

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: P866973

Luminaire Tested: PRLX-2002-L-927-83L-L-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866973  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-81)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-927-83L-L-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

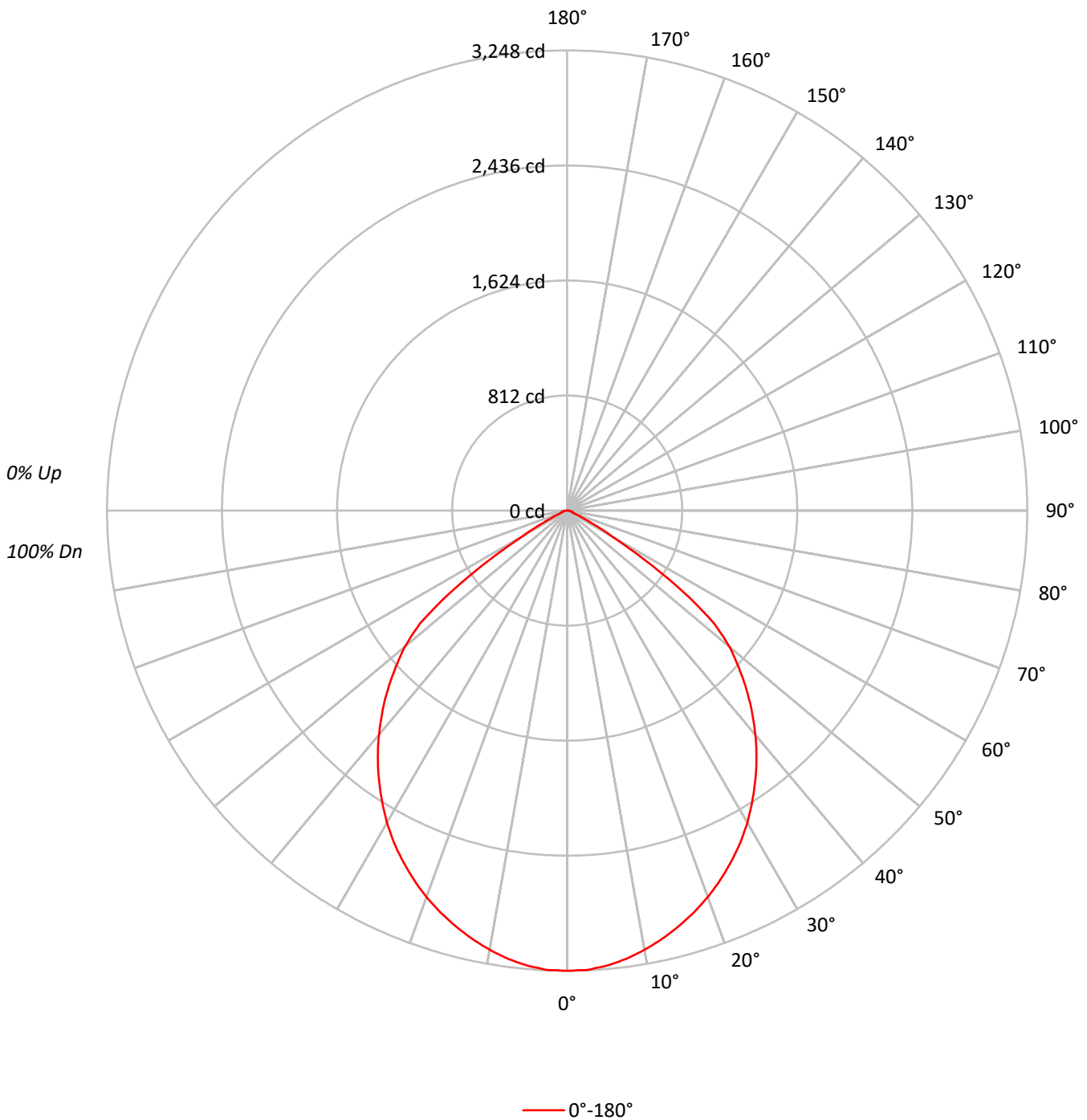
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6306.7 lumens  
Efficiency: N/A  
Efficacy: 97.8 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 64.5  
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	112	108	105	102	109	106	103	100	102	99	97		98	96	94		94	93	92	90
2	104	97	92	88	101	96	91	87	92	88	85		89	86	83		86	83	81	79
3	96	88	81	76	94	86	80	75	83	78	74		81	77	73		78	75	72	70
4	89	79	72	66	87	78	71	66	76	70	65		74	68	64		72	67	64	62
5	83	72	64	59	81	71	64	58	69	63	58		67	62	57		65	60	57	55
6	77	65	58	52	75	65	57	52	63	56	51		61	56	51		60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46		56	50	46		55	50	46	44
8	67	55	47	42	66	54	47	42	53	46	42		52	46	42		51	45	41	40
9	63	51	43	38	62	50	43	38	49	43	38		48	42	38		47	42	38	36
10	59	47	40	35	58	46	39	35	46	39	35		45	39	35		44	38	34	33

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

	0°
0°	16027
5°	15968
10°	15768
15°	15520
20°	15242
25°	14901
30°	14490
35°	13955
40°	13318
45°	12507
50°	11492
55°	8643
60°	3639
65°	1341
70°	617
75°	675
80°	779
85°	906

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 12507 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	305.3	4.8
10°-20°	856.5	13.6
20°-30°	1259.9	20.0
30°-40°	1447.0	22.9
40°-50°	1378.4	21.9
50°-60°	863.2	13.7
60°-70°	142.9	2.3
70°-80°	37.3	0.6
80°-90°	16.2	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°	2421.6	38.4
0°-40°	3868.6	61.3
0°-60°	6110.2	96.9
0°-90°	6306.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6306.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	3248	
5°	3224	305
15°	3038	856
25°	2737	1260
35°	2317	1447
45°	1792	1378
55°	1005	863
65°	115	143
75°	35	37
85°	16	16
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	3248.3
2.5°	3244.9
5°	3224.2
7.5°	3191.5
10°	3147.4
12.5°	3097.3
15°	3038.5
17.5°	2974.4
20°	2902.9
22.5°	2823.4
25°	2737.2
27.5°	2645.7
30°	2543.4
32.5°	2432.5
35°	2317.0
37.5°	2195.4
40°	2067.8
42.5°	1932.1
45°	1792.5
47.5°	1643.5
50°	1497.2
52.5°	1307.5
55°	1004.8
57.5°	649.4
60°	368.8
62.5°	209.1
65°	114.9
67.5°	54.1
70°	42.8
72.5°	39.4
75°	35.4
77.5°	31.4
80°	27.4
82.5°	22.0
85°	16.0
87.5°	8.0
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	16.86	18.25	17.22	18.56	18.88	16.86	18.25	17.22	18.56	18.88
	3H	16.77	18.00	17.15	18.33	18.69	16.77	18.00	17.15	18.33	18.69
	4H	16.73	17.87	17.13	18.22	18.60	16.73	17.87	17.13	18.22	18.60
	6H	16.69	17.73	17.10	18.10	18.50	16.69	17.73	17.10	18.10	18.50
	8H	16.67	17.66	17.10	18.05	18.45	16.67	17.66	17.10	18.05	18.45
	12H	16.65	17.59	17.08	17.97	18.40	16.65	17.59	17.08	17.97	18.40
4H	2H	16.73	17.86	17.13	18.21	18.60	16.73	17.86	17.13	18.21	18.60
	3H	16.66	17.58	17.07	17.98	18.38	16.66	17.58	17.07	17.98	18.38
	4H	16.62	17.43	17.05	17.85	18.29	16.62	17.43	17.05	17.85	18.29
	6H	16.60	17.30	17.06	17.75	18.21	16.60	17.30	17.06	17.75	18.21
	8H	16.58	17.23	17.05	17.68	18.15	16.58	17.23	17.05	17.68	18.15
	12H	16.56	17.15	17.05	17.63	18.10	16.56	17.15	17.05	17.63	18.10
8H	4H	16.51	17.17	16.98	17.61	18.08	16.51	17.17	16.98	17.61	18.08
	6H	16.49	17.03	16.99	17.53	18.01	16.49	17.03	16.99	17.53	18.01
	8H	16.47	16.97	17.00	17.48	17.97	16.47	16.97	17.00	17.48	17.97
	12H	16.48	16.92	17.00	17.42	17.99	16.48	16.92	17.00	17.42	17.99
12H	4H	16.47	17.05	16.95	17.53	18.01	16.47	17.05	16.95	17.53	18.01
	6H	16.44	16.93	16.96	17.44	17.93	16.44	16.93	16.96	17.44	17.93
	8H	16.45	16.89	16.96	17.38	17.95	16.45	16.89	16.96	17.38	17.95