

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: P1214591

Luminaire Tested: 22-ID2-45-CFR1-L940-U

Issue Date: 12/4/2025

Test Information

Test Method: LM-79-2019
Report Number: P1214591
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-L940-U
Description: 2X2 IN DEPTH TROFFER WITH 1INCH CUBE REGRESS LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

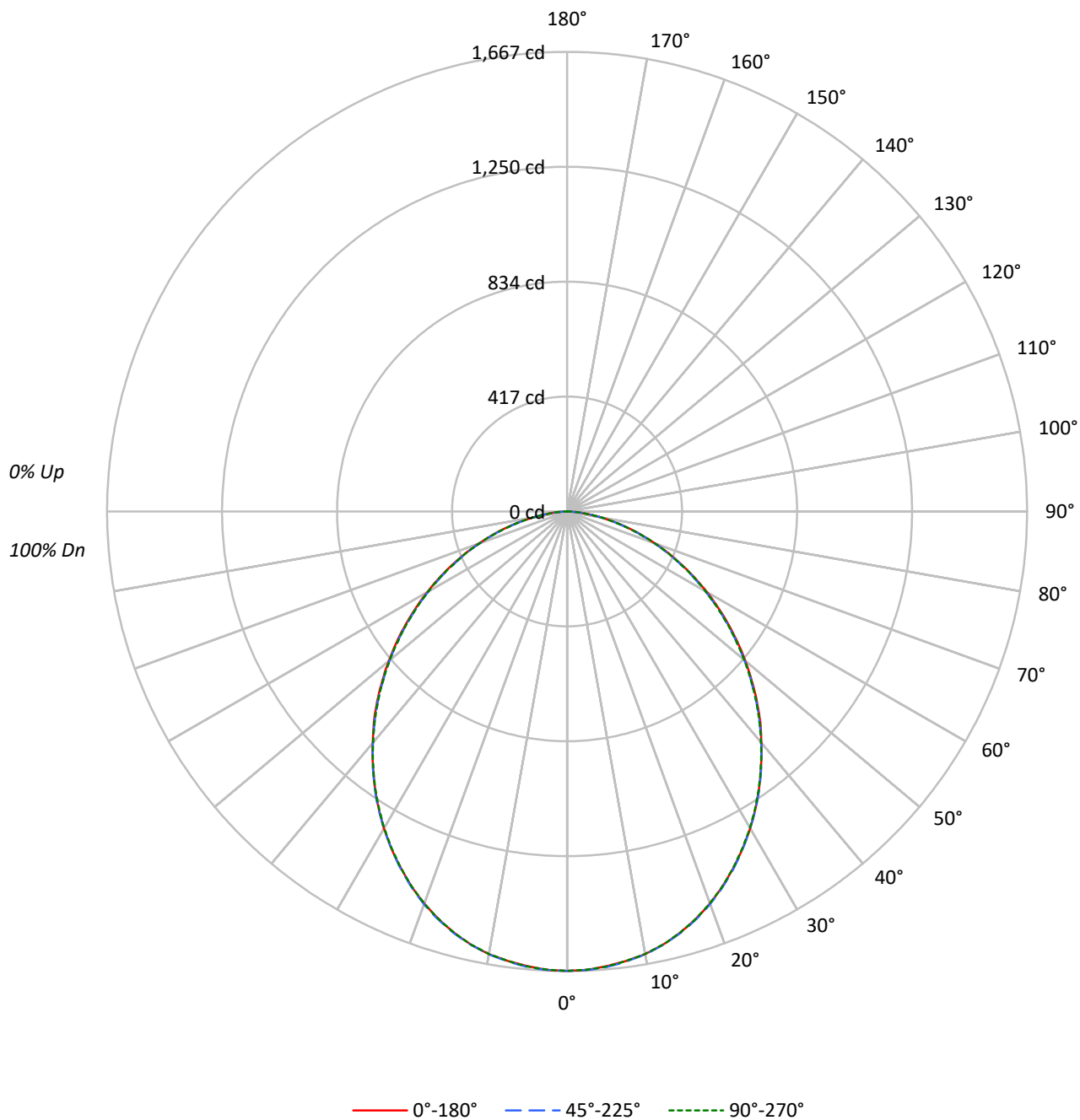
Lumens per Lamp: N/A
Luminaire Lumens: 4139.6 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.29
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P1214591
CATALOG NUMBER: 22-ID2-45-CFR1-L940-U

Luminous Intensity Polar Plot



TEST NUMBER: P1214591

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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		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°	4485	4485	4485
5°	4472	4479	4475
10°	4455	4456	4453
15°	4406	4412	4406
20°	4334	4341	4333
25°	4235	4241	4232
30°	4125	4123	4118
35°	3992	3997	3988
40°	3847	3845	3842
45°	3702	3685	3683
50°	3530	3510	3510
55°	3348	3321	3321
60°	3150	3118	3118
65°	2930	2896	2896
70°	2673	2648	2656
75°	2359	2336	2342
80°	1932	1915	1932
85°	1371	1355	1405

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3702 cd/sqm

TEST NUMBER: P1214591
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.4	3.8
10°-20°	445.9	10.8
20°-30°	656.8	15.9
30°-40°	759.1	18.3
40°-50°	745.9	18.0
50°-60°	632.8	15.3
60°-70°	450.5	10.9
70°-80°	237.4	5.7
80°-90°	54.0	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°	1260.1	30.4
0°-40°	2019.2	48.8
0°-60°	3397.8	82.1
0°-90°	4139.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4139.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1667	1667	1667	1667	1667	
5°	1655	1658	1658	1658	1656	157
15°	1582	1584	1584	1583	1582	446
25°	1426	1428	1428	1426	1425	657
35°	1215	1217	1217	1211	1214	760
45°	973	967	968	962	968	750
55°	714	707	708	704	708	638
65°	460	454	455	451	455	456
75°	227	222	225	220	225	241
85°	44	42	44	43	46	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1666.6	1666.6	1666.6	1666.6	1666.6
2.5°	1664.0	1665.0	1664.5	1665.0	1663.4
5°	1655.4	1658.1	1658.1	1657.5	1656.5
7.5°	1644.2	1646.8	1646.3	1646.3	1644.2
10°	1630.3	1631.3	1630.8	1630.8	1629.7
12.5°	1609.4	1610.5	1609.9	1609.9	1608.9
15°	1581.6	1583.7	1583.7	1582.6	1581.6
17.5°	1550.0	1551.6	1552.1	1550.0	1549.5
20°	1513.6	1515.2	1515.8	1513.1	1513.1
22.5°	1471.9	1474.0	1474.0	1471.3	1471.9
25°	1426.4	1428.5	1428.5	1425.9	1425.3
27.5°	1378.3	1379.9	1379.3	1376.6	1376.6
30°	1327.4	1328.0	1326.9	1322.1	1325.3
32.5°	1272.3	1273.4	1273.9	1268.6	1270.7
35°	1215.1	1216.7	1216.7	1211.3	1214.0
37.5°	1156.2	1156.7	1156.7	1151.4	1154.6
40°	1095.2	1095.2	1094.7	1089.3	1093.6
42.5°	1036.4	1031.0	1032.1	1026.7	1031.5
45°	972.7	967.3	968.4	962.5	967.9
47.5°	908.0	902.6	903.1	899.4	903.1
50°	843.2	837.9	838.4	834.1	838.4
52.5°	778.5	772.6	772.6	768.8	772.6
55°	713.7	707.3	707.9	703.6	707.9
57.5°	649.0	642.6	643.1	639.4	643.1
60°	585.3	578.9	579.4	575.7	579.4
62.5°	522.2	515.8	516.3	512.6	519.5
65°	460.1	454.2	454.8	451.0	454.8
67.5°	399.7	393.8	394.3	389.0	397.0
70°	339.7	334.4	336.5	330.1	337.6
72.5°	282.5	277.1	279.3	273.4	280.4
75°	226.9	222.0	224.7	219.9	225.3
77.5°	173.9	170.1	172.3	168.5	172.8
80°	124.7	121.5	123.6	119.8	124.7
82.5°	80.8	78.1	80.8	78.7	81.3
85°	44.4	41.7	43.9	42.8	45.5
87.5°	15.0	13.4	15.0	13.4	15.5
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	16.08	17.67	16.45	17.99	18.30	16.04	17.63	16.41	17.95	18.26
	3H	17.69	19.12	18.07	19.45	19.81	17.64	19.07	18.02	19.40	19.76
	4H	18.25	19.59	18.65	19.94	20.32	18.20	19.54	18.60	19.89	20.27
	6H	18.62	19.86	19.03	20.23	20.62	18.57	19.81	18.98	20.17	20.57
	8H	18.71	19.90	19.14	20.29	20.69	18.66	19.85	19.09	20.24	20.64
	12H	18.76	19.89	19.19	20.28	20.70	18.71	19.85	19.14	20.23	20.66
4H	2H	16.65	18.00	17.05	18.34	18.72	16.62	17.96	17.02	18.31	18.69
	3H	18.46	19.59	18.87	19.98	20.38	18.42	19.54	18.83	19.94	20.34
	4H	19.13	20.14	19.57	20.56	21.00	19.08	20.10	19.52	20.51	20.95
	6H	19.61	20.49	20.06	20.93	21.38	19.56	20.44	20.01	20.88	21.34
	8H	19.73	20.56	20.19	21.00	21.46	19.69	20.51	20.15	20.95	21.42
	12H	19.81	20.55	20.29	21.02	21.49	19.77	20.50	20.25	20.98	21.45
8H	4H	19.38	20.20	19.84	20.65	21.11	19.34	20.16	19.80	20.60	21.07
	6H	19.94	20.62	20.44	21.11	21.59	19.90	20.58	20.39	21.07	21.55
	8H	20.12	20.73	20.63	21.24	21.72	20.08	20.69	20.59	21.20	21.68
	12H	20.24	20.78	20.75	21.27	21.83	20.20	20.75	20.71	21.24	21.80
12H	4H	19.39	20.13	19.88	20.61	21.08	19.35	20.09	19.83	20.57	21.04
	6H	19.97	20.58	20.48	21.09	21.58	19.93	20.54	20.44	21.05	21.53
	8H	20.19	20.73	20.70	21.22	21.78	20.15	20.69	20.66	21.18	21.75

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

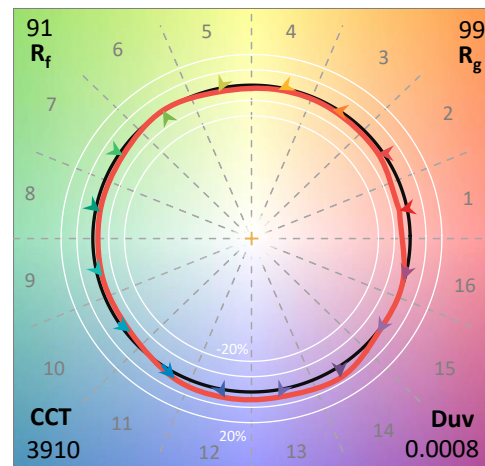
Test Information

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

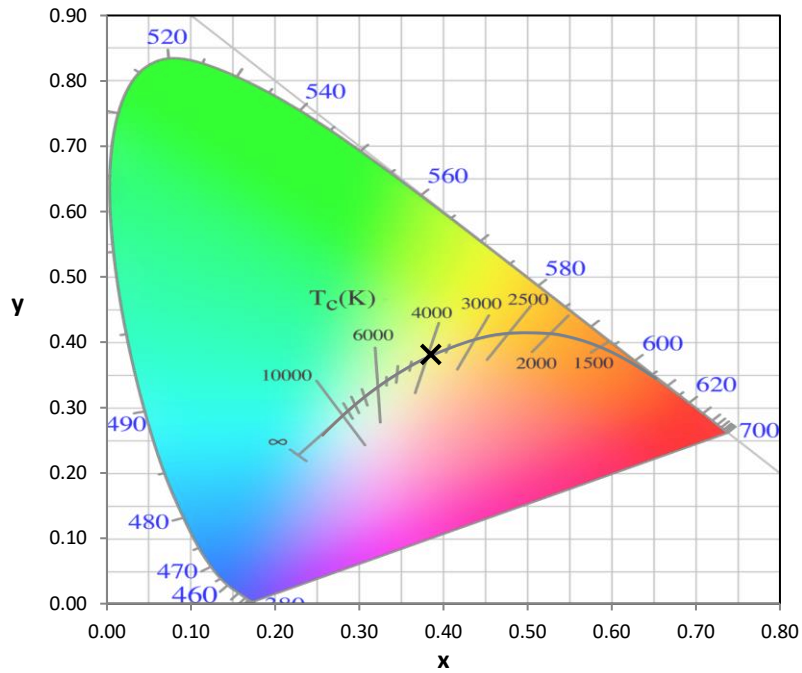
Stabilization Time: 31M
 Operation Time: 1H 31M
 Sphere Temperature (°C): 25.2.

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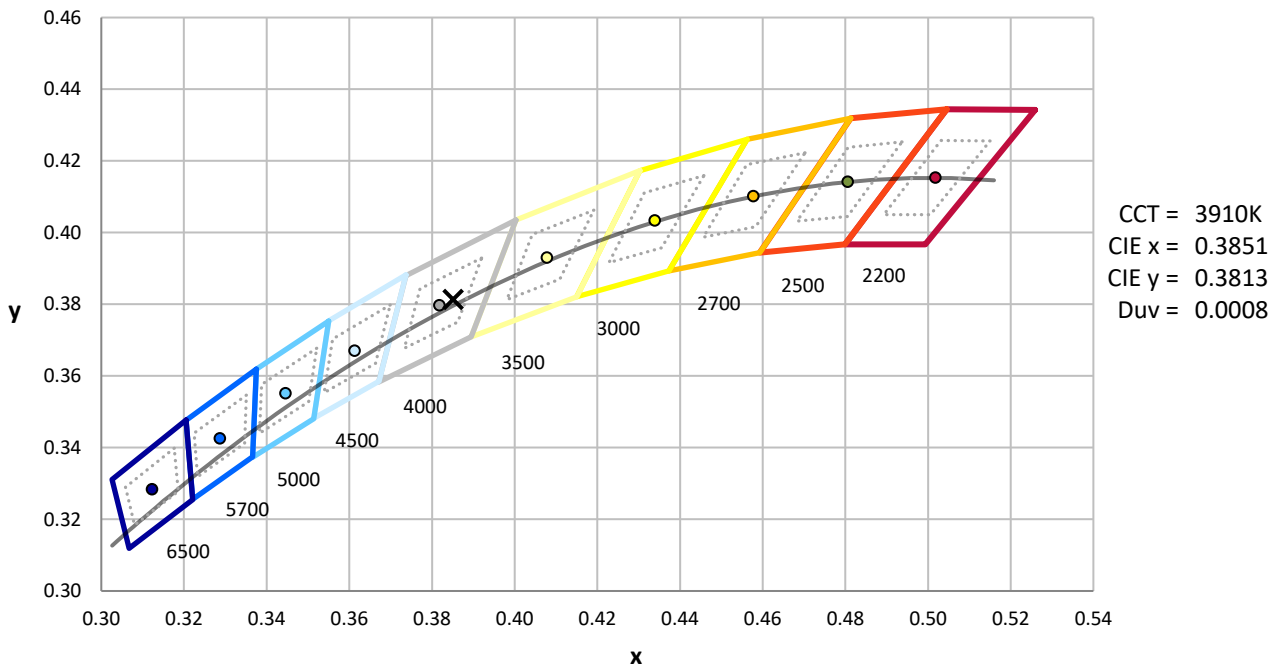
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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



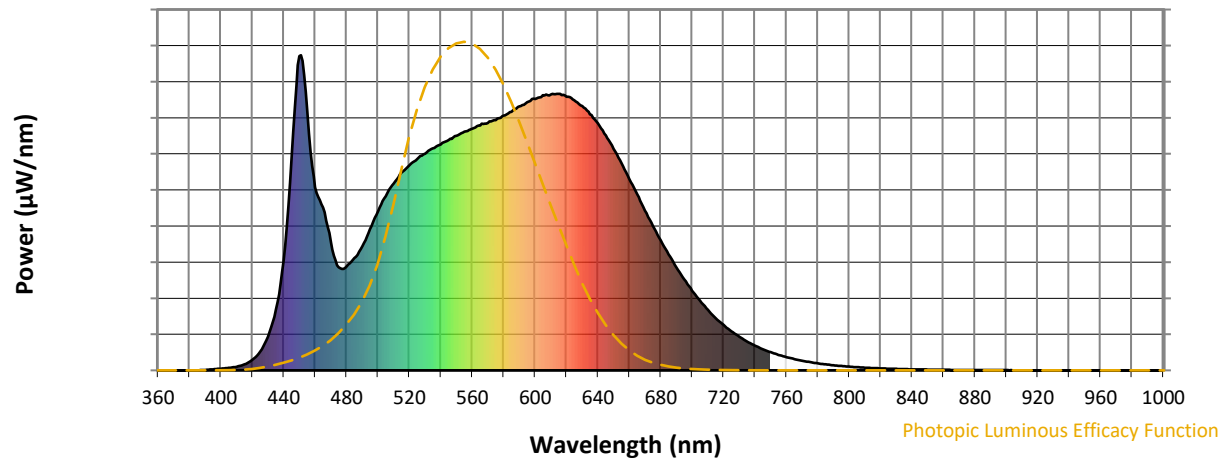
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 4000K 4-step quadrangle

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Photopic Flux vs. Wavelength

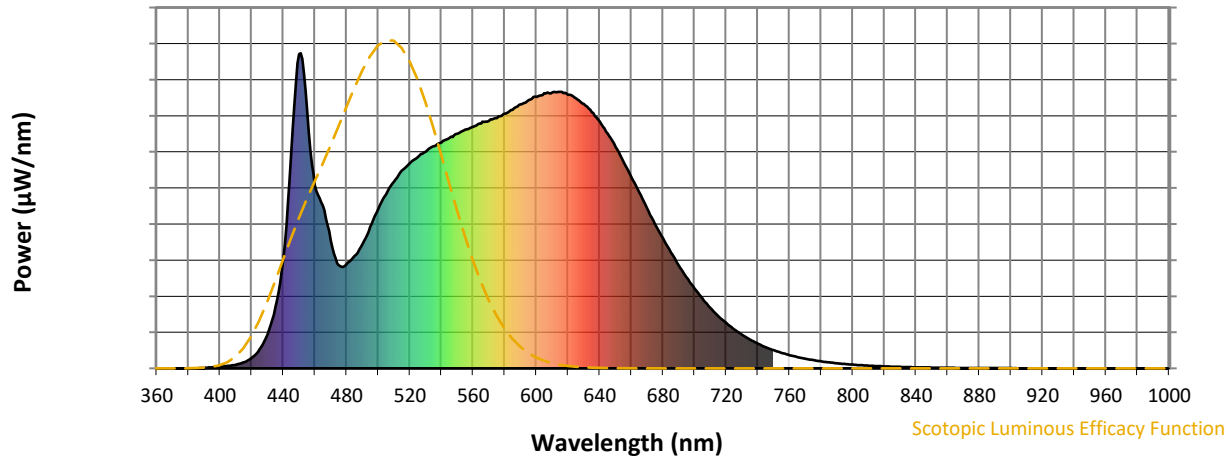


Photopic Lumens: NR

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



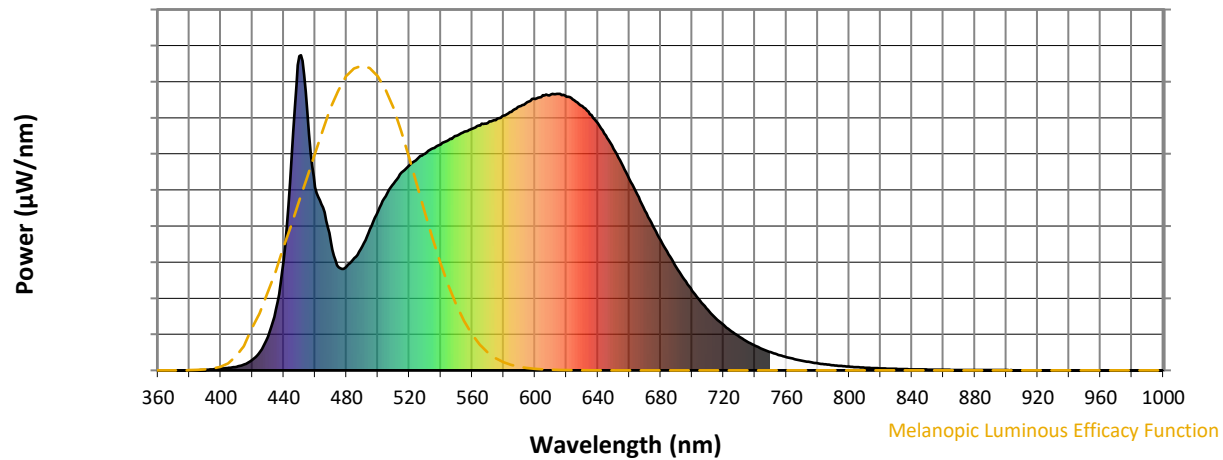
Scotopic Lumens: NR

S/P: 1.75

λ (nm)	Power W ^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	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

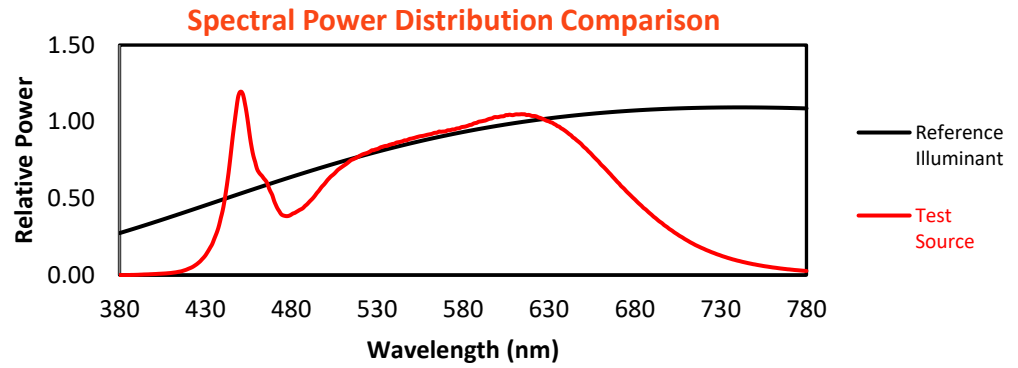
λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	394	NR	620	868	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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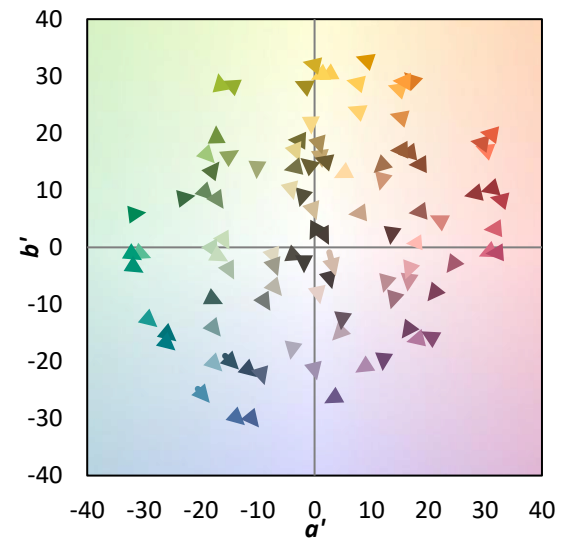
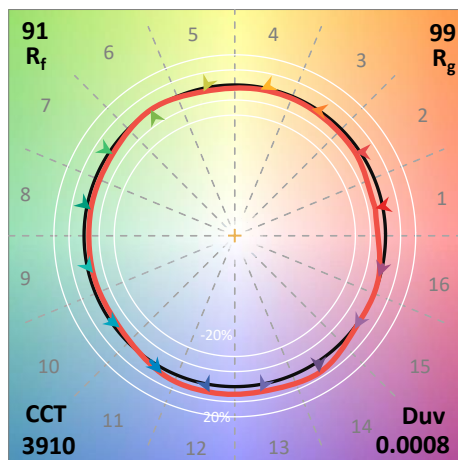
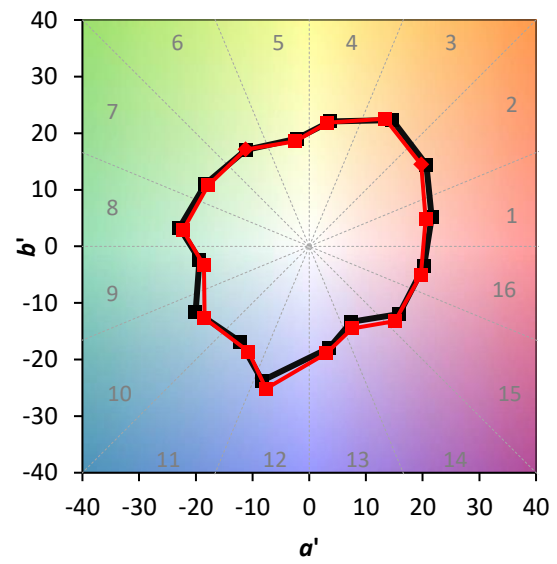
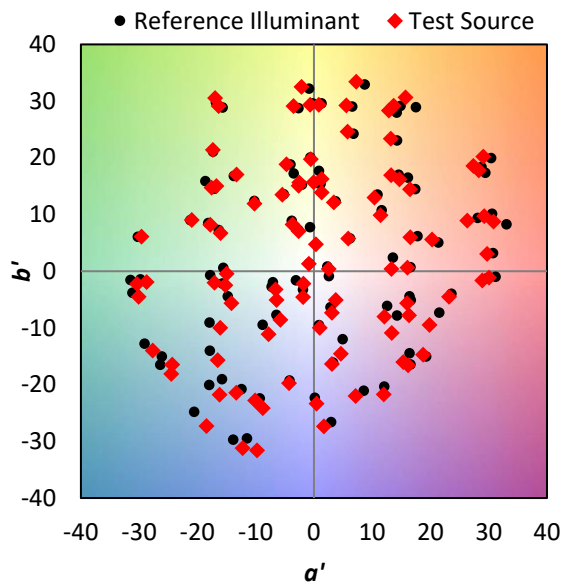
TM-30-18

Summary

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

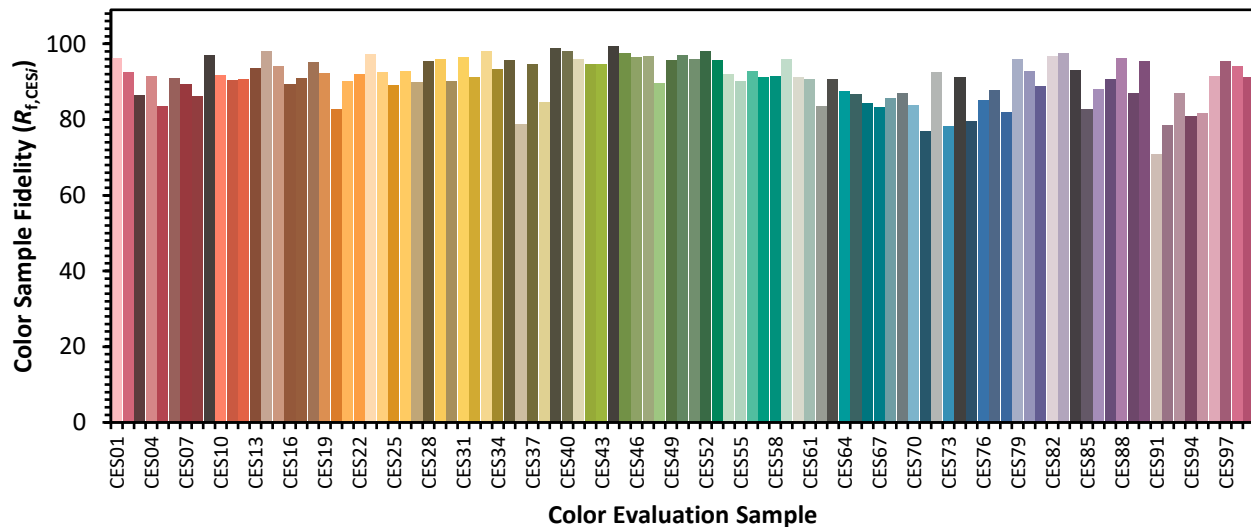


Color Vector Graphics

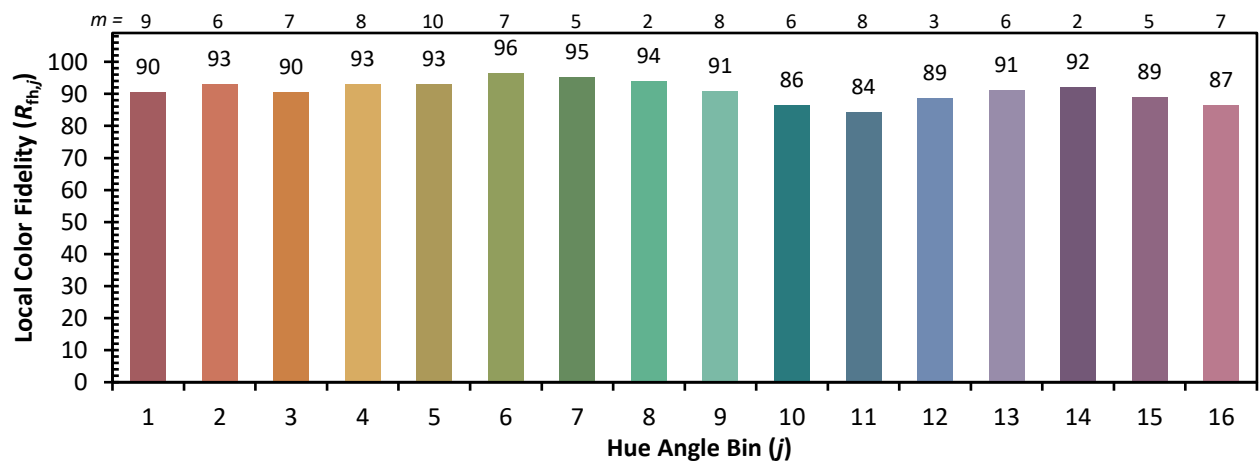
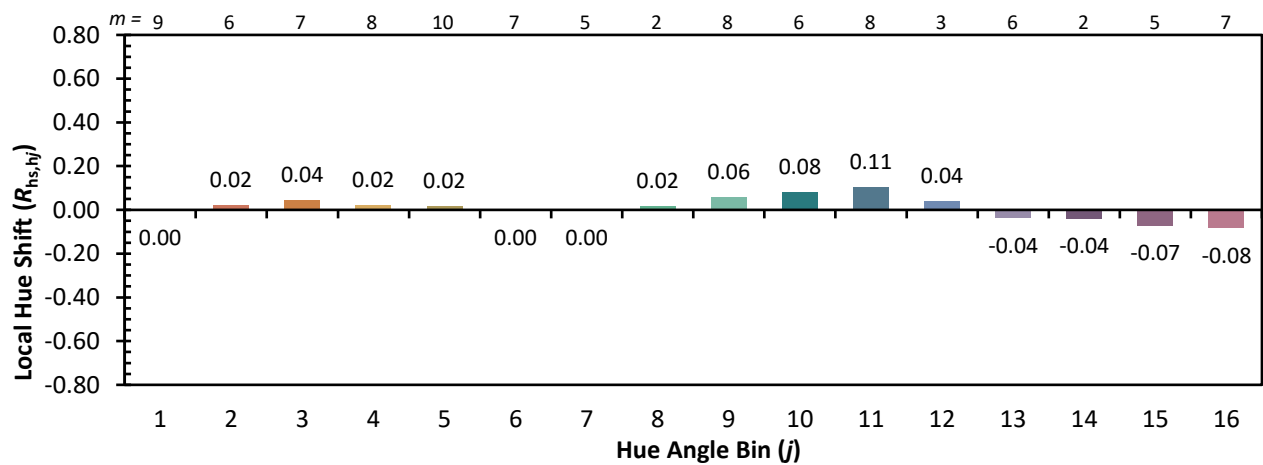
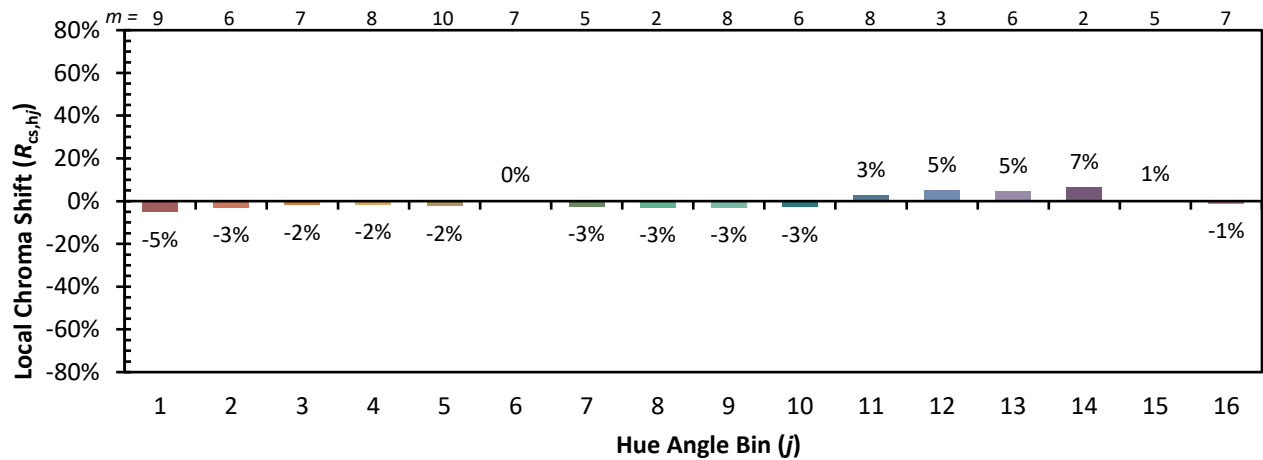


Individual Sample Fidelity Index ($R_{f,i}$)

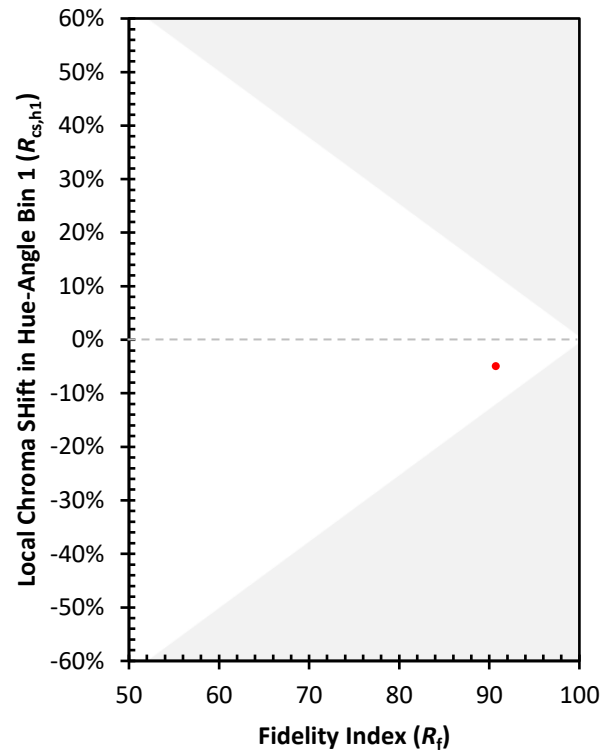
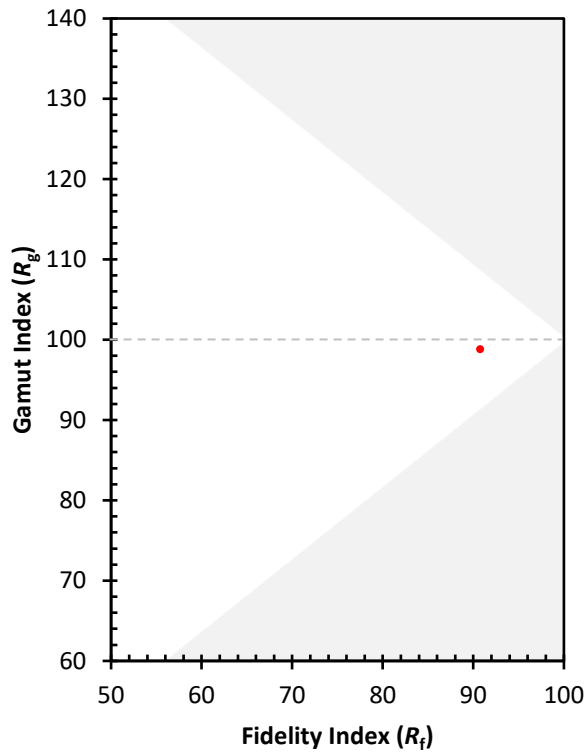
CES01 = 86	CES26 = 93	CES51 = 96	CES76 = 85
CES02 = 62	CES27 = 90	CES52 = 98	CES77 = 88
CES03 = 31	CES28 = 96	CES53 = 96	CES78 = 82
CES04 = 69	CES29 = 96	CES54 = 92	CES79 = 96
CES05 = 49	CES30 = 90	CES55 = 90	CES80 = 93
CES06 = 50	CES31 = 97	CES56 = 93	CES81 = 89
CES07 = 42	CES32 = 91	CES57 = 91	CES82 = 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)