

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: P866977

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866977
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-69)
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-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

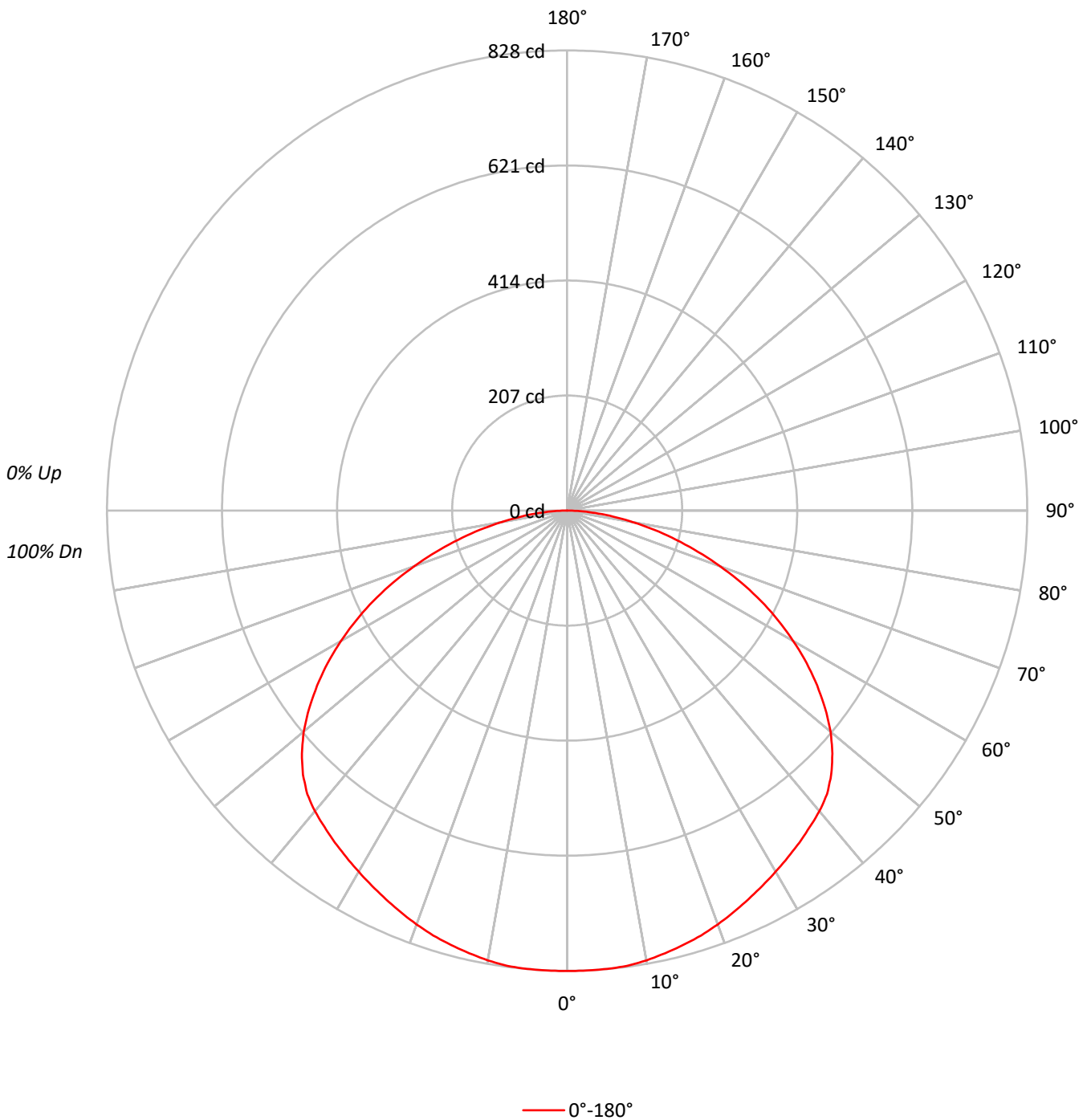
Lumens per Lamp: N/A
Luminaire Lumens: 2782.6 lumens
Efficiency: N/A
Efficacy: 43.1 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.52
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 64.5
Input Voltage (V): 120
Input Current (A_{in}): 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	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73		80	76	72		77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61		70	65	60		68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51		62	56	50		60	54	50	48
5	74	61	51	45	72	60	51	44	58	50	44		55	49	43		54	48	43	41
6	68	54	45	39	66	54	45	38	52	44	38		50	43	38		48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33		45	38	33		44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30		41	34	29		40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	27		38	31	26		37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24		35	28	24		34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4087
5°	4100
10°	4117
15°	4133
20°	4160
25°	4201
30°	4275
35°	4390
40°	4548
45°	4690
50°	4749
55°	4724
60°	4641
65°	4492
70°	4221
75°	3872
80°	3455
85°	2836

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 4749 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	2.8
10°-20°	228.7	8.2
20°-30°	356.6	12.8
30°-40°	457.1	16.4
40°-50°	516.8	18.6
50°-60°	489.9	17.6
60°-70°	379.5	13.6
70°-80°	215.8	7.8
80°-90°	59.2	2.1
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
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0°-30°	664.2	23.9
0°-40°	1121.3	40.3
0°-60°	2128.0	76.5
0°-90°	2782.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2782.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	828	
5°	828	79
15°	809	229
25°	772	357
35°	729	457
45°	672	517
55°	549	490
65°	385	380
75°	203	216
85°	50	59
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	828.4
2.5°	828.4
5°	827.8
7.5°	826.4
10°	821.8
12.5°	815.7
15°	809.1
17.5°	801.7
20°	792.4
22.5°	782.3
25°	771.7
27.5°	761.0
30°	750.3
32.5°	739.6
35°	728.9
37.5°	717.5
40°	706.2
42.5°	692.1
45°	672.1
47.5°	647.4
50°	618.7
52.5°	585.3
55°	549.2
57.5°	511.1
60°	470.3
62.5°	428.2
65°	384.8
67.5°	339.4
70°	292.6
72.5°	247.2
75°	203.1
77.5°	161.0
80°	121.6
82.5°	84.2
85°	50.1
87.5°	22.7
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	17.84	19.53	18.20	19.85	20.16	17.84	19.53	18.20	19.85	20.16
	3H	19.68	21.21	20.05	21.54	21.90	19.68	21.21	20.05	21.54	21.90
	4H	20.34	21.79	20.74	22.14	22.52	20.34	21.79	20.74	22.14	22.52
	6H	20.83	22.18	21.24	22.54	22.93	20.83	22.18	21.24	22.54	22.93
	8H	20.99	22.27	21.41	22.66	23.06	20.99	22.27	21.41	22.66	23.06
	12H	21.09	22.32	21.51	22.70	23.13	21.09	22.32	21.51	22.70	23.13
4H	2H	18.50	19.95	18.90	20.30	20.67	18.50	19.95	18.90	20.30	20.67
	3H	20.55	21.77	20.96	22.16	22.56	20.55	21.77	20.96	22.16	22.56
	4H	21.34	22.45	21.77	22.86	23.29	21.34	22.45	21.77	22.86	23.29
	6H	21.96	22.93	22.41	23.36	23.82	21.96	22.93	22.41	23.36	23.82
	8H	22.16	23.07	22.62	23.51	23.97	22.16	23.07	22.62	23.51	23.97
	12H	22.30	23.12	22.78	23.59	24.06	22.30	23.12	22.78	23.59	24.06
8H	4H	21.66	22.57	22.12	23.01	23.47	21.66	22.57	22.12	23.01	23.47
	6H	22.39	23.15	22.88	23.64	24.11	22.39	23.15	22.88	23.64	24.11
	8H	22.67	23.34	23.17	23.85	24.33	22.67	23.34	23.17	23.85	24.33
	12H	22.88	23.48	23.38	23.97	24.53	22.88	23.48	23.38	23.97	24.53
12H	4H	21.70	22.52	22.18	22.99	23.46	21.70	22.52	22.18	22.99	23.46
	6H	22.45	23.13	22.96	23.64	24.12	22.45	23.13	22.96	23.64	24.12
	8H	22.78	23.38	23.28	23.87	24.43	22.78	23.38	23.28	23.87	24.43