

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: P1216045

Luminaire Tested: 24-ID2-45-CNC-L930-U

Issue Date: 12/5/2025

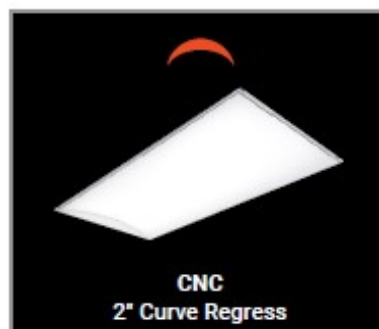
Test Information

Test Method: LM-79-2019
Report Number: P1216045
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-L930-U
Description: 2X4 IN DEPTH TROFFER WITH 2INCH CURVE REGRESSED
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

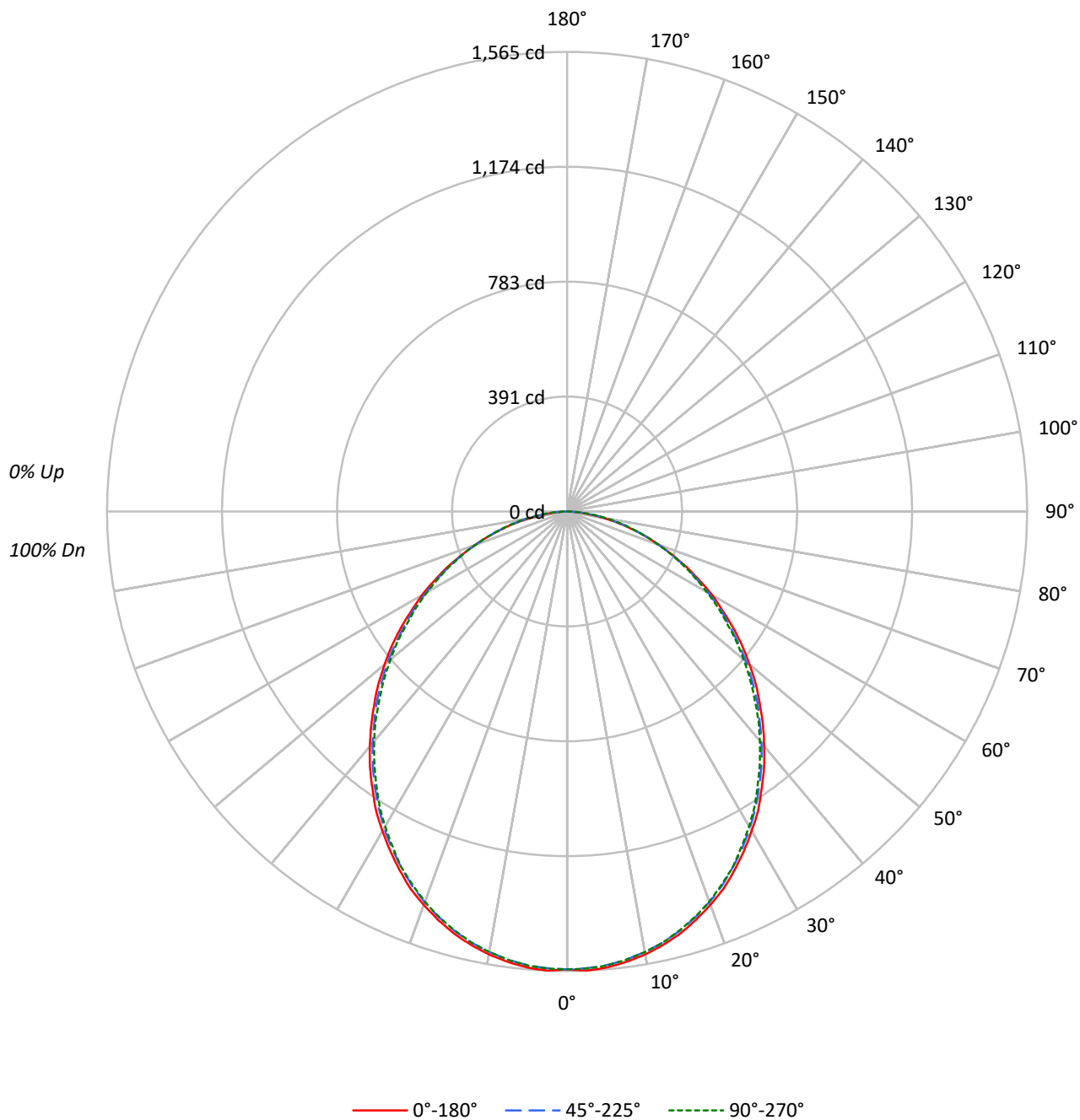
Lumens per Lamp: N/A
Luminaire Lumens: 3945.1 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P1216045
CATALOG NUMBER: 24-ID2-45-CNC-L930-U

Luminous Intensity Polar Plot



TEST NUMBER: P1216045

CATALOG NUMBER: 24-ID2-45-CNC-L930-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	100	97	106	102	99	95	98	95	92		94	92	89		85
2	100	92	85	79	97	90	84	78	86	81	77		83	79	75		71
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		60
4	84	72	63	57	81	71	63	56	68	61	56		66	60	55		52
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		45
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		40
7	66	53	44	38	64	52	44	38	51	43	38		49	42	37		35
8	62	48	40	34	60	48	40	34	46	39	34		45	38	34		32
9	58	44	36	31	56	44	36	31	43	36	31		42	35	30		29
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2098	2098	2098
5°	2105	2094	2096
10°	2093	2081	2081
15°	2072	2060	2058
20°	2041	2027	2025
25°	2001	1983	1982
30°	1952	1934	1924
35°	1895	1874	1859
40°	1833	1808	1792
45°	1764	1741	1716
50°	1695	1664	1640
55°	1616	1578	1557
60°	1535	1495	1480
65°	1430	1404	1401
70°	1309	1303	1298
75°	1169	1189	1197
80°	954	1038	1089
85°	656	832	832

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1764 cd/sqm

TEST NUMBER: P1216045
 CATALOG NUMBER: 24-ID2-45-CNC-L930-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.3	3.7
10°-20°	417.0	10.6
20°-30°	615.8	15.6
30°-40°	713.9	18.1
40°-50°	705.2	17.9
50°-60°	604.2	15.3
60°-70°	438.4	11.1
70°-80°	242.0	6.1
80°-90°	61.3	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°	1180.0	29.9
0°-40°	1893.9	48.0
0°-60°	3203.3	81.2
0°-90°	3945.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3945.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1559	1559	1559	1559	1559	
5°	1559	1553	1551	1548	1552	148
15°	1488	1482	1479	1476	1477	419
25°	1348	1342	1336	1333	1335	621
35°	1154	1149	1141	1135	1132	722
45°	927	921	915	906	902	716
55°	689	682	672	667	664	616
65°	449	445	441	439	440	445
75°	225	224	229	230	230	238
85°	42	47	54	54	54	53
90°	0	0	0	0	0	

TEST NUMBER: P1216045

CATALOG NUMBER: 24-ID2-45-CNC-L930-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1559.4	1559.4	1559.4	1559.4	1559.4
2.5°	1564.9	1559.4	1556.7	1554.5	1557.8
5°	1558.9	1552.9	1550.7	1548.0	1551.8
7.5°	1546.9	1542.0	1539.3	1537.1	1539.3
10°	1531.7	1526.2	1523.5	1521.9	1523.5
12.5°	1511.5	1507.7	1503.4	1500.1	1503.4
15°	1487.6	1482.1	1478.9	1475.6	1477.2
17.5°	1458.2	1453.3	1448.9	1446.2	1447.8
20°	1425.5	1419.5	1415.7	1413.0	1414.1
22.5°	1391.2	1383.6	1378.7	1374.3	1374.9
25°	1347.6	1342.2	1335.7	1332.9	1335.1
27.5°	1303.0	1297.0	1291.5	1287.2	1286.1
30°	1256.2	1250.7	1244.7	1239.8	1238.2
32.5°	1209.3	1200.1	1193.5	1188.6	1188.1
35°	1153.8	1149.4	1140.7	1135.3	1131.5
37.5°	1101.0	1094.4	1085.7	1080.8	1077.0
40°	1043.8	1037.3	1029.1	1022.0	1020.4
42.5°	986.1	981.2	970.3	965.9	963.2
45°	927.3	921.3	914.8	905.5	901.7
47.5°	871.2	865.2	854.3	846.1	844.0
50°	809.7	802.6	795.0	785.2	783.5
52.5°	751.4	743.2	733.4	729.1	725.8
55°	688.8	682.3	672.5	667.0	663.7
57.5°	626.7	622.9	616.4	608.7	608.2
60°	570.6	563.0	555.4	549.9	549.9
62.5°	508.0	505.3	497.7	494.4	492.8
65°	449.2	445.4	441.0	438.9	440.0
67.5°	388.8	388.2	385.0	385.5	384.4
70°	332.7	330.5	331.1	332.1	330.0
72.5°	278.2	276.6	279.3	279.9	281.0
75°	224.9	223.8	228.7	230.3	230.3
77.5°	171.5	174.8	180.2	184.6	184.6
80°	123.1	127.4	133.9	137.8	140.5
82.5°	79.0	86.0	92.0	94.7	94.7
85°	42.5	46.8	53.9	54.4	53.9
87.5°	13.1	16.3	19.6	20.7	21.2
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1216045

CATALOG NUMBER: 24-ID2-45-CNC-L930-U

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	13.61	15.21	13.97	15.52	15.84	13.44	15.04	13.80	15.35	15.67
	3H	15.25	16.69	15.63	17.02	17.38	15.13	16.57	15.51	16.90	17.26
	4H	15.83	17.19	16.23	17.54	17.91	15.76	17.12	16.16	17.47	17.84
	6H	16.22	17.47	16.63	17.84	18.23	16.23	17.49	16.64	17.85	18.24
	8H	16.32	17.52	16.74	17.91	18.30	16.38	17.57	16.80	17.96	18.36
	12H	16.37	17.51	16.80	17.90	18.33	16.46	17.61	16.89	17.99	18.42
4H	2H	14.18	15.53	14.57	15.88	16.26	14.04	15.40	14.44	15.74	16.12
	3H	16.04	17.17	16.44	17.57	17.97	15.95	17.08	16.36	17.48	17.88
	4H	16.74	17.76	17.17	18.18	18.61	16.71	17.73	17.14	18.14	18.58
	6H	17.24	18.13	17.70	18.58	19.03	17.30	18.20	17.76	18.64	19.09
	8H	17.38	18.21	17.84	18.66	19.12	17.49	18.33	17.95	18.77	19.24
	12H	17.46	18.21	17.94	18.68	19.15	17.61	18.36	18.09	18.84	19.31
8H	4H	17.02	17.85	17.48	18.30	18.76	16.99	17.83	17.45	18.27	18.73
	6H	17.63	18.32	18.12	18.81	19.29	17.70	18.39	18.20	18.88	19.36
	8H	17.83	18.45	18.34	18.96	19.44	17.96	18.58	18.47	19.09	19.57
	12H	17.96	18.51	18.47	19.00	19.56	18.14	18.69	18.65	19.19	19.75
12H	4H	17.05	17.80	17.53	18.27	18.74	17.01	17.76	17.49	18.24	18.71
	6H	17.67	18.30	18.18	18.80	19.29	17.74	18.37	18.25	18.87	19.36
	8H	17.93	18.48	18.43	18.97	19.53	18.05	18.60	18.56	19.09	19.66

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

Report Prepared for

Cooper Lighting Solutions

Corelite

Report Number: SP1-2506-458-9

Test Date: 08/26/2025

Luminaire Tested: 22ID2-55-CFR1-L930-U

Data in this report applies to families of products including 22ID2-55-CFR1-L930-U

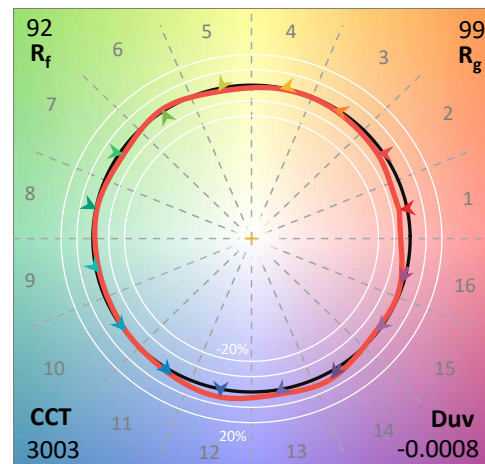
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-458-9
 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-L930-U**
 Description: 2X2 CGTX WITH INDEPTH FRAME AND CFR1 LENS - 5500 LUMEN 3000K 90CRI

Spectral Parameters

CCT (K): 3003
 CIE u' : 0.2507
 CIE v' : 0.5202
 Duv: -0.0008
 CIE x: 0.4356
 CIE y: 0.4017
 CIE z: 0.1627
 Peak Wavelength (nm): 618
 Dominant Wavelength (nm): 583
 Purity: 51.31044
 R_f: 91.9
 R_g: 99.2

CRI (Ra): 93.2
 R1: 93.7
 R2: 97.2
 R3: 98.7
 R4: 93.5
 R5: 93.6
 R6: 96.3
 R7: 91.5
 R8: 81.5
 R9: 59.0
 R10: 92.7
 R11: 94.9
 R12: 82.6
 R13: 94.8
 R14: 99.1
 R15: 89.5



Test Conditions

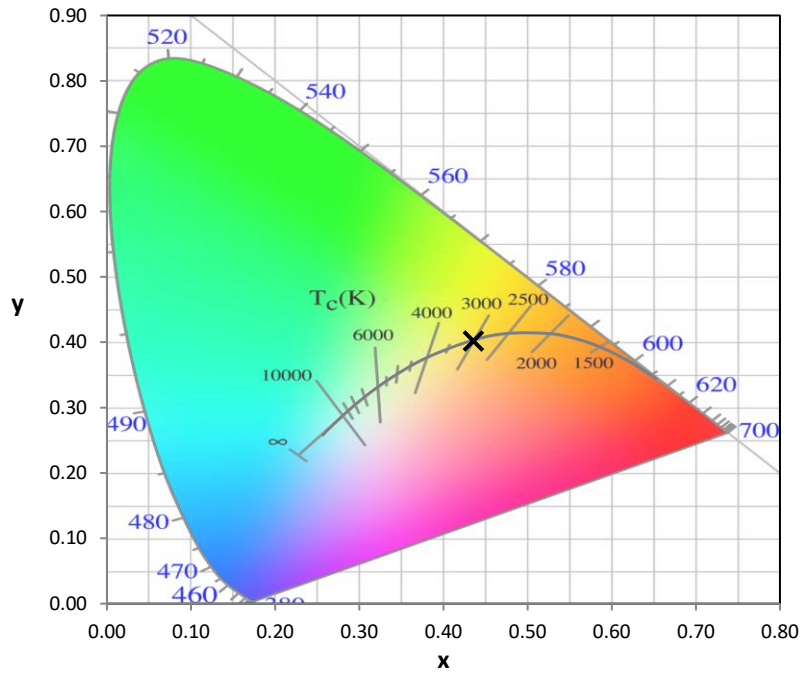
Stabilization Time: 32M
 Operation Time: 1H 32M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2506-458-9

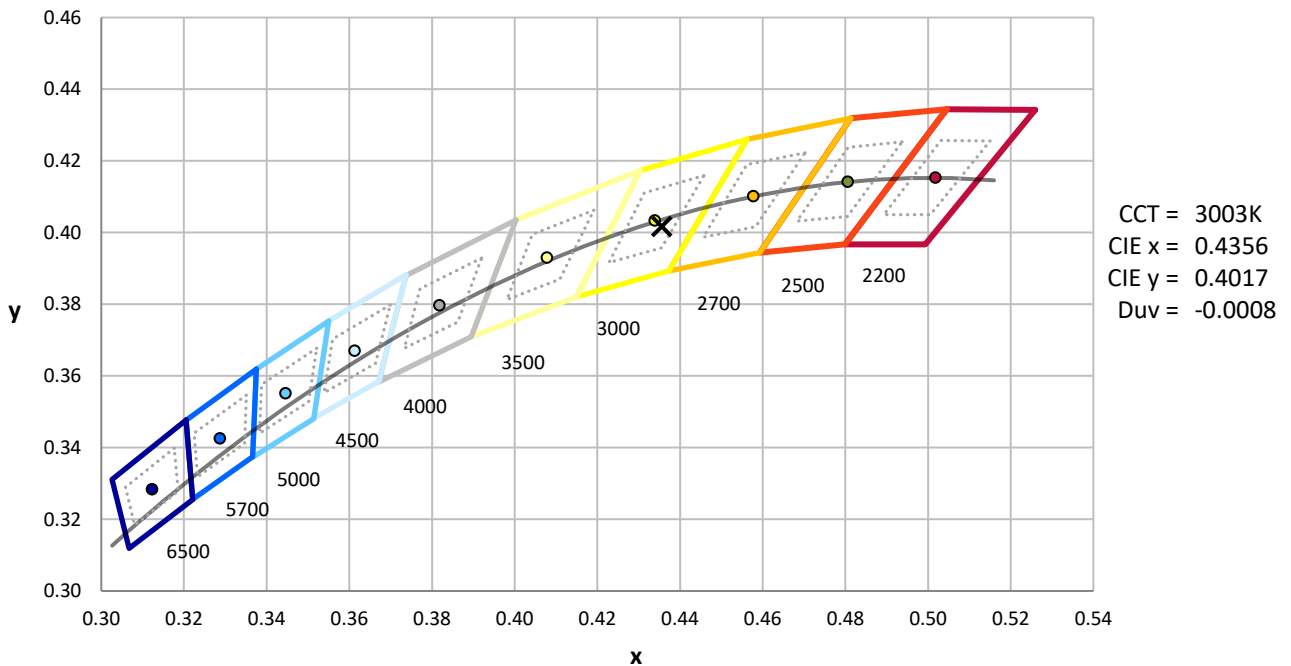
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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

REPORT NUMBER: SP1-2506-458-9

CIE 1931 Chromaticity Diagram



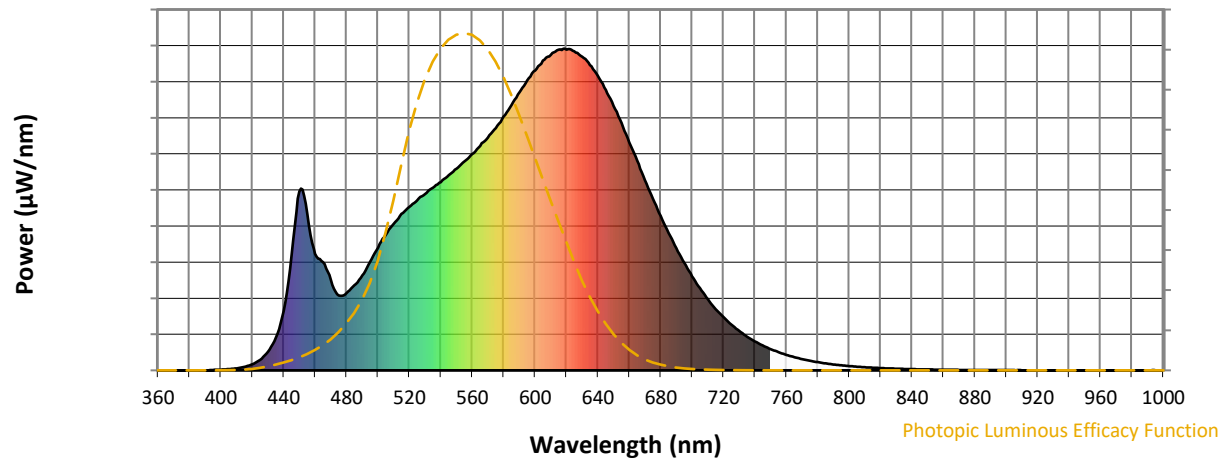
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2506-458-9

Photopic Flux vs. Wavelength

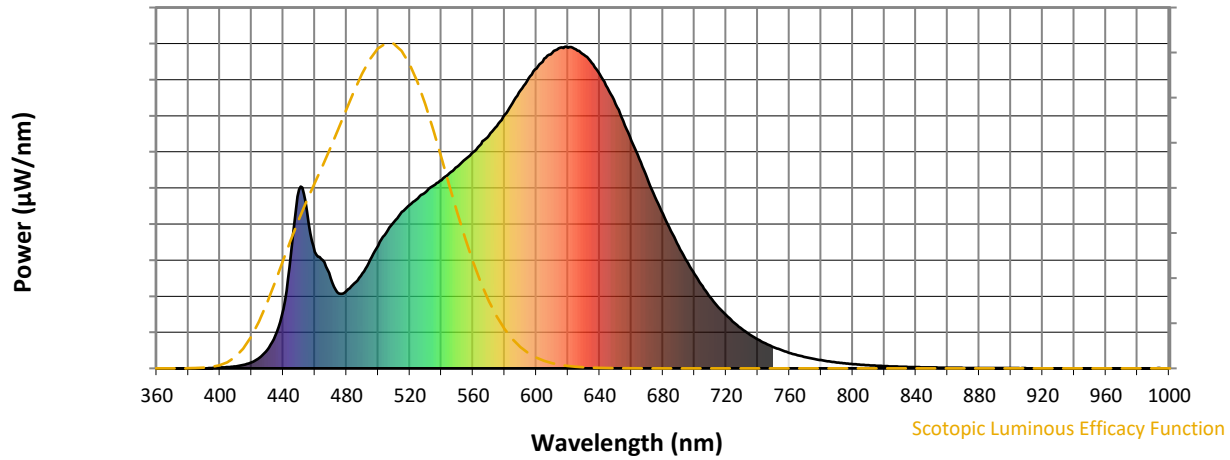


Photopic Lumens: NR

λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	296	NR	620	997	NR	750	66	NR	880	1	NR
365	0	NR	495	338	NR	625	992	NR	755	56	NR	885	1	NR
370	0	NR	500	381	NR	630	975	NR	760	48	NR	890	1	NR
375	0	NR	505	421	NR	635	949	NR	765	41	NR	895	1	NR
380	0	NR	510	456	NR	640	916	NR	770	35	NR	900	1	NR
385	0	NR	515	487	NR	645	871	NR	775	30	NR	905	1	NR
390	0	NR	520	508	NR	650	821	NR	780	26	NR	910	1	NR
395	1	NR	525	529	NR	655	769	NR	785	22	NR	915	0	NR
400	2	NR	530	548	NR	660	709	NR	790	18	NR	920	0	NR
405	4	NR	535	568	NR	665	652	NR	795	16	NR	925	0	NR
410	6	NR	540	585	NR	670	591	NR	800	13	NR	930	0	NR
415	11	NR	545	607	NR	675	534	NR	805	11	NR	935	0	NR
420	19	NR	550	627	NR	680	480	NR	810	10	NR	940	0	NR
425	33	NR	555	649	NR	685	427	NR	815	8	NR	945	0	NR
430	58	NR	560	673	NR	690	380	NR	820	7	NR	950	0	NR
435	103	NR	565	697	NR	695	334	NR	825	6	NR	955	0	NR
440	184	NR	570	723	NR	700	292	NR	830	5	NR	960	0	NR
445	360	NR	575	753	NR	705	255	NR	835	4	NR	965	0	NR
450	557	NR	580	789	NR	710	221	NR	840	4	NR	970	0	NR
455	486	NR	585	825	NR	715	190	NR	845	3	NR	975	0	NR
460	362	NR	590	864	NR	720	166	NR	850	3	NR	980	0	NR
465	337	NR	595	902	NR	725	143	NR	855	2	NR	985	0	NR
470	279	NR	600	932	NR	730	122	NR	860	2	NR	990	0	NR
475	233	NR	605	963	NR	735	105	NR	865	2	NR	995	0	NR
480	241	NR	610	981	NR	740	90	NR	870	1	NR	1000	0	NR
485	264	NR	615	997	NR	745	77	NR	875	1	NR			

REPORT NUMBER: SP1-2506-458-9

Scotopic Flux vs. Wavelength



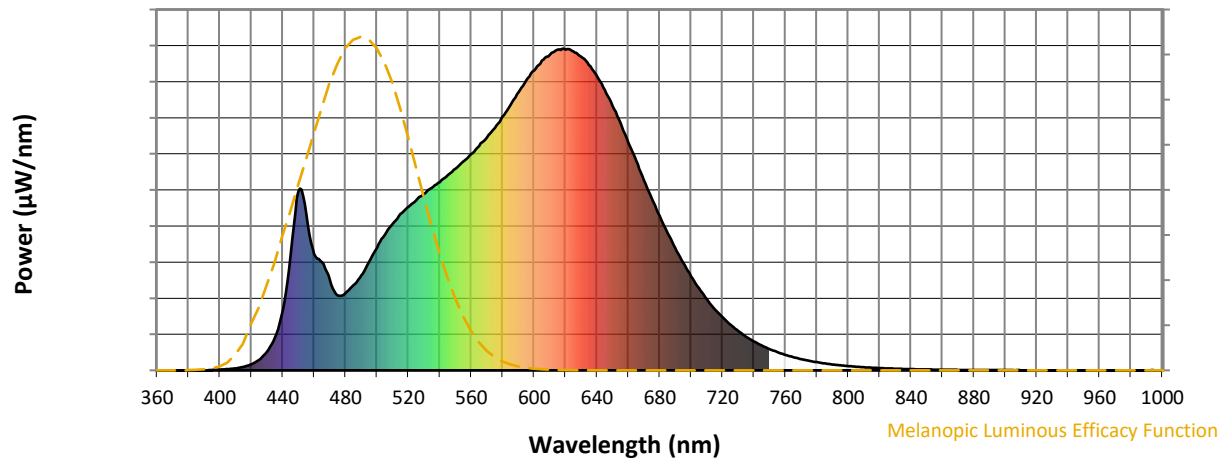
Scotopic Lumens: NR

S/P: 1.43

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	296	NR	620	997	NR	750	66	NR	880	1	NR
365	0	NR	495	338	NR	625	992	NR	755	56	NR	885	1	NR
370	0	NR	500	381	NR	630	975	NR	760	48	NR	890	1	NR
375	0	NR	505	421	NR	635	949	NR	765	41	NR	895	1	NR
380	0	NR	510	456	NR	640	916	NR	770	35	NR	900	1	NR
385	0	NR	515	487	NR	645	871	NR	775	30	NR	905	1	NR
390	0	NR	520	508	NR	650	821	NR	780	26	NR	910	1	NR
395	1	NR	525	529	NR	655	769	NR	785	22	NR	915	0	NR
400	2	NR	530	548	NR	660	709	NR	790	18	NR	920	0	NR
405	4	NR	535	568	NR	665	652	NR	795	16	NR	925	0	NR
410	6	NR	540	585	NR	670	591	NR	800	13	NR	930	0	NR
415	11	NR	545	607	NR	675	534	NR	805	11	NR	935	0	NR
420	19	NR	550	627	NR	680	480	NR	810	10	NR	940	0	NR
425	33	NR	555	649	NR	685	427	NR	815	8	NR	945	0	NR
430	58	NR	560	673	NR	690	380	NR	820	7	NR	950	0	NR
435	103	NR	565	697	NR	695	334	NR	825	6	NR	955	0	NR
440	184	NR	570	723	NR	700	292	NR	830	5	NR	960	0	NR
445	360	NR	575	753	NR	705	255	NR	835	4	NR	965	0	NR
450	557	NR	580	789	NR	710	221	NR	840	4	NR	970	0	NR
455	486	NR	585	825	NR	715	190	NR	845	3	NR	975	0	NR
460	362	NR	590	864	NR	720	166	NR	850	3	NR	980	0	NR
465	337	NR	595	902	NR	725	143	NR	855	2	NR	985	0	NR
470	279	NR	600	932	NR	730	122	NR	860	2	NR	990	0	NR
475	233	NR	605	963	NR	735	105	NR	865	2	NR	995	0	NR
480	241	NR	610	981	NR	740	90	NR	870	1	NR	1000	0	NR
485	264	NR	615	997	NR	745	77	NR	875	1	NR			

REPORT NUMBER: SP1-2506-458-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.82

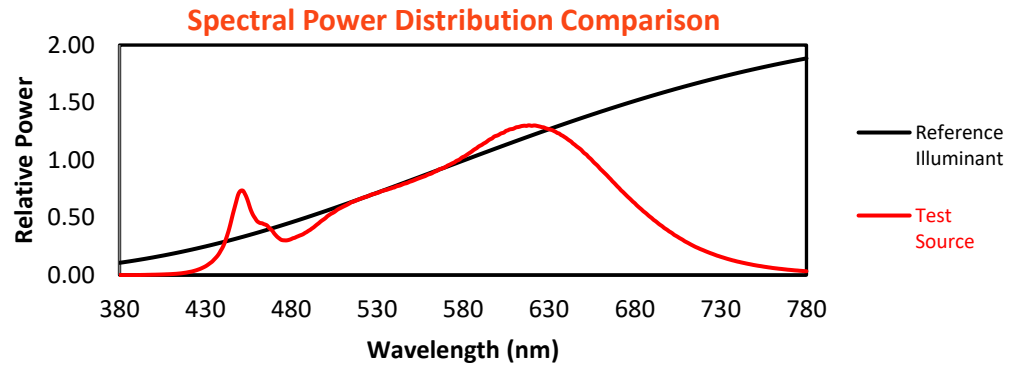
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	296	NR	620	997	NR	750	66	NR	880	1	NR
365	0	NR	495	338	NR	625	992	NR	755	56	NR	885	1	NR
370	0	NR	500	381	NR	630	975	NR	760	48	NR	890	1	NR
375	0	NR	505	421	NR	635	949	NR	765	41	NR	895	1	NR
380	0	NR	510	456	NR	640	916	NR	770	35	NR	900	1	NR
385	0	NR	515	487	NR	645	871	NR	775	30	NR	905	1	NR
390	0	NR	520	508	NR	650	821	NR	780	26	NR	910	1	NR
395	1	NR	525	529	NR	655	769	NR	785	22	NR	915	0	NR
400	2	NR	530	548	NR	660	709	NR	790	18	NR	920	0	NR
405	4	NR	535	568	NR	665	652	NR	795	16	NR	925	0	NR
410	6	NR	540	585	NR	670	591	NR	800	13	NR	930	0	NR
415	11	NR	545	607	NR	675	534	NR	805	11	NR	935	0	NR
420	19	NR	550	627	NR	680	480	NR	810	10	NR	940	0	NR
425	33	NR	555	649	NR	685	427	NR	815	8	NR	945	0	NR
430	58	NR	560	673	NR	690	380	NR	820	7	NR	950	0	NR
435	103	NR	565	697	NR	695	334	NR	825	6	NR	955	0	NR
440	184	NR	570	723	NR	700	292	NR	830	5	NR	960	0	NR
445	360	NR	575	753	NR	705	255	NR	835	4	NR	965	0	NR
450	557	NR	580	789	NR	710	221	NR	840	4	NR	970	0	NR
455	486	NR	585	825	NR	715	190	NR	845	3	NR	975	0	NR
460	362	NR	590	864	NR	720	166	NR	850	3	NR	980	0	NR
465	337	NR	595	902	NR	725	143	NR	855	2	NR	985	0	NR
470	279	NR	600	932	NR	730	122	NR	860	2	NR	990	0	NR
475	233	NR	605	963	NR	735	105	NR	865	2	NR	995	0	NR
480	241	NR	610	981	NR	740	90	NR	870	1	NR	1000	0	NR
485	264	NR	615	997	NR	745	77	NR	875	1	NR			

REPORT NUMBER: SP1-2506-458-9

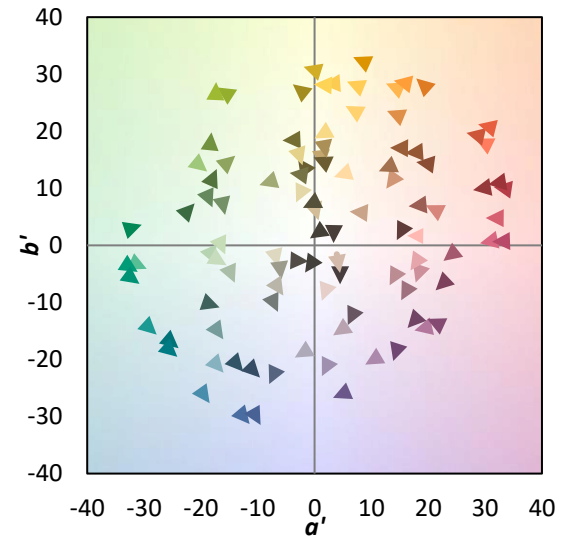
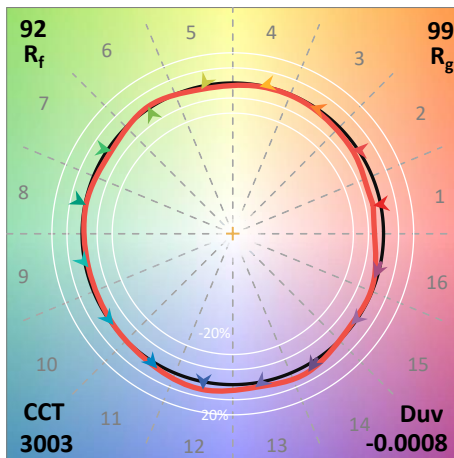
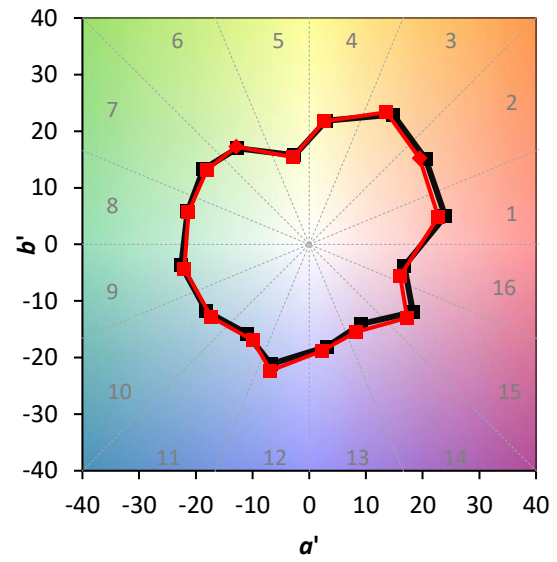
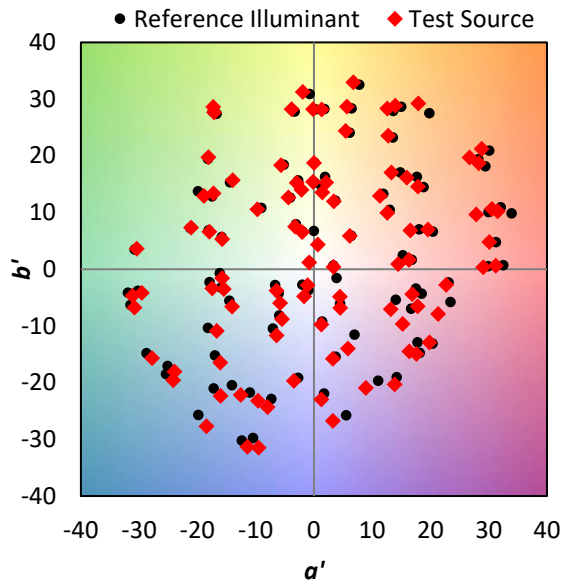
TM-30-18

Summary

$R_f = 91.9$
 $R_g = 99.2$
 $CIE R_a = 93.2$
 $R_9 = 59.0$

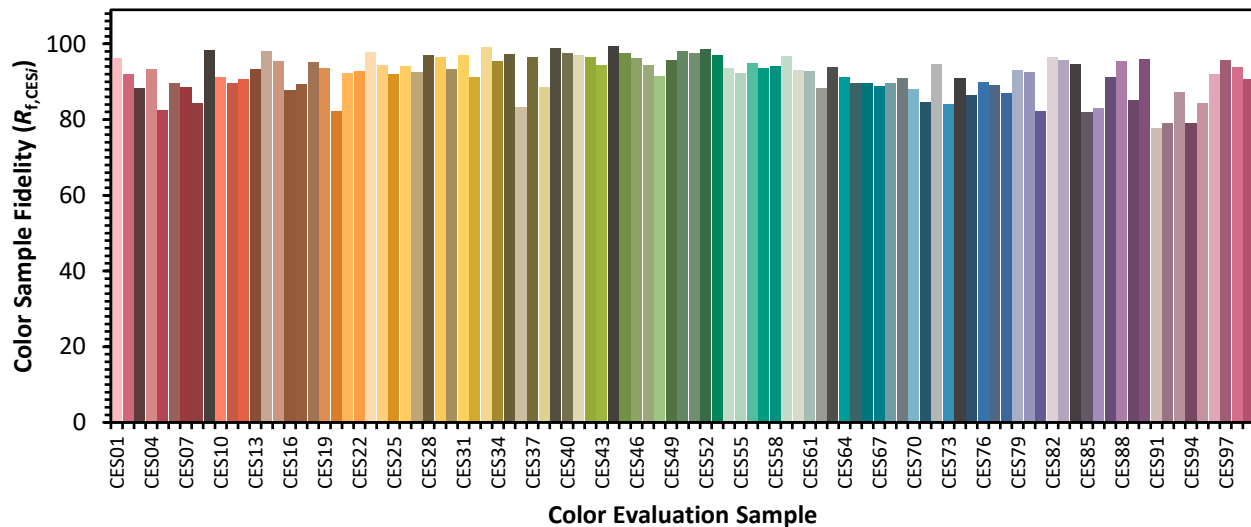


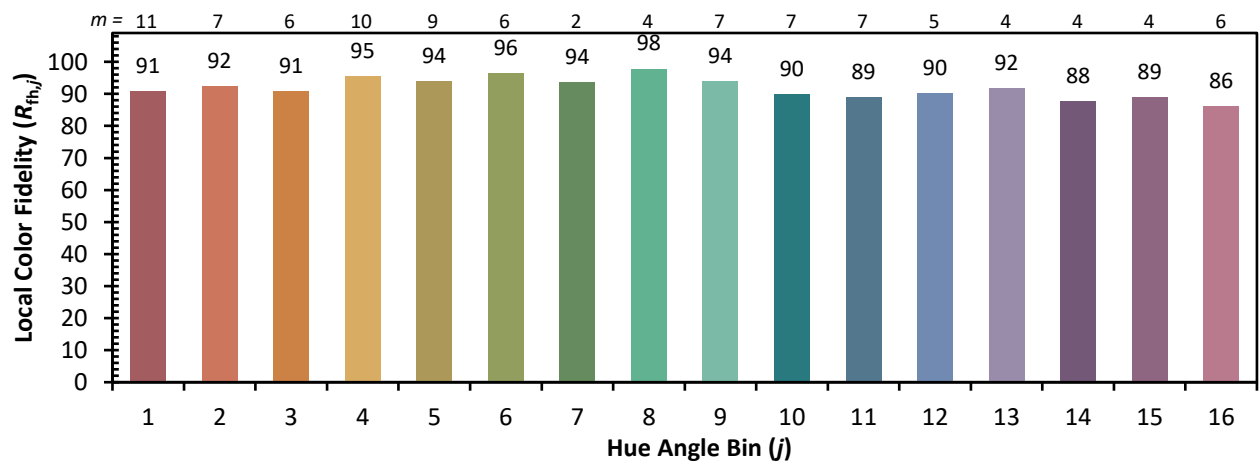
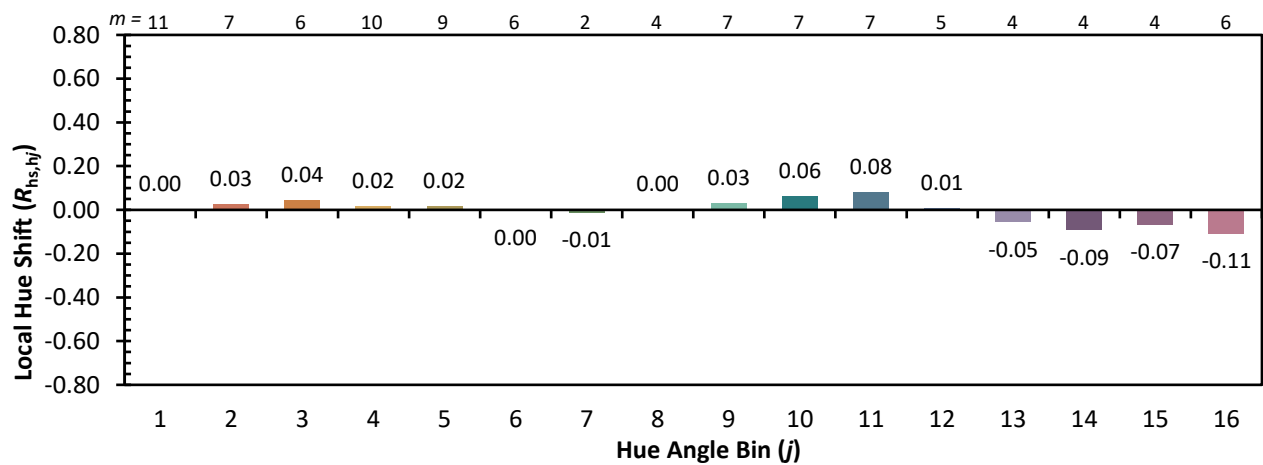
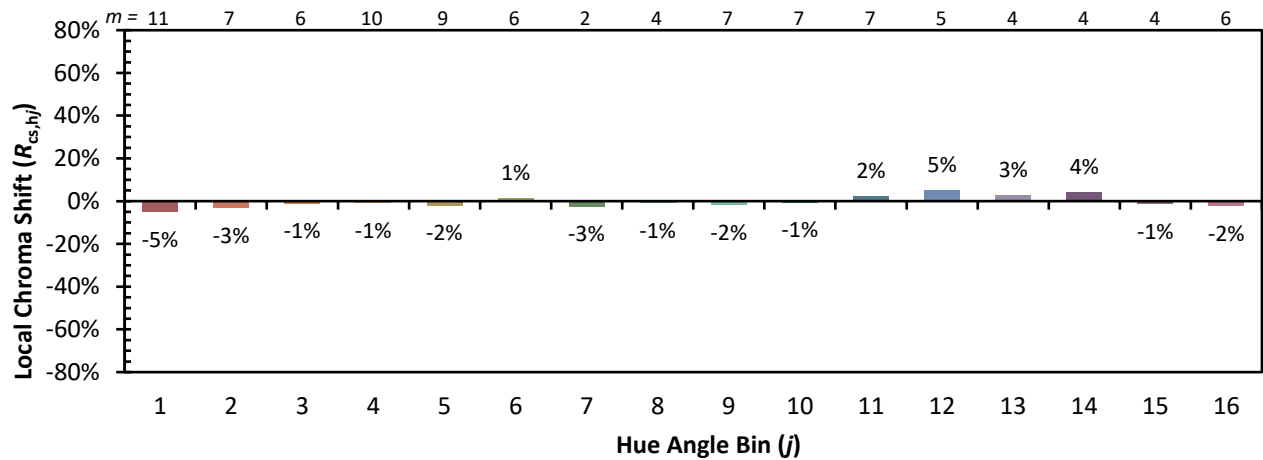
Color Vector Graphics



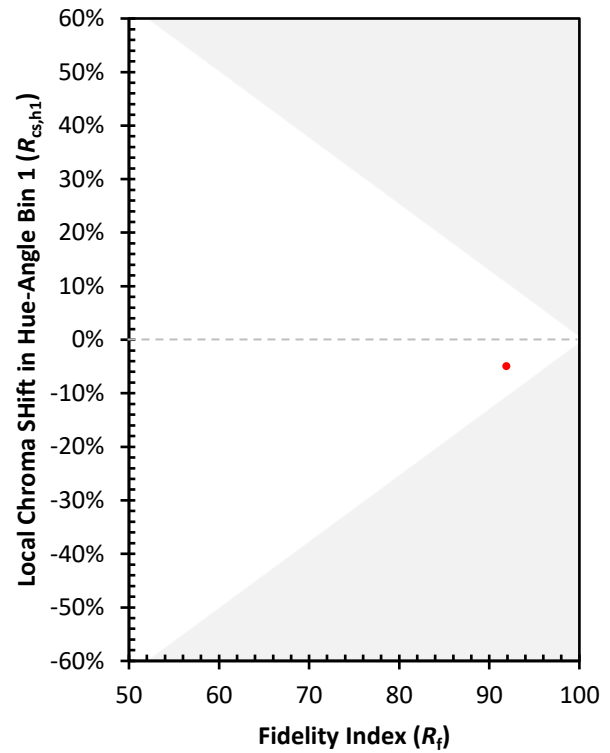
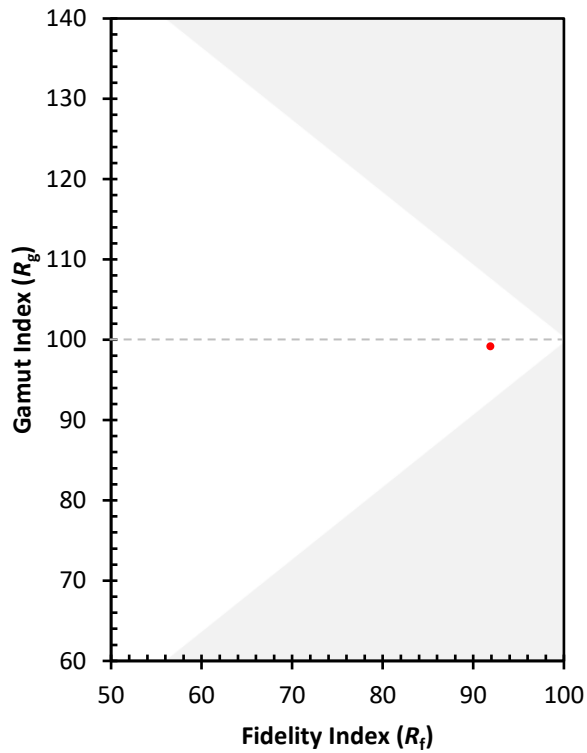
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 94	CES51 = 97	CES76 = 90
CES02 = 63	CES27 = 92	CES52 = 99	CES77 = 89
CES03 = 32	CES28 = 97	CES53 = 97	CES78 = 87
CES04 = 70	CES29 = 97	CES54 = 94	CES79 = 93
CES05 = 51	CES30 = 93	CES55 = 92	CES80 = 93
CES06 = 51	CES31 = 97	CES56 = 95	CES81 = 82
CES07 = 43	CES32 = 91	CES57 = 94	CES82 = 97
CES08 = 42	CES33 = 99	CES58 = 94	CES83 = 96
CES09 = 29	CES34 = 95	CES59 = 97	CES84 = 95
CES10 = 76	CES35 = 97	CES60 = 93	CES85 = 82
CES11 = 59	CES36 = 83	CES61 = 93	CES86 = 83
CES12 = 65	CES37 = 97	CES62 = 88	CES87 = 91
CES13 = 44	CES38 = 89	CES63 = 94	CES88 = 96
CES14 = 74	CES39 = 99	CES64 = 91	CES89 = 85
CES15 = 72	CES40 = 98	CES65 = 90	CES90 = 96
CES16 = 48	CES41 = 97	CES66 = 90	CES91 = 78
CES17 = 50	CES42 = 96	CES67 = 89	CES92 = 79
CES18 = 57	CES43 = 94	CES68 = 90	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 79
CES20 = 67	CES45 = 98	CES70 = 88	CES95 = 84
CES21 = 86	CES46 = 96	CES71 = 85	CES96 = 92
CES22 = 79	CES47 = 94	CES72 = 95	CES97 = 96
CES23 = 92	CES48 = 91	CES73 = 84	CES98 = 94
CES24 = 91	CES49 = 96	CES74 = 91	CES99 = 91
CES25 = 72	CES50 = 98	CES75 = 87	



Color Rendition by Hue-Angle Bin


Measure Comparisons



(END OF REPORT)