

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P979310

Luminaire Tested: PRLX-240-927-48L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979310
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-240-927-48L-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 240 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

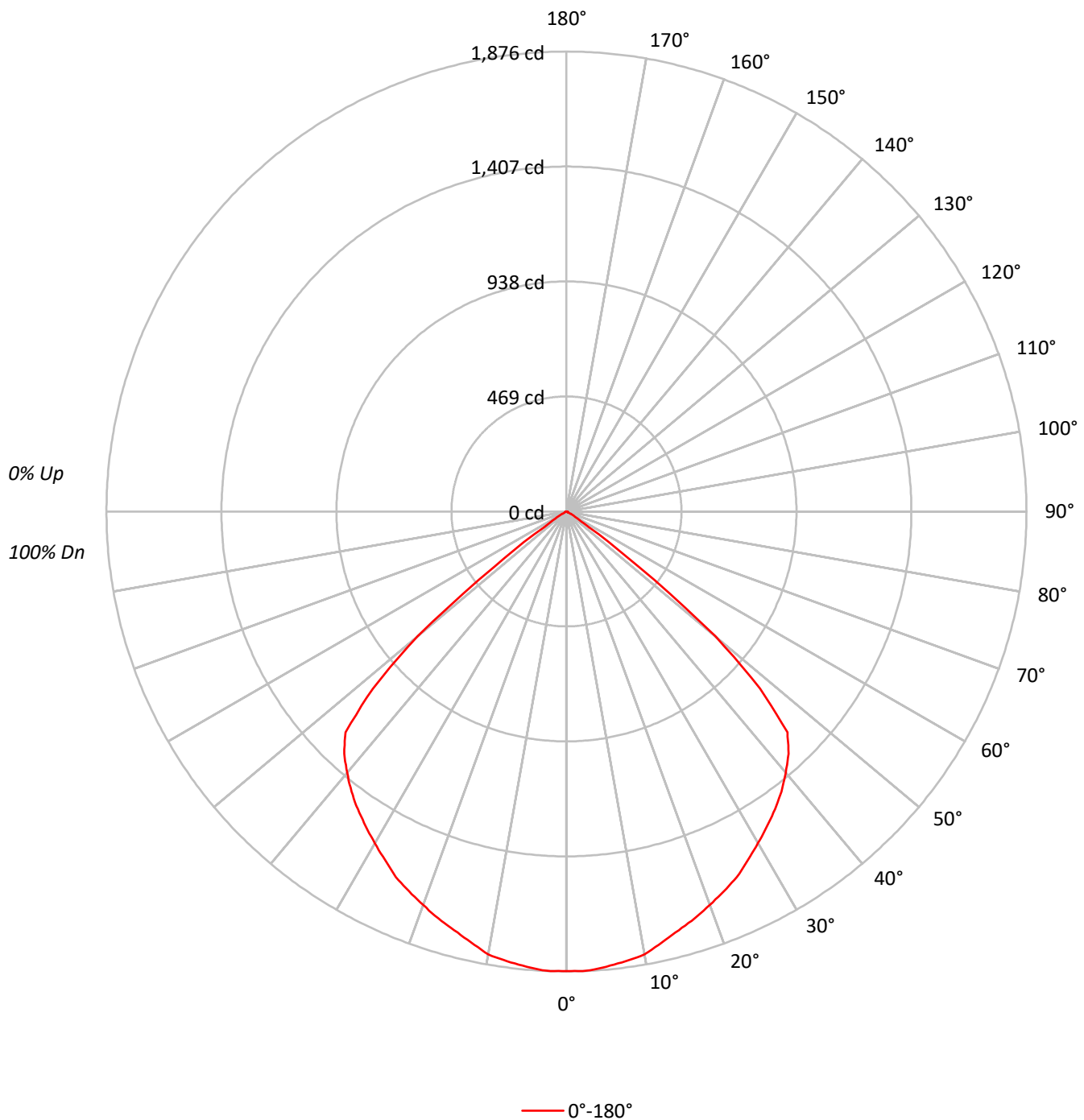
Lumens per Lamp: N/A
Luminaire Lumens: 3500.2 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.39
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

Input Watts (W): 33.5
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
RW	70	50	30	10	70	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		100
1	112	109	106	103	110	107	104	102	103	100	99		99	97	96		91
2	105	99	94	90	103	97	93	89	94	90	87		91	88	85		82
3	98	90	84	79	96	89	83	78	86	81	77		83	79	76		73
4	91	82	75	70	89	81	74	69	78	73	69		76	72	68		65
5	85	75	68	62	83	74	67	62	72	66	61		70	65	61		58
6	79	68	61	56	78	67	60	55	66	60	55		64	59	55		52
7	74	63	55	50	73	62	55	50	61	54	50		59	54	49		47
8	69	58	50	45	68	57	50	45	56	49	45		55	49	45		43
9	65	53	46	41	64	53	46	41	52	45	41		51	45	41		39
10	61	49	42	38	60	49	42	38	48	42	37		47	41	37		36

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	18871
5°	18844
10°	18763
15°	18431
20°	18303
25°	18279
30°	18173
35°	18234
40°	18287
45°	18143
50°	12416
55°	1935
60°	477
65°	100
70°	124
75°	163
80°	244
85°	162

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 18143 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	177.0	5.1
10°-20°	500.0	14.3
20°-30°	757.1	21.6
30°-40°	928.2	26.5
40°-50°	918.9	26.3
50°-60°	204.9	5.9
60°-70°	7.5	0.2
70°-80°	4.4	0.1
80°-90°	2.1	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°	1434.1	41.0
0°-40°	2362.3	67.5
0°-60°	3486.1	99.6
0°-90°	3500.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3500.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1874	
5°	1864	177
15°	1768	500
25°	1645	757
35°	1483	928
45°	1274	919
55°	110	205
65°	4	8
75°	4	4
85°	1	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1874.2
2.5°	1875.6
5°	1864.4
7.5°	1850.4
10°	1835.1
12.5°	1800.2
15°	1768.1
17.5°	1740.2
20°	1708.1
22.5°	1677.4
25°	1645.3
27.5°	1602.0
30°	1563.0
32.5°	1522.5
35°	1483.4
37.5°	1440.2
40°	1391.3
42.5°	1341.1
45°	1274.1
47.5°	1070.4
50°	792.6
52.5°	369.8
55°	110.2
57.5°	53.0
60°	23.7
62.5°	8.4
65°	4.2
67.5°	4.2
70°	4.2
72.5°	4.2
75°	4.2
77.5°	4.2
80°	4.2
82.5°	2.8
85°	1.4
87.5°	1.4
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	4.02	5.32	4.39	5.63	5.95	4.02	5.32	4.39	5.63	5.95
	3H	3.93	5.07	4.31	5.40	5.77	3.93	5.07	4.31	5.40	5.77
	4H	3.91	4.96	4.31	5.31	5.70	3.91	4.96	4.31	5.31	5.70
	6H	3.93	4.89	4.35	5.27	5.66	3.93	4.89	4.35	5.27	5.66
	8H	3.94	4.85	4.37	5.24	5.65	3.94	4.85	4.37	5.24	5.65
	12H	3.92	4.79	4.36	5.18	5.61	3.92	4.79	4.36	5.18	5.61
4H	2H	3.83	4.88	4.23	5.23	5.61	3.83	4.88	4.23	5.23	5.61
	3H	3.76	4.60	4.17	5.01	5.41	3.76	4.60	4.17	5.01	5.41
	4H	3.76	4.50	4.19	4.92	5.37	3.76	4.50	4.19	4.92	5.37
	6H	3.85	4.49	4.32	4.94	5.41	3.85	4.49	4.32	4.94	5.41
	8H	3.88	4.48	4.35	4.93	5.40	3.88	4.48	4.35	4.93	5.40
	12H	3.88	4.41	4.37	4.90	5.37	3.88	4.41	4.37	4.90	5.37
8H	4H	3.67	4.27	4.14	4.72	5.19	3.67	4.27	4.14	4.72	5.19
	6H	3.81	4.31	4.32	4.81	5.29	3.81	4.31	4.32	4.81	5.29
	8H	3.87	4.32	4.40	4.84	5.33	3.87	4.32	4.40	4.84	5.33
	12H	3.90	4.31	4.42	4.80	5.38	3.90	4.31	4.42	4.80	5.38
12H	4H	3.63	4.17	4.12	4.65	5.12	3.63	4.17	4.12	4.65	5.12
	6H	3.78	4.23	4.31	4.75	5.24	3.78	4.23	4.31	4.75	5.24
	8H	3.88	4.28	4.39	4.77	5.35	3.88	4.28	4.39	4.77	5.35