

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: P1215618

Luminaire Tested: 24-ID2-80-CFR1-L835-U

Issue Date: 12/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1215618
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2508-510-6)
Test Lab: INNOVATION CENTER
Issue Date: 12/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24-ID2-80-CFR1-L835-U
Description: 2X4 IN DEPTH TROFFER WITH 1INCH CUBE REGRESS LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

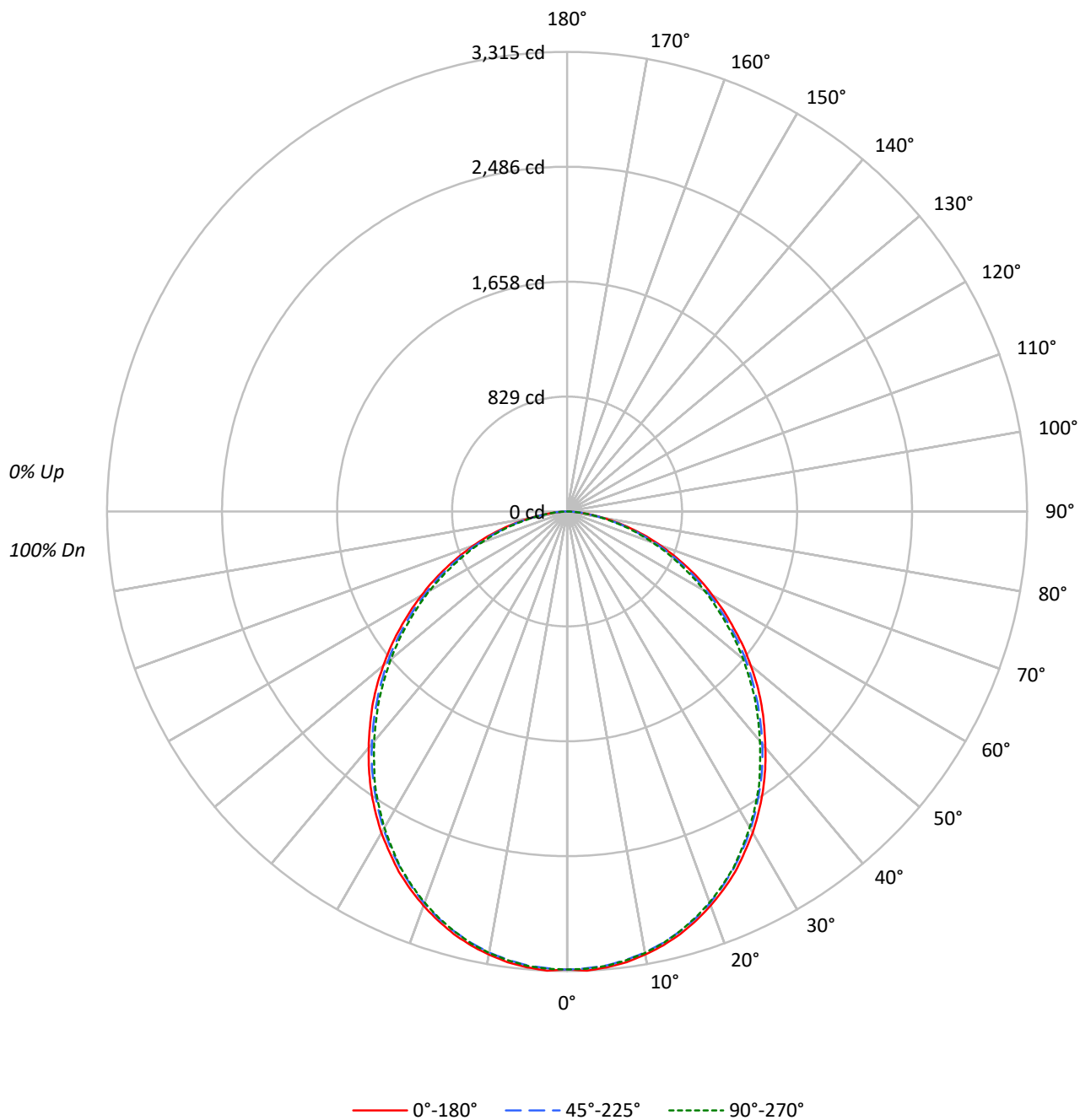
Lumens per Lamp: N/A
Luminaire Lumens: 8315.5 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.19 / 1.3
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 69.1
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: P1215618
CATALOG NUMBER: 24-ID2-80-CFR1-L835-U

Luminous Intensity Polar Plot



TEST NUMBER: P1215618

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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	95	98	95	92		94	92	90		85
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		71
3	91	81	73	67	89	79	72	66	77	70	65		74	68	64		61
4	84	72	64	57	81	71	63	57	68	61	56		66	60	55		52
5	77	65	56	49	75	64	55	49	61	54	49		59	53	48		45
6	71	58	50	43	70	57	49	43	56	48	43		54	47	42		40
7	66	53	44	38	65	52	44	38	51	43	38		49	43	38		36
8	62	49	40	34	60	48	40	34	47	39	34		45	39	34		32
9	58	45	37	31	56	44	36	31	43	36	31		42	35	31		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°	4445	4445	4445
5°	4458	4438	4442
10°	4435	4413	4418
15°	4395	4369	4368
20°	4332	4306	4298
25°	4257	4217	4210
30°	4157	4109	4090
35°	4042	3982	3962
40°	3905	3843	3797
45°	3775	3688	3643
50°	3615	3529	3470
55°	3441	3345	3270
60°	3256	3152	3076
65°	3060	2933	2836
70°	2816	2686	2579
75°	2510	2362	2280
80°	2051	1936	1839
85°	1439	1403	1298

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3775 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	312.1	3.8
10°-20°	884.7	10.6
20°-30°	1308.6	15.7
30°-40°	1518.4	18.3
40°-50°	1498.7	18.0
50°-60°	1278.9	15.4
60°-70°	916.8	11.0
70°-80°	485.8	5.8
80°-90°	111.6	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°	2505.4	30.1
0°-40°	4023.7	48.4
0°-60°	6801.3	81.8
0°-90°	8315.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8315.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3304	3304	3304	3304	3304	
5°	3300	3290	3286	3281	3289	313
15°	3155	3142	3137	3131	3136	889
25°	2868	2854	2840	2831	2836	1319
35°	2461	2446	2424	2412	2412	1538
45°	1984	1964	1938	1920	1914	1528
55°	1467	1451	1426	1405	1394	1314
65°	961	948	921	904	891	951
75°	483	470	454	443	438	512
85°	93	95	91	86	84	117
90°	0	0	0	0	0	

TEST NUMBER: P1215618

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3303.8	3303.8	3303.8	3303.8	3303.8
2.5°	3315.2	3302.7	3298.2	3294.8	3301.6
5°	3300.4	3290.2	3285.7	3281.1	3289.1
7.5°	3278.9	3267.5	3261.8	3258.4	3265.2
10°	3245.9	3235.7	3230.0	3226.6	3233.4
12.5°	3205.0	3194.8	3188.0	3184.6	3191.4
15°	3155.0	3142.5	3136.8	3131.2	3135.7
17.5°	3093.7	3084.6	3077.8	3068.7	3073.2
20°	3025.5	3014.1	3007.3	2999.4	3001.6
22.5°	2949.4	2940.3	2927.8	2921.0	2921.0
25°	2867.6	2853.9	2840.3	2831.2	2835.8
27.5°	2771.0	2759.6	2744.9	2732.4	2733.5
30°	2675.6	2660.8	2644.9	2633.5	2632.4
32.5°	2569.9	2559.7	2537.0	2525.6	2522.2
35°	2460.8	2446.1	2424.5	2412.0	2412.0
37.5°	2345.0	2332.5	2310.9	2292.7	2284.7
40°	2223.4	2210.9	2188.2	2168.9	2162.0
42.5°	2103.0	2096.1	2063.2	2047.3	2037.1
45°	1983.7	1964.4	1938.2	1920.0	1914.4
47.5°	1858.7	1841.7	1812.1	1791.7	1782.6
50°	1726.9	1715.5	1686.0	1661.0	1657.6
52.5°	1601.9	1582.6	1559.9	1532.6	1528.1
55°	1466.7	1450.8	1425.8	1405.4	1394.0
57.5°	1339.5	1327.0	1302.0	1274.7	1269.0
60°	1210.0	1197.5	1171.3	1150.9	1142.9
62.5°	1088.4	1070.2	1049.8	1023.6	1015.7
65°	961.2	947.5	921.4	904.4	890.7
67.5°	833.9	823.7	802.1	786.2	777.1
70°	715.8	703.3	682.8	663.5	655.5
72.5°	599.9	584.0	564.7	551.0	547.6
75°	482.9	470.4	454.4	443.1	438.5
77.5°	368.1	363.6	349.9	337.4	332.9
80°	264.7	261.3	249.9	242.0	237.4
82.5°	171.6	169.3	164.7	157.9	156.8
85°	93.2	95.4	90.9	86.3	84.1
87.5°	32.9	31.8	30.7	29.5	27.3
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	16.29	17.88	16.65	18.19	18.51	15.99	17.58	16.35	17.89	18.21
	3H	17.93	19.37	18.31	19.69	20.05	17.58	19.01	17.95	19.34	19.70
	4H	18.52	19.87	18.92	20.21	20.59	18.13	19.47	18.52	19.82	20.20
	6H	18.90	20.15	19.31	20.51	20.90	18.48	19.72	18.89	20.09	20.48
	8H	19.00	20.19	19.42	20.58	20.98	18.57	19.76	18.99	20.15	20.55
	12H	19.05	20.19	19.48	20.57	21.00	18.61	19.75	19.04	20.13	20.56
4H	2H	16.83	18.18	17.23	18.52	18.90	16.59	17.94	16.99	18.29	18.66
	3H	18.69	19.81	19.10	20.21	20.61	18.38	19.51	18.79	19.91	20.31
	4H	19.39	20.40	19.82	20.82	21.25	19.04	20.06	19.48	20.47	20.91
	6H	19.88	20.77	20.34	21.21	21.67	19.50	20.39	19.96	20.83	21.28
	8H	20.02	20.85	20.48	21.29	21.75	19.62	20.45	20.09	20.89	21.36
	12H	20.10	20.84	20.58	21.32	21.79	19.70	20.44	20.18	20.92	21.39
8H	4H	19.62	20.45	20.08	20.89	21.36	19.31	20.14	19.77	20.58	21.05
	6H	20.21	20.90	20.71	21.39	21.86	19.86	20.55	20.36	21.04	21.51
	8H	20.40	21.01	20.91	21.52	22.01	20.04	20.65	20.55	21.16	21.64
	12H	20.53	21.07	21.04	21.57	22.13	20.16	20.70	20.66	21.19	21.75
12H	4H	19.63	20.38	20.11	20.85	21.32	19.33	20.08	19.81	20.55	21.02
	6H	20.23	20.85	20.74	21.36	21.84	19.89	20.51	20.41	21.02	21.51
	8H	20.47	21.01	20.98	21.50	22.06	20.12	20.66	20.62	21.15	21.71

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

Report Prepared for

Cooper Lighting Solutions

Corelite

Report Number: SP1-2506-458-1

Test Date: 07/23/2025

Luminaire Tested: 22ID2-55-CFR1-L835-U

Data in this report applies to families of products including 22ID2-55-CFR1-L835-U

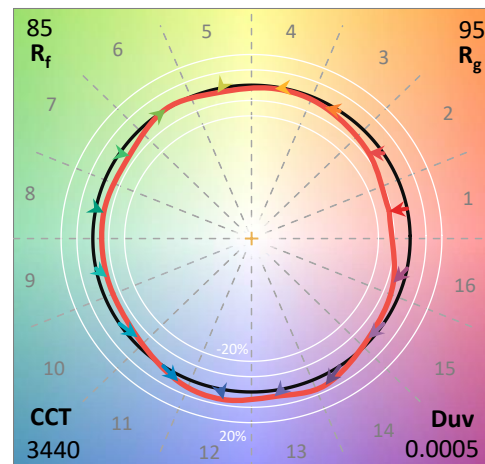
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2506-458-1
 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-L835-U**
 Description: 2X2 CGTX WITH INDEPTH FRAME AND CFR1 LENS - 5500 LUMEN 3500K 80CRI

Spectral Parameters

CCT (K): 3440
 CIE u' : 0.2370
 CIE v' : 0.5132
 Duv: 0.0005
 CIE x: 0.4093
 CIE y: 0.3940
 CIE z: 0.1967
 Peak Wavelength (nm): 599
 Dominant Wavelength (nm): 580
 Purity: 41.09375
 R_f: 84.9
 R_g: 94.6

CRI (Ra): 84.2
 R1: 82.8
 R2: 91.7
 R3: 96.7
 R4: 81.9
 R5: 82.6
 R6: 88.8
 R7: 85.0
 R8: 63.7
 R9: 13.6
 R10: 80.1
 R11: 81.1
 R12: 65.8
 R13: 85.2
 R14: 98.7
 R15: 76.2



Test Conditions

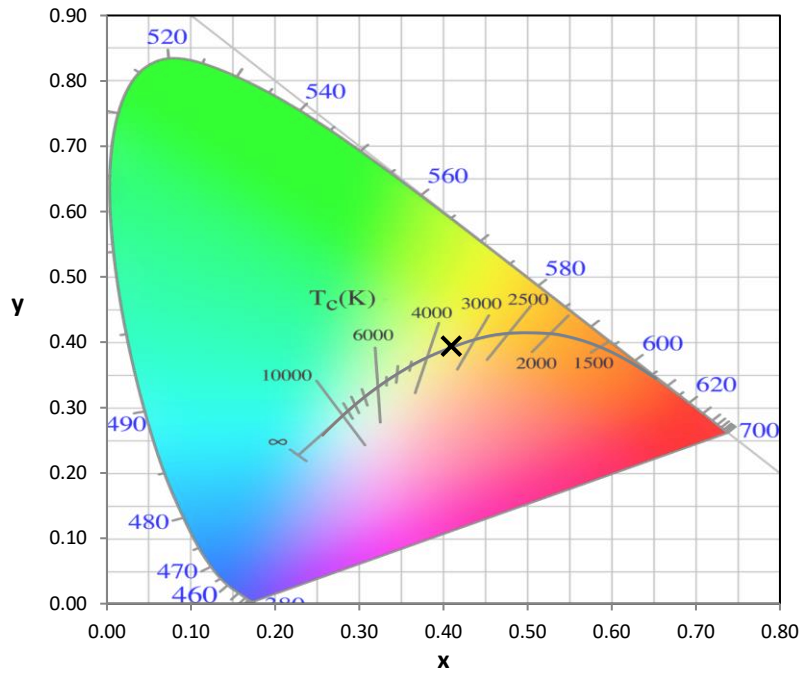
Stabilization Time: 36M
 Operation Time: 1H 36M
 Sphere Temperature (°C): 24.0

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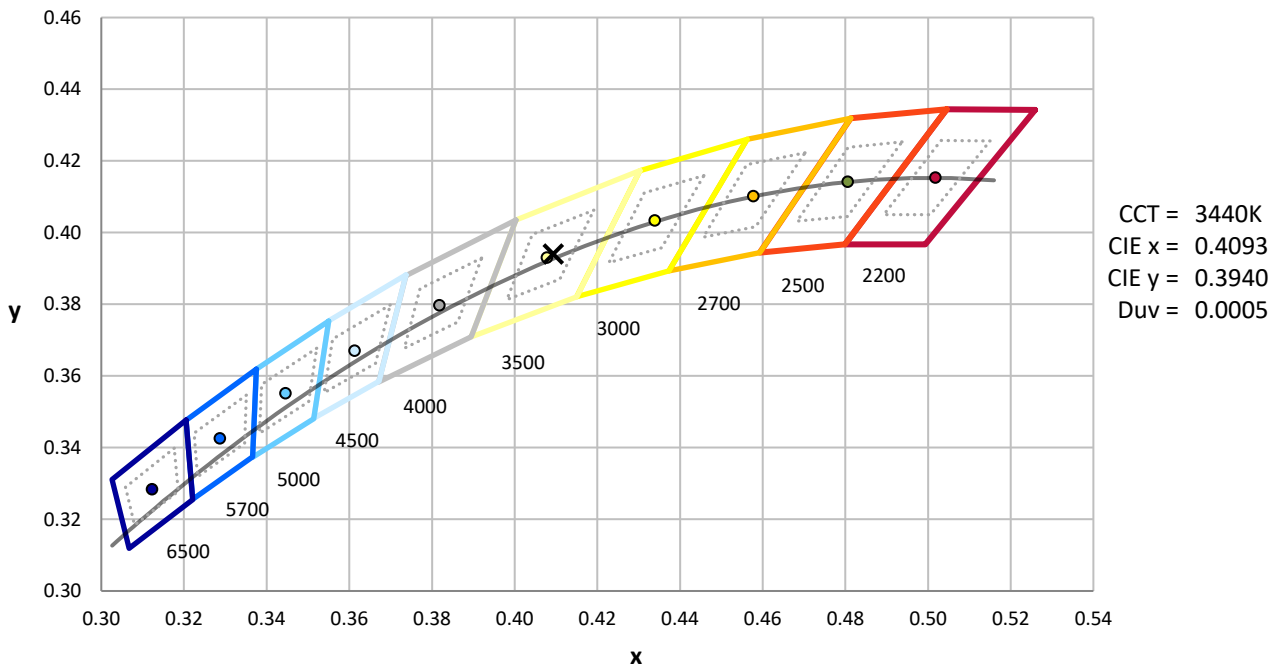
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208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



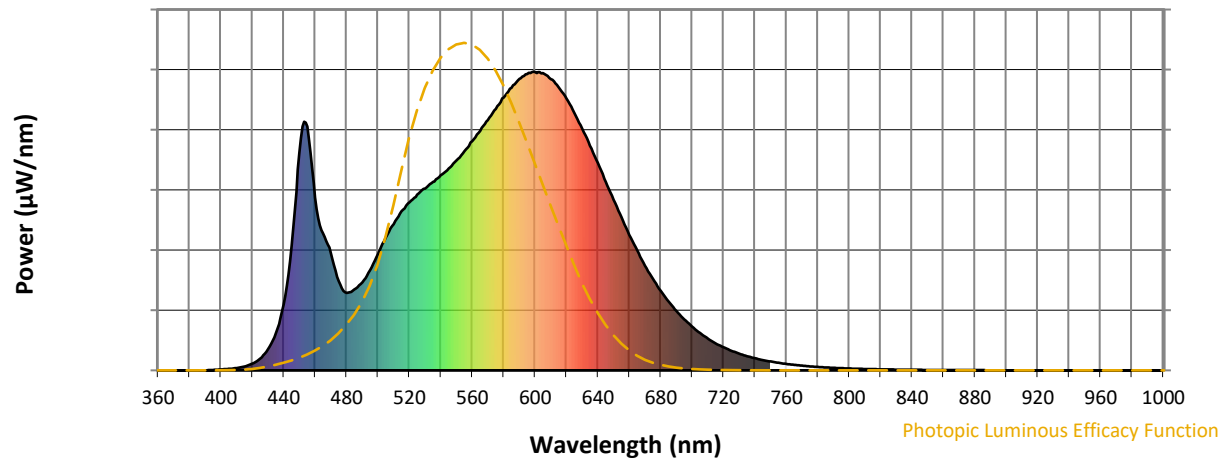
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

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Photopic Flux vs. Wavelength

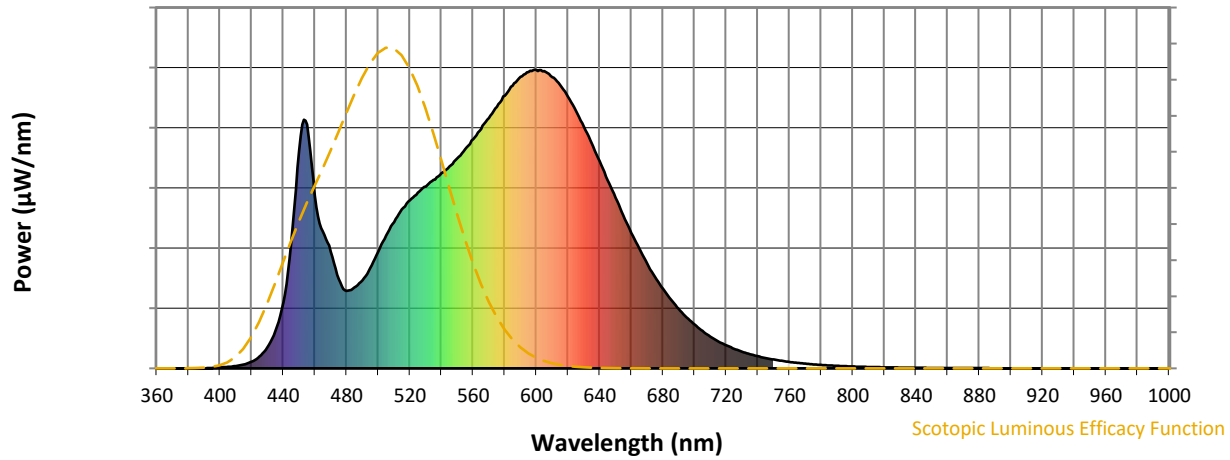


Photopic Lumens: NR

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	295	NR	620	910	NR	750	30	NR	880	1	NR
365	0	NR	495	335	NR	625	862	NR	755	25	NR	885	1	NR
370	0	NR	500	390	NR	630	809	NR	760	21	NR	890	1	NR
375	0	NR	505	445	NR	635	752	NR	765	18	NR	895	0	NR
380	0	NR	510	490	NR	640	694	NR	770	16	NR	900	0	NR
385	0	NR	515	532	NR	645	630	NR	775	13	NR	905	0	NR
390	0	NR	520	563	NR	650	571	NR	780	12	NR	910	0	NR
395	2	NR	525	588	NR	655	512	NR	785	10	NR	915	0	NR
400	3	NR	530	609	NR	660	453	NR	790	8	NR	920	0	NR
405	5	NR	535	631	NR	665	401	NR	795	7	NR	925	0	NR
410	8	NR	540	654	NR	670	351	NR	800	6	NR	930	0	NR
415	13	NR	545	677	NR	675	306	NR	805	5	NR	935	0	NR
420	23	NR	550	702	NR	680	267	NR	810	5	NR	940	0	NR
425	40	NR	555	734	NR	685	230	NR	815	4	NR	945	0	NR
430	70	NR	560	767	NR	690	199	NR	820	4	NR	950	0	NR
435	126	NR	565	802	NR	695	171	NR	825	3	NR	955	0	NR
440	221	NR	570	838	NR	700	146	NR	830	3	NR	960	0	NR
445	418	NR	575	875	NR	705	125	NR	835	2	NR	965	0	NR
450	729	NR	580	913	NR	710	107	NR	840	2	NR	970	0	NR
455	816	NR	585	946	NR	715	90	NR	845	2	NR	975	0	NR
460	578	NR	590	976	NR	720	77	NR	850	1	NR	980	0	NR
465	458	NR	595	992	NR	725	66	NR	855	1	NR	985	0	NR
470	390	NR	600	999	NR	730	56	NR	860	1	NR	990	0	NR
475	299	NR	605	995	NR	735	47	NR	865	1	NR	995	0	NR
480	260	NR	610	975	NR	740	40	NR	870	1	NR	1000	0	NR
485	271	NR	615	948	NR	745	34	NR	875	1	NR			

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Scotopic Flux vs. Wavelength



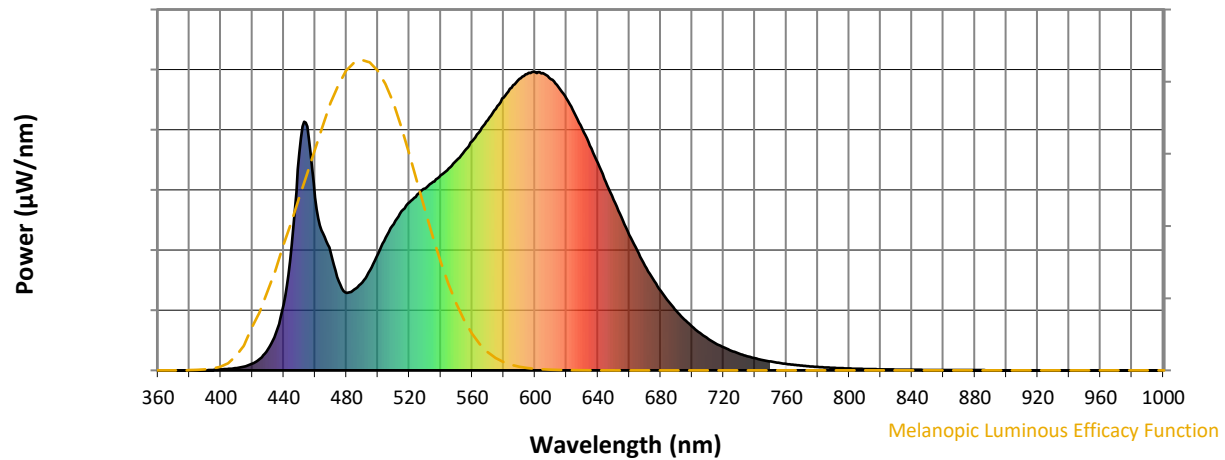
Scotopic Lumens: NR

S/P: 1.53

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	295	NR	620	910	NR	750	30	NR	880	1	NR
365	0	NR	495	335	NR	625	862	NR	755	25	NR	885	1	NR
370	0	NR	500	390	NR	630	809	NR	760	21	NR	890	1	NR
375	0	NR	505	445	NR	635	752	NR	765	18	NR	895	0	NR
380	0	NR	510	490	NR	640	694	NR	770	16	NR	900	0	NR
385	0	NR	515	532	NR	645	630	NR	775	13	NR	905	0	NR
390	0	NR	520	563	NR	650	571	NR	780	12	NR	910	0	NR
395	2	NR	525	588	NR	655	512	NR	785	10	NR	915	0	NR
400	3	NR	530	609	NR	660	453	NR	790	8	NR	920	0	NR
405	5	NR	535	631	NR	665	401	NR	795	7	NR	925	0	NR
410	8	NR	540	654	NR	670	351	NR	800	6	NR	930	0	NR
415	13	NR	545	677	NR	675	306	NR	805	5	NR	935	0	NR
420	23	NR	550	702	NR	680	267	NR	810	5	NR	940	0	NR
425	40	NR	555	734	NR	685	230	NR	815	4	NR	945	0	NR
430	70	NR	560	767	NR	690	199	NR	820	4	NR	950	0	NR
435	126	NR	565	802	NR	695	171	NR	825	3	NR	955	0	NR
440	221	NR	570	838	NR	700	146	NR	830	3	NR	960	0	NR
445	418	NR	575	875	NR	705	125	NR	835	2	NR	965	0	NR
450	729	NR	580	913	NR	710	107	NR	840	2	NR	970	0	NR
455	816	NR	585	946	NR	715	90	NR	845	2	NR	975	0	NR
460	578	NR	590	976	NR	720	77	NR	850	1	NR	980	0	NR
465	458	NR	595	992	NR	725	66	NR	855	1	NR	985	0	NR
470	390	NR	600	999	NR	730	56	NR	860	1	NR	990	0	NR
475	299	NR	605	995	NR	735	47	NR	865	1	NR	995	0	NR
480	260	NR	610	975	NR	740	40	NR	870	1	NR	1000	0	NR
485	271	NR	615	948	NR	745	34	NR	875	1	NR			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 3.07

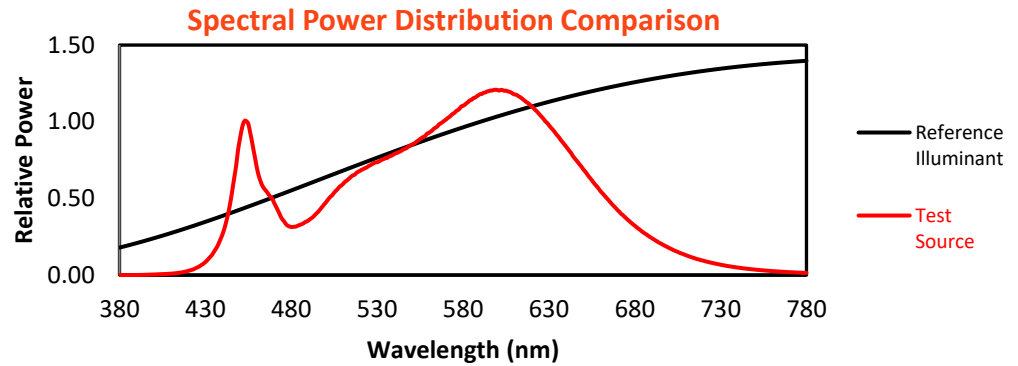
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	295	NR	620	910	NR	750	30	NR	880	1	NR
365	0	NR	495	335	NR	625	862	NR	755	25	NR	885	1	NR
370	0	NR	500	390	NR	630	809	NR	760	21	NR	890	1	NR
375	0	NR	505	445	NR	635	752	NR	765	18	NR	895	0	NR
380	0	NR	510	490	NR	640	694	NR	770	16	NR	900	0	NR
385	0	NR	515	532	NR	645	630	NR	775	13	NR	905	0	NR
390	0	NR	520	563	NR	650	571	NR	780	12	NR	910	0	NR
395	2	NR	525	588	NR	655	512	NR	785	10	NR	915	0	NR
400	3	NR	530	609	NR	660	453	NR	790	8	NR	920	0	NR
405	5	NR	535	631	NR	665	401	NR	795	7	NR	925	0	NR
410	8	NR	540	654	NR	670	351	NR	800	6	NR	930	0	NR
415	13	NR	545	677	NR	675	306	NR	805	5	NR	935	0	NR
420	23	NR	550	702	NR	680	267	NR	810	5	NR	940	0	NR
425	40	NR	555	734	NR	685	230	NR	815	4	NR	945	0	NR
430	70	NR	560	767	NR	690	199	NR	820	4	NR	950	0	NR
435	126	NR	565	802	NR	695	171	NR	825	3	NR	955	0	NR
440	221	NR	570	838	NR	700	146	NR	830	3	NR	960	0	NR
445	418	NR	575	875	NR	705	125	NR	835	2	NR	965	0	NR
450	729	NR	580	913	NR	710	107	NR	840	2	NR	970	0	NR
455	816	NR	585	946	NR	715	90	NR	845	2	NR	975	0	NR
460	578	NR	590	976	NR	720	77	NR	850	1	NR	980	0	NR
465	458	NR	595	992	NR	725	66	NR	855	1	NR	985	0	NR
470	390	NR	600	999	NR	730	56	NR	860	1	NR	990	0	NR
475	299	NR	605	995	NR	735	47	NR	865	1	NR	995	0	NR
480	260	NR	610	975	NR	740	40	NR	870	1	NR	1000	0	NR
485	271	NR	615	948	NR	745	34	NR	875	1	NR			

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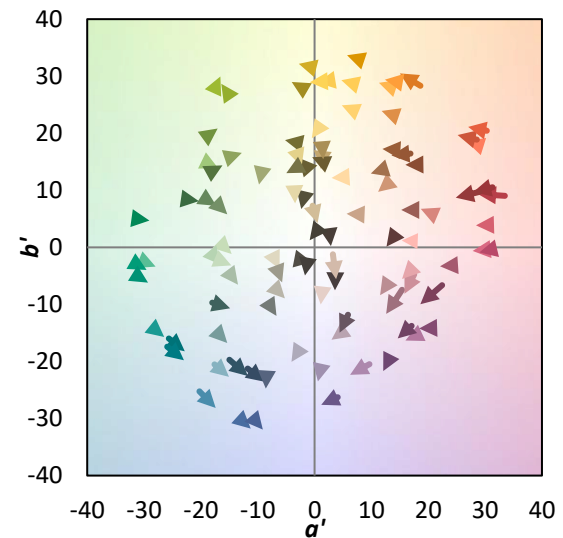
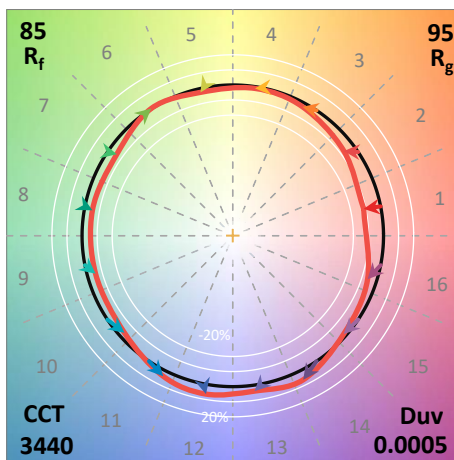
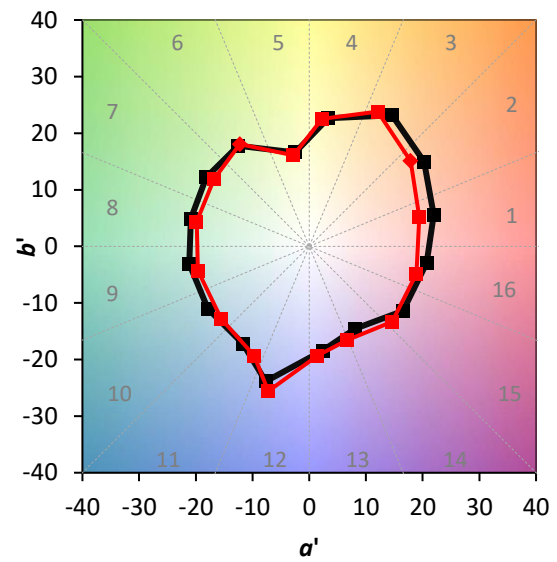
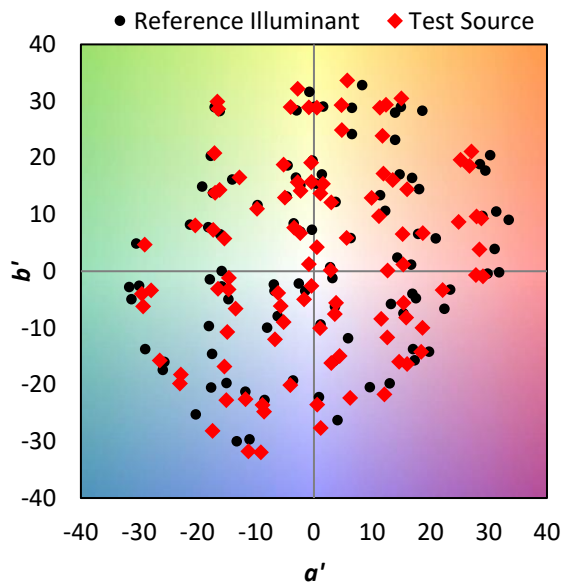
TM-30-18

Summary

$R_f = 84.9$
 $R_g = 94.6$
 $CIE R_a = 84.2$
 $R_9 = 13.6$

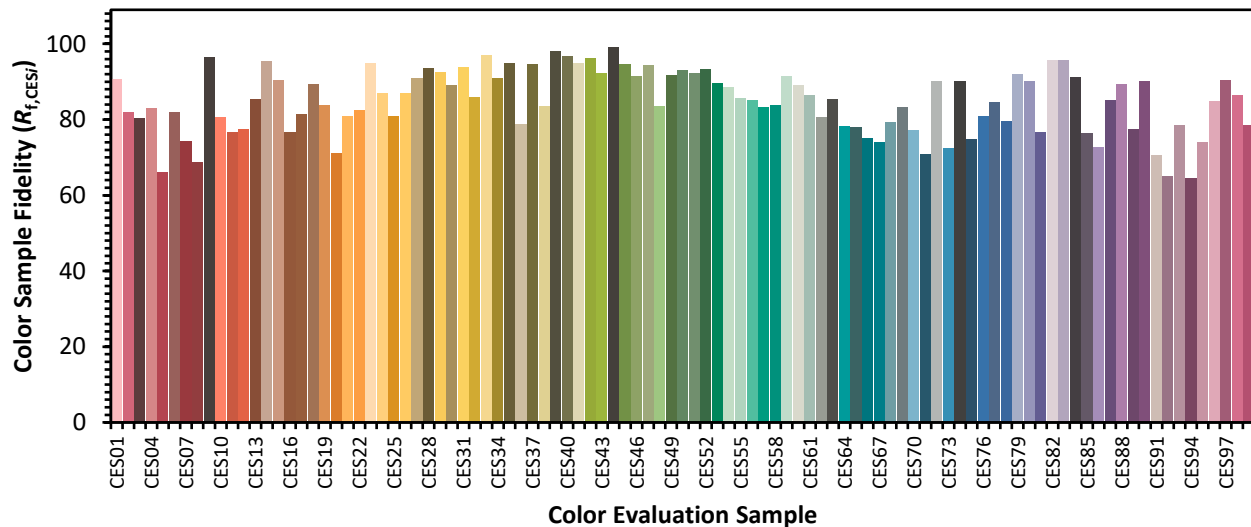


Color Vector Graphics

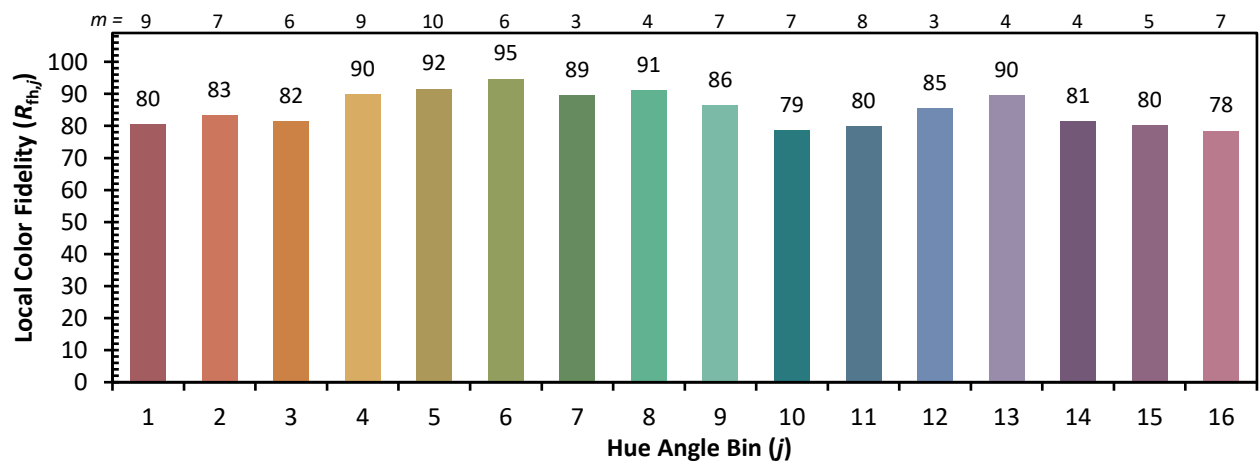
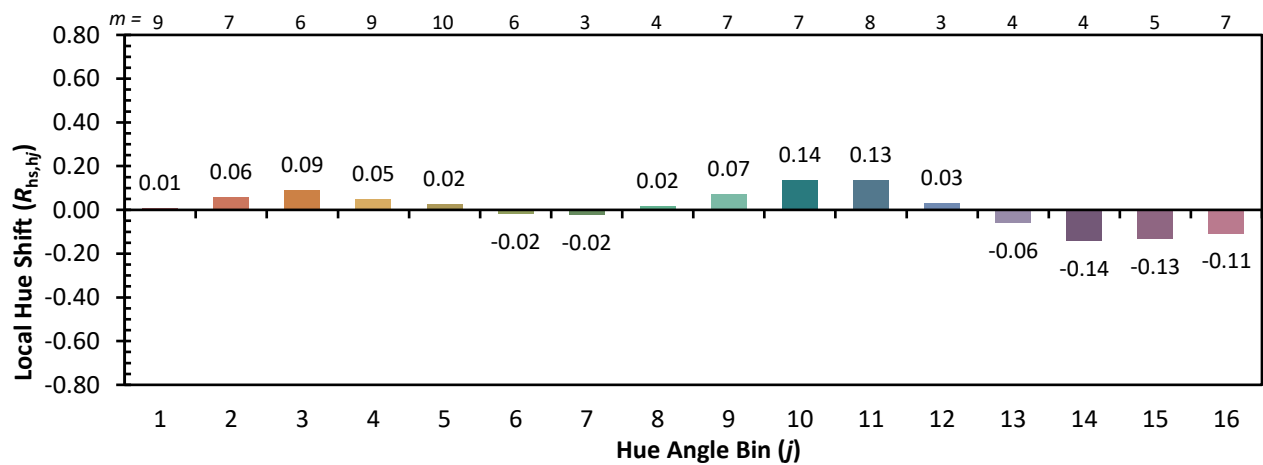
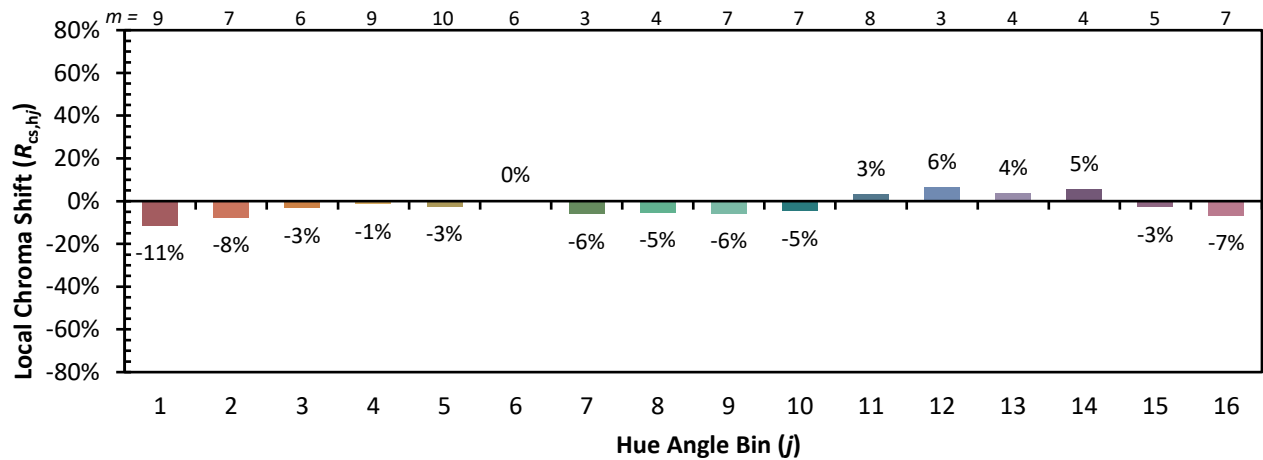


Individual Sample Fidelity Index ($R_{f,i}$)

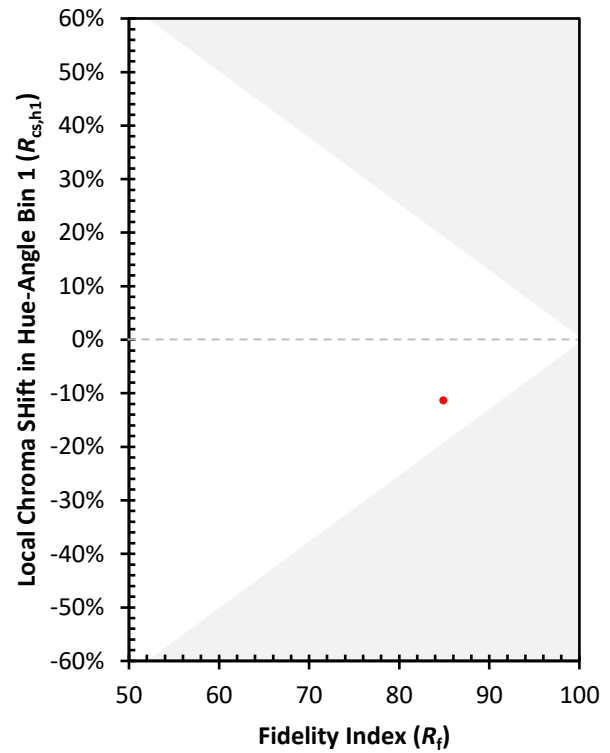
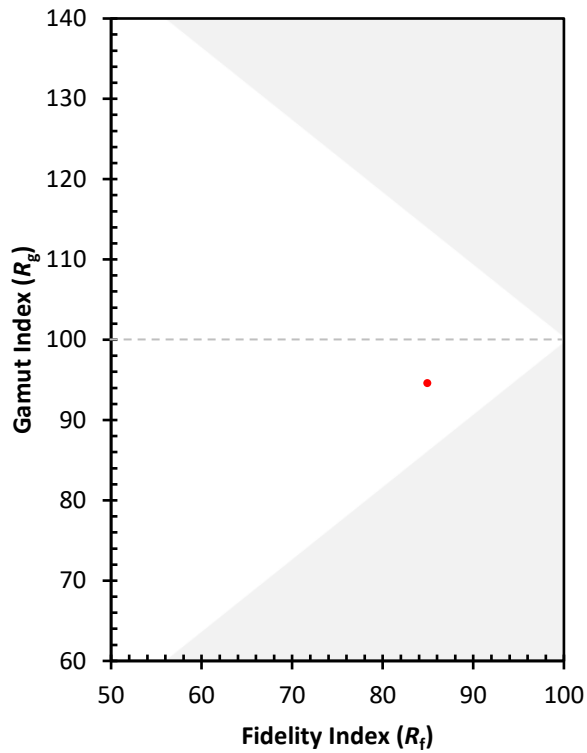
CES01 = 86	CES26 = 87	CES51 = 92	CES76 = 81
CES02 = 62	CES27 = 91	CES52 = 93	CES77 = 85
CES03 = 31	CES28 = 94	CES53 = 90	CES78 = 80
CES04 = 70	CES29 = 92	CES54 = 89	CES79 = 92
CES05 = 49	CES30 = 89	CES55 = 86	CES80 = 90
CES06 = 51	CES31 = 94	CES56 = 85	CES81 = 77
CES07 = 41	CES32 = 86	CES57 = 83	CES82 = 96
CES08 = 40	CES33 = 97	CES58 = 84	CES83 = 96
CES09 = 29	CES34 = 91	CES59 = 91	CES84 = 91
CES10 = 75	CES35 = 95	CES60 = 89	CES85 = 76
CES11 = 58	CES36 = 79	CES61 = 87	CES86 = 73
CES12 = 64	CES37 = 95	CES62 = 81	CES87 = 85
CES13 = 43	CES38 = 84	CES63 = 85	CES88 = 89
CES14 = 74	CES39 = 98	CES64 = 78	CES89 = 78
CES15 = 71	CES40 = 97	CES65 = 78	CES90 = 90
CES16 = 47	CES41 = 95	CES66 = 75	CES91 = 71
CES17 = 50	CES42 = 96	CES67 = 74	CES92 = 65
CES18 = 56	CES43 = 92	CES68 = 79	CES93 = 79
CES19 = 72	CES44 = 99	CES69 = 83	CES94 = 64
CES20 = 66	CES45 = 95	CES70 = 77	CES95 = 74
CES21 = 86	CES46 = 91	CES71 = 71	CES96 = 85
CES22 = 78	CES47 = 94	CES72 = 90	CES97 = 90
CES23 = 92	CES48 = 83	CES73 = 72	CES98 = 86
CES24 = 90	CES49 = 92	CES74 = 90	CES99 = 79
CES25 = 72	CES50 = 93	CES75 = 75	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)