

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: P981029

Luminaire Tested: PRLX-CYL3S-10-935-23L-FL-U-S-X-X-WHTE

Issue Date: 4/11/2025

Test Information

Test Method: LM-79-2024
Report Number: P981029
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-10-935-23L-FL-U-S-X-X-WHTE
Description: PentaLux 3-INCH CYLINDER, FLOOD OPTIC
2300 LUMENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

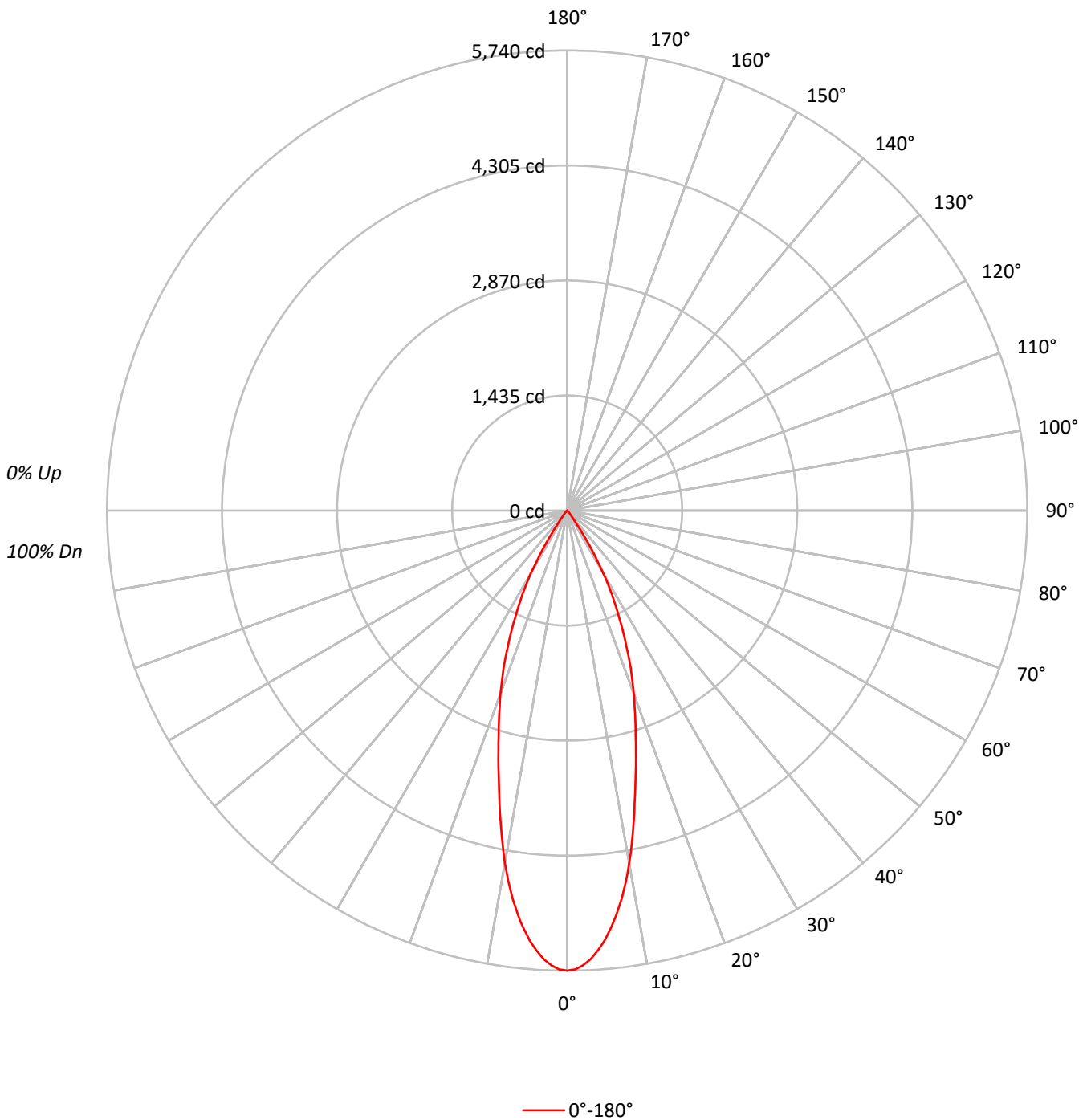
Lumens per Lamp: N/A
Luminaire Lumens: 2365.3 lumens
Efficiency: N/A
Efficacy: 105.1 lumens/watt
Spacing Criteria (0/90/45): 0.56 / 0.56 / 0.62
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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

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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°	1258649
5°	1183752
10°	994348
15°	751491
20°	566466
25°	393071
30°	228820
35°	62694
40°	14542
45°	4590
50°	2831
55°	1988
60°	1535
65°	1401
70°	1410
75°	1610
80°	2020
85°	2013

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4590 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	484.3	20.5
10°-20°	921.7	39.0
20°-30°	740.1	31.3
30°-40°	193.5	8.2
40°-50°	15.4	0.6
50°-60°	4.8	0.2
60°-70°	2.7	0.1
70°-80°	2.0	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°	2146.1	90.7
0°-40°	2339.6	98.9
0°-60°	2359.7	99.8
0°-90°	2365.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2365.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	5740	
5°	5378	484
15°	3310	922
25°	1625	740
35°	234	194
45°	15	15
55°	5	5
65°	3	3
75°	2	2
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	5739.9
1°	5723.8
2°	5676.9
3°	5603.2
4°	5501.4
5°	5377.8
6°	5234.9
7°	5071.1
8°	4888.4
9°	4687.3
10°	4465.7
11°	4230.3
12°	3987.1
13°	3747.0
14°	3522.8
15°	3310.3
16°	3113.6
17°	2925.8
18°	2750.9
19°	2585.6
20°	2427.5
21°	2269.8
22°	2116.3
23°	1945.5
24°	1781.3
25°	1624.6
26°	1475.5
27°	1330.4
28°	1195.3
29°	1056.0
30°	903.7
31°	746.4
32°	595.2
33°	456.5
34°	334.6
35°	234.2
36°	161.4
37°	109.7
38°	79.2
39°	63.2
40°	50.8
41°	40.3
42°	31.8
43°	24.4
44°	18.9

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CANDELA DISTRIBUTION (continued):

	0°
45°	14.8
46°	13.0
47°	11.6
48°	10.3
49°	9.2
50°	8.3
51°	7.4
52°	6.8
53°	6.1
54°	5.6
55°	5.2
56°	4.8
57°	4.3
58°	4.0
59°	3.7
60°	3.5
61°	3.3
62°	3.2
63°	3.0
64°	2.8
65°	2.7
66°	2.5
67°	2.4
68°	2.3
69°	2.3
70°	2.2
71°	2.1
72°	2.1
73°	2.1
74°	2.0
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°	0.8
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	0.00	0.00	0.30	0.62	0.00	0.00	0.00	0.30	0.62
	3H	0.53	1.31	0.92	1.65	2.02	0.53	1.31	0.92	1.65	2.02
	4H	1.41	2.13	1.81	2.48	2.87	1.41	2.13	1.81	2.48	2.87
	6H	2.36	3.02	2.78	3.40	3.80	2.36	3.02	2.78	3.40	3.80
	8H	2.87	3.48	3.30	3.88	4.29	2.87	3.48	3.30	3.88	4.29
	12H	3.10	3.69	3.53	4.07	4.50	3.10	3.69	3.53	4.07	4.50
4H	2H	0.00	0.15	0.00	0.51	0.90	0.00	0.15	0.00	0.51	0.90
	3H	1.16	1.75	1.58	2.16	2.57	1.16	1.75	1.58	2.16	2.57
	4H	2.24	2.77	2.68	3.19	3.64	2.24	2.77	2.68	3.19	3.64
	6H	3.43	3.88	3.90	4.33	4.81	3.43	3.88	3.90	4.33	4.81
	8H	4.04	4.46	4.52	4.91	5.39	4.04	4.46	4.52	4.91	5.39
	12H	4.40	4.75	4.89	5.24	5.72	4.40	4.75	4.89	5.24	5.72
8H	4H	2.63	3.05	3.11	3.50	3.98	2.63	3.05	3.11	3.50	3.98
	6H	4.07	4.40	4.59	4.90	5.39	4.07	4.40	4.59	4.90	5.39
	8H	4.85	5.14	5.39	5.66	6.16	4.85	5.14	5.39	5.66	6.16
	12H	5.35	5.60	5.88	6.10	6.68	5.35	5.60	5.88	6.10	6.68
12H	4H	2.70	3.06	3.20	3.55	4.03	2.70	3.06	3.20	3.55	4.03
	6H	4.24	4.52	4.77	5.05	5.55	4.24	4.52	4.77	5.05	5.55
	8H	5.10	5.34	5.63	5.84	6.43	5.10	5.34	5.63	5.84	6.43