

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: P980200

Luminaire Tested: PRLX-242-940-62L-C-U-S-BLAK-X

Issue Date: 4/3/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P980200  
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-242-940-62L-C-U-S-BLAK-X  
Description: 3D PRINTED LUMINAIRE, INTEGRAL LED LIGHT ENGINE, BLACK 242 SHADE WITH CLEAR LENS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

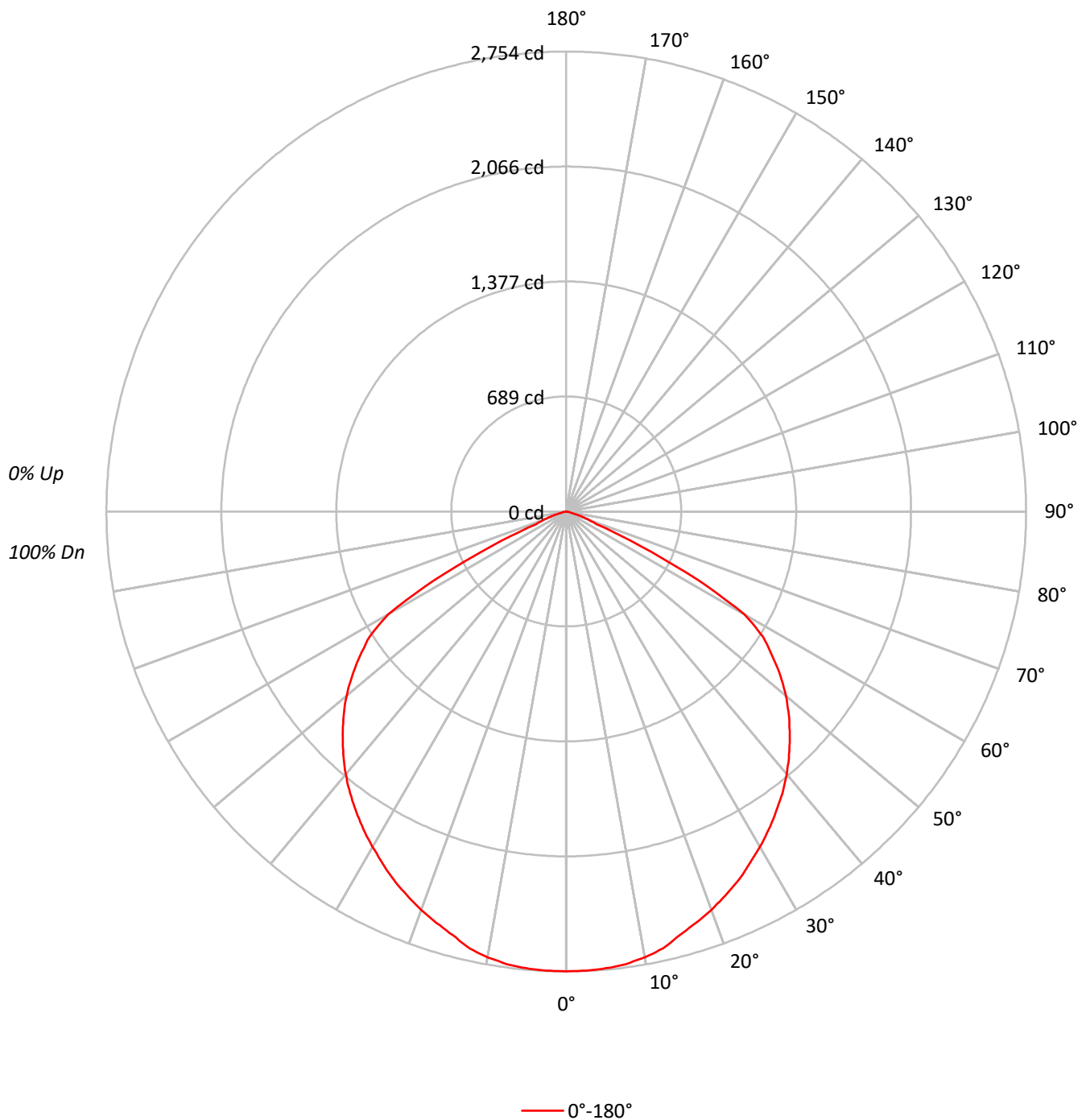
Lumens per Lamp: N/A  
Luminaire Lumens: 6902.1 lumens  
Efficiency: N/A  
Efficacy: 143.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.39  
Luminous Opening: Circular (Dia: 1.75' x H: 0')  
CIE Type: Direct

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  |     |     |  |  | 0  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 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 | 102 | 102 | 102 | 100 |  |  |    |
| 1   | 111 | 107 | 103 | 100 | 108 | 105 | 102 | 99  | 101 | 98  | 96  | 97  | 95  | 93  | 93  | 92  | 90  | 88  |  |  |    |
| 2   | 102 | 95  | 89  | 84  | 100 | 93  | 88  | 83  | 90  | 85  | 81  | 86  | 83  | 79  | 84  | 80  | 78  | 76  |  |  |    |
| 3   | 94  | 84  | 77  | 71  | 91  | 83  | 76  | 71  | 80  | 74  | 69  | 77  | 72  | 68  | 75  | 71  | 67  | 65  |  |  |    |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 61  | 71  | 65  | 60  | 69  | 63  | 59  | 67  | 62  | 58  | 56  |  |  |    |
| 5   | 79  | 67  | 59  | 53  | 77  | 66  | 58  | 52  | 64  | 57  | 52  | 62  | 56  | 51  | 60  | 55  | 51  | 49  |  |  |    |
| 6   | 73  | 61  | 52  | 46  | 71  | 60  | 52  | 46  | 58  | 51  | 46  | 56  | 50  | 45  | 55  | 49  | 45  | 43  |  |  |    |
| 7   | 68  | 55  | 47  | 41  | 66  | 54  | 46  | 41  | 53  | 46  | 40  | 51  | 45  | 40  | 50  | 44  | 40  | 38  |  |  |    |
| 8   | 63  | 50  | 42  | 36  | 62  | 49  | 42  | 36  | 48  | 41  | 36  | 47  | 41  | 36  | 46  | 40  | 36  | 34  |  |  |    |
| 9   | 59  | 46  | 38  | 33  | 58  | 45  | 38  | 33  | 44  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 32  | 30  |  |  |    |
| 10  | 55  | 42  | 35  | 30  | 54  | 42  | 35  | 30  | 41  | 34  | 29  | 40  | 34  | 29  | 39  | 33  | 29  | 27  |  |  |    |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 12326 |
| 5°  | 12336 |
| 10° | 12319 |
| 15° | 12168 |
| 20° | 12094 |
| 25° | 12040 |
| 30° | 11982 |
| 35° | 11979 |
| 40° | 12001 |
| 45° | 11982 |
| 50° | 11959 |
| 55° | 11759 |
| 60° | 11014 |
| 65° | 5138  |
| 70° | 1728  |
| 75° | 536   |
| 80° | 0     |
| 85° | 0     |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle:  $0^\circ$ 

Vertical Angle:  $45^\circ$

Luminance: 11982 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 261.0  | 3.8       |
| 10°-20°   | 742.5  | 10.8      |
| 20°-30°   | 1123.6 | 16.3      |
| 30°-40°   | 1373.3 | 19.9      |
| 40°-50°   | 1460.9 | 21.2      |
| 50°-60°   | 1340.8 | 19.4      |
| 60°-70°   | 550.2  | 8.0       |
| 70°-80°   | 49.6   | 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°    | 2127.2 | 30.8      |
| 0°-40°    | 3500.4 | 50.7      |
| 0°-60°    | 6302.2 | 91.3      |
| 0°-90°    | 6902.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6902.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2754 |      |
| 5°  | 2746 | 261  |
| 15° | 2626 | 743  |
| 25° | 2438 | 1124 |
| 35° | 2193 | 1373 |
| 45° | 1893 | 1461 |
| 55° | 1507 | 1341 |
| 65° | 485  | 550  |
| 75° | 31   | 50   |
| 85° | 0    | 0    |
| 90° | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 2754.3 |
| 2.5°  | 2752.2 |
| 5°    | 2746.0 |
| 7.5°  | 2733.7 |
| 10°   | 2710.9 |
| 12.5° | 2680.0 |
| 15°   | 2626.3 |
| 17.5° | 2582.9 |
| 20°   | 2539.6 |
| 22.5° | 2490.0 |
| 25°   | 2438.4 |
| 27.5° | 2378.5 |
| 30°   | 2318.7 |
| 32.5° | 2258.8 |
| 35°   | 2192.7 |
| 37.5° | 2126.6 |
| 40°   | 2054.4 |
| 42.5° | 1975.9 |
| 45°   | 1893.3 |
| 47.5° | 1808.7 |
| 50°   | 1717.8 |
| 52.5° | 1616.7 |
| 55°   | 1507.2 |
| 57.5° | 1397.8 |
| 60°   | 1230.6 |
| 62.5° | 887.8  |
| 65°   | 485.2  |
| 67.5° | 194.1  |
| 70°   | 132.1  |
| 72.5° | 90.8   |
| 75°   | 31.0   |
| 77.5° | 2.1    |
| 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 | 21.52            | 23.05 | 21.88 | 23.37 | 23.68 | 21.52          | 23.05 | 21.88 | 23.37 | 23.68 |
|                 | 3H   | 21.50            | 22.87 | 21.88 | 23.19 | 23.55 | 21.50          | 22.87 | 21.88 | 23.19 | 23.55 |
|                 | 4H   | 21.45            | 22.72 | 21.85 | 23.07 | 23.45 | 21.45          | 22.72 | 21.85 | 23.07 | 23.45 |
|                 | 6H   | 21.39            | 22.56 | 21.80 | 22.92 | 23.32 | 21.39          | 22.56 | 21.80 | 22.92 | 23.32 |
|                 | 8H   | 21.35            | 22.46 | 21.78 | 22.85 | 23.26 | 21.35          | 22.46 | 21.78 | 22.85 | 23.26 |
|                 | 12H  | 21.32            | 22.38 | 21.75 | 22.76 | 23.19 | 21.32          | 22.38 | 21.75 | 22.76 | 23.19 |
| 4H              | 2H   | 21.57            | 22.84 | 21.97 | 23.19 | 23.57 | 21.57          | 22.84 | 21.97 | 23.19 | 23.57 |
|                 | 3H   | 21.59            | 22.62 | 22.00 | 23.02 | 23.42 | 21.59          | 22.62 | 22.00 | 23.02 | 23.42 |
|                 | 4H   | 21.53            | 22.45 | 21.96 | 22.86 | 23.30 | 21.53          | 22.45 | 21.96 | 22.86 | 23.30 |
|                 | 6H   | 21.47            | 22.26 | 21.92 | 22.70 | 23.16 | 21.47          | 22.26 | 21.92 | 22.70 | 23.16 |
|                 | 8H   | 21.42            | 22.16 | 21.88 | 22.61 | 23.07 | 21.42          | 22.16 | 21.88 | 22.61 | 23.07 |
|                 | 12H  | 21.39            | 22.04 | 21.87 | 22.52 | 22.99 | 21.39          | 22.04 | 21.87 | 22.52 | 22.99 |
| 8H              | 4H   | 21.43            | 22.17 | 21.89 | 22.61 | 23.08 | 21.43          | 22.17 | 21.89 | 22.61 | 23.08 |
|                 | 6H   | 21.34            | 21.95 | 21.84 | 22.44 | 22.92 | 21.34          | 21.95 | 21.84 | 22.44 | 22.92 |
|                 | 8H   | 21.29            | 21.83 | 21.80 | 22.34 | 22.83 | 21.29          | 21.83 | 21.80 | 22.34 | 22.83 |
|                 | 12H  | 21.25            | 21.73 | 21.76 | 22.23 | 22.79 | 21.25          | 21.73 | 21.76 | 22.23 | 22.79 |
| 12H             | 4H   | 21.39            | 22.05 | 21.88 | 22.53 | 23.00 | 21.39          | 22.05 | 21.88 | 22.53 | 23.00 |
|                 | 6H   | 21.29            | 21.83 | 21.80 | 22.34 | 22.83 | 21.29          | 21.83 | 21.80 | 22.34 | 22.83 |
|                 | 8H   | 21.25            | 21.73 | 21.76 | 22.23 | 22.79 | 21.25          | 21.73 | 21.76 | 22.23 | 22.79 |