

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: P980152

Luminaire Tested: PRLX-242-940-18L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P980152
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-242-940-18L-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

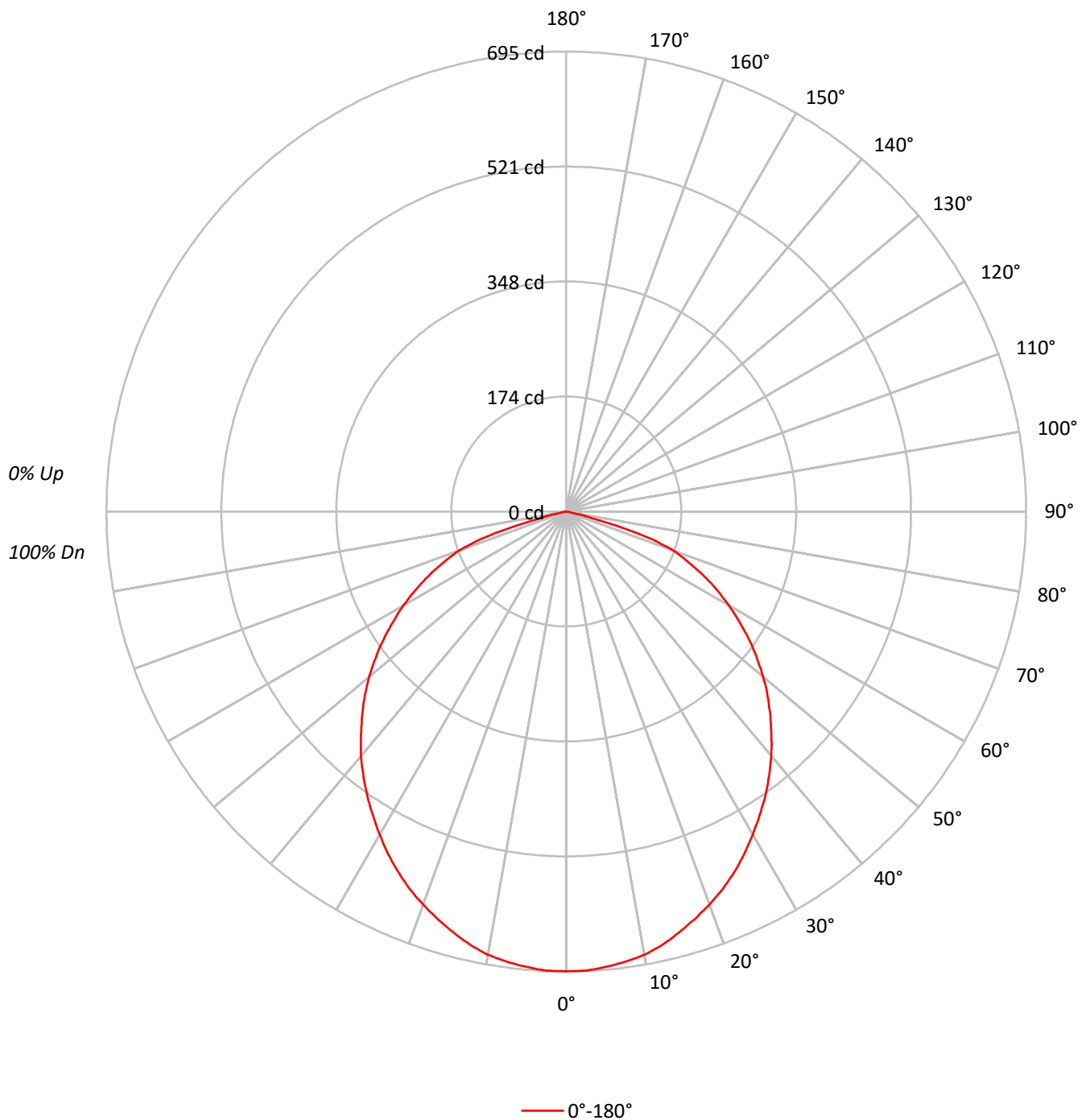
Lumens per Lamp: N/A
Luminaire Lumens: 1789.6 lumens
Efficiency: N/A
Efficacy: 162.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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		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°	3110
5°	3104
10°	3091
15°	3052
20°	3011
25°	2969
30°	2913
35°	2866
40°	2819
45°	2761
50°	2707
55°	2631
60°	2542
65°	2424
70°	2245
75°	880
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2761 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.6	3.7
10°-20°	185.8	10.4
20°-30°	276.8	15.5
30°-40°	328.1	18.3
40°-50°	336.6	18.8
50°-60°	301.2	16.8
60°-70°	225.9	12.6
70°-80°	69.6	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°	528.2	29.5
0°-40°	856.3	47.8
0°-60°	1494.1	83.5
0°-90°	1789.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1789.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	695	
5°	691	66
15°	659	186
25°	601	277
35°	525	328
45°	436	337
55°	337	301
65°	229	226
75°	51	70
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	695.0
2.5°	694.4
5°	690.9
7.5°	686.2
10°	680.3
12.5°	671.0
15°	658.7
17.5°	645.8
20°	632.3
22.5°	617.7
25°	601.3
27.5°	583.2
30°	563.8
32.5°	543.9
35°	524.6
37.5°	503.5
40°	482.5
42.5°	459.0
45°	436.2
47.5°	412.8
50°	388.8
52.5°	363.0
55°	337.2
57.5°	310.3
60°	284.0
62.5°	256.4
65°	228.9
67.5°	200.2
70°	171.6
72.5°	127.1
75°	50.9
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	15.70	17.29	16.06	17.60	17.92	15.70	17.29	16.06	17.60	17.92
	3H	17.45	18.87	17.82	19.20	19.56	17.45	18.87	17.82	19.20	19.56
	4H	17.64	18.98	18.04	19.33	19.71	17.64	18.98	18.04	19.33	19.71
	6H	17.58	18.82	18.00	19.19	19.58	17.58	18.82	18.00	19.19	19.58
	8H	17.55	18.73	17.98	19.12	19.52	17.55	18.73	17.98	19.12	19.52
	12H	17.52	18.65	17.95	19.03	19.46	17.52	18.65	17.95	19.03	19.46
4H	2H	16.33	17.67	16.73	18.02	18.40	16.33	17.67	16.73	18.02	18.40
	3H	18.25	19.36	18.66	19.75	20.15	18.25	19.36	18.66	19.75	20.15
	4H	18.43	19.42	18.86	19.84	20.28	18.43	19.42	18.86	19.84	20.28
	6H	18.38	19.24	18.83	19.68	20.14	18.38	19.24	18.83	19.68	20.14
	8H	18.34	19.14	18.80	19.58	20.05	18.34	19.14	18.80	19.58	20.05
	12H	18.31	19.03	18.79	19.51	19.98	18.31	19.03	18.79	19.51	19.98
8H	4H	18.47	19.27	18.93	19.71	20.18	18.47	19.27	18.93	19.71	20.18
	6H	18.40	19.05	18.89	19.54	20.02	18.40	19.05	18.89	19.54	20.02
	8H	18.35	18.94	18.87	19.45	19.93	18.35	18.94	18.87	19.45	19.93
	12H	18.33	18.84	18.84	19.33	19.90	18.33	18.84	18.84	19.33	19.90
12H	4H	18.44	19.15	18.92	19.63	20.10	18.44	19.15	18.92	19.63	20.10
	6H	18.35	18.94	18.87	19.45	19.93	18.35	18.94	18.87	19.45	19.93
	8H	18.33	18.84	18.84	19.33	19.90	18.33	18.84	18.84	19.33	19.90