

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: P1214588

Luminaire Tested: 22-ID2-45-CFR1-L850-U

Issue Date: 12/4/2025

Test Information

Test Method: LM-79-2019
Report Number: P1214588
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2506-458-3)
Test Lab: INNOVATION CENTER
Issue Date: 12/4/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 22-ID2-45-CFR1-L850-U
Description: 2X2 IN DEPTH TROFFER WITH 1INCH CUBE REGRESS LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

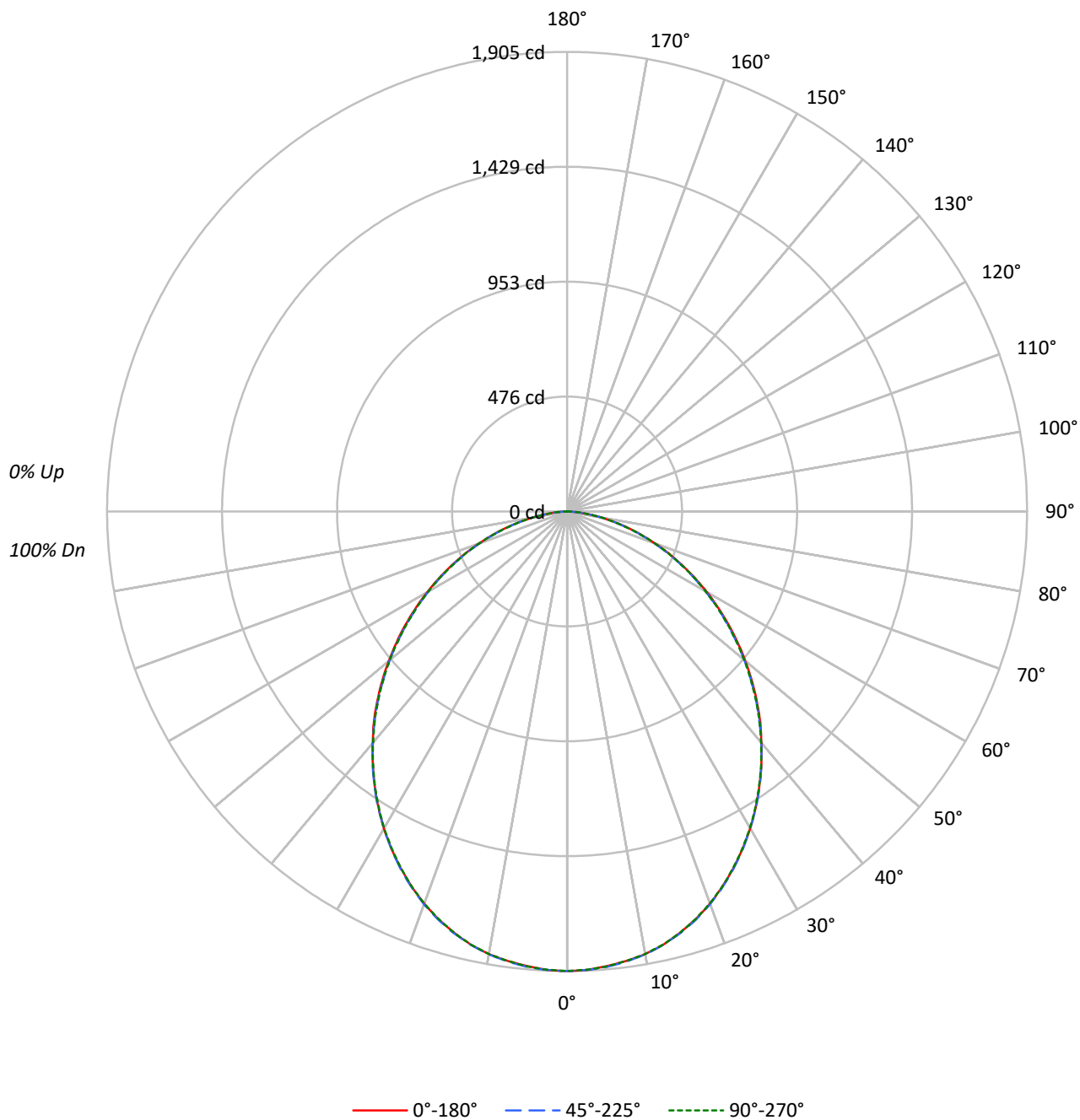
Lumens per Lamp: N/A
Luminaire Lumens: 4731.4 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.29
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 38.9
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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CATALOG NUMBER: 22-ID2-45-CFR1-L850-U

Luminous Intensity Polar Plot



TEST NUMBER: P1214588

CATALOG NUMBER: 22-ID2-45-CFR1-L850-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		100
1	109	105	101	97	107	103	99	96	98	95	93		94	92	90		85
2	100	92	85	80	97	90	84	79	87	82	77		83	79	75		72
3	91	81	73	67	89	80	72	67	77	70	65		74	69	64		61
4	84	72	64	57	82	71	63	57	68	62	56		66	60	55		53
5	77	65	56	50	75	64	56	49	62	54	49		60	53	48		46
6	72	59	50	44	70	58	49	43	56	48	43		54	48	43		40
7	66	53	45	39	65	52	44	39	51	44	38		49	43	38		36
8	62	49	40	35	60	48	40	35	47	39	34		45	39	34		32
9	58	45	37	31	57	44	36	31	43	36	31		42	36	31		29
10	54	41	34	28	53	41	33	28	40	33	28		39	33	28		26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5126	5126	5126
5°	5111	5119	5114
10°	5091	5093	5090
15°	5036	5043	5036
20°	4954	4961	4952
25°	4841	4848	4837
30°	4714	4712	4707
35°	4562	4568	4558
40°	4397	4395	4391
45°	4231	4212	4210
50°	4034	4011	4011
55°	3827	3795	3795
60°	3601	3564	3564
65°	3349	3310	3310
70°	3055	3026	3036
75°	2696	2670	2676
80°	2208	2190	2208
85°	1568	1547	1606

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4231 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.8	3.8
10°-20°	509.7	10.8
20°-30°	750.7	15.9
30°-40°	867.6	18.3
40°-50°	852.5	18.0
50°-60°	723.2	15.3
60°-70°	514.9	10.9
70°-80°	271.3	5.7
80°-90°	61.7	1.3
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°	1440.2	30.4
0°-40°	2307.8	48.8
0°-60°	3883.5	82.1
0°-90°	4731.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4731.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1905	1905	1905	1905	1905	
5°	1892	1895	1895	1894	1893	180
15°	1808	1810	1810	1809	1808	509
25°	1630	1633	1633	1630	1629	751
35°	1389	1391	1391	1384	1388	868
45°	1112	1106	1107	1100	1106	857
55°	816	808	809	804	809	729
65°	526	519	520	516	520	521
75°	259	254	257	251	257	276
85°	51	48	50	49	52	63
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1904.9	1904.9	1904.9	1904.9	1904.9
2.5°	1901.8	1903.0	1902.4	1903.0	1901.2
5°	1892.0	1895.1	1895.1	1894.5	1893.2
7.5°	1879.2	1882.2	1881.6	1881.6	1879.2
10°	1863.3	1864.5	1863.9	1863.9	1862.7
12.5°	1839.4	1840.7	1840.0	1840.0	1838.8
15°	1807.6	1810.1	1810.1	1808.9	1807.6
17.5°	1771.6	1773.4	1774.0	1771.6	1770.9
20°	1730.0	1731.8	1732.4	1729.4	1729.4
22.5°	1682.3	1684.7	1684.7	1681.7	1682.3
25°	1630.3	1632.7	1632.7	1629.7	1629.1
27.5°	1575.3	1577.1	1576.5	1573.4	1573.4
30°	1517.2	1517.8	1516.6	1511.1	1514.7
32.5°	1454.2	1455.4	1456.0	1449.9	1452.3
35°	1388.7	1390.6	1390.6	1384.5	1387.5
37.5°	1321.5	1322.1	1322.1	1316.0	1319.6
40°	1251.8	1251.8	1251.2	1245.0	1249.9
42.5°	1184.5	1178.4	1179.6	1173.5	1179.0
45°	1111.7	1105.6	1106.8	1100.1	1106.2
47.5°	1037.7	1031.6	1032.2	1028.0	1032.2
50°	963.7	957.6	958.2	953.4	958.2
52.5°	889.8	883.0	883.0	878.7	883.0
55°	815.8	808.4	809.0	804.1	809.0
57.5°	741.8	734.4	735.0	730.8	735.0
60°	669.0	661.7	662.3	658.0	662.3
62.5°	596.8	589.5	590.1	585.8	593.8
65°	525.9	519.2	519.8	515.5	519.8
67.5°	456.8	450.1	450.7	444.6	453.7
70°	388.3	382.2	384.6	377.3	385.9
72.5°	322.9	316.8	319.2	312.5	320.4
75°	259.3	253.8	256.8	251.3	257.4
77.5°	198.7	194.5	196.9	192.6	197.5
80°	142.5	138.8	141.3	137.0	142.5
82.5°	92.3	89.3	92.3	89.9	93.0
85°	50.8	47.7	50.1	48.9	52.0
87.5°	17.1	15.3	17.1	15.3	17.7
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	16.55	18.14	16.91	18.45	18.76	16.51	18.10	16.87	18.41	18.72
	3H	18.16	19.59	18.53	19.91	20.27	18.11	19.53	18.48	19.86	20.22
	4H	18.71	20.06	19.11	20.41	20.78	18.66	20.01	19.06	20.35	20.73
	6H	19.08	20.32	19.49	20.69	21.08	19.03	20.27	19.44	20.64	21.03
	8H	19.17	20.36	19.60	20.75	21.15	19.13	20.31	19.55	20.70	21.10
	12H	19.22	20.36	19.65	20.74	21.17	19.18	20.31	19.61	20.70	21.12
4H	2H	17.12	18.46	17.51	18.81	19.18	17.08	18.43	17.48	18.78	19.15
	3H	18.93	20.05	19.34	20.45	20.85	18.88	20.00	19.29	20.40	20.80
	4H	19.60	20.61	20.03	21.02	21.46	19.55	20.56	19.98	20.97	21.41
	6H	20.07	20.95	20.52	21.39	21.85	20.02	20.90	20.48	21.34	21.80
	8H	20.20	21.02	20.66	21.46	21.93	20.15	20.97	20.61	21.42	21.88
	12H	20.27	21.01	20.75	21.49	21.96	20.23	20.97	20.71	21.45	21.92
8H	4H	19.84	20.67	20.31	21.11	21.58	19.80	20.62	20.26	21.07	21.53
	6H	20.41	21.09	20.90	21.58	22.05	20.36	21.04	20.86	21.53	22.01
	8H	20.58	21.19	21.09	21.70	22.19	20.54	21.15	21.05	21.66	22.15
	12H	20.70	21.24	21.21	21.73	22.30	20.67	21.21	21.18	21.70	22.26
12H	4H	19.86	20.60	20.34	21.07	21.54	19.82	20.55	20.30	21.03	21.50
	6H	20.43	21.05	20.94	21.55	22.04	20.39	21.00	20.90	21.51	22.00
	8H	20.65	21.19	21.16	21.69	22.25	20.62	21.16	21.12	21.65	22.21

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

Report Prepared for

Cooper Lighting Solutions

Corelite

Report Number: SP1-2506-458-7

Test Date: 08/26/2025

Luminaire Tested: 22ID2-55-CFR1-L850-U

Data in this report applies to families of products including 22ID2-55-CFR1-L850-U

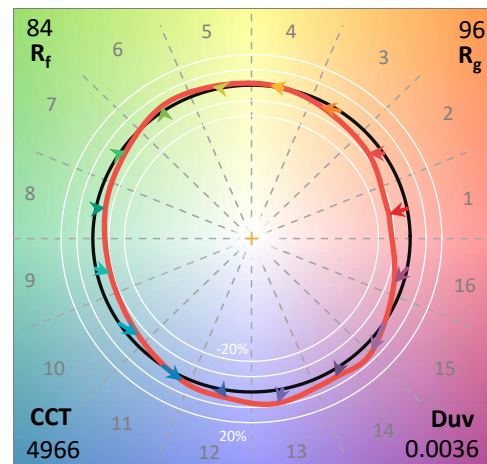
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-458-7
 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-L850-U**
 Description: 2X2 CGTX WITH INDEPTH FRAME AND CFR1 LENS - 5500 LUMEN 5000K 80CRI

Spectral Parameters

CCT (K): 4966
 CIE u' : 0.2093
 CIE v' : 0.4890
 Duv: 0.0036
 CIE x: 0.3468
 CIE y: 0.3601
 CIE z: 0.2931
 Peak Wavelength (nm): 450
 Dominant Wavelength (nm): 570
 Purity: 12.1135
 R_f: 84
 R_g: 96.2

CRI (Ra): 83.1
 R1: 81.0
 R2: 87.8
 R3: 92.7
 R4: 82.4
 R5: 81.0
 R6: 82.6
 R7: 88.5
 R8: 68.6
 R9: 10.3
 R10: 70.9
 R11: 81.3
 R12: 55.9
 R13: 82.8
 R14: 96.1
 R15: 75.1



Test Conditions

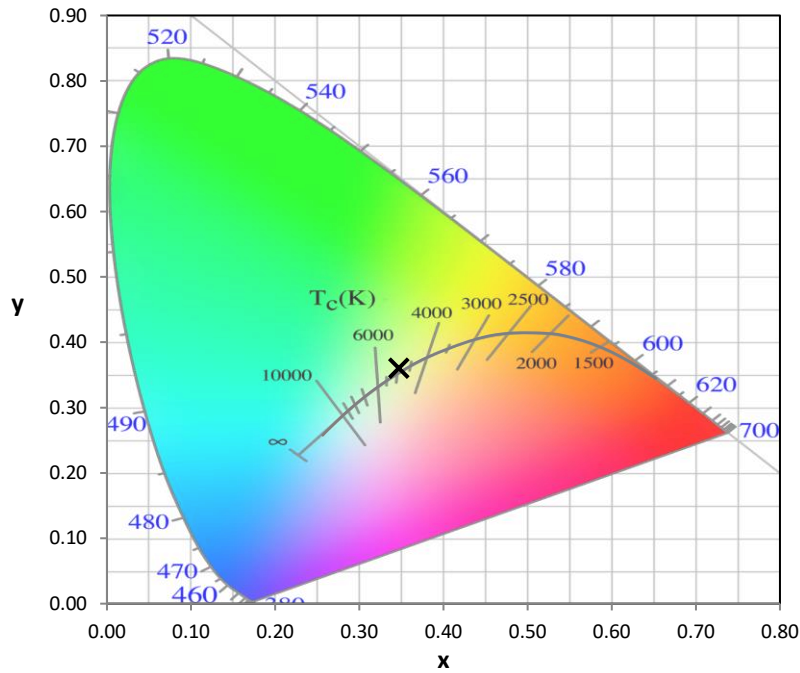
Stabilization Time: 37M
 Operation Time: 1H 37M
 Sphere Temperature (°C): 25.2

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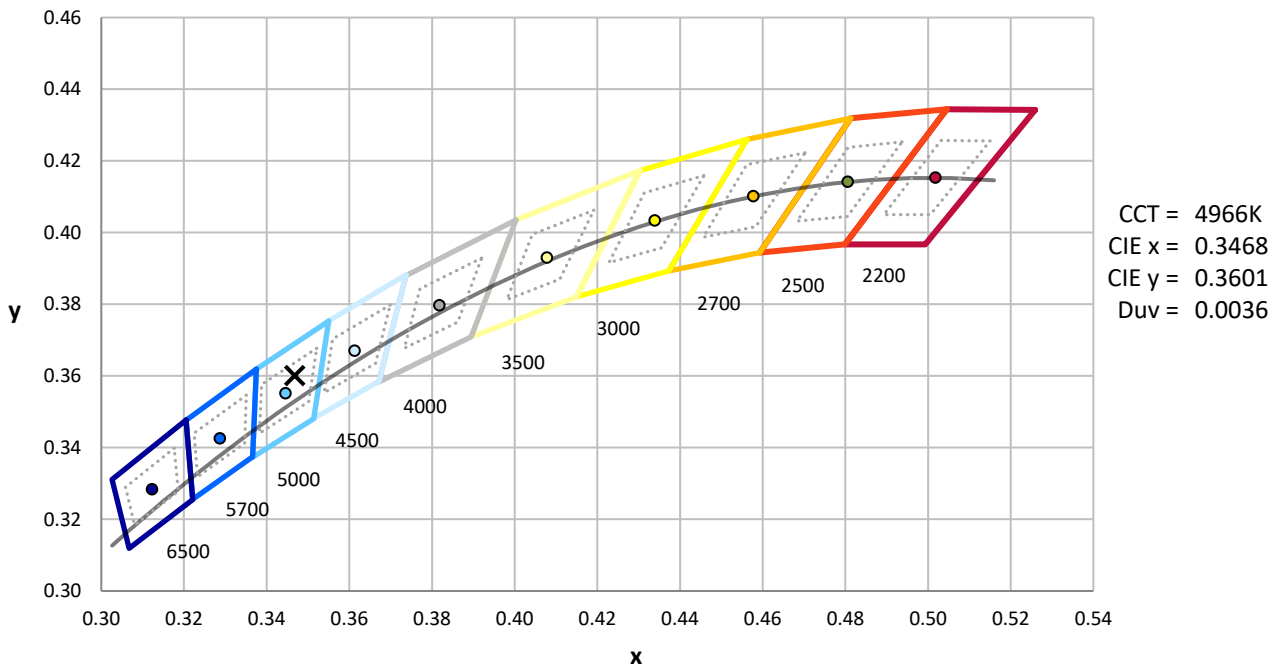
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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



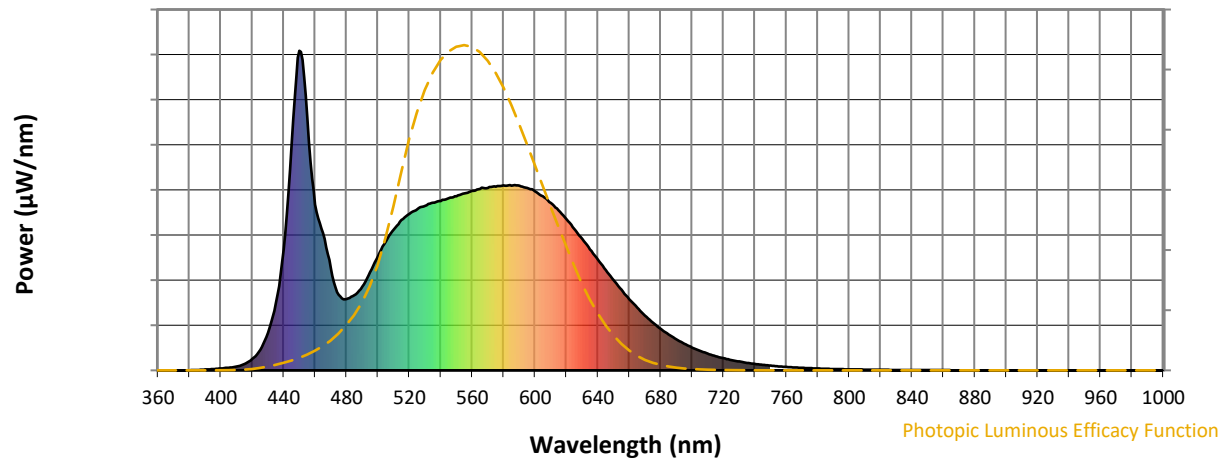
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 5000K 4-step quadrangle

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Photopic Flux vs. Wavelength

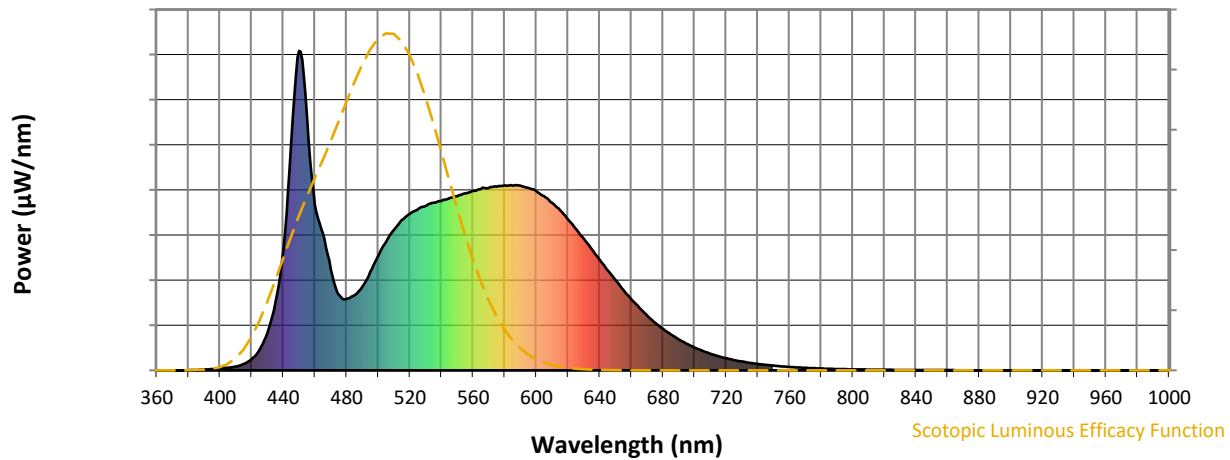


Photopic Lumens: NR

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	262	NR	620	472	NR	750	15	NR	880	0	NR
365	0	NR	495	307	NR	625	443	NR	755	13	NR	885	0	NR
370	0	NR	500	358	NR	630	412	NR	760	11	NR	890	0	NR
375	0	NR	505	403	NR	635	379	NR	765	9	NR	895	0	NR
380	0	NR	510	440	NR	640	346	NR	770	8	NR	900	0	NR
385	1	NR	515	471	NR	645	313	NR	775	7	NR	905	0	NR
390	3	NR	520	490	NR	650	282	NR	780	6	NR	910	0	NR
395	4	NR	525	504	NR	655	252	NR	785	5	NR	915	0	NR
400	6	NR	530	515	NR	660	223	NR	790	4	NR	920	0	NR
405	9	NR	535	524	NR	665	197	NR	795	4	NR	925	0	NR
410	12	NR	540	530	NR	670	171	NR	800	3	NR	930	0	NR
415	20	NR	545	539	NR	675	149	NR	805	3	NR	935	0	NR
420	36	NR	550	545	NR	680	130	NR	810	2	NR	940	0	NR
425	64	NR	555	554	NR	685	112	NR	815	2	NR	945	0	NR
430	117	NR	560	562	NR	690	97	NR	820	2	NR	950	0	NR
435	212	NR	565	567	NR	695	83	NR	825	2	NR	955	0	NR
440	378	NR	570	571	NR	700	71	NR	830	1	NR	960	0	NR
445	709	NR	575	574	NR	705	61	NR	835	1	NR	965	0	NR
450	1000	NR	580	579	NR	710	52	NR	840	1	NR	970	0	NR
455	789	NR	585	578	NR	715	44	NR	845	1	NR	975	0	NR
460	519	NR	590	578	NR	720	38	NR	850	1	NR	980	0	NR
465	429	NR	595	571	NR	725	32	NR	855	1	NR	985	0	NR
470	316	NR	600	560	NR	730	28	NR	860	1	NR	990	0	NR
475	236	NR	605	545	NR	735	24	NR	865	1	NR	995	0	NR
480	224	NR	610	524	NR	740	20	NR	870	0	NR	1000	0	NR
485	235	NR	615	501	NR	745	17	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



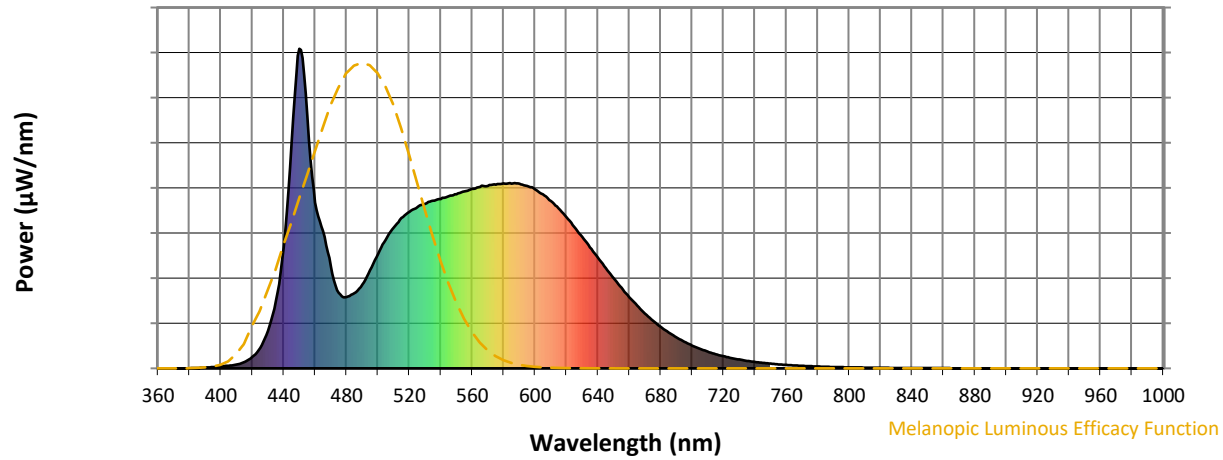
Scotopic Lumens: NR

S/P: 1.94

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	262	NR	620	472	NR	750	15	NR	880	0	NR
365	0	NR	495	307	NR	625	443	NR	755	13	NR	885	0	NR
370	0	NR	500	358	NR	630	412	NR	760	11	NR	890	0	NR
375	0	NR	505	403	NR	635	379	NR	765	9	NR	895	0	NR
380	0	NR	510	440	NR	640	346	NR	770	8	NR	900	0	NR
385	1	NR	515	471	NR	645	313	NR	775	7	NR	905	0	NR
390	3	NR	520	490	NR	650	282	NR	780	6	NR	910	0	NR
395	4	NR	525	504	NR	655	252	NR	785	5	NR	915	0	NR
400	6	NR	530	515	NR	660	223	NR	790	4	NR	920	0	NR
405	9	NR	535	524	NR	665	197	NR	795	4	NR	925	0	NR
410	12	NR	540	530	NR	670	171	NR	800	3	NR	930	0	NR
415	20	NR	545	539	NR	675	149	NR	805	3	NR	935	0	NR
420	36	NR	550	545	NR	680	130	NR	810	2	NR	940	0	NR
425	64	NR	555	554	NR	685	112	NR	815	2	NR	945	0	NR
430	117	NR	560	562	NR	690	97	NR	820	2	NR	950	0	NR
435	212	NR	565	567	NR	695	83	NR	825	2	NR	955	0	NR
440	378	NR	570	571	NR	700	71	NR	830	1	NR	960	0	NR
445	709	NR	575	574	NR	705	61	NR	835	1	NR	965	0	NR
450	1000	NR	580	579	NR	710	52	NR	840	1	NR	970	0	NR
455	789	NR	585	578	NR	715	44	NR	845	1	NR	975	0	NR
460	519	NR	590	578	NR	720	38	NR	850	1	NR	980	0	NR
465	429	NR	595	571	NR	725	32	NR	855	1	NR	985	0	NR
470	316	NR	600	560	NR	730	28	NR	860	1	NR	990	0	NR
475	236	NR	605	545	NR	735	24	NR	865	1	NR	995	0	NR
480	224	NR	610	524	NR	740	20	NR	870	0	NR	1000	0	NR
485	235	NR	615	501	NR	745	17	NR	875	0	NR			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 4.11

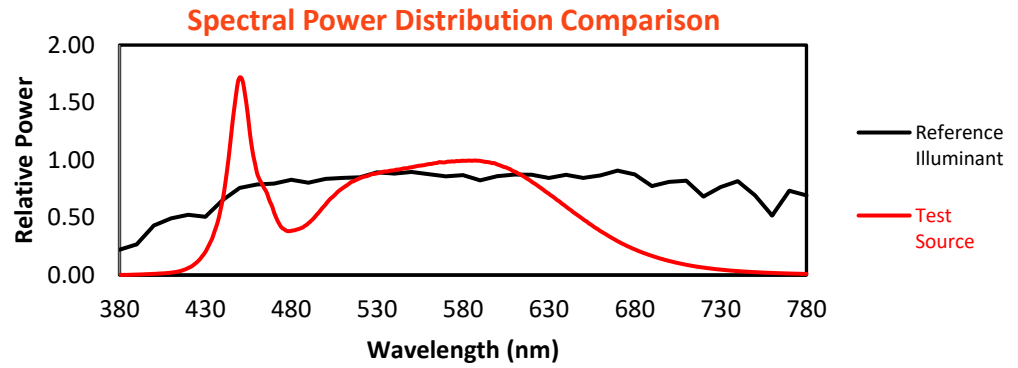
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	262	NR	620	472	NR	750	15	NR	880	0	NR
365	0	NR	495	307	NR	625	443	NR	755	13	NR	885	0	NR
370	0	NR	500	358	NR	630	412	NR	760	11	NR	890	0	NR
375	0	NR	505	403	NR	635	379	NR	765	9	NR	895	0	NR
380	0	NR	510	440	NR	640	346	NR	770	8	NR	900	0	NR
385	1	NR	515	471	NR	645	313	NR	775	7	NR	905	0	NR
390	3	NR	520	490	NR	650	282	NR	780	6	NR	910	0	NR
395	4	NR	525	504	NR	655	252	NR	785	5	NR	915	0	NR
400	6	NR	530	515	NR	660	223	NR	790	4	NR	920	0	NR
405	9	NR	535	524	NR	665	197	NR	795	4	NR	925	0	NR
410	12	NR	540	530	NR	670	171	NR	800	3	NR	930	0	NR
415	20	NR	545	539	NR	675	149	NR	805	3	NR	935	0	NR
420	36	NR	550	545	NR	680	130	NR	810	2	NR	940	0	NR
425	64	NR	555	554	NR	685	112	NR	815	2	NR	945	0	NR
430	117	NR	560	562	NR	690	97	NR	820	2	NR	950	0	NR
435	212	NR	565	567	NR	695	83	NR	825	2	NR	955	0	NR
440	378	NR	570	571	NR	700	71	NR	830	1	NR	960	0	NR
445	709	NR	575	574	NR	705	61	NR	835	1	NR	965	0	NR
450	1000	NR	580	579	NR	710	52	NR	840	1	NR	970	0	NR
455	789	NR	585	578	NR	715	44	NR	845	1	NR	975	0	NR
460	519	NR	590	578	NR	720	38	NR	850	1	NR	980	0	NR
465	429	NR	595	571	NR	725	32	NR	855	1	NR	985	0	NR
470	316	NR	600	560	NR	730	28	NR	860	1	NR	990	0	NR
475	236	NR	605	545	NR	735	24	NR	865	1	NR	995	0	NR
480	224	NR	610	524	NR	740	20	NR	870	0	NR	1000	0	NR
485	235	NR	615	501	NR	745	17	NR	875	0	NR			

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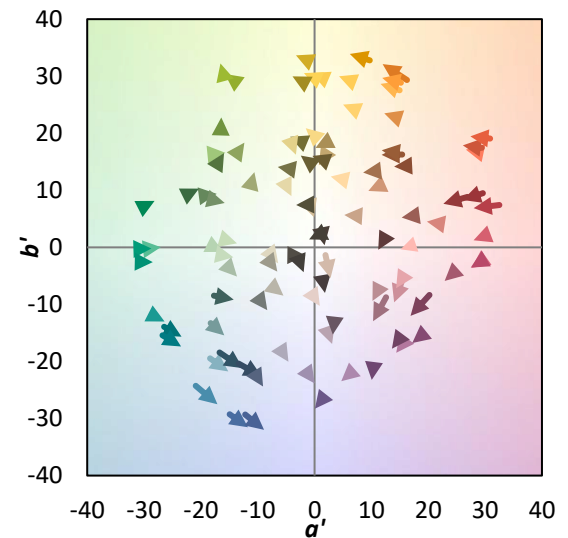
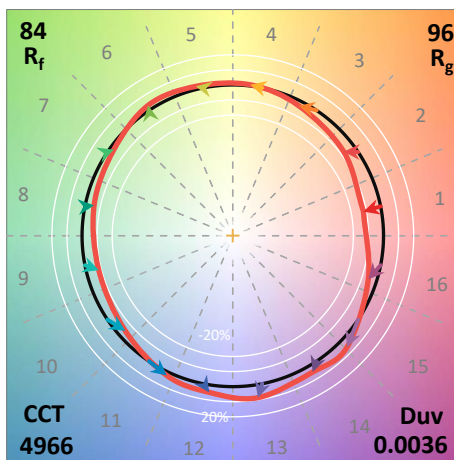
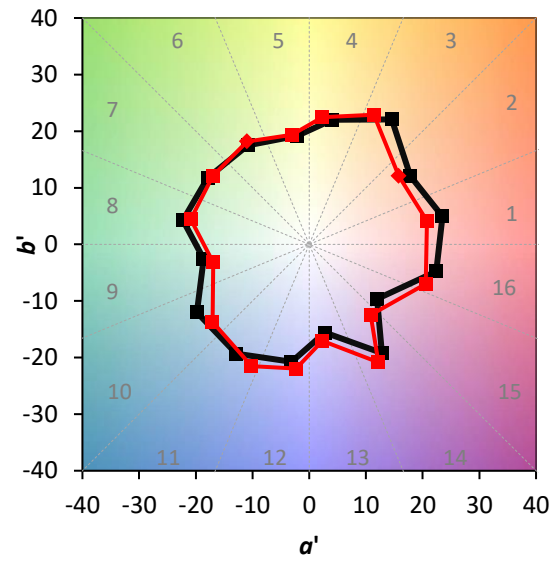
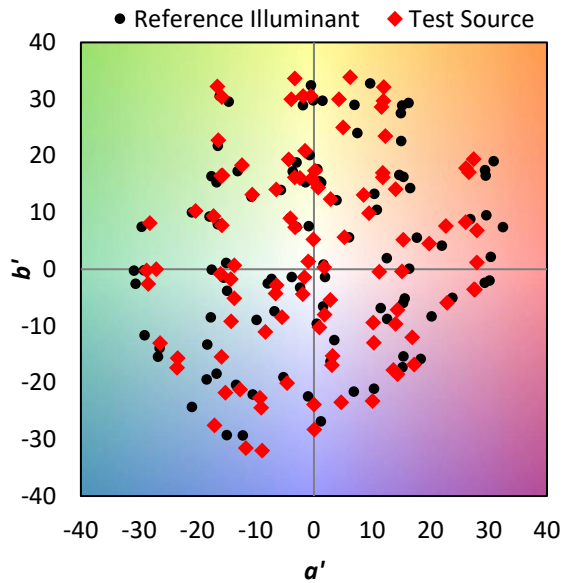
TM-30-18

Summary

$R_f = 84$
 $R_g = 96.2$
 $CIE\ R_a = 83.1$
 $R_9 = 10.3$

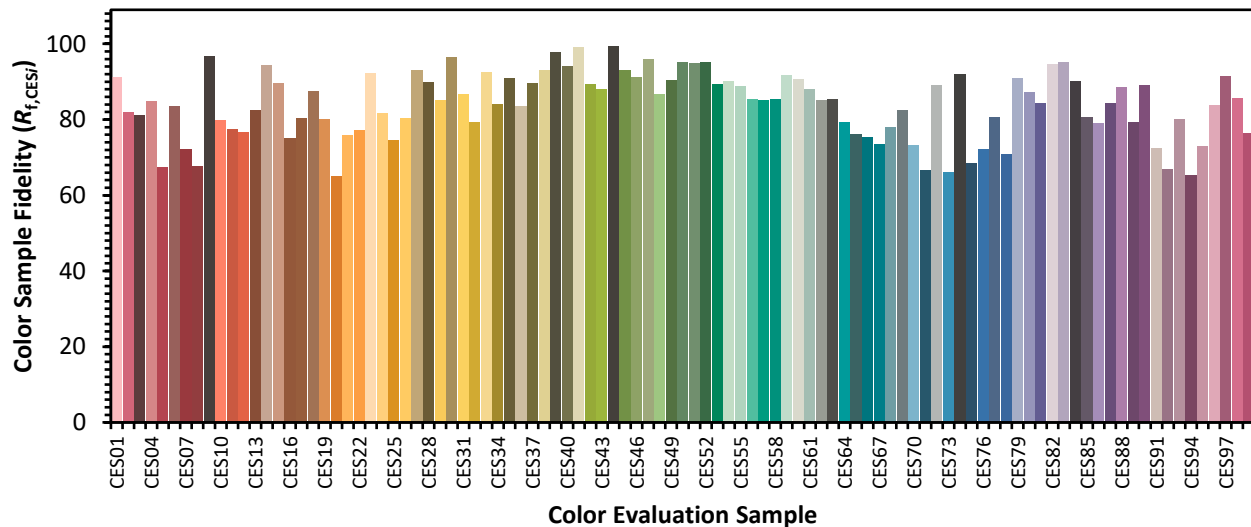


Color Vector Graphics

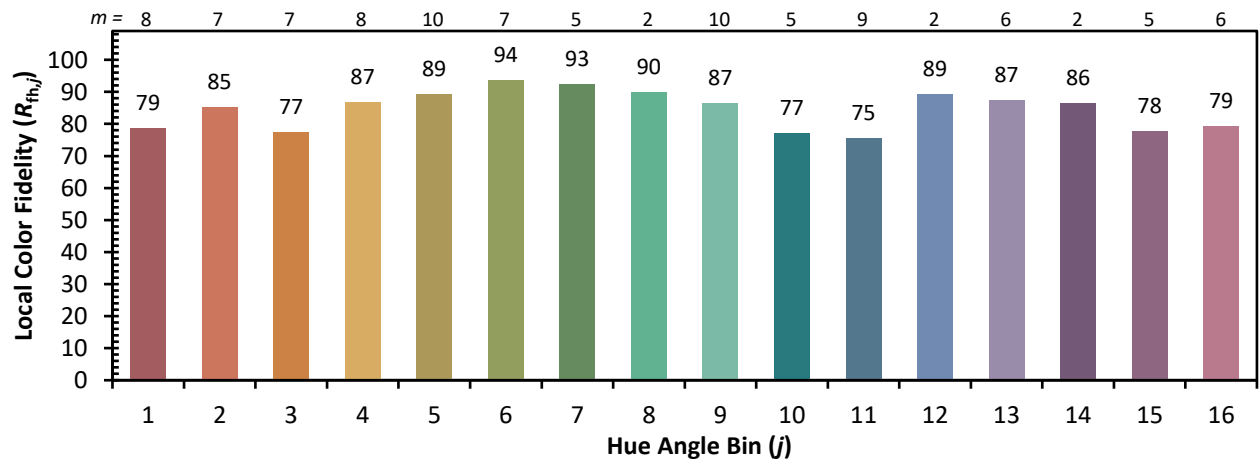
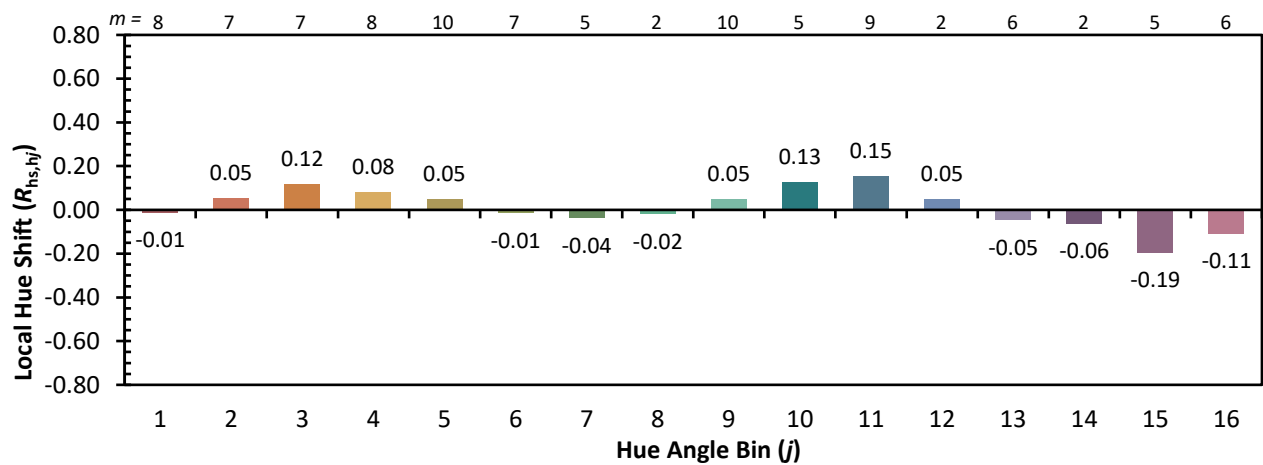
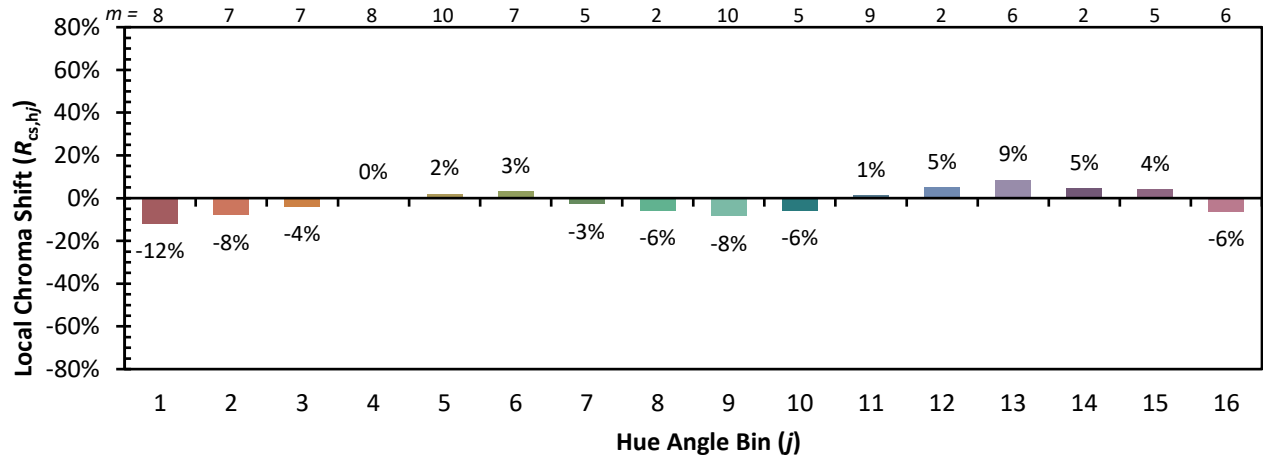


Individual Sample Fidelity Index ($R_{f,i}$)

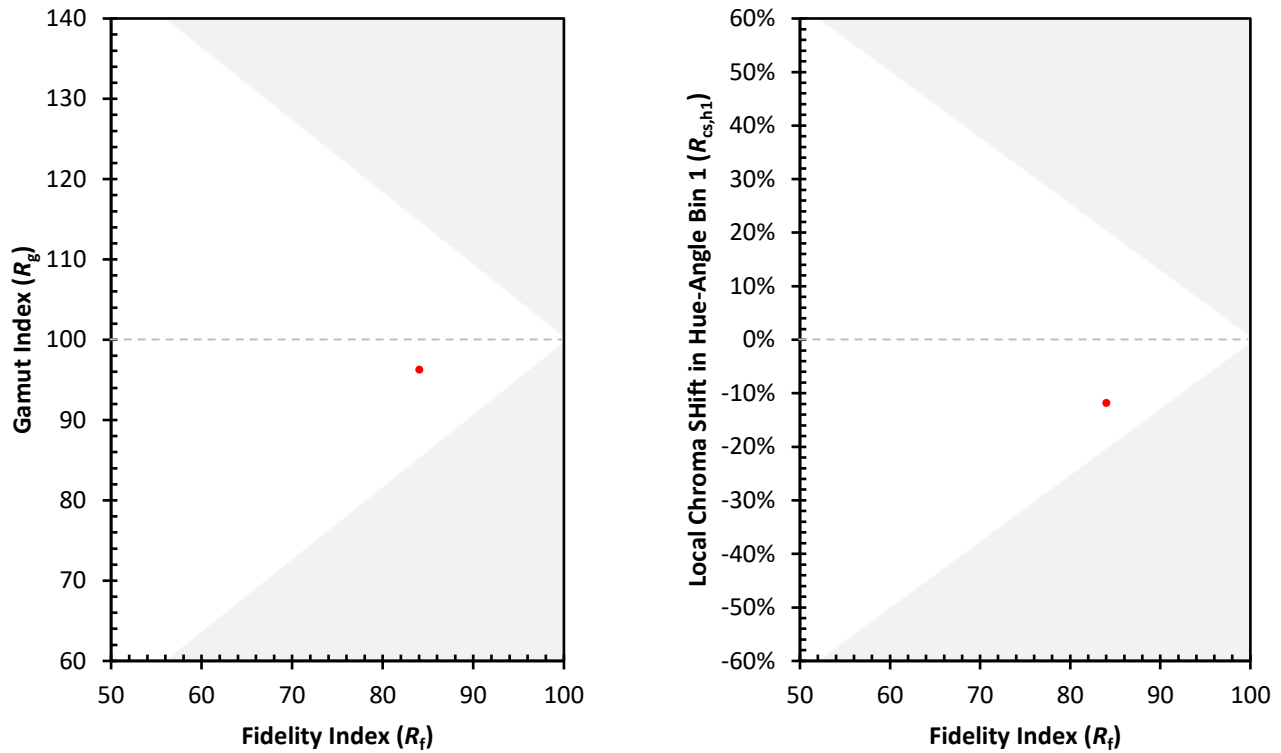
CES01 = 85	CES26 = 80	CES51 = 95	CES76 = 72
CES02 = 60	CES27 = 93	CES52 = 95	CES77 = 81
CES03 = 30	CES28 = 90	CES53 = 89	CES78 = 71
CES04 = 69	CES29 = 85	CES54 = 90	CES79 = 91
CES05 = 47	CES30 = 97	CES55 = 89	CES80 = 87
CES06 = 50	CES31 = 87	CES56 = 86	CES81 = 84
CES07 = 40	CES32 = 79	CES57 = 85	CES82 = 95
CES08 = 39	CES33 = 92	CES58 = 85	CES83 = 95
CES09 = 29	CES34 = 84	CES59 = 92	CES84 = 90
CES10 = 73	CES35 = 91	CES60 = 91	CES85 = 81
CES11 = 56	CES36 = 83	CES61 = 88	CES86 = 79
CES12 = 62	CES37 = 90	CES62 = 85	CES87 = 84
CES13 = 42	CES38 = 93	CES63 = 85	CES88 = 89
CES14 = 74	CES39 = 98	CES64 = 79	CES89 = 79
CES15 = 71	CES40 = 94	CES65 = 76	CES90 = 89
CES16 = 46	CES41 = 99	CES66 = 75	CES91 = 72
CES17 = 48	CES42 = 89	CES67 = 73	CES92 = 67
CES18 = 55	CES43 = 88	CES68 = 78	CES93 = 80
CES19 = 70	CES44 = 99	CES69 = 82	CES94 = 65
CES20 = 64	CES45 = 93	CES70 = 73	CES95 = 73
CES21 = 85	CES46 = 91	CES71 = 67	CES96 = 84
CES22 = 77	CES47 = 96	CES72 = 89	CES97 = 92
CES23 = 91	CES48 = 87	CES73 = 66	CES98 = 86
CES24 = 90	CES49 = 90	CES74 = 92	CES99 = 77
CES25 = 71	CES50 = 95	CES75 = 68	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)