

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: P866378

Luminaire Tested: PRLX-2002-M-940-45L-L-U-S-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866378  
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: Prenalux  
Catalog Number: PRLX-2002-M-940-45L-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: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

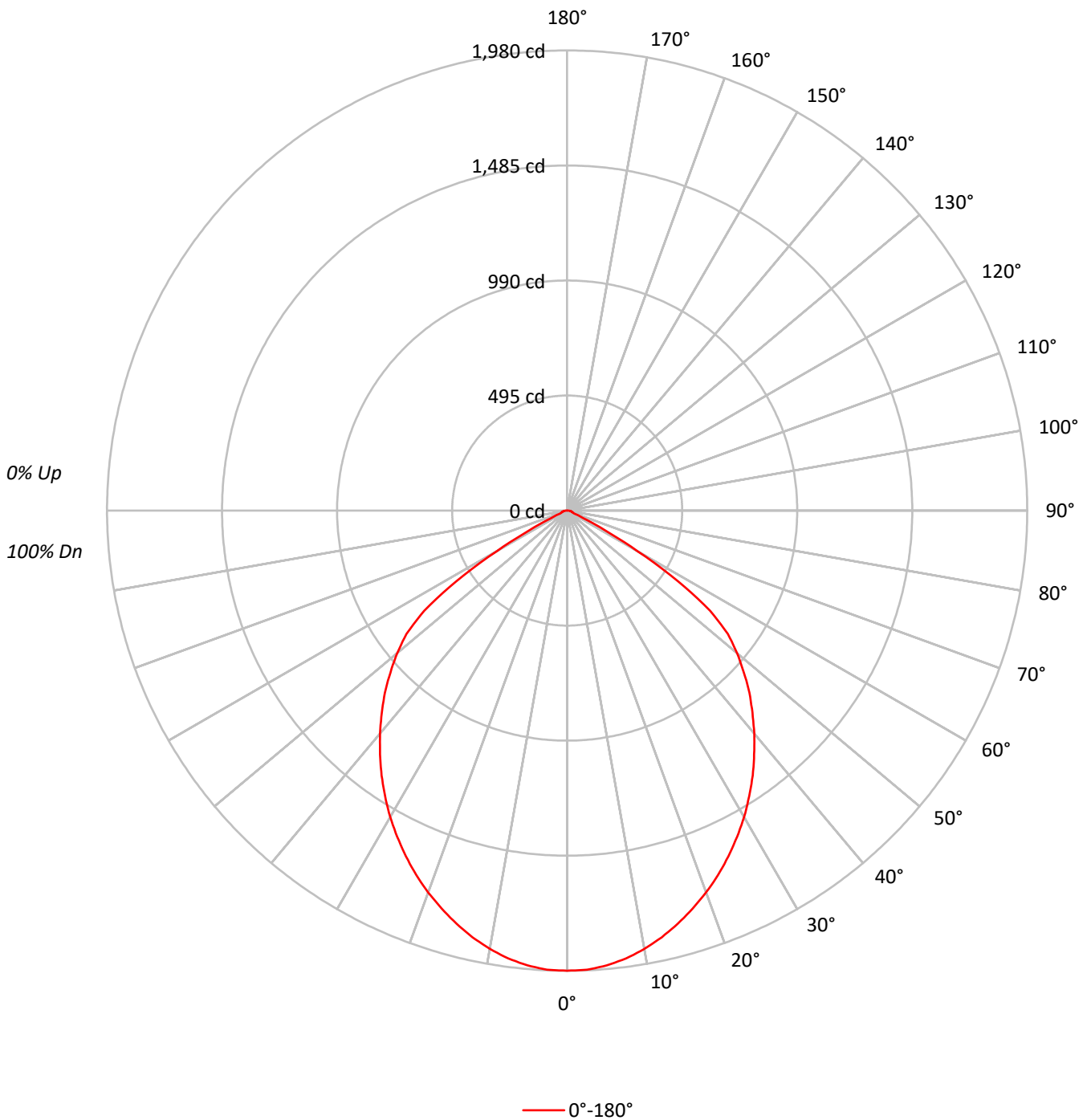
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3965.3 lumens  
Efficiency: N/A  
Efficacy: 102.2 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 (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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### 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°	15752
5°	15689
10°	15474
15°	15158
20°	14804
25°	14409
30°	13986
35°	13518
40°	13006
45°	12476
50°	11821
55°	10415
60°	5553
65°	1459
70°	600
75°	676
80°	770
85°	940

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12476 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	186.0	4.7
10°-20°	518.3	13.1
20°-30°	755.7	19.1
30°-40°	869.8	21.9
40°-50°	853.4	21.5
50°-60°	632.1	15.9
60°-70°	116.7	2.9
70°-80°	23.1	0.6
80°-90°	10.4	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°	1460.0	36.8
0°-40°	2329.7	58.8
0°-60°	3815.2	96.2
0°-90°	3965.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3965.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1980	
5°	1964	186
15°	1840	518
25°	1641	756
35°	1392	870
45°	1109	853
55°	751	632
65°	78	117
75°	22	23
85°	10	10
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1980.0
2.5°	1977.4
5°	1964.5
7.5°	1943.8
10°	1915.4
12.5°	1880.5
15°	1840.4
17.5°	1795.2
20°	1748.6
22.5°	1696.9
25°	1641.4
27.5°	1583.2
30°	1522.5
32.5°	1457.8
35°	1391.9
37.5°	1322.1
40°	1252.3
42.5°	1180.0
45°	1108.9
47.5°	1031.3
50°	955.1
52.5°	871.1
55°	750.9
57.5°	567.4
60°	349.0
62.5°	179.6
65°	77.5
67.5°	33.6
70°	25.8
72.5°	24.6
75°	22.0
77.5°	19.4
80°	16.8
82.5°	14.2
85°	10.3
87.5°	5.2
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	19.17	20.60	19.54	20.91	21.23	19.17	20.60	19.54	20.91	21.23
	3H	19.07	20.33	19.45	20.66	21.02	19.07	20.33	19.45	20.66	21.02
	4H	19.02	20.19	19.42	20.54	20.92	19.02	20.19	19.42	20.54	20.92
	6H	18.97	20.04	19.38	20.41	20.80	18.97	20.04	19.38	20.41	20.80
	8H	18.94	19.95	19.36	20.34	20.75	18.94	19.95	19.36	20.34	20.75
	12H	18.91	19.88	19.34	20.26	20.69	18.91	19.88	19.34	20.26	20.69
4H	2H	19.03	20.20	19.43	20.55	20.93	19.03	20.20	19.43	20.55	20.93
	3H	18.94	19.88	19.35	20.28	20.69	18.94	19.88	19.35	20.28	20.69
	4H	18.88	19.72	19.31	20.14	20.58	18.88	19.72	19.31	20.14	20.58
	6H	18.83	19.56	19.30	20.00	20.47	18.83	19.56	19.30	20.00	20.47
	8H	18.80	19.47	19.27	19.92	20.39	18.80	19.47	19.27	19.92	20.39
	12H	18.77	19.37	19.26	19.85	20.33	18.77	19.37	19.26	19.85	20.33
8H	4H	18.76	19.44	19.23	19.88	20.35	18.76	19.44	19.23	19.88	20.35
	6H	18.70	19.26	19.20	19.76	20.24	18.70	19.26	19.20	19.76	20.24
	8H	18.67	19.17	19.19	19.69	20.18	18.67	19.17	19.19	19.69	20.18
	12H	18.65	19.11	19.16	19.60	20.17	18.65	19.11	19.16	19.60	20.17
12H	4H	18.72	19.32	19.21	19.80	20.28	18.72	19.32	19.21	19.80	20.28
	6H	18.65	19.15	19.17	19.67	20.16	18.65	19.15	19.17	19.67	20.16
	8H	18.63	19.09	19.14	19.58	20.15	18.63	19.09	19.14	19.58	20.15