

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: P865549

Luminaire Tested: PRLX-2001-S-940-15L-G-U-S-X-X-BRSS-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865549  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-4)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2001-S-940-15L-G-U-S-X-X-BRSS-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, GLOBE LENS,  
TAPERED DRUM WITH BRASS INTERIOR SHADE.  
LIGHT LEVEL 3  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

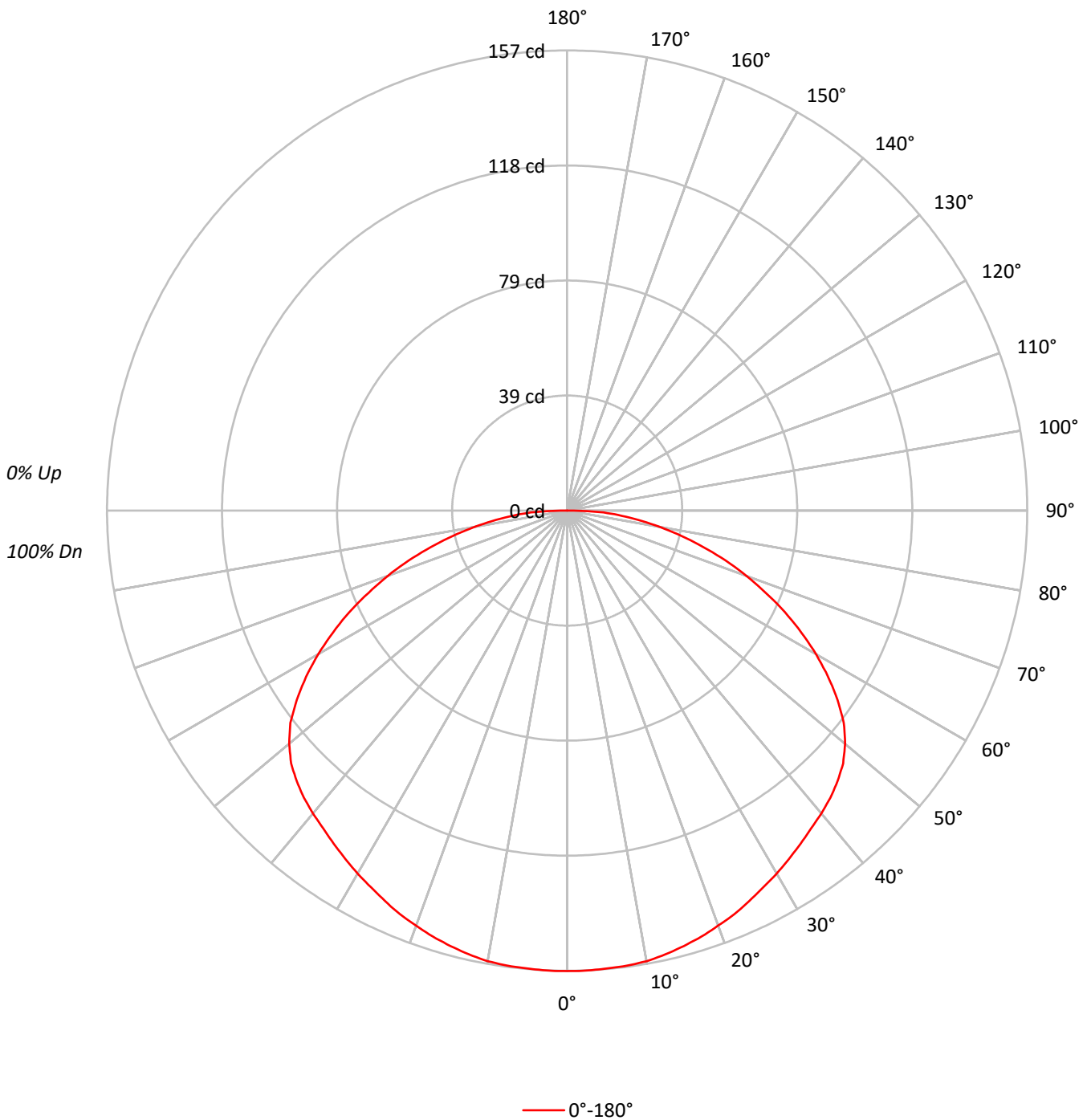
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 565.2 lumens  
Efficiency: N/A  
Efficacy: 36.2 lumens/watt  
Spacing Criteria (0/90/45): 1.36 / 1.36 / 1.55  
Luminous Opening: Circular (Dia: 0.92' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 15.6  
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   | 107 | 102 | 97  | 93  | 105 | 100 | 95  | 91  | 95  | 92  | 89  |  | 91  | 89  | 86  |  | 88  | 85  | 83  | 81  |
| 2   | 97  | 88  | 80  | 74  | 94  | 86  | 79  | 73  | 82  | 76  | 71  |  | 79  | 74  | 70  |  | 76  | 72  | 68  | 66  |
| 3   | 88  | 76  | 67  | 60  | 85  | 75  | 66  | 60  | 72  | 64  | 59  |  | 69  | 63  | 58  |  | 66  | 61  | 57  | 54  |
| 4   | 80  | 67  | 57  | 50  | 77  | 66  | 57  | 50  | 63  | 55  | 49  |  | 61  | 54  | 48  |  | 58  | 53  | 48  | 45  |
| 5   | 73  | 59  | 50  | 43  | 71  | 58  | 49  | 42  | 56  | 48  | 42  |  | 54  | 47  | 41  |  | 52  | 46  | 41  | 39  |
| 6   | 67  | 53  | 44  | 37  | 65  | 52  | 43  | 37  | 50  | 42  | 36  |  | 48  | 41  | 36  |  | 47  | 41  | 36  | 33  |
| 7   | 62  | 48  | 39  | 32  | 60  | 47  | 38  | 32  | 45  | 38  | 32  |  | 44  | 37  | 31  |  | 43  | 36  | 31  | 29  |
| 8   | 58  | 43  | 35  | 28  | 56  | 43  | 34  | 28  | 41  | 34  | 28  |  | 40  | 33  | 28  |  | 39  | 32  | 28  | 26  |
| 9   | 54  | 40  | 31  | 25  | 52  | 39  | 31  | 25  | 38  | 30  | 25  |  | 37  | 30  | 25  |  | 36  | 29  | 25  | 23  |
| 10  | 50  | 37  | 28  | 23  | 49  | 36  | 28  | 23  | 35  | 28  | 23  |  | 34  | 27  | 23  |  | 33  | 27  | 22  | 21  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 2562 |
| 5°  | 2567 |
| 10° | 2585 |
| 15° | 2597 |
| 20° | 2616 |
| 25° | 2645 |
| 30° | 2693 |
| 35° | 2764 |
| 40° | 2872 |
| 45° | 3010 |
| 50° | 3141 |
| 55° | 3202 |
| 60° | 3200 |
| 65° | 3165 |
| 70° | 3104 |
| 75° | 3031 |
| 80° | 3006 |
| 85° | 3275 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 87.5°  
 Luminance: 4188 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 15.0   | 2.6       |
| 10°-20°   | 43.5   | 7.7       |
| 20°-30°   | 67.9   | 12.0      |
| 30°-40°   | 87.1   | 15.4      |
| 40°-50°   | 100.7  | 17.8      |
| 50°-60°   | 100.3  | 17.7      |
| 60°-70°   | 80.9   | 14.3      |
| 70°-80°   | 51.0   | 9.0       |
| 80°-90°   | 18.8   | 3.3       |
| 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°    | 126.3  | 22.4      |
| 0°-40°    | 213.5  | 37.8      |
| 0°-60°    | 414.4  | 73.3      |
| 0°-90°    | 565.2  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 565.2  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 157 |      |
| 5°  | 157 | 15   |
| 15° | 154 | 43   |
| 25° | 147 | 68   |
| 35° | 139 | 87   |
| 45° | 130 | 101  |
| 55° | 113 | 100  |
| 65° | 82  | 81   |
| 75° | 48  | 51   |
| 85° | 18  | 19   |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 157.1 |
| 2.5°  | 157.1 |
| 5°    | 156.8 |
| 7.5°  | 156.6 |
| 10°   | 156.1 |
| 12.5° | 155.1 |
| 15°   | 153.8 |
| 17.5° | 152.4 |
| 20°   | 150.7 |
| 22.5° | 149.1 |
| 25°   | 147.0 |
| 27.5° | 144.9 |
| 30°   | 143.0 |
| 32.5° | 140.9 |
| 35°   | 138.8 |
| 37.5° | 136.7 |
| 40°   | 134.9 |
| 42.5° | 132.9 |
| 45°   | 130.5 |
| 47.5° | 127.7 |
| 50°   | 123.8 |
| 52.5° | 119.0 |
| 55°   | 112.6 |
| 57.5° | 105.6 |
| 60°   | 98.1  |
| 62.5° | 90.1  |
| 65°   | 82.0  |
| 67.5° | 73.3  |
| 70°   | 65.1  |
| 72.5° | 56.7  |
| 75°   | 48.1  |
| 77.5° | 40.0  |
| 80°   | 32.0  |
| 82.5° | 24.4  |
| 85°   | 17.5  |
| 87.5° | 11.2  |
| 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 | 16.53            | 18.26 | 16.89 | 18.58 | 18.89 | 16.53          | 18.26 | 16.89 | 18.58 | 18.89 |
|                 | 3H   | 18.54            | 20.11 | 18.91 | 20.44 | 20.80 | 18.54          | 20.11 | 18.91 | 20.44 | 20.80 |
|                 | 4H   | 19.35            | 20.84 | 19.74 | 21.19 | 21.56 | 19.35          | 20.84 | 19.74 | 21.19 | 21.56 |
|                 | 6H   | 20.02            | 21.41 | 20.43 | 21.77 | 22.16 | 20.02          | 21.41 | 20.43 | 21.77 | 22.16 |
|                 | 8H   | 20.28            | 21.61 | 20.70 | 22.00 | 22.39 | 20.28          | 21.61 | 20.70 | 22.00 | 22.39 |
|                 | 12H  | 20.50            | 21.78 | 20.93 | 22.16 | 22.59 | 20.50          | 21.78 | 20.93 | 22.16 | 22.59 |
| 4H              | 2H   | 17.23            | 18.73 | 17.63 | 19.07 | 19.44 | 17.23          | 18.73 | 17.63 | 19.07 | 19.44 |
|                 | 3H   | 19.47            | 20.74 | 19.88 | 21.13 | 21.53 | 19.47          | 20.74 | 19.88 | 21.13 | 21.53 |
|                 | 4H   | 20.42            | 21.58 | 20.85 | 21.99 | 22.42 | 20.42          | 21.58 | 20.85 | 21.99 | 22.42 |
|                 | 6H   | 21.25            | 22.26 | 21.70 | 22.70 | 23.15 | 21.25          | 22.26 | 21.70 | 22.70 | 23.15 |
|                 | 8H   | 21.57            | 22.52 | 22.03 | 22.96 | 23.43 | 21.57          | 22.52 | 22.03 | 22.96 | 23.43 |
|                 | 12H  | 21.87            | 22.73 | 22.35 | 23.20 | 23.67 | 21.87          | 22.73 | 22.35 | 23.20 | 23.67 |
| 8H              | 4H   | 20.82            | 21.77 | 21.28 | 22.21 | 22.67 | 20.82          | 21.77 | 21.28 | 22.21 | 22.67 |
|                 | 6H   | 21.80            | 22.59 | 22.29 | 23.08 | 23.55 | 21.80          | 22.59 | 22.29 | 23.08 | 23.55 |
|                 | 8H   | 22.23            | 22.94 | 22.73 | 23.45 | 23.93 | 22.23          | 22.94 | 22.73 | 23.45 | 23.93 |
|                 | 12H  | 22.64            | 23.28 | 23.14 | 23.77 | 24.32 | 22.64          | 23.28 | 23.14 | 23.77 | 24.32 |
| 12H             | 4H   | 20.88            | 21.74 | 21.36 | 22.21 | 22.68 | 20.88          | 21.74 | 21.36 | 22.21 | 22.68 |
|                 | 6H   | 21.90            | 22.62 | 22.40 | 23.12 | 23.60 | 21.90          | 22.62 | 22.40 | 23.12 | 23.60 |
|                 | 8H   | 22.40            | 23.04 | 22.91 | 23.53 | 24.08 | 22.40          | 23.04 | 22.91 | 23.53 | 24.08 |