

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: P867165

Luminaire Tested: PRLX-2002-L-940-83L-L-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867165
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-940-83L-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 5
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

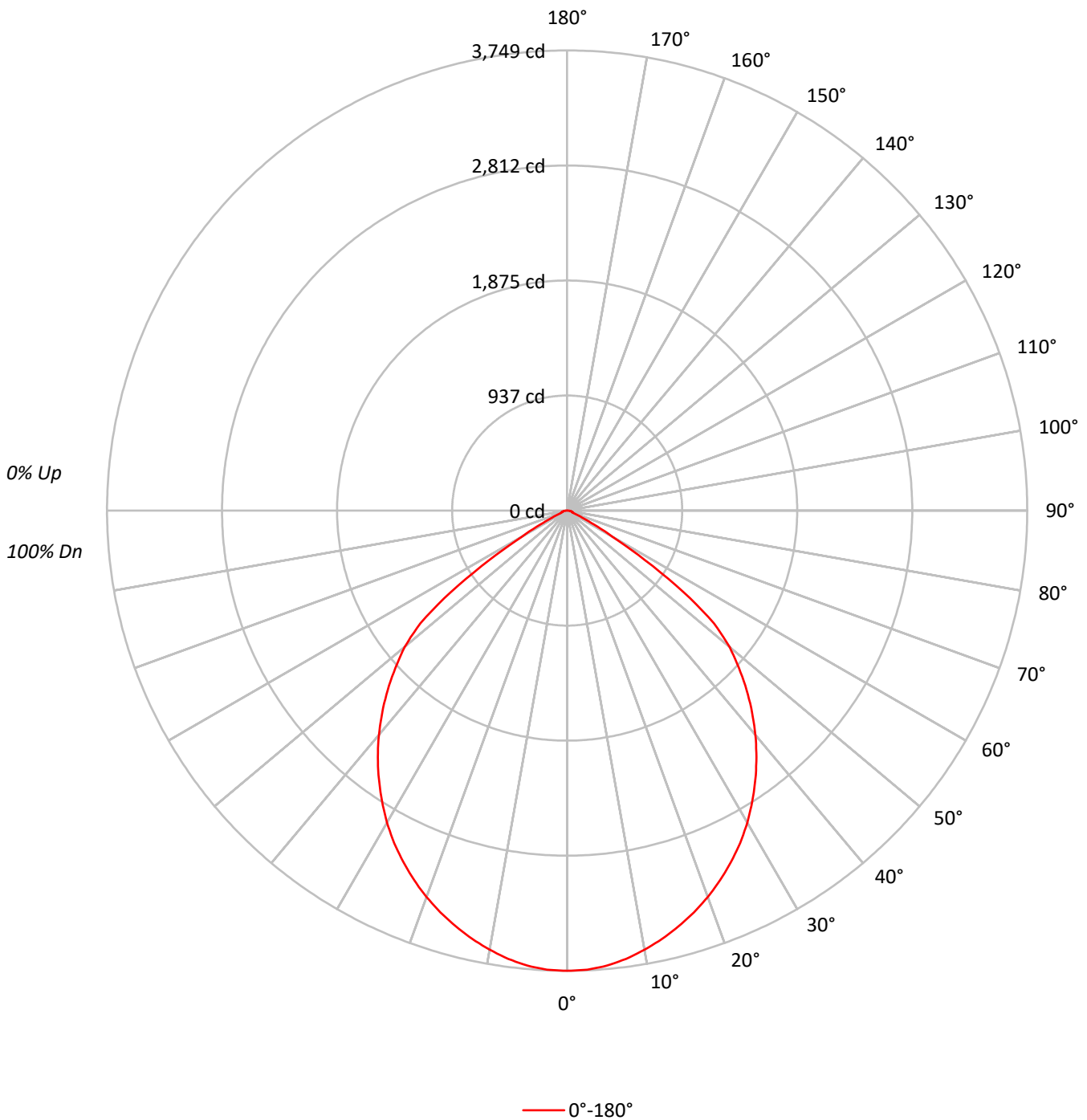
Lumens per Lamp: N/A
Luminaire Lumens: 7278.9 lumens
Efficiency: N/A
Efficacy: 112.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	18497
5°	18430
10°	18199
15°	17913
20°	17591
25°	17198
30°	16724
35°	16106
40°	15371
45°	14435
50°	13264
55°	9976
60°	4200
65°	1548
70°	711
75°	780
80°	898
85°	1047

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 14435 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.4	4.8
10°-20°	988.5	13.6
20°-30°	1454.1	20.0
30°-40°	1670.0	22.9
40°-50°	1590.9	21.9
50°-60°	996.3	13.7
60°-70°	164.9	2.3
70°-80°	43.1	0.6
80°-90°	18.8	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°	2794.9	38.4
0°-40°	4465.0	61.3
0°-60°	7052.1	96.9
0°-90°	7278.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7278.9	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3749	
5°	3721	352
15°	3507	988
25°	3159	1454
35°	2674	1670
45°	2069	1591
55°	1160	996
65°	133	165
75°	41	43
85°	18	19
90°	0	

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CANDELA DISTRIBUTION (FULL):

0°	
0°	3749.0
2.5°	3745.2
5°	3721.3
7.5°	3683.5
10°	3632.6
12.5°	3574.8
15°	3506.9
17.5°	3432.9
20°	3350.4
22.5°	3258.6
25°	3159.1
27.5°	3053.5
30°	2935.5
32.5°	2807.5
35°	2674.1
37.5°	2533.8
40°	2386.5
42.5°	2230.0
45°	2068.8
47.5°	1896.9
50°	1728.0
52.5°	1509.0
55°	1159.7
57.5°	749.5
60°	425.6
62.5°	241.4
65°	132.6
67.5°	62.5
70°	49.3
72.5°	45.5
75°	40.9
77.5°	36.2
80°	31.6
82.5°	25.4
85°	18.5
87.5°	9.3
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	17.36	18.75	17.72	19.06	19.38	17.36	18.75	17.72	19.06	19.38
	3H	17.27	18.50	17.65	18.83	19.19	17.27	18.50	17.65	18.83	19.19
	4H	17.23	18.37	17.63	18.72	19.10	17.23	18.37	17.63	18.72	19.10
	6H	17.19	18.23	17.60	18.60	18.99	17.19	18.23	17.60	18.60	18.99
	8H	17.17	18.15	17.59	18.55	18.95	17.17	18.15	17.59	18.55	18.95
	12H	17.14	18.09	17.58	18.47	18.90	17.14	18.09	17.58	18.47	18.90
4H	2H	17.22	18.36	17.63	18.71	19.10	17.22	18.36	17.63	18.71	19.10
	3H	17.16	18.08	17.57	18.48	18.88	17.16	18.08	17.57	18.48	18.88
	4H	17.12	17.93	17.55	18.35	18.79	17.12	17.93	17.55	18.35	18.79
	6H	17.10	17.80	17.56	18.25	18.71	17.10	17.80	17.56	18.25	18.71
	8H	17.07	17.73	17.54	18.18	18.65	17.07	17.73	17.54	18.18	18.65
	12H	17.06	17.64	17.55	18.13	18.60	17.06	17.64	17.55	18.13	18.60
8H	4H	17.01	17.66	17.48	18.11	18.58	17.01	17.66	17.48	18.11	18.58
	6H	16.99	17.53	17.49	18.02	18.50	16.99	17.53	17.49	18.02	18.50
	8H	16.97	17.47	17.49	17.98	18.47	16.97	17.47	17.49	17.98	18.47
	12H	16.98	17.42	17.49	17.92	18.49	16.98	17.42	17.49	17.92	18.49
12H	4H	16.97	17.55	17.45	18.03	18.51	16.97	17.55	17.45	18.03	18.51
	6H	16.93	17.43	17.45	17.94	18.43	16.93	17.43	17.45	17.94	18.43
	8H	16.95	17.39	17.46	17.88	18.45	16.95	17.39	17.46	17.88	18.45