

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: P980082

Luminaire Tested: PRLX-242-935-23L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980082
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-242-935-23L-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

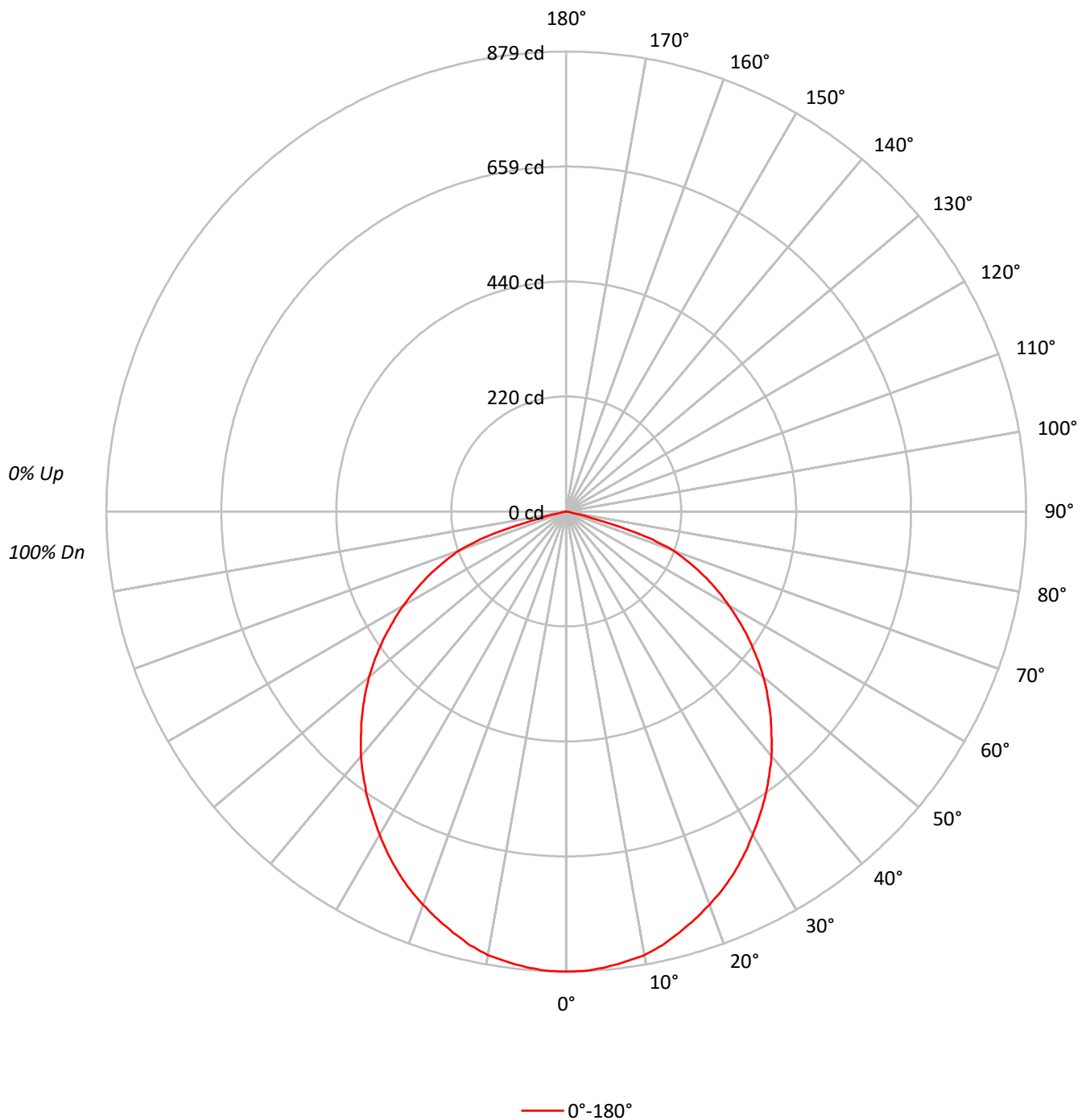
Lumens per Lamp: N/A
Luminaire Lumens: 2264.5 lumens
Efficiency: N/A
Efficacy: 151.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3935
5°	3927
10°	3912
15°	3862
20°	3810
25°	3757
30°	3686
35°	3626
40°	3566
45°	3493
50°	3425
55°	3329
60°	3216
65°	3068
70°	2841
75°	1115
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3493 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.0	3.7
10°-20°	235.1	10.4
20°-30°	350.3	15.5
30°-40°	415.1	18.3
40°-50°	425.9	18.8
50°-60°	381.1	16.8
60°-70°	285.9	12.6
70°-80°	88.1	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°	668.4	29.5
0°-40°	1083.5	47.8
0°-60°	1890.5	83.5
0°-90°	2264.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2264.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	879	
5°	874	83
15°	834	235
25°	761	350
35°	664	415
45°	552	426
55°	427	381
65°	290	286
75°	64	88
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	879.4
2.5°	878.7
5°	874.2
7.5°	868.3
10°	860.9
12.5°	849.0
15°	833.5
17.5°	817.2
20°	800.1
22.5°	781.6
25°	760.9
27.5°	737.9
30°	713.4
32.5°	688.3
35°	663.8
37.5°	637.1
40°	610.5
42.5°	580.8
45°	551.9
47.5°	522.3
50°	491.9
52.5°	459.3
55°	426.7
57.5°	392.7
60°	359.3
62.5°	324.5
65°	289.7
67.5°	253.4
70°	217.1
72.5°	160.8
75°	64.5
77.5°	3.0
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	16.52	18.11	16.88	18.42	18.73	16.52	18.11	16.88	18.42	18.73
	3H	18.26	19.69	18.64	20.02	20.38	18.26	19.69	18.64	20.02	20.38
	4H	18.46	19.80	18.86	20.15	20.53	18.46	19.80	18.86	20.15	20.53
	6H	18.40	19.64	18.81	20.00	20.40	18.40	19.64	18.81	20.00	20.40
	8H	18.37	19.55	18.79	19.94	20.34	18.37	19.55	18.79	19.94	20.34
	12H	18.34	19.47	18.77	19.85	20.28	18.34	19.47	18.77	19.85	20.28
4H	2H	17.15	18.49	17.55	18.84	19.21	17.15	18.49	17.55	18.84	19.21
	3H	19.07	20.17	19.48	20.57	20.97	19.07	20.17	19.48	20.57	20.97
	4H	19.25	20.24	19.68	20.66	21.09	19.25	20.24	19.68	20.66	21.09
	6H	19.20	20.06	19.65	20.50	20.96	19.20	20.06	19.65	20.50	20.96
	8H	19.16	19.96	19.62	20.40	20.87	19.16	19.96	19.62	20.40	20.87
	12H	19.13	19.85	19.61	20.32	20.79	19.13	19.85	19.61	20.32	20.79
8H	4H	19.29	20.09	19.75	20.53	21.00	19.29	20.09	19.75	20.53	21.00
	6H	19.22	19.87	19.71	20.36	20.84	19.22	19.87	19.71	20.36	20.84
	8H	19.17	19.76	19.69	20.27	20.75	19.17	19.76	19.69	20.27	20.75
	12H	19.15	19.66	19.66	20.15	20.72	19.15	19.66	19.66	20.15	20.72
12H	4H	19.26	19.97	19.74	20.45	20.92	19.26	19.97	19.74	20.45	20.92
	6H	19.17	19.76	19.68	20.27	20.75	19.17	19.76	19.68	20.27	20.75
	8H	19.15	19.66	19.66	20.15	20.72	19.15	19.66	19.66	20.15	20.72