

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: P979962

Luminaire Tested: PRLX-242-927-LL7-F-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P979962  
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-LL7-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**

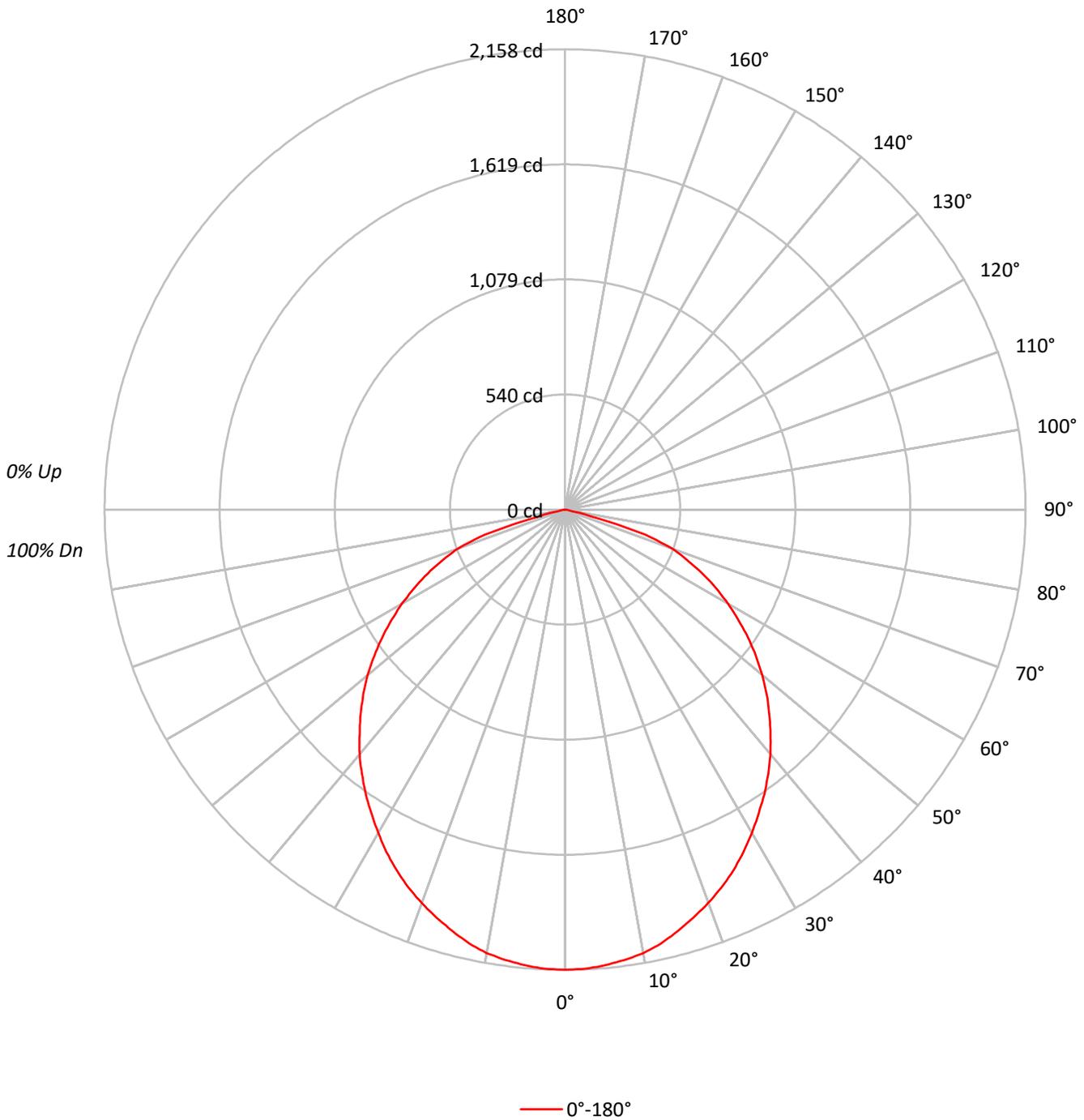
Lumens per Lamp: N/A  
Luminaire Lumens: 5555.6 lumens  
Efficiency: N/A  
Efficacy: 115.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	
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°	9655
5°	9634
10°	9597
15°	9474
20°	9348
25°	9217
30°	9045
35°	8897
40°	8749
45°	8570
50°	8402
55°	8168
60°	7890
65°	7526
70°	6967
75°	2734
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8570 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	203.7	3.7
10°-20°	576.8	10.4
20°-30°	859.3	15.5
30°-40°	1018.4	18.3
40°-50°	1044.9	18.8
50°-60°	935.0	16.8
60°-70°	701.4	12.6
70°-80°	216.0	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°	1639.8	29.5
0°-40°	2658.2	47.8
0°-60°	4638.1	83.5
0°-90°	5555.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5555.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2158	
5°	2145	204
15°	2045	577
25°	1867	859
35°	1628	1018
45°	1354	1045
55°	1047	935
65°	711	701
75°	158	216
85°	0	0
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2157.5
2.5°	2155.6
5°	2144.7
7.5°	2130.2
10°	2112.0
12.5°	2082.9
15°	2044.8
17.5°	2004.8
20°	1963.0
22.5°	1917.5
25°	1866.6
27.5°	1810.3
30°	1750.3
32.5°	1688.5
35°	1628.5
37.5°	1563.1
40°	1497.7
42.5°	1425.0
45°	1354.1
47.5°	1281.4
50°	1206.9
52.5°	1126.9
55°	1046.9
57.5°	963.3
60°	881.5
62.5°	796.1
65°	710.7
67.5°	621.6
70°	532.5
72.5°	394.4
75°	158.1
77.5°	7.3
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	19.63	21.22	20.00	21.54	21.85	19.63	21.22	20.00	21.54	21.85
	3H	21.38	22.81	21.76	23.14	23.50	21.38	22.81	21.76	23.14	23.50
	4H	21.58	22.92	21.98	23.27	23.64	21.58	22.92	21.98	23.27	23.64
	6H	21.52	22.76	21.93	23.12	23.51	21.52	22.76	21.93	23.12	23.51
	8H	21.49	22.66	21.91	23.05	23.45	21.49	22.66	21.91	23.05	23.45
	12H	21.46	22.58	21.89	22.97	23.39	21.46	22.58	21.89	22.97	23.39
4H	2H	20.27	21.61	20.67	21.96	22.33	20.27	21.61	20.67	21.96	22.33
	3H	22.18	23.29	22.59	23.69	24.09	22.18	23.29	22.59	23.69	24.09
	4H	22.37	23.36	22.80	23.77	24.21	22.37	23.36	22.80	23.77	24.21
	6H	22.31	23.17	22.77	23.62	24.07	22.31	23.17	22.77	23.62	24.07
	8H	22.28	23.08	22.74	23.52	23.99	22.28	23.08	22.74	23.52	23.99
	12H	22.25	22.96	22.73	23.44	23.91	22.25	22.96	22.73	23.44	23.91
8H	4H	22.40	23.20	22.86	23.65	24.11	22.40	23.20	22.86	23.65	24.11
	6H	22.33	22.99	22.83	23.48	23.96	22.33	22.99	22.83	23.48	23.96
	8H	22.29	22.87	22.80	23.38	23.87	22.29	22.87	22.80	23.38	23.87
	12H	22.26	22.78	22.77	23.27	23.83	22.26	22.78	22.77	23.27	23.83
12H	4H	22.38	23.09	22.86	23.57	24.04	22.38	23.09	22.86	23.57	24.04
	6H	22.29	22.87	22.80	23.38	23.87	22.29	22.87	22.80	23.38	23.87
	8H	22.26	22.78	22.77	23.27	23.83	22.26	22.78	22.77	23.27	23.83