

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: P866246

Luminaire Tested: PRLX-2002-M-930-45L-G-U-S-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866246  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-40)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-930-45L-G-U-S-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

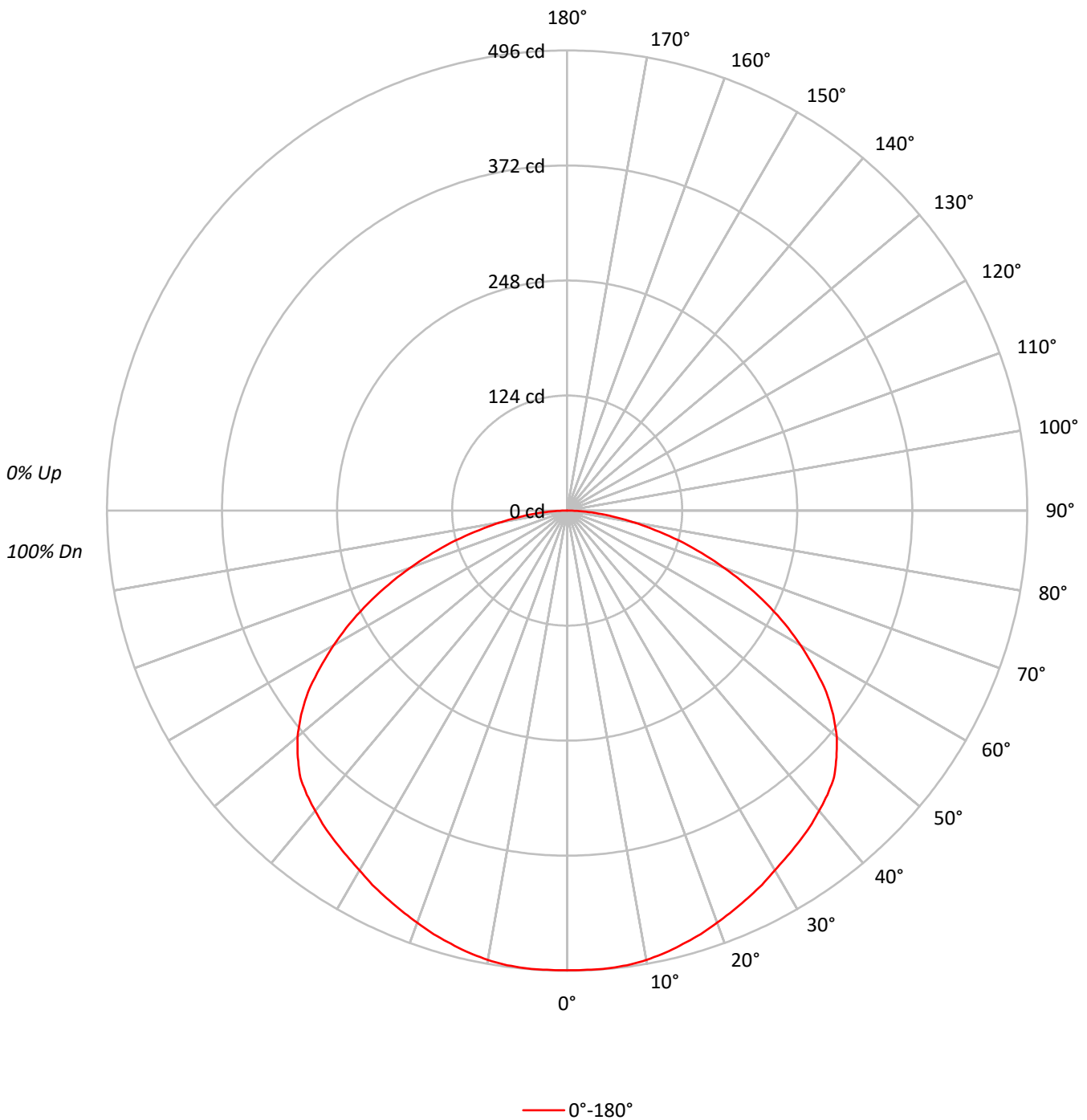
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1686.3 lumens  
Efficiency: N/A  
Efficacy: 43.5 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	59	68	63	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	59	51	44	57	49	44	55	48	43	53	47	43	40
6	68	54	45	38	66	53	44	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	58	44	36	30	57	44	35	30	42	35	29	41	34	29	40	34	29	27
9	55	41	32	26	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°	3942
5°	3957
10°	3974
15°	3982
20°	4003
25°	4045
30°	4112
35°	4232
40°	4388
45°	4578
50°	4696
55°	4731
60°	4627
65°	4462
70°	4175
75°	3827
80°	3345
85°	2729

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 55°  
 Luminance: 4731 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.2	2.8
10°-20°	136.7	8.1
20°-30°	212.9	12.6
30°-40°	273.3	16.2
40°-50°	312.6	18.5
50°-60°	302.8	18.0
60°-70°	233.8	13.9
70°-80°	131.7	7.8
80°-90°	35.3	2.1
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°	396.8	23.5
0°-40°	670.1	39.7
0°-60°	1285.5	76.2
0°-90°	1686.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1686.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	496	
5°	496	47
15°	484	137
25°	461	213
35°	436	273
45°	407	313
55°	341	303
65°	237	234
75°	124	132
85°	30	35
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	495.5
2.5°	495.5
5°	495.5
7.5°	494.3
10°	491.9
12.5°	488.3
15°	483.5
17.5°	478.7
20°	472.8
22.5°	466.8
25°	460.8
27.5°	454.8
30°	447.6
32.5°	441.6
35°	435.7
37.5°	429.7
40°	422.5
42.5°	415.3
45°	406.9
47.5°	393.8
50°	379.4
52.5°	361.4
55°	341.1
57.5°	316.0
60°	290.8
62.5°	264.5
65°	237.0
67.5°	208.3
70°	179.5
72.5°	152.0
75°	124.5
77.5°	96.9
80°	73.0
82.5°	50.3
85°	29.9
87.5°	13.2
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	17.89	19.59	18.25	19.90	20.22	17.89	19.59	18.25	19.90	20.22
	3H	19.70	21.25	20.08	21.57	21.93	19.70	21.25	20.08	21.57	21.93
	4H	20.37	21.82	20.76	22.17	22.54	20.37	21.82	20.76	22.17	22.54
	6H	20.83	22.18	21.24	22.55	22.94	20.83	22.18	21.24	22.55	22.94
	8H	20.98	22.27	21.40	22.66	23.06	20.98	22.27	21.40	22.66	23.06
	12H	21.07	22.31	21.50	22.69	23.12	21.07	22.31	21.50	22.69	23.12
4H	2H	18.55	20.00	18.94	20.35	20.72	18.55	20.00	18.94	20.35	20.72
	3H	20.57	21.80	20.98	22.20	22.60	20.57	21.80	20.98	22.20	22.60
	4H	21.36	22.47	21.79	22.88	23.32	21.36	22.47	21.79	22.88	23.32
	6H	21.95	22.92	22.40	23.36	23.81	21.95	22.92	22.40	23.36	23.81
	8H	22.14	23.05	22.60	23.49	23.96	22.14	23.05	22.60	23.49	23.96
	12H	22.28	23.10	22.75	23.57	24.04	22.28	23.10	22.75	23.57	24.04
8H	4H	21.67	22.58	22.13	23.03	23.49	21.67	22.58	22.13	23.03	23.49
	6H	22.37	23.14	22.87	23.62	24.09	22.37	23.14	22.87	23.62	24.09
	8H	22.64	23.32	23.14	23.82	24.31	22.64	23.32	23.14	23.82	24.31
	12H	22.84	23.44	23.34	23.93	24.49	22.84	23.44	23.34	23.93	24.49
12H	4H	21.71	22.53	22.19	23.00	23.47	21.71	22.53	22.19	23.00	23.47
	6H	22.43	23.11	22.94	23.62	24.10	22.43	23.11	22.94	23.62	24.10
	8H	22.75	23.35	23.25	23.84	24.40	22.75	23.35	23.25	23.84	24.40