

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: P866381

Luminaire Tested: PRLX-2002-M-940-55L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866381  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-39)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-M-940-55L-G-U-S-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 6  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

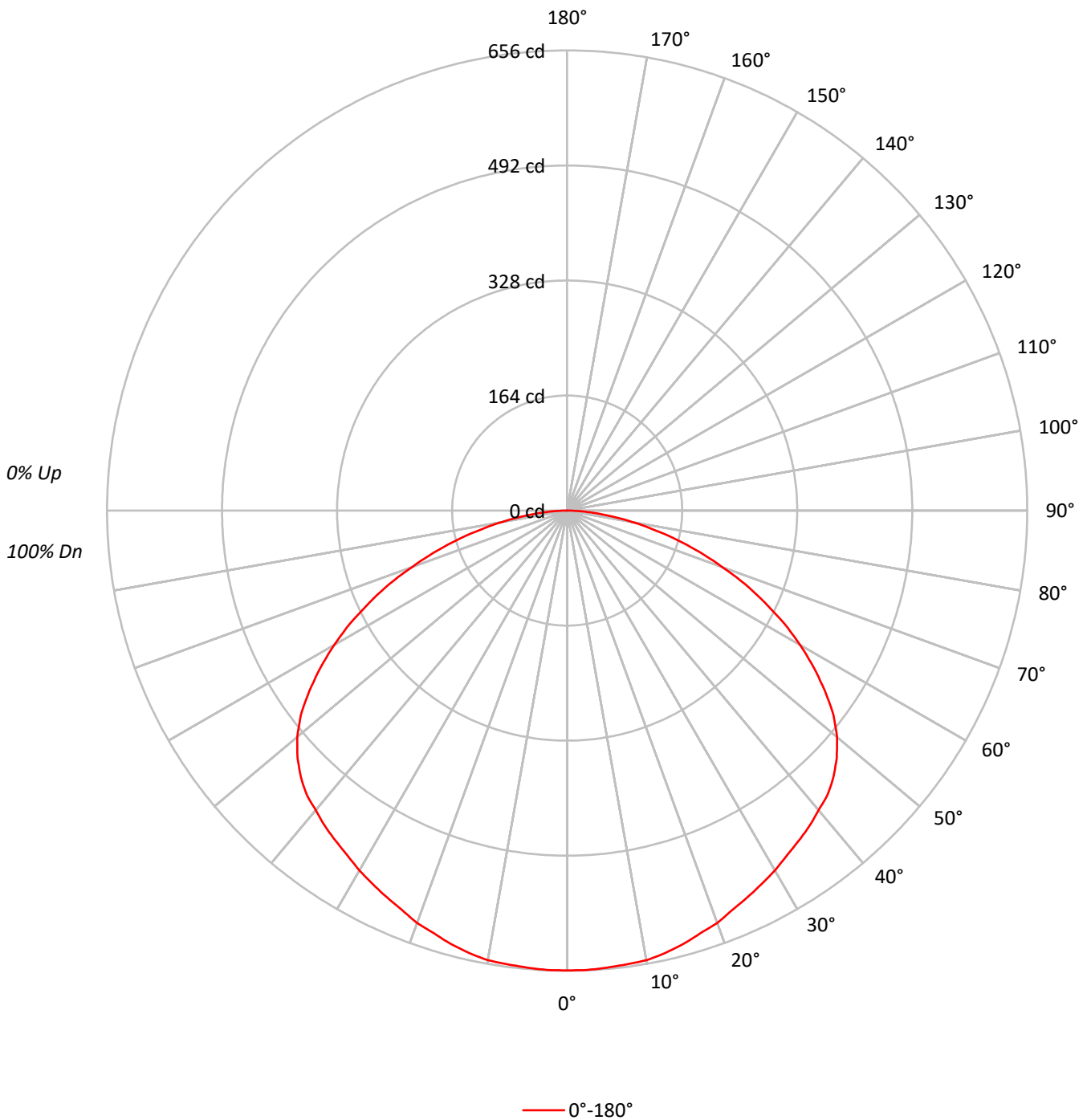
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2224.3 lumens  
Efficiency: N/A  
Efficacy: 46.1 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): 48.3  
Input Voltage (V): 120  
Input Current (Ain): 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

TEST NUMBER: P866381

CATALOG NUMBER: PRLX-2002-M-940-55L-G-U-S-X-X-BRSS-X

### Luminous Intensity Polar Plot





TEST NUMBER: P866381

CATALOG NUMBER: PRLX-2002-M-940-55L-G-U-S-X-X-BRSS-X

**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	60		68	63	58	56
4	81	68	59	52	78	67	58	52	64	57	51		62	56	50		60	54	50	47
5	74	61	51	44	72	59	51	44	57	50	44		55	48	43		53	47	43	40
6	68	54	45	38	66	53	45	38	51	44	38		50	43	37		48	42	37	35
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44	37	33	31
8	59	45	36	30	57	44	35	30	42	35	29		41	34	29		40	34	29	27
9	55	41	32	27	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°	5215
5°	5223
10°	5257
15°	5269
20°	5296
25°	5339
30°	5442
35°	5585
40°	5791
45°	6043
50°	6217
55°	6222
60°	6107
65°	5858
70°	5476
75°	5001
80°	4343
85°	3460

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 6255 cd/sqm

TEST NUMBER: P866381

CATALOG NUMBER: PRLX-2002-M-940-55L-G-U-S-X-X-BRSS-X

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.3	2.8
10°-20°	180.7	8.1
20°-30°	281.2	12.6
30°-40°	360.8	16.2
40°-50°	413.4	18.6
50°-60°	399.8	18.0
60°-70°	308.0	13.8
70°-80°	172.6	7.8
80°-90°	45.6	2.0
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°	524.2	23.6
0°-40°	885.0	39.8
0°-60°	1698.2	76.3
0°-90°	2224.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2224.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	656	
5°	654	62
15°	640	181
25°	608	281
35°	575	361
45°	537	413
55°	449	400
65°	311	308
75°	163	173
85°	38	46
90°	0	

TEST NUMBER: P866381

CATALOG NUMBER: PRLX-2002-M-940-55L-G-U-S-X-X-BRSS-X

**CANDELA DISTRIBUTION (FULL):**

	0°
0°	655.5
2.5°	655.5
5°	654.0
7.5°	652.4
10°	650.8
12.5°	646.1
15°	639.7
17.5°	631.8
20°	625.5
22.5°	616.0
25°	608.2
27.5°	600.3
30°	592.4
32.5°	582.9
35°	575.0
37.5°	567.1
40°	557.6
42.5°	549.7
45°	537.1
47.5°	521.3
50°	502.3
52.5°	478.6
55°	448.6
57.5°	417.0
60°	383.8
62.5°	349.1
65°	311.2
67.5°	274.9
70°	235.4
72.5°	199.0
75°	162.7
77.5°	127.9
80°	94.8
82.5°	64.8
85°	37.9
87.5°	17.4
90°	0.0



TEST NUMBER: P866381  
 CATALOG NUMBER: PRLX-2002-M-940-55L-G-U-S-X-X-BRSS-X

**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	18.85	20.55	19.22	20.87	21.18	18.85	20.55	19.22	20.87	21.18
	3H	20.66	22.21	21.04	22.53	22.89	20.66	22.21	21.04	22.53	22.89
	4H	21.32	22.77	21.71	23.12	23.49	21.32	22.77	21.71	23.12	23.49
	6H	21.78	23.13	22.19	23.49	23.88	21.78	23.13	22.19	23.49	23.88
	8H	21.92	23.21	22.34	23.60	24.00	21.92	23.21	22.34	23.60	24.00
	12H	22.01	23.25	22.43	23.63	24.06	22.01	23.25	22.43	23.63	24.06
4H	2H	19.51	20.96	19.90	21.31	21.68	19.51	20.96	19.90	21.31	21.68
	3H	21.52	22.75	21.93	23.15	23.54	21.52	22.75	21.93	23.15	23.54
	4H	22.30	23.41	22.73	23.82	24.26	22.30	23.41	22.73	23.82	24.26
	6H	22.89	23.86	23.34	24.30	24.75	22.89	23.86	23.34	24.30	24.75
	8H	23.07	23.98	23.53	24.42	24.89	23.07	23.98	23.53	24.42	24.89
	12H	23.20	24.02	23.68	24.49	24.96	23.20	24.02	23.68	24.49	24.96
8H	4H	22.61	23.52	23.07	23.96	24.43	22.61	23.52	23.07	23.96	24.43
	6H	23.31	24.07	23.80	24.55	25.03	23.31	24.07	23.80	24.55	25.03
	8H	23.56	24.24	24.06	24.74	25.23	23.56	24.24	24.06	24.74	25.23
	12H	23.75	24.35	24.25	24.84	25.40	23.75	24.35	24.25	24.84	25.40
12H	4H	22.65	23.47	23.12	23.94	24.41	22.65	23.47	23.12	23.94	24.41
	6H	23.36	24.04	23.87	24.55	25.03	23.36	24.04	23.87	24.55	25.03
	8H	23.66	24.27	24.17	24.76	25.31	23.66	24.27	24.17	24.76	25.31