

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: P979941

Luminaire Tested: PRLX-242-927-LL5-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P979941  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-242-927-LL5-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

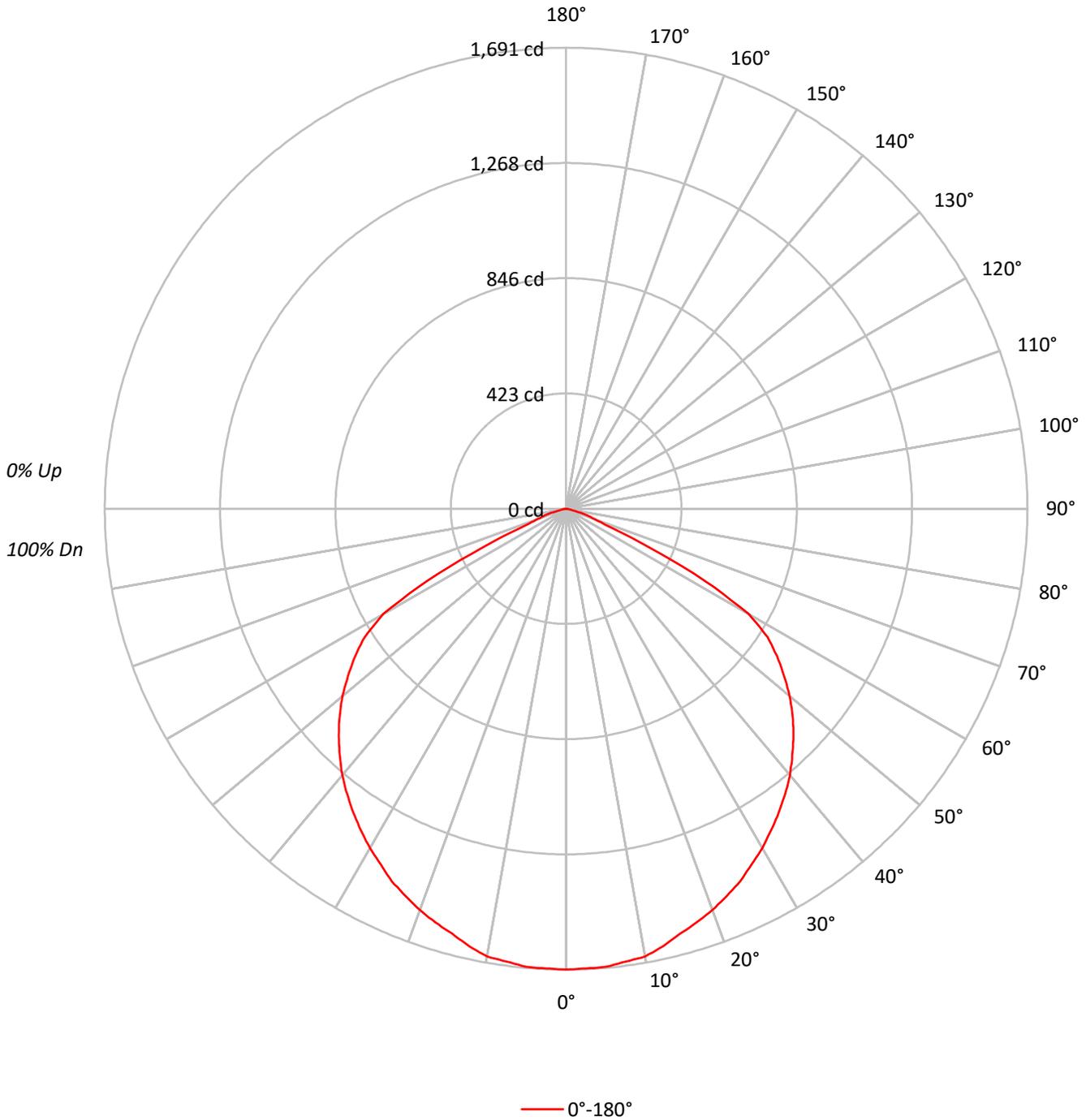
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4332.3 lumens  
Efficiency: N/A  
Efficacy: 146.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4  
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	104	101	98	100	98	95	96	94	92	93	91	90	88				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64				
4	86	75	67	60	83	73	66	60	71	64	59	69	63	58	67	62	58	56				
5	79	67	58	52	77	66	58	52	64	57	51	62	56	51	60	55	50	48				
6	73	60	52	46	71	59	51	45	57	50	45	56	49	45	54	49	44	42				
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33				
9	59	46	38	32	57	45	37	32	44	37	32	43	36	32	42	36	32	30				
10	55	42	34	29	54	42	34	29	41	34	29	40	33	29	39	33	29	27				

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

	0°
0°	7566
5°	7578
10°	7581
15°	7479
20°	7462
25°	7452
30°	7430
35°	7430
40°	7455
45°	7458
50°	7447
55°	7358
60°	6916
65°	3541
70°	1426
75°	671
80°	129
85°	195

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7458 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	160.3	3.7
10°-20°	456.8	10.5
20°-30°	695.0	16.0
30°-40°	851.6	19.7
40°-50°	908.7	21.0
50°-60°	837.9	19.3
60°-70°	368.9	8.5
70°-80°	49.4	1.1
80°-90°	3.8	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°	1312.0	30.3
0°-40°	2163.6	49.9
0°-60°	3910.2	90.3
0°-90°	4332.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4332.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1691	
5°	1687	160
15°	1614	457
25°	1509	695
35°	1360	852
45°	1178	909
55°	943	838
65°	334	369
75°	39	49
85°	4	4
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1690.7
2.5°	1688.2
5°	1687.0
7.5°	1675.7
10°	1668.2
12.5°	1643.2
15°	1614.4
17.5°	1591.8
20°	1566.8
22.5°	1538.0
25°	1509.1
27.5°	1471.6
30°	1437.8
32.5°	1398.9
35°	1360.1
37.5°	1318.8
40°	1276.2
42.5°	1227.4
45°	1178.5
47.5°	1125.9
50°	1069.6
52.5°	1006.9
55°	943.1
57.5°	875.4
60°	772.7
62.5°	574.9
65°	334.4
67.5°	155.3
70°	109.0
72.5°	81.4
75°	38.8
77.5°	11.3
80°	5.0
82.5°	5.0
85°	3.8
87.5°	2.5
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	19.87	21.42	20.23	21.73	22.05	19.87	21.42	20.23	21.73	22.05
	3H	19.92	21.29	20.29	21.62	21.98	19.92	21.29	20.29	21.62	21.98
	4H	19.88	21.17	20.28	21.52	21.89	19.88	21.17	20.28	21.52	21.89
	6H	19.82	21.00	20.23	21.37	21.76	19.82	21.00	20.23	21.37	21.76
	8H	19.79	20.91	20.21	21.30	21.70	19.79	20.91	20.21	21.30	21.70
	12H	19.76	20.83	20.19	21.21	21.64	19.76	20.83	20.19	21.21	21.64
4H	2H	19.96	21.25	20.36	21.60	21.98	19.96	21.25	20.36	21.60	21.98
	3H	20.05	21.10	20.46	21.50	21.90	20.05	21.10	20.46	21.50	21.90
	4H	20.02	20.95	20.45	21.37	21.81	20.02	20.95	20.45	21.37	21.81
	6H	19.96	20.77	20.42	21.21	21.67	19.96	20.77	20.42	21.21	21.67
	8H	19.92	20.67	20.38	21.11	21.58	19.92	20.67	20.38	21.11	21.58
	12H	19.88	20.55	20.37	21.03	21.50	19.88	20.55	20.37	21.03	21.50
8H	4H	19.93	20.68	20.40	21.13	21.59	19.93	20.68	20.40	21.13	21.59
	6H	19.85	20.47	20.35	20.96	21.44	19.85	20.47	20.35	20.96	21.44
	8H	19.80	20.35	20.31	20.86	21.35	19.80	20.35	20.31	20.86	21.35
	12H	19.76	20.26	20.27	20.75	21.31	19.76	20.26	20.27	20.75	21.31
12H	4H	19.90	20.57	20.38	21.05	21.52	19.90	20.57	20.38	21.05	21.52
	6H	19.80	20.35	20.31	20.86	21.35	19.80	20.35	20.31	20.86	21.35
	8H	19.76	20.25	20.27	20.75	21.31	19.76	20.25	20.27	20.75	21.31