

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: P866929

Luminaire Tested: PRLX-2002-L-927-117L-G-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866929  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-69)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-927-117L-G-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 7  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

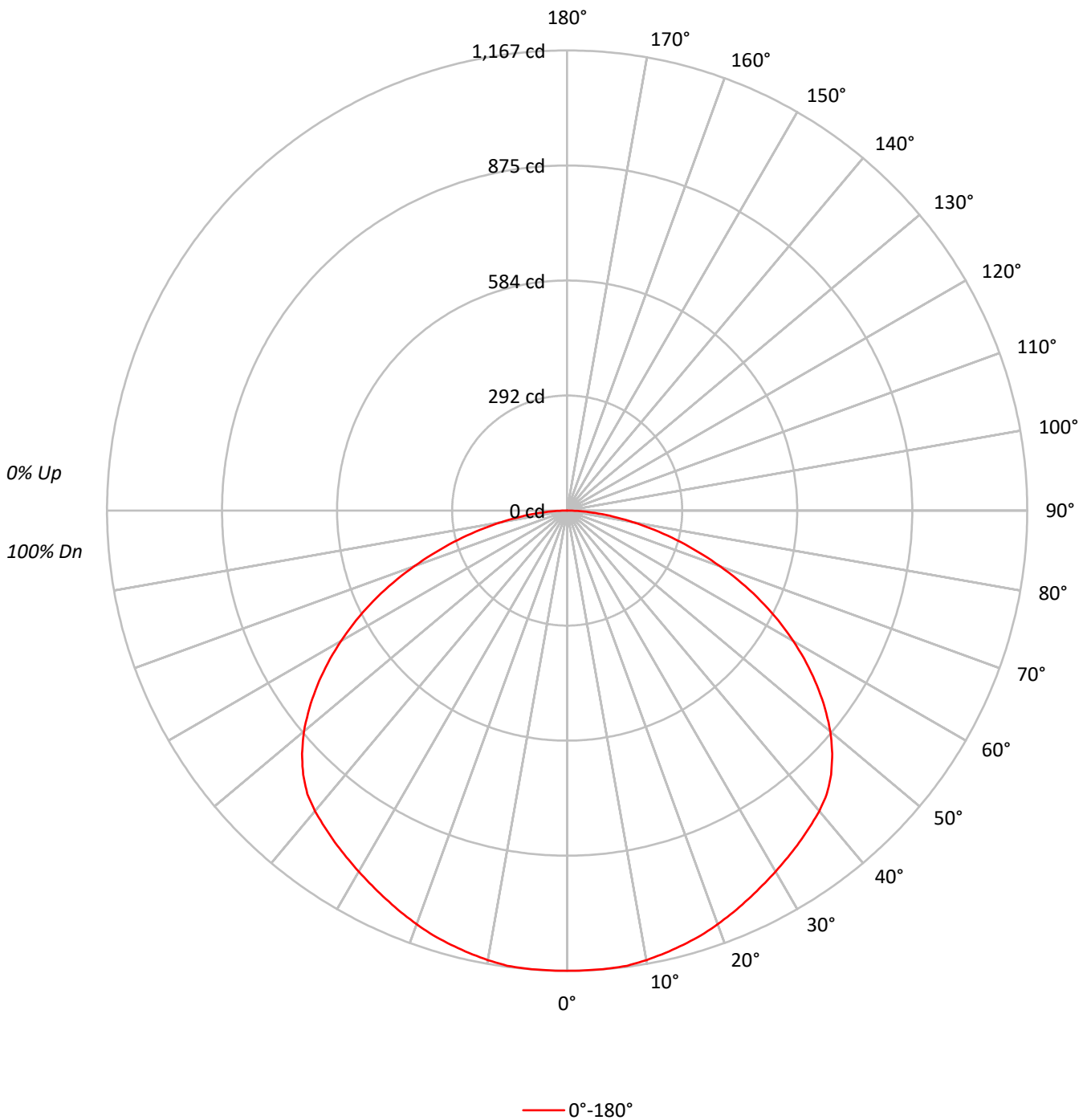
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3920.1 lumens  
Efficiency: N/A  
Efficacy: 41.2 lumens/watt  
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.52  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 95.2  
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	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	48
5	74	61	51	45	72	60	51	44	58	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	27		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	28	24		34	28	24	22

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

	0°
0°	5758
5°	5776
10°	5800
15°	5822
20°	5861
25°	5918
30°	6022
35°	6185
40°	6408
45°	6607
50°	6690
55°	6655
60°	6538
65°	6329
70°	5948
75°	5454
80°	4867
85°	3997

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 6690 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.1	2.8
10°-20°	322.2	8.2
20°-30°	502.3	12.8
30°-40°	644.0	16.4
40°-50°	728.1	18.6
50°-60°	690.2	17.6
60°-70°	534.7	13.6
70°-80°	304.0	7.8
80°-90°	83.5	2.1
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°	935.7	23.9
0°-40°	1579.7	40.3
0°-60°	2998.0	76.5
0°-90°	3920.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3920.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1167	
5°	1166	111
15°	1140	322
25°	1087	502
35°	1027	644
45°	947	728
55°	774	690
65°	542	535
75°	286	304
85°	71	83
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1167.1
2.5°	1167.1
5°	1166.2
7.5°	1164.3
10°	1157.7
12.5°	1149.2
15°	1139.8
17.5°	1129.5
20°	1116.3
22.5°	1102.2
25°	1087.1
27.5°	1072.0
30°	1057.0
32.5°	1041.9
35°	1026.9
37.5°	1010.9
40°	994.9
42.5°	975.1
45°	946.9
47.5°	912.0
50°	871.6
52.5°	824.5
55°	773.7
57.5°	720.0
60°	662.6
62.5°	603.3
65°	542.1
67.5°	478.1
70°	412.3
72.5°	348.2
75°	286.1
77.5°	226.8
80°	171.3
82.5°	118.6
85°	70.6
87.5°	32.0
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	19.03	20.72	19.39	21.04	21.35	19.03	20.72	19.39	21.04	21.35
	3H	20.87	22.40	21.24	22.73	23.09	20.87	22.40	21.24	22.73	23.09
	4H	21.53	22.99	21.93	23.33	23.71	21.53	22.99	21.93	23.33	23.71
	6H	22.02	23.37	22.43	23.73	24.12	22.02	23.37	22.43	23.73	24.12
	8H	22.18	23.46	22.60	23.85	24.25	22.18	23.46	22.60	23.85	24.25
	12H	22.28	23.51	22.70	23.89	24.32	22.28	23.51	22.70	23.89	24.32
4H	2H	19.69	21.14	20.09	21.49	21.86	19.69	21.14	20.09	21.49	21.86
	3H	21.74	22.96	22.15	23.36	23.75	21.74	22.96	22.15	23.36	23.75
	4H	22.53	23.64	22.96	24.05	24.48	22.53	23.64	22.96	24.05	24.48
	6H	23.15	24.12	23.60	24.55	25.01	23.15	24.12	23.60	24.55	25.01
	8H	23.35	24.26	23.81	24.70	25.16	23.35	24.26	23.81	24.70	25.16
	12H	23.49	24.31	23.97	24.78	25.25	23.49	24.31	23.97	24.78	25.25
8H	4H	22.85	23.76	23.31	24.20	24.66	22.85	23.76	23.31	24.20	24.66
	6H	23.58	24.34	24.07	24.83	25.30	23.58	24.34	24.07	24.83	25.30
	8H	23.86	24.54	24.36	25.04	25.52	23.86	24.54	24.36	25.04	25.52
	12H	24.07	24.67	24.57	25.16	25.72	24.07	24.67	24.57	25.16	25.72
12H	4H	22.89	23.71	23.37	24.18	24.65	22.89	23.71	23.37	24.18	24.65
	6H	23.64	24.32	24.15	24.83	25.31	23.64	24.32	24.15	24.83	25.31
	8H	23.97	24.57	24.48	25.06	25.62	23.97	24.57	24.48	25.06	25.62