

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: P865725

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

Issue Date: 8/20/2024

Test Information

Test Method: LM-79-2019
Report Number: P865725
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-8)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 8/20/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: Pentalux
Catalog Number: PRLX-2002-S-940-25L-G-U-S-X-X-BRSS-X
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.
LIGHT LEVEL 5
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

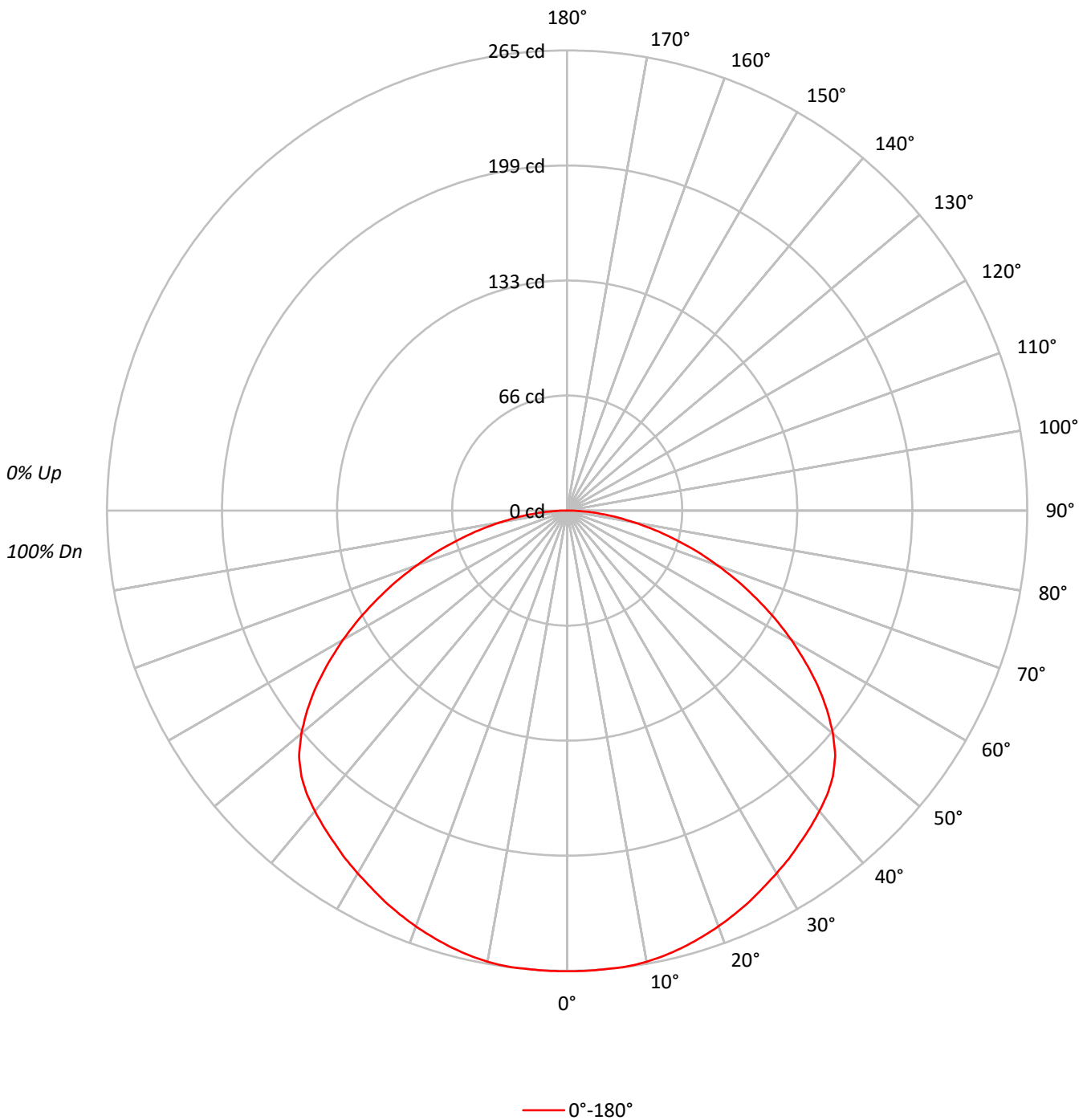
Lumens per Lamp: N/A
Luminaire Lumens: 891.6 lumens
Efficiency: N/A
Efficacy: 30.6 lumens/watt
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.52
Luminous Opening: Circular (Dia: 0.85' x H: 0')
CIE Type: Direct

Input Watts (W): 29.1
Input Voltage (V): 120
Input Current (Ain): 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	87	81	75	84	78	73	80	76	72	77	74	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	35	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	4983
5°	4997
10°	5034
15°	5058
20°	5093
25°	5148
30°	5232
35°	5359
40°	5542
45°	5749
50°	5839
55°	5777
60°	5605
65°	5356
70°	5047
75°	4688
80°	4230
85°	3772

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 50°
 Luminance: 5839 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.3	2.8
10°-20°	73.5	8.2
20°-30°	114.7	12.9
30°-40°	146.7	16.4
40°-50°	166.3	18.7
50°-60°	157.1	17.6
60°-70°	119.4	13.4
70°-80°	68.6	7.7
80°-90°	20.1	2.3
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°	213.5	23.9
0°-40°	360.1	40.4
0°-60°	683.6	76.7
0°-90°	891.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	891.6	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	265	
5°	265	25
15°	260	74
25°	248	115
35°	234	147
45°	216	166
55°	176	157
65°	120	119
75°	65	69
85°	18	20
90°	0	

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CANDELA DISTRIBUTION (FULL):

	0°
0°	265.3
2.5°	265.3
5°	265.0
7.5°	264.8
10°	263.9
12.5°	262.2
15°	260.1
17.5°	257.6
20°	254.8
22.5°	251.7
25°	248.4
27.5°	244.7
30°	241.2
32.5°	237.7
35°	233.7
37.5°	230.0
40°	226.0
42.5°	221.8
45°	216.4
47.5°	209.4
50°	199.8
52.5°	188.6
55°	176.4
57.5°	162.8
60°	149.2
62.5°	135.0
65°	120.5
67.5°	106.4
70°	91.9
72.5°	78.4
75°	64.6
77.5°	51.7
80°	39.1
82.5°	27.8
85°	17.5
87.5°	9.1
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	18.49	20.18	18.85	20.49	20.81	18.49	20.18	18.85	20.49	20.81
	3H	20.28	21.82	20.66	22.14	22.50	20.28	21.82	20.66	22.14	22.50
	4H	20.95	22.40	21.35	22.75	23.12	20.95	22.40	21.35	22.75	23.12
	6H	21.46	22.80	21.87	23.17	23.56	21.46	22.80	21.87	23.17	23.56
	8H	21.62	22.91	22.04	23.30	23.69	21.62	22.91	22.04	23.30	23.69
	12H	21.74	22.97	22.17	23.36	23.78	21.74	22.97	22.17	23.36	23.78
4H	2H	19.12	20.57	19.52	20.92	21.30	19.12	20.57	19.52	20.92	21.30
	3H	21.14	22.36	21.55	22.76	23.16	21.14	22.36	21.55	22.76	23.16
	4H	21.94	23.05	22.37	23.46	23.90	21.94	23.05	22.37	23.46	23.90
	6H	22.58	23.55	23.03	23.99	24.44	22.58	23.55	23.03	23.99	24.44
	8H	22.79	23.70	23.25	24.14	24.61	22.79	23.70	23.25	24.14	24.61
	12H	22.96	23.78	23.44	24.25	24.72	22.96	23.78	23.44	24.25	24.72
8H	4H	22.27	23.17	22.73	23.62	24.08	22.27	23.17	22.73	23.62	24.08
	6H	23.02	23.78	23.51	24.27	24.74	23.02	23.78	23.51	24.27	24.74
	8H	23.31	24.00	23.82	24.50	24.98	23.31	24.00	23.82	24.50	24.98
	12H	23.56	24.16	24.06	24.65	25.21	23.56	24.16	24.06	24.65	25.21
12H	4H	22.31	23.12	22.78	23.60	24.07	22.31	23.12	22.78	23.60	24.07
	6H	23.08	23.77	23.59	24.27	24.75	23.08	23.77	23.59	24.27	24.75
	8H	23.44	24.04	23.94	24.53	25.09	23.44	24.04	23.94	24.53	25.09