

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: P980452

Luminaire Tested: PRLX-243-935-LL8-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980452
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-243-935-LL8-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

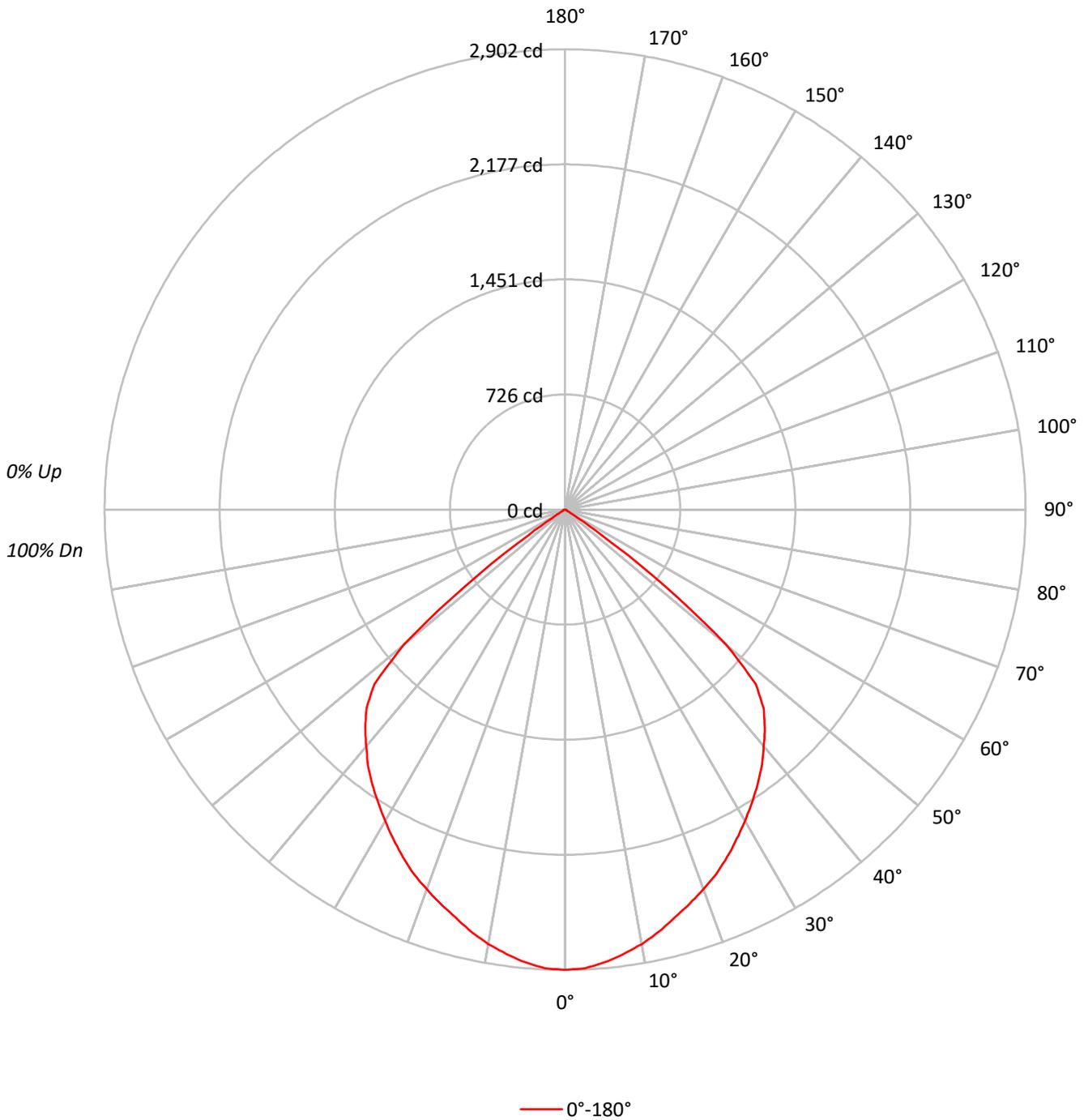
Lumens per Lamp: N/A
Luminaire Lumens: 5205.3 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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	0
RW	70	50	30	10	70	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			100	
1	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91			91	
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81			81	
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73			73	
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65			65	
5	85	74	67	62	83	73	67	62	71	66	61	70	64	60	68	63	60	58			58	
6	79	68	61	55	77	67	60	55	66	59	55	64	58	54	63	58	54	52			52	
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47			47	
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	43			43	
9	65	53	46	41	64	52	46	41	51	45	41	50	45	40	49	44	40	39			39	
10	61	49	42	37	60	49	42	37	48	41	37	47	41	37	46	41	37	35			35	

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	14318
5°	14197
10°	13936
15°	13605
20°	13377
25°	13163
30°	12914
35°	12743
40°	12547
45°	12340
50°	10150
55°	2396
60°	140
65°	138
70°	170
75°	179
80°	134
85°	136

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 12340 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.9	5.2
10°-20°	752.2	14.5
20°-30°	1113.5	21.4
30°-40°	1323.6	25.4
40°-50°	1329.2	25.5
50°-60°	391.6	7.5
60°-70°	12.0	0.2
70°-80°	9.0	0.2
80°-90°	3.2	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°	2136.6	41.0
0°-40°	3460.2	66.5
0°-60°	5181.1	99.5
0°-90°	5205.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5205.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2902	
5°	2867	271
15°	2664	752
25°	2418	1114
35°	2116	1324
45°	1769	1329
55°	279	392
65°	12	12
75°	9	9
85°	2	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2902.0
2.5°	2894.9
5°	2866.6
7.5°	2826.5
10°	2781.6
12.5°	2727.3
15°	2663.5
17.5°	2606.9
20°	2547.8
22.5°	2488.8
25°	2418.0
27.5°	2342.4
30°	2266.8
32.5°	2191.3
35°	2115.7
37.5°	2037.8
40°	1948.1
42.5°	1863.0
45°	1768.6
47.5°	1629.3
50°	1322.3
52.5°	798.1
55°	278.6
57.5°	54.3
60°	14.2
62.5°	11.8
65°	11.8
67.5°	11.8
70°	11.8
72.5°	9.4
75°	9.4
77.5°	7.1
80°	4.7
82.5°	4.7
85°	2.4
87.5°	2.4
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	0.21	1.53	0.58	1.84	2.15	0.21	1.53	0.58	1.84	2.15
	3H	0.42	1.57	0.80	1.90	2.26	0.42	1.57	0.80	1.90	2.26
	4H	0.57	1.64	0.98	1.99	2.37	0.57	1.64	0.98	1.99	2.37
	6H	0.68	1.65	1.09	2.02	2.42	0.68	1.65	1.09	2.02	2.42
	8H	0.73	1.65	1.16	2.04	2.45	0.73	1.65	1.16	2.04	2.45
	12H	0.75	1.63	1.19	2.02	2.45	0.75	1.63	1.19	2.02	2.45
4H	2H	0.09	1.16	0.49	1.51	1.89	0.09	1.16	0.49	1.51	1.89
	3H	0.44	1.29	0.86	1.70	2.10	0.44	1.29	0.86	1.70	2.10
	4H	0.71	1.47	1.15	1.89	2.33	0.71	1.47	1.15	1.89	2.33
	6H	0.91	1.56	1.37	2.00	2.47	0.91	1.56	1.37	2.00	2.47
	8H	1.00	1.61	1.47	2.05	2.53	1.00	1.61	1.47	2.05	2.53
	12H	1.06	1.60	1.55	2.08	2.56	1.06	1.60	1.55	2.08	2.56
8H	4H	0.74	1.35	1.21	1.80	2.27	0.74	1.35	1.21	1.80	2.27
	6H	0.99	1.49	1.49	1.99	2.47	0.99	1.49	1.49	1.99	2.47
	8H	1.15	1.60	1.67	2.12	2.61	1.15	1.60	1.67	2.12	2.61
	12H	1.27	1.68	1.78	2.17	2.74	1.27	1.68	1.78	2.17	2.74
12H	4H	0.71	1.25	1.20	1.73	2.21	0.71	1.25	1.20	1.73	2.21
	6H	0.98	1.43	1.50	1.95	2.44	0.98	1.43	1.50	1.95	2.44
	8H	1.18	1.59	1.70	2.09	2.66	1.18	1.59	1.70	2.09	2.66