

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: P867384

Luminaire Tested: PRLX-2004-L-940-133L-G-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867384  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-75)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2004-L-940-133L-G-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,  
BELL WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 8  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

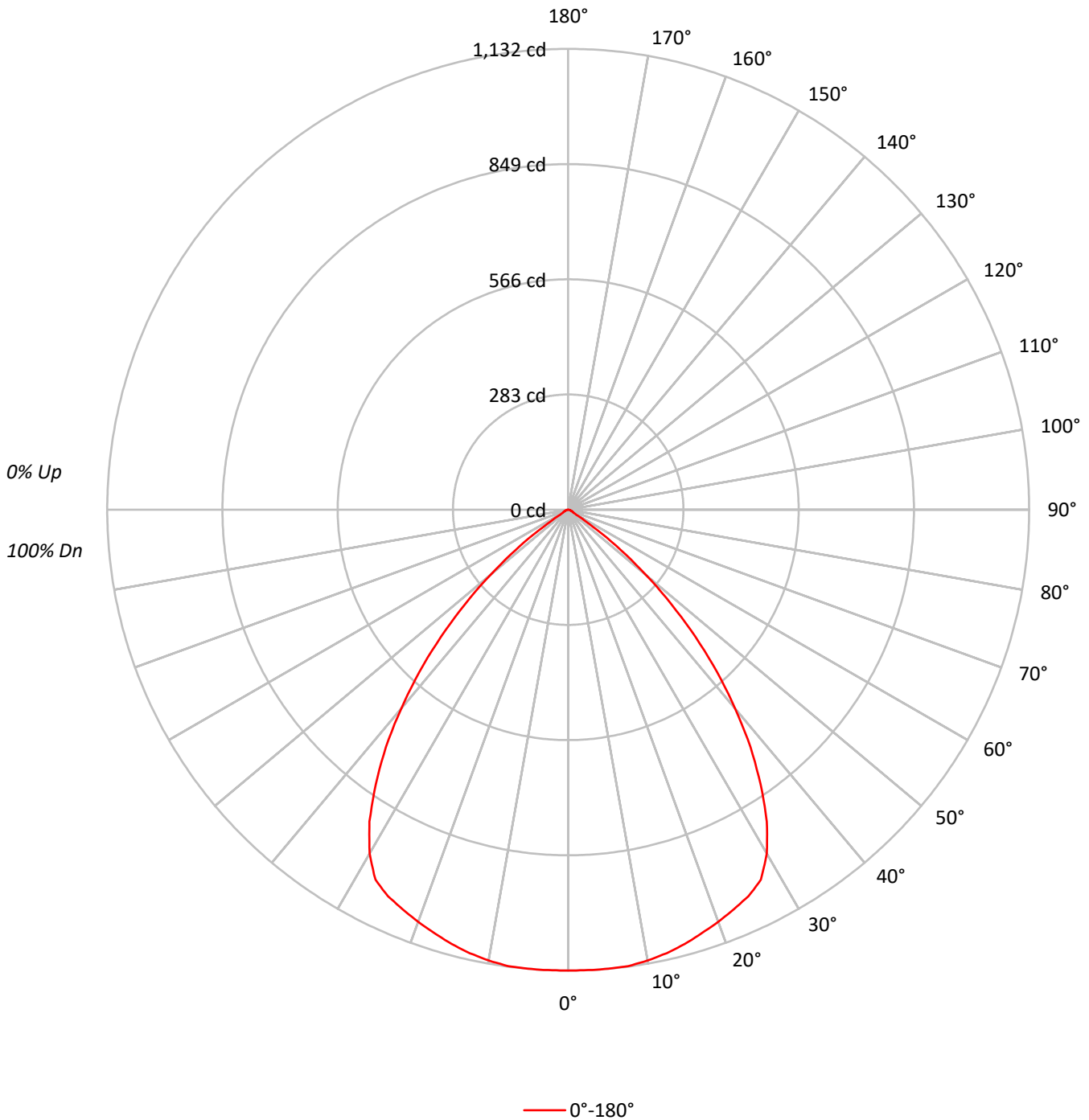
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1857.1 lumens  
Efficiency: N/A  
Efficacy: 16.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.19  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 111.8  
Input Voltage (V): 120  
Input Current (Ain): 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   | 112 | 109 | 106 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99  | 99  | 98  | 96  | 96  | 94  | 93  | 91  |
| 2   | 106 | 100 | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 91  | 88  | 92  | 89  | 86  | 89  | 87  | 84  | 83  |
| 3   | 99  | 91  | 86  | 81  | 97  | 90  | 85  | 80  | 87  | 83  | 79  | 85  | 81  | 78  | 82  | 79  | 76  | 75  |
| 4   | 93  | 84  | 77  | 72  | 91  | 83  | 76  | 72  | 80  | 75  | 71  | 78  | 74  | 70  | 76  | 72  | 69  | 67  |
| 5   | 87  | 77  | 70  | 65  | 85  | 76  | 69  | 65  | 74  | 68  | 64  | 72  | 67  | 63  | 71  | 66  | 63  | 61  |
| 6   | 81  | 71  | 64  | 59  | 80  | 70  | 63  | 58  | 68  | 62  | 58  | 67  | 62  | 58  | 65  | 61  | 57  | 55  |
| 7   | 76  | 65  | 58  | 53  | 75  | 65  | 58  | 53  | 63  | 57  | 53  | 62  | 56  | 52  | 61  | 56  | 52  | 51  |
| 8   | 72  | 60  | 53  | 49  | 70  | 60  | 53  | 48  | 59  | 53  | 48  | 58  | 52  | 48  | 56  | 51  | 48  | 46  |
| 9   | 67  | 56  | 49  | 45  | 66  | 56  | 49  | 44  | 55  | 49  | 44  | 54  | 48  | 44  | 53  | 48  | 44  | 42  |
| 10  | 64  | 52  | 45  | 41  | 62  | 52  | 45  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 49  | 44  | 41  | 39  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 5585 |
| 5°  | 5606 |
| 10° | 5634 |
| 15° | 5642 |
| 20° | 5656 |
| 25° | 5702 |
| 30° | 5556 |
| 35° | 4960 |
| 40° | 4110 |
| 45° | 3081 |
| 50° | 1910 |
| 55° | 738  |
| 60° | 160  |
| 65° | 131  |
| 70° | 108  |
| 75° | 95   |
| 80° | 105  |
| 85° | 68   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3081 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 107.9  | 5.8       |
| 10°-20°   | 312.0  | 16.8      |
| 20°-30°   | 480.3  | 25.9      |
| 30°-40°   | 509.9  | 27.5      |
| 40°-50°   | 338.4  | 18.2      |
| 50°-60°   | 89.8   | 4.8       |
| 60°-70°   | 11.5   | 0.6       |
| 70°-80°   | 5.4    | 0.3       |
| 80°-90°   | 1.8    | 0.1       |
| 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°    | 900.1  | 48.5      |
| 0°-40°    | 1410.0 | 75.9      |
| 0°-60°    | 1838.3 | 99.0      |
| 0°-90°    | 1857.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1857.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1132 |      |
| 5°  | 1132 | 108  |
| 15° | 1105 | 312  |
| 25° | 1047 | 480  |
| 35° | 824  | 510  |
| 45° | 442  | 338  |
| 55° | 86   | 90   |
| 65° | 11   | 12   |
| 75° | 5    | 5    |
| 85° | 1    | 2    |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1132.0 |
| 2.5°  | 1132.0 |
| 5°    | 1132.0 |
| 7.5°  | 1130.7 |
| 10°   | 1124.5 |
| 12.5° | 1115.8 |
| 15°   | 1104.6 |
| 17.5° | 1090.9 |
| 20°   | 1077.2 |
| 22.5° | 1062.3 |
| 25°   | 1047.4 |
| 27.5° | 1025.0 |
| 30°   | 975.2  |
| 32.5° | 908.1  |
| 35°   | 823.5  |
| 37.5° | 735.2  |
| 40°   | 638.1  |
| 42.5° | 541.1  |
| 45°   | 441.6  |
| 47.5° | 343.3  |
| 50°   | 248.8  |
| 52.5° | 163.0  |
| 55°   | 85.8   |
| 57.5° | 28.6   |
| 60°   | 16.2   |
| 62.5° | 13.7   |
| 65°   | 11.2   |
| 67.5° | 10.0   |
| 70°   | 7.5    |
| 72.5° | 6.2    |
| 75°   | 5.0    |
| 77.5° | 3.7    |
| 80°   | 3.7    |
| 82.5° | 2.5    |
| 85°   | 1.2    |
| 87.5° | 1.2    |
| 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 | 0.00             | 0.85 | 0.02 | 1.16 | 1.48 | 0.00           | 0.85 | 0.02 | 1.16 | 1.48 |
|                 | 3H   | 0.13             | 1.18 | 0.51 | 1.51 | 1.88 | 0.13           | 1.18 | 0.51 | 1.51 | 1.88 |
|                 | 4H   | 0.28             | 1.25 | 0.69 | 1.61 | 1.99 | 0.28           | 1.25 | 0.69 | 1.61 | 1.99 |
|                 | 6H   | 0.40             | 1.29 | 0.82 | 1.67 | 2.06 | 0.40           | 1.29 | 0.82 | 1.67 | 2.06 |
|                 | 8H   | 0.46             | 1.30 | 0.89 | 1.69 | 2.10 | 0.46           | 1.30 | 0.89 | 1.69 | 2.10 |
|                 | 12H  | 0.47             | 1.27 | 0.90 | 1.65 | 2.09 | 0.47           | 1.27 | 0.90 | 1.65 | 2.09 |
| 4H              | 2H   | 0.00             | 0.65 | 0.08 | 1.00 | 1.39 | 0.00           | 0.65 | 0.08 | 1.00 | 1.39 |
|                 | 3H   | 0.30             | 1.09 | 0.72 | 1.49 | 1.90 | 0.30           | 1.09 | 0.72 | 1.49 | 1.90 |
|                 | 4H   | 0.53             | 1.23 | 0.97 | 1.65 | 2.10 | 0.53           | 1.23 | 0.97 | 1.65 | 2.10 |
|                 | 6H   | 0.77             | 1.36 | 1.23 | 1.81 | 2.28 | 0.77           | 1.36 | 1.23 | 1.81 | 2.28 |
|                 | 8H   | 0.86             | 1.42 | 1.34 | 1.87 | 2.34 | 0.86           | 1.42 | 1.34 | 1.87 | 2.34 |
|                 | 12H  | 0.90             | 1.39 | 1.39 | 1.87 | 2.35 | 0.90           | 1.39 | 1.39 | 1.87 | 2.35 |
| 8H              | 4H   | 0.54             | 1.10 | 1.02 | 1.55 | 2.02 | 0.54           | 1.10 | 1.02 | 1.55 | 2.02 |
|                 | 6H   | 0.88             | 1.33 | 1.38 | 1.83 | 2.31 | 0.88           | 1.33 | 1.38 | 1.83 | 2.31 |
|                 | 8H   | 1.03             | 1.44 | 1.56 | 1.96 | 2.45 | 1.03           | 1.44 | 1.56 | 1.96 | 2.45 |
|                 | 12H  | 1.11             | 1.48 | 1.63 | 1.97 | 2.55 | 1.11           | 1.48 | 1.63 | 1.97 | 2.55 |
| 12H             | 4H   | 0.52             | 1.01 | 1.01 | 1.50 | 1.97 | 0.52           | 1.01 | 1.01 | 1.50 | 1.97 |
|                 | 6H   | 0.87             | 1.28 | 1.40 | 1.80 | 2.30 | 0.87           | 1.28 | 1.40 | 1.80 | 2.30 |
|                 | 8H   | 1.07             | 1.43 | 1.59 | 1.93 | 2.51 | 1.07           | 1.43 | 1.59 | 1.93 | 2.51 |