

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: P866963

Luminaire Tested: PRLX-2002-L-927-48L-G-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866963  
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-927-48L-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 3  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

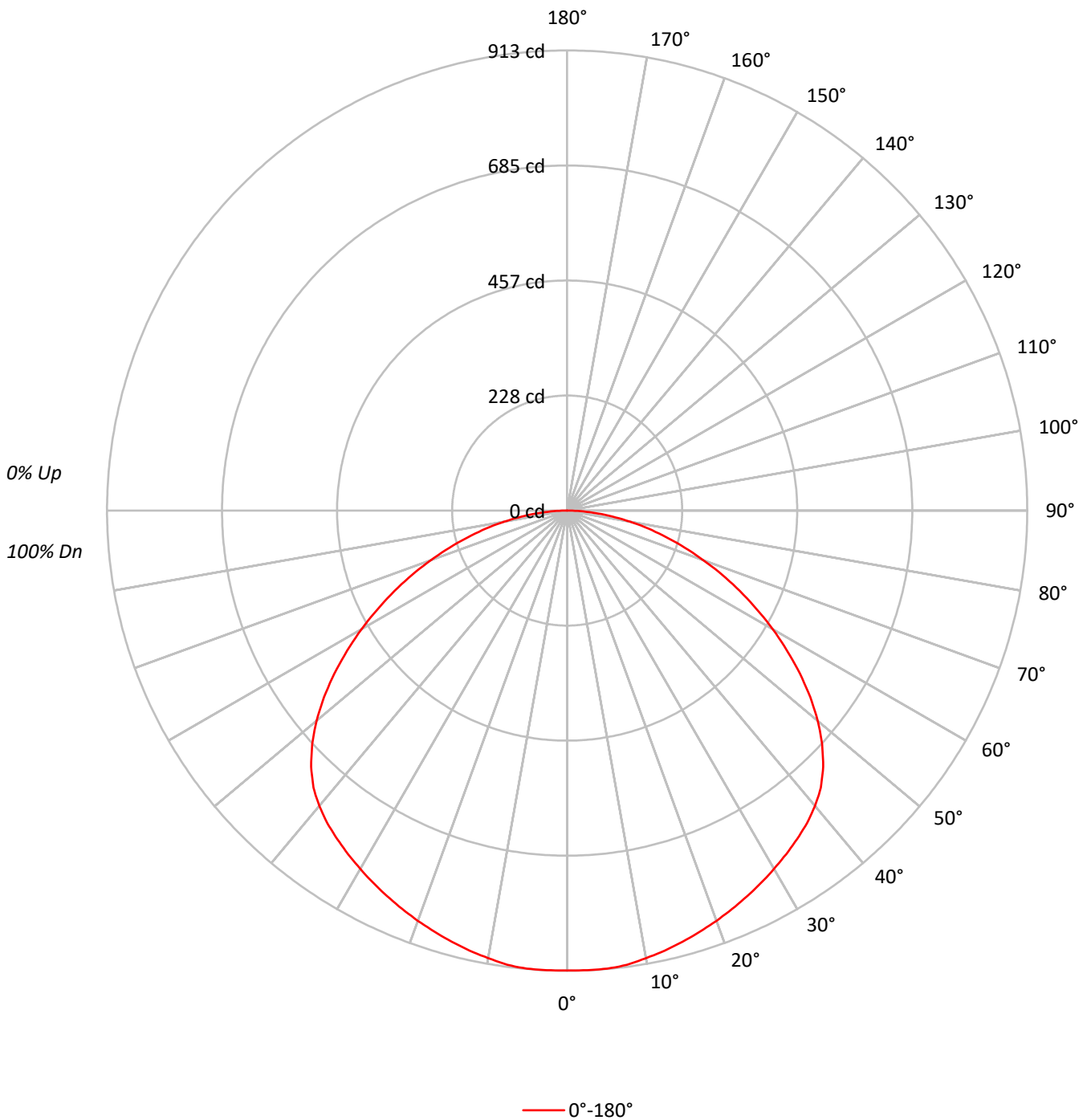
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2936.0 lumens  
Efficiency: N/A  
Efficacy: 78.3 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): 37.5  
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°	4502
5°	4519
10°	4517
15°	4523
20°	4548
25°	4597
30°	4676
35°	4791
40°	4928
45°	5013
50°	4984
55°	4851
60°	4650
65°	4413
70°	4147
75°	3870
80°	3591
85°	3198

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5013 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.8	3.0
10°-20°	250.3	8.5
20°-30°	390.1	13.3
30°-40°	498.5	17.0
40°-50°	551.9	18.8
50°-60°	503.0	17.1
60°-70°	374.8	12.8
70°-80°	216.3	7.4
80°-90°	64.2	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°	727.2	24.8
0°-40°	1225.7	41.7
0°-60°	2280.7	77.7
0°-90°	2936.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2936.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	912	
5°	912	87
15°	886	250
25°	844	390
35°	796	499
45°	718	552
55°	564	503
65°	378	375
75°	203	216
85°	56	64
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	912.4
2.5°	912.8
5°	912.4
7.5°	909.2
10°	901.7
12.5°	894.2
15°	885.5
17.5°	876.1
20°	866.2
22.5°	855.5
25°	844.5
27.5°	833.0
30°	820.8
32.5°	808.5
35°	795.5
37.5°	781.7
40°	765.1
42.5°	745.3
45°	718.5
47.5°	686.1
50°	649.3
52.5°	607.9
55°	564.0
57.5°	517.4
60°	471.2
62.5°	424.6
65°	378.0
67.5°	333.0
70°	287.5
72.5°	245.3
75°	203.0
77.5°	165.1
80°	126.4
82.5°	90.1
85°	56.5
87.5°	26.1
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	17.75	19.43	18.12	19.75	20.06	17.75	19.43	18.12	19.75	20.06
	3H	19.50	21.02	19.88	21.35	21.71	19.50	21.02	19.88	21.35	21.71
	4H	20.17	21.60	20.57	21.95	22.32	20.17	21.60	20.57	21.95	22.32
	6H	20.69	22.02	21.10	22.38	22.77	20.69	22.02	21.10	22.38	22.77
	8H	20.86	22.13	21.29	22.52	22.92	20.86	22.13	21.29	22.52	22.92
	12H	20.99	22.20	21.41	22.59	23.01	20.99	22.20	21.41	22.59	23.01
4H	2H	18.37	19.81	18.77	20.15	20.53	18.37	19.81	18.77	20.15	20.53
	3H	20.35	21.55	20.76	21.95	22.35	20.35	21.55	20.76	21.95	22.35
	4H	21.15	22.24	21.58	22.65	23.08	21.15	22.24	21.58	22.65	23.08
	6H	21.80	22.76	22.25	23.20	23.65	21.80	22.76	22.25	23.20	23.65
	8H	22.03	22.92	22.49	23.36	23.83	22.03	22.92	22.49	23.36	23.83
	12H	22.20	23.01	22.68	23.48	23.95	22.20	23.01	22.68	23.48	23.95
8H	4H	21.47	22.36	21.93	22.81	23.27	21.47	22.36	21.93	22.81	23.27
	6H	22.25	23.00	22.75	23.49	23.96	22.25	23.00	22.75	23.49	23.96
	8H	22.56	23.23	23.07	23.73	24.22	22.56	23.23	23.07	23.73	24.22
	12H	22.81	23.41	23.32	23.90	24.45	22.81	23.41	23.32	23.90	24.45
12H	4H	21.51	22.32	21.99	22.79	23.26	21.51	22.32	21.99	22.79	23.26
	6H	22.32	22.99	22.82	23.49	23.98	22.32	22.99	22.82	23.49	23.98
	8H	22.69	23.28	23.19	23.77	24.33	22.69	23.28	23.19	23.77	24.33