

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: P979890

Luminaire Tested: PRLX-241-940-LL8-C-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P979890  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-241-940-LL8-C-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 241 SHADE WITH CLEAR LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

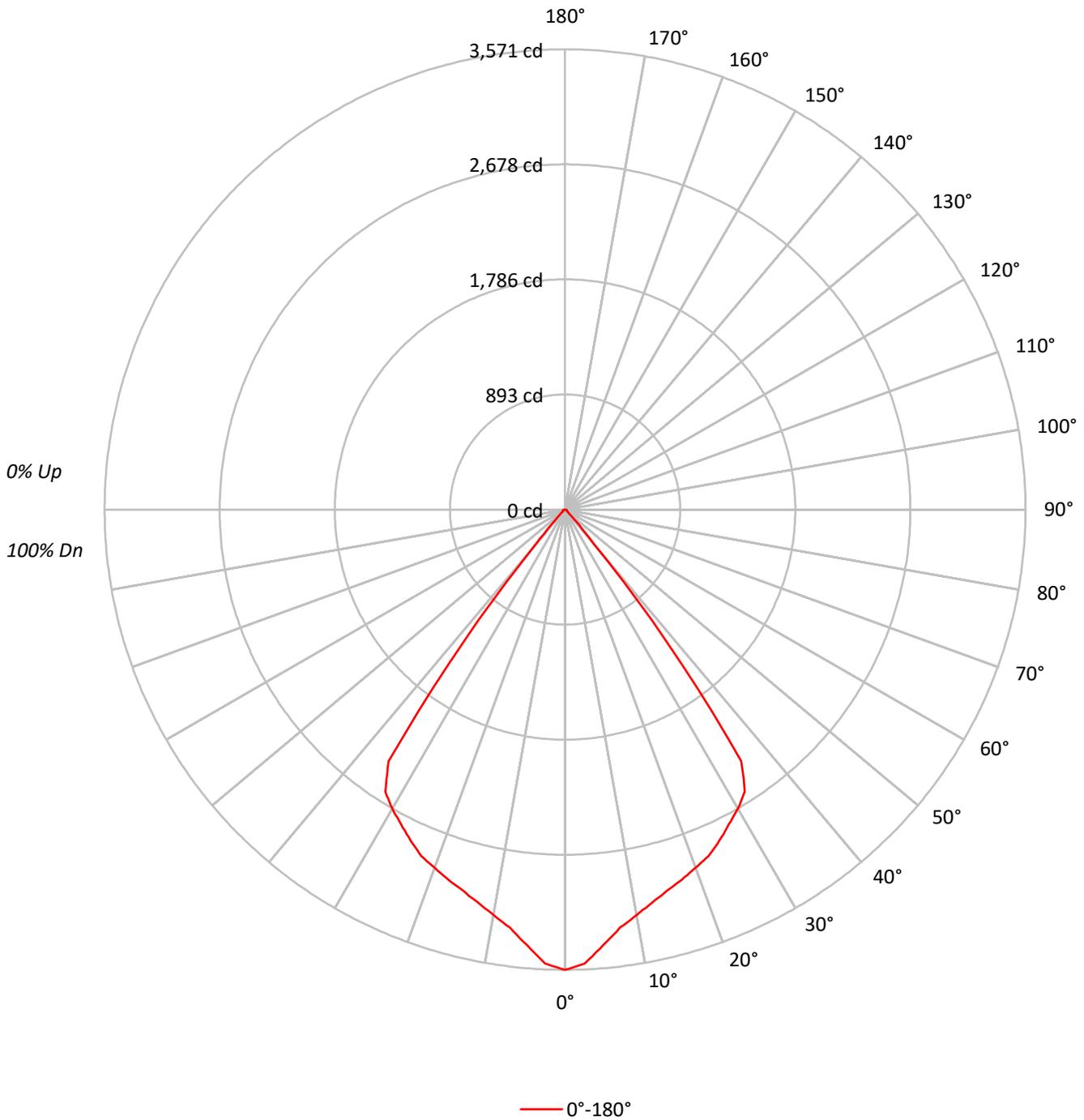
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3796.0 lumens  
Efficiency: N/A  
Efficacy: 61.7 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.13 / 1.05  
Luminous Opening: Circular (Dia: 1.33' 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	113	110	108	106	111	108	106	104	104	102	101	101	99	98	97	96	95	93
2	108	103	98	95	105	101	97	94	98	94	92	95	92	90	92	90	88	86
3	102	95	90	86	100	94	89	85	91	87	84	89	86	83	87	84	82	80
4	97	89	83	79	95	88	82	78	85	81	77	83	80	76	82	78	76	74
5	91	83	77	72	90	82	76	72	80	75	71	78	74	71	77	73	70	69
6	87	77	71	67	85	77	71	67	75	70	66	74	69	66	72	68	65	64
7	82	72	66	62	81	72	66	62	70	65	61	69	65	61	68	64	61	59
8	78	68	62	57	76	67	61	57	66	61	57	65	60	57	64	60	57	55
9	74	64	58	54	73	63	57	53	62	57	53	61	57	53	61	56	53	51
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48

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

	0°
0°	27527
5°	26248
10°	25000
15°	24432
20°	24271
25°	24102
30°	23850
35°	22426
40°	3451
45°	560
50°	264
55°	263
60°	302
65°	312
70°	275
75°	292
80°	218
85°	212

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 560 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	317.5	8.4
10°-20°	866.2	22.8
20°-30°	1305.3	34.4
30°-40°	1190.5	31.4
40°-50°	70.0	1.8
50°-60°	17.8	0.5
60°-70°	16.0	0.4
70°-80°	9.4	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°	2489.0	65.6
0°-40°	3679.5	96.9
0°-60°	3767.3	99.2
0°-90°	3796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3796.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3571	
5°	3392	317
15°	3061	866
25°	2834	1305
35°	2383	1191
45°	51	70
55°	20	18
65°	17	16
75°	10	9
85°	2	3
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3570.7
2.5°	3524.2
5°	3391.9
7.5°	3271.9
10°	3193.6
12.5°	3122.5
15°	3061.3
17.5°	3009.9
20°	2958.5
22.5°	2909.5
25°	2833.5
27.5°	2752.7
30°	2679.3
32.5°	2593.5
35°	2382.9
37.5°	1283.3
40°	342.9
42.5°	115.1
45°	51.4
47.5°	26.9
50°	22.0
52.5°	19.6
55°	19.6
57.5°	19.6
60°	19.6
62.5°	17.1
65°	17.1
67.5°	14.7
70°	12.2
72.5°	9.8
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	0.25	0.00	0.00	0.00	0.00	0.25
	4H	0.00	0.27	0.00	0.62	1.02	0.00	0.27	0.00	0.62	1.02
	6H	0.01	0.69	0.43	1.07	1.47	0.01	0.69	0.43	1.07	1.47
	8H	0.23	0.87	0.67	1.26	1.68	0.23	0.87	0.67	1.26	1.68
	12H	0.36	0.98	0.80	1.36	1.79	0.36	0.98	0.80	1.36	1.79
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	0.15	0.00	0.56	0.96	0.00	0.15	0.00	0.56	0.96
	4H	0.47	1.02	0.91	1.44	1.89	0.47	1.02	0.91	1.44	1.89
	6H	1.05	1.52	1.53	1.97	2.44	1.05	1.52	1.53	1.97	2.44
	8H	1.33	1.76	1.81	2.21	2.69	1.33	1.76	1.81	2.21	2.69
	12H	1.51	1.88	2.00	2.37	2.84	1.51	1.88	2.00	2.37	2.84
8H	4H	0.73	1.16	1.21	1.61	2.09	0.73	1.16	1.21	1.61	2.09
	6H	1.43	1.77	1.94	2.27	2.76	1.43	1.77	1.94	2.27	2.76
	8H	1.83	2.13	2.36	2.65	3.15	1.83	2.13	2.36	2.65	3.15
	12H	2.10	2.36	2.63	2.86	3.44	2.10	2.36	2.63	2.86	3.44
12H	4H	0.72	1.09	1.21	1.58	2.06	0.72	1.09	1.21	1.58	2.06
	6H	1.48	1.78	2.01	2.30	2.80	1.48	1.78	2.01	2.30	2.80
	8H	1.95	2.21	2.48	2.71	3.29	1.95	2.21	2.48	2.71	3.29