

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: P980442

Luminaire Tested: PRLX-243-935-LL7-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980442
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-243-935-LL7-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

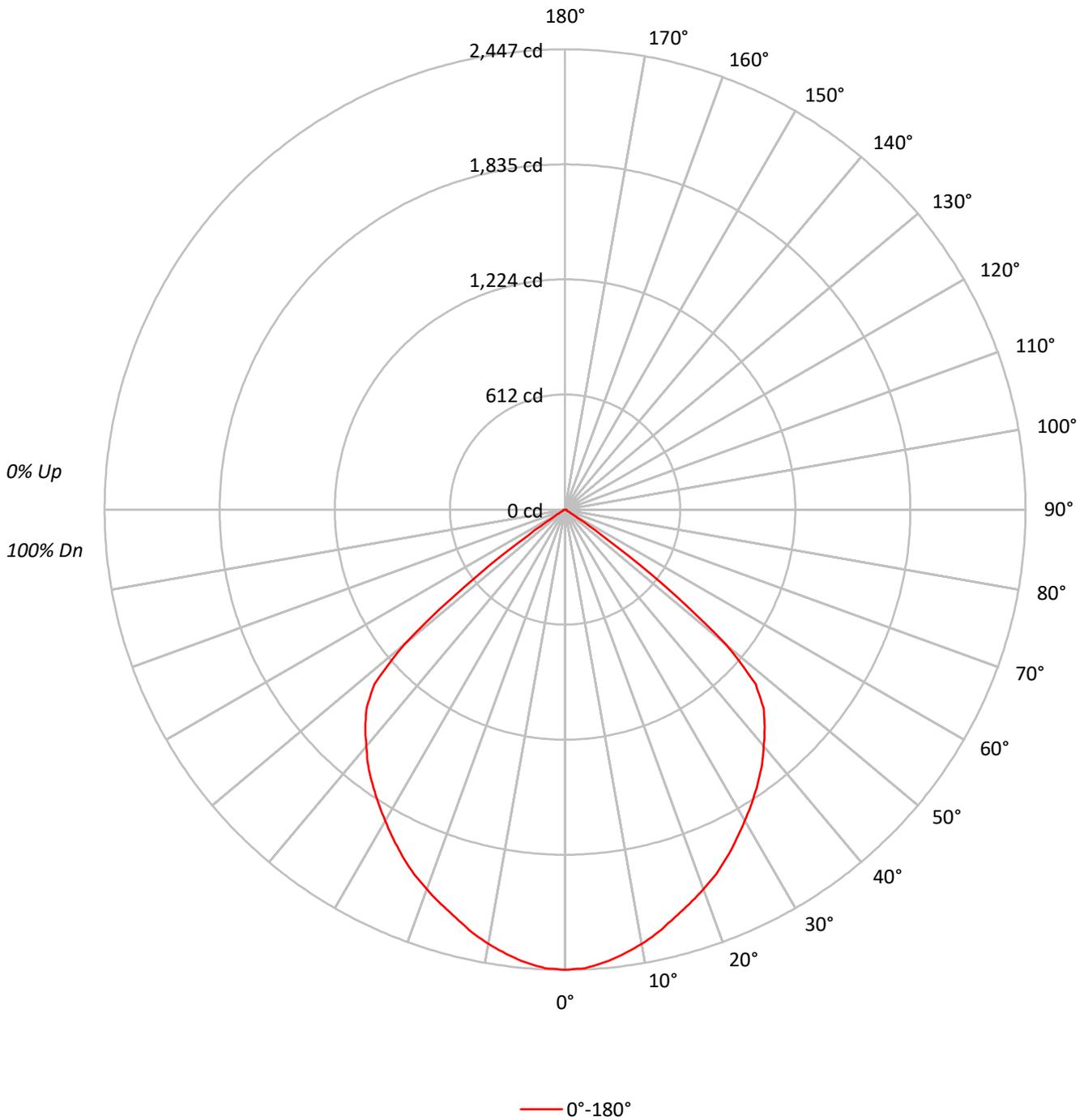
Lumens per Lamp: N/A
Luminaire Lumens: 4388.5 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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									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	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	98	99	97	95	95	94	93	91																												
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81																												
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73																												
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65																												
5	85	74	67	62	83	73	67	62	71	66	61	70	64	60	68	63	60	58																												
6	79	68	61	55	77	67	60	55	66	59	55	64	58	54	63	58	54	52																												
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47																												
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	43																												
9	65	53	46	41	64	52	46	41	51	45	41	50	45	40	49	44	40	39																												
10	61	49	42	37	60	49	42	37	48	41	37	47	41	37	46	41	37	35																												

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	12071
5°	11969
10°	11748
15°	11470
20°	11278
25°	11097
30°	10888
35°	10743
40°	10577
45°	10403
50°	8557
55°	2021
60°	117
65°	117
70°	144
75°	153
80°	114
85°	113

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10403 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.4	5.2
10°-20°	634.1	14.5
20°-30°	938.8	21.4
30°-40°	1115.9	25.4
40°-50°	1120.6	25.5
50°-60°	330.2	7.5
60°-70°	10.2	0.2
70°-80°	7.7	0.2
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°	1801.3	41.0
0°-40°	2917.2	66.5
0°-60°	4368.0	99.5
0°-90°	4388.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4388.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2447	
5°	2417	228
15°	2246	634
25°	2038	939
35°	1784	1116
45°	1491	1121
55°	235	330
65°	10	10
75°	8	8
85°	2	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2446.6
2.5°	2440.6
5°	2416.7
7.5°	2382.9
10°	2345.0
12.5°	2299.3
15°	2245.5
17.5°	2197.7
20°	2148.0
22.5°	2098.2
25°	2038.5
27.5°	1974.8
30°	1911.1
32.5°	1847.4
35°	1783.7
37.5°	1718.0
40°	1642.3
42.5°	1570.7
45°	1491.0
47.5°	1373.6
50°	1114.8
52.5°	672.9
55°	234.9
57.5°	45.8
60°	11.9
62.5°	10.0
65°	10.0
67.5°	10.0
70°	10.0
72.5°	8.0
75°	8.0
77.5°	6.0
80°	4.0
82.5°	4.0
85°	2.0
87.5°	2.0
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	0.00	0.94	0.00	1.25	1.56	0.00	0.94	0.00	1.25	1.56
	3H	0.00	0.98	0.21	1.31	1.67	0.00	0.98	0.21	1.31	1.67
	4H	0.00	1.05	0.39	1.41	1.79	0.00	1.05	0.39	1.41	1.79
	6H	0.10	1.07	0.51	1.44	1.84	0.10	1.07	0.51	1.44	1.84
	8H	0.15	1.07	0.58	1.46	1.86	0.15	1.07	0.58	1.46	1.86
	12H	0.17	1.05	0.61	1.43	1.87	0.17	1.05	0.61	1.43	1.87
4H	2H	0.00	0.57	0.00	0.92	1.30	0.00	0.57	0.00	0.92	1.30
	3H	0.00	0.71	0.27	1.11	1.52	0.00	0.71	0.27	1.11	1.52
	4H	0.13	0.89	0.57	1.31	1.75	0.13	0.89	0.57	1.31	1.75
	6H	0.33	0.98	0.79	1.43	1.89	0.33	0.98	0.79	1.43	1.89
	8H	0.42	1.03	0.89	1.48	1.95	0.42	1.03	0.89	1.48	1.95
	12H	0.48	1.02	0.97	1.51	1.98	0.48	1.02	0.97	1.51	1.98
8H	4H	0.16	0.77	0.63	1.22	1.69	0.16	0.77	0.63	1.22	1.69
	6H	0.41	0.92	0.92	1.41	1.89	0.41	0.92	0.92	1.41	1.89
	8H	0.57	1.03	1.10	1.55	2.04	0.57	1.03	1.10	1.55	2.04
	12H	0.69	1.10	1.21	1.60	2.17	0.69	1.10	1.21	1.60	2.17
12H	4H	0.13	0.67	0.62	1.16	1.63	0.13	0.67	0.62	1.16	1.63
	6H	0.40	0.86	0.93	1.37	1.87	0.40	0.86	0.93	1.37	1.87
	8H	0.61	1.02	1.12	1.51	2.09	0.61	1.02	1.12	1.51	2.09