

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: P866716

Luminaire Tested: PRLX-2001-L-927-83L-L-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

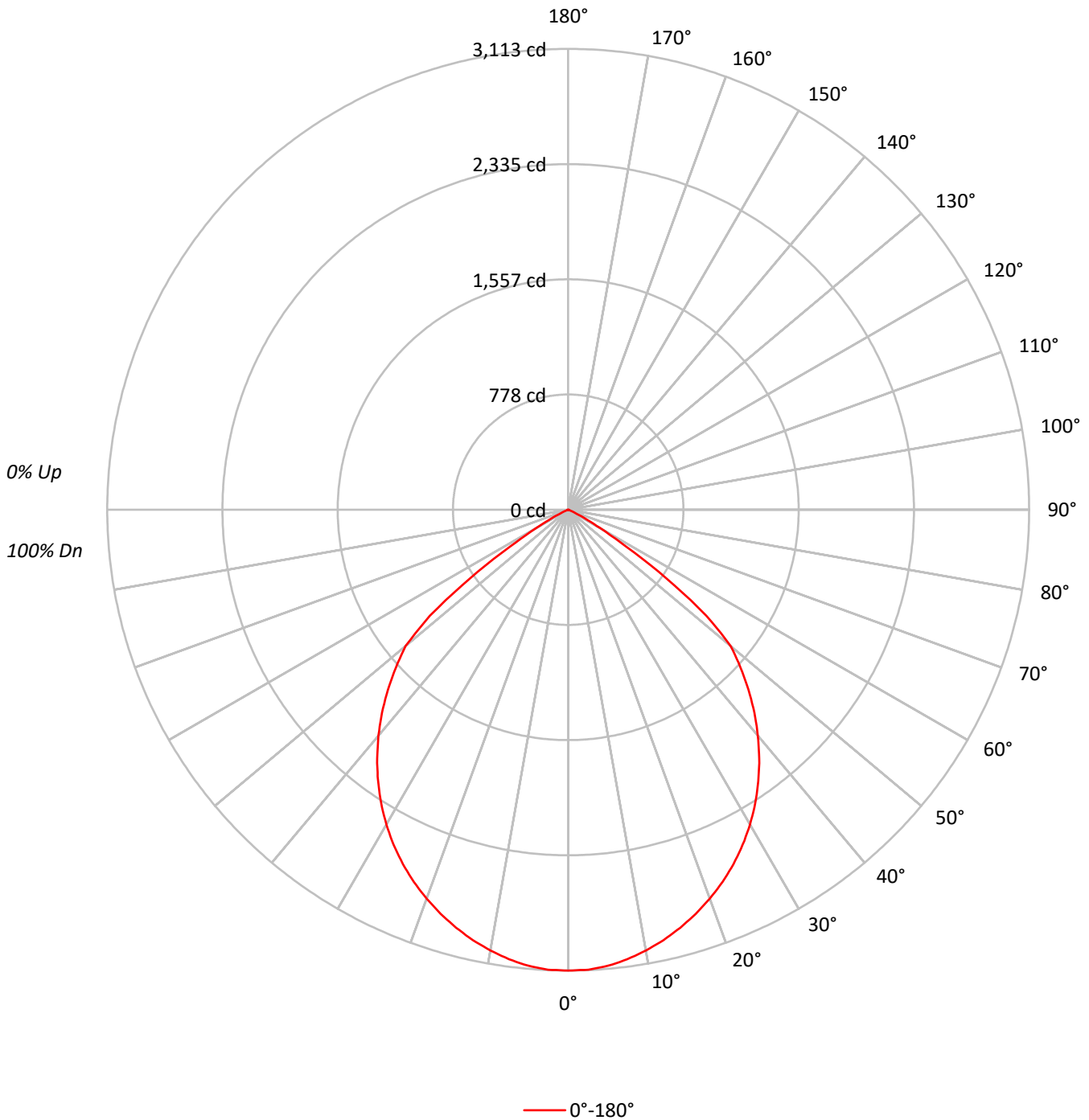
Test Method: LM-79-2019  
Report Number: P866716  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-79)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2001-L-927-83L-L-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS,  
TAPERED DRUM WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5866.8 lumens  
Efficiency: N/A  
Efficacy: 91.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.27  
Luminous Opening: Circular (Dia: 1.58' 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: 0.5 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	109	105	103	109	106	104	101	102	100	98		98	97	95		95	94	92	90
2	104	98	93	89	102	96	92	88	93	89	86		90	87	84		87	84	82	80
3	97	89	82	77	95	87	81	77	84	79	75		82	78	74		80	76	73	71
4	90	80	73	68	88	79	73	67	77	71	67		75	70	66		73	68	65	63
5	84	73	66	60	82	72	65	60	70	64	59		68	63	59		66	62	58	56
6	78	67	59	53	76	66	58	53	64	58	53		62	57	52		61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48		57	52	47		56	51	47	45
8	68	56	48	43	67	55	48	43	54	48	43		53	47	43		52	47	43	41
9	64	52	44	39	62	51	44	39	50	44	39		49	43	39		48	43	39	37
10	60	48	41	36	59	47	41	36	46	40	36		46	40	36		45	39	35	34

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

	0°
0°	17020
5°	16971
10°	16786
15°	16547
20°	16262
25°	15935
30°	15499
35°	14941
40°	14222
45°	13306
50°	12176
55°	7724
60°	2681
65°	674
70°	117
75°	127
80°	148
85°	169

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 13306 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	293.0	5.0
10°-20°	824.0	14.0
20°-30°	1215.2	20.7
30°-40°	1397.3	23.8
40°-50°	1324.7	22.6
50°-60°	726.7	12.4
60°-70°	76.9	1.3
70°-80°	6.3	0.1
80°-90°	2.8	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°	2332.1	39.8
0°-40°	3729.4	63.6
0°-60°	5780.8	98.5
0°-90°	5866.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5866.8	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3113	
5°	3093	293
15°	2924	824
25°	2642	1215
35°	2239	1397
45°	1721	1325
55°	810	727
65°	52	77
75°	6	6
85°	3	3
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	3113.3
2.5°	3110.0
5°	3092.6
7.5°	3062.6
10°	3023.8
12.5°	2977.7
15°	2923.6
17.5°	2862.8
20°	2795.3
22.5°	2721.8
25°	2641.7
27.5°	2552.1
30°	2455.3
32.5°	2351.0
35°	2238.8
37.5°	2119.2
40°	1992.9
42.5°	1860.6
45°	1721.0
47.5°	1578.7
50°	1431.7
52.5°	1176.5
55°	810.4
57.5°	463.7
60°	245.2
62.5°	127.6
65°	52.1
67.5°	10.0
70°	7.3
72.5°	6.7
75°	6.0
77.5°	5.3
80°	4.7
82.5°	4.0
85°	2.7
87.5°	1.3
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	15.15	16.51	15.51	16.82	17.13	15.15	16.51	15.51	16.82	17.13
	3H	15.02	16.21	15.40	16.54	16.91	15.02	16.21	15.40	16.54	16.91
	4H	14.95	16.06	15.36	16.41	16.79	14.95	16.06	15.36	16.41	16.79
	6H	14.88	15.89	15.29	16.26	16.65	14.88	15.89	15.29	16.26	16.65
	8H	14.84	15.79	15.27	16.19	16.59	14.84	15.79	15.27	16.19	16.59
	12H	14.80	15.71	15.23	16.09	16.52	14.80	15.71	15.23	16.09	16.52
4H	2H	14.98	16.08	15.38	16.43	16.82	14.98	16.08	15.38	16.43	16.82
	3H	14.86	15.74	15.27	16.14	16.55	14.86	15.74	15.27	16.14	16.55
	4H	14.77	15.56	15.21	15.98	16.42	14.77	15.56	15.21	15.98	16.42
	6H	14.69	15.37	15.16	15.81	16.28	14.69	15.37	15.16	15.81	16.28
	8H	14.64	15.27	15.11	15.71	16.19	14.64	15.27	15.11	15.71	16.19
	12H	14.59	15.15	15.08	15.63	16.11	14.59	15.15	15.08	15.63	16.11
8H	4H	14.63	15.26	15.10	15.71	16.18	14.63	15.26	15.10	15.71	16.18
	6H	14.53	15.05	15.03	15.54	16.03	14.53	15.05	15.03	15.54	16.03
	8H	14.46	14.93	14.98	15.45	15.94	14.46	14.93	14.98	15.45	15.94
	12H	14.41	14.84	14.93	15.33	15.90	14.41	14.84	14.93	15.33	15.90
12H	4H	14.58	15.14	15.07	15.63	16.10	14.58	15.14	15.07	15.63	16.10
	6H	14.46	14.93	14.98	15.45	15.94	14.46	14.93	14.98	15.45	15.94
	8H	14.41	14.84	14.92	15.33	15.90	14.41	14.84	14.92	15.33	15.90