

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: P865678

Luminaire Tested: PRLX-2002-S-935-20L-G-U-S-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865678  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-9)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-S-935-20L-G-U-S-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 4  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

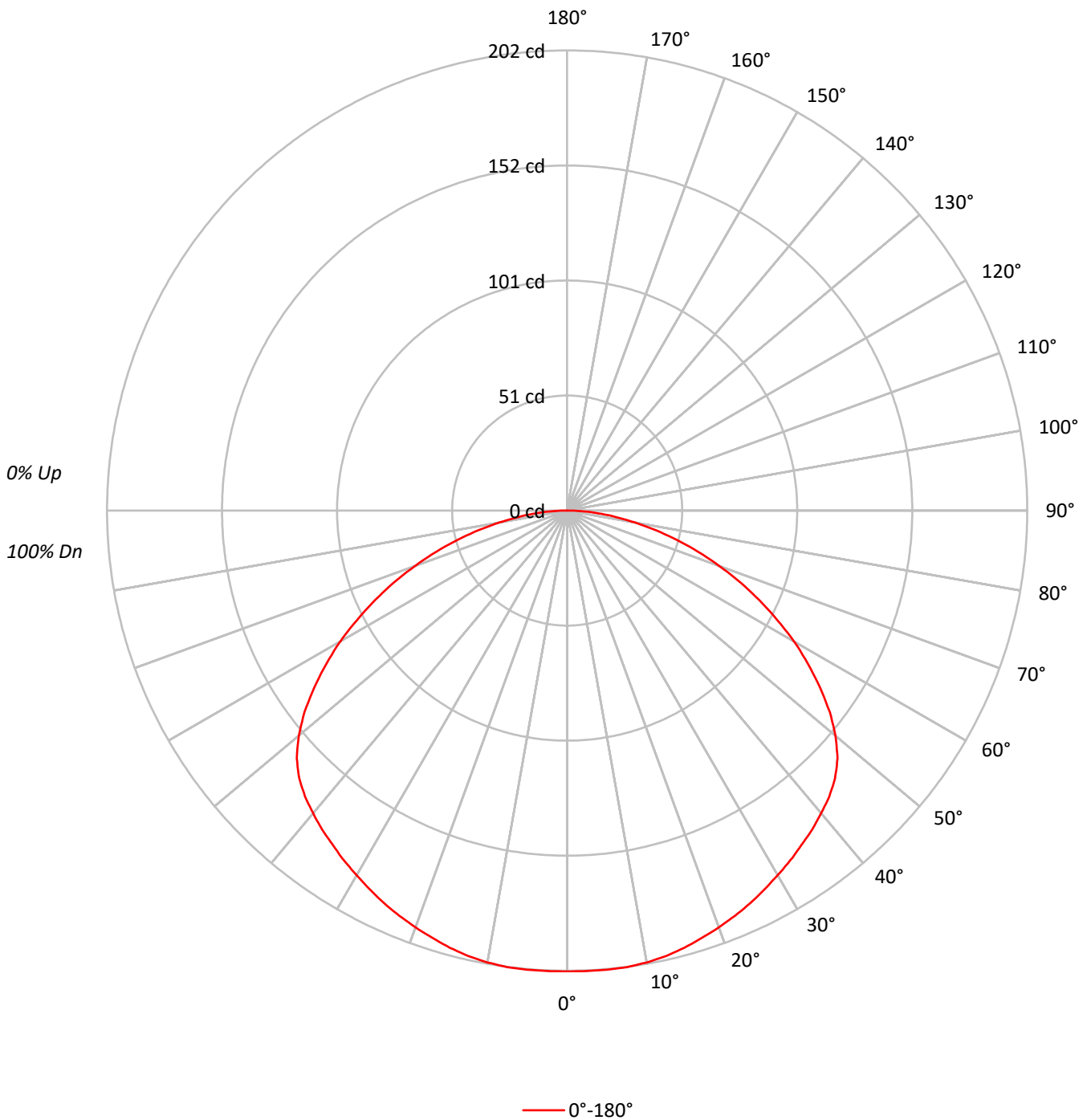
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 685.1 lumens  
Efficiency: N/A  
Efficacy: 31.4 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.53  
Luminous Opening: Circular (Dia: 0.85' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.8  
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: 0.333 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70
3	89	78	69	62	86	76	68	62	73	66	61	70	65	60	68	63	59
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43
6	68	54	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26
10	51	38	29	24	50	37	29	24	36	29	24	35	28	24	34	28	24

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

	0°
0°	3800
5°	3815
10°	3842
15°	3864
20°	3892
25°	3942
30°	4008
35°	4112
40°	4254
45°	4418
50°	4495
55°	4438
60°	4324
65°	4134
70°	3905
75°	3614
80°	3267
85°	2974

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 4495 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	19.3	2.8
10°-20°	56.2	8.2
20°-30°	87.8	12.8
30°-40°	112.5	16.4
40°-50°	127.8	18.7
50°-60°	120.9	17.7
60°-70°	92.1	13.4
70°-80°	52.9	7.7
80°-90°	15.6	2.3
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°	163.2	23.8
0°-40°	275.7	40.2
0°-60°	524.5	76.6
0°-90°	685.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	685.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	202	
5°	202	19
15°	199	56
25°	190	88
35°	179	113
45°	166	128
55°	136	121
65°	93	92
75°	50	53
85°	14	16
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	202.3
2.5°	202.3
5°	202.3
7.5°	202.1
10°	201.4
12.5°	200.3
15°	198.7
17.5°	196.7
20°	194.7
22.5°	192.5
25°	190.2
27.5°	187.5
30°	184.8
32.5°	182.2
35°	179.3
37.5°	176.6
40°	173.5
42.5°	170.3
45°	166.3
47.5°	161.0
50°	153.8
52.5°	145.3
55°	135.5
57.5°	125.4
60°	115.1
62.5°	104.0
65°	93.0
67.5°	82.2
70°	71.1
72.5°	60.4
75°	49.8
77.5°	39.8
80°	30.2
82.5°	21.4
85°	13.8
87.5°	7.1
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	17.59	19.28	17.95	19.60	19.91	17.59	19.28	17.95	19.60	19.91
	3H	19.39	20.93	19.77	21.25	21.61	19.39	20.93	19.77	21.25	21.61
	4H	20.06	21.51	20.46	21.86	22.24	20.06	21.51	20.46	21.86	22.24
	6H	20.56	21.91	20.97	22.27	22.66	20.56	21.91	20.97	22.27	22.66
	8H	20.73	22.02	21.15	22.41	22.80	20.73	22.02	21.15	22.41	22.80
	12H	20.85	22.09	21.28	22.47	22.90	20.85	22.09	21.28	22.47	22.90
4H	2H	18.23	19.68	18.62	20.03	20.40	18.23	19.68	18.62	20.03	20.40
	3H	20.25	21.47	20.66	21.87	22.27	20.25	21.47	20.66	21.87	22.27
	4H	21.05	22.16	21.48	22.57	23.01	21.05	22.16	21.48	22.57	23.01
	6H	21.69	22.66	22.14	23.10	23.55	21.69	22.66	22.14	23.10	23.55
	8H	21.90	22.81	22.36	23.25	23.72	21.90	22.81	22.36	23.25	23.72
	12H	22.07	22.89	22.55	23.37	23.83	22.07	22.89	22.55	23.37	23.83
8H	4H	21.38	22.29	21.83	22.73	23.19	21.38	22.29	21.83	22.73	23.19
	6H	22.13	22.89	22.62	23.38	23.85	22.13	22.89	22.62	23.38	23.85
	8H	22.42	23.11	22.93	23.61	24.09	22.42	23.11	22.93	23.61	24.09
	12H	22.67	23.28	23.18	23.77	24.33	22.67	23.28	23.18	23.77	24.33
12H	4H	21.42	22.24	21.89	22.71	23.18	21.42	22.24	21.89	22.71	23.18
	6H	22.19	22.88	22.70	23.38	23.86	22.19	22.88	22.70	23.38	23.86
	8H	22.55	23.15	23.05	23.64	24.20	22.55	23.15	23.05	23.64	24.20