

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: PrentaLux

Report Number: P1057226

Luminaire Tested: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK

Issue Date: 8/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057226
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2504-407-4, G2-2504-407-4)
Test Lab: INNOVATION CENTER
Issue Date: 8/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK
Description: PrentaLux 2-INCH CYLINDER
DOWNLIGHT 750 LUMENS, MEDIUM OPTIC (23-DEGREES)
UPLIGHT 750 LUMENS, MEDIUM OPTIC (23-DEGREES)
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

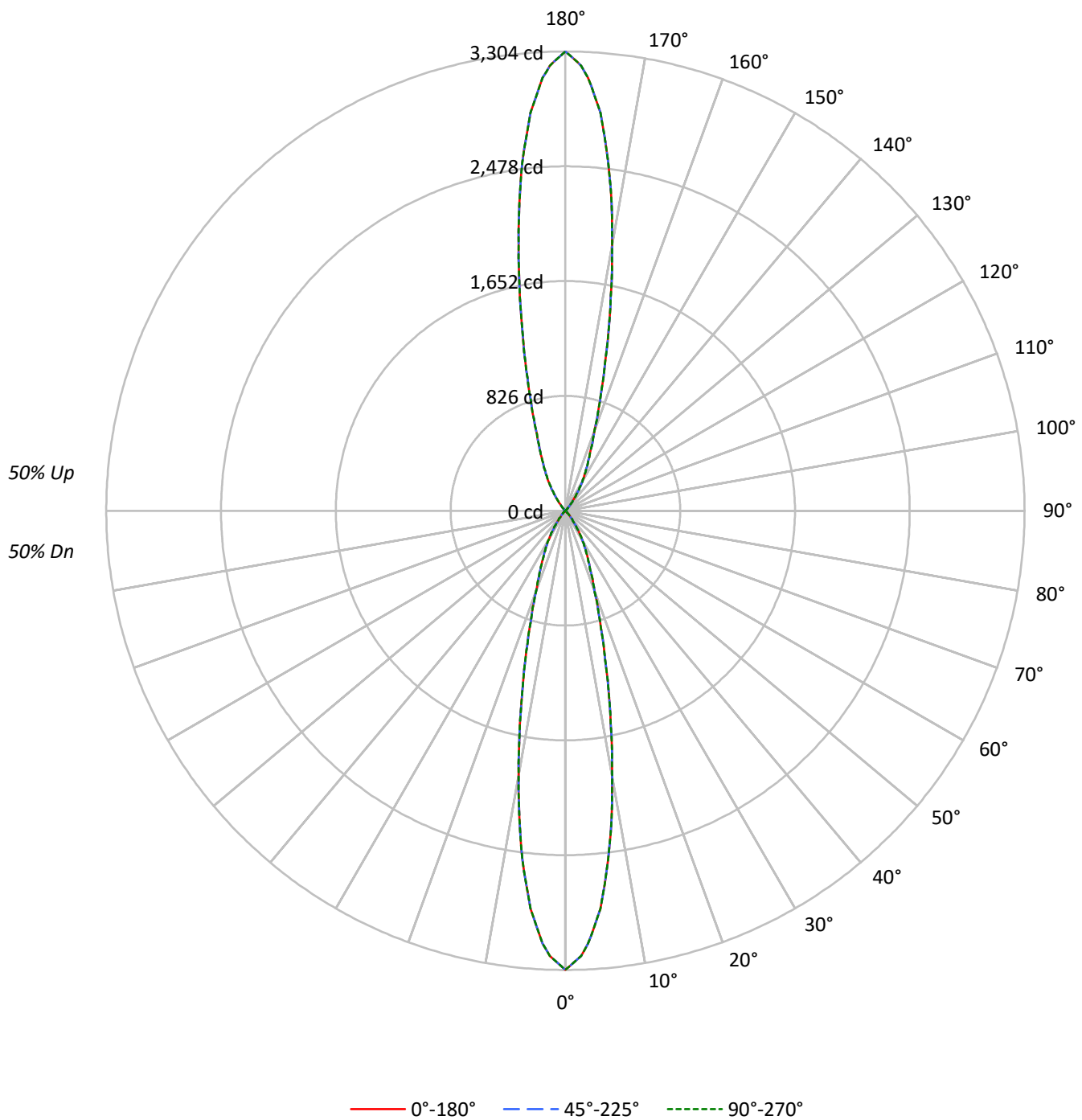
Lumens per Lamp: N/A
Luminaire Lumens: 1666.3 lumens
Efficiency: N/A
Efficacy: 130.2 lumens/watt
Spacing Criteria (0/90/45): 0.39 / 0.39 / 0.42
Luminous Opening: Circular (Dia: 0.15' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 12.8
Input Voltage (V): 120
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: P1057226

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK

Luminous Intensity Polar Plot



TEST NUMBER: P1057226

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	101	97	95	92	93	90	88	86	77	76	74	65	64	63	54	53	53
2	95	89	85	81	88	83	79	76	72	69	67	62	60	58	52	51	50
3	89	82	77	73	83	77	72	69	67	64	61	58	56	54	50	49	48
4	84	76	70	66	78	72	67	63	63	60	57	55	53	51	48	46	45
5	79	71	65	60	74	67	62	58	59	56	53	53	50	48	46	44	43
6	75	66	60	56	70	63	57	54	56	52	49	50	47	45	44	43	41
7	71	62	56	52	67	59	54	50	53	49	47	48	45	43	43	41	39
8	68	59	53	49	64	56	51	47	51	47	44	46	43	41	41	39	38
9	65	55	50	46	61	53	48	44	48	44	42	44	41	39	40	38	36
10	62	53	47	43	58	50	45	42	46	42	40	42	39	37	39	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2128840	2128840	2128840
5°	1859654	1859654	1859654
10°	1268478	1268478	1268478
15°	739271	739271	739271
20°	421204	421204	421204
25°	272612	272612	272612
30°	180298	180298	180298
35°	94718	94718	94718
40°	36762	36762	36762
45°	11848	11848	11848
50°	6115	6115	6115
55°	4269	4269	4269
60°	2964	2964	2964
65°	2287	2287	2287
70°	1507	1507	1507
75°	1992	1992	1992
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11848 cd/sqm

TEST NUMBER: P1057226

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.2	14.6
10°-20°	312.0	18.7
20°-30°	180.1	10.8
30°-40°	78.8	4.7
40°-50°	13.4	0.8
50°-60°	3.5	0.2
60°-70°	1.7	0.1
70°-80°	0.5	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.6	0.0
110°-120°	1.7	0.1
120°-130°	3.5	0.2
130°-140°	13.4	0.8
140°-150°	78.8	4.7
150°-160°	180.1	10.8
160°-170°	312.0	18.7
170°-180°	243.2	14.6
0°-30°	735.3	44.1
0°-40°	814.1	48.9
0°-60°	830.9	49.9
0°-90°	833.1	50.0
90°-120°	2.2	0.1
90°-150°	97.9	5.9
90°-180°	833.0	50.0
0°-180°	1666.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3304	3304	3304	3304	3304	
5°	2875	2875	2875	2875	2875	243
15°	1108	1108	1108	1108	1108	312
25°	383	383	383	383	383	180
35°	120	120	120	120	120	79
45°	13	13	13	13	13	13
55°	4	4	4	4	4	3
65°	2	2	2	2	2	2
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0
95°	0	0	0	0	0	0
105°	1	1	1	1	1	1
115°	2	2	2	2	2	2
125°	4	4	4	4	4	3
135°	13	13	13	13	13	13
145°	120	120	120	120	120	79
155°	383	383	383	383	383	180
165°	1108	1108	1108	1108	1108	312
175°	2875	2875	2875	2875	2875	243
180°	3304	3304	3304	3304	3304	

TEST NUMBER: P1057226

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3303.5	3303.5	3303.5	3303.5	3303.5
1°	3254.1	3254.1	3254.1	3254.1	3254.1
2°	3204.7	3204.7	3204.7	3204.7	3204.7
3°	3119.0	3119.0	3119.0	3119.0	3119.0
4°	2996.9	2996.9	2996.9	2996.9	2996.9
5°	2874.8	2874.8	2874.8	2874.8	2874.8
6°	2702.2	2702.2	2702.2	2702.2	2702.2
7°	2529.5	2529.5	2529.5	2529.5	2529.5
8°	2342.2	2342.2	2342.2	2342.2	2342.2
9°	2140.4	2140.4	2140.4	2140.4	2140.4
10°	1938.5	1938.5	1938.5	1938.5	1938.5
11°	1755.1	1755.1	1755.1	1755.1	1755.1
12°	1571.7	1571.7	1571.7	1571.7	1571.7
13°	1405.6	1405.6	1405.6	1405.6	1405.6
14°	1256.8	1256.8	1256.8	1256.8	1256.8
15°	1108.1	1108.1	1108.1	1108.1	1108.1
16°	992.7	992.7	992.7	992.7	992.7
17°	877.4	877.4	877.4	877.4	877.4
18°	778.6	778.6	778.6	778.6	778.6
19°	696.4	696.4	696.4	696.4	696.4
20°	614.2	614.2	614.2	614.2	614.2
21°	559.9	559.9	559.9	559.9	559.9
22°	505.6	505.6	505.6	505.6	505.6
23°	459.5	459.5	459.5	459.5	459.5
24°	421.5	421.5	421.5	421.5	421.5
25°	383.4	383.4	383.4	383.4	383.4
26°	354.0	354.0	354.0	354.0	354.0
27°	324.5	324.5	324.5	324.5	324.5
28°	296.3	296.3	296.3	296.3	296.3
29°	269.3	269.3	269.3	269.3	269.3
30°	242.3	242.3	242.3	242.3	242.3
31°	216.9	216.9	216.9	216.9	216.9
32°	191.4	191.4	191.4	191.4	191.4
33°	167.0	167.0	167.0	167.0	167.0
34°	143.7	143.7	143.7	143.7	143.7
35°	120.4	120.4	120.4	120.4	120.4
36°	102.6	102.6	102.6	102.6	102.6
37°	84.8	84.8	84.8	84.8	84.8
38°	69.5	69.5	69.5	69.5	69.5
39°	56.6	56.6	56.6	56.6	56.6
40°	43.7	43.7	43.7	43.7	43.7
41°	36.0	36.0	36.0	36.0	36.0
42°	28.4	28.4	28.4	28.4	28.4
43°	22.2	22.2	22.2	22.2	22.2
44°	17.6	17.6	17.6	17.6	17.6

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CATALOG NUMBER: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
45°	13.0	13.0	13.0	13.0	13.0
46°	11.2	11.2	11.2	11.2	11.2
47°	9.4	9.4	9.4	9.4	9.4
48°	8.0	8.0	8.0	8.0	8.0
49°	7.1	7.1	7.1	7.1	7.1
50°	6.1	6.1	6.1	6.1	6.1
51°	5.5	5.5	5.5	5.5	5.5
52°	4.9	4.9	4.9	4.9	4.9
53°	4.4	4.4	4.4	4.4	4.4
54°	4.1	4.1	4.1	4.1	4.1
55°	3.8	3.8	3.8	3.8	3.8
56°	3.5	3.5	3.5	3.5	3.5
57°	3.2	3.2	3.2	3.2	3.2
58°	2.9	2.9	2.9	2.9	2.9
59°	2.6	2.6	2.6	2.6	2.6
60°	2.3	2.3	2.3	2.3	2.3
61°	2.3	2.3	2.3	2.3	2.3
62°	2.3	2.3	2.3	2.3	2.3
63°	2.1	2.1	2.1	2.1	2.1
64°	1.8	1.8	1.8	1.8	1.8
65°	1.5	1.5	1.5	1.5	1.5
66°	1.5	1.5	1.5	1.5	1.5
67°	1.5	1.5	1.5	1.5	1.5
68°	1.4	1.4	1.4	1.4	1.4
69°	1.1	1.1	1.1	1.1	1.1
70°	0.8	0.8	0.8	0.8	0.8
71°	0.8	0.8	0.8	0.8	0.8
72°	0.8	0.8	0.8	0.8	0.8
73°	0.8	0.8	0.8	0.8	0.8
74°	0.8	0.8	0.8	0.8	0.8
75°	0.8	0.8	0.8	0.8	0.8
76°	0.5	0.5	0.5	0.5	0.5
77°	0.2	0.2	0.2	0.2	0.2
78°	0.0	0.0	0.0	0.0	0.0
79°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
81°	0.0	0.0	0.0	0.0	0.0
82°	0.0	0.0	0.0	0.0	0.0
83°	0.0	0.0	0.0	0.0	0.0
84°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
86°	0.0	0.0	0.0	0.0	0.0
87°	0.0	0.0	0.0	0.0	0.0
88°	0.0	0.0	0.0	0.0	0.0
89°	0.0	0.0	0.0	0.0	0.0

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CATALOG NUMBER: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
90°	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0
103°	0.2	0.2	0.2	0.2	0.2
104°	0.5	0.5	0.5	0.5	0.5
105°	0.8	0.8	0.8	0.8	0.8
106°	0.8	0.8	0.8	0.8	0.8
107°	0.8	0.8	0.8	0.8	0.8
108°	0.8	0.8	0.8	0.8	0.8
109°	0.8	0.8	0.8	0.8	0.8
110°	0.8	0.8	0.8	0.8	0.8
111°	1.1	1.1	1.1	1.1	1.1
112°	1.4	1.4	1.4	1.4	1.4
113°	1.5	1.5	1.5	1.5	1.5
114°	1.5	1.5	1.5	1.5	1.5
115°	1.5	1.5	1.5	1.5	1.5
116°	1.8	1.8	1.8	1.8	1.8
117°	2.1	2.1	2.1	2.1	2.1
118°	2.3	2.3	2.3	2.3	2.3
119°	2.3	2.3	2.3	2.3	2.3
120°	2.3	2.3	2.3	2.3	2.3
121°	2.6	2.6	2.6	2.6	2.6
122°	2.9	2.9	2.9	2.9	2.9
123°	3.2	3.2	3.2	3.2	3.2
124°	3.5	3.5	3.5	3.5	3.5
125°	3.8	3.8	3.8	3.8	3.8
126°	4.1	4.1	4.1	4.1	4.1
127°	4.4	4.4	4.4	4.4	4.4
128°	4.9	4.9	4.9	4.9	4.9
129°	5.5	5.5	5.5	5.5	5.5
130°	6.1	6.1	6.1	6.1	6.1
131°	7.1	7.1	7.1	7.1	7.1
132°	8.0	8.0	8.0	8.0	8.0
133°	9.4	9.4	9.4	9.4	9.4
134°	11.2	11.2	11.2	11.2	11.2

TEST NUMBER: P1057226

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
135°	13.0	13.0	13.0	13.0	13.0
136°	17.6	17.6	17.6	17.6	17.6
137°	22.2	22.2	22.2	22.2	22.2
138°	28.4	28.4	28.4	28.4	28.4
139°	36.0	36.0	36.0	36.0	36.0
140°	43.7	43.7	43.7	43.7	43.7
141°	56.6	56.6	56.6	56.6	56.6
142°	69.5	69.5	69.5	69.5	69.5
143°	84.8	84.8	84.8	84.8	84.8
144°	102.6	102.6	102.6	102.6	102.6
145°	120.4	120.4	120.4	120.4	120.4
146°	143.7	143.7	143.7	143.7	143.7
147°	167.0	167.0	167.0	167.0	167.0
148°	191.4	191.4	191.4	191.4	191.4
149°	216.9	216.9	216.9	216.9	216.9
150°	242.3	242.3	242.3	242.3	242.3
151°	269.3	269.3	269.3	269.3	269.3
152°	296.3	296.3	296.3	296.3	296.3
153°	324.5	324.5	324.5	324.5	324.5
154°	354.0	354.0	354.0	354.0	354.0
155°	383.4	383.4	383.4	383.4	383.4
156°	421.5	421.5	421.5	421.5	421.5
157°	459.5	459.5	459.5	459.5	459.5
158°	505.6	505.6	505.6	505.6	505.6
159°	559.9	559.9	559.9	559.9	559.9
160°	614.2	614.2	614.2	614.2	614.2
161°	696.4	696.4	696.4	696.4	696.4
162°	778.6	778.6	778.6	778.6	778.6
163°	877.4	877.4	877.4	877.4	877.4
164°	992.7	992.7	992.7	992.7	992.7
165°	1108.1	1108.1	1108.1	1108.1	1108.1
166°	1256.8	1256.8	1256.8	1256.8	1256.8
167°	1405.6	1405.6	1405.6	1405.6	1405.6
168°	1571.7	1571.7	1571.7	1571.7	1571.7
169°	1755.1	1755.1	1755.1	1755.1	1755.1
170°	1938.5	1938.5	1938.5	1938.5	1938.5
171°	2140.4	2140.4	2140.4	2140.4	2140.4
172°	2342.2	2342.2	2342.2	2342.2	2342.2
173°	2529.5	2529.5	2529.5	2529.5	2529.5
174°	2702.2	2702.2	2702.2	2702.2	2702.2
175°	2874.8	2874.8	2874.8	2874.8	2874.8
176°	2996.9	2996.9	2996.9	2996.9	2996.9
177°	3119.0	3119.0	3119.0	3119.0	3119.0
178°	3204.7	3204.7	3204.7	3204.7	3204.7
179°	3254.1	3254.1	3254.1	3254.1	3254.1



TEST NUMBER: P1057226
CATALOG NUMBER: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
180°	3303.5	3303.5	3303.5	3303.5	3303.5

TEST NUMBER: P1057226

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-15L-MD-MD-U-S-X-X-BLAK

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	0.00	0.48	0.85	1.46	2.75	0.00	0.48	0.85	1.46	2.75
	3H	0.60	1.17	1.62	2.16	3.47	0.60	1.17	1.62	2.16	3.47
	4H	0.89	1.42	1.92	2.42	3.74	0.89	1.42	1.92	2.42	3.74
	6H	0.78	1.27	1.81	2.27	3.60	0.78	1.27	1.81	2.27	3.60
	8H	0.71	1.18	1.75	2.19	3.52	0.71	1.18	1.75	2.19	3.52
	12H	0.65	1.09	1.69	2.10	3.44	0.65	1.09	1.69	2.10	3.44
4H	2H	0.00	0.48	0.98	1.47	2.79	0.00	0.48	0.98	1.47	2.79
	3H	0.79	1.24	1.83	2.26	3.59	0.79	1.24	1.83	2.26	3.59
	4H	1.21	1.62	2.25	2.63	3.99	1.21	1.62	2.25	2.63	3.99
	6H	1.10	1.44	2.15	2.48	3.84	1.10	1.44	2.15	2.48	3.84
	8H	1.03	1.35	2.08	2.38	3.75	1.03	1.35	2.08	2.38	3.75
	12H	0.96	1.24	2.02	2.29	3.66	0.96	1.24	2.02	2.29	3.66
8H	4H	1.16	1.48	2.21	2.51	3.88	1.16	1.48	2.21	2.51	3.88
	6H	1.04	1.30	2.12	2.38	3.74	1.04	1.30	2.12	2.38	3.74
	8H	0.98	1.21	2.06	2.27	3.65	0.98	1.21	2.06	2.27	3.65
	12H	0.91	1.11	1.99	2.16	3.59	0.91	1.11	1.99	2.16	3.59
12H	4H	1.09	1.37	2.15	2.42	3.79	1.09	1.37	2.15	2.42	3.79
	6H	0.98	1.21	2.06	2.27	3.65	0.98	1.21	2.06	2.27	3.65
	8H	0.91	1.11	1.99	2.16	3.59	0.91	1.11	1.99	2.16	3.59

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

Report Prepared for

Cooper Lighting Solutions

PrentaLux 3D Printing

Report Number: SP1-2504-407-1

Test Date: 07/16/2025

Luminaire Tested: PRLX-CYL2-X-927-10L-FL-U-S-X-X-BLAK

Data in this report applies to families of products including PRLX-CYL2-X-927-10L-FL-U-S-X-X-BLAK

Test Information

Test Method: LM-79-2019
 Report Number: SP1-2504-407-1
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 07/30/2025
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: PentaLux 3D Printing
 Catalog Number: **PRLX-CYL2-X-927-10L-FL-U-S-X-X-BLAK**
 Description: PentaLux 2-INCH CYLINDER, BLACK TRIM, FLOOD OPTIC, 1000 LUMENS, 2700K

Spectral Parameters

CCT (K): 2742
 CIE u' : 0.2602
 CIE v' : 0.5287
 Duv: 0.0015
 CIE x: 0.4591
 CIE y: 0.4146
 CIE z: 0.1264
 Peak Wavelength (nm): 630
 Dominant Wavelength (nm): 583
 Purity: 62.24215
 R_f: 91.5
 R_g: 100.2

CRI (Ra): 93.2
 R1: 94.5
 R2: 95.6
 R3: 95.5
 R4: 95.6
 R5: 93.8
 R6: 96.5
 R7: 92.3
 R8: 81.6
 R9: 55.9
 R10: 87.9
 R11: 97.0
 R12: 84.0
 R13: 94.5
 R14: 96.0
 R15: 88.9



Test Conditions

Stabilization Time: 41M
 Operation Time: 1H 41M
 Sphere Temperature (°C): 24.0

REPORT NUMBER: SP1-2504-407-1

Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	76INCH SPHERE IN0058	6/16/2025	12/16/2025
Power Meter	XITRON INXT2011004	1/21/2025	1/21/2026
AC Power Source	CHROMA 61603 IN0063	10/22/2024	10/22/2025
DC Power Source	AGILENT E3634A IN0208	10/22/2024	10/22/2025
Sphere Thermometer	ONSET IN0085	10/22/2024	10/22/2025
Room Thermometer	ONSET IN0046	10/22/2024	10/22/2025

REPORT NUMBER: SP1-2504-407-1

CIE 1931 Chromaticity Diagram



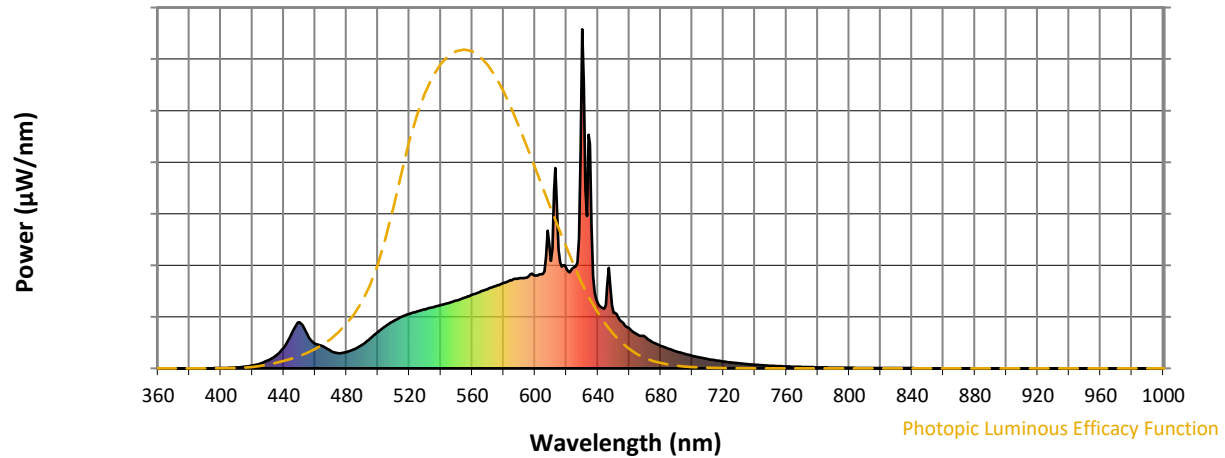
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2504-407-1

Photopic Flux vs. Wavelength



Photopic Lumens: NR

λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)	λ (nm)	Power W ^λ /nm	Lumens (φ/nm)
360	0	NR	490	70	NR	620	293	NR	750	8	NR	880	0	NR
365	0	NR	495	88	NR	625	299	NR	755	7	NR	885	0	NR
370	0	NR	500	108	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	125	NR	635	661	NR	765	5	NR	895	0	NR
380	0	NR	510	140	NR	640	192	NR	770	4	NR	900	0	NR
385	0	NR	515	152	NR	645	187	NR	775	4	NR	905	0	NR
390	0	NR	520	160	NR	650	164	NR	780	3	NR	910	0	NR
395	0	NR	525	168	NR	655	138	NR	785	3	NR	915	0	NR
400	1	NR	530	174	NR	660	118	NR	790	2	NR	920	0	NR
405	2	NR	535	180	NR	665	100	NR	795	2	NR	925	0	NR
410	3	NR	540	187	NR	670	94	NR	800	2	NR	930	0	NR
415	5	NR	545	193	NR	675	77	NR	805	1	NR	935	0	NR
420	9	NR	550	200	NR	680	67	NR	810	1	NR	940	0	NR
425	14	NR	555	208	NR	685	58	NR	815	1	NR	945	0	NR
430	23	NR	560	217	NR	690	50	NR	820	1	NR	950	0	NR
435	38	NR	565	226	NR	695	43	NR	825	1	NR	955	0	NR
440	61	NR	570	234	NR	700	37	NR	830	1	NR	960	0	NR
445	103	NR	575	243	NR	705	32	NR	835	1	NR	965	0	NR
450	135	NR	580	252	NR	710	28	NR	840	1	NR	970	0	NR
455	100	NR	585	260	NR	715	23	NR	845	0	NR	975	0	NR
460	72	NR	590	266	NR	720	20	NR	850	0	NR	980	0	NR
465	65	NR	595	268	NR	725	17	NR	855	0	NR	985	0	NR
470	51	NR	600	274	NR	730	15	NR	860	0	NR	990	0	NR
475	45	NR	605	278	NR	735	13	NR	865	0	NR	995	0	NR
480	48	NR	610	317	NR	740	11	NR	870	0	NR	1000	0	NR
485	57	NR	615	350	NR	745	9	NR	875	0	NR			

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Scotopic Flux vs. Wavelength



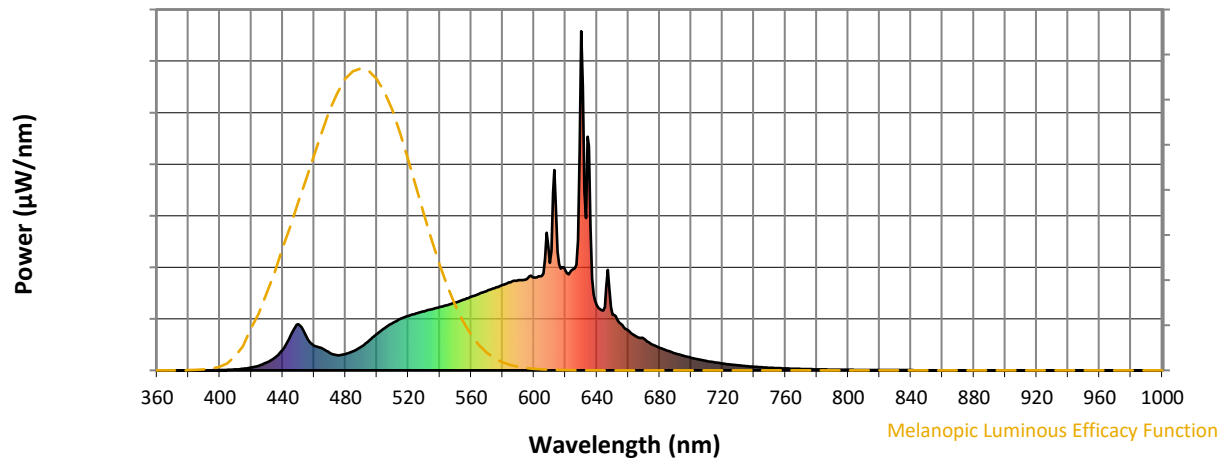
Scotopic Lumens: NR

S/P: 1.28

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	70	NR	620	293	NR	750	8	NR	880	0	NR
365	0	NR	495	88	NR	625	299	NR	755	7	NR	885	0	NR
370	0	NR	500	108	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	125	NR	635	661	NR	765	5	NR	895	0	NR
380	0	NR	510	140	NR	640	192	NR	770	4	NR	900	0	NR
385	0	NR	515	152	NR	645	187	NR	775	4	NR	905	0	NR
390	0	NR	520	160	NR	650	164	NR	780	3	NR	910	0	NR
395	0	NR	525	168	NR	655	138	NR	785	3	NR	915	0	NR
400	1	NR	530	174	NR	660	118	NR	790	2	NR	920	0	NR
405	2	NR	535	180	NR	665	100	NR	795	2	NR	925	0	NR
410	3	NR	540	187	NR	670	94	NR	800	2	NR	930	0	NR
415	5	NR	545	193	NR	675	77	NR	805	1	NR	935	0	NR
420	9	NR	550	200	NR	680	67	NR	810	1	NR	940	0	NR
425	14	NR	555	208	NR	685	58	NR	815	1	NR	945	0	NR
430	23	NR	560	217	NR	690	50	NR	820	1	NR	950	0	NR
435	38	NR	565	226	NR	695	43	NR	825	1	NR	955	0	NR
440	61	NR	570	234	NR	700	37	NR	830	1	NR	960	0	NR
445	103	NR	575	243	NR	705	32	NR	835	1	NR	965	0	NR
450	135	NR	580	252	NR	710	28	NR	840	1	NR	970	0	NR
455	100	NR	585	260	NR	715	23	NR	845	0	NR	975	0	NR
460	72	NR	590	266	NR	720	20	NR	850	0	NR	980	0	NR
465	65	NR	595	268	NR	725	17	NR	855	0	NR	985	0	NR
470	51	NR	600	274	NR	730	15	NR	860	0	NR	990	0	NR
475	45	NR	605	278	NR	735	13	NR	865	0	NR	995	0	NR
480	48	NR	610	317	NR	740	11	NR	870	0	NR	1000	0	NR
485	57	NR	615	350	NR	745	9	NR	875	0	NR			

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Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.38

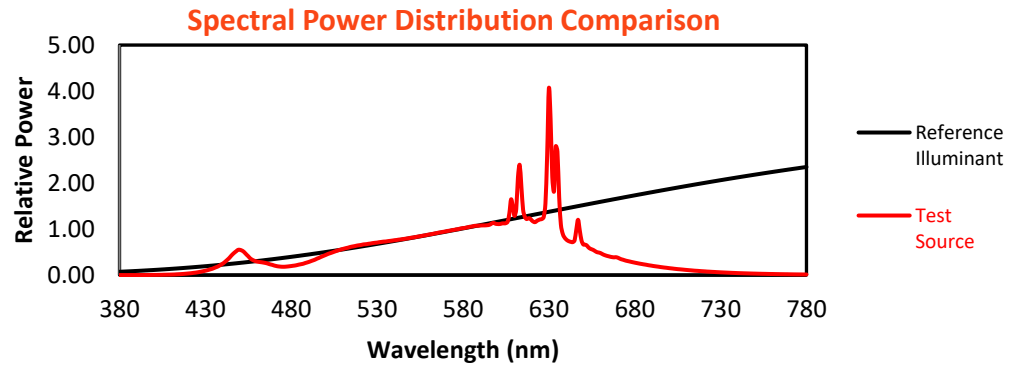
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	70	NR	620	293	NR	750	8	NR	880	0	NR
365	0	NR	495	88	NR	625	299	NR	755	7	NR	885	0	NR
370	0	NR	500	108	NR	630	1000	NR	760	6	NR	890	0	NR
375	0	NR	505	125	NR	635	661	NR	765	5	NR	895	0	NR
380	0	NR	510	140	NR	640	192	NR	770	4	NR	900	0	NR
385	0	NR	515	152	NR	645	187	NR	775	4	NR	905	0	NR
390	0	NR	520	160	NR	650	164	NR	780	3	NR	910	0	NR
395	0	NR	525	168	NR	655	138	NR	785	3	NR	915	0	NR
400	1	NR	530	174	NR	660	118	NR	790	2	NR	920	0	NR
405	2	NR	535	180	NR	665	100	NR	795	2	NR	925	0	NR
410	3	NR	540	187	NR	670	94	NR	800	2	NR	930	0	NR
415	5	NR	545	193	NR	675	77	NR	805	1	NR	935	0	NR
420	9	NR	550	200	NR	680	67	NR	810	1	NR	940	0	NR
425	14	NR	555	208	NR	685	58	NR	815	1	NR	945	0	NR
430	23	NR	560	217	NR	690	50	NR	820	1	NR	950	0	NR
435	38	NR	565	226	NR	695	43	NR	825	1	NR	955	0	NR
440	61	NR	570	234	NR	700	37	NR	830	1	NR	960	0	NR
445	103	NR	575	243	NR	705	32	NR	835	1	NR	965	0	NR
450	135	NR	580	252	NR	710	28	NR	840	1	NR	970	0	NR
455	100	NR	585	260	NR	715	23	NR	845	0	NR	975	0	NR
460	72	NR	590	266	NR	720	20	NR	850	0	NR	980	0	NR
465	65	NR	595	268	NR	725	17	NR	855	0	NR	985	0	NR
470	51	NR	600	274	NR	730	15	NR	860	0	NR	990	0	NR
475	45	NR	605	278	NR	735	13	NR	865	0	NR	995	0	NR
480	48	NR	610	317	NR	740	11	NR	870	0	NR	1000	0	NR
485	57	NR	615	350	NR	745	9	NR	875	0	NR			

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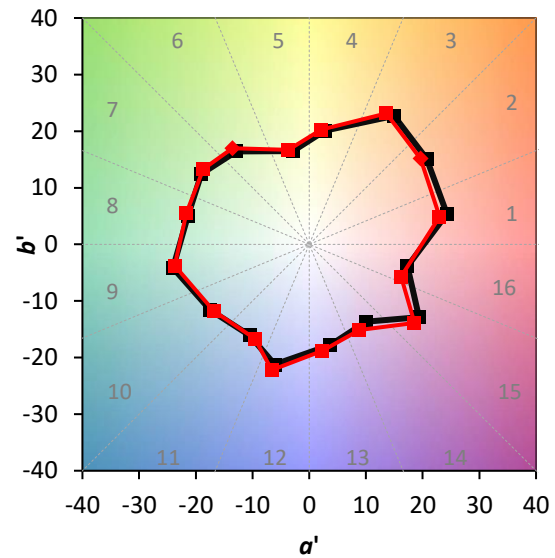
TM-30-18

Summary

$R_f = 91.5$
 $R_g = 100.2$
 $CIE R_a = 93.2$
 $R_9 = 55.9$

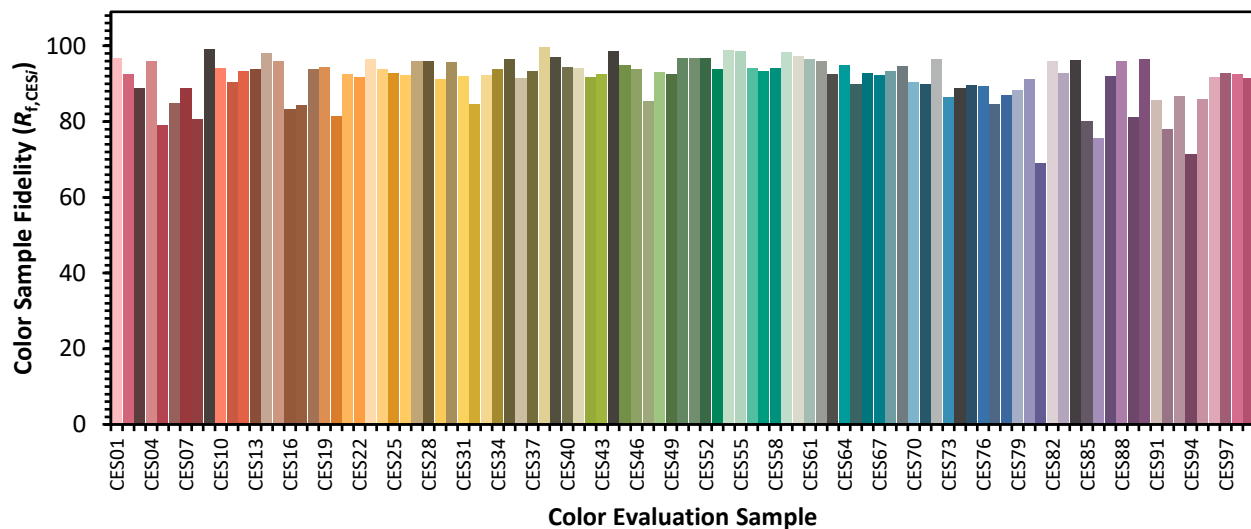


Color Vector Graphics



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

CES01 = 86	CES26 = 92	CES51 = 97	CES76 = 89
CES02 = 64	CES27 = 96	CES52 = 97	CES77 = 85
CES03 = 32	CES28 = 96	CES53 = 94	CES78 = 87
CES04 = 70	CES29 = 91	CES54 = 99	CES79 = 88
CES05 = 51	CES30 = 96	CES55 = 99	CES80 = 91
CES06 = 51	CES31 = 92	CES56 = 94	CES81 = 69
CES07 = 44	CES32 = 85	CES57 = 93	CES82 = 96
CES08 = 43	CES33 = 92	CES58 = 94	CES83 = 93
CES09 = 29	CES34 = 94	CES59 = 98	CES84 = 96
CES10 = 77	CES35 = 97	CES60 = 97	CES85 = 80
CES11 = 59	CES36 = 91	CES61 = 97	CES86 = 76
CES12 = 66	CES37 = 93	CES62 = 96	CES87 = 92
CES13 = 44	CES38 = 100	CES63 = 93	CES88 = 96
CES14 = 74	CES39 = 97	CES64 = 95	CES89 = 81
CES15 = 72	CES40 = 94	CES65 = 90	CES90 = 97
CES16 = 48	CES41 = 94	CES66 = 93	CES91 = 86
CES17 = 50	CES42 = 92	CES67 = 92	CES92 = 78
CES18 = 57	CES43 = 92	CES68 = 93	CES93 = 87
CES19 = 72	CES44 = 99	CES69 = 95	CES94 = 71
CES20 = 68	CES45 = 95	CES70 = 90	CES95 = 86
CES21 = 87	CES46 = 94	CES71 = 90	CES96 = 92
CES22 = 79	CES47 = 86	CES72 = 96	CES97 = 93
CES23 = 92	CES48 = 93	CES73 = 86	CES98 = 92
CES24 = 91	CES49 = 93	CES74 = 89	CES99 = 91
CES25 = 72	CES50 = 97	CES75 = 90	



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)