

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: P865611

Luminaire Tested: PRLX-2002-S-927-25L-L-U-S-X-X-WHHR-X

Issue Date: 8/20/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P865611  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2304-993-19)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 8/20/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: Prenalux  
Catalog Number: PRLX-2002-S-927-25L-L-U-S-X-X-WHHR-X  
Description: PRENTALUX 3D PRINTED PENDANT LED LUMINAIRE, SMALL LIGHT ENGINE, FLAT LENS, TRUNCATED DOME WITH WHITE INTERIOR SHADE.  
LIGHT LEVEL 5  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

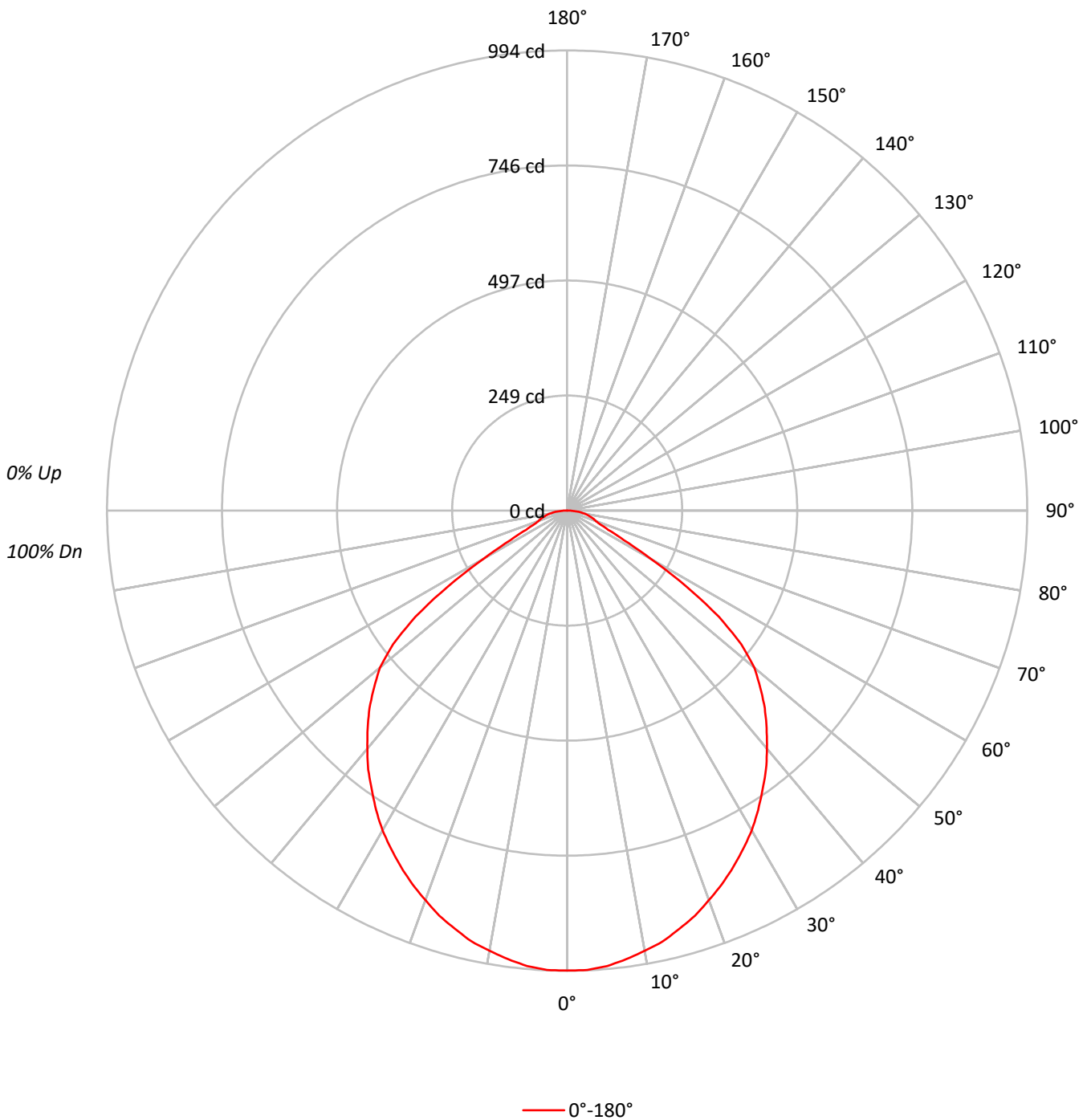
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2205.5 lumens  
Efficiency: N/A  
Efficacy: 75.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31  
Luminous Opening: Circular (Dia: 0.85' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 29.1  
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: 0.333 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   | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98  | 100 | 98  | 95  | 96  | 94  | 92  | 93  | 91  | 90  | 88  |
| 2   | 102 | 95  | 89  | 84  | 100 | 93  | 88  | 83  | 90  | 85  | 81  | 87  | 83  | 80  | 84  | 81  | 78  | 76  |
| 3   | 94  | 85  | 78  | 72  | 92  | 83  | 77  | 71  | 80  | 75  | 70  | 78  | 73  | 69  | 75  | 71  | 68  | 66  |
| 4   | 87  | 76  | 68  | 62  | 85  | 75  | 68  | 62  | 72  | 66  | 61  | 70  | 65  | 60  | 68  | 63  | 60  | 58  |
| 5   | 80  | 69  | 60  | 54  | 78  | 68  | 60  | 54  | 66  | 59  | 54  | 64  | 58  | 53  | 62  | 57  | 53  | 51  |
| 6   | 74  | 62  | 54  | 48  | 73  | 61  | 54  | 48  | 60  | 53  | 47  | 58  | 52  | 47  | 56  | 51  | 47  | 45  |
| 7   | 69  | 57  | 49  | 43  | 68  | 56  | 48  | 43  | 54  | 47  | 42  | 53  | 47  | 42  | 52  | 46  | 42  | 40  |
| 8   | 65  | 52  | 44  | 38  | 63  | 51  | 44  | 38  | 50  | 43  | 38  | 49  | 42  | 38  | 48  | 42  | 38  | 36  |
| 9   | 60  | 48  | 40  | 35  | 59  | 47  | 40  | 35  | 46  | 39  | 35  | 45  | 39  | 34  | 44  | 38  | 34  | 32  |
| 10  | 57  | 44  | 37  | 32  | 55  | 44  | 36  | 32  | 43  | 36  | 31  | 42  | 36  | 31  | 41  | 35  | 31  | 30  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 18662 |
| 5°  | 18620 |
| 10° | 18416 |
| 15° | 18193 |
| 20° | 17901 |
| 25° | 17607 |
| 30° | 17300 |
| 35° | 16868 |
| 40° | 16468 |
| 45° | 16037 |
| 50° | 15421 |
| 55° | 13093 |
| 60° | 7811  |
| 65° | 4351  |
| 70° | 3625  |
| 75° | 3774  |
| 80° | 4111  |
| 85° | 4311  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 16037 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 93.5   | 4.2       |
| 10°-20°   | 263.8  | 12.0      |
| 20°-30°   | 391.3  | 17.7      |
| 30°-40°   | 460.7  | 20.9      |
| 40°-50°   | 464.5  | 21.1      |
| 50°-60°   | 344.2  | 15.6      |
| 60°-70°   | 110.5  | 5.0       |
| 70°-80°   | 55.4   | 2.5       |
| 80°-90°   | 21.5   | 1.0       |
| 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°    | 748.6  | 33.9      |
| 0°-40°    | 1209.4 | 54.8      |
| 0°-60°    | 2018.0 | 91.5      |
| 0°-90°    | 2205.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2205.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 994 |      |
| 5°  | 988 | 94   |
| 15° | 936 | 264  |
| 25° | 850 | 391  |
| 35° | 736 | 461  |
| 45° | 604 | 464  |
| 55° | 400 | 344  |
| 65° | 98  | 110  |
| 75° | 52  | 55   |
| 85° | 20  | 21   |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 993.5 |
| 2.5°  | 993.5 |
| 5°    | 987.5 |
| 7.5°  | 977.5 |
| 10°   | 965.5 |
| 12.5° | 953.5 |
| 15°   | 935.5 |
| 17.5° | 917.5 |
| 20°   | 895.5 |
| 22.5° | 873.5 |
| 25°   | 849.5 |
| 27.5° | 823.6 |
| 30°   | 797.6 |
| 32.5° | 767.6 |
| 35°   | 735.6 |
| 37.5° | 705.6 |
| 40°   | 671.6 |
| 42.5° | 637.7 |
| 45°   | 603.7 |
| 47.5° | 565.7 |
| 50°   | 527.7 |
| 52.5° | 473.7 |
| 55°   | 399.8 |
| 57.5° | 305.8 |
| 60°   | 207.9 |
| 62.5° | 137.9 |
| 65°   | 97.9  |
| 67.5° | 76.0  |
| 70°   | 66.0  |
| 72.5° | 60.0  |
| 75°   | 52.0  |
| 77.5° | 46.0  |
| 80°   | 38.0  |
| 82.5° | 30.0  |
| 85°   | 20.0  |
| 87.5° | 10.0  |
| 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 | 19.86            | 21.35 | 20.22 | 21.66 | 21.98 | 19.86          | 21.35 | 20.22 | 21.66 | 21.98 |
|                 | 3H   | 20.10            | 21.42 | 20.48 | 21.75 | 22.11 | 20.10          | 21.42 | 20.48 | 21.75 | 22.11 |
|                 | 4H   | 20.26            | 21.50 | 20.66 | 21.85 | 22.23 | 20.26          | 21.50 | 20.66 | 21.85 | 22.23 |
|                 | 6H   | 20.46            | 21.59 | 20.87 | 21.96 | 22.35 | 20.46          | 21.59 | 20.87 | 21.96 | 22.35 |
|                 | 8H   | 20.54            | 21.62 | 20.97 | 22.01 | 22.42 | 20.54          | 21.62 | 20.97 | 22.01 | 22.42 |
|                 | 12H  | 20.61            | 21.65 | 21.04 | 22.03 | 22.46 | 20.61          | 21.65 | 21.04 | 22.03 | 22.46 |
| 4H              | 2H   | 19.85            | 21.09 | 20.25 | 21.44 | 21.82 | 19.85          | 21.09 | 20.25 | 21.44 | 21.82 |
|                 | 3H   | 20.24            | 21.25 | 20.65 | 21.65 | 22.05 | 20.24          | 21.25 | 20.65 | 21.65 | 22.05 |
|                 | 4H   | 20.50            | 21.40 | 20.93 | 21.82 | 22.26 | 20.50          | 21.40 | 20.93 | 21.82 | 22.26 |
|                 | 6H   | 20.83            | 21.61 | 21.29 | 22.06 | 22.52 | 20.83          | 21.61 | 21.29 | 22.06 | 22.52 |
|                 | 8H   | 20.97            | 21.71 | 21.44 | 22.15 | 22.62 | 20.97          | 21.71 | 21.44 | 22.15 | 22.62 |
|                 | 12H  | 21.10            | 21.76 | 21.59 | 22.24 | 22.71 | 21.10          | 21.76 | 21.59 | 22.24 | 22.71 |
| 8H              | 4H   | 20.57            | 21.30 | 21.03 | 21.75 | 22.22 | 20.57          | 21.30 | 21.03 | 21.75 | 22.22 |
|                 | 6H   | 21.00            | 21.61 | 21.50 | 22.10 | 22.58 | 21.00          | 21.61 | 21.50 | 22.10 | 22.58 |
|                 | 8H   | 21.22            | 21.77 | 21.74 | 22.29 | 22.78 | 21.22          | 21.77 | 21.74 | 22.29 | 22.78 |
|                 | 12H  | 21.43            | 21.93 | 21.94 | 22.42 | 22.99 | 21.43          | 21.93 | 21.94 | 22.42 | 22.99 |
| 12H             | 4H   | 20.57            | 21.22 | 21.05 | 21.70 | 22.18 | 20.57          | 21.22 | 21.05 | 21.70 | 22.18 |
|                 | 6H   | 21.02            | 21.57 | 21.54 | 22.08 | 22.57 | 21.02          | 21.57 | 21.54 | 22.08 | 22.57 |
|                 | 8H   | 21.30            | 21.79 | 21.81 | 22.29 | 22.85 | 21.30          | 21.79 | 21.81 | 22.29 | 22.85 |