

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: P980342

Luminaire Tested: PRLX-243-930-LL5-F-U-S-BLAK-X

Issue Date: 4/3/2025

Test Information

Test Method: LM-79-2024
Report Number: P980342
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-37)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/3/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-243-930-LL5-F-U-S-BLAK-X
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

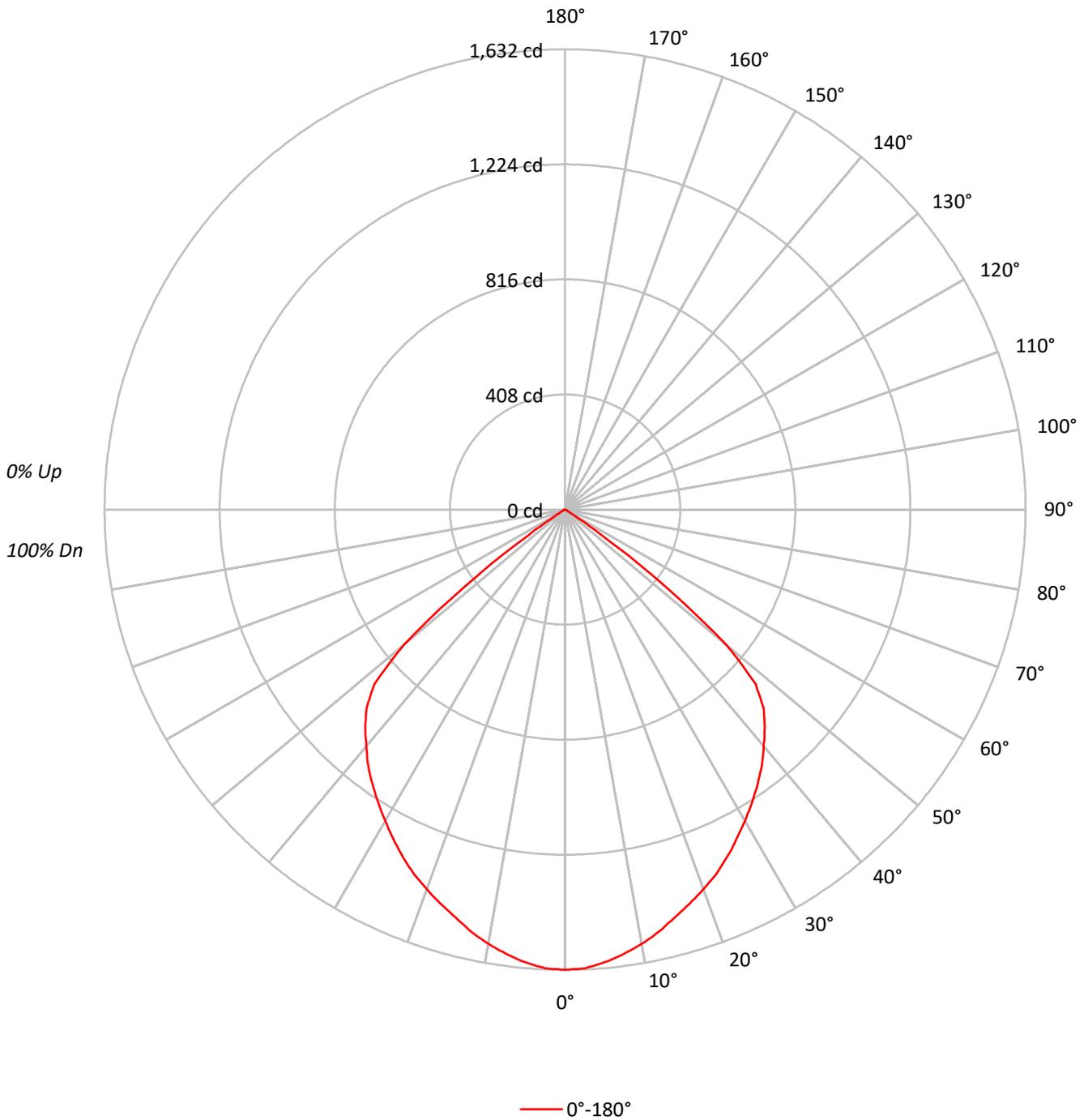
Lumens per Lamp: N/A
Luminaire Lumens: 2926.9 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P980342
CATALOG NUMBER: PRLX-243-930-LL5-F-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	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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65
5	85	74	67	62	83	73	67	62	71	66	61	70	64	60	68	63	60	58
6	79	68	61	55	77	67	60	55	66	59	55	64	58	54	63	58	54	52
7	74	62	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	43
9	65	53	46	41	64	52	46	41	51	45	41	50	45	40	49	44	40	39
10	61	49	42	37	60	49	42	37	48	41	37	47	41	37	46	41	37	35

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	8051
5°	7983
10°	7836
15°	7650
20°	7522
25°	7401
30°	7261
35°	7165
40°	7055
45°	6939
50°	5707
55°	1348
60°	79
65°	77
70°	95
75°	101
80°	77
85°	74

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6939 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.3	5.2
10°-20°	422.9	14.5
20°-30°	626.1	21.4
30°-40°	744.2	25.4
40°-50°	747.4	25.5
50°-60°	220.2	7.5
60°-70°	6.7	0.2
70°-80°	5.1	0.2
80°-90°	1.8	0.1
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°	1201.4	41.0
0°-40°	1945.6	66.5
0°-60°	2913.3	99.5
0°-90°	2926.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2926.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1632	
5°	1612	152
15°	1498	423
25°	1360	626
35°	1190	744
45°	994	747
55°	157	220
65°	7	7
75°	5	5
85°	1	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1631.8
2.5°	1627.8
5°	1611.8
7.5°	1589.3
10°	1564.0
12.5°	1533.5
15°	1497.7
17.5°	1465.8
20°	1432.6
22.5°	1399.4
25°	1359.6
27.5°	1317.1
30°	1274.6
32.5°	1232.1
35°	1189.6
37.5°	1145.8
40°	1095.4
42.5°	1047.6
45°	994.5
47.5°	916.1
50°	743.5
52.5°	448.8
55°	156.7
57.5°	30.5
60°	8.0
62.5°	6.6
65°	6.6
67.5°	6.6
70°	6.6
72.5°	5.3
75°	5.3
77.5°	4.0
80°	2.7
82.5°	2.7
85°	1.3
87.5°	1.3
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	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.15
	3H	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.25
	4H	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.37
	6H	0.00	0.00	0.00	0.02	0.41	0.00	0.00	0.00	0.02	0.41
	8H	0.00	0.00	0.00	0.04	0.44	0.00	0.00	0.00	0.04	0.44
	12H	0.00	0.00	0.00	0.02	0.45	0.00	0.00	0.00	0.02	0.45
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.09
	4H	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.32
	6H	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.47
	8H	0.00	0.00	0.00	0.06	0.53	0.00	0.00	0.00	0.06	0.53
	12H	0.00	0.00	0.00	0.09	0.56	0.00	0.00	0.00	0.09	0.56
8H	4H	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.26
	6H	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.47
	8H	0.00	0.00	0.00	0.13	0.62	0.00	0.00	0.00	0.13	0.62
	12H	0.00	0.00	0.00	0.18	0.75	0.00	0.00	0.00	0.18	0.75
12H	4H	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.20
	6H	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.45
	8H	0.00	0.00	0.00	0.10	0.67	0.00	0.00	0.00	0.10	0.67