

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



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: FAIL-SAFE

Report Number: P1357345

Luminaire Tested: 6ASL4-20VHE-3-A59-UNV

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1357345
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-12)
Test Lab: INNOVATION CENTER
Issue Date: 2/17/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: 6ASL4-20VHE-3-A59-UNV
Description: 6FT 2000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND A59 LEDS 3 ROW
Light Source: -
Ballast/Driver: -

Summary

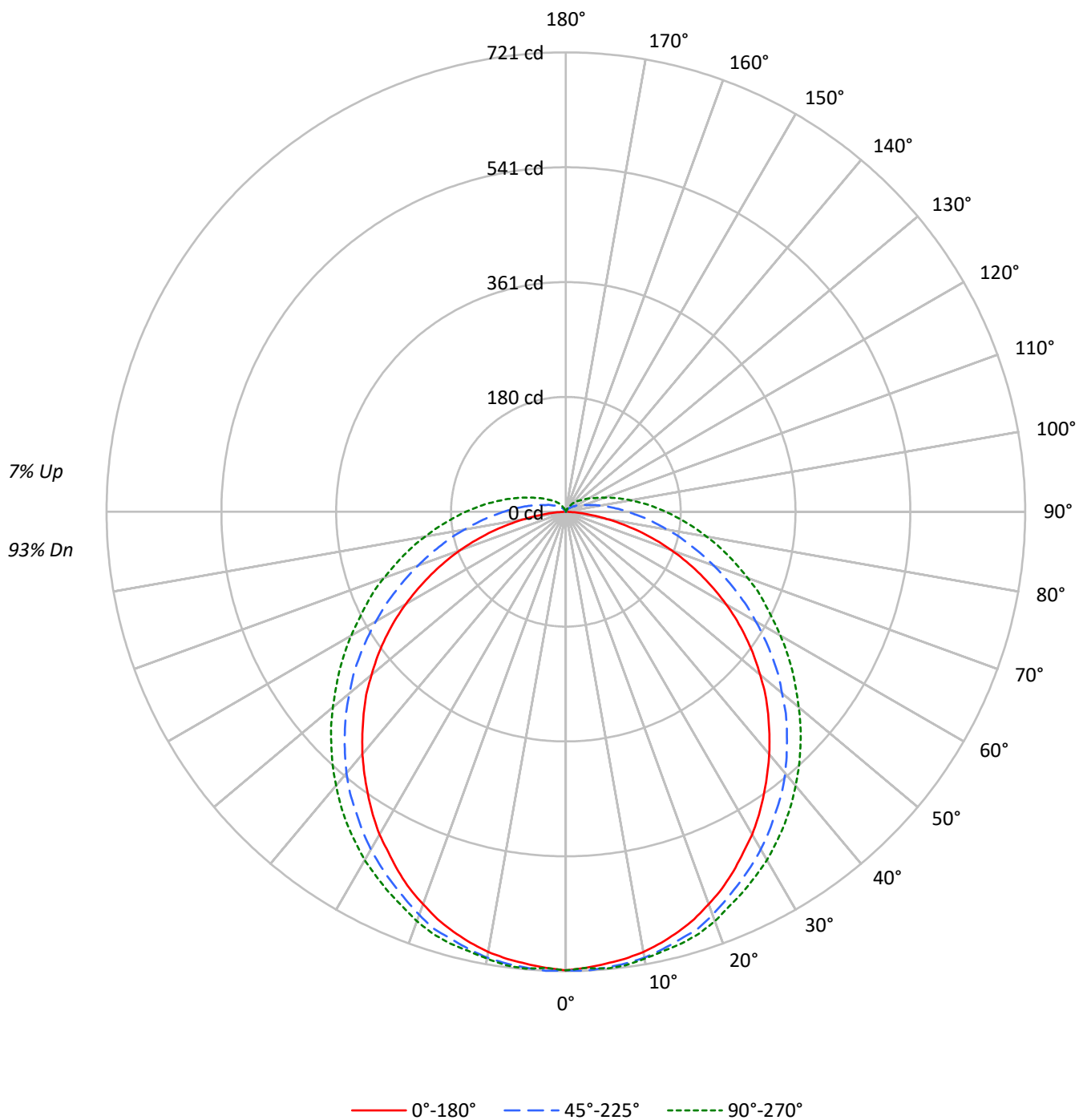
Lumens per Lamp: N/A
Luminaire Lumens: 2447.0 lumens
Efficiency: N/A
Efficacy: 35.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 5.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 69.8
Input Voltage (V): NR
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

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20
RC	80					70					50					30					10
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																					
0	117	117	117	117		114	114	114	114		107	107	107		101	101	101		96	96	96
1	105	100	95	91		102	97	92	88		91	88	84		86	83	80		81	79	77
2	95	86	79	72		92	84	77	71		79	73	68		75	70	66		71	67	63
3	86	75	67	60		83	73	65	59		69	62	57		65	60	55		62	57	53
4	79	66	57	50		76	65	56	49		61	54	48		58	52	47		55	50	45
5	73	59	50	43		70	58	49	42		55	47	41		52	45	40		49	44	39
6	67	53	44	37		64	52	43	37		49	42	36		47	40	35		45	39	34
7	62	48	39	33		60	47	38	32		45	37	32		43	36	31		41	35	30
8	58	44	35	29		56	43	35	29		41	34	28		39	32	28		37	32	27
9	54	40	32	26		52	39	31	26		38	30	25		36	30	25		35	29	24
10	50	37	29	24		49	36	29	23		35	28	23		33	27	23		32	26	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3887	3887	3887
5°	3855	3816	3798
10°	3836	3744	3702
15°	3797	3654	3620
20°	3743	3567	3529
25°	3679	3458	3424
30°	3612	3364	3336
35°	3528	3256	3238
40°	3452	3158	3134
45°	3370	3040	3030
50°	3276	2912	2922
55°	3175	2790	2825
60°	3044	2647	2726
65°	2875	2511	2644
70°	2661	2376	2580
75°	2345	2253	2536
80°	1862	2164	2517
85°	1158	2150	2555

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3370 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.2	2.8
10°-20°	195.9	8.0
20°-30°	296.3	12.1
30°-40°	358.7	14.7
40°-50°	376.8	15.4
50°-60°	351.5	14.4
60°-70°	290.5	11.9
70°-80°	209.2	8.5
80°-90°	130.0	5.3
90°-100°	76.2	3.1
100°-110°	43.6	1.8
110°-120°	24.6	1.0
120°-130°	14.2	0.6
130°-140°	7.6	0.3
140°-150°	3.2	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	560.4	22.9
0°-40°	919.2	37.6
0°-60°	1647.4	67.3
0°-90°	2277.1	93.1
90°-120°	144.3	5.9
90°-150°	169.3	6.9
90°-180°	170.0	6.9
0°-180°	2447.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	712	718	718	718	720	68
15°	682	691	694	699	702	192
25°	622	633	643	652	658	287
35°	542	557	575	591	598	339
45°	449	465	491	512	521	346
55°	346	365	395	423	434	309
65°	233	256	295	332	346	231
75°	120	150	202	245	263	127
85°	22	67	127	172	188	27
90°	0	40	97	139	157	1
95°	0	25	73	112	129	0
105°	0	9	40	70	82	0
115°	0	4	24	43	51	0
125°	0	3	15	28	33	0
135°	0	0	9	18	22	0
145°	0	0	4	10	12	0
155°	0	0	0	3	4	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	719.7	719.7	719.7	719.7	719.7
2.5°	716.7	721.2	721.2	716.7	716.7
5°	712.2	718.2	718.2	718.2	719.7
7.5°	707.7	715.2	715.2	715.2	718.2
10°	701.7	709.2	710.7	710.7	712.2
12.5°	692.8	701.7	703.2	704.7	706.2
15°	682.3	691.3	694.3	698.7	701.7
17.5°	670.3	680.8	686.8	691.3	694.3
20°	655.4	665.8	673.3	679.3	683.8
22.5°	640.4	649.4	658.3	665.8	670.3
25°	622.4	632.9	643.4	652.4	658.3
27.5°	603.0	615.0	628.4	638.9	644.9
30°	585.0	597.0	612.0	625.4	631.4
32.5°	564.1	577.6	594.0	607.5	615.0
35°	541.6	556.6	574.6	591.0	598.5
37.5°	519.2	534.2	556.6	573.1	580.5
40°	496.8	511.7	535.7	553.6	561.1
42.5°	472.8	487.8	513.2	532.7	541.6
45°	448.9	465.3	490.8	511.7	520.7
47.5°	424.9	441.4	468.3	490.8	499.7
50°	398.0	416.0	442.9	468.3	477.3
52.5°	372.6	390.5	420.4	445.9	454.9
55°	345.6	365.1	395.0	423.4	433.9
57.5°	318.7	338.2	369.6	399.5	411.5
60°	290.3	311.2	344.1	375.6	389.0
62.5°	261.8	284.3	320.2	353.1	366.6
65°	233.4	255.9	294.8	332.2	345.6
67.5°	205.0	228.9	270.8	309.7	326.2
70°	176.6	202.0	246.9	287.3	303.7
72.5°	148.1	175.1	224.4	266.3	282.8
75°	119.7	149.6	202.0	245.4	263.3
77.5°	91.3	125.7	182.5	225.9	243.9
80°	65.8	104.7	161.6	206.5	224.4
82.5°	41.9	83.8	143.6	188.5	206.5
85°	22.4	67.3	127.2	172.1	188.5
87.5°	7.5	52.4	110.7	155.6	172.1
90°	0.0	40.4	97.3	139.2	157.1
92.5°	0.0	31.4	85.3	125.7	142.1
95°	0.0	25.4	73.3	112.2	128.7
97.5°	0.0	20.9	64.3	100.2	115.2
100°	0.0	16.5	55.4	89.8	103.2
102.5°	0.0	13.5	47.9	79.3	92.8
105°	0.0	9.0	40.4	70.3	82.3
107.5°	0.0	7.5	34.4	62.8	73.3
110°	0.0	6.0	31.4	53.9	64.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	4.5	28.4	47.9	58.4
115°	0.0	4.5	23.9	43.4	50.9
117.5°	0.0	4.5	20.9	38.9	46.4
120°	0.0	3.0	19.5	34.4	41.9
122.5°	0.0	3.0	16.5	31.4	37.4
125°	0.0	3.0	15.0	28.4	32.9
127.5°	0.0	1.5	13.5	25.4	29.9
130°	0.0	1.5	12.0	22.4	26.9
132.5°	0.0	1.5	10.5	20.9	25.4
135°	0.0	0.0	9.0	18.0	22.4
137.5°	0.0	0.0	7.5	16.5	19.5
140°	0.0	0.0	6.0	13.5	18.0
142.5°	0.0	0.0	4.5	12.0	15.0
145°	0.0	0.0	4.5	10.5	12.0
147.5°	0.0	0.0	3.0	7.5	10.5
150°	0.0	0.0	1.5	6.0	7.5
152.5°	0.0	0.0	0.0	4.5	6.0
155°	0.0	0.0	0.0	3.0	4.5
157.5°	0.0	0.0	0.0	0.0	1.5
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	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	14.06	15.60	14.53	16.06	16.54	16.11	17.65	16.58	18.11	18.59
	3H	15.56	16.96	16.04	17.43	17.95	18.59	19.99	19.07	20.46	20.98
	4H	16.04	17.37	16.54	17.85	18.39	19.80	21.13	20.30	21.61	22.15
	6H	16.31	17.55	16.83	18.05	18.60	21.07	22.31	21.58	22.80	23.36
	8H	16.36	17.55	16.89	18.07	18.63	21.73	22.92	22.26	23.44	24.00
	12H	16.38	17.52	16.91	18.03	18.62	22.46	23.60	23.00	24.12	24.71
4H	2H	14.94	16.27	15.45	16.76	17.29	16.55	17.88	17.05	18.36	18.90
	3H	16.68	17.81	17.19	18.34	18.90	19.25	20.38	19.76	20.91	21.47
	4H	17.28	18.32	17.82	18.86	19.45	20.63	21.67	21.16	22.20	22.79
	6H	17.68	18.60	18.23	19.16	19.76	22.09	23.01	22.64	23.57	24.18
	8H	17.77	18.64	18.33	19.20	19.82	22.86	23.72	23.42	24.28	24.90
	12H	17.82	18.60	18.40	19.19	19.82	23.72	24.50	24.30	25.09	25.71
8H	4H	17.97	18.83	18.53	19.39	20.01	20.84	21.71	21.40	22.27	22.89
	6H	18.55	19.28	19.14	19.88	20.51	22.47	23.21	23.07	23.81	24.44
	8H	18.73	19.39	19.33	20.00	20.64	23.38	24.04	23.99	24.66	25.29
	12H	18.84	19.43	19.45	20.04	20.74	24.43	25.02	25.03	25.62	26.32
12H	4H	18.17	18.95	18.75	19.54	20.16	20.85	21.63	21.43	22.22	22.85
	6H	18.85	19.51	19.45	20.12	20.76	22.51	23.17	23.12	23.79	24.42
	8H	19.13	19.71	19.73	20.32	21.02	23.49	24.08	24.09	24.68	25.38

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

Report Prepared for

Cooper Lighting Solutions

Fail-Safe

Report Number: SP1-2511-597-9

Test Date: 01/22/2026

Luminaire Tested: 4ASL-2-A590-UNV-OPL-1_600mA

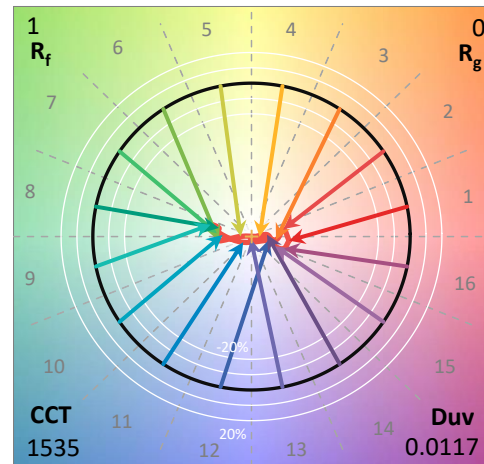
Data in this report applies to families of products including 4ASL

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2511-597-9
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 01/29/2026
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Fail-Safe
 Catalog Number: **4ASL-2-A590-UNV-OPL-1_600mA**
 Description: 2foot 4ASL LED LUMINAIRE WITH OPL LENS AND AMBER 590 LEDS with 1 rows at 600mA

Spectral Parameters

CCT (K):	1535	CRI (Ra):	-20.0		
CIE u':	0.3534	R1:	-32.1	R9:	-380.5
CIE v':	0.5468	R2:	53.1	R10:	29.9
Duv:	0.0117	R3:	18.5	R11:	-92.0
CIE x:	0.5921	R4:	-65.7	R12:	-8.5
CIE y:	0.4072	R5:	-38.6	R13:	-13.5
CIE z:	0.0007	R6:	42.8	R14:	47.1
Peak Wavelength (nm):	598	R7:	-6.2	R15:	-65.4
Dominant Wavelength (nm):	592	R8:	-132.3		
Purity:	99.97894				
Rf:	1.3				
Rg:	0.1				



Test Conditions

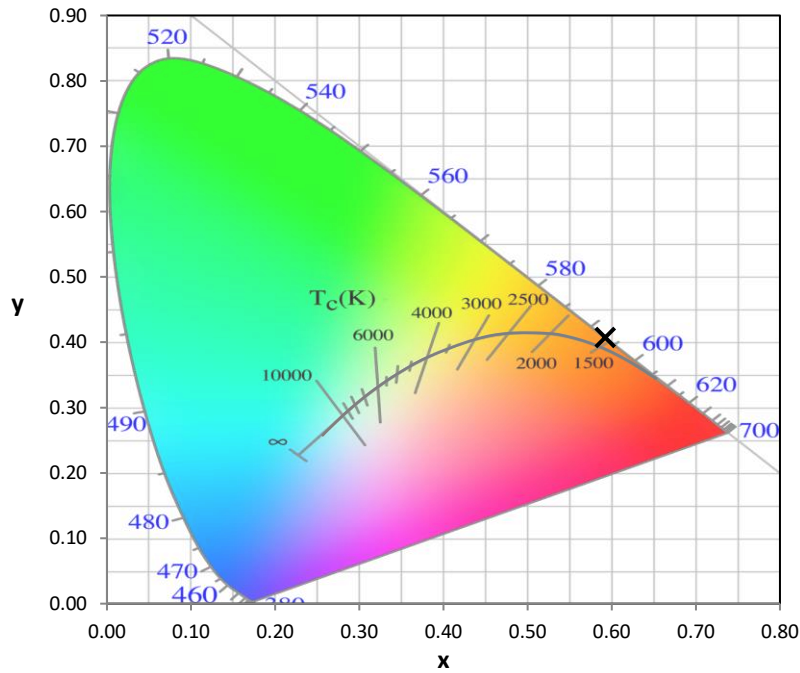
Stabilization Time: 77M
 Operation Time: 2H 17M
 Sphere Temperature (°C): 25.1

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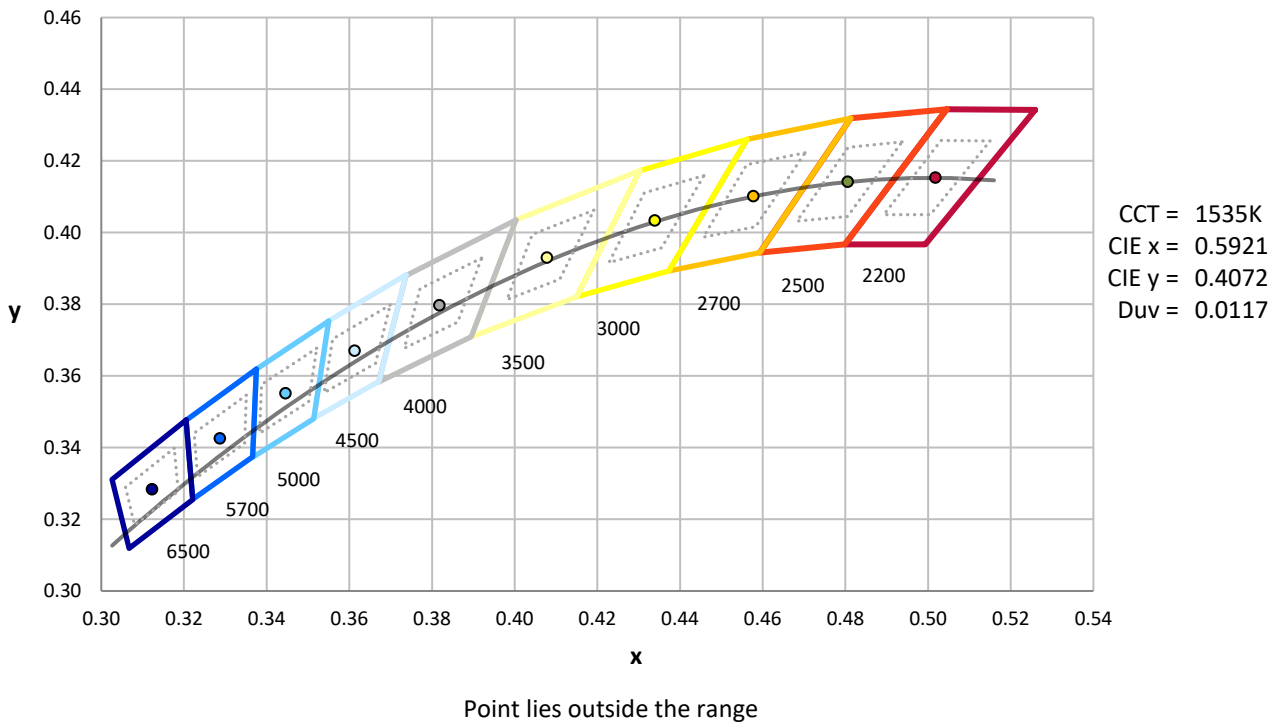
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208	10/21/2025	10/21/2026
Sphere Thermometer	ONSET IN0085	10/21/2025	10/21/2026
Room Thermometer	ONSET IN0046	10/21/2025	10/21/2026

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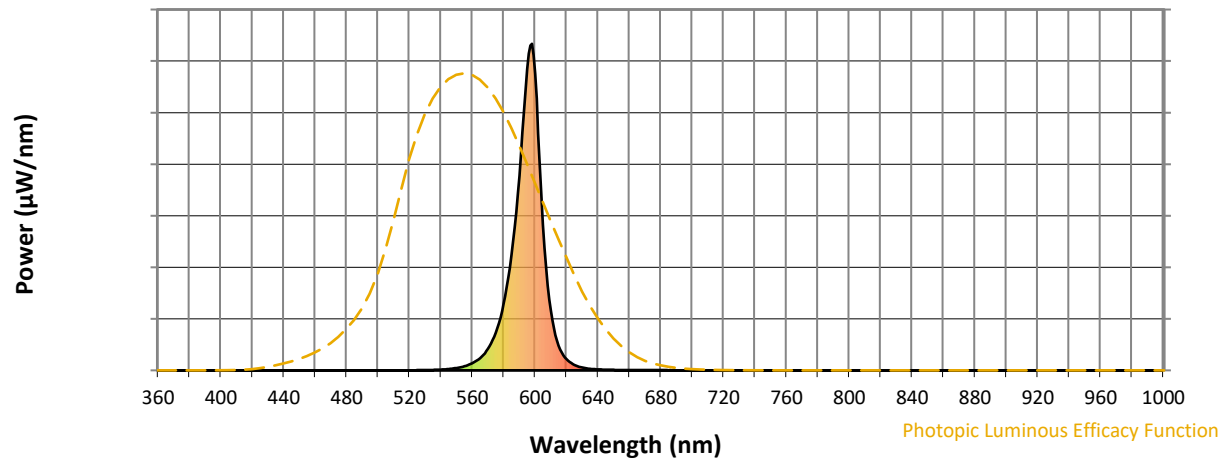
CIE 1931 Chromaticity Diagram



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



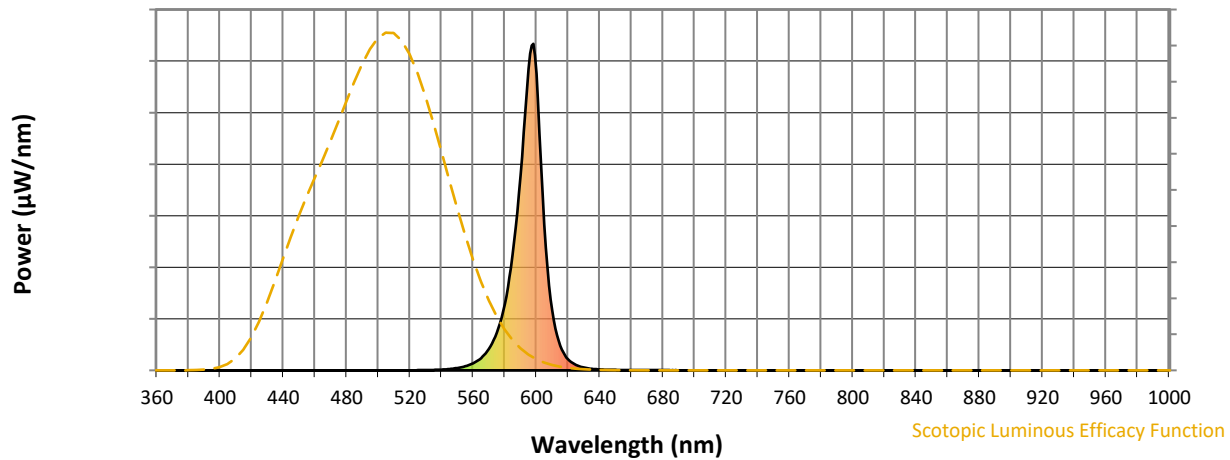
REPORT NUMBER: SP1-2511-597-9

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	0	NR	620	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	9	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	5	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	2	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	2	NR	780	0	NR	910	0	NR
395	0	NR	525	1	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	1	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	2	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	1	NR	810	0	NR	940	0	NR
425	0	NR	555	12	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	22	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	38	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	66	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	115	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	203	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	354	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	596	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	923	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	909	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	447	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	183	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	75	NR	745	0	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



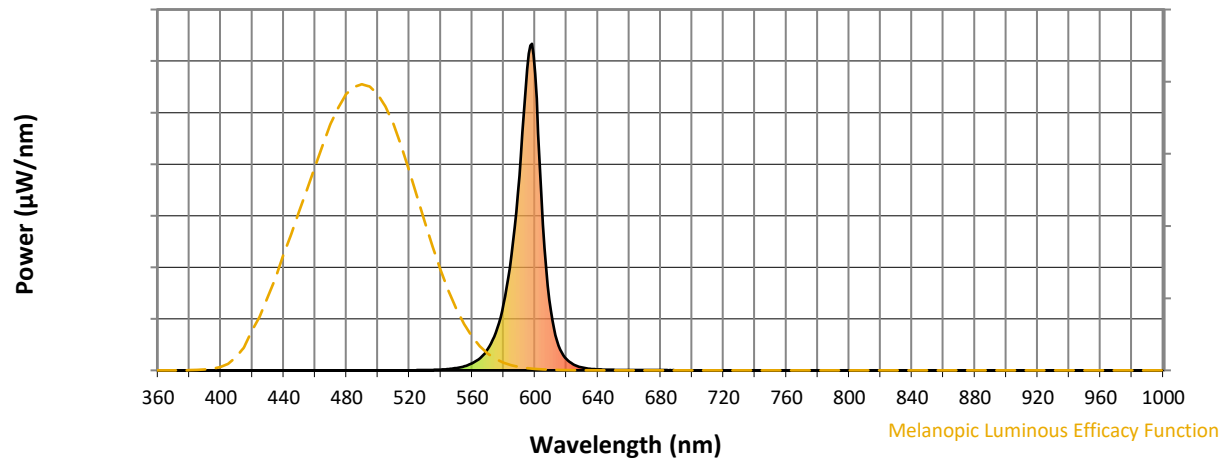
Scotopic Lumens: NR

S/P: 0.22

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	0	NR	620	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	9	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	5	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	2	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	2	NR	780	0	NR	910	0	NR
395	0	NR	525	1	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	1	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	2	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	1	NR	810	0	NR	940	0	NR
425	0	NR	555	12	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	22	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	38	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	66	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	115	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	203	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	354	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	596	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	923	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	909	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	447	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	183	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	75	NR	745	0	NR	875	0	NR			

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Melanopic Flux vs. Wavelength


Melanopic Lumens: NR
M/P: 0.12

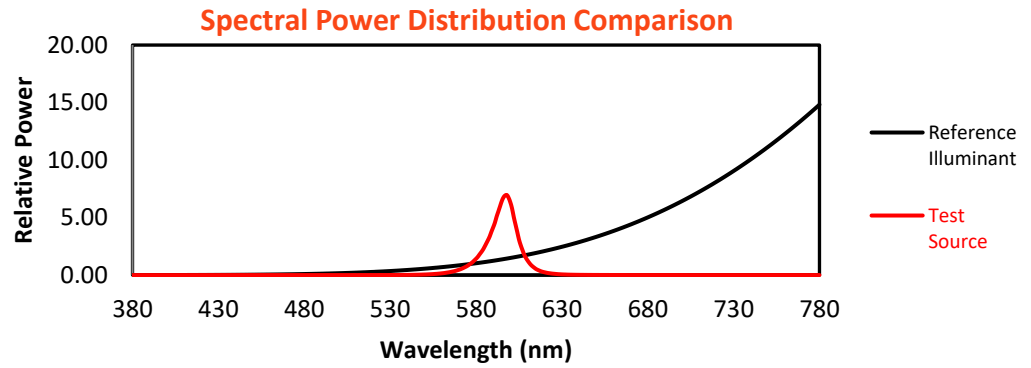
λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^{\wedge}/\text{nm}$	Lumens (ϕ/nm)
360	0	NR	490	0	NR	620	35	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	17	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	9	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	5	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	2	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	2	NR	780	0	NR	910	0	NR
395	0	NR	525	1	NR	655	1	NR	785	0	NR	915	0	NR
400	0	NR	530	1	NR	660	1	NR	790	0	NR	920	0	NR
405	0	NR	535	1	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	2	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	4	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	7	NR	680	1	NR	810	0	NR	940	0	NR
425	0	NR	555	12	NR	685	0	NR	815	0	NR	945	0	NR
430	0	NR	560	22	NR	690	0	NR	820	0	NR	950	0	NR
435	0	NR	565	38	NR	695	0	NR	825	0	NR	955	0	NR
440	0	NR	570	66	NR	700	0	NR	830	0	NR	960	0	NR
445	0	NR	575	115	NR	705	0	NR	835	0	NR	965	0	NR
450	0	NR	580	203	NR	710	0	NR	840	0	NR	970	0	NR
455	0	NR	585	354	NR	715	0	NR	845	0	NR	975	0	NR
460	0	NR	590	596	NR	720	0	NR	850	0	NR	980	0	NR
465	0	NR	595	923	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	909	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	447	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	183	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	75	NR	745	0	NR	875	0	NR			

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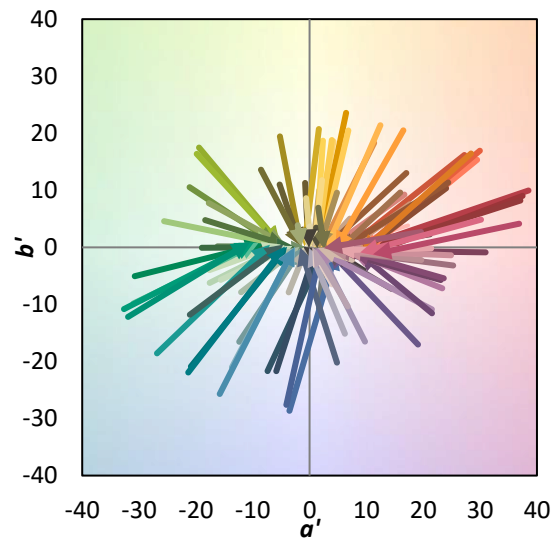
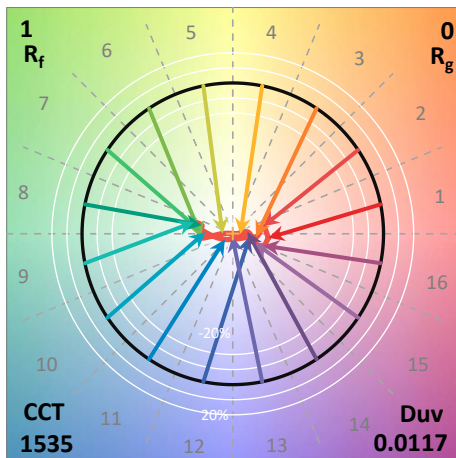
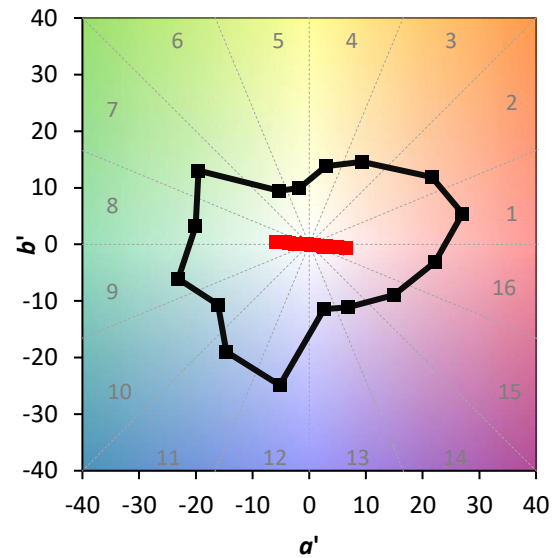
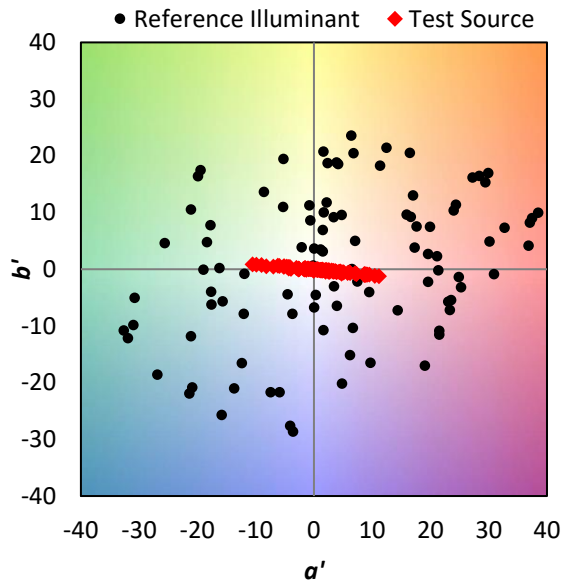
TM-30-18

Summary

$R_f = 1.3$
 $R_g = 0.1$
 $CIE\ R_a = -20.0$
 $R_g = -380.5$

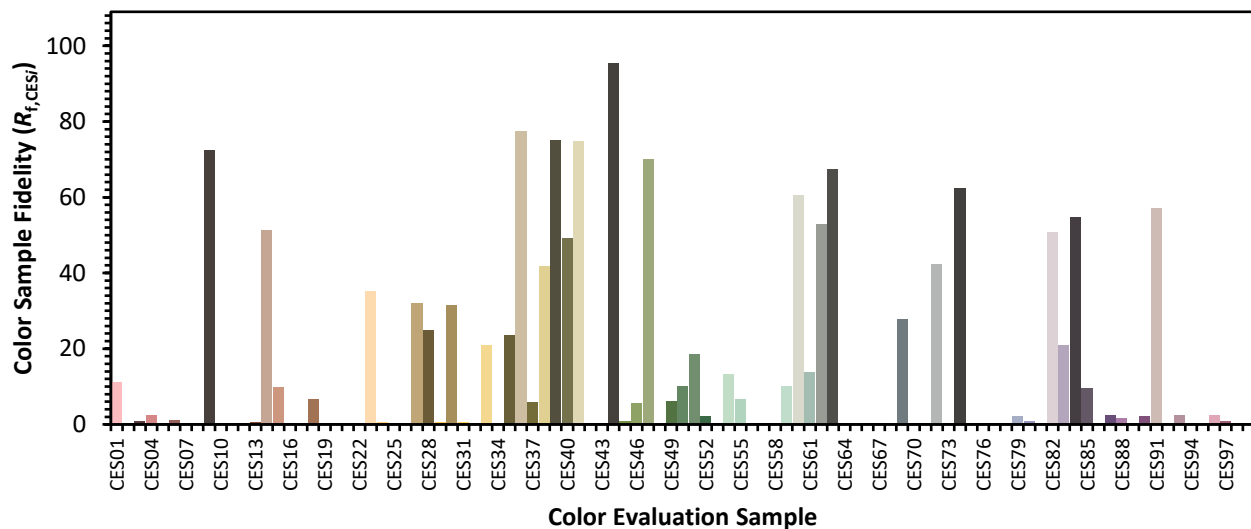


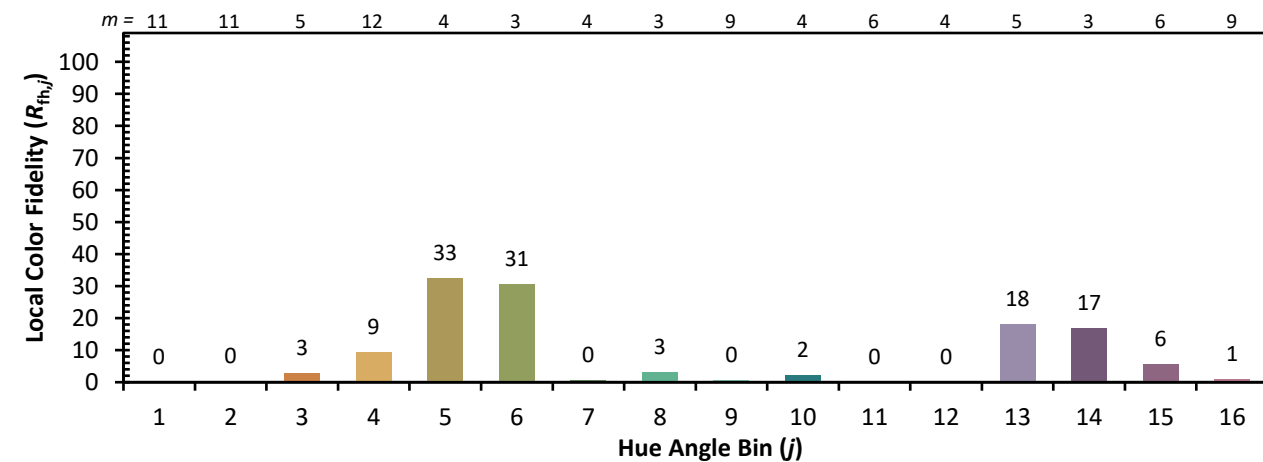
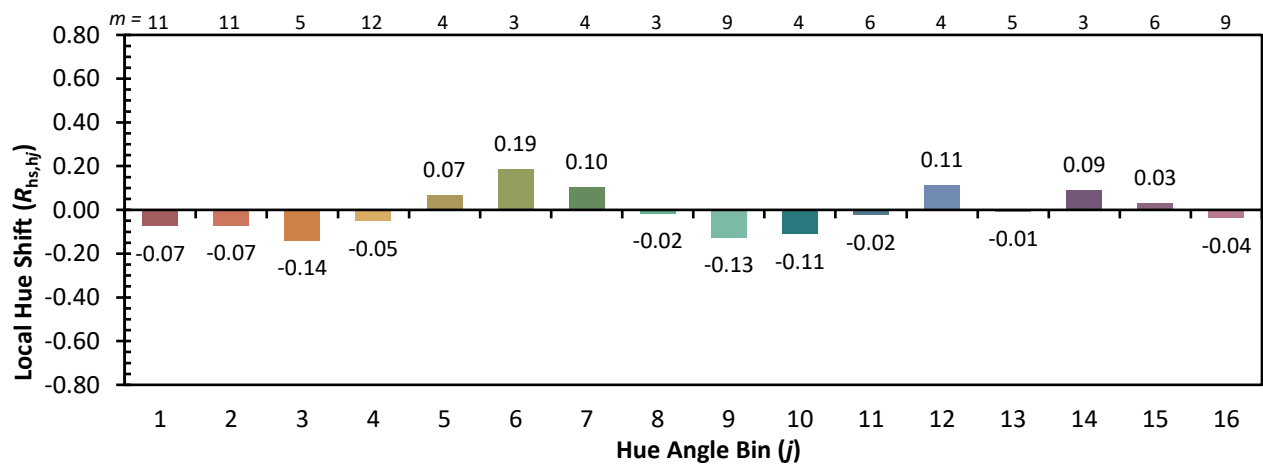
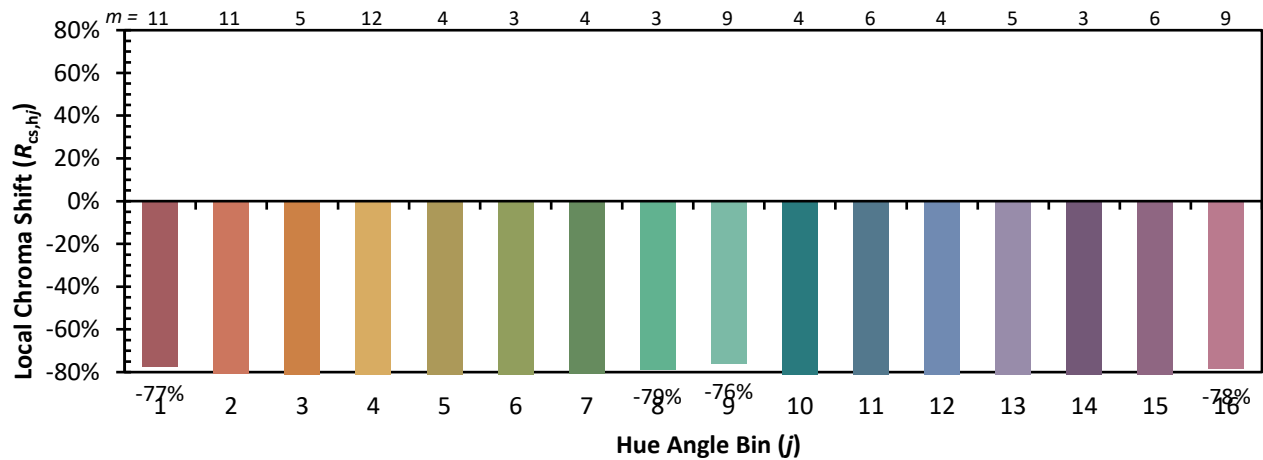
Color Vector Graphics

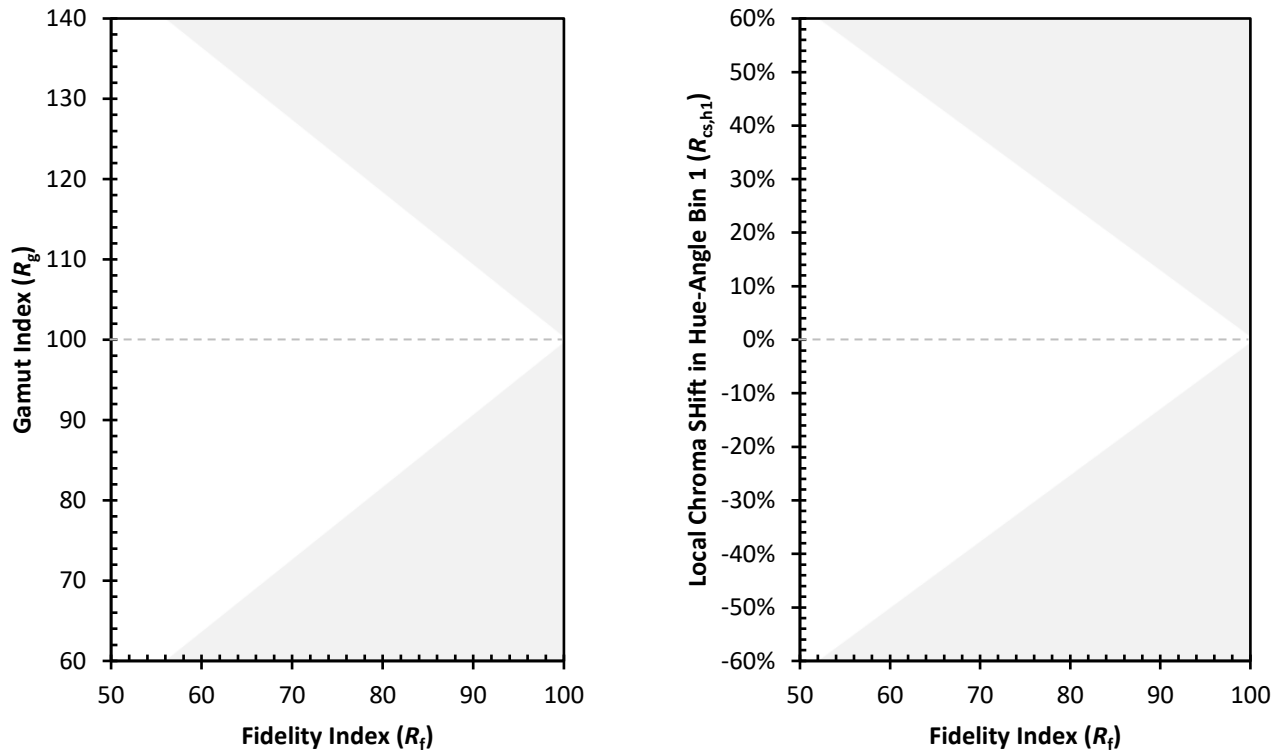


Individual Sample Fidelity Index (R_{fi})

CES01 = 90	CES26 = 0	CES51 = 19	CES76 = 0
CES02 = 70	CES27 = 32	CES52 = 2	CES77 = 0
CES03 = 31	CES28 = 25	CES53 = 0	CES78 = 0
CES04 = 77	CES29 = 1	CES54 = 13	CES79 = 2
CES05 = 52	CES30 = 31	CES55 = 7	CES80 = 1
CES06 = 56	CES31 = 1	CES56 = 0	CES81 = 0
CES07 = 41	CES32 = 0	CES57 = 0	CES82 = 51
CES08 = 39	CES33 = 21	CES58 = 0	CES83 = 21
CES09 = 29	CES34 = 0	CES59 = 10	CES84 = 55
CES10 = 87	CES35 = 24	CES60 = 60	CES85 = 10
CES11 = 70	CES36 = 77	CES61 = 14	CES86 = 0
CES12 = 76	CES37 = 6	CES62 = 53	CES87 = 2
CES13 = 47	CES38 = 42	CES63 = 68	CES88 = 2
CES14 = 77	CES39 = 75	CES64 = 0	CES89 = 0
CES15 = 74	CES40 = 49	CES65 = 0	CES90 = 2
CES16 = 49	CES41 = 75	CES66 = 0	CES91 = 57
CES17 = 56	CES42 = 0	CES67 = 0	CES92 = 0
CES18 = 60	CES43 = 0	CES68 = 0	CES93 = 3
CES19 = 80	CES44 = 95	CES69 = 28	CES94 = 0
CES20 = 71	CES45 = 1	CES70 = 0	CES95 = 0
CES21 = 94	CES46 = 6	CES71 = 0	CES96 = 2
CES22 = 87	CES47 = 70	CES72 = 42	CES97 = 1
CES23 = 94	CES48 = 0	CES73 = 0	CES98 = 0
CES24 = 95	CES49 = 6	CES74 = 62	CES99 = 0
CES25 = 79	CES50 = 10	CES75 = 0	



Color Rendition by Hue-Angle Bin


Measure Comparisons


(END OF REPORT)