

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: P867149

Luminaire Tested: PRLX-2002-L-940-48L-L-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P867149
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-940-48L-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 3
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

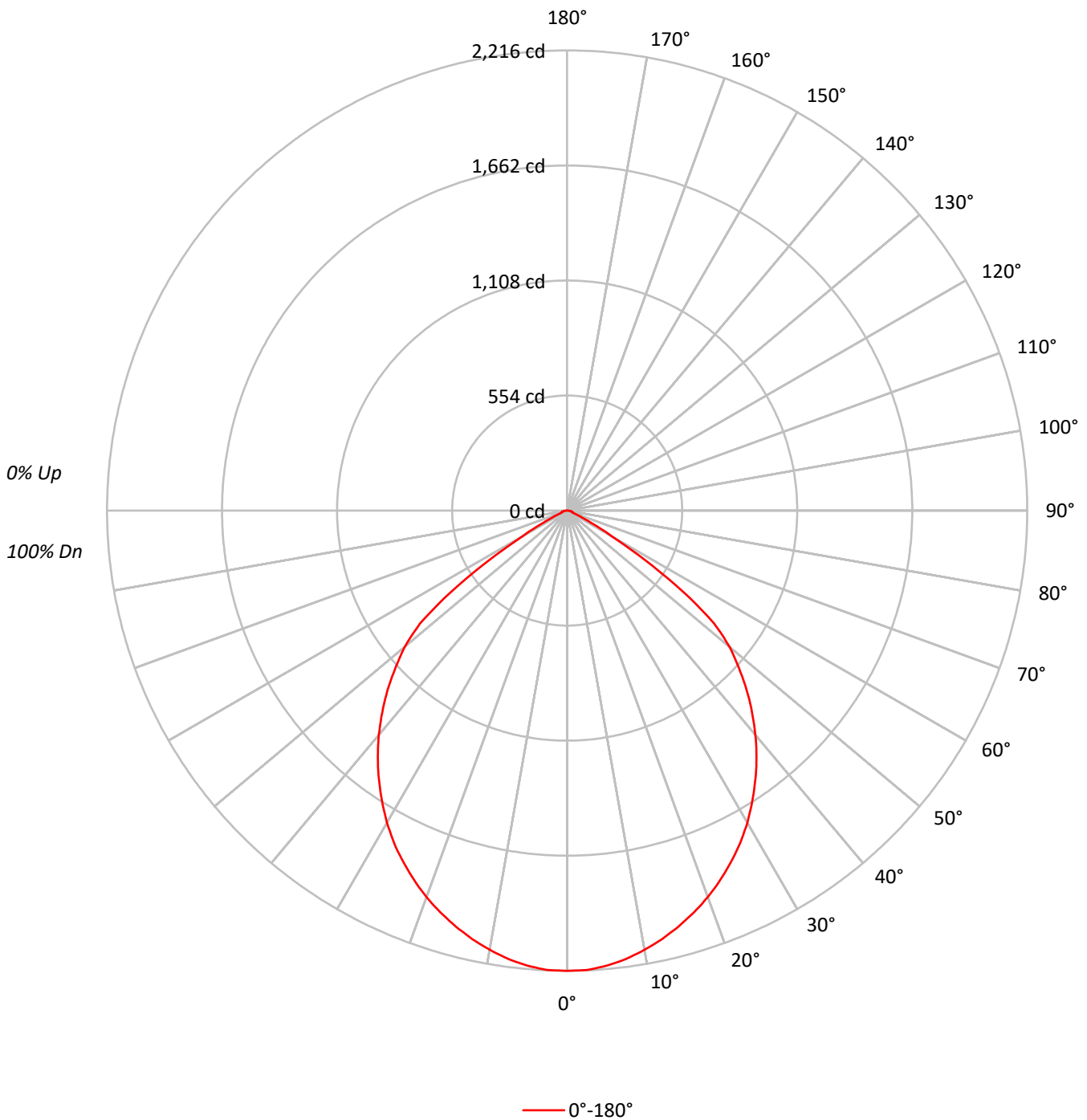
Lumens per Lamp: N/A
Luminaire Lumens: 4303.2 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27
Luminous Opening: Circular (Dia: 1.67' x H: 0')
CIE Type: Direct

Input Watts (W): 37.5
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°	10935
5°	10896
10°	10759
15°	10590
20°	10400
25°	10167
30°	9887
35°	9522
40°	9087
45°	8534
50°	7841
55°	5897
60°	2483
65°	915
70°	421
75°	461
80°	531
85°	617

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8534 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.3	4.8
10°-20°	584.4	13.6
20°-30°	859.6	20.0
30°-40°	987.3	22.9
40°-50°	940.5	21.9
50°-60°	589.0	13.7
60°-70°	97.5	2.3
70°-80°	25.5	0.6
80°-90°	11.1	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°	1652.4	38.4
0°-40°	2639.7	61.3
0°-60°	4169.2	96.9
0°-90°	4303.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4303.2	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	2216	
5°	2200	208
15°	2073	584
25°	1868	860
35°	1581	987
45°	1223	941
55°	686	589
65°	78	97
75°	24	25
85°	11	11
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	2216.4
2.5°	2214.1
5°	2200.0
7.5°	2177.7
10°	2147.6
12.5°	2113.4
15°	2073.3
17.5°	2029.5
20°	1980.7
22.5°	1926.5
25°	1867.7
27.5°	1805.2
30°	1735.5
32.5°	1659.8
35°	1580.9
37.5°	1498.0
40°	1410.9
42.5°	1318.4
45°	1223.1
47.5°	1121.4
50°	1021.6
52.5°	892.1
55°	685.6
57.5°	443.1
60°	251.6
62.5°	142.7
65°	78.4
67.5°	36.9
70°	29.2
72.5°	26.9
75°	24.2
77.5°	21.4
80°	18.7
82.5°	15.0
85°	10.9
87.5°	5.5
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	15.53	16.92	15.89	17.24	17.55	15.53	16.92	15.89	17.24	17.55
	3H	15.45	16.67	15.82	17.00	17.36	15.45	16.67	15.82	17.00	17.36
	4H	15.40	16.54	15.80	16.89	17.27	15.40	16.54	15.80	16.89	17.27
	6H	15.36	16.41	15.78	16.78	17.17	15.36	16.41	15.78	16.78	17.17
	8H	15.34	16.33	15.77	16.72	17.12	15.34	16.33	15.77	16.72	17.12
	12H	15.32	16.26	15.75	16.64	17.07	15.32	16.26	15.75	16.64	17.07
4H	2H	15.40	16.54	15.80	16.89	17.27	15.40	16.54	15.80	16.89	17.27
	3H	15.33	16.25	15.74	16.65	17.06	15.33	16.25	15.74	16.65	17.06
	4H	15.29	16.11	15.72	16.52	16.97	15.29	16.11	15.72	16.52	16.97
	6H	15.27	15.97	15.73	16.42	16.89	15.27	15.97	15.73	16.42	16.89
	8H	15.25	15.91	15.72	16.35	16.82	15.25	15.91	15.72	16.35	16.82
	12H	15.24	15.82	15.72	16.30	16.77	15.24	15.82	15.72	16.30	16.77
8H	4H	15.18	15.84	15.65	16.28	16.76	15.18	15.84	15.65	16.28	16.76
	6H	15.16	15.70	15.66	16.20	16.68	15.16	15.70	15.66	16.20	16.68
	8H	15.15	15.64	15.67	16.15	16.64	15.15	15.64	15.67	16.15	16.64
	12H	15.15	15.60	15.67	16.09	16.66	15.15	15.60	15.67	16.09	16.66
12H	4H	15.14	15.72	15.63	16.21	16.68	15.14	15.72	15.63	16.21	16.68
	6H	15.11	15.60	15.63	16.11	16.61	15.11	15.60	15.63	16.11	16.61
	8H	15.12	15.56	15.63	16.06	16.63	15.12	15.56	15.63	16.06	16.63