

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P979920

Luminaire Tested: PRLX-242-927-23L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979920
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-242-927-23L-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

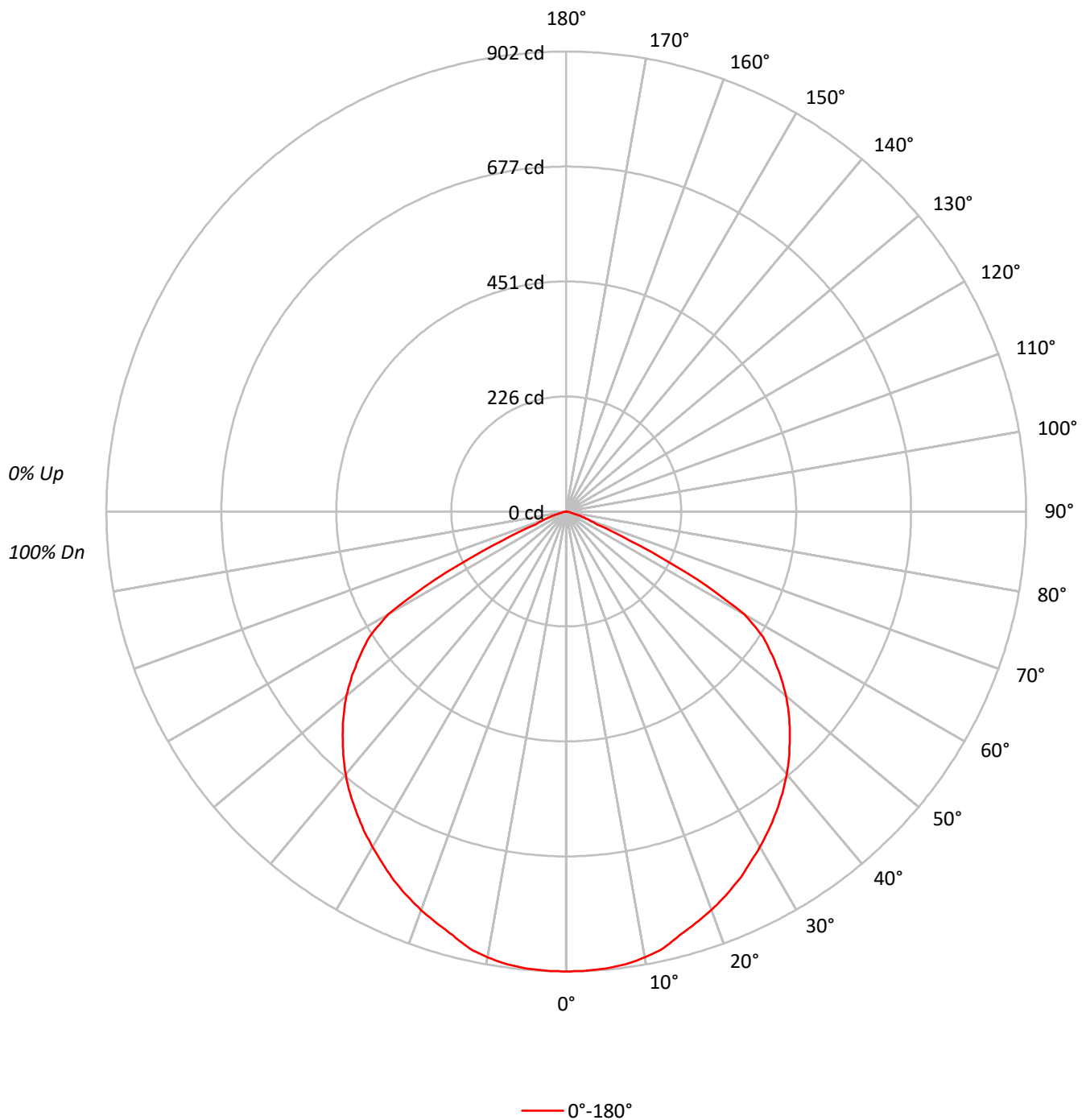
Lumens per Lamp: N/A
Luminaire Lumens: 2261.2 lumens
Efficiency: N/A
Efficacy: 150.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 15
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
RW	70	50	30	10	70	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		100
1	111	107	103	100	108	105	102	99	101	98	96		97	95	93		88
2	102	95	89	84	100	93	88	83	90	85	81		86	83	79		76
3	94	84	77	71	91	83	76	71	80	74	69		77	72	68		65
4	86	75	67	61	84	74	66	61	71	65	60		69	63	59		56
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		49
6	73	61	52	46	71	60	52	46	58	51	46		56	50	45		43
7	68	55	47	41	66	54	46	41	53	46	40		51	45	40		38
8	63	50	42	36	62	49	42	36	48	41	36		47	41	36		34
9	59	46	38	33	58	45	38	33	44	37	32		43	37	32		30
10	55	42	35	30	54	42	35	30	41	34	29		40	34	29		27

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4038
5°	4041
10°	4036
15°	3986
20°	3962
25°	3945
30°	3925
35°	3925
40°	3932
45°	3926
50°	3918
55°	3853
60°	3608
65°	1684
70°	567
75°	175
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3926 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	3.8
10°-20°	243.3	10.8
20°-30°	368.1	16.3
30°-40°	449.9	19.9
40°-50°	478.6	21.2
50°-60°	439.3	19.4
60°-70°	180.3	8.0
70°-80°	16.3	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°	696.9	30.8
0°-40°	1146.8	50.7
0°-60°	2064.6	91.3
0°-90°	2261.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2261.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	902	
5°	900	86
15°	860	243
25°	799	368
35°	718	450
45°	620	479
55°	494	439
65°	159	180
75°	10	16
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	902.3
2.5°	901.7
5°	899.6
7.5°	895.6
10°	888.1
12.5°	878.0
15°	860.4
17.5°	846.2
20°	832.0
22.5°	815.8
25°	798.9
27.5°	779.2
30°	759.6
32.5°	740.0
35°	718.4
37.5°	696.7
40°	673.0
42.5°	647.3
45°	620.3
47.5°	592.5
50°	562.8
52.5°	529.6
55°	493.8
57.5°	457.9
60°	403.1
62.5°	290.9
65°	159.0
67.5°	63.6
70°	43.3
72.5°	29.8
75°	10.1
77.5°	0.7
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	17.64	19.18	18.00	19.49	19.80	17.64	19.18	18.00	19.49	19.80
	3H	17.62	18.99	18.00	19.32	19.68	17.62	18.99	18.00	19.32	19.68
	4H	17.57	18.85	17.97	19.19	19.57	17.57	18.85	17.97	19.19	19.57
	6H	17.51	18.68	17.92	19.05	19.44	17.51	18.68	17.92	19.05	19.44
	8H	17.48	18.59	17.90	18.98	19.38	17.48	18.59	17.90	18.98	19.38
	12H	17.44	18.51	17.87	18.89	19.32	17.44	18.51	17.87	18.89	19.32
4H	2H	17.69	18.97	18.09	19.31	19.69	17.69	18.97	18.09	19.31	19.69
	3H	17.71	18.74	18.12	19.14	19.54	17.71	18.74	18.12	19.14	19.54
	4H	17.65	18.57	18.08	18.99	19.43	17.65	18.57	18.08	18.99	19.43
	6H	17.59	18.38	18.05	18.83	19.29	17.59	18.38	18.05	18.83	19.29
	8H	17.54	18.28	18.01	18.73	19.20	17.54	18.28	18.01	18.73	19.20
	12H	17.51	18.17	17.99	18.65	19.12	17.51	18.17	17.99	18.65	19.12
8H	4H	17.55	18.29	18.01	18.73	19.20	17.55	18.29	18.01	18.73	19.20
	6H	17.46	18.07	17.96	18.56	19.04	17.46	18.07	17.96	18.56	19.04
	8H	17.41	17.96	17.93	18.47	18.96	17.41	17.96	17.93	18.47	18.96
	12H	17.37	17.86	17.88	18.35	18.92	17.37	17.86	17.88	18.35	18.92
12H	4H	17.51	18.17	18.00	18.65	19.12	17.51	18.17	18.00	18.65	19.12
	6H	17.41	17.96	17.93	18.47	18.96	17.41	17.96	17.93	18.47	18.96
	8H	17.37	17.86	17.88	18.35	18.92	17.37	17.86	17.88	18.35	18.92