

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: P979312

Luminaire Tested: PRLX-240-927-48L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979312
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-240-927-48L-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 240 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

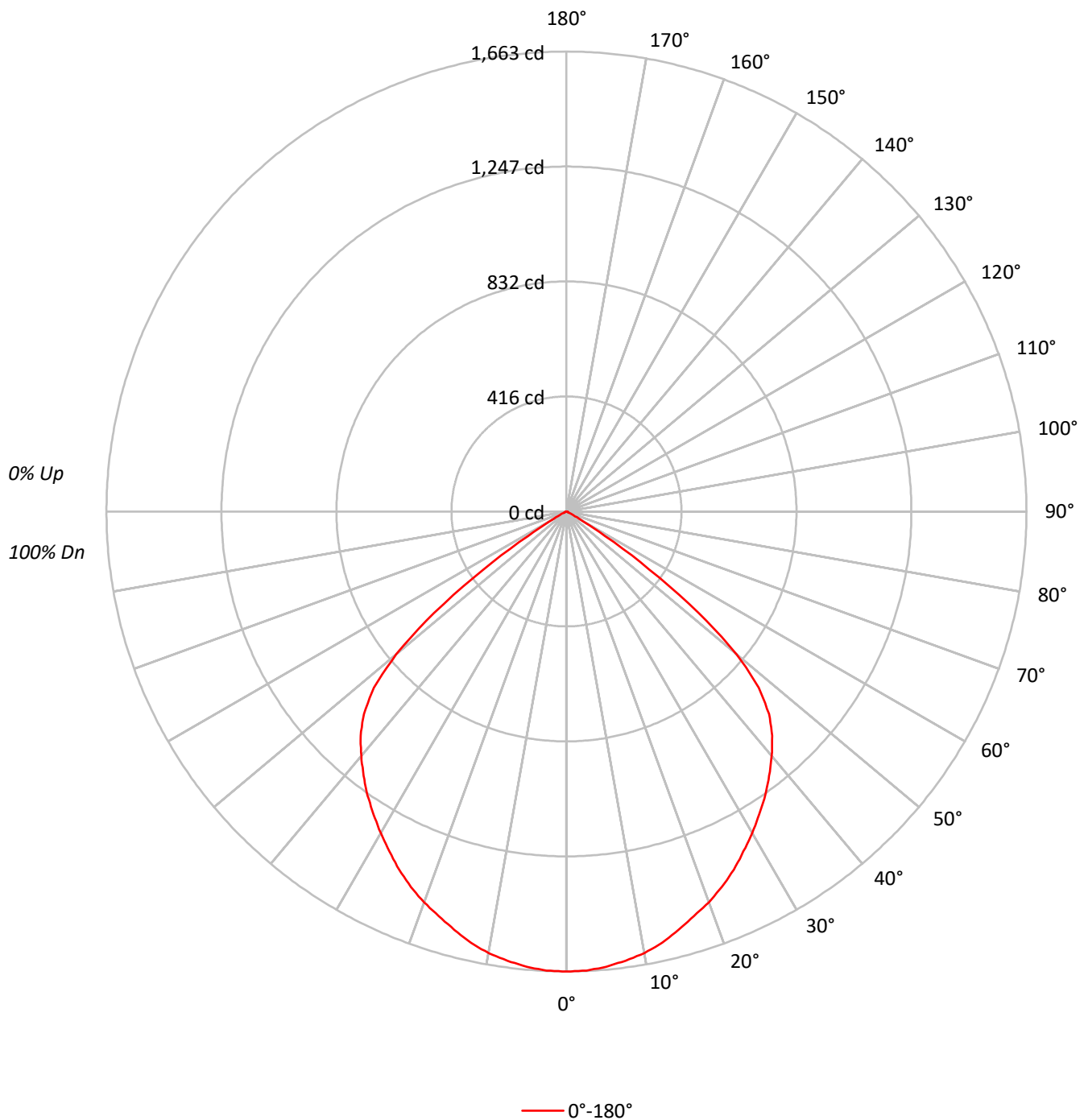
Lumens per Lamp: N/A
Luminaire Lumens: 3183.9 lumens
Efficiency: N/A
Efficacy: 95.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.33
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

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	106	104	101	102	100	98		99	97	95		95
2	105	98	93	89	102	97	92	88	93	89	86		90	87	84		87
3	97	89	83	78	95	88	82	77	85	80	76		82	78	75		80
4	90	81	74	68	88	80	73	68	77	72	67		75	70	66		73
5	84	73	66	61	82	72	65	60	70	64	60		69	63	59		67
6	78	67	59	54	77	66	59	54	64	58	53		63	57	53		61
7	73	61	54	48	71	61	53	48	59	53	48		58	52	48		57
8	68	56	49	44	67	56	49	44	54	48	43		53	47	43		52
9	64	52	45	40	63	51	44	40	50	44	39		49	43	39		48
10	60	48	41	36	59	48	41	36	47	40	36		46	40	36		45

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	16749
5°	16701
10°	16580
15°	16322
20°	16120
25°	15892
30°	15609
35°	15404
40°	15170
45°	14745
50°	12569
55°	6418
60°	1039
65°	133
70°	124
75°	163
80°	162
85°	162

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14745 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.7	4.9
10°-20°	441.9	13.9
20°-30°	658.4	20.7
30°-40°	783.5	24.6
40°-50°	782.2	24.6
50°-60°	343.1	10.8
60°-70°	11.9	0.4
70°-80°	4.3	0.1
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°	1257.0	39.5
0°-40°	2040.6	64.1
0°-60°	3165.8	99.4
0°-90°	3183.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3183.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1663	
5°	1652	157
15°	1566	442
25°	1430	658
35°	1253	784
45°	1036	782
55°	366	343
65°	6	12
75°	4	4
85°	1	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1663.4
2.5°	1662.0
5°	1652.3
7.5°	1638.3
10°	1621.6
12.5°	1597.9
15°	1565.8
17.5°	1533.7
20°	1504.4
22.5°	1469.5
25°	1430.4
27.5°	1385.7
30°	1342.5
32.5°	1297.8
35°	1253.2
37.5°	1204.3
40°	1154.1
42.5°	1101.1
45°	1035.5
47.5°	943.4
50°	802.4
52.5°	602.9
55°	365.6
57.5°	164.7
60°	51.6
62.5°	11.2
65°	5.6
67.5°	4.2
70°	4.2
72.5°	4.2
75°	4.2
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	12.10	13.44	12.46	13.76	14.07	12.10	13.44	12.46	13.76	14.07
	3H	11.97	13.15	12.35	13.48	13.85	11.97	13.15	12.35	13.48	13.85
	4H	11.91	13.00	12.31	13.35	13.73	11.91	13.00	12.31	13.35	13.73
	6H	11.84	12.84	12.25	13.21	13.60	11.84	12.84	12.25	13.21	13.60
	8H	11.80	12.75	12.23	13.14	13.54	11.80	12.75	12.23	13.14	13.54
	12H	11.76	12.66	12.19	13.05	13.48	11.76	12.66	12.19	13.05	13.48
4H	2H	11.90	12.99	12.30	13.34	13.73	11.90	12.99	12.30	13.34	13.73
	3H	11.78	12.65	12.19	13.06	13.46	11.78	12.65	12.19	13.06	13.46
	4H	11.70	12.48	12.14	12.90	13.34	11.70	12.48	12.14	12.90	13.34
	6H	11.63	12.30	12.10	12.75	13.21	11.63	12.30	12.10	12.75	13.21
	8H	11.58	12.21	12.05	12.65	13.12	11.58	12.21	12.05	12.65	13.12
	12H	11.54	12.09	12.02	12.57	13.05	11.54	12.09	12.02	12.57	13.05
8H	4H	11.56	12.19	12.03	12.64	13.11	11.56	12.19	12.03	12.64	13.11
	6H	11.47	11.99	11.98	12.48	12.97	11.47	11.99	11.98	12.48	12.97
	8H	11.41	11.88	11.94	12.40	12.89	11.41	11.88	11.94	12.40	12.89
	12H	11.37	11.79	11.88	12.29	12.86	11.37	11.79	11.88	12.29	12.86
12H	4H	11.52	12.07	12.00	12.55	13.03	11.52	12.07	12.00	12.55	13.03
	6H	11.40	11.87	11.93	12.39	12.88	11.40	11.87	11.93	12.39	12.88
	8H	11.37	11.79	11.88	12.28	12.85	11.37	11.79	11.88	12.28	12.85