

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: P866943

Luminaire Tested: PRLX-2002-L-927-15L-L-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866943  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-80)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-927-15L-L-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 1  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

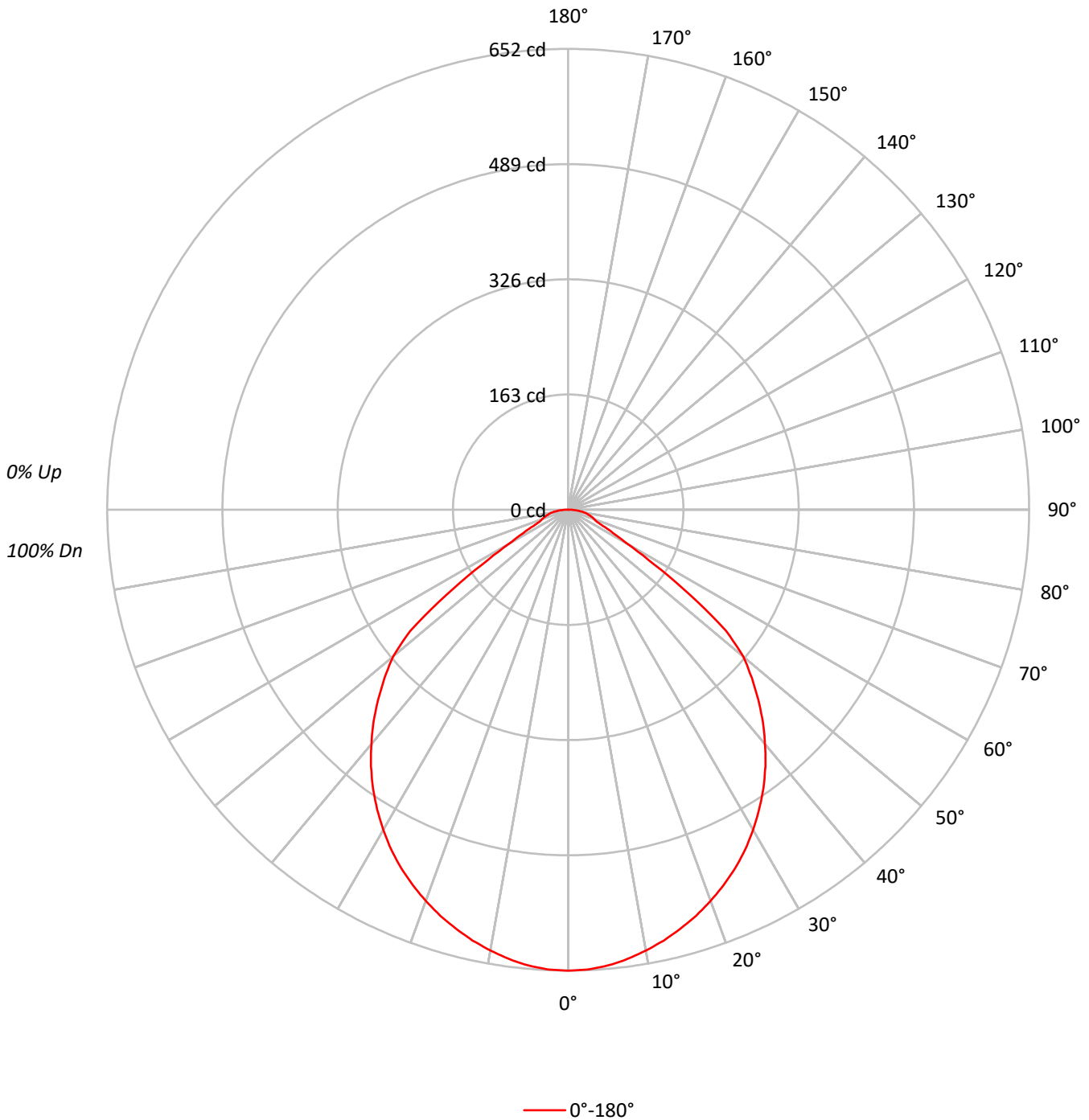
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1377.7 lumens  
Efficiency: N/A  
Efficacy: 84.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.3  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 16.4  
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	111	107	103	100	108	105	101	99	101	98	96		97	95	93		93	91	90	88
2	103	96	90	85	100	94	89	84	90	86	82		87	84	80		84	81	79	77
3	95	86	79	73	92	84	78	73	81	76	71		79	74	70		76	72	69	67
4	88	77	69	64	85	76	69	63	73	67	62		71	66	62		69	65	61	59
5	81	70	62	56	79	69	61	56	67	60	55		65	59	54		63	58	54	52
6	75	63	55	49	74	62	55	49	61	54	49		59	53	48		58	52	48	46
7	70	58	50	44	69	57	49	44	56	49	44		54	48	43		53	47	43	41
8	66	53	45	40	64	52	45	40	51	44	39		50	44	39		49	43	39	37
9	61	49	41	36	60	48	41	36	47	40	36		46	40	36		45	40	35	34
10	58	45	38	33	56	45	38	33	44	37	33		43	37	33		42	36	32	31

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

	0°
0°	3218
5°	3206
10°	3173
15°	3135
20°	3092
25°	3044
30°	2980
35°	2898
40°	2790
45°	2652
50°	2482
55°	1818
60°	950
65°	633
70°	565
75°	602
80°	659
85°	725

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2652 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.3	4.5
10°-20°	173.1	12.6
20°-30°	257.4	18.7
30°-40°	300.5	21.8
40°-50°	292.7	21.2
50°-60°	187.5	13.6
60°-70°	58.4	4.2
70°-80°	33.3	2.4
80°-90°	13.5	1.0
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°	491.8	35.7
0°-40°	792.3	57.5
0°-60°	1272.5	92.4
0°-90°	1377.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1377.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	652	
5°	647	61
15°	614	173
25°	559	257
35°	481	300
45°	380	293
55°	211	188
65°	54	58
75°	32	33
85°	13	13
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	652.2
2.5°	651.2
5°	647.3
7.5°	641.2
10°	633.3
12.5°	624.4
15°	613.7
17.5°	602.2
20°	588.9
22.5°	574.7
25°	559.2
27.5°	542.2
30°	523.0
32.5°	502.7
35°	481.2
37.5°	458.1
40°	433.2
42.5°	407.5
45°	380.1
47.5°	352.1
50°	323.3
52.5°	281.4
55°	211.3
57.5°	143.1
60°	96.3
62.5°	71.8
65°	54.2
67.5°	43.0
70°	39.2
72.5°	35.7
75°	31.6
77.5°	27.5
80°	23.2
82.5°	18.3
85°	12.8
87.5°	6.8
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	11.61	13.07	11.98	13.38	13.69	11.61	13.07	11.98	13.38	13.69
	3H	12.03	13.32	12.41	13.65	14.01	12.03	13.32	12.41	13.65	14.01
	4H	12.31	13.52	12.71	13.87	14.25	12.31	13.52	12.71	13.87	14.25
	6H	12.63	13.74	13.04	14.11	14.50	12.63	13.74	13.04	14.11	14.50
	8H	12.78	13.83	13.21	14.22	14.62	12.78	13.83	13.21	14.22	14.62
	12H	12.90	13.91	13.33	14.29	14.72	12.90	13.91	13.33	14.29	14.72
4H	2H	11.67	12.87	12.07	13.22	13.60	11.67	12.87	12.07	13.22	13.60
	3H	12.28	13.27	12.70	13.67	14.07	12.28	13.27	12.70	13.67	14.07
	4H	12.71	13.59	13.14	14.01	14.45	12.71	13.59	13.14	14.01	14.45
	6H	13.20	13.96	13.66	14.41	14.87	13.20	13.96	13.66	14.41	14.87
	8H	13.42	14.14	13.89	14.58	15.05	13.42	14.14	13.89	14.58	15.05
	12H	13.62	14.26	14.11	14.74	15.21	13.62	14.26	14.11	14.74	15.21
8H	4H	12.85	13.57	13.32	14.01	14.48	12.85	13.57	13.32	14.01	14.48
	6H	13.49	14.08	13.98	14.57	15.05	13.49	14.08	13.98	14.57	15.05
	8H	13.80	14.34	14.32	14.85	15.34	13.80	14.34	14.32	14.85	15.34
	12H	14.11	14.59	14.62	15.09	15.65	14.11	14.59	14.62	15.09	15.65
12H	4H	12.87	13.50	13.35	13.98	14.46	12.87	13.50	13.35	13.98	14.46
	6H	13.53	14.07	14.05	14.58	15.07	13.53	14.07	14.05	14.58	15.07
	8H	13.92	14.40	14.43	14.89	15.46	13.92	14.40	14.43	14.89	15.46