

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: P866147

Luminaire Tested: PRLX-2001-M-940-75L-L-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866147
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-46)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2001-M-940-75L-L-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS,
TAPERED DRUM WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 8
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

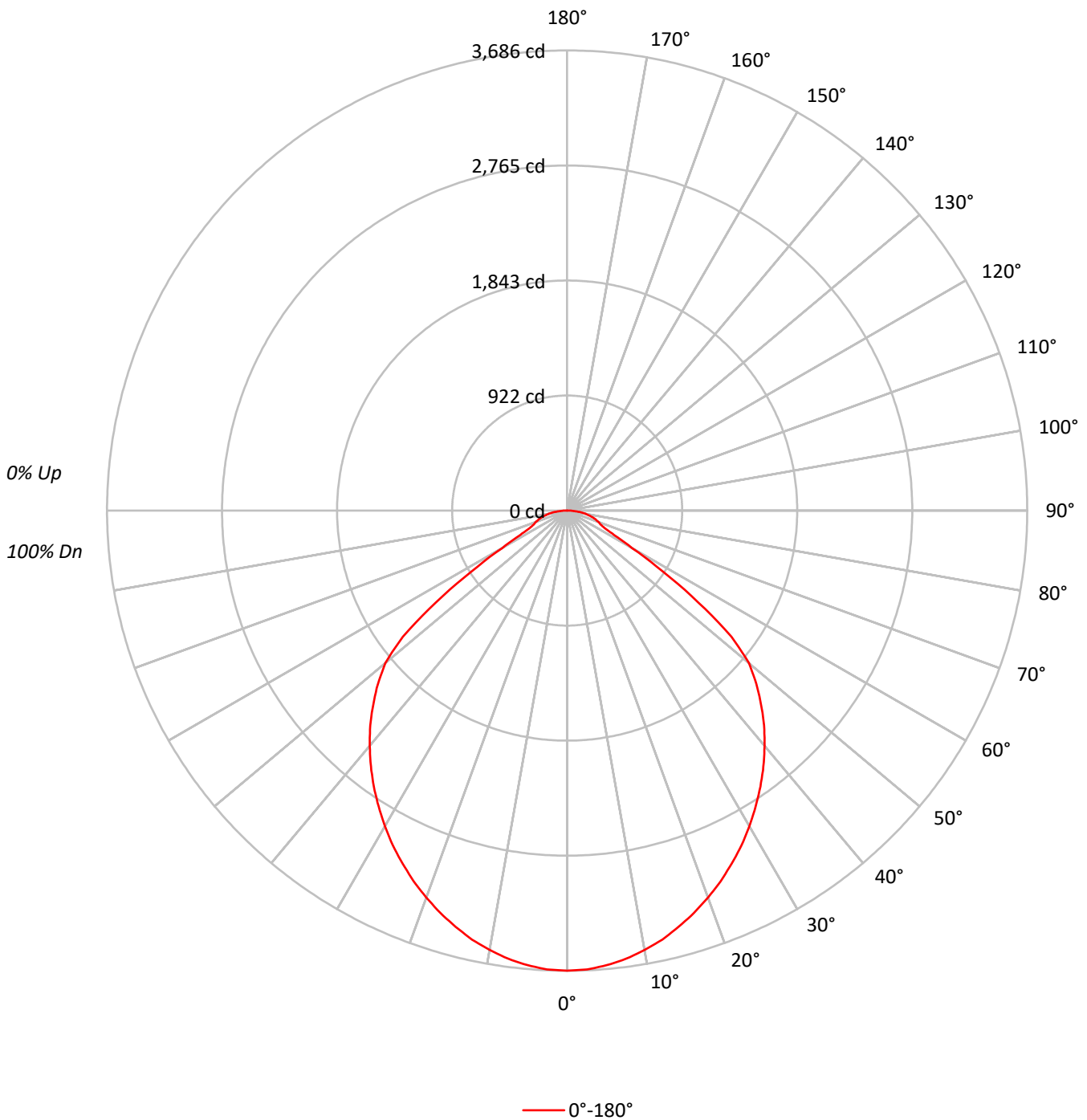
Lumens per Lamp: N/A
Luminaire Lumens: 7938.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.31
Luminous Opening: Circular (Dia: 1.27' x H: 0')
CIE Type: Direct

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: 0.333 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	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	82	87	83	80	84	81	78	76
3	94	85	78	72	92	84	77	72	81	75	71	78	73	69	76	72	68	66
4	87	77	69	63	85	75	68	62	73	67	62	71	65	61	69	64	60	58
5	81	69	61	55	79	68	60	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	54	48	60	53	48	58	52	48	57	52	47	45
7	70	57	49	43	68	56	49	43	55	48	43	54	47	43	52	47	42	41
8	65	52	44	39	64	52	44	39	50	44	39	49	43	38	48	42	38	37
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	31275
5°	31138
10°	30793
15°	30316
20°	29781
25°	29204
30°	28600
35°	27960
40°	27250
45°	26367
50°	25081
55°	18994
60°	10200
65°	6574
70°	6627
75°	6990
80°	7262
85°	7341

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 26367 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.4	4.4
10°-20°	972.9	12.3
20°-30°	1437.3	18.1
30°-40°	1687.7	21.3
40°-50°	1691.9	21.3
50°-60°	1133.0	14.3
60°-70°	363.9	4.6
70°-80°	222.5	2.8
80°-90°	82.4	1.0
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°	2756.6	34.7
0°-40°	4444.3	56.0
0°-60°	7269.2	91.6
0°-90°	7938.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7938.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	3686	
5°	3655	346
15°	3451	973
25°	3119	1437
35°	2699	1688
45°	2197	1692
55°	1284	1133
65°	327	364
75°	213	223
85°	75	82
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	3685.5
2.5°	3679.1
5°	3655.4
7.5°	3620.9
10°	3573.5
12.5°	3519.7
15°	3450.7
17.5°	3379.7
20°	3297.8
22.5°	3213.8
25°	3119.0
27.5°	3024.2
30°	2918.7
32.5°	2811.0
35°	2699.0
37.5°	2582.7
40°	2459.9
42.5°	2335.0
45°	2197.1
47.5°	2057.1
50°	1899.8
52.5°	1658.6
55°	1283.8
57.5°	911.1
60°	601.0
62.5°	424.3
65°	327.4
67.5°	288.6
70°	267.1
72.5°	241.2
75°	213.2
77.5°	180.9
80°	148.6
82.5°	114.2
85°	75.4
87.5°	38.8
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	20.24	21.72	20.61	22.03	22.34	20.24	21.72	20.61	22.03	22.34
	3H	20.72	22.03	21.10	22.36	22.72	20.72	22.03	21.10	22.36	22.72
	4H	21.04	22.27	21.44	22.62	23.00	21.04	22.27	21.44	22.62	23.00
	6H	21.37	22.50	21.78	22.86	23.26	21.37	22.50	21.78	22.86	23.26
	8H	21.51	22.58	21.94	22.97	23.37	21.51	22.58	21.94	22.97	23.37
	12H	21.62	22.64	22.05	23.02	23.45	21.62	22.64	22.05	23.02	23.45
4H	2H	20.28	21.50	20.68	21.85	22.23	20.28	21.50	20.68	21.85	22.23
	3H	20.99	21.99	21.40	22.39	22.79	20.99	21.99	21.40	22.39	22.79
	4H	21.46	22.36	21.89	22.77	23.21	21.46	22.36	21.89	22.77	23.21
	6H	21.96	22.74	22.42	23.18	23.64	21.96	22.74	22.42	23.18	23.64
	8H	22.17	22.89	22.63	23.34	23.81	22.17	22.89	22.63	23.34	23.81
	12H	22.34	22.99	22.82	23.47	23.94	22.34	22.99	22.82	23.47	23.94
8H	4H	21.62	22.35	22.09	22.80	23.26	21.62	22.35	22.09	22.80	23.26
	6H	22.25	22.86	22.75	23.35	23.83	22.25	22.86	22.75	23.35	23.83
	8H	22.55	23.10	23.07	23.61	24.10	22.55	23.10	23.07	23.61	24.10
	12H	22.82	23.31	23.33	23.80	24.37	22.82	23.31	23.33	23.80	24.37
12H	4H	21.64	22.29	22.12	22.77	23.24	21.64	22.29	22.12	22.77	23.24
	6H	22.30	22.85	22.81	23.36	23.85	22.30	22.85	22.81	23.36	23.85
	8H	22.66	23.15	23.17	23.64	24.21	22.66	23.15	23.17	23.64	24.21