

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: P866399

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P866399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-38)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-M-940-75L-G-U-S-X-X-WHHR-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.
LIGHT LEVEL 8
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

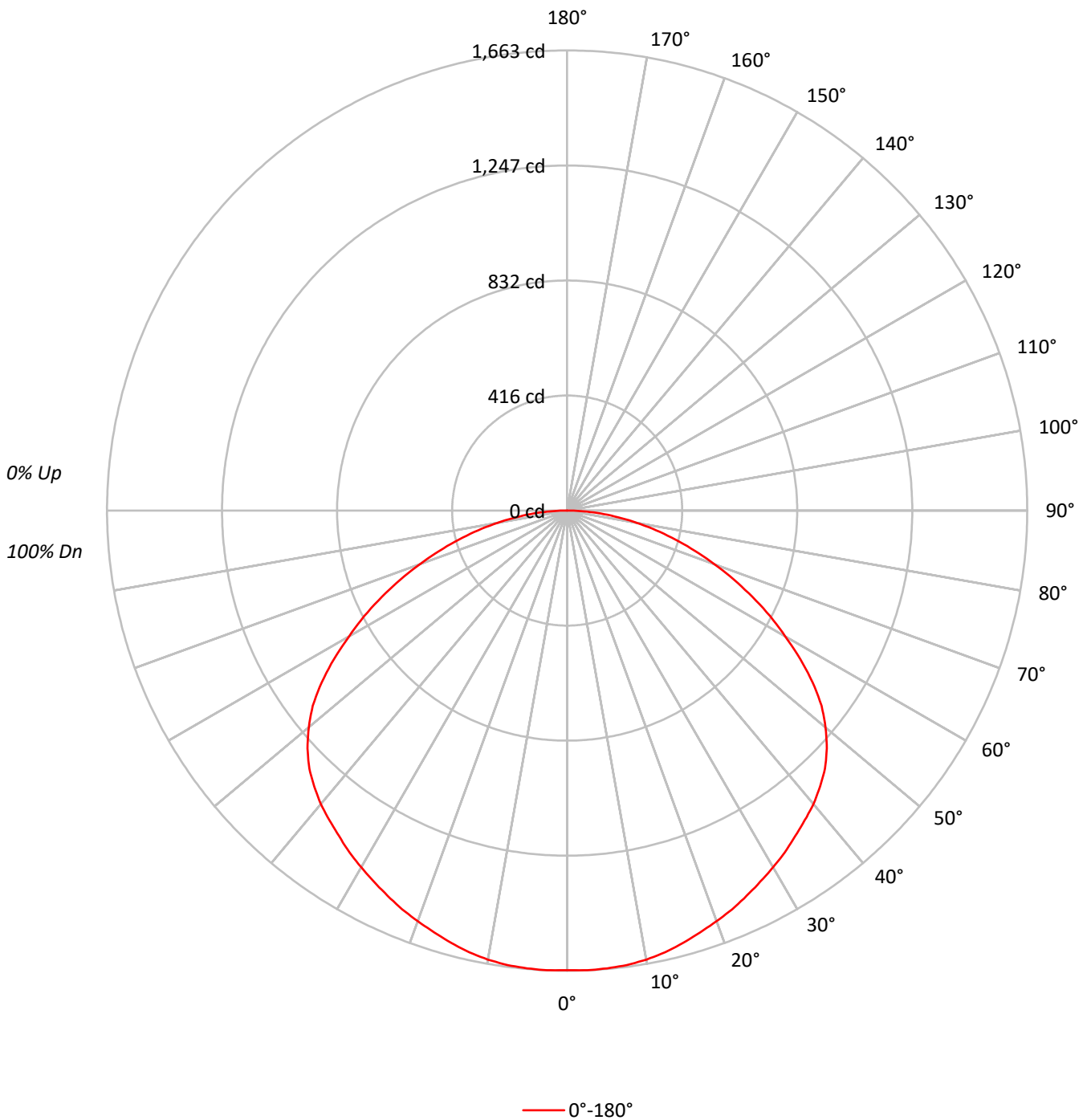
Lumens per Lamp: N/A
Luminaire Lumens: 5499.8 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.5
Luminous Opening: Circular (Dia: 1.31' x H: 0')
CIE Type: Direct

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: 0.333 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P866399

CATALOG NUMBER: PRLX-2002-M-940-75L-G-U-S-X-X-WHHR-X

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	108	103	99	94	105	101	97	93	96	93	90	93	90	87	89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	35	30	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	13212
5°	13263
10°	13312
15°	13324
20°	13368
25°	13482
30°	13673
35°	13954
40°	14384
45°	14832
50°	15090
55°	15029
60°	14497
65°	13908
70°	13177
75°	12449
80°	11742
85°	11009

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 52.5°
 Luminance: 15145 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.1	2.9
10°-20°	457.1	8.3
20°-30°	709.4	12.9
30°-40°	901.6	16.4
40°-50°	1014.0	18.4
50°-60°	963.4	17.5
60°-70°	731.7	13.3
70°-80°	430.1	7.8
80°-90°	134.5	2.4
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°	1324.6	24.1
0°-40°	2226.2	40.5
0°-60°	4203.5	76.4
0°-90°	5499.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5499.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	1661	
5°	1661	158
15°	1618	457
25°	1536	709
35°	1437	902
45°	1318	1014
55°	1084	963
65°	739	732
75°	405	430
85°	121	134
90°	0	

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CATALOG NUMBER: PRLX-2002-M-940-75L-G-U-S-X-X-WHHR-X

CANDELA DISTRIBUTION (FULL):

	0°
0°	1660.7
2.5°	1662.9
5°	1660.7
7.5°	1656.4
10°	1647.8
12.5°	1634.9
15°	1617.7
17.5°	1598.3
20°	1578.9
22.5°	1559.5
25°	1535.8
27.5°	1512.1
30°	1488.4
32.5°	1464.7
35°	1436.7
37.5°	1410.9
40°	1385.0
42.5°	1352.7
45°	1318.3
47.5°	1273.0
50°	1219.2
52.5°	1158.9
55°	1083.5
57.5°	999.5
60°	911.1
62.5°	827.1
65°	738.8
67.5°	652.7
70°	566.5
72.5°	484.7
75°	405.0
77.5°	329.6
80°	256.3
82.5°	185.2
85°	120.6
87.5°	60.3
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	21.79	23.48	22.15	23.80	24.11	21.79	23.48	22.15	23.80	24.11
	3H	23.58	25.12	23.96	25.45	25.81	23.58	25.12	23.96	25.45	25.81
	4H	24.28	25.73	24.68	26.08	26.45	24.28	25.73	24.68	26.08	26.45
	6H	24.83	26.18	25.24	26.54	26.93	24.83	26.18	25.24	26.54	26.93
	8H	25.02	26.31	25.44	26.70	27.10	25.02	26.31	25.44	26.70	27.10
	12H	25.16	26.40	25.59	26.78	27.21	25.16	26.40	25.59	26.78	27.21
4H	2H	22.42	23.87	22.82	24.22	24.59	22.42	23.87	22.82	24.22	24.59
	3H	24.45	25.67	24.86	26.07	26.46	24.45	25.67	24.86	26.07	26.46
	4H	25.28	26.39	25.71	26.80	27.23	25.28	26.39	25.71	26.80	27.23
	6H	25.97	26.94	26.42	27.38	27.83	25.97	26.94	26.42	27.38	27.83
	8H	26.22	27.13	26.67	27.57	28.03	26.22	27.13	26.67	27.57	28.03
	12H	26.41	27.24	26.89	27.71	28.18	26.41	27.24	26.89	27.71	28.18
8H	4H	25.62	26.53	26.07	26.97	27.43	25.62	26.53	26.07	26.97	27.43
	6H	26.44	27.20	26.93	27.69	28.16	26.44	27.20	26.93	27.69	28.16
	8H	26.77	27.46	27.28	27.96	28.45	26.77	27.46	27.28	27.96	28.45
	12H	27.06	27.67	27.57	28.16	28.71	27.06	27.67	27.57	28.16	28.71
12H	4H	25.66	26.48	26.14	26.96	27.43	25.66	26.48	26.14	26.96	27.43
	6H	26.51	27.20	27.02	27.70	28.19	26.51	27.20	27.02	27.70	28.19
	8H	26.91	27.52	27.42	28.01	28.56	26.91	27.52	27.42	28.01	28.56