

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: P979941

Luminaire Tested: PRLX-242-927-43L-C-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979941
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-242-927-43L-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

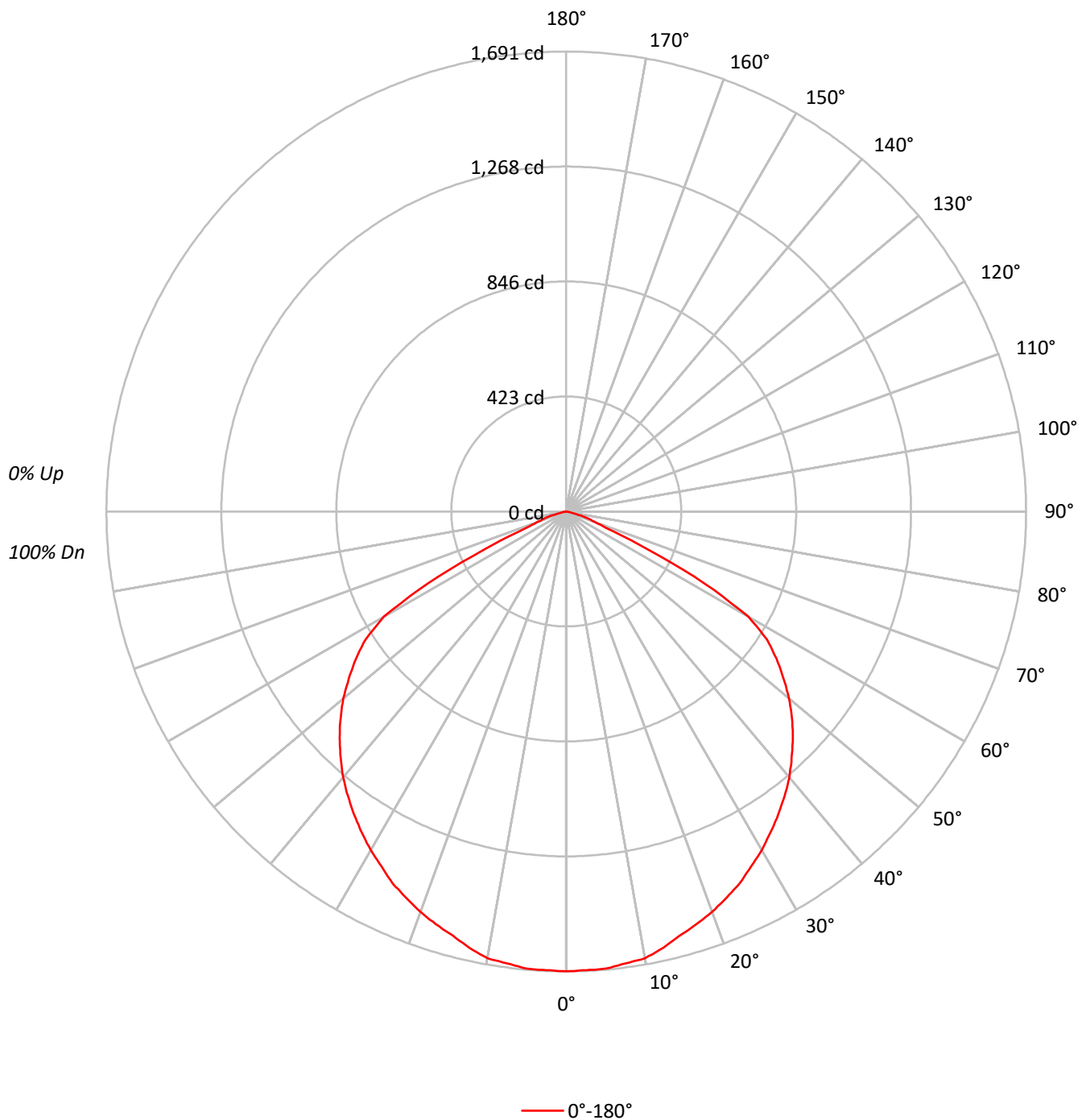
Lumens per Lamp: N/A
Luminaire Lumens: 4332.3 lumens
Efficiency: N/A
Efficacy: 146.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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	104	101	98	100	98	95		96	94	92		93
2	102	95	89	84	99	93	87	83	89	85	81		86	82	79		83
3	93	84	76	71	91	82	75	70	79	74	69		77	72	68		74
4	86	75	67	60	83	73	66	60	71	64	59		69	63	58		67
5	79	67	58	52	77	66	58	52	64	57	51		62	56	51		60
6	73	60	52	46	71	59	51	45	57	50	45		56	49	45		54
7	68	55	46	40	66	54	46	40	52	45	40		51	44	40		49
8	63	50	42	36	61	49	41	36	48	41	36		47	40	35		45
9	59	46	38	32	57	45	37	32	44	37	32		43	36	32		42
10	55	42	34	29	54	42	34	29	41	34	29		40	33	29		39

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	7566
5°	7578
10°	7581
15°	7479
20°	7462
25°	7452
30°	7430
35°	7430
40°	7455
45°	7458
50°	7447
55°	7358
60°	6916
65°	3541
70°	1426
75°	671
80°	129
85°	195

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7458 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	3.7
10°-20°	456.8	10.5
20°-30°	695.0	16.0
30°-40°	851.6	19.7
40°-50°	908.7	21.0
50°-60°	837.9	19.3
60°-70°	368.9	8.5
70°-80°	49.4	1.1
80°-90°	3.8	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°	1312.0	30.3
0°-40°	2163.6	49.9
0°-60°	3910.2	90.3
0°-90°	4332.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4332.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1691	
5°	1687	160
15°	1614	457
25°	1509	695
35°	1360	852
45°	1178	909
55°	943	838
65°	334	369
75°	39	49
85°	4	4
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1690.7
2.5°	1688.2
5°	1687.0
7.5°	1675.7
10°	1668.2
12.5°	1643.2
15°	1614.4
17.5°	1591.8
20°	1566.8
22.5°	1538.0
25°	1509.1
27.5°	1471.6
30°	1437.8
32.5°	1398.9
35°	1360.1
37.5°	1318.8
40°	1276.2
42.5°	1227.4
45°	1178.5
47.5°	1125.9
50°	1069.6
52.5°	1006.9
55°	943.1
57.5°	875.4
60°	772.7
62.5°	574.9
65°	334.4
67.5°	155.3
70°	109.0
72.5°	81.4
75°	38.8
77.5°	11.3
80°	5.0
82.5°	5.0
85°	3.8
87.5°	2.5
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	19.87	21.42	20.23	21.73	22.05	19.87	21.42	20.23	21.73	22.05
	3H	19.92	21.29	20.29	21.62	21.98	19.92	21.29	20.29	21.62	21.98
	4H	19.88	21.17	20.28	21.52	21.89	19.88	21.17	20.28	21.52	21.89
	6H	19.82	21.00	20.23	21.37	21.76	19.82	21.00	20.23	21.37	21.76
	8H	19.79	20.91	20.21	21.30	21.70	19.79	20.91	20.21	21.30	21.70
	12H	19.76	20.83	20.19	21.21	21.64	19.76	20.83	20.19	21.21	21.64
4H	2H	19.96	21.25	20.36	21.60	21.98	19.96	21.25	20.36	21.60	21.98
	3H	20.05	21.10	20.46	21.50	21.90	20.05	21.10	20.46	21.50	21.90
	4H	20.02	20.95	20.45	21.37	21.81	20.02	20.95	20.45	21.37	21.81
	6H	19.96	20.77	20.42	21.21	21.67	19.96	20.77	20.42	21.21	21.67
	8H	19.92	20.67	20.38	21.11	21.58	19.92	20.67	20.38	21.11	21.58
	12H	19.88	20.55	20.37	21.03	21.50	19.88	20.55	20.37	21.03	21.50
8H	4H	19.93	20.68	20.40	21.13	21.59	19.93	20.68	20.40	21.13	21.59
	6H	19.85	20.47	20.35	20.96	21.44	19.85	20.47	20.35	20.96	21.44
	8H	19.80	20.35	20.31	20.86	21.35	19.80	20.35	20.31	20.86	21.35
	12H	19.76	20.26	20.27	20.75	21.31	19.76	20.26	20.27	20.75	21.31
12H	4H	19.90	20.57	20.38	21.05	21.52	19.90	20.57	20.38	21.05	21.52
	6H	19.80	20.35	20.31	20.86	21.35	19.80	20.35	20.31	20.86	21.35
	8H	19.76	20.25	20.27	20.75	21.31	19.76	20.25	20.27	20.75	21.31

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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