

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P979302

Luminaire Tested: PRLX-240-927-LL5-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979302
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-LL5-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

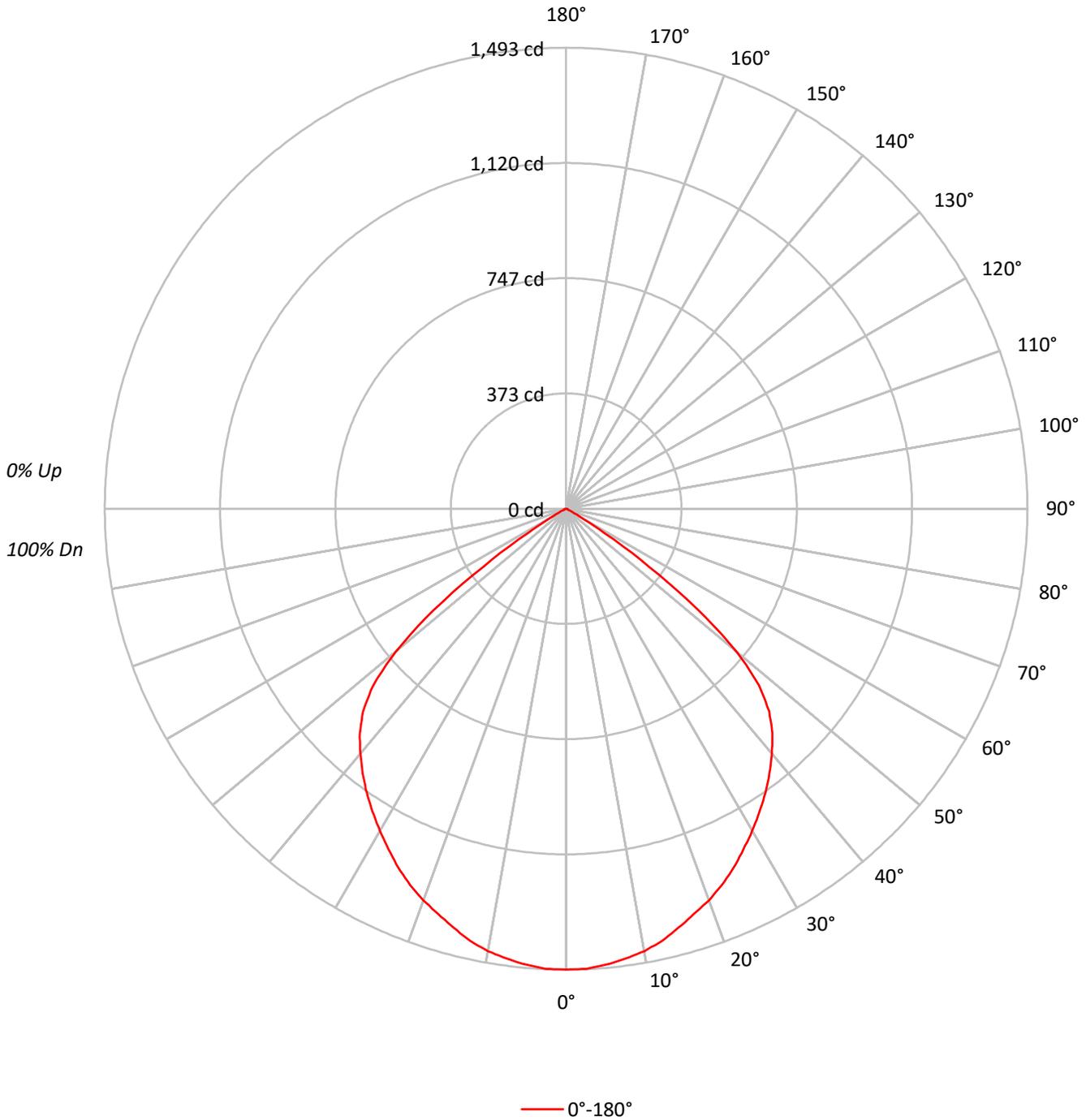
Lumens per Lamp: N/A
Luminaire Lumens: 2857.3 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.33
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57
6	78	67	59	54	77	66	59	54	64	58	53	63	57	53	61	56	53	51
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46
8	68	56	49	44	67	56	49	44	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	51	44	40	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	15032
5°	14987
10°	14879
15°	14648
20°	14467
25°	14262
30°	14008
35°	13825
40°	13613
45°	13233
50°	11280
55°	5760
60°	932
65°	119
70°	112
75°	148
80°	145
85°	150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 13233 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.7	4.9
10°-20°	396.6	13.9
20°-30°	590.9	20.7
30°-40°	703.2	24.6
40°-50°	701.9	24.6
50°-60°	307.9	10.8
60°-70°	10.7	0.4
70°-80°	3.8	0.1
80°-90°	1.7	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°	1128.1	39.5
0°-40°	1831.3	64.1
0°-60°	2841.1	99.4
0°-90°	2857.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2857.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1493	
5°	1483	141
15°	1405	397
25°	1284	591
35°	1125	703
45°	929	702
55°	328	308
65°	5	11
75°	4	4
85°	1	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1492.9
2.5°	1491.6
5°	1482.8
7.5°	1470.3
10°	1455.3
12.5°	1434.0
15°	1405.2
17.5°	1376.4
20°	1350.1
22.5°	1318.8
25°	1283.7
27.5°	1243.6
30°	1204.8
32.5°	1164.7
35°	1124.7
37.5°	1080.8
40°	1035.7
42.5°	988.1
45°	929.3
47.5°	846.6
50°	720.1
52.5°	541.0
55°	328.1
57.5°	147.8
60°	46.3
62.5°	10.0
65°	5.0
67.5°	3.8
70°	3.8
72.5°	3.8
75°	3.8
77.5°	3.8
80°	2.5
82.5°	2.5
85°	1.3
87.5°	1.3
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	11.72	13.07	12.08	13.38	13.69	11.72	13.07	12.08	13.38	13.69
	3H	11.60	12.78	11.98	13.11	13.47	11.60	12.78	11.98	13.11	13.47
	4H	11.53	12.62	11.93	12.98	13.36	11.53	12.62	11.93	12.98	13.36
	6H	11.46	12.46	11.88	12.83	13.23	11.46	12.46	11.88	12.83	13.23
	8H	11.42	12.37	11.85	12.76	13.17	11.42	12.37	11.85	12.76	13.17
	12H	11.39	12.29	11.82	12.67	13.10	11.39	12.29	11.82	12.67	13.10
4H	2H	11.52	12.62	11.93	12.97	13.35	11.52	12.62	11.93	12.97	13.35
	3H	11.40	12.28	11.82	12.68	13.09	11.40	12.28	11.82	12.68	13.09
	4H	11.33	12.10	11.76	12.52	12.96	11.33	12.10	11.76	12.52	12.96
	6H	11.26	11.92	11.72	12.37	12.84	11.26	11.92	11.72	12.37	12.84
	8H	11.20	11.83	11.67	12.28	12.75	11.20	11.83	11.67	12.28	12.75
	12H	11.16	11.71	11.65	12.20	12.67	11.16	11.71	11.65	12.20	12.67
8H	4H	11.19	11.81	11.66	12.26	12.73	11.19	11.81	11.66	12.26	12.73
	6H	11.10	11.61	11.60	12.11	12.59	11.10	11.61	11.60	12.11	12.59
	8H	11.04	11.51	11.56	12.02	12.52	11.04	11.51	11.56	12.02	12.52
	12H	10.99	11.42	11.51	11.91	12.48	10.99	11.42	11.51	11.91	12.48
12H	4H	11.14	11.69	11.63	12.18	12.65	11.14	11.69	11.63	12.18	12.65
	6H	11.03	11.50	11.55	12.01	12.51	11.03	11.50	11.55	12.01	12.51
	8H	10.99	11.41	11.50	11.91	12.48	10.99	11.41	11.50	11.91	12.48