

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: P980362

Luminaire Tested: PRLX-243-930-LL7-F-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980362  
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-243-930-LL7-F-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

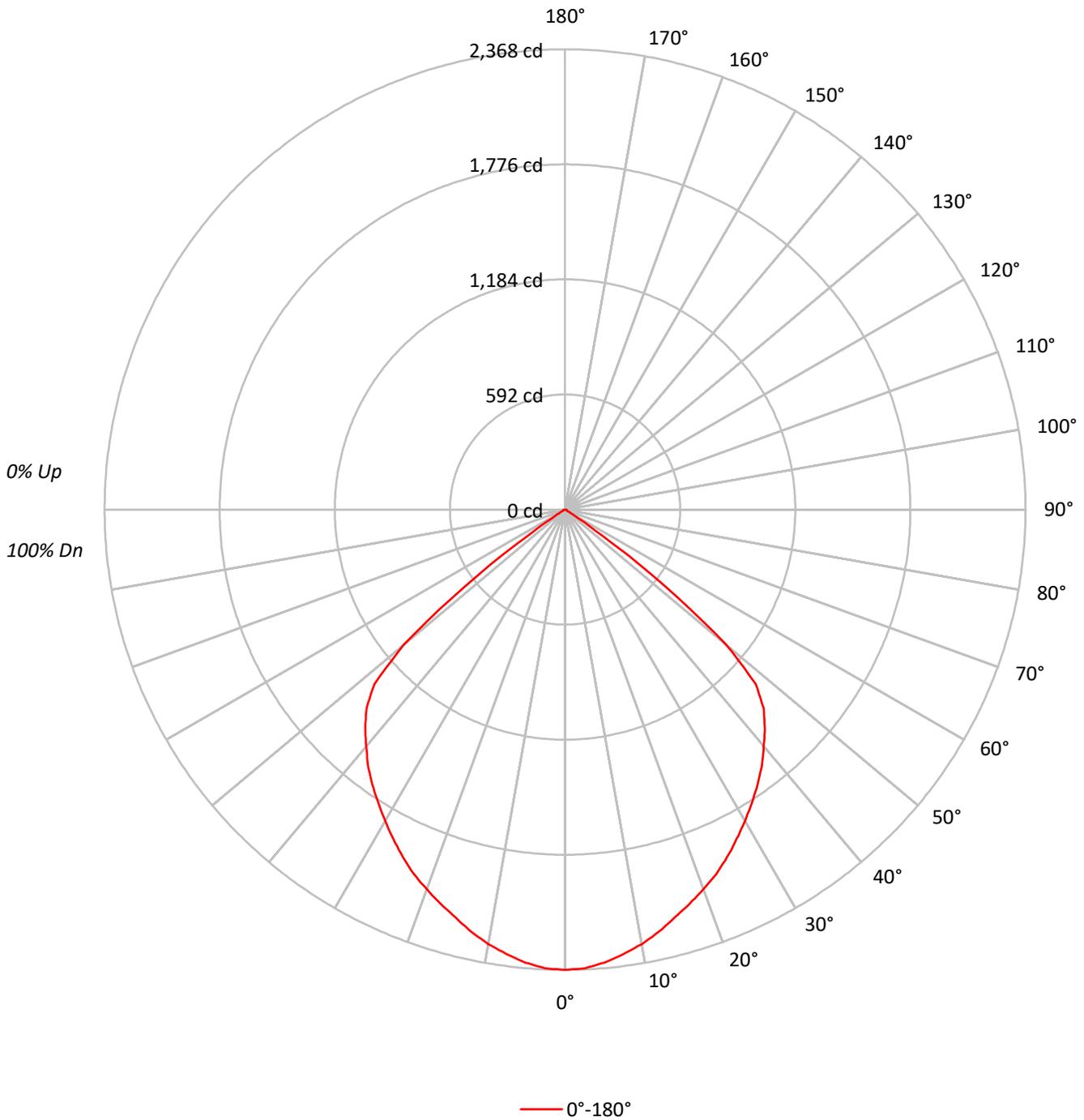
Lumens per Lamp: N/A  
Luminaire Lumens: 4247.7 lumens  
Efficiency: N/A  
Efficacy: 88.5 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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°	11684
5°	11585
10°	11372
15°	11102
20°	10916
25°	10741
30°	10538
35°	10399
40°	10239
45°	10070
50°	8282
55°	1956
60°	114
65°	112
70°	138
75°	147
80°	111
85°	108

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10070 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	221.0	5.2
10°-20°	613.8	14.5
20°-30°	908.7	21.4
30°-40°	1080.1	25.4
40°-50°	1084.7	25.5
50°-60°	319.6	7.5
60°-70°	9.8	0.2
70°-80°	7.4	0.2
80°-90°	2.6	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°	1743.5	41.0
0°-40°	2823.6	66.5
0°-60°	4227.9	99.5
0°-90°	4247.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4247.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2368	
5°	2339	221
15°	2174	614
25°	1973	909
35°	1726	1080
45°	1443	1085
55°	227	320
65°	10	10
75°	8	7
85°	2	3
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2368.1
2.5°	2362.3
5°	2339.2
7.5°	2306.5
10°	2269.8
12.5°	2225.5
15°	2173.5
17.5°	2127.3
20°	2079.1
22.5°	2030.9
25°	1973.1
27.5°	1911.4
30°	1849.8
32.5°	1788.1
35°	1726.5
37.5°	1662.9
40°	1589.7
42.5°	1520.3
45°	1443.2
47.5°	1329.5
50°	1079.0
52.5°	651.3
55°	227.4
57.5°	44.3
60°	11.6
62.5°	9.6
65°	9.6
67.5°	9.6
70°	9.6
72.5°	7.7
75°	7.7
77.5°	5.8
80°	3.9
82.5°	3.9
85°	1.9
87.5°	1.9
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	0.82	0.00	1.13	1.45	0.00	0.82	0.00	1.13	1.45
	3H	0.00	0.86	0.09	1.19	1.55	0.00	0.86	0.09	1.19	1.55
	4H	0.00	0.93	0.27	1.28	1.67	0.00	0.93	0.27	1.28	1.67
	6H	0.00	0.95	0.39	1.32	1.71	0.00	0.95	0.39	1.32	1.71
	8H	0.03	0.95	0.46	1.34	1.74	0.03	0.95	0.46	1.34	1.74
	12H	0.05	0.93	0.48	1.31	1.74	0.05	0.93	0.48	1.31	1.74
4H	2H	0.00	0.45	0.00	0.80	1.18	0.00	0.45	0.00	0.80	1.18
	3H	0.00	0.58	0.15	0.99	1.39	0.00	0.58	0.15	0.99	1.39
	4H	0.00	0.76	0.44	1.18	1.63	0.00	0.76	0.44	1.18	1.63
	6H	0.20	0.85	0.67	1.30	1.77	0.20	0.85	0.67	1.30	1.77
	8H	0.30	0.91	0.77	1.36	1.83	0.30	0.91	0.77	1.36	1.83
	12H	0.36	0.90	0.85	1.38	1.86	0.36	0.90	0.85	1.38	1.86
8H	4H	0.03	0.64	0.50	1.09	1.56	0.03	0.64	0.50	1.09	1.56
	6H	0.29	0.79	0.79	1.29	1.77	0.29	0.79	0.79	1.29	1.77
	8H	0.45	0.91	0.98	1.42	1.92	0.45	0.91	0.98	1.42	1.92
	12H	0.57	0.98	1.08	1.47	2.05	0.57	0.98	1.08	1.47	2.05
12H	4H	0.01	0.54	0.49	1.03	1.50	0.01	0.54	0.49	1.03	1.50
	6H	0.28	0.73	0.80	1.25	1.74	0.28	0.73	0.80	1.25	1.74
	8H	0.49	0.90	1.00	1.39	1.97	0.49	0.90	1.00	1.39	1.97