

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: P1057246

Luminaire Tested: PRLX-CYL2W-DI-X-927-20L-NF-MD-U-S-X-X-BLAK

Issue Date: 8/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1057246
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2504-407-4, G2-2504-407-3)
Test Lab: INNOVATION CENTER
Issue Date: 8/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-CYL2W-DI-X-927-20L-NF-MD-U-S-X-X-BLAK
Description: PrentaLux 2-INCH CYLINDER
DOWNLIGHT 1000 LUMENS, NARROW FLOOD OPTIC (27-DEGREES)
UPLIGHT 1000 LUMENS, MEDIUM OPTIC (23-DEGREES)
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

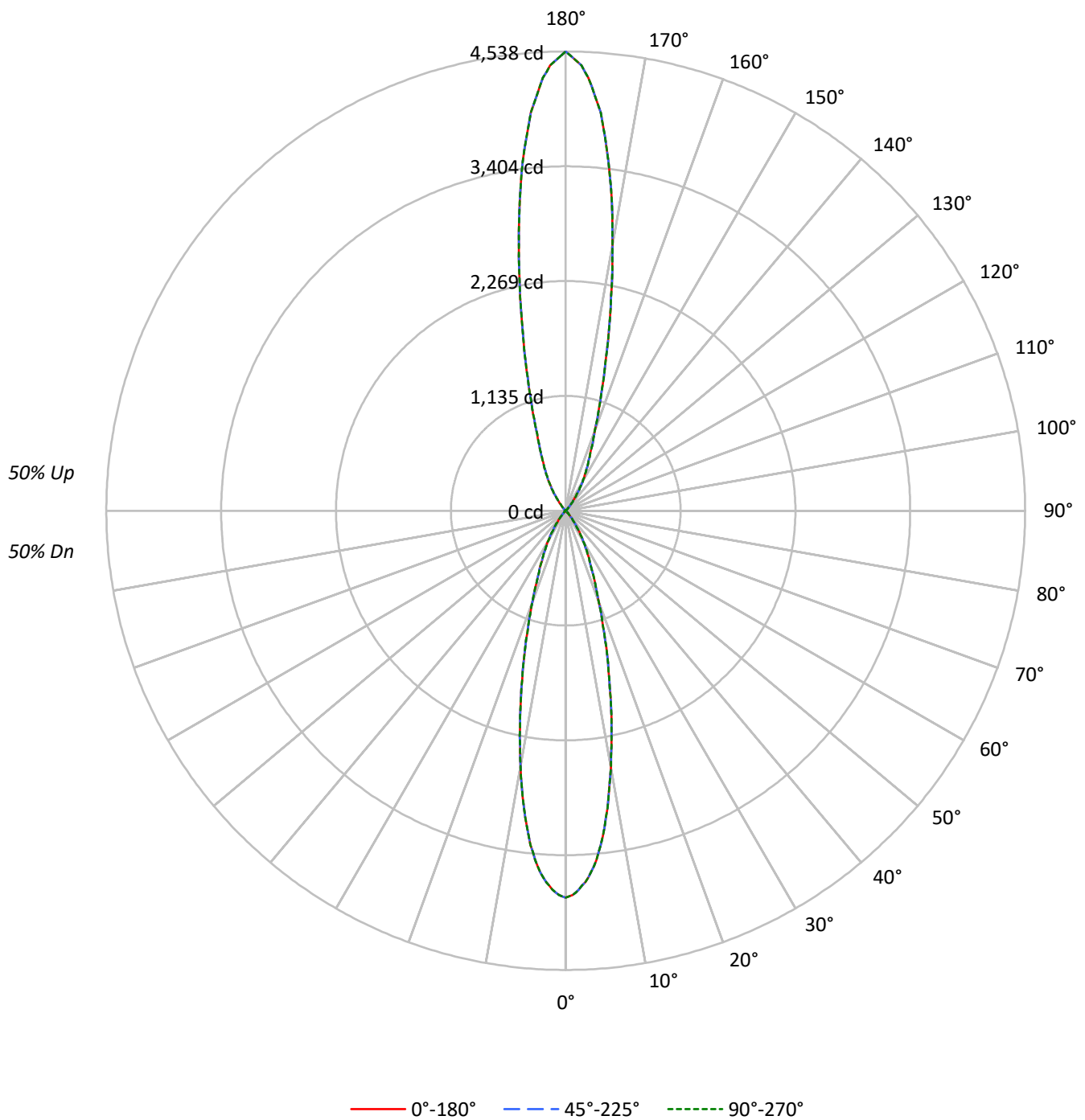
Lumens per Lamp: N/A
Luminaire Lumens: 2308.5 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 0.45 / 0.45 / 0.48
Luminous Opening: Circular (Dia: 0.15' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 18.1
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: P1057246

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-NF-MD-U-S-X-X-BLAK

Luminous Intensity Polar Plot



TEST NUMBER: P1057246

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-NF-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	84	84	84	69	69	69	57	57	57
1	101	98	95	92	93	91	88	86	77	76	74	65	64	64	54	54	53
2	95	89	85	81	88	83	79	76	72	69	67	62	60	59	52	51	50
3	89	82	77	72	83	77	72	69	67	64	61	58	56	54	50	49	48
4	84	76	70	66	78	71	66	63	63	59	57	55	53	51	48	46	45
5	79	71	65	60	74	67	61	58	59	55	53	52	50	48	46	44	43
6	75	66	60	55	70	62	57	53	56	52	49	50	47	45	44	42	41
7	71	62	56	52	67	59	53	50	53	49	46	48	45	43	43	41	39
8	68	58	52	48	64	55	50	47	50	46	44	46	43	41	41	39	38
9	64	55	49	45	61	53	47	44	48	44	41	44	41	39	40	38	36
10	61	52	46	43	58	50	45	42	46	42	39	42	39	37	38	36	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2464067	2464067	2464067
5°	2240473	2240473	2240473
10°	1680464	1680464	1680464
15°	1091394	1091394	1091394
20°	653751	653751	653751
25°	407425	407425	407425
30°	258653	258653	258653
35°	135075	135075	135075
40°	54091	54091	54091
45°	18227	18227	18227
50°	9524	9524	9524
55°	5955	5955	5955
60°	5413	5413	5413
65°	3202	3202	3202
70°	2073	2073	2073
75°	2739	2739	2739
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18227 cd/sqm

TEST NUMBER: P1057246

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-NF-MD-U-S-X-X-BLAK

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.1	13.0
10°-20°	451.9	19.6
20°-30°	270.1	11.7
30°-40°	112.6	4.9
40°-50°	19.9	0.9
50°-60°	5.3	0.2
60°-70°	2.5	0.1
70°-80°	0.7	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.7	0.0
110°-120°	2.3	0.1
120°-130°	4.8	0.2
130°-140°	18.4	0.8
140°-150°	108.2	4.7
150°-160°	247.4	10.7
160°-170°	428.6	18.6
170°-180°	334.0	14.5
0°-30°	1023.1	44.3
0°-40°	1135.7	49.2
0°-60°	1160.8	50.3
0°-90°	1164.0	50.4
90°-120°	3.1	0.1
90°-150°	134.5	5.8
90°-180°	1144.0	49.6
0°-180°	2308.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3824	3824	3824	3824	3824	
5°	3464	3464	3464	3464	3464	301
15°	1636	1636	1636	1636	1636	452
25°	573	573	573	573	573	270
35°	172	172	172	172	172	113
45°	20	20	20	20	20	20
55°	5	5	5	5	5	5
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°	5	5	5	5	5	5
135°	18	18	18	18	18	18
145°	165	165	165	165	165	108
155°	527	527	527	527	527	247
165°	1522	1522	1522	1522	1522	429
175°	3949	3949	3949	3949	3949	334
180°	4538	4538	4538	4538	4538	

TEST NUMBER: P1057246

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-NF-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3823.7	3823.7	3823.7	3823.7	3823.7
1°	3799.5	3799.5	3799.5	3799.5	3799.5
2°	3745.8	3745.8	3745.8	3745.8	3745.8
3°	3675.2	3675.2	3675.2	3675.2	3675.2
4°	3583.6	3583.6	3583.6	3583.6	3583.6
5°	3463.5	3463.5	3463.5	3463.5	3463.5
6°	3320.2	3320.2	3320.2	3320.2	3320.2
7°	3149.6	3149.6	3149.6	3149.6	3149.6
8°	2963.1	2963.1	2963.1	2963.1	2963.1
9°	2766.1	2766.1	2766.1	2766.1	2766.1
10°	2568.1	2568.1	2568.1	2568.1	2568.1
11°	2366.9	2366.9	2366.9	2366.9	2366.9
12°	2175.2	2175.2	2175.2	2175.2	2175.2
13°	1986.7	1986.7	1986.7	1986.7	1986.7
14°	1806.5	1806.5	1806.5	1806.5	1806.5
15°	1635.9	1635.9	1635.9	1635.9	1635.9
16°	1483.4	1483.4	1483.4	1483.4	1483.4
17°	1330.8	1330.8	1330.8	1330.8	1330.8
18°	1194.3	1194.3	1194.3	1194.3	1194.3
19°	1073.8	1073.8	1073.8	1073.8	1073.8
20°	953.3	953.3	953.3	953.3	953.3
21°	864.0	864.0	864.0	864.0	864.0
22°	774.6	774.6	774.6	774.6	774.6
23°	698.6	698.6	698.6	698.6	698.6
24°	635.8	635.8	635.8	635.8	635.8
25°	573.0	573.0	573.0	573.0	573.0
26°	524.6	524.6	524.6	524.6	524.6
27°	476.1	476.1	476.1	476.1	476.1
28°	431.0	431.0	431.0	431.0	431.0
29°	389.3	389.3	389.3	389.3	389.3
30°	347.6	347.6	347.6	347.6	347.6
31°	310.1	310.1	310.1	310.1	310.1
32°	272.6	272.6	272.6	272.6	272.6
33°	237.4	237.4	237.4	237.4	237.4
34°	204.6	204.6	204.6	204.6	204.6
35°	171.7	171.7	171.7	171.7	171.7
36°	146.4	146.4	146.4	146.4	146.4
37°	121.1	121.1	121.1	121.1	121.1
38°	99.6	99.6	99.6	99.6	99.6
39°	82.0	82.0	82.0	82.0	82.0
40°	64.3	64.3	64.3	64.3	64.3
41°	52.9	52.9	52.9	52.9	52.9
42°	41.5	41.5	41.5	41.5	41.5
43°	32.7	32.7	32.7	32.7	32.7
44°	26.3	26.3	26.3	26.3	26.3

TEST NUMBER: P1057246

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-NF-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
45°	20.0	20.0	20.0	20.0	20.0
46°	17.1	17.1	17.1	17.1	17.1
47°	14.1	14.1	14.1	14.1	14.1
48°	12.0	12.0	12.0	12.0	12.0
49°	10.7	10.7	10.7	10.7	10.7
50°	9.5	9.5	9.5	9.5	9.5
51°	8.6	8.6	8.6	8.6	8.6
52°	7.8	7.8	7.8	7.8	7.8
53°	7.0	7.0	7.0	7.0	7.0
54°	6.1	6.1	6.1	6.1	6.1
55°	5.3	5.3	5.3	5.3	5.3
56°	4.8	4.8	4.8	4.8	4.8
57°	4.4	4.4	4.4	4.4	4.4
58°	4.2	4.2	4.2	4.2	4.2
59°	4.2	4.2	4.2	4.2	4.2
60°	4.2	4.2	4.2	4.2	4.2
61°	3.8	3.8	3.8	3.8	3.8
62°	3.4	3.4	3.4	3.4	3.4
63°	2.9	2.9	2.9	2.9	2.9
64°	2.5	2.5	2.5	2.5	2.5
65°	2.1	2.1	2.1	2.1	2.1
66°	2.1	2.1	2.1	2.1	2.1
67°	2.1	2.1	2.1	2.1	2.1
68°	1.9	1.9	1.9	1.9	1.9
69°	1.5	1.5	1.5	1.5	1.5
70°	1.1	1.1	1.1	1.1	1.1
71°	1.1	1.1	1.1	1.1	1.1
72°	1.1	1.1	1.1	1.1	1.1
73°	1.1	1.1	1.1	1.1	1.1
74°	1.1	1.1	1.1	1.1	1.1
75°	1.1	1.1	1.1	1.1	1.1
76°	0.6	0.6	0.6	0.6	0.6
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

TEST NUMBER: P1057246

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-NF-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°	0.6	0.6	0.6	0.6	0.6
105°	1.1	1.1	1.1	1.1	1.1
106°	1.1	1.1	1.1	1.1	1.1
107°	1.1	1.1	1.1	1.1	1.1
108°	1.1	1.1	1.1	1.1	1.1
109°	1.1	1.1	1.1	1.1	1.1
110°	1.1	1.1	1.1	1.1	1.1
111°	1.5	1.5	1.5	1.5	1.5
112°	1.9	1.9	1.9	1.9	1.9
113°	2.1	2.1	2.1	2.1	2.1
114°	2.1	2.1	2.1	2.1	2.1
115°	2.1	2.1	2.1	2.1	2.1
116°	2.5	2.5	2.5	2.5	2.5
117°	2.9	2.9	2.9	2.9	2.9
118°	3.2	3.2	3.2	3.2	3.2
119°	3.2	3.2	3.2	3.2	3.2
120°	3.2	3.2	3.2	3.2	3.2
121°	3.6	3.6	3.6	3.6	3.6
122°	4.0	4.0	4.0	4.0	4.0
123°	4.4	4.4	4.4	4.4	4.4
124°	4.8	4.8	4.8	4.8	4.8
125°	5.3	5.3	5.3	5.3	5.3
126°	5.7	5.7	5.7	5.7	5.7
127°	6.1	6.1	6.1	6.1	6.1
128°	6.7	6.7	6.7	6.7	6.7
129°	7.6	7.6	7.6	7.6	7.6
130°	8.4	8.4	8.4	8.4	8.4
131°	9.7	9.7	9.7	9.7	9.7
132°	11.0	11.0	11.0	11.0	11.0
133°	12.9	12.9	12.9	12.9	12.9
134°	15.4	15.4	15.4	15.4	15.4

TEST NUMBER: P1057246

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-NF-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
135°	17.9	17.9	17.9	17.9	17.9
136°	24.2	24.2	24.2	24.2	24.2
137°	30.5	30.5	30.5	30.5	30.5
138°	39.0	39.0	39.0	39.0	39.0
139°	49.5	49.5	49.5	49.5	49.5
140°	60.0	60.0	60.0	60.0	60.0
141°	77.7	77.7	77.7	77.7	77.7
142°	95.4	95.4	95.4	95.4	95.4
143°	116.5	116.5	116.5	116.5	116.5
144°	140.9	140.9	140.9	140.9	140.9
145°	165.4	165.4	165.4	165.4	165.4
146°	197.4	197.4	197.4	197.4	197.4
147°	229.4	229.4	229.4	229.4	229.4
148°	262.9	262.9	262.9	262.9	262.9
149°	297.9	297.9	297.9	297.9	297.9
150°	332.9	332.9	332.9	332.9	332.9
151°	369.9	369.9	369.9	369.9	369.9
152°	407.0	407.0	407.0	407.0	407.0
153°	445.8	445.8	445.8	445.8	445.8
154°	486.2	486.2	486.2	486.2	486.2
155°	526.7	526.7	526.7	526.7	526.7
156°	578.9	578.9	578.9	578.9	578.9
157°	631.2	631.2	631.2	631.2	631.2
158°	694.6	694.6	694.6	694.6	694.6
159°	769.1	769.1	769.1	769.1	769.1
160°	843.7	843.7	843.7	843.7	843.7
161°	956.6	956.6	956.6	956.6	956.6
162°	1069.6	1069.6	1069.6	1069.6	1069.6
163°	1205.2	1205.2	1205.2	1205.2	1205.2
164°	1363.6	1363.6	1363.6	1363.6	1363.6
165°	1522.1	1522.1	1522.1	1522.1	1522.1
166°	1726.4	1726.4	1726.4	1726.4	1726.4
167°	1930.8	1930.8	1930.8	1930.8	1930.8
168°	2158.9	2158.9	2158.9	2158.9	2158.9
169°	2410.9	2410.9	2410.9	2410.9	2410.9
170°	2662.8	2662.8	2662.8	2662.8	2662.8
171°	2940.1	2940.1	2940.1	2940.1	2940.1
172°	3217.3	3217.3	3217.3	3217.3	3217.3
173°	3474.5	3474.5	3474.5	3474.5	3474.5
174°	3711.7	3711.7	3711.7	3711.7	3711.7
175°	3948.9	3948.9	3948.9	3948.9	3948.9
176°	4116.6	4116.6	4116.6	4116.6	4116.6
177°	4284.3	4284.3	4284.3	4284.3	4284.3
178°	4402.1	4402.1	4402.1	4402.1	4402.1
179°	4469.9	4469.9	4469.9	4469.9	4469.9



TEST NUMBER: P1057246
CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-NF-MD-U-S-X-X-BLAK

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
180°	4537.8	4537.8	4537.8	4537.8	4537.8

TEST NUMBER: P1057246

CATALOG NUMBER: PRLX-CYL2W-DI-X-927-20L-NF-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	1.17	1.81	2.18	2.79	4.08	1.17	1.81	2.18	2.79	4.08
	3H	1.86	2.43	2.88	3.42	4.73	1.86	2.43	2.88	3.42	4.73
	4H	2.13	2.67	3.16	3.66	4.97	2.13	2.67	3.16	3.66	4.97
	6H	2.02	2.51	3.05	3.51	4.83	2.02	2.51	3.05	3.51	4.83
	8H	1.95	2.42	2.99	3.43	4.75	1.95	2.42	2.99	3.43	4.75
	12H	1.89	2.33	2.93	3.34	4.68	1.89	2.33	2.93	3.34	4.68
4H	2H	1.26	1.80	2.29	2.79	4.11	1.26	1.80	2.29	2.79	4.11
	3H	2.04	2.49	3.07	3.51	4.83	2.04	2.49	3.07	3.51	4.83
	4H	2.43	2.83	3.46	3.85	5.20	2.43	2.83	3.46	3.85	5.20
	6H	2.31	2.66	3.36	3.69	5.04	2.31	2.66	3.36	3.69	5.04
	8H	2.25	2.57	3.29	3.60	4.95	2.25	2.57	3.29	3.60	4.95
	12H	2.17	2.46	3.23	3.50	4.86	2.17	2.46	3.23	3.50	4.86
8H	4H	2.37	2.69	3.41	3.72	5.07	2.37	2.69	3.41	3.72	5.07
	6H	2.25	2.51	3.32	3.58	4.94	2.25	2.51	3.32	3.58	4.94
	8H	2.19	2.41	3.26	3.47	4.85	2.19	2.41	3.26	3.47	4.85
	12H	2.12	2.32	3.19	3.36	4.79	2.12	2.32	3.19	3.36	4.79
12H	4H	2.29	2.58	3.35	3.62	4.98	2.29	2.58	3.35	3.62	4.98
	6H	2.19	2.41	3.26	3.47	4.85	2.19	2.41	3.26	3.47	4.85
	8H	2.12	2.32	3.19	3.36	4.79	2.12	2.32	3.19	3.36	4.79

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: PrentaLux 3D Printing
 Catalog Number: **PRLX-CYL2-X-927-10L-FL-U-S-X-X-BLAK**
 Description: PrentaLux 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



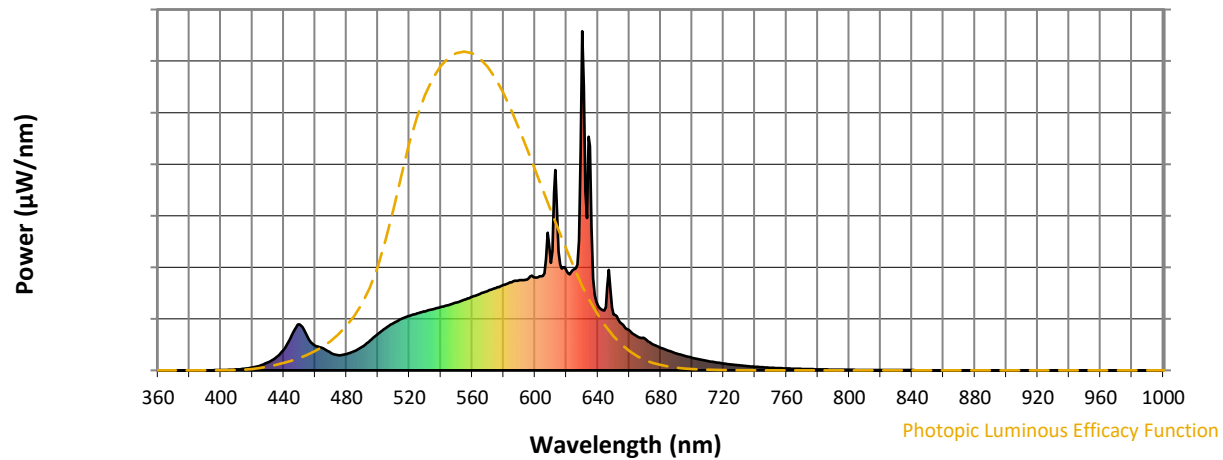
Test Conditions

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

Photopic Flux vs. Wavelength

Photopic Lumens: NR

λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	Lumens (ϕ/nm)	λ (nm)	Power $\text{W}^\wedge/\text{nm}$	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			

REPORT NUMBER: SP1-2504-407-1

Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 1.28

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			

REPORT NUMBER: SP1-2504-407-1

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.38

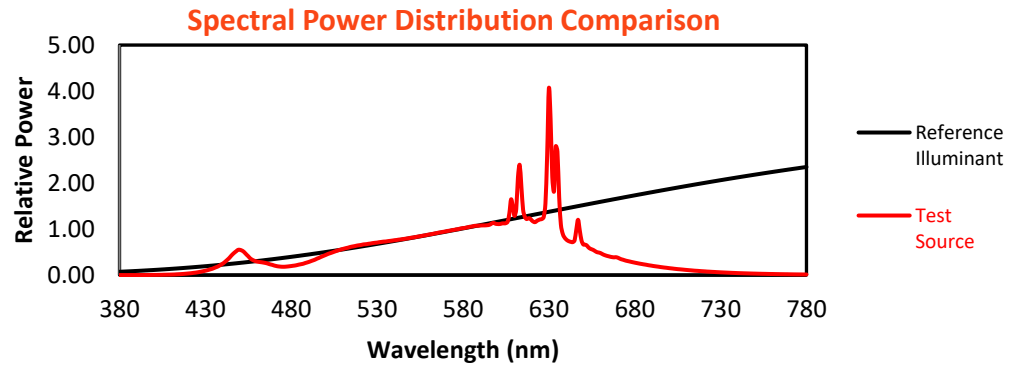
λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)	λ (nm)	Power W [^] /nm	Lumens (φ/nm)
360	0	NR	490	70	NR	620	293	NR	750	8	NR	880	0	NR
365	0	NR	495	88	NR	625	299	NR	755	7	NR	885	0	NR
370	0	NR	500	108	NR	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			

REPORT NUMBER: SP1-2504-407-1

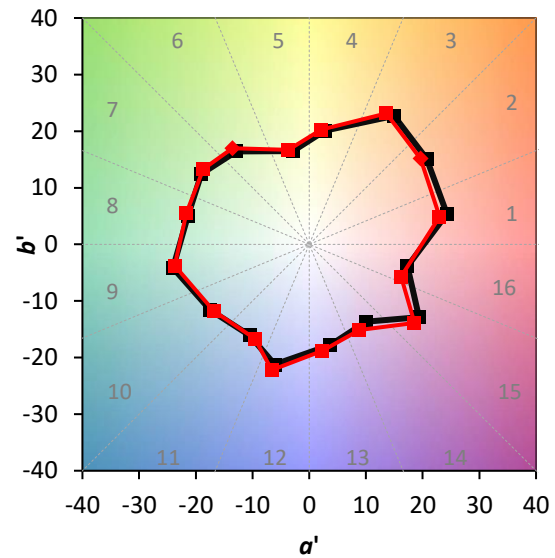
TM-30-18

Summary

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

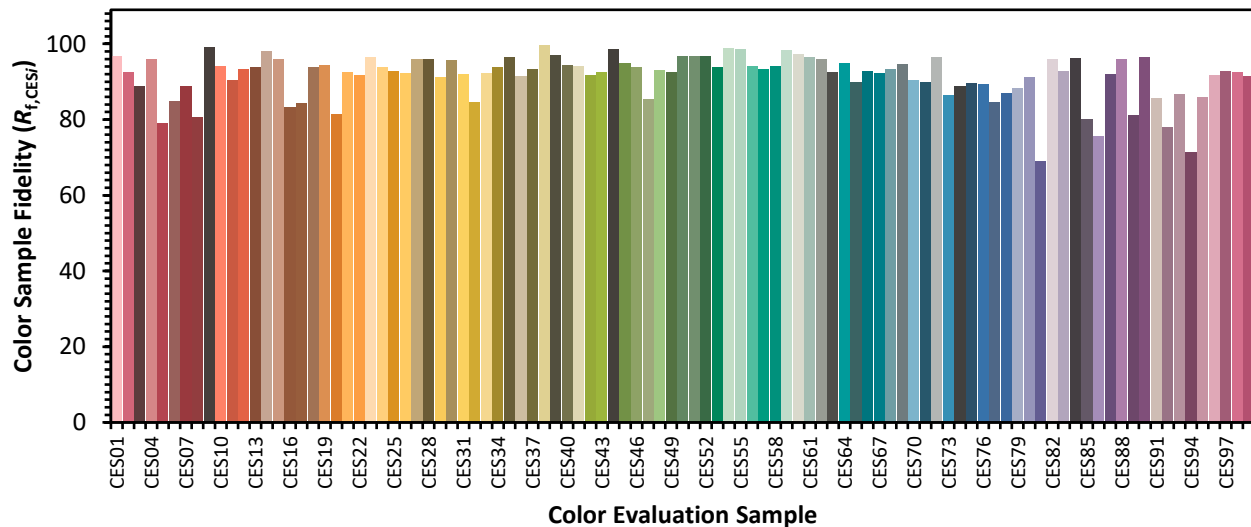


Color Vector Graphics



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)