

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: P867107

Luminaire Tested: PRLX-2002-L-935-83L-G-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867107
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-68)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-L-935-83L-G-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

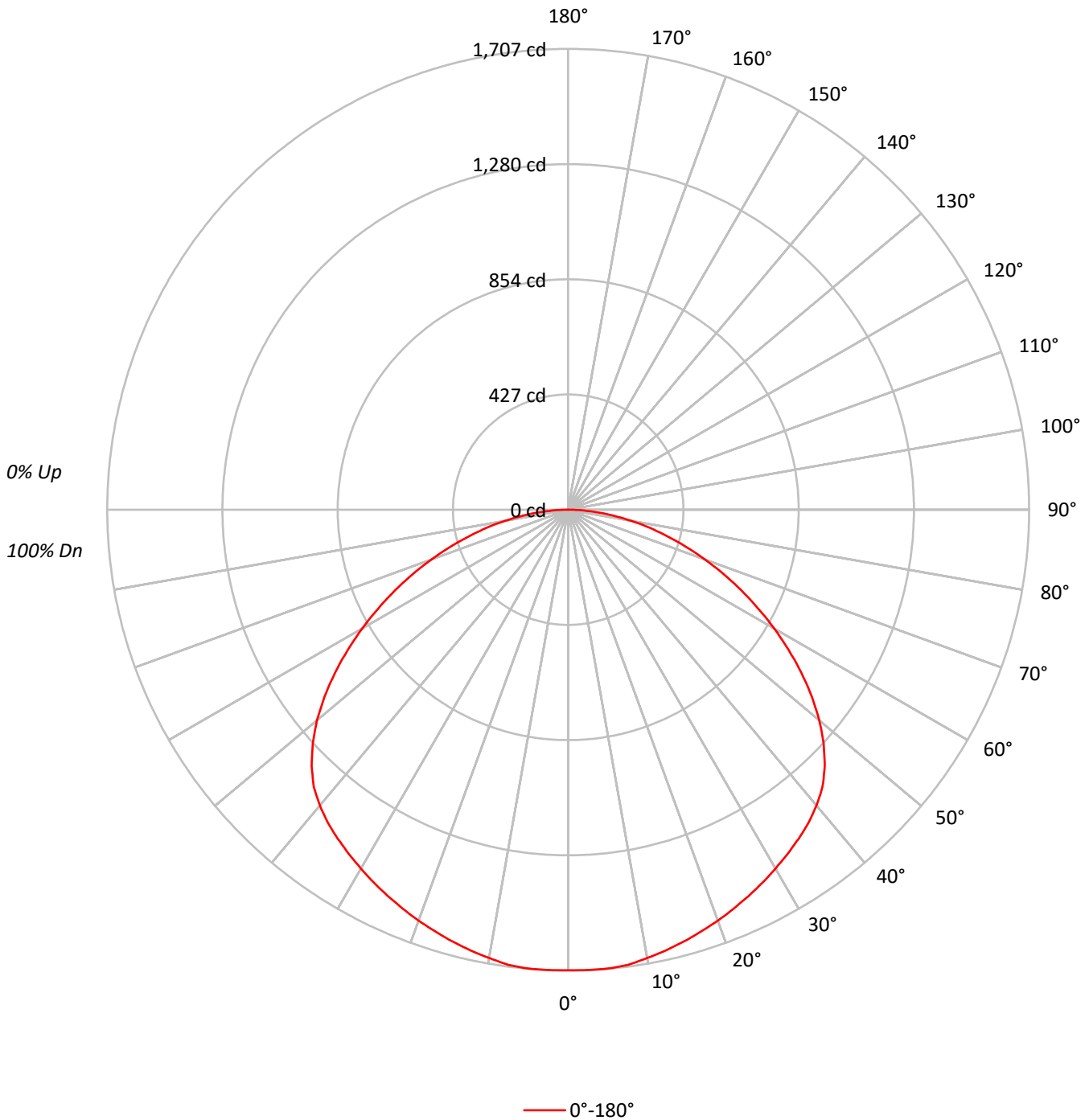
Lumens per Lamp: N/A
Luminaire Lumens: 5490.2 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 1.35 / 1.35 / 1.49
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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: 0.333 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	108	103	99	95	106	101	97	93	97	94	90		93	90	88		89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74		81	76	72		78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	60		68	64	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		61	55	51	48
5	75	62	52	45	73	60	52	45	58	51	45		56	49	44		54	48	44	42
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	64	50	41	35	62	49	41	34	47	40	34		46	39	34		45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30		42	35	30		41	35	30	28
9	55	42	33	27	54	41	33	27	40	32	27		39	32	27		38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25		36	29	24		35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	8418
5°	8450
10°	8448
15°	8459
20°	8505
25°	8596
30°	8744
35°	8960
40°	9215
45°	9374
50°	9321
55°	9072
60°	8695
65°	8251
70°	7757
75°	7236
80°	6717
85°	5978

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 9374 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.2	3.0
10°-20°	468.1	8.5
20°-30°	729.5	13.3
30°-40°	932.2	17.0
40°-50°	1032.1	18.8
50°-60°	940.7	17.1
60°-70°	700.8	12.8
70°-80°	404.6	7.4
80°-90°	119.9	2.2
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°	1359.8	24.8
0°-40°	2292.1	41.7
0°-60°	4264.9	77.7
0°-90°	5490.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5490.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1706	
5°	1706	162
15°	1656	468
25°	1579	729
35°	1488	932
45°	1344	1032
55°	1055	941
65°	707	701
75°	380	405
85°	106	120
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1706.2
2.5°	1706.9
5°	1706.2
7.5°	1700.3
10°	1686.2
12.5°	1672.2
15°	1656.0
17.5°	1638.2
20°	1619.8
22.5°	1599.8
25°	1579.1
27.5°	1557.7
30°	1534.8
32.5°	1511.9
35°	1487.6
37.5°	1461.7
40°	1430.7
42.5°	1393.8
45°	1343.5
47.5°	1283.0
50°	1214.3
52.5°	1136.7
55°	1054.7
57.5°	967.6
60°	881.2
62.5°	794.0
65°	706.8
67.5°	622.6
70°	537.7
72.5°	458.7
75°	379.6
77.5°	308.7
80°	236.4
82.5°	168.4
85°	105.6
87.5°	48.7
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	19.93	21.61	20.29	21.92	22.24	19.93	21.61	20.29	21.92	22.24
	3H	21.68	23.20	22.06	23.52	23.88	21.68	23.20	22.06	23.52	23.88
	4H	22.34	23.78	22.74	24.12	24.50	22.34	23.78	22.74	24.12	24.50
	6H	22.86	24.19	23.27	24.56	24.95	22.86	24.19	23.27	24.56	24.95
	8H	23.04	24.31	23.46	24.70	25.09	23.04	24.31	23.46	24.70	25.09
	12H	23.16	24.38	23.59	24.76	25.19	23.16	24.38	23.59	24.76	25.19
4H	2H	20.55	21.98	20.95	22.33	22.70	20.55	21.98	20.95	22.33	22.70
	3H	22.52	23.73	22.93	24.12	24.52	22.52	23.73	22.93	24.12	24.52
	4H	23.32	24.41	23.75	24.82	25.26	23.32	24.41	23.75	24.82	25.26
	6H	23.98	24.93	24.43	25.37	25.82	23.98	24.93	24.43	25.37	25.82
	8H	24.20	25.10	24.66	25.54	26.00	24.20	25.10	24.66	25.54	26.00
	12H	24.38	25.18	24.85	25.66	26.12	24.38	25.18	24.85	25.66	26.12
8H	4H	23.64	24.54	24.10	24.98	25.44	23.64	24.54	24.10	24.98	25.44
	6H	24.43	25.17	24.92	25.66	26.13	24.43	25.17	24.92	25.66	26.13
	8H	24.73	25.40	25.24	25.91	26.39	24.73	25.40	25.24	25.91	26.39
	12H	24.99	25.58	25.49	26.07	26.63	24.99	25.58	25.49	26.07	26.63
12H	4H	23.69	24.49	24.16	24.97	25.43	23.69	24.49	24.16	24.97	25.43
	6H	24.49	25.16	25.00	25.67	26.15	24.49	25.16	25.00	25.67	26.15
	8H	24.86	25.45	25.36	25.94	26.50	24.86	25.45	25.36	25.94	26.50