

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: P865889

Luminaire Tested: PRLX-2004-S-940-25L-L-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865889  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-24)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2004-S-940-25L-L-U-S-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, BELL WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

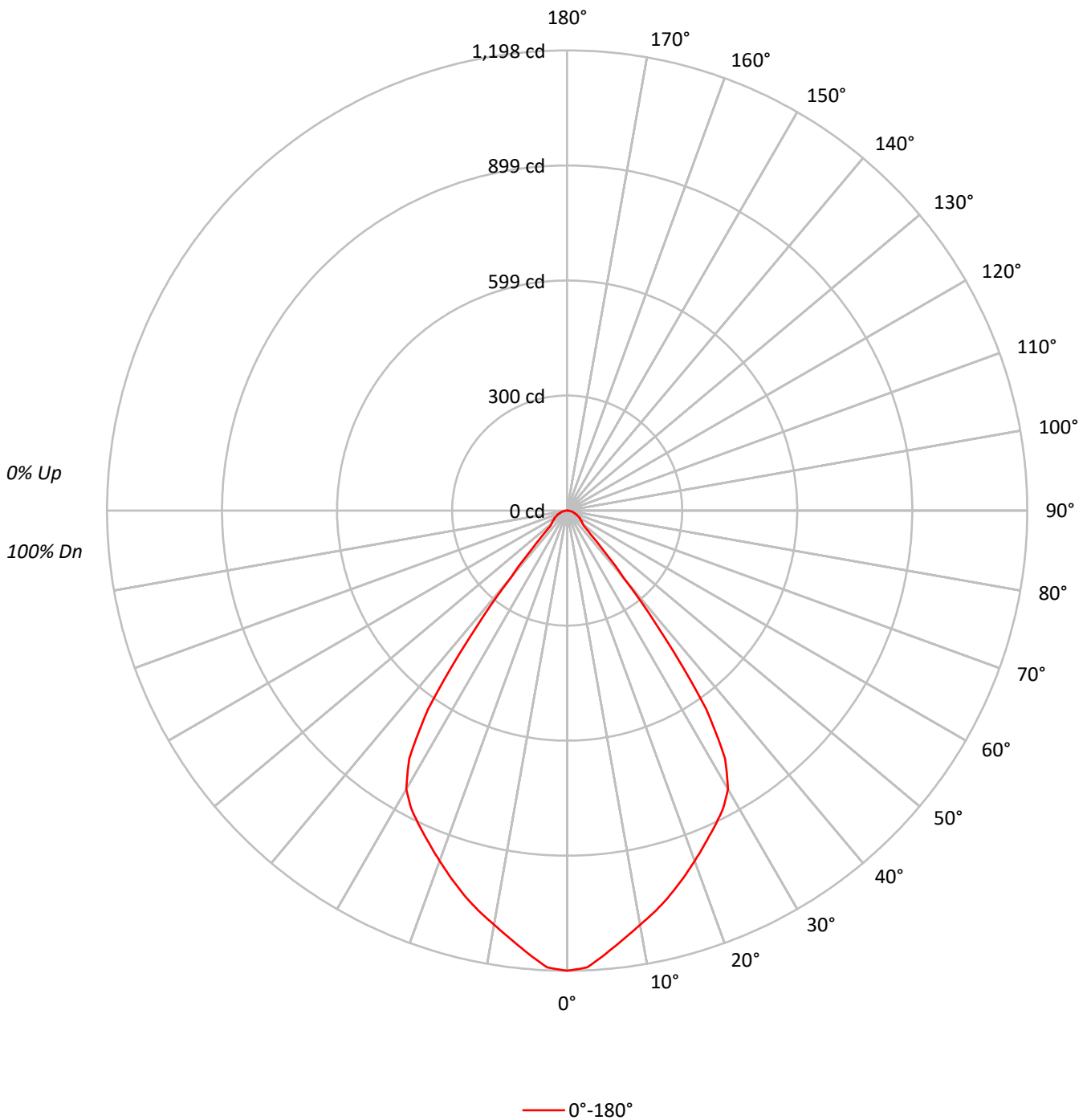
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1348.9 lumens  
Efficiency: N/A  
Efficacy: 46.4 lumens/watt  
Spacing Criteria (0/90/45): 1.06 / 1.06 / 1.02  
Luminous Opening: Circular (Dia: 0.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.1  
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: P865889

CATALOG NUMBER: PRLX-2004-S-940-25L-L-U-S-X-X-BRSS-X

### Luminous Intensity Polar Plot





TEST NUMBER: P865889

CATALOG NUMBER: PRLX-2004-S-940-25L-L-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	113	110	107	104	110	107	105	103	103	101	99		99	98	96		96	95	94	92
2	106	101	96	92	104	99	95	91	96	92	89		93	90	87		90	88	86	84
3	100	93	87	83	98	92	86	82	89	85	81		86	83	80		84	81	78	77
4	94	86	80	75	93	85	79	75	83	78	74		81	76	73		79	75	72	70
5	89	80	73	69	87	79	73	68	77	72	68		75	71	67		74	70	67	65
6	84	74	68	63	83	74	67	63	72	67	62		71	66	62		69	65	62	60
7	80	69	63	58	78	69	62	58	67	62	58		66	61	57		65	60	57	56
8	75	65	58	54	74	64	58	54	63	58	54		62	57	53		61	57	53	52
9	71	61	54	50	70	60	54	50	59	54	50		58	53	50		58	53	50	48
10	68	57	51	47	67	57	51	47	56	50	47		55	50	46		54	50	46	45

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

	0°
0°	19536
5°	18959
10°	18132
15°	17498
20°	16850
25°	16335
30°	15773
35°	12576
40°	4882
45°	1942
50°	1307
55°	1263
60°	1220
65°	1084
70°	1006
75°	1033
80°	883
85°	880

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1942 cd/sqm

TEST NUMBER: P865889

CATALOG NUMBER: PRLX-2004-S-940-25L-L-U-S-X-X-BRSS-X

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.6	8.0
10°-20°	291.5	21.6
20°-30°	418.0	31.0
30°-40°	361.0	26.8
40°-50°	79.3	5.9
50°-60°	39.7	2.9
60°-70°	28.7	2.1
70°-80°	17.0	1.3
80°-90°	5.1	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°	818.1	60.7
0°-40°	1179.1	87.4
0°-60°	1298.2	96.2
0°-90°	1348.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1348.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1198	
5°	1158	109
15°	1036	292
25°	908	418
35°	632	361
45°	84	79
55°	44	40
65°	28	29
75°	16	17
85°	5	5
90°	0	

TEST NUMBER: P865889

CATALOG NUMBER: PRLX-2004-S-940-25L-L-U-S-X-X-BRSS-X

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1197.8
2.5°	1190.7
5°	1158.0
7.5°	1125.2
10°	1094.8
12.5°	1066.8
15°	1036.3
17.5°	1003.6
20°	970.8
22.5°	938.1
25°	907.7
27.5°	877.3
30°	837.5
32.5°	765.0
35°	631.6
37.5°	418.8
40°	229.3
42.5°	135.7
45°	84.2
47.5°	58.5
50°	51.5
52.5°	49.1
55°	44.4
57.5°	39.8
60°	37.4
62.5°	32.8
65°	28.1
67.5°	25.7
70°	21.1
72.5°	18.7
75°	16.4
77.5°	14.0
80°	9.4
82.5°	7.0
85°	4.7
87.5°	2.3
90°	0.0



TEST NUMBER: P865889

CATALOG NUMBER: PRLX-2004-S-940-25L-L-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	7.58	8.65	7.95	8.96	9.27	7.58	8.65	7.95	8.96	9.27
	3H	9.21	10.15	9.59	10.48	10.85	9.21	10.15	9.59	10.48	10.85
	4H	9.88	10.76	10.29	11.11	11.50	9.88	10.76	10.29	11.11	11.50
	6H	10.42	11.22	10.84	11.59	11.99	10.42	11.22	10.84	11.59	11.99
	8H	10.56	11.32	11.00	11.71	12.12	10.56	11.32	11.00	11.71	12.12
	12H	10.67	11.39	11.10	11.77	12.20	10.67	11.39	11.10	11.77	12.20
4H	2H	8.05	8.92	8.46	9.28	9.67	8.05	8.92	8.46	9.28	9.67
	3H	9.88	10.60	10.30	11.01	11.41	9.88	10.60	10.30	11.01	11.41
	4H	10.71	11.35	11.15	11.78	12.22	10.71	11.35	11.15	11.78	12.22
	6H	11.37	11.92	11.84	12.37	12.85	11.37	11.92	11.84	12.37	12.85
	8H	11.56	12.07	12.04	12.52	13.00	11.56	12.07	12.04	12.52	13.00
	12H	11.71	12.16	12.20	12.64	13.12	11.71	12.16	12.20	12.64	13.12
8H	4H	10.98	11.50	11.46	11.95	12.42	10.98	11.50	11.46	11.95	12.42
	6H	11.76	12.17	12.27	12.67	13.16	11.76	12.17	12.27	12.67	13.16
	8H	12.03	12.39	12.56	12.91	13.41	12.03	12.39	12.56	12.91	13.41
	12H	12.27	12.59	12.79	13.09	13.66	12.27	12.59	12.79	13.09	13.66
12H	4H	10.99	11.43	11.48	11.92	12.40	10.99	11.43	11.48	11.92	12.40
	6H	11.79	12.16	12.32	12.68	13.18	11.79	12.16	12.32	12.68	13.18
	8H	12.12	12.44	12.64	12.94	13.51	12.12	12.44	12.64	12.94	13.51