

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: P979922

Luminaire Tested: PRLX-242-927-23L-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979922
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-242-927-23L-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

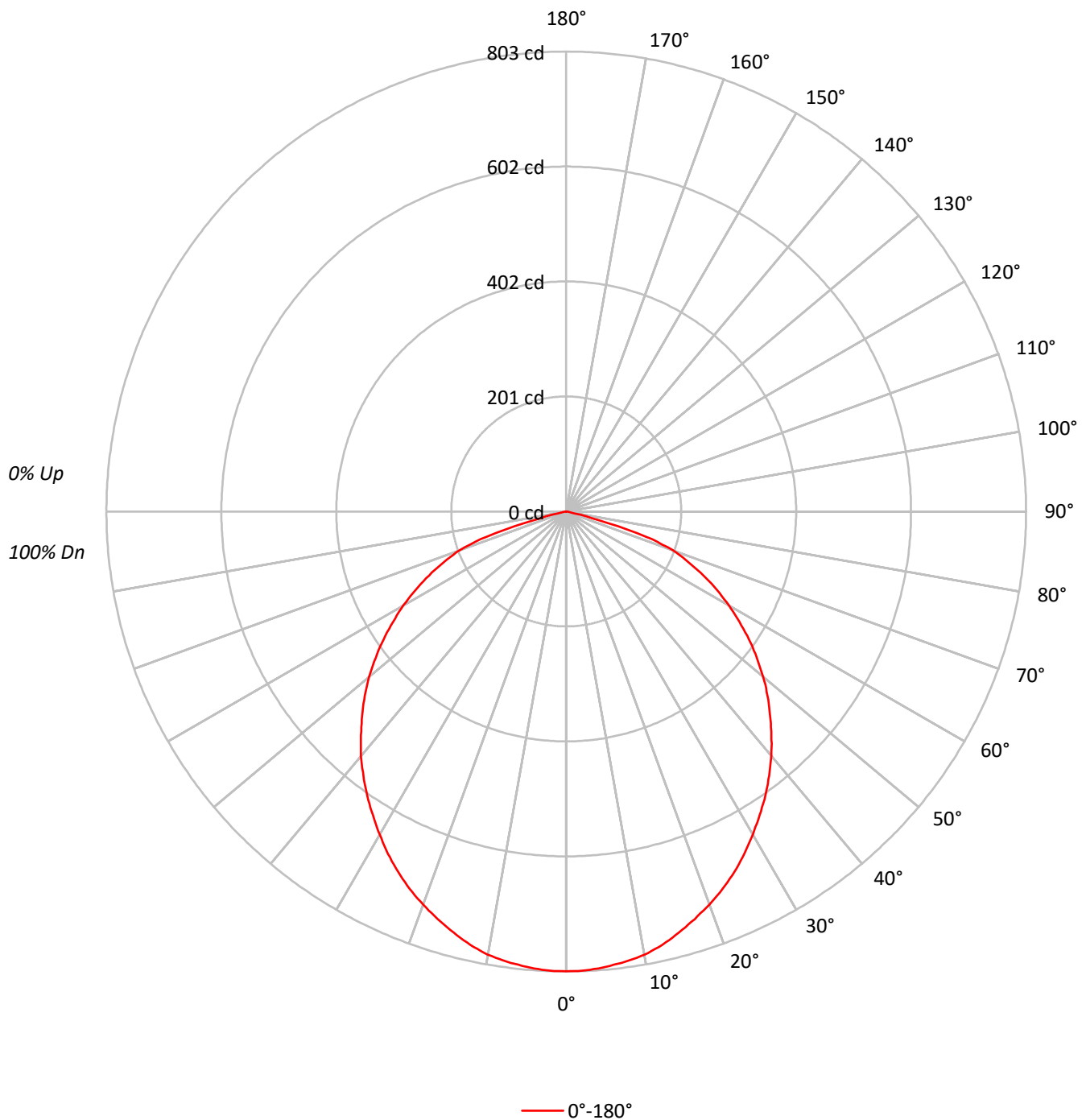
Lumens per Lamp: N/A
Luminaire Lumens: 2067.5 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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°	3593
5°	3586
10°	3572
15°	3526
20°	3479
25°	3430
30°	3366
35°	3311
40°	3256
45°	3189
50°	3127
55°	3040
60°	2937
65°	2801
70°	2593
75°	1017
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3189 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.8	3.7
10°-20°	214.7	10.4
20°-30°	319.8	15.5
30°-40°	379.0	18.3
40°-50°	388.9	18.8
50°-60°	348.0	16.8
60°-70°	261.0	12.6
70°-80°	80.4	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°	610.3	29.5
0°-40°	989.3	47.8
0°-60°	1726.1	83.5
0°-90°	2067.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2067.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	803	
5°	798	76
15°	761	215
25°	695	320
35°	606	379
45°	504	389
55°	390	348
65°	264	261
75°	59	80
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	802.9
2.5°	802.2
5°	798.2
7.5°	792.8
10°	786.0
12.5°	775.2
15°	761.0
17.5°	746.1
20°	730.5
22.5°	713.6
25°	694.7
27.5°	673.7
30°	651.4
32.5°	628.4
35°	606.1
37.5°	581.7
40°	557.4
42.5°	530.3
45°	503.9
47.5°	476.9
50°	449.1
52.5°	419.4
55°	389.6
57.5°	358.5
60°	328.1
62.5°	296.3
65°	264.5
67.5°	231.3
70°	198.2
72.5°	146.8
75°	58.8
77.5°	2.7
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	16.20	17.79	16.56	18.10	18.42	16.20	17.79	16.56	18.10	18.42
	3H	17.95	19.38	18.32	19.70	20.06	17.95	19.38	18.32	19.70	20.06
	4H	18.15	19.48	18.54	19.83	20.21	18.15	19.48	18.54	19.83	20.21
	6H	18.08	19.32	18.50	19.69	20.08	18.08	19.32	18.50	19.69	20.08
	8H	18.05	19.23	18.48	19.62	20.02	18.05	19.23	18.48	19.62	20.02
	12H	18.02	19.15	18.45	19.53	19.96	18.02	19.15	18.45	19.53	19.96
4H	2H	16.83	18.17	17.23	18.52	18.90	16.83	18.17	17.23	18.52	18.90
	3H	18.75	19.86	19.16	20.26	20.66	18.75	19.86	19.16	20.26	20.66
	4H	18.93	19.93	19.36	20.34	20.78	18.93	19.93	19.36	20.34	20.78
	6H	18.88	19.74	19.34	20.18	20.64	18.88	19.74	19.34	20.18	20.64
	8H	18.84	19.64	19.30	20.09	20.55	18.84	19.64	19.30	20.09	20.55
	12H	18.81	19.53	19.30	20.01	20.48	18.81	19.53	19.30	20.01	20.48
8H	4H	18.97	19.77	19.43	20.21	20.68	18.97	19.77	19.43	20.21	20.68
	6H	18.90	19.55	19.39	20.04	20.52	18.90	19.55	19.39	20.04	20.52
	8H	18.86	19.44	19.37	19.95	20.44	18.86	19.44	19.37	19.95	20.44
	12H	18.83	19.34	19.34	19.83	20.40	18.83	19.34	19.34	19.83	20.40
12H	4H	18.94	19.66	19.42	20.13	20.60	18.94	19.66	19.42	20.13	20.60
	6H	18.85	19.44	19.37	19.95	20.44	18.85	19.44	19.37	19.95	20.44
	8H	18.83	19.34	19.34	19.83	20.40	18.83	19.34	19.34	19.83	20.40

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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