

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: P867117

Luminaire Tested: PRLX-2002-L-940-117L-L-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867117  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-81)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-940-117L-L-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 7  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

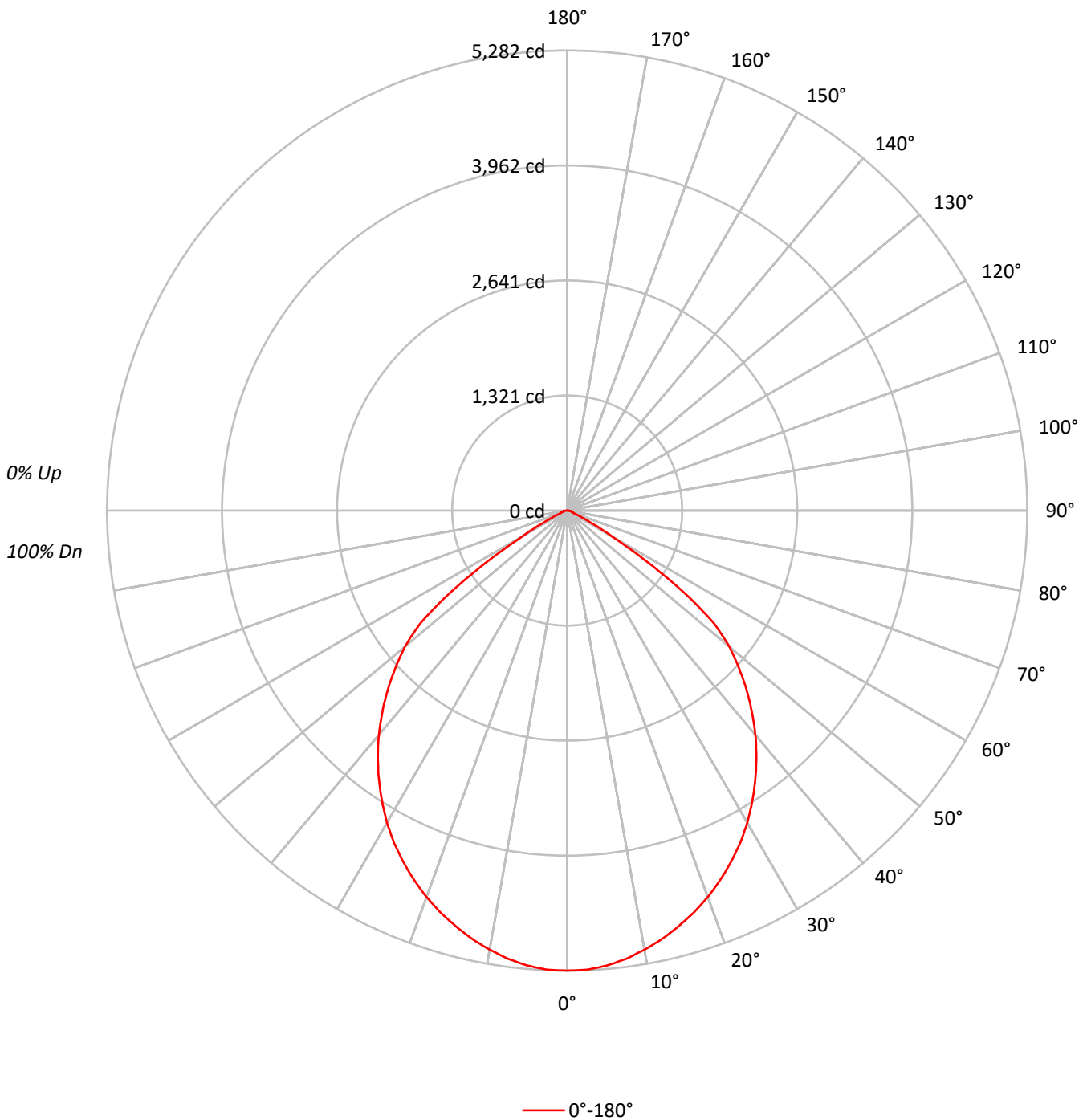
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10254.5 lumens  
Efficiency: N/A  
Efficacy: 107.7 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 95.2  
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	108	105	102	109	106	103	100	102	99	97		98	96	94		94	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	77	73		78	75	72	70
4	89	79	72	66	87	78	71	66	76	70	65		74	68	64		72	67	64	62
5	83	72	64	59	81	71	64	58	69	63	58		67	62	57		65	60	57	55
6	77	65	58	52	75	65	57	52	63	56	51		61	56	51		60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46		56	50	46		55	50	46	44
8	67	55	47	42	66	54	47	42	53	46	42		52	46	42		51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38		48	42	38		47	42	38	36
10	59	47	40	35	58	46	39	35	46	39	35		45	39	35		44	38	34	33

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

	0°
0°	26058
5°	25964
10°	25639
15°	25235
20°	24782
25°	24228
30°	23561
35°	22691
40°	21654
45°	20337
50°	18686
55°	14054
60°	5917
65°	2181
70°	1003
75°	1098
80°	1264
85°	1477

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 20337 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	496.4	4.8
10°-20°	1392.6	13.6
20°-30°	2048.5	20.0
30°-40°	2352.7	22.9
40°-50°	2241.2	21.9
50°-60°	1403.6	13.7
60°-70°	232.3	2.3
70°-80°	60.7	0.6
80°-90°	26.4	0.3
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°	3937.5	38.4
0°-40°	6290.3	61.3
0°-60°	9935.1	96.9
0°-90°	10254.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10254.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5282	
5°	5242	496
15°	4940	1393
25°	4451	2049
35°	3767	2353
45°	2915	2241
55°	1634	1404
65°	187	232
75°	58	61
85°	26	26
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5281.6
2.5°	5276.2
5°	5242.5
7.5°	5189.3
10°	5117.6
12.5°	5036.1
15°	4940.5
17.5°	4836.3
20°	4720.0
22.5°	4590.7
25°	4450.6
27.5°	4301.8
30°	4135.6
32.5°	3955.3
35°	3767.3
37.5°	3569.6
40°	3362.1
42.5°	3141.6
45°	2914.6
47.5°	2672.3
50°	2434.4
52.5°	2125.9
55°	1633.8
57.5°	1055.9
60°	599.6
62.5°	340.0
65°	186.8
67.5°	88.0
70°	69.5
72.5°	64.1
75°	57.6
77.5°	51.1
80°	44.5
82.5°	35.8
85°	26.1
87.5°	13.0
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	18.55	19.94	18.91	20.25	20.57	18.55	19.94	18.91	20.25	20.57
	3H	18.46	19.69	18.84	20.02	20.38	18.46	19.69	18.84	20.02	20.38
	4H	18.42	19.56	18.82	19.91	20.29	18.42	19.56	18.82	19.91	20.29
	6H	18.38	19.42	18.79	19.79	20.19	18.38	19.42	18.79	19.79	20.19
	8H	18.36	19.35	18.79	19.74	20.14	18.36	19.35	18.79	19.74	20.14
	12H	18.33	19.28	18.77	19.66	20.09	18.33	19.28	18.77	19.66	20.09
4H	2H	18.42	19.55	18.82	19.90	20.29	18.42	19.55	18.82	19.90	20.29
	3H	18.35	19.27	18.76	19.67	20.07	18.35	19.27	18.76	19.67	20.07
	4H	18.31	19.12	18.74	19.54	19.98	18.31	19.12	18.74	19.54	19.98
	6H	18.29	18.99	18.75	19.44	19.90	18.29	18.99	18.75	19.44	19.90
	8H	18.27	18.92	18.73	19.37	19.84	18.27	18.92	18.73	19.37	19.84
	12H	18.25	18.84	18.74	19.32	19.79	18.25	18.84	18.74	19.32	19.79
8H	4H	18.20	18.86	18.67	19.30	19.77	18.20	18.86	18.67	19.30	19.77
	6H	18.18	18.72	18.68	19.22	19.70	18.18	18.72	18.68	19.22	19.70
	8H	18.16	18.66	18.68	19.17	19.66	18.16	18.66	18.68	19.17	19.66
	12H	18.17	18.61	18.68	19.11	19.68	18.17	18.61	18.68	19.11	19.68
12H	4H	18.16	18.74	18.64	19.22	19.70	18.16	18.74	18.64	19.22	19.70
	6H	18.12	18.62	18.65	19.13	19.62	18.12	18.62	18.65	19.13	19.62
	8H	18.14	18.58	18.65	19.07	19.64	18.14	18.58	18.65	19.07	19.64