

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: P865883

Luminaire Tested: PRLX-2004-S-940-20L-L-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865883  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-23)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2004-S-940-20L-L-U-S-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, BELL WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 4  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

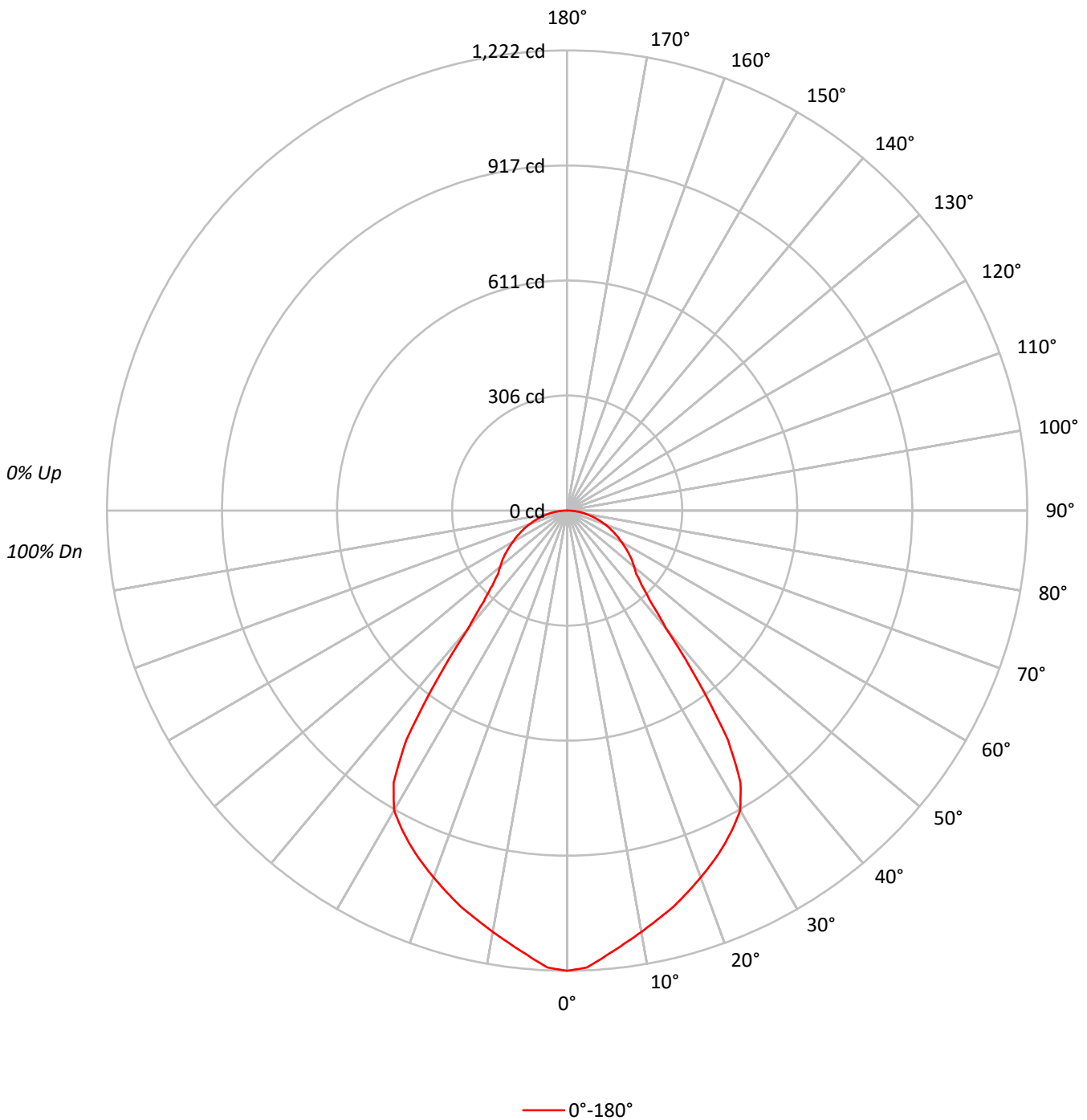
Lumens per Lamp: N/A  
Luminaire Lumens: 1959.3 lumens  
Efficiency: N/A  
Efficacy: 89.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.13 / 1.07  
Luminous Opening: Circular (Dia: 0.92' x H: 0')  
CIE Type: Direct

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: 0.5 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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	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	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68
4	89	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60
5	83	72	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	66	58	52	75	65	57	52	63	57	52	61	56	51	60	55	51	49
7	72	61	53	47	71	60	53	47	58	52	47	57	51	47	56	50	46	45
8	68	56	49	43	67	55	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	52	45	40	50	44	40	49	44	39	49	43	39	38
10	60	49	42	37	59	48	41	37	47	41	37	46	41	36	45	40	36	35

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

	0°
0°	19933
5°	19426
10°	18814
15°	18392
20°	17996
25°	17681
30°	17306
35°	14832
40°	8687
45°	6475
50°	5889
55°	5696
60°	5435
65°	5272
70°	5088
75°	4953
80°	4743
85°	4547

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 6475 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.7	5.7
10°-20°	306.9	15.7
20°-30°	452.4	23.1
30°-40°	438.9	22.4
40°-50°	226.1	11.5
50°-60°	178.9	9.1
60°-70°	135.2	6.9
70°-80°	82.4	4.2
80°-90°	26.7	1.4
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°	871.0	44.5
0°-40°	1309.9	66.9
0°-60°	1714.9	87.5
0°-90°	1959.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1959.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1222	
5°	1186	112
15°	1089	307
25°	982	452
35°	745	439
45°	281	226
55°	200	179
65°	137	135
75°	79	82
85°	24	27
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1222.1
2.5°	1214.6
5°	1186.5
7.5°	1160.3
10°	1136.0
12.5°	1111.7
15°	1089.2
17.5°	1063.0
20°	1036.8
22.5°	1010.6
25°	982.5
27.5°	952.6
30°	918.9
32.5°	857.1
35°	744.9
37.5°	570.8
40°	408.0
42.5°	327.5
45°	280.7
47.5°	248.9
50°	232.1
52.5°	217.1
55°	200.3
57.5°	183.4
60°	166.6
62.5°	151.6
65°	136.6
67.5°	121.6
70°	106.7
72.5°	91.7
75°	78.6
77.5°	63.6
80°	50.5
82.5°	37.4
85°	24.3
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	16.51	17.87	16.87	18.19	18.50	16.51	17.87	16.87	18.19	18.50
	3H	18.33	19.55	18.71	19.88	20.25	18.33	19.55	18.71	19.88	20.25
	4H	19.06	20.21	19.46	20.56	20.94	19.06	20.21	19.46	20.56	20.94
	6H	19.63	20.69	20.05	21.06	21.45	19.63	20.69	20.05	21.06	21.45
	8H	19.84	20.85	20.27	21.24	21.64	19.84	20.85	20.27	21.24	21.64
	12H	20.00	20.96	20.43	21.34	21.77	20.00	20.96	20.43	21.34	21.77
4H	2H	17.10	18.25	17.50	18.60	18.98	17.10	18.25	17.50	18.60	18.98
	3H	19.15	20.10	19.56	20.50	20.90	19.15	20.10	19.56	20.50	20.90
	4H	20.02	20.87	20.45	21.29	21.73	20.02	20.87	20.45	21.29	21.73
	6H	20.73	21.47	21.19	21.92	22.38	20.73	21.47	21.19	21.92	22.38
	8H	20.99	21.69	21.46	22.14	22.60	20.99	21.69	21.46	22.14	22.60
	12H	21.20	21.82	21.68	22.30	22.77	21.20	21.82	21.68	22.30	22.77
8H	4H	20.33	21.02	20.80	21.47	21.94	20.33	21.02	20.80	21.47	21.94
	6H	21.19	21.76	21.69	22.25	22.73	21.19	21.76	21.69	22.25	22.73
	8H	21.55	22.06	22.07	22.57	23.06	21.55	22.06	22.07	22.57	23.06
	12H	21.85	22.30	22.36	22.79	23.36	21.85	22.30	22.36	22.79	23.36
12H	4H	20.36	20.98	20.84	21.46	21.93	20.36	20.98	20.84	21.46	21.93
	6H	21.26	21.77	21.78	22.28	22.77	21.26	21.77	21.78	22.28	22.77
	8H	21.68	22.13	22.20	22.63	23.19	21.68	22.13	22.20	22.63	23.19