

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: P284019

Luminaire Tested: **LDA2B159040D010 EU2B15WFL559040 2LBAPINSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P284019
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: LDA2B159040D010 EU2B15WFL559040 2LBAPINSQ1MB
Description: PORTFOLIO 2IN ADJ 1500 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: 1101.7 lumens
Efficiency: N/A
Efficacy: 78.1 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

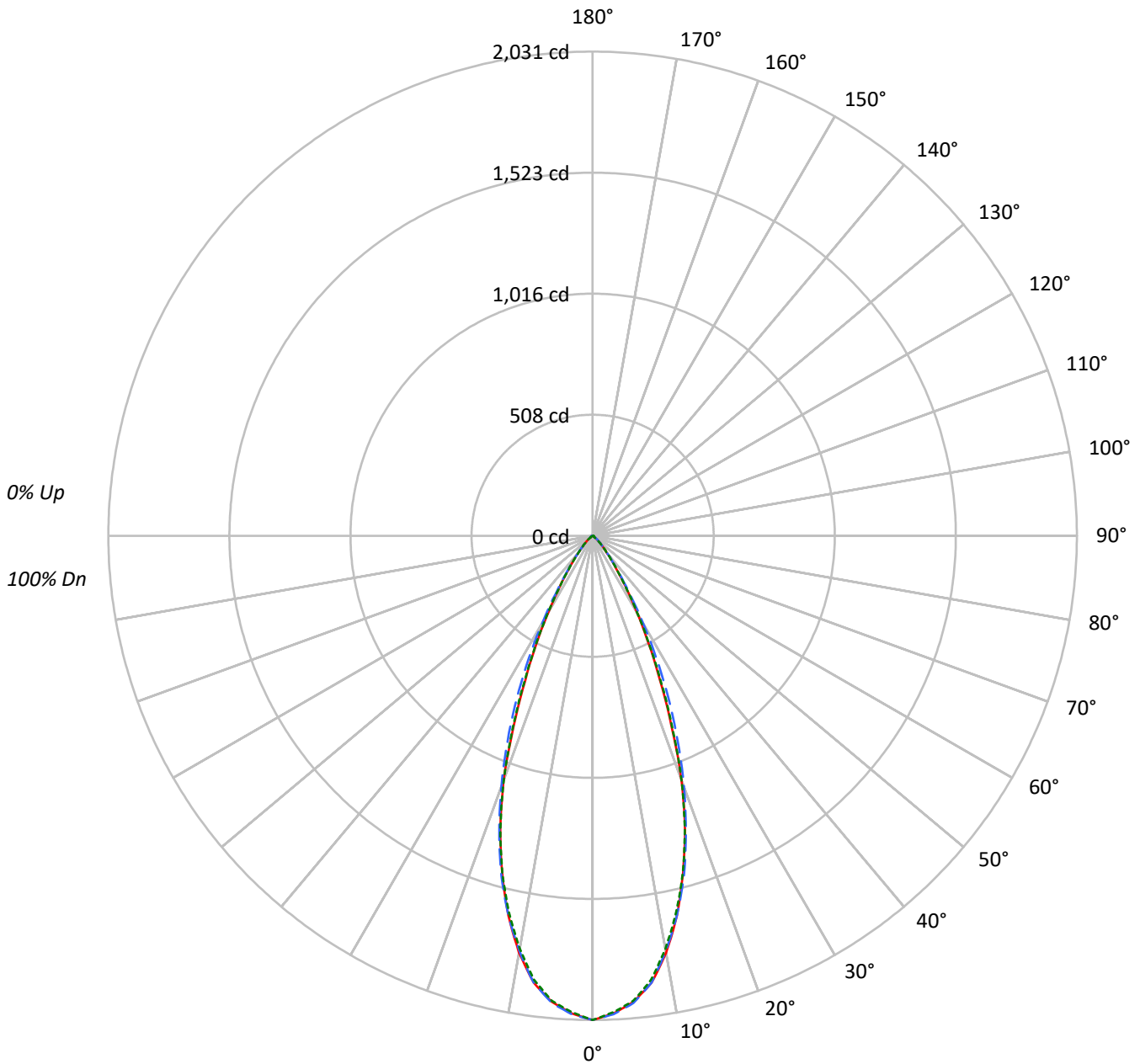
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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° | 1002067 | 1002067 | 1002067 |
| 5° | 971921 | 974298 | 969890 |
| 10° | 889677 | 886120 | 880760 |
| 15° | 748323 | 755269 | 747097 |
| 20° | 572277 | 587450 | 571332 |
| 25° | 363418 | 409689 | 370494 |
| 30° | 211353 | 238641 | 215056 |
| 35° | 111724 | 118831 | 112085 |
| 40° | 58994 | 61634 | 58994 |
| 45° | 33002 | 34188 | 33421 |
| 50° | 15427 | 19495 | 15427 |
| 55° | 5591 | 10666 | 6107 |
| 60° | 6414 | 6414 | 6414 |
| 65° | 6888 | 7588 | 6888 |
| 70° | 8511 | 7645 | 8511 |
| 75° | 7815 | 7815 | 7815 |
| 80° | 8523 | 6819 | 8523 |
| 85° | 6793 | 6793 | 6793 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 181.3 | 16.5 |
| 10°-20° | 403.7 | 36.6 |
| 20°-30° | 326.0 | 29.6 |
| 30°-40° | 128.9 | 11.7 |
| 40°-50° | 39.6 | 3.6 |
| 50°-60° | 10.2 | 0.9 |
| 60°-70° | 6.2 | 0.6 |
| 70°-80° | 4.5 | 0.4 |
| 80°-90° | 1.4 | 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° | 911.0 | 82.7 |
| 0°-40° | 1039.8 | 94.4 |
| 0°-60° | 1089.6 | 98.9 |
| 0°-90° | 1101.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1101.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2031 | 2031 | 2031 | 2031 | 2031 | |
| 5° | 1962 | 1966 | 1967 | 1963 | 1958 | 182 |
| 15° | 1465 | 1469 | 1479 | 1473 | 1463 | 402 |
| 25° | 668 | 700 | 753 | 712 | 681 | 311 |
| 35° | 186 | 191 | 197 | 191 | 186 | 124 |
| 45° | 47 | 48 | 49 | 48 | 48 | 39 |
| 55° | 6 | 9 | 12 | 9 | 7 | 8 |
| 65° | 6 | 6 | 6 | 6 | 6 | 6 |
| 75° | 4 | 4 | 4 | 4 | 4 | 5 |
| 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° | 2031.1 | 2031.1 | 2031.1 | 2031.1 | 2031.1 |
| 2.5° | 2005.7 | 2006.8 | 2008.6 | 2006.3 | 2000.3 |
| 5° | 1962.5 | 1966.1 | 1967.3 | 1963.1 | 1958.4 |
| 7.5° | 1891.6 | 1887.5 | 1891.1 | 1884.0 | 1878.1 |
| 10° | 1775.9 | 1770.5 | 1768.8 | 1758.1 | 1758.1 |
| 12.5° | 1632.9 | 1631.1 | 1632.3 | 1627.0 | 1618.7 |
| 15° | 1465.1 | 1469.2 | 1478.7 | 1472.8 | 1462.7 |
| 17.5° | 1287.3 | 1293.2 | 1301.5 | 1299.7 | 1286.1 |
| 20° | 1090.0 | 1107.1 | 1118.9 | 1107.7 | 1088.2 |
| 22.5° | 865.5 | 902.1 | 932.2 | 908.6 | 876.7 |
| 25° | 667.6 | 699.5 | 752.6 | 712.5 | 680.6 |
| 27.5° | 506.3 | 529.3 | 577.8 | 538.2 | 516.3 |
| 30° | 371.0 | 385.2 | 418.9 | 392.9 | 377.5 |
| 32.5° | 265.3 | 275.3 | 289.5 | 274.1 | 266.4 |
| 35° | 185.5 | 190.8 | 197.3 | 191.4 | 186.1 |
| 37.5° | 130.6 | 132.3 | 137.1 | 132.3 | 130.0 |
| 40° | 91.6 | 92.2 | 95.7 | 92.8 | 91.6 |
| 42.5° | 66.2 | 66.2 | 67.9 | 66.8 | 66.2 |
| 45° | 47.3 | 47.9 | 49.0 | 48.4 | 47.9 |
| 47.5° | 33.7 | 34.9 | 34.9 | 35.4 | 33.1 |
| 50° | 20.1 | 24.8 | 25.4 | 24.8 | 20.1 |
| 52.5° | 10.6 | 14.8 | 18.3 | 14.8 | 10.6 |
| 55° | 6.5 | 8.9 | 12.4 | 8.9 | 7.1 |
| 57.5° | 6.5 | 6.5 | 8.3 | 7.1 | 6.5 |
| 60° | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 62.5° | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 65° | 5.9 | 6.5 | 6.5 | 6.5 | 5.9 |
| 67.5° | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 |
| 70° | 5.9 | 5.9 | 5.3 | 5.9 | 5.9 |
| 72.5° | 5.3 | 5.3 | 4.7 | 5.3 | 5.3 |
| 75° | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 |
| 77.5° | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| 80° | 3.0 | 3.0 | 2.4 | 3.0 | 3.0 |
| 82.5° | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| 85° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 87.5° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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







(END OF REPORT)