

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: P979961

Luminaire Tested: PRLX-242-927-LL7-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P979961  
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-LL7-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**

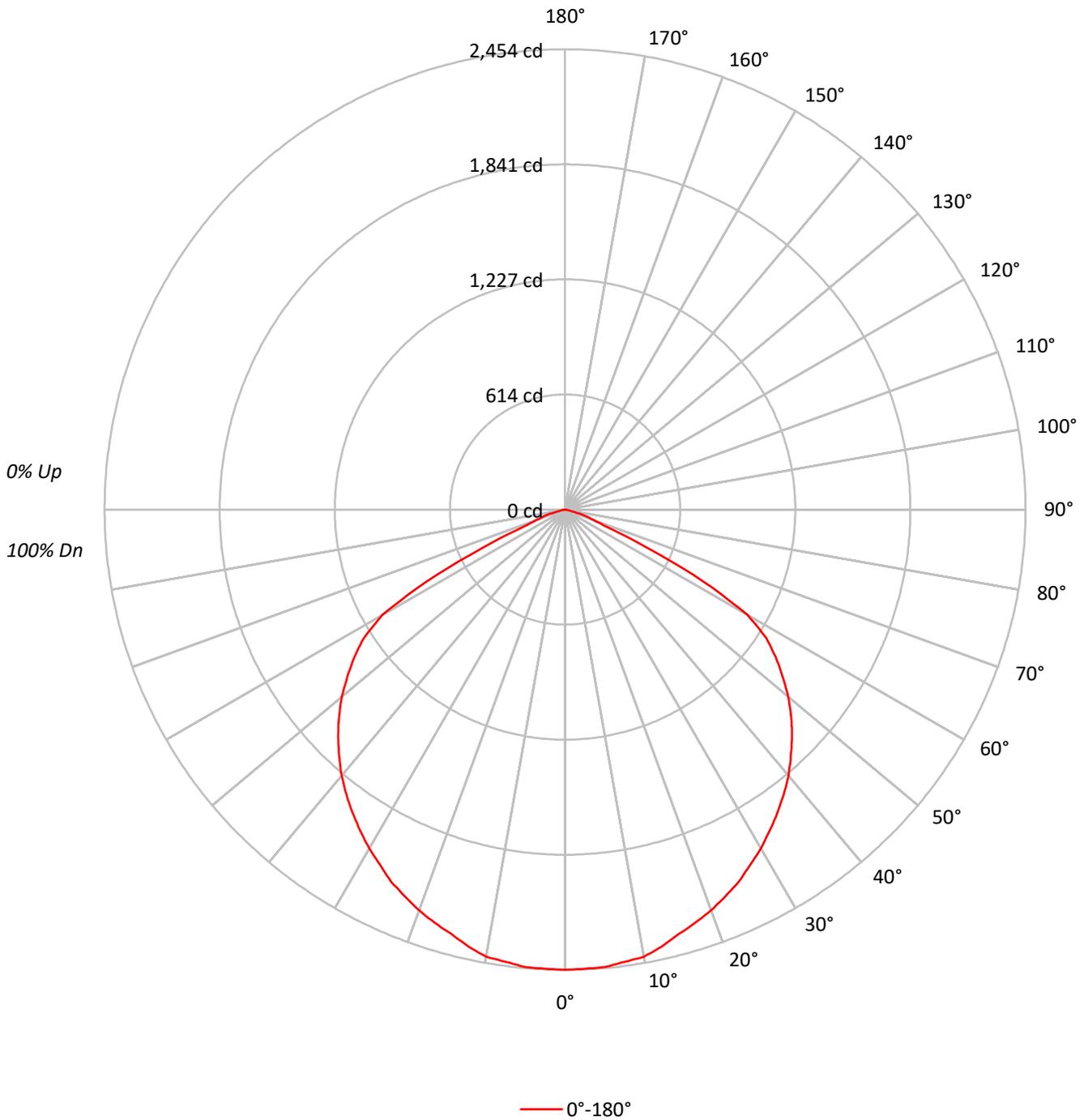
Lumens per Lamp: N/A  
Luminaire Lumens: 6287.2 lumens  
Efficiency: N/A  
Efficacy: 131.0 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P979961  
CATALOG NUMBER: PRLX-242-927-LL7-C-U-S-WHTE-X

### Luminous Intensity Polar Plot





TEST NUMBER: P979961

CATALOG NUMBER: PRLX-242-927-LL7-C-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	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°	10981
5°	10998
10°	11001
15°	10855
20°	10829
25°	10815
30°	10782
35°	10784
40°	10820
45°	10824
50°	10806
55°	10678
60°	10037
65°	5139
70°	2069
75°	973
80°	188
85°	282

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 10824 cd/sqm

TEST NUMBER: P979961

CATALOG NUMBER: PRLX-242-927-LL7-C-U-S-WHTE-X

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.6	3.7
10°-20°	663.0	10.5
20°-30°	1008.6	16.0
30°-40°	1235.8	19.7
40°-50°	1318.8	21.0
50°-60°	1216.0	19.3
60°-70°	535.4	8.5
70°-80°	71.7	1.1
80°-90°	5.5	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°	1904.1	30.3
0°-40°	3140.0	49.9
0°-60°	5674.7	90.3
0°-90°	6287.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6287.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2454	
5°	2448	233
15°	2343	663
25°	2190	1009
35°	1974	1236
45°	1710	1319
55°	1369	1216
65°	485	535
75°	56	72
85°	6	5
90°	0	

TEST NUMBER: P979961

CATALOG NUMBER: PRLX-242-927-LL7-C-U-S-WHTE-X

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2453.7
2.5°	2450.1
5°	2448.3
7.5°	2431.9
10°	2421.0
12.5°	2384.7
15°	2342.9
17.5°	2310.1
20°	2273.8
22.5°	2232.0
25°	2190.2
27.5°	2135.6
30°	2086.6
32.5°	2030.2
35°	1973.9
37.5°	1913.9
40°	1852.1
42.5°	1781.2
45°	1710.3
47.5°	1634.0
50°	1552.2
52.5°	1461.3
55°	1368.6
57.5°	1270.5
60°	1121.4
62.5°	834.3
65°	485.3
67.5°	225.4
70°	158.1
72.5°	118.1
75°	56.3
77.5°	16.4
80°	7.3
82.5°	7.3
85°	5.5
87.5°	3.6
90°	0.0



TEST NUMBER: P979961  
 CATALOG NUMBER: PRLX-242-927-LL7-C-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	21.16	22.71	21.53	23.03	23.34	21.16	22.71	21.53	23.03	23.34
	3H	21.21	22.59	21.59	22.91	23.28	21.21	22.59	21.59	22.91	23.28
	4H	21.18	22.46	21.58	22.81	23.19	21.18	22.46	21.58	22.81	23.19
	6H	21.12	22.30	21.53	22.66	23.06	21.12	22.30	21.53	22.66	23.06
	8H	21.08	22.21	21.51	22.60	23.00	21.08	22.21	21.51	22.60	23.00
	12H	21.05	22.12	21.48	22.51	22.94	21.05	22.12	21.48	22.51	22.94
4H	2H	21.26	22.54	21.66	22.89	23.27	21.26	22.54	21.66	22.89	23.27
	3H	21.35	22.40	21.76	22.80	23.20	21.35	22.40	21.76	22.80	23.20
	4H	21.31	22.25	21.74	22.66	23.10	21.31	22.25	21.74	22.66	23.10
	6H	21.25	22.06	21.71	22.50	22.97	21.25	22.06	21.71	22.50	22.97
	8H	21.21	21.96	21.68	22.41	22.88	21.21	21.96	21.68	22.41	22.88
	12H	21.18	21.85	21.66	22.33	22.80	21.18	21.85	21.66	22.33	22.80
8H	4H	21.22	21.98	21.69	22.42	22.89	21.22	21.98	21.69	22.42	22.89
	6H	21.14	21.76	21.64	22.25	22.73	21.14	21.76	21.64	22.25	22.73
	8H	21.09	21.65	21.61	22.16	22.65	21.09	21.65	21.61	22.16	22.65
	12H	21.06	21.55	21.57	22.04	22.61	21.06	21.55	21.57	22.04	22.61
12H	4H	21.19	21.86	21.67	22.34	22.81	21.19	21.86	21.67	22.34	22.81
	6H	21.09	21.65	21.61	22.16	22.65	21.09	21.65	21.61	22.16	22.65
	8H	21.06	21.55	21.57	22.04	22.61	21.06	21.55	21.57	22.04	22.61