

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: P979300

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

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979300
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-240-927-LL5-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 240 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

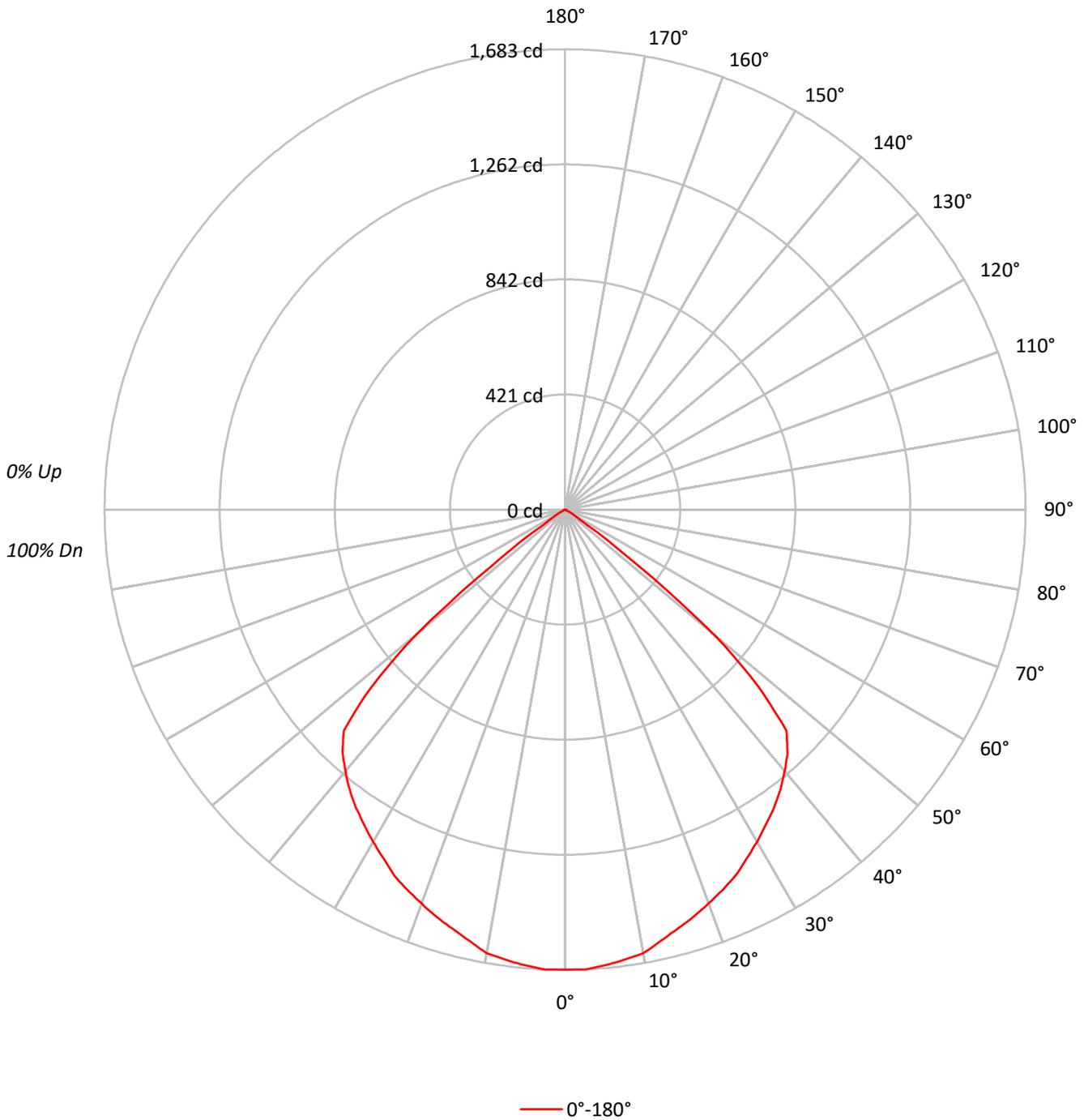
Lumens per Lamp: N/A
Luminaire Lumens: 3141.4 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.39
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

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									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	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	107	104	102	103	100	99	99	97	96	95	94	93	91																												
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82																												
3	98	90	84	79	96	89	83	78	86	81	77	83	79	76	81	78	75	73																												
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65																												
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58																												
6	79	68	61	56	78	67	60	55	66	60	55	64	59	55	63	58	54	52																												
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																												
8	69	58	50	45	68	57	50	45	56	49	45	55	49	45	54	48	44	43																												
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39																												
10	61	49	42	38	60	49	42	38	48	42	37	47	41	37	46	41	37	36																												

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	16936
5°	16912
10°	16838
15°	16541
20°	16425
25°	16405
30°	16309
35°	16364
40°	16412
45°	16282
50°	11144
55°	1736
60°	429
65°	91
70°	112
75°	148
80°	220
85°	150

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 16282 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.9	5.1
10°-20°	448.7	14.3
20°-30°	679.5	21.6
30°-40°	833.0	26.5
40°-50°	824.7	26.3
50°-60°	183.9	5.9
60°-70°	6.8	0.2
70°-80°	4.0	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°	1287.1	41.0
0°-40°	2120.1	67.5
0°-60°	3128.7	99.6
0°-90°	3141.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3141.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1682	
5°	1673	159
15°	1587	449
25°	1477	680
35°	1331	833
45°	1143	825
55°	99	184
65°	4	7
75°	4	4
85°	1	2
90°	0	



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CANDELA DISTRIBUTION (FULL):

	0°
0°	1682.0
2.5°	1683.2
5°	1673.2
7.5°	1660.7
10°	1646.9
12.5°	1615.6
15°	1586.8
17.5°	1561.8
20°	1532.9
22.5°	1505.4
25°	1476.6
27.5°	1437.8
30°	1402.7
32.5°	1366.4
35°	1331.3
37.5°	1292.5
40°	1248.6
42.5°	1203.6
45°	1143.4
47.5°	960.6
50°	711.4
52.5°	331.9
55°	98.9
57.5°	47.6
60°	21.3
62.5°	7.5
65°	3.8
67.5°	3.8
70°	3.8
72.5°	3.8
75°	3.8
77.5°	3.8
80°	3.8
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	3.65	4.95	4.02	5.26	5.58	3.65	4.95	4.02	5.26	5.58
	3H	3.56	4.70	3.94	5.03	5.39	3.56	4.70	3.94	5.03	5.39
	4H	3.54	4.59	3.94	4.94	5.33	3.54	4.59	3.94	4.94	5.33
	6H	3.56	4.53	3.98	4.90	5.29	3.56	4.53	3.98	4.90	5.29
	8H	3.57	4.48	4.00	4.87	5.28	3.57	4.48	4.00	4.87	5.28
	12H	3.56	4.43	3.99	4.81	5.24	3.56	4.43	3.99	4.81	5.24
4H	2H	3.46	4.51	3.86	4.86	5.24	3.46	4.51	3.86	4.86	5.24
	3H	3.39	4.23	3.80	4.64	5.04	3.39	4.23	3.80	4.64	5.04
	4H	3.39	4.14	3.83	4.56	5.00	3.39	4.14	3.83	4.56	5.00
	6H	3.49	4.13	3.95	4.57	5.04	3.49	4.13	3.95	4.57	5.04
	8H	3.51	4.11	3.98	4.56	5.03	3.51	4.11	3.98	4.56	5.03
	12H	3.52	4.05	4.00	4.53	5.01	3.52	4.05	4.00	4.53	5.01
8H	4H	3.30	3.90	3.77	4.35	4.82	3.30	3.90	3.77	4.35	4.82
	6H	3.45	3.94	3.95	4.44	4.92	3.45	3.94	3.95	4.44	4.92
	8H	3.51	3.96	4.03	4.48	4.97	3.51	3.96	4.03	4.48	4.97
	12H	3.54	3.95	4.06	4.44	5.01	3.54	3.95	4.06	4.44	5.01
12H	4H	3.27	3.80	3.76	4.28	4.76	3.27	3.80	3.76	4.28	4.76
	6H	3.42	3.87	3.94	4.38	4.88	3.42	3.87	3.94	4.38	4.88
	8H	3.51	3.91	4.03	4.41	4.98	3.51	3.91	4.03	4.41	4.98