

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: P866169

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866169
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-51)
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-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

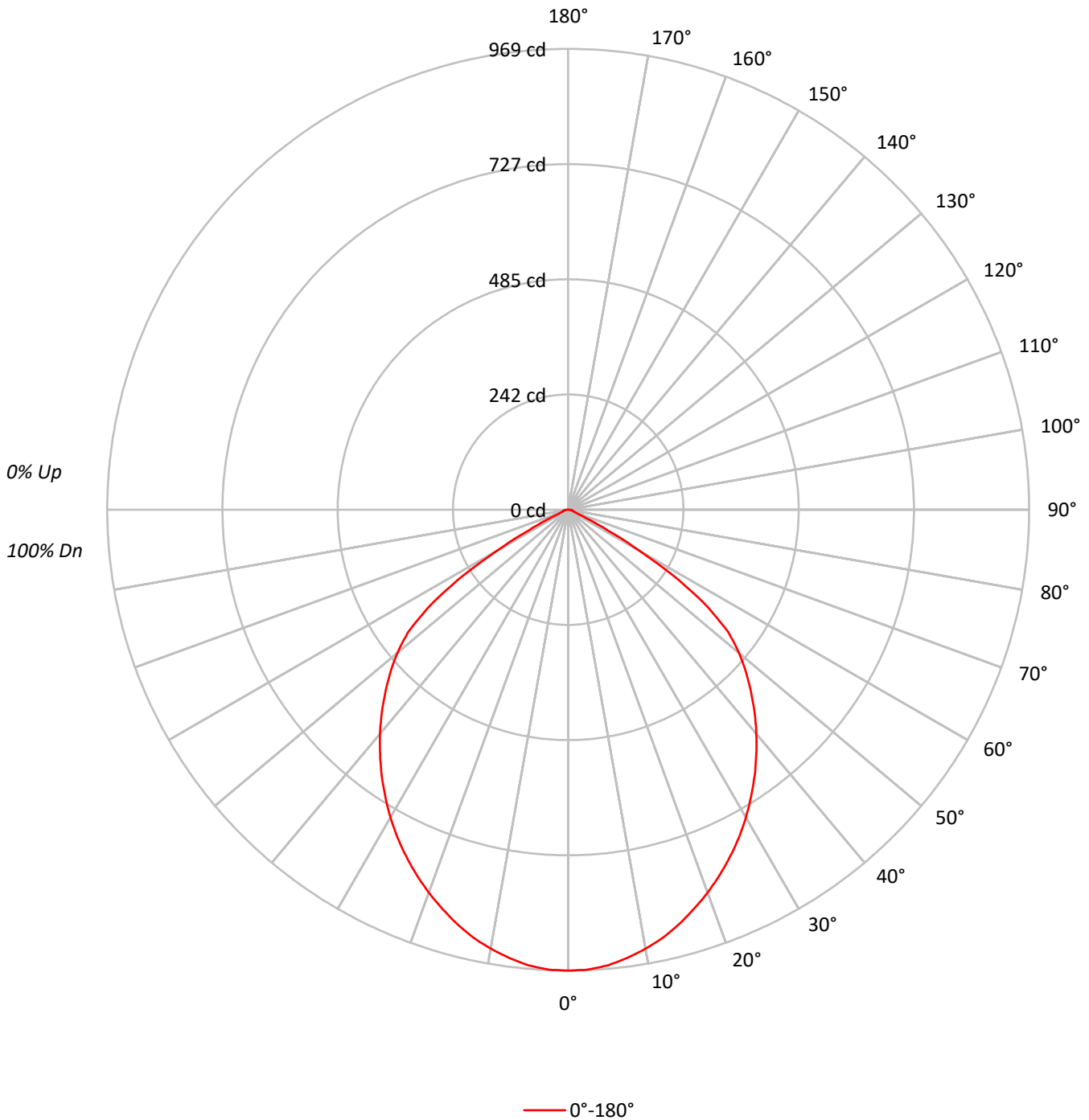
Lumens per Lamp: N/A
Luminaire Lumens: 1946.1 lumens
Efficiency: N/A
Efficacy: 89.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 21.7
Input Voltage (V): 120
Input Current (A_{in}): 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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	48
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	48	44	43
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	40	36	35
10	58	46	39	34	57	45	38	34	44	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	7711
5°	7679
10°	7574
15°	7429
20°	7256
25°	7066
30°	6864
35°	6635
40°	6390
45°	6116
50°	5802
55°	4998
60°	2756
65°	776
70°	309
75°	332
80°	376
85°	466

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6116 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.0	4.7
10°-20°	254.0	13.1
20°-30°	370.6	19.0
30°-40°	427.0	21.9
40°-50°	419.3	21.5
50°-60°	307.5	15.8
60°-70°	60.2	3.1
70°-80°	11.4	0.6
80°-90°	5.1	0.3
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°	715.6	36.8
0°-40°	1142.7	58.7
0°-60°	1869.4	96.1
0°-90°	1946.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1946.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	969	
5°	962	91
15°	902	254
25°	805	371
35°	683	427
45°	544	419
55°	360	307
65°	41	60
75°	11	11
85°	5	5
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	969.2
2.5°	968.0
5°	961.6
7.5°	950.8
10°	937.5
12.5°	921.7
15°	902.0
17.5°	879.8
20°	857.0
22.5°	831.6
25°	805.0
27.5°	777.0
30°	747.2
32.5°	715.5
35°	683.2
37.5°	649.5
40°	615.3
42.5°	580.4
45°	543.6
47.5°	507.5
50°	468.8
52.5°	425.0
55°	360.3
57.5°	275.9
60°	173.2
62.5°	93.2
65°	41.2
67.5°	19.0
70°	13.3
72.5°	12.1
75°	10.8
77.5°	9.5
80°	8.2
82.5°	7.0
85°	5.1
87.5°	2.5
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	16.64	18.07	17.01	18.38	18.70	16.64	18.07	17.01	18.38	18.70
	3H	16.55	17.81	16.93	18.13	18.50	16.55	17.81	16.93	18.13	18.50
	4H	16.49	17.66	16.89	18.01	18.39	16.49	17.66	16.89	18.01	18.39
	6H	16.44	17.51	16.85	17.88	18.27	16.44	17.51	16.85	17.88	18.27
	8H	16.41	17.43	16.84	17.82	18.22	16.41	17.43	16.84	17.82	18.22
	12H	16.38	17.35	16.81	17.74	18.17	16.38	17.35	16.81	17.74	18.17
4H	2H	16.50	17.67	16.90	18.02	18.40	16.50	17.67	16.90	18.02	18.40
	3H	16.42	17.36	16.83	17.77	18.17	16.42	17.36	16.83	17.77	18.17
	4H	16.36	17.20	16.79	17.62	18.06	16.36	17.20	16.79	17.62	18.06
	6H	16.32	17.04	16.78	17.48	17.95	16.32	17.04	16.78	17.48	17.95
	8H	16.28	16.96	16.75	17.40	17.87	16.28	16.96	16.75	17.40	17.87
	12H	16.26	16.86	16.74	17.34	17.81	16.26	16.86	16.74	17.34	17.81
8H	4H	16.24	16.92	16.71	17.37	17.84	16.24	16.92	16.71	17.37	17.84
	6H	16.19	16.74	16.69	17.24	17.72	16.19	16.74	16.69	17.24	17.72
	8H	16.15	16.66	16.67	17.17	17.66	16.15	16.66	16.67	17.17	17.66
	12H	16.14	16.59	16.65	17.09	17.65	16.14	16.59	16.65	17.09	17.65
12H	4H	16.20	16.80	16.69	17.29	17.76	16.20	16.80	16.69	17.29	17.76
	6H	16.13	16.64	16.65	17.15	17.64	16.13	16.64	16.65	17.15	17.64
	8H	16.12	16.57	16.63	17.06	17.63	16.12	16.57	16.63	17.06	17.63