

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: P979972

Luminaire Tested: PRLX-242-927-74L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979972
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-242-927-74L-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

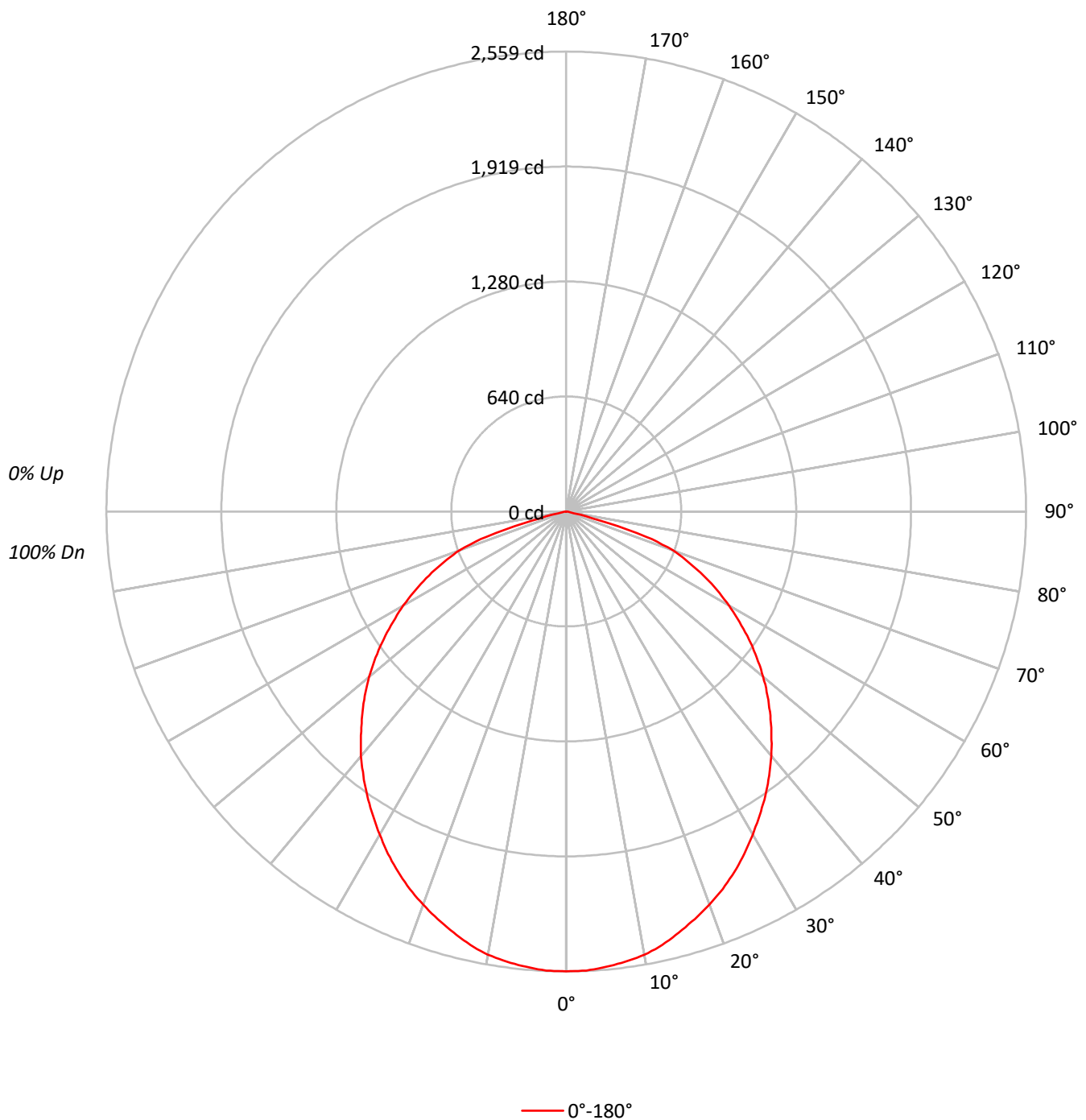
Lumens per Lamp: N/A
Luminaire Lumens: 6589.8 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
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°	11452
5°	11428
10°	11384
15°	11237
20°	11089
25°	10933
30°	10729
35°	10553
40°	10378
45°	10165
50°	9966
55°	9689
60°	9358
65°	8927
70°	8265
75°	3244
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10165 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.6	3.7
10°-20°	684.2	10.4
20°-30°	1019.3	15.5
30°-40°	1208.0	18.3
40°-50°	1239.4	18.8
50°-60°	1109.1	16.8
60°-70°	832.0	12.6
70°-80°	256.2	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°	1945.1	29.5
0°-40°	3153.1	47.8
0°-60°	5501.6	83.5
0°-90°	6589.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6589.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2559	
5°	2544	242
15°	2425	684
25°	2214	1019
35°	1932	1208
45°	1606	1239
55°	1242	1109
65°	843	832
75°	188	256
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	2559.1
2.5°	2556.9
5°	2544.0
7.5°	2526.7
10°	2505.2
12.5°	2470.7
15°	2425.4
17.5°	2378.0
20°	2328.4
22.5°	2274.5
25°	2214.1
27.5°	2147.3
30°	2076.2
32.5°	2002.9
35°	1931.7
37.5°	1854.1
40°	1776.5
42.5°	1690.2
45°	1606.2
47.5°	1519.9
50°	1431.5
52.5°	1336.7
55°	1241.8
57.5°	1142.6
60°	1045.6
62.5°	944.3
65°	843.0
67.5°	737.3
70°	631.7
72.5°	467.8
75°	187.6
77.5°	8.6
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	20.23	21.82	20.59	22.13	22.44	20.23	21.82	20.59	22.13	22.44
	3H	21.97	23.40	22.35	23.73	24.09	21.97	23.40	22.35	23.73	24.09
	4H	22.17	23.51	22.57	23.86	24.24	22.17	23.51	22.57	23.86	24.24
	6H	22.11	23.35	22.52	23.71	24.11	22.11	23.35	22.52	23.71	24.11
	8H	22.08	23.26	22.50	23.65	24.05	22.08	23.26	22.50	23.65	24.05
	12H	22.05	23.18	22.48	23.56	23.99	22.05	23.18	22.48	23.56	23.99
4H	2H	20.86	22.20	21.26	22.55	22.93	20.86	22.20	21.26	22.55	22.93
	3H	22.78	23.88	23.19	24.28	24.68	22.78	23.88	23.19	24.28	24.68
	4H	22.96	23.95	23.39	24.37	24.80	22.96	23.95	23.39	24.37	24.80
	6H	22.91	23.77	23.36	24.21	24.67	22.91	23.77	23.36	24.21	24.67
	8H	22.87	23.67	23.33	24.11	24.58	22.87	23.67	23.33	24.11	24.58
	12H	22.84	23.56	23.32	24.03	24.50	22.84	23.56	23.32	24.03	24.50
8H	4H	23.00	23.80	23.46	24.24	24.71	23.00	23.80	23.46	24.24	24.71
	6H	22.93	23.58	23.42	24.07	24.55	22.93	23.58	23.42	24.07	24.55
	8H	22.88	23.47	23.40	23.98	24.46	22.88	23.47	23.40	23.98	24.46
	12H	22.86	23.37	23.37	23.86	24.43	22.86	23.37	23.37	23.86	24.43
12H	4H	22.97	23.68	23.45	24.16	24.63	22.97	23.68	23.45	24.16	24.63
	6H	22.88	23.47	23.39	23.98	24.46	22.88	23.47	23.39	23.98	24.46
	8H	22.86	23.37	23.37	23.86	24.43	22.86	23.37	23.37	23.86	24.43