

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: P979911

Luminaire Tested: PRLX-242-927-18L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979911
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-242-927-18L-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: -

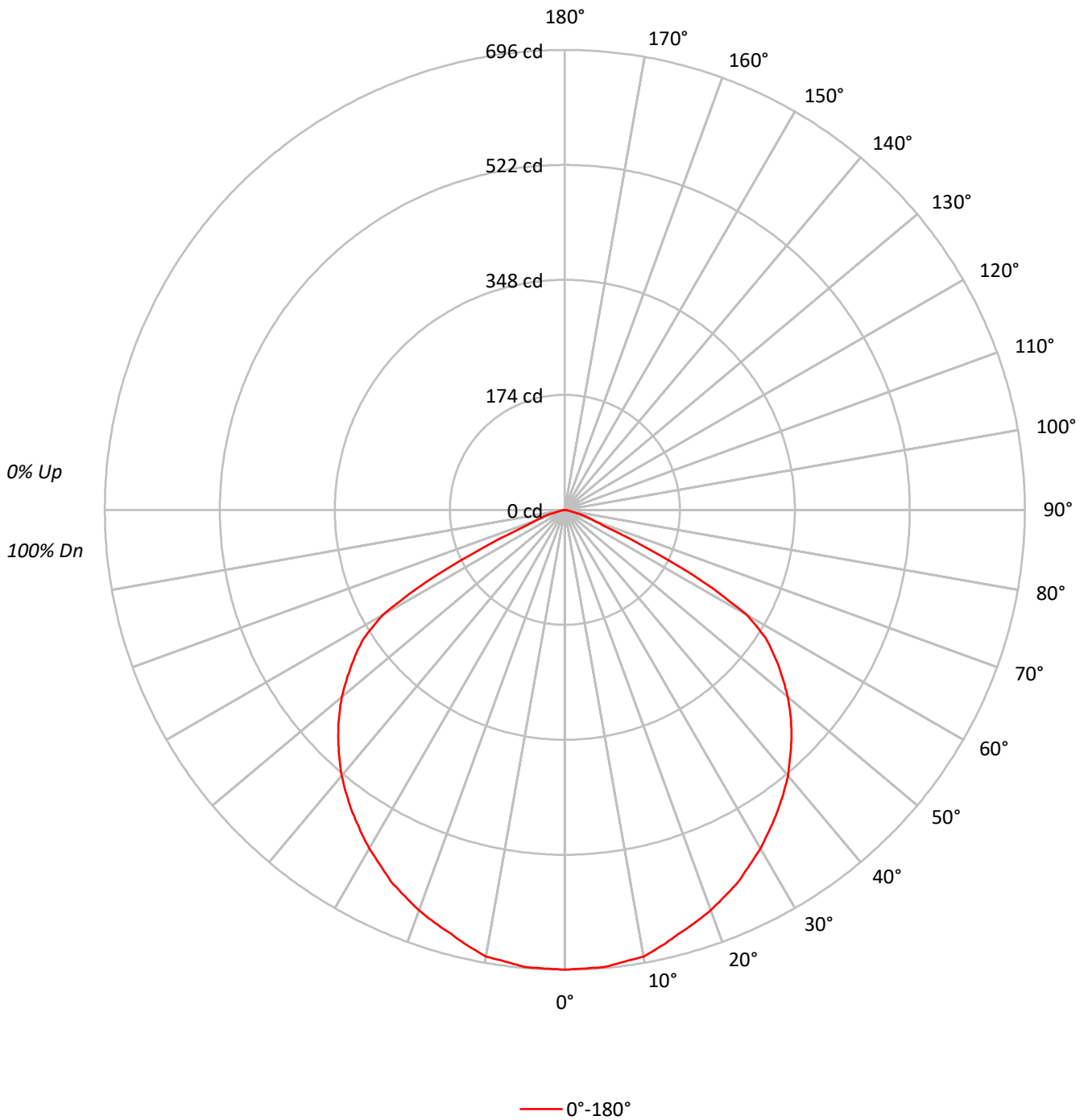
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1782.9 lumens
Efficiency: N/A
Efficacy: 162.1 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): 11
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	60	83	73	66	60	71	64	59	69	63	58	67	62	58	56
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	3114
5°	3119
10°	3120
15°	3078
20°	3071
25°	3067
30°	3058
35°	3058
40°	3068
45°	3069
50°	3065
55°	3028
60°	2846
65°	1457
70°	586
75°	277
80°	54
85°	77

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 47.5°
 Luminance: 3070 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	3.7
10°-20°	188.0	10.5
20°-30°	286.0	16.0
30°-40°	350.4	19.7
40°-50°	374.0	21.0
50°-60°	344.8	19.3
60°-70°	151.8	8.5
70°-80°	20.3	1.1
80°-90°	1.5	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°	540.0	30.3
0°-40°	890.4	49.9
0°-60°	1609.2	90.3
0°-90°	1782.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1782.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	696	
5°	694	66
15°	664	188
25°	621	286
35°	560	350
45°	485	374
55°	388	345
65°	138	152
75°	16	20
85°	2	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	695.8
2.5°	694.8
5°	694.3
7.5°	689.6
10°	686.5
12.5°	676.2
15°	664.4
17.5°	655.1
20°	644.8
22.5°	632.9
25°	621.1
27.5°	605.6
30°	591.7
32.5°	575.7
35°	559.7
37.5°	542.7
40°	525.2
42.5°	505.1
45°	485.0
47.5°	463.4
50°	440.2
52.5°	414.4
55°	388.1
57.5°	360.3
60°	318.0
62.5°	236.6
65°	137.6
67.5°	63.9
70°	44.8
72.5°	33.5
75°	16.0
77.5°	4.6
80°	2.1
82.5°	2.1
85°	1.5
87.5°	1.0
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	16.79	18.33	17.15	18.65	18.96	16.79	18.33	17.15	18.65	18.96
	3H	16.83	18.21	17.21	18.54	18.90	16.83	18.21	17.21	18.54	18.90
	4H	16.80	18.08	17.20	18.43	18.81	16.80	18.08	17.20	18.43	18.81
	6H	16.74	17.92	17.15	18.29	18.68	16.74	17.92	17.15	18.29	18.68
	8H	16.70	17.83	17.13	18.22	18.62	16.70	17.83	17.13	18.22	18.62
	12H	16.67	17.75	17.10	18.13	18.56	16.67	17.75	17.10	18.13	18.56
4H	2H	16.88	18.16	17.28	18.51	18.89	16.88	18.16	17.28	18.51	18.89
	3H	16.97	18.02	17.38	18.42	18.82	16.97	18.02	17.38	18.42	18.82
	4H	16.93	17.87	17.37	18.28	18.72	16.93	17.87	17.37	18.28	18.72
	6H	16.88	17.68	17.33	18.13	18.59	16.88	17.68	17.33	18.13	18.59
	8H	16.83	17.58	17.30	18.03	18.50	16.83	17.58	17.30	18.03	18.50
	12H	16.80	17.47	17.28	17.95	18.42	16.80	17.47	17.28	17.95	18.42
8H	4H	16.85	17.60	17.31	18.04	18.51	16.85	17.60	17.31	18.04	18.51
	6H	16.77	17.38	17.26	17.88	18.35	16.77	17.38	17.26	17.88	18.35
	8H	16.71	17.27	17.23	17.78	18.27	16.71	17.27	17.23	17.78	18.27
	12H	16.68	17.17	17.19	17.66	18.23	16.68	17.17	17.19	17.66	18.23
12H	4H	16.81	17.48	17.30	17.96	18.43	16.81	17.48	17.30	17.96	18.43
	6H	16.71	17.27	17.23	17.78	18.27	16.71	17.27	17.23	17.78	18.27
	8H	16.68	17.17	17.19	17.66	18.23	16.68	17.17	17.19	17.66	18.23