

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: P979972

Luminaire Tested: PRLX-242-927-LL8-F-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P979972  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-27)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-242-927-LL8-F-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

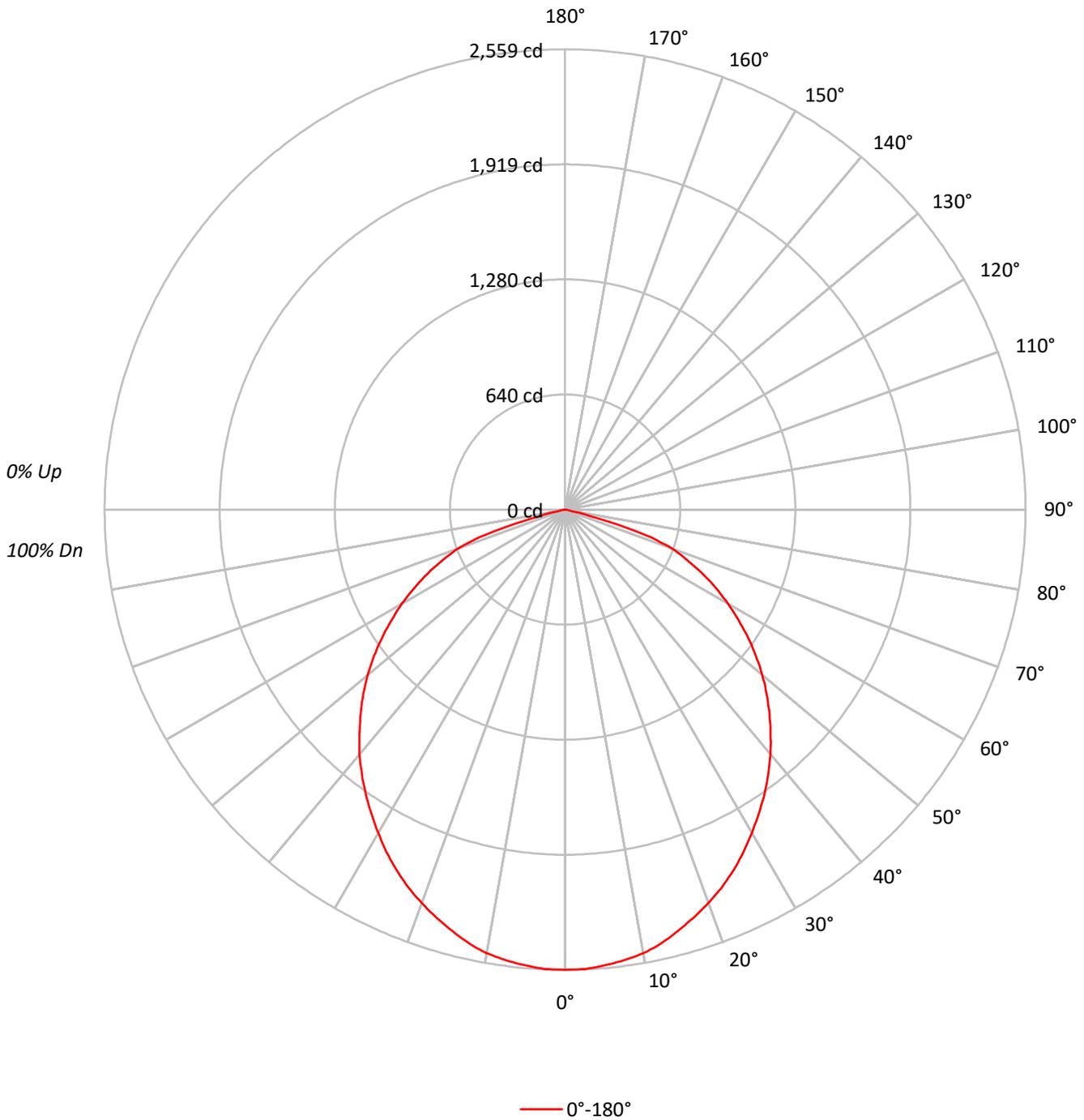
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6589.8 lumens  
Efficiency: N/A  
Efficacy: 107.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33  
Luminous Opening: Circular (Dia: 1.75' 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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	11452
5°	11428
10°	11384
15°	11237
20°	11089
25°	10933
30°	10729
35°	10553
40°	10378
45°	10165
50°	9966
55°	9689
60°	9358
65°	8927
70°	8265
75°	3244
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10165 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	241.6	3.7
10°-20°	684.2	10.4
20°-30°	1019.3	15.5
30°-40°	1208.0	18.3
40°-50°	1239.4	18.8
50°-60°	1109.1	16.8
60°-70°	832.0	12.6
70°-80°	256.2	3.9
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°	1945.1	29.5
0°-40°	3153.1	47.8
0°-60°	5501.6	83.5
0°-90°	6589.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6589.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2559	
5°	2544	242
15°	2425	684
25°	2214	1019
35°	1932	1208
45°	1606	1239
55°	1242	1109
65°	843	832
75°	188	256
85°	0	0
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2559.1
2.5°	2556.9
5°	2544.0
7.5°	2526.7
10°	2505.2
12.5°	2470.7
15°	2425.4
17.5°	2378.0
20°	2328.4
22.5°	2274.5
25°	2214.1
27.5°	2147.3
30°	2076.2
32.5°	2002.9
35°	1931.7
37.5°	1854.1
40°	1776.5
42.5°	1690.2
45°	1606.2
47.5°	1519.9
50°	1431.5
52.5°	1336.7
55°	1241.8
57.5°	1142.6
60°	1045.6
62.5°	944.3
65°	843.0
67.5°	737.3
70°	631.7
72.5°	467.8
75°	187.6
77.5°	8.6
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	20.23	21.82	20.59	22.13	22.44	20.23	21.82	20.59	22.13	22.44
	3H	21.97	23.40	22.35	23.73	24.09	21.97	23.40	22.35	23.73	24.09
	4H	22.17	23.51	22.57	23.86	24.24	22.17	23.51	22.57	23.86	24.24
	6H	22.11	23.35	22.52	23.71	24.11	22.11	23.35	22.52	23.71	24.11
	8H	22.08	23.26	22.50	23.65	24.05	22.08	23.26	22.50	23.65	24.05
	12H	22.05	23.18	22.48	23.56	23.99	22.05	23.18	22.48	23.56	23.99
4H	2H	20.86	22.20	21.26	22.55	22.93	20.86	22.20	21.26	22.55	22.93
	3H	22.78	23.88	23.19	24.28	24.68	22.78	23.88	23.19	24.28	24.68
	4H	22.96	23.95	23.39	24.37	24.80	22.96	23.95	23.39	24.37	24.80
	6H	22.91	23.77	23.36	24.21	24.67	22.91	23.77	23.36	24.21	24.67
	8H	22.87	23.67	23.33	24.11	24.58	22.87	23.67	23.33	24.11	24.58
	12H	22.84	23.56	23.32	24.03	24.50	22.84	23.56	23.32	24.03	24.50
8H	4H	23.00	23.80	23.46	24.24	24.71	23.00	23.80	23.46	24.24	24.71
	6H	22.93	23.58	23.42	24.07	24.55	22.93	23.58	23.42	24.07	24.55
	8H	22.88	23.47	23.40	23.98	24.46	22.88	23.47	23.40	23.98	24.46
	12H	22.86	23.37	23.37	23.86	24.43	22.86	23.37	23.37	23.86	24.43
12H	4H	22.97	23.68	23.45	24.16	24.63	22.97	23.68	23.45	24.16	24.63
	6H	22.88	23.47	23.39	23.98	24.46	22.88	23.47	23.39	23.98	24.46
	8H	22.86	23.37	23.37	23.86	24.43	22.86	23.37	23.37	23.86	24.43