

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: P980040

Luminaire Tested: PRLX-242-930-LL7-C-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980040  
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-242-930-LL7-C-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

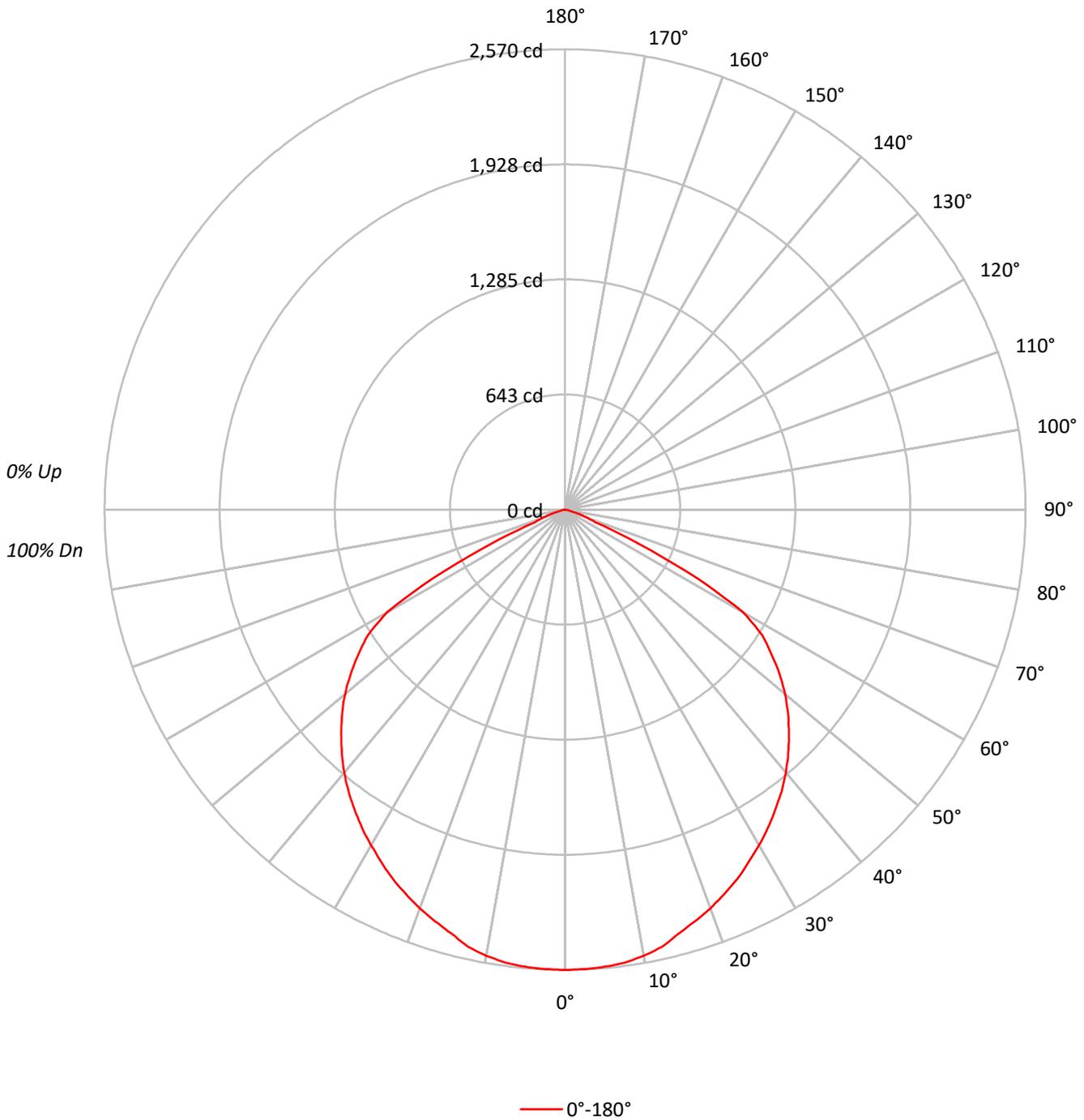
Lumens per Lamp: N/A  
Luminaire Lumens: 6441.3 lumens  
Efficiency: N/A  
Efficacy: 134.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76				76
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				65
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56				56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43				43
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38				38
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27				27

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

	0°
0°	11503
5°	11512
10°	11497
15°	11355
20°	11287
25°	11236
30°	11182
35°	11179
40°	11200
45°	11182
50°	11161
55°	10974
60°	10278
65°	4795
70°	1613
75°	500
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11182 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	243.6	3.8
10°-20°	693.0	10.8
20°-30°	1048.6	16.3
30°-40°	1281.6	19.9
40°-50°	1363.4	21.2
50°-60°	1251.3	19.4
60°-70°	513.5	8.0
70°-80°	46.3	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°	1985.2	30.8
0°-40°	3266.8	50.7
0°-60°	5881.4	91.3
0°-90°	6441.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6441.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2570	
5°	2563	244
15°	2451	693
25°	2276	1049
35°	2046	1282
45°	1767	1363
55°	1407	1251
65°	453	514
75°	29	46
85°	0	0
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2570.4
2.5°	2568.5
5°	2562.7
7.5°	2551.2
10°	2530.0
12.5°	2501.1
15°	2451.0
17.5°	2410.5
20°	2370.0
22.5°	2323.8
25°	2275.6
27.5°	2219.7
30°	2163.9
32.5°	2108.0
35°	2046.3
37.5°	1984.7
40°	1917.2
42.5°	1844.0
45°	1766.9
47.5°	1687.9
50°	1603.1
52.5°	1508.7
55°	1406.6
57.5°	1304.5
60°	1148.4
62.5°	828.6
65°	452.8
67.5°	181.1
70°	123.3
72.5°	84.8
75°	28.9
77.5°	1.9
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	21.28	22.81	21.64	23.13	23.44	21.28	22.81	21.64	23.13	23.44
	3H	21.26	22.63	21.64	22.95	23.31	21.26	22.63	21.64	22.95	23.31
	4H	21.21	22.48	21.61	22.83	23.21	21.21	22.48	21.61	22.83	23.21
	6H	21.15	22.32	21.56	22.68	23.08	21.15	22.32	21.56	22.68	23.08
	8H	21.11	22.22	21.54	22.61	23.02	21.11	22.22	21.54	22.61	23.02
	12H	21.08	22.14	21.51	22.52	22.95	21.08	22.14	21.51	22.52	22.95
4H	2H	21.33	22.60	21.73	22.95	23.33	21.33	22.60	21.73	22.95	23.33
	3H	21.35	22.38	21.76	22.78	23.18	21.35	22.38	21.76	22.78	23.18
	4H	21.29	22.21	21.72	22.62	23.06	21.29	22.21	21.72	22.62	23.06
	6H	21.23	22.02	21.68	22.46	22.92	21.23	22.02	21.68	22.46	22.92
	8H	21.18	21.92	21.65	22.37	22.83	21.18	21.92	21.65	22.37	22.83
	12H	21.15	21.80	21.63	22.28	22.75	21.15	21.80	21.63	22.28	22.75
8H	4H	21.19	21.93	21.65	22.37	22.84	21.19	21.93	21.65	22.37	22.84
	6H	21.10	21.71	21.60	22.20	22.68	21.10	21.71	21.60	22.20	22.68
	8H	21.05	21.59	21.56	22.10	22.59	21.05	21.59	21.56	22.10	22.59
	12H	21.01	21.49	21.52	21.99	22.55	21.01	21.49	21.52	21.99	22.55
12H	4H	21.15	21.81	21.64	22.29	22.76	21.15	21.81	21.64	22.29	22.76
	6H	21.05	21.59	21.56	22.10	22.59	21.05	21.59	21.56	22.10	22.59
	8H	21.01	21.49	21.52	21.99	22.55	21.01	21.49	21.52	21.99	22.55