

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: P866227

Luminaire Tested: PRLX-2002-M-930-15L-L-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866227  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-50)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-M-930-15L-L-U-S-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 2  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

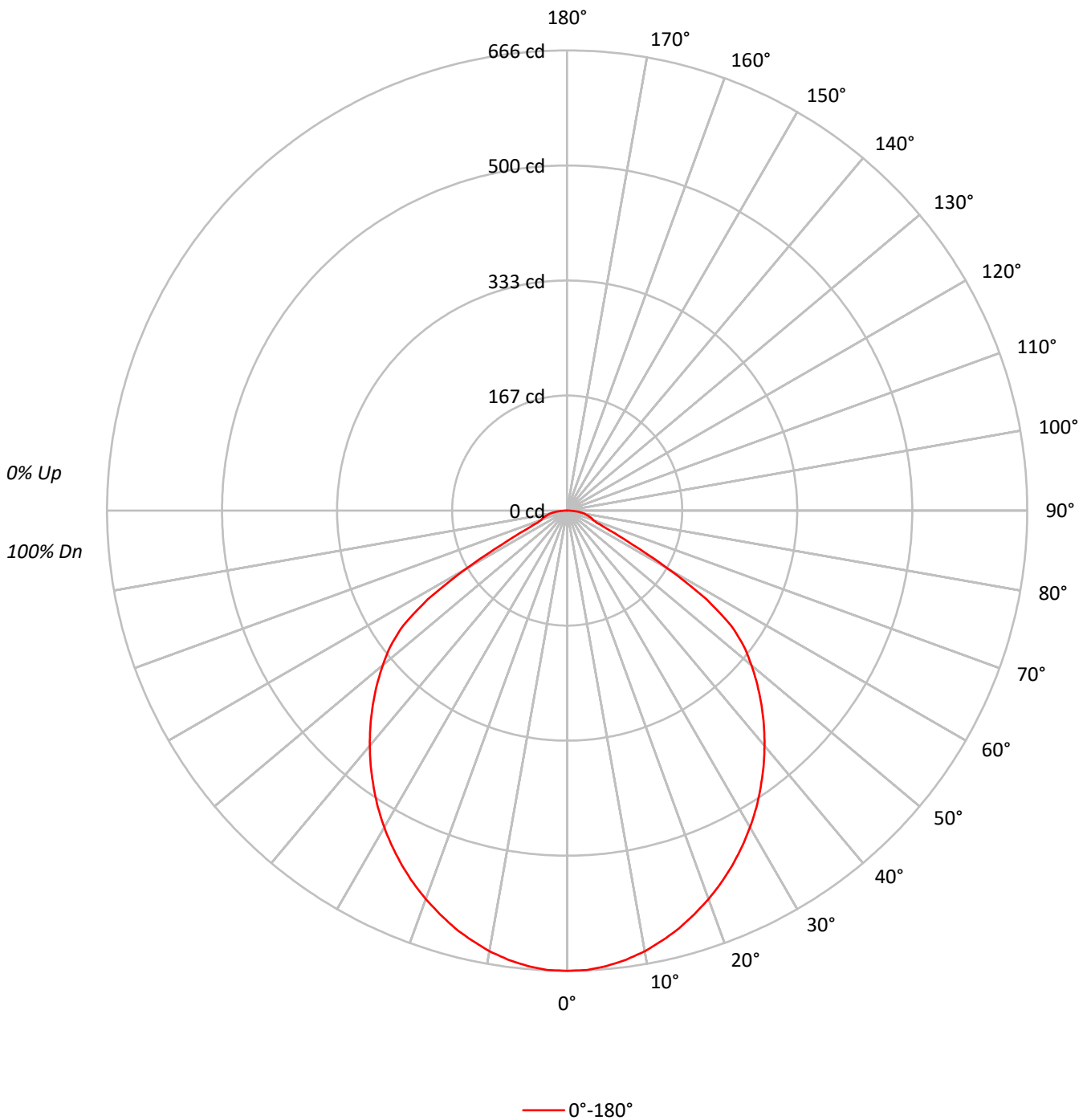
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1488.1 lumens  
Efficiency: N/A  
Efficacy: 106.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.19 / 1.3  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 14  
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  | 89  | 87  |
| 2   | 102 | 95  | 89  | 84  | 100 | 93  | 88  | 83  | 90  | 85  | 81  | 86  | 83  | 79  | 84  | 80  | 78  | 76  |
| 3   | 94  | 85  | 77  | 72  | 92  | 83  | 76  | 71  | 80  | 75  | 70  | 78  | 73  | 69  | 75  | 71  | 68  | 66  |
| 4   | 87  | 76  | 68  | 62  | 84  | 75  | 67  | 62  | 72  | 66  | 61  | 70  | 64  | 60  | 68  | 63  | 59  | 57  |
| 5   | 80  | 68  | 60  | 54  | 78  | 67  | 60  | 54  | 65  | 58  | 53  | 63  | 57  | 53  | 62  | 56  | 52  | 50  |
| 6   | 74  | 62  | 54  | 48  | 72  | 61  | 53  | 48  | 59  | 52  | 47  | 58  | 51  | 47  | 56  | 51  | 46  | 44  |
| 7   | 69  | 56  | 48  | 42  | 67  | 56  | 48  | 42  | 54  | 47  | 42  | 53  | 46  | 42  | 51  | 46  | 41  | 40  |
| 8   | 64  | 52  | 44  | 38  | 63  | 51  | 43  | 38  | 50  | 43  | 38  | 48  | 42  | 38  | 47  | 42  | 37  | 36  |
| 9   | 60  | 47  | 40  | 34  | 59  | 47  | 39  | 34  | 46  | 39  | 34  | 45  | 38  | 34  | 44  | 38  | 34  | 32  |
| 10  | 56  | 44  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 41  | 35  | 31  | 29  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 5300 |
| 5°  | 5283 |
| 10° | 5231 |
| 15° | 5156 |
| 20° | 5066 |
| 25° | 4969 |
| 30° | 4863 |
| 35° | 4742 |
| 40° | 4615 |
| 45° | 4476 |
| 50° | 4311 |
| 55° | 4017 |
| 60° | 2699 |
| 65° | 1276 |
| 70° | 937  |
| 75° | 1005 |
| 80° | 1113 |
| 85° | 1241 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4476 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 62.7   | 4.2       |
| 10°-20°   | 176.3  | 11.9      |
| 20°-30°   | 260.7  | 17.5      |
| 30°-40°   | 305.4  | 20.5      |
| 40°-50°   | 306.6  | 20.6      |
| 50°-60°   | 247.5  | 16.6      |
| 60°-70°   | 80.0   | 5.4       |
| 70°-80°   | 34.5   | 2.3       |
| 80°-90°   | 14.3   | 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°    | 499.8  | 33.6      |
| 0°-40°    | 805.2  | 54.1      |
| 0°-60°    | 1359.3 | 91.3      |
| 0°-90°    | 1488.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1488.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 666 |      |
| 5°  | 662 | 63   |
| 15° | 626 | 176  |
| 25° | 566 | 261  |
| 35° | 488 | 305  |
| 45° | 398 | 307  |
| 55° | 290 | 247  |
| 65° | 68  | 80   |
| 75° | 33  | 35   |
| 85° | 14  | 14   |
| 90° | 0   |      |

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CATALOG NUMBER: PRLX-2002-M-930-15L-L-U-S-X-X-WHHR-X

**CANDELA DISTRIBUTION (FULL):**

| 0°    |       |
|-------|-------|
| 0°    | 666.2 |
| 2.5°  | 665.4 |
| 5°    | 661.5 |
| 7.5°  | 655.5 |
| 10°   | 647.5 |
| 12.5° | 637.1 |
| 15°   | 626.0 |
| 17.5° | 612.4 |
| 20°   | 598.4 |
| 22.5° | 582.9 |
| 25°   | 566.1 |
| 27.5° | 548.2 |
| 30°   | 529.4 |
| 32.5° | 509.5 |
| 35°   | 488.3 |
| 37.5° | 466.8 |
| 40°   | 444.4 |
| 42.5° | 421.3 |
| 45°   | 397.8 |
| 47.5° | 373.4 |
| 50°   | 348.3 |
| 52.5° | 322.4 |
| 55°   | 289.6 |
| 57.5° | 239.0 |
| 60°   | 169.6 |
| 62.5° | 106.1 |
| 65°   | 67.8  |
| 67.5° | 46.7  |
| 70°   | 40.3  |
| 72.5° | 37.1  |
| 75°   | 32.7  |
| 77.5° | 28.7  |
| 80°   | 24.3  |
| 82.5° | 19.5  |
| 85°   | 13.6  |
| 87.5° | 7.2   |
| 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 | 16.53            | 18.03 | 16.90 | 18.34 | 18.66 | 16.53          | 18.03 | 16.90 | 18.34 | 18.66 |
|                 | 3H   | 16.64            | 17.97 | 17.02 | 18.30 | 18.66 | 16.64          | 17.97 | 17.02 | 18.30 | 18.66 |
|                 | 4H   | 16.73            | 17.97 | 17.13 | 18.32 | 18.70 | 16.73          | 17.97 | 17.13 | 18.32 | 18.70 |
|                 | 6H   | 16.84            | 17.98 | 17.25 | 18.35 | 18.74 | 16.84          | 17.98 | 17.25 | 18.35 | 18.74 |
|                 | 8H   | 16.89            | 17.98 | 17.32 | 18.37 | 18.78 | 16.89          | 17.98 | 17.32 | 18.37 | 18.78 |
|                 | 12H  | 16.94            | 17.98 | 17.37 | 18.37 | 18.80 | 16.94          | 17.98 | 17.37 | 18.37 | 18.80 |
| 4H              | 2H   | 16.49            | 17.74 | 16.89 | 18.09 | 18.47 | 16.49          | 17.74 | 16.89 | 18.09 | 18.47 |
|                 | 3H   | 16.70            | 17.72 | 17.11 | 18.12 | 18.52 | 16.70          | 17.72 | 17.11 | 18.12 | 18.52 |
|                 | 4H   | 16.86            | 17.76 | 17.29 | 18.18 | 18.62 | 16.86          | 17.76 | 17.29 | 18.18 | 18.62 |
|                 | 6H   | 17.07            | 17.86 | 17.53 | 18.31 | 18.77 | 17.07          | 17.86 | 17.53 | 18.31 | 18.77 |
|                 | 8H   | 17.18            | 17.92 | 17.64 | 18.36 | 18.83 | 17.18          | 17.92 | 17.64 | 18.36 | 18.83 |
|                 | 12H  | 17.28            | 17.94 | 17.76 | 18.42 | 18.89 | 17.28          | 17.94 | 17.76 | 18.42 | 18.89 |
| 8H              | 4H   | 16.87            | 17.61 | 17.34 | 18.05 | 18.52 | 16.87          | 17.61 | 17.34 | 18.05 | 18.52 |
|                 | 6H   | 17.17            | 17.78 | 17.67 | 18.27 | 18.75 | 17.17          | 17.78 | 17.67 | 18.27 | 18.75 |
|                 | 8H   | 17.33            | 17.89 | 17.85 | 18.40 | 18.89 | 17.33          | 17.89 | 17.85 | 18.40 | 18.89 |
|                 | 12H  | 17.51            | 18.01 | 18.02 | 18.50 | 19.07 | 17.51          | 18.01 | 18.02 | 18.50 | 19.07 |
| 12H             | 4H   | 16.86            | 17.52 | 17.34 | 18.00 | 18.47 | 16.86          | 17.52 | 17.34 | 18.00 | 18.47 |
|                 | 6H   | 17.17            | 17.73 | 17.69 | 18.24 | 18.73 | 17.17          | 17.73 | 17.69 | 18.24 | 18.73 |
|                 | 8H   | 17.39            | 17.89 | 17.90 | 18.38 | 18.94 | 17.39          | 17.89 | 17.90 | 18.38 | 18.94 |