

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: P865891

Luminaire Tested: PRLX-2004-S-940-25L-L-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865891  
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: Pentalux  
Catalog Number: PRLX-2004-S-940-25L-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 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

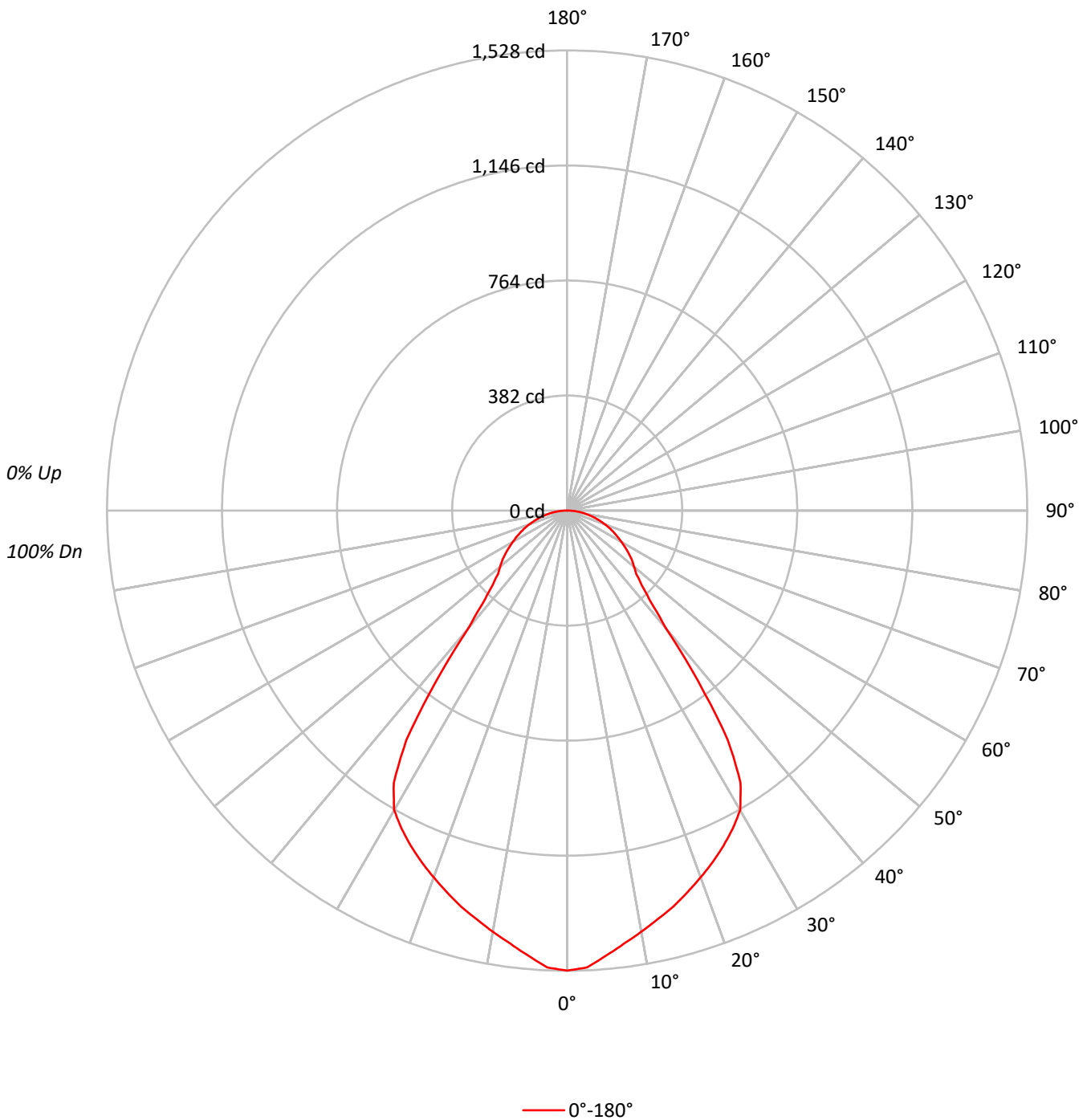
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2449.2 lumens  
Efficiency: N/A  
Efficacy: 84.2 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): 29.1  
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°	24915
5°	24284
10°	23518
15°	22990
20°	22495
25°	22103
30°	21632
35°	18539
40°	10859
45°	8094
50°	7361
55°	7117
60°	6792
65°	6592
70°	6357
75°	6195
80°	5936
85°	5689

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 8094 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.6	5.7
10°-20°	383.6	15.7
20°-30°	565.5	23.1
30°-40°	548.6	22.4
40°-50°	282.7	11.5
50°-60°	223.6	9.1
60°-70°	169.1	6.9
70°-80°	103.0	4.2
80°-90°	33.4	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°	1088.8	44.5
0°-40°	1637.4	66.9
0°-60°	2143.7	87.5
0°-90°	2449.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2449.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1528	
5°	1483	140
15°	1362	384
25°	1228	566
35°	931	549
45°	351	283
55°	250	224
65°	171	169
75°	98	103
85°	30	33
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1527.6
2.5°	1518.3
5°	1483.2
7.5°	1450.4
10°	1420.0
12.5°	1389.6
15°	1361.5
17.5°	1328.8
20°	1296.0
22.5°	1263.3
25°	1228.2
27.5°	1190.7
30°	1148.6
32.5°	1071.4
35°	931.1
37.5°	713.5
40°	510.0
42.5°	409.4
45°	350.9
47.5°	311.1
50°	290.1
52.5°	271.4
55°	250.3
57.5°	229.3
60°	208.2
62.5°	189.5
65°	170.8
67.5°	152.1
70°	133.3
72.5°	114.6
75°	98.3
77.5°	79.5
80°	63.2
82.5°	46.8
85°	30.4
87.5°	14.0
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	17.29	18.65	17.65	18.96	19.28	17.29	18.65	17.65	18.96	19.28
	3H	19.11	20.33	19.49	20.66	21.02	19.11	20.33	19.49	20.66	21.02
	4H	19.84	20.98	20.24	21.33	21.71	19.84	20.98	20.24	21.33	21.71
	6H	20.41	21.47	20.83	21.84	22.23	20.41	21.47	20.83	21.84	22.23
	8H	20.62	21.62	21.05	22.01	22.42	20.62	21.62	21.05	22.01	22.42
	12H	20.77	21.73	21.20	22.12	22.55	20.77	21.73	21.20	22.12	22.55
4H	2H	17.88	19.02	18.28	19.37	19.76	17.88	19.02	18.28	19.37	19.76
	3H	19.92	20.88	20.34	21.28	21.68	19.92	20.88	20.34	21.28	21.68
	4H	20.79	21.65	21.23	22.07	22.51	20.79	21.65	21.23	22.07	22.51
	6H	21.51	22.25	21.97	22.70	23.16	21.51	22.25	21.97	22.70	23.16
	8H	21.77	22.47	22.24	22.91	23.38	21.77	22.47	22.24	22.91	23.38
	12H	21.98	22.59	22.46	23.08	23.55	21.98	22.59	22.46	23.08	23.55
8H	4H	21.11	21.80	21.57	22.25	22.72	21.11	21.80	21.57	22.25	22.72
	6H	21.97	22.54	22.47	23.03	23.51	21.97	22.54	22.47	23.03	23.51
	8H	22.33	22.84	22.84	23.35	23.84	22.33	22.84	22.84	23.35	23.84
	12H	22.63	23.08	23.14	23.57	24.14	22.63	23.08	23.14	23.57	24.14
12H	4H	21.14	21.75	21.62	22.24	22.71	21.14	21.75	21.62	22.24	22.71
	6H	22.03	22.55	22.55	23.06	23.55	22.03	22.55	22.55	23.06	23.55
	8H	22.46	22.91	22.97	23.40	23.97	22.46	22.91	22.97	23.40	23.97