

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: P981005

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

Issue Date: 4/11/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P981005  
TEST IS SCALED FROM ( FO44194.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-FL-U-S-X-X-WHTE  
Description: PentaLux 3-INCH CYLINDER, FLOOD OPTIC  
2300 LUMENS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

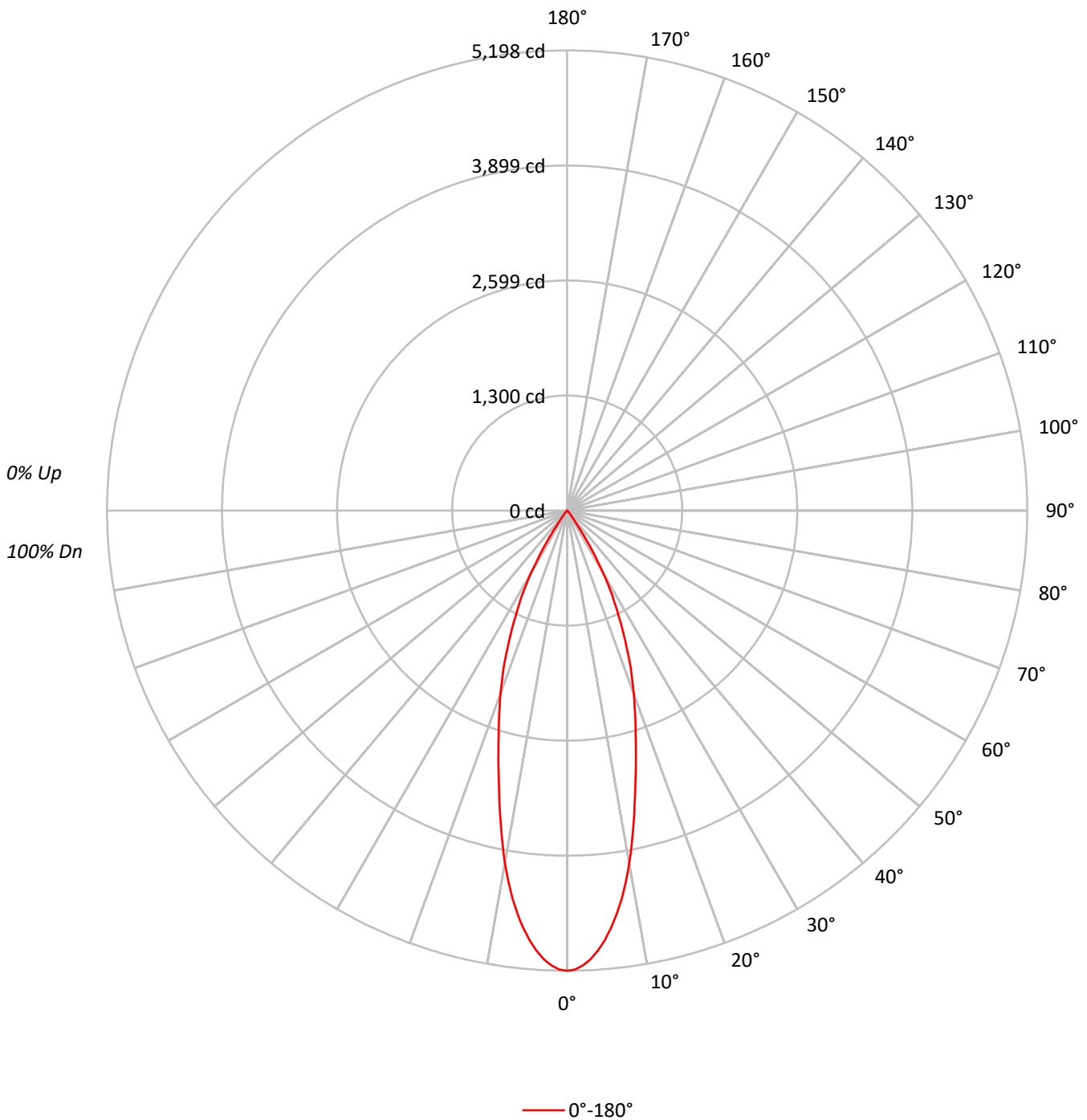
Lumens per Lamp: N/A  
Luminaire Lumens: 2142.2 lumens  
Efficiency: N/A  
Efficacy: 95.2 lumens/watt  
Spacing Criteria (0/90/45): 0.56 / 0.56 / 0.62  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	94	92	91
3	106	100	96	93	104	99	95	92	96	93	91	94	91	89	92	90	88	86
4	101	95	91	87	100	94	90	87	92	88	86	90	87	85	88	86	84	82
5	98	91	86	82	96	90	85	82	88	84	81	87	83	81	85	82	80	79
6	94	87	82	78	93	86	81	78	84	80	77	83	80	77	82	79	76	75
7	90	83	78	74	89	82	77	74	81	77	74	80	76	73	79	76	73	72
8	87	79	74	71	86	79	74	71	78	74	71	77	73	70	76	73	70	69
9	84	76	71	68	83	76	71	68	75	70	68	74	70	67	73	70	67	66
10	81	73	68	65	80	73	68	65	72	68	65	71	67	65	71	67	64	63

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

	0°
0°	1139909
5°	1072086
10°	900540
15°	680594
20°	513028
25°	355980
30°	207222
35°	56778
40°	13168
45°	4155
50°	2559
55°	1797
60°	1403
65°	1245
70°	1282
75°	1440
80°	1768
85°	2013

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4155 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	438.6	20.5
10°-20°	834.8	39.0
20°-30°	670.3	31.3
30°-40°	175.3	8.2
40°-50°	13.9	0.6
50°-60°	4.3	0.2
60°-70°	2.5	0.1
70°-80°	1.8	0.1
80°-90°	0.8	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°	1943.6	90.7
0°-40°	2118.9	98.9
0°-60°	2137.1	99.8
0°-90°	2142.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2142.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5198	
5°	4870	439
15°	2998	835
25°	1471	670
35°	212	175
45°	13	14
55°	5	4
65°	2	2
75°	2	2
85°	1	1
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	5198.4
1°	5183.9
2°	5141.3
3°	5074.6
4°	4982.4
5°	4870.5
6°	4741.0
7°	4592.7
8°	4427.3
9°	4245.1
10°	4044.4
11°	3831.2
12°	3611.0
13°	3393.5
14°	3190.5
15°	2998.0
16°	2819.8
17°	2649.8
18°	2491.4
19°	2341.7
20°	2198.5
21°	2055.7
22°	1916.7
23°	1762.0
24°	1613.3
25°	1471.3
26°	1336.3
27°	1204.9
28°	1082.5
29°	956.4
30°	818.4
31°	675.9
32°	539.0
33°	413.5
34°	303.1
35°	212.1
36°	146.2
37°	99.4
38°	71.7
39°	57.2
40°	46.0
41°	36.5
42°	28.8
43°	22.1
44°	17.1

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**CANDELA DISTRIBUTION (continued):**

	0°
45°	13.4
46°	11.8
47°	10.5
48°	9.3
49°	8.4
50°	7.5
51°	6.7
52°	6.1
53°	5.6
54°	5.1
55°	4.7
56°	4.3
57°	3.9
58°	3.6
59°	3.4
60°	3.2
61°	3.0
62°	2.9
63°	2.7
64°	2.5
65°	2.4
66°	2.3
67°	2.2
68°	2.1
69°	2.1
70°	2.0
71°	1.9
72°	1.9
73°	1.9
74°	1.8
75°	1.7
76°	1.7
77°	1.6
78°	1.5
79°	1.5
80°	1.4
81°	1.3
82°	1.3
83°	1.2
84°	1.0
85°	0.8
86°	0.4
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	0.25	0.00	0.00	0.00	0.00	0.25
	3H	0.19	0.97	0.58	1.31	1.68	0.19	0.97	0.58	1.31	1.68
	4H	1.05	1.78	1.46	2.13	2.52	1.05	1.78	1.46	2.13	2.52
	6H	1.96	2.62	2.39	3.00	3.40	1.96	2.62	2.39	3.00	3.40
	8H	2.44	3.06	2.88	3.45	3.86	2.44	3.06	2.88	3.45	3.86
	12H	2.70	3.29	3.14	3.68	4.11	2.70	3.29	3.14	3.68	4.11
4H	2H	0.00	0.00	0.00	0.12	0.51	0.00	0.00	0.00	0.12	0.51
	3H	0.81	1.40	1.22	1.81	2.21	0.81	1.40	1.22	1.81	2.21
	4H	1.87	2.40	2.31	2.82	3.27	1.87	2.40	2.31	2.82	3.27
	6H	3.01	3.45	3.48	3.91	4.38	3.01	3.45	3.48	3.91	4.38
	8H	3.59	4.01	4.07	4.46	4.94	3.59	4.01	4.07	4.46	4.94
	12H	3.99	4.35	4.49	4.84	5.32	3.99	4.35	4.49	4.84	5.32
8H	4H	2.25	2.67	2.73	3.12	3.60	2.25	2.67	2.73	3.12	3.60
	6H	3.63	3.95	4.14	4.46	4.95	3.63	3.95	4.14	4.46	4.95
	8H	4.39	4.68	4.93	5.20	5.70	4.39	4.68	4.93	5.20	5.70
	12H	4.95	5.20	5.48	5.70	6.28	4.95	5.20	5.48	5.70	6.28
12H	4H	2.32	2.67	2.81	3.16	3.64	2.32	2.67	2.81	3.16	3.64
	6H	3.78	4.07	4.32	4.59	5.09	3.78	4.07	4.32	4.59	5.09
	8H	4.64	4.88	5.16	5.38	5.97	4.64	4.88	5.16	5.38	5.97