

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: P866978

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866978
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-70)
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-GREY-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH GRAY INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

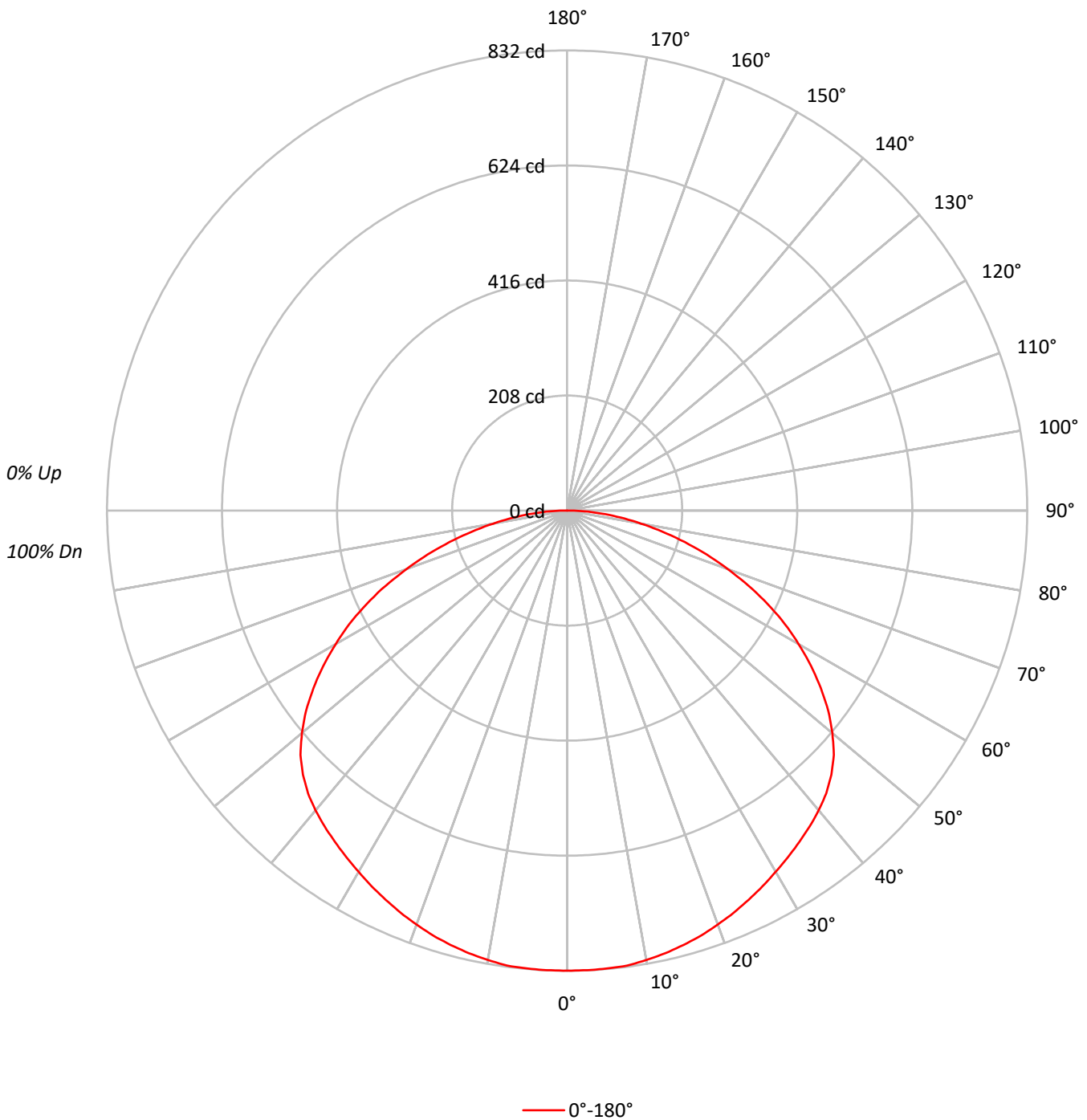
Lumens per Lamp: N/A
Luminaire Lumens: 2844.6 lumens
Efficiency: N/A
Efficacy: 44.1 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.52
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

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	108	103	98	94	105	101	96	93	96	93	90		92	89	87		89	86	84	82
2	98	89	82	75	95	87	80	75	83	78	73		80	75	71		77	73	69	67
3	88	77	69	62	86	76	68	61	73	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51		62	55	50		59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43		55	48	43		53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	37		50	42	37		48	42	37	35
7	63	49	40	33	61	48	39	33	46	39	33		45	38	33		44	37	32	30
8	58	44	36	29	57	44	35	29	42	35	29		41	34	29		40	33	29	27
9	54	41	32	26	53	40	32	26	39	31	26		38	31	26		37	30	26	24
10	51	37	29	24	50	37	29	24	36	29	24		35	28	23		34	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4104
5°	4116
10°	4134
15°	4153
20°	4181
25°	4226
30°	4297
35°	4406
40°	4557
45°	4713
50°	4805
55°	4816
60°	4773
65°	4672
70°	4453
75°	4190
80°	3853
85°	3555

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 4825 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.2	2.8
10°-20°	229.9	8.1
20°-30°	358.6	12.6
30°-40°	458.9	16.1
40°-50°	519.9	18.3
50°-60°	499.6	17.6
60°-70°	394.8	13.9
70°-80°	232.8	8.2
80°-90°	70.8	2.5
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°	667.7	23.5
0°-40°	1126.6	39.6
0°-60°	2146.1	75.4
0°-90°	2844.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2844.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	832	
5°	831	79
15°	813	230
25°	776	359
35°	732	459
45°	675	520
55°	560	500
65°	400	395
75°	220	233
85°	63	71
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	831.8
2.5°	831.8
5°	831.1
7.5°	829.8
10°	825.1
12.5°	819.8
15°	813.1
17.5°	805.7
20°	796.4
22.5°	787.0
25°	776.3
27.5°	765.6
30°	754.3
32.5°	742.9
35°	731.6
37.5°	720.2
40°	707.5
42.5°	693.5
45°	675.4
47.5°	654.1
50°	626.0
52.5°	595.3
55°	559.9
57.5°	523.1
60°	483.7
62.5°	443.6
65°	400.2
67.5°	355.4
70°	308.7
72.5°	264.6
75°	219.8
77.5°	176.4
80°	135.6
82.5°	97.5
85°	62.8
87.5°	32.1
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	17.91	19.62	18.27	19.93	20.24	17.91	19.62	18.27	19.93	20.24
	3H	19.82	21.38	20.20	21.70	22.06	19.82	21.38	20.20	21.70	22.06
	4H	20.55	22.01	20.94	22.36	22.73	20.55	22.01	20.94	22.36	22.73
	6H	21.09	22.45	21.50	22.82	23.21	21.09	22.45	21.50	22.82	23.21
	8H	21.28	22.58	21.70	22.97	23.37	21.28	22.58	21.70	22.97	23.37
	12H	21.42	22.67	21.85	23.05	23.48	21.42	22.67	21.85	23.05	23.48
4H	2H	18.59	20.06	18.99	20.40	20.78	18.59	20.06	18.99	20.40	20.78
	3H	20.72	21.96	21.13	22.35	22.75	20.72	21.96	21.13	22.35	22.75
	4H	21.58	22.70	22.01	23.11	23.54	21.58	22.70	22.01	23.11	23.54
	6H	22.26	23.24	22.71	23.68	24.13	22.26	23.24	22.71	23.68	24.13
	8H	22.50	23.42	22.95	23.86	24.32	22.50	23.42	22.95	23.86	24.32
	12H	22.69	23.52	23.17	23.99	24.46	22.69	23.52	23.17	23.99	24.46
8H	4H	21.92	22.84	22.38	23.28	23.75	21.92	22.84	22.38	23.28	23.75
	6H	22.73	23.50	23.22	23.99	24.46	22.73	23.50	23.22	23.99	24.46
	8H	23.05	23.75	23.56	24.25	24.73	23.05	23.75	23.56	24.25	24.73
	12H	23.33	23.94	23.83	24.43	24.99	23.33	23.94	23.83	24.43	24.99
12H	4H	21.97	22.80	22.45	23.27	23.74	21.97	22.80	22.45	23.27	23.74
	6H	22.80	23.50	23.31	24.00	24.48	22.80	23.50	23.31	24.00	24.48
	8H	23.19	23.80	23.69	24.29	24.85	23.19	23.80	23.69	24.29	24.85