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: P1590923

Luminaire Tested: 22CGTX-45-L93050-W2A-4000K

Issue Date: 9/7/2026

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:	P1590923
	TEST IS SCALED FROM IESNA LM-79-24 TEST DATA (G3-2512-631-4)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	9/7/2026
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	METALUX
Catalog Number:	22CGTX-45-L93050-W2A-4000K
Description:	2X2 4500 LUMEN CGTX TROFFER WITH VividTune LEDS AT 4000K CCT
Light Source:	4000K CCT, 90 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	5121.9 lumens
Efficiency:	N/A
Efficacy:	108.7 lumens/watt
Spacing Criteria (0/90/45):	1.27 / 1.27 / 1.39
Luminous Opening:	Rectangular (W 2' x L: 2' x H: 0')
CIE Type:	Direct
Input Watts (W):	47.1
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

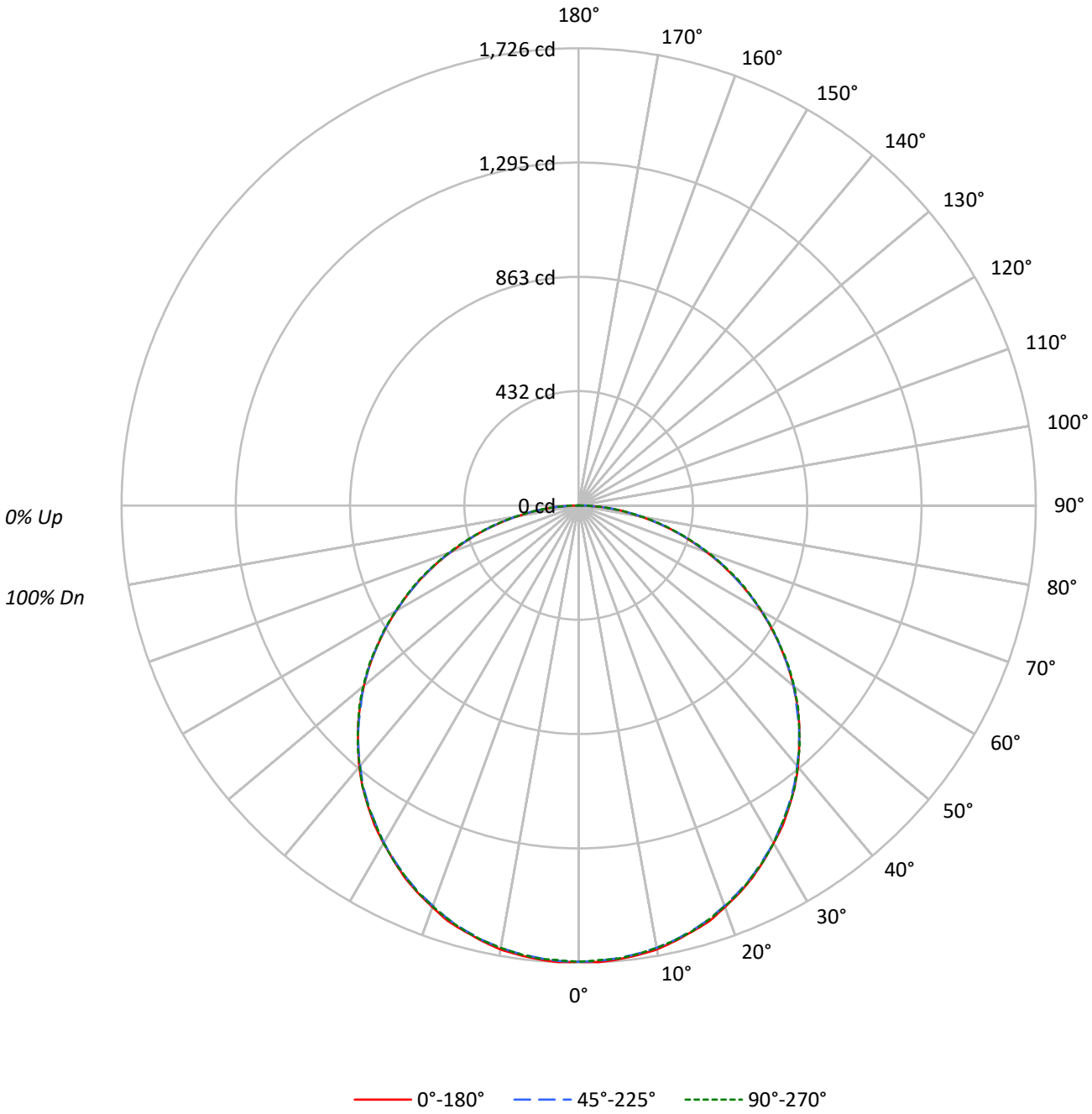


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Scaled Data Report

TEST NUMBER: P1590923
CATALOG NUMBER: 22CGTX-45-L93050-W2A-4000K

Luminous Intensity Polar Plot



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Scaled Data Report

TEST NUMBER: P1590923
CATALOG NUMBER: 22CGTX-45-L93050-W2A-4000K

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°	4635	4635	4635
5°	4647	4633	4639
10°	4650	4633	4633
15°	4637	4625	4631
20°	4621	4606	4612
25°	4606	4591	4594
30°	4575	4569	4575
35°	4554	4540	4550
40°	4527	4509	4516
45°	4482	4474	4478
50°	4431	4435	4444
55°	4362	4366	4372
60°	4278	4289	4294
65°	4182	4182	4229
70°	4041	4065	4106
75°	3883	3917	3927
80°	3634	3699	3730
85°	3331	3365	3427

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4482 cd/sqm

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Scaled Data Report

TEST NUMBER: P1590923
CATALOG NUMBER: 22CGTX-45-L93050-W2A-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.2	3.2
10°-20°	469.0	9.2
20°-30°	713.3	13.9
30°-40°	865.6	16.9
40°-50°	907.3	17.7
50°-60°	832.7	16.3
60°-70°	651.6	12.7
70°-80°	396.9	7.7
80°-90°	122.2	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°	1345.6	26.3
0°-40°	2211.2	43.2
0°-60°	3951.2	77.1
0°-90°	5121.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5121.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1722	1722	1722	1722	1722	
5°	1720	1719	1715	1716	1717	164
15°	1664	1662	1660	1658	1662	470
25°	1551	1549	1546	1547	1547	714
35°	1386	1384	1382	1383	1385	868
45°	1178	1175	1176	1178	1177	908
55°	930	934	931	934	932	831
65°	657	653	657	661	664	649
75°	374	374	377	377	378	393
85°	108	107	109	110	111	121
90°	0	0	0	0	0	

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TEST NUMBER: P1590923
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	*1722.5*	1722.5	1722.5	1722.5	1722.5
2.5°	*1725.6*	*1722.5*	*1721.4*	*1719.3*	*1718.3*
5°	*1720.4*	1719.3	1715.2	1716.2	1717.3
7.5°	*1712.1*	1709.0	1706.9	1706.9	1707.9
10°	*1701.7*	1698.6	1695.5	1696.5	1695.5
12.5°	*1684.1*	1684.1	1679.9	1679.9	1681.0
15°	*1664.3*	1662.3	1660.2	1658.1	1662.3
17.5°	*1644.6*	1639.4	1637.4	1639.4	1638.4
20°	*1613.5*	1612.5	1608.3	1609.4	1610.4
22.5°	*1584.5*	1582.4	1579.3	1580.3	1582.4
25°	*1551.2*	1549.2	1546.1	1547.1	1547.1
27.5°	*1511.8*	1511.8	1508.7	1509.7	1511.8
30°	*1472.4*	1471.4	1470.3	1471.4	1472.4
32.5°	*1433.0*	1428.8	1426.7	1426.7	1426.7
35°	*1386.3*	1384.2	1382.1	1383.2	1385.2
37.5°	*1339.6*	1335.4	1335.4	1334.4	1339.6
40°	*1288.7*	1285.6	1283.5	1283.5	1285.6
42.5°	*1231.7*	1230.6	1231.7	1231.7	1234.8
45°	*1177.7*	1174.6	1175.6	1177.7	1176.7
47.5°	*1119.6*	1118.6	1115.4	1118.6	1122.7
50°	*1058.4*	1057.3	1059.4	1058.4	1061.5
52.5°	*995.1*	996.1	995.1	997.2	1000.3
55°	*929.7*	933.9	930.7	933.9	931.8
57.5°	*863.3*	864.3	865.4	867.5	867.5
60°	*794.8*	799.0	796.9	797.9	797.9
62.5°	*726.3*	729.4	726.3	730.5	730.5
65°	*656.8*	652.7	656.8	661.0	664.1
67.5°	*585.2*	585.2	590.4	592.5	590.4
70°	*513.6*	514.7	516.7	519.8	521.9
72.5°	*441.0*	441.0	445.1	448.3	449.3
75°	*373.5*	373.5	376.7	376.7	377.7
77.5°	*303.0*	303.0	307.1	309.2	310.2
80°	*234.5*	238.7	238.7	239.7	240.7
82.5°	*170.2*	169.1	173.3	174.3	174.3
85°	*107.9*	106.9	109.0	110.0	111.0
87.5°	*47.7*	48.8	47.7	49.8	50.8
90°	*0.0*	0.0	0.0	0.0	0.0

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TEST NUMBER: P1590923
CATALOG NUMBER: 22CGTX-45-L93050-W2A-4000K

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	17.30	18.97	17.67	19.28	19.60	17.33	18.99	17.69	19.31	19.62
	3H	19.22	20.73	19.59	21.05	21.41	19.27	20.78	19.64	21.10	21.46
	4H	19.97	21.39	20.37	21.74	22.11	20.03	21.45	20.42	21.80	22.17
	6H	20.55	21.88	20.96	22.24	22.63	20.63	21.95	21.04	22.31	22.70
	8H	20.76	22.02	21.18	22.41	22.81	20.84	22.10	21.26	22.49	22.89
	12H	20.90	22.12	21.33	22.50	22.93	20.99	22.20	21.42	22.58	23.01
4H	2H	17.97	19.39	18.37	19.74	20.12	17.99	19.41	18.39	19.76	20.14
	3H	20.11	21.31	20.52	21.71	22.11	20.16	21.36	20.57	21.76	22.15
	4H	21.00	22.09	21.43	22.50	22.94	21.06	22.14	21.49	22.56	22.99
	6H	21.73	22.68	22.18	23.12	23.58	21.80	22.75	22.25	23.19	23.65
	8H	21.99	22.88	22.45	23.32	23.79	22.07	22.96	22.53	23.40	23.86
	12H	22.19	22.99	22.67	23.47	23.93	22.27	23.08	22.75	23.55	24.02
8H	4H	21.37	22.26	21.83	22.70	23.17	21.41	22.31	21.87	22.75	23.21
	6H	22.23	22.98	22.73	23.47	23.94	22.30	23.04	22.79	23.53	24.00
	8H	22.58	23.25	23.08	23.75	24.24	22.65	23.32	23.16	23.82	24.31
	12H	22.86	23.45	23.37	23.94	24.50	22.94	23.54	23.45	24.03	24.58
12H	4H	21.42	22.22	21.90	22.70	23.16	21.46	22.27	21.94	22.74	23.21
	6H	22.31	22.98	22.82	23.49	23.97	22.37	23.04	22.88	23.55	24.03
	8H	22.72	23.31	23.23	23.80	24.36	22.79	23.38	23.30	23.87	24.43

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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: SP1-2512-631-31-R2

Test Date: 02/05/2026

Luminaire Tested: 22CGTX-50-L93050-W2A-4000K

Data in this report applies to families of products including 22CGTX

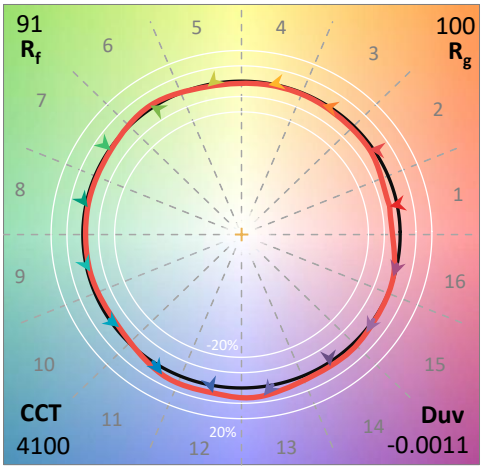
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Version: v7.05

Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2512-631-31-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:	**22CGTX-50-L93050-W2A-4000K**
Description:	*THIS IS A REVISION OF REPORT SP1-2512-631-31-R2 TO UPDATE THE CATALOG INFORMATION* 2X2 5000 LUMEN HE CGTX TUNABLE WHITE FROM 3000K TO 5000K - 4.5 Volt

Spectral Parameters

CCT (K):	4100	CRI (Ra):	94.2		
CIE u':	0.2240	R1:	95.8	R9:	68.3
CIE v':	0.4984	R2:	96.4	R10:	89.3
Duv:	-0.0011	R3:	94.9	R11:	95.3
CIE x:	0.3754	R4:	95.5	R12:	73.6
CIE y:	0.3712	R5:	94.7	R13:	96.1
CIE z:	0.2534	R6:	93.8	R14:	96.4
Peak Wavelength (nm):	630	R7:	94.6	R15:	93.4
Dominant Wavelength (nm):	579	R8:	88.1		
Purity:	24.05581				
Rf:	90.9				
Rg:	99.8				



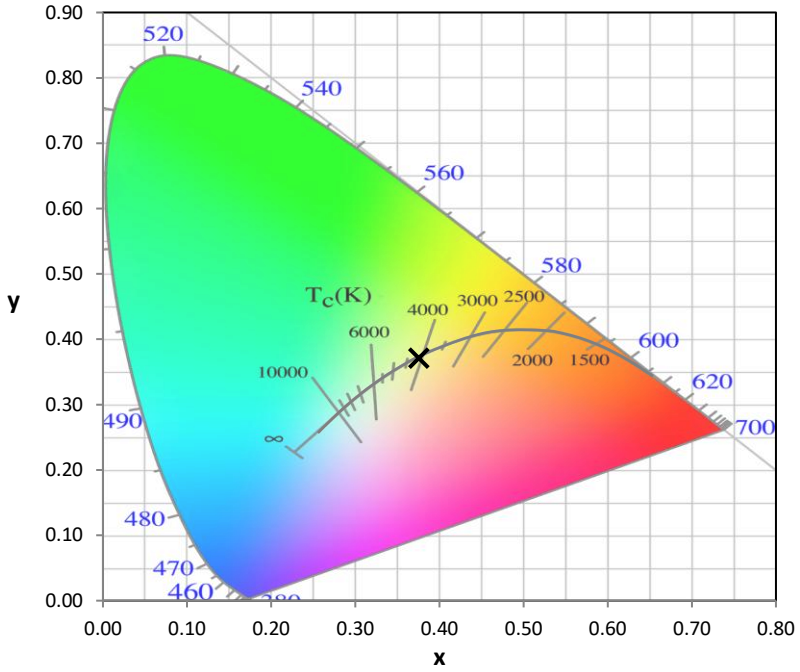
Test Conditions

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

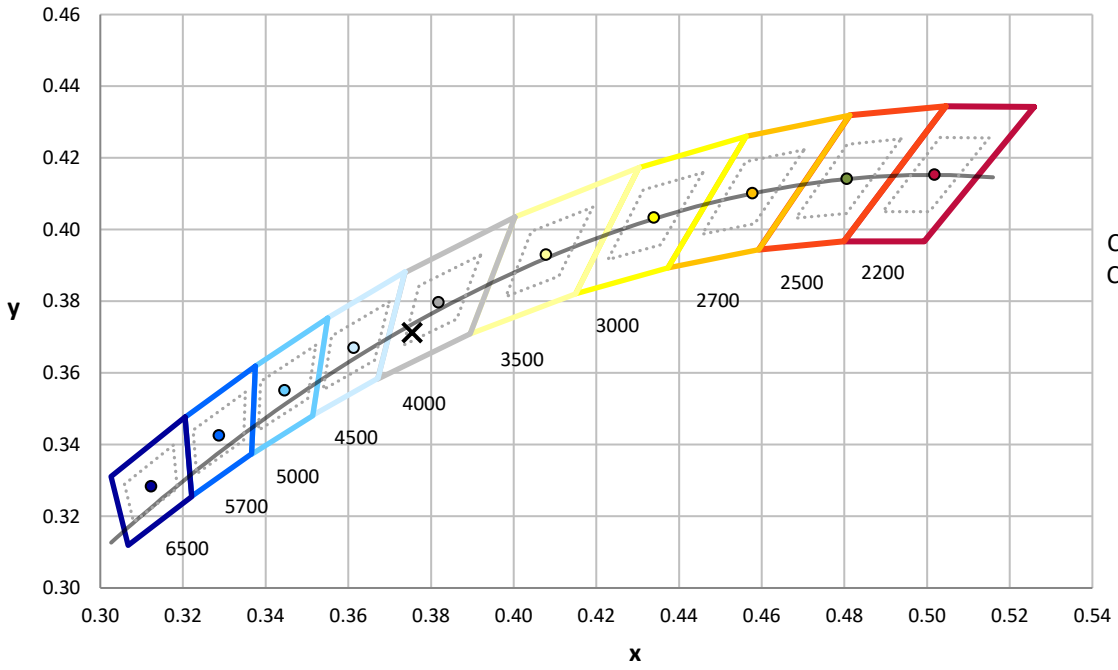
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	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: SP1-2512-631-31-R2

CIE 1931 Chromaticity Diagram



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

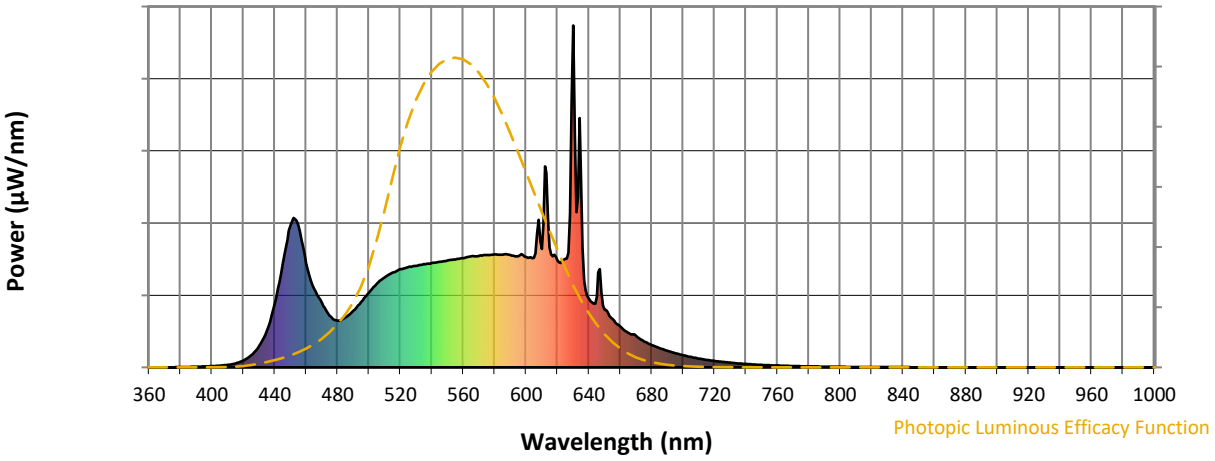


CCT = 4100K
CIE x = 0.3754
CIE y = 0.3712
Duv = -0.0011

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2512-631-31-R2

Photopic Flux vs. Wavelength

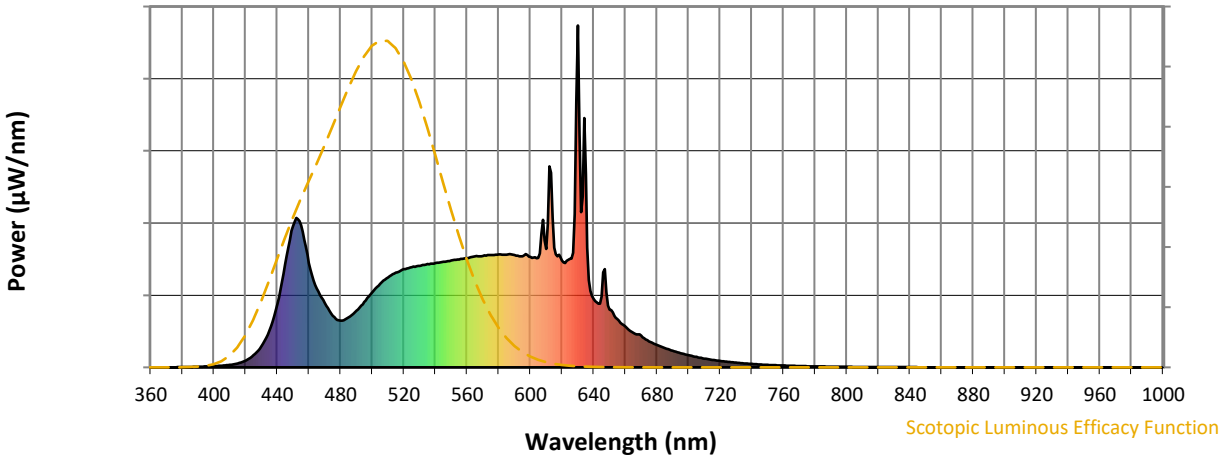


Photopic Lumens: NR

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	165	NR	620	313	NR	750	7	NR	880	0	NR
365	0	NR	495	191	NR	625	318	NR	755	6	NR	885	0	NR
370	0	NR	500	219	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	245	NR	635	564	NR	765	5	NR	895	0	NR
380	1	NR	510	263	NR	640	200	NR	770	4	NR	900	0	NR
385	1	NR	515	277	NR	645	207	NR	775	3	NR	905	0	NR
390	2	NR	520	287	NR	650	169	NR	780	3	NR	910	0	NR
395	2	NR	525	293	NR	655	141	NR	785	2	NR	915	0	NR
400	4	NR	530	297	NR	660	120	NR	790	2	NR	920	0	NR
405	5	NR	535	302	NR	665	102	NR	795	2	NR	925	0	NR
410	7	NR	540	305	NR	670	93	NR	800	2	NR	930	0	NR
415	12	NR	545	309	NR	675	76	NR	805	1	NR	935	0	NR
420	20	NR	550	313	NR	680	65	NR	810	1	NR	940	0	NR
425	36	NR	555	316	NR	685	56	NR	815	1	NR	945	0	NR
430	62	NR	560	320	NR	690	49	NR	820	1	NR	950	0	NR
435	108	NR	565	325	NR	695	42	NR	825	1	NR	955	0	NR
440	185	NR	570	326	NR	700	36	NR	830	1	NR	960	0	NR
445	301	NR	575	329	NR	705	31	NR	835	1	NR	965	0	NR
450	413	NR	580	330	NR	710	26	NR	840	1	NR	970	0	NR
455	415	NR	585	329	NR	715	22	NR	845	0	NR	975	0	NR
460	305	NR	590	329	NR	720	19	NR	850	0	NR	980	0	NR
465	231	NR	595	325	NR	725	16	NR	855	0	NR	985	0	NR
470	188	NR	600	323	NR	730	14	NR	860	0	NR	990	0	NR
475	151	NR	605	320	NR	735	12	NR	865	0	NR	995	0	NR
480	137	NR	610	346	NR	740	10	NR	870	0	NR	1000	0	NR
485	146	NR	615	351	NR	745	9	NR	875	0	NR			

REPORT NUMBER: SP1-2512-631-31-R2

Scotopic Flux vs. Wavelength

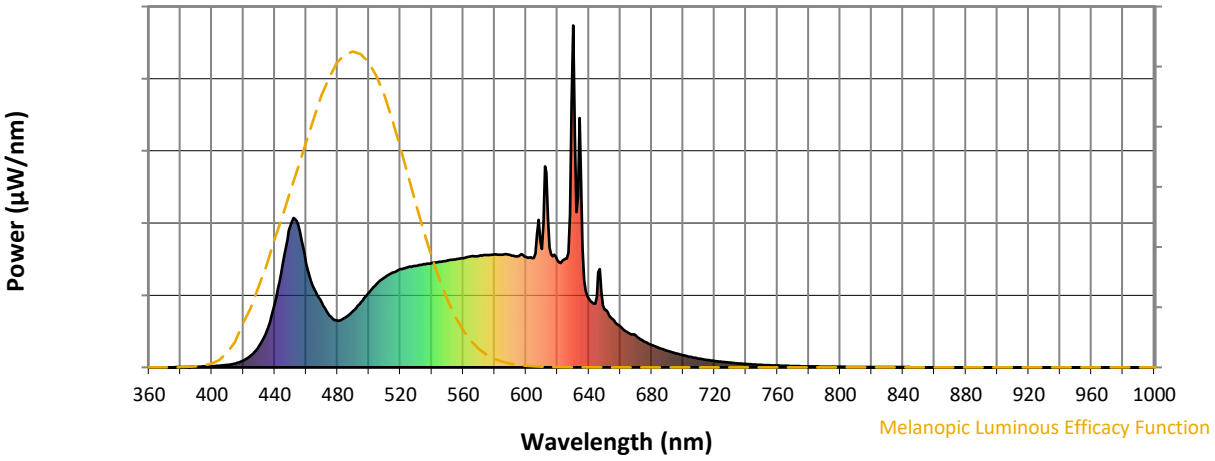


Scotopic Lumens: NR **S/P: 1.82**

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	165	NR	620	313	NR	750	7	NR	880	0	NR
365	0	NR	495	191	NR	625	318	NR	755	6	NR	885	0	NR
370	0	NR	500	219	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	245	NR	635	564	NR	765	5	NR	895	0	NR
380	1	NR	510	263	NR	640	200	NR	770	4	NR	900	0	NR
385	1	NR	515	277	NR	645	207	NR	775	3	NR	905	0	NR
390	2	NR	520	287	NR	650	169	NR	780	3	NR	910	0	NR
395	2	NR	525	293	NR	655	141	NR	785	2	NR	915	0	NR
400	4	NR	530	297	NR	660	120	NR	790	2	NR	920	0	NR
405	5	NR	535	302	NR	665	102	NR	795	2	NR	925	0	NR
410	7	NR	540	305	NR	670	93	NR	800	2	NR	930	0	NR
415	12	NR	545	309	NR	675	76	NR	805	1	NR	935	0	NR
420	20	NR	550	313	NR	680	65	NR	810	1	NR	940	0	NR
425	36	NR	555	316	NR	685	56	NR	815	1	NR	945	0	NR
430	62	NR	560	320	NR	690	49	NR	820	1	NR	950	0	NR
435	108	NR	565	325	NR	695	42	NR	825	1	NR	955	0	NR
440	185	NR	570	326	NR	700	36	NR	830	1	NR	960	0	NR
445	301	NR	575	329	NR	705	31	NR	835	1	NR	965	0	NR
450	413	NR	580	330	NR	710	26	NR	840	1	NR	970	0	NR
455	415	NR	585	329	NR	715	22	NR	845	0	NR	975	0	NR
460	305	NR	590	329	NR	720	19	NR	850	0	NR	980	0	NR
465	231	NR	595	325	NR	725	16	NR	855	0	NR	985	0	NR
470	188	NR	600	323	NR	730	14	NR	860	0	NR	990	0	NR
475	151	NR	605	320	NR	735	12	NR	865	0	NR	995	0	NR
480	137	NR	610	346	NR	740	10	NR	870	0	NR	1000	0	NR
485	146	NR	615	351	NR	745	9	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.81**

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	165	NR	620	313	NR	750	7	NR	880	0	NR
365	0	NR	495	191	NR	625	318	NR	755	6	NR	885	0	NR
370	0	NR	500	219	NR	630	1000	NR	760	5	NR	890	0	NR
375	0	NR	505	245	NR	635	564	NR	765	5	NR	895	0	NR
380	1	NR	510	263	NR	640	200	NR	770	4	NR	900	0	NR
385	1	NR	515	277	NR	645	207	NR	775	3	NR	905	0	NR
390	2	NR	520	287	NR	650	169	NR	780	3	NR	910	0	NR
395	2	NR	525	293	NR	655	141	NR	785	2	NR	915	0	NR
400	4	NR	530	297	NR	660	120	NR	790	2	NR	920	0	NR
405	5	NR	535	302	NR	665	102	NR	795	2	NR	925	0	NR
410	7	NR	540	305	NR	670	93	NR	800	2	NR	930	0	NR
415	12	NR	545	309	NR	675	76	NR	805	1	NR	935	0	NR
420	20	NR	550	313	NR	680	65	NR	810	1	NR	940	0	NR
425	36	NR	555	316	NR	685	56	NR	815	1	NR	945	0	NR
430	62	NR	560	320	NR	690	49	NR	820	1	NR	950	0	NR
435	108	NR	565	325	NR	695	42	NR	825	1	NR	955	0	NR
440	185	NR	570	326	NR	700	36	NR	830	1	NR	960	0	NR
445	301	NR	575	329	NR	705	31	NR	835	1	NR	965	0	NR
450	413	NR	580	330	NR	710	26	NR	840	1	NR	970	0	NR
455	415	NR	585	329	NR	715	22	NR	845	0	NR	975	0	NR
460	305	NR	590	329	NR	720	19	NR	850	0	NR	980	0	NR
465	231	NR	595	325	NR	725	16	NR	855	0	NR	985	0	NR
470	188	NR	600	323	NR	730	14	NR	860	0	NR	990	0	NR
475	151	NR	605	320	NR	735	12	NR	865	0	NR	995	0	NR
480	137	NR	610	346	NR	740	10	NR	870	0	NR	1000	0	NR
485	146	NR	615	351	NR	745	9	NR	875	0	NR			

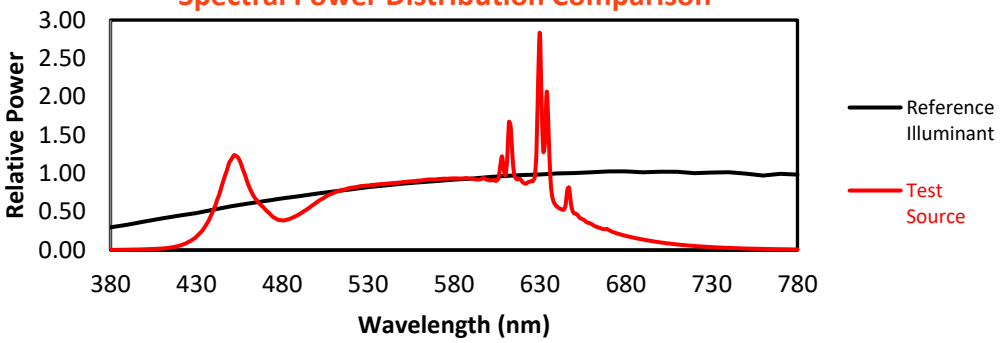
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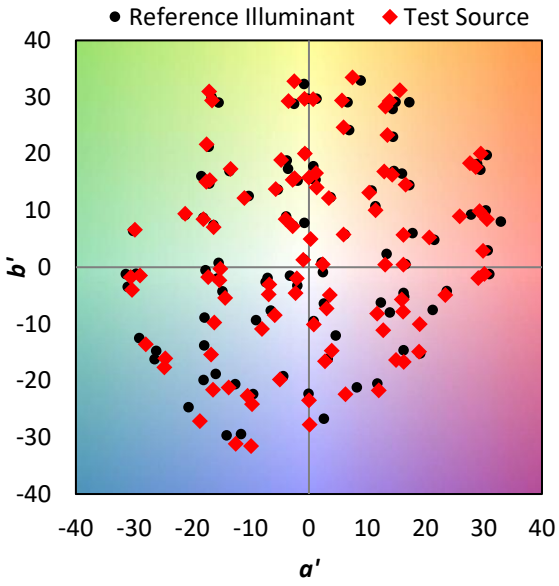
Summary

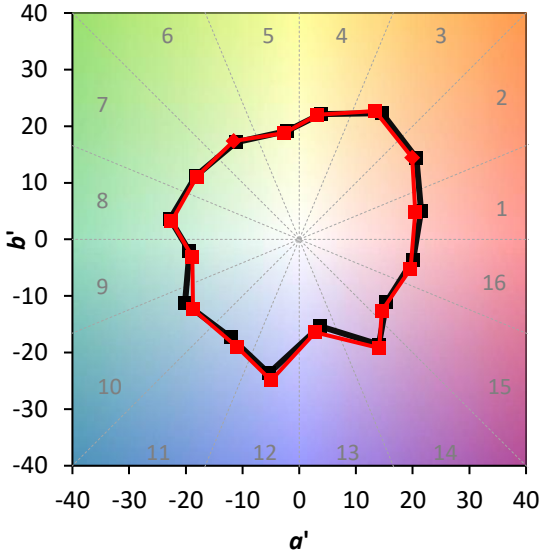
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R_g = 99.8
CIE R_a = 94.2
R_9 = 68.3

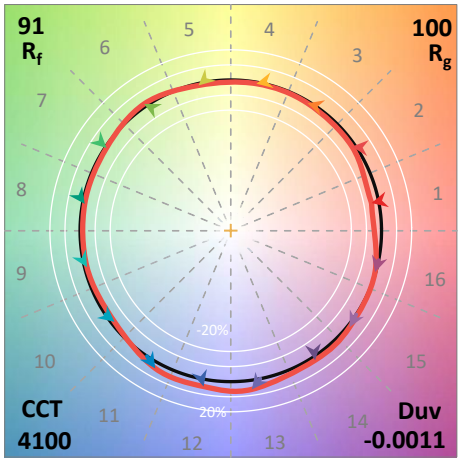
Spectral Power Distribution Comparison

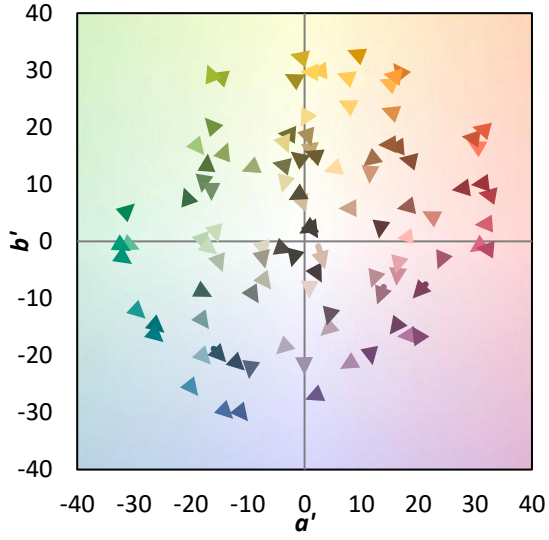


Color Vector Graphics







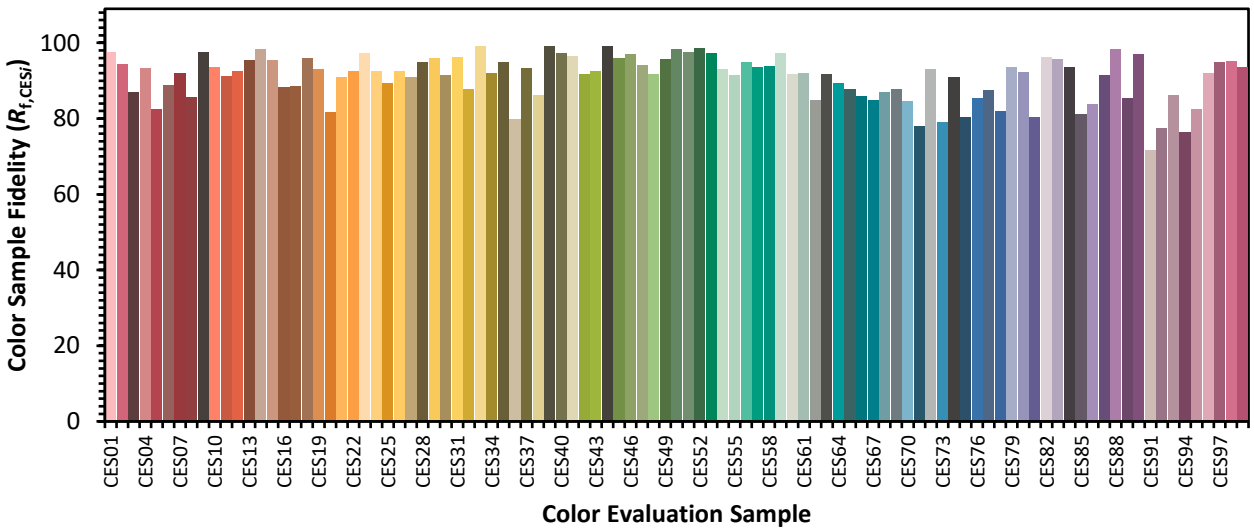


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Individual Sample Fidelity Index ($R_{f,i}$)

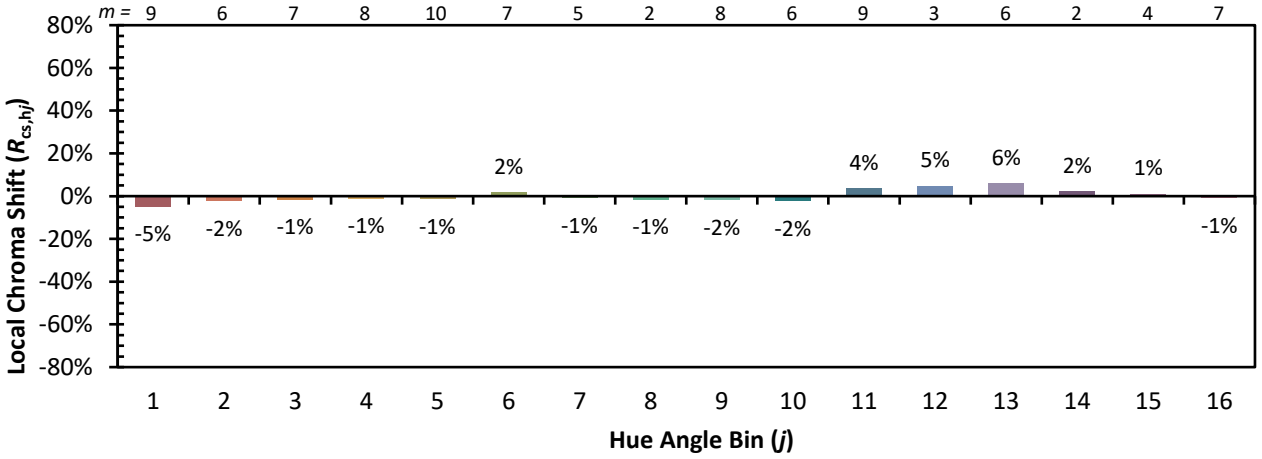
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CES02 = 62	CES27 = 91	CES52 = 99	CES77 = 87
CES03 = 31	CES28 = 95	CES53 = 97	CES78 = 82
CES04 = 69	CES29 = 96	CES54 = 93	CES79 = 94
CES05 = 49	CES30 = 92	CES55 = 91	CES80 = 92
CES06 = 50	CES31 = 96	CES56 = 95	CES81 = 80
CES07 = 42	CES32 = 88	CES57 = 93	CES82 = 96
CES08 = 41	CES33 = 99	CES58 = 94	CES83 = 96
CES09 = 29	CES34 = 92	CES59 = 97	CES84 = 94
CES10 = 74	CES35 = 95	CES60 = 92	CES85 = 81
CES11 = 57	CES36 = 80	CES61 = 92	CES86 = 84
CES12 = 63	CES37 = 93	CES62 = 85	CES87 = 91
CES13 = 43	CES38 = 86	CES63 = 92	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 89	CES89 = 85
CES15 = 71	CES40 = 97	CES65 = 88	CES90 = 97
CES16 = 47	CES41 = 97	CES66 = 86	CES91 = 72
CES17 = 49	CES42 = 92	CES67 = 85	CES92 = 77
CES18 = 56	CES43 = 93	CES68 = 87	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 88	CES94 = 77
CES20 = 66	CES45 = 96	CES70 = 85	CES95 = 82
CES21 = 85	CES46 = 97	CES71 = 78	CES96 = 92
CES22 = 78	CES47 = 94	CES72 = 93	CES97 = 95
CES23 = 91	CES48 = 92	CES73 = 79	CES98 = 95
CES24 = 90	CES49 = 96	CES74 = 91	CES99 = 94
CES25 = 71	CES50 = 98	CES75 = 80	

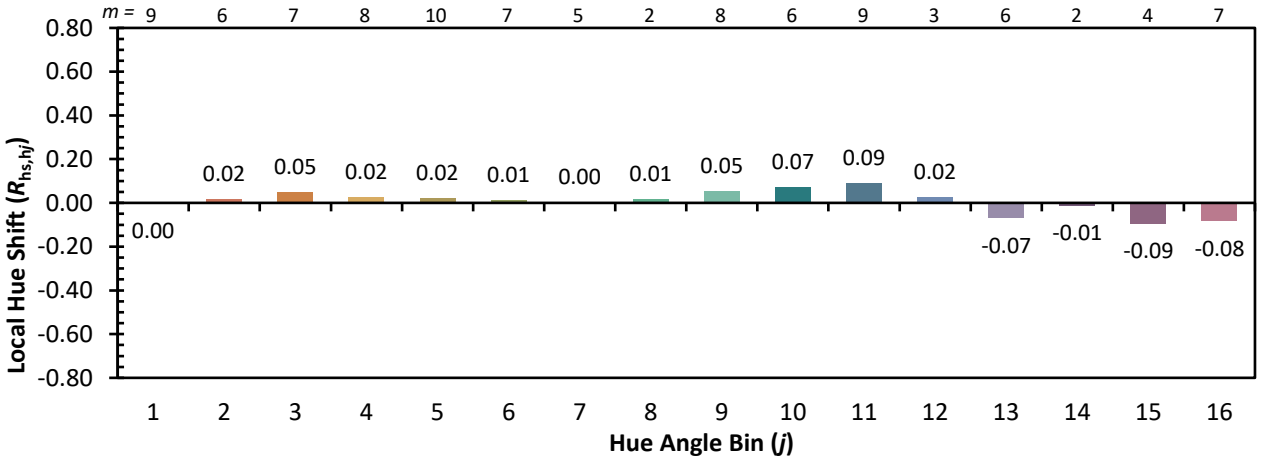


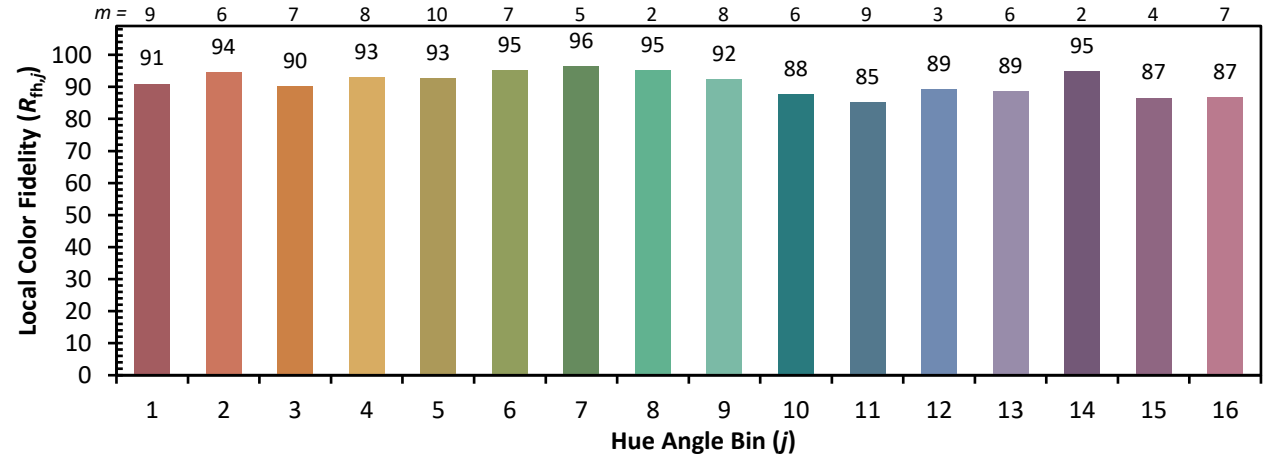
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Color Rendition by Hue-Angle Bin



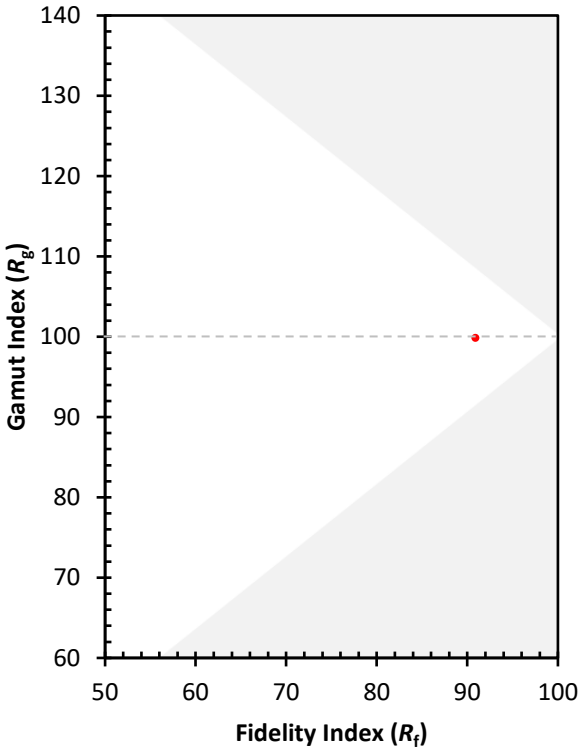


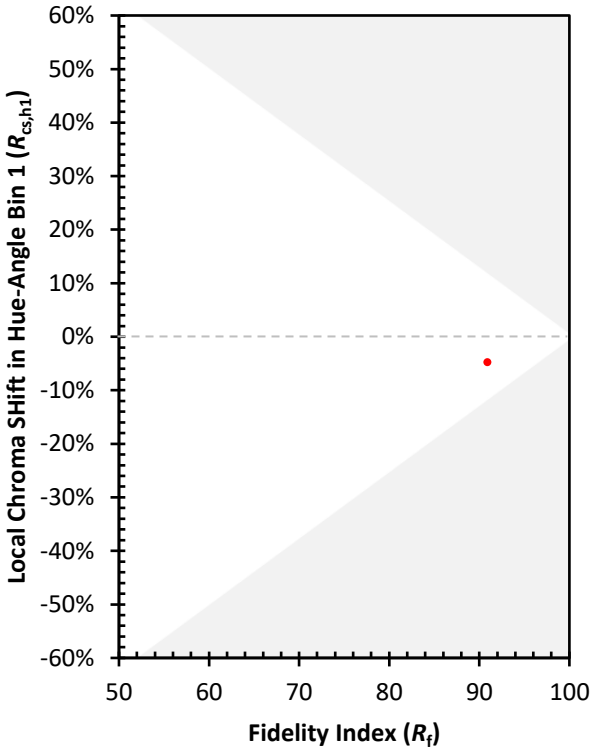


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Measure Comparisons





(END OF REPORT)