

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: P980191

Luminaire Tested: PRLX-242-940-48L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980191
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-242-940-48L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

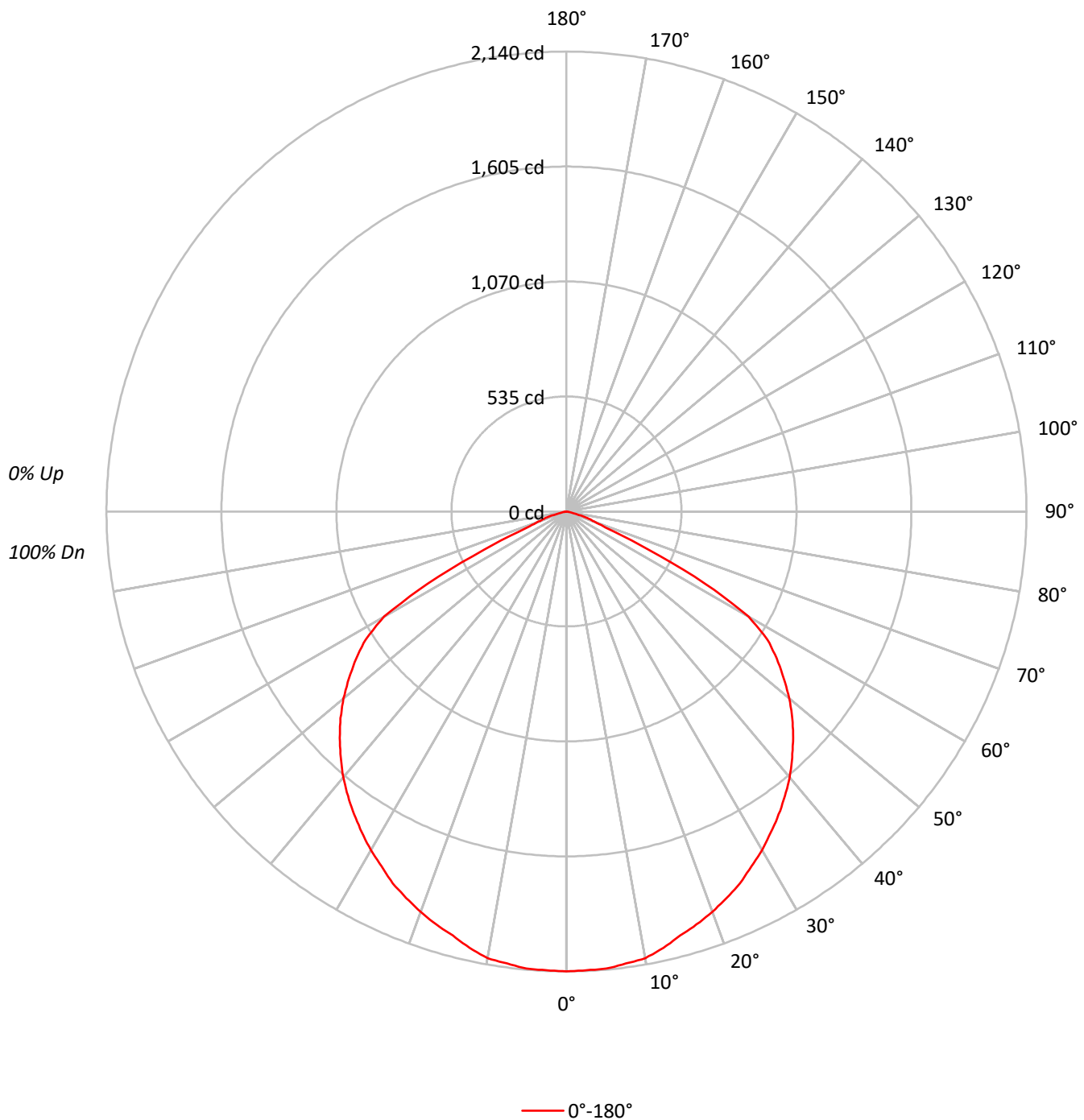
Lumens per Lamp: N/A
Luminaire Lumens: 5483.6 lumens
Efficiency: N/A
Efficacy: 163.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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°	9577
5°	9592
10°	9595
15°	9467
20°	9444
25°	9432
30°	9404
35°	9405
40°	9437
45°	9441
50°	9425
55°	9313
60°	8754
65°	4482
70°	1804
75°	849
80°	162
85°	246

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9441 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.9	3.7
10°-20°	578.2	10.5
20°-30°	879.6	16.0
30°-40°	1077.9	19.7
40°-50°	1150.2	21.0
50°-60°	1060.6	19.3
60°-70°	467.0	8.5
70°-80°	62.5	1.1
80°-90°	4.8	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°	1660.7	30.3
0°-40°	2738.6	49.9
0°-60°	4949.4	90.3
0°-90°	5483.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5483.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2140	
5°	2135	203
15°	2043	578
25°	1910	880
35°	1722	1078
45°	1492	1150
55°	1194	1061
65°	423	467
75°	49	62
85°	5	5
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2140.1
2.5°	2136.9
5°	2135.3
7.5°	2121.1
10°	2111.5
12.5°	2079.8
15°	2043.4
17.5°	2014.8
20°	1983.1
22.5°	1946.7
25°	1910.2
27.5°	1862.7
30°	1819.9
32.5°	1770.7
35°	1721.6
37.5°	1669.3
40°	1615.4
42.5°	1553.5
45°	1491.7
47.5°	1425.1
50°	1353.8
52.5°	1274.5
55°	1193.7
57.5°	1108.1
60°	978.1
62.5°	727.6
65°	423.3
67.5°	196.6
70°	137.9
72.5°	103.0
75°	49.1
77.5°	14.3
80°	6.3
82.5°	6.3
85°	4.8
87.5°	3.2
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	20.69	22.24	21.05	22.55	22.87	20.69	22.24	21.05	22.55	22.87
	3H	20.73	22.11	21.11	22.44	22.80	20.73	22.11	21.11	22.44	22.80
	4H	20.70	21.99	21.10	22.33	22.71	20.70	21.99	21.10	22.33	22.71
	6H	20.64	21.82	21.05	22.19	22.58	20.64	21.82	21.05	22.19	22.58
	8H	20.61	21.73	21.03	22.12	22.52	20.61	21.73	21.03	22.12	22.52
	12H	20.58	21.65	21.01	22.03	22.46	20.58	21.65	21.01	22.03	22.46
4H	2H	20.78	22.07	21.18	22.42	22.80	20.78	22.07	21.18	22.42	22.80
	3H	20.87	21.92	21.28	22.32	22.72	20.87	21.92	21.28	22.32	22.72
	4H	20.84	21.77	21.27	22.19	22.63	20.84	21.77	21.27	22.19	22.63
	6H	20.78	21.59	21.24	22.03	22.49	20.78	21.59	21.24	22.03	22.49
	8H	20.74	21.49	21.20	21.93	22.40	20.74	21.49	21.20	21.93	22.40
	12H	20.70	21.37	21.19	21.85	22.32	20.70	21.37	21.19	21.85	22.32
8H	4H	20.75	21.50	21.21	21.95	22.41	20.75	21.50	21.21	21.95	22.41
	6H	20.67	21.29	21.17	21.78	22.26	20.67	21.29	21.17	21.78	22.26
	8H	20.62	21.17	21.13	21.68	22.17	20.62	21.17	21.13	21.68	22.17
	12H	20.58	21.07	21.09	21.57	22.13	20.58	21.07	21.09	21.57	22.13
12H	4H	20.72	21.39	21.20	21.86	22.34	20.72	21.39	21.20	21.86	22.34
	6H	20.62	21.17	21.13	21.68	22.17	20.62	21.17	21.13	21.68	22.17
	8H	20.58	21.07	21.09	21.57	22.13	20.58	21.07	21.09	21.57	22.13

END OF REPORT