

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: P979942

Luminaire Tested: PRLX-242-927-43L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979942
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-27)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-927-43L-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

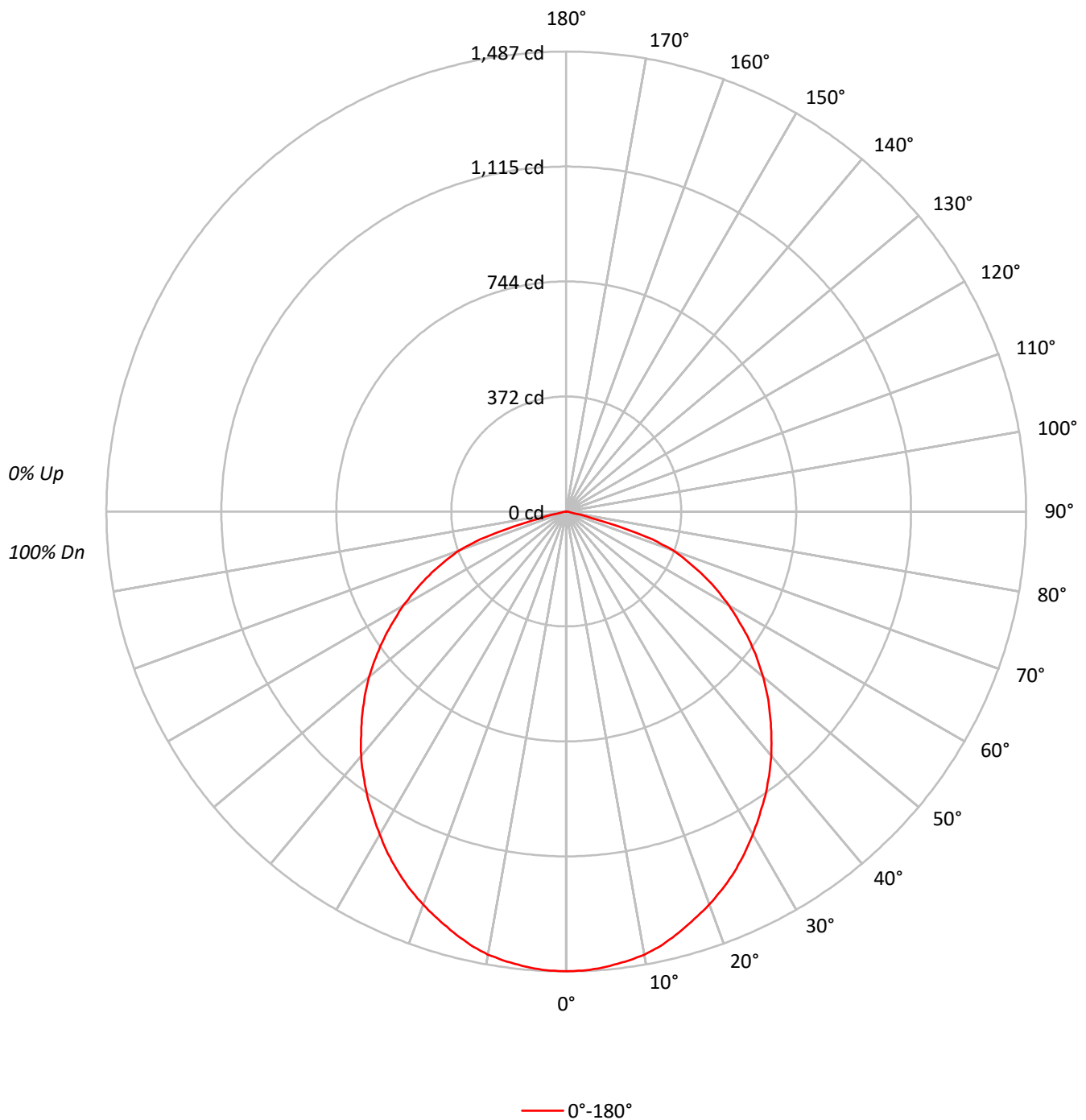
Lumens per Lamp: N/A
Luminaire Lumens: 3828.2 lumens
Efficiency: N/A
Efficacy: 129.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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
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	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72
4	84	73	64	58	82	71	63	57	69	62	57		67	61	56		64
5	77	65	56	50	75	64	56	50	62	55	49		60	53	48		58
6	72	59	50	44	70	58	49	43	56	48	43		54	48	43		53
7	66	53	44	38	65	52	44	38	51	43	38		49	43	38		48
8	62	48	40	34	60	48	40	34	46	39	34		45	39	34		44
9	58	44	36	31	56	44	36	31	43	36	31		42	35	31		41
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		38

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	6653
5°	6639
10°	6613
15°	6528
20°	6442
25°	6351
30°	6232
35°	6131
40°	6029
45°	5905
50°	5790
55°	5628
60°	5436
65°	5185
70°	4802
75°	1885
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5905 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	3.7
10°-20°	397.4	10.4
20°-30°	592.1	15.5
30°-40°	701.7	18.3
40°-50°	720.0	18.8
50°-60°	644.3	16.8
60°-70°	483.3	12.6
70°-80°	148.9	3.9
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°	1129.9	29.5
0°-40°	1831.7	47.8
0°-60°	3196.0	83.5
0°-90°	3828.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3828.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1487	
5°	1478	140
15°	1409	397
25°	1286	592
35°	1122	702
45°	933	720
55°	721	644
65°	490	483
75°	109	149
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1486.6
2.5°	1485.4
5°	1477.8
7.5°	1467.8
10°	1455.3
12.5°	1435.3
15°	1409.0
17.5°	1381.4
20°	1352.6
22.5°	1321.3
25°	1286.2
27.5°	1247.4
30°	1206.1
32.5°	1163.5
35°	1122.2
37.5°	1077.1
40°	1032.0
42.5°	981.9
45°	933.0
47.5°	882.9
50°	831.6
52.5°	776.5
55°	721.4
57.5°	663.8
60°	607.4
62.5°	548.6
65°	489.7
67.5°	428.3
70°	367.0
72.5°	271.8
75°	109.0
77.5°	5.0
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	18.34	19.93	18.70	20.24	20.56	18.34	19.93	18.70	20.24	20.56
	3H	20.09	21.52	20.47	21.84	22.20	20.09	21.52	20.47	21.84	22.20
	4H	20.29	21.63	20.68	21.97	22.35	20.29	21.63	20.68	21.97	22.35
	6H	20.23	21.46	20.64	21.83	22.22	20.23	21.46	20.64	21.83	22.22
	8H	20.19	21.37	20.62	21.76	22.16	20.19	21.37	20.62	21.76	22.16
	12H	20.16	21.29	20.59	21.67	22.10	20.16	21.29	20.59	21.67	22.10
4H	2H	18.97	20.31	19.37	20.66	21.04	18.97	20.31	19.37	20.66	21.04
	3H	20.89	22.00	21.30	22.40	22.80	20.89	22.00	21.30	22.40	22.80
	4H	21.07	22.07	21.50	22.48	22.92	21.07	22.07	21.50	22.48	22.92
	6H	21.02	21.88	21.48	22.32	22.78	21.02	21.88	21.48	22.32	22.78
	8H	20.98	21.78	21.44	22.23	22.69	20.98	21.78	21.44	22.23	22.69
	12H	20.96	21.67	21.44	22.15	22.62	20.96	21.67	21.44	22.15	22.62
8H	4H	21.11	21.91	21.57	22.35	22.82	21.11	21.91	21.57	22.35	22.82
	6H	21.04	21.69	21.54	22.18	22.66	21.04	21.69	21.54	22.18	22.66
	8H	21.00	21.58	21.51	22.09	22.58	21.00	21.58	21.51	22.09	22.58
	12H	20.97	21.48	21.48	21.97	22.54	20.97	21.48	21.48	21.97	22.54
12H	4H	21.08	21.80	21.56	22.27	22.74	21.08	21.80	21.56	22.27	22.74
	6H	20.99	21.58	21.51	22.09	22.58	20.99	21.58	21.51	22.09	22.58
	8H	20.97	21.48	21.48	21.97	22.54	20.97	21.48	21.48	21.97	22.54