

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: P979971

Luminaire Tested: PRLX-242-927-LL8-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979971
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-242-927-LL8-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7457.6 lumens
Efficiency: N/A
Efficacy: 121.3 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

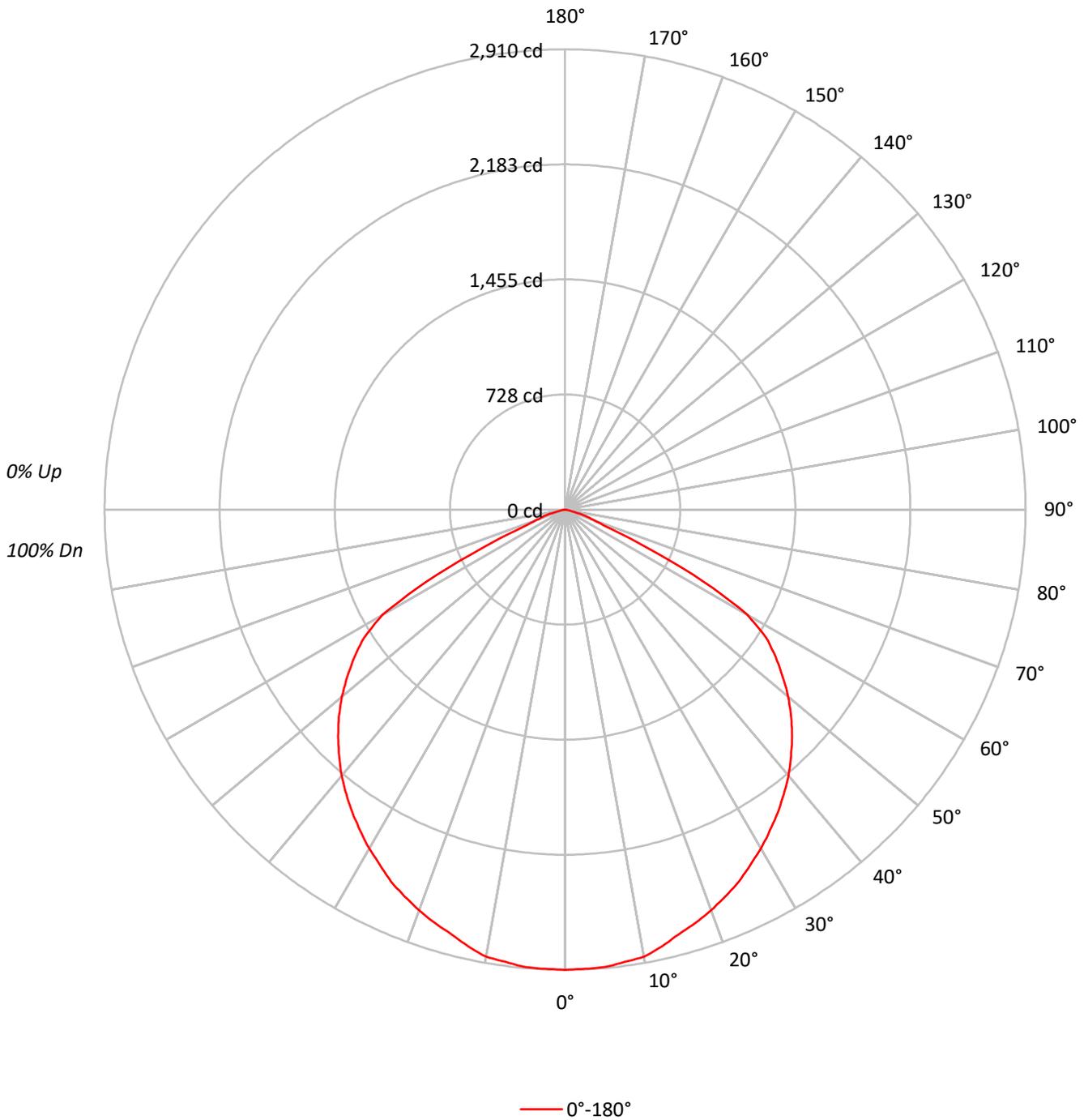
Input Watts (W): 61.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	13025
5°	13045
10°	13049
15°	12875
20°	12844
25°	12828
30°	12789
35°	12791
40°	12834
45°	12839
50°	12819
55°	12666
60°	11906
65°	6095
70°	2455
75°	1155
80°	222
85°	334

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12839 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.9	3.7
10°-20°	786.4	10.5
20°-30°	1196.3	16.0
30°-40°	1465.9	19.7
40°-50°	1564.3	21.0
50°-60°	1442.4	19.3
60°-70°	635.0	8.5
70°-80°	85.0	1.1
80°-90°	6.5	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°	2258.6	30.3
0°-40°	3724.5	49.9
0°-60°	6731.1	90.3
0°-90°	7457.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7457.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2910	
5°	2904	276
15°	2779	786
25°	2598	1196
35°	2341	1466
45°	2029	1564
55°	1623	1442
65°	576	635
75°	67	85
85°	6	6
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2910.5
2.5°	2906.2
5°	2904.0
7.5°	2884.6
10°	2871.7
12.5°	2828.6
15°	2779.0
17.5°	2740.2
20°	2697.1
22.5°	2647.5
25°	2597.9
27.5°	2533.2
30°	2475.0
32.5°	2408.2
35°	2341.3
37.5°	2270.2
40°	2196.9
42.5°	2112.8
45°	2028.7
47.5°	1938.2
50°	1841.2
52.5°	1733.4
55°	1623.4
57.5°	1507.0
60°	1330.2
62.5°	989.6
65°	575.6
67.5°	267.3
70°	187.6
72.5°	140.1
75°	66.8
77.5°	19.4
80°	8.6
82.5°	8.6
85°	6.5
87.5°	4.3
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	21.76	23.31	22.12	23.62	23.93	21.76	23.31	22.12	23.62	23.93
	3H	21.80	23.18	22.18	23.51	23.87	21.80	23.18	22.18	23.51	23.87
	4H	21.77	23.05	22.17	23.40	23.78	21.77	23.05	22.17	23.40	23.78
	6H	21.71	22.89	22.12	23.26	23.65	21.71	22.89	22.12	23.26	23.65
	8H	21.67	22.80	22.10	23.19	23.59	21.67	22.80	22.10	23.19	23.59
	12H	21.64	22.72	22.07	23.10	23.53	21.64	22.72	22.07	23.10	23.53
4H	2H	21.85	23.14	22.25	23.49	23.86	21.85	23.14	22.25	23.49	23.86
	3H	21.94	22.99	22.35	23.39	23.79	21.94	22.99	22.35	23.39	23.79
	4H	21.90	22.84	22.34	23.26	23.69	21.90	22.84	22.34	23.26	23.69
	6H	21.85	22.65	22.31	23.10	23.56	21.85	22.65	22.31	23.10	23.56
	8H	21.80	22.56	22.27	23.00	23.47	21.80	22.56	22.27	23.00	23.47
	12H	21.77	22.44	22.25	22.92	23.39	21.77	22.44	22.25	22.92	23.39
8H	4H	21.82	22.57	22.28	23.01	23.48	21.82	22.57	22.28	23.01	23.48
	6H	21.74	22.35	22.24	22.85	23.33	21.74	22.35	22.24	22.85	23.33
	8H	21.69	22.24	22.20	22.75	23.24	21.69	22.24	22.20	22.75	23.24
	12H	21.65	22.14	22.16	22.64	23.20	21.65	22.14	22.16	22.64	23.20
12H	4H	21.78	22.45	22.27	22.93	23.40	21.78	22.45	22.27	22.93	23.40
	6H	21.68	22.24	22.20	22.75	23.24	21.68	22.24	22.20	22.75	23.24
	8H	21.65	22.14	22.16	22.63	23.20	21.65	22.14	22.16	22.63	23.20