

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: P979932

Luminaire Tested: PRLX-242-927-31L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979932
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-242-927-31L-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

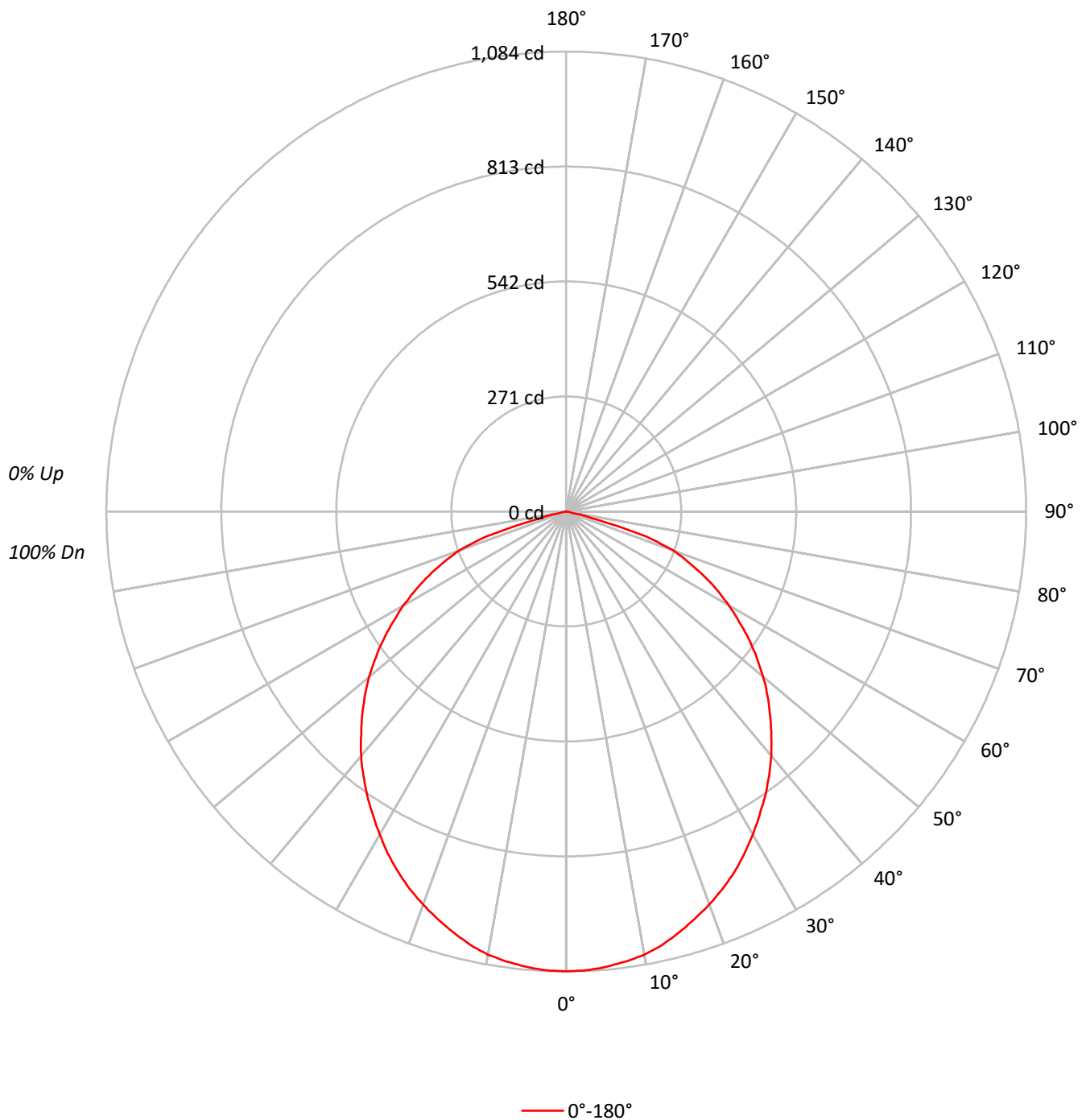
Lumens per Lamp: N/A
Luminaire Lumens: 2790.8 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 20.5
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	30	10
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	106	102	98		107	103	100	97		99	96	94		95	93	91		92	90	88
2	100	93	86	81		98	91	85	80		87	83	78		84	80	77		81	78	75
3	92	82	74	68		89	80	73	67		77	71	66		75	69	65		72	68	64
4	84	73	64	58		82	71	63	57		69	62	57		67	61	56		64	59	55
5	77	65	56	50		75	64	56	50		62	55	49		60	53	48		58	52	48
6	72	59	50	44		70	58	49	43		56	48	43		54	48	43		53	47	42
7	66	53	44	38		65	52	44	38		51	43	38		49	43	38		48	42	37
8	62	48	40	34		60	48	40	34		46	39	34		45	39	34		44	38	34
9	58	44	36	31		56	44	36	31		43	36	31		42	35	31		41	35	30
10	54	41	33	28		53	41	33	28		40	33	28		39	32	28		38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4850
5°	4840
10°	4821
15°	4759
20°	4696
25°	4630
30°	4543
35°	4469
40°	4395
45°	4305
50°	4221
55°	4103
60°	3963
65°	3780
70°	3500
75°	1373
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4305 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.3	3.7
10°-20°	289.7	10.4
20°-30°	431.7	15.5
30°-40°	511.6	18.3
40°-50°	524.9	18.8
50°-60°	469.7	16.8
60°-70°	352.4	12.6
70°-80°	108.5	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°	823.7	29.5
0°-40°	1335.3	47.8
0°-60°	2329.9	83.5
0°-90°	2790.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2790.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1084	
5°	1077	102
15°	1027	290
25°	938	432
35°	818	512
45°	680	525
55°	526	470
65°	357	352
75°	79	109
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1083.8
2.5°	1082.9
5°	1077.4
7.5°	1070.1
10°	1060.9
12.5°	1046.3
15°	1027.2
17.5°	1007.1
20°	986.1
22.5°	963.2
25°	937.7
27.5°	909.4
30°	879.2
32.5°	848.2
35°	818.1
37.5°	785.2
40°	752.3
42.5°	715.8
45°	680.2
47.5°	643.7
50°	606.3
52.5°	566.1
55°	525.9
57.5°	483.9
60°	442.8
62.5°	399.9
65°	357.0
67.5°	312.3
70°	267.5
72.5°	198.1
75°	79.4
77.5°	3.7
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	17.24	18.83	17.61	19.15	19.46	17.24	18.83	17.61	19.15	19.46
	3H	18.99	20.42	19.37	20.75	21.11	18.99	20.42	19.37	20.75	21.11
	4H	19.19	20.53	19.59	20.88	21.25	19.19	20.53	19.59	20.88	21.25
	6H	19.13	20.36	19.54	20.73	21.12	19.13	20.36	19.54	20.73	21.12
	8H	19.09	20.27	19.52	20.66	21.06	19.09	20.27	19.52	20.66	21.06
	12H	19.07	20.19	19.50	20.57	21.00	19.07	20.19	19.50	20.57	21.00
4H	2H	17.88	19.22	18.27	19.56	19.94	17.88	19.22	18.27	19.56	19.94
	3H	19.79	20.90	20.20	21.30	21.70	19.79	20.90	20.20	21.30	21.70
	4H	19.97	20.97	20.41	21.38	21.82	19.97	20.97	20.41	21.38	21.82
	6H	19.92	20.78	20.38	21.22	21.68	19.92	20.78	20.38	21.22	21.68
	8H	19.88	20.68	20.35	21.13	21.60	19.88	20.68	20.35	21.13	21.60
	12H	19.86	20.57	20.34	21.05	21.52	19.86	20.57	20.34	21.05	21.52
8H	4H	20.01	20.81	20.47	21.25	21.72	20.01	20.81	20.47	21.25	21.72
	6H	19.94	20.60	20.44	21.09	21.56	19.94	20.60	20.44	21.09	21.56
	8H	19.90	20.48	20.41	20.99	21.48	19.90	20.48	20.41	20.99	21.48
	12H	19.87	20.38	20.38	20.88	21.44	19.87	20.38	20.38	20.88	21.44
12H	4H	19.98	20.70	20.46	21.18	21.65	19.98	20.70	20.46	21.18	21.65
	6H	19.90	20.48	20.41	20.99	21.48	19.90	20.48	20.41	20.99	21.48
	8H	19.87	20.38	20.38	20.88	21.44	19.87	20.38	20.38	20.88	21.44

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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