

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: P867425

Luminaire Tested: PRLX-2004-L-940-83L-G-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867425  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-73)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2004-L-940-83L-G-X-X-BRSS-X  
Description: PRENATALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS,  
BELL WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

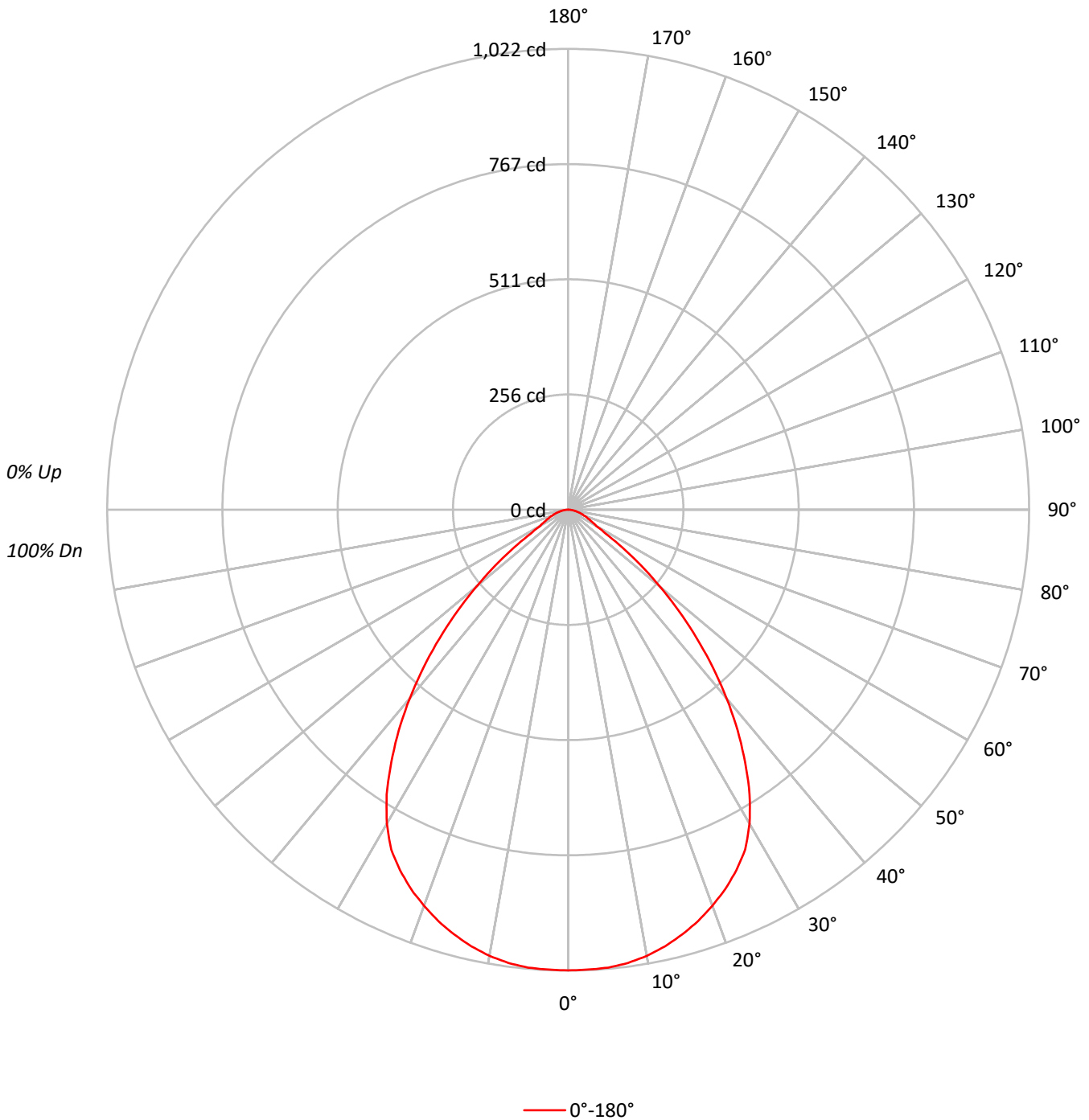
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1735.0 lumens  
Efficiency: N/A  
Efficacy: 26.9 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.17  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 64.5  
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 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97  | 98  | 96  | 95  | 95  | 93  | 92  | 90  |
| 2   | 104 | 98  | 93  | 89  | 102 | 96  | 92  | 88  | 93  | 89  | 86  | 90  | 87  | 84  | 87  | 84  | 82  | 80  |
| 3   | 97  | 89  | 83  | 78  | 95  | 88  | 82  | 77  | 85  | 80  | 76  | 82  | 78  | 74  | 80  | 76  | 73  | 71  |
| 4   | 91  | 81  | 74  | 69  | 89  | 80  | 73  | 68  | 78  | 72  | 67  | 75  | 70  | 67  | 73  | 69  | 66  | 64  |
| 5   | 85  | 74  | 67  | 61  | 83  | 73  | 66  | 61  | 71  | 65  | 60  | 69  | 64  | 60  | 68  | 63  | 59  | 57  |
| 6   | 79  | 68  | 61  | 55  | 77  | 67  | 60  | 55  | 65  | 59  | 55  | 64  | 58  | 54  | 62  | 58  | 54  | 52  |
| 7   | 74  | 63  | 55  | 50  | 72  | 62  | 55  | 50  | 60  | 54  | 49  | 59  | 53  | 49  | 58  | 53  | 49  | 47  |
| 8   | 69  | 58  | 50  | 45  | 68  | 57  | 50  | 45  | 56  | 50  | 45  | 55  | 49  | 45  | 54  | 49  | 45  | 43  |
| 9   | 65  | 54  | 46  | 42  | 64  | 53  | 46  | 42  | 52  | 46  | 41  | 51  | 45  | 41  | 50  | 45  | 41  | 39  |
| 10  | 62  | 50  | 43  | 38  | 60  | 49  | 43  | 38  | 48  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 36  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 5041 |
| 5°  | 5049 |
| 10° | 5033 |
| 15° | 4982 |
| 20° | 4907 |
| 25° | 4802 |
| 30° | 4582 |
| 35° | 4120 |
| 40° | 3521 |
| 45° | 2814 |
| 50° | 2042 |
| 55° | 1253 |
| 60° | 708  |
| 65° | 604  |
| 70° | 534  |
| 75° | 484  |
| 80° | 438  |
| 85° | 391  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2814 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 96.8   | 5.6       |
| 10°-20°   | 274.9  | 15.8      |
| 20°-30°   | 404.7  | 23.3      |
| 30°-40°   | 424.8  | 24.5      |
| 40°-50°   | 310.1  | 17.9      |
| 50°-60°   | 136.6  | 7.9       |
| 60°-70°   | 52.1   | 3.0       |
| 70°-80°   | 27.0   | 1.6       |
| 80°-90°   | 8.0    | 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°    | 776.4  | 44.7      |
| 0°-40°    | 1201.2 | 69.2      |
| 0°-60°    | 1647.9 | 95.0      |
| 0°-90°    | 1735.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1735.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1022 |      |
| 5°  | 1019 | 97   |
| 15° | 975  | 275  |
| 25° | 882  | 405  |
| 35° | 684  | 425  |
| 45° | 403  | 310  |
| 55° | 146  | 137  |
| 65° | 52   | 52   |
| 75° | 25   | 27   |
| 85° | 7    | 8    |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1021.7 |
| 2.5°  | 1020.9 |
| 5°    | 1019.4 |
| 7.5°  | 1014.0 |
| 10°   | 1004.7 |
| 12.5° | 991.6  |
| 15°   | 975.4  |
| 17.5° | 956.9  |
| 20°   | 934.6  |
| 22.5° | 910.7  |
| 25°   | 882.1  |
| 27.5° | 849.7  |
| 30°   | 804.2  |
| 32.5° | 748.7  |
| 35°   | 684.0  |
| 37.5° | 616.9  |
| 40°   | 546.7  |
| 42.5° | 475.0  |
| 45°   | 403.3  |
| 47.5° | 332.3  |
| 50°   | 266.0  |
| 52.5° | 203.6  |
| 55°   | 145.7  |
| 57.5° | 98.7   |
| 60°   | 71.7   |
| 62.5° | 60.9   |
| 65°   | 51.7   |
| 67.5° | 44.0   |
| 70°   | 37.0   |
| 72.5° | 30.8   |
| 75°   | 25.4   |
| 77.5° | 20.0   |
| 80°   | 15.4   |
| 82.5° | 11.6   |
| 85°   | 6.9    |
| 87.5° | 3.1    |
| 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 | 8.45             | 9.75  | 8.82  | 10.07 | 10.38 | 8.45           | 9.75  | 8.82  | 10.07 | 10.38 |
|                 | 3H   | 9.33             | 10.49 | 9.71  | 10.82 | 11.18 | 9.33           | 10.49 | 9.71  | 10.82 | 11.18 |
|                 | 4H   | 9.69             | 10.76 | 10.09 | 11.11 | 11.49 | 9.69           | 10.76 | 10.09 | 11.11 | 11.49 |
|                 | 6H   | 9.95             | 10.93 | 10.36 | 11.30 | 11.69 | 9.95           | 10.93 | 10.36 | 11.30 | 11.69 |
|                 | 8H   | 10.04            | 10.97 | 10.47 | 11.36 | 11.77 | 10.04          | 10.97 | 10.47 | 11.36 | 11.77 |
|                 | 12H  | 10.10            | 10.99 | 10.53 | 11.37 | 11.80 | 10.10          | 10.99 | 10.53 | 11.37 | 11.80 |
| 4H              | 2H   | 8.68             | 9.75  | 9.08  | 10.10 | 10.48 | 8.68           | 9.75  | 9.08  | 10.10 | 10.48 |
|                 | 3H   | 9.78             | 10.65 | 10.19 | 11.05 | 11.46 | 9.78           | 10.65 | 10.19 | 11.05 | 11.46 |
|                 | 4H   | 10.25            | 11.02 | 10.68 | 11.44 | 11.89 | 10.25          | 11.02 | 10.68 | 11.44 | 11.89 |
|                 | 6H   | 10.63            | 11.30 | 11.09 | 11.75 | 12.21 | 10.63          | 11.30 | 11.09 | 11.75 | 12.21 |
|                 | 8H   | 10.77            | 11.39 | 11.24 | 11.84 | 12.31 | 10.77          | 11.39 | 11.24 | 11.84 | 12.31 |
|                 | 12H  | 10.86            | 11.42 | 11.35 | 11.90 | 12.37 | 10.86          | 11.42 | 11.35 | 11.90 | 12.37 |
| 8H              | 4H   | 10.38            | 11.01 | 10.85 | 11.45 | 11.93 | 10.38          | 11.01 | 10.85 | 11.45 | 11.93 |
|                 | 6H   | 10.87            | 11.38 | 11.37 | 11.87 | 12.36 | 10.87          | 11.38 | 11.37 | 11.87 | 12.36 |
|                 | 8H   | 11.07            | 11.53 | 11.60 | 12.05 | 12.54 | 11.07          | 11.53 | 11.60 | 12.05 | 12.54 |
|                 | 12H  | 11.24            | 11.65 | 11.75 | 12.14 | 12.71 | 11.24          | 11.65 | 11.75 | 12.14 | 12.71 |
| 12H             | 4H   | 10.37            | 10.93 | 10.86 | 11.41 | 11.88 | 10.37          | 10.93 | 10.86 | 11.41 | 11.88 |
|                 | 6H   | 10.88            | 11.34 | 11.40 | 11.86 | 12.35 | 10.88          | 11.34 | 11.40 | 11.86 | 12.35 |
|                 | 8H   | 11.14            | 11.55 | 11.66 | 12.04 | 12.62 | 11.14          | 11.55 | 11.66 | 12.04 | 12.62 |