

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: P866186

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

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866186  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-52)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-927-45L-L-U-S-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

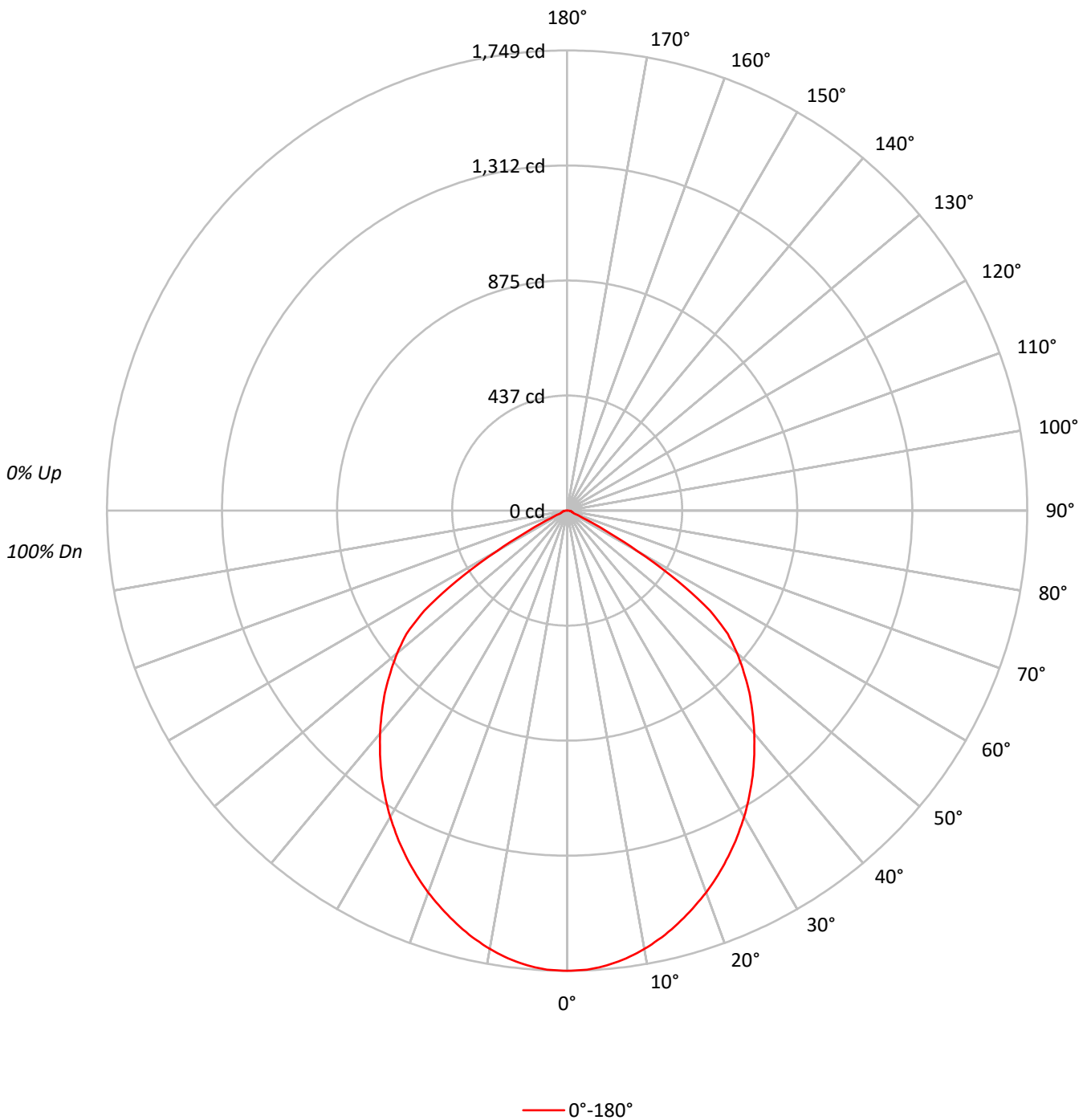
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3503.1 lumens  
Efficiency: N/A  
Efficacy: 90.3 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.27  
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	63	57	80	70	63	57	68	61	56	66	60	56	64	59	55	53
6	76	64	56	51	74	64	56	51	62	55	50	60	54	50	59	53	49	48
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	48	44	43
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	40	36	35
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

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

	0°
0°	13916
5°	13860
10°	13670
15°	13392
20°	13079
25°	12729
30°	12356
35°	11943
40°	11491
45°	11022
50°	10444
55°	9202
60°	4906
65°	1290
70°	530
75°	596
80°	678
85°	831

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11022 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.3	4.7
10°-20°	457.9	13.1
20°-30°	667.6	19.1
30°-40°	768.4	21.9
40°-50°	753.9	21.5
50°-60°	558.4	15.9
60°-70°	103.1	2.9
70°-80°	20.3	0.6
80°-90°	9.2	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°	1289.8	36.8
0°-40°	2058.2	58.8
0°-60°	3370.5	96.2
0°-90°	3503.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3503.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1749	
5°	1736	164
15°	1626	458
25°	1450	668
35°	1230	768
45°	980	754
55°	663	558
65°	68	103
75°	19	20
85°	9	9
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1749.2
2.5°	1746.9
5°	1735.5
7.5°	1717.2
10°	1692.1
12.5°	1661.3
15°	1625.9
17.5°	1585.9
20°	1544.8
22.5°	1499.2
25°	1450.1
27.5°	1398.7
30°	1345.0
32.5°	1287.9
35°	1229.7
37.5°	1168.0
40°	1106.4
42.5°	1042.4
45°	979.6
47.5°	911.1
50°	843.8
52.5°	769.6
55°	663.4
57.5°	501.2
60°	308.3
62.5°	158.7
65°	68.5
67.5°	29.7
70°	22.8
72.5°	21.7
75°	19.4
77.5°	17.1
80°	14.8
82.5°	12.6
85°	9.1
87.5°	4.6
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	18.74	20.17	19.11	20.48	20.80	18.74	20.17	19.11	20.48	20.80
	3H	18.64	19.90	19.02	20.23	20.59	18.64	19.90	19.02	20.23	20.59
	4H	18.59	19.76	18.99	20.11	20.49	18.59	19.76	18.99	20.11	20.49
	6H	18.53	19.61	18.95	19.97	20.37	18.53	19.61	18.95	19.97	20.37
	8H	18.50	19.52	18.93	19.91	20.31	18.50	19.52	18.93	19.91	20.31
	12H	18.48	19.45	18.91	19.83	20.26	18.48	19.45	18.91	19.83	20.26
4H	2H	18.60	19.76	19.00	20.11	20.50	18.60	19.76	19.00	20.11	20.50
	3H	18.51	19.45	18.92	19.85	20.25	18.51	19.45	18.92	19.85	20.25
	4H	18.45	19.29	18.88	19.70	20.15	18.45	19.29	18.88	19.70	20.15
	6H	18.40	19.12	18.86	19.57	20.04	18.40	19.12	18.86	19.57	20.04
	8H	18.37	19.04	18.83	19.49	19.96	18.37	19.04	18.83	19.49	19.96
	12H	18.34	18.94	18.83	19.42	19.90	18.34	18.94	18.83	19.42	19.90
8H	4H	18.33	19.01	18.80	19.45	19.92	18.33	19.01	18.80	19.45	19.92
	6H	18.27	18.83	18.77	19.32	19.81	18.27	18.83	18.77	19.32	19.81
	8H	18.24	18.74	18.75	19.26	19.75	18.24	18.74	18.75	19.26	19.75
	12H	18.22	18.67	18.73	19.17	19.74	18.22	18.67	18.73	19.17	19.74
12H	4H	18.29	18.89	18.77	19.37	19.84	18.29	18.89	18.77	19.37	19.84
	6H	18.21	18.72	18.73	19.23	19.73	18.21	18.72	18.73	19.23	19.73
	8H	18.20	18.66	18.71	19.15	19.72	18.20	18.66	18.71	19.15	19.72