

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: P866310

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

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866310  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-40)  
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-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

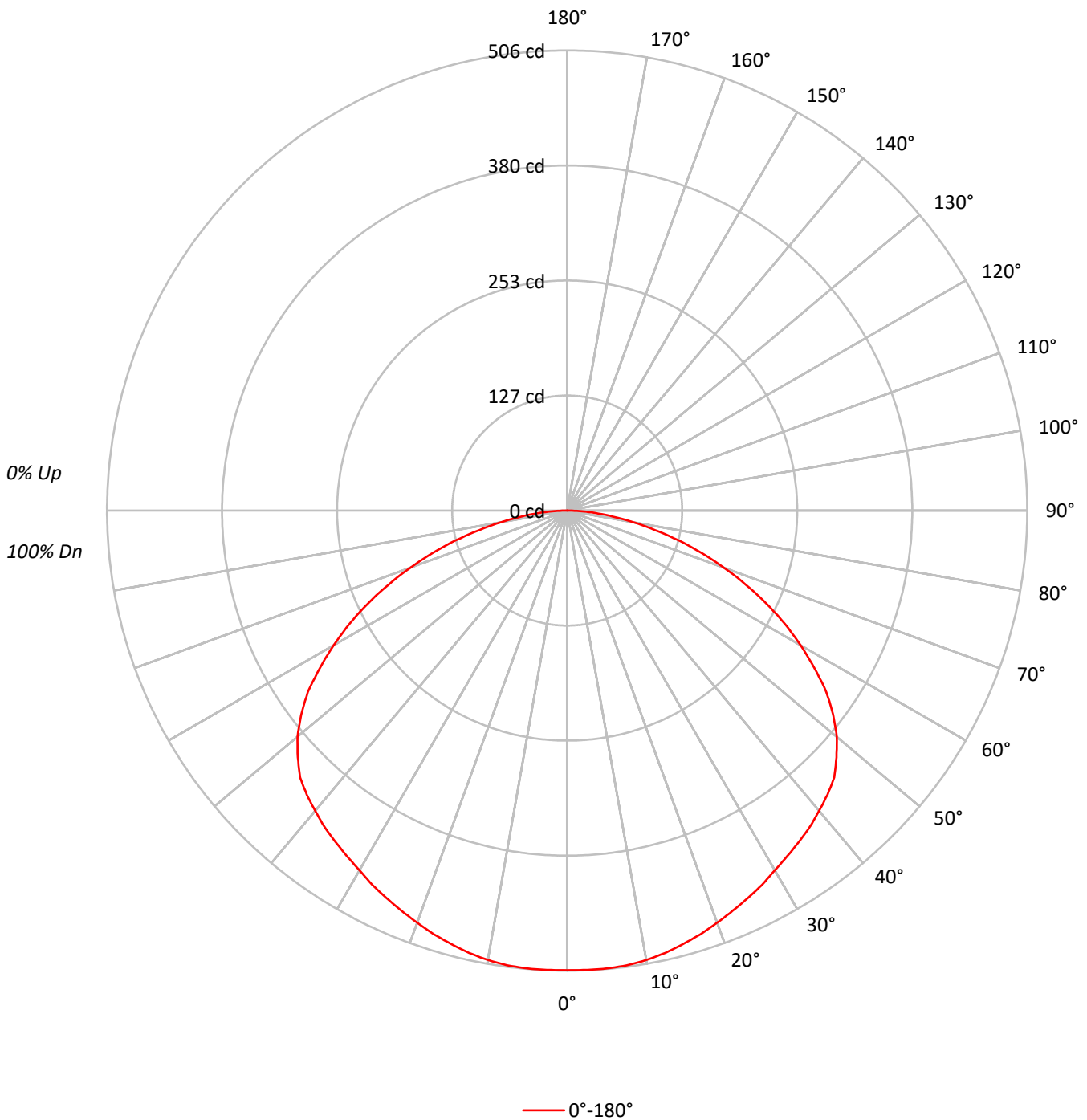
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1720.5 lumens  
Efficiency: N/A  
Efficacy: 44.3 lumens/watt  
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.53  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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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CATALOG NUMBER: PRLX-2002-M-935-45L-G-U-S-X-X-GREY-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	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
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	59		68	63	58	56
4	81	68	59	52	78	67	58	52	64	57	51		62	55	50		60	54	49	47
5	74	61	51	44	72	59	51	44	57	49	44		55	48	43		53	47	43	40
6	68	54	45	38	66	53	44	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33		45	38	33		44	37	33	31
8	58	44	36	30	57	44	35	30	42	35	29		41	34	29		40	34	29	27
9	55	41	32	26	53	40	32	26	39	31	26		38	31	26		37	31	26	24
10	51	37	29	24	50	37	29	24	36	29	24		35	28	24		34	28	23	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	4022
5°	4037
10°	4055
15°	4063
20°	4083
25°	4127
30°	4195
35°	4317
40°	4476
45°	4671
50°	4791
55°	4827
60°	4721
65°	4552
70°	4261
75°	3904
80°	3413
85°	2784

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 55°  
 Luminance: 4827 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.1	2.8
10°-20°	139.5	8.1
20°-30°	217.2	12.6
30°-40°	278.8	16.2
40°-50°	318.9	18.5
50°-60°	309.0	18.0
60°-70°	238.5	13.9
70°-80°	134.4	7.8
80°-90°	36.0	2.1
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°	404.8	23.5
0°-40°	683.6	39.7
0°-60°	1311.5	76.2
0°-90°	1720.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1720.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	506	
5°	506	48
15°	493	139
25°	470	217
35°	444	279
45°	415	319
55°	348	309
65°	242	239
75°	127	134
85°	30	36
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	505.5
2.5°	505.5
5°	505.5
7.5°	504.3
10°	501.9
12.5°	498.2
15°	493.3
17.5°	488.4
20°	482.3
22.5°	476.2
25°	470.1
27.5°	464.0
30°	456.7
32.5°	450.6
35°	444.5
37.5°	438.4
40°	431.0
42.5°	423.7
45°	415.2
47.5°	401.7
50°	387.1
52.5°	368.8
55°	348.0
57.5°	322.4
60°	296.7
62.5°	269.9
65°	241.8
67.5°	212.5
70°	183.2
72.5°	155.1
75°	127.0
77.5°	98.9
80°	74.5
82.5°	51.3
85°	30.5
87.5°	13.4
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	17.96	19.66	18.32	19.97	20.29	17.96	19.66	18.32	19.97	20.29
	3H	19.77	21.32	20.15	21.64	22.00	19.77	21.32	20.15	21.64	22.00
	4H	20.44	21.89	20.83	22.24	22.61	20.44	21.89	20.83	22.24	22.61
	6H	20.90	22.25	21.31	22.62	23.01	20.90	22.25	21.31	22.62	23.01
	8H	21.05	22.34	21.47	22.73	23.13	21.05	22.34	21.47	22.73	23.13
	12H	21.14	22.38	21.57	22.76	23.19	21.14	22.38	21.57	22.76	23.19
4H	2H	18.61	20.07	19.01	20.42	20.79	18.61	20.07	19.01	20.42	20.79
	3H	20.64	21.87	21.05	22.27	22.67	20.64	21.87	21.05	22.27	22.67
	4H	21.43	22.54	21.86	22.95	23.39	21.43	22.54	21.86	22.95	23.39
	6H	22.02	22.99	22.47	23.43	23.88	22.02	22.99	22.47	23.43	23.88
	8H	22.21	23.12	22.67	23.56	24.03	22.21	23.12	22.67	23.56	24.03
	12H	22.35	23.17	22.82	23.64	24.11	22.35	23.17	22.82	23.64	24.11
8H	4H	21.74	22.65	22.20	23.10	23.56	21.74	22.65	22.20	23.10	23.56
	6H	22.45	23.21	22.94	23.69	24.16	22.45	23.21	22.94	23.69	24.16
	8H	22.71	23.39	23.21	23.89	24.38	22.71	23.39	23.21	23.89	24.38
	12H	22.91	23.51	23.41	24.00	24.56	22.91	23.51	23.41	24.00	24.56
12H	4H	21.78	22.60	22.26	23.07	23.54	21.78	22.60	22.26	23.07	23.54
	6H	22.50	23.18	23.01	23.69	24.17	22.50	23.18	23.01	23.69	24.17
	8H	22.82	23.42	23.32	23.91	24.47	22.82	23.42	23.32	23.91	24.47