

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: P1215715

Luminaire Tested: 24-ID2-65-CFR2-L840-U

Issue Date: 12/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1215715
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2508-510-7)
Test Lab: INNOVATION CENTER
Issue Date: 12/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24-ID2-65-CFR2-L840-U
Description: 2X4 IN DEPTH TROFFER WITH 2INCH CUBE REGRESS LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

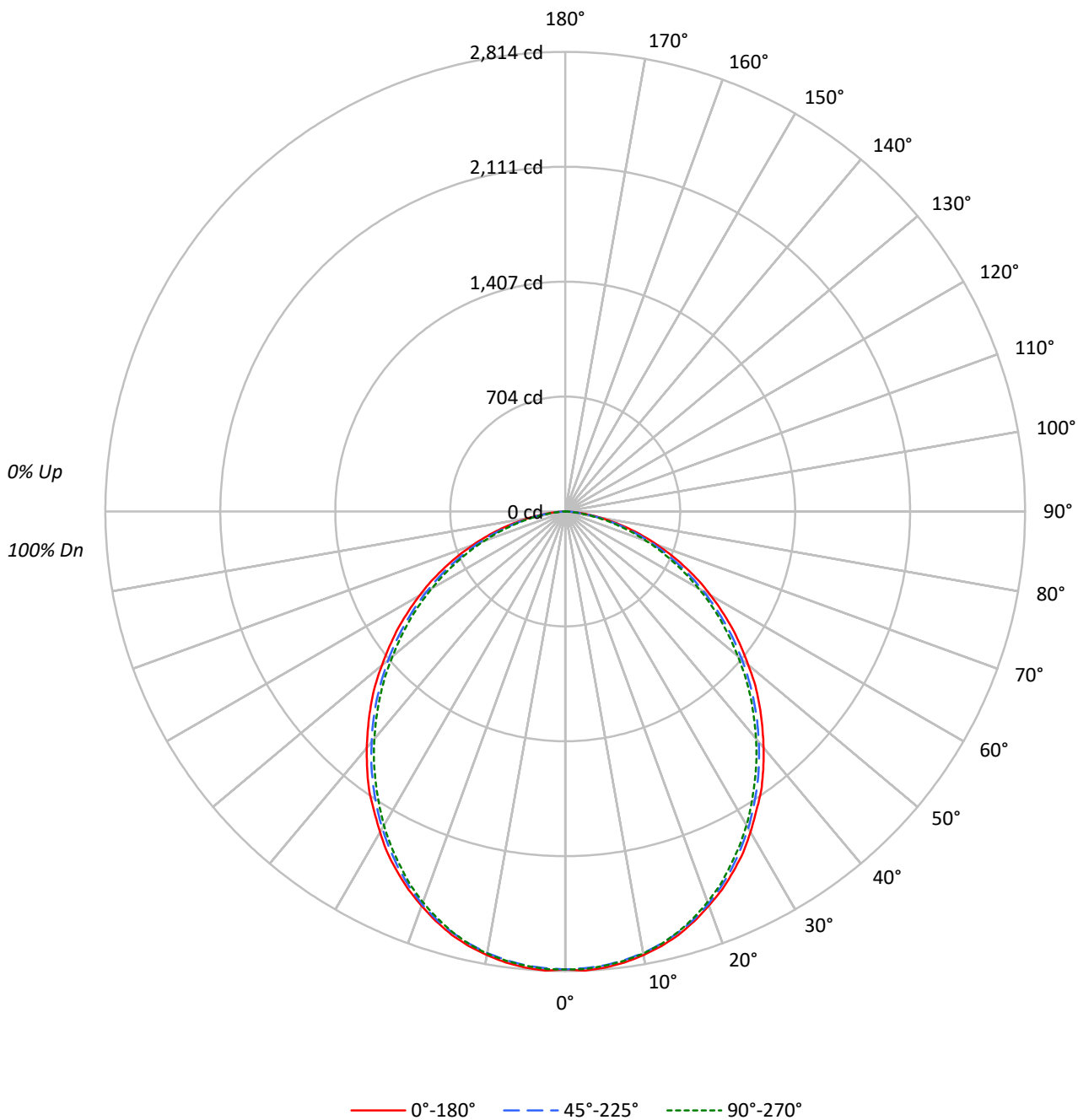
Lumens per Lamp: N/A
Luminaire Lumens: 6978.9 lumens
Efficiency: N/A
Efficacy: 124.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 56.1
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: P1215715
CATALOG NUMBER: 24-ID2-65-CFR2-L840-U

Luminous Intensity Polar Plot





TEST NUMBER: P1215715
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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72
3	91	81	74	67	89	80	73	67	77	71	65	74	69	64	72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56	66	60	55	64	59	55	53
5	77	65	56	50	75	64	56	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40
7	67	53	45	39	65	53	44	39	51	44	38	50	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	40	34	46	39	34	44	38	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3773	3773	3773
5°	3786	3767	3771
10°	3769	3751	3756
15°	3738	3718	3714
20°	3678	3665	3646
25°	3612	3580	3551
30°	3522	3480	3448
35°	3434	3365	3321
40°	3317	3237	3192
45°	3200	3102	3050
50°	3062	2956	2886
55°	2928	2796	2725
60°	2769	2623	2531
65°	2588	2430	2318
70°	2362	2208	2088
75°	2090	1902	1763
80°	1684	1499	1373
85°	1118	956	780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3200 cd/sqm



TEST NUMBER: P1215715
 CATALOG NUMBER: 24-ID2-65-CFR2-L840-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.1	3.8
10°-20°	752.2	10.8
20°-30°	1109.9	15.9
30°-40°	1283.4	18.4
40°-50°	1262.3	18.1
50°-60°	1072.0	15.4
60°-70°	759.9	10.9
70°-80°	391.7	5.6
80°-90°	82.4	1.2
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°	2127.2	30.5
0°-40°	3410.6	48.9
0°-60°	5744.8	82.3
0°-90°	6978.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6978.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2804	2804	2804	2804	2804	
5°	2803	2793	2789	2786	2792	266
15°	2683	2673	2669	2663	2666	756
25°	2433	2424	2412	2396	2392	1120
35°	2091	2079	2049	2031	2022	1304
45°	1682	1668	1630	1608	1603	1297
55°	1248	1229	1192	1171	1162	1114
65°	813	793	763	738	728	805
75°	402	385	366	345	339	425
85°	72	69	62	55	50	91
90°	0	0	0	0	0	



TEST NUMBER: P1215715
 CATALOG NUMBER: 24-ID2-65-CFR2-L840-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2804.3	2804.3	2804.3	2804.3	2804.3
2.5°	2813.9	2804.3	2798.6	2796.7	2803.4
5°	2803.4	2792.9	2789.1	2786.2	2791.9
7.5°	2785.3	2774.8	2771.0	2768.1	2773.8
10°	2758.6	2749.1	2745.3	2742.4	2749.1
12.5°	2725.2	2715.7	2711.0	2708.1	2712.9
15°	2683.3	2672.8	2669.0	2663.3	2666.2
17.5°	2630.0	2622.3	2619.5	2609.0	2609.9
20°	2569.0	2563.3	2559.4	2544.2	2546.1
22.5°	2506.1	2498.5	2488.9	2475.6	2475.6
25°	2432.7	2424.1	2411.7	2396.5	2391.7
27.5°	2356.5	2347.0	2326.9	2313.6	2308.8
30°	2266.9	2261.2	2240.2	2223.1	2219.3
32.5°	2175.4	2171.6	2144.9	2130.6	2121.1
35°	2090.6	2079.2	2048.7	2030.6	2022.0
37.5°	1990.6	1980.1	1947.7	1931.5	1922.0
40°	1888.6	1875.3	1842.9	1829.5	1817.1
42.5°	1784.7	1775.2	1738.1	1717.1	1708.5
45°	1681.8	1667.5	1630.4	1607.5	1602.7
47.5°	1578.0	1558.0	1521.8	1497.9	1493.2
50°	1462.7	1448.4	1412.2	1387.4	1378.8
52.5°	1354.0	1336.9	1304.5	1280.7	1269.2
55°	1248.3	1229.2	1192.1	1171.1	1161.6
57.5°	1136.8	1119.6	1086.3	1059.6	1052.0
60°	1029.1	1007.2	974.8	952.9	940.5
62.5°	923.3	901.4	870.0	842.3	836.6
65°	812.8	792.8	763.3	738.5	728.0
67.5°	706.1	686.1	657.5	638.4	628.9
70°	600.3	584.1	561.2	536.5	530.8
72.5°	499.3	484.1	460.2	439.3	434.5
75°	402.1	385.0	365.9	344.9	339.2
77.5°	304.0	295.4	275.4	263.9	257.3
80°	217.3	206.8	193.4	183.0	177.2
82.5°	135.3	131.5	122.9	113.4	107.7
85°	72.4	68.6	61.9	55.3	50.5
87.5°	20.0	21.9	21.9	21.0	21.0
90°	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1215715
 CATALOG NUMBER: 24-ID2-65-CFR2-L840-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	15.73	17.31	16.09	17.63	17.94	15.32	16.90	15.68	17.22	17.53
	3H	17.35	18.78	17.73	19.11	19.47	16.84	18.27	17.22	18.59	18.95
	4H	17.92	19.26	18.32	19.61	19.99	17.33	18.67	17.73	19.02	19.40
	6H	18.28	19.52	18.69	19.89	20.28	17.64	18.88	18.05	19.24	19.63
	8H	18.37	19.55	18.79	19.94	20.34	17.70	18.88	18.13	19.27	19.67
	12H	18.41	19.54	18.84	19.92	20.35	17.72	18.85	18.15	19.23	19.66
4H	2H	16.25	17.59	16.64	17.94	18.31	15.91	17.26	16.31	17.60	17.98
	3H	18.08	19.20	18.49	19.60	20.00	17.64	18.76	18.05	19.15	19.55
	4H	18.76	19.77	19.19	20.18	20.62	18.23	19.24	18.67	19.66	20.09
	6H	19.23	20.11	19.68	20.55	21.00	18.64	19.51	19.09	19.95	20.41
	8H	19.35	20.17	19.81	20.61	21.08	18.72	19.55	19.19	19.99	20.45
	12H	19.41	20.15	19.89	20.62	21.09	18.76	19.50	19.25	19.98	20.45
8H	4H	18.96	19.79	19.43	20.23	20.69	18.49	19.31	18.95	19.76	20.22
	6H	19.52	20.20	20.01	20.69	21.16	18.98	19.65	19.47	20.14	20.62
	8H	19.68	20.29	20.20	20.80	21.29	19.11	19.71	19.62	20.22	20.71
	12H	19.79	20.33	20.30	20.82	21.39	19.18	19.72	19.69	20.21	20.77
12H	4H	18.97	19.71	19.45	20.18	20.65	18.51	19.24	18.99	19.72	20.19
	6H	19.53	20.14	20.04	20.65	21.13	19.00	19.61	19.51	20.12	20.61
	8H	19.74	20.28	20.25	20.77	21.33	19.17	19.71	19.68	20.20	20.77

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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

Report Prepared for

Cooper Lighting Solutions

Corelite

Report Number: SP1-2506-458-5

Test Date: 08/26/2025

Luminaire Tested: 22ID2-55-CFR1-L840-U

Data in this report applies to families of products including 22ID2-55-CFR1-L840-U

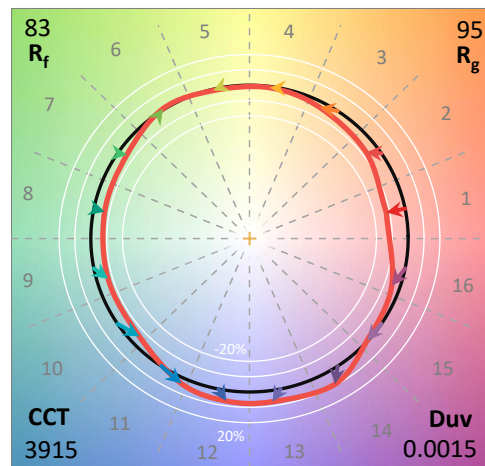
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-458-5
 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-L840-U**
 Description: 2X2 CGTX WITH INDEPTH FRAME AND CFR1 LENS - 5500 LUMEN 4000K 80CRI

Spectral Parameters

CCT (K): 3915
 CIE u': 0.2259
 CIE v': 0.5051
 Duv: 0.0015
 CIE x: 0.3854
 CIE y: 0.3830
 CIE z: 0.2316
 Peak Wavelength (nm): 453
 Dominant Wavelength (nm): 578
 Purity: 30.6207
 Rf: 83.2
 Rg: 94.6

CRI (Ra):	82.3		
R1:	80.6	R9:	7.6
R2:	88.9	R10:	72.9
R3:	94.6	R11:	78.7
R4:	80.5	R12:	57.3
R5:	80.0	R13:	82.7
R6:	84.0	R14:	97.1
R7:	86.1	R15:	74.3
R8:	64.0		



Test Conditions

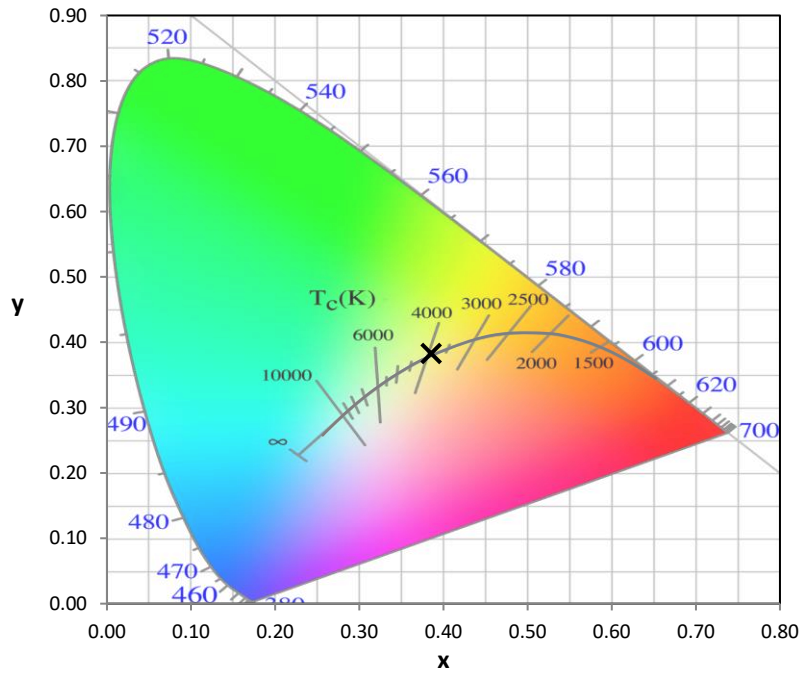
Stabilization Time: 34M
 Operation Time: 1H 34M
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2506-458-5

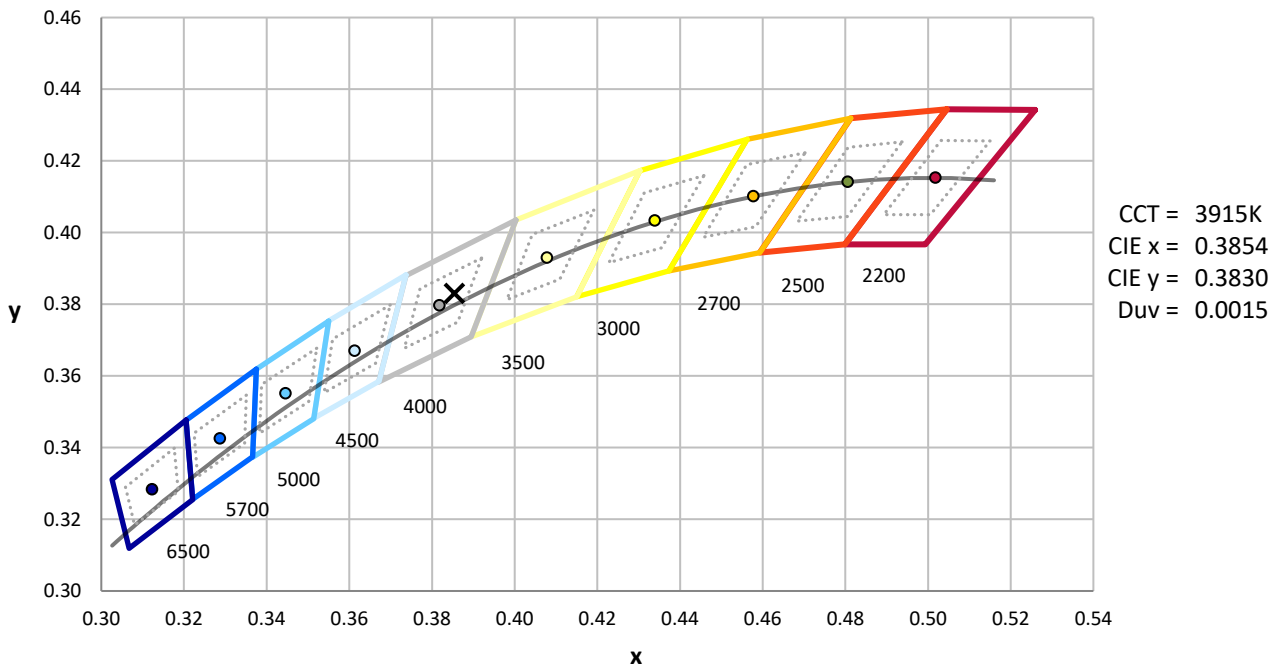
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	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: SP1-2506-458-5

CIE 1931 Chromaticity Diagram



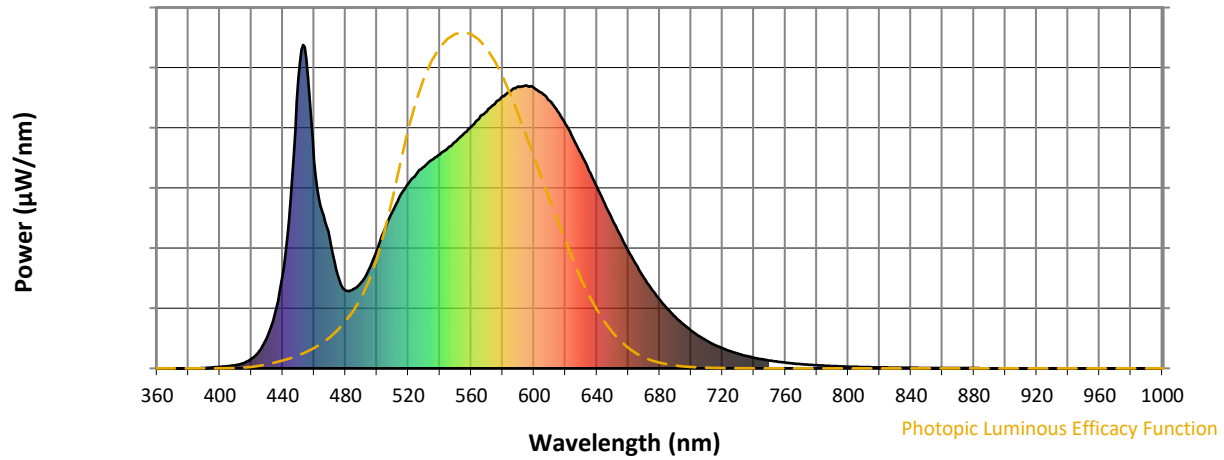
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2506-458-5

Photopic Flux vs. Wavelength

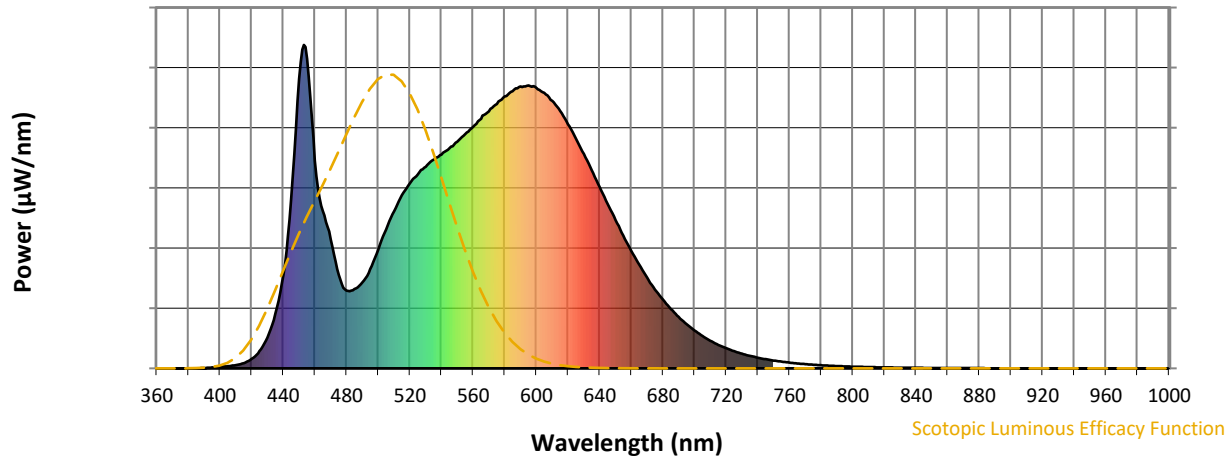


Photopic Lumens: NR

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	266	NR	620	755	NR	750	24	NR	880	1	NR
365	0	NR	495	307	NR	625	710	NR	755	21	NR	885	0	NR
370	0	NR	500	366	NR	630	663	NR	760	18	NR	890	0	NR
375	0	NR	505	430	NR	635	612	NR	765	15	NR	895	0	NR
380	0	NR	510	486	NR	640	561	NR	770	13	NR	900	0	NR
385	0	NR	515	536	NR	645	509	NR	775	11	NR	905	0	NR
390	1	NR	520	571	NR	650	458	NR	780	10	NR	910	0	NR
395	3	NR	525	600	NR	655	410	NR	785	8	NR	915	0	NR
400	5	NR	530	624	NR	660	363	NR	790	7	NR	920	0	NR
405	7	NR	535	645	NR	665	321	NR	795	6	NR	925	0	NR
410	10	NR	540	661	NR	670	280	NR	800	5	NR	930	0	NR
415	16	NR	545	681	NR	675	244	NR	805	5	NR	935	0	NR
420	30	NR	550	701	NR	680	213	NR	810	4	NR	940	0	NR
425	53	NR	555	724	NR	685	183	NR	815	3	NR	945	0	NR
430	95	NR	560	747	NR	690	159	NR	820	3	NR	950	0	NR
435	170	NR	565	772	NR	695	136	NR	825	3	NR	955	0	NR
440	289	NR	570	795	NR	700	117	NR	830	2	NR	960	0	NR
445	522	NR	575	817	NR	705	100	NR	835	2	NR	965	0	NR
450	895	NR	580	841	NR	710	85	NR	840	2	NR	970	0	NR
455	957	NR	585	857	NR	715	72	NR	845	1	NR	975	0	NR
460	642	NR	590	871	NR	720	62	NR	850	1	NR	980	0	NR
465	487	NR	595	875	NR	725	53	NR	855	1	NR	985	0	NR
470	397	NR	600	866	NR	730	45	NR	860	1	NR	990	0	NR
475	289	NR	605	852	NR	735	39	NR	865	1	NR	995	0	NR
480	241	NR	610	827	NR	740	33	NR	870	1	NR	1000	0	NR
485	245	NR	615	796	NR	745	28	NR	875	1	NR			

REPORT NUMBER: SP1-2506-458-5

Scotopic Flux vs. Wavelength



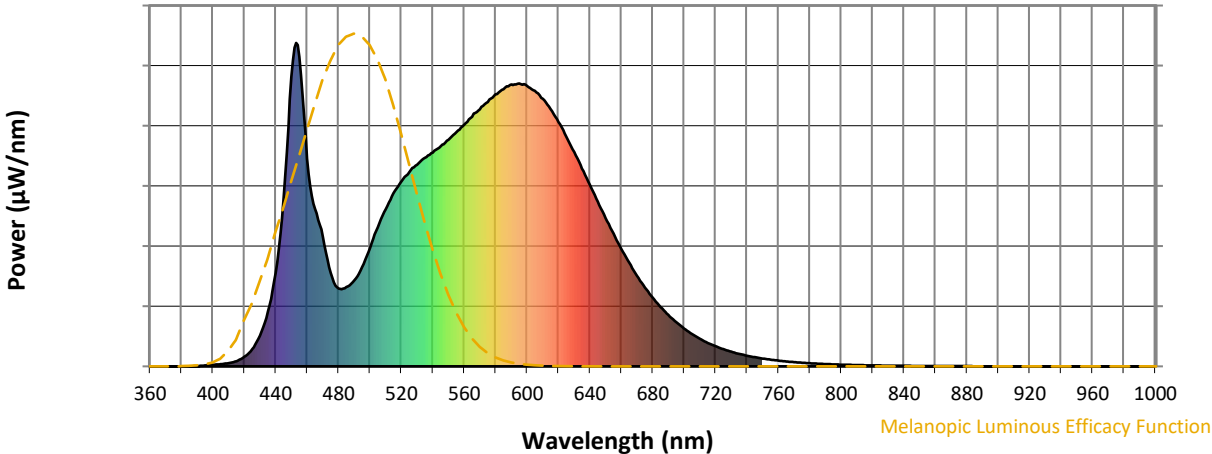
Scotopic Lumens: NR

S/P: 1.65

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	266	NR	620	755	NR	750	24	NR	880	1	NR
365	0	NR	495	307	NR	625	710	NR	755	21	NR	885	0	NR
370	0	NR	500	366	NR	630	663	NR	760	18	NR	890	0	NR
375	0	NR	505	430	NR	635	612	NR	765	15	NR	895	0	NR
380	0	NR	510	486	NR	640	561	NR	770	13	NR	900	0	NR
385	0	NR	515	536	NR	645	509	NR	775	11	NR	905	0	NR
390	1	NR	520	571	NR	650	458	NR	780	10	NR	910	0	NR
395	3	NR	525	600	NR	655	410	NR	785	8	NR	915	0	NR
400	5	NR	530	624	NR	660	363	NR	790	7	NR	920	0	NR
405	7	NR	535	645	NR	665	321	NR	795	6	NR	925	0	NR
410	10	NR	540	661	NR	670	280	NR	800	5	NR	930	0	NR
415	16	NR	545	681	NR	675	244	NR	805	5	NR	935	0	NR
420	30	NR	550	701	NR	680	213	NR	810	4	NR	940	0	NR
425	53	NR	555	724	NR	685	183	NR	815	3	NR	945	0	NR
430	95	NR	560	747	NR	690	159	NR	820	3	NR	950	0	NR
435	170	NR	565	772	NR	695	136	NR	825	3	NR	955	0	NR
440	289	NR	570	795	NR	700	117	NR	830	2	NR	960	0	NR
445	522	NR	575	817	NR	705	100	NR	835	2	NR	965	0	NR
450	895	NR	580	841	NR	710	85	NR	840	2	NR	970	0	NR
455	957	NR	585	857	NR	715	72	NR	845	1	NR	975	0	NR
460	642	NR	590	871	NR	720	62	NR	850	1	NR	980	0	NR
465	487	NR	595	875	NR	725	53	NR	855	1	NR	985	0	NR
470	397	NR	600	866	NR	730	45	NR	860	1	NR	990	0	NR
475	289	NR	605	852	NR	735	39	NR	865	1	NR	995	0	NR
480	241	NR	610	827	NR	740	33	NR	870	1	NR	1000	0	NR
485	245	NR	615	796	NR	745	28	NR	875	1	NR			

REPORT NUMBER: SP1-2506-458-5

Melanopic Flux vs. Wavelength

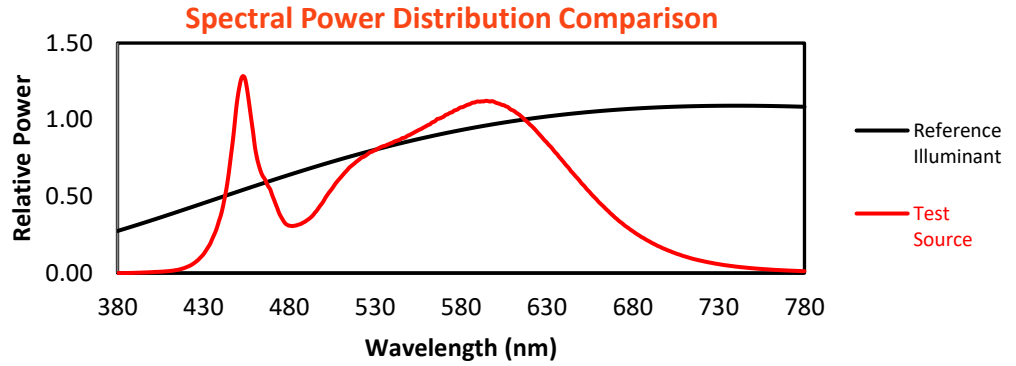


Melanopic Lumens: NR M/P: 3.36

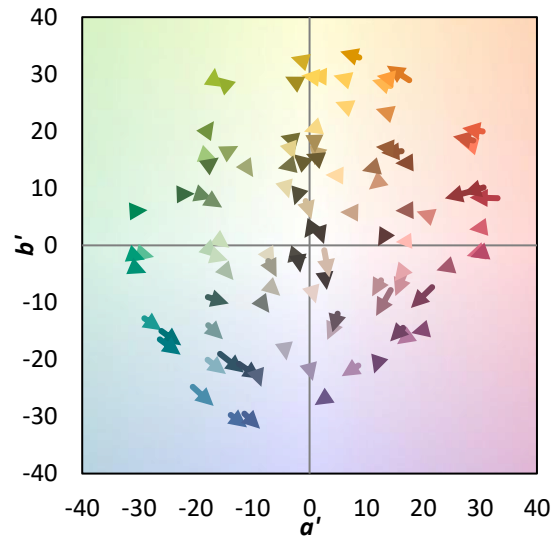
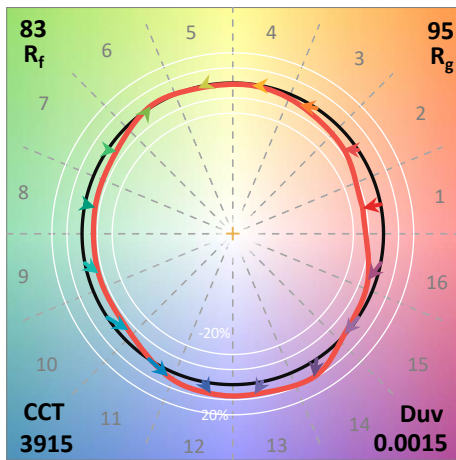
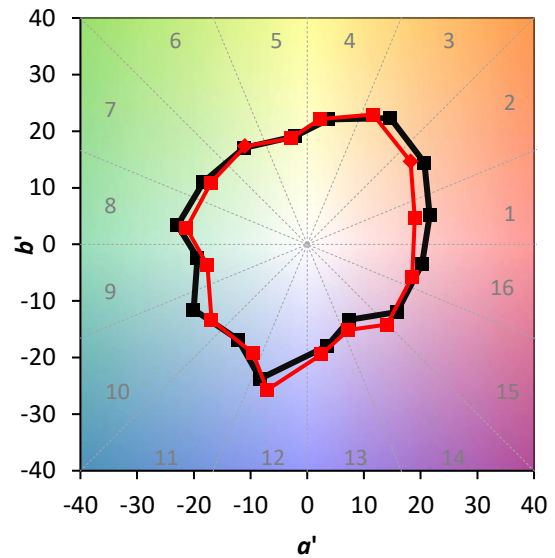
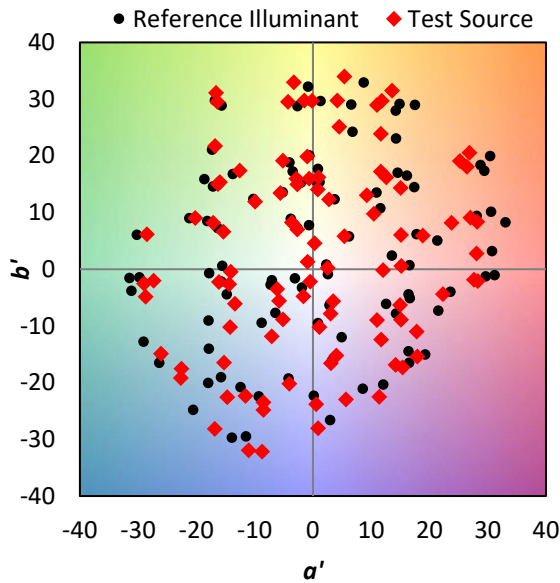
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	266	NR	620	755	NR	750	24	NR	880	1	NR
365	0	NR	495	307	NR	625	710	NR	755	21	NR	885	0	NR
370	0	NR	500	366	NR	630	663	NR	760	18	NR	890	0	NR
375	0	NR	505	430	NR	635	612	NR	765	15	NR	895	0	NR
380	0	NR	510	486	NR	640	561	NR	770	13	NR	900	0	NR
385	0	NR	515	536	NR	645	509	NR	775	11	NR	905	0	NR
390	1	NR	520	571	NR	650	458	NR	780	10	NR	910	0	NR
395	3	NR	525	600	NR	655	410	NR	785	8	NR	915	0	NR
400	5	NR	530	624	NR	660	363	NR	790	7	NR	920	0	NR
405	7	NR	535	645	NR	665	321	NR	795	6	NR	925	0	NR
410	10	NR	540	661	NR	670	280	NR	800	5	NR	930	0	NR
415	16	NR	545	681	NR	675	244	NR	805	5	NR	935	0	NR
420	30	NR	550	701	NR	680	213	NR	810	4	NR	940	0	NR
425	53	NR	555	724	NR	685	183	NR	815	3	NR	945	0	NR
430	95	NR	560	747	NR	690	159	NR	820	3	NR	950	0	NR
435	170	NR	565	772	NR	695	136	NR	825	3	NR	955	0	NR
440	289	NR	570	795	NR	700	117	NR	830	2	NR	960	0	NR
445	522	NR	575	817	NR	705	100	NR	835	2	NR	965	0	NR
450	895	NR	580	841	NR	710	85	NR	840	2	NR	970	0	NR
455	957	NR	585	857	NR	715	72	NR	845	1	NR	975	0	NR
460	642	NR	590	871	NR	720	62	NR	850	1	NR	980	0	NR
465	487	NR	595	875	NR	725	53	NR	855	1	NR	985	0	NR
470	397	NR	600	866	NR	730	45	NR	860	1	NR	990	0	NR
475	289	NR	605	852	NR	735	39	NR	865	1	NR	995	0	NR
480	241	NR	610	827	NR	740	33	NR	870	1	NR	1000	0	NR
485	245	NR	615	796	NR	745	28	NR	875	1	NR			

Summary

$R_f = 83.2$
 $R_g = 94.6$
 CIE $R_a = 82.3$
 $R_9 = 7.6$

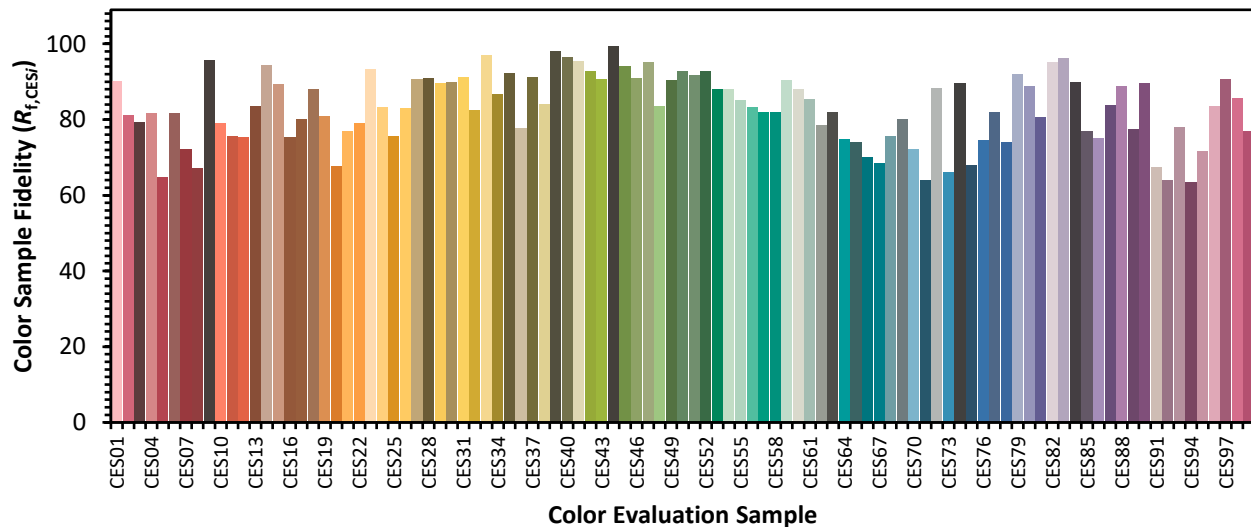


Color Vector Graphics

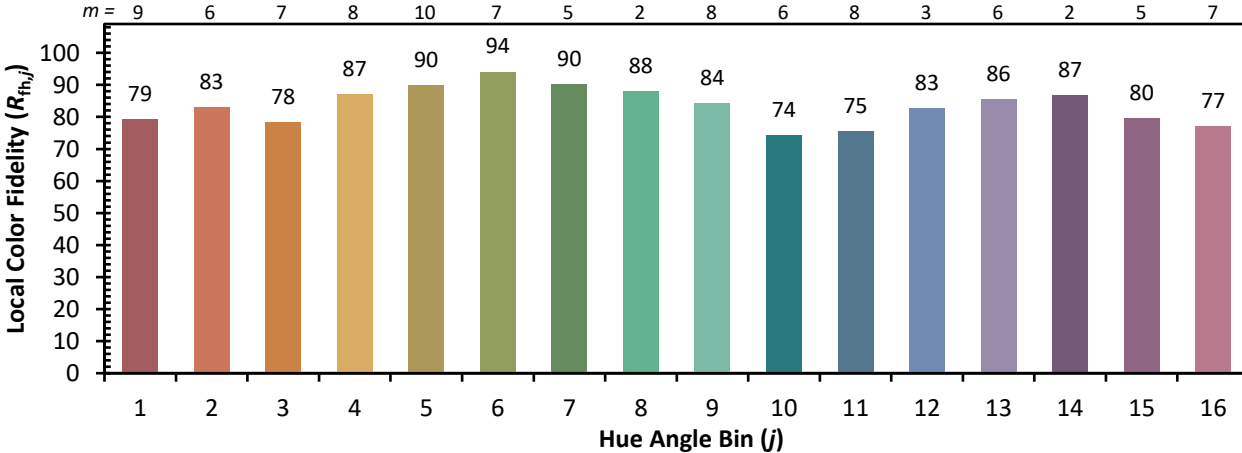
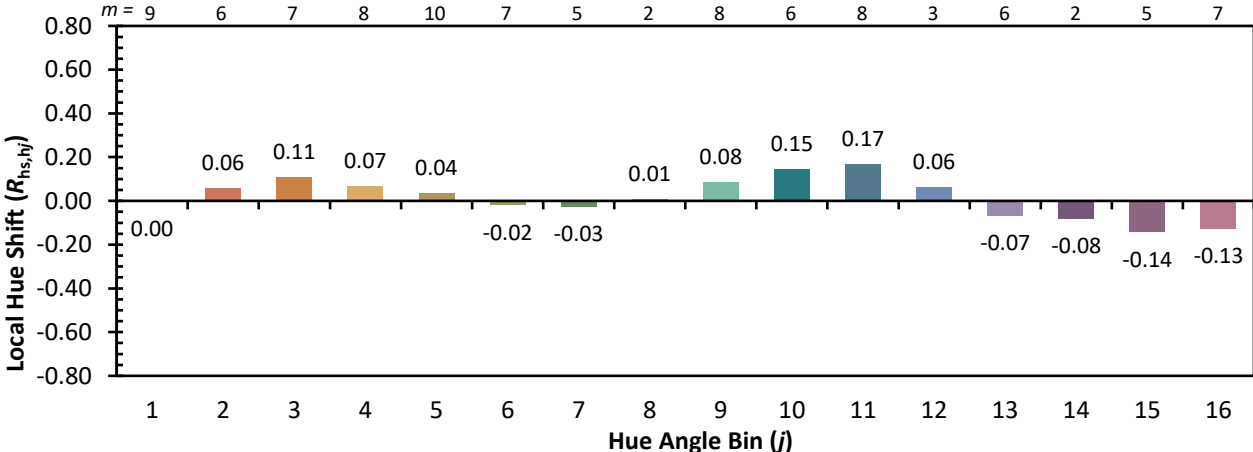
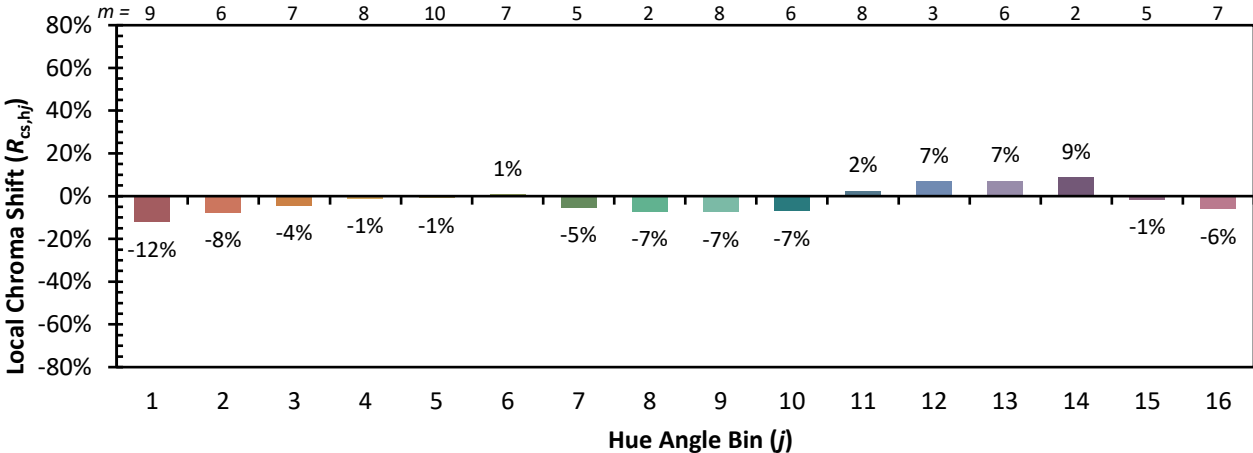


Individual Sample Fidelity Index ($R_{f,i}$)

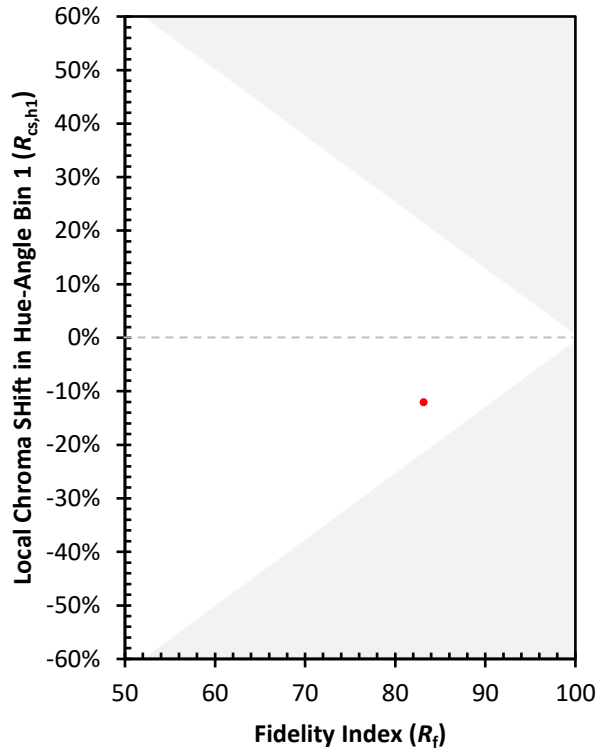
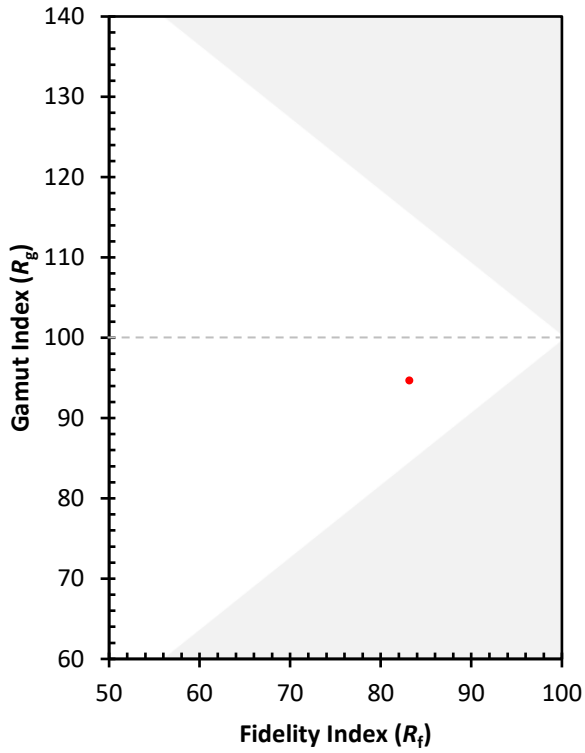
CES01 = 86	CES26 = 83	CES51 = 92	CES76 = 75
CES02 = 61	CES27 = 91	CES52 = 93	CES77 = 82
CES03 = 31	CES28 = 91	CES53 = 88	CES78 = 74
CES04 = 70	CES29 = 90	CES54 = 88	CES79 = 92
CES05 = 48	CES30 = 90	CES55 = 85	CES80 = 89
CES06 = 50	CES31 = 91	CES56 = 83	CES81 = 81
CES07 = 41	CES32 = 83	CES57 = 82	CES82 = 95
CES08 = 40	CES33 = 97	CES58 = 82	CES83 = 96
CES09 = 29	CES34 = 87	CES59 = 90	CES84 = 90
CES10 = 74	CES35 = 92	CES60 = 88	CES85 = 77
CES11 = 57	CES36 = 78	CES61 = 85	CES86 = 75
CES12 = 63	CES37 = 91	CES62 = 79	CES87 = 84
CES13 = 42	CES38 = 84	CES63 = 82	CES88 = 89
CES14 = 74	CES39 = 98	CES64 = 75	CES89 = 77
CES15 = 71	CES40 = 96	CES65 = 74	CES90 = 90
CES16 = 47	CES41 = 95	CES66 = 70	CES91 = 67
CES17 = 49	CES42 = 93	CES67 = 69	CES92 = 64
CES18 = 56	CES43 = 91	CES68 = 76	CES93 = 78
CES19 = 71	CES44 = 99	CES69 = 80	CES94 = 63
CES20 = 65	CES45 = 94	CES70 = 72	CES95 = 72
CES21 = 86	CES46 = 91	CES71 = 64	CES96 = 84
CES22 = 78	CES47 = 95	CES72 = 88	CES97 = 91
CES23 = 91	CES48 = 83	CES73 = 66	CES98 = 86
CES24 = 90	CES49 = 90	CES74 = 90	CES99 = 77
CES25 = 71	CES50 = 93	CES75 = 68	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)