

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: P980523

Luminaire Tested: PRLX-243-940-LL7-F-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980523  
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-243-940-LL7-F-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH FROSTED LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

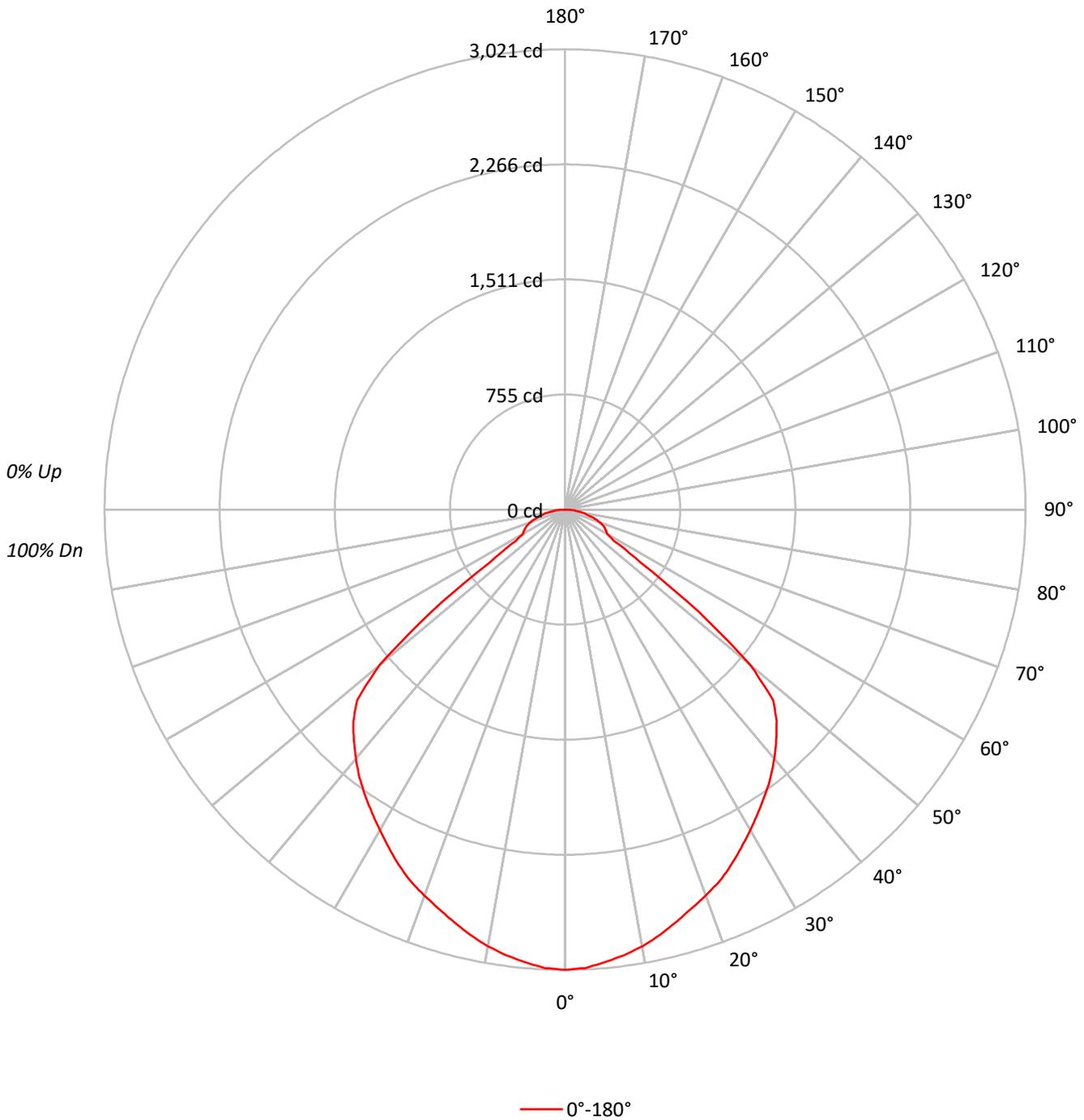
Lumens per Lamp: N/A  
Luminaire Lumens: 6384.2 lumens  
Efficiency: N/A  
Efficacy: 133.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.36  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct

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									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	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													100															
1	111	107	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90	88													88															
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77													77															
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67													67															
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61	59													59															
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52													52															
6	76	64	56	50	74	63	55	50	61	54	49	59	53	49	58	53	48	46													46															
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	42													42															
8	66	53	45	40	64	53	45	40	51	45	40	50	44	39	49	43	39	37													37															
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34													34															
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31													31															

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

	0°
0°	14903
5°	14776
10°	14585
15°	14322
20°	14158
25°	14027
30°	13844
35°	13779
40°	13750
45°	13700
50°	12155
55°	5204
60°	3138
65°	3351
70°	3455
75°	3346
80°	3228
85°	3272

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13700 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	282.6	4.4
10°-20°	791.8	12.4
20°-30°	1186.5	18.6
30°-40°	1432.4	22.4
40°-50°	1490.1	23.3
50°-60°	670.3	10.5
60°-70°	281.3	4.4
70°-80°	186.0	2.9
80°-90°	63.2	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°	2260.8	35.4
0°-40°	3693.2	57.9
0°-60°	5853.7	91.7
0°-90°	6384.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6384.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3021	
5°	2984	283
15°	2804	792
25°	2577	1186
35°	2288	1432
45°	1964	1490
55°	605	670
65°	287	281
75°	176	186
85°	58	63
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3020.6
2.5°	3012.4
5°	2983.5
7.5°	2950.4
10°	2911.2
12.5°	2861.7
15°	2803.9
17.5°	2748.1
20°	2696.5
22.5°	2642.8
25°	2576.7
27.5°	2502.4
30°	2430.1
32.5°	2357.9
35°	2287.7
37.5°	2215.4
40°	2134.9
42.5°	2050.2
45°	1963.5
47.5°	1850.0
50°	1583.6
52.5°	1106.7
55°	605.0
57.5°	377.8
60°	318.0
62.5°	303.5
65°	287.0
67.5°	266.3
70°	239.5
72.5°	208.5
75°	175.5
77.5°	144.5
80°	113.6
82.5°	84.7
85°	57.8
87.5°	33.0
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	13.13	14.58	13.49	14.89	15.21	13.13	14.58	13.49	14.89	15.21
	3H	15.22	16.51	15.60	16.84	17.20	15.22	16.51	15.60	16.84	17.20
	4H	16.05	17.25	16.45	17.60	17.98	16.05	17.25	16.45	17.60	17.98
	6H	16.70	17.80	17.11	18.17	18.56	16.70	17.80	17.11	18.17	18.56
	8H	16.93	17.98	17.36	18.37	18.77	16.93	17.98	17.36	18.37	18.77
	12H	17.11	18.12	17.54	18.50	18.93	17.11	18.12	17.54	18.50	18.93
4H	2H	13.79	14.99	14.19	15.34	15.72	13.79	14.99	14.19	15.34	15.72
	3H	16.13	17.12	16.55	17.52	17.92	16.13	17.12	16.55	17.52	17.92
	4H	17.10	17.98	17.53	18.39	18.83	17.10	17.98	17.53	18.39	18.83
	6H	17.88	18.64	18.34	19.09	19.55	17.88	18.64	18.34	19.09	19.55
	8H	18.16	18.88	18.63	19.32	19.79	18.16	18.88	18.63	19.32	19.79
	12H	18.40	19.04	18.88	19.52	19.99	18.40	19.04	18.88	19.52	19.99
8H	4H	17.45	18.16	17.91	18.61	19.08	17.45	18.16	17.91	18.61	19.08
	6H	18.37	18.96	18.87	19.46	19.94	18.37	18.96	18.87	19.46	19.94
	8H	18.75	19.29	19.27	19.80	20.29	18.75	19.29	19.27	19.80	20.29
	12H	19.09	19.57	19.60	20.06	20.63	19.09	19.57	19.60	20.06	20.63
12H	4H	17.49	18.12	17.97	18.60	19.08	17.49	18.12	17.97	18.60	19.08
	6H	18.44	18.98	18.96	19.49	19.98	18.44	18.98	18.96	19.49	19.98
	8H	18.89	19.37	19.40	19.86	20.43	18.89	19.37	19.40	19.86	20.43