

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: P867141

Luminaire Tested: PRLX-2002-L-940-32L-L-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867141  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-81)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-L-940-32L-L-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 2  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

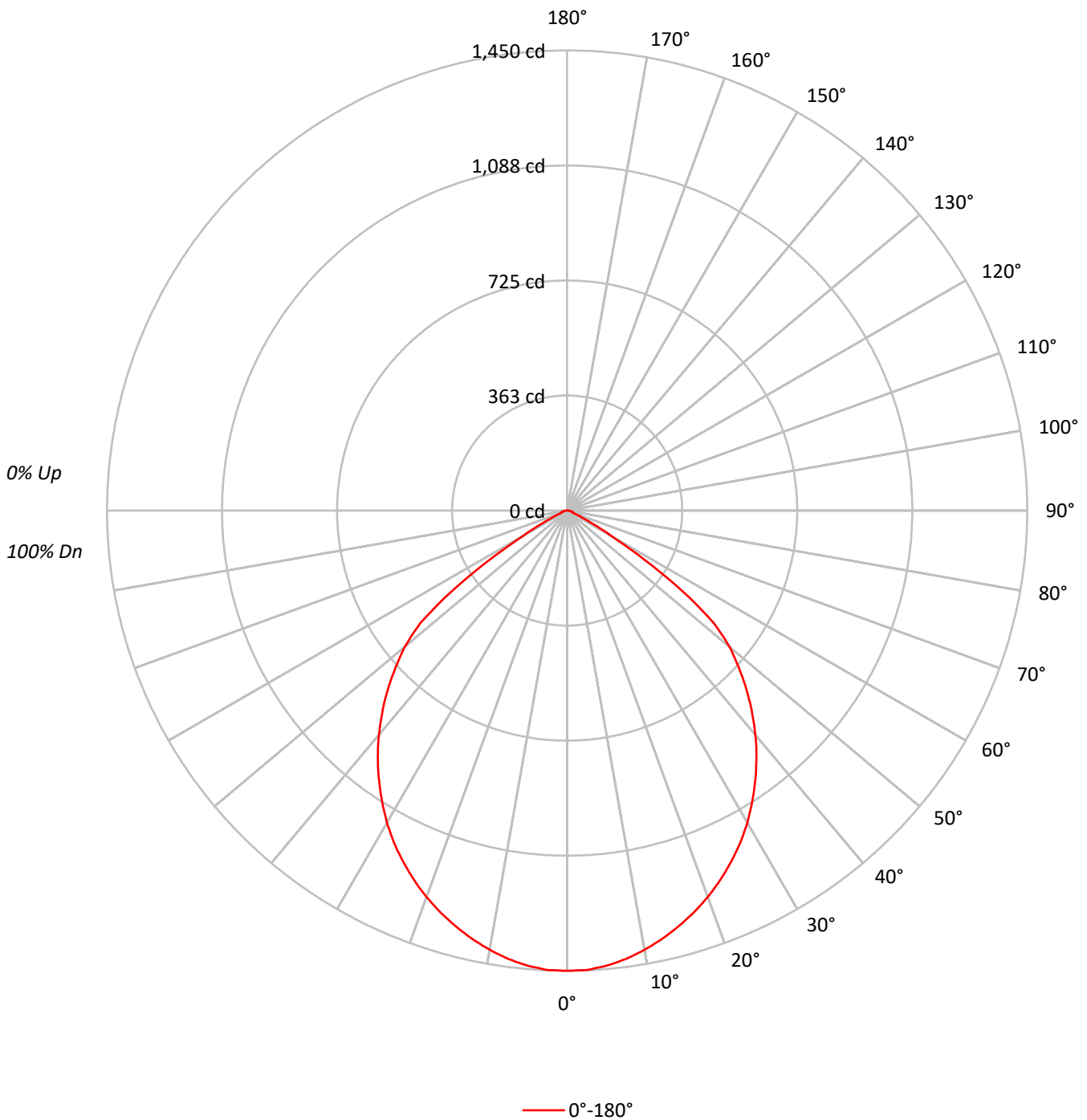
Lumens per Lamp: N/A  
Luminaire Lumens: 2815.5 lumens  
Efficiency: N/A  
Efficacy: 107.9 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.27  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 26.1  
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 | 100 | 102 | 99  | 97  |  | 98  | 96  | 94  |  | 94  | 93  | 92  | 90  |
| 2   | 104 | 97  | 92  | 88  | 101 | 96  | 91  | 87  | 92  | 88  | 85  |  | 89  | 86  | 83  |  | 86  | 83  | 81  | 79  |
| 3   | 96  | 88  | 81  | 76  | 94  | 86  | 80  | 75  | 83  | 78  | 74  |  | 81  | 77  | 73  |  | 78  | 75  | 72  | 70  |
| 4   | 89  | 79  | 72  | 66  | 87  | 78  | 71  | 66  | 76  | 70  | 65  |  | 74  | 68  | 64  |  | 72  | 67  | 64  | 62  |
| 5   | 83  | 72  | 64  | 59  | 81  | 71  | 64  | 58  | 69  | 63  | 58  |  | 67  | 62  | 57  |  | 65  | 60  | 57  | 55  |
| 6   | 77  | 65  | 58  | 52  | 75  | 65  | 57  | 52  | 63  | 56  | 51  |  | 61  | 56  | 51  |  | 60  | 55  | 51  | 49  |
| 7   | 72  | 60  | 52  | 47  | 70  | 59  | 52  | 47  | 58  | 51  | 46  |  | 56  | 50  | 46  |  | 55  | 50  | 46  | 44  |
| 8   | 67  | 55  | 47  | 42  | 66  | 54  | 47  | 42  | 53  | 46  | 42  |  | 52  | 46  | 42  |  | 51  | 45  | 41  | 40  |
| 9   | 63  | 51  | 43  | 38  | 62  | 50  | 43  | 38  | 49  | 43  | 38  |  | 48  | 42  | 38  |  | 47  | 42  | 38  | 36  |
| 10  | 59  | 47  | 40  | 35  | 58  | 46  | 39  | 35  | 46  | 39  | 35  |  | 45  | 39  | 35  |  | 44  | 38  | 34  | 33  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 7155 |
| 5°  | 7129 |
| 10° | 7039 |
| 15° | 6929 |
| 20° | 6804 |
| 25° | 6652 |
| 30° | 6469 |
| 35° | 6230 |
| 40° | 5945 |
| 45° | 5583 |
| 50° | 5130 |
| 55° | 3859 |
| 60° | 1624 |
| 65° | 599  |
| 70° | 276  |
| 75° | 301  |
| 80° | 347  |
| 85° | 408  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5583 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 136.3  | 4.8       |
| 10°-20°   | 382.3  | 13.6      |
| 20°-30°   | 562.4  | 20.0      |
| 30°-40°   | 646.0  | 22.9      |
| 40°-50°   | 615.4  | 21.9      |
| 50°-60°   | 385.4  | 13.7      |
| 60°-70°   | 63.8   | 2.3       |
| 70°-80°   | 16.6   | 0.6       |
| 80°-90°   | 7.3    | 0.3       |
| 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°    | 1081.1 | 38.4      |
| 0°-40°    | 1727.0 | 61.3      |
| 0°-60°    | 2727.8 | 96.9      |
| 0°-90°    | 2815.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2815.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1450 |      |
| 5°  | 1439 | 136  |
| 15° | 1356 | 382  |
| 25° | 1222 | 562  |
| 35° | 1034 | 646  |
| 45° | 800  | 615  |
| 55° | 449  | 385  |
| 65° | 51   | 64   |
| 75° | 16   | 17   |
| 85° | 7    | 7    |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1450.1 |
| 2.5°  | 1448.6 |
| 5°    | 1439.4 |
| 7.5°  | 1424.8 |
| 10°   | 1405.1 |
| 12.5° | 1382.7 |
| 15°   | 1356.5 |
| 17.5° | 1327.8 |
| 20°   | 1295.9 |
| 22.5° | 1260.4 |
| 25°   | 1222.0 |
| 27.5° | 1181.1 |
| 30°   | 1135.5 |
| 32.5° | 1085.9 |
| 35°   | 1034.3 |
| 37.5° | 980.1  |
| 40°   | 923.1  |
| 42.5° | 862.6  |
| 45°   | 800.2  |
| 47.5° | 733.7  |
| 50°   | 668.4  |
| 52.5° | 583.7  |
| 55°   | 448.6  |
| 57.5° | 289.9  |
| 60°   | 164.6  |
| 62.5° | 93.4   |
| 65°   | 51.3   |
| 67.5° | 24.2   |
| 70°   | 19.1   |
| 72.5° | 17.6   |
| 75°   | 15.8   |
| 77.5° | 14.0   |
| 80°   | 12.2   |
| 82.5° | 9.8    |
| 85°   | 7.2    |
| 87.5° | 3.6    |
| 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 | 14.06            | 15.45 | 14.42 | 15.76 | 16.08 | 14.06          | 15.45 | 14.42 | 15.76 | 16.08 |
|                 | 3H   | 13.97            | 15.20 | 14.35 | 15.53 | 15.89 | 13.97          | 15.20 | 14.35 | 15.53 | 15.89 |
|                 | 4H   | 13.93            | 15.07 | 14.33 | 15.42 | 15.80 | 13.93          | 15.07 | 14.33 | 15.42 | 15.80 |
|                 | 6H   | 13.89            | 14.93 | 14.30 | 15.30 | 15.69 | 13.89          | 14.93 | 14.30 | 15.30 | 15.69 |
|                 | 8H   | 13.87            | 14.85 | 14.29 | 15.24 | 15.65 | 13.87          | 14.85 | 14.29 | 15.24 | 15.65 |
|                 | 12H  | 13.84            | 14.79 | 14.28 | 15.17 | 15.60 | 13.84          | 14.79 | 14.28 | 15.17 | 15.60 |
| 4H              | 2H   | 13.92            | 15.06 | 14.33 | 15.41 | 15.79 | 13.92          | 15.06 | 14.33 | 15.41 | 15.79 |
|                 | 3H   | 13.86            | 14.77 | 14.27 | 15.18 | 15.58 | 13.86          | 14.77 | 14.27 | 15.18 | 15.58 |
|                 | 4H   | 13.82            | 14.63 | 14.25 | 15.05 | 15.49 | 13.82          | 14.63 | 14.25 | 15.05 | 15.49 |
|                 | 6H   | 13.80            | 14.50 | 14.26 | 14.95 | 15.41 | 13.80          | 14.50 | 14.26 | 14.95 | 15.41 |
|                 | 8H   | 13.77            | 14.43 | 14.24 | 14.88 | 15.35 | 13.77          | 14.43 | 14.24 | 14.88 | 15.35 |
|                 | 12H  | 13.76            | 14.34 | 14.25 | 14.83 | 15.30 | 13.76          | 14.34 | 14.25 | 14.83 | 15.30 |
| 8H              | 4H   | 13.71            | 14.36 | 14.18 | 14.81 | 15.28 | 13.71          | 14.36 | 14.18 | 14.81 | 15.28 |
|                 | 6H   | 13.69            | 14.23 | 14.19 | 14.72 | 15.20 | 13.69          | 14.23 | 14.19 | 14.72 | 15.20 |
|                 | 8H   | 13.67            | 14.16 | 14.19 | 14.68 | 15.17 | 13.67          | 14.16 | 14.19 | 14.68 | 15.17 |
|                 | 12H  | 13.68            | 14.12 | 14.19 | 14.62 | 15.19 | 13.68          | 14.12 | 14.19 | 14.62 | 15.19 |
| 12H             | 4H   | 13.67            | 14.25 | 14.15 | 14.73 | 15.21 | 13.67          | 14.25 | 14.15 | 14.73 | 15.21 |
|                 | 6H   | 13.63            | 14.13 | 14.15 | 14.64 | 15.13 | 13.63          | 14.13 | 14.15 | 14.64 | 15.13 |
|                 | 8H   | 13.65            | 14.09 | 14.16 | 14.58 | 15.15 | 13.65          | 14.09 | 14.16 | 14.58 | 15.15 |