

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P980112

Luminaire Tested: PRLX-242-935-LL6-F-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2024  
Report Number: P980112  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-27)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-242-935-LL6-F-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH FROSTED LENS  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4671.8 lumens  
Efficiency: N/A  
Efficacy: 139.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct

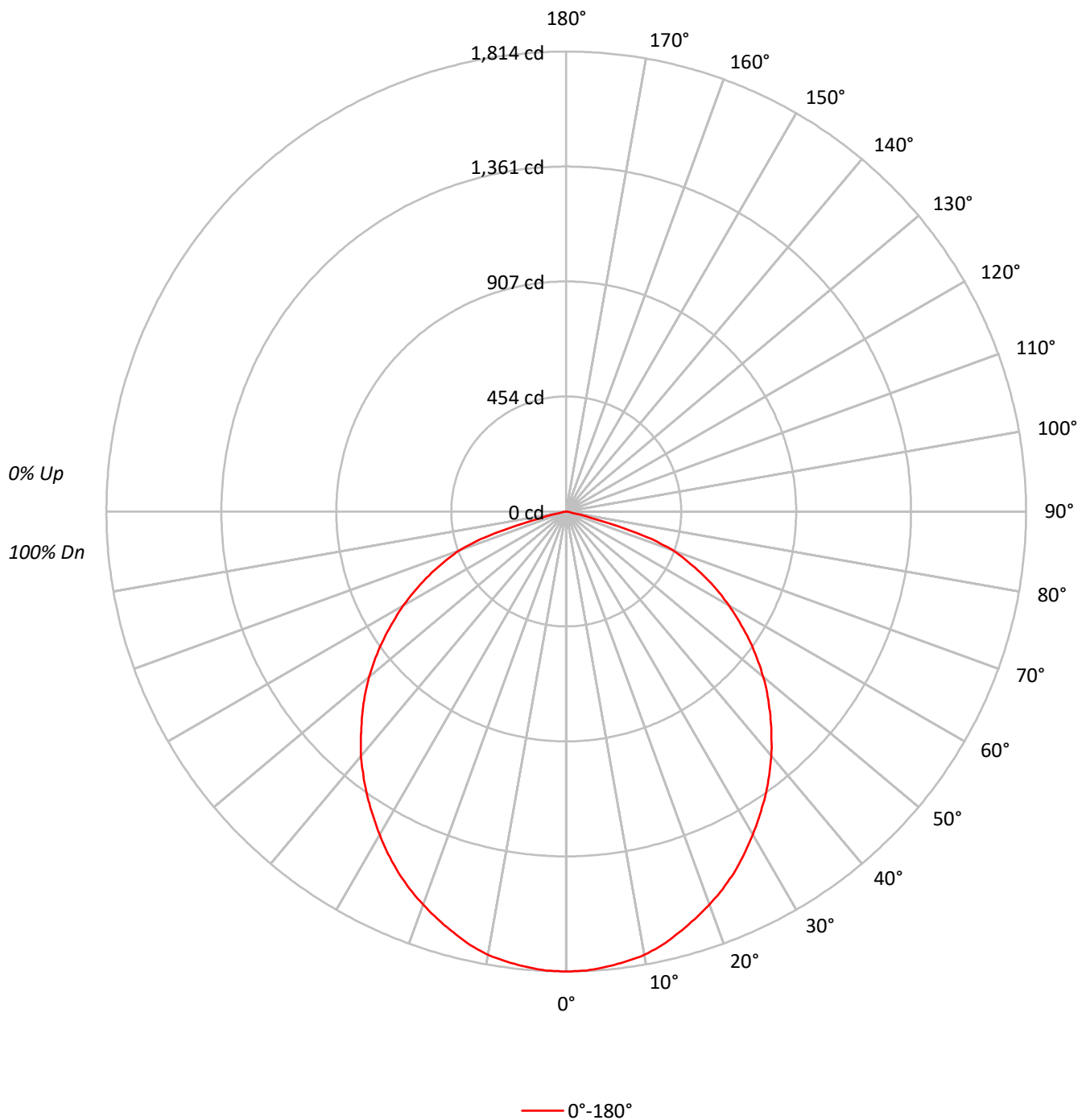
Input Watts (W): 33.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 110 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  |  | 95  | 93  | 91  |  | 92  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  |  | 84  | 80  | 77  |  | 81  |
| 3   | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  |  | 75  | 69  | 65  |  | 72  |
| 4   | 84  | 73  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 57  |  | 67  | 61  | 56  |  | 64  |
| 5   | 77  | 65  | 56  | 50  | 75  | 64  | 56  | 50  | 62  | 55  | 49  |  | 60  | 53  | 48  |  | 58  |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 49  | 43  | 56  | 48  | 43  |  | 54  | 48  | 43  |  | 53  |
| 7   | 66  | 53  | 44  | 38  | 65  | 52  | 44  | 38  | 51  | 43  | 38  |  | 49  | 43  | 38  |  | 48  |
| 8   | 62  | 48  | 40  | 34  | 60  | 48  | 40  | 34  | 46  | 39  | 34  |  | 45  | 39  | 34  |  | 44  |
| 9   | 58  | 44  | 36  | 31  | 56  | 44  | 36  | 31  | 43  | 36  | 31  |  | 42  | 35  | 31  |  | 41  |
| 10  | 54  | 41  | 33  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  |  | 39  | 32  | 28  |  | 38  |

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

|     |      |
|-----|------|
|     | 0°   |
| 0°  | 8119 |
| 5°  | 8102 |
| 10° | 8070 |
| 15° | 7966 |
| 20° | 7861 |
| 25° | 7751 |
| 30° | 7606 |
| 35° | 7482 |
| 40° | 7357 |
| 45° | 7207 |
| 50° | 7066 |
| 55° | 6869 |
| 60° | 6635 |
| 65° | 6328 |
| 70° | 5859 |
| 75° | 2300 |
| 80° | 0    |
| 85° | 0    |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7207 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 171.3  | 3.7       |
| 10°-20°   | 485.0  | 10.4      |
| 20°-30°   | 722.6  | 15.5      |
| 30°-40°   | 856.4  | 18.3      |
| 40°-50°   | 878.7  | 18.8      |
| 50°-60°   | 786.3  | 16.8      |
| 60°-70°   | 589.8  | 12.6      |
| 70°-80°   | 181.7  | 3.9       |
| 80°-90°   | 0.0    | 0.0       |
| 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°    | 1379.0 | 29.5      |
| 0°-40°    | 2235.3 | 47.8      |
| 0°-60°    | 3900.3 | 83.5      |
| 0°-90°    | 4671.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4671.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1814 |      |
| 5°  | 1804 | 171  |
| 15° | 1720 | 485  |
| 25° | 1570 | 723  |
| 35° | 1370 | 856  |
| 45° | 1139 | 879  |
| 55° | 880  | 786  |
| 65° | 598  | 590  |
| 75° | 133  | 182  |
| 85° | 0    | 0    |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1814.3 |
| 2.5°  | 1812.7 |
| 5°    | 1803.6 |
| 7.5°  | 1791.3 |
| 10°   | 1776.0 |
| 12.5° | 1751.6 |
| 15°   | 1719.5 |
| 17.5° | 1685.9 |
| 20°   | 1650.7 |
| 22.5° | 1612.5 |
| 25°   | 1569.7 |
| 27.5° | 1522.3 |
| 30°   | 1471.9 |
| 32.5° | 1419.9 |
| 35°   | 1369.5 |
| 37.5° | 1314.5 |
| 40°   | 1259.4 |
| 42.5° | 1198.3 |
| 45°   | 1138.7 |
| 47.5° | 1077.5 |
| 50°   | 1014.9 |
| 52.5° | 947.6  |
| 55°   | 880.4  |
| 57.5° | 810.1  |
| 60°   | 741.3  |
| 62.5° | 669.5  |
| 65°   | 597.6  |
| 67.5° | 522.7  |
| 70°   | 447.8  |
| 72.5° | 331.7  |
| 75°   | 133.0  |
| 77.5° | 6.1    |
| 80°   | 0.0    |
| 82.5° | 0.0    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 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 | 19.03            | 20.62 | 19.40 | 20.94 | 21.25 | 19.03          | 20.62 | 19.40 | 20.94 | 21.25 |
|                 | 3H   | 20.78            | 22.21 | 21.16 | 22.54 | 22.90 | 20.78          | 22.21 | 21.16 | 22.54 | 22.90 |
|                 | 4H   | 20.98            | 22.32 | 21.38 | 22.67 | 23.04 | 20.98          | 22.32 | 21.38 | 22.67 | 23.04 |
|                 | 6H   | 20.92            | 22.15 | 21.33 | 22.52 | 22.91 | 20.92          | 22.15 | 21.33 | 22.52 | 22.91 |
|                 | 8H   | 20.88            | 22.06 | 21.31 | 22.45 | 22.85 | 20.88          | 22.06 | 21.31 | 22.45 | 22.85 |
|                 | 12H  | 20.86            | 21.98 | 21.29 | 22.36 | 22.79 | 20.86          | 21.98 | 21.29 | 22.36 | 22.79 |
| 4H              | 2H   | 19.67            | 21.01 | 20.06 | 21.35 | 21.73 | 19.67          | 21.01 | 20.06 | 21.35 | 21.73 |
|                 | 3H   | 21.58            | 22.69 | 21.99 | 23.09 | 23.49 | 21.58          | 22.69 | 21.99 | 23.09 | 23.49 |
|                 | 4H   | 21.76            | 22.76 | 22.20 | 23.17 | 23.61 | 21.76          | 22.76 | 22.20 | 23.17 | 23.61 |
|                 | 6H   | 21.71            | 22.57 | 22.17 | 23.01 | 23.47 | 21.71          | 22.57 | 22.17 | 23.01 | 23.47 |
|                 | 8H   | 21.67            | 22.48 | 22.14 | 22.92 | 23.39 | 21.67          | 22.48 | 22.14 | 22.92 | 23.39 |
|                 | 12H  | 21.65            | 22.36 | 22.13 | 22.84 | 23.31 | 21.65          | 22.36 | 22.13 | 22.84 | 23.31 |
| 8H              | 4H   | 21.80            | 22.60 | 22.26 | 23.05 | 23.51 | 21.80          | 22.60 | 22.26 | 23.05 | 23.51 |
|                 | 6H   | 21.73            | 22.39 | 22.23 | 22.88 | 23.35 | 21.73          | 22.39 | 22.23 | 22.88 | 23.35 |
|                 | 8H   | 21.69            | 22.27 | 22.20 | 22.78 | 23.27 | 21.69          | 22.27 | 22.20 | 22.78 | 23.27 |
|                 | 12H  | 21.66            | 22.17 | 22.17 | 22.67 | 23.23 | 21.66          | 22.17 | 22.17 | 22.67 | 23.23 |
| 12H             | 4H   | 21.77            | 22.49 | 22.26 | 22.97 | 23.44 | 21.77          | 22.49 | 22.26 | 22.97 | 23.44 |
|                 | 6H   | 21.69            | 22.27 | 22.20 | 22.78 | 23.27 | 21.69          | 22.27 | 22.20 | 22.78 | 23.27 |
|                 | 8H   | 21.66            | 22.17 | 22.17 | 22.67 | 23.23 | 21.66          | 22.17 | 22.17 | 22.67 | 23.23 |