

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: P207506

Luminaire Tested: **LD4B50D010TE EU4B30509030 4LBMB1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P207506  
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: LD4B50D010TE EU4B30509030 4LBMB1  
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT  
MEDIUM DISTRIBUTION WITH SPECULAR BLACK TRIM  
SINGLE DRIVER D010TE  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1828.2 lumens  
Efficiency: N/A  
Efficacy: 31.1 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.87  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

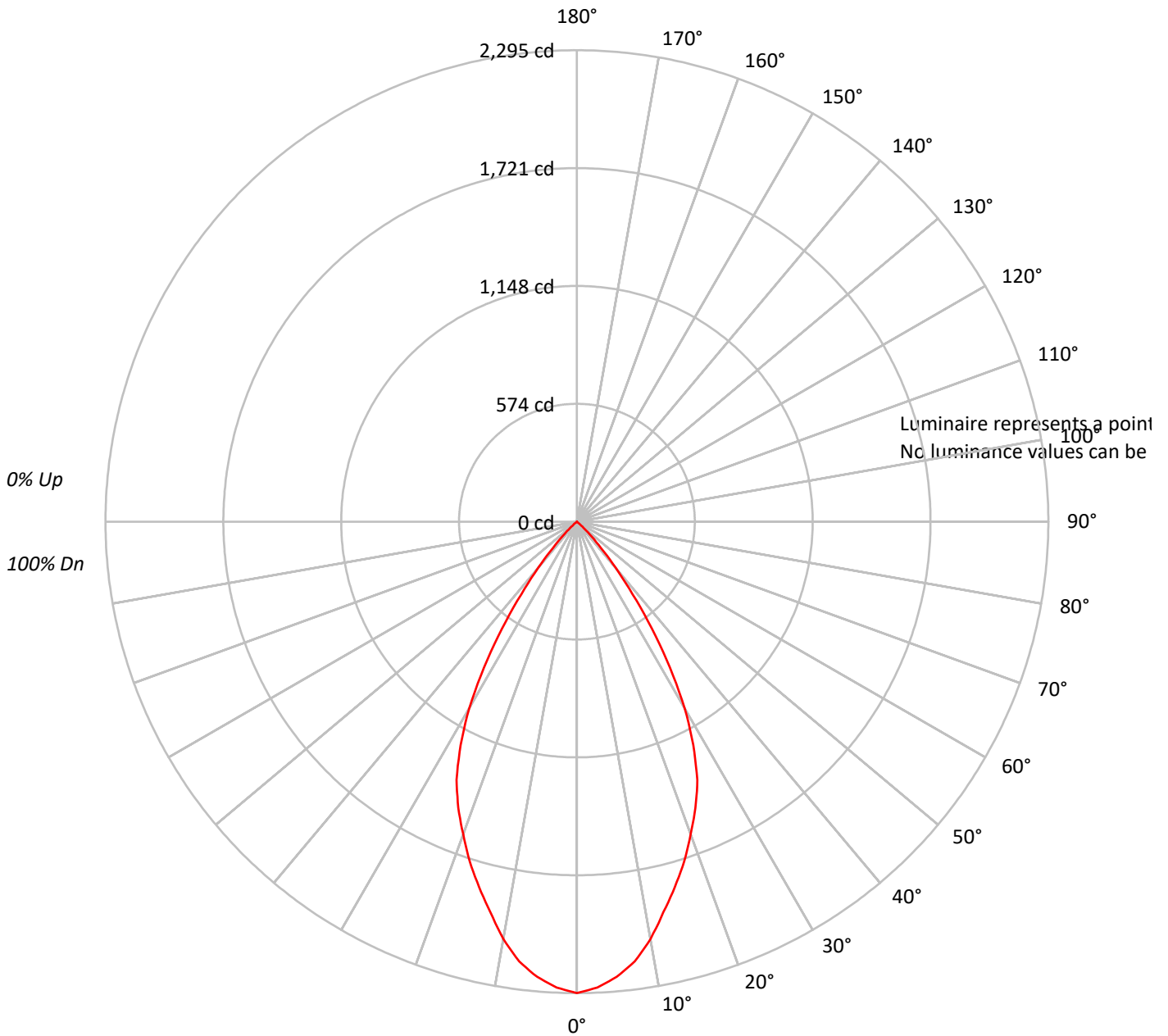
Input Watts (W): 58.77  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |     |     |     | 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 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 94  |    |    |   |
| 2   | 108 | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 99  | 96  | 93  | 96  | 93  | 91  | 93  | 91  | 89  | 88  |    |    |   |
| 3   | 103 | 97  | 92  | 88  | 101 | 95  | 91  | 87  | 93  | 89  | 86  | 90  | 87  | 85  | 88  | 86  | 83  | 82  |    |    |   |
| 4   | 98  | 91  | 85  | 81  | 96  | 90  | 85  | 81  | 87  | 83  | 80  | 85  | 82  | 79  | 84  | 81  | 78  | 77  |    |    |   |
| 5   | 93  | 85  | 79  | 75  | 92  | 84  | 79  | 75  | 82  | 78  | 74  | 81  | 77  | 74  | 79  | 76  | 73  | 72  |    |    |   |
| 6   | 89  | 80  | 74  | 70  | 87  | 79  | 74  | 70  | 78  | 73  | 69  | 76  | 72  | 69  | 75  | 71  | 68  | 67  |    |    |   |
| 7   | 84  | 75  | 70  | 65  | 83  | 75  | 69  | 65  | 73  | 68  | 65  | 72  | 68  | 65  | 71  | 67  | 64  | 63  |    |    |   |
| 8   | 80  | 71  | 65  | 61  | 79  | 71  | 65  | 61  | 69  | 64  | 61  | 68  | 64  | 61  | 67  | 63  | 60  | 59  |    |    |   |
| 9   | 77  | 67  | 61  | 58  | 76  | 67  | 61  | 57  | 66  | 61  | 57  | 65  | 60  | 57  | 64  | 60  | 57  | 56  |    |    |   |
| 10  | 73  | 64  | 58  | 54  | 72  | 63  | 58  | 54  | 62  | 57  | 54  | 62  | 57  | 54  | 61  | 57  | 54  | 52  |    |    |   |

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





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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 207.4  | 11.3      |
| 10°-20°   | 515.6  | 28.2      |
| 20°-30°   | 623.5  | 34.1      |
| 30°-40°   | 397.7  | 21.8      |
| 40°-50°   | 83.0   | 4.5       |
| 50°-60°   | 1.1    | 0.1       |
| 60°-70°   | 0.0    | 0.0       |
| 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°    | 1346.4 | 73.6      |
| 0°-40°    | 1744.1 | 95.4      |
| 0°-60°    | 1828.2 | 100.0     |
| 0°-90°    | 1828.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1828.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2295 |      |
| 5°  | 2224 | 207  |
| 15° | 1841 | 516  |
| 25° | 1387 | 624  |
| 35° | 636  | 398  |
| 45° | 86   | 83   |
| 55° | 0    | 1    |
| 65° | 0    | 0    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2294.9 |
| 2.5°  | 2269.7 |
| 5°    | 2224.3 |
| 7.5°  | 2158.7 |
| 10°   | 2062.9 |
| 12.5° | 1946.9 |
| 15°   | 1840.9 |
| 17.5° | 1735.0 |
| 20°   | 1619.0 |
| 22.5° | 1508.1 |
| 25°   | 1387.0 |
| 27.5° | 1225.6 |
| 30°   | 1049.1 |
| 32.5° | 842.3  |
| 35°   | 635.5  |
| 37.5° | 443.8  |
| 40°   | 292.5  |
| 42.5° | 171.5  |
| 45°   | 85.7   |
| 47.5° | 35.3   |
| 50°   | 10.1   |
| 52.5° | 0.0    |
| 55°   | 0.0    |
| 57.5° | 0.0    |
| 60°   | 0.0    |
| 62.5° | 0.0    |
| 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    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 90°   | 0.0    |



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— 0°-180°







(END OF REPORT)