

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: P1357363

Luminaire Tested: 6ASL4-30VHE-3-A59-UNV

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1357363
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: 6ASL4-30VHE-3-A59-UNV
Description: 6FT 3000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND A59 LEDS 3 ROW
Light Source: -
Ballast/Driver: -

Summary

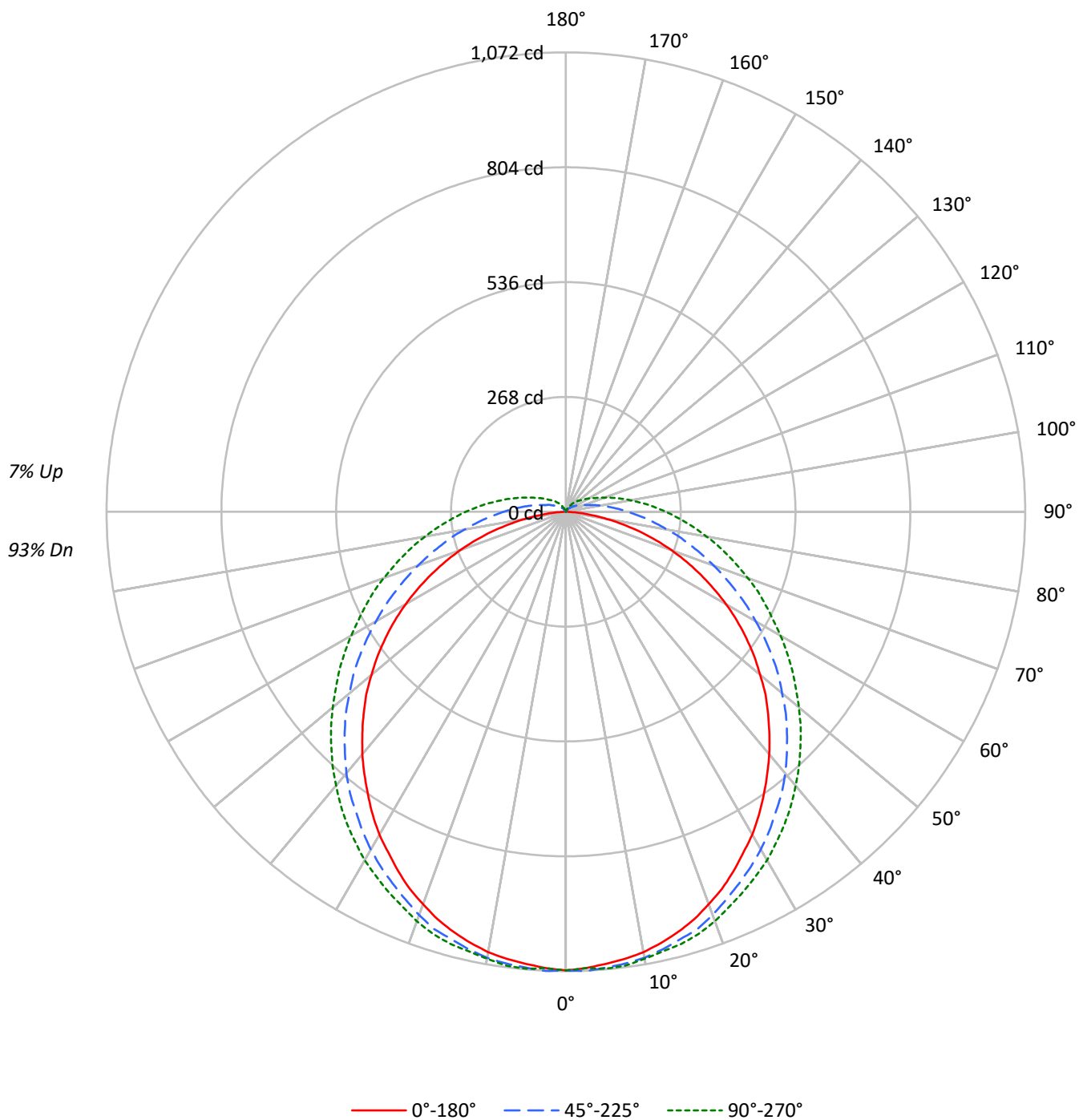
Lumens per Lamp: N/A
Luminaire Lumens: 3639.0 lumens
Efficiency: N/A
Efficacy: 33.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 5.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 109.2
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			0
RW	70	50	30	10	70	50	30	10	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	96	96	93
1	105	100	95	91	102	97	92	88	91	88	84	86	83	80	81	79	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	75	70	66	71	67	63	63	63	61
3	86	75	67	60	83	73	65	59	69	62	57	65	60	55	62	57	53	53	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	45	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	39	39	37
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	45	39	34	34	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	30	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	32	28	37	32	27	27	27	25
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25	35	29	24	24	24	22
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	22	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5780	5780	5780
5°	5734	5675	5648
10°	5706	5567	5505
15°	5647	5433	5384
20°	5566	5304	5248
25°	5471	5142	5092
30°	5372	5002	4961
35°	5247	4842	4814
40°	5133	4697	4661
45°	5011	4520	4506
50°	4872	4330	4345
55°	4722	4149	4201
60°	4526	3937	4054
65°	4276	3733	3933
70°	3957	3533	3838
75°	3488	3351	3772
80°	2771	3217	3745
85°	1726	3196	3800

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5011 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.5	2.8
10°-20°	291.4	8.0
20°-30°	440.6	12.1
30°-40°	533.5	14.7
40°-50°	560.3	15.4
50°-60°	522.7	14.4
60°-70°	432.0	11.9
70°-80°	311.1	8.5
80°-90°	193.3	5.3
90°-100°	113.3	3.1
100°-110°	64.8	1.8
110°-120°	36.6	1.0
120°-130°	21.1	0.6
130°-140°	11.3	0.3
140°-150°	4.8	0.1
150°-160°	0.9	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	833.5	22.9
0°-40°	1366.9	37.6
0°-60°	2449.9	67.3
0°-90°	3386.3	93.1
90°-120°	214.6	5.9
90°-150°	251.8	6.9
90°-180°	253.0	7.0
0°-180°	3639.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1070	1070	1070	1070	1070	
5°	1059	1068	1068	1068	1070	101
15°	1015	1028	1032	1039	1044	286
25°	926	941	957	970	979	426
35°	806	828	854	879	890	504
45°	668	692	730	761	774	515
55°	514	543	587	630	645	459
65°	347	380	438	494	514	343
75°	178	222	300	365	392	188
85°	33	100	189	256	280	41
90°	0	60	145	207	234	2
95°	0	38	109	167	191	0
105°	0	13	60	105	122	0
115°	0	7	36	64	76	0
125°	0	4	22	42	49	0
135°	0	0	13	27	33	0
145°	0	0	7	16	18	0
155°	0	0	0	4	7	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°	1070.3	1070.3	1070.3	1070.3	1070.3
2.5°	1065.8	1072.5	1072.5	1065.8	1065.8
5°	1059.2	1068.1	1068.1	1068.1	1070.3
7.5°	1052.5	1063.6	1063.6	1063.6	1068.1
10°	1043.6	1054.7	1056.9	1056.9	1059.2
12.5°	1030.2	1043.6	1045.8	1048.0	1050.3
15°	1014.7	1028.0	1032.5	1039.1	1043.6
17.5°	996.9	1012.4	1021.3	1028.0	1032.5
20°	974.6	990.2	1001.3	1010.2	1016.9
22.5°	952.3	965.7	979.0	990.2	996.9
25°	925.6	941.2	956.8	970.1	979.0
27.5°	896.7	914.5	934.5	950.1	959.0
30°	870.0	887.8	910.1	930.1	939.0
32.5°	838.9	858.9	883.4	903.4	914.5
35°	805.5	827.7	854.4	878.9	890.0
37.5°	772.1	794.4	827.7	852.2	863.3
40°	738.7	761.0	796.6	823.3	834.4
42.5°	703.1	725.4	763.2	792.1	805.5
45°	667.5	692.0	729.8	761.0	774.3
47.5°	631.9	656.4	696.5	729.8	743.2
50°	591.9	618.6	658.6	696.5	709.8
52.5°	554.1	580.8	625.3	663.1	676.4
55°	514.0	542.9	587.4	629.7	645.3
57.5°	473.9	502.9	549.6	594.1	611.9
60°	431.7	462.8	511.8	558.5	578.5
62.5°	389.4	422.8	476.2	525.1	545.2
65°	347.1	380.5	438.3	494.0	514.0
67.5°	304.8	340.4	402.7	460.6	485.1
70°	262.6	300.4	367.1	427.2	451.7
72.5°	220.3	260.3	333.8	396.1	420.5
75°	178.0	222.5	300.4	364.9	391.6
77.5°	135.7	186.9	271.5	336.0	362.7
80°	97.9	155.8	240.3	307.1	333.8
82.5°	62.3	124.6	213.6	280.4	307.1
85°	33.4	100.1	189.1	255.9	280.4
87.5°	11.1	77.9	164.7	231.4	255.9
90°	0.0	60.1	144.6	206.9	233.6
92.5°	0.0	46.7	126.8	186.9	211.4
95°	0.0	37.8	109.0	166.9	191.4
97.5°	0.0	31.2	95.7	149.1	171.3
100°	0.0	24.5	82.3	133.5	153.5
102.5°	0.0	20.0	71.2	117.9	138.0
105°	0.0	13.4	60.1	104.6	122.4
107.5°	0.0	11.1	51.2	93.5	109.0
110°	0.0	8.9	46.7	80.1	95.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	6.7	42.3	71.2	86.8
115°	0.0	6.7	35.6	64.5	75.7
117.5°	0.0	6.7	31.2	57.9	69.0
120°	0.0	4.5	28.9	51.2	62.3
122.5°	0.0	4.5	24.5	46.7	55.6
125°	0.0	4.5	22.3	42.3	49.0
127.5°	0.0	2.2	20.0	37.8	44.5
130°	0.0	2.2	17.8	33.4	40.1
132.5°	0.0	2.2	15.6	31.2	37.8
135°	0.0	0.0	13.4	26.7	33.4
137.5°	0.0	0.0	11.1	24.5	28.9
140°	0.0	0.0	8.9	20.0	26.7
142.5°	0.0	0.0	6.7	17.8	22.3
145°	0.0	0.0	6.7	15.6	17.8
147.5°	0.0	0.0	4.5	11.1	15.6
150°	0.0	0.0	2.2	8.9	11.1
152.5°	0.0	0.0	0.0	6.7	8.9
155°	0.0	0.0	0.0	4.5	6.7
157.5°	0.0	0.0	0.0	0.0	2.2
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	15.44	16.98	15.91	17.43	17.92	17.49	19.03	17.96	19.49	19.97
	3H	16.93	18.34	17.42	18.80	19.33	19.97	21.37	20.45	21.84	22.36
	4H	17.42	18.75	17.92	19.23	19.77	21.18	22.51	21.68	22.99	23.53
	6H	17.69	18.93	18.21	19.43	19.98	22.45	23.69	22.96	24.18	24.74
	8H	17.74	18.93	18.27	19.45	20.01	23.11	24.30	23.64	24.82	25.38
	12H	17.76	18.90	18.29	19.41	20.00	23.84	24.98	24.38	25.50	26.09
4H	2H	16.32	17.65	16.82	18.13	18.67	17.93	19.26	18.43	19.74	20.28
	3H	18.06	19.19	18.57	19.72	20.28	20.63	21.76	21.14	22.29	22.85
	4H	18.66	19.70	19.19	20.23	20.83	22.01	23.04	22.54	23.58	24.17
	6H	19.06	19.97	19.61	20.54	21.14	23.47	24.39	24.02	24.95	25.55
	8H	19.15	20.01	19.71	20.58	21.20	24.24	25.10	24.80	25.66	26.28
	12H	19.20	19.98	19.78	20.57	21.19	25.10	25.88	25.68	26.47	27.09
8H	4H	19.35	20.21	19.91	20.77	21.39	22.22	23.08	22.78	23.65	24.27
	6H	19.93	20.66	20.52	21.26	21.89	23.85	24.58	24.45	25.19	25.81
	8H	20.11	20.77	20.71	21.38	22.02	24.76	25.42	25.37	26.04	26.67
	12H	20.22	20.81	20.83	21.42	22.12	25.81	26.40	26.41	27.00	27.70
12H	4H	19.54	20.33	20.13	20.92	21.54	22.23	23.01	22.81	23.60	24.23
	6H	20.22	20.89	20.83	21.50	22.14	23.89	24.55	24.49	25.17	25.80
	8H	20.50	21.09	21.11	21.70	22.40	24.87	25.46	25.47	26.06	26.76

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

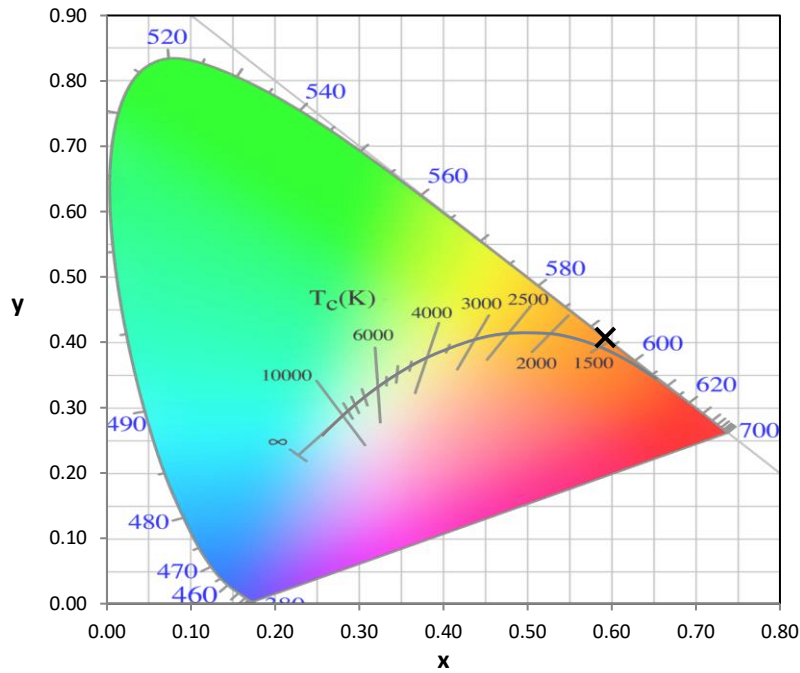
Stabilization Time: 77M
 Operation Time: 2H 17M
 Sphere Temperature (°C): 25.1

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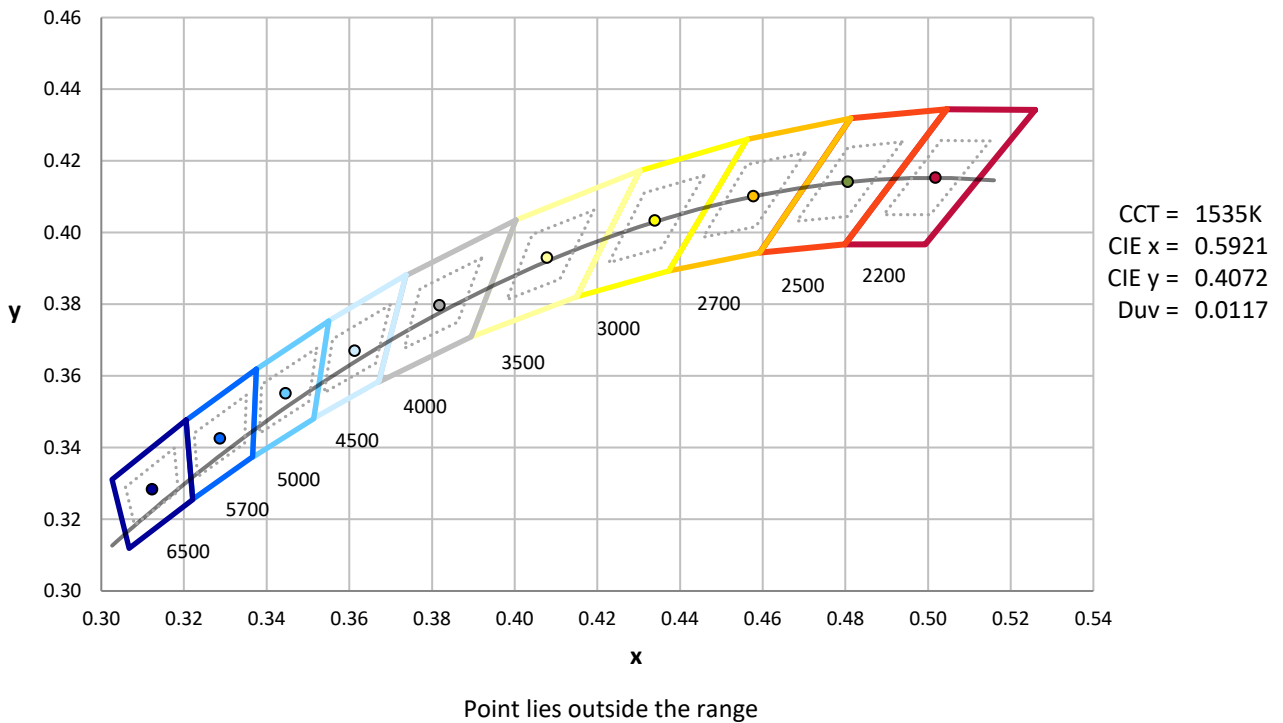
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	12/16/2025	6/16/2026
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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

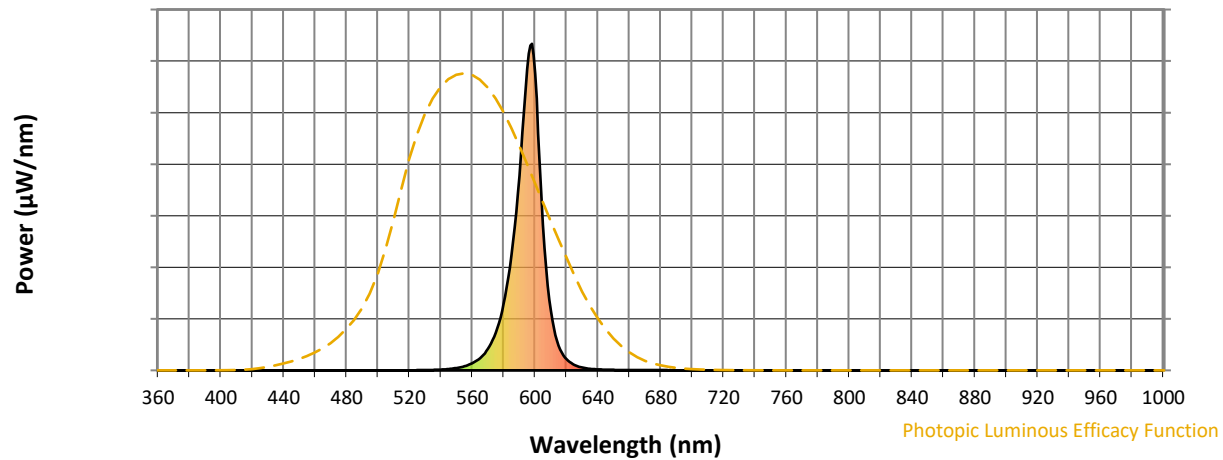


CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



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Photopic Flux vs. Wavelength

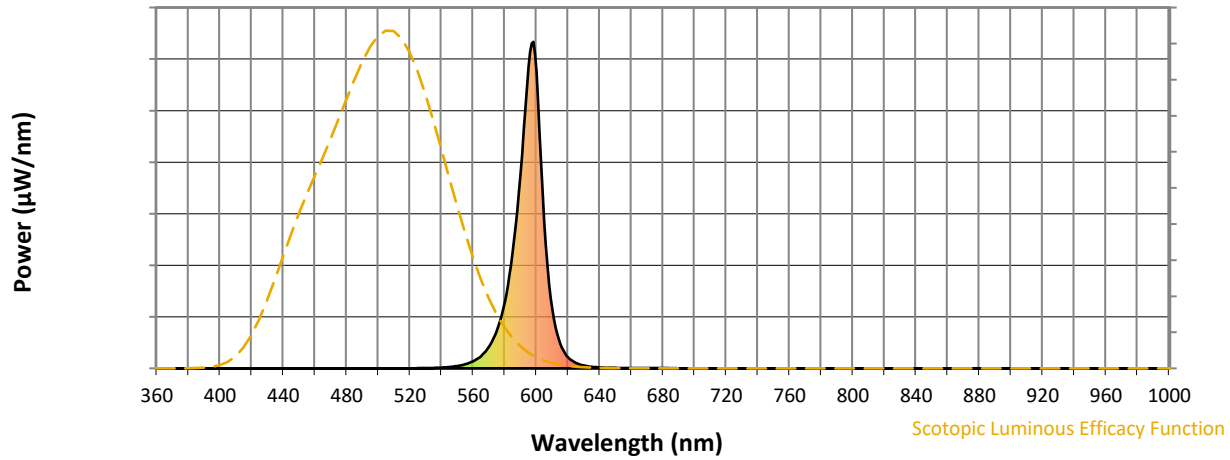


Photopic Lumens: NR

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



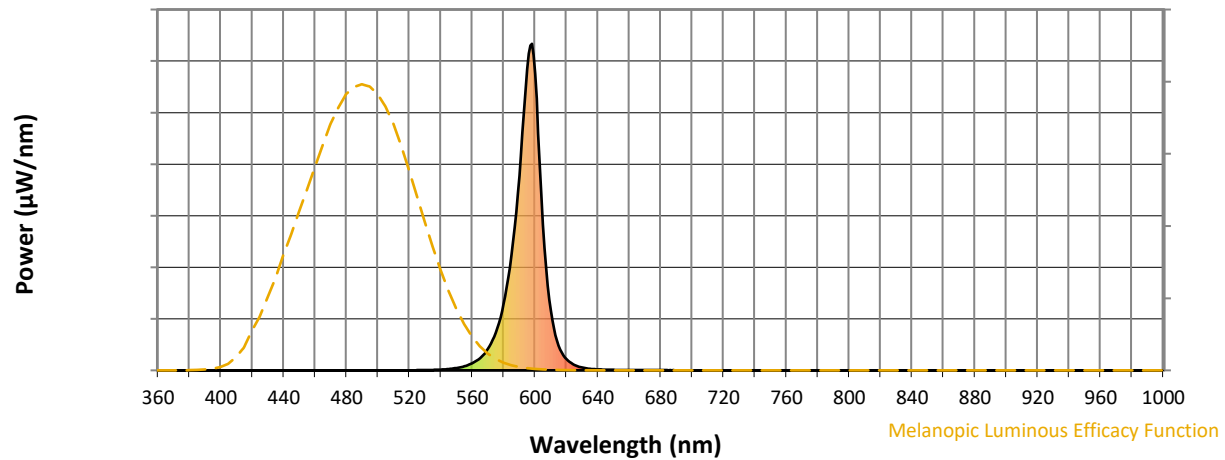
Scotopic Lumens: NR

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 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	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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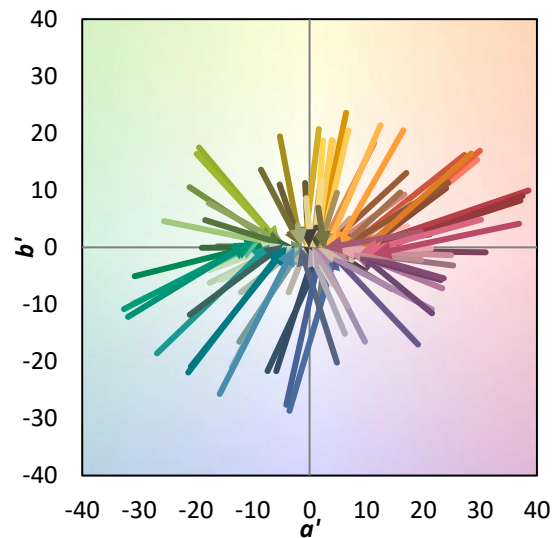
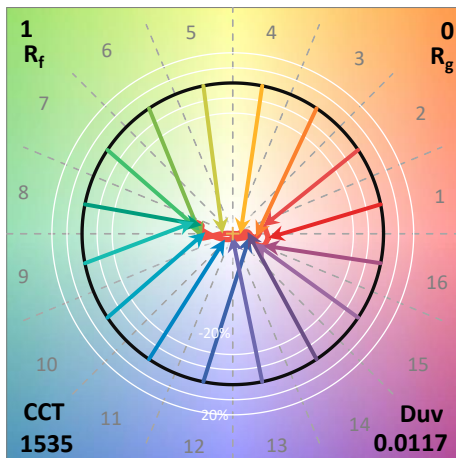
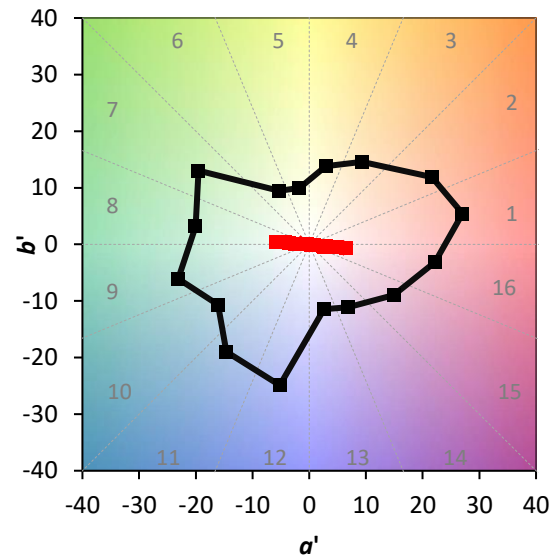
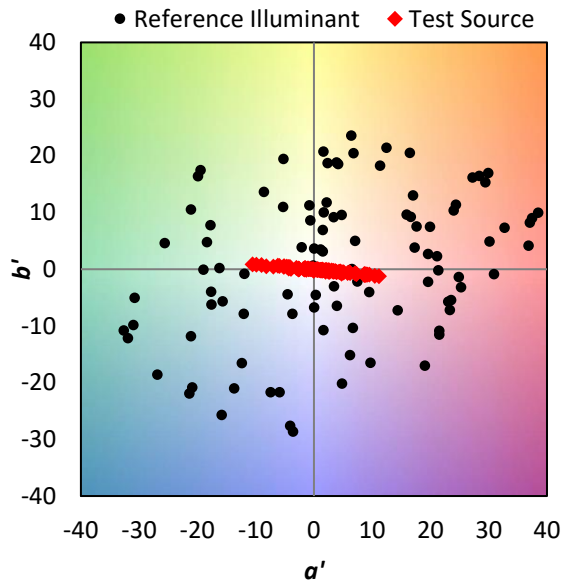
TM-30-18

Summary

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

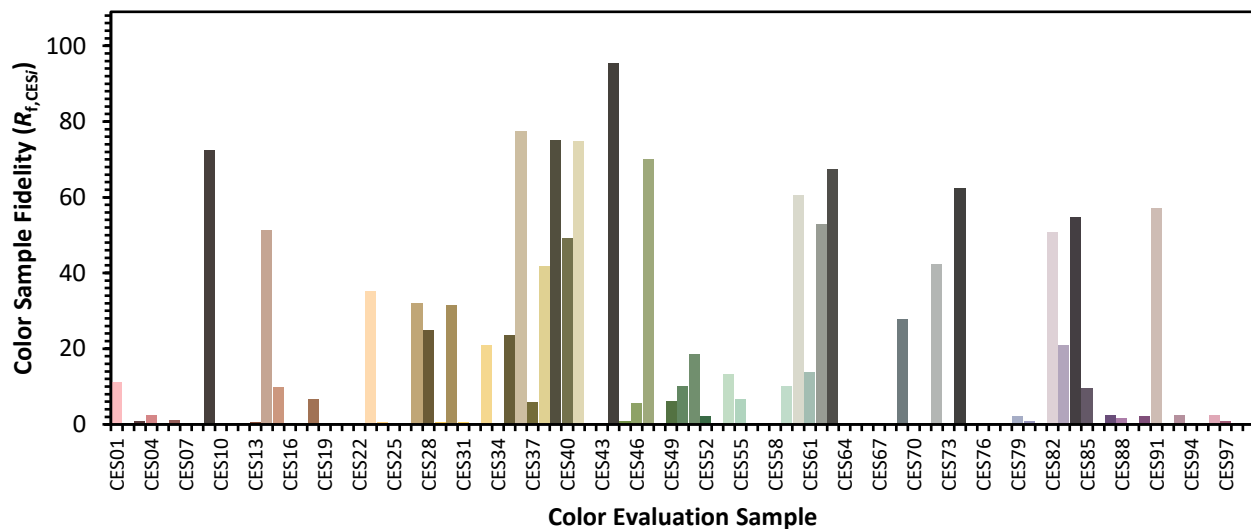


Color Vector Graphics

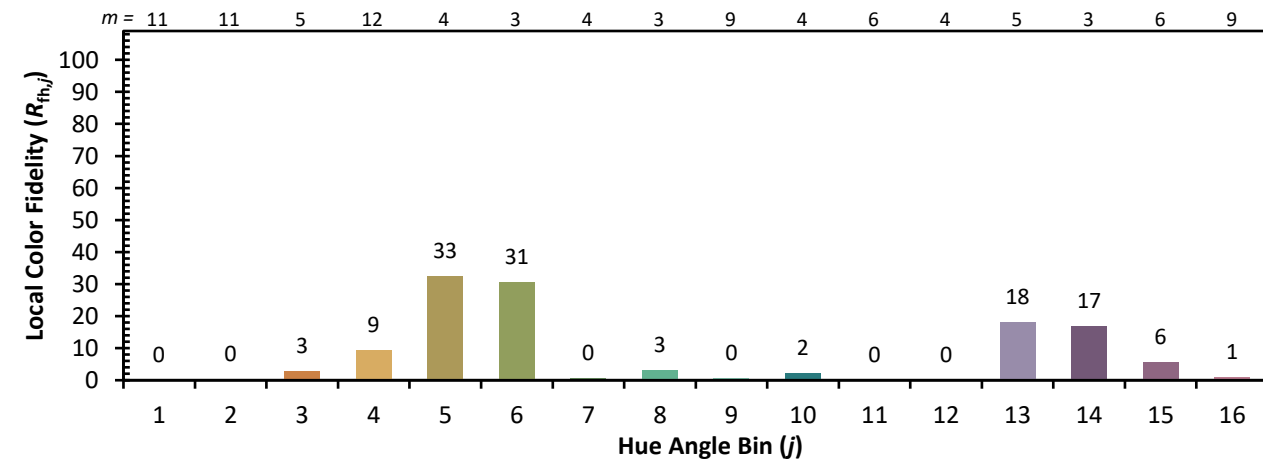
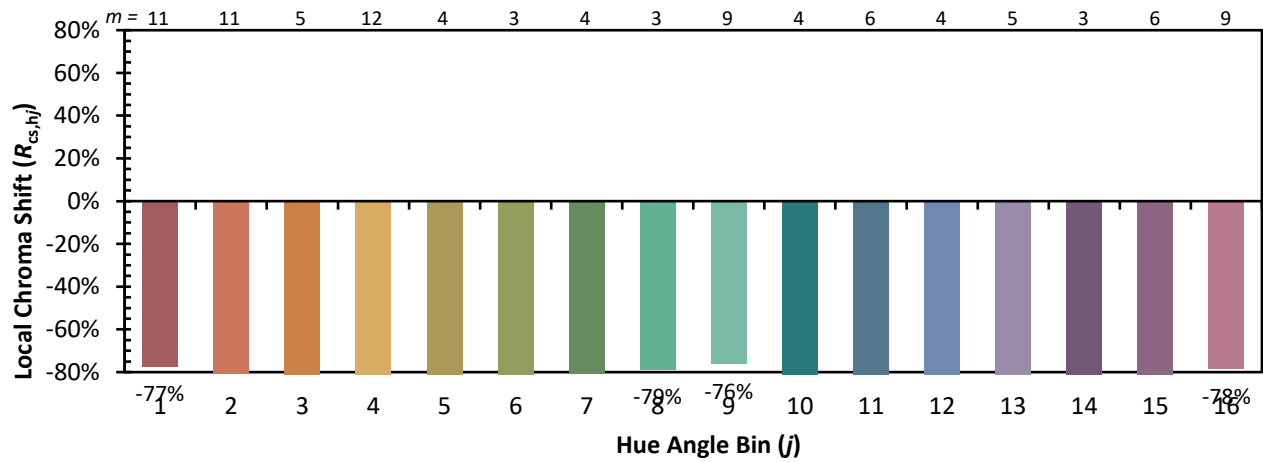


Individual Sample Fidelity Index ($R_{f,i}$)

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



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Measure Comparisons



(END OF REPORT)