

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: P981039

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

Issue Date: 4/11/2025

Test Information

Test Method: LM-79-2024
Report Number: P981039
TEST IS SCALED FROM (FO44196.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-SP-U-S-X-X-WHTE
Description: PentaLux 3-INCH CYLINDER, SPOT OPTIC
1500 LUMENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

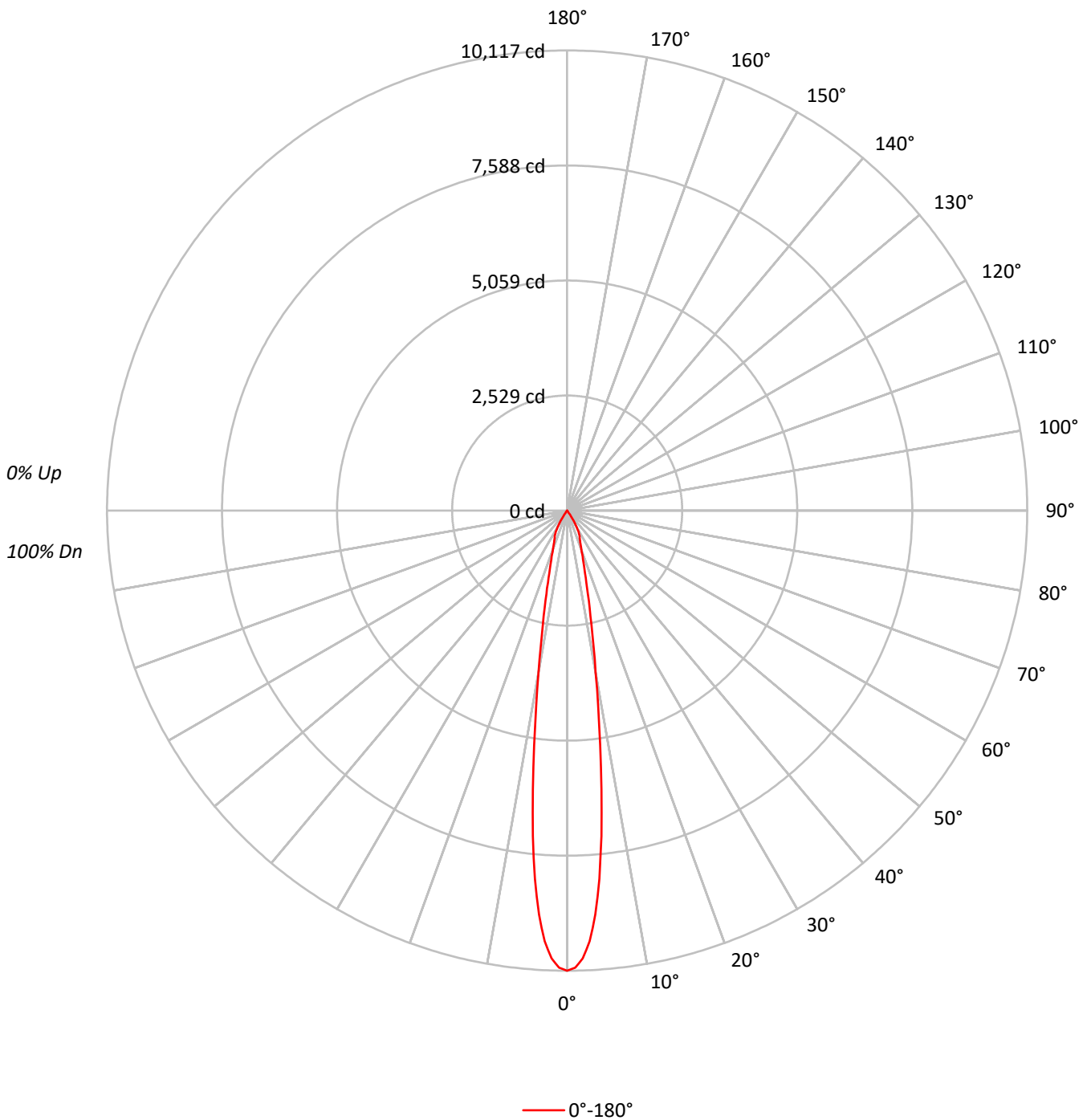
Lumens per Lamp: N/A
Luminaire Lumens: 1479.5 lumens
Efficiency: N/A
Efficacy: 109.6 lumens/watt
Spacing Criteria (0/90/45): 0.28 / 0.28 / 0.29
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

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	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	100	100	100	100	100	100		
1	115	113	111	109	113	111	109	108	107	106	104	103	102	101	100	99	98	97	97	96	95	94	94	94		
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	98	96	95	94	94	93	92	91	91	91		
3	108	103	100	97	106	102	99	96	99	97	95	97	95	93	95	93	92	91	91	90	89	88	88	88		
4	105	99	95	92	103	98	95	92	96	93	91	94	92	90	93	91	89	88	88	86	84	83	83	83		
5	102	96	92	89	100	95	91	88	93	90	88	92	89	87	90	88	86	85	85	83	81	80	80	80		
6	99	92	88	85	97	92	88	85	90	87	85	89	86	84	88	86	84	83	83	81	79	78	78	78		
7	96	90	85	83	95	89	85	82	88	84	82	87	84	82	86	83	81	80	80	78	76	75	75	75		
8	93	87	83	80	92	86	83	80	86	82	80	85	82	79	84	81	79	78	78	76	74	74	74	74		
9	91	84	80	78	90	84	80	78	83	80	77	83	79	77	82	79	77	76	76	74	72	72	72	72		
10	89	82	78	76	88	82	78	76	81	78	75	81	77	75	80	77	75	74	74	72	70	70	70	70		

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2218463
5°	1788065
10°	803904
15°	371285
20°	213635
25°	157291
30°	103687
35°	22727
40°	3721
45°	1023
50°	580
55°	421
60°	439
65°	467
70°	513
75°	508
80°	631
85°	755

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1023 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	613.5	41.5
10°-20°	483.0	32.6
20°-30°	296.7	20.1
30°-40°	80.1	5.4
40°-50°	3.3	0.2
50°-60°	1.1	0.1
60°-70°	0.9	0.1
70°-80°	0.7	0.0
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°	1393.2	94.2
0°-40°	1473.3	99.6
0°-60°	1477.7	99.9
0°-90°	1479.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1479.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	10117	
5°	8123	613
15°	1636	483
25°	650	297
35°	85	80
45°	3	3
55°	1	1
65°	1	1
75°	1	1
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	10117.0
1°	10051.0
2°	9854.2
3°	9478.3
4°	8901.6
5°	8123.2
6°	7196.0
7°	6179.4
8°	5204.9
9°	4337.6
10°	3610.4
11°	3026.2
12°	2560.5
13°	2188.8
14°	1885.2
15°	1635.5
16°	1432.0
17°	1263.8
18°	1127.1
19°	1010.7
20°	915.5
21°	838.3
22°	775.8
23°	725.0
24°	683.7
25°	650.1
26°	619.7
27°	582.0
28°	534.2
29°	475.1
30°	409.5
31°	340.5
32°	269.9
33°	200.3
34°	137.6
35°	84.9
36°	48.1
37°	28.2
38°	21.4
39°	17.2
40°	13.0
41°	9.4
42°	6.4
43°	4.7
44°	3.9



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CANDELA DISTRIBUTION (continued):

	0°
45°	3.3
46°	2.9
47°	2.5
48°	2.1
49°	1.9
50°	1.7
51°	1.5
52°	1.4
53°	1.3
54°	1.2
55°	1.1
56°	1.1
57°	1.1
58°	1.0
59°	1.0
60°	1.0
61°	1.0
62°	1.0
63°	1.0
64°	1.0
65°	0.9
66°	0.9
67°	0.8
68°	0.8
69°	0.8
70°	0.8
71°	0.8
72°	0.7
73°	0.7
74°	0.6
75°	0.6
76°	0.6
77°	0.6
78°	0.6
79°	0.6
80°	0.5
81°	0.5
82°	0.5
83°	0.4
84°	0.4
85°	0.3
86°	0.1
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.55	0.00	0.00	0.00	0.00	0.55
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.21