

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: P1217082

Luminaire Tested: 14-ID2-20-CNC-L830-U

Issue Date: 12/5/2025

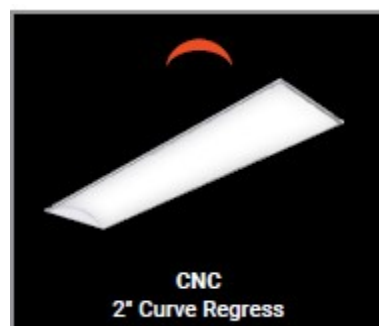
Test Information

Test Method: LM-79-2019
Report Number: P1217082
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2508-507-17)
Test Lab: INNOVATION CENTER
Issue Date: 12/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 14-ID2-20-CNC-L830-U
Description: 1X4 IN DEPTH TROFFER WITH 2INCH CURVE REGRESS LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

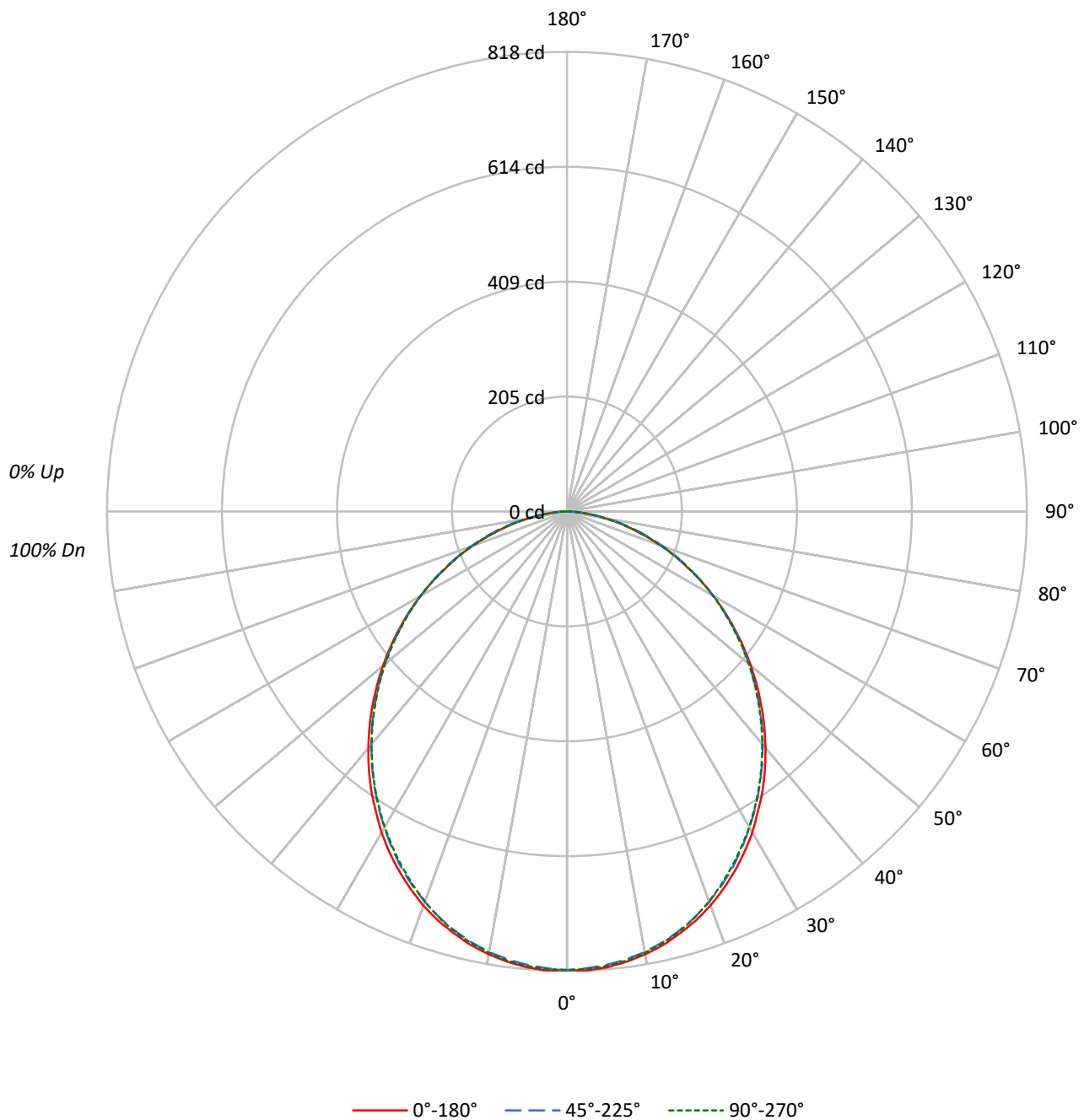
Lumens per Lamp: N/A
Luminaire Lumens: 2089.0 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.3
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.6
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: P1217082
CATALOG NUMBER: 14-ID2-20-CNC-L830-U

Luminous Intensity Polar Plot



TEST NUMBER: P1217082

CATALOG NUMBER: 14-ID2-20-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	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	97	106	102	98	95	98	95	92	94	92	89	90	88	87	87	87	84
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	73	73	71
3	91	81	73	66	88	79	72	66	76	70	64	73	68	63	71	66	62	62	62	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	54	54	52
5	77	64	55	49	75	63	55	48	61	54	48	59	53	47	57	51	47	47	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	41	41	39
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	37	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	33	33	31
9	57	44	36	31	56	44	36	31	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	38	32	27	27	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2196	2196	2196
5°	2200	2189	2193
10°	2188	2175	2180
15°	2165	2151	2155
20°	2137	2117	2116
25°	2097	2073	2066
30°	2050	2018	2015
35°	1993	1962	1959
40°	1930	1901	1899
45°	1861	1837	1833
50°	1787	1770	1767
55°	1708	1696	1688
60°	1619	1619	1614
65°	1511	1533	1520
70°	1400	1431	1408
75°	1237	1314	1263
80°	1051	1134	1051
85°	790	855	821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1861 cd/sqm

TEST NUMBER: P1217082
 CATALOG NUMBER: 14-ID2-20-CNC-L830-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	3.7
10°-20°	218.0	10.4
20°-30°	321.7	15.4
30°-40°	374.4	17.9
40°-50°	373.1	17.9
50°-60°	323.5	15.5
60°-70°	237.3	11.4
70°-80°	131.2	6.3
80°-90°	32.7	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°	616.8	29.5
0°-40°	991.2	47.4
0°-60°	1687.8	80.8
0°-90°	2089.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2089.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	816	816	816	816	816	
5°	814	813	810	810	812	77
15°	777	776	772	771	774	219
25°	706	702	698	694	696	325
35°	607	603	597	594	596	379
45°	489	487	483	480	482	377
55°	364	363	362	360	360	325
65°	237	241	241	238	239	236
75°	119	127	126	122	122	127
85°	26	29	28	26	27	31
90°	0	0	0	0	0	

TEST NUMBER: P1217082

CATALOG NUMBER: 14-ID2-20-CNC-L830-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	816.2	816.2	816.2	816.2	816.2
2.5°	817.6	816.6	813.7	813.7	815.2
5°	814.4	813.4	810.2	810.2	812.0
7.5°	808.4	807.7	804.1	804.1	806.6
10°	800.6	799.2	796.0	795.6	797.8
12.5°	790.3	788.9	785.3	784.6	786.7
15°	777.2	775.7	772.2	771.1	773.6
17.5°	763.3	760.5	757.3	755.1	757.3
20°	746.3	743.4	739.1	736.7	738.8
22.5°	727.1	723.9	719.6	715.7	718.2
25°	706.1	702.2	698.3	694.4	695.8
27.5°	683.7	679.1	674.5	671.0	672.4
30°	659.6	654.6	649.3	646.4	648.6
32.5°	632.6	629.7	624.1	620.9	622.6
35°	606.7	602.8	597.1	594.2	596.4
37.5°	578.6	574.7	569.7	566.5	568.7
40°	549.5	545.9	541.3	538.1	540.6
42.5°	519.6	517.5	512.5	509.0	511.5
45°	489.1	486.6	482.7	479.9	481.6
47.5°	458.2	456.1	452.9	449.7	452.2
50°	426.9	426.2	422.7	419.8	422.0
52.5°	395.3	395.3	392.1	389.6	391.8
55°	364.1	363.4	361.6	359.5	359.8
57.5°	332.5	332.5	331.0	328.9	330.7
60°	300.8	302.3	300.8	298.4	299.8
62.5°	269.6	271.4	270.7	267.8	269.2
65°	237.3	241.2	240.8	237.6	238.7
67.5°	208.1	211.3	211.0	208.1	208.9
70°	177.9	182.2	181.9	178.7	179.0
72.5°	147.4	153.8	153.4	149.9	149.9
75°	119.0	126.8	126.4	121.8	121.5
77.5°	93.4	100.2	99.5	94.5	94.5
80°	67.8	73.9	73.2	67.8	67.8
82.5°	45.1	50.4	49.0	44.8	45.5
85°	25.6	29.1	27.7	25.6	26.6
87.5°	9.2	11.4	11.0	9.2	10.3
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1217082

CATALOG NUMBER: 14-ID2-20-CNC-L830-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	13.85	15.46	14.21	15.77	16.08	13.78	15.39	14.14	15.70	16.01
	3H	15.53	16.98	15.91	17.31	17.67	15.47	16.92	15.85	17.25	17.61
	4H	16.13	17.49	16.52	17.84	18.21	16.08	17.44	16.47	17.79	18.16
	6H	16.54	17.80	16.95	18.16	18.56	16.48	17.75	16.89	18.11	18.50
	8H	16.65	17.86	17.08	18.25	18.64	16.59	17.80	17.02	18.19	18.59
	12H	16.71	17.87	17.14	18.25	18.68	16.66	17.81	17.09	18.20	18.63
4H	2H	14.45	15.81	14.85	16.16	16.54	14.39	15.76	14.79	16.11	16.48
	3H	16.36	17.50	16.77	17.89	18.29	16.30	17.44	16.71	17.84	18.24
	4H	17.09	18.12	17.52	18.53	18.97	17.02	18.05	17.45	18.47	18.90
	6H	17.63	18.53	18.08	18.97	19.43	17.54	18.44	17.99	18.88	19.34
	8H	17.79	18.63	18.25	19.07	19.54	17.69	18.53	18.15	18.97	19.44
	12H	17.88	18.64	18.37	19.12	19.59	17.79	18.54	18.27	19.02	19.49
8H	4H	17.38	18.22	17.84	18.67	19.13	17.32	18.16	17.78	18.60	19.07
	6H	18.04	18.74	18.53	19.23	19.70	17.94	18.64	18.43	19.13	19.60
	8H	18.26	18.89	18.77	19.40	19.88	18.14	18.77	18.65	19.28	19.76
	12H	18.43	18.98	18.93	19.47	20.03	18.30	18.85	18.80	19.34	19.90
12H	4H	17.40	18.16	17.88	18.64	19.10	17.35	18.10	17.83	18.58	19.05
	6H	18.08	18.71	18.59	19.21	19.70	17.99	18.62	18.50	19.12	19.61
	8H	18.36	18.91	18.87	19.40	19.96	18.24	18.79	18.75	19.29	19.85

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

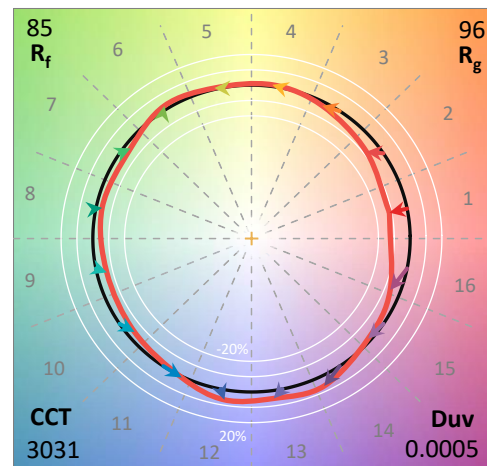
Test Information

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
 Rf: 84.8
 Rg: 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

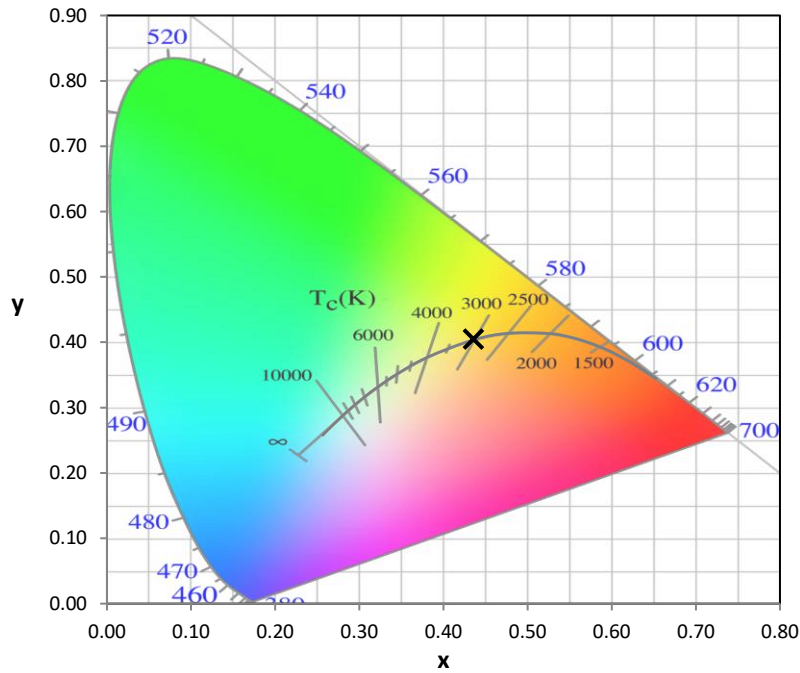
Stabilization Time: 38M
 Operation Time: 1H 38M
 Sphere Temperature (°C): 24.0

REPORT NUMBER: SP1-2506-458-3

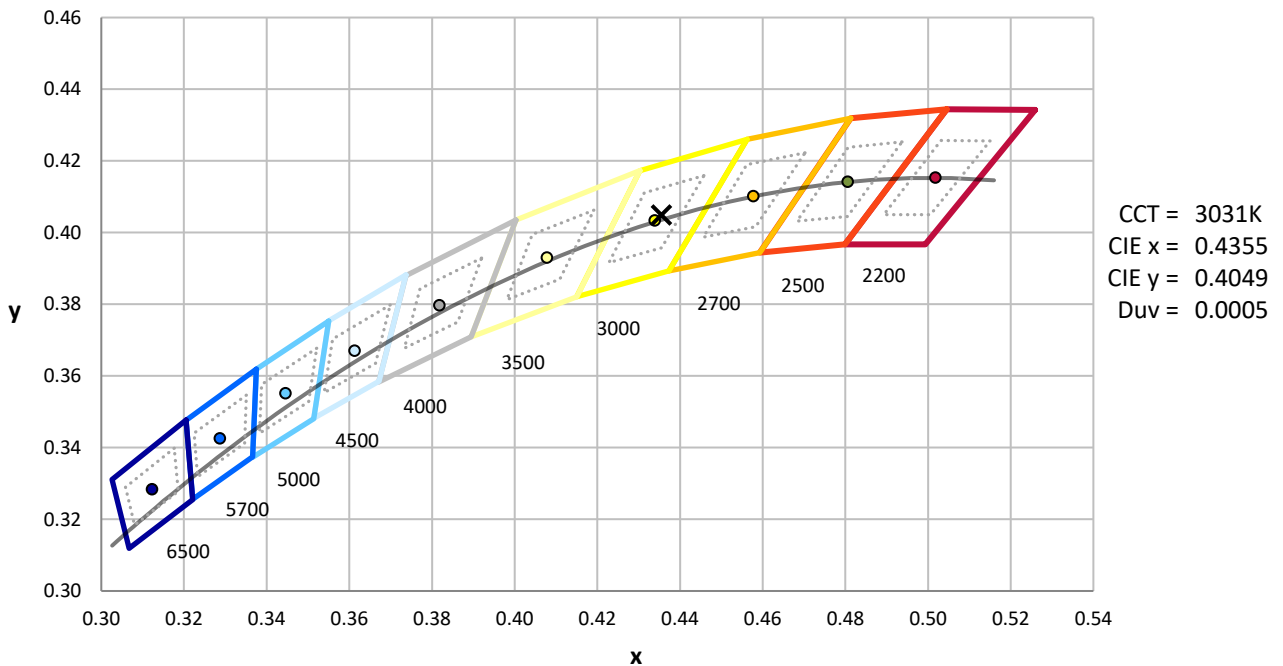
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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: SP1-2506-458-3

CIE 1931 Chromaticity Diagram

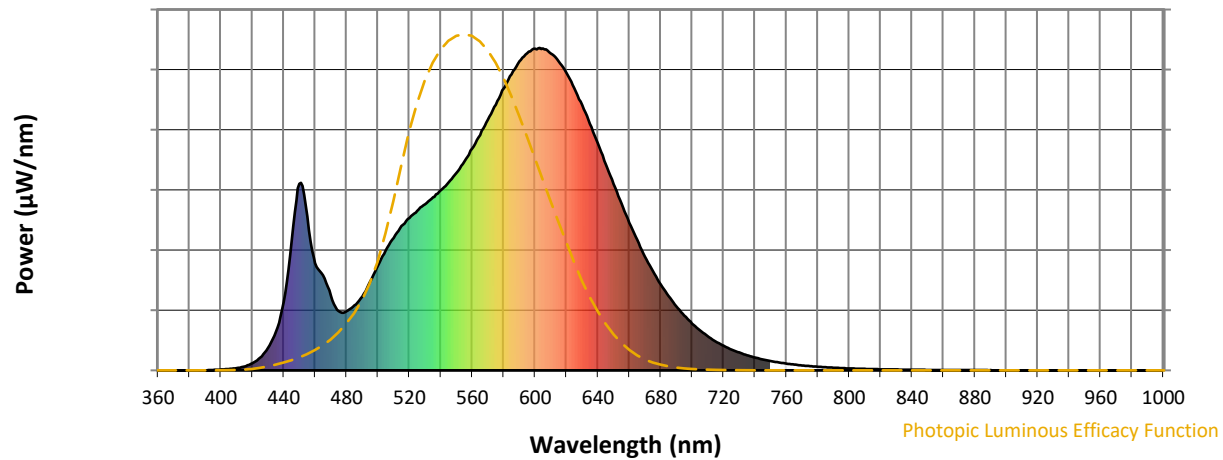


CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

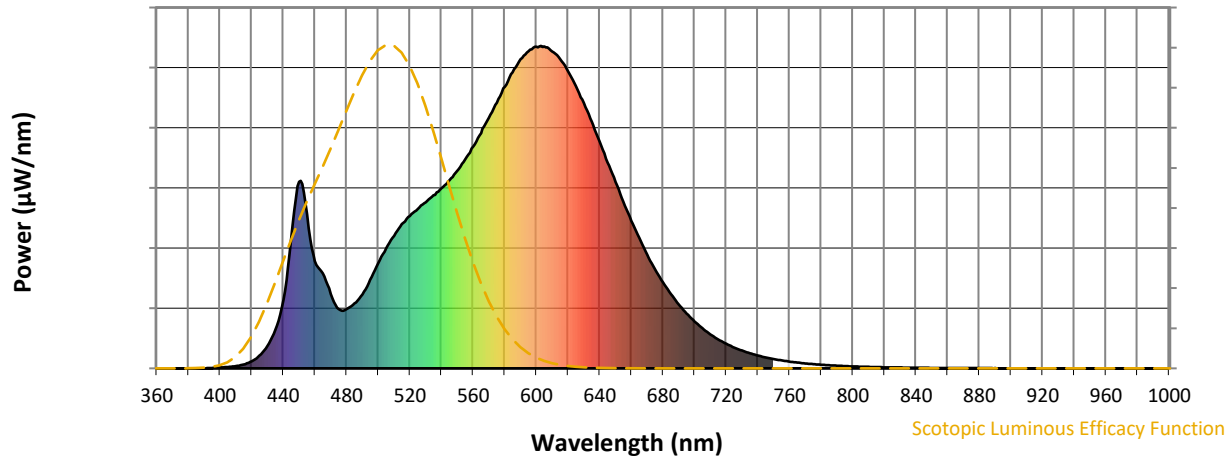
REPORT NUMBER: SP1-2506-458-3

Photopic Flux vs. Wavelength

Photopic Lumens: NR

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			

REPORT NUMBER: SP1-2506-458-3

Scotopic Flux vs. Wavelength



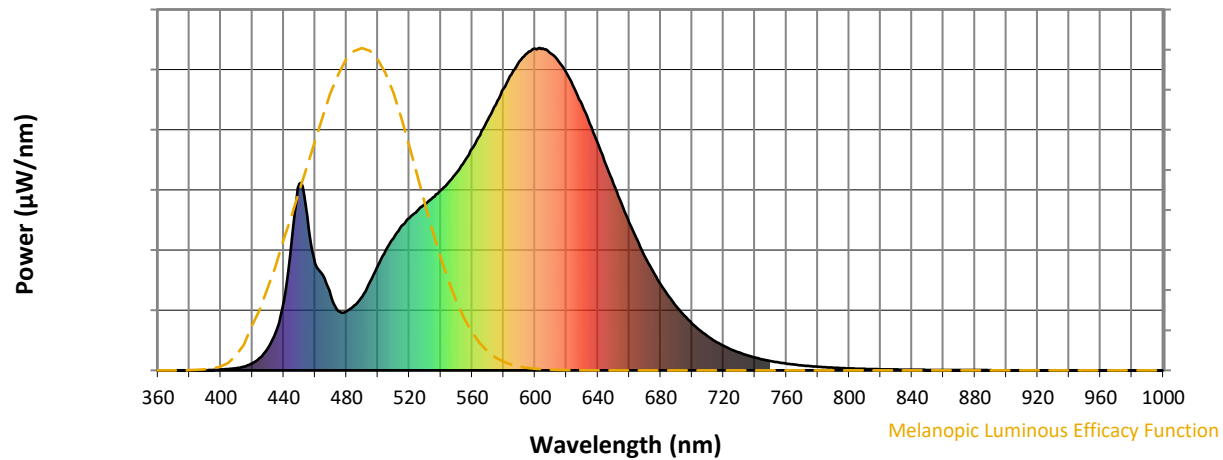
Scotopic Lumens: NR

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			

REPORT NUMBER: SP1-2506-458-3

Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 2.59

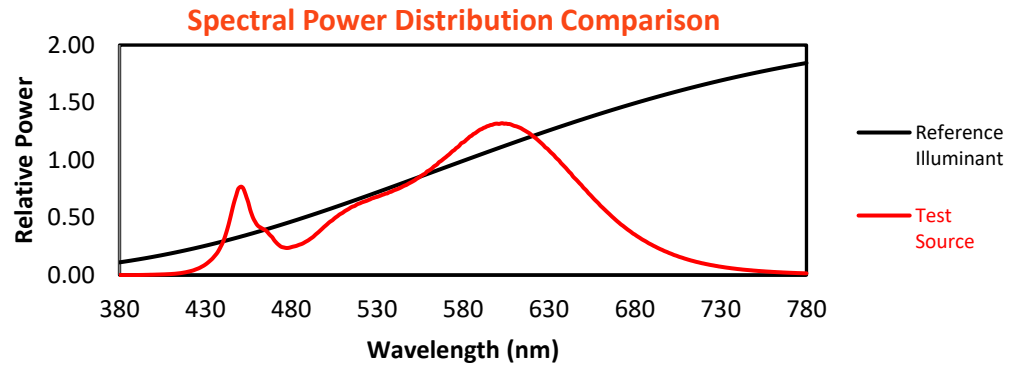
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	229	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			

REPORT NUMBER: SP1-2506-458-3

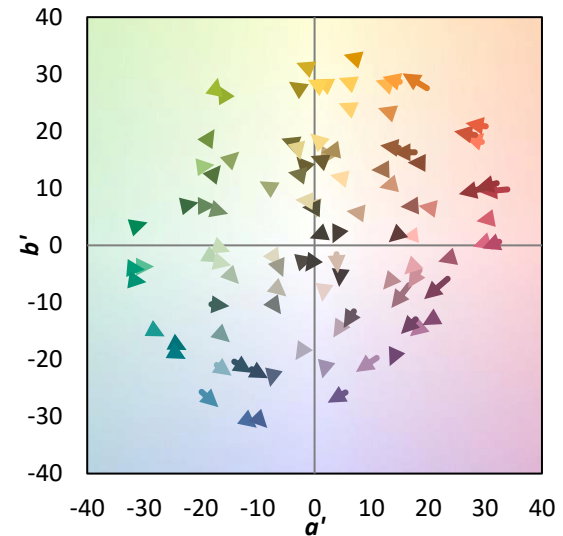
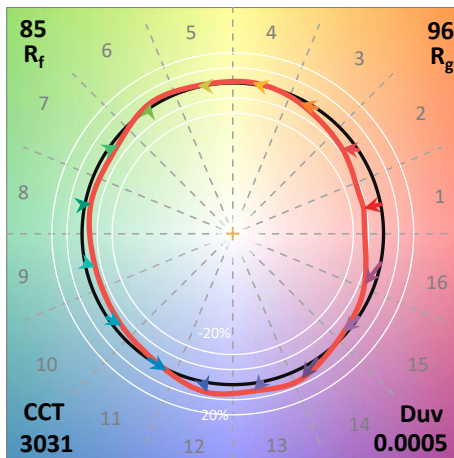
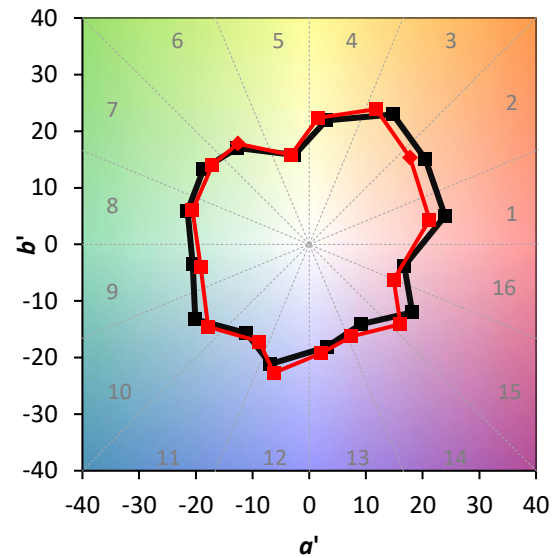
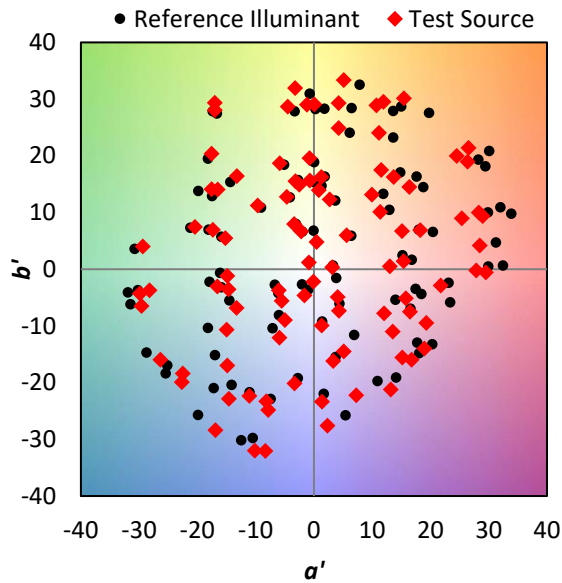
TM-30-18

Summary

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

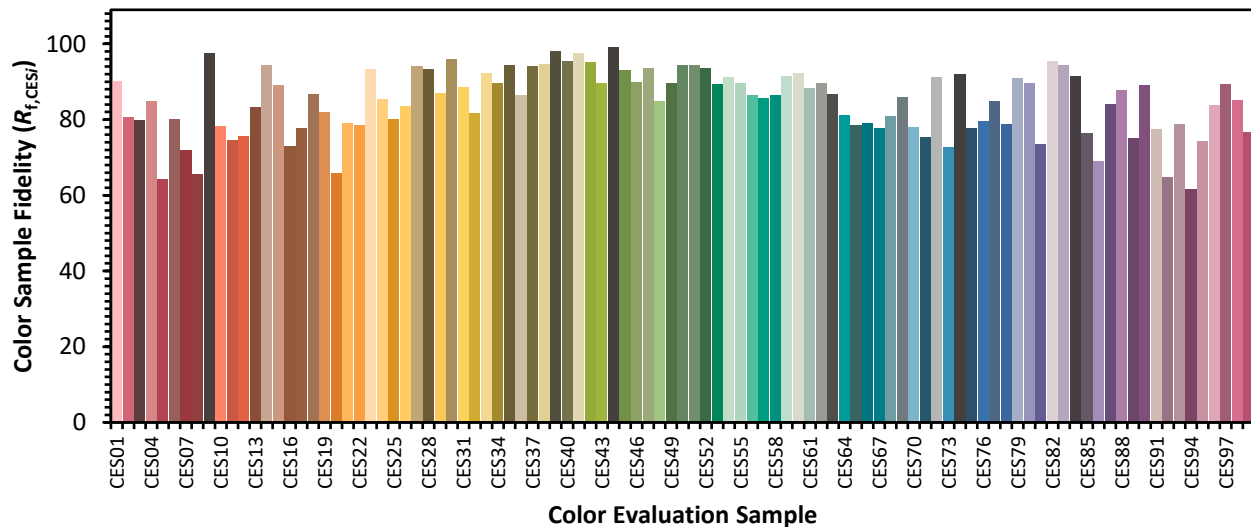


Color Vector Graphics

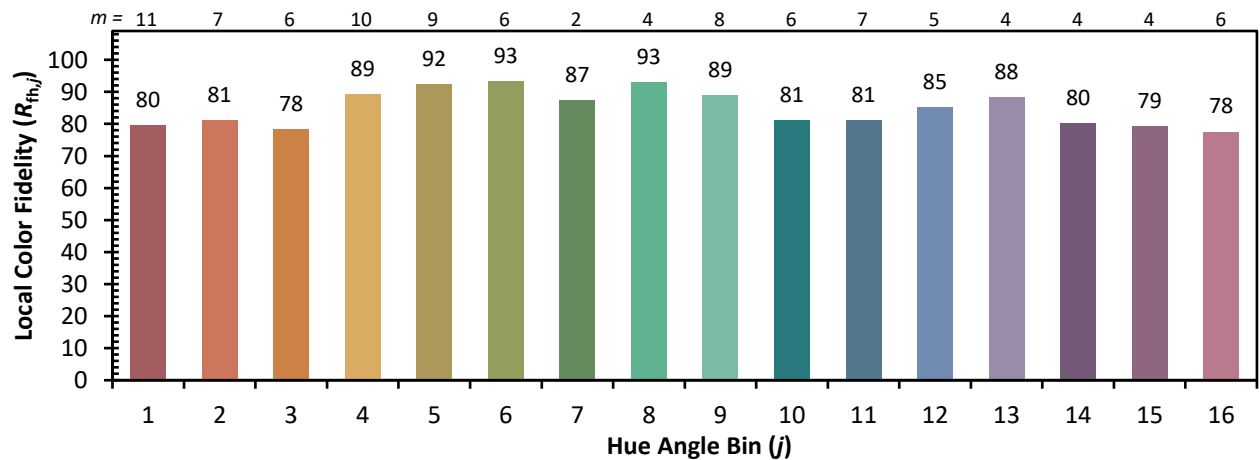
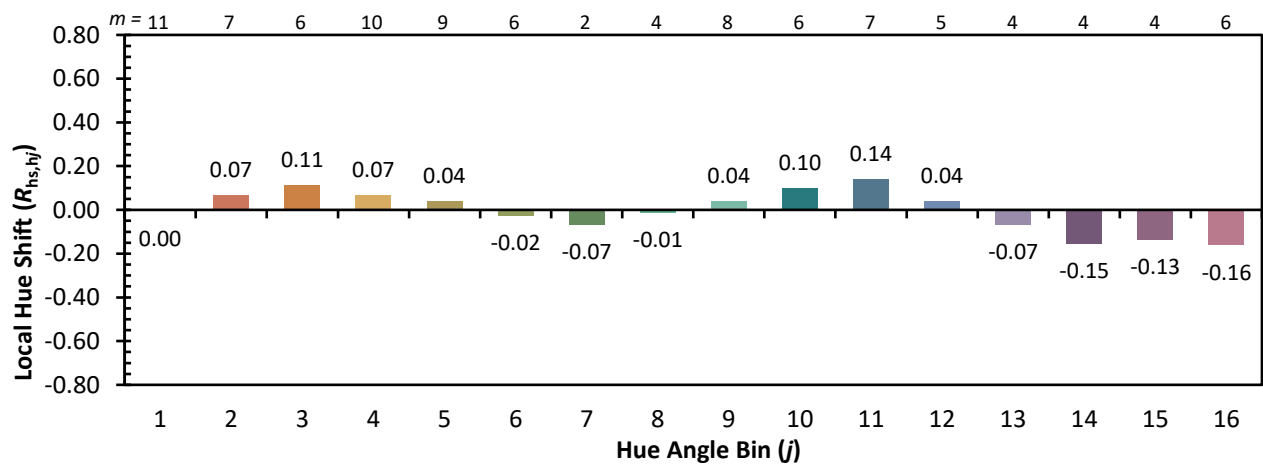
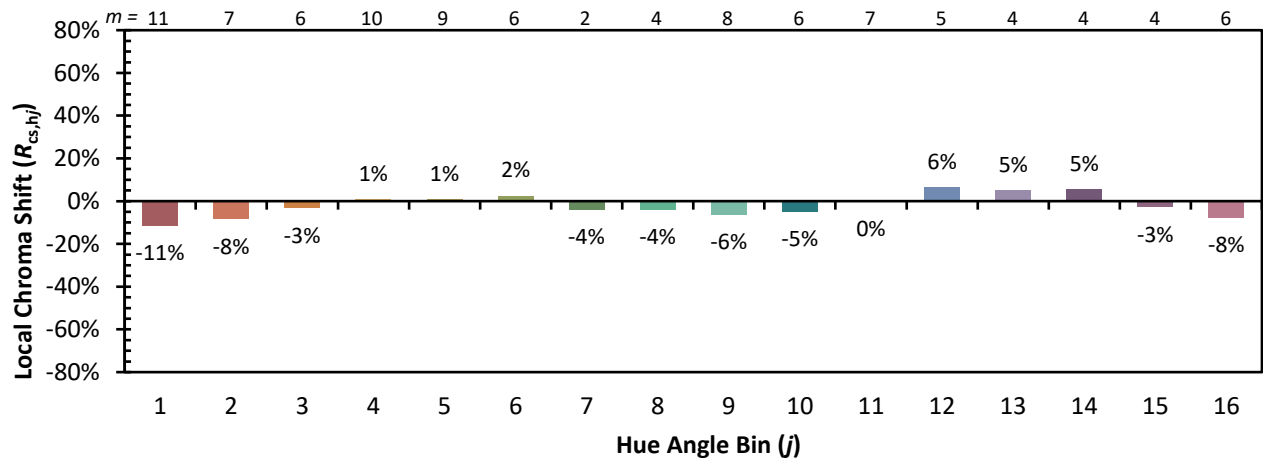


Individual Sample Fidelity Index ($R_{f,i}$)

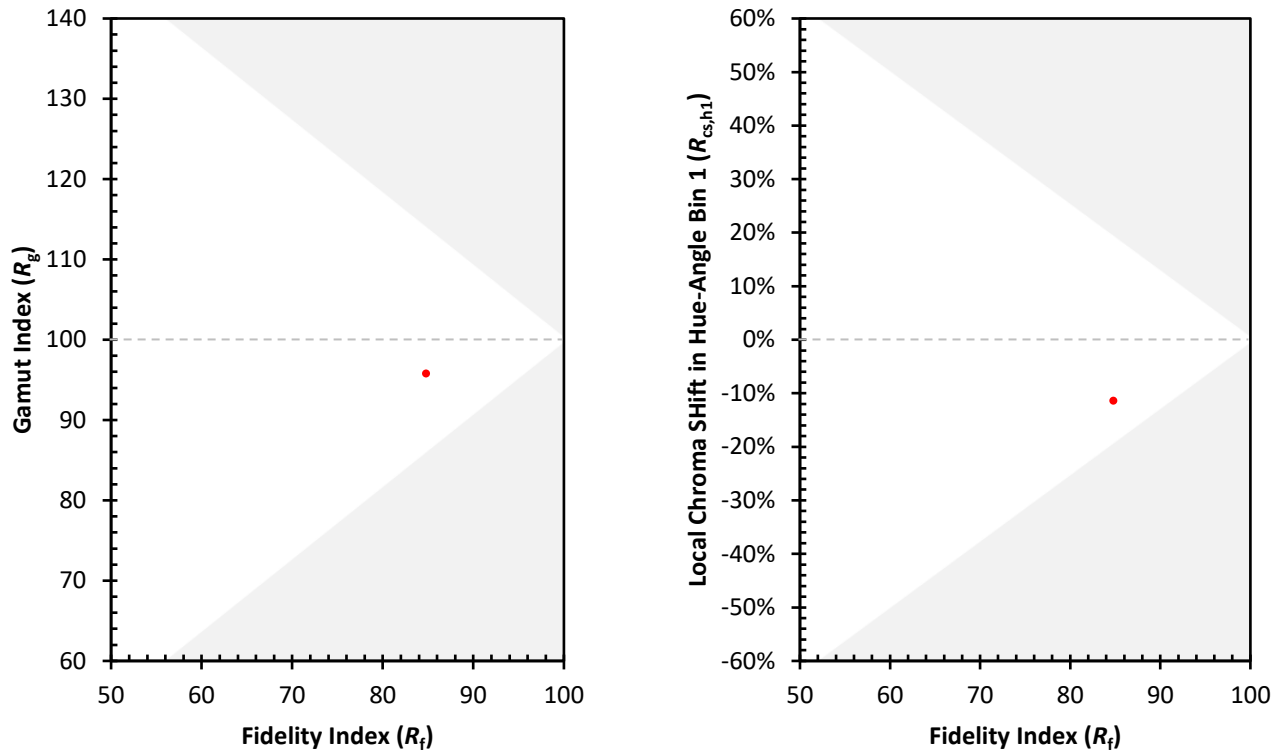
CES01 = 86	CES26 = 84	CES51 = 94	CES76 = 80
CES02 = 63	CES27 = 94	CES52 = 94	CES77 = 85
CES03 = 31	CES28 = 93	CES53 = 89	CES78 = 79
CES04 = 70	CES29 = 87	CES54 = 91	CES79 = 91
CES05 = 50	CES30 = 96	CES55 = 90	CES80 = 90
CES06 = 51	CES31 = 89	CES56 = 87	CES81 = 74
CES07 = 42	CES32 = 82	CES57 = 86	CES82 = 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)