

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: P981044

Luminaire Tested: PRLX-CYL3S-10-940-23L-WD-U-S-X-X-WHTE

Issue Date: 4/11/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P981044  
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-10-940-23L-WD-U-S-X-X-WHTE  
Description: PentaLux 3-INCH CYLINDER, WIDE FLOOD OPTIC  
2300 LUMENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

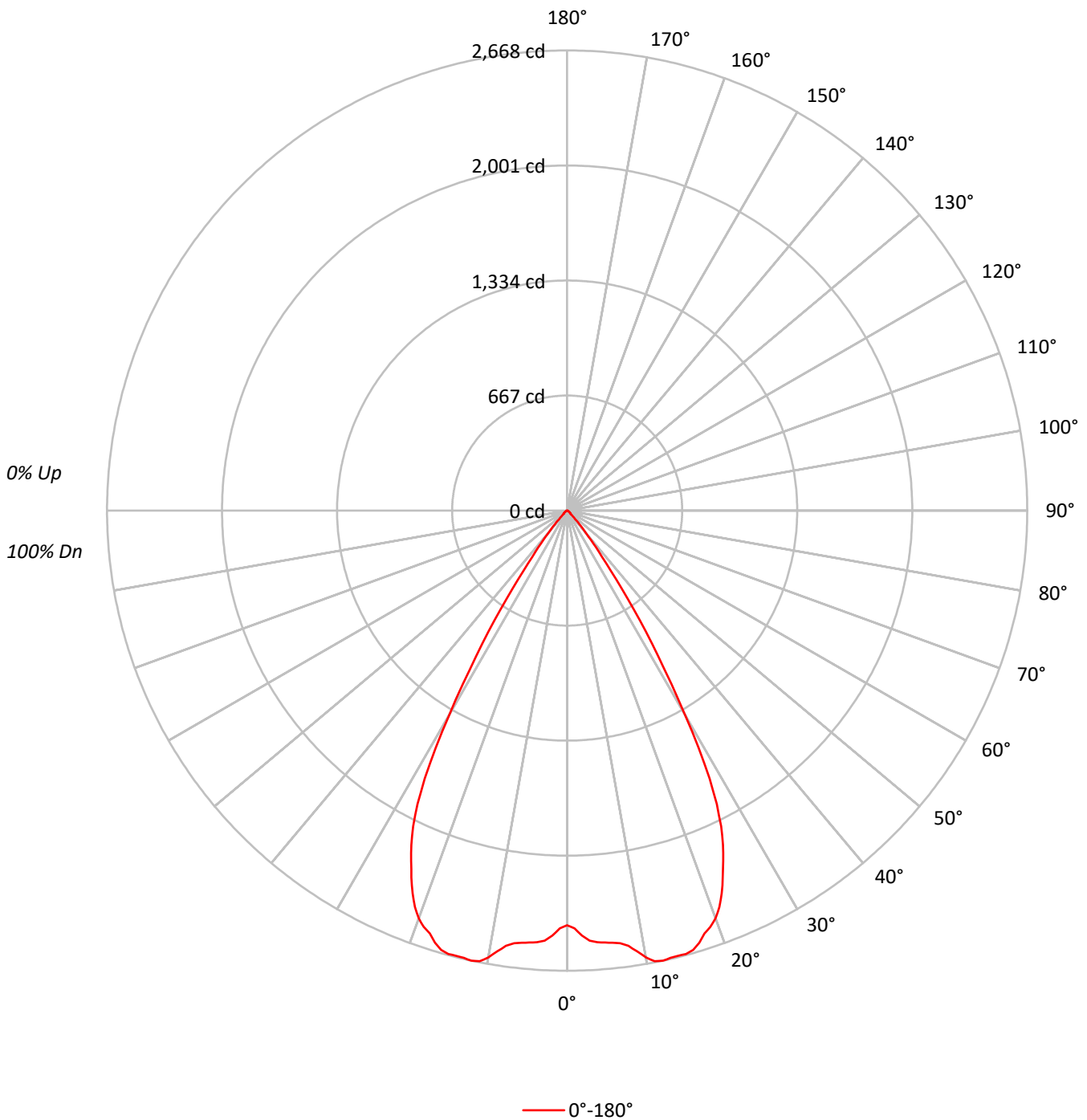
Lumens per Lamp: N/A  
Luminaire Lumens: 2383.8 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Spacing Criteria (0/90/45): 1.07 / 1.07 / 0.89  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P981044

CATALOG NUMBER: PRLX-CYL3S-10-940-23L-WD-U-S-X-X-WHTE

### Luminous Intensity Polar Plot





TEST NUMBER: P981044

CATALOG NUMBER: PRLX-CYL3S-10-940-23L-WD-U-S-X-X-WHTE

**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°	527282
5°	553465
10°	585716
15°	604181
20°	587164
25°	517457
30°	346939
35°	146990
40°	48777
45°	12466
50°	7880
55°	6346
60°	4868
65°	3632
70°	2885
75°	3050
80°	3915
85°	4277

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12466 cd/sqm

TEST NUMBER: P981044

CATALOG NUMBER: PRLX-CYL3S-10-940-23L-WD-U-S-X-X-WHTE

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	242.5	10.2
10°-20°	743.2	31.2
20°-30°	944.9	39.6
30°-40°	378.0	15.9
40°-50°	47.2	2.0
50°-60°	15.2	0.6
60°-70°	7.2	0.3
70°-80°	3.9	0.2
80°-90°	1.7	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°	1930.6	81.0
0°-40°	2308.6	96.8
0°-60°	2371.0	99.5
0°-90°	2383.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2383.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2405	
5°	2514	242
15°	2661	743
25°	2139	945
35°	549	378
45°	40	47
55°	17	15
65°	7	7
75°	4	4
85°	2	2
90°	0	

TEST NUMBER: P981044

CATALOG NUMBER: PRLX-CYL3S-10-940-23L-WD-U-S-X-X-WHTE

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2404.6
1°	2422.3
2°	2465.5
3°	2497.3
4°	2508.7
5°	2514.4
6°	2518.9
7°	2526.9
8°	2549.0
9°	2587.0
10°	2630.5
11°	2661.6
12°	2668.4
13°	2661.6
14°	2660.0
15°	2661.4
16°	2650.3
17°	2619.7
18°	2578.7
19°	2553.0
20°	2516.2
21°	2461.9
22°	2393.7
23°	2310.2
24°	2224.6
25°	2138.7
26°	2036.5
27°	1909.8
28°	1759.9
29°	1572.2
30°	1370.2
31°	1171.5
32°	993.3
33°	837.3
34°	692.0
35°	549.1
36°	427.1
37°	336.3
38°	271.2
39°	218.3
40°	170.4
41°	134.1
42°	106.3
43°	81.1
44°	56.9

TEST NUMBER: P981044

CATALOG NUMBER: PRLX-CYL3S-10-940-23L-WD-U-S-X-X-WHTE

**CANDELA DISTRIBUTION (continued):**

	0°
45°	40.2
46°	32.4
47°	29.3
48°	26.9
49°	24.9
50°	23.1
51°	21.3
52°	19.5
53°	18.1
54°	17.0
55°	16.6
56°	16.5
57°	16.0
58°	15.1
59°	13.7
60°	11.1
61°	9.0
62°	8.2
63°	8.1
64°	7.7
65°	7.0
66°	6.8
67°	6.6
68°	6.3
69°	5.4
70°	4.5
71°	4.0
72°	3.9
73°	3.7
74°	3.7
75°	3.6
76°	3.6
77°	3.6
78°	3.5
79°	3.3
80°	3.1
81°	3.0
82°	2.8
83°	2.6
84°	2.2
85°	1.7
86°	1.0
87°	0.3
88°	0.1
89°	0.1



TEST NUMBER: P981044

CATALOG NUMBER: PRLX-CYL3S-10-940-23L-WD-U-S-X-X-WHTE

CANDELA DISTRIBUTION (continued):

90° |  $\frac{0^\circ}{0.0}$

TEST NUMBER: P981044  
 CATALOG NUMBER: PRLX-CYL3S-10-940-23L-WD-U-S-X-X-WHTE

**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	8.23	9.16	8.60	9.47	9.78	8.23	9.16	8.60	9.47	9.78
	3H	8.86	9.67	9.24	10.00	10.37	8.86	9.67	9.24	10.00	10.37
	4H	9.08	9.83	9.49	10.19	10.58	9.08	9.83	9.49	10.19	10.58
	6H	9.47	10.15	9.89	10.53	10.93	9.47	10.15	9.89	10.53	10.93
	8H	9.69	10.33	10.13	10.72	11.13	9.69	10.33	10.13	10.72	11.13
	12H	9.80	10.41	10.24	10.80	11.23	9.80	10.41	10.24	10.80	11.23
4H	2H	8.25	9.00	8.66	9.35	9.75	8.25	9.00	8.66	9.35	9.75
	3H	8.99	9.60	9.40	10.01	10.41	8.99	9.60	9.40	10.01	10.41
	4H	9.35	9.89	9.79	10.32	10.77	9.35	9.89	9.79	10.32	10.77
	6H	9.96	10.42	10.43	10.87	11.35	9.96	10.42	10.43	10.87	11.35
	8H	10.29	10.72	10.77	11.17	11.65	10.29	10.72	10.77	11.17	11.65
	12H	10.51	10.88	11.01	11.37	11.85	10.51	10.88	11.01	11.37	11.85
8H	4H	9.45	9.88	9.93	10.33	10.81	9.45	9.88	9.93	10.33	10.81
	6H	10.27	10.60	10.78	11.11	11.59	10.27	10.60	10.78	11.11	11.59
	8H	10.75	11.04	11.28	11.57	12.07	10.75	11.04	11.28	11.57	12.07
	12H	11.12	11.38	11.65	11.88	12.46	11.12	11.38	11.65	11.88	12.46
12H	4H	9.46	9.83	9.95	10.32	10.80	9.46	9.83	9.95	10.32	10.80
	6H	10.34	10.64	10.88	11.16	11.66	10.34	10.64	10.88	11.16	11.66
	8H	10.90	11.16	11.43	11.66	12.24	10.90	11.16	11.43	11.66	12.24