

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: P980311

Luminaire Tested: PRLX-243-930-18L-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P980311  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-31)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-243-930-18L-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 243 SHADE WITH CLEAR LENS  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

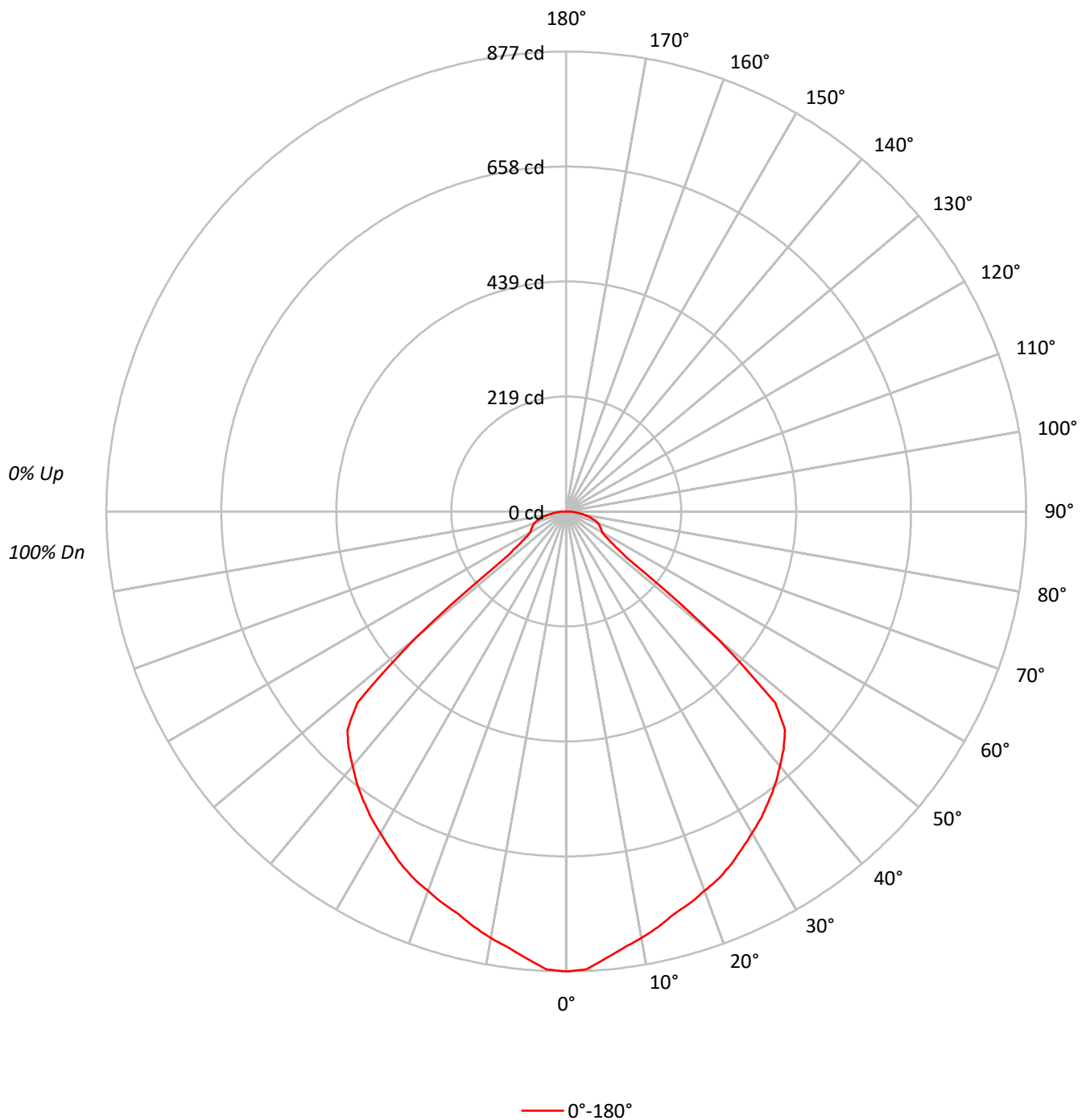
Lumens per Lamp: N/A  
Luminaire Lumens: 1770.0 lumens  
Efficiency: N/A  
Efficacy: 160.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.38  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 11  
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 | 104 | 100 | 108 | 105 | 102 | 99  | 101 | 98  | 96  |  | 97  | 95  | 93  |  | 88  |
| 2   | 103 | 96  | 91  | 86  | 100 | 94  | 89  | 85  | 91  | 87  | 83  |  | 88  | 84  | 81  |  | 77  |
| 3   | 95  | 87  | 80  | 74  | 93  | 85  | 79  | 74  | 82  | 77  | 72  |  | 80  | 75  | 71  |  | 68  |
| 4   | 88  | 78  | 71  | 65  | 86  | 77  | 70  | 65  | 75  | 68  | 64  |  | 72  | 67  | 63  |  | 60  |
| 5   | 82  | 71  | 63  | 57  | 80  | 70  | 63  | 57  | 68  | 61  | 56  |  | 66  | 60  | 56  |  | 53  |
| 6   | 76  | 65  | 57  | 51  | 75  | 64  | 56  | 51  | 62  | 55  | 50  |  | 60  | 55  | 50  |  | 48  |
| 7   | 71  | 59  | 51  | 46  | 70  | 58  | 51  | 46  | 57  | 50  | 45  |  | 56  | 50  | 45  |  | 43  |
| 8   | 67  | 54  | 47  | 41  | 65  | 54  | 46  | 41  | 52  | 46  | 41  |  | 51  | 45  | 41  |  | 39  |
| 9   | 62  | 50  | 43  | 37  | 61  | 49  | 42  | 37  | 48  | 42  | 37  |  | 47  | 41  | 37  |  | 35  |
| 10  | 59  | 46  | 39  | 34  | 57  | 46  | 39  | 34  | 45  | 38  | 34  |  | 44  | 38  | 34  |  | 32  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 4327 |
| 5°  | 4240 |
| 10° | 4139 |
| 15° | 4061 |
| 20° | 4042 |
| 25° | 4045 |
| 30° | 4038 |
| 35° | 4058 |
| 40° | 4082 |
| 45° | 4117 |
| 50° | 2861 |
| 55° | 931  |
| 60° | 777  |
| 65° | 842  |
| 70° | 922  |
| 75° | 959  |
| 80° | 915  |
| 85° | 928  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
Vertical Angle: 45°  
Luminance: 4117 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 80.8   | 4.6       |
| 10°-20°   | 225.1  | 12.7      |
| 20°-30°   | 342.4  | 19.3      |
| 30°-40°   | 421.9  | 23.8      |
| 40°-50°   | 432.9  | 24.5      |
| 50°-60°   | 125.8  | 7.1       |
| 60°-70°   | 71.2   | 4.0       |
| 70°-80°   | 52.0   | 2.9       |
| 80°-90°   | 17.9   | 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°    | 648.3  | 36.6      |
| 0°-40°    | 1070.2 | 60.5      |
| 0°-60°    | 1628.9 | 92.0      |
| 0°-90°    | 1770.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1770.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 877 |      |
| 5°  | 856 | 81   |
| 15° | 795 | 225  |
| 25° | 743 | 342  |
| 35° | 674 | 422  |
| 45° | 590 | 433  |
| 55° | 108 | 126  |
| 65° | 72  | 71   |
| 75° | 50  | 52   |
| 85° | 16  | 18   |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |       |
|-------|-------|
| 0°    | 877.0 |
| 2.5°  | 874.3 |
| 5°    | 856.2 |
| 7.5°  | 839.3 |
| 10°   | 826.2 |
| 12.5° | 811.4 |
| 15°   | 795.0 |
| 17.5° | 783.6 |
| 20°   | 769.9 |
| 22.5° | 758.4 |
| 25°   | 743.1 |
| 27.5° | 725.6 |
| 30°   | 708.7 |
| 32.5° | 692.3 |
| 35°   | 673.7 |
| 37.5° | 655.1 |
| 40°   | 633.8 |
| 42.5° | 613.6 |
| 45°   | 590.1 |
| 47.5° | 540.4 |
| 50°   | 372.7 |
| 52.5° | 146.4 |
| 55°   | 108.2 |
| 57.5° | 89.1  |
| 60°   | 78.7  |
| 62.5° | 75.4  |
| 65°   | 72.1  |
| 67.5° | 68.3  |
| 70°   | 63.9  |
| 72.5° | 57.9  |
| 75°   | 50.3  |
| 77.5° | 41.0  |
| 80°   | 32.2  |
| 82.5° | 24.0  |
| 85°   | 16.4  |
| 87.5° | 9.3   |
| 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 | 7.62             | 9.03  | 7.98  | 9.34  | 9.66  | 7.62           | 9.03  | 7.98  | 9.34  | 9.66  |
|                 | 3H   | 10.04            | 11.29 | 10.41 | 11.62 | 11.98 | 10.04          | 11.29 | 10.41 | 11.62 | 11.98 |
|                 | 4H   | 11.09            | 12.26 | 11.49 | 12.61 | 13.00 | 11.09          | 12.26 | 11.49 | 12.61 | 13.00 |
|                 | 6H   | 11.88            | 12.96 | 12.29 | 13.32 | 13.72 | 11.88          | 12.96 | 12.29 | 13.32 | 13.72 |
|                 | 8H   | 12.15            | 13.18 | 12.58 | 13.57 | 13.97 | 12.15          | 13.18 | 12.58 | 13.57 | 13.97 |
|                 | 12H  | 12.37            | 13.35 | 12.80 | 13.73 | 14.16 | 12.37          | 13.35 | 12.80 | 13.73 | 14.16 |
| 4H              | 2H   | 8.36             | 9.53  | 8.76  | 9.88  | 10.27 | 8.36           | 9.53  | 8.76  | 9.88  | 10.27 |
|                 | 3H   | 11.06            | 12.01 | 11.47 | 12.42 | 12.82 | 11.06          | 12.01 | 11.47 | 12.42 | 12.82 |
|                 | 4H   | 12.25            | 13.11 | 12.68 | 13.53 | 13.97 | 12.25          | 13.11 | 12.68 | 13.53 | 13.97 |
|                 | 6H   | 13.16            | 13.91 | 13.62 | 14.35 | 14.82 | 13.16          | 13.91 | 13.62 | 14.35 | 14.82 |
|                 | 8H   | 13.49            | 14.19 | 13.96 | 14.63 | 15.10 | 13.49          | 14.19 | 13.96 | 14.63 | 15.10 |
|                 | 12H  | 13.75            | 14.38 | 14.24 | 14.86 | 15.33 | 13.75          | 14.38 | 14.24 | 14.86 | 15.33 |
| 8H              | 4H   | 12.67            | 13.37 | 13.14 | 13.81 | 14.28 | 12.67          | 13.37 | 13.14 | 13.81 | 14.28 |
|                 | 6H   | 13.73            | 14.30 | 14.22 | 14.80 | 15.28 | 13.73          | 14.30 | 14.22 | 14.80 | 15.28 |
|                 | 8H   | 14.15            | 14.67 | 14.66 | 15.18 | 15.67 | 14.15          | 14.67 | 14.66 | 15.18 | 15.67 |
|                 | 12H  | 14.52            | 14.98 | 15.03 | 15.48 | 16.04 | 14.52          | 14.98 | 15.03 | 15.48 | 16.04 |
| 12H             | 4H   | 12.72            | 13.34 | 13.20 | 13.82 | 14.29 | 12.72          | 13.34 | 13.20 | 13.82 | 14.29 |
|                 | 6H   | 13.81            | 14.33 | 14.33 | 14.84 | 15.33 | 13.81          | 14.33 | 14.33 | 14.84 | 15.33 |
|                 | 8H   | 14.30            | 14.77 | 14.81 | 15.26 | 15.83 | 14.30          | 14.77 | 14.81 | 15.26 | 15.83 |

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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