

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: P866957

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866957
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-81)
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-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 3
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

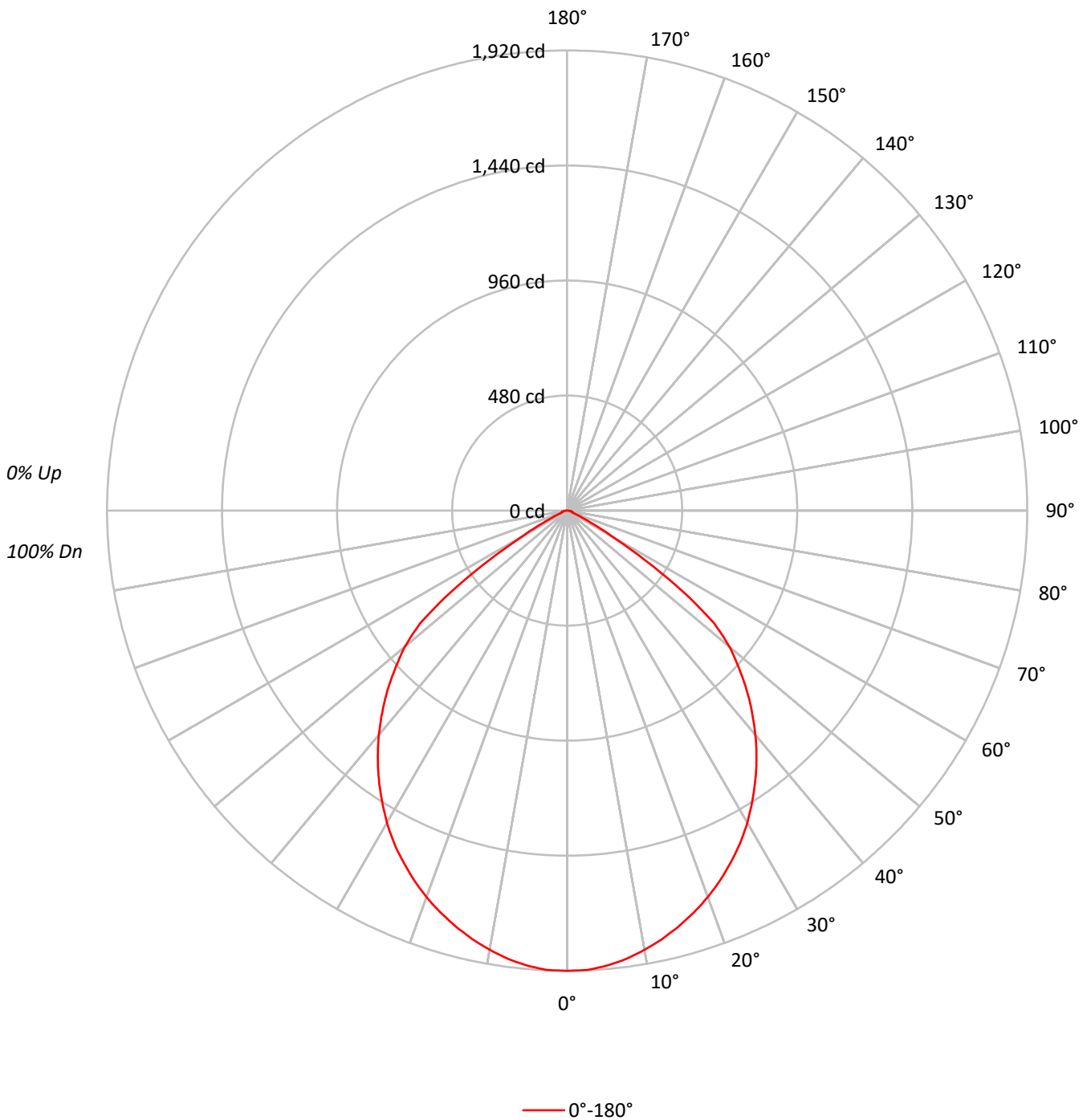
Lumens per Lamp: N/A
Luminaire Lumens: 3728.5 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 37.5
Input Voltage (V): 120
Input Current (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

TEST NUMBER: P866957

CATALOG NUMBER: PRLX-2002-L-927-48L-L-X-X-BRSS-X

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	92	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	83	78	74	81	77	73	78	75	72	70
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	72	67	64	62
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	60	57	55
6	77	65	58	52	75	65	57	52	63	56	51	61	56	51	60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	46	39	35	46	39	35	45	39	35	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	9475
5°	9441
10°	9322
15°	9176
20°	9011
25°	8809
30°	8567
35°	8250
40°	7874
45°	7394
50°	6794
55°	5109
60°	2151
65°	793
70°	365
75°	398
80°	460
85°	538

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7394 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.5	4.8
10°-20°	506.3	13.6
20°-30°	744.8	20.0
30°-40°	855.5	22.9
40°-50°	814.9	21.9
50°-60°	510.3	13.7
60°-70°	84.4	2.3
70°-80°	22.1	0.6
80°-90°	9.6	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°	1431.7	38.4
0°-40°	2287.1	61.3
0°-60°	3612.3	96.9
0°-90°	3728.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3728.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1920	
5°	1906	181
15°	1796	506
25°	1618	745
35°	1370	855
45°	1060	815
55°	594	510
65°	68	84
75°	21	22
85°	10	10
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1920.4
2.5°	1918.4
5°	1906.2
7.5°	1886.8
10°	1860.7
12.5°	1831.1
15°	1796.4
17.5°	1758.4
20°	1716.2
22.5°	1669.2
25°	1618.2
27.5°	1564.1
30°	1503.7
32.5°	1438.1
35°	1369.8
37.5°	1297.9
40°	1222.5
42.5°	1142.3
45°	1059.7
47.5°	971.6
50°	885.1
52.5°	773.0
55°	594.0
57.5°	383.9
60°	218.0
62.5°	123.6
65°	67.9
67.5°	32.0
70°	25.3
72.5°	23.3
75°	20.9
77.5°	18.6
80°	16.2
82.5°	13.0
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	15.03	16.42	15.40	16.74	17.05	15.03	16.42	15.40	16.74	17.05
	3H	14.95	16.17	15.33	16.50	16.87	14.95	16.17	15.33	16.50	16.87
	4H	14.90	16.04	15.31	16.39	16.77	14.90	16.04	15.31	16.39	16.77
	6H	14.86	15.91	15.28	16.28	16.67	14.86	15.91	15.28	16.28	16.67
	8H	14.84	15.83	15.27	16.22	16.62	14.84	15.83	15.27	16.22	16.62
	12H	14.82	15.76	15.25	16.15	16.58	14.82	15.76	15.25	16.15	16.58
4H	2H	14.90	16.04	15.30	16.39	16.77	14.90	16.04	15.30	16.39	16.77
	3H	14.83	15.75	15.25	16.15	16.56	14.83	15.75	15.25	16.15	16.56
	4H	14.79	15.61	15.23	16.03	16.47	14.79	15.61	15.23	16.03	16.47
	6H	14.77	15.48	15.23	15.92	16.39	14.77	15.48	15.23	15.92	16.39
	8H	14.75	15.41	15.22	15.85	16.32	14.75	15.41	15.22	15.85	16.32
	12H	14.74	15.32	15.22	15.80	16.28	14.74	15.32	15.22	15.80	16.28
8H	4H	14.68	15.34	15.15	15.79	16.26	14.68	15.34	15.15	15.79	16.26
	6H	14.66	15.20	15.16	15.70	16.18	14.66	15.20	15.16	15.70	16.18
	8H	14.65	15.14	15.17	15.66	16.15	14.65	15.14	15.17	15.66	16.15
	12H	14.66	15.10	15.17	15.59	16.16	14.66	15.10	15.17	15.59	16.16
12H	4H	14.64	15.22	15.13	15.71	16.18	14.64	15.22	15.13	15.71	16.18
	6H	14.61	15.10	15.13	15.62	16.11	14.61	15.10	15.13	15.62	16.11
	8H	14.62	15.06	15.14	15.56	16.13	14.62	15.06	15.14	15.56	16.13