

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: P980211

Luminaire Tested: PRLX-242-940-LL8-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980211  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-242-940-LL8-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

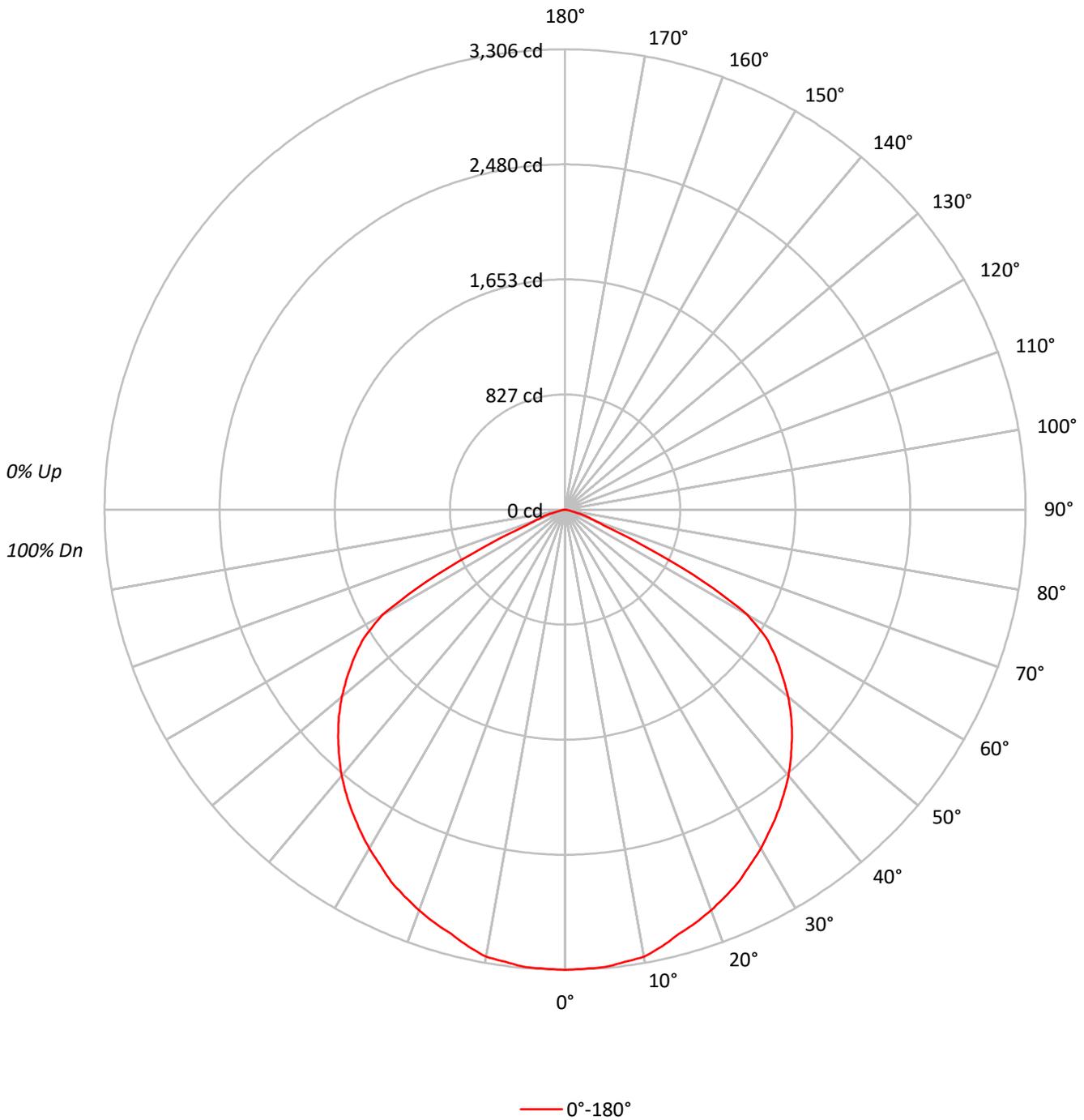
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8471.6 lumens  
Efficiency: N/A  
Efficacy: 137.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4  
Luminous Opening: Circular (Dia: 1.75' 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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	60	83	73	66	60	71	64	59	69	63	58	67	62	58	56
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

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

	0°
0°	14796
5°	14819
10°	14823
15°	14625
20°	14591
25°	14572
30°	14528
35°	14530
40°	14579
45°	14585
50°	14561
55°	14388
60°	13525
65°	6924
70°	2788
75°	1312
80°	253
85°	375

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14585 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	313.4	3.7
10°-20°	893.3	10.5
20°-30°	1359.0	16.0
30°-40°	1665.2	19.7
40°-50°	1777.0	21.0
50°-60°	1638.5	19.3
60°-70°	721.4	8.5
70°-80°	96.6	1.1
80°-90°	7.3	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°	2565.6	30.3
0°-40°	4230.8	49.9
0°-60°	7646.3	90.3
0°-90°	8471.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8471.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3306	
5°	3299	313
15°	3157	893
25°	2951	1359
35°	2660	1665
45°	2305	1777
55°	1844	1638
65°	654	721
75°	76	97
85°	7	7
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3306.2
2.5°	3301.3
5°	3298.9
7.5°	3276.8
10°	3262.1
12.5°	3213.2
15°	3156.8
17.5°	3112.7
20°	3063.8
22.5°	3007.4
25°	2951.1
27.5°	2877.6
30°	2811.5
32.5°	2735.6
35°	2659.7
37.5°	2578.8
40°	2495.6
42.5°	2400.1
45°	2304.6
47.5°	2201.7
50°	2091.5
52.5°	1969.0
55°	1844.1
57.5°	1711.9
60°	1511.1
62.5°	1124.1
65°	653.9
67.5°	303.7
70°	213.1
72.5°	159.2
75°	75.9
77.5°	22.0
80°	9.8
82.5°	9.8
85°	7.3
87.5°	4.9
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	22.20	23.75	22.56	24.06	24.38	22.20	23.75	22.56	24.06	24.38
	3H	22.25	23.62	22.62	23.95	24.31	22.25	23.62	22.62	23.95	24.31
	4H	22.21	23.50	22.61	23.85	24.22	22.21	23.50	22.61	23.85	24.22
	6H	22.15	23.33	22.56	23.70	24.09	22.15	23.33	22.56	23.70	24.09
	8H	22.12	23.24	22.54	23.63	24.03	22.12	23.24	22.54	23.63	24.03
	12H	22.09	23.16	22.52	23.54	23.97	22.09	23.16	22.52	23.54	23.97
4H	2H	22.29	23.58	22.69	23.93	24.31	22.29	23.58	22.69	23.93	24.31
	3H	22.38	23.43	22.80	23.83	24.23	22.38	23.43	22.80	23.83	24.23
	4H	22.35	23.28	22.78	23.70	24.14	22.35	23.28	22.78	23.70	24.14
	6H	22.29	23.10	22.75	23.54	24.00	22.29	23.10	22.75	23.54	24.00
	8H	22.25	23.00	22.71	23.44	23.91	22.25	23.00	22.71	23.44	23.91
	12H	22.21	22.88	22.70	23.36	23.83	22.21	22.88	22.70	23.36	23.83
8H	4H	22.26	23.01	22.73	23.46	23.93	22.26	23.01	22.73	23.46	23.93
	6H	22.18	22.80	22.68	23.29	23.77	22.18	22.80	22.68	23.29	23.77
	8H	22.13	22.68	22.64	23.19	23.68	22.13	22.68	22.64	23.19	23.68
	12H	22.09	22.59	22.60	23.08	23.64	22.09	22.59	22.60	23.08	23.64
12H	4H	22.23	22.90	22.71	23.38	23.85	22.23	22.90	22.71	23.38	23.85
	6H	22.13	22.68	22.64	23.19	23.68	22.13	22.68	22.64	23.19	23.68
	8H	22.09	22.59	22.60	23.08	23.64	22.09	22.59	22.60	23.08	23.64