

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: P866164

Luminaire Tested: PRLX-2002-M-927-25L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866164  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-41)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-927-25L-G-U-S-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 3  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

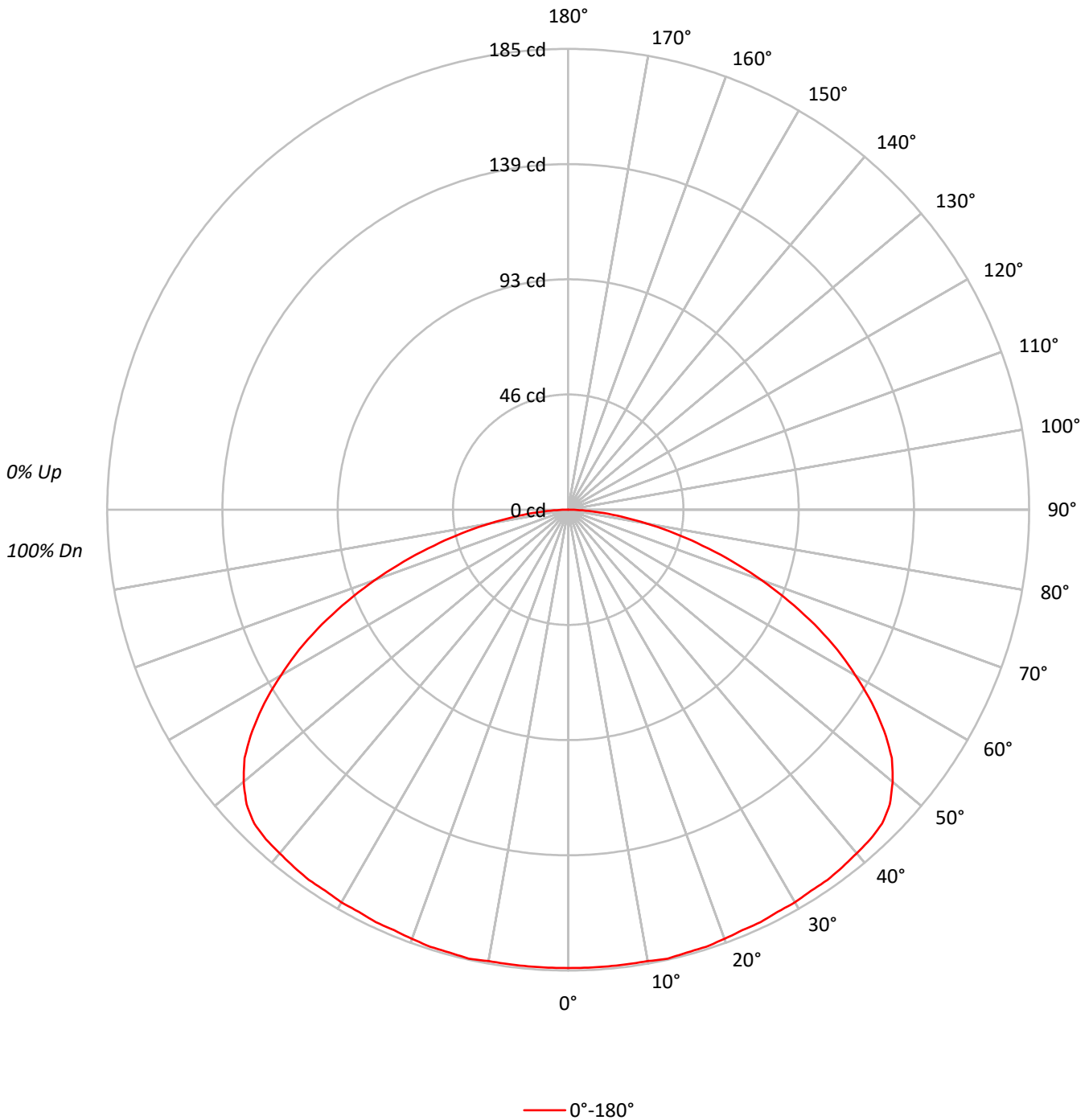
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 724.7 lumens  
Efficiency: N/A  
Efficacy: 33.4 lumens/watt  
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.67  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.7  
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	108	103	98	94	105	100	96	92	96	93	90	92	89	87	89	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	67	61	57	55
4	80	67	58	51	78	66	57	50	63	56	49	61	54	49	59	53	48	46
5	73	59	50	43	71	58	49	42	56	48	42	54	47	41	52	46	41	39
6	67	53	43	37	65	52	43	37	50	42	36	48	41	36	47	40	35	33
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	36	30	25	35	29	24	23
10	50	36	28	22	49	36	28	22	35	27	22	34	27	22	33	26	22	20

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

	0°
0°	1464
5°	1469
10°	1486
15°	1515
20°	1552
25°	1604
30°	1672
35°	1762
40°	1870
45°	2005
50°	2104
55°	2147
60°	2119
65°	2054
70°	1919
75°	1715
80°	1452
85°	1159

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 55°  
 Luminance: 2147 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	17.6	2.4
10°-20°	52.2	7.2
20°-30°	84.5	11.7
30°-40°	113.8	15.7
40°-50°	136.9	18.9
50°-60°	137.6	19.0
60°-70°	107.5	14.8
70°-80°	59.5	8.2
80°-90°	15.2	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°	154.2	21.3
0°-40°	268.0	37.0
0°-60°	542.5	74.9
0°-90°	724.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	724.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	184	
5°	184	18
15°	184	52
25°	183	84
35°	181	114
45°	178	137
55°	155	138
65°	109	108
75°	56	60
85°	13	15
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	184.0
2.5°	184.0
5°	184.0
7.5°	184.0
10°	184.0
12.5°	184.6
15°	184.0
17.5°	184.0
20°	183.3
22.5°	182.7
25°	182.7
27.5°	182.0
30°	182.0
32.5°	181.4
35°	181.4
37.5°	180.8
40°	180.1
42.5°	179.5
45°	178.2
47.5°	175.1
50°	170.0
52.5°	163.7
55°	154.8
57.5°	144.6
60°	133.2
62.5°	121.8
65°	109.1
67.5°	95.8
70°	82.5
72.5°	69.1
75°	55.8
77.5°	43.8
80°	31.7
82.5°	21.6
85°	12.7
87.5°	5.7
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	15.35	17.08	15.71	17.40	17.71	15.35	17.08	15.71	17.40	17.71
	3H	17.18	18.76	17.56	19.08	19.44	17.18	18.76	17.56	19.08	19.44
	4H	17.82	19.31	18.22	19.66	20.03	17.82	19.31	18.22	19.66	20.03
	6H	18.27	19.65	18.68	20.01	20.40	18.27	19.65	18.68	20.01	20.40
	8H	18.40	19.72	18.82	20.11	20.50	18.40	19.72	18.82	20.11	20.50
	12H	18.48	19.75	18.91	20.13	20.56	18.48	19.75	18.91	20.13	20.56
4H	2H	16.02	17.51	16.42	17.85	18.23	16.02	17.51	16.42	17.85	18.23
	3H	18.06	19.31	18.47	19.71	20.11	18.06	19.31	18.47	19.71	20.11
	4H	18.82	19.96	19.25	20.37	20.80	18.82	19.96	19.25	20.37	20.80
	6H	19.38	20.38	19.83	20.82	21.27	19.38	20.38	19.83	20.82	21.27
	8H	19.55	20.49	20.01	20.93	21.39	19.55	20.49	20.01	20.93	21.39
	12H	19.67	20.52	20.15	20.99	21.46	19.67	20.52	20.15	20.99	21.46
8H	4H	19.13	20.06	19.58	20.50	20.96	19.13	20.06	19.58	20.50	20.96
	6H	19.79	20.57	20.28	21.06	21.53	19.79	20.57	20.28	21.06	21.53
	8H	20.03	20.73	20.53	21.23	21.71	20.03	20.73	20.53	21.23	21.71
	12H	20.21	20.83	20.71	21.32	21.87	20.21	20.83	20.71	21.32	21.87
12H	4H	19.16	20.00	19.64	20.48	20.94	19.16	20.00	19.64	20.48	20.94
	6H	19.84	20.54	20.35	21.04	21.53	19.84	20.54	20.35	21.04	21.53
	8H	20.13	20.75	20.63	21.24	21.79	20.13	20.75	20.63	21.24	21.79