

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: P980273

Luminaire Tested: PRLX-243-927-48L-F-U-S-WHTE-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980273
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-32)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-927-48L-F-U-S-WHTE-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

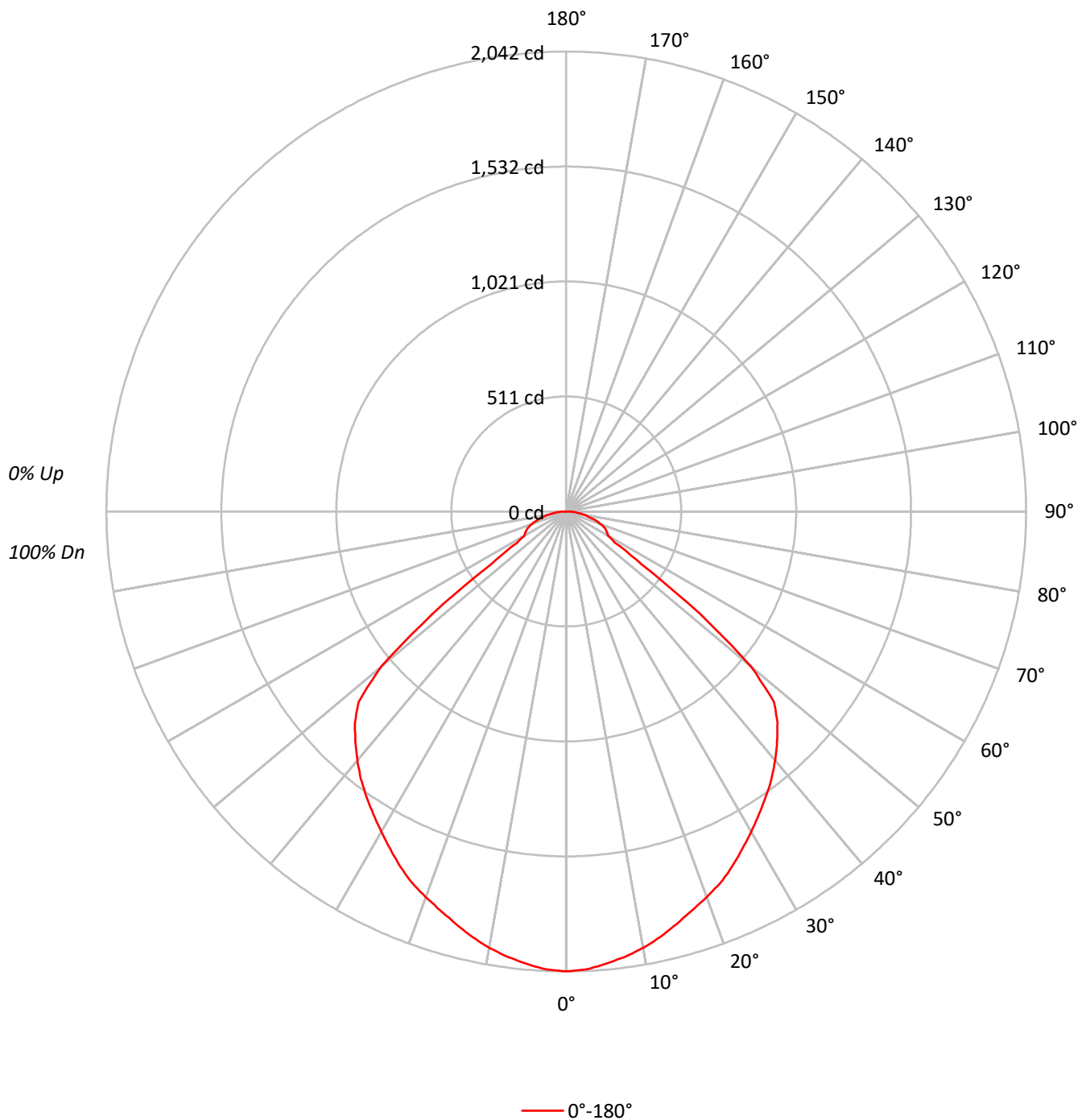
Lumens per Lamp: N/A
Luminaire Lumens: 4315.0 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.36
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	111	107	103	100	108	105	101	99	100	98	95		97	95	93		88
2	103	96	90	85	100	94	89	84	90	86	82		87	84	80		77
3	95	86	79	73	92	84	78	73	81	76	71		79	74	70		67
4	88	77	70	64	86	76	69	63	74	67	63		71	66	62		59
5	81	70	62	56	79	69	61	56	67	60	55		65	59	55		52
6	76	64	56	50	74	63	55	50	61	54	49		59	53	49		46
7	70	58	50	44	69	57	50	44	56	49	44		54	48	44		42
8	66	53	45	40	64	53	45	40	51	45	40		50	44	39		37
9	61	49	41	36	60	48	41	36	47	41	36		46	40	36		34
10	58	45	38	33	56	45	38	33	44	37	33		43	37	33		31

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	10073
5°	9987
10°	9858
15°	9680
20°	9569
25°	9481
30°	9357
35°	9313
40°	9294
45°	9260
50°	8216
55°	3517
60°	2121
65°	2265
70°	2335
75°	2261
80°	2182
85°	2213

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9260 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.0	4.4
10°-20°	535.2	12.4
20°-30°	801.9	18.6
30°-40°	968.2	22.4
40°-50°	1007.1	23.3
50°-60°	453.1	10.5
60°-70°	190.1	4.4
70°-80°	125.7	2.9
80°-90°	42.7	1.0
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°	1528.1	35.4
0°-40°	2496.2	57.9
0°-60°	3956.5	91.7
0°-90°	4315.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4315.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2042	
5°	2016	191
15°	1895	535
25°	1742	802
35°	1546	968
45°	1327	1007
55°	409	453
65°	194	190
75°	119	126
85°	39	43
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2041.6
2.5°	2036.0
5°	2016.5
7.5°	1994.2
10°	1967.7
12.5°	1934.2
15°	1895.1
17.5°	1857.4
20°	1822.5
22.5°	1786.3
25°	1741.6
27.5°	1691.4
30°	1642.5
32.5°	1593.7
35°	1546.2
37.5°	1497.4
40°	1443.0
42.5°	1385.7
45°	1327.1
47.5°	1250.4
50°	1070.4
52.5°	748.0
55°	408.9
57.5°	255.4
60°	214.9
62.5°	205.1
65°	194.0
67.5°	180.0
70°	161.9
72.5°	140.9
75°	118.6
77.5°	97.7
80°	76.8
82.5°	57.2
85°	39.1
87.5°	22.3
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	11.77	13.22	12.13	13.53	13.85	11.77	13.22	12.13	13.53	13.85
	3H	13.86	15.15	14.24	15.48	15.84	13.86	15.15	14.24	15.48	15.84
	4H	14.69	15.89	15.09	16.24	16.62	14.69	15.89	15.09	16.24	16.62
	6H	15.34	16.44	15.75	16.81	17.20	15.34	16.44	15.75	16.81	17.20
	8H	15.57	16.62	16.00	17.01	17.41	15.57	16.62	16.00	17.01	17.41
	12H	15.75	16.76	16.18	17.14	17.57	15.75	16.76	16.18	17.14	17.57
4H	2H	12.43	13.63	12.83	13.98	14.36	12.43	13.63	12.83	13.98	14.36
	3H	14.77	15.76	15.19	16.16	16.56	14.77	15.76	15.19	16.16	16.56
	4H	15.73	16.62	16.17	17.03	17.47	15.73	16.62	16.17	17.03	17.47
	6H	16.52	17.28	16.98	17.73	18.19	16.52	17.28	16.98	17.73	18.19
	8H	16.80	17.52	17.27	17.96	18.43	16.80	17.52	17.27	17.96	18.43
	12H	17.04	17.68	17.52	18.16	18.63	17.04	17.68	17.52	18.16	18.63
8H	4H	16.09	16.80	16.55	17.25	17.72	16.09	16.80	16.55	17.25	17.72
	6H	17.01	17.60	17.51	18.10	18.58	17.01	17.60	17.51	18.10	18.58
	8H	17.39	17.92	17.90	18.44	18.93	17.39	17.92	17.90	18.44	18.93
	12H	17.72	18.20	18.24	18.70	19.26	17.72	18.20	18.24	18.70	19.26
12H	4H	16.12	16.76	16.61	17.24	17.72	16.12	16.76	16.61	17.24	17.72
	6H	17.08	17.62	17.60	18.13	18.62	17.08	17.62	17.60	18.13	18.62
	8H	17.53	18.01	18.04	18.50	19.07	17.53	18.01	18.04	18.50	19.07