

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: P866401

Luminaire Tested: PRLX-2002-M-940-75L-L-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866401
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-51)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-M-940-75L-L-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 8
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

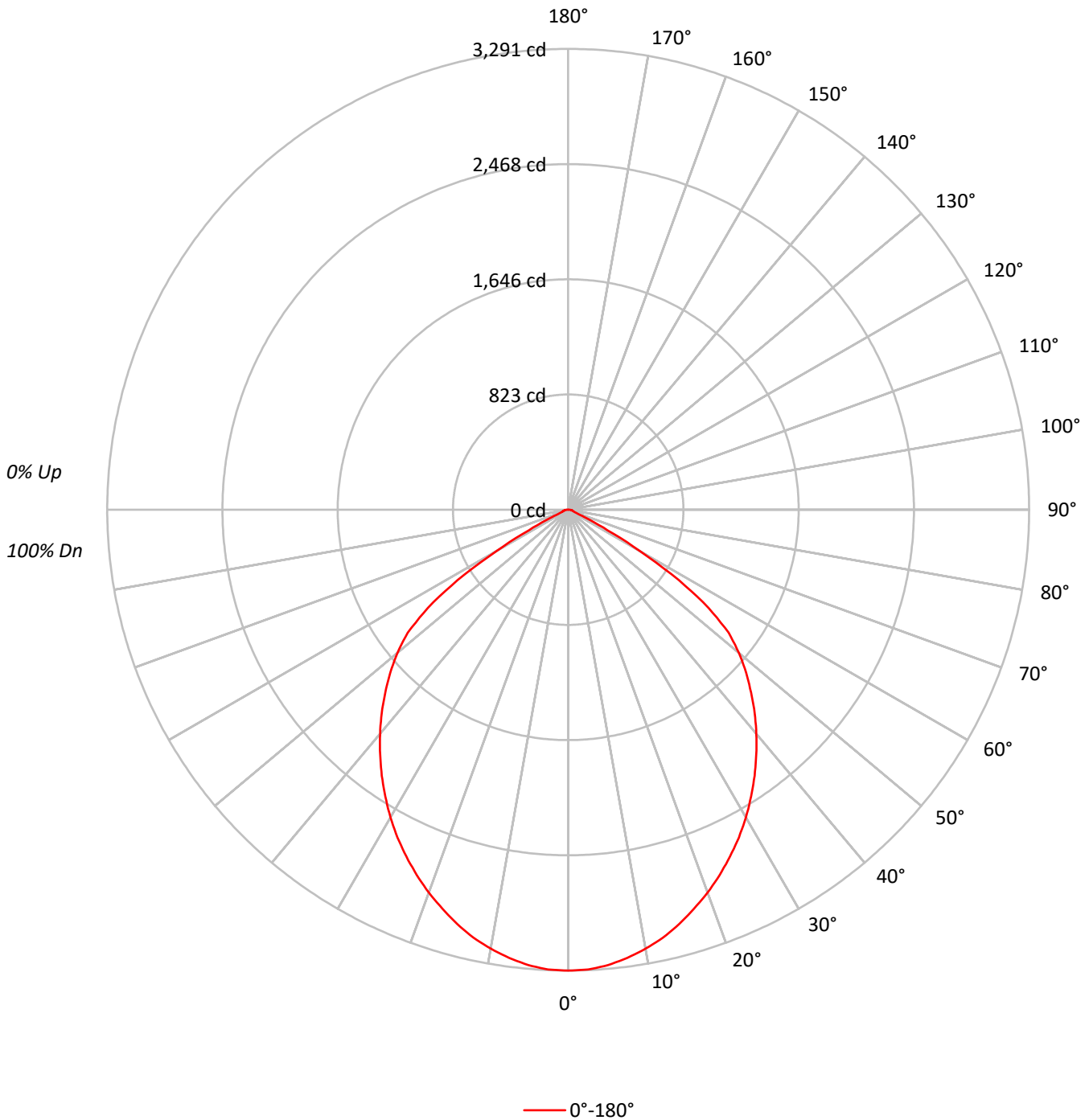
Lumens per Lamp: N/A
Luminaire Lumens: 6608.6 lumens
Efficiency: N/A
Efficacy: 94.8 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 69.7
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	111	108	105	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	80	75	93	86	79	74	83	77	73	80	76	72	78	74	71	69
4	89	78	71	65	86	77	70	65	75	69	64	73	67	63	71	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	48
7	71	59	51	45	69	58	51	45	57	50	45	55	49	45	54	48	44	43
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38
9	62	50	42	37	61	49	42	37	48	41	37	47	41	37	46	40	36	35
10	58	46	39	34	57	45	38	34	44	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	26185
5°	26079
10°	25719
15°	25228
20°	24638
25°	23994
30°	23310
35°	22531
40°	21699
45°	20770
50°	19702
55°	16970
60°	9356
65°	2635
70°	1051
75°	1125
80°	1283
85°	1570

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20770 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.0	4.7
10°-20°	862.5	13.1
20°-30°	1258.6	19.0
30°-40°	1450.2	21.9
40°-50°	1423.7	21.5
50°-60°	1044.1	15.8
60°-70°	204.5	3.1
70°-80°	38.7	0.6
80°-90°	17.3	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°	2430.1	36.8
0°-40°	3880.2	58.7
0°-60°	6348.1	96.1
0°-90°	6608.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6608.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3291	
5°	3266	309
15°	3063	862
25°	2733	1259
35°	2320	1450
45°	1846	1424
55°	1224	1044
65°	140	205
75°	37	39
85°	17	17
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	3291.3
2.5°	3287.0
5°	3265.5
7.5°	3228.9
10°	3183.6
12.5°	3129.8
15°	3063.0
17.5°	2987.6
20°	2910.1
22.5°	2823.9
25°	2733.4
27.5°	2638.7
30°	2537.4
32.5°	2429.7
35°	2319.9
37.5°	2205.7
40°	2089.4
42.5°	1970.9
45°	1846.0
47.5°	1723.2
50°	1591.8
52.5°	1443.2
55°	1223.5
57.5°	937.0
60°	588.0
62.5°	316.6
65°	140.0
67.5°	64.6
70°	45.2
72.5°	40.9
75°	36.6
77.5°	32.3
80°	28.0
82.5°	23.7
85°	17.2
87.5°	8.6
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	20.89	22.32	21.25	22.63	22.95	20.89	22.32	21.25	22.63	22.95
	3H	20.80	22.05	21.17	22.38	22.75	20.80	22.05	21.17	22.38	22.75
	4H	20.74	21.91	21.14	22.26	22.64	20.74	21.91	21.14	22.26	22.64
	6H	20.69	21.76	21.10	22.13	22.52	20.69	21.76	21.10	22.13	22.52
	8H	20.66	21.68	21.09	22.07	22.47	20.66	21.68	21.09	22.07	22.47
	12H	20.63	21.60	21.06	21.98	22.41	20.63	21.60	21.06	21.98	22.41
4H	2H	20.75	21.92	21.15	22.27	22.65	20.75	21.92	21.15	22.27	22.65
	3H	20.67	21.61	21.08	22.01	22.42	20.67	21.61	21.08	22.01	22.42
	4H	20.61	21.45	21.04	21.87	22.31	20.61	21.45	21.04	21.87	22.31
	6H	20.56	21.29	21.03	21.73	22.20	20.56	21.29	21.03	21.73	22.20
	8H	20.53	21.21	21.00	21.65	22.12	20.53	21.21	21.00	21.65	22.12
	12H	20.50	21.10	20.99	21.59	22.06	20.50	21.10	20.99	21.59	22.06
8H	4H	20.49	21.17	20.96	21.62	22.09	20.49	21.17	20.96	21.62	22.09
	6H	20.43	20.99	20.94	21.49	21.97	20.43	20.99	20.94	21.49	21.97
	8H	20.40	20.91	20.92	21.42	21.91	20.40	20.91	20.92	21.42	21.91
	12H	20.38	20.84	20.90	21.33	21.90	20.38	20.84	20.90	21.33	21.90
12H	4H	20.45	21.05	20.94	21.53	22.01	20.45	21.05	20.94	21.53	22.01
	6H	20.38	20.88	20.90	21.40	21.89	20.38	20.88	20.90	21.40	21.89
	8H	20.36	20.82	20.88	21.31	21.88	20.36	20.82	20.88	21.31	21.88