

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: P980521

Luminaire Tested: PRLX-243-940-LL7-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980521
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-31)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-940-LL7-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6688.2 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

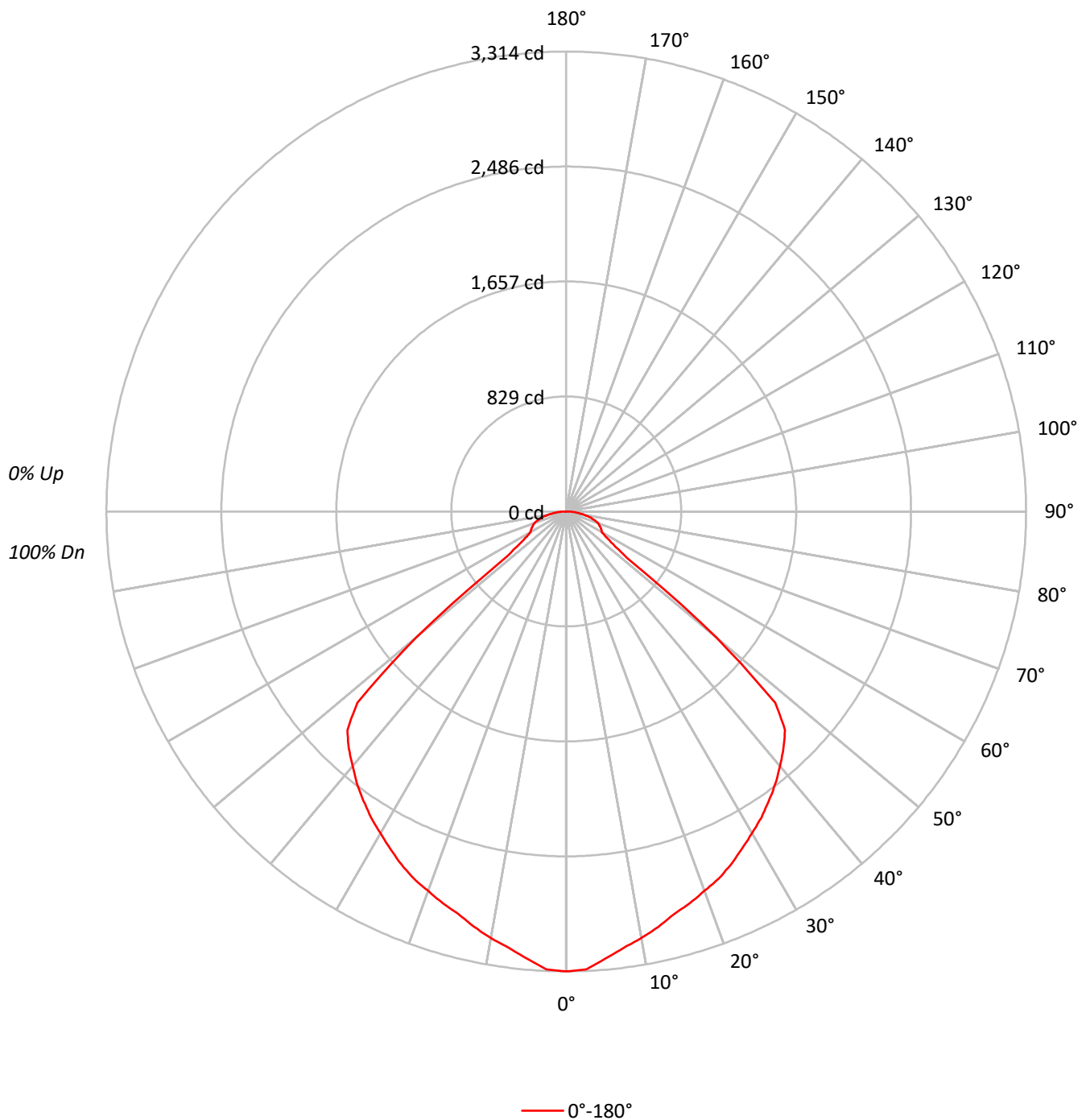
Input Watts (W): 48
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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
RW	70	50	30	10	70	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		100
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		88
2	103	96	91	86	100	94	89	85	91	87	83		88	84	81		77
3	95	87	80	74	93	85	79	74	82	77	72		80	75	71		68
4	88	78	71	65	86	77	70	65	75	68	64		72	67	63		60
5	82	71	63	57	80	70	63	57	68	61	56		66	60	56		53
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		48
7	71	59	51	46	70	58	51	46	57	50	45		56	50	45		43
8	67	54	47	41	65	54	46	41	52	46	41		51	45	41		39
9	62	50	43	37	61	49	42	37	48	42	37		47	41	37		35
10	59	46	39	34	57	46	39	34	45	38	34		44	38	34		32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	16350
5°	16024
10°	15640
15°	15345
20°	15275
25°	15286
30°	15256
35°	15334
40°	15425
45°	15559
50°	10808
55°	3516
60°	2934
65°	3181
70°	3485
75°	3622
80°	3461
85°	3504

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 15559 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.2	4.6
10°-20°	850.6	12.7
20°-30°	1293.9	19.3
30°-40°	1594.3	23.8
40°-50°	1635.6	24.5
50°-60°	475.2	7.1
60°-70°	268.9	4.0
70°-80°	196.7	2.9
80°-90°	67.7	1.0
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°	2449.7	36.6
0°-40°	4044.1	60.5
0°-60°	6154.9	92.0
0°-90°	6688.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6688.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3314	
5°	3235	305
15°	3004	851
25°	2808	1294
35°	2546	1594
45°	2230	1636
55°	409	475
65°	272	269
75°	190	197
85°	62	68
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	3313.8
2.5°	3303.5
5°	3235.4
7.5°	3171.4
10°	3121.8
12.5°	3066.1
15°	3004.1
17.5°	2960.8
20°	2909.2
22.5°	2865.8
25°	2808.0
27.5°	2741.9
30°	2677.9
32.5°	2616.0
35°	2545.8
37.5°	2475.6
40°	2395.0
42.5°	2318.6
45°	2229.9
47.5°	2042.0
50°	1408.1
52.5°	553.3
55°	408.8
57.5°	336.5
60°	297.3
62.5°	284.9
65°	272.5
67.5°	258.1
70°	241.6
72.5°	218.9
75°	190.0
77.5°	154.9
80°	121.8
82.5°	90.8
85°	61.9
87.5°	35.1
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	12.23	13.64	12.60	13.96	14.27	12.23	13.64	12.60	13.96	14.27
	3H	14.65	15.91	15.03	16.24	16.60	14.65	15.91	15.03	16.24	16.60
	4H	15.71	16.88	16.11	17.23	17.61	15.71	16.88	16.11	17.23	17.61
	6H	16.50	17.57	16.91	17.94	18.34	16.50	17.57	16.91	17.94	18.34
	8H	16.77	17.80	17.20	18.19	18.59	16.77	17.80	17.20	18.19	18.59
	12H	16.99	17.97	17.42	18.35	18.78	16.99	17.97	17.42	18.35	18.78
4H	2H	12.98	14.15	13.38	14.50	14.88	12.98	14.15	13.38	14.50	14.88
	3H	15.67	16.63	16.09	17.04	17.44	15.67	16.63	16.09	17.04	17.44
	4H	16.87	17.73	17.30	18.15	18.59	16.87	17.73	17.30	18.15	18.59
	6H	17.78	18.53	18.24	18.97	19.43	17.78	18.53	18.24	18.97	19.43
	8H	18.11	18.81	18.58	19.25	19.72	18.11	18.81	18.58	19.25	19.72
	12H	18.37	19.00	18.86	19.48	19.95	18.37	19.00	18.86	19.48	19.95
8H	4H	17.29	17.99	17.76	18.43	18.90	17.29	17.99	17.76	18.43	18.90
	6H	18.34	18.92	18.84	19.42	19.90	18.34	18.92	18.84	19.42	19.90
	8H	18.77	19.29	19.28	19.80	20.29	18.77	19.29	19.28	19.80	20.29
	12H	19.14	19.60	19.65	20.10	20.66	19.14	19.60	19.65	20.10	20.66
12H	4H	17.34	17.96	17.82	18.44	18.91	17.34	17.96	17.82	18.44	18.91
	6H	18.43	18.95	18.95	19.46	19.95	18.43	18.95	18.95	19.46	19.95
	8H	18.92	19.39	19.43	19.88	20.45	18.92	19.39	19.43	19.88	20.45

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

7 of 7