

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: P867213

Luminaire Tested: PRLX-2004-L-927-48L-L-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867213  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-85)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2004-L-927-48L-L-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,  
BELL WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 3  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

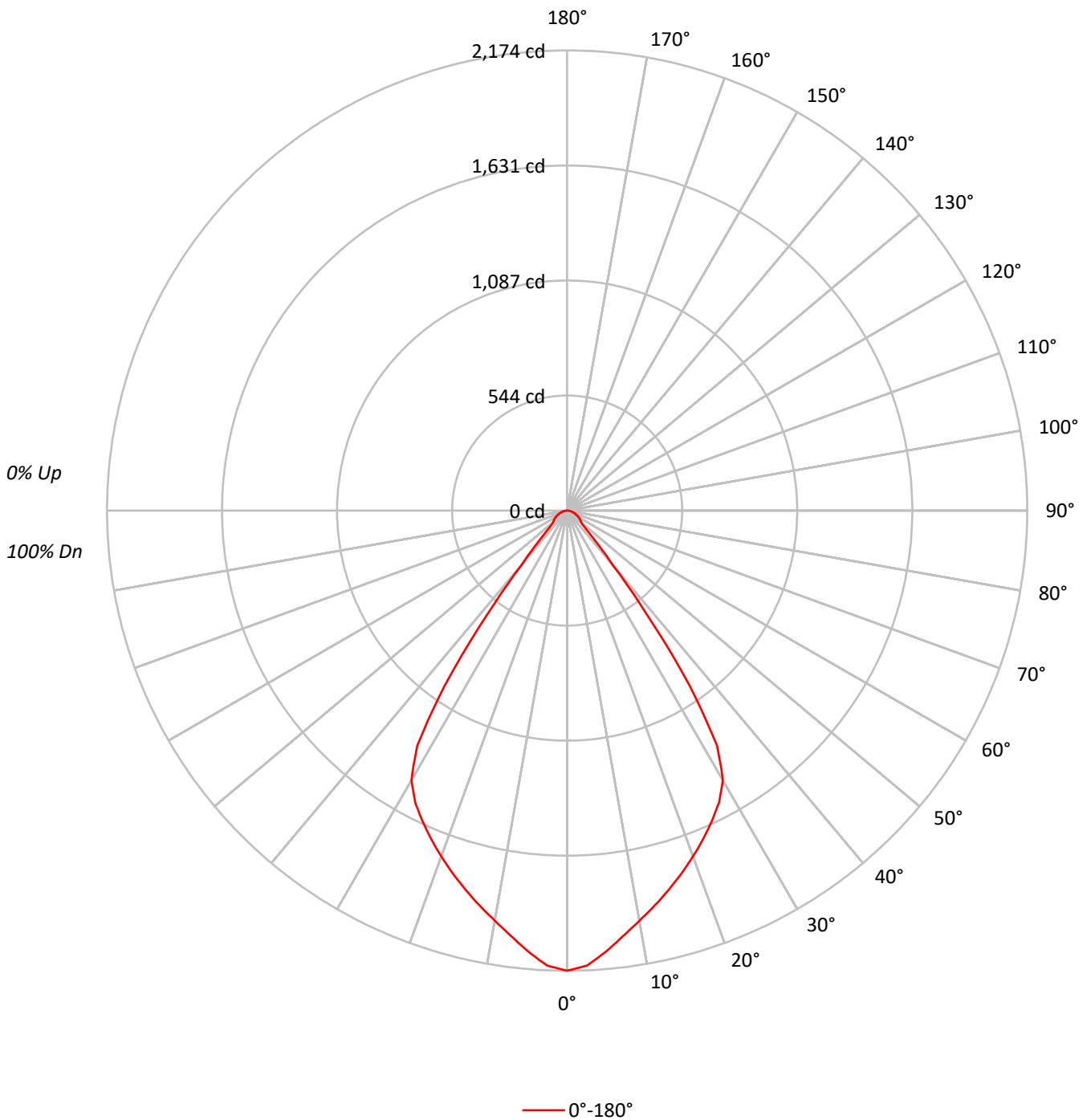
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2327.7 lumens  
Efficiency: N/A  
Efficacy: 62.1 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 0.99  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 37.5  
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: 0.5 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	113	110	107	104	110	107	105	103	103	101	99		100	98	97		96	95	94	92
2	106	101	96	93	104	99	95	92	96	93	90		93	90	88		90	88	86	84
3	100	93	88	83	98	92	87	83	89	85	81		87	83	80		84	81	79	77
4	95	87	80	76	93	85	80	75	83	78	74		81	77	74		79	76	73	71
5	90	80	74	69	88	79	73	69	78	72	68		76	71	68		74	70	67	66
6	85	75	68	64	83	74	68	64	73	67	63		71	66	63		70	66	62	61
7	80	70	64	59	79	69	63	59	68	63	58		67	62	58		66	61	58	56
8	76	66	59	55	75	65	59	55	64	58	54		63	58	54		62	57	54	52
9	72	62	55	51	71	61	55	51	60	55	51		59	54	51		58	54	50	49
10	68	58	52	48	67	58	52	48	57	51	47		56	51	47		55	50	47	46

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

	0°
0°	10724
5°	10360
10°	9855
15°	9472
20°	9127
25°	8805
30°	8380
35°	6078
40°	2160
45°	951
50°	658
55°	649
60°	612
65°	577
70°	541
75°	513
80°	483
85°	447

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 951 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	195.7	8.4
10°-20°	522.2	22.4
20°-30°	743.4	31.9
30°-40°	589.5	25.3
40°-50°	123.5	5.3
50°-60°	66.9	2.9
60°-70°	49.0	2.1
70°-80°	28.4	1.2
80°-90°	8.8	0.4
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°	1461.4	62.8
0°-40°	2050.9	88.1
0°-60°	2241.3	96.3
0°-90°	2327.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2327.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2174	
5°	2092	196
15°	1854	522
25°	1617	743
35°	1009	589
45°	136	124
55°	75	67
65°	49	49
75°	27	28
85°	8	9
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2173.6
2.5°	2151.8
5°	2091.8
7.5°	2027.4
10°	1967.0
12.5°	1910.9
15°	1854.4
17.5°	1797.5
20°	1738.3
22.5°	1679.0
25°	1617.4
27.5°	1554.2
30°	1470.9
32.5°	1317.6
35°	1009.2
37.5°	620.1
40°	335.3
42.5°	205.0
45°	136.3
47.5°	99.1
50°	85.7
52.5°	81.4
55°	75.4
57.5°	68.7
60°	62.0
62.5°	55.7
65°	49.4
67.5°	43.4
70°	37.5
72.5°	32.0
75°	26.9
77.5°	21.7
80°	17.0
82.5°	12.2
85°	7.9
87.5°	3.9
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	5.32	6.37	5.68	6.68	7.00	5.32	6.37	5.68	6.68	7.00
	3H	6.94	7.88	7.33	8.21	8.58	6.94	7.88	7.33	8.21	8.58
	4H	7.57	8.44	7.98	8.79	9.18	7.57	8.44	7.98	8.79	9.18
	6H	8.05	8.84	8.47	9.22	9.62	8.05	8.84	8.47	9.22	9.62
	8H	8.21	8.96	8.65	9.35	9.76	8.21	8.96	8.65	9.35	9.76
	12H	8.32	9.03	8.75	9.42	9.85	8.32	9.03	8.75	9.42	9.85
4H	2H	5.81	6.67	6.21	7.03	7.42	5.81	6.67	6.21	7.03	7.42
	3H	7.65	8.36	8.06	8.76	9.17	7.65	8.36	8.06	8.76	9.17
	4H	8.40	9.03	8.84	9.46	9.91	8.40	9.03	8.84	9.46	9.91
	6H	9.01	9.55	9.48	10.00	10.48	9.01	9.55	9.48	10.00	10.48
	8H	9.22	9.72	9.69	10.17	10.65	9.22	9.72	9.69	10.17	10.65
	12H	9.37	9.81	9.86	10.30	10.77	9.37	9.81	9.86	10.30	10.77
8H	4H	8.63	9.14	9.11	9.59	10.07	8.63	9.14	9.11	9.59	10.07
	6H	9.38	9.79	9.89	10.29	10.78	9.38	9.79	9.89	10.29	10.78
	8H	9.68	10.04	10.21	10.56	11.05	9.68	10.04	10.21	10.56	11.05
	12H	9.92	10.23	10.44	10.73	11.31	9.92	10.23	10.44	10.73	11.31
12H	4H	8.64	9.08	9.13	9.57	10.04	8.64	9.08	9.13	9.57	10.04
	6H	9.43	9.79	9.96	10.31	10.80	9.43	9.79	9.96	10.31	10.80
	8H	9.78	10.09	10.30	10.59	11.17	9.78	10.09	10.30	10.59	11.17