

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: P865600

Luminaire Tested: PRLX-2002-S-927-20L-L-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865600
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-22)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-S-927-20L-L-U-S-X-X-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 4
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

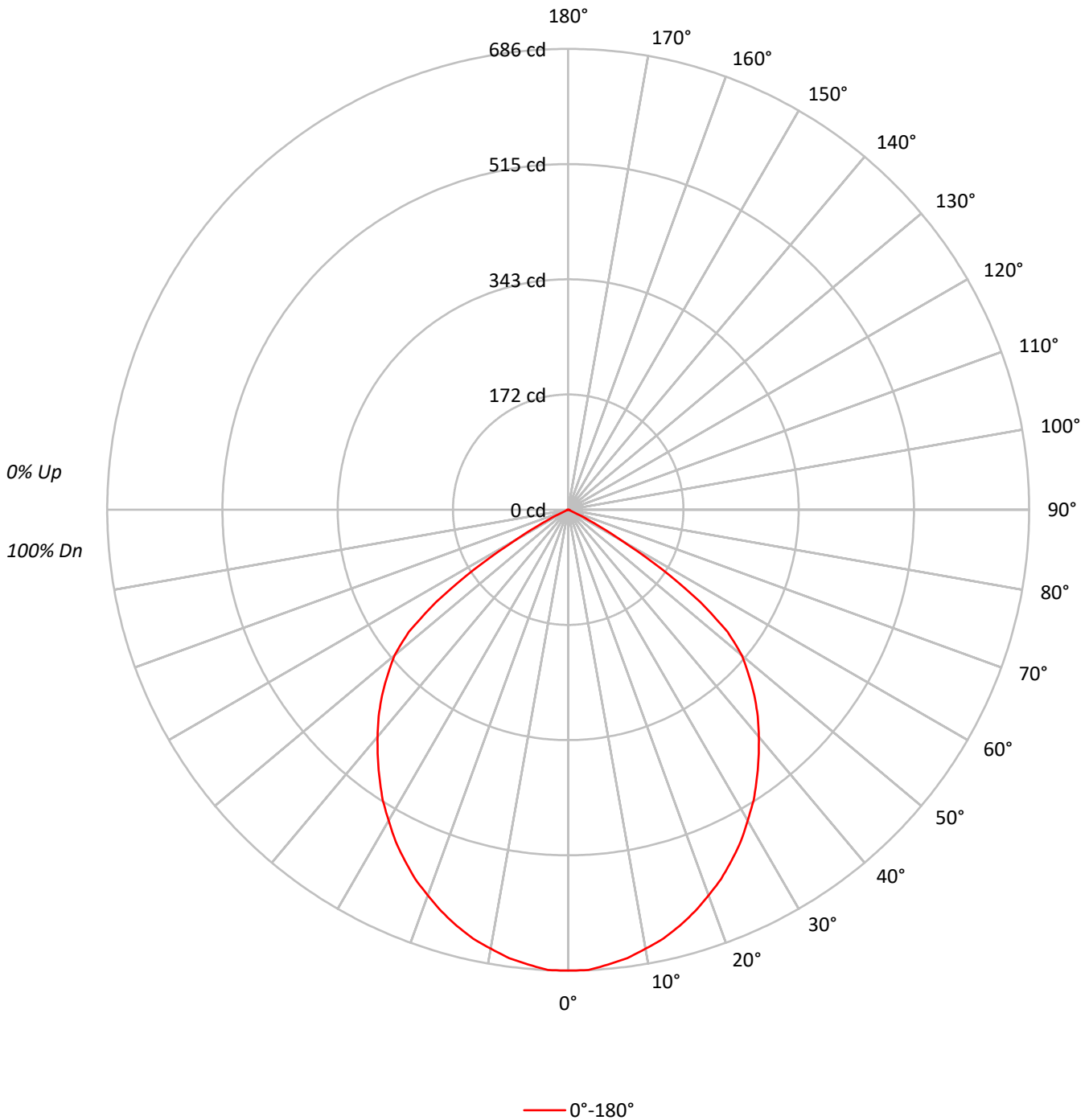
Lumens per Lamp: N/A
Luminaire Lumens: 1351.3 lumens
Efficiency: N/A
Efficacy: 62.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.28
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

Input Watts (W): 21.8
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	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90
2	104	98	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	51	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	12886
5°	12815
10°	12658
15°	12471
20°	12212
25°	11932
30°	11585
35°	11220
40°	10824
45°	10408
50°	9860
55°	7857
60°	3426
65°	711
70°	88
75°	116
80°	173
85°	345

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 10408 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.4	4.8
10°-20°	180.6	13.4
20°-30°	265.1	19.6
30°-40°	306.0	22.6
40°-50°	301.5	22.3
50°-60°	204.1	15.1
60°-70°	26.5	2.0
70°-80°	1.7	0.1
80°-90°	1.5	0.1
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°	510.1	37.7
0°-40°	816.1	60.4
0°-60°	1321.7	97.8
0°-90°	1351.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1351.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	686	
5°	680	64
15°	641	181
25°	576	265
35°	489	306
45°	392	302
55°	240	204
65°	16	26
75°	2	2
85°	2	2
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	686.0
2.5°	686.0
5°	679.6
7.5°	673.2
10°	663.6
12.5°	654.0
15°	641.3
17.5°	626.9
20°	610.9
22.5°	594.9
25°	575.7
27.5°	556.5
30°	534.1
32.5°	513.3
35°	489.3
37.5°	465.3
40°	441.4
42.5°	417.4
45°	391.8
47.5°	364.6
50°	337.4
52.5°	299.0
55°	239.9
57.5°	166.3
60°	91.2
62.5°	43.2
65°	16.0
67.5°	3.2
70°	1.6
72.5°	1.6
75°	1.6
77.5°	1.6
80°	1.6
82.5°	1.6
85°	1.6
87.5°	1.6
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	17.37	18.77	17.73	19.08	19.40	17.37	18.77	17.73	19.08	19.40
	3H	17.25	18.48	17.63	18.81	19.17	17.25	18.48	17.63	18.81	19.17
	4H	17.18	18.32	17.58	18.67	19.06	17.18	18.32	17.58	18.67	19.06
	6H	17.11	18.16	17.52	18.53	18.92	17.11	18.16	17.52	18.53	18.92
	8H	17.07	18.06	17.50	18.45	18.86	17.07	18.06	17.50	18.45	18.86
	12H	17.03	17.98	17.46	18.36	18.79	17.03	17.98	17.46	18.36	18.79
4H	2H	17.20	18.34	17.60	18.69	19.08	17.20	18.34	17.60	18.69	19.08
	3H	17.08	18.00	17.50	18.40	18.81	17.08	18.00	17.50	18.40	18.81
	4H	17.00	17.82	17.44	18.23	18.68	17.00	17.82	17.44	18.23	18.68
	6H	16.93	17.63	17.39	18.07	18.54	16.93	17.63	17.39	18.07	18.54
	8H	16.87	17.53	17.34	17.98	18.45	16.87	17.53	17.34	17.98	18.45
	12H	16.83	17.41	17.32	17.89	18.37	16.83	17.41	17.32	17.89	18.37
8H	4H	16.87	17.52	17.34	17.97	18.44	16.87	17.52	17.34	17.97	18.44
	6H	16.77	17.31	17.27	17.80	18.28	16.77	17.31	17.27	17.80	18.28
	8H	16.70	17.20	17.22	17.71	18.20	16.70	17.20	17.22	17.71	18.20
	12H	16.66	17.10	17.17	17.60	18.17	16.66	17.10	17.17	17.60	18.17
12H	4H	16.82	17.40	17.31	17.89	18.36	16.82	17.40	17.31	17.89	18.36
	6H	16.70	17.19	17.22	17.71	18.20	16.70	17.19	17.22	17.71	18.20
	8H	16.65	17.10	17.17	17.59	18.16	16.65	17.10	17.17	17.59	18.16