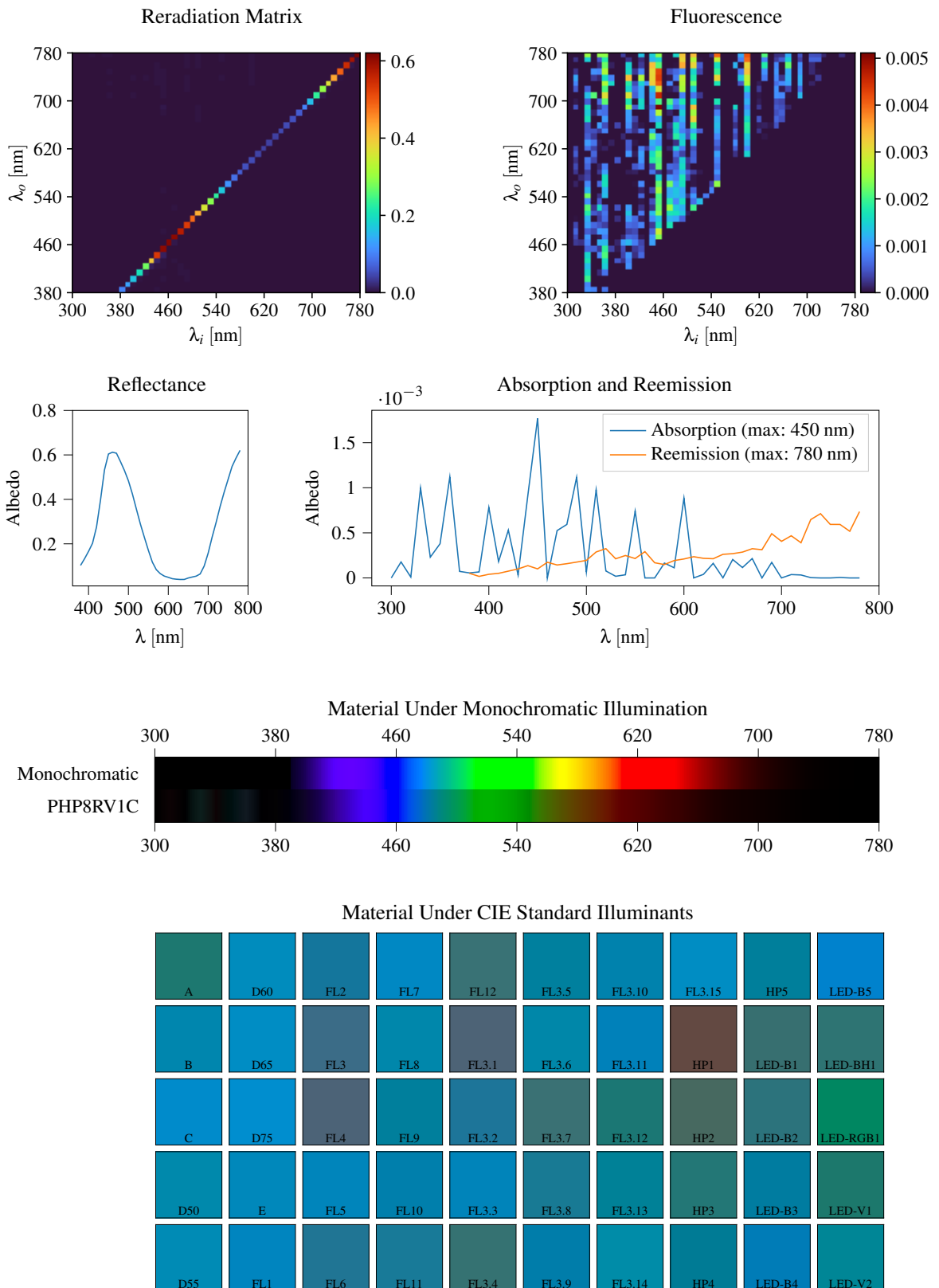
8 Gaussians max

Scaling factor: 91.54417641237848

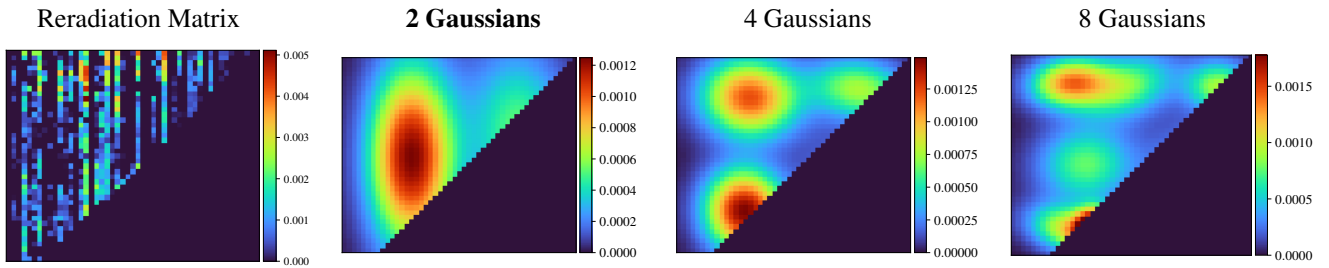
Gaussians:

Weight	Mean		Covariance			
0.151190430	461.675333597	415.635297729	5087.943170400	516.897958072	516.897958072	1186.345081698
0.100556806	608.117394752	461.756361103	5550.826014266	-1148.741294229	-1148.741294229	3212.800880355
0.107736886	346.240962004	616.183323986	1369.789595920	-200.508088158	-200.508088158	8798.983895216
0.192946786	491.002565181	607.492421486	1761.496402458	1147.382214012	1147.382214012	5318.591478380
0.116103588	599.236327528	589.117797177	1282.825917076	912.967733150	912.967733150	1662.064158461
0.048296014	684.822550420	645.400260104	4327.566871957	1340.827313327	1340.827313327	4944.193369381
0.281984170	529.697317119	733.802561416	10694.861289482	-178.194415340	-178.194415340	1286.567680047

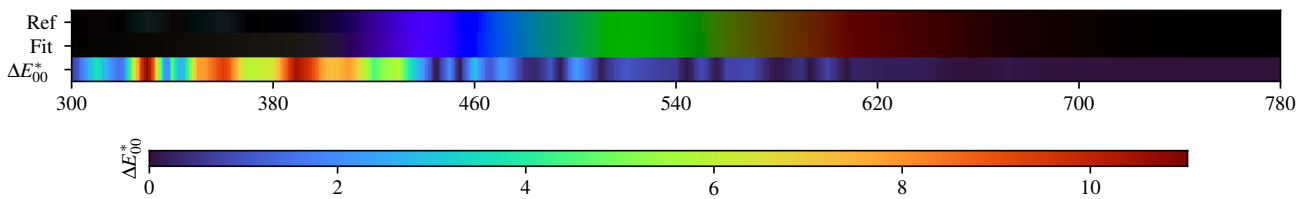
3.130. PHP8RV1C



PHP8RV1C - Weighted Expectation-Maximization - 2 Gaussians



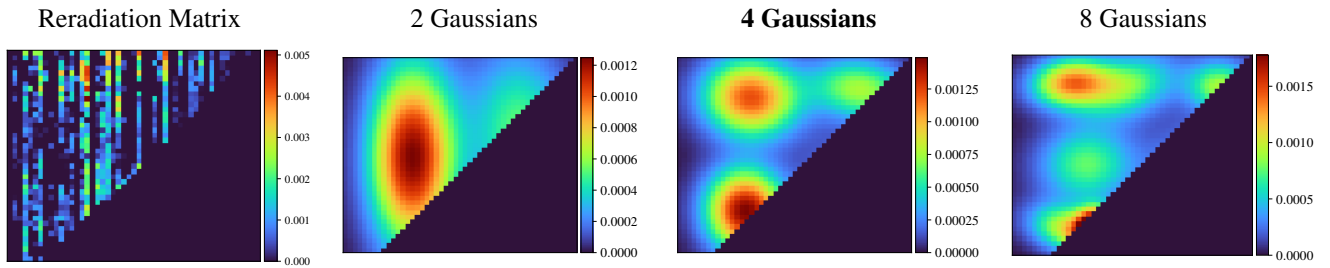
Fitted Material Under Monochromatic Illumination



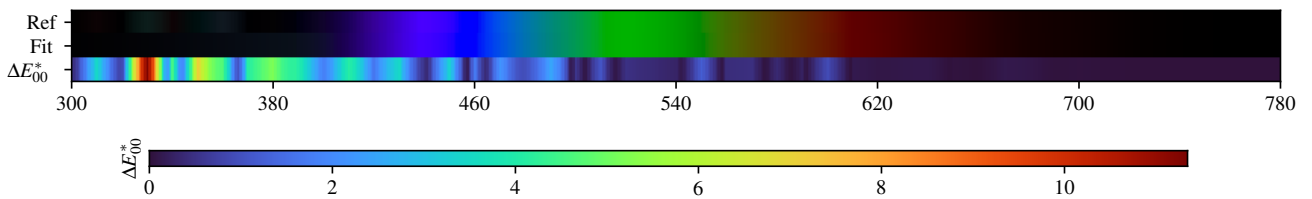
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.52$	$\Delta E = 0.77$	$\Delta E = 0.47$	$\Delta E = 0.61$	$\Delta E = 0.33$	$\Delta E = 0.46$	$\Delta E = 0.35$	$\Delta E = 0.64$	$\Delta E = 0.64$	$\Delta E = 0.55$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.67$	$\Delta E = 0.81$	$\Delta E = 0.40$	$\Delta E = 0.48$	$\Delta E = 0.42$	$\Delta E = 0.48$	$\Delta E = 0.45$	$\Delta E = 0.31$	$\Delta E = 0.43$	$\Delta E = 0.48$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.81$	$\Delta E = 0.90$	$\Delta E = 0.38$	$\Delta E = 0.44$	$\Delta E = 0.46$	$\Delta E = 0.42$	$\Delta E = 0.35$	$\Delta E = 0.70$	$\Delta E = 0.43$	$\Delta E = 0.49$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.67$	$\Delta E = 0.97$	$\Delta E = 0.57$	$\Delta E = 0.38$	$\Delta E = 0.56$	$\Delta E = 0.38$	$\Delta E = 0.39$	$\Delta E = 0.55$	$\Delta E = 0.40$	$\Delta E = 0.69$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.72$	$\Delta E = 0.58$	$\Delta E = 0.44$	$\Delta E = 0.33$	$\Delta E = 0.39$	$\Delta E = 0.42$	$\Delta E = 0.43$	$\Delta E = 0.70$	$\Delta E = 0.51$	$\Delta E = 0.72$

PHP8RV1C - Weighted Expectation-Maximization - 4 Gaussians



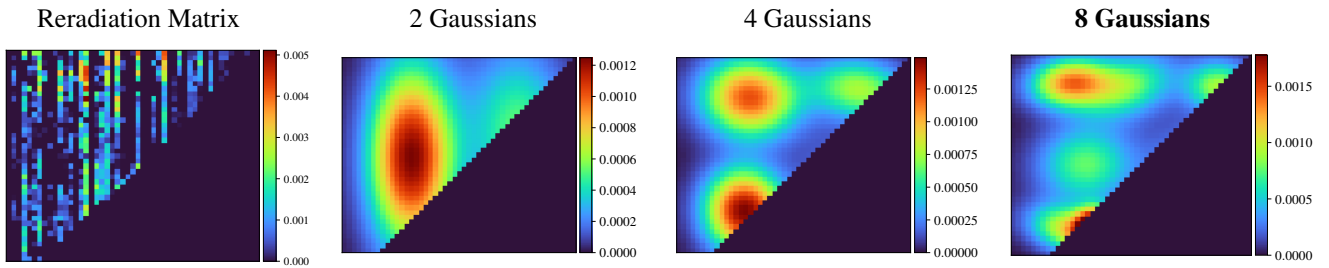
Fitted Material Under Monochromatic Illumination



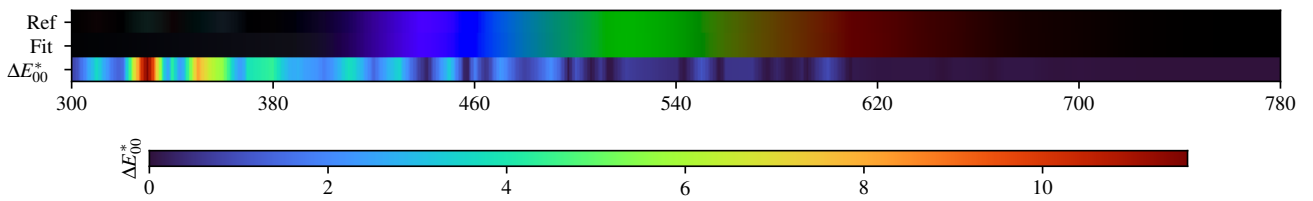
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.35$	$\Delta E = 0.34$	$\Delta E = 0.26$	$\Delta E = 0.28$	$\Delta E = 0.45$	$\Delta E = 0.30$	$\Delta E = 0.44$	$\Delta E = 0.29$	$\Delta E = 0.28$	$\Delta E = 0.39$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.33$	$\Delta E = 0.34$	$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.21$	$\Delta E = 0.32$	$\Delta E = 0.37$	$\Delta E = 0.26$	$\Delta E = 0.35$	$\Delta E = 0.30$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.28$	$\Delta E = 0.32$	$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.22$	$\Delta E = 0.39$	$\Delta E = 0.30$	$\Delta E = 0.33$	$\Delta E = 0.36$	$\Delta E = 0.21$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.36$	$\Delta E = 0.26$	$\Delta E = 0.28$	$\Delta E = 0.42$	$\Delta E = 0.26$	$\Delta E = 0.40$	$\Delta E = 0.34$	$\Delta E = 0.31$	$\Delta E = 0.38$	$\Delta E = 0.40$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.35$	$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.43$	$\Delta E = 0.21$	$\Delta E = 0.38$	$\Delta E = 0.38$	$\Delta E = 0.23$	$\Delta E = 0.35$	$\Delta E = 0.37$

PHP8RV1C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.19$	$\Delta E = 0.29$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.31$	$\Delta E = 0.21$	$\Delta E = 0.33$	$\Delta E = 0.21$	$\Delta E = 0.21$	$\Delta E = 0.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.30$	$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.09$	$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.16$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.26$	$\Delta E = 0.32$	$\Delta E = 0.14$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.28$	$\Delta E = 0.16$	$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.19$	$\Delta E = 0.30$	$\Delta E = 0.20$	$\Delta E = 0.30$	$\Delta E = 0.23$	$\Delta E = 0.16$	$\Delta E = 0.26$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.31$	$\Delta E = 0.10$	$\Delta E = 0.29$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.26$	$\Delta E = 0.28$

PHP8RV1C - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.102915	0.132883	0.165942	0.202418	0.275308	0.396592	0.532378	0.604058	0.612155	0.607689	0.570269
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.530204	0.483694	0.424507	0.356309	0.289379	0.229510	0.171349	0.117897	0.083564	0.065754	0.054896
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.049255	0.043144	0.040861	0.039626	0.039736	0.046203	0.050625	0.054717	0.064528	0.099947	0.158010
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.230415	0.296547	0.367921	0.431461	0.489934	0.548289	0.586319	0.620496			

2 Gaussians

Scaling factor: 93.60989649151063

Gaussians:

Weight	Mean		Covariance			
0.327616965	664.942315664	625.152743662	5442.186925410	-682.422978718	-682.422978718	15221.908230273
0.672383035	439.787028034	574.987838338	3706.276824460	-9.851985273	-9.851985273	17471.033421762

4 Gaussians

Scaling factor: 89.70920592396489

Gaussians:

Weight	Mean		Covariance			
0.136818464	666.095239475	496.912351677	4306.105565010	-1003.787678658	-1003.787678658	5239.911274073
0.352240302	438.044087169	462.126928671	3227.757772031	-108.515045707	-108.515045707	3533.238331444
0.171963825	676.443477394	717.374297953	5140.466416376	-501.052088916	-501.052088916	2106.894501910
0.338977409	447.808612320	700.028274015	4756.296626113	-160.817831515	-160.817831515	3327.145037910

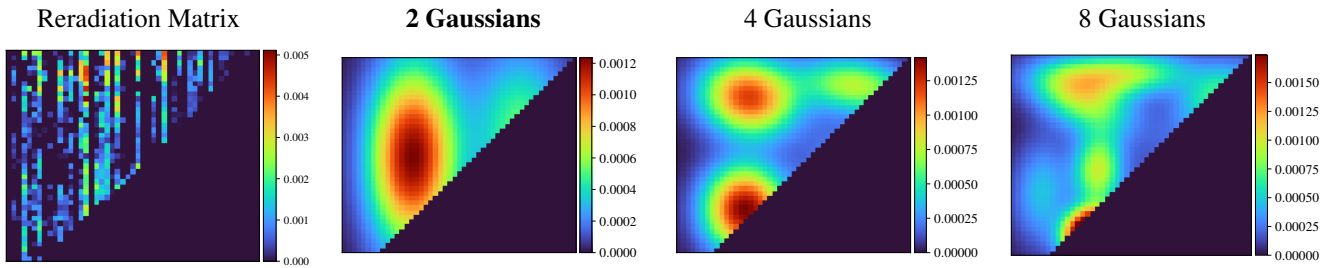
8 Gaussians

Scaling factor: 92.02274084530248

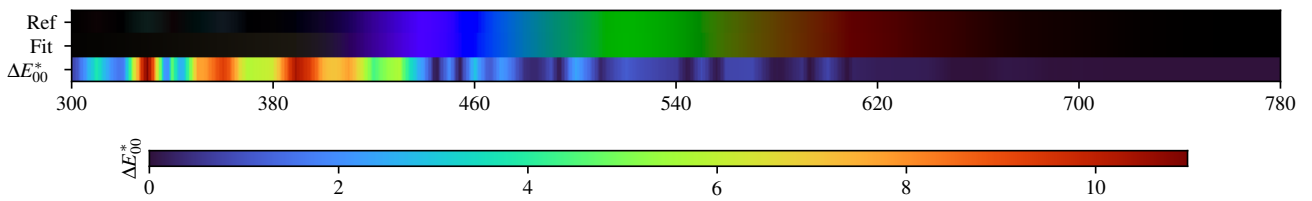
Gaussians:

Weight	Mean		Covariance			
0.074437843	685.499717924	446.913394717	3700.154393763	333.946247431	333.946247431	2485.091674966
0.170183900	413.950635541	727.525805015	3083.489849509	176.172697401	176.172697401	1214.377220963
0.080850231	649.646506579	572.145867313	3975.779675127	570.556847067	570.556847067	3847.097175534
0.131850575	415.074521440	427.179245020	3187.762977105	-519.005265206	-519.005265206	1161.450259288
0.102842497	717.369777099	719.438019117	2207.506341666	-49.996987480	-49.996987480	1323.809554857
0.154266031	532.546725428	719.314477763	4309.000398679	958.413387173	958.413387173	2186.175648136
0.099890776	461.199562469	427.899054880	594.918101901	56.221763261	56.221763261	801.839575662
0.185678148	446.069890005	560.445862178	4505.817932020	63.619528965	63.619528965	2841.226379360

PHP8RV1C - Weighted variational Bayesian inference - 2 Gaussians



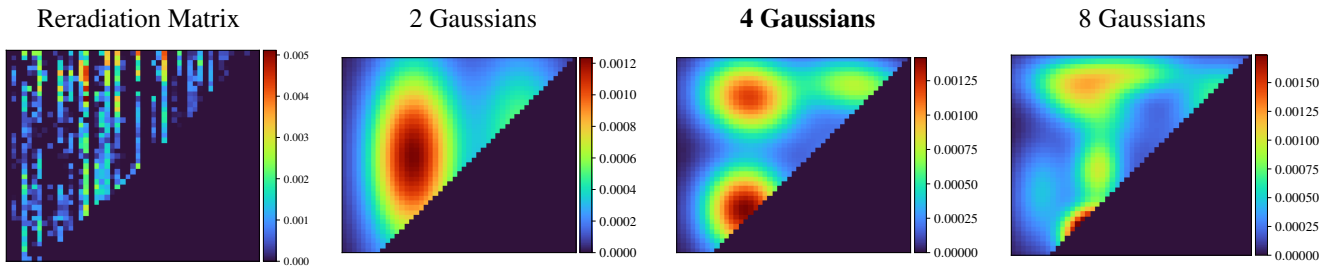
Fitted Material Under Monochromatic Illumination



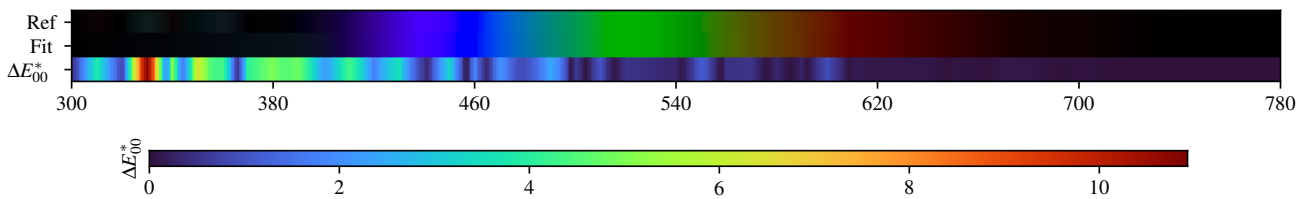
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.53$	$\Delta E = 0.78$	$\Delta E = 0.47$	$\Delta E = 0.62$	$\Delta E = 0.32$	$\Delta E = 0.47$	$\Delta E = 0.36$	$\Delta E = 0.66$	$\Delta E = 0.65$	$\Delta E = 0.57$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.69$	$\Delta E = 0.83$	$\Delta E = 0.40$	$\Delta E = 0.50$	$\Delta E = 0.41$	$\Delta E = 0.50$	$\Delta E = 0.46$	$\Delta E = 0.30$	$\Delta E = 0.43$	$\Delta E = 0.48$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.82$	$\Delta E = 0.91$	$\Delta E = 0.37$	$\Delta E = 0.45$	$\Delta E = 0.47$	$\Delta E = 0.41$	$\Delta E = 0.35$	$\Delta E = 0.70$	$\Delta E = 0.43$	$\Delta E = 0.51$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.68$	$\Delta E = 0.98$	$\Delta E = 0.58$	$\Delta E = 0.39$	$\Delta E = 0.58$	$\Delta E = 0.39$	$\Delta E = 0.41$	$\Delta E = 0.56$	$\Delta E = 0.41$	$\Delta E = 0.70$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.73$	$\Delta E = 0.59$	$\Delta E = 0.44$	$\Delta E = 0.34$	$\Delta E = 0.39$	$\Delta E = 0.43$	$\Delta E = 0.45$	$\Delta E = 0.70$	$\Delta E = 0.52$	$\Delta E = 0.73$

PHP8RV1C - Weighted variational Bayesian inference - 4 Gaussians



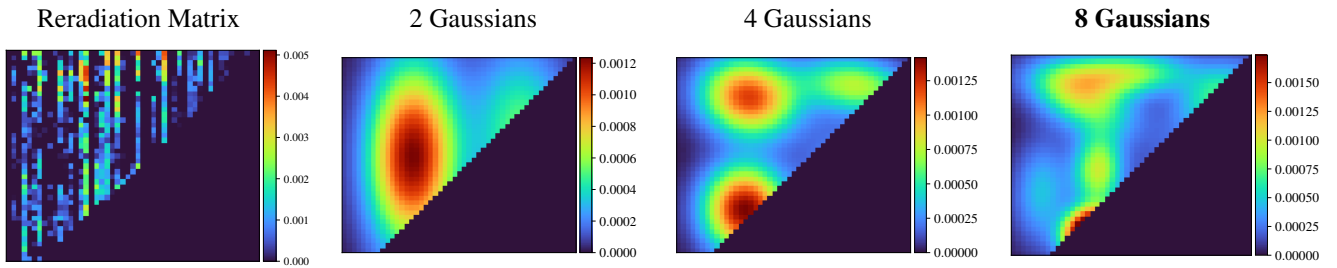
Fitted Material Under Monochromatic Illumination



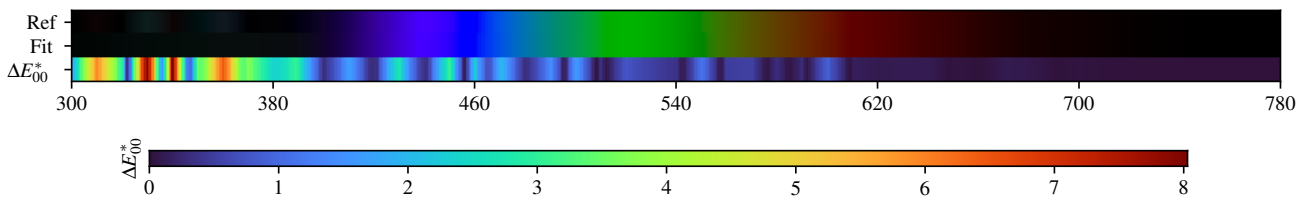
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.30$	$\Delta E = 0.28$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.41$	$\Delta E = 0.26$	$\Delta E = 0.40$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.35$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.17$	$\Delta E = 0.27$	$\Delta E = 0.34$	$\Delta E = 0.23$	$\Delta E = 0.30$	$\Delta E = 0.25$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.22$	$\Delta E = 0.26$	$\Delta E = 0.27$	$\Delta E = 0.26$	$\Delta E = 0.19$	$\Delta E = 0.35$	$\Delta E = 0.27$	$\Delta E = 0.29$	$\Delta E = 0.32$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.38$	$\Delta E = 0.21$	$\Delta E = 0.36$	$\Delta E = 0.30$	$\Delta E = 0.26$	$\Delta E = 0.34$	$\Delta E = 0.34$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.23$	$\Delta E = 0.39$	$\Delta E = 0.18$	$\Delta E = 0.34$	$\Delta E = 0.33$	$\Delta E = 0.19$	$\Delta E = 0.32$	$\Delta E = 0.30$

PHP8RV1C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.22$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.30$	FL3.5 $\Delta E = 0.18$	FL3.10 $\Delta E = 0.26$	FL3.15 $\Delta E = 0.16$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.23$
B $\Delta E = 0.22$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.11$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.25$	HP1 $\Delta E = 0.17$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.19$
C $\Delta E = 0.23$	D75 $\Delta E = 0.22$	FL4 $\Delta E = 0.13$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.28$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.30$	LED-B2 $\Delta E = 0.20$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.22$	E $\Delta E = 0.20$	FL5 $\Delta E = 0.16$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.18$	FL3.8 $\Delta E = 0.28$	FL3.13 $\Delta E = 0.17$	HP3 $\Delta E = 0.16$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.22$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.15$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.28$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.26$	FL3.14 $\Delta E = 0.19$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.22$	LED-V2 $\Delta E = 0.27$

PHP8RV1C - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.102915	0.132883	0.165942	0.202418	0.275308	0.396592	0.532378	0.604058	0.612155	0.607689	0.570269
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.530204	0.483694	0.424507	0.356309	0.289379	0.229510	0.171349	0.117897	0.083564	0.065754	0.054896
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.049255	0.043144	0.040861	0.039626	0.039736	0.046203	0.050625	0.054717	0.064528	0.099947	0.158010
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.230415	0.296547	0.367921	0.431461	0.489934	0.548289	0.586319	0.620496			

2 Gaussians max

Scaling factor: 93.81646487417976

Gaussians:

Weight	Mean		Covariance			
0.686889975	442.300765732	576.837172824	3953.116793879	167.687157910	167.687157910	17475.932899809
0.313110025	670.312825582	623.410489205	4964.188369200	-461.664499090	-461.664499090	15254.434430548

4 Gaussians max

Scaling factor: 89.416013756451

Gaussians:

Weight	Mean		Covariance			
0.361574182	438.813200527	465.225674537	3394.305976742	-75.587248959	-75.587248959	3864.713213753
0.154022160	665.133715600	514.400331741	4524.882135881	-1138.890379175	-1138.890379175	7040.673001634
0.319060702	445.520474336	700.765147457	4646.816806006	-382.861456883	-382.861456883	3131.036114938
0.165342956	668.435834358	726.406192359	6318.350854997	-675.097440036	-675.097440036	1692.444774783

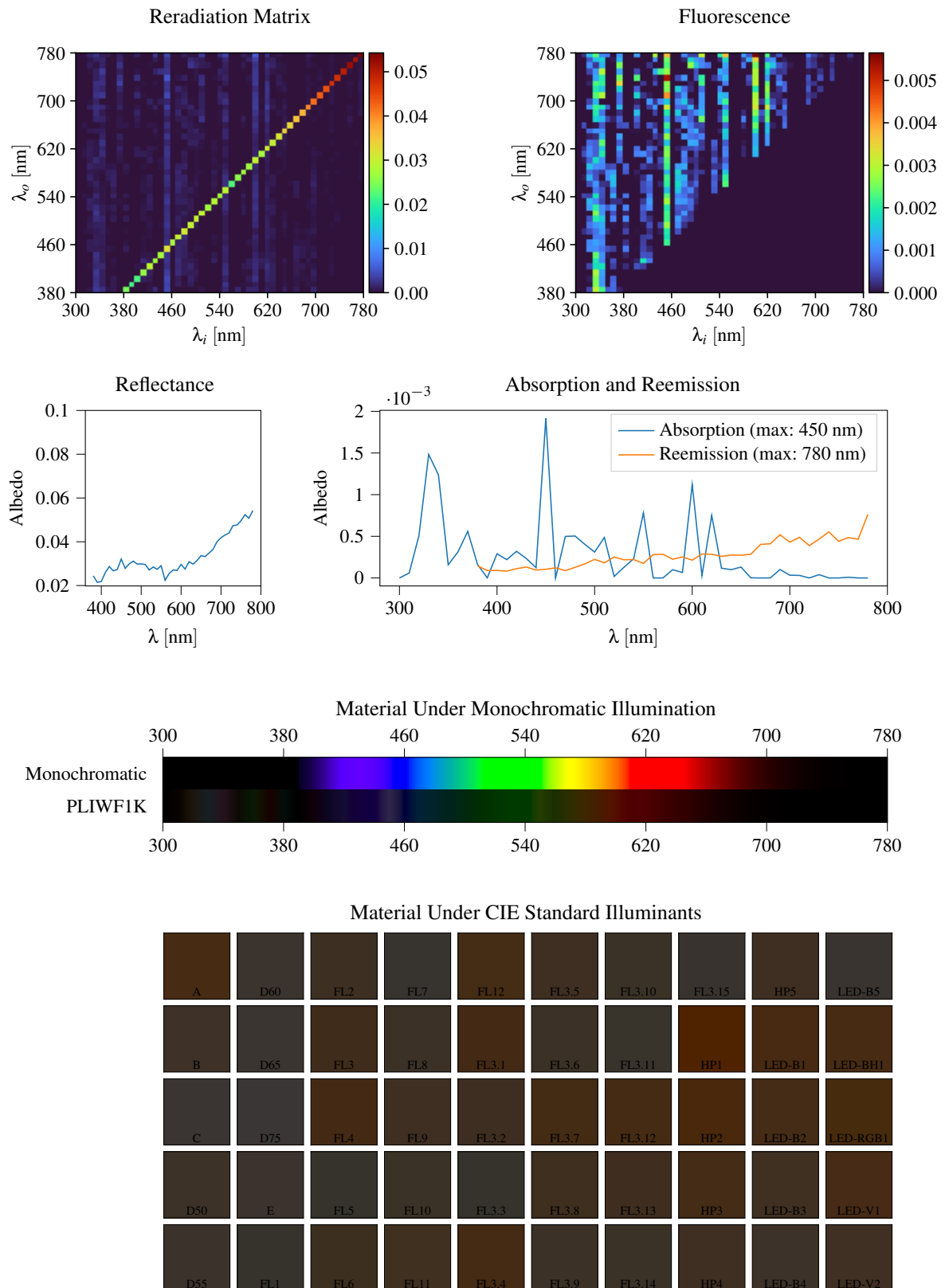
8 Gaussians max

Scaling factor: 93.8263304831807

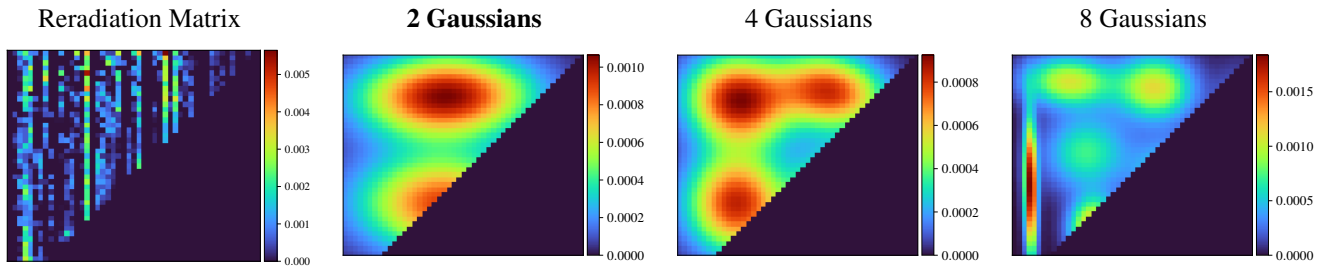
Gaussians:

Weight	Mean		Covariance			
0.090708188	357.160707430	503.766802143	1609.074253673	157.327425727	157.327425727	5290.750020399
0.183582911	453.632304662	423.909087294	1196.997833572	186.215761159	186.215761159	1027.068172943
0.149029182	660.345001957	499.002203214	4989.849329490	-722.511922275	-722.511922275	5781.318176119
0.109250700	471.106552190	549.374618807	1133.128602581	68.834353552	68.834353552	2581.957581720
0.178579441	443.348730101	690.655649419	4949.515159821	-1393.430887353	-1393.430887353	2396.796610549
0.103360025	709.978307707	698.925910292	3270.914713006	1138.208572926	1138.208572926	2206.871875539
0.184373372	517.745683448	744.523473923	9879.575303835	347.373278810	347.373278810	970.269463768

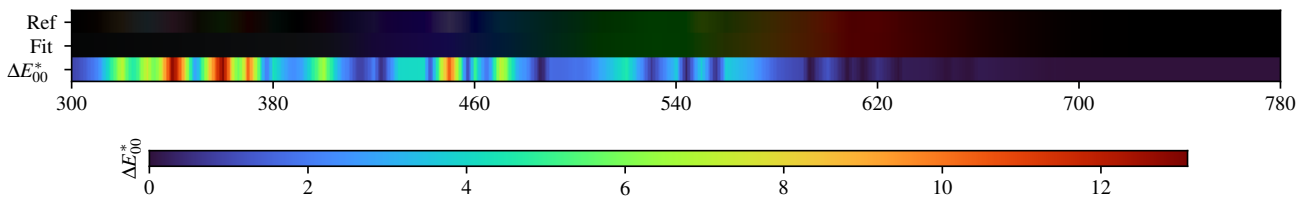
3.131. PLIWF1K



PLIWF1K - Weighted Expectation-Maximization - 2 Gaussians



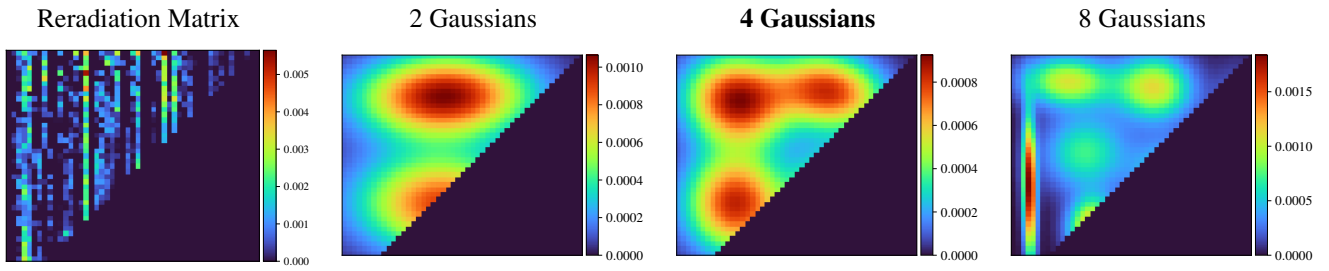
Fitted Material Under Monochromatic Illumination



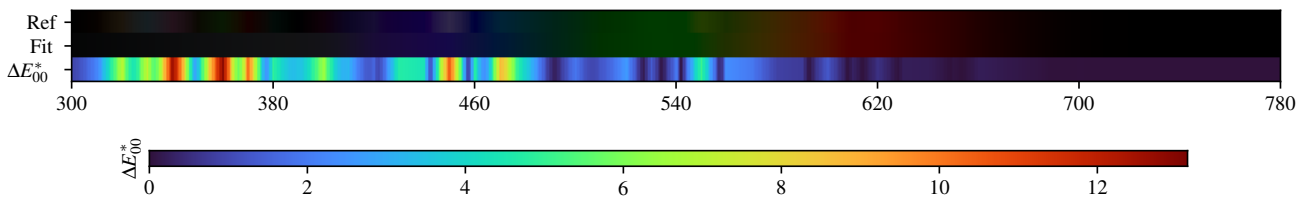
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.23$	$\Delta E = 0.42$	$\Delta E = 0.54$	$\Delta E = 0.35$	$\Delta E = 0.59$	$\Delta E = 0.27$	$\Delta E = 0.64$	$\Delta E = 0.35$	$\Delta E = 0.38$	$\Delta E = 1.05$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.41$	$\Delta E = 0.46$	$\Delta E = 0.52$	$\Delta E = 0.27$	$\Delta E = 0.45$	$\Delta E = 0.32$	$\Delta E = 0.92$	$\Delta E = 0.16$	$\Delta E = 0.26$	$\Delta E = 0.17$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.49$	$\Delta E = 0.58$	$\Delta E = 0.44$	$\Delta E = 0.30$	$\Delta E = 0.49$	$\Delta E = 0.68$	$\Delta E = 0.20$	$\Delta E = 0.52$	$\Delta E = 0.36$	$\Delta E = 0.47$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.35$	$\Delta E = 0.86$	$\Delta E = 0.54$	$\Delta E = 0.81$	$\Delta E = 0.62$	$\Delta E = 0.87$	$\Delta E = 0.22$	$\Delta E = 0.25$	$\Delta E = 0.51$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.47$	$\Delta E = 0.63$	$\Delta E = 0.75$	$\Delta E = 0.24$	$\Delta E = 0.92$	$\Delta E = 0.23$	$\Delta E = 0.53$	$\Delta E = 0.93$	$\Delta E = 0.31$

PLIWF1K - Weighted Expectation-Maximization - 4 Gaussians



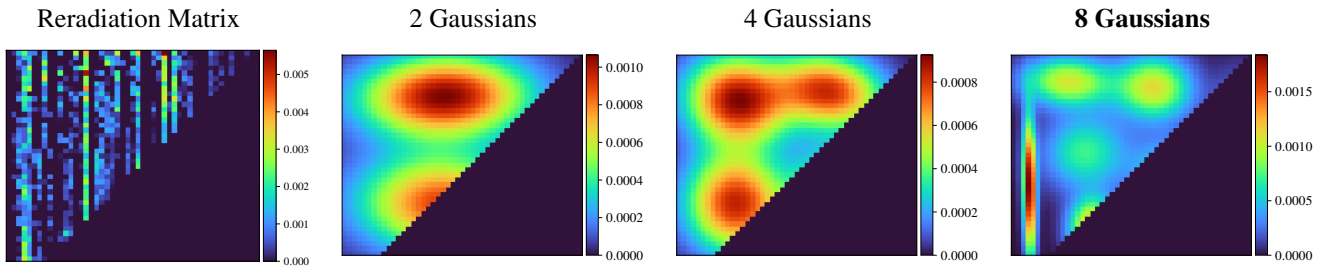
Fitted Material Under Monochromatic Illumination



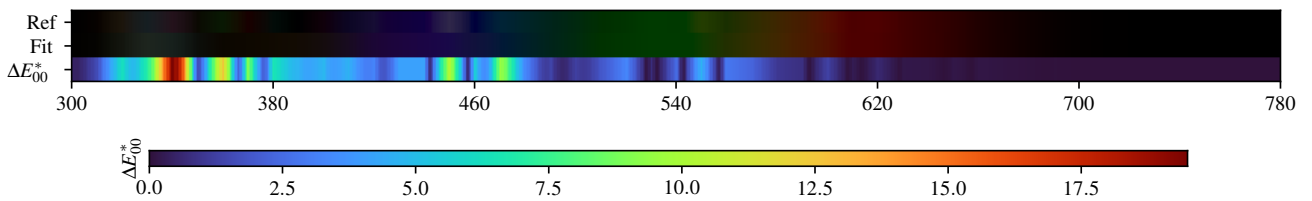
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.55$	$\Delta E = 1.23$	$\Delta E = 0.70$	$\Delta E = 0.98$	$\Delta E = 0.75$	$\Delta E = 0.66$	$\Delta E = 1.11$	$\Delta E = 1.00$	$\Delta E = 0.73$	$\Delta E = 1.69$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.04$	$\Delta E = 1.32$	$\Delta E = 0.57$	$\Delta E = 0.76$	$\Delta E = 0.38$	$\Delta E = 0.74$	$\Delta E = 1.25$	$\Delta E = 0.10$	$\Delta E = 0.47$	$\Delta E = 0.44$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.28$	$\Delta E = 1.48$	$\Delta E = 0.46$	$\Delta E = 0.67$	$\Delta E = 0.63$	$\Delta E = 0.72$	$\Delta E = 0.31$	$\Delta E = 0.69$	$\Delta E = 0.61$	$\Delta E = 0.12$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.02$	$\Delta E = 1.59$	$\Delta E = 0.89$	$\Delta E = 1.17$	$\Delta E = 0.85$	$\Delta E = 0.96$	$\Delta E = 0.59$	$\Delta E = 0.46$	$\Delta E = 0.93$	$\Delta E = 0.49$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.12$	$\Delta E = 0.92$	$\Delta E = 0.66$	$\Delta E = 1.01$	$\Delta E = 0.26$	$\Delta E = 1.15$	$\Delta E = 0.71$	$\Delta E = 0.71$	$\Delta E = 1.33$	$\Delta E = 0.74$

PLIWF1K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.93$	$\Delta E = 0.75$	$\Delta E = 1.11$	$\Delta E = 0.58$	$\Delta E = 0.60$	$\Delta E = 1.14$	$\Delta E = 1.04$	$\Delta E = 0.77$	$\Delta E = 1.76$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.00$	$\Delta E = 0.93$	$\Delta E = 0.52$	$\Delta E = 0.77$	$\Delta E = 0.30$	$\Delta E = 0.81$	$\Delta E = 1.35$	$\Delta E = 0.06$	$\Delta E = 0.35$	$\Delta E = 0.28$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.34$	$\Delta E = 0.91$	$\Delta E = 0.35$	$\Delta E = 0.59$	$\Delta E = 0.63$	$\Delta E = 0.57$	$\Delta E = 0.09$	$\Delta E = 0.51$	$\Delta E = 0.51$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.83$	$\Delta E = 1.26$	$\Delta E = 1.20$	$\Delta E = 1.16$	$\Delta E = 1.24$	$\Delta E = 0.93$	$\Delta E = 0.48$	$\Delta E = 0.13$	$\Delta E = 0.93$	$\Delta E = 0.20$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.89$	$\Delta E = 1.21$	$\Delta E = 0.74$	$\Delta E = 0.93$	$\Delta E = 0.08$	$\Delta E = 1.19$	$\Delta E = 0.72$	$\Delta E = 0.79$	$\Delta E = 1.41$	$\Delta E = 0.77$

PLIWF1K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.024403	0.021455	0.021854	0.025919	0.028644	0.026745	0.027312	0.032098	0.027867	0.029890	0.031139
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.029811	0.029882	0.029624	0.027115	0.028461	0.027428	0.029034	0.022401	0.025507	0.027121	0.026911
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.029650	0.027519	0.030880	0.029807	0.031420	0.033669	0.033244	0.034849	0.036488	0.039991	0.041866
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.043073	0.043979	0.047376	0.047618	0.049563	0.052364	0.050766	0.054273			

2 Gaussians

Scaling factor: 92.78549540243914

Gaussians:

Weight	Mean		Covariance			
0.503372103	501.098988864	479.602441013	14068.093455223	-392.843798703	-392.843798703	4801.310462531
0.496627897	502.729149187	699.388838681	14090.055484005	245.541172214	245.541172214	3409.711531977

4 Gaussians

Scaling factor: 89.2960044354675

Gaussians:

Weight	Mean		Covariance			
0.214092037	617.985003475	477.424244718	3125.773856294	-109.127511364	-109.127511364	4676.147615213
0.275349258	417.511801191	690.680445233	5058.909604178	-328.579561376	-328.579561376	3888.677319399
0.222371091	605.451972034	709.211508936	5763.167829263	-595.621388987	-595.621388987	2767.982327604
0.288187614	416.417353424	481.128530768	4856.791172226	-103.501517779	-103.501517779	4926.993378139

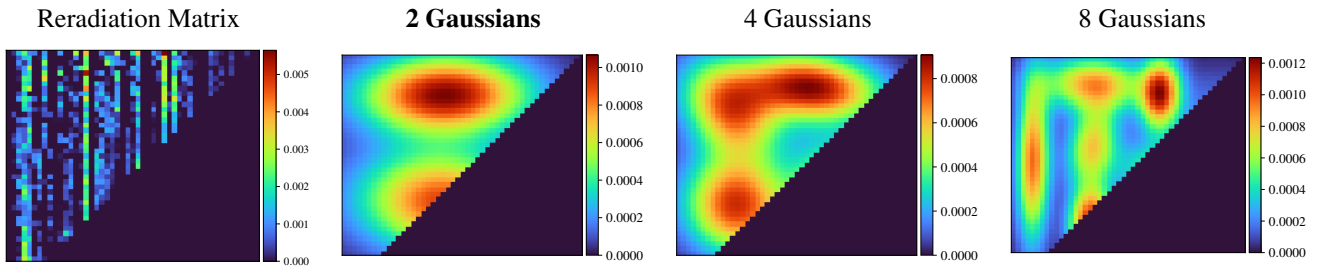
8 Gaussians

Scaling factor: 87.7651432442767

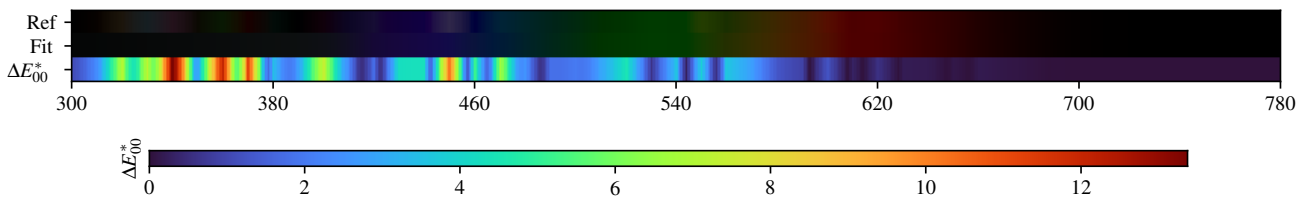
Gaussians:

Weight	Mean		Covariance			
0.107735479	456.566673736	435.076290822	966.869346496	112.035781950	112.035781950	1565.970143728
0.167464100	409.980985298	729.893079922	3953.479905976	-97.674891923	-97.674891923	1250.090638144
0.028935875	743.572018118	686.112025516	1043.697496563	381.980688339	381.980688339	3593.979009312
0.115304064	332.932193488	509.824440336	84.345578129	-133.404346373	-133.404346373	8939.274023389
0.188946257	585.609212281	716.922893620	2813.507532903	-54.455223321	-54.455223321	2087.776979092
0.162662184	444.257076641	585.379552682	3482.898046611	76.478611673	76.478611673	2918.960505581
0.113571401	613.294422111	543.219779867	2800.884358858	-17.637551828	-17.637551828	2305.684880954
0.115380641	620.498398533	421.553652897	2967.082169166	267.430271815	267.430271815	888.978657868

PLIWF1K - Weighted variational Bayesian inference - 2 Gaussians



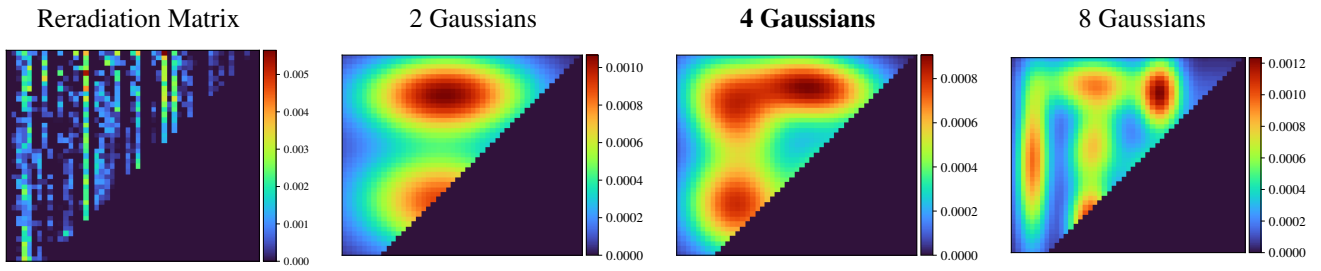
Fitted Material Under Monochromatic Illumination



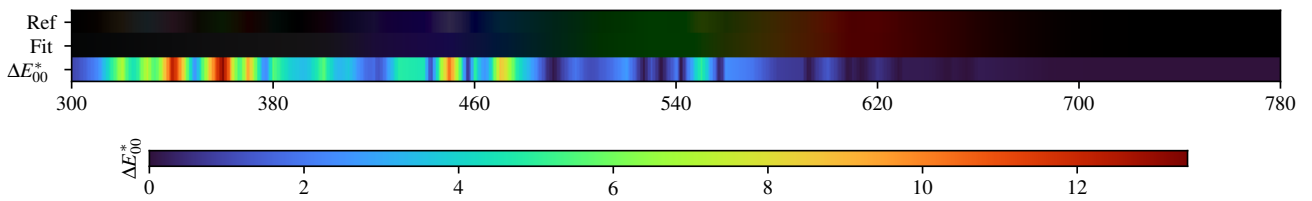
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.20$	$\Delta E = 0.52$	$\Delta E = 0.28$	$\Delta E = 0.43$	$\Delta E = 0.42$	$\Delta E = 0.24$	$\Delta E = 0.33$	$\Delta E = 0.65$	$\Delta E = 0.29$	$\Delta E = 0.70$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.36$	$\Delta E = 0.62$	$\Delta E = 0.32$	$\Delta E = 0.32$	$\Delta E = 0.33$	$\Delta E = 0.27$	$\Delta E = 0.54$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.54$	$\Delta E = 0.81$	$\Delta E = 0.30$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.53$	$\Delta E = 0.28$	$\Delta E = 0.39$	$\Delta E = 0.17$	$\Delta E = 0.61$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.34$	$\Delta E = 0.74$	$\Delta E = 0.26$	$\Delta E = 0.49$	$\Delta E = 0.28$	$\Delta E = 0.60$	$\Delta E = 0.28$	$\Delta E = 0.37$	$\Delta E = 0.21$	$\Delta E = 0.36$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.42$	$\Delta E = 0.28$	$\Delta E = 0.36$	$\Delta E = 0.48$	$\Delta E = 0.23$	$\Delta E = 0.59$	$\Delta E = 0.37$	$\Delta E = 0.35$	$\Delta E = 0.59$	$\Delta E = 0.39$

PLIWF1K - Weighted variational Bayesian inference - 4 Gaussians



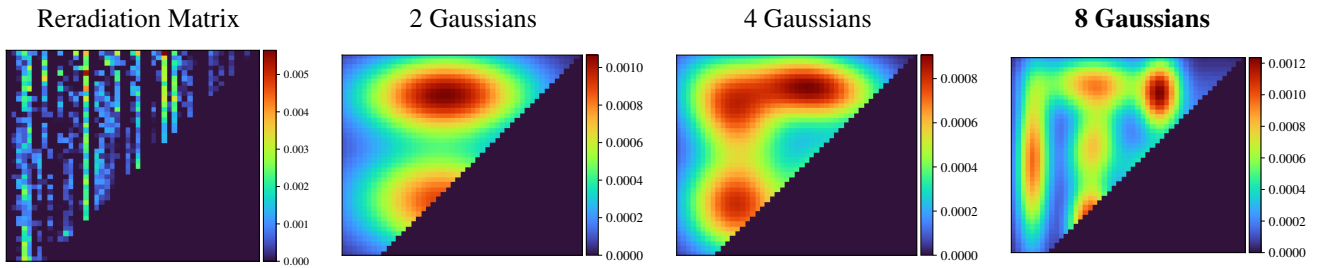
Fitted Material Under Monochromatic Illumination



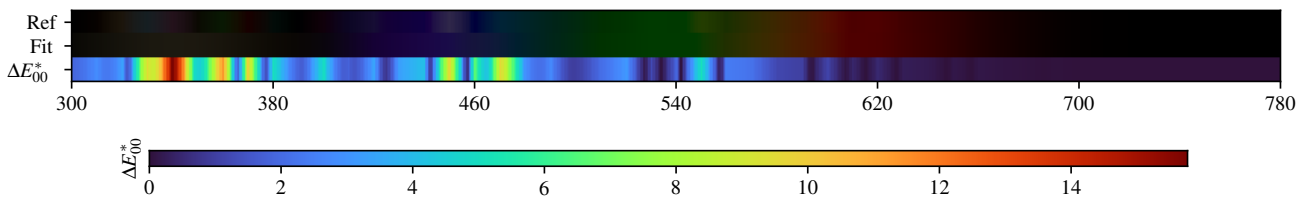
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.41$	$\Delta E = 0.97$	$\Delta E = 0.54$	$\Delta E = 0.75$	$\Delta E = 0.60$	$\Delta E = 0.47$	$\Delta E = 0.91$	$\Delta E = 0.77$	$\Delta E = 0.54$	$\Delta E = 1.45$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.81$	$\Delta E = 1.05$	$\Delta E = 0.44$	$\Delta E = 0.57$	$\Delta E = 0.27$	$\Delta E = 0.53$	$\Delta E = 1.04$	$\Delta E = 0.08$	$\Delta E = 0.34$	$\Delta E = 0.33$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.02$	$\Delta E = 1.19$	$\Delta E = 0.36$	$\Delta E = 0.49$	$\Delta E = 0.46$	$\Delta E = 0.55$	$\Delta E = 0.22$	$\Delta E = 0.55$	$\Delta E = 0.46$	$\Delta E = 0.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.79$	$\Delta E = 1.35$	$\Delta E = 0.69$	$\Delta E = 0.98$	$\Delta E = 0.65$	$\Delta E = 0.76$	$\Delta E = 0.41$	$\Delta E = 0.41$	$\Delta E = 0.74$	$\Delta E = 0.36$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.89$	$\Delta E = 0.71$	$\Delta E = 0.51$	$\Delta E = 0.83$	$\Delta E = 0.17$	$\Delta E = 0.94$	$\Delta E = 0.51$	$\Delta E = 0.56$	$\Delta E = 1.12$	$\Delta E = 0.52$

PLIWF1K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.32$	$\Delta E = 0.97$	$\Delta E = 0.76$	$\Delta E = 1.00$	$\Delta E = 0.68$	$\Delta E = 0.65$	$\Delta E = 1.11$	$\Delta E = 0.97$	$\Delta E = 0.78$	$\Delta E = 1.50$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.93$	$\Delta E = 1.00$	$\Delta E = 0.57$	$\Delta E = 0.76$	$\Delta E = 0.42$	$\Delta E = 0.86$	$\Delta E = 1.26$	$\Delta E = 0.17$	$\Delta E = 0.40$	$\Delta E = 0.32$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.18$	$\Delta E = 1.04$	$\Delta E = 0.43$	$\Delta E = 0.61$	$\Delta E = 0.69$	$\Delta E = 0.76$	$\Delta E = 0.23$	$\Delta E = 0.53$	$\Delta E = 0.53$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.85$	$\Delta E = 1.08$	$\Delta E = 1.11$	$\Delta E = 1.07$	$\Delta E = 1.21$	$\Delta E = 1.02$	$\Delta E = 0.58$	$\Delta E = 0.18$	$\Delta E = 0.87$	$\Delta E = 0.30$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.92$	$\Delta E = 1.13$	$\Delta E = 0.75$	$\Delta E = 0.92$	$\Delta E = 0.21$	$\Delta E = 1.18$	$\Delta E = 0.85$	$\Delta E = 0.83$	$\Delta E = 1.24$	$\Delta E = 0.78$

PLIWF1K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.024403	0.021455	0.021854	0.025919	0.028644	0.026745	0.027312	0.032098	0.027867	0.029890	0.031139
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.029811	0.029882	0.029624	0.027115	0.028461	0.027428	0.029034	0.022401	0.025507	0.027121	0.026911
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.029650	0.027519	0.030880	0.029807	0.031420	0.033669	0.033244	0.034849	0.036488	0.039991	0.041866
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.043073	0.043979	0.047376	0.047618	0.049563	0.052364	0.050766	0.054273			

2 Gaussians max

Scaling factor: 92.54986753471397

Gaussians:

Weight	Mean		Covariance			
0.522348902	500.120110775	484.102757083	14052.858116167	-496.358302792	-496.358302792	5216.092624080
0.477651098	503.994331139	702.917189263	14062.933293642	127.939726574	127.939726574	3145.288566356

4 Gaussians max

Scaling factor: 89.26931469341508

Gaussians:

Weight	Mean		Covariance			
0.277802354	416.900122906	477.471691573	5150.266680566	-240.494873895	-240.494873895	4819.961454953
0.226579315	618.648404877	487.396159291	3282.056285260	-148.829660472	-148.829660472	5683.353156454
0.214024458	403.940443536	671.325324314	4524.426672095	-1337.276033717	-1337.276033717	4674.453724756
0.281593874	567.223325367	717.473872308	9191.819127268	-719.693257703	-719.693257703	2258.932641795

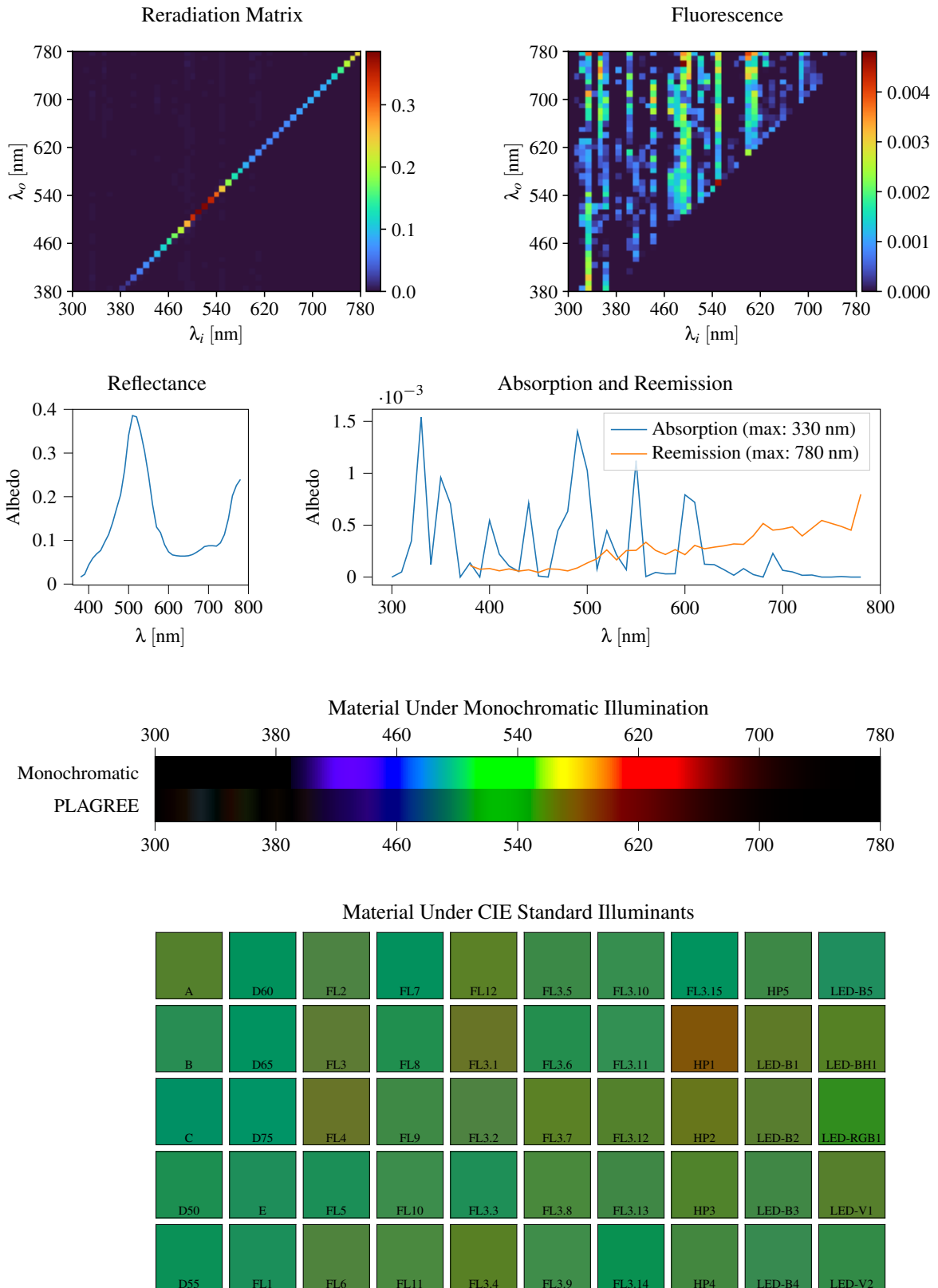
8 Gaussians max

Scaling factor: 87.97245035774812

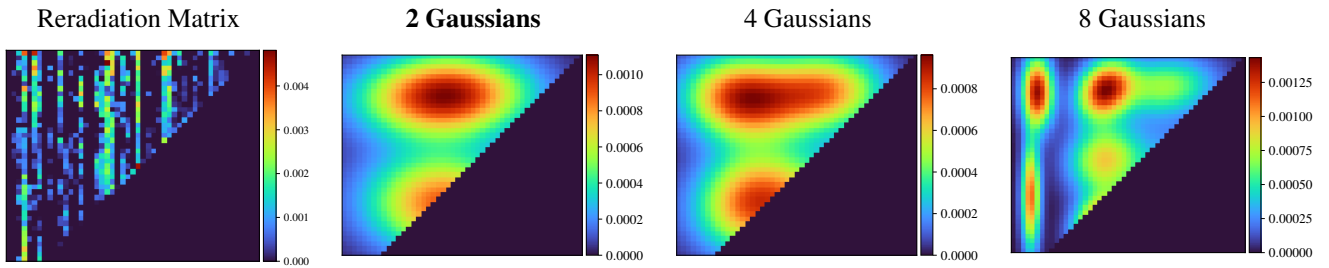
Gaussians:

Weight	Mean		Covariance			
0.194709104	340.915657064	568.275065924	585.009880184	166.138863015	166.138863015	13883.032920475
0.107486615	458.336659389	442.796734420	881.196385235	228.092617578	228.092617578	2384.181413157
0.129154479	614.074596011	428.796536707	3371.618929482	28.875501548	28.875501548	1485.439301698
0.097342581	603.675038185	543.503120516	3719.041751844	-449.034312120	-449.034312120	1804.115706274
0.121193551	464.760009926	600.008934092	1372.937781912	519.621073556	519.621073556	3742.426608898
0.054433537	696.144033236	670.750886907	4708.997805377	1666.808818340	1666.808818340	4807.921831517
0.114113264	606.079453186	708.381757865	829.865757955	117.497277826	117.497277826	2708.554609538
0.181566870	466.435648087	729.629872337	5520.806460529	-117.441391495	-117.441391495	1600.171190944

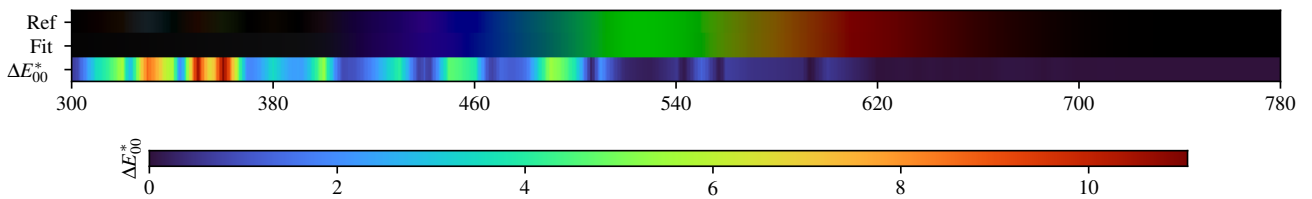
3.132. PLAGREE



PLAGREE - Weighted Expectation-Maximization - 2 Gaussians



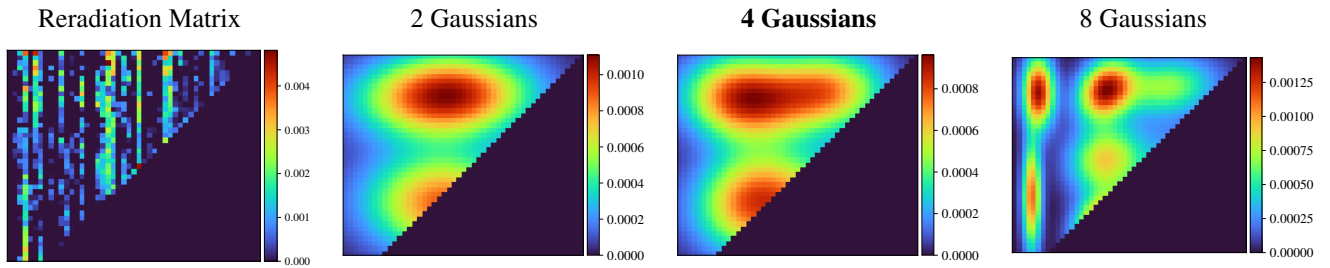
Fitted Material Under Monochromatic Illumination



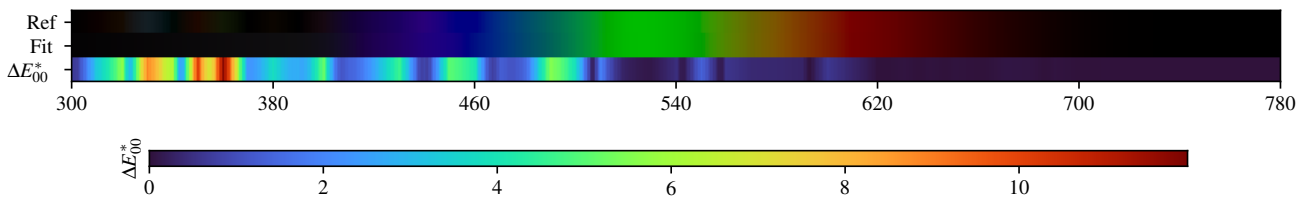
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.33$	$\Delta E = 0.24$	$\Delta E = 0.33$	$\Delta E = 0.54$	$\Delta E = 0.23$	$\Delta E = 0.57$	$\Delta E = 0.41$	$\Delta E = 0.20$	$\Delta E = 0.15$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.30$	$\Delta E = 0.35$	$\Delta E = 0.20$	$\Delta E = 0.31$	$\Delta E = 0.10$	$\Delta E = 0.25$	$\Delta E = 0.45$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.35$	$\Delta E = 0.37$	$\Delta E = 0.16$	$\Delta E = 0.27$	$\Delta E = 0.17$	$\Delta E = 0.47$	$\Delta E = 0.25$	$\Delta E = 0.19$	$\Delta E = 0.12$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.29$	$\Delta E = 0.39$	$\Delta E = 0.30$	$\Delta E = 0.53$	$\Delta E = 0.23$	$\Delta E = 0.46$	$\Delta E = 0.33$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.23$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.31$	$\Delta E = 0.32$	$\Delta E = 0.22$	$\Delta E = 0.54$	$\Delta E = 0.11$	$\Delta E = 0.46$	$\Delta E = 0.39$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.28$

PLAGREE - Weighted Expectation-Maximization - 4 Gaussians



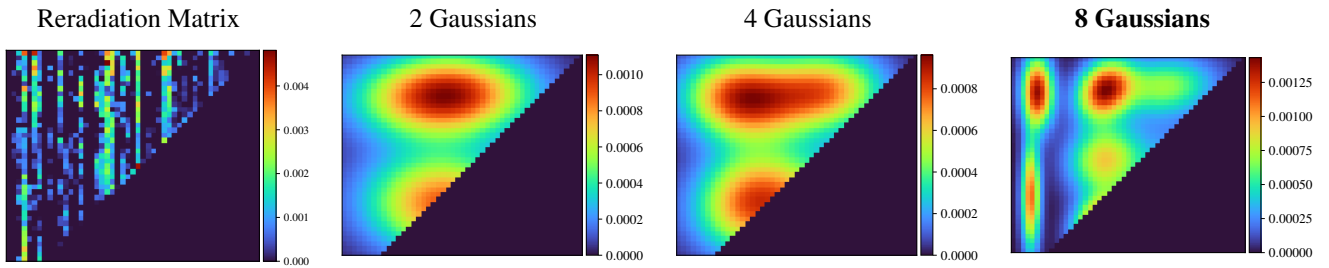
Fitted Material Under Monochromatic Illumination



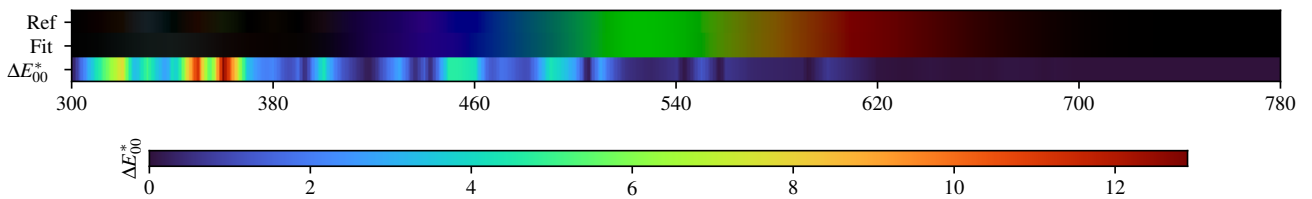
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.27$	$\Delta E = 0.37$	$\Delta E = 0.30$	$\Delta E = 0.37$	$\Delta E = 0.61$	$\Delta E = 0.28$	$\Delta E = 0.62$	$\Delta E = 0.45$	$\Delta E = 0.25$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.35$	$\Delta E = 0.39$	$\Delta E = 0.26$	$\Delta E = 0.36$	$\Delta E = 0.14$	$\Delta E = 0.30$	$\Delta E = 0.50$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.38$	$\Delta E = 0.41$	$\Delta E = 0.23$	$\Delta E = 0.33$	$\Delta E = 0.23$	$\Delta E = 0.54$	$\Delta E = 0.31$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.34$	$\Delta E = 0.44$	$\Delta E = 0.35$	$\Delta E = 0.58$	$\Delta E = 0.27$	$\Delta E = 0.53$	$\Delta E = 0.38$	$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.29$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.36$	$\Delta E = 0.36$	$\Delta E = 0.28$	$\Delta E = 0.61$	$\Delta E = 0.16$	$\Delta E = 0.52$	$\Delta E = 0.44$	$\Delta E = 0.24$	$\Delta E = 0.14$	$\Delta E = 0.33$

PLAGREE - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.50$	$\Delta E = 0.08$	$\Delta E = 0.41$	$\Delta E = 0.17$	$\Delta E = 0.06$	$\Delta E = 0.26$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.30$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.45$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.39$	$\Delta E = 0.06$	$\Delta E = 0.38$	$\Delta E = 0.17$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.45$	$\Delta E = 0.05$	$\Delta E = 0.35$	$\Delta E = 0.17$	$\Delta E = 0.05$	$\Delta E = 0.21$	$\Delta E = 0.08$

PLAGREE - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.016174	0.022310	0.043539	0.058879	0.069147	0.076832	0.095732	0.113387	0.140511	0.173169	0.204486
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.260793	0.340426	0.385805	0.382701	0.348301	0.303889	0.248447	0.182155	0.130507	0.117661	0.090362
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.073833	0.066686	0.064895	0.064008	0.064007	0.064803	0.067560	0.072686	0.078568	0.085835	0.087649
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.087771	0.086905	0.094344	0.113423	0.149760	0.202097	0.225810	0.239526			

2 Gaussians

Scaling factor: 89.00328808676326

Gaussians:

Weight	Mean		Covariance			
0.483277966	503.256314871	480.658763235	11831.112057173	-326.385594736	-326.385594736	4910.408870049
0.516722034	503.390032881	700.828754669	13348.360745927	384.355471175	384.355471175	3312.766044769

4 Gaussians

Scaling factor: 86.23105434323558

Gaussians:

Weight	Mean		Covariance			
0.159887655	609.081259405	472.780530767	6262.147833371	-25.308223979	-25.308223979	4926.192215099
0.286548154	427.111858802	694.976490283	6223.662720487	-287.035189164	-287.035189164	3416.242162174
0.228417067	595.999824374	708.979789808	6497.550891588	231.256403599	231.256403599	3005.101790507
0.325147124	453.383032697	485.153803886	6522.978363612	415.688416456	415.688416456	4902.912003933

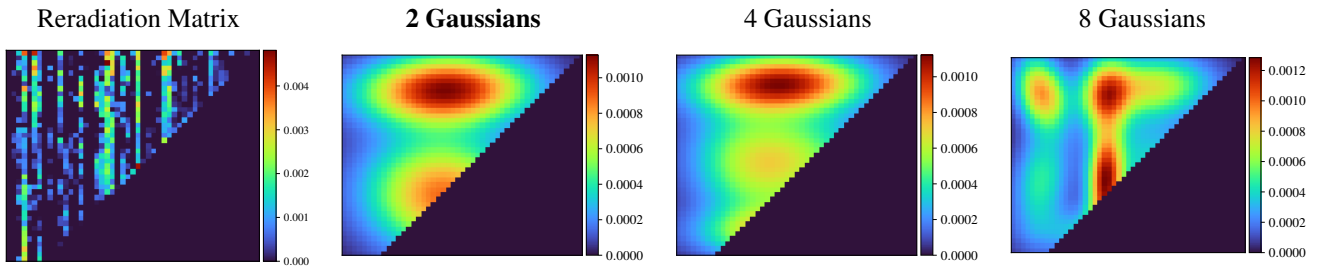
8 Gaussians

Scaling factor: 84.26894848485635

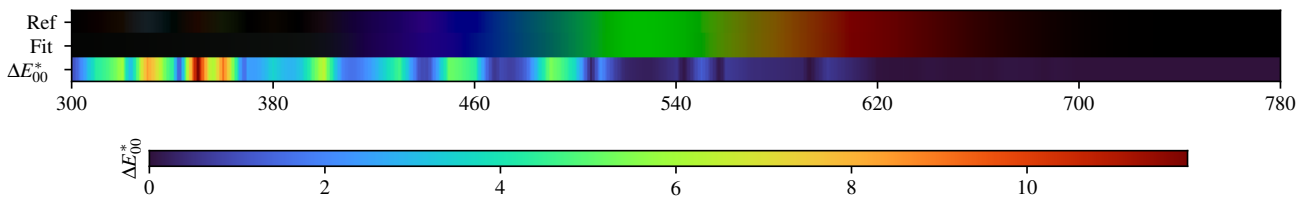
Gaussians:

Weight	Mean		Covariance			
0.092515913	610.088905384	413.455796308	5946.555728821	520.147485959	520.147485959	819.554935986
0.114952879	350.360776346	711.795155572	500.243617477	-25.962497455	-25.962497455	2553.280744024
0.160522523	487.633711619	570.016190716	2515.849881786	194.578356330	194.578356330	2512.008467794
0.158231855	616.135373826	724.127544390	5283.381764311	348.164314269	348.164314269	1818.993365376
0.089657594	336.356340130	493.950010396	181.942927578	-0.177020334	-0.177020334	6163.194984162
0.125704602	480.107924795	439.824067105	1335.752119378	328.863262577	328.863262577	1509.572810652
0.104943663	621.165280834	560.016604794	4773.680813779	223.470172031	223.470172031	4059.442186833
0.153470971	489.623705198	716.268040489	1509.165094555	345.285181304	345.285181304	1811.673938541

PLAGREE - Weighted variational Bayesian inference - 2 Gaussians



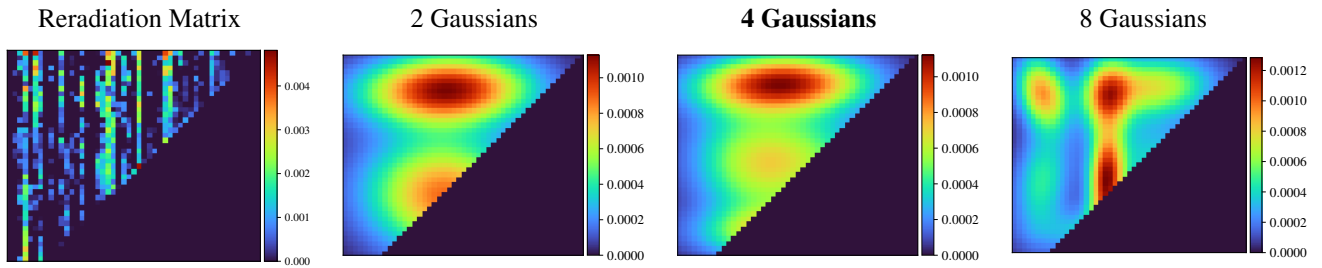
Fitted Material Under Monochromatic Illumination



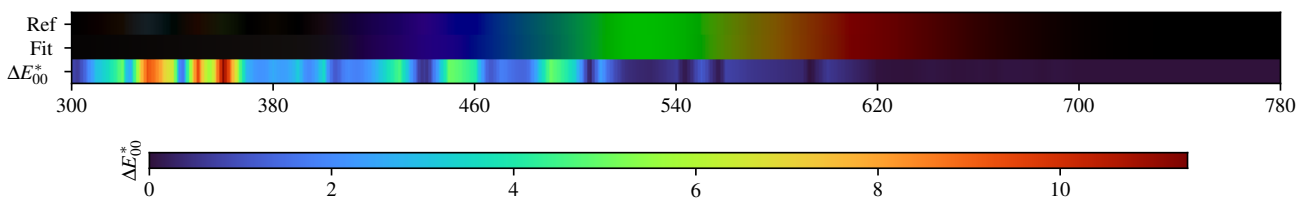
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.22$	$\Delta E = 0.29$	$\Delta E = 0.25$	$\Delta E = 0.31$	$\Delta E = 0.57$	$\Delta E = 0.23$	$\Delta E = 0.57$	$\Delta E = 0.38$	$\Delta E = 0.20$	$\Delta E = 0.19$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.28$	$\Delta E = 0.30$	$\Delta E = 0.22$	$\Delta E = 0.29$	$\Delta E = 0.11$	$\Delta E = 0.24$	$\Delta E = 0.44$	$\Delta E = 0.13$	$\Delta E = 0.16$	$\Delta E = 0.12$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.31$	$\Delta E = 0.32$	$\Delta E = 0.19$	$\Delta E = 0.27$	$\Delta E = 0.17$	$\Delta E = 0.51$	$\Delta E = 0.27$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.27$	$\Delta E = 0.35$	$\Delta E = 0.28$	$\Delta E = 0.53$	$\Delta E = 0.21$	$\Delta E = 0.48$	$\Delta E = 0.33$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.28$	$\Delta E = 0.30$	$\Delta E = 0.22$	$\Delta E = 0.56$	$\Delta E = 0.12$	$\Delta E = 0.47$	$\Delta E = 0.37$	$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.26$

PLAGREE - Weighted variational Bayesian inference - 4 Gaussians



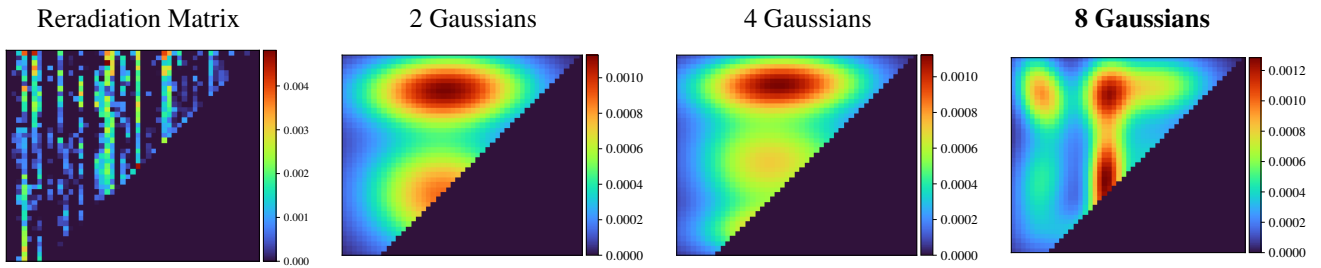
Fitted Material Under Monochromatic Illumination



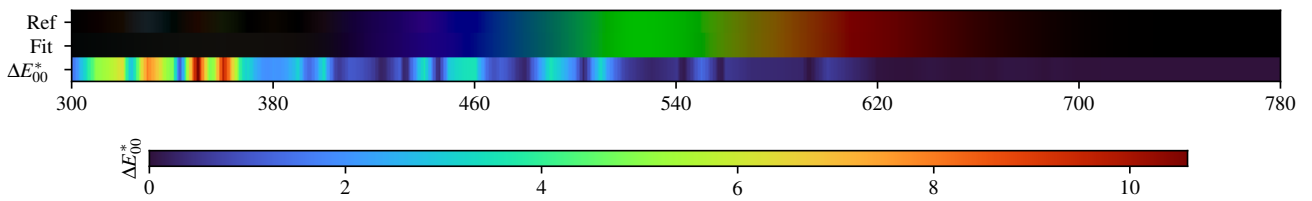
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.43$	$\Delta E = 0.10$	$\Delta E = 0.39$	$\Delta E = 0.18$	$\Delta E = 0.15$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.26$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.38$	$\Delta E = 0.15$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.28$	$\Delta E = 0.13$	$\Delta E = 0.34$	$\Delta E = 0.13$	$\Delta E = 0.33$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.39$	$\Delta E = 0.05$	$\Delta E = 0.29$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.27$	$\Delta E = 0.11$

PLAGREE - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.53$	$\Delta E = 0.08$	$\Delta E = 0.45$	$\Delta E = 0.15$	$\Delta E = 0.06$	$\Delta E = 0.14$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.37$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.04$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.07$	$\Delta E = 0.47$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.07$	$\Delta E = 0.10$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.46$	$\Delta E = 0.06$	$\Delta E = 0.43$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.50$	$\Delta E = 0.05$	$\Delta E = 0.41$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.06$

PLAGREE - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.016174	0.022310	0.043539	0.058879	0.069147	0.076832	0.095732	0.113387	0.140511	0.173169	0.204486
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.260793	0.340426	0.385805	0.382701	0.348301	0.303889	0.248447	0.182155	0.130507	0.117661	0.090362
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.073833	0.066686	0.064895	0.064008	0.064007	0.064803	0.067560	0.072686	0.078568	0.085835	0.087649
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.087771	0.086905	0.094344	0.113423	0.149760	0.202097	0.225810	0.239526			

2 Gaussians max

Scaling factor: 88.10990200864423

Gaussians:

Weight	Mean		Covariance			
0.551736661	501.996055390	497.753349653	11833.362571326	-443.913455233	-443.913455233	6582.450864296
0.448263339	505.136633295	713.054227006	13539.037247651	275.326193656	275.326193656	2407.127630030

4 Gaussians max

Scaling factor: 87.02612623510838

Gaussians:

Weight	Mean		Covariance			
0.216035049	515.982552563	423.189300956	12534.356128012	183.170962123	183.170962123	1336.029919941
0.179668414	429.182427191	574.581789944	6838.322374492	-260.849476922	-260.849476922	6305.633522796
0.243994393	541.844763534	566.497694067	9702.275086936	974.147486397	974.147486397	5187.804157662
0.360302145	507.046944556	726.185164138	13606.067425962	289.581050881	289.581050881	1664.285385209

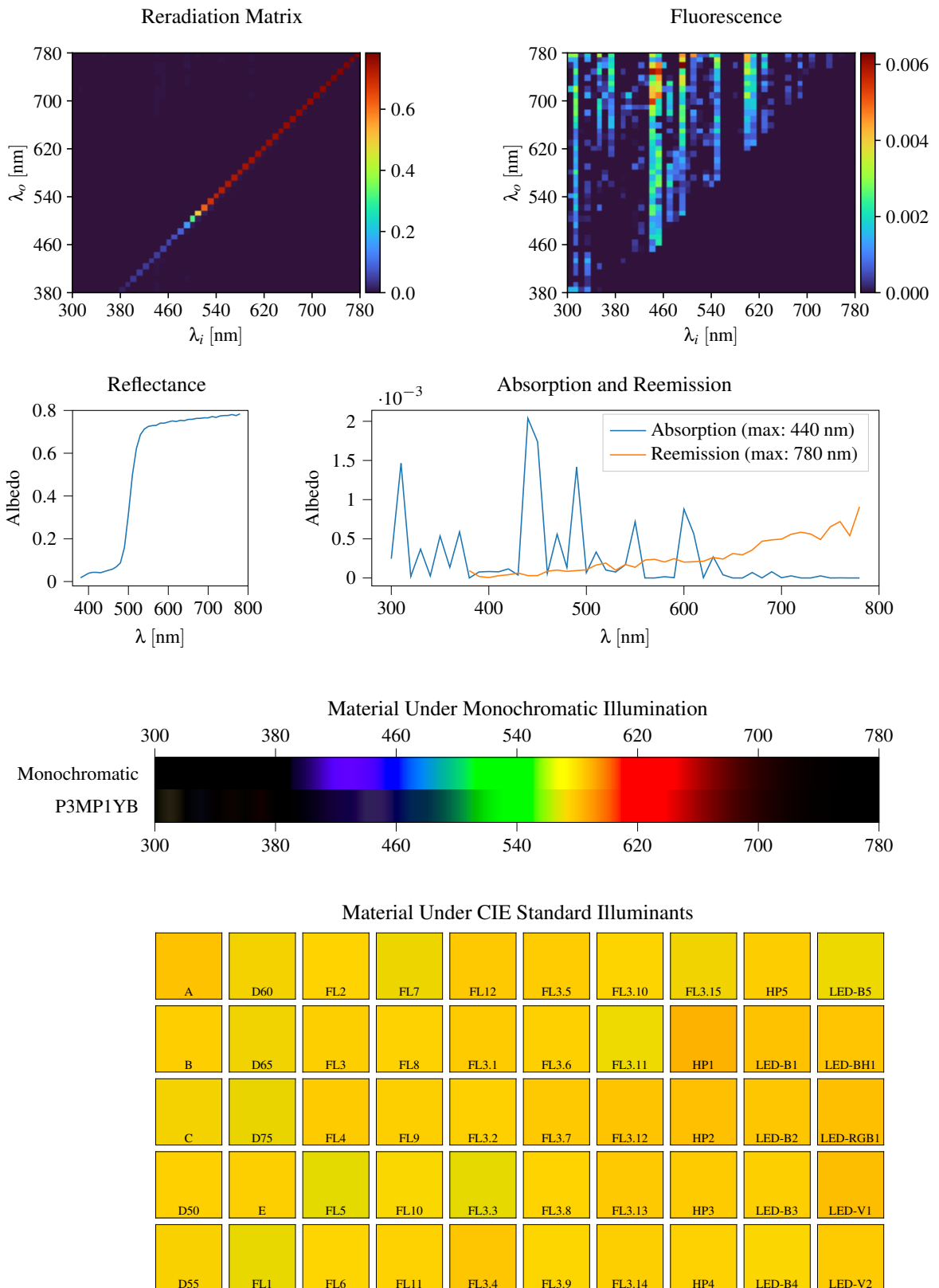
8 Gaussians max

Scaling factor: 85.50363023475973

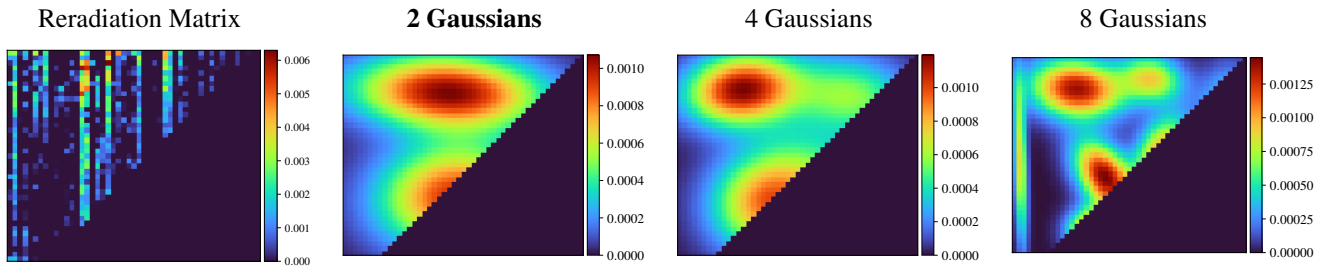
Gaussians:

Weight	Mean		Covariance			
0.112209878	357.735378180	525.344887619	1779.794258779	695.818897481	695.818897481	6262.394761912
0.166150434	541.152094667	419.072645760	11336.618009393	312.580210020	312.580210020	1222.896966647
0.153285564	492.265643852	520.943925087	601.882254875	140.984930548	140.984930548	5357.234633224
0.088743134	607.811769962	574.958549923	6653.949199964	-340.458933556	-340.458933556	4507.978572661
0.056724639	571.996060844	562.250637820	4950.465572048	-950.321872365	-950.321872365	4005.670351213
0.117888007	357.526164768	711.289977021	1316.516856381	-448.789377895	-448.789377895	2656.469623713
0.100891435	492.794659072	704.056159690	1146.317479700	91.393234420	91.393234420	2755.768532229
0.204106909	587.088207615	724.318952835	7482.098073482	316.314589379	316.314589379	1941.655741156

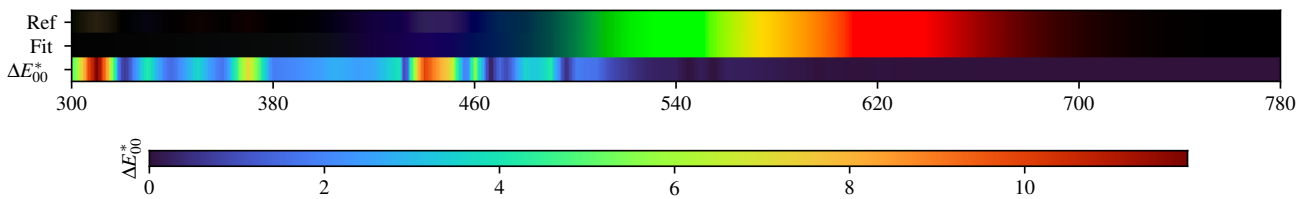
3.133. P3MPIYB



P3MP1YB - Weighted Expectation-Maximization - 2 Gaussians



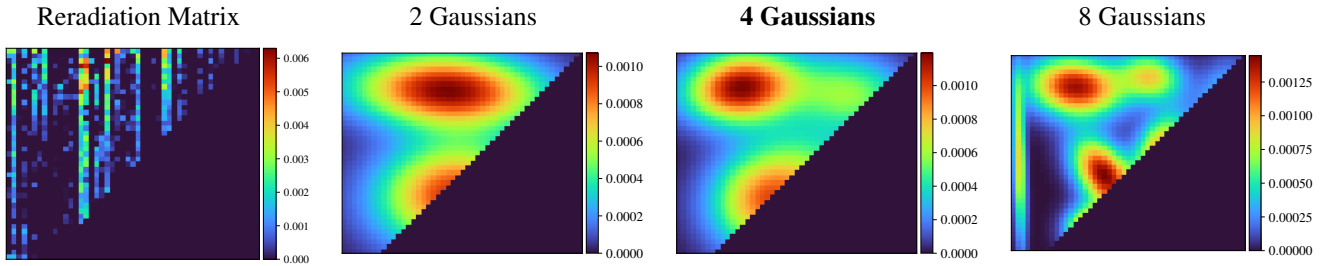
Fitted Material Under Monochromatic Illumination



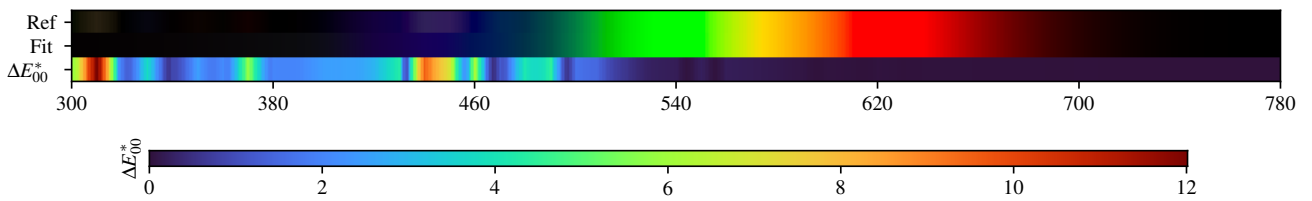
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.02$	FL7 $\Delta E = 0.07$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.06$	LED-B5 $\Delta E = 0.08$
B $\Delta E = 0.08$	D65 $\Delta E = 0.15$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.05$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.13$	D75 $\Delta E = 0.18$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.09$
D50 $\Delta E = 0.09$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.05$	FL10 $\Delta E = 0.09$	FL3.3 $\Delta E = 0.06$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.11$	FL1 $\Delta E = 0.06$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.07$	FL3.14 $\Delta E = 0.09$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.06$	LED-V2 $\Delta E = 0.11$

P3MP1YB - Weighted Expectation-Maximization - 4 Gaussians



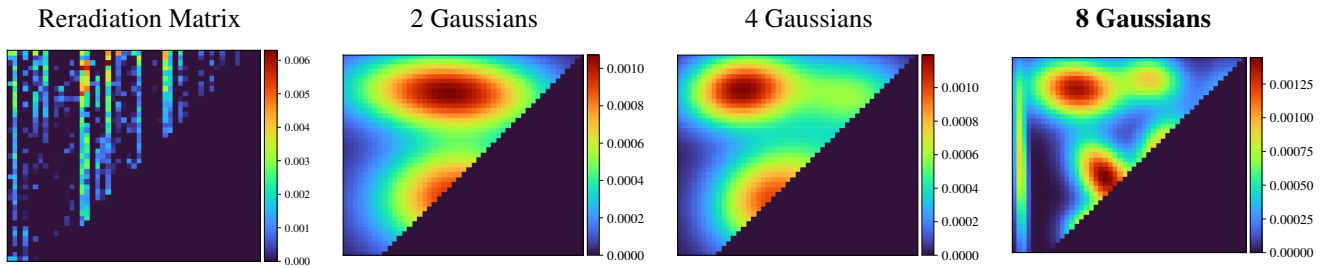
Fitted Material Under Monochromatic Illumination



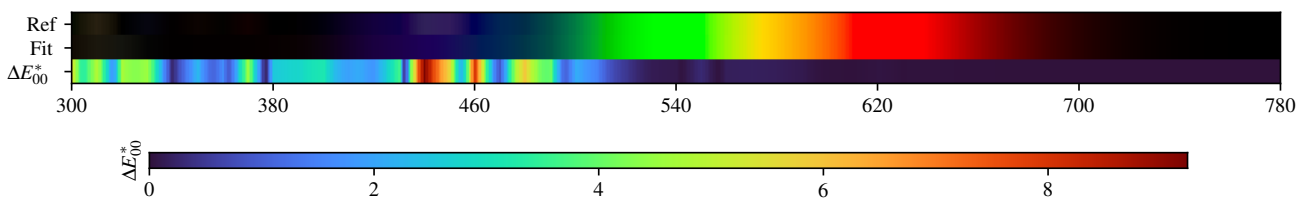
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.06$	$\Delta E = 0.19$	$\Delta E = 0.05$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.10$	$\Delta E = 0.13$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.02$	$\Delta E = 0.10$	$\Delta E = 0.04$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.03$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.25$	$\Delta E = 0.02$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.22$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.05$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.15$

P3MP1YB - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.23$	FL2 $\Delta E = 0.08$	FL7 $\Delta E = 0.19$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.19$	FL3.15 $\Delta E = 0.23$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.21$	D65 $\Delta E = 0.24$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.18$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.25$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.14$	FL3.2 $\Delta E = 0.09$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.19$
D50 $\Delta E = 0.21$	E $\Delta E = 0.21$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.16$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.12$	FL3.13 $\Delta E = 0.19$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.14$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.08$	FL3.9 $\Delta E = 0.15$	FL3.14 $\Delta E = 0.25$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.20$

P3MP1YB - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.017694	0.027981	0.038685	0.043031	0.043009	0.041144	0.046975	0.052691	0.057710	0.069061	0.087331
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.158621	0.315746	0.497983	0.621403	0.686346	0.713021	0.725266	0.729010	0.730530	0.740630	0.740584
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.746069	0.750971	0.748273	0.753769	0.752280	0.758076	0.758537	0.762639	0.763165	0.765490	0.765363
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.771307	0.767639	0.774377	0.776110	0.776539	0.780716	0.775942	0.784102			

2 Gaussians

Scaling factor: 92.23991794443155

Gaussians:

Weight	Mean		Covariance			
0.504180413	522.210323992	495.494686238	11356.271024923	417.868243548	417.868243548	5439.690668404
0.495819587	508.928404126	708.064373284	17243.317762015	-667.648480871	-667.648480871	2767.130032720

4 Gaussians

Scaling factor: 91.04462496982848

Gaussians:

Weight	Mean		Covariance			
0.171243398	610.304189549	525.503916489	8240.515239159	-2914.675177712	-2914.675177712	6452.012237218
0.306270624	425.122296920	713.304295046	5906.799689883	422.912199479	422.912199479	2503.533432042
0.183480070	647.943194865	700.377395668	7353.764630987	-647.905945422	-647.905945422	3139.513021761
0.339005909	477.947986008	483.567912471	5936.593623617	255.644888511	255.644888511	4828.244330991

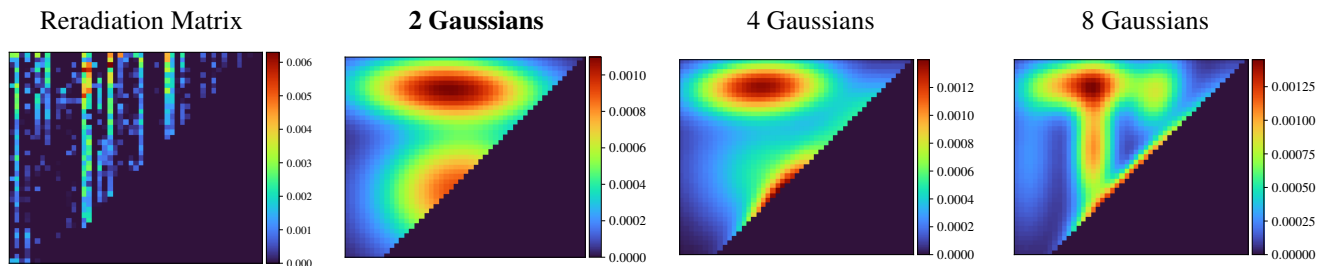
8 Gaussians

Scaling factor: 93.0049864846088

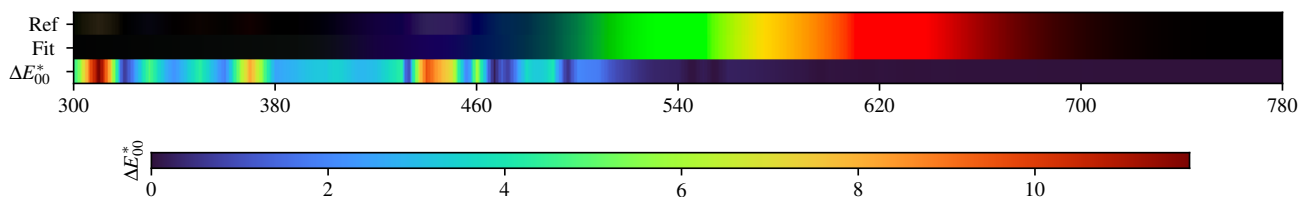
Gaussians:

Weight	Mean		Covariance			
0.086529672	653.593277935	440.572582414	6277.341051921	510.854591066	510.854591066	2269.651023652
0.268669841	430.469701088	717.967462677	4527.769915024	-326.573879335	-326.573879335	1843.078580154
0.072815485	739.648599232	684.243413898	1552.105995632	350.839966468	350.839966468	3569.311727312
0.060434497	312.742107543	562.583320321	86.069278269	-311.794701540	-311.794701540	12658.276544565
0.090415279	587.526540964	739.882814401	2014.267290283	-201.308032385	-201.308032385	1228.116411284
0.121471583	606.031445118	588.649176915	1425.716678902	689.920328545	689.920328545	2418.259318447
0.191124931	488.696287520	534.236474980	1869.964534249	-1004.831062267	-1004.831062267	2619.328397390
0.108538713	465.438978693	419.595652054	1098.254314538	4.770755348	4.770755348	973.741081598

P3MP1YB - Weighted variational Bayesian inference - 2 Gaussians



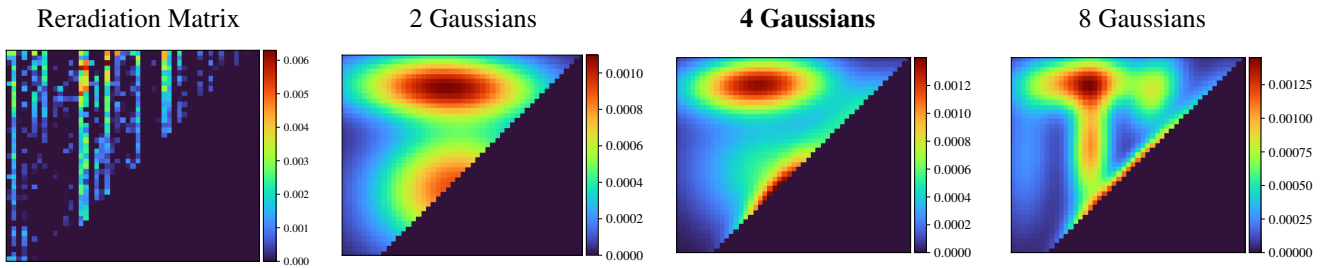
Fitted Material Under Monochromatic Illumination



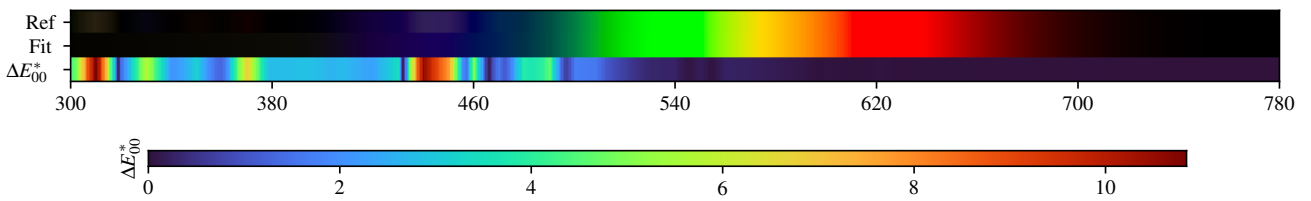
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.15$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.11$	D65 $\Delta E = 0.17$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.10$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.15$	D75 $\Delta E = 0.20$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.12$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.10$	FL3.3 $\Delta E = 0.07$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.10$
D55 $\Delta E = 0.14$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.13$

P3MP1YB - Weighted variational Bayesian inference - 4 Gaussians



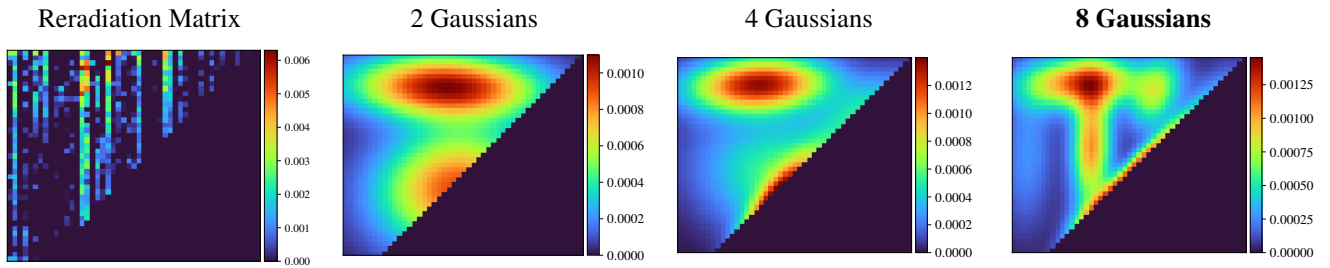
Fitted Material Under Monochromatic Illumination



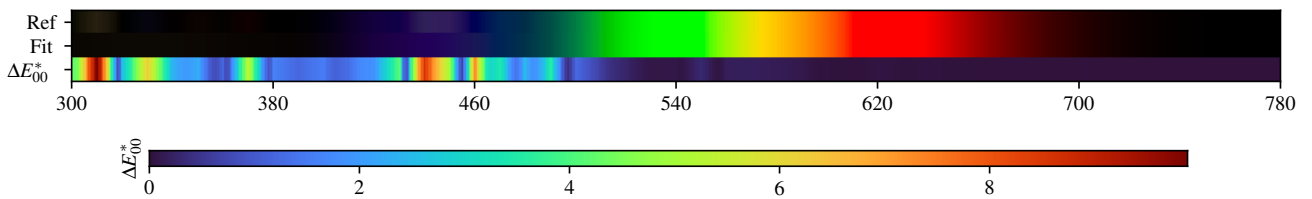
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.04$	$\Delta E = 0.10$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.09$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.04$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.14$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.16$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.14$

P3MP1YB - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.05$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.04$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.07$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.09$

P3MP1YB - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.017694	0.027981	0.038685	0.043031	0.043009	0.041144	0.046975	0.052691	0.057710	0.069061	0.087331
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.158621	0.315746	0.497983	0.621403	0.686346	0.713021	0.725266	0.729010	0.730530	0.740630	0.740584
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.746069	0.750971	0.748273	0.753769	0.752280	0.758076	0.758537	0.762639	0.763165	0.765490	0.765363
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.771307	0.767639	0.774377	0.776110	0.776539	0.780716	0.775942	0.784102			

2 Gaussians max

Scaling factor: 91.1316999292866

Gaussians:

Weight	Mean		Covariance			
0.572541559	524.237622085	512.202525939	11928.447456796	623.968471646	623.968471646	7068.085038191
0.427458441	504.308972994	719.287646214	17248.726666595	-409.037617710	-409.037617710	2000.227679703

4 Gaussians max

Scaling factor: 97.80771353294172

Gaussians:

Weight	Mean		Covariance			
0.420827303	520.450331688	528.957410092	14769.334120051	-2070.549942782	-2070.549942782	8265.956698644
0.143392180	494.816024633	469.677516514	2215.396011770	2240.246721590	2240.246721590	3532.035585845
0.101978147	687.345845148	665.404655530	5331.647879951	2642.648114249	2642.648114249	3573.884964433
0.333802370	466.391633545	728.433857473	10072.757693662	446.952859829	446.952859829	1585.436583295

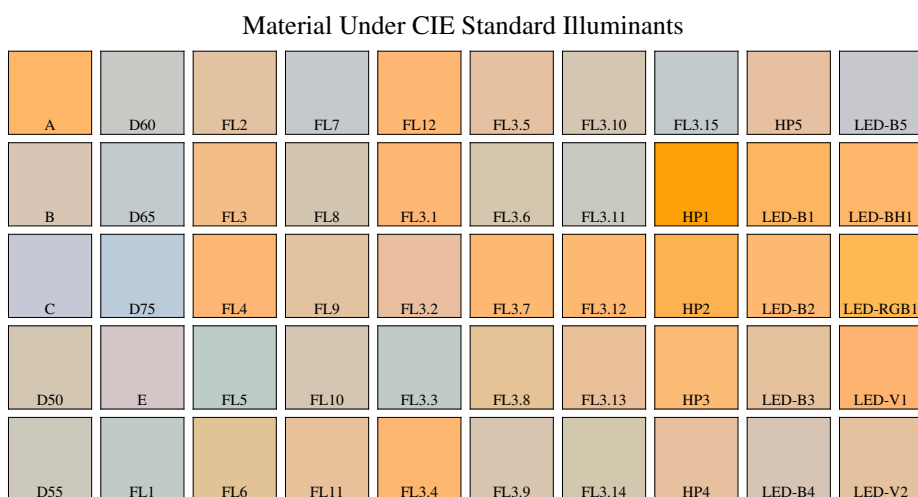
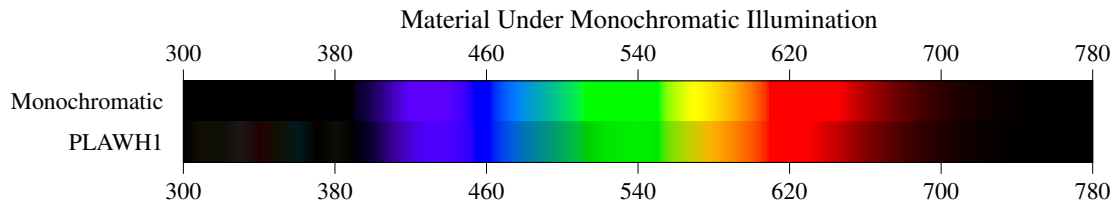
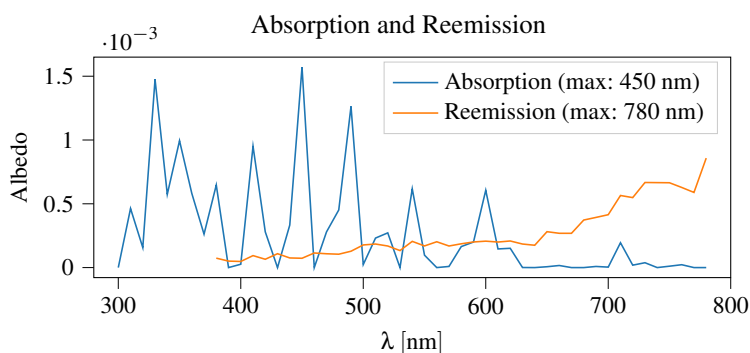
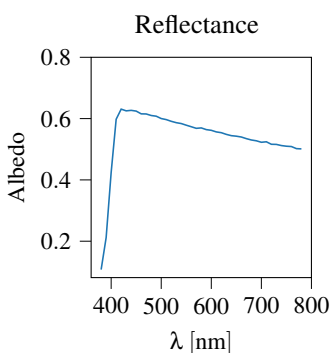
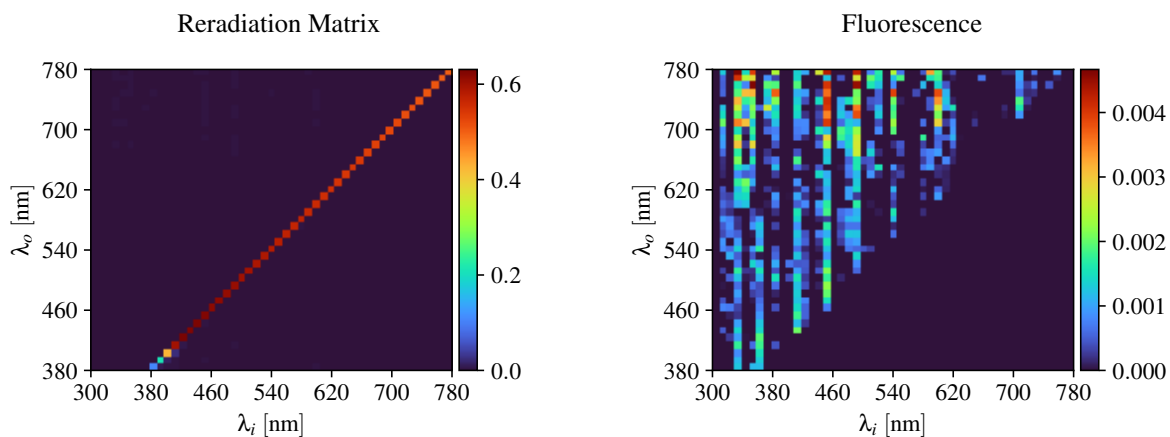
8 Gaussians max

Scaling factor: 99.42051386706372

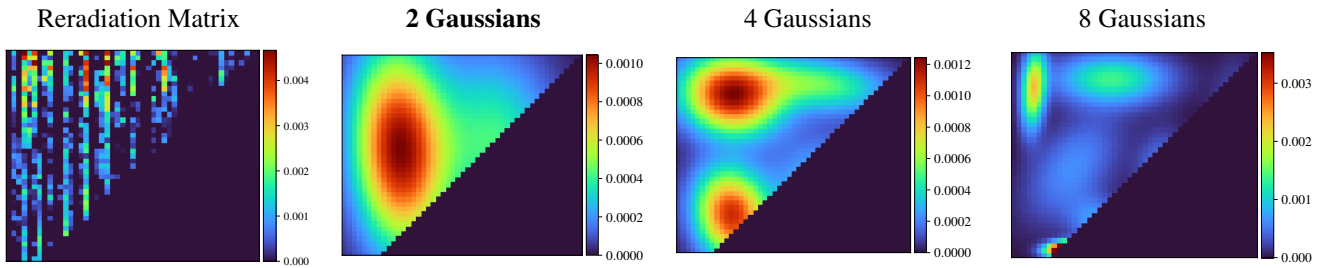
Gaussians:

Weight	Mean		Covariance			
0.077868408	327.950738063	584.538059567	1599.387304720	577.077024695	577.077024695	12761.845066364
0.188464870	554.354694102	540.060791465	5329.427037192	5266.461638350	5266.461638350	5821.096690491
0.074642782	480.563715066	424.097901887	1852.446846803	327.803530227	327.803530227	1972.002371199
0.125906352	627.992054438	462.654102508	7387.107596388	-338.891535178	-338.891535178	3634.926960366
0.154334399	460.894211817	600.372471064	782.746181723	210.449311583	210.449311583	6988.451081270
0.071636181	729.284537557	672.990974686	3136.316024337	1215.094137376	1215.094137376	4527.500754177
0.077399547	595.441606782	707.800046132	1354.600390123	739.115353374	739.115353374	3069.438260980
0.229747461	442.525609586	732.440606358	6943.431711114	281.625675583	281.625675583	1404.041564937

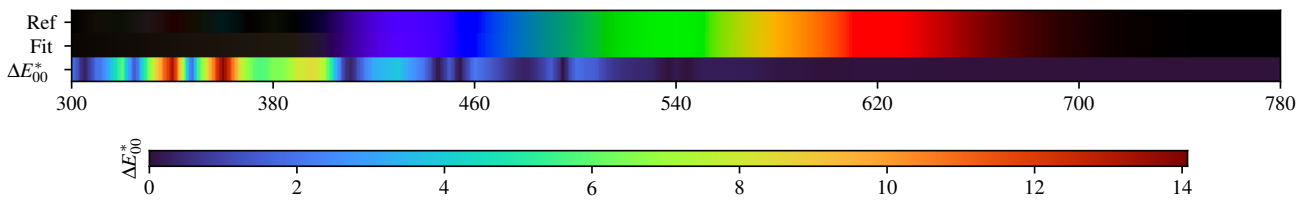
3.134. PLAWH1



PLAWH1 - Weighted Expectation-Maximization - 2 Gaussians



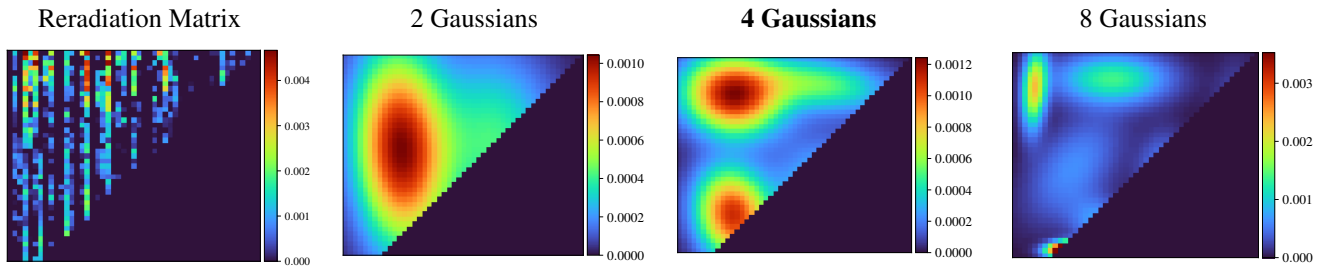
Fitted Material Under Monochromatic Illumination



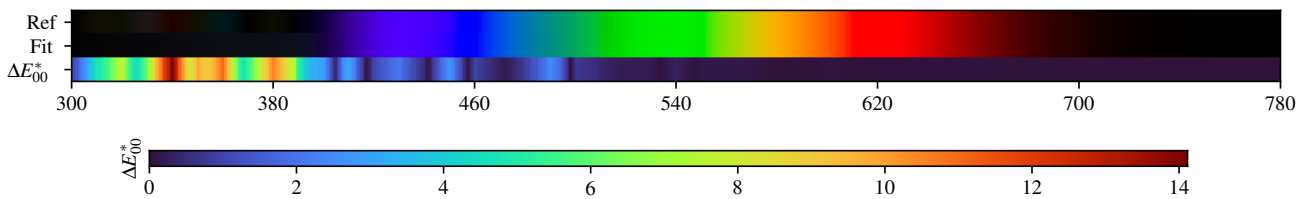
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.55$	FL2 $\Delta E = 0.19$	FL7 $\Delta E = 0.42$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.18$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.46$	HP5 $\Delta E = 0.23$	LED-B5 $\Delta E = 0.40$
B $\Delta E = 0.33$	D65 $\Delta E = 0.56$	FL3 $\Delta E = 0.14$	FL8 $\Delta E = 0.26$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.24$	FL3.11 $\Delta E = 0.19$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.09$	LED-BH1 $\Delta E = 0.11$
C $\Delta E = 0.51$	D75 $\Delta E = 0.53$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.18$	FL3.2 $\Delta E = 0.16$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.34$	E $\Delta E = 0.60$	FL5 $\Delta E = 0.40$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.37$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.17$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.44$	FL1 $\Delta E = 0.42$	FL6 $\Delta E = 0.19$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.21$	HP4 $\Delta E = 0.22$	LED-B4 $\Delta E = 0.27$	LED-V2 $\Delta E = 0.25$

PLAWH1 - Weighted Expectation-Maximization - 4 Gaussians



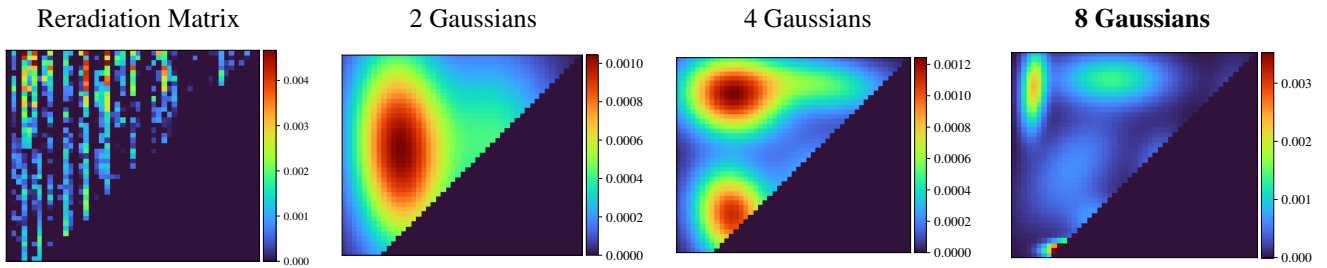
Fitted Material Under Monochromatic Illumination



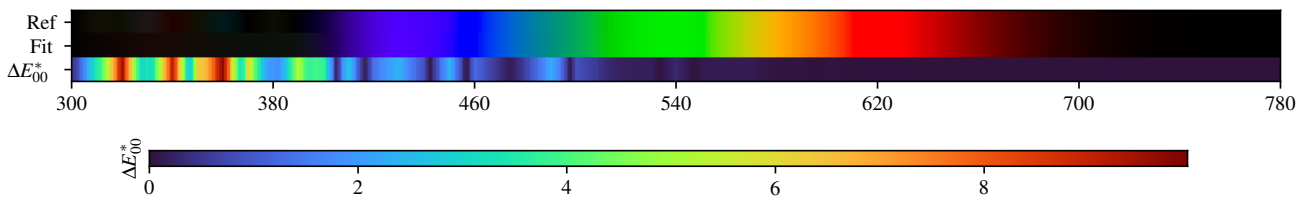
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.29$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.06$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.16$
B $\Delta E = 0.16$	D65 $\Delta E = 0.30$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.28$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.21$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.01$
D50 $\Delta E = 0.16$	E $\Delta E = 0.32$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.14$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.17$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.10$

PLAWH1 - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.05$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.05$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.01$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.06$	HP5 $\Delta E = 0.04$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.04$	D65 $\Delta E = 0.06$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.02$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.01$	FL3.11 $\Delta E = 0.18$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.02$
C $\Delta E = 0.06$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.02$	FL3.2 $\Delta E = 0.02$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.00$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.02$
D50 $\Delta E = 0.03$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.02$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.01$	HP3 $\Delta E = 0.04$	LED-B3 $\Delta E = 0.04$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.03$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.06$

PLAWH1 - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.107418	0.211930	0.424130	0.597905	0.630874	0.625263	0.626891	0.624456	0.615489	0.615117	0.610107
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.607852	0.600145	0.596751	0.591171	0.586707	0.583814	0.578468	0.573454	0.568267	0.569612	0.564043
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.561784	0.556568	0.554015	0.548525	0.544323	0.542625	0.539924	0.534634	0.530236	0.527567	0.522770
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.524343	0.516223	0.515809	0.512038	0.509910	0.508855	0.502042	0.501154			

2 Gaussians

Scaling factor: 84.86055521939565

Gaussians:

Weight	Mean		Covariance			
0.338247608	604.212722031	606.839180054	7590.937617312	-903.535457980	-903.535457980	16461.845613065
0.661752392	410.643854490	591.367301596	4089.051658690	-914.845362061	-914.845362061	19334.899019050

4 Gaussians

Scaling factor: 82.05226988332078

Gaussians:

Weight	Mean		Covariance			
0.192009100	605.347397645	500.745204316	6441.052594043	15.350966263	15.350966263	5998.020344251
0.362021268	409.607589868	704.797931473	5034.297747743	-325.844671392	-325.844671392	3167.641175358
0.290890172	410.357455930	454.684604584	2815.026134343	-469.416710442	-469.416710442	4430.744666562
0.155079460	594.728934472	728.902897652	9895.537878108	-991.282870029	-991.282870029	1638.081520602

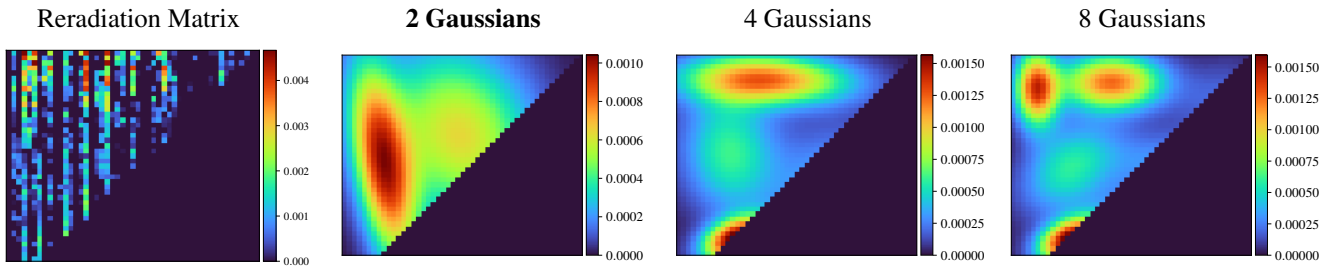
8 Gaussians

Scaling factor: 83.97812941201165

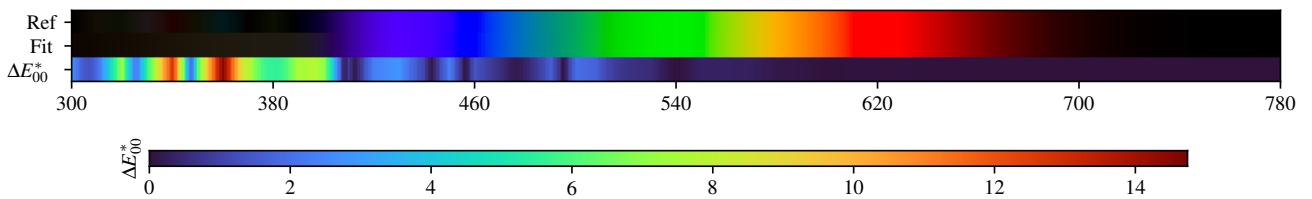
Gaussians:

Weight	Mean		Covariance			
0.076487862	610.186869307	423.223221889	5586.126257351	26.684761067	26.684761067	968.475304326
0.139384467	339.035114817	711.606773642	268.170094944	183.182491768	183.182491768	2873.961542040
0.070544099	590.375140434	553.355440257	1148.338027680	310.340250294	310.340250294	2698.284265782
0.104263927	404.399894362	392.958906546	656.722166758	34.644887946	34.644887946	98.778319126
0.064049270	729.296264863	646.119328403	951.534764812	642.799441209	642.799441209	8321.246737876
0.202103182	416.419134867	556.017700842	4327.290137513	2408.918173282	2408.918173282	5471.195362847
0.069020810	468.520473606	444.533700774	1515.300485309	-221.448452955	-221.448452955	1137.067285577
0.274146382	493.057577476	731.712603341	6005.810575127	-18.676830687	-18.676830687	1222.257681533

PLAWH1 - Weighted variational Bayesian inference - 2 Gaussians



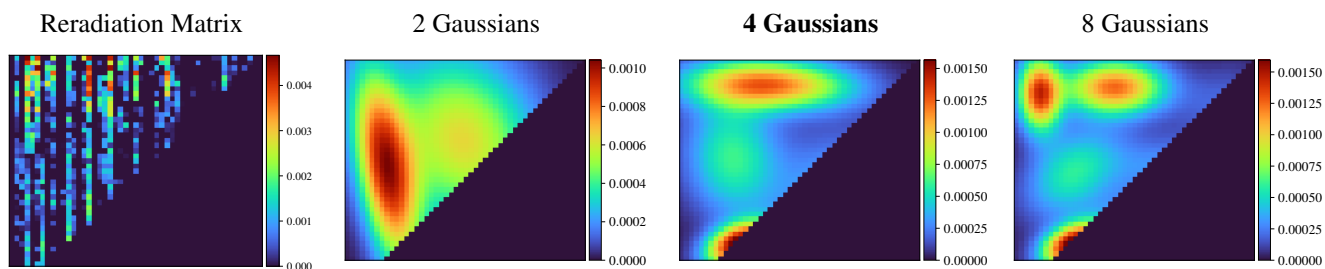
Fitted Material Under Monochromatic Illumination



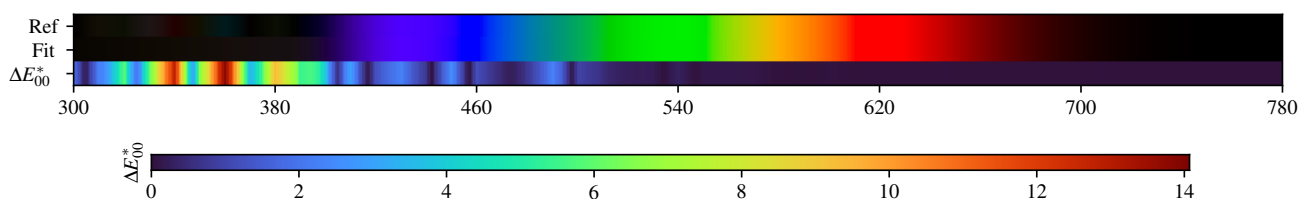
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.54$	FL2 $\Delta E = 0.24$	FL7 $\Delta E = 0.42$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.19$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.43$	HP5 $\Delta E = 0.20$	LED-B5 $\Delta E = 0.48$
B $\Delta E = 0.32$	D65 $\Delta E = 0.53$	FL3 $\Delta E = 0.17$	FL8 $\Delta E = 0.33$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.30$	FL3.11 $\Delta E = 0.25$	HP1 $\Delta E = 0.09$	LED-B1 $\Delta E = 0.12$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.48$	D75 $\Delta E = 0.50$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.21$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.12$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.14$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.38$	E $\Delta E = 0.53$	FL5 $\Delta E = 0.41$	FL10 $\Delta E = 0.21$	FL3.3 $\Delta E = 0.40$	FL3.8 $\Delta E = 0.13$	FL3.13 $\Delta E = 0.16$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.22$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.46$	FL1 $\Delta E = 0.42$	FL6 $\Delta E = 0.24$	FL11 $\Delta E = 0.13$	FL3.4 $\Delta E = 0.12$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.29$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.36$	LED-V2 $\Delta E = 0.23$

PLAWH1 - Weighted variational Bayesian inference - 4 Gaussians



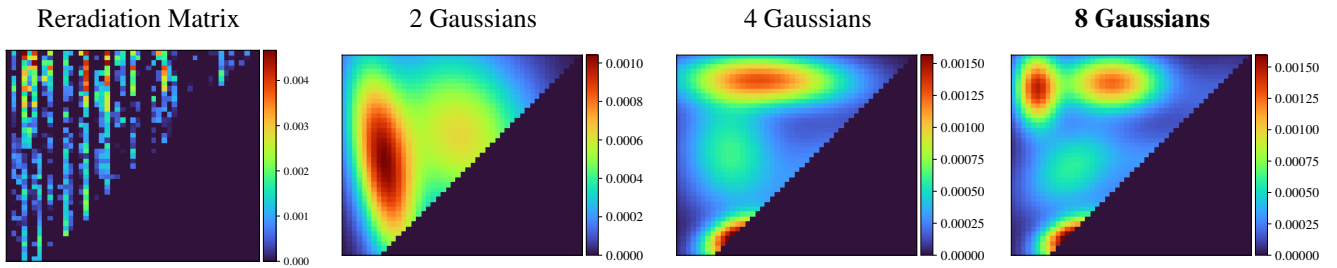
Fitted Material Under Monochromatic Illumination



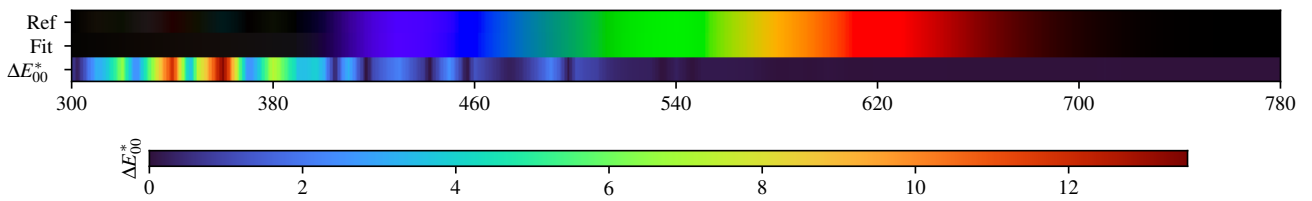
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.10$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.04$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.02$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.06$	HP5 $\Delta E = 0.03$	LED-B5 $\Delta E = 0.07$
B $\Delta E = 0.06$	D65 $\Delta E = 0.11$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.03$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.02$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.01$	LED-BH1 $\Delta E = 0.02$
C $\Delta E = 0.08$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.02$	FL3.2 $\Delta E = 0.02$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.01$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.05$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.04$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.03$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.02$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.08$	FL1 $\Delta E = 0.04$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.05$	LED-B4 $\Delta E = 0.06$	LED-V2 $\Delta E = 0.03$

PLAWH1 - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.04$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.04$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.05$	HP5 $\Delta E = 0.03$	LED-B5 $\Delta E = 0.04$
B $\Delta E = 0.04$	D65 $\Delta E = 0.05$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.04$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.03$	FL3.11 $\Delta E = 0.17$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.04$	D75 $\Delta E = 0.06$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.02$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.02$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.03$	E $\Delta E = 0.10$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.03$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.02$	LED-V1 $\Delta E = 0.01$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.04$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.11$	FL3.14 $\Delta E = 0.06$	HP4 $\Delta E = 0.04$	LED-B4 $\Delta E = 0.04$	LED-V2 $\Delta E = 0.01$

PLAWH1 - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.107418	0.211930	0.424130	0.597905	0.630874	0.625263	0.626891	0.624456	0.615489	0.615117	0.610107
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.607852	0.600145	0.596751	0.591171	0.586707	0.583814	0.578468	0.573454	0.568267	0.569612	0.564043
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.561784	0.556568	0.554015	0.548525	0.544323	0.542625	0.539924	0.534634	0.530236	0.527567	0.522770
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.524343	0.516223	0.515809	0.512038	0.509910	0.508855	0.502042	0.501154			

2 Gaussians max

Scaling factor: 83.97633090213586

Gaussians:

Weight	Mean		Covariance			
0.367519725	378.736633368	554.918132196	2142.391890067	-3209.664773051	-3209.664773051	19935.695518023
0.632480275	533.073224944	620.843047604	11614.134539757	-2253.022318696	-2253.022318696	15854.029907630

4 Gaussians max

Scaling factor: 84.81234284976371

Gaussians:

Weight	Mean		Covariance			
0.163861583	419.974438287	409.002581657	2193.559884819	509.631507990	509.631507990	938.814536348
0.209335672	609.724461890	513.764019929	7125.587732308	899.726814170	899.726814170	7870.922145971
0.257379644	402.894292291	585.808771619	4418.145456531	-299.302668670	-299.302668670	7549.338251655
0.369423101	477.164539560	733.517936378	13695.123791919	-313.461000651	-313.461000651	1259.523254978

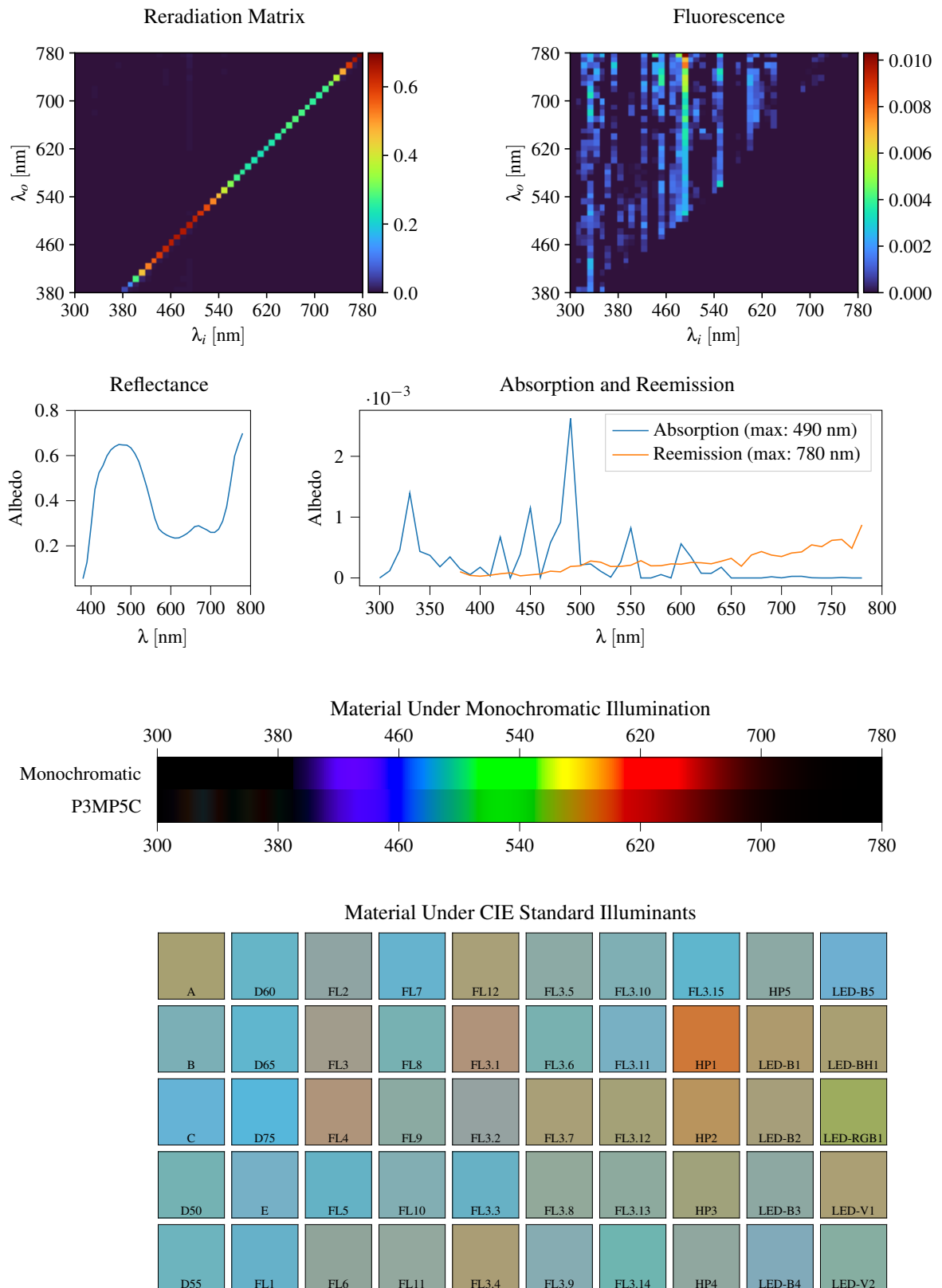
8 Gaussians max

Scaling factor: 84.07260761468322

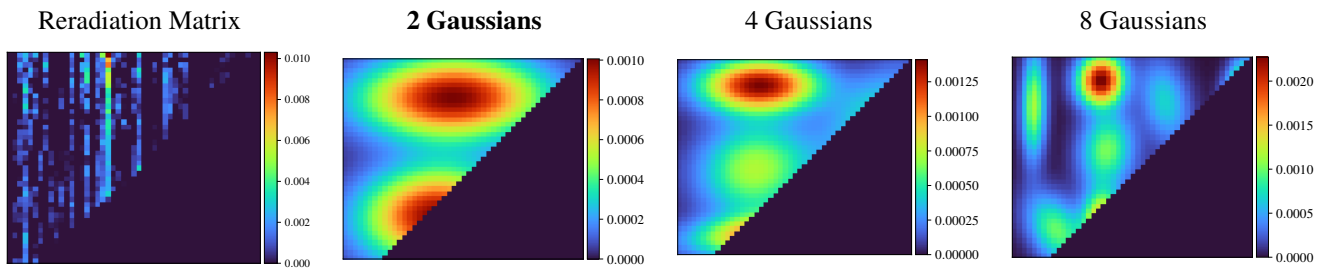
Gaussians:

Weight	Mean		Covariance			
0.162787496	418.657869375	408.193048739	1998.682387308	492.538360110	492.538360110	920.179108673
0.120824205	585.344545088	445.865442967	7346.406847923	-839.332740057	-839.332740057	2314.130381151
0.165918387	411.851632320	553.786048910	4438.658198361	1526.848984511	1526.848984511	4108.435715945
0.079706170	600.896981447	567.405974337	7545.820324403	-271.931807015	-271.931807015	1859.376318013
0.157352777	346.354129180	713.986103433	904.139370729	-46.324425774	-46.324425774	2786.013317558
0.049349829	713.174578156	692.005118943	3609.489859021	1137.409445872	1137.409445872	3908.496266888
0.262899884	498.894249279	728.095961343	5269.455714947	18.718762508	18.718762508	1536.626231576

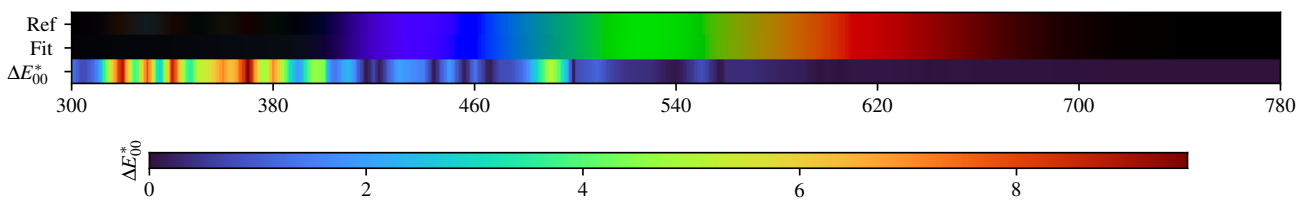
3.135. P3MP5C



P3MP5C - Weighted Expectation-Maximization - 2 Gaussians



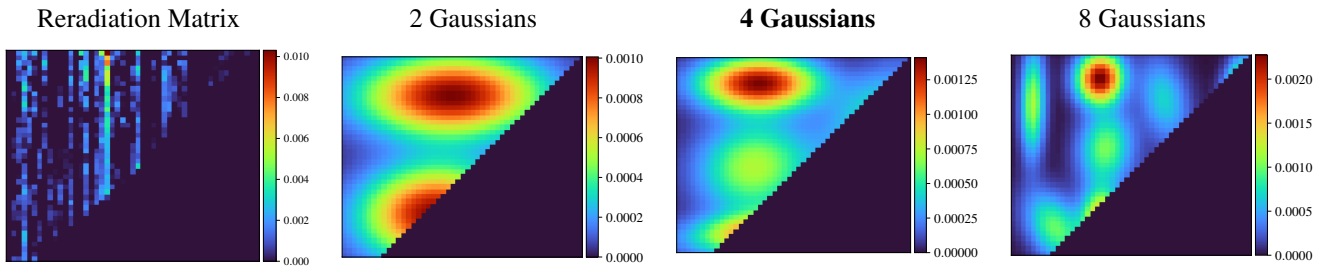
Fitted Material Under Monochromatic Illumination



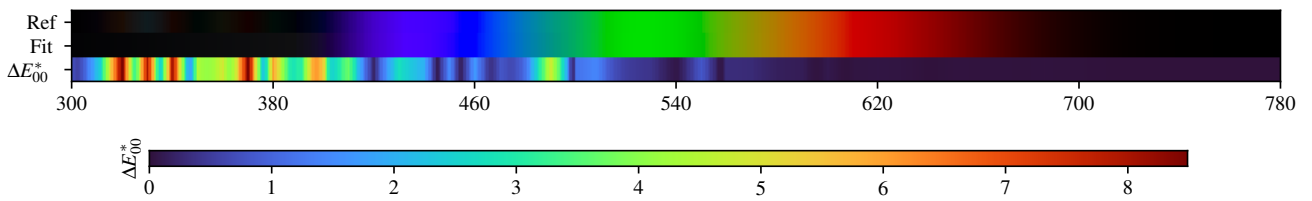
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.16$	D60 $\Delta E = 0.30$	FL2 $\Delta E = 0.27$	FL7 $\Delta E = 0.21$	FL12 $\Delta E = 0.30$	FL3.5 $\Delta E = 0.24$	FL3.10 $\Delta E = 0.48$	FL3.15 $\Delta E = 0.25$	HP5 $\Delta E = 0.26$	LED-B5 $\Delta E = 0.14$
B $\Delta E = 0.30$	D65 $\Delta E = 0.29$	FL3 $\Delta E = 0.27$	FL8 $\Delta E = 0.25$	FL3.1 $\Delta E = 0.25$	FL3.6 $\Delta E = 0.24$	FL3.11 $\Delta E = 0.41$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.17$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.24$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.25$	FL9 $\Delta E = 0.23$	FL3.2 $\Delta E = 0.27$	FL3.7 $\Delta E = 0.27$	FL3.12 $\Delta E = 0.16$	HP2 $\Delta E = 0.19$	LED-B2 $\Delta E = 0.17$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.31$	E $\Delta E = 0.32$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.49$	FL3.3 $\Delta E = 0.21$	FL3.8 $\Delta E = 0.43$	FL3.13 $\Delta E = 0.27$	HP3 $\Delta E = 0.18$	LED-B3 $\Delta E = 0.20$	LED-V1 $\Delta E = 0.23$
D55 $\Delta E = 0.31$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.23$	FL11 $\Delta E = 0.51$	FL3.4 $\Delta E = 0.18$	FL3.9 $\Delta E = 0.47$	FL3.14 $\Delta E = 0.32$	HP4 $\Delta E = 0.28$	LED-B4 $\Delta E = 0.16$	LED-V2 $\Delta E = 0.31$

P3MP5C - Weighted Expectation-Maximization - 4 Gaussians



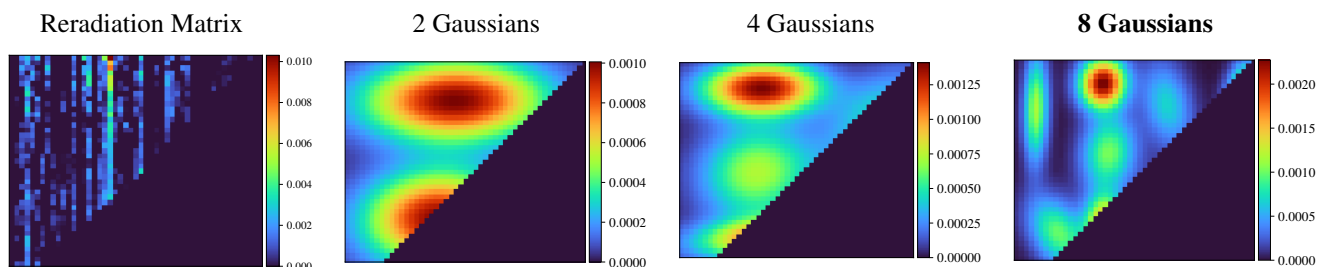
Fitted Material Under Monochromatic Illumination



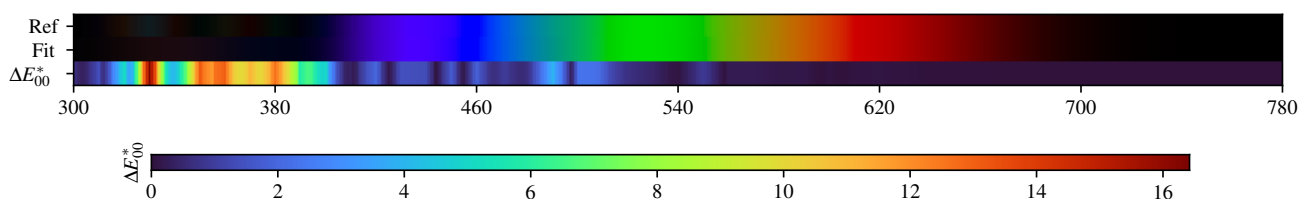
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.25$	$\Delta E = 0.10$	$\Delta E = 0.34$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.02$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.28$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.34$	$\Delta E = 0.09$	$\Delta E = 0.34$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.04$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.39$	$\Delta E = 0.11$	$\Delta E = 0.33$	$\Delta E = 0.18$	$\Delta E = 0.17$	$\Delta E = 0.03$	$\Delta E = 0.13$

P3MP5C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.39$	$\Delta E = 0.29$	$\Delta E = 0.24$	$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.38$	$\Delta E = 0.29$	$\Delta E = 0.31$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.35$	$\Delta E = 0.40$	$\Delta E = 0.29$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.36$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.20$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.31$	$\Delta E = 0.41$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.30$	$\Delta E = 0.26$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.20$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.35$	$\Delta E = 0.51$	$\Delta E = 0.24$	$\Delta E = 0.42$	$\Delta E = 0.23$	$\Delta E = 0.37$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.19$	$\Delta E = 0.29$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.38$	$\Delta E = 0.24$	$\Delta E = 0.24$	$\Delta E = 0.43$	$\Delta E = 0.19$	$\Delta E = 0.41$	$\Delta E = 0.21$	$\Delta E = 0.36$	$\Delta E = 0.20$	$\Delta E = 0.30$

P3MP5C - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.054551	0.127441	0.283333	0.451210	0.523706	0.555362	0.598694	0.625546	0.640138	0.649065	0.647067
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.646261	0.634429	0.609275	0.573524	0.518532	0.459423	0.392105	0.322181	0.275193	0.258429	0.247448
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.239587	0.234374	0.235163	0.243429	0.253737	0.268214	0.285381	0.288838	0.279512	0.271031	0.259673
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.259593	0.273894	0.309088	0.373015	0.480678	0.597984	0.652529	0.698757			

2 Gaussians

Scaling factor: 90.50620016393

Gaussians:

Weight	Mean		Covariance			
0.475334859	483.289094326	465.405823066	10663.949325377	341.924498371	341.924498371	4435.648124299
0.524665141	517.456121531	705.158570320	16588.289605540	179.503601961	179.503601961	3388.298589890

4 Gaussians

Scaling factor: 89.30908030732611

Gaussians:

Weight	Mean		Covariance			
0.261502074	492.010521098	417.917077386	11869.098523817	816.689398017	816.689398017	958.115625710
0.320412636	467.154296057	730.673636015	7235.786318382	59.496912099	59.496912099	1499.422941002
0.134118987	695.127707739	672.974887815	5838.545772352	3479.606037026	3479.606037026	5953.091014895
0.283966303	456.538702215	554.762208998	6529.873546656	409.749662202	409.749662202	4694.725570807

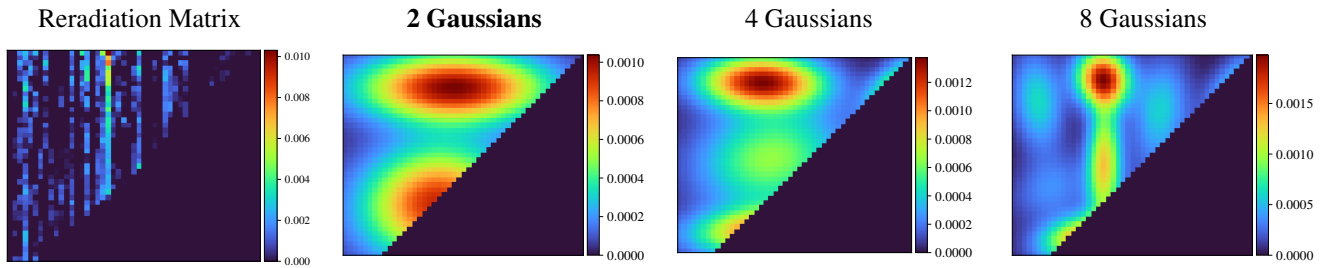
8 Gaussians

Scaling factor: 86.27050514738404

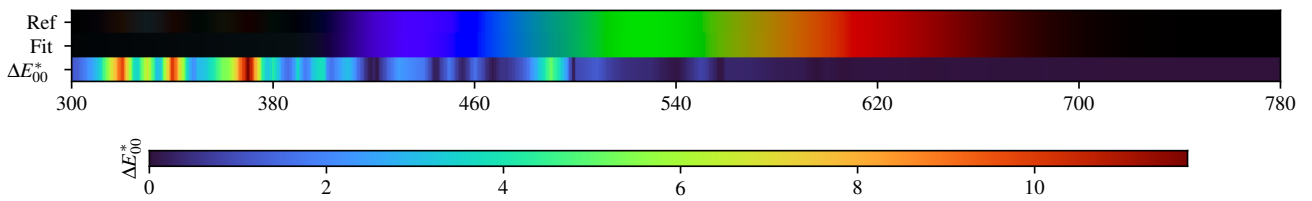
Gaussians:

Weight	Mean		Covariance			
0.148891304	480.046822213	443.747295626	728.407237685	-65.677675667	-65.677675667	1826.462358206
0.186618479	475.028271851	736.063728668	1017.703260725	41.131693068	41.131693068	1227.182937619
0.108083470	640.065549733	471.920043742	5193.809301263	-130.024235524	-130.024235524	4539.333494508
0.099377796	605.337434497	693.349496770	1229.697576513	-514.615664820	-514.615664820	3549.301422392
0.138767793	384.914246855	431.308010073	1744.494122538	-761.456117209	-761.456117209	2492.971411388
0.105136978	339.486668242	684.481694802	284.793832172	72.127814781	72.127814781	5467.088986666
0.142250605	486.141236471	595.124629897	1396.999019307	183.530708068	183.530708068	2655.913226768
0.070873575	754.776344740	724.944214639	548.296076819	363.998569271	363.998569271	1664.271625165

P3MP5C - Weighted variational Bayesian inference - 2 Gaussians



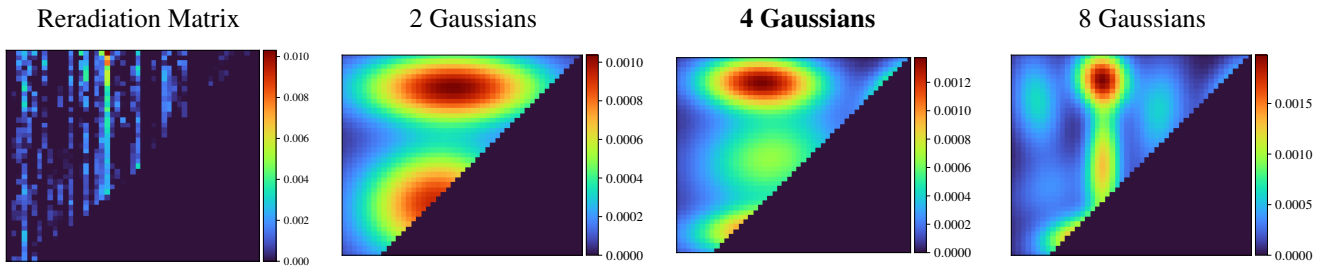
Fitted Material Under Monochromatic Illumination



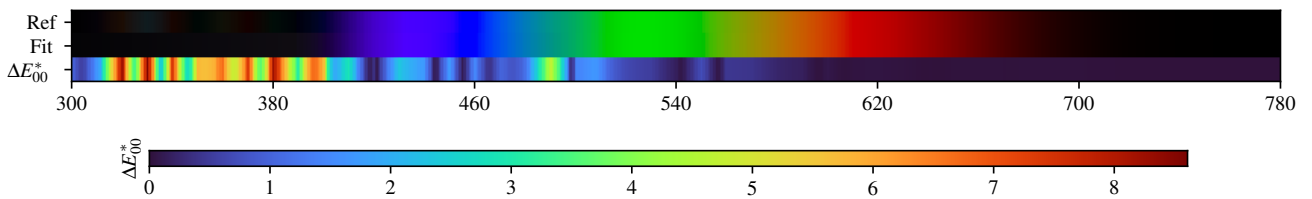
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.18$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.15$	FL12 $\Delta E = 0.29$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.43$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.14$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.18$	D65 $\Delta E = 0.18$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.12$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.36$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.17$	D75 $\Delta E = 0.19$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.24$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.08$	LED-B2 $\Delta E = 0.05$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.19$	E $\Delta E = 0.19$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.43$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.42$	FL3.13 $\Delta E = 0.22$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.18$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.49$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.40$	FL3.14 $\Delta E = 0.25$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.22$

P3MP5C - Weighted variational Bayesian inference - 4 Gaussians



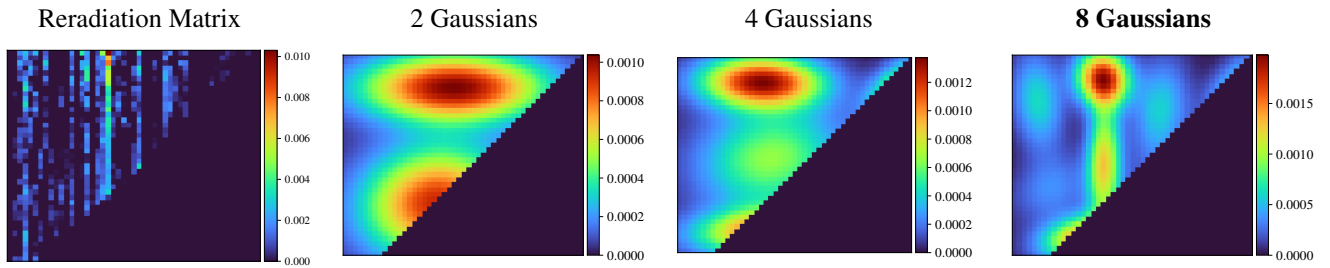
Fitted Material Under Monochromatic Illumination



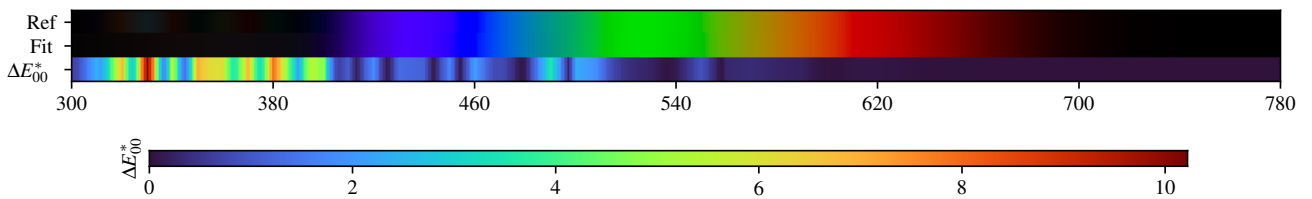
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.21$	D60 $\Delta E = 0.27$	FL2 $\Delta E = 0.29$	FL7 $\Delta E = 0.20$	FL12 $\Delta E = 0.23$	FL3.5 $\Delta E = 0.21$	FL3.10 $\Delta E = 0.35$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.28$	LED-B5 $\Delta E = 0.16$
B $\Delta E = 0.28$	D65 $\Delta E = 0.27$	FL3 $\Delta E = 0.35$	FL8 $\Delta E = 0.19$	FL3.1 $\Delta E = 0.26$	FL3.6 $\Delta E = 0.19$	FL3.11 $\Delta E = 0.30$	HP1 $\Delta E = 0.13$	LED-B1 $\Delta E = 0.20$	LED-BH1 $\Delta E = 0.22$
C $\Delta E = 0.25$	D75 $\Delta E = 0.27$	FL4 $\Delta E = 0.26$	FL9 $\Delta E = 0.20$	FL3.2 $\Delta E = 0.31$	FL3.7 $\Delta E = 0.22$	FL3.12 $\Delta E = 0.17$	HP2 $\Delta E = 0.19$	LED-B2 $\Delta E = 0.24$	LED-RGB1 $\Delta E = 0.17$
D50 $\Delta E = 0.25$	E $\Delta E = 0.35$	FL5 $\Delta E = 0.21$	FL10 $\Delta E = 0.36$	FL3.3 $\Delta E = 0.21$	FL3.8 $\Delta E = 0.30$	FL3.13 $\Delta E = 0.20$	HP3 $\Delta E = 0.25$	LED-B3 $\Delta E = 0.19$	LED-V1 $\Delta E = 0.27$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.21$	FL6 $\Delta E = 0.26$	FL11 $\Delta E = 0.35$	FL3.4 $\Delta E = 0.22$	FL3.9 $\Delta E = 0.35$	FL3.14 $\Delta E = 0.20$	HP4 $\Delta E = 0.34$	LED-B4 $\Delta E = 0.20$	LED-V2 $\Delta E = 0.25$

P3MP5C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.24$	$\Delta E = 0.13$	$\Delta E = 0.27$	$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.05$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.27$	$\Delta E = 0.09$	$\Delta E = 0.24$	$\Delta E = 0.10$	$\Delta E = 0.26$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.15$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.24$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.22$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.14$	$\Delta E = 0.23$	$\Delta E = 0.11$	$\Delta E = 0.32$	$\Delta E = 0.12$	$\Delta E = 0.31$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.10$	$\Delta E = 0.21$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.37$	$\Delta E = 0.18$	$\Delta E = 0.31$	$\Delta E = 0.06$	$\Delta E = 0.26$	$\Delta E = 0.08$	$\Delta E = 0.17$

P3MP5C - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.054551	0.127441	0.283333	0.451210	0.523706	0.555362	0.598694	0.625546	0.640138	0.649065	0.647067
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.646261	0.634429	0.609275	0.573524	0.518532	0.459423	0.392105	0.322181	0.275193	0.258429	0.247448
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.239587	0.234374	0.235163	0.243429	0.253737	0.268214	0.285381	0.288838	0.279512	0.271031	0.259673
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.259593	0.273894	0.309088	0.373015	0.480678	0.597984	0.652529	0.698757			

2 Gaussians max

Scaling factor: 89.10763850290476

Gaussians:

Weight	Mean		Covariance			
0.537516207	485.231805190	482.274266374	10879.555931377	503.426726131	503.426726131	6245.733812430
0.462483793	519.941078565	717.413750705	17075.746966076	-17.356550110	-17.356550110	2382.285405814

4 Gaussians max

Scaling factor: 90.92777432395067

Gaussians:

Weight	Mean		Covariance			
0.266211270	486.101497619	420.093922341	11086.988397941	530.594313087	530.594313087	1186.496714951
0.362319964	489.967452784	572.652365783	11123.778094106	916.866667736	916.866667736	5745.645665869
0.070321469	747.371704507	723.184745422	1908.537610717	1119.613913807	1119.613913807	2049.363313079
0.301147297	471.131442544	733.531635351	7636.852504818	-108.079621187	-108.079621187	1451.523759926

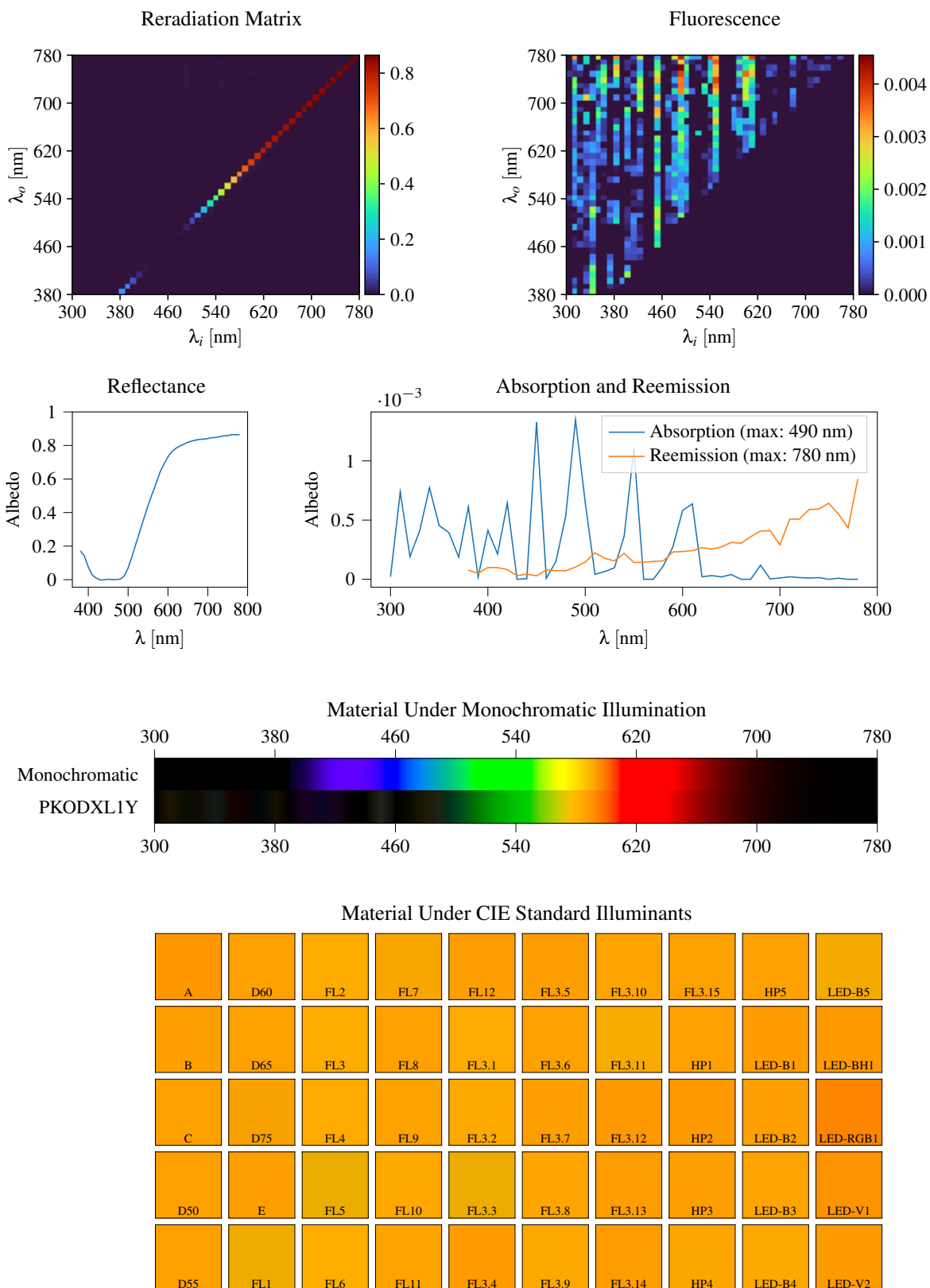
8 Gaussians max

Scaling factor: 89.0517537172129

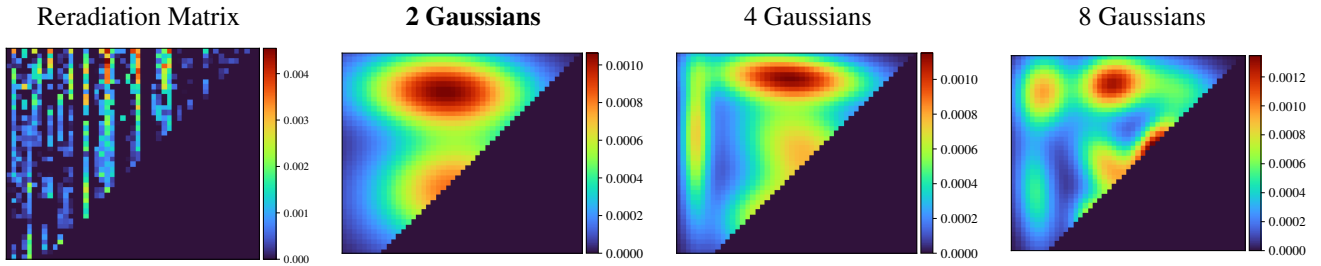
Gaussians:

Weight	Mean		Covariance			
0.188824093	443.929044580	413.587465474	3716.414848630	562.705483006	562.705483006	985.977078138
0.105903136	634.825966983	479.983940708	6482.771610378	-938.962118793	-938.962118793	5144.331235914
0.065132038	374.416866118	510.904822069	3191.647798393	643.199355026	643.199355026	2322.674306839
0.170309137	481.427329331	562.701768337	547.149843130	82.754643766	82.754643766	7383.650923890
0.108055006	595.773339600	672.877844997	1477.674016440	494.394952390	494.394952390	5023.379618564
0.104991609	347.082959600	689.703325992	1244.948507084	-383.298218503	-383.298218503	4708.606535953
0.074668124	746.173666921	717.604803148	1843.114700678	1135.926329546	1135.926329546	2459.164293317
0.182116858	479.131971127	735.744080848	1355.670631536	-76.485645825	-76.485645825	1492.883411728

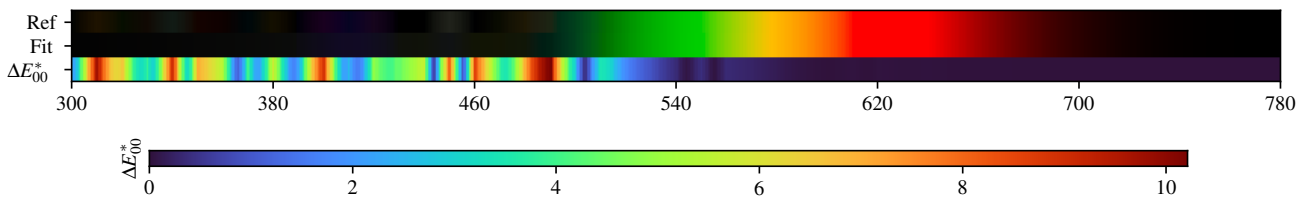
3.136. PKODXL1Y



PKODXL1Y - Weighted Expectation-Maximization - 2 Gaussians



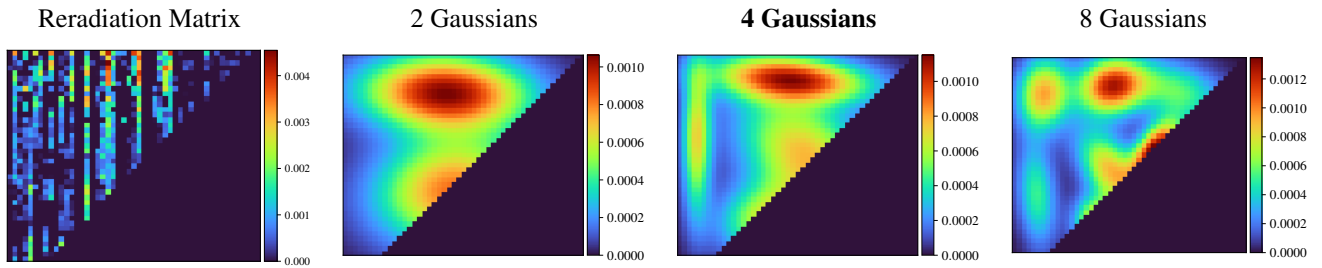
Fitted Material Under Monochromatic Illumination



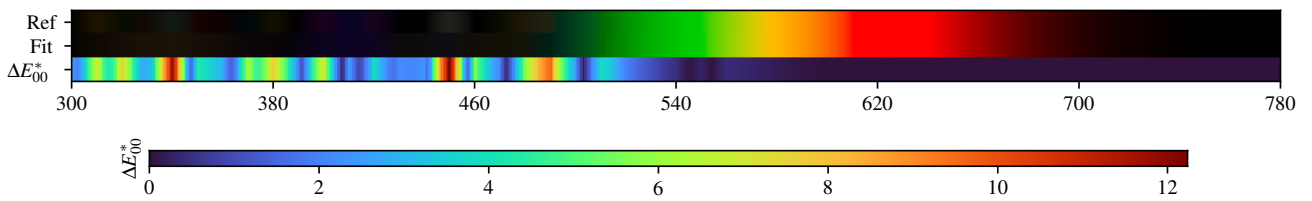
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.17$	$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.22$	$\Delta E = 0.20$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.15$	$\Delta E = 0.28$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.10$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.09$	$\Delta E = 0.13$

PKODXL1Y - Weighted Expectation-Maximization - 4 Gaussians



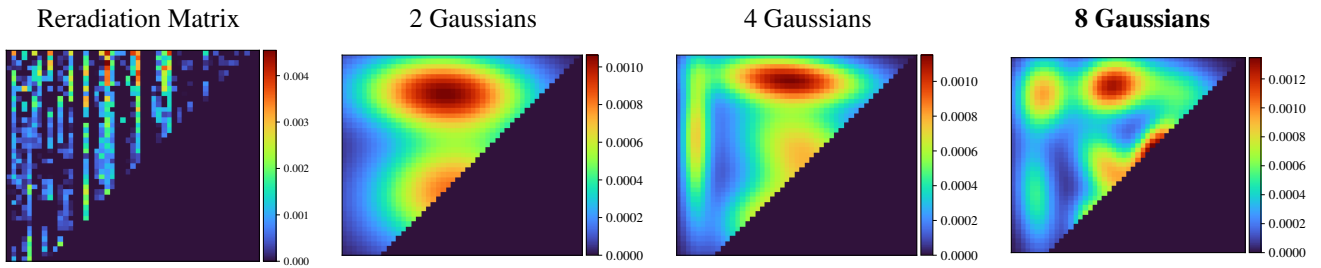
Fitted Material Under Monochromatic Illumination



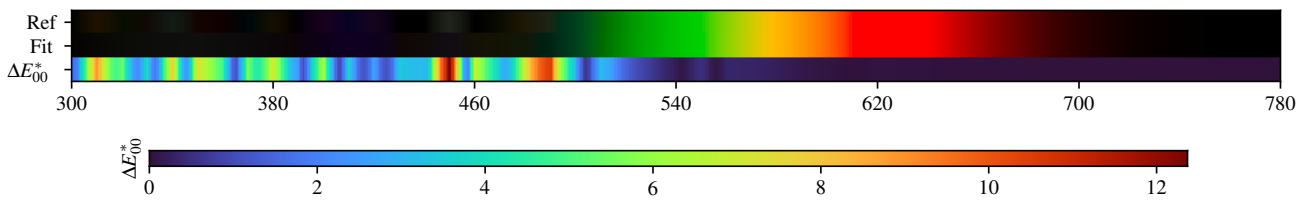
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.17$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.07$	FL3.15 $\Delta E = 0.18$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.11$
B $\Delta E = 0.16$	D65 $\Delta E = 0.18$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.12$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.10$	FL3.11 $\Delta E = 0.08$	HP1 $\Delta E = 0.06$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.20$	D75 $\Delta E = 0.20$	FL4 $\Delta E = 0.09$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.10$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.14$	E $\Delta E = 0.25$	FL5 $\Delta E = 0.15$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.13$	FL3.8 $\Delta E = 0.04$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.15$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.06$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.10$	LED-V2 $\Delta E = 0.12$

PKODXL1Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.14$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.10$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.11$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.16$

PKODXL1Y - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.172056	0.141651	0.074890	0.027635	0.009285	0.000000	0.000000	0.002761	0.000349	0.000744	0.003492
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.020615	0.069664	0.139566	0.217006	0.293081	0.367580	0.441725	0.507975	0.573169	0.640569	0.688851
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.732417	0.763516	0.783259	0.796540	0.807839	0.818905	0.826478	0.832579	0.836456	0.837779	0.840858
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.846086	0.847698	0.853249	0.857209	0.858624	0.864732	0.864428	0.863681			

2 Gaussians

Scaling factor: 82.62870963868721

Gaussians:

Weight	Mean		Covariance			
0.508808638	516.977690518	507.994988375	11478.931528449	728.553354637	728.553354637	5835.409255734
0.491191362	502.503409442	707.368185132	13594.645853065	-381.427102277	-381.427102277	2844.696737250

4 Gaussians

Scaling factor: 81.03768959170164

Gaussians:

Weight	Mean		Covariance			
0.175047162	481.825541692	449.440394687	4814.563070795	401.358112858	401.358112858	2549.015881162
0.283562140	528.190648009	734.894221485	12178.026854718	-879.373125539	-879.373125539	1141.880873821
0.111521144	335.340367519	612.257743893	395.441589419	67.094703871	67.094703871	11087.388035401
0.429869553	554.478541192	582.930915751	8712.299633376	-2885.231276853	-2885.231276853	7117.373971976

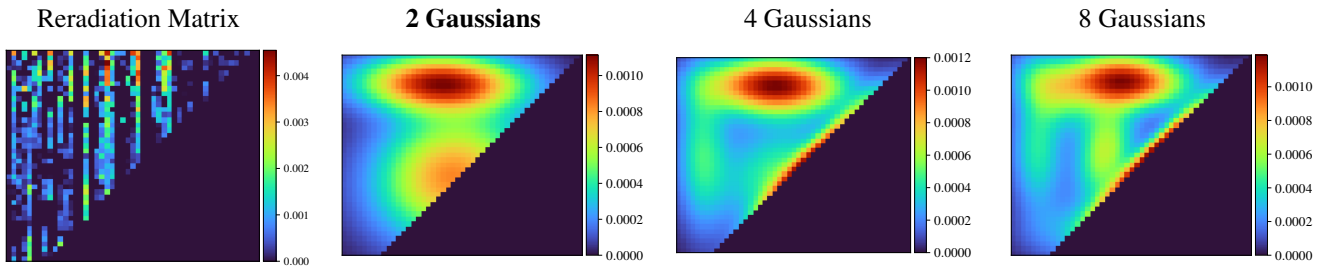
8 Gaussians

Scaling factor: 82.66953507316154

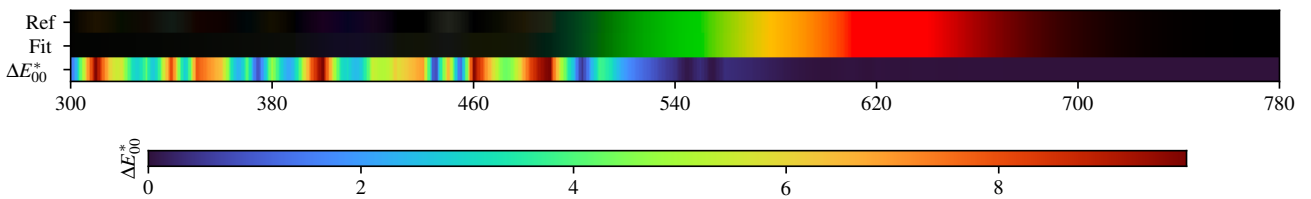
Gaussians:

Weight	Mean		Covariance			
0.094799866	475.495039910	432.426537627	1028.045699596	-142.339335964	-142.339335964	1459.629656799
0.178838630	501.607569781	722.900993310	2278.498372621	186.537601492	186.537601492	1749.963952102
0.140978449	595.518192605	585.579840871	1111.899417195	694.508215399	694.508215399	1794.837283921
0.131359007	635.956680479	715.404810230	5212.327736983	-1079.989633862	-1079.989633862	2061.487155808
0.138575049	360.636036029	708.410067260	1421.221934136	111.306677528	111.306677528	2732.337814571
0.150183850	500.780751205	547.946486373	2138.637959502	-1262.845223685	-1262.845223685	3077.987388739
0.082571837	346.456149475	497.974295213	812.486481167	-396.609366226	-396.609366226	5681.988462191
0.082693312	650.580359519	453.972035231	5457.808216982	1025.137861256	1025.137861256	3023.389844474

PKODXL1Y - Weighted variational Bayesian inference - 2 Gaussians



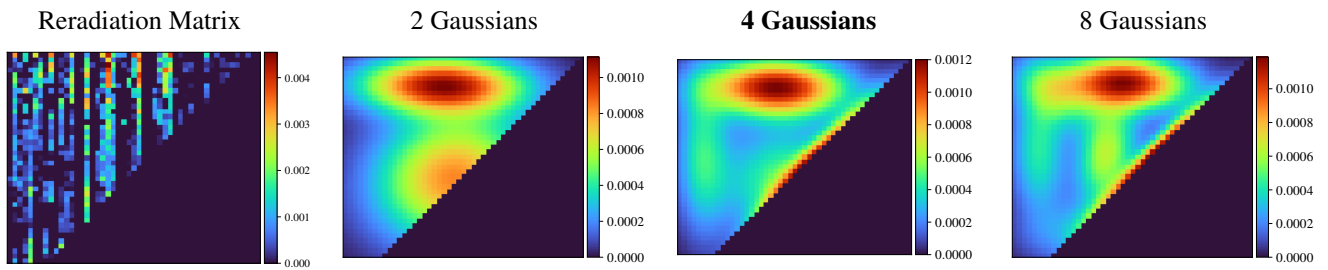
Fitted Material Under Monochromatic Illumination



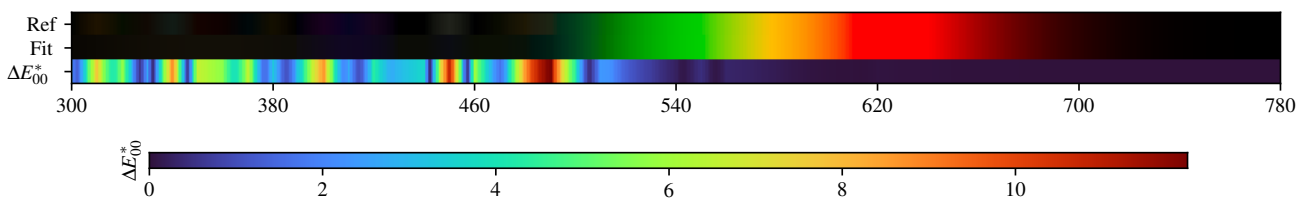
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.10$	$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.22$	$\Delta E = 0.15$	$\Delta E = 0.17$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.23$	$\Delta E = 0.10$	$\Delta E = 0.16$	$\Delta E = 0.07$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.11$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.23$	$\Delta E = 0.25$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.11$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.18$	$\Delta E = 0.11$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.15$	$\Delta E = 0.17$

PKODXL1Y - Weighted variational Bayesian inference - 4 Gaussians



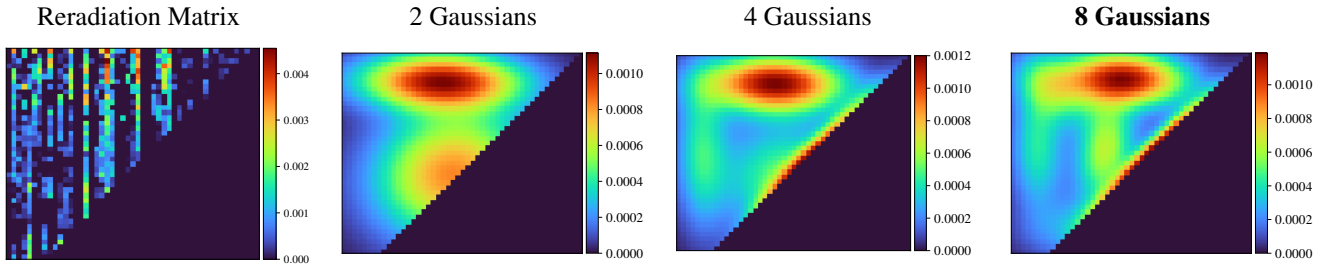
Fitted Material Under Monochromatic Illumination



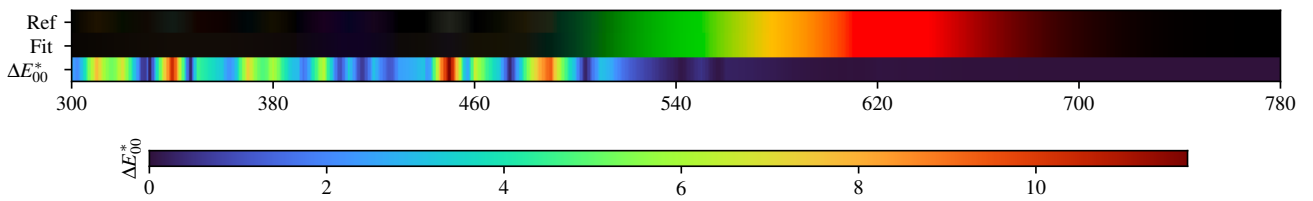
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.09$	D65 $\Delta E = 0.14$	FL3 $\Delta E = 0.06$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.11$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.09$
C $\Delta E = 0.12$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.06$	FL9 $\Delta E = 0.08$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.05$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.09$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.11$	E $\Delta E = 0.15$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.05$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.07$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.07$	HP4 $\Delta E = 0.08$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.11$

PKODXL1Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.07$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.12$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.06$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.07$

PKODXL1Y - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.172056	0.141651	0.074890	0.027635	0.009285	0.000000	0.000000	0.002761	0.000349	0.000744	0.003492
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.020615	0.069664	0.139566	0.217006	0.293081	0.367580	0.441725	0.507975	0.573169	0.640569	0.688851
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.732417	0.763516	0.783259	0.796540	0.807839	0.818905	0.826478	0.832579	0.836456	0.837779	0.840858
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.846086	0.847698	0.853249	0.857209	0.858624	0.864732	0.864428	0.863681			

2 Gaussians max

Scaling factor: 81.31577743490442

Gaussians:

Weight	Mean		Covariance			
0.639260824	518.196088832	537.318433378	12001.639583197	809.245939461	809.245939461	8472.416288386
0.360739176	495.260476228	727.024866302	13205.421399054	-144.615463523	-144.615463523	1583.854612522

4 Gaussians max

Scaling factor: 87.28950972145037

Gaussians:

Weight	Mean		Covariance			
0.115928186	347.382261657	588.373009059	1366.626101239	-53.993936199	-53.993936199	12613.289988215
0.184024305	581.568239941	564.653551991	6158.825979042	6323.313258008	6323.313258008	7286.920818758
0.355045670	534.212879253	516.763067401	10342.326511845	-894.930632241	-894.930632241	7709.399452343
0.345001839	501.432919406	725.838671510	9750.139101423	-136.269136977	-136.269136977	1711.004896360

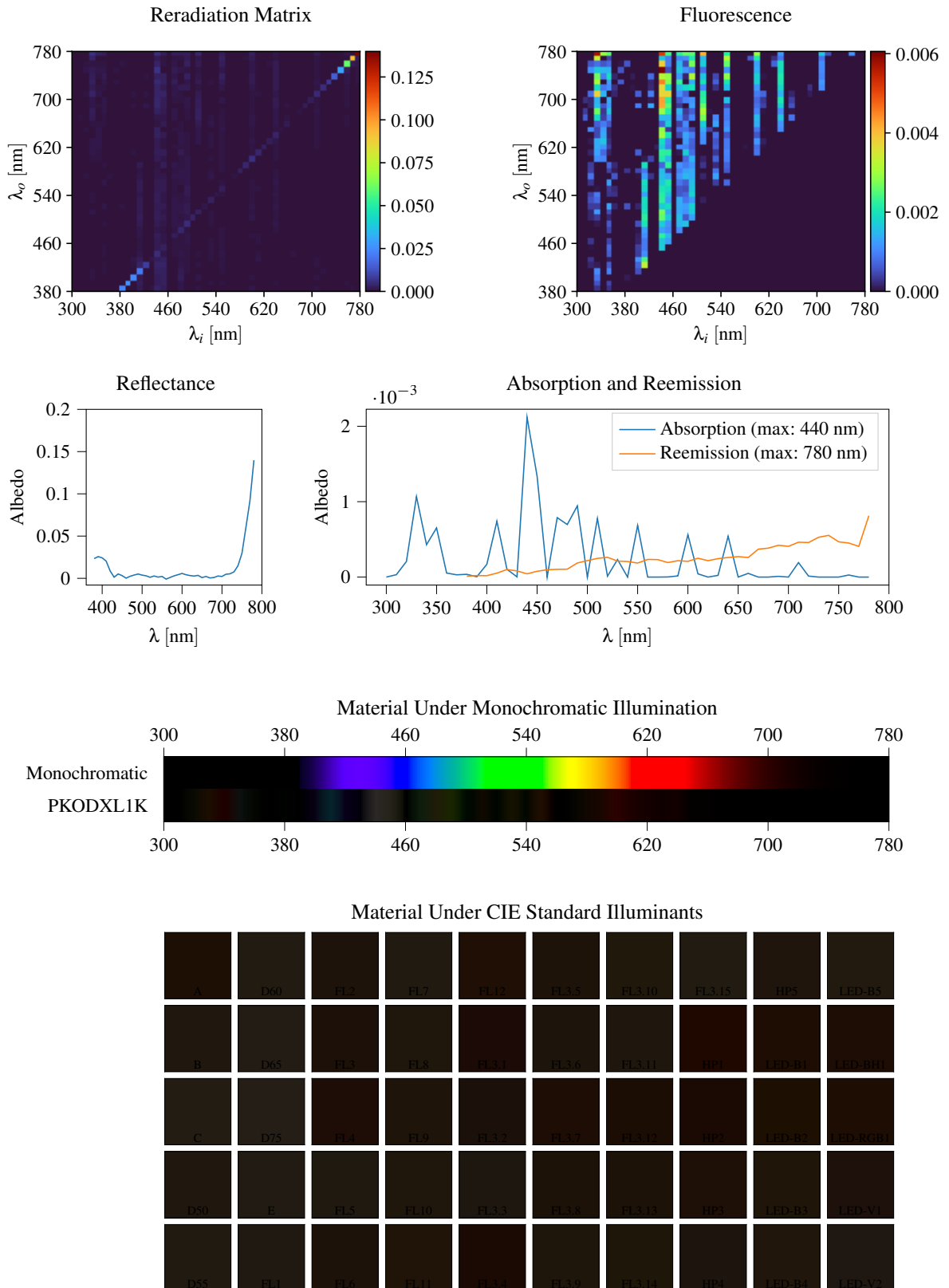
8 Gaussians max

Scaling factor: 86.60941324632608

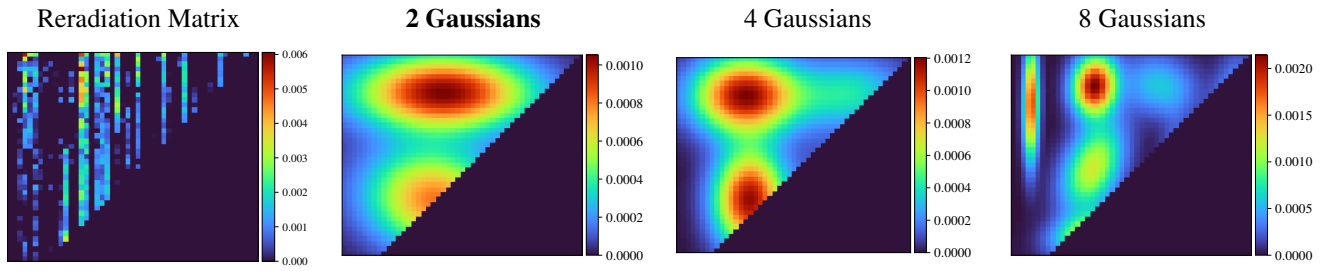
Gaussians:

Weight	Mean		Covariance			
0.168744106	533.496541853	431.668242866	12120.194108712	755.409981406	755.409981406	1709.875300542
0.111658681	348.697984170	591.963292825	1463.910051671	-65.298015175	-65.298015175	8992.388965049
0.198721899	588.208752617	574.200780968	4824.276890761	4635.968801406	4635.968801406	5108.747613593
0.117334002	483.866371107	581.401864605	1624.640924418	721.099896985	721.099896985	4879.708081920
0.057645692	636.901786608	577.037127467	7367.492708216	-7.009683095	-7.009683095	5211.761783449
0.070548645	386.137742030	705.520957872	3567.580119854	-1482.670305668	-1482.670305668	2736.693647327
0.275228697	522.593903556	731.780635339	7877.324377984	-245.206091521	-245.206091521	1463.343060626

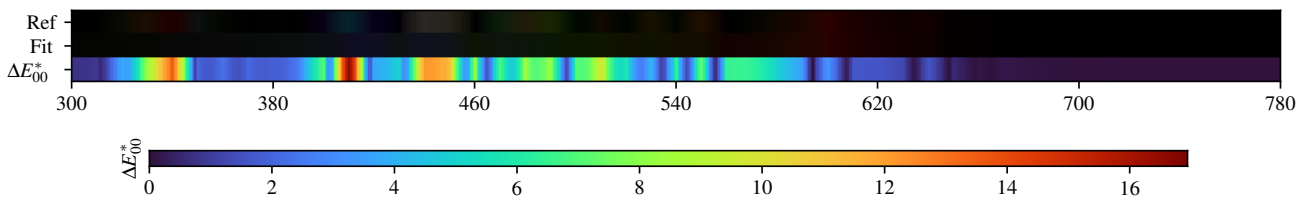
3.137. PKODXL1K



PKODXL1K - Weighted Expectation-Maximization - 2 Gaussians



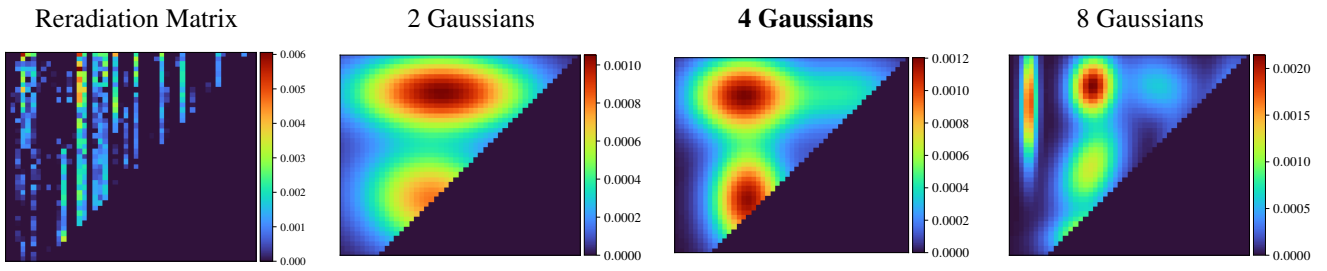
Fitted Material Under Monochromatic Illumination



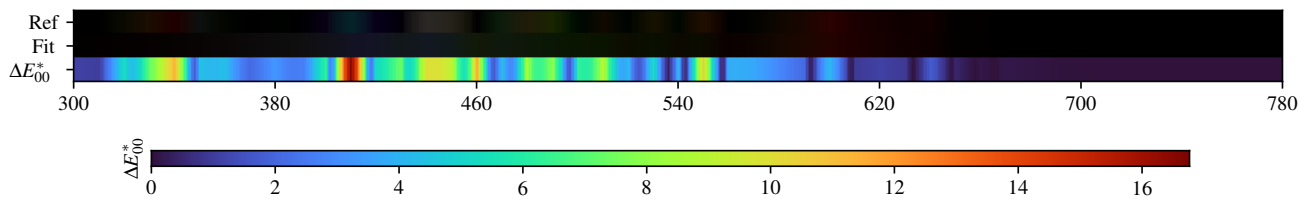
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.94$	$\Delta E = 1.66$	$\Delta E = 1.98$	$\Delta E = 2.27$	$\Delta E = 2.28$	$\Delta E = 1.29$	$\Delta E = 3.67$	$\Delta E = 1.93$	$\Delta E = 1.64$	$\Delta E = 2.52$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.87$	$\Delta E = 1.73$	$\Delta E = 1.79$	$\Delta E = 1.72$	$\Delta E = 1.75$	$\Delta E = 1.38$	$\Delta E = 3.65$	$\Delta E = 1.63$	$\Delta E = 1.06$	$\Delta E = 0.99$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.24$	$\Delta E = 1.86$	$\Delta E = 1.70$	$\Delta E = 1.49$	$\Delta E = 1.70$	$\Delta E = 2.33$	$\Delta E = 1.10$	$\Delta E = 1.83$	$\Delta E = 1.09$	$\Delta E = 1.05$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.52$	$\Delta E = 1.84$	$\Delta E = 2.41$	$\Delta E = 3.57$	$\Delta E = 2.16$	$\Delta E = 2.74$	$\Delta E = 1.41$	$\Delta E = 1.08$	$\Delta E = 1.89$	$\Delta E = 2.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.60$	$\Delta E = 2.46$	$\Delta E = 1.89$	$\Delta E = 3.02$	$\Delta E = 1.07$	$\Delta E = 3.27$	$\Delta E = 1.46$	$\Delta E = 1.97$	$\Delta E = 2.23$	$\Delta E = 2.96$

PKODXL1K - Weighted Expectation-Maximization - 4 Gaussians



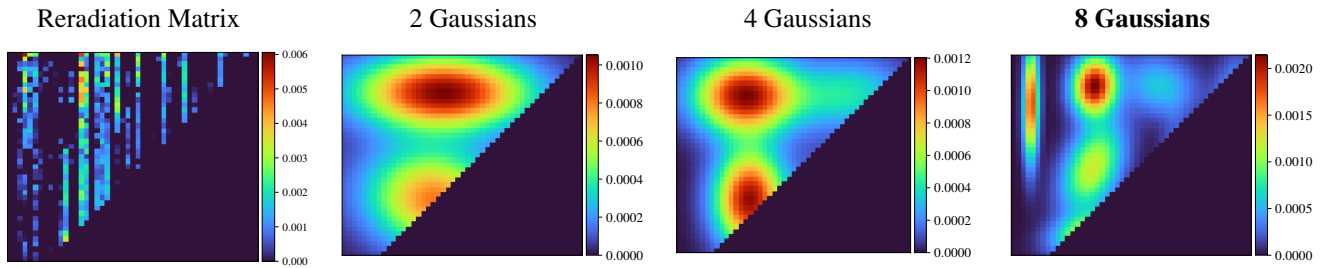
Fitted Material Under Monochromatic Illumination



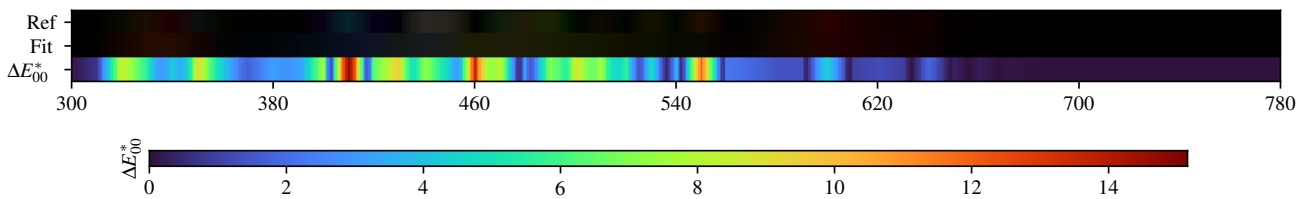
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.84$	$\Delta E = 2.05$	$\Delta E = 1.45$	$\Delta E = 2.13$	$\Delta E = 1.67$	$\Delta E = 1.14$	$\Delta E = 2.55$	$\Delta E = 2.21$	$\Delta E = 1.05$	$\Delta E = 2.95$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.63$	$\Delta E = 2.23$	$\Delta E = 1.08$	$\Delta E = 1.83$	$\Delta E = 0.30$	$\Delta E = 1.39$	$\Delta E = 2.42$	$\Delta E = 0.28$	$\Delta E = 0.94$	$\Delta E = 0.91$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.20$	$\Delta E = 2.49$	$\Delta E = 0.85$	$\Delta E = 1.57$	$\Delta E = 0.77$	$\Delta E = 1.23$	$\Delta E = 0.51$	$\Delta E = 0.21$	$\Delta E = 1.13$	$\Delta E = 1.67$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.70$	$\Delta E = 1.88$	$\Delta E = 2.02$	$\Delta E = 2.62$	$\Delta E = 1.43$	$\Delta E = 1.72$	$\Delta E = 0.94$	$\Delta E = 0.68$	$\Delta E = 2.03$	$\Delta E = 0.89$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.87$	$\Delta E = 2.07$	$\Delta E = 1.31$	$\Delta E = 2.30$	$\Delta E = 0.44$	$\Delta E = 2.16$	$\Delta E = 1.40$	$\Delta E = 0.77$	$\Delta E = 2.43$	$\Delta E = 1.31$

PKODXL1K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.02$	$\Delta E = 1.01$	$\Delta E = 1.04$	$\Delta E = 1.09$	$\Delta E = 0.92$	$\Delta E = 1.07$	$\Delta E = 0.61$	$\Delta E = 0.96$	$\Delta E = 1.52$	$\Delta E = 2.18$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.19$	$\Delta E = 1.00$	$\Delta E = 0.97$	$\Delta E = 1.14$	$\Delta E = 0.55$	$\Delta E = 1.21$	$\Delta E = 0.29$	$\Delta E = 0.89$	$\Delta E = 1.20$	$\Delta E = 1.17$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.08$	$\Delta E = 1.03$	$\Delta E = 0.94$	$\Delta E = 1.07$	$\Delta E = 0.78$	$\Delta E = 0.71$	$\Delta E = 0.60$	$\Delta E = 0.62$	$\Delta E = 1.35$	$\Delta E = 1.89$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.12$	$\Delta E = 0.82$	$\Delta E = 1.08$	$\Delta E = 0.72$	$\Delta E = 1.07$	$\Delta E = 0.54$	$\Delta E = 0.81$	$\Delta E = 1.25$	$\Delta E = 1.51$	$\Delta E = 0.69$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.05$	$\Delta E = 1.05$	$\Delta E = 1.06$	$\Delta E = 0.88$	$\Delta E = 0.79$	$\Delta E = 0.44$	$\Delta E = 1.05$	$\Delta E = 1.06$	$\Delta E = 2.14$	$\Delta E = 1.17$

PKODXL1K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.023329	0.025732	0.024226	0.020386	0.008672	0.001330	0.005193	0.003148	0.000183	0.002428	0.003874
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.005122	0.003785	0.002997	0.001214	0.002767	0.001453	0.002234	0.000000	0.001013	0.002910	0.004311
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.005791	0.004238	0.003265	0.002668	0.003508	0.000893	0.002171	0.000442	0.000994	0.002727	0.002213
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.004836	0.005328	0.007610	0.014792	0.029534	0.060338	0.091776	0.139894			

2 Gaussians

Scaling factor: 77.95175101421037

Gaussians:

Weight	Mean	Covariance				
0.444706329	484.297661736	488.592583602	9289.757455654	-715.435893879	-715.435893879	5143.253355951
0.555293671	501.005488109	707.537522958	15229.059713369	-103.916249092	-103.916249092	2845.382551504

4 Gaussians

Scaling factor: 74.0904582404789

Gaussians:

Weight	Mean	Covariance				
0.349611149	447.908709955	486.825186972	2511.207959627	15.751958748	15.751958748	4976.888182502
0.159274432	651.892008232	708.009122814	7406.774517239	203.763452854	203.763452854	2770.651090557
0.086342628	648.210970321	483.765250708	4287.466152355	-1358.913310553	-1358.913310553	4755.565057825
0.404771791	437.736940061	705.173883416	5388.315076505	13.482885196	13.482885196	3054.720247332

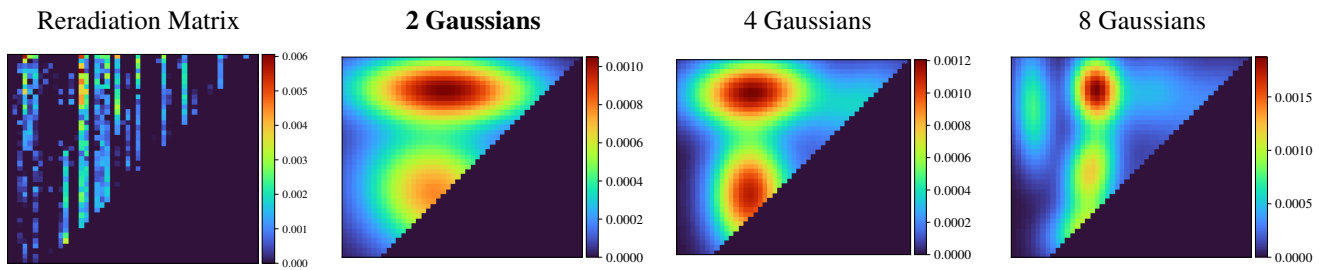
8 Gaussians

Scaling factor: 74.49920333076378

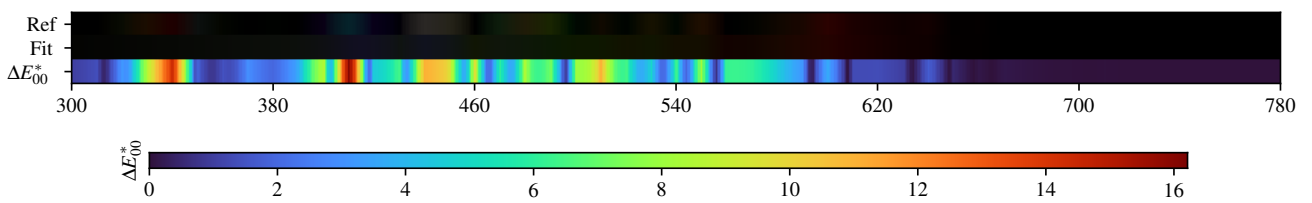
Gaussians:

Weight	Mean	Covariance					
0.146656065	456.843779617	420.133522418	2599.912042066	407.057108191	407.057108191	826.997692416	
0.111144154	595.383946279	721.222169222	2668.495110651	-325.727077527	-325.727077527	1908.561749699	
0.128338717	336.050478285	685.286283709	111.283878385	44.153898852	44.153898852	6056.279701407	
0.023726403	730.507520969	430.431810665	1038.133938847	192.281192163	192.281192163	1460.482813434	
0.061276750	743.569264863	703.017213953	861.998449507	489.270837628	489.270837628	3644.564237054	
0.216562544	463.607376171	721.056088747	879.691433724	79.707007764	79.707007764	1668.878068648	
0.062887471	622.951744356	519.667349572	417.145823854	273.745792200	273.745792200	6267.094607457	
0.249407896	460.302556687	554.602682776	1808.846928706	1004.517441516	1004.517441516	3796.375822527	

PKODXL1K - Weighted variational Bayesian inference - 2 Gaussians



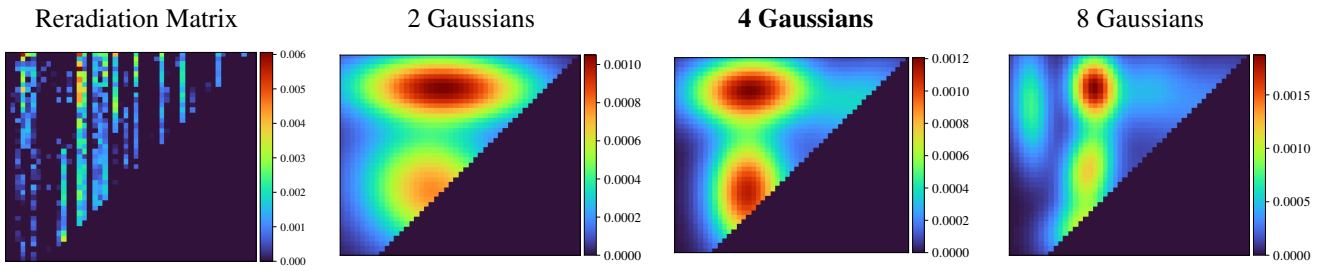
Fitted Material Under Monochromatic Illumination



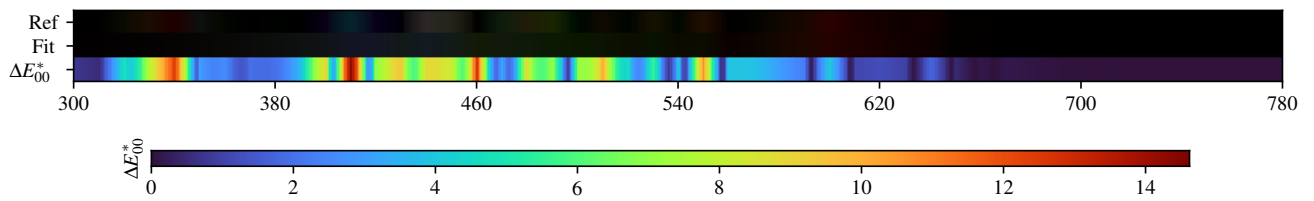
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.76$	$\Delta E = 0.80$	$\Delta E = 0.71$	$\Delta E = 0.54$	$\Delta E = 1.32$	$\Delta E = 0.41$	$\Delta E = 2.06$	$\Delta E = 0.67$	$\Delta E = 0.66$	$\Delta E = 1.05$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.34$	$\Delta E = 0.90$	$\Delta E = 0.88$	$\Delta E = 0.41$	$\Delta E = 1.27$	$\Delta E = 0.38$	$\Delta E = 1.92$	$\Delta E = 1.29$	$\Delta E = 0.48$	$\Delta E = 0.64$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.39$	$\Delta E = 1.11$	$\Delta E = 1.00$	$\Delta E = 0.29$	$\Delta E = 0.87$	$\Delta E = 1.53$	$\Delta E = 0.74$	$\Delta E = 1.37$	$\Delta E = 0.37$	$\Delta E = 2.26$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.67$	$\Delta E = 0.70$	$\Delta E = 0.56$	$\Delta E = 1.95$	$\Delta E = 0.54$	$\Delta E = 1.55$	$\Delta E = 0.40$	$\Delta E = 1.02$	$\Delta E = 0.59$	$\Delta E = 1.61$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.72$	$\Delta E = 0.60$	$\Delta E = 0.76$	$\Delta E = 1.70$	$\Delta E = 1.00$	$\Delta E = 1.79$	$\Delta E = 0.28$	$\Delta E = 1.11$	$\Delta E = 0.79$	$\Delta E = 1.62$

PKODXL1K - Weighted variational Bayesian inference - 4 Gaussians



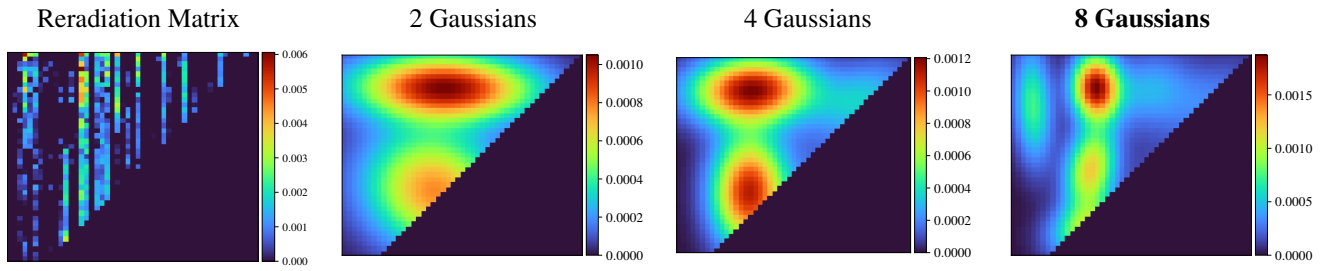
Fitted Material Under Monochromatic Illumination



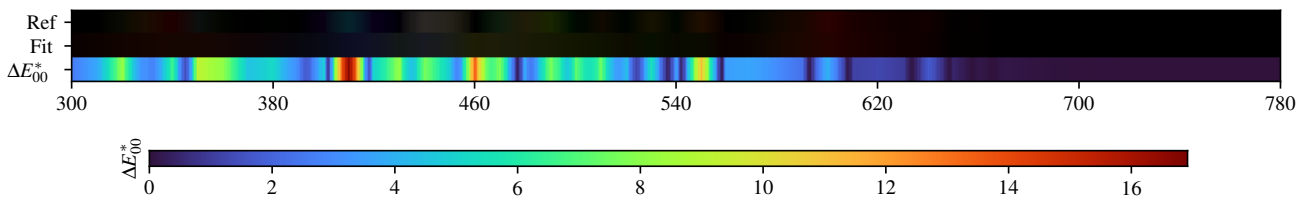
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.42$	$\Delta E = 3.08$	$\Delta E = 1.55$	$\Delta E = 2.76$	$\Delta E = 1.13$	$\Delta E = 1.77$	$\Delta E = 1.87$	$\Delta E = 2.99$	$\Delta E = 2.03$	$\Delta E = 3.60$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 2.53$	$\Delta E = 3.23$	$\Delta E = 0.96$	$\Delta E = 2.48$	$\Delta E = 0.16$	$\Delta E = 2.18$	$\Delta E = 1.76$	$\Delta E = 0.54$	$\Delta E = 1.20$	$\Delta E = 1.23$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.92$	$\Delta E = 3.48$	$\Delta E = 0.62$	$\Delta E = 1.99$	$\Delta E = 1.00$	$\Delta E = 0.74$	$\Delta E = 0.80$	$\Delta E = 0.44$	$\Delta E = 1.46$	$\Delta E = 2.45$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 2.76$	$\Delta E = 2.66$	$\Delta E = 2.54$	$\Delta E = 1.97$	$\Delta E = 2.08$	$\Delta E = 0.98$	$\Delta E = 1.32$	$\Delta E = 1.45$	$\Delta E = 2.33$	$\Delta E = 0.42$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 2.92$	$\Delta E = 2.58$	$\Delta E = 1.38$	$\Delta E = 1.63$	$\Delta E = 0.81$	$\Delta E = 1.40$	$\Delta E = 2.05$	$\Delta E = 1.43$	$\Delta E = 2.95$	$\Delta E = 0.76$

PKODXL1K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.22$	$\Delta E = 0.87$	$\Delta E = 0.34$	$\Delta E = 0.30$	$\Delta E = 1.31$	$\Delta E = 0.38$	$\Delta E = 1.47$	$\Delta E = 0.47$	$\Delta E = 0.41$	$\Delta E = 1.30$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.40$	$\Delta E = 1.04$	$\Delta E = 0.35$	$\Delta E = 0.11$	$\Delta E = 0.34$	$\Delta E = 0.43$	$\Delta E = 1.12$	$\Delta E = 0.59$	$\Delta E = 0.41$	$\Delta E = 0.46$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.64$	$\Delta E = 1.34$	$\Delta E = 0.37$	$\Delta E = 0.17$	$\Delta E = 0.42$	$\Delta E = 1.23$	$\Delta E = 0.36$	$\Delta E = 0.51$	$\Delta E = 0.53$	$\Delta E = 1.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.52$	$\Delta E = 1.61$	$\Delta E = 0.30$	$\Delta E = 1.33$	$\Delta E = 0.55$	$\Delta E = 1.23$	$\Delta E = 0.69$	$\Delta E = 0.37$	$\Delta E = 0.65$	$\Delta E = 1.41$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.69$	$\Delta E = 0.32$	$\Delta E = 0.32$	$\Delta E = 1.41$	$\Delta E = 0.17$	$\Delta E = 1.24$	$\Delta E = 0.75$	$\Delta E = 0.58$	$\Delta E = 1.22$	$\Delta E = 1.84$

PKODXL1K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.023329	0.025732	0.024226	0.020386	0.008672	0.001330	0.005193	0.003148	0.000183	0.002428	0.003874
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.005122	0.003785	0.002997	0.001214	0.002767	0.001453	0.002234	0.000000	0.001013	0.002910	0.004311
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.005791	0.004238	0.003265	0.002668	0.003508	0.000893	0.002171	0.000442	0.000994	0.002727	0.002213
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.004836	0.005328	0.007610	0.014792	0.029534	0.060338	0.091776	0.139894			

2 Gaussians max

Scaling factor: 76.95440968741633

Gaussians:

Weight	Mean		Covariance			
0.511520272	482.907411941	507.380472749	9419.694965467	-905.354478025	-905.354478025	7065.994723689
0.488479728	504.926160831	717.354343755	15763.244313968	-349.231940780	-349.231940780	2174.971258212

4 Gaussians max

Scaling factor: 74.2947837252521

Gaussians:

Weight	Mean		Covariance			
0.388104162	446.849945899	501.764910592	2695.312752898	15.642994321	15.642994321	6434.186251861
0.088031878	638.507719312	482.338749184	5647.420719424	-1755.129775416	-1755.129775416	4864.011705953
0.117535936	682.266665472	692.316912462	5347.197633301	1577.698982539	1577.698982539	3718.488531195
0.406328025	452.789802965	716.471739640	7236.169993772	248.031009020	248.031009020	2306.601081800

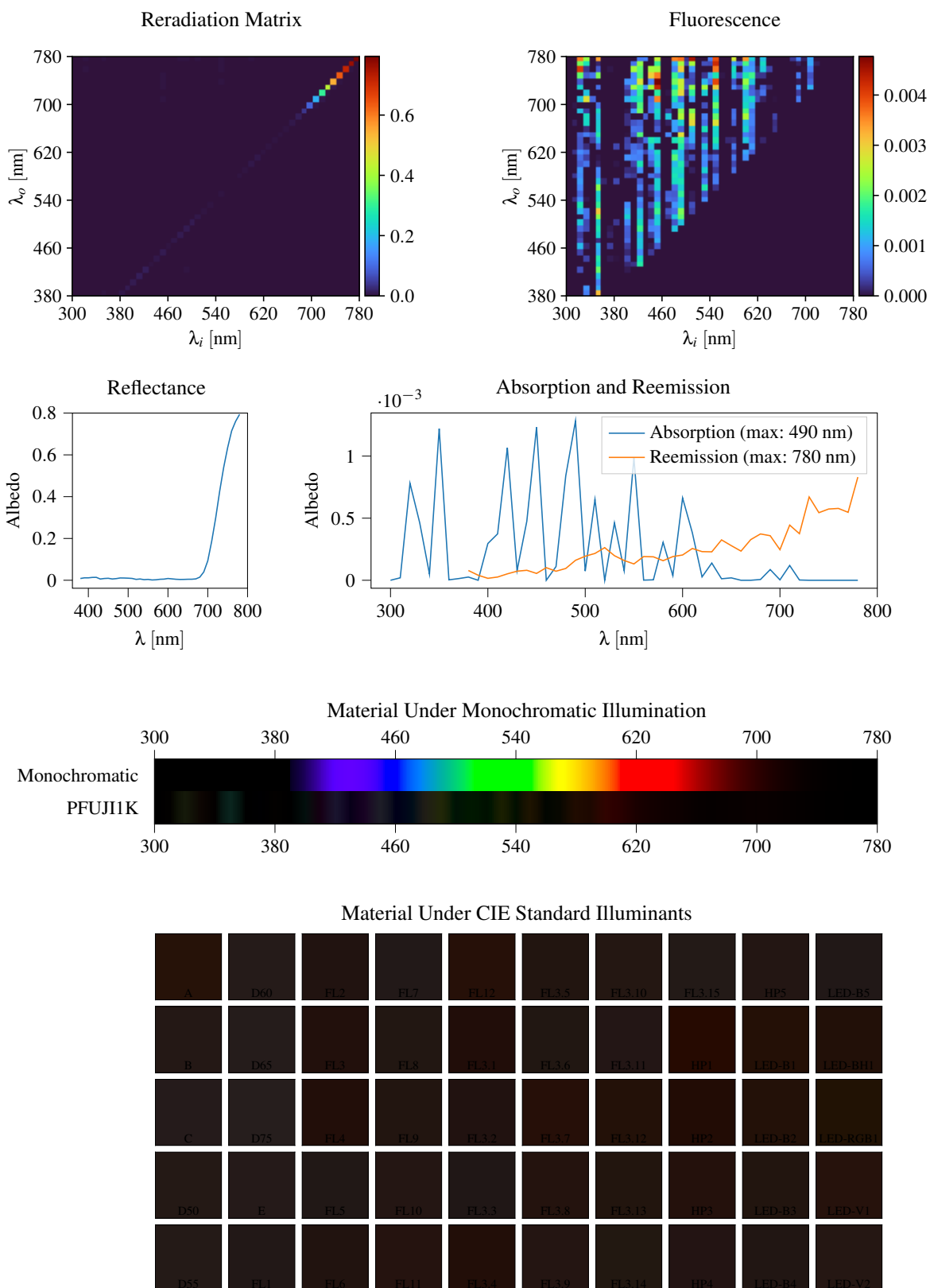
8 Gaussians max

Scaling factor: 75.47065483465556

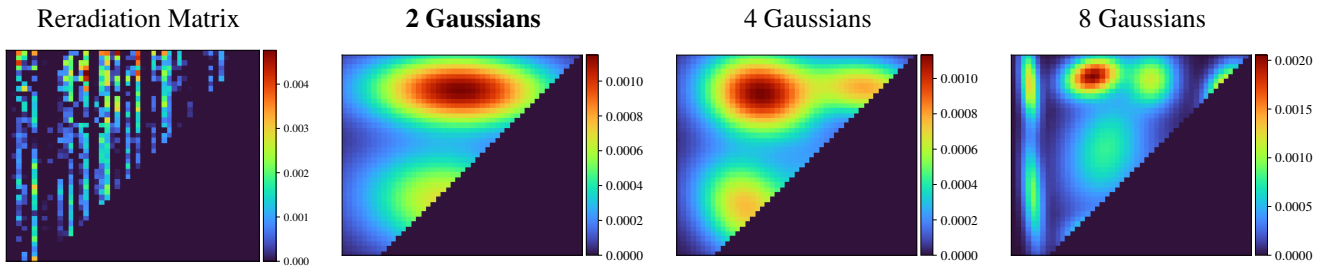
Gaussians:

Weight	Mean		Covariance			
0.156903095	453.690288056	426.704565584	2798.561138132	375.623382306	375.623382306	1459.725881026
0.090937451	633.988942295	487.567597231	5928.745204589	-2263.596471633	-2263.596471633	5096.044168321
0.196942826	455.611699259	550.338372737	1211.550865053	442.606299419	442.606299419	3520.392213388
0.135741205	339.837023648	680.264011875	738.264961473	-258.500772640	-258.500772640	6642.774573930
0.087522078	703.419901854	687.577607702	4477.353436064	2090.510958135	2090.510958135	4165.283173193
0.119021115	575.370365375	713.205175997	3806.402427044	464.148398872	464.148398872	2787.292056909
0.211535626	466.030061030	718.293862948	1016.046056775	-26.659967109	-26.659967109	2026.766685516

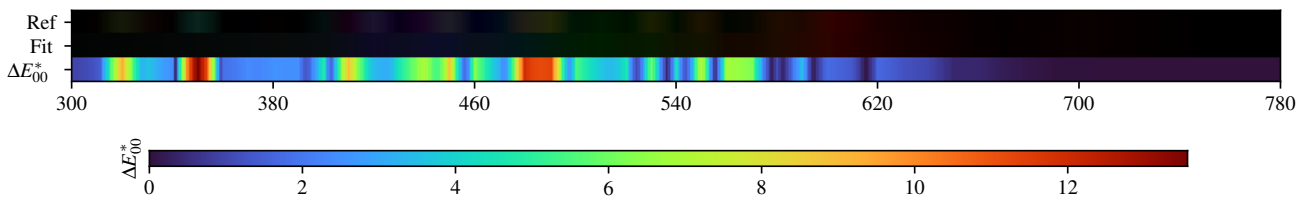
3.138. PFUJI1K



PFUJ11K - Weighted Expectation-Maximization - 2 Gaussians



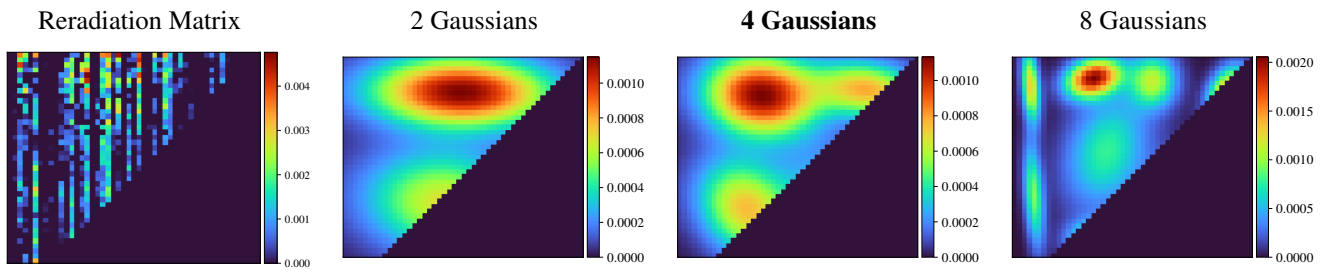
Fitted Material Under Monochromatic Illumination



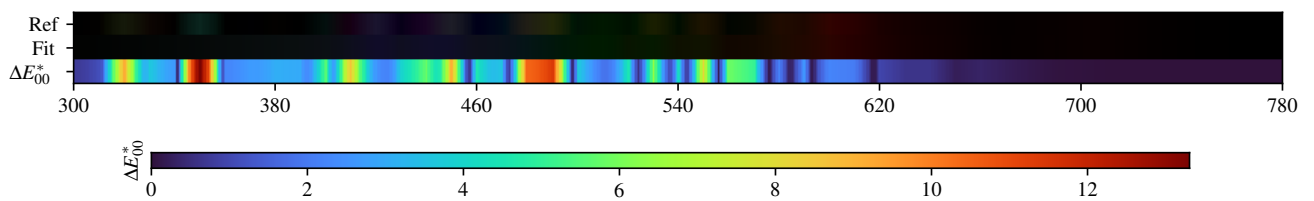
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.55$	$\Delta E = 2.61$	$\Delta E = 1.45$	$\Delta E = 3.06$	$\Delta E = 1.40$	$\Delta E = 1.38$	$\Delta E = 2.60$	$\Delta E = 3.47$	$\Delta E = 1.50$	$\Delta E = 1.91$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 2.14$	$\Delta E = 2.82$	$\Delta E = 0.85$	$\Delta E = 2.28$	$\Delta E = 0.11$	$\Delta E = 1.90$	$\Delta E = 2.42$	$\Delta E = 0.52$	$\Delta E = 0.34$	$\Delta E = 0.37$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 3.12$	$\Delta E = 3.14$	$\Delta E = 0.47$	$\Delta E = 1.61$	$\Delta E = 0.99$	$\Delta E = 1.21$	$\Delta E = 0.68$	$\Delta E = 0.64$	$\Delta E = 0.45$	$\Delta E = 0.77$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 2.10$	$\Delta E = 3.05$	$\Delta E = 2.83$	$\Delta E = 2.37$	$\Delta E = 2.35$	$\Delta E = 1.66$	$\Delta E = 1.35$	$\Delta E = 1.17$	$\Delta E = 1.16$	$\Delta E = 1.16$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 2.38$	$\Delta E = 2.91$	$\Delta E = 1.28$	$\Delta E = 1.91$	$\Delta E = 0.29$	$\Delta E = 2.04$	$\Delta E = 2.30$	$\Delta E = 1.42$	$\Delta E = 1.30$	$\Delta E = 2.27$

PFUJIK - Weighted Expectation-Maximization - 4 Gaussians



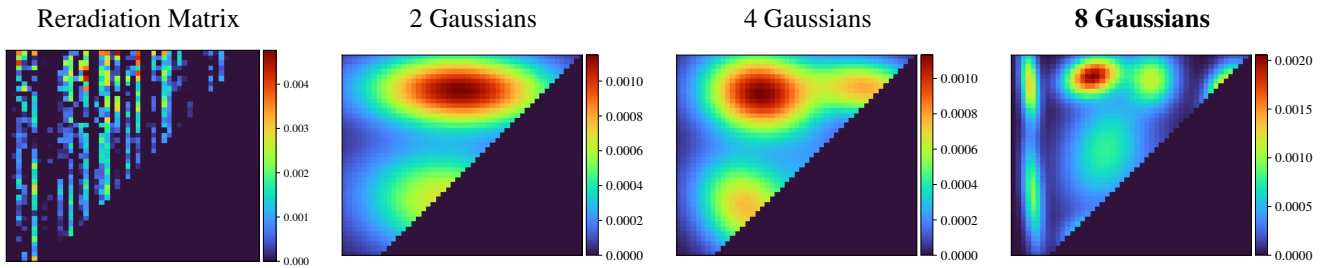
Fitted Material Under Monochromatic Illumination



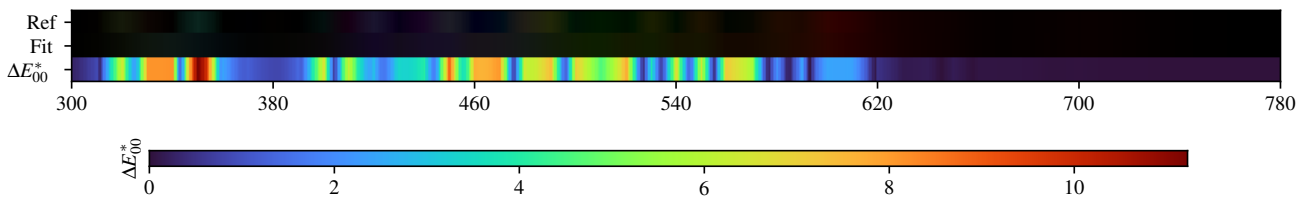
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.04$	$\Delta E = 2.64$	$\Delta E = 1.63$	$\Delta E = 2.64$	$\Delta E = 1.93$	$\Delta E = 1.64$	$\Delta E = 2.99$	$\Delta E = 3.00$	$\Delta E = 1.35$	$\Delta E = 2.29$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 2.23$	$\Delta E = 2.77$	$\Delta E = 1.22$	$\Delta E = 2.09$	$\Delta E = 0.71$	$\Delta E = 1.93$	$\Delta E = 2.74$	$\Delta E = 0.39$	$\Delta E = 0.85$	$\Delta E = 0.69$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.73$	$\Delta E = 2.95$	$\Delta E = 0.99$	$\Delta E = 1.69$	$\Delta E = 1.30$	$\Delta E = 1.81$	$\Delta E = 1.10$	$\Delta E = 0.34$	$\Delta E = 1.00$	$\Delta E = 0.54$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 2.27$	$\Delta E = 2.80$	$\Delta E = 2.50$	$\Delta E = 2.72$	$\Delta E = 2.20$	$\Delta E = 2.16$	$\Delta E = 1.80$	$\Delta E = 0.91$	$\Delta E = 1.79$	$\Delta E = 1.25$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 2.48$	$\Delta E = 2.56$	$\Delta E = 1.48$	$\Delta E = 2.38$	$\Delta E = 0.67$	$\Delta E = 2.48$	$\Delta E = 2.26$	$\Delta E = 1.26$	$\Delta E = 1.87$	$\Delta E = 2.02$

PFUJIK - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.14$	$\Delta E = 1.41$	$\Delta E = 1.24$	$\Delta E = 1.55$	$\Delta E = 1.17$	$\Delta E = 1.15$	$\Delta E = 0.61$	$\Delta E = 1.41$	$\Delta E = 1.78$	$\Delta E = 1.52$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.43$	$\Delta E = 1.42$	$\Delta E = 0.98$	$\Delta E = 1.37$	$\Delta E = 0.60$	$\Delta E = 1.21$	$\Delta E = 0.73$	$\Delta E = 0.94$	$\Delta E = 0.88$	$\Delta E = 1.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.60$	$\Delta E = 1.44$	$\Delta E = 0.83$	$\Delta E = 1.29$	$\Delta E = 1.04$	$\Delta E = 1.28$	$\Delta E = 0.83$	$\Delta E = 1.33$	$\Delta E = 0.92$	$\Delta E = 1.68$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.34$	$\Delta E = 1.69$	$\Delta E = 1.46$	$\Delta E = 0.81$	$\Delta E = 1.38$	$\Delta E = 0.95$	$\Delta E = 0.81$	$\Delta E = 1.82$	$\Delta E = 0.96$	$\Delta E = 1.56$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.39$	$\Delta E = 1.47$	$\Delta E = 1.16$	$\Delta E = 0.95$	$\Delta E = 0.87$	$\Delta E = 0.82$	$\Delta E = 0.88$	$\Delta E = 1.90$	$\Delta E = 1.28$	$\Delta E = 1.72$

PFUJIK - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.008408	0.011509	0.011509	0.013569	0.013908	0.005858	0.008387	0.009412	0.006091	0.007847	0.010928
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.010653	0.009893	0.008679	0.004162	0.006007	0.002863	0.004108	0.001404	0.002256	0.004661	0.005386
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.008445	0.006578	0.004692	0.003779	0.004010	0.004729	0.004851	0.006469	0.014826	0.039591	0.092622
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.187346	0.298934	0.426516	0.539718	0.634543	0.714500	0.760380	0.794025			

2 Gaussians

Scaling factor: 82.51216422064222

Gaussians:

Weight	Mean		Covariance			
0.444586636	505.932013807	485.675198304	13560.745433298	-909.613564732	-909.613564732	5394.359303658
0.555413364	534.486339457	712.120971359	16254.318418521	-314.702077610	-314.702077610	2500.610455540

4 Gaussians

Scaling factor: 79.7747711536203

Gaussians:

Weight	Mean		Covariance			
0.165723744	628.065762940	491.825097668	6383.733569000	-1570.385901734	-1570.385901734	5311.651704795
0.399098383	465.238050712	705.649049903	6239.014516982	-391.244562824	-391.244562824	3270.330108977
0.172570125	682.381340073	716.817642444	5368.534500375	-497.215023429	-497.215023429	1598.324934378
0.262607748	435.142040797	474.526766435	4620.907070622	-1078.032855161	-1078.032855161	4705.195362106

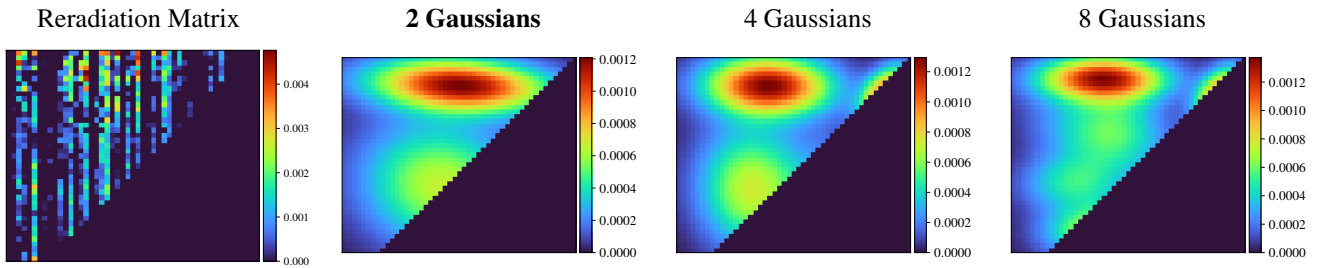
8 Gaussians

Scaling factor: 80.67471099316622

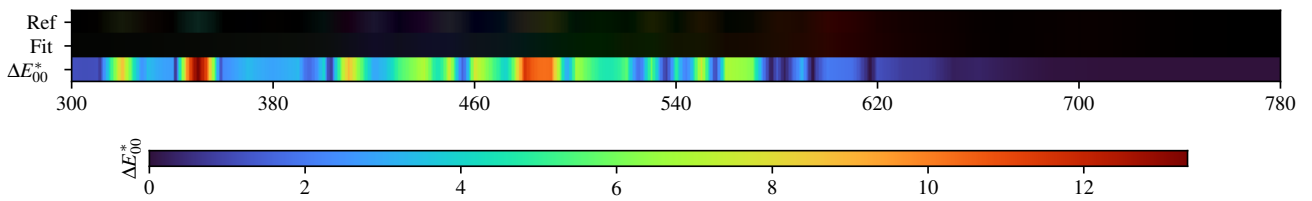
Gaussians:

Weight	Mean		Covariance			
0.098043326	472.209071339	412.576033396	1623.102966562	47.909478334	47.909478334	681.313756274
0.151304282	459.886295363	740.842102591	1430.669450613	244.656800415	244.656800415	727.304471798
0.270184791	485.398068388	592.098375455	3342.447332070	1140.579710034	1140.579710034	6405.117068820
0.060178072	333.165727971	723.396088358	160.751167347	-189.851522388	-189.851522388	2465.714883319
0.111712549	731.186086058	710.462783459	707.502991328	312.101952506	312.101952506	1247.080535320
0.066918928	339.404525115	502.154176266	196.248450773	-342.203643717	-342.203643717	5106.026934331
0.139402130	652.126303554	482.496554160	4258.909488569	-462.511748091	-462.511748091	5248.871454425
0.102255921	581.015380872	735.042664969	1106.431406074	14.821319054	14.821319054	1366.557651448

PFUJIK - Weighted variational Bayesian inference - 2 Gaussians



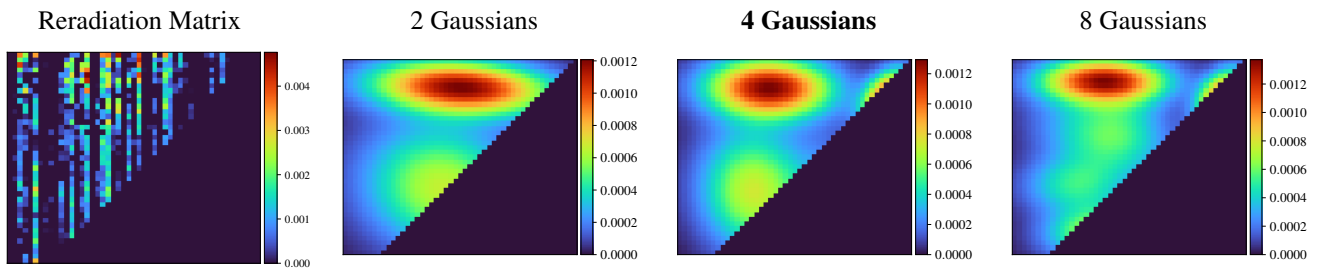
Fitted Material Under Monochromatic Illumination



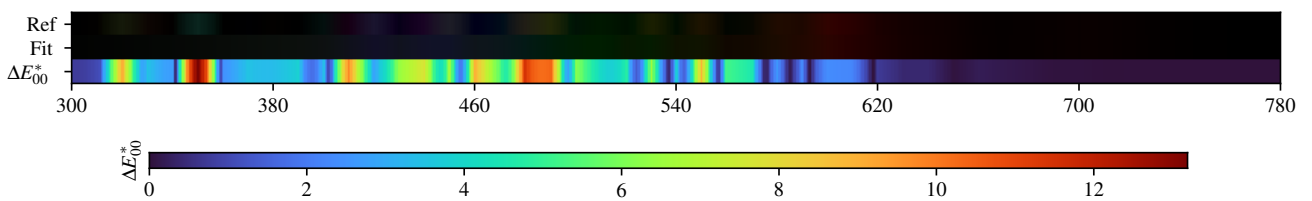
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.93$	$\Delta E = 3.93$	$\Delta E = 2.66$	$\Delta E = 4.30$	$\Delta E = 2.00$	$\Delta E = 2.66$	$\Delta E = 3.16$	$\Delta E = 4.73$	$\Delta E = 3.19$	$\Delta E = 2.74$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 3.58$	$\Delta E = 4.06$	$\Delta E = 1.83$	$\Delta E = 3.66$	$\Delta E = 0.89$	$\Delta E = 3.22$	$\Delta E = 3.05$	$\Delta E = 1.00$	$\Delta E = 1.41$	$\Delta E = 1.77$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 4.38$	$\Delta E = 4.25$	$\Delta E = 1.30$	$\Delta E = 2.95$	$\Delta E = 2.08$	$\Delta E = 1.86$	$\Delta E = 1.69$	$\Delta E = 1.33$	$\Delta E = 1.55$	$\Delta E = 2.60$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 3.53$	$\Delta E = 4.63$	$\Delta E = 4.05$	$\Delta E = 3.06$	$\Delta E = 3.52$	$\Delta E = 2.35$	$\Delta E = 2.44$	$\Delta E = 2.76$	$\Delta E = 2.21$	$\Delta E = 2.75$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 3.75$	$\Delta E = 4.10$	$\Delta E = 2.44$	$\Delta E = 2.56$	$\Delta E = 1.34$	$\Delta E = 2.71$	$\Delta E = 3.47$	$\Delta E = 3.12$	$\Delta E = 2.29$	$\Delta E = 3.94$

PFUJIK - Weighted variational Bayesian inference - 4 Gaussians



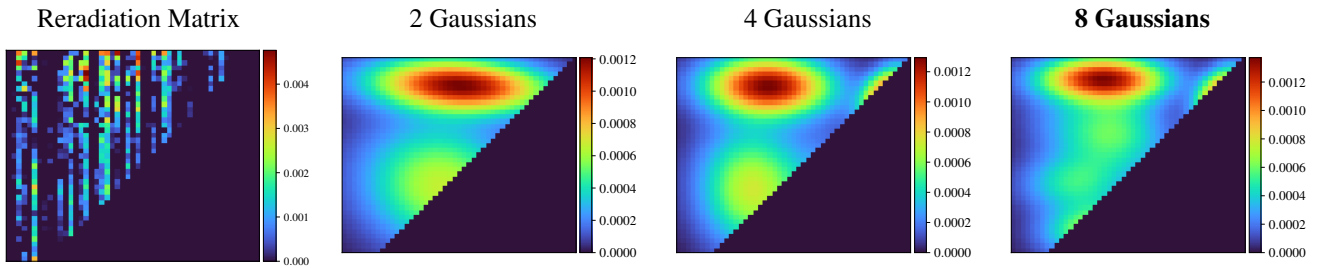
Fitted Material Under Monochromatic Illumination



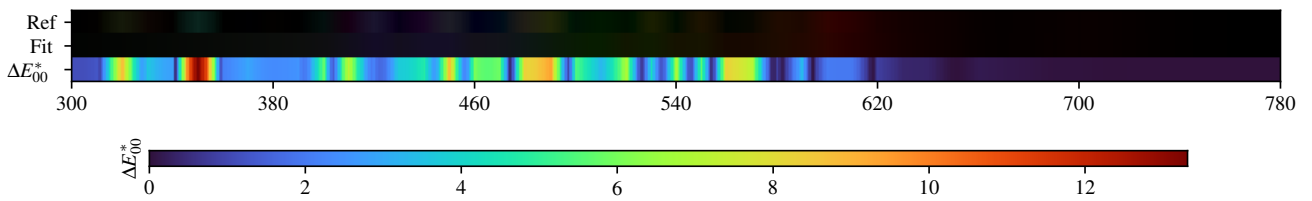
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 2.28$	$\Delta E = 4.84$	$\Delta E = 3.50$	$\Delta E = 5.25$	$\Delta E = 2.71$	$\Delta E = 3.33$	$\Delta E = 4.10$	$\Delta E = 5.70$	$\Delta E = 3.87$	$\Delta E = 3.82$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 4.40$	$\Delta E = 5.01$	$\Delta E = 2.61$	$\Delta E = 4.46$	$\Delta E = 1.60$	$\Delta E = 3.97$	$\Delta E = 4.02$	$\Delta E = 1.28$	$\Delta E = 1.99$	$\Delta E = 2.24$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 5.37$	$\Delta E = 5.26$	$\Delta E = 2.06$	$\Delta E = 3.68$	$\Delta E = 2.78$	$\Delta E = 2.59$	$\Delta E = 2.26$	$\Delta E = 1.42$	$\Delta E = 2.16$	$\Delta E = 2.82$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 4.34$	$\Delta E = 5.54$	$\Delta E = 5.07$	$\Delta E = 3.99$	$\Delta E = 4.45$	$\Delta E = 3.14$	$\Delta E = 3.12$	$\Delta E = 3.16$	$\Delta E = 3.03$	$\Delta E = 3.21$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 4.62$	$\Delta E = 5.11$	$\Delta E = 3.27$	$\Delta E = 3.36$	$\Delta E = 1.80$	$\Delta E = 3.59$	$\Delta E = 4.25$	$\Delta E = 3.79$	$\Delta E = 3.23$	$\Delta E = 4.66$

PFUJIK - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.46$	$\Delta E = 0.61$	$\Delta E = 0.43$	$\Delta E = 0.31$	$\Delta E = 0.66$	$\Delta E = 0.42$	$\Delta E = 0.93$	$\Delta E = 0.43$	$\Delta E = 0.79$	$\Delta E = 1.18$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.44$	$\Delta E = 0.63$	$\Delta E = 0.45$	$\Delta E = 0.28$	$\Delta E = 0.55$	$\Delta E = 0.52$	$\Delta E = 0.46$	$\Delta E = 0.85$	$\Delta E = 0.54$	$\Delta E = 0.75$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.40$	$\Delta E = 0.67$	$\Delta E = 0.43$	$\Delta E = 0.31$	$\Delta E = 0.51$	$\Delta E = 0.67$	$\Delta E = 0.32$	$\Delta E = 1.37$	$\Delta E = 0.64$	$\Delta E = 1.03$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.58$	$\Delta E = 1.01$	$\Delta E = 0.36$	$\Delta E = 0.54$	$\Delta E = 0.54$	$\Delta E = 0.48$	$\Delta E = 0.59$	$\Delta E = 1.09$	$\Delta E = 0.79$	$\Delta E = 0.70$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.60$	$\Delta E = 0.31$	$\Delta E = 0.50$	$\Delta E = 0.59$	$\Delta E = 0.52$	$\Delta E = 0.47$	$\Delta E = 0.77$	$\Delta E = 1.11$	$\Delta E = 1.01$	$\Delta E = 0.48$

PFUJIK - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.008408	0.011509	0.011509	0.013569	0.013908	0.005858	0.008387	0.009412	0.006091	0.007847	0.010928
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.010653	0.009893	0.008679	0.004162	0.006007	0.002863	0.004108	0.001404	0.002256	0.004661	0.005386
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.008445	0.006578	0.004692	0.003779	0.004010	0.004729	0.004851	0.006469	0.014826	0.039591	0.092622
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.187346	0.298934	0.426516	0.539718	0.634543	0.714500	0.760380	0.794025			

2 Gaussians max

Scaling factor: 81.0766834313407

Gaussians:

Weight	Mean		Covariance			
0.542395669	504.050377937	514.407549177	13188.105824981	-1147.862259005	-1147.862259005	8505.841568022
0.457604331	542.907348599	726.035597399	16833.368298346	-886.670817382	-886.670817382	1546.903733470

4 Gaussians max

Scaling factor: 82.17048435234838

Gaussians:

Weight	Mean		Covariance			
0.383324152	454.724625881	508.300475362	6009.505559633	-365.921617635	-365.921617635	7811.990094791
0.124779449	656.155707229	495.268152893	4447.983306833	-1763.959415120	-1763.959415120	6360.651518042
0.107435874	729.864756134	707.122821190	1231.130324136	608.141784830	608.141784830	1605.676516723
0.384460526	487.496086566	725.294914829	8281.129188153	-151.611132657	-151.611132657	1906.703855840

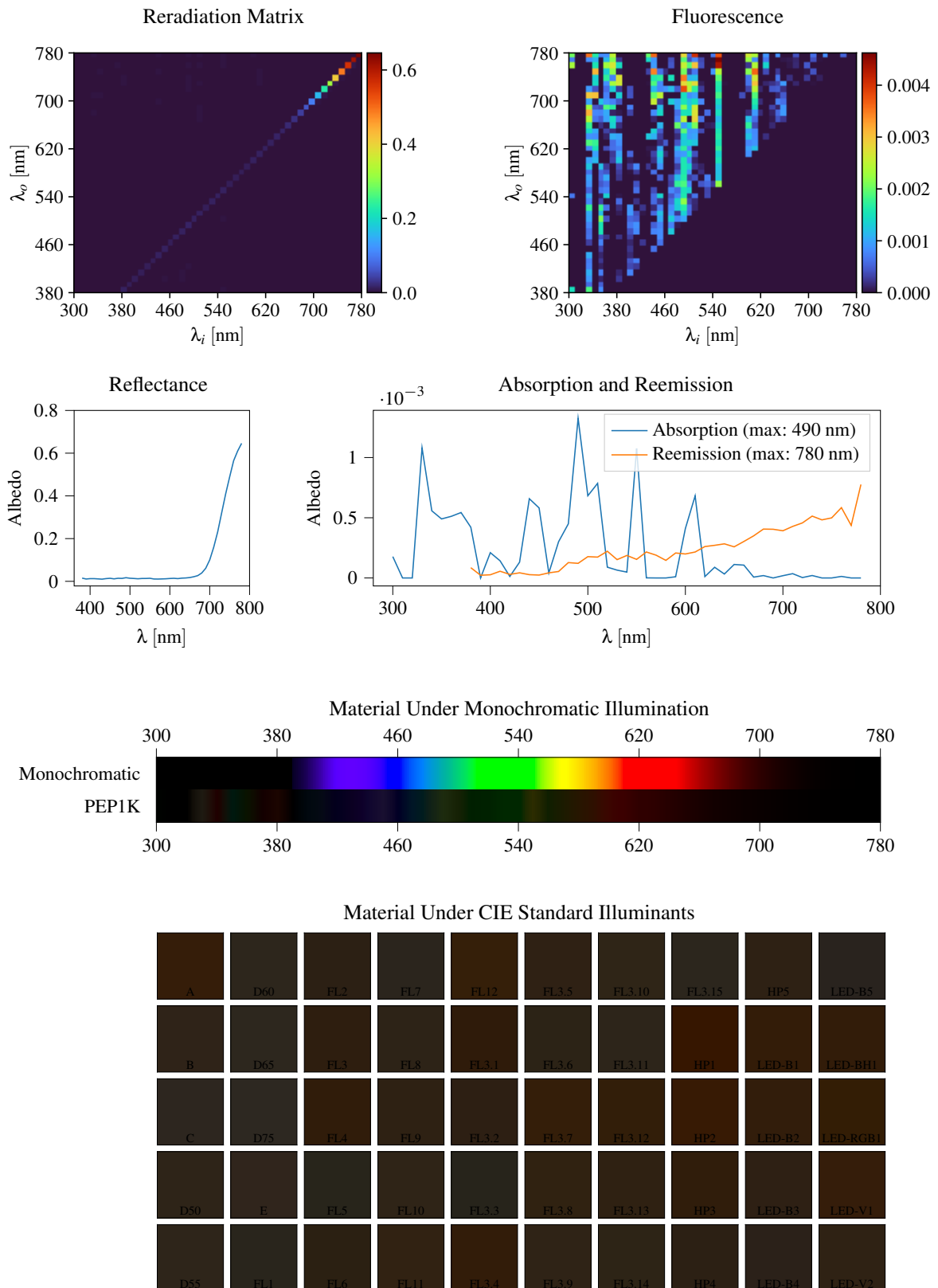
8 Gaussians max

Scaling factor: 82.25841580725523

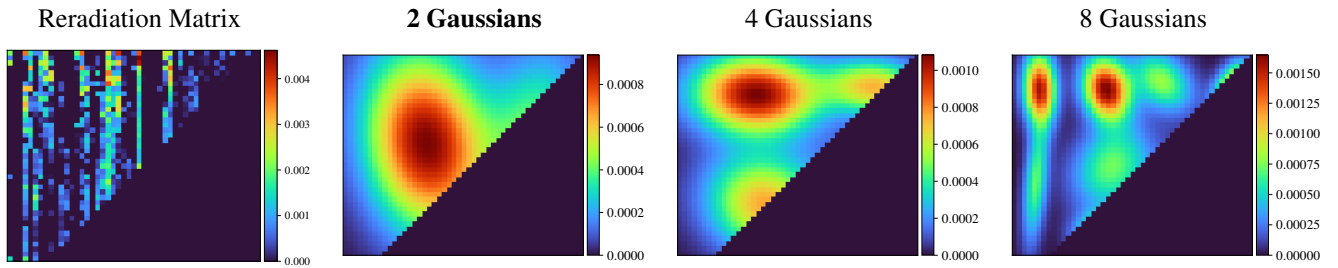
Gaussians:

Weight	Mean		Covariance			
0.158535995	475.906837568	422.193829886	5879.522502847	348.341743003	348.341743003	1404.277490870
0.097464417	671.021376577	481.990636270	3740.834019013	-1114.270790126	-1114.270790126	4977.638547322
0.114315455	423.742357568	520.694367465	5731.324659414	105.067308283	105.067308283	1803.351486544
0.131318146	526.190576575	633.510314988	4362.212280683	-80.489376362	-80.489376362	3851.440469395
0.099231539	431.000201387	634.641645001	6086.388049659	-858.116928739	-858.116928739	3202.012935560
0.108674570	729.552419581	705.919292633	1228.676413047	618.300987533	618.300987533	1647.236416705
0.290341982	486.168823448	740.883959461	8439.723089289	-60.012130964	-60.012130964	1077.701498863

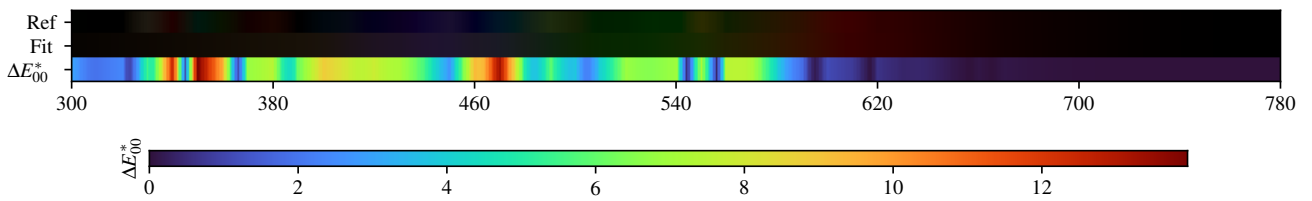
3.139. PEP1K



PEP1K - Weighted Expectation-Maximization - 2 Gaussians



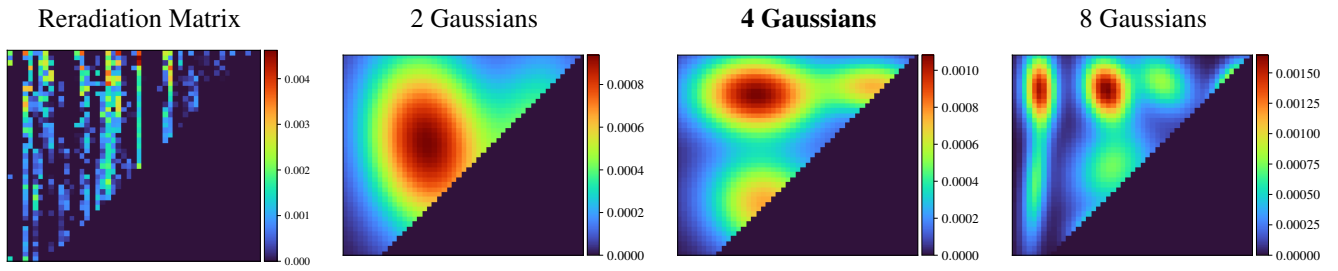
Fitted Material Under Monochromatic Illumination



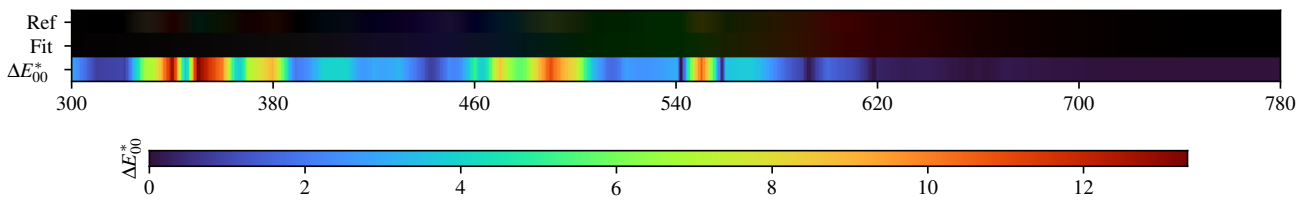
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.35$	$\Delta E = 3.36$	$\Delta E = 2.21$	$\Delta E = 3.23$	$\Delta E = 0.17$	$\Delta E = 1.91$	$\Delta E = 0.93$	$\Delta E = 2.98$	$\Delta E = 2.50$	$\Delta E = 3.67$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 2.68$	$\Delta E = 3.60$	$\Delta E = 1.67$	$\Delta E = 2.35$	$\Delta E = 1.30$	$\Delta E = 2.40$	$\Delta E = 1.38$	$\Delta E = 0.95$	$\Delta E = 1.33$	$\Delta E = 1.63$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 3.66$	$\Delta E = 3.98$	$\Delta E = 1.30$	$\Delta E = 1.90$	$\Delta E = 1.99$	$\Delta E = 0.25$	$\Delta E = 1.01$	$\Delta E = 1.02$	$\Delta E = 1.52$	$\Delta E = 1.62$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 2.77$	$\Delta E = 3.20$	$\Delta E = 3.58$	$\Delta E = 0.98$	$\Delta E = 3.61$	$\Delta E = 0.48$	$\Delta E = 1.63$	$\Delta E = 1.88$	$\Delta E = 2.14$	$\Delta E = 1.56$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 3.09$	$\Delta E = 3.47$	$\Delta E = 2.21$	$\Delta E = 0.48$	$\Delta E = 1.16$	$\Delta E = 0.88$	$\Delta E = 2.23$	$\Delta E = 2.62$	$\Delta E = 2.99$	$\Delta E = 2.43$

PEP1K - Weighted Expectation-Maximization - 4 Gaussians



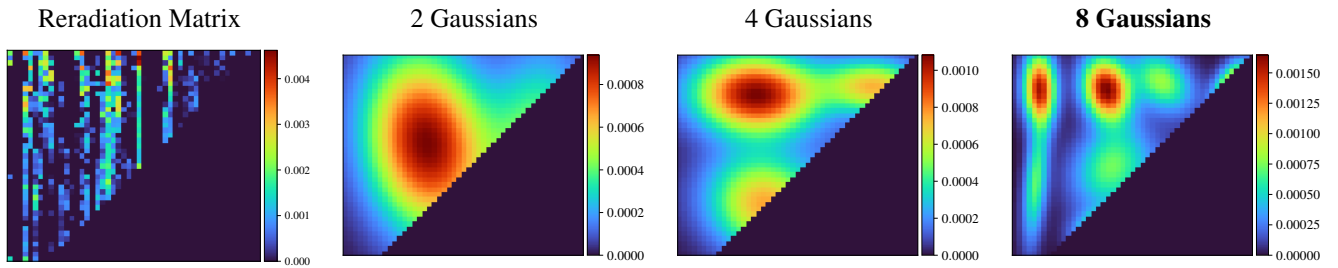
Fitted Material Under Monochromatic Illumination



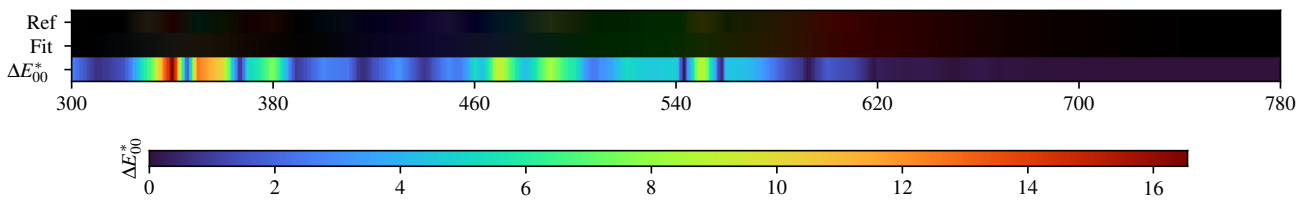
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.74$	$\Delta E = 1.66$	$\Delta E = 1.04$	$\Delta E = 1.50$	$\Delta E = 1.91$	$\Delta E = 1.00$	$\Delta E = 2.65$	$\Delta E = 1.86$	$\Delta E = 0.91$	$\Delta E = 1.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.36$	$\Delta E = 1.78$	$\Delta E = 0.77$	$\Delta E = 1.28$	$\Delta E = 0.44$	$\Delta E = 1.13$	$\Delta E = 2.76$	$\Delta E = 0.29$	$\Delta E = 0.50$	$\Delta E = 0.47$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.58$	$\Delta E = 2.01$	$\Delta E = 0.61$	$\Delta E = 1.08$	$\Delta E = 0.82$	$\Delta E = 1.83$	$\Delta E = 0.88$	$\Delta E = 0.66$	$\Delta E = 0.56$	$\Delta E = 0.41$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.41$	$\Delta E = 1.96$	$\Delta E = 1.49$	$\Delta E = 2.72$	$\Delta E = 1.21$	$\Delta E = 2.32$	$\Delta E = 1.23$	$\Delta E = 0.63$	$\Delta E = 0.93$	$\Delta E = 0.90$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.53$	$\Delta E = 1.50$	$\Delta E = 0.95$	$\Delta E = 2.40$	$\Delta E = 0.43$	$\Delta E = 2.57$	$\Delta E = 1.56$	$\Delta E = 0.86$	$\Delta E = 0.92$	$\Delta E = 1.34$

PEP1K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.41$	$\Delta E = 0.45$	$\Delta E = 0.44$	$\Delta E = 0.53$	$\Delta E = 1.60$	$\Delta E = 0.30$	$\Delta E = 1.86$	$\Delta E = 0.70$	$\Delta E = 0.55$	$\Delta E = 1.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.40$	$\Delta E = 0.48$	$\Delta E = 0.43$	$\Delta E = 0.46$	$\Delta E = 0.30$	$\Delta E = 0.24$	$\Delta E = 2.02$	$\Delta E = 0.44$	$\Delta E = 0.66$	$\Delta E = 0.88$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.43$	$\Delta E = 0.53$	$\Delta E = 0.41$	$\Delta E = 0.45$	$\Delta E = 0.29$	$\Delta E = 1.64$	$\Delta E = 0.36$	$\Delta E = 0.31$	$\Delta E = 0.73$	$\Delta E = 1.01$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.42$	$\Delta E = 0.49$	$\Delta E = 0.42$	$\Delta E = 2.03$	$\Delta E = 0.20$	$\Delta E = 1.92$	$\Delta E = 0.27$	$\Delta E = 0.94$	$\Delta E = 0.96$	$\Delta E = 0.34$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.43$	$\Delta E = 0.46$	$\Delta E = 0.42$	$\Delta E = 1.90$	$\Delta E = 0.47$	$\Delta E = 2.02$	$\Delta E = 0.33$	$\Delta E = 0.66$	$\Delta E = 1.23$	$\Delta E = 0.22$

PEP1K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.015006	0.010852	0.012548	0.012561	0.011364	0.010149	0.012712	0.014178	0.011567	0.014228	0.013718
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.016973	0.014415	0.013313	0.011936	0.013298	0.013399	0.014233	0.010928	0.010618	0.011218	0.011921
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.013258	0.014131	0.012660	0.014887	0.015754	0.017646	0.021456	0.026652	0.038902	0.061054	0.100009
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.159342	0.231371	0.320615	0.409124	0.488551	0.564603	0.609756	0.645937			

2 Gaussians

Scaling factor: 87.4090734607983

Gaussians:

Weight	Mean		Covariance			
0.270254463	686.637794490	612.216624401	4980.205674456	1310.130180956	1310.130180956	16625.398017092
0.729745537	463.819737649	604.021916217	7309.998475935	-1513.174942811	-1513.174942811	16372.689639118

4 Gaussians

Scaling factor: 81.81583954672054

Gaussians:

Weight	Mean		Covariance			
0.122278297	674.337198621	484.246844579	4345.467656654	-389.256680581	-389.256680581	5285.396887261
0.405877113	455.137095799	703.481583635	7674.573993244	-196.807251018	-196.807251018	3131.691537800
0.323780529	474.042775189	479.239937558	6485.919970630	-621.112131119	-621.112131119	4885.144571587
0.148064061	698.109695956	718.121992557	5001.897970569	-266.702493016	-266.702493016	1497.650638389

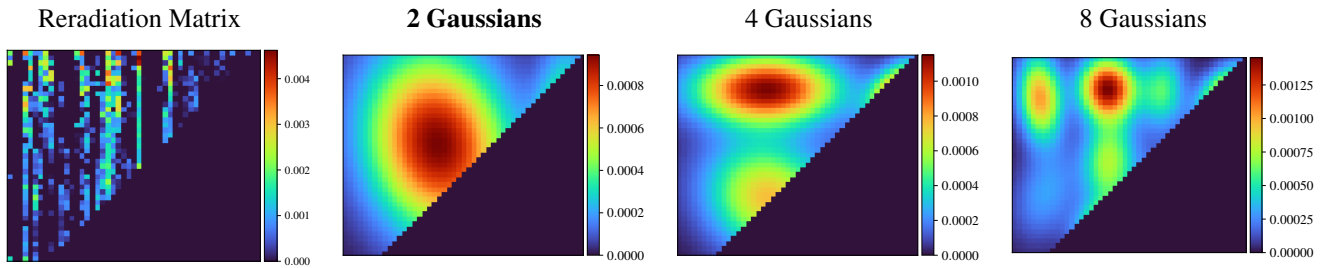
8 Gaussians

Scaling factor: 83.08919492040125

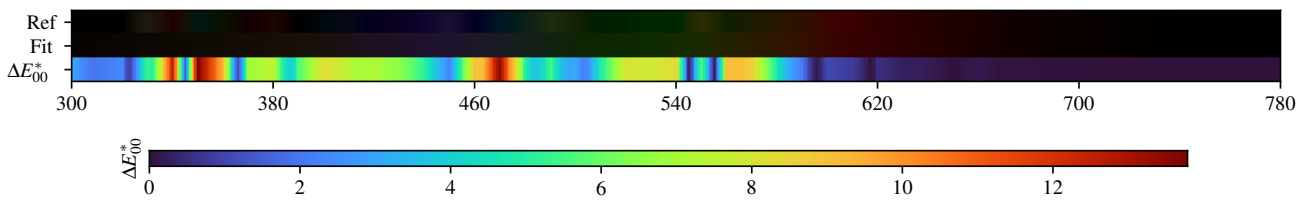
Gaussians:

Weight	Mean		Covariance			
0.151562937	663.955293653	481.156438202	4549.593866267	167.490895151	167.490895151	5315.376189389
0.173990082	486.089254686	713.444394094	1062.865019507	-226.640051375	-226.640051375	1925.369131956
0.069655825	343.079123253	526.210753670	292.935909954	572.668751802	572.668751802	7074.643141752
0.093082427	745.454418038	715.771464552	703.591296072	321.203564325	321.203564325	1150.621335479
0.124097628	351.051546496	715.168095214	489.728662495	-54.571799603	-54.571799603	2402.955127574
0.167180175	495.764139330	556.418589023	2877.876845410	674.267557961	674.267557961	3454.312494109
0.118259557	490.153963613	418.574706407	1488.768264004	46.543395111	46.543395111	824.788629973
0.102171369	598.342106212	730.401987910	1804.252124599	-536.115681675	-536.115681675	1754.503474793

PEP1K - Weighted variational Bayesian inference - 2 Gaussians



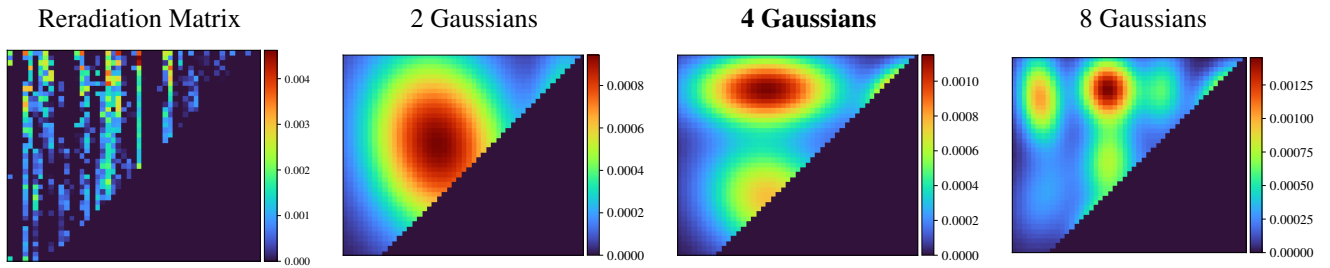
Fitted Material Under Monochromatic Illumination



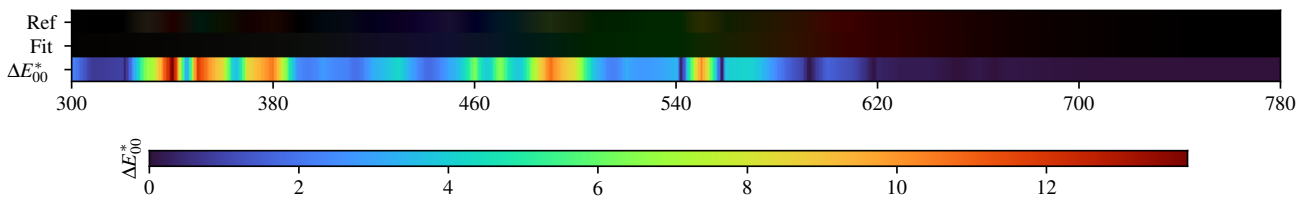
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 1.64$	$\Delta E = 3.79$	$\Delta E = 2.75$	$\Delta E = 3.74$	$\Delta E = 0.35$	$\Delta E = 2.30$	$\Delta E = 1.44$	$\Delta E = 3.45$	$\Delta E = 2.88$	$\Delta E = 4.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 3.07$	$\Delta E = 4.01$	$\Delta E = 2.14$	$\Delta E = 2.84$	$\Delta E = 1.70$	$\Delta E = 2.87$	$\Delta E = 1.92$	$\Delta E = 1.20$	$\Delta E = 1.63$	$\Delta E = 1.93$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 4.05$	$\Delta E = 4.36$	$\Delta E = 1.70$	$\Delta E = 2.34$	$\Delta E = 2.46$	$\Delta E = 0.35$	$\Delta E = 1.34$	$\Delta E = 1.30$	$\Delta E = 1.84$	$\Delta E = 1.94$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 3.20$	$\Delta E = 3.47$	$\Delta E = 4.26$	$\Delta E = 1.49$	$\Delta E = 4.27$	$\Delta E = 0.86$	$\Delta E = 2.05$	$\Delta E = 2.16$	$\Delta E = 2.56$	$\Delta E = 1.81$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 3.52$	$\Delta E = 4.10$	$\Delta E = 2.80$	$\Delta E = 0.87$	$\Delta E = 1.47$	$\Delta E = 1.33$	$\Delta E = 2.74$	$\Delta E = 2.97$	$\Delta E = 3.45$	$\Delta E = 2.82$

PEP1K - Weighted variational Bayesian inference - 4 Gaussians



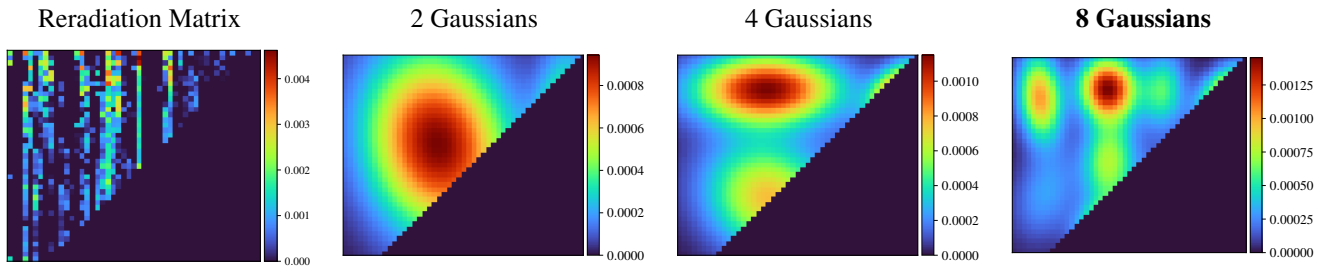
Fitted Material Under Monochromatic Illumination



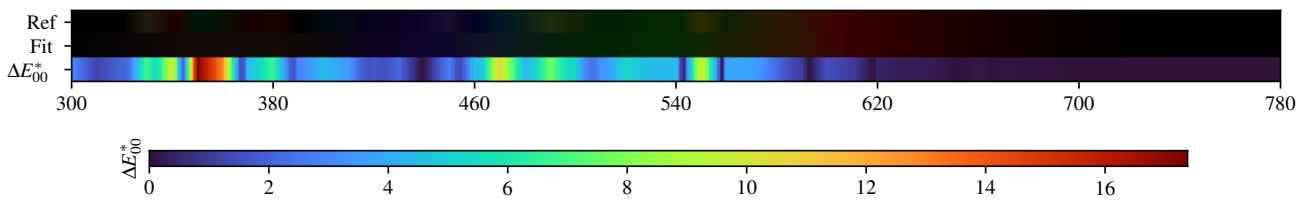
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.66$	$\Delta E = 2.08$	$\Delta E = 1.19$	$\Delta E = 2.04$	$\Delta E = 1.94$	$\Delta E = 1.04$	$\Delta E = 2.99$	$\Delta E = 2.47$	$\Delta E = 1.18$	$\Delta E = 2.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.60$	$\Delta E = 2.26$	$\Delta E = 0.81$	$\Delta E = 1.61$	$\Delta E = 0.37$	$\Delta E = 1.33$	$\Delta E = 3.22$	$\Delta E = 0.36$	$\Delta E = 0.71$	$\Delta E = 0.88$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.10$	$\Delta E = 2.56$	$\Delta E = 0.58$	$\Delta E = 1.23$	$\Delta E = 0.83$	$\Delta E = 1.88$	$\Delta E = 0.76$	$\Delta E = 0.51$	$\Delta E = 0.86$	$\Delta E = 0.95$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.69$	$\Delta E = 2.29$	$\Delta E = 1.89$	$\Delta E = 3.09$	$\Delta E = 1.51$	$\Delta E = 2.55$	$\Delta E = 1.10$	$\Delta E = 1.14$	$\Delta E = 1.50$	$\Delta E = 0.75$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.89$	$\Delta E = 1.95$	$\Delta E = 1.10$	$\Delta E = 2.61$	$\Delta E = 0.48$	$\Delta E = 2.93$	$\Delta E = 1.71$	$\Delta E = 1.21$	$\Delta E = 1.82$	$\Delta E = 1.25$

PEP1K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.06$	$\Delta E = 0.81$	$\Delta E = 0.21$	$\Delta E = 0.36$	$\Delta E = 1.35$	$\Delta E = 0.26$	$\Delta E = 1.45$	$\Delta E = 0.32$	$\Delta E = 0.38$	$\Delta E = 0.52$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.44$	$\Delta E = 0.92$	$\Delta E = 0.17$	$\Delta E = 0.23$	$\Delta E = 0.07$	$\Delta E = 0.41$	$\Delta E = 1.47$	$\Delta E = 0.24$	$\Delta E = 0.22$	$\Delta E = 0.40$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.65$	$\Delta E = 1.11$	$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.23$	$\Delta E = 1.31$	$\Delta E = 0.18$	$\Delta E = 0.18$	$\Delta E = 0.25$	$\Delta E = 0.71$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.57$	$\Delta E = 0.66$	$\Delta E = 0.40$	$\Delta E = 1.57$	$\Delta E = 0.61$	$\Delta E = 1.48$	$\Delta E = 0.42$	$\Delta E = 0.47$	$\Delta E = 0.26$	$\Delta E = 0.09$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.69$	$\Delta E = 0.40$	$\Delta E = 0.19$	$\Delta E = 1.53$	$\Delta E = 0.17$	$\Delta E = 1.51$	$\Delta E = 0.50$	$\Delta E = 0.41$	$\Delta E = 0.48$	$\Delta E = 0.47$

PEP1K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.015006	0.010852	0.012548	0.012561	0.011364	0.010149	0.012712	0.014178	0.011567	0.014228	0.013718
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.016973	0.014415	0.013313	0.011936	0.013298	0.013399	0.014233	0.010928	0.010618	0.011218	0.011921
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.013258	0.014131	0.012660	0.014887	0.015754	0.017646	0.021456	0.026652	0.038902	0.061054	0.100009
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.159342	0.231371	0.320615	0.409124	0.488551	0.564603	0.609756	0.645937			

2 Gaussians max

Scaling factor: 88.61319151836788

Gaussians:

Weight	Mean		Covariance			
0.847683220	486.528356318	602.508553369	9855.815989009	-1620.522275745	-1620.522275745	16538.182544165
0.152316780	733.430951581	626.606890511	1619.699567889	1402.504385403	1402.504385403	15262.865877284

4 Gaussians max

Scaling factor: 84.21259211536395

Gaussians:

Weight	Mean		Covariance			
0.385599546	481.404863015	492.562602611	7649.679678111	-943.592224287	-943.592224287	6216.626280860
0.099780428	689.244708210	490.073347421	3825.185419462	-520.408455395	-520.408455395	5982.233219423
0.422511526	476.555746883	713.889706473	10104.377257266	27.803537338	27.803537338	2449.564499556
0.092108500	740.384130783	712.286354148	1545.156004786	718.186742328	718.186742328	1566.071127151

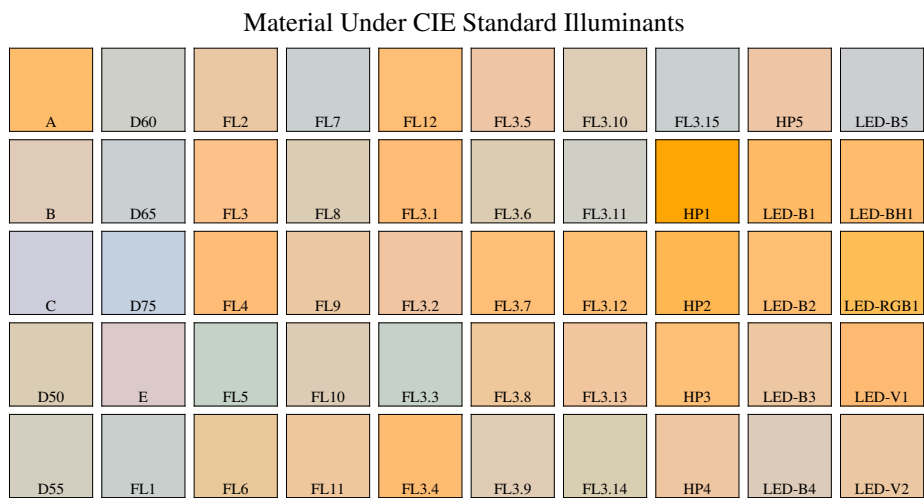
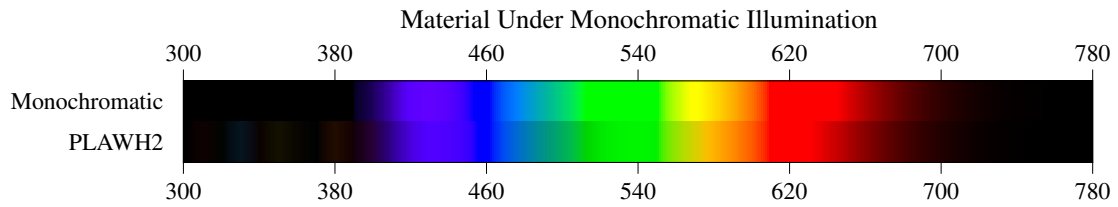
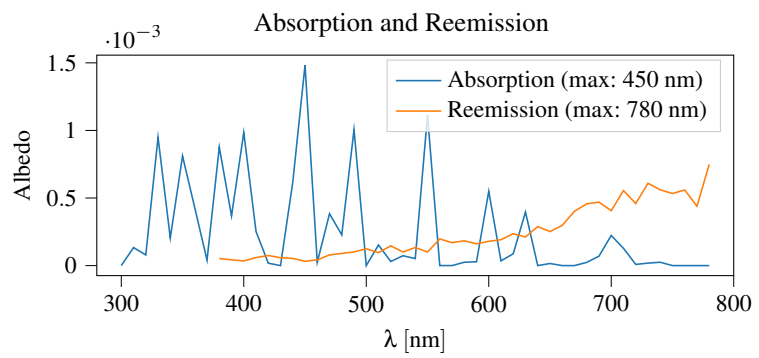
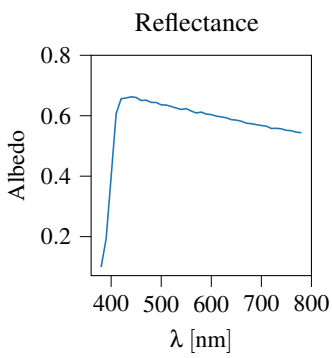
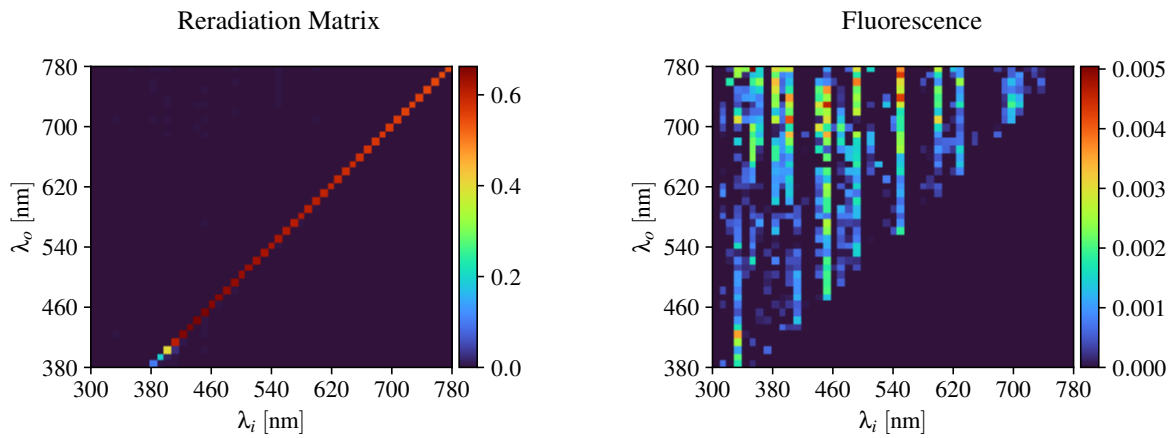
8 Gaussians max

Scaling factor: 84.59859364227759

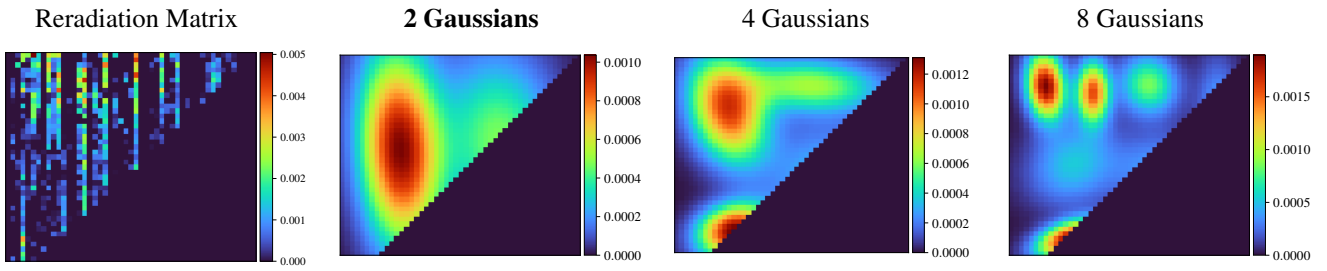
Gaussians:

Weight	Mean		Covariance			
0.072734244	365.427477163	499.236251802	2360.688695165	867.388153626	867.388153626	4630.340149399
0.117685366	492.731944716	424.574412850	1547.997985303	193.376962384	193.376962384	1435.754358438
0.164578855	652.772788966	483.567146747	5454.722579317	-343.930107855	-343.930107855	5267.270341393
0.130552704	496.430949502	566.626527095	1398.492042355	168.315518901	168.315518901	4237.829723445
0.145648077	353.781360921	699.972815582	980.328107980	-245.090818644	-245.090818644	3762.068043925
0.076036588	609.097304954	715.222121721	1046.872482455	125.920855310	125.920855310	2957.846315841
0.101675985	738.611753230	710.816245695	1552.422788290	687.337729189	687.337729189	1669.859409703
0.191088180	494.754456263	719.780891880	1643.498243922	-32.128879321	-32.128879321	2005.213347039

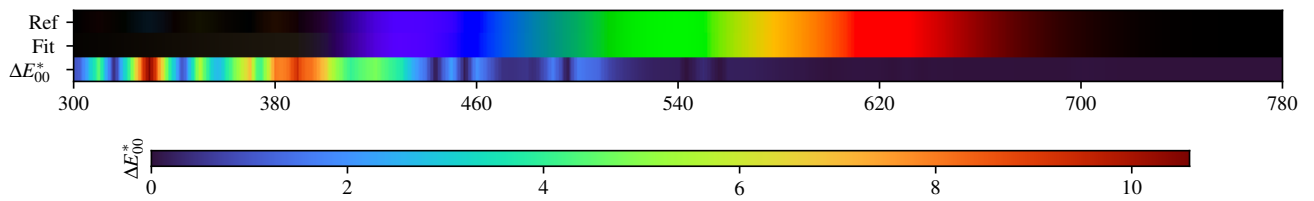
3.140. PLAWH2



PLAWH2 - Weighted Expectation-Maximization - 2 Gaussians



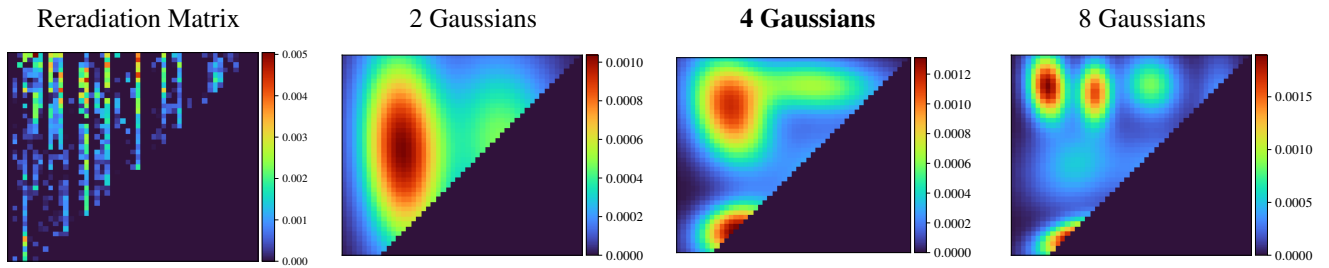
Fitted Material Under Monochromatic Illumination



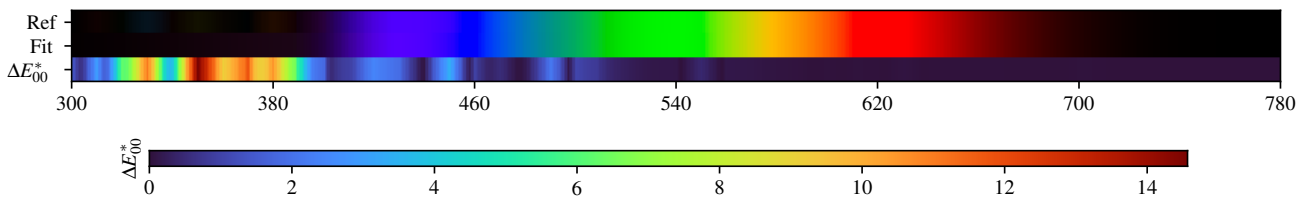
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.34$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.27$	FL12 $\Delta E = 0.03$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.06$	FL3.15 $\Delta E = 0.30$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.15$
B $\Delta E = 0.23$	D65 $\Delta E = 0.40$	FL3 $\Delta E = 0.08$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.07$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.08$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.33$	D75 $\Delta E = 0.40$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.21$	E $\Delta E = 0.43$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.06$	FL3.3 $\Delta E = 0.23$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.09$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.24$	FL6 $\Delta E = 0.11$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.05$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.21$

PLAWH2 - Weighted Expectation-Maximization - 4 Gaussians



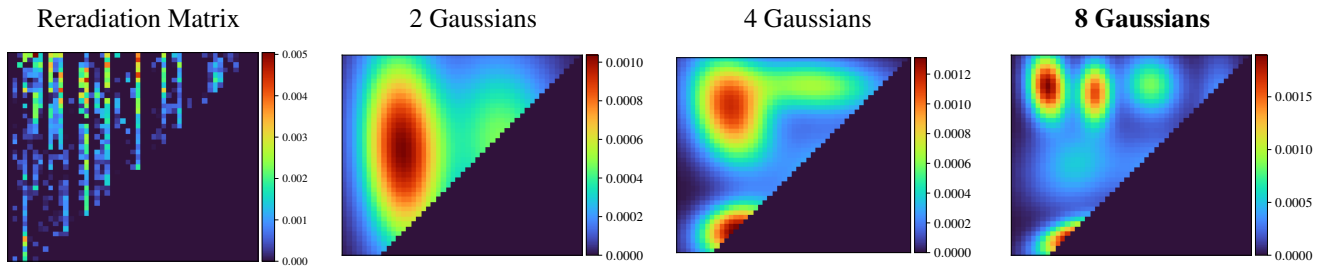
Fitted Material Under Monochromatic Illumination



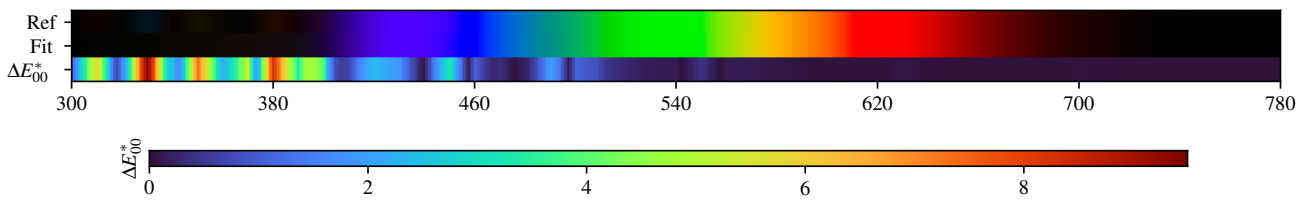
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.08$	D60 $\Delta E = 0.49$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.31$	FL12 $\Delta E = 0.08$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.32$	HP5 $\Delta E = 0.21$	LED-B5 $\Delta E = 0.34$
B $\Delta E = 0.32$	D65 $\Delta E = 0.57$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.16$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.24$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.05$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.40$	D75 $\Delta E = 0.62$	FL4 $\Delta E = 0.07$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.07$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.06$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.01$
D50 $\Delta E = 0.33$	E $\Delta E = 0.50$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.20$	FL3.3 $\Delta E = 0.22$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.15$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.41$	FL1 $\Delta E = 0.26$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.14$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.19$	FL3.14 $\Delta E = 0.10$	HP4 $\Delta E = 0.25$	LED-B4 $\Delta E = 0.26$	LED-V2 $\Delta E = 0.24$

PLAWH2 - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.02$	D60 $\Delta E = 0.08$	FL2 $\Delta E = 0.02$	FL7 $\Delta E = 0.09$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.02$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.15$	HP5 $\Delta E = 0.03$	LED-B5 $\Delta E = 0.13$
B $\Delta E = 0.05$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.03$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.01$	LED-BH1 $\Delta E = 0.01$
C $\Delta E = 0.09$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.02$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.01$	HP2 $\Delta E = 0.01$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.04$
D50 $\Delta E = 0.05$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.06$	FL10 $\Delta E = 0.14$	FL3.3 $\Delta E = 0.03$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.02$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.02$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.05$	LED-B4 $\Delta E = 0.09$	LED-V2 $\Delta E = 0.03$

PLAWH2 - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.099119	0.193126	0.398584	0.607083	0.656291	0.658870	0.662478	0.660424	0.650354	0.651498	0.644069
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.643872	0.636056	0.635425	0.630627	0.625257	0.620752	0.623399	0.615365	0.609151	0.612052	0.605487
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.603754	0.598684	0.596167	0.593138	0.587031	0.585481	0.581812	0.575482	0.573448	0.570549	0.567721
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.565402	0.557837	0.558376	0.556571	0.551654	0.550342	0.545420	0.543923			

2 Gaussians

Scaling factor: 78.20892619619318

Gaussians:

Weight	Mean		Covariance			
0.373472692	618.683928880	608.778507804	6413.557018424	-816.892984162	-816.892984162	15288.400400592
0.626527308	416.266285701	591.197452911	3150.631451112	-929.089776913	-929.089776913	18880.020310996

4 Gaussians

Scaling factor: 76.65964713889701

Gaussians:

Weight	Mean		Covariance			
0.224729982	615.538358458	518.946752615	6862.350369411	-157.053656720	-157.053656720	7399.303982634
0.204961627	420.654401599	420.712037808	2586.537779820	300.862054133	300.862054133	1406.173045831
0.206224946	578.207603324	726.480837316	10350.774817941	-483.220844683	-483.220844683	1510.345428066
0.364083444	406.706163719	673.176192642	3008.231131902	-902.420062720	-902.420062720	5603.362943330

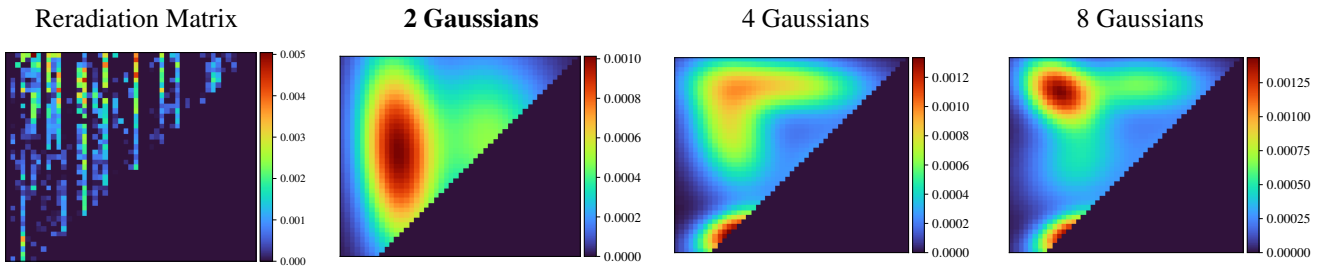
8 Gaussians

Scaling factor: 77.15930635464898

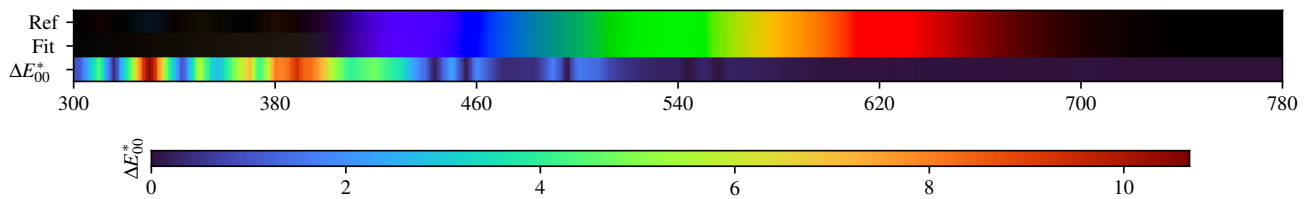
Gaussians:

Weight	Mean		Covariance			
0.081152696	632.795692844	427.051527423	4987.252514180	288.701759906	288.701759906	1273.234179859
0.121606946	464.723305375	707.622359684	506.283604084	-5.221820910	-5.221820910	1825.467414828
0.155344579	425.040676132	561.483021572	3938.881177847	618.050714652	618.050714652	3503.802209482
0.077393749	719.932575352	670.489192575	948.848843825	-175.931273197	-175.931273197	5956.317910538
0.116478085	577.725589137	723.422323789	1592.445580861	-79.629159872	-79.629159872	1779.788520555
0.183355971	369.539612288	720.100163650	700.385148413	-138.787765928	-138.787765928	2056.542952712
0.090864864	592.476066863	555.014485942	3535.877224939	418.598185882	418.598185882	2609.704811223
0.173803110	422.122029320	409.724985686	2195.048738594	520.306493805	520.306493805	676.362977375

PLAWH2 - Weighted variational Bayesian inference - 2 Gaussians



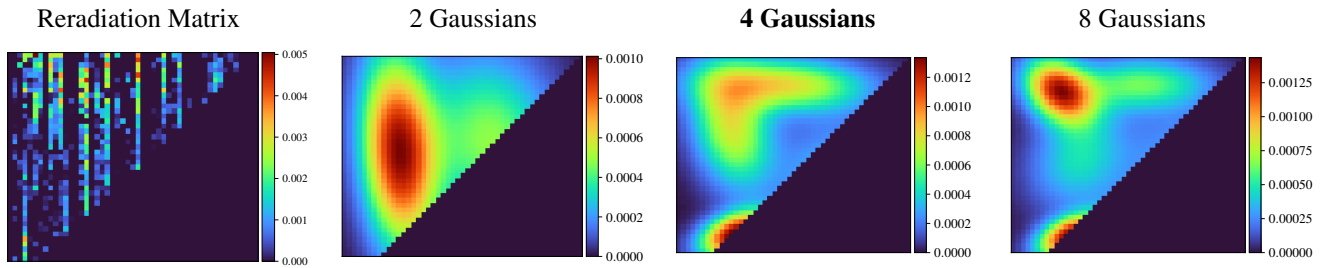
Fitted Material Under Monochromatic Illumination



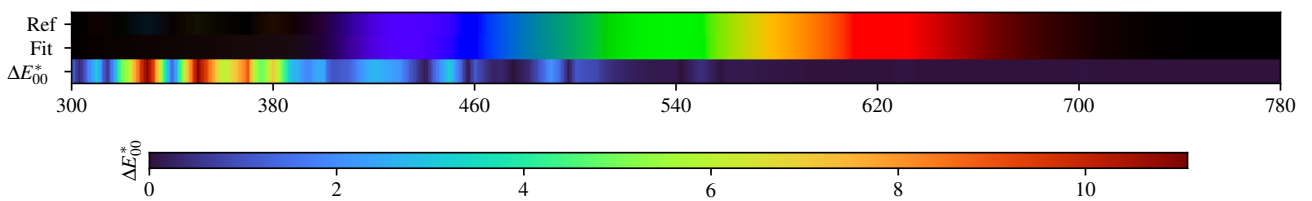
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.09$	D60 $\Delta E = 0.34$	FL2 $\Delta E = 0.12$	FL7 $\Delta E = 0.26$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.12$	FL3.10 $\Delta E = 0.05$	FL3.15 $\Delta E = 0.28$	HP5 $\Delta E = 0.18$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.22$	D65 $\Delta E = 0.39$	FL3 $\Delta E = 0.09$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.09$	HP1 $\Delta E = 0.07$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.32$	D75 $\Delta E = 0.39$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.06$	FL3.12 $\Delta E = 0.07$	HP2 $\Delta E = 0.07$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.08$
D50 $\Delta E = 0.21$	E $\Delta E = 0.41$	FL5 $\Delta E = 0.23$	FL10 $\Delta E = 0.05$	FL3.3 $\Delta E = 0.24$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.12$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.14$
D55 $\Delta E = 0.27$	FL1 $\Delta E = 0.25$	FL6 $\Delta E = 0.12$	FL11 $\Delta E = 0.04$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.07$	FL3.14 $\Delta E = 0.14$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.13$	LED-V2 $\Delta E = 0.20$

PLAWH2 - Weighted variational Bayesian inference - 4 Gaussians



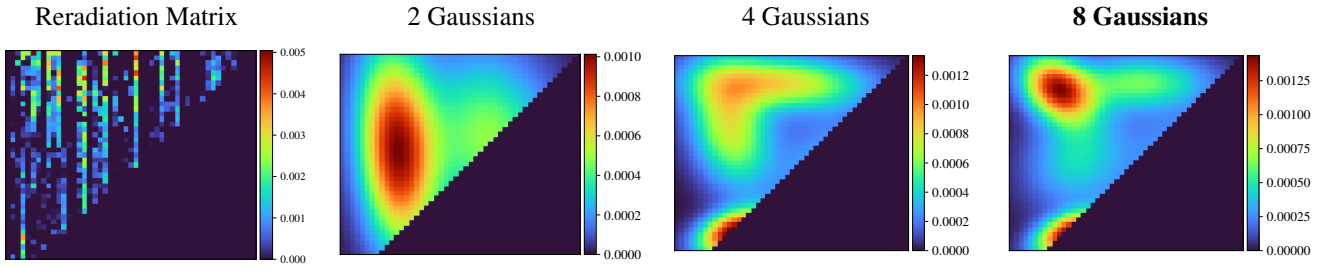
Fitted Material Under Monochromatic Illumination



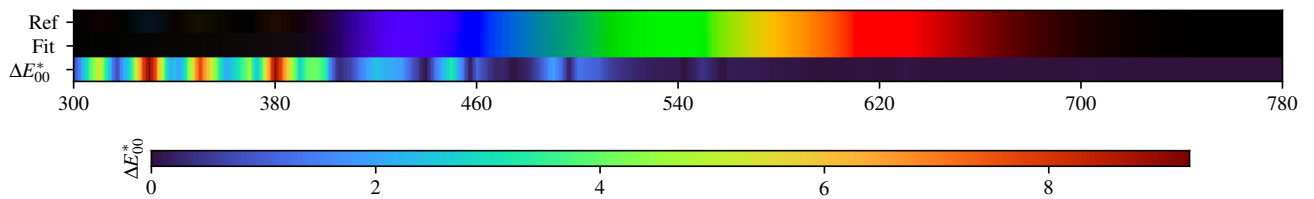
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.22$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.12$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.12$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.20$
B $\Delta E = 0.14$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.06$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.17$	D75 $\Delta E = 0.29$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.05$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.01$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.02$
D50 $\Delta E = 0.15$	E $\Delta E = 0.22$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.10$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.02$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.06$
D55 $\Delta E = 0.19$	FL1 $\Delta E = 0.11$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.12$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.13$	LED-B4 $\Delta E = 0.15$	LED-V2 $\Delta E = 0.12$

PLAWH2 - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.11$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.06$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.10$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.17$
B $\Delta E = 0.09$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.04$	FL8 $\Delta E = 0.04$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.14$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.02$
C $\Delta E = 0.10$	D75 $\Delta E = 0.12$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.01$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.02$
D50 $\Delta E = 0.08$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.07$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.07$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.01$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.08$	LED-V1 $\Delta E = 0.05$
D55 $\Delta E = 0.09$	FL1 $\Delta E = 0.07$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.01$	HP4 $\Delta E = 0.10$	LED-B4 $\Delta E = 0.14$	LED-V2 $\Delta E = 0.08$

PLAWH2 - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.099119	0.193126	0.398584	0.607083	0.656291	0.658870	0.662478	0.660424	0.650354	0.651498	0.644069
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.643872	0.636056	0.635425	0.630627	0.625257	0.620752	0.623399	0.615365	0.609151	0.612052	0.605487
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.603754	0.598684	0.596167	0.593138	0.587031	0.585481	0.581812	0.575482	0.573448	0.570549	0.567721
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.565402	0.557837	0.558376	0.556571	0.551654	0.550342	0.545420	0.543923			

2 Gaussians max

Scaling factor: 77.84339921891926

Gaussians:

Weight	Mean	Covariance				
0.559573584	409.851246356	586.347861045	2826.507846417	-1243.313048896	-1243.313048896	19233.471397371
0.440426416	596.535255361	612.228945123	8622.876842644	-1249.497787963	-1249.497787963	15057.300281615

4 Gaussians max

Scaling factor: 77.78520653996114

Gaussians:

Weight	Mean	Covariance				
0.180143722	423.032780957	412.846251679	2668.347035841	589.479207207	589.479207207	1065.894234367
0.223208638	624.005476752	525.401189648	6238.255577822	190.195517869	190.195517869	8419.072982973
0.306921301	410.900192503	635.595762668	3362.760128606	-1180.035137874	-1180.035137874	7878.340928429
0.289726339	519.991569739	727.634655041	14077.452842808	-422.445385968	-422.445385968	1514.314268840

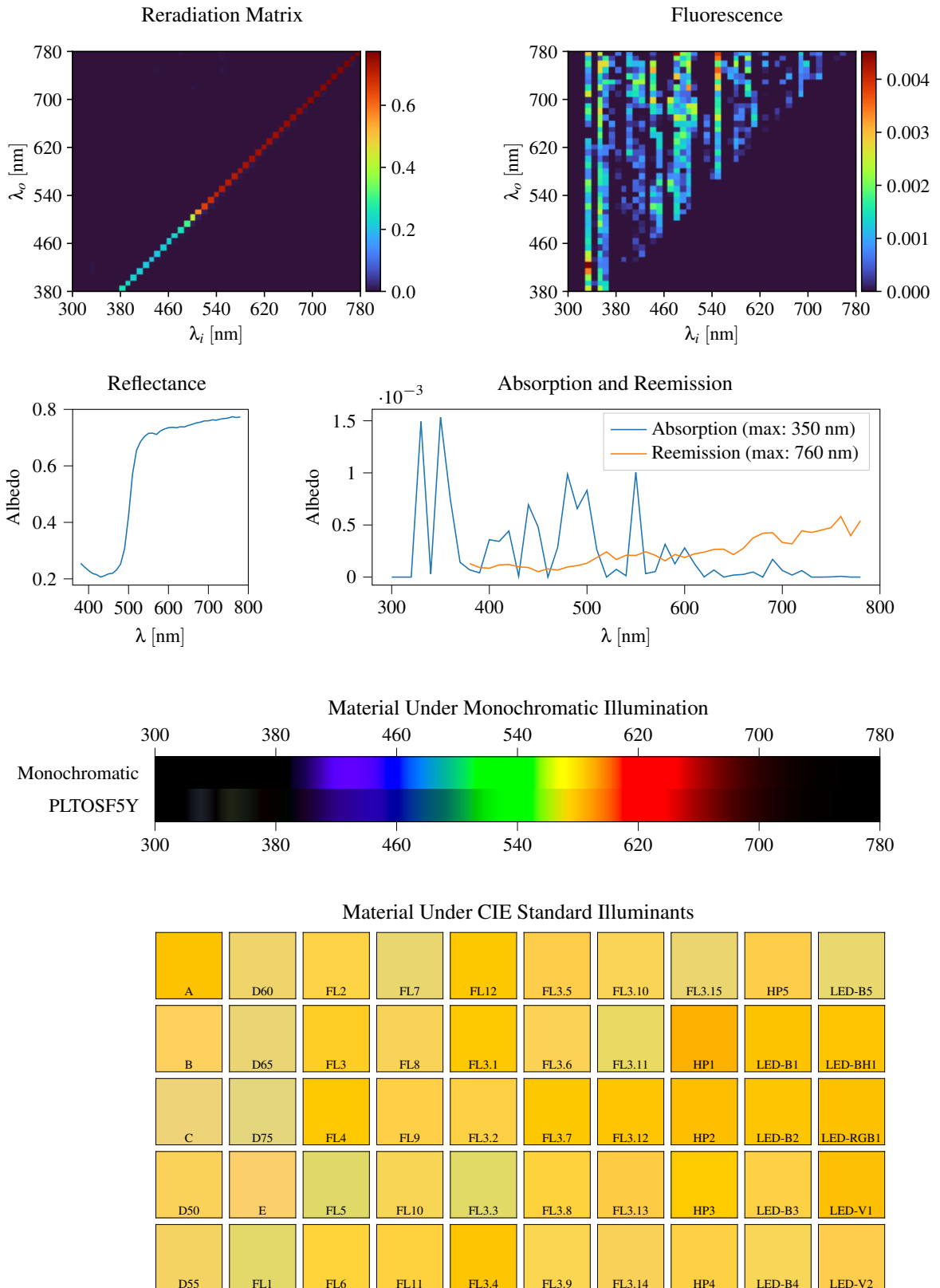
8 Gaussians max

Scaling factor: 76.82228096330063

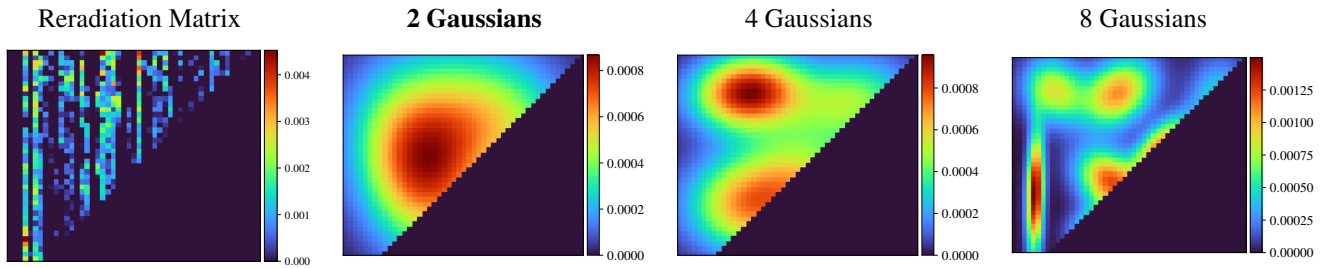
Gaussians:

Weight	Mean	Covariance				
0.162205397	422.406352634	409.974292499	2288.485747541	615.373560932	615.373560932	961.460833497
0.108782425	614.843715002	448.942730961	6201.508470112	-704.283416185	-704.283416185	2792.919538451
0.196481101	436.781871506	572.737481649	5105.930320317	986.237702128	986.237702128	5487.639786092
0.103420017	644.281509724	591.342609053	5794.320089709	598.061425678	598.061425678	3701.604245151
0.226719191	395.463895280	714.153390064	2451.458288592	-701.083956843	-701.083956843	2207.725214510
0.199900690	569.222746131	728.232435468	10184.200054639	16.640713203	16.640713203	1561.125619142

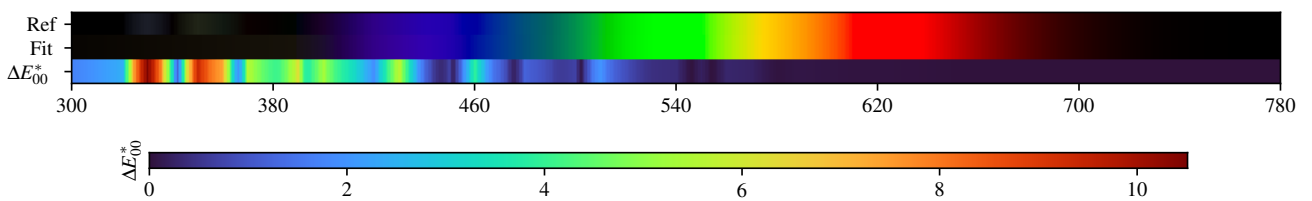
3.141. PLTOSF5Y



PLTOSF5Y - Weighted Expectation-Maximization - 2 Gaussians



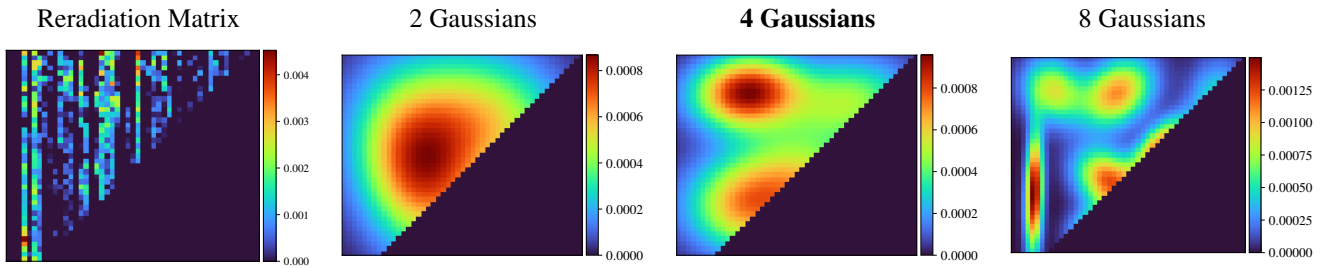
Fitted Material Under Monochromatic Illumination



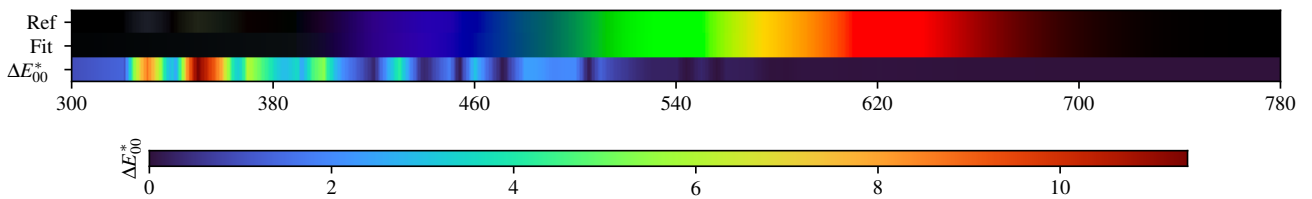
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.11$	D60 $\Delta E = 0.24$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.22$	FL12 $\Delta E = 0.07$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.11$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.17$	LED-B5 $\Delta E = 0.27$
B $\Delta E = 0.19$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.17$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.16$	FL3.11 $\Delta E = 0.16$	HP1 $\Delta E = 0.08$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.12$
C $\Delta E = 0.26$	D75 $\Delta E = 0.30$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.14$	FL3.2 $\Delta E = 0.13$	FL3.7 $\Delta E = 0.08$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.09$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.12$
D50 $\Delta E = 0.20$	E $\Delta E = 0.25$	FL5 $\Delta E = 0.22$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.21$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.14$	LED-B3 $\Delta E = 0.16$	LED-V1 $\Delta E = 0.12$
D55 $\Delta E = 0.22$	FL1 $\Delta E = 0.22$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.10$	FL3.4 $\Delta E = 0.09$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.14$	HP4 $\Delta E = 0.18$	LED-B4 $\Delta E = 0.22$	LED-V2 $\Delta E = 0.16$

PLTOSF5Y - Weighted Expectation-Maximization - 4 Gaussians



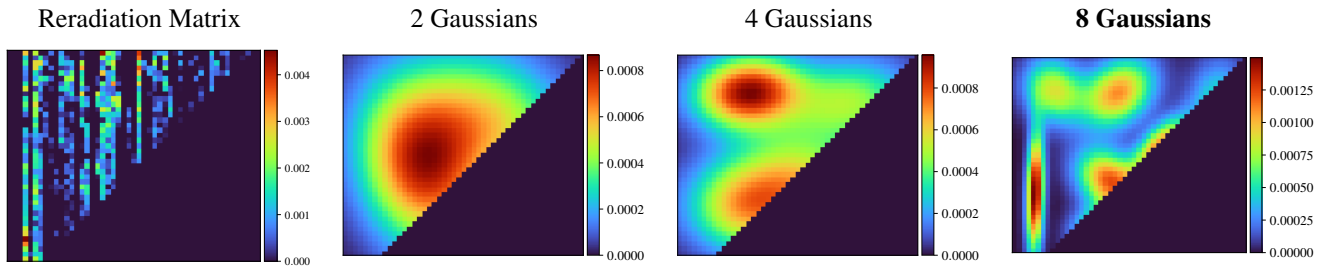
Fitted Material Under Monochromatic Illumination



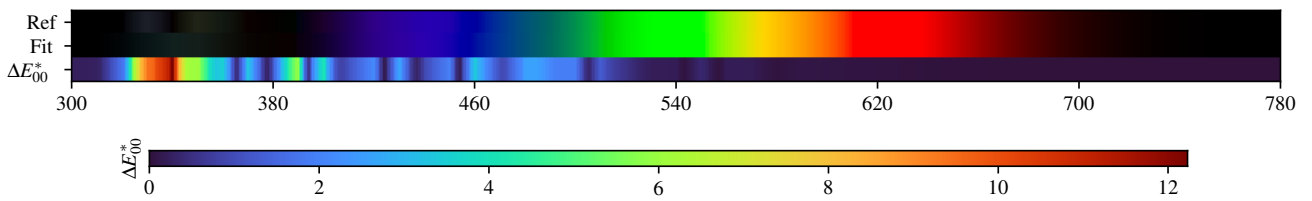
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.05$	$\Delta E = 0.10$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.06$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.09$	$\Delta E = 0.12$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.04$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.08$	$\Delta E = 0.15$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.08$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.05$	$\Delta E = 0.04$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.09$

PLTOSF5Y - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.20$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.16$	FL12 $\Delta E = 0.05$	FL3.5 $\Delta E = 0.13$	FL3.10 $\Delta E = 0.15$	FL3.15 $\Delta E = 0.20$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.11$
B $\Delta E = 0.16$	D65 $\Delta E = 0.21$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.15$	FL3.11 $\Delta E = 0.12$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.20$	D75 $\Delta E = 0.23$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.12$	FL3.2 $\Delta E = 0.08$	FL3.7 $\Delta E = 0.05$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.08$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.17$	E $\Delta E = 0.17$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.13$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.08$	FL3.13 $\Delta E = 0.14$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.09$
D55 $\Delta E = 0.18$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.09$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.10$	FL3.14 $\Delta E = 0.20$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.09$	LED-V2 $\Delta E = 0.15$

PLTOSF5Y - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.255182	0.241726	0.229437	0.219246	0.214975	0.206396	0.211143	0.217785	0.219755	0.231824	0.251968
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.306026	0.422634	0.570741	0.655224	0.685706	0.704127	0.715043	0.715977	0.711131	0.723761	0.730347
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.735230	0.736475	0.734931	0.738319	0.737675	0.743335	0.747335	0.752088	0.754673	0.759129	0.759409
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.762953	0.761577	0.765602	0.767393	0.769492	0.773794	0.771091	0.773268			

2 Gaussians

Scaling factor: 79.35151986664484

Gaussians:

Weight	Mean	Covariance				
0.593950565	451.036262457	555.530933358	7526.623220892	-1967.470394764	-1967.470394764	13938.375547461
0.406049435	596.516637604	650.422361715	11643.200156064	-1706.806434978	-1706.806434978	9720.141878342

4 Gaussians

Scaling factor: 79.06226774340242

Gaussians:

Weight	Mean	Covariance				
0.266687669	432.605870157	475.658529784	6452.286544805	-113.641677121	-113.641677121	4286.891434844
0.196809682	648.041930148	687.031193868	7457.404272715	420.820563469	420.820563469	3752.114299997
0.259270684	561.692962535	523.166884214	8137.093640779	-1592.086574223	-1592.086574223	5545.061255635
0.277231966	438.500627926	708.262673815	5578.495652889	260.439250362	260.439250362	2594.191576641

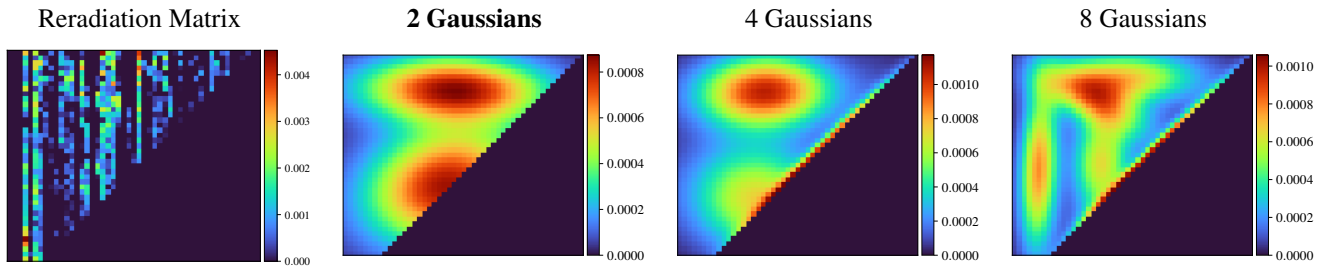
8 Gaussians

Scaling factor: 80.1706396105963

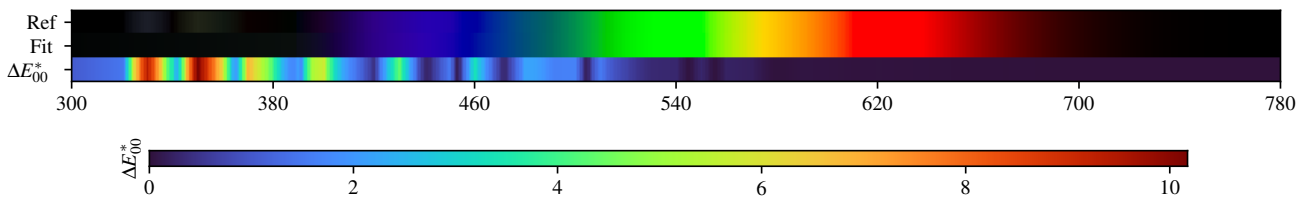
Gaussians:

Weight	Mean	Covariance					
0.122911790	343.437969150	501.108280823	148.660606962	163.106952551	163.106952551	6989.337344996	
0.205854176	516.126628818	709.645476948	2559.386257869	681.352429279	681.352429279	2431.660073803	
0.179628342	498.869500348	525.737236494	2088.653964306	-579.512788654	-579.512788654	1903.912291893	
0.129039905	382.667730160	715.350899036	1782.629691750	-233.779053946	-233.779053946	2080.833038731	
0.096152846	722.764940875	693.346027478	1680.754439258	230.274965443	230.274965443	3640.605742694	
0.086768759	479.120945643	424.446518411	1440.924378643	169.779196215	169.779196215	1088.110123403	
0.073198840	646.698151110	444.317525356	6016.099551030	1165.453025185	1165.453025185	2409.275757715	
0.106445342	603.618614976	597.681430513	1473.153457394	974.392826917	974.392826917	1600.532092684	

PLTOSF5Y - Weighted variational Bayesian inference - 2 Gaussians



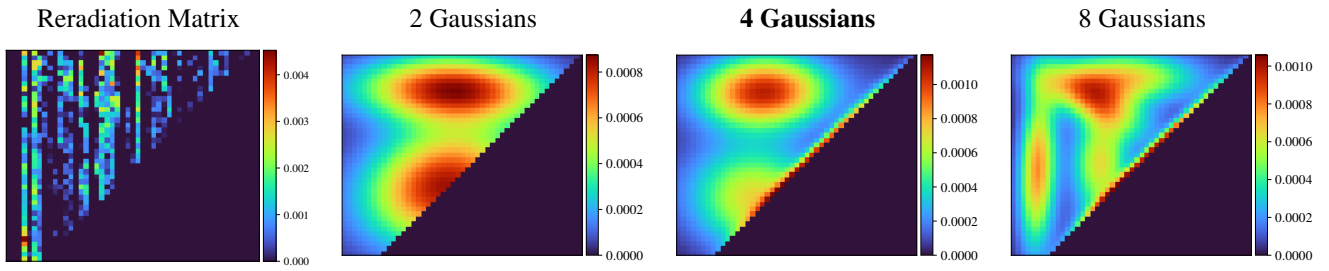
Fitted Material Under Monochromatic Illumination



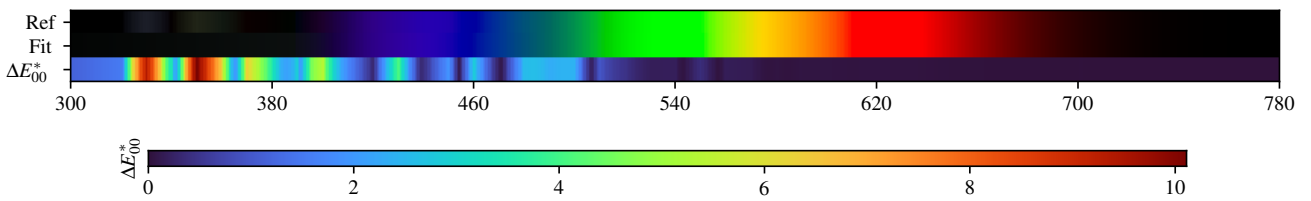
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.12$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.11$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.08$	FL3.10 $\Delta E = 0.09$	FL3.15 $\Delta E = 0.14$	HP5 $\Delta E = 0.09$	LED-B5 $\Delta E = 0.09$
B $\Delta E = 0.11$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.08$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.06$	LED-BH1 $\Delta E = 0.07$
C $\Delta E = 0.15$	D75 $\Delta E = 0.15$	FL4 $\Delta E = 0.05$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.06$	FL3.7 $\Delta E = 0.04$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.06$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.11$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.09$	FL10 $\Delta E = 0.08$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.06$	FL3.13 $\Delta E = 0.08$	HP3 $\Delta E = 0.08$	LED-B3 $\Delta E = 0.07$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.12$	FL1 $\Delta E = 0.10$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.06$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.07$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.11$

PLTOSF5Y - Weighted variational Bayesian inference - 4 Gaussians



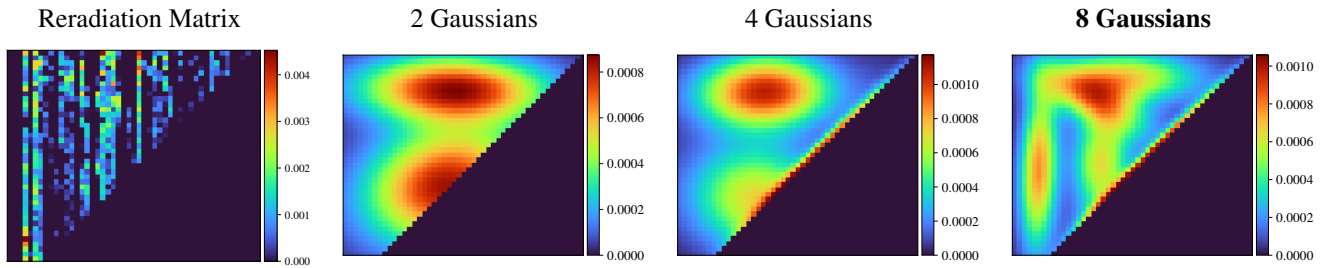
Fitted Material Under Monochromatic Illumination



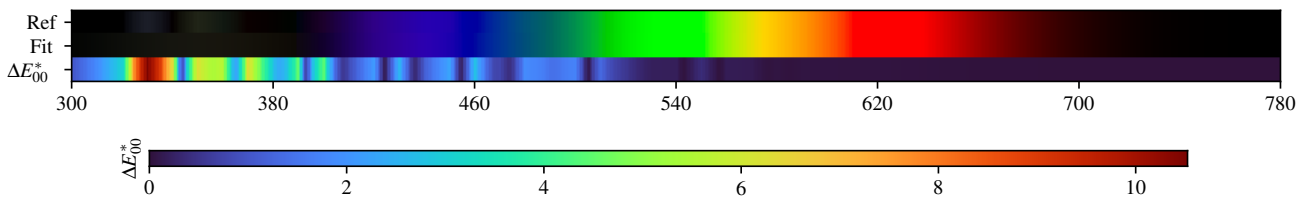
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.15$	FL2 $\Delta E = 0.06$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.07$	FL3.10 $\Delta E = 0.12$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.08$	LED-B5 $\Delta E = 0.08$
B $\Delta E = 0.12$	D65 $\Delta E = 0.16$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.09$	FL3.11 $\Delta E = 0.12$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.05$
C $\Delta E = 0.17$	D75 $\Delta E = 0.19$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.07$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.11$	E $\Delta E = 0.17$	FL5 $\Delta E = 0.12$	FL10 $\Delta E = 0.12$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.07$	FL3.13 $\Delta E = 0.07$	HP3 $\Delta E = 0.07$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.07$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.13$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.08$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.11$	HP4 $\Delta E = 0.09$	LED-B4 $\Delta E = 0.06$	LED-V2 $\Delta E = 0.11$

PLTOSF5Y - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.04$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.04$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.05$	FL3.15 $\Delta E = 0.05$	HP5 $\Delta E = 0.05$	LED-B5 $\Delta E = 0.07$
B $\Delta E = 0.04$	D65 $\Delta E = 0.04$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.03$	FL3.1 $\Delta E = 0.03$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.03$	HP1 $\Delta E = 0.04$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.05$	D75 $\Delta E = 0.04$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.04$	E $\Delta E = 0.07$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.04$	FL3.3 $\Delta E = 0.03$	FL3.8 $\Delta E = 0.03$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.05$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.03$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.03$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.06$	LED-B4 $\Delta E = 0.06$	LED-V2 $\Delta E = 0.03$

PLTOSF5Y - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.255182	0.241726	0.229437	0.219246	0.214975	0.206396	0.211143	0.217785	0.219755	0.231824	0.251968
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.306026	0.422634	0.570741	0.655224	0.685706	0.704127	0.715043	0.715977	0.711131	0.723761	0.730347
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.735230	0.736475	0.734931	0.738319	0.737675	0.743335	0.747335	0.752088	0.754673	0.759129	0.759409
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.762953	0.761577	0.765602	0.767393	0.769492	0.773794	0.771091	0.773268			

2 Gaussians max

Scaling factor: 79.58489299224846

Gaussians:

Weight	Mean	Covariance				
0.608670105	504.352932658	516.612107879	12617.928766608	1429.266448903	1429.266448903	6960.932797751
0.391329895	519.211894210	714.132229783	16727.707089485	-269.299509567	-269.299509567	2179.189226089

4 Gaussians max

Scaling factor: 86.85290237963775

Gaussians:

Weight	Mean	Covariance				
0.375789933	460.149741406	489.765143442	9079.139358316	-584.666630095	-584.666630095	5634.332456596
0.077174794	716.950066801	585.066013740	3010.856358523	451.099732024	451.099732024	13320.392492810
0.188889137	596.811608275	585.782273237	7834.165468130	7621.732282826	7621.732282826	7744.668308110
0.358146136	472.621080398	708.848032097	8401.150520257	205.547227636	205.547227636	2583.728559501

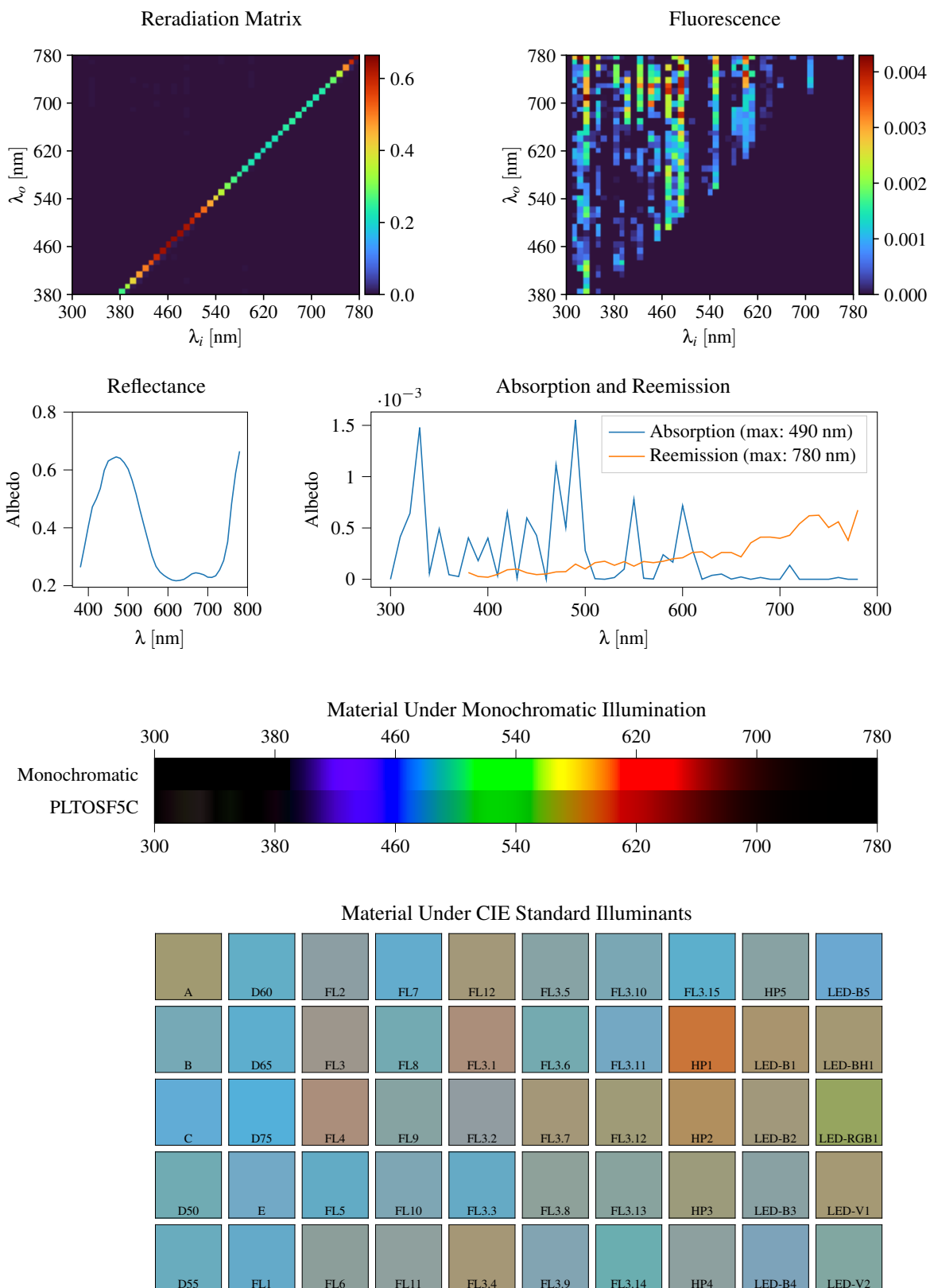
8 Gaussians max

Scaling factor: 84.09251032968086

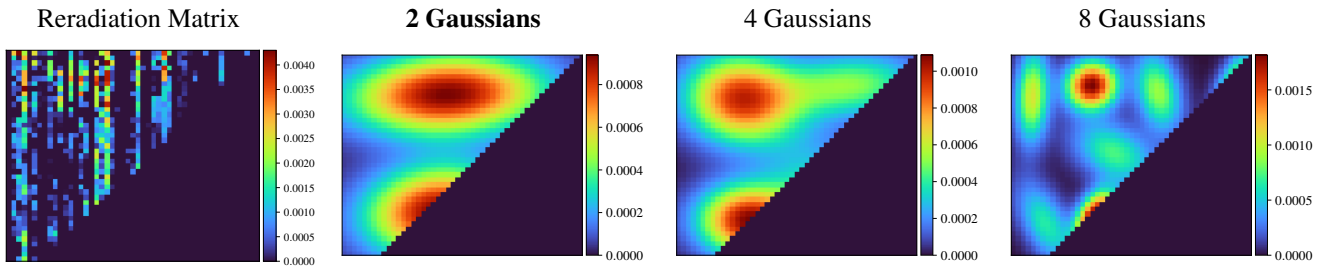
Gaussians:

Weight	Mean	Covariance				
0.169540294	349.102066610	550.975020094	702.124546282	465.787494687	465.787494687	12656.212742910
0.204077816	586.309407831	574.943585522	7914.026468199	7740.106106665	7740.106106665	7875.534053217
0.108751547	525.744585128	430.317842959	3658.430360754	396.227487053	396.227487053	1875.039763374
0.039486714	666.001204126	467.551840615	5725.998764479	-2112.208659023	-2112.208659023	3618.422539908
0.123915839	475.054060334	562.152137812	1528.684720896	67.931561476	67.931561476	4570.533031903
0.051721660	716.520797469	616.338257228	3832.477535841	819.455551155	819.455551155	6612.158714307
0.128894114	467.469158574	688.486607542	5762.218593646	-2512.836586540	-2512.836586540	2555.279562455
0.173612017	526.464540132	737.065768453	9320.218469685	111.339783122	111.339783122	1324.497753883

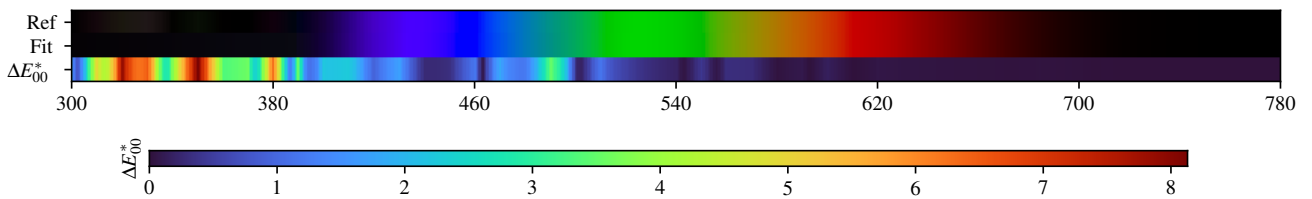
3.142. PLTOSF5C



PLTOSF5C - Weighted Expectation-Maximization - 2 Gaussians



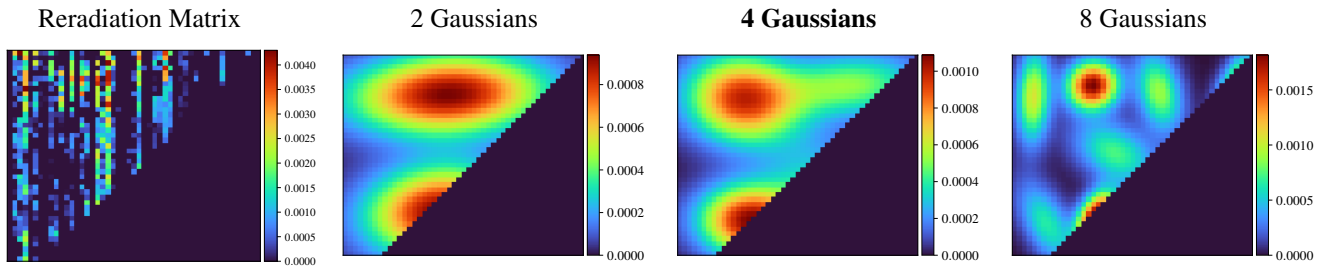
Fitted Material Under Monochromatic Illumination



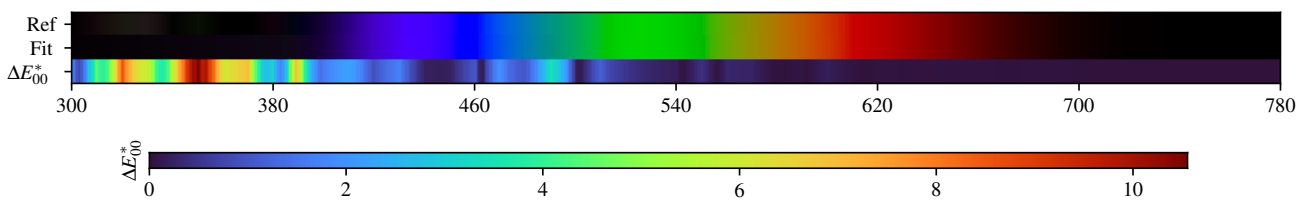
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.16$	FL2 $\Delta E = 0.15$	FL7 $\Delta E = 0.14$	FL12 $\Delta E = 0.19$	FL3.5 $\Delta E = 0.15$	FL3.10 $\Delta E = 0.29$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.11$
B $\Delta E = 0.16$	D65 $\Delta E = 0.17$	FL3 $\Delta E = 0.12$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.08$	FL3.6 $\Delta E = 0.14$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.08$
C $\Delta E = 0.17$	D75 $\Delta E = 0.18$	FL4 $\Delta E = 0.10$	FL9 $\Delta E = 0.16$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.15$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.12$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.17$	E $\Delta E = 0.16$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.27$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.28$	FL3.13 $\Delta E = 0.21$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.09$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.17$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.15$	FL11 $\Delta E = 0.33$	FL3.4 $\Delta E = 0.06$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.21$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.08$	LED-V2 $\Delta E = 0.21$

PLTOSF5C - Weighted Expectation-Maximization - 4 Gaussians



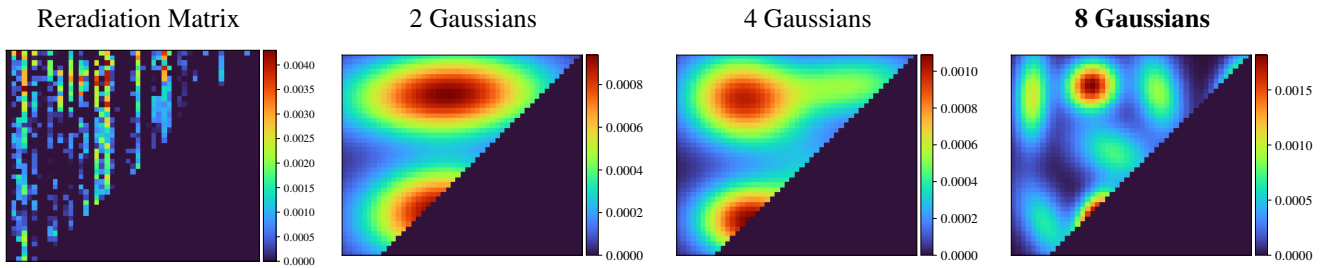
Fitted Material Under Monochromatic Illumination



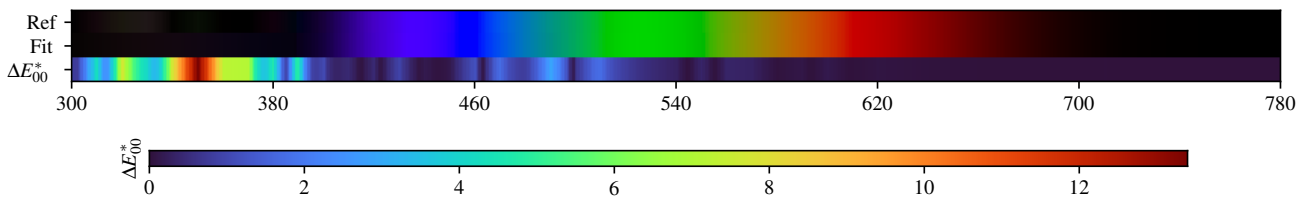
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.12$	D60 $\Delta E = 0.27$	FL2 $\Delta E = 0.23$	FL7 $\Delta E = 0.18$	FL12 $\Delta E = 0.22$	FL3.5 $\Delta E = 0.21$	FL3.10 $\Delta E = 0.34$	FL3.15 $\Delta E = 0.22$	HP5 $\Delta E = 0.25$	LED-B5 $\Delta E = 0.06$
B $\Delta E = 0.26$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.19$	FL8 $\Delta E = 0.22$	FL3.1 $\Delta E = 0.10$	FL3.6 $\Delta E = 0.20$	FL3.11 $\Delta E = 0.26$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.07$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.19$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.14$	FL9 $\Delta E = 0.22$	FL3.2 $\Delta E = 0.19$	FL3.7 $\Delta E = 0.18$	FL3.12 $\Delta E = 0.11$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.07$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.28$	E $\Delta E = 0.29$	FL5 $\Delta E = 0.19$	FL10 $\Delta E = 0.32$	FL3.3 $\Delta E = 0.17$	FL3.8 $\Delta E = 0.32$	FL3.13 $\Delta E = 0.24$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.13$	LED-V1 $\Delta E = 0.19$
D55 $\Delta E = 0.28$	FL1 $\Delta E = 0.19$	FL6 $\Delta E = 0.22$	FL11 $\Delta E = 0.38$	FL3.4 $\Delta E = 0.07$	FL3.9 $\Delta E = 0.29$	FL3.14 $\Delta E = 0.26$	HP4 $\Delta E = 0.27$	LED-B4 $\Delta E = 0.09$	LED-V2 $\Delta E = 0.31$

PLTOSF5C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.11$	$\Delta E = 0.23$	$\Delta E = 0.13$	$\Delta E = 0.15$	$\Delta E = 0.12$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.18$	$\Delta E = 0.05$	$\Delta E = 0.11$	$\Delta E = 0.18$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.13$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.12$	$\Delta E = 0.07$	$\Delta E = 0.15$	$\Delta E = 0.13$	$\Delta E = 0.18$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.12$	$\Delta E = 0.23$	$\Delta E = 0.10$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.26$	$\Delta E = 0.12$	$\Delta E = 0.20$	$\Delta E = 0.11$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.13$

PLTOSF5C - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.263499	0.332858	0.405456	0.471764	0.499553	0.535704	0.598595	0.630902	0.638810	0.645043	0.640211
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.625174	0.603201	0.564442	0.516399	0.460000	0.407163	0.355304	0.303113	0.266602	0.247369	0.235624
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.226566	0.219680	0.216936	0.218297	0.221755	0.230615	0.240758	0.244506	0.241933	0.237620	0.229389
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.228487	0.234151	0.254976	0.286794	0.351066	0.484118	0.588878	0.664502			

2 Gaussians

Scaling factor: 83.149392751281

Gaussians:

Weight	Mean		Covariance			
0.454100603	492.171692586	464.583443157	10379.755448064	577.652983243	577.652983243	3933.044395244
0.545899397	507.831048439	703.376892198	18499.680360214	705.298645636	705.298645636	3223.252705500

4 Gaussians

Scaling factor: 80.13133028491745

Gaussians:

Weight	Mean		Covariance			
0.285989474	442.917383573	446.161531127	4881.154564628	-63.334065198	-63.334065198	2428.778226729
0.173940968	593.345051297	503.728566753	6243.392067312	-1124.032592289	-1124.032592289	6055.536922751
0.183160827	647.426843250	721.755902106	10233.414508100	598.744160931	598.744160931	2069.184256147
0.356908731	426.608132769	693.529402287	6070.362446957	-312.448660410	-312.448660410	3815.735141766

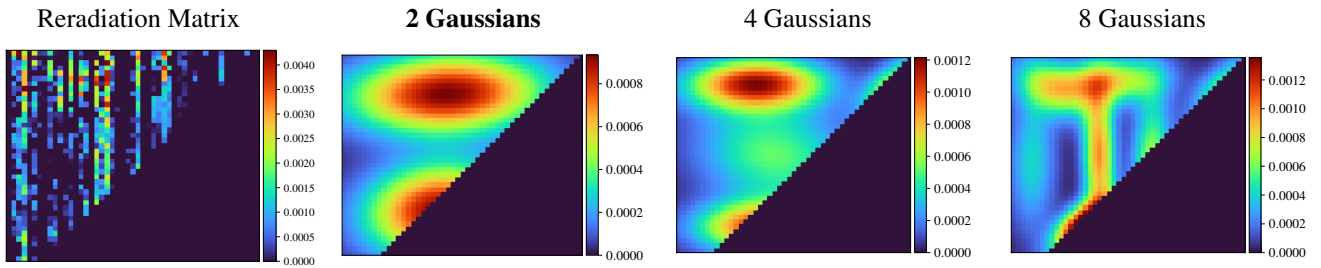
8 Gaussians

Scaling factor: 80.90670012075273

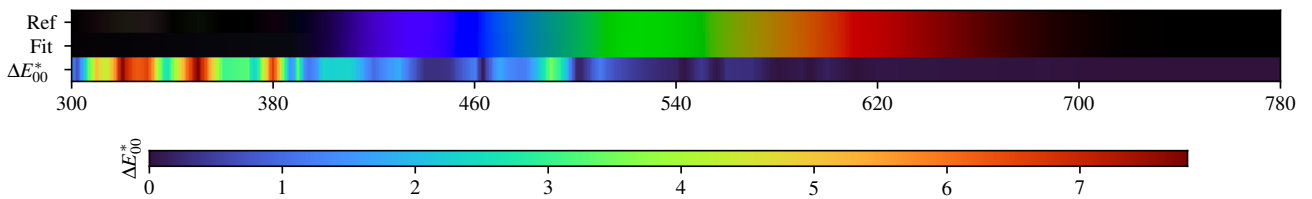
Gaussians:

Weight	Mean		Covariance			
0.095745286	364.293255700	441.184970124	1563.458580787	-1170.587516167	-1170.587516167	3202.072657194
0.163036431	467.213715274	446.399415375	698.242381921	330.602216262	330.602216262	1395.113884100
0.119430298	592.874375940	708.176298079	1073.445952493	-500.649988969	-500.649988969	3034.590537453
0.123362682	338.144310438	699.109746491	558.793816992	144.326318367	144.326318367	4118.248198513
0.079615144	749.480882220	725.619507470	820.365106245	673.448801658	673.448801658	1875.210696747
0.128620340	502.617997032	585.499504617	3146.912187618	-850.174150657	-850.174150657	1882.803371315
0.124151004	618.000049765	452.815475552	4551.164689553	960.175394171	960.175394171	3437.733581741
0.166038814	458.351269095	721.537262012	1232.331351764	49.731296528	49.731296528	1129.482960209

PLTOSF5C - Weighted variational Bayesian inference - 2 Gaussians



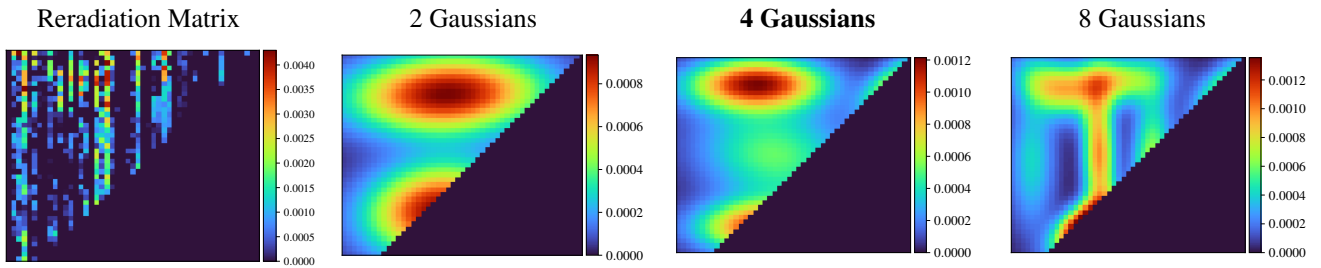
Fitted Material Under Monochromatic Illumination



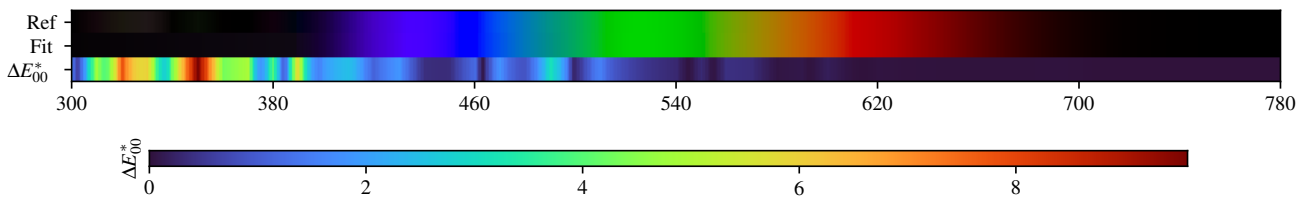
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.07$	D60 $\Delta E = 0.17$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.15$	FL12 $\Delta E = 0.18$	FL3.5 $\Delta E = 0.14$	FL3.10 $\Delta E = 0.28$	FL3.15 $\Delta E = 0.17$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.14$
B $\Delta E = 0.16$	D65 $\Delta E = 0.17$	FL3 $\Delta E = 0.10$	FL8 $\Delta E = 0.15$	FL3.1 $\Delta E = 0.06$	FL3.6 $\Delta E = 0.14$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.06$
C $\Delta E = 0.19$	D75 $\Delta E = 0.19$	FL4 $\Delta E = 0.08$	FL9 $\Delta E = 0.15$	FL3.2 $\Delta E = 0.11$	FL3.7 $\Delta E = 0.15$	FL3.12 $\Delta E = 0.08$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.17$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.26$	FL3.3 $\Delta E = 0.12$	FL3.8 $\Delta E = 0.27$	FL3.13 $\Delta E = 0.20$	HP3 $\Delta E = 0.10$	LED-B3 $\Delta E = 0.10$	LED-V1 $\Delta E = 0.11$
D55 $\Delta E = 0.16$	FL1 $\Delta E = 0.14$	FL6 $\Delta E = 0.14$	FL11 $\Delta E = 0.32$	FL3.4 $\Delta E = 0.05$	FL3.9 $\Delta E = 0.24$	FL3.14 $\Delta E = 0.21$	HP4 $\Delta E = 0.16$	LED-B4 $\Delta E = 0.11$	LED-V2 $\Delta E = 0.21$

PLTOSF5C - Weighted variational Bayesian inference - 4 Gaussians



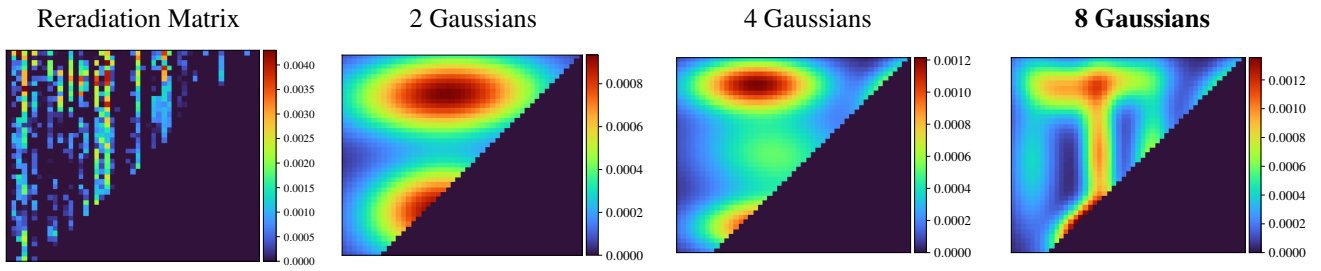
Fitted Material Under Monochromatic Illumination



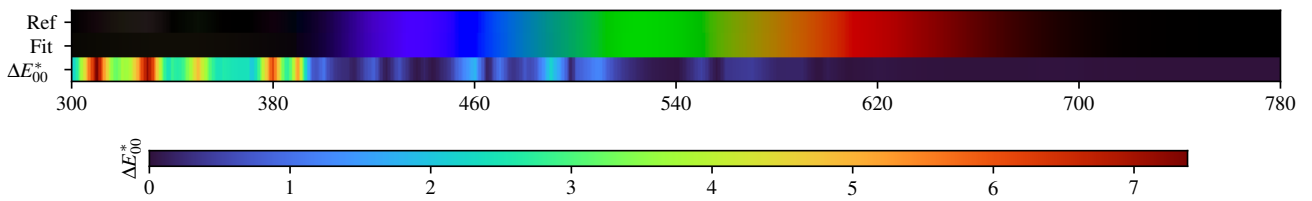
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.13$	FL2 $\Delta E = 0.14$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.13$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.20$	FL3.15 $\Delta E = 0.09$	HP5 $\Delta E = 0.12$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.13$	D65 $\Delta E = 0.13$	FL3 $\Delta E = 0.15$	FL8 $\Delta E = 0.10$	FL3.1 $\Delta E = 0.09$	FL3.6 $\Delta E = 0.08$	FL3.11 $\Delta E = 0.14$	HP1 $\Delta E = 0.05$	LED-B1 $\Delta E = 0.08$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.10$	D75 $\Delta E = 0.13$	FL4 $\Delta E = 0.11$	FL9 $\Delta E = 0.10$	FL3.2 $\Delta E = 0.12$	FL3.7 $\Delta E = 0.11$	FL3.12 $\Delta E = 0.06$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.15$
D50 $\Delta E = 0.13$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.08$	FL3.8 $\Delta E = 0.18$	FL3.13 $\Delta E = 0.10$	HP3 $\Delta E = 0.09$	LED-B3 $\Delta E = 0.10$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.13$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.13$	FL11 $\Delta E = 0.23$	FL3.4 $\Delta E = 0.11$	FL3.9 $\Delta E = 0.17$	FL3.14 $\Delta E = 0.12$	HP4 $\Delta E = 0.14$	LED-B4 $\Delta E = 0.12$	LED-V2 $\Delta E = 0.14$

PLTOSF5C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.11$	D60 $\Delta E = 0.10$	FL2 $\Delta E = 0.18$	FL7 $\Delta E = 0.08$	FL12 $\Delta E = 0.15$	FL3.5 $\Delta E = 0.09$	FL3.10 $\Delta E = 0.17$	FL3.15 $\Delta E = 0.07$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.11$
B $\Delta E = 0.12$	D65 $\Delta E = 0.09$	FL3 $\Delta E = 0.24$	FL8 $\Delta E = 0.09$	FL3.1 $\Delta E = 0.17$	FL3.6 $\Delta E = 0.07$	FL3.11 $\Delta E = 0.14$	HP1 $\Delta E = 0.11$	LED-B1 $\Delta E = 0.13$	LED-BH1 $\Delta E = 0.15$
C $\Delta E = 0.09$	D75 $\Delta E = 0.09$	FL4 $\Delta E = 0.19$	FL9 $\Delta E = 0.11$	FL3.2 $\Delta E = 0.17$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.10$
D50 $\Delta E = 0.10$	E $\Delta E = 0.13$	FL5 $\Delta E = 0.10$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.09$	FL3.8 $\Delta E = 0.20$	FL3.13 $\Delta E = 0.06$	HP3 $\Delta E = 0.11$	LED-B3 $\Delta E = 0.11$	LED-V1 $\Delta E = 0.15$
D55 $\Delta E = 0.10$	FL1 $\Delta E = 0.09$	FL6 $\Delta E = 0.17$	FL11 $\Delta E = 0.25$	FL3.4 $\Delta E = 0.14$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.21$	LED-B4 $\Delta E = 0.12$	LED-V2 $\Delta E = 0.15$

PLTOSF5C - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.263499	0.332858	0.405456	0.471764	0.499553	0.535704	0.598595	0.630902	0.638810	0.645043	0.640211
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.625174	0.603201	0.564442	0.516399	0.460000	0.407163	0.355304	0.303113	0.266602	0.247369	0.235624
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.226566	0.219680	0.216936	0.218297	0.221755	0.230615	0.240758	0.244506	0.241933	0.237620	0.229389
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.228487	0.234151	0.254976	0.286794	0.351066	0.484118	0.588878	0.664502			

2 Gaussians max

Scaling factor: 83.04345832293764

Gaussians:

Weight	Mean		Covariance			
0.462019475	492.471359972	466.917528643	10406.859230363	600.975302287	600.975302287	4193.707476123
0.537980525	507.917729744	704.602843801	18551.553795949	697.213056783	697.213056783	3137.720007776

4 Gaussians max

Scaling factor: 83.54643962629916

Gaussians:

Weight	Mean		Covariance			
0.284470339	480.663255852	428.777916557	8940.217023596	82.234874544	82.234874544	1383.893442263
0.330340247	498.232253003	580.999821865	12633.764700008	-1122.218090246	-1122.218090246	5714.827570559
0.076342833	743.590850840	725.601640973	2196.851299374	1346.902449415	1346.902449415	2071.402176569
0.308846581	462.317865129	729.185136984	9375.122122463	66.960890039	66.960890039	1383.597377286

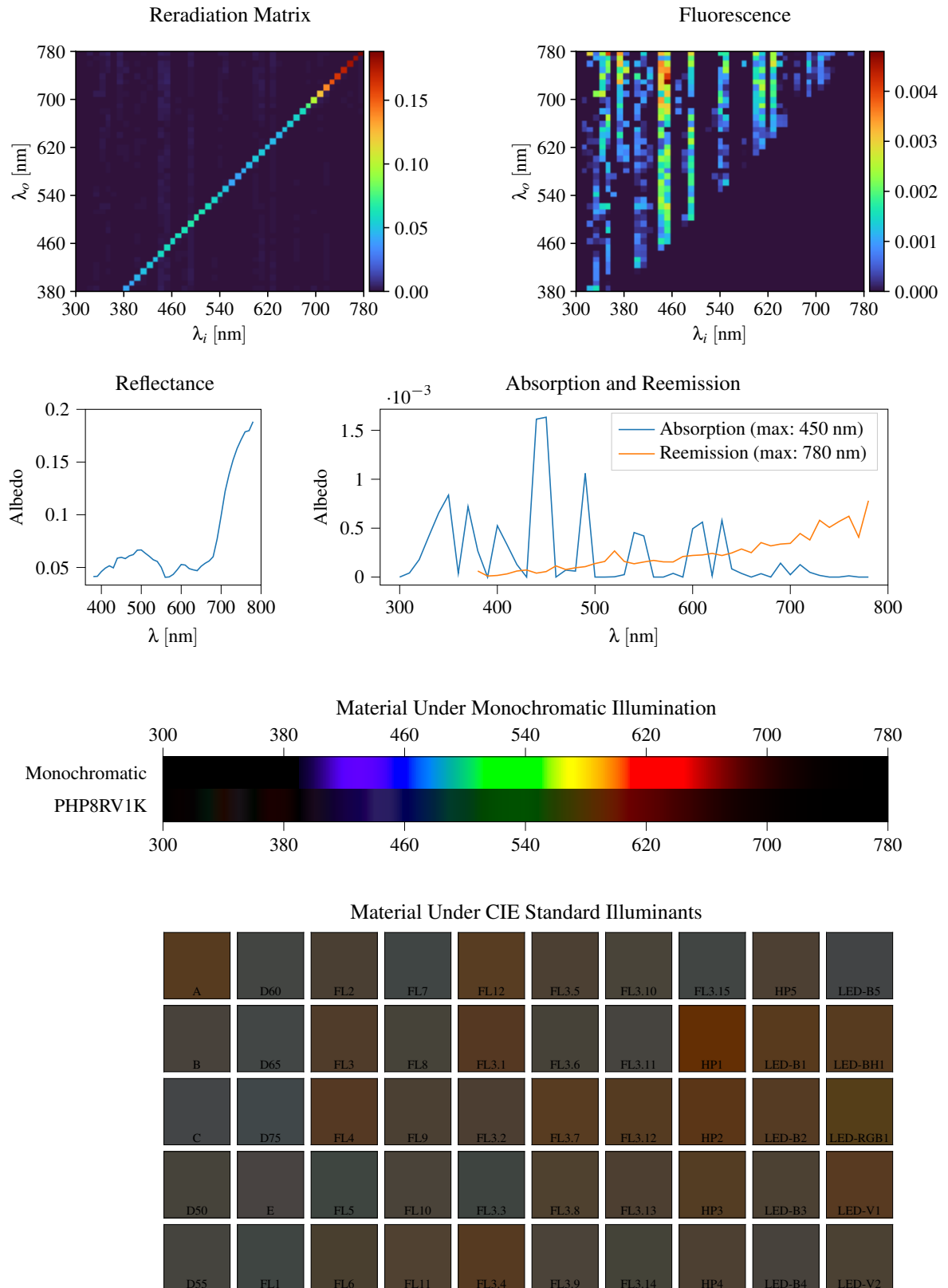
8 Gaussians max

Scaling factor: 83.9617432239227

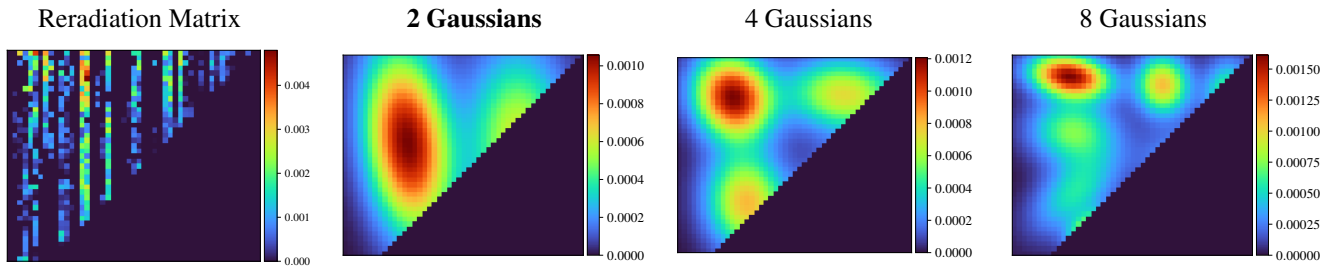
Gaussians:

Weight	Mean		Covariance			
0.114007411	339.159127971	568.565971488	1219.684517022	131.523486648	131.523486648	10990.530901933
0.168998515	448.525196068	430.735985694	1725.671040220	871.966720900	871.966720900	1437.652772632
0.154450295	478.698070365	578.590568183	510.093529849	-122.585469526	-122.585469526	8613.952123368
0.160682120	587.431148051	548.491667772	787.384427365	343.182130758	343.182130758	12787.199069274
0.050953878	674.198686028	477.823328355	4894.183270152	332.408835290	332.408835290	5678.782845124
0.084650427	738.939160178	718.559970074	2336.201231313	1558.196351397	1558.196351397	2487.929002899
0.091872210	381.933322514	719.724514126	3385.487224761	-1436.462601294	-1436.462601294	2259.744227801
0.174385145	493.240237642	733.616977049	6627.288953160	494.247911162	494.247911162	1200.202301992

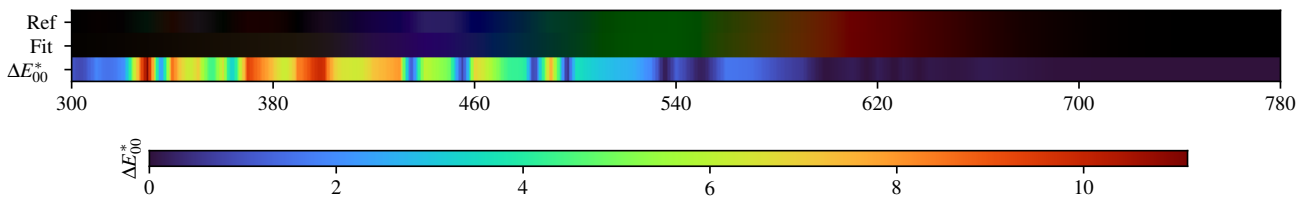
3.143. PHP8RV1K



PHP8RV1K - Weighted Expectation-Maximization - 2 Gaussians



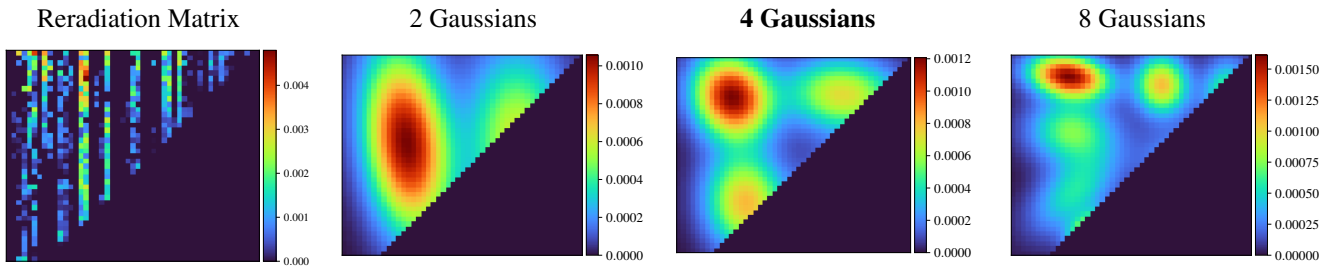
Fitted Material Under Monochromatic Illumination



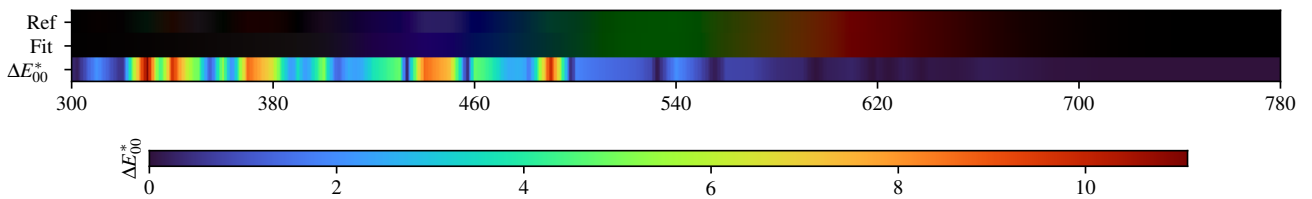
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.55$	$\Delta E = 1.97$	$\Delta E = 1.10$	$\Delta E = 1.69$	$\Delta E = 0.27$	$\Delta E = 0.86$	$\Delta E = 0.38$	$\Delta E = 1.67$	$\Delta E = 1.10$	$\Delta E = 1.61$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.40$	$\Delta E = 2.14$	$\Delta E = 0.79$	$\Delta E = 1.26$	$\Delta E = 0.51$	$\Delta E = 1.18$	$\Delta E = 0.17$	$\Delta E = 0.40$	$\Delta E = 0.45$	$\Delta E = 0.46$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.07$	$\Delta E = 2.27$	$\Delta E = 0.59$	$\Delta E = 0.94$	$\Delta E = 0.86$	$\Delta E = 0.20$	$\Delta E = 0.40$	$\Delta E = 0.44$	$\Delta E = 0.54$	$\Delta E = 0.47$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.51$	$\Delta E = 2.09$	$\Delta E = 1.64$	$\Delta E = 0.32$	$\Delta E = 1.61$	$\Delta E = 0.16$	$\Delta E = 0.68$	$\Delta E = 0.52$	$\Delta E = 1.06$	$\Delta E = 0.76$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.76$	$\Delta E = 1.67$	$\Delta E = 1.12$	$\Delta E = 0.30$	$\Delta E = 0.43$	$\Delta E = 0.12$	$\Delta E = 1.00$	$\Delta E = 1.08$	$\Delta E = 1.36$	$\Delta E = 1.29$

PHP8RV1K - Weighted Expectation-Maximization - 4 Gaussians



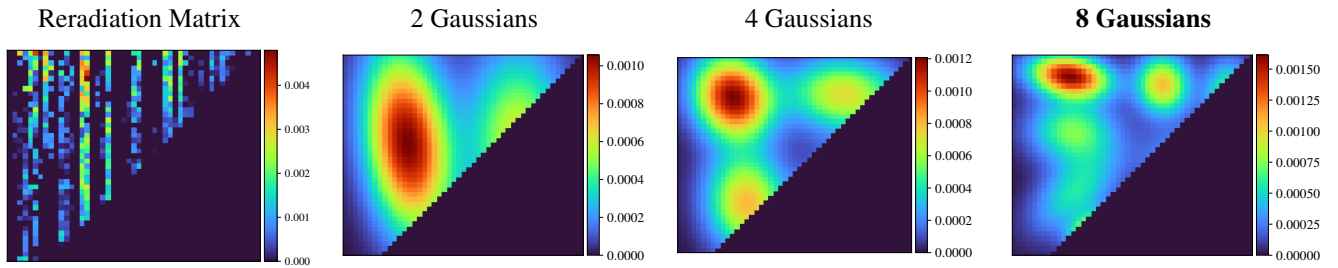
Fitted Material Under Monochromatic Illumination



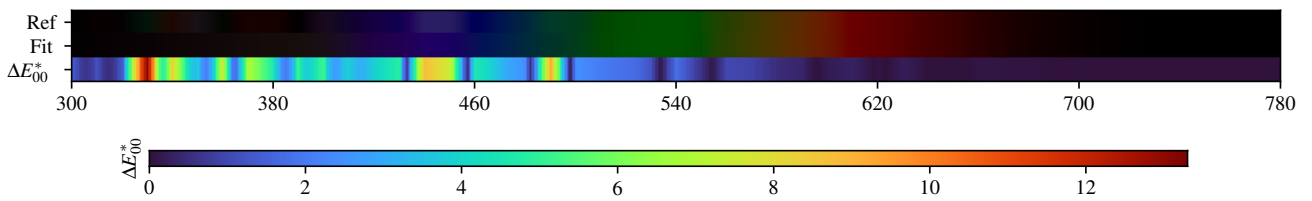
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.21$	$\Delta E = 0.78$	$\Delta E = 0.56$	$\Delta E = 0.80$	$\Delta E = 0.80$	$\Delta E = 0.29$	$\Delta E = 1.38$	$\Delta E = 0.83$	$\Delta E = 0.38$	$\Delta E = 1.22$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.56$	$\Delta E = 0.84$	$\Delta E = 0.49$	$\Delta E = 0.53$	$\Delta E = 0.18$	$\Delta E = 0.39$	$\Delta E = 1.76$	$\Delta E = 0.08$	$\Delta E = 0.26$	$\Delta E = 0.35$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.77$	$\Delta E = 0.84$	$\Delta E = 0.43$	$\Delta E = 0.45$	$\Delta E = 0.28$	$\Delta E = 0.74$	$\Delta E = 0.18$	$\Delta E = 0.19$	$\Delta E = 0.33$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.58$	$\Delta E = 0.83$	$\Delta E = 0.72$	$\Delta E = 1.49$	$\Delta E = 0.48$	$\Delta E = 1.13$	$\Delta E = 0.32$	$\Delta E = 0.37$	$\Delta E = 0.84$	$\Delta E = 0.29$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.69$	$\Delta E = 0.77$	$\Delta E = 0.50$	$\Delta E = 1.17$	$\Delta E = 0.09$	$\Delta E = 1.44$	$\Delta E = 0.60$	$\Delta E = 0.44$	$\Delta E = 0.99$	$\Delta E = 0.34$

PHP8RV1K - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.16$	$\Delta E = 0.82$	$\Delta E = 0.77$	$\Delta E = 0.97$	$\Delta E = 0.66$	$\Delta E = 0.38$	$\Delta E = 0.99$	$\Delta E = 0.81$	$\Delta E = 0.54$	$\Delta E = 1.44$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.73$	$\Delta E = 0.89$	$\Delta E = 0.57$	$\Delta E = 0.68$	$\Delta E = 0.19$	$\Delta E = 0.49$	$\Delta E = 1.15$	$\Delta E = 0.14$	$\Delta E = 0.25$	$\Delta E = 0.29$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.06$	$\Delta E = 1.00$	$\Delta E = 0.42$	$\Delta E = 0.61$	$\Delta E = 0.42$	$\Delta E = 0.62$	$\Delta E = 0.06$	$\Delta E = 0.13$	$\Delta E = 0.35$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.67$	$\Delta E = 0.74$	$\Delta E = 0.87$	$\Delta E = 1.06$	$\Delta E = 0.70$	$\Delta E = 0.83$	$\Delta E = 0.19$	$\Delta E = 0.10$	$\Delta E = 1.00$	$\Delta E = 0.18$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.76$	$\Delta E = 0.95$	$\Delta E = 0.72$	$\Delta E = 0.91$	$\Delta E = 0.06$	$\Delta E = 0.99$	$\Delta E = 0.25$	$\Delta E = 0.52$	$\Delta E = 1.21$	$\Delta E = 0.52$

PHP8RV1K - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.041354	0.041608	0.046084	0.049392	0.051573	0.049631	0.058849	0.059630	0.058404	0.060998	0.062213
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.066433	0.066629	0.063515	0.060626	0.057332	0.055719	0.050161	0.040681	0.041036	0.043417	0.047798
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.052817	0.052272	0.048910	0.047765	0.046947	0.051141	0.053980	0.056171	0.060187	0.076963	0.099083
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.122200	0.138508	0.152022	0.162883	0.171216	0.178664	0.179800	0.188308			

2 Gaussians

Scaling factor: 82.0207482682541

Gaussians:

Weight	Mean		Covariance			
0.407067736	650.129451993	608.920119836	4741.128314623	-312.336017463	-312.336017463	16289.758204851
0.592932264	425.775223904	604.713894608	3457.639078707	-1596.245140151	-1596.245140151	16269.596825935

4 Gaussians

Scaling factor: 76.75161507615996

Gaussians:

Weight	Mean		Covariance			
0.166901202	654.024497680	476.822772725	3153.300246047	-493.696905393	-493.696905393	4502.649340448
0.264951530	440.491443951	480.020061228	3285.359331062	-295.596833744	-295.596833744	4963.930354088
0.318361208	411.090058973	701.244630189	3031.496439710	-368.077386203	-368.077386203	3562.226863285
0.249786060	641.993820061	706.255113172	6441.903109721	-344.811755334	-344.811755334	2773.428024837

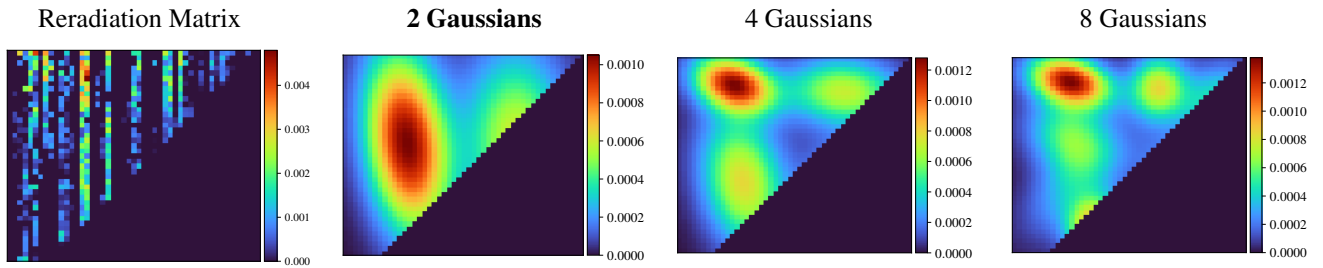
8 Gaussians

Scaling factor: 77.37461602531432

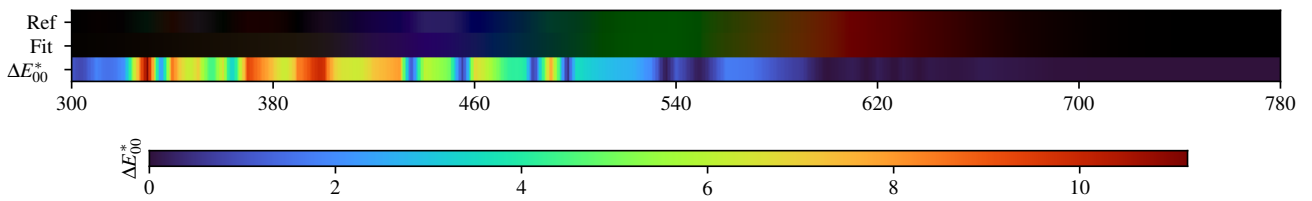
Gaussians:

Weight	Mean		Covariance			
0.109579527	654.727568279	434.147775979	3562.236774212	9.886654462	9.886654462	1556.224694780
0.130606259	422.568137753	503.901594396	3531.549129309	1656.401636086	1656.401636086	3158.457132296
0.127870707	600.578243498	722.901728992	1332.871476743	-46.332986352	-46.332986352	1684.754263663
0.203434233	412.350132511	740.266756876	2973.162003888	-333.270978637	-333.270978637	884.101573368
0.160548572	417.702804211	628.326359125	3569.370270595	-111.896922660	-111.896922660	2064.589783903
0.083906604	732.051894986	707.198072529	1121.961779740	35.337996406	35.337996406	2136.984682602
0.095674503	464.183838192	417.388742407	970.405067965	154.003104768	154.003104768	752.551125940
0.088379594	640.296869478	564.125679965	3438.435817613	-142.874821851	-142.874821851	2384.329633593

PHP8RV1K - Weighted variational Bayesian inference - 2 Gaussians



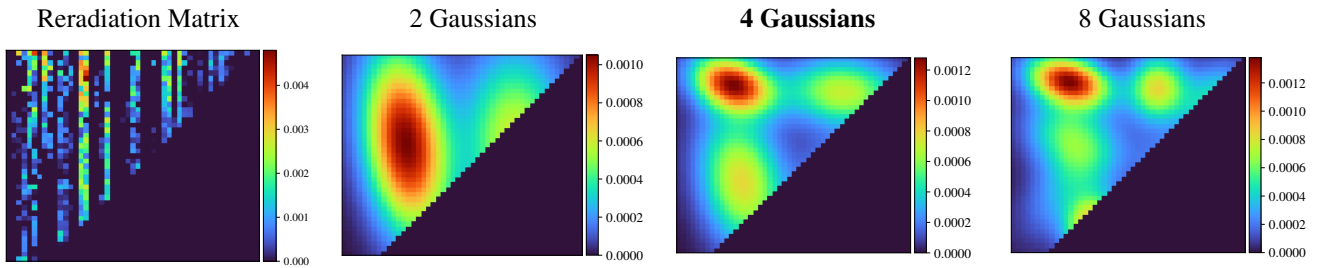
Fitted Material Under Monochromatic Illumination



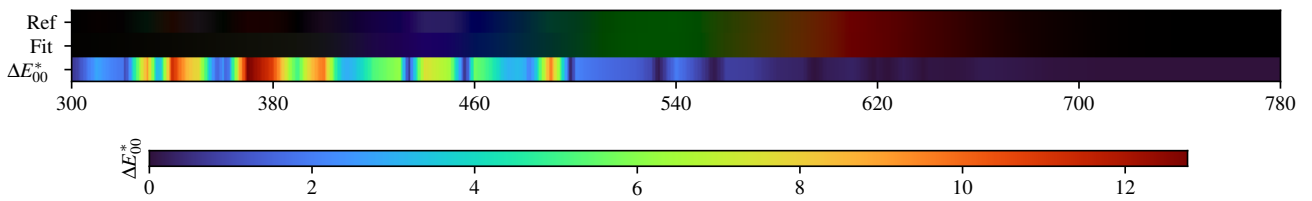
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.56$	$\Delta E = 1.99$	$\Delta E = 1.15$	$\Delta E = 1.72$	$\Delta E = 0.28$	$\Delta E = 0.88$	$\Delta E = 0.42$	$\Delta E = 1.68$	$\Delta E = 1.12$	$\Delta E = 1.65$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.42$	$\Delta E = 2.15$	$\Delta E = 0.84$	$\Delta E = 1.30$	$\Delta E = 0.55$	$\Delta E = 1.21$	$\Delta E = 0.22$	$\Delta E = 0.42$	$\Delta E = 0.48$	$\Delta E = 0.49$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 2.08$	$\Delta E = 2.28$	$\Delta E = 0.64$	$\Delta E = 0.99$	$\Delta E = 0.90$	$\Delta E = 0.17$	$\Delta E = 0.42$	$\Delta E = 0.46$	$\Delta E = 0.57$	$\Delta E = 0.49$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.53$	$\Delta E = 2.10$	$\Delta E = 1.68$	$\Delta E = 0.37$	$\Delta E = 1.65$	$\Delta E = 0.14$	$\Delta E = 0.70$	$\Delta E = 0.54$	$\Delta E = 1.11$	$\Delta E = 0.76$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.78$	$\Delta E = 1.71$	$\Delta E = 1.19$	$\Delta E = 0.32$	$\Delta E = 0.46$	$\Delta E = 0.13$	$\Delta E = 1.02$	$\Delta E = 1.11$	$\Delta E = 1.41$	$\Delta E = 1.31$

PHP8RV1K - Weighted variational Bayesian inference - 4 Gaussians



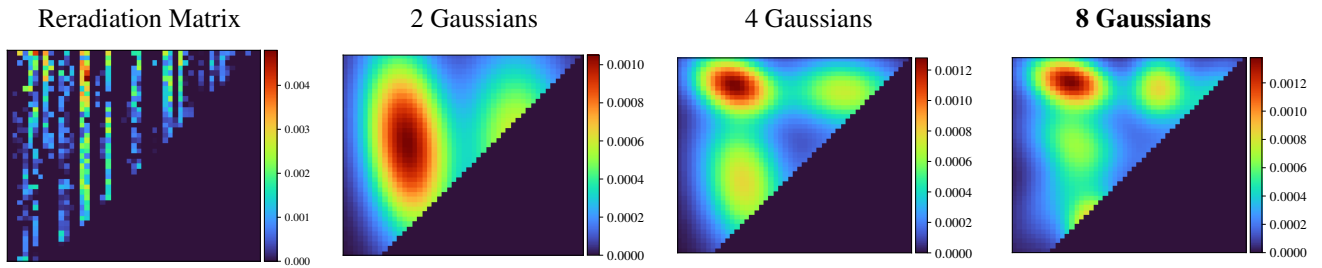
Fitted Material Under Monochromatic Illumination



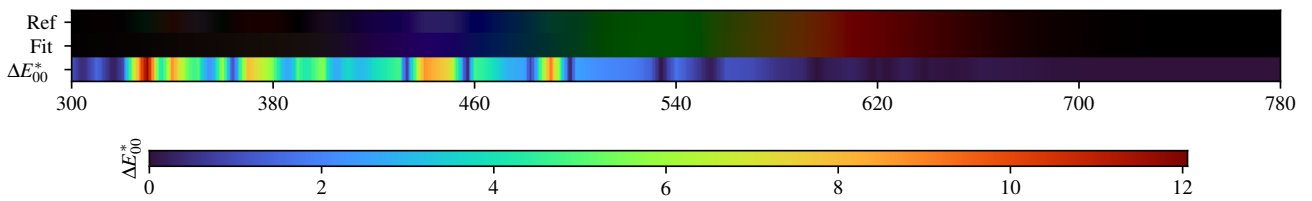
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.32$	$\Delta E = 1.26$	$\Delta E = 0.30$	$\Delta E = 0.74$	$\Delta E = 0.75$	$\Delta E = 0.54$	$\Delta E = 1.44$	$\Delta E = 0.98$	$\Delta E = 0.66$	$\Delta E = 0.80$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.95$	$\Delta E = 1.37$	$\Delta E = 0.15$	$\Delta E = 0.63$	$\Delta E = 0.07$	$\Delta E = 0.69$	$\Delta E = 1.85$	$\Delta E = 0.11$	$\Delta E = 0.13$	$\Delta E = 0.17$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.20$	$\Delta E = 1.58$	$\Delta E = 0.15$	$\Delta E = 0.40$	$\Delta E = 0.35$	$\Delta E = 0.78$	$\Delta E = 0.30$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.28$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.04$	$\Delta E = 1.72$	$\Delta E = 0.59$	$\Delta E = 1.56$	$\Delta E = 0.59$	$\Delta E = 1.26$	$\Delta E = 0.60$	$\Delta E = 0.58$	$\Delta E = 0.47$	$\Delta E = 0.48$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.15$	$\Delta E = 0.63$	$\Delta E = 0.26$	$\Delta E = 1.16$	$\Delta E = 0.20$	$\Delta E = 1.57$	$\Delta E = 0.86$	$\Delta E = 0.71$	$\Delta E = 0.59$	$\Delta E = 0.89$

PHP8RV1K - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.69$	$\Delta E = 0.79$	$\Delta E = 0.93$	$\Delta E = 0.66$	$\Delta E = 0.37$	$\Delta E = 1.01$	$\Delta E = 0.73$	$\Delta E = 0.55$	$\Delta E = 1.44$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.68$	$\Delta E = 0.74$	$\Delta E = 0.61$	$\Delta E = 0.66$	$\Delta E = 0.23$	$\Delta E = 0.47$	$\Delta E = 1.18$	$\Delta E = 0.15$	$\Delta E = 0.28$	$\Delta E = 0.35$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.96$	$\Delta E = 0.80$	$\Delta E = 0.47$	$\Delta E = 0.62$	$\Delta E = 0.44$	$\Delta E = 0.59$	$\Delta E = 0.07$	$\Delta E = 0.18$	$\Delta E = 0.38$	$\Delta E = 0.09$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.60$	$\Delta E = 0.60$	$\Delta E = 0.84$	$\Delta E = 1.09$	$\Delta E = 0.67$	$\Delta E = 0.81$	$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 1.03$	$\Delta E = 0.22$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.65$	$\Delta E = 0.92$	$\Delta E = 0.75$	$\Delta E = 0.93$	$\Delta E = 0.10$	$\Delta E = 1.01$	$\Delta E = 0.21$	$\Delta E = 0.54$	$\Delta E = 1.24$	$\Delta E = 0.52$

PHP8RV1K - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.041354	0.041608	0.046084	0.049392	0.051573	0.049631	0.058849	0.059630	0.058404	0.060998	0.062213
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.066433	0.066629	0.063515	0.060626	0.057332	0.055719	0.050161	0.040681	0.041036	0.043417	0.047798
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.052817	0.052272	0.048910	0.047765	0.046947	0.051141	0.053980	0.056171	0.060187	0.076963	0.099083
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.122200	0.138508	0.152022	0.162883	0.171216	0.178664	0.179800	0.188308			

2 Gaussians max

Scaling factor: 81.97713117824756

Gaussians:

Weight	Mean		Covariance			
0.581365797	424.312107681	604.210673703	3385.311567765	-1669.300265693	-1669.300265693	16256.864789036
0.418634203	646.435325290	609.377170429	5163.258114895	-366.885519496	-366.885519496	16204.656574208

4 Gaussians max

Scaling factor: 75.44441732609607

Gaussians:

Weight	Mean		Covariance			
0.364530780	432.613116277	523.442330257	3601.724555842	-1225.722309036	-1225.722309036	9218.012462937
0.183305663	651.980129580	488.648738006	3504.287429770	-641.109558796	-641.109558796	5684.435483975
0.233000909	641.414782808	712.284162402	6720.158875328	-364.900709712	-364.900709712	2377.182047115
0.219162649	412.936044023	728.632578824	3159.150477997	-629.844784824	-629.844784824	1668.867703497

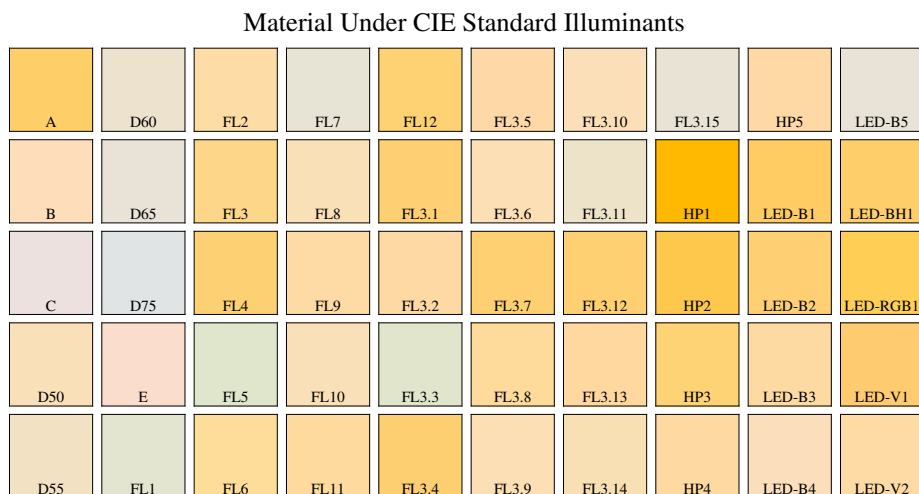
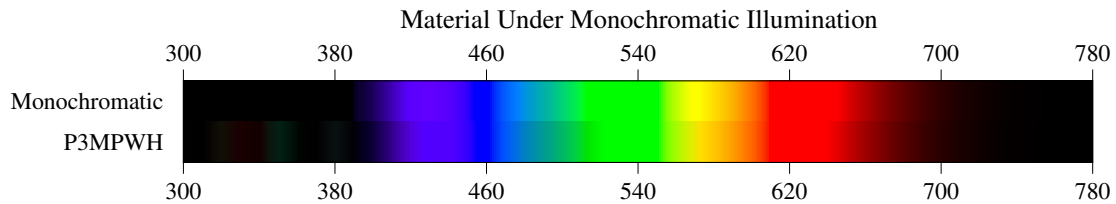
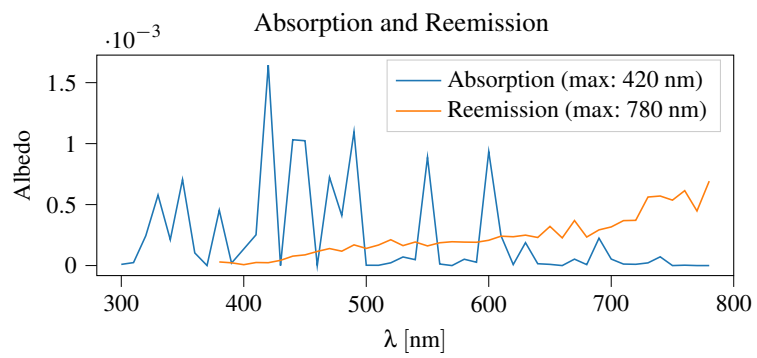
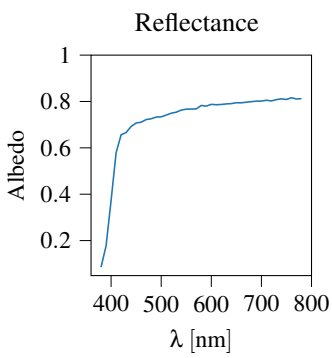
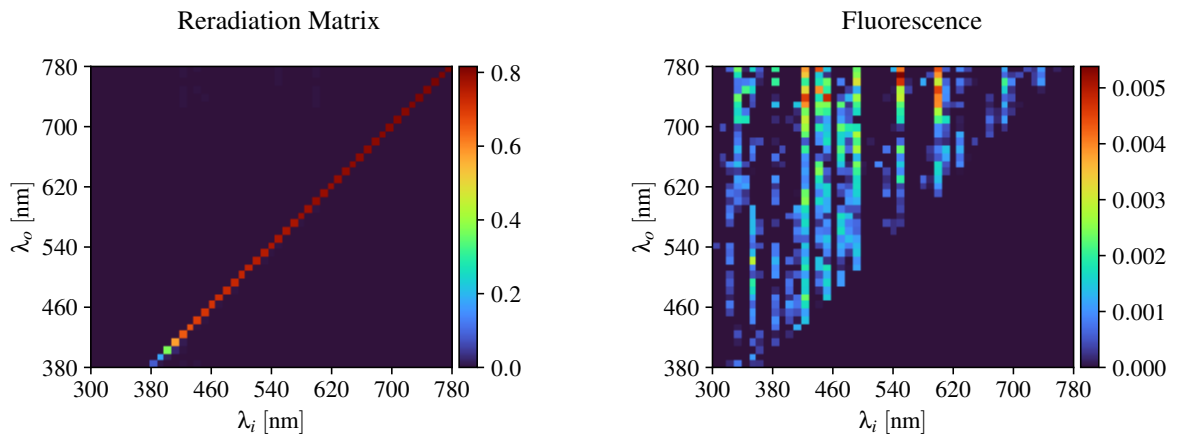
8 Gaussians max

Scaling factor: 77.87328967991631

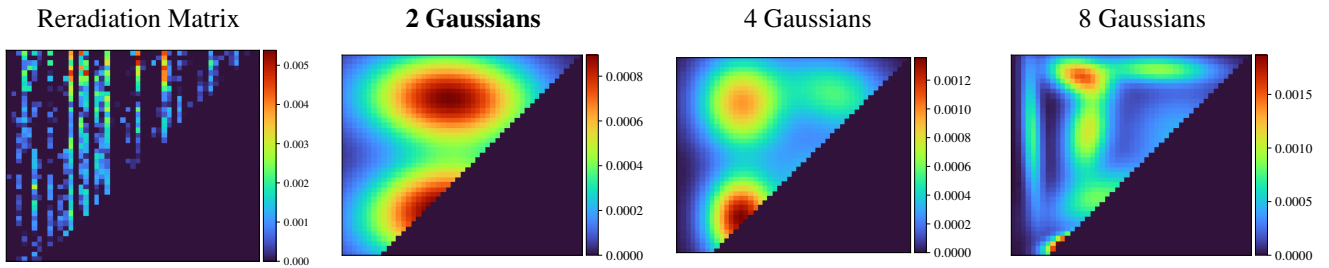
Gaussians:

Weight	Mean		Covariance			
0.110305703	419.724121012	516.921482047	4435.753025348	2505.726339415	2505.726339415	5031.587775160
0.117315646	464.181846073	431.609726298	1388.196979496	190.615998225	190.615998225	1840.492257663
0.135976355	652.467241173	453.709638268	3527.669617547	-390.614437585	-390.614437585	2997.529037887
0.050061770	638.891220782	574.593225825	4882.512988763	-111.818310671	-111.818310671	1885.308471093
0.150060788	415.129948897	619.250789766	3758.177925694	-646.809525314	-646.809525314	2968.576503864
0.094624924	718.278609309	698.805664476	2591.135344958	716.912256700	716.912256700	2790.712161028
0.126413325	600.304977985	720.328850076	1671.472716972	41.422679598	41.422679598	2185.469488261
0.215241490	416.742843461	734.793735209	3310.737852591	-608.146869775	-608.146869775	1336.692953647

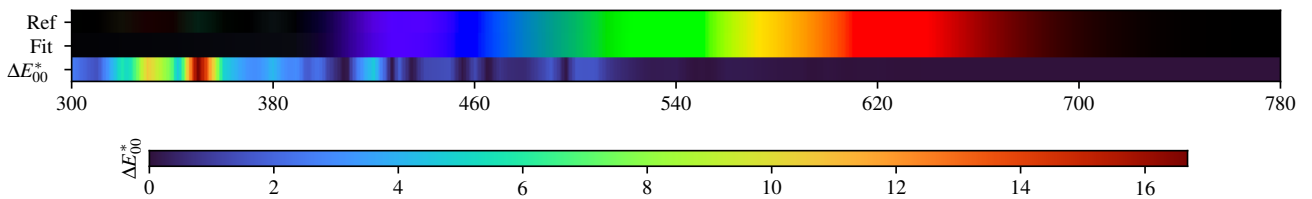
3.144. P3MPWH



P3MPWH - Weighted Expectation-Maximization - 2 Gaussians



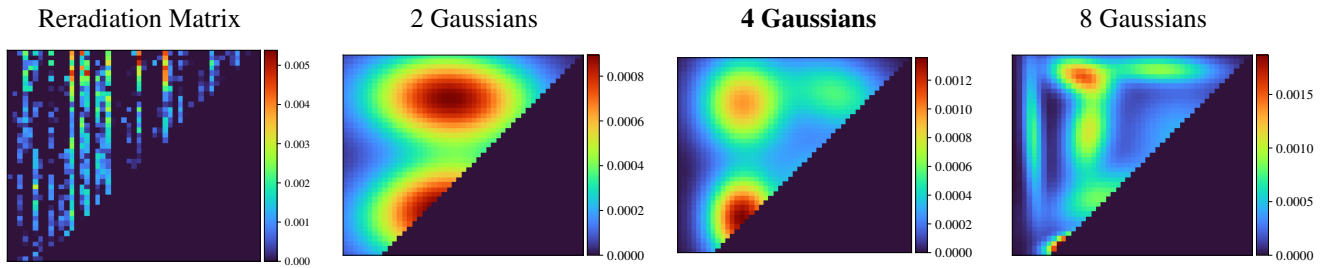
Fitted Material Under Monochromatic Illumination



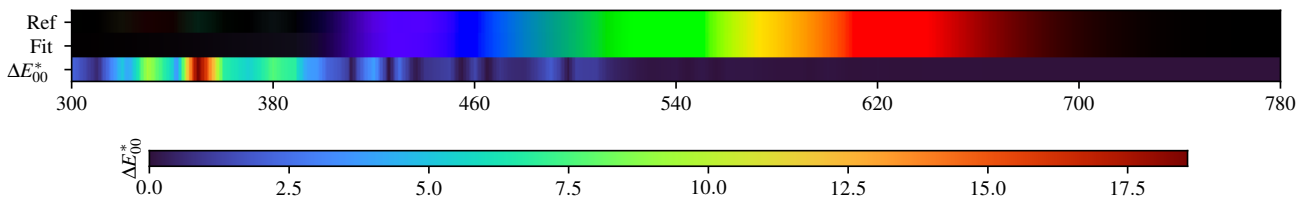
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.04$	D60 $\Delta E = 0.08$	FL2 $\Delta E = 0.05$	FL7 $\Delta E = 0.04$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.04$	FL3.15 $\Delta E = 0.05$	HP5 $\Delta E = 0.04$	LED-B5 $\Delta E = 0.07$
B $\Delta E = 0.05$	D65 $\Delta E = 0.10$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.03$	FL3.1 $\Delta E = 0.05$	FL3.6 $\Delta E = 0.04$	FL3.11 $\Delta E = 0.04$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.04$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.09$	D75 $\Delta E = 0.16$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.03$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.05$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.05$	E $\Delta E = 0.11$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.04$	FL3.3 $\Delta E = 0.05$	FL3.8 $\Delta E = 0.03$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.03$	LED-B3 $\Delta E = 0.04$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.06$	FL1 $\Delta E = 0.04$	FL6 $\Delta E = 0.05$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.04$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.05$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.03$

P3MPWH - Weighted Expectation-Maximization - 4 Gaussians



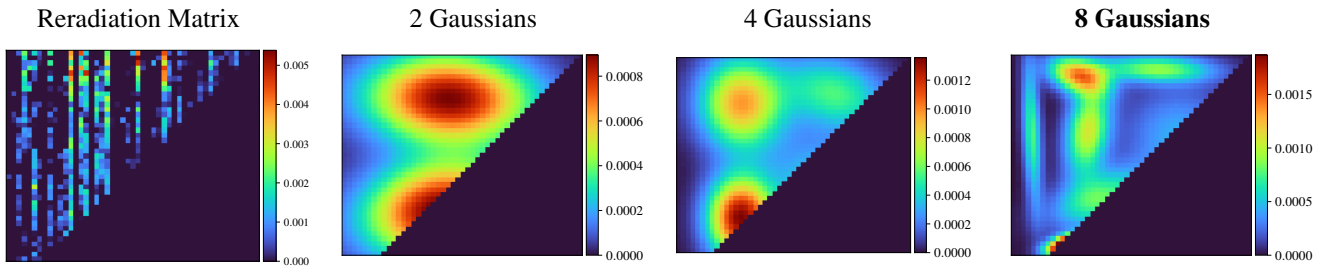
Fitted Material Under Monochromatic Illumination



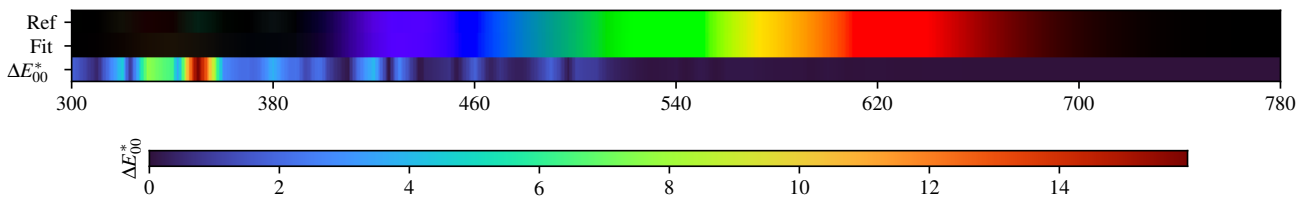
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.05$	D60 $\Delta E = 0.21$	FL2 $\Delta E = 0.07$	FL7 $\Delta E = 0.17$	FL12 $\Delta E = 0.04$	FL3.5 $\Delta E = 0.05$	FL3.10 $\Delta E = 0.10$	FL3.15 $\Delta E = 0.18$	HP5 $\Delta E = 0.10$	LED-B5 $\Delta E = 0.12$
B $\Delta E = 0.14$	D65 $\Delta E = 0.26$	FL3 $\Delta E = 0.05$	FL8 $\Delta E = 0.08$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.06$	FL3.11 $\Delta E = 0.14$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.02$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.28$	D75 $\Delta E = 0.38$	FL4 $\Delta E = 0.04$	FL9 $\Delta E = 0.06$	FL3.2 $\Delta E = 0.05$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.01$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.02$	LED-RGB1 $\Delta E = 0.03$
D50 $\Delta E = 0.13$	E $\Delta E = 0.31$	FL5 $\Delta E = 0.14$	FL10 $\Delta E = 0.11$	FL3.3 $\Delta E = 0.11$	FL3.8 $\Delta E = 0.05$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.06$	LED-B3 $\Delta E = 0.05$	LED-V1 $\Delta E = 0.08$
D55 $\Delta E = 0.17$	FL1 $\Delta E = 0.16$	FL6 $\Delta E = 0.06$	FL11 $\Delta E = 0.07$	FL3.4 $\Delta E = 0.02$	FL3.9 $\Delta E = 0.09$	FL3.14 $\Delta E = 0.05$	HP4 $\Delta E = 0.12$	LED-B4 $\Delta E = 0.07$	LED-V2 $\Delta E = 0.11$

P3MPWH - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.04$	FL2 $\Delta E = 0.02$	FL7 $\Delta E = 0.04$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.04$	FL3.15 $\Delta E = 0.04$	HP5 $\Delta E = 0.03$	LED-B5 $\Delta E = 0.10$
B $\Delta E = 0.03$	D65 $\Delta E = 0.05$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.04$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.03$	FL3.11 $\Delta E = 0.03$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.03$	D75 $\Delta E = 0.07$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.03$	E $\Delta E = 0.03$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.04$	FL3.3 $\Delta E = 0.04$	FL3.8 $\Delta E = 0.02$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.03$	LED-V1 $\Delta E = 0.03$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.03$	FL6 $\Delta E = 0.02$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.02$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.02$	LED-B4 $\Delta E = 0.06$	LED-V2 $\Delta E = 0.03$

P3MPWH - Weighted Expectation-Maximization - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.085469	0.177447	0.372740	0.578569	0.656446	0.666122	0.692146	0.707153	0.710551	0.721943	0.725501
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.732628	0.733666	0.741304	0.749273	0.753782	0.762758	0.766907	0.767457	0.767947	0.782898	0.780049
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.787693	0.785957	0.787106	0.789545	0.790826	0.794635	0.794280	0.797002	0.799219	0.801429	0.801856
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.805366	0.802340	0.808159	0.811266	0.808726	0.816103	0.810720	0.812352			

2 Gaussians

Scaling factor: 83.33503046591828

Gaussians:

Weight	Mean		Covariance			
0.504746047	497.094365850	467.050087032	11446.595222691	899.152830837	899.152830837	4625.263404515
0.495253953	511.811121975	695.087379876	13415.907912281	-370.153699404	-370.153699404	4042.037446650

4 Gaussians

Scaling factor: 78.88859975355332

Gaussians:

Weight	Mean		Covariance			
0.218688688	607.261746902	500.026741931	6046.323711246	-1031.998705921	-1031.998705921	5620.137443518
0.302365674	430.215070608	687.691812716	3564.490187993	-88.893583134	-88.893583134	4436.805077988
0.184080409	624.219844692	709.761022855	6221.180309587	-1135.154835405	-1135.154835405	3144.156805277
0.294865230	429.323963599	447.827532203	2198.074641215	-8.285774512	-8.285774512	3493.322721311

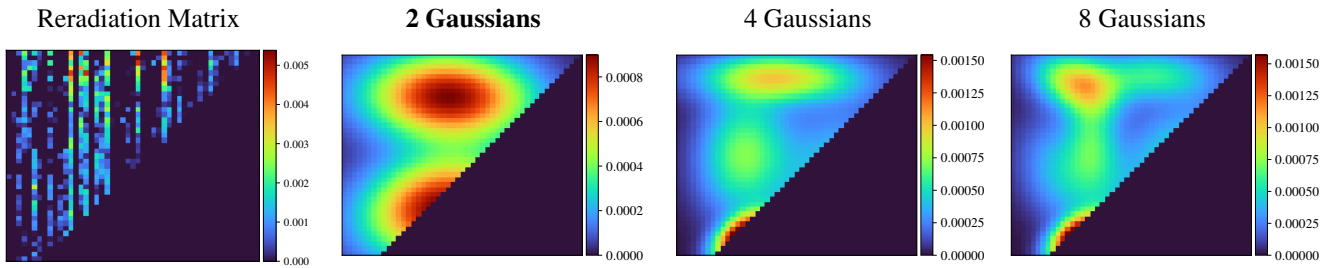
8 Gaussians

Scaling factor: 80.08263948435277

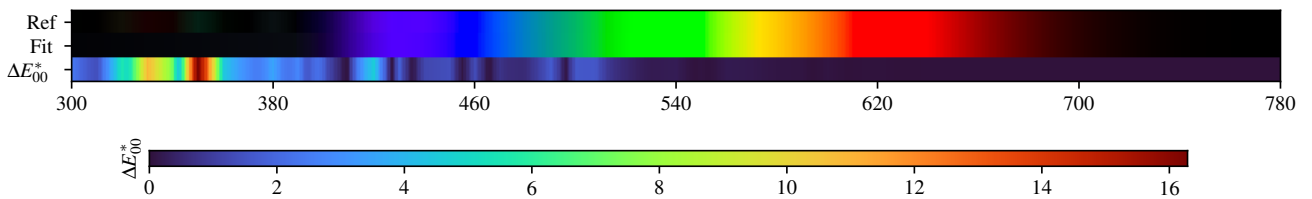
Gaussians:

Weight	Mean		Covariance			
0.096576761	613.251425396	421.771391651	7009.182036164	278.516078594	278.516078594	1184.497544462
0.102962867	430.417764785	741.149887875	1690.715085892	-371.210675618	-371.210675618	694.896035450
0.183590890	633.052338177	617.357211872	5547.363343147	58.546763812	58.546763812	5143.377457093
0.131379970	425.283230342	398.151352808	1034.330601639	188.525260301	188.525260301	202.942395127
0.155935009	450.325957536	629.061008666	952.401651583	481.929588028	481.929588028	3938.412685068
0.072739266	337.873798339	622.629057884	178.650643440	-424.737480739	-424.737480739	9474.539884736
0.104551131	588.065535317	755.064001860	6654.744756253	-186.525249881	-186.525249881	382.066733598
0.152264106	475.899964539	492.348095265	4701.763423707	1295.155573417	1295.155573417	1715.425705188

P3MPWH - Weighted variational Bayesian inference - 2 Gaussians



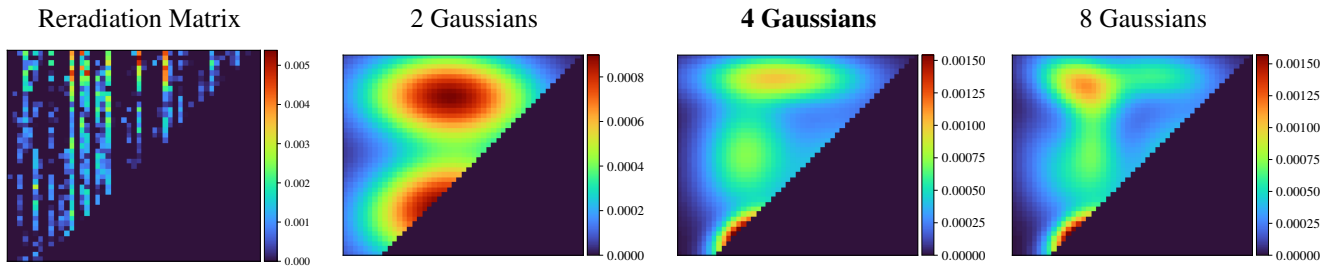
Fitted Material Under Monochromatic Illumination



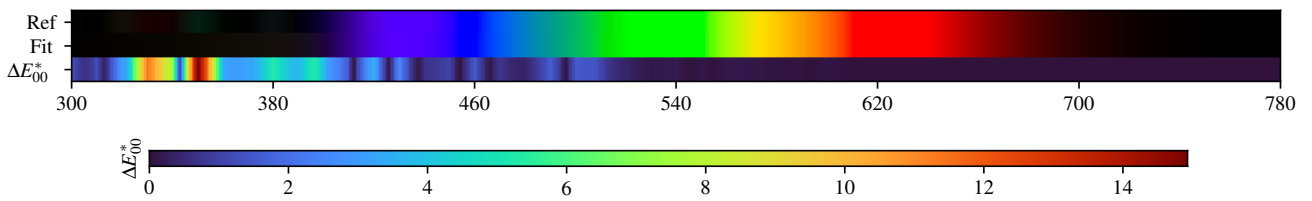
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.06$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.07$	FL12 $\Delta E = 0.01$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.05$	FL3.15 $\Delta E = 0.09$	HP5 $\Delta E = 0.01$	LED-B5 $\Delta E = 0.02$
B $\Delta E = 0.03$	D65 $\Delta E = 0.09$	FL3 $\Delta E = 0.03$	FL8 $\Delta E = 0.03$	FL3.1 $\Delta E = 0.04$	FL3.6 $\Delta E = 0.03$	FL3.11 $\Delta E = 0.05$	HP1 $\Delta E = 0.03$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.04$
C $\Delta E = 0.09$	D75 $\Delta E = 0.14$	FL4 $\Delta E = 0.03$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.04$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.04$	HP2 $\Delta E = 0.04$	LED-B2 $\Delta E = 0.04$	LED-RGB1 $\Delta E = 0.07$
D50 $\Delta E = 0.03$	E $\Delta E = 0.07$	FL5 $\Delta E = 0.04$	FL10 $\Delta E = 0.04$	FL3.3 $\Delta E = 0.02$	FL3.8 $\Delta E = 0.02$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.03$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.05$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.02$	FL3.4 $\Delta E = 0.04$	FL3.9 $\Delta E = 0.02$	FL3.14 $\Delta E = 0.04$	HP4 $\Delta E = 0.02$	LED-B4 $\Delta E = 0.03$	LED-V2 $\Delta E = 0.01$

P3MPWH - Weighted variational Bayesian inference - 4 Gaussians



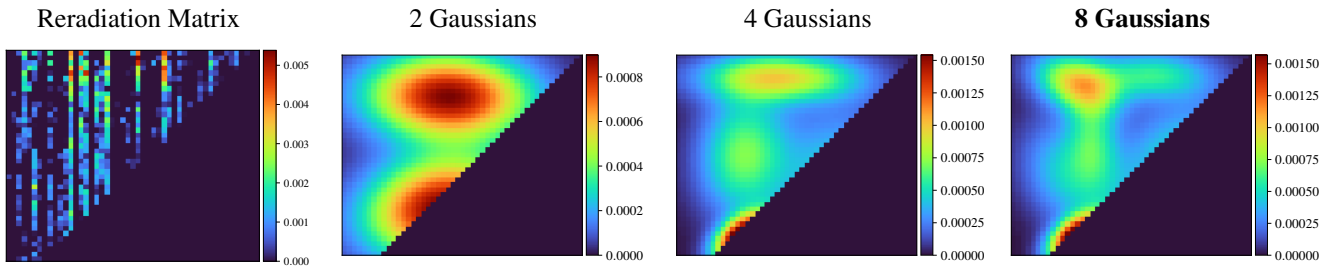
Fitted Material Under Monochromatic Illumination



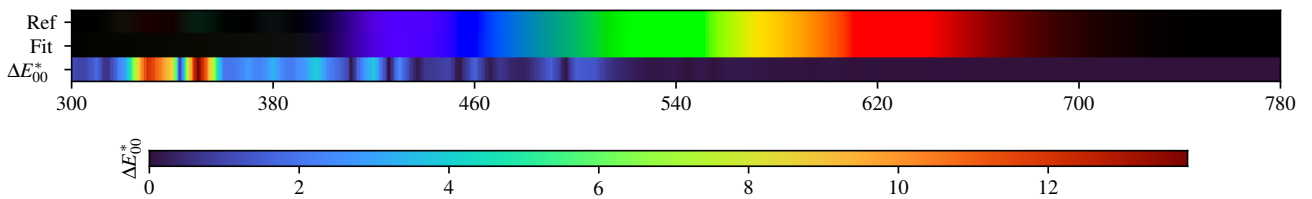
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.07$	FL2 $\Delta E = 0.03$	FL7 $\Delta E = 0.03$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.04$	FL3.15 $\Delta E = 0.04$	HP5 $\Delta E = 0.03$	LED-B5 $\Delta E = 0.05$
B $\Delta E = 0.04$	D65 $\Delta E = 0.08$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.03$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.03$	FL3.11 $\Delta E = 0.04$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.05$	D75 $\Delta E = 0.09$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.02$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.04$	E $\Delta E = 0.08$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.04$	FL3.3 $\Delta E = 0.05$	FL3.8 $\Delta E = 0.02$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.03$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.05$	FL1 $\Delta E = 0.03$	FL6 $\Delta E = 0.03$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.03$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.03$	LED-B4 $\Delta E = 0.04$	LED-V2 $\Delta E = 0.03$

P3MPWH - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.03$	D60 $\Delta E = 0.04$	FL2 $\Delta E = 0.02$	FL7 $\Delta E = 0.03$	FL12 $\Delta E = 0.02$	FL3.5 $\Delta E = 0.03$	FL3.10 $\Delta E = 0.04$	FL3.15 $\Delta E = 0.04$	HP5 $\Delta E = 0.03$	LED-B5 $\Delta E = 0.05$
B $\Delta E = 0.03$	D65 $\Delta E = 0.04$	FL3 $\Delta E = 0.02$	FL8 $\Delta E = 0.03$	FL3.1 $\Delta E = 0.02$	FL3.6 $\Delta E = 0.03$	FL3.11 $\Delta E = 0.05$	HP1 $\Delta E = 0.02$	LED-B1 $\Delta E = 0.03$	LED-BH1 $\Delta E = 0.03$
C $\Delta E = 0.05$	D75 $\Delta E = 0.05$	FL4 $\Delta E = 0.02$	FL9 $\Delta E = 0.03$	FL3.2 $\Delta E = 0.03$	FL3.7 $\Delta E = 0.01$	FL3.12 $\Delta E = 0.03$	HP2 $\Delta E = 0.03$	LED-B2 $\Delta E = 0.03$	LED-RGB1 $\Delta E = 0.06$
D50 $\Delta E = 0.03$	E $\Delta E = 0.06$	FL5 $\Delta E = 0.03$	FL10 $\Delta E = 0.05$	FL3.3 $\Delta E = 0.04$	FL3.8 $\Delta E = 0.02$	FL3.13 $\Delta E = 0.03$	HP3 $\Delta E = 0.02$	LED-B3 $\Delta E = 0.03$	LED-V1 $\Delta E = 0.02$
D55 $\Delta E = 0.04$	FL1 $\Delta E = 0.03$	FL6 $\Delta E = 0.02$	FL11 $\Delta E = 0.03$	FL3.4 $\Delta E = 0.03$	FL3.9 $\Delta E = 0.03$	FL3.14 $\Delta E = 0.03$	HP4 $\Delta E = 0.03$	LED-B4 $\Delta E = 0.04$	LED-V2 $\Delta E = 0.02$

P3MPWH - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.085469	0.177447	0.372740	0.578569	0.656446	0.666122	0.692146	0.707153	0.710551	0.721943	0.725501
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.732628	0.733666	0.741304	0.749273	0.753782	0.762758	0.766907	0.767457	0.767947	0.782898	0.780049
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.787693	0.785957	0.787106	0.789545	0.790826	0.794635	0.794280	0.797002	0.799219	0.801429	0.801856
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.805366	0.802340	0.808159	0.811266	0.808726	0.816103	0.810720	0.812352			

2 Gaussians max

Scaling factor: 83.2050699219782

Gaussians:

Weight	Mean		Covariance			
0.524682366	498.661853751	471.832582738	11591.387464100	1045.746928068	1045.746928068	5082.088685266
0.475317634	510.899126661	699.073059644	13351.725844692	-286.070959189	-286.070959189	3729.098798957

4 Gaussians max

Scaling factor: 81.82224625452092

Gaussians:

Weight	Mean		Covariance			
0.172672182	433.401645015	412.549993306	1533.586011732	578.649358411	578.649358411	1063.903372665
0.284976456	619.299099961	535.633057985	6391.546371267	846.939760536	846.939760536	9765.550617496
0.280934863	431.296153078	581.180050173	3847.438128234	413.187858848	413.187858848	7333.117642086
0.261416500	505.953377773	738.128168818	12231.849621759	-61.460274141	-61.460274141	1164.497621385

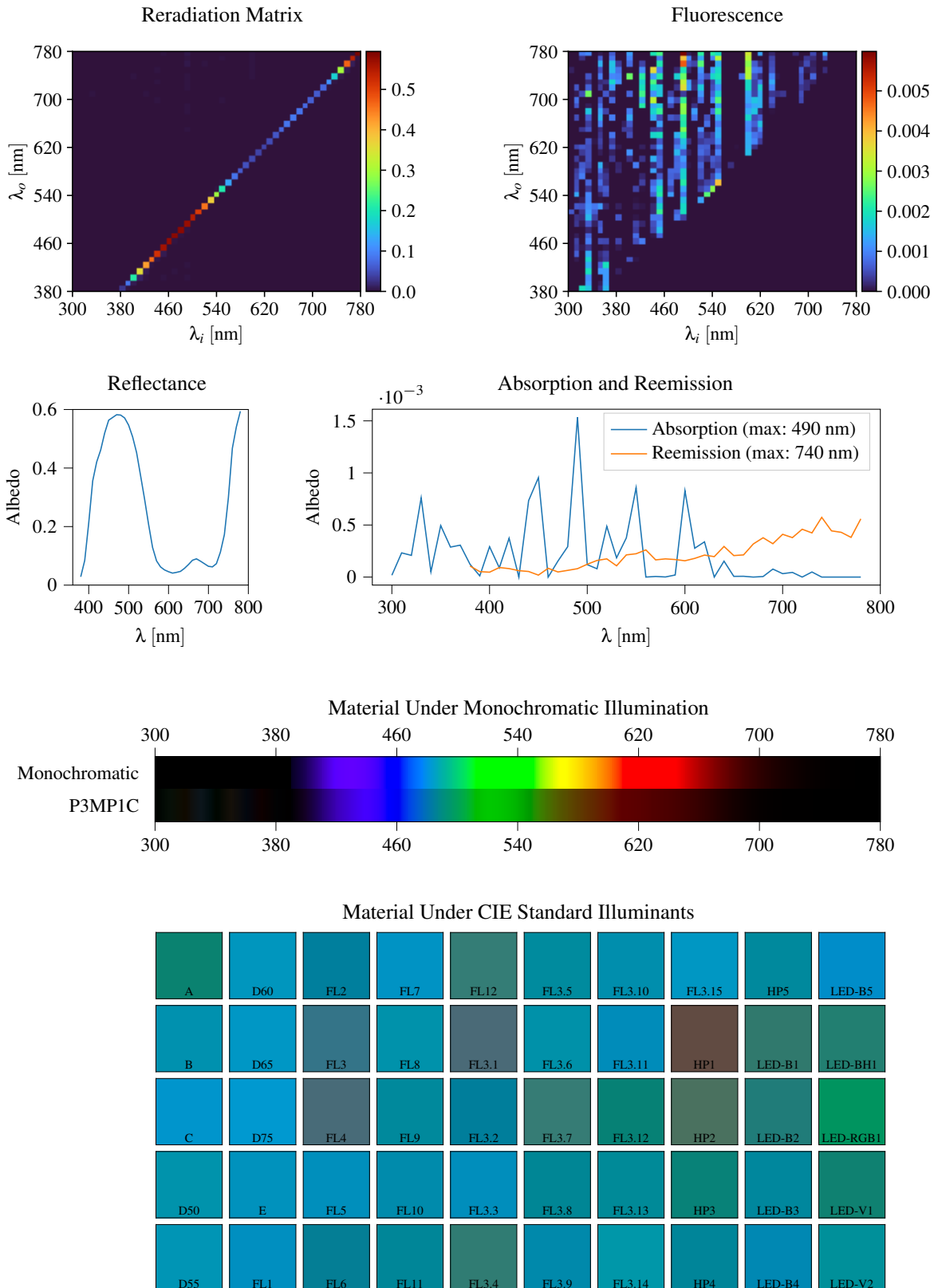
8 Gaussians max

Scaling factor: 82.1321863248661

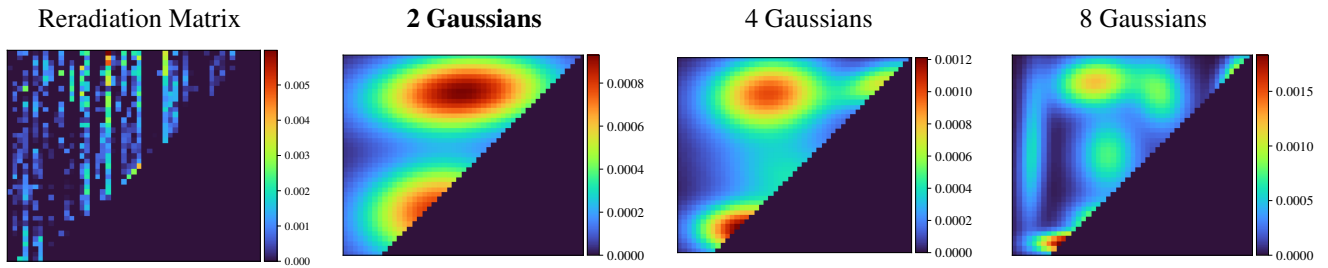
Gaussians:

Weight	Mean		Covariance			
0.169906838	431.971029531	411.362313853	1503.979857130	544.341123010	544.341123010	1016.101415528
0.143876634	607.114066647	456.979643978	7497.336389828	-547.379691729	-547.379691729	3364.704255688
0.141303513	400.569217225	544.532007019	3510.579506377	-851.526221999	-851.526221999	5438.057808711
0.098400130	460.957923904	615.941554353	1318.114503040	-213.140001310	-213.140001310	5356.396769459
0.157808964	620.671115238	600.448261617	6507.268564366	2342.123478428	2342.123478428	4482.486900727
0.152929243	426.532406146	725.506731585	3519.355560727	-853.214455834	-853.214455834	1709.785522409
0.135650258	581.069765407	742.153441240	7427.512966222	-55.704916679	-55.704916679	1234.237652490

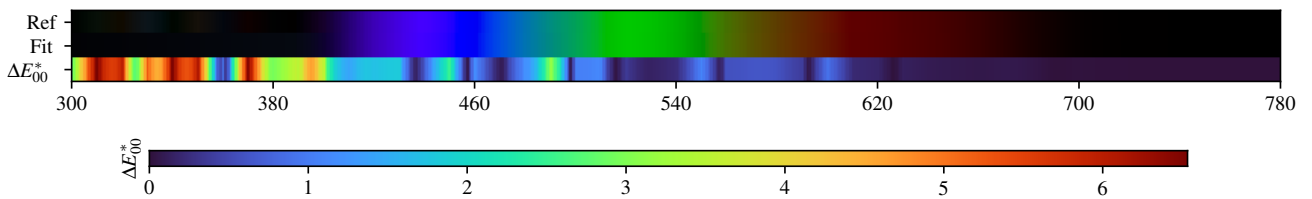
3.145. P3MP1C



P3MP1C - Weighted Expectation-Maximization - 2 Gaussians



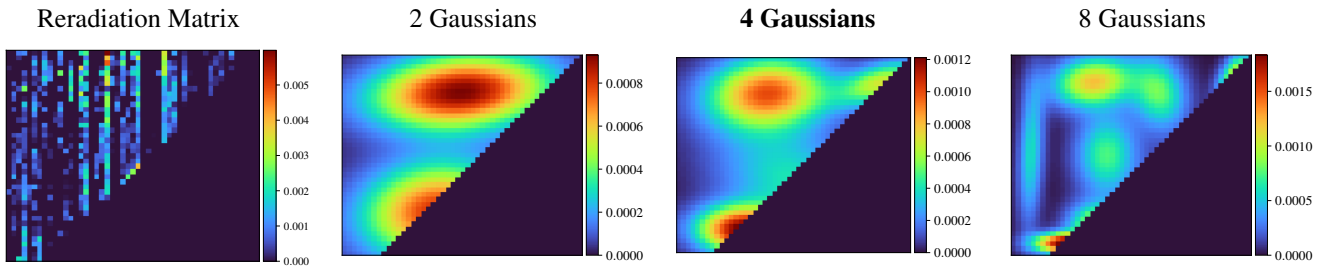
Fitted Material Under Monochromatic Illumination



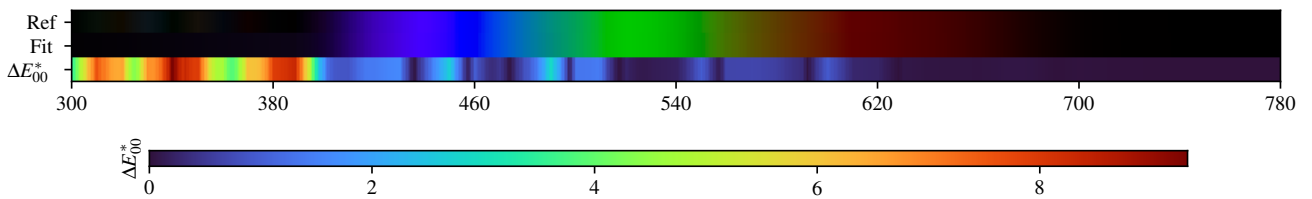
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.27$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.63$	$\Delta E = 0.20$	$\Delta E = 0.47$	$\Delta E = 0.22$	$\Delta E = 0.19$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.45$	$\Delta E = 0.10$	$\Delta E = 0.28$	$\Delta E = 0.29$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.23$	$\Delta E = 0.24$	$\Delta E = 0.17$	$\Delta E = 0.56$	$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.30$	$\Delta E = 0.17$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.51$	$\Delta E = 0.17$	$\Delta E = 0.51$	$\Delta E = 0.23$	$\Delta E = 0.30$	$\Delta E = 0.32$	$\Delta E = 0.26$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.23$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.55$	$\Delta E = 0.19$	$\Delta E = 0.48$	$\Delta E = 0.25$	$\Delta E = 0.18$	$\Delta E = 0.32$	$\Delta E = 0.22$

P3MP1C - Weighted Expectation-Maximization - 4 Gaussians



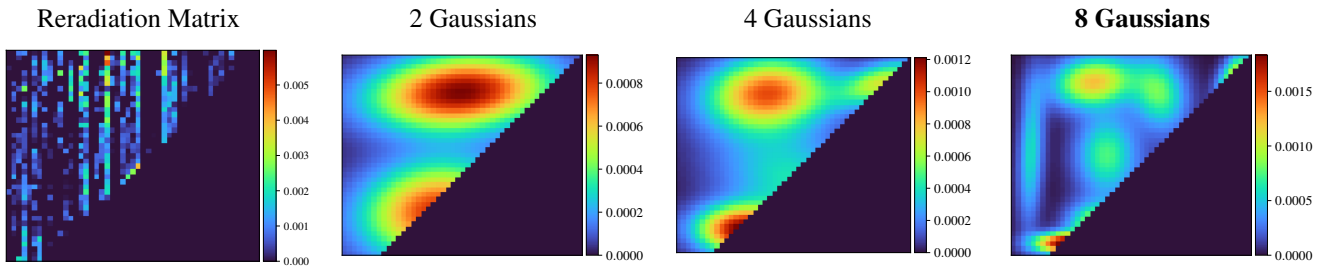
Fitted Material Under Monochromatic Illumination



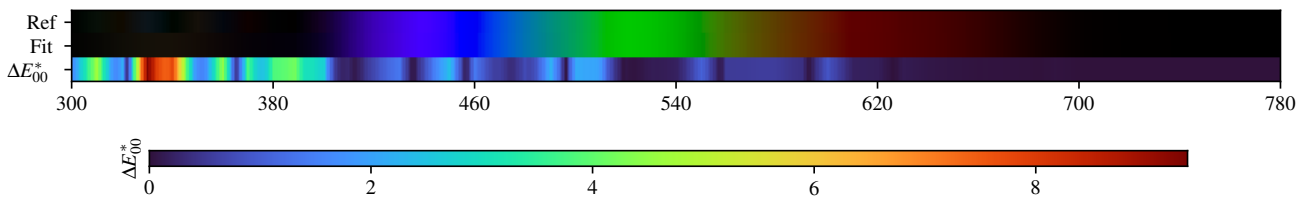
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.26$	$\Delta E = 0.38$	$\Delta E = 0.28$	$\Delta E = 0.29$	$\Delta E = 0.60$	$\Delta E = 0.23$	$\Delta E = 0.47$	$\Delta E = 0.30$	$\Delta E = 0.30$	$\Delta E = 0.42$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.33$	$\Delta E = 0.40$	$\Delta E = 0.29$	$\Delta E = 0.27$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.47$	$\Delta E = 0.05$	$\Delta E = 0.26$	$\Delta E = 0.27$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.35$	$\Delta E = 0.43$	$\Delta E = 0.28$	$\Delta E = 0.27$	$\Delta E = 0.24$	$\Delta E = 0.53$	$\Delta E = 0.22$	$\Delta E = 0.23$	$\Delta E = 0.29$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.35$	$\Delta E = 0.42$	$\Delta E = 0.29$	$\Delta E = 0.52$	$\Delta E = 0.26$	$\Delta E = 0.51$	$\Delta E = 0.22$	$\Delta E = 0.32$	$\Delta E = 0.37$	$\Delta E = 0.31$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.37$	$\Delta E = 0.29$	$\Delta E = 0.30$	$\Delta E = 0.55$	$\Delta E = 0.18$	$\Delta E = 0.49$	$\Delta E = 0.24$	$\Delta E = 0.34$	$\Delta E = 0.41$	$\Delta E = 0.33$

P3MP1C - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.12$	$\Delta E = 0.19$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.52$	$\Delta E = 0.12$	$\Delta E = 0.34$	$\Delta E = 0.15$	$\Delta E = 0.16$	$\Delta E = 0.32$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.18$	$\Delta E = 0.20$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.37$	$\Delta E = 0.07$	$\Delta E = 0.17$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.45$	$\Delta E = 0.10$	$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.21$	$\Delta E = 0.17$	$\Delta E = 0.41$	$\Delta E = 0.16$	$\Delta E = 0.42$	$\Delta E = 0.09$	$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.19$	$\Delta E = 0.16$	$\Delta E = 0.19$	$\Delta E = 0.46$	$\Delta E = 0.11$	$\Delta E = 0.39$	$\Delta E = 0.09$	$\Delta E = 0.19$	$\Delta E = 0.32$	$\Delta E = 0.15$

P3MP1C - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.028483	0.084454	0.212059	0.356186	0.420930	0.461676	0.519540	0.563467	0.572808	0.582147	0.580942
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.571190	0.546467	0.506588	0.452592	0.373778	0.293830	0.207811	0.128893	0.082828	0.062176	0.051940
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.045816	0.041056	0.043577	0.046970	0.057349	0.070357	0.084980	0.089787	0.081939	0.073126	0.064295
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.062363	0.073325	0.112689	0.172789	0.298193	0.467749	0.540407	0.594034			

2 Gaussians

Scaling factor: 74.62276905263036

Gaussians:

Weight	Mean		Covariance			
0.483243629	486.799841824	465.816284616	10898.647390448	725.873621205	725.873621205	4634.000124284
0.516756371	535.829760105	708.092854632	15710.294089569	1047.201138980	1047.201138980	2843.464570295

4 Gaussians

Scaling factor: 73.8514410845367

Gaussians:

Weight	Mean		Covariance			
0.286864599	537.345272437	528.464885204	12510.088078671	-2285.070613444	-2285.070613444	5940.550197890
0.376049036	485.787554106	710.168719416	7598.146329748	423.927502743	423.927502743	2707.393317450
0.097252905	723.399044423	731.944658225	3547.648876669	909.041737906	909.041737906	1059.910038020
0.239833460	437.630464057	421.852612397	4499.385271794	-80.732018031	-80.732018031	1190.148810350

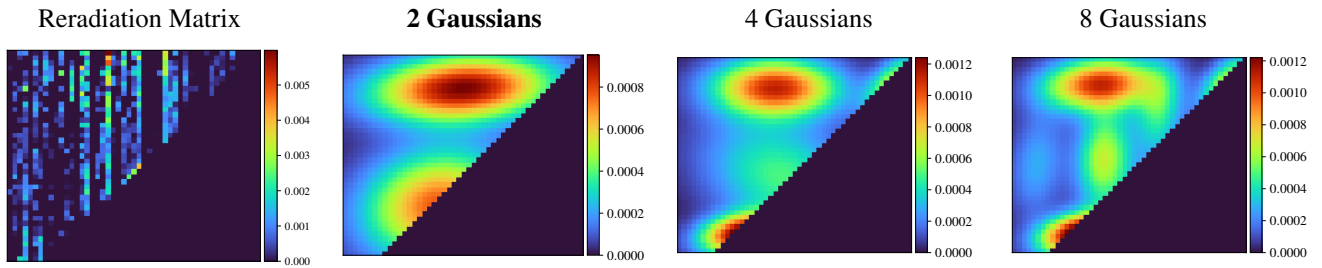
8 Gaussians

Scaling factor: 73.1554124835722

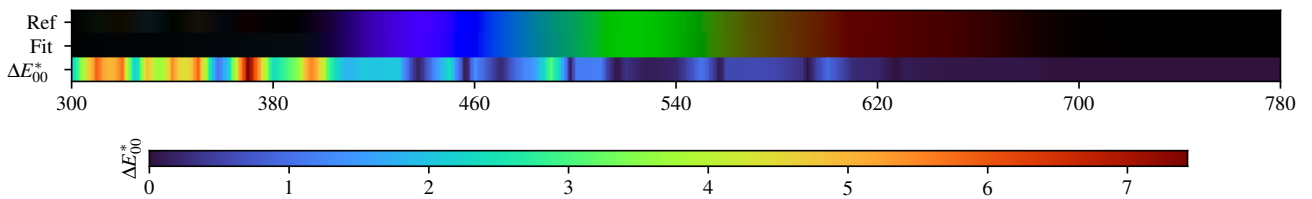
Gaussians:

Weight	Mean		Covariance			
0.131882649	475.685467480	432.084385599	1679.690145019	-89.416721788	-89.416721788	1022.339011710
0.079438014	751.313614762	735.076554054	604.552279822	342.615011642	342.615011642	1137.712769813
0.088536218	335.777636914	585.605971597	322.481958390	415.858867511	415.858867511	10233.443877054
0.204738389	462.010848507	729.074865894	3239.145637837	256.559545585	256.559545585	1273.067569520
0.128797842	595.729514659	705.848890272	1475.970889268	-261.315335479	-261.315335479	2622.564566917
0.093789741	402.435785800	400.484869471	1687.305480380	1.305764521	1.305764521	207.256583365
0.121604499	634.722228838	479.112190103	3865.150835459	364.725442250	364.725442250	5013.267796073
0.151212648	487.663583071	580.536459134	1795.194526278	43.672014898	43.672014898	3178.331737076

P3MP1C - Weighted variational Bayesian inference - 2 Gaussians



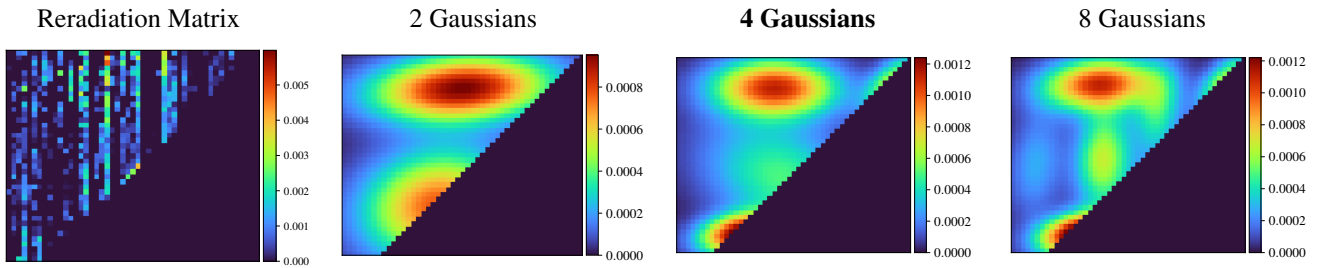
Fitted Material Under Monochromatic Illumination



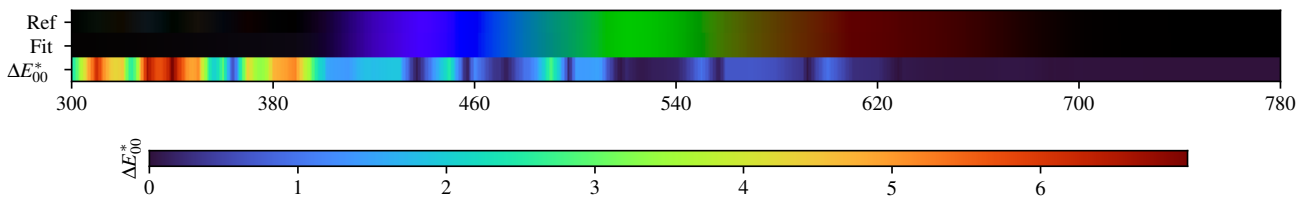
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.25$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.61$	$\Delta E = 0.18$	$\Delta E = 0.43$	$\Delta E = 0.22$	$\Delta E = 0.17$	$\Delta E = 0.24$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.41$	$\Delta E = 0.26$	$\Delta E = 0.26$	$\Delta E = 0.26$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.22$	$\Delta E = 0.21$	$\Delta E = 0.15$	$\Delta E = 0.55$	$\Delta E = 0.25$	$\Delta E = 0.17$	$\Delta E = 0.25$	$\Delta E = 0.16$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.20$	$\Delta E = 0.46$	$\Delta E = 0.16$	$\Delta E = 0.48$	$\Delta E = 0.22$	$\Delta E = 0.28$	$\Delta E = 0.26$	$\Delta E = 0.24$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.19$	$\Delta E = 0.51$	$\Delta E = 0.18$	$\Delta E = 0.44$	$\Delta E = 0.24$	$\Delta E = 0.15$	$\Delta E = 0.25$	$\Delta E = 0.19$

P3MP1C - Weighted variational Bayesian inference - 4 Gaussians



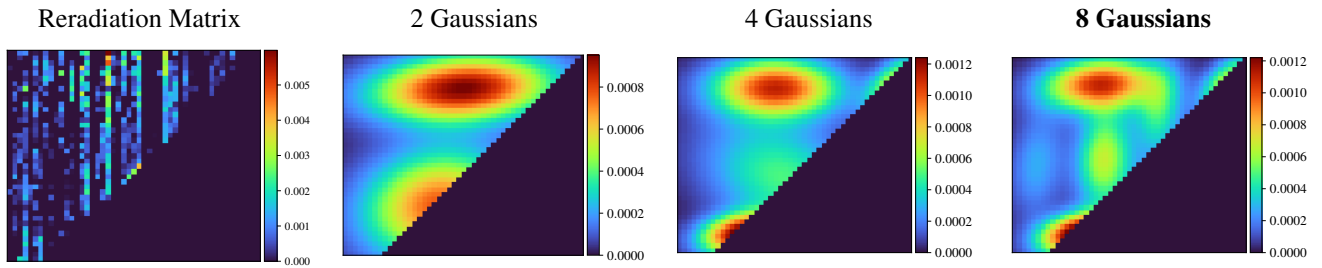
Fitted Material Under Monochromatic Illumination



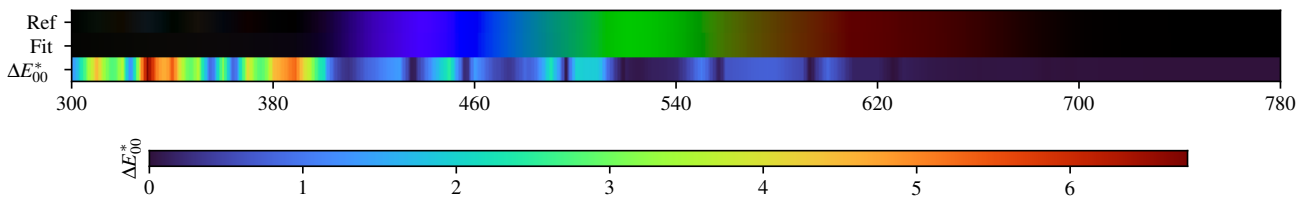
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.17$	$\Delta E = 0.18$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.54$	$\Delta E = 0.12$	$\Delta E = 0.38$	$\Delta E = 0.14$	$\Delta E = 0.14$	$\Delta E = 0.28$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.17$	$\Delta E = 0.15$	$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.37$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.12$	$\Delta E = 0.49$	$\Delta E = 0.17$	$\Delta E = 0.14$	$\Delta E = 0.20$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.17$	$\Delta E = 0.19$	$\Delta E = 0.15$	$\Delta E = 0.42$	$\Delta E = 0.12$	$\Delta E = 0.43$	$\Delta E = 0.14$	$\Delta E = 0.21$	$\Delta E = 0.25$	$\Delta E = 0.18$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.14$	$\Delta E = 0.17$	$\Delta E = 0.47$	$\Delta E = 0.12$	$\Delta E = 0.40$	$\Delta E = 0.15$	$\Delta E = 0.18$	$\Delta E = 0.28$	$\Delta E = 0.16$

P3MP1C - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.13$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.50$	$\Delta E = 0.13$	$\Delta E = 0.34$	$\Delta E = 0.15$	$\Delta E = 0.19$	$\Delta E = 0.31$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.19$	$\Delta E = 0.21$	$\Delta E = 0.23$	$\Delta E = 0.15$	$\Delta E = 0.25$	$\Delta E = 0.13$	$\Delta E = 0.37$	$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.19$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.23$	$\Delta E = 0.27$	$\Delta E = 0.16$	$\Delta E = 0.18$	$\Delta E = 0.43$	$\Delta E = 0.10$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.19$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.41$	$\Delta E = 0.17$	$\Delta E = 0.42$	$\Delta E = 0.09$	$\Delta E = 0.20$	$\Delta E = 0.27$	$\Delta E = 0.18$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.20$	$\Delta E = 0.17$	$\Delta E = 0.22$	$\Delta E = 0.45$	$\Delta E = 0.12$	$\Delta E = 0.39$	$\Delta E = 0.09$	$\Delta E = 0.25$	$\Delta E = 0.32$	$\Delta E = 0.19$

P3MP1C - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.028483	0.084454	0.212059	0.356186	0.420930	0.461676	0.519540	0.563467	0.572808	0.582147	0.580942
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.571190	0.546467	0.506588	0.452592	0.373778	0.293830	0.207811	0.128893	0.082828	0.062176	0.051940
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.045816	0.041056	0.043577	0.046970	0.057349	0.070357	0.084980	0.089787	0.081939	0.073126	0.064295
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.062363	0.073325	0.112689	0.172789	0.298193	0.467749	0.540407	0.594034			

2 Gaussians max

Scaling factor: 73.87176331471301

Gaussians:

Weight	Mean		Covariance			
0.523940069	488.668370906	477.309440373	10983.289520596	941.715055771	941.715055771	5928.227484823
0.476059931	537.997555200	715.795737107	15965.825059828	882.730619526	882.730619526	2220.563759324

4 Gaussians max

Scaling factor: 75.950387336172

Gaussians:

Weight	Mean		Covariance			
0.198232498	438.296485815	414.422503255	3906.521897684	405.386527821	405.386527821	854.798082169
0.377650868	513.289720202	535.884728363	12855.036928682	-2500.095593728	-2500.095593728	6961.425866026
0.077897698	746.749900536	731.679418817	1714.601527848	979.100854425	979.100854425	1755.744973063
0.346218936	500.834725186	721.215133448	8073.349809021	-69.180088088	-69.180088088	1812.503279659

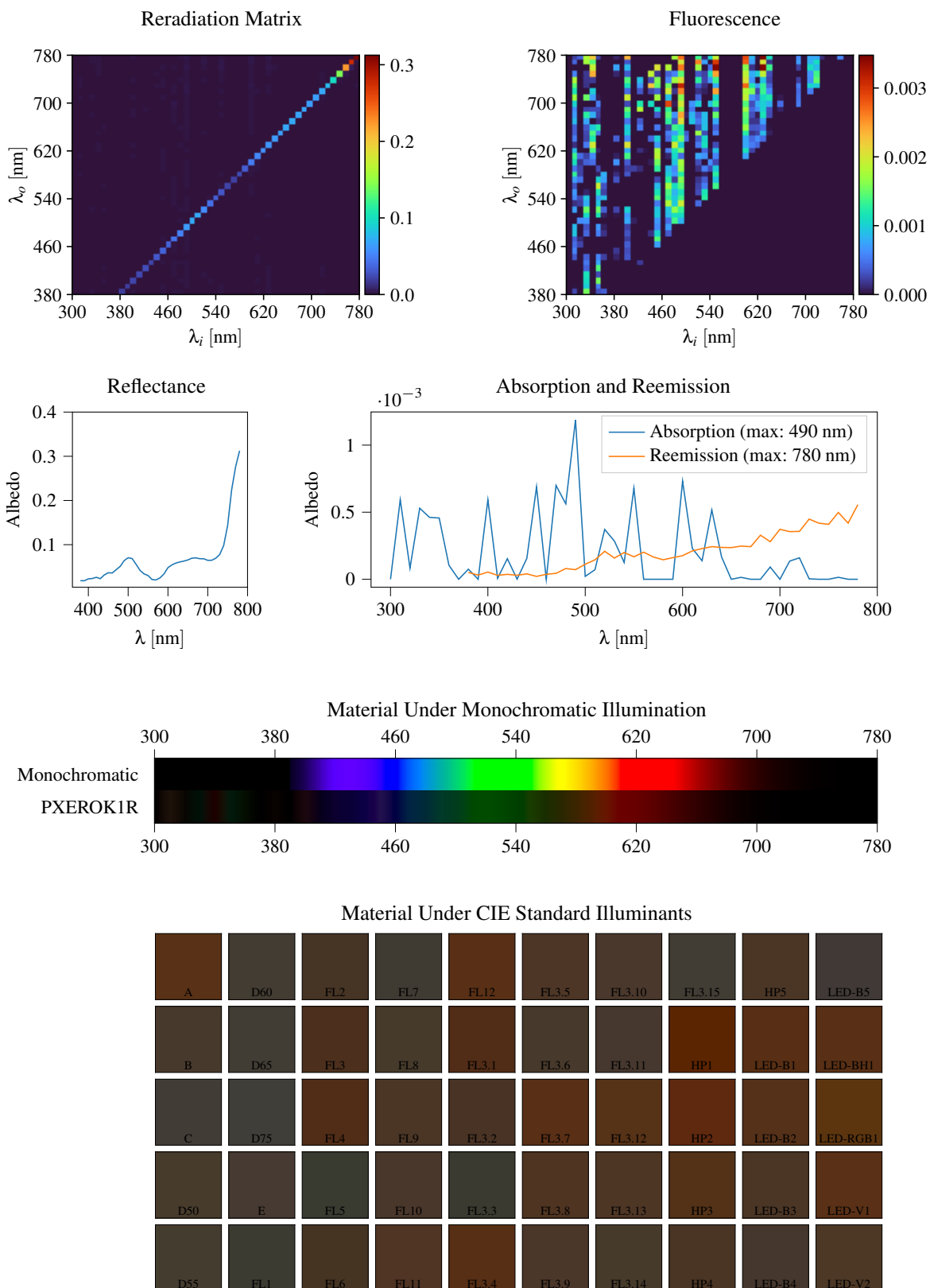
8 Gaussians max

Scaling factor: 74.44199089966739

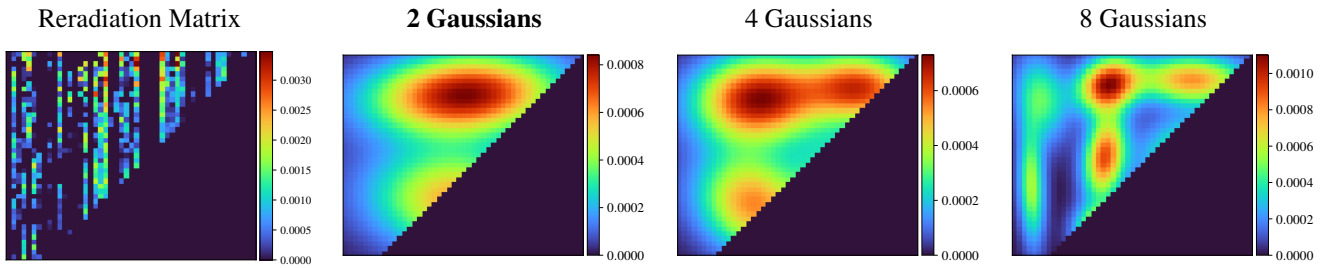
Gaussians:

Weight	Mean		Covariance			
0.206018360	441.035898300	415.486445873	3463.844265112	503.121952248	503.121952248	901.411760334
0.114335756	613.625264625	464.041684425	5408.848741659	-682.855195026	-682.855195026	3650.016450696
0.075397281	347.023744215	560.212370988	1725.248721029	589.821562747	589.821562747	6139.294295186
0.145688526	485.592131141	574.902784692	1511.350155639	316.832160600	316.832160600	4860.163459813
0.024164286	636.219696557	582.713346780	7060.842943636	566.838775063	566.838775063	3042.713730954
0.078547495	600.768414797	672.979412084	1199.657796629	333.159413539	333.159413539	3916.655637708
0.082270169	745.707866464	731.305513043	1676.258025948	929.283257733	929.283257733	1744.714425815
0.273578128	477.624439512	728.686761129	6517.086391301	379.627392807	379.627392807	1464.052316502

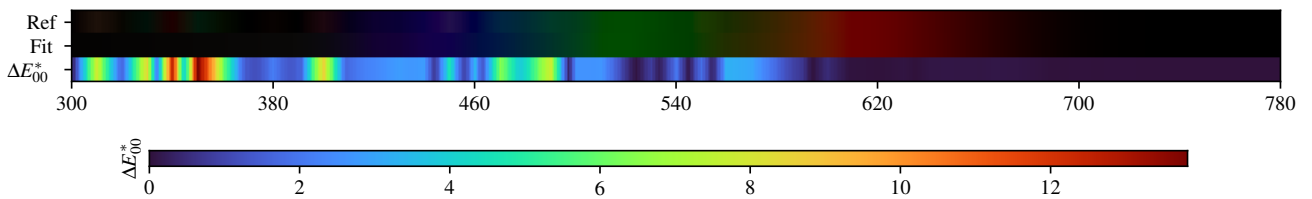
3.146. PXEROK1R



PXEROK1R - Weighted Expectation-Maximization - 2 Gaussians



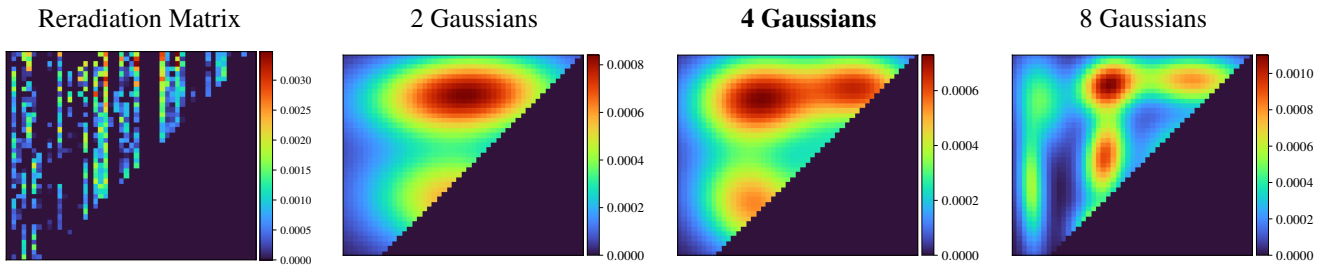
Fitted Material Under Monochromatic Illumination



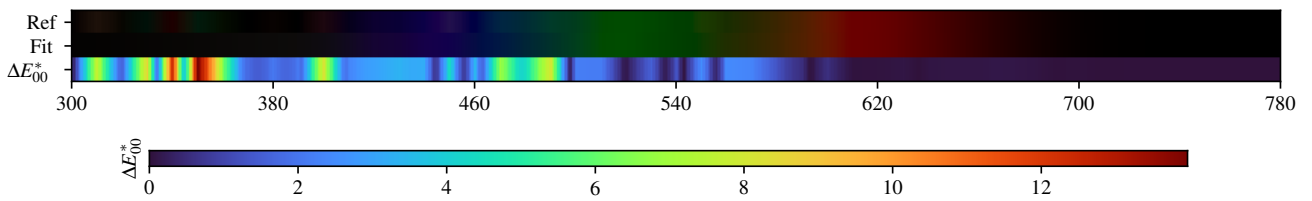
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.46$	$\Delta E = 1.00$	$\Delta E = 0.83$	$\Delta E = 0.86$	$\Delta E = 0.57$	$\Delta E = 0.73$	$\Delta E = 1.11$	$\Delta E = 0.84$	$\Delta E = 0.63$	$\Delta E = 0.77$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.88$	$\Delta E = 1.04$	$\Delta E = 0.63$	$\Delta E = 0.83$	$\Delta E = 0.45$	$\Delta E = 0.87$	$\Delta E = 1.01$	$\Delta E = 0.25$	$\Delta E = 0.35$	$\Delta E = 0.22$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.98$	$\Delta E = 1.09$	$\Delta E = 0.46$	$\Delta E = 0.73$	$\Delta E = 0.73$	$\Delta E = 0.51$	$\Delta E = 0.44$	$\Delta E = 0.36$	$\Delta E = 0.41$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.92$	$\Delta E = 0.85$	$\Delta E = 0.87$	$\Delta E = 0.98$	$\Delta E = 0.92$	$\Delta E = 0.75$	$\Delta E = 0.85$	$\Delta E = 0.26$	$\Delta E = 0.54$	$\Delta E = 0.42$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.97$	$\Delta E = 0.89$	$\Delta E = 0.86$	$\Delta E = 0.81$	$\Delta E = 0.31$	$\Delta E = 0.90$	$\Delta E = 0.98$	$\Delta E = 0.51$	$\Delta E = 0.66$	$\Delta E = 0.73$

PXEROK1R - Weighted Expectation-Maximization - 4 Gaussians



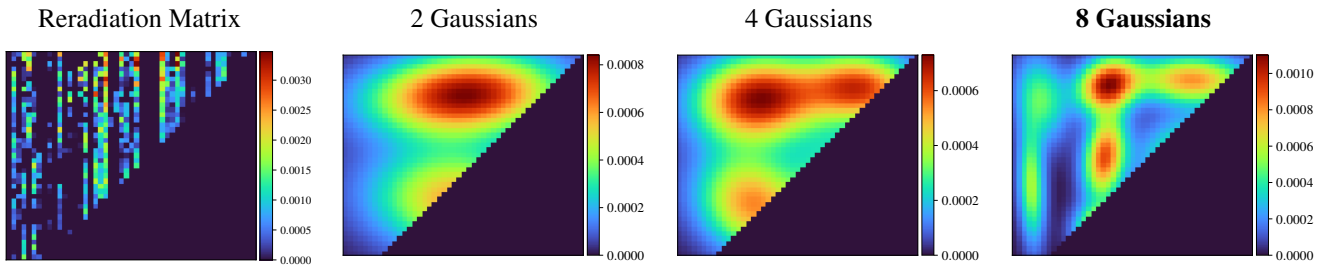
Fitted Material Under Monochromatic Illumination



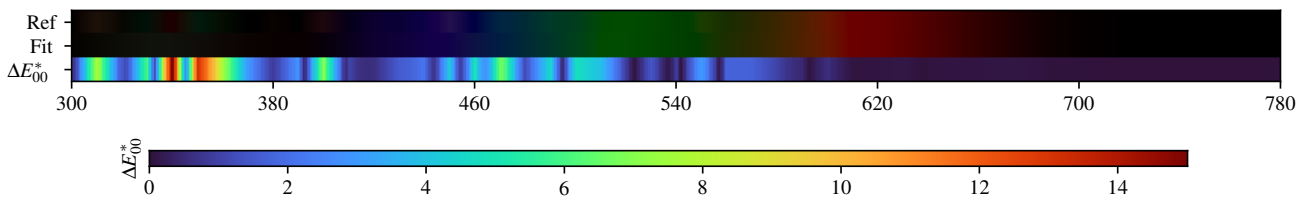
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.60$	$\Delta E = 1.26$	$\Delta E = 0.84$	$\Delta E = 1.06$	$\Delta E = 0.68$	$\Delta E = 0.88$	$\Delta E = 1.30$	$\Delta E = 1.11$	$\Delta E = 0.76$	$\Delta E = 0.90$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 1.11$	$\Delta E = 1.32$	$\Delta E = 0.61$	$\Delta E = 0.99$	$\Delta E = 0.40$	$\Delta E = 1.02$	$\Delta E = 1.18$	$\Delta E = 0.13$	$\Delta E = 0.41$	$\Delta E = 0.29$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.30$	$\Delta E = 1.42$	$\Delta E = 0.43$	$\Delta E = 0.86$	$\Delta E = 0.76$	$\Delta E = 0.59$	$\Delta E = 0.55$	$\Delta E = 0.43$	$\Delta E = 0.48$	$\Delta E = 0.21$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 1.13$	$\Delta E = 1.16$	$\Delta E = 0.93$	$\Delta E = 1.15$	$\Delta E = 0.95$	$\Delta E = 0.87$	$\Delta E = 1.01$	$\Delta E = 0.37$	$\Delta E = 0.63$	$\Delta E = 0.62$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.20$	$\Delta E = 0.99$	$\Delta E = 0.80$	$\Delta E = 0.96$	$\Delta E = 0.36$	$\Delta E = 1.05$	$\Delta E = 1.18$	$\Delta E = 0.59$	$\Delta E = 0.72$	$\Delta E = 0.96$

PXEROK1R - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.13$	$\Delta E = 0.68$	$\Delta E = 0.31$	$\Delta E = 0.52$	$\Delta E = 0.37$	$\Delta E = 0.29$	$\Delta E = 0.55$	$\Delta E = 0.55$	$\Delta E = 0.25$	$\Delta E = 0.16$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.46$	$\Delta E = 0.74$	$\Delta E = 0.19$	$\Delta E = 0.39$	$\Delta E = 0.12$	$\Delta E = 0.45$	$\Delta E = 0.51$	$\Delta E = 0.27$	$\Delta E = 0.04$	$\Delta E = 0.05$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.64$	$\Delta E = 0.84$	$\Delta E = 0.12$	$\Delta E = 0.27$	$\Delta E = 0.28$	$\Delta E = 0.30$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.05$	$\Delta E = 0.20$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.52$	$\Delta E = 0.64$	$\Delta E = 0.53$	$\Delta E = 0.52$	$\Delta E = 0.60$	$\Delta E = 0.40$	$\Delta E = 0.34$	$\Delta E = 0.10$	$\Delta E = 0.07$	$\Delta E = 0.13$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.60$	$\Delta E = 0.55$	$\Delta E = 0.31$	$\Delta E = 0.47$	$\Delta E = 0.05$	$\Delta E = 0.47$	$\Delta E = 0.55$	$\Delta E = 0.20$	$\Delta E = 0.08$	$\Delta E = 0.36$

PXEROK1R - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.018540	0.018402	0.022708	0.023444	0.026210	0.023110	0.031527	0.036469	0.035927	0.043517	0.050868
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.063948	0.070448	0.068594	0.055437	0.041625	0.033834	0.030254	0.021124	0.020173	0.024879	0.033787
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.048060	0.054304	0.058392	0.060982	0.062837	0.065448	0.069427	0.070213	0.068227	0.068161	0.064572
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.064745	0.069240	0.077652	0.098050	0.143515	0.223929	0.276351	0.312423			

2 Gaussians

Scaling factor: 72.72781021363136

Gaussians:

Weight	Mean		Covariance			
0.463589103	532.362187918	485.898833758	15162.564062811	-990.743686269	-990.743686269	5396.136076472
0.536410897	542.016591218	702.876657425	17369.346793162	801.780891698	801.780891698	3228.030985951

4 Gaussians

Scaling factor: 71.23583058867335

Gaussians:

Weight	Mean		Covariance			
0.200127250	649.616463724	492.174988792	4316.937879041	-1304.349331243	-1304.349331243	5730.434187856
0.334302905	458.944017634	693.672727947	7756.419158901	228.821661908	228.821661908	3671.128890612
0.204572685	668.257115891	716.114135155	5972.930063412	-166.212803147	-166.212803147	2428.756895199
0.260997160	449.819024334	480.450730939	6160.375810623	-966.066098185	-966.066098185	5082.202047377

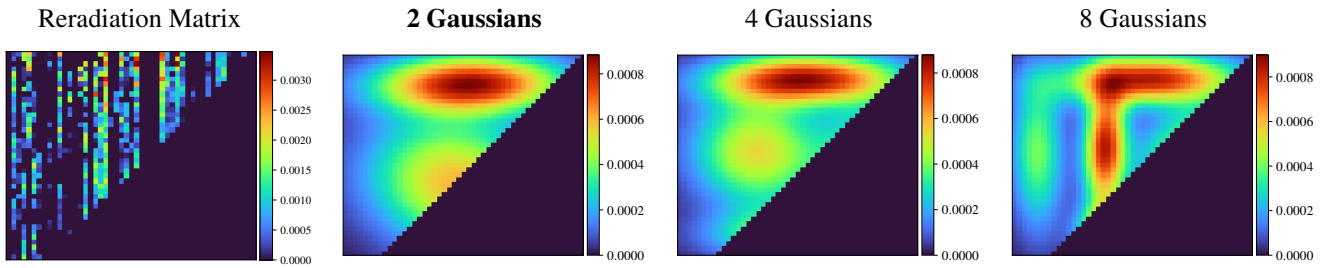
8 Gaussians

Scaling factor: 69.74300314053527

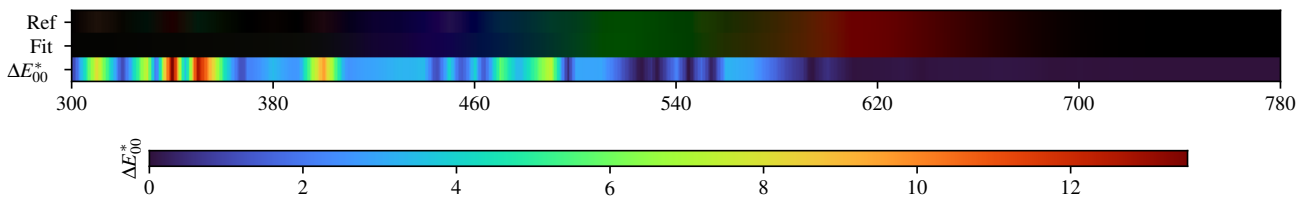
Gaussians:

Weight	Mean		Covariance			
0.126748428	661.450786546	437.708704456	3769.079426485	-2.307784277	-2.307784277	1865.574540265
0.142643581	488.115250403	723.004383617	1802.244958868	278.842979225	278.842979225	1462.514946931
0.134305694	482.498956421	576.694457300	861.262821538	383.989645743	383.989645743	3432.510574617
0.188895187	658.880229108	733.603960179	6270.155278047	-94.373127533	-94.373127533	1125.281282042
0.076430605	335.124445105	515.934315385	354.440842542	-224.692213195	-224.692213195	6566.407052621
0.092242802	353.809802571	695.523377562	1358.282141866	-417.095920548	-417.095920548	3836.439780039
0.100169445	480.194065973	423.417909486	1263.177829901	-32.091263187	-32.091263187	1126.778275245
0.138564259	638.432705408	589.227978810	4242.410237800	818.713656609	818.713656609	2857.328772341

PXEROK1R - Weighted variational Bayesian inference - 2 Gaussians



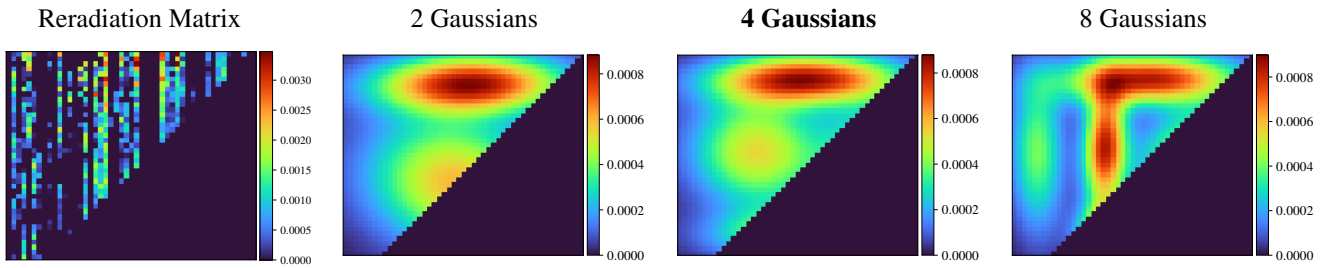
Fitted Material Under Monochromatic Illumination



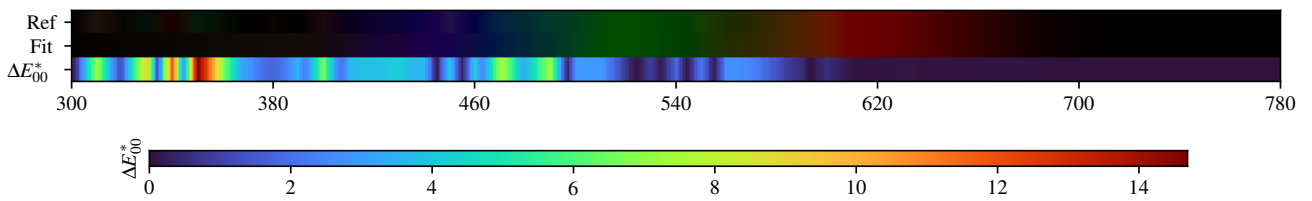
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.11$	$\Delta E = 0.30$	$\Delta E = 0.22$	$\Delta E = 0.24$	$\Delta E = 0.18$	$\Delta E = 0.08$	$\Delta E = 0.40$	$\Delta E = 0.36$	$\Delta E = 0.29$	$\Delta E = 0.26$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.20$	$\Delta E = 0.35$	$\Delta E = 0.22$	$\Delta E = 0.10$	$\Delta E = 0.21$	$\Delta E = 0.08$	$\Delta E = 0.26$	$\Delta E = 0.31$	$\Delta E = 0.14$	$\Delta E = 0.28$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.39$	$\Delta E = 0.44$	$\Delta E = 0.20$	$\Delta E = 0.11$	$\Delta E = 0.20$	$\Delta E = 0.14$	$\Delta E = 0.06$	$\Delta E = 0.19$	$\Delta E = 0.14$	$\Delta E = 0.41$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.18$	$\Delta E = 0.60$	$\Delta E = 0.18$	$\Delta E = 0.27$	$\Delta E = 0.21$	$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.37$	$\Delta E = 0.23$	$\Delta E = 0.26$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.24$	$\Delta E = 0.15$	$\Delta E = 0.28$	$\Delta E = 0.24$	$\Delta E = 0.15$	$\Delta E = 0.23$	$\Delta E = 0.20$	$\Delta E = 0.45$	$\Delta E = 0.25$	$\Delta E = 0.27$

PXEROK1R - Weighted variational Bayesian inference - 4 Gaussians



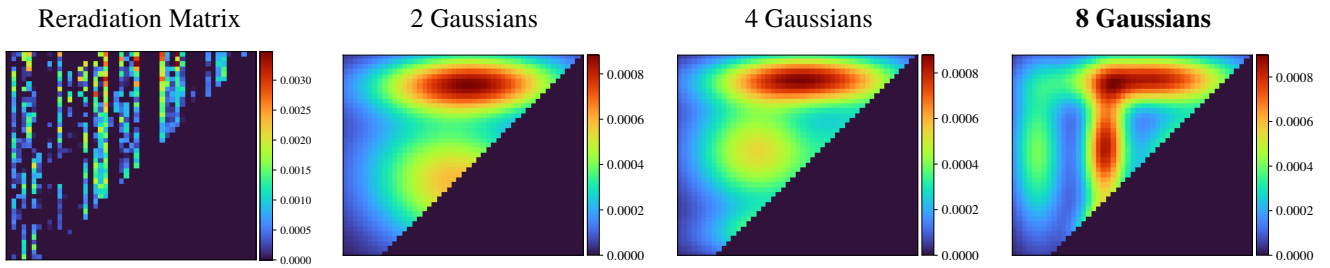
Fitted Material Under Monochromatic Illumination



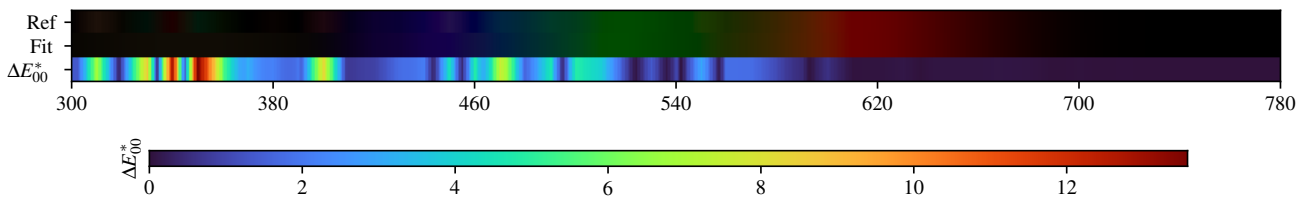
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.31$	$\Delta E = 1.23$	$\Delta E = 0.70$	$\Delta E = 1.07$	$\Delta E = 0.40$	$\Delta E = 0.63$	$\Delta E = 0.97$	$\Delta E = 1.05$	$\Delta E = 0.56$	$\Delta E = 0.88$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.87$	$\Delta E = 1.33$	$\Delta E = 0.43$	$\Delta E = 0.84$	$\Delta E = 0.27$	$\Delta E = 0.88$	$\Delta E = 0.83$	$\Delta E = 0.24$	$\Delta E = 0.21$	$\Delta E = 0.13$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 1.17$	$\Delta E = 1.50$	$\Delta E = 0.27$	$\Delta E = 0.63$	$\Delta E = 0.58$	$\Delta E = 0.35$	$\Delta E = 0.33$	$\Delta E = 0.22$	$\Delta E = 0.27$	$\Delta E = 0.13$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.98$	$\Delta E = 0.90$	$\Delta E = 1.12$	$\Delta E = 0.78$	$\Delta E = 1.14$	$\Delta E = 0.55$	$\Delta E = 0.76$	$\Delta E = 0.18$	$\Delta E = 0.44$	$\Delta E = 0.27$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 1.10$	$\Delta E = 1.15$	$\Delta E = 0.71$	$\Delta E = 0.60$	$\Delta E = 0.18$	$\Delta E = 0.69$	$\Delta E = 1.04$	$\Delta E = 0.47$	$\Delta E = 0.62$	$\Delta E = 0.66$

PXEROK1R - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.18$	$\Delta E = 0.86$	$\Delta E = 0.44$	$\Delta E = 0.76$	$\Delta E = 0.38$	$\Delta E = 0.42$	$\Delta E = 0.73$	$\Delta E = 0.76$	$\Delta E = 0.37$	$\Delta E = 0.58$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.61$	$\Delta E = 0.94$	$\Delta E = 0.26$	$\Delta E = 0.59$	$\Delta E = 0.15$	$\Delta E = 0.64$	$\Delta E = 0.65$	$\Delta E = 0.26$	$\Delta E = 0.10$	$\Delta E = 0.03$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.85$	$\Delta E = 1.05$	$\Delta E = 0.16$	$\Delta E = 0.41$	$\Delta E = 0.37$	$\Delta E = 0.31$	$\Delta E = 0.16$	$\Delta E = 0.13$	$\Delta E = 0.14$	$\Delta E = 0.19$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.67$	$\Delta E = 0.56$	$\Delta E = 0.78$	$\Delta E = 0.63$	$\Delta E = 0.84$	$\Delta E = 0.46$	$\Delta E = 0.48$	$\Delta E = 0.09$	$\Delta E = 0.26$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.77$	$\Delta E = 0.81$	$\Delta E = 0.44$	$\Delta E = 0.53$	$\Delta E = 0.09$	$\Delta E = 0.56$	$\Delta E = 0.78$	$\Delta E = 0.25$	$\Delta E = 0.37$	$\Delta E = 0.45$

PXEROK1R - Weighted variational Bayesian inference - Fits**Diagonal**

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.018540	0.018402	0.022708	0.023444	0.026210	0.023110	0.031527	0.036469	0.035927	0.043517	0.050868
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.063948	0.070448	0.068594	0.055437	0.041625	0.033834	0.030254	0.021124	0.020173	0.024879	0.033787
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.048060	0.054304	0.058392	0.060982	0.062837	0.065448	0.069427	0.070213	0.068227	0.068161	0.064572
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.064745	0.069240	0.077652	0.098050	0.143515	0.223929	0.276351	0.312423			

2 Gaussians max

Scaling factor: 71.2449427211585

Gaussians:

Weight	Mean		Covariance			
0.603234274	526.557495077	521.304238333	15357.159668516	-1556.042517331	-1556.042517331	8836.296202123
0.396765726	554.310187873	724.955447386	17370.569806885	184.701808391	184.701808391	1683.292067594

4 Gaussians max

Scaling factor: 71.10019860948759

Gaussians:

Weight	Mean		Covariance			
0.194694017	552.235135849	421.219346789	14526.113304626	302.814085558	302.814085558	1255.937462109
0.334989534	457.264399270	587.315846250	8309.387040077	-98.469853284	-98.469853284	6094.356583003
0.141976939	665.825851952	581.348070607	4072.801144733	1000.374786443	1000.374786443	6788.890901091
0.328339510	555.505261976	734.222311715	16772.634583927	108.035246730	108.035246730	1220.355475217

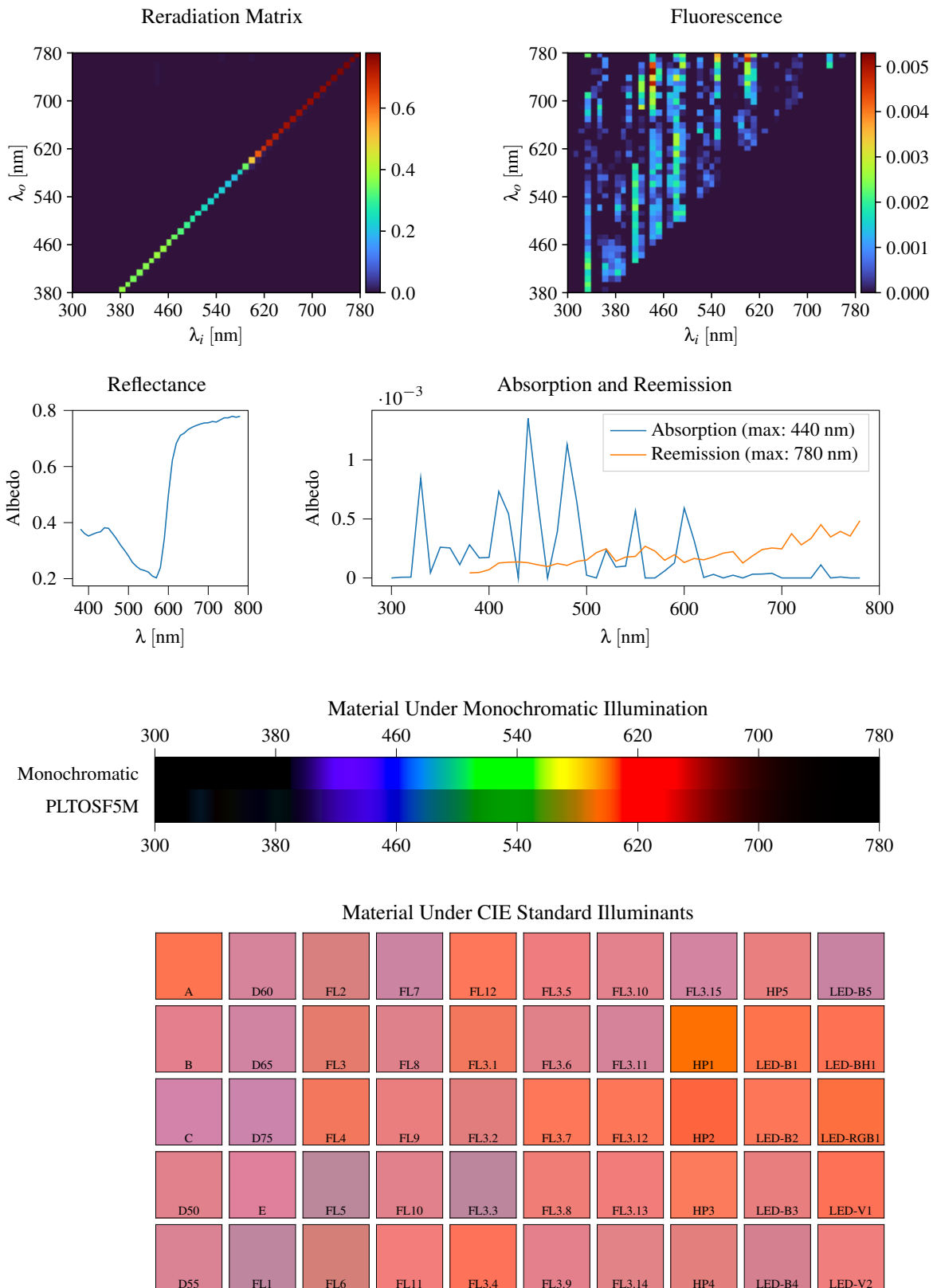
8 Gaussians max

Scaling factor: 71.18793104011492

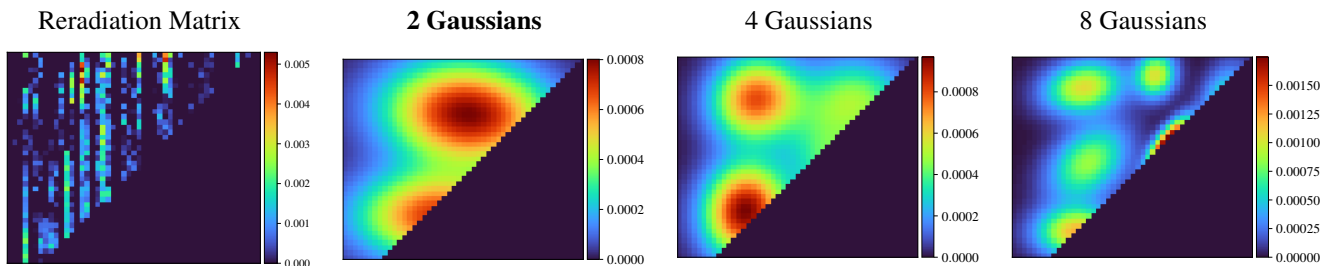
Gaussians:

Weight	Mean		Covariance			
0.147448209	346.666062803	586.132144521	1410.671641601	-79.500382444	-79.500382444	12094.880036637
0.089030427	485.274035890	425.048836049	1491.162222147	187.896863053	187.896863053	1626.628208972
0.137685048	659.466933626	445.946725673	3984.237242465	-226.503330623	-226.503330623	2621.636500122
0.174909511	483.418880235	597.803632883	887.751307170	253.678163902	253.678163902	6740.808058120
0.140920158	641.492027730	601.879479407	5233.356809907	1719.119496185	1719.119496185	3617.970406505
0.307688725	572.839426818	733.909088028	14516.552509144	228.137410140	228.137410140	1211.352034459

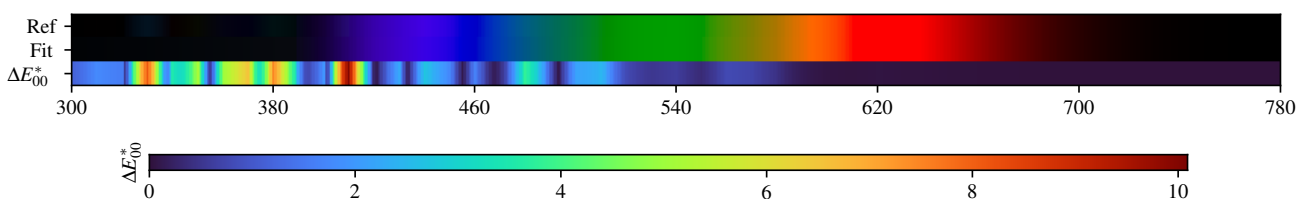
3.147. PLTOSF5M



PLTOSF5M - Weighted Expectation-Maximization - 2 Gaussians



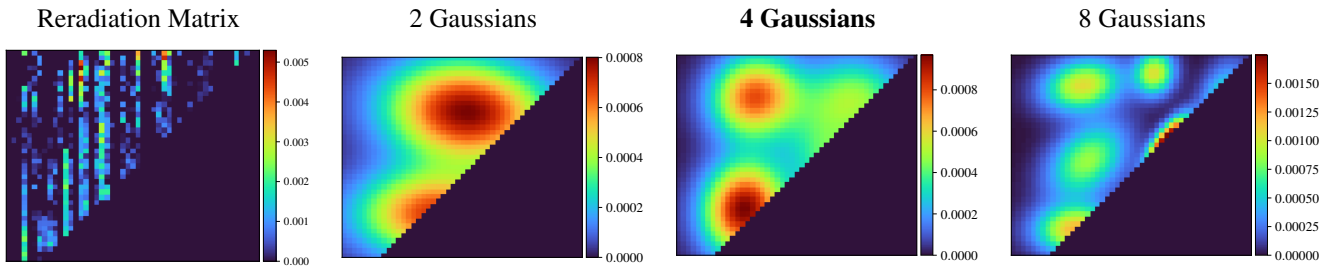
Fitted Material Under Monochromatic Illumination



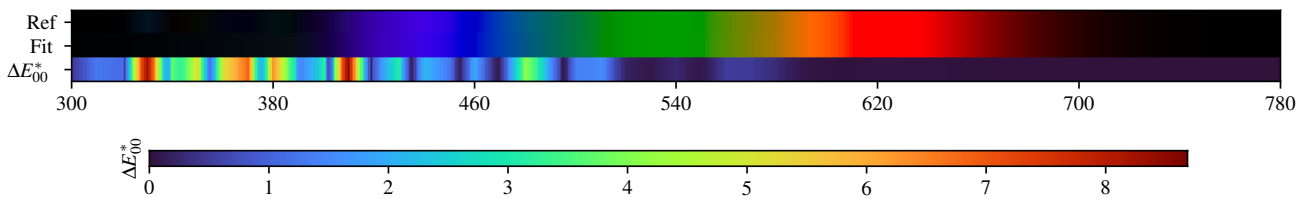
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.10$	D60 $\Delta E = 0.20$	FL2 $\Delta E = 0.17$	FL7 $\Delta E = 0.19$	FL12 $\Delta E = 0.09$	FL3.5 $\Delta E = 0.11$	FL3.10 $\Delta E = 0.14$	FL3.15 $\Delta E = 0.19$	HP5 $\Delta E = 0.16$	LED-B5 $\Delta E = 0.16$
B $\Delta E = 0.16$	D65 $\Delta E = 0.22$	FL3 $\Delta E = 0.15$	FL8 $\Delta E = 0.14$	FL3.1 $\Delta E = 0.13$	FL3.6 $\Delta E = 0.13$	FL3.11 $\Delta E = 0.15$	HP1 $\Delta E = 0.12$	LED-B1 $\Delta E = 0.10$	LED-BH1 $\Delta E = 0.10$
C $\Delta E = 0.21$	D75 $\Delta E = 0.25$	FL4 $\Delta E = 0.13$	FL9 $\Delta E = 0.13$	FL3.2 $\Delta E = 0.14$	FL3.7 $\Delta E = 0.09$	FL3.12 $\Delta E = 0.09$	HP2 $\Delta E = 0.11$	LED-B2 $\Delta E = 0.11$	LED-RGB1 $\Delta E = 0.11$
D50 $\Delta E = 0.17$	E $\Delta E = 0.18$	FL5 $\Delta E = 0.26$	FL10 $\Delta E = 0.15$	FL3.3 $\Delta E = 0.24$	FL3.8 $\Delta E = 0.11$	FL3.13 $\Delta E = 0.11$	HP3 $\Delta E = 0.13$	LED-B3 $\Delta E = 0.12$	LED-V1 $\Delta E = 0.13$
D55 $\Delta E = 0.19$	FL1 $\Delta E = 0.23$	FL6 $\Delta E = 0.19$	FL11 $\Delta E = 0.12$	FL3.4 $\Delta E = 0.10$	FL3.9 $\Delta E = 0.13$	FL3.14 $\Delta E = 0.13$	HP4 $\Delta E = 0.19$	LED-B4 $\Delta E = 0.14$	LED-V2 $\Delta E = 0.22$

PLTOSF5M - Weighted Expectation-Maximization - 4 Gaussians



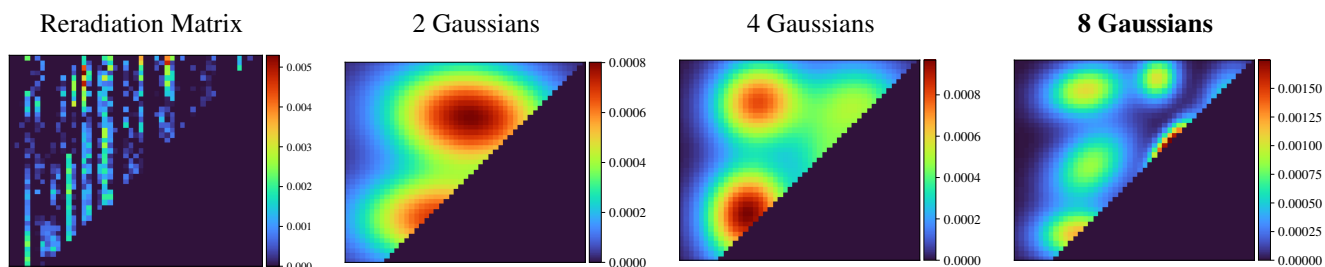
Fitted Material Under Monochromatic Illumination



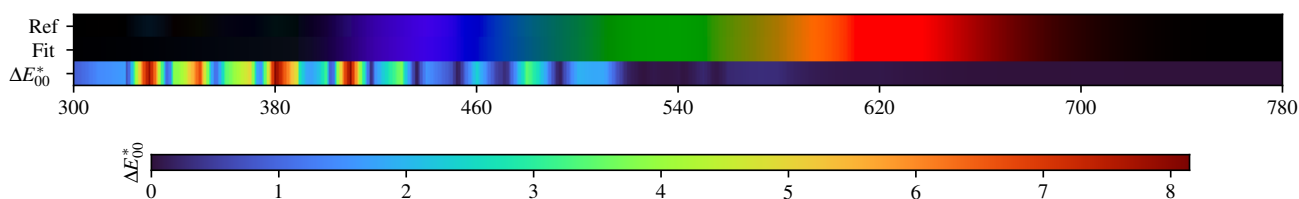
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.19$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.08$	$\Delta E = 0.10$	$\Delta E = 0.15$	$\Delta E = 0.20$	$\Delta E = 0.15$	$\Delta E = 0.09$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.17$	$\Delta E = 0.20$	$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.07$	$\Delta E = 0.12$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.06$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.20$	$\Delta E = 0.21$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.05$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.17$	$\Delta E = 0.16$	$\Delta E = 0.14$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.12$	$\Delta E = 0.09$	$\Delta E = 0.14$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.18$	$\Delta E = 0.17$	$\Delta E = 0.13$	$\Delta E = 0.13$	$\Delta E = 0.05$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.18$	$\Delta E = 0.08$	$\Delta E = 0.23$

PLTOSF5M - Weighted Expectation-Maximization - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.11$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.10$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.08$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.11$	$\Delta E = 0.14$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.07$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.12$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.13$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.12$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.12$	$\Delta E = 0.11$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.09$	$\Delta E = 0.15$	$\Delta E = 0.10$	$\Delta E = 0.17$

PLTOSF5M - Weighted Expectation-Maximization - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.376568	0.360833	0.352154	0.358389	0.363996	0.367363	0.381717	0.379653	0.361371	0.342228	0.320065
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.301587	0.281056	0.258054	0.243902	0.233234	0.229358	0.223427	0.209215	0.202971	0.239402	0.343412
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.497173	0.621717	0.683007	0.710874	0.719356	0.732457	0.740392	0.746349	0.751496	0.755328	0.755939
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.760672	0.758589	0.766052	0.773731	0.773521	0.779289	0.775719	0.779296			

2 Gaussians

Scaling factor: 69.65611224010351

Gaussians:

Weight	Mean		Covariance			
0.409225444	481.879076836	463.444700338	11660.336701529	-73.470482462	-73.470482462	3752.171557940
0.590774556	547.881173736	671.738710860	12952.782568804	-725.497483876	-725.497483876	5215.080742653

4 Gaussians

Scaling factor: 66.59215800839254

Gaussians:

Weight	Mean		Covariance			
0.340303283	433.842012863	470.105592848	3300.185509773	196.579530051	196.579530051	4207.819734975
0.257140480	452.423393852	698.315124130	3633.570792951	230.242125421	230.242125421	3418.816717332
0.179109269	660.896025725	696.867313280	5051.081211487	-292.094582399	-292.094582399	3487.115370341
0.223446968	619.943978433	546.619831381	4599.442700647	-2564.650433094	-2564.650433094	8089.393073126

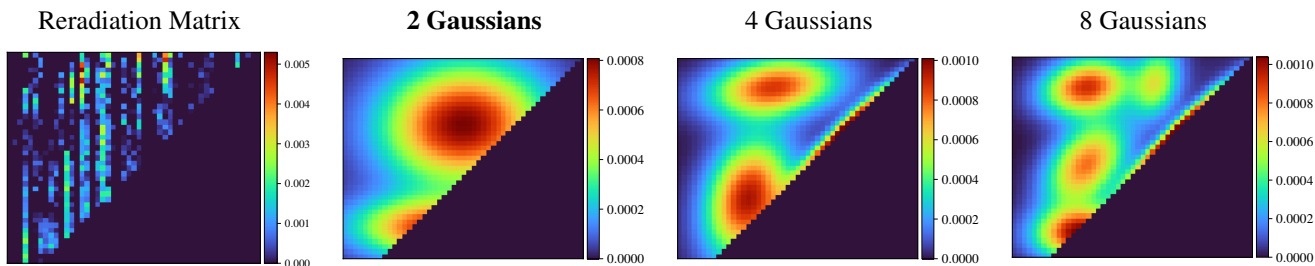
8 Gaussians

Scaling factor: 68.77520266444844

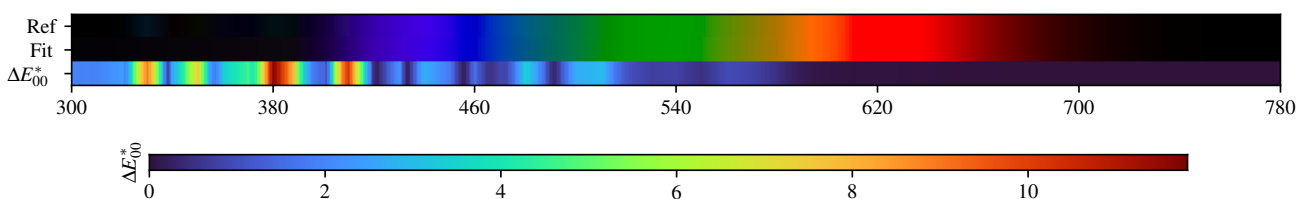
Gaussians:

Weight	Mean		Covariance			
0.203384751	428.874010809	427.467921667	3187.832985230	69.660746465	69.660746465	1115.735615031
0.084048337	725.101825953	697.888385689	1085.618389934	451.771078972	451.771078972	2322.097061899
0.207015533	449.137765450	568.393843910	2960.691944781	1035.652275303	1035.652275303	2750.479195930
0.054243486	589.562697529	456.571625410	1675.576049997	-165.327250147	-165.327250147	2684.680792294
0.076063419	586.217595932	746.408160738	746.536315770	59.233444495	59.233444495	919.188080014
0.140746510	612.705359266	602.669584106	690.374282141	598.110800995	598.110800995	1100.801769423
0.048138348	724.734698838	463.558777429	1141.980838736	463.858502205	463.858502205	3999.948599918
0.186359616	440.168235415	722.030596754	2953.120898370	349.189150003	349.189150003	1332.028510066

PLTOSF5M - Weighted variational Bayesian inference - 2 Gaussians



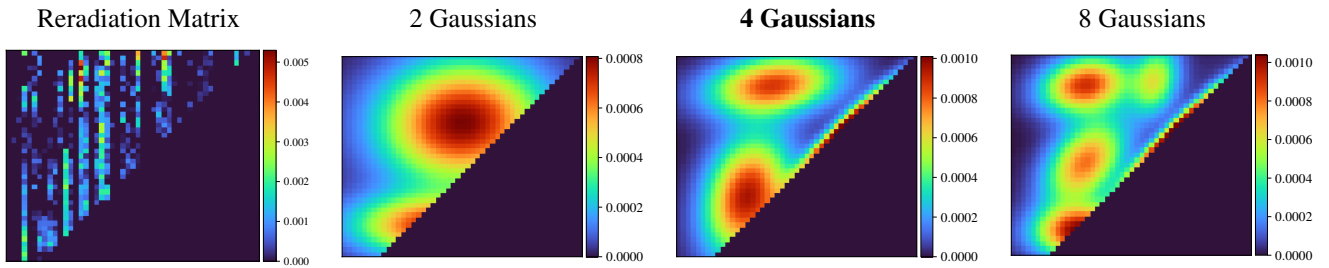
Fitted Material Under Monochromatic Illumination



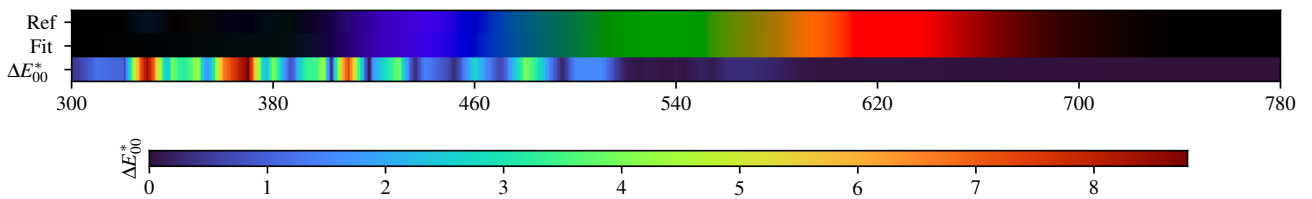
Fitted Material Under CIE Standard Illuminants

A $\Delta E = 0.14$	D60 $\Delta E = 0.32$	FL2 $\Delta E = 0.24$	FL7 $\Delta E = 0.30$	FL12 $\Delta E = 0.11$	FL3.5 $\Delta E = 0.16$	FL3.10 $\Delta E = 0.18$	FL3.15 $\Delta E = 0.29$	HP5 $\Delta E = 0.22$	LED-B5 $\Delta E = 0.28$
B $\Delta E = 0.24$	D65 $\Delta E = 0.35$	FL3 $\Delta E = 0.20$	FL8 $\Delta E = 0.21$	FL3.1 $\Delta E = 0.16$	FL3.6 $\Delta E = 0.20$	FL3.11 $\Delta E = 0.22$	HP1 $\Delta E = 0.15$	LED-B1 $\Delta E = 0.14$	LED-BH1 $\Delta E = 0.13$
C $\Delta E = 0.31$	D75 $\Delta E = 0.40$	FL4 $\Delta E = 0.16$	FL9 $\Delta E = 0.18$	FL3.2 $\Delta E = 0.20$	FL3.7 $\Delta E = 0.12$	FL3.12 $\Delta E = 0.13$	HP2 $\Delta E = 0.14$	LED-B2 $\Delta E = 0.15$	LED-RGB1 $\Delta E = 0.14$
D50 $\Delta E = 0.25$	E $\Delta E = 0.29$	FL5 $\Delta E = 0.41$	FL10 $\Delta E = 0.19$	FL3.3 $\Delta E = 0.37$	FL3.8 $\Delta E = 0.15$	FL3.13 $\Delta E = 0.15$	HP3 $\Delta E = 0.17$	LED-B3 $\Delta E = 0.18$	LED-V1 $\Delta E = 0.16$
D55 $\Delta E = 0.29$	FL1 $\Delta E = 0.37$	FL6 $\Delta E = 0.25$	FL11 $\Delta E = 0.15$	FL3.4 $\Delta E = 0.13$	FL3.9 $\Delta E = 0.18$	FL3.14 $\Delta E = 0.20$	HP4 $\Delta E = 0.26$	LED-B4 $\Delta E = 0.23$	LED-V2 $\Delta E = 0.27$

PLTOSF5M - Weighted variational Bayesian inference - 4 Gaussians



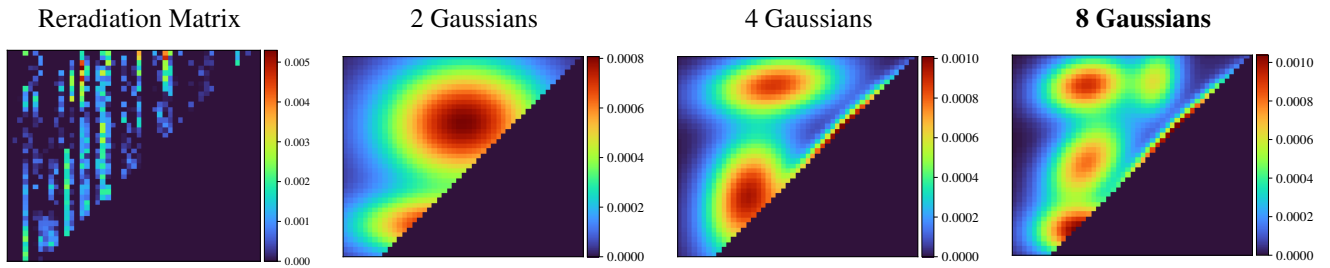
Fitted Material Under Monochromatic Illumination



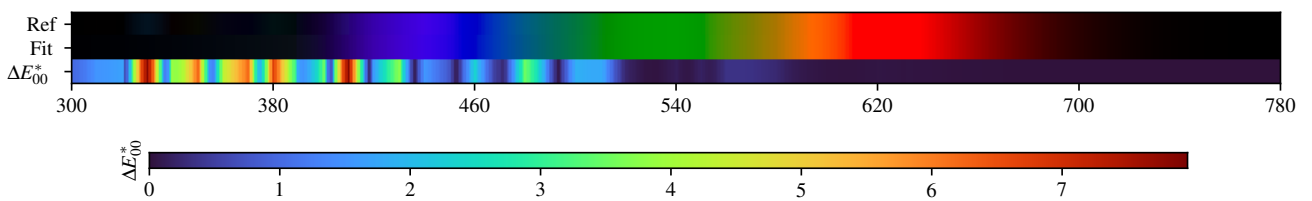
Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.08$	$\Delta E = 0.13$	$\Delta E = 0.02$	$\Delta E = 0.08$	$\Delta E = 0.08$	$\Delta E = 0.14$	$\Delta E = 0.08$	$\Delta E = 0.18$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.09$	$\Delta E = 0.09$	$\Delta E = 0.09$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.15$	$\Delta E = 0.17$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.10$	$\Delta E = 0.10$	$\Delta E = 0.11$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.11$	$\Delta E = 0.15$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.12$	$\Delta E = 0.05$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.11$	$\Delta E = 0.03$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.12$	$\Delta E = 0.15$	$\Delta E = 0.08$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.15$	$\Delta E = 0.01$

PLTOSF5M - Weighted variational Bayesian inference - 8 Gaussians



Fitted Material Under Monochromatic Illumination



Fitted Material Under CIE Standard Illuminants

A	D60	FL2	FL7	FL12	FL3.5	FL3.10	FL3.15	HP5	LED-B5
$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.10$
B	D65	FL3	FL8	FL3.1	FL3.6	FL3.11	HP1	LED-B1	LED-BH1
$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.05$	$\Delta E = 0.03$	$\Delta E = 0.09$	$\Delta E = 0.07$	$\Delta E = 0.07$
C	D75	FL4	FL9	FL3.2	FL3.7	FL3.12	HP2	LED-B2	LED-RGB1
$\Delta E = 0.07$	$\Delta E = 0.08$	$\Delta E = 0.06$	$\Delta E = 0.05$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.05$	$\Delta E = 0.09$	$\Delta E = 0.08$	$\Delta E = 0.08$
D50	E	FL5	FL10	FL3.3	FL3.8	FL3.13	HP3	LED-B3	LED-V1
$\Delta E = 0.06$	$\Delta E = 0.08$	$\Delta E = 0.07$	$\Delta E = 0.04$	$\Delta E = 0.08$	$\Delta E = 0.03$	$\Delta E = 0.04$	$\Delta E = 0.07$	$\Delta E = 0.07$	$\Delta E = 0.08$
D55	FL1	FL6	FL11	FL3.4	FL3.9	FL3.14	HP4	LED-B4	LED-V2
$\Delta E = 0.07$	$\Delta E = 0.06$	$\Delta E = 0.07$	$\Delta E = 0.03$	$\Delta E = 0.06$	$\Delta E = 0.03$	$\Delta E = 0.04$	$\Delta E = 0.09$	$\Delta E = 0.10$	$\Delta E = 0.12$

PLTOSF5M - Weighted variational Bayesian inference - Fits

Diagonal

380 nm	390 nm	400 nm	410 nm	420 nm	430 nm	440 nm	450 nm	460 nm	470 nm	480 nm
0.376568	0.360833	0.352154	0.358389	0.363996	0.367363	0.381717	0.379653	0.361371	0.342228	0.320065
490 nm	500 nm	510 nm	520 nm	530 nm	540 nm	550 nm	560 nm	570 nm	580 nm	590 nm
0.301587	0.281056	0.258054	0.243902	0.233234	0.229358	0.223427	0.209215	0.202971	0.239402	0.343412
600 nm	610 nm	620 nm	630 nm	640 nm	650 nm	660 nm	670 nm	680 nm	690 nm	700 nm
0.497173	0.621717	0.683007	0.710874	0.719356	0.732457	0.740392	0.746349	0.751496	0.755328	0.755939
710 nm	720 nm	730 nm	740 nm	750 nm	760 nm	770 nm	780 nm			
0.760672	0.758589	0.766052	0.773731	0.773521	0.779289	0.775719	0.779296			

2 Gaussians max

Scaling factor: 70.24909170249028

Gaussians:

Weight	Mean	Covariance
0.290549268	477.968280282	435.933428060
0.709450732	538.473623648	648.011890708

4 Gaussians max

Scaling factor: 69.24243058551663

Gaussians:

Weight	Mean	Covariance
0.405335428	438.943224275	497.745419628
0.126785917	661.733199590	494.747172978
0.187245561	644.234612605	633.247279192
0.280633094	492.107419804	724.925080181

8 Gaussians max

Scaling factor: 70.98343259012718

Gaussians:

Weight	Mean	Covariance
0.194424077	435.555232965	424.977382744
0.086662696	645.417657910	458.657895012
0.216213375	445.113005182	564.572696748
0.185574355	635.116404389	624.663629590
0.049880002	722.148549789	638.146110967
0.188604017	445.644691668	722.970850657
0.077297894	588.052896383	731.096330899