

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: P980292

Luminaire Tested: PRLX-243-927-74L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980292
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-243-927-74L-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

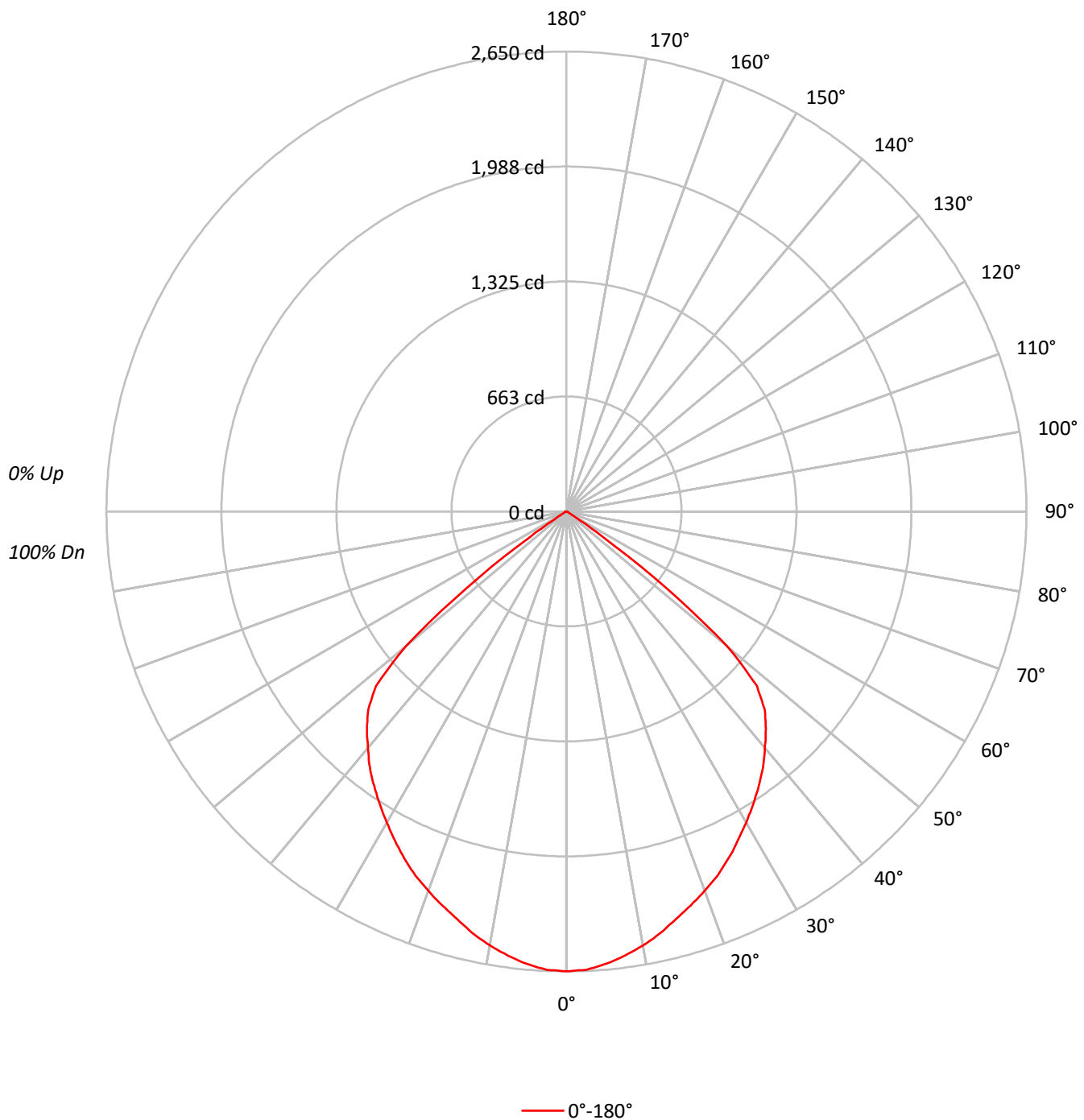
Lumens per Lamp: N/A
Luminaire Lumens: 4752.7 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
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°	13073
5°	12963
10°	12724
15°	12422
20°	12214
25°	12018
30°	11791
35°	11635
40°	11455
45°	11267
50°	9267
55°	2188
60°	127
65°	126
70°	156
75°	164
80°	122
85°	125

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11267 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.3	5.2
10°-20°	686.8	14.5
20°-30°	1016.7	21.4
30°-40°	1208.5	25.4
40°-50°	1213.6	25.5
50°-60°	357.6	7.5
60°-70°	11.0	0.2
70°-80°	8.2	0.2
80°-90°	3.0	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°	1950.8	41.0
0°-40°	3159.2	66.5
0°-60°	4730.5	99.5
0°-90°	4752.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4752.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2650	
5°	2617	247
15°	2432	687
25°	2208	1017
35°	1932	1208
45°	1615	1214
55°	254	358
65°	11	11
75°	9	8
85°	2	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2649.6
2.5°	2643.2
5°	2617.3
7.5°	2580.6
10°	2539.7
12.5°	2490.1
15°	2431.9
17.5°	2380.1
20°	2326.2
22.5°	2272.3
25°	2207.7
27.5°	2138.7
30°	2069.7
32.5°	2000.7
35°	1931.7
37.5°	1860.6
40°	1778.6
42.5°	1701.0
45°	1614.8
47.5°	1487.6
50°	1207.3
52.5°	728.7
55°	254.4
57.5°	49.6
60°	12.9
62.5°	10.8
65°	10.8
67.5°	10.8
70°	10.8
72.5°	8.6
75°	8.6
77.5°	6.5
80°	4.3
82.5°	4.3
85°	2.2
87.5°	2.2
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	1.21	0.26	1.53	1.84	0.00	1.21	0.26	1.53	1.84
	3H	0.10	1.25	0.48	1.58	1.95	0.10	1.25	0.48	1.58	1.95
	4H	0.26	1.33	0.67	1.68	2.06	0.26	1.33	0.67	1.68	2.06
	6H	0.37	1.34	0.78	1.71	2.11	0.37	1.34	0.78	1.71	2.11
	8H	0.42	1.34	0.85	1.73	2.13	0.42	1.34	0.85	1.73	2.13
	12H	0.44	1.32	0.88	1.71	2.14	0.44	1.32	0.88	1.71	2.14
4H	2H	0.00	0.84	0.18	1.19	1.58	0.00	0.84	0.18	1.19	1.58
	3H	0.13	0.98	0.54	1.39	1.79	0.13	0.98	0.54	1.39	1.79
	4H	0.40	1.16	0.84	1.58	2.02	0.40	1.16	0.84	1.58	2.02
	6H	0.60	1.25	1.06	1.69	2.16	0.60	1.25	1.06	1.69	2.16
	8H	0.69	1.30	1.16	1.74	2.22	0.69	1.30	1.16	1.74	2.22
	12H	0.75	1.29	1.24	1.77	2.25	0.75	1.29	1.24	1.77	2.25
8H	4H	0.43	1.04	0.90	1.49	1.96	0.43	1.04	0.90	1.49	1.96
	6H	0.68	1.18	1.18	1.68	2.16	0.68	1.18	1.18	1.68	2.16
	8H	0.84	1.29	1.36	1.81	2.30	0.84	1.29	1.36	1.81	2.30
	12H	0.96	1.37	1.47	1.86	2.43	0.96	1.37	1.47	1.86	2.43
12H	4H	0.40	0.94	0.89	1.42	1.90	0.40	0.94	0.89	1.42	1.90
	6H	0.67	1.12	1.19	1.64	2.13	0.67	1.12	1.19	1.64	2.13
	8H	0.87	1.28	1.39	1.78	2.35	0.87	1.28	1.39	1.78	2.35

END OF REPORT