

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: P866636

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866636
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-940-55L-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 6
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

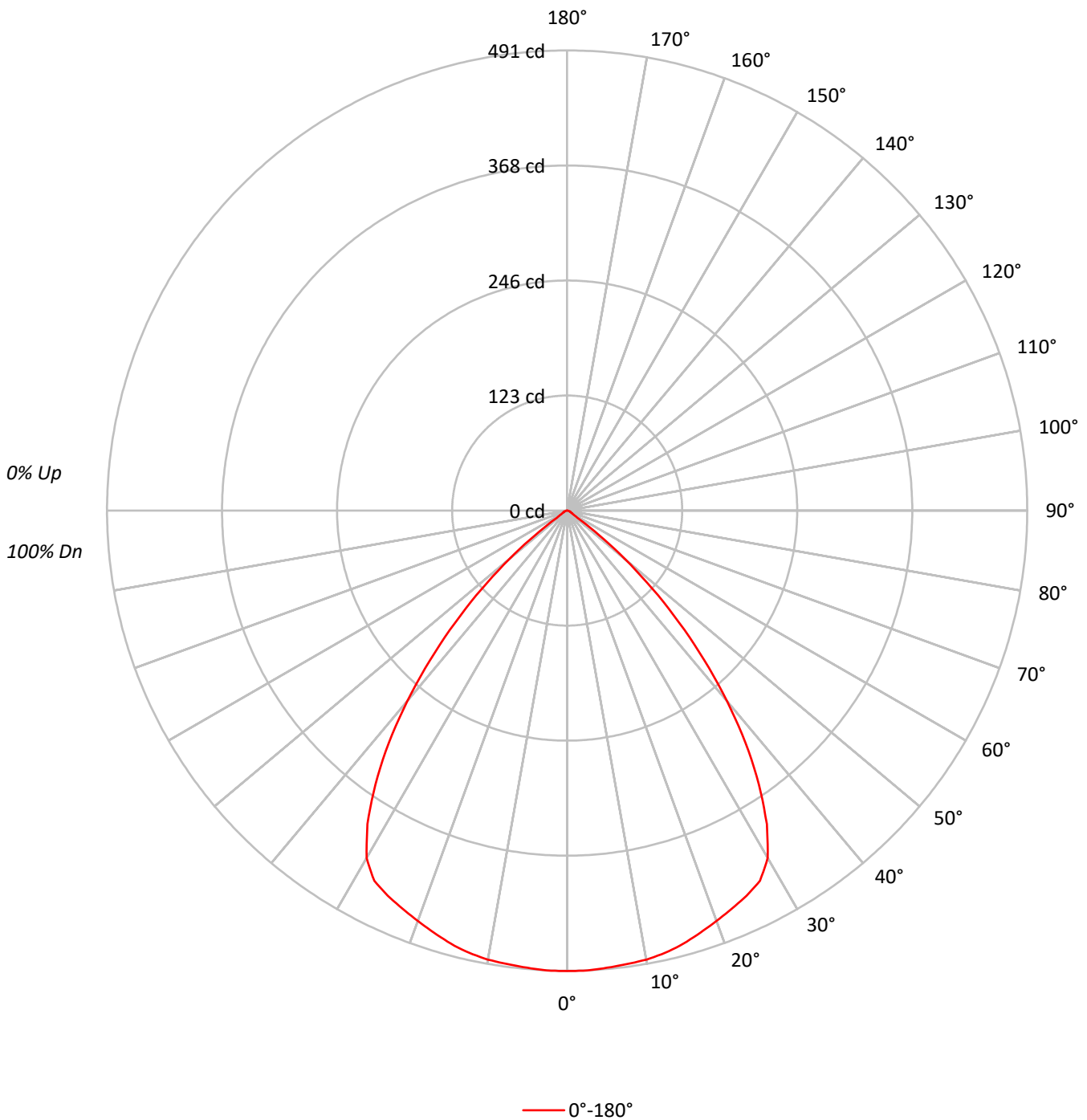
Lumens per Lamp: N/A
Luminaire Lumens: 771.0 lumens
Efficiency: N/A
Efficacy: 16.0 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.18
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 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: 0.333 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°	3909
5°	3911
10°	3930
15°	3942
20°	3945
25°	3979
30°	3933
35°	3467
40°	2756
45°	1901
50°	998
55°	197
60°	100
65°	88
70°	74
75°	49
80°	73
85°	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1901 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.6	6.0
10°-20°	135.1	17.5
20°-30°	208.5	27.0
30°-40°	219.9	28.5
40°-50°	130.0	16.9
50°-60°	23.6	3.1
60°-70°	4.3	0.6
70°-80°	2.3	0.3
80°-90°	0.7	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°	390.2	50.6
0°-40°	610.1	79.1
0°-60°	763.7	99.1
0°-90°	771.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	771.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	491	
5°	490	47
15°	479	135
25°	453	208
35°	357	220
45°	169	130
55°	14	24
65°	5	4
75°	2	2
85°	0	1
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	491.3
2.5°	491.3
5°	489.7
7.5°	488.1
10°	486.5
12.5°	483.4
15°	478.6
17.5°	472.3
20°	466.0
22.5°	459.7
25°	453.3
27.5°	445.5
30°	428.1
32.5°	396.5
35°	357.0
37.5°	312.8
40°	265.4
42.5°	216.4
45°	169.0
47.5°	123.2
50°	80.6
52.5°	42.6
55°	14.2
57.5°	7.9
60°	6.3
62.5°	4.7
65°	4.7
67.5°	3.2
70°	3.2
72.5°	3.2
75°	1.6
77.5°	1.6
80°	1.6
82.5°	1.6
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	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12H	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.09
	12H	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.19
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	8H	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.24