

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: P867229

Luminaire Tested: PRLX-2004-L-927-83L-L-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867229
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-85)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2004-L-927-83L-L-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,
BELL WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

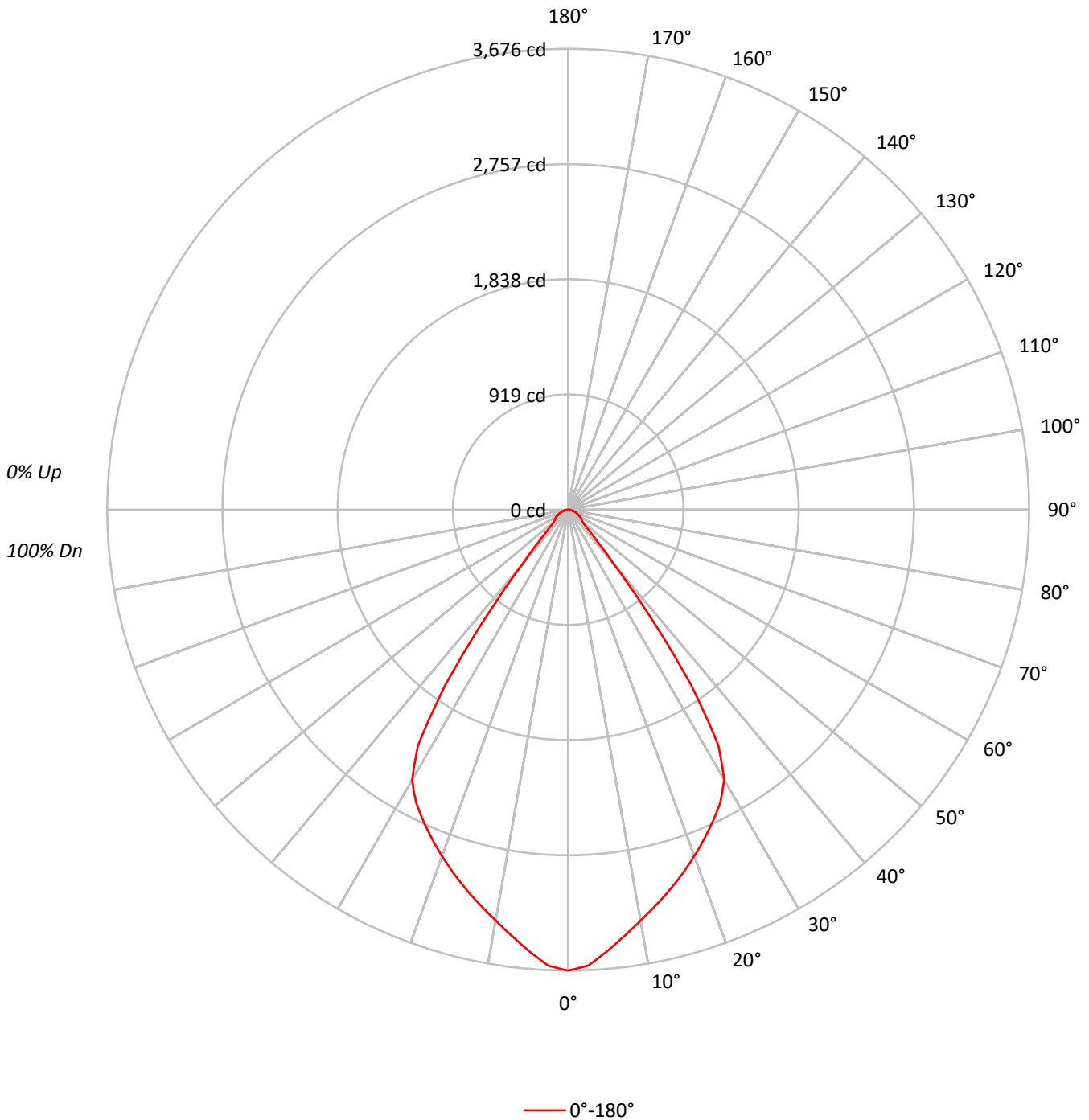
Lumens per Lamp: N/A
Luminaire Lumens: 3937.3 lumens
Efficiency: N/A
Efficacy: 61.0 lumens/watt
Spacing Criteria (0/90/45): 1.04 / 1.04 / 0.99
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
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

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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	87	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	63	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°	18139
5°	17524
10°	16669
15°	16022
20°	15438
25°	14894
30°	14174
35°	10281
40°	3653
45°	1608
50°	1113
55°	1098
60°	1035
65°	975
70°	916
75°	865
80°	815
85°	759

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1608 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.1	8.4
10°-20°	883.3	22.4
20°-30°	1257.6	31.9
30°-40°	997.1	25.3
40°-50°	209.0	5.3
50°-60°	113.2	2.9
60°-70°	83.0	2.1
70°-80°	48.1	1.2
80°-90°	15.0	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°	2472.0	62.8
0°-40°	3469.1	88.1
0°-60°	3791.3	96.3
0°-90°	3937.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3937.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3676	
5°	3538	331
15°	3137	883
25°	2736	1258
35°	1707	997
45°	230	209
55°	128	113
65°	84	83
75°	45	48
85°	13	15
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	3676.5
2.5°	3639.8
5°	3538.2
7.5°	3429.3
10°	3327.1
12.5°	3232.2
15°	3136.7
17.5°	3040.5
20°	2940.3
22.5°	2840.1
25°	2735.9
27.5°	2629.0
30°	2488.0
32.5°	2228.8
35°	1707.0
37.5°	1048.9
40°	567.2
42.5°	346.7
45°	230.5
47.5°	167.7
50°	145.0
52.5°	137.6
55°	127.6
57.5°	116.2
60°	104.9
62.5°	94.2
65°	83.5
67.5°	73.5
70°	63.5
72.5°	54.1
75°	45.4
77.5°	36.7
80°	28.7
82.5°	20.7
85°	13.4
87.5°	6.7
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	7.14	8.20	7.51	8.51	8.82	7.14	8.20	7.51	8.51	8.82
	3H	8.77	9.71	9.16	10.04	10.41	8.77	9.71	9.16	10.04	10.41
	4H	9.40	10.27	9.81	10.62	11.01	9.40	10.27	9.81	10.62	11.01
	6H	9.88	10.67	10.29	11.04	11.44	9.88	10.67	10.29	11.04	11.44
	8H	10.04	10.79	10.47	11.18	11.59	10.04	10.79	10.47	11.18	11.59
	12H	10.14	10.86	10.58	11.24	11.67	10.14	10.86	10.58	11.24	11.67
4H	2H	7.63	8.50	8.04	8.85	9.24	7.63	8.50	8.04	8.85	9.24
	3H	9.47	10.18	9.89	10.59	11.00	9.47	10.18	9.89	10.59	11.00
	4H	10.22	10.86	10.66	11.28	11.73	10.22	10.86	10.66	11.28	11.73
	6H	10.83	11.38	11.30	11.83	12.30	10.83	11.38	11.30	11.83	12.30
	8H	11.04	11.55	11.52	12.00	12.47	11.04	11.55	11.52	12.00	12.47
	12H	11.19	11.63	11.68	12.12	12.60	11.19	11.63	11.68	12.12	12.60
8H	4H	10.46	10.97	10.93	11.42	11.89	10.46	10.97	10.93	11.42	11.89
	6H	11.21	11.61	11.72	12.11	12.60	11.21	11.61	11.72	12.11	12.60
	8H	11.50	11.86	12.03	12.38	12.88	11.50	11.86	12.03	12.38	12.88
	12H	11.75	12.06	12.27	12.56	13.14	11.75	12.06	12.27	12.56	13.14
12H	4H	10.46	10.90	10.95	11.39	11.87	10.46	10.90	10.95	11.39	11.87
	6H	11.25	11.61	11.78	12.13	12.63	11.25	11.61	11.78	12.13	12.63
	8H	11.60	11.92	12.12	12.41	12.99	11.60	11.92	12.12	12.41	12.99