

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: P866947

Luminaire Tested: PRLX-2002-L-927-15L-G-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866947  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-68)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-927-15L-G-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 1  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

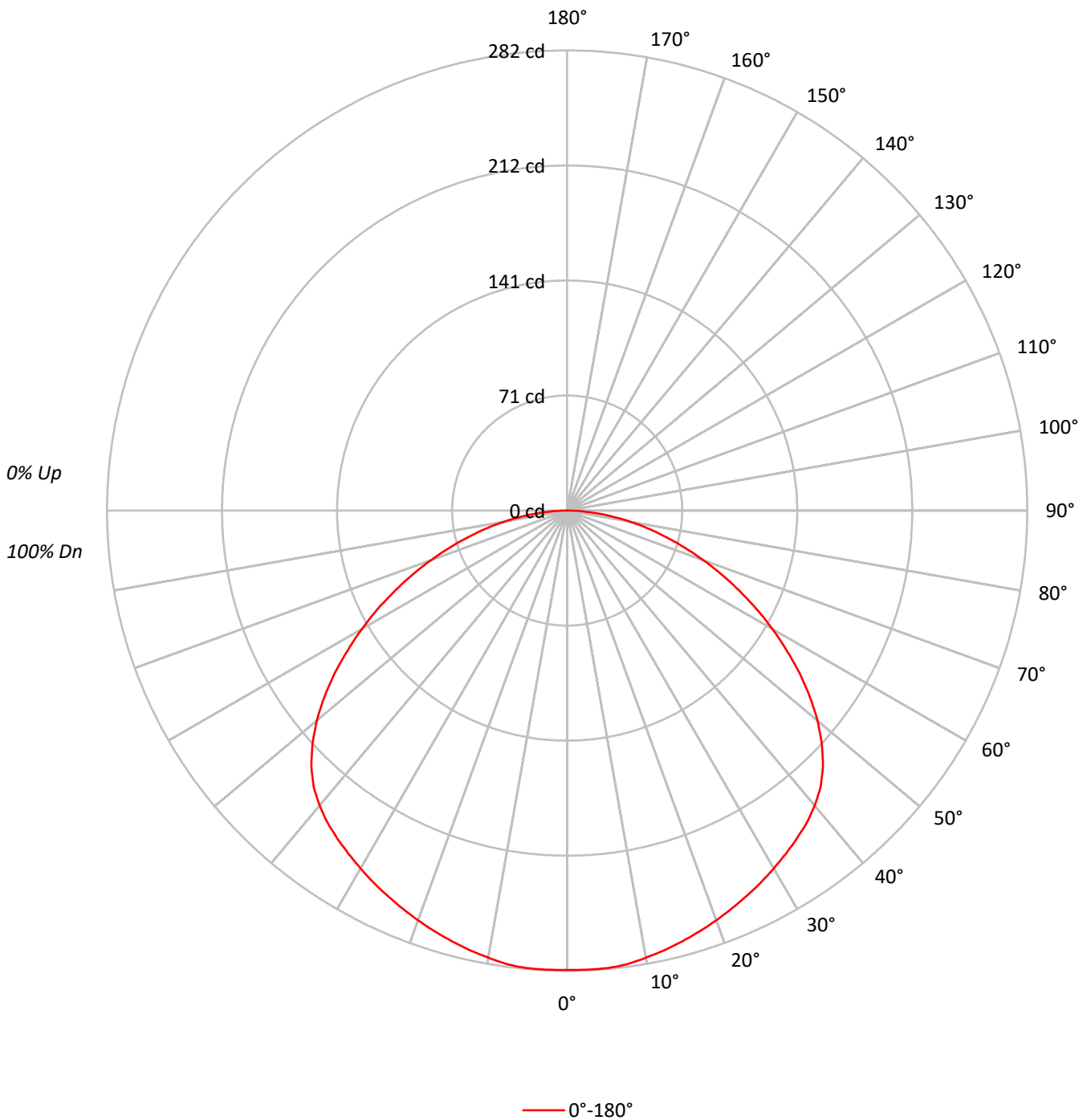
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 905.7 lumens  
Efficiency: N/A  
Efficacy: 55.2 lumens/watt  
Spacing Criteria (0/90/45): 1.35 / 1.35 / 1.49  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.4  
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	108	103	99	95	106	101	97	93	97	94	90		93	90	88		89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68	64	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	45	73	60	52	45	58	51	45		56	49	44		54	48	44	42
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	27	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	24		35	29	24	23

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

	0°
0°	1389
5°	1394
10°	1394
15°	1395
20°	1403
25°	1418
30°	1442
35°	1478
40°	1520
45°	1547
50°	1537
55°	1497
60°	1435
65°	1361
70°	1280
75°	1193
80°	1108
85°	985

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1547 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	26.8	3.0
10°-20°	77.2	8.5
20°-30°	120.3	13.3
30°-40°	153.8	17.0
40°-50°	170.3	18.8
50°-60°	155.2	17.1
60°-70°	115.6	12.8
70°-80°	66.7	7.4
80°-90°	19.8	2.2
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°	224.3	24.8
0°-40°	378.1	41.8
0°-60°	703.6	77.7
0°-90°	905.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	905.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	282	
5°	282	27
15°	273	77
25°	260	120
35°	245	154
45°	222	170
55°	174	155
65°	117	116
75°	63	67
85°	17	20
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	281.5
2.5°	281.6
5°	281.5
7.5°	280.5
10°	278.2
12.5°	275.9
15°	273.2
17.5°	270.3
20°	267.2
22.5°	263.9
25°	260.5
27.5°	257.0
30°	253.2
32.5°	249.4
35°	245.4
37.5°	241.2
40°	236.0
42.5°	229.9
45°	221.7
47.5°	211.7
50°	200.3
52.5°	187.5
55°	174.0
57.5°	159.6
60°	145.4
62.5°	131.0
65°	116.6
67.5°	102.7
70°	88.7
72.5°	75.7
75°	62.6
77.5°	50.9
80°	39.0
82.5°	27.8
85°	17.4
87.5°	8.0
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	13.67	15.35	14.03	15.66	15.97	13.67	15.35	14.03	15.66	15.97
	3H	15.42	16.94	15.79	17.26	17.62	15.42	16.94	15.79	17.26	17.62
	4H	16.08	17.52	16.48	17.86	18.24	16.08	17.52	16.48	17.86	18.24
	6H	16.60	17.93	17.01	18.29	18.68	16.60	17.93	17.01	18.29	18.68
	8H	16.78	18.05	17.20	18.44	18.83	16.78	18.05	17.20	18.44	18.83
	12H	16.90	18.12	17.33	18.50	18.93	16.90	18.12	17.33	18.50	18.93
4H	2H	14.29	15.72	14.69	16.07	16.44	14.29	15.72	14.69	16.07	16.44
	3H	16.26	17.47	16.67	17.86	18.26	16.26	17.47	16.67	17.86	18.26
	4H	17.06	18.15	17.49	18.56	19.00	17.06	18.15	17.49	18.56	19.00
	6H	17.71	18.67	18.17	19.11	19.56	17.71	18.67	18.17	19.11	19.56
	8H	17.94	18.84	18.40	19.28	19.74	17.94	18.84	18.40	19.28	19.74
	12H	18.11	18.92	18.59	19.39	19.86	18.11	18.92	18.59	19.39	19.86
8H	4H	17.38	18.28	17.84	18.72	19.18	17.38	18.28	17.84	18.72	19.18
	6H	18.17	18.91	18.66	19.40	19.87	18.17	18.91	18.66	19.40	19.87
	8H	18.47	19.14	18.98	19.65	20.13	18.47	19.14	18.98	19.65	20.13
	12H	18.72	19.32	19.23	19.81	20.37	18.72	19.32	19.23	19.81	20.37
12H	4H	17.42	18.23	17.90	18.70	19.17	17.42	18.23	17.90	18.70	19.17
	6H	18.23	18.90	18.74	19.41	19.89	18.23	18.90	18.74	19.41	19.89
	8H	18.60	19.19	19.10	19.68	20.24	18.60	19.19	19.10	19.68	20.24