

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: P980272

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

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980272
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-243-927-48L-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

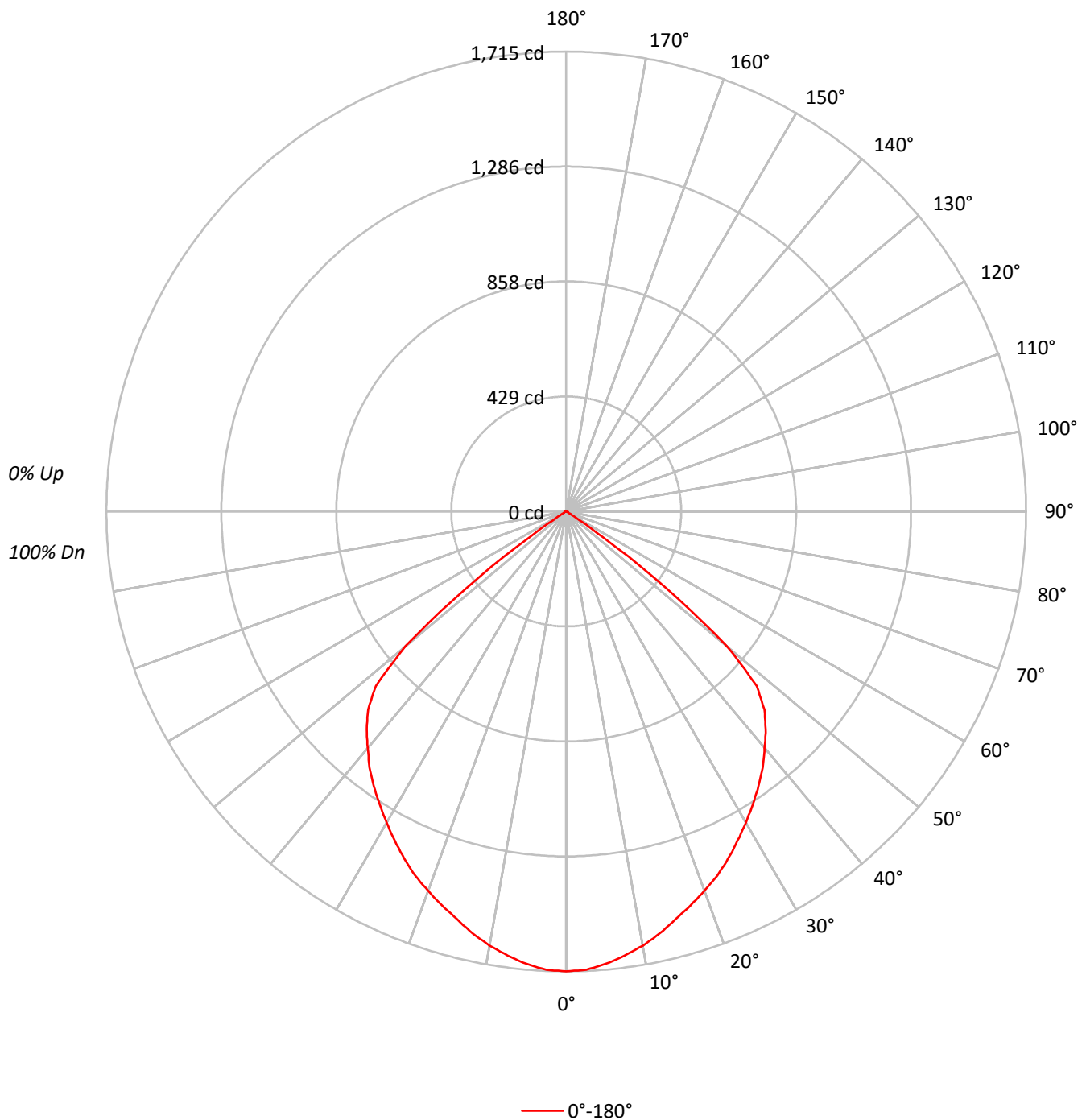
Lumens per Lamp: N/A
Luminaire Lumens: 3076.4 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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°	8462
5°	8390
10°	8236
15°	8040
20°	7906
25°	7779
30°	7632
35°	7531
40°	7415
45°	7293
50°	5999
55°	1417
60°	83
65°	82
70°	101
75°	107
80°	80
85°	79

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7293 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.1	5.2
10°-20°	444.5	14.4
20°-30°	658.1	21.4
30°-40°	782.2	25.4
40°-50°	785.6	25.5
50°-60°	231.5	7.5
60°-70°	7.1	0.2
70°-80°	5.4	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°	1262.7	41.0
0°-40°	2044.9	66.5
0°-60°	3062.0	99.5
0°-90°	3076.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3076.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1715	
5°	1694	160
15°	1574	445
25°	1429	658
35°	1250	782
45°	1045	786
55°	165	231
65°	7	7
75°	6	5
85°	1	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1715.1
2.5°	1710.9
5°	1694.1
7.5°	1670.4
10°	1643.9
12.5°	1611.8
15°	1574.1
17.5°	1540.6
20°	1505.8
22.5°	1470.9
25°	1429.0
27.5°	1384.3
30°	1339.7
32.5°	1295.0
35°	1250.4
37.5°	1204.3
40°	1151.3
42.5°	1101.1
45°	1045.2
47.5°	962.9
50°	781.5
52.5°	471.7
55°	164.7
57.5°	32.1
60°	8.4
62.5°	7.0
65°	7.0
67.5°	7.0
70°	7.0
72.5°	5.6
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	0.01	0.33	0.00	0.00	0.00	0.01	0.33
	3H	0.00	0.00	0.00	0.07	0.44	0.00	0.00	0.00	0.07	0.44
	4H	0.00	0.00	0.00	0.17	0.55	0.00	0.00	0.00	0.17	0.55
	6H	0.00	0.00	0.00	0.21	0.60	0.00	0.00	0.00	0.21	0.60
	8H	0.00	0.00	0.00	0.22	0.63	0.00	0.00	0.00	0.22	0.63
	12H	0.00	0.00	0.00	0.20	0.63	0.00	0.00	0.00	0.20	0.63
4H	2H	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.07
	3H	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.28
	4H	0.00	0.00	0.00	0.07	0.52	0.00	0.00	0.00	0.07	0.52
	6H	0.00	0.00	0.00	0.19	0.66	0.00	0.00	0.00	0.19	0.66
	8H	0.00	0.00	0.00	0.24	0.71	0.00	0.00	0.00	0.24	0.71
	12H	0.00	0.00	0.00	0.27	0.74	0.00	0.00	0.00	0.27	0.74
8H	4H	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.45
	6H	0.00	0.00	0.00	0.18	0.66	0.00	0.00	0.00	0.18	0.66
	8H	0.00	0.00	0.00	0.31	0.80	0.00	0.00	0.00	0.31	0.80
	12H	0.00	0.00	0.00	0.36	0.93	0.00	0.00	0.00	0.36	0.93
12H	4H	0.00	0.00	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.39
	6H	0.00	0.00	0.00	0.14	0.63	0.00	0.00	0.00	0.14	0.63
	8H	0.00	0.00	0.00	0.28	0.85	0.00	0.00	0.00	0.28	0.85

END OF REPORT