

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: P981040

Luminaire Tested: PRLX-CYL3S-10-940-15L-WD-U-S-X-X-WHTE

Issue Date: 4/11/2025

Test Information

Test Method: LM-79-2024
Report Number: P981040
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-10-940-15L-WD-U-S-X-X-WHTE
Description: PentaLux 3-INCH CYLINDER, WIDE FLOOD OPTIC
1500 LUMENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

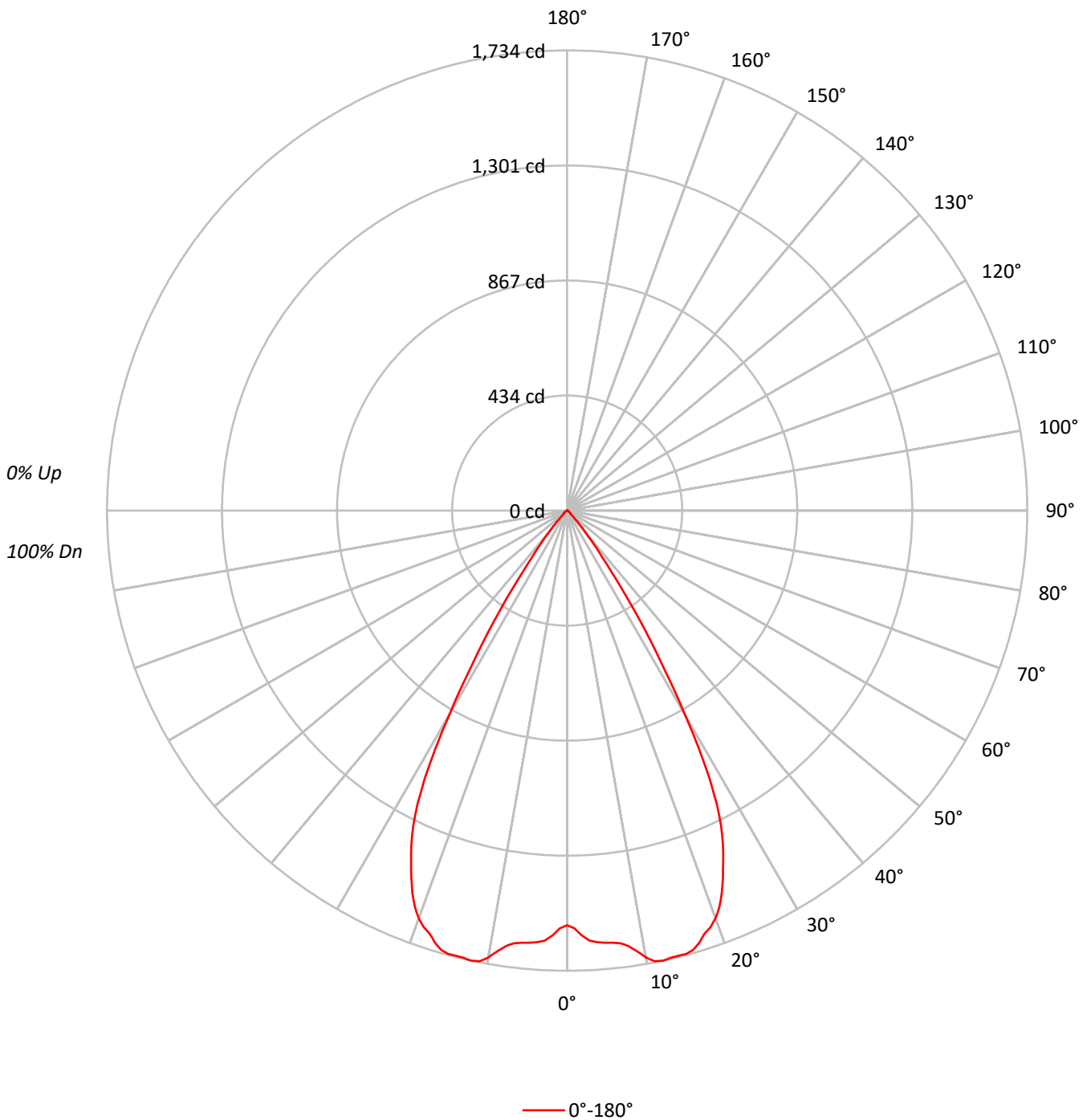
Lumens per Lamp: N/A
Luminaire Lumens: 1549.4 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.07 / 1.07 / 0.89
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 13.5
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°	342736
5°	359739
10°	380710
15°	392715
20°	381650
25°	336358
30°	225503
35°	95539
40°	31717
45°	8094
50°	5117
55°	4129
60°	3158
65°	2387
70°	1859
75°	1949
80°	2526
85°	2768

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8094 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.6	10.2
10°-20°	483.1	31.2
20°-30°	614.2	39.6
30°-40°	245.7	15.9
40°-50°	30.7	2.0
50°-60°	9.9	0.6
60°-70°	4.7	0.3
70°-80°	2.5	0.2
80°-90°	1.1	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°	1254.9	81.0
0°-40°	1500.6	96.8
0°-60°	1541.2	99.5
0°-90°	1549.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1549.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1563	
5°	1634	158
15°	1730	483
25°	1390	614
35°	357	246
45°	26	31
55°	11	10
65°	5	5
75°	2	2
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1563.0
1°	1574.5
2°	1602.6
3°	1623.2
4°	1630.7
5°	1634.3
6°	1637.3
7°	1642.5
8°	1656.9
9°	1681.6
10°	1709.8
11°	1730.0
12°	1734.4
13°	1730.0
14°	1729.0
15°	1729.9
16°	1722.7
17°	1702.8
18°	1676.2
19°	1659.5
20°	1635.5
21°	1600.2
22°	1555.9
23°	1501.7
24°	1446.0
25°	1390.2
26°	1323.7
27°	1241.3
28°	1143.9
29°	1021.9
30°	890.6
31°	761.5
32°	645.6
33°	544.3
34°	449.8
35°	356.9
36°	277.6
37°	218.6
38°	176.3
39°	141.9
40°	110.8
41°	87.2
42°	69.1
43°	52.7
44°	37.0

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CANDELA DISTRIBUTION (continued):

	0°
45°	26.1
46°	21.1
47°	19.0
48°	17.5
49°	16.2
50°	15.0
51°	13.8
52°	12.7
53°	11.8
54°	11.0
55°	10.8
56°	10.7
57°	10.4
58°	9.8
59°	8.9
60°	7.2
61°	5.8
62°	5.3
63°	5.3
64°	5.0
65°	4.6
66°	4.4
67°	4.3
68°	4.1
69°	3.5
70°	2.9
71°	2.6
72°	2.5
73°	2.4
74°	2.4
75°	2.3
76°	2.3
77°	2.3
78°	2.2
79°	2.2
80°	2.0
81°	2.0
82°	1.8
83°	1.7
84°	1.4
85°	1.1
86°	0.6
87°	0.2
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	6.73	7.65	7.10	7.96	8.28	6.73	7.65	7.10	7.96	8.28
	3H	7.35	8.16	7.74	8.50	8.87	7.35	8.16	7.74	8.50	8.87
	4H	7.58	8.32	7.99	8.68	9.07	7.58	8.32	7.99	8.68	9.07
	6H	7.95	8.63	8.37	9.01	9.41	7.95	8.63	8.37	9.01	9.41
	8H	8.18	8.82	8.62	9.21	9.62	8.18	8.82	8.62	9.21	9.62
	12H	8.29	8.90	8.72	9.28	9.71	8.29	8.90	8.72	9.28	9.71
4H	2H	6.75	7.50	7.16	7.86	8.25	6.75	7.50	7.16	7.86	8.25
	3H	7.49	8.10	7.90	8.51	8.91	7.49	8.10	7.90	8.51	8.91
	4H	7.84	8.38	8.28	8.81	9.26	7.84	8.38	8.28	8.81	9.26
	6H	8.43	8.89	8.90	9.34	9.82	8.43	8.89	8.90	9.34	9.82
	8H	8.77	9.20	9.25	9.65	10.13	8.77	9.20	9.25	9.65	10.13
	12H	8.99	9.36	9.49	9.85	10.33	8.99	9.36	9.49	9.85	10.33
8H	4H	7.94	8.37	8.42	8.82	9.30	7.94	8.37	8.42	8.82	9.30
	6H	8.75	9.08	9.26	9.59	10.08	8.75	9.08	9.26	9.59	10.08
	8H	9.23	9.53	9.77	10.06	10.55	9.23	9.53	9.77	10.06	10.55
	12H	9.60	9.86	10.13	10.36	10.94	9.60	9.86	10.13	10.36	10.94
12H	4H	7.95	8.32	8.44	8.81	9.29	7.95	8.32	8.44	8.81	9.29
	6H	8.82	9.12	9.36	9.65	10.14	8.82	9.12	9.36	9.65	10.14
	8H	9.39	9.65	9.92	10.15	10.73	9.39	9.65	9.92	10.15	10.73