

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: P866437

Luminaire Tested: PRLX-2004-M-927-45L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866437
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-927-45L-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 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

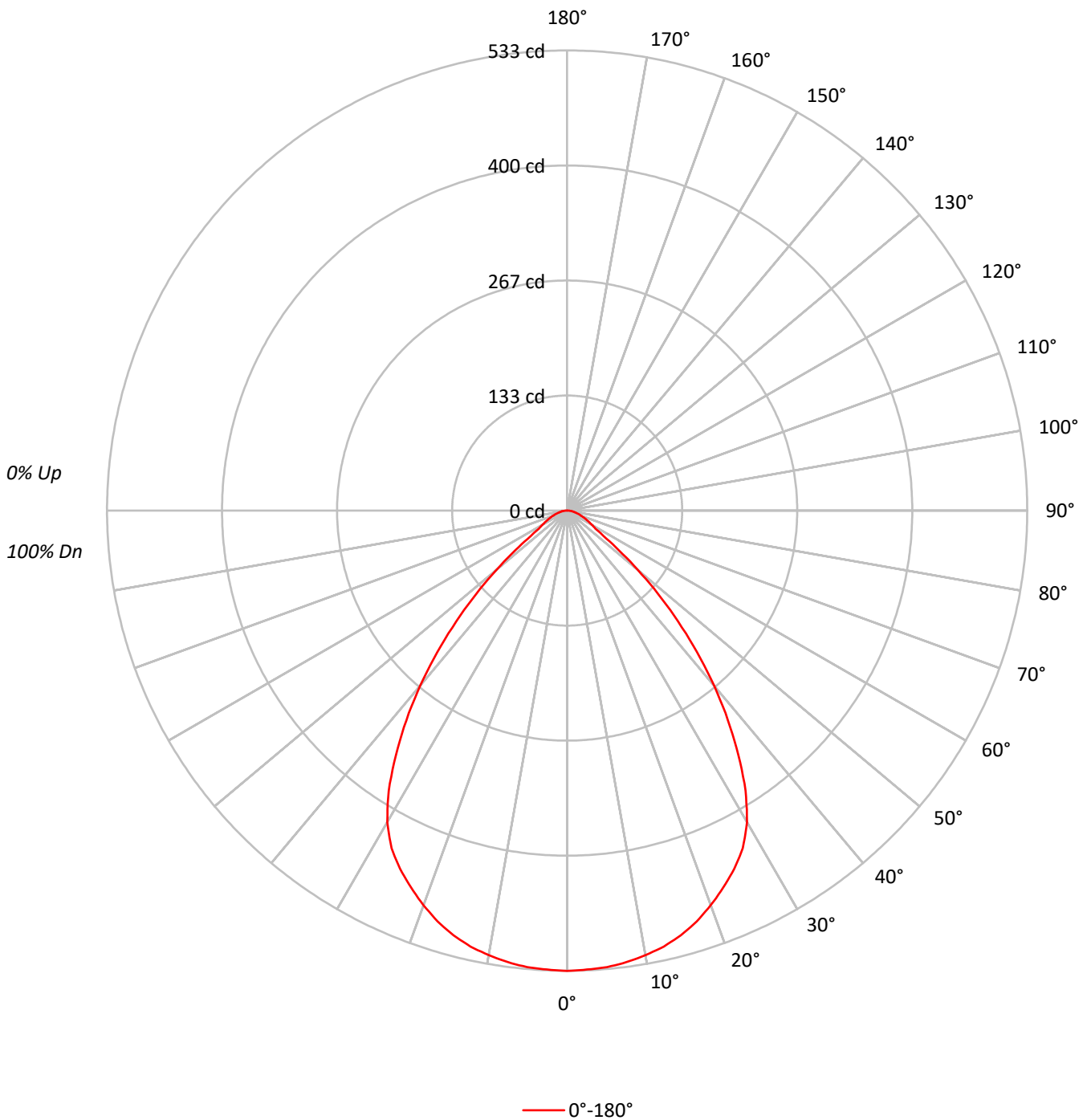
Lumens per Lamp: N/A
Luminaire Lumens: 851.3 lumens
Efficiency: N/A
Efficacy: 21.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.14
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 38.8
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: P866437

CATALOG NUMBER: PRLX-2004-M-927-45L-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°	4242
5°	4240
10°	4224
15°	4194
20°	4118
25°	4020
30°	3828
35°	3360
40°	2751
45°	2042
50°	1314
55°	713
60°	527
65°	452
70°	398
75°	350
80°	316
85°	310

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2042 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	5.9
10°-20°	143.3	16.8
20°-30°	210.0	24.7
30°-40°	214.5	25.2
40°-50°	140.1	16.5
50°-60°	52.1	6.1
60°-70°	24.3	2.9
70°-80°	12.5	1.5
80°-90°	4.0	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°	403.8	47.4
0°-40°	618.2	72.6
0°-60°	810.5	95.2
0°-90°	851.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	851.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	533	
5°	531	50
15°	509	143
25°	458	210
35°	346	214
45°	182	140
55°	51	52
65°	24	24
75°	11	12
85°	3	4
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	533.2
2.5°	532.1
5°	530.9
7.5°	527.5
10°	522.9
12.5°	517.2
15°	509.2
17.5°	499.0
20°	486.4
22.5°	472.7
25°	457.9
27.5°	440.7
30°	416.7
32.5°	384.8
35°	346.0
37.5°	306.0
40°	264.9
42.5°	222.6
45°	181.5
47.5°	142.7
50°	106.2
52.5°	75.4
55°	51.4
57.5°	38.8
60°	33.1
62.5°	28.5
65°	24.0
67.5°	20.6
70°	17.1
72.5°	14.8
75°	11.4
77.5°	9.1
80°	6.9
82.5°	5.7
85°	3.4
87.5°	2.3
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	6.22	7.48	6.59	7.79	8.11	6.22	7.48	6.59	7.79	8.11
	3H	7.42	8.53	7.80	8.86	9.22	7.42	8.53	7.80	8.86	9.22
	4H	7.85	8.89	8.26	9.24	9.62	7.85	8.89	8.26	9.24	9.62
	6H	8.16	9.11	8.58	9.48	9.88	8.16	9.11	8.58	9.48	9.88
	8H	8.29	9.19	8.72	9.58	9.98	8.29	9.19	8.72	9.58	9.98
	12H	8.38	9.23	8.81	9.62	10.05	8.38	9.23	8.81	9.62	10.05
4H	2H	6.59	7.62	6.99	7.97	8.36	6.59	7.62	6.99	7.97	8.36
	3H	8.01	8.85	8.42	9.25	9.66	8.01	8.85	8.42	9.25	9.66
	4H	8.55	9.30	8.98	9.72	10.16	8.55	9.30	8.98	9.72	10.16
	6H	8.97	9.62	9.44	10.07	10.53	8.97	9.62	9.44	10.07	10.53
	8H	9.15	9.75	9.62	10.20	10.67	9.15	9.75	9.62	10.20	10.67
	12H	9.28	9.82	9.77	10.30	10.77	9.28	9.82	9.77	10.30	10.77
8H	4H	8.71	9.31	9.18	9.76	10.23	8.71	9.31	9.18	9.76	10.23
	6H	9.25	9.74	9.75	10.24	10.72	9.25	9.74	9.75	10.24	10.72
	8H	9.51	9.95	10.03	10.47	10.96	9.51	9.95	10.03	10.47	10.96
	12H	9.73	10.12	10.24	10.62	11.19	9.73	10.12	10.24	10.62	11.19
12H	4H	8.71	9.24	9.19	9.72	10.20	8.71	9.24	9.19	9.72	10.20
	6H	9.27	9.72	9.80	10.23	10.73	9.27	9.72	9.80	10.23	10.73
	8H	9.60	9.99	10.11	10.48	11.06	9.60	9.99	10.11	10.48	11.06