

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P980431

Luminaire Tested: PRLX-243-935-48L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980431
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-243-935-48L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

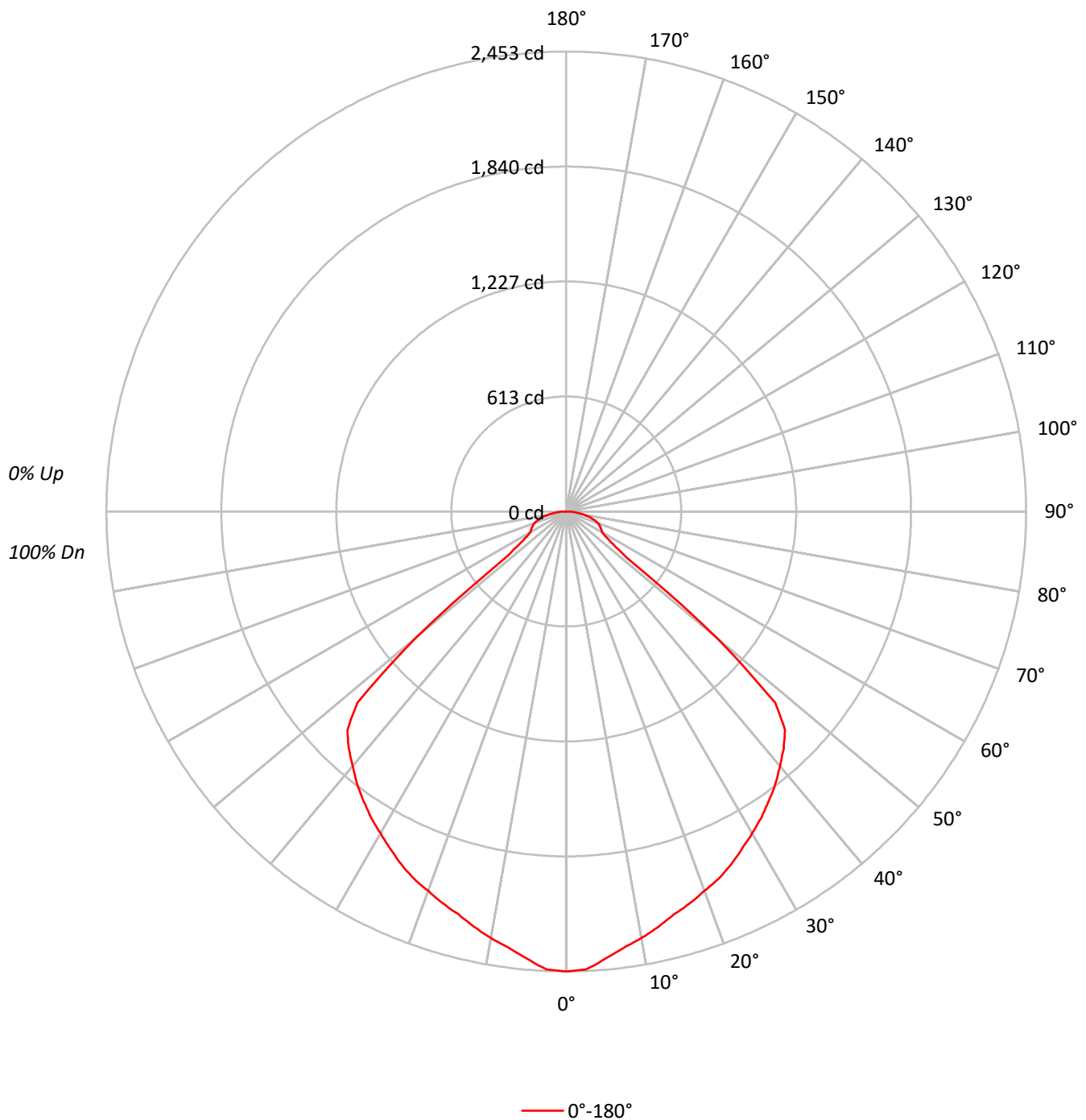
Lumens per Lamp: N/A
Luminaire Lumens: 4951.1 lumens
Efficiency: N/A
Efficacy: 147.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 33.5
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
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	49	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°	12103
5°	11862
10°	11578
15°	11359
20°	11307
25°	11316
30°	11294
35°	11351
40°	11419
45°	11518
50°	8001
55°	2603
60°	2172
65°	2356
70°	2579
75°	2680
80°	2563
85°	2598

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11518 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.0	4.6
10°-20°	629.7	12.7
20°-30°	957.8	19.3
30°-40°	1180.3	23.8
40°-50°	1210.8	24.5
50°-60°	351.8	7.1
60°-70°	199.1	4.0
70°-80°	145.6	2.9
80°-90°	50.2	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°	1813.5	36.6
0°-40°	2993.7	60.5
0°-60°	4556.3	92.0
0°-90°	4951.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4951.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2453	
5°	2395	226
15°	2224	630
25°	2079	958
35°	1885	1180
45°	1651	1211
55°	303	352
65°	202	199
75°	141	146
85°	46	50
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2453.1
2.5°	2445.5
5°	2395.1
7.5°	2347.7
10°	2311.0
12.5°	2269.7
15°	2223.9
17.5°	2191.8
20°	2153.6
22.5°	2121.5
25°	2078.7
27.5°	2029.8
30°	1982.4
32.5°	1936.5
35°	1884.6
37.5°	1832.6
40°	1773.0
42.5°	1716.4
45°	1650.7
47.5°	1511.6
50°	1042.4
52.5°	409.6
55°	302.6
57.5°	249.1
60°	220.1
62.5°	210.9
65°	201.8
67.5°	191.1
70°	178.8
72.5°	162.0
75°	140.6
77.5°	114.6
80°	90.2
82.5°	67.3
85°	45.9
87.5°	26.0
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	11.19	12.60	11.55	12.91	13.23	11.19	12.60	11.55	12.91	13.23
	3H	13.61	14.86	13.99	15.19	15.56	13.61	14.86	13.99	15.19	15.56
	4H	14.67	15.84	15.07	16.19	16.57	14.67	15.84	15.07	16.19	16.57
	6H	15.45	16.53	15.86	16.90	17.29	15.45	16.53	15.86	16.90	17.29
	8H	15.73	16.75	16.16	17.14	17.55	15.73	16.75	16.16	17.14	17.55
	12H	15.94	16.92	16.37	17.30	17.73	15.94	16.92	16.37	17.30	17.73
4H	2H	11.94	13.11	12.34	13.46	13.84	11.94	13.11	12.34	13.46	13.84
	3H	14.63	15.59	15.04	15.99	16.39	14.63	15.59	15.04	15.99	16.39
	4H	15.82	16.68	16.26	17.10	17.54	15.82	16.68	16.26	17.10	17.54
	6H	16.73	17.48	17.20	17.93	18.39	16.73	17.48	17.20	17.93	18.39
	8H	17.06	17.76	17.53	18.21	18.68	17.06	17.76	17.53	18.21	18.68
	12H	17.33	17.95	17.81	18.43	18.90	17.33	17.95	17.81	18.43	18.90
8H	4H	16.24	16.94	16.71	17.39	17.86	16.24	16.94	16.71	17.39	17.86
	6H	17.30	17.88	17.80	18.37	18.85	17.30	17.88	17.80	18.37	18.85
	8H	17.72	18.24	18.24	18.76	19.25	17.72	18.24	18.24	18.76	19.25
	12H	18.09	18.56	18.60	19.05	19.62	18.09	18.56	18.60	19.05	19.62
12H	4H	16.29	16.91	16.78	17.39	17.87	16.29	16.91	16.78	17.39	17.87
	6H	17.38	17.91	17.90	18.42	18.91	17.38	17.91	17.90	18.42	18.91
	8H	17.88	18.34	18.39	18.84	19.41	17.88	18.34	18.39	18.84	19.41