

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: P979953

Luminaire Tested: PRLX-242-927-48L-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979953
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-927-48L-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

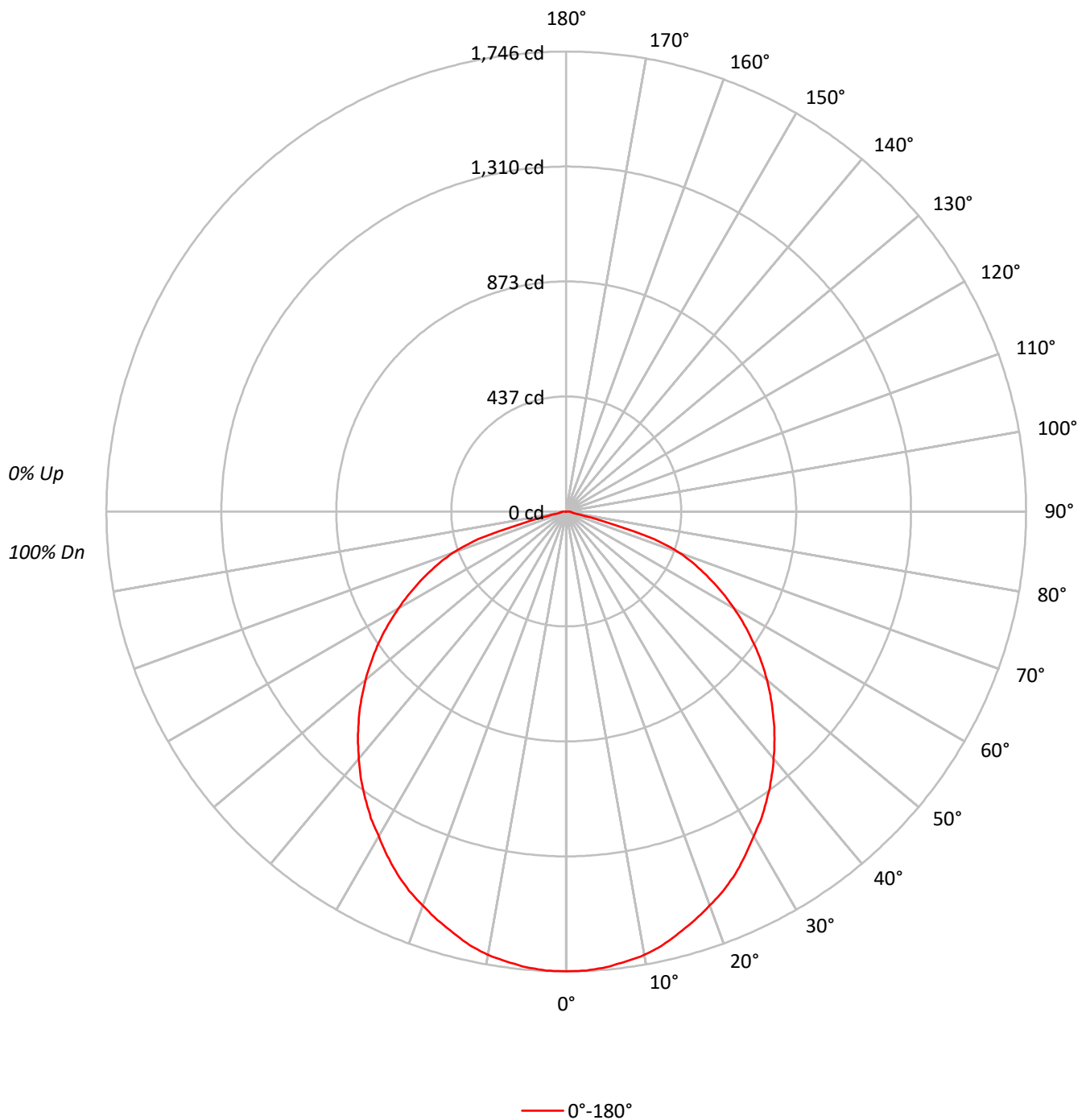
Lumens per Lamp: N/A
Luminaire Lumens: 4605.4 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.34
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74
3	91	81	73	67	89	80	72	67	77	71	65	74	69	64	71	67	63
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	7813
5°	7805
10°	7768
15°	7675
20°	7583
25°	7497
30°	7355
35°	7265
40°	7158
45°	7048
50°	6927
55°	6772
60°	6582
65°	6340
70°	5989
75°	2485
80°	539
85°	857

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7048 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.9	3.6
10°-20°	467.4	10.1
20°-30°	698.6	15.2
30°-40°	832.1	18.1
40°-50°	859.0	18.7
50°-60°	775.6	16.8
60°-70°	592.3	12.9
70°-80°	200.0	4.3
80°-90°	15.4	0.3
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°	1330.9	28.9
0°-40°	2163.1	47.0
0°-60°	3797.7	82.5
0°-90°	4605.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4605.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1746	
5°	1737	165
15°	1656	467
25°	1518	699
35°	1330	832
45°	1114	859
55°	868	776
65°	599	592
75°	144	200
85°	17	15
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1745.8
2.5°	1744.4
5°	1737.4
7.5°	1723.5
10°	1709.5
12.5°	1687.2
15°	1656.5
17.5°	1625.8
20°	1592.3
22.5°	1558.8
25°	1518.3
27.5°	1472.3
30°	1423.4
32.5°	1380.2
35°	1329.9
37.5°	1279.7
40°	1225.3
42.5°	1170.8
45°	1113.6
47.5°	1055.0
50°	995.0
52.5°	932.2
55°	868.0
57.5°	802.4
60°	735.4
62.5°	668.4
65°	598.7
67.5°	530.3
70°	457.7
72.5°	350.3
75°	143.7
77.5°	30.7
80°	20.9
82.5°	19.5
85°	16.7
87.5°	9.8
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	19.00	20.60	19.36	20.92	21.23	19.00	20.60	19.36	20.92	21.23
	3H	20.83	22.27	21.20	22.59	22.96	20.83	22.27	21.20	22.59	22.96
	4H	21.06	22.41	21.46	22.76	23.14	21.06	22.41	21.46	22.76	23.14
	6H	21.01	22.26	21.42	22.62	23.01	21.01	22.26	21.42	22.62	23.01
	8H	20.98	22.17	21.40	22.56	22.96	20.98	22.17	21.40	22.56	22.96
	12H	20.95	22.10	21.38	22.48	22.91	20.95	22.10	21.38	22.48	22.91
4H	2H	19.65	21.00	20.05	21.35	21.73	19.65	21.00	20.05	21.35	21.73
	3H	21.65	22.78	22.06	23.18	23.58	21.65	22.78	22.06	23.18	23.58
	4H	21.87	22.88	22.30	23.29	23.73	21.87	22.88	22.30	23.29	23.73
	6H	21.83	22.71	22.29	23.15	23.61	21.83	22.71	22.29	23.15	23.61
	8H	21.80	22.62	22.26	23.06	23.53	21.80	22.62	22.26	23.06	23.53
	12H	21.78	22.51	22.26	22.99	23.46	21.78	22.51	22.26	22.99	23.46
8H	4H	21.92	22.74	22.39	23.18	23.65	21.92	22.74	22.39	23.18	23.65
	6H	21.87	22.54	22.37	23.03	23.51	21.87	22.54	22.37	23.03	23.51
	8H	21.84	22.44	22.35	22.94	23.43	21.84	22.44	22.35	22.94	23.43
	12H	21.83	22.35	22.34	22.84	23.41	21.83	22.35	22.34	22.84	23.41
12H	4H	21.90	22.63	22.38	23.10	23.58	21.90	22.63	22.38	23.10	23.58
	6H	21.83	22.43	22.34	22.94	23.42	21.83	22.43	22.34	22.94	23.42
	8H	21.82	22.34	22.33	22.83	23.40	21.82	22.34	22.33	22.83	23.40