

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: P865450

Luminaire Tested: PRLX-2001-S-927-25L-L-U-S-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865450  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2001-S-927-25L-L-U-S-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS,  
TAPERED DRUM WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

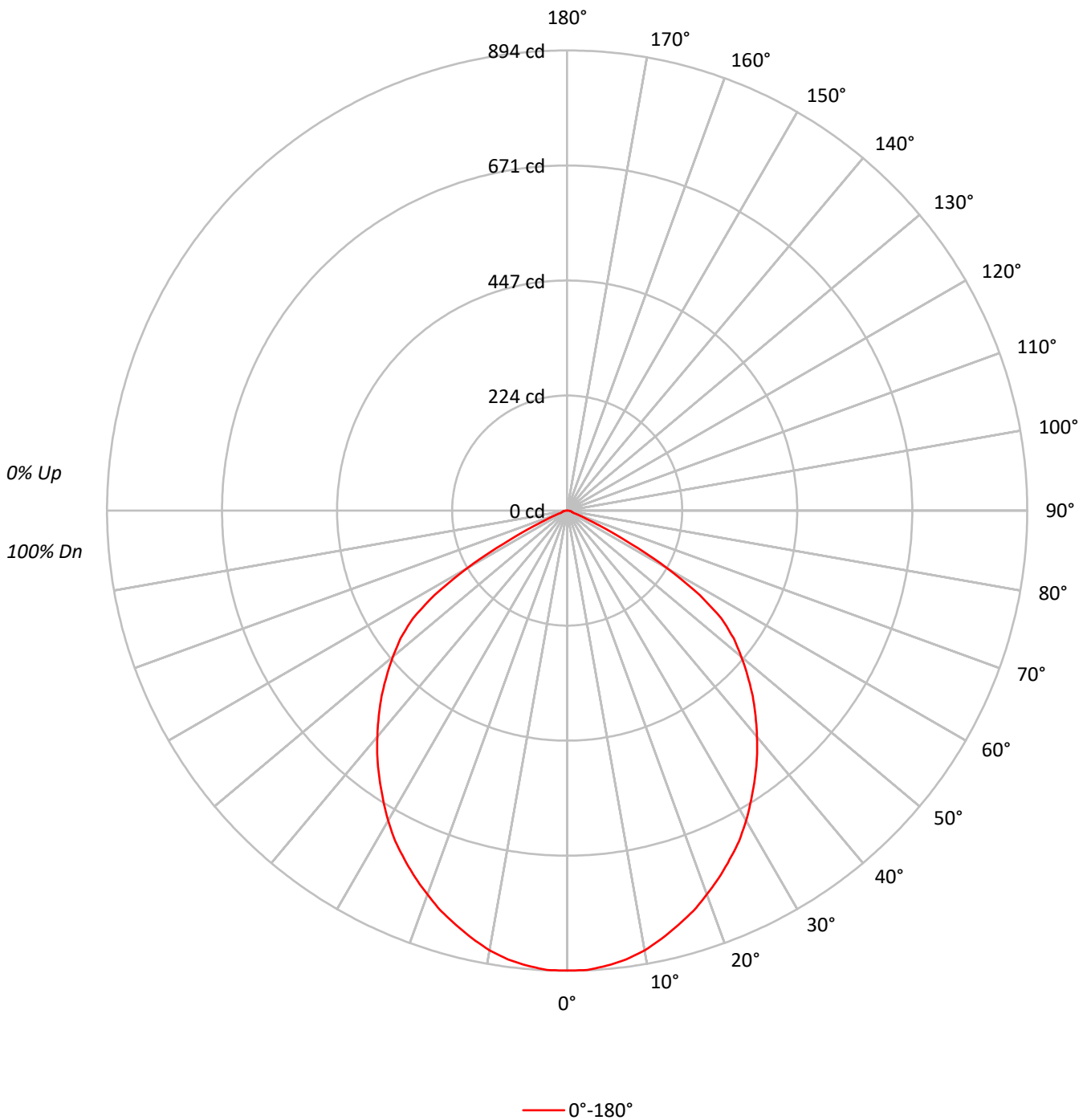
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1871.5 lumens  
Efficiency: N/A  
Efficacy: 64.3 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.28  
Luminous Opening: Circular (Dia: 0.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.1  
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   | 111 | 108 | 104 | 101 | 109 | 105 | 102 | 100 | 101 | 99  | 96  | 97  | 95  | 94  | 94  | 92  | 91  | 89  |
| 2   | 103 | 96  | 91  | 86  | 101 | 94  | 89  | 85  | 91  | 87  | 83  | 88  | 84  | 81  | 85  | 82  | 80  | 78  |
| 3   | 95  | 86  | 79  | 74  | 93  | 85  | 78  | 73  | 82  | 76  | 72  | 79  | 75  | 71  | 77  | 73  | 70  | 68  |
| 4   | 88  | 77  | 70  | 64  | 86  | 76  | 69  | 64  | 74  | 68  | 63  | 72  | 66  | 62  | 70  | 65  | 61  | 59  |
| 5   | 81  | 70  | 62  | 56  | 79  | 69  | 61  | 56  | 67  | 60  | 55  | 65  | 59  | 55  | 63  | 58  | 54  | 52  |
| 6   | 75  | 63  | 55  | 50  | 74  | 62  | 55  | 49  | 61  | 54  | 49  | 59  | 53  | 49  | 58  | 52  | 48  | 46  |
| 7   | 70  | 58  | 50  | 44  | 68  | 57  | 49  | 44  | 56  | 49  | 44  | 54  | 48  | 43  | 53  | 47  | 43  | 41  |
| 8   | 65  | 53  | 45  | 40  | 64  | 52  | 45  | 40  | 51  | 44  | 39  | 50  | 44  | 39  | 49  | 43  | 39  | 37  |
| 9   | 61  | 49  | 41  | 36  | 60  | 48  | 41  | 36  | 47  | 40  | 36  | 46  | 40  | 35  | 45  | 39  | 35  | 34  |
| 10  | 57  | 45  | 38  | 33  | 56  | 45  | 37  | 33  | 44  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 32  | 31  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 14573 |
| 5°  | 14531 |
| 10° | 14367 |
| 15° | 14074 |
| 20° | 13774 |
| 25° | 13454 |
| 30° | 13100 |
| 35° | 12657 |
| 40° | 12215 |
| 45° | 11757 |
| 50° | 11210 |
| 55° | 10402 |
| 60° | 7369  |
| 65° | 2702  |
| 70° | 668   |
| 75° | 630   |
| 80° | 751   |
| 85° | 749   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 11757 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 84.1   | 4.5       |
| 10°-20°   | 235.0  | 12.6      |
| 20°-30°   | 344.4  | 18.4      |
| 30°-40°   | 397.7  | 21.2      |
| 40°-50°   | 392.6  | 21.0      |
| 50°-60°   | 315.2  | 16.8      |
| 60°-70°   | 87.9   | 4.7       |
| 70°-80°   | 10.3   | 0.6       |
| 80°-90°   | 4.4    | 0.2       |
| 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°    | 663.5  | 35.5      |
| 0°-40°    | 1061.2 | 56.7      |
| 0°-60°    | 1768.9 | 94.5      |
| 0°-90°    | 1871.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1871.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 894 |      |
| 5°  | 888 | 84   |
| 15° | 834 | 235  |
| 25° | 748 | 344  |
| 35° | 636 | 398  |
| 45° | 510 | 393  |
| 55° | 366 | 315  |
| 65° | 70  | 88   |
| 75° | 10  | 10   |
| 85° | 4   | 4    |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 893.5 |
| 2.5°  | 893.5 |
| 5°    | 887.5 |
| 7.5°  | 879.5 |
| 10°   | 867.5 |
| 12.5° | 851.5 |
| 15°   | 833.5 |
| 17.5° | 815.6 |
| 20°   | 793.6 |
| 22.5° | 771.6 |
| 25°   | 747.6 |
| 27.5° | 723.6 |
| 30°   | 695.6 |
| 32.5° | 665.6 |
| 35°   | 635.7 |
| 37.5° | 605.7 |
| 40°   | 573.7 |
| 42.5° | 541.7 |
| 45°   | 509.7 |
| 47.5° | 475.7 |
| 50°   | 441.8 |
| 52.5° | 407.8 |
| 55°   | 365.8 |
| 57.5° | 305.8 |
| 60°   | 225.9 |
| 62.5° | 137.9 |
| 65°   | 70.0  |
| 67.5° | 32.0  |
| 70°   | 14.0  |
| 72.5° | 10.0  |
| 75°   | 10.0  |
| 77.5° | 8.0   |
| 80°   | 8.0   |
| 82.5° | 6.0   |
| 85°   | 4.0   |
| 87.5° | 2.0   |
| 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 | 20.01            | 21.47 | 20.37 | 21.78 | 22.10 | 20.01          | 21.47 | 20.37 | 21.78 | 22.10 |
|                 | 3H   | 19.93            | 21.22 | 20.31 | 21.55 | 21.91 | 19.93          | 21.22 | 20.31 | 21.55 | 21.91 |
|                 | 4H   | 19.88            | 21.08 | 20.28 | 21.43 | 21.81 | 19.88          | 21.08 | 20.28 | 21.43 | 21.81 |
|                 | 6H   | 19.82            | 20.92 | 20.23 | 21.29 | 21.68 | 19.82          | 20.92 | 20.23 | 21.29 | 21.68 |
|                 | 8H   | 19.79            | 20.83 | 20.22 | 21.22 | 21.62 | 19.79          | 20.83 | 20.22 | 21.22 | 21.62 |
|                 | 12H  | 19.76            | 20.75 | 20.19 | 21.14 | 21.57 | 19.76          | 20.75 | 20.19 | 21.14 | 21.57 |
| 4H              | 2H   | 19.93            | 21.13 | 20.33 | 21.48 | 21.86 | 19.93          | 21.13 | 20.33 | 21.48 | 21.86 |
|                 | 3H   | 19.87            | 20.83 | 20.28 | 21.24 | 21.64 | 19.87          | 20.83 | 20.28 | 21.24 | 21.64 |
|                 | 4H   | 19.80            | 20.66 | 20.24 | 21.08 | 21.52 | 19.80          | 20.66 | 20.24 | 21.08 | 21.52 |
|                 | 6H   | 19.75            | 20.49 | 20.21 | 20.94 | 21.40 | 19.75          | 20.49 | 20.21 | 20.94 | 21.40 |
|                 | 8H   | 19.71            | 20.40 | 20.18 | 20.85 | 21.32 | 19.71          | 20.40 | 20.18 | 20.85 | 21.32 |
|                 | 12H  | 19.68            | 20.30 | 20.16 | 20.78 | 21.25 | 19.68          | 20.30 | 20.16 | 20.78 | 21.25 |
| 8H              | 4H   | 19.69            | 20.38 | 20.15 | 20.83 | 21.30 | 19.69          | 20.38 | 20.15 | 20.83 | 21.30 |
|                 | 6H   | 19.62            | 20.19 | 20.12 | 20.69 | 21.17 | 19.62          | 20.19 | 20.12 | 20.69 | 21.17 |
|                 | 8H   | 19.58            | 20.09 | 20.09 | 20.61 | 21.10 | 19.58          | 20.09 | 20.09 | 20.61 | 21.10 |
|                 | 12H  | 19.55            | 20.01 | 20.06 | 20.50 | 21.07 | 19.55          | 20.01 | 20.06 | 20.50 | 21.07 |
| 12H             | 4H   | 19.65            | 20.27 | 20.13 | 20.75 | 21.22 | 19.65          | 20.27 | 20.13 | 20.75 | 21.22 |
|                 | 6H   | 19.56            | 20.08 | 20.08 | 20.59 | 21.08 | 19.56          | 20.08 | 20.08 | 20.59 | 21.08 |
|                 | 8H   | 19.54            | 20.00 | 20.05 | 20.50 | 21.06 | 19.54          | 20.00 | 20.05 | 20.50 | 21.06 |