

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: P866657

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866657
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-55)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-M-940-75L-L-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 8
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

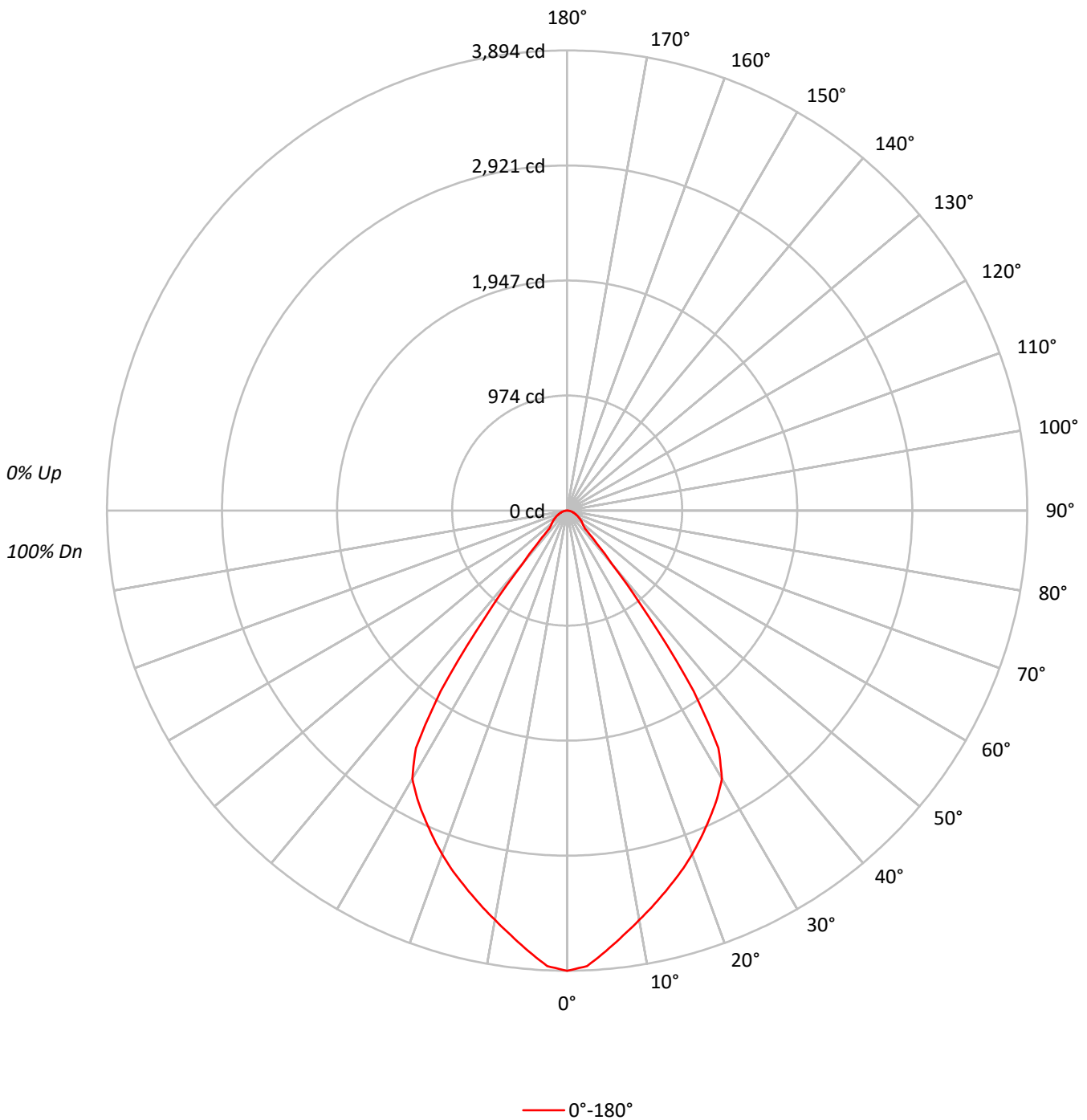
Lumens per Lamp: N/A
Luminaire Lumens: 4157.2 lumens
Efficiency: N/A
Efficacy: 59.6 lumens/watt
Spacing Criteria (0/90/45): 1.03 / 1.03 / 1
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

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: 0.5 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	103	103	101	99	100	98	97	96	95	94	92
2	106	101	96	93	104	99	95	92	96	93	90	93	90	88	90	88	86	84
3	100	93	88	83	98	92	87	83	89	85	81	87	83	80	84	81	79	77
4	95	86	80	76	93	85	80	75	83	78	74	81	77	74	79	76	73	71
5	90	80	74	69	88	79	73	69	78	72	68	76	71	68	74	70	67	66
6	85	75	68	64	83	74	68	64	73	67	63	71	66	63	70	66	62	61
7	80	70	64	59	79	69	63	59	68	62	58	67	62	58	66	61	58	56
8	76	66	59	55	75	65	59	55	64	58	54	63	58	54	62	57	54	52
9	72	62	55	51	71	61	55	51	60	55	51	59	54	51	58	54	50	49
10	68	58	52	48	67	58	52	48	57	51	47	56	51	47	55	50	47	46

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	30984
5°	29898
10°	28416
15°	27233
20°	26206
25°	25129
30°	24062
35°	18117
40°	6107
45°	2375
50°	2107
55°	1942
60°	1782
65°	1623
70°	1503
75°	1457
80°	1384
85°	1378

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2375 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.3	8.4
10°-20°	931.3	22.4
20°-30°	1318.3	31.7
30°-40°	1069.8	25.7
40°-50°	210.0	5.1
50°-60°	125.3	3.0
60°-70°	86.3	2.1
70°-80°	50.0	1.2
80°-90°	15.8	0.4
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°	2599.9	62.5
0°-40°	3669.7	88.3
0°-60°	4005.1	96.3
0°-90°	4157.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4157.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3894	
5°	3744	350
15°	3306	931
25°	2863	1318
35°	1865	1070
45°	211	210
55°	140	125
65°	86	86
75°	47	50
85°	15	16
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	3894.5
2.5°	3857.8
5°	3743.7
7.5°	3627.4
10°	3517.5
12.5°	3412.0
15°	3306.4
17.5°	3203.0
20°	3095.3
22.5°	2979.0
25°	2862.7
27.5°	2748.5
30°	2619.3
32.5°	2382.3
35°	1865.4
37.5°	1133.0
40°	588.0
42.5°	331.7
45°	211.1
47.5°	183.1
50°	170.2
52.5°	155.1
55°	140.0
57.5°	124.9
60°	112.0
62.5°	99.1
65°	86.2
67.5°	75.4
70°	64.6
72.5°	56.0
75°	47.4
77.5°	38.8
80°	30.2
82.5°	21.5
85°	15.1
87.5°	6.5
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	9.11	10.17	9.48	10.48	10.80	9.11	10.17	9.48	10.48	10.80
	3H	10.61	11.54	10.99	11.87	12.24	10.61	11.54	10.99	11.87	12.24
	4H	11.22	12.08	11.63	12.44	12.83	11.22	12.08	11.63	12.44	12.83
	6H	11.70	12.49	12.12	12.87	13.26	11.70	12.49	12.12	12.87	13.26
	8H	11.86	12.60	12.29	13.00	13.41	11.86	12.60	12.29	13.00	13.41
	12H	11.98	12.69	12.41	13.07	13.50	11.98	12.69	12.41	13.07	13.50
4H	2H	9.55	10.42	9.96	10.77	11.16	9.55	10.42	9.96	10.77	11.16
	3H	11.27	11.98	11.68	12.39	12.79	11.27	11.98	11.68	12.39	12.79
	4H	12.01	12.65	12.45	13.07	13.52	12.01	12.65	12.45	13.07	13.52
	6H	12.63	13.18	13.10	13.63	14.10	12.63	13.18	13.10	13.63	14.10
	8H	12.84	13.34	13.31	13.79	14.27	12.84	13.34	13.31	13.79	14.27
	12H	13.00	13.44	13.49	13.93	14.41	13.00	13.44	13.49	13.93	14.41
8H	4H	12.24	12.75	12.72	13.20	13.68	12.24	12.75	12.72	13.20	13.68
	6H	13.01	13.41	13.51	13.91	14.40	13.01	13.41	13.51	13.91	14.40
	8H	13.30	13.66	13.83	14.18	14.67	13.30	13.66	13.83	14.18	14.67
	12H	13.57	13.88	14.09	14.38	14.95	13.57	13.88	14.09	14.38	14.95
12H	4H	12.25	12.69	12.74	13.18	13.65	12.25	12.69	12.74	13.18	13.65
	6H	13.05	13.41	13.58	13.93	14.42	13.05	13.41	13.58	13.93	14.42
	8H	13.40	13.71	13.92	14.21	14.79	13.40	13.71	13.92	14.21	14.79