

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: P867109

Luminaire Tested: PRLX-2002-L-940-100L-L-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867109
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-81)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-L-940-100L-L-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 6
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

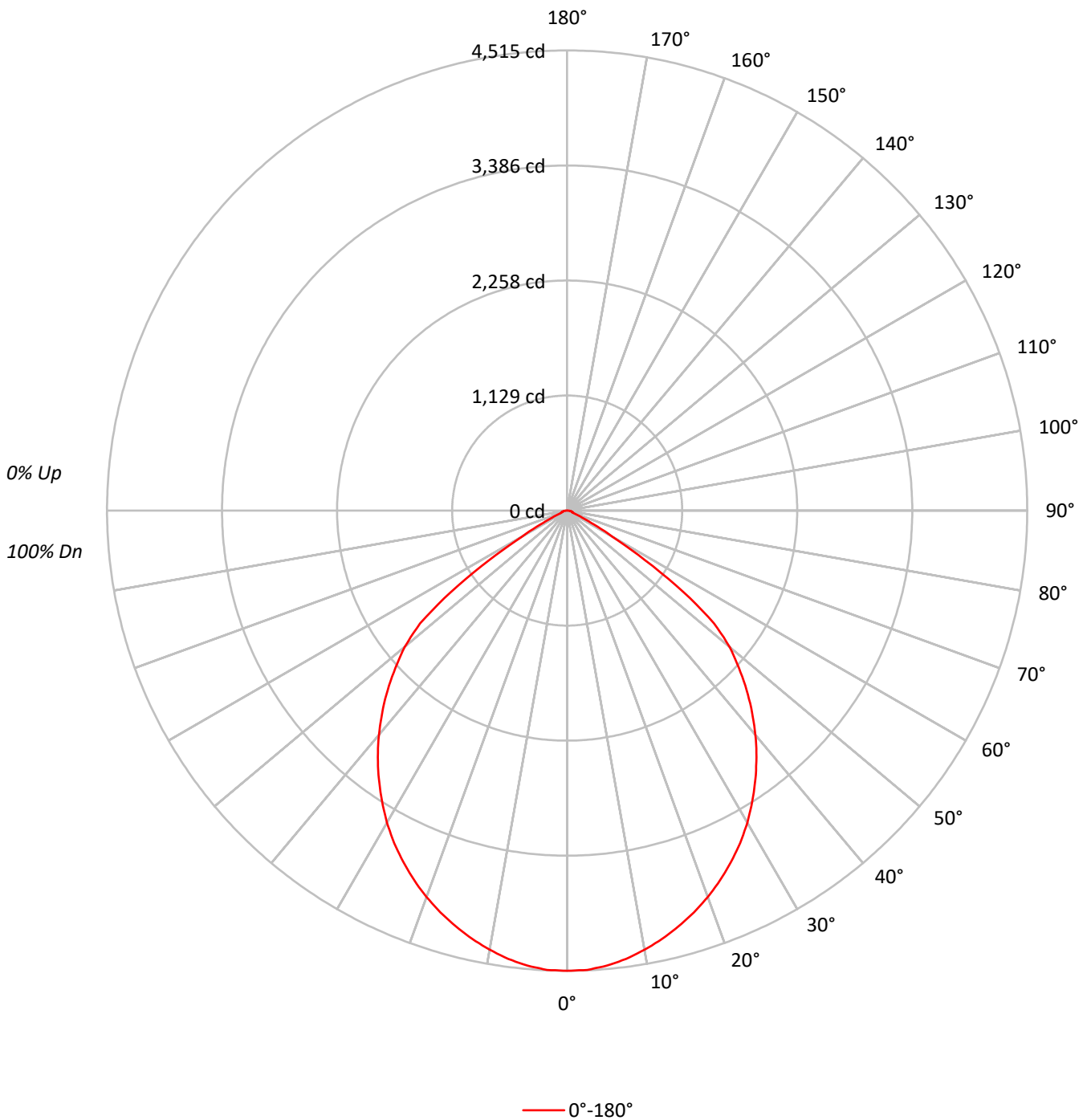
Lumens per Lamp: N/A
Luminaire Lumens: 8766.7 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 79.4
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	112	108	105	102	109	106	103	100	102	99	97		98	96	94		94	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	77	73		78	75	72	70
4	89	79	72	66	87	78	71	66	76	70	65		74	68	64		72	67	64	62
5	83	72	64	59	81	71	64	58	69	63	58		67	62	57		65	60	57	55
6	77	65	58	52	75	65	57	52	63	56	51		61	56	51		60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46		56	50	46		55	50	46	44
8	67	55	47	42	66	54	47	42	53	46	42		52	46	42		51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38		48	42	38		47	42	38	36
10	59	47	40	35	58	46	39	35	46	39	35		45	39	35		44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	22278
5°	22197
10°	21919
15°	21574
20°	21187
25°	20713
30°	20143
35°	19399
40°	18512
45°	17386
50°	15975
55°	12015
60°	5058
65°	1864
70°	857
75°	938
80°	1083
85°	1262

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17386 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	424.4	4.8
10°-20°	1190.5	13.6
20°-30°	1751.3	20.0
30°-40°	2011.4	22.9
40°-50°	1916.1	21.9
50°-60°	1200.0	13.7
60°-70°	198.6	2.3
70°-80°	51.8	0.6
80°-90°	22.6	0.3
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°	3366.2	38.4
0°-40°	5377.6	61.3
0°-60°	8493.6	96.9
0°-90°	8766.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8766.7	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	4515	
5°	4482	424
15°	4224	1191
25°	3805	1751
35°	3221	2011
45°	2492	1916
55°	1397	1200
65°	160	199
75°	49	52
85°	22	23
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	4515.3
2.5°	4510.7
5°	4481.9
7.5°	4436.4
10°	4375.1
12.5°	4305.4
15°	4223.7
17.5°	4134.6
20°	4035.2
22.5°	3924.7
25°	3804.9
27.5°	3677.6
30°	3535.6
32.5°	3381.4
35°	3220.7
37.5°	3051.7
40°	2874.3
42.5°	2685.8
45°	2491.7
47.5°	2284.6
50°	2081.2
52.5°	1817.5
55°	1396.8
57.5°	902.7
60°	512.6
62.5°	290.7
65°	159.7
67.5°	75.2
70°	59.4
72.5°	54.8
75°	49.2
77.5°	43.6
80°	38.1
82.5°	30.6
85°	22.3
87.5°	11.1
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	18.00	19.40	18.37	19.71	20.02	18.00	19.40	18.37	19.71	20.02
	3H	17.92	19.14	18.30	19.47	19.84	17.92	19.14	18.30	19.47	19.84
	4H	17.87	19.01	18.28	19.36	19.75	17.87	19.01	18.28	19.36	19.75
	6H	17.83	18.88	18.25	19.25	19.64	17.83	18.88	18.25	19.25	19.64
	8H	17.81	18.80	18.24	19.19	19.60	17.81	18.80	18.24	19.19	19.60
	12H	17.79	18.73	18.22	19.12	19.55	17.79	18.73	18.22	19.12	19.55
4H	2H	17.87	19.01	18.27	19.36	19.74	17.87	19.01	18.27	19.36	19.74
	3H	17.80	18.72	18.22	19.12	19.53	17.80	18.72	18.22	19.12	19.53
	4H	17.76	18.58	18.20	19.00	19.44	17.76	18.58	18.20	19.00	19.44
	6H	17.74	18.45	18.21	18.89	19.36	17.74	18.45	18.21	18.89	19.36
	8H	17.72	18.38	18.19	18.82	19.30	17.72	18.38	18.19	18.82	19.30
	12H	17.71	18.29	18.19	18.77	19.25	17.71	18.29	18.19	18.77	19.25
8H	4H	17.65	18.31	18.12	18.76	19.23	17.65	18.31	18.12	18.76	19.23
	6H	17.63	18.17	18.13	18.67	19.15	17.63	18.17	18.13	18.67	19.15
	8H	17.62	18.11	18.14	18.63	19.12	17.62	18.11	18.14	18.63	19.12
	12H	17.63	18.07	18.14	18.56	19.13	17.63	18.07	18.14	18.56	19.13
12H	4H	17.61	18.20	18.10	18.68	19.15	17.61	18.20	18.10	18.68	19.15
	6H	17.58	18.07	18.10	18.59	19.08	17.58	18.07	18.10	18.59	19.08
	8H	17.59	18.03	18.11	18.53	19.10	17.59	18.03	18.11	18.53	19.10