

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P979902

Luminaire Tested: PRLX-242-927-LL1-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P979902
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-LL1-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

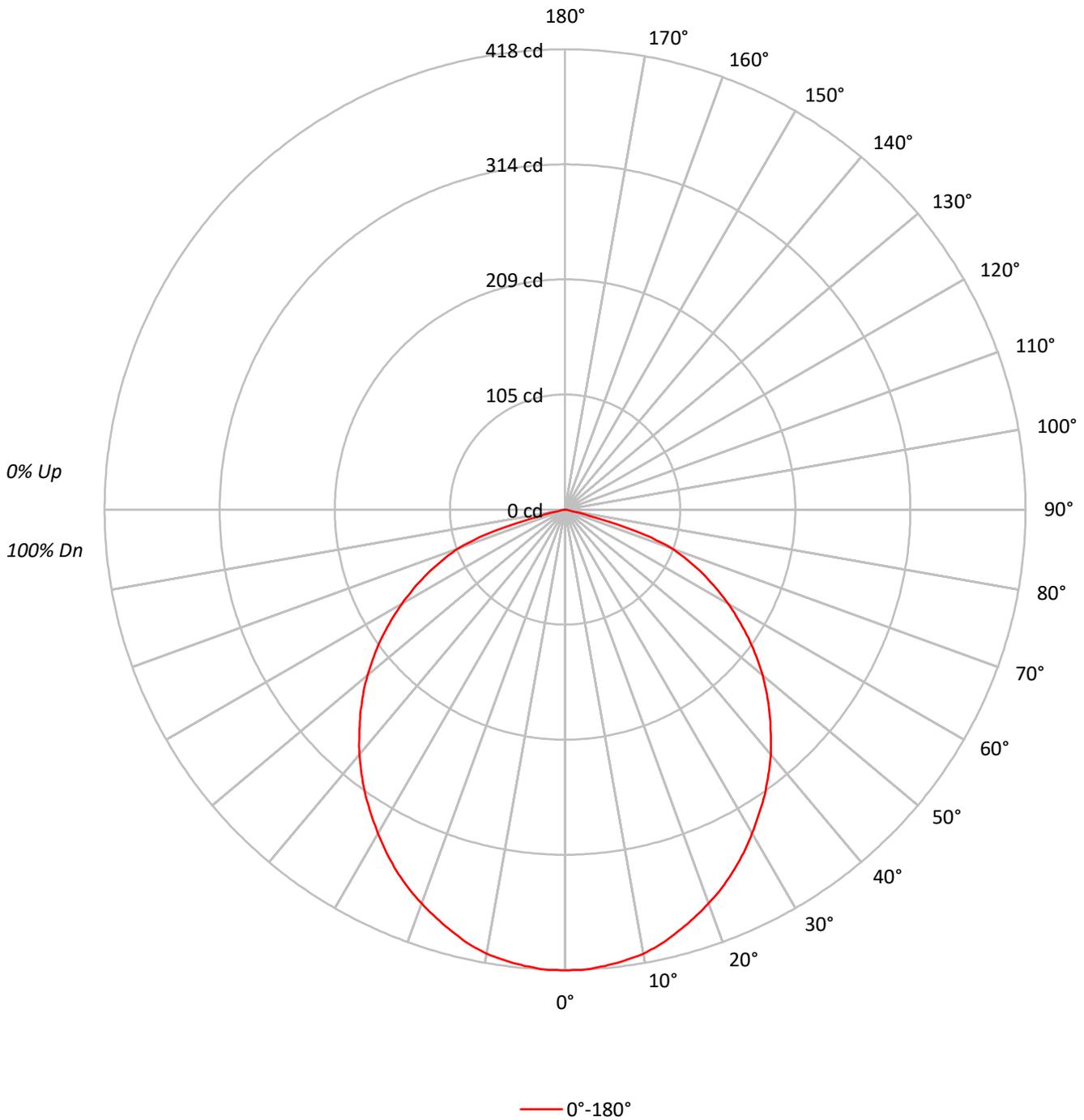
Lumens per Lamp: N/A
Luminaire Lumens: 1077.7 lumens
Efficiency: N/A
Efficacy: 143.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 7.5
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	0		
RW	70	50	30	10	70	50	30	10	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		102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92	90	88	86
2	100	93	86	81	98	91	85	80	87	83	78		84	80	77		81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72	68	64	62
4	84	73	64	58	82	71	63	57	69	62	57		67	61	56		64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	53	48		58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43		54	48	43		53	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38		49	43	38		48	42	37	36
8	62	48	40	34	60	48	40	34	46	39	34		45	39	34		44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31		42	35	31		41	35	30	29
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1873
5°	1869
10°	1862
15°	1838
20°	1813
25°	1788
30°	1755
35°	1726
40°	1697
45°	1663
50°	1630
55°	1585
60°	1530
65°	1460
70°	1352
75°	531
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1663 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.5	3.7
10°-20°	111.9	10.4
20°-30°	166.7	15.5
30°-40°	197.6	18.3
40°-50°	202.7	18.8
50°-60°	181.4	16.8
60°-70°	136.1	12.6
70°-80°	41.9	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°	318.1	29.5
0°-40°	515.7	47.8
0°-60°	899.8	83.5
0°-90°	1077.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1077.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	418	
5°	416	40
15°	397	112
25°	362	167
35°	316	198
45°	263	203
55°	203	181
65°	138	136
75°	31	42
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	418.5
2.5°	418.2
5°	416.1
7.5°	413.3
10°	409.7
12.5°	404.1
15°	396.7
17.5°	388.9
20°	380.8
22.5°	372.0
25°	362.1
27.5°	351.2
30°	339.6
32.5°	327.6
35°	315.9
37.5°	303.2
40°	290.5
42.5°	276.4
45°	262.7
47.5°	248.6
50°	234.1
52.5°	218.6
55°	203.1
57.5°	186.9
60°	171.0
62.5°	154.4
65°	137.9
67.5°	120.6
70°	103.3
72.5°	76.5
75°	30.7
77.5°	1.4
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	13.94	15.53	14.30	15.84	16.16	13.94	15.53	14.30	15.84	16.16
	3H	15.68	17.11	16.06	17.44	17.80	15.68	17.11	16.06	17.44	17.80
	4H	15.88	17.22	16.28	17.57	17.95	15.88	17.22	16.28	17.57	17.95
	6H	15.82	17.06	16.23	17.42	17.82	15.82	17.06	16.23	17.42	17.82
	8H	15.79	16.97	16.21	17.36	17.76	15.79	16.97	16.21	17.36	17.76
	12H	15.76	16.89	16.19	17.27	17.70	15.76	16.89	16.19	17.27	17.70
4H	2H	14.57	15.91	14.97	16.26	16.64	14.57	15.91	14.97	16.26	16.64
	3H	16.49	17.59	16.90	17.99	18.39	16.49	17.59	16.90	17.99	18.39
	4H	16.67	17.66	17.10	18.08	18.51	16.67	17.66	17.10	18.08	18.51
	6H	16.62	17.48	17.07	17.92	18.38	16.62	17.48	17.07	17.92	18.38
	8H	16.58	17.38	17.04	17.82	18.29	16.58	17.38	17.04	17.82	18.29
	12H	16.55	17.27	17.03	17.74	18.21	16.55	17.27	17.03	17.74	18.21
8H	4H	16.71	17.51	17.17	17.95	18.42	16.71	17.51	17.17	17.95	18.42
	6H	16.64	17.29	17.13	17.78	18.26	16.64	17.29	17.13	17.78	18.26
	8H	16.59	17.18	17.11	17.69	18.17	16.59	17.18	17.11	17.69	18.17
	12H	16.57	17.08	17.08	17.57	18.14	16.57	17.08	17.08	17.57	18.14
12H	4H	16.68	17.39	17.16	17.87	18.34	16.68	17.39	17.16	17.87	18.34
	6H	16.59	17.18	17.10	17.68	18.17	16.59	17.18	17.10	17.68	18.17
	8H	16.57	17.08	17.08	17.57	18.14	16.57	17.08	17.08	17.57	18.14