

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: P866343

Luminaire Tested: PRLX-2002-M-940-07L-G-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866343  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-38)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-M-940-07L-G-U-S-X-X-WHHR-X  
Description: PRENATALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 1  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

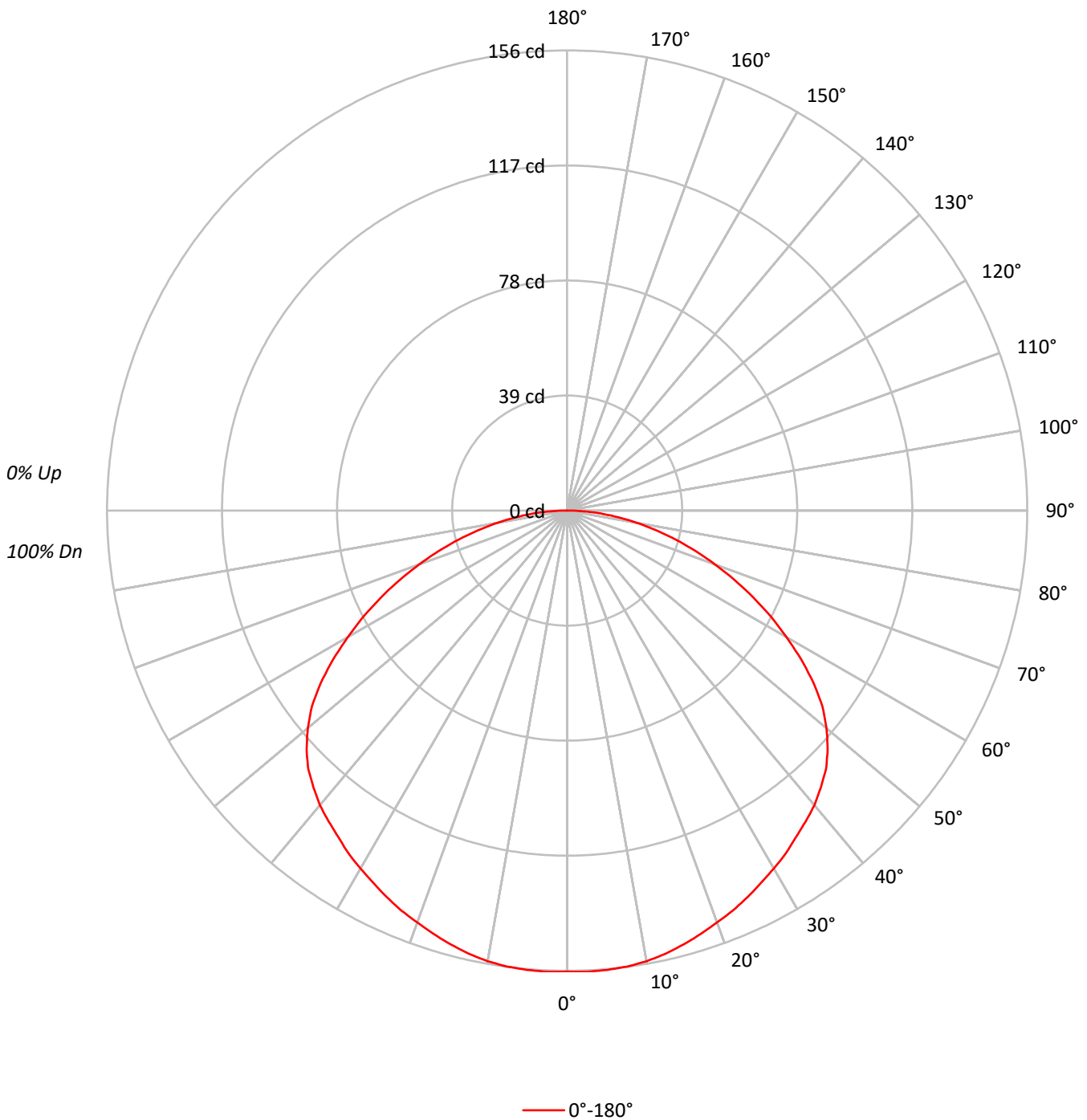
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 517.7 lumens  
Efficiency: N/A  
Efficacy: 63.1 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.5  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 8.2  
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   | 108 | 103 | 99  | 94  | 105 | 101 | 97  | 93  | 96  | 93  | 90  |  | 93  | 90  | 87  |  | 89  | 87  | 85  | 82  |
| 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  | 64  | 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  | 52  | 45  | 72  | 60  | 51  | 44  | 58  | 50  | 44  |  | 56  | 49  | 43  |  | 54  | 48  | 43  | 41  |
| 6   | 68  | 55  | 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  | 35  | 30  |  | 40  | 34  | 29  | 27  |
| 9   | 55  | 41  | 33  | 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  | 29  | 24  |  | 34  | 28  | 24  | 22  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 1243 |
| 5°  | 1248 |
| 10° | 1253 |
| 15° | 1254 |
| 20° | 1258 |
| 25° | 1269 |
| 30° | 1287 |
| 35° | 1313 |
| 40° | 1354 |
| 45° | 1396 |
| 50° | 1421 |
| 55° | 1415 |
| 60° | 1365 |
| 65° | 1308 |
| 70° | 1240 |
| 75° | 1171 |
| 80° | 1104 |
| 85° | 1041 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 1426 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 14.9   | 2.9       |
| 10°-20°   | 43.0   | 8.3       |
| 20°-30°   | 66.8   | 12.9      |
| 30°-40°   | 84.9   | 16.4      |
| 40°-50°   | 95.4   | 18.4      |
| 50°-60°   | 90.7   | 17.5      |
| 60°-70°   | 68.9   | 13.3      |
| 70°-80°   | 40.5   | 7.8       |
| 80°-90°   | 12.7   | 2.4       |
| 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°    | 124.7  | 24.1      |
| 0°-40°    | 209.6  | 40.5      |
| 0°-60°    | 395.7  | 76.4      |
| 0°-90°    | 517.7  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 517.7  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 156 |      |
| 5°  | 156 | 15   |
| 15° | 152 | 43   |
| 25° | 145 | 67   |
| 35° | 135 | 85   |
| 45° | 124 | 95   |
| 55° | 102 | 91   |
| 65° | 70  | 69   |
| 75° | 38  | 40   |
| 85° | 11  | 13   |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |       |
|-------|-------|
| 0°    | 156.3 |
| 2.5°  | 156.5 |
| 5°    | 156.3 |
| 7.5°  | 155.9 |
| 10°   | 155.1 |
| 12.5° | 153.9 |
| 15°   | 152.3 |
| 17.5° | 150.5 |
| 20°   | 148.6 |
| 22.5° | 146.8 |
| 25°   | 144.6 |
| 27.5° | 142.3 |
| 30°   | 140.1 |
| 32.5° | 137.9 |
| 35°   | 135.2 |
| 37.5° | 132.8 |
| 40°   | 130.4 |
| 42.5° | 127.3 |
| 45°   | 124.1 |
| 47.5° | 119.8 |
| 50°   | 114.8 |
| 52.5° | 109.1 |
| 55°   | 102.0 |
| 57.5° | 94.1  |
| 60°   | 85.8  |
| 62.5° | 77.9  |
| 65°   | 69.5  |
| 67.5° | 61.4  |
| 70°   | 53.3  |
| 72.5° | 45.6  |
| 75°   | 38.1  |
| 77.5° | 31.0  |
| 80°   | 24.1  |
| 82.5° | 17.4  |
| 85°   | 11.4  |
| 87.5° | 5.7   |
| 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 | 13.58            | 15.27 | 13.94 | 15.59 | 15.90 | 13.58          | 15.27 | 13.94 | 15.59 | 15.90 |
|                 | 3H   | 15.37            | 16.91 | 15.75 | 17.24 | 17.60 | 15.37          | 16.91 | 15.75 | 17.24 | 17.60 |
|                 | 4H   | 16.07            | 17.52 | 16.46 | 17.87 | 18.24 | 16.07          | 17.52 | 16.46 | 17.87 | 18.24 |
|                 | 6H   | 16.62            | 17.96 | 17.03 | 18.33 | 18.72 | 16.62          | 17.96 | 17.03 | 18.33 | 18.72 |
|                 | 8H   | 16.81            | 18.10 | 17.23 | 18.48 | 18.88 | 16.81          | 18.10 | 17.23 | 18.48 | 18.88 |
|                 | 12H  | 16.95            | 18.19 | 17.38 | 18.57 | 19.00 | 16.95          | 18.19 | 17.38 | 18.57 | 19.00 |
| 4H              | 2H   | 14.21            | 15.66 | 14.61 | 16.01 | 16.39 | 14.21          | 15.66 | 14.61 | 16.01 | 16.39 |
|                 | 3H   | 16.24            | 17.46 | 16.64 | 17.85 | 18.25 | 16.24          | 17.46 | 16.64 | 17.85 | 18.25 |
|                 | 4H   | 17.07            | 18.17 | 17.50 | 18.59 | 19.02 | 17.07          | 18.17 | 17.50 | 18.59 | 19.02 |
|                 | 6H   | 17.75            | 18.73 | 18.21 | 19.17 | 19.62 | 17.75          | 18.73 | 18.21 | 19.17 | 19.62 |
|                 | 8H   | 18.00            | 18.91 | 18.46 | 19.35 | 19.82 | 18.00          | 18.91 | 18.46 | 19.35 | 19.82 |
|                 | 12H  | 18.20            | 19.02 | 18.68 | 19.50 | 19.96 | 18.20          | 19.02 | 18.68 | 19.50 | 19.96 |
| 8H              | 4H   | 17.40            | 18.31 | 17.86 | 18.76 | 19.22 | 17.40          | 18.31 | 17.86 | 18.76 | 19.22 |
|                 | 6H   | 18.23            | 18.99 | 18.72 | 19.47 | 19.95 | 18.23          | 18.99 | 18.72 | 19.47 | 19.95 |
|                 | 8H   | 18.56            | 19.24 | 19.07 | 19.75 | 20.23 | 18.56          | 19.24 | 19.07 | 19.75 | 20.23 |
|                 | 12H  | 18.85            | 19.45 | 19.35 | 19.94 | 20.50 | 18.85          | 19.45 | 19.35 | 19.94 | 20.50 |
| 12H             | 4H   | 17.45            | 18.27 | 17.93 | 18.74 | 19.21 | 17.45          | 18.27 | 17.93 | 18.74 | 19.21 |
|                 | 6H   | 18.30            | 18.99 | 18.81 | 19.49 | 19.97 | 18.30          | 18.99 | 18.81 | 19.49 | 19.97 |
|                 | 8H   | 18.70            | 19.30 | 19.20 | 19.79 | 20.35 | 18.70          | 19.30 | 19.20 | 19.79 | 20.35 |