

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: P867101

Luminaire Tested: PRLX-2002-L-935-83L-L-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867101  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-81)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-935-83L-L-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

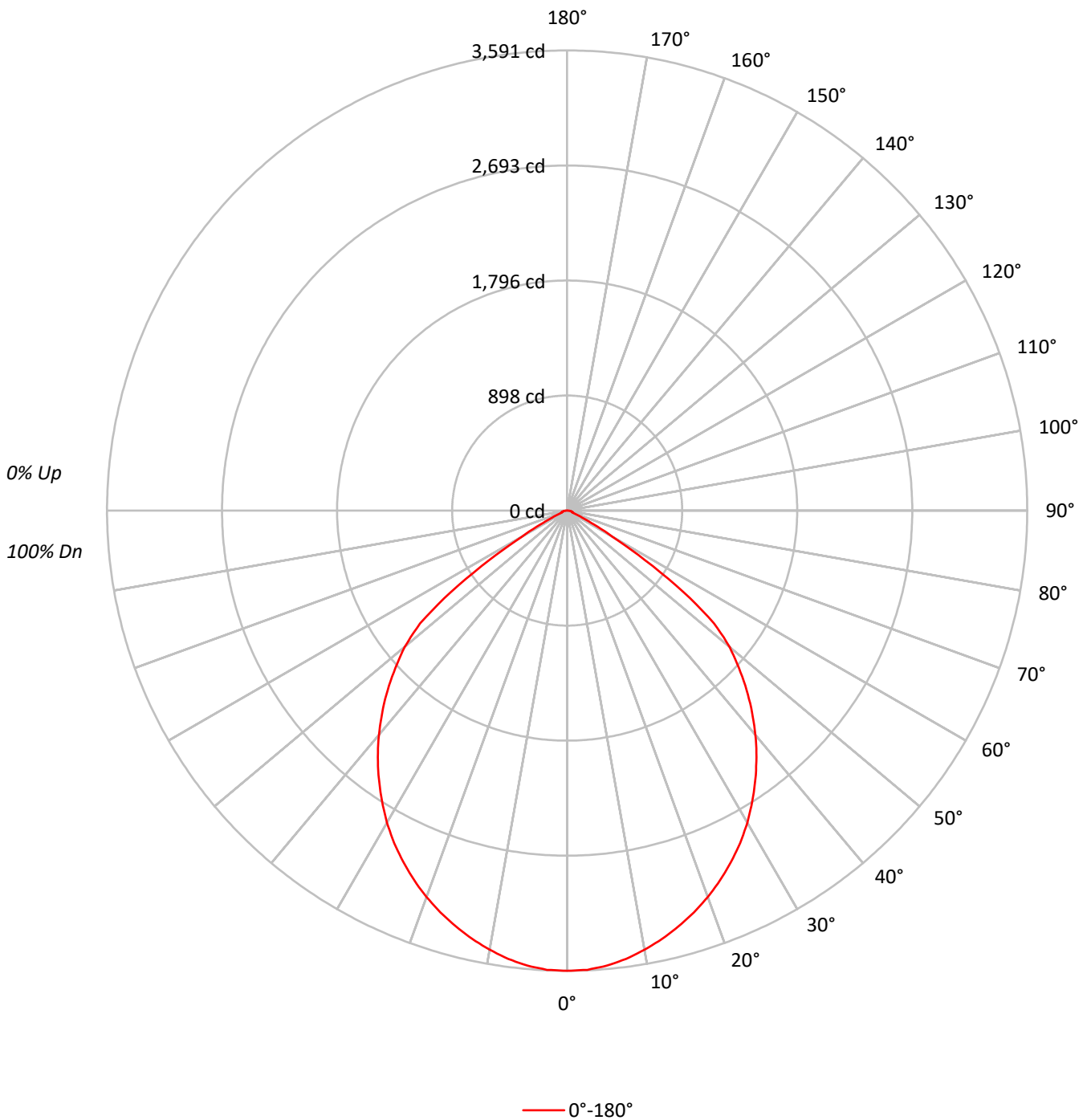
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6972.3 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27  
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	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	100	102	99	97	98	96	94	94	93	92	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	83	78	74	81	77	73	78	75	72	70
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	72	67	64	62
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	60	57	55
6	77	65	58	52	75	65	57	52	63	56	51	61	56	51	60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	46	39	35	46	39	35	45	39	35	44	38	34	33

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

	0°
0°	17718
5°	17654
10°	17433
15°	17158
20°	16850
25°	16474
30°	16020
35°	15428
40°	14723
45°	13827
50°	12705
55°	9556
60°	4023
65°	1483
70°	682
75°	745
80°	861
85°	1002

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13827 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	337.5	4.8
10°-20°	946.8	13.6
20°-30°	1392.8	20.0
30°-40°	1599.7	22.9
40°-50°	1523.9	21.9
50°-60°	954.4	13.7
60°-70°	157.9	2.3
70°-80°	41.2	0.6
80°-90°	18.0	0.3
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°	2677.2	38.4
0°-40°	4276.9	61.3
0°-60°	6755.2	96.9
0°-90°	6972.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6972.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3591	
5°	3564	338
15°	3359	947
25°	3026	1393
35°	2562	1600
45°	1982	1524
55°	1111	954
65°	127	158
75°	39	41
85°	18	18
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3591.1
2.5°	3587.4
5°	3564.5
7.5°	3528.3
10°	3479.6
12.5°	3424.2
15°	3359.2
17.5°	3288.3
20°	3209.2
22.5°	3121.4
25°	3026.1
27.5°	2924.9
30°	2811.9
32.5°	2689.3
35°	2561.5
37.5°	2427.1
40°	2286.0
42.5°	2136.1
45°	1981.7
47.5°	1817.0
50°	1655.2
52.5°	1445.5
55°	1110.9
57.5°	717.9
60°	407.7
62.5°	231.2
65°	127.0
67.5°	59.8
70°	47.3
72.5°	43.6
75°	39.1
77.5°	34.7
80°	30.3
82.5°	24.4
85°	17.7
87.5°	8.9
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	17.21	18.60	17.57	18.91	19.23	17.21	18.60	17.57	18.91	19.23
	3H	17.12	18.35	17.50	18.68	19.04	17.12	18.35	17.50	18.68	19.04
	4H	17.08	18.22	17.48	18.57	18.95	17.08	18.22	17.48	18.57	18.95
	6H	17.04	18.08	17.45	18.45	18.84	17.04	18.08	17.45	18.45	18.84
	8H	17.02	18.00	17.45	18.40	18.80	17.02	18.00	17.45	18.40	18.80
	12H	16.99	17.94	17.43	18.32	18.75	16.99	17.94	17.43	18.32	18.75
4H	2H	17.07	18.21	17.48	18.56	18.95	17.07	18.21	17.48	18.56	18.95
	3H	17.01	17.93	17.42	18.33	18.73	17.01	17.93	17.42	18.33	18.73
	4H	16.97	17.78	17.40	18.20	18.64	16.97	17.78	17.40	18.20	18.64
	6H	16.95	17.65	17.41	18.10	18.56	16.95	17.65	17.41	18.10	18.56
	8H	16.92	17.58	17.39	18.03	18.50	16.92	17.58	17.39	18.03	18.50
	12H	16.91	17.50	17.40	17.98	18.45	16.91	17.50	17.40	17.98	18.45
8H	4H	16.86	17.51	17.33	17.96	18.43	16.86	17.51	17.33	17.96	18.43
	6H	16.84	17.38	17.34	17.87	18.36	16.84	17.38	17.34	17.87	18.36
	8H	16.82	17.32	17.34	17.83	18.32	16.82	17.32	17.34	17.83	18.32
	12H	16.83	17.27	17.34	17.77	18.34	16.83	17.27	17.34	17.77	18.34
12H	4H	16.82	17.40	17.30	17.88	18.36	16.82	17.40	17.30	17.88	18.36
	6H	16.78	17.28	17.30	17.79	18.28	16.78	17.28	17.30	17.79	18.28
	8H	16.80	17.24	17.31	17.73	18.30	16.80	17.24	17.31	17.73	18.30