

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: P980372

Luminaire Tested: PRLX-243-930-74L-F-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P980372  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2502-353-37)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/3/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PrentaLux  
Catalog Number: PRLX-243-930-74L-F-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 243 SHADE WITH FROSTED LENS  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

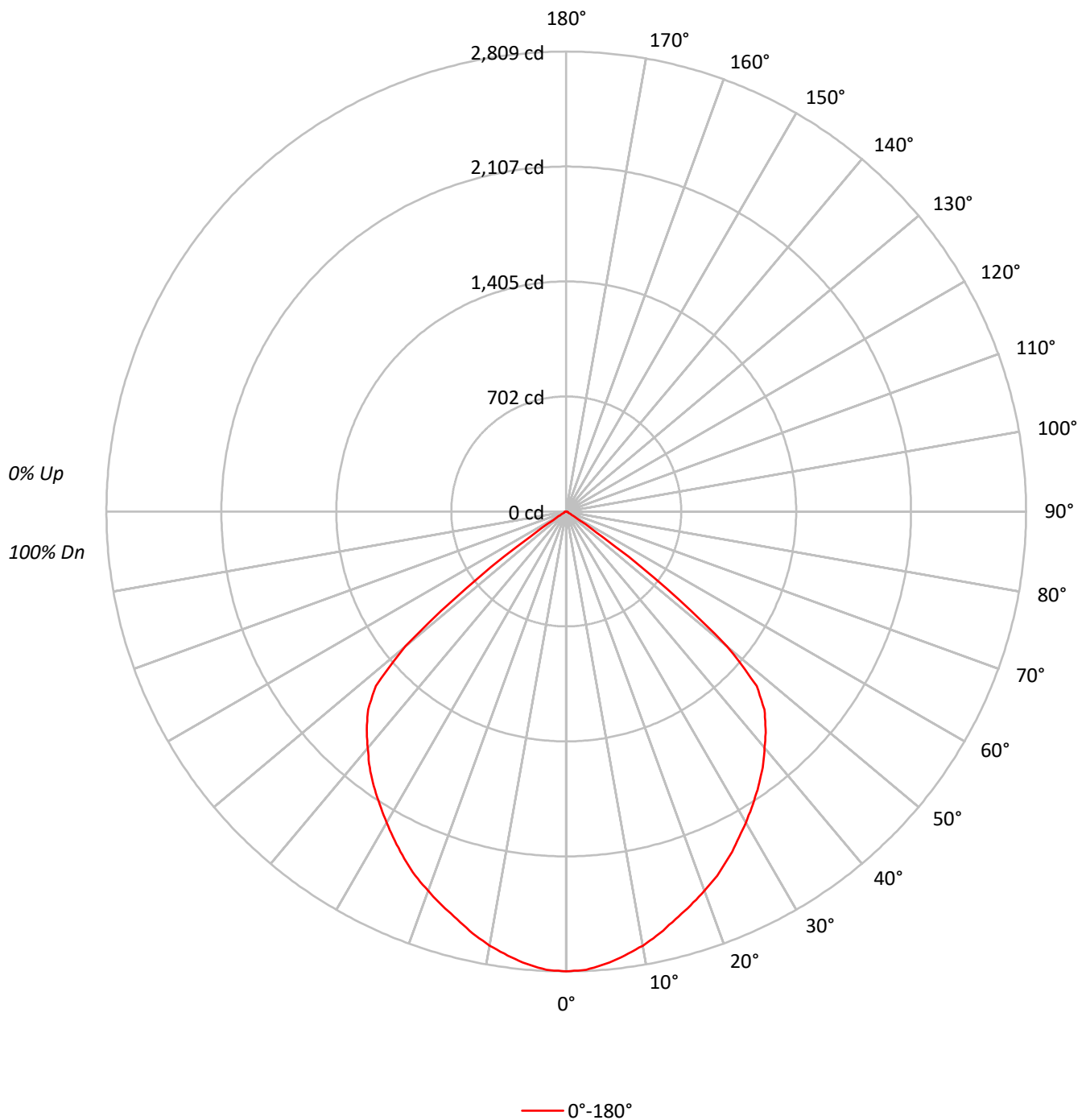
Lumens per Lamp: N/A  
Luminaire Lumens: 5038.4 lumens  
Efficiency: N/A  
Efficacy: 81.9 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.31  
Luminous Opening: Circular (Dia: 1.67' x H: 0')  
CIE Type: Direct

Input Watts (W): 61.5  
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

TEST NUMBER: P980372

CATALOG NUMBER: PRLX-243-930-74L-F-U-S-BLAK-X

### Luminous Intensity Polar Plot



TEST NUMBER: P980372

CATALOG NUMBER: PRLX-243-930-74L-F-U-S-BLAK-X

**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   | 112 | 109 | 106 | 103 | 110 | 107 | 104 | 102 | 103 | 100 | 98  |  | 99  | 97  | 95  |  | 95  |
| 2   | 105 | 99  | 94  | 90  | 103 | 97  | 93  | 89  | 94  | 90  | 87  |  | 91  | 88  | 85  |  | 88  |
| 3   | 98  | 90  | 84  | 79  | 96  | 88  | 83  | 78  | 86  | 81  | 77  |  | 83  | 79  | 76  |  | 81  |
| 4   | 91  | 82  | 75  | 70  | 89  | 80  | 74  | 69  | 78  | 73  | 68  |  | 76  | 71  | 67  |  | 74  |
| 5   | 85  | 74  | 67  | 62  | 83  | 73  | 67  | 62  | 71  | 66  | 61  |  | 70  | 64  | 60  |  | 68  |
| 6   | 79  | 68  | 61  | 55  | 77  | 67  | 60  | 55  | 66  | 59  | 55  |  | 64  | 58  | 54  |  | 63  |
| 7   | 74  | 62  | 55  | 50  | 72  | 62  | 55  | 50  | 60  | 54  | 49  |  | 59  | 53  | 49  |  | 58  |
| 8   | 69  | 57  | 50  | 45  | 68  | 57  | 50  | 45  | 56  | 49  | 45  |  | 54  | 49  | 44  |  | 53  |
| 9   | 65  | 53  | 46  | 41  | 64  | 52  | 46  | 41  | 51  | 45  | 41  |  | 50  | 45  | 40  |  | 49  |
| 10  | 61  | 49  | 42  | 37  | 60  | 49  | 42  | 37  | 48  | 41  | 37  |  | 47  | 41  | 37  |  | 46  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 13859 |
| 5°  | 13742 |
| 10° | 13489 |
| 15° | 13169 |
| 20° | 12948 |
| 25° | 12741 |
| 30° | 12500 |
| 35° | 12335 |
| 40° | 12144 |
| 45° | 11945 |
| 50° | 9824  |
| 55° | 2320  |
| 60° | 135   |
| 65° | 133   |
| 70° | 164   |
| 75° | 173   |
| 80° | 131   |
| 85° | 130   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11945 cd/sqm

TEST NUMBER: P980372

CATALOG NUMBER: PRLX-243-930-74L-F-U-S-BLAK-X

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 262.2  | 5.2       |
| 10°-20°   | 728.1  | 14.5      |
| 20°-30°   | 1077.8 | 21.4      |
| 30°-40°   | 1281.1 | 25.4      |
| 40°-50°   | 1286.6 | 25.5      |
| 50°-60°   | 379.1  | 7.5       |
| 60°-70°   | 11.6   | 0.2       |
| 70°-80°   | 8.7    | 0.2       |
| 80°-90°   | 3.1    | 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°    | 2068.1 | 41.0      |
| 0°-40°    | 3349.2 | 66.5      |
| 0°-60°    | 5014.9 | 99.5      |
| 0°-90°    | 5038.4 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5038.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2809 |      |
| 5°  | 2775 | 262  |
| 15° | 2578 | 728  |
| 25° | 2340 | 1078 |
| 35° | 2048 | 1281 |
| 45° | 1712 | 1287 |
| 55° | 270  | 379  |
| 65° | 11   | 12   |
| 75° | 9    | 9    |
| 85° | 2    | 3    |
| 90° | 0    |      |

TEST NUMBER: P980372

CATALOG NUMBER: PRLX-243-930-74L-F-U-S-BLAK-X

**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 2808.9 |
| 2.5°  | 2802.1 |
| 5°    | 2774.7 |
| 7.5°  | 2735.8 |
| 10°   | 2692.4 |
| 12.5° | 2639.8 |
| 15°   | 2578.1 |
| 17.5° | 2523.3 |
| 20°   | 2466.1 |
| 22.5° | 2409.0 |
| 25°   | 2340.4 |
| 27.5° | 2267.3 |
| 30°   | 2194.1 |
| 32.5° | 2121.0 |
| 35°   | 2047.9 |
| 37.5° | 1972.4 |
| 40°   | 1885.6 |
| 42.5° | 1803.3 |
| 45°   | 1711.9 |
| 47.5° | 1577.0 |
| 50°   | 1279.9 |
| 52.5° | 772.5  |
| 55°   | 269.7  |
| 57.5° | 52.6   |
| 60°   | 13.7   |
| 62.5° | 11.4   |
| 65°   | 11.4   |
| 67.5° | 11.4   |
| 70°   | 11.4   |
| 72.5° | 9.1    |
| 75°   | 9.1    |
| 77.5° | 6.9    |
| 80°   | 4.6    |
| 82.5° | 4.6    |
| 85°   | 2.3    |
| 87.5° | 2.3    |
| 90°   | 0.0    |

TEST NUMBER: P980372

CATALOG NUMBER: PRLX-243-930-74L-F-U-S-BLAK-X

**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 | 0.10             | 1.42 | 0.47 | 1.73 | 2.05 | 0.10           | 1.42 | 0.47 | 1.73 | 2.05 |
|                 | 3H   | 0.31             | 1.46 | 0.69 | 1.79 | 2.15 | 0.31           | 1.46 | 0.69 | 1.79 | 2.15 |
|                 | 4H   | 0.46             | 1.53 | 0.87 | 1.88 | 2.26 | 0.46           | 1.53 | 0.87 | 1.88 | 2.26 |
|                 | 6H   | 0.57             | 1.55 | 0.99 | 1.92 | 2.31 | 0.57           | 1.55 | 0.99 | 1.92 | 2.31 |
|                 | 8H   | 0.62             | 1.54 | 1.05 | 1.93 | 2.34 | 0.62           | 1.54 | 1.05 | 1.93 | 2.34 |
|                 | 12H  | 0.65             | 1.53 | 1.08 | 1.91 | 2.34 | 0.65           | 1.53 | 1.08 | 1.91 | 2.34 |
| 4H              | 2H   | 0.00             | 1.05 | 0.39 | 1.40 | 1.78 | 0.00           | 1.05 | 0.39 | 1.40 | 1.78 |
|                 | 3H   | 0.33             | 1.18 | 0.74 | 1.59 | 1.99 | 0.33           | 1.18 | 0.74 | 1.59 | 1.99 |
|                 | 4H   | 0.60             | 1.36 | 1.04 | 1.78 | 2.22 | 0.60           | 1.36 | 1.04 | 1.78 | 2.22 |
|                 | 6H   | 0.80             | 1.45 | 1.26 | 1.90 | 2.36 | 0.80           | 1.45 | 1.26 | 1.90 | 2.36 |
|                 | 8H   | 0.89             | 1.50 | 1.36 | 1.95 | 2.42 | 0.89           | 1.50 | 1.36 | 1.95 | 2.42 |
|                 | 12H  | 0.96             | 1.49 | 1.44 | 1.98 | 2.45 | 0.96           | 1.49 | 1.44 | 1.98 | 2.45 |
| 8H              | 4H   | 0.63             | 1.24 | 1.10 | 1.69 | 2.16 | 0.63           | 1.24 | 1.10 | 1.69 | 2.16 |
|                 | 6H   | 0.88             | 1.39 | 1.39 | 1.88 | 2.36 | 0.88           | 1.39 | 1.39 | 1.88 | 2.36 |
|                 | 8H   | 1.04             | 1.50 | 1.57 | 2.02 | 2.51 | 1.04           | 1.50 | 1.57 | 2.02 | 2.51 |
|                 | 12H  | 1.16             | 1.57 | 1.68 | 2.07 | 2.64 | 1.16           | 1.57 | 1.68 | 2.07 | 2.64 |
| 12H             | 4H   | 0.60             | 1.14 | 1.09 | 1.62 | 2.10 | 0.60           | 1.14 | 1.09 | 1.62 | 2.10 |
|                 | 6H   | 0.87             | 1.33 | 1.40 | 1.84 | 2.34 | 0.87           | 1.33 | 1.40 | 1.84 | 2.34 |
|                 | 8H   | 1.08             | 1.49 | 1.60 | 1.99 | 2.56 | 1.08           | 1.49 | 1.60 | 1.99 | 2.56 |