

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: P980102

Luminaire Tested: PRLX-242-935-LL5-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980102
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-LL5-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

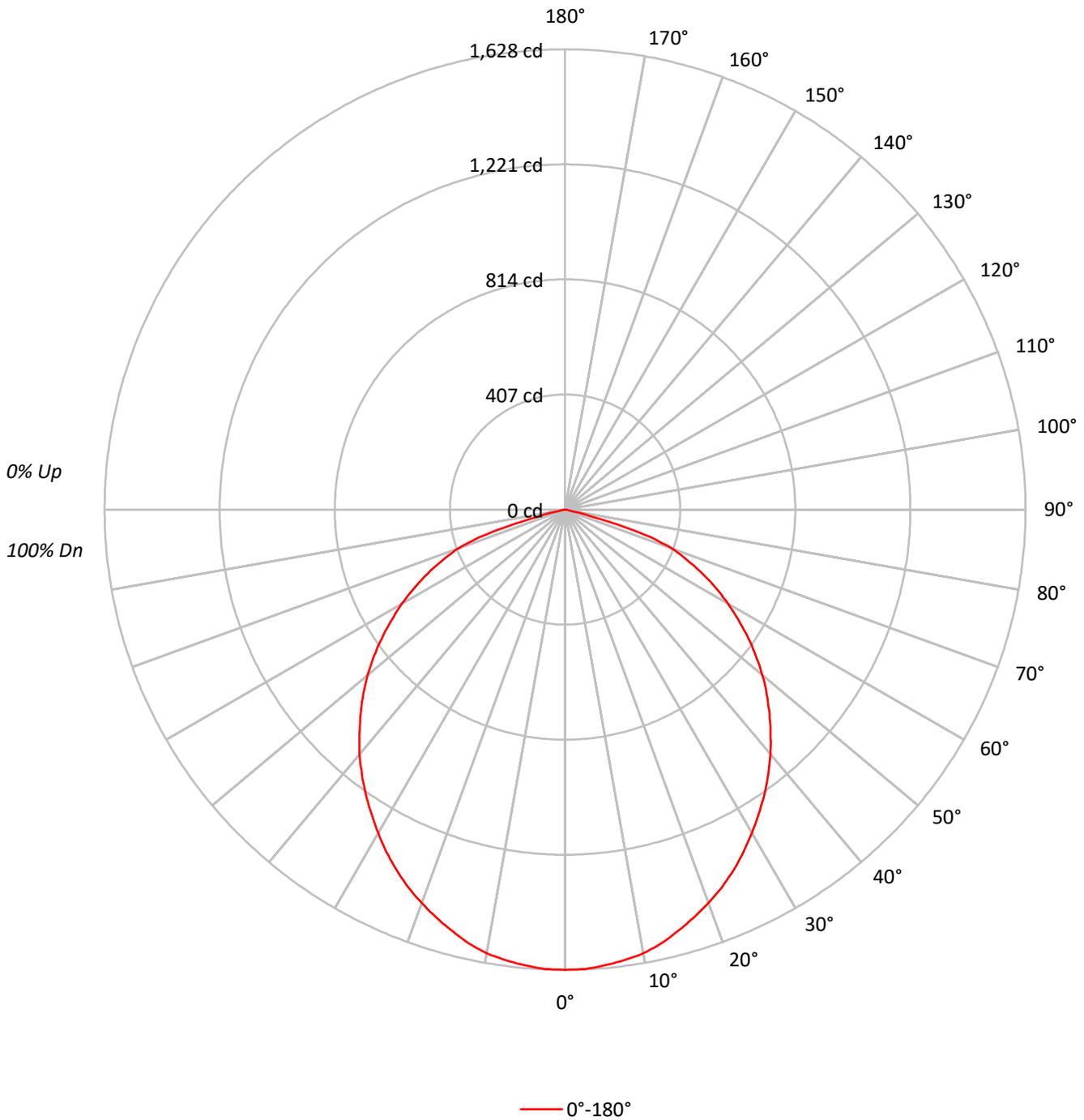
Lumens per Lamp: N/A
Luminaire Lumens: 4192.7 lumens
Efficiency: N/A
Efficacy: 142.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

Input Watts (W): 29.5
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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100	
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86			86	
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73			73	
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62			62	
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53			53	
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46			46	
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40			40	
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	36			36	
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32			32	
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29			29	
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26			26	

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	7286
5°	7271
10°	7243
15°	7150
20°	7055
25°	6956
30°	6826
35°	6714
40°	6603
45°	6467
50°	6341
55°	6164
60°	5955
65°	5679
70°	5259
75°	2063
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6467 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.7	3.7
10°-20°	435.3	10.4
20°-30°	648.5	15.5
30°-40°	768.6	18.3
40°-50°	788.6	18.8
50°-60°	705.7	16.8
60°-70°	529.3	12.6
70°-80°	163.0	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°	1237.5	29.5
0°-40°	2006.1	47.8
0°-60°	3500.4	83.5
0°-90°	4192.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4192.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1628	
5°	1619	154
15°	1543	435
25°	1409	649
35°	1229	769
45°	1022	789
55°	790	706
65°	536	529
75°	119	163
85°	0	0
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1628.2
2.5°	1626.8
5°	1618.6
7.5°	1607.6
10°	1593.9
12.5°	1572.0
15°	1543.2
17.5°	1513.0
20°	1481.4
22.5°	1447.1
25°	1408.7
27.5°	1366.2
30°	1320.9
32.5°	1274.3
35°	1229.0
37.5°	1179.7
40°	1130.3
42.5°	1075.4
45°	1021.9
47.5°	967.1
50°	910.8
52.5°	850.5
55°	790.1
57.5°	727.0
60°	665.3
62.5°	600.8
65°	536.3
67.5°	469.1
70°	401.9
72.5°	297.7
75°	119.3
77.5°	5.5
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	18.65	20.25	19.02	20.56	20.87	18.65	20.25	19.02	20.56	20.87
	3H	20.40	21.83	20.78	22.16	22.52	20.40	21.83	20.78	22.16	22.52
	4H	20.60	21.94	21.00	22.29	22.67	20.60	21.94	21.00	22.29	22.67
	6H	20.54	21.78	20.95	22.14	22.53	20.54	21.78	20.95	22.14	22.53
	8H	20.51	21.69	20.93	22.08	22.48	20.51	21.69	20.93	22.08	22.48
	12H	20.48	21.61	20.91	21.99	22.42	20.48	21.61	20.91	21.99	22.42
4H	2H	19.29	20.63	19.69	20.98	21.35	19.29	20.63	19.69	20.98	21.35
	3H	21.20	22.31	21.61	22.71	23.11	21.20	22.31	21.61	22.71	23.11
	4H	21.39	22.38	21.82	22.80	23.23	21.39	22.38	21.82	22.80	23.23
	6H	21.34	22.20	21.79	22.64	23.10	21.34	22.20	21.79	22.64	23.10
	8H	21.30	22.10	21.76	22.54	23.01	21.30	22.10	21.76	22.54	23.01
	12H	21.27	21.99	21.75	22.46	22.93	21.27	21.99	21.75	22.46	22.93
8H	4H	21.42	22.23	21.89	22.67	23.14	21.42	22.23	21.89	22.67	23.14
	6H	21.35	22.01	21.85	22.50	22.98	21.35	22.01	21.85	22.50	22.98
	8H	21.31	21.90	21.83	22.40	22.89	21.31	21.90	21.83	22.40	22.89
	12H	21.29	21.80	21.80	22.29	22.85	21.29	21.80	21.80	22.29	22.85
12H	4H	21.40	22.11	21.88	22.59	23.06	21.40	22.11	21.88	22.59	23.06
	6H	21.31	21.89	21.82	22.40	22.89	21.31	21.89	21.82	22.40	22.89
	8H	21.29	21.80	21.80	22.29	22.85	21.29	21.80	21.80	22.29	22.85