

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: P866372

Luminaire Tested: PRLX-2002-M-940-45L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866372  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-41)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-M-940-45L-G-U-S-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

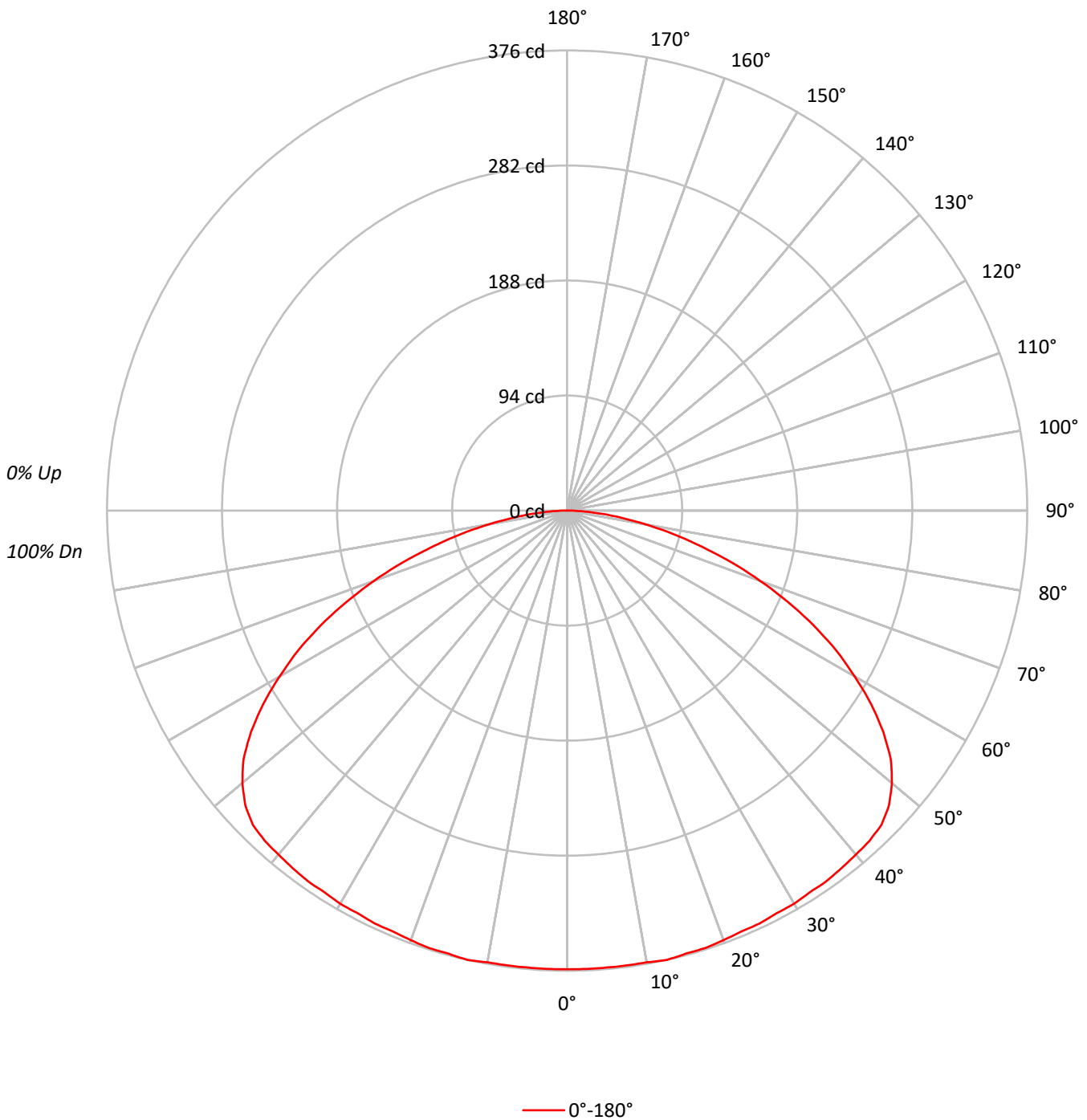
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1476.5 lumens  
Efficiency: N/A  
Efficacy: 38.1 lumens/watt  
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.67  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.8  
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: 0.5 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	98	94	105	100	96	92	96	93	90		92	89	87		89	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72		80	75	71		76	72	69	67
3	88	77	68	61	85	75	67	60	72	65	59		69	63	58		67	61	57	55
4	80	67	58	51	78	66	57	50	63	56	49		61	54	49		59	53	48	46
5	73	59	50	43	71	58	49	42	56	48	42		54	47	41		52	46	41	39
6	67	53	43	37	65	52	43	37	50	42	36		48	41	36		47	40	35	33
7	62	48	38	32	60	47	38	32	45	37	32		44	37	31		42	36	31	29
8	57	43	34	28	56	42	34	28	41	33	28		40	33	28		39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25		36	30	25		35	29	24	23
10	50	36	28	22	49	36	28	22	35	27	22		34	27	22		33	26	22	20

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

	0°
0°	2982
5°	2993
10°	3028
15°	3087
20°	3162
25°	3267
30°	3407
35°	3590
40°	3811
45°	4086
50°	4287
55°	4373
60°	4318
65°	4185
70°	3908
75°	3495
80°	2960
85°	2355

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 55°  
 Luminance: 4373 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.8	2.4
10°-20°	106.3	7.2
20°-30°	172.1	11.7
30°-40°	231.8	15.7
40°-50°	279.1	18.9
50°-60°	280.2	19.0
60°-70°	219.0	14.8
70°-80°	121.3	8.2
80°-90°	30.9	2.1
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°	314.1	21.3
0°-40°	546.0	37.0
0°-60°	1105.3	74.9
0°-90°	1476.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1476.5	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	375	
5°	375	36
15°	375	106
25°	372	172
35°	370	232
45°	363	279
55°	315	280
65°	222	219
75°	114	121
85°	26	31
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	374.8
2.5°	374.8
5°	374.8
7.5°	374.8
10°	374.8
12.5°	376.1
15°	374.8
17.5°	374.8
20°	373.5
22.5°	372.2
25°	372.2
27.5°	370.9
30°	370.9
32.5°	369.6
35°	369.6
37.5°	368.3
40°	367.0
42.5°	365.8
45°	363.2
47.5°	356.7
50°	346.4
52.5°	333.4
55°	315.3
57.5°	294.7
60°	271.4
62.5°	248.1
65°	222.3
67.5°	195.2
70°	168.0
72.5°	140.9
75°	113.7
77.5°	89.2
80°	64.6
82.5°	43.9
85°	25.8
87.5°	11.6
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	17.82	19.56	18.19	19.87	20.18	17.82	19.56	18.19	19.87	20.18
	3H	19.65	21.23	20.03	21.56	21.91	19.65	21.23	20.03	21.56	21.91
	4H	20.30	21.78	20.69	22.13	22.50	20.30	21.78	20.69	22.13	22.50
	6H	20.74	22.12	21.15	22.49	22.87	20.74	22.12	21.15	22.49	22.87
	8H	20.87	22.19	21.29	22.58	22.98	20.87	22.19	21.29	22.58	22.98
	12H	20.95	22.22	21.38	22.60	23.03	20.95	22.22	21.38	22.60	23.03
4H	2H	18.49	19.98	18.89	20.33	20.70	18.49	19.98	18.89	20.33	20.70
	3H	20.53	21.79	20.94	22.18	22.58	20.53	21.79	20.94	22.18	22.58
	4H	21.29	22.43	21.72	22.84	23.27	21.29	22.43	21.72	22.84	23.27
	6H	21.85	22.85	22.30	23.29	23.74	21.85	22.85	22.30	23.29	23.74
	8H	22.02	22.96	22.48	23.40	23.86	22.02	22.96	22.48	23.40	23.86
	12H	22.14	22.99	22.62	23.46	23.93	22.14	22.99	22.62	23.46	23.93
8H	4H	21.60	22.53	22.06	22.97	23.44	21.60	22.53	22.06	22.97	23.44
	6H	22.27	23.04	22.76	23.53	24.00	22.27	23.04	22.76	23.53	24.00
	8H	22.50	23.20	23.00	23.70	24.18	22.50	23.20	23.00	23.70	24.18
	12H	22.68	23.30	23.18	23.79	24.34	22.68	23.30	23.18	23.79	24.34
12H	4H	21.63	22.48	22.11	22.95	23.42	21.63	22.48	22.11	22.95	23.42
	6H	22.31	23.01	22.82	23.52	24.00	22.31	23.01	22.82	23.52	24.00
	8H	22.60	23.22	23.10	23.71	24.26	22.60	23.22	23.10	23.71	24.26