

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: P865696

Luminaire Tested: PRLX-2002-S-940-05L-L-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865696  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-22)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-S-940-05L-L-U-S-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 1  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

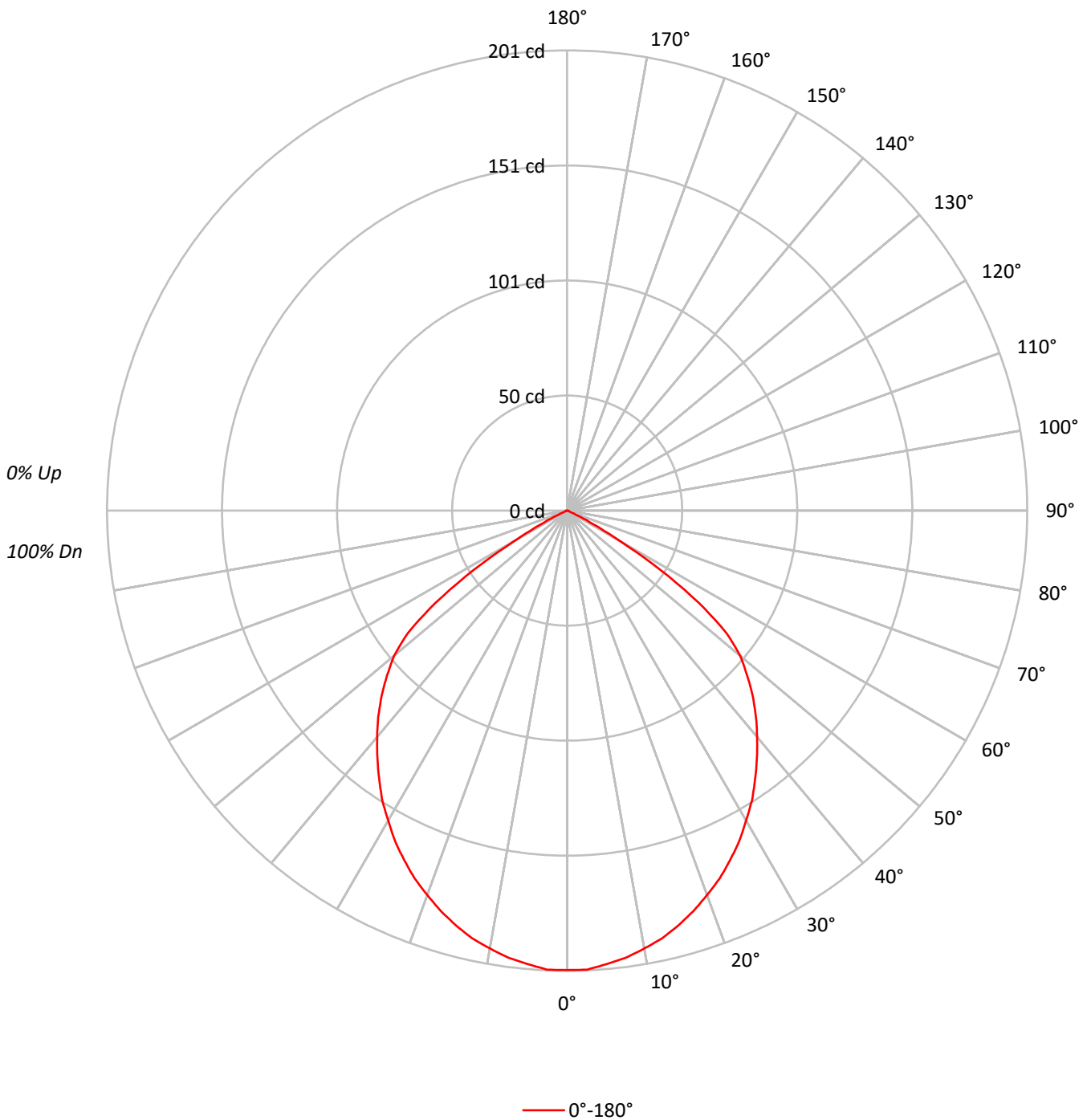
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 395.4 lumens  
Efficiency: N/A  
Efficacy: 63.8 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.28  
Luminous Opening: Circular (Dia: 0.85' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 6.2  
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	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	62
5	83	72	64	58	81	71	64	58	69	62	58	67	61	57	65	60	56	55
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	51	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32

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

	0°
0°	3770
5°	3749
10°	3704
15°	3648
20°	3572
25°	3490
30°	3390
35°	3284
40°	3166
45°	3044
50°	2884
55°	2299
60°	1003
65°	209
70°	27
75°	36
80°	54
85°	108

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3044 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	18.8	4.8
10°-20°	52.8	13.4
20°-30°	77.5	19.6
30°-40°	89.5	22.6
40°-50°	88.2	22.3
50°-60°	59.7	15.1
60°-70°	7.7	2.0
70°-80°	0.5	0.1
80°-90°	0.5	0.1
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°	149.2	37.7
0°-40°	238.8	60.4
0°-60°	386.7	97.8
0°-90°	395.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	395.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	201	
5°	199	19
15°	188	53
25°	168	78
35°	143	90
45°	115	88
55°	70	60
65°	5	8
75°	0	1
85°	0	0
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	200.7
2.5°	200.7
5°	198.8
7.5°	197.0
10°	194.2
12.5°	191.4
15°	187.6
17.5°	183.4
20°	178.7
22.5°	174.0
25°	168.4
27.5°	162.8
30°	156.3
32.5°	150.2
35°	143.2
37.5°	136.2
40°	129.1
42.5°	122.1
45°	114.6
47.5°	106.7
50°	98.7
52.5°	87.5
55°	70.2
57.5°	48.7
60°	26.7
62.5°	12.6
65°	4.7
67.5°	0.9
70°	0.5
72.5°	0.5
75°	0.5
77.5°	0.5
80°	0.5
82.5°	0.5
85°	0.5
87.5°	0.5
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	13.10	14.50	13.47	14.82	15.13	13.10	14.50	13.47	14.82	15.13
	3H	12.98	14.21	13.36	14.54	14.91	12.98	14.21	13.36	14.54	14.91
	4H	12.92	14.06	13.32	14.41	14.79	12.92	14.06	13.32	14.41	14.79
	6H	12.85	13.89	13.26	14.26	14.65	12.85	13.89	13.26	14.26	14.65
	8H	12.81	13.80	13.23	14.19	14.59	12.81	13.80	13.23	14.19	14.59
	12H	12.77	13.72	13.20	14.10	14.53	12.77	13.72	13.20	14.10	14.53
4H	2H	12.94	14.08	13.34	14.43	14.81	12.94	14.08	13.34	14.43	14.81
	3H	12.82	13.74	13.23	14.14	14.54	12.82	13.74	13.23	14.14	14.54
	4H	12.74	13.55	13.17	13.97	14.41	12.74	13.55	13.17	13.97	14.41
	6H	12.66	13.36	13.13	13.81	14.28	12.66	13.36	13.13	13.81	14.28
	8H	12.61	13.27	13.08	13.71	14.18	12.61	13.27	13.08	13.71	14.18
	12H	12.57	13.15	13.05	13.63	14.11	12.57	13.15	13.05	13.63	14.11
8H	4H	12.60	13.26	13.07	13.71	14.18	12.60	13.26	13.07	13.71	14.18
	6H	12.50	13.04	13.00	13.54	14.02	12.50	13.04	13.00	13.54	14.02
	8H	12.44	12.93	12.96	13.45	13.94	12.44	12.93	12.96	13.45	13.94
	12H	12.40	12.84	12.91	13.34	13.90	12.40	12.84	12.91	13.34	13.90
12H	4H	12.56	13.14	13.04	13.62	14.10	12.56	13.14	13.04	13.62	14.10
	6H	12.44	12.93	12.96	13.44	13.93	12.44	12.93	12.96	13.44	13.93
	8H	12.39	12.83	12.90	13.33	13.90	12.39	12.83	12.90	13.33	13.90