

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: P866171

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

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866171  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-50)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-927-25L-L-U-S-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 3  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

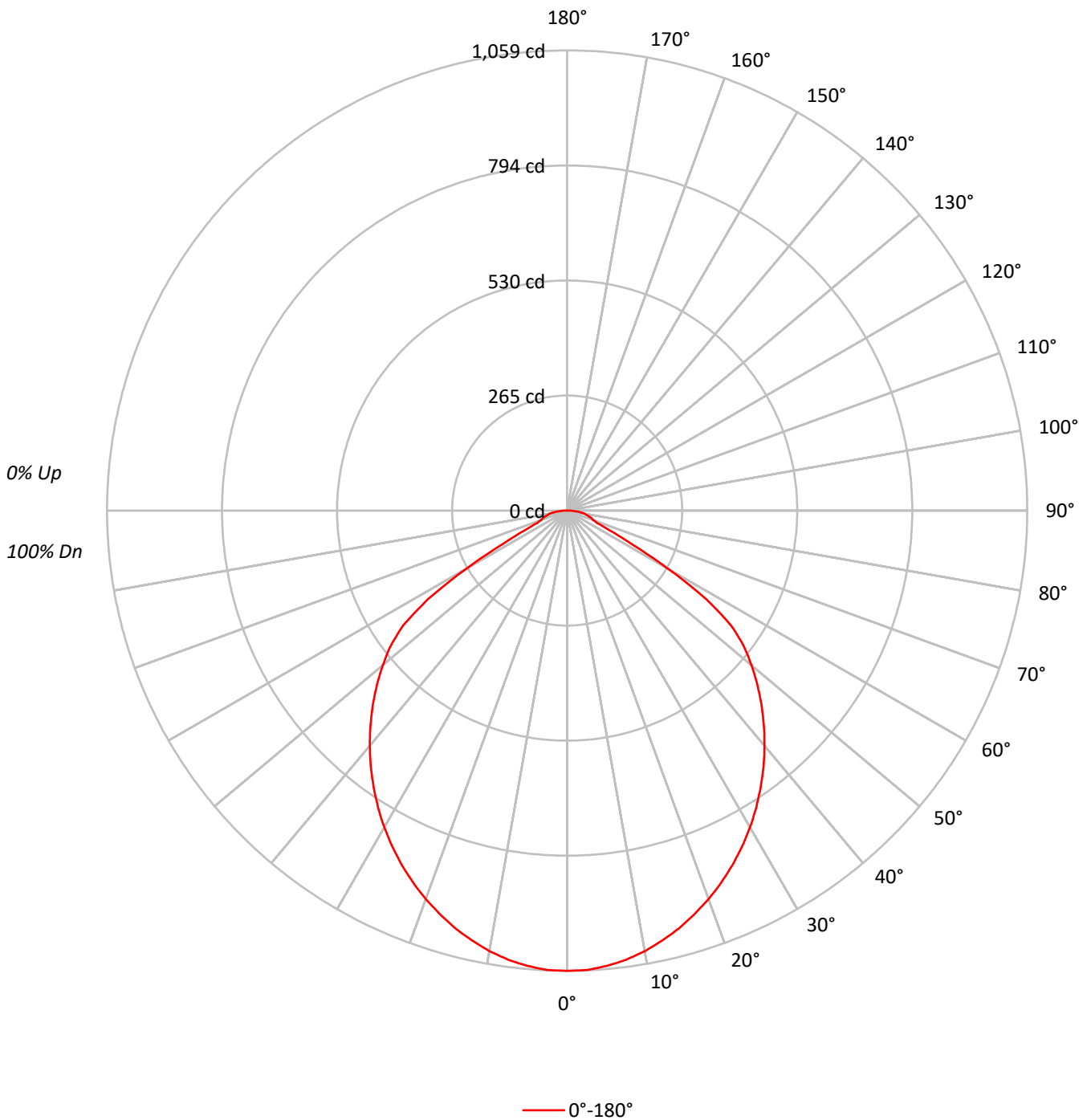
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2365.9 lumens  
Efficiency: N/A  
Efficacy: 109.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3  
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: 0.333 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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	87
2	102	95	89	84	100	93	88	83	90	85	81	86	83	79	84	80	78	76
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	68	62	84	75	67	62	72	66	61	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50
6	74	62	54	48	72	61	53	48	59	52	47	58	51	47	56	51	46	44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	40
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	41	35	31	29

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

	0°
0°	8428
5°	8399
10°	8317
15°	8198
20°	8056
25°	7901
30°	7732
35°	7541
40°	7338
45°	7115
50°	6854
55°	6387
60°	4290
65°	2029
70°	1491
75°	1598
80°	1773
85°	1972

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7115 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.7	4.2
10°-20°	280.4	11.9
20°-30°	414.5	17.5
30°-40°	485.6	20.5
40°-50°	487.5	20.6
50°-60°	393.4	16.6
60°-70°	127.2	5.4
70°-80°	54.9	2.3
80°-90°	22.7	1.0
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°	794.6	33.6
0°-40°	1280.2	54.1
0°-60°	2161.1	91.3
0°-90°	2365.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2365.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1059	
5°	1052	100
15°	995	280
25°	900	415
35°	776	486
45°	632	487
55°	460	393
65°	108	127
75°	52	55
85°	22	23
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1059.3
2.5°	1058.0
5°	1051.7
7.5°	1042.2
10°	1029.5
12.5°	1013.0
15°	995.3
17.5°	973.7
20°	951.5
22.5°	926.7
25°	900.1
27.5°	871.6
30°	841.7
32.5°	810.0
35°	776.4
37.5°	742.2
40°	706.6
42.5°	669.8
45°	632.4
47.5°	593.7
50°	553.8
52.5°	512.5
55°	460.5
57.5°	380.0
60°	269.6
62.5°	168.7
65°	107.8
67.5°	74.2
70°	64.1
72.5°	59.0
75°	52.0
77.5°	45.7
80°	38.7
82.5°	31.1
85°	21.6
87.5°	11.4
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	18.14	19.64	18.51	19.95	20.27	18.14	19.64	18.51	19.95	20.27
	3H	18.25	19.58	18.63	19.91	20.27	18.25	19.58	18.63	19.91	20.27
	4H	18.34	19.58	18.74	19.93	20.31	18.34	19.58	18.74	19.93	20.31
	6H	18.45	19.60	18.86	19.96	20.36	18.45	19.60	18.86	19.96	20.36
	8H	18.51	19.60	18.93	19.99	20.39	18.51	19.60	18.93	19.99	20.39
	12H	18.56	19.60	18.99	19.98	20.41	18.56	19.60	18.99	19.98	20.41
4H	2H	18.11	19.35	18.51	19.70	20.08	18.11	19.35	18.51	19.70	20.08
	3H	18.31	19.33	18.72	19.73	20.13	18.31	19.33	18.72	19.73	20.13
	4H	18.47	19.38	18.90	19.79	20.23	18.47	19.38	18.90	19.79	20.23
	6H	18.69	19.48	19.15	19.92	20.38	18.69	19.48	19.15	19.92	20.38
	8H	18.79	19.53	19.26	19.97	20.44	18.79	19.53	19.26	19.97	20.44
	12H	18.89	19.55	19.38	20.03	20.50	18.89	19.55	19.38	20.03	20.50
8H	4H	18.48	19.22	18.95	19.67	20.13	18.48	19.22	18.95	19.67	20.13
	6H	18.78	19.39	19.28	19.89	20.37	18.78	19.39	19.28	19.89	20.37
	8H	18.95	19.50	19.46	20.01	20.50	18.95	19.50	19.46	20.01	20.50
	12H	19.13	19.62	19.64	20.11	20.68	19.13	19.62	19.64	20.11	20.68
12H	4H	18.47	19.13	18.96	19.61	20.08	18.47	19.13	18.96	19.61	20.08
	6H	18.78	19.34	19.30	19.85	20.34	18.78	19.34	19.30	19.85	20.34
	8H	19.00	19.50	19.51	19.99	20.56	19.00	19.50	19.51	19.99	20.56