

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: P981033

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

Issue Date: 4/11/2025

Test Information

Test Method: LM-79-2024
Report Number: P981033
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-10-940-10L-FL-U-S-X-X-WHTE
Description: PentaLux 3-INCH CYLINDER, FLOOD OPTIC
1000 LUMENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

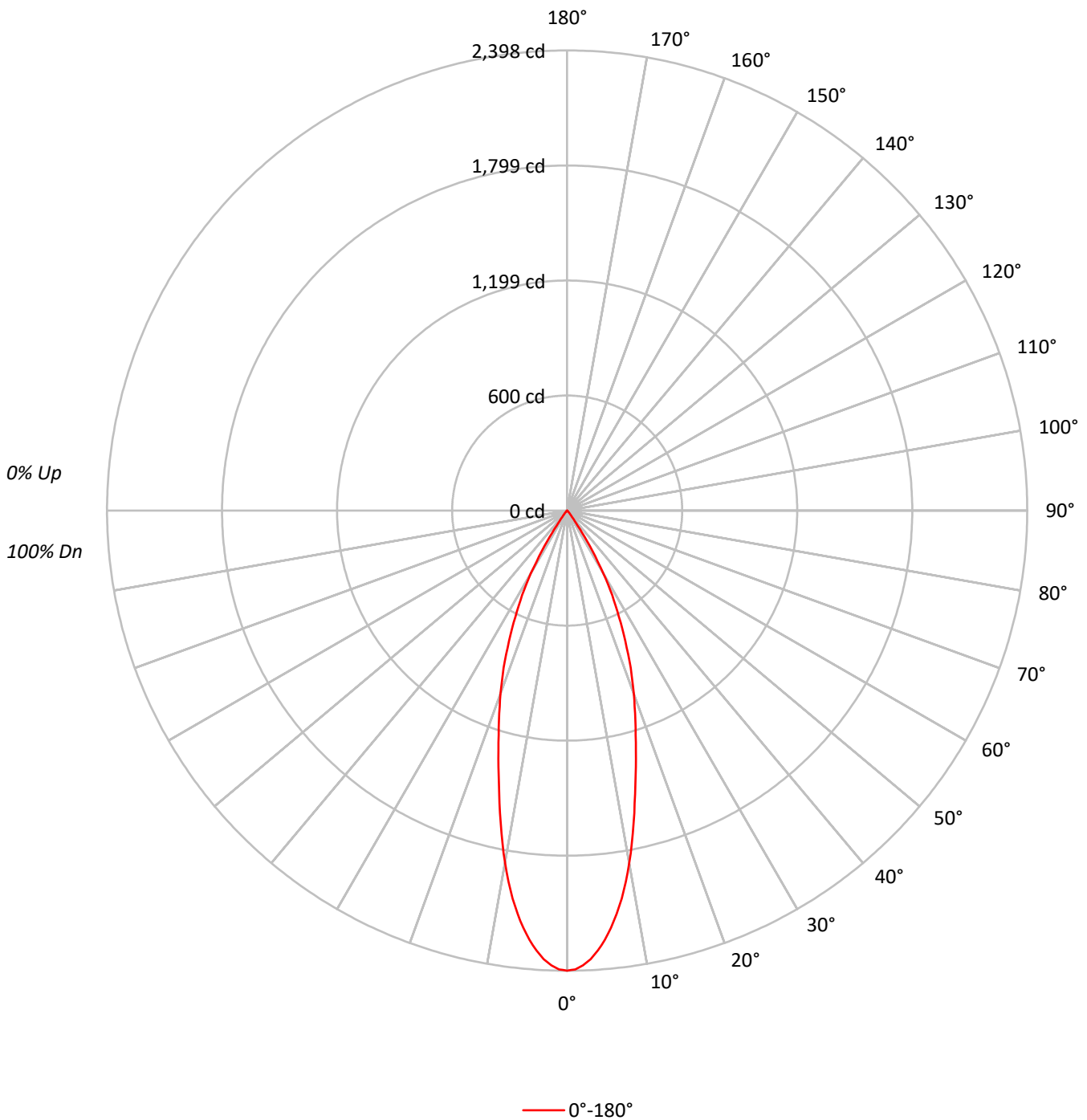
Lumens per Lamp: N/A
Luminaire Lumens: 988.1 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 0.56 / 0.56 / 0.62
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 9.5
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°	525791
5°	494496
10°	415379
15°	313918
20°	236644
25°	164187
30°	95584
35°	26180
40°	6069
45°	1923
50°	1194
55°	841
60°	658
65°	571
70°	577
75°	678
80°	884
85°	1006

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1923 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.3	20.5
10°-20°	385.0	39.0
20°-30°	309.2	31.3
30°-40°	80.8	8.2
40°-50°	6.4	0.6
50°-60°	2.0	0.2
60°-70°	1.1	0.1
70°-80°	0.9	0.1
80°-90°	0.3	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°	896.5	90.7
0°-40°	977.3	98.9
0°-60°	985.7	99.8
0°-90°	988.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	988.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2398	
5°	2246	202
15°	1383	385
25°	679	309
35°	98	81
45°	6	6
55°	2	2
65°	1	1
75°	1	1
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2397.8
1°	2391.0
2°	2371.4
3°	2340.7
4°	2298.1
5°	2246.5
6°	2186.8
7°	2118.4
8°	2042.1
9°	1958.0
10°	1865.5
11°	1767.1
12°	1665.6
13°	1565.3
14°	1471.6
15°	1382.8
16°	1300.6
17°	1222.2
18°	1149.2
19°	1080.1
20°	1014.1
21°	948.2
22°	884.1
23°	812.7
24°	744.1
25°	678.6
26°	616.4
27°	555.8
28°	499.3
29°	441.1
30°	377.5
31°	311.8
32°	248.6
33°	190.7
34°	139.8
35°	97.8
36°	67.4
37°	45.8
38°	33.1
39°	26.4
40°	21.2
41°	16.8
42°	13.3
43°	10.2
44°	7.9

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CANDELA DISTRIBUTION (continued):

	0°
45°	6.2
46°	5.4
47°	4.8
48°	4.3
49°	3.9
50°	3.5
51°	3.1
52°	2.8
53°	2.6
54°	2.3
55°	2.2
56°	2.0
57°	1.8
58°	1.7
59°	1.5
60°	1.5
61°	1.4
62°	1.3
63°	1.2
64°	1.2
65°	1.1
66°	1.1
67°	1.0
68°	1.0
69°	1.0
70°	0.9
71°	0.9
72°	0.9
73°	0.9
74°	0.8
75°	0.8
76°	0.8
77°	0.8
78°	0.7
79°	0.7
80°	0.7
81°	0.6
82°	0.6
83°	0.5
84°	0.4
85°	0.4
86°	0.2
87°	0.1
88°	0.0
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	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.09	0.00	0.47	0.86	0.00	0.09	0.00	0.47	0.86
	8H	0.00	0.48	0.31	0.88	1.29	0.00	0.48	0.31	0.88	1.29
	12H	0.10	0.68	0.53	1.07	1.50	0.10	0.68	0.53	1.07	1.50
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.23	0.68	0.00	0.00	0.00	0.23	0.68
	6H	0.49	0.93	0.96	1.39	1.86	0.49	0.93	0.96	1.39	1.86
	8H	1.02	1.44	1.50	1.89	2.37	1.02	1.44	1.50	1.89	2.37
	12H	1.36	1.72	1.86	2.21	2.69	1.36	1.72	1.86	2.21	2.69
8H	4H	0.00	0.09	0.16	0.55	1.02	0.00	0.09	0.16	0.55	1.02
	6H	1.12	1.44	1.63	1.95	2.44	1.12	1.44	1.63	1.95	2.44
	8H	1.80	2.09	2.34	2.61	3.11	1.80	2.09	2.34	2.61	3.11
	12H	2.30	2.54	2.82	3.04	3.62	2.30	2.54	2.82	3.04	3.62
12H	4H	0.00	0.10	0.24	0.59	1.07	0.00	0.10	0.24	0.59	1.07
	6H	1.26	1.55	1.80	2.08	2.57	1.26	1.55	1.80	2.08	2.57
	8H	2.02	2.27	2.55	2.77	3.35	2.02	2.27	2.55	2.77	3.35