

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: P866314

Luminaire Tested: PRLX-2002-M-935-45L-L-U-S-X-X-GREY-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866314
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-52)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-M-935-45L-L-U-S-X-X-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

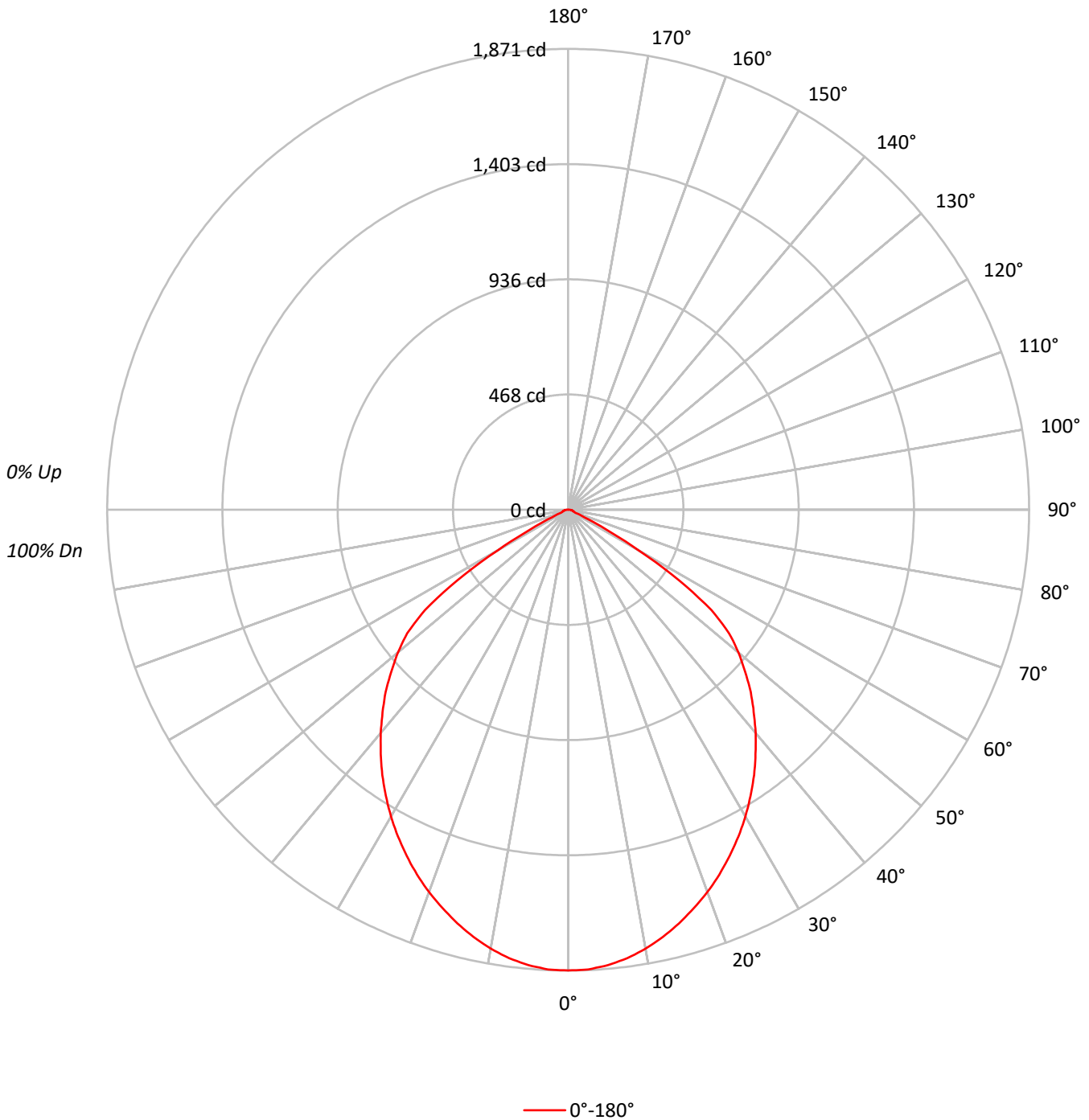
Lumens per Lamp: N/A
Luminaire Lumens: 3746.5 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.15 / 1.27
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 38.8
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	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	63	57	68	61	56	66	60	56	64	59	55	53
6	76	64	56	51	74	64	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	41	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	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	14883
5°	14823
10°	14620
15°	14321
20°	13988
25°	13613
30°	13215
35°	12773
40°	12288
45°	11788
50°	11169
55°	9841
60°	5246
65°	1380
70°	568
75°	639
80°	728
85°	895

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11788 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.7	4.7
10°-20°	489.7	13.1
20°-30°	714.0	19.1
30°-40°	821.8	21.9
40°-50°	806.3	21.5
50°-60°	597.2	15.9
60°-70°	110.2	2.9
70°-80°	21.8	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°	1379.4	36.8
0°-40°	2201.2	58.8
0°-60°	3604.7	96.2
0°-90°	3746.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3746.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1871	
5°	1856	176
15°	1739	490
25°	1551	714
35°	1315	822
45°	1048	806
55°	710	597
65°	73	110
75°	21	22
85°	10	10
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1870.7
2.5°	1868.3
5°	1856.1
7.5°	1836.5
10°	1809.7
12.5°	1776.7
15°	1738.8
17.5°	1696.1
20°	1652.2
22.5°	1603.3
25°	1550.8
27.5°	1495.9
30°	1438.5
32.5°	1377.4
35°	1315.1
37.5°	1249.2
40°	1183.2
42.5°	1114.9
45°	1047.7
47.5°	974.4
50°	902.4
52.5°	823.0
55°	709.5
57.5°	536.1
60°	329.7
62.5°	169.7
65°	73.3
67.5°	31.7
70°	24.4
72.5°	23.2
75°	20.8
77.5°	18.3
80°	15.9
82.5°	13.4
85°	9.8
87.5°	4.9
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	18.98	20.40	19.34	20.72	21.03	18.98	20.40	19.34	20.72	21.03
	3H	18.88	20.13	19.25	20.46	20.83	18.88	20.13	19.25	20.46	20.83
	4H	18.82	19.99	19.22	20.34	20.72	18.82	19.99	19.22	20.34	20.72
	6H	18.77	19.84	19.18	20.21	20.60	18.77	19.84	19.18	20.21	20.60
	8H	18.74	19.75	19.17	20.15	20.55	18.74	19.75	19.17	20.15	20.55
	12H	18.71	19.68	19.14	20.06	20.49	18.71	19.68	19.14	20.06	20.49
4H	2H	18.83	20.00	19.23	20.35	20.73	18.83	20.00	19.23	20.35	20.73
	3H	18.74	19.68	19.15	20.09	20.49	18.74	19.68	19.15	20.09	20.49
	4H	18.68	19.52	19.12	19.94	20.38	18.68	19.52	19.12	19.94	20.38
	6H	18.64	19.36	19.10	19.80	20.27	18.64	19.36	19.10	19.80	20.27
	8H	18.60	19.28	19.07	19.72	20.19	18.60	19.28	19.07	19.72	20.19
	12H	18.58	19.18	19.06	19.66	20.13	18.58	19.18	19.06	19.66	20.13
8H	4H	18.57	19.24	19.03	19.69	20.16	18.57	19.24	19.03	19.69	20.16
	6H	18.51	19.06	19.01	19.56	20.04	18.51	19.06	19.01	19.56	20.04
	8H	18.47	18.98	18.99	19.49	19.98	18.47	18.98	18.99	19.49	19.98
	12H	18.45	18.91	18.97	19.40	19.97	18.45	18.91	18.97	19.40	19.97
12H	4H	18.52	19.12	19.01	19.61	20.08	18.52	19.12	19.01	19.61	20.08
	6H	18.45	18.96	18.97	19.47	19.96	18.45	18.96	18.97	19.47	19.96
	8H	18.43	18.89	18.95	19.38	19.95	18.43	18.89	18.95	19.38	19.95