

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: P980181

Luminaire Tested: PRLX-242-940-LL5-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980181  
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-242-940-LL5-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

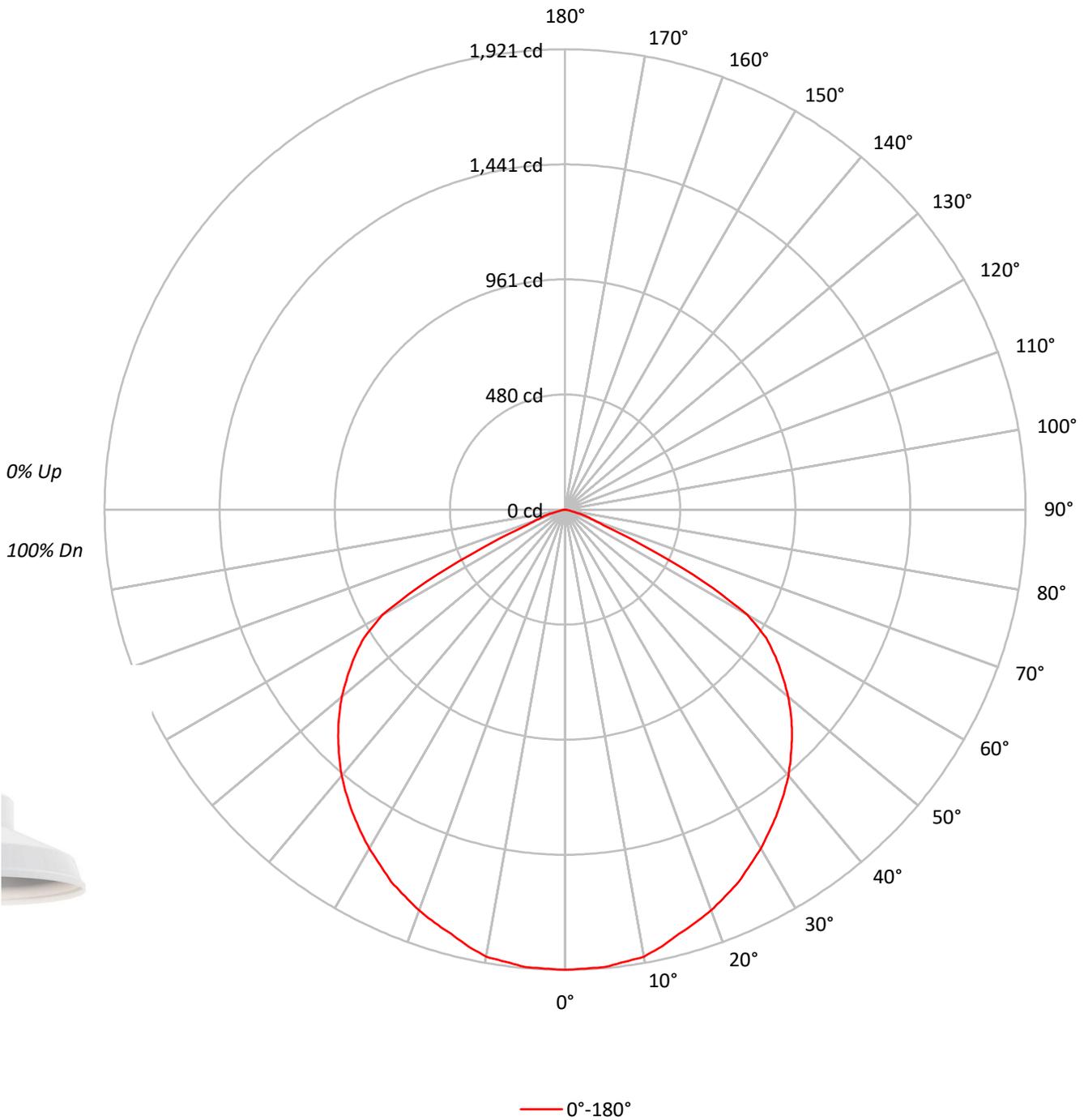
Lumens per Lamp: N/A  
Luminaire Lumens: 4921.3 lumens  
Efficiency: N/A  
Efficacy: 166.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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	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°	8595
5°	8609
10°	8611
15°	8496
20°	8476
25°	8465
30°	8439
35°	8441
40°	8469
45°	8472
50°	8459
55°	8358
60°	7857
65°	4023
70°	1620
75°	763
80°	147
85°	221

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8472 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.1	3.7
10°-20°	518.9	10.5
20°-30°	789.4	16.0
30°-40°	967.3	19.7
40°-50°	1032.2	21.0
50°-60°	951.8	19.3
60°-70°	419.1	8.5
70°-80°	56.1	1.1
80°-90°	4.3	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°	1490.4	30.3
0°-40°	2457.7	49.9
0°-60°	4441.8	90.3
0°-90°	4921.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4921.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1921	
5°	1916	182
15°	1834	519
25°	1714	789
35°	1545	967
45°	1339	1032
55°	1071	952
65°	380	419
75°	44	56
85°	4	4
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1920.6
2.5°	1917.8
5°	1916.4
7.5°	1903.6
10°	1895.0
12.5°	1866.6
15°	1833.8
17.5°	1808.2
20°	1779.8
22.5°	1747.1
25°	1714.3
27.5°	1671.7
30°	1633.2
32.5°	1589.1
35°	1545.0
37.5°	1498.1
40°	1449.7
42.5°	1394.2
45°	1338.7
47.5°	1279.0
50°	1215.0
52.5°	1143.8
55°	1071.3
57.5°	994.5
60°	877.8
62.5°	653.0
65°	379.9
67.5°	176.4
70°	123.8
72.5°	92.5
75°	44.1
77.5°	12.8
80°	5.7
82.5°	5.7
85°	4.3
87.5°	2.8
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	20.31	21.86	20.68	22.18	22.49	20.31	21.86	20.68	22.18	22.49
	3H	20.36	21.74	20.74	22.06	22.42	20.36	21.74	20.74	22.06	22.42
	4H	20.33	21.61	20.73	21.96	22.34	20.33	21.61	20.73	21.96	22.34
	6H	20.27	21.45	20.68	21.81	22.21	20.27	21.45	20.68	21.81	22.21
	8H	20.23	21.35	20.66	21.74	22.15	20.23	21.35	20.66	21.74	22.15
	12H	20.20	21.27	20.63	21.66	22.09	20.20	21.27	20.63	21.66	22.09
4H	2H	20.41	21.69	20.81	22.04	22.42	20.41	21.69	20.81	22.04	22.42
	3H	20.50	21.54	20.91	21.95	22.35	20.50	21.54	20.91	21.95	22.35
	4H	20.46	21.40	20.89	21.81	22.25	20.46	21.40	20.89	21.81	22.25
	6H	20.40	21.21	20.86	21.65	22.11	20.40	21.21	20.86	21.65	22.11
	8H	20.36	21.11	20.83	21.56	22.02	20.36	21.11	20.83	21.56	22.02
	12H	20.33	21.00	20.81	21.48	21.95	20.33	21.00	20.81	21.48	21.95
8H	4H	20.37	21.13	20.84	21.57	22.04	20.37	21.13	20.84	21.57	22.04
	6H	20.29	20.91	20.79	21.40	21.88	20.29	20.91	20.79	21.40	21.88
	8H	20.24	20.80	20.76	21.31	21.80	20.24	20.80	20.76	21.31	21.80
	12H	20.21	20.70	20.72	21.19	21.76	20.21	20.70	20.72	21.19	21.76
12H	4H	20.34	21.01	20.82	21.49	21.96	20.34	21.01	20.82	21.49	21.96
	6H	20.24	20.80	20.76	21.31	21.80	20.24	20.80	20.76	21.31	21.80
	8H	20.21	20.70	20.72	21.19	21.76	20.21	20.70	20.72	21.19	21.76