

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: P866311

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866311
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-38)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-M-935-45L-G-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

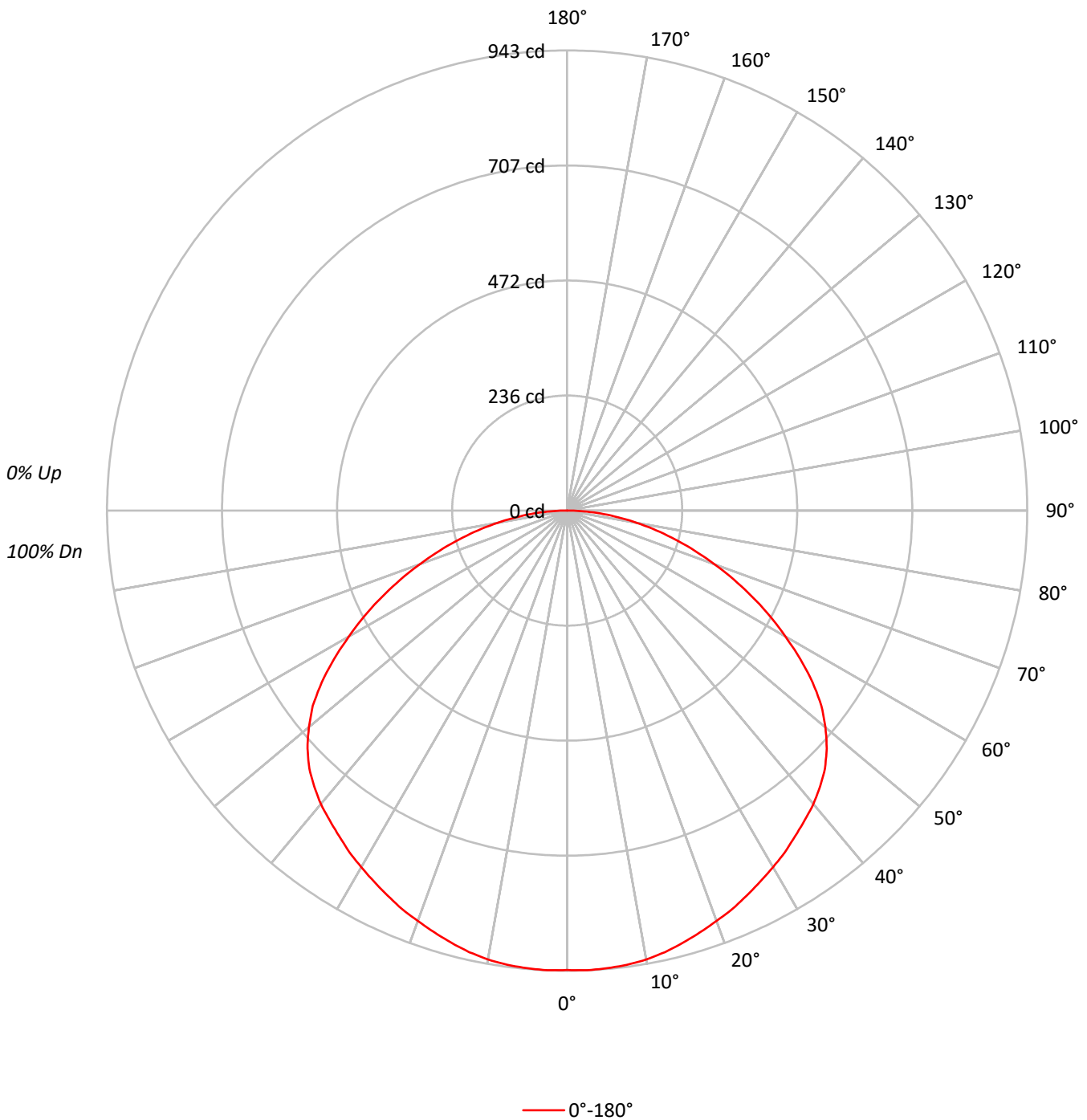
Lumens per Lamp: N/A
Luminaire Lumens: 3117.8 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.5
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 38.8
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: 0.333 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P866311

CATALOG NUMBER: PRLX-2002-M-935-45L-G-U-S-X-X-WHHR-X

Luminous Intensity Polar Plot



TEST NUMBER: P866311

CATALOG NUMBER: PRLX-2002-M-935-45L-G-U-S-X-X-WHHR-X

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	108	103	99	94	105	101	97	93	96	93	90		93	90	87		89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73		80	76	72		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	60		68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38		50	43	38		48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		41	35	30		40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	29	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	7490
5°	7519
10°	7546
15°	7553
20°	7578
25°	7642
30°	7752
35°	7911
40°	8155
45°	8408
50°	8554
55°	8519
60°	8218
65°	7884
70°	7469
75°	7058
80°	6657
85°	6244

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 8586 cd/sqm

TEST NUMBER: P866311

CATALOG NUMBER: PRLX-2002-M-935-45L-G-U-S-X-X-WHHR-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.6	2.9
10°-20°	259.1	8.3
20°-30°	402.1	12.9
30°-40°	511.1	16.4
40°-50°	574.8	18.4
50°-60°	546.1	17.5
60°-70°	414.8	13.3
70°-80°	243.8	7.8
80°-90°	76.3	2.4
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°	750.9	24.1
0°-40°	1262.0	40.5
0°-60°	2383.0	76.4
0°-90°	3117.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3117.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	942	
5°	942	90
15°	917	259
25°	871	402
35°	814	511
45°	747	575
55°	614	546
65°	419	415
75°	230	244
85°	68	76
90°	0	

TEST NUMBER: P866311

CATALOG NUMBER: PRLX-2002-M-935-45L-G-U-S-X-X-WHHR-X

CANDELA DISTRIBUTION (FULL):

0°	
0°	941.5
2.5°	942.7
5°	941.5
7.5°	939.0
10°	934.1
12.5°	926.8
15°	917.0
17.5°	906.1
20°	895.1
22.5°	884.1
25°	870.6
27.5°	857.2
30°	843.8
32.5°	830.3
35°	814.5
37.5°	799.8
40°	785.2
42.5°	766.9
45°	747.3
47.5°	721.7
50°	691.1
52.5°	657.0
55°	614.2
57.5°	566.6
60°	516.5
62.5°	468.9
65°	418.8
67.5°	370.0
70°	321.1
72.5°	274.7
75°	229.6
77.5°	186.8
80°	145.3
82.5°	105.0
85°	68.4
87.5°	34.2
90°	0.0

TEST NUMBER: P866311
 CATALOG NUMBER: PRLX-2002-M-935-45L-G-U-S-X-X-WHHR-X

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	19.81	21.51	20.18	21.82	22.14	19.81	21.51	20.18	21.82	22.14
	3H	21.61	23.15	21.99	23.48	23.83	21.61	23.15	21.99	23.48	23.83
	4H	22.31	23.76	22.70	24.10	24.48	22.31	23.76	22.70	24.10	24.48
	6H	22.86	24.20	23.27	24.57	24.96	22.86	24.20	23.27	24.57	24.96
	8H	23.05	24.34	23.47	24.73	25.12	23.05	24.34	23.47	24.73	25.12
	12H	23.19	24.43	23.62	24.81	25.24	23.19	24.43	23.62	24.81	25.24
4H	2H	20.45	21.90	20.85	22.25	22.62	20.45	21.90	20.85	22.25	22.62
	3H	22.47	23.70	22.88	24.09	24.49	22.47	23.70	22.88	24.09	24.49
	4H	23.31	24.41	23.74	24.83	25.26	23.31	24.41	23.74	24.83	25.26
	6H	23.99	24.97	24.45	25.41	25.86	23.99	24.97	24.45	25.41	25.86
	8H	24.24	25.15	24.70	25.60	26.06	24.24	25.15	24.70	25.60	26.06
	12H	24.44	25.26	24.92	25.74	26.20	24.44	25.26	24.92	25.74	26.20
8H	4H	23.64	24.55	24.10	25.00	25.46	23.64	24.55	24.10	25.00	25.46
	6H	24.47	25.23	24.96	25.72	26.19	24.47	25.23	24.96	25.72	26.19
	8H	24.80	25.49	25.31	25.99	26.47	24.80	25.49	25.31	25.99	26.47
	12H	25.09	25.70	25.59	26.18	26.74	25.09	25.70	25.59	26.18	26.74
12H	4H	23.69	24.51	24.17	24.98	25.45	23.69	24.51	24.17	24.98	25.45
	6H	24.54	25.23	25.05	25.73	26.21	24.54	25.23	25.05	25.73	26.21
	8H	24.94	25.55	25.44	26.03	26.59	24.94	25.55	25.44	26.03	26.59