

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: P980202

Luminaire Tested: PRLX-242-940-LL7-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980202
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-242-940-LL7-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6310.9 lumens
Efficiency: N/A
Efficacy: 131.5 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

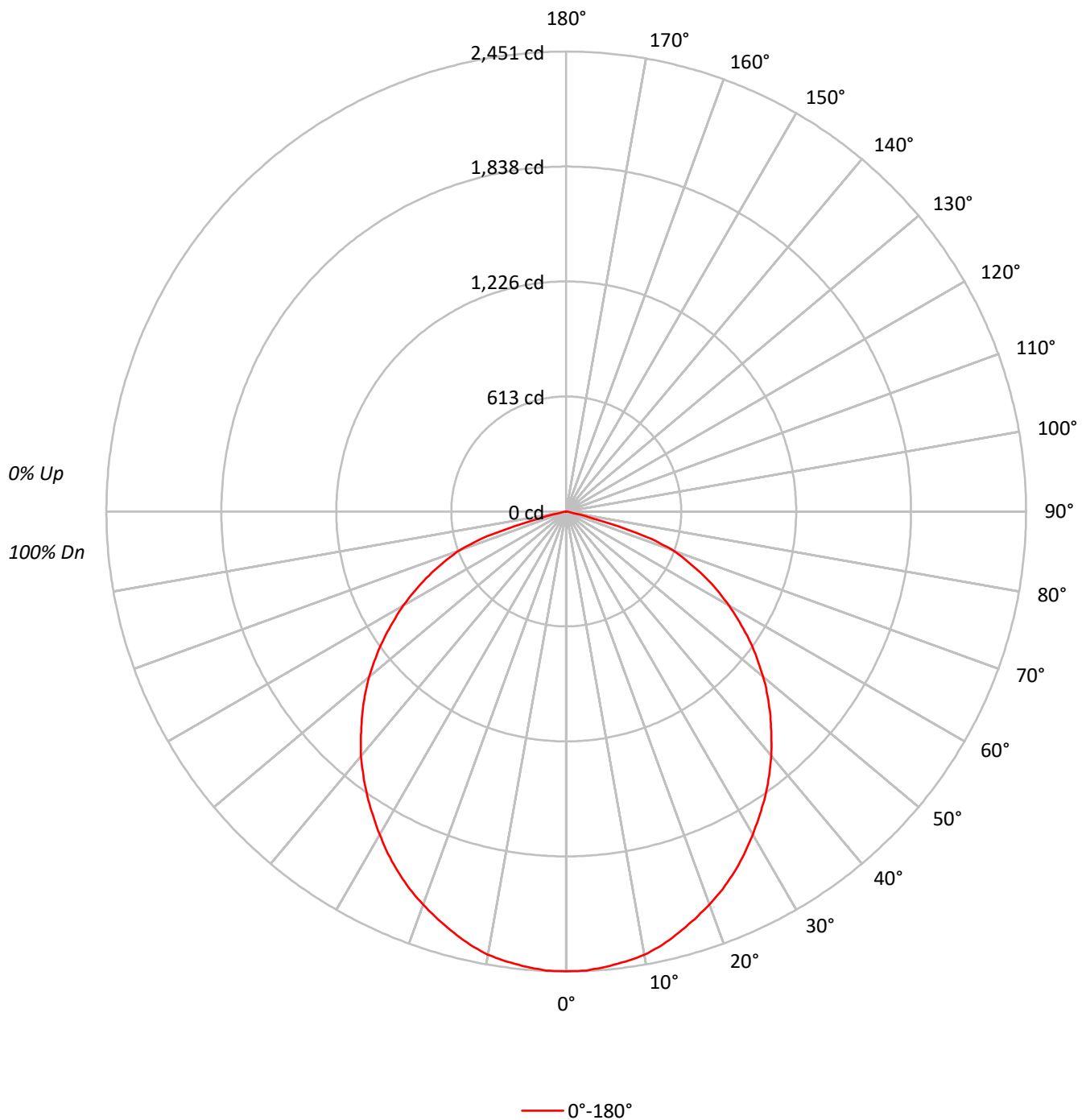
Input Watts (W): 48
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	10968
5°	10944
10°	10902
15°	10761
20°	10619
25°	10470
30°	10274
35°	10107
40°	9939
45°	9735
50°	9545
55°	9279
60°	8963
65°	8549
70°	7916
75°	3105
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9735 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	231.4	3.7
10°-20°	655.2	10.4
20°-30°	976.2	15.5
30°-40°	1156.9	18.3
40°-50°	1187.0	18.8
50°-60°	1062.2	16.8
60°-70°	796.8	12.6
70°-80°	245.4	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°	1862.8	29.5
0°-40°	3019.6	47.8
0°-60°	5268.8	83.5
0°-90°	6310.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6310.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2451	
5°	2436	231
15°	2323	655
25°	2120	976
35°	1850	1157
45°	1538	1187
55°	1189	1062
65°	807	797
75°	180	245
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2450.8
2.5°	2448.7
5°	2436.3
7.5°	2419.8
10°	2399.2
12.5°	2366.1
15°	2322.8
17.5°	2277.4
20°	2229.9
22.5°	2178.3
25°	2120.4
27.5°	2056.4
30°	1988.3
32.5°	1918.1
35°	1850.0
37.5°	1775.6
40°	1701.3
42.5°	1618.7
45°	1538.2
47.5°	1455.6
50°	1371.0
52.5°	1280.1
55°	1189.3
57.5°	1094.3
60°	1001.4
62.5°	904.3
65°	807.3
67.5°	706.1
70°	605.0
72.5°	448.0
75°	179.6
77.5°	8.3
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	20.08	21.67	20.44	21.98	22.30	20.08	21.67	20.44	21.98	22.30
	3H	21.82	23.25	22.20	23.58	23.94	21.82	23.25	22.20	23.58	23.94
	4H	22.02	23.36	22.42	23.71	24.09	22.02	23.36	22.42	23.71	24.09
	6H	21.96	23.20	22.37	23.56	23.96	21.96	23.20	22.37	23.56	23.96
	8H	21.93	23.11	22.35	23.50	23.90	21.93	23.11	22.35	23.50	23.90
	12H	21.90	23.03	22.33	23.41	23.84	21.90	23.03	22.33	23.41	23.84
4H	2H	20.71	22.05	21.11	22.40	22.78	20.71	22.05	21.11	22.40	22.78
	3H	22.63	23.73	23.04	24.13	24.53	22.63	23.73	23.04	24.13	24.53
	4H	22.81	23.80	23.24	24.22	24.65	22.81	23.80	23.24	24.22	24.65
	6H	22.76	23.62	23.21	24.06	24.52	22.76	23.62	23.21	24.06	24.52
	8H	22.72	23.52	23.18	23.96	24.43	22.72	23.52	23.18	23.96	24.43
	12H	22.69	23.41	23.17	23.88	24.35	22.69	23.41	23.17	23.88	24.35
8H	4H	22.85	23.65	23.31	24.09	24.56	22.85	23.65	23.31	24.09	24.56
	6H	22.78	23.43	23.27	23.92	24.40	22.78	23.43	23.27	23.92	24.40
	8H	22.73	23.32	23.25	23.83	24.31	22.73	23.32	23.25	23.83	24.31
	12H	22.71	23.22	23.22	23.71	24.28	22.71	23.22	23.22	23.71	24.28
12H	4H	22.82	23.53	23.30	24.01	24.48	22.82	23.53	23.30	24.01	24.48
	6H	22.73	23.32	23.24	23.83	24.31	22.73	23.32	23.24	23.83	24.31
	8H	22.71	23.22	23.22	23.71	24.28	22.71	23.22	23.22	23.71	24.28