

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: P979912

Luminaire Tested: PRLX-242-927-18L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979912
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-242-927-18L-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

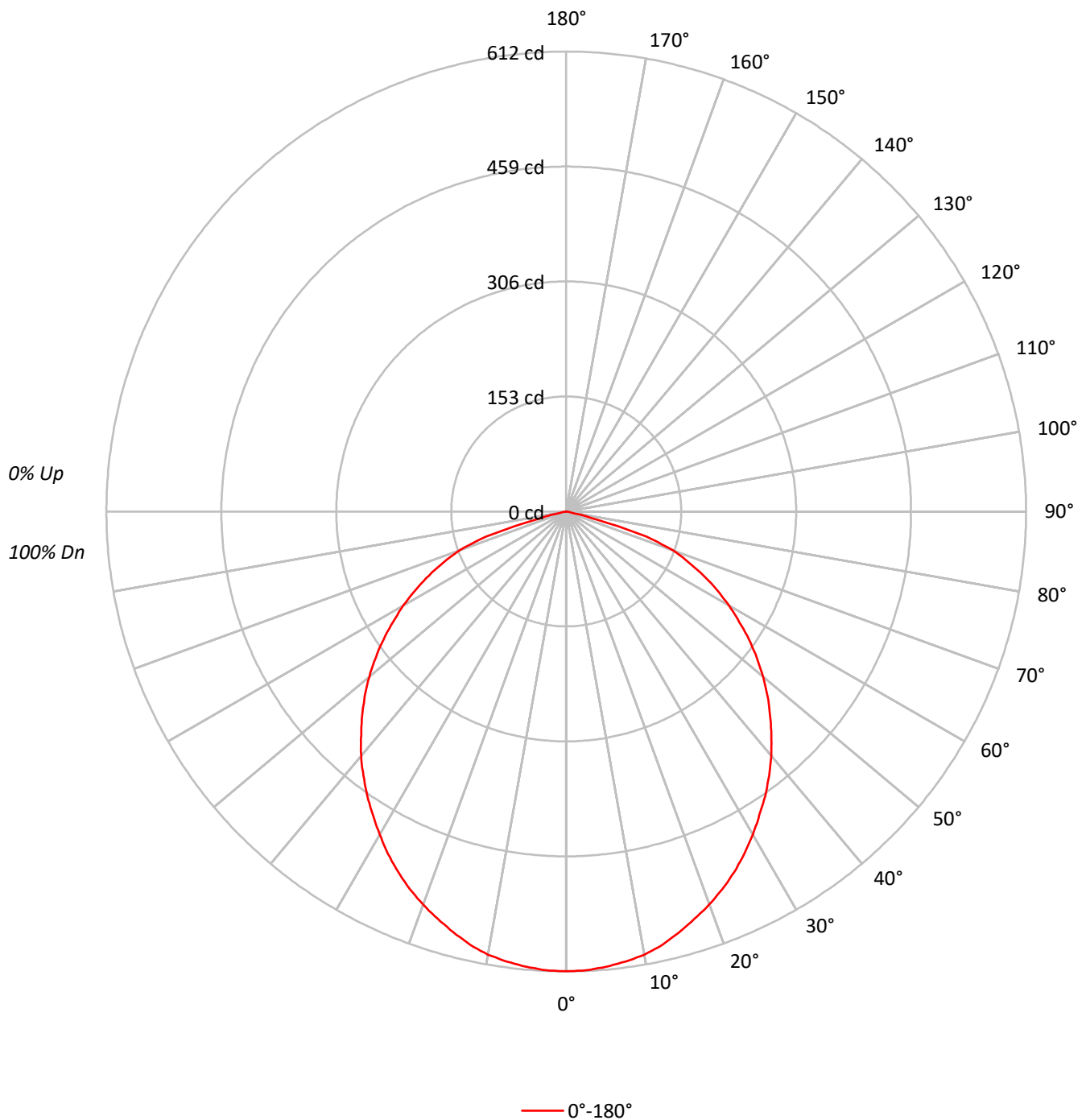
Lumens per Lamp: N/A
Luminaire Lumens: 1575.5 lumens
Efficiency: N/A
Efficacy: 143.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 11
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°	2738
5°	2732
10°	2721
15°	2686
20°	2651
25°	2614
30°	2565
35°	2523
40°	2481
45°	2430
50°	2382
55°	2316
60°	2238
65°	2134
70°	1976
75°	775
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2430 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	3.7
10°-20°	163.6	10.4
20°-30°	243.7	15.5
30°-40°	288.8	18.3
40°-50°	296.3	18.8
50°-60°	265.2	16.8
60°-70°	198.9	12.6
70°-80°	61.2	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°	465.0	29.5
0°-40°	753.8	47.8
0°-60°	1315.3	83.5
0°-90°	1575.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1575.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	612	
5°	608	58
15°	580	164
25°	529	244
35°	462	289
45°	384	296
55°	297	265
65°	202	199
75°	45	61
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	611.8
2.5°	611.3
5°	608.2
7.5°	604.1
10°	598.9
12.5°	590.7
15°	579.8
17.5°	568.5
20°	556.7
22.5°	543.8
25°	529.3
27.5°	513.4
30°	496.4
32.5°	478.8
35°	461.8
37.5°	443.3
40°	424.7
42.5°	404.1
45°	384.0
47.5°	363.4
50°	342.2
52.5°	319.6
55°	296.9
57.5°	273.2
60°	250.0
62.5°	225.8
65°	201.5
67.5°	176.3
70°	151.0
72.5°	111.8
75°	44.8
77.5°	2.1
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	15.25	16.85	15.62	17.16	17.47	15.25	16.85	15.62	17.16	17.47
	3H	17.00	18.43	17.38	18.76	19.12	17.00	18.43	17.38	18.76	19.12
	4H	17.20	18.54	17.60	18.89	19.27	17.20	18.54	17.60	18.89	19.27
	6H	17.14	18.38	17.55	18.74	19.13	17.14	18.38	17.55	18.74	19.13
	8H	17.11	18.29	17.53	18.67	19.07	17.11	18.29	17.53	18.67	19.07
	12H	17.08	18.21	17.51	18.59	19.02	17.08	18.21	17.51	18.59	19.02
4H	2H	15.89	17.23	16.29	17.58	17.95	15.89	17.23	16.29	17.58	17.95
	3H	17.80	18.91	18.21	19.31	19.71	17.80	18.91	18.21	19.31	19.71
	4H	17.99	18.98	18.42	19.40	19.83	17.99	18.98	18.42	19.40	19.83
	6H	17.94	18.80	18.39	19.24	19.70	17.94	18.80	18.39	19.24	19.70
	8H	17.90	18.70	18.36	19.14	19.61	17.90	18.70	18.36	19.14	19.61
	12H	17.87	18.58	18.35	19.06	19.53	17.87	18.58	18.35	19.06	19.53
8H	4H	18.02	18.82	18.49	19.27	19.73	18.02	18.82	18.49	19.27	19.73
	6H	17.95	18.61	18.45	19.10	19.58	17.95	18.61	18.45	19.10	19.58
	8H	17.91	18.49	18.42	19.00	19.49	17.91	18.49	18.42	19.00	19.49
	12H	17.89	18.40	18.40	18.89	19.45	17.89	18.40	18.40	18.89	19.45
12H	4H	18.00	18.71	18.48	19.19	19.66	18.00	18.71	18.48	19.19	19.66
	6H	17.91	18.49	18.42	19.00	19.49	17.91	18.49	18.42	19.00	19.49
	8H	17.89	18.40	18.40	18.89	19.45	17.89	18.40	18.40	18.89	19.45

END OF REPORT