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: P1357510

Luminaire Tested: 8ASL4-25VHE-3-40-UNV

Issue Date: 2/17/2026

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

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P1357510
	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:	8ASL4-25VHE-3-40-UNV
Description:	8FT 2500 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND 4000K LEDS 3 ROW
Light Source:	-
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	20448.0 lumens
Efficiency:	N/A
Efficacy:	119.4 lumens/watt
Spacing Criteria (0/90/45):	1.21 / 1.3 / 1.39
Luminous Opening:	Rectangular w/ Sides (W: 0.33' x L: 7.98' x H: 0.1')
CIE Type:	Direct

Input Watts (W):	171.2
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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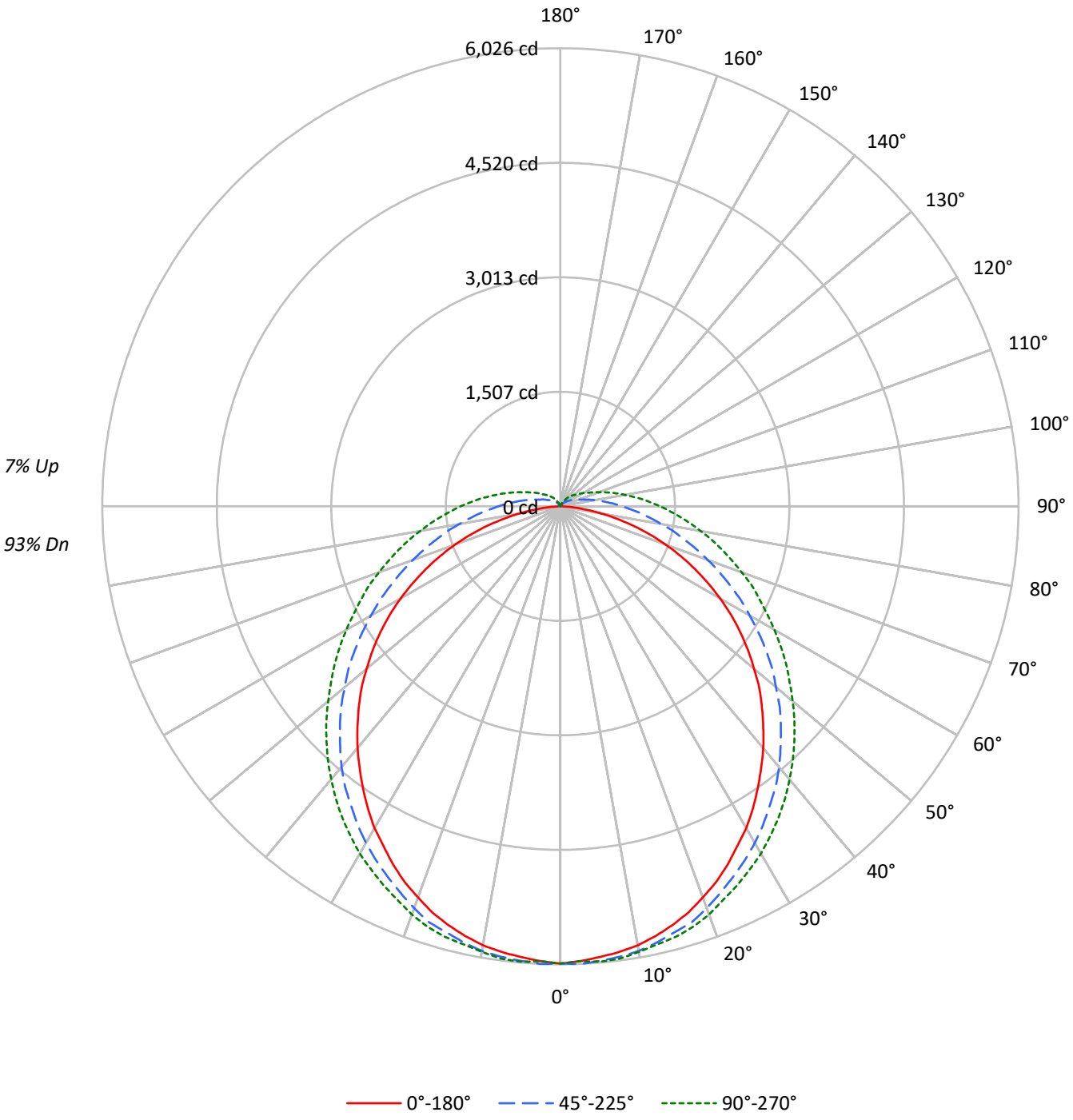
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93
1	105	100	95	91	102	97	92	88	91	88	84	86	83	80	81	79	77	74
2	95	86	79	72	92	84	77	71	79	73	68	75	70	66	71	67	63	61
3	86	75	67	60	83	73	65	59	69	62	57	65	60	55	62	57	53	50
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	50	45	43
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	37
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	45	39	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	28
8	58	44	35	29	56	43	35	29	41	34	28	39	32	28	37	32	27	25
9	54	40	32	26	52	39	31	26	38	30	25	36	30	25	35	29	24	22
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24339	24339	24339
5°	24150	23900	23782
10°	24043	23454	23180
15°	23805	22895	22671
20°	23474	22358	22096
25°	23085	21681	21442
30°	22675	21094	20888
35°	22159	20428	20273
40°	21693	19819	19625
45°	21192	19079	18974
50°	20619	18285	18297
55°	20006	17527	17689
60°	19199	16641	17072
65°	18170	15791	16560
70°	16854	14953	16159
75°	14915	14196	15884
80°	11937	13650	15767
85°	7576	13591	16000

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 21192 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	570.3	2.8
10°-20°	1637.4	8.0
20°-30°	2475.6	12.1
30°-40°	2997.6	14.7
40°-50°	3148.4	15.4
50°-60°	2937.3	14.4
60°-70°	2427.5	11.9
70°-80°	1747.9	8.5
80°-90°	1086.1	5.3
90°-100°	636.4	3.1
100°-110°	364.1	1.8
110°-120°	205.6	1.0
120°-130°	118.3	0.6
130°-140°	63.7	0.3
140°-150°	26.8	0.1
150°-160°	5.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	4683.3	22.9
0°-40°	7680.9	37.6
0°-60°	13766.6	67.3
0°-90°	19028.1	93.1
90°-120°	1206.1	5.9
90°-150°	1414.9	6.9
90°-180°	1420.0	6.9
0°-180°	20448.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6014	6014	6014	6014	6014	
5°	5952	6002	6002	6002	6014	566
15°	5702	5776	5802	5839	5864	1608
25°	5201	5289	5376	5451	5501	2396
35°	4526	4651	4801	4939	5001	2833
45°	3751	3888	4101	4276	4351	2894
55°	2888	3051	3301	3538	3626	2581
65°	1950	2138	2463	2776	2888	1930
75°	1000	1250	1688	2050	2201	1058
85°	188	563	1063	1438	1575	229
90°	0	338	813	1163	1313	9
95°	0	213	613	938	1075	0
105°	0	75	338	588	688	0
115°	0	38	200	363	425	0
125°	0	25	125	238	275	0
135°	0	0	75	150	188	0
145°	0	0	38	88	100	0
155°	0	0	0	25	38	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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TEST NUMBER: P1357510
CATALOG NUMBER: 8ASL4-25VHE-3-40-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6014.0	*6014.0*	6014.0	6014.0	6014.0
2.5°	*5989.0*	*6026.5*	*6026.5*	*5989.0*	*5989.0*
5°	5951.5	*6001.5*	6001.5	6001.5	6014.0
7.5°	5914.0	*5976.5*	5976.5	5976.5	6001.5
10°	5864.0	*5926.5*	5939.0	5939.0	5951.5
12.5°	5789.0	*5864.0*	5876.5	5889.0	5901.5
15°	5701.5	*5776.5*	5801.5	5839.0	5864.0
17.5°	5601.4	*5688.9*	5739.0	5776.5	5801.5
20°	5476.4	*5563.9*	5626.4	5676.4	5714.0
22.5°	5351.4	*5426.4*	5501.4	5563.9	5601.4
25°	5201.3	*5288.8*	5376.4	5451.4	5501.4
27.5°	5038.8	*5138.8*	5251.3	5338.9	5388.9
30°	4888.7	*4988.8*	5113.8	5226.3	5276.3
32.5°	4713.7	*4826.2*	4963.8	5076.3	5138.8
35°	4526.2	*4651.2*	4801.2	4938.8	5001.3
37.5°	4338.6	*4463.6*	4651.2	4788.7	4851.2
40°	4151.1	*4276.1*	4476.1	4626.2	4688.7
42.5°	3951.0	*4076.0*	4288.6	4451.1	4526.2
45°	3751.0	*3888.5*	4101.0	4276.1	4351.1
47.5°	3550.9	*3688.4*	3913.5	4101.0	4176.1
50°	3325.8	*3475.9*	3700.9	3913.5	3988.5
52.5°	3113.3	*3263.3*	3513.4	3725.9	3801.0
55°	2888.2	*3050.8*	3300.8	3538.4	3625.9
57.5°	2663.2	*2825.7*	3088.3	3338.4	3438.4
60°	2425.6	*2600.7*	2875.7	3138.3	3250.8
62.5°	2188.1	*2375.6*	2675.7	2950.8	3063.3
65°	1950.5	*2138.0*	2463.1	2775.7	2888.2
67.5°	1712.9	*1913.0*	2263.1	2588.2	2725.7
70°	1475.4	*1687.9*	2063.0	2400.6	2538.1
72.5°	1237.8	*1462.9*	1875.5	2225.6	2363.1
75°	1000.3	*1250.3*	1687.9	2050.5	2200.6
77.5°	762.7	*1050.3*	1525.4	1888.0	2038.0
80°	550.1	*875.2*	1350.3	1725.4	1875.5
82.5°	350.1	*700.2*	1200.3	1575.4	1725.4
85°	187.5	*562.6*	1062.8	1437.9	1575.4
87.5°	62.5	*437.6*	925.2	1300.3	1437.9
90°	0.0	*337.6*	812.7	1162.8	1312.8
92.5°	0.0	*262.6*	712.7	1050.3	1187.8
95°	0.0	*212.6*	612.7	937.7	1075.3
97.5°	0.0	*175.0*	537.6	837.7	962.7
100°	0.0	*137.5*	462.6	750.2	862.7
102.5°	0.0	*112.5*	400.1	662.7	775.2
105°	0.0	*75.0*	337.6	587.6	687.7
107.5°	0.0	*62.5*	287.6	525.1	612.7
110°	0.0	*50.0*	262.6	450.1	537.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	*37.5*	237.6	400.1	487.6
115°	0.0	*37.5*	200.1	362.6	425.1
117.5°	0.0	*37.5*	175.0	325.1	387.6
120°	0.0	*25.0*	162.5	287.6	350.1
122.5°	0.0	*25.0*	137.5	262.6	312.6
125°	0.0	*25.0*	125.0	237.6	275.1
127.5°	0.0	*12.5*	112.5	212.6	250.1
130°	0.0	*12.5*	100.0	187.5	225.1
132.5°	0.0	*12.5*	87.5	175.0	212.6
135°	0.0	*0.0*	75.0	150.0	187.5
137.5°	0.0	*0.0*	62.5	137.5	162.5
140°	0.0	*0.0*	50.0	112.5	150.0
142.5°	0.0	*0.0*	37.5	100.0	125.0
145°	0.0	*0.0*	37.5	87.5	100.0
147.5°	0.0	*0.0*	25.0	62.5	87.5
150°	0.0	*0.0*	12.5	50.0	62.5
152.5°	0.0	*0.0*	0.0	37.5	50.0
155°	0.0	*0.0*	0.0	25.0	37.5
157.5°	0.0	*0.0*	0.0	0.0	12.5
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	20.44	21.98	20.91	22.43	22.92	22.51	24.05	22.98	24.50	24.99
	3H	21.93	23.34	22.42	23.80	24.33	24.99	26.39	25.47	26.86	27.38
	4H	22.41	23.75	22.92	24.23	24.77	26.20	27.53	26.71	28.02	28.55
	6H	22.69	23.93	23.20	24.43	24.98	27.48	28.72	28.00	29.22	29.77
	8H	22.74	23.93	23.27	24.45	25.01	28.15	29.34	28.68	29.86	30.42
	12H	22.76	23.89	23.29	24.41	25.00	28.90	30.04	29.43	30.55	31.14
4H	2H	21.32	22.65	21.83	23.14	23.67	22.94	24.27	23.44	24.75	25.29
	3H	23.06	24.19	23.57	24.72	25.28	25.65	26.78	26.16	27.31	27.87
	4H	23.66	24.70	24.20	25.24	25.83	27.03	28.07	27.57	28.61	29.20
	6H	24.06	24.98	24.61	25.54	26.15	28.50	29.42	29.06	29.98	30.59
	8H	24.15	25.02	24.71	25.58	26.20	29.28	30.14	29.84	30.70	31.32
	12H	24.20	24.98	24.78	25.57	26.20	30.15	30.93	30.73	31.52	32.15
8H	4H	24.35	25.22	24.91	25.78	26.40	27.25	28.11	27.81	28.67	29.29
	6H	24.93	25.66	25.52	26.27	26.89	28.89	29.62	29.48	30.22	30.85
	8H	25.11	25.77	25.72	26.39	27.03	29.80	30.46	30.41	31.08	31.71
	12H	25.23	25.82	25.84	26.42	27.13	30.86	31.45	31.47	32.05	32.76
12H	4H	24.55	25.34	25.13	25.93	26.55	27.25	28.04	27.84	28.63	29.25
	6H	25.23	25.89	25.84	26.51	27.15	28.92	29.58	29.53	30.20	30.84
	8H	25.51	26.10	26.12	26.70	27.41	29.91	30.50	30.51	31.10	31.80

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

Report Prepared for

Cooper Lighting Solutions

Fail-Safe

Report Number: SP1-2511-597-4

Test Date: 11/18/2025

Luminaire Tested: 4ASL-2-40-UNV-OPL-1_600mA

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

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.05

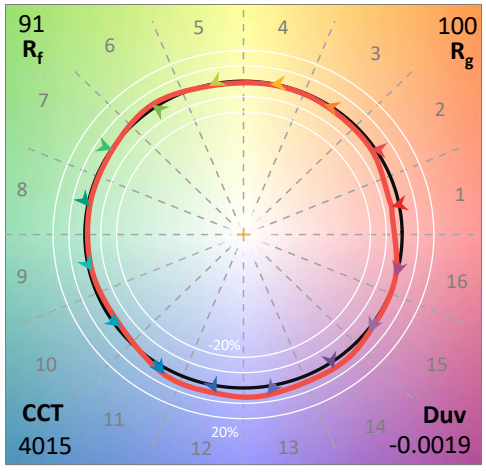
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2511-597-4
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	11/18/2025
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	Fail-Safe
Catalog Number:	**4ASL-2-40-UNV-OPL-1_600mA**
Description:	2foot 4ASL LED LUMINAIRE WITH OPL LENS AND 4000K LEDS with 1 rows at 600mA

Spectral Parameters

CCT (K):	4015
CIE u':	0.2259
CIE v':	0.4990
Duv:	-0.0019
CIE x:	0.3785
CIE y:	0.3715
CIE z:	0.2500
Peak Wavelength (nm):	630
Dominant Wavelength (nm):	580
Purity:	25.06827
Rf:	90.7
Rg:	100.2

CRI (Ra):	93.9
R1:	95.7
R2:	96.3
R3:	94.8
R4:	95.2
R5:	94.6
R6:	93.5
R7:	94.0
R8:	87.2
R9:	66.3
R10:	89.1
R11:	95.0
R12:	73.8
R13:	96.0
R14:	96.4
R15:	93.2



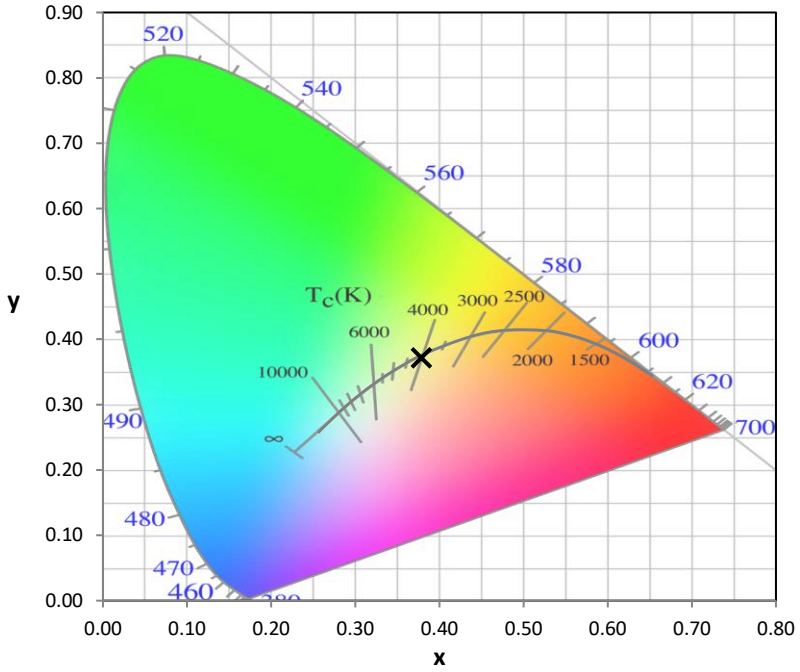
Test Conditions

Stabilization Time:	23M
Operation Time:	1H 23M
Sphere Temperature (°C):	24.1

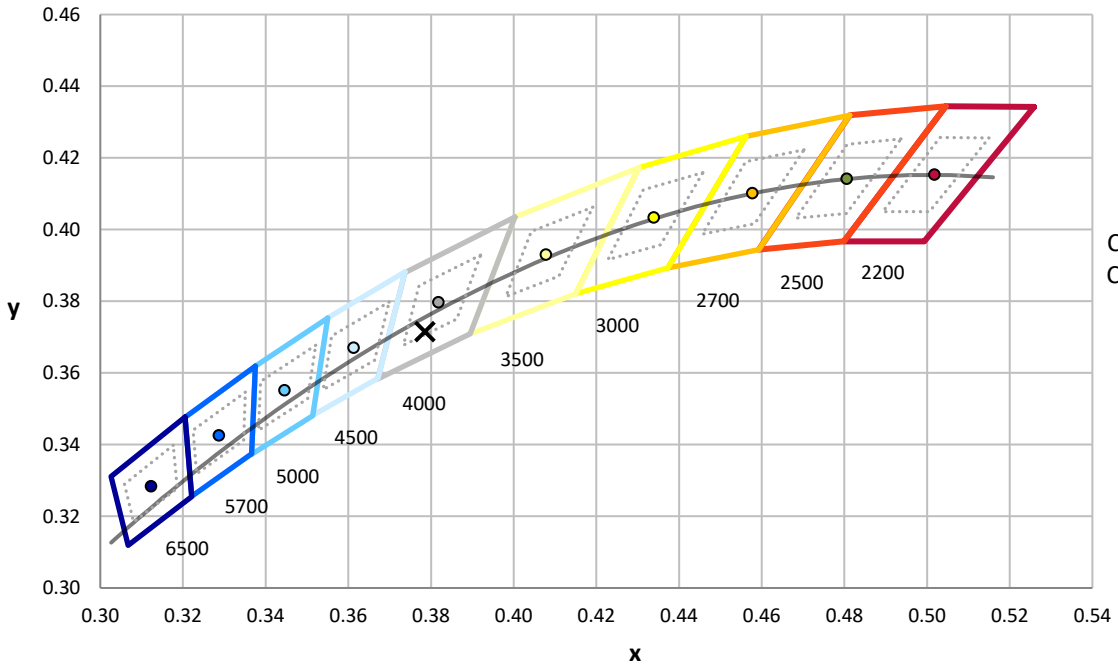
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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

REPORT NUMBER: SP1-2511-597-4

CIE 1931 Chromaticity Diagram



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

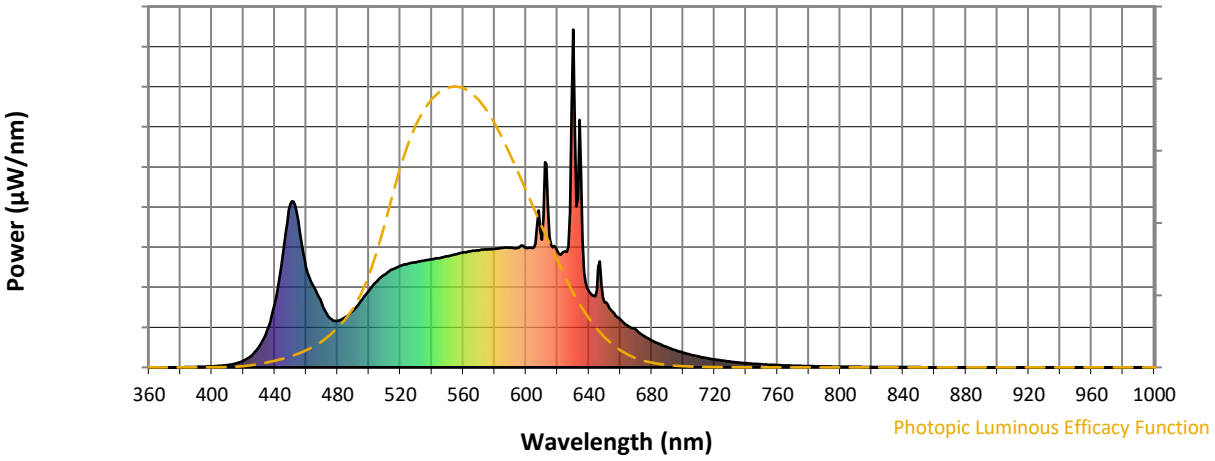


CCT = 4015K
CIE x = 0.3785
CIE y = 0.3715
Duv = -0.0019

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2511-597-4

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	169	NR	620	343	NR	750	9	NR	880	0	NR
365	0	NR	495	197	NR	625	343	NR	755	8	NR	885	0	NR
370	0	NR	500	228	NR	630	1000	NR	760	7	NR	890	0	NR
375	0	NR	505	254	NR	635	591	NR	765	6	NR	895	0	NR
380	0	NR	510	274	NR	640	225	NR	770	5	NR	900	0	NR
385	1	NR	515	290	NR	645	229	NR	775	4	NR	905	0	NR
390	1	NR	520	300	NR	650	193	NR	780	4	NR	910	0	NR
395	2	NR	525	307	NR	655	165	NR	785	3	NR	915	0	NR
400	3	NR	530	311	NR	660	142	NR	790	3	NR	920	0	NR
405	5	NR	535	316	NR	665	122	NR	795	2	NR	925	0	NR
410	7	NR	540	320	NR	670	112	NR	800	2	NR	930	0	NR
415	11	NR	545	323	NR	675	93	NR	805	2	NR	935	0	NR
420	20	NR	550	329	NR	680	80	NR	810	2	NR	940	0	NR
425	35	NR	555	334	NR	685	69	NR	815	1	NR	945	0	NR
430	61	NR	560	340	NR	690	59	NR	820	1	NR	950	0	NR
435	108	NR	565	344	NR	695	51	NR	825	1	NR	955	0	NR
440	187	NR	570	346	NR	700	43	NR	830	1	NR	960	0	NR
445	329	NR	575	349	NR	705	37	NR	835	1	NR	965	0	NR
450	484	NR	580	351	NR	710	32	NR	840	1	NR	970	0	NR
455	433	NR	585	353	NR	715	27	NR	845	1	NR	975	0	NR
460	296	NR	590	354	NR	720	23	NR	850	1	NR	980	0	NR
465	237	NR	595	353	NR	725	20	NR	855	0	NR	985	0	NR
470	188	NR	600	354	NR	730	17	NR	860	0	NR	990	0	NR
475	146	NR	605	354	NR	735	15	NR	865	0	NR	995	0	NR
480	138	NR	610	378	NR	740	12	NR	870	0	NR	1000	0	NR
485	149	NR	615	385	NR	745	11	NR	875	0	NR			

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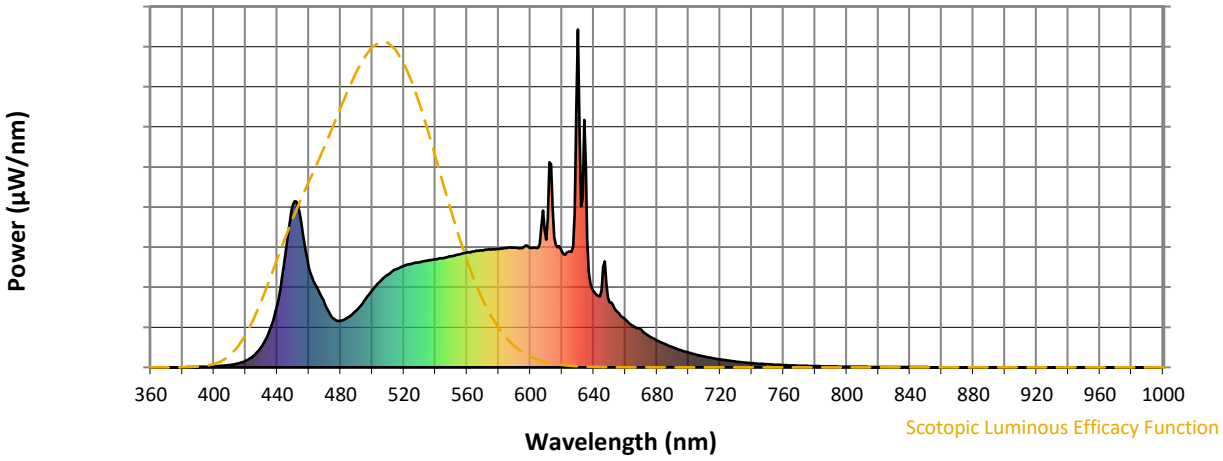
Scotopic Flux vs. Wavelength



Scotopic Lumens: NR **S/P: 1.79**

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	169	NR	620	343	NR	750	9	NR	880	0	NR
365	0	NR	495	197	NR	625	343	NR	755	8	NR	885	0	NR
370	0	NR	500	228	NR	630	1000	NR	760	7	NR	890	0	NR
375	0	NR	505	254	NR	635	591	NR	765	6	NR	895	0	NR
380	0	NR	510	274	NR	640	225	NR	770	5	NR	900	0	NR
385	1	NR	515	290	NR	645	229	NR	775	4	NR	905	0	NR
390	1	NR	520	300	NR	650	193	NR	780	4	NR	910	0	NR
395	2	NR	525	307	NR	655	165	NR	785	3	NR	915	0	NR
400	3	NR	530	311	NR	660	142	NR	790	3	NR	920	0	NR
405	5	NR	535	316	NR	665	122	NR	795	2	NR	925	0	NR
410	7	NR	540	320	NR	670	112	NR	800	2	NR	930	0	NR
415	11	NR	545	323	NR	675	93	NR	805	2	NR	935	0	NR
420	20	NR	550	329	NR	680	80	NR	810	2	NR	940	0	NR
425	35	NR	555	334	NR	685	69	NR	815	1	NR	945	0	NR
430	61	NR	560	340	NR	690	59	NR	820	1	NR	950	0	NR
435	108	NR	565	344	NR	695	51	NR	825	1	NR	955	0	NR
440	187	NR	570	346	NR	700	43	NR	830	1	NR	960	0	NR
445	329	NR	575	349	NR	705	37	NR	835	1	NR	965	0	NR
450	484	NR	580	351	NR	710	32	NR	840	1	NR	970	0	NR
455	433	NR	585	353	NR	715	27	NR	845	1	NR	975	0	NR
460	296	NR	590	354	NR	720	23	NR	850	1	NR	980	0	NR
465	237	NR	595	353	NR	725	20	NR	855	0	NR	985	0	NR
470	188	NR	600	354	NR	730	17	NR	860	0	NR	990	0	NR
475	146	NR	605	354	NR	735	15	NR	865	0	NR	995	0	NR
480	138	NR	610	378	NR	740	12	NR	870	0	NR	1000	0	NR
485	149	NR	615	385	NR	745	11	NR	875	0	NR			

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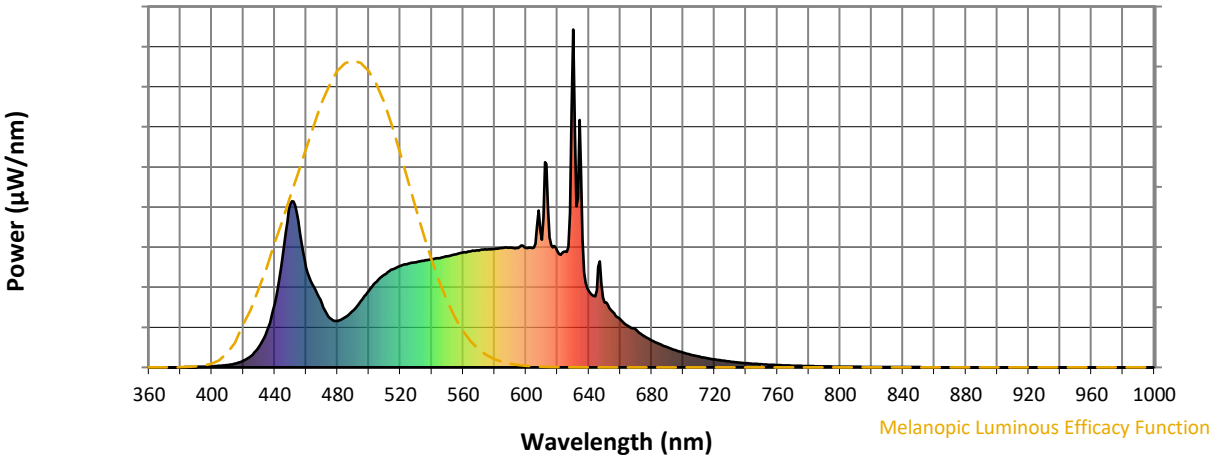
Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 3.74**

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	169	NR	620	343	NR	750	9	NR	880	0	NR
365	0	NR	495	197	NR	625	343	NR	755	8	NR	885	0	NR
370	0	NR	500	228	NR	630	1000	NR	760	7	NR	890	0	NR
375	0	NR	505	254	NR	635	591	NR	765	6	NR	895	0	NR
380	0	NR	510	274	NR	640	225	NR	770	5	NR	900	0	NR
385	1	NR	515	290	NR	645	229	NR	775	4	NR	905	0	NR
390	1	NR	520	300	NR	650	193	NR	780	4	NR	910	0	NR
395	2	NR	525	307	NR	655	165	NR	785	3	NR	915	0	NR
400	3	NR	530	311	NR	660	142	NR	790	3	NR	920	0	NR
405	5	NR	535	316	NR	665	122	NR	795	2	NR	925	0	NR
410	7	NR	540	320	NR	670	112	NR	800	2	NR	930	0	NR
415	11	NR	545	323	NR	675	93	NR	805	2	NR	935	0	NR
420	20	NR	550	329	NR	680	80	NR	810	2	NR	940	0	NR
425	35	NR	555	334	NR	685	69	NR	815	1	NR	945	0	NR
430	61	NR	560	340	NR	690	59	NR	820	1	NR	950	0	NR
435	108	NR	565	344	NR	695	51	NR	825	1	NR	955	0	NR
440	187	NR	570	346	NR	700	43	NR	830	1	NR	960	0	NR
445	329	NR	575	349	NR	705	37	NR	835	1	NR	965	0	NR
450	484	NR	580	351	NR	710	32	NR	840	1	NR	970	0	NR
455	433	NR	585	353	NR	715	27	NR	845	1	NR	975	0	NR
460	296	NR	590	354	NR	720	23	NR	850	1	NR	980	0	NR
465	237	NR	595	353	NR	725	20	NR	855	0	NR	985	0	NR
470	188	NR	600	354	NR	730	17	NR	860	0	NR	990	0	NR
475	146	NR	605	354	NR	735	15	NR	865	0	NR	995	0	NR
480	138	NR	610	378	NR	740	12	NR	870	0	NR	1000	0	NR
485	149	NR	615	385	NR	745	11	NR	875	0	NR			

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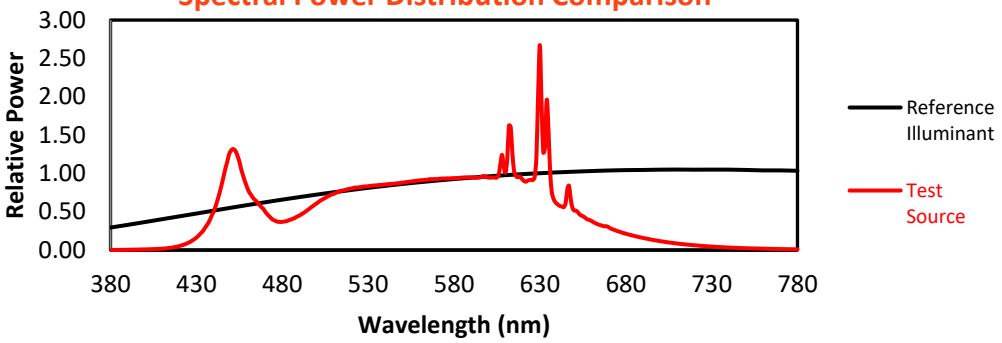
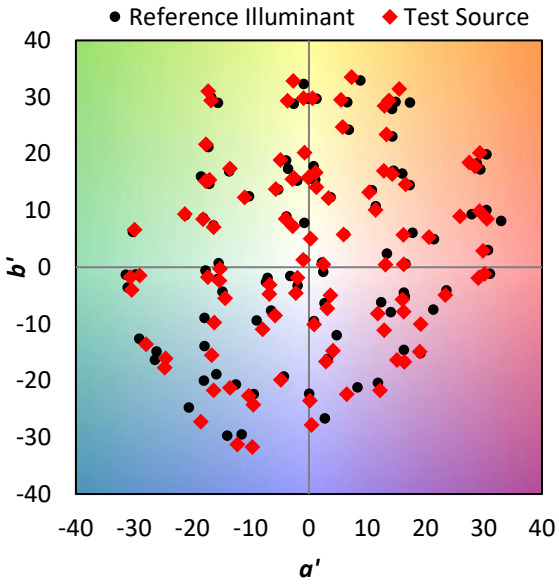
Summary

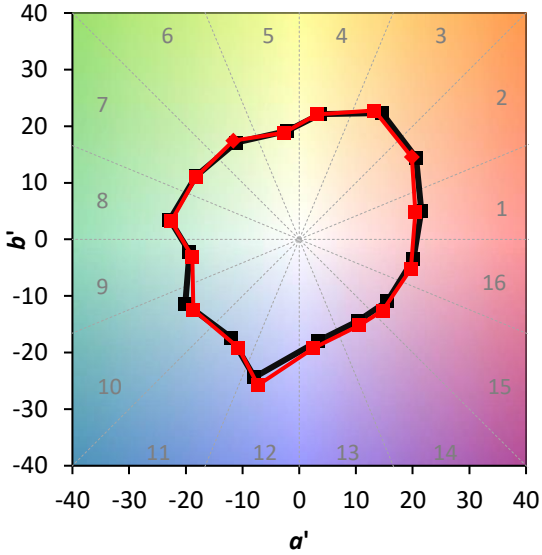
R_f = 90.7
R_g = 100.2
CIE R_a = 93.9
R_9 = 66.3

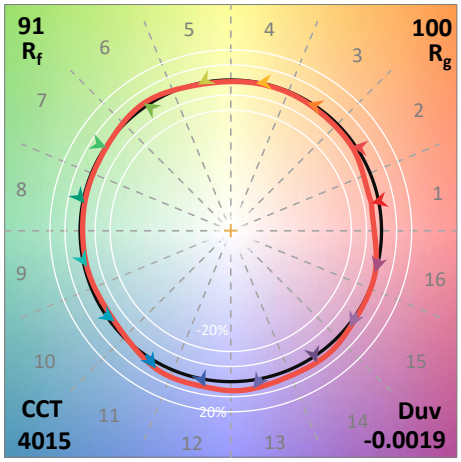
Spectral Power Distribution Comparison

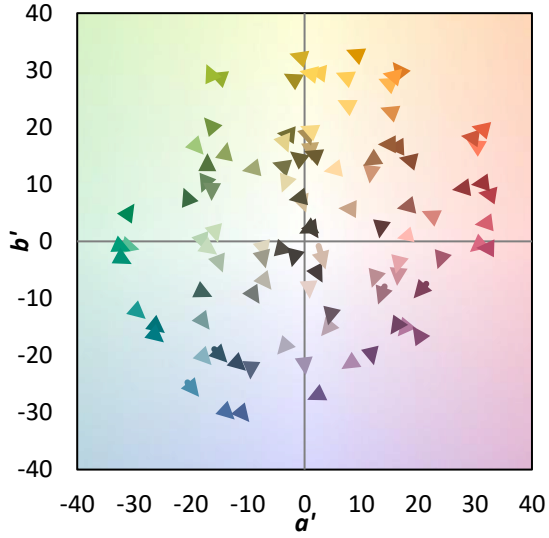


Color Vector Graphics









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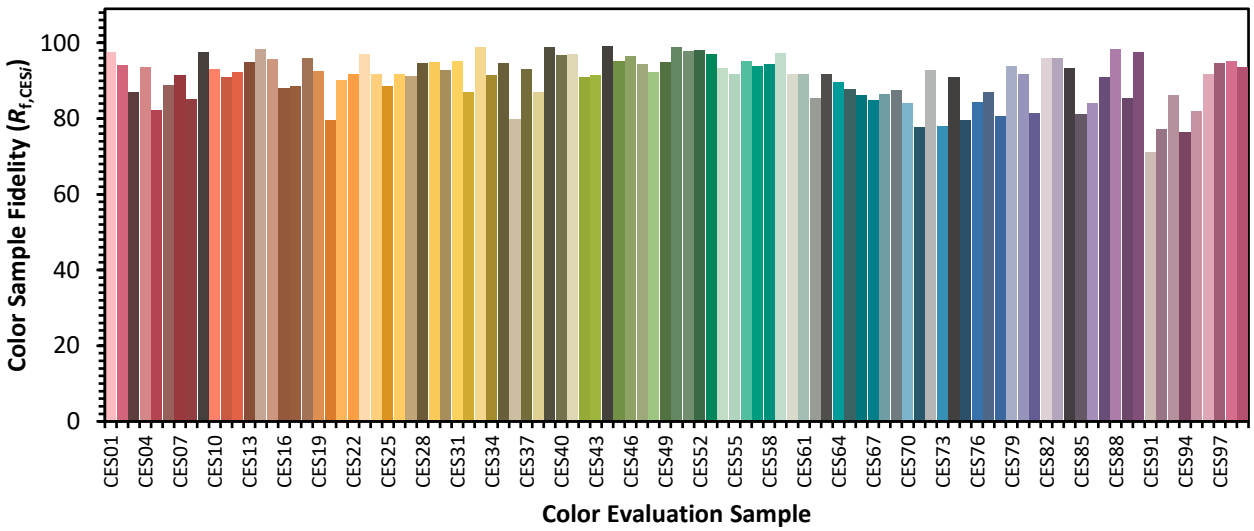
Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 86	CES26 = 92	CES51 = 98	CES76 = 84
CES02 = 62	CES27 = 91	CES52 = 98	CES77 = 87
CES03 = 31	CES28 = 95	CES53 = 97	CES78 = 81
CES04 = 69	CES29 = 95	CES54 = 93	CES79 = 94
CES05 = 49	CES30 = 93	CES55 = 92	CES80 = 92
CES06 = 50	CES31 = 95	CES56 = 95	CES81 = 81
CES07 = 42	CES32 = 87	CES57 = 94	CES82 = 96
CES08 = 41	CES33 = 99	CES58 = 94	CES83 = 96
CES09 = 29	CES34 = 91	CES59 = 97	CES84 = 93
CES10 = 74	CES35 = 95	CES60 = 92	CES85 = 81
CES11 = 57	CES36 = 80	CES61 = 92	CES86 = 84
CES12 = 63	CES37 = 93	CES62 = 85	CES87 = 91
CES13 = 43	CES38 = 87	CES63 = 92	CES88 = 98
CES14 = 74	CES39 = 99	CES64 = 90	CES89 = 85
CES15 = 71	CES40 = 97	CES65 = 88	CES90 = 98
CES16 = 47	CES41 = 97	CES66 = 86	CES91 = 71
CES17 = 49	CES42 = 91	CES67 = 85	CES92 = 77
CES18 = 56	CES43 = 91	CES68 = 87	CES93 = 86
CES19 = 71	CES44 = 99	CES69 = 87	CES94 = 76
CES20 = 66	CES45 = 95	CES70 = 84	CES95 = 82
CES21 = 85	CES46 = 96	CES71 = 78	CES96 = 92
CES22 = 78	CES47 = 94	CES72 = 93	CES97 = 95
CES23 = 91	CES48 = 92	CES73 = 78	CES98 = 95
CES24 = 90	CES49 = 95	CES74 = 91	CES99 = 94
CES25 = 71	CES50 = 99	CES75 = 80	



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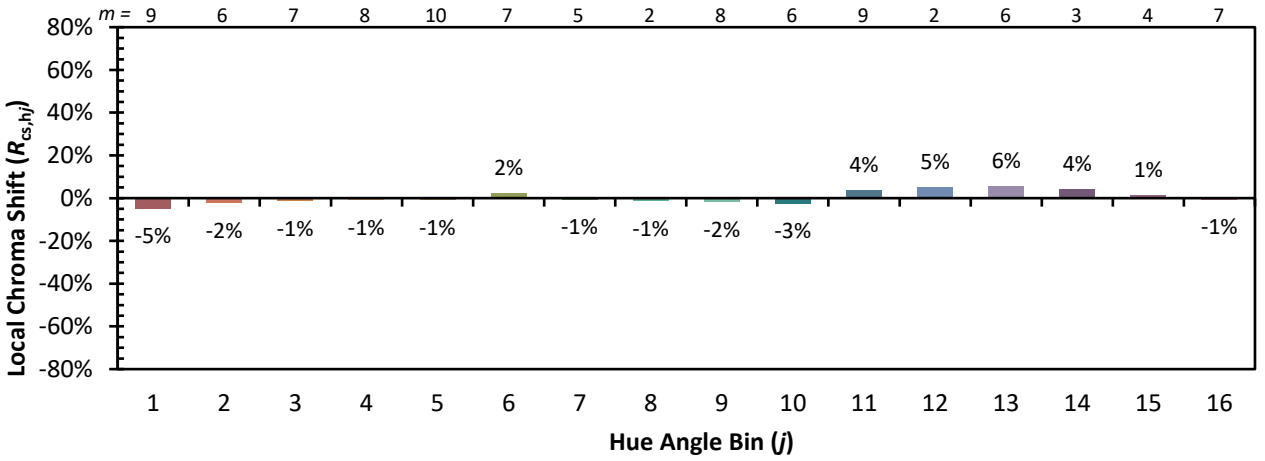
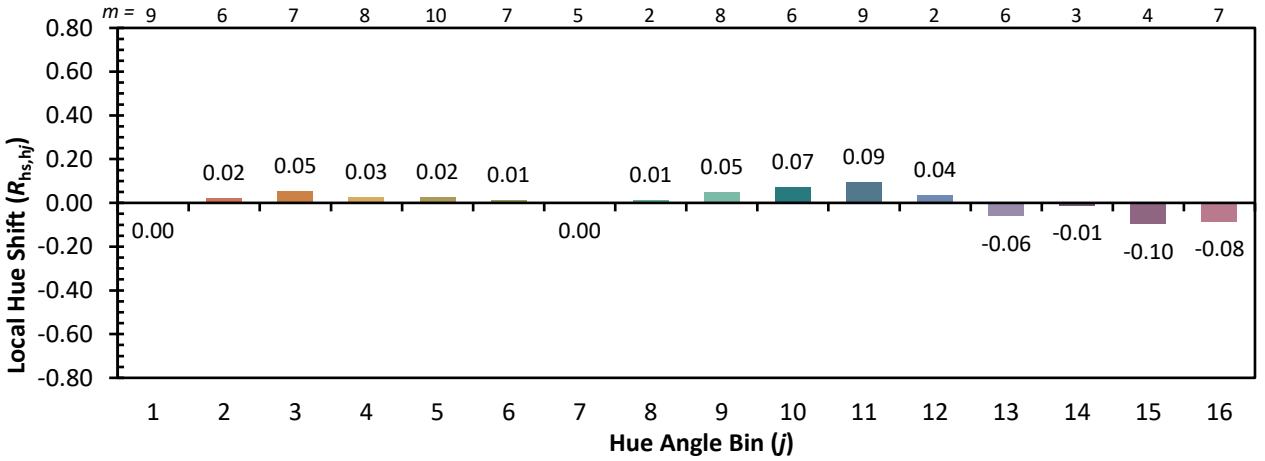
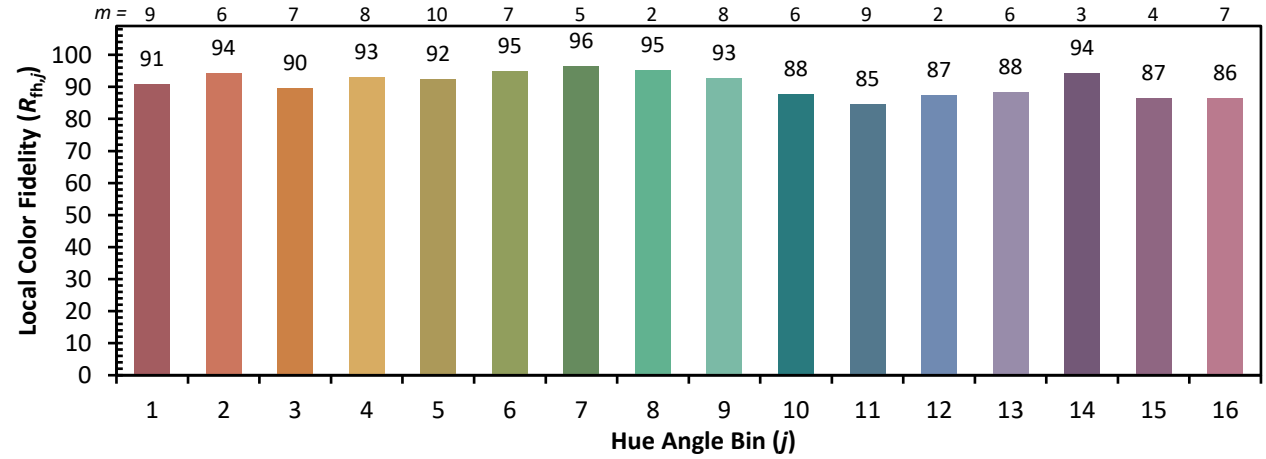
Color Rendition by Hue-Angle Bin







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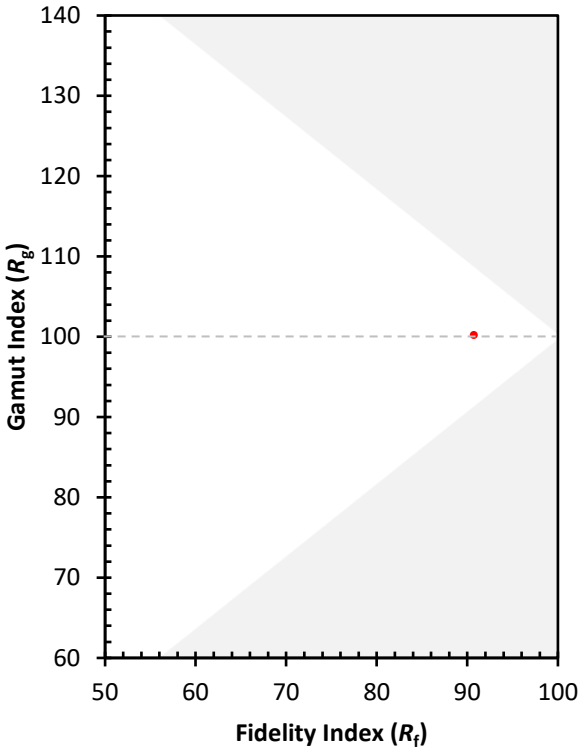
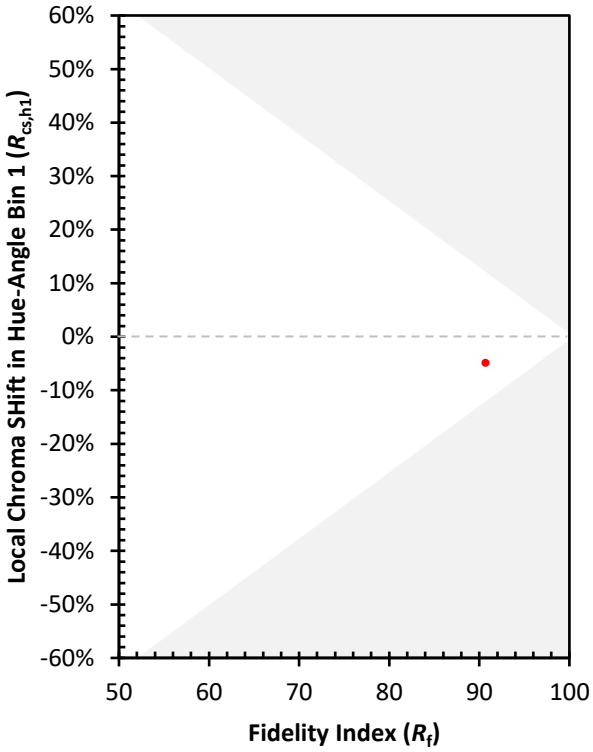
Measure Comparisons





(END OF REPORT)