

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: P980270

Luminaire Tested: PRLX-243-927-48L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980270
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-927-48L-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

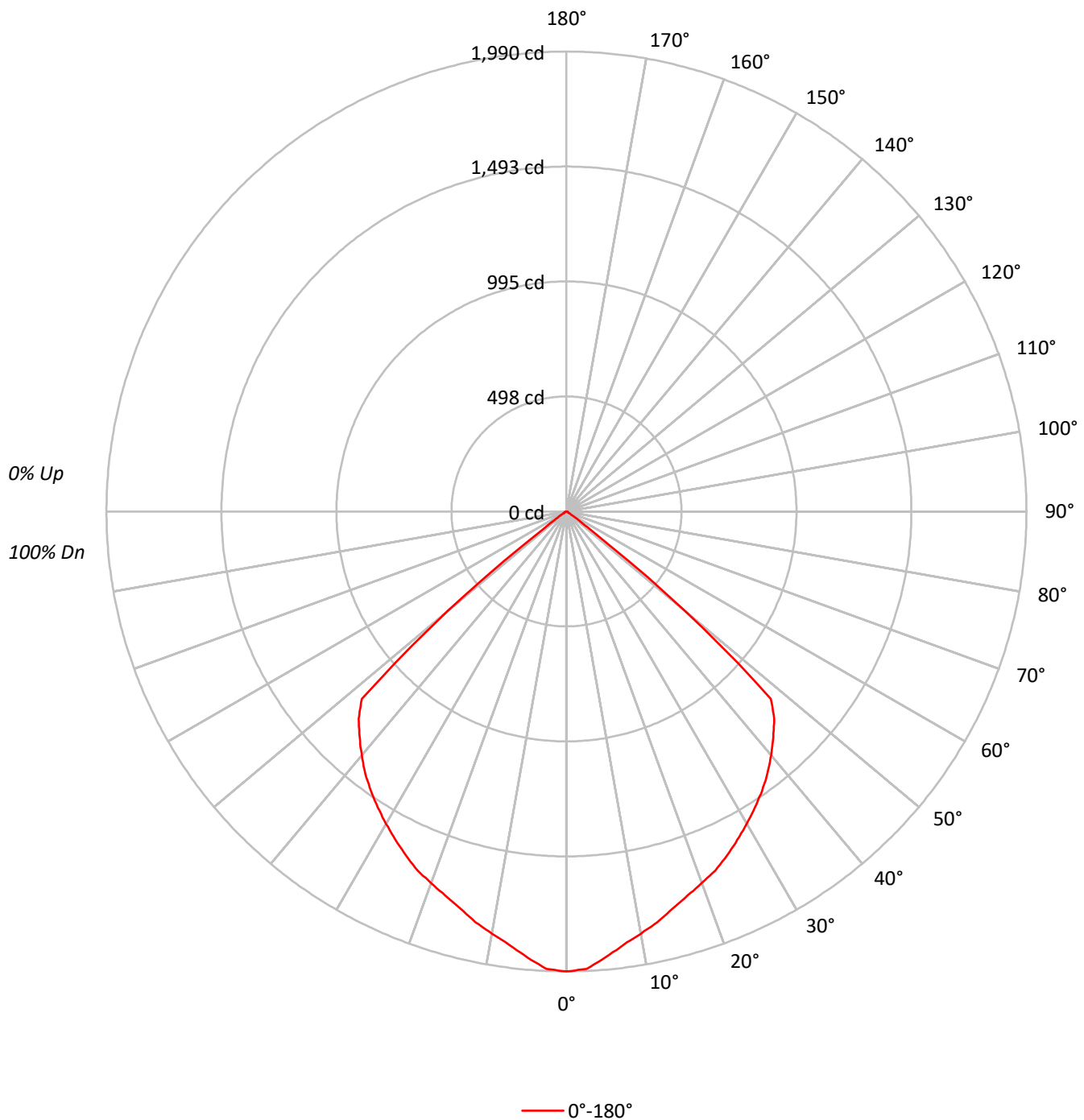
Lumens per Lamp: N/A
Luminaire Lumens: 3423.0 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.34
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	112	109	106	104	110	107	104	102	103	101	99		99	97	96		96
2	105	99	95	91	103	98	93	89	94	91	88		91	88	86		88
3	98	91	85	80	96	89	84	79	86	82	78		84	80	77		82
4	92	83	76	71	90	81	75	70	79	74	69		77	72	69		75
5	86	75	68	63	84	74	68	63	73	67	62		71	66	62		69
6	80	69	62	57	78	68	61	56	67	61	56		65	60	56		64
7	75	63	56	51	73	63	56	51	61	55	51		60	54	50		59
8	70	58	51	46	69	58	51	46	57	50	46		55	50	46		54
9	66	54	47	42	64	53	47	42	52	46	42		51	46	42		50
10	62	50	43	38	61	50	43	38	49	43	38		48	42	38		47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	9818
5°	9593
10°	9291
15°	9081
20°	8983
25°	8942
30°	8889
35°	8885
40°	8871
45°	8870
50°	5141
55°	456
60°	69
65°	82
70°	101
75°	107
80°	80
85°	79

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8870 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.2	5.3
10°-20°	502.7	14.7
20°-30°	757.2	22.1
30°-40°	923.0	27.0
40°-50°	927.6	27.1
50°-60°	115.8	3.4
60°-70°	6.9	0.2
70°-80°	5.7	0.2
80°-90°	1.9	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°	1442.1	42.1
0°-40°	2365.1	69.1
0°-60°	3408.5	99.6
0°-90°	3423.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3423.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1990	
5°	1937	182
15°	1778	503
25°	1642	757
35°	1475	923
45°	1271	928
55°	53	116
65°	7	7
75°	6	6
85°	1	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1990.0
2.5°	1981.6
5°	1937.0
7.5°	1890.9
10°	1854.6
12.5°	1819.7
15°	1777.9
17.5°	1743.0
20°	1710.9
22.5°	1681.6
25°	1642.5
27.5°	1602.0
30°	1560.2
32.5°	1518.3
35°	1475.1
37.5°	1429.0
40°	1377.4
42.5°	1324.3
45°	1271.3
47.5°	1200.1
50°	669.8
52.5°	127.0
55°	53.0
57.5°	16.7
60°	7.0
62.5°	7.0
65°	7.0
67.5°	7.0
70°	7.0
72.5°	7.0
75°	5.6
77.5°	4.2
80°	2.8
82.5°	2.8
85°	1.4
87.5°	1.4
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

END OF REPORT