

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: P865599

Luminaire Tested: PRLX-2002-S-927-20L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865599  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-7)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-S-927-20L-G-U-S-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 4  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

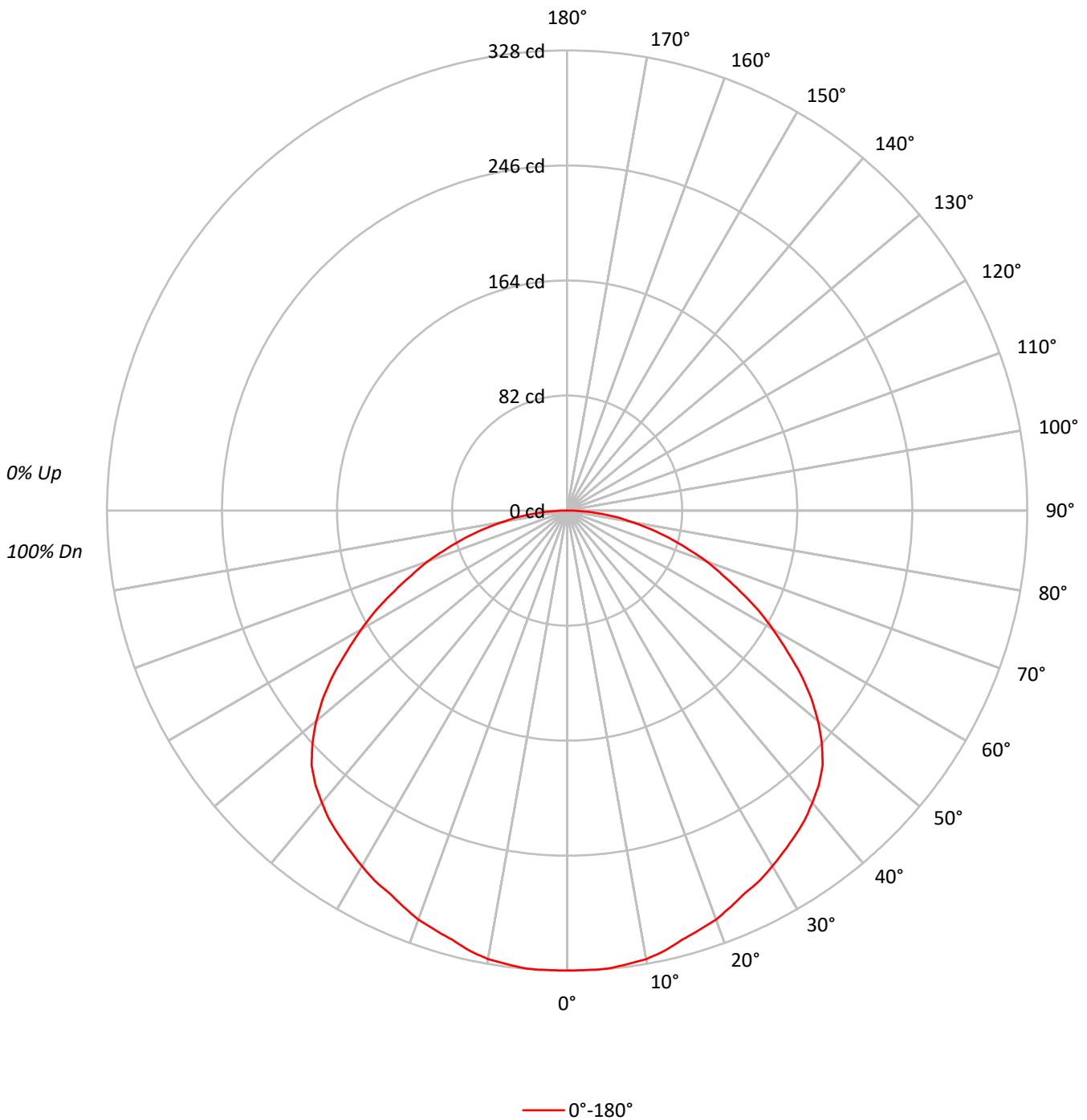
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1055.7 lumens  
Efficiency: N/A  
Efficacy: 48.4 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.49  
Luminous Opening: Circular (Dia: 0.85' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 21.8  
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	108	103	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	89	82	76	95	88	81	76	84	78	74		81	76	72		78	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61		71	65	60		68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52		63	56	51		60	55	50	48
5	75	61	52	45	72	60	51	45	58	50	44		56	49	44		54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39		51	44	38		49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34		46	39	34		44	38	33	31
8	59	45	37	31	57	45	36	30	43	36	30		42	35	30		41	34	30	28
9	55	41	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	29	24		36	29	24		35	29	24	22

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

	0°
0°	6157
5°	6181
10°	6191
15°	6157
20°	6201
25°	6230
30°	6347
35°	6490
40°	6667
45°	6840
50°	6824
55°	6651
60°	6368
65°	6040
70°	5794
75°	5458
80°	5019
85°	4828

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 47.5°  
 Luminance: 6848 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.2	3.0
10°-20°	89.7	8.5
20°-30°	139.2	13.2
30°-40°	177.4	16.8
40°-50°	197.5	18.7
50°-60°	180.9	17.1
60°-70°	135.3	12.8
70°-80°	79.5	7.5
80°-90°	25.0	2.4
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°	260.1	24.6
0°-40°	437.5	41.4
0°-60°	815.9	77.3
0°-90°	1055.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1055.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	328	
5°	328	31
15°	317	90
25°	301	139
35°	283	177
45°	258	197
55°	203	181
65°	136	135
75°	75	80
85°	22	25
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	327.8
2.5°	327.8
5°	327.8
7.5°	326.2
10°	324.6
12.5°	321.4
15°	316.6
17.5°	313.4
20°	310.2
22.5°	305.4
25°	300.6
27.5°	297.4
30°	292.6
32.5°	287.8
35°	283.0
37.5°	278.2
40°	271.9
42.5°	265.5
45°	257.5
47.5°	246.3
50°	233.5
52.5°	219.1
55°	203.1
57.5°	185.5
60°	169.5
62.5°	153.5
65°	135.9
67.5°	119.9
70°	105.5
72.5°	89.6
75°	75.2
77.5°	60.8
80°	46.4
82.5°	35.2
85°	22.4
87.5°	11.2
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	18.82	20.50	19.19	20.82	21.13	18.82	20.50	19.19	20.82	21.13
	3H	20.60	22.13	20.98	22.45	22.81	20.60	22.13	20.98	22.45	22.81
	4H	21.30	22.74	21.70	23.08	23.46	21.30	22.74	21.70	23.08	23.46
	6H	21.84	23.17	22.25	23.53	23.92	21.84	23.17	22.25	23.53	23.92
	8H	22.03	23.31	22.46	23.70	24.09	22.03	23.31	22.46	23.70	24.09
	12H	22.18	23.40	22.61	23.78	24.21	22.18	23.40	22.61	23.78	24.21
4H	2H	19.44	20.88	19.84	21.23	21.60	19.44	20.88	19.84	21.23	21.60
	3H	21.46	22.67	21.87	23.07	23.47	21.46	22.67	21.87	23.07	23.47
	4H	22.30	23.39	22.73	23.80	24.24	22.30	23.39	22.73	23.80	24.24
	6H	22.97	23.93	23.42	24.37	24.82	22.97	23.93	23.42	24.37	24.82
	8H	23.22	24.12	23.68	24.56	25.03	23.22	24.12	23.68	24.56	25.03
	12H	23.43	24.24	23.90	24.71	25.18	23.43	24.24	23.90	24.71	25.18
8H	4H	22.63	23.53	23.09	23.97	24.44	22.63	23.53	23.09	23.97	24.44
	6H	23.43	24.19	23.93	24.67	25.15	23.43	24.19	23.93	24.67	25.15
	8H	23.78	24.45	24.28	24.96	25.44	23.78	24.45	24.28	24.96	25.44
	12H	24.07	24.67	24.58	25.16	25.72	24.07	24.67	24.58	25.16	25.72
12H	4H	22.67	23.49	23.15	23.96	24.43	22.67	23.49	23.15	23.96	24.43
	6H	23.51	24.18	24.01	24.69	25.17	23.51	24.18	24.01	24.69	25.17
	8H	23.92	24.52	24.42	25.01	25.56	23.92	24.52	24.42	25.01	25.56