

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: P866377

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

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866377  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-51)  
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-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

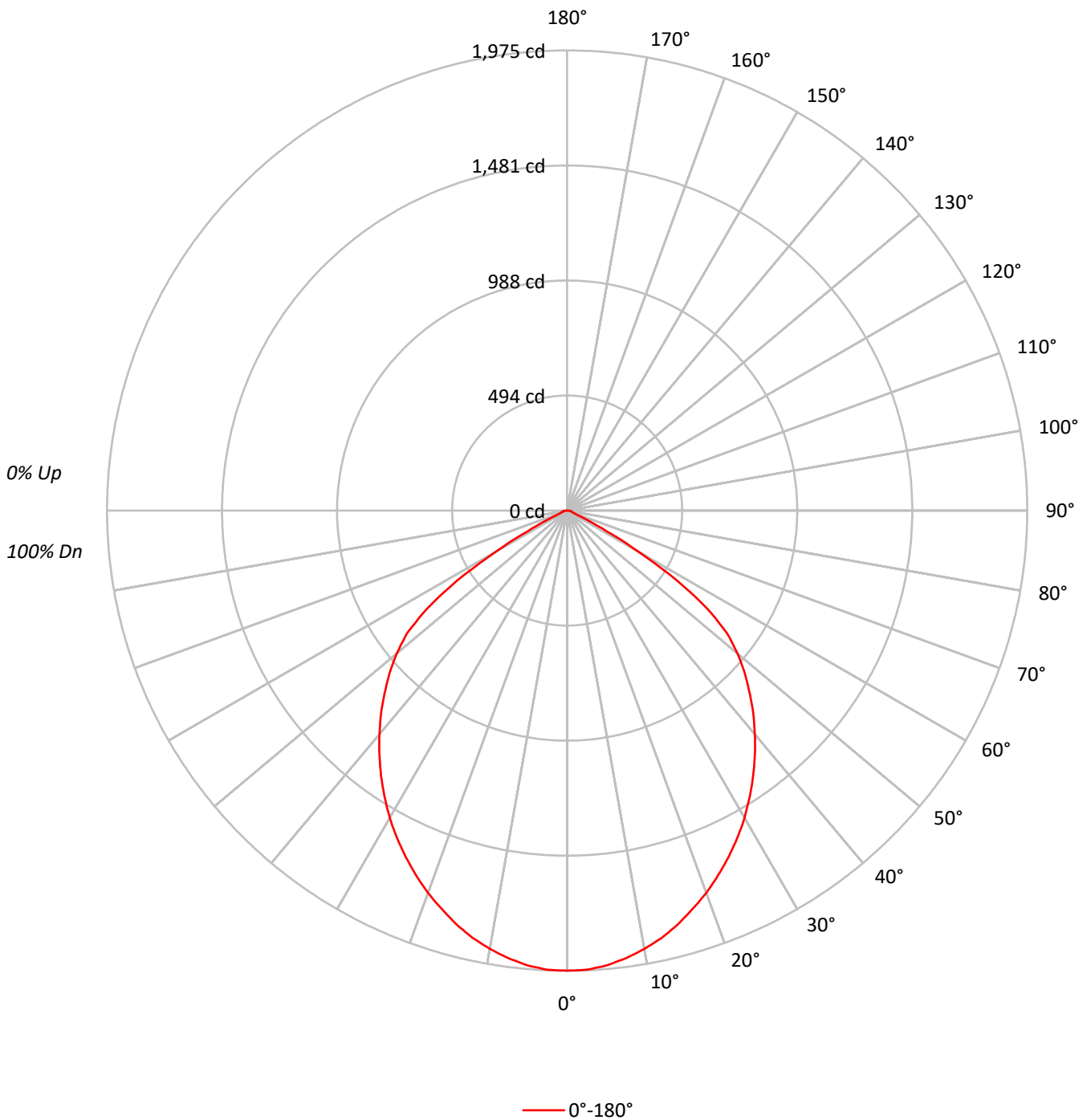
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3965.2 lumens  
Efficiency: N/A  
Efficacy: 102.2 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.16 / 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	62	57	68	61	56		66	60	56		64	59	55	53
6	76	64	56	51	74	63	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	40		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	44	38	34		44	38	33		43	37	33	32

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

	0°
0°	15711
5°	15647
10°	15432
15°	15137
20°	14782
25°	14397
30°	13986
35°	13518
40°	13019
45°	12462
50°	11821
55°	10182
60°	5614
65°	1581
70°	630
75°	676
80°	770
85°	940

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12462 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.4	4.7
10°-20°	517.5	13.1
20°-30°	755.1	19.0
30°-40°	870.1	21.9
40°-50°	854.2	21.5
50°-60°	626.5	15.8
60°-70°	122.7	3.1
70°-80°	23.2	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°	1458.1	36.8
0°-40°	2328.1	58.7
0°-60°	3808.9	96.1
0°-90°	3965.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3965.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1975	
5°	1959	185
15°	1838	518
25°	1640	755
35°	1392	870
45°	1108	854
55°	734	626
65°	84	123
75°	22	23
85°	10	10
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1974.8
2.5°	1972.2
5°	1959.3
7.5°	1937.3
10°	1910.2
12.5°	1877.9
15°	1837.8
17.5°	1792.6
20°	1746.0
22.5°	1694.3
25°	1640.1
27.5°	1583.2
30°	1522.5
32.5°	1457.8
35°	1391.9
37.5°	1323.4
40°	1253.6
42.5°	1182.6
45°	1107.6
47.5°	1033.9
50°	955.1
52.5°	865.9
55°	734.1
57.5°	562.2
60°	352.8
62.5°	190.0
65°	84.0
67.5°	38.8
70°	27.1
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	19.12	20.54	19.48	20.86	21.17	19.12	20.54	19.48	20.86	21.17
	3H	19.02	20.28	19.40	20.61	20.97	19.02	20.28	19.40	20.61	20.97
	4H	18.97	20.14	19.37	20.49	20.87	18.97	20.14	19.37	20.49	20.87
	6H	18.91	19.99	19.33	20.35	20.75	18.91	19.99	19.33	20.35	20.75
	8H	18.88	19.90	19.31	20.29	20.69	18.88	19.90	19.31	20.29	20.69
	12H	18.85	19.83	19.29	20.21	20.64	18.85	19.83	19.29	20.21	20.64
4H	2H	18.98	20.15	19.38	20.50	20.88	18.98	20.15	19.38	20.50	20.88
	3H	18.89	19.84	19.31	20.24	20.64	18.89	19.84	19.31	20.24	20.64
	4H	18.83	19.67	19.27	20.09	20.53	18.83	19.67	19.27	20.09	20.53
	6H	18.79	19.51	19.25	19.96	20.42	18.79	19.51	19.25	19.96	20.42
	8H	18.75	19.43	19.22	19.88	20.35	18.75	19.43	19.22	19.88	20.35
	12H	18.73	19.33	19.21	19.81	20.28	18.73	19.33	19.21	19.81	20.28
8H	4H	18.72	19.39	19.19	19.84	20.31	18.72	19.39	19.19	19.84	20.31
	6H	18.66	19.22	19.16	19.71	20.19	18.66	19.22	19.16	19.71	20.19
	8H	18.62	19.13	19.14	19.65	20.14	18.62	19.13	19.14	19.65	20.14
	12H	18.61	19.06	19.12	19.56	20.13	18.61	19.06	19.12	19.56	20.13
12H	4H	18.68	19.28	19.16	19.76	20.23	18.68	19.28	19.16	19.76	20.23
	6H	18.60	19.11	19.12	19.62	20.11	18.60	19.11	19.12	19.62	20.11
	8H	18.59	19.04	19.10	19.54	20.11	18.59	19.04	19.10	19.54	20.11