

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: P866637

Luminaire Tested: PRLX-2004-M-940-55L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866637
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-43)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-M-940-55L-G-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 6
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

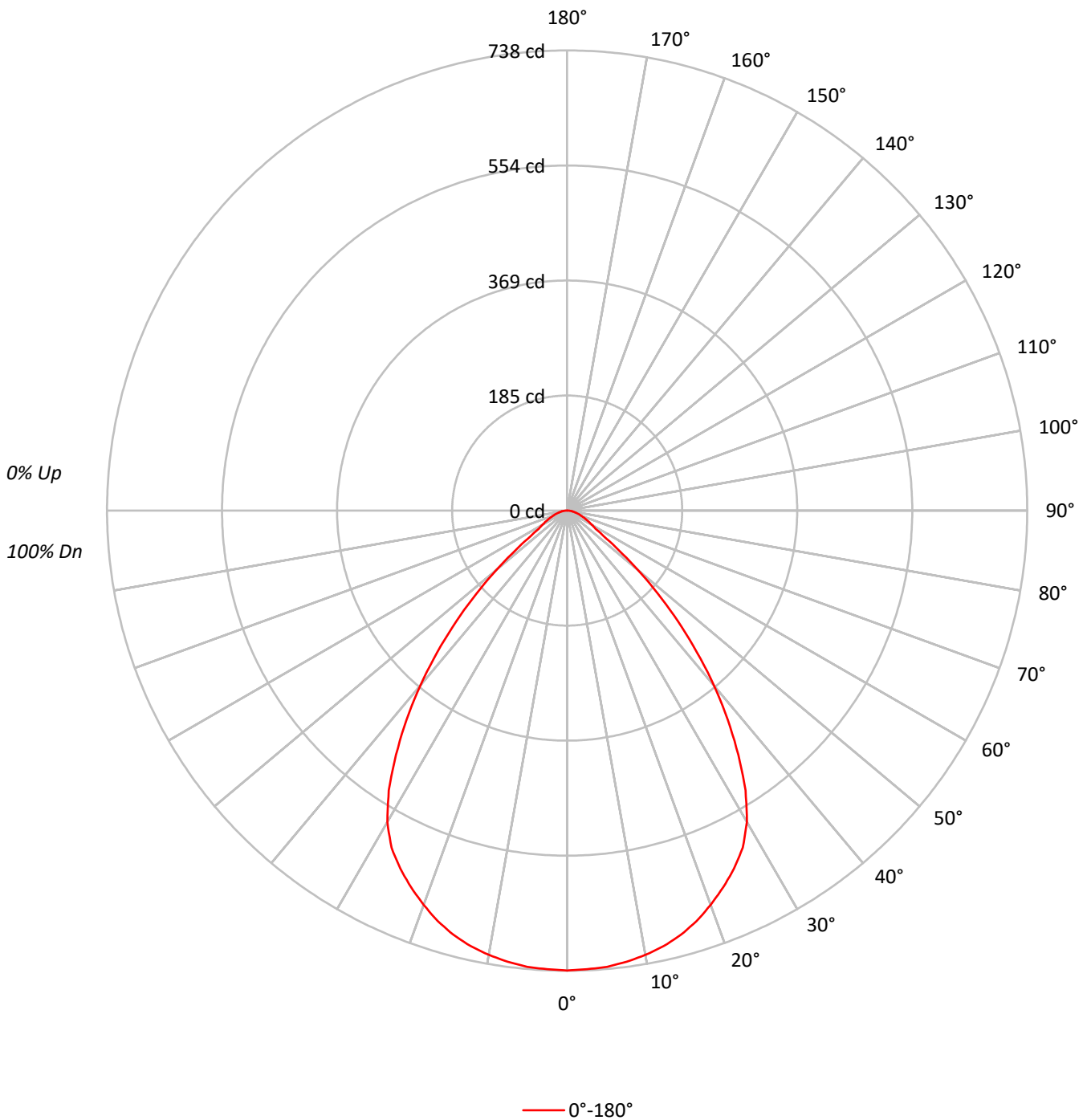
Lumens per Lamp: N/A
Luminaire Lumens: 1177.7 lumens
Efficiency: N/A
Efficacy: 24.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.14
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 48.3
Input Voltage (V): 120
Input Current (A_{in}): 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: P866637

CATALOG NUMBER: PRLX-2004-M-940-55L-G-U-S-X-X-BRSS-X

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	112	108	105	103	109	106	103	101	102	100	98	98	97	95	95	93	92	90
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	88	85	83	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	91	82	75	70	89	81	74	70	79	73	69	76	72	68	74	70	67	65
5	85	75	68	63	84	74	67	62	72	66	62	70	65	61	69	64	61	59
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49
8	71	59	52	47	69	59	52	47	57	51	47	56	51	46	55	50	46	45
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	51	46	43	41
10	63	51	44	40	62	51	44	40	50	44	40	49	43	39	48	43	39	38

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5869
5°	5866
10°	5845
15°	5803
20°	5697
25°	5560
30°	5297
35°	4648
40°	3806
45°	2826
50°	1818
55°	986
60°	729
65°	625
70°	551
75°	486
80°	435
85°	429

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2826 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	5.9
10°-20°	198.3	16.8
20°-30°	290.6	24.7
30°-40°	296.7	25.2
40°-50°	193.9	16.5
50°-60°	72.1	6.1
60°-70°	33.6	2.9
70°-80°	17.3	1.5
80°-90°	5.6	0.5
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°	558.6	47.4
0°-40°	855.3	72.6
0°-60°	1121.3	95.2
0°-90°	1177.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1177.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	738	
5°	734	70
15°	704	198
25°	633	291
35°	479	297
45°	251	194
55°	71	72
65°	33	34
75°	16	17
85°	5	6
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	737.7
2.5°	736.1
5°	734.5
7.5°	729.8
10°	723.5
12.5°	715.6
15°	704.5
17.5°	690.3
20°	672.9
22.5°	654.0
25°	633.4
27.5°	609.7
30°	576.6
32.5°	532.3
35°	478.6
37.5°	423.3
40°	366.5
42.5°	308.0
45°	251.2
47.5°	197.5
50°	146.9
52.5°	104.3
55°	71.1
57.5°	53.7
60°	45.8
62.5°	39.5
65°	33.2
67.5°	28.4
70°	23.7
72.5°	20.5
75°	15.8
77.5°	12.6
80°	9.5
82.5°	7.9
85°	4.7
87.5°	3.2
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	7.35	8.61	7.72	8.92	9.24	7.35	8.61	7.72	8.92	9.24
	3H	8.54	9.65	8.92	9.99	10.35	8.54	9.65	8.92	9.99	10.35
	4H	8.98	10.02	9.39	10.37	10.75	8.98	10.02	9.39	10.37	10.75
	6H	9.29	10.24	9.71	10.61	11.00	9.29	10.24	9.71	10.61	11.00
	8H	9.42	10.31	9.85	10.71	11.11	9.42	10.31	9.85	10.71	11.11
	12H	9.51	10.36	9.94	10.74	11.18	9.51	10.36	9.94	10.74	11.18
4H	2H	7.72	8.75	8.12	9.10	9.49	7.72	8.75	8.12	9.10	9.49
	3H	9.13	9.97	9.55	10.38	10.78	9.13	9.97	9.55	10.38	10.78
	4H	9.68	10.43	10.11	10.85	11.29	9.68	10.43	10.11	10.85	11.29
	6H	10.10	10.75	10.56	11.19	11.66	10.10	10.75	10.56	11.19	11.66
	8H	10.28	10.88	10.75	11.33	11.80	10.28	10.88	10.75	11.33	11.80
	12H	10.41	10.94	10.90	11.43	11.90	10.41	10.94	10.90	11.43	11.90
8H	4H	9.84	10.44	10.31	10.89	11.36	9.84	10.44	10.31	10.89	11.36
	6H	10.37	10.87	10.88	11.36	11.85	10.37	10.87	10.88	11.36	11.85
	8H	10.64	11.08	11.16	11.60	12.09	10.64	11.08	11.16	11.60	12.09
	12H	10.86	11.25	11.37	11.74	12.32	10.86	11.25	11.37	11.74	12.32
12H	4H	9.84	10.37	10.32	10.85	11.33	9.84	10.37	10.32	10.85	11.33
	6H	10.40	10.84	10.92	11.36	11.85	10.40	10.84	10.92	11.36	11.85
	8H	10.72	11.11	11.24	11.61	12.18	10.72	11.11	11.24	11.61	12.18