

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: P979631

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

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979631
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-241-927-48L-C-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 241 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

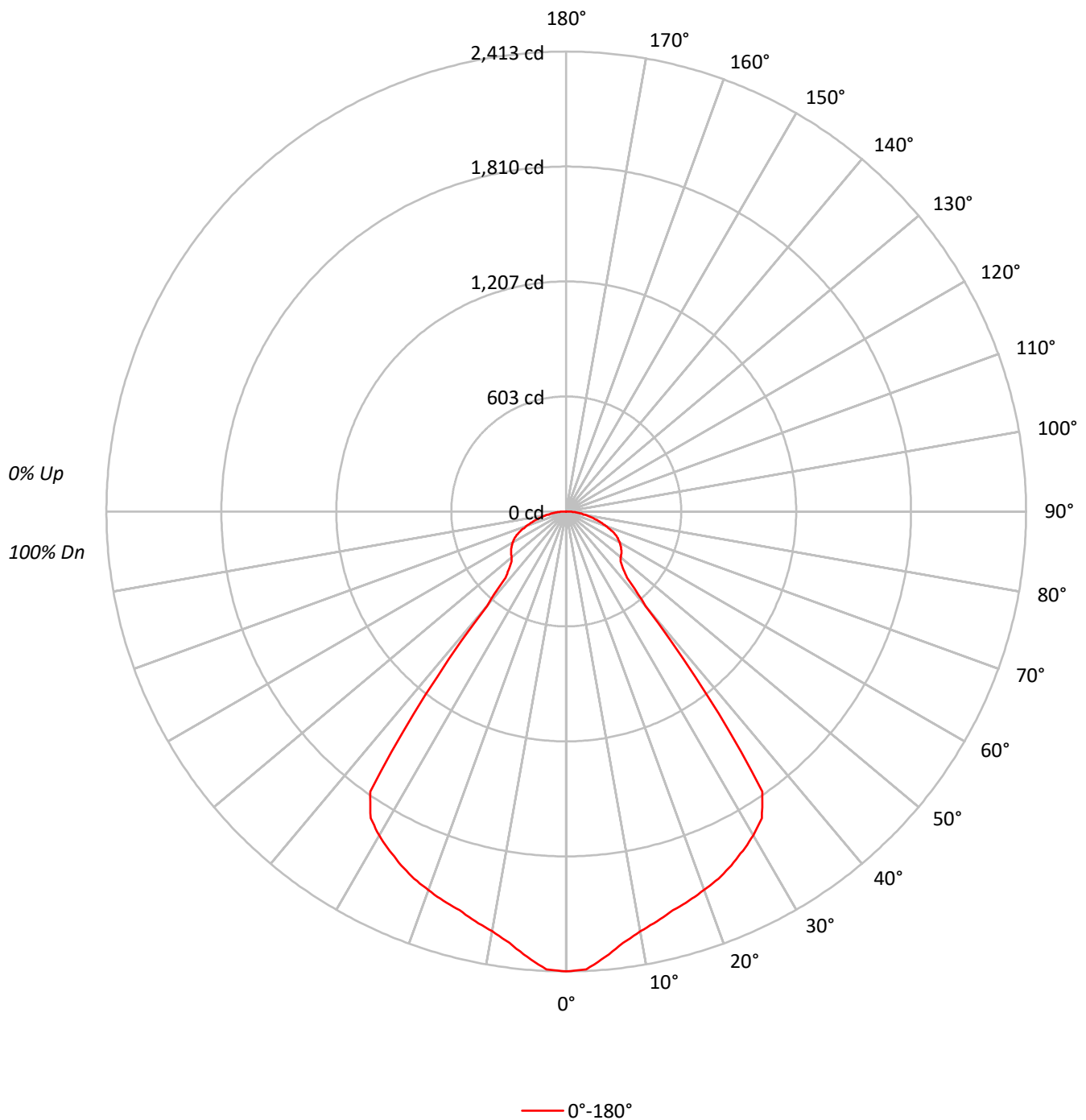
Lumens per Lamp: N/A
Luminaire Lumens: 3893.2 lumens
Efficiency: N/A
Efficacy: 116.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.09
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	103	100	108	105	101	98	100	98	95		97	94	92		93
2	103	96	90	85	100	94	89	84	91	86	83		87	84	81		85
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77
4	89	79	71	66	87	78	71	65	75	69	65		73	68	64		71
5	83	72	64	59	81	71	64	59	69	63	58		67	62	57		65
6	78	66	59	53	76	65	58	53	64	57	52		62	56	52		61
7	73	61	54	48	71	60	53	48	59	53	48		58	52	48		56
8	69	57	49	44	67	56	49	44	55	48	44		54	48	44		53
9	65	53	46	41	63	52	45	41	51	45	40		50	44	40		49
10	61	49	42	38	60	49	42	37	48	42	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	18600
5°	18164
10°	17511
15°	17285
20°	17345
25°	17425
30°	17478
35°	16876
40°	6516
45°	4579
50°	4485
55°	4746
60°	4992
65°	5142
70°	4970
75°	4697
80°	4400
85°	4078

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 65°

Luminance: 5142 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.3	5.7
10°-20°	613.8	15.8
20°-30°	944.5	24.3
30°-40°	960.8	24.7
40°-50°	344.2	8.8
50°-60°	314.8	8.1
60°-70°	275.0	7.1
70°-80°	167.3	4.3
80°-90°	52.6	1.4
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°	1778.6	45.7
0°-40°	2739.4	70.4
0°-60°	3398.3	87.3
0°-90°	3893.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3893.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2413	
5°	2347	220
15°	2166	614
25°	2049	945
35°	1793	961
45°	420	344
55°	353	315
65°	282	275
75°	158	167
85°	46	53
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	2412.8
2.5°	2404.5
5°	2347.2
7.5°	2283.1
10°	2237.0
12.5°	2202.1
15°	2165.8
17.5°	2142.1
20°	2114.2
22.5°	2086.3
25°	2048.6
27.5°	2006.7
30°	1963.5
32.5°	1909.1
35°	1793.2
37.5°	1214.1
40°	647.5
42.5°	471.7
45°	420.0
47.5°	388.0
50°	374.0
52.5°	364.2
55°	353.1
57.5°	339.1
60°	323.8
62.5°	305.6
65°	281.9
67.5°	251.2
70°	220.5
72.5°	188.4
75°	157.7
77.5°	128.4
80°	99.1
82.5°	72.6
85°	46.1
87.5°	25.1
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	15.87	17.19	16.23	17.50	17.82	15.87	17.19	16.23	17.50	17.82
	3H	18.03	19.21	18.40	19.54	19.91	18.03	19.21	18.40	19.54	19.91
	4H	18.81	19.92	19.21	20.27	20.65	18.81	19.92	19.21	20.27	20.65
	6H	19.40	20.42	19.81	20.79	21.19	19.40	20.42	19.81	20.79	21.19
	8H	19.60	20.57	20.03	20.96	21.37	19.60	20.57	20.03	20.96	21.37
	12H	19.74	20.67	20.17	21.05	21.48	19.74	20.67	20.17	21.05	21.48
4H	2H	16.61	17.73	17.02	18.08	18.46	16.61	17.73	17.02	18.08	18.46
	3H	18.93	19.86	19.34	20.26	20.67	18.93	19.86	19.34	20.26	20.67
	4H	19.83	20.67	20.26	21.08	21.53	19.83	20.67	20.26	21.08	21.53
	6H	20.54	21.27	21.00	21.71	22.18	20.54	21.27	21.00	21.71	22.18
	8H	20.79	21.47	21.26	21.92	22.39	20.79	21.47	21.26	21.92	22.39
	12H	20.98	21.58	21.47	22.06	22.54	20.98	21.58	21.47	22.06	22.54
8H	4H	20.15	20.83	20.62	21.28	21.75	20.15	20.83	20.62	21.28	21.75
	6H	21.01	21.56	21.51	22.06	22.54	21.01	21.56	21.51	22.06	22.54
	8H	21.35	21.84	21.87	22.35	22.85	21.35	21.84	21.87	22.35	22.85
	12H	21.63	22.06	22.14	22.55	23.12	21.63	22.06	22.14	22.55	23.12
12H	4H	20.18	20.78	20.66	21.26	21.73	20.18	20.78	20.66	21.26	21.73
	6H	21.07	21.57	21.59	22.08	22.57	21.07	21.57	21.59	22.08	22.57
	8H	21.48	21.91	21.99	22.40	22.97	21.48	21.91	21.99	22.40	22.97