

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: P980522

Luminaire Tested: PRLX-243-940-LL7-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980522
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-940-LL7-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4551.5 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

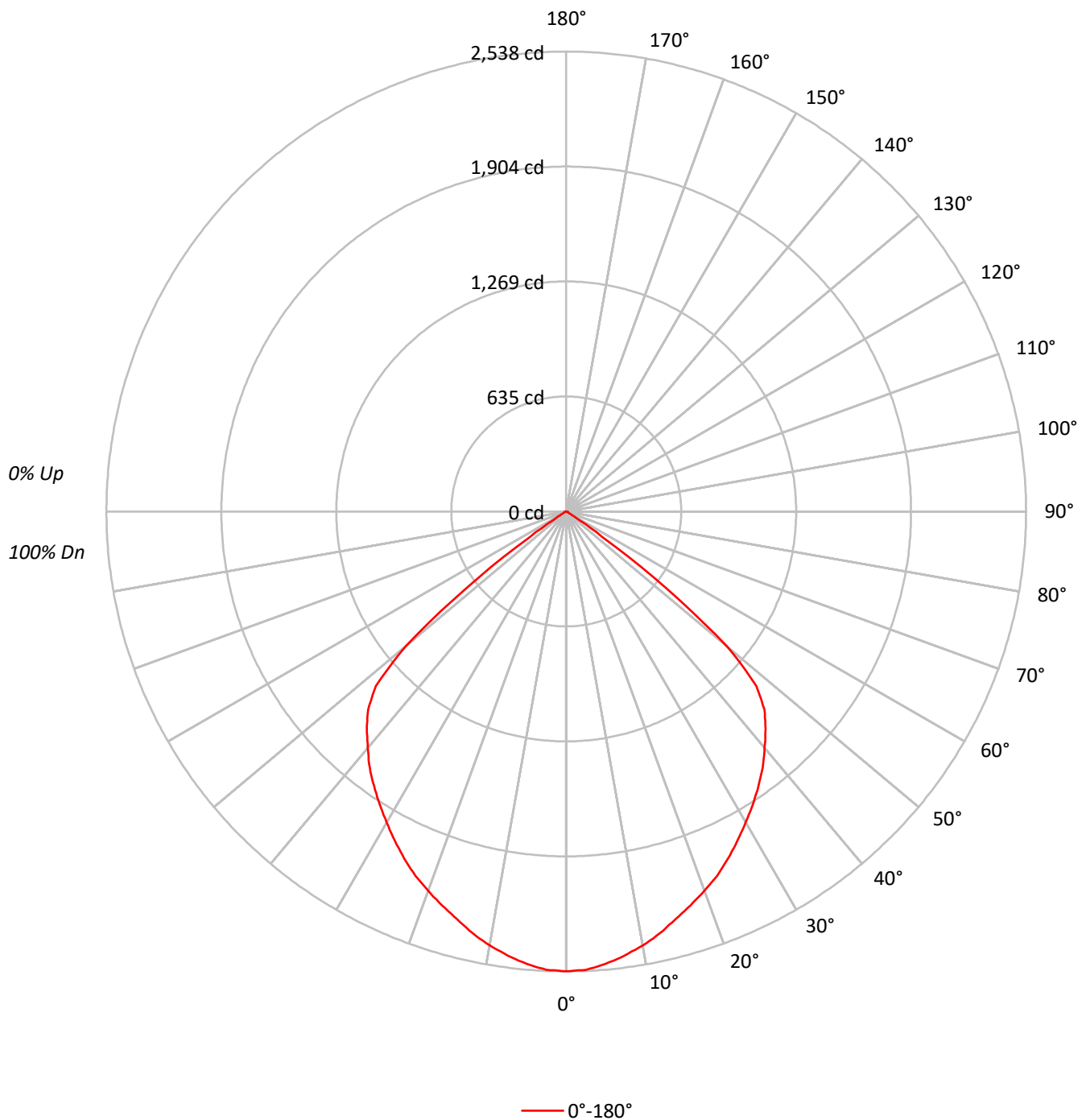
Input Watts (W): 48
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	112	109	106	103	110	107	104	102	103	100	98		99	97	95		95
2	105	99	94	90	103	97	93	89	94	90	87		91	88	85		88
3	98	90	84	79	96	88	83	78	86	81	77		83	79	76		81
4	91	82	75	70	89	80	74	69	78	73	68		76	71	67		74
5	85	74	67	62	83	73	67	62	71	66	61		70	64	60		68
6	79	68	61	55	77	67	60	55	66	59	55		64	58	54		63
7	74	62	55	50	72	62	55	50	60	54	49		59	53	49		58
8	69	57	50	45	68	57	50	45	56	49	45		54	49	44		53
9	65	53	46	41	64	52	46	41	51	45	41		50	45	40		49
10	61	49	42	37	60	49	42	37	48	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	12520
5°	12414
10°	12185
15°	11896
20°	11697
25°	11509
30°	11292
35°	11143
40°	10971
45°	10791
50°	8875
55°	2095
60°	122
65°	120
70°	149
75°	158
80°	116
85°	119

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10791 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.8	5.2
10°-20°	657.7	14.5
20°-30°	973.7	21.4
30°-40°	1157.3	25.4
40°-50°	1162.3	25.5
50°-60°	342.5	7.5
60°-70°	10.5	0.2
70°-80°	7.9	0.2
80°-90°	2.8	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°	1868.2	41.0
0°-40°	3025.6	66.5
0°-60°	4530.3	99.5
0°-90°	4551.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4551.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2538	
5°	2506	237
15°	2329	658
25°	2114	974
35°	1850	1157
45°	1546	1162
55°	244	342
65°	10	10
75°	8	8
85°	2	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	2537.5
2.5°	2531.3
5°	2506.5
7.5°	2471.4
10°	2432.2
12.5°	2384.7
15°	2329.0
17.5°	2279.4
20°	2227.8
22.5°	2176.2
25°	2114.2
27.5°	2048.2
30°	1982.1
32.5°	1916.0
35°	1850.0
37.5°	1781.8
40°	1703.4
42.5°	1629.0
45°	1546.5
47.5°	1424.6
50°	1156.2
52.5°	697.9
55°	243.6
57.5°	47.5
60°	12.4
62.5°	10.3
65°	10.3
67.5°	10.3
70°	10.3
72.5°	8.3
75°	8.3
77.5°	6.2
80°	4.1
82.5°	4.1
85°	2.1
87.5°	2.1
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	0.00	1.06	0.11	1.38	1.69	0.00	1.06	0.11	1.38	1.69
	3H	0.00	1.10	0.33	1.43	1.80	0.00	1.10	0.33	1.43	1.80
	4H	0.11	1.18	0.52	1.53	1.91	0.11	1.18	0.52	1.53	1.91
	6H	0.22	1.19	0.63	1.56	1.96	0.22	1.19	0.63	1.56	1.96
	8H	0.27	1.19	0.70	1.58	1.98	0.27	1.19	0.70	1.58	1.98
	12H	0.29	1.17	0.72	1.55	1.98	0.29	1.17	0.72	1.55	1.98
4H	2H	0.00	0.69	0.03	1.04	1.43	0.00	0.69	0.03	1.04	1.43
	3H	0.00	0.83	0.39	1.24	1.64	0.00	0.83	0.39	1.24	1.64
	4H	0.25	1.01	0.69	1.43	1.87	0.25	1.01	0.69	1.43	1.87
	6H	0.45	1.10	0.91	1.54	2.01	0.45	1.10	0.91	1.54	2.01
	8H	0.54	1.15	1.01	1.59	2.07	0.54	1.15	1.01	1.59	2.07
	12H	0.60	1.14	1.09	1.62	2.10	0.60	1.14	1.09	1.62	2.10
8H	4H	0.28	0.89	0.75	1.34	1.81	0.28	0.89	0.75	1.34	1.81
	6H	0.53	1.03	1.03	1.53	2.01	0.53	1.03	1.03	1.53	2.01
	8H	0.68	1.14	1.21	1.66	2.15	0.68	1.14	1.21	1.66	2.15
	12H	0.80	1.21	1.32	1.71	2.28	0.80	1.21	1.32	1.71	2.28
12H	4H	0.25	0.79	0.74	1.28	1.75	0.25	0.79	0.74	1.28	1.75
	6H	0.52	0.97	1.04	1.49	1.98	0.52	0.97	1.04	1.49	1.98
	8H	0.72	1.13	1.24	1.63	2.20	0.72	1.13	1.24	1.63	2.20

END OF REPORT