

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: P866357

Luminaire Tested: PRLX-2002-M-940-25L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866357  
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-940-25L-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 3  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

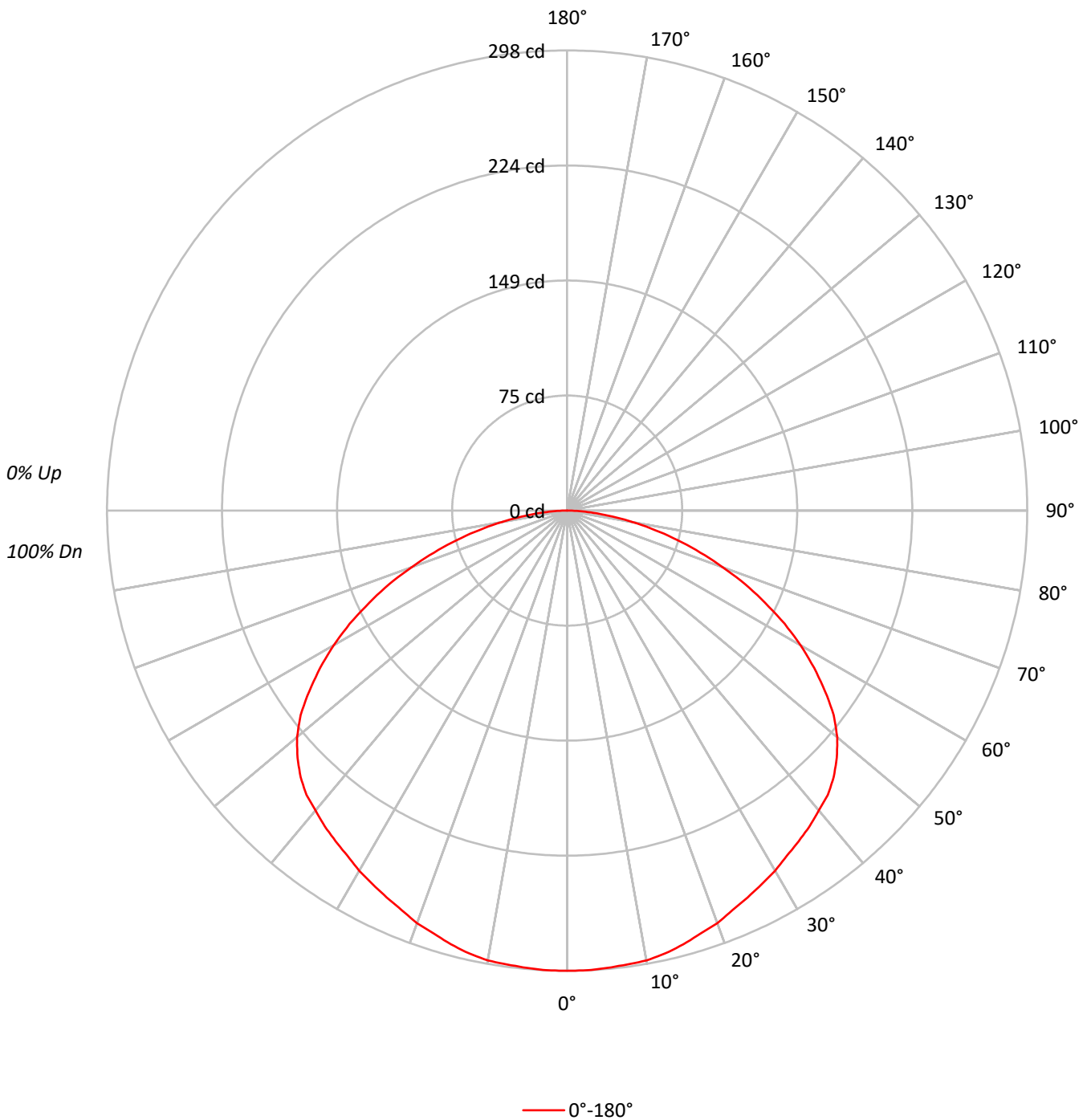
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1011.1 lumens  
Efficiency: N/A  
Efficacy: 46.6 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): 21.7  
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°	2371
5°	2374
10°	2390
15°	2395
20°	2407
25°	2426
30°	2474
35°	2539
40°	2633
45°	2746
50°	2826
55°	2828
60°	2777
65°	2662
70°	2489
75°	2275
80°	1975
85°	1570

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 2844 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.3	2.8
10°-20°	82.2	8.1
20°-30°	127.8	12.6
30°-40°	164.0	16.2
40°-50°	187.9	18.6
50°-60°	181.8	18.0
60°-70°	140.0	13.8
70°-80°	78.5	7.8
80°-90°	20.7	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°	238.3	23.6
0°-40°	402.3	39.8
0°-60°	771.9	76.3
0°-90°	1011.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1011.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	298	
5°	297	28
15°	291	82
25°	276	128
35°	261	164
45°	244	188
55°	204	182
65°	141	140
75°	74	78
85°	17	21
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	298.0
2.5°	298.0
5°	297.3
7.5°	296.5
10°	295.8
12.5°	293.7
15°	290.8
17.5°	287.2
20°	284.3
22.5°	280.0
25°	276.4
27.5°	272.8
30°	269.3
32.5°	264.9
35°	261.4
37.5°	257.8
40°	253.5
42.5°	249.9
45°	244.1
47.5°	236.9
50°	228.3
52.5°	217.6
55°	203.9
57.5°	189.6
60°	174.5
62.5°	158.7
65°	141.4
67.5°	124.9
70°	107.0
72.5°	90.5
75°	74.0
77.5°	58.2
80°	43.1
82.5°	29.4
85°	17.2
87.5°	7.9
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	16.12	17.82	16.48	18.13	18.45	16.12	17.82	16.48	18.13	18.45
	3H	17.92	19.47	18.30	19.79	20.15	17.92	19.47	18.30	19.79	20.15
	4H	18.58	20.03	18.97	20.38	20.75	18.58	20.03	18.97	20.38	20.75
	6H	19.04	20.39	19.45	20.76	21.15	19.04	20.39	19.45	20.76	21.15
	8H	19.18	20.47	19.60	20.86	21.26	19.18	20.47	19.60	20.86	21.26
	12H	19.27	20.51	19.70	20.89	21.32	19.27	20.51	19.70	20.89	21.32
4H	2H	16.77	18.22	17.16	18.57	18.94	16.77	18.22	17.16	18.57	18.94
	3H	18.79	20.01	19.19	20.41	20.81	18.79	20.01	19.19	20.41	20.81
	4H	19.56	20.67	19.99	21.09	21.52	19.56	20.67	19.99	21.09	21.52
	6H	20.15	21.12	20.60	21.56	22.01	20.15	21.12	20.60	21.56	22.01
	8H	20.33	21.24	20.79	21.68	22.15	20.33	21.24	20.79	21.68	22.15
	12H	20.46	21.28	20.94	21.75	22.22	20.46	21.28	20.94	21.75	22.22
8H	4H	19.87	20.78	20.33	21.23	21.69	19.87	20.78	20.33	21.23	21.69
	6H	20.57	21.33	21.06	21.82	22.29	20.57	21.33	21.06	21.82	22.29
	8H	20.82	21.50	21.33	22.01	22.49	20.82	21.50	21.33	22.01	22.49
	12H	21.01	21.61	21.52	22.10	22.66	21.01	21.61	21.52	22.10	22.66
12H	4H	19.91	20.73	20.39	21.20	21.67	19.91	20.73	20.39	21.20	21.67
	6H	20.62	21.31	21.13	21.81	22.29	20.62	21.31	21.13	21.81	22.29
	8H	20.93	21.53	21.43	22.02	22.58	20.93	21.53	21.43	22.02	22.58