

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: P979542

Luminaire Tested: PRLX-240-940-LL5-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979542
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-240-940-LL5-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 240 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

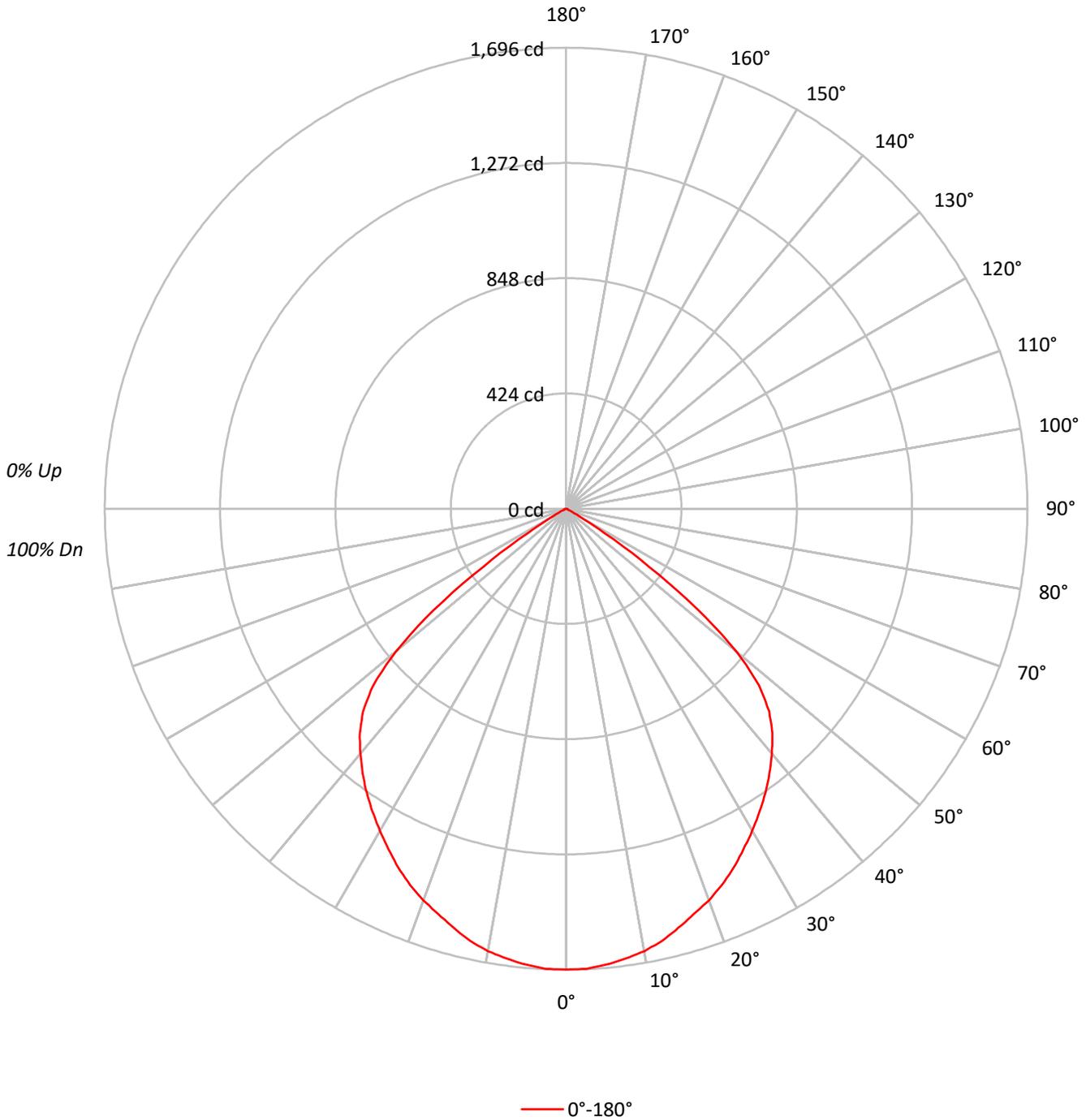
Lumens per Lamp: N/A
Luminaire Lumens: 3245.8 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.33
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	17075
5°	17026
10°	16903
15°	16640
20°	16434
25°	16202
30°	15912
35°	15704
40°	15465
45°	15031
50°	12814
55°	6543
60°	1059
65°	136
70°	127
75°	167
80°	162
85°	162

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 15031 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.8	4.9
10°-20°	450.5	13.9
20°-30°	671.2	20.7
30°-40°	798.8	24.6
40°-50°	797.4	24.6
50°-60°	349.7	10.8
60°-70°	12.1	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°	1281.5	39.5
0°-40°	2080.3	64.1
0°-60°	3227.4	99.4
0°-90°	3245.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3245.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1696	
5°	1684	160
15°	1596	450
25°	1458	671
35°	1278	799
45°	1056	797
55°	373	350
65°	6	12
75°	4	4
85°	1	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1695.8
2.5°	1694.4
5°	1684.5
7.5°	1670.2
10°	1653.2
12.5°	1629.0
15°	1596.3
17.5°	1563.5
20°	1533.7
22.5°	1498.1
25°	1458.3
27.5°	1412.7
30°	1368.6
32.5°	1323.1
35°	1277.6
37.5°	1227.8
40°	1176.6
42.5°	1122.5
45°	1055.6
47.5°	961.7
50°	818.0
52.5°	614.6
55°	372.7
57.5°	167.9
60°	52.6
62.5°	11.4
65°	5.7
67.5°	4.3
70°	4.3
72.5°	4.3
75°	4.3
77.5°	4.3
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	12.16	13.51	12.53	13.82	14.14	12.16	13.51	12.53	13.82	14.14
	3H	12.04	13.22	12.42	13.55	13.91	12.04	13.22	12.42	13.55	13.91
	4H	11.98	13.07	12.38	13.42	13.80	11.98	13.07	12.38	13.42	13.80
	6H	11.91	12.91	12.32	13.28	13.67	11.91	12.91	12.32	13.28	13.67
	8H	11.87	12.81	12.30	13.20	13.61	11.87	12.81	12.30	13.20	13.61
	12H	11.83	12.73	12.26	13.11	13.54	11.83	12.73	12.26	13.11	13.54
4H	2H	11.97	13.06	12.37	13.41	13.79	11.97	13.06	12.37	13.41	13.79
	3H	11.85	12.72	12.26	13.13	13.53	11.85	12.72	12.26	13.13	13.53
	4H	11.77	12.54	12.20	12.96	13.41	11.77	12.54	12.20	12.96	13.41
	6H	11.70	12.37	12.16	12.81	13.28	11.70	12.37	12.16	12.81	13.28
	8H	11.65	12.27	12.12	12.72	13.19	11.65	12.27	12.12	12.72	13.19
	12H	11.60	12.16	12.09	12.64	13.11	11.60	12.16	12.09	12.64	13.11
8H	4H	11.63	12.26	12.10	12.70	13.17	11.63	12.26	12.10	12.70	13.17
	6H	11.54	12.05	12.04	12.55	13.03	11.54	12.05	12.04	12.55	13.03
	8H	11.48	11.95	12.00	12.47	12.96	11.48	11.95	12.00	12.47	12.96
	12H	11.44	11.86	11.95	12.35	12.92	11.44	11.86	11.95	12.35	12.92
12H	4H	11.58	12.13	12.07	12.62	13.09	11.58	12.13	12.07	12.62	13.09
	6H	11.47	11.94	11.99	12.46	12.95	11.47	11.94	11.99	12.46	12.95
	8H	11.43	11.85	11.95	12.35	12.92	11.43	11.85	11.95	12.35	12.92