

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: P866181

Luminaire Tested: PRLX-2002-M-927-45L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866181  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-39)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-927-45L-G-U-S-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

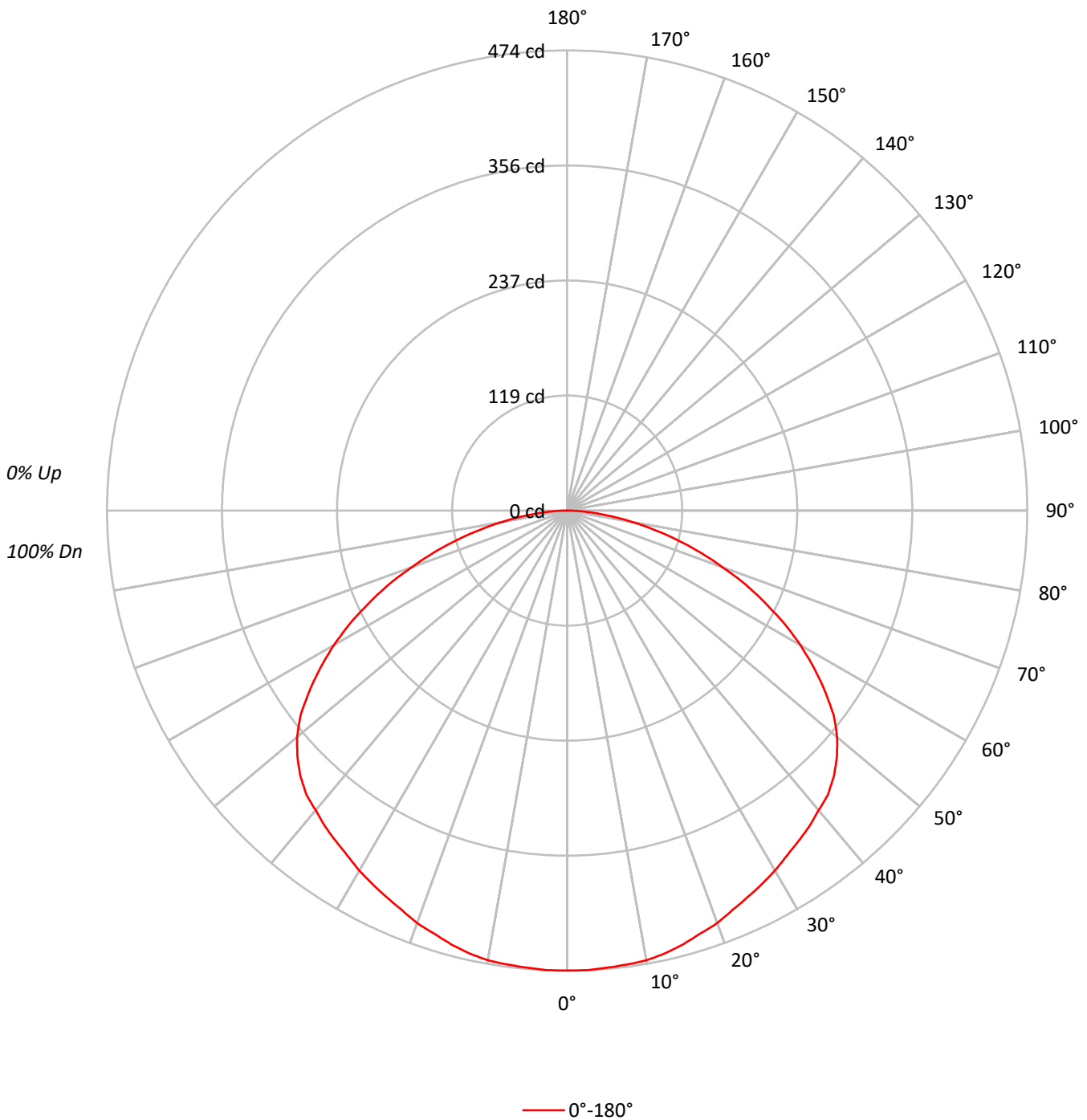
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1607.8 lumens  
Efficiency: N/A  
Efficacy: 41.4 lumens/watt  
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.53  
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	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73		80	76	72		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	58	56
4	81	68	59	52	78	67	58	52	64	57	51		62	56	50		60	54	50	47
5	74	61	51	44	72	59	51	44	57	50	44		55	48	43		53	47	43	40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44	37	33	31
8	59	45	36	30	57	44	35	30	42	35	29		41	34	29		40	34	29	27
9	55	41	32	27	53	40	32	26	39	31	26		38	31	26		37	31	26	24
10	51	37	29	24	50	37	29	24	36	29	24		35	28	24		34	28	23	22

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

	0°
0°	3769
5°	3775
10°	3800
15°	3809
20°	3828
25°	3859
30°	3934
35°	4036
40°	4185
45°	4368
50°	4494
55°	4498
60°	4415
65°	4234
70°	3957
75°	3615
80°	3138
85°	2501

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 4522 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.1	2.8
10°-20°	130.6	8.1
20°-30°	203.2	12.6
30°-40°	260.8	16.2
40°-50°	298.8	18.6
50°-60°	289.0	18.0
60°-70°	222.6	13.8
70°-80°	124.8	7.8
80°-90°	32.9	2.0
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°	378.9	23.6
0°-40°	639.7	39.8
0°-60°	1227.5	76.3
0°-90°	1607.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1607.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	474	
5°	473	45
15°	462	131
25°	440	203
35°	416	261
45°	388	299
55°	324	289
65°	225	223
75°	118	125
85°	27	33
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	473.8
2.5°	473.8
5°	472.7
7.5°	471.6
10°	470.4
12.5°	467.0
15°	462.4
17.5°	456.7
20°	452.1
22.5°	445.3
25°	439.6
27.5°	433.9
30°	428.2
32.5°	421.3
35°	415.6
37.5°	409.9
40°	403.0
42.5°	397.3
45°	388.2
47.5°	376.8
50°	363.1
52.5°	346.0
55°	324.3
57.5°	301.4
60°	277.5
62.5°	252.3
65°	224.9
67.5°	198.7
70°	170.1
72.5°	143.9
75°	117.6
77.5°	92.5
80°	68.5
82.5°	46.8
85°	27.4
87.5°	12.6
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	17.72	19.43	18.09	19.74	20.06	17.72	19.43	18.09	19.74	20.06
	3H	19.53	21.08	19.91	21.40	21.76	19.53	21.08	19.91	21.40	21.76
	4H	20.19	21.64	20.58	21.99	22.36	20.19	21.64	20.58	21.99	22.36
	6H	20.65	22.00	21.06	22.37	22.76	20.65	22.00	21.06	22.37	22.76
	8H	20.79	22.08	21.21	22.47	22.87	20.79	22.08	21.21	22.47	22.87
	12H	20.88	22.12	21.31	22.50	22.93	20.88	22.12	21.31	22.50	22.93
4H	2H	18.38	19.83	18.77	20.18	20.55	18.38	19.83	18.77	20.18	20.55
	3H	20.40	21.62	20.80	22.02	22.42	20.40	21.62	20.80	22.02	22.42
	4H	21.17	22.28	21.60	22.70	23.13	21.17	22.28	21.60	22.70	23.13
	6H	21.76	22.73	22.21	23.17	23.62	21.76	22.73	22.21	23.17	23.62
	8H	21.94	22.85	22.40	23.29	23.76	21.94	22.85	22.40	23.29	23.76
	12H	22.07	22.89	22.55	23.36	23.83	22.07	22.89	22.55	23.36	23.83
8H	4H	21.48	22.39	21.94	22.84	23.30	21.48	22.39	21.94	22.84	23.30
	6H	22.18	22.94	22.67	23.43	23.90	22.18	22.94	22.67	23.43	23.90
	8H	22.43	23.11	22.94	23.62	24.10	22.43	23.11	22.94	23.62	24.10
	12H	22.62	23.22	23.13	23.71	24.27	22.62	23.22	23.13	23.71	24.27
12H	4H	21.52	22.34	22.00	22.81	23.28	21.52	22.34	22.00	22.81	23.28
	6H	22.23	22.91	22.74	23.42	23.90	22.23	22.91	22.74	23.42	23.90
	8H	22.54	23.14	23.04	23.63	24.19	22.54	23.14	23.04	23.63	24.19