

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: P867116

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

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867116  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-83)  
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-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 7  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

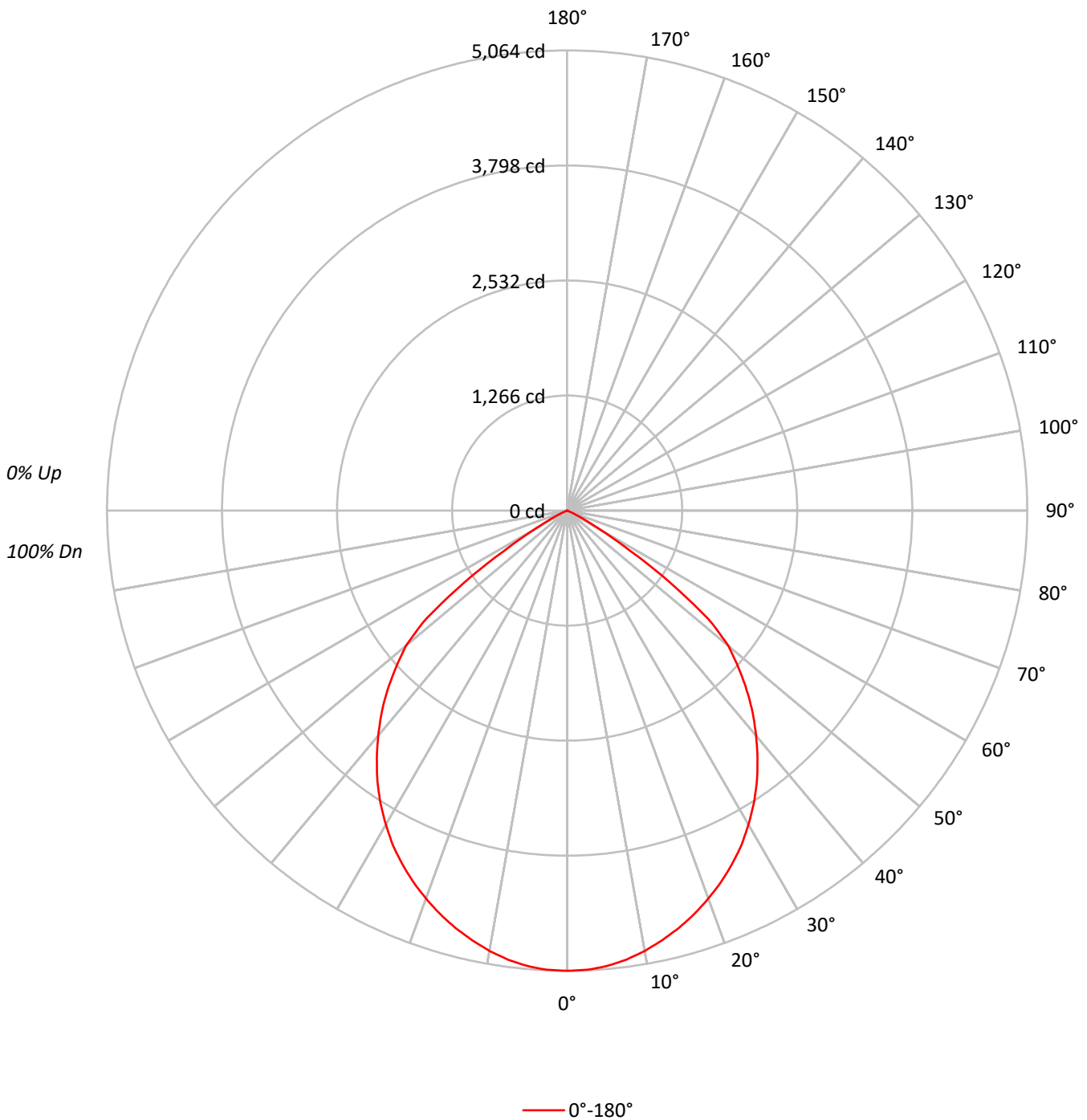
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9578.5 lumens  
Efficiency: N/A  
Efficacy: 100.6 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 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	109	105	103	109	106	104	101	102	100	98	98	97	95	95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71
4	90	80	73	68	88	79	72	67	77	71	66	75	70	66	73	68	65	63
5	84	73	65	60	82	72	65	60	70	64	59	68	63	58	66	62	58	56
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	43	39	49	43	39	48	43	39	37
10	60	48	41	36	59	47	40	36	46	40	36	45	40	35	45	39	35	34

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

	0°
0°	24987
5°	24915
10°	24648
15°	24281
20°	23858
25°	23371
30°	22738
35°	21919
40°	20828
45°	19503
50°	17777
55°	11886
60°	4223
65°	976
70°	157
75°	166
80°	216
85°	243

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 19503 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	476.7	5.0
10°-20°	1339.7	14.0
20°-30°	1975.6	20.6
30°-40°	2270.2	23.7
40°-50°	2149.3	22.4
50°-60°	1223.7	12.8
60°-70°	129.7	1.4
70°-80°	9.3	0.1
80°-90°	4.3	0.0
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°	3792.0	39.6
0°-40°	6062.2	63.3
0°-60°	9435.2	98.5
0°-90°	9578.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9578.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5064	
5°	5031	477
15°	4754	1340
25°	4293	1976
35°	3639	2270
45°	2795	2149
55°	1382	1224
65°	84	130
75°	9	9
85°	4	4
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	5064.4
2.5°	5058.9
5°	5030.7
7.5°	4984.0
10°	4919.9
12.5°	4841.7
15°	4753.7
17.5°	4653.8
20°	4544.0
22.5°	4424.5
25°	4293.1
27.5°	4151.9
30°	3991.1
32.5°	3821.6
35°	3639.1
37.5°	3441.4
40°	3233.9
42.5°	3024.3
45°	2795.1
47.5°	2557.2
50°	2316.0
52.5°	1955.4
55°	1381.8
57.5°	824.5
60°	428.0
62.5°	214.0
65°	83.6
67.5°	16.3
70°	10.9
72.5°	9.8
75°	8.7
77.5°	7.6
80°	7.6
82.5°	5.4
85°	4.3
87.5°	2.2
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	17.08	18.44	17.44	18.75	19.07	17.08	18.44	17.44	18.75	19.07
	3H	16.95	18.15	17.33	18.48	18.84	16.95	18.15	17.33	18.48	18.84
	4H	16.88	17.99	17.29	18.34	18.72	16.88	17.99	17.29	18.34	18.72
	6H	16.81	17.82	17.22	18.19	18.59	16.81	17.82	17.22	18.19	18.59
	8H	16.77	17.73	17.20	18.12	18.52	16.77	17.73	17.20	18.12	18.52
	12H	16.73	17.64	17.16	18.03	18.46	16.73	17.64	17.16	18.03	18.46
4H	2H	16.90	18.01	17.31	18.36	18.75	16.90	18.01	17.31	18.36	18.75
	3H	16.78	17.67	17.19	18.07	18.48	16.78	17.67	17.19	18.07	18.48
	4H	16.70	17.48	17.13	17.90	18.35	16.70	17.48	17.13	17.90	18.35
	6H	16.62	17.29	17.08	17.74	18.21	16.62	17.29	17.08	17.74	18.21
	8H	16.56	17.19	17.03	17.64	18.11	16.56	17.19	17.03	17.64	18.11
	12H	16.51	17.07	17.00	17.56	18.03	16.51	17.07	17.00	17.56	18.03
8H	4H	16.56	17.19	17.03	17.64	18.11	16.56	17.19	17.03	17.64	18.11
	6H	16.45	16.97	16.95	17.47	17.95	16.45	16.97	16.95	17.47	17.95
	8H	16.38	16.86	16.91	17.37	17.87	16.38	16.86	16.91	17.37	17.87
	12H	16.33	16.76	16.85	17.26	17.83	16.33	16.76	16.85	17.26	17.83
12H	4H	16.51	17.07	16.99	17.55	18.03	16.51	17.07	16.99	17.55	18.03
	6H	16.38	16.86	16.90	17.37	17.86	16.38	16.86	16.90	17.37	17.86
	8H	16.33	16.76	16.85	17.25	17.82	16.33	16.76	16.85	17.25	17.82