

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: P865705

Luminaire Tested: PRLX-2002-S-940-10L-L-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865705  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-20)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-S-940-10L-L-U-S-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 2  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

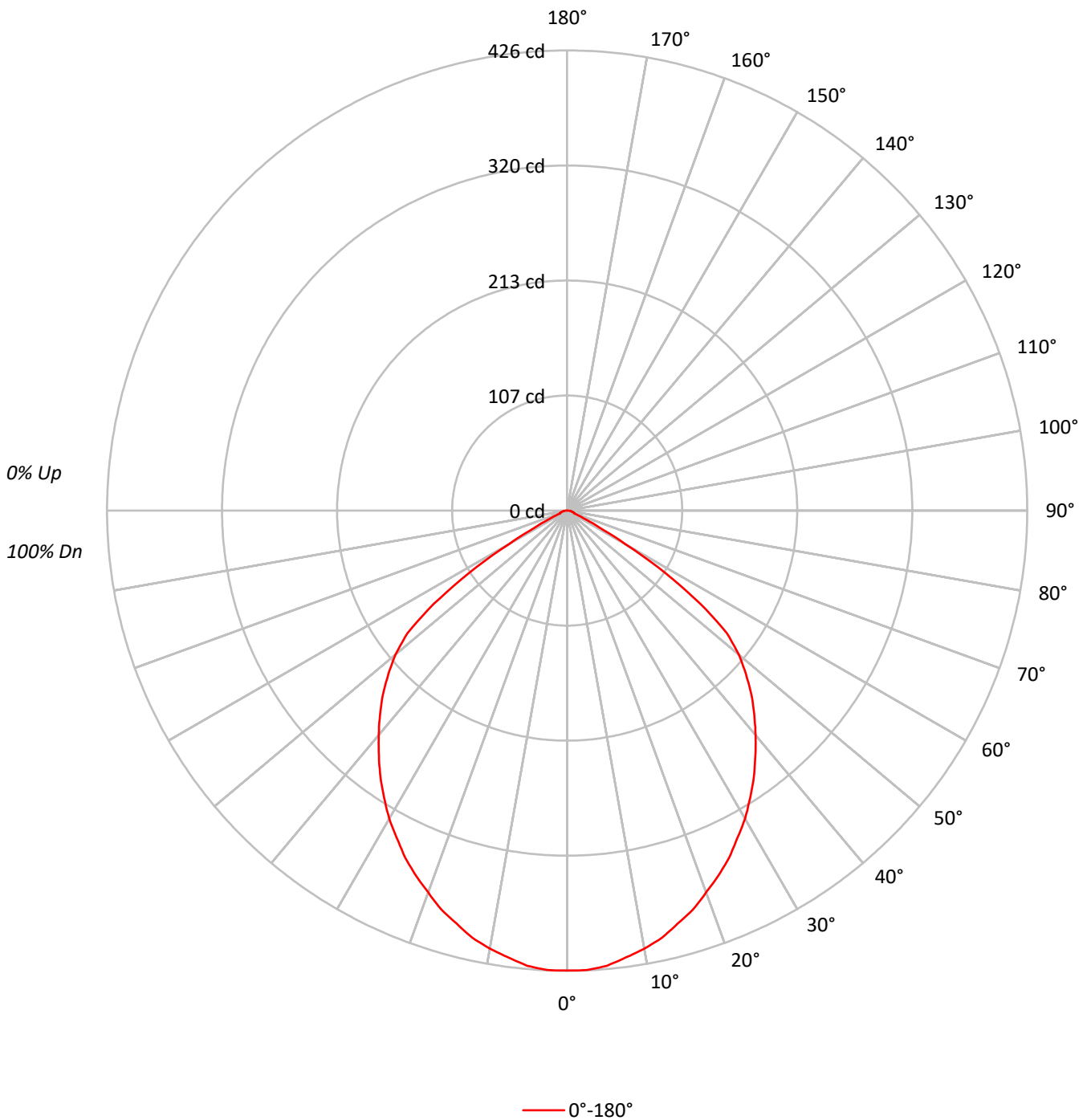
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 848.2 lumens  
Efficiency: N/A  
Efficacy: 80.8 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27  
Luminous Opening: Circular (Dia: 0.85' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 10.5  
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: 0.333 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	108	105	102	109	106	103	100	102	99	97		98	96	94		94	93	91	89
2	104	97	92	87	101	95	90	86	92	88	84		89	85	82		86	83	80	79
3	96	87	81	75	94	86	80	75	83	78	73		80	76	72		78	74	71	69
4	89	79	71	66	87	77	70	65	75	69	64		73	68	63		71	66	63	61
5	82	71	63	58	80	70	63	57	68	62	57		66	61	56		65	60	56	54
6	76	65	57	51	75	64	56	51	62	55	50		60	55	50		59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45		55	49	45		54	49	45	43
8	66	54	46	41	65	53	46	41	52	46	41		51	45	41		50	44	40	39
9	62	50	42	37	61	49	42	37	48	42	37		47	41	37		46	41	37	35
10	58	46	39	34	57	46	39	34	45	38	34		44	38	34		43	37	34	32

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

	0°
0°	7998
5°	7976
10°	7853
15°	7697
20°	7520
25°	7350
30°	7145
35°	6909
40°	6655
45°	6413
50°	6070
55°	4935
60°	2356
65°	747
70°	362
75°	406
80°	400
85°	603

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6413 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	40.0	4.7
10°-20°	111.6	13.2
20°-30°	163.1	19.2
30°-40°	188.3	22.2
40°-50°	185.6	21.9
50°-60°	128.9	15.2
60°-70°	22.4	2.6
70°-80°	5.8	0.7
80°-90°	2.5	0.3
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°	314.7	37.1
0°-40°	502.9	59.3
0°-60°	817.5	96.4
0°-90°	848.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	848.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	426	
5°	423	40
15°	396	112
25°	355	163
35°	301	188
45°	241	186
55°	151	129
65°	17	22
75°	6	6
85°	3	3
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	425.8
2.5°	425.8
5°	423.0
7.5°	417.3
10°	411.7
12.5°	405.2
15°	395.8
17.5°	387.4
20°	376.2
22.5°	365.9
25°	354.6
27.5°	341.5
30°	329.4
32.5°	315.3
35°	301.3
37.5°	286.3
40°	271.4
42.5°	256.4
45°	241.4
47.5°	224.6
50°	207.7
52.5°	186.2
55°	150.7
57.5°	108.5
60°	62.7
62.5°	32.8
65°	16.8
67.5°	7.5
70°	6.6
72.5°	6.6
75°	5.6
77.5°	4.7
80°	3.7
82.5°	3.7
85°	2.8
87.5°	0.9
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	16.01	17.43	16.38	17.74	18.06	16.01	17.43	16.38	17.74	18.06
	3H	15.92	17.17	16.30	17.50	17.86	15.92	17.17	16.30	17.50	17.86
	4H	15.88	17.04	16.28	17.39	17.77	15.88	17.04	16.28	17.39	17.77
	6H	15.83	16.90	16.24	17.27	17.66	15.83	16.90	16.24	17.27	17.66
	8H	15.81	16.82	16.24	17.21	17.61	15.81	16.82	16.24	17.21	17.61
	12H	15.79	16.75	16.22	17.14	17.57	15.79	16.75	16.22	17.14	17.57
4H	2H	15.87	17.03	16.27	17.38	17.76	15.87	17.03	16.27	17.38	17.76
	3H	15.80	16.74	16.21	17.14	17.54	15.80	16.74	16.21	17.14	17.54
	4H	15.76	16.59	16.19	17.01	17.45	15.76	16.59	16.19	17.01	17.45
	6H	15.72	16.44	16.18	16.89	17.35	15.72	16.44	16.18	16.89	17.35
	8H	15.70	16.37	16.17	16.82	17.29	15.70	16.37	16.17	16.82	17.29
	12H	15.69	16.29	16.18	16.77	17.24	15.69	16.29	16.18	16.77	17.24
8H	4H	15.65	16.32	16.11	16.77	17.24	15.65	16.32	16.11	16.77	17.24
	6H	15.61	16.16	16.11	16.66	17.14	15.61	16.16	16.11	16.66	17.14
	8H	15.59	16.10	16.11	16.61	17.10	15.59	16.10	16.11	16.61	17.10
	12H	15.60	16.06	16.12	16.55	17.12	15.60	16.06	16.12	16.55	17.12
12H	4H	15.61	16.20	16.09	16.69	17.16	15.61	16.20	16.09	16.69	17.16
	6H	15.55	16.06	16.07	16.57	17.06	15.55	16.06	16.07	16.57	17.06
	8H	15.56	16.02	16.08	16.51	17.08	15.56	16.02	16.08	16.51	17.08