

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: P1357214

Luminaire Tested: 4ASL4-25VHE-3-G52-UNV

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1357214
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: 4ASL4-25VHE-3-G52-UNV
Description: 4FT 2500 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND G52 LEDS 3 ROW
Light Source: -
Ballast/Driver: -

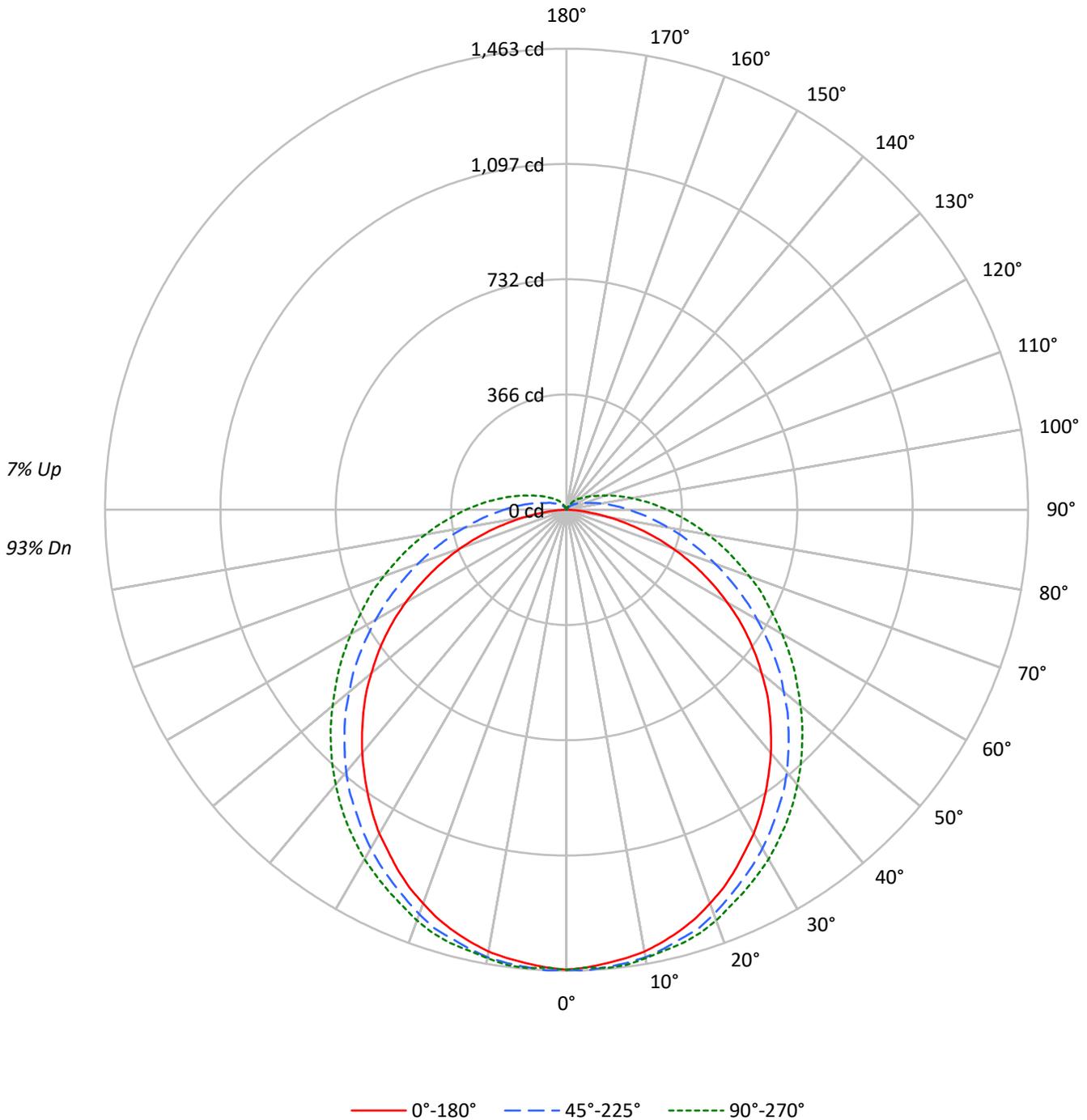
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4964.0 lumens
Efficiency: N/A
Efficacy: 50.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 3.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 98.6
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

TEST NUMBER: P1357214
CATALOG NUMBER: 4ASL4-25VHE-3-G52-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P1357214

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11848	11848	11848
5°	11743	11625	11577
10°	11677	11400	11284
15°	11548	11119	11036
20°	11373	10850	10756
25°	11170	10513	10437
30°	10956	10220	10168
35°	10690	9889	9869
40°	10446	9585	9553
45°	10184	9219	9236
50°	9885	8824	8908
55°	9563	8448	8611
60°	9142	8009	8311
65°	8609	7587	8062
70°	7929	7167	7867
75°	6935	6785	7732
80°	5437	6496	7675
85°	3261	6428	7788

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10184 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.4	2.8
10°-20°	397.5	8.0
20°-30°	601.0	12.1
30°-40°	727.7	14.7
40°-50°	764.3	15.4
50°-60°	713.1	14.4
60°-70°	589.3	11.9
70°-80°	424.3	8.5
80°-90°	263.7	5.3
90°-100°	154.5	3.1
100°-110°	88.4	1.8
110°-120°	49.9	1.0
120°-130°	28.7	0.6
130°-140°	15.5	0.3
140°-150°	6.5	0.1
150°-160°	1.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1136.9	22.9
0°-40°	1864.6	37.6
0°-60°	3342.0	67.3
0°-90°	4619.3	93.1
90°-120°	292.8	5.9
90°-150°	343.5	6.9
90°-180°	345.0	7.0
0°-180°	4964.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1460	1460	1460	1460	1460	
5°	1445	1457	1457	1457	1460	137
15°	1384	1402	1408	1418	1424	390
25°	1263	1284	1305	1323	1336	582
35°	1099	1129	1166	1199	1214	688
45°	911	944	996	1038	1056	703
55°	701	741	801	859	880	626
65°	474	519	598	674	701	469
75°	243	304	410	498	534	257
85°	46	137	258	349	382	56
90°	0	82	197	282	319	2
95°	0	52	149	228	261	0
105°	0	18	82	143	167	0
115°	0	9	49	88	103	0
125°	0	6	30	58	67	0
135°	0	0	18	36	46	0
145°	0	0	9	21	24	0
155°	0	0	0	6	9	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P1357214
 CATALOG NUMBER: 4ASL4-25VHE-3-G52-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1460.0	1460.0	1460.0	1460.0	1460.0
2.5°	1453.9	1463.0	1463.0	1453.9	1453.9
5°	1444.8	1456.9	1456.9	1456.9	1460.0
7.5°	1435.7	1450.9	1450.9	1450.9	1456.9
10°	1423.6	1438.7	1441.8	1441.8	1444.8
12.5°	1405.3	1423.6	1426.6	1429.6	1432.7
15°	1384.1	1402.3	1408.4	1417.5	1423.6
17.5°	1359.8	1381.1	1393.2	1402.3	1408.4
20°	1329.5	1350.7	1365.9	1378.0	1387.1
22.5°	1299.1	1317.3	1335.5	1350.7	1359.8
25°	1262.7	1283.9	1305.2	1323.4	1335.5
27.5°	1223.2	1247.5	1274.8	1296.1	1308.2
30°	1186.8	1211.1	1241.4	1268.8	1280.9
32.5°	1144.3	1171.6	1205.0	1232.3	1247.5
35°	1098.8	1129.1	1165.6	1198.9	1214.1
37.5°	1053.2	1083.6	1129.1	1162.5	1177.7
40°	1007.7	1038.1	1086.6	1123.1	1138.2
42.5°	959.2	989.5	1041.1	1080.6	1098.8
45°	910.6	944.0	995.6	1038.1	1056.3
47.5°	862.0	895.4	950.0	995.6	1013.8
50°	807.4	843.8	898.4	950.0	968.3
52.5°	755.8	792.2	852.9	904.5	922.7
55°	701.2	740.6	801.3	859.0	880.2
57.5°	646.5	686.0	749.7	810.4	834.7
60°	588.8	631.3	698.1	761.9	789.2
62.5°	531.2	576.7	649.6	716.3	743.6
65°	473.5	519.0	598.0	673.8	701.2
67.5°	415.8	464.4	549.4	628.3	661.7
70°	358.2	409.8	500.8	582.8	616.2
72.5°	300.5	355.1	455.3	540.3	573.7
75°	242.8	303.5	409.8	497.8	534.2
77.5°	185.2	255.0	370.3	458.3	494.8
80°	133.6	212.5	327.8	418.9	455.3
82.5°	85.0	170.0	291.4	382.4	418.9
85°	45.5	136.6	258.0	349.1	382.4
87.5°	15.2	106.2	224.6	315.7	349.1
90°	0.0	82.0	197.3	282.3	318.7
92.5°	0.0	63.7	173.0	255.0	288.4
95°	0.0	51.6	148.7	227.6	261.0
97.5°	0.0	42.5	130.5	203.4	233.7
100°	0.0	33.4	112.3	182.1	209.4
102.5°	0.0	27.3	97.1	160.9	188.2
105°	0.0	18.2	82.0	142.7	166.9
107.5°	0.0	15.2	69.8	127.5	148.7
110°	0.0	12.1	63.7	109.3	130.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	9.1	57.7	97.1	118.4
115°	0.0	9.1	48.6	88.0	103.2
117.5°	0.0	9.1	42.5	78.9	94.1
120°	0.0	6.1	39.5	69.8	85.0
122.5°	0.0	6.1	33.4	63.7	75.9
125°	0.0	6.1	30.4	57.7	66.8
127.5°	0.0	3.0	27.3	51.6	60.7
130°	0.0	3.0	24.3	45.5	54.6
132.5°	0.0	3.0	21.2	42.5	51.6
135°	0.0	0.0	18.2	36.4	45.5
137.5°	0.0	0.0	15.2	33.4	39.5
140°	0.0	0.0	12.1	27.3	36.4
142.5°	0.0	0.0	9.1	24.3	30.4
145°	0.0	0.0	9.1	21.2	24.3
147.5°	0.0	0.0	6.1	15.2	21.2
150°	0.0	0.0	3.0	12.1	15.2
152.5°	0.0	0.0	0.0	9.1	12.1
155°	0.0	0.0	0.0	6.1	9.1
157.5°	0.0	0.0	0.0	0.0	3.0
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	17.92	19.46	18.39	19.92	20.40	19.95	21.49	20.42	21.94	22.43
	3H	19.42	20.82	19.90	21.29	21.81	22.41	23.82	22.89	24.28	24.80
	4H	19.90	21.23	20.40	21.71	22.25	23.61	24.94	24.11	25.42	25.96
	6H	20.18	21.42	20.69	21.91	22.46	24.86	26.10	25.38	26.60	27.15
	8H	20.23	21.42	20.75	21.94	22.49	25.51	26.70	26.04	27.22	27.78
	12H	20.24	21.38	20.77	21.89	22.48	26.22	27.36	26.75	27.87	28.46
4H	2H	18.80	20.13	19.30	20.61	21.15	20.38	21.71	20.89	22.20	22.73
	3H	20.53	21.67	21.05	22.19	22.75	23.07	24.21	23.59	24.73	25.29
	4H	21.14	22.18	21.67	22.71	23.31	24.44	25.48	24.97	26.01	26.61
	6H	21.54	22.45	22.09	23.02	23.62	25.88	26.80	26.44	27.36	27.97
	8H	21.63	22.49	22.19	23.06	23.67	26.64	27.50	27.20	28.06	28.68
	12H	21.68	22.46	22.26	23.05	23.67	27.47	28.26	28.05	28.85	29.47
8H	4H	21.82	22.68	22.38	23.24	23.86	24.66	25.52	25.22	26.08	26.70
	6H	22.40	23.13	22.99	23.73	24.36	26.27	27.00	26.86	27.61	28.23
	8H	22.58	23.24	23.18	23.86	24.49	27.16	27.82	27.77	28.44	29.08
	12H	22.70	23.29	23.30	23.89	24.59	28.19	28.77	28.79	29.38	30.08
12H	4H	22.01	22.80	22.59	23.39	24.01	24.66	25.45	25.25	26.04	26.66
	6H	22.69	23.35	23.30	23.97	24.61	26.31	26.97	26.91	27.58	28.22
	8H	22.97	23.56	23.58	24.16	24.87	27.27	27.86	27.88	28.46	29.17

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

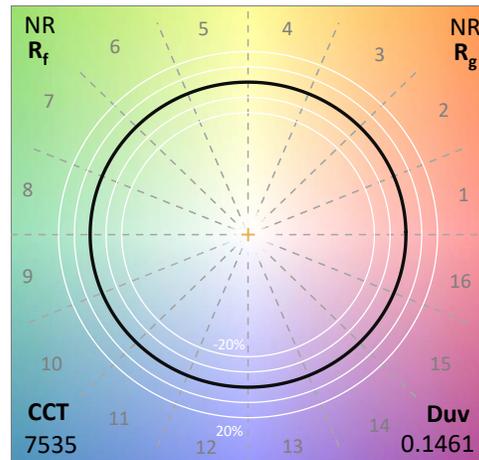
Test Information

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

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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



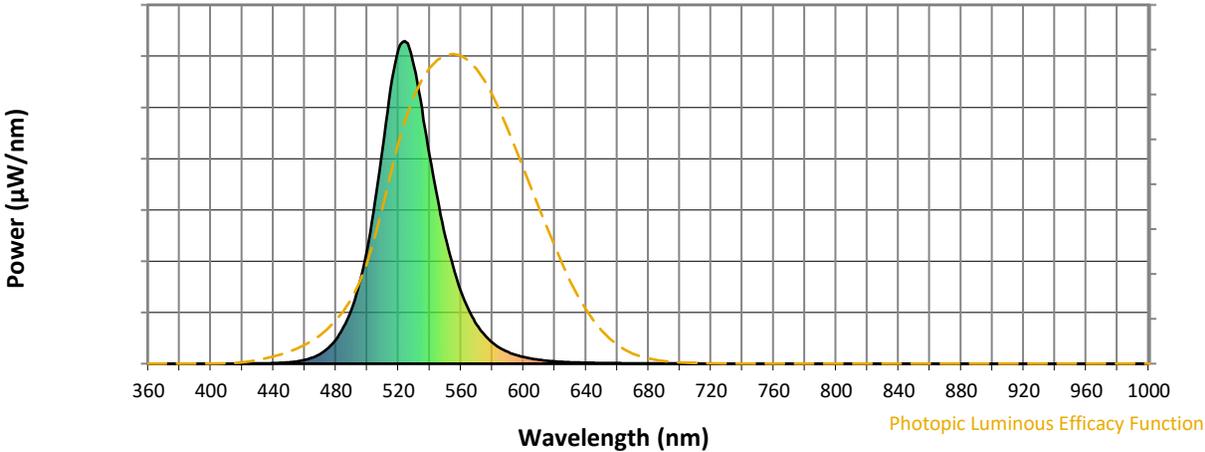
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies outside the range

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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



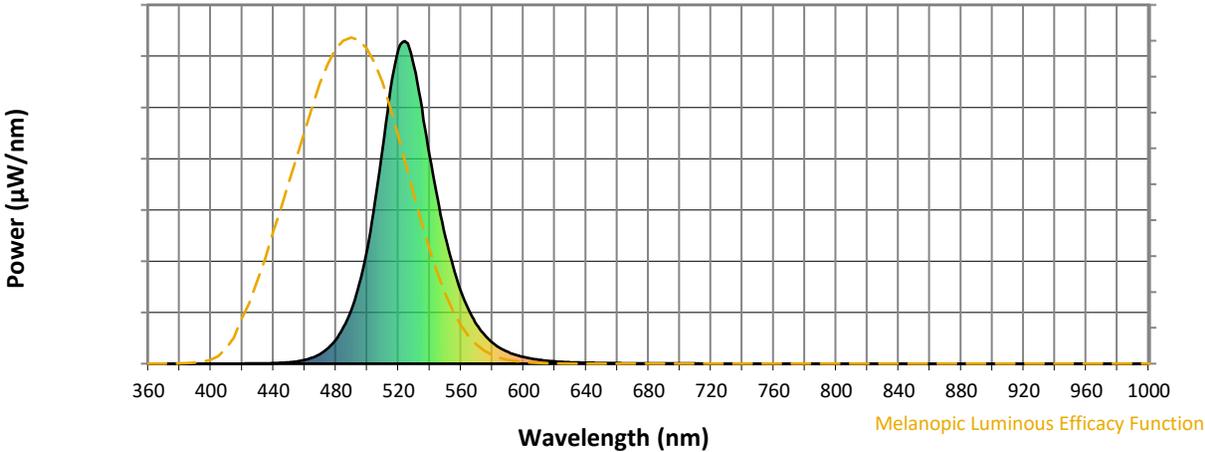
Scotopic Lumens: NR

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

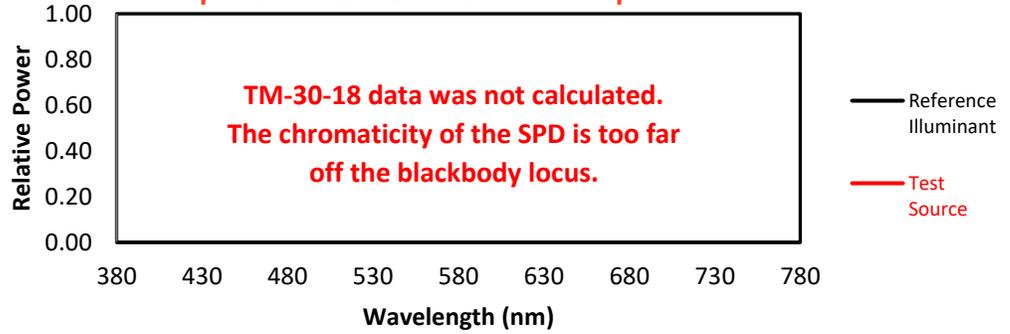
M/P: 4.87

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			

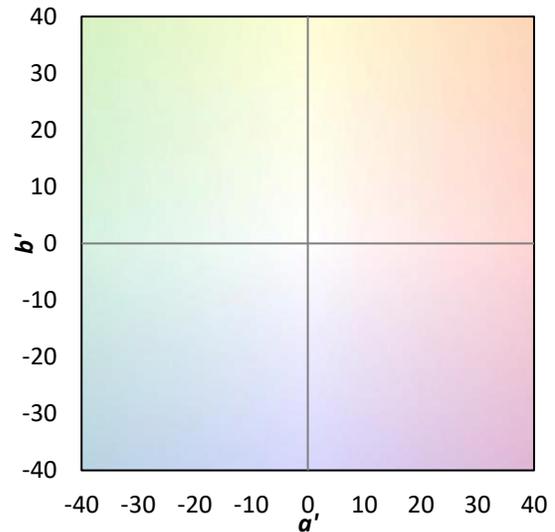
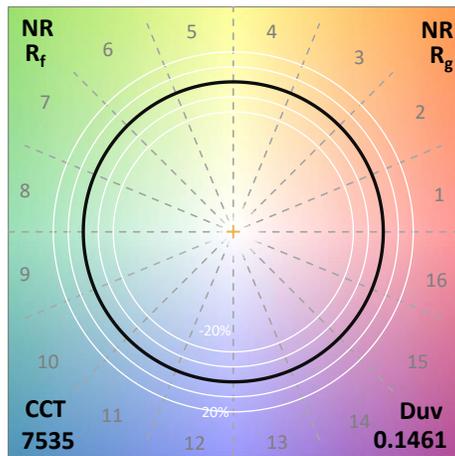
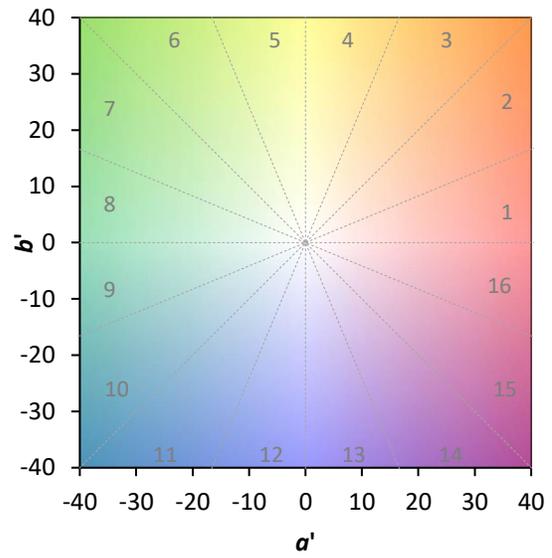
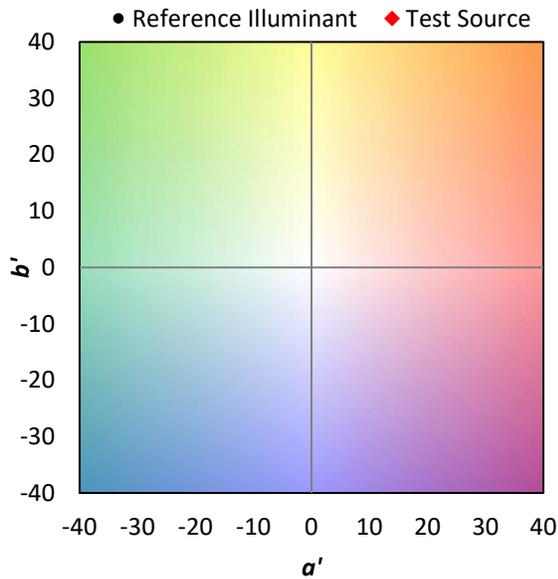
Summary

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

Spectral Power Distribution Comparison



Color Vector Graphics

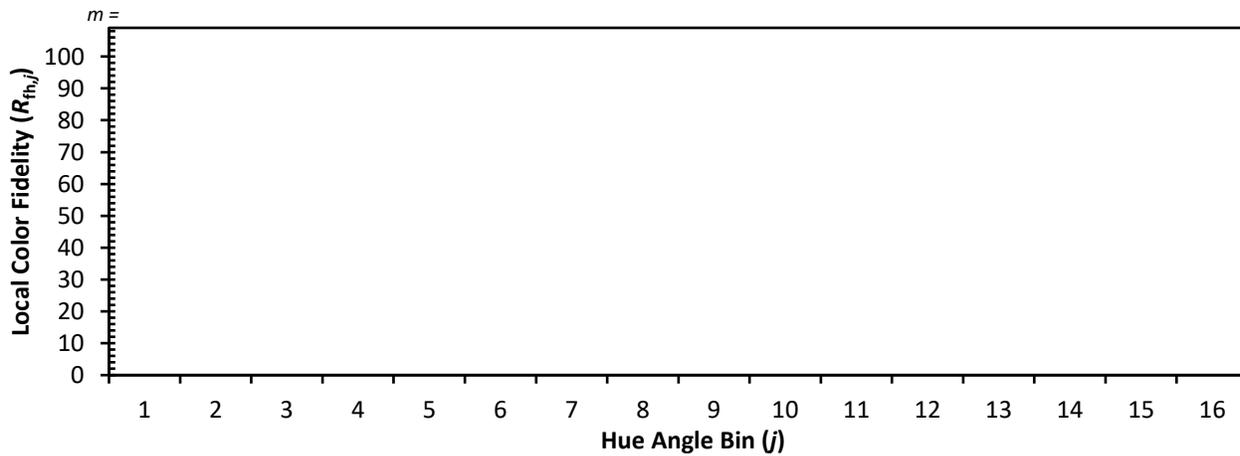


Individual Sample Fidelity Index ($R_{f,i}$)

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)