

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: P866857

Luminaire Tested: PRLX-2001-L-940-100L-G-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866857  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-65)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2001-L-940-100L-G-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,  
TAPERED DRUM WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 6  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

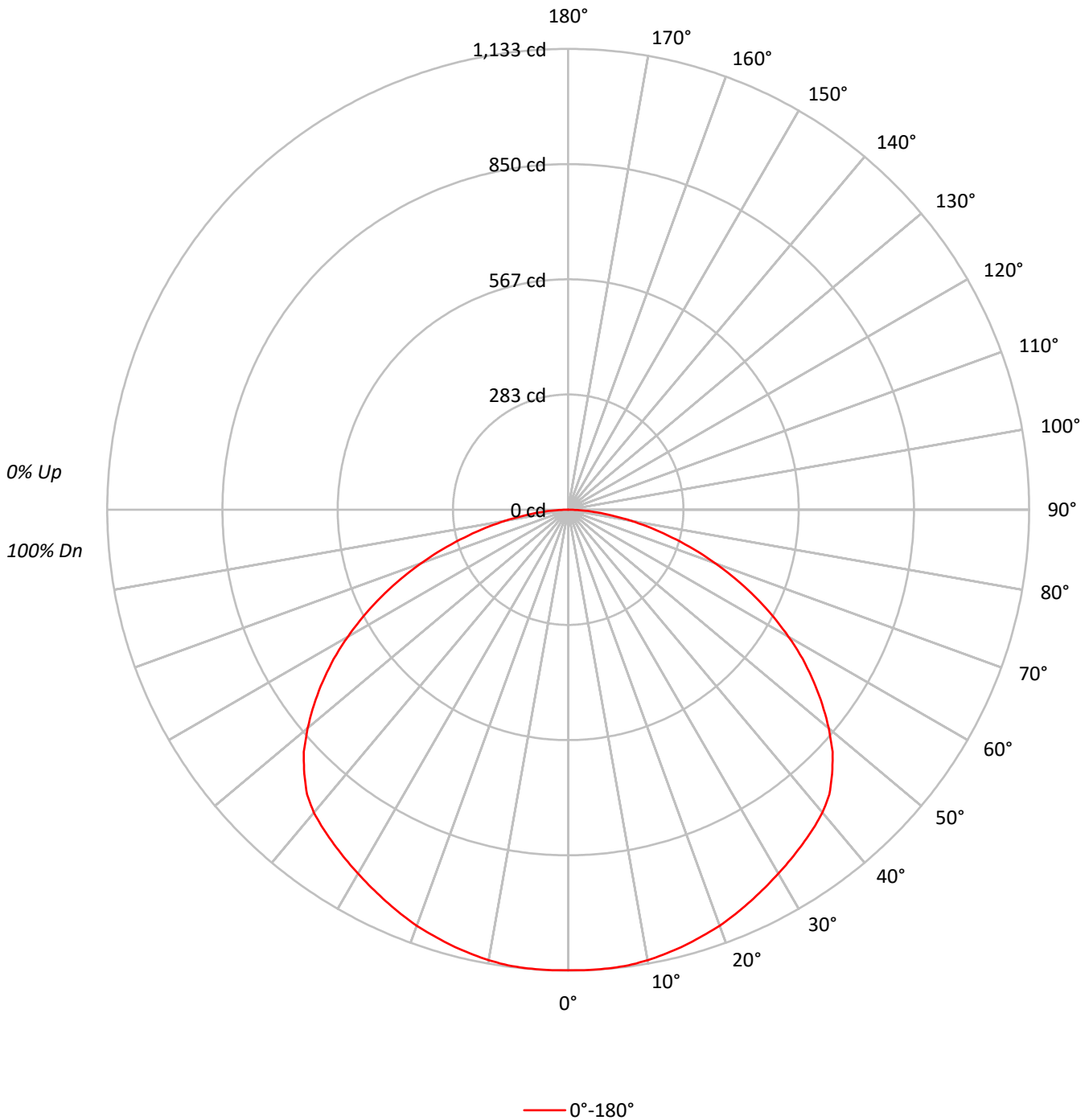
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3762.4 lumens  
Efficiency: N/A  
Efficacy: 47.4 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.51  
Luminous Opening: Circular (Dia: 1.58' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 79.4  
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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	82	76	95	88	81	76	84	79	74	81	76	72	78	74	70	68
3	89	78	70	63	87	77	69	62	74	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	38	50	43	38	49	43	38	36
7	63	50	40	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	53	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	34	28	24	22

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

	0°
0°	6189
5°	6213
10°	6243
15°	6276
20°	6332
25°	6403
30°	6519
35°	6700
40°	6939
45°	7094
50°	7108
55°	7020
60°	6843
65°	6560
70°	6131
75°	5572
80°	4943
85°	4021

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 47.5°  
 Luminance: 7131 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.9	2.9
10°-20°	313.5	8.3
20°-30°	490.5	13.0
30°-40°	629.7	16.7
40°-50°	705.8	18.8
50°-60°	657.3	17.5
60°-70°	501.0	13.3
70°-80°	281.4	7.5
80°-90°	75.4	2.0
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°	911.8	24.2
0°-40°	1541.5	41.0
0°-60°	2904.6	77.2
0°-90°	3762.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3762.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1132	
5°	1132	108
15°	1109	314
25°	1062	490
35°	1004	630
45°	918	706
55°	736	657
65°	507	501
75°	264	281
85°	64	75
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1132.1
2.5°	1133.0
5°	1132.1
7.5°	1130.2
10°	1124.7
12.5°	1117.2
15°	1108.9
17.5°	1098.7
20°	1088.4
22.5°	1075.4
25°	1061.5
27.5°	1047.6
30°	1032.7
32.5°	1018.8
35°	1003.9
37.5°	989.1
40°	972.3
42.5°	950.1
45°	917.6
47.5°	881.3
50°	835.8
52.5°	787.5
55°	736.5
57.5°	683.5
60°	625.9
62.5°	567.4
65°	507.1
67.5°	445.8
70°	383.6
72.5°	324.1
75°	263.8
77.5°	209.0
80°	157.0
82.5°	106.8
85°	64.1
87.5°	27.9
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	19.17	20.86	19.54	21.18	21.49	19.17	20.86	19.54	21.18	21.49
	3H	20.96	22.49	21.34	22.81	23.17	20.96	22.49	21.34	22.81	23.17
	4H	21.60	23.05	22.00	23.39	23.77	21.60	23.05	22.00	23.39	23.77
	6H	22.07	23.41	22.48	23.77	24.16	22.07	23.41	22.48	23.77	24.16
	8H	22.21	23.49	22.64	23.88	24.28	22.21	23.49	22.64	23.88	24.28
	12H	22.31	23.53	22.74	23.91	24.34	22.31	23.53	22.74	23.91	24.34
4H	2H	19.82	21.26	20.21	21.61	21.98	19.82	21.26	20.21	21.61	21.98
	3H	21.81	23.03	22.22	23.42	23.82	21.81	23.03	22.22	23.42	23.82
	4H	22.58	23.68	23.01	24.09	24.53	22.58	23.68	23.01	24.09	24.53
	6H	23.18	24.14	23.63	24.58	25.03	23.18	24.14	23.63	24.58	25.03
	8H	23.36	24.26	23.82	24.70	25.17	23.36	24.26	23.82	24.70	25.17
	12H	23.50	24.31	23.98	24.78	25.25	23.50	24.31	23.98	24.78	25.25
8H	4H	22.89	23.79	23.35	24.23	24.69	22.89	23.79	23.35	24.23	24.69
	6H	23.60	24.35	24.09	24.83	25.31	23.60	24.35	24.09	24.83	25.31
	8H	23.85	24.53	24.36	25.03	25.51	23.85	24.53	24.36	25.03	25.51
	12H	24.05	24.65	24.56	25.14	25.70	24.05	24.65	24.56	25.14	25.70
12H	4H	22.92	23.73	23.40	24.21	24.68	22.92	23.73	23.40	24.21	24.68
	6H	23.65	24.32	24.16	24.83	25.31	23.65	24.32	24.16	24.83	25.31
	8H	23.96	24.56	24.47	25.05	25.60	23.96	24.56	24.47	25.05	25.60