

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: P979951

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

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979951
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-242-927-48L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

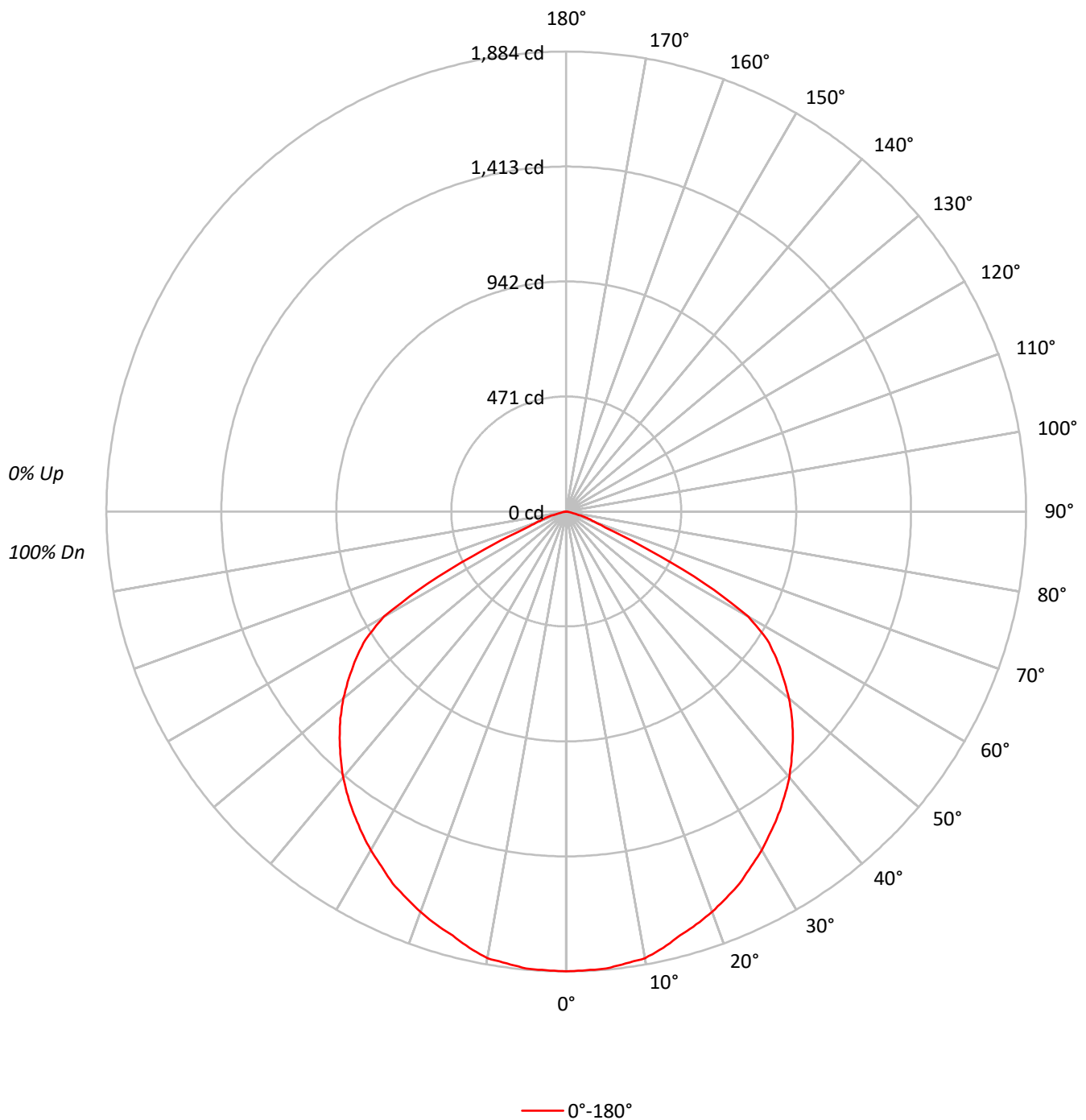
Lumens per Lamp: N/A
Luminaire Lumens: 4827.3 lumens
Efficiency: N/A
Efficacy: 144.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	8431
5°	8444
10°	8447
15°	8334
20°	8314
25°	8303
30°	8278
35°	8279
40°	8307
45°	8311
50°	8297
55°	8198
60°	7706
65°	3945
70°	1588
75°	749
80°	144
85°	216

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 8311 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.6	3.7
10°-20°	509.0	10.5
20°-30°	774.4	16.0
30°-40°	948.9	19.7
40°-50°	1012.6	21.0
50°-60°	933.6	19.3
60°-70°	411.0	8.5
70°-80°	55.1	1.1
80°-90°	4.2	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°	1461.9	30.3
0°-40°	2410.8	49.9
0°-60°	4357.0	90.3
0°-90°	4827.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4827.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1884	
5°	1880	179
15°	1799	509
25°	1682	774
35°	1516	949
45°	1313	1013
55°	1051	934
65°	373	411
75°	43	55
85°	4	4
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1883.9
2.5°	1881.1
5°	1879.7
7.5°	1867.2
10°	1858.8
12.5°	1830.9
15°	1798.8
17.5°	1773.7
20°	1745.8
22.5°	1713.7
25°	1681.6
27.5°	1639.7
30°	1602.0
32.5°	1558.8
35°	1515.5
37.5°	1469.5
40°	1422.0
42.5°	1367.6
45°	1313.2
47.5°	1254.6
50°	1191.8
52.5°	1122.0
55°	1050.8
57.5°	975.5
60°	861.0
62.5°	640.5
65°	372.6
67.5°	173.0
70°	121.4
72.5°	90.7
75°	43.3
77.5°	12.6
80°	5.6
82.5°	5.6
85°	4.2
87.5°	2.8
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	20.25	21.79	20.61	22.11	22.42	20.25	21.79	20.61	22.11	22.42
	3H	20.29	21.67	20.67	22.00	22.36	20.29	21.67	20.67	22.00	22.36
	4H	20.26	21.54	20.66	21.89	22.27	20.26	21.54	20.66	21.89	22.27
	6H	20.20	21.38	20.61	21.75	22.14	20.20	21.38	20.61	21.75	22.14
	8H	20.16	21.29	20.59	21.68	22.08	20.16	21.29	20.59	21.68	22.08
	12H	20.13	21.21	20.56	21.59	22.02	20.13	21.21	20.56	21.59	22.02
4H	2H	20.34	21.63	20.74	21.97	22.35	20.34	21.63	20.74	21.97	22.35
	3H	20.43	21.48	20.84	21.88	22.28	20.43	21.48	20.84	21.88	22.28
	4H	20.39	21.33	20.83	21.74	22.18	20.39	21.33	20.83	21.74	22.18
	6H	20.34	21.14	20.80	21.59	22.05	20.34	21.14	20.80	21.59	22.05
	8H	20.29	21.04	20.76	21.49	21.96	20.29	21.04	20.76	21.49	21.96
	12H	20.26	20.93	20.74	21.41	21.88	20.26	20.93	20.74	21.41	21.88
8H	4H	20.31	21.06	20.77	21.50	21.97	20.31	21.06	20.77	21.50	21.97
	6H	20.23	20.84	20.72	21.34	21.81	20.23	20.84	20.72	21.34	21.81
	8H	20.17	20.73	20.69	21.24	21.73	20.17	20.73	20.69	21.24	21.73
	12H	20.14	20.63	20.65	21.12	21.69	20.14	20.63	20.65	21.12	21.69
12H	4H	20.27	20.94	20.76	21.42	21.89	20.27	20.94	20.76	21.42	21.89
	6H	20.17	20.73	20.69	21.24	21.73	20.17	20.73	20.69	21.24	21.73
	8H	20.14	20.63	20.65	21.12	21.69	20.14	20.63	20.65	21.12	21.69