

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: P980530

Luminaire Tested: PRLX-243-940-LL8-C-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980530  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-36)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-243-940-LL8-C-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH CLEAR LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

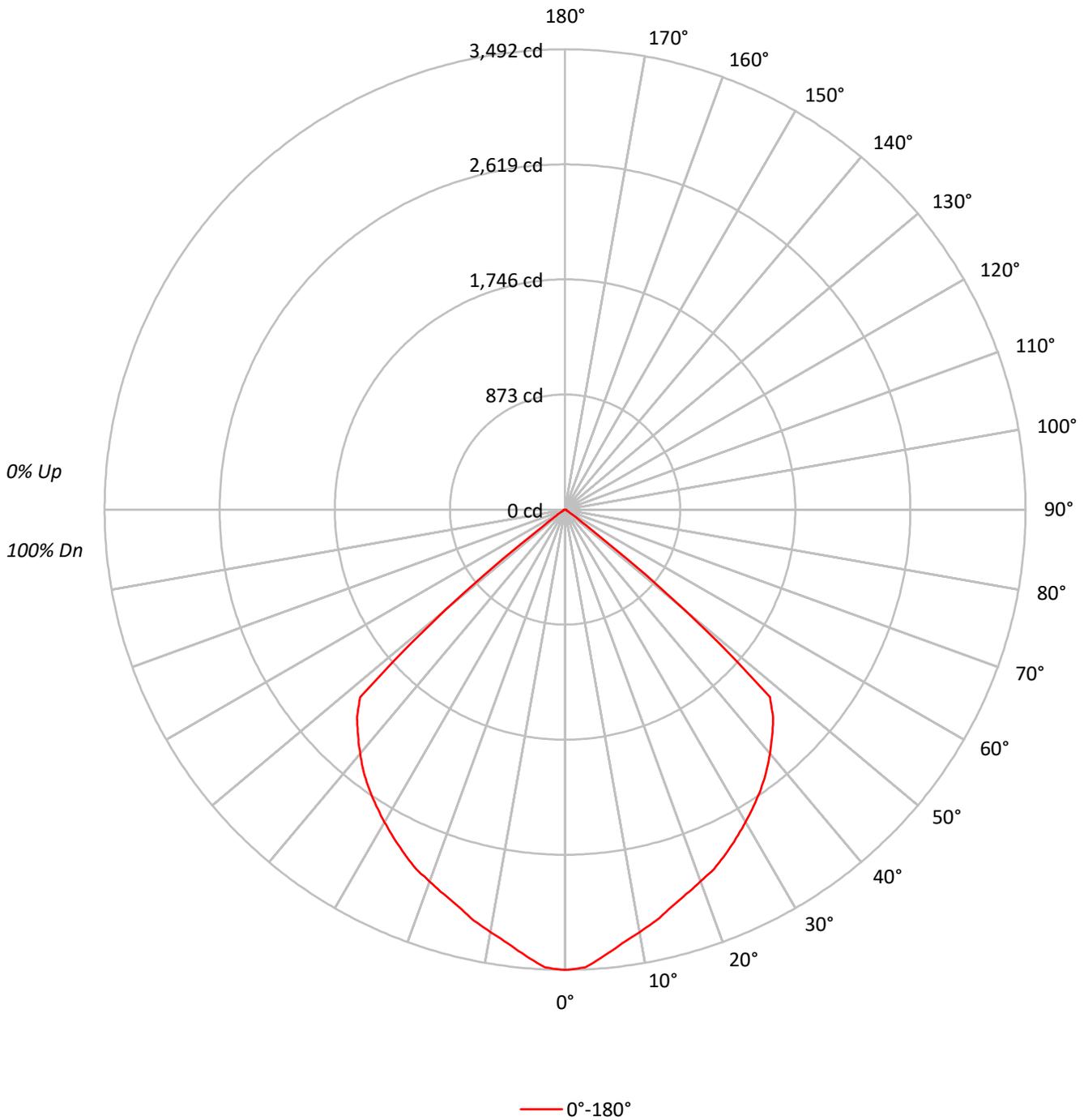
Lumens per Lamp: N/A  
Luminaire Lumens: 6007.1 lumens  
Efficiency: N/A  
Efficacy: 97.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.34  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct

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	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
2	105	99	95	91	103	98	93	89	94	91	88	91	88	86	88	86	84	82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74
4	92	83	76	71	90	81	75	70	79	74	69	77	72	69	75	71	68	66
5	86	75	68	63	84	74	68	63	73	67	62	71	66	62	69	65	61	59
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53
7	75	63	56	51	73	63	56	51	61	55	51	60	54	50	59	54	50	48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44
9	66	54	47	42	64	53	47	42	52	46	42	51	46	42	50	45	41	40
10	62	50	43	38	61	50	43	38	49	43	38	48	42	38	47	42	38	36

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

	0°
0°	17230
5°	16836
10°	16306
15°	15937
20°	15764
25°	15692
30°	15599
35°	15591
40°	15568
45°	15567
50°	9023
55°	801
60°	120
65°	142
70°	176
75°	187
80°	139
85°	136

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 15567 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	319.8	5.3
10°-20°	882.2	14.7
20°-30°	1328.9	22.1
30°-40°	1619.8	27.0
40°-50°	1627.9	27.1
50°-60°	203.2	3.4
60°-70°	12.1	0.2
70°-80°	10.0	0.2
80°-90°	3.3	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°	2530.8	42.1
0°-40°	4150.6	69.1
0°-60°	5981.7	99.6
0°-90°	6007.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6007.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3492	
5°	3399	320
15°	3120	882
25°	2882	1329
35°	2589	1620
45°	2231	1628
55°	93	203
65°	12	12
75°	10	10
85°	2	3
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3492.3
2.5°	3477.6
5°	3399.3
7.5°	3318.5
10°	3254.8
12.5°	3193.6
15°	3120.1
17.5°	3058.9
20°	3002.5
22.5°	2951.1
25°	2882.5
27.5°	2811.5
30°	2738.0
32.5°	2664.6
35°	2588.6
37.5°	2507.8
40°	2417.2
42.5°	2324.1
45°	2231.1
47.5°	2106.2
50°	1175.5
52.5°	222.9
55°	93.1
57.5°	29.4
60°	12.2
62.5°	12.2
65°	12.2
67.5°	12.2
70°	12.2
72.5°	12.2
75°	9.8
77.5°	7.3
80°	4.9
82.5°	4.9
85°	2.4
87.5°	2.4
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.07
	12H	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.20
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.13
	8H	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.45
	12H	0.00	0.00	0.00	0.12	0.70	0.00	0.00	0.00	0.12	0.70
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.15
	8H	0.00	0.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.56