

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: P980283

Luminaire Tested: PRLX-243-927-LL7-F-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980283  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-32)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-243-927-LL7-F-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH FROSTED LENS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

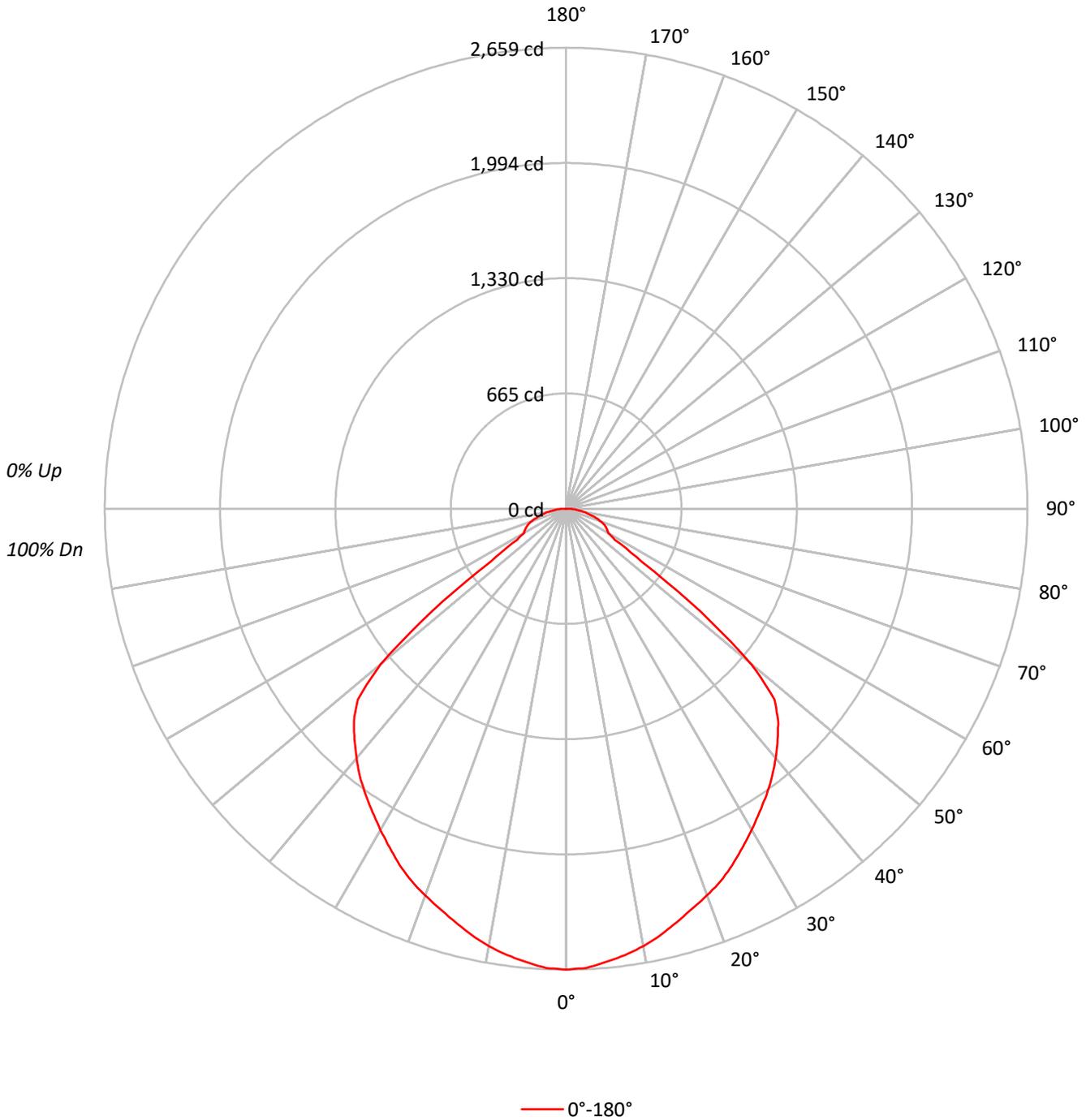
Lumens per Lamp: N/A  
Luminaire Lumens: 5620.1 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.36  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 48  
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	105	101	99	100	98	95	97	95	93	93	91	90	88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42
8	66	53	45	40	64	53	45	40	51	45	40	50	44	39	49	43	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

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

	0°
0°	13120
5°	13008
10°	12839
15°	12608
20°	12463
25°	12348
30°	12188
35°	12130
40°	12105
45°	12061
50°	10701
55°	4580
60°	2762
65°	2949
70°	3041
75°	2945
80°	2841
85°	2881

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12061 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.7	4.4
10°-20°	697.0	12.4
20°-30°	1044.5	18.6
30°-40°	1261.0	22.4
40°-50°	1311.7	23.3
50°-60°	590.1	10.5
60°-70°	247.6	4.4
70°-80°	163.7	2.9
80°-90°	55.7	1.0
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°	1990.2	35.4
0°-40°	3251.2	57.9
0°-60°	5153.0	91.7
0°-90°	5620.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5620.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2659	
5°	2626	249
15°	2468	697
25°	2268	1044
35°	2014	1261
45°	1728	1312
55°	532	590
65°	253	248
75°	154	164
85°	51	56
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2659.1
2.5°	2651.8
5°	2626.4
7.5°	2597.3
10°	2562.8
12.5°	2519.2
15°	2468.3
17.5°	2419.2
20°	2373.7
22.5°	2326.5
25°	2268.3
27.5°	2202.9
30°	2139.3
32.5°	2075.7
35°	2013.9
37.5°	1950.3
40°	1879.4
42.5°	1804.8
45°	1728.5
47.5°	1628.5
50°	1394.1
52.5°	974.2
55°	532.5
57.5°	332.6
60°	279.9
62.5°	267.2
65°	252.6
67.5°	234.5
70°	210.8
72.5°	183.6
75°	154.5
77.5°	127.2
80°	100.0
82.5°	74.5
85°	50.9
87.5°	29.1
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	12.69	14.13	13.05	14.45	14.76	12.69	14.13	13.05	14.45	14.76
	3H	14.78	16.06	15.16	16.39	16.76	14.78	16.06	15.16	16.39	16.76
	4H	15.61	16.81	16.01	17.16	17.54	15.61	16.81	16.01	17.16	17.54
	6H	16.25	17.36	16.67	17.73	18.12	16.25	17.36	16.67	17.73	18.12
	8H	16.49	17.54	16.91	17.93	18.33	16.49	17.54	16.91	17.93	18.33
	12H	16.67	17.67	17.10	18.06	18.49	16.67	17.67	17.10	18.06	18.49
4H	2H	13.35	14.55	13.75	14.90	15.28	13.35	14.55	13.75	14.90	15.28
	3H	15.69	16.67	16.10	17.08	17.48	15.69	16.67	16.10	17.08	17.48
	4H	16.65	17.53	17.09	17.95	18.39	16.65	17.53	17.09	17.95	18.39
	6H	17.43	18.20	17.89	18.64	19.11	17.43	18.20	17.89	18.64	19.11
	8H	17.72	18.44	18.19	18.88	19.35	17.72	18.44	18.19	18.88	19.35
	12H	17.96	18.59	18.44	19.07	19.55	17.96	18.59	18.44	19.07	19.55
8H	4H	17.01	17.72	17.47	18.17	18.64	17.01	17.72	17.47	18.17	18.64
	6H	17.93	18.52	18.43	19.02	19.49	17.93	18.52	18.43	19.02	19.49
	8H	18.31	18.84	18.82	19.35	19.84	18.31	18.84	18.82	19.35	19.84
	12H	18.64	19.12	19.15	19.62	20.18	18.64	19.12	19.15	19.62	20.18
12H	4H	17.04	17.68	17.53	18.16	18.63	17.04	17.68	17.53	18.16	18.63
	6H	18.00	18.54	18.52	19.05	19.54	18.00	18.54	18.52	19.05	19.54
	8H	18.44	18.92	18.96	19.42	19.98	18.44	18.92	18.96	19.42	19.98