

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: P865756

Luminaire Tested: PRLX-2004-S-927-20L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865756  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-14)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2004-S-927-20L-G-U-S-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS,  
BELL WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 4  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

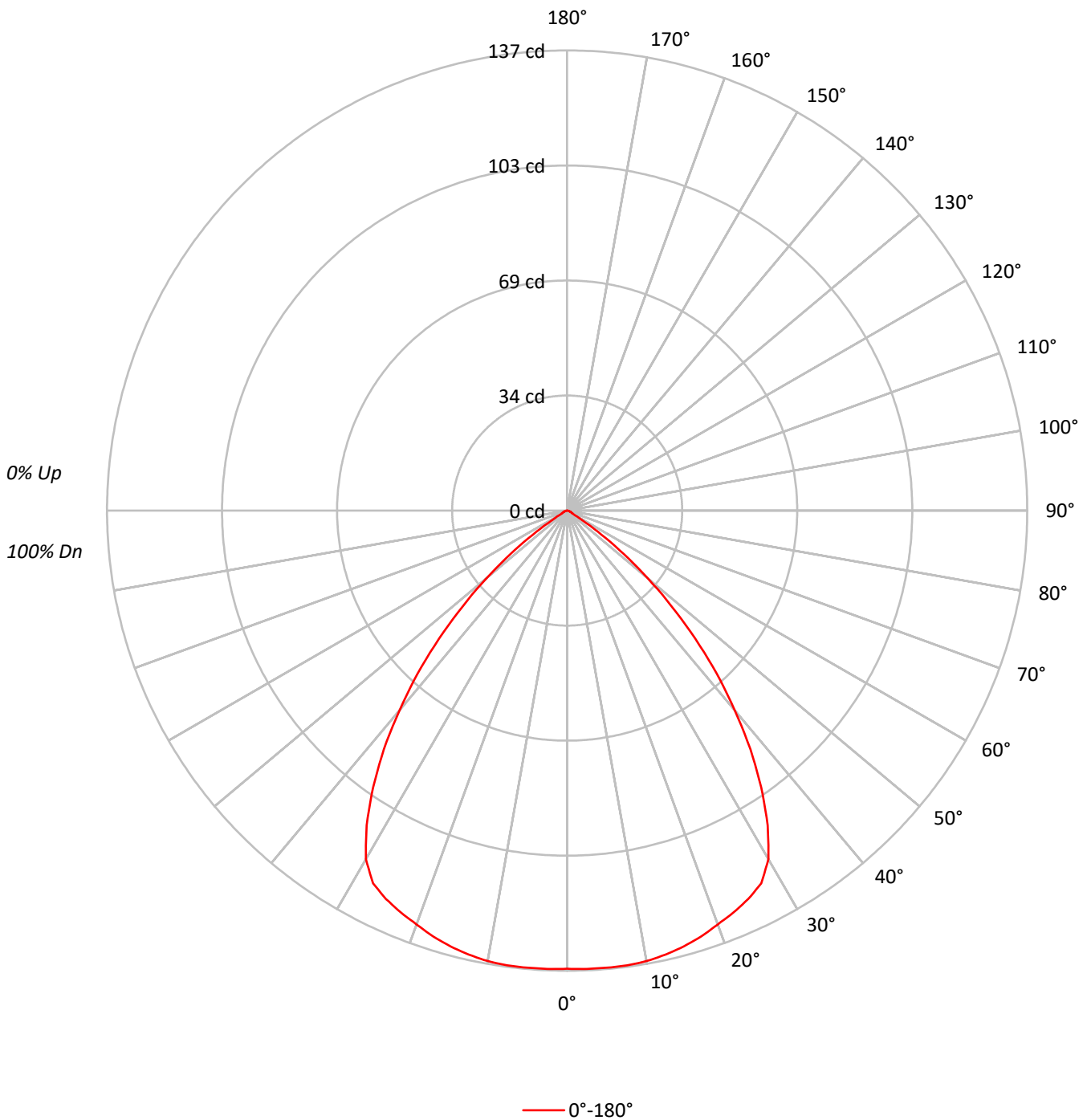
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 227.9 lumens  
Efficiency: N/A  
Efficacy: 10.5 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.2  
Luminous Opening: Circular (Dia: 0.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.8  
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	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	83
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74
4	93	84	77	72	91	82	76	71	80	75	71	78	73	70	76	72	69	67
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	62	61
6	81	71	63	58	79	70	63	58	68	62	58	67	61	57	65	60	57	55
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

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

	0°
0°	2225
5°	2236
10°	2256
15°	2268
20°	2275
25°	2296
30°	2256
35°	2005
40°	1654
45°	1243
50°	792
55°	355
60°	72
65°	54
70°	48
75°	38
80°	47
85°	37

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1243 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	13.0	5.7
10°-20°	37.9	16.6
20°-30°	58.6	25.7
30°-40°	62.3	27.3
40°-50°	41.4	18.2
50°-60°	12.3	5.4
60°-70°	1.4	0.6
70°-80°	0.7	0.3
80°-90°	0.3	0.1
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°	109.6	48.1
0°-40°	171.9	75.4
0°-60°	225.6	99.0
0°-90°	227.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	227.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	136	
5°	137	13
15°	134	38
25°	128	59
35°	101	62
45°	54	41
55°	12	12
65°	1	1
75°	1	1
85°	0	0
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	136.4
2.5°	136.6
5°	136.6
7.5°	136.6
10°	136.2
12.5°	135.4
15°	134.3
17.5°	132.9
20°	131.1
22.5°	129.5
25°	127.6
27.5°	125.1
30°	119.8
32.5°	111.1
35°	100.7
37.5°	89.6
40°	77.7
42.5°	65.9
45°	53.9
47.5°	42.2
50°	31.2
52.5°	21.3
55°	12.5
57.5°	5.4
60°	2.2
62.5°	1.6
65°	1.4
67.5°	1.1
70°	1.0
72.5°	0.8
75°	0.6
77.5°	0.5
80°	0.5
82.5°	0.3
85°	0.2
87.5°	0.2
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	0.00	0.62	0.00	0.93	1.25	0.00	0.62	0.00	0.93	1.25
	3H	0.00	0.58	0.00	0.92	1.28	0.00	0.58	0.00	0.92	1.28
	4H	0.00	0.54	0.00	0.89	1.28	0.00	0.54	0.00	0.89	1.28
	6H	0.00	0.50	0.02	0.87	1.26	0.00	0.50	0.02	0.87	1.26
	8H	0.00	0.45	0.04	0.85	1.25	0.00	0.45	0.04	0.85	1.25
	12H	0.00	0.41	0.03	0.79	1.22	0.00	0.41	0.03	0.79	1.22
4H	2H	0.00	0.27	0.00	0.63	1.01	0.00	0.27	0.00	0.63	1.01
	3H	0.00	0.30	0.00	0.70	1.11	0.00	0.30	0.00	0.70	1.11
	4H	0.00	0.28	0.02	0.70	1.15	0.00	0.28	0.02	0.70	1.15
	6H	0.00	0.30	0.17	0.75	1.22	0.00	0.30	0.17	0.75	1.22
	8H	0.00	0.29	0.20	0.74	1.21	0.00	0.29	0.20	0.74	1.21
	12H	0.00	0.23	0.23	0.72	1.20	0.00	0.23	0.23	0.72	1.20
8H	4H	0.00	0.08	0.00	0.53	1.00	0.00	0.08	0.00	0.53	1.00
	6H	0.00	0.16	0.21	0.66	1.15	0.00	0.16	0.21	0.66	1.15
	8H	0.00	0.18	0.30	0.70	1.19	0.00	0.18	0.30	0.70	1.19
	12H	0.00	0.19	0.34	0.69	1.26	0.00	0.19	0.34	0.69	1.26
12H	4H	0.00	0.00	0.00	0.47	0.94	0.00	0.00	0.00	0.47	0.94
	6H	0.00	0.09	0.20	0.61	1.10	0.00	0.09	0.20	0.61	1.10
	8H	0.00	0.14	0.29	0.64	1.21	0.00	0.14	0.29	0.64	1.21