

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: P980022

Luminaire Tested: PRLX-242-930-LL5-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980022
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-242-930-LL5-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

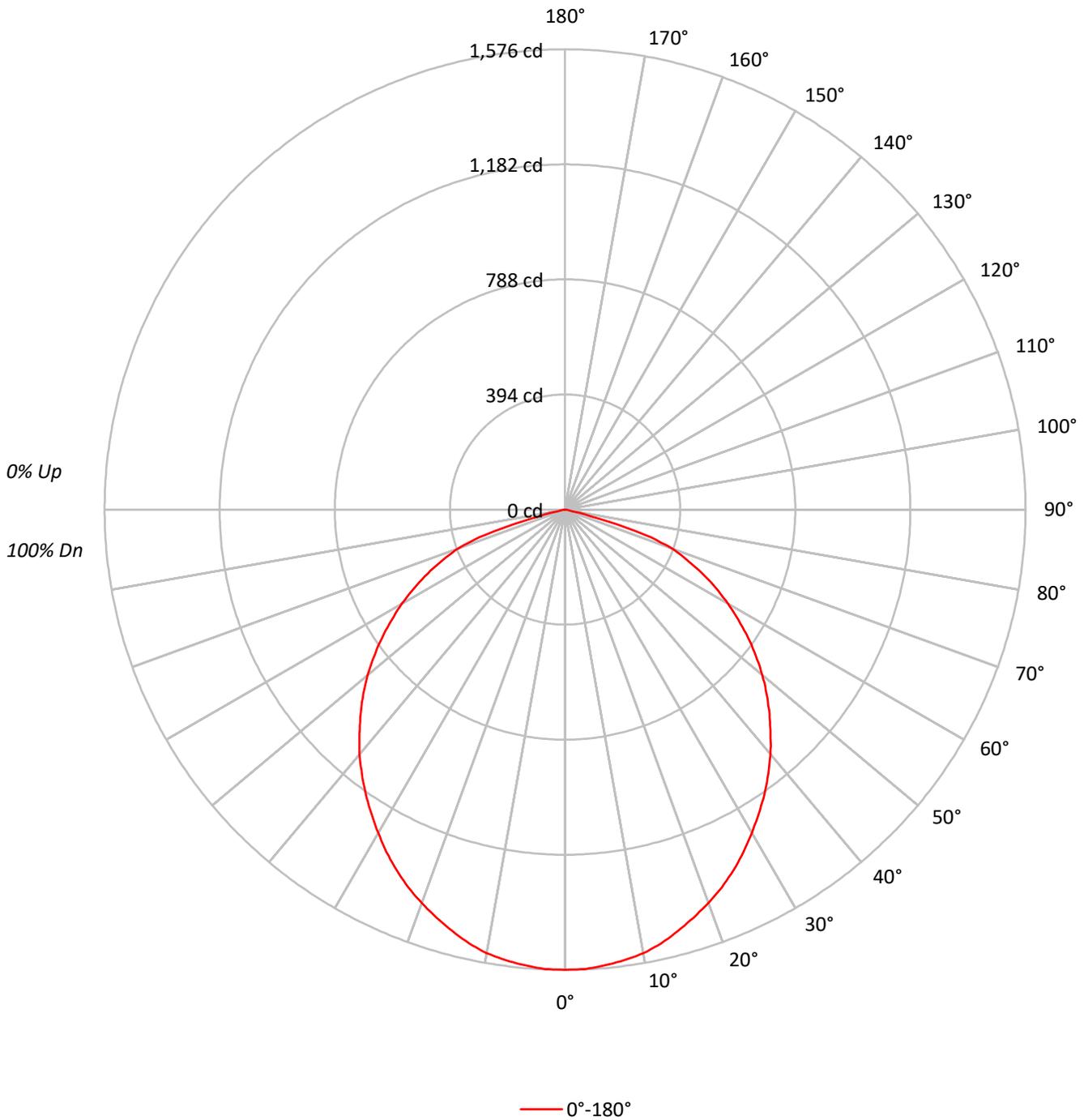
Lumens per Lamp: N/A
Luminaire Lumens: 4058.2 lumens
Efficiency: N/A
Efficacy: 137.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Circular (Dia: 1.75' x H: 0')
CIE Type: Direct

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	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°	7053
5°	7038
10°	7011
15°	6920
20°	6829
25°	6733
30°	6607
35°	6499
40°	6391
45°	6260
50°	6138
55°	5967
60°	5763
65°	5497
70°	5090
75°	1997
80°	0
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6260 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.8	3.7
10°-20°	421.3	10.4
20°-30°	627.7	15.5
30°-40°	743.9	18.3
40°-50°	763.3	18.8
50°-60°	683.0	16.8
60°-70°	512.4	12.6
70°-80°	157.8	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°	1197.9	29.5
0°-40°	1941.8	47.8
0°-60°	3388.1	83.5
0°-90°	4058.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4058.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1576	
5°	1567	149
15°	1494	421
25°	1364	628
35°	1190	744
45°	989	763
55°	765	683
65°	519	512
75°	116	158
85°	0	0
90°	0	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	1576.0
2.5°	1574.7
5°	1566.7
7.5°	1556.1
10°	1542.8
12.5°	1521.6
15°	1493.7
17.5°	1464.5
20°	1433.9
22.5°	1400.7
25°	1363.6
27.5°	1322.4
30°	1278.6
32.5°	1233.4
35°	1189.6
37.5°	1141.8
40°	1094.0
42.5°	1040.9
45°	989.1
47.5°	936.0
50°	881.6
52.5°	823.2
55°	764.8
57.5°	703.7
60°	643.9
62.5°	581.5
65°	519.1
67.5°	454.1
70°	389.0
72.5°	288.1
75°	115.5
77.5°	5.3
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	18.54	20.13	18.91	20.45	20.76	18.54	20.13	18.91	20.45	20.76
	3H	20.29	21.72	20.67	22.05	22.41	20.29	21.72	20.67	22.05	22.41
	4H	20.49	21.83	20.89	22.18	22.55	20.49	21.83	20.89	22.18	22.55
	6H	20.43	21.67	20.84	22.03	22.42	20.43	21.67	20.84	22.03	22.42
	8H	20.40	21.57	20.82	21.96	22.36	20.40	21.57	20.82	21.96	22.36
	12H	20.37	21.49	20.80	21.87	22.30	20.37	21.49	20.80	21.87	22.30
4H	2H	19.18	20.52	19.58	20.86	21.24	19.18	20.52	19.58	20.86	21.24
	3H	21.09	22.20	21.50	22.60	23.00	21.09	22.20	21.50	22.60	23.00
	4H	21.27	22.27	21.71	22.68	23.12	21.27	22.27	21.71	22.68	23.12
	6H	21.22	22.08	21.68	22.53	22.98	21.22	22.08	21.68	22.53	22.98
	8H	21.18	21.99	21.65	22.43	22.90	21.18	21.99	21.65	22.43	22.90
	12H	21.16	21.87	21.64	22.35	22.82	21.16	21.87	21.64	22.35	22.82
8H	4H	21.31	22.11	21.77	22.56	23.02	21.31	22.11	21.77	22.56	23.02
	6H	21.24	21.90	21.74	22.39	22.86	21.24	21.90	21.74	22.39	22.86
	8H	21.20	21.78	21.71	22.29	22.78	21.20	21.78	21.71	22.29	22.78
	12H	21.17	21.69	21.68	22.18	22.74	21.17	21.69	21.68	22.18	22.74
12H	4H	21.28	22.00	21.77	22.48	22.95	21.28	22.00	21.77	22.48	22.95
	6H	21.20	21.78	21.71	22.29	22.78	21.20	21.78	21.71	22.29	22.78
	8H	21.17	21.69	21.68	22.18	22.74	21.17	21.69	21.68	22.18	22.74