

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: P211403

Luminaire Tested: **LE\_4B15D010 EC4B10208050 4LBS1WH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211403  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LE\_4B15D010 EC4B10208050 4LBS1WH  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH WHEAT TRIM  
WATTAGE D010TR-14.39W DE010-14.29W D5LT-14.34W DMX-14.46W DL2-15.8W  
DL3-15.28W DLE-15.432W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1773.3 lumens  
Efficiency: N/A  
Efficacy: 124.0 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.08  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

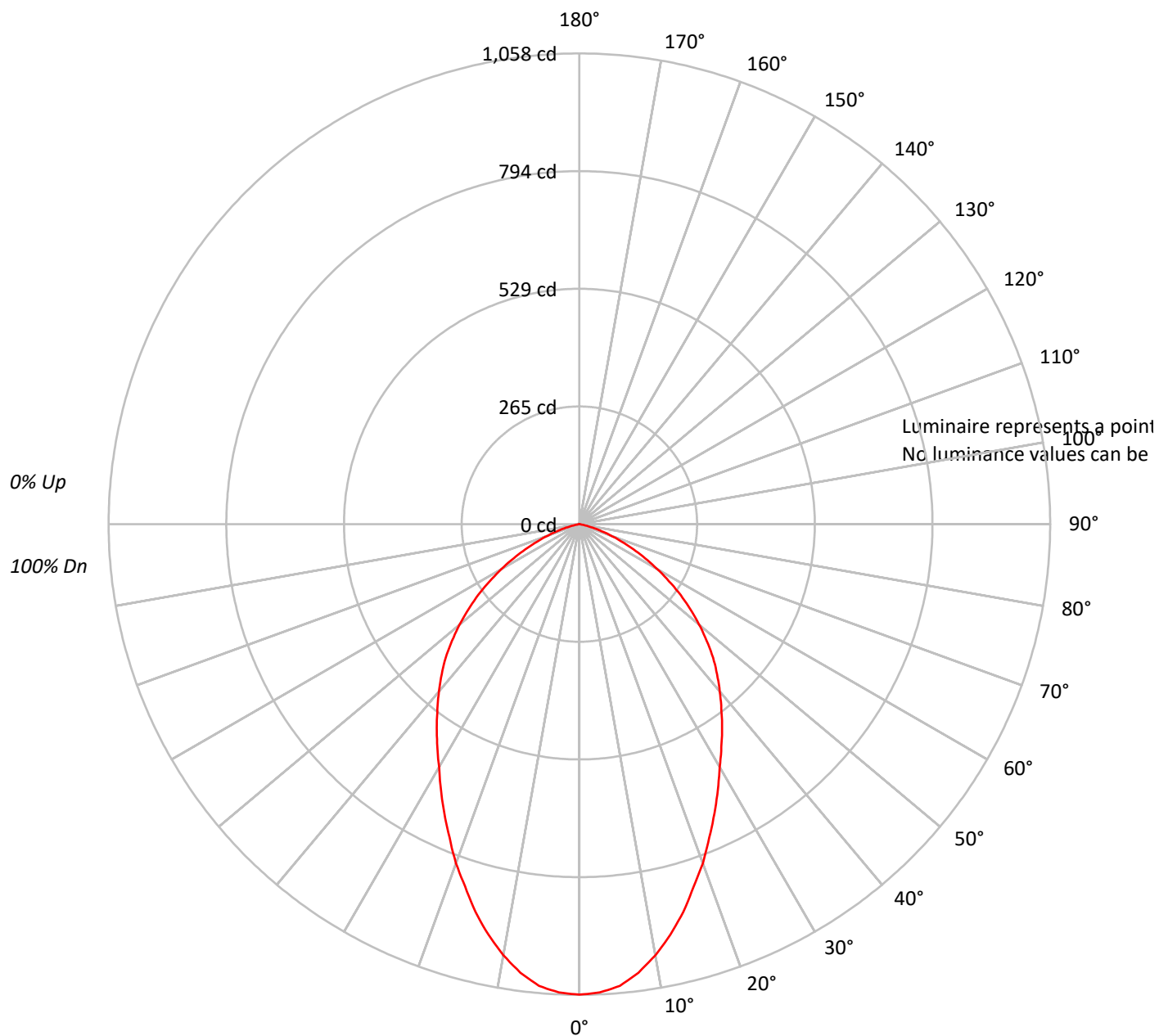
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P211403

CATALOG NUMBER: LE\_4B15D010 EC4B10208050 4LBS1WH

### Luminous Intensity Polar Plot





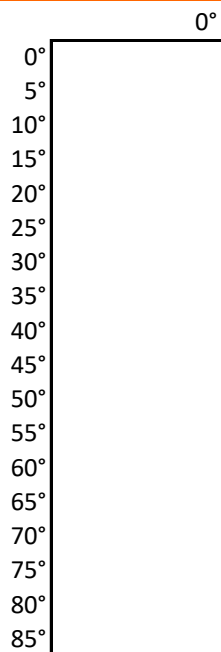
TEST NUMBER: P211403

CATALOG NUMBER: LE\_4B15D010 EC4B10208050 4LBS1WH

**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  | 30  | 10  | 50  | 30  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 |
| 1   | 111 | 107 | 104 | 101 | 108 | 105 | 102 | 99  | 101 | 98  | 96  | 97  | 95  | 93  | 94  | 92  | 90  | 89  | 89  |
| 2   | 103 | 96  | 90  | 85  | 100 | 94  | 89  | 84  | 91  | 86  | 83  | 87  | 84  | 81  | 85  | 82  | 79  | 77  | 77  |
| 3   | 95  | 86  | 79  | 73  | 93  | 84  | 78  | 73  | 82  | 76  | 72  | 79  | 74  | 70  | 76  | 73  | 69  | 67  | 67  |
| 4   | 88  | 77  | 70  | 64  | 86  | 76  | 69  | 63  | 74  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 59  | 59  |
| 5   | 81  | 70  | 62  | 56  | 79  | 69  | 62  | 56  | 67  | 60  | 55  | 65  | 59  | 55  | 63  | 58  | 54  | 52  | 52  |
| 6   | 76  | 64  | 56  | 50  | 74  | 63  | 55  | 50  | 61  | 54  | 49  | 60  | 54  | 49  | 58  | 53  | 49  | 47  | 47  |
| 7   | 71  | 58  | 51  | 45  | 69  | 58  | 50  | 45  | 56  | 49  | 45  | 55  | 49  | 44  | 54  | 48  | 44  | 42  | 42  |
| 8   | 66  | 54  | 46  | 41  | 65  | 53  | 46  | 41  | 52  | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 40  | 38  | 38  |
| 9   | 62  | 50  | 42  | 37  | 61  | 49  | 42  | 37  | 48  | 41  | 37  | 47  | 41  | 37  | 46  | 41  | 37  | 35  | 35  |
| 10  | 58  | 46  | 39  | 34  | 57  | 46  | 39  | 34  | 45  | 38  | 34  | 44  | 38  | 34  | 43  | 38  | 34  | 32  | 32  |

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





TEST NUMBER: P211403

CATALOG NUMBER: LE\_4B15D010 EC4B10208050 4LBS1WH

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 97.5   | 5.5       |
| 10°-20°   | 252.5  | 14.2      |
| 20°-30°   | 330.2  | 18.6      |
| 30°-40°   | 349.7  | 19.7      |
| 40°-50°   | 326.1  | 18.4      |
| 50°-60°   | 247.0  | 13.9      |
| 60°-70°   | 133.8  | 7.5       |
| 70°-80°   | 35.9   | 2.0       |
| 80°-90°   | 0.5    | 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°    | 680.3  | 38.4      |
| 0°-40°    | 1030.0 | 58.1      |
| 0°-60°    | 1603.1 | 90.4      |
| 0°-90°    | 1773.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1773.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1058 |      |
| 5°  | 1042 | 98   |
| 15° | 902  | 252  |
| 25° | 718  | 330  |
| 35° | 559  | 350  |
| 45° | 425  | 326  |
| 55° | 278  | 247  |
| 65° | 134  | 134  |
| 75° | 31   | 36   |
| 85° | 0    | 1    |
| 90° | 0    |      |



TEST NUMBER: P211403

CATALOG NUMBER: LE\_4B15D010 EC4B10208050 4LBS1WH

**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1057.6 |
| 2.5°  | 1053.7 |
| 5°    | 1042.0 |
| 7.5°  | 1016.9 |
| 10°   | 983.8  |
| 12.5° | 945.1  |
| 15°   | 902.4  |
| 17.5° | 853.9  |
| 20°   | 811.2  |
| 22.5° | 762.6  |
| 25°   | 718.0  |
| 27.5° | 673.4  |
| 30°   | 630.7  |
| 32.5° | 593.8  |
| 35°   | 558.9  |
| 37.5° | 524.0  |
| 40°   | 490.9  |
| 42.5° | 458.0  |
| 45°   | 425.0  |
| 47.5° | 388.1  |
| 50°   | 351.2  |
| 52.5° | 314.4  |
| 55°   | 277.5  |
| 57.5° | 238.7  |
| 60°   | 201.8  |
| 62.5° | 166.9  |
| 65°   | 133.9  |
| 67.5° | 102.9  |
| 70°   | 75.6   |
| 72.5° | 52.4   |
| 75°   | 31.1   |
| 77.5° | 13.6   |
| 80°   | 3.8    |
| 82.5° | 0.0    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 90°   | 0.0    |



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







(END OF REPORT)