

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: P867177

Luminaire Tested: PRLX-2004-L-927-100L-G-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867177  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-73)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2004-L-927-100L-G-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,  
BELL WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 6  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

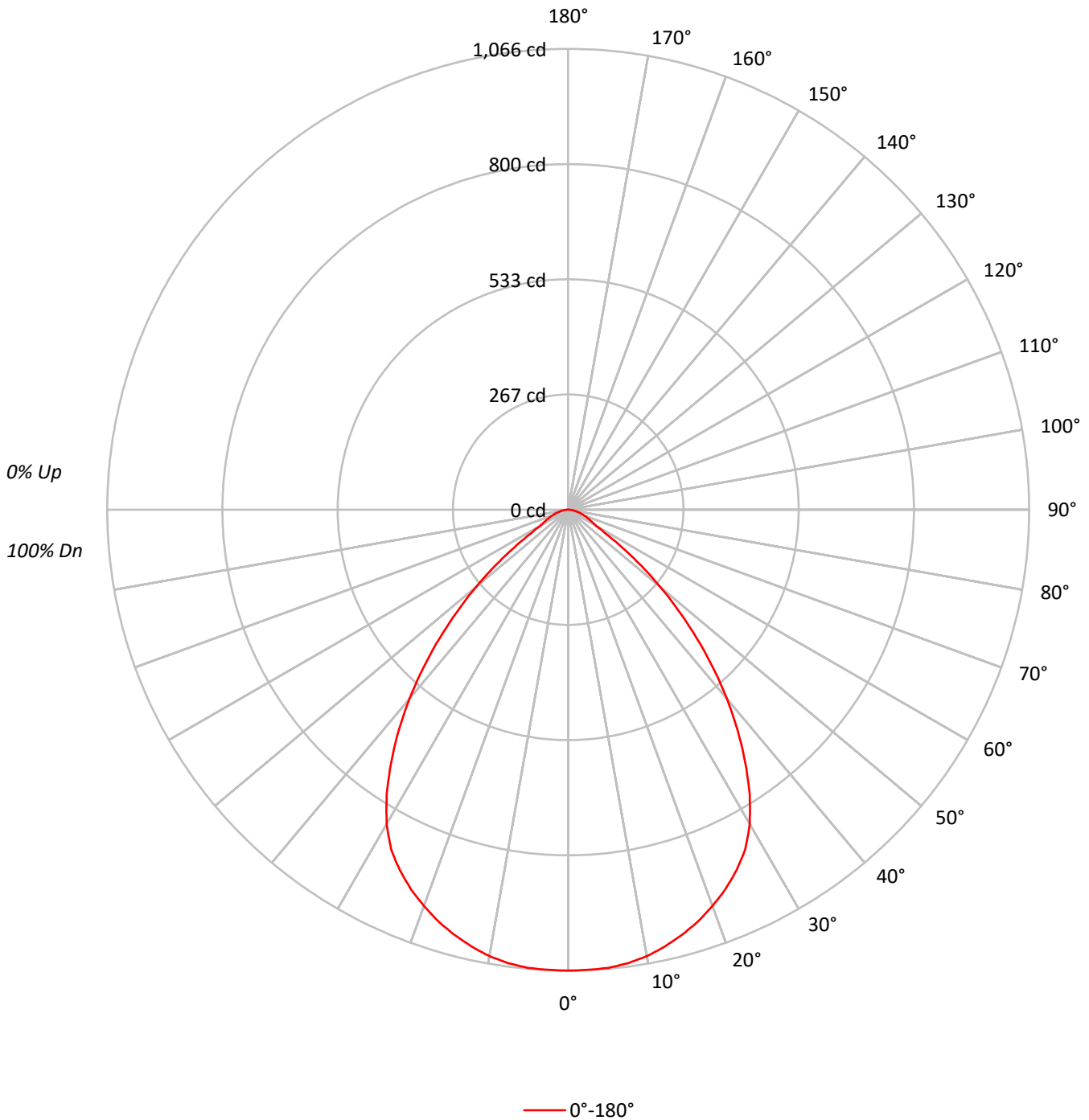
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1810.6 lumens  
Efficiency: N/A  
Efficacy: 22.8 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.17  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 79.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 3 HR  
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71
4	91	81	74	69	89	80	73	68	78	72	67	75	70	67	73	69	66	64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	57
6	79	68	61	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52
7	74	63	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	49	45	43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36

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

	0°
0°	5260
5°	5269
10°	5253
15°	5199
20°	5120
25°	5011
30°	4782
35°	4299
40°	3674
45°	2936
50°	2131
55°	1308
60°	738
65°	629
70°	557
75°	507
80°	457
85°	408

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2936 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.0	5.6
10°-20°	286.9	15.8
20°-30°	422.3	23.3
30°-40°	443.3	24.5
40°-50°	323.6	17.9
50°-60°	142.6	7.9
60°-70°	54.4	3.0
70°-80°	28.2	1.6
80°-90°	8.3	0.5
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°	810.2	44.7
0°-40°	1253.5	69.2
0°-60°	1719.6	95.0
0°-90°	1810.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1810.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1066	
5°	1064	101
15°	1018	287
25°	920	422
35°	714	443
45°	421	324
55°	152	143
65°	54	54
75°	27	28
85°	7	8
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1066.2
2.5°	1065.4
5°	1063.8
7.5°	1058.1
10°	1048.5
12.5°	1034.8
15°	1017.9
17.5°	998.6
20°	975.2
22.5°	950.3
25°	920.5
27.5°	886.7
30°	839.3
32.5°	781.3
35°	713.7
37.5°	643.7
40°	570.5
42.5°	495.7
45°	420.8
47.5°	346.8
50°	277.6
52.5°	212.4
55°	152.1
57.5°	103.0
60°	74.8
62.5°	63.6
65°	53.9
67.5°	45.9
70°	38.6
72.5°	32.2
75°	26.6
77.5°	20.9
80°	16.1
82.5°	12.1
85°	7.2
87.5°	3.2
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	8.60	9.90	8.97	10.22	10.53	8.60	9.90	8.97	10.22	10.53
	3H	9.48	10.63	9.86	10.96	11.33	9.48	10.63	9.86	10.96	11.33
	4H	9.84	10.91	10.24	11.26	11.64	9.84	10.91	10.24	11.26	11.64
	6H	10.10	11.08	10.51	11.45	11.84	10.10	11.08	10.51	11.45	11.84
	8H	10.19	11.12	10.62	11.51	11.92	10.19	11.12	10.62	11.51	11.92
	12H	10.25	11.14	10.68	11.52	11.95	10.25	11.14	10.68	11.52	11.95
4H	2H	8.83	9.90	9.23	10.25	10.63	8.83	9.90	9.23	10.25	10.63
	3H	9.93	10.80	10.34	11.20	11.61	9.93	10.80	10.34	11.20	11.61
	4H	10.40	11.18	10.83	11.60	12.04	10.40	11.18	10.83	11.60	12.04
	6H	10.78	11.45	11.25	11.90	12.37	10.78	11.45	11.25	11.90	12.37
	8H	10.92	11.54	11.39	11.99	12.46	10.92	11.54	11.39	11.99	12.46
	12H	11.02	11.57	11.50	12.05	12.53	11.02	11.57	11.50	12.05	12.53
8H	4H	10.53	11.16	11.00	11.61	12.08	10.53	11.16	11.00	11.61	12.08
	6H	11.02	11.53	11.52	12.03	12.51	11.02	11.53	11.52	12.03	12.51
	8H	11.23	11.69	11.75	12.20	12.70	11.23	11.69	11.75	12.20	12.70
	12H	11.39	11.80	11.91	12.30	12.87	11.39	11.80	11.91	12.30	12.87
12H	4H	10.53	11.08	11.01	11.56	12.04	10.53	11.08	11.01	11.56	12.04
	6H	11.03	11.50	11.56	12.01	12.50	11.03	11.50	11.56	12.01	12.50
	8H	11.29	11.70	11.81	12.20	12.77	11.29	11.70	11.81	12.20	12.77