

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: P867233

Luminaire Tested: PRLX-2004-L-927-83L-G-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867233  
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-927-83L-G-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,  
BELL WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

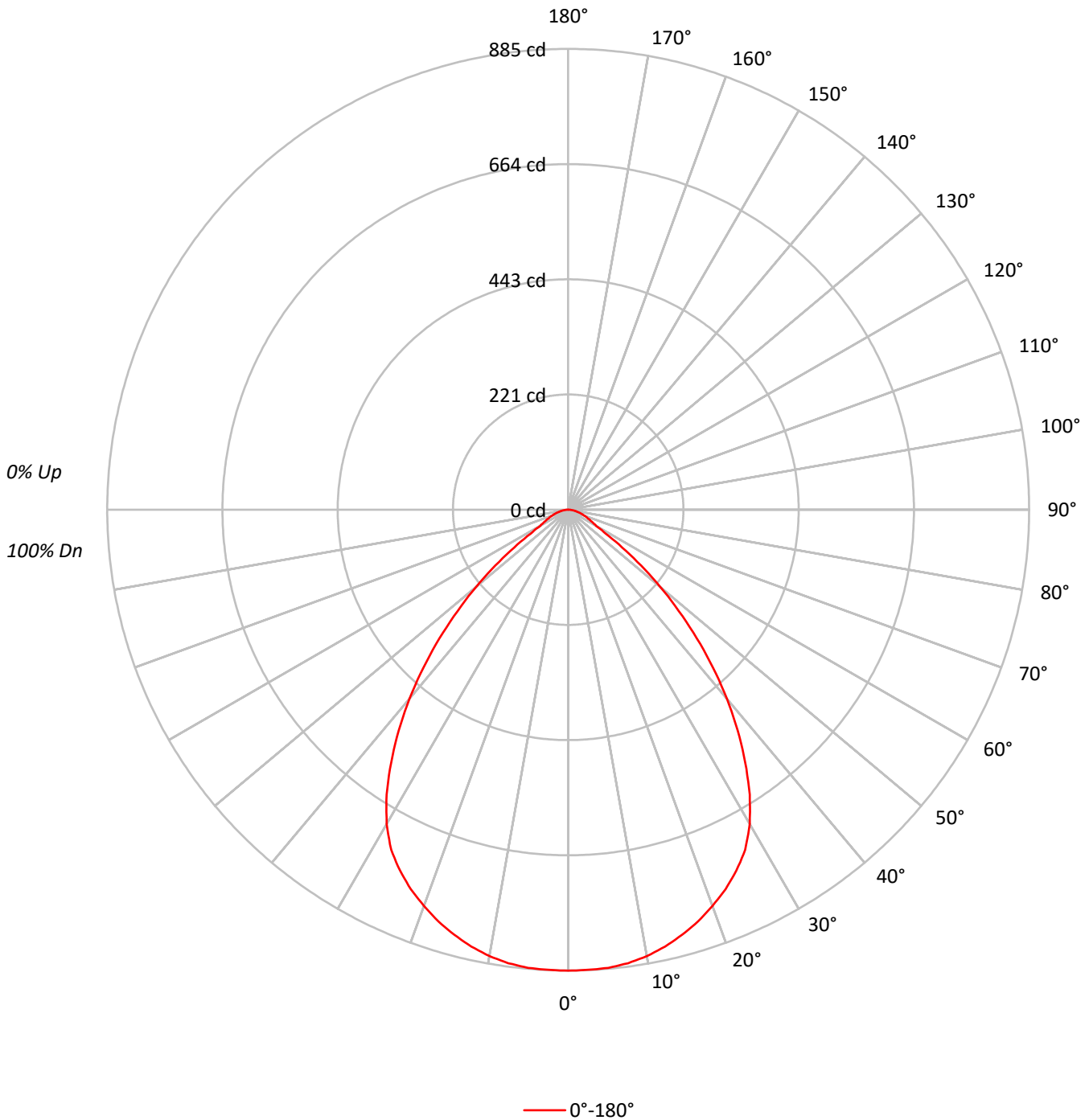
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1503.3 lumens  
Efficiency: N/A  
Efficacy: 23.3 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): 64.5  
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	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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90				90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	74	80	76	73	71				71
4	91	81	74	69	89	80	73	68	78	72	67	75	70	67	73	69	66	64				64
5	85	74	67	61	83	73	66	61	71	65	60	69	64	60	68	63	59	57				57
6	79	68	61	55	77	67	60	55	65	59	55	64	58	54	62	58	54	52				52
7	74	63	55	50	72	62	55	50	60	54	49	59	53	49	58	53	49	47				47
8	69	58	50	45	68	57	50	45	56	50	45	55	49	45	54	49	45	43				43
9	65	54	46	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39				39
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36				36

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

	0°
0°	4367
5°	4374
10°	4361
15°	4317
20°	4251
25°	4161
30°	3970
35°	3569
40°	3051
45°	2438
50°	1769
55°	1086
60°	613
65°	523
70°	463
75°	419
80°	381
85°	340

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2438 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.9	5.6
10°-20°	238.2	15.8
20°-30°	350.6	23.3
30°-40°	368.0	24.5
40°-50°	268.6	17.9
50°-60°	118.4	7.9
60°-70°	45.2	3.0
70°-80°	23.4	1.6
80°-90°	6.9	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°	672.7	44.7
0°-40°	1040.7	69.2
0°-60°	1427.8	95.0
0°-90°	1503.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1503.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	885	
5°	883	84
15°	845	238
25°	764	351
35°	593	368
45°	349	269
55°	126	118
65°	45	45
75°	22	23
85°	6	7
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	885.2
2.5°	884.6
5°	883.2
7.5°	878.5
10°	870.5
12.5°	859.2
15°	845.1
17.5°	829.1
20°	809.7
22.5°	789.0
25°	764.3
27.5°	736.2
30°	696.8
32.5°	648.7
35°	592.6
37.5°	534.5
40°	473.7
42.5°	411.5
45°	349.4
47.5°	287.9
50°	230.5
52.5°	176.4
55°	126.3
57.5°	85.5
60°	62.1
62.5°	52.8
65°	44.8
67.5°	38.1
70°	32.1
72.5°	26.7
75°	22.0
77.5°	17.4
80°	13.4
82.5°	10.0
85°	6.0
87.5°	2.7
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	7.95	9.25	8.32	9.57	9.88	7.95	9.25	8.32	9.57	9.88
	3H	8.84	9.99	9.22	10.32	10.68	8.84	9.99	9.22	10.32	10.68
	4H	9.19	10.26	9.59	10.61	10.99	9.19	10.26	9.59	10.61	10.99
	6H	9.45	10.43	9.87	10.80	11.20	9.45	10.43	9.87	10.80	11.20
	8H	9.54	10.47	9.98	10.86	11.27	9.54	10.47	9.98	10.86	11.27
	12H	9.60	10.49	10.03	10.87	11.30	9.60	10.49	10.03	10.87	11.30
4H	2H	8.18	9.25	8.58	9.60	9.98	8.18	9.25	8.58	9.60	9.98
	3H	9.28	10.15	9.69	10.56	10.96	9.28	10.15	9.69	10.56	10.96
	4H	9.75	10.53	10.19	10.95	11.39	9.75	10.53	10.19	10.95	11.39
	6H	10.14	10.80	10.60	11.25	11.72	10.14	10.80	10.60	11.25	11.72
	8H	10.27	10.90	10.74	11.35	11.82	10.27	10.90	10.74	11.35	11.82
	12H	10.37	10.92	10.85	11.40	11.88	10.37	10.92	10.85	11.40	11.88
8H	4H	9.88	10.51	10.35	10.96	11.43	9.88	10.51	10.35	10.96	11.43
	6H	10.37	10.88	10.88	11.38	11.86	10.37	10.88	10.88	11.38	11.86
	8H	10.58	11.04	11.10	11.56	12.05	10.58	11.04	11.10	11.56	12.05
	12H	10.74	11.15	11.26	11.65	12.22	10.74	11.15	11.26	11.65	12.22
12H	4H	9.88	10.43	10.36	10.91	11.39	9.88	10.43	10.36	10.91	11.39
	6H	10.39	10.85	10.91	11.36	11.86	10.39	10.85	10.91	11.36	11.86
	8H	10.64	11.05	11.16	11.55	12.12	10.64	11.05	11.16	11.55	12.12