

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: P980170

Luminaire Tested: PRLX-242-940-LL4-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980170
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-940-LL4-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3467.2 lumens
Efficiency: N/A
Efficacy: 170.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

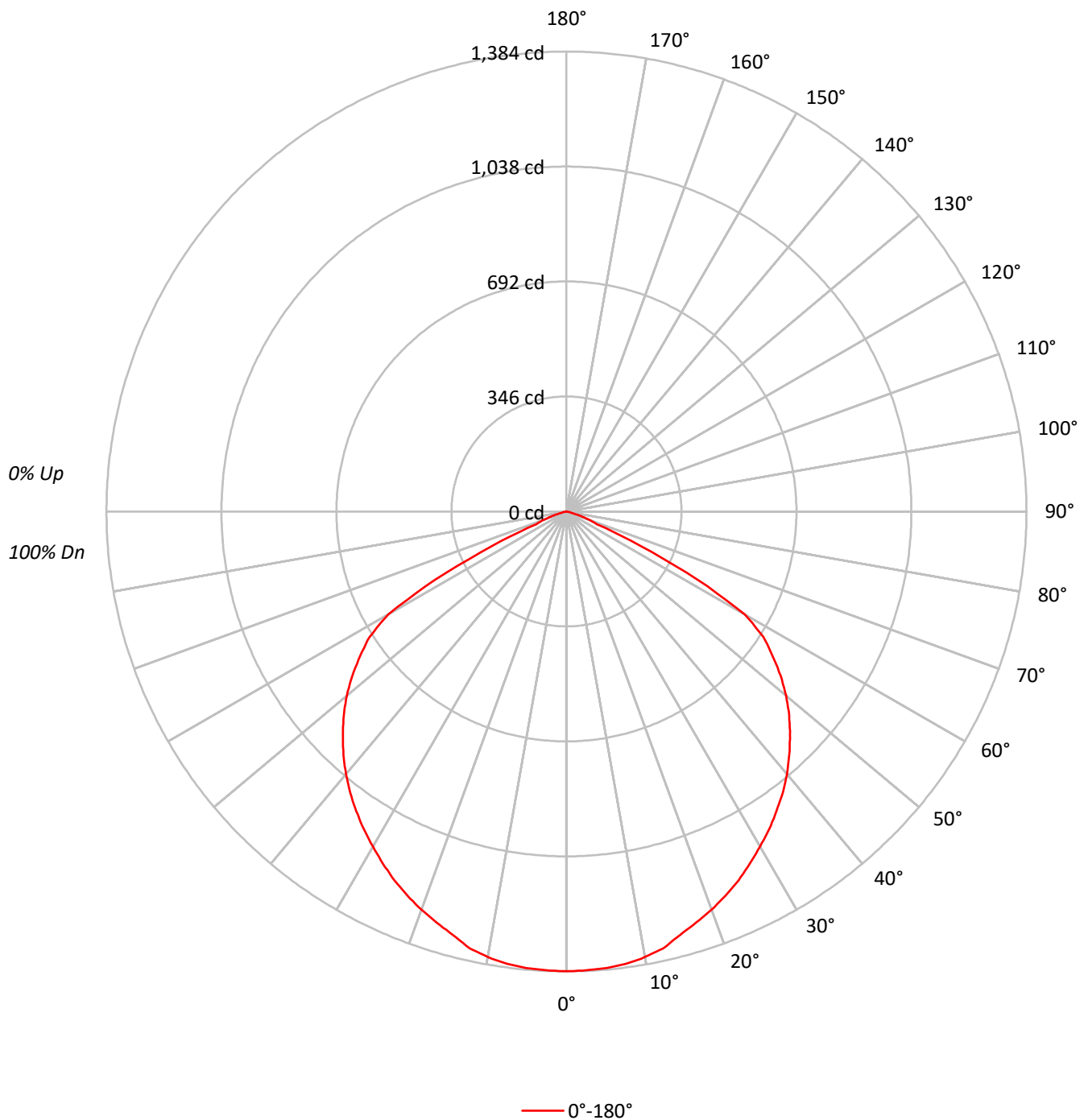
Input Watts (W): 20.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P980170

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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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	6192
5°	6197
10°	6188
15°	6112
20°	6075
25°	6048
30°	6018
35°	6018
40°	6029
45°	6019
50°	6008
55°	5907
60°	5533
65°	2581
70°	869
75°	270
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6019 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.1	3.8
10°-20°	373.0	10.8
20°-30°	564.4	16.3
30°-40°	689.8	19.9
40°-50°	733.9	21.2
50°-60°	673.5	19.4
60°-70°	276.4	8.0
70°-80°	24.9	0.7
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°	1068.5	30.8
0°-40°	1758.4	50.7
0°-60°	3165.8	91.3
0°-90°	3467.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3467.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1384	
5°	1379	131
15°	1319	373
25°	1225	564
35°	1102	690
45°	951	734
55°	757	674
65°	244	276
75°	16	25
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1383.6
2.5°	1382.5
5°	1379.4
7.5°	1373.2
10°	1361.8
12.5°	1346.2
15°	1319.3
17.5°	1297.5
20°	1275.7
22.5°	1250.8
25°	1224.9
27.5°	1194.8
30°	1164.7
32.5°	1134.7
35°	1101.5
37.5°	1068.3
40°	1032.0
42.5°	992.6
45°	951.1
47.5°	908.6
50°	862.9
52.5°	812.1
55°	757.1
57.5°	702.2
60°	618.2
62.5°	446.0
65°	243.7
67.5°	97.5
70°	66.4
72.5°	45.6
75°	15.6
77.5°	1.0
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	19.13	20.66	19.49	20.98	21.29	19.13	20.66	19.49	20.98	21.29
	3H	19.11	20.47	19.49	20.80	21.16	19.11	20.47	19.49	20.80	21.16
	4H	19.06	20.33	19.46	20.68	21.06	19.06	20.33	19.46	20.68	21.06
	6H	19.00	20.17	19.41	20.53	20.92	19.00	20.17	19.41	20.53	20.92
	8H	18.96	20.07	19.39	20.46	20.86	18.96	20.07	19.39	20.46	20.86
	12H	18.93	19.99	19.36	20.37	20.80	18.93	19.99	19.36	20.37	20.80
4H	2H	19.18	20.45	19.58	20.80	21.18	19.18	20.45	19.58	20.80	21.18
	3H	19.19	20.23	19.60	20.63	21.03	19.19	20.23	19.60	20.63	21.03
	4H	19.13	20.06	19.57	20.47	20.91	19.13	20.06	19.57	20.47	20.91
	6H	19.07	19.87	19.53	20.31	20.77	19.07	19.87	19.53	20.31	20.77
	8H	19.03	19.77	19.49	20.21	20.68	19.03	19.77	19.49	20.21	20.68
	12H	18.99	19.65	19.48	20.13	20.60	18.99	19.65	19.48	20.13	20.60
8H	4H	19.04	19.78	19.50	20.22	20.69	19.04	19.78	19.50	20.22	20.69
	6H	18.95	19.56	19.45	20.05	20.53	18.95	19.56	19.45	20.05	20.53
	8H	18.90	19.44	19.41	19.95	20.44	18.90	19.44	19.41	19.95	20.44
	12H	18.86	19.34	19.37	19.84	20.40	18.86	19.34	19.37	19.84	20.40
12H	4H	19.00	19.66	19.48	20.14	20.61	19.00	19.66	19.48	20.14	20.61
	6H	18.89	19.44	19.41	19.95	20.44	18.89	19.44	19.41	19.95	20.44
	8H	18.86	19.34	19.37	19.84	20.40	18.86	19.34	19.37	19.84	20.40