

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: P980200

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

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980200
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-LL7-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

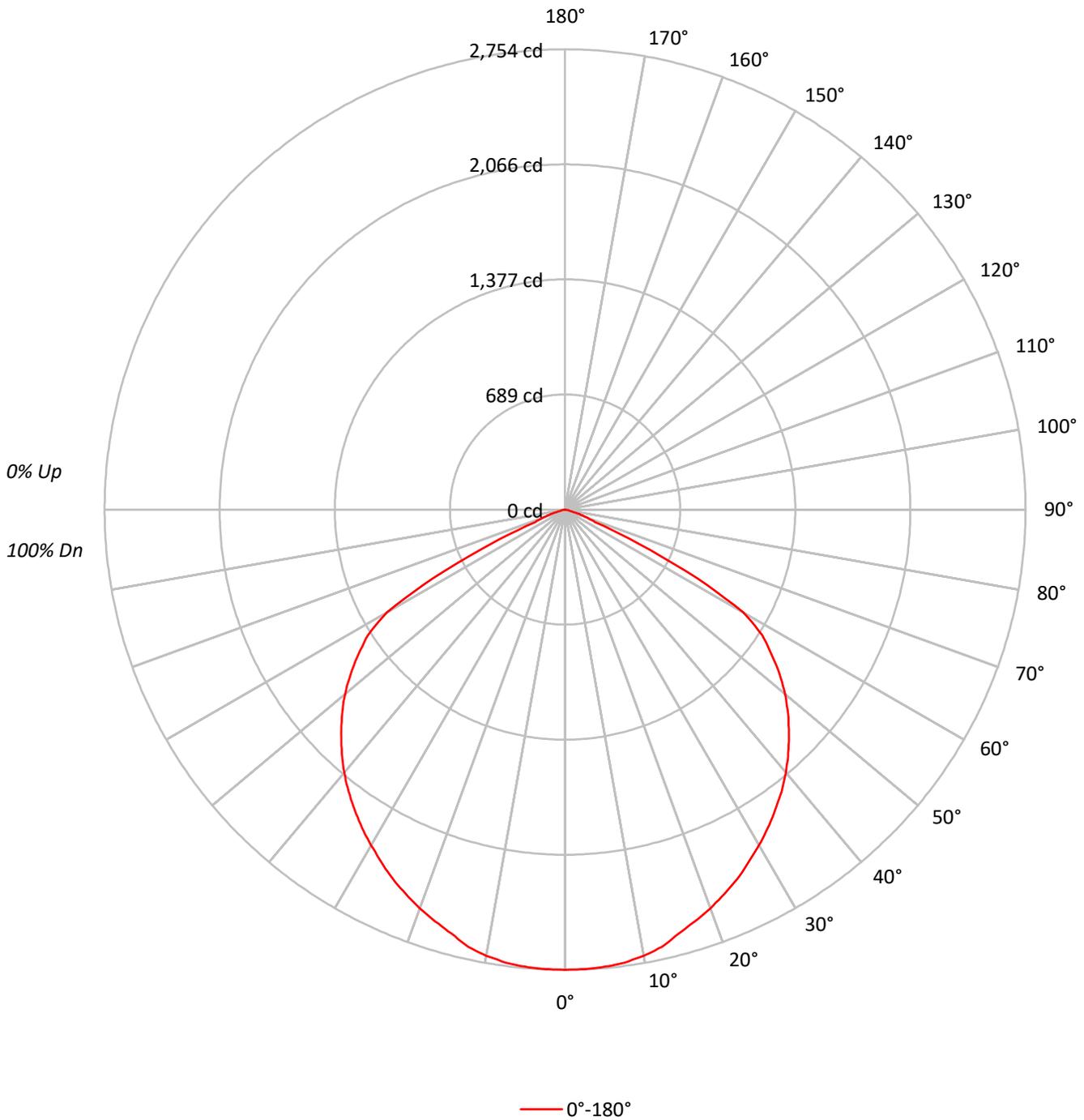
Lumens per Lamp: N/A
Luminaire Lumens: 6902.1 lumens
Efficiency: N/A
Efficacy: 143.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 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									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	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	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88													88															
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76													76															
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65													65															
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56													56															
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49													49															
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43													43															
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38													38															
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34													34															
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30													30															
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27													27															

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	12326
5°	12336
10°	12319
15°	12168
20°	12094
25°	12040
30°	11982
35°	11979
40°	12001
45°	11982
50°	11959
55°	11759
60°	11014
65°	5138
70°	1728
75°	536
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11982 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.0	3.8
10°-20°	742.5	10.8
20°-30°	1123.6	16.3
30°-40°	1373.3	19.9
40°-50°	1460.9	21.2
50°-60°	1340.8	19.4
60°-70°	550.2	8.0
70°-80°	49.6	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°	2127.2	30.8
0°-40°	3500.4	50.7
0°-60°	6302.2	91.3
0°-90°	6902.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6902.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2754	
5°	2746	261
15°	2626	743
25°	2438	1124
35°	2193	1373
45°	1893	1461
55°	1507	1341
65°	485	550
75°	31	50
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	2754.3
2.5°	2752.2
5°	2746.0
7.5°	2733.7
10°	2710.9
12.5°	2680.0
15°	2626.3
17.5°	2582.9
20°	2539.6
22.5°	2490.0
25°	2438.4
27.5°	2378.5
30°	2318.7
32.5°	2258.8
35°	2192.7
37.5°	2126.6
40°	2054.4
42.5°	1975.9
45°	1893.3
47.5°	1808.7
50°	1717.8
52.5°	1616.7
55°	1507.2
57.5°	1397.8
60°	1230.6
62.5°	887.8
65°	485.2
67.5°	194.1
70°	132.1
72.5°	90.8
75°	31.0
77.5°	2.1
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	21.52	23.05	21.88	23.37	23.68	21.52	23.05	21.88	23.37	23.68
	3H	21.50	22.87	21.88	23.19	23.55	21.50	22.87	21.88	23.19	23.55
	4H	21.45	22.72	21.85	23.07	23.45	21.45	22.72	21.85	23.07	23.45
	6H	21.39	22.56	21.80	22.92	23.32	21.39	22.56	21.80	22.92	23.32
	8H	21.35	22.46	21.78	22.85	23.26	21.35	22.46	21.78	22.85	23.26
	12H	21.32	22.38	21.75	22.76	23.19	21.32	22.38	21.75	22.76	23.19
4H	2H	21.57	22.84	21.97	23.19	23.57	21.57	22.84	21.97	23.19	23.57
	3H	21.59	22.62	22.00	23.02	23.42	21.59	22.62	22.00	23.02	23.42
	4H	21.53	22.45	21.96	22.86	23.30	21.53	22.45	21.96	22.86	23.30
	6H	21.47	22.26	21.92	22.70	23.16	21.47	22.26	21.92	22.70	23.16
	8H	21.42	22.16	21.88	22.61	23.07	21.42	22.16	21.88	22.61	23.07
	12H	21.39	22.04	21.87	22.52	22.99	21.39	22.04	21.87	22.52	22.99
8H	4H	21.43	22.17	21.89	22.61	23.08	21.43	22.17	21.89	22.61	23.08
	6H	21.34	21.95	21.84	22.44	22.92	21.34	21.95	21.84	22.44	22.92
	8H	21.29	21.83	21.80	22.34	22.83	21.29	21.83	21.80	22.34	22.83
	12H	21.25	21.73	21.76	22.23	22.79	21.25	21.73	21.76	22.23	22.79
12H	4H	21.39	22.05	21.88	22.53	23.00	21.39	22.05	21.88	22.53	23.00
	6H	21.29	21.83	21.80	22.34	22.83	21.29	21.83	21.80	22.34	22.83
	8H	21.25	21.73	21.76	22.23	22.79	21.25	21.73	21.76	22.23	22.79