

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: P980120

Luminaire Tested: PRLX-242-935-LL7-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980120
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-935-LL7-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6654.8 lumens
Efficiency: N/A
Efficacy: 138.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

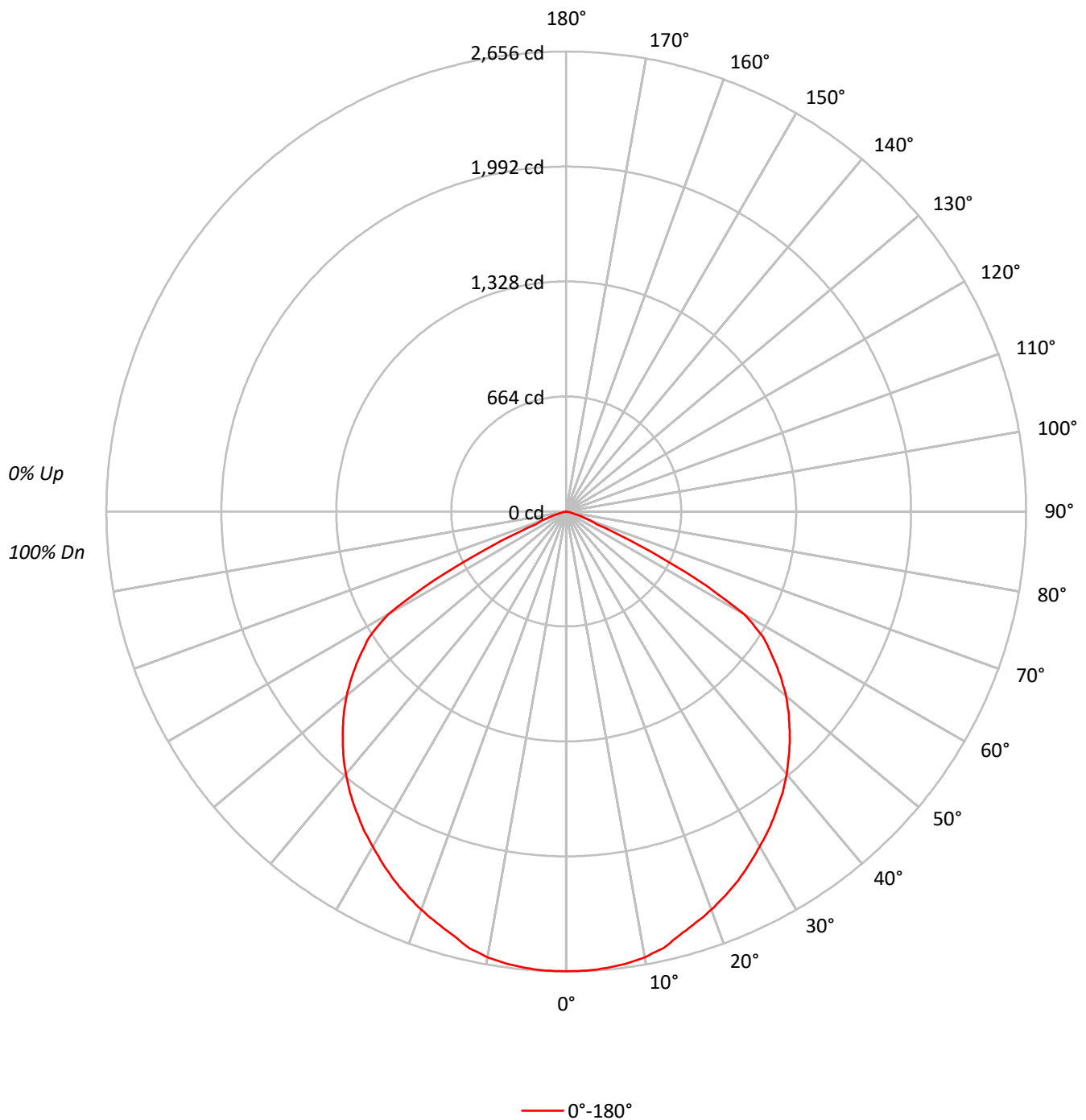
Input Watts (W): 48
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88								
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76								
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65								
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56								
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49								
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43								
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38								
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34								
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30								
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27								

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	11884
5°	11894
10°	11878
15°	11732
20°	11661
25°	11609
30°	11552
35°	11550
40°	11572
45°	11553
50°	11531
55°	11338
60°	10619
65°	4954
70°	1667
75°	517
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Luminance: 11553 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.7	3.8
10°-20°	715.9	10.8
20°-30°	1083.4	16.3
30°-40°	1324.0	19.9
40°-50°	1408.6	21.2
50°-60°	1292.8	19.4
60°-70°	530.5	8.0
70°-80°	47.9	0.7
80°-90°	0.0	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°	2051.0	30.8
0°-40°	3375.0	50.7
0°-60°	6076.4	91.3
0°-90°	6654.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6654.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2656	
5°	2648	252
15°	2532	716
25°	2351	1083
35°	2114	1324
45°	1826	1409
55°	1453	1293
65°	468	531
75°	30	48
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2655.6
2.5°	2653.6
5°	2647.6
7.5°	2635.7
10°	2613.8
12.5°	2583.9
15°	2532.2
17.5°	2490.4
20°	2448.6
22.5°	2400.8
25°	2351.0
27.5°	2293.3
30°	2235.6
32.5°	2177.8
35°	2114.1
37.5°	2050.4
40°	1980.8
42.5°	1905.1
45°	1825.5
47.5°	1743.9
50°	1656.3
52.5°	1558.7
55°	1453.2
57.5°	1347.7
60°	1186.5
62.5°	856.0
65°	467.8
67.5°	187.1
70°	127.4
72.5°	87.6
75°	29.9
77.5°	2.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
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	21.39	22.93	21.76	23.24	23.56	21.39	22.93	21.76	23.24	23.56
	3H	21.37	22.74	21.75	23.07	23.43	21.37	22.74	21.75	23.07	23.43
	4H	21.32	22.60	21.72	22.94	23.32	21.32	22.60	21.72	22.94	23.32
	6H	21.26	22.43	21.67	22.80	23.19	21.26	22.43	21.67	22.80	23.19
	8H	21.23	22.34	21.65	22.73	23.13	21.23	22.34	21.65	22.73	23.13
	12H	21.19	22.26	21.62	22.64	23.07	21.19	22.26	21.62	22.64	23.07
4H	2H	21.44	22.72	21.84	23.07	23.44	21.44	22.72	21.84	23.07	23.44
	3H	21.46	22.49	21.87	22.89	23.29	21.46	22.49	21.87	22.89	23.29
	4H	21.40	22.32	21.83	22.74	23.18	21.40	22.32	21.83	22.74	23.18
	6H	21.34	22.13	21.80	22.58	23.04	21.34	22.13	21.80	22.58	23.04
	8H	21.29	22.03	21.76	22.48	22.95	21.29	22.03	21.76	22.48	22.95
	12H	21.26	21.92	21.74	22.40	22.87	21.26	21.92	21.74	22.40	22.87
8H	4H	21.30	22.04	21.77	22.49	22.95	21.30	22.04	21.77	22.49	22.95
	6H	21.22	21.82	21.71	22.32	22.79	21.22	21.82	21.71	22.32	22.79
	8H	21.16	21.71	21.68	22.22	22.71	21.16	21.71	21.68	22.22	22.71
	12H	21.12	21.61	21.63	22.10	22.67	21.12	21.61	21.63	22.10	22.67
12H	4H	21.27	21.92	21.75	22.40	22.88	21.27	21.92	21.75	22.40	22.88
	6H	21.16	21.71	21.68	22.22	22.71	21.16	21.71	21.68	22.22	22.71
	8H	21.12	21.61	21.63	22.10	22.67	21.12	21.61	21.63	22.10	22.67