

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: P980040

Luminaire Tested: PRLX-242-930-62L-C-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P980040  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-26)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-242-930-62L-C-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

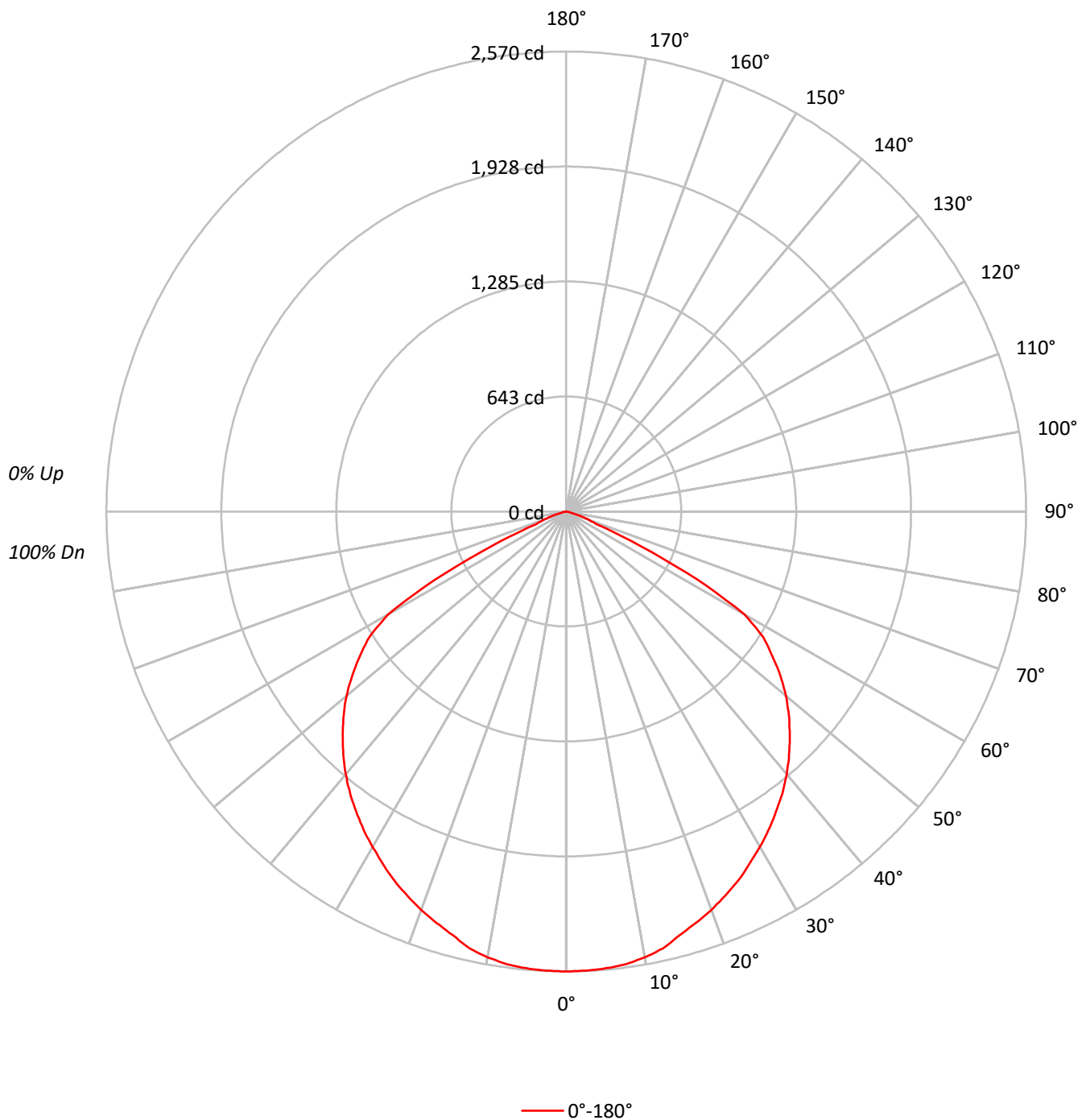
Lumens per Lamp: N/A  
Luminaire Lumens: 6441.3 lumens  
Efficiency: N/A  
Efficacy: 134.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct

Input Watts (W): 48  
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 | 105 | 102 | 99  | 101 | 98  | 96  |  | 97  | 95  | 93  |  | 93  |
| 2   | 102 | 95  | 89  | 84  | 100 | 93  | 88  | 83  | 90  | 85  | 81  |  | 86  | 83  | 79  |  | 84  |
| 3   | 94  | 84  | 77  | 71  | 91  | 83  | 76  | 71  | 80  | 74  | 69  |  | 77  | 72  | 68  |  | 75  |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 61  | 71  | 65  | 60  |  | 69  | 63  | 59  |  | 67  |
| 5   | 79  | 67  | 59  | 53  | 77  | 66  | 58  | 52  | 64  | 57  | 52  |  | 62  | 56  | 51  |  | 60  |
| 6   | 73  | 61  | 52  | 46  | 71  | 60  | 52  | 46  | 58  | 51  | 46  |  | 56  | 50  | 45  |  | 55  |
| 7   | 68  | 55  | 47  | 41  | 66  | 54  | 46  | 41  | 53  | 46  | 40  |  | 51  | 45  | 40  |  | 50  |
| 8   | 63  | 50  | 42  | 36  | 62  | 49  | 42  | 36  | 48  | 41  | 36  |  | 47  | 41  | 36  |  | 46  |
| 9   | 59  | 46  | 38  | 33  | 58  | 45  | 38  | 33  | 44  | 37  | 32  |  | 43  | 37  | 32  |  | 42  |
| 10  | 55  | 42  | 35  | 30  | 54  | 42  | 35  | 30  | 41  | 34  | 29  |  | 40  | 34  | 29  |  | 39  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 11503 |
| 5°  | 11512 |
| 10° | 11497 |
| 15° | 11355 |
| 20° | 11287 |
| 25° | 11236 |
| 30° | 11182 |
| 35° | 11179 |
| 40° | 11200 |
| 45° | 11182 |
| 50° | 11161 |
| 55° | 10974 |
| 60° | 10278 |
| 65° | 4795  |
| 70° | 1613  |
| 75° | 500   |
| 80° | 0     |
| 85° | 0     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11182 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 243.6  | 3.8       |
| 10°-20°   | 693.0  | 10.8      |
| 20°-30°   | 1048.6 | 16.3      |
| 30°-40°   | 1281.6 | 19.9      |
| 40°-50°   | 1363.4 | 21.2      |
| 50°-60°   | 1251.3 | 19.4      |
| 60°-70°   | 513.5  | 8.0       |
| 70°-80°   | 46.3   | 0.7       |
| 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°    | 1985.2 | 30.8      |
| 0°-40°    | 3266.8 | 50.7      |
| 0°-60°    | 5881.4 | 91.3      |
| 0°-90°    | 6441.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6441.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2570 |      |
| 5°  | 2563 | 244  |
| 15° | 2451 | 693  |
| 25° | 2276 | 1049 |
| 35° | 2046 | 1282 |
| 45° | 1767 | 1363 |
| 55° | 1407 | 1251 |
| 65° | 453  | 514  |
| 75° | 29   | 46   |
| 85° | 0    | 0    |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 2570.4 |
| 2.5°  | 2568.5 |
| 5°    | 2562.7 |
| 7.5°  | 2551.2 |
| 10°   | 2530.0 |
| 12.5° | 2501.1 |
| 15°   | 2451.0 |
| 17.5° | 2410.5 |
| 20°   | 2370.0 |
| 22.5° | 2323.8 |
| 25°   | 2275.6 |
| 27.5° | 2219.7 |
| 30°   | 2163.9 |
| 32.5° | 2108.0 |
| 35°   | 2046.3 |
| 37.5° | 1984.7 |
| 40°   | 1917.2 |
| 42.5° | 1844.0 |
| 45°   | 1766.9 |
| 47.5° | 1687.9 |
| 50°   | 1603.1 |
| 52.5° | 1508.7 |
| 55°   | 1406.6 |
| 57.5° | 1304.5 |
| 60°   | 1148.4 |
| 62.5° | 828.6  |
| 65°   | 452.8  |
| 67.5° | 181.1  |
| 70°   | 123.3  |
| 72.5° | 84.8   |
| 75°   | 28.9   |
| 77.5° | 1.9    |
| 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 | 21.28            | 22.81 | 21.64 | 23.13 | 23.44 | 21.28          | 22.81 | 21.64 | 23.13 | 23.44 |
|                 | 3H   | 21.26            | 22.63 | 21.64 | 22.95 | 23.31 | 21.26          | 22.63 | 21.64 | 22.95 | 23.31 |
|                 | 4H   | 21.21            | 22.48 | 21.61 | 22.83 | 23.21 | 21.21          | 22.48 | 21.61 | 22.83 | 23.21 |
|                 | 6H   | 21.15            | 22.32 | 21.56 | 22.68 | 23.08 | 21.15          | 22.32 | 21.56 | 22.68 | 23.08 |
|                 | 8H   | 21.11            | 22.22 | 21.54 | 22.61 | 23.02 | 21.11          | 22.22 | 21.54 | 22.61 | 23.02 |
|                 | 12H  | 21.08            | 22.14 | 21.51 | 22.52 | 22.95 | 21.08          | 22.14 | 21.51 | 22.52 | 22.95 |
| 4H              | 2H   | 21.33            | 22.60 | 21.73 | 22.95 | 23.33 | 21.33          | 22.60 | 21.73 | 22.95 | 23.33 |
|                 | 3H   | 21.35            | 22.38 | 21.76 | 22.78 | 23.18 | 21.35          | 22.38 | 21.76 | 22.78 | 23.18 |
|                 | 4H   | 21.29            | 22.21 | 21.72 | 22.62 | 23.06 | 21.29          | 22.21 | 21.72 | 22.62 | 23.06 |
|                 | 6H   | 21.23            | 22.02 | 21.68 | 22.46 | 22.92 | 21.23          | 22.02 | 21.68 | 22.46 | 22.92 |
|                 | 8H   | 21.18            | 21.92 | 21.65 | 22.37 | 22.83 | 21.18          | 21.92 | 21.65 | 22.37 | 22.83 |
|                 | 12H  | 21.15            | 21.80 | 21.63 | 22.28 | 22.75 | 21.15          | 21.80 | 21.63 | 22.28 | 22.75 |
| 8H              | 4H   | 21.19            | 21.93 | 21.65 | 22.37 | 22.84 | 21.19          | 21.93 | 21.65 | 22.37 | 22.84 |
|                 | 6H   | 21.10            | 21.71 | 21.60 | 22.20 | 22.68 | 21.10          | 21.71 | 21.60 | 22.20 | 22.68 |
|                 | 8H   | 21.05            | 21.59 | 21.56 | 22.10 | 22.59 | 21.05          | 21.59 | 21.56 | 22.10 | 22.59 |
|                 | 12H  | 21.01            | 21.49 | 21.52 | 21.99 | 22.55 | 21.01          | 21.49 | 21.52 | 21.99 | 22.55 |
| 12H             | 4H   | 21.15            | 21.81 | 21.64 | 22.29 | 22.76 | 21.15          | 21.81 | 21.64 | 22.29 | 22.76 |
|                 | 6H   | 21.05            | 21.59 | 21.56 | 22.10 | 22.59 | 21.05          | 21.59 | 21.56 | 22.10 | 22.59 |
|                 | 8H   | 21.01            | 21.49 | 21.52 | 21.99 | 22.55 | 21.01          | 21.49 | 21.52 | 21.99 | 22.55 |