

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: P866652

Luminaire Tested: PRLX-2004-M-940-75L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866652
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-45)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-M-940-75L-G-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,
BELL WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 8
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

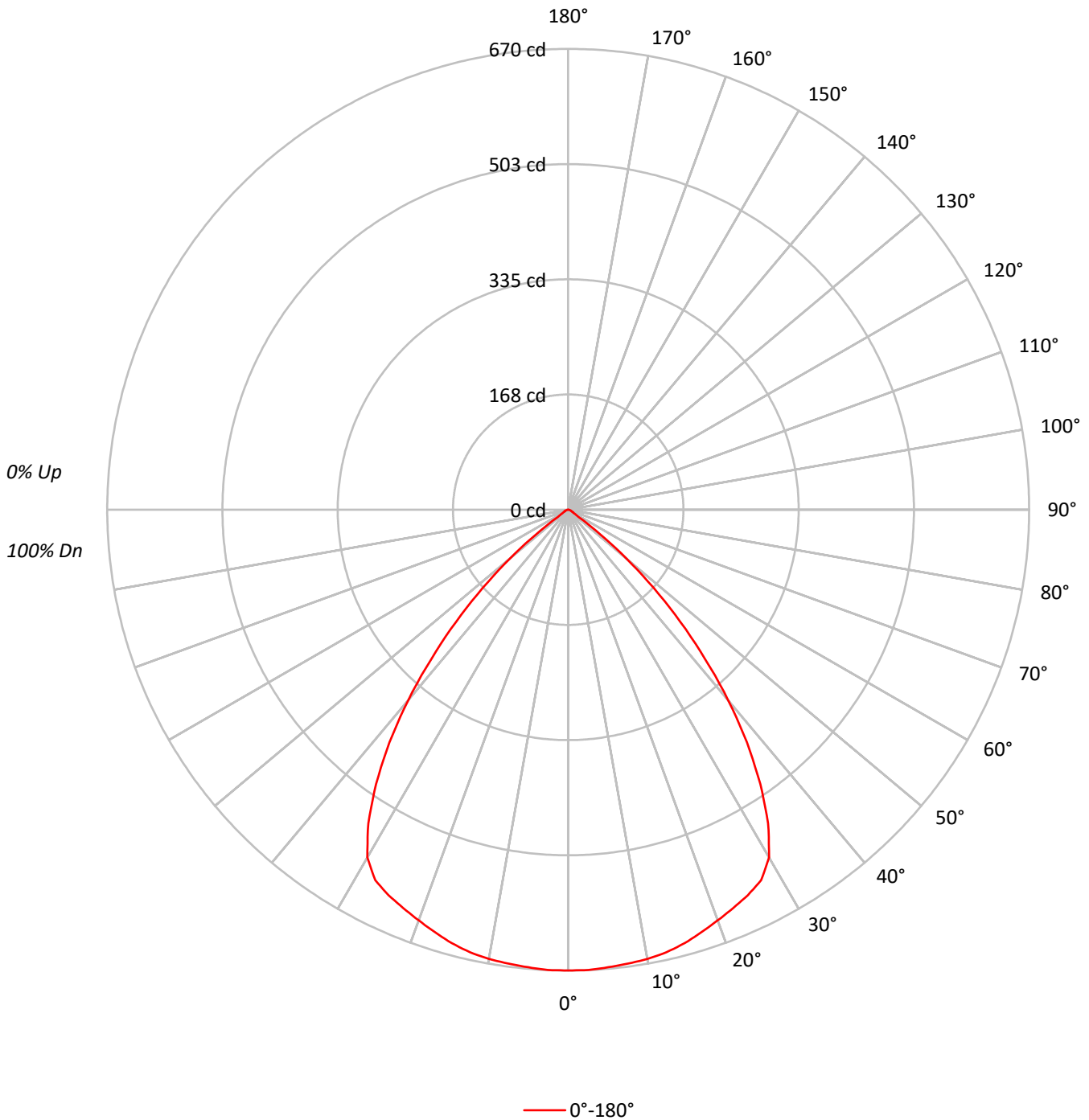
Lumens per Lamp: N/A
Luminaire Lumens: 1051.4 lumens
Efficiency: N/A
Efficacy: 15.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.18
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 69.7
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: 0.333 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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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	113	110	107	104	110	107	105	102	103	101	99	99	98	96	96	95	94	92
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83
3	99	92	86	82	97	91	85	81	88	83	80	85	82	78	83	80	77	75
4	93	85	78	73	91	83	77	73	81	76	72	79	75	71	77	73	70	68
5	88	78	71	66	86	77	70	66	75	69	65	73	68	65	72	67	64	62
6	82	72	65	60	80	71	64	60	69	64	59	68	63	59	66	62	58	57
7	77	66	59	55	76	66	59	54	64	58	54	63	58	54	62	57	53	52
8	73	62	55	50	71	61	54	50	60	54	50	59	53	49	58	53	49	48
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44
10	64	53	47	42	63	53	47	42	52	46	42	51	46	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	5330
5°	5332
10°	5359
15°	5376
20°	5380
25°	5427
30°	5362
35°	4728
40°	3759
45°	2593
50°	1360
55°	269
60°	137
65°	122
70°	100
75°	68
80°	101
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2593 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	6.0
10°-20°	184.2	17.5
20°-30°	284.3	27.0
30°-40°	299.9	28.5
40°-50°	177.3	16.9
50°-60°	32.3	3.1
60°-70°	5.9	0.6
70°-80°	3.1	0.3
80°-90°	0.9	0.1
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°	532.1	50.6
0°-40°	831.9	79.1
0°-60°	1041.5	99.1
0°-90°	1051.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1051.4	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	670	
5°	668	64
15°	653	184
25°	618	284
35°	487	300
45°	230	177
55°	19	32
65°	6	6
75°	2	3
85°	0	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	669.9
2.5°	669.9
5°	667.7
7.5°	665.6
10°	663.4
12.5°	659.1
15°	652.7
17.5°	644.1
20°	635.4
22.5°	626.8
25°	618.2
27.5°	607.4
30°	583.7
32.5°	540.7
35°	486.8
37.5°	426.5
40°	361.9
42.5°	295.1
45°	230.5
47.5°	168.0
50°	109.9
52.5°	58.2
55°	19.4
57.5°	10.8
60°	8.6
62.5°	6.5
65°	6.5
67.5°	4.3
70°	4.3
72.5°	4.3
75°	2.2
77.5°	2.2
80°	2.2
82.5°	2.2
85°	0.0
87.5°	0.0
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.04
	12H	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.05
4H	2H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.42
	8H	0.00	0.00	0.00	0.30	0.78	0.00	0.00	0.00	0.30	0.78
	12H	0.00	0.00	0.00	0.33	0.81	0.00	0.00	0.00	0.33	0.81
8H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.16	0.65	0.00	0.00	0.00	0.16	0.65
	8H	0.00	0.16	0.30	0.68	1.18	0.00	0.16	0.30	0.68	1.18
	12H	0.00	0.21	0.38	0.71	1.28	0.00	0.21	0.38	0.71	1.28
12H	4H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6H	0.00	0.00	0.00	0.23	0.72	0.00	0.00	0.00	0.23	0.72
	8H	0.00	0.26	0.43	0.75	1.33	0.00	0.26	0.43	0.75	1.33