

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: P867359

Luminaire Tested: PRLX-2004-L-935-83L-L-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867359  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-84)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2004-L-935-83L-L-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,  
BELL WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

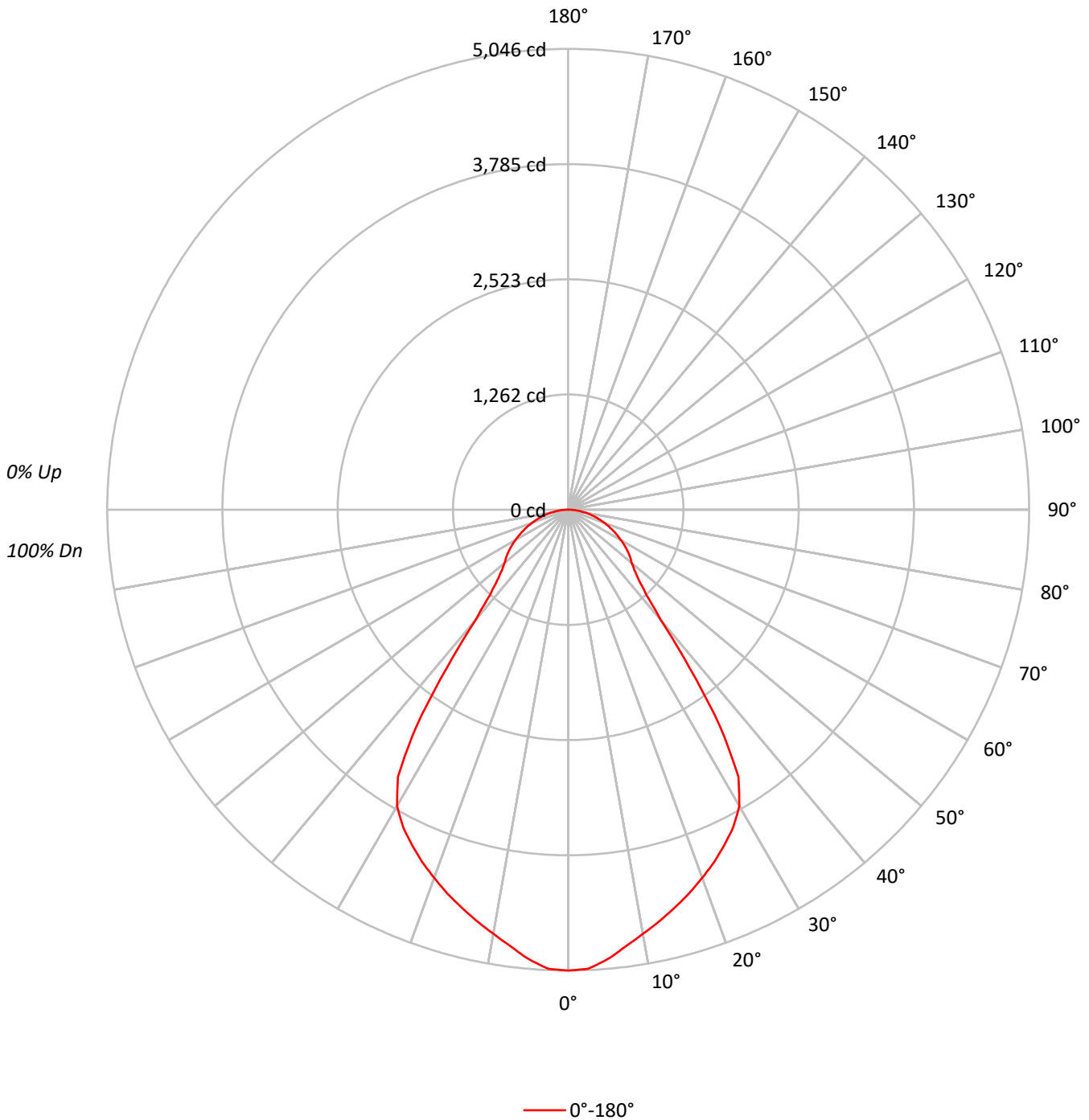
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7889.3 lumens  
Efficiency: N/A  
Efficacy: 122.3 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.05  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 64.5  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	107	103	100	108	105	101	98	100	98	95		97	94	92		93	91	90	88
2	103	96	90	85	100	94	89	84	91	86	82		87	84	81		85	82	79	77
3	95	87	80	74	93	85	79	74	82	77	72		80	75	71		77	73	70	68
4	89	79	71	66	87	77	70	65	75	69	64		73	68	63		71	66	63	61
5	83	72	64	59	81	71	64	58	69	63	58		67	61	57		65	60	57	55
6	78	66	58	53	76	65	58	53	63	57	52		62	56	52		60	55	51	50
7	73	61	53	48	71	60	53	48	59	52	48		57	52	47		56	51	47	45
8	68	57	49	44	67	56	49	44	55	48	44		53	48	43		52	47	43	41
9	64	53	45	40	63	52	45	40	51	45	40		50	44	40		49	44	40	38
10	61	49	42	37	60	49	42	37	48	41	37		47	41	37		46	41	37	35

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

	0°
0°	24897
5°	24476
10°	23627
15°	23036
20°	22523
25°	22038
30°	21342
35°	17475
40°	10147
45°	7674
50°	6973
55°	6856
60°	6610
65°	6346
70°	6095
75°	5829
80°	5583
85°	5350

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 7674 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	464.1	5.9
10°-20°	1271.7	16.1
20°-30°	1862.3	23.6
30°-40°	1731.6	21.9
40°-50°	882.2	11.2
50°-60°	709.7	9.0
60°-70°	538.9	6.8
70°-80°	324.6	4.1
80°-90°	104.3	1.3
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°	3598.1	45.6
0°-40°	5329.7	67.6
0°-60°	6921.6	87.7
0°-90°	7889.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7889.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	5046	
5°	4942	464
15°	4510	1272
25°	4048	1862
35°	2901	1732
45°	1100	882
55°	797	710
65°	544	539
75°	306	325
85°	94	104
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	5046.2
2.5°	5031.4
5°	4942.0
7.5°	4822.4
10°	4716.0
12.5°	4614.8
15°	4509.9
17.5°	4403.6
20°	4289.8
22.5°	4174.6
25°	4048.3
27.5°	3915.4
30°	3746.2
32.5°	3467.8
35°	2901.3
37.5°	2177.4
40°	1575.4
42.5°	1266.7
45°	1099.8
47.5°	982.3
50°	908.5
52.5°	855.3
55°	797.0
57.5°	732.0
60°	669.9
62.5°	605.7
65°	543.6
67.5°	482.3
70°	422.5
72.5°	364.1
75°	305.8
77.5°	251.1
80°	196.5
82.5°	145.5
85°	94.5
87.5°	45.1
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	17.15	18.50	17.51	18.82	19.13	17.15	18.50	17.51	18.82	19.13
	3H	18.95	20.16	19.33	20.49	20.85	18.95	20.16	19.33	20.49	20.85
	4H	19.65	20.79	20.06	21.14	21.52	19.65	20.79	20.06	21.14	21.52
	6H	20.21	21.26	20.63	21.63	22.03	20.21	21.26	20.63	21.63	22.03
	8H	20.42	21.41	20.84	21.80	22.20	20.42	21.41	20.84	21.80	22.20
	12H	20.56	21.51	20.99	21.89	22.32	20.56	21.51	20.99	21.89	22.32
4H	2H	17.74	18.87	18.14	19.22	19.60	17.74	18.87	18.14	19.22	19.60
	3H	19.76	20.70	20.17	21.10	21.51	19.76	20.70	20.17	21.10	21.51
	4H	20.60	21.45	21.03	21.87	22.31	20.60	21.45	21.03	21.87	22.31
	6H	21.30	22.03	21.76	22.48	22.94	21.30	22.03	21.76	22.48	22.94
	8H	21.55	22.24	22.02	22.69	23.16	21.55	22.24	22.02	22.69	23.16
	12H	21.75	22.36	22.23	22.84	23.31	21.75	22.36	22.23	22.84	23.31
8H	4H	20.90	21.59	21.37	22.04	22.51	20.90	21.59	21.37	22.04	22.51
	6H	21.74	22.31	22.24	22.80	23.28	21.74	22.31	22.24	22.80	23.28
	8H	22.09	22.60	22.61	23.11	23.60	22.09	22.60	22.61	23.11	23.60
	12H	22.39	22.83	22.90	23.32	23.89	22.39	22.83	22.90	23.32	23.89
12H	4H	20.93	21.54	21.41	22.02	22.50	20.93	21.54	21.41	22.02	22.50
	6H	21.81	22.32	22.33	22.83	23.32	21.81	22.32	22.33	22.83	23.32
	8H	22.22	22.67	22.73	23.16	23.73	22.22	22.67	22.73	23.16	23.73