

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: P979530

Luminaire Tested: PRLX-240-940-LL4-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979530
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-240-940-LL4-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 240 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

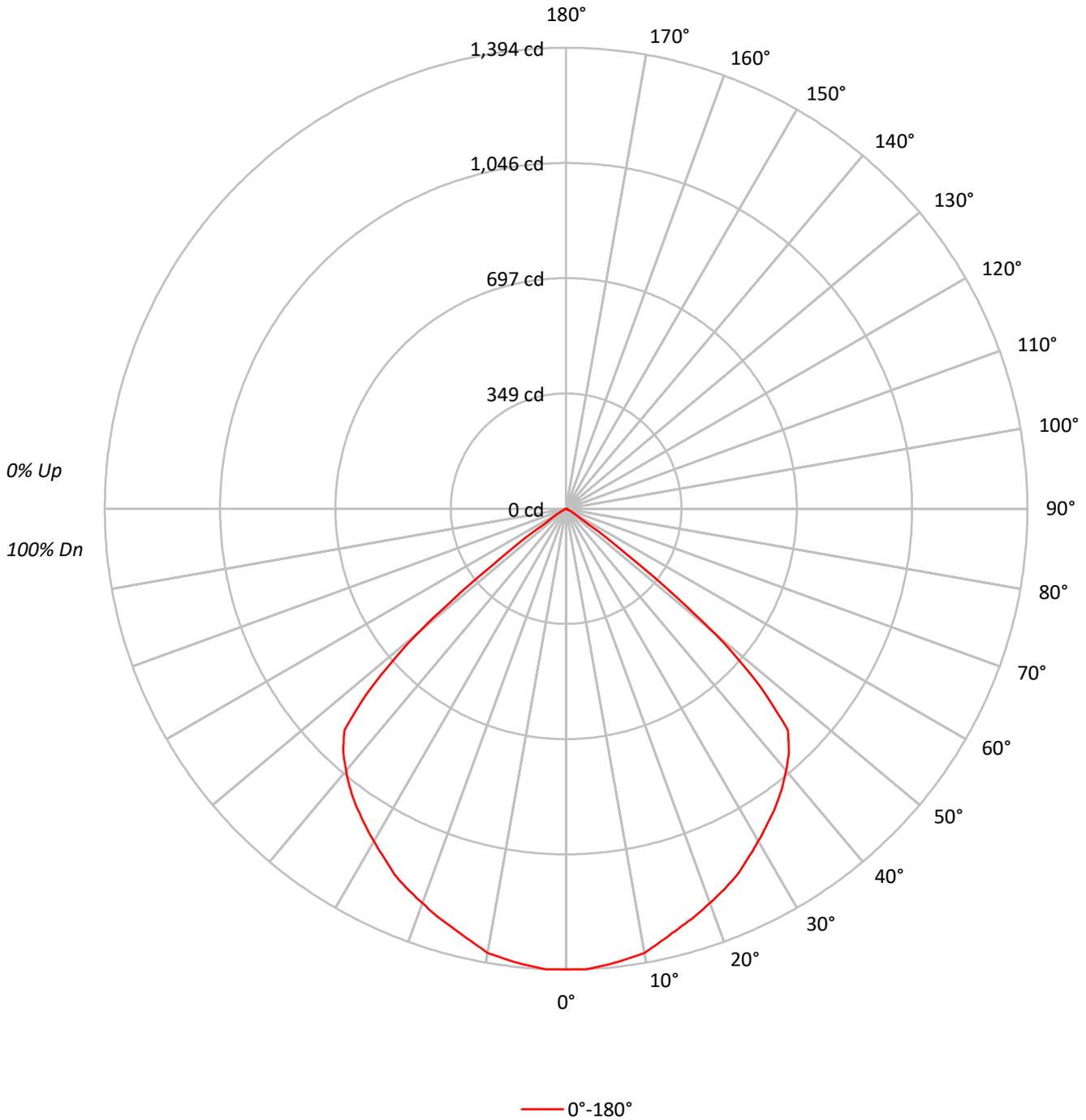
Lumens per Lamp: N/A
Luminaire Lumens: 2601.3 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.39
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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	112	109	106	103	110	107	104	102	103	100	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58
6	79	68	61	56	78	67	61	55	66	60	55	64	59	55	63	58	54	52
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39
10	61	49	42	38	60	49	42	38	48	42	37	47	41	37	46	41	37	36

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	14025
5°	14006
10°	13945
15°	13698
20°	13603
25°	13585
30°	13506
35°	13552
40°	13592
45°	13484
50°	9228
55°	1438
60°	354
65°	74
70°	91
75°	121
80°	180
85°	116

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13484 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.6	5.1
10°-20°	371.6	14.3
20°-30°	562.7	21.6
30°-40°	689.9	26.5
40°-50°	683.0	26.3
50°-60°	152.3	5.9
60°-70°	5.6	0.2
70°-80°	3.3	0.1
80°-90°	1.5	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°	1065.9	41.0
0°-40°	1755.7	67.5
0°-60°	2591.0	99.6
0°-90°	2601.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2601.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1393	
5°	1386	132
15°	1314	372
25°	1223	563
35°	1102	690
45°	947	683
55°	82	152
65°	3	6
75°	3	3
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1392.9
2.5°	1394.0
5°	1385.7
7.5°	1375.3
10°	1363.9
12.5°	1337.9
15°	1314.1
17.5°	1293.4
20°	1269.5
22.5°	1246.7
25°	1222.8
27.5°	1190.7
30°	1161.6
32.5°	1131.6
35°	1102.5
37.5°	1070.4
40°	1034.1
42.5°	996.7
45°	946.9
47.5°	795.5
50°	589.1
52.5°	274.8
55°	81.9
57.5°	39.4
60°	17.6
62.5°	6.2
65°	3.1
67.5°	3.1
70°	3.1
72.5°	3.1
75°	3.1
77.5°	3.1
80°	3.1
82.5°	2.1
85°	1.0
87.5°	1.0
90°	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	2.99	4.29	3.36	4.61	4.92	2.99	4.29	3.36	4.61	4.92
	3H	2.90	4.04	3.28	4.37	4.73	2.90	4.04	3.28	4.37	4.73
	4H	2.88	3.93	3.28	4.28	4.67	2.88	3.93	3.28	4.28	4.67
	6H	2.90	3.86	3.32	4.23	4.63	2.90	3.86	3.32	4.23	4.63
	8H	2.91	3.82	3.34	4.21	4.61	2.91	3.82	3.34	4.21	4.61
	12H	2.89	3.76	3.32	4.14	4.57	2.89	3.76	3.32	4.14	4.57
4H	2H	2.80	3.85	3.20	4.20	4.58	2.80	3.85	3.20	4.20	4.58
	3H	2.73	3.57	3.14	3.98	4.38	2.73	3.57	3.14	3.98	4.38
	4H	2.73	3.47	3.16	3.89	4.34	2.73	3.47	3.16	3.89	4.34
	6H	2.82	3.46	3.28	3.91	4.37	2.82	3.46	3.28	3.91	4.37
	8H	2.85	3.45	3.32	3.89	4.37	2.85	3.45	3.32	3.89	4.37
	12H	2.85	3.38	3.33	3.86	4.34	2.85	3.38	3.33	3.86	4.34
8H	4H	2.64	3.24	3.11	3.68	4.16	2.64	3.24	3.11	3.68	4.16
	6H	2.78	3.27	3.28	3.77	4.25	2.78	3.27	3.28	3.77	4.25
	8H	2.84	3.29	3.36	3.81	4.30	2.84	3.29	3.36	3.81	4.30
	12H	2.87	3.27	3.38	3.77	4.34	2.87	3.27	3.38	3.77	4.34
12H	4H	2.60	3.13	3.09	3.62	4.09	2.60	3.13	3.09	3.62	4.09
	6H	2.75	3.20	3.27	3.71	4.20	2.75	3.20	3.27	3.71	4.20
	8H	2.84	3.24	3.36	3.74	4.31	2.84	3.24	3.36	3.74	4.31