

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: P980240

Luminaire Tested: PRLX-243-927-23L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980240
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-36)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-927-23L-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

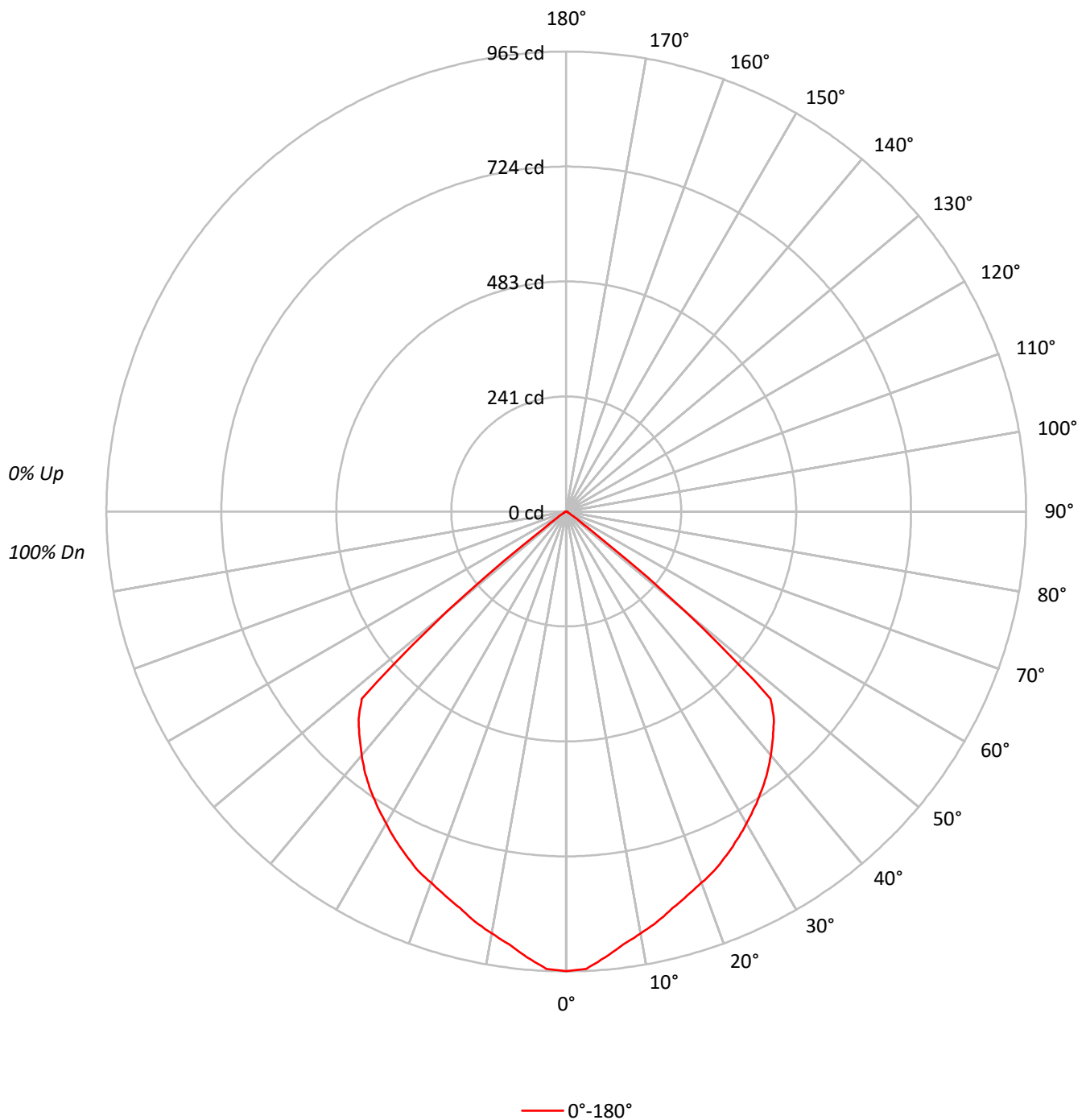
Lumens per Lamp: N/A
Luminaire Lumens: 1659.2 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.34
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	112	109	106	104	110	107	104	102	103	101	99		99	97	96		96
2	105	99	95	91	103	98	93	89	94	91	87		91	88	86		88
3	98	91	85	80	96	89	84	79	86	82	78		84	80	77		82
4	92	83	76	71	90	81	75	70	79	74	69		77	72	69		75
5	86	75	68	63	84	74	68	63	73	67	62		71	66	62		69
6	80	69	62	57	78	68	61	56	67	61	56		65	60	56		64
7	75	63	56	51	73	63	56	51	61	55	51		60	54	50		59
8	70	58	51	46	69	58	51	46	57	50	46		55	50	46		54
9	66	54	47	42	64	53	47	42	52	46	42		51	46	42		50
10	62	50	43	38	61	50	43	38	49	43	38		48	42	38		47

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4759
5°	4650
10°	4504
15°	4402
20°	4354
25°	4334
30°	4308
35°	4306
40°	4300
45°	4300
50°	2492
55°	221
60°	34
65°	40
70°	49
75°	51
80°	40
85°	40

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4300 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	5.3
10°-20°	243.7	14.7
20°-30°	367.0	22.1
30°-40°	447.4	27.0
40°-50°	449.6	27.1
50°-60°	56.1	3.4
60°-70°	3.4	0.2
70°-80°	2.8	0.2
80°-90°	1.0	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°	699.0	42.1
0°-40°	1146.4	69.1
0°-60°	1652.1	99.6
0°-90°	1659.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1659.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	965	
5°	939	88
15°	862	244
25°	796	367
35°	715	447
45°	616	450
55°	26	56
65°	3	3
75°	3	3
85°	1	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	964.6
2.5°	960.5
5°	938.9
7.5°	916.5
10°	899.0
12.5°	882.1
15°	861.8
17.5°	844.8
20°	829.3
22.5°	815.1
25°	796.1
27.5°	776.5
30°	756.2
32.5°	735.9
35°	715.0
37.5°	692.7
40°	667.6
42.5°	641.9
45°	616.2
47.5°	581.7
50°	324.7
52.5°	61.6
55°	25.7
57.5°	8.1
60°	3.4
62.5°	3.4
65°	3.4
67.5°	3.4
70°	3.4
72.5°	3.4
75°	2.7
77.5°	2.0
80°	1.4
82.5°	1.4
85°	0.7
87.5°	0.7
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	0.00	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
8H	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
12H	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

END OF REPORT