

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: P865699

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

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865699  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-19)  
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-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 1  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

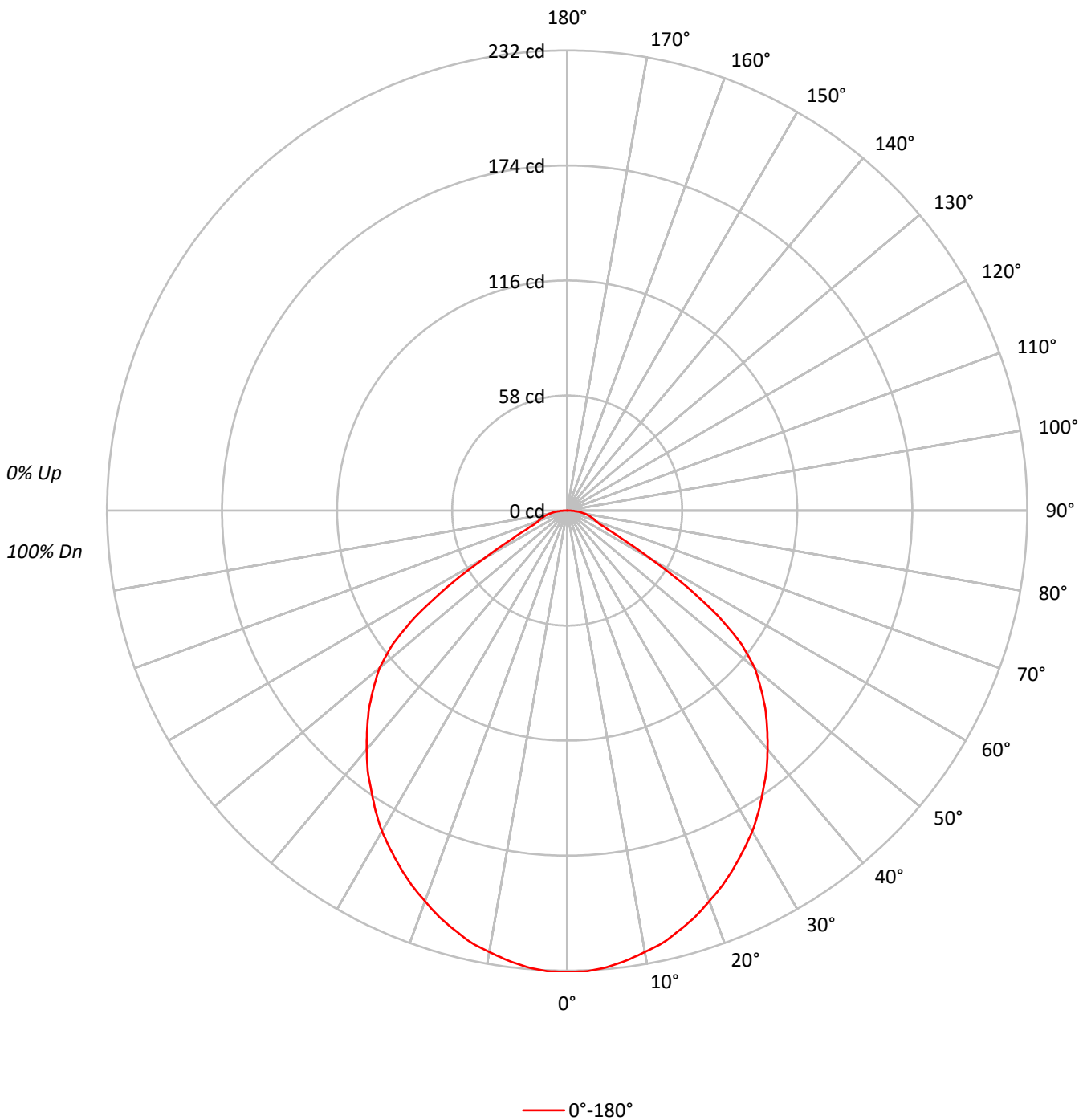
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 516.3 lumens  
Efficiency: N/A  
Efficacy: 83.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31  
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	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66
4	87	76	68	62	85	75	68	62	72	66	61	70	65	60	68	63	60	58
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51
6	74	62	54	48	73	61	54	48	60	53	47	58	52	47	56	51	47	45
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36
9	60	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

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

	0°
0°	4367
5°	4358
10°	4311
15°	4259
20°	4190
25°	4120
30°	4050
35°	3949
40°	3855
45°	3754
50°	3609
55°	3065
60°	1830
65°	1018
70°	846
75°	885
80°	963
85°	1013

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3754 cd/sqm

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.9	4.2
10°-20°	61.8	12.0
20°-30°	91.6	17.7
30°-40°	107.9	20.9
40°-50°	108.7	21.1
50°-60°	80.6	15.6
60°-70°	25.9	5.0
70°-80°	13.0	2.5
80°-90°	5.0	1.0
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°	175.2	33.9
0°-40°	283.1	54.8
0°-60°	472.4	91.5
0°-90°	516.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	516.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	232	
5°	231	22
15°	219	62
25°	199	92
35°	172	108
45°	141	109
55°	94	81
65°	23	26
75°	12	13
85°	5	5
90°	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	232.5
2.5°	232.5
5°	231.1
7.5°	228.8
10°	226.0
12.5°	223.2
15°	219.0
17.5°	214.8
20°	209.6
22.5°	204.5
25°	198.8
27.5°	192.8
30°	186.7
32.5°	179.7
35°	172.2
37.5°	165.2
40°	157.2
42.5°	149.3
45°	141.3
47.5°	132.4
50°	123.5
52.5°	110.9
55°	93.6
57.5°	71.6
60°	48.7
62.5°	32.3
65°	22.9
67.5°	17.8
70°	15.4
72.5°	14.0
75°	12.2
77.5°	10.8
80°	8.9
82.5°	7.0
85°	4.7
87.5°	2.3
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	14.81	16.30	15.18	16.62	16.93	14.81	16.30	15.18	16.62	16.93
	3H	15.06	16.38	15.44	16.71	17.07	15.06	16.38	15.44	16.71	17.07
	4H	15.22	16.45	15.62	16.80	17.18	15.22	16.45	15.62	16.80	17.18
	6H	15.41	16.55	15.83	16.92	17.31	15.41	16.55	15.83	16.92	17.31
	8H	15.50	16.58	15.93	16.97	17.37	15.50	16.58	15.93	16.97	17.37
	12H	15.57	16.60	16.00	16.98	17.41	15.57	16.60	16.00	16.98	17.41
4H	2H	14.81	16.05	15.21	16.40	16.78	14.81	16.05	15.21	16.40	16.78
	3H	15.19	16.20	15.61	16.61	17.01	15.19	16.20	15.61	16.61	17.01
	4H	15.45	16.36	15.89	16.78	17.22	15.45	16.36	15.89	16.78	17.22
	6H	15.78	16.57	16.24	17.01	17.47	15.78	16.57	16.24	17.01	17.47
	8H	15.93	16.66	16.39	17.11	17.58	15.93	16.66	16.39	17.11	17.58
	12H	16.06	16.71	16.54	17.19	17.67	16.06	16.71	16.54	17.19	17.67
8H	4H	15.52	16.26	15.99	16.70	17.17	15.52	16.26	15.99	16.70	17.17
	6H	15.96	16.57	16.46	17.06	17.54	15.96	16.57	16.46	17.06	17.54
	8H	16.18	16.73	16.69	17.24	17.73	16.18	16.73	16.69	17.24	17.73
	12H	16.39	16.88	16.90	17.38	17.94	16.39	16.88	16.90	17.38	17.94
12H	4H	15.52	16.18	16.01	16.66	17.13	15.52	16.18	16.01	16.66	17.13
	6H	15.98	16.53	16.49	17.04	17.53	15.98	16.53	16.49	17.04	17.53
	8H	16.25	16.75	16.76	17.24	17.81	16.25	16.75	16.76	17.24	17.81