

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: P865729

Luminaire Tested: PRLX-2002-S-940-25L-L-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865729  
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: Pentalux  
Catalog Number: PRLX-2002-S-940-25L-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 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

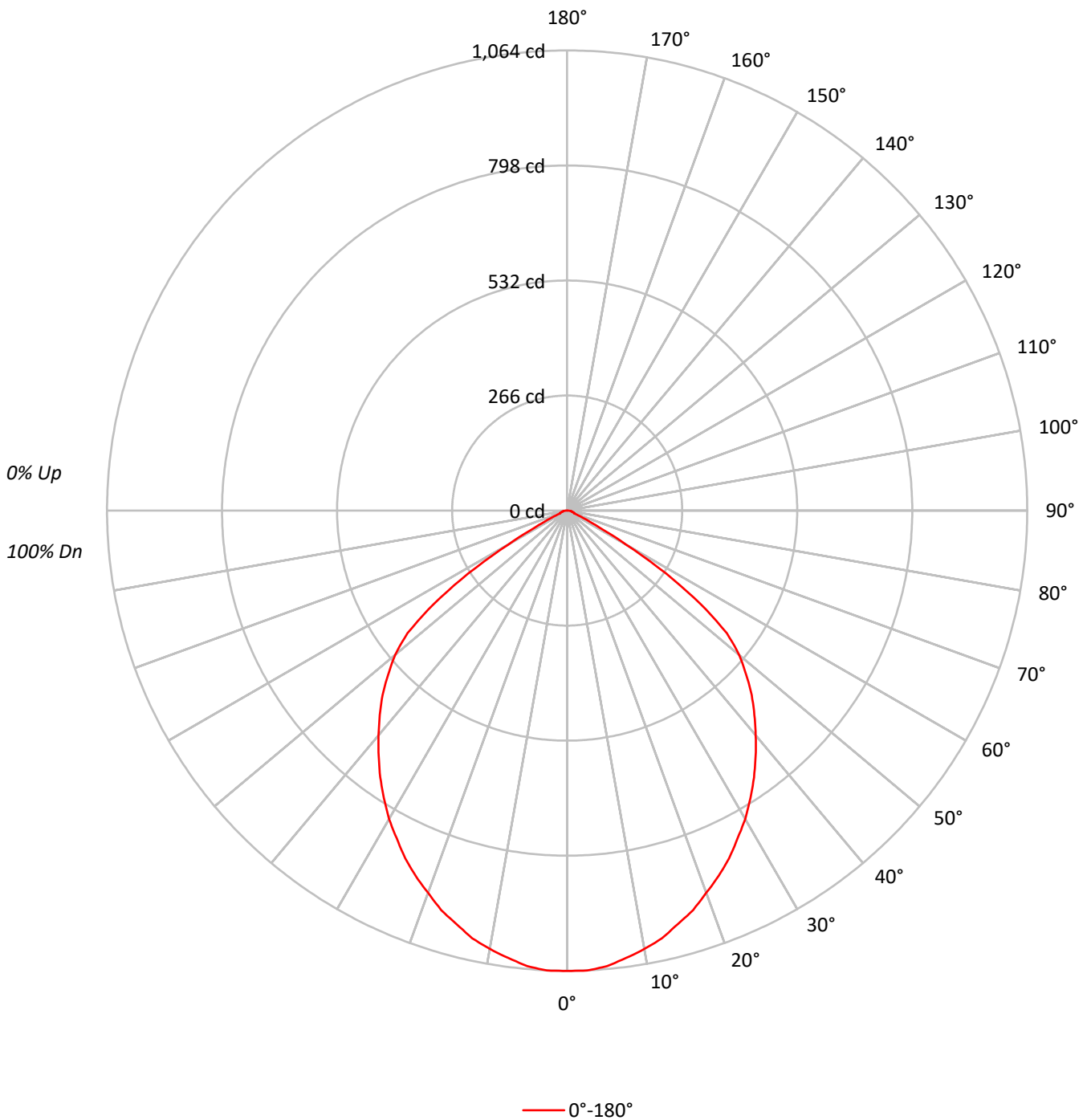
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2120.6 lumens  
Efficiency: N/A  
Efficacy: 72.9 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): 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: 0.333 HR  
Operation Time: 3 HR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P865729

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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	64	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°	19994
5°	19938
10°	19633
15°	19243
20°	18798
25°	18376
30°	17862
35°	17274
40°	16635
45°	16035
50°	15176
55°	12333
60°	5887
65°	1871
70°	901
75°	1016
80°	1017
85°	1509

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16035 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.0	4.7
10°-20°	279.0	13.2
20°-30°	407.7	19.2
30°-40°	470.7	22.2
40°-50°	463.9	21.9
50°-60°	322.4	15.2
60°-70°	56.0	2.6
70°-80°	14.5	0.7
80°-90°	6.4	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°	786.7	37.1
0°-40°	1257.4	59.3
0°-60°	2043.7	96.4
0°-90°	2120.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2120.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1064	
5°	1057	100
15°	990	279
25°	887	408
35°	753	471
45°	604	464
55°	377	322
65°	42	56
75°	14	15
85°	7	6
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1064.4
2.5°	1064.4
5°	1057.4
7.5°	1043.4
10°	1029.3
12.5°	1012.9
15°	989.5
17.5°	968.5
20°	940.4
22.5°	914.7
25°	886.6
27.5°	853.9
30°	823.5
32.5°	788.4
35°	753.3
37.5°	715.8
40°	678.4
42.5°	641.0
45°	603.6
47.5°	561.4
50°	519.3
52.5°	465.5
55°	376.6
57.5°	271.4
60°	156.7
62.5°	81.9
65°	42.1
67.5°	18.7
70°	16.4
72.5°	16.4
75°	14.0
77.5°	11.7
80°	9.4
82.5°	9.4
85°	7.0
87.5°	2.3
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	19.20	20.62	19.56	20.93	21.25	19.20	20.62	19.56	20.93	21.25
	3H	19.11	20.36	19.49	20.69	21.05	19.11	20.36	19.49	20.69	21.05
	4H	19.06	20.23	19.46	20.58	20.96	19.06	20.23	19.46	20.58	20.96
	6H	19.02	20.08	19.43	20.45	20.85	19.02	20.08	19.43	20.45	20.85
	8H	18.99	20.00	19.42	20.40	20.80	18.99	20.00	19.42	20.40	20.80
	12H	18.97	19.94	19.41	20.32	20.75	18.97	19.94	19.41	20.32	20.75
4H	2H	19.06	20.22	19.46	20.57	20.95	19.06	20.22	19.46	20.57	20.95
	3H	18.98	19.92	19.40	20.33	20.73	18.98	19.92	19.40	20.33	20.73
	4H	18.94	19.78	19.38	20.19	20.64	18.94	19.78	19.38	20.19	20.64
	6H	18.91	19.63	19.37	20.07	20.54	18.91	19.63	19.37	20.07	20.54
	8H	18.89	19.56	19.35	20.01	20.48	18.89	19.56	19.35	20.01	20.48
	12H	18.88	19.48	19.36	19.96	20.43	18.88	19.48	19.36	19.96	20.43
8H	4H	18.83	19.51	19.30	19.95	20.42	18.83	19.51	19.30	19.95	20.42
	6H	18.79	19.35	19.29	19.84	20.32	18.79	19.35	19.29	19.84	20.32
	8H	18.78	19.28	19.30	19.80	20.29	18.78	19.28	19.30	19.80	20.29
	12H	18.79	19.25	19.30	19.74	20.31	18.79	19.25	19.30	19.74	20.31
12H	4H	18.79	19.39	19.28	19.87	20.34	18.79	19.39	19.28	19.87	20.34
	6H	18.74	19.24	19.26	19.76	20.25	18.74	19.24	19.26	19.76	20.25
	8H	18.75	19.21	19.26	19.70	20.27	18.75	19.21	19.26	19.70	20.27