

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: P980421

Luminaire Tested: PRLX-243-935-43L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980421
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-243-935-43L-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

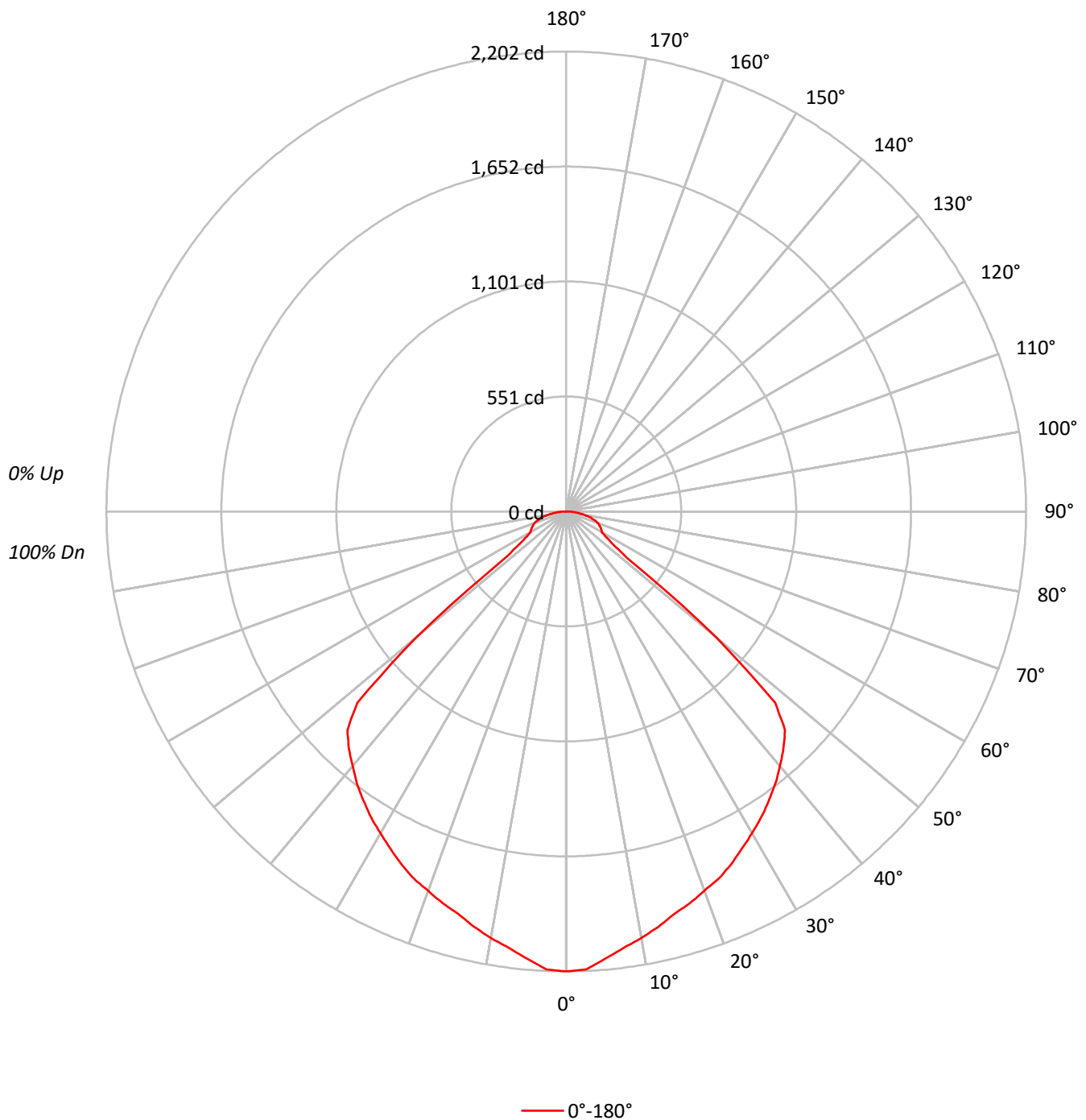
Lumens per Lamp: N/A
Luminaire Lumens: 4443.4 lumens
Efficiency: N/A
Efficacy: 150.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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°	10862
5°	10646
10°	10391
15°	10194
20°	10148
25°	10156
30°	10136
35°	10187
40°	10248
45°	10336
50°	7181
55°	2336
60°	1949
65°	2114
70°	2315
75°	2406
80°	2299
85°	2332

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10336 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.8	4.6
10°-20°	565.1	12.7
20°-30°	859.6	19.3
30°-40°	1059.2	23.8
40°-50°	1086.6	24.5
50°-60°	315.7	7.1
60°-70°	178.7	4.0
70°-80°	130.7	2.9
80°-90°	45.0	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°	1627.5	36.6
0°-40°	2686.7	60.5
0°-60°	4089.1	92.0
0°-90°	4443.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4443.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2202	
5°	2150	203
15°	1996	565
25°	1866	860
35°	1691	1059
45°	1481	1087
55°	272	316
65°	181	179
75°	126	131
85°	41	45
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2201.6
2.5°	2194.7
5°	2149.5
7.5°	2106.9
10°	2074.0
12.5°	2037.0
15°	1995.8
17.5°	1967.0
20°	1932.7
22.5°	1903.9
25°	1865.5
27.5°	1821.6
30°	1779.1
32.5°	1737.9
35°	1691.3
37.5°	1644.7
40°	1591.2
42.5°	1540.4
45°	1481.4
47.5°	1356.6
50°	935.5
52.5°	367.6
55°	271.6
57.5°	223.6
60°	197.5
62.5°	189.3
65°	181.1
67.5°	171.5
70°	160.5
72.5°	145.4
75°	126.2
77.5°	102.9
80°	80.9
82.5°	60.4
85°	41.2
87.5°	23.3
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	10.81	12.22	11.18	12.54	12.85	10.81	12.22	11.18	12.54	12.85
	3H	13.23	14.49	13.61	14.82	15.18	13.23	14.49	13.61	14.82	15.18
	4H	14.29	15.46	14.69	15.81	16.19	14.29	15.46	14.69	15.81	16.19
	6H	15.07	16.15	15.49	16.52	16.91	15.07	16.15	15.49	16.52	16.91
	8H	15.35	16.38	15.78	16.77	17.17	15.35	16.38	15.78	16.77	17.17
	12H	15.57	16.55	16.00	16.93	17.36	15.57	16.55	16.00	16.93	17.36
4H	2H	11.56	12.73	11.96	13.08	13.46	11.56	12.73	11.96	13.08	13.46
	3H	14.25	15.21	14.67	15.62	16.02	14.25	15.21	14.67	15.62	16.02
	4H	15.45	16.31	15.88	16.72	17.17	15.45	16.31	15.88	16.72	17.17
	6H	16.36	17.11	16.82	17.55	18.01	16.36	17.11	16.82	17.55	18.01
	8H	16.69	17.39	17.15	17.83	18.30	16.69	17.39	17.15	17.83	18.30
	12H	16.95	17.58	17.44	18.06	18.53	16.95	17.58	17.44	18.06	18.53
8H	4H	15.87	16.57	16.34	17.01	17.48	15.87	16.57	16.34	17.01	17.48
	6H	16.92	17.50	17.42	18.00	18.48	16.92	17.50	17.42	18.00	18.48
	8H	17.35	17.87	17.86	18.38	18.87	17.35	17.87	17.86	18.38	18.87
	12H	17.72	18.18	18.23	18.68	19.25	17.72	18.18	18.23	18.68	19.25
12H	4H	15.92	16.54	16.40	17.02	17.49	15.92	16.54	16.40	17.02	17.49
	6H	17.01	17.53	17.53	18.04	18.53	17.01	17.53	17.53	18.04	18.53
	8H	17.50	17.97	18.01	18.46	19.03	17.50	17.97	18.01	18.46	19.03