

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: P1356744

Luminaire Tested: 1ASL4-25VHE-3-R63-UNV

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1356744
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: 1ASL4-25VHE-3-R63-UNV
Description: 1FT 2500 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND R63 LEDS 3 ROW
Light Source: -
Ballast/Driver: -

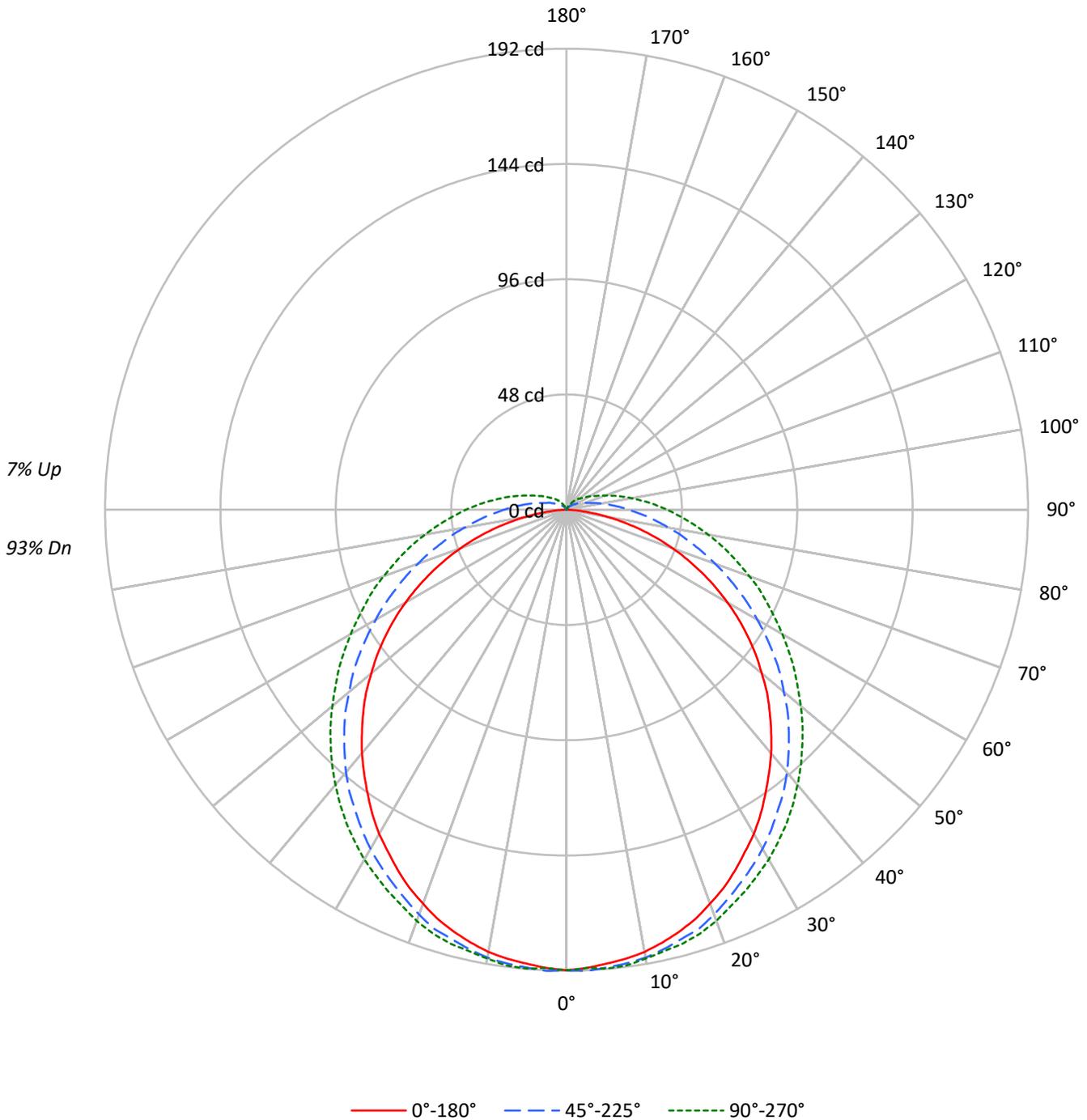
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 652.0 lumens
Efficiency: N/A
Efficacy: 41.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 0.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 15.9
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

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Luminous Intensity Polar Plot





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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°	6325	6325	6325
5°	6225	6176	6181
10°	6147	6028	6024
15°	6035	5852	5891
20°	5899	5683	5741
25°	5748	5480	5571
30°	5593	5304	5426
35°	5407	5105	5269
40°	5233	4920	5099
45°	5042	4706	4929
50°	4827	4475	4755
55°	4597	4251	4596
60°	4305	3998	4438
65°	3952	3746	4303
70°	3507	3498	4197
75°	2910	3256	4129
80°	2073	3054	4097
85°	1025	2925	4155

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5042 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.2	2.8
10°-20°	52.2	8.0
20°-30°	78.9	12.1
30°-40°	95.6	14.7
40°-50°	100.4	15.4
50°-60°	93.7	14.4
60°-70°	77.4	11.9
70°-80°	55.7	8.5
80°-90°	34.6	5.3
90°-100°	20.3	3.1
100°-110°	11.6	1.8
110°-120°	6.6	1.0
120°-130°	3.8	0.6
130°-140°	2.0	0.3
140°-150°	0.9	0.1
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	149.3	22.9
0°-40°	244.9	37.6
0°-60°	439.0	67.3
0°-90°	606.7	93.0
90°-120°	38.5	5.9
90°-150°	45.2	6.9
90°-180°	45.0	6.9
0°-180°	652.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	192	192	192	192	192	
5°	190	191	191	191	192	18
15°	182	184	185	186	187	51
25°	166	169	171	174	175	76
35°	144	148	153	158	160	90
45°	120	124	131	136	139	92
55°	92	97	105	113	116	82
65°	62	68	78	88	92	62
75°	32	40	54	65	70	34
85°	6	18	34	46	50	7
90°	0	11	26	37	42	0
95°	0	7	20	30	34	0
105°	0	2	11	19	22	0
115°	0	1	6	12	14	0
125°	0	1	4	8	9	0
135°	0	0	2	5	6	0
145°	0	0	1	3	3	0
155°	0	0	0	1	1	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	191.8	191.8	191.8	191.8	191.8
2.5°	191.0	192.2	192.2	191.0	191.0
5°	189.8	191.4	191.4	191.4	191.8
7.5°	188.6	190.6	190.6	190.6	191.4
10°	187.0	189.0	189.4	189.4	189.8
12.5°	184.6	187.0	187.4	187.8	188.2
15°	181.8	184.2	185.0	186.2	187.0
17.5°	178.6	181.4	183.0	184.2	185.0
20°	174.6	177.4	179.4	181.0	182.2
22.5°	170.6	173.0	175.4	177.4	178.6
25°	165.8	168.6	171.4	173.8	175.4
27.5°	160.7	163.9	167.4	170.2	171.8
30°	155.9	159.1	163.1	166.6	168.2
32.5°	150.3	153.9	158.3	161.9	163.9
35°	144.3	148.3	153.1	157.5	159.5
37.5°	138.3	142.3	148.3	152.7	154.7
40°	132.4	136.3	142.7	147.5	149.5
42.5°	126.0	130.0	136.7	141.9	144.3
45°	119.6	124.0	130.8	136.3	138.7
47.5°	113.2	117.6	124.8	130.8	133.2
50°	106.0	110.8	118.0	124.8	127.2
52.5°	99.3	104.1	112.0	118.8	121.2
55°	92.1	97.3	105.2	112.8	115.6
57.5°	84.9	90.1	98.5	106.4	109.6
60°	77.3	82.9	91.7	100.1	103.7
62.5°	69.8	75.7	85.3	94.1	97.7
65°	62.2	68.2	78.5	88.5	92.1
67.5°	54.6	61.0	72.2	82.5	86.9
70°	47.0	53.8	65.8	76.5	80.9
72.5°	39.5	46.6	59.8	71.0	75.3
75°	31.9	39.9	53.8	65.4	70.2
77.5°	24.3	33.5	48.6	60.2	65.0
80°	17.5	27.9	43.1	55.0	59.8
82.5°	11.2	22.3	38.3	50.2	55.0
85°	6.0	17.9	33.9	45.8	50.2
87.5°	2.0	14.0	29.5	41.5	45.8
90°	0.0	10.8	25.9	37.1	41.9
92.5°	0.0	8.4	22.7	33.5	37.9
95°	0.0	6.8	19.5	29.9	34.3
97.5°	0.0	5.6	17.1	26.7	30.7
100°	0.0	4.4	14.8	23.9	27.5
102.5°	0.0	3.6	12.8	21.1	24.7
105°	0.0	2.4	10.8	18.7	21.9
107.5°	0.0	2.0	9.2	16.7	19.5
110°	0.0	1.6	8.4	14.4	17.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.2	7.6	12.8	15.5
115°	0.0	1.2	6.4	11.6	13.6
117.5°	0.0	1.2	5.6	10.4	12.4
120°	0.0	0.8	5.2	9.2	11.2
122.5°	0.0	0.8	4.4	8.4	10.0
125°	0.0	0.8	4.0	7.6	8.8
127.5°	0.0	0.4	3.6	6.8	8.0
130°	0.0	0.4	3.2	6.0	7.2
132.5°	0.0	0.4	2.8	5.6	6.8
135°	0.0	0.0	2.4	4.8	6.0
137.5°	0.0	0.0	2.0	4.4	5.2
140°	0.0	0.0	1.6	3.6	4.8
142.5°	0.0	0.0	1.2	3.2	4.0
145°	0.0	0.0	1.2	2.8	3.2
147.5°	0.0	0.0	0.8	2.0	2.8
150°	0.0	0.0	0.4	1.6	2.0
152.5°	0.0	0.0	0.0	1.2	1.6
155°	0.0	0.0	0.0	0.8	1.2
157.5°	0.0	0.0	0.0	0.0	0.4
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	15.65	17.19	16.12	17.64	18.13	17.43	18.97	17.90	19.43	19.91
	3H	17.15	18.55	17.63	19.02	19.54	19.79	21.20	20.27	21.66	22.19
	4H	17.63	18.97	18.14	19.45	19.99	20.91	22.24	21.41	22.72	23.26
	6H	17.91	19.15	18.43	19.65	20.20	22.04	23.28	22.55	23.77	24.33
	8H	17.96	19.15	18.49	19.67	20.23	22.59	23.78	23.12	24.30	24.86
	12H	17.98	19.12	18.51	19.63	20.22	23.16	24.30	23.69	24.81	25.40
4H	2H	16.48	17.81	16.98	18.29	18.83	17.88	19.21	18.38	19.69	20.23
	3H	18.21	19.35	18.73	19.87	20.44	20.47	21.60	20.98	22.13	22.69
	4H	18.82	19.86	19.36	20.40	20.99	21.76	22.80	22.29	23.33	23.92
	6H	19.22	20.14	19.78	20.70	21.31	23.08	23.99	23.63	24.55	25.16
	8H	19.32	20.18	19.88	20.74	21.36	23.73	24.59	24.29	25.16	25.78
	12H	19.36	20.15	19.95	20.74	21.36	24.42	25.20	25.00	25.79	26.42
8H	4H	19.45	20.31	20.01	20.88	21.50	21.98	22.85	22.54	23.41	24.03
	6H	20.03	20.76	20.62	21.36	21.99	23.47	24.20	24.07	24.81	25.43
	8H	20.21	20.87	20.82	21.49	22.12	24.27	24.93	24.88	25.55	26.18
	12H	20.33	20.92	20.93	21.52	22.22	25.14	25.73	25.75	26.34	27.04
12H	4H	19.62	20.40	20.20	20.99	21.62	21.99	22.78	22.57	23.37	23.99
	6H	20.29	20.95	20.89	21.57	22.20	23.51	24.18	24.12	24.79	25.43
	8H	20.57	21.16	21.17	21.76	22.46	24.38	24.97	24.99	25.58	26.28

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

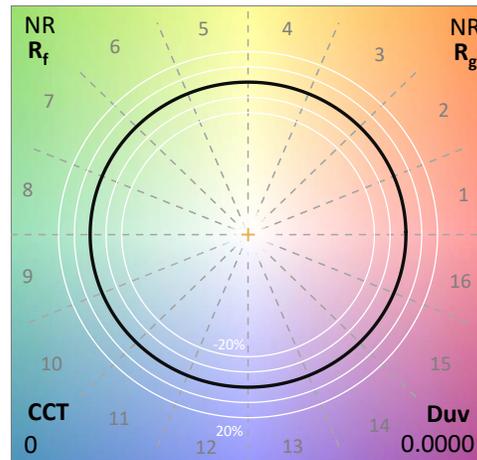
Test Information

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

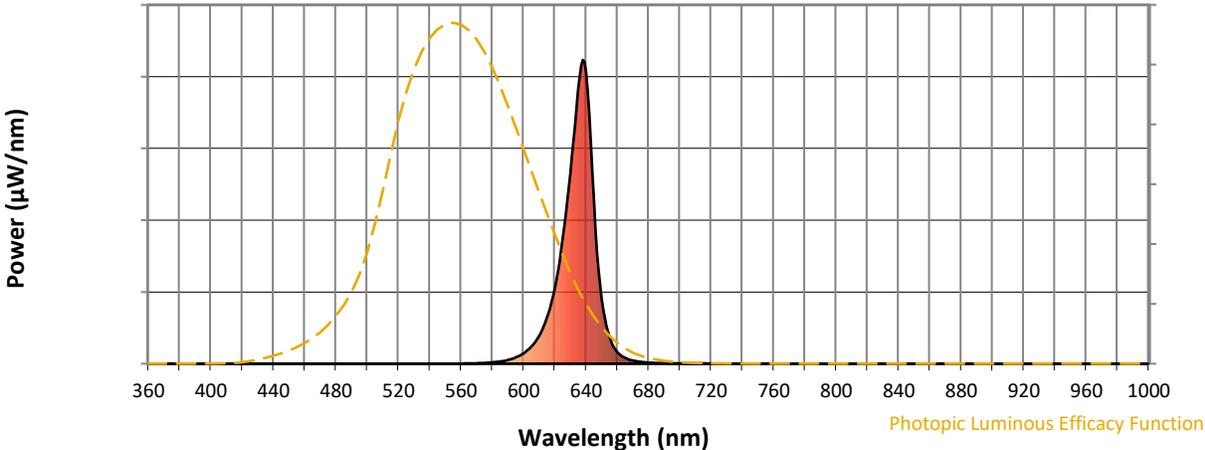


CCT = 0K
 CIE x = 0.7004
 CIE y = 0.2995
 Duv = 0.0000

Point lies outside the range

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Photopic Flux vs. Wavelength

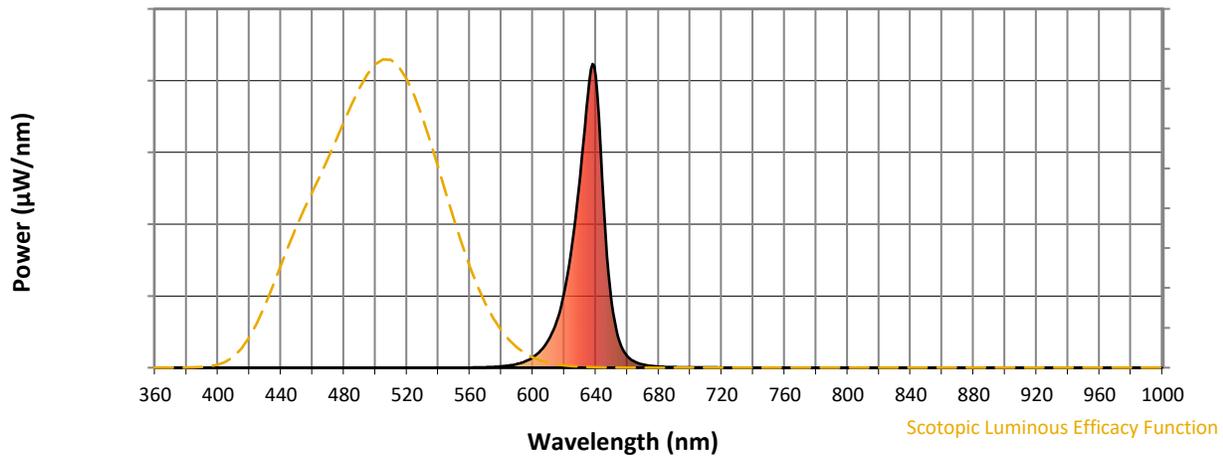


Photopic Lumens: NR

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



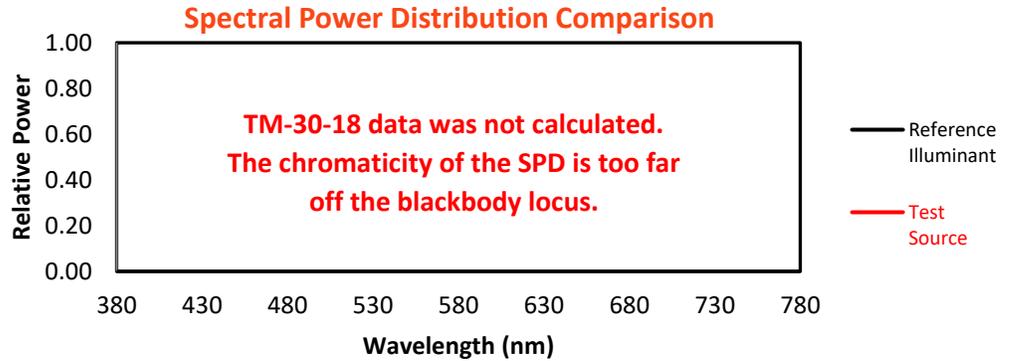
Melanopic Lumens: NR

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

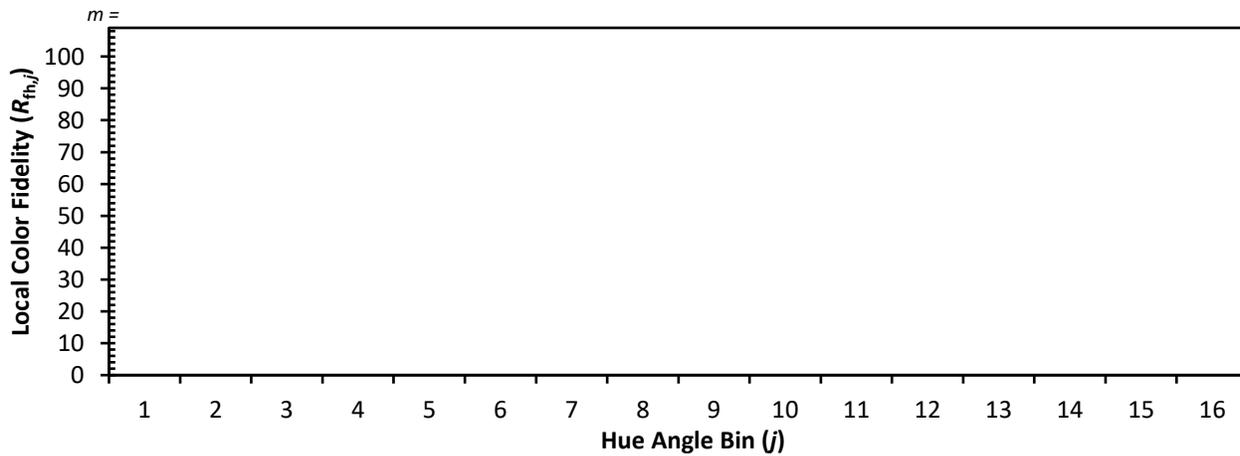


Individual Sample Fidelity Index ($R_{f,i}$)

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)