

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: P866403

Luminaire Tested: PRLX-2002-M-940-75L-L-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866403  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-50)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-940-75L-L-U-S-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 8  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

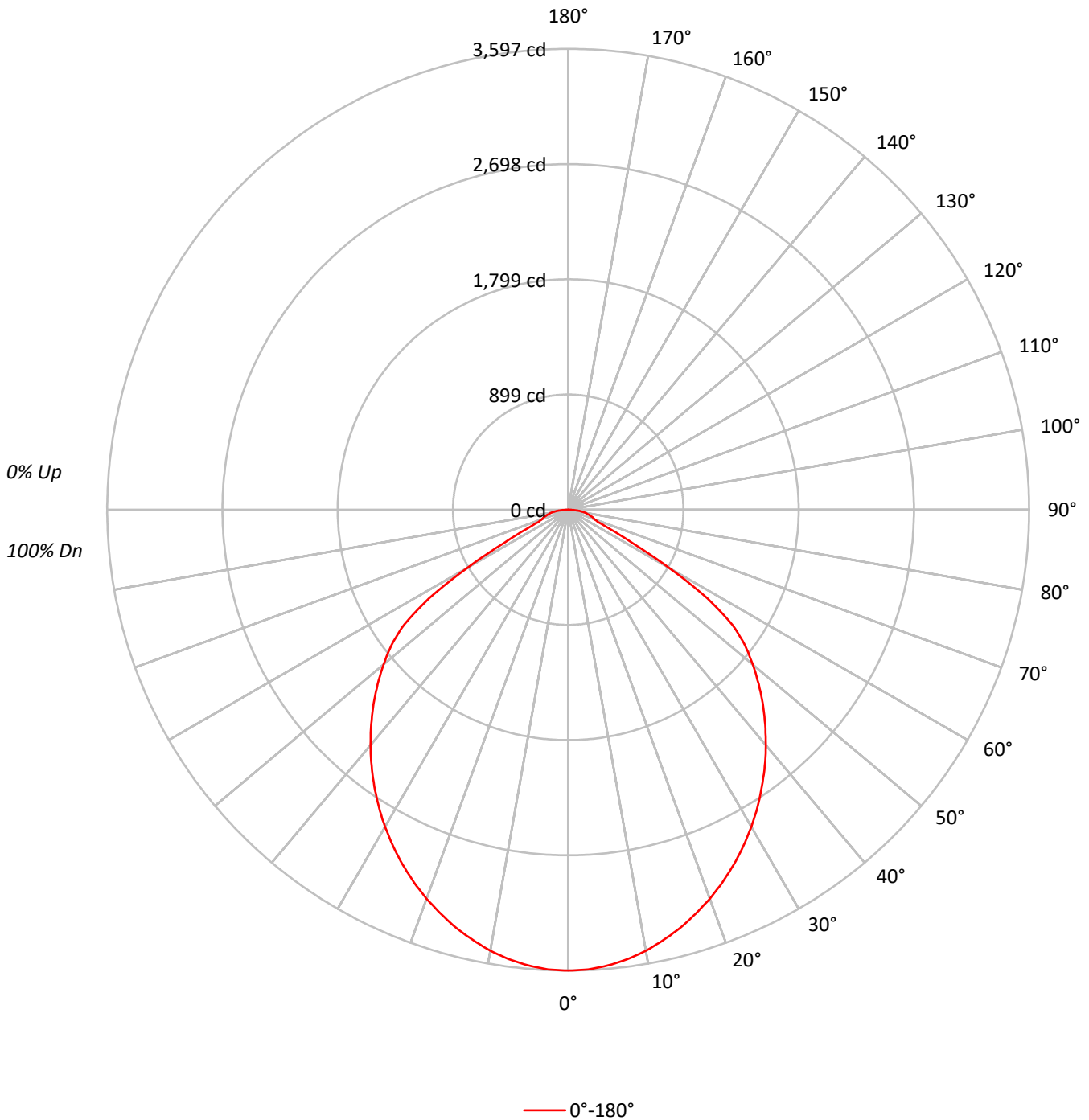
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8034.3 lumens  
Efficiency: N/A  
Efficacy: 115.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 69.7  
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: 0.333 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	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	51	47	56	51	46	44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	40
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

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

	0°
0°	28618
5°	28522
10°	28242
15°	27837
20°	27355
25°	26831
30°	26259
35°	25606
40°	24921
45°	24163
50°	23275
55°	21691
60°	14567
65°	6894
70°	5062
75°	5428
80°	6020
85°	6682

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 24163 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	338.5	4.2
10°-20°	952.1	11.9
20°-30°	1407.6	17.5
30°-40°	1649.1	20.5
40°-50°	1655.4	20.6
50°-60°	1336.0	16.6
60°-70°	431.9	5.4
70°-80°	186.5	2.3
80°-90°	77.1	1.0
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°	2698.2	33.6
0°-40°	4347.4	54.1
0°-60°	7338.8	91.3
0°-90°	8034.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8034.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3597	
5°	3571	339
15°	3380	952
25°	3057	1408
35°	2636	1649
45°	2148	1655
55°	1564	1336
65°	366	432
75°	177	187
85°	73	77
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3597.2
2.5°	3592.9
5°	3571.4
7.5°	3539.1
10°	3496.0
12.5°	3440.0
15°	3379.7
17.5°	3306.4
20°	3231.0
22.5°	3147.0
25°	3056.6
27.5°	2959.6
30°	2858.4
32.5°	2750.7
35°	2636.5
37.5°	2520.2
40°	2399.6
42.5°	2274.6
45°	2147.6
47.5°	2016.2
50°	1880.5
52.5°	1740.4
55°	1563.8
57.5°	1290.3
60°	915.5
62.5°	573.0
65°	366.2
67.5°	252.0
70°	217.6
72.5°	200.3
75°	176.6
77.5°	155.1
80°	131.4
82.5°	105.5
85°	73.2
87.5°	38.8
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	22.39	23.89	22.75	24.20	24.52	22.39	23.89	22.75	24.20	24.52
	3H	22.50	23.83	22.87	24.16	24.52	22.50	23.83	22.87	24.16	24.52
	4H	22.58	23.83	22.98	24.18	24.56	22.58	23.83	22.98	24.18	24.56
	6H	22.70	23.84	23.11	24.21	24.60	22.70	23.84	23.11	24.21	24.60
	8H	22.75	23.84	23.18	24.23	24.63	22.75	23.84	23.18	24.23	24.63
	12H	22.80	23.84	23.23	24.23	24.66	22.80	23.84	23.23	24.23	24.66
4H	2H	22.35	23.60	22.75	23.95	24.32	22.35	23.60	22.75	23.95	24.32
	3H	22.56	23.57	22.97	23.97	24.38	22.56	23.57	22.97	23.97	24.38
	4H	22.71	23.62	23.15	24.04	24.48	22.71	23.62	23.15	24.04	24.48
	6H	22.93	23.72	23.39	24.17	24.63	22.93	23.72	23.39	24.17	24.63
	8H	23.04	23.78	23.50	24.22	24.69	23.04	23.78	23.50	24.22	24.69
	12H	23.14	23.80	23.62	24.28	24.75	23.14	23.80	23.62	24.28	24.75
8H	4H	22.73	23.47	23.19	23.91	24.38	22.73	23.47	23.19	23.91	24.38
	6H	23.03	23.64	23.53	24.13	24.61	23.03	23.64	23.53	24.13	24.61
	8H	23.20	23.75	23.71	24.26	24.75	23.20	23.75	23.71	24.26	24.75
	12H	23.37	23.87	23.88	24.36	24.93	23.37	23.87	23.88	24.36	24.93
12H	4H	22.72	23.38	23.20	23.86	24.33	22.72	23.38	23.20	23.86	24.33
	6H	23.03	23.59	23.55	24.10	24.59	23.03	23.59	23.55	24.10	24.59
	8H	23.25	23.75	23.76	24.24	24.80	23.25	23.75	23.76	24.24	24.80