

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: P866979

Luminaire Tested: PRLX-2002-L-927-83L-G-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866979
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-927-83L-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: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

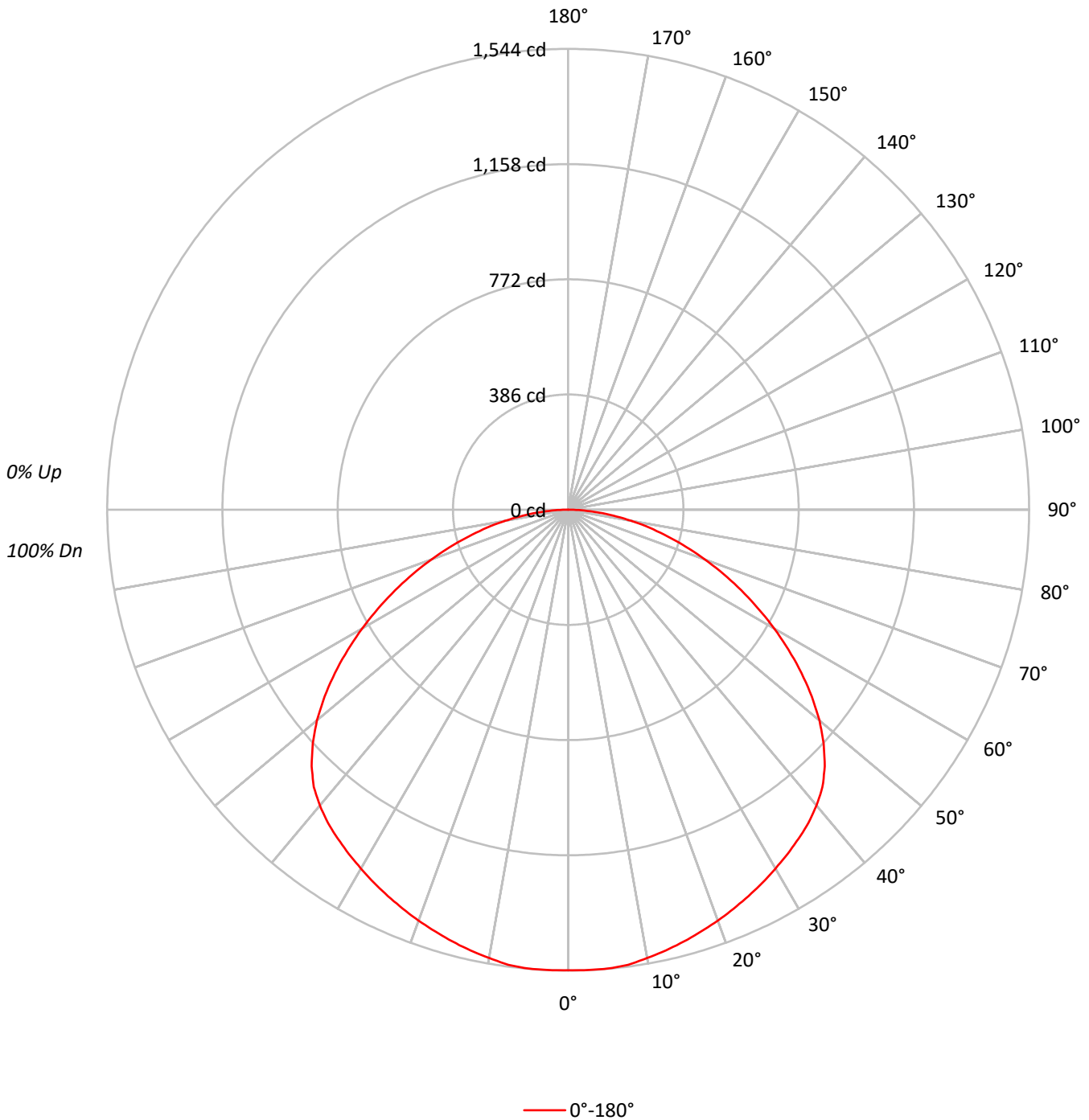
Lumens per Lamp: N/A
Luminaire Lumens: 4966.1 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Spacing Criteria (0/90/45): 1.35 / 1.35 / 1.49
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
Input Voltage (V): 120
Input Current (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	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°	7614
5°	7643
10°	7642
15°	7651
20°	7692
25°	7776
30°	7909
35°	8104
40°	8335
45°	8480
50°	8431
55°	8206
60°	7864
65°	7465
70°	7017
75°	6546
80°	6075
85°	5406

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8480 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	3.0
10°-20°	423.4	8.5
20°-30°	659.8	13.3
30°-40°	843.2	17.0
40°-50°	933.6	18.8
50°-60°	850.8	17.1
60°-70°	633.9	12.8
70°-80°	366.0	7.4
80°-90°	108.5	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°	1230.0	24.8
0°-40°	2073.3	41.7
0°-60°	3857.7	77.7
0°-90°	4966.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4966.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1543	
5°	1543	147
15°	1498	423
25°	1428	660
35°	1346	843
45°	1215	934
55°	954	851
65°	639	634
75°	343	366
85°	96	108
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	1543.3
2.5°	1544.0
5°	1543.3
7.5°	1538.0
10°	1525.3
12.5°	1512.6
15°	1497.9
17.5°	1481.8
20°	1465.1
22.5°	1447.1
25°	1428.4
27.5°	1409.0
30°	1388.3
32.5°	1367.6
35°	1345.5
37.5°	1322.2
40°	1294.1
42.5°	1260.7
45°	1215.3
47.5°	1160.5
50°	1098.4
52.5°	1028.2
55°	954.0
57.5°	875.2
60°	797.0
62.5°	718.2
65°	639.4
67.5°	563.2
70°	486.4
72.5°	414.9
75°	343.4
77.5°	279.3
80°	213.8
82.5°	152.3
85°	95.5
87.5°	44.1
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	19.58	21.26	19.95	21.57	21.89	19.58	21.26	19.95	21.57	21.89
	3H	21.33	22.85	21.71	23.18	23.54	21.33	22.85	21.71	23.18	23.54
	4H	22.00	23.43	22.39	23.78	24.15	22.00	23.43	22.39	23.78	24.15
	6H	22.51	23.84	22.92	24.21	24.60	22.51	23.84	22.92	24.21	24.60
	8H	22.69	23.96	23.11	24.35	24.75	22.69	23.96	23.11	24.35	24.75
	12H	22.81	24.03	23.24	24.41	24.84	22.81	24.03	23.24	24.41	24.84
4H	2H	20.20	21.63	20.60	21.98	22.35	20.20	21.63	20.60	21.98	22.35
	3H	22.18	23.38	22.58	23.78	24.18	22.18	23.38	22.58	23.78	24.18
	4H	22.97	24.06	23.40	24.48	24.91	22.97	24.06	23.40	24.48	24.91
	6H	23.63	24.58	24.08	25.02	25.48	23.63	24.58	24.08	25.02	25.48
	8H	23.86	24.75	24.31	25.19	25.66	23.86	24.75	24.31	25.19	25.66
	12H	24.03	24.83	24.51	25.31	25.78	24.03	24.83	24.51	25.31	25.78
8H	4H	23.30	24.19	23.76	24.63	25.10	23.30	24.19	23.76	24.63	25.10
	6H	24.08	24.83	24.57	25.31	25.79	24.08	24.83	24.57	25.31	25.79
	8H	24.39	25.06	24.89	25.56	26.04	24.39	25.06	24.89	25.56	26.04
	12H	24.64	25.23	25.14	25.72	26.28	24.64	25.23	25.14	25.72	26.28
12H	4H	23.34	24.14	23.82	24.62	25.09	23.34	24.14	23.82	24.62	25.09
	6H	24.14	24.82	24.65	25.32	25.81	24.14	24.82	24.65	25.32	25.81
	8H	24.51	25.11	25.02	25.59	26.15	24.51	25.11	25.02	25.59	26.15