

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: P865590

Luminaire Tested: PRLX-2002-S-927-15L-G-U-S-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865590  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-S-927-15L-G-U-S-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 3  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

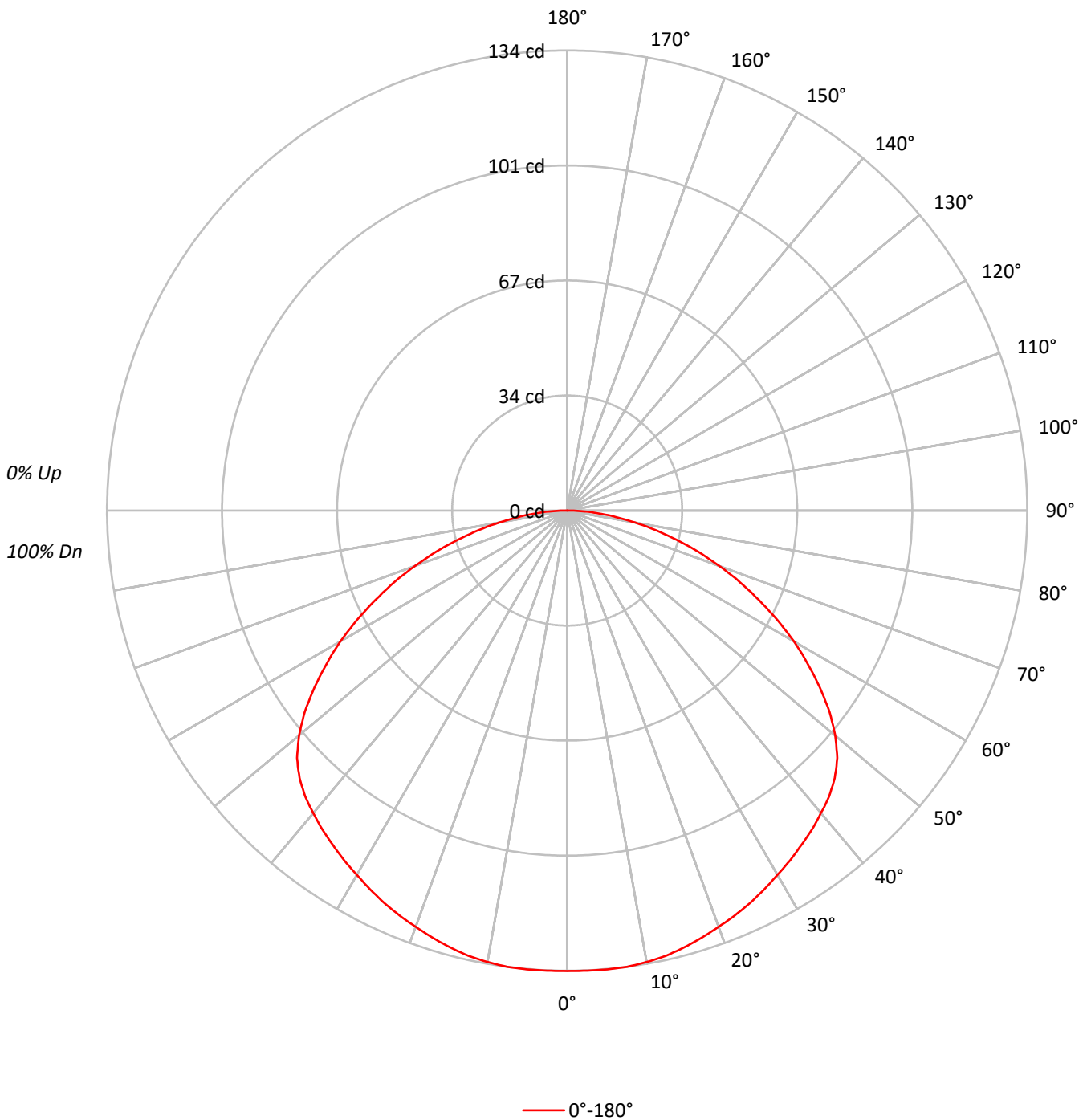
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 454.1 lumens  
Efficiency: N/A  
Efficacy: 29.1 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.53  
Luminous Opening: Circular (Dia: 0.85' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 15.6  
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	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	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	54	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	29	24	50	37	29	24	36	29	24	35	28	24	34	28	24	22

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

	0°
0°	2519
5°	2529
10°	2546
15°	2561
20°	2579
25°	2614
30°	2657
35°	2727
40°	2820
45°	2927
50°	2978
55°	2941
60°	2866
65°	2738
70°	2587
75°	2395
80°	2163
85°	1961

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 2978 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	12.8	2.8
10°-20°	37.2	8.2
20°-30°	58.2	12.8
30°-40°	74.6	16.4
40°-50°	84.7	18.7
50°-60°	80.1	17.6
60°-70°	61.1	13.4
70°-80°	35.1	7.7
80°-90°	10.3	2.3
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°	108.2	23.8
0°-40°	182.8	40.3
0°-60°	347.7	76.6
0°-90°	454.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	454.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	134	
5°	134	13
15°	132	37
25°	126	58
35°	119	75
45°	110	85
55°	90	80
65°	62	61
75°	33	35
85°	9	10
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	134.1
2.5°	134.1
5°	134.1
7.5°	134.0
10°	133.5
12.5°	132.8
15°	131.7
17.5°	130.4
20°	129.0
22.5°	127.6
25°	126.1
27.5°	124.3
30°	122.5
32.5°	120.8
35°	118.9
37.5°	117.1
40°	115.0
42.5°	112.9
45°	110.2
47.5°	106.7
50°	101.9
52.5°	96.3
55°	89.8
57.5°	83.1
60°	76.3
62.5°	69.0
65°	61.6
67.5°	54.5
70°	47.1
72.5°	40.1
75°	33.0
77.5°	26.4
80°	20.0
82.5°	14.2
85°	9.1
87.5°	4.7
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	16.16	17.85	16.52	18.17	18.48	16.16	17.85	16.52	18.17	18.48
	3H	17.96	19.50	18.34	19.82	20.18	17.96	19.50	18.34	19.82	20.18
	4H	18.63	20.09	19.03	20.43	20.81	18.63	20.09	19.03	20.43	20.81
	6H	19.13	20.48	19.54	20.85	21.24	19.13	20.48	19.54	20.85	21.24
	8H	19.30	20.59	19.72	20.98	21.38	19.30	20.59	19.72	20.98	21.38
	12H	19.42	20.66	19.85	21.04	21.47	19.42	20.66	19.85	21.04	21.47
4H	2H	16.80	18.25	17.19	18.59	18.97	16.80	18.25	17.19	18.59	18.97
	3H	18.82	20.04	19.23	20.44	20.84	18.82	20.04	19.23	20.44	20.84
	4H	19.62	20.73	20.06	21.14	21.58	19.62	20.73	20.06	21.14	21.58
	6H	20.26	21.23	20.71	21.67	22.12	20.26	21.23	20.71	21.67	22.12
	8H	20.47	21.38	20.93	21.82	22.29	20.47	21.38	20.93	21.82	22.29
	12H	20.64	21.46	21.12	21.94	22.40	20.64	21.46	21.12	21.94	22.40
8H	4H	19.95	20.86	20.41	21.30	21.76	19.95	20.86	20.41	21.30	21.76
	6H	20.70	21.46	21.19	21.95	22.42	20.70	21.46	21.19	21.95	22.42
	8H	20.99	21.68	21.50	22.18	22.66	20.99	21.68	21.50	22.18	22.66
	12H	21.24	21.85	21.75	22.34	22.90	21.24	21.85	21.75	22.34	22.90
12H	4H	19.99	20.81	20.47	21.28	21.75	19.99	20.81	20.47	21.28	21.75
	6H	20.76	21.45	21.27	21.95	22.44	20.76	21.45	21.27	21.95	22.44
	8H	21.12	21.72	21.62	22.21	22.77	21.12	21.72	21.62	22.21	22.77