

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: CORELITE

Report Number: P1216041

Luminaire Tested: 24-ID2-45-CNC-L830-U

Issue Date: 12/5/2025

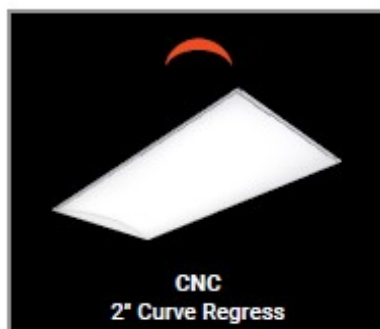
Test Information

Test Method: LM-79-2019
Report Number: P1216041
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2508-510-9)
Test Lab: INNOVATION CENTER
Issue Date: 12/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24-ID2-45-CNC-L830-U
Description: 2X4 IN DEPTH TROFFER WITH 2INCH CURVE REGRESSED
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

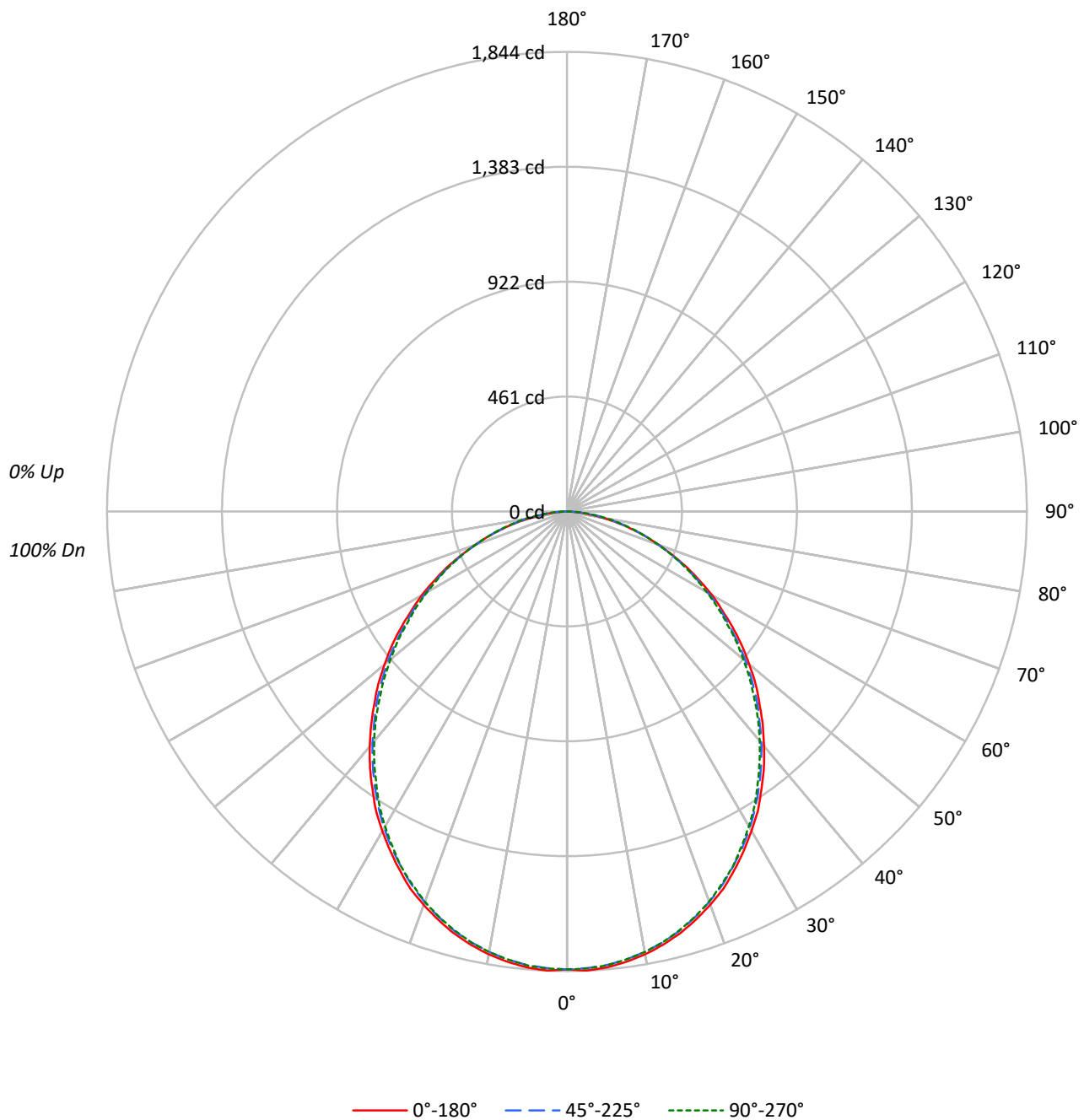
Lumens per Lamp: N/A
Luminaire Lumens: 4647.6 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 39
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



TEST NUMBER: P1216041
CATALOG NUMBER: 24-ID2-45-CNC-L830-U

Luminous Intensity Polar Plot



TEST NUMBER: P1216041

CATALOG NUMBER: 24-ID2-45-CNC-L830-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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
1	109	105	100	97	106	102	99	95	98	95	92		94	92	89		91
2	100	92	85	79	97	90	84	78	86	81	77		83	79	75		80
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	84	72	63	57	81	71	63	56	68	61	56		66	60	55		64
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52
7	66	53	44	38	64	52	44	38	51	43	38		49	42	37		48
8	62	48	40	34	60	48	40	34	46	39	34		45	38	34		44
9	58	44	36	31	56	44	36	31	43	36	31		42	35	30		41
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2472	2472	2472
5°	2480	2467	2469
10°	2465	2452	2452
15°	2441	2427	2424
20°	2404	2388	2385
25°	2357	2336	2335
30°	2299	2278	2266
35°	2233	2207	2190
40°	2160	2129	2111
45°	2079	2051	2021
50°	1997	1960	1932
55°	1903	1858	1834
60°	1809	1761	1743
65°	1685	1654	1650
70°	1542	1534	1529
75°	1377	1400	1410
80°	1124	1223	1282
85°	772	980	980

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2079 cd/sqm

TEST NUMBER: P1216041
 CATALOG NUMBER: 24-ID2-45-CNC-L830-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.5	3.7
10°-20°	491.2	10.6
20°-30°	725.5	15.6
30°-40°	841.1	18.1
40°-50°	830.8	17.9
50°-60°	711.8	15.3
60°-70°	516.5	11.1
70°-80°	285.1	6.1
80°-90°	72.3	1.6
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°	1390.1	29.9
0°-40°	2231.2	48.0
0°-60°	3773.8	81.2
0°-90°	4647.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4647.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1837	1837	1837	1837	1837	
5°	1836	1829	1827	1824	1828	174
15°	1752	1746	1742	1738	1740	494
25°	1588	1581	1574	1570	1573	731
35°	1359	1354	1344	1337	1333	851
45°	1092	1085	1078	1067	1062	844
55°	811	804	792	786	782	726
65°	529	525	520	517	518	524
75°	265	264	269	271	271	280
85°	50	55	64	64	64	63
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1837.1	1837.1	1837.1	1837.1	1837.1
2.5°	1843.6	1837.1	1833.9	1831.4	1835.2
5°	1836.5	1829.4	1826.9	1823.7	1828.2
7.5°	1822.4	1816.6	1813.4	1810.8	1813.4
10°	1804.4	1798.0	1794.8	1792.9	1794.8
12.5°	1780.7	1776.2	1771.1	1767.2	1771.1
15°	1752.5	1746.1	1742.2	1738.4	1740.3
17.5°	1717.8	1712.1	1706.9	1703.7	1705.6
20°	1679.3	1672.3	1667.8	1664.6	1665.9
22.5°	1638.9	1630.0	1624.2	1619.0	1619.7
25°	1587.6	1581.2	1573.5	1570.3	1572.9
27.5°	1535.0	1528.0	1521.5	1516.4	1515.1
30°	1479.9	1473.4	1466.4	1460.6	1458.7
32.5°	1424.7	1413.8	1406.1	1400.3	1399.7
35°	1359.3	1354.1	1343.9	1337.4	1333.0
37.5°	1297.0	1289.3	1279.1	1273.3	1268.8
40°	1229.7	1222.0	1212.4	1204.0	1202.1
42.5°	1161.7	1155.9	1143.1	1138.0	1134.7
45°	1092.4	1085.4	1077.7	1066.7	1062.3
47.5°	1026.3	1019.3	1006.5	996.8	994.3
50°	953.9	945.5	936.5	925.0	923.1
52.5°	885.2	875.6	864.0	858.9	855.1
55°	811.4	803.8	792.2	785.8	781.9
57.5°	738.3	733.8	726.1	717.2	716.5
60°	672.3	663.3	654.3	647.9	647.9
62.5°	598.5	595.3	586.3	582.4	580.5
65°	529.2	524.7	519.6	517.0	518.3
67.5°	458.0	457.4	453.5	454.2	452.9
70°	391.9	389.4	390.0	391.3	388.7
72.5°	327.8	325.9	329.1	329.7	331.0
75°	264.9	263.6	269.4	271.3	271.3
77.5°	202.1	205.9	212.3	217.5	217.5
80°	145.0	150.1	157.8	162.3	165.5
82.5°	93.0	101.4	108.4	111.6	111.6
85°	50.0	55.2	63.5	64.1	63.5
87.5°	15.4	19.2	23.1	24.4	25.0
90°	0.0	0.0	0.0	0.0	0.0

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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	14.18	15.78	14.54	16.09	16.41	14.01	15.61	14.37	15.92	16.24
	3H	15.82	17.26	16.20	17.59	17.95	15.70	17.14	16.08	17.47	17.83
	4H	16.40	17.76	16.80	18.11	18.48	16.33	17.69	16.73	18.04	18.41
	6H	16.79	18.04	17.20	18.41	18.80	16.80	18.06	17.21	18.42	18.81
	8H	16.89	18.09	17.31	18.47	18.87	16.95	18.14	17.37	18.53	18.93
	12H	16.94	18.08	17.37	18.47	18.89	17.03	18.18	17.46	18.56	18.99
4H	2H	14.75	16.10	15.14	16.45	16.83	14.61	15.97	15.01	16.32	16.69
	3H	16.60	17.74	17.01	18.14	18.54	16.52	17.65	16.93	18.05	18.45
	4H	17.31	18.33	17.74	18.75	19.18	17.28	18.30	17.71	18.71	19.15
	6H	17.81	18.70	18.26	19.14	19.60	17.87	18.77	18.33	19.21	19.66
	8H	17.95	18.78	18.41	19.23	19.69	18.06	18.90	18.52	19.34	19.81
	12H	18.03	18.78	18.51	19.25	19.72	18.18	18.93	18.66	19.41	19.88
8H	4H	17.59	18.42	18.05	18.87	19.33	17.56	18.40	18.02	18.84	19.30
	6H	18.20	18.89	18.69	19.38	19.85	18.27	18.96	18.76	19.45	19.93
	8H	18.40	19.02	18.91	19.52	20.01	18.53	19.15	19.04	19.66	20.14
	12H	18.53	19.08	19.04	19.57	20.13	18.71	19.26	19.22	19.76	20.32
12H	4H	17.62	18.36	18.10	18.84	19.31	17.58	18.33	18.06	18.81	19.28
	6H	18.24	18.87	18.75	19.37	19.86	18.31	18.94	18.82	19.44	19.93
	8H	18.50	19.04	19.00	19.54	20.10	18.62	19.17	19.13	19.66	20.22

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

Report Prepared for

Cooper Lighting Solutions

Corelite

Report Number: SP1-2506-458-3

Test Date: 07/24/2025

Luminaire Tested: 22ID2-55-CFR1-L830-U

Data in this report applies to families of products including 22ID2-55-CFR1-L830-U

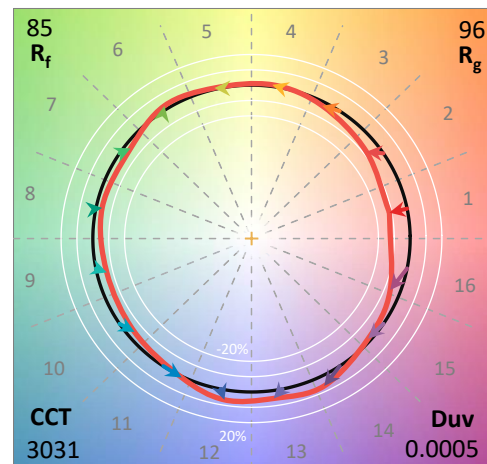
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-458-3
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 08/27/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Corelite
 Catalog Number: **22ID2-55-CFR1-L830-U**
 Description: 2X2 CGTX WITH INDEPTH FRAME AND CFR1 LENS - 5500 LUMEN 3000K 80CRI

Spectral Parameters

CCT (K): 3031
 CIE u' : 0.2493
 CIE v' : 0.5215
 Duv: 0.0005
 CIE x: 0.4355
 CIE y: 0.4049
 CIE z: 0.1596
 Peak Wavelength (nm): 603
 Dominant Wavelength (nm): 582
 Purity: 52.24762
 R_f: 84.8
 R_g: 95.8

CRI (Ra): 82.5
 R1: 80.7
 R2: 90.5
 R3: 96.7
 R4: 80.7
 R5: 80.9
 R6: 88.5
 R7: 83.0
 R8: 58.8
 R9: 5.8
 R10: 78.6
 R11: 80.2
 R12: 69.8
 R13: 83.0
 R14: 98.8
 R15: 73.0



Test Conditions

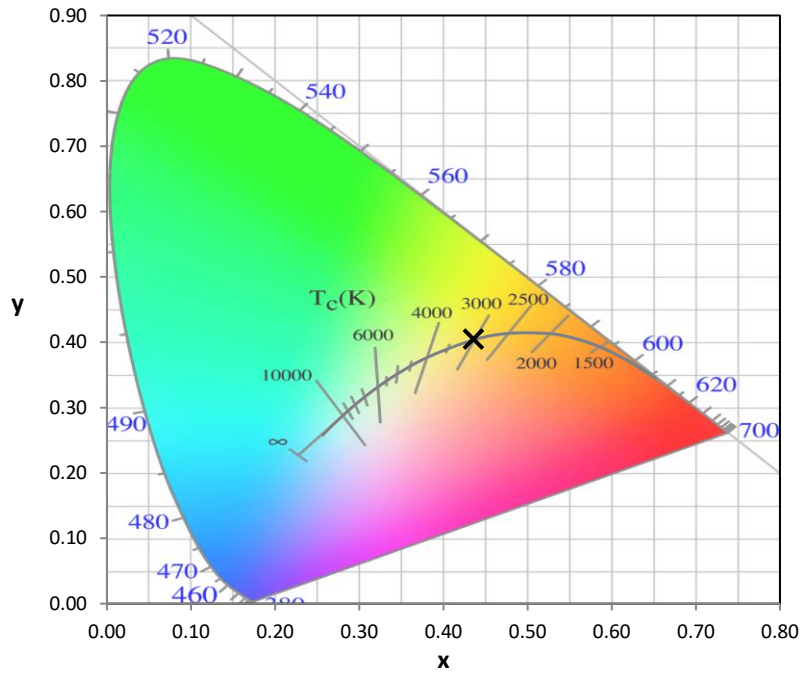
Stabilization Time: 38M
 Operation Time: 1H 38M
 Sphere Temperature (°C): 24.0

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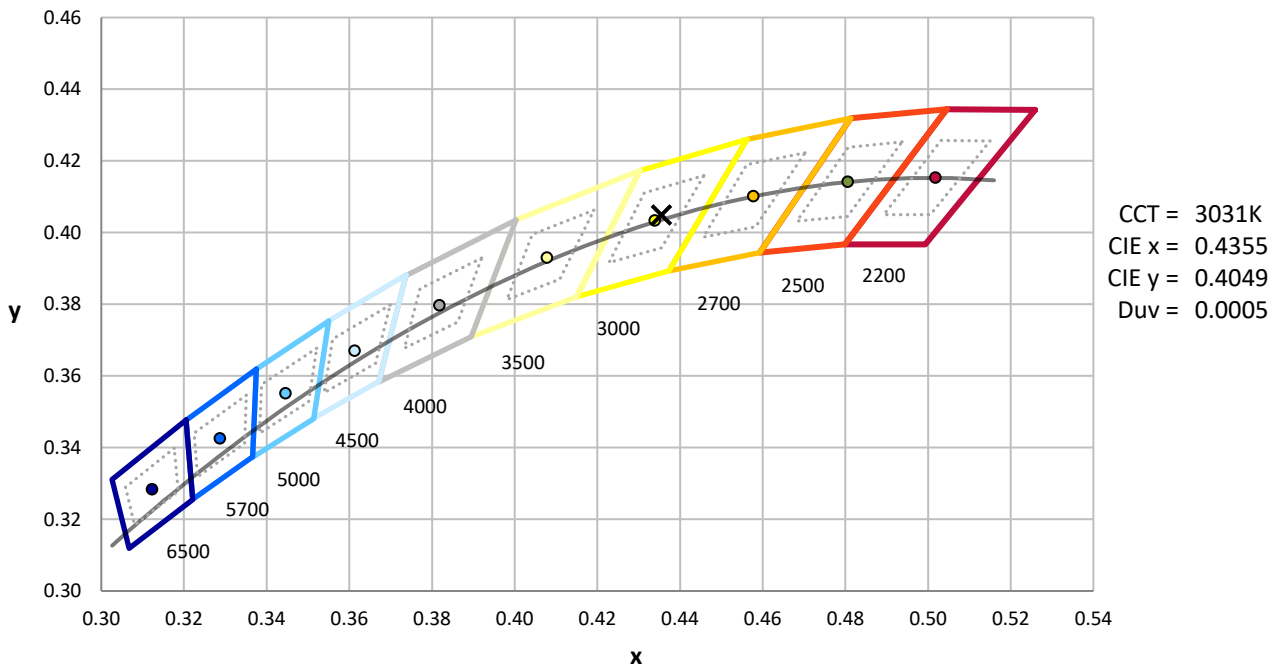
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

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CIE 1931 Chromaticity Diagram



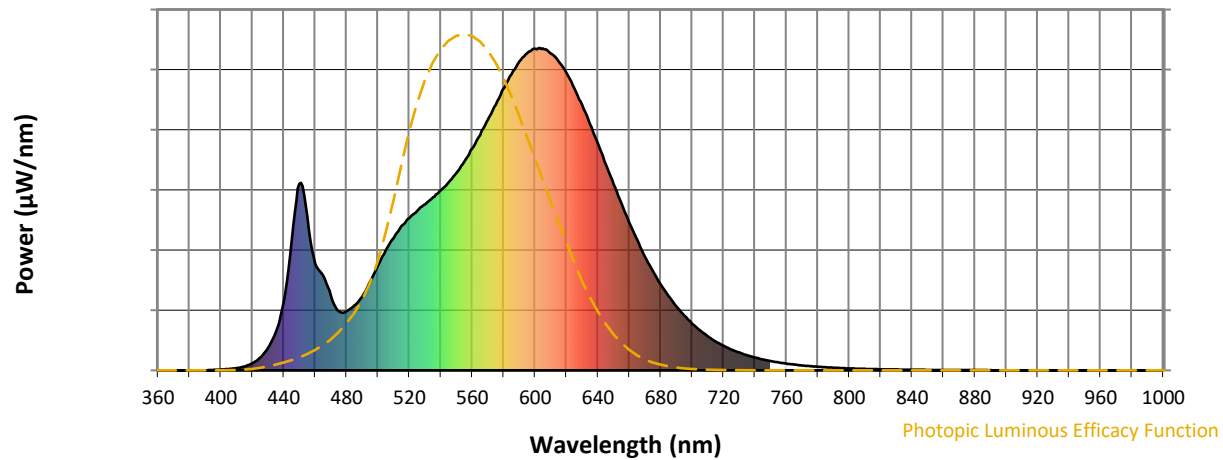
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

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Photopic Flux vs. Wavelength

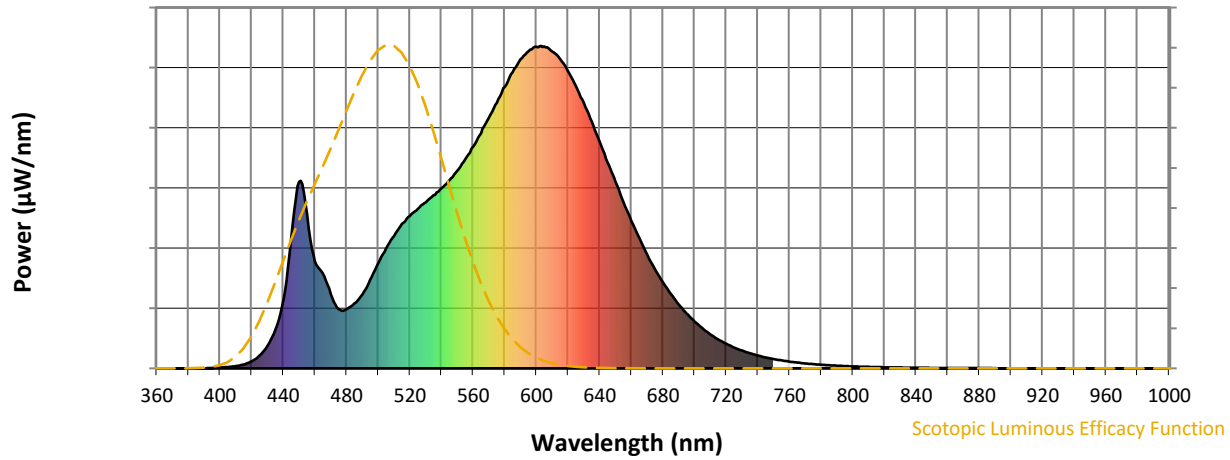


Photopic Lumens: NR

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	229	NR	620	922	NR	750	29	NR	880	1	NR
365	0	NR	495	275	NR	625	875	NR	755	25	NR	885	1	NR
370	0	NR	500	326	NR	630	822	NR	760	21	NR	890	1	NR
375	0	NR	505	372	NR	635	764	NR	765	18	NR	895	0	NR
380	0	NR	510	411	NR	640	704	NR	770	15	NR	900	0	NR
385	0	NR	515	447	NR	645	638	NR	775	13	NR	905	0	NR
390	0	NR	520	473	NR	650	577	NR	780	11	NR	910	0	NR
395	1	NR	525	495	NR	655	517	NR	785	10	NR	915	0	NR
400	3	NR	530	515	NR	660	457	NR	790	8	NR	920	0	NR
405	4	NR	535	537	NR	665	404	NR	795	7	NR	925	0	NR
410	7	NR	540	559	NR	670	353	NR	800	6	NR	930	0	NR
415	12	NR	545	584	NR	675	307	NR	805	5	NR	935	0	NR
420	22	NR	550	612	NR	680	267	NR	810	5	NR	940	0	NR
425	40	NR	555	648	NR	685	230	NR	815	4	NR	945	0	NR
430	69	NR	560	688	NR	690	199	NR	820	3	NR	950	0	NR
435	120	NR	565	730	NR	695	170	NR	825	3	NR	955	0	NR
440	212	NR	570	777	NR	700	145	NR	830	3	NR	960	0	NR
445	400	NR	575	824	NR	705	124	NR	835	2	NR	965	0	NR
450	578	NR	580	873	NR	710	106	NR	840	2	NR	970	0	NR
455	478	NR	585	918	NR	715	90	NR	845	2	NR	975	0	NR
460	332	NR	590	958	NR	720	76	NR	850	1	NR	980	0	NR
465	295	NR	595	983	NR	725	65	NR	855	1	NR	985	0	NR
470	231	NR	600	997	NR	730	55	NR	860	1	NR	990	0	NR
475	183	NR	605	998	NR	735	47	NR	865	1	NR	995	0	NR
480	184	NR	610	982	NR	740	40	NR	870	1	NR	1000	0	NR
485	201	NR	615	958	NR	745	34	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



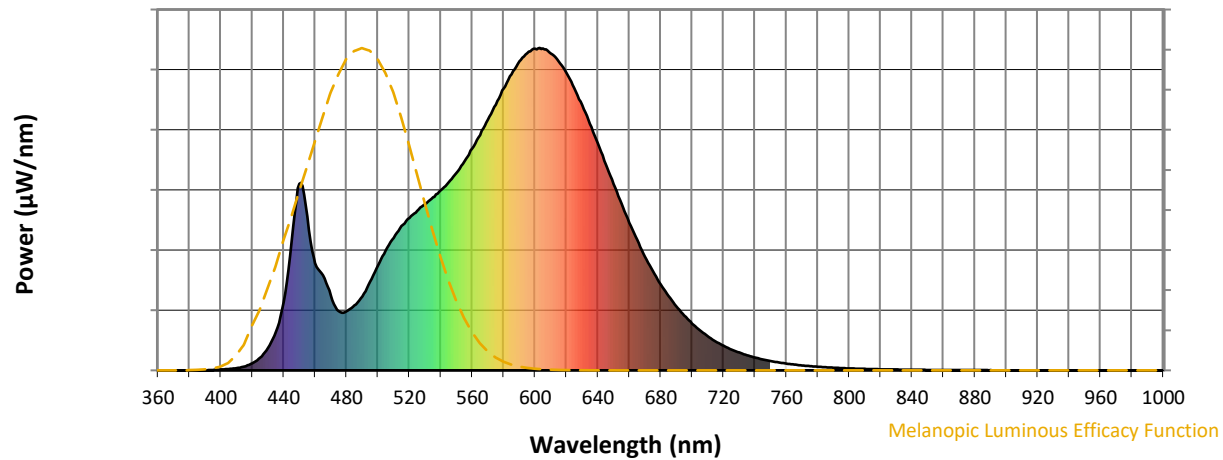
Scotopic Lumens: NR

S/P: 1.35

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	229	NR	620	922	NR	750	29	NR	880	1	NR
365	0	NR	495	275	NR	625	875	NR	755	25	NR	885	1	NR
370	0	NR	500	326	NR	630	822	NR	760	21	NR	890	1	NR
375	0	NR	505	372	NR	635	764	NR	765	18	NR	895	0	NR
380	0	NR	510	411	NR	640	704	NR	770	15	NR	900	0	NR
385	0	NR	515	447	NR	645	638	NR	775	13	NR	905	0	NR
390	0	NR	520	473	NR	650	577	NR	780	11	NR	910	0	NR
395	1	NR	525	495	NR	655	517	NR	785	10	NR	915	0	NR
400	3	NR	530	515	NR	660	457	NR	790	8	NR	920	0	NR
405	4	NR	535	537	NR	665	404	NR	795	7	NR	925	0	NR
410	7	NR	540	559	NR	670	353	NR	800	6	NR	930	0	NR
415	12	NR	545	584	NR	675	307	NR	805	5	NR	935	0	NR
420	22	NR	550	612	NR	680	267	NR	810	5	NR	940	0	NR
425	40	NR	555	648	NR	685	230	NR	815	4	NR	945	0	NR
430	69	NR	560	688	NR	690	199	NR	820	3	NR	950	0	NR
435	120	NR	565	730	NR	695	170	NR	825	3	NR	955	0	NR
440	212	NR	570	777	NR	700	145	NR	830	3	NR	960	0	NR
445	400	NR	575	824	NR	705	124	NR	835	2	NR	965	0	NR
450	578	NR	580	873	NR	710	106	NR	840	2	NR	970	0	NR
455	478	NR	585	918	NR	715	90	NR	845	2	NR	975	0	NR
460	332	NR	590	958	NR	720	76	NR	850	1	NR	980	0	NR
465	295	NR	595	983	NR	725	65	NR	855	1	NR	985	0	NR
470	231	NR	600	997	NR	730	55	NR	860	1	NR	990	0	NR
475	183	NR	605	998	NR	735	47	NR	865	1	NR	995	0	NR
480	184	NR	610	982	NR	740	40	NR	870	1	NR	1000	0	NR
485	201	NR	615	958	NR	745	34	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.59

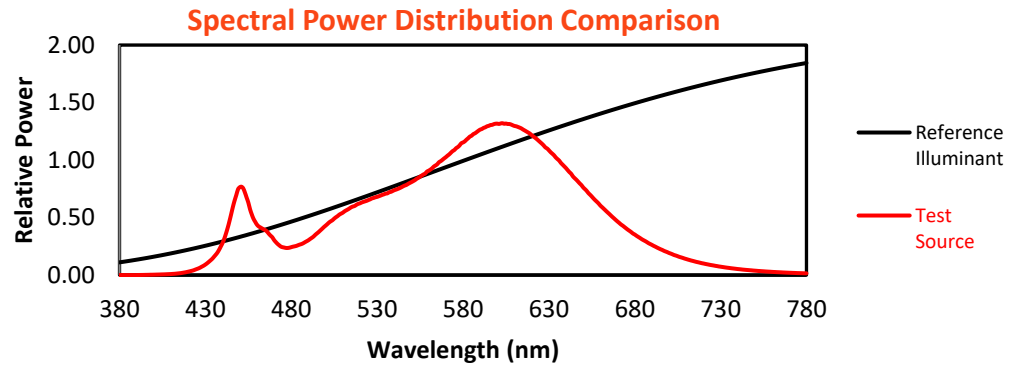
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	229	NR	620	922	NR	750	29	NR	880	1	NR
365	0	NR	495	275	NR	625	875	NR	755	25	NR	885	1	NR
370	0	NR	500	326	NR	630	822	NR	760	21	NR	890	1	NR
375	0	NR	505	372	NR	635	764	NR	765	18	NR	895	0	NR
380	0	NR	510	411	NR	640	704	NR	770	15	NR	900	0	NR
385	0	NR	515	447	NR	645	638	NR	775	13	NR	905	0	NR
390	0	NR	520	473	NR	650	577	NR	780	11	NR	910	0	NR
395	1	NR	525	495	NR	655	517	NR	785	10	NR	915	0	NR
400	3	NR	530	515	NR	660	457	NR	790	8	NR	920	0	NR
405	4	NR	535	537	NR	665	404	NR	795	7	NR	925	0	NR
410	7	NR	540	559	NR	670	353	NR	800	6	NR	930	0	NR
415	12	NR	545	584	NR	675	307	NR	805	5	NR	935	0	NR
420	22	NR	550	612	NR	680	267	NR	810	5	NR	940	0	NR
425	40	NR	555	648	NR	685	230	NR	815	4	NR	945	0	NR
430	69	NR	560	688	NR	690	199	NR	820	3	NR	950	0	NR
435	120	NR	565	730	NR	695	170	NR	825	3	NR	955	0	NR
440	212	NR	570	777	NR	700	145	NR	830	3	NR	960	0	NR
445	400	NR	575	824	NR	705	124	NR	835	2	NR	965	0	NR
450	578	NR	580	873	NR	710	106	NR	840	2	NR	970	0	NR
455	478	NR	585	918	NR	715	90	NR	845	2	NR	975	0	NR
460	332	NR	590	958	NR	720	76	NR	850	1	NR	980	0	NR
465	295	NR	595	983	NR	725	65	NR	855	1	NR	985	0	NR
470	231	NR	600	997	NR	730	55	NR	860	1	NR	990	0	NR
475	183	NR	605	998	NR	735	47	NR	865	1	NR	995	0	NR
480	184	NR	610	982	NR	740	40	NR	870	1	NR	1000	0	NR
485	201	NR	615	958	NR	745	34	NR	875	1	NR			

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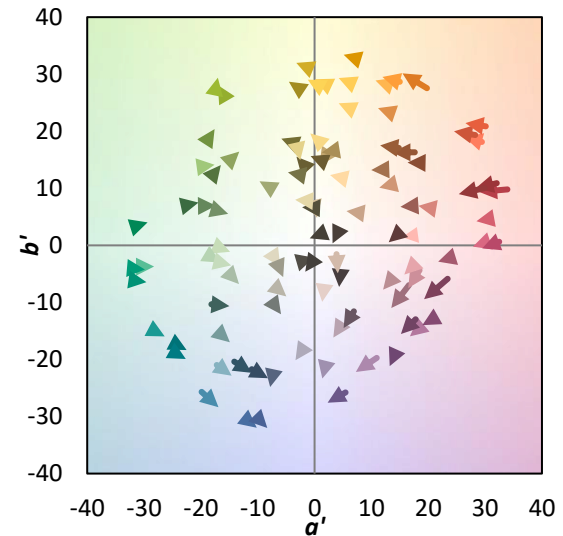
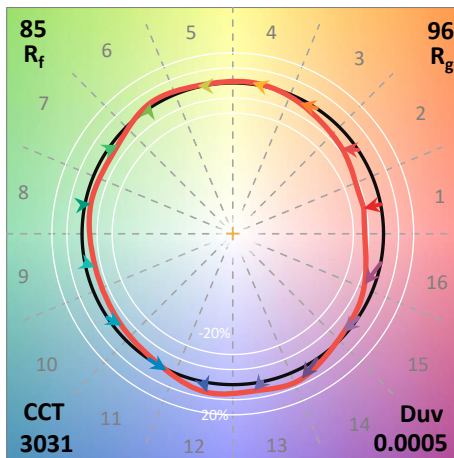
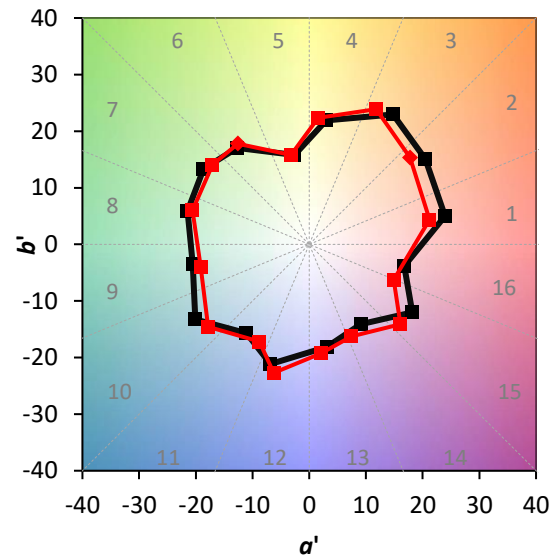
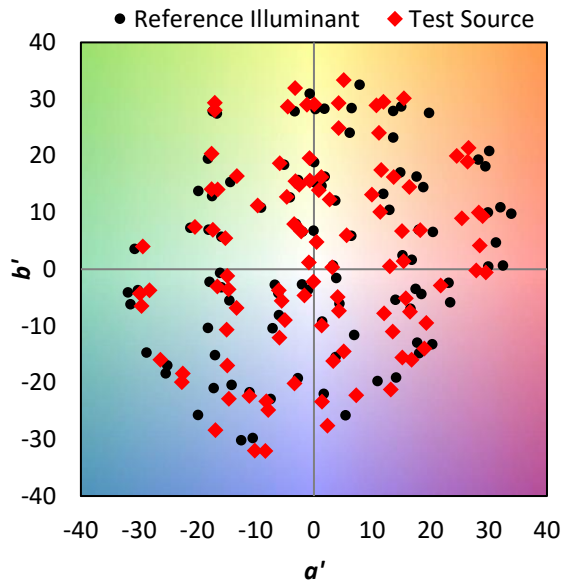
TM-30-18

Summary

$R_f = 84.8$
 $R_g = 95.8$
 $CIE R_a = 82.5$
 $R_9 = 5.8$

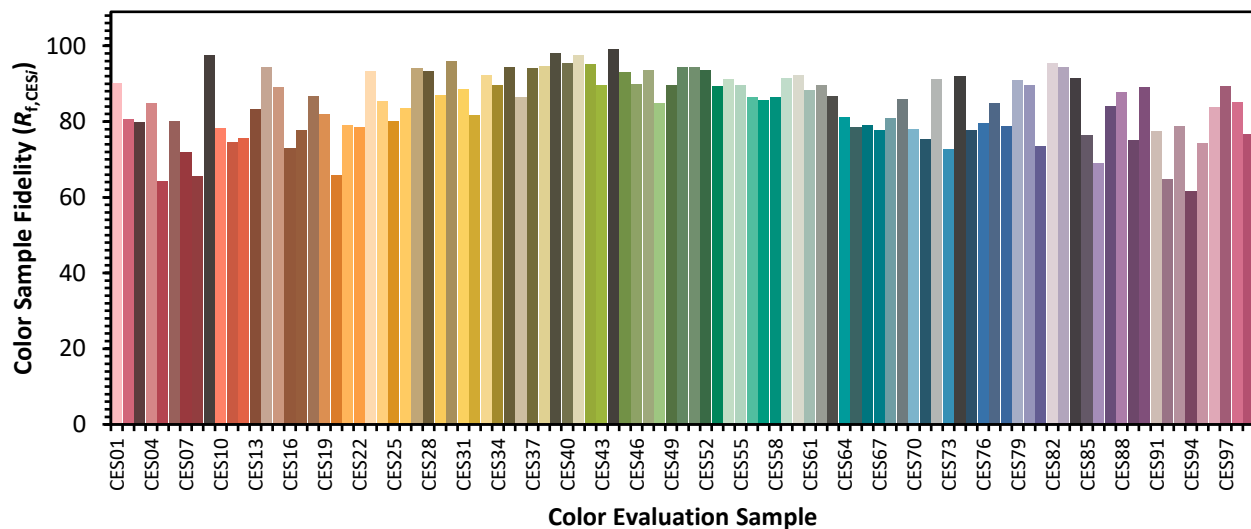


Color Vector Graphics

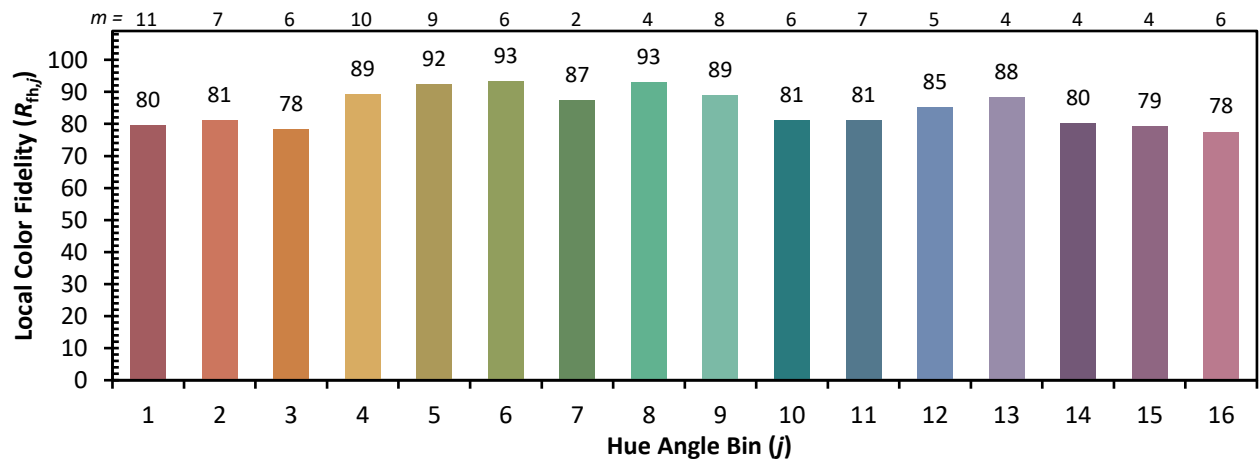
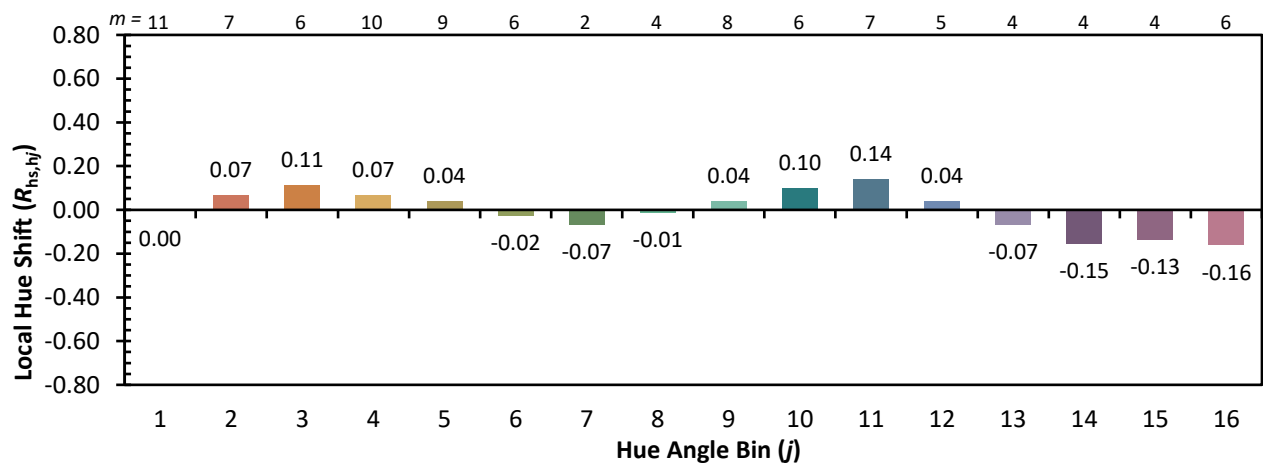
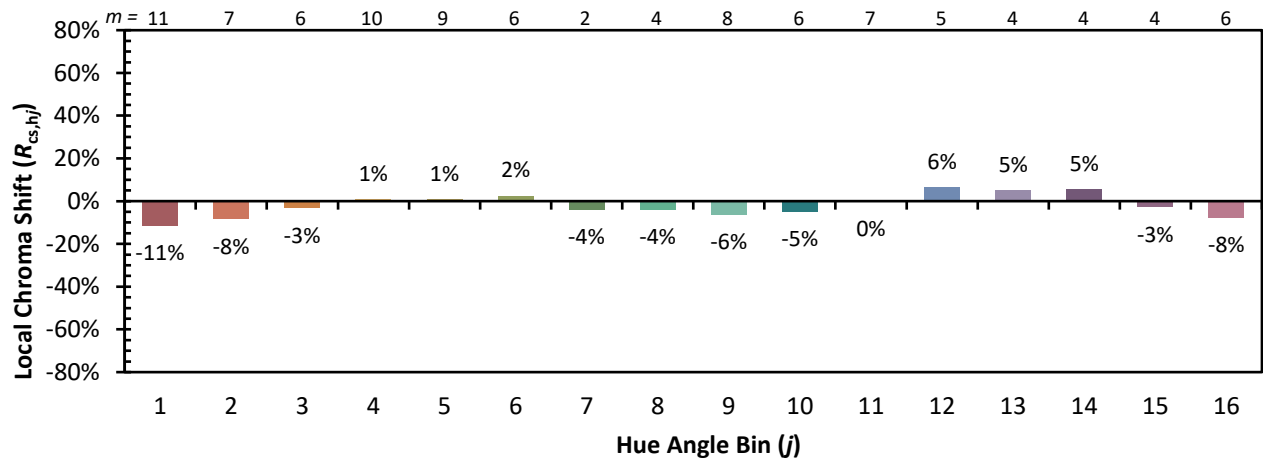


Individual Sample Fidelity Index ($R_{f,i}$)

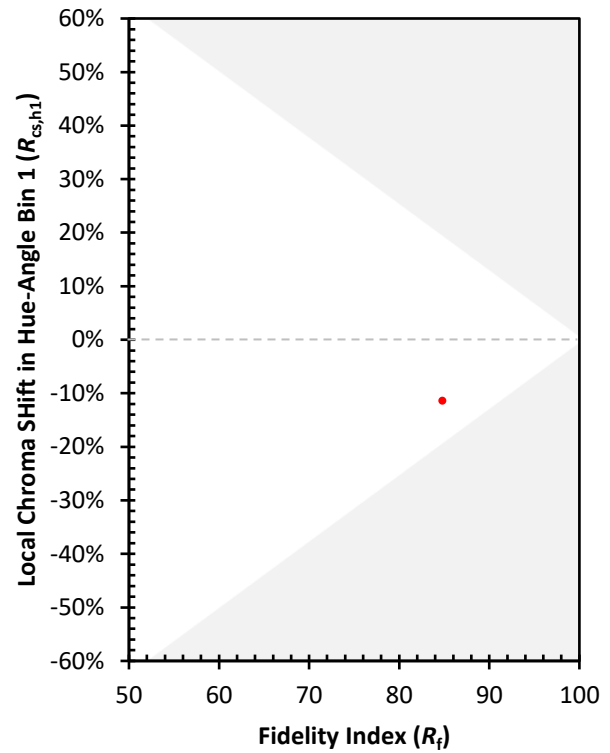
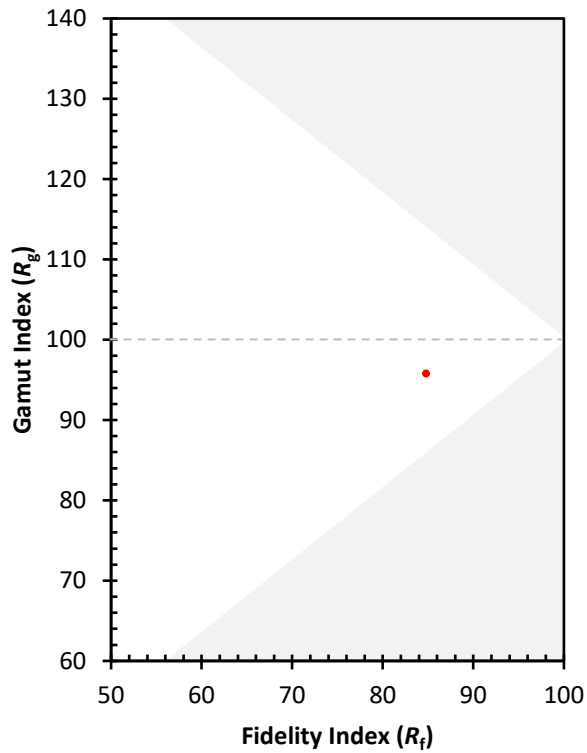
CES01 = 86	CES26 = 84	CES51 = 94	CES76 = 80
CES02 = 63	CES27 = 94	CES52 = 94	CES77 = 85
CES03 = 31	CES28 = 93	CES53 = 89	CES78 = 79
CES04 = 70	CES29 = 87	CES54 = 91	CES79 = 91
CES05 = 50	CES30 = 96	CES55 = 90	CES80 = 90
CES06 = 51	CES31 = 89	CES56 = 87	CES81 = 74
CES07 = 42	CES32 = 82	CES57 = 86	CES82 = 95
CES08 = 41	CES33 = 92	CES58 = 87	CES83 = 94
CES09 = 29	CES34 = 90	CES59 = 91	CES84 = 92
CES10 = 76	CES35 = 94	CES60 = 92	CES85 = 77
CES11 = 59	CES36 = 86	CES61 = 88	CES86 = 69
CES12 = 65	CES37 = 94	CES62 = 90	CES87 = 84
CES13 = 43	CES38 = 95	CES63 = 87	CES88 = 88
CES14 = 74	CES39 = 98	CES64 = 81	CES89 = 75
CES15 = 72	CES40 = 95	CES65 = 79	CES90 = 89
CES16 = 47	CES41 = 97	CES66 = 79	CES91 = 77
CES17 = 50	CES42 = 95	CES67 = 78	CES92 = 65
CES18 = 56	CES43 = 90	CES68 = 81	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 86	CES94 = 62
CES20 = 67	CES45 = 93	CES70 = 78	CES95 = 74
CES21 = 87	CES46 = 90	CES71 = 75	CES96 = 84
CES22 = 79	CES47 = 94	CES72 = 91	CES97 = 89
CES23 = 92	CES48 = 85	CES73 = 73	CES98 = 85
CES24 = 91	CES49 = 90	CES74 = 92	CES99 = 77
CES25 = 72	CES50 = 94	CES75 = 78	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)