

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: P866630

Luminaire Tested: PRLX-2004-M-940-45L-G-U-S-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866630  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-44)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2004-M-940-45L-G-U-S-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,  
BELL WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

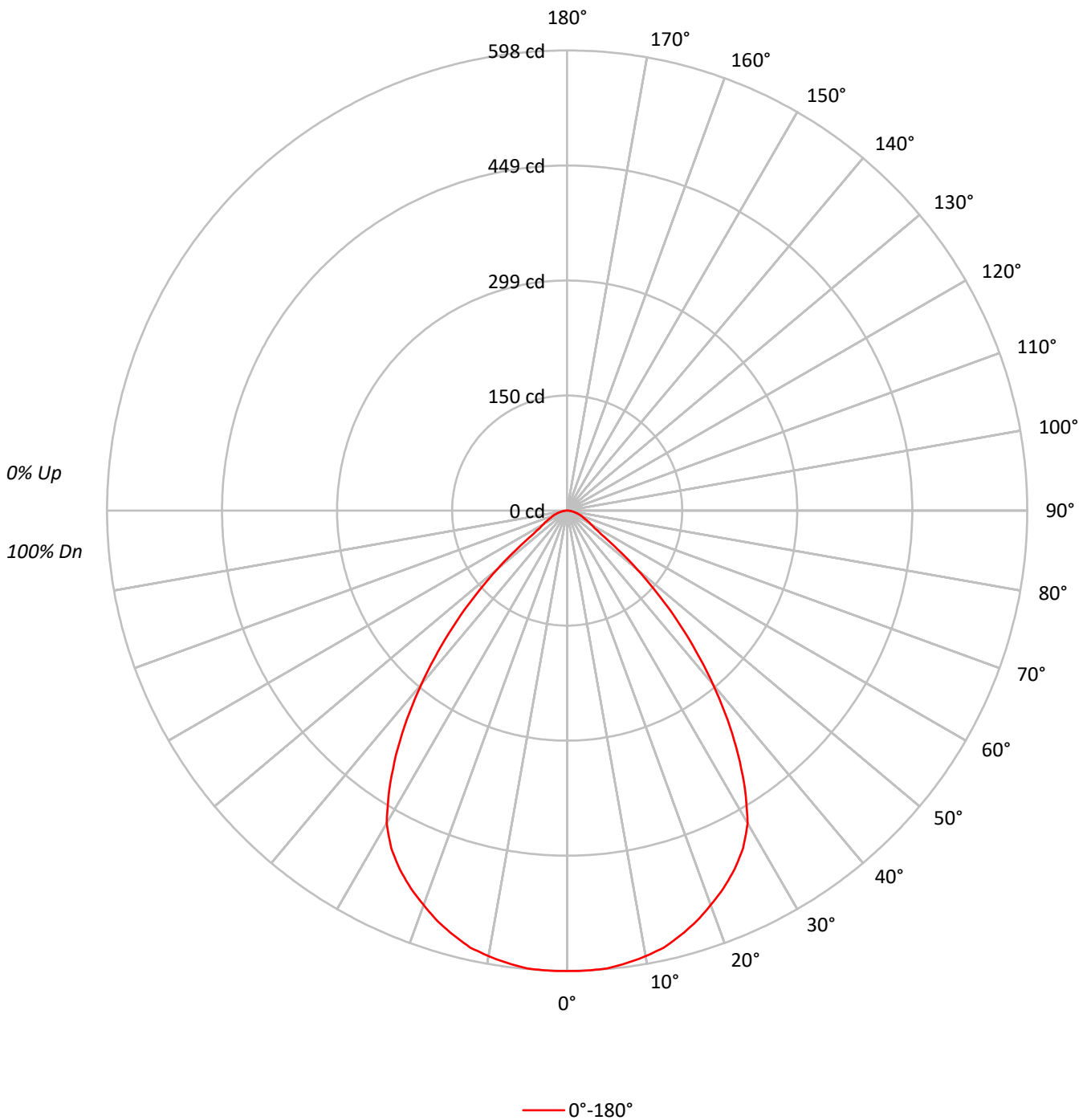
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 950.6 lumens  
Efficiency: N/A  
Efficacy: 24.5 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.14  
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: 0.333 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	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	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90
2	105	99	94	89	102	97	92	88	94	90	86	90	87	85	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	91	82	75	70	89	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	75	68	63	84	74	68	63	72	67	62	71	65	61	69	64	61	59
6	80	69	62	57	78	68	62	57	67	61	56	65	60	56	64	59	55	54
7	75	64	57	52	74	63	56	52	62	56	51	61	55	51	59	54	51	49
8	71	59	52	47	69	59	52	47	57	51	47	56	51	47	55	50	46	45
9	67	55	48	43	65	55	48	43	54	47	43	53	47	43	52	46	43	41
10	63	51	45	40	62	51	44	40	50	44	40	49	44	40	48	43	40	38

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

	0°
0°	4761
5°	4769
10°	4750
15°	4705
20°	4618
25°	4516
30°	4309
35°	3765
40°	3061
45°	2283
50°	1472
55°	753
60°	576
65°	486
70°	451
75°	397
80°	357
85°	356

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2283 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.7	6.0
10°-20°	160.9	16.9
20°-30°	236.0	24.8
30°-40°	240.1	25.3
40°-50°	156.0	16.4
50°-60°	57.0	6.0
60°-70°	26.3	2.8
70°-80°	13.8	1.5
80°-90°	3.9	0.4
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°	453.5	47.7
0°-40°	693.6	73.0
0°-60°	906.6	95.4
0°-90°	950.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	950.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	598	
5°	597	57
15°	571	161
25°	514	236
35°	388	240
45°	203	156
55°	54	57
65°	26	26
75°	13	14
85°	4	4
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	598.4
2.5°	598.4
5°	597.1
7.5°	593.2
10°	588.0
12.5°	581.6
15°	571.2
17.5°	559.6
20°	545.4
22.5°	531.2
25°	514.4
27.5°	495.0
30°	469.1
32.5°	430.4
35°	387.7
37.5°	342.5
40°	294.7
42.5°	248.1
45°	202.9
47.5°	157.7
50°	118.9
52.5°	82.7
55°	54.3
57.5°	42.6
60°	36.2
62.5°	31.0
65°	25.8
67.5°	22.0
70°	19.4
72.5°	15.5
75°	12.9
77.5°	10.3
80°	7.8
82.5°	5.2
85°	3.9
87.5°	1.3
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	6.49	7.75	6.86	8.06	8.37	6.49	7.75	6.86	8.06	8.37
	3H	7.68	8.79	8.06	9.12	9.48	7.68	8.79	8.06	9.12	9.48
	4H	8.12	9.15	8.52	9.50	9.88	8.12	9.15	8.52	9.50	9.88
	6H	8.45	9.39	8.87	9.77	10.16	8.45	9.39	8.87	9.77	10.16
	8H	8.54	9.44	8.98	9.83	10.23	8.54	9.44	8.98	9.83	10.23
	12H	8.62	9.47	9.05	9.85	10.28	8.62	9.47	9.05	9.85	10.28
4H	2H	6.84	7.87	7.24	8.22	8.60	6.84	7.87	7.24	8.22	8.60
	3H	8.26	9.09	8.67	9.50	9.90	8.26	9.09	8.67	9.50	9.90
	4H	8.82	9.56	9.25	9.98	10.43	8.82	9.56	9.25	9.98	10.43
	6H	9.27	9.91	9.73	10.36	10.83	9.27	9.91	9.73	10.36	10.83
	8H	9.40	10.00	9.87	10.45	10.92	9.40	10.00	9.87	10.45	10.92
	12H	9.51	10.04	10.00	10.52	11.00	9.51	10.04	10.00	10.52	11.00
8H	4H	8.99	9.59	9.46	10.04	10.51	8.99	9.59	9.46	10.04	10.51
	6H	9.55	10.04	10.05	10.54	11.02	9.55	10.04	10.05	10.54	11.02
	8H	9.74	10.18	10.26	10.70	11.19	9.74	10.18	10.26	10.70	11.19
	12H	9.93	10.32	10.45	10.82	11.39	9.93	10.32	10.45	10.82	11.39
12H	4H	8.98	9.51	9.47	10.00	10.47	8.98	9.51	9.47	10.00	10.47
	6H	9.56	10.00	10.09	10.52	11.01	9.56	10.00	10.09	10.52	11.01
	8H	9.81	10.19	10.32	10.69	11.26	9.81	10.19	10.32	10.69	11.26