

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: P979980

Luminaire Tested: PRLX-242-930-LL1-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979980
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-242-930-LL1-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

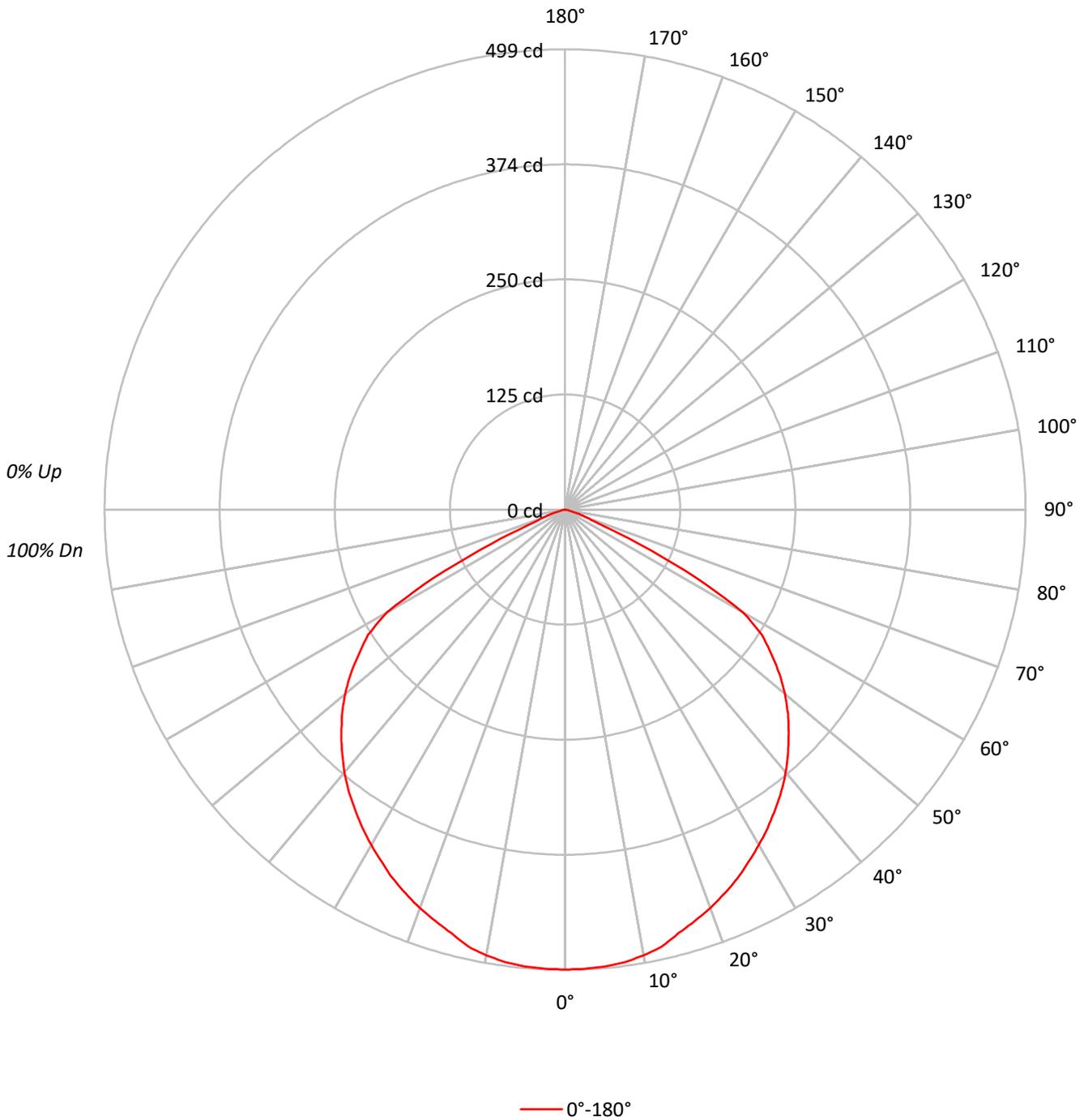
Lumens per Lamp: N/A
Luminaire Lumens: 1249.6 lumens
Efficiency: N/A
Efficacy: 166.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 7.5
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				
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56				
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43				
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38				
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34				
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27				

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	2232
5°	2234
10°	2230
15°	2203
20°	2190
25°	2180
30°	2169
35°	2169
40°	2173
45°	2170
50°	2165
55°	2129
60°	1994
65°	930
70°	313
75°	97
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2170 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.3	3.8
10°-20°	134.4	10.8
20°-30°	203.4	16.3
30°-40°	248.6	19.9
40°-50°	264.5	21.2
50°-60°	242.8	19.4
60°-70°	99.6	8.0
70°-80°	9.0	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°	385.1	30.8
0°-40°	633.7	50.7
0°-60°	1141.0	91.3
0°-90°	1249.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1249.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	499	
5°	497	47
15°	476	134
25°	442	203
35°	397	249
45°	343	265
55°	273	243
65°	88	100
75°	6	9
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	498.7
2.5°	498.3
5°	497.2
7.5°	494.9
10°	490.8
12.5°	485.2
15°	475.5
17.5°	467.6
20°	459.8
22.5°	450.8
25°	441.5
27.5°	430.6
30°	419.8
32.5°	408.9
35°	397.0
37.5°	385.0
40°	371.9
42.5°	357.7
45°	342.8
47.5°	327.5
50°	311.0
52.5°	292.7
55°	272.9
57.5°	253.1
60°	222.8
62.5°	160.7
65°	87.8
67.5°	35.1
70°	23.9
72.5°	16.4
75°	5.6
77.5°	0.4
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	15.58	17.12	15.95	17.43	17.75	15.58	17.12	15.95	17.43	17.75
	3H	15.56	16.93	15.94	17.26	17.62	15.56	16.93	15.94	17.26	17.62
	4H	15.51	16.79	15.91	17.13	17.51	15.51	16.79	15.91	17.13	17.51
	6H	15.45	16.62	15.86	16.99	17.38	15.45	16.62	15.86	16.99	17.38
	8H	15.42	16.53	15.84	16.92	17.32	15.42	16.53	15.84	16.92	17.32
	12H	15.38	16.45	15.81	16.83	17.26	15.38	16.45	15.81	16.83	17.26
4H	2H	15.63	16.91	16.03	17.26	17.63	15.63	16.91	16.03	17.26	17.63
	3H	15.65	16.68	16.06	17.08	17.48	15.65	16.68	16.06	17.08	17.48
	4H	15.59	16.51	16.02	16.93	17.37	15.59	16.51	16.02	16.93	17.37
	6H	15.53	16.32	15.99	16.77	17.23	15.53	16.32	15.99	16.77	17.23
	8H	15.48	16.22	15.95	16.67	17.14	15.48	16.22	15.95	16.67	17.14
	12H	15.45	16.11	15.93	16.59	17.06	15.45	16.11	15.93	16.59	17.06
8H	4H	15.49	16.23	15.95	16.67	17.14	15.49	16.23	15.95	16.67	17.14
	6H	15.40	16.01	15.90	16.51	16.98	15.40	16.01	15.90	16.51	16.98
	8H	15.35	15.90	15.87	16.41	16.90	15.35	15.90	15.87	16.41	16.90
	12H	15.31	15.80	15.82	16.29	16.86	15.31	15.80	15.82	16.29	16.86
12H	4H	15.45	16.11	15.94	16.59	17.06	15.45	16.11	15.94	16.59	17.06
	6H	15.35	15.90	15.87	16.41	16.90	15.35	15.90	15.87	16.41	16.90
	8H	15.31	15.80	15.82	16.29	16.86	15.31	15.80	15.82	16.29	16.86