

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: P865708

Luminaire Tested: PRLX-2002-S-940-15L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865708  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-S-940-15L-G-U-S-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 3  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

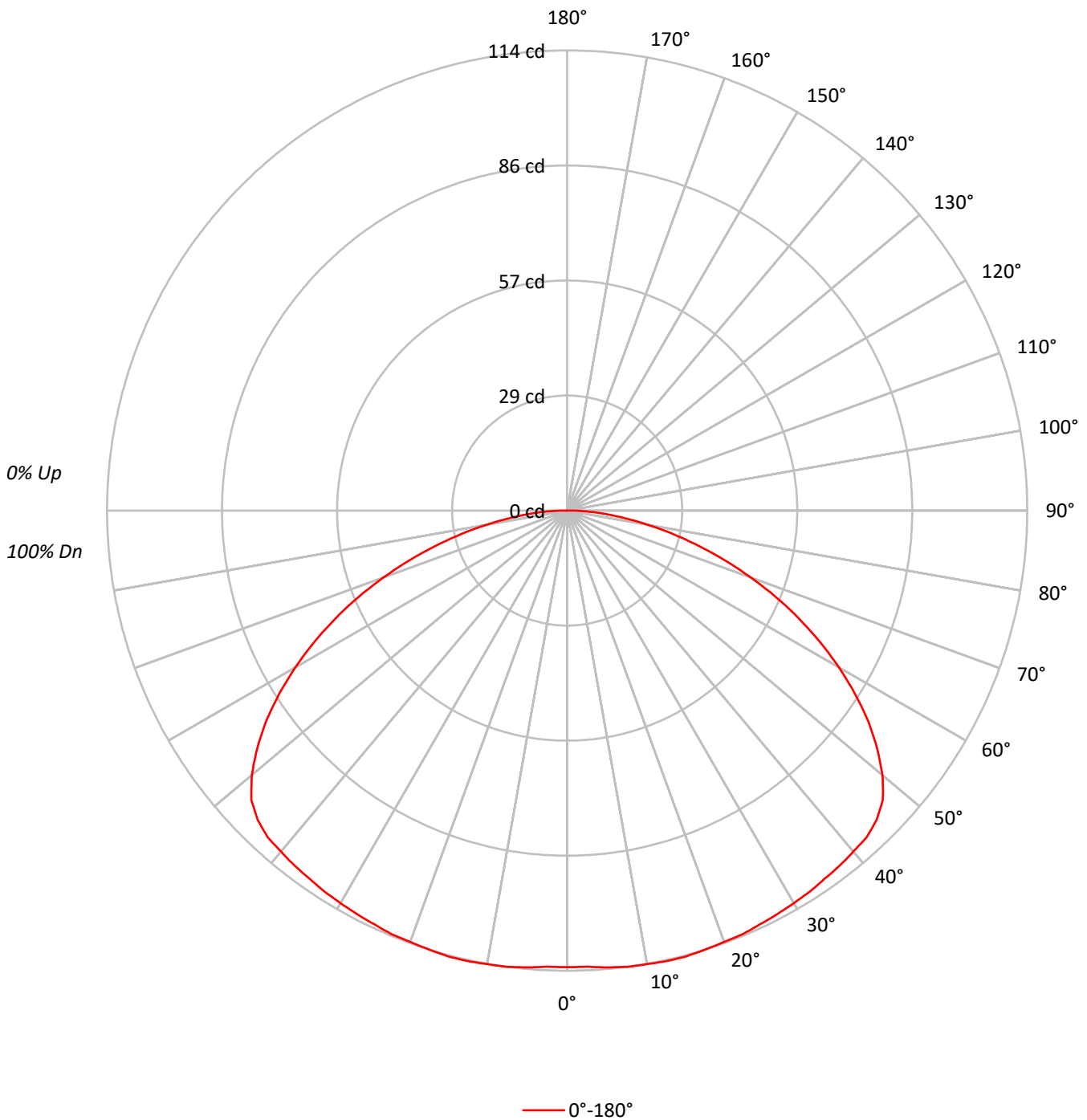
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 438.7 lumens  
Efficiency: N/A  
Efficacy: 28.1 lumens/watt  
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.65  
Luminous Opening: Circular (Dia: 0.85' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 15.6  
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	98	94	105	100	96	92	96	93	89		92	89	87		89	86	84	82
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77	73	69	67
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67	62	57	55
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59	53	48	46
5	73	60	50	43	71	59	50	43	56	48	42		54	47	42		52	46	41	39
6	67	53	44	37	65	52	43	37	50	42	37		49	42	36		47	41	36	34
7	62	48	39	32	60	47	38	32	46	38	32		44	37	32		43	36	31	29
8	58	43	35	28	56	43	34	28	41	34	28		40	33	28		39	33	28	26
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36	29	25	23
10	50	36	28	23	49	36	28	23	35	28	23		34	27	22		33	27	22	21

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

	0°
0°	2125
5°	2142
10°	2176
15°	2223
20°	2273
25°	2344
30°	2436
35°	2552
40°	2705
45°	2880
50°	2981
55°	2983
60°	2923
65°	2818
70°	2653
75°	2446
80°	2207
85°	1961

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 2987 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	10.9	2.5
10°-20°	32.3	7.4
20°-30°	52.3	11.9
30°-40°	69.9	15.9
40°-50°	83.3	19.0
50°-60°	81.1	18.5
60°-70°	62.6	14.3
70°-80°	35.8	8.2
80°-90°	10.4	2.4
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°	95.5	21.8
0°-40°	165.5	37.7
0°-60°	329.8	75.2
0°-90°	438.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	438.7	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	113	
5°	114	11
15°	114	32
25°	113	52
35°	111	70
45°	108	83
55°	91	81
65°	63	63
75°	34	36
85°	9	10
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	113.1
2.5°	113.1
5°	113.6
7.5°	114.0
10°	114.1
12.5°	114.3
15°	114.3
17.5°	114.0
20°	113.7
22.5°	113.6
25°	113.1
27.5°	112.7
30°	112.3
32.5°	111.9
35°	111.3
37.5°	110.9
40°	110.3
42.5°	109.8
45°	108.4
47.5°	106.1
50°	102.0
52.5°	96.8
55°	91.1
57.5°	84.6
60°	77.8
62.5°	70.7
65°	63.4
67.5°	56.0
70°	48.3
72.5°	41.0
75°	33.7
77.5°	26.8
80°	20.4
82.5°	14.3
85°	9.1
87.5°	4.8
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	16.36	18.09	16.73	18.40	18.72	16.36	18.09	16.73	18.40	18.72
	3H	18.19	19.76	18.57	20.09	20.45	18.19	19.76	18.57	20.09	20.45
	4H	18.87	20.35	19.26	20.70	21.07	18.87	20.35	19.26	20.70	21.07
	6H	19.37	20.74	19.78	21.10	21.49	19.37	20.74	19.78	21.10	21.49
	8H	19.53	20.85	19.95	21.23	21.63	19.53	20.85	19.95	21.23	21.63
	12H	19.65	20.91	20.07	21.29	21.72	19.65	20.91	20.07	21.29	21.72
4H	2H	17.02	18.50	17.42	18.85	19.22	17.02	18.50	17.42	18.85	19.22
	3H	19.07	20.32	19.48	20.71	21.11	19.07	20.32	19.48	20.71	21.11
	4H	19.87	21.00	20.30	21.41	21.85	19.87	21.00	20.30	21.41	21.85
	6H	20.50	21.49	20.95	21.93	22.38	20.50	21.49	20.95	21.93	22.38
	8H	20.71	21.64	21.17	22.08	22.55	20.71	21.64	21.17	22.08	22.55
	12H	20.88	21.72	21.35	22.19	22.66	20.88	21.72	21.35	22.19	22.66
8H	4H	20.20	21.13	20.65	21.57	22.03	20.20	21.13	20.65	21.57	22.03
	6H	20.95	21.72	21.44	22.21	22.68	20.95	21.72	21.44	22.21	22.68
	8H	21.23	21.93	21.74	22.44	22.92	21.23	21.93	21.74	22.44	22.92
	12H	21.48	22.10	21.98	22.58	23.14	21.48	22.10	21.98	22.58	23.14
12H	4H	20.24	21.08	20.71	21.55	22.02	20.24	21.08	20.71	21.55	22.02
	6H	21.01	21.71	21.51	22.21	22.70	21.01	21.71	21.51	22.21	22.70
	8H	21.36	21.98	21.86	22.46	23.02	21.36	21.98	21.86	22.46	23.02