

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: P867112

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

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867112  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-71)  
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-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 6  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

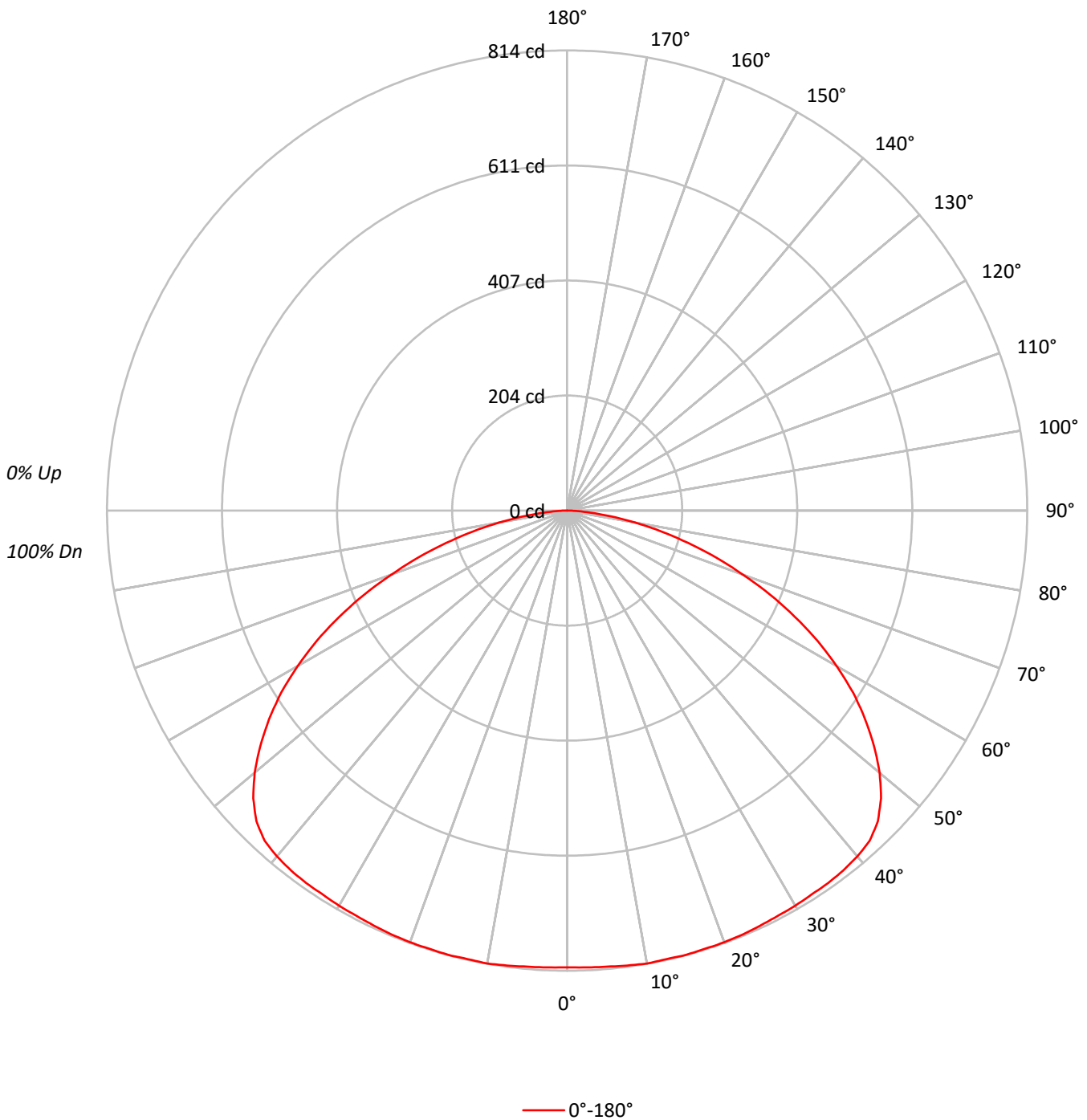
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3083.8 lumens  
Efficiency: N/A  
Efficacy: 38.8 lumens/watt  
Spacing Criteria (0/90/45): 1.52 / 1.52 / 1.65  
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: 0.5 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	71	77	73	70	68
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	56	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	44	38	66	53	44	37	51	43	37	49	42	37	48	41	36	34
7	63	48	39	33	61	48	39	33	46	38	32	44	37	32	43	37	32	30
8	58	44	35	29	56	43	35	29	42	34	29	41	34	28	39	33	28	26
9	54	40	32	26	53	39	31	26	38	31	26	37	30	25	36	30	25	23
10	50	37	29	23	49	36	28	23	35	28	23	34	28	23	33	27	23	21

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

	0°
0°	3987
5°	4011
10°	4076
15°	4155
20°	4267
25°	4408
30°	4598
35°	4844
40°	5144
45°	5424
50°	5539
55°	5536
60°	5434
65°	5193
70°	4769
75°	4232
80°	3458
85°	2315

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 5548 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.4	2.5
10°-20°	230.4	7.5
20°-30°	374.8	12.2
30°-40°	504.8	16.4
40°-50°	596.1	19.3
50°-60°	573.7	18.6
60°-70°	438.6	14.2
70°-80°	235.6	7.6
80°-90°	52.4	1.7
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°	682.6	22.1
0°-40°	1187.4	38.5
0°-60°	2357.1	76.4
0°-90°	3083.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3083.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	808	
5°	810	77
15°	814	230
25°	810	375
35°	804	505
45°	777	596
55°	644	574
65°	445	439
75°	222	236
85°	41	52
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	808.0
2.5°	808.9
5°	809.8
7.5°	811.7
10°	813.5
12.5°	812.6
15°	813.5
17.5°	812.6
20°	812.6
22.5°	811.7
25°	809.8
27.5°	808.0
30°	807.0
32.5°	805.2
35°	804.3
37.5°	802.4
40°	798.7
42.5°	792.2
45°	777.3
47.5°	753.2
50°	721.6
52.5°	684.5
55°	643.6
57.5°	599.9
60°	550.7
62.5°	499.6
65°	444.8
67.5°	388.2
70°	330.6
72.5°	275.8
75°	222.0
77.5°	170.0
80°	121.7
82.5°	77.1
85°	40.9
87.5°	13.9
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	18.57	20.28	18.93	20.60	20.91	18.57	20.28	18.93	20.60	20.91
	3H	20.32	21.87	20.70	22.20	22.56	20.32	21.87	20.70	22.20	22.56
	4H	20.93	22.39	21.32	22.74	23.11	20.93	22.39	21.32	22.74	23.11
	6H	21.32	22.68	21.73	23.05	23.44	21.32	22.68	21.73	23.05	23.44
	8H	21.42	22.73	21.85	23.11	23.51	21.42	22.73	21.85	23.11	23.51
	12H	21.47	22.72	21.90	23.10	23.53	21.47	22.72	21.90	23.10	23.53
4H	2H	19.22	20.68	19.61	21.03	21.40	19.22	20.68	19.61	21.03	21.40
	3H	21.17	22.40	21.58	22.80	23.20	21.17	22.40	21.58	22.80	23.20
	4H	21.89	23.01	22.32	23.42	23.85	21.89	23.01	22.32	23.42	23.85
	6H	22.40	23.38	22.85	23.81	24.27	22.40	23.38	22.85	23.81	24.27
	8H	22.54	23.45	22.99	23.89	24.35	22.54	23.45	22.99	23.89	24.35
	12H	22.62	23.44	23.09	23.91	24.38	22.62	23.44	23.09	23.91	24.38
8H	4H	22.18	23.09	22.64	23.53	24.00	22.18	23.09	22.64	23.53	24.00
	6H	22.78	23.54	23.27	24.02	24.50	22.78	23.54	23.27	24.02	24.50
	8H	22.96	23.65	23.47	24.15	24.63	22.96	23.65	23.47	24.15	24.63
	12H	23.09	23.69	23.59	24.18	24.74	23.09	23.69	23.59	24.18	24.74
12H	4H	22.20	23.03	22.68	23.50	23.97	22.20	23.03	22.68	23.50	23.97
	6H	22.81	23.50	23.32	24.00	24.49	22.81	23.50	23.32	24.00	24.49
	8H	23.05	23.65	23.55	24.14	24.70	23.05	23.65	23.55	24.14	24.70