

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: P1357050

Luminaire Tested: 3ASL4-25VHE-3-R63-UNV

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1357050
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: 3ASL4-25VHE-3-R63-UNV
Description: 3FT 2500 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND R63 LEDS 3 ROW
Light Source: -
Ballast/Driver: -

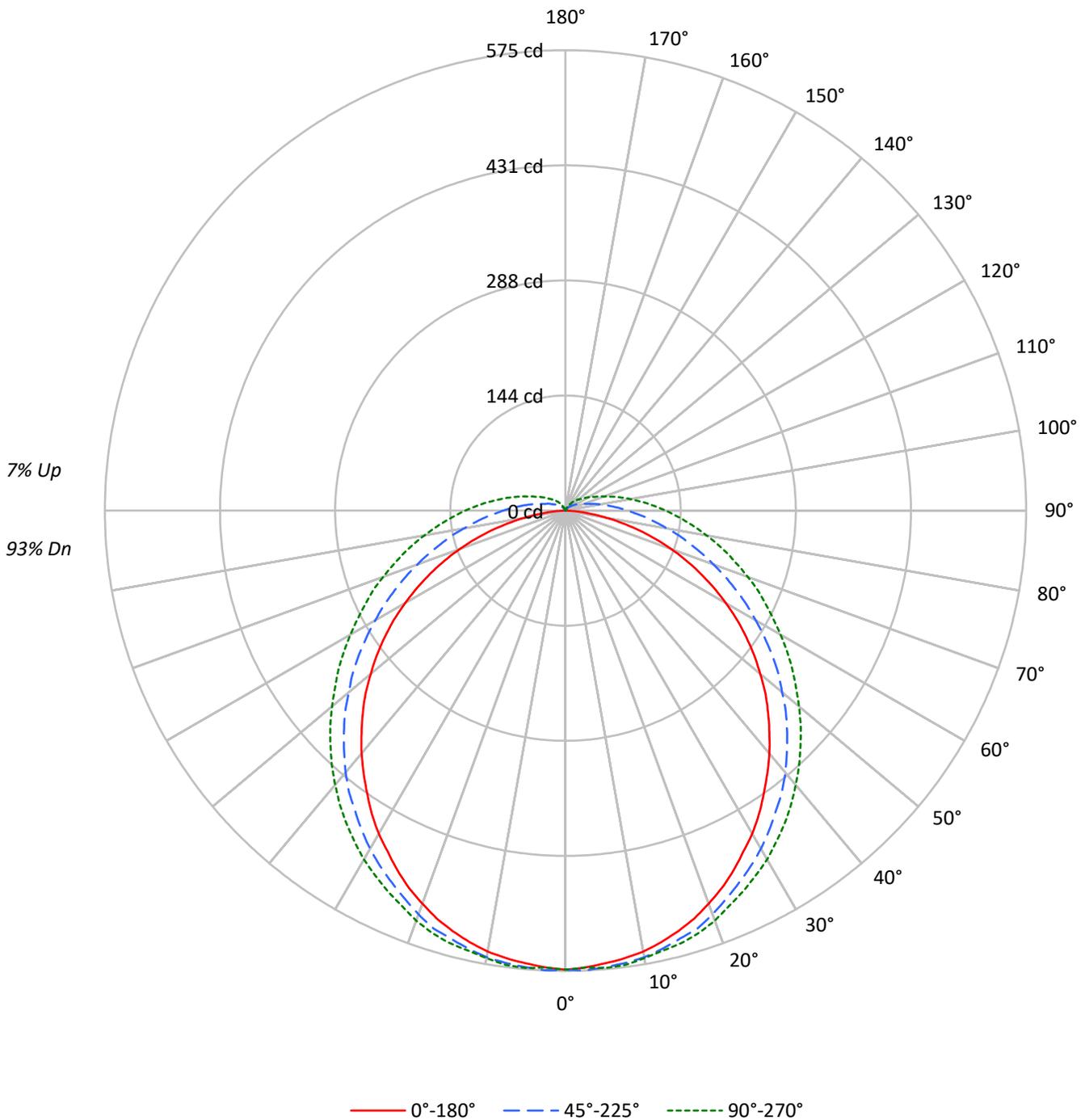
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1950.0 lumens
Efficiency: N/A
Efficacy: 41.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 47.5
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: P1357050
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Luminous Intensity Polar Plot





TEST NUMBER: P1357050
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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°	6216	6216	6216
5°	6157	6096	6074
10°	6117	5975	5921
15°	6045	5825	5790
20°	5949	5682	5643
25°	5837	5501	5476
30°	5720	5346	5335
35°	5575	5170	5178
40°	5442	5008	5012
45°	5298	4813	4846
50°	5135	4603	4674
55°	4957	4404	4518
60°	4728	4170	4360
65°	4438	3946	4229
70°	4068	3722	4126
75°	3534	3517	4058
80°	2735	3359	4028
85°	1591	3308	4086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5298 cd/sqm



TEST NUMBER: P1357050
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.4	2.8
10°-20°	156.2	8.0
20°-30°	236.1	12.1
30°-40°	285.9	14.7
40°-50°	300.2	15.4
50°-60°	280.1	14.4
60°-70°	231.5	11.9
70°-80°	166.7	8.5
80°-90°	103.6	5.3
90°-100°	60.7	3.1
100°-110°	34.7	1.8
110°-120°	19.6	1.0
120°-130°	11.3	0.6
130°-140°	6.1	0.3
140°-150°	2.6	0.1
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	446.6	22.9
0°-40°	732.5	37.6
0°-60°	1312.9	67.3
0°-90°	1814.6	93.1
90°-120°	115.0	5.9
90°-150°	134.9	6.9
90°-180°	135.0	6.9
0°-180°	1950.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	574	574	574	574	574	
5°	568	572	572	572	574	54
15°	544	551	553	557	559	153
25°	496	504	513	520	525	228
35°	432	444	458	471	477	270
45°	358	371	391	408	415	276
55°	275	291	315	337	346	246
65°	186	204	235	265	275	184
75°	95	119	161	196	210	101
85°	18	54	101	137	150	22
90°	0	32	78	111	125	1
95°	0	20	58	89	102	0
105°	0	7	32	56	66	0
115°	0	4	19	35	40	0
125°	0	2	12	23	26	0
135°	0	0	7	14	18	0
145°	0	0	4	8	10	0
155°	0	0	0	2	4	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P1357050
 CATALOG NUMBER: 3ASL4-25VHE-3-R63-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	573.5	573.5	573.5	573.5	573.5
2.5°	571.1	574.7	574.7	571.1	571.1
5°	567.6	572.3	572.3	572.3	573.5
7.5°	564.0	569.9	569.9	569.9	572.3
10°	559.2	565.2	566.4	566.4	567.6
12.5°	552.1	559.2	560.4	561.6	562.8
15°	543.7	550.9	553.3	556.8	559.2
17.5°	534.2	542.5	547.3	550.9	553.3
20°	522.3	530.6	536.6	541.3	544.9
22.5°	510.3	517.5	524.6	530.6	534.2
25°	496.0	504.4	512.7	519.9	524.6
27.5°	480.5	490.1	500.8	509.1	513.9
30°	466.2	475.7	487.7	498.4	503.2
32.5°	449.5	460.2	473.4	484.1	490.1
35°	431.6	443.6	457.9	471.0	476.9
37.5°	413.7	425.7	443.6	456.7	462.6
40°	395.9	407.8	426.9	441.2	447.1
42.5°	376.8	388.7	409.0	424.5	431.6
45°	357.7	370.8	391.1	407.8	414.9
47.5°	338.6	351.7	373.2	391.1	398.2
50°	317.2	331.5	352.9	373.2	380.4
52.5°	296.9	311.2	335.1	355.3	362.5
55°	275.4	290.9	314.8	337.4	345.8
57.5°	254.0	269.5	294.5	318.4	327.9
60°	231.3	248.0	274.2	299.3	310.0
62.5°	208.7	226.5	255.2	281.4	292.1
65°	186.0	203.9	234.9	264.7	275.4
67.5°	163.4	182.4	215.8	246.8	259.9
70°	140.7	161.0	196.7	228.9	242.0
72.5°	118.0	139.5	178.9	212.2	225.4
75°	95.4	119.2	161.0	195.5	209.9
77.5°	72.7	100.2	145.5	180.0	194.4
80°	52.5	83.5	128.8	164.5	178.9
82.5°	33.4	66.8	114.5	150.2	164.5
85°	17.9	53.7	101.3	137.1	150.2
87.5°	6.0	41.7	88.2	124.0	137.1
90°	0.0	32.2	77.5	110.9	125.2
92.5°	0.0	25.0	68.0	100.2	113.3
95°	0.0	20.3	58.4	89.4	102.5
97.5°	0.0	16.7	51.3	79.9	91.8
100°	0.0	13.1	44.1	71.5	82.3
102.5°	0.0	10.7	38.2	63.2	73.9
105°	0.0	7.2	32.2	56.0	65.6
107.5°	0.0	6.0	27.4	50.1	58.4
110°	0.0	4.8	25.0	42.9	51.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	3.6	22.7	38.2	46.5
115°	0.0	3.6	19.1	34.6	40.5
117.5°	0.0	3.6	16.7	31.0	37.0
120°	0.0	2.4	15.5	27.4	33.4
122.5°	0.0	2.4	13.1	25.0	29.8
125°	0.0	2.4	11.9	22.7	26.2
127.5°	0.0	1.2	10.7	20.3	23.8
130°	0.0	1.2	9.5	17.9	21.5
132.5°	0.0	1.2	8.3	16.7	20.3
135°	0.0	0.0	7.2	14.3	17.9
137.5°	0.0	0.0	6.0	13.1	15.5
140°	0.0	0.0	4.8	10.7	14.3
142.5°	0.0	0.0	3.6	9.5	11.9
145°	0.0	0.0	3.6	8.3	9.5
147.5°	0.0	0.0	2.4	6.0	8.3
150°	0.0	0.0	1.2	4.8	6.0
152.5°	0.0	0.0	0.0	3.6	4.8
155°	0.0	0.0	0.0	2.4	3.6
157.5°	0.0	0.0	0.0	0.0	1.2
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	15.67	17.21	16.14	17.67	18.15	17.67	19.21	18.14	19.66	20.15
	3H	17.17	18.57	17.65	19.04	19.56	20.12	21.52	20.60	21.99	22.51
	4H	17.65	18.98	18.15	19.46	20.00	21.31	22.64	21.81	23.12	23.66
	6H	17.93	19.17	18.44	19.66	20.22	22.54	23.78	23.06	24.28	24.83
	8H	17.98	19.17	18.51	19.69	20.25	23.18	24.36	23.70	24.88	25.44
	12H	17.99	19.13	18.53	19.64	20.23	23.86	25.00	24.40	25.52	26.11
4H	2H	16.54	17.87	17.05	18.36	18.89	18.11	19.44	18.61	19.92	20.46
	3H	18.28	19.41	18.79	19.94	20.50	20.78	21.92	21.30	22.44	23.00
	4H	18.88	19.92	19.42	20.46	21.05	22.14	23.18	22.67	23.71	24.31
	6H	19.28	20.20	19.84	20.76	21.37	23.57	24.48	24.12	25.05	25.65
	8H	19.38	20.24	19.94	20.80	21.42	24.31	25.17	24.87	25.73	26.35
	12H	19.42	20.20	20.00	20.79	21.42	25.12	25.90	25.70	26.49	27.12
8H	4H	19.56	20.42	20.12	20.98	21.60	22.36	23.22	22.92	23.78	24.40
	6H	20.14	20.87	20.73	21.47	22.10	23.96	24.69	24.55	25.29	25.92
	8H	20.32	20.98	20.92	21.59	22.23	24.83	25.50	25.44	26.11	26.75
	12H	20.43	21.02	21.04	21.63	22.33	25.83	26.42	26.44	27.03	27.73
12H	4H	19.75	20.53	20.33	21.12	21.75	22.37	23.15	22.95	23.74	24.36
	6H	20.43	21.09	21.03	21.70	22.34	23.99	24.65	24.60	25.27	25.91
	8H	20.71	21.30	21.31	21.90	22.60	24.94	25.53	25.55	26.13	26.84

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

Report Prepared for

Cooper Lighting Solutions

Fail-Safe

Report Number: SP1-2511-597-7

Test Date: 01/21/2026

Luminaire Tested: 4ASL-2-R630-UNV-OPL-1_600mA

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

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2511-597-7
 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-R630-UNV-OPL-1_600mA**
 Description: 2foot 4ASL LED LUMINAIRE WITH OPL LENS AND RED 630NM LEDS with 1 rows at 600mA

Spectral Parameters

CCT (K): 0
 CIE u': 0.5395
 CIE v': 0.5190
 Duv: 0.0000
 CIE x: 0.7004
 CIE y: 0.2995
 CIE z: 0.0001
 Peak Wavelength (nm): 638
 Dominant Wavelength (nm): 624
 Purity: 99.9862
 Rf: NR
 Rg: NR

CRI (Ra): 0.0
 R1: 0.0
 R2: 0.0
 R3: 0.0
 R4: 0.0
 R5: 0.0
 R6: 0.0
 R7: 0.0
 R8: 0.0
 R9: 0.0
 R10: 0.0
 R11: 0.0
 R12: 0.0
 R13: 0.0
 R14: 0.0
 R15: 0.0



Test Conditions

Stabilization Time: 69M
 Operation Time: 2H 9M
 Sphere Temperature (°C): 25.1

REPORT NUMBER: SP1-2511-597-7

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



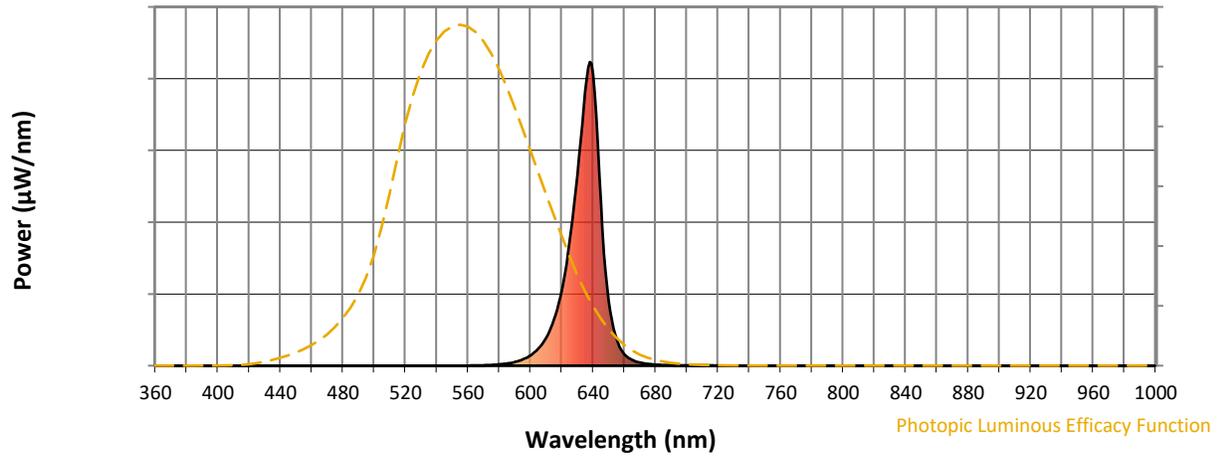
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies outside the range

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Photopic Flux vs. Wavelength

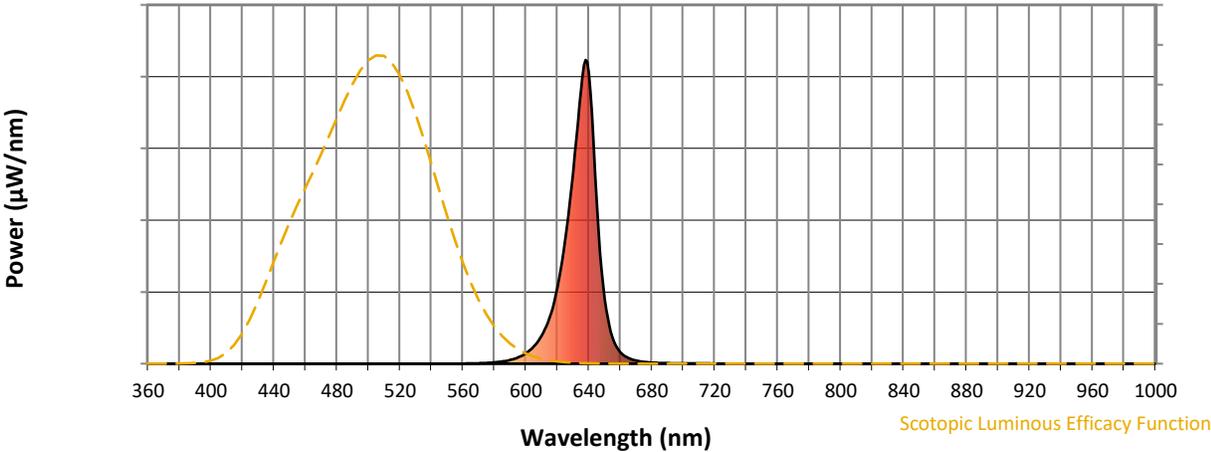


Photopic Lumens: NR

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	0	NR	620	248	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	409	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	630	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	903	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	960	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	535	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	212	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	88	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	38	NR	790	0	NR	920	0	NR
405	0	NR	535	0	NR	665	19	NR	795	0	NR	925	0	NR
410	0	NR	540	0	NR	670	10	NR	800	0	NR	930	0	NR
415	0	NR	545	0	NR	675	6	NR	805	0	NR	935	0	NR
420	0	NR	550	0	NR	680	4	NR	810	0	NR	940	0	NR
425	0	NR	555	0	NR	685	2	NR	815	0	NR	945	0	NR
430	0	NR	560	0	NR	690	2	NR	820	0	NR	950	0	NR
435	0	NR	565	1	NR	695	1	NR	825	0	NR	955	0	NR
440	0	NR	570	2	NR	700	1	NR	830	0	NR	960	0	NR
445	0	NR	575	3	NR	705	1	NR	835	0	NR	965	0	NR
450	0	NR	580	4	NR	710	1	NR	840	0	NR	970	0	NR
455	0	NR	585	7	NR	715	1	NR	845	0	NR	975	0	NR
460	0	NR	590	12	NR	720	1	NR	850	0	NR	980	0	NR
465	0	NR	595	20	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	34	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	56	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	92	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	152	NR	745	0	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



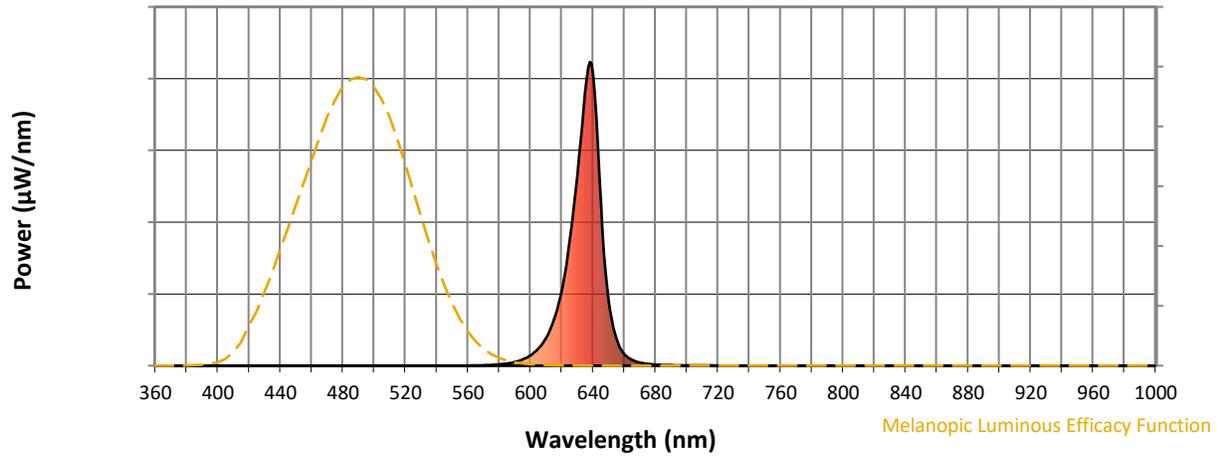
Scotopic Lumens: NR

S/P: 0.05

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	248	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	409	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	630	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	903	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	960	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	535	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	212	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	88	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	38	NR	790	0	NR	920	0	NR
405	0	NR	535	0	NR	665	19	NR	795	0	NR	925	0	NR
410	0	NR	540	0	NR	670	10	NR	800	0	NR	930	0	NR
415	0	NR	545	0	NR	675	6	NR	805	0	NR	935	0	NR
420	0	NR	550	0	NR	680	4	NR	810	0	NR	940	0	NR
425	0	NR	555	0	NR	685	2	NR	815	0	NR	945	0	NR
430	0	NR	560	0	NR	690	2	NR	820	0	NR	950	0	NR
435	0	NR	565	1	NR	695	1	NR	825	0	NR	955	0	NR
440	0	NR	570	2	NR	700	1	NR	830	0	NR	960	0	NR
445	0	NR	575	3	NR	705	1	NR	835	0	NR	965	0	NR
450	0	NR	580	4	NR	710	1	NR	840	0	NR	970	0	NR
455	0	NR	585	7	NR	715	1	NR	845	0	NR	975	0	NR
460	0	NR	590	12	NR	720	1	NR	850	0	NR	980	0	NR
465	0	NR	595	20	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	34	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	56	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	92	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	152	NR	745	0	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 0.02

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	248	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	409	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	630	NR	760	0	NR	890	0	NR
375	0	NR	505	0	NR	635	903	NR	765	0	NR	895	0	NR
380	0	NR	510	0	NR	640	960	NR	770	0	NR	900	0	NR
385	0	NR	515	0	NR	645	535	NR	775	0	NR	905	0	NR
390	0	NR	520	0	NR	650	212	NR	780	0	NR	910	0	NR
395	0	NR	525	0	NR	655	88	NR	785	0	NR	915	0	NR
400	0	NR	530	0	NR	660	38	NR	790	0	NR	920	0	NR
405	0	NR	535	0	NR	665	19	NR	795	0	NR	925	0	NR
410	0	NR	540	0	NR	670	10	NR	800	0	NR	930	0	NR
415	0	NR	545	0	NR	675	6	NR	805	0	NR	935	0	NR
420	0	NR	550	0	NR	680	4	NR	810	0	NR	940	0	NR
425	0	NR	555	0	NR	685	2	NR	815	0	NR	945	0	NR
430	0	NR	560	0	NR	690	2	NR	820	0	NR	950	0	NR
435	0	NR	565	1	NR	695	1	NR	825	0	NR	955	0	NR
440	0	NR	570	2	NR	700	1	NR	830	0	NR	960	0	NR
445	0	NR	575	3	NR	705	1	NR	835	0	NR	965	0	NR
450	0	NR	580	4	NR	710	1	NR	840	0	NR	970	0	NR
455	0	NR	585	7	NR	715	1	NR	845	0	NR	975	0	NR
460	0	NR	590	12	NR	720	1	NR	850	0	NR	980	0	NR
465	0	NR	595	20	NR	725	0	NR	855	0	NR	985	0	NR
470	0	NR	600	34	NR	730	0	NR	860	0	NR	990	0	NR
475	0	NR	605	56	NR	735	0	NR	865	0	NR	995	0	NR
480	0	NR	610	92	NR	740	0	NR	870	0	NR	1000	0	NR
485	0	NR	615	152	NR	745	0	NR	875	0	NR			

Summary

$R_f = 0$
 $R_g = 0$
 CIE $R_a = 0.0$
 $R_9 = 0.0$



Color Vector Graphics

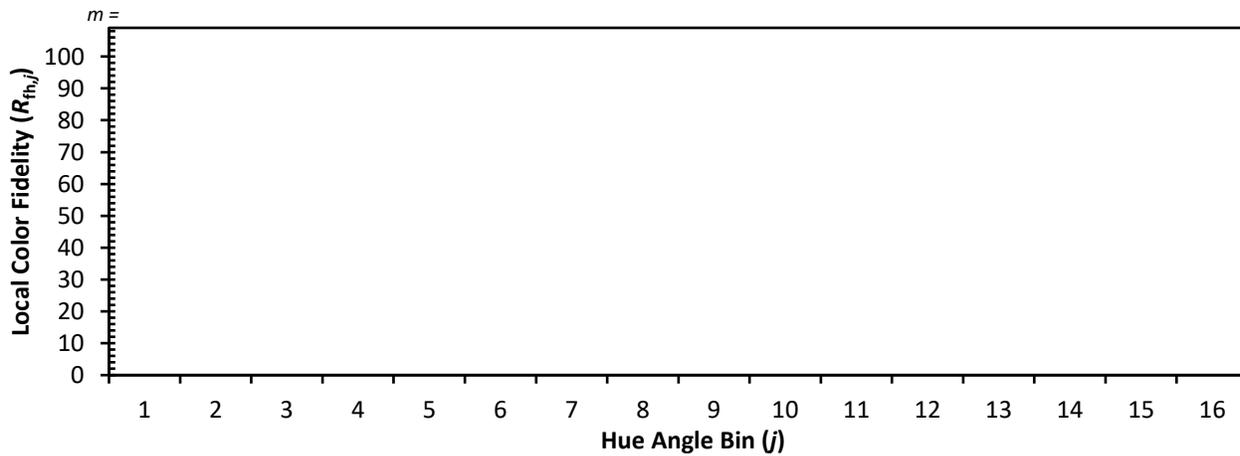


Individual Sample Fidelity Index ($R_{f,i}$)

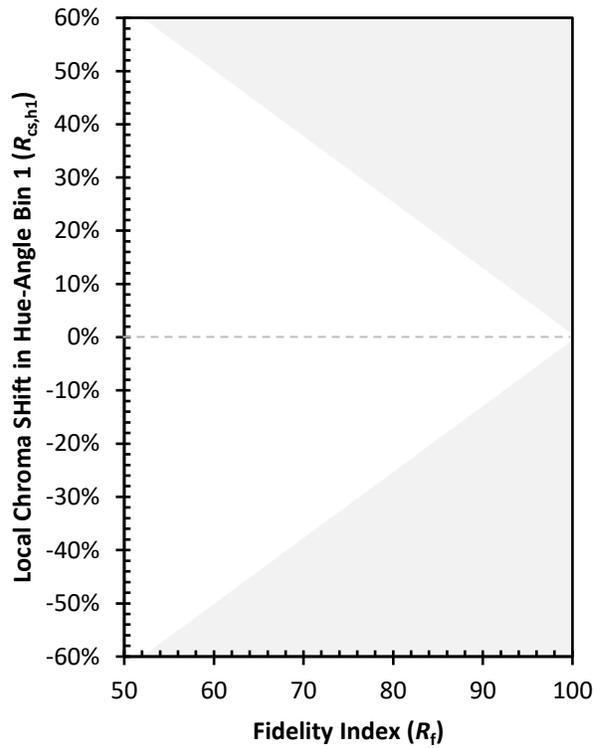
CES01 = 0	CES26 = 0	CES51 = 0	CES76 = 0
CES02 = 0	CES27 = 0	CES52 = 0	CES77 = 0
CES03 = 0	CES28 = 0	CES53 = 0	CES78 = 0
CES04 = 0	CES29 = 0	CES54 = 0	CES79 = 0
CES05 = 0	CES30 = 0	CES55 = 0	CES80 = 0
CES06 = 0	CES31 = 0	CES56 = 0	CES81 = 0
CES07 = 0	CES32 = 0	CES57 = 0	CES82 = 0
CES08 = 0	CES33 = 0	CES58 = 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)