

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: P1357490

Luminaire Tested: 8ASL4-20HE-2-G52-UNV

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1357490
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2511-597-7)
Test Lab: INNOVATION CENTER
Issue Date: 2/17/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: 8ASL4-20HE-2-G52-UNV
Description: 8FT 2000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND G52 LEDS 2 ROW
Light Source: -
Ballast/Driver: -

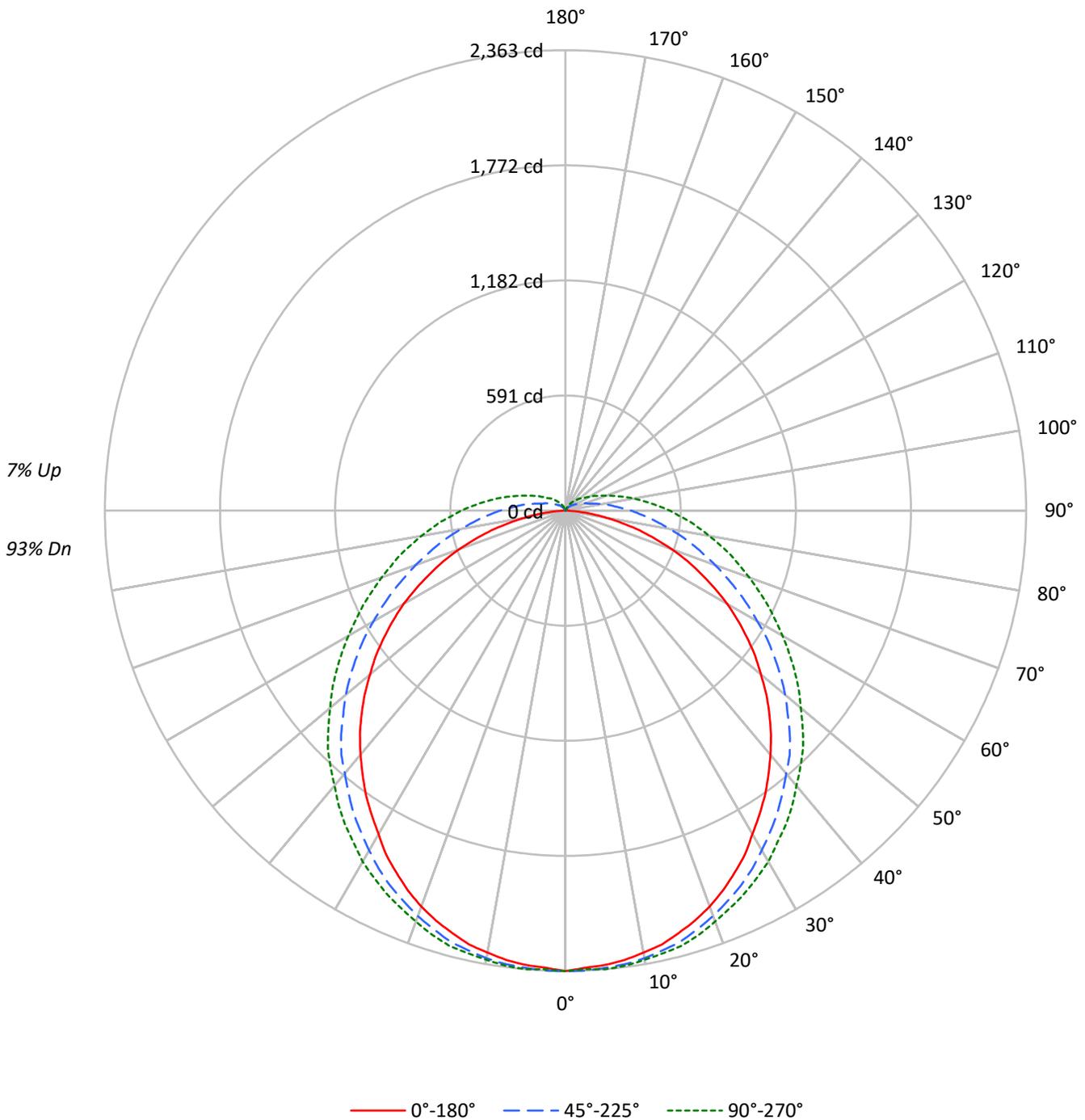
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8113.0 lumens
Efficiency: N/A
Efficacy: 49.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 7.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 164.9
Input Voltage (V): NR
Input Current (A_{in}): 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: P1357490
CATALOG NUMBER: 8ASL4-20HE-2-G52-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P1357490

CATALOG NUMBER: 8ASL4-20HE-2-G52-UNV

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	50	30	10	0
RCR																					
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	95	95	95	93
1	105	100	95	90	102	97	92	88	91	87	84	86	83	80	81	79	77	77	77	77	74
2	95	86	79	72	92	84	77	71	79	73	68	74	70	65	70	66	63	63	63	63	60
3	86	75	66	59	83	73	65	58	69	62	56	65	59	55	62	57	53	53	53	53	50
4	79	66	57	50	76	64	56	49	61	54	48	58	51	46	55	49	45	45	45	45	42
5	72	59	50	43	70	57	49	42	54	47	41	52	45	40	49	43	39	39	39	39	36
6	67	53	44	37	64	52	43	37	49	41	36	47	40	35	44	39	34	34	34	34	32
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	30	30	30	28
8	58	44	35	29	56	43	34	29	41	33	28	39	32	28	37	31	27	27	27	27	25
9	54	40	32	26	52	39	31	26	37	30	25	36	29	25	34	29	24	24	24	24	22
10	50	37	29	24	49	36	28	23	35	28	23	33	27	22	32	26	22	22	22	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9564	9564	9564
5°	9499	9382	9345
10°	9446	9215	9117
15°	9370	9033	8935
20°	9270	8800	8679
25°	9104	8571	8458
30°	8893	8307	8238
35°	8732	8063	7983
40°	8544	7799	7714
45°	8355	7572	7518
50°	8109	7270	7228
55°	7876	6946	6997
60°	7588	6580	6752
65°	7130	6241	6562
70°	6622	5926	6388
75°	5873	5688	6330
80°	4676	5484	6310
85°	3002	5511	6491

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8355 cd/sqm



TEST NUMBER: P1357490
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.1	2.8
10°-20°	644.2	7.9
20°-30°	976.2	12.0
30°-40°	1180.7	14.6
40°-50°	1244.7	15.3
50°-60°	1161.7	14.3
60°-70°	959.1	11.8
70°-80°	695.8	8.6
80°-90°	439.6	5.4
90°-100°	262.4	3.2
100°-110°	150.4	1.9
110°-120°	85.4	1.1
120°-130°	48.7	0.6
130°-140°	26.4	0.3
140°-150°	11.6	0.1
150°-160°	2.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1844.5	22.7
0°-40°	3025.2	37.3
0°-60°	5431.5	66.9
0°-90°	7526.0	92.8
90°-120°	498.3	6.1
90°-150°	584.9	7.2
90°-180°	587.0	7.2
0°-180°	8113.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2363	2363	2363	2363	2363	
5°	2341	2363	2356	2356	2363	222
15°	2244	2274	2289	2296	2311	633
25°	2051	2081	2125	2155	2170	945
35°	1784	1828	1895	1947	1969	1115
45°	1479	1538	1628	1694	1724	1140
55°	1137	1204	1308	1397	1434	1016
65°	765	847	974	1092	1144	760
75°	394	498	676	818	877	414
85°	74	230	431	580	639	91
90°	0	141	334	476	535	3
95°	0	89	253	386	438	0
105°	0	30	141	245	282	0
115°	0	15	82	149	178	0
125°	0	7	52	97	112	0
135°	0	0	30	60	74	0
145°	0	0	15	37	45	0
155°	0	0	0	7	15	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P1357490
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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2363.2	2363.2	2363.2	2363.2	2363.2
2.5°	2348.4	2370.7	2363.2	2355.8	2355.8
5°	2340.9	2363.2	2355.8	2355.8	2363.2
7.5°	2326.1	2348.4	2348.4	2348.4	2355.8
10°	2303.8	2333.5	2333.5	2333.5	2340.9
12.5°	2281.5	2303.8	2311.2	2318.6	2326.1
15°	2244.3	2274.1	2288.9	2296.3	2311.2
17.5°	2207.2	2229.5	2251.8	2274.1	2281.5
20°	2162.6	2192.3	2214.6	2236.9	2244.3
22.5°	2110.6	2140.3	2170.0	2192.3	2207.2
25°	2051.1	2080.8	2125.4	2155.1	2170.0
27.5°	1991.7	2021.4	2073.4	2110.6	2125.4
30°	1917.3	1961.9	2013.9	2058.5	2080.8
32.5°	1850.5	1895.0	1954.5	2006.5	2021.4
35°	1783.6	1828.2	1895.0	1947.1	1969.4
37.5°	1709.3	1761.3	1828.2	1887.6	1909.9
40°	1634.9	1687.0	1761.3	1828.2	1843.0
42.5°	1560.6	1612.6	1701.8	1761.3	1783.6
45°	1478.9	1538.3	1627.5	1694.4	1724.1
47.5°	1397.1	1456.6	1545.8	1620.1	1649.8
50°	1308.0	1374.8	1471.4	1545.8	1575.5
52.5°	1226.2	1293.1	1389.7	1471.4	1508.6
55°	1137.0	1203.9	1308.0	1397.1	1434.3
57.5°	1047.8	1114.7	1226.2	1322.8	1360.0
60°	958.7	1025.6	1137.0	1248.5	1285.7
62.5°	862.1	936.4	1055.3	1166.8	1211.3
65°	765.4	847.2	973.5	1092.4	1144.5
67.5°	676.3	758.0	891.8	1025.6	1070.1
70°	579.7	668.8	817.5	951.2	1003.3
72.5°	483.1	579.7	743.2	884.4	936.4
75°	393.9	497.9	676.3	817.5	876.9
77.5°	297.3	423.6	609.4	758.0	810.0
80°	215.5	349.3	542.5	698.6	750.6
82.5°	141.2	282.4	483.1	639.1	691.1
85°	74.3	230.4	431.0	579.7	639.1
87.5°	22.3	178.4	379.0	527.6	579.7
90°	0.0	141.2	334.4	475.6	535.1
92.5°	0.0	111.5	289.8	431.0	483.1
95°	0.0	89.2	252.7	386.4	438.5
97.5°	0.0	74.3	222.9	349.3	393.9
100°	0.0	59.5	193.2	312.1	356.7
102.5°	0.0	44.6	163.5	275.0	319.6
105°	0.0	29.7	141.2	245.2	282.4
107.5°	0.0	22.3	118.9	215.5	252.7
110°	0.0	22.3	111.5	185.8	222.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	14.9	96.6	170.9	200.7
115°	0.0	14.9	81.7	148.6	178.4
117.5°	0.0	14.9	74.3	133.8	163.5
120°	0.0	14.9	66.9	118.9	141.2
122.5°	0.0	7.4	59.5	104.0	126.3
125°	0.0	7.4	52.0	96.6	111.5
127.5°	0.0	7.4	44.6	89.2	104.0
130°	0.0	7.4	44.6	81.7	96.6
132.5°	0.0	0.0	37.2	74.3	89.2
135°	0.0	0.0	29.7	59.5	74.3
137.5°	0.0	0.0	29.7	52.0	66.9
140°	0.0	0.0	22.3	52.0	59.5
142.5°	0.0	0.0	14.9	44.6	52.0
145°	0.0	0.0	14.9	37.2	44.6
147.5°	0.0	0.0	7.4	29.7	37.2
150°	0.0	0.0	7.4	22.3	29.7
152.5°	0.0	0.0	0.0	14.9	22.3
155°	0.0	0.0	0.0	7.4	14.9
157.5°	0.0	0.0	0.0	0.0	7.4
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	17.17	18.71	17.65	19.17	19.66	19.27	20.81	19.75	21.27	21.76
	3H	18.67	20.07	19.16	20.54	21.08	21.74	23.15	22.23	23.62	24.15
	4H	19.15	20.48	19.66	20.97	21.51	22.97	24.30	23.48	24.79	25.33
	6H	19.43	20.66	19.95	21.17	21.73	24.27	25.51	24.79	26.01	26.57
	8H	19.48	20.67	20.01	21.19	21.76	24.95	26.14	25.48	26.66	27.23
	12H	19.50	20.63	20.03	21.15	21.75	25.72	26.86	26.26	27.37	27.97
4H	2H	18.06	19.39	18.57	19.88	20.42	19.70	21.03	20.21	21.52	22.06
	3H	19.80	20.93	20.32	21.46	22.03	22.40	23.54	22.92	24.07	24.63
	4H	20.41	21.45	20.95	21.99	22.59	23.80	24.84	24.34	25.38	25.98
	6H	20.81	21.73	21.37	22.29	22.91	25.30	26.22	25.86	26.78	27.39
	8H	20.91	21.77	21.47	22.34	22.96	26.09	26.95	26.65	27.52	28.14
	12H	20.96	21.74	21.54	22.33	22.96	26.98	27.76	27.57	28.36	28.99
8H	4H	21.12	21.98	21.68	22.54	23.17	24.02	24.88	24.59	25.45	26.08
	6H	21.70	22.43	22.30	23.04	23.67	25.69	26.42	26.29	27.03	27.66
	8H	21.89	22.55	22.50	23.17	23.81	26.63	27.29	27.23	27.90	28.55
	12H	22.01	22.60	22.62	23.21	23.92	27.70	28.29	28.31	28.90	29.61
12H	4H	21.32	22.10	21.91	22.70	23.33	24.03	24.81	24.62	25.41	26.04
	6H	22.01	22.67	22.62	23.29	23.94	25.73	26.39	26.34	27.01	27.65
	8H	22.30	22.89	22.91	23.50	24.21	26.73	27.32	27.34	27.93	28.64

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

Report Prepared for

Cooper Lighting Solutions

Fail-Safe

Report Number: SP1-2511-597-8

Test Date: 01/22/2026

Luminaire Tested: 4ASL-2-G520-UNV-OPL-1_600mA

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

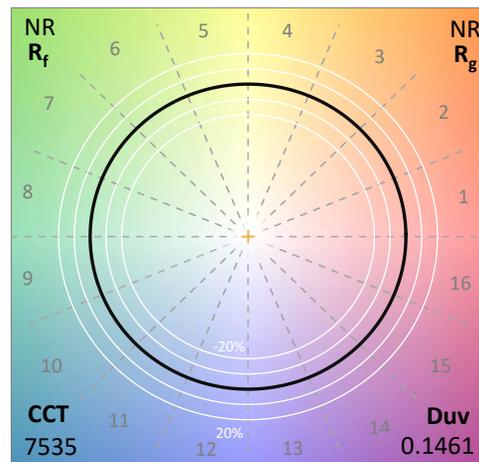
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2511-597-8
 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-G520-UNV-OPL-1_600mA**
 Description: 2foot 4ASL LED LUMINAIRE WITH OPL LENS AND GREEN 520NM LEDS with 1 rows at 600mA

Spectral Parameters

CCT (K): 7535
 CIE u': 0.0718
 CIE v': 0.5710
 Duv: 0.1461
 CIE x: 0.1962
 CIE y: 0.6931
 CIE z: 0.1107
 Peak Wavelength (nm): 524
 Dominant Wavelength (nm): 529
 Purity: 75.95236
 Rf: NR
 Rg: NR

CRI (Ra):	-11.7		
R1:	-30.6	R9:	-351.9
R2:	5.1	R10:	-75.5
R3:	5.6	R11:	-78.0
R4:	-51.7	R12:	-14.7
R5:	-6.4	R13:	-32.5
R6:	-0.6	R14:	52.7
R7:	10.9	R15:	-37.0
R8:	-25.8		



Test Conditions

Stabilization Time: 48M
 Operation Time: 1H 48M
 Sphere Temperature (°C): 25.1

REPORT NUMBER: SP1-2511-597-8

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

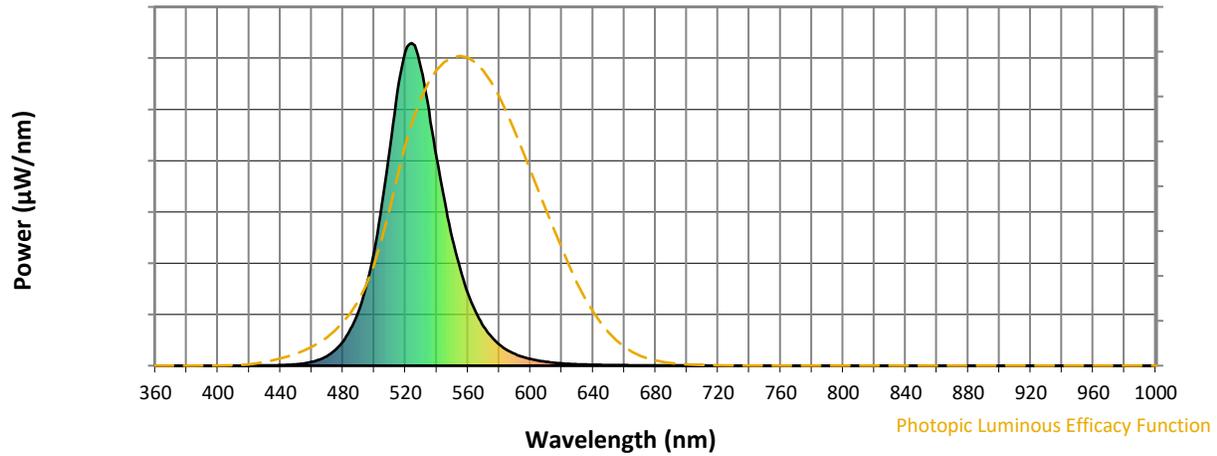


CCT = 7535K
 CIE x = 0.1962
 CIE y = 0.6931
 Duv = 0.1461

Point lies outside the range

REPORT NUMBER: SP1-2511-597-8

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	7	NR	750	0	NR	880	0	NR
365	0	NR	495	249	NR	625	6	NR	755	0	NR	885	0	NR
370	0	NR	500	356	NR	630	4	NR	760	0	NR	890	0	NR
375	0	NR	505	502	NR	635	4	NR	765	0	NR	895	0	NR
380	0	NR	510	674	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	853	NR	645	3	NR	775	0	NR	905	0	NR
390	0	NR	520	976	NR	650	2	NR	780	0	NR	910	0	NR
395	0	NR	525	996	NR	655	2	NR	785	0	NR	915	0	NR
400	0	NR	530	920	NR	660	2	NR	790	0	NR	920	0	NR
405	0	NR	535	792	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	642	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	511	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	394	NR	680	1	NR	810	0	NR	940	0	NR
425	1	NR	555	300	NR	685	1	NR	815	0	NR	945	0	NR
430	1	NR	560	224	NR	690	1	NR	820	0	NR	950	0	NR
435	1	NR	565	166	NR	695	1	NR	825	0	NR	955	0	NR
440	2	NR	570	122	NR	700	1	NR	830	0	NR	960	0	NR
445	3	NR	575	90	NR	705	1	NR	835	0	NR	965	0	NR
450	4	NR	580	66	NR	710	1	NR	840	0	NR	970	0	NR
455	7	NR	585	48	NR	715	0	NR	845	0	NR	975	0	NR
460	12	NR	590	36	NR	720	0	NR	850	0	NR	980	0	NR
465	19	NR	595	27	NR	725	0	NR	855	0	NR	985	0	NR
470	31	NR	600	21	NR	730	0	NR	860	0	NR	990	0	NR
475	49	NR	605	16	NR	735	0	NR	865	0	NR	995	0	NR
480	75	NR	610	12	NR	740	0	NR	870	0	NR	1000	0	NR
485	115	NR	615	9	NR	745	0	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



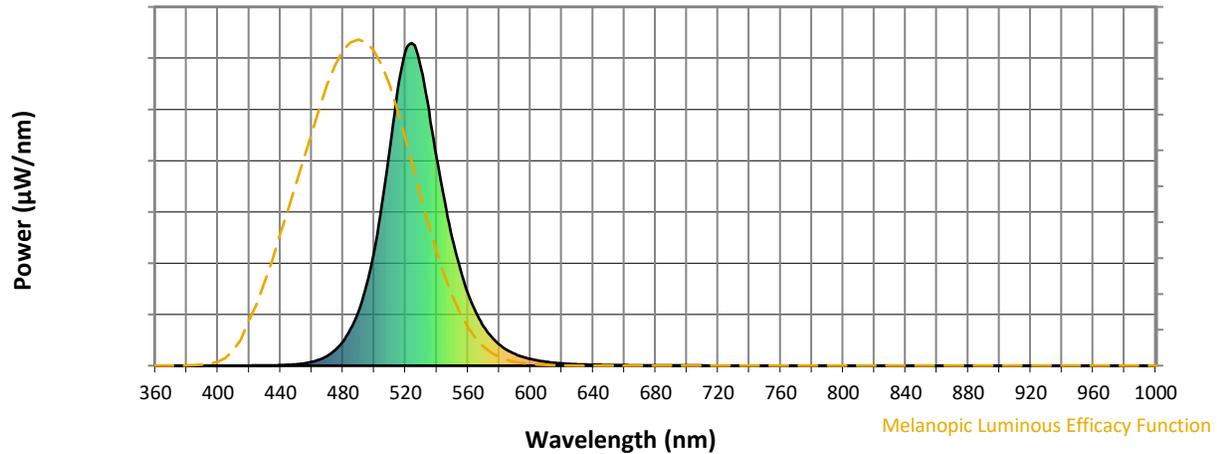
Scotopic Lumens: NR

S/P: 2.63

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	7	NR	750	0	NR	880	0	NR
365	0	NR	495	249	NR	625	6	NR	755	0	NR	885	0	NR
370	0	NR	500	356	NR	630	4	NR	760	0	NR	890	0	NR
375	0	NR	505	502	NR	635	4	NR	765	0	NR	895	0	NR
380	0	NR	510	674	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	853	NR	645	3	NR	775	0	NR	905	0	NR
390	0	NR	520	976	NR	650	2	NR	780	0	NR	910	0	NR
395	0	NR	525	996	NR	655	2	NR	785	0	NR	915	0	NR
400	0	NR	530	920	NR	660	2	NR	790	0	NR	920	0	NR
405	0	NR	535	792	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	642	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	511	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	394	NR	680	1	NR	810	0	NR	940	0	NR
425	1	NR	555	300	NR	685	1	NR	815	0	NR	945	0	NR
430	1	NR	560	224	NR	690	1	NR	820	0	NR	950	0	NR
435	1	NR	565	166	NR	695	1	NR	825	0	NR	955	0	NR
440	2	NR	570	122	NR	700	1	NR	830	0	NR	960	0	NR
445	3	NR	575	90	NR	705	1	NR	835	0	NR	965	0	NR
450	4	NR	580	66	NR	710	1	NR	840	0	NR	970	0	NR
455	7	NR	585	48	NR	715	0	NR	845	0	NR	975	0	NR
460	12	NR	590	36	NR	720	0	NR	850	0	NR	980	0	NR
465	19	NR	595	27	NR	725	0	NR	855	0	NR	985	0	NR
470	31	NR	600	21	NR	730	0	NR	860	0	NR	990	0	NR
475	49	NR	605	16	NR	735	0	NR	865	0	NR	995	0	NR
480	75	NR	610	12	NR	740	0	NR	870	0	NR	1000	0	NR
485	115	NR	615	9	NR	745	0	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

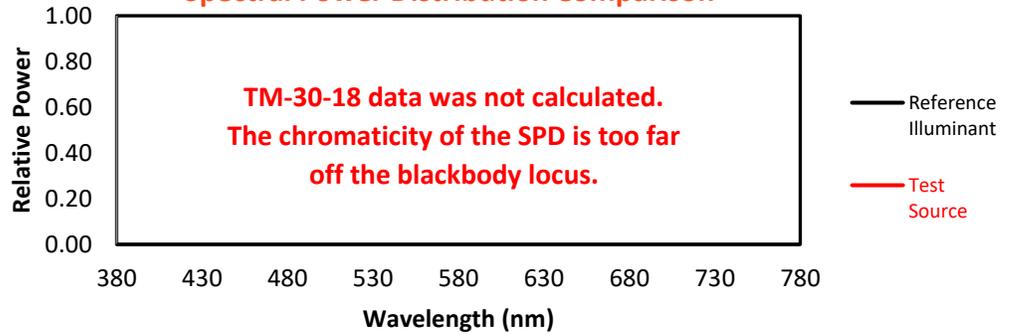
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λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	169	NR	620	7	NR	750	0	NR	880	0	NR
365	0	NR	495	249	NR	625	6	NR	755	0	NR	885	0	NR
370	0	NR	500	356	NR	630	4	NR	760	0	NR	890	0	NR
375	0	NR	505	502	NR	635	4	NR	765	0	NR	895	0	NR
380	0	NR	510	674	NR	640	3	NR	770	0	NR	900	0	NR
385	0	NR	515	853	NR	645	3	NR	775	0	NR	905	0	NR
390	0	NR	520	976	NR	650	2	NR	780	0	NR	910	0	NR
395	0	NR	525	996	NR	655	2	NR	785	0	NR	915	0	NR
400	0	NR	530	920	NR	660	2	NR	790	0	NR	920	0	NR
405	0	NR	535	792	NR	665	1	NR	795	0	NR	925	0	NR
410	0	NR	540	642	NR	670	1	NR	800	0	NR	930	0	NR
415	0	NR	545	511	NR	675	1	NR	805	0	NR	935	0	NR
420	0	NR	550	394	NR	680	1	NR	810	0	NR	940	0	NR
425	1	NR	555	300	NR	685	1	NR	815	0	NR	945	0	NR
430	1	NR	560	224	NR	690	1	NR	820	0	NR	950	0	NR
435	1	NR	565	166	NR	695	1	NR	825	0	NR	955	0	NR
440	2	NR	570	122	NR	700	1	NR	830	0	NR	960	0	NR
445	3	NR	575	90	NR	705	1	NR	835	0	NR	965	0	NR
450	4	NR	580	66	NR	710	1	NR	840	0	NR	970	0	NR
455	7	NR	585	48	NR	715	0	NR	845	0	NR	975	0	NR
460	12	NR	590	36	NR	720	0	NR	850	0	NR	980	0	NR
465	19	NR	595	27	NR	725	0	NR	855	0	NR	985	0	NR
470	31	NR	600	21	NR	730	0	NR	860	0	NR	990	0	NR
475	49	NR	605	16	NR	735	0	NR	865	0	NR	995	0	NR
480	75	NR	610	12	NR	740	0	NR	870	0	NR	1000	0	NR
485	115	NR	615	9	NR	745	0	NR	875	0	NR			

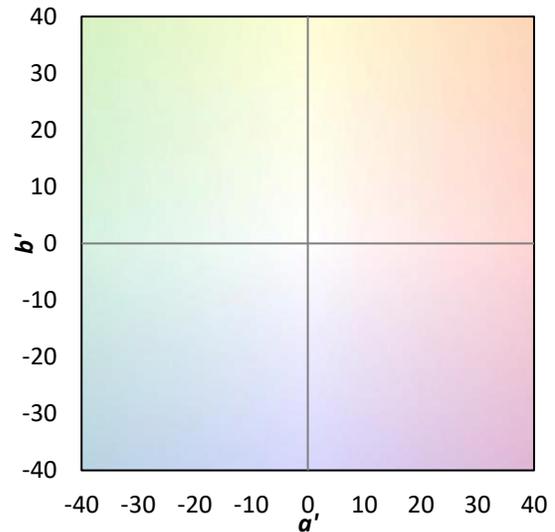
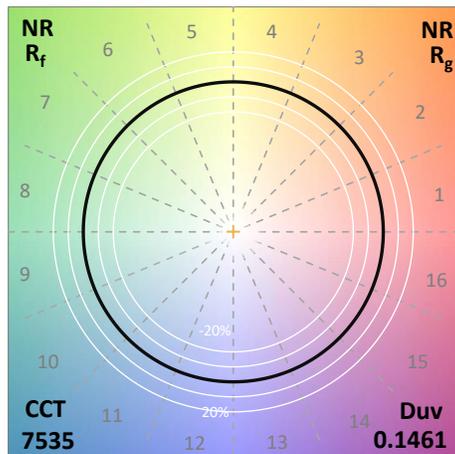
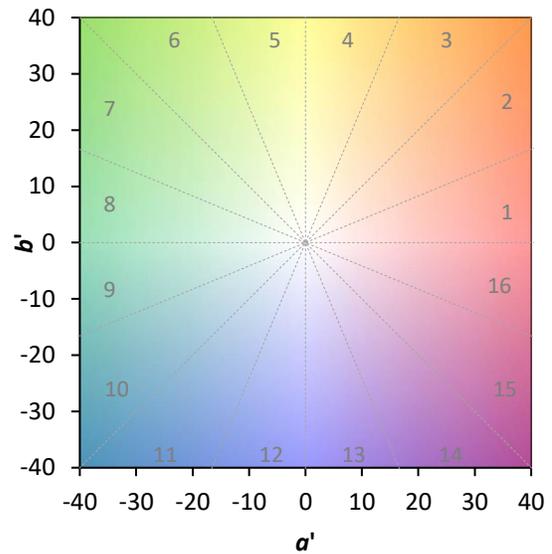
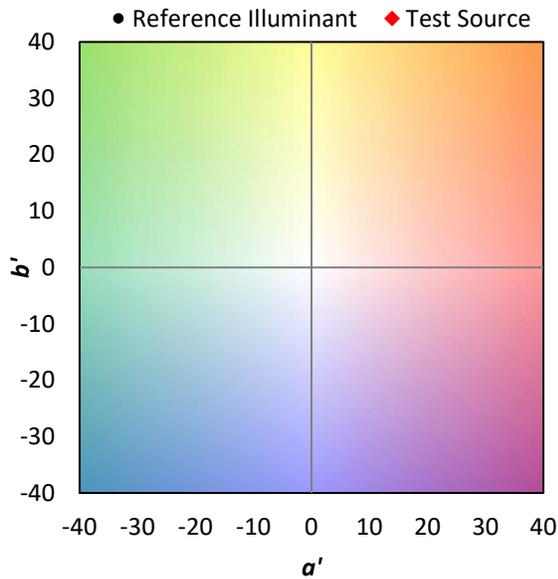
Summary

$R_f = 0$
 $R_g = 0$
 $CIE R_a = -11.7$
 $R_g = -351.9$

Spectral Power Distribution Comparison

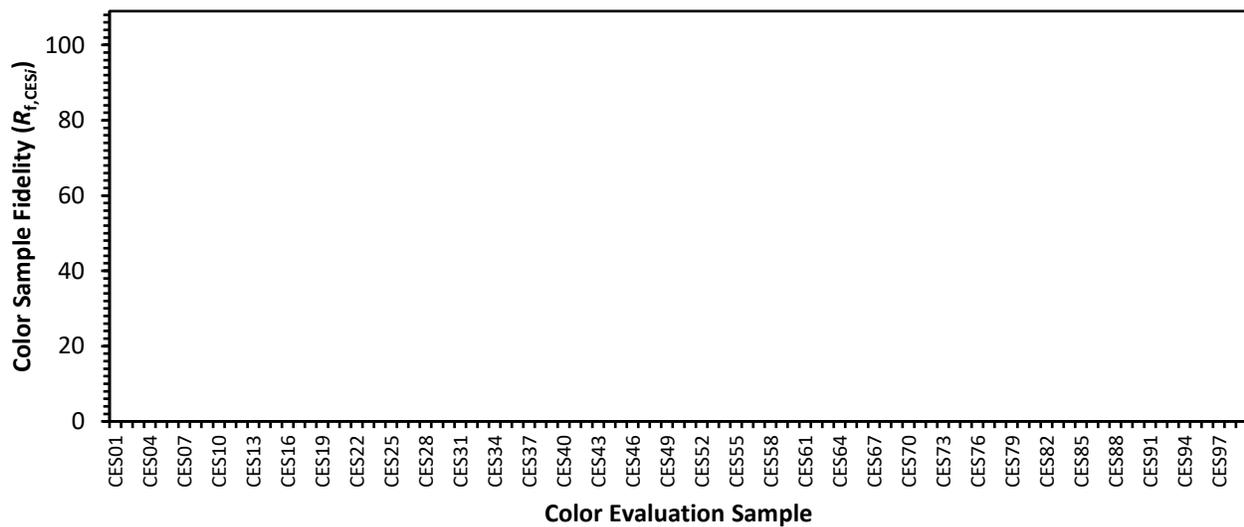


Color Vector Graphics

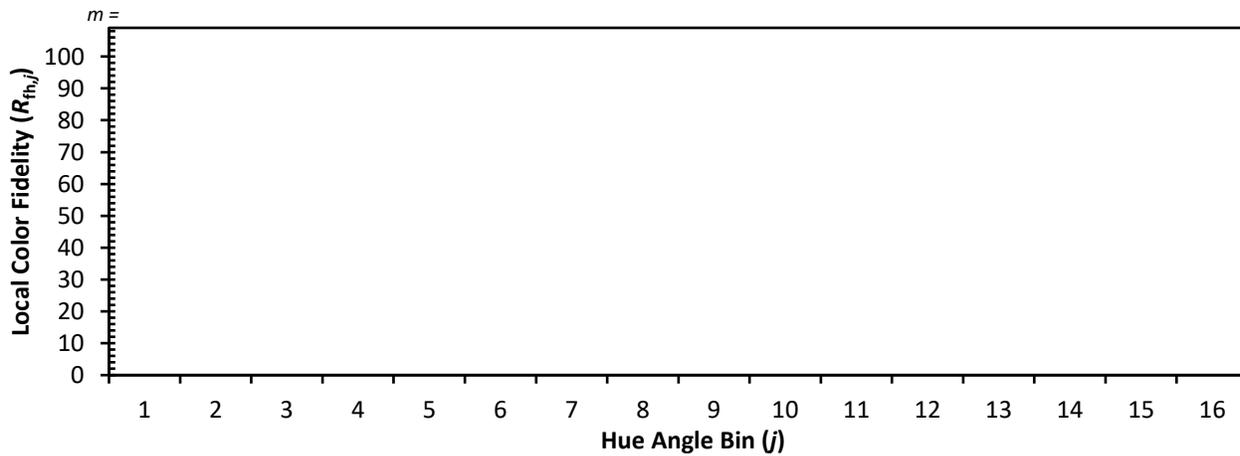


Individual Sample Fidelity Index ($R_{f,i}$)

CES01 = 0	CES26 = 0	CES51 = 0	CES76 = 0
CES02 = 0	CES27 = 0	CES52 = 0	CES77 = 0
CES03 = 0	CES28 = 0	CES53 = 0	CES78 = 0
CES04 = 0	CES29 = 0	CES54 = 0	CES79 = 0
CES05 = 0	CES30 = 0	CES55 = 0	CES80 = 0
CES06 = 0	CES31 = 0	CES56 = 0	CES81 = 0
CES07 = 0	CES32 = 0	CES57 = 0	CES82 = 0
CES08 = 0	CES33 = 0	CES58 = 0	CES83 = 0
CES09 = 0	CES34 = 0	CES59 = 0	CES84 = 0
CES10 = 0	CES35 = 0	CES60 = 0	CES85 = 0
CES11 = 0	CES36 = 0	CES61 = 0	CES86 = 0
CES12 = 0	CES37 = 0	CES62 = 0	CES87 = 0
CES13 = 0	CES38 = 0	CES63 = 0	CES88 = 0
CES14 = 0	CES39 = 0	CES64 = 0	CES89 = 0
CES15 = 0	CES40 = 0	CES65 = 0	CES90 = 0
CES16 = 0	CES41 = 0	CES66 = 0	CES91 = 0
CES17 = 0	CES42 = 0	CES67 = 0	CES92 = 0
CES18 = 0	CES43 = 0	CES68 = 0	CES93 = 0
CES19 = 0	CES44 = 0	CES69 = 0	CES94 = 0
CES20 = 0	CES45 = 0	CES70 = 0	CES95 = 0
CES21 = 0	CES46 = 0	CES71 = 0	CES96 = 0
CES22 = 0	CES47 = 0	CES72 = 0	CES97 = 0
CES23 = 0	CES48 = 0	CES73 = 0	CES98 = 0
CES24 = 0	CES49 = 0	CES74 = 0	CES99 = 0
CES25 = 0	CES50 = 0	CES75 = 0	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)