

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: P866984

Luminaire Tested: PRLX-2002-L-930-100L-G-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866984  
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-930-100L-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 6  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

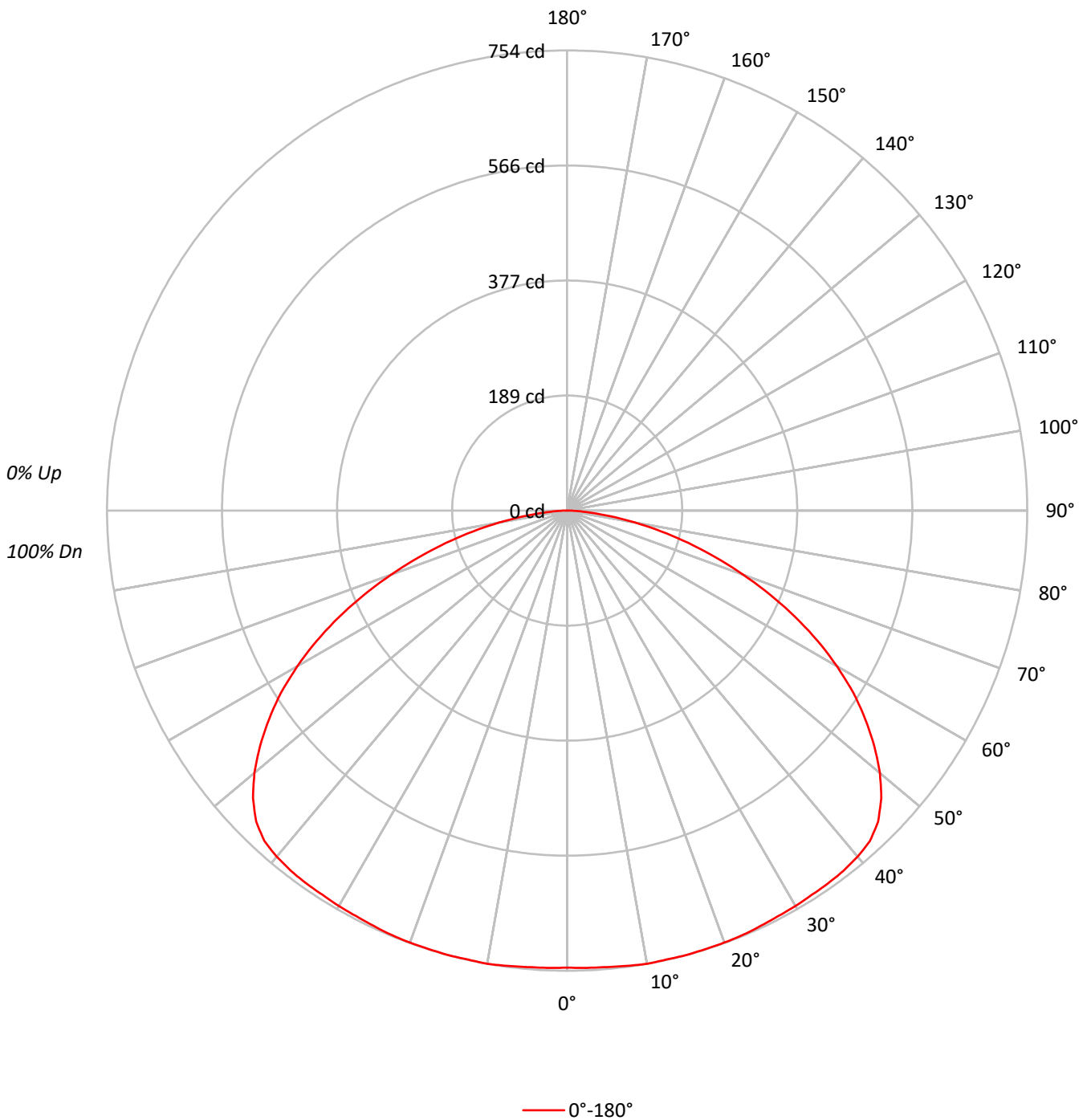
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2858.9 lumens  
Efficiency: N/A  
Efficacy: 36.0 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): 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: 0.5 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	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°	3695
5°	3718
10°	3778
15°	3852
20°	3955
25°	4087
30°	4263
35°	4491
40°	4769
45°	5028
50°	5135
55°	5132
60°	5038
65°	4815
70°	4421
75°	3923
80°	3205
85°	2145

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 5142 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.8	2.5
10°-20°	213.6	7.5
20°-30°	347.4	12.2
30°-40°	468.0	16.4
40°-50°	552.6	19.3
50°-60°	531.8	18.6
60°-70°	406.7	14.2
70°-80°	218.4	7.6
80°-90°	48.6	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°	632.8	22.1
0°-40°	1100.8	38.5
0°-60°	2185.2	76.4
0°-90°	2858.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2858.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	749	
5°	751	72
15°	754	214
25°	751	347
35°	746	468
45°	721	553
55°	597	532
65°	412	407
75°	206	218
85°	38	49
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	749.0
2.5°	749.9
5°	750.8
7.5°	752.5
10°	754.2
12.5°	753.3
15°	754.2
17.5°	753.3
20°	753.3
22.5°	752.5
25°	750.8
27.5°	749.0
30°	748.2
32.5°	746.5
35°	745.6
37.5°	743.9
40°	740.4
42.5°	734.4
45°	720.6
47.5°	698.2
50°	669.0
52.5°	634.5
55°	596.6
57.5°	556.2
60°	510.6
62.5°	463.2
65°	412.4
67.5°	359.9
70°	306.5
72.5°	255.7
75°	205.8
77.5°	157.6
80°	112.8
82.5°	71.5
85°	37.9
87.5°	12.9
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	18.30	20.02	18.67	20.33	20.65	18.30	20.02	18.67	20.33	20.65
	3H	20.06	21.61	20.43	21.94	22.30	20.06	21.61	20.43	21.94	22.30
	4H	20.66	22.13	21.06	22.48	22.85	20.66	22.13	21.06	22.48	22.85
	6H	21.06	22.42	21.47	22.78	23.17	21.06	22.42	21.47	22.78	23.17
	8H	21.16	22.46	21.58	22.85	23.25	21.16	22.46	21.58	22.85	23.25
	12H	21.21	22.46	21.64	22.84	23.27	21.21	22.46	21.64	22.84	23.27
4H	2H	18.95	20.42	19.35	20.77	21.14	18.95	20.42	19.35	20.77	21.14
	3H	20.91	22.14	21.32	22.53	22.93	20.91	22.14	21.32	22.53	22.93
	4H	21.63	22.75	22.06	23.16	23.59	21.63	22.75	22.06	23.16	23.59
	6H	22.14	23.11	22.59	23.55	24.00	22.14	23.11	22.59	23.55	24.00
	8H	22.27	23.19	22.73	23.63	24.09	22.27	23.19	22.73	23.63	24.09
	12H	22.35	23.18	22.83	23.65	24.12	22.35	23.18	22.83	23.65	24.12
8H	4H	21.91	22.83	22.37	23.27	23.73	21.91	22.83	22.37	23.27	23.73
	6H	22.52	23.28	23.01	23.76	24.23	22.52	23.28	23.01	23.76	24.23
	8H	22.70	23.38	23.21	23.89	24.37	22.70	23.38	23.21	23.89	24.37
	12H	22.83	23.43	23.33	23.92	24.48	22.83	23.43	23.33	23.92	24.48
12H	4H	21.94	22.76	22.42	23.24	23.70	21.94	22.76	22.42	23.24	23.70
	6H	22.55	23.23	23.06	23.74	24.22	22.55	23.23	23.06	23.74	24.22
	8H	22.78	23.39	23.29	23.88	24.43	22.78	23.39	23.29	23.88	24.43