

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: P866958

Luminaire Tested: PRLX-2002-L-927-48L-L-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866958
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-82)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-L-927-48L-L-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

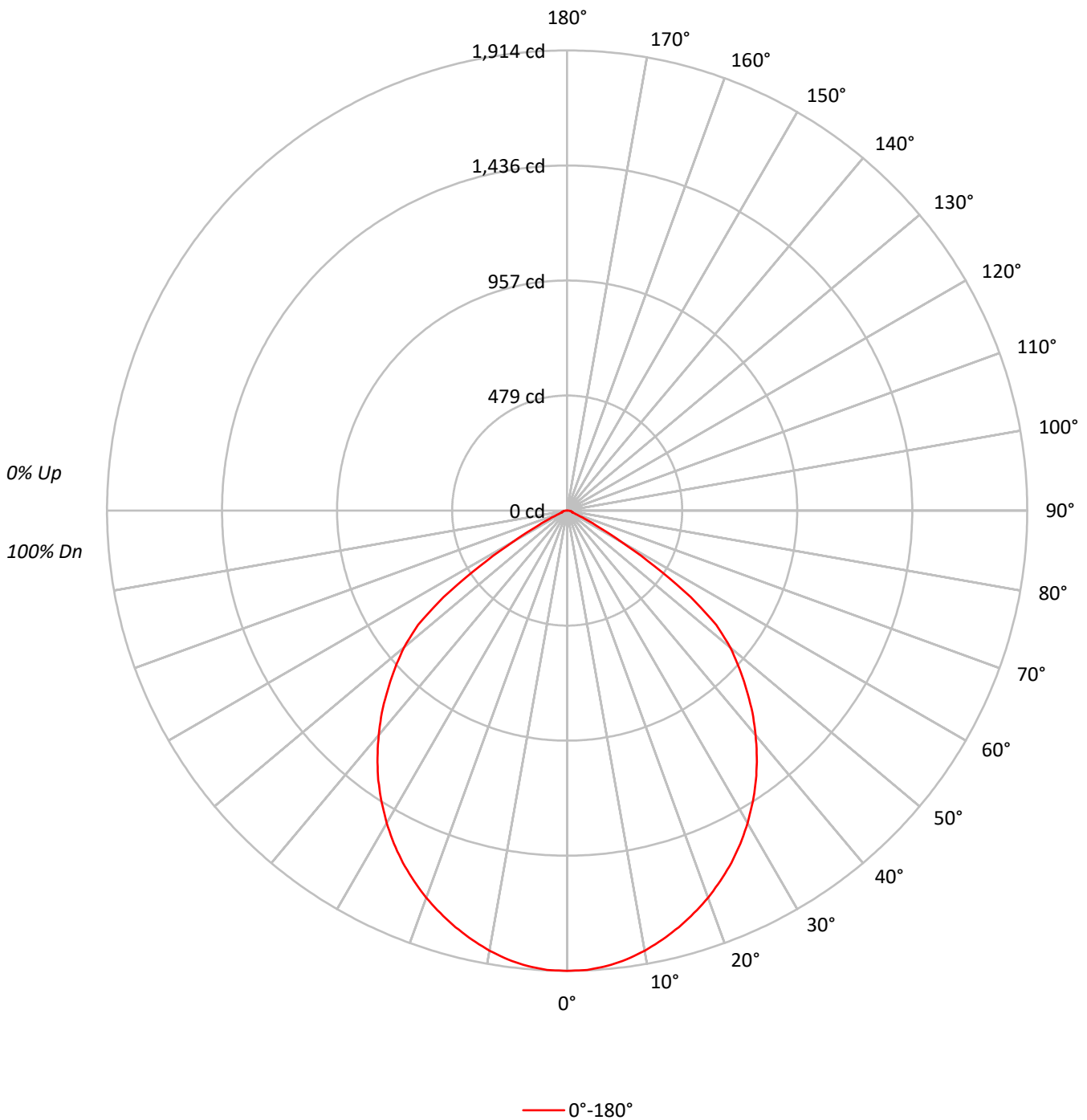
Lumens per Lamp: N/A
Luminaire Lumens: 3762.7 lumens
Efficiency: N/A
Efficacy: 100.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 37.5
Input Voltage (V): 120
Input Current (Ain): 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	94	93	91	90
2	104	97	92	87	101	95	91	86	92	88	84	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	70	65	73	68	64	71	67	63	61
5	83	72	64	58	81	71	63	58	69	62	57	67	61	57	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	48
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	43
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	9446
5°	9417
10°	9312
15°	9163
20°	8996
25°	8798
30°	8551
35°	8248
40°	7853
45°	7370
50°	6791
55°	5399
60°	2541
65°	918
70°	353
75°	391
80°	449
85°	538

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7370 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.1	4.8
10°-20°	505.6	13.4
20°-30°	743.6	19.8
30°-40°	854.3	22.7
40°-50°	813.8	21.6
50°-60°	535.1	14.2
60°-70°	98.8	2.6
70°-80°	21.6	0.6
80°-90°	9.7	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°	1429.3	38.0
0°-40°	2283.7	60.7
0°-60°	3632.6	96.5
0°-90°	3762.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3762.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1914	
5°	1901	180
15°	1794	506
25°	1616	744
35°	1369	854
45°	1056	814
55°	628	535
65°	79	99
75°	20	22
85°	10	10
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1914.5
2.5°	1912.5
5°	1901.4
7.5°	1883.6
10°	1858.8
12.5°	1828.4
15°	1794.0
17.5°	1755.3
20°	1713.4
22.5°	1666.8
25°	1616.2
27.5°	1561.0
30°	1500.9
32.5°	1436.5
35°	1369.4
37.5°	1295.9
40°	1219.3
42.5°	1140.7
45°	1056.2
47.5°	972.4
50°	884.8
52.5°	782.1
55°	627.6
57.5°	430.1
60°	257.5
62.5°	145.0
65°	78.6
67.5°	39.5
70°	24.5
72.5°	22.5
75°	20.5
77.5°	18.6
80°	15.8
82.5°	13.0
85°	9.5
87.5°	5.1
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	15.79	17.20	16.16	17.51	17.82	15.79	17.20	16.16	17.51	17.82
	3H	15.71	16.95	16.09	17.28	17.64	15.71	16.95	16.09	17.28	17.64
	4H	15.66	16.81	16.06	17.16	17.54	15.66	16.81	16.06	17.16	17.54
	6H	15.62	16.67	16.03	17.04	17.43	15.62	16.67	16.03	17.04	17.43
	8H	15.59	16.59	16.02	16.98	17.38	15.59	16.59	16.02	16.98	17.38
	12H	15.56	16.52	16.00	16.90	17.33	15.56	16.52	16.00	16.90	17.33
4H	2H	15.67	16.82	16.07	17.17	17.55	15.67	16.82	16.07	17.17	17.55
	3H	15.60	16.52	16.01	16.93	17.33	15.60	16.52	16.01	16.93	17.33
	4H	15.55	16.37	15.98	16.79	17.23	15.55	16.37	15.98	16.79	17.23
	6H	15.52	16.23	15.98	16.67	17.14	15.52	16.23	15.98	16.67	17.14
	8H	15.49	16.15	15.96	16.60	17.07	15.49	16.15	15.96	16.60	17.07
	12H	15.47	16.06	15.96	16.54	17.01	15.47	16.06	15.96	16.54	17.01
8H	4H	15.44	16.10	15.90	16.54	17.01	15.44	16.10	15.90	16.54	17.01
	6H	15.40	15.94	15.90	16.44	16.92	15.40	15.94	15.90	16.44	16.92
	8H	15.37	15.87	15.89	16.38	16.87	15.37	15.87	15.89	16.38	16.87
	12H	15.37	15.82	15.88	16.31	16.88	15.37	15.82	15.88	16.31	16.88
12H	4H	15.39	15.98	15.88	16.46	16.94	15.39	15.98	15.88	16.46	16.94
	6H	15.34	15.84	15.86	16.35	16.84	15.34	15.84	15.86	16.35	16.84
	8H	15.34	15.79	15.86	16.28	16.85	15.34	15.79	15.86	16.28	16.85