

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: P867115

Luminaire Tested: PRLX-2002-L-940-100L-G-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867115  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-68)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-940-100L-G-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 6  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

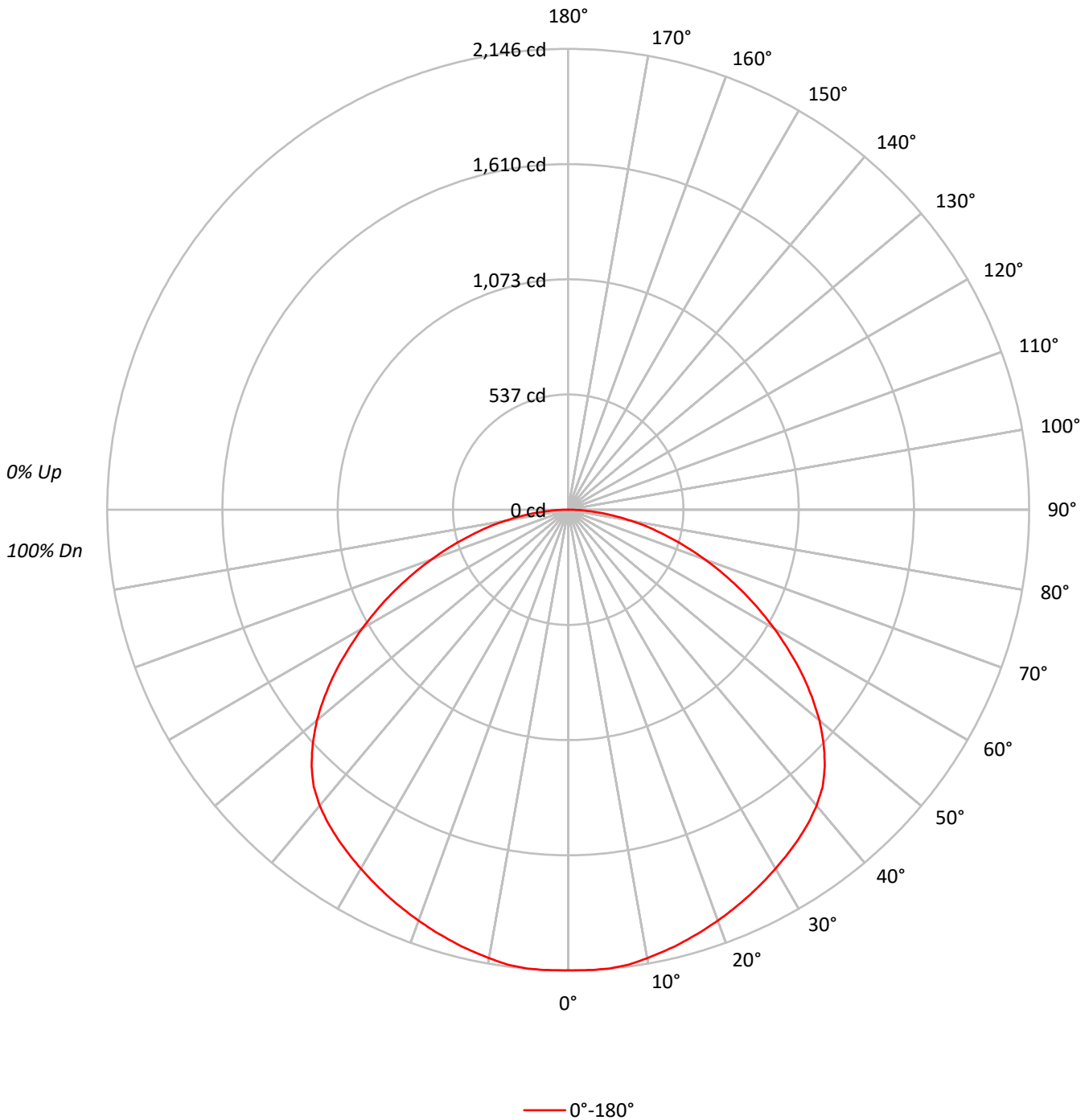
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6903.3 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 1.35 / 1.35 / 1.49  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 79.4  
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	108	103	99	95	106	101	97	93	97	94	90		93	90	88		89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68	64	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	45	73	60	52	45	58	51	45		56	49	44		54	48	44	42
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	27	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	24		35	29	24	23

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

	0°
0°	10585
5°	10625
10°	10622
15°	10635
20°	10693
25°	10809
30°	10994
35°	11266
40°	11586
45°	11787
50°	11719
55°	11408
60°	10932
65°	10376
70°	9753
75°	9101
80°	8444
85°	7518

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11787 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.0	3.0
10°-20°	588.6	8.5
20°-30°	917.2	13.3
30°-40°	1172.2	17.0
40°-50°	1297.8	18.8
50°-60°	1182.8	17.1
60°-70°	881.2	12.8
70°-80°	508.7	7.4
80°-90°	150.8	2.2
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°	1709.8	24.8
0°-40°	2882.0	41.7
0°-60°	5362.5	77.7
0°-90°	6903.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6903.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2145	
5°	2145	204
15°	2082	589
25°	1986	917
35°	1870	1172
45°	1689	1298
55°	1326	1183
65°	889	881
75°	477	509
85°	133	151
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2145.3
2.5°	2146.2
5°	2145.3
7.5°	2137.9
10°	2120.2
12.5°	2102.6
15°	2082.1
17.5°	2059.9
20°	2036.6
22.5°	2011.6
25°	1985.6
27.5°	1958.6
30°	1929.8
32.5°	1901.0
35°	1870.4
37.5°	1837.9
40°	1798.9
42.5°	1752.5
45°	1689.3
47.5°	1613.2
50°	1526.8
52.5°	1429.3
55°	1326.2
57.5°	1216.6
60°	1107.9
62.5°	998.4
65°	888.8
67.5°	782.9
70°	676.1
72.5°	576.7
75°	477.4
77.5°	388.2
80°	297.2
82.5°	211.7
85°	132.8
87.5°	61.3
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	20.73	22.40	21.09	22.72	23.03	20.73	22.40	21.09	22.72	23.03
	3H	22.47	23.99	22.85	24.32	24.68	22.47	23.99	22.85	24.32	24.68
	4H	23.14	24.57	23.54	24.92	25.29	23.14	24.57	23.54	24.92	25.29
	6H	23.66	24.99	24.07	25.35	25.74	23.66	24.99	24.07	25.35	25.74
	8H	23.83	25.10	24.26	25.49	25.89	23.83	25.10	24.26	25.49	25.89
	12H	23.96	25.17	24.38	25.56	25.98	23.96	25.17	24.38	25.56	25.98
4H	2H	21.34	22.78	21.74	23.12	23.50	21.34	22.78	21.74	23.12	23.50
	3H	23.32	24.52	23.73	24.92	25.32	23.32	24.52	23.73	24.92	25.32
	4H	24.12	25.21	24.55	25.62	26.06	24.12	25.21	24.55	25.62	26.06
	6H	24.77	25.73	25.22	26.17	26.62	24.77	25.73	25.22	26.17	26.62
	8H	25.00	25.89	25.46	26.34	26.80	25.00	25.89	25.46	26.34	26.80
	12H	25.17	25.98	25.65	26.45	26.92	25.17	25.98	25.65	26.45	26.92
8H	4H	24.44	25.34	24.90	25.78	26.24	24.44	25.34	24.90	25.78	26.24
	6H	25.22	25.97	25.72	26.46	26.93	25.22	25.97	25.72	26.46	26.93
	8H	25.53	26.20	26.04	26.70	27.19	25.53	26.20	26.04	26.70	27.19
	12H	25.78	26.38	26.29	26.87	27.42	25.78	26.38	26.29	26.87	27.42
12H	4H	24.48	25.29	24.96	25.76	26.23	24.48	25.29	24.96	25.76	26.23
	6H	25.29	25.96	25.80	26.47	26.95	25.29	25.96	25.80	26.47	26.95
	8H	25.66	26.25	26.16	26.74	27.30	25.66	26.25	26.16	26.74	27.30