

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: P865580

Luminaire Tested: PRLX-2002-S-927-10L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865580  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-S-927-10L-G-U-S-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 2  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

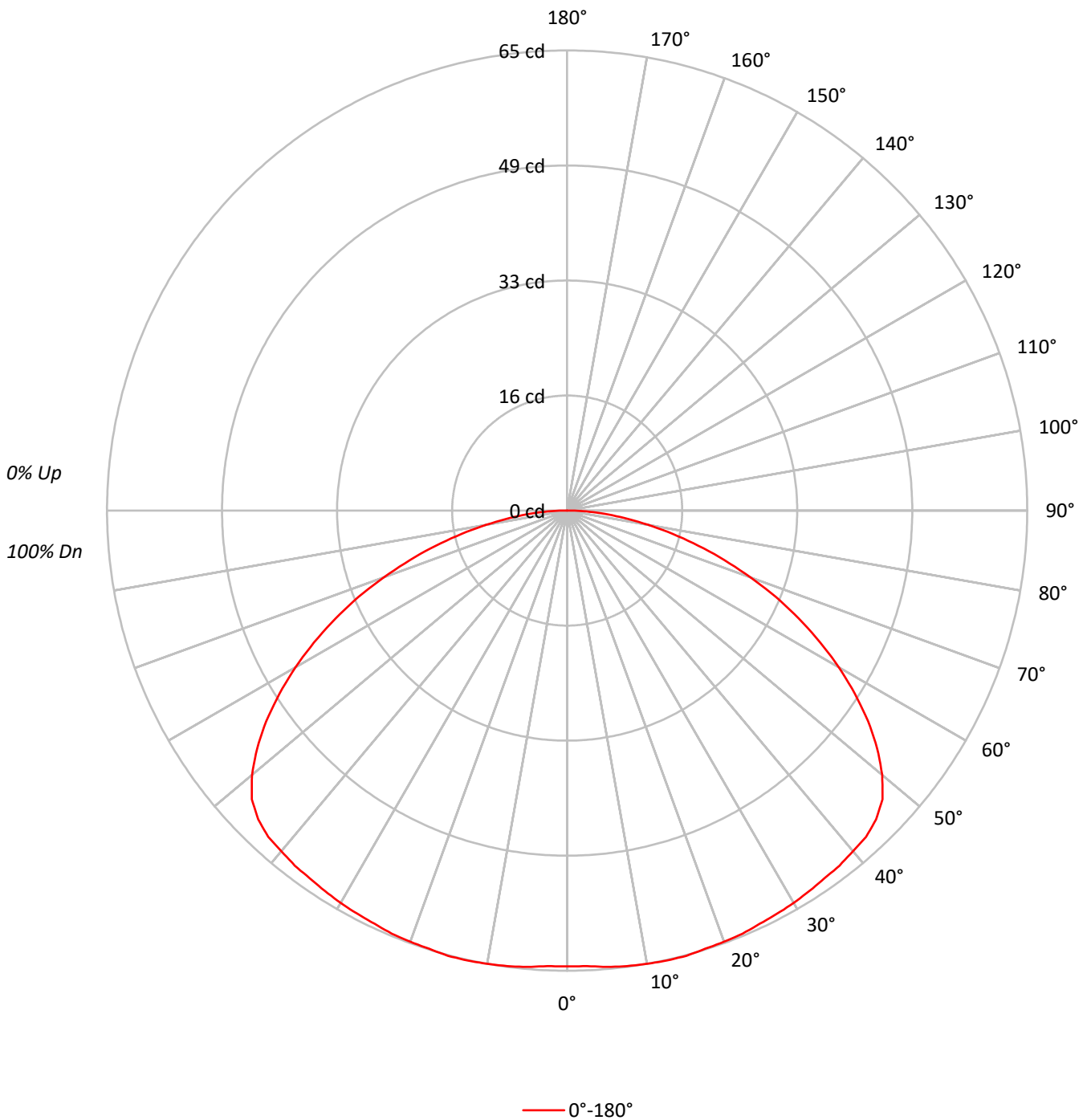
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 249.9 lumens  
Efficiency: N/A  
Efficacy: 23.8 lumens/watt  
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.65  
Luminous Opening: Circular (Dia: 0.85' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 10.5  
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	98	94	105	100	96	92	96	93	89		92	89	87		89	86	84	82
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77	73	69	67
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67	62	57	55
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59	53	48	46
5	73	60	50	43	71	59	50	43	56	48	42		54	47	42		52	46	41	39
6	67	53	44	37	65	52	43	37	50	42	37		49	42	36		47	41	36	34
7	62	48	39	32	60	47	38	32	46	38	32		44	37	32		43	36	31	29
8	58	43	35	28	56	43	34	28	41	34	28		40	33	28		39	33	28	26
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36	29	25	23
10	50	36	28	23	49	36	28	23	35	28	23		34	27	22		33	27	22	21

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

	0°
0°	1210
5°	1220
10°	1240
15°	1266
20°	1295
25°	1335
30°	1388
35°	1454
40°	1540
45°	1639
50°	1698
55°	1700
60°	1664
65°	1605
70°	1510
75°	1393
80°	1255
85°	1121

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 1703 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	6.2	2.5
10°-20°	18.4	7.4
20°-30°	29.8	11.9
30°-40°	39.8	15.9
40°-50°	47.4	19.0
50°-60°	46.2	18.5
60°-70°	35.7	14.3
70°-80°	20.4	8.2
80°-90°	6.0	2.4
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°	54.4	21.8
0°-40°	94.2	37.7
0°-60°	187.8	75.2
0°-90°	249.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	249.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	64	
5°	65	6
15°	65	18
25°	64	30
35°	63	40
45°	62	47
55°	52	46
65°	36	36
75°	19	20
85°	5	6
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	64.4
2.5°	64.4
5°	64.7
7.5°	64.9
10°	65.0
12.5°	65.1
15°	65.1
17.5°	64.9
20°	64.8
22.5°	64.7
25°	64.4
27.5°	64.2
30°	64.0
32.5°	63.7
35°	63.4
37.5°	63.2
40°	62.8
42.5°	62.5
45°	61.7
47.5°	60.4
50°	58.1
52.5°	55.2
55°	51.9
57.5°	48.2
60°	44.3
62.5°	40.3
65°	36.1
67.5°	31.9
70°	27.5
72.5°	23.3
75°	19.2
77.5°	15.3
80°	11.6
82.5°	8.2
85°	5.2
87.5°	2.7
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	14.41	16.13	14.77	16.45	16.76	14.41	16.13	14.77	16.45	16.76
	3H	16.24	17.81	16.61	18.13	18.49	16.24	17.81	16.61	18.13	18.49
	4H	16.91	18.39	17.31	18.74	19.11	16.91	18.39	17.31	18.74	19.11
	6H	17.41	18.79	17.82	19.15	19.54	17.41	18.79	17.82	19.15	19.54
	8H	17.58	18.89	18.00	19.28	19.68	17.58	18.89	18.00	19.28	19.68
	12H	17.69	18.96	18.12	19.34	19.77	17.69	18.96	18.12	19.34	19.77
4H	2H	15.07	16.55	15.46	16.89	17.27	15.07	16.55	15.46	16.89	17.27
	3H	17.11	18.36	17.52	18.76	19.15	17.11	18.36	17.52	18.76	19.15
	4H	17.91	19.05	18.34	19.46	19.89	17.91	19.05	18.34	19.46	19.89
	6H	18.54	19.54	18.99	19.98	20.43	18.54	19.54	18.99	19.98	20.43
	8H	18.76	19.69	19.22	20.13	20.59	18.76	19.69	19.22	20.13	20.59
	12H	18.92	19.77	19.40	20.24	20.71	18.92	19.77	19.40	20.24	20.71
8H	4H	18.24	19.17	18.70	19.61	20.07	18.24	19.17	18.70	19.61	20.07
	6H	18.99	19.77	19.48	20.25	20.73	18.99	19.77	19.48	20.25	20.73
	8H	19.28	19.98	19.79	20.48	20.97	19.28	19.98	19.79	20.48	20.97
	12H	19.53	20.15	20.03	20.63	21.19	19.53	20.15	20.03	20.63	21.19
12H	4H	18.28	19.12	18.76	19.59	20.06	18.28	19.12	18.76	19.59	20.06
	6H	19.05	19.75	19.56	20.26	20.74	19.05	19.75	19.56	20.26	20.74
	8H	19.40	20.02	19.91	20.51	21.07	19.40	20.02	19.91	20.51	21.07