

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: P867174

Luminaire Tested: PRLX-2004-L-927-100L-L-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867174  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-86)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2004-L-927-100L-L-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,  
BELL WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 6  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

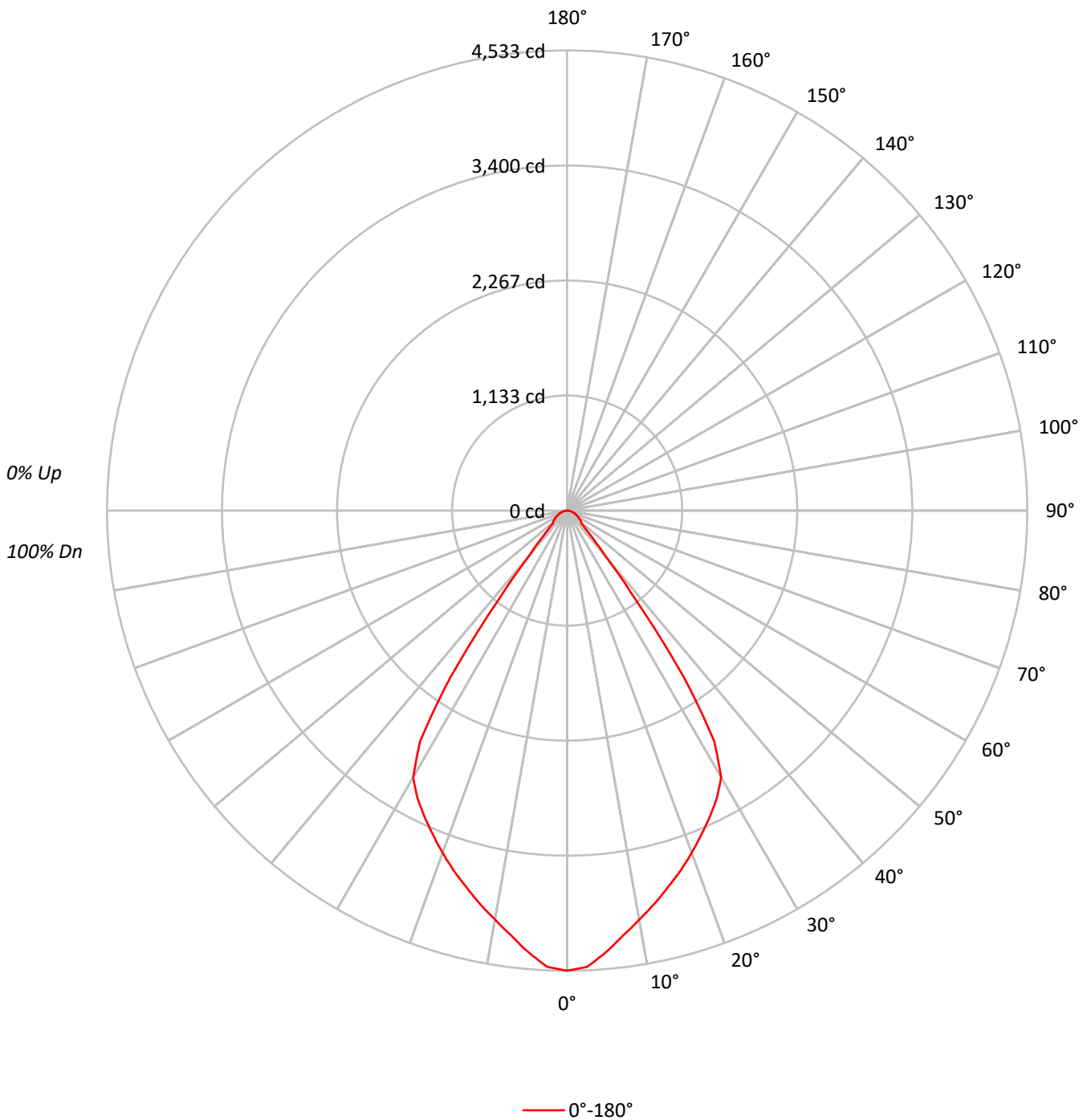
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4726.4 lumens  
Efficiency: N/A  
Efficacy: 59.5 lumens/watt  
Spacing Criteria (0/90/45): 1.02 / 1.02 / 0.98  
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	113	110	107	104	110	108	105	103	103	101	100	100	98	97	96	95	94	92
2	107	101	97	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84
3	101	94	88	84	99	92	87	83	89	85	82	87	83	80	85	82	79	77
4	95	87	81	76	93	86	80	76	83	79	75	81	77	74	79	76	73	71
5	90	81	74	70	88	80	74	69	78	73	69	76	72	68	75	71	68	66
6	85	75	69	64	83	74	68	64	73	68	64	71	67	63	70	66	63	61
7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57
8	76	66	60	55	75	65	59	55	64	59	55	63	58	55	62	58	54	53
9	72	62	56	51	71	62	55	51	61	55	51	60	55	51	59	54	51	49
10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	56	51	48	46

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

	0°
0°	22363
5°	21636
10°	20503
15°	19613
20°	18834
25°	18100
30°	17283
35°	12106
40°	3809
45°	1847
50°	1377
55°	1329
60°	1238
65°	1146
70°	1067
75°	997
80°	938
85°	866

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1847 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	408.1	8.6
10°-20°	1081.6	22.9
20°-30°	1529.8	32.4
30°-40°	1164.9	24.6
40°-50°	234.2	5.0
50°-60°	137.3	2.9
60°-70°	97.7	2.1
70°-80°	55.7	1.2
80°-90°	17.2	0.4
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°	3019.4	63.9
0°-40°	4184.3	88.5
0°-60°	4555.8	96.4
0°-90°	4726.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4726.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	4533	
5°	4368	408
15°	3840	1082
25°	3325	1530
35°	2010	1165
45°	265	234
55°	154	137
65°	98	98
75°	52	56
85°	15	17
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	4532.6
2.5°	4498.8
5°	4368.5
7.5°	4222.0
10°	4092.5
12.5°	3967.8
15°	3839.8
17.5°	3717.5
20°	3587.2
22.5°	3455.2
25°	3324.8
27.5°	3192.9
30°	3033.6
32.5°	2696.4
35°	2010.0
37.5°	1111.2
40°	591.4
42.5°	391.1
45°	264.7
47.5°	190.7
50°	179.4
52.5°	168.2
55°	154.5
57.5°	139.2
60°	125.5
62.5°	111.0
65°	98.2
67.5°	86.1
70°	74.0
72.5°	62.8
75°	52.3
77.5°	42.6
80°	33.0
82.5°	24.1
85°	15.3
87.5°	7.2
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	7.77	8.82	8.13	9.13	9.45	7.77	8.82	8.13	9.13	9.45
	3H	9.33	10.26	9.71	10.59	10.96	9.33	10.26	9.71	10.59	10.96
	4H	9.92	10.78	10.33	11.14	11.53	9.92	10.78	10.33	11.14	11.53
	6H	10.38	11.17	10.80	11.54	11.94	10.38	11.17	10.80	11.54	11.94
	8H	10.53	11.28	10.97	11.67	12.08	10.53	11.28	10.97	11.67	12.08
	12H	10.63	11.34	11.07	11.73	12.16	10.63	11.34	11.07	11.73	12.16
4H	2H	8.23	9.09	8.64	9.45	9.84	8.23	9.09	8.64	9.45	9.84
	3H	10.01	10.71	10.42	11.12	11.53	10.01	10.71	10.42	11.12	11.53
	4H	10.72	11.35	11.16	11.78	12.22	10.72	11.35	11.16	11.78	12.22
	6H	11.31	11.85	11.78	12.30	12.77	11.31	11.85	11.78	12.30	12.77
	8H	11.51	12.01	11.98	12.46	12.94	11.51	12.01	11.98	12.46	12.94
	12H	11.65	12.09	12.14	12.58	13.06	11.65	12.09	12.14	12.58	13.06
8H	4H	10.94	11.45	11.42	11.90	12.37	10.94	11.45	11.42	11.90	12.37
	6H	11.67	12.07	12.18	12.57	13.06	11.67	12.07	12.18	12.57	13.06
	8H	11.95	12.31	12.49	12.83	13.33	11.95	12.31	12.49	12.83	13.33
	12H	12.19	12.50	12.71	13.00	13.58	12.19	12.50	12.71	13.00	13.58
12H	4H	10.94	11.38	11.43	11.87	12.35	10.94	11.38	11.43	11.87	12.35
	6H	11.70	12.06	12.24	12.58	13.08	11.70	12.06	12.24	12.58	13.08
	8H	12.05	12.36	12.57	12.86	13.44	12.05	12.36	12.57	12.86	13.44