

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: P866916

Luminaire Tested: PRLX-2002-L-927-100L-L-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866916  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-83)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-927-100L-L-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 6  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

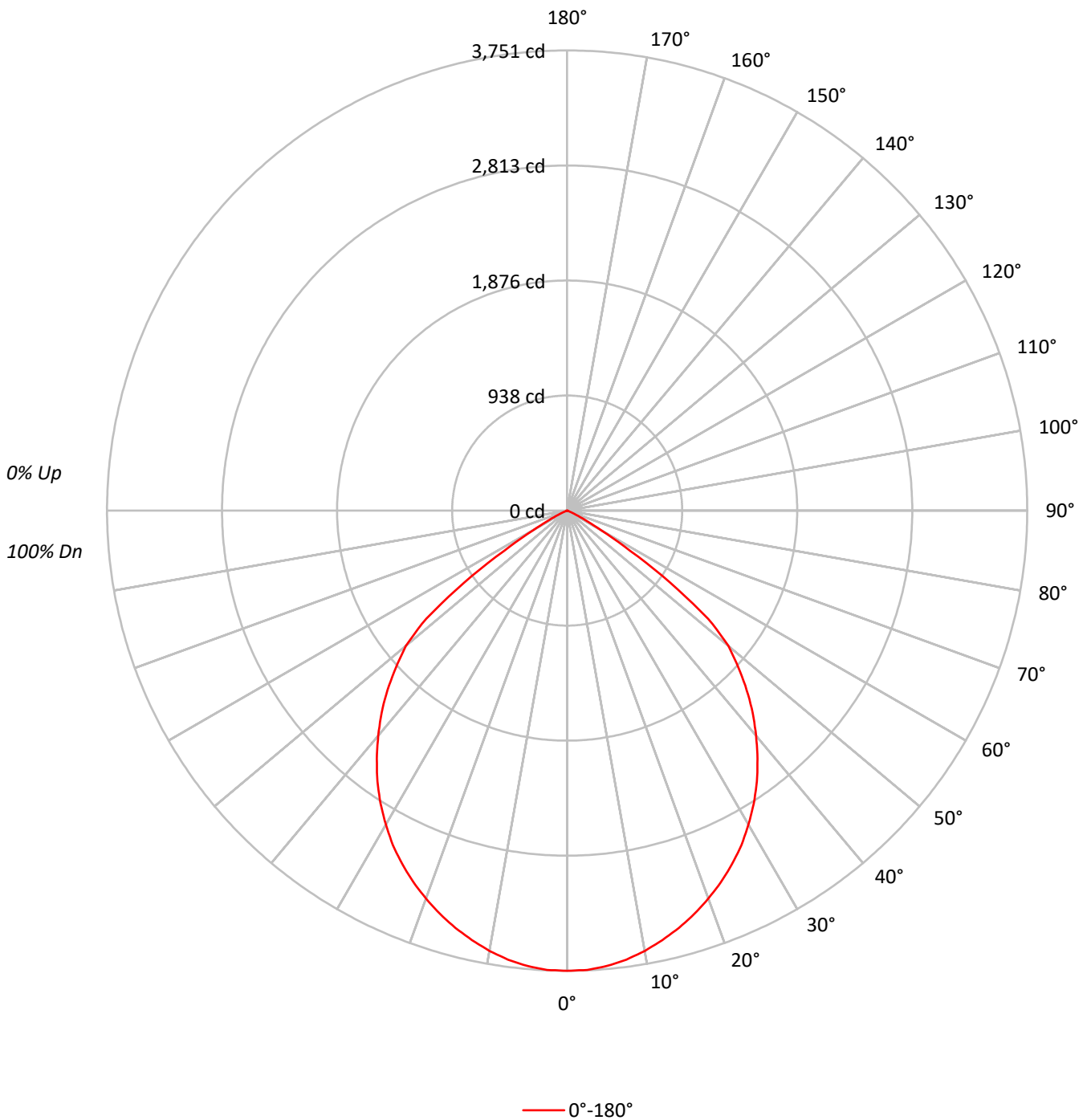
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7095.0 lumens  
Efficiency: N/A  
Efficacy: 89.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.27  
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	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63
5	84	73	65	60	82	72	65	60	70	64	59	68	63	58	66	62	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34

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

	0°
0°	18508
5°	18456
10°	18258
15°	17986
20°	17673
25°	17311
30°	16842
35°	16236
40°	15429
45°	14446
50°	13168
55°	8804
60°	3128
65°	724
70°	115
75°	122
80°	159
85°	181

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 14446 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	353.1	5.0
10°-20°	992.3	14.0
20°-30°	1463.4	20.6
30°-40°	1681.6	23.7
40°-50°	1592.1	22.4
50°-60°	906.4	12.8
60°-70°	96.1	1.4
70°-80°	6.9	0.1
80°-90°	3.2	0.0
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°	2808.8	39.6
0°-40°	4490.4	63.3
0°-60°	6988.9	98.5
0°-90°	7095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7095.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3751	
5°	3726	353
15°	3521	992
25°	3180	1463
35°	2696	1682
45°	2070	1592
55°	1024	906
65°	62	96
75°	6	7
85°	3	3
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3751.3
2.5°	3747.3
5°	3726.4
7.5°	3691.8
10°	3644.3
12.5°	3586.3
15°	3521.2
17.5°	3447.1
20°	3365.9
22.5°	3277.4
25°	3180.0
27.5°	3075.4
30°	2956.3
32.5°	2830.8
35°	2695.6
37.5°	2549.1
40°	2395.5
42.5°	2240.2
45°	2070.4
47.5°	1894.2
50°	1715.5
52.5°	1448.4
55°	1023.5
57.5°	610.7
60°	317.0
62.5°	158.5
65°	62.0
67.5°	12.1
70°	8.0
72.5°	7.2
75°	6.4
77.5°	5.6
80°	5.6
82.5°	4.0
85°	3.2
87.5°	1.6
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	16.03	17.40	16.40	17.71	18.02	16.03	17.40	16.40	17.71	18.02
	3H	15.91	17.10	16.29	17.43	17.80	15.91	17.10	16.29	17.43	17.80
	4H	15.84	16.95	16.24	17.30	17.68	15.84	16.95	16.24	17.30	17.68
	6H	15.76	16.78	16.18	17.15	17.54	15.76	16.78	16.18	17.15	17.54
	8H	15.72	16.68	16.15	17.07	17.48	15.72	16.68	16.15	17.07	17.48
	12H	15.68	16.60	16.11	16.98	17.41	15.68	16.60	16.11	16.98	17.41
4H	2H	15.86	16.97	16.26	17.32	17.70	15.86	16.97	16.26	17.32	17.70
	3H	15.74	16.63	16.15	17.03	17.43	15.74	16.63	16.15	17.03	17.43
	4H	15.65	16.44	16.09	16.86	17.30	15.65	16.44	16.09	16.86	17.30
	6H	15.57	16.25	16.04	16.70	17.16	15.57	16.25	16.04	16.70	17.16
	8H	15.52	16.15	15.99	16.60	17.07	15.52	16.15	15.99	16.60	17.07
	12H	15.47	16.03	15.96	16.51	16.99	15.47	16.03	15.96	16.51	16.99
8H	4H	15.51	16.15	15.98	16.59	17.07	15.51	16.15	15.98	16.59	17.07
	6H	15.41	15.93	15.91	16.43	16.91	15.41	15.93	15.91	16.43	16.91
	8H	15.34	15.82	15.86	16.33	16.82	15.34	15.82	15.86	16.33	16.82
	12H	15.29	15.72	15.81	16.21	16.78	15.29	15.72	15.81	16.21	16.78
12H	4H	15.46	16.03	15.95	16.51	16.98	15.46	16.03	15.95	16.51	16.98
	6H	15.34	15.81	15.86	16.33	16.82	15.34	15.81	15.86	16.33	16.82
	8H	15.29	15.72	15.80	16.21	16.78	15.29	15.72	15.80	16.21	16.78