

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: P979950

Luminaire Tested: PRLX-242-927-48L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979950
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-927-48L-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

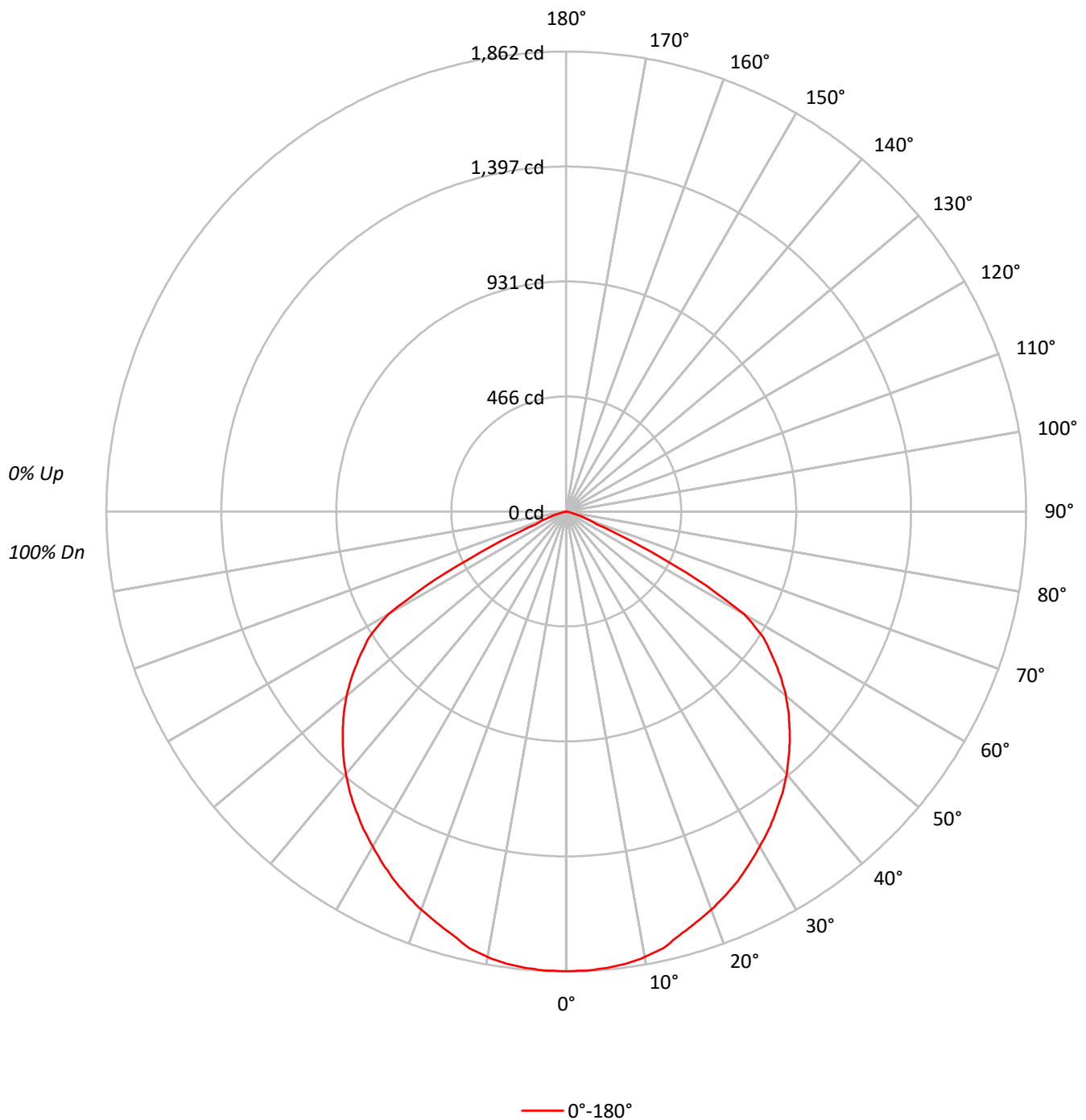
Lumens per Lamp: N/A
Luminaire Lumens: 4665.1 lumens
Efficiency: N/A
Efficacy: 139.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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	102	99	101	98	96		97	95	93		88
2	102	95	89	84	100	93	88	83	90	85	81		86	83	79		76
3	94	84	77	71	91	83	76	71	80	74	69		77	72	68		65
4	86	75	67	61	84	74	66	61	71	65	60		69	63	59		56
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		49
6	73	61	52	46	71	60	52	46	58	51	46		56	50	45		43
7	68	55	47	41	66	54	46	41	53	46	40		51	45	40		38
8	63	50	42	36	62	49	42	36	48	41	36		47	41	36		34
9	59	46	38	33	58	45	38	33	44	37	32		43	37	32		30
10	55	42	35	30	54	42	35	30	41	34	29		40	34	29		27

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	8331
5°	8338
10°	8326
15°	8224
20°	8175
25°	8138
30°	8098
35°	8096
40°	8111
45°	8099
50°	8084
55°	7948
60°	7444
65°	3472
70°	1168
75°	361
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8099 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.4	3.8
10°-20°	501.9	10.8
20°-30°	759.4	16.3
30°-40°	928.2	19.9
40°-50°	987.4	21.2
50°-60°	906.3	19.4
60°-70°	371.9	8.0
70°-80°	33.5	0.7
80°-90°	0.0	0.0
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°	1437.8	30.8
0°-40°	2365.9	50.7
0°-60°	4259.6	91.3
0°-90°	4665.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4665.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1862	
5°	1856	176
15°	1775	502
25°	1648	759
35°	1482	928
45°	1280	987
55°	1019	906
65°	328	372
75°	21	34
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1861.6
2.5°	1860.2
5°	1856.0
7.5°	1847.7
10°	1832.3
12.5°	1811.4
15°	1775.1
17.5°	1745.8
20°	1716.5
22.5°	1683.0
25°	1648.1
27.5°	1607.6
30°	1567.2
32.5°	1526.7
35°	1482.0
37.5°	1437.4
40°	1388.5
42.5°	1335.5
45°	1279.7
47.5°	1222.5
50°	1161.1
52.5°	1092.7
55°	1018.7
57.5°	944.8
60°	831.7
62.5°	600.1
65°	327.9
67.5°	131.2
70°	89.3
72.5°	61.4
75°	20.9
77.5°	1.4
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
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	20.16	21.69	20.52	22.01	22.32	20.16	21.69	20.52	22.01	22.32
	3H	20.14	21.50	20.52	21.83	22.19	20.14	21.50	20.52	21.83	22.19
	4H	20.09	21.36	20.49	21.71	22.09	20.09	21.36	20.49	21.71	22.09
	6H	20.03	21.20	20.44	21.56	21.96	20.03	21.20	20.44	21.56	21.96
	8H	19.99	21.10	20.42	21.49	21.89	19.99	21.10	20.42	21.49	21.89
	12H	19.96	21.02	20.39	21.40	21.83	19.96	21.02	20.39	21.40	21.83
4H	2H	20.21	21.48	20.61	21.83	22.21	20.21	21.48	20.61	21.83	22.21
	3H	20.22	21.26	20.64	21.66	22.06	20.22	21.26	20.64	21.66	22.06
	4H	20.17	21.09	20.60	21.50	21.94	20.17	21.09	20.60	21.50	21.94
	6H	20.10	20.90	20.56	21.34	21.80	20.10	20.90	20.56	21.34	21.80
	8H	20.06	20.80	20.52	21.24	21.71	20.06	20.80	20.52	21.24	21.71
	12H	20.02	20.68	20.51	21.16	21.63	20.02	20.68	20.51	21.16	21.63
8H	4H	20.07	20.81	20.53	21.25	21.72	20.07	20.81	20.53	21.25	21.72
	6H	19.98	20.59	20.48	21.08	21.56	19.98	20.59	20.48	21.08	21.56
	8H	19.93	20.47	20.44	20.98	21.47	19.93	20.47	20.44	20.98	21.47
	12H	19.89	20.37	20.40	20.87	21.43	19.89	20.37	20.40	20.87	21.43
12H	4H	20.03	20.69	20.51	21.17	21.64	20.03	20.69	20.51	21.17	21.64
	6H	19.93	20.47	20.44	20.98	21.47	19.93	20.47	20.44	20.98	21.47
	8H	19.89	20.37	20.40	20.87	21.43	19.89	20.37	20.40	20.87	21.43

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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