

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P283893

Luminaire Tested: **LDA2B108035D010 EU2B10WFL558035 2LBAPINSQ1MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P283893  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-61)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B108035D010 EU2B10WFL558035 2LBAPINSQ1MB  
Description: PORTFOLIO 2IN ADJ 1000 LUMEN LED LUMINAIRE WITH WIDE FLOOD OPTIC AND  
2in Adj SQ PinHole, MB  
  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 978.8 lumens  
Efficiency: N/A  
Efficacy: 97.9 lumens/watt  
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

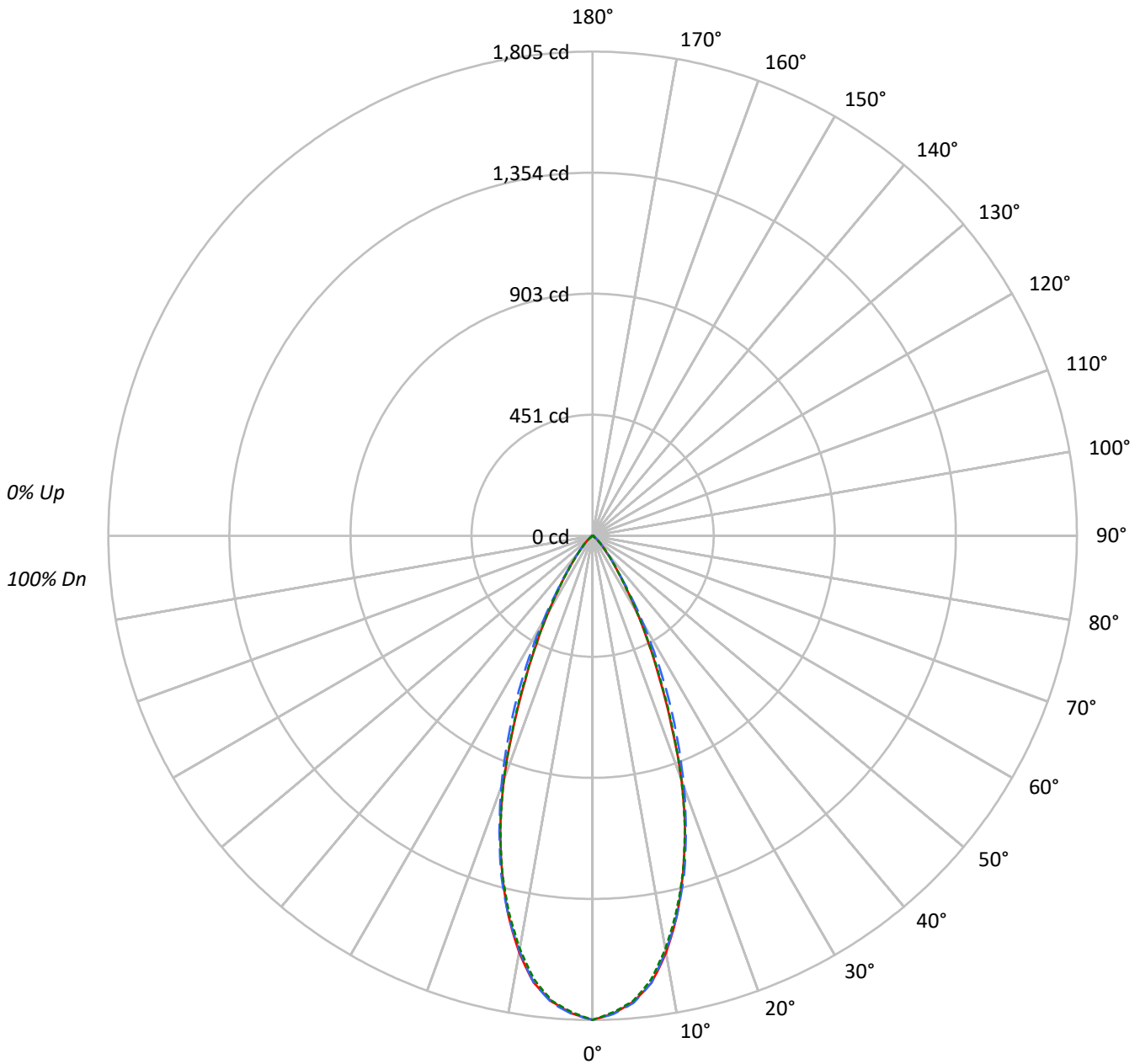
Input Watts (W): 10  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |     | 20 |    |   |  |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |     |     |     |     |     | 50  |     |     |     |     |     |     |     |     | 30 |    |   |  |  |  |  |  |  | 10 |  |  |  |  |  |  |  |  | 0 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 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   | 114 | 111 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 94  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 109 | 104 | 101 | 98  | 107 | 103 | 99  | 96  | 100 | 97  | 94  | 97  | 94  | 92  | 94  | 92  | 90  | 89  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 104 | 98  | 94  | 90  | 102 | 97  | 93  | 89  | 94  | 91  | 88  | 92  | 89  | 87  | 90  | 87  | 85  | 84  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 100 | 93  | 88  | 84  | 98  | 92  | 87  | 83  | 90  | 86  | 82  | 88  | 84  | 81  | 86  | 83  | 81  | 79  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 95  | 88  | 82  | 79  | 94  | 87  | 82  | 78  | 85  | 81  | 78  | 84  | 80  | 77  | 82  | 79  | 76  | 75  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 91  | 83  | 78  | 74  | 90  | 82  | 77  | 74  | 81  | 77  | 73  | 80  | 76  | 73  | 78  | 75  | 72  | 71  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 87  | 79  | 74  | 70  | 86  | 78  | 73  | 70  | 77  | 73  | 69  | 76  | 72  | 69  | 75  | 71  | 69  | 67  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 84  | 75  | 70  | 66  | 83  | 75  | 70  | 66  | 74  | 69  | 66  | 73  | 69  | 66  | 72  | 68  | 65  | 64  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 81  | 72  | 67  | 63  | 80  | 71  | 66  | 63  | 71  | 66  | 63  | 70  | 66  | 63  | 69  | 65  | 62  | 61  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 77  | 69  | 64  | 60  | 76  | 68  | 63  | 60  | 68  | 63  | 60  | 67  | 63  | 60  | 66  | 62  | 60  | 58  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 890370 | 890370 | 890370 |
| 5°  | 863611 | 865691 | 861778 |
| 10° | 790485 | 787329 | 782620 |
| 15° | 664915 | 671095 | 663842 |
| 20° | 508486 | 521980 | 507646 |
| 25° | 322917 | 364071 | 329177 |
| 30° | 187825 | 212037 | 191072 |
| 35° | 99256  | 105580 | 99618  |
| 40° | 52425  | 54743  | 52425  |
| 45° | 29304  | 30421  | 29653  |
| 50° | 13662  | 17346  | 13662  |
| 55° | 4989   | 9462   | 5419   |
| 60° | 5723   | 5723   | 5723   |
| 65° | 6070   | 6771   | 6070   |
| 70° | 7501   | 6780   | 7501   |
| 75° | 7053   | 7053   | 7053   |
| 80° | 7387   | 5966   | 7387   |
| 85° | 5661   | 5661   | 5661   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 161.1  | 16.5      |
| 10°-20°   | 358.7  | 36.6      |
| 20°-30°   | 289.7  | 29.6      |
| 30°-40°   | 114.5  | 11.7      |
| 40°-50°   | 35.2   | 3.6       |
| 50°-60°   | 9.1    | 0.9       |
| 60°-70°   | 5.5    | 0.6       |
| 70°-80°   | 4.0    | 0.4       |
| 80°-90°   | 1.2    | 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°    | 809.5  | 82.7      |
| 0°-40°    | 924.0  | 94.4      |
| 0°-60°    | 968.2  | 98.9      |
| 0°-90°    | 978.8  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 978.8  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1805 | 1805  | 1805 | 1805  | 1805 |      |
| 5°  | 1744 | 1747  | 1748 | 1744  | 1740 | 161  |
| 15° | 1302 | 1306  | 1314 | 1309  | 1300 | 358  |
| 25° | 593  | 622   | 669  | 633   | 605  | 276  |
| 35° | 165  | 170   | 175  | 170   | 165  | 110  |
| 45° | 42   | 42    | 44   | 43    | 42   | 34   |
| 55° | 6    | 8     | 11   | 8     | 6    | 7    |
| 65° | 5    | 6     | 6    | 6     | 5    | 5    |
| 75° | 4    | 4     | 4    | 4     | 4    | 4    |
| 85° | 1    | 1     | 1    | 1     | 1    | 1    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 1804.7 | 1804.7 | 1804.7 | 1804.7 | 1804.7 |
| 2.5°  | 1782.1 | 1783.2 | 1784.8 | 1782.7 | 1777.4 |
| 5°    | 1743.8 | 1747.0 | 1748.0 | 1744.3 | 1740.1 |
| 7.5°  | 1680.8 | 1677.1 | 1680.3 | 1674.0 | 1668.7 |
| 10°   | 1577.9 | 1573.2 | 1571.6 | 1562.2 | 1562.2 |
| 12.5° | 1450.9 | 1449.3 | 1450.4 | 1445.6 | 1438.3 |
| 15°   | 1301.8 | 1305.5 | 1313.9 | 1308.6 | 1299.7 |
| 17.5° | 1143.8 | 1149.1 | 1156.4 | 1154.8 | 1142.8 |
| 20°   | 968.5  | 983.7  | 994.2  | 984.2  | 966.9  |
| 22.5° | 769.0  | 801.6  | 828.3  | 807.3  | 779.0  |
| 25°   | 593.2  | 621.5  | 668.8  | 633.1  | 604.7  |
| 27.5° | 449.9  | 470.3  | 513.4  | 478.2  | 458.8  |
| 30°   | 329.7  | 342.3  | 372.2  | 349.1  | 335.4  |
| 32.5° | 235.7  | 244.6  | 257.2  | 243.6  | 236.7  |
| 35°   | 164.8  | 169.6  | 175.3  | 170.1  | 165.4  |
| 37.5° | 116.0  | 117.6  | 121.8  | 117.6  | 115.5  |
| 40°   | 81.4   | 81.9   | 85.0   | 82.4   | 81.4   |
| 42.5° | 58.8   | 58.8   | 60.4   | 59.3   | 58.8   |
| 45°   | 42.0   | 42.5   | 43.6   | 43.0   | 42.5   |
| 47.5° | 29.9   | 31.0   | 31.0   | 31.5   | 29.4   |
| 50°   | 17.8   | 22.0   | 22.6   | 22.0   | 17.8   |
| 52.5° | 9.4    | 13.1   | 16.3   | 13.1   | 9.4    |
| 55°   | 5.8    | 7.9    | 11.0   | 7.9    | 6.3    |
| 57.5° | 5.8    | 5.8    | 7.3    | 6.3    | 5.8    |
| 60°   | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    |
| 62.5° | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    |
| 65°   | 5.2    | 5.8    | 5.8    | 5.8    | 5.2    |
| 67.5° | 5.2    | 5.2    | 5.2    | 5.2    | 5.2    |
| 70°   | 5.2    | 5.2    | 4.7    | 5.2    | 5.2    |
| 72.5° | 4.7    | 4.7    | 4.2    | 4.7    | 4.7    |
| 75°   | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    |
| 77.5° | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    |
| 80°   | 2.6    | 2.6    | 2.1    | 2.6    | 2.6    |
| 82.5° | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    |
| 85°   | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    |
| 87.5° | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)