Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: METALUX

Report Number: P1527721

Luminaire Tested: 22CGTX-25-B2750-W2A-2700K

Issue Date: 8/26/2026

Report Generated By 670265710 / DESKTOP-98SHLC4

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1527721
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	8/26/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	22CGTX-25-B2750-W2A-2700K
Description:	2X2 2500 LUMEN CGTX TROFFER WITH BIO UP LEDS AT 2700K CCT WITH FROSTED SMOOTH L
Light Source:	2700K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	2695.7 lumens
Efficiency:	N/A
Efficacy:	110.9 lumens/watt
Spacing Criteria (0/90/45):	1.26 / 1.26 / 1.38
Luminous Opening:	Rectangular (W 1.81' x L: 1.81' x H: 0')
CIE Type:	Direct

Input Watts (W):	24.3
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	24 FT

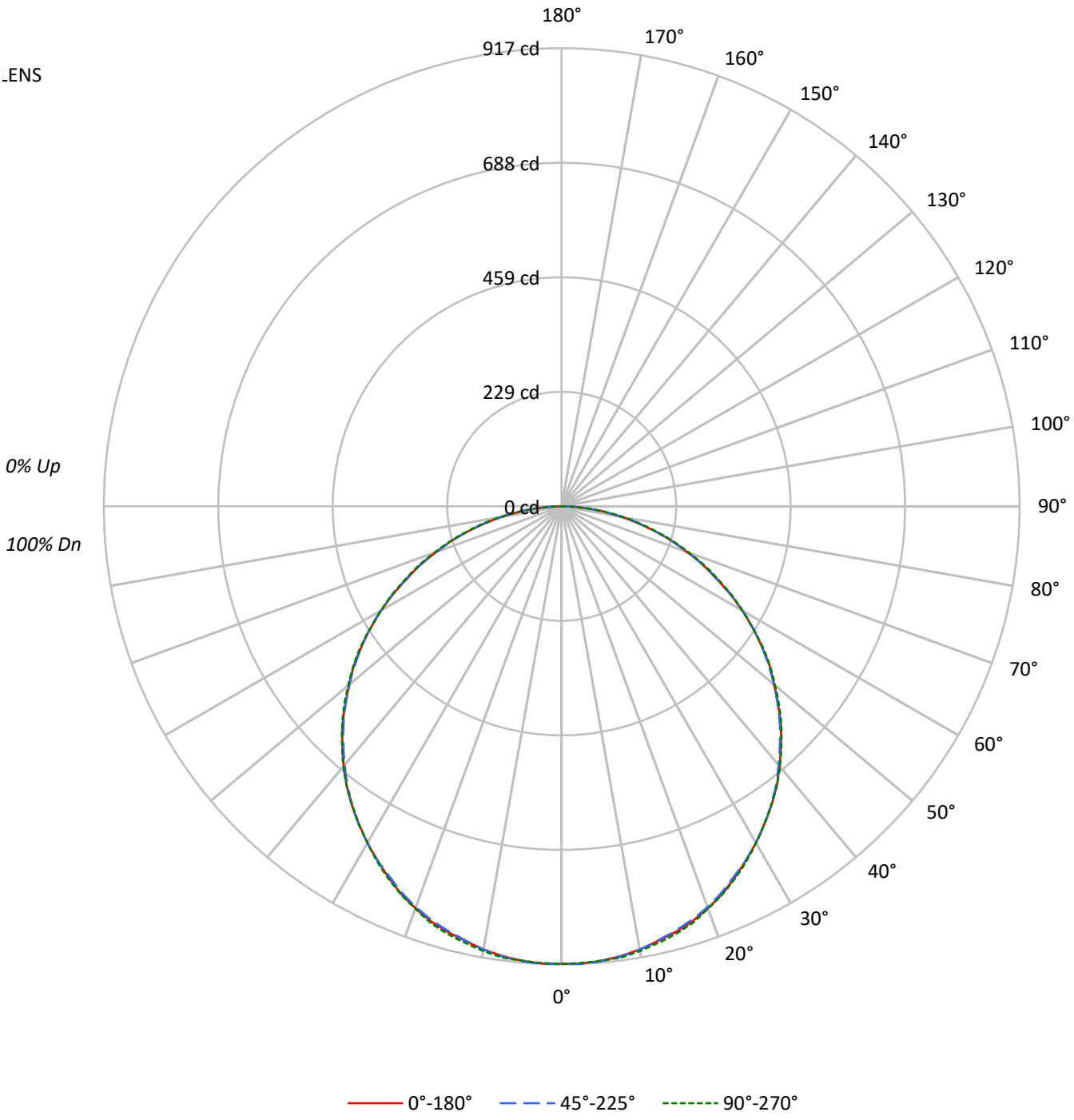


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Scaled Data Report

TEST NUMBER: P1527721
CATALOG NUMBER: 22CGTX-25-B2750-W2A-2700K

Luminous Intensity Polar Plot



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TEST NUMBER: P1527721
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			20
RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	94	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	37	30	25	36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3001	3001	3001
5°	3003	3006	3003
10°	2998	2998	3008
15°	2992	2985	3005
20°	2985	2978	2988
25°	2965	2954	2972
30°	2943	2943	2943
35°	2928	2924	2924
40°	2904	2891	2909
45°	2878	2864	2882
50°	2829	2829	2844
55°	2793	2793	2811
60°	2739	2739	2739
65°	2644	2659	2675
70°	2558	2577	2596
75°	2456	2469	2494
80°	2264	2340	2377
85°	2105	2068	2143

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
Vertical Angle: 45°
Luminance: 2882 cd/sqm

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Scaled Data Report

TEST NUMBER: P1527721
CATALOG NUMBER: 22CGTX-25-B2750-W2A-2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.8	3.2
10°-20°	249.0	9.2
20°-30°	377.8	14.0
30°-40°	457.2	17.0
40°-50°	477.8	17.7
50°-60°	437.2	16.2
60°-70°	340.6	12.6
70°-80°	206.6	7.7
80°-90°	62.7	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	713.6	26.5
0°-40°	1170.8	43.4
0°-60°	2085.8	77.4
0°-90°	2695.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2695.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	916	916	916	916	916	
5°	913	914	914	913	913	87
15°	882	882	880	883	886	249
25°	820	819	817	821	822	378
35°	732	730	731	731	731	458
45°	621	619	618	620	622	478
55°	489	488	489	490	492	437
65°	341	342	343	346	345	339
75°	194	194	195	197	197	205
85°	56	54	55	56	57	61
90°	0	0	0	0	0	

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Scaled Data Report

TEST NUMBER: P1527721
CATALOG NUMBER: 22CGTX-25-B2750-W2A-2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	916	916	*916*	916	916
2.5°	*916*	*916*	*917*	*915*	*915*
5°	913	914	*914*	913	913
7.5°	908	909	*909*	909	911
10°	901	902	*901*	901	904
12.5°	891	893	*890*	893	895
15°	882	882	*880*	883	886
17.5°	871	868	*868*	870	874
20°	856	854	*854*	856	857
22.5°	840	838	*837*	840	841
25°	820	819	*817*	821	822
27.5°	799	799	*799*	800	801
30°	778	777	*778*	778	778
32.5°	755	754	*756*	755	755
35°	732	730	*731*	731	731
37.5°	707	704	*705*	705	707
40°	679	678	*676*	678	680
42.5°	650	650	*647*	650	651
45°	621	619	*618*	620	622
47.5°	588	589	*587*	589	591
50°	555	555	*555*	558	558
52.5°	525	522	*522*	525	526
55°	489	488	*489*	490	492
57.5°	454	453	*455*	455	454
60°	418	417	*418*	420	418
62.5°	380	379	*382*	384	383
65°	341	342	*343*	346	345
67.5°	306	306	*307*	309	310
70°	267	268	*269*	271	271
72.5°	232	231	*231*	233	235
75°	194	194	*195*	197	197
77.5°	156	158	*160*	161	161
80°	120	121	*124*	125	126
82.5°	87	87	*89*	91	90
85°	56	54	*55*	56	57
87.5°	23	24	*25*	26	24
90°	0	0	*0*	0	0

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TEST NUMBER: P1527721
CATALOG NUMBER: 22CGTX-25-B2750-W2A-2700K

CIE UGR TABLE:

Reflectances:											
	Ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
	Wall	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
	Reference plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	15.73	17.40	16.10	17.71	18.02	15.76	17.42	16.13	17.74	18.05
	3H	17.64	19.14	18.01	19.47	19.83	17.69	19.19	18.06	19.52	19.88
	4H	18.38	19.80	18.78	20.15	20.52	18.44	19.86	18.84	20.21	20.58
	6H	18.95	20.27	19.36	20.63	21.02	19.04	20.36	19.45	20.72	21.11
	8H	19.14	20.40	19.57	20.79	21.19	19.25	20.51	19.67	20.89	21.29
	12H	19.28	20.49	19.71	20.87	21.30	19.39	20.60	19.82	20.98	21.41
4H	2H	16.40	17.82	16.80	18.17	18.54	16.42	17.84	16.82	18.19	18.56
	3H	18.53	19.72	18.94	20.12	20.52	18.57	19.77	18.98	20.16	20.56
	4H	19.41	20.49	19.84	20.91	21.34	19.47	20.55	19.90	20.96	21.40
	6H	20.11	21.06	20.57	21.50	21.96	20.21	21.16	20.66	21.59	22.05
	8H	20.36	21.25	20.82	21.69	22.16	20.47	21.36	20.93	21.80	22.26
	12H	20.56	21.36	21.04	21.83	22.30	20.67	21.47	21.15	21.94	22.41
8H	4H	19.77	20.66	20.23	21.10	21.56	19.82	20.71	20.28	21.15	21.61
	6H	20.61	21.35	21.10	21.84	22.31	20.70	21.44	21.19	21.93	22.40
	8H	20.94	21.61	21.45	22.11	22.60	21.05	21.71	21.55	22.22	22.70
	12H	21.22	21.81	21.72	22.30	22.86	21.33	21.92	21.84	22.41	22.97
12H	4H	19.82	20.62	20.30	21.09	21.56	19.86	20.67	20.34	21.14	21.61
	6H	20.69	21.36	21.20	21.86	22.35	20.77	21.44	21.28	21.94	22.43
	8H	21.08	21.67	21.59	22.16	22.72	21.18	21.77	21.69	22.26	22.82

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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Metalux

Report Number: SP1-2505-441-19-R2

Test Date: 06/13/2025

Luminaire Tested: 24CGTX-55-B2750-W2A-2700K

Data in this report applies to families of products including 24CGTX

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

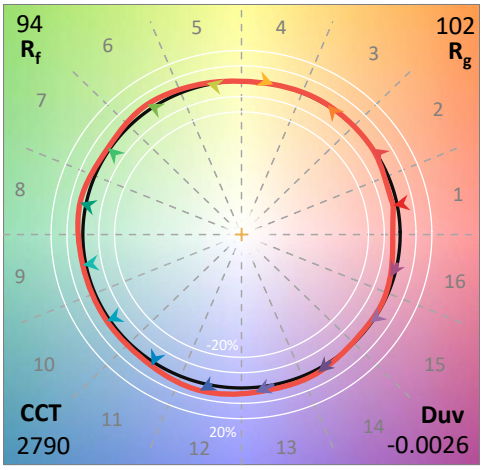
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2505-441-19-R2
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	07/28/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Metalux
Catalog Number:	**24CGTX-55-B2750-W2A-2700K**
Description:	*THIS IS A REVISION OF REPORT SP1-2504-441-19-R2 TO UPDATE THE CATALOG INFORMATION* 2X4 5500 LUMEN CGTX AT 9.0V

Spectral Parameters

CCT (K):	2790
CIE u':	0.2594
CIE v':	0.5218
Duv:	-0.0026
CIE x:	0.4483
CIE y:	0.4008
CIE z:	0.1509
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	584
Purity:	54.87344
Rf:	93.8
Rg:	102.2

CRI (Ra):	95.1				
R1:	96.3	R9:	82.2		
R2:	97.2	R10:	95.9		
R3:	99.0	R11:	90.1		
R4:	95.3	R12:	90.6		
R5:	95.9	R13:	96.2		
R6:	91.0	R14:	97.9		
R7:	93.9	R15:	99.0		
R8:	92.1				



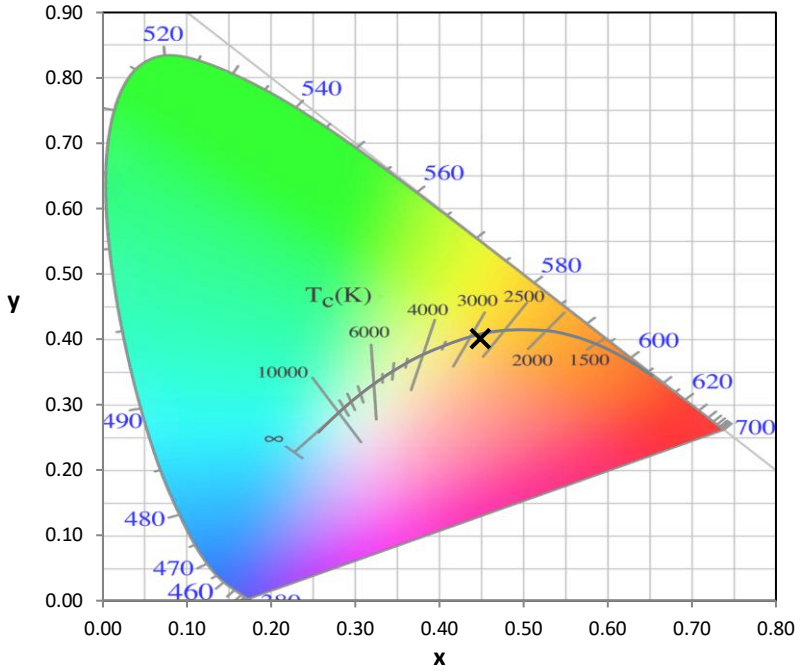
Test Conditions

Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	25.0

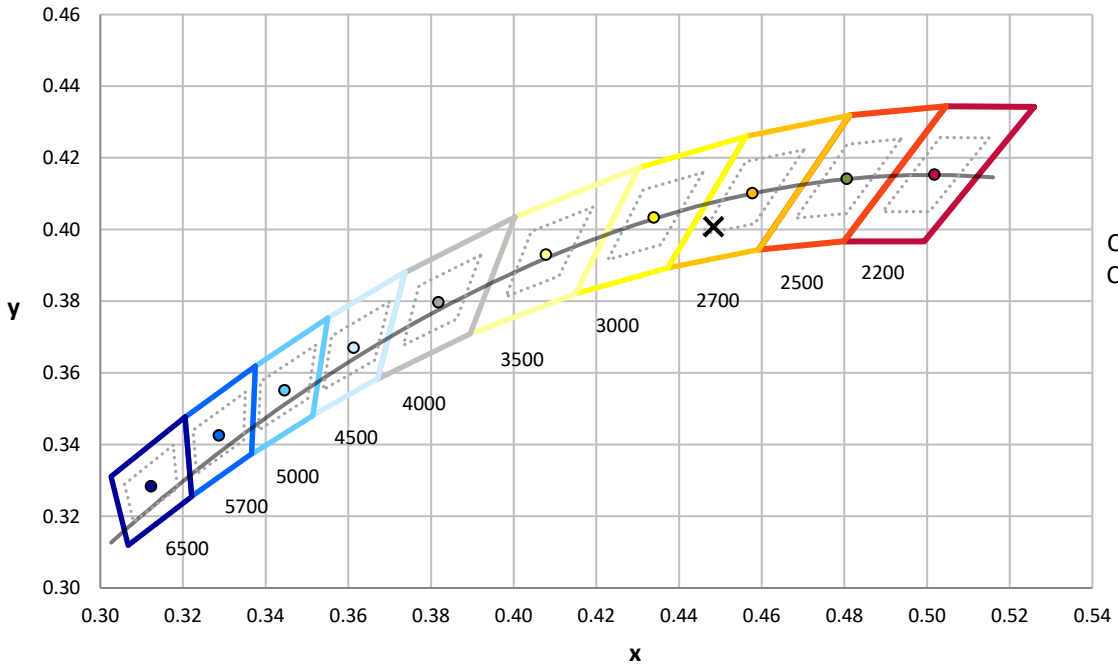
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2024	6/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2505-441-19-R2

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

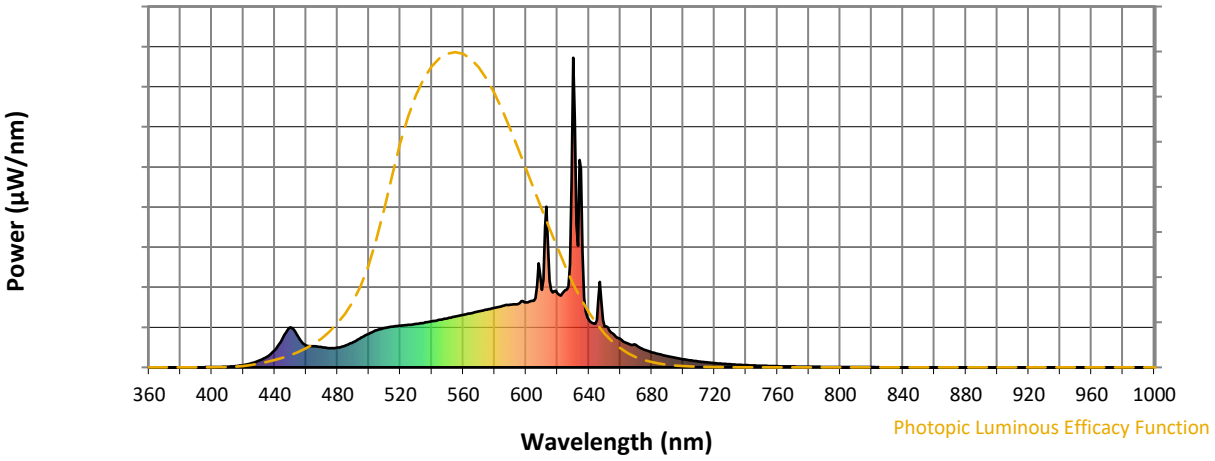


CCT = 2790K
CIE x = 0.4483
CIE y = 0.4008
Duv = -0.0026

Point lies inside the ANSI 2700K 4-step quadrangle

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Photopic Flux vs. Wavelength

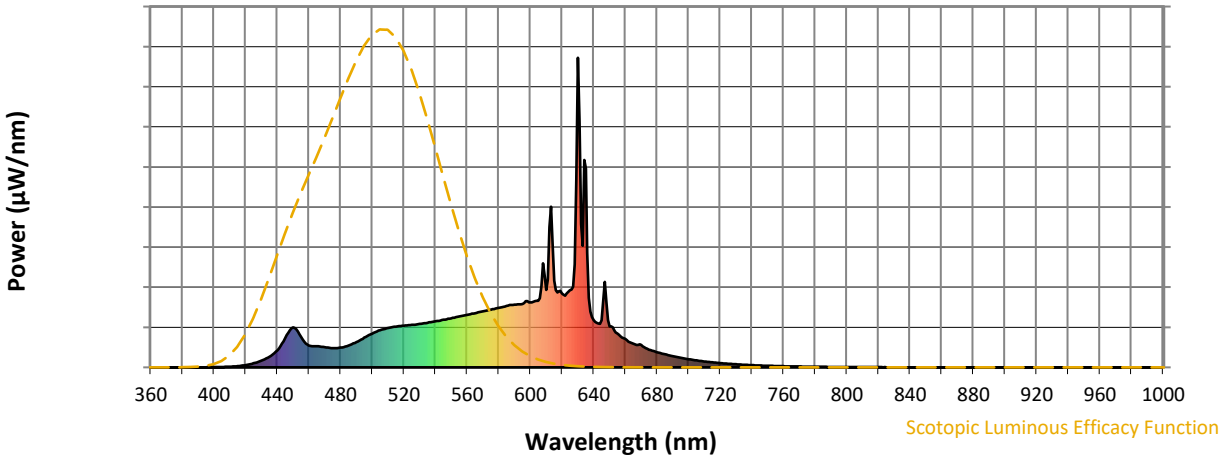


Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	81	NR	620	239	NR	750	5	NR	880	0	NR
365	0	NR	495	96	NR	625	249	NR	755	4	NR	885	0	NR
370	0	NR	500	109	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	120	NR	635	641	NR	765	3	NR	895	0	NR
380	0	NR	510	127	NR	640	153	NR	770	3	NR	900	0	NR
385	0	NR	515	131	NR	645	152	NR	775	2	NR	905	0	NR
390	0	NR	520	135	NR	650	132	NR	780	2	NR	910	0	NR
395	0	NR	525	137	NR	655	109	NR	785	2	NR	915	0	NR
400	1	NR	530	140	NR	660	92	NR	790	1	NR	920	0	NR
405	1	NR	535	144	NR	665	76	NR	795	1	NR	925	0	NR
410	2	NR	540	149	NR	670	72	NR	800	1	NR	930	0	NR
415	4	NR	545	154	NR	675	57	NR	805	1	NR	935	0	NR
420	7	NR	550	158	NR	680	49	NR	810	1	NR	940	0	NR
425	13	NR	555	164	NR	685	42	NR	815	1	NR	945	0	NR
430	22	NR	560	170	NR	690	36	NR	820	1	NR	950	0	NR
435	34	NR	565	175	NR	695	31	NR	825	1	NR	955	0	NR
440	55	NR	570	181	NR	700	26	NR	830	0	NR	960	0	NR
445	94	NR	575	186	NR	705	22	NR	835	0	NR	965	0	NR
450	129	NR	580	192	NR	710	19	NR	840	0	NR	970	0	NR
455	99	NR	585	198	NR	715	16	NR	845	0	NR	975	0	NR
460	71	NR	590	203	NR	720	14	NR	850	0	NR	980	0	NR
465	68	NR	595	204	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	210	NR	730	10	NR	860	0	NR	990	0	NR
475	62	NR	605	216	NR	735	8	NR	865	0	NR	995	0	NR
480	64	NR	610	250	NR	740	7	NR	870	0	NR	1000	0	NR
485	71	NR	615	281	NR	745	6	NR	875	0	NR			

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Scotopic Flux vs. Wavelength

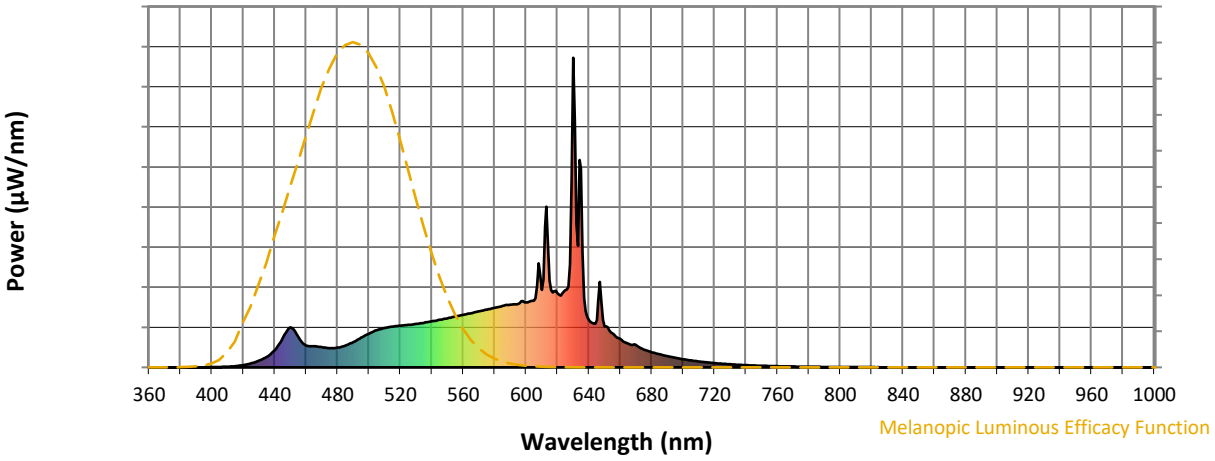


Scotopic Lumens: NR **S/P: 1.41**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	81	NR	620	239	NR	750	5	NR	880	0	NR
365	0	NR	495	96	NR	625	249	NR	755	4	NR	885	0	NR
370	0	NR	500	109	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	120	NR	635	641	NR	765	3	NR	895	0	NR
380	0	NR	510	127	NR	640	153	NR	770	3	NR	900	0	NR
385	0	NR	515	131	NR	645	152	NR	775	2	NR	905	0	NR
390	0	NR	520	135	NR	650	132	NR	780	2	NR	910	0	NR
395	0	NR	525	137	NR	655	109	NR	785	2	NR	915	0	NR
400	1	NR	530	140	NR	660	92	NR	790	1	NR	920	0	NR
405	1	NR	535	144	NR	665	76	NR	795	1	NR	925	0	NR
410	2	NR	540	149	NR	670	72	NR	800	1	NR	930	0	NR
415	4	NR	545	154	NR	675	57	NR	805	1	NR	935	0	NR
420	7	NR	550	158	NR	680	49	NR	810	1	NR	940	0	NR
425	13	NR	555	164	NR	685	42	NR	815	1	NR	945	0	NR
430	22	NR	560	170	NR	690	36	NR	820	1	NR	950	0	NR
435	34	NR	565	175	NR	695	31	NR	825	1	NR	955	0	NR
440	55	NR	570	181	NR	700	26	NR	830	0	NR	960	0	NR
445	94	NR	575	186	NR	705	22	NR	835	0	NR	965	0	NR
450	129	NR	580	192	NR	710	19	NR	840	0	NR	970	0	NR
455	99	NR	585	198	NR	715	16	NR	845	0	NR	975	0	NR
460	71	NR	590	203	NR	720	14	NR	850	0	NR	980	0	NR
465	68	NR	595	204	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	210	NR	730	10	NR	860	0	NR	990	0	NR
475	62	NR	605	216	NR	735	8	NR	865	0	NR	995	0	NR
480	64	NR	610	250	NR	740	7	NR	870	0	NR	1000	0	NR
485	71	NR	615	281	NR	745	6	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.77**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	81	NR	620	239	NR	750	5	NR	880	0	NR
365	0	NR	495	96	NR	625	249	NR	755	4	NR	885	0	NR
370	0	NR	500	109	NR	630	1000	NR	760	4	NR	890	0	NR
375	0	NR	505	120	NR	635	641	NR	765	3	NR	895	0	NR
380	0	NR	510	127	NR	640	153	NR	770	3	NR	900	0	NR
385	0	NR	515	131	NR	645	152	NR	775	2	NR	905	0	NR
390	0	NR	520	135	NR	650	132	NR	780	2	NR	910	0	NR
395	0	NR	525	137	NR	655	109	NR	785	2	NR	915	0	NR
400	1	NR	530	140	NR	660	92	NR	790	1	NR	920	0	NR
405	1	NR	535	144	NR	665	76	NR	795	1	NR	925	0	NR
410	2	NR	540	149	NR	670	72	NR	800	1	NR	930	0	NR
415	4	NR	545	154	NR	675	57	NR	805	1	NR	935	0	NR
420	7	NR	550	158	NR	680	49	NR	810	1	NR	940	0	NR
425	13	NR	555	164	NR	685	42	NR	815	1	NR	945	0	NR
430	22	NR	560	170	NR	690	36	NR	820	1	NR	950	0	NR
435	34	NR	565	175	NR	695	31	NR	825	1	NR	955	0	NR
440	55	NR	570	181	NR	700	26	NR	830	0	NR	960	0	NR
445	94	NR	575	186	NR	705	22	NR	835	0	NR	965	0	NR
450	129	NR	580	192	NR	710	19	NR	840	0	NR	970	0	NR
455	99	NR	585	198	NR	715	16	NR	845	0	NR	975	0	NR
460	71	NR	590	203	NR	720	14	NR	850	0	NR	980	0	NR
465	68	NR	595	204	NR	725	12	NR	855	0	NR	985	0	NR
470	65	NR	600	210	NR	730	10	NR	860	0	NR	990	0	NR
475	62	NR	605	216	NR	735	8	NR	865	0	NR	995	0	NR
480	64	NR	610	250	NR	740	7	NR	870	0	NR	1000	0	NR
485	71	NR	615	281	NR	745	6	NR	875	0	NR			

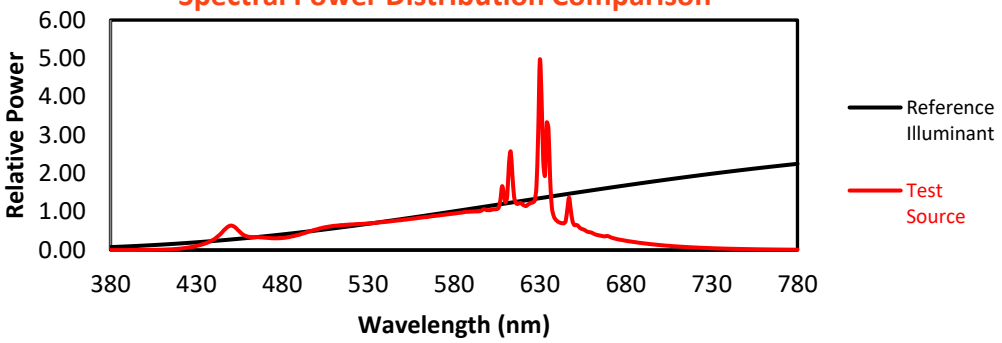
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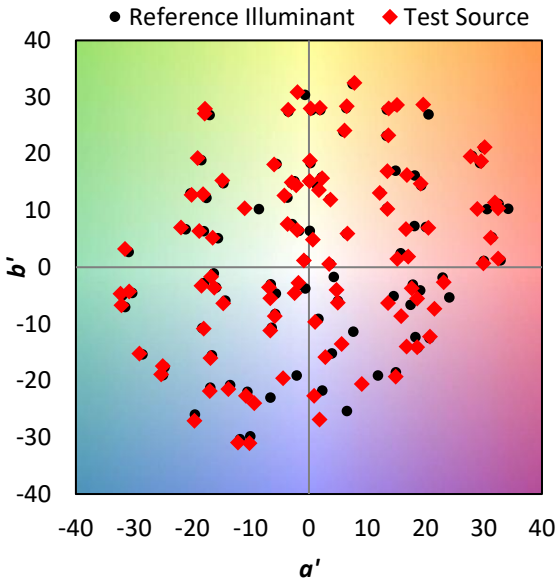
Summary

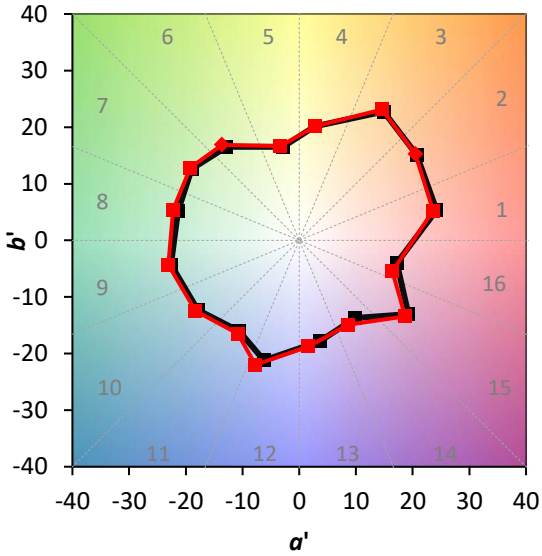
R_f = 93.8
R_g = 102.2
CIE R_a = 95.1
R_9 = 82.2

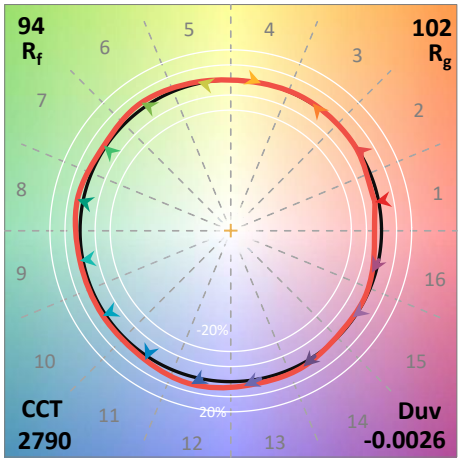
Spectral Power Distribution Comparison

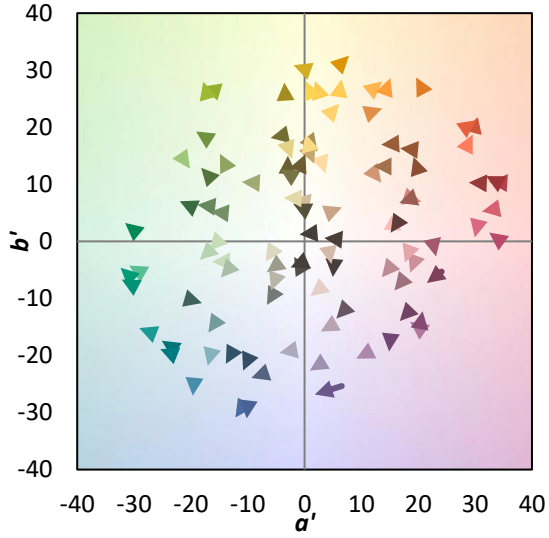


Color Vector Graphics







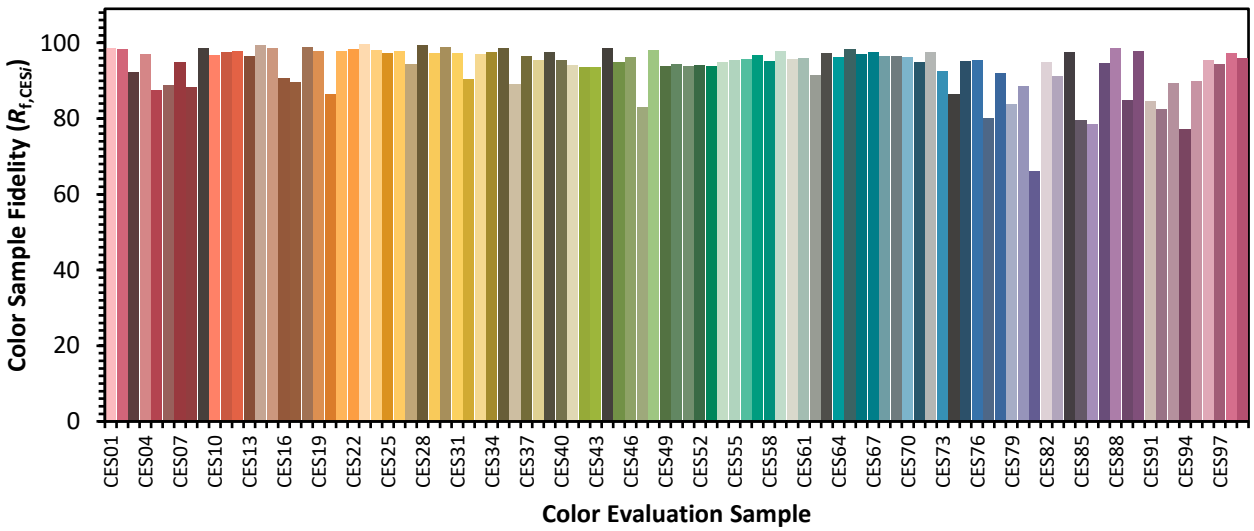


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Individual Sample Fidelity Index ($R_{f,i}$)

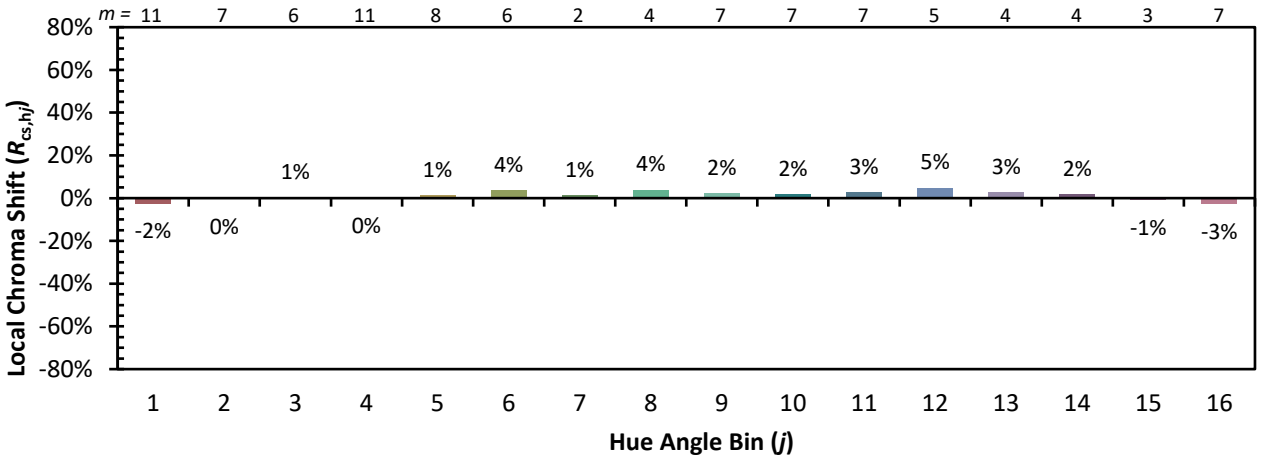
CES01 = 86	CES26 = 98	CES51 = 94	CES76 = 95
CES02 = 64	CES27 = 94	CES52 = 94	CES77 = 80
CES03 = 32	CES28 = 99	CES53 = 94	CES78 = 92
CES04 = 70	CES29 = 97	CES54 = 95	CES79 = 84
CES05 = 51	CES30 = 99	CES55 = 95	CES80 = 89
CES06 = 51	CES31 = 97	CES56 = 96	CES81 = 66
CES07 = 45	CES32 = 90	CES57 = 97	CES82 = 95
CES08 = 43	CES33 = 97	CES58 = 95	CES83 = 91
CES09 = 29	CES34 = 97	CES59 = 98	CES84 = 98
CES10 = 77	CES35 = 99	CES60 = 96	CES85 = 80
CES11 = 59	CES36 = 89	CES61 = 96	CES86 = 79
CES12 = 66	CES37 = 96	CES62 = 91	CES87 = 95
CES13 = 45	CES38 = 95	CES63 = 97	CES88 = 99
CES14 = 74	CES39 = 98	CES64 = 96	CES89 = 85
CES15 = 72	CES40 = 95	CES65 = 98	CES90 = 98
CES16 = 48	CES41 = 94	CES66 = 97	CES91 = 85
CES17 = 50	CES42 = 94	CES67 = 97	CES92 = 83
CES18 = 57	CES43 = 94	CES68 = 96	CES93 = 89
CES19 = 72	CES44 = 99	CES69 = 96	CES94 = 77
CES20 = 68	CES45 = 95	CES70 = 96	CES95 = 90
CES21 = 86	CES46 = 96	CES71 = 95	CES96 = 96
CES22 = 79	CES47 = 83	CES72 = 98	CES97 = 94
CES23 = 92	CES48 = 98	CES73 = 93	CES98 = 97
CES24 = 90	CES49 = 94	CES74 = 86	CES99 = 96
CES25 = 72	CES50 = 94	CES75 = 95	

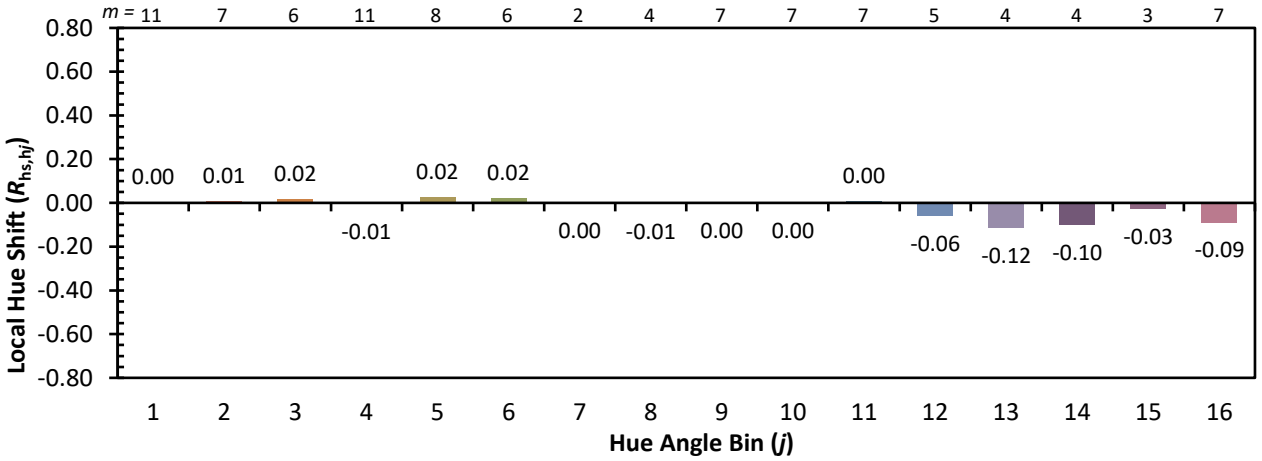


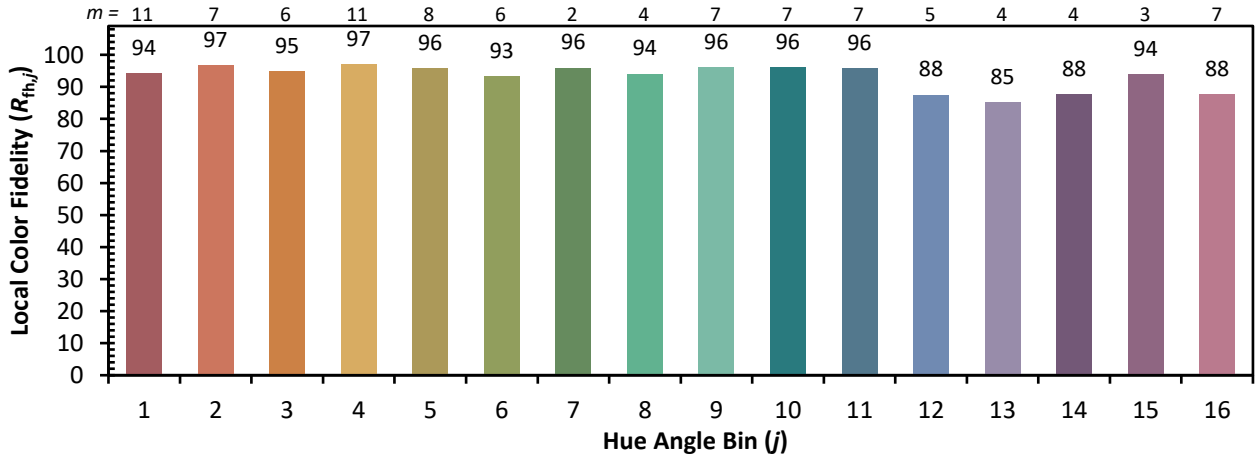
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Color Rendition by Hue-Angle Bin



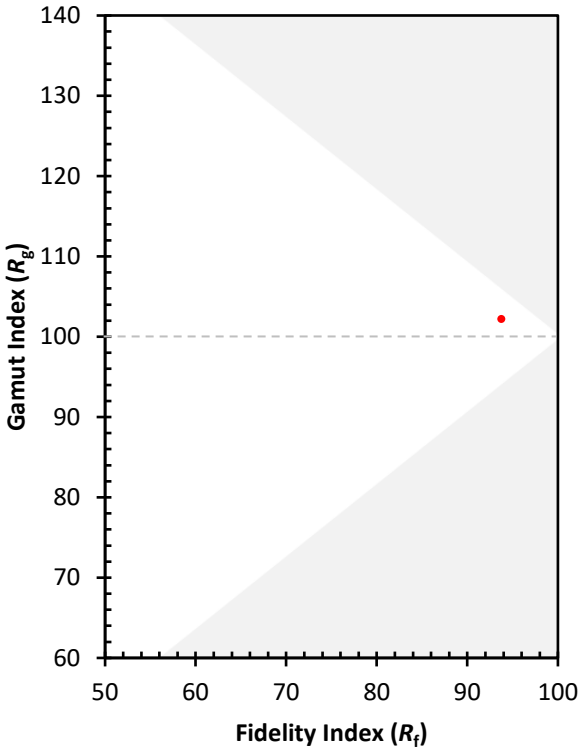


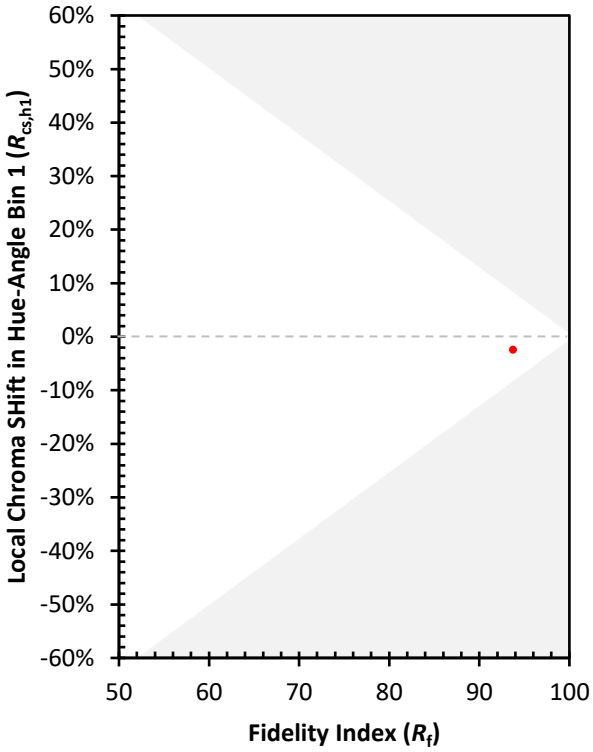


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Measure Comparisons





(END OF REPORT)