

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: P981008

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

Issue Date: 4/11/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P981008  
TEST IS SCALED FROM ( FO44195.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-WD-U-S-X-X-WHTE  
Description: PentaLux 3-INCH CYLINDER, WIDE FLOOD OPTIC  
2300 LUMENS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

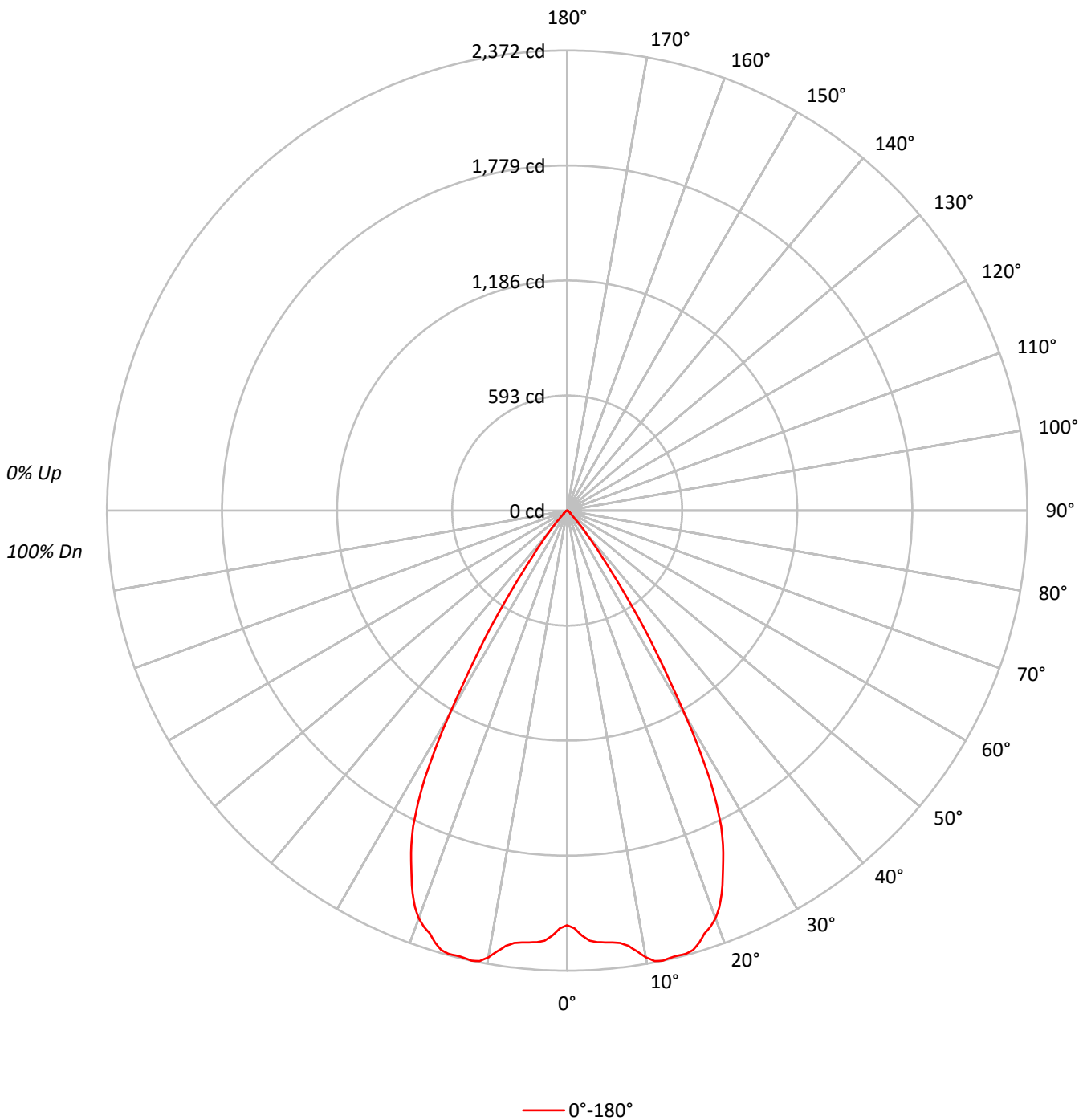
Lumens per Lamp: N/A  
Luminaire Lumens: 2118.9 lumens  
Efficiency: N/A  
Efficacy: 94.2 lumens/watt  
Spacing Criteria (0/90/45): 1.07 / 1.07 / 0.89  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94
2	108	104	100	97	106	102	99	96	99	96	94	96	94	92	93	91	90	88
3	103	97	93	89	101	96	92	88	93	90	87	91	88	85	89	86	84	82
4	98	91	86	82	97	90	85	82	88	84	81	86	83	80	84	81	79	77
5	94	86	80	76	92	85	80	76	83	79	75	82	78	75	80	77	74	73
6	89	81	75	71	88	80	75	71	79	74	70	77	73	70	76	72	70	68
7	85	76	71	67	84	76	70	66	74	70	66	73	69	66	72	68	65	64
8	81	72	67	63	80	72	66	62	71	66	62	70	65	62	69	65	62	60
9	78	68	63	59	77	68	63	59	67	62	59	66	62	58	65	61	58	57
10	74	65	59	56	73	64	59	56	64	59	55	63	58	55	62	58	55	54

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

	0°
0°	468691
5°	491964
10°	520632
15°	537052
20°	521919
25°	459970
30°	308402
35°	130661
40°	43367
45°	11071
50°	6993
55°	5658
60°	4342
65°	3217
70°	2565
75°	2711
80°	3536
85°	3774

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11071 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.6	10.2
10°-20°	660.7	31.2
20°-30°	839.9	39.6
30°-40°	336.0	15.9
40°-50°	41.9	2.0
50°-60°	13.6	0.6
60°-70°	6.4	0.3
70°-80°	3.5	0.2
80°-90°	1.5	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°	1716.1	81.0
0°-40°	2052.1	96.8
0°-60°	2107.6	99.5
0°-90°	2118.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2118.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2137	
5°	2235	216
15°	2366	661
25°	1901	840
35°	488	336
45°	36	42
55°	15	14
65°	6	6
75°	3	3
85°	2	1
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2137.4
1°	2153.2
2°	2191.6
3°	2219.8
4°	2230.0
5°	2235.0
6°	2239.0
7°	2246.1
8°	2265.8
9°	2299.6
10°	2338.2
11°	2365.8
12°	2371.9
13°	2365.8
14°	2364.5
15°	2365.7
16°	2355.8
17°	2328.6
18°	2292.2
19°	2269.3
20°	2236.6
21°	2188.3
22°	2127.7
23°	2053.5
24°	1977.4
25°	1901.1
26°	1810.2
27°	1697.6
28°	1564.3
29°	1397.5
30°	1218.0
31°	1041.3
32°	882.9
33°	744.3
34°	615.1
35°	488.1
36°	379.7
37°	298.9
38°	241.1
39°	194.0
40°	151.5
41°	119.2
42°	94.5
43°	72.1
44°	50.6

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**CANDELA DISTRIBUTION (continued):**

	0°
45°	35.7
46°	28.8
47°	26.0
48°	23.9
49°	22.2
50°	20.5
51°	18.9
52°	17.4
53°	16.1
54°	15.1
55°	14.8
56°	14.7
57°	14.2
58°	13.4
59°	12.2
60°	9.9
61°	8.0
62°	7.3
63°	7.2
64°	6.8
65°	6.2
66°	6.0
67°	5.9
68°	5.6
69°	4.8
70°	4.0
71°	3.6
72°	3.5
73°	3.3
74°	3.3
75°	3.2
76°	3.2
77°	3.2
78°	3.1
79°	3.0
80°	2.8
81°	2.7
82°	2.5
83°	2.3
84°	1.9
85°	1.5
86°	0.9
87°	0.3
88°	0.1
89°	0.1



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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	7.81	8.73	8.18	9.05	9.36	7.81	8.73	8.18	9.05	9.36
	3H	8.44	9.25	8.82	9.58	9.95	8.44	9.25	8.82	9.58	9.95
	4H	8.67	9.42	9.08	9.77	10.16	8.67	9.42	9.08	9.77	10.16
	6H	9.06	9.74	9.48	10.12	10.52	9.06	9.74	9.48	10.12	10.52
	8H	9.29	9.92	9.72	10.32	10.73	9.29	9.92	9.72	10.32	10.73
	12H	9.39	10.00	9.83	10.39	10.82	9.39	10.00	9.83	10.39	10.82
4H	2H	7.83	8.58	8.24	8.93	9.32	7.83	8.58	8.24	8.93	9.32
	3H	8.57	9.18	8.99	9.59	10.00	8.57	9.18	8.99	9.59	10.00
	4H	8.94	9.48	9.38	9.91	10.36	8.94	9.48	9.38	9.91	10.36
	6H	9.55	10.02	10.03	10.47	10.94	9.55	10.02	10.03	10.47	10.94
	8H	9.89	10.32	10.37	10.77	11.25	9.89	10.32	10.37	10.77	11.25
	12H	10.11	10.47	10.60	10.96	11.44	10.11	10.47	10.60	10.96	11.44
8H	4H	9.04	9.47	9.52	9.93	10.40	9.04	9.47	9.52	9.93	10.40
	6H	9.87	10.21	10.38	10.71	11.20	9.87	10.21	10.38	10.71	11.20
	8H	10.35	10.65	10.89	11.18	11.67	10.35	10.65	10.89	11.18	11.67
	12H	10.71	10.97	11.24	11.47	12.05	10.71	10.97	11.24	11.47	12.05
12H	4H	9.05	9.42	9.55	9.91	10.39	9.05	9.42	9.55	9.91	10.39
	6H	9.95	10.25	10.48	10.77	11.27	9.95	10.25	10.48	10.77	11.27
	8H	10.51	10.77	11.04	11.27	11.85	10.51	10.77	11.04	11.27	11.85