

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: P979981

Luminaire Tested: PRLX-242-930-12L-C-U-S-WHTE-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P979981  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-21)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-242-930-12L-C-U-S-WHTE-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, WHITE 242 SHADE WITH CLEAR LENS  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

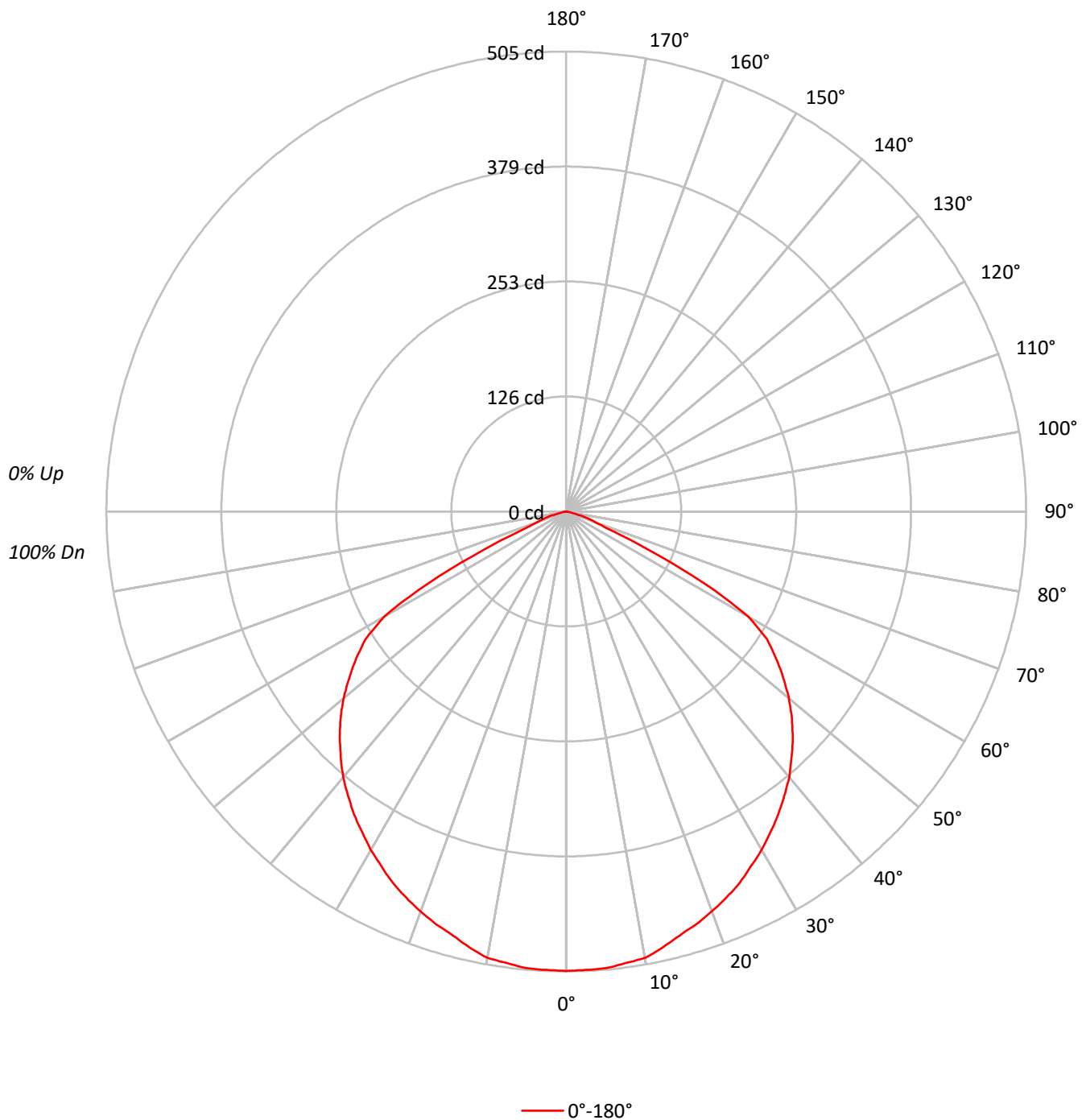
Lumens per Lamp: N/A  
Luminaire Lumens: 1293.0 lumens  
Efficiency: N/A  
Efficacy: 172.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.4  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.5  
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   | 102 | 95  | 89  | 84  | 99  | 93  | 87  | 83  | 89  | 85  | 81  |  | 86  | 82  | 79  |  | 75  |
| 3   | 93  | 84  | 76  | 71  | 91  | 82  | 75  | 70  | 79  | 74  | 69  |  | 77  | 72  | 68  |  | 64  |
| 4   | 86  | 75  | 67  | 60  | 83  | 73  | 66  | 60  | 71  | 64  | 59  |  | 69  | 63  | 58  |  | 56  |
| 5   | 79  | 67  | 58  | 52  | 77  | 66  | 58  | 52  | 64  | 57  | 51  |  | 62  | 56  | 51  |  | 48  |
| 6   | 73  | 60  | 52  | 46  | 71  | 59  | 51  | 45  | 57  | 50  | 45  |  | 56  | 49  | 45  |  | 42  |
| 7   | 68  | 55  | 46  | 40  | 66  | 54  | 46  | 40  | 52  | 45  | 40  |  | 51  | 44  | 40  |  | 37  |
| 8   | 63  | 50  | 42  | 36  | 61  | 49  | 41  | 36  | 48  | 41  | 36  |  | 47  | 40  | 35  |  | 33  |
| 9   | 59  | 46  | 38  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  |  | 43  | 36  | 32  |  | 30  |
| 10  | 55  | 42  | 34  | 29  | 54  | 42  | 34  | 29  | 41  | 34  | 29  |  | 40  | 33  | 29  |  | 27  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 2258 |
| 5°  | 2262 |
| 10° | 2263 |
| 15° | 2232 |
| 20° | 2227 |
| 25° | 2224 |
| 30° | 2217 |
| 35° | 2218 |
| 40° | 2225 |
| 45° | 2226 |
| 50° | 2222 |
| 55° | 2196 |
| 60° | 2064 |
| 65° | 1057 |
| 70° | 425  |
| 75° | 201  |
| 80° | 39   |
| 85° | 56   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2226 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 47.8   | 3.7       |
| 10°-20°   | 136.3  | 10.5      |
| 20°-30°   | 207.4  | 16.0      |
| 30°-40°   | 254.2  | 19.7      |
| 40°-50°   | 271.2  | 21.0      |
| 50°-60°   | 250.1  | 19.3      |
| 60°-70°   | 110.1  | 8.5       |
| 70°-80°   | 14.8   | 1.1       |
| 80°-90°   | 1.1    | 0.1       |
| 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°    | 391.6  | 30.3      |
| 0°-40°    | 645.7  | 49.9      |
| 0°-60°    | 1167.1 | 90.3      |
| 0°-90°    | 1293.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1293.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 505 |      |
| 5°  | 504 | 48   |
| 15° | 482 | 136  |
| 25° | 450 | 207  |
| 35° | 406 | 254  |
| 45° | 352 | 271  |
| 55° | 282 | 250  |
| 65° | 100 | 110  |
| 75° | 12  | 15   |
| 85° | 1   | 1    |
| 90° | 0   |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |       |
|-------|-------|
| 0°    | 504.6 |
| 2.5°  | 503.9 |
| 5°    | 503.5 |
| 7.5°  | 500.2 |
| 10°   | 497.9 |
| 12.5° | 490.4 |
| 15°   | 481.8 |
| 17.5° | 475.1 |
| 20°   | 467.6 |
| 22.5° | 459.0 |
| 25°   | 450.4 |
| 27.5° | 439.2 |
| 30°   | 429.1 |
| 32.5° | 417.5 |
| 35°   | 406.0 |
| 37.5° | 393.6 |
| 40°   | 380.9 |
| 42.5° | 366.3 |
| 45°   | 351.8 |
| 47.5° | 336.1 |
| 50°   | 319.2 |
| 52.5° | 300.5 |
| 55°   | 281.5 |
| 57.5° | 261.3 |
| 60°   | 230.6 |
| 62.5° | 171.6 |
| 65°   | 99.8  |
| 67.5° | 46.4  |
| 70°   | 32.5  |
| 72.5° | 24.3  |
| 75°   | 11.6  |
| 77.5° | 3.4   |
| 80°   | 1.5   |
| 82.5° | 1.5   |
| 85°   | 1.1   |
| 87.5° | 0.7   |
| 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 | 15.67            | 17.22 | 16.03 | 17.53 | 17.85 | 15.67          | 17.22 | 16.03 | 17.53 | 17.85 |
|                 | 3H   | 15.72            | 17.09 | 16.09 | 17.42 | 17.78 | 15.72          | 17.09 | 16.09 | 17.42 | 17.78 |
|                 | 4H   | 15.68            | 16.97 | 16.08 | 17.32 | 17.69 | 15.68          | 16.97 | 16.08 | 17.32 | 17.69 |
|                 | 6H   | 15.62            | 16.80 | 16.03 | 17.17 | 17.56 | 15.62          | 16.80 | 16.03 | 17.17 | 17.56 |
|                 | 8H   | 15.59            | 16.71 | 16.01 | 17.10 | 17.50 | 15.59          | 16.71 | 16.01 | 17.10 | 17.50 |
|                 | 12H  | 15.56            | 16.63 | 15.99 | 17.01 | 17.44 | 15.56          | 16.63 | 15.99 | 17.01 | 17.44 |
| 4H              | 2H   | 15.76            | 17.05 | 16.16 | 17.40 | 17.78 | 15.76          | 17.05 | 16.16 | 17.40 | 17.78 |
|                 | 3H   | 15.85            | 16.90 | 16.26 | 17.30 | 17.70 | 15.85          | 16.90 | 16.26 | 17.30 | 17.70 |
|                 | 4H   | 15.82            | 16.75 | 16.25 | 17.17 | 17.61 | 15.82          | 16.75 | 16.25 | 17.17 | 17.61 |
|                 | 6H   | 15.76            | 16.57 | 16.22 | 17.01 | 17.47 | 15.76          | 16.57 | 16.22 | 17.01 | 17.47 |
|                 | 8H   | 15.72            | 16.47 | 16.18 | 16.91 | 17.38 | 15.72          | 16.47 | 16.18 | 16.91 | 17.38 |
|                 | 12H  | 15.68            | 16.35 | 16.17 | 16.83 | 17.30 | 15.68          | 16.35 | 16.17 | 16.83 | 17.30 |
| 8H              | 4H   | 15.73            | 16.48 | 16.19 | 16.93 | 17.39 | 15.73          | 16.48 | 16.19 | 16.93 | 17.39 |
|                 | 6H   | 15.65            | 16.27 | 16.15 | 16.76 | 17.24 | 15.65          | 16.27 | 16.15 | 16.76 | 17.24 |
|                 | 8H   | 15.60            | 16.15 | 16.11 | 16.66 | 17.15 | 15.60          | 16.15 | 16.11 | 16.66 | 17.15 |
|                 | 12H  | 15.56            | 16.06 | 16.07 | 16.55 | 17.11 | 15.56          | 16.06 | 16.07 | 16.55 | 17.11 |
| 12H             | 4H   | 15.70            | 16.37 | 16.18 | 16.85 | 17.32 | 15.70          | 16.37 | 16.18 | 16.85 | 17.32 |
|                 | 6H   | 15.60            | 16.15 | 16.11 | 16.66 | 17.15 | 15.60          | 16.15 | 16.11 | 16.66 | 17.15 |
|                 | 8H   | 15.56            | 16.05 | 16.07 | 16.55 | 17.11 | 15.56          | 16.05 | 16.07 | 16.55 | 17.11 |

END OF REPORT

FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE

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