

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: P980042

Luminaire Tested: PRLX-242-930-LL7-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980042
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-LL7-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

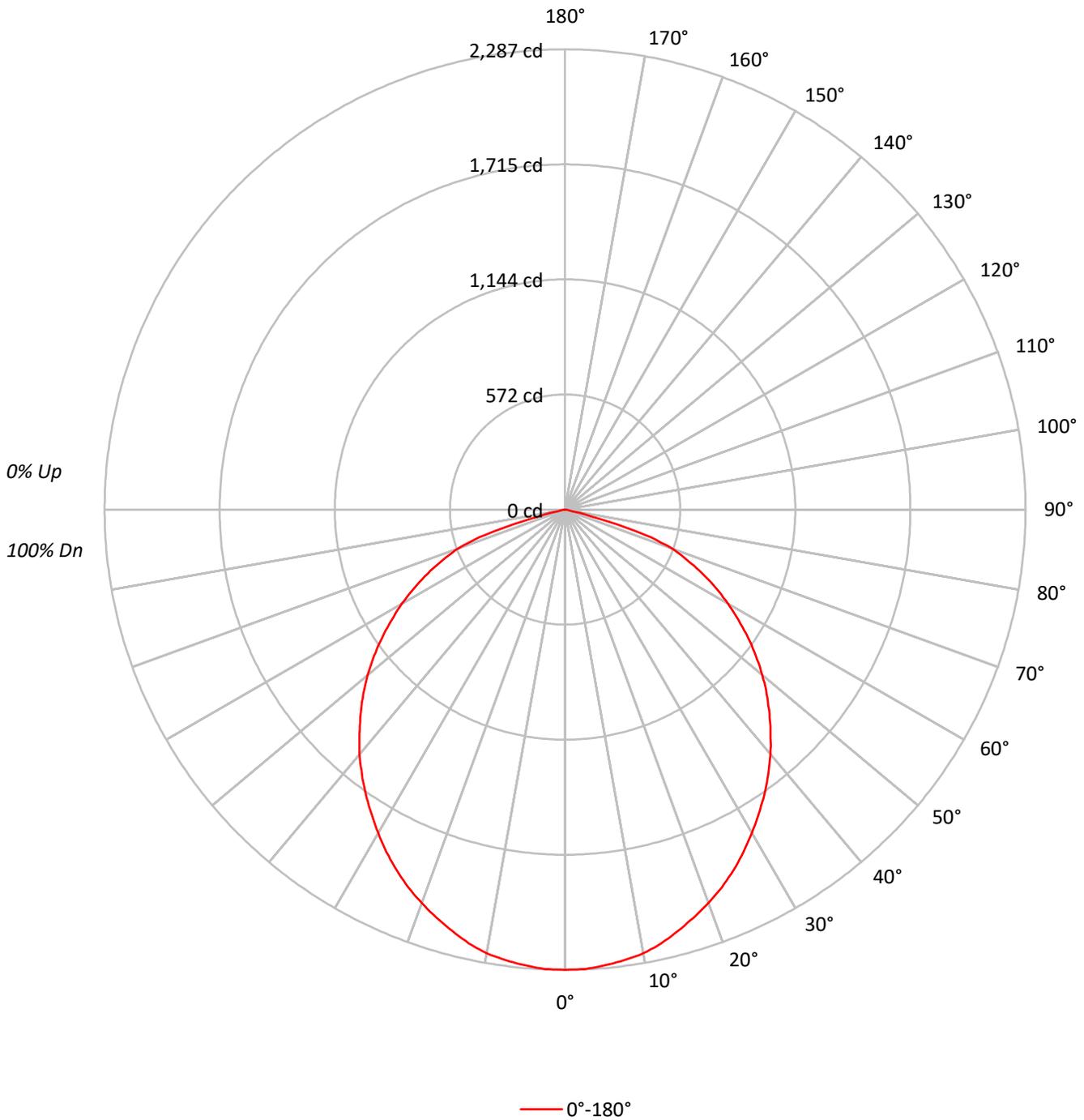
Lumens per Lamp: N/A
Luminaire Lumens: 5889.6 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 48
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°	10235
5°	10214
10°	10174
15°	10043
20°	9910
25°	9771
30°	9589
35°	9432
40°	9275
45°	9085
50°	8907
55°	8660
60°	8364
65°	7978
70°	7387
75°	2898
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9085 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.9	3.7
10°-20°	611.5	10.4
20°-30°	911.0	15.5
30°-40°	1079.6	18.3
40°-50°	1107.7	18.8
50°-60°	991.3	16.8
60°-70°	743.6	12.6
70°-80°	229.0	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°	1738.4	29.5
0°-40°	2818.1	47.8
0°-60°	4917.0	83.5
0°-90°	5889.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5889.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2287	
5°	2274	216
15°	2168	611
25°	1979	911
35°	1726	1080
45°	1436	1108
55°	1110	991
65°	753	744
75°	168	229
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	2287.2
2.5°	2285.3
5°	2273.7
7.5°	2258.3
10°	2239.0
12.5°	2208.2
15°	2167.7
17.5°	2125.3
20°	2081.0
22.5°	2032.8
25°	1978.9
27.5°	1919.2
30°	1855.6
32.5°	1790.1
35°	1726.5
37.5°	1657.1
40°	1587.7
42.5°	1510.7
45°	1435.5
47.5°	1358.4
50°	1279.4
52.5°	1194.7
55°	1109.9
57.5°	1021.2
60°	934.5
62.5°	844.0
65°	753.4
67.5°	659.0
70°	564.6
72.5°	418.1
75°	167.6
77.5°	7.7
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	19.84	21.43	20.20	21.74	22.05	19.84	21.43	20.20	21.74	22.05
	3H	21.58	23.01	21.96	23.34	23.70	21.58	23.01	21.96	23.34	23.70
	4H	21.78	23.12	22.18	23.47	23.85	21.78	23.12	22.18	23.47	23.85
	6H	21.72	22.96	22.13	23.32	23.72	21.72	22.96	22.13	23.32	23.72
	8H	21.69	22.87	22.11	23.26	23.66	21.69	22.87	22.11	23.26	23.66
	12H	21.66	22.79	22.09	23.17	23.60	21.66	22.79	22.09	23.17	23.60
4H	2H	20.47	21.81	20.87	22.16	22.53	20.47	21.81	20.87	22.16	22.53
	3H	22.39	23.49	22.80	23.89	24.29	22.39	23.49	22.80	23.89	24.29
	4H	22.57	23.56	23.00	23.98	24.41	22.57	23.56	23.00	23.98	24.41
	6H	22.52	23.38	22.97	23.82	24.28	22.52	23.38	22.97	23.82	24.28
	8H	22.48	23.28	22.94	23.72	24.19	22.48	23.28	22.94	23.72	24.19
	12H	22.45	23.17	22.93	23.64	24.11	22.45	23.17	22.93	23.64	24.11
8H	4H	22.60	23.41	23.07	23.85	24.32	22.60	23.41	23.07	23.85	24.32
	6H	22.54	23.19	23.03	23.68	24.16	22.54	23.19	23.03	23.68	24.16
	8H	22.49	23.08	23.01	23.59	24.07	22.49	23.08	23.01	23.59	24.07
	12H	22.47	22.98	22.98	23.47	24.04	22.47	22.98	22.98	23.47	24.04
12H	4H	22.58	23.29	23.06	23.77	24.24	22.58	23.29	23.06	23.77	24.24
	6H	22.49	23.08	23.00	23.58	24.07	22.49	23.08	23.00	23.58	24.07
	8H	22.47	22.98	22.98	23.47	24.04	22.47	22.98	22.98	23.47	24.04