

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P981004

Luminaire Tested: PRLX-CYL3S-10-927-15L-WD-U-S-X-X-WHTE

Issue Date: 4/11/2025

Test Information

Test Method: LM-79-2024
Report Number: P981004
TEST IS SCALED FROM (FO44195.PSO)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/11/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PentaLux
Catalog Number: PRLX-CYL3S-10-927-15L-WD-U-S-X-X-WHTE
Description: PentaLux 3-INCH CYLINDER, WIDE FLOOD OPTIC
1500 LUMENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

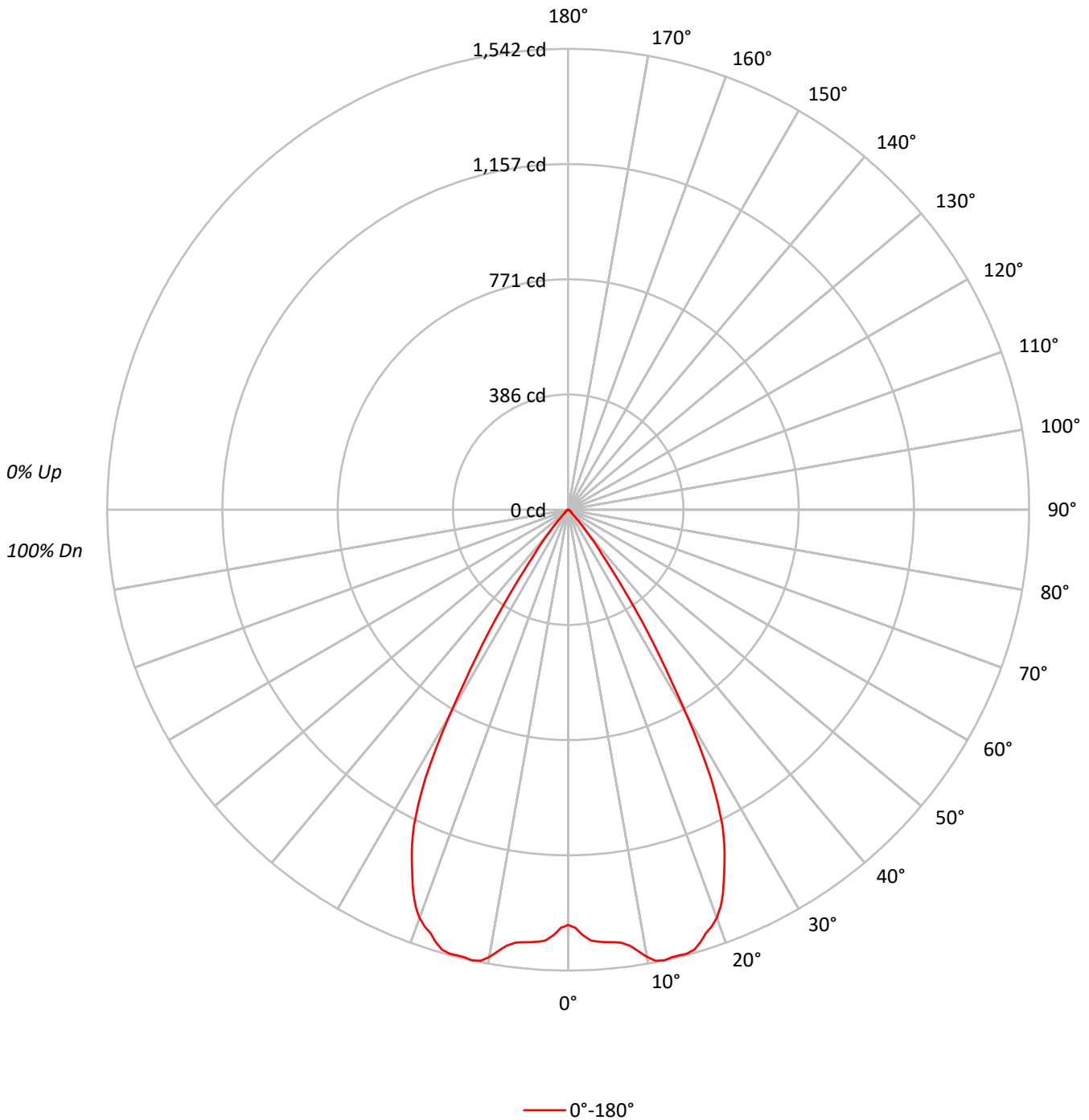
Lumens per Lamp: N/A
Luminaire Lumens: 1377.3 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 1.07 / 1.07 / 0.89
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 13.5
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

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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	70	68
7	85	76	71	67	84	76	70	66	74	70	66	73	69	66	72	68	65	64
8	81	72	67	63	80	72	66	62	71	66	62	70	65	62	69	65	62	60
9	78	68	63	59	77	68	63	59	67	62	59	66	62	58	65	61	58	57
10	74	65	59	56	73	64	59	56	64	59	55	63	58	55	62	58	55	54

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	304647
5°	319766
10°	338404
15°	349083
20°	339249
25°	298977
30°	200461
35°	84912
40°	28196
45°	7195
50°	4571
55°	3670
60°	2807
65°	2127
70°	1667
75°	1779
80°	2273
85°	2516

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7195 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.1	10.2
10°-20°	429.4	31.2
20°-30°	545.9	39.6
30°-40°	218.4	15.9
40°-50°	27.2	2.0
50°-60°	8.8	0.6
60°-70°	4.2	0.3
70°-80°	2.2	0.2
80°-90°	1.0	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1115.4	81.0
0°-40°	1333.9	96.8
0°-60°	1369.9	99.5
0°-90°	1377.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1377.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1389	
5°	1453	140
15°	1538	429
25°	1236	546
35°	317	218
45°	23	27
55°	10	9
65°	4	4
75°	2	2
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1389.3
1°	1399.6
2°	1424.5
3°	1442.9
4°	1449.5
5°	1452.7
6°	1455.4
7°	1460.0
8°	1472.8
9°	1494.7
10°	1519.8
11°	1537.8
12°	1541.7
13°	1537.8
14°	1536.9
15°	1537.7
16°	1531.3
17°	1513.6
18°	1489.9
19°	1475.1
20°	1453.8
21°	1422.4
22°	1383.0
23°	1334.8
24°	1285.3
25°	1235.7
26°	1176.6
27°	1103.4
28°	1016.8
29°	908.4
30°	791.7
31°	676.9
32°	573.9
33°	483.8
34°	399.8
35°	317.2
36°	246.8
37°	194.3
38°	156.7
39°	126.1
40°	98.5
41°	77.5
42°	61.4
43°	46.9
44°	32.9

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CANDELA DISTRIBUTION (continued):

	0°
45°	23.2
46°	18.7
47°	16.9
48°	15.5
49°	14.4
50°	13.4
51°	12.3
52°	11.3
53°	10.5
54°	9.8
55°	9.6
56°	9.5
57°	9.2
58°	8.7
59°	7.9
60°	6.4
61°	5.2
62°	4.7
63°	4.7
64°	4.4
65°	4.1
66°	3.9
67°	3.8
68°	3.6
69°	3.1
70°	2.6
71°	2.3
72°	2.2
73°	2.1
74°	2.1
75°	2.1
76°	2.1
77°	2.1
78°	2.0
79°	1.9
80°	1.8
81°	1.7
82°	1.6
83°	1.5
84°	1.2
85°	1.0
86°	0.6
87°	0.2
88°	0.1
89°	0.1



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CANDELA DISTRIBUTION (continued):

90° | $\frac{0^\circ}{0.0}$



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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	6.30	7.23	6.67	7.54	7.85	6.30	7.23	6.67	7.54	7.85
	3H	6.92	7.73	7.30	8.06	8.43	6.92	7.73	7.30	8.06	8.43
	4H	7.14	7.89	7.55	8.24	8.63	7.14	7.89	7.55	8.24	8.63
	6H	7.53	8.21	7.95	8.59	8.99	7.53	8.21	7.95	8.59	8.99
	8H	7.75	8.39	8.19	8.78	9.19	7.75	8.39	8.19	8.78	9.19
	12H	7.86	8.47	8.29	8.85	9.28	7.86	8.47	8.29	8.85	9.28
4H	2H	6.33	7.08	6.74	7.43	7.82	6.33	7.08	6.74	7.43	7.82
	3H	7.05	7.66	7.47	8.07	8.48	7.05	7.66	7.47	8.07	8.48
	4H	7.42	7.96	7.86	8.39	8.84	7.42	7.96	7.86	8.39	8.84
	6H	8.03	8.49	8.50	8.94	9.42	8.03	8.49	8.50	8.94	9.42
	8H	8.35	8.78	8.83	9.23	9.71	8.35	8.78	8.83	9.23	9.71
	12H	8.57	8.94	9.06	9.43	9.91	8.57	8.94	9.06	9.43	9.91
8H	4H	7.52	7.95	8.00	8.41	8.88	7.52	7.95	8.00	8.41	8.88
	6H	8.34	8.67	8.85	9.18	9.67	8.34	8.67	8.85	9.18	9.67
	8H	8.81	9.11	9.34	9.63	10.13	8.81	9.11	9.34	9.63	10.13
	12H	9.17	9.43	9.70	9.93	10.51	9.17	9.43	9.70	9.93	10.51
12H	4H	7.53	7.90	8.02	8.39	8.87	7.53	7.90	8.02	8.39	8.87
	6H	8.41	8.71	8.95	9.23	9.73	8.41	8.71	8.95	9.23	9.73
	8H	8.96	9.22	9.49	9.72	10.30	8.96	9.22	9.49	9.72	10.30