

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: P866168

Luminaire Tested: PRLX-2002-M-927-25L-L-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866168  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-53)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-M-927-25L-L-U-S-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 3  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

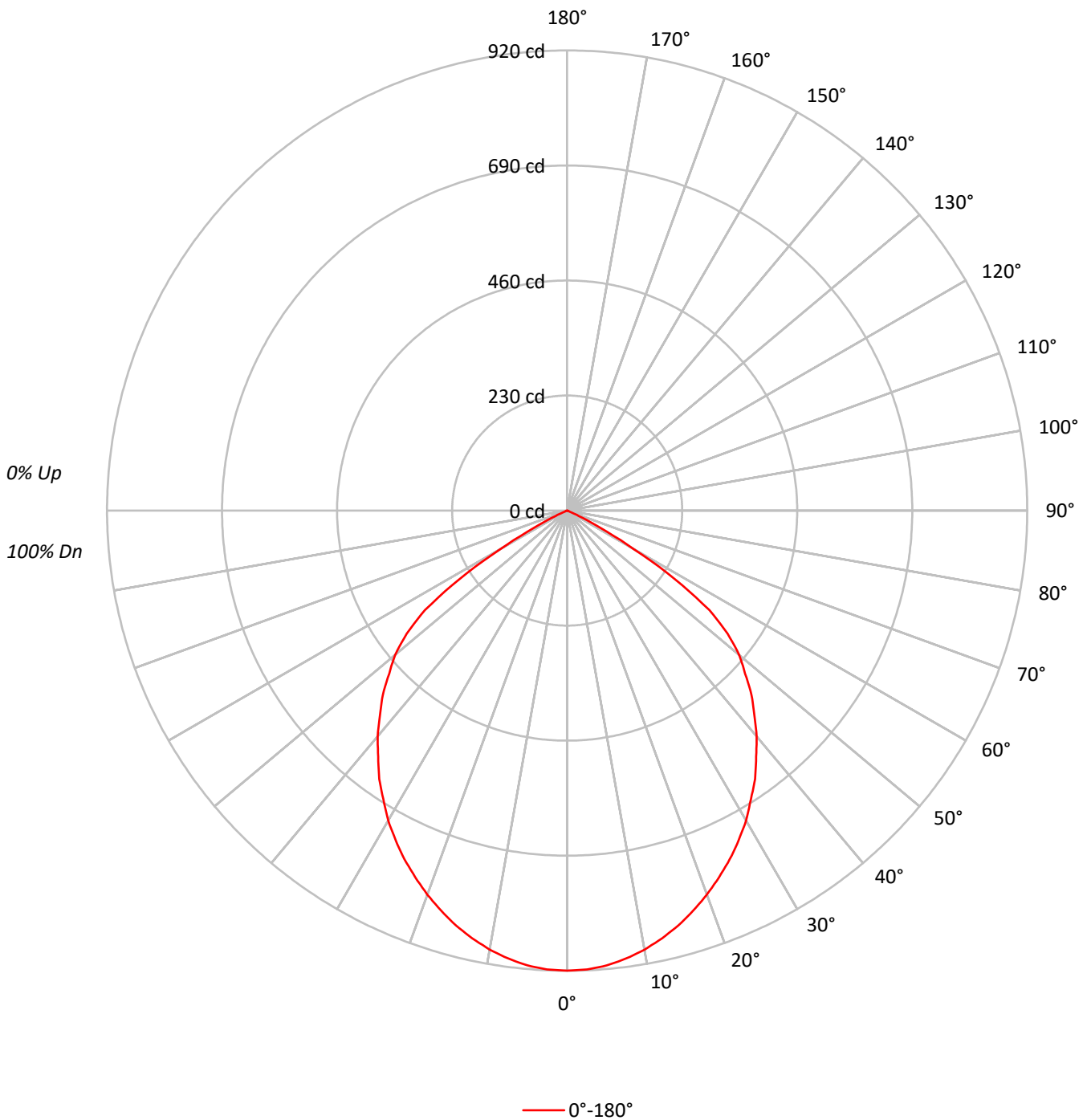
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1830.1 lumens  
Efficiency: N/A  
Efficacy: 84.3 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.7  
Input Voltage (V): 120  
Input Current (Ain): 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	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	71	69
4	89	79	72	66	87	78	71	66	75	69	65	73	68	64	71	67	63	61
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

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

	0°
0°	7318
5°	7290
10°	7200
15°	7074
20°	6917
25°	6754
30°	6573
35°	6364
40°	6120
45°	5866
50°	5558
55°	4813
60°	2463
65°	478
70°	44
75°	58
80°	60
85°	55

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5866 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.4	4.7
10°-20°	241.8	13.2
20°-30°	354.1	19.3
30°-40°	408.7	22.3
40°-50°	400.7	21.9
50°-60°	291.2	15.9
60°-70°	44.6	2.4
70°-80°	1.8	0.1
80°-90°	0.9	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°	682.4	37.3
0°-40°	1091.0	59.6
0°-60°	1782.8	97.4
0°-90°	1830.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1830.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	920	
5°	913	86
15°	859	242
25°	769	354
35°	655	409
45°	521	401
55°	347	291
65°	25	45
75°	2	2
85°	1	1
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	919.8
2.5°	918.5
5°	912.8
7.5°	903.3
10°	891.2
12.5°	876.0
15°	858.9
17.5°	838.6
20°	817.0
22.5°	793.5
25°	769.4
27.5°	742.8
30°	715.5
32.5°	683.8
35°	655.3
37.5°	620.4
40°	589.3
42.5°	553.8
45°	521.4
47.5°	482.7
50°	449.1
52.5°	404.1
55°	347.0
57.5°	256.3
60°	154.8
62.5°	73.6
65°	25.4
67.5°	6.3
70°	1.9
72.5°	1.9
75°	1.9
77.5°	1.3
80°	1.3
82.5°	1.3
85°	0.6
87.5°	0.6
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	16.35	17.76	16.71	18.08	18.39	16.35	17.76	16.71	18.08	18.39
	3H	16.23	17.47	16.61	17.80	18.17	16.23	17.47	16.61	17.80	18.17
	4H	16.17	17.32	16.57	17.67	18.05	16.17	17.32	16.57	17.67	18.05
	6H	16.09	17.15	16.51	17.52	17.91	16.09	17.15	16.51	17.52	17.91
	8H	16.05	17.06	16.48	17.45	17.85	16.05	17.06	16.48	17.45	17.85
	12H	16.02	16.97	16.45	17.35	17.78	16.02	16.97	16.45	17.35	17.78
4H	2H	16.19	17.34	16.59	17.69	18.07	16.19	17.34	16.59	17.69	18.07
	3H	16.07	17.00	16.49	17.40	17.81	16.07	17.00	16.49	17.40	17.81
	4H	15.99	16.81	16.43	17.23	17.67	15.99	16.81	16.43	17.23	17.67
	6H	15.92	16.62	16.38	17.07	17.54	15.92	16.62	16.38	17.07	17.54
	8H	15.86	16.52	16.33	16.97	17.44	15.86	16.52	16.33	16.97	17.44
	12H	15.82	16.40	16.30	16.89	17.36	15.82	16.40	16.30	16.89	17.36
8H	4H	15.86	16.52	16.33	16.97	17.44	15.86	16.52	16.33	16.97	17.44
	6H	15.76	16.30	16.26	16.80	17.28	15.76	16.30	16.26	16.80	17.28
	8H	15.69	16.19	16.21	16.70	17.19	15.69	16.19	16.21	16.70	17.19
	12H	15.64	16.09	16.16	16.58	17.15	15.64	16.09	16.16	16.58	17.15
12H	4H	15.82	16.40	16.30	16.88	17.36	15.82	16.40	16.30	16.88	17.36
	6H	15.69	16.19	16.21	16.70	17.19	15.69	16.19	16.21	16.70	17.19
	8H	15.64	16.09	16.16	16.58	17.15	15.64	16.09	16.16	16.58	17.15