

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: P980512

Luminaire Tested: PRLX-243-940-48L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980512
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-940-48L-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

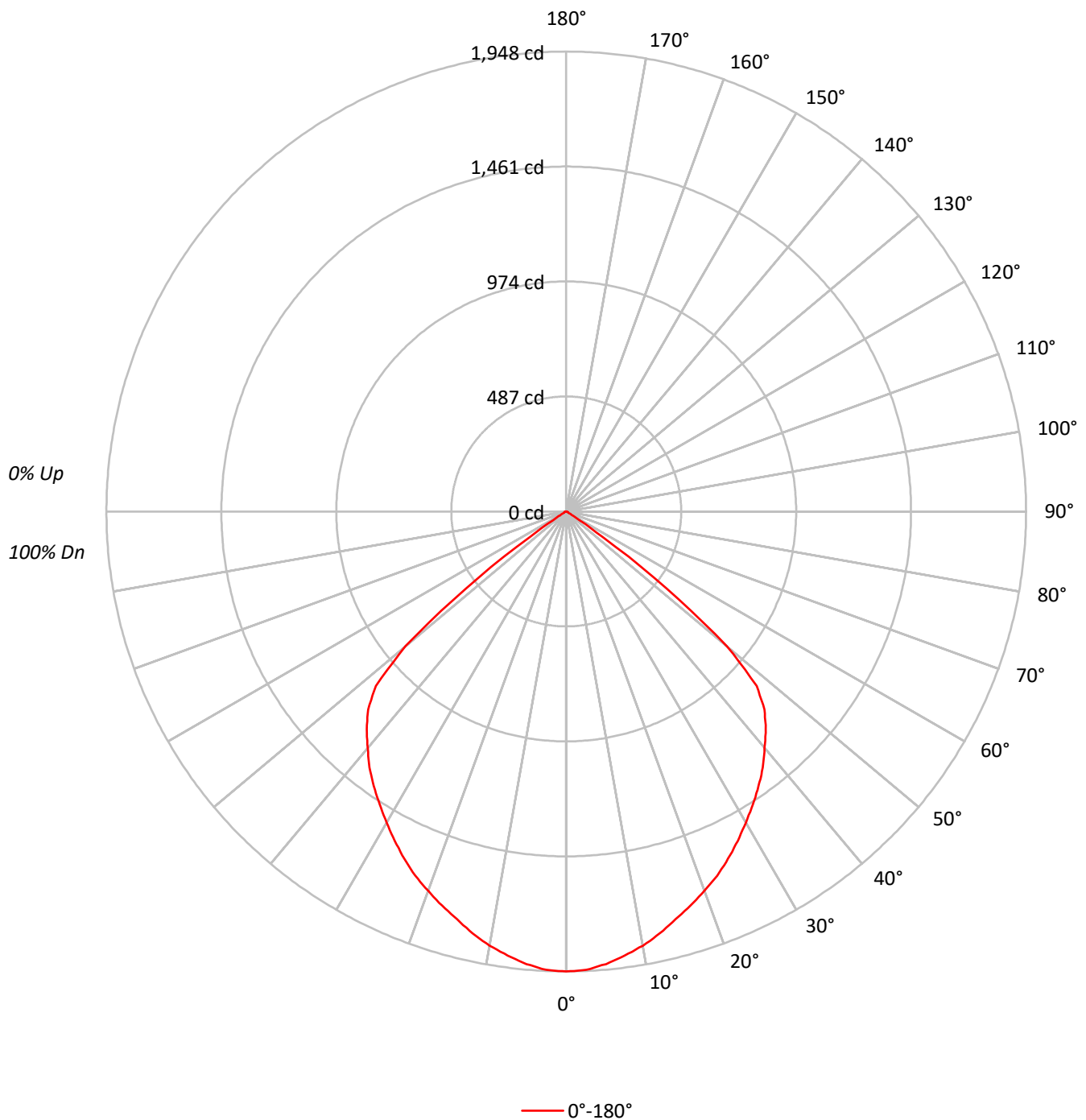
Lumens per Lamp: N/A
Luminaire Lumens: 3494.6 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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	103	110	107	104	102	103	100	98		99	97	95		95
2	105	99	94	90	103	97	93	89	94	90	87		91	88	85		88
3	98	90	84	79	96	88	83	78	86	81	77		83	79	76		81
4	91	82	75	70	89	80	74	69	78	73	68		76	71	67		74
5	85	74	67	62	83	73	67	62	71	66	61		70	64	60		68
6	79	68	61	55	77	67	60	55	66	59	55		64	58	54		63
7	74	62	55	50	72	62	55	50	60	54	49		59	53	49		58
8	69	57	50	45	68	57	50	45	56	49	45		54	49	44		53
9	65	53	46	41	64	52	46	41	51	45	41		50	45	40		49
10	61	49	42	37	60	49	42	37	48	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	9613
5°	9531
10°	9356
15°	9134
20°	8981
25°	8837
30°	8670
35°	8555
40°	8423
45°	8284
50°	6814
55°	1609
60°	94
65°	92
70°	114
75°	120
80°	91
85°	91

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8284 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.8	5.2
10°-20°	505.0	14.5
20°-30°	747.6	21.4
30°-40°	888.6	25.4
40°-50°	892.4	25.5
50°-60°	262.9	7.5
60°-70°	8.0	0.2
70°-80°	6.1	0.2
80°-90°	2.2	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°	1434.4	41.0
0°-40°	2323.0	66.5
0°-60°	3478.3	99.5
0°-90°	3494.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3494.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1948	
5°	1924	182
15°	1788	505
25°	1623	748
35°	1420	889
45°	1187	892
55°	187	263
65°	8	8
75°	6	6
85°	2	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1948.3
2.5°	1943.5
5°	1924.5
7.5°	1897.5
10°	1867.4
12.5°	1831.0
15°	1788.2
17.5°	1750.1
20°	1710.5
22.5°	1670.8
25°	1623.3
27.5°	1572.6
30°	1521.8
32.5°	1471.1
35°	1420.4
37.5°	1368.1
40°	1307.8
42.5°	1250.8
45°	1187.3
47.5°	1093.8
50°	887.7
52.5°	535.8
55°	187.1
57.5°	36.5
60°	9.5
62.5°	7.9
65°	7.9
67.5°	7.9
70°	7.9
72.5°	6.3
75°	6.3
77.5°	4.8
80°	3.2
82.5°	3.2
85°	1.6
87.5°	1.6
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	0.15	0.00	0.46	0.78	0.00	0.15	0.00	0.46	0.78
	3H	0.00	0.19	0.00	0.52	0.88	0.00	0.19	0.00	0.52	0.88
	4H	0.00	0.26	0.00	0.61	0.99	0.00	0.26	0.00	0.61	0.99
	6H	0.00	0.28	0.00	0.65	1.04	0.00	0.28	0.00	0.65	1.04
	8H	0.00	0.27	0.00	0.67	1.07	0.00	0.27	0.00	0.67	1.07
	12H	0.00	0.26	0.00	0.64	1.07	0.00	0.26	0.00	0.64	1.07
4H	2H	0.00	0.00	0.00	0.13	0.51	0.00	0.00	0.00	0.13	0.51
	3H	0.00	0.00	0.00	0.32	0.72	0.00	0.00	0.00	0.32	0.72
	4H	0.00	0.09	0.00	0.51	0.95	0.00	0.09	0.00	0.51	0.95
	6H	0.00	0.18	0.00	0.63	1.10	0.00	0.18	0.00	0.63	1.10
	8H	0.00	0.23	0.10	0.68	1.15	0.00	0.23	0.10	0.68	1.15
	12H	0.00	0.23	0.18	0.71	1.18	0.00	0.23	0.18	0.71	1.18
8H	4H	0.00	0.00	0.00	0.41	0.89	0.00	0.00	0.00	0.41	0.89
	6H	0.00	0.12	0.12	0.61	1.10	0.00	0.12	0.12	0.61	1.10
	8H	0.00	0.23	0.30	0.75	1.24	0.00	0.23	0.30	0.75	1.24
	12H	0.00	0.31	0.41	0.80	1.37	0.00	0.31	0.41	0.80	1.37
12H	4H	0.00	0.00	0.00	0.35	0.83	0.00	0.00	0.00	0.35	0.83
	6H	0.00	0.06	0.13	0.58	1.07	0.00	0.06	0.13	0.58	1.07
	8H	0.00	0.22	0.33	0.72	1.29	0.00	0.22	0.33	0.72	1.29

END OF REPORT