

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: P981002

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

Issue Date: 4/11/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P981002  
TEST IS SCALED FROM ( FO44193.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-MD-U-S-X-X-WHTE  
Description: PentaLux 3-INCH CYLINDER, MEDIUM OPTIC  
1500 LUMENS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

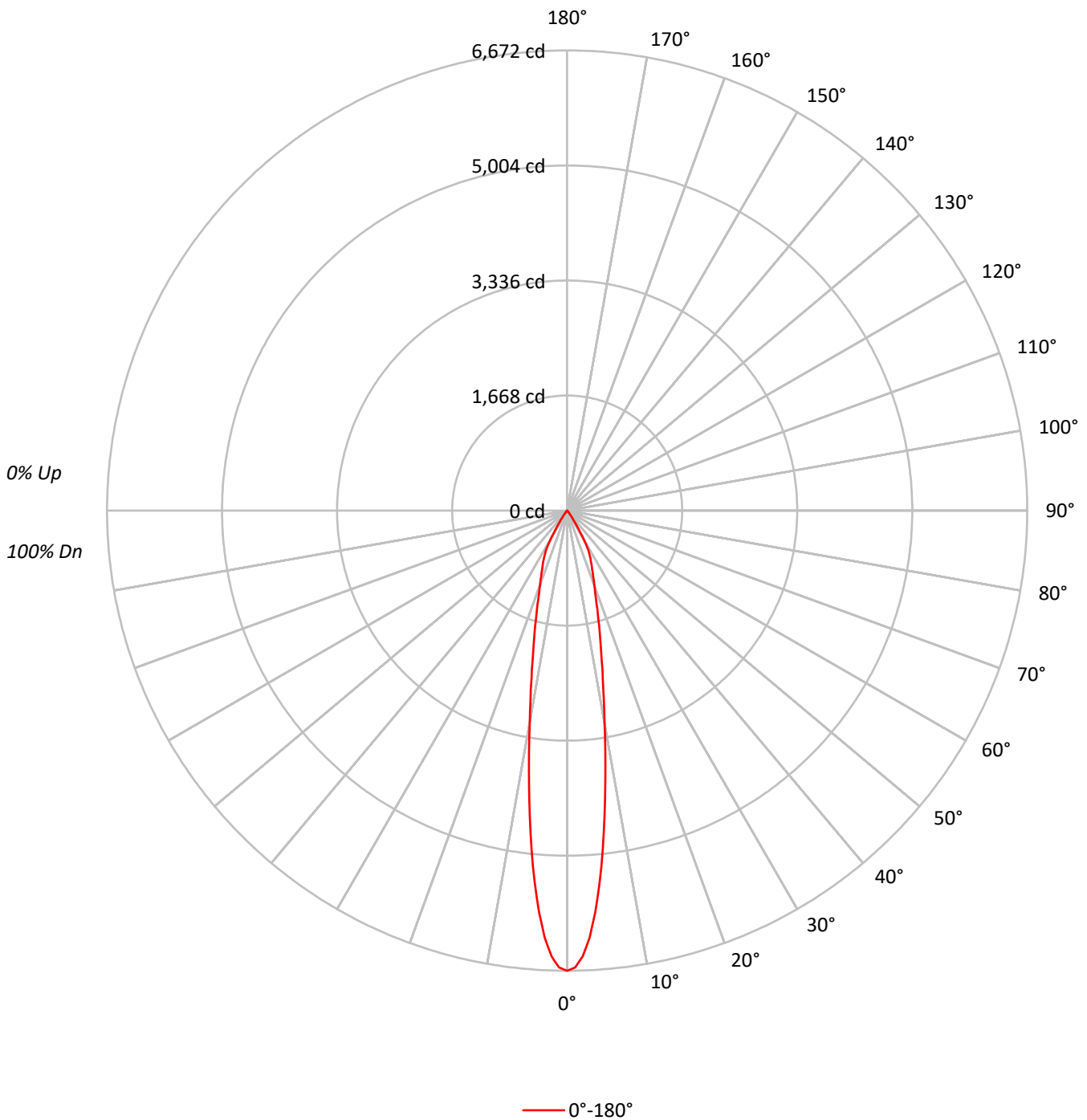
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1440.4 lumens  
Efficiency: N/A  
Efficacy: 106.7 lumens/watt  
Spacing Criteria (0/90/45): 0.32 / 0.32 / 0.37  
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	115	112	110	109	112	110	108	107	106	105	104	103	102	101	99	98	98	96
2	111	107	103	101	108	105	102	100	102	99	97	99	97	95	96	95	93	92
3	107	102	98	95	105	100	97	94	98	95	92	95	93	91	93	91	90	88
4	103	97	93	89	101	96	92	89	94	91	88	92	89	87	90	88	86	85
5	99	93	88	85	98	92	88	85	90	87	84	89	86	83	87	85	83	82
6	96	89	85	81	95	89	84	81	87	83	81	86	83	80	85	82	80	78
7	93	86	81	78	92	85	81	78	84	80	77	83	80	77	82	79	77	76
8	90	83	78	75	89	82	78	75	81	77	75	80	77	74	80	76	74	73
9	87	80	75	72	86	79	75	72	79	75	72	78	74	72	77	74	72	71
10	85	77	73	70	84	77	73	70	76	72	70	75	72	69	75	72	69	68

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	1463019
5°	1190576
10°	695823
15°	412034
20°	268520
25°	198326
30°	121512
35°	30785
40°	9589
45°	2233
50°	1023
55°	803
60°	833
65°	986
70°	1090
75°	1271
80°	1768
85°	2013

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2233 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	438.2	30.4
10°-20°	515.1	35.8
20°-30°	371.5	25.8
30°-40°	100.7	7.0
40°-50°	8.7	0.6
50°-60°	2.0	0.1
60°-70°	1.9	0.1
70°-80°	1.6	0.1
80°-90°	0.7	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°	1324.8	92.0
0°-40°	1425.5	99.0
0°-60°	1436.2	99.7
0°-90°	1440.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1440.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	6672	
5°	5409	438
15°	1815	515
25°	820	371
35°	115	101
45°	7	9
55°	2	2
65°	2	2
75°	2	2
85°	1	1
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	6671.9
1°	6625.3
2°	6468.5
3°	6198.2
4°	5837.4
5°	5408.8
6°	4941.3
7°	4456.9
8°	3975.0
9°	3527.1
10°	3125.0
11°	2779.7
12°	2488.3
13°	2233.5
14°	2009.3
15°	1815.0
16°	1645.1
17°	1493.1
18°	1356.7
19°	1245.4
20°	1150.7
21°	1072.3
22°	999.3
23°	933.8
24°	873.8
25°	819.7
26°	768.4
27°	713.0
28°	651.0
29°	570.6
30°	479.9
31°	390.0
32°	307.2
33°	232.0
34°	166.5
35°	115.0
36°	79.9
37°	58.1
38°	47.7
39°	40.2
40°	33.5
41°	27.5
42°	21.5
43°	15.0
44°	9.6

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**CANDELA DISTRIBUTION (continued):**

	0°
45°	7.2
46°	5.7
47°	4.7
48°	3.9
49°	3.4
50°	3.0
51°	2.7
52°	2.5
53°	2.3
54°	2.2
55°	2.1
56°	2.1
57°	2.0
58°	1.9
59°	1.9
60°	1.9
61°	1.9
62°	1.9
63°	1.9
64°	1.9
65°	1.9
66°	1.9
67°	1.9
68°	1.8
69°	1.8
70°	1.7
71°	1.7
72°	1.7
73°	1.6
74°	1.6
75°	1.5
76°	1.5
77°	1.4
78°	1.4
79°	1.4
80°	1.4
81°	1.3
82°	1.2
83°	1.2
84°	1.0
85°	0.8
86°	0.4
87°	0.1
88°	0.1
89°	0.0



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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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.29
	4H	0.24	0.97	0.65	1.32	1.71	0.24	0.97	0.65	1.32	1.71
	6H	1.70	2.36	2.12	2.74	3.13	1.70	2.36	2.12	2.74	3.13
	8H	2.42	3.03	2.86	3.43	3.84	2.42	3.03	2.86	3.43	3.84
	12H	2.83	3.42	3.27	3.81	4.24	2.83	3.42	3.27	3.81	4.24
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.48	0.31	0.89	1.30	0.00	0.48	0.31	0.89	1.30
	4H	1.45	1.97	1.89	2.40	2.85	1.45	1.97	1.89	2.40	2.85
	6H	3.09	3.54	3.57	3.99	4.47	3.09	3.54	3.57	3.99	4.47
	8H	3.89	4.30	4.37	4.75	5.23	3.89	4.30	4.37	4.75	5.23
	12H	4.44	4.80	4.94	5.29	5.77	4.44	4.80	4.94	5.29	5.77
8H	4H	2.00	2.41	2.48	2.86	3.34	2.00	2.41	2.48	2.86	3.34
	6H	3.91	4.23	4.42	4.74	5.23	3.91	4.23	4.42	4.74	5.23
	8H	4.87	5.16	5.41	5.68	6.18	4.87	5.16	5.41	5.68	6.18
	12H	5.60	5.84	6.12	6.34	6.92	5.60	5.84	6.12	6.34	6.92
12H	4H	2.13	2.48	2.62	2.97	3.45	2.13	2.48	2.62	2.97	3.45
	6H	4.12	4.41	4.66	4.93	5.43	4.12	4.41	4.66	4.93	5.43
	8H	5.19	5.43	5.71	5.93	6.52	5.19	5.43	5.71	5.93	6.52