

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: P866118

Luminaire Tested: PRLX-2001-M-940-45L-G-U-S-X-X-GREY-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866118  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-36)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2001-M-940-45L-G-U-S-X-X-GREY-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS,  
TAPERED DRUM WITH GRAY INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

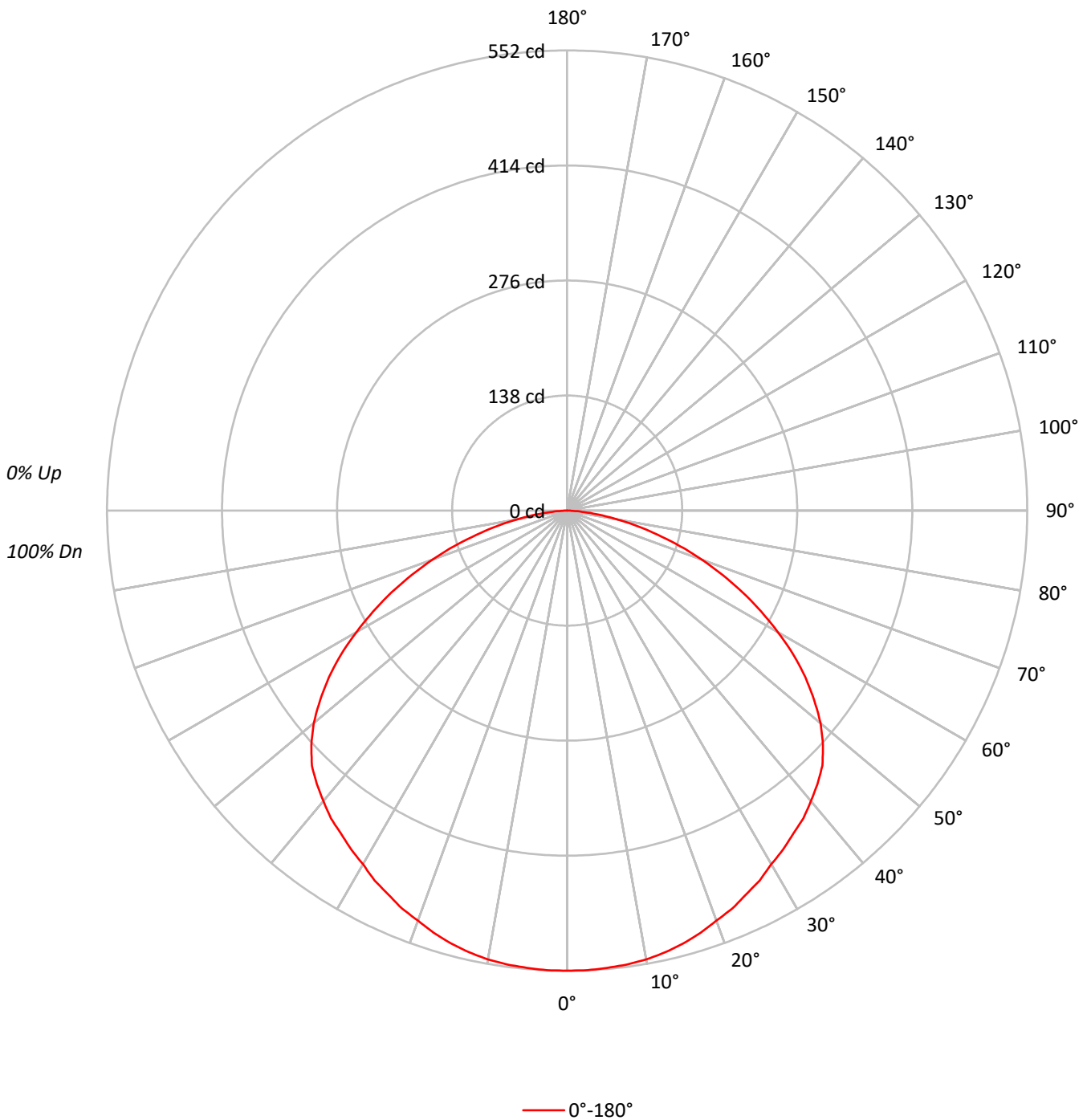
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1755.1 lumens  
Efficiency: N/A  
Efficacy: 45.2 lumens/watt  
Spacing Criteria (0/90/45): 1.33 / 1.33 / 1.49  
Luminous Opening: Circular (Dia: 1.27' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 38.8  
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   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 93  | 91  | 88  | 90  | 88  | 86  | 84  |
| 2   | 99  | 90  | 83  | 77  | 96  | 88  | 82  | 76  | 85  | 79  | 75  | 81  | 77  | 73  | 78  | 75  | 71  | 69  |
| 3   | 90  | 79  | 70  | 64  | 87  | 77  | 69  | 63  | 74  | 68  | 62  | 71  | 66  | 61  | 69  | 64  | 60  | 58  |
| 4   | 82  | 69  | 61  | 54  | 79  | 68  | 60  | 53  | 66  | 58  | 53  | 63  | 57  | 52  | 61  | 56  | 51  | 49  |
| 5   | 75  | 62  | 53  | 46  | 73  | 61  | 52  | 46  | 59  | 51  | 45  | 57  | 50  | 45  | 55  | 49  | 44  | 42  |
| 6   | 69  | 55  | 46  | 40  | 67  | 54  | 46  | 40  | 53  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 38  | 36  |
| 7   | 64  | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 48  | 40  | 34  | 46  | 39  | 34  | 45  | 39  | 34  | 32  |
| 8   | 59  | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 44  | 36  | 31  | 42  | 35  | 30  | 41  | 35  | 30  | 28  |
| 9   | 55  | 42  | 33  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 27  | 39  | 32  | 27  | 38  | 32  | 27  | 25  |
| 10  | 52  | 38  | 30  | 25  | 51  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 25  | 23  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 4683 |
| 5°  | 4690 |
| 10° | 4711 |
| 15° | 4723 |
| 20° | 4727 |
| 25° | 4756 |
| 30° | 4799 |
| 35° | 4900 |
| 40° | 5039 |
| 45° | 5196 |
| 50° | 5239 |
| 55° | 5163 |
| 60° | 4958 |
| 65° | 4671 |
| 70° | 4265 |
| 75° | 3685 |
| 80° | 2966 |
| 85° | 2015 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 50°  
 Luminance: 5239 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 52.4   | 3.0       |
| 10°-20°   | 151.8  | 8.6       |
| 20°-30°   | 234.6  | 13.4      |
| 30°-40°   | 296.8  | 16.9      |
| 40°-50°   | 332.3  | 18.9      |
| 50°-60°   | 310.6  | 17.7      |
| 60°-70°   | 229.7  | 13.1      |
| 70°-80°   | 120.6  | 6.9       |
| 80°-90°   | 26.2   | 1.5       |
| 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°    | 438.9  | 25.0      |
| 0°-40°    | 735.7  | 41.9      |
| 0°-60°    | 1378.6 | 78.6      |
| 0°-90°    | 1755.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1755.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 552 |      |
| 5°  | 551 | 52   |
| 15° | 538 | 152  |
| 25° | 508 | 235  |
| 35° | 473 | 297  |
| 45° | 433 | 332  |
| 55° | 349 | 311  |
| 65° | 233 | 230  |
| 75° | 112 | 121  |
| 85° | 21  | 26   |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 551.9 |
| 2.5°  | 551.9 |
| 5°    | 550.6 |
| 7.5°  | 549.3 |
| 10°   | 546.7 |
| 12.5° | 542.8 |
| 15°   | 537.6 |
| 17.5° | 531.2 |
| 20°   | 523.4 |
| 22.5° | 517.0 |
| 25°   | 507.9 |
| 27.5° | 500.2 |
| 30°   | 489.8 |
| 32.5° | 482.1 |
| 35°   | 473.0 |
| 37.5° | 465.3 |
| 40°   | 454.9 |
| 42.5° | 444.6 |
| 45°   | 433.0 |
| 47.5° | 416.2 |
| 50°   | 396.8 |
| 52.5° | 373.5 |
| 55°   | 349.0 |
| 57.5° | 321.8 |
| 60°   | 292.1 |
| 62.5° | 262.4 |
| 65°   | 232.6 |
| 67.5° | 201.6 |
| 70°   | 171.9 |
| 72.5° | 142.2 |
| 75°   | 112.4 |
| 77.5° | 86.6  |
| 80°   | 60.7  |
| 82.5° | 38.8  |
| 85°   | 20.7  |
| 87.5° | 6.5   |
| 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 | 18.13            | 19.80 | 18.50 | 20.12 | 20.43 | 18.13          | 19.80 | 18.50 | 20.12 | 20.43 |
|                 | 3H   | 19.79            | 21.31 | 20.17 | 21.63 | 21.99 | 19.79          | 21.31 | 20.17 | 21.63 | 21.99 |
|                 | 4H   | 20.35            | 21.78 | 20.75 | 22.13 | 22.50 | 20.35          | 21.78 | 20.75 | 22.13 | 22.50 |
|                 | 6H   | 20.72            | 22.04 | 21.13 | 22.40 | 22.79 | 20.72          | 22.04 | 21.13 | 22.40 | 22.79 |
|                 | 8H   | 20.80            | 22.07 | 21.23 | 22.46 | 22.85 | 20.80          | 22.07 | 21.23 | 22.46 | 22.85 |
|                 | 12H  | 20.85            | 22.06 | 21.28 | 22.44 | 22.87 | 20.85          | 22.06 | 21.28 | 22.44 | 22.87 |
| 4H              | 2H   | 18.74            | 20.16 | 19.14 | 20.51 | 20.89 | 18.74          | 20.16 | 19.14 | 20.51 | 20.89 |
|                 | 3H   | 20.61            | 21.80 | 21.02 | 22.20 | 22.60 | 20.61          | 21.80 | 21.02 | 22.20 | 22.60 |
|                 | 4H   | 21.28            | 22.36 | 21.71 | 22.77 | 23.21 | 21.28          | 22.36 | 21.71 | 22.77 | 23.21 |
|                 | 6H   | 21.75            | 22.69 | 22.20 | 23.13 | 23.58 | 21.75          | 22.69 | 22.20 | 23.13 | 23.58 |
|                 | 8H   | 21.87            | 22.75 | 22.33 | 23.19 | 23.66 | 21.87          | 22.75 | 22.33 | 23.19 | 23.66 |
|                 | 12H  | 21.94            | 22.73 | 22.42 | 23.21 | 23.68 | 21.94          | 22.73 | 22.42 | 23.21 | 23.68 |
| 8H              | 4H   | 21.54            | 22.42 | 22.00 | 22.86 | 23.33 | 21.54          | 22.42 | 22.00 | 22.86 | 23.33 |
|                 | 6H   | 22.10            | 22.83 | 22.59 | 23.32 | 23.79 | 22.10          | 22.83 | 22.59 | 23.32 | 23.79 |
|                 | 8H   | 22.27            | 22.92 | 22.77 | 23.43 | 23.91 | 22.27          | 22.92 | 22.77 | 23.43 | 23.91 |
|                 | 12H  | 22.38            | 22.96 | 22.89 | 23.45 | 24.01 | 22.38          | 22.96 | 22.89 | 23.45 | 24.01 |
| 12H             | 4H   | 21.56            | 22.35 | 22.04 | 22.83 | 23.30 | 21.56          | 22.35 | 22.04 | 22.83 | 23.30 |
|                 | 6H   | 22.13            | 22.78 | 22.63 | 23.29 | 23.77 | 22.13          | 22.78 | 22.63 | 23.29 | 23.77 |
|                 | 8H   | 22.34            | 22.92 | 22.84 | 23.41 | 23.97 | 22.34          | 22.92 | 22.84 | 23.41 | 23.97 |