

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: P1216415

Luminaire Tested: 24-ID2-50-DBR-L940-U

Issue Date: 12/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1216415
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2508-510-10)
Test Lab: INNOVATION CENTER
Issue Date: 12/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24-ID2-50-DBR-L940-U
Description: 2X4 IN DEPTH TROFFER WITH 2INCH DOUBLE BARREL REGRESSED
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

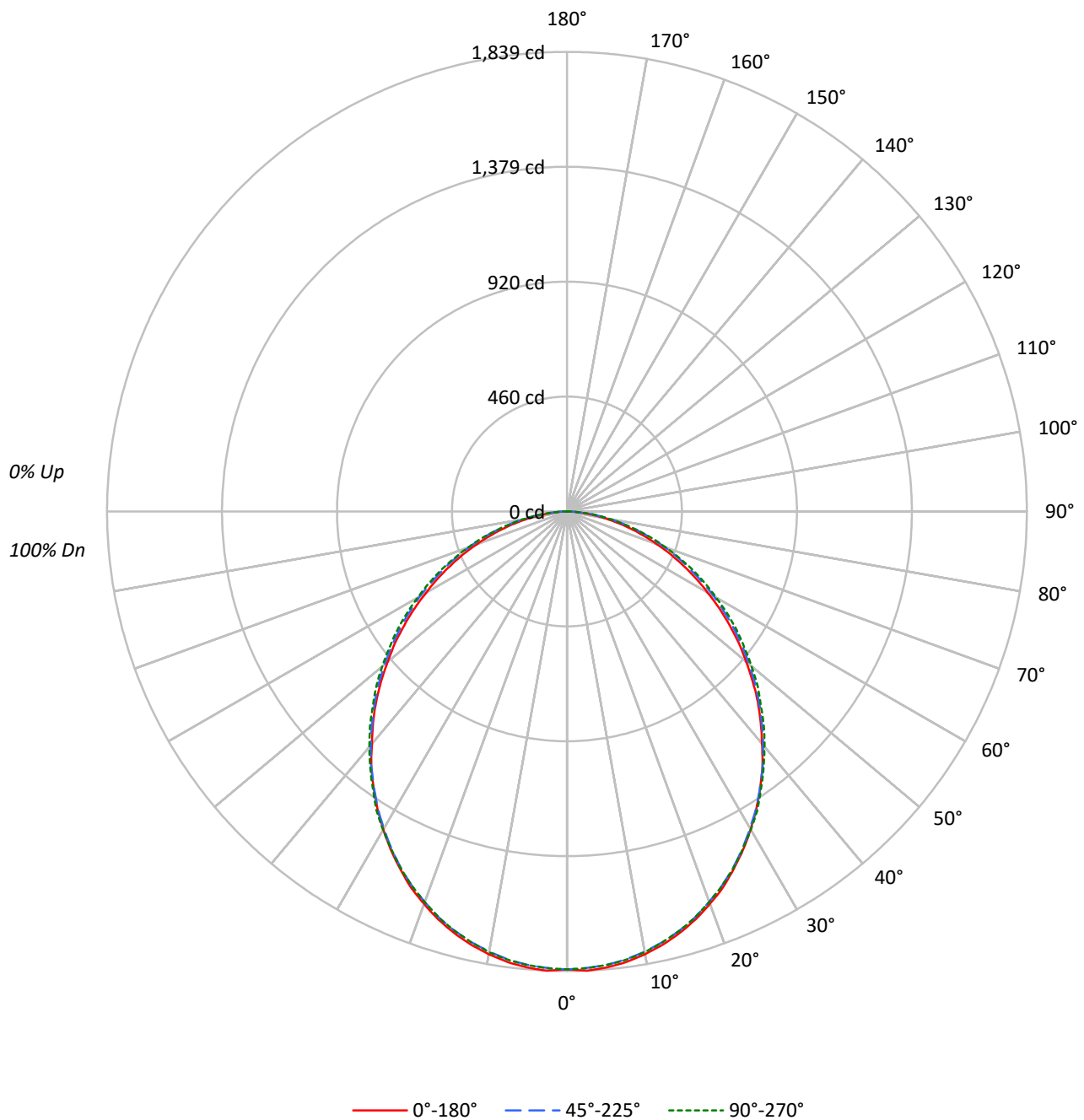
Lumens per Lamp: N/A
Luminaire Lumens: 4711.9 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.3
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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: 24-ID2-50-DBR-L940-U

Luminous Intensity Polar Plot



TEST NUMBER: P1216415

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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	50	30	10	50	30	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	86	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	73	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	62	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	54	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	47	47	45
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	41	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	37	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	33	33	31
9	57	44	36	31	56	44	36	30	42	35	30	41	35	30	40	34	30	30	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	27	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2465	2465	2465
5°	2474	2460	2461
10°	2458	2444	2446
15°	2432	2419	2420
20°	2393	2381	2381
25°	2343	2335	2337
30°	2282	2275	2285
35°	2214	2211	2223
40°	2131	2144	2159
45°	2054	2069	2086
50°	1958	1989	2018
55°	1863	1907	1945
60°	1749	1824	1854
65°	1637	1722	1771
70°	1506	1626	1654
75°	1358	1514	1527
80°	1153	1350	1364
85°	883	1113	1144

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 67.5°

Vertical Angle: 45°

Luminance: 2086 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.0	3.7
10°-20°	489.7	10.4
20°-30°	724.3	15.4
30°-40°	843.1	17.9
40°-50°	838.8	17.8
50°-60°	725.9	15.4
60°-70°	533.8	11.3
70°-80°	301.5	6.4
80°-90°	81.8	1.7
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°	1387.0	29.4
0°-40°	2230.0	47.3
0°-60°	3794.8	80.5
0°-90°	4711.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4711.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1832	1832	1832	1832	1832	
5°	1832	1825	1821	1818	1822	174
15°	1746	1740	1737	1733	1737	492
25°	1578	1574	1573	1571	1574	727
35°	1348	1345	1346	1352	1353	842
45°	1080	1080	1087	1096	1096	831
55°	794	798	813	824	829	710
65°	514	524	541	551	556	510
75°	261	276	291	293	294	277
85°	57	68	72	73	74	68
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1832.2	1832.2	1832.2	1832.2	1832.2
2.5°	1839.3	1832.2	1828.3	1826.3	1828.9
5°	1831.5	1825.0	1821.1	1818.5	1821.8
7.5°	1818.5	1811.4	1807.5	1804.9	1809.4
10°	1799.0	1791.9	1788.6	1786.7	1790.6
12.5°	1775.0	1769.1	1765.2	1762.6	1765.2
15°	1745.7	1740.5	1736.6	1733.4	1737.3
17.5°	1711.3	1704.8	1703.5	1699.6	1702.9
20°	1671.0	1665.8	1662.6	1660.6	1663.2
22.5°	1629.4	1622.3	1620.3	1618.4	1621.0
25°	1578.1	1573.5	1572.9	1570.9	1574.2
27.5°	1526.1	1523.5	1520.2	1521.5	1522.2
30°	1468.9	1465.6	1464.3	1466.9	1470.8
32.5°	1409.7	1407.1	1407.8	1410.4	1417.5
35°	1348.0	1345.4	1346.0	1351.9	1353.2
37.5°	1284.9	1280.4	1284.9	1288.8	1292.1
40°	1213.4	1214.1	1220.6	1225.8	1229.0
42.5°	1147.1	1147.1	1153.6	1161.4	1165.3
45°	1079.6	1079.6	1087.4	1096.5	1096.5
47.5°	1008.1	1006.8	1021.1	1030.8	1034.1
50°	935.3	937.9	950.2	960.0	963.9
52.5°	867.0	868.3	882.0	892.4	894.3
55°	794.2	798.1	813.1	824.1	829.3
57.5°	722.7	729.2	744.2	757.8	759.1
60°	649.9	660.3	677.9	685.0	688.9
62.5°	583.6	594.0	608.3	620.0	622.6
65°	514.1	524.5	540.8	551.2	556.4
67.5°	449.1	461.5	477.7	485.5	485.5
70°	382.8	396.5	413.4	419.9	420.5
72.5°	320.4	336.0	351.0	356.2	357.5
75°	261.3	275.6	291.2	293.1	293.8
77.5°	203.4	218.4	230.1	234.0	232.0
80°	148.8	163.8	174.2	176.8	176.1
82.5°	101.4	113.7	123.5	123.5	123.5
85°	57.2	67.6	72.1	73.4	74.1
87.5°	18.8	26.6	30.5	30.5	30.5
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	14.06	15.66	14.42	15.98	16.29	14.34	15.94	14.70	16.26	16.57
	3H	15.71	17.16	16.09	17.49	17.85	16.07	17.52	16.45	17.85	18.21
	4H	16.31	17.67	16.71	18.02	18.40	16.72	18.09	17.12	18.44	18.81
	6H	16.72	17.99	17.13	18.35	18.74	17.19	18.46	17.61	18.83	19.22
	8H	16.84	18.05	17.26	18.44	18.84	17.35	18.56	17.77	18.95	19.34
	12H	16.91	18.07	17.34	18.45	18.88	17.45	18.60	17.88	18.99	19.41
4H	2H	14.69	16.06	15.09	16.41	16.78	14.91	16.28	15.31	16.63	17.01
	3H	16.57	17.72	16.98	18.12	18.52	16.88	18.02	17.29	18.42	18.82
	4H	17.30	18.34	17.73	18.75	19.19	17.66	18.69	18.09	19.11	19.54
	6H	17.84	18.74	18.29	19.18	19.64	18.27	19.17	18.72	19.61	20.07
	8H	18.00	18.85	18.46	19.29	19.76	18.47	19.31	18.93	19.75	20.22
	12H	18.11	18.87	18.59	19.34	19.81	18.61	19.37	19.09	19.84	20.31
8H	4H	17.63	18.48	18.09	18.92	19.38	17.95	18.79	18.41	19.24	19.70
	6H	18.29	19.00	18.79	19.49	19.96	18.68	19.38	19.17	19.87	20.34
	8H	18.53	19.16	19.04	19.67	20.15	18.95	19.58	19.46	20.09	20.57
	12H	18.70	19.26	19.21	19.75	20.31	19.16	19.72	19.67	20.21	20.77
12H	4H	17.67	18.43	18.15	18.90	19.37	17.98	18.73	18.46	19.21	19.68
	6H	18.36	18.99	18.87	19.50	19.98	18.73	19.36	19.24	19.86	20.35
	8H	18.65	19.21	19.16	19.70	20.26	19.06	19.61	19.56	20.10	20.67

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

Report Prepared for

Cooper Lighting Solutions

Corelite

Report Number: SP1-2506-458-11

Test Date: 08/26/2025

Luminaire Tested: 22ID2-55-CFR1-L940-U

Data in this report applies to families of products including 22ID2-55-CFR1-L940-U

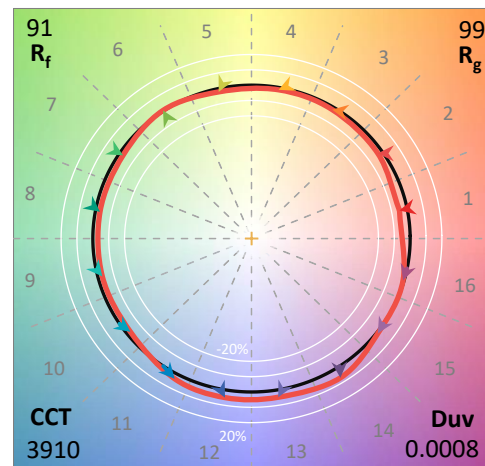
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-458-11
 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-L940-U**
 Description: 2X2 CGTX WITH INDEPTH FRAME AND CFR1 LENS - 5500 LUMEN 4000K 90CRI

Spectral Parameters

CCT (K): 3910
 CIE u' : 0.2263
 CIE v' : 0.5043
 Duv: 0.0008
 CIE x: 0.3851
 CIE y: 0.3813
 CIE z: 0.2336
 Peak Wavelength (nm): 451
 Dominant Wavelength (nm): 578
 Purity: 30.01895
 R_f: 90.8
 R_g: 98.8

CRI (Ra): 92.4
 R1: 92.5
 R2: 94.9
 R3: 95.8
 R4: 92.7
 R5: 91.7
 R6: 92.1
 R7: 94.3
 R8: 85.2
 R9: 62.0
 R10: 87.0
 R11: 92.8
 R12: 71.7
 R13: 93.2
 R14: 97.3
 R15: 89.6



Test Conditions

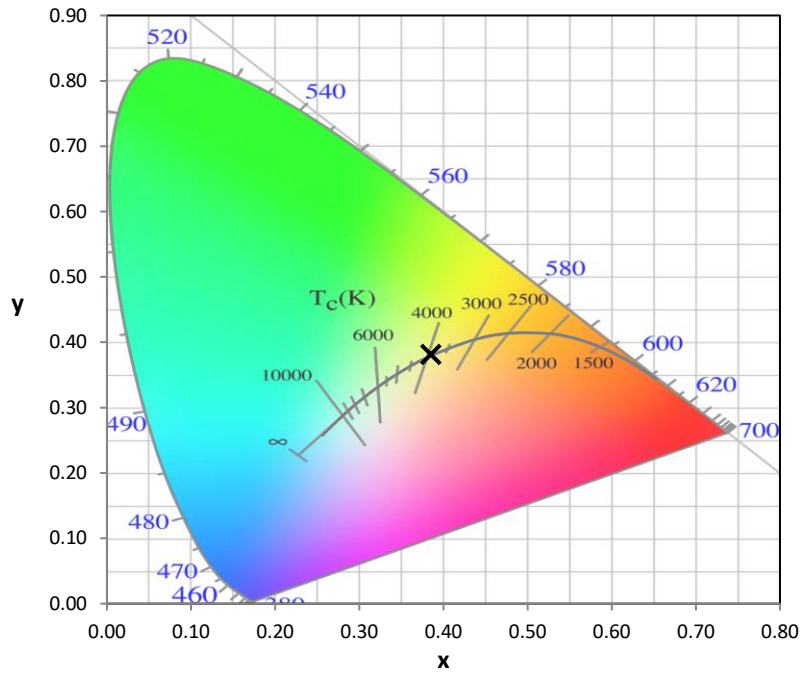
Stabilization Time: 31M
 Operation Time: 1H 31M
 Sphere Temperature (°C): 25.2.

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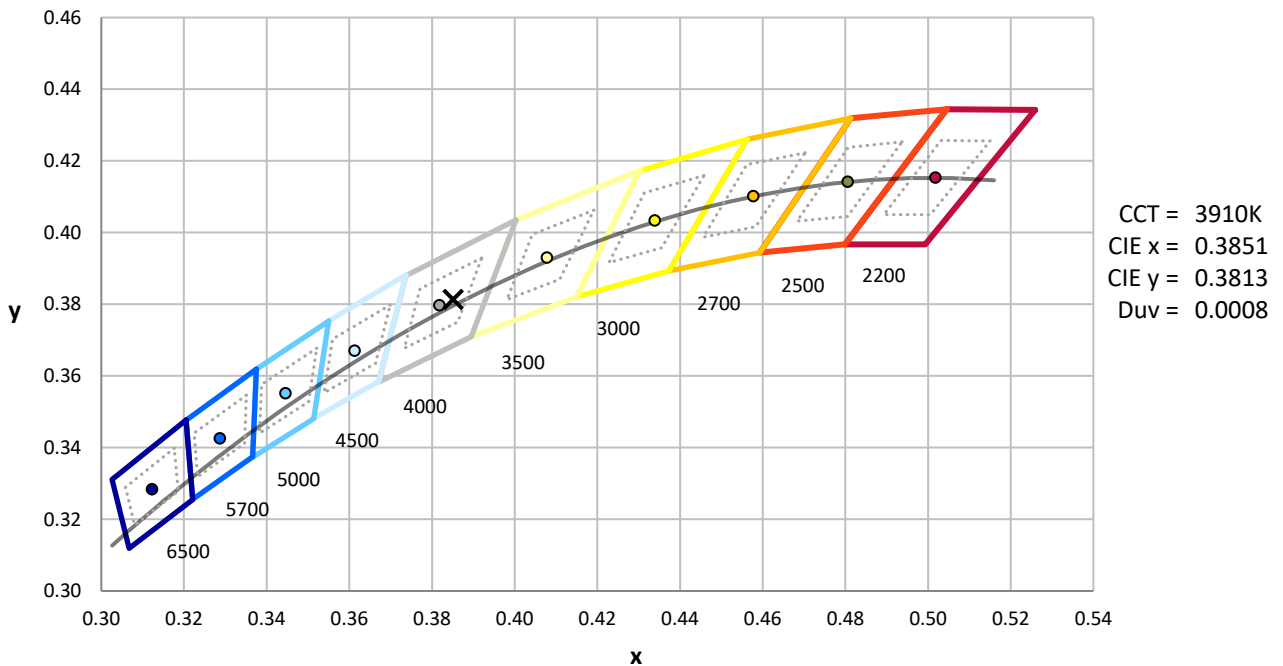
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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



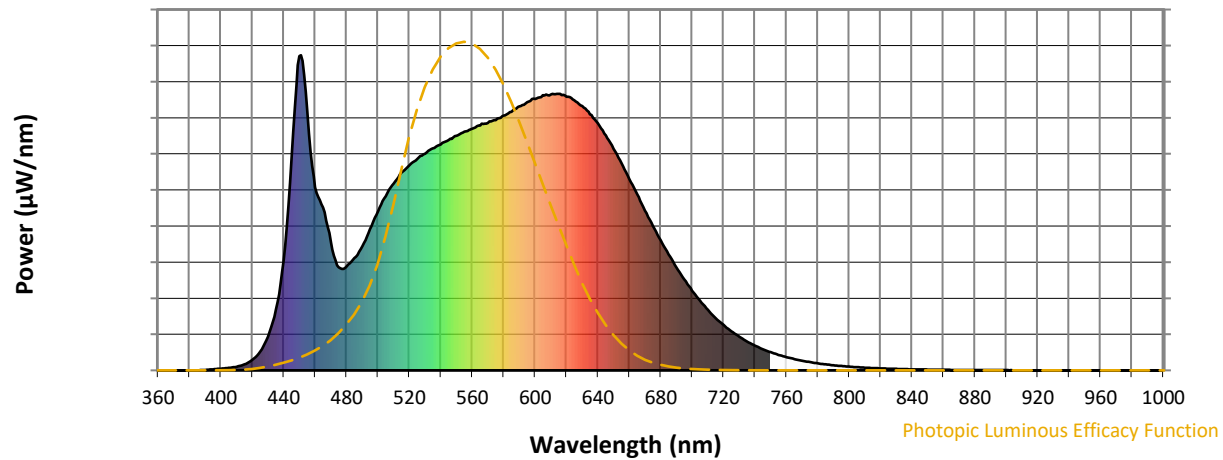
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

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Photopic Flux vs. Wavelength

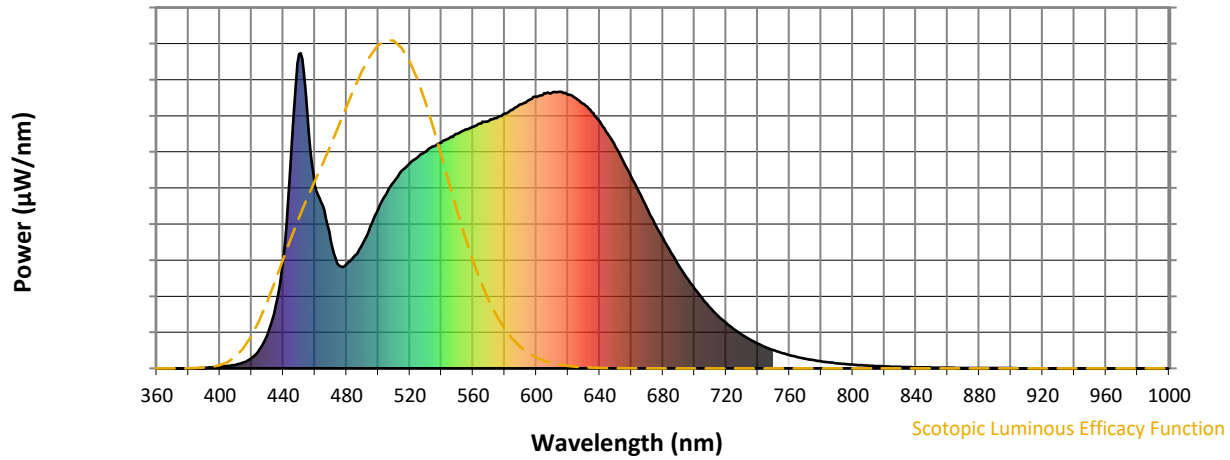


Photopic Lumens: NR

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	394	NR	620	868	NR	750	58	NR	880	1	NR
365	0	NR	495	449	NR	625	858	NR	755	49	NR	885	1	NR
370	0	NR	500	505	NR	630	839	NR	760	42	NR	890	1	NR
375	0	NR	505	553	NR	635	813	NR	765	36	NR	895	1	NR
380	0	NR	510	593	NR	640	783	NR	770	31	NR	900	1	NR
385	0	NR	515	628	NR	645	746	NR	775	26	NR	905	1	NR
390	1	NR	520	651	NR	650	702	NR	780	22	NR	910	0	NR
395	4	NR	525	670	NR	655	657	NR	785	19	NR	915	0	NR
400	5	NR	530	687	NR	660	607	NR	790	16	NR	920	0	NR
405	8	NR	535	705	NR	665	559	NR	795	14	NR	925	0	NR
410	12	NR	540	717	NR	670	507	NR	800	12	NR	930	0	NR
415	19	NR	545	731	NR	675	458	NR	805	10	NR	935	0	NR
420	34	NR	550	745	NR	680	413	NR	810	9	NR	940	0	NR
425	60	NR	555	757	NR	685	367	NR	815	7	NR	945	0	NR
430	107	NR	560	767	NR	690	328	NR	820	6	NR	950	0	NR
435	194	NR	565	777	NR	695	289	NR	825	5	NR	955	0	NR
440	349	NR	570	785	NR	700	253	NR	830	5	NR	960	0	NR
445	678	NR	575	794	NR	705	221	NR	835	4	NR	965	0	NR
450	997	NR	580	809	NR	710	192	NR	840	3	NR	970	0	NR
455	819	NR	585	820	NR	715	165	NR	845	3	NR	975	0	NR
460	581	NR	590	838	NR	720	144	NR	850	2	NR	980	0	NR
465	517	NR	595	851	NR	725	124	NR	855	2	NR	985	0	NR
470	406	NR	600	861	NR	730	107	NR	860	2	NR	990	0	NR
475	327	NR	605	873	NR	735	91	NR	865	2	NR	995	0	NR
480	330	NR	610	875	NR	740	78	NR	870	1	NR	1000	0	NR
485	356	NR	615	877	NR	745	67	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



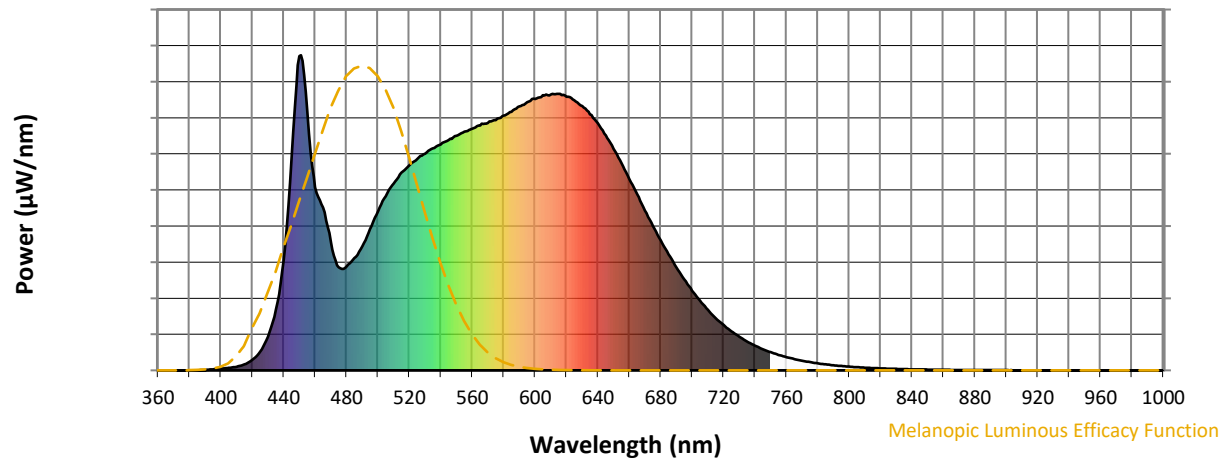
Scotopic Lumens: NR

S/P: 1.75

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	394	NR	620	868	NR	750	58	NR	880	1	NR
365	0	NR	495	449	NR	625	858	NR	755	49	NR	885	1	NR
370	0	NR	500	505	NR	630	839	NR	760	42	NR	890	1	NR
375	0	NR	505	553	NR	635	813	NR	765	36	NR	895	1	NR
380	0	NR	510	593	NR	640	783	NR	770	31	NR	900	1	NR
385	0	NR	515	628	NR	645	746	NR	775	26	NR	905	1	NR
390	1	NR	520	651	NR	650	702	NR	780	22	NR	910	0	NR
395	4	NR	525	670	NR	655	657	NR	785	19	NR	915	0	NR
400	5	NR	530	687	NR	660	607	NR	790	16	NR	920	0	NR
405	8	NR	535	705	NR	665	559	NR	795	14	NR	925	0	NR
410	12	NR	540	717	NR	670	507	NR	800	12	NR	930	0	NR
415	19	NR	545	731	NR	675	458	NR	805	10	NR	935	0	NR
420	34	NR	550	745	NR	680	413	NR	810	9	NR	940	0	NR
425	60	NR	555	757	NR	685	367	NR	815	7	NR	945	0	NR
430	107	NR	560	767	NR	690	328	NR	820	6	NR	950	0	NR
435	194	NR	565	777	NR	695	289	NR	825	5	NR	955	0	NR
440	349	NR	570	785	NR	700	253	NR	830	5	NR	960	0	NR
445	678	NR	575	794	NR	705	221	NR	835	4	NR	965	0	NR
450	997	NR	580	809	NR	710	192	NR	840	3	NR	970	0	NR
455	819	NR	585	820	NR	715	165	NR	845	3	NR	975	0	NR
460	581	NR	590	838	NR	720	144	NR	850	2	NR	980	0	NR
465	517	NR	595	851	NR	725	124	NR	855	2	NR	985	0	NR
470	406	NR	600	861	NR	730	107	NR	860	2	NR	990	0	NR
475	327	NR	605	873	NR	735	91	NR	865	2	NR	995	0	NR
480	330	NR	610	875	NR	740	78	NR	870	1	NR	1000	0	NR
485	356	NR	615	877	NR	745	67	NR	875	1	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 3.61

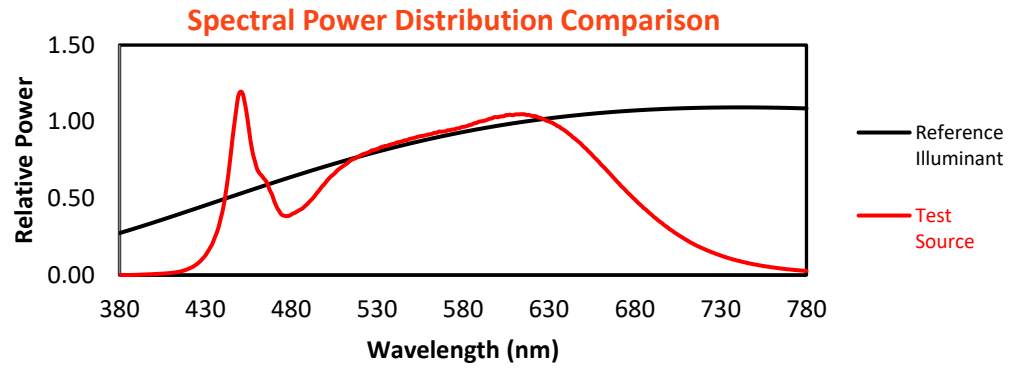
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	394	NR	620	868	NR	750	58	NR	880	1	NR
365	0	NR	495	449	NR	625	858	NR	755	49	NR	885	1	NR
370	0	NR	500	505	NR	630	839	NR	760	42	NR	890	1	NR
375	0	NR	505	553	NR	635	813	NR	765	36	NR	895	1	NR
380	0	NR	510	593	NR	640	783	NR	770	31	NR	900	1	NR
385	0	NR	515	628	NR	645	746	NR	775	26	NR	905	1	NR
390	1	NR	520	651	NR	650	702	NR	780	22	NR	910	0	NR
395	4	NR	525	670	NR	655	657	NR	785	19	NR	915	0	NR
400	5	NR	530	687	NR	660	607	NR	790	16	NR	920	0	NR
405	8	NR	535	705	NR	665	559	NR	795	14	NR	925	0	NR
410	12	NR	540	717	NR	670	507	NR	800	12	NR	930	0	NR
415	19	NR	545	731	NR	675	458	NR	805	10	NR	935	0	NR
420	34	NR	550	745	NR	680	413	NR	810	9	NR	940	0	NR
425	60	NR	555	757	NR	685	367	NR	815	7	NR	945	0	NR
430	107	NR	560	767	NR	690	328	NR	820	6	NR	950	0	NR
435	194	NR	565	777	NR	695	289	NR	825	5	NR	955	0	NR
440	349	NR	570	785	NR	700	253	NR	830	5	NR	960	0	NR
445	678	NR	575	794	NR	705	221	NR	835	4	NR	965	0	NR
450	997	NR	580	809	NR	710	192	NR	840	3	NR	970	0	NR
455	819	NR	585	820	NR	715	165	NR	845	3	NR	975	0	NR
460	581	NR	590	838	NR	720	144	NR	850	2	NR	980	0	NR
465	517	NR	595	851	NR	725	124	NR	855	2	NR	985	0	NR
470	406	NR	600	861	NR	730	107	NR	860	2	NR	990	0	NR
475	327	NR	605	873	NR	735	91	NR	865	2	NR	995	0	NR
480	330	NR	610	875	NR	740	78	NR	870	1	NR	1000	0	NR
485	356	NR	615	877	NR	745	67	NR	875	1	NR			

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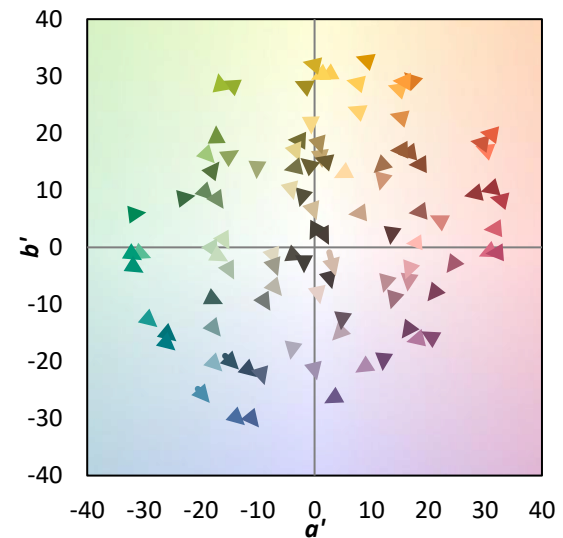
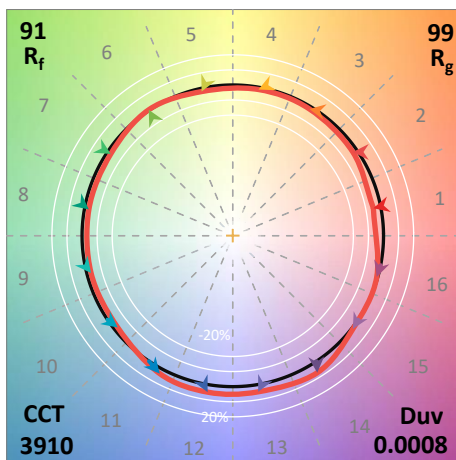
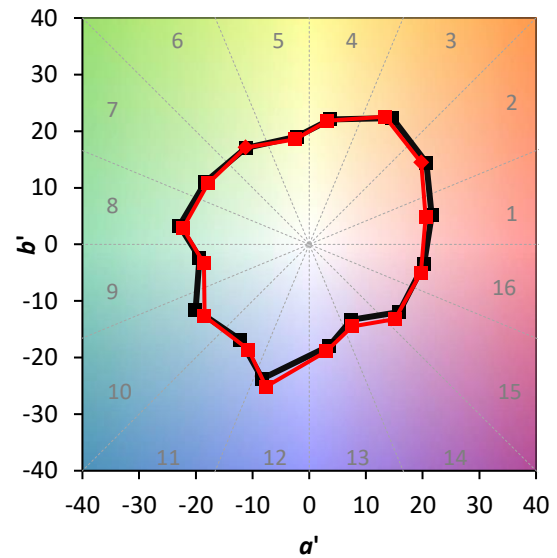
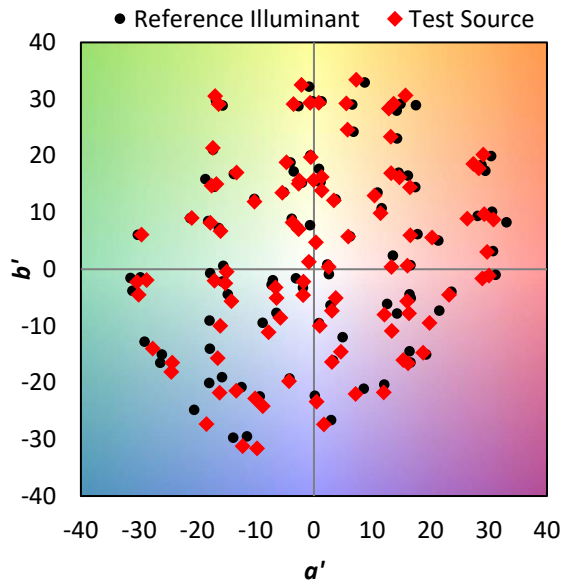
TM-30-18

Summary

$R_f = 90.8$
 $R_g = 98.8$
 $CIE R_a = 92.4$
 $R_9 = 62.0$

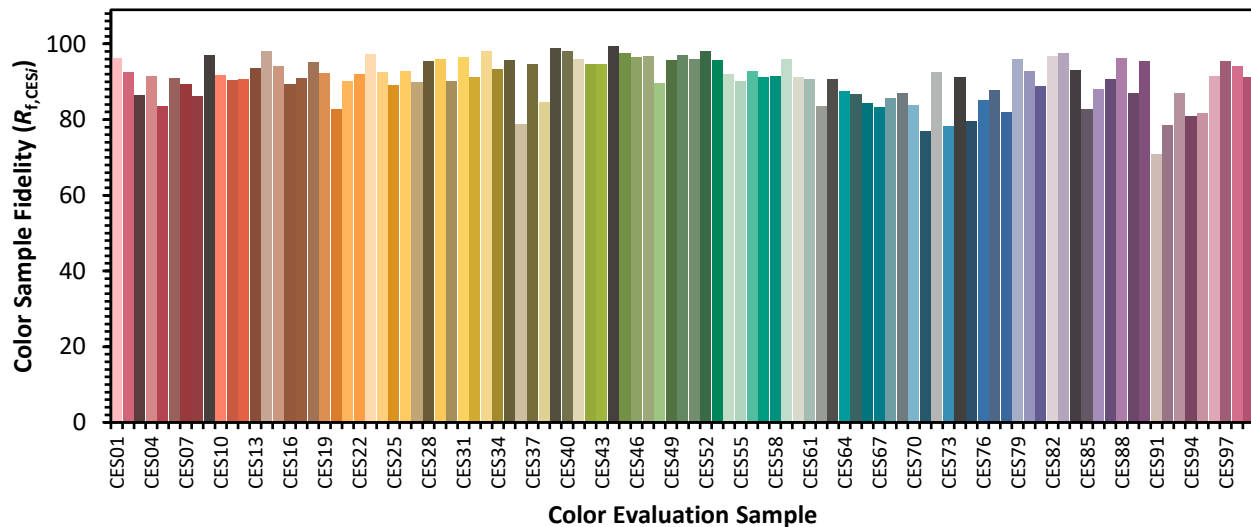


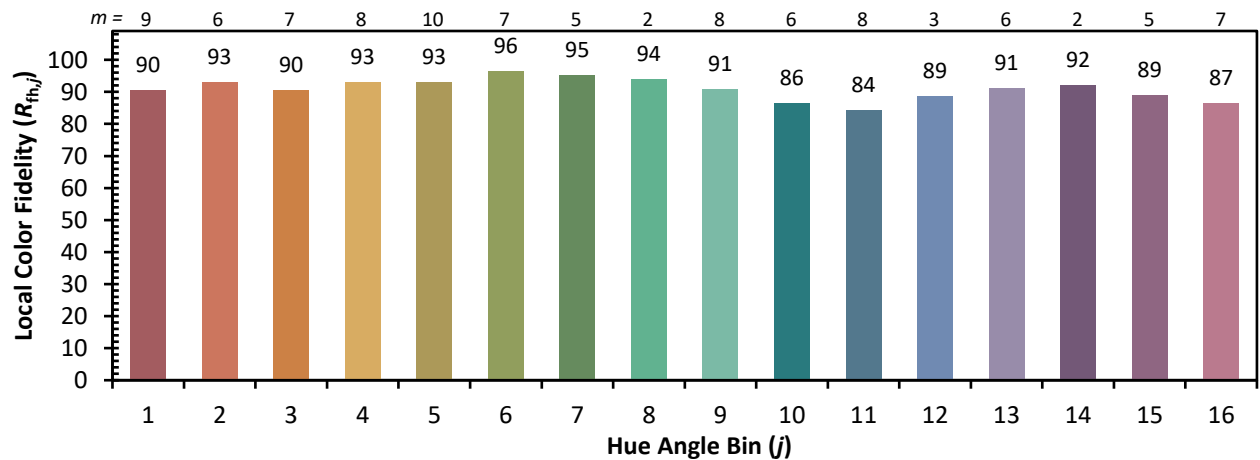
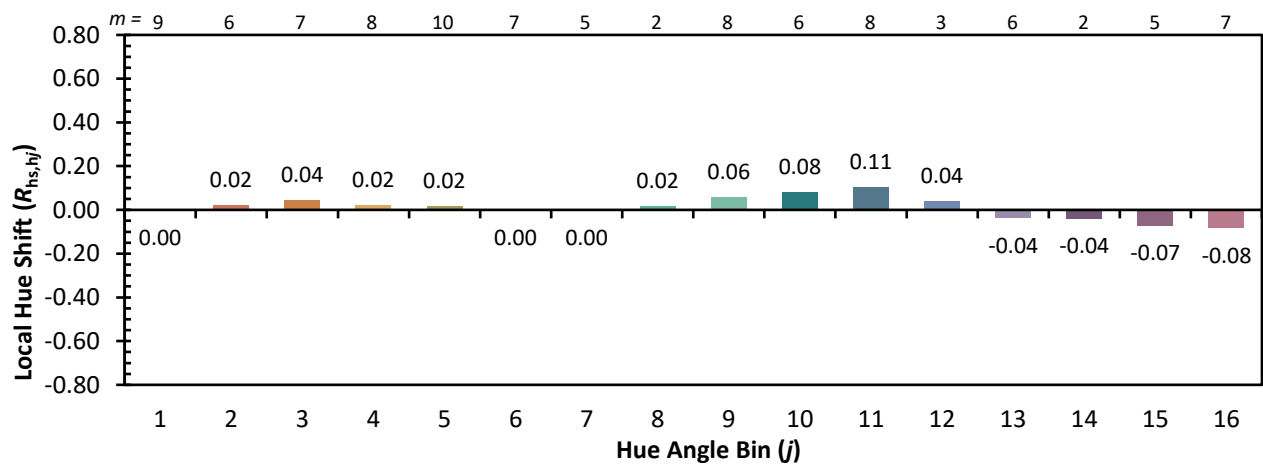
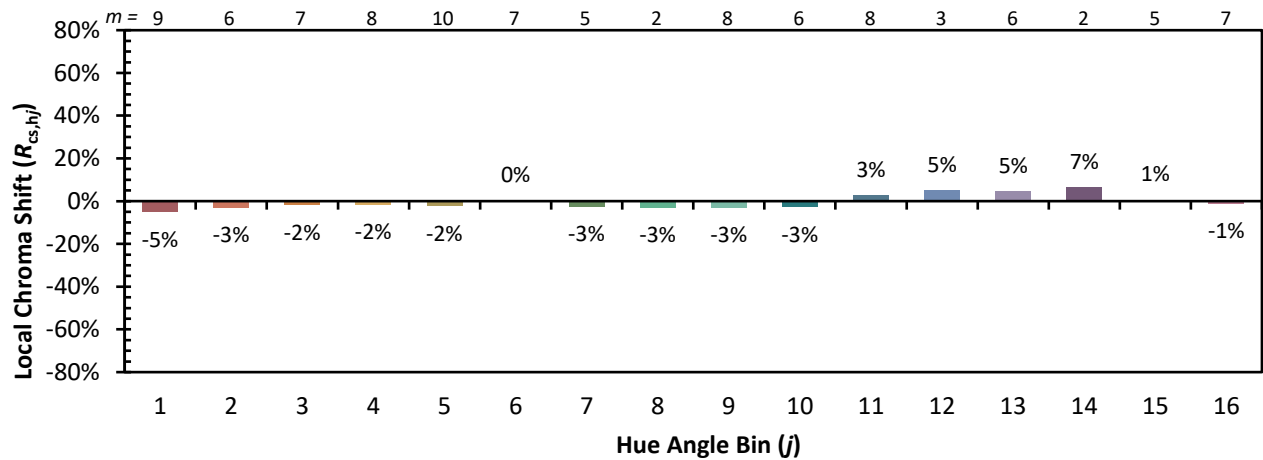
Color Vector Graphics



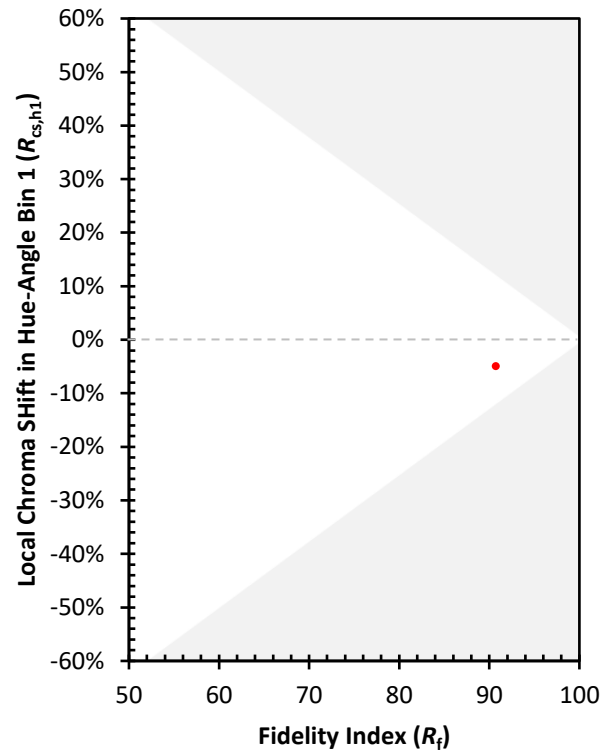
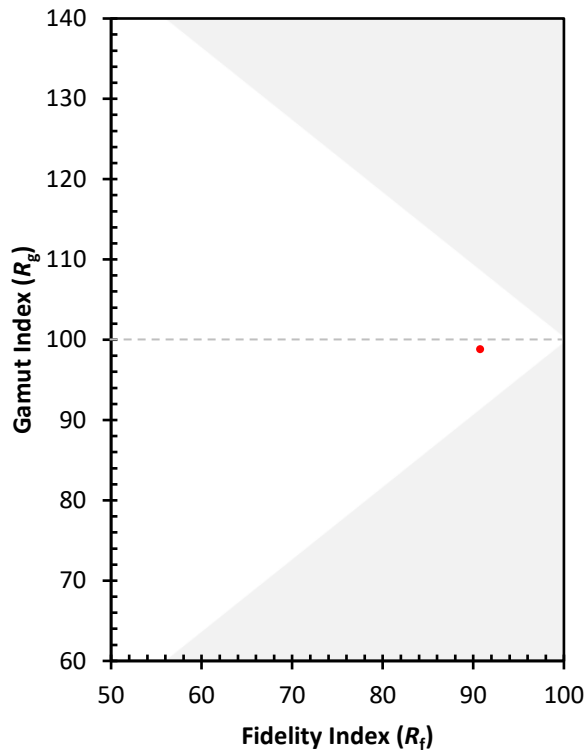
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 93	CES51 = 96	CES76 = 85
CES02 = 62	CES27 = 90	CES52 = 98	CES77 = 88
CES03 = 31	CES28 = 96	CES53 = 96	CES78 = 82
CES04 = 69	CES29 = 96	CES54 = 92	CES79 = 96
CES05 = 49	CES30 = 90	CES55 = 90	CES80 = 93
CES06 = 50	CES31 = 97	CES56 = 93	CES81 = 89
CES07 = 42	CES32 = 91	CES57 = 91	CES82 = 97
CES08 = 41	CES33 = 98	CES58 = 92	CES83 = 98
CES09 = 29	CES34 = 93	CES59 = 96	CES84 = 93
CES10 = 74	CES35 = 96	CES60 = 91	CES85 = 83
CES11 = 57	CES36 = 79	CES61 = 91	CES86 = 88
CES12 = 63	CES37 = 95	CES62 = 84	CES87 = 91
CES13 = 43	CES38 = 85	CES63 = 91	CES88 = 96
CES14 = 74	CES39 = 99	CES64 = 87	CES89 = 87
CES15 = 71	CES40 = 98	CES65 = 87	CES90 = 96
CES16 = 47	CES41 = 96	CES66 = 84	CES91 = 71
CES17 = 49	CES42 = 95	CES67 = 83	CES92 = 79
CES18 = 56	CES43 = 95	CES68 = 86	CES93 = 87
CES19 = 71	CES44 = 99	CES69 = 87	CES94 = 81
CES20 = 66	CES45 = 98	CES70 = 84	CES95 = 82
CES21 = 85	CES46 = 97	CES71 = 77	CES96 = 91
CES22 = 78	CES47 = 97	CES72 = 93	CES97 = 96
CES23 = 91	CES48 = 90	CES73 = 78	CES98 = 94
CES24 = 90	CES49 = 96	CES74 = 91	CES99 = 91
CES25 = 71	CES50 = 97	CES75 = 80	



Color Rendition by Hue-Angle Bin


Measure Comparisons



(END OF REPORT)