

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: P208319

Luminaire Tested: **LD4B50D010TE EU4B30508035 4LBNI1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P208319  
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 EU4B30508035 4LBNLI1  
Description: PORTFOLIO 4 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT  
NARROW DISTRIBUTION WITH SPECULAR CLEAR TRIM  
SINGLE DRIVER D010TE  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3925.3 lumens  
Efficiency: N/A  
Efficacy: 66.8 lumens/watt  
Spacing Criteria (0/90/45): 0.48 / 0.48 / 0.54  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

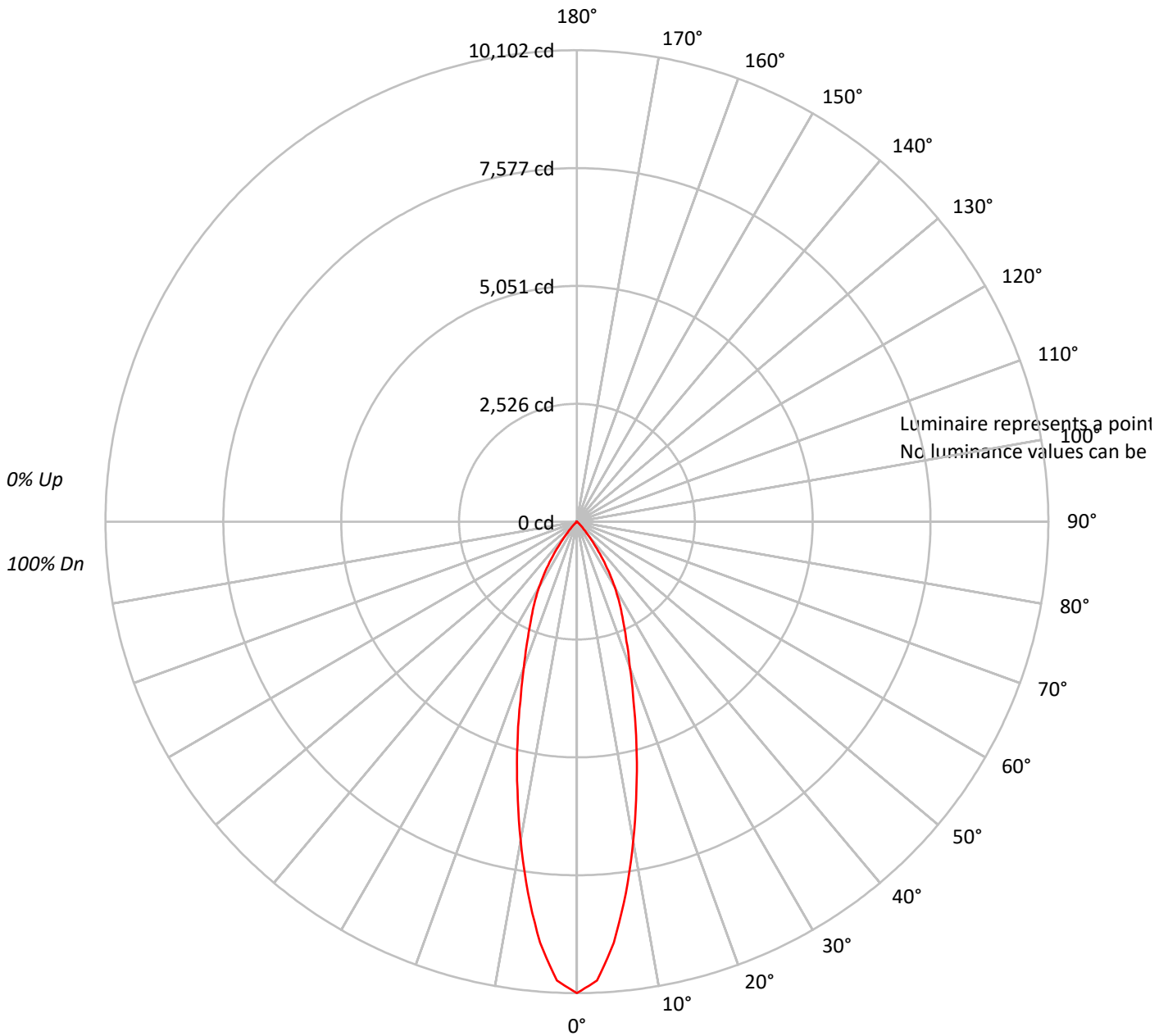
Input Watts (W): 58.77  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P208319

CATALOG NUMBER: LD4B50D010TE EU4B30508035 4LBNLI1

### Luminous Intensity Polar Plot





TEST NUMBER: P208319

CATALOG NUMBER: LD4B50D010TE EU4B30508035 4LBNLI1

**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 | 100 | 100 | 100 |
| 1   | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 95  | 95  | 95  | 95  |
| 2   | 109 | 105 | 102 | 99  | 107 | 103 | 100 | 98  | 100 | 98  | 95  | 97  | 95  | 93  | 95  | 93  | 92  | 90  | 90  | 90  | 90  |
| 3   | 105 | 99  | 95  | 92  | 103 | 98  | 94  | 91  | 95  | 92  | 89  | 93  | 90  | 88  | 91  | 89  | 87  | 85  | 85  | 85  | 85  |
| 4   | 101 | 94  | 89  | 86  | 99  | 93  | 88  | 85  | 91  | 87  | 84  | 89  | 86  | 83  | 87  | 84  | 82  | 81  | 81  | 81  | 81  |
| 5   | 96  | 89  | 84  | 80  | 95  | 88  | 84  | 80  | 87  | 82  | 79  | 85  | 81  | 79  | 83  | 80  | 78  | 77  | 77  | 77  | 77  |
| 6   | 92  | 85  | 80  | 76  | 91  | 84  | 79  | 76  | 83  | 78  | 75  | 81  | 78  | 75  | 80  | 77  | 74  | 73  | 73  | 73  | 73  |
| 7   | 89  | 81  | 76  | 72  | 88  | 80  | 75  | 72  | 79  | 75  | 71  | 78  | 74  | 71  | 77  | 73  | 71  | 69  | 69  | 69  | 69  |
| 8   | 85  | 77  | 72  | 68  | 84  | 77  | 72  | 68  | 76  | 71  | 68  | 75  | 71  | 68  | 74  | 70  | 67  | 66  | 66  | 66  | 66  |
| 9   | 82  | 74  | 69  | 65  | 81  | 73  | 68  | 65  | 72  | 68  | 65  | 72  | 68  | 65  | 71  | 67  | 64  | 63  | 63  | 63  | 63  |
| 10  | 79  | 71  | 66  | 62  | 78  | 70  | 65  | 62  | 69  | 65  | 62  | 69  | 65  | 62  | 68  | 64  | 62  | 61  | 61  | 61  | 61  |

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





TEST NUMBER: P208319

CATALOG NUMBER: LD4B50D010TE EU4B30508035 4LBNLI1

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 796.1  | 20.3      |
| 10°-20°   | 1362.9 | 34.7      |
| 20°-30°   | 1083.2 | 27.6      |
| 30°-40°   | 573.4  | 14.6      |
| 40°-50°   | 98.8   | 2.5       |
| 50°-60°   | 7.4    | 0.2       |
| 60°-70°   | 3.7    | 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°    | 3242.1 | 82.6      |
| 0°-40°    | 3815.5 | 97.2      |
| 0°-60°    | 3921.6 | 99.9      |
| 0°-90°    | 3925.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3925.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 10102 |      |
| 5°  | 9056  | 796  |
| 15° | 4927  | 1363 |
| 25° | 2334  | 1083 |
| 35° | 907   | 573  |
| 45° | 103   | 99   |
| 55° | 6     | 7    |
| 65° | 6     | 4    |
| 75° | 0     | 0    |
| 85° | 0     | 0    |
| 90° | 0     |      |



TEST NUMBER: P208319

CATALOG NUMBER: LD4B50D010TE EU4B30508035 4LBNI1

**CANDELA DISTRIBUTION (FULL):**

| 0°    |         |
|-------|---------|
| 0°    | 10101.7 |
| 2.5°  | 9841.7  |
| 5°    | 9055.8  |
| 7.5°  | 8028.1  |
| 10°   | 6940.0  |
| 12.5° | 5888.1  |
| 15°   | 4926.9  |
| 17.5° | 4032.2  |
| 20°   | 3318.9  |
| 22.5° | 2774.8  |
| 25°   | 2333.5  |
| 27.5° | 1976.8  |
| 30°   | 1620.1  |
| 32.5° | 1257.4  |
| 35°   | 906.8   |
| 37.5° | 598.5   |
| 40°   | 356.7   |
| 42.5° | 205.5   |
| 45°   | 102.8   |
| 47.5° | 36.3    |
| 50°   | 12.1    |
| 52.5° | 12.1    |
| 55°   | 6.0     |
| 57.5° | 6.0     |
| 60°   | 6.0     |
| 62.5° | 6.0     |
| 65°   | 6.0     |
| 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     |



Report Generated By E9808895 / USPTCWHP6082093







— 0°-180°







(END OF REPORT)