

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: P866635

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

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866635  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-54)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2004-M-940-45L-L-U-S-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS,  
BELL WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

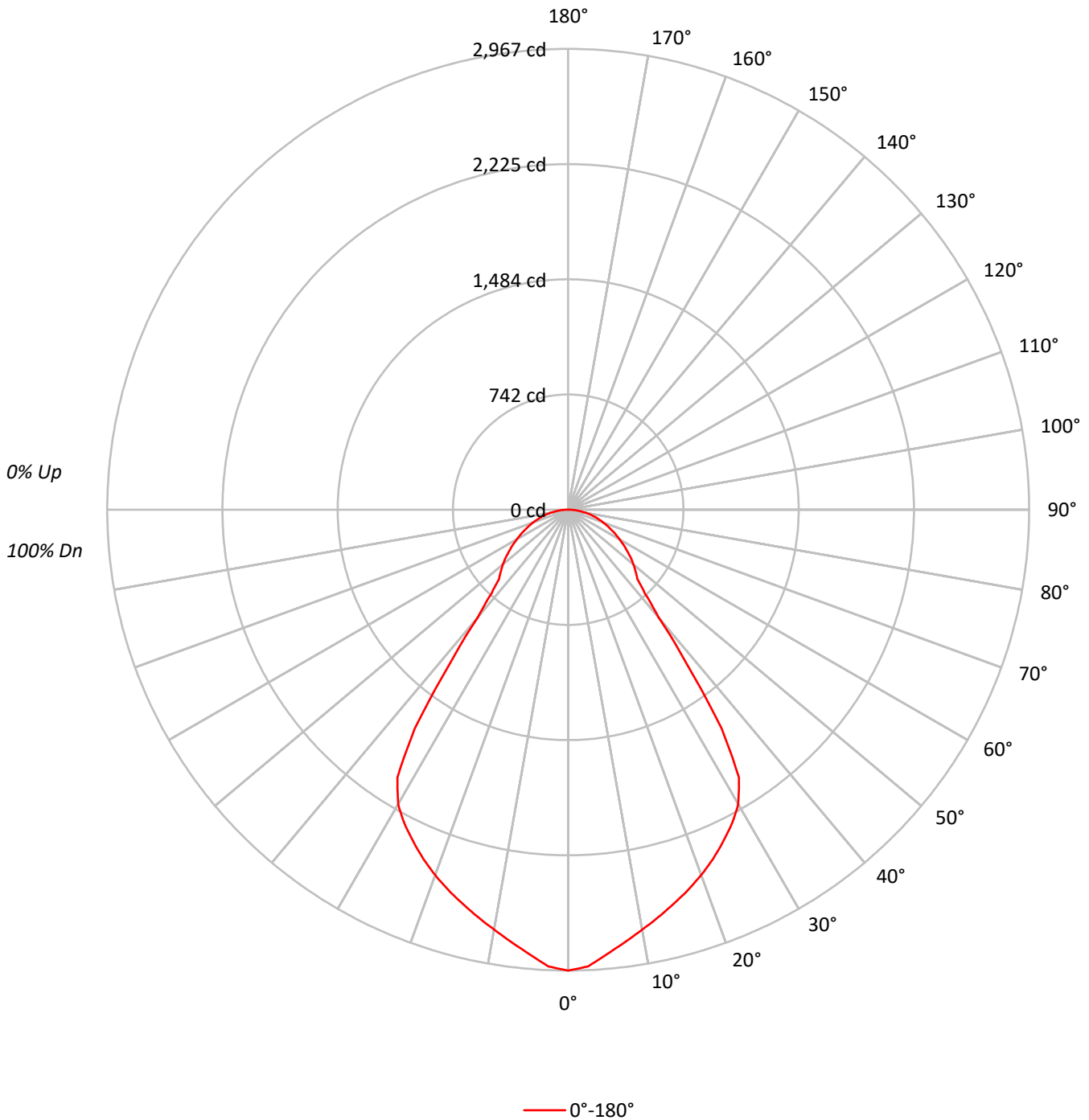
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4594.7 lumens  
Efficiency: N/A  
Efficacy: 118.4 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.05  
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

TEST NUMBER: P866635

CATALOG NUMBER: PRLX-2004-M-940-45L-L-U-S-X-X-WHHR-X

### Luminous Intensity Polar Plot





TEST NUMBER: P866635

CATALOG NUMBER: PRLX-2004-M-940-45L-L-U-S-X-X-WHHR-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	111	107	103	100	108	105	101	98	100	98	95	97	94	92	93	91	90	88
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68
4	89	79	71	66	87	77	71	65	75	69	64	73	68	64	71	66	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38
10	61	49	42	37	60	49	42	37	48	41	37	47	41	37	46	41	37	35

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

	0°
0°	23608
5°	22934
10°	22176
15°	21630
20°	21195
25°	20705
30°	20112
35°	16720
40°	9409
45°	7081
50°	6799
55°	6436
60°	6067
65°	5766
70°	5562
75°	5404
80°	5269
85°	5194

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7081 cd/sqm

TEST NUMBER: P866635

CATALOG NUMBER: PRLX-2004-M-940-45L-L-U-S-X-X-WHHR-X

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	270.3	5.9
10°-20°	740.8	16.1
20°-30°	1086.0	23.6
30°-40°	1014.5	22.1
40°-50°	514.5	11.2
50°-60°	415.4	9.0
60°-70°	305.4	6.6
70°-80°	185.8	4.0
80°-90°	62.1	1.4
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°	2097.1	45.6
0°-40°	3111.6	67.7
0°-60°	4041.4	88.0
0°-90°	4594.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4594.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2967	
5°	2872	270
15°	2626	741
25°	2359	1086
35°	1722	1014
45°	629	514
55°	464	415
65°	306	305
75°	176	186
85°	57	62
90°	0	

TEST NUMBER: P866635

CATALOG NUMBER: PRLX-2004-M-940-45L-L-U-S-X-X-WHHR-X

**CANDELA DISTRIBUTION (FULL):**

0°	
0°	2967.4
2.5°	2942.8
5°	2871.7
7.5°	2807.1
10°	2745.1
12.5°	2685.6
15°	2626.2
17.5°	2566.7
20°	2503.4
22.5°	2434.9
25°	2358.7
27.5°	2281.1
30°	2189.3
32.5°	2044.6
35°	1721.5
37.5°	1254.9
40°	906.0
42.5°	730.2
45°	629.4
47.5°	588.0
50°	549.3
52.5°	506.6
55°	464.0
57.5°	422.6
60°	381.3
62.5°	345.1
65°	306.3
67.5°	272.7
70°	239.1
72.5°	206.8
75°	175.8
77.5°	144.8
80°	115.0
82.5°	85.3
85°	56.9
87.5°	28.4
90°	0.0

TEST NUMBER: P866635  
 CATALOG NUMBER: PRLX-2004-M-940-45L-L-U-S-X-X-WHHR-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	16.87	18.22	17.23	18.53	18.85	16.87	18.22	17.23	18.53	18.85
	3H	18.61	19.82	18.99	20.15	20.51	18.61	19.82	18.99	20.15	20.51
	4H	19.32	20.45	19.72	20.80	21.18	19.32	20.45	19.72	20.80	21.18
	6H	19.89	20.94	20.30	21.31	21.70	19.89	20.94	20.30	21.31	21.70
	8H	20.10	21.09	20.53	21.48	21.89	20.10	21.09	20.53	21.48	21.89
	12H	20.26	21.21	20.69	21.59	22.02	20.26	21.21	20.69	21.59	22.02
4H	2H	17.42	18.55	17.82	18.90	19.29	17.42	18.55	17.82	18.90	19.29
	3H	19.40	20.34	19.81	20.74	21.14	19.40	20.34	19.81	20.74	21.14
	4H	20.24	21.09	20.68	21.51	21.95	20.24	21.09	20.68	21.51	21.95
	6H	20.97	21.70	21.43	22.15	22.61	20.97	21.70	21.43	22.15	22.61
	8H	21.23	21.92	21.70	22.37	22.84	21.23	21.92	21.70	22.37	22.84
	12H	21.45	22.06	21.93	22.54	23.01	21.45	22.06	21.93	22.54	23.01
8H	4H	20.55	21.24	21.02	21.69	22.16	20.55	21.24	21.02	21.69	22.16
	6H	21.42	21.99	21.92	22.48	22.96	21.42	21.99	21.92	22.48	22.96
	8H	21.79	22.29	22.31	22.81	23.30	21.79	22.29	22.31	22.81	23.30
	12H	22.10	22.55	22.62	23.04	23.61	22.10	22.55	22.62	23.04	23.61
12H	4H	20.58	21.19	21.07	21.68	22.15	20.58	21.19	21.07	21.68	22.15
	6H	21.49	22.00	22.01	22.51	23.00	21.49	22.00	22.01	22.51	23.00
	8H	21.92	22.37	22.44	22.86	23.43	21.92	22.37	22.44	22.86	23.43