

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: P980072

Luminaire Tested: PRLX-242-935-18L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980072
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-242-935-18L-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

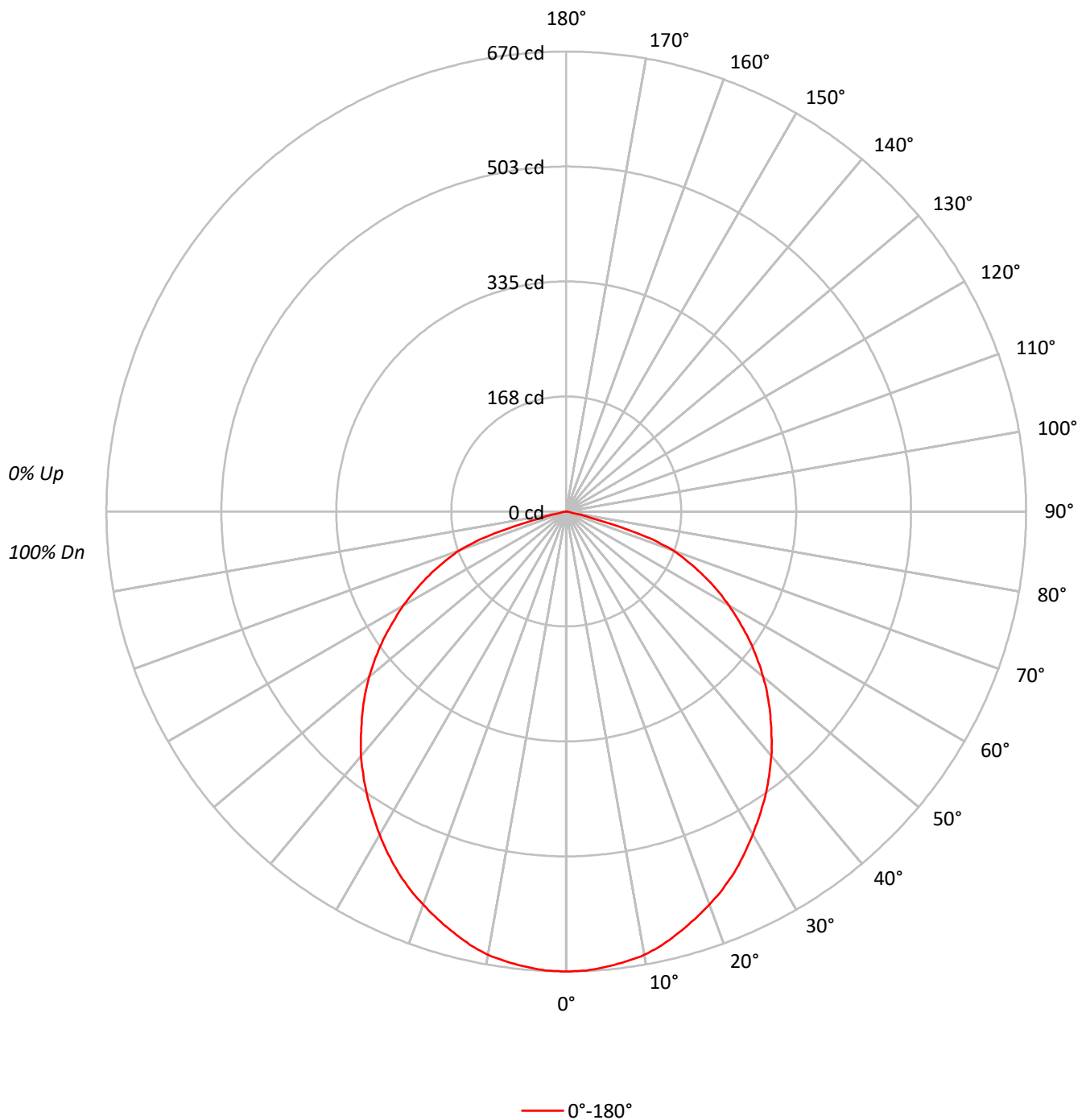
Lumens per Lamp: N/A
Luminaire Lumens: 1725.6 lumens
Efficiency: N/A
Efficacy: 156.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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
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°	2999
5°	2992
10°	2981
15°	2942
20°	2904
25°	2863
30°	2809
35°	2763
40°	2718
45°	2662
50°	2609
55°	2537
60°	2451
65°	2337
70°	2164
75°	849
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2662 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	3.7
10°-20°	179.1	10.4
20°-30°	266.9	15.5
30°-40°	316.3	18.3
40°-50°	324.5	18.8
50°-60°	290.4	16.8
60°-70°	217.9	12.6
70°-80°	67.1	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°	509.3	29.5
0°-40°	825.6	47.8
0°-60°	1440.6	83.5
0°-90°	1725.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1725.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	670	
5°	666	63
15°	635	179
25°	580	267
35°	506	316
45°	421	325
55°	325	290
65°	221	218
75°	49	67
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	670.1
2.5°	669.5
5°	666.1
7.5°	661.6
10°	656.0
12.5°	646.9
15°	635.1
17.5°	622.7
20°	609.7
22.5°	595.6
25°	579.8
27.5°	562.3
30°	543.6
32.5°	524.4
35°	505.8
37.5°	485.5
40°	465.2
42.5°	442.6
45°	420.6
47.5°	398.0
50°	374.8
52.5°	350.0
55°	325.2
57.5°	299.2
60°	273.8
62.5°	247.3
65°	220.7
67.5°	193.1
70°	165.4
72.5°	122.5
75°	49.1
77.5°	2.3
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	15.57	17.16	15.93	17.48	17.79	15.57	17.16	15.93	17.48	17.79
	3H	17.32	18.75	17.70	19.08	19.44	17.32	18.75	17.70	19.08	19.44
	4H	17.52	18.86	17.92	19.21	19.58	17.52	18.86	17.92	19.21	19.58
	6H	17.46	18.69	17.87	19.06	19.45	17.46	18.69	17.87	19.06	19.45
	8H	17.42	18.60	17.85	18.99	19.39	17.42	18.60	17.85	18.99	19.39
	12H	17.40	18.52	17.82	18.90	19.33	17.40	18.52	17.82	18.90	19.33
4H	2H	16.20	17.54	16.60	17.89	18.27	16.20	17.54	16.60	17.89	18.27
	3H	18.12	19.23	18.53	19.63	20.03	18.12	19.23	18.53	19.63	20.03
	4H	18.30	19.30	18.73	19.71	20.15	18.30	19.30	18.73	19.71	20.15
	6H	18.25	19.11	18.71	19.55	20.01	18.25	19.11	18.71	19.55	20.01
	8H	18.21	19.01	18.68	19.46	19.92	18.21	19.01	18.68	19.46	19.92
	12H	18.19	18.90	18.67	19.38	19.85	18.19	18.90	18.67	19.38	19.85
8H	4H	18.34	19.14	18.80	19.58	20.05	18.34	19.14	18.80	19.58	20.05
	6H	18.27	18.93	18.77	19.42	19.89	18.27	18.93	18.77	19.42	19.89
	8H	18.23	18.81	18.74	19.32	19.81	18.23	18.81	18.74	19.32	19.81
	12H	18.20	18.71	18.71	19.21	19.77	18.20	18.71	18.71	19.21	19.77
12H	4H	18.31	19.03	18.79	19.50	19.98	18.31	19.03	18.79	19.50	19.98
	6H	18.23	18.81	18.74	19.32	19.81	18.23	18.81	18.74	19.32	19.81
	8H	18.20	18.71	18.71	19.21	19.77	18.20	18.71	18.71	19.21	19.77