

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: P867161

Luminaire Tested: PRLX-2002-L-940-67L-G-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867161  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-69)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-940-67L-G-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 4  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

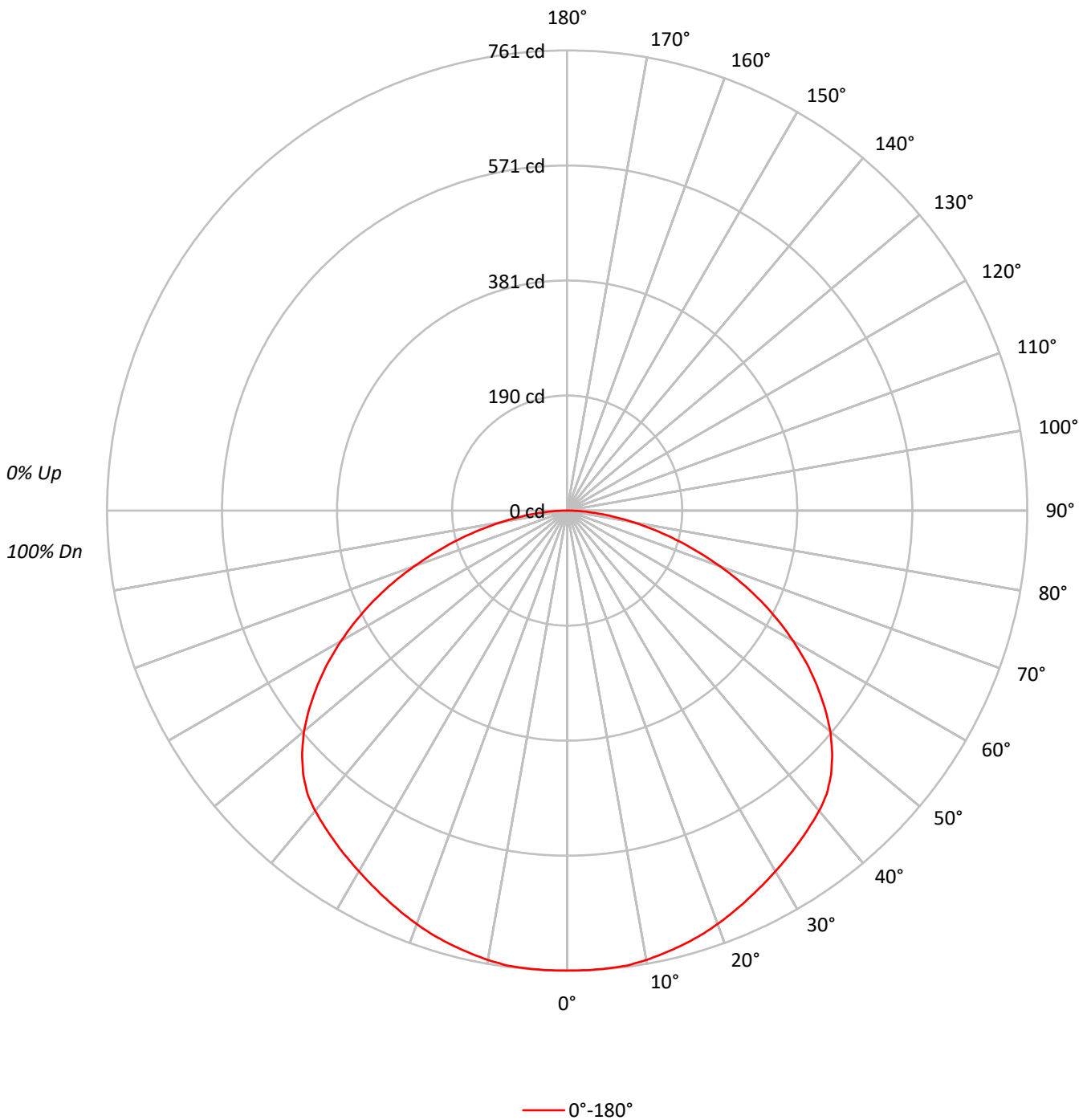
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2555.1 lumens  
Efficiency: N/A  
Efficacy: 50.7 lumens/watt  
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.52  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 50.4  
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  | 72  |  | 77  | 73  | 70  | 68  |
| 3   | 89  | 78  | 69  | 62  | 86  | 76  | 68  | 62  | 73  | 66  | 61  |  | 70  | 65  | 60  |  | 68  | 63  | 59  | 56  |
| 4   | 81  | 68  | 59  | 52  | 79  | 67  | 59  | 52  | 65  | 57  | 51  |  | 62  | 56  | 50  |  | 60  | 54  | 50  | 48  |
| 5   | 74  | 61  | 51  | 45  | 72  | 60  | 51  | 44  | 58  | 50  | 44  |  | 55  | 49  | 43  |  | 54  | 48  | 43  | 41  |
| 6   | 68  | 54  | 45  | 39  | 66  | 54  | 45  | 38  | 52  | 44  | 38  |  | 50  | 43  | 38  |  | 48  | 42  | 37  | 35  |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 34  | 47  | 39  | 33  |  | 45  | 38  | 33  |  | 44  | 38  | 33  | 31  |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 43  | 35  | 30  |  | 41  | 34  | 29  |  | 40  | 34  | 29  | 27  |
| 9   | 55  | 41  | 32  | 27  | 53  | 40  | 32  | 27  | 39  | 32  | 27  |  | 38  | 31  | 26  |  | 37  | 31  | 26  | 24  |
| 10  | 51  | 38  | 30  | 24  | 50  | 37  | 29  | 24  | 36  | 29  | 24  |  | 35  | 28  | 24  |  | 34  | 28  | 24  | 22  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 3753 |
| 5°  | 3765 |
| 10° | 3780 |
| 15° | 3795 |
| 20° | 3820 |
| 25° | 3858 |
| 30° | 3925 |
| 35° | 4031 |
| 40° | 4176 |
| 45° | 4306 |
| 50° | 4361 |
| 55° | 4338 |
| 60° | 4262 |
| 65° | 4126 |
| 70° | 3876 |
| 75° | 3555 |
| 80° | 3174 |
| 85° | 2604 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 4361 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 72.4   | 2.8       |
| 10°-20°   | 210.0  | 8.2       |
| 20°-30°   | 327.4  | 12.8      |
| 30°-40°   | 419.8  | 16.4      |
| 40°-50°   | 474.6  | 18.6      |
| 50°-60°   | 449.9  | 17.6      |
| 60°-70°   | 348.5  | 13.6      |
| 70°-80°   | 198.1  | 7.8       |
| 80°-90°   | 54.4   | 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°    | 609.9  | 23.9      |
| 0°-40°    | 1029.6 | 40.3      |
| 0°-60°    | 1954.1 | 76.5      |
| 0°-90°    | 2555.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2555.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 761 |      |
| 5°  | 760 | 72   |
| 15° | 743 | 210  |
| 25° | 709 | 327  |
| 35° | 669 | 420  |
| 45° | 617 | 475  |
| 55° | 504 | 450  |
| 65° | 353 | 348  |
| 75° | 186 | 198  |
| 85° | 46  | 54   |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 760.7 |
| 2.5°  | 760.7 |
| 5°    | 760.1 |
| 7.5°  | 758.9 |
| 10°   | 754.6 |
| 12.5° | 749.1 |
| 15°   | 742.9 |
| 17.5° | 736.2 |
| 20°   | 727.6 |
| 22.5° | 718.4 |
| 25°   | 708.6 |
| 27.5° | 698.7 |
| 30°   | 688.9 |
| 32.5° | 679.1 |
| 35°   | 669.3 |
| 37.5° | 658.9 |
| 40°   | 648.4 |
| 42.5° | 635.6 |
| 45°   | 617.2 |
| 47.5° | 594.5 |
| 50°   | 568.1 |
| 52.5° | 537.4 |
| 55°   | 504.3 |
| 57.5° | 469.3 |
| 60°   | 431.9 |
| 62.5° | 393.2 |
| 65°   | 353.4 |
| 67.5° | 311.6 |
| 70°   | 268.7 |
| 72.5° | 227.0 |
| 75°   | 186.5 |
| 77.5° | 147.8 |
| 80°   | 111.7 |
| 82.5° | 77.3  |
| 85°   | 46.0  |
| 87.5° | 20.9  |
| 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 | 17.54            | 19.24 | 17.90 | 19.55 | 19.86 | 17.54          | 19.24 | 17.90 | 19.55 | 19.86 |
|                 | 3H   | 19.38            | 20.92 | 19.75 | 21.24 | 21.60 | 19.38          | 20.92 | 19.75 | 21.24 | 21.60 |
|                 | 4H   | 20.05            | 21.50 | 20.44 | 21.85 | 22.22 | 20.05          | 21.50 | 20.44 | 21.85 | 22.22 |
|                 | 6H   | 20.53            | 21.88 | 20.94 | 22.24 | 22.63 | 20.53          | 21.88 | 20.94 | 22.24 | 22.63 |
|                 | 8H   | 20.69            | 21.98 | 21.11 | 22.37 | 22.76 | 20.69          | 21.98 | 21.11 | 22.37 | 22.76 |
|                 | 12H  | 20.79            | 22.02 | 21.22 | 22.41 | 22.83 | 20.79          | 22.02 | 21.22 | 22.41 | 22.83 |
| 4H              | 2H   | 18.20            | 19.65 | 18.60 | 20.00 | 20.38 | 18.20          | 19.65 | 18.60 | 20.00 | 20.38 |
|                 | 3H   | 20.25            | 21.47 | 20.66 | 21.87 | 22.27 | 20.25          | 21.47 | 20.66 | 21.87 | 22.27 |
|                 | 4H   | 21.04            | 22.15 | 21.48 | 22.56 | 23.00 | 21.04          | 22.15 | 21.48 | 22.56 | 23.00 |
|                 | 6H   | 21.66            | 22.63 | 22.11 | 23.07 | 23.52 | 21.66          | 22.63 | 22.11 | 23.07 | 23.52 |
|                 | 8H   | 21.86            | 22.77 | 22.32 | 23.21 | 23.67 | 21.86          | 22.77 | 22.32 | 23.21 | 23.67 |
|                 | 12H  | 22.00            | 22.82 | 22.48 | 23.30 | 23.76 | 22.00          | 22.82 | 22.48 | 23.30 | 23.76 |
| 8H              | 4H   | 21.36            | 22.27 | 21.82 | 22.71 | 23.18 | 21.36          | 22.27 | 21.82 | 22.71 | 23.18 |
|                 | 6H   | 22.10            | 22.85 | 22.59 | 23.34 | 23.81 | 22.10          | 22.85 | 22.59 | 23.34 | 23.81 |
|                 | 8H   | 22.37            | 23.05 | 22.88 | 23.55 | 24.04 | 22.37          | 23.05 | 22.88 | 23.55 | 24.04 |
|                 | 12H  | 22.58            | 23.18 | 23.09 | 23.67 | 24.23 | 22.58          | 23.18 | 23.09 | 23.67 | 24.23 |
| 12H             | 4H   | 21.40            | 22.22 | 21.88 | 22.69 | 23.16 | 21.40          | 22.22 | 21.88 | 22.69 | 23.16 |
|                 | 6H   | 22.15            | 22.84 | 22.66 | 23.34 | 23.82 | 22.15          | 22.84 | 22.66 | 23.34 | 23.82 |
|                 | 8H   | 22.48            | 23.09 | 22.99 | 23.57 | 24.13 | 22.48          | 23.09 | 22.99 | 23.57 | 24.13 |