

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: P1356879

Luminaire Tested: 2ASL4-20HE-2-R63-UNV

Issue Date: 2/17/2026

Test Information

Test Method: LM-79-2019
Report Number: P1356879
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: 2ASL4-20HE-2-R63-UNV
Description: 2FT 2000 LUMEN PER FOOT 4ASL LED LUMINAIRE WITH OPL LENS AND R63 LEDS 2 ROW
Light Source: -
Ballast/Driver: -

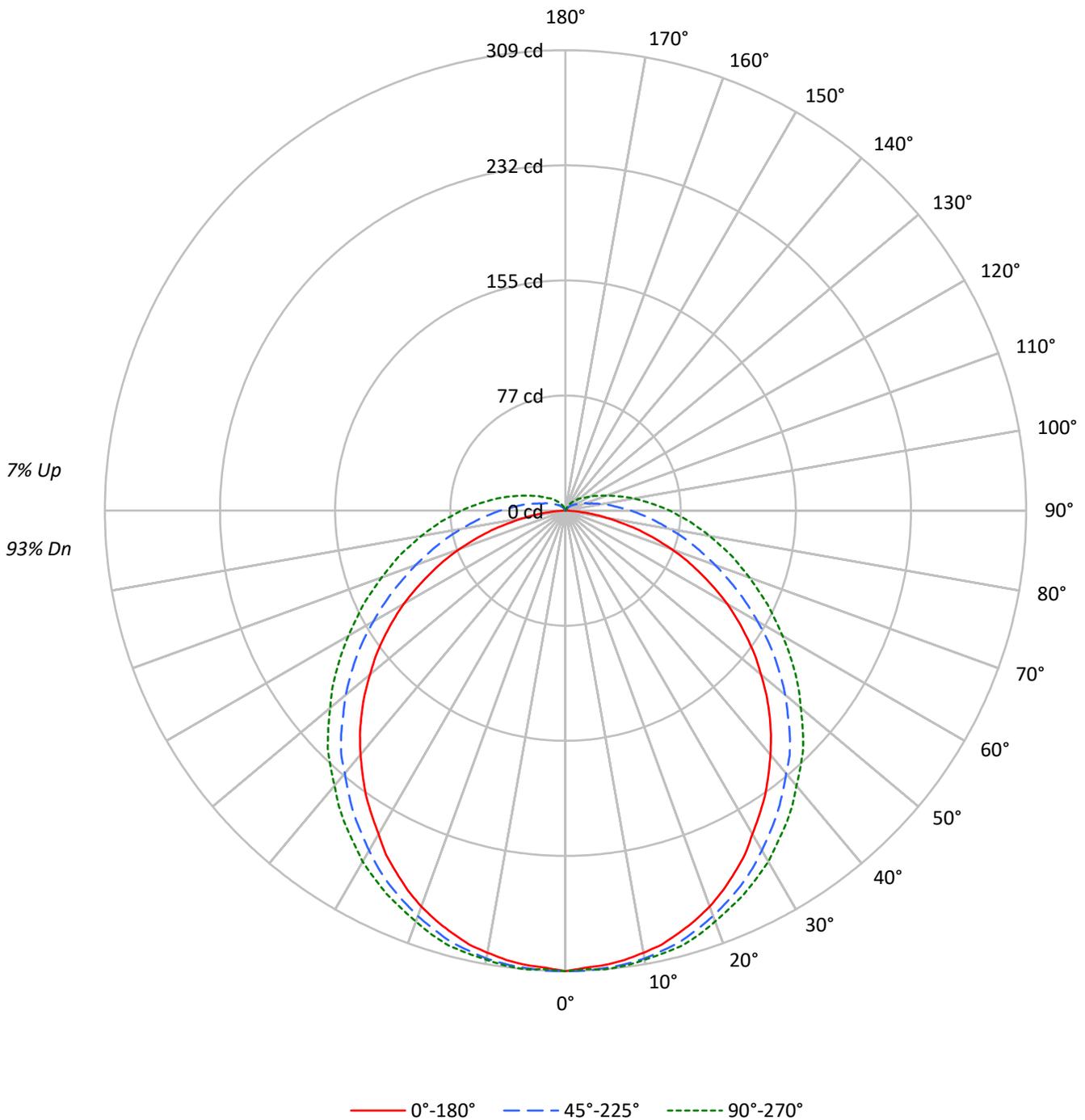
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1061.0 lumens
Efficiency: N/A
Efficacy: 40.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.4
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1.98' x H: 0.1')
CIE Type: Direct

Input Watts (W): 26.5
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

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Luminous Intensity Polar Plot





TEST NUMBER: P1356879

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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	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°	5043	5043	5043
5°	4990	4935	4928
10°	4946	4836	4807
15°	4889	4729	4712
20°	4818	4596	4576
25°	4713	4467	4459
30°	4584	4319	4343
35°	4482	4180	4208
40°	4361	4032	4067
45°	4239	3903	3964
50°	4087	3735	3810
55°	3934	3556	3690
60°	3750	3353	3559
65°	3473	3163	3460
70°	3159	2983	3368
75°	2714	2838	3338
80°	2041	2703	3328
85°	1134	2672	3423

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4239 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.3	2.8
10°-20°	84.3	7.9
20°-30°	127.7	12.0
30°-40°	154.4	14.6
40°-50°	162.8	15.3
50°-60°	151.9	14.3
60°-70°	125.4	11.8
70°-80°	91.0	8.6
80°-90°	57.5	5.4
90°-100°	34.3	3.2
100°-110°	19.7	1.9
110°-120°	11.2	1.1
120°-130°	6.4	0.6
130°-140°	3.5	0.3
140°-150°	1.5	0.1
150°-160°	0.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	241.2	22.7
0°-40°	395.6	37.3
0°-60°	710.3	66.9
0°-90°	984.2	92.8
90°-120°	65.2	6.1
90°-150°	76.5	7.2
90°-180°	77.0	7.3
0°-180°	1061.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	309	309	309	309	309	
5°	306	309	308	308	309	29
15°	294	297	299	300	302	83
25°	268	272	278	282	284	124
35°	233	239	248	255	258	146
45°	193	201	213	222	226	149
55°	149	157	171	183	188	133
65°	100	111	127	143	150	99
75°	52	65	88	107	115	54
85°	10	30	56	76	84	12
90°	0	18	44	62	70	0
95°	0	12	33	50	57	0
105°	0	4	18	32	37	0
115°	0	2	11	19	23	0
125°	0	1	7	13	15	0
135°	0	0	4	8	10	0
145°	0	0	2	5	6	0
155°	0	0	0	1	2	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P1356879

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	309.1	309.1	309.1	309.1	309.1
2.5°	307.1	310.0	309.1	308.1	308.1
5°	306.1	309.1	308.1	308.1	309.1
7.5°	304.2	307.1	307.1	307.1	308.1
10°	301.3	305.2	305.2	305.2	306.1
12.5°	298.4	301.3	302.3	303.2	304.2
15°	293.5	297.4	299.3	300.3	302.3
17.5°	288.6	291.6	294.5	297.4	298.4
20°	282.8	286.7	289.6	292.5	293.5
22.5°	276.0	279.9	283.8	286.7	288.6
25°	268.2	272.1	278.0	281.8	283.8
27.5°	260.5	264.4	271.2	276.0	278.0
30°	250.7	256.6	263.4	269.2	272.1
32.5°	242.0	247.8	255.6	262.4	264.4
35°	233.3	239.1	247.8	254.6	257.5
37.5°	223.5	230.3	239.1	246.9	249.8
40°	213.8	220.6	230.3	239.1	241.0
42.5°	204.1	210.9	222.6	230.3	233.3
45°	193.4	201.2	212.8	221.6	225.5
47.5°	182.7	190.5	202.2	211.9	215.8
50°	171.1	179.8	192.4	202.2	206.0
52.5°	160.4	169.1	181.7	192.4	197.3
55°	148.7	157.4	171.1	182.7	187.6
57.5°	137.0	145.8	160.4	173.0	177.9
60°	125.4	134.1	148.7	163.3	168.1
62.5°	112.7	122.5	138.0	152.6	158.4
65°	100.1	110.8	127.3	142.9	149.7
67.5°	88.4	99.1	116.6	134.1	140.0
70°	75.8	87.5	106.9	124.4	131.2
72.5°	63.2	75.8	97.2	115.7	122.5
75°	51.5	65.1	88.4	106.9	114.7
77.5°	38.9	55.4	79.7	99.1	105.9
80°	28.2	45.7	70.9	91.4	98.2
82.5°	18.5	36.9	63.2	83.6	90.4
85°	9.7	30.1	56.4	75.8	83.6
87.5°	2.9	23.3	49.6	69.0	75.8
90°	0.0	18.5	43.7	62.2	70.0
92.5°	0.0	14.6	37.9	56.4	63.2
95°	0.0	11.7	33.0	50.5	57.3
97.5°	0.0	9.7	29.2	45.7	51.5
100°	0.0	7.8	25.3	40.8	46.7
102.5°	0.0	5.8	21.4	36.0	41.8
105°	0.0	3.9	18.5	32.1	36.9
107.5°	0.0	2.9	15.6	28.2	33.0
110°	0.0	2.9	14.6	24.3	29.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	1.9	12.6	22.4	26.2
115°	0.0	1.9	10.7	19.4	23.3
117.5°	0.0	1.9	9.7	17.5	21.4
120°	0.0	1.9	8.7	15.6	18.5
122.5°	0.0	1.0	7.8	13.6	16.5
125°	0.0	1.0	6.8	12.6	14.6
127.5°	0.0	1.0	5.8	11.7	13.6
130°	0.0	1.0	5.8	10.7	12.6
132.5°	0.0	0.0	4.9	9.7	11.7
135°	0.0	0.0	3.9	7.8	9.7
137.5°	0.0	0.0	3.9	6.8	8.7
140°	0.0	0.0	2.9	6.8	7.8
142.5°	0.0	0.0	1.9	5.8	6.8
145°	0.0	0.0	1.9	4.9	5.8
147.5°	0.0	0.0	1.0	3.9	4.9
150°	0.0	0.0	1.0	2.9	3.9
152.5°	0.0	0.0	0.0	1.9	2.9
155°	0.0	0.0	0.0	1.0	1.9
157.5°	0.0	0.0	0.0	0.0	1.0
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	14.90	16.44	15.38	16.90	17.39	16.88	18.41	17.35	18.88	19.37
	3H	16.41	17.81	16.89	18.28	18.81	19.29	20.69	19.78	21.16	21.70
	4H	16.89	18.22	17.39	18.70	19.25	20.47	21.80	20.98	22.29	22.83
	6H	17.16	18.40	17.68	18.90	19.46	21.70	22.93	22.21	23.43	23.99
	8H	17.22	18.40	17.75	18.93	19.49	22.32	23.50	22.85	24.03	24.59
	12H	17.23	18.37	17.77	18.89	19.49	22.99	24.12	23.52	24.64	25.24
4H	2H	15.77	17.09	16.27	17.58	18.13	17.31	18.64	17.82	19.13	19.67
	3H	17.51	18.64	18.03	19.17	19.74	19.96	21.09	20.48	21.62	22.19
	4H	18.12	19.16	18.66	19.70	20.29	21.31	22.35	21.85	22.89	23.49
	6H	18.52	19.44	19.08	20.00	20.62	22.73	23.65	23.29	24.22	24.83
	8H	18.62	19.48	19.18	20.05	20.67	23.46	24.32	24.03	24.89	25.52
	12H	18.67	19.45	19.25	20.05	20.68	24.26	25.04	24.84	25.63	26.26
8H	4H	18.79	19.66	19.36	20.22	20.85	21.54	22.40	22.10	22.97	23.59
	6H	19.38	20.11	19.98	20.72	21.35	23.13	23.87	23.73	24.47	25.11
	8H	19.57	20.23	20.18	20.85	21.49	24.01	24.67	24.62	25.29	25.93
	12H	19.69	20.28	20.30	20.89	21.60	24.99	25.58	25.60	26.18	26.89
12H	4H	18.99	19.77	19.57	20.36	20.99	21.55	22.33	22.13	22.93	23.56
	6H	19.67	20.33	20.28	20.95	21.60	23.17	23.84	23.78	24.45	25.10
	8H	19.96	20.55	20.57	21.16	21.87	24.12	24.71	24.73	25.32	26.03

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

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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

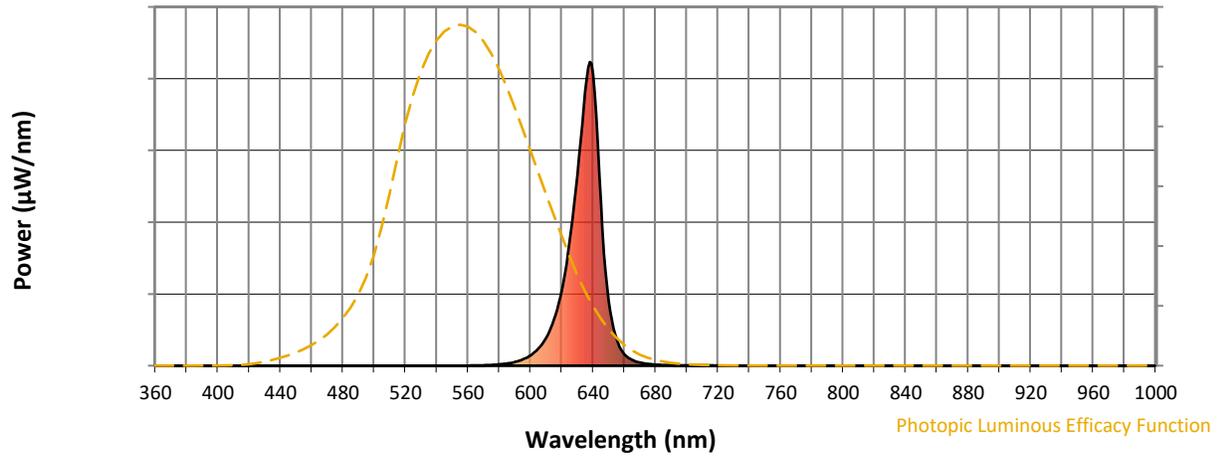


CCT = 0K
 CIE x = 0.7004
 CIE y = 0.2995
 Duv = 0.0000

Point lies outside the range

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Photopic Flux vs. Wavelength

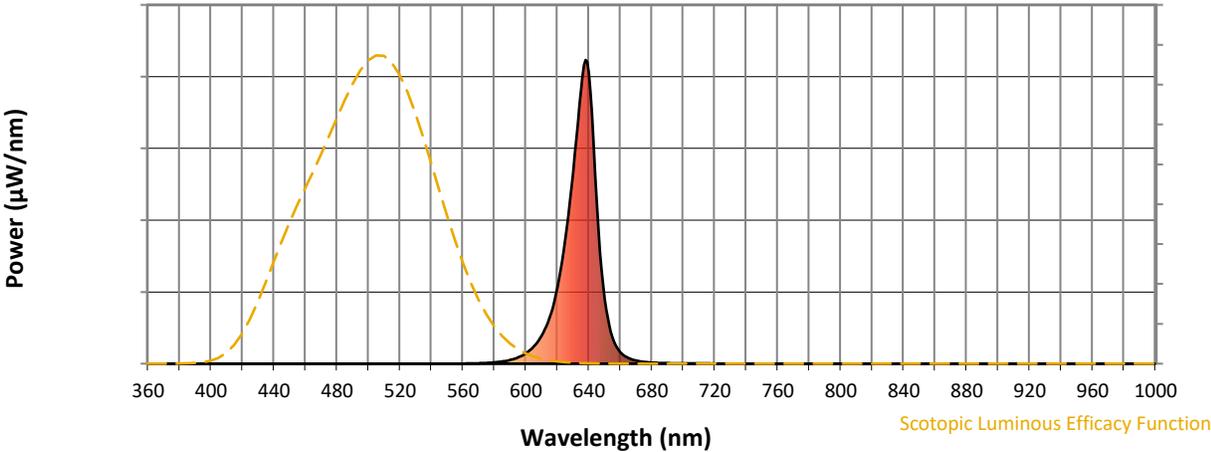


Photopic Lumens: NR

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



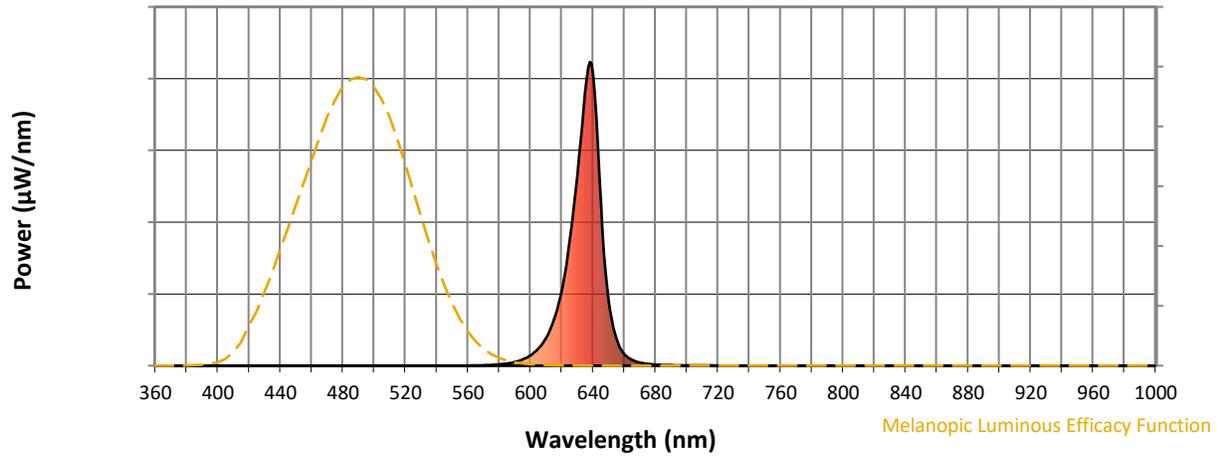
Scotopic Lumens: NR

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



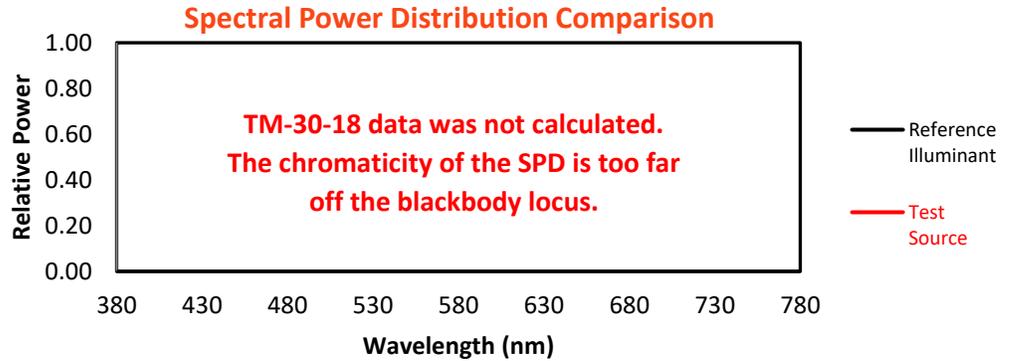
Melanopic Lumens: NR

M/P: 0.02

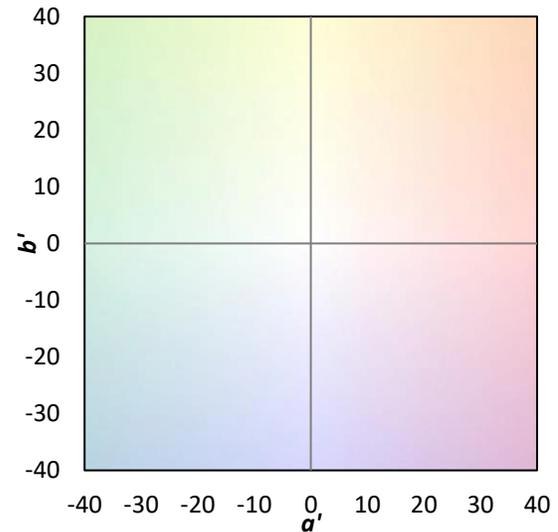
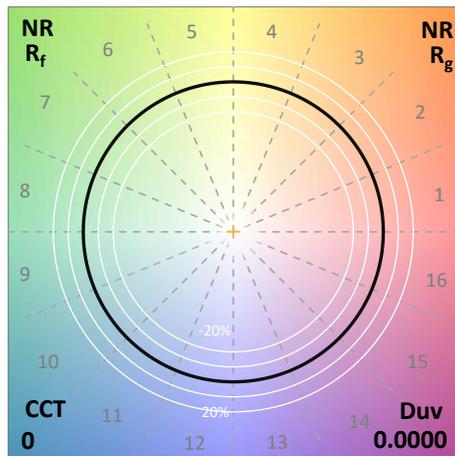
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	0	NR	620	248	NR	750	0	NR	880	0	NR
365	0	NR	495	0	NR	625	409	NR	755	0	NR	885	0	NR
370	0	NR	500	0	NR	630	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

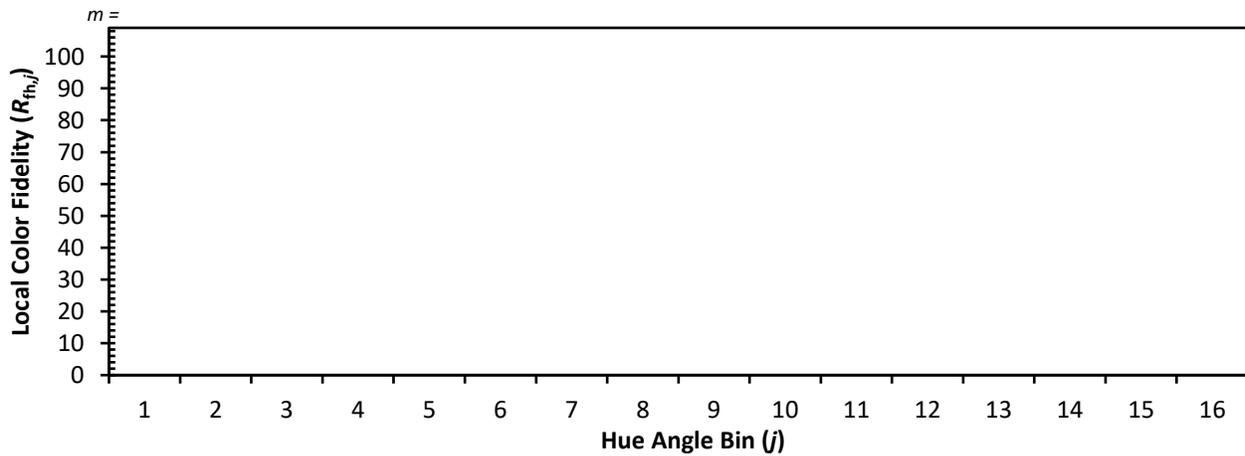


Individual Sample Fidelity Index ($R_{f,i}$)

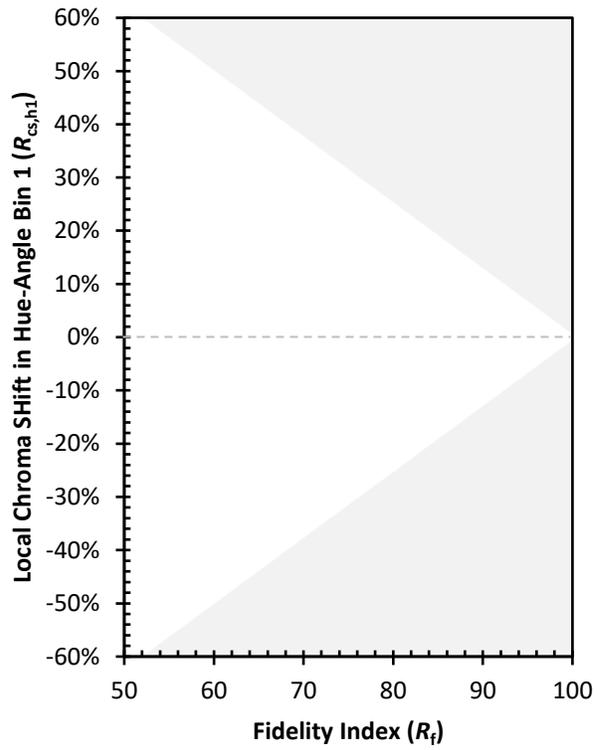
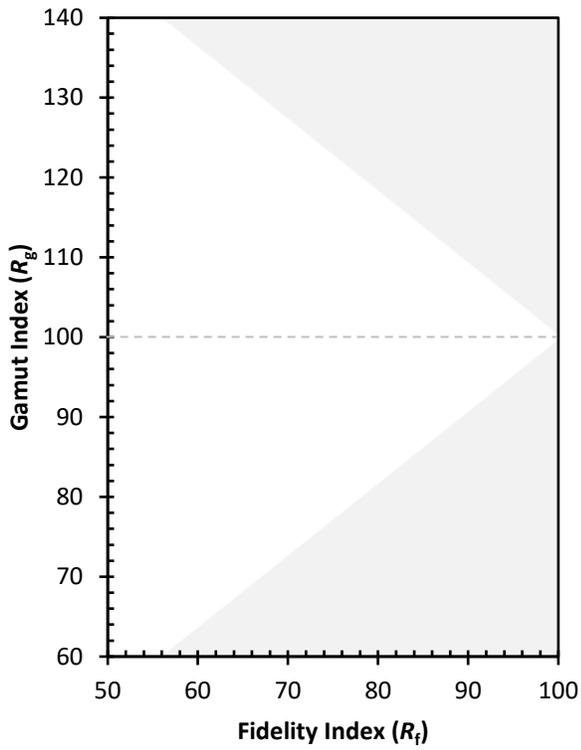
CES01 = 0	CES26 = 0	CES51 = 0	CES76 = 0
CES02 = 0	CES27 = 0	CES52 = 0	CES77 = 0
CES03 = 0	CES28 = 0	CES53 = 0	CES78 = 0
CES04 = 0	CES29 = 0	CES54 = 0	CES79 = 0
CES05 = 0	CES30 = 0	CES55 = 0	CES80 = 0
CES06 = 0	CES31 = 0	CES56 = 0	CES81 = 0
CES07 = 0	CES32 = 0	CES57 = 0	CES82 = 0
CES08 = 0	CES33 = 0	CES58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