

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: P980101

Luminaire Tested: PRLX-242-935-43L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980101
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-242-935-43L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

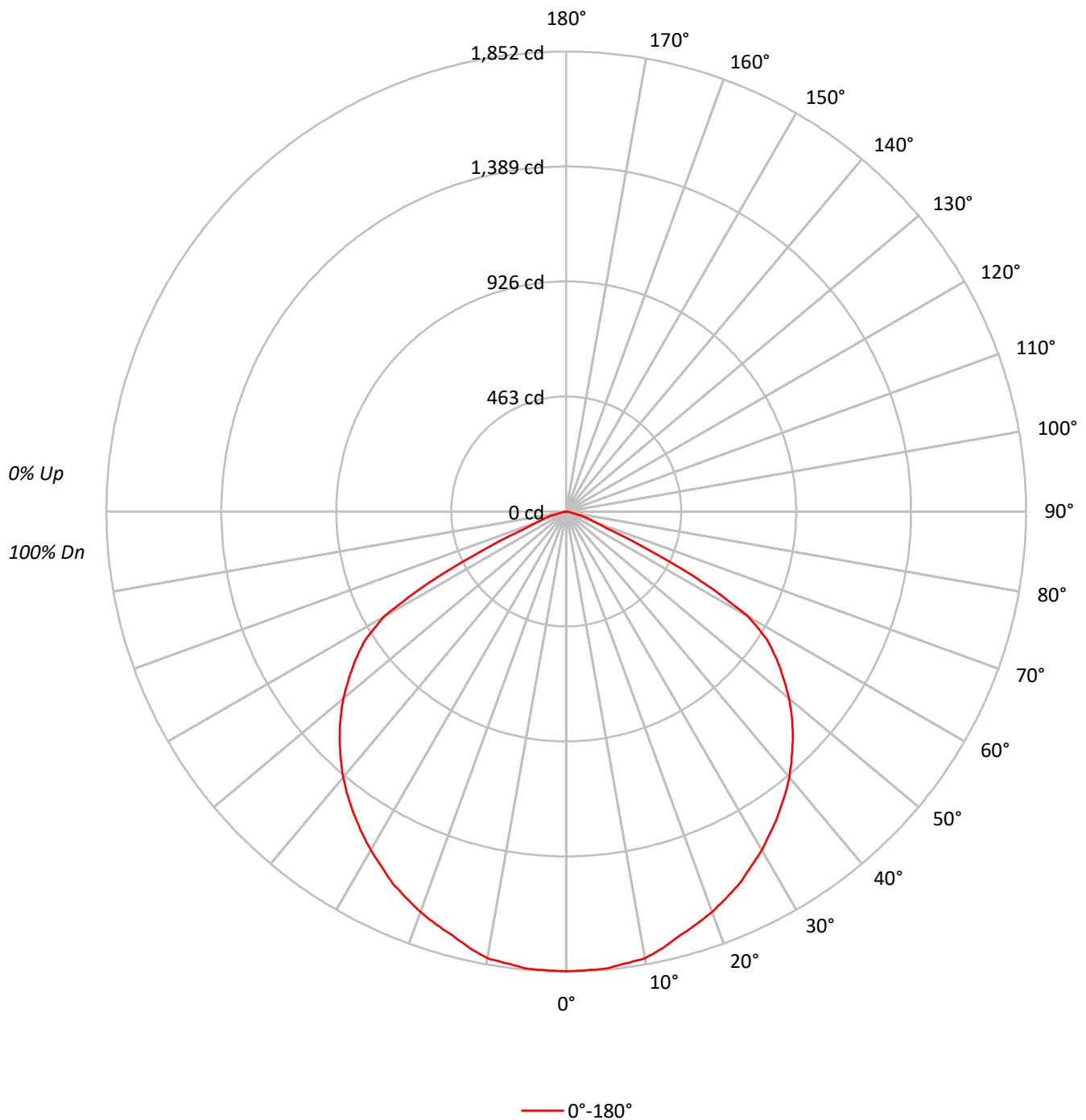
Lumens per Lamp: N/A
Luminaire Lumens: 4744.9 lumens
Efficiency: N/A
Efficacy: 160.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 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	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66
4	86	75	67	60	83	73	66	60	71	64	59	69	63	58	67	62	58
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	8287
5°	8300
10°	8303
15°	8192
20°	8172
25°	8162
30°	8137
35°	8138
40°	8166
45°	8169
50°	8155
55°	8059
60°	7575
65°	3878
70°	1561
75°	735
80°	142
85°	211

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8169 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.5	3.7
10°-20°	500.3	10.5
20°-30°	761.2	16.0
30°-40°	932.7	19.7
40°-50°	995.3	21.0
50°-60°	917.7	19.3
60°-70°	404.0	8.5
70°-80°	54.1	1.1
80°-90°	4.1	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°	1437.0	30.3
0°-40°	2369.7	49.9
0°-60°	4282.7	90.3
0°-90°	4744.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4744.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1852	
5°	1848	176
15°	1768	500
25°	1653	761
35°	1490	933
45°	1291	995
55°	1033	918
65°	366	404
75°	42	54
85°	4	4
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1851.8
2.5°	1849.1
5°	1847.7
7.5°	1835.3
10°	1827.1
12.5°	1799.7
15°	1768.1
17.5°	1743.4
20°	1716.0
22.5°	1684.5
25°	1652.9
27.5°	1611.8
30°	1574.7
32.5°	1532.2
35°	1489.7
37.5°	1444.4
40°	1397.8
42.5°	1344.3
45°	1290.8
47.5°	1233.2
50°	1171.4
52.5°	1102.8
55°	1032.9
57.5°	958.8
60°	846.3
62.5°	629.6
65°	366.2
67.5°	170.1
70°	119.3
72.5°	89.2
75°	42.5
77.5°	12.3
80°	5.5
82.5°	5.5
85°	4.1
87.5°	2.7
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	20.19	21.73	20.55	22.05	22.36	20.19	21.73	20.55	22.05	22.36
	3H	20.23	21.61	20.61	21.94	22.30	20.23	21.61	20.61	21.94	22.30
	4H	20.20	21.48	20.60	21.83	22.21	20.20	21.48	20.60	21.83	22.21
	6H	20.14	21.32	20.55	21.69	22.08	20.14	21.32	20.55	21.69	22.08
	8H	20.10	21.23	20.53	21.62	22.02	20.10	21.23	20.53	21.62	22.02
	12H	20.07	21.15	20.50	21.53	21.96	20.07	21.15	20.50	21.53	21.96
4H	2H	20.28	21.57	20.68	21.91	22.29	20.28	21.57	20.68	21.91	22.29
	3H	20.37	21.42	20.78	21.82	22.22	20.37	21.42	20.78	21.82	22.22
	4H	20.33	21.27	20.77	21.68	22.12	20.33	21.27	20.77	21.68	22.12
	6H	20.28	21.08	20.73	21.53	21.99	20.28	21.08	20.73	21.53	21.99
	8H	20.23	20.98	20.70	21.43	21.90	20.23	20.98	20.70	21.43	21.90
	12H	20.20	20.87	20.68	21.35	21.82	20.20	20.87	20.68	21.35	21.82
8H	4H	20.25	21.00	20.71	21.44	21.91	20.25	21.00	20.71	21.44	21.91
	6H	20.17	20.78	20.66	21.28	21.75	20.17	20.78	20.66	21.28	21.75
	8H	20.11	20.67	20.63	21.18	21.67	20.11	20.67	20.63	21.18	21.67
	12H	20.08	20.57	20.59	21.06	21.63	20.08	20.57	20.59	21.06	21.63
12H	4H	20.21	20.88	20.70	21.36	21.83	20.21	20.88	20.70	21.36	21.83
	6H	20.11	20.67	20.63	21.18	21.67	20.11	20.67	20.63	21.18	21.67
	8H	20.08	20.57	20.59	21.06	21.63	20.08	20.57	20.59	21.06	21.63