

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: P867056

Luminaire Tested: PRLX-2002-L-935-117L-G-X-X-BLAK-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P867056  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-71)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Pentalux  
Catalog Number: PRLX-2002-L-935-117L-G-X-X-BLAK-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, LARGE LIGHT ENGINE, GLOBE LENS, TRUNCATED DOME WITH BLACK INTERIOR SHADE.  
LIGHT LEVEL 7  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

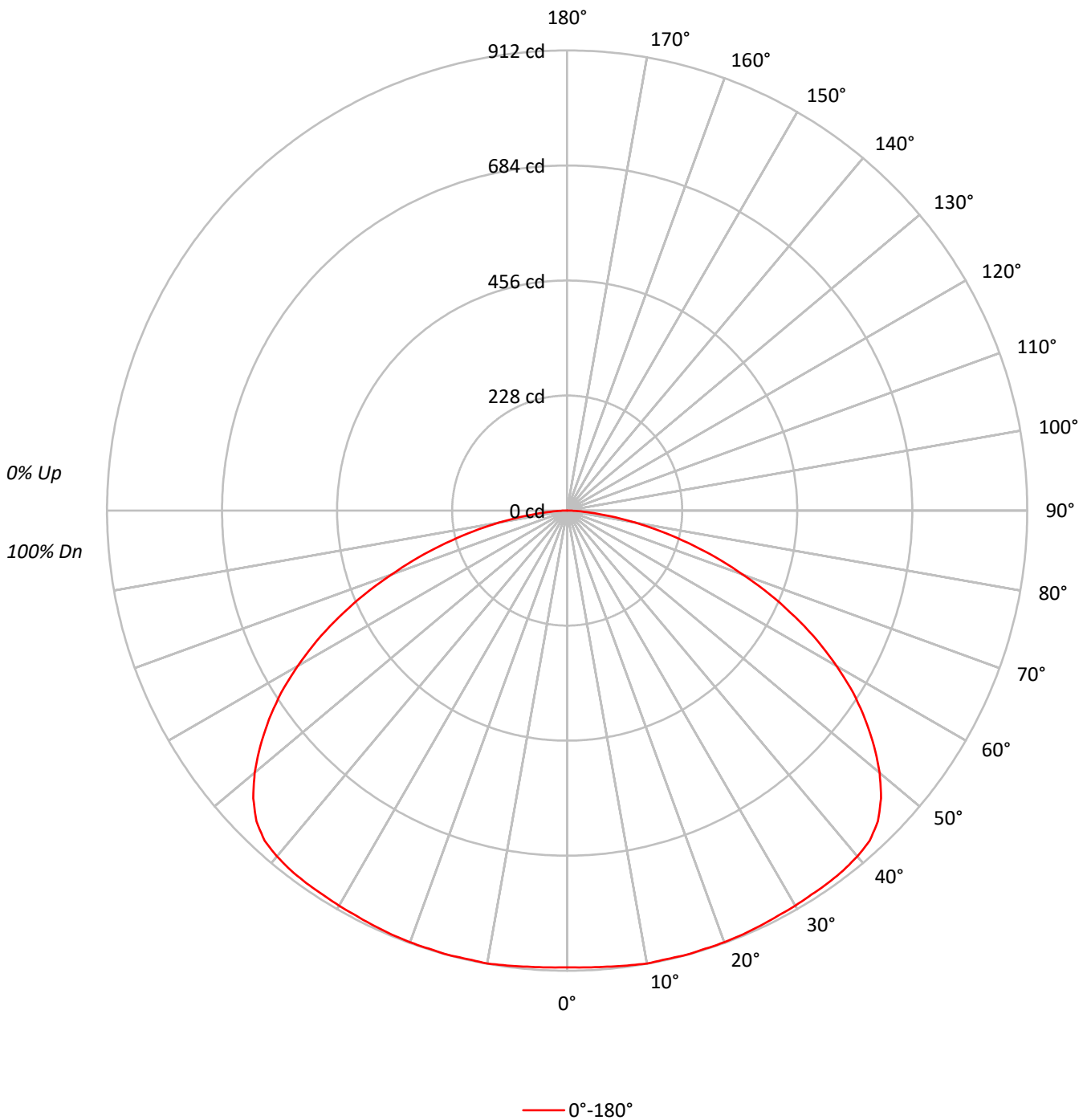
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3455.2 lumens  
Efficiency: N/A  
Efficacy: 36.3 lumens/watt  
Spacing Criteria (0/90/45): 1.52 / 1.52 / 1.65  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 95.2  
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 | 99  | 95  | 105 | 101 | 97  | 93  | 97  | 93  | 90  |  | 93  | 90  | 87  |  | 89  | 87  | 85  | 83  |
| 2   | 98  | 89  | 82  | 76  | 95  | 87  | 81  | 75  | 84  | 78  | 73  |  | 80  | 76  | 71  |  | 77  | 73  | 70  | 68  |
| 3   | 89  | 77  | 69  | 62  | 86  | 76  | 68  | 61  | 73  | 66  | 60  |  | 70  | 64  | 59  |  | 67  | 62  | 58  | 56  |
| 4   | 81  | 68  | 59  | 52  | 78  | 67  | 58  | 51  | 64  | 56  | 51  |  | 62  | 55  | 50  |  | 59  | 54  | 49  | 47  |
| 5   | 74  | 60  | 51  | 44  | 72  | 59  | 50  | 44  | 57  | 49  | 43  |  | 55  | 48  | 43  |  | 53  | 47  | 42  | 40  |
| 6   | 68  | 54  | 44  | 38  | 66  | 53  | 44  | 37  | 51  | 43  | 37  |  | 49  | 42  | 37  |  | 48  | 41  | 36  | 34  |
| 7   | 63  | 48  | 39  | 33  | 61  | 48  | 39  | 33  | 46  | 38  | 32  |  | 44  | 37  | 32  |  | 43  | 37  | 32  | 30  |
| 8   | 58  | 44  | 35  | 29  | 56  | 43  | 35  | 29  | 42  | 34  | 29  |  | 41  | 34  | 28  |  | 39  | 33  | 28  | 26  |
| 9   | 54  | 40  | 32  | 26  | 53  | 39  | 31  | 26  | 38  | 31  | 26  |  | 37  | 30  | 25  |  | 36  | 30  | 25  | 23  |
| 10  | 50  | 37  | 29  | 23  | 49  | 36  | 28  | 23  | 35  | 28  | 23  |  | 34  | 28  | 23  |  | 33  | 27  | 23  | 21  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 4467 |
| 5°  | 4494 |
| 10° | 4567 |
| 15° | 4656 |
| 20° | 4781 |
| 25° | 4940 |
| 30° | 5151 |
| 35° | 5427 |
| 40° | 5764 |
| 45° | 6077 |
| 50° | 6206 |
| 55° | 6203 |
| 60° | 6088 |
| 65° | 5819 |
| 70° | 5343 |
| 75° | 4741 |
| 80° | 3873 |
| 85° | 2593 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 52.5°  
 Luminance: 6215 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 86.8   | 2.5       |
| 10°-20°   | 258.2  | 7.5       |
| 20°-30°   | 419.9  | 12.2      |
| 30°-40°   | 565.6  | 16.4      |
| 40°-50°   | 667.8  | 19.3      |
| 50°-60°   | 642.7  | 18.6      |
| 60°-70°   | 491.5  | 14.2      |
| 70°-80°   | 264.0  | 7.6       |
| 80°-90°   | 58.7   | 1.7       |
| 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°    | 764.8  | 22.1      |
| 0°-40°    | 1330.4 | 38.5      |
| 0°-60°    | 2641.0 | 76.4      |
| 0°-90°    | 3455.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3455.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 905 |      |
| 5°  | 907 | 87   |
| 15° | 912 | 258  |
| 25° | 907 | 420  |
| 35° | 901 | 566  |
| 45° | 871 | 668  |
| 55° | 721 | 643  |
| 65° | 498 | 491  |
| 75° | 249 | 264  |
| 85° | 46  | 59   |
| 90° | 0   |      |

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CATALOG NUMBER: PRLX-2002-L-935-117L-G-X-X-BLAK-X

**CANDELA DISTRIBUTION (FULL):**

| 0°    |       |
|-------|-------|
| 0°    | 905.3 |
| 2.5°  | 906.3 |
| 5°    | 907.4 |
| 7.5°  | 909.4 |
| 10°   | 911.5 |
| 12.5° | 910.5 |
| 15°   | 911.5 |
| 17.5° | 910.5 |
| 20°   | 910.5 |
| 22.5° | 909.4 |
| 25°   | 907.4 |
| 27.5° | 905.3 |
| 30°   | 904.2 |
| 32.5° | 902.2 |
| 35°   | 901.1 |
| 37.5° | 899.0 |
| 40°   | 894.9 |
| 42.5° | 887.6 |
| 45°   | 870.9 |
| 47.5° | 843.9 |
| 50°   | 808.5 |
| 52.5° | 766.9 |
| 55°   | 721.1 |
| 57.5° | 672.2 |
| 60°   | 617.0 |
| 62.5° | 559.8 |
| 65°   | 498.4 |
| 67.5° | 435.0 |
| 70°   | 370.4 |
| 72.5° | 309.0 |
| 75°   | 248.7 |
| 77.5° | 190.4 |
| 80°   | 136.3 |
| 82.5° | 86.4  |
| 85°   | 45.8  |
| 87.5° | 15.6  |
| 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 | 18.96            | 20.68 | 19.33 | 20.99 | 21.31 | 18.96          | 20.68 | 19.33 | 20.99 | 21.31 |
|                 | 3H   | 20.72            | 22.27 | 21.09 | 22.60 | 22.95 | 20.72          | 22.27 | 21.09 | 22.60 | 22.95 |
|                 | 4H   | 21.32            | 22.79 | 21.72 | 23.13 | 23.51 | 21.32          | 22.79 | 21.72 | 23.13 | 23.51 |
|                 | 6H   | 21.72            | 23.08 | 22.13 | 23.44 | 23.83 | 21.72          | 23.08 | 22.13 | 23.44 | 23.83 |
|                 | 8H   | 21.82            | 23.12 | 22.24 | 23.51 | 23.91 | 21.82          | 23.12 | 22.24 | 23.51 | 23.91 |
|                 | 12H  | 21.87            | 23.12 | 22.30 | 23.50 | 23.93 | 21.87          | 23.12 | 22.30 | 23.50 | 23.93 |
| 4H              | 2H   | 19.61            | 21.08 | 20.01 | 21.42 | 21.80 | 19.61          | 21.08 | 20.01 | 21.42 | 21.80 |
|                 | 3H   | 21.57            | 22.80 | 21.97 | 23.19 | 23.59 | 21.57          | 22.80 | 21.97 | 23.19 | 23.59 |
|                 | 4H   | 22.29            | 23.40 | 22.72 | 23.81 | 24.25 | 22.29          | 23.40 | 22.72 | 23.81 | 24.25 |
|                 | 6H   | 22.79            | 23.77 | 23.25 | 24.21 | 24.66 | 22.79          | 23.77 | 23.25 | 24.21 | 24.66 |
|                 | 8H   | 22.93            | 23.84 | 23.39 | 24.28 | 24.75 | 22.93          | 23.84 | 23.39 | 24.28 | 24.75 |
|                 | 12H  | 23.01            | 23.83 | 23.49 | 24.31 | 24.77 | 23.01          | 23.83 | 23.49 | 24.31 | 24.77 |
| 8H              | 4H   | 22.57            | 23.49 | 23.03 | 23.93 | 24.39 | 22.57          | 23.49 | 23.03 | 23.93 | 24.39 |
|                 | 6H   | 23.17            | 23.93 | 23.66 | 24.42 | 24.89 | 23.17          | 23.93 | 23.66 | 24.42 | 24.89 |
|                 | 8H   | 23.36            | 24.04 | 23.87 | 24.54 | 25.03 | 23.36          | 24.04 | 23.87 | 24.54 | 25.03 |
|                 | 12H  | 23.49            | 24.09 | 23.99 | 24.58 | 25.13 | 23.49          | 24.09 | 23.99 | 24.58 | 25.13 |
| 12H             | 4H   | 22.60            | 23.42 | 23.08 | 23.89 | 24.36 | 22.60          | 23.42 | 23.08 | 23.89 | 24.36 |
|                 | 6H   | 23.21            | 23.89 | 23.72 | 24.40 | 24.88 | 23.21          | 23.89 | 23.72 | 24.40 | 24.88 |
|                 | 8H   | 23.44            | 24.04 | 23.95 | 24.53 | 25.09 | 23.44          | 24.04 | 23.95 | 24.53 | 25.09 |