

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: P867150

Luminaire Tested: PRLX-2002-L-940-48L-L-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867150  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-82)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-940-48L-L-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 3  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

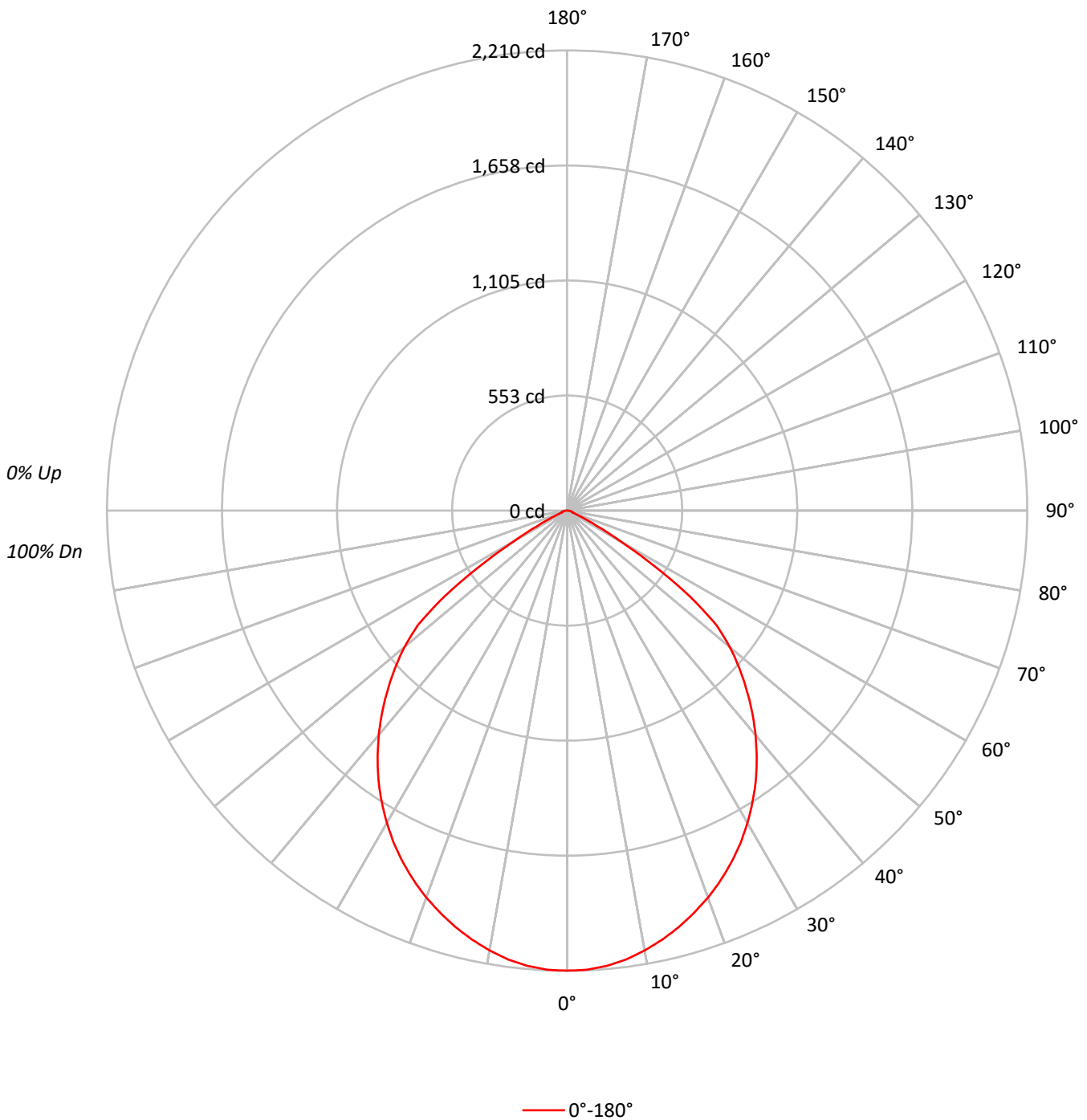
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4342.7 lumens  
Efficiency: N/A  
Efficacy: 115.8 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): 37.5  
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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	71	69
4	89	79	72	66	87	78	71	66	75	70	65	73	68	64	71	67	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	43
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32

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

	0°
0°	10902
5°	10869
10°	10748
15°	10576
20°	10383
25°	10155
30°	9869
35°	9519
40°	9064
45°	8506
50°	7838
55°	6231
60°	2933
65°	1059
70°	408
75°	452
80°	517
85°	617

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8506 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.9	4.8
10°-20°	583.5	13.4
20°-30°	858.3	19.8
30°-40°	986.1	22.7
40°-50°	939.2	21.6
50°-60°	617.6	14.2
60°-70°	114.1	2.6
70°-80°	24.9	0.6
80°-90°	11.1	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°	1649.7	38.0
0°-40°	2635.8	60.7
0°-60°	4192.5	96.5
0°-90°	4342.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4342.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2210	
5°	2194	208
15°	2070	583
25°	1865	858
35°	1580	986
45°	1219	939
55°	724	618
65°	91	114
75°	24	25
85°	11	11
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2209.6
2.5°	2207.3
5°	2194.5
7.5°	2174.0
10°	2145.3
12.5°	2110.2
15°	2070.5
17.5°	2025.9
20°	1977.5
22.5°	1923.8
25°	1865.4
27.5°	1801.6
30°	1732.3
32.5°	1658.0
35°	1580.5
37.5°	1495.7
40°	1407.3
42.5°	1316.5
45°	1219.0
47.5°	1122.3
50°	1021.1
52.5°	902.6
55°	724.4
57.5°	496.4
60°	297.2
62.5°	167.3
65°	90.7
67.5°	45.6
70°	28.3
72.5°	26.0
75°	23.7
77.5°	21.4
80°	18.2
82.5°	15.0
85°	10.9
87.5°	5.9
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	16.29	17.69	16.66	18.01	18.32	16.29	17.69	16.66	18.01	18.32
	3H	16.21	17.44	16.59	17.77	18.14	16.21	17.44	16.59	17.77	18.14
	4H	16.16	17.31	16.56	17.66	18.04	16.16	17.31	16.56	17.66	18.04
	6H	16.11	17.17	16.53	17.53	17.93	16.11	17.17	16.53	17.53	17.93
	8H	16.09	17.08	16.52	17.47	17.88	16.09	17.08	16.52	17.47	17.88
	12H	16.06	17.01	16.49	17.40	17.83	16.06	17.01	16.49	17.40	17.83
4H	2H	16.17	17.31	16.57	17.66	18.05	16.17	17.31	16.57	17.66	18.05
	3H	16.10	17.02	16.51	17.43	17.83	16.10	17.02	16.51	17.43	17.83
	4H	16.05	16.87	16.48	17.29	17.73	16.05	16.87	16.48	17.29	17.73
	6H	16.02	16.72	16.48	17.17	17.64	16.02	16.72	16.48	17.17	17.64
	8H	15.99	16.65	16.45	17.10	17.57	15.99	16.65	16.45	17.10	17.57
	12H	15.97	16.56	16.45	17.04	17.51	15.97	16.56	16.45	17.04	17.51
8H	4H	15.93	16.60	16.40	17.04	17.51	15.93	16.60	16.40	17.04	17.51
	6H	15.90	16.44	16.40	16.94	17.42	15.90	16.44	16.40	16.94	17.42
	8H	15.87	16.37	16.39	16.88	17.37	15.87	16.37	16.39	16.88	17.37
	12H	15.87	16.31	16.38	16.81	17.38	15.87	16.31	16.38	16.81	17.38
12H	4H	15.89	16.48	16.38	16.96	17.44	15.89	16.48	16.38	16.96	17.44
	6H	15.84	16.34	16.36	16.85	17.34	15.84	16.34	16.36	16.85	17.34
	8H	15.84	16.29	16.35	16.78	17.35	15.84	16.29	16.35	16.78	17.35