

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: P979642

Luminaire Tested: PRLX-241-927-LL7-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979642
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-241-927-LL7-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 241 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

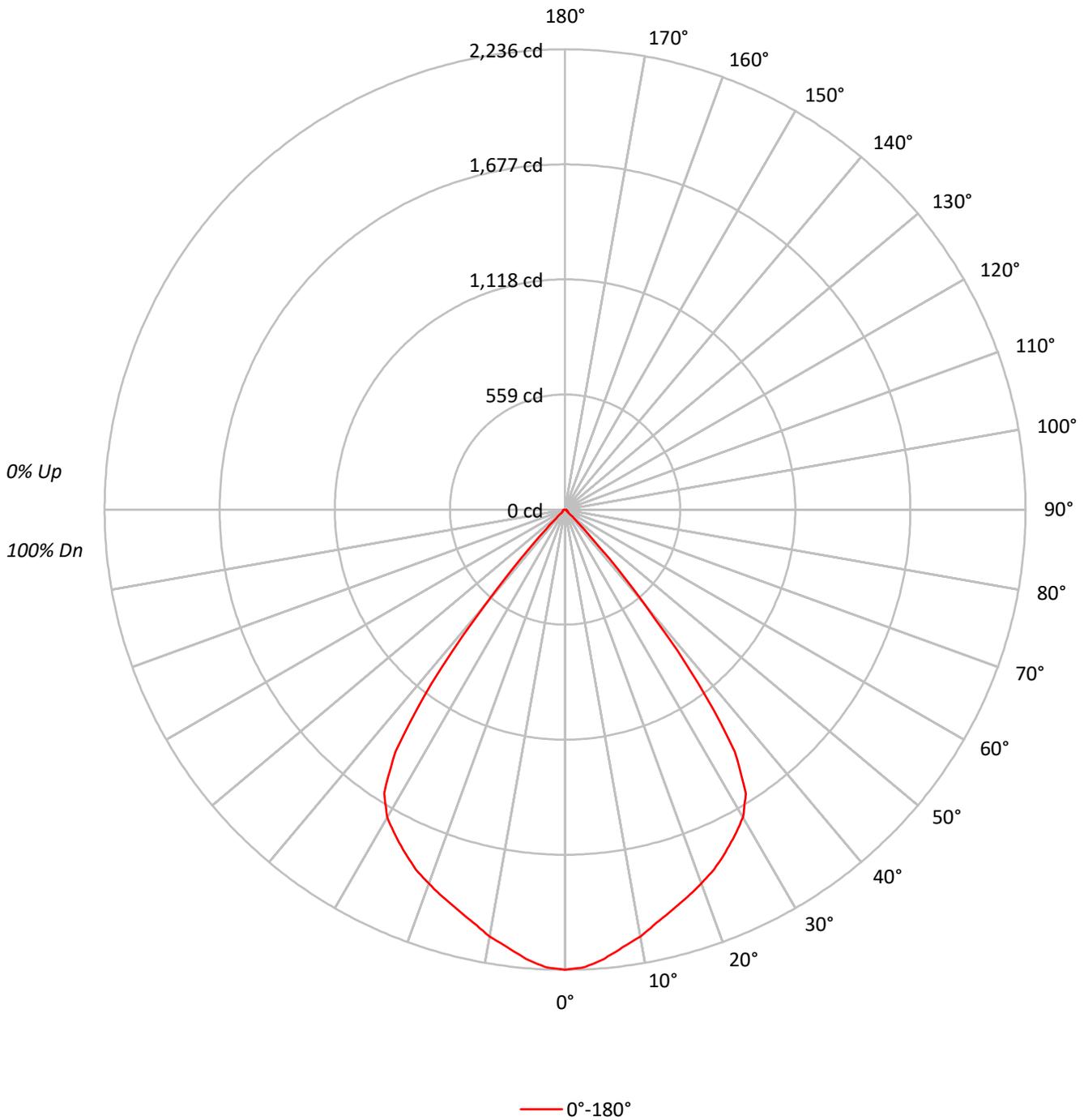
Lumens per Lamp: N/A
Luminaire Lumens: 2588.9 lumens
Efficiency: N/A
Efficacy: 53.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.07
Luminous Opening: Circular (Dia: 1.33' x H: 0')
CIE Type: Direct

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	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93
2	107	102	98	95	105	101	97	93	97	94	91	94	92	89	92	89	88	86
3	102	95	90	86	100	93	89	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	82	77	85	80	77	83	79	76	81	78	75	73
5	91	82	76	71	89	81	75	71	79	74	70	78	73	70	76	72	69	68
6	86	77	70	66	84	76	70	65	74	69	65	73	68	65	71	67	64	63
7	81	71	65	61	80	71	65	61	69	64	60	68	63	60	67	63	60	58
8	77	67	61	56	76	66	60	56	65	60	56	64	59	56	63	59	55	54
9	73	63	56	52	72	62	56	52	61	56	52	60	55	52	59	55	52	50
10	69	59	53	49	68	58	53	49	58	52	49	57	52	48	56	52	48	47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	17234
5°	16949
10°	16490
15°	16073
20°	15865
25°	15646
30°	15371
35°	13513
40°	6000
45°	753
50°	174
55°	195
60°	196
65°	199
70°	165
75°	164
80°	160
85°	159

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 753 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.2	8.0
10°-20°	569.0	22.0
20°-30°	847.3	32.7
30°-40°	817.7	31.6
40°-50°	118.9	4.6
50°-60°	12.4	0.5
60°-70°	10.1	0.4
70°-80°	5.8	0.2
80°-90°	1.5	0.1
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°	1622.5	62.7
0°-40°	2440.2	94.3
0°-60°	2571.5	99.3
0°-90°	2588.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2588.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2236	
5°	2190	206
15°	2014	569
25°	1839	847
35°	1436	818
45°	69	119
55°	14	12
65°	11	10
75°	6	6
85°	2	1
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	2235.6
2.5°	2224.7
5°	2190.2
7.5°	2144.7
10°	2106.6
12.5°	2055.7
15°	2013.9
17.5°	1973.9
20°	1933.9
22.5°	1892.1
25°	1839.4
27.5°	1784.9
30°	1726.7
32.5°	1634.0
35°	1435.9
37.5°	1063.3
40°	596.2
42.5°	247.2
45°	69.1
47.5°	21.8
50°	14.5
52.5°	14.5
55°	14.5
57.5°	12.7
60°	12.7
62.5°	10.9
65°	10.9
67.5°	9.1
70°	7.3
72.5°	7.3
75°	5.5
77.5°	3.6
80°	3.6
82.5°	1.8
85°	1.8
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.42
	8H	0.00	0.00	0.00	0.04	0.52	0.00	0.00	0.00	0.04	0.52
	12H	0.00	0.00	0.00	0.15	0.63	0.00	0.00	0.00	0.15	0.63
8H	4H	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.07
	6H	0.00	0.00	0.00	0.22	0.70	0.00	0.00	0.00	0.22	0.70
	8H	0.00	0.00	0.08	0.38	0.88	0.00	0.00	0.08	0.38	0.88
	12H	0.00	0.05	0.31	0.55	1.13	0.00	0.05	0.31	0.55	1.13
12H	4H	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.05
	6H	0.00	0.00	0.00	0.21	0.71	0.00	0.00	0.00	0.21	0.71
	8H	0.00	0.00	0.14	0.38	0.96	0.00	0.00	0.14	0.38	0.96