

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: P980020

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

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980020  
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-242-930-LL5-C-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

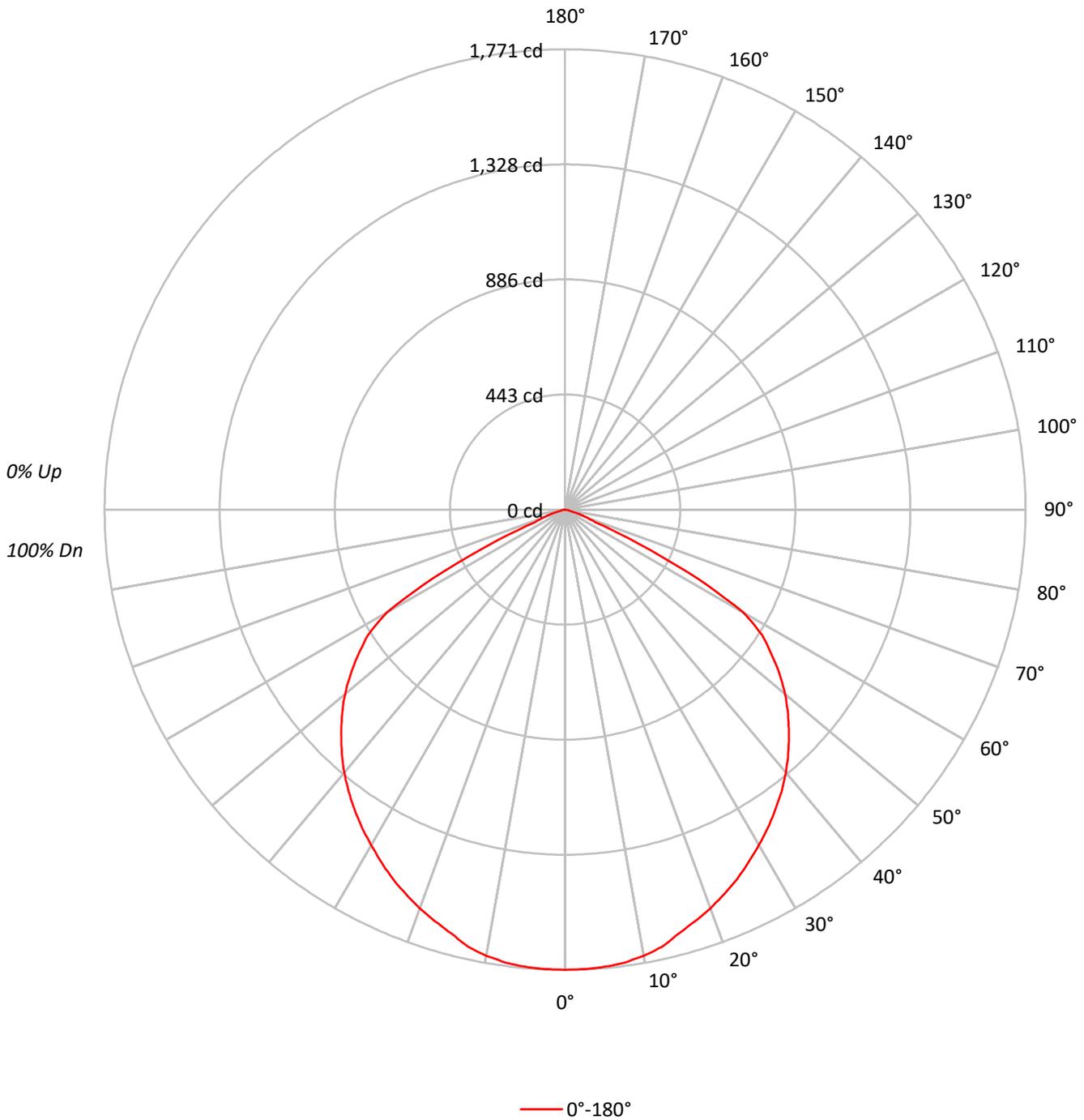
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4438.4 lumens  
Efficiency: N/A  
Efficacy: 150.5 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): 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				
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88				
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65				
4	86	75	67	61	84	74	66	61	71	65	60	69	63	59	67	62	58	56				
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43				
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38				
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34				
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	27				

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	7926
5°	7933
10°	7922
15°	7825
20°	7777
25°	7742
30°	7705
35°	7703
40°	7718
45°	7705
50°	7691
55°	7562
60°	7082
65°	3304
70°	1112
75°	344
80°	0
85°	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7705 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.9	3.8
10°-20°	477.5	10.8
20°-30°	722.5	16.3
30°-40°	883.1	19.9
40°-50°	939.5	21.2
50°-60°	862.2	19.4
60°-70°	353.8	8.0
70°-80°	31.9	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°	1367.9	30.8
0°-40°	2251.0	50.7
0°-60°	4052.7	91.3
0°-90°	4438.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4438.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1771	
5°	1766	168
15°	1689	477
25°	1568	723
35°	1410	883
45°	1218	939
55°	969	862
65°	312	354
75°	20	32
85°	0	0
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1771.2
2.5°	1769.8
5°	1765.9
7.5°	1757.9
10°	1743.3
12.5°	1723.4
15°	1688.9
17.5°	1661.0
20°	1633.1
22.5°	1601.2
25°	1568.0
27.5°	1529.5
30°	1491.0
32.5°	1452.5
35°	1410.0
37.5°	1367.5
40°	1321.1
42.5°	1270.6
45°	1217.5
47.5°	1163.1
50°	1104.7
52.5°	1039.6
55°	969.2
57.5°	898.9
60°	791.3
62.5°	570.9
65°	312.0
67.5°	124.8
70°	85.0
72.5°	58.4
75°	19.9
77.5°	1.3
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	19.98	21.52	20.35	21.83	22.15	19.98	21.52	20.35	21.83	22.15
	3H	19.97	21.33	20.35	21.66	22.02	19.97	21.33	20.35	21.66	22.02
	4H	19.92	21.19	20.32	21.54	21.92	19.92	21.19	20.32	21.54	21.92
	6H	19.85	21.02	20.27	21.39	21.78	19.85	21.02	20.27	21.39	21.78
	8H	19.82	20.93	20.25	21.32	21.72	19.82	20.93	20.25	21.32	21.72
	12H	19.79	20.85	20.22	21.23	21.66	19.79	20.85	20.22	21.23	21.66
4H	2H	20.04	21.31	20.44	21.66	22.04	20.04	21.31	20.44	21.66	22.04
	3H	20.05	21.09	20.46	21.49	21.89	20.05	21.09	20.46	21.49	21.89
	4H	19.99	20.91	20.43	21.33	21.77	19.99	20.91	20.43	21.33	21.77
	6H	19.93	20.73	20.39	21.17	21.63	19.93	20.73	20.39	21.17	21.63
	8H	19.89	20.63	20.35	21.07	21.54	19.89	20.63	20.35	21.07	21.54
	12H	19.85	20.51	20.33	20.99	21.46	19.85	20.51	20.33	20.99	21.46
8H	4H	19.89	20.63	20.36	21.08	21.55	19.89	20.63	20.36	21.08	21.55
	6H	19.81	20.42	20.31	20.91	21.39	19.81	20.42	20.31	20.91	21.39
	8H	19.75	20.30	20.27	20.81	21.30	19.75	20.30	20.27	20.81	21.30
	12H	19.72	20.20	20.23	20.69	21.26	19.72	20.20	20.23	20.69	21.26
12H	4H	19.86	20.52	20.34	21.00	21.47	19.86	20.52	20.34	21.00	21.47
	6H	19.75	20.30	20.27	20.81	21.30	19.75	20.30	20.27	20.81	21.30
	8H	19.72	20.20	20.23	20.69	21.26	19.72	20.20	20.23	20.69	21.26