

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: P866505

Luminaire Tested: PRLX-2004-M-930-45L-L-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866505  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-55)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2004-M-930-45L-L-U-S-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS,  
BELL WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

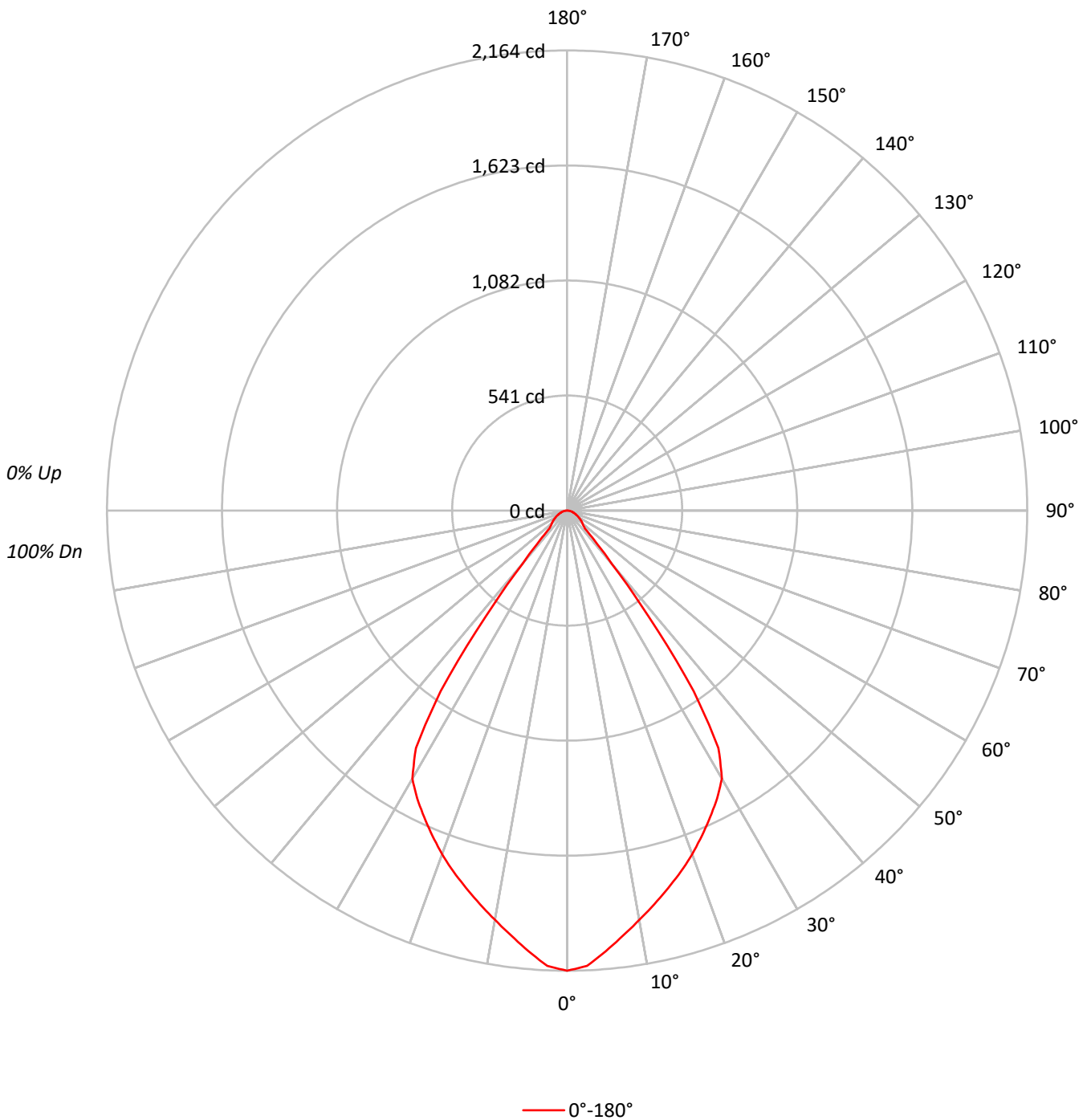
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2309.9 lumens  
Efficiency: N/A  
Efficacy: 59.5 lumens/watt  
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.8  
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	86	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	62	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°	17215
5°	16612
10°	15789
15°	15132
20°	14561
25°	13963
30°	13370
35°	10067
40°	3393
45°	1320
50°	1171
55°	1079
60°	990
65°	902
70°	835
75°	808
80°	770
85°	767

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1320 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.6	8.4
10°-20°	517.5	22.4
20°-30°	732.5	31.7
30°-40°	594.4	25.7
40°-50°	116.7	5.1
50°-60°	69.7	3.0
60°-70°	48.0	2.1
70°-80°	27.8	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°	1444.6	62.5
0°-40°	2039.0	88.3
0°-60°	2225.4	96.3
0°-90°	2309.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2309.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2164	
5°	2080	195
15°	1837	517
25°	1591	732
35°	1036	594
45°	117	117
55°	78	70
65°	48	48
75°	26	28
85°	8	9
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2163.9
2.5°	2143.6
5°	2080.1
7.5°	2015.5
10°	1954.4
12.5°	1895.8
15°	1837.2
17.5°	1779.7
20°	1719.9
22.5°	1655.2
25°	1590.6
27.5°	1527.2
30°	1455.4
32.5°	1323.7
35°	1036.5
37.5°	629.5
40°	326.7
42.5°	184.3
45°	117.3
47.5°	101.7
50°	94.6
52.5°	86.2
55°	77.8
57.5°	69.4
60°	62.2
62.5°	55.1
65°	47.9
67.5°	41.9
70°	35.9
72.5°	31.1
75°	26.3
77.5°	21.5
80°	16.8
82.5°	12.0
85°	8.4
87.5°	3.6
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	7.07	8.13	7.44	8.44	8.75	7.07	8.13	7.44	8.44	8.75
	3H	8.57	9.50	8.95	9.83	10.20	8.57	9.50	8.95	9.83	10.20
	4H	9.18	10.04	9.58	10.39	10.78	9.18	10.04	9.58	10.39	10.78
	6H	9.66	10.45	10.07	10.82	11.22	9.66	10.45	10.07	10.82	11.22
	8H	9.82	10.56	10.25	10.95	11.36	9.82	10.56	10.25	10.95	11.36
	12H	9.93	10.65	10.37	11.03	11.46	9.93	10.65	10.37	11.03	11.46
4H	2H	7.51	8.38	7.92	8.73	9.12	7.51	8.38	7.92	8.73	9.12
	3H	9.23	9.94	9.64	10.34	10.75	9.23	9.94	9.64	10.34	10.75
	4H	9.97	10.60	10.41	11.03	11.47	9.97	10.60	10.41	11.03	11.47
	6H	10.59	11.13	11.06	11.58	12.05	10.59	11.13	11.06	11.58	12.05
	8H	10.79	11.30	11.27	11.75	12.23	10.79	11.30	11.27	11.75	12.23
	12H	10.96	11.40	11.45	11.89	12.37	10.96	11.40	11.45	11.89	12.37
8H	4H	10.20	10.71	10.68	11.16	11.63	10.20	10.71	10.68	11.16	11.63
	6H	10.96	11.36	11.47	11.87	12.35	10.96	11.36	11.47	11.87	12.35
	8H	11.26	11.61	11.79	12.14	12.63	11.26	11.61	11.79	12.14	12.63
	12H	11.53	11.84	12.05	12.34	12.91	11.53	11.84	12.05	12.34	12.91
12H	4H	10.21	10.64	10.70	11.13	11.61	10.21	10.64	10.70	11.13	11.61
	6H	11.00	11.36	11.53	11.88	12.38	11.00	11.36	11.53	11.88	12.38
	8H	11.36	11.67	11.88	12.17	12.75	11.36	11.67	11.88	12.17	12.75