

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: P866702

Luminaire Tested: PRLX-2001-L-927-48L-L-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866702
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-78)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2001-L-927-48L-L-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
TAPERED DRUM WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

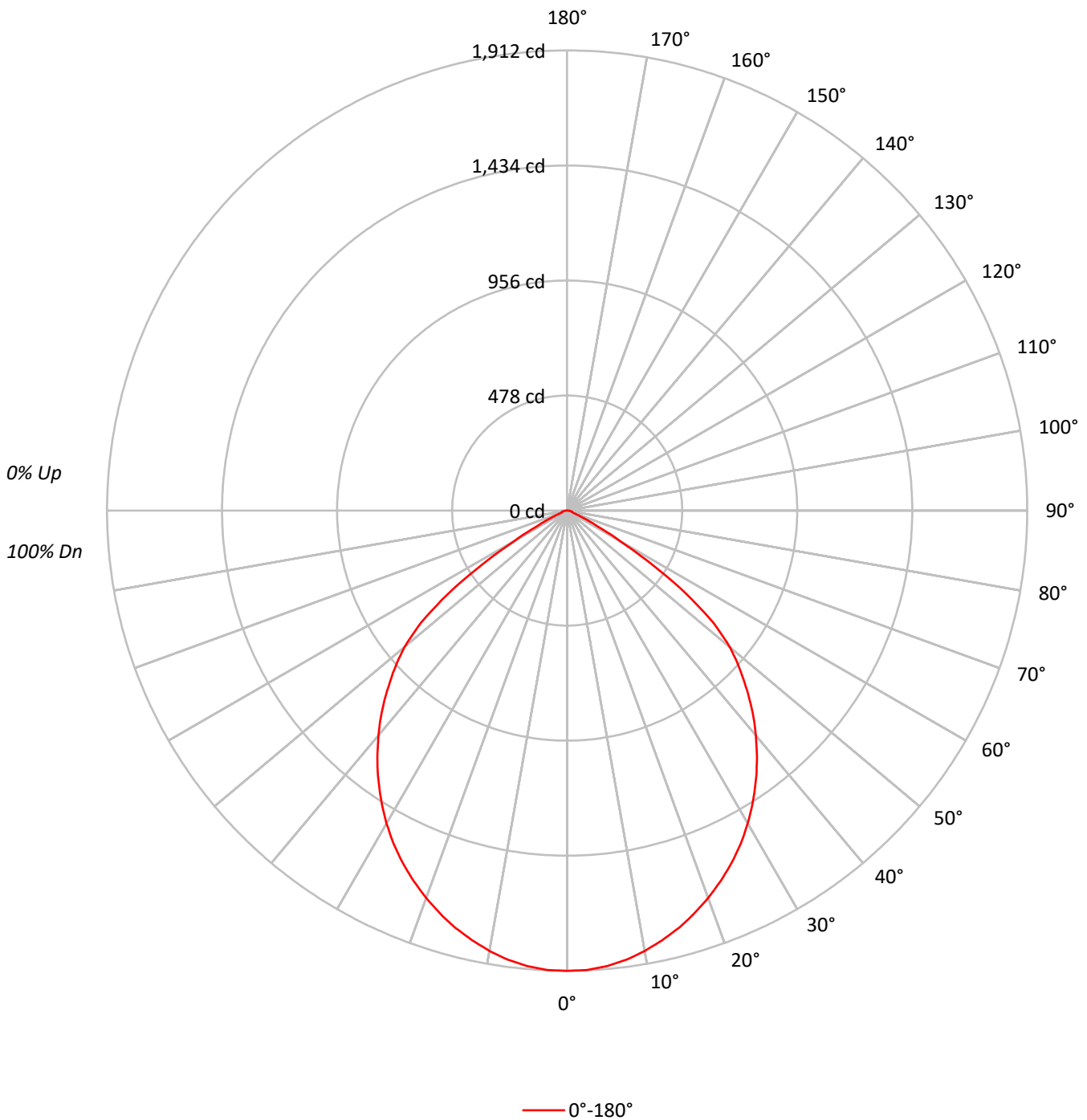
Lumens per Lamp: N/A
Luminaire Lumens: 3756.2 lumens
Efficiency: N/A
Efficacy: 100.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27
Luminous Opening: Circular (Dia: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 37.5
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	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	49
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	51	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	35	45	39	34	44	38	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	10455
5°	10426
10°	10312
15°	10156
20°	9966
25°	9749
30°	9475
35°	9126
40°	8701
45°	8172
50°	7508
55°	5798
60°	2802
65°	1058
70°	417
75°	458
80°	523
85°	596

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8172 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.0	4.8
10°-20°	505.6	13.5
20°-30°	743.6	19.8
30°-40°	854.0	22.7
40°-50°	814.1	21.7
50°-60°	525.5	14.0
60°-70°	101.0	2.7
70°-80°	22.7	0.6
80°-90°	9.8	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°	1429.1	38.0
0°-40°	2283.1	60.8
0°-60°	3622.7	96.4
0°-90°	3756.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3756.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1912	
5°	1900	180
15°	1794	506
25°	1616	744
35°	1367	854
45°	1057	814
55°	608	526
65°	82	101
75°	22	23
85°	10	10
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1912.5
2.5°	1910.1
5°	1899.8
7.5°	1882.5
10°	1857.6
12.5°	1828.0
15°	1794.4
17.5°	1755.7
20°	1713.0
22.5°	1666.0
25°	1616.2
27.5°	1561.3
30°	1500.9
32.5°	1436.1
35°	1367.4
37.5°	1295.9
40°	1219.3
42.5°	1142.3
45°	1057.0
47.5°	972.8
50°	882.8
52.5°	766.3
55°	608.3
57.5°	423.8
60°	256.3
62.5°	146.9
65°	81.8
67.5°	42.7
70°	26.1
72.5°	23.7
75°	21.7
77.5°	19.4
80°	16.6
82.5°	13.4
85°	9.5
87.5°	4.7
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	16.06	17.46	16.42	17.77	18.09	16.06	17.46	16.42	17.77	18.09
	3H	15.98	17.22	16.36	17.55	17.91	15.98	17.22	16.36	17.55	17.91
	4H	15.94	17.08	16.34	17.43	17.82	15.94	17.08	16.34	17.43	17.82
	6H	15.89	16.94	16.31	17.31	17.71	15.89	16.94	16.31	17.31	17.71
	8H	15.87	16.86	16.30	17.26	17.66	15.87	16.86	16.30	17.26	17.66
	12H	15.84	16.80	16.28	17.18	17.61	15.84	16.80	16.28	17.18	17.61
4H	2H	15.94	17.09	16.34	17.44	17.82	15.94	17.09	16.34	17.44	17.82
	3H	15.88	16.80	16.29	17.21	17.61	15.88	16.80	16.29	17.21	17.61
	4H	15.83	16.65	16.27	17.07	17.52	15.83	16.65	16.27	17.07	17.52
	6H	15.81	16.52	16.27	16.96	17.43	15.81	16.52	16.27	16.96	17.43
	8H	15.78	16.44	16.25	16.89	17.36	15.78	16.44	16.25	16.89	17.36
	12H	15.76	16.35	16.25	16.83	17.31	15.76	16.35	16.25	16.83	17.31
8H	4H	15.72	16.38	16.19	16.83	17.30	15.72	16.38	16.19	16.83	17.30
	6H	15.69	16.24	16.19	16.73	17.21	15.69	16.24	16.19	16.73	17.21
	8H	15.67	16.17	16.19	16.68	17.17	15.67	16.17	16.19	16.68	17.17
	12H	15.67	16.12	16.18	16.61	17.18	15.67	16.12	16.18	16.61	17.18
12H	4H	15.68	16.27	16.17	16.75	17.23	15.68	16.27	16.17	16.75	17.23
	6H	15.64	16.13	16.16	16.65	17.14	15.64	16.13	16.16	16.65	17.14
	8H	15.64	16.09	16.16	16.58	17.15	15.64	16.09	16.16	16.58	17.15