

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: P867104

Luminaire Tested: PRLX-2002-L-935-83L-G-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867104  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-71)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-935-83L-G-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

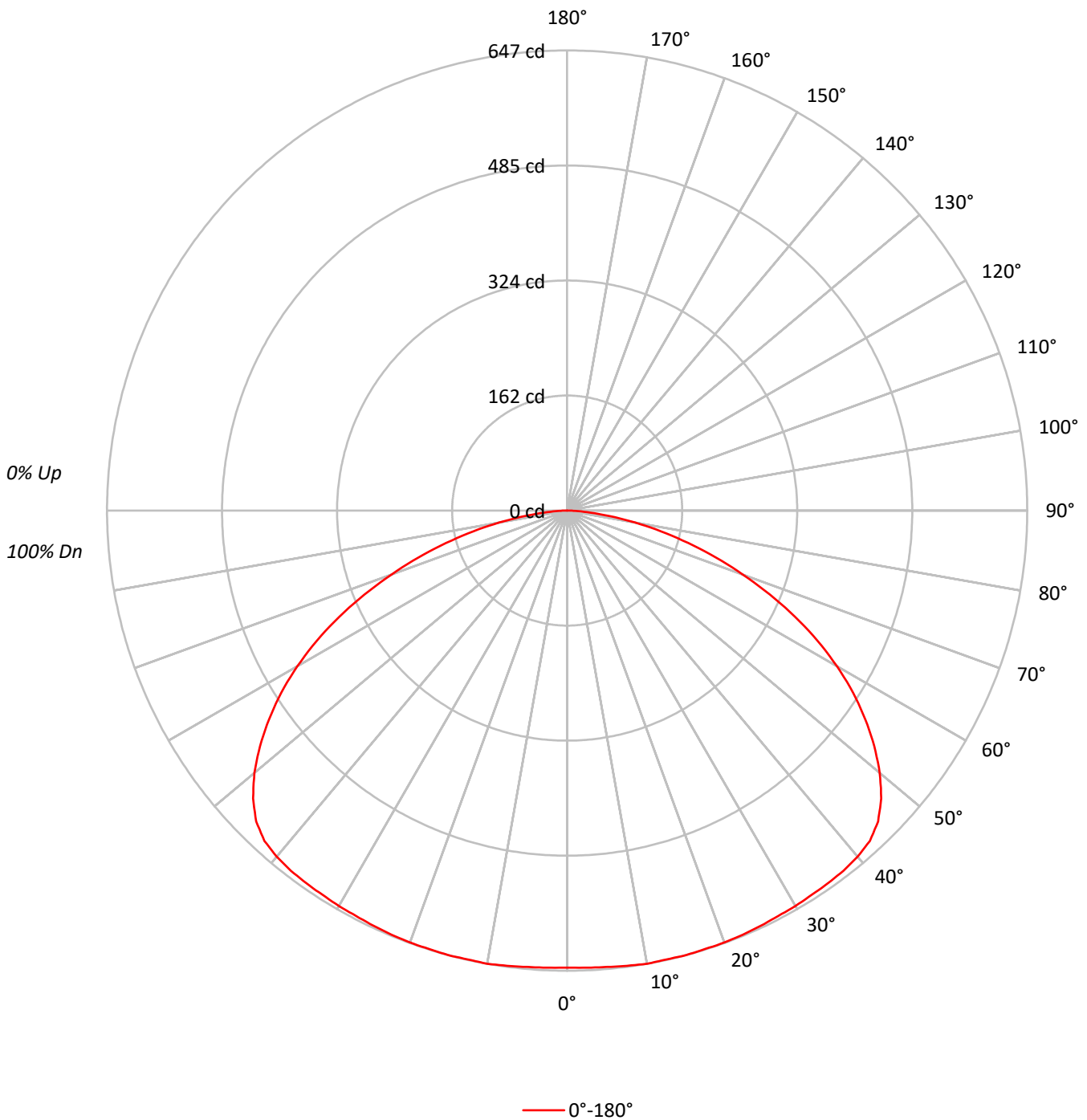
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2452.6 lumens  
Efficiency: N/A  
Efficacy: 38.0 lumens/watt  
Spacing Criteria (0/90/45): 1.52 / 1.52 / 1.65  
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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CATALOG NUMBER: PRLX-2002-L-935-83L-G-X-X-BLAK-X

### 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	71		77	73	70	68
3	89	77	69	62	86	76	68	61	73	66	60		70	64	59		67	62	58	56
4	81	68	59	52	78	67	58	51	64	56	51		62	55	50		59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43		55	48	43		53	47	42	40
6	68	54	44	38	66	53	44	37	51	43	37		49	42	37		48	41	36	34
7	63	48	39	33	61	48	39	33	46	38	32		44	37	32		43	37	32	30
8	58	44	35	29	56	43	35	29	42	34	29		41	34	28		39	33	28	26
9	54	40	32	26	53	39	31	26	38	31	26		37	30	25		36	30	25	23
10	50	37	29	23	49	36	28	23	35	28	23		34	28	23		33	27	23	21

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

	0°
0°	3170
5°	3190
10°	3241
15°	3305
20°	3393
25°	3506
30°	3657
35°	3852
40°	4091
45°	4313
50°	4405
55°	4403
60°	4322
65°	4130
70°	3792
75°	3365
80°	2750
85°	1840

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 4412 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.6	2.5
10°-20°	183.3	7.5
20°-30°	298.1	12.2
30°-40°	401.5	16.4
40°-50°	474.0	19.3
50°-60°	456.2	18.6
60°-70°	348.9	14.2
70°-80°	187.4	7.6
80°-90°	41.7	1.7
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°	542.9	22.1
0°-40°	944.4	38.5
0°-60°	1874.7	76.4
0°-90°	2452.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2452.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	643	
5°	644	62
15°	647	183
25°	644	298
35°	640	401
45°	618	474
55°	512	456
65°	354	349
75°	176	187
85°	32	42
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	642.6
2.5°	643.3
5°	644.1
7.5°	645.5
10°	647.0
12.5°	646.3
15°	647.0
17.5°	646.3
20°	646.3
22.5°	645.5
25°	644.1
27.5°	642.6
30°	641.9
32.5°	640.4
35°	639.6
37.5°	638.2
40°	635.2
42.5°	630.0
45°	618.2
47.5°	599.0
50°	573.9
52.5°	544.4
55°	511.9
57.5°	477.1
60°	438.0
62.5°	397.4
65°	353.8
67.5°	308.7
70°	262.9
72.5°	219.4
75°	176.5
77.5°	135.2
80°	96.8
82.5°	61.3
85°	32.5
87.5°	11.1
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	17.77	19.49	18.14	19.80	20.11	17.77	19.49	18.14	19.80	20.11
	3H	19.52	21.08	19.90	21.40	21.76	19.52	21.08	19.90	21.40	21.76
	4H	20.13	21.60	20.53	21.94	22.32	20.13	21.60	20.53	21.94	22.32
	6H	20.53	21.89	20.94	22.25	22.64	20.53	21.89	20.94	22.25	22.64
	8H	20.63	21.93	21.05	22.32	22.71	20.63	21.93	21.05	22.32	22.71
	12H	20.68	21.93	21.11	22.31	22.74	20.68	21.93	21.11	22.31	22.74
4H	2H	18.42	19.89	18.82	20.23	20.61	18.42	19.89	18.82	20.23	20.61
	3H	20.37	21.61	20.78	22.00	22.40	20.37	21.61	20.78	22.00	22.40
	4H	21.10	22.21	21.53	22.62	23.06	21.10	22.21	21.53	22.62	23.06
	6H	21.60	22.58	22.06	23.02	23.47	21.60	22.58	22.06	23.02	23.47
	8H	21.74	22.65	22.20	23.09	23.56	21.74	22.65	22.20	23.09	23.56
	12H	21.82	22.64	22.30	23.12	23.58	21.82	22.64	22.30	23.12	23.58
8H	4H	21.38	22.29	21.84	22.74	23.20	21.38	22.29	21.84	22.74	23.20
	6H	21.98	22.74	22.47	23.23	23.70	21.98	22.74	22.47	23.23	23.70
	8H	22.17	22.85	22.67	23.35	23.84	22.17	22.85	22.67	23.35	23.84
	12H	22.29	22.90	22.80	23.39	23.94	22.29	22.90	22.80	23.39	23.94
12H	4H	21.41	22.23	21.89	22.70	23.17	21.41	22.23	21.89	22.70	23.17
	6H	22.02	22.70	22.52	23.21	23.69	22.02	22.70	22.52	23.21	23.69
	8H	22.25	22.85	22.76	23.34	23.90	22.25	22.85	22.76	23.34	23.90