

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: P867169

Luminaire Tested: PRLX-2002-L-940-83L-G-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867169  
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-940-83L-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 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

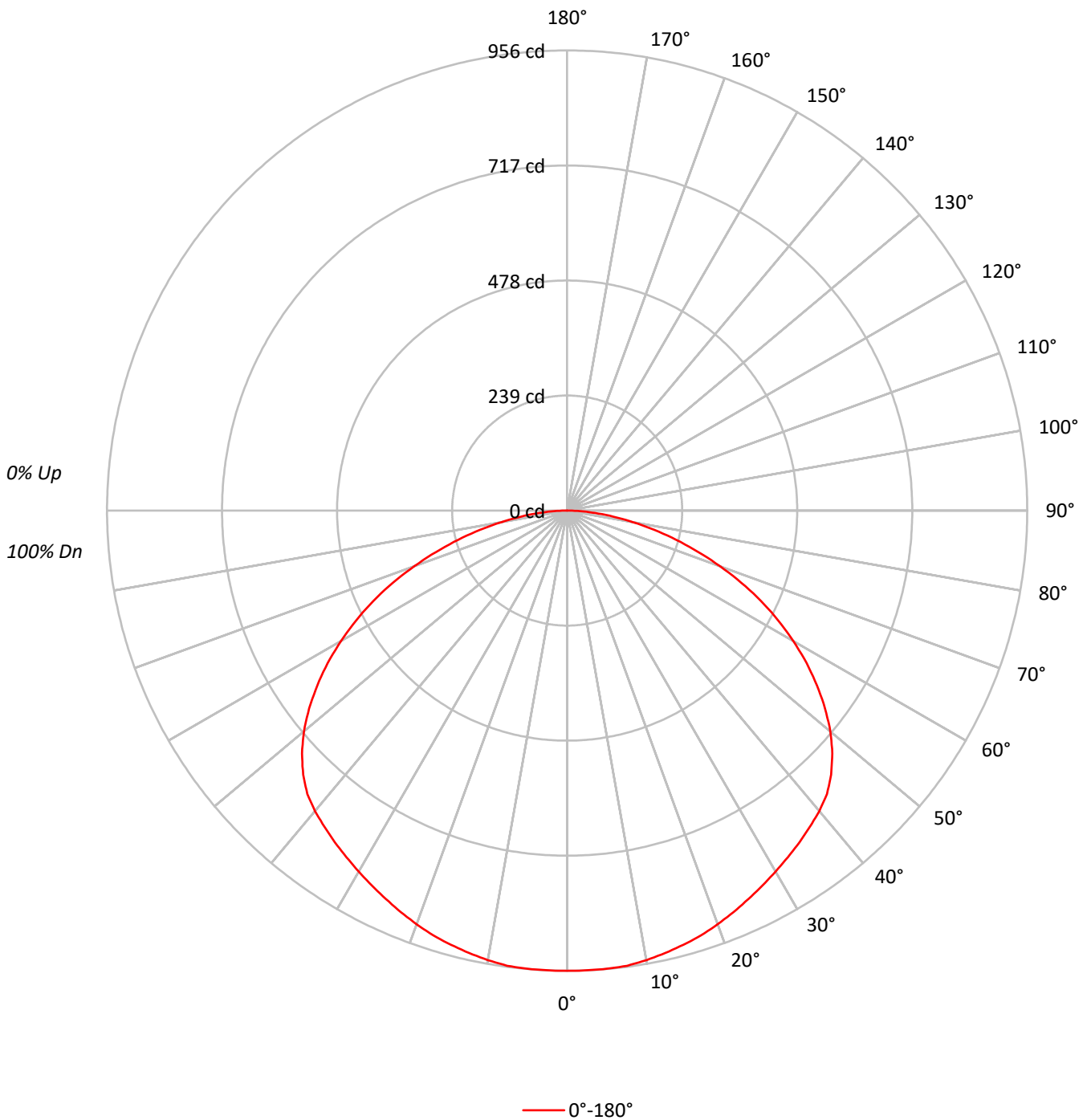
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3211.5 lumens  
Efficiency: N/A  
Efficacy: 49.8 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): 64.5  
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°	4717
5°	4732
10°	4751
15°	4770
20°	4802
25°	4848
30°	4933
35°	5067
40°	5249
45°	5412
50°	5480
55°	5452
60°	5356
65°	5185
70°	4871
75°	4468
80°	3986
85°	3272

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 5480 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.0	2.8
10°-20°	264.0	8.2
20°-30°	411.5	12.8
30°-40°	527.6	16.4
40°-50°	596.4	18.6
50°-60°	565.4	17.6
60°-70°	438.0	13.6
70°-80°	249.0	7.8
80°-90°	68.4	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°	766.5	23.9
0°-40°	1294.1	40.3
0°-60°	2456.0	76.5
0°-90°	3211.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3211.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	956	
5°	955	91
15°	934	264
25°	891	412
35°	841	528
45°	776	596
55°	634	565
65°	444	438
75°	234	249
85°	58	68
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	956.1
2.5°	956.1
5°	955.4
7.5°	953.8
10°	948.4
12.5°	941.5
15°	933.8
17.5°	925.3
20°	914.5
22.5°	902.9
25°	890.6
27.5°	878.3
30°	865.9
32.5°	853.6
35°	841.3
37.5°	828.1
40°	815.0
42.5°	798.8
45°	775.7
47.5°	747.2
50°	714.0
52.5°	675.5
55°	633.8
57.5°	589.9
60°	542.8
62.5°	494.3
65°	444.1
67.5°	391.7
70°	337.7
72.5°	285.3
75°	234.4
77.5°	185.8
80°	140.3
82.5°	97.2
85°	57.8
87.5°	26.2
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	18.33	20.03	18.70	20.35	20.66	18.33	20.03	18.70	20.35	20.66
	3H	20.17	21.71	20.55	22.04	22.40	20.17	21.71	20.55	22.04	22.40
	4H	20.84	22.29	21.24	22.64	23.01	20.84	22.29	21.24	22.64	23.01
	6H	21.33	22.68	21.74	23.04	23.43	21.33	22.68	21.74	23.04	23.43
	8H	21.48	22.77	21.91	23.16	23.56	21.48	22.77	21.91	23.16	23.56
	12H	21.58	22.82	22.01	23.20	23.63	21.58	22.82	22.01	23.20	23.63
4H	2H	19.00	20.45	19.39	20.80	21.17	19.00	20.45	19.39	20.80	21.17
	3H	21.05	22.27	21.45	22.66	23.06	21.05	22.27	21.45	22.66	23.06
	4H	21.84	22.95	22.27	23.36	23.79	21.84	22.95	22.27	23.36	23.79
	6H	22.45	23.42	22.91	23.86	24.31	22.45	23.42	22.91	23.86	24.31
	8H	22.66	23.56	23.11	24.00	24.47	22.66	23.56	23.11	24.00	24.47
	12H	22.80	23.62	23.28	24.09	24.56	22.80	23.62	23.28	24.09	24.56
8H	4H	22.16	23.07	22.62	23.51	23.97	22.16	23.07	22.62	23.51	23.97
	6H	22.89	23.65	23.38	24.13	24.61	22.89	23.65	23.38	24.13	24.61
	8H	23.16	23.84	23.67	24.35	24.83	23.16	23.84	23.67	24.35	24.83
	12H	23.38	23.98	23.88	24.47	25.02	23.38	23.98	23.88	24.47	25.02
12H	4H	22.19	23.01	22.67	23.49	23.95	22.19	23.01	22.67	23.49	23.95
	6H	22.95	23.63	23.45	24.13	24.62	22.95	23.63	23.45	24.13	24.62
	8H	23.28	23.88	23.78	24.37	24.93	23.28	23.88	23.78	24.37	24.93