

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: P981006

Luminaire Tested: PRLX-CYL3S-10-927-23L-MD-U-S-X-X-WHTE

Issue Date: 4/11/2025

Test Information

Test Method: LM-79-2024
Report Number: P981006
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-10-927-23L-MD-U-S-X-X-WHTE
Description: PentaLux 3-INCH CYLINDER, MEDIUM OPTIC
2300 LUMENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

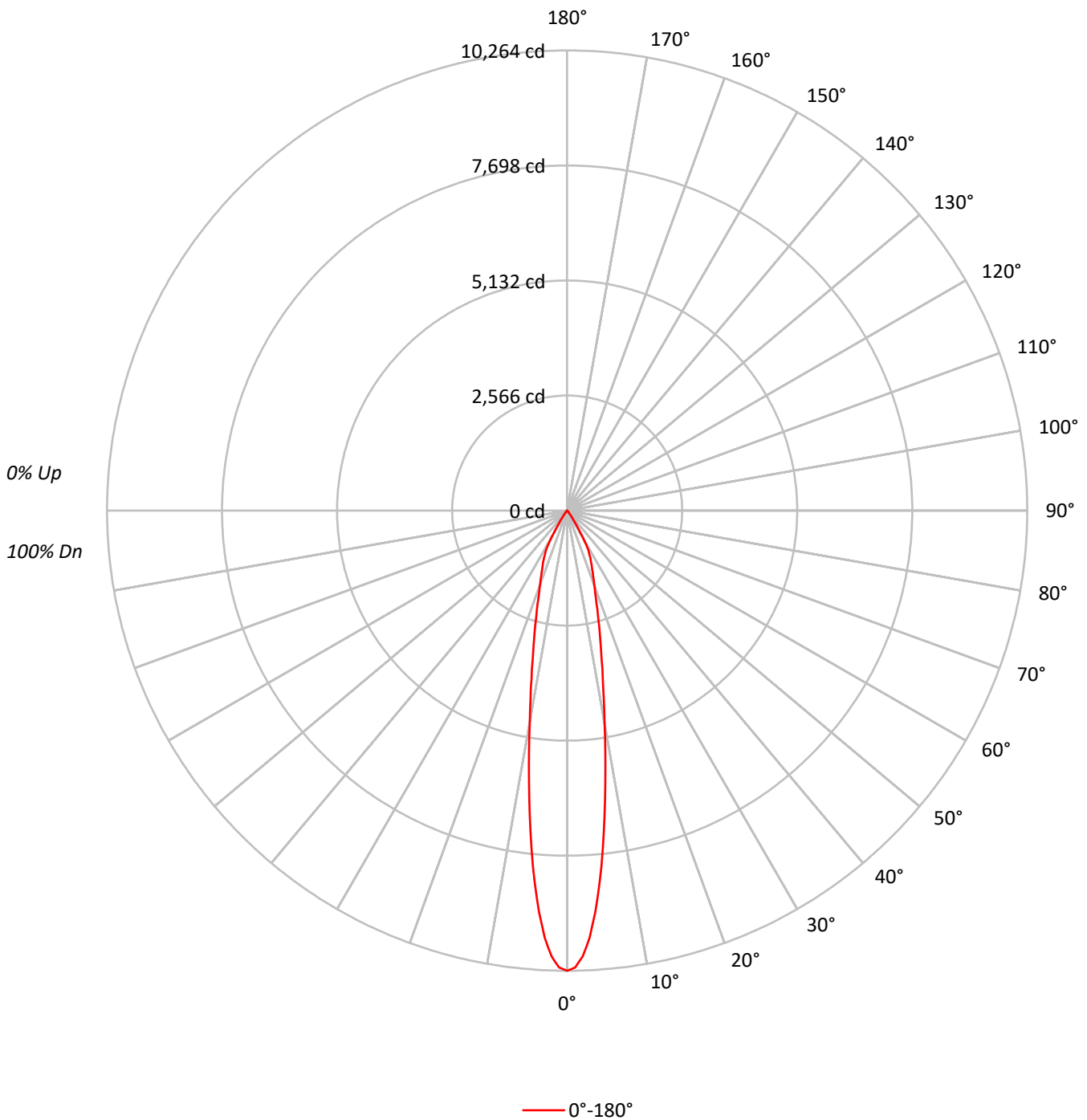
Lumens per Lamp: N/A
Luminaire Lumens: 2216.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.32 / 0.37
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 22.5
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°	2250807
5°	1831648
10°	1070521
15°	633897
20°	413106
25°	305122
30°	186915
35°	47355
40°	14771
45°	3442
50°	1569
55°	1223
60°	1316
65°	1505
70°	1731
75°	1949
80°	2652
85°	3019

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3442 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	674.1	30.4
10°-20°	792.5	35.8
20°-30°	571.5	25.8
30°-40°	154.9	7.0
40°-50°	13.4	0.6
50°-60°	3.1	0.1
60°-70°	2.9	0.1
70°-80°	2.5	0.1
80°-90°	1.1	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°	2038.2	92.0
0°-40°	2193.0	99.0
0°-60°	2209.5	99.7
0°-90°	2216.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2216.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	10264	
5°	8321	674
15°	2792	792
25°	1261	572
35°	177	155
45°	11	13
55°	3	3
65°	3	3
75°	2	3
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	10264.5
1°	10192.8
2°	9951.5
3°	9535.6
4°	8980.7
5°	8321.2
6°	7602.0
7°	6856.8
8°	6115.4
9°	5426.4
10°	4807.8
11°	4276.4
12°	3828.2
13°	3436.1
14°	3091.3
15°	2792.3
16°	2530.9
17°	2297.1
18°	2087.2
19°	1916.0
20°	1770.3
21°	1649.7
22°	1537.4
23°	1436.6
24°	1344.3
25°	1261.1
26°	1182.1
27°	1097.0
28°	1001.5
29°	877.9
30°	738.2
31°	600.0
32°	472.6
33°	356.9
34°	256.1
35°	176.9
36°	122.9
37°	89.4
38°	73.4
39°	61.9
40°	51.6
41°	42.2
42°	33.0
43°	23.0
44°	14.8

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CANDELA DISTRIBUTION (continued):

	0°
45°	11.1
46°	8.8
47°	7.3
48°	6.0
49°	5.2
50°	4.6
51°	4.1
52°	3.8
53°	3.6
54°	3.4
55°	3.2
56°	3.2
57°	3.1
58°	3.0
59°	3.0
60°	3.0
61°	2.9
62°	2.9
63°	2.9
64°	2.9
65°	2.9
66°	2.9
67°	2.9
68°	2.8
69°	2.8
70°	2.7
71°	2.7
72°	2.6
73°	2.5
74°	2.4
75°	2.3
76°	2.3
77°	2.2
78°	2.2
79°	2.1
80°	2.1
81°	2.0
82°	1.9
83°	1.8
84°	1.5
85°	1.2
86°	0.7
87°	0.2
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	0.40	1.18	0.78	1.51	1.88	0.40	1.18	0.78	1.51	1.88
	4H	1.75	2.48	2.16	2.83	3.22	1.75	2.48	2.16	2.83	3.22
	6H	3.20	3.86	3.62	4.24	4.64	3.20	3.86	3.62	4.24	4.64
	8H	3.93	4.55	4.37	4.94	5.35	3.93	4.55	4.37	4.94	5.35
	12H	4.32	4.91	4.76	5.29	5.73	4.32	4.91	4.76	5.29	5.73
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	1.50	2.09	1.91	2.50	2.90	1.50	2.09	1.91	2.50	2.90
	4H	2.97	3.50	3.41	3.93	4.38	2.97	3.50	3.41	3.93	4.38
	6H	4.60	5.05	5.07	5.50	5.98	4.60	5.05	5.07	5.50	5.98
	8H	5.40	5.82	5.88	6.27	6.75	5.40	5.82	5.88	6.27	6.75
	12H	5.93	6.28	6.42	6.77	7.25	5.93	6.28	6.42	6.77	7.25
8H	4H	3.52	3.94	4.00	4.39	4.87	3.52	3.94	4.00	4.39	4.87
	6H	5.41	5.73	5.92	6.23	6.72	5.41	5.73	5.92	6.23	6.72
	8H	6.37	6.66	6.91	7.18	7.68	6.37	6.66	6.91	7.18	7.68
	12H	7.07	7.31	7.59	7.81	8.39	7.07	7.31	7.59	7.81	8.39
12H	4H	3.65	4.01	4.14	4.50	4.97	3.65	4.01	4.14	4.50	4.97
	6H	5.62	5.91	6.16	6.43	6.93	5.62	5.91	6.16	6.43	6.93
	8H	6.69	6.93	7.21	7.43	8.01	6.69	6.93	7.21	7.43	8.01