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: P1590682

Luminaire Tested: 24CGTX-45-B45-HCD

Issue Date: 9/4/2026

Report Generated By 670265710 / DESKTOP-98SHLC4

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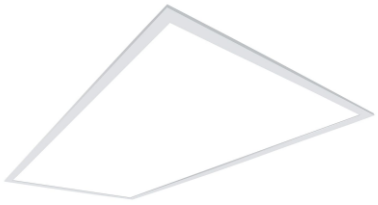
Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1590682
	TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G3-2510-581-28)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	9/4/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	24CGTX-45-B45-HCD
Description:	2X4 4500 LUMEN CGTX TROFFER WITH BIO UP LEDS AT 4500K CCT WITH FROSTED SMOOTH LENS
Light Source:	4500K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	4449.9 lumens
Efficiency:	N/A
Efficacy:	113.2 lumens/watt
Spacing Criteria (0/90/45):	1.27 / 1.27 / 1.39
Luminous Opening:	Rectangular (W 2' x L: 4' x H: 0')
CIE Type:	Direct
Input Watts (W):	39.3
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

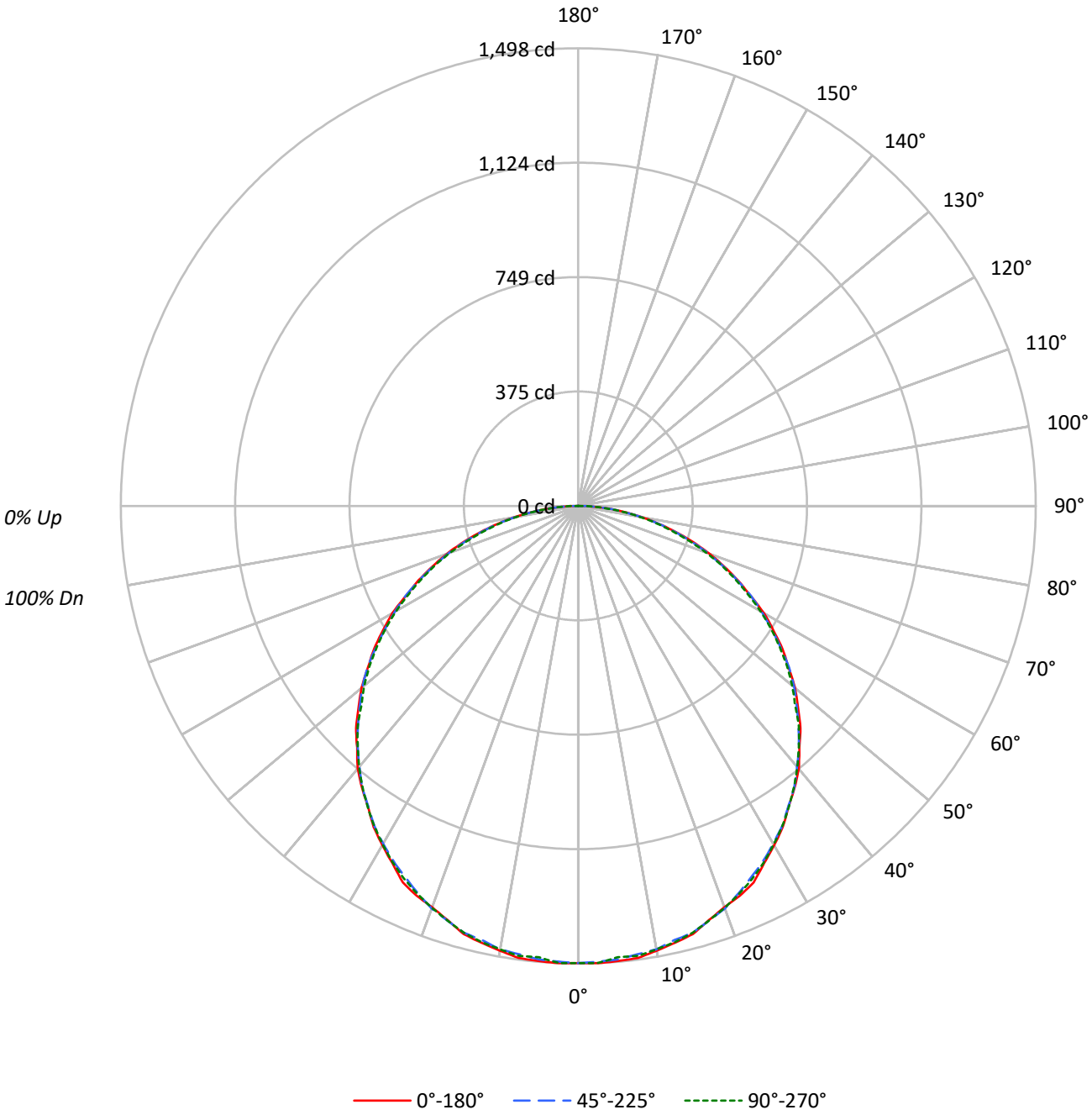


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Scaled Data Report

TEST NUMBER: P1590682
CATALOG NUMBER: 24CGTX-45-B45-HCD

Luminous Intensity Polar Plot



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Scaled Data Report

TEST NUMBER: P1590682
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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	93	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	68
3	89	79	70	63	87	77	69	63	74	67	62	71	65	61	69	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	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	39	51	44	39	50	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2014	2014	2014
5°	2020	2012	2003
10°	2020	2014	2014
15°	2021	2014	2014
20°	2002	2009	2005
25°	2019	1991	2000
30°	1993	1983	1989
35°	1972	1970	1975
40°	1973	1958	1960
45°	1958	1941	1944
50°	1939	1932	1913
55°	1915	1898	1888
60°	1890	1866	1852
65°	1836	1823	1800
70°	1798	1769	1747
75°	1724	1694	1656
80°	1635	1603	1572
85°	1496	1471	1408

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 1958 cd/sqm

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Scaled Data Report

TEST NUMBER: P1590682
CATALOG NUMBER: 24CGTX-45-B45-HCD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	3.2
10°-20°	407.3	9.2
20°-30°	619.8	13.9
30°-40°	752.6	16.9
40°-50°	788.8	17.7
50°-60°	723.1	16.2
60°-70°	565.6	12.7
70°-80°	344.1	7.7
80°-90°	106.8	2.4
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°	1168.9	26.3
0°-40°	1921.5	43.2
0°-60°	3433.4	77.2
0°-90°	4449.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4449.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1497	1497	1497	1497	1497	
5°	1496	1493	1490	1490	1483	142
15°	1451	1440	1446	1442	1446	408
25°	1360	1343	1341	1342	1348	623
35°	1201	1207	1199	1202	1202	754
45°	1029	1022	1020	1021	1022	792
55°	816	808	809	803	805	728
65°	577	576	573	568	565	571
75°	332	329	326	323	318	350
85°	97	97	95	91	91	108
90°	0	0	0	0	0	

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TEST NUMBER: P1590682
CATALOG NUMBER: 24CGTX-45-B45-HCD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	*1496.6*	1496.6	1496.6	1496.6	1496.6
2.5°	*1498.2*	*1494.1*	*1493.3*	*1487.6*	*1497.4*
5°	*1495.7*	1493.3	1490.0	1490.0	1482.7
7.5°	*1492.5*	1486.0	1480.3	1481.9	1486.0
10°	*1478.6*	1472.9	1473.8	1465.6	1473.8
12.5°	*1464.8*	1460.7	1455.8	1459.9	1462.3
15°	*1450.9*	1439.5	1446.1	1442.0	1446.1
17.5°	*1421.6*	1424.1	1423.2	1418.4	1423.2
20°	*1398.0*	1404.5	1402.9	1398.0	1400.4
22.5°	*1381.7*	1372.7	1371.9	1372.7	1375.2
25°	*1359.7*	1342.6	1341.0	1341.8	1347.5
27.5°	*1318.1*	1313.3	1310.8	1310.0	1315.7
30°	*1283.1*	1276.6	1276.6	1275.8	1279.9
32.5°	*1246.5*	1243.2	1242.4	1243.2	1243.2
35°	*1200.8*	1207.4	1199.2	1201.6	1202.5
37.5°	*1163.4*	1165.8	1161.7	1158.5	1160.1
40°	*1123.4*	1117.7	1114.5	1114.5	1116.1
42.5°	*1072.1*	1077.0	1068.9	1073.7	1068.9
45°	*1028.9*	1021.6	1020.0	1020.8	1021.6
47.5°	*976.0*	971.9	969.5	975.2	962.1
50°	*926.3*	922.2	923.0	919.8	914.1
52.5°	*867.6*	865.2	870.1	864.4	861.1
55°	*816.3*	808.2	809.0	803.3	804.9
57.5°	*757.6*	755.2	749.5	749.5	747.9
60°	*702.3*	693.3	693.3	690.0	688.4
62.5°	*634.6*	633.8	637.9	631.4	625.7
65°	*576.8*	576.0	572.7	567.8	565.4
67.5°	*515.7*	511.6	510.0	504.3	507.5
70°	*457.0*	451.3	449.7	443.2	444.0
72.5°	*394.3*	389.4	387.8	380.5	379.6
75°	*331.6*	329.1	325.9	322.6	318.5
77.5°	*268.8*	268.0	268.8	259.9	260.7
80°	*211.0*	210.2	206.9	202.0	202.9
82.5°	*151.5*	151.5	149.9	147.5	145.0
85°	*96.9*	96.9	95.3	91.2	91.2
87.5°	*44.0*	44.8	46.4	46.4	45.6
90°	*0.0*	0.0	0.0	0.0	0.0

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TEST NUMBER: P1590682
CATALOG NUMBER: 24CGTX-45-B45-HCD

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	14.45	16.11	14.81	16.43	16.74	14.39	16.05	14.75	16.37	16.68
	3H	16.39	17.89	16.76	18.22	18.58	16.30	17.80	16.67	18.13	18.49
	4H	17.15	18.58	17.55	18.92	19.30	17.03	18.46	17.43	18.80	19.18
	6H	17.75	19.07	18.16	19.44	19.83	17.61	18.94	18.02	19.30	19.69
	8H	17.96	19.23	18.39	19.61	20.01	17.81	19.08	18.24	19.47	19.86
	12H	18.11	19.33	18.54	19.71	20.13	17.96	19.17	18.38	19.55	19.98
4H	2H	15.11	16.54	15.51	16.89	17.26	15.07	16.49	15.47	16.84	17.21
	3H	17.28	18.48	17.69	18.87	19.27	17.20	18.40	17.61	18.79	19.19
	4H	18.18	19.27	18.61	19.68	20.12	18.07	19.16	18.51	19.57	20.01
	6H	18.92	19.88	19.38	20.32	20.77	18.79	19.74	19.24	20.18	20.64
	8H	19.19	20.08	19.65	20.52	20.99	19.05	19.94	19.50	20.38	20.84
	12H	19.40	20.20	19.87	20.67	21.14	19.24	20.04	19.72	20.52	20.99
8H	4H	18.54	19.43	18.99	19.87	20.33	18.44	19.33	18.90	19.78	20.24
	6H	19.42	20.16	19.91	20.65	21.12	19.29	20.04	19.79	20.53	21.00
	8H	19.77	20.44	20.28	20.95	21.43	19.64	20.31	20.14	20.81	21.29
	12H	20.07	20.66	20.57	21.15	21.71	19.91	20.51	20.42	21.00	21.55
12H	4H	18.58	19.39	19.06	19.86	20.33	18.49	19.30	18.97	19.77	20.24
	6H	19.49	20.16	20.00	20.67	21.15	19.38	20.05	19.88	20.55	21.04
	8H	19.91	20.50	20.42	20.99	21.55	19.78	20.37	20.29	20.86	21.42

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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: SP1-2510-581-4-R2

Test Date: 01/21/2026

Luminaire Tested: 24CGTX-55-B45-HCD

Data in this report applies to families of products including 24CGTX-55HE

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.05

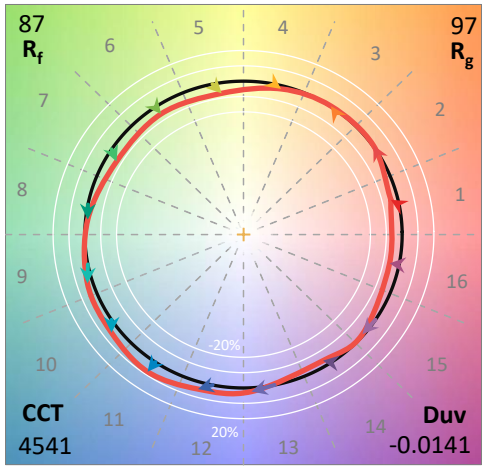
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2510-581-4-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-B45-HCD**
Description:	*THIS IS A REVISION OF REPORT SP1-2510-581-4-R2 TO UPDATE THE CATALOG INFORMATION* 2X4 CGTX 5500 lumen with BioUp Boards with fixed CCT 4500K - Control Volatge at 3V

Spectral Parameters

CCT (K):	4541
CIE u':	0.2259
CIE v':	0.4759
Duv:	-0.0141
CIE x:	0.3541
CIE y:	0.3316
CIE z:	0.3143
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	622
Purity:	5.72732
Rf:	87.2
Rg:	96.7

CRI (Ra):	86.3
R1:	91.4
R2:	86.5
R3:	84.4
R4:	88.4
R5:	89.6
R6:	80.7
R7:	83.3
R8:	86.2
R9:	86.2
R10:	74.5
R11:	89.9
R12:	69.8
R13:	89.5
R14:	92.9
R15:	92.2



Test Conditions

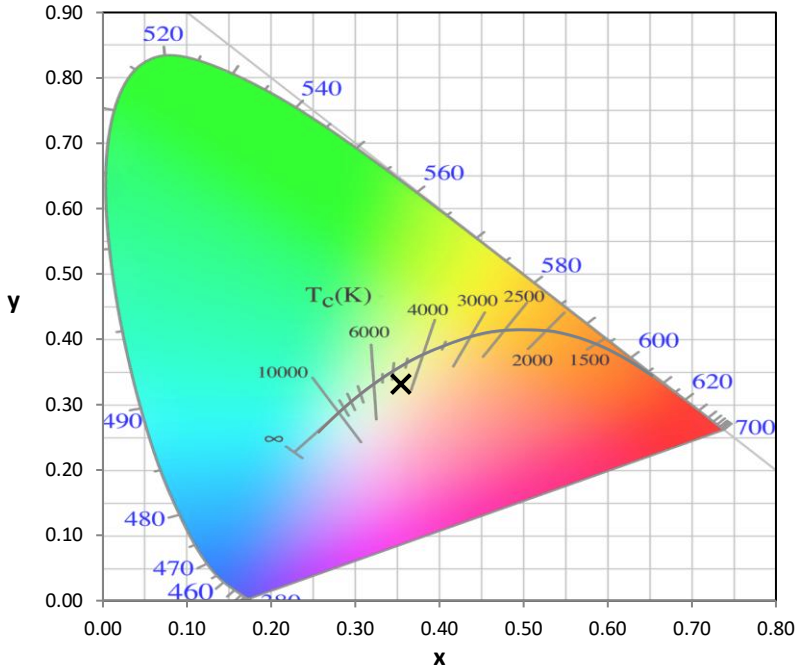
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	25.1

REPORT NUMBER: SP1-2510-581-4-R2

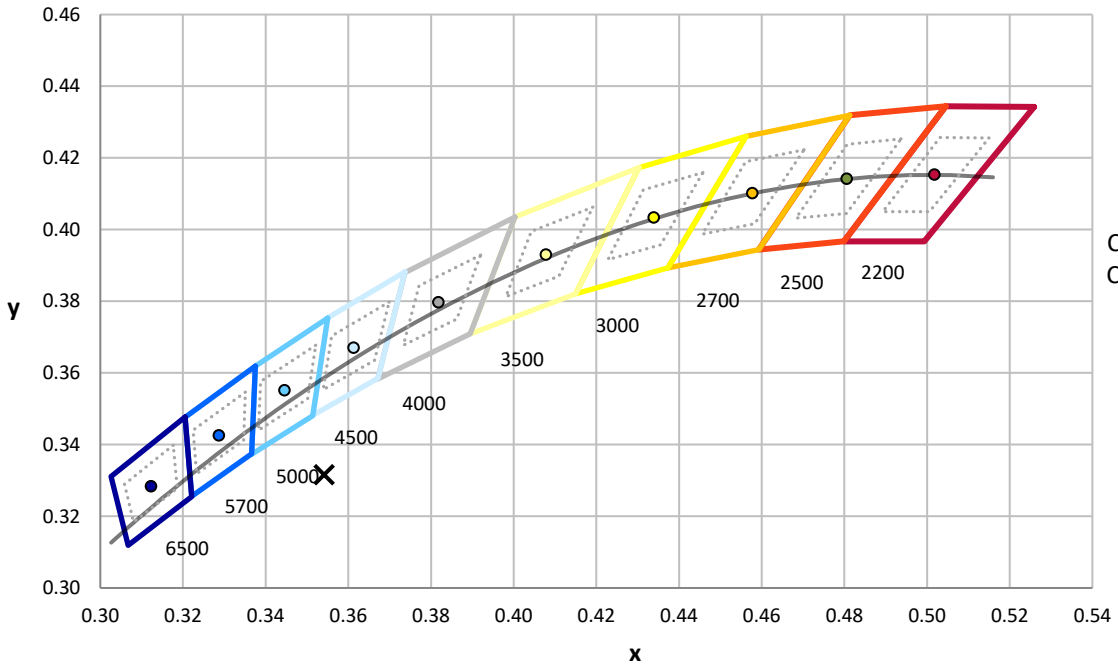
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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

REPORT NUMBER: SP1-2510-581-4-R2

CIE 1931 Chromaticity Diagram



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

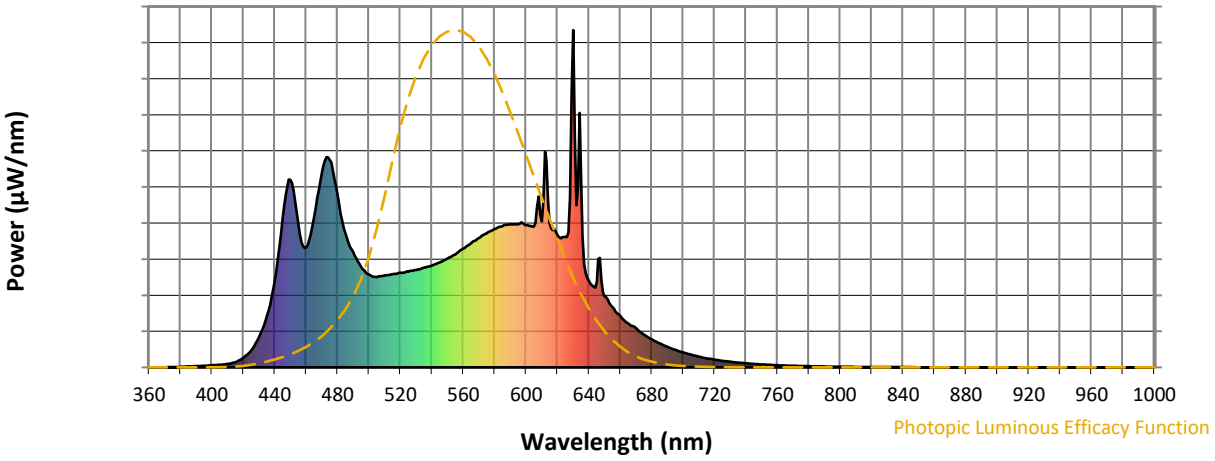


CCT = 4541K
CIE x = 0.3541
CIE y = 0.3316
Duv = -0.0141

Point lies outside the range

REPORT NUMBER: SP1-2510-581-4-R2

Photopic Flux vs. Wavelength

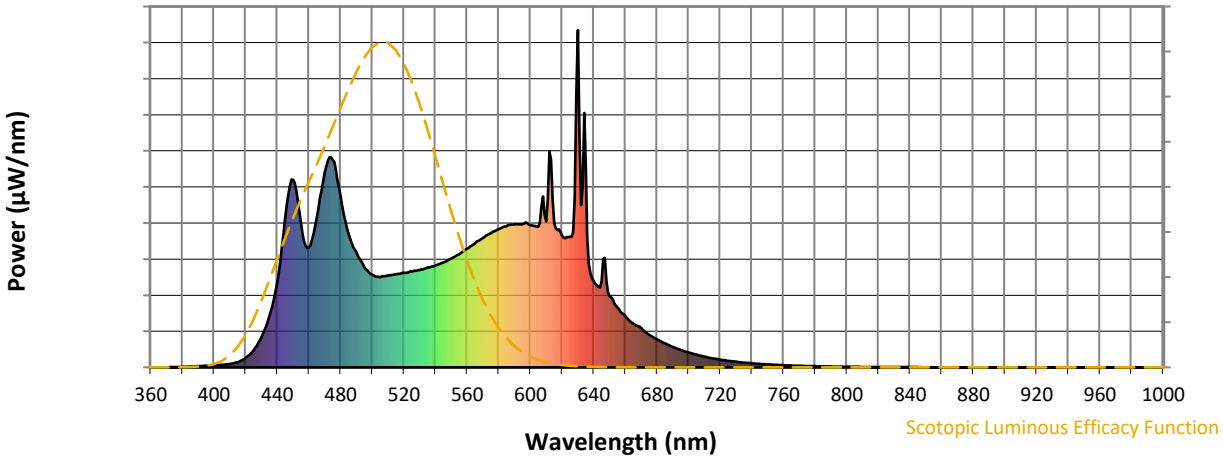


Photopic Lumens: NR

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	341	NR	620	392	NR	750	9	NR	880	0	NR
365	0	NR	495	298	NR	625	387	NR	755	7	NR	885	0	NR
370	0	NR	500	275	NR	630	1000	NR	760	6	NR	890	0	NR
375	1	NR	505	267	NR	635	584	NR	765	5	NR	895	0	NR
380	2	NR	510	272	NR	640	256	NR	770	5	NR	900	0	NR
385	2	NR	515	276	NR	645	254	NR	775	4	NR	905	0	NR
390	3	NR	520	281	NR	650	210	NR	780	3	NR	910	0	NR
395	5	NR	525	284	NR	655	179	NR	785	3	NR	915	0	NR
400	6	NR	530	289	NR	660	152	NR	790	2	NR	920	0	NR
405	8	NR	535	296	NR	665	130	NR	795	2	NR	925	0	NR
410	10	NR	540	301	NR	670	117	NR	800	2	NR	930	0	NR
415	16	NR	545	312	NR	675	97	NR	805	2	NR	935	0	NR
420	28	NR	550	323	NR	680	83	NR	810	1	NR	940	0	NR
425	51	NR	555	335	NR	685	71	NR	815	1	NR	945	0	NR
430	89	NR	560	352	NR	690	61	NR	820	1	NR	950	0	NR
435	153	NR	565	368	NR	695	52	NR	825	1	NR	955	0	NR
440	254	NR	570	384	NR	700	44	NR	830	1	NR	960	0	NR
445	443	NR	575	398	NR	705	38	NR	835	1	NR	965	0	NR
450	556	NR	580	410	NR	710	32	NR	840	1	NR	970	0	NR
455	426	NR	585	419	NR	715	27	NR	845	1	NR	975	0	NR
460	355	NR	590	424	NR	720	23	NR	850	0	NR	980	0	NR
465	444	NR	595	424	NR	725	19	NR	855	0	NR	985	0	NR
470	579	NR	600	422	NR	730	17	NR	860	0	NR	990	0	NR
475	615	NR	605	418	NR	735	14	NR	865	0	NR	995	0	NR
480	510	NR	610	433	NR	740	12	NR	870	0	NR	1000	0	NR
485	398	NR	615	428	NR	745	10	NR	875	0	NR			

REPORT NUMBER: SP1-2510-581-4-R2

Scotopic Flux vs. Wavelength

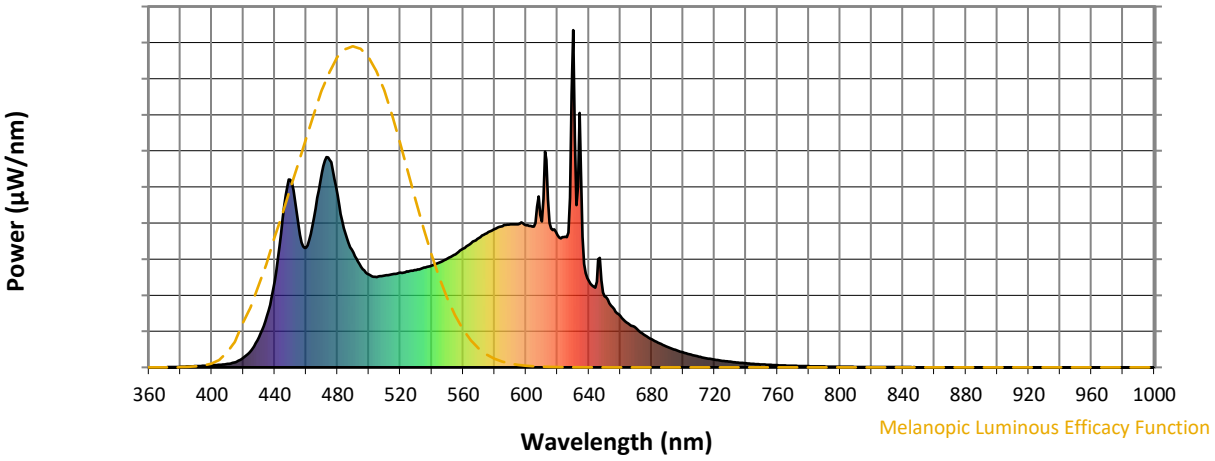


Scotopic Lumens: NR **S/P: 2.17**

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	341	NR	620	392	NR	750	9	NR	880	0	NR
365	0	NR	495	298	NR	625	387	NR	755	7	NR	885	0	NR
370	0	NR	500	275	NR	630	1000	NR	760	6	NR	890	0	NR
375	1	NR	505	267	NR	635	584	NR	765	5	NR	895	0	NR
380	2	NR	510	272	NR	640	256	NR	770	5	NR	900	0	NR
385	2	NR	515	276	NR	645	254	NR	775	4	NR	905	0	NR
390	3	NR	520	281	NR	650	210	NR	780	3	NR	910	0	NR
395	5	NR	525	284	NR	655	179	NR	785	3	NR	915	0	NR
400	6	NR	530	289	NR	660	152	NR	790	2	NR	920	0	NR
405	8	NR	535	296	NR	665	130	NR	795	2	NR	925	0	NR
410	10	NR	540	301	NR	670	117	NR	800	2	NR	930	0	NR
415	16	NR	545	312	NR	675	97	NR	805	2	NR	935	0	NR
420	28	NR	550	323	NR	680	83	NR	810	1	NR	940	0	NR
425	51	NR	555	335	NR	685	71	NR	815	1	NR	945	0	NR
430	89	NR	560	352	NR	690	61	NR	820	1	NR	950	0	NR
435	153	NR	565	368	NR	695	52	NR	825	1	NR	955	0	NR
440	254	NR	570	384	NR	700	44	NR	830	1	NR	960	0	NR
445	443	NR	575	398	NR	705	38	NR	835	1	NR	965	0	NR
450	556	NR	580	410	NR	710	32	NR	840	1	NR	970	0	NR
455	426	NR	585	419	NR	715	27	NR	845	1	NR	975	0	NR
460	355	NR	590	424	NR	720	23	NR	850	0	NR	980	0	NR
465	444	NR	595	424	NR	725	19	NR	855	0	NR	985	0	NR
470	579	NR	600	422	NR	730	17	NR	860	0	NR	990	0	NR
475	615	NR	605	418	NR	735	14	NR	865	0	NR	995	0	NR
480	510	NR	610	433	NR	740	12	NR	870	0	NR	1000	0	NR
485	398	NR	615	428	NR	745	10	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 5.01**

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	341	NR	620	392	NR	750	9	NR	880	0	NR
365	0	NR	495	298	NR	625	387	NR	755	7	NR	885	0	NR
370	0	NR	500	275	NR	630	1000	NR	760	6	NR	890	0	NR
375	1	NR	505	267	NR	635	584	NR	765	5	NR	895	0	NR
380	2	NR	510	272	NR	640	256	NR	770	5	NR	900	0	NR
385	2	NR	515	276	NR	645	254	NR	775	4	NR	905	0	NR
390	3	NR	520	281	NR	650	210	NR	780	3	NR	910	0	NR
395	5	NR	525	284	NR	655	179	NR	785	3	NR	915	0	NR
400	6	NR	530	289	NR	660	152	NR	790	2	NR	920	0	NR
405	8	NR	535	296	NR	665	130	NR	795	2	NR	925	0	NR
410	10	NR	540	301	NR	670	117	NR	800	2	NR	930	0	NR
415	16	NR	545	312	NR	675	97	NR	805	2	NR	935	0	NR
420	28	NR	550	323	NR	680	83	NR	810	1	NR	940	0	NR
425	51	NR	555	335	NR	685	71	NR	815	1	NR	945	0	NR
430	89	NR	560	352	NR	690	61	NR	820	1	NR	950	0	NR
435	153	NR	565	368	NR	695	52	NR	825	1	NR	955	0	NR
440	254	NR	570	384	NR	700	44	NR	830	1	NR	960	0	NR
445	443	NR	575	398	NR	705	38	NR	835	1	NR	965	0	NR
450	556	NR	580	410	NR	710	32	NR	840	1	NR	970	0	NR
455	426	NR	585	419	NR	715	27	NR	845	1	NR	975	0	NR
460	355	NR	590	424	NR	720	23	NR	850	0	NR	980	0	NR
465	444	NR	595	424	NR	725	19	NR	855	0	NR	985	0	NR
470	579	NR	600	422	NR	730	17	NR	860	0	NR	990	0	NR
475	615	NR	605	418	NR	735	14	NR	865	0	NR	995	0	NR
480	510	NR	610	433	NR	740	12	NR	870	0	NR	1000	0	NR
485	398	NR	615	428	NR	745	10	NR	875	0	NR			

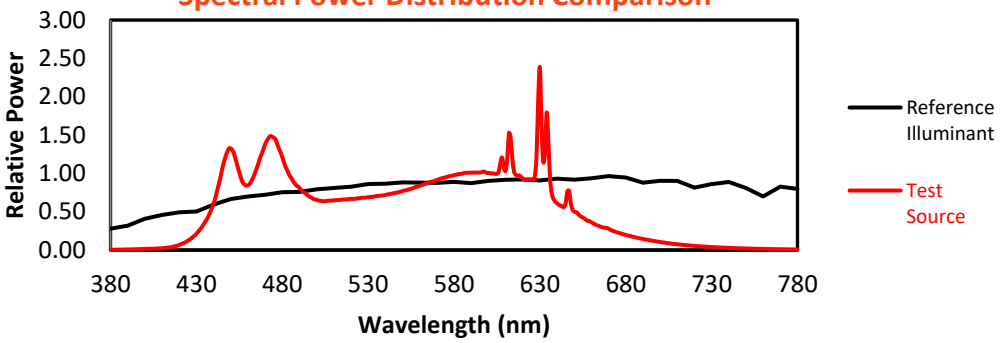
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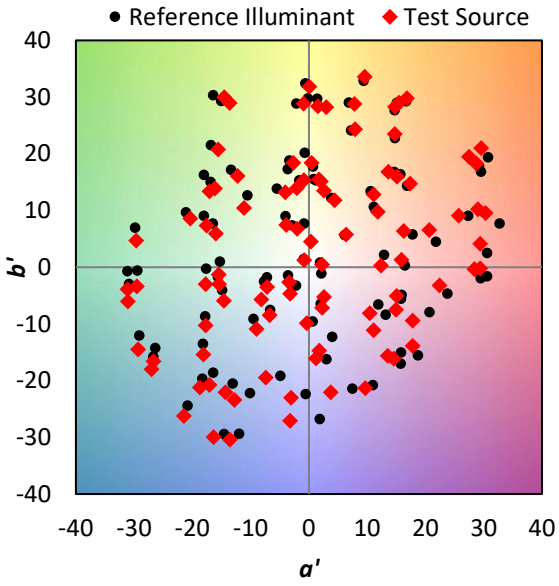
Summary

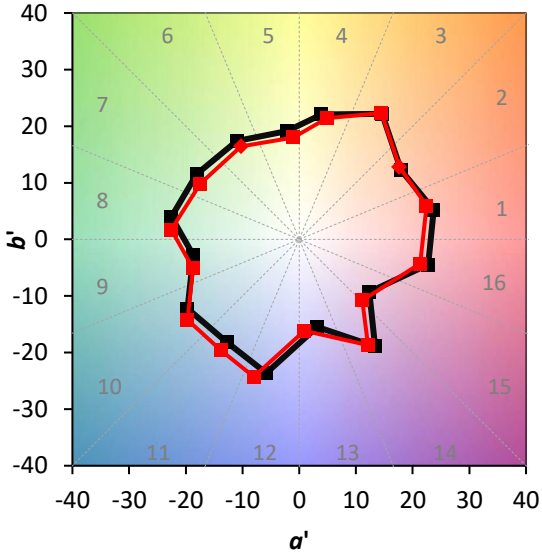
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R_g = 96.7
CIE R_a = 86.3
R_9 = 86.2

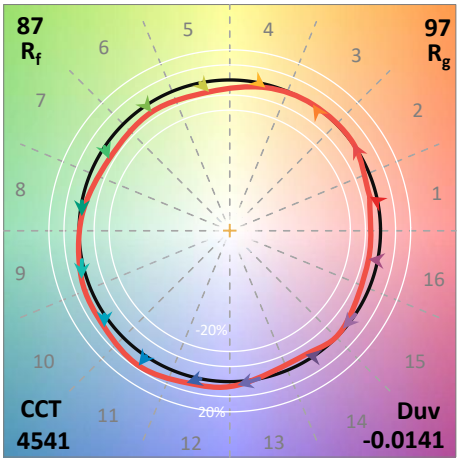
Spectral Power Distribution Comparison

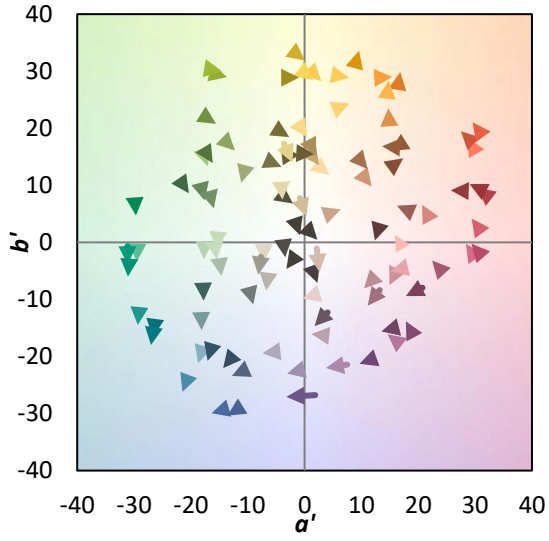


Color Vector Graphics







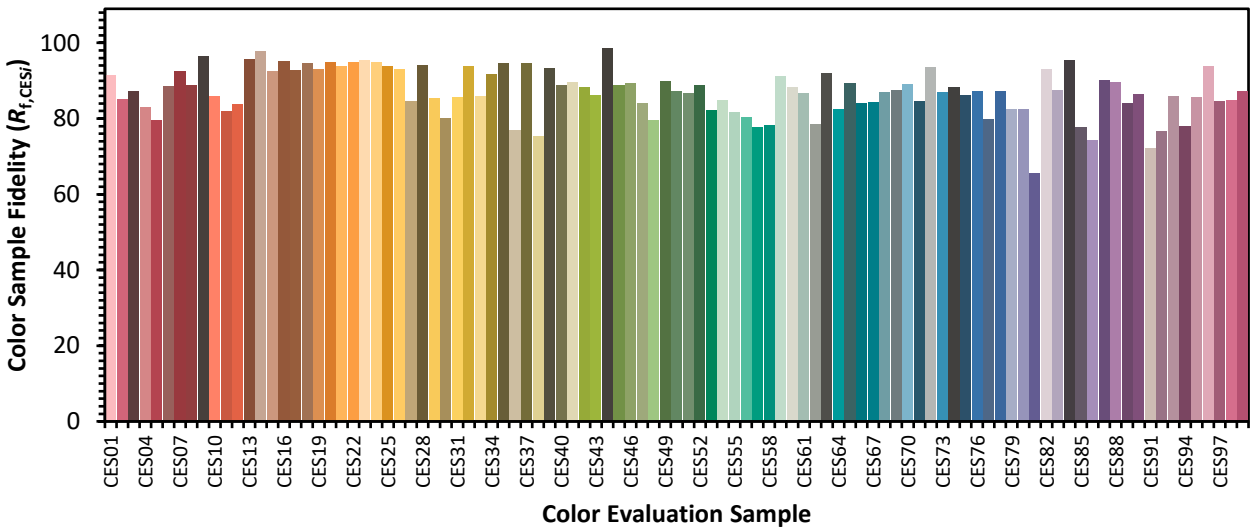


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Individual Sample Fidelity Index ($R_{f,i}$)

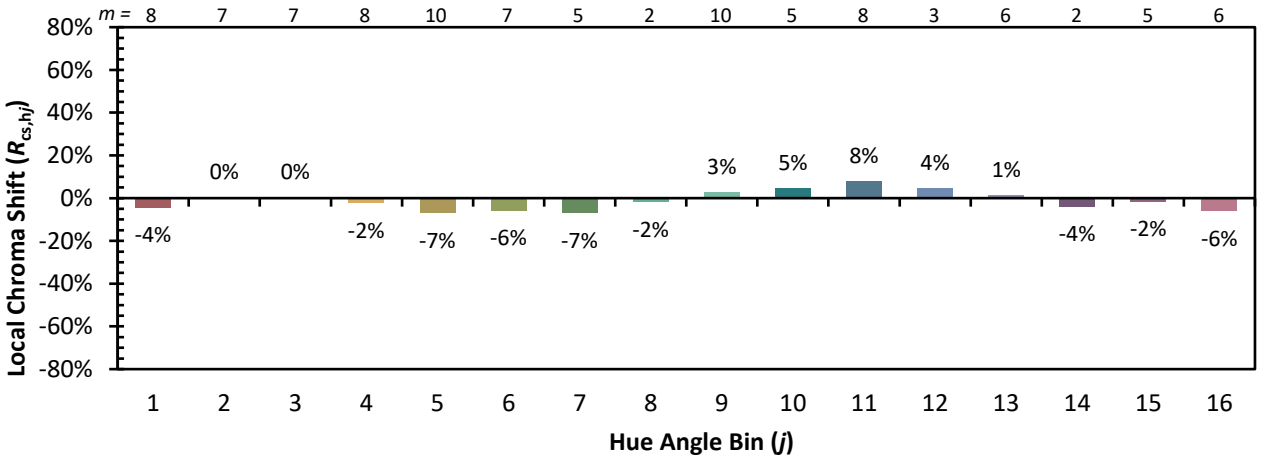
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CES02 = 62	CES27 = 85	CES52 = 89	CES77 = 80
CES03 = 31	CES28 = 94	CES53 = 82	CES78 = 87
CES04 = 69	CES29 = 85	CES54 = 85	CES79 = 83
CES05 = 49	CES30 = 80	CES55 = 82	CES80 = 83
CES06 = 50	CES31 = 86	CES56 = 80	CES81 = 66
CES07 = 42	CES32 = 94	CES57 = 78	CES82 = 93
CES08 = 41	CES33 = 86	CES58 = 78	CES83 = 88
CES09 = 29	CES34 = 92	CES59 = 91	CES84 = 96
CES10 = 75	CES35 = 95	CES60 = 88	CES85 = 78
CES11 = 57	CES36 = 77	CES61 = 87	CES86 = 74
CES12 = 63	CES37 = 95	CES62 = 79	CES87 = 90
CES13 = 43	CES38 = 75	CES63 = 92	CES88 = 90
CES14 = 74	CES39 = 93	CES64 = 82	CES89 = 84
CES15 = 71	CES40 = 89	CES65 = 89	CES90 = 87
CES16 = 47	CES41 = 90	CES66 = 84	CES91 = 72
CES17 = 49	CES42 = 88	CES67 = 84	CES92 = 77
CES18 = 56	CES43 = 86	CES68 = 87	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 87	CES94 = 78
CES20 = 66	CES45 = 89	CES70 = 89	CES95 = 86
CES21 = 85	CES46 = 89	CES71 = 85	CES96 = 94
CES22 = 78	CES47 = 84	CES72 = 94	CES97 = 85
CES23 = 91	CES48 = 79	CES73 = 87	CES98 = 85
CES24 = 90	CES49 = 90	CES74 = 88	CES99 = 87
CES25 = 71	CES50 = 87	CES75 = 86	

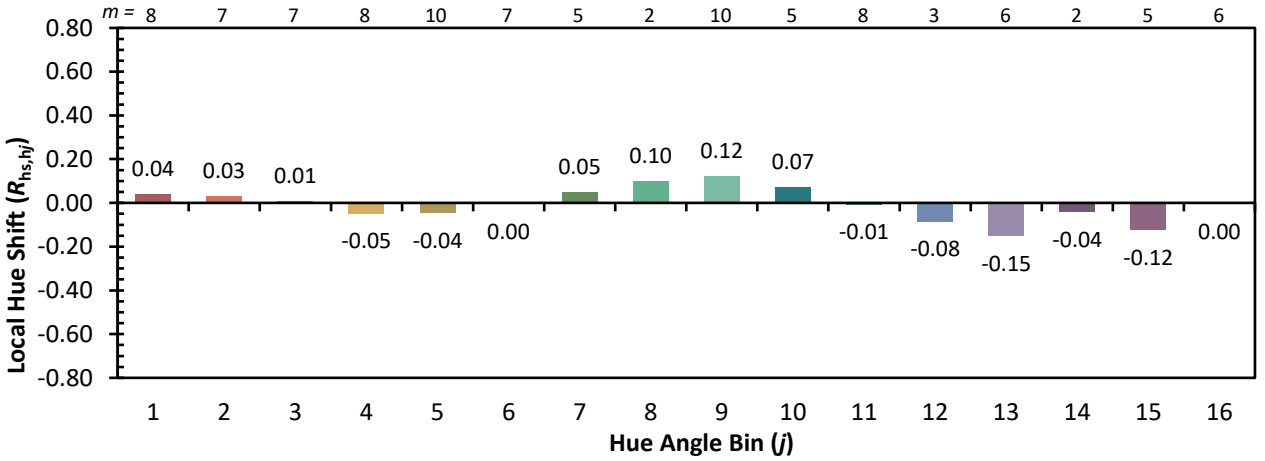


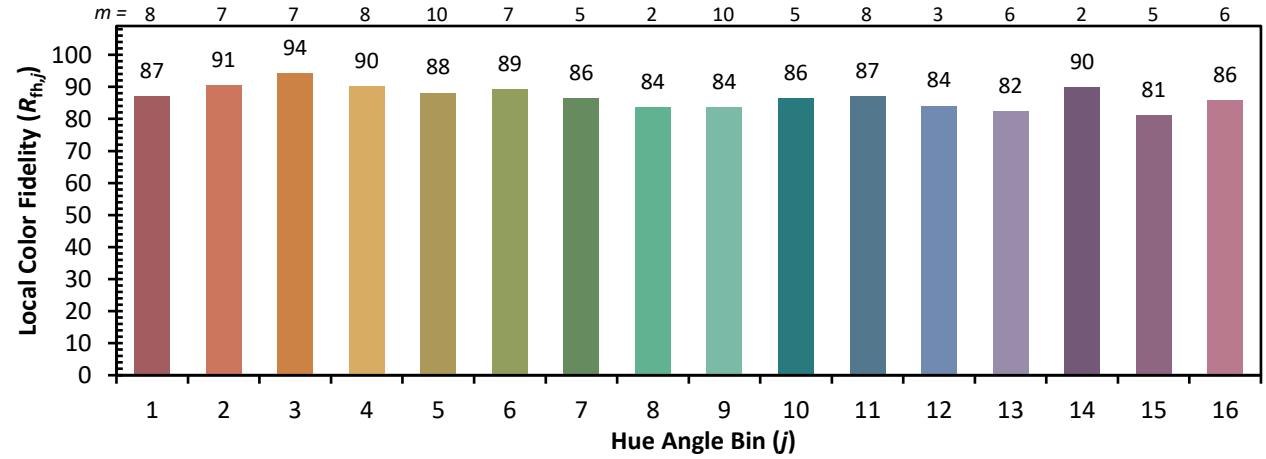
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Color Rendition by Hue-Angle Bin



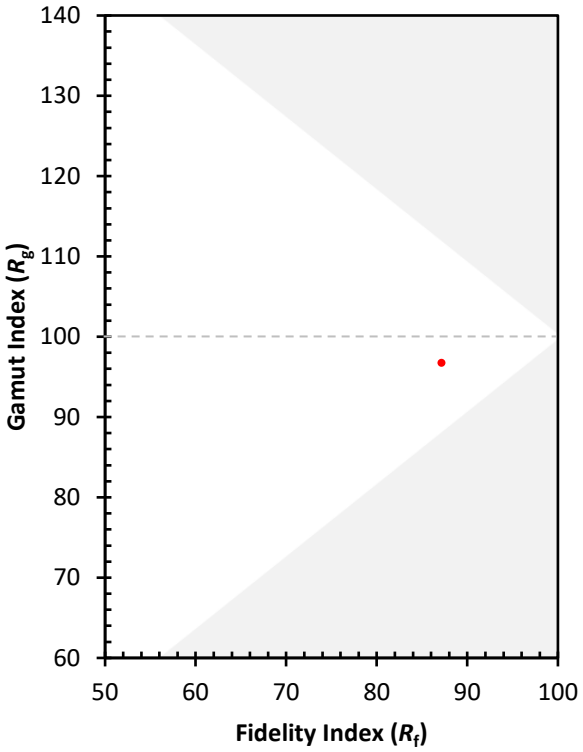


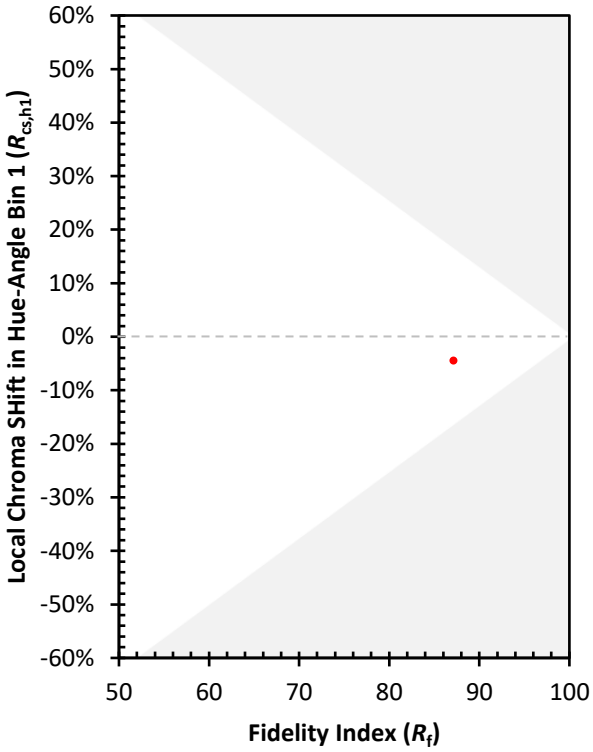


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Measure Comparisons





(END OF REPORT)