

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: P#

Luminaire Tested: **LD2B20D010 EU2B20WFL558030 2LBDL\*LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29153)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD2B20D010 EU2B20WFL558030 2LBDL\*LI  
Description: 2000 Lumen, 2inch Portfolio LED Downlight  
WIDE FLOOD OPTIC  
LENSED SPUN ROUND TRIM WITH LI FINISH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1635.3 lumens  
Efficiency: N/A  
Efficacy: 78.2 lumens/watt  
Spacing Criteria (0/90/45): 0.73 / 0.73 / 0.8  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

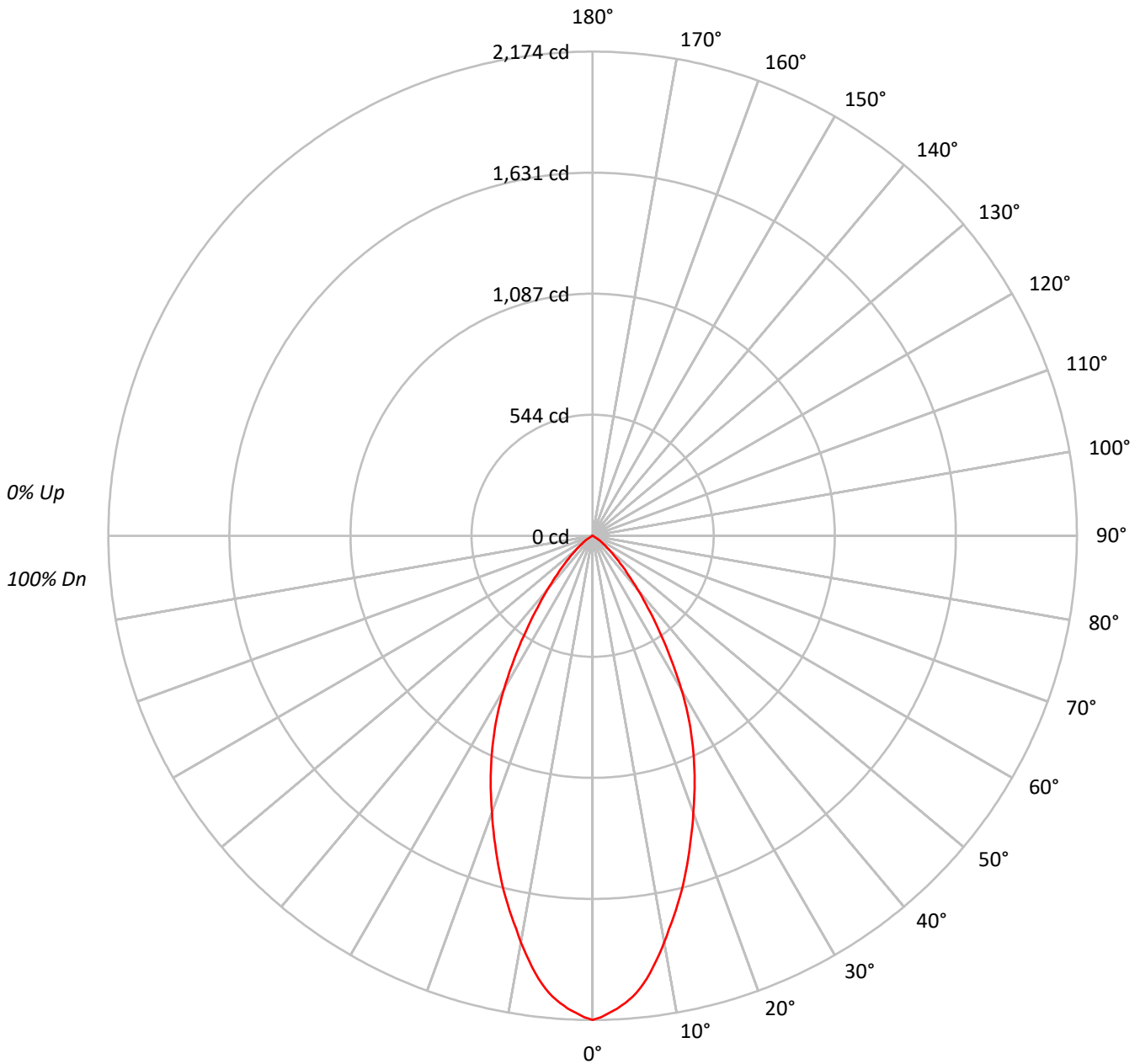
Input Watts (W): 20.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P#

CATALOG NUMBER: LD2B20D010 EU2B20WFL558030 2LBDL\*LI

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LD2B20D010 EU2B20WFL558030 2LBDL\*LI

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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|
| RF  | 20  |     |     |     |     |     |     |     |     | 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 | 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   | 113 | 111 | 108 | 106 | 111 | 109 | 106 | 104 | 104 | 103 | 101 | 101 | 99  | 98  | 97  | 96  | 95  | 93  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 2   | 108 | 103 | 99  | 95  | 106 | 101 | 97  | 94  | 98  | 95  | 92  | 95  | 92  | 90  | 92  | 90  | 88  | 87  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 3   | 102 | 96  | 91  | 87  | 100 | 94  | 90  | 86  | 92  | 88  | 85  | 89  | 86  | 83  | 87  | 84  | 82  | 80  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 4   | 97  | 89  | 84  | 79  | 95  | 88  | 83  | 79  | 86  | 81  | 78  | 84  | 80  | 77  | 82  | 79  | 76  | 75  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 5   | 92  | 83  | 78  | 73  | 90  | 83  | 77  | 73  | 81  | 76  | 72  | 79  | 75  | 72  | 77  | 74  | 71  | 69  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 6   | 87  | 78  | 72  | 68  | 86  | 77  | 72  | 68  | 76  | 71  | 67  | 74  | 70  | 67  | 73  | 69  | 66  | 65  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 7   | 83  | 73  | 67  | 63  | 82  | 73  | 67  | 63  | 72  | 66  | 63  | 70  | 66  | 62  | 69  | 65  | 62  | 61  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 8   | 79  | 69  | 63  | 59  | 78  | 69  | 63  | 59  | 68  | 62  | 59  | 66  | 62  | 58  | 66  | 61  | 58  | 57  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 9   | 75  | 65  | 59  | 55  | 74  | 65  | 59  | 55  | 64  | 59  | 55  | 63  | 58  | 55  | 62  | 58  | 55  | 53  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 10  | 72  | 62  | 56  | 52  | 71  | 61  | 56  | 52  | 61  | 55  | 52  | 60  | 55  | 52  | 59  | 55  | 52  | 50  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 842090 |
| 5°  | 807202 |
| 10° | 728982 |
| 15° | 638689 |
| 20° | 544935 |
| 25° | 457093 |
| 30° | 356563 |
| 35° | 245794 |
| 40° | 157862 |
| 45° | 95535  |
| 50° | 56042  |
| 55° | 31402  |
| 60° | 8986   |
| 65° | 0      |
| 70° | 0      |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |



TEST NUMBER: P#

CATALOG NUMBER: LD2B20D010 EU2B20WFL558030 2LBDL\*LI

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 191.0  | 11.7      |
| 10°-20°   | 442.7  | 27.1      |
| 20°-30°   | 486.5  | 29.7      |
| 30°-40°   | 329.2  | 20.1      |
| 40°-50°   | 141.1  | 8.6       |
| 50°-60°   | 43.1   | 2.6       |
| 60°-70°   | 1.8    | 0.1       |
| 70°-80°   | 0.0    | 0.0       |
| 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°    | 1120.1 | 68.5      |
| 0°-40°    | 1449.3 | 88.6      |
| 0°-60°    | 1633.5 | 99.9      |
| 0°-90°    | 1635.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1635.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2174 |      |
| 5°  | 2076 | 191  |
| 15° | 1593 | 443  |
| 25° | 1070 | 486  |
| 35° | 520  | 329  |
| 45° | 174  | 141  |
| 55° | 46   | 43   |
| 65° | 0    | 2    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



TEST NUMBER: P#

CATALOG NUMBER: LD2B20D010 EU2B20WFL558030 2LBDL\*LI

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2174.0 |
| 1°    | 2162.3 |
| 2°    | 2144.1 |
| 3°    | 2125.8 |
| 4°    | 2102.6 |
| 5°    | 2076.0 |
| 6°    | 2042.8 |
| 7°    | 2002.9 |
| 8°    | 1954.7 |
| 9°    | 1904.9 |
| 10°   | 1853.4 |
| 11°   | 1798.6 |
| 12°   | 1748.8 |
| 13°   | 1697.3 |
| 14°   | 1645.8 |
| 15°   | 1592.7 |
| 17.5° | 1454.9 |
| 20°   | 1322.0 |
| 22.5° | 1195.8 |
| 25°   | 1069.5 |
| 27.5° | 940.0  |
| 30°   | 797.2  |
| 32.5° | 652.7  |
| 35°   | 519.8  |
| 37.5° | 406.9  |
| 40°   | 312.2  |
| 42.5° | 235.8  |
| 45°   | 174.4  |
| 47.5° | 127.9  |
| 50°   | 93.0   |
| 52.5° | 66.4   |
| 55°   | 46.5   |
| 57.5° | 29.9   |
| 60°   | 11.6   |
| 62.5° | 1.7    |
| 65°   | 0.0    |
| 67.5° | 0.0    |
| 70°   | 0.0    |
| 72.5° | 0.0    |
| 75°   | 0.0    |
| 77.5° | 0.0    |
| 80°   | 0.0    |
| 82.5° | 0.0    |



TEST NUMBER: P#

CATALOG NUMBER: LD2B20D010 EU2B20WFL558030 2LBDL\*LI

**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







|       |  |     |
|-------|--|-----|
| 85°   |  | 0.0 |
| 87.5° |  | 0.0 |



(END OF REPORT)