

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: P867043

Luminaire Tested: PRLX-2002-L-930-83L-G-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867043  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-68)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-930-83L-G-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

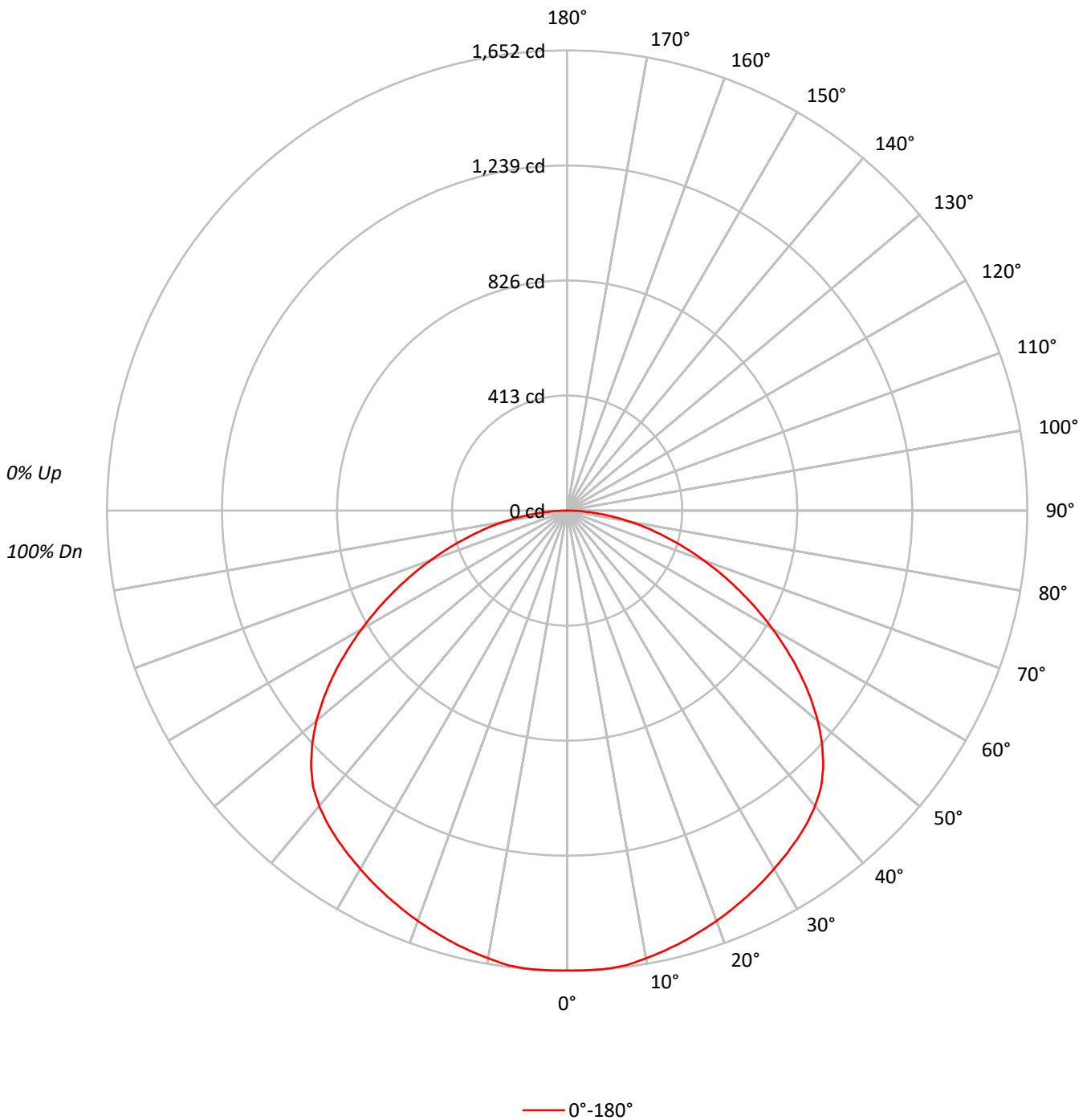
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5313.6 lumens  
Efficiency: N/A  
Efficacy: 82.4 lumens/watt  
Spacing Criteria (0/90/45): 1.35 / 1.35 / 1.49  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 64.5  
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

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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	108	103	99	95	106	101	97	93	97	94	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	61	55	51	48
5	75	62	52	45	73	60	52	45	58	51	45	56	49	44	54	48	44	42
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	8147
5°	8178
10°	8176
15°	8186
20°	8231
25°	8320
30°	8463
35°	8671
40°	8918
45°	9073
50°	9020
55°	8781
60°	8415
65°	7986
70°	7507
75°	7004
80°	6501
85°	5785

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 9073 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	157.0	3.0
10°-20°	453.1	8.5
20°-30°	706.0	13.3
30°-40°	902.3	17.0
40°-50°	998.9	18.8
50°-60°	910.4	17.1
60°-70°	678.3	12.8
70°-80°	391.5	7.4
80°-90°	116.1	2.2
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°	1316.1	24.8
0°-40°	2218.4	41.7
0°-60°	4127.7	77.7
0°-90°	5313.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5313.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1651	
5°	1651	157
15°	1603	453
25°	1528	706
35°	1440	902
45°	1300	999
55°	1021	910
65°	684	678
75°	367	392
85°	102	116
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1651.3
2.5°	1652.0
5°	1651.3
7.5°	1645.6
10°	1632.0
12.5°	1618.4
15°	1602.7
17.5°	1585.5
20°	1567.7
22.5°	1548.4
25°	1528.3
27.5°	1507.6
30°	1485.5
32.5°	1463.3
35°	1439.7
37.5°	1414.7
40°	1384.7
42.5°	1348.9
45°	1300.3
47.5°	1241.7
50°	1175.2
52.5°	1100.1
55°	1020.8
57.5°	936.4
60°	852.8
62.5°	768.5
65°	684.1
67.5°	602.6
70°	520.4
72.5°	443.9
75°	367.4
77.5°	298.8
80°	228.8
82.5°	163.0
85°	102.2
87.5°	47.2
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	19.82	21.49	20.18	21.81	22.12	19.82	21.49	20.18	21.81	22.12
	3H	21.57	23.08	21.94	23.41	23.77	21.57	23.08	21.94	23.41	23.77
	4H	22.23	23.66	22.63	24.01	24.38	22.23	23.66	22.63	24.01	24.38
	6H	22.75	24.08	23.16	24.44	24.83	22.75	24.08	23.16	24.44	24.83
	8H	22.92	24.19	23.35	24.58	24.98	22.92	24.19	23.35	24.58	24.98
	12H	23.05	24.26	23.47	24.65	25.07	23.05	24.26	23.47	24.65	25.07
4H	2H	20.44	21.87	20.83	22.21	22.59	20.44	21.87	20.83	22.21	22.59
	3H	22.41	23.61	22.82	24.01	24.41	22.41	23.61	22.82	24.01	24.41
	4H	23.21	24.30	23.64	24.71	25.15	23.21	24.30	23.64	24.71	25.15
	6H	23.86	24.82	24.32	25.26	25.71	23.86	24.82	24.32	25.26	25.71
	8H	24.09	24.98	24.55	25.43	25.89	24.09	24.98	24.55	25.43	25.89
	12H	24.26	25.07	24.74	25.54	26.01	24.26	25.07	24.74	25.54	26.01
8H	4H	23.53	24.43	23.99	24.87	25.33	23.53	24.43	23.99	24.87	25.33
	6H	24.31	25.06	24.81	25.55	26.02	24.31	25.06	24.81	25.55	26.02
	8H	24.62	25.29	25.13	25.80	26.28	24.62	25.29	25.13	25.80	26.28
	12H	24.87	25.47	25.38	25.96	26.51	24.87	25.47	25.38	25.96	26.51
12H	4H	23.57	24.38	24.05	24.85	25.32	23.57	24.38	24.05	24.85	25.32
	6H	24.38	25.05	24.89	25.56	26.04	24.38	25.05	24.89	25.56	26.04
	8H	24.75	25.34	25.25	25.83	26.39	24.75	25.34	25.25	25.83	26.39