

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P866207

Luminaire Tested: PRLX-2002-M-927-75L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866207  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-38)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-927-75L-G-U-S-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 8  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

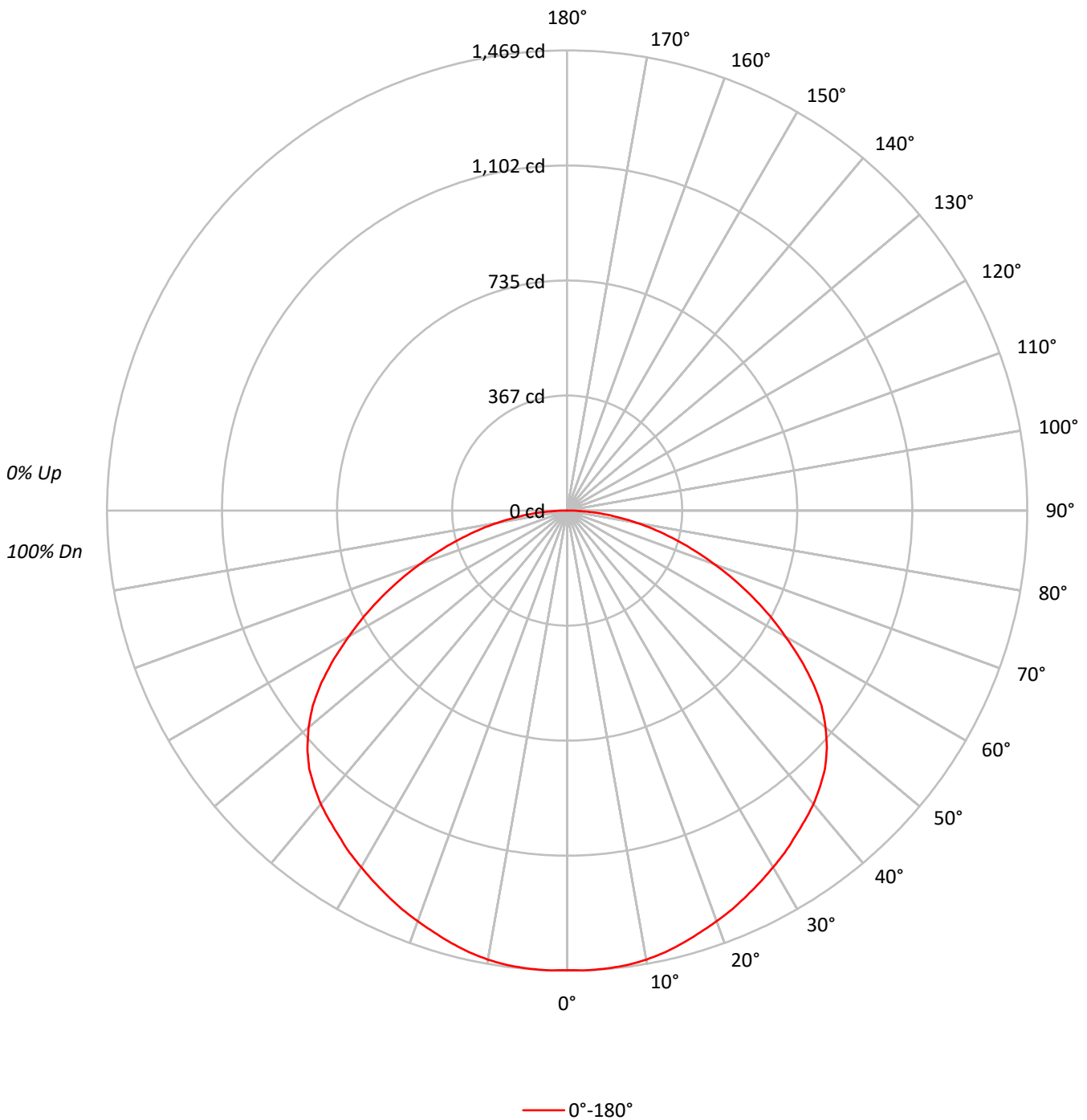
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4858.9 lumens  
Efficiency: N/A  
Efficacy: 69.7 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.5  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 69.7  
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: 0.333 HR  
Operation Time: 3 HR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P866207

CATALOG NUMBER: PRLX-2002-M-927-75L-G-U-S-X-X-WHHR-X

### Luminous Intensity Polar Plot





TEST NUMBER: P866207

CATALOG NUMBER: PRLX-2002-M-927-75L-G-U-S-X-X-WHHR-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	108	103	99	94	105	101	97	93	96	93	90	93	90	87	89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	35	30	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°
0°	11673
5°	11717
10°	11761
15°	11771
20°	11810
25°	11910
30°	12079
35°	12328
40°	12708
45°	13103
50°	13331
55°	13277
60°	12809
65°	12287
70°	11642
75°	10998
80°	10377
85°	9731

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 13380 cd/sqm

TEST NUMBER: P866207

CATALOG NUMBER: PRLX-2002-M-927-75L-G-U-S-X-X-WHHR-X

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.7	2.9
10°-20°	403.8	8.3
20°-30°	626.7	12.9
30°-40°	796.5	16.4
40°-50°	895.8	18.4
50°-60°	851.1	17.5
60°-70°	646.4	13.3
70°-80°	380.0	7.8
80°-90°	118.9	2.4
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°	1170.2	24.1
0°-40°	1966.7	40.5
0°-60°	3713.6	76.4
0°-90°	4858.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4858.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1467	
5°	1467	140
15°	1429	404
25°	1357	627
35°	1269	797
45°	1165	896
55°	957	851
65°	653	646
75°	358	380
85°	107	119
90°	0	

TEST NUMBER: P866207

CATALOG NUMBER: PRLX-2002-M-927-75L-G-U-S-X-X-WHHR-X

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1467.2
2.5°	1469.1
5°	1467.2
7.5°	1463.4
10°	1455.8
12.5°	1444.4
15°	1429.1
17.5°	1412.0
20°	1394.9
22.5°	1377.7
25°	1356.8
27.5°	1335.9
30°	1314.9
32.5°	1294.0
35°	1269.3
37.5°	1246.4
40°	1223.6
42.5°	1195.1
45°	1164.6
47.5°	1124.7
50°	1077.1
52.5°	1023.8
55°	957.2
57.5°	883.0
60°	805.0
62.5°	730.7
65°	652.7
67.5°	576.6
70°	500.5
72.5°	428.2
75°	357.8
77.5°	291.2
80°	226.5
82.5°	163.7
85°	106.6
87.5°	53.3
90°	0.0



TEST NUMBER: P866207  
 CATALOG NUMBER: PRLX-2002-M-927-75L-G-U-S-X-X-WHHR-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	21.36	23.05	21.72	23.37	23.68	21.36	23.05	21.72	23.37	23.68
	3H	23.15	24.69	23.53	25.02	25.38	23.15	24.69	23.53	25.02	25.38
	4H	23.85	25.30	24.25	25.65	26.02	23.85	25.30	24.25	25.65	26.02
	6H	24.40	25.75	24.81	26.11	26.50	24.40	25.75	24.81	26.11	26.50
	8H	24.59	25.88	25.01	26.27	26.66	24.59	25.88	25.01	26.27	26.66
	12H	24.73	25.97	25.16	26.35	26.78	24.73	25.97	25.16	26.35	26.78
4H	2H	21.99	23.44	22.39	23.79	24.16	21.99	23.44	22.39	23.79	24.16
	3H	24.02	25.24	24.43	25.64	26.03	24.02	25.24	24.43	25.64	26.03
	4H	24.85	25.96	25.28	26.37	26.80	24.85	25.96	25.28	26.37	26.80
	6H	25.54	26.51	25.99	26.95	27.40	25.54	26.51	25.99	26.95	27.40
	8H	25.79	26.70	26.24	27.14	27.60	25.79	26.70	26.24	27.14	27.60
	12H	25.98	26.81	26.46	27.28	27.75	25.98	26.81	26.46	27.28	27.75
8H	4H	25.19	26.10	25.64	26.54	27.00	25.19	26.10	25.64	26.54	27.00
	6H	26.01	26.77	26.50	27.26	27.73	26.01	26.77	26.50	27.26	27.73
	8H	26.34	27.03	26.85	27.53	28.02	26.34	27.03	26.85	27.53	28.02
	12H	26.63	27.24	27.14	27.73	28.28	26.63	27.24	27.14	27.73	28.28
12H	4H	25.23	26.05	25.71	26.53	26.99	25.23	26.05	25.71	26.53	26.99
	6H	26.08	26.77	26.59	27.27	27.76	26.08	26.77	26.59	27.27	27.76
	8H	26.48	27.09	26.99	27.58	28.13	26.48	27.09	26.99	27.58	28.13