

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: P866220

Luminaire Tested: PRLX-2002-M-930-15L-G-U-S-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P866220  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-41)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-M-930-15L-G-U-S-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, MEDIUM LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 2  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

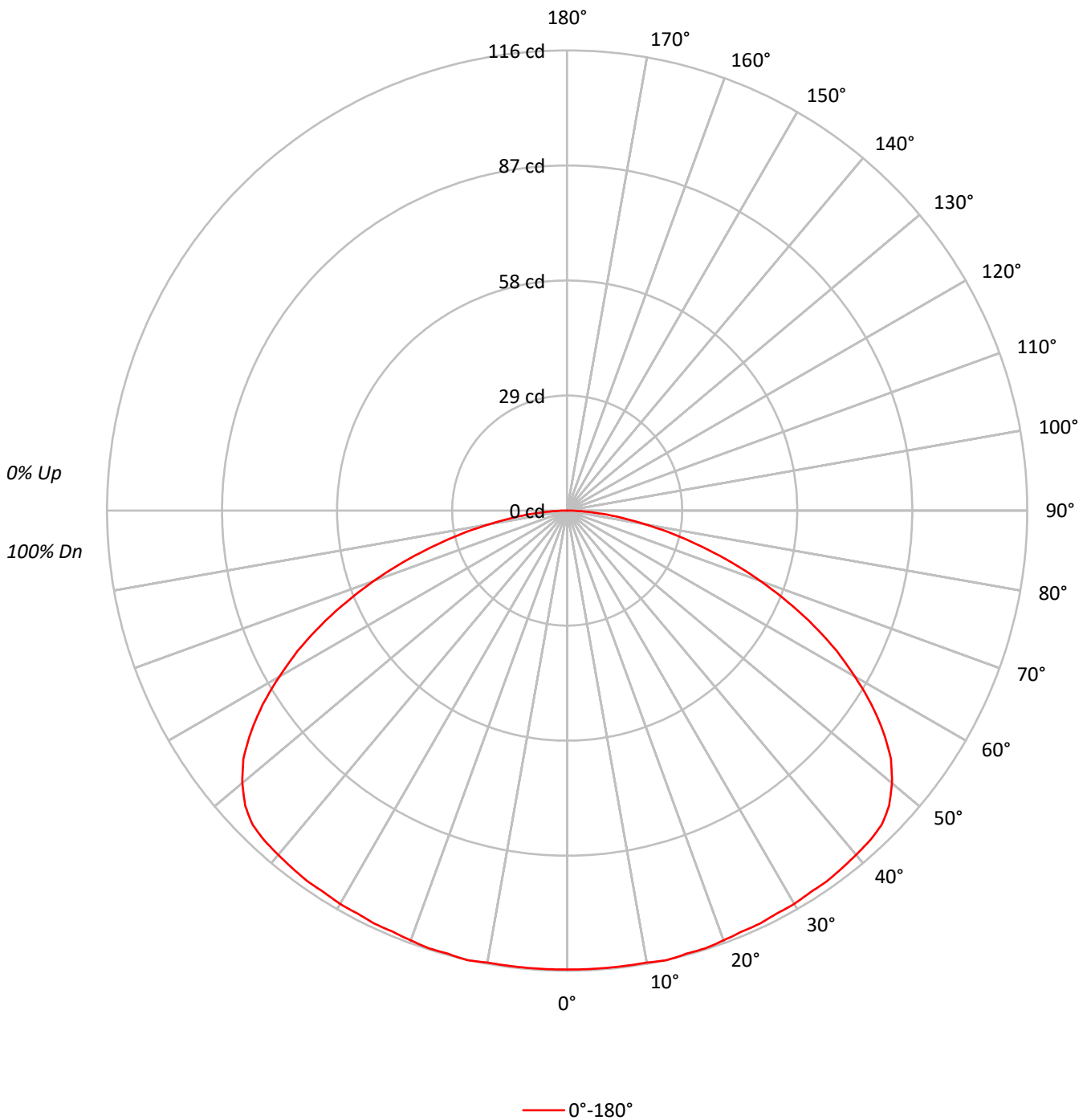
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 455.8 lumens  
Efficiency: N/A  
Efficacy: 32.6 lumens/watt  
Spacing Criteria (0/90/45): 1.51 / 1.51 / 1.67  
Luminous Opening: Circular (Dia: 1.31' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 14  
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   | 108 | 103 | 98  | 94  | 105 | 100 | 96  | 92  | 96  | 93  | 90  |  | 92  | 89  | 87  |  | 89  | 86  | 84  | 82  |
| 2   | 97  | 88  | 81  | 75  | 95  | 86  | 80  | 74  | 83  | 77  | 72  |  | 80  | 75  | 71  |  | 76  | 72  | 69  | 67  |
| 3   | 88  | 77  | 68  | 61  | 85  | 75  | 67  | 60  | 72  | 65  | 59  |  | 69  | 63  | 58  |  | 67  | 61  | 57  | 55  |
| 4   | 80  | 67  | 58  | 51  | 78  | 66  | 57  | 50  | 63  | 56  | 49  |  | 61  | 54  | 49  |  | 59  | 53  | 48  | 46  |
| 5   | 73  | 59  | 50  | 43  | 71  | 58  | 49  | 42  | 56  | 48  | 42  |  | 54  | 47  | 41  |  | 52  | 46  | 41  | 39  |
| 6   | 67  | 53  | 43  | 37  | 65  | 52  | 43  | 37  | 50  | 42  | 36  |  | 48  | 41  | 36  |  | 47  | 40  | 35  | 33  |
| 7   | 62  | 48  | 38  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 32  |  | 44  | 37  | 31  |  | 42  | 36  | 31  | 29  |
| 8   | 57  | 43  | 34  | 28  | 56  | 42  | 34  | 28  | 41  | 33  | 28  |  | 40  | 33  | 28  |  | 39  | 32  | 27  | 25  |
| 9   | 53  | 39  | 31  | 25  | 52  | 39  | 31  | 25  | 38  | 30  | 25  |  | 36  | 30  | 25  |  | 35  | 29  | 24  | 23  |
| 10  | 50  | 36  | 28  | 22  | 49  | 36  | 28  | 22  | 35  | 27  | 22  |  | 34  | 27  | 22  |  | 33  | 26  | 22  | 20  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 920  |
| 5°  | 924  |
| 10° | 935  |
| 15° | 953  |
| 20° | 976  |
| 25° | 1009 |
| 30° | 1052 |
| 35° | 1108 |
| 40° | 1177 |
| 45° | 1261 |
| 50° | 1323 |
| 55° | 1350 |
| 60° | 1333 |
| 65° | 1291 |
| 70° | 1207 |
| 75° | 1079 |
| 80° | 912  |
| 85° | 730  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 55°  
 Luminance: 1350 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 11.0   | 2.4       |
| 10°-20°   | 32.8   | 7.2       |
| 20°-30°   | 53.1   | 11.7      |
| 30°-40°   | 71.6   | 15.7      |
| 40°-50°   | 86.1   | 18.9      |
| 50°-60°   | 86.5   | 19.0      |
| 60°-70°   | 67.6   | 14.8      |
| 70°-80°   | 37.4   | 8.2       |
| 80°-90°   | 9.6    | 2.1       |
| 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°    | 97.0   | 21.3      |
| 0°-40°    | 168.5  | 37.0      |
| 0°-60°    | 341.2  | 74.9      |
| 0°-90°    | 455.8  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 455.8  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 116 |      |
| 5°  | 116 | 11   |
| 15° | 116 | 33   |
| 25° | 115 | 53   |
| 35° | 114 | 72   |
| 45° | 112 | 86   |
| 55° | 97  | 86   |
| 65° | 69  | 68   |
| 75° | 35  | 37   |
| 85° | 8   | 10   |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 115.7 |
| 2.5°  | 115.7 |
| 5°    | 115.7 |
| 7.5°  | 115.7 |
| 10°   | 115.7 |
| 12.5° | 116.1 |
| 15°   | 115.7 |
| 17.5° | 115.7 |
| 20°   | 115.3 |
| 22.5° | 114.9 |
| 25°   | 114.9 |
| 27.5° | 114.5 |
| 30°   | 114.5 |
| 32.5° | 114.1 |
| 35°   | 114.1 |
| 37.5° | 113.7 |
| 40°   | 113.3 |
| 42.5° | 112.9 |
| 45°   | 112.1 |
| 47.5° | 110.1 |
| 50°   | 106.9 |
| 52.5° | 102.9 |
| 55°   | 97.3  |
| 57.5° | 91.0  |
| 60°   | 83.8  |
| 62.5° | 76.6  |
| 65°   | 68.6  |
| 67.5° | 60.2  |
| 70°   | 51.9  |
| 72.5° | 43.5  |
| 75°   | 35.1  |
| 77.5° | 27.5  |
| 80°   | 19.9  |
| 82.5° | 13.6  |
| 85°   | 8.0   |
| 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 | 13.74            | 15.47 | 14.10 | 15.79 | 16.10 | 13.74          | 15.47 | 14.10 | 15.79 | 16.10 |
|                 | 3H   | 15.57            | 17.15 | 15.95 | 17.47 | 17.83 | 15.57          | 17.15 | 15.95 | 17.47 | 17.83 |
|                 | 4H   | 16.21            | 17.70 | 16.61 | 18.05 | 18.42 | 16.21          | 17.70 | 16.61 | 18.05 | 18.42 |
|                 | 6H   | 16.66            | 18.04 | 17.06 | 18.40 | 18.79 | 16.66          | 18.04 | 17.06 | 18.40 | 18.79 |
|                 | 8H   | 16.78            | 18.11 | 17.21 | 18.50 | 18.89 | 16.78          | 18.11 | 17.21 | 18.50 | 18.89 |
|                 | 12H  | 16.87            | 18.14 | 17.30 | 18.52 | 18.95 | 16.87          | 18.14 | 17.30 | 18.52 | 18.95 |
| 4H              | 2H   | 14.41            | 15.90 | 14.81 | 16.25 | 16.62 | 14.41          | 15.90 | 14.81 | 16.25 | 16.62 |
|                 | 3H   | 16.45            | 17.70 | 16.86 | 18.10 | 18.50 | 16.45          | 17.70 | 16.86 | 18.10 | 18.50 |
|                 | 4H   | 17.21            | 18.35 | 17.64 | 18.76 | 19.19 | 17.21          | 18.35 | 17.64 | 18.76 | 19.19 |
|                 | 6H   | 17.77            | 18.76 | 18.22 | 19.20 | 19.65 | 17.77          | 18.76 | 18.22 | 19.20 | 19.65 |
|                 | 8H   | 17.94            | 18.87 | 18.40 | 19.31 | 19.78 | 17.94          | 18.87 | 18.40 | 19.31 | 19.78 |
|                 | 12H  | 18.06            | 18.90 | 18.54 | 19.38 | 19.84 | 18.06          | 18.90 | 18.54 | 19.38 | 19.84 |
| 8H              | 4H   | 17.52            | 18.45 | 17.97 | 18.89 | 19.35 | 17.52          | 18.45 | 17.97 | 18.89 | 19.35 |
|                 | 6H   | 18.18            | 18.96 | 18.67 | 19.44 | 19.92 | 18.18          | 18.96 | 18.67 | 19.44 | 19.92 |
|                 | 8H   | 18.41            | 19.11 | 18.92 | 19.62 | 20.10 | 18.41          | 19.11 | 18.92 | 19.62 | 20.10 |
|                 | 12H  | 18.60            | 19.22 | 19.10 | 19.70 | 20.26 | 18.60          | 19.22 | 19.10 | 19.70 | 20.26 |
| 12H             | 4H   | 17.55            | 18.39 | 18.03 | 18.86 | 19.33 | 17.55          | 18.39 | 18.03 | 18.86 | 19.33 |
|                 | 6H   | 18.23            | 18.93 | 18.73 | 19.43 | 19.92 | 18.23          | 18.93 | 18.73 | 19.43 | 19.92 |
|                 | 8H   | 18.52            | 19.13 | 19.02 | 19.62 | 20.18 | 18.52          | 19.13 | 19.02 | 19.62 | 20.18 |