

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: P980223

Luminaire Tested: PRLX-243-927-LL1-F-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980223  
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-LL1-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: -

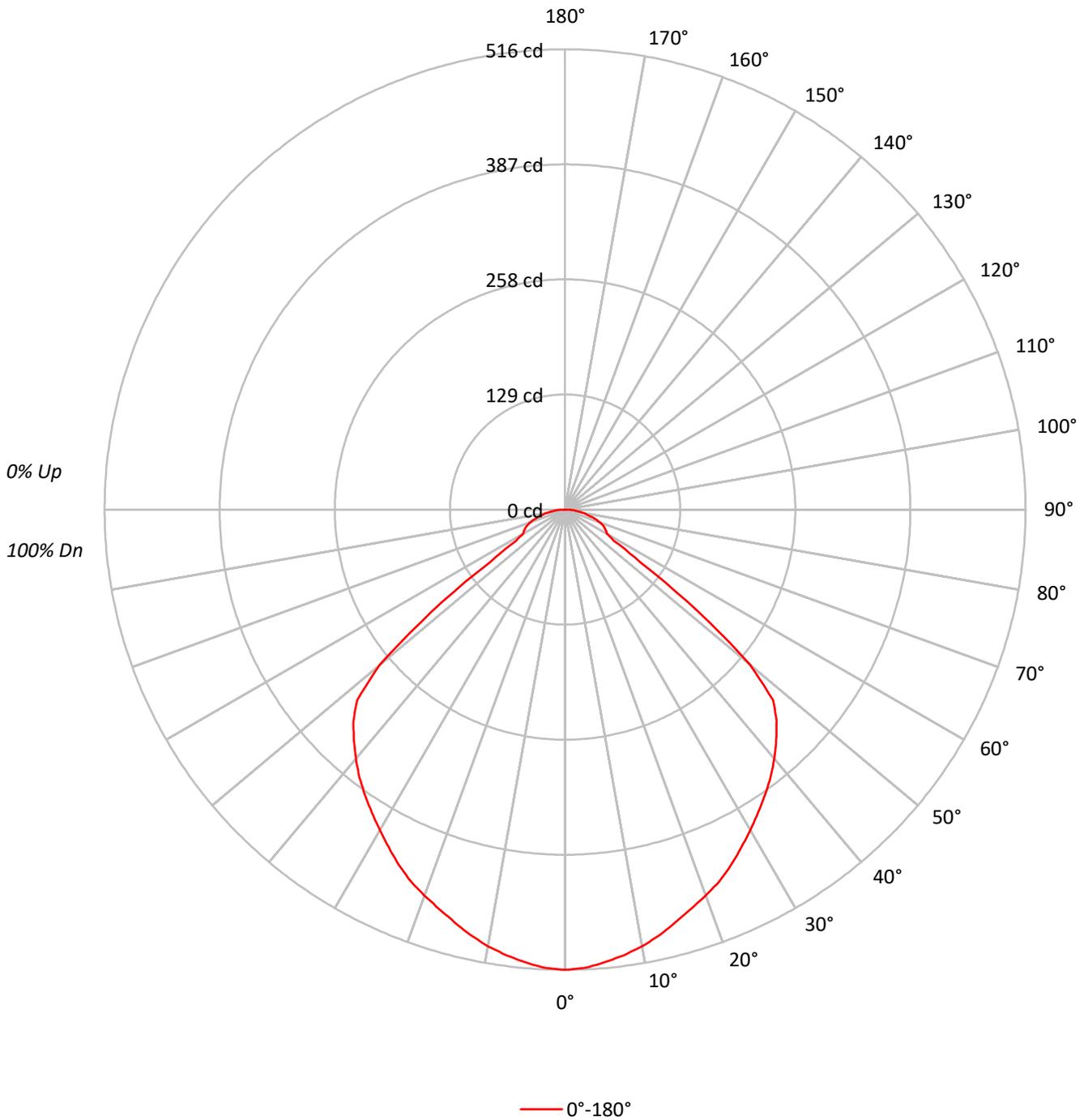
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1090.2 lumens  
Efficiency: N/A  
Efficacy: 145.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.35  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 7.5  
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



TEST NUMBER: P980223  
CATALOG NUMBER: PRLX-243-927-LL1-F-U-S-WHTE-X

### Luminous Intensity Polar Plot





TEST NUMBER: P980223

CATALOG NUMBER: PRLX-243-927-LL1-F-U-S-WHTE-X

**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°	2545
5°	2523
10°	2491
15°	2446
20°	2418
25°	2395
30°	2364
35°	2353
40°	2348
45°	2340
50°	2075
55°	889
60°	536
65°	572
70°	590
75°	572
80°	551
85°	560

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2340 cd/sqm

TEST NUMBER: P980223

CATALOG NUMBER: PRLX-243-927-LL1-F-U-S-WHTE-X

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.3	4.4
10°-20°	135.2	12.4
20°-30°	202.6	18.6
30°-40°	244.6	22.4
40°-50°	254.5	23.3
50°-60°	114.5	10.5
60°-70°	48.0	4.4
70°-80°	31.8	2.9
80°-90°	10.8	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°	386.1	35.4
0°-40°	630.7	57.9
0°-60°	999.6	91.7
0°-90°	1090.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1090.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	516	
5°	510	48
15°	479	135
25°	440	203
35°	391	245
45°	335	254
55°	103	114
65°	49	48
75°	30	32
85°	10	11
90°	0	



TEST NUMBER: P980223

CATALOG NUMBER: PRLX-243-927-LL1-F-U-S-WHTE-X

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	515.9
2.5°	514.4
5°	509.5
7.5°	503.9
10°	497.2
12.5°	488.7
15°	478.8
17.5°	469.3
20°	460.5
22.5°	451.3
25°	440.0
27.5°	427.4
30°	415.0
32.5°	402.7
35°	390.7
37.5°	378.3
40°	364.6
42.5°	350.1
45°	335.3
47.5°	315.9
50°	270.4
52.5°	189.0
55°	103.3
57.5°	64.5
60°	54.3
62.5°	51.8
65°	49.0
67.5°	45.5
70°	40.9
72.5°	35.6
75°	30.0
77.5°	24.7
80°	19.4
82.5°	14.5
85°	9.9
87.5°	5.6
90°	0.0



TEST NUMBER: P980223  
 CATALOG NUMBER: PRLX-243-927-LL1-F-U-S-WHTE-X

**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	6.99	8.43	7.35	8.75	9.06	6.99	8.43	7.35	8.75	9.06
	3H	9.08	10.37	9.46	10.70	11.06	9.08	10.37	9.46	10.70	11.06
	4H	9.91	11.11	10.31	11.46	11.84	9.91	11.11	10.31	11.46	11.84
	6H	10.56	11.66	10.97	12.03	12.42	10.56	11.66	10.97	12.03	12.42
	8H	10.79	11.84	11.22	12.23	12.63	10.79	11.84	11.22	12.23	12.63
	12H	10.97	11.98	11.41	12.36	12.79	10.97	11.98	11.41	12.36	12.79
4H	2H	7.65	8.85	8.05	9.20	9.58	7.65	8.85	8.05	9.20	9.58
	3H	9.99	10.98	10.40	11.38	11.78	9.99	10.98	10.40	11.38	11.78
	4H	10.96	11.84	11.39	12.25	12.69	10.96	11.84	11.39	12.25	12.69
	6H	11.74	12.50	12.20	12.95	13.41	11.74	12.50	12.20	12.95	13.41
	8H	12.03	12.74	12.49	13.19	13.66	12.03	12.74	12.49	13.19	13.66
	12H	12.26	12.90	12.75	13.38	13.85	12.26	12.90	12.75	13.38	13.85
8H	4H	11.31	12.02	11.78	12.47	12.94	11.31	12.02	11.78	12.47	12.94
	6H	12.23	12.83	12.73	13.32	13.80	12.23	12.83	12.73	13.32	13.80
	8H	12.61	13.15	13.13	13.66	14.15	12.61	13.15	13.13	13.66	14.15
	12H	12.95	13.43	13.46	13.92	14.49	12.95	13.43	13.46	13.92	14.49
12H	4H	11.35	11.98	11.83	12.46	12.94	11.35	11.98	11.83	12.46	12.94
	6H	12.30	12.84	12.82	13.35	13.84	12.30	12.84	12.82	13.35	13.84
	8H	12.75	13.23	13.26	13.72	14.29	12.75	13.23	13.26	13.72	14.29