

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: P866605

Luminaire Tested: PRLX-2004-M-940-15L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866605  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-43)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2004-M-940-15L-G-U-S-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,  
BELL WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 2  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

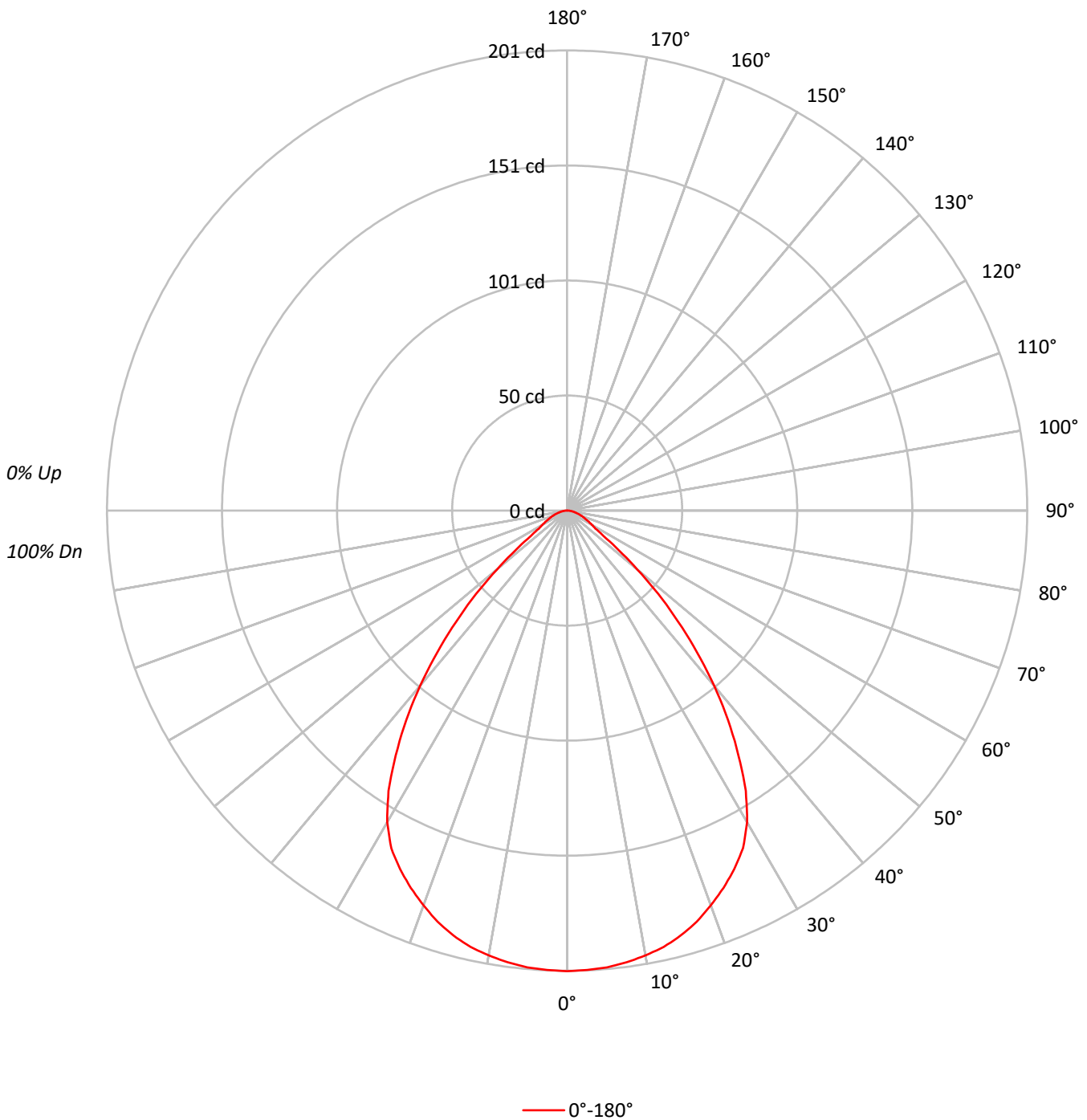
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 321.2 lumens  
Efficiency: N/A  
Efficacy: 22.9 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.14  
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: 0.5 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   | 112 | 108 | 105 | 103 | 109 | 106 | 103 | 101 | 102 | 100 | 98  | 98  | 97  | 95  | 95  | 93  | 92  | 90  |
| 2   | 105 | 99  | 94  | 89  | 102 | 97  | 92  | 88  | 93  | 90  | 86  | 90  | 87  | 84  | 88  | 85  | 83  | 81  |
| 3   | 98  | 90  | 84  | 79  | 96  | 88  | 83  | 78  | 86  | 81  | 77  | 83  | 79  | 75  | 81  | 77  | 74  | 72  |
| 4   | 91  | 82  | 75  | 70  | 89  | 81  | 74  | 70  | 79  | 73  | 69  | 76  | 72  | 68  | 74  | 70  | 67  | 65  |
| 5   | 85  | 75  | 68  | 63  | 84  | 74  | 67  | 62  | 72  | 66  | 62  | 70  | 65  | 61  | 69  | 64  | 61  | 59  |
| 6   | 80  | 69  | 62  | 57  | 78  | 68  | 61  | 56  | 67  | 61  | 56  | 65  | 60  | 56  | 64  | 59  | 55  | 53  |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 56  | 51  | 62  | 56  | 51  | 60  | 55  | 51  | 59  | 54  | 50  | 49  |
| 8   | 71  | 59  | 52  | 47  | 69  | 59  | 52  | 47  | 57  | 51  | 47  | 56  | 51  | 46  | 55  | 50  | 46  | 45  |
| 9   | 66  | 55  | 48  | 43  | 65  | 54  | 48  | 43  | 53  | 47  | 43  | 52  | 47  | 43  | 51  | 46  | 43  | 41  |
| 10  | 63  | 51  | 44  | 40  | 62  | 51  | 44  | 40  | 50  | 44  | 40  | 49  | 43  | 39  | 48  | 43  | 39  | 38  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 1601 |
| 5°  | 1600 |
| 10° | 1594 |
| 15° | 1582 |
| 20° | 1554 |
| 25° | 1517 |
| 30° | 1444 |
| 35° | 1267 |
| 40° | 1038 |
| 45° | 771  |
| 50° | 496  |
| 55° | 269  |
| 60° | 199  |
| 65° | 169  |
| 70° | 151  |
| 75° | 132  |
| 80° | 119  |
| 85° | 119  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 771 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 19.0   | 5.9       |
| 10°-20°   | 54.1   | 16.8      |
| 20°-30°   | 79.3   | 24.7      |
| 30°-40°   | 80.9   | 25.2      |
| 40°-50°   | 52.9   | 16.5      |
| 50°-60°   | 19.7   | 6.1       |
| 60°-70°   | 9.2    | 2.9       |
| 70°-80°   | 4.7    | 1.5       |
| 80°-90°   | 1.6    | 0.5       |
| 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°    | 152.4  | 47.4      |
| 0°-40°    | 233.3  | 72.6      |
| 0°-60°    | 305.8  | 95.2      |
| 0°-90°    | 321.2  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 321.2  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 201 |      |
| 5°  | 200 | 19   |
| 15° | 192 | 54   |
| 25° | 173 | 79   |
| 35° | 130 | 81   |
| 45° | 68  | 53   |
| 55° | 19  | 20   |
| 65° | 9   | 9    |
| 75° | 4   | 5    |
| 85° | 1   | 2    |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 201.2 |
| 2.5°  | 200.8 |
| 5°    | 200.3 |
| 7.5°  | 199.0 |
| 10°   | 197.3 |
| 12.5° | 195.2 |
| 15°   | 192.1 |
| 17.5° | 188.3 |
| 20°   | 183.5 |
| 22.5° | 178.4 |
| 25°   | 172.8 |
| 27.5° | 166.3 |
| 30°   | 157.2 |
| 32.5° | 145.2 |
| 35°   | 130.5 |
| 37.5° | 115.5 |
| 40°   | 99.9  |
| 42.5° | 84.0  |
| 45°   | 68.5  |
| 47.5° | 53.9  |
| 50°   | 40.1  |
| 52.5° | 28.4  |
| 55°   | 19.4  |
| 57.5° | 14.6  |
| 60°   | 12.5  |
| 62.5° | 10.8  |
| 65°   | 9.0   |
| 67.5° | 7.8   |
| 70°   | 6.5   |
| 72.5° | 5.6   |
| 75°   | 4.3   |
| 77.5° | 3.4   |
| 80°   | 2.6   |
| 82.5° | 2.2   |
| 85°   | 1.3   |
| 87.5° | 0.9   |
| 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 | 2.82             | 4.08 | 3.18 | 4.39 | 4.70 | 2.82           | 4.08 | 3.18 | 4.39 | 4.70 |
|                 | 3H   | 4.03             | 5.14 | 4.41 | 5.47 | 5.84 | 4.03           | 5.14 | 4.41 | 5.47 | 5.84 |
|                 | 4H   | 4.47             | 5.50 | 4.87 | 5.85 | 6.24 | 4.47           | 5.50 | 4.87 | 5.85 | 6.24 |
|                 | 6H   | 4.77             | 5.72 | 5.19 | 6.09 | 6.48 | 4.77           | 5.72 | 5.19 | 6.09 | 6.48 |
|                 | 8H   | 4.90             | 5.80 | 5.34 | 6.19 | 6.60 | 4.90           | 5.80 | 5.34 | 6.19 | 6.60 |
|                 | 12H  | 5.00             | 5.85 | 5.43 | 6.24 | 6.67 | 5.00           | 5.85 | 5.43 | 6.24 | 6.67 |
| 4H              | 2H   | 3.18             | 4.22 | 3.59 | 4.57 | 4.95 | 3.18           | 4.22 | 3.59 | 4.57 | 4.95 |
|                 | 3H   | 4.62             | 5.46 | 5.03 | 5.87 | 6.27 | 4.62           | 5.46 | 5.03 | 5.87 | 6.27 |
|                 | 4H   | 5.16             | 5.91 | 5.60 | 6.33 | 6.78 | 5.16           | 5.91 | 5.60 | 6.33 | 6.78 |
|                 | 6H   | 5.58             | 6.23 | 6.04 | 6.67 | 7.14 | 5.58           | 6.23 | 6.04 | 6.67 | 7.14 |
|                 | 8H   | 5.76             | 6.37 | 6.24 | 6.82 | 7.29 | 5.76           | 6.37 | 6.24 | 6.82 | 7.29 |
|                 | 12H  | 5.90             | 6.44 | 6.39 | 6.92 | 7.40 | 5.90           | 6.44 | 6.39 | 6.92 | 7.40 |
| 8H              | 4H   | 5.32             | 5.93 | 5.79 | 6.37 | 6.85 | 5.32           | 5.93 | 5.79 | 6.37 | 6.85 |
|                 | 6H   | 5.85             | 6.35 | 6.36 | 6.84 | 7.33 | 5.85           | 6.35 | 6.36 | 6.84 | 7.33 |
|                 | 8H   | 6.13             | 6.57 | 6.65 | 7.09 | 7.58 | 6.13           | 6.57 | 6.65 | 7.09 | 7.58 |
|                 | 12H  | 6.36             | 6.75 | 6.87 | 7.24 | 7.82 | 6.36           | 6.75 | 6.87 | 7.24 | 7.82 |
| 12H             | 4H   | 5.32             | 5.85 | 5.81 | 6.33 | 6.81 | 5.32           | 5.85 | 5.81 | 6.33 | 6.81 |
|                 | 6H   | 5.88             | 6.32 | 6.41 | 6.84 | 7.33 | 5.88           | 6.32 | 6.41 | 6.84 | 7.33 |
|                 | 8H   | 6.22             | 6.61 | 6.73 | 7.11 | 7.68 | 6.22           | 6.61 | 6.73 | 7.11 | 7.68 |