

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: P979320

Luminaire Tested: PRLX-240-927-LL7-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979320
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-LL7-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

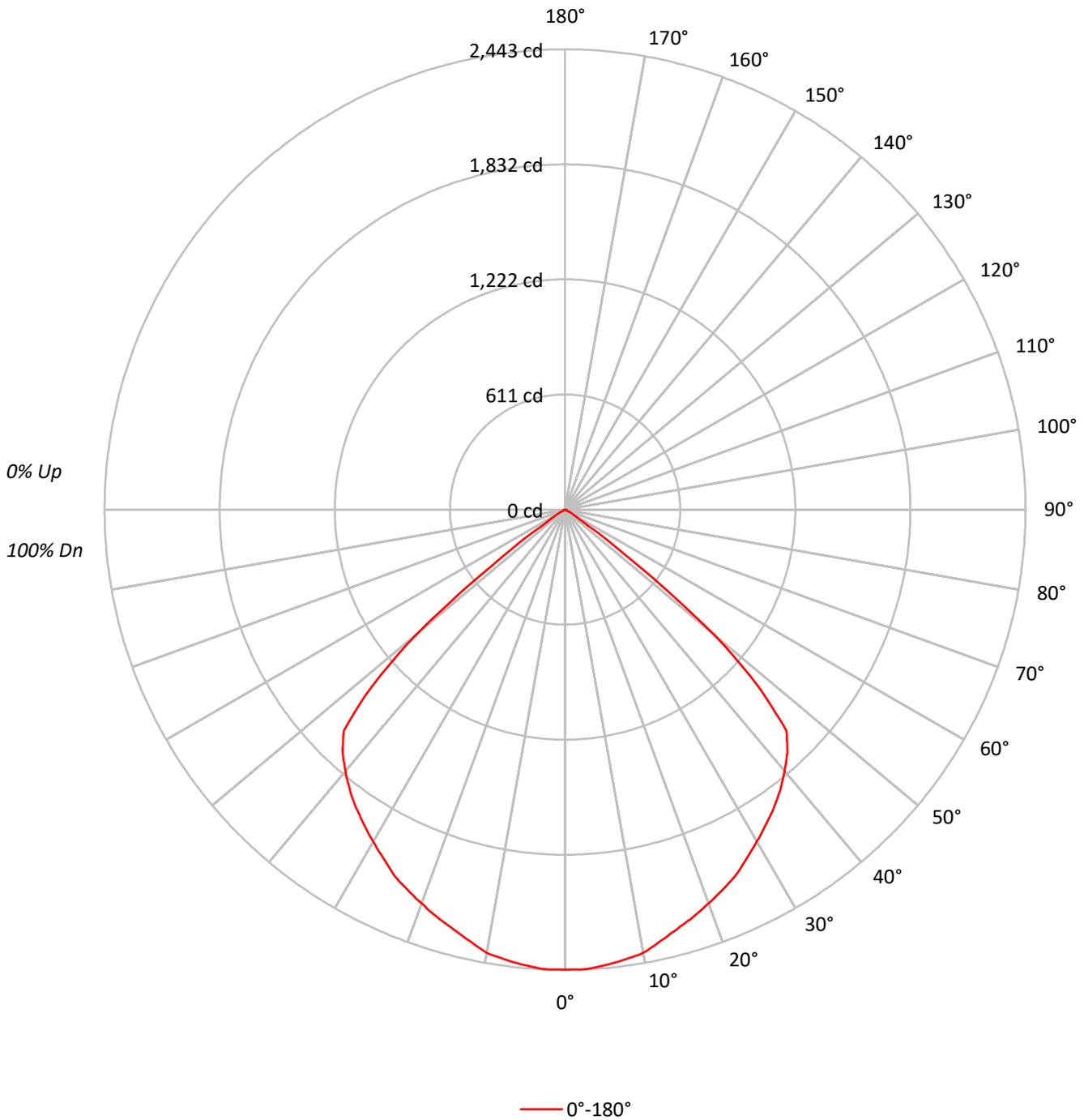
Lumens per Lamp: N/A
Luminaire Lumens: 4558.9 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.39
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

Input Watts (W): 48
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	60	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°	24578
5°	24544
10°	24437
15°	24006
20°	23838
25°	23807
30°	23668
35°	23749
40°	23819
45°	23629
50°	16172
55°	2521
60°	622
65°	131
70°	162
75°	214
80°	319
85°	208

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 23629 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	230.6	5.1
10°-20°	651.2	14.3
20°-30°	986.1	21.6
30°-40°	1208.9	26.5
40°-50°	1196.9	26.3
50°-60°	266.9	5.9
60°-70°	9.8	0.2
70°-80°	5.8	0.1
80°-90°	2.7	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°	1867.8	41.0
0°-40°	3076.7	67.5
0°-60°	4540.5	99.6
0°-90°	4558.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4558.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2441	
5°	2428	231
15°	2303	651
25°	2143	986
35°	1932	1209
45°	1659	1197
55°	144	267
65°	6	10
75°	6	6
85°	2	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2441.0
2.5°	2442.8
5°	2428.3
7.5°	2410.1
10°	2390.1
12.5°	2344.7
15°	2302.9
17.5°	2266.5
20°	2224.7
22.5°	2184.7
25°	2142.9
27.5°	2086.6
30°	2035.7
32.5°	1983.0
35°	1932.1
37.5°	1875.7
40°	1812.1
42.5°	1746.7
45°	1659.4
47.5°	1394.1
50°	1032.4
52.5°	481.7
55°	143.6
57.5°	69.1
60°	30.9
62.5°	10.9
65°	5.5
67.5°	5.5
70°	5.5
72.5°	5.5
75°	5.5
77.5°	5.5
80°	5.5
82.5°	3.6
85°	1.8
87.5°	1.8
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	4.95	6.25	5.31	6.56	6.88	4.95	6.25	5.31	6.56	6.88
	3H	4.86	6.00	5.24	6.33	6.69	4.86	6.00	5.24	6.33	6.69
	4H	4.84	5.89	5.24	6.24	6.62	4.84	5.89	5.24	6.24	6.62
	6H	4.86	5.82	5.27	6.19	6.59	4.86	5.82	5.27	6.19	6.59
	8H	4.86	5.77	5.30	6.17	6.57	4.86	5.77	5.30	6.17	6.57
	12H	4.85	5.72	5.28	6.10	6.53	4.85	5.72	5.28	6.10	6.53
4H	2H	4.75	5.80	5.15	6.15	6.54	4.75	5.80	5.15	6.15	6.54
	3H	4.69	5.53	5.10	5.93	6.34	4.69	5.53	5.10	5.93	6.34
	4H	4.68	5.43	5.12	5.85	6.30	4.68	5.43	5.12	5.85	6.30
	6H	4.78	5.42	5.24	5.87	6.34	4.78	5.42	5.24	5.87	6.34
	8H	4.81	5.41	5.28	5.85	6.33	4.81	5.41	5.28	5.85	6.33
	12H	4.81	5.34	5.29	5.82	6.30	4.81	5.34	5.29	5.82	6.30
8H	4H	4.60	5.20	5.07	5.64	6.12	4.60	5.20	5.07	5.64	6.12
	6H	4.74	5.24	5.25	5.73	6.22	4.74	5.24	5.25	5.73	6.22
	8H	4.80	5.25	5.32	5.77	6.26	4.80	5.25	5.32	5.77	6.26
	12H	4.83	5.23	5.34	5.73	6.30	4.83	5.23	5.34	5.73	6.30
12H	4H	4.56	5.09	5.05	5.58	6.05	4.56	5.09	5.05	5.58	6.05
	6H	4.71	5.16	5.23	5.68	6.17	4.71	5.16	5.23	5.68	6.17
	8H	4.80	5.20	5.32	5.70	6.27	4.80	5.20	5.32	5.70	6.27