

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: P866629

Luminaire Tested: PRLX-2004-M-940-45L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866629  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-43)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2004-M-940-45L-G-U-S-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,  
BELL WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

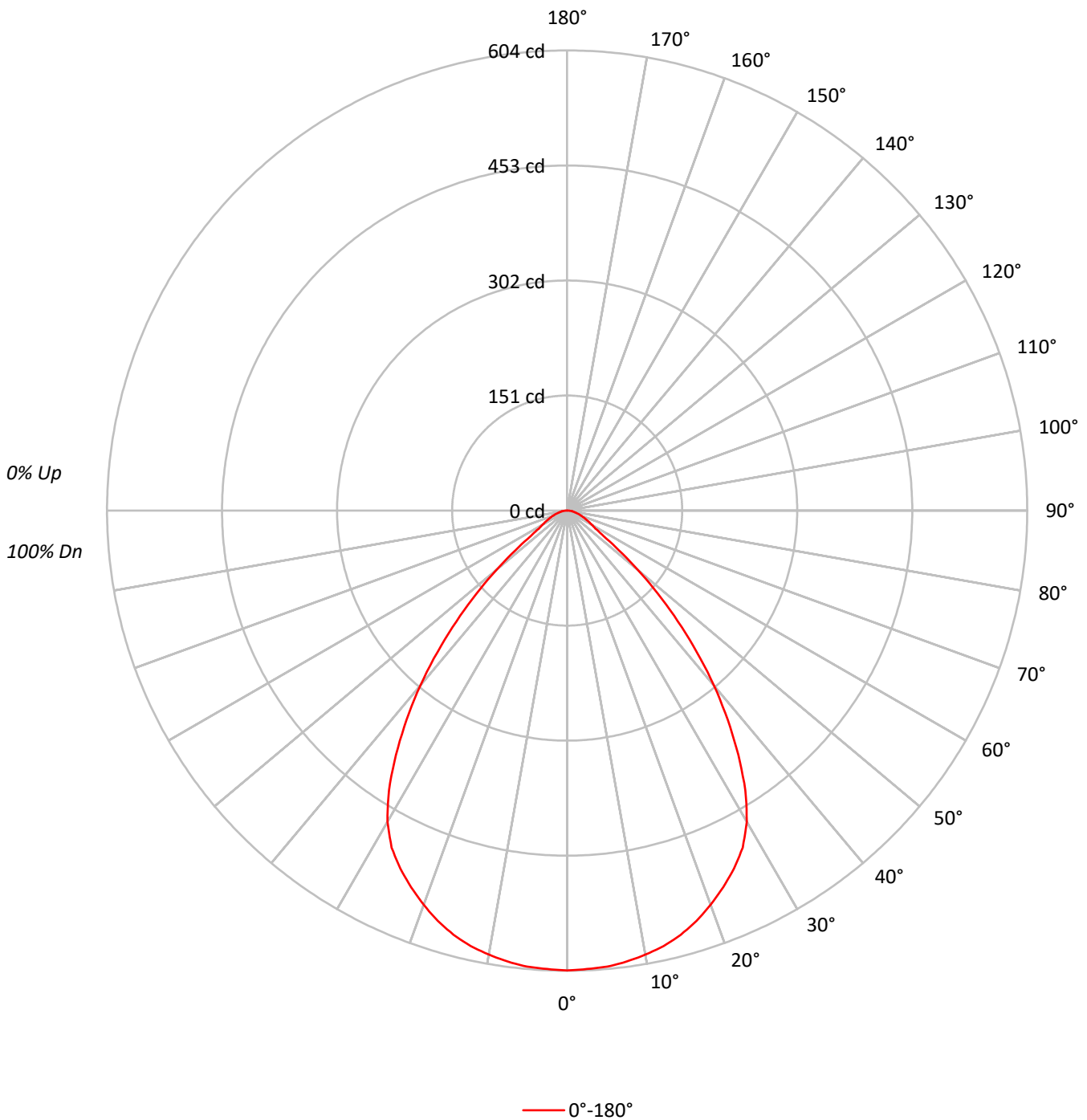
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 963.6 lumens  
Efficiency: N/A  
Efficacy: 24.8 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.14  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.8  
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	103	109	106	103	101	102	100	98		98	97	95		95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86		90	87	84		88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77		83	79	75		81	77	74	72
4	91	82	75	70	89	81	74	70	79	73	69		76	72	68		74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62		70	65	61		69	64	61	59
6	80	69	62	57	78	68	61	56	67	61	56		65	60	56		64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51		60	55	51		59	54	50	49
8	71	59	52	47	69	59	52	47	57	51	47		56	51	46		55	50	46	45
9	66	55	48	43	65	54	48	43	53	47	43		52	47	43		51	46	43	41
10	63	51	44	40	62	51	44	40	50	44	40		49	43	39		48	43	39	38

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

	0°
0°	4802
5°	4800
10°	4782
15°	4747
20°	4662
25°	4550
30°	4333
35°	3803
40°	3114
45°	2312
50°	1488
55°	807
60°	597
65°	510
70°	451
75°	397
80°	357
85°	356

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2312 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.1	5.9
10°-20°	162.3	16.8
20°-30°	237.7	24.7
30°-40°	242.7	25.2
40°-50°	158.6	16.5
50°-60°	59.0	6.1
60°-70°	27.5	2.9
70°-80°	14.1	1.5
80°-90°	4.6	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°	457.1	47.4
0°-40°	699.8	72.6
0°-60°	917.4	95.2
0°-90°	963.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	963.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	604	
5°	601	57
15°	576	162
25°	518	238
35°	392	243
45°	206	159
55°	58	59
65°	27	27
75°	13	14
85°	4	5
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	603.6
2.5°	602.3
5°	601.0
7.5°	597.1
10°	591.9
12.5°	585.5
15°	576.4
17.5°	564.8
20°	550.6
22.5°	535.1
25°	518.3
27.5°	498.9
30°	471.7
32.5°	435.5
35°	391.6
37.5°	346.4
40°	299.8
42.5°	252.0
45°	205.5
47.5°	161.6
50°	120.2
52.5°	85.3
55°	58.2
57.5°	43.9
60°	37.5
62.5°	32.3
65°	27.1
67.5°	23.3
70°	19.4
72.5°	16.8
75°	12.9
77.5°	10.3
80°	7.8
82.5°	6.5
85°	3.9
87.5°	2.6
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	6.65	7.91	7.01	8.22	8.54	6.65	7.91	7.01	8.22	8.54
	3H	7.85	8.96	8.23	9.29	9.65	7.85	8.96	8.23	9.29	9.65
	4H	8.29	9.32	8.69	9.67	10.05	8.29	9.32	8.69	9.67	10.05
	6H	8.59	9.54	9.01	9.91	10.31	8.59	9.54	9.01	9.91	10.31
	8H	8.72	9.62	9.15	10.01	10.42	8.72	9.62	9.15	10.01	10.42
	12H	8.81	9.67	9.25	10.05	10.48	8.81	9.67	9.25	10.05	10.48
4H	2H	7.02	8.05	7.42	8.40	8.79	7.02	8.05	7.42	8.40	8.79
	3H	8.44	9.28	8.85	9.68	10.09	8.44	9.28	8.85	9.68	10.09
	4H	8.98	9.73	9.41	10.15	10.59	8.98	9.73	9.41	10.15	10.59
	6H	9.40	10.05	9.87	10.50	10.96	9.40	10.05	9.87	10.50	10.96
	8H	9.58	10.19	10.05	10.63	11.11	9.58	10.19	10.05	10.63	11.11
	12H	9.72	10.25	10.21	10.74	11.21	9.72	10.25	10.21	10.74	11.21
8H	4H	9.14	9.75	9.61	10.19	10.67	9.14	9.75	9.61	10.19	10.67
	6H	9.68	10.17	10.18	10.67	11.15	9.68	10.17	10.18	10.67	11.15
	8H	9.94	10.39	10.47	10.90	11.40	9.94	10.39	10.47	10.90	11.40
	12H	10.17	10.56	10.68	11.05	11.63	10.17	10.56	10.68	11.05	11.63
12H	4H	9.14	9.67	9.62	10.15	10.63	9.14	9.67	9.62	10.15	10.63
	6H	9.70	10.15	10.23	10.66	11.16	9.70	10.15	10.23	10.66	11.16
	8H	10.03	10.42	10.55	10.92	11.49	10.03	10.42	10.55	10.92	11.49