

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: P979970

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

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P979970  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-26)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-242-927-LL8-C-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

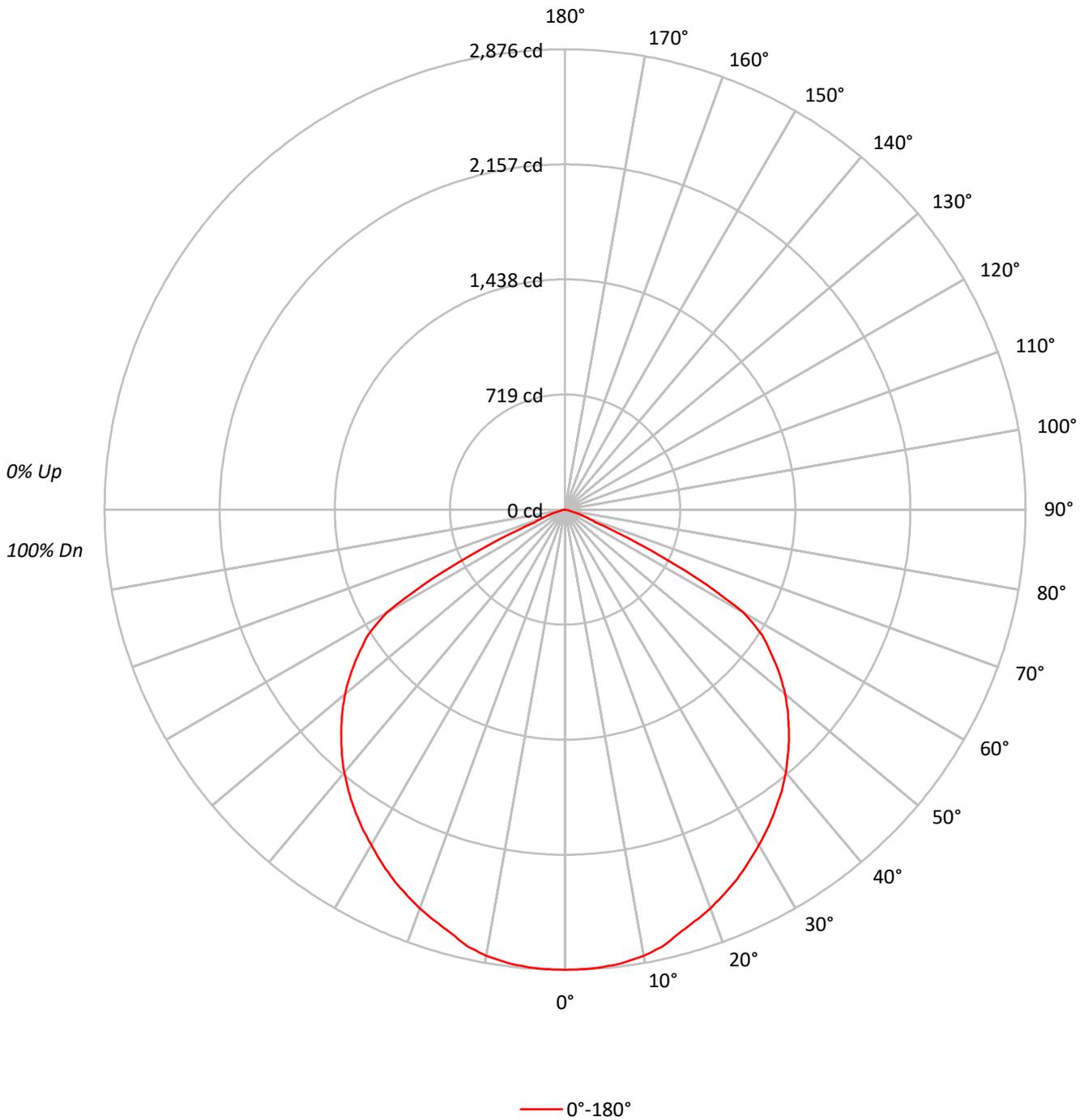
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7207.0 lumens  
Efficiency: N/A  
Efficacy: 117.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39  
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																		
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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88																												
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76																												
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																												
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56																												
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																												
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43																												
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38																												
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34																												
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																												
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27																												

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

	0°
0°	12870
5°	12881
10°	12863
15°	12705
20°	12629
25°	12572
30°	12511
35°	12508
40°	12531
45°	12512
50°	12488
55°	12279
60°	11500
65°	5364
70°	1806
75°	558
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12512 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	272.6	3.8
10°-20°	775.3	10.8
20°-30°	1173.3	16.3
30°-40°	1433.9	19.9
40°-50°	1525.5	21.2
50°-60°	1400.1	19.4
60°-70°	574.6	8.0
70°-80°	51.9	0.7
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°	2221.2	30.8
0°-40°	3655.1	50.7
0°-60°	6580.6	91.3
0°-90°	7207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7207.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2876	
5°	2867	273
15°	2742	775
25°	2546	1173
35°	2290	1434
45°	1977	1525
55°	1574	1400
65°	507	575
75°	32	52
85°	0	0
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2876.0
2.5°	2873.8
5°	2867.4
7.5°	2854.4
10°	2830.7
12.5°	2798.4
15°	2742.3
17.5°	2697.1
20°	2651.8
22.5°	2600.0
25°	2546.1
27.5°	2483.6
30°	2421.1
32.5°	2358.6
35°	2289.6
37.5°	2220.6
40°	2145.1
42.5°	2063.2
45°	1977.0
47.5°	1888.6
50°	1793.7
52.5°	1688.1
55°	1573.8
57.5°	1459.6
60°	1284.9
62.5°	927.0
65°	506.6
67.5°	202.7
70°	138.0
72.5°	94.9
75°	32.3
77.5°	2.2
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	21.67	23.20	22.03	23.52	23.83	21.67	23.20	22.03	23.52	23.83
	3H	21.65	23.02	22.03	23.34	23.71	21.65	23.02	22.03	23.34	23.71
	4H	21.60	22.87	22.00	23.22	23.60	21.60	22.87	22.00	23.22	23.60
	6H	21.54	22.71	21.95	23.07	23.47	21.54	22.71	21.95	23.07	23.47
	8H	21.50	22.61	21.93	23.00	23.41	21.50	22.61	21.93	23.00	23.41
	12H	21.47	22.53	21.90	22.92	23.34	21.47	22.53	21.90	22.92	23.34
4H	2H	21.72	22.99	22.12	23.34	23.72	21.72	22.99	22.12	23.34	23.72
	3H	21.74	22.77	22.15	23.17	23.57	21.74	22.77	22.15	23.17	23.57
	4H	21.68	22.60	22.11	23.01	23.45	21.68	22.60	22.11	23.01	23.45
	6H	21.62	22.41	22.07	22.85	23.31	21.62	22.41	22.07	22.85	23.31
	8H	21.57	22.31	22.04	22.76	23.22	21.57	22.31	22.04	22.76	23.22
	12H	21.54	22.19	22.02	22.67	23.15	21.54	22.19	22.02	22.67	23.15
8H	4H	21.58	22.32	22.04	22.76	23.23	21.58	22.32	22.04	22.76	23.23
	6H	21.49	22.10	21.99	22.59	23.07	21.49	22.10	21.99	22.59	23.07
	8H	21.44	21.98	21.95	22.50	22.98	21.44	21.98	21.95	22.50	22.98
	12H	21.40	21.89	21.91	22.38	22.94	21.40	21.89	21.91	22.38	22.94
12H	4H	21.54	22.20	22.03	22.68	23.15	21.54	22.20	22.03	22.68	23.15
	6H	21.44	21.98	21.95	22.50	22.98	21.44	21.98	21.95	22.50	22.98
	8H	21.40	21.89	21.91	22.38	22.94	21.40	21.89	21.91	22.38	22.94