

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: P979970

Luminaire Tested: PRLX-242-927-74L-C-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2019
Report Number: P979970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-26)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-242-927-74L-C-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

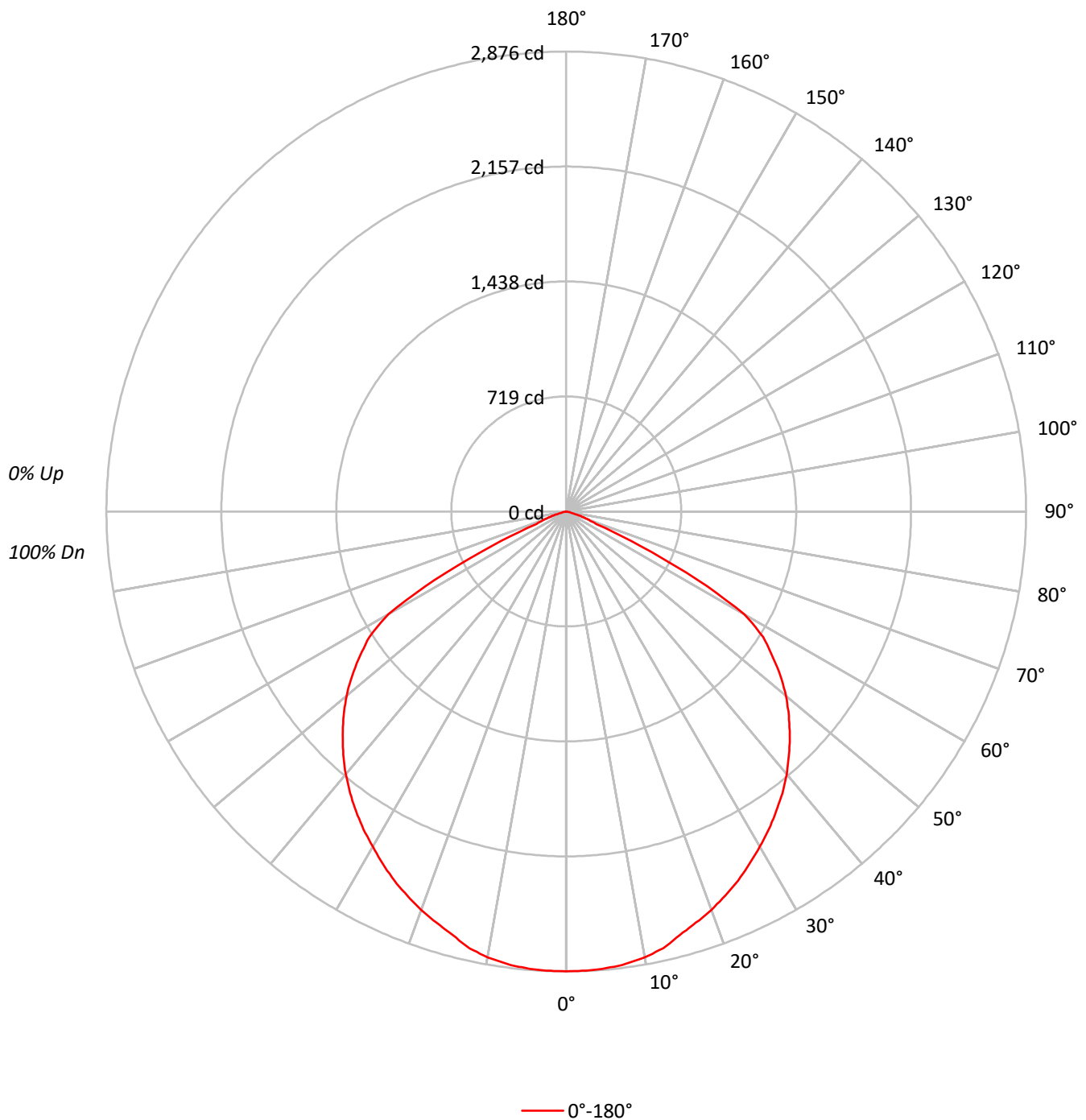
Lumens per Lamp: N/A
Luminaire Lumens: 7207.0 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 61.5
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

TEST NUMBER: P979970

CATALOG NUMBER: PRLX-242-927-74L-C-U-S-BLAK-X

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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	12870
5°	12881
10°	12863
15°	12705
20°	12629
25°	12572
30°	12511
35°	12508
40°	12531
45°	12512
50°	12488
55°	12279
60°	11500
65°	5364
70°	1806
75°	558
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12512 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.6	3.8
10°-20°	775.3	10.8
20°-30°	1173.3	16.3
30°-40°	1433.9	19.9
40°-50°	1525.5	21.2
50°-60°	1400.1	19.4
60°-70°	574.6	8.0
70°-80°	51.9	0.7
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°	2221.2	30.8
0°-40°	3655.1	50.7
0°-60°	6580.6	91.3
0°-90°	7207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7207.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2876	
5°	2867	273
15°	2742	775
25°	2546	1173
35°	2290	1434
45°	1977	1525
55°	1574	1400
65°	507	575
75°	32	52
85°	0	0
90°	0	

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CATALOG NUMBER: PRLX-242-927-74L-C-U-S-BLAK-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	2876.0
2.5°	2873.8
5°	2867.4
7.5°	2854.4
10°	2830.7
12.5°	2798.4
15°	2742.3
17.5°	2697.1
20°	2651.8
22.5°	2600.0
25°	2546.1
27.5°	2483.6
30°	2421.1
32.5°	2358.6
35°	2289.6
37.5°	2220.6
40°	2145.1
42.5°	2063.2
45°	1977.0
47.5°	1888.6
50°	1793.7
52.5°	1688.1
55°	1573.8
57.5°	1459.6
60°	1284.9
62.5°	927.0
65°	506.6
67.5°	202.7
70°	138.0
72.5°	94.9
75°	32.3
77.5°	2.2
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	21.67	23.20	22.03	23.52	23.83	21.67	23.20	22.03	23.52	23.83
	3H	21.65	23.02	22.03	23.34	23.71	21.65	23.02	22.03	23.34	23.71
	4H	21.60	22.87	22.00	23.22	23.60	21.60	22.87	22.00	23.22	23.60
	6H	21.54	22.71	21.95	23.07	23.47	21.54	22.71	21.95	23.07	23.47
	8H	21.50	22.61	21.93	23.00	23.41	21.50	22.61	21.93	23.00	23.41
	12H	21.47	22.53	21.90	22.92	23.34	21.47	22.53	21.90	22.92	23.34
4H	2H	21.72	22.99	22.12	23.34	23.72	21.72	22.99	22.12	23.34	23.72
	3H	21.74	22.77	22.15	23.17	23.57	21.74	22.77	22.15	23.17	23.57
	4H	21.68	22.60	22.11	23.01	23.45	21.68	22.60	22.11	23.01	23.45
	6H	21.62	22.41	22.07	22.85	23.31	21.62	22.41	22.07	22.85	23.31
	8H	21.57	22.31	22.04	22.76	23.22	21.57	22.31	22.04	22.76	23.22
	12H	21.54	22.19	22.02	22.67	23.15	21.54	22.19	22.02	22.67	23.15
8H	4H	21.58	22.32	22.04	22.76	23.23	21.58	22.32	22.04	22.76	23.23
	6H	21.49	22.10	21.99	22.59	23.07	21.49	22.10	21.99	22.59	23.07
	8H	21.44	21.98	21.95	22.50	22.98	21.44	21.98	21.95	22.50	22.98
	12H	21.40	21.89	21.91	22.38	22.94	21.40	21.89	21.91	22.38	22.94
12H	4H	21.54	22.20	22.03	22.68	23.15	21.54	22.20	22.03	22.68	23.15
	6H	21.44	21.98	21.95	22.50	22.98	21.44	21.98	21.95	22.50	22.98
	8H	21.40	21.89	21.91	22.38	22.94	21.40	21.89	21.91	22.38	22.94

END OF REPORT