

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: P979773

Luminaire Tested: PRLX-241-935-31L-F-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P979773  
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-241-935-31L-F-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 241 SHADE WITH FROSTED LENS  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

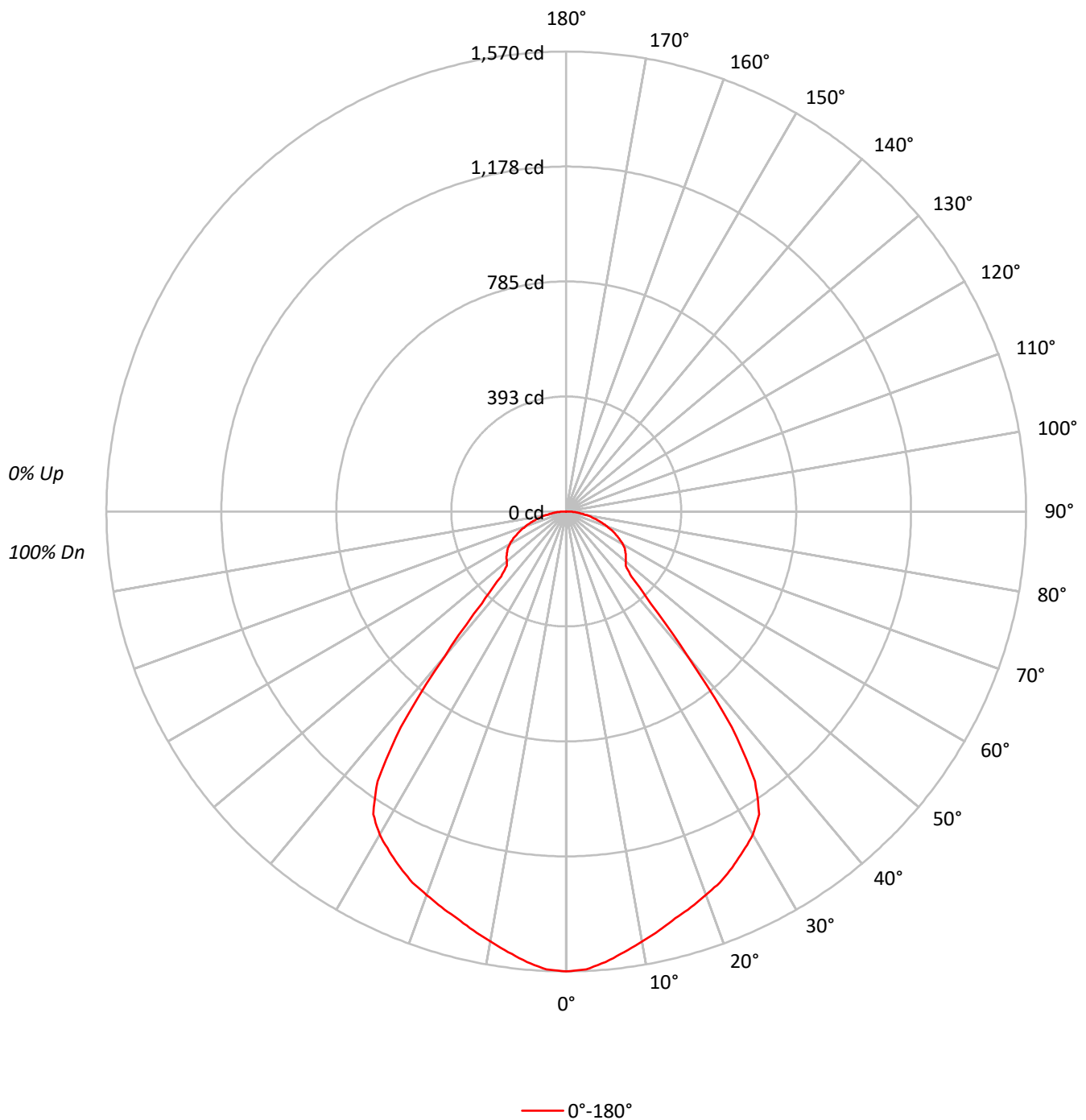
Lumens per Lamp: N/A  
Luminaire Lumens: 2662.8 lumens  
Efficiency: N/A  
Efficacy: 128.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.12  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 20.7  
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  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 111 | 107 | 103 | 100 | 108 | 104 | 101 | 98  | 100 | 98  | 95  |  | 96  | 94  | 92  |  | 93  |
| 2   | 103 | 96  | 90  | 85  | 100 | 94  | 89  | 84  | 90  | 86  | 82  |  | 87  | 84  | 81  |  | 84  |
| 3   | 95  | 86  | 80  | 74  | 93  | 85  | 79  | 73  | 82  | 77  | 72  |  | 79  | 75  | 71  |  | 77  |
| 4   | 89  | 78  | 71  | 65  | 87  | 77  | 70  | 65  | 75  | 69  | 64  |  | 73  | 67  | 63  |  | 71  |
| 5   | 83  | 72  | 64  | 58  | 81  | 71  | 63  | 58  | 69  | 62  | 57  |  | 67  | 61  | 57  |  | 65  |
| 6   | 77  | 66  | 58  | 52  | 76  | 65  | 58  | 52  | 63  | 57  | 52  |  | 62  | 56  | 51  |  | 60  |
| 7   | 72  | 61  | 53  | 48  | 71  | 60  | 53  | 47  | 58  | 52  | 47  |  | 57  | 51  | 47  |  | 56  |
| 8   | 68  | 56  | 49  | 43  | 67  | 55  | 48  | 43  | 54  | 48  | 43  |  | 53  | 47  | 43  |  | 52  |
| 9   | 64  | 52  | 45  | 40  | 63  | 52  | 45  | 40  | 51  | 44  | 40  |  | 50  | 44  | 39  |  | 49  |
| 10  | 60  | 49  | 42  | 37  | 59  | 48  | 41  | 37  | 47  | 41  | 37  |  | 46  | 41  | 36  |  | 46  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 12103 |
| 5°  | 11948 |
| 10° | 11672 |
| 15° | 11477 |
| 20° | 11428 |
| 25° | 11407 |
| 30° | 11341 |
| 35° | 10578 |
| 40° | 6511  |
| 45° | 3423  |
| 50° | 3178  |
| 55° | 3320  |
| 60° | 3438  |
| 65° | 3411  |
| 70° | 3313  |
| 75° | 3157  |
| 80° | 2974  |
| 85° | 2742  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 62.5°  
Luminance: 3439 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 145.6  | 5.5       |
| 10°-20°   | 406.9  | 15.3      |
| 20°-30°   | 617.8  | 23.2      |
| 30°-40°   | 658.3  | 24.7      |
| 40°-50°   | 281.3  | 10.6      |
| 50°-60°   | 220.6  | 8.3       |
| 60°-70°   | 184.4  | 6.9       |
| 70°-80°   | 112.4  | 4.2       |
| 80°-90°   | 35.5   | 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°    | 1170.4 | 44.0      |
| 0°-40°    | 1828.7 | 68.7      |
| 0°-60°    | 2330.6 | 87.5      |
| 0°-90°    | 2662.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2662.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1570 |      |
| 5°  | 1544 | 146  |
| 15° | 1438 | 407  |
| 25° | 1341 | 618  |
| 35° | 1124 | 658  |
| 45° | 314  | 281  |
| 55° | 247  | 221  |
| 65° | 187  | 184  |
| 75° | 106  | 112  |
| 85° | 31   | 36   |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |      |
|-------|------|
| 0°    | 1570 |
| 2.5°  | 1565 |
| 5°    | 1544 |
| 7.5°  | 1517 |
| 10°   | 1491 |
| 12.5° | 1465 |
| 15°   | 1438 |
| 17.5° | 1417 |
| 20°   | 1393 |
| 22.5° | 1371 |
| 25°   | 1341 |
| 27.5° | 1308 |
| 30°   | 1274 |
| 32.5° | 1226 |
| 35°   | 1124 |
| 37.5° | 929  |
| 40°   | 647  |
| 42.5° | 427  |
| 45°   | 314  |
| 47.5° | 275  |
| 50°   | 265  |
| 52.5° | 257  |
| 55°   | 247  |
| 57.5° | 237  |
| 60°   | 223  |
| 62.5° | 206  |
| 65°   | 187  |
| 67.5° | 167  |
| 70°   | 147  |
| 72.5° | 126  |
| 75°   | 106  |
| 77.5° | 87   |
| 80°   | 67   |
| 82.5° | 49   |
| 85°   | 31   |
| 87.5° | 17   |
| 90°   | 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 | 14.67            | 16.01 | 15.03 | 16.32 | 16.64 | 14.67          | 16.01 | 15.03 | 16.32 | 16.64 |
|                 | 3H   | 16.67            | 17.87 | 17.05 | 18.20 | 18.57 | 16.67          | 17.87 | 17.05 | 18.20 | 18.57 |
|                 | 4H   | 17.43            | 18.55 | 17.83 | 18.91 | 19.29 | 17.43          | 18.55 | 17.83 | 18.91 | 19.29 |
|                 | 6H   | 18.01            | 19.05 | 18.43 | 19.42 | 19.82 | 18.01          | 19.05 | 18.43 | 19.42 | 19.82 |
|                 | 8H   | 18.21            | 19.20 | 18.64 | 19.59 | 20.00 | 18.21          | 19.20 | 18.64 | 19.59 | 20.00 |
|                 | 12H  | 18.35            | 19.30 | 18.78 | 19.68 | 20.11 | 18.35          | 19.30 | 18.78 | 19.68 | 20.11 |
| 4H              | 2H   | 15.34            | 16.46 | 15.74 | 16.81 | 17.20 | 15.34          | 16.46 | 15.74 | 16.81 | 17.20 |
|                 | 3H   | 17.54            | 18.48 | 17.95 | 18.88 | 19.28 | 17.54          | 18.48 | 17.95 | 18.88 | 19.28 |
|                 | 4H   | 18.42            | 19.27 | 18.86 | 19.68 | 20.13 | 18.42          | 19.27 | 18.86 | 19.68 | 20.13 |
|                 | 6H   | 19.14            | 19.87 | 19.60 | 20.32 | 20.78 | 19.14          | 19.87 | 19.60 | 20.32 | 20.78 |
|                 | 8H   | 19.39            | 20.07 | 19.86 | 20.52 | 20.99 | 19.39          | 20.07 | 19.86 | 20.52 | 20.99 |
|                 | 12H  | 19.57            | 20.18 | 20.06 | 20.66 | 21.14 | 19.57          | 20.18 | 20.06 | 20.66 | 21.14 |
| 8H              | 4H   | 18.74            | 19.43 | 19.21 | 19.87 | 20.34 | 18.74          | 19.43 | 19.21 | 19.87 | 20.34 |
|                 | 6H   | 19.60            | 20.16 | 20.10 | 20.65 | 21.13 | 19.60          | 20.16 | 20.10 | 20.65 | 21.13 |
|                 | 8H   | 19.94            | 20.44 | 20.46 | 20.95 | 21.44 | 19.94          | 20.44 | 20.46 | 20.95 | 21.44 |
|                 | 12H  | 20.22            | 20.66 | 20.73 | 21.15 | 21.72 | 20.22          | 20.66 | 20.73 | 21.15 | 21.72 |
| 12H             | 4H   | 18.77            | 19.38 | 19.26 | 19.86 | 20.33 | 18.77          | 19.38 | 19.26 | 19.86 | 20.33 |
|                 | 6H   | 19.66            | 20.16 | 20.18 | 20.68 | 21.17 | 19.66          | 20.16 | 20.18 | 20.68 | 21.17 |
|                 | 8H   | 20.07            | 20.50 | 20.58 | 21.00 | 21.57 | 20.07          | 20.50 | 20.58 | 21.00 | 21.57 |