

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: P980162

Luminaire Tested: PRLX-242-940-23L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980162
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-242-940-23L-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

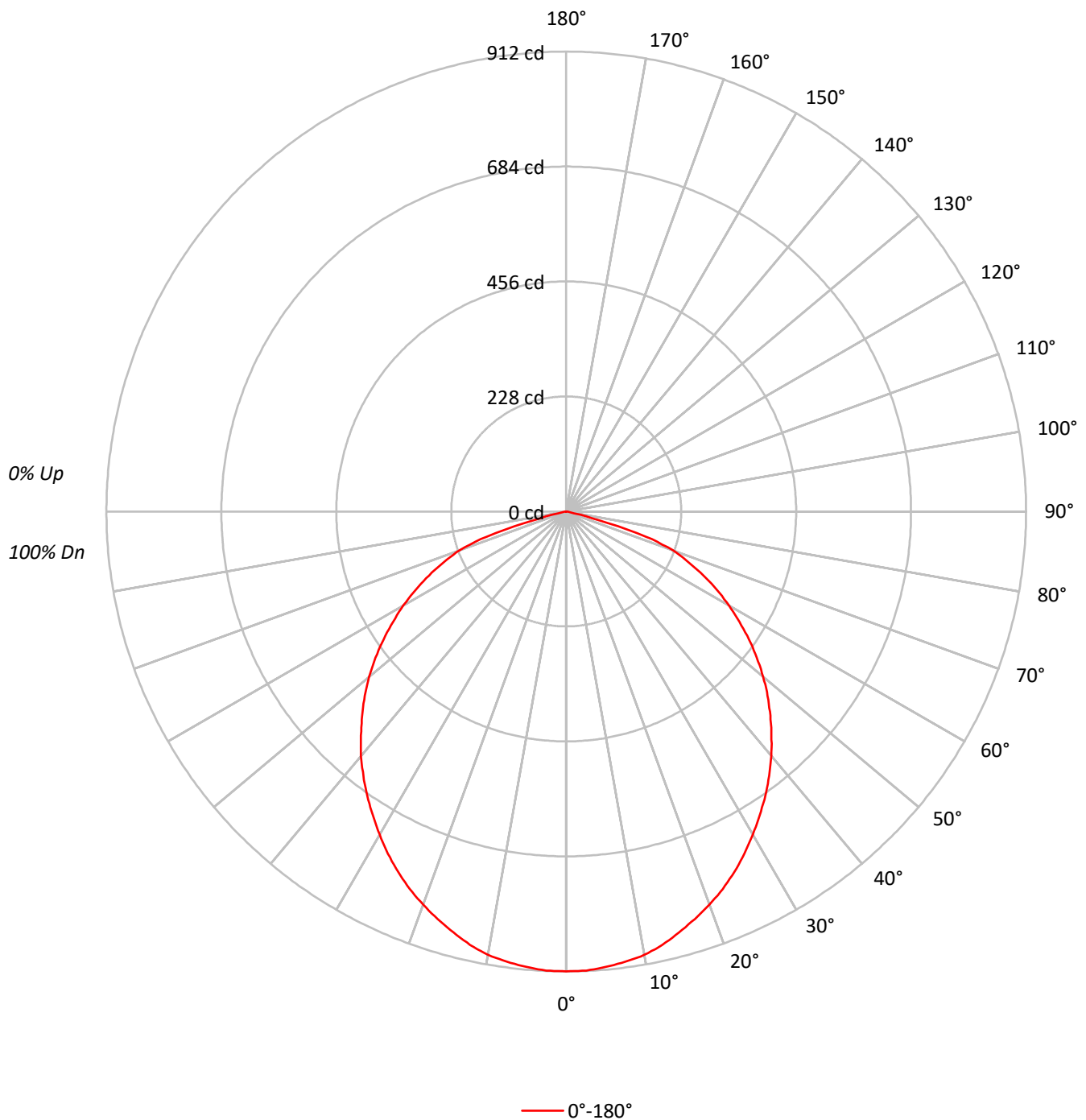
Lumens per Lamp: N/A
Luminaire Lumens: 2348.6 lumens
Efficiency: N/A
Efficacy: 156.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		86
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		73
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		62
4	84	73	64	58	82	71	63	57	69	62	57		67	61	56		53
5	77	65	56	50	75	64	56	50	62	55	49		60	53	48		46
6	72	59	50	44	70	58	49	43	56	48	43		54	48	43		40
7	66	53	44	38	65	52	44	38	51	43	38		49	43	38		36
8	62	48	40	34	60	48	40	34	46	39	34		45	39	34		32
9	58	44	36	31	56	44	36	31	43	36	31		42	35	31		29
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		26

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4082
5°	4073
10°	4057
15°	4005
20°	3952
25°	3896
30°	3824
35°	3761
40°	3699
45°	3623
50°	3552
55°	3453
60°	3336
65°	3181
70°	2945
75°	1155
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3623 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	3.7
10°-20°	243.8	10.4
20°-30°	363.3	15.5
30°-40°	430.5	18.3
40°-50°	441.7	18.8
50°-60°	395.3	16.8
60°-70°	296.5	12.6
70°-80°	91.3	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°	693.2	29.5
0°-40°	1123.8	47.8
0°-60°	1960.8	83.5
0°-90°	2348.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2348.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	912	
5°	907	86
15°	864	244
25°	789	363
35°	688	431
45°	572	442
55°	443	395
65°	300	297
75°	67	91
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	912.1
2.5°	911.3
5°	906.7
7.5°	900.6
10°	892.9
12.5°	880.6
15°	864.4
17.5°	847.5
20°	829.9
22.5°	810.7
25°	789.1
27.5°	765.3
30°	740.0
32.5°	713.8
35°	688.5
37.5°	660.8
40°	633.2
42.5°	602.4
45°	572.5
47.5°	541.7
50°	510.2
52.5°	476.4
55°	442.6
57.5°	407.2
60°	372.7
62.5°	336.6
65°	300.4
67.5°	262.8
70°	225.1
72.5°	166.7
75°	66.8
77.5°	3.1
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	16.64	18.23	17.01	18.55	18.86	16.64	18.23	17.01	18.55	18.86
	3H	18.39	19.82	18.77	20.15	20.51	18.39	19.82	18.77	20.15	20.51
	4H	18.59	19.93	18.99	20.28	20.65	18.59	19.93	18.99	20.28	20.65
	6H	18.53	19.76	18.94	20.13	20.52	18.53	19.76	18.94	20.13	20.52
	8H	18.49	19.67	18.92	20.06	20.46	18.49	19.67	18.92	20.06	20.46
	12H	18.47	19.59	18.90	19.97	20.40	18.47	19.59	18.90	19.97	20.40
4H	2H	17.28	18.62	17.67	18.96	19.34	17.28	18.62	17.67	18.96	19.34
	3H	19.19	20.30	19.60	20.70	21.10	19.19	20.30	19.60	20.70	21.10
	4H	19.37	20.37	19.81	20.78	21.22	19.37	20.37	19.81	20.78	21.22
	6H	19.32	20.18	19.78	20.62	21.08	19.32	20.18	19.78	20.62	21.08
	8H	19.28	20.08	19.75	20.53	21.00	19.28	20.08	19.75	20.53	21.00
	12H	19.26	19.97	19.74	20.45	20.92	19.26	19.97	19.74	20.45	20.92
8H	4H	19.41	20.21	19.87	20.65	21.12	19.41	20.21	19.87	20.65	21.12
	6H	19.34	20.00	19.84	20.49	20.96	19.34	20.00	19.84	20.49	20.96
	8H	19.30	19.88	19.81	20.39	20.88	19.30	19.88	19.81	20.39	20.88
	12H	19.27	19.78	19.78	20.28	20.84	19.27	19.78	19.78	20.28	20.84
12H	4H	19.38	20.10	19.87	20.58	21.05	19.38	20.10	19.87	20.58	21.05
	6H	19.30	19.88	19.81	20.39	20.88	19.30	19.88	19.81	20.39	20.88
	8H	19.27	19.78	19.78	20.28	20.84	19.27	19.78	19.78	20.28	20.84

END OF REPORT