

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: P865927

Luminaire Tested: PRLX-2001-M-927-45L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865927  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-31)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2001-M-927-45L-G-U-S-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,  
TAPERED DRUM WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

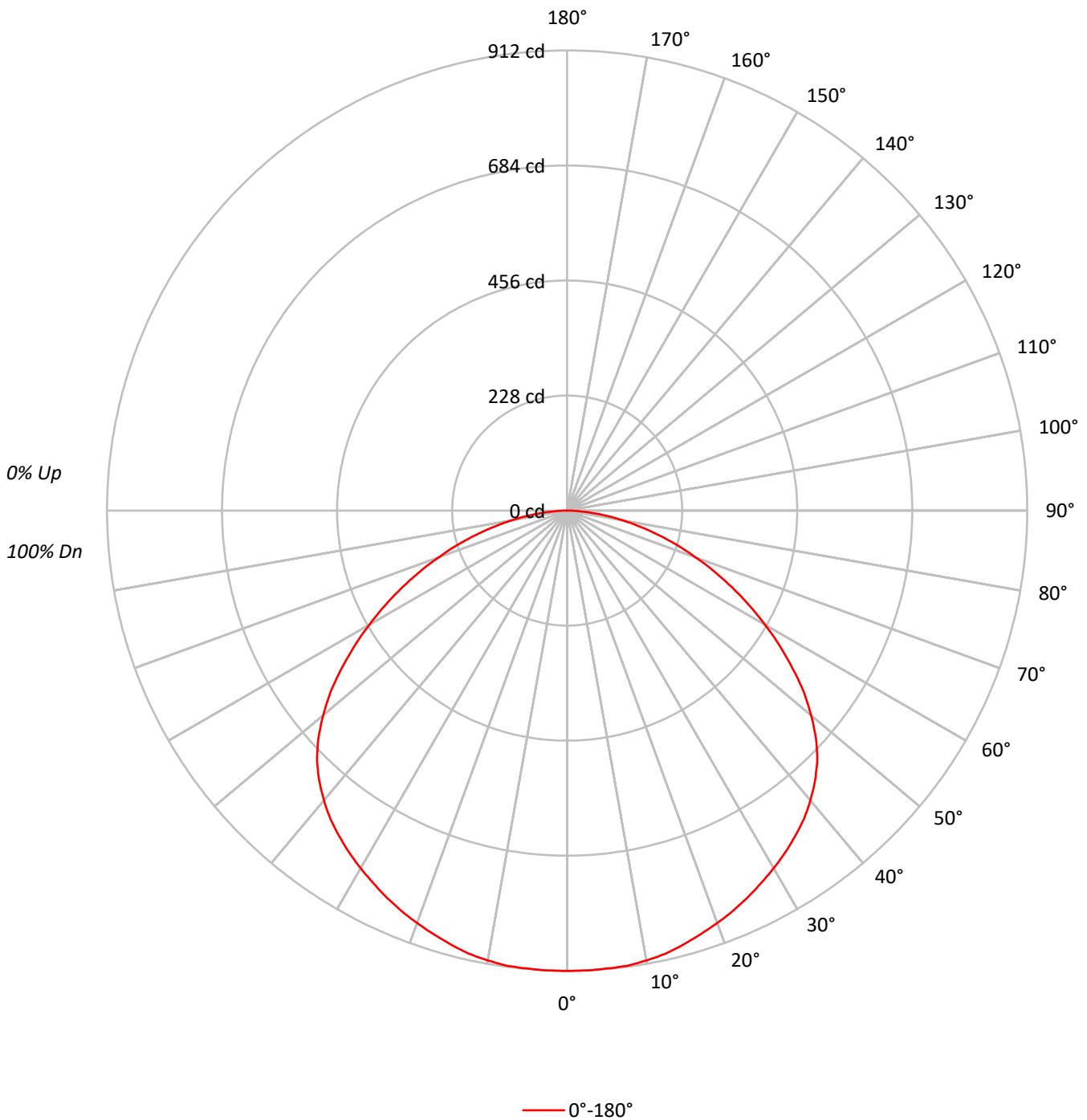
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2860.0 lumens  
Efficiency: N/A  
Efficacy: 73.7 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.47  
Luminous Opening: Circular (Dia: 1.27' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.8  
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: 0.333 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	109	104	99	95	106	101	97	94	97	94	91		93	91	88		90	88	86	83
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53		63	57	52		61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	39		51	44	39		50	44	39	37
7	64	50	41	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41	35	31	29
9	56	42	34	28	54	41	33	28	40	33	28		39	32	28		38	32	27	26
10	52	39	31	25	51	38	30	25	37	30	25		36	30	25		35	29	25	23

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

	0°
0°	7742
5°	7761
10°	7802
15°	7824
20°	7857
25°	7922
30°	8022
35°	8161
40°	8309
45°	8414
50°	8336
55°	8075
60°	7693
65°	7245
70°	6714
75°	6177
80°	5468
85°	4450

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8414 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.8	3.0
10°-20°	251.6	8.8
20°-30°	390.6	13.7
30°-40°	493.4	17.3
40°-50°	538.6	18.8
50°-60°	487.3	17.0
60°-70°	357.6	12.5
70°-80°	199.7	7.0
80°-90°	54.4	1.9
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°	729.1	25.5
0°-40°	1222.4	42.7
0°-60°	2248.3	78.6
0°-90°	2860.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2860.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	912	
5°	911	87
15°	891	252
25°	846	391
35°	788	493
45°	701	539
55°	546	487
65°	361	358
75°	188	200
85°	46	54
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	912.3
2.5°	912.3
5°	911.1
7.5°	910.0
10°	905.4
12.5°	899.7
15°	890.6
17.5°	880.3
20°	870.0
22.5°	858.6
25°	846.1
27.5°	832.4
30°	818.7
32.5°	803.8
35°	787.8
37.5°	770.7
40°	750.1
42.5°	727.3
45°	701.1
47.5°	669.1
50°	631.4
52.5°	591.4
55°	545.8
57.5°	500.1
60°	453.3
62.5°	406.5
65°	360.8
67.5°	316.3
70°	270.6
72.5°	229.5
75°	188.4
77.5°	148.4
80°	111.9
82.5°	77.6
85°	45.7
87.5°	20.6
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	19.51	21.17	19.87	21.49	21.80	19.51	21.17	19.87	21.49	21.80
	3H	21.20	22.70	21.58	23.03	23.39	21.20	22.70	21.58	23.03	23.39
	4H	21.83	23.25	22.22	23.59	23.97	21.83	23.25	22.22	23.59	23.97
	6H	22.28	23.60	22.69	23.96	24.35	22.28	23.60	22.69	23.96	24.35
	8H	22.42	23.68	22.85	24.07	24.47	22.42	23.68	22.85	24.07	24.47
	12H	22.52	23.72	22.95	24.10	24.53	22.52	23.72	22.95	24.10	24.53
4H	2H	20.11	21.53	20.51	21.88	22.25	20.11	21.53	20.51	21.88	22.25
	3H	22.02	23.21	22.43	23.61	24.01	22.02	23.21	22.43	23.61	24.01
	4H	22.78	23.85	23.21	24.27	24.70	22.78	23.85	23.21	24.27	24.70
	6H	23.36	24.30	23.81	24.74	25.19	23.36	24.30	23.81	24.74	25.19
	8H	23.55	24.43	24.01	24.87	25.34	23.55	24.43	24.01	24.87	25.34
	12H	23.68	24.47	24.16	24.95	25.42	23.68	24.47	24.16	24.95	25.42
8H	4H	23.07	23.96	23.53	24.40	24.86	23.07	23.96	23.53	24.40	24.86
	6H	23.77	24.50	24.26	24.99	25.47	23.77	24.50	24.26	24.99	25.47
	8H	24.03	24.69	24.54	25.19	25.68	24.03	24.69	24.54	25.19	25.68
	12H	24.23	24.81	24.73	25.30	25.86	24.23	24.81	24.73	25.30	25.86
12H	4H	23.11	23.90	23.59	24.37	24.84	23.11	23.90	23.59	24.37	24.84
	6H	23.82	24.48	24.33	24.99	25.47	23.82	24.48	24.33	24.99	25.47
	8H	24.14	24.72	24.64	25.21	25.77	24.14	24.72	24.64	25.21	25.77