

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: P980372

Luminaire Tested: PRLX-243-930-LL8-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980372
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-243-930-LL8-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

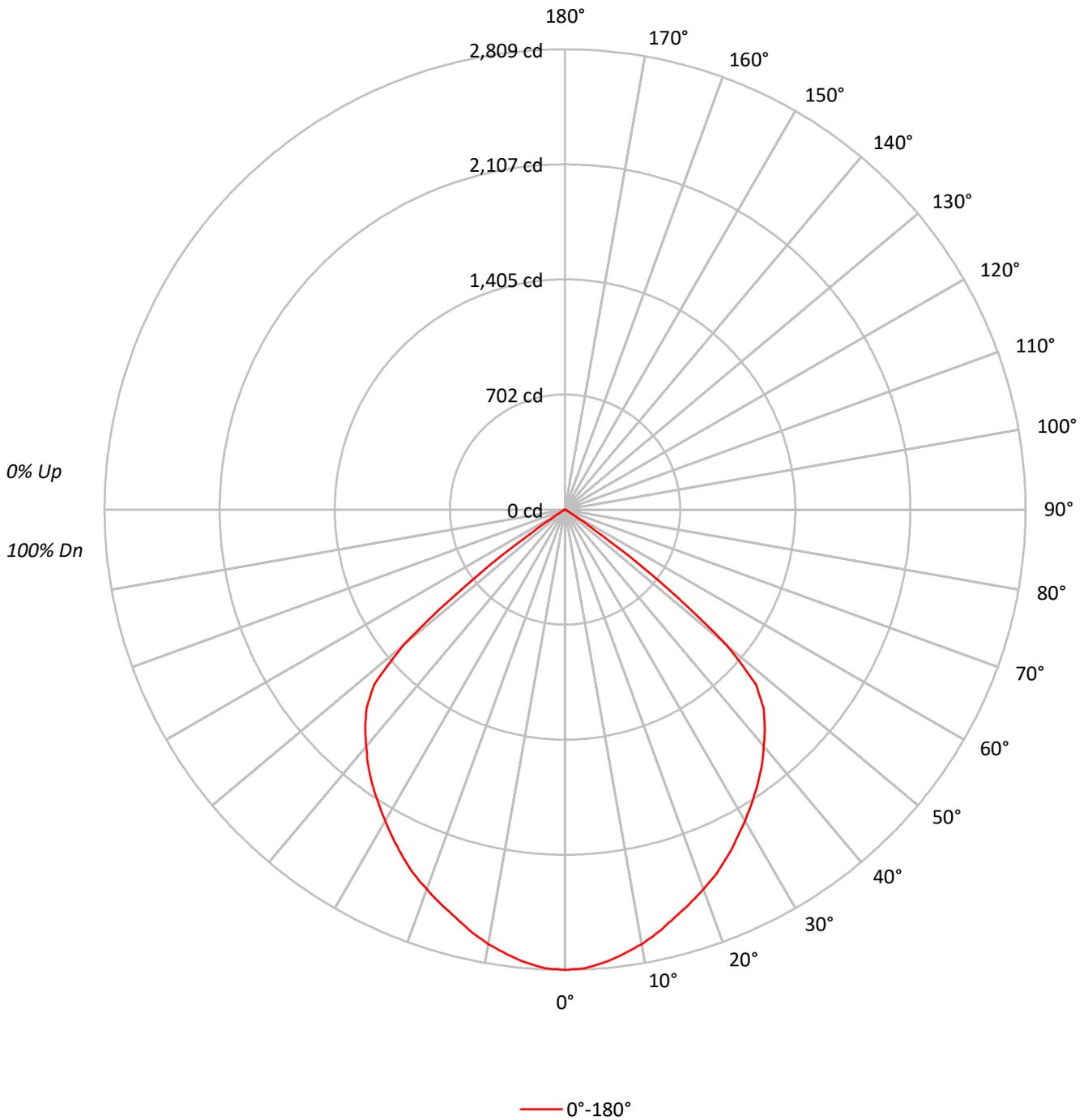
Lumens per Lamp: N/A
Luminaire Lumens: 5038.4 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
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	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	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°	13859
5°	13742
10°	13489
15°	13169
20°	12948
25°	12741
30°	12500
35°	12335
40°	12144
45°	11945
50°	9824
55°	2320
60°	135
65°	133
70°	164
75°	173
80°	131
85°	130

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11945 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.2	5.2
10°-20°	728.1	14.5
20°-30°	1077.8	21.4
30°-40°	1281.1	25.4
40°-50°	1286.6	25.5
50°-60°	379.1	7.5
60°-70°	11.6	0.2
70°-80°	8.7	0.2
80°-90°	3.1	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°	2068.1	41.0
0°-40°	3349.2	66.5
0°-60°	5014.9	99.5
0°-90°	5038.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5038.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2809	
5°	2775	262
15°	2578	728
25°	2340	1078
35°	2048	1281
45°	1712	1287
55°	270	379
65°	11	12
75°	9	9
85°	2	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2808.9
2.5°	2802.1
5°	2774.7
7.5°	2735.8
10°	2692.4
12.5°	2639.8
15°	2578.1
17.5°	2523.3
20°	2466.1
22.5°	2409.0
25°	2340.4
27.5°	2267.3
30°	2194.1
32.5°	2121.0
35°	2047.9
37.5°	1972.4
40°	1885.6
42.5°	1803.3
45°	1711.9
47.5°	1577.0
50°	1279.9
52.5°	772.5
55°	269.7
57.5°	52.6
60°	13.7
62.5°	11.4
65°	11.4
67.5°	11.4
70°	11.4
72.5°	9.1
75°	9.1
77.5°	6.9
80°	4.6
82.5°	4.6
85°	2.3
87.5°	2.3
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	0.10	1.42	0.47	1.73	2.05	0.10	1.42	0.47	1.73	2.05
	3H	0.31	1.46	0.69	1.79	2.15	0.31	1.46	0.69	1.79	2.15
	4H	0.46	1.53	0.87	1.88	2.26	0.46	1.53	0.87	1.88	2.26
	6H	0.57	1.55	0.99	1.92	2.31	0.57	1.55	0.99	1.92	2.31
	8H	0.62	1.54	1.05	1.93	2.34	0.62	1.54	1.05	1.93	2.34
	12H	0.65	1.53	1.08	1.91	2.34	0.65	1.53	1.08	1.91	2.34
4H	2H	0.00	1.05	0.39	1.40	1.78	0.00	1.05	0.39	1.40	1.78
	3H	0.33	1.18	0.74	1.59	1.99	0.33	1.18	0.74	1.59	1.99
	4H	0.60	1.36	1.04	1.78	2.22	0.60	1.36	1.04	1.78	2.22
	6H	0.80	1.45	1.26	1.90	2.36	0.80	1.45	1.26	1.90	2.36
	8H	0.89	1.50	1.36	1.95	2.42	0.89	1.50	1.36	1.95	2.42
	12H	0.96	1.49	1.44	1.98	2.45	0.96	1.49	1.44	1.98	2.45
8H	4H	0.63	1.24	1.10	1.69	2.16	0.63	1.24	1.10	1.69	2.16
	6H	0.88	1.39	1.39	1.88	2.36	0.88	1.39	1.39	1.88	2.36
	8H	1.04	1.50	1.57	2.02	2.51	1.04	1.50	1.57	2.02	2.51
	12H	1.16	1.57	1.68	2.07	2.64	1.16	1.57	1.68	2.07	2.64
12H	4H	0.60	1.14	1.09	1.62	2.10	0.60	1.14	1.09	1.62	2.10
	6H	0.87	1.33	1.40	1.84	2.34	0.87	1.33	1.40	1.84	2.34
	8H	1.08	1.49	1.60	1.99	2.56	1.08	1.49	1.60	1.99	2.56