

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: P981041

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

Issue Date: 4/11/2025

Test Information

Test Method: LM-79-2024
Report Number: P981041
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-10-940-23L-FL-U-S-X-X-WHTE
Description: PentaLux 3-INCH CYLINDER, FLOOD OPTIC
2300 LUMENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

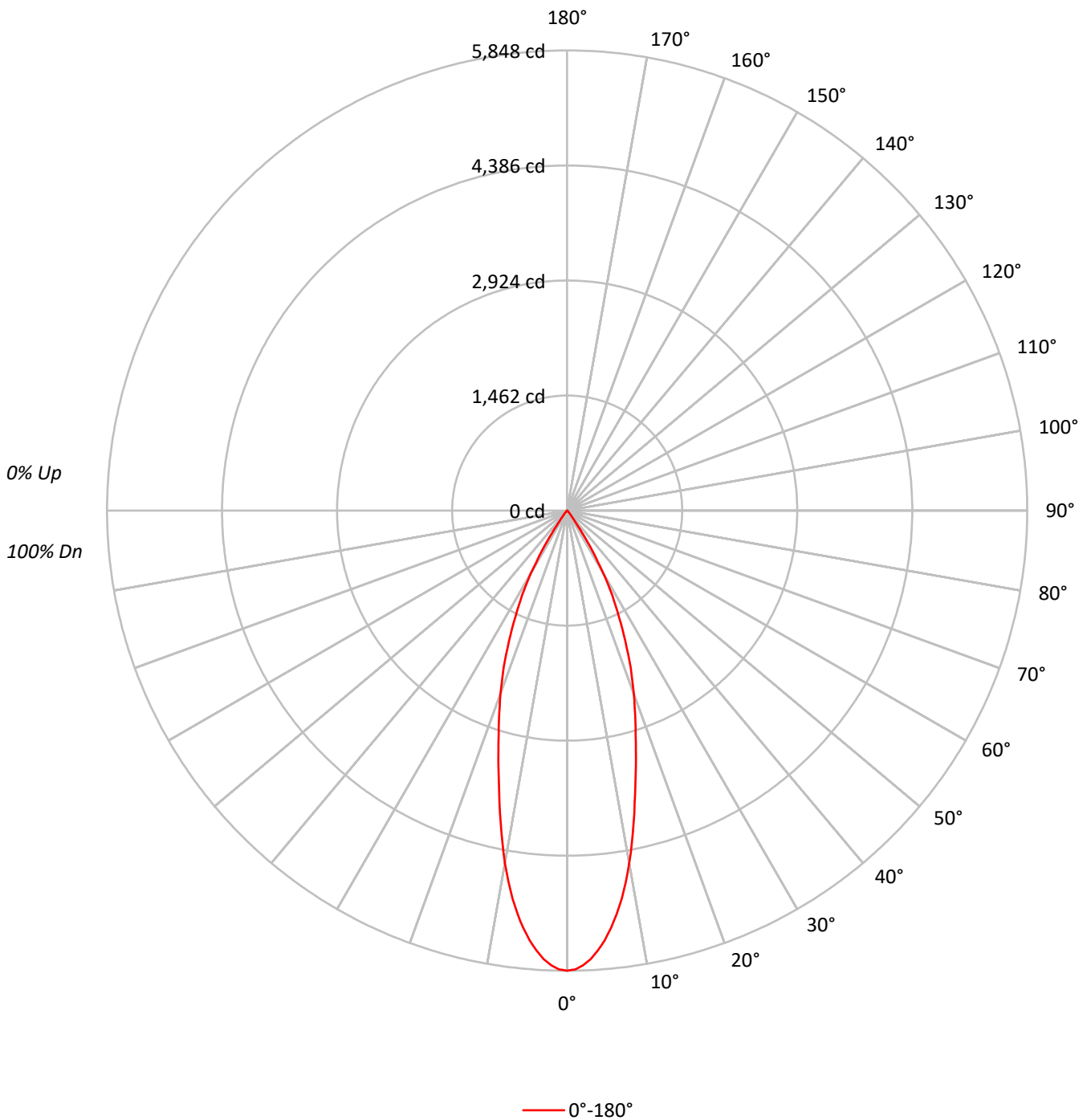
Lumens per Lamp: N/A
Luminaire Lumens: 2409.9 lumens
Efficiency: N/A
Efficacy: 107.1 lumens/watt
Spacing Criteria (0/90/45): 0.56 / 0.56 / 0.62
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P981041

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

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°	1282397
5°	1206094
10°	1013119
15°	765680
20°	577154
25°	400475
30°	233124
35°	63871
40°	14799
45°	4683
50°	2866
55°	2026
60°	1579
65°	1401
70°	1475
75°	1610
80°	2020
85°	2264

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4683 cd/sqm

TEST NUMBER: P981041

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	493.4	20.5
10°-20°	939.1	39.0
20°-30°	754.0	31.3
30°-40°	197.2	8.2
40°-50°	15.6	0.6
50°-60°	4.9	0.2
60°-70°	2.8	0.1
70°-80°	2.1	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°	2186.6	90.7
0°-40°	2383.7	98.9
0°-60°	2404.3	99.8
0°-90°	2409.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2409.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	5848	
5°	5479	493
15°	3373	939
25°	1655	754
35°	239	197
45°	15	16
55°	5	5
65°	3	3
75°	2	2
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	5848.2
1°	5831.8
2°	5784.0
3°	5708.9
4°	5605.2
5°	5479.3
6°	5333.6
7°	5166.8
8°	4980.7
9°	4775.7
10°	4550.0
11°	4310.1
12°	4062.3
13°	3817.7
14°	3589.3
15°	3372.8
16°	3172.3
17°	2981.0
18°	2802.8
19°	2634.4
20°	2473.3
21°	2312.6
22°	2156.2
23°	1982.2
24°	1815.0
25°	1655.2
26°	1503.4
27°	1355.5
28°	1217.8
29°	1075.9
30°	920.7
31°	760.4
32°	606.4
33°	465.2
34°	341.0
35°	238.6
36°	164.5
37°	111.8
38°	80.7
39°	64.4
40°	51.7
41°	41.0
42°	32.4
43°	24.8
44°	19.2

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CANDELA DISTRIBUTION (continued):

	0°
45°	15.1
46°	13.3
47°	11.8
48°	10.5
49°	9.4
50°	8.4
51°	7.6
52°	6.9
53°	6.3
54°	5.7
55°	5.3
56°	4.9
57°	4.4
58°	4.1
59°	3.8
60°	3.6
61°	3.3
62°	3.2
63°	3.0
64°	2.8
65°	2.7
66°	2.6
67°	2.5
68°	2.4
69°	2.4
70°	2.3
71°	2.2
72°	2.2
73°	2.2
74°	2.1
75°	1.9
76°	1.9
77°	1.8
78°	1.7
79°	1.7
80°	1.6
81°	1.5
82°	1.5
83°	1.3
84°	1.1
85°	0.9
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	0.09	0.00	0.40	0.72	0.00	0.09	0.00	0.40	0.72
	3H	0.68	1.47	1.07	1.80	2.17	0.68	1.47	1.07	1.80	2.17
	4H	1.57	2.29	1.98	2.65	3.04	1.57	2.29	1.98	2.65	3.04
	6H	2.47	3.13	2.89	3.51	3.90	2.47	3.13	2.89	3.51	3.90
	8H	2.95	3.56	3.38	3.96	4.37	2.95	3.56	3.38	3.96	4.37
	12H	3.19	3.78	3.62	4.16	4.59	3.19	3.78	3.62	4.16	4.59
4H	2H	0.00	0.23	0.00	0.58	0.97	0.00	0.23	0.00	0.58	0.97
	3H	1.31	1.90	1.72	2.31	2.71	1.31	1.90	1.72	2.31	2.71
	4H	2.38	2.90	2.82	3.33	3.78	2.38	2.90	2.82	3.33	3.78
	6H	3.50	3.95	3.98	4.40	4.88	3.50	3.95	3.98	4.40	4.88
	8H	4.09	4.50	4.57	4.96	5.43	4.09	4.50	4.57	4.96	5.43
	12H	4.46	4.81	4.95	5.31	5.78	4.46	4.81	4.95	5.31	5.78
8H	4H	2.75	3.17	3.23	3.62	4.09	2.75	3.17	3.23	3.62	4.09
	6H	4.13	4.45	4.64	4.96	5.44	4.13	4.45	4.64	4.96	5.44
	8H	4.88	5.16	5.41	5.69	6.19	4.88	5.16	5.41	5.69	6.19
	12H	5.41	5.65	5.93	6.15	6.73	5.41	5.65	5.93	6.15	6.73
12H	4H	2.82	3.17	3.31	3.66	4.14	2.82	3.17	3.31	3.66	4.14
	6H	4.28	4.57	4.82	5.09	5.59	4.28	4.57	4.82	5.09	5.59
	8H	5.12	5.36	5.64	5.86	6.45	5.12	5.36	5.64	5.86	6.45