

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: P866376

Luminaire Tested: PRLX-2002-M-940-45L-L-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866376  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-53)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-940-45L-L-U-S-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

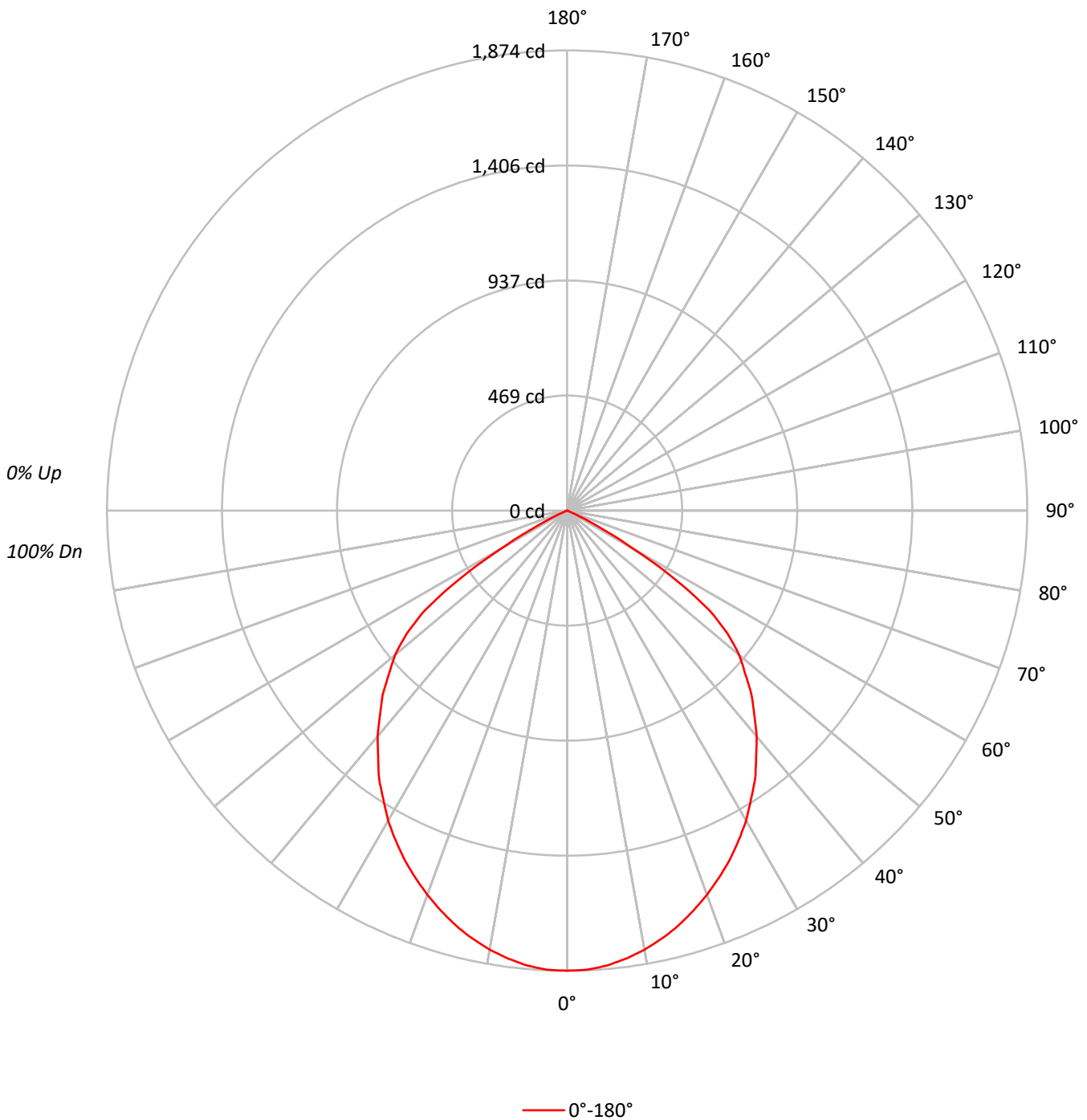
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3728.7 lumens  
Efficiency: N/A  
Efficacy: 96.1 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.8  
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	95	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	76	73	78	75	71	69
4	89	79	72	66	87	78	71	66	75	69	65	73	68	64	71	67	63	61
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

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

	0°
0°	14909
5°	14853
10°	14669
15°	14413
20°	14093
25°	13762
30°	13392
35°	12967
40°	12470
45°	11953
50°	11325
55°	9806
60°	5017
65°	973
70°	91
75°	120
80°	119
85°	119

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11953 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.1	4.7
10°-20°	492.7	13.2
20°-30°	721.5	19.3
30°-40°	832.6	22.3
40°-50°	816.3	21.9
50°-60°	593.2	15.9
60°-70°	90.9	2.4
70°-80°	3.6	0.1
80°-90°	1.8	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°	1390.3	37.3
0°-40°	2222.9	59.6
0°-60°	3632.4	97.4
0°-90°	3728.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3728.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1874	
5°	1860	176
15°	1750	493
25°	1568	721
35°	1335	833
45°	1062	816
55°	707	593
65°	52	91
75°	4	4
85°	1	2
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1874.0
2.5°	1871.4
5°	1859.8
7.5°	1840.4
10°	1815.8
12.5°	1784.8
15°	1749.9
17.5°	1708.6
20°	1664.6
22.5°	1616.8
25°	1567.7
27.5°	1513.4
30°	1457.8
32.5°	1393.2
35°	1335.1
37.5°	1264.0
40°	1200.7
42.5°	1128.3
45°	1062.4
47.5°	983.5
50°	915.0
52.5°	823.3
55°	707.0
57.5°	522.1
60°	315.3
62.5°	149.9
65°	51.7
67.5°	12.9
70°	3.9
72.5°	3.9
75°	3.9
77.5°	2.6
80°	2.6
82.5°	2.6
85°	1.3
87.5°	1.3
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	18.82	20.23	19.19	20.55	20.86	18.82	20.23	19.19	20.55	20.86
	3H	18.70	19.95	19.08	20.28	20.64	18.70	19.95	19.08	20.28	20.64
	4H	18.64	19.79	19.04	20.14	20.52	18.64	19.79	19.04	20.14	20.52
	6H	18.57	19.62	18.98	19.99	20.38	18.57	19.62	18.98	19.99	20.38
	8H	18.53	19.53	18.96	19.92	20.32	18.53	19.53	18.96	19.92	20.32
	12H	18.49	19.44	18.92	19.83	20.26	18.49	19.44	18.92	19.83	20.26
4H	2H	18.66	19.81	19.06	20.16	20.54	18.66	19.81	19.06	20.16	20.54
	3H	18.54	19.47	18.96	19.87	20.28	18.54	19.47	18.96	19.87	20.28
	4H	18.46	19.28	18.90	19.70	20.15	18.46	19.28	18.90	19.70	20.15
	6H	18.39	19.10	18.85	19.54	20.01	18.39	19.10	18.85	19.54	20.01
	8H	18.33	18.99	18.80	19.44	19.91	18.33	18.99	18.80	19.44	19.91
	12H	18.29	18.87	18.77	19.36	19.83	18.29	18.87	18.77	19.36	19.83
8H	4H	18.33	18.99	18.80	19.44	19.91	18.33	18.99	18.80	19.44	19.91
	6H	18.23	18.77	18.73	19.27	19.75	18.23	18.77	18.73	19.27	19.75
	8H	18.16	18.66	18.68	19.17	19.66	18.16	18.66	18.68	19.17	19.66
	12H	18.11	18.56	18.63	19.05	19.62	18.11	18.56	18.63	19.05	19.62
12H	4H	18.29	18.87	18.77	19.36	19.83	18.29	18.87	18.77	19.36	19.83
	6H	18.16	18.66	18.68	19.17	19.66	18.16	18.66	18.68	19.17	19.66
	8H	18.11	18.56	18.63	19.05	19.62	18.11	18.56	18.63	19.05	19.62