

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: P980052

Luminaire Tested: PRLX-242-930-LL8-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980052
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-27)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-930-LL8-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

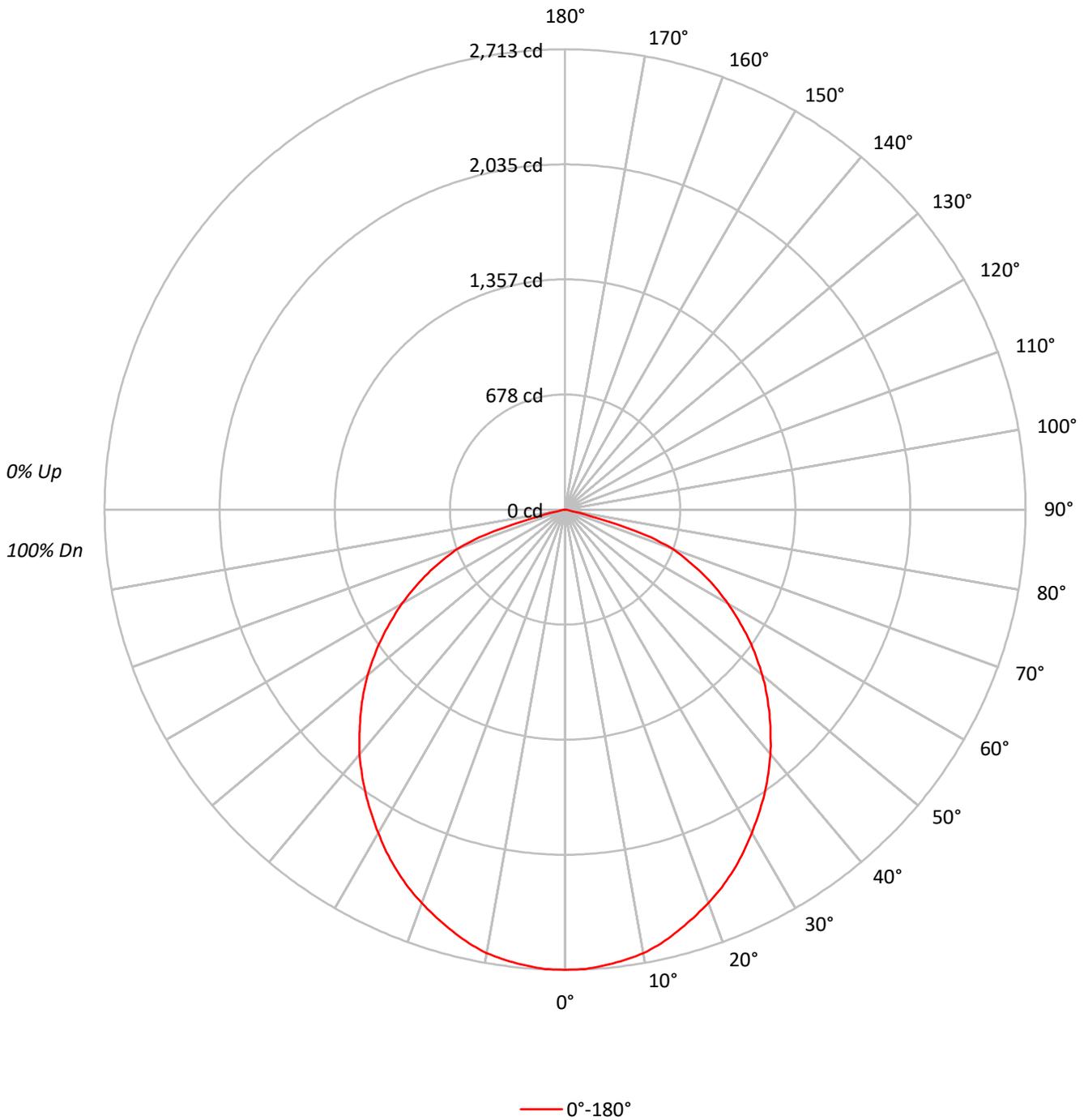
Lumens per Lamp: N/A
Luminaire Lumens: 6986.1 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	12141
5°	12115
10°	12068
15°	11913
20°	11755
25°	11590
30°	11373
35°	11188
40°	11002
45°	10776
50°	10566
55°	10271
60°	9921
65°	9463
70°	8763
75°	3437
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.1	3.7
10°-20°	725.3	10.4
20°-30°	1080.6	15.5
30°-40°	1280.6	18.3
40°-50°	1313.9	18.8
50°-60°	1175.8	16.8
60°-70°	882.0	12.6
70°-80°	271.6	3.9
80°-90°	0.0	0.0
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°	2062.0	29.5
0°-40°	3342.7	47.8
0°-60°	5832.4	83.5
0°-90°	6986.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6986.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2713	
5°	2697	256
15°	2571	725
25°	2347	1081
35°	2048	1281
45°	1703	1314
55°	1316	1176
65°	894	882
75°	199	272
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2713.0
2.5°	2710.7
5°	2697.0
7.5°	2678.7
10°	2655.8
12.5°	2619.2
15°	2571.3
17.5°	2521.0
20°	2468.4
22.5°	2411.3
25°	2347.3
27.5°	2276.4
30°	2201.0
32.5°	2123.3
35°	2047.9
37.5°	1965.6
40°	1883.3
42.5°	1791.9
45°	1702.7
47.5°	1611.3
50°	1517.6
52.5°	1417.0
55°	1316.5
57.5°	1211.3
60°	1108.5
62.5°	1001.1
65°	893.7
67.5°	781.7
70°	669.7
72.5°	496.0
75°	198.8
77.5°	9.1
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
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	20.43	22.02	20.79	22.33	22.65	20.43	22.02	20.79	22.33	22.65
	3H	22.18	23.61	22.55	23.93	24.29	22.18	23.61	22.55	23.93	24.29
	4H	22.38	23.72	22.77	24.06	24.44	22.38	23.72	22.77	24.06	24.44
	6H	22.32	23.55	22.73	23.92	24.31	22.32	23.55	22.73	23.92	24.31
	8H	22.28	23.46	22.71	23.85	24.25	22.28	23.46	22.71	23.85	24.25
	12H	22.25	23.38	22.68	23.76	24.19	22.25	23.38	22.68	23.76	24.19
4H	2H	21.06	22.40	21.46	22.75	23.13	21.06	22.40	21.46	22.75	23.13
	3H	22.98	24.09	23.39	24.49	24.89	22.98	24.09	23.39	24.49	24.89
	4H	23.16	24.16	23.59	24.57	25.01	23.16	24.16	23.59	24.57	25.01
	6H	23.11	23.97	23.57	24.41	24.87	23.11	23.97	23.57	24.41	24.87
	8H	23.07	23.87	23.53	24.32	24.78	23.07	23.87	23.53	24.32	24.78
	12H	23.05	23.76	23.53	24.24	24.71	23.05	23.76	23.53	24.24	24.71
8H	4H	23.20	24.00	23.66	24.44	24.91	23.20	24.00	23.66	24.44	24.91
	6H	23.13	23.78	23.62	24.27	24.75	23.13	23.78	23.62	24.27	24.75
	8H	23.09	23.67	23.60	24.18	24.67	23.09	23.67	23.60	24.18	24.67
	12H	23.06	23.57	23.57	24.06	24.63	23.06	23.57	23.57	24.06	24.63
12H	4H	23.17	23.89	23.65	24.36	24.83	23.17	23.89	23.65	24.36	24.83
	6H	23.08	23.67	23.60	24.18	24.67	23.08	23.67	23.60	24.18	24.67
	8H	23.06	23.57	23.57	24.06	24.63	23.06	23.57	23.57	24.06	24.63