

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: P979603

Luminaire Tested: PRLX-241-927-23L-F-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P979603  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-241-927-23L-F-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 241 SHADE WITH FROSTED LENS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

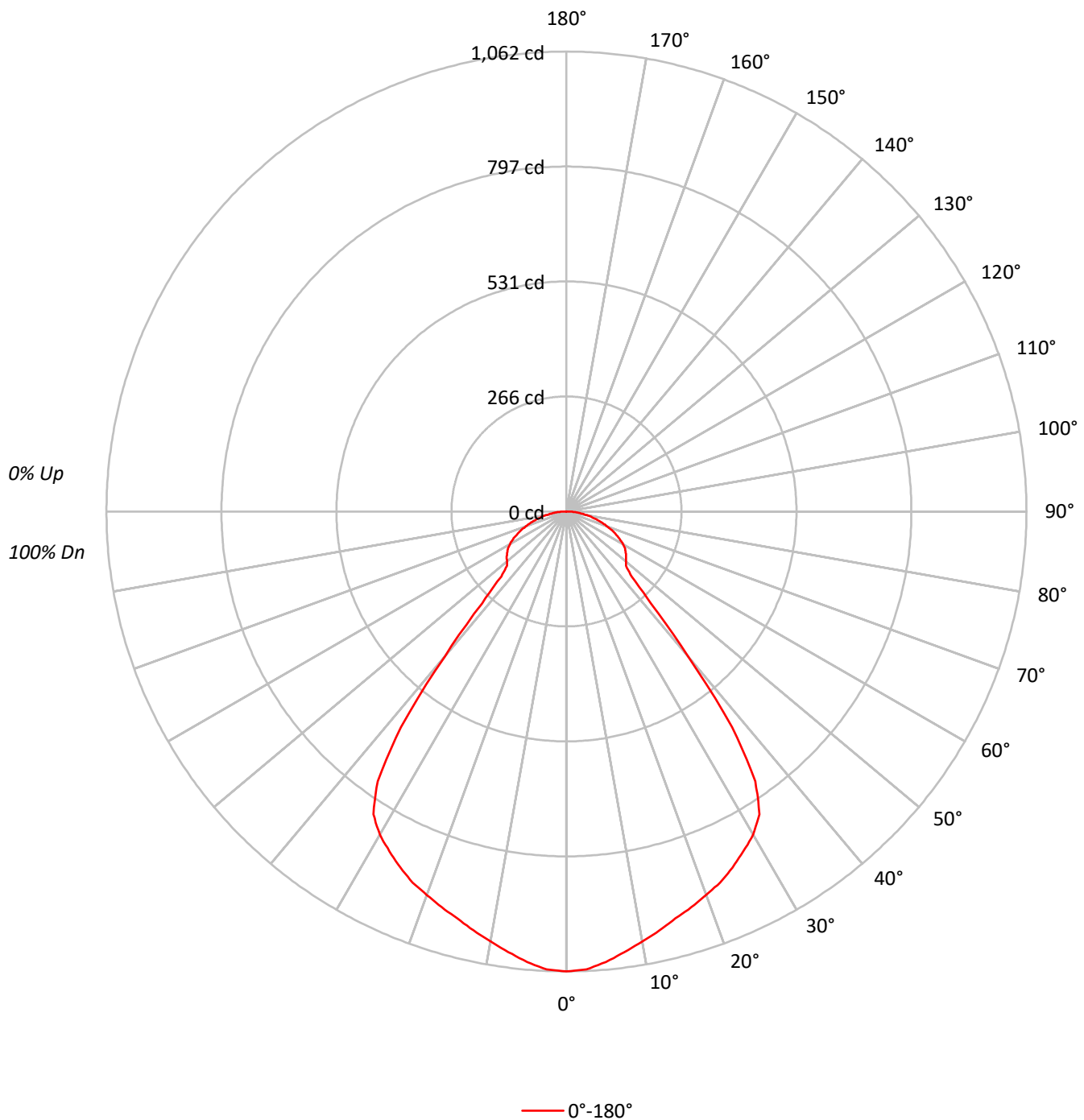
Lumens per Lamp: N/A  
Luminaire Lumens: 1801.2 lumens  
Efficiency: N/A  
Efficacy: 120.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.12  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 15  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
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  |
| RW  | 70  | 50  | 30  | 10  | 70  | 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 |  | 100 |
| 1   | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98  | 100 | 98  | 95  |  | 96  | 94  | 92  |  | 88  |
| 2   | 103 | 96  | 90  | 85  | 100 | 94  | 89  | 84  | 90  | 86  | 82  |  | 87  | 84  | 81  |  | 77  |
| 3   | 95  | 86  | 80  | 74  | 93  | 85  | 79  | 73  | 82  | 77  | 72  |  | 79  | 75  | 71  |  | 68  |
| 4   | 89  | 78  | 71  | 65  | 87  | 77  | 70  | 65  | 75  | 69  | 64  |  | 73  | 67  | 63  |  | 61  |
| 5   | 83  | 72  | 64  | 58  | 81  | 71  | 63  | 58  | 69  | 62  | 57  |  | 67  | 61  | 57  |  | 54  |
| 6   | 77  | 66  | 58  | 52  | 76  | 65  | 58  | 52  | 63  | 57  | 52  |  | 62  | 56  | 51  |  | 49  |
| 7   | 72  | 61  | 53  | 48  | 71  | 60  | 53  | 47  | 58  | 52  | 47  |  | 57  | 51  | 47  |  | 45  |
| 8   | 68  | 56  | 49  | 43  | 67  | 55  | 48  | 43  | 54  | 48  | 43  |  | 53  | 47  | 43  |  | 41  |
| 9   | 64  | 52  | 45  | 40  | 63  | 52  | 45  | 40  | 51  | 44  | 40  |  | 50  | 44  | 39  |  | 38  |
| 10  | 60  | 49  | 42  | 37  | 59  | 48  | 41  | 37  | 47  | 41  | 37  |  | 46  | 41  | 36  |  | 35  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 8187 |
| 5°  | 8082 |
| 10° | 7895 |
| 15° | 7763 |
| 20° | 7730 |
| 25° | 7716 |
| 30° | 7671 |
| 35° | 7155 |
| 40° | 4404 |
| 45° | 2316 |
| 50° | 2150 |
| 55° | 2246 |
| 60° | 2325 |
| 65° | 2308 |
| 70° | 2240 |
| 75° | 2136 |
| 80° | 2011 |
| 85° | 1857 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 62.5°  
Luminance: 2326 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 98.5   | 5.5       |
| 10°-20°   | 275.3  | 15.3      |
| 20°-30°   | 417.9  | 23.2      |
| 30°-40°   | 445.3  | 24.7      |
| 40°-50°   | 190.2  | 10.6      |
| 50°-60°   | 149.2  | 8.3       |
| 60°-70°   | 124.7  | 6.9       |
| 70°-80°   | 76.0   | 4.2       |
| 80°-90°   | 24.0   | 1.3       |
| 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°    | 791.7  | 44.0      |
| 0°-40°    | 1237.0 | 68.7      |
| 0°-60°    | 1576.5 | 87.5      |
| 0°-90°    | 1801.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1801.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1062 |      |
| 5°  | 1044 | 99   |
| 15° | 973  | 275  |
| 25° | 907  | 418  |
| 35° | 760  | 445  |
| 45° | 212  | 190  |
| 55° | 167  | 149  |
| 65° | 126  | 125  |
| 75° | 72   | 76   |
| 85° | 21   | 24   |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1062.0 |
| 2.5°  | 1058.6 |
| 5°    | 1044.4 |
| 7.5°  | 1026.1 |
| 10°   | 1008.5 |
| 12.5° | 991.0  |
| 15°   | 972.7  |
| 17.5° | 958.5  |
| 20°   | 942.3  |
| 22.5° | 927.4  |
| 25°   | 907.1  |
| 27.5° | 884.8  |
| 30°   | 861.8  |
| 32.5° | 829.3  |
| 35°   | 760.3  |
| 37.5° | 628.4  |
| 40°   | 437.6  |
| 42.5° | 288.8  |
| 45°   | 212.4  |
| 47.5° | 186.0  |
| 50°   | 179.3  |
| 52.5° | 173.8  |
| 55°   | 167.1  |
| 57.5° | 160.3  |
| 60°   | 150.8  |
| 62.5° | 139.3  |
| 65°   | 126.5  |
| 67.5° | 113.0  |
| 70°   | 99.4   |
| 72.5° | 85.2   |
| 75°   | 71.7   |
| 77.5° | 58.8   |
| 80°   | 45.3   |
| 82.5° | 33.1   |
| 85°   | 21.0   |
| 87.5° | 11.5   |
| 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 | 13.31            | 14.65 | 13.67 | 14.96 | 15.28 | 13.31          | 14.65 | 13.67 | 14.96 | 15.28 |
|                 | 3H   | 15.31            | 16.52 | 15.69 | 16.84 | 17.21 | 15.31          | 16.52 | 15.69 | 16.84 | 17.21 |
|                 | 4H   | 16.07            | 17.20 | 16.47 | 17.55 | 17.93 | 16.07          | 17.20 | 16.47 | 17.55 | 17.93 |
|                 | 6H   | 16.66            | 17.69 | 17.07 | 18.06 | 18.46 | 16.66          | 17.69 | 17.07 | 18.06 | 18.46 |
|                 | 8H   | 16.86            | 17.84 | 17.28 | 18.23 | 18.64 | 16.86          | 17.84 | 17.28 | 18.23 | 18.64 |
|                 | 12H  | 16.99            | 17.94 | 17.43 | 18.32 | 18.75 | 16.99          | 17.94 | 17.43 | 18.32 | 18.75 |
| 4H              | 2H   | 13.98            | 15.11 | 14.38 | 15.46 | 15.84 | 13.98          | 15.11 | 14.38 | 15.46 | 15.84 |
|                 | 3H   | 16.18            | 17.12 | 16.59 | 17.52 | 17.92 | 16.18          | 17.12 | 16.59 | 17.52 | 17.92 |
|                 | 4H   | 17.06            | 17.91 | 17.50 | 18.33 | 18.77 | 17.06          | 17.91 | 17.50 | 18.33 | 18.77 |
|                 | 6H   | 17.78            | 18.51 | 18.24 | 18.96 | 19.42 | 17.78          | 18.51 | 18.24 | 18.96 | 19.42 |
|                 | 8H   | 18.03            | 18.71 | 18.50 | 19.16 | 19.63 | 18.03          | 18.71 | 18.50 | 19.16 | 19.63 |
|                 | 12H  | 18.21            | 18.82 | 18.70 | 19.30 | 19.78 | 18.21          | 18.82 | 18.70 | 19.30 | 19.78 |
| 8H              | 4H   | 17.38            | 18.07 | 17.85 | 18.51 | 18.98 | 17.38          | 18.07 | 17.85 | 18.51 | 18.98 |
|                 | 6H   | 18.24            | 18.80 | 18.74 | 19.29 | 19.77 | 18.24          | 18.80 | 18.74 | 19.29 | 19.77 |
|                 | 8H   | 18.58            | 19.08 | 19.10 | 19.59 | 20.08 | 18.58          | 19.08 | 19.10 | 19.59 | 20.08 |
|                 | 12H  | 18.86            | 19.30 | 19.37 | 19.79 | 20.36 | 18.86          | 19.30 | 19.37 | 19.79 | 20.36 |
| 12H             | 4H   | 17.41            | 18.02 | 17.90 | 18.50 | 18.97 | 17.41          | 18.02 | 17.90 | 18.50 | 18.97 |
|                 | 6H   | 18.30            | 18.80 | 18.82 | 19.32 | 19.81 | 18.30          | 18.80 | 18.82 | 19.32 | 19.81 |
|                 | 8H   | 18.71            | 19.14 | 19.22 | 19.64 | 20.21 | 18.71          | 19.14 | 19.22 | 19.64 | 20.21 |