

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: P979611

Luminaire Tested: PRLX-241-927-31L-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P979611  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-241-927-31L-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 241 SHADE WITH CLEAR LENS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

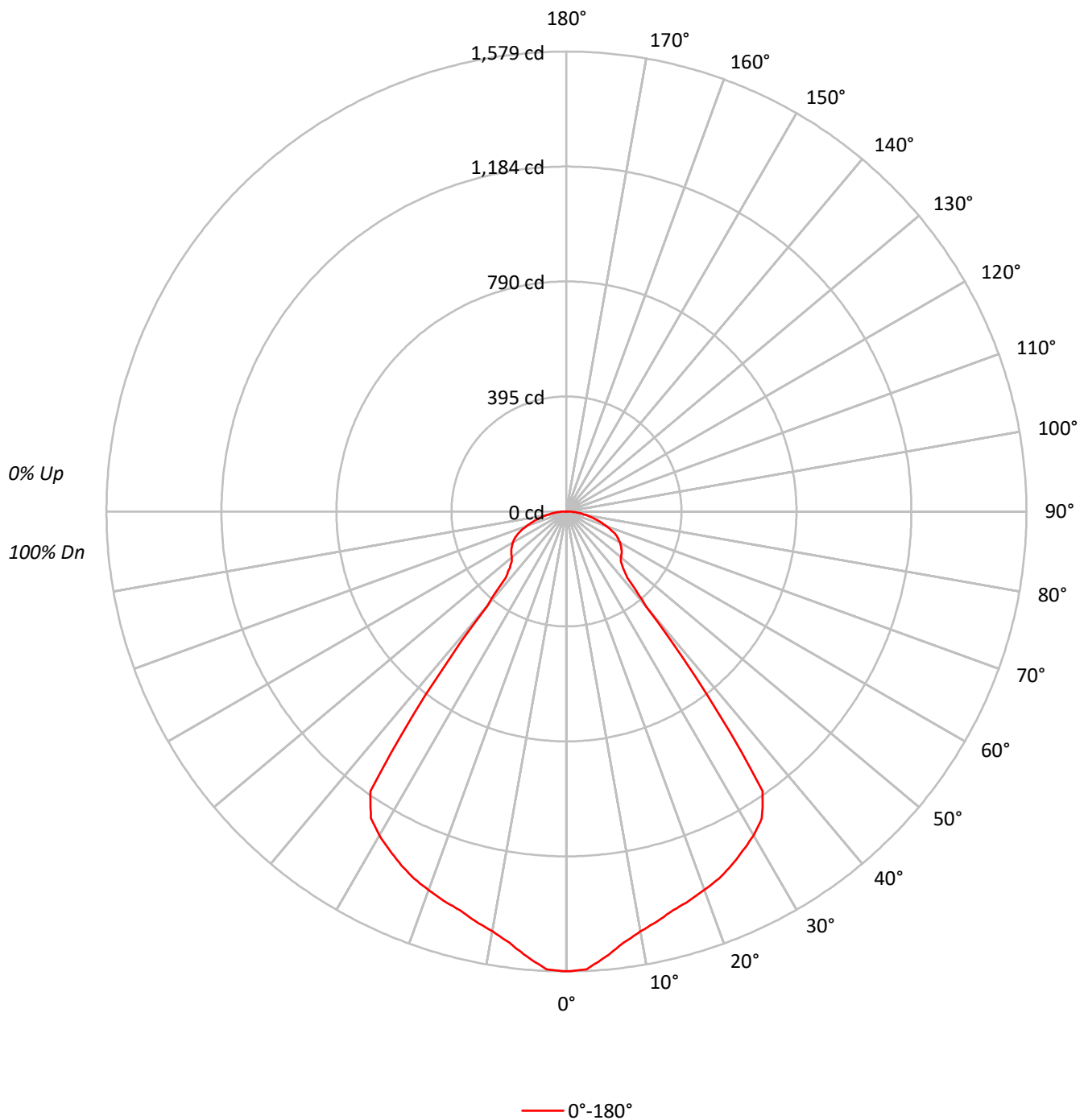
Lumens per Lamp: N/A  
Luminaire Lumens: 2547.1 lumens  
Efficiency: N/A  
Efficacy: 123.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.09  
Luminous Opening: Circular (Dia: 1.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 20.6  
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 | 105 | 101 | 98  | 100 | 98  | 95  |  | 97  | 94  | 92  |  | 88  |
| 2   | 103 | 96  | 90  | 85  | 100 | 94  | 89  | 84  | 91  | 86  | 83  |  | 87  | 84  | 81  |  | 77  |
| 3   | 95  | 87  | 80  | 74  | 93  | 85  | 79  | 74  | 82  | 77  | 73  |  | 80  | 75  | 71  |  | 68  |
| 4   | 89  | 79  | 71  | 66  | 87  | 78  | 71  | 65  | 75  | 69  | 65  |  | 73  | 68  | 64  |  | 61  |
| 5   | 83  | 72  | 64  | 59  | 81  | 71  | 64  | 59  | 69  | 63  | 58  |  | 67  | 62  | 57  |  | 55  |
| 6   | 78  | 66  | 59  | 53  | 76  | 65  | 58  | 53  | 64  | 57  | 52  |  | 62  | 56  | 52  |  | 50  |
| 7   | 73  | 61  | 54  | 48  | 71  | 60  | 53  | 48  | 59  | 53  | 48  |  | 58  | 52  | 48  |  | 45  |
| 8   | 69  | 57  | 49  | 44  | 67  | 56  | 49  | 44  | 55  | 48  | 44  |  | 54  | 48  | 44  |  | 42  |
| 9   | 65  | 53  | 46  | 41  | 63  | 52  | 45  | 41  | 51  | 45  | 40  |  | 50  | 44  | 40  |  | 38  |
| 10  | 61  | 49  | 42  | 38  | 60  | 49  | 42  | 37  | 48  | 42  | 37  |  | 47  | 41  | 37  |  | 36  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 12170 |
| 5°  | 11884 |
| 10° | 11457 |
| 15° | 11309 |
| 20° | 11348 |
| 25° | 11401 |
| 30° | 11435 |
| 35° | 11041 |
| 40° | 4263  |
| 45° | 2996  |
| 50° | 2935  |
| 55° | 3105  |
| 60° | 3266  |
| 65° | 3364  |
| 70° | 3253  |
| 75° | 3074  |
| 80° | 2877  |
| 85° | 2662  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 65°  
Luminance: 3364 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 144.2  | 5.7       |
| 10°-20°   | 401.6  | 15.8      |
| 20°-30°   | 618.0  | 24.3      |
| 30°-40°   | 628.6  | 24.7      |
| 40°-50°   | 225.2  | 8.8       |
| 50°-60°   | 205.9  | 8.1       |
| 60°-70°   | 179.9  | 7.1       |
| 70°-80°   | 109.5  | 4.3       |
| 80°-90°   | 34.4   | 1.4       |
| 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°    | 1163.7 | 45.7      |
| 0°-40°    | 1792.2 | 70.4      |
| 0°-60°    | 2223.4 | 87.3      |
| 0°-90°    | 2547.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2547.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1579 |      |
| 5°  | 1536 | 144  |
| 15° | 1417 | 402  |
| 25° | 1340 | 618  |
| 35° | 1173 | 629  |
| 45° | 275  | 225  |
| 55° | 231  | 206  |
| 65° | 184  | 180  |
| 75° | 103  | 109  |
| 85° | 30   | 34   |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1578.6 |
| 2.5°  | 1573.2 |
| 5°    | 1535.7 |
| 7.5°  | 1493.7 |
| 10°   | 1463.6 |
| 12.5° | 1440.8 |
| 15°   | 1417.0 |
| 17.5° | 1401.5 |
| 20°   | 1383.2 |
| 22.5° | 1365.0 |
| 25°   | 1340.3 |
| 27.5° | 1312.9 |
| 30°   | 1284.6 |
| 32.5° | 1249.0 |
| 35°   | 1173.2 |
| 37.5° | 794.3  |
| 40°   | 423.6  |
| 42.5° | 308.6  |
| 45°   | 274.8  |
| 47.5° | 253.8  |
| 50°   | 244.7  |
| 52.5° | 238.3  |
| 55°   | 231.0  |
| 57.5° | 221.9  |
| 60°   | 211.8  |
| 62.5° | 200.0  |
| 65°   | 184.4  |
| 67.5° | 164.3  |
| 70°   | 144.3  |
| 72.5° | 123.3  |
| 75°   | 103.2  |
| 77.5° | 84.0   |
| 80°   | 64.8   |
| 82.5° | 47.5   |
| 85°   | 30.1   |
| 87.5° | 16.4   |
| 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 | 14.39            | 15.72 | 14.76 | 16.03 | 16.34 | 14.39          | 15.72 | 14.76 | 16.03 | 16.34 |
|                 | 3H   | 16.55            | 17.74 | 16.93 | 18.07 | 18.43 | 16.55          | 17.74 | 16.93 | 18.07 | 18.43 |
|                 | 4H   | 17.33            | 18.45 | 17.74 | 18.80 | 19.18 | 17.33          | 18.45 | 17.74 | 18.80 | 19.18 |
|                 | 6H   | 17.92            | 18.95 | 18.34 | 19.32 | 19.71 | 17.92          | 18.95 | 18.34 | 19.32 | 19.71 |
|                 | 8H   | 18.12            | 19.10 | 18.55 | 19.49 | 19.89 | 18.12          | 19.10 | 18.55 | 19.49 | 19.89 |
|                 | 12H  | 18.26            | 19.20 | 18.70 | 19.58 | 20.01 | 18.26          | 19.20 | 18.70 | 19.58 | 20.01 |
| 4H              | 2H   | 15.14            | 16.25 | 15.54 | 16.60 | 16.99 | 15.14          | 16.25 | 15.54 | 16.60 | 16.99 |
|                 | 3H   | 17.46            | 18.39 | 17.87 | 18.79 | 19.19 | 17.46          | 18.39 | 17.87 | 18.79 | 19.19 |
|                 | 4H   | 18.36            | 19.19 | 18.79 | 19.61 | 20.05 | 18.36          | 19.19 | 18.79 | 19.61 | 20.05 |
|                 | 6H   | 19.07            | 19.79 | 19.53 | 20.24 | 20.70 | 19.07          | 19.79 | 19.53 | 20.24 | 20.70 |
|                 | 8H   | 19.32            | 20.00 | 19.79 | 20.44 | 20.91 | 19.32          | 20.00 | 19.79 | 20.44 | 20.91 |
|                 | 12H  | 19.51            | 20.11 | 19.99 | 20.59 | 21.06 | 19.51          | 20.11 | 19.99 | 20.59 | 21.06 |
| 8H              | 4H   | 18.68            | 19.36 | 19.15 | 19.80 | 20.27 | 18.68          | 19.36 | 19.15 | 19.80 | 20.27 |
|                 | 6H   | 19.53            | 20.09 | 20.03 | 20.58 | 21.06 | 19.53          | 20.09 | 20.03 | 20.58 | 21.06 |
|                 | 8H   | 19.87            | 20.37 | 20.39 | 20.88 | 21.37 | 19.87          | 20.37 | 20.39 | 20.88 | 21.37 |
|                 | 12H  | 20.15            | 20.59 | 20.67 | 21.08 | 21.65 | 20.15          | 20.59 | 20.67 | 21.08 | 21.65 |
| 12H             | 4H   | 18.71            | 19.31 | 19.19 | 19.79 | 20.26 | 18.71          | 19.31 | 19.19 | 19.79 | 20.26 |
|                 | 6H   | 19.60            | 20.09 | 20.12 | 20.61 | 21.10 | 19.60          | 20.09 | 20.12 | 20.61 | 21.10 |
|                 | 8H   | 20.00            | 20.43 | 20.52 | 20.93 | 21.50 | 20.00          | 20.43 | 20.52 | 20.93 | 21.50 |