

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: P979633

Luminaire Tested: PRLX-241-927-48L-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979633
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-241-927-48L-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 241 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

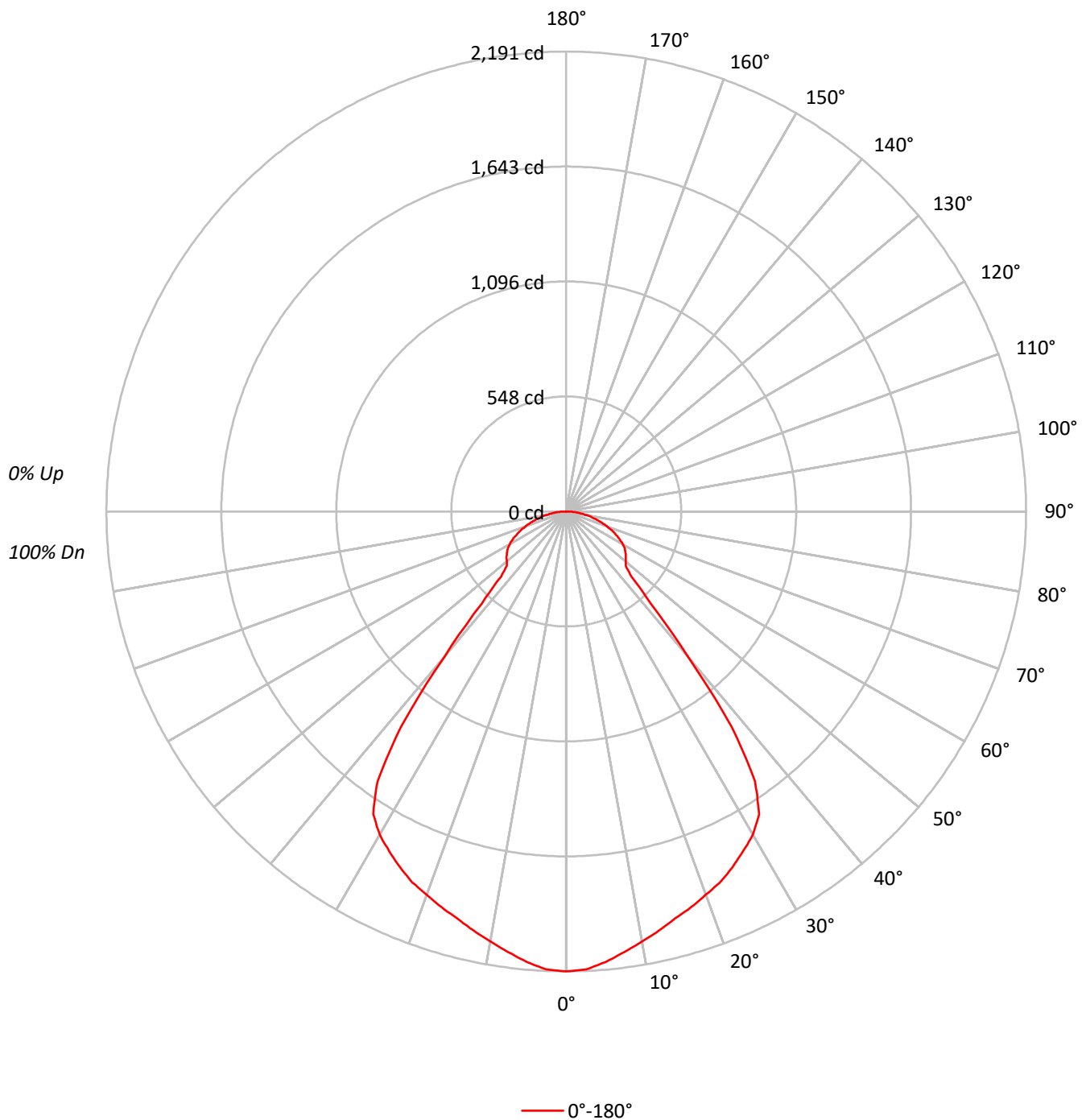
Lumens per Lamp: N/A
Luminaire Lumens: 3716.0 lumens
Efficiency: N/A
Efficacy: 110.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.12
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

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	103	96	90	85	100	94	89	84	90	86	82	87	84	81	84	81	79
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56
6	77	66	58	52	76	65	58	52	63	57	52	62	56	51	60	55	51
7	72	61	53	48	71	60	53	47	58	52	47	57	51	47	56	51	47
8	68	56	49	43	67	55	48	43	54	48	43	53	47	43	52	47	43
9	64	52	45	40	63	52	45	40	51	44	40	50	44	39	49	43	39
10	60	49	42	37	59	48	41	37	47	41	37	46	41	36	46	40	36

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	16890
5°	16674
10°	16288
15°	16016
20°	15947
25°	15918
30°	15826
35°	14761
40°	9086
45°	4777
50°	4435
55°	4633
60°	4798
65°	4761
70°	4623
75°	4405
80°	4151
85°	3830

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 62.5°

Luminance: 4800 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.2	5.5
10°-20°	567.9	15.3
20°-30°	862.2	23.2
30°-40°	918.7	24.7
40°-50°	392.5	10.6
50°-60°	307.8	8.3
60°-70°	257.3	6.9
70°-80°	156.8	4.2
80°-90°	49.6	1.3
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°	1633.3	44.0
0°-40°	2552.0	68.7
0°-60°	3252.3	87.5
0°-90°	3716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3716.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2191	
5°	2155	203
15°	2007	568
25°	1871	862
35°	1568	919
45°	438	393
55°	345	308
65°	261	257
75°	148	157
85°	43	50
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2190.9
2.5°	2184.0
5°	2154.7
7.5°	2117.0
10°	2080.7
12.5°	2044.4
15°	2006.7
17.5°	1977.4
20°	1943.9
22.5°	1913.2
25°	1871.4
27.5°	1825.3
30°	1777.9
32.5°	1710.9
35°	1568.5
37.5°	1296.4
40°	902.9
42.5°	595.9
45°	438.2
47.5°	383.8
50°	369.8
52.5°	358.6
55°	344.7
57.5°	330.7
60°	311.2
62.5°	287.5
65°	261.0
67.5°	233.0
70°	205.1
72.5°	175.8
75°	147.9
77.5°	121.4
80°	93.5
82.5°	68.4
85°	43.3
87.5°	23.7
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	15.82	17.17	16.19	17.48	17.79	15.82	17.17	16.19	17.48	17.79
	3H	17.83	19.03	18.21	19.36	19.72	17.83	19.03	18.21	19.36	19.72
	4H	18.59	19.71	18.99	20.06	20.44	18.59	19.71	18.99	20.06	20.44
	6H	19.17	20.21	19.59	20.58	20.97	19.17	20.21	19.59	20.58	20.97
	8H	19.37	20.36	19.80	20.75	21.15	19.37	20.36	19.80	20.75	21.15
	12H	19.51	20.45	19.94	20.84	21.27	19.51	20.45	19.94	20.84	21.27
4H	2H	16.50	17.62	16.90	17.97	18.35	16.50	17.62	16.90	17.97	18.35
	3H	18.69	19.63	19.11	20.04	20.44	18.69	19.63	19.11	20.04	20.44
	4H	19.58	20.42	20.01	20.84	21.28	19.58	20.42	20.01	20.84	21.28
	6H	20.29	21.03	20.76	21.47	21.94	20.29	21.03	20.76	21.47	21.94
	8H	20.55	21.23	21.01	21.68	22.15	20.55	21.23	21.01	21.68	22.15
	12H	20.73	21.34	21.22	21.82	22.29	20.73	21.34	21.22	21.82	22.29
8H	4H	19.90	20.58	20.37	21.03	21.50	19.90	20.58	20.37	21.03	21.50
	6H	20.76	21.32	21.26	21.81	22.29	20.76	21.32	21.26	21.81	22.29
	8H	21.10	21.60	21.61	22.11	22.60	21.10	21.60	21.61	22.11	22.60
	12H	21.37	21.81	21.89	22.31	22.88	21.37	21.81	21.89	22.31	22.88
12H	4H	19.93	20.53	20.41	21.02	21.49	19.93	20.53	20.41	21.02	21.49
	6H	20.82	21.32	21.34	21.83	22.33	20.82	21.32	21.34	21.83	22.33
	8H	21.22	21.66	21.74	22.16	22.73	21.22	21.66	21.74	22.16	22.73