

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: P866184

Luminaire Tested: PRLX-2002-M-927-45L-L-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866184
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-53)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Prenalux
Catalog Number: PRLX-2002-M-927-45L-L-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

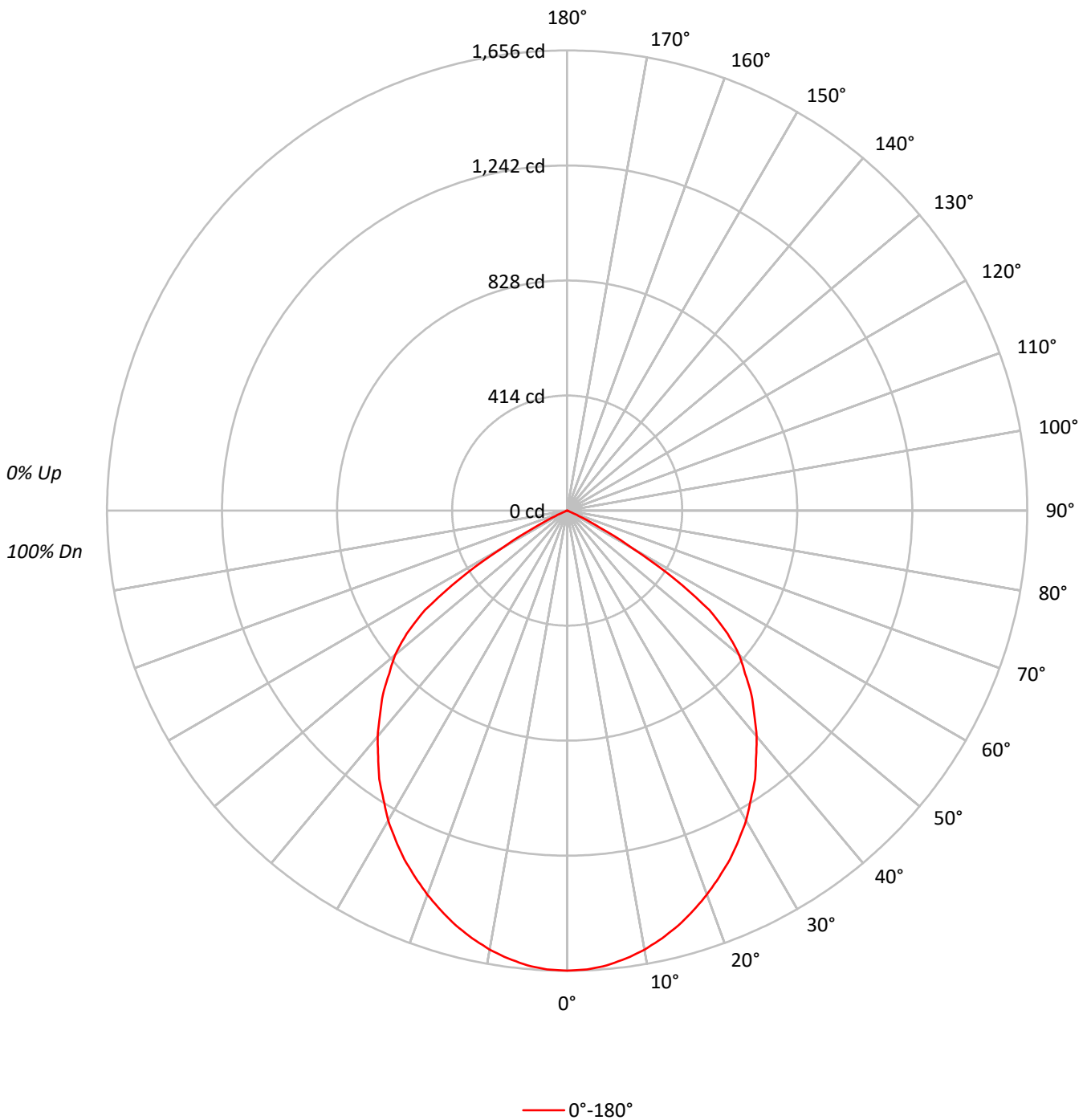
Lumens per Lamp: N/A
Luminaire Lumens: 3294.1 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 38.8
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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	95	93	92	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	71	69
4	89	79	72	66	87	78	71	66	75	69	65	73	68	64	71	67	63	61
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	13172
5°	13121
10°	12960
15°	12733
20°	12451
25°	12158
30°	11831
35°	11456
40°	11016
45°	10559
50°	10006
55°	8663
60°	4433
65°	860
70°	79
75°	105
80°	105
85°	100

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10559 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.6	4.7
10°-20°	435.3	13.2
20°-30°	637.4	19.3
30°-40°	735.6	22.3
40°-50°	721.2	21.9
50°-60°	524.1	15.9
60°-70°	80.3	2.4
70°-80°	3.2	0.1
80°-90°	1.5	0.0
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°	1228.3	37.3
0°-40°	1963.8	59.6
0°-60°	3209.0	97.4
0°-90°	3294.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3294.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1656	
5°	1643	156
15°	1546	435
25°	1385	637
35°	1180	736
45°	938	721
55°	625	524
65°	46	80
75°	3	3
85°	1	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	1655.6
2.5°	1653.3
5°	1643.0
7.5°	1625.9
10°	1604.2
12.5°	1576.8
15°	1546.0
17.5°	1509.4
20°	1470.6
22.5°	1428.4
25°	1385.0
27.5°	1337.0
30°	1287.9
32.5°	1230.8
35°	1179.5
37.5°	1116.7
40°	1060.7
42.5°	996.8
45°	938.5
47.5°	868.9
50°	808.4
52.5°	727.3
55°	624.6
57.5°	461.3
60°	278.6
62.5°	132.4
65°	45.7
67.5°	11.4
70°	3.4
72.5°	3.4
75°	3.4
77.5°	2.3
80°	2.3
82.5°	2.3
85°	1.1
87.5°	1.1
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	18.39	19.81	18.76	20.12	20.43	18.39	19.81	18.76	20.12	20.43
	3H	18.27	19.52	18.65	19.85	20.21	18.27	19.52	18.65	19.85	20.21
	4H	18.21	19.36	18.61	19.71	20.09	18.21	19.36	18.61	19.71	20.09
	6H	18.14	19.19	18.55	19.56	19.96	18.14	19.19	18.55	19.56	19.96
	8H	18.10	19.10	18.53	19.49	19.89	18.10	19.10	18.53	19.49	19.89
	12H	18.06	19.01	18.49	19.40	19.83	18.06	19.01	18.49	19.40	19.83
4H	2H	18.23	19.38	18.63	19.73	20.11	18.23	19.38	18.63	19.73	20.11
	3H	18.12	19.04	18.53	19.44	19.85	18.12	19.04	18.53	19.44	19.85
	4H	18.03	18.86	18.47	19.27	19.72	18.03	18.86	18.47	19.27	19.72
	6H	17.96	18.67	18.42	19.11	19.58	17.96	18.67	18.42	19.11	19.58
	8H	17.90	18.56	18.37	19.01	19.48	17.90	18.56	18.37	19.01	19.48
	12H	17.86	18.44	18.34	18.93	19.40	17.86	18.44	18.34	18.93	19.40
8H	4H	17.90	18.56	18.37	19.01	19.48	17.90	18.56	18.37	19.01	19.48
	6H	17.80	18.34	18.30	18.84	19.32	17.80	18.34	18.30	18.84	19.32
	8H	17.73	18.23	18.25	18.74	19.23	17.73	18.23	18.25	18.74	19.23
	12H	17.68	18.13	18.20	18.62	19.19	17.68	18.13	18.20	18.62	19.19
12H	4H	17.86	18.44	18.34	18.93	19.40	17.86	18.44	18.34	18.93	19.40
	6H	17.73	18.23	18.25	18.74	19.23	17.73	18.23	18.25	18.74	19.23
	8H	17.68	18.13	18.20	18.62	19.19	17.68	18.13	18.20	18.62	19.19