

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: P981019

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

Issue Date: 4/11/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P981019  
TEST IS SCALED FROM ( FO44196.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-SP-U-S-X-X-WHTE  
Description: PentaLux 3-INCH CYLINDER, SPOT OPTIC  
2300 LUMENS  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

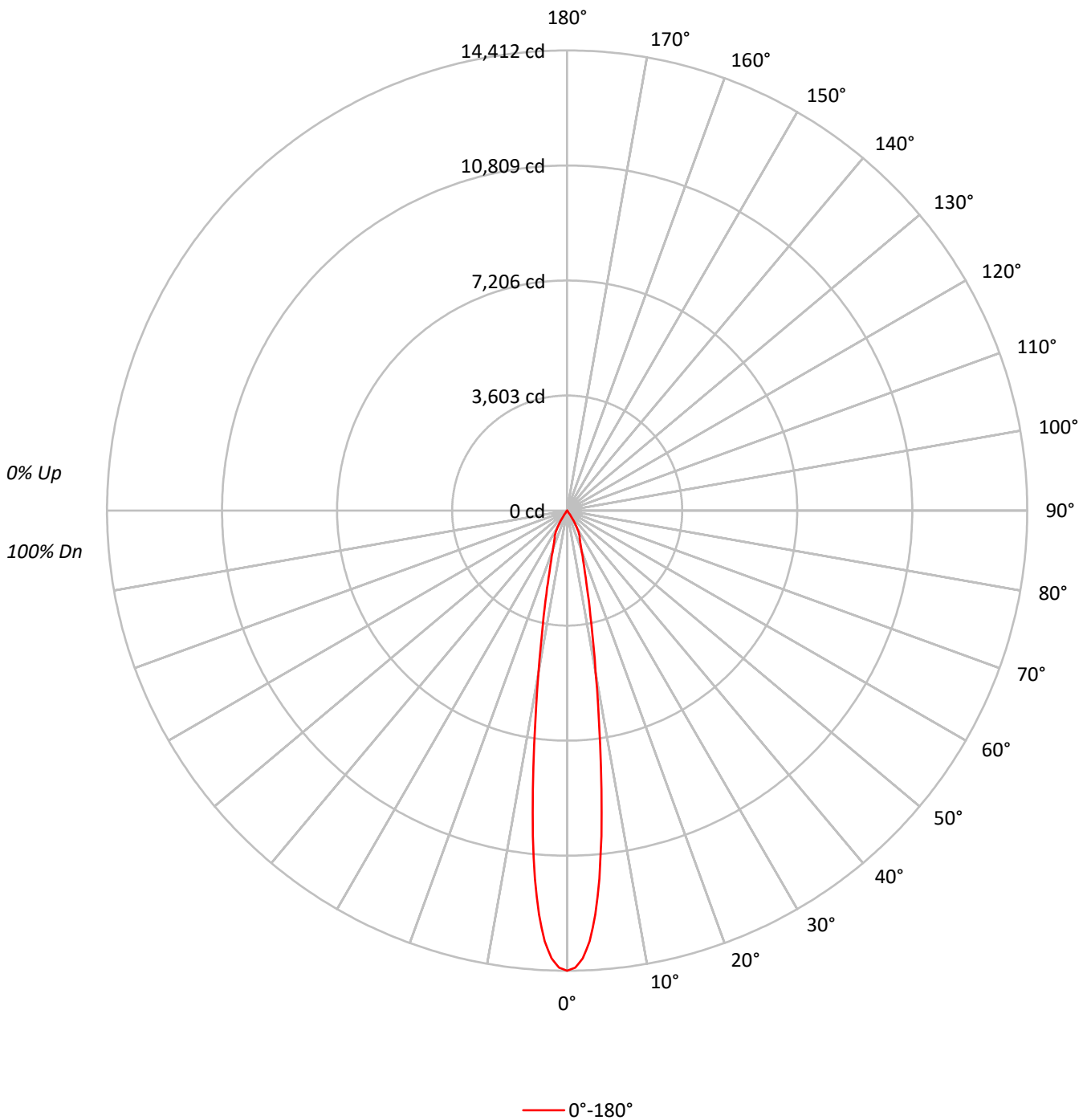
Lumens per Lamp: N/A  
Luminaire Lumens: 2107.6 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Spacing Criteria (0/90/45): 0.28 / 0.28 / 0.29  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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	113	111	109	113	111	109	108	107	106	104	103	102	101	100	99	98	97
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94
3	108	103	100	97	106	102	99	96	99	97	95	97	95	93	95	93	92	91
4	105	99	95	92	103	98	95	92	96	93	91	94	92	90	93	91	89	88
5	102	96	92	89	100	95	91	88	93	90	88	92	89	87	90	88	86	85
6	99	92	88	85	97	92	88	85	90	87	85	89	86	84	88	86	84	83
7	96	90	85	83	95	89	85	82	88	84	82	87	84	82	86	83	81	80
8	93	87	83	80	92	86	83	80	86	82	80	85	82	79	84	81	79	78
9	91	84	80	78	90	84	80	78	83	80	77	83	79	77	82	79	77	76
10	89	82	78	76	88	82	78	76	81	78	75	81	77	75	80	77	75	74

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

	0°
0°	3160207
5°	2547099
10°	1145180
15°	528879
20°	304316
25°	224069
30°	147694
35°	32364
40°	5296
45°	1458
50°	819
55°	612
60°	614
65°	675
70°	705
75°	763
80°	884
85°	1006

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1458 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	873.9	41.5
10°-20°	688.1	32.6
20°-30°	422.6	20.1
30°-40°	114.1	5.4
40°-50°	4.8	0.2
50°-60°	1.5	0.1
60°-70°	1.3	0.1
70°-80°	1.0	0.0
80°-90°	0.4	0.0
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°	1984.6	94.2
0°-40°	2098.6	99.6
0°-60°	2104.9	99.9
0°-90°	2107.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2107.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	14412	
5°	11572	874
15°	2330	688
25°	926	423
35°	121	114
45°	5	5
55°	2	2
65°	1	1
75°	1	1
85°	0	0
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	14411.7
1°	14317.6
2°	14037.3
3°	13501.8
4°	12680.3
5°	11571.5
6°	10250.7
7°	8802.5
8°	7414.4
9°	6178.9
10°	5143.1
11°	4310.8
12°	3647.5
13°	3117.9
14°	2685.5
15°	2329.7
16°	2039.8
17°	1800.2
18°	1605.5
19°	1439.7
20°	1304.1
21°	1194.2
22°	1105.1
23°	1032.8
24°	973.9
25°	926.1
26°	882.7
27°	829.1
28°	761.0
29°	676.8
30°	583.3
31°	485.1
32°	384.4
33°	285.3
34°	196.0
35°	120.9
36°	68.5
37°	40.1
38°	30.5
39°	24.5
40°	18.5
41°	13.4
42°	9.1
43°	6.7
44°	5.6

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**CANDELA DISTRIBUTION (continued):**

	0°
45°	4.7
46°	4.1
47°	3.5
48°	3.0
49°	2.7
50°	2.4
51°	2.2
52°	2.0
53°	1.9
54°	1.7
55°	1.6
56°	1.6
57°	1.5
58°	1.4
59°	1.4
60°	1.4
61°	1.4
62°	1.4
63°	1.4
64°	1.4
65°	1.3
66°	1.3
67°	1.2
68°	1.2
69°	1.2
70°	1.1
71°	1.1
72°	1.0
73°	1.0
74°	0.9
75°	0.9
76°	0.8
77°	0.8
78°	0.8
79°	0.8
80°	0.7
81°	0.7
82°	0.7
83°	0.6
84°	0.5
85°	0.4
86°	0.2
87°	0.1
88°	0.0
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	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.28
12H	0.00	0.00	0.00	0.17	0.65	0.00	0.00	0.00	0.17	0.65	
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.28
	8H	0.00	0.07	0.32	0.59	1.09	0.00	0.07	0.32	0.59	1.09
	12H	0.32	0.56	0.85	1.06	1.65	0.32	0.56	0.85	1.06	1.65
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.44
	8H	0.04	0.28	0.57	0.78	1.37	0.04	0.28	0.57	0.78	1.37