

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: P980292

Luminaire Tested: PRLX-243-927-LL8-F-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980292  
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-243-927-LL8-F-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

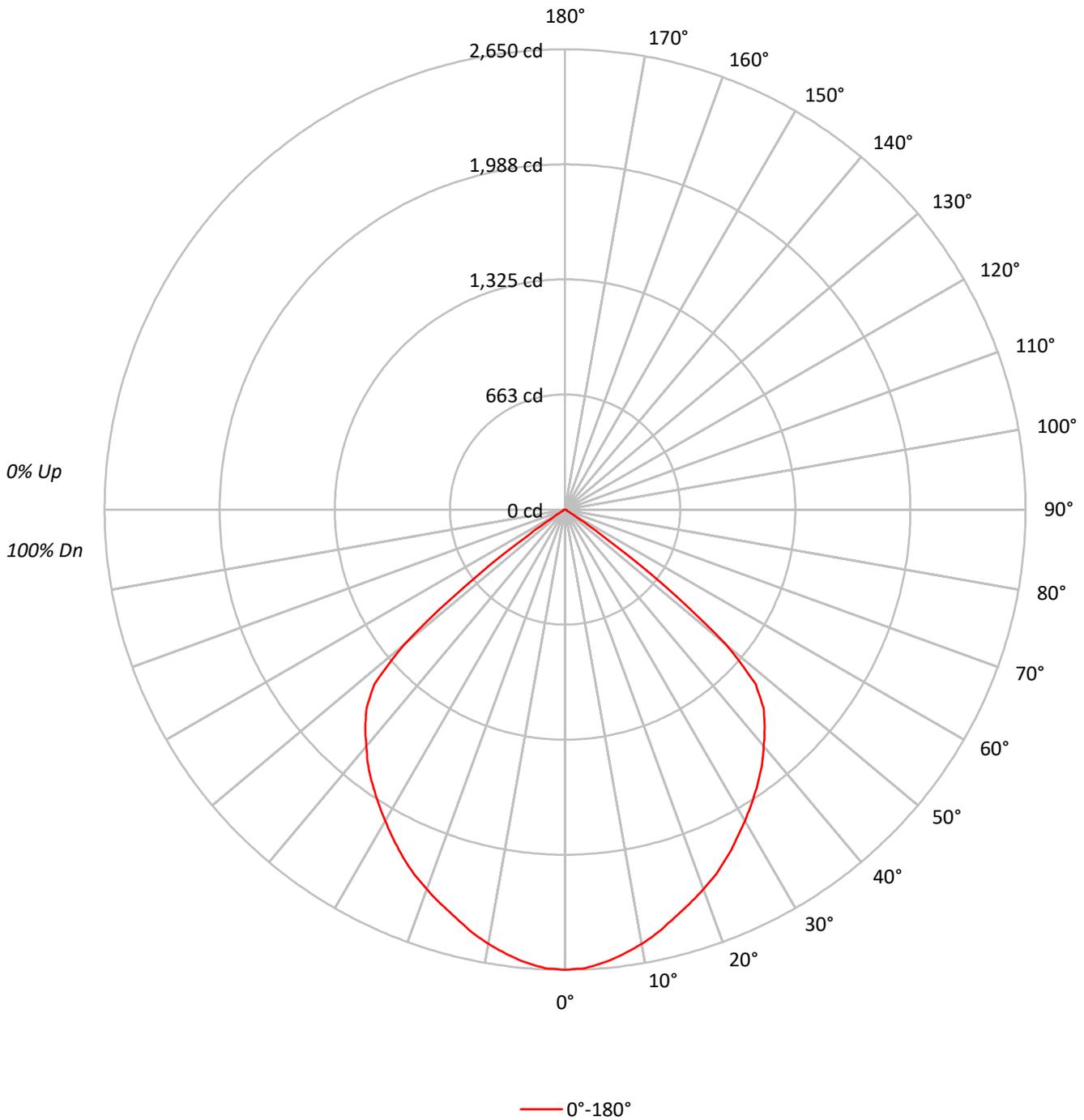
Lumens per Lamp: N/A  
Luminaire Lumens: 4752.7 lumens  
Efficiency: N/A  
Efficacy: 77.3 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct

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°	13073
5°	12963
10°	12724
15°	12422
20°	12214
25°	12018
30°	11791
35°	11635
40°	11455
45°	11267
50°	9267
55°	2188
60°	127
65°	126
70°	156
75°	164
80°	122
85°	125

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11267 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	247.3	5.2
10°-20°	686.8	14.5
20°-30°	1016.7	21.4
30°-40°	1208.5	25.4
40°-50°	1213.6	25.5
50°-60°	357.6	7.5
60°-70°	11.0	0.2
70°-80°	8.2	0.2
80°-90°	3.0	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°	1950.8	41.0
0°-40°	3159.2	66.5
0°-60°	4730.5	99.5
0°-90°	4752.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4752.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2650	
5°	2617	247
15°	2432	687
25°	2208	1017
35°	1932	1208
45°	1615	1214
55°	254	358
65°	11	11
75°	9	8
85°	2	3
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2649.6
2.5°	2643.2
5°	2617.3
7.5°	2580.6
10°	2539.7
12.5°	2490.1
15°	2431.9
17.5°	2380.1
20°	2326.2
22.5°	2272.3
25°	2207.7
27.5°	2138.7
30°	2069.7
32.5°	2000.7
35°	1931.7
37.5°	1860.6
40°	1778.6
42.5°	1701.0
45°	1614.8
47.5°	1487.6
50°	1207.3
52.5°	728.7
55°	254.4
57.5°	49.6
60°	12.9
62.5°	10.8
65°	10.8
67.5°	10.8
70°	10.8
72.5°	8.6
75°	8.6
77.5°	6.5
80°	4.3
82.5°	4.3
85°	2.2
87.5°	2.2
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	1.21	0.26	1.53	1.84	0.00	1.21	0.26	1.53	1.84
	3H	0.10	1.25	0.48	1.58	1.95	0.10	1.25	0.48	1.58	1.95
	4H	0.26	1.33	0.67	1.68	2.06	0.26	1.33	0.67	1.68	2.06
	6H	0.37	1.34	0.78	1.71	2.11	0.37	1.34	0.78	1.71	2.11
	8H	0.42	1.34	0.85	1.73	2.13	0.42	1.34	0.85	1.73	2.13
	12H	0.44	1.32	0.88	1.71	2.14	0.44	1.32	0.88	1.71	2.14
4H	2H	0.00	0.84	0.18	1.19	1.58	0.00	0.84	0.18	1.19	1.58
	3H	0.13	0.98	0.54	1.39	1.79	0.13	0.98	0.54	1.39	1.79
	4H	0.40	1.16	0.84	1.58	2.02	0.40	1.16	0.84	1.58	2.02
	6H	0.60	1.25	1.06	1.69	2.16	0.60	1.25	1.06	1.69	2.16
	8H	0.69	1.30	1.16	1.74	2.22	0.69	1.30	1.16	1.74	2.22
	12H	0.75	1.29	1.24	1.77	2.25	0.75	1.29	1.24	1.77	2.25
8H	4H	0.43	1.04	0.90	1.49	1.96	0.43	1.04	0.90	1.49	1.96
	6H	0.68	1.18	1.18	1.68	2.16	0.68	1.18	1.18	1.68	2.16
	8H	0.84	1.29	1.36	1.81	2.30	0.84	1.29	1.36	1.81	2.30
	12H	0.96	1.37	1.47	1.86	2.43	0.96	1.37	1.47	1.86	2.43
12H	4H	0.40	0.94	0.89	1.42	1.90	0.40	0.94	0.89	1.42	1.90
	6H	0.67	1.12	1.19	1.64	2.13	0.67	1.12	1.19	1.64	2.13
	8H	0.87	1.28	1.39	1.78	2.35	0.87	1.28	1.39	1.78	2.35