

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: P1356793

Luminaire Tested: 2ASL4-10-1-40-UNV

Issue Date: 2/17/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1356793  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/17/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: 2ASL4-10-1-40-UNV  
Description: 2FT 1000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND 4000K LEDS 1 ROW  
Light Source: -  
Ballast/Driver: -

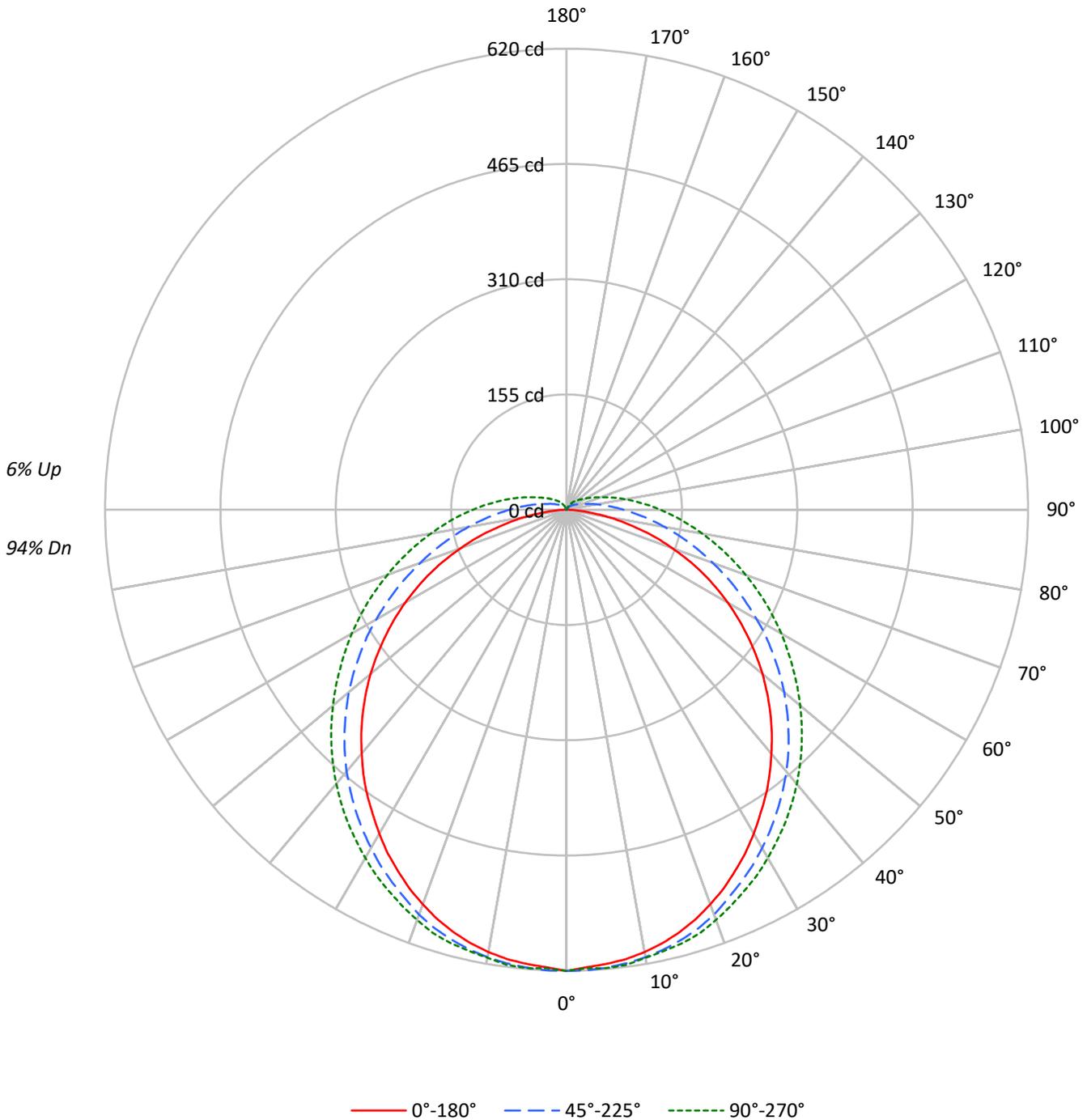
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2076.0 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39  
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1.98' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 17.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P1356793  
CATALOG NUMBER: 2ASL4-10-1-40-UNV

### Luminous Intensity Polar Plot





TEST NUMBER: P1356793  
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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	0
RCR																					
0	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	96	96	96	94
1	106	100	95	91	102	97	93	89	92	88	85	87	84	81	82	80	78	82	80	78	75
2	95	86	79	73	92	84	77	71	79	74	69	75	70	66	71	67	64	71	67	64	61
3	87	76	67	60	84	73	65	59	69	63	57	66	60	55	62	58	54	62	58	54	51
4	79	67	57	50	76	65	56	50	62	54	48	58	52	47	56	50	46	56	50	46	43
5	73	59	50	43	70	58	49	43	55	47	42	52	46	41	50	44	40	50	44	40	37
6	67	53	44	38	65	52	43	37	50	42	36	47	41	35	45	39	35	45	39	35	32
7	62	48	39	33	60	47	39	33	45	37	32	43	36	31	41	35	31	41	35	31	29
8	58	44	35	29	56	43	35	29	41	34	29	39	33	28	38	32	27	38	32	27	25
9	54	40	32	26	52	39	32	26	38	31	26	36	30	25	35	29	25	35	29	25	23
10	51	37	29	24	49	36	29	24	35	28	23	34	27	23	32	27	22	32	27	22	21

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10118	10118	10118
5°	9996	9898	9864
10°	9915	9682	9605
15°	9791	9452	9402
20°	9621	9196	9153
25°	9417	8892	8884
30°	9195	8614	8631
35°	8975	8330	8380
40°	8728	8044	8120
45°	8488	7732	7855
50°	8209	7407	7576
55°	7868	7041	7299
60°	7488	6659	7055
65°	7008	6257	6810
70°	6285	5833	6571
75°	5359	5451	6390
80°	4110	5109	6277
85°	2209	4852	6318

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8488 cd/sqm



TEST NUMBER: P1356793  
 CATALOG NUMBER: 2ASL4-10-1-40-UNV

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.7	2.8
10°-20°	168.6	8.1
20°-30°	254.9	12.3
30°-40°	308.1	14.8
40°-50°	323.9	15.6
50°-60°	301.7	14.5
60°-70°	247.9	11.9
70°-80°	176.0	8.5
80°-90°	106.1	5.1
90°-100°	59.4	2.9
100°-110°	32.9	1.6
110°-120°	18.4	0.9
120°-130°	10.6	0.5
130°-140°	5.8	0.3
140°-150°	2.6	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	482.1	23.2
0°-40°	790.2	38.1
0°-60°	1415.8	68.2
0°-90°	1945.8	93.7
90°-120°	110.7	5.3
90°-150°	129.6	6.2
90°-180°	130.0	6.3
0°-180°	2076.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	613	619	618	617	619	58
15°	588	596	598	601	603	166
25°	536	546	553	561	565	247
35°	467	479	494	506	513	292
45°	387	401	422	439	447	299
55°	297	314	339	361	371	266
65°	202	220	252	281	295	199
75°	102	128	170	205	220	109
85°	19	55	102	140	154	24
90°	0	32	76	112	126	1
95°	0	19	56	88	101	0
105°	0	7	30	53	63	0
115°	0	4	18	32	39	0
125°	0	2	11	21	25	0
135°	0	1	7	13	17	0
145°	1	0	3	8	10	0
155°	1	1	0	2	3	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P1356793

CATALOG NUMBER: 2ASL4-10-1-40-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	620.1	620.1	620.1	620.1	620.1
2.5°	615.9	621.5	620.1	617.3	617.3
5°	613.1	618.7	618.0	617.3	618.7
7.5°	609.6	615.2	615.2	615.9	617.3
10°	604.0	611.0	611.0	611.0	611.7
12.5°	596.9	604.0	605.4	606.1	607.5
15°	587.8	595.5	598.3	601.1	603.2
17.5°	577.3	585.0	589.9	593.4	596.9
20°	564.7	573.1	579.4	583.6	587.1
22.5°	551.3	559.8	566.1	572.4	576.6
25°	535.9	545.7	553.4	561.2	565.4
27.5°	520.5	530.3	540.1	549.2	554.1
30°	502.9	514.2	525.4	535.9	540.8
32.5°	484.7	496.6	510.0	521.2	526.8
35°	467.2	479.1	493.8	506.4	512.8
37.5°	448.2	460.2	477.0	491.0	497.3
40°	427.9	441.2	459.5	474.2	481.2
42.5°	408.2	421.6	441.2	457.3	464.4
45°	387.2	401.2	421.6	439.1	446.8
47.5°	365.5	380.2	401.9	420.2	428.6
50°	343.7	359.1	381.6	401.2	409.6
52.5°	320.6	336.7	360.5	381.6	390.7
55°	297.4	314.3	338.8	361.2	371.1
57.5°	274.3	291.1	317.8	341.6	352.1
60°	250.4	268.0	295.3	321.3	333.2
62.5°	225.9	244.1	272.9	300.9	313.5
65°	202.0	220.3	251.8	281.3	294.6
67.5°	176.8	196.4	230.1	260.9	275.0
70°	150.8	173.3	209.0	242.0	256.0
72.5°	127.7	150.8	189.4	223.1	237.8
75°	101.7	127.7	169.8	204.8	219.6
77.5°	79.3	107.3	151.5	187.3	202.0
80°	56.8	87.7	134.0	170.5	185.2
82.5°	36.5	70.1	117.8	155.0	169.0
85°	18.9	54.7	102.4	140.3	154.3
87.5°	5.6	42.1	88.4	125.6	139.6
90°	0.0	32.3	76.5	112.2	125.6
92.5°	0.0	24.6	65.9	100.3	113.6
95°	0.0	18.9	56.1	88.4	101.0
97.5°	0.0	14.7	48.4	77.9	90.5
100°	0.0	11.9	41.4	68.7	80.7
102.5°	0.0	9.8	35.8	61.0	71.5
105°	0.0	7.0	29.5	53.3	63.1
107.5°	0.0	4.9	26.0	47.0	55.4
110°	0.0	4.2	23.1	40.7	49.1



TEST NUMBER: P1356793  
 CATALOG NUMBER: 2ASL4-10-1-40-UNV

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	3.5	20.3	36.5	43.5
115°	0.0	3.5	18.2	32.3	38.6
117.5°	0.0	2.8	15.4	28.8	34.4
120°	0.0	2.8	14.0	26.0	30.9
122.5°	0.0	2.1	12.6	23.1	28.1
125°	0.0	2.1	11.2	21.0	24.6
127.5°	0.0	1.4	9.8	18.9	22.4
130°	0.0	1.4	9.1	16.8	20.3
132.5°	0.0	0.7	8.4	15.4	18.2
135°	0.0	0.7	7.0	13.3	16.8
137.5°	0.0	0.0	6.3	11.9	14.7
140°	0.0	0.0	4.9	10.5	13.3
142.5°	0.7	0.0	4.2	9.1	11.2
145°	0.7	0.0	2.8	7.7	9.8
147.5°	0.7	0.7	2.1	6.3	7.7
150°	0.7	0.7	1.4	4.2	6.3
152.5°	0.7	0.7	0.7	2.8	4.2
155°	0.7	0.7	0.0	2.1	2.8
157.5°	0.7	0.7	0.0	0.7	1.4
160°	0.7	0.7	0.0	0.0	0.7
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	17.41	18.97	17.87	19.41	19.88	19.31	20.87	19.77	21.31	21.78
	3H	18.91	20.32	19.38	20.78	21.28	21.69	23.10	22.16	23.55	24.06
	4H	19.39	20.73	19.88	21.20	21.72	22.83	24.17	23.32	24.64	25.16
	6H	19.66	20.91	20.17	21.40	21.93	23.99	25.23	24.49	25.72	26.26
	8H	19.72	20.91	20.23	21.42	21.96	24.57	25.76	25.09	26.27	26.82
	12H	19.73	20.88	20.25	21.38	21.95	25.19	26.34	25.72	26.84	27.42
4H	2H	18.26	19.60	18.76	20.07	20.60	19.75	21.09	20.25	21.56	22.09
	3H	19.99	21.13	20.50	21.65	22.19	22.35	23.49	22.86	24.01	24.55
	4H	20.59	21.64	21.12	22.16	22.74	23.66	24.70	24.18	25.22	25.80
	6H	20.99	21.91	21.54	22.46	23.06	25.01	25.93	25.55	26.48	27.07
	8H	21.08	21.95	21.63	22.50	23.11	25.69	26.56	26.24	27.11	27.72
	12H	21.13	21.91	21.70	22.49	23.10	26.44	27.23	27.01	27.81	28.42
8H	4H	21.23	22.09	21.78	22.64	23.25	23.87	24.74	24.42	25.29	25.89
	6H	21.79	22.53	22.38	23.12	23.73	25.39	26.12	25.97	26.72	27.33
	8H	21.97	22.63	22.57	23.24	23.86	26.21	26.88	26.81	27.48	28.11
	12H	22.08	22.67	22.68	23.26	23.96	27.14	27.74	27.74	28.33	29.02
12H	4H	21.40	22.18	21.97	22.76	23.37	23.88	24.67	24.45	25.25	25.86
	6H	22.06	22.72	22.65	23.32	23.95	25.42	26.09	26.02	26.69	27.32
	8H	22.33	22.92	22.92	23.51	24.20	26.32	26.91	26.92	27.50	28.19

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

**Test Information**

Test Method: LM-79-2019  
 Report Number: SP1-2511-597-4  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry:  $4\pi$   
 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  
 R<sub>f</sub>: 90.7  
 R<sub>g</sub>: 100.2

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



**Test Conditions**

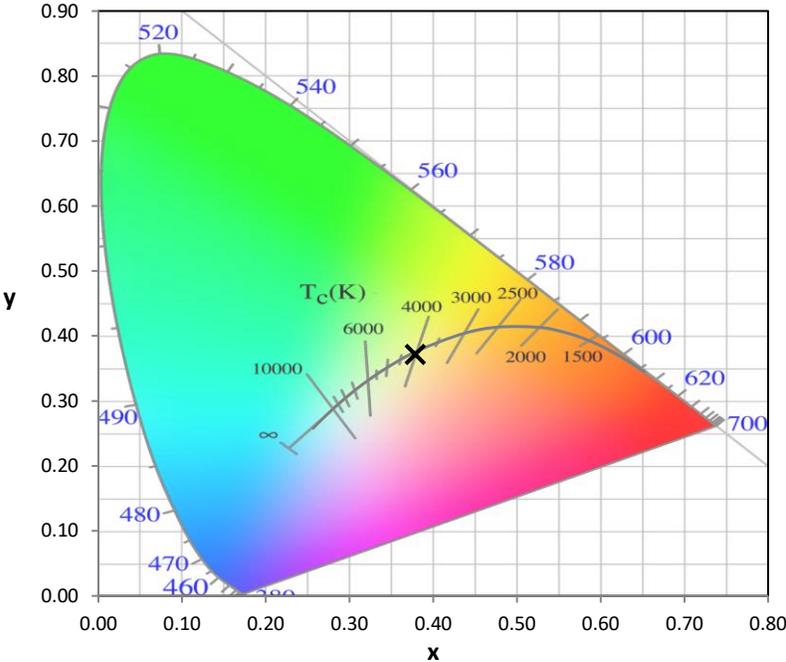
Stabilization Time: 23M  
 Operation Time: 1H 23M  
 Sphere Temperature (°C): 24.1

REPORT NUMBER: SP1-2511-597-4

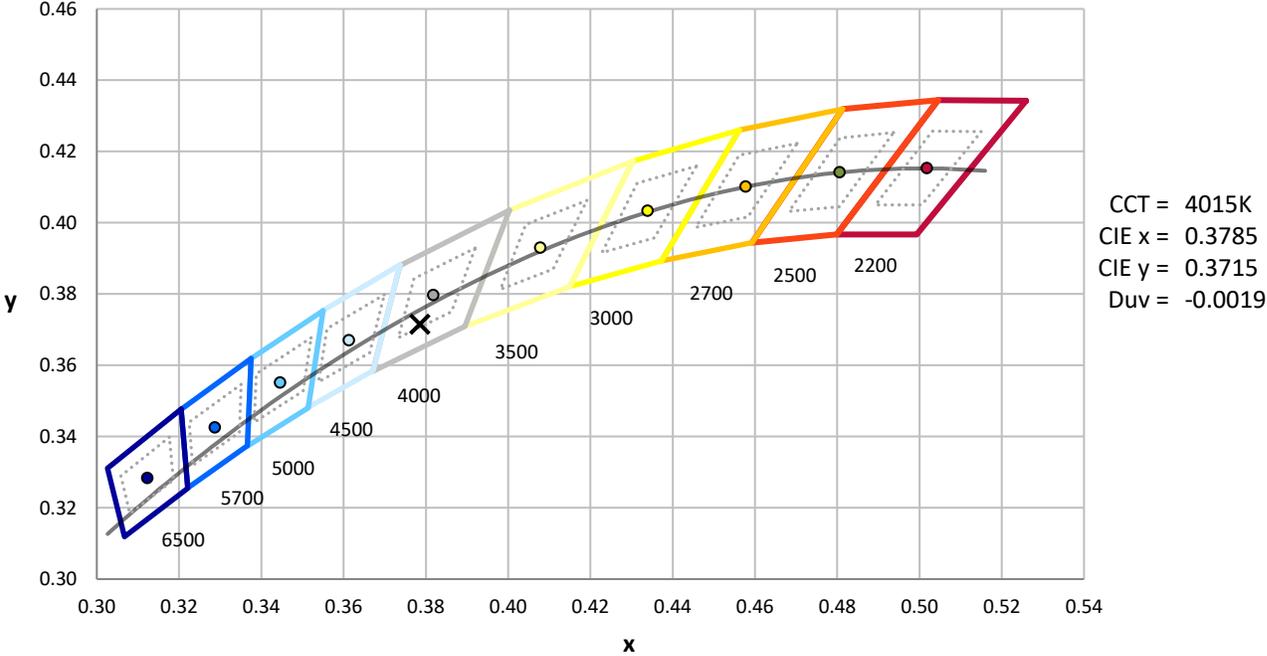
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	10/21/2025	10/21/2026
AC Power Source	CHROMA 61603 IN0063	10/21/2025	10/21/2026
DC Power Source	AGILENT E3634A IN0208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

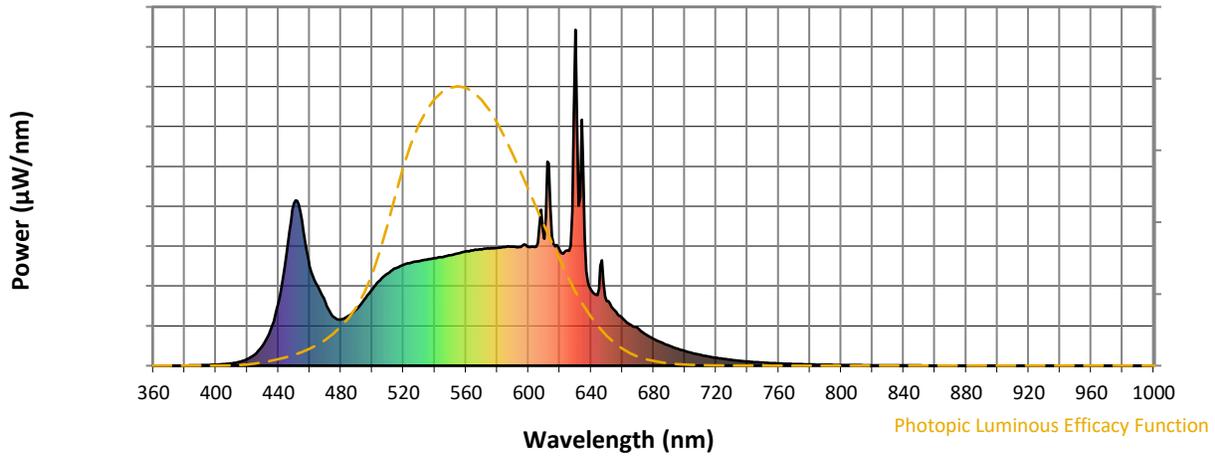


CCT = 4015K  
 CIE x = 0.3785  
 CIE y = 0.3715  
 Duv = -0.0019

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 <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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			

REPORT NUMBER: SP1-2511-597-4

**Scotopic Flux vs. Wavelength**



**Scotopic Lumens: NR**

**S/P: 1.79**

λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /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			

REPORT NUMBER: SP1-2511-597-4

**Melanopic Flux vs. Wavelength**



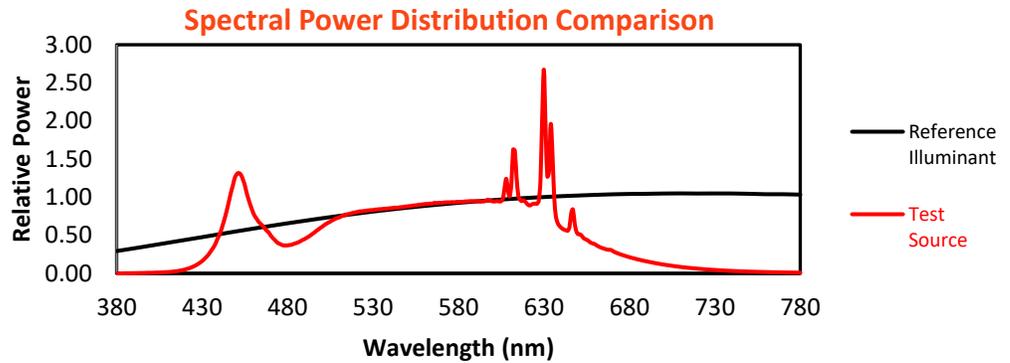
**Melanopic Lumens: NR**

**M/P: 3.74**

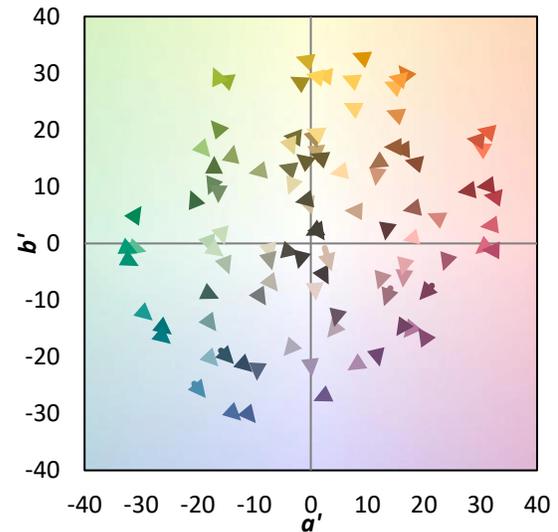
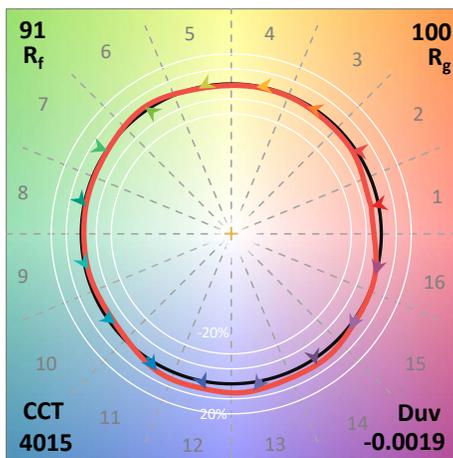
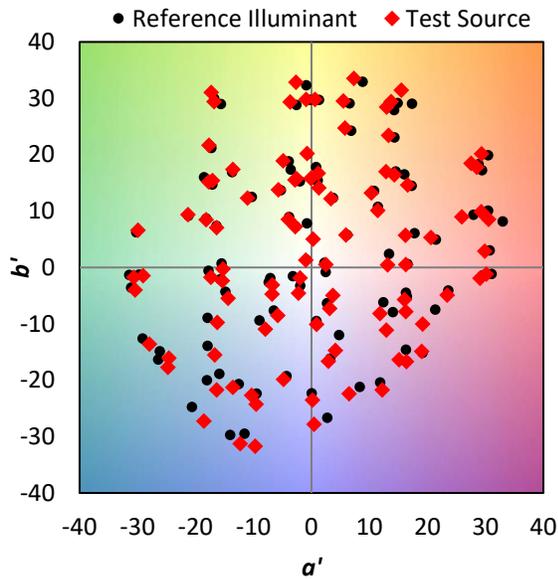
λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)	λ (nm)	Power W <sup>^</sup> /nm	Lumens (φ/nm)
360	0	NR	490	169	NR	620	343	NR	750	9	NR	880	0	NR
365	0	NR	495	197	NR	625	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			

**Summary**

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

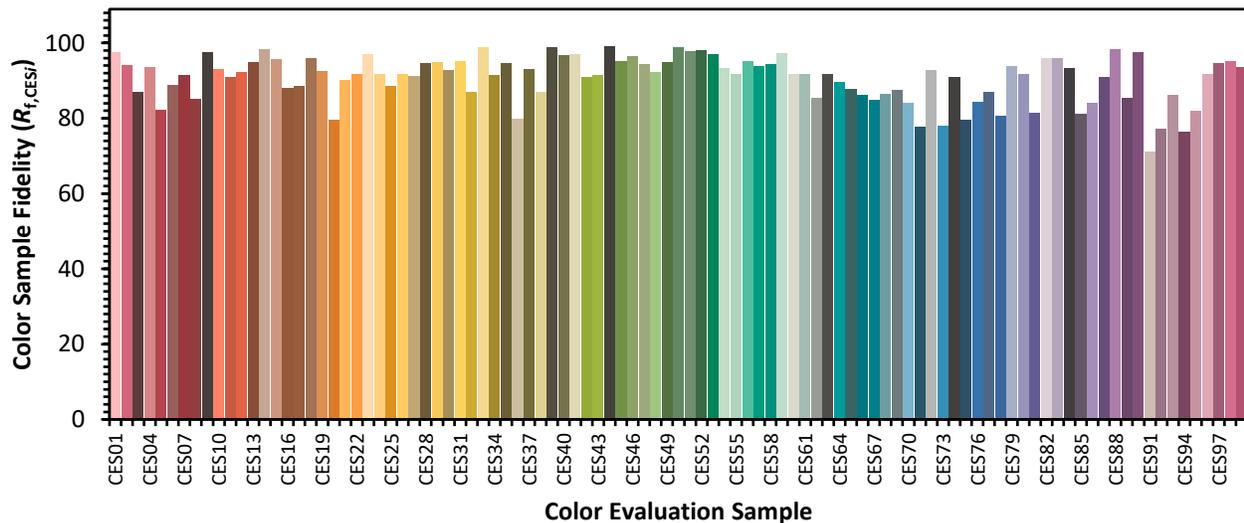


**Color Vector Graphics**

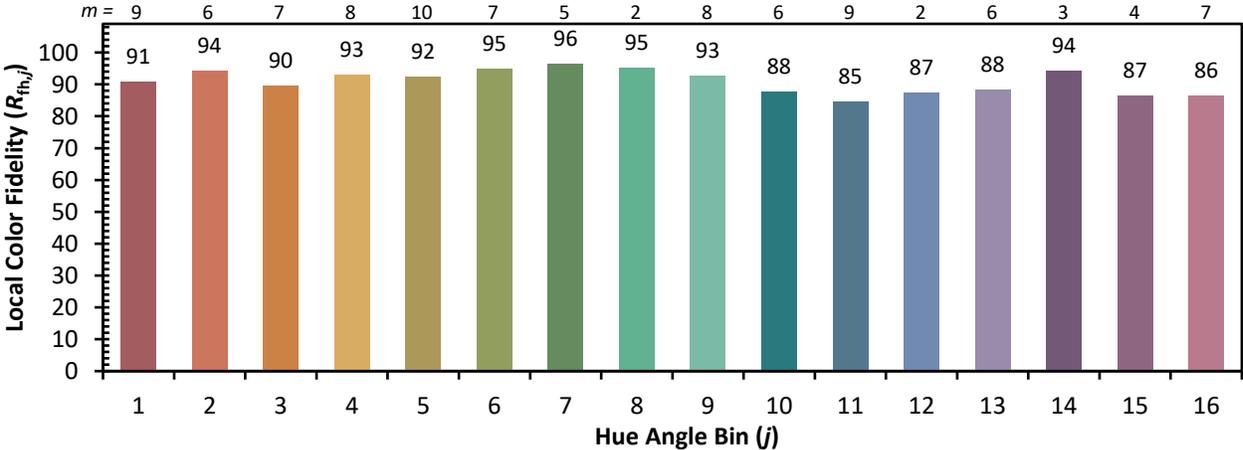


Individual Sample Fidelity Index ( $R_{f,i}$ )

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	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)