

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: P979960

Luminaire Tested: PRLX-242-927-LL7-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979960
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-242-927-LL7-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

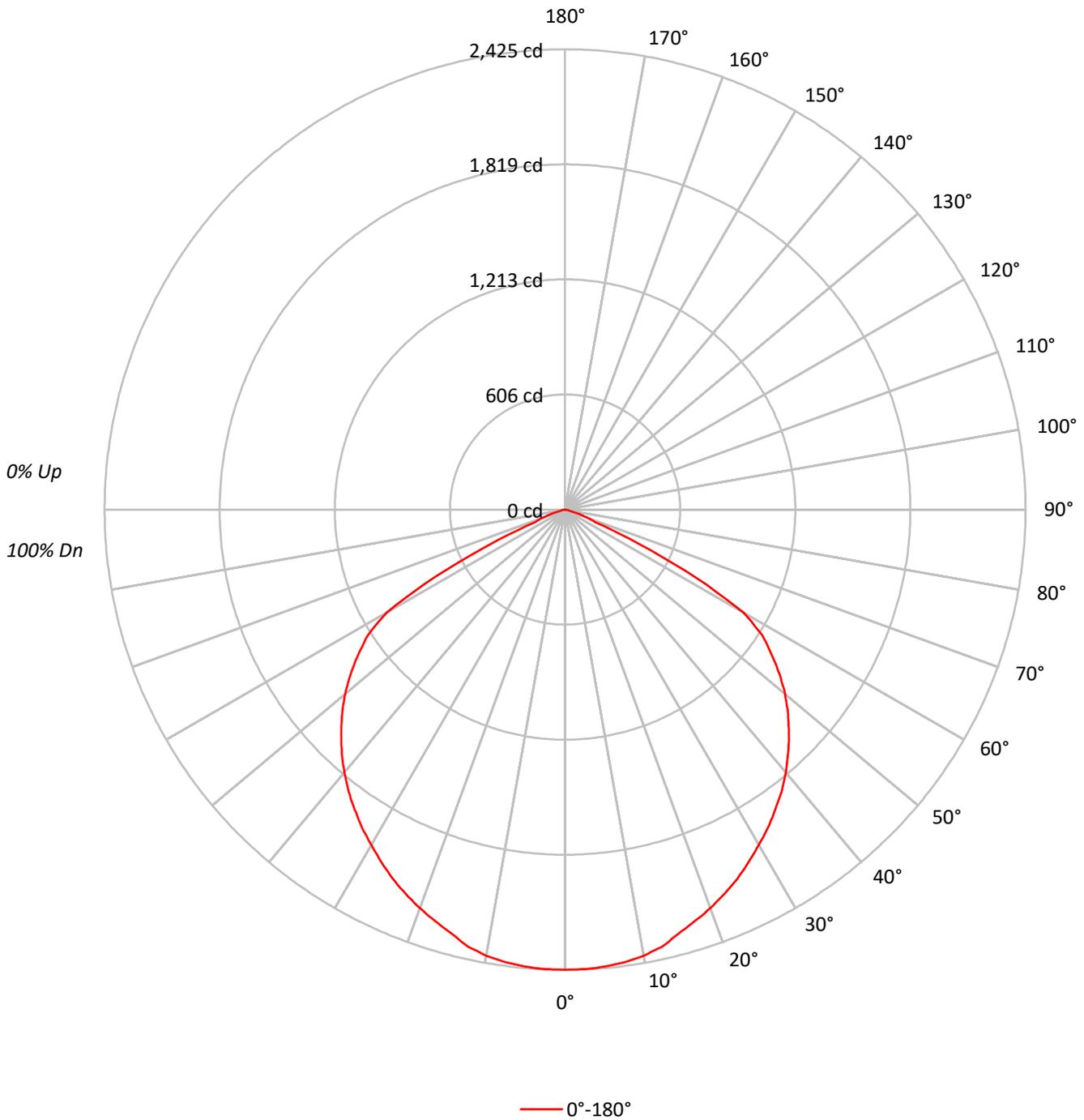
Lumens per Lamp: N/A
Luminaire Lumens: 6076.0 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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	
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	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°	10850
5°	10859
10°	10845
15°	10711
20°	10647
25°	10599
30°	10547
35°	10545
40°	10565
45°	10548
50°	10528
55°	10352
60°	9696
65°	4523
70°	1522
75°	472
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10548 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.8	3.8
10°-20°	653.7	10.8
20°-30°	989.1	16.3
30°-40°	1208.9	19.9
40°-50°	1286.1	21.2
50°-60°	1180.3	19.4
60°-70°	484.4	8.0
70°-80°	43.7	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°	1872.6	30.8
0°-40°	3081.5	50.7
0°-60°	5547.9	91.3
0°-90°	6076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6076.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2425	
5°	2417	230
15°	2312	654
25°	2147	989
35°	1930	1209
45°	1667	1286
55°	1327	1180
65°	427	484
75°	27	44
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2424.6
2.5°	2422.8
5°	2417.4
7.5°	2406.5
10°	2386.5
12.5°	2359.2
15°	2312.0
17.5°	2273.8
20°	2235.6
22.5°	2192.0
25°	2146.6
27.5°	2093.8
30°	2041.1
32.5°	1988.4
35°	1930.3
37.5°	1872.1
40°	1808.5
42.5°	1739.4
45°	1666.7
47.5°	1592.2
50°	1512.2
52.5°	1423.2
55°	1326.8
57.5°	1230.5
60°	1083.3
62.5°	781.6
65°	427.1
67.5°	170.9
70°	116.3
72.5°	80.0
75°	27.3
77.5°	1.8
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	21.07	22.61	21.44	22.92	23.24	21.07	22.61	21.44	22.92	23.24
	3H	21.06	22.42	21.44	22.75	23.11	21.06	22.42	21.44	22.75	23.11
	4H	21.01	22.28	21.41	22.63	23.01	21.01	22.28	21.41	22.63	23.01
	6H	20.95	22.11	21.36	22.48	22.87	20.95	22.11	21.36	22.48	22.87
	8H	20.91	22.02	21.34	22.41	22.81	20.91	22.02	21.34	22.41	22.81
	12H	20.88	21.94	21.31	22.32	22.75	20.88	21.94	21.31	22.32	22.75
4H	2H	21.13	22.40	21.53	22.75	23.13	21.13	22.40	21.53	22.75	23.13
	3H	21.14	22.18	21.55	22.58	22.98	21.14	22.18	21.55	22.58	22.98
	4H	21.08	22.00	21.52	22.42	22.86	21.08	22.00	21.52	22.42	22.86
	6H	21.02	21.82	21.48	22.26	22.72	21.02	21.82	21.48	22.26	22.72
	8H	20.98	21.72	21.44	22.16	22.63	20.98	21.72	21.44	22.16	22.63
	12H	20.94	21.60	21.43	22.08	22.55	20.94	21.60	21.43	22.08	22.55
8H	4H	20.98	21.72	21.45	22.17	22.64	20.98	21.72	21.45	22.17	22.64
	6H	20.90	21.51	21.40	22.00	22.48	20.90	21.51	21.40	22.00	22.48
	8H	20.84	21.39	21.36	21.90	22.39	20.84	21.39	21.36	21.90	22.39
	12H	20.81	21.29	21.32	21.78	22.35	20.81	21.29	21.32	21.78	22.35
12H	4H	20.95	21.61	21.43	22.09	22.56	20.95	21.61	21.43	22.09	22.56
	6H	20.84	21.39	21.36	21.90	22.39	20.84	21.39	21.36	21.90	22.39
	8H	20.81	21.29	21.32	21.78	22.35	20.81	21.29	21.32	21.78	22.35