

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: P981018

Luminaire Tested: PRLX-CYL3S-10-930-23L-MD-U-S-X-X-WHTE

Issue Date: 4/11/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P981018  
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-10-930-23L-MD-U-S-X-X-WHTE  
Description: PentaLux 3-INCH CYLINDER, MEDIUM OPTIC  
2300 LUMENS  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

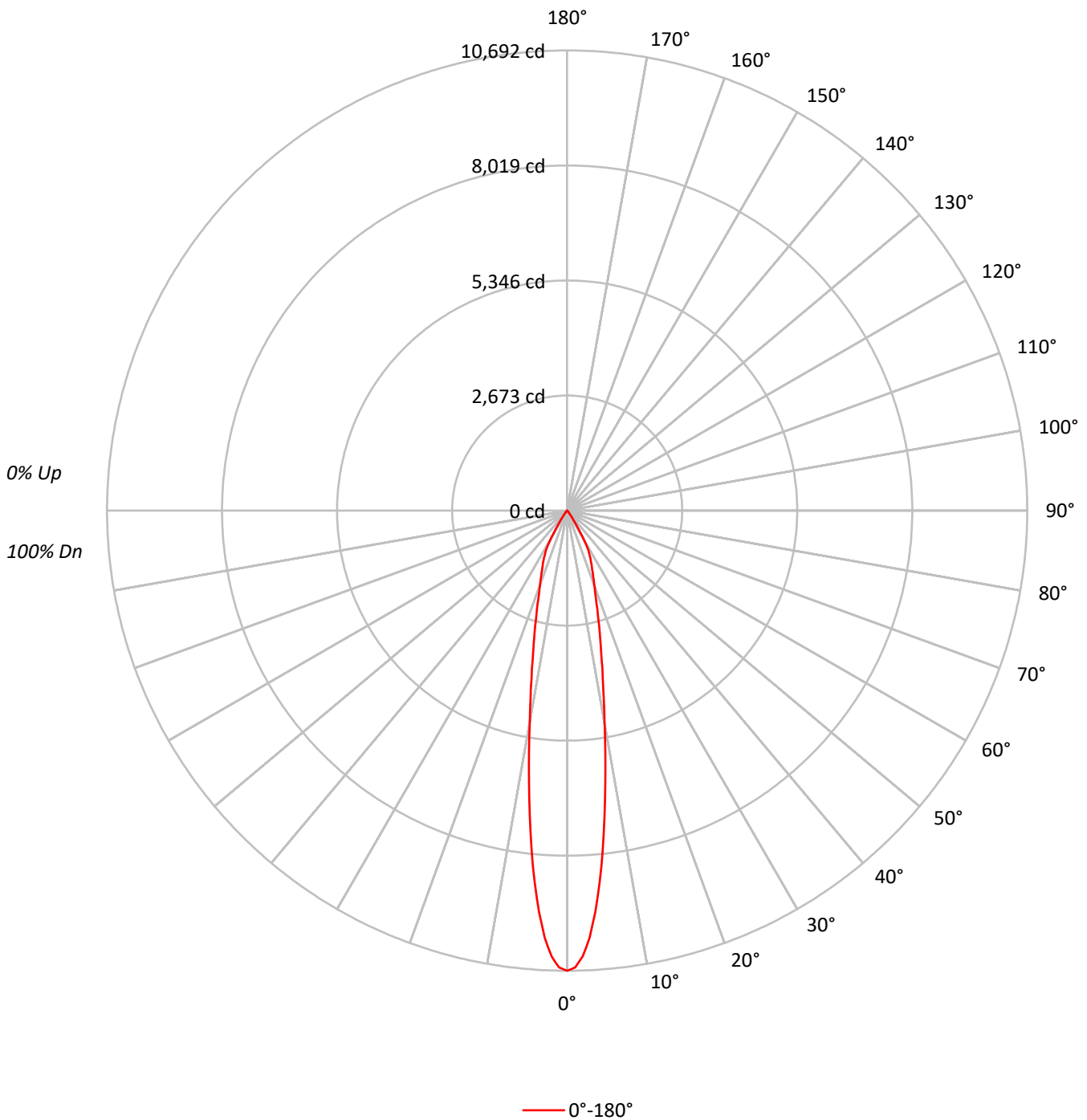
Lumens per Lamp: N/A  
Luminaire Lumens: 2308.3 lumens  
Efficiency: N/A  
Efficacy: 102.6 lumens/watt  
Spacing Criteria (0/90/45): 0.32 / 0.32 / 0.37  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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°	2344593
5°	1907985
10°	1115121
15°	660322
20°	430327
25°	317825
30°	194714
35°	49336
40°	15372
45°	3597
50°	1637
55°	1262
60°	1360
65°	1557
70°	1795
75°	2033
80°	2778
85°	3271

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3597 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	702.2	30.4
10°-20°	825.5	35.8
20°-30°	595.3	25.8
30°-40°	161.3	7.0
40°-50°	14.0	0.6
50°-60°	3.2	0.1
60°-70°	3.0	0.1
70°-80°	2.6	0.1
80°-90°	1.2	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°	2123.1	92.0
0°-40°	2284.4	99.0
0°-60°	2301.6	99.7
0°-90°	2308.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2308.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	10692	
5°	8668	702
15°	2909	826
25°	1314	595
35°	184	161
45°	12	14
55°	3	3
65°	3	3
75°	2	3
85°	1	1
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	10692.2
1°	10617.5
2°	10366.2
3°	9933.0
4°	9354.9
5°	8668.0
6°	7918.8
7°	7142.5
8°	6370.2
9°	5652.5
10°	5008.1
11°	4454.6
12°	3987.7
13°	3579.3
14°	3220.1
15°	2908.7
16°	2636.4
17°	2392.8
18°	2174.2
19°	1995.8
20°	1844.1
21°	1718.4
22°	1601.5
23°	1496.5
24°	1400.3
25°	1313.6
26°	1231.4
27°	1142.7
28°	1043.2
29°	914.5
30°	769.0
31°	625.0
32°	492.3
33°	371.8
34°	266.8
35°	184.3
36°	128.0
37°	93.1
38°	76.5
39°	64.5
40°	53.7
41°	44.0
42°	34.4
43°	24.0
44°	15.4

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**CANDELA DISTRIBUTION (continued):**

	0°
45°	11.6
46°	9.2
47°	7.6
48°	6.3
49°	5.4
50°	4.8
51°	4.3
52°	4.0
53°	3.7
54°	3.5
55°	3.3
56°	3.3
57°	3.2
58°	3.1
59°	3.1
60°	3.1
61°	3.0
62°	3.0
63°	3.0
64°	3.0
65°	3.0
66°	3.0
67°	3.0
68°	2.9
69°	2.9
70°	2.8
71°	2.8
72°	2.7
73°	2.6
74°	2.5
75°	2.4
76°	2.4
77°	2.3
78°	2.3
79°	2.2
80°	2.2
81°	2.1
82°	2.0
83°	1.9
84°	1.6
85°	1.3
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	0.49	1.27	0.88	1.61	1.98	0.49	1.27	0.88	1.61	1.98
	4H	1.87	2.59	2.27	2.94	3.33	1.87	2.59	2.27	2.94	3.33
	6H	3.34	4.00	3.76	4.37	4.77	3.34	4.00	3.76	4.37	4.77
	8H	4.08	4.70	4.52	5.09	5.50	4.08	4.70	4.52	5.09	5.50
	12H	4.49	5.08	4.93	5.46	5.90	4.49	5.08	4.93	5.46	5.90
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	1.60	2.19	2.01	2.60	3.00	1.60	2.19	2.01	2.60	3.00
	4H	3.09	3.62	3.53	4.04	4.49	3.09	3.62	3.53	4.04	4.49
	6H	4.74	5.19	5.21	5.64	6.12	4.74	5.19	5.21	5.64	6.12
	8H	5.56	5.98	6.04	6.43	6.90	5.56	5.98	6.04	6.43	6.90
	12H	6.11	6.46	6.60	6.96	7.43	6.11	6.46	6.60	6.96	7.43
8H	4H	3.65	4.07	4.13	4.52	4.99	3.65	4.07	4.13	4.52	4.99
	6H	5.55	5.88	6.07	6.38	6.87	5.55	5.88	6.07	6.38	6.87
	8H	6.54	6.83	7.08	7.35	7.85	6.54	6.83	7.08	7.35	7.85
	12H	7.26	7.51	7.79	8.01	8.59	7.26	7.51	7.79	8.01	8.59
12H	4H	3.78	4.13	4.27	4.62	5.10	3.78	4.13	4.27	4.62	5.10
	6H	5.77	6.06	6.31	6.58	7.08	5.77	6.06	6.31	6.58	7.08
	8H	6.86	7.10	7.38	7.60	8.19	6.86	7.10	7.38	7.60	8.19