

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: P866400

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866400
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-53)
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-BLAK-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.
LIGHT LEVEL 8
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

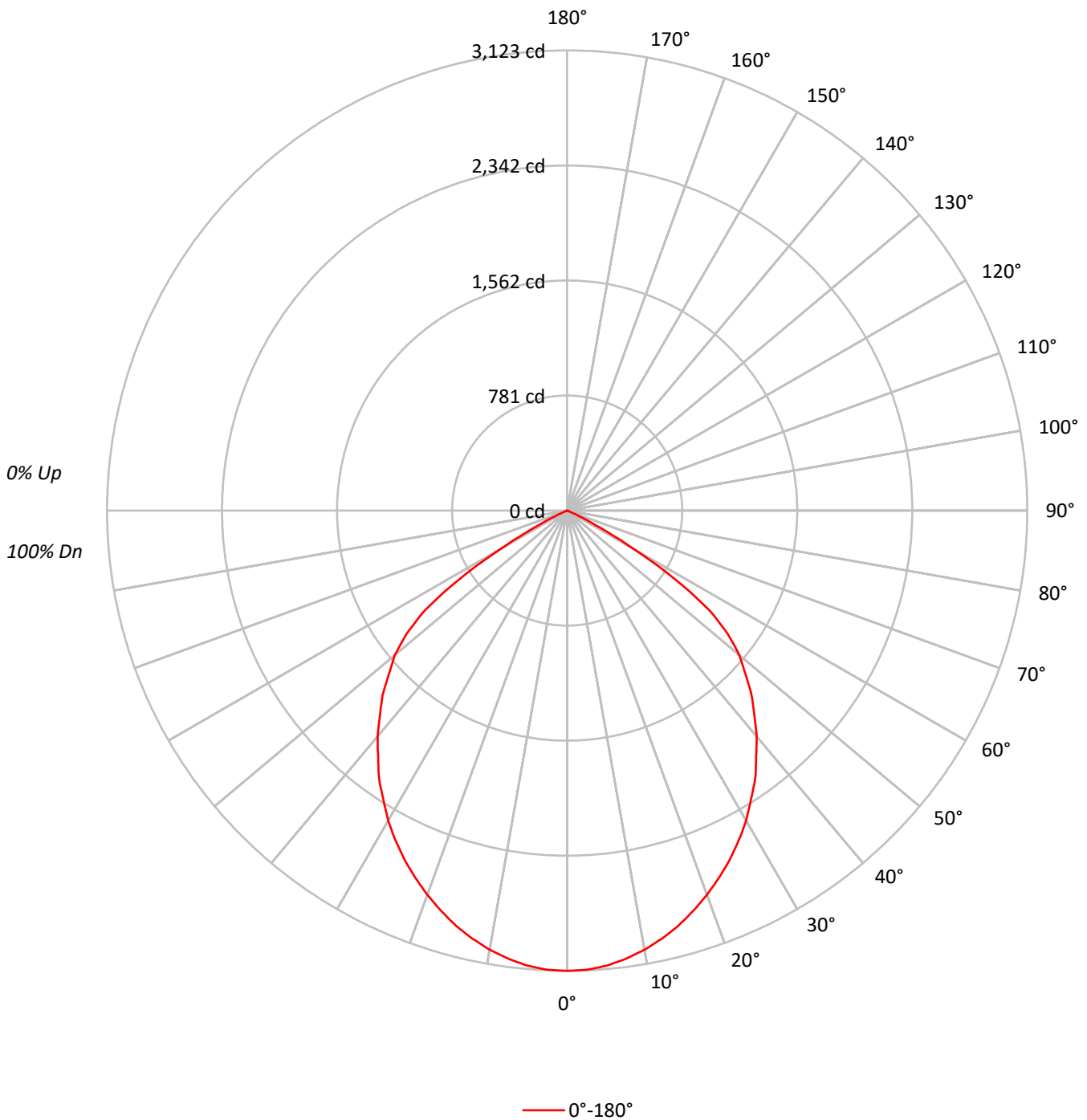
Lumens per Lamp: N/A
Luminaire Lumens: 6214.5 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

Input Watts (W): 69.7
Input Voltage (V): 120
Input Current (Ain): 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	95	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	76	73	78	75	71	69
4	89	79	72	66	87	78	71	66	75	69	65	73	68	64	71	67	63	61
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35
10	59	46	39	34	57	46	39	34	45	38	34	44	38	34	43	38	34	32

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	24848
5°	24754
10°	24449
15°	24021
20°	23489
25°	22936
30°	22320
35°	21611
40°	20782
45°	19921
50°	18875
55°	16344
60°	8363
65°	1623
70°	151
75°	200
80°	197
85°	201

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19921 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.5	4.7
10°-20°	821.2	13.2
20°-30°	1202.5	19.3
30°-40°	1387.6	22.3
40°-50°	1360.6	21.9
50°-60°	988.6	15.9
60°-70°	151.6	2.4
70°-80°	6.0	0.1
80°-90°	3.0	0.0
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°	2317.2	37.3
0°-40°	3704.8	59.6
0°-60°	6054.0	97.4
0°-90°	6214.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6214.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3123	
5°	3100	293
15°	2916	821
25°	2613	1202
35°	2225	1388
45°	1771	1361
55°	1178	989
65°	86	152
75°	6	6
85°	2	3
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	3123.3
2.5°	3119.0
5°	3099.6
7.5°	3067.3
10°	3026.4
12.5°	2974.7
15°	2916.5
17.5°	2847.6
20°	2774.4
22.5°	2694.7
25°	2612.8
27.5°	2522.4
30°	2429.7
32.5°	2322.0
35°	2225.1
37.5°	2106.6
40°	2001.1
42.5°	1880.5
45°	1770.6
47.5°	1639.2
50°	1525.0
52.5°	1372.1
55°	1178.3
57.5°	870.2
60°	525.6
62.5°	249.9
65°	86.2
67.5°	21.5
70°	6.5
72.5°	6.5
75°	6.5
77.5°	4.3
80°	4.3
82.5°	4.3
85°	2.2
87.5°	2.2
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	20.60	22.01	20.96	22.32	22.64	20.60	22.01	20.96	22.32	22.64
	3H	20.48	21.72	20.86	22.05	22.41	20.48	21.72	20.86	22.05	22.41
	4H	20.41	21.57	20.81	21.92	22.30	20.41	21.57	20.81	21.92	22.30
	6H	20.34	21.40	20.76	21.77	22.16	20.34	21.40	20.76	21.77	22.16
	8H	20.30	21.30	20.73	21.69	22.10	20.30	21.30	20.73	21.69	22.10
	12H	20.26	21.22	20.69	21.60	22.03	20.26	21.22	20.69	21.60	22.03
4H	2H	20.43	21.59	20.84	21.94	22.32	20.43	21.59	20.84	21.94	22.32
	3H	20.32	21.25	20.73	21.65	22.05	20.32	21.25	20.73	21.65	22.05
	4H	20.24	21.06	20.67	21.48	21.92	20.24	21.06	20.67	21.48	21.92
	6H	20.16	20.87	20.63	21.32	21.78	20.16	20.87	20.63	21.32	21.78
	8H	20.11	20.77	20.58	21.22	21.69	20.11	20.77	20.58	21.22	21.69
	12H	20.06	20.65	20.55	21.13	21.61	20.06	20.65	20.55	21.13	21.61
8H	4H	20.11	20.77	20.58	21.21	21.69	20.11	20.77	20.58	21.21	21.69
	6H	20.00	20.55	20.51	21.04	21.53	20.00	20.55	20.51	21.04	21.53
	8H	19.94	20.43	20.46	20.95	21.44	19.94	20.43	20.46	20.95	21.44
	12H	19.89	20.33	20.40	20.83	21.40	19.89	20.33	20.40	20.83	21.40
12H	4H	20.06	20.65	20.55	21.13	21.60	20.06	20.65	20.55	21.13	21.60
	6H	19.94	20.43	20.46	20.95	21.44	19.94	20.43	20.46	20.95	21.44
	8H	19.89	20.33	20.40	20.83	21.40	19.89	20.33	20.40	20.83	21.40