

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 EU2B2010NFL259050 2LBPIN**

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 (P14816)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD2B20D010 EU2B2010NFL259050 2LBPIN  
Description: 2000 Lumen, 2inch Portfolio LED Downlight  
NARROW FLOOD OPTIC  
ROUND PINHOLE BLACK OCULUS  
Light Source: -  
Ballast/Driver: -

**Summary**

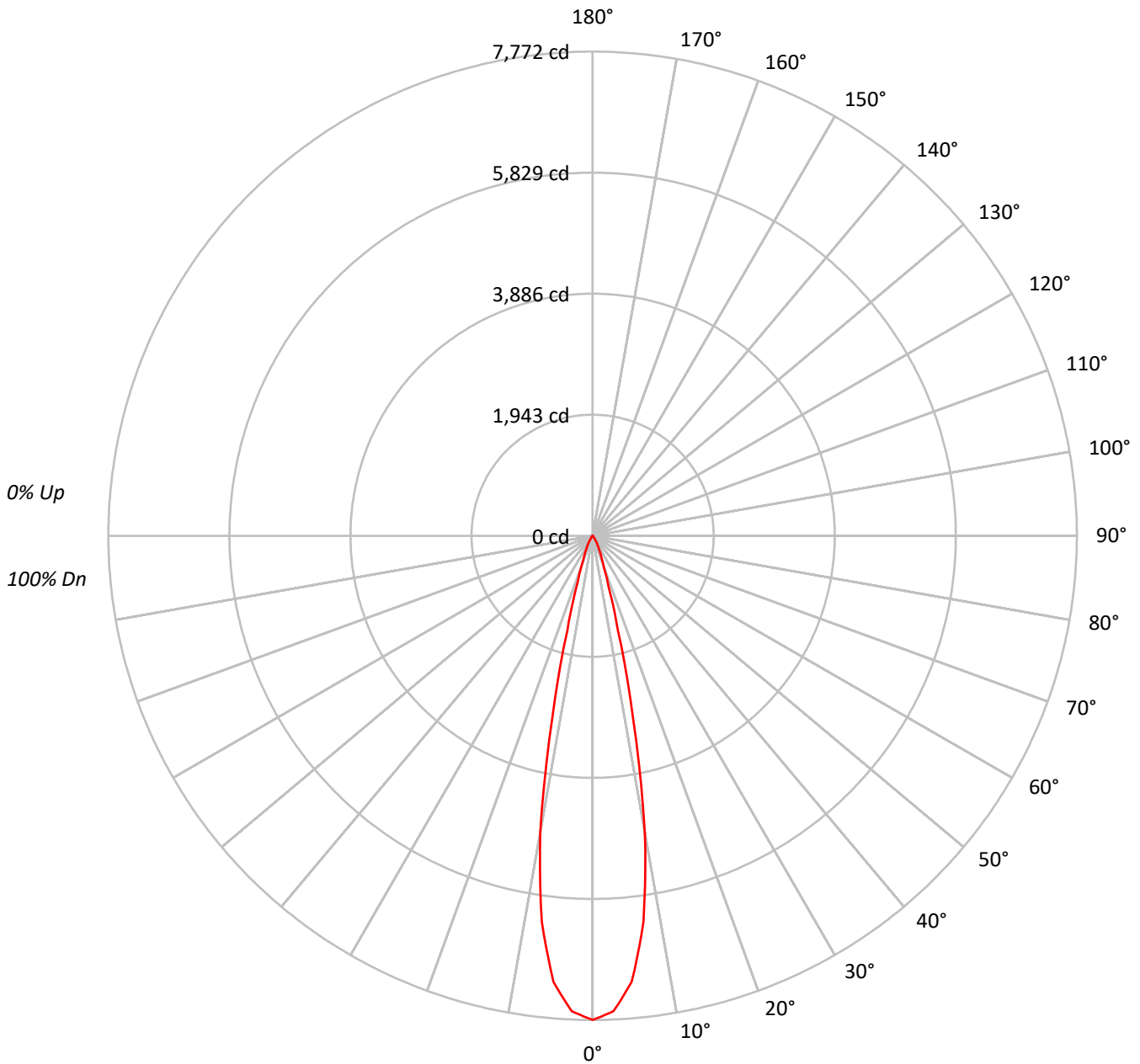
Lumens per Lamp: N/A  
Luminaire Lumens: 1282.5 lumens  
Efficiency: N/A  
Efficacy: 61.4 lumens/watt  
Spacing Criteria (0/90/45): 0.39 / 0.39 / 0.35  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

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



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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 | 100 | 99 | 100 |
| 1   | 115 | 113 | 112 | 110 | 113 | 111 | 110 | 108 | 107 | 106 | 105 | 104 | 103 | 102 | 100 | 100 | 99  | 97  | 97  | 96 | 97  |
| 2   | 112 | 109 | 106 | 104 | 110 | 107 | 105 | 103 | 104 | 102 | 100 | 101 | 100 | 98  | 99  | 97  | 96  | 95  | 95  | 94 | 95  |
| 3   | 109 | 105 | 102 | 99  | 107 | 104 | 101 | 98  | 101 | 99  | 97  | 99  | 97  | 95  | 97  | 95  | 94  | 93  | 93  | 92 | 93  |
| 4   | 106 | 101 | 98  | 95  | 105 | 100 | 97  | 95  | 98  | 96  | 94  | 97  | 94  | 93  | 95  | 93  | 92  | 90  | 90  | 89 | 90  |
| 5   | 104 | 98  | 95  | 92  | 102 | 98  | 94  | 92  | 96  | 93  | 91  | 95  | 92  | 90  | 93  | 91  | 89  | 88  | 88  | 87 | 88  |
| 6   | 101 | 96  | 92  | 89  | 100 | 95  | 91  | 89  | 94  | 91  | 88  | 92  | 90  | 88  | 91  | 89  | 87  | 86  | 86  | 85 | 86  |
| 7   | 99  | 93  | 89  | 87  | 98  | 93  | 89  | 87  | 92  | 88  | 86  | 91  | 88  | 86  | 90  | 87  | 85  | 85  | 85  | 84 | 85  |
| 8   | 97  | 91  | 87  | 85  | 96  | 90  | 87  | 85  | 90  | 86  | 84  | 89  | 86  | 84  | 88  | 85  | 84  | 83  | 83  | 82 | 83  |
| 9   | 95  | 89  | 85  | 83  | 94  | 88  | 85  | 83  | 88  | 85  | 82  | 87  | 84  | 82  | 86  | 84  | 82  | 81  | 81  | 80 | 81  |
| 10  | 93  | 87  | 83  | 81  | 92  | 87  | 83  | 81  | 86  | 83  | 81  | 85  | 83  | 81  | 85  | 82  | 80  | 80  | 80  | 79 | 80  |

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 3011459 |
| 5°  | 2796507 |
| 10° | 1900741 |
| 15° | 628810  |
| 20° | 213599  |
| 25° | 108211  |
| 30° | 55884   |
| 35° | 18354   |
| 40° | 6829    |
| 45° | 3672    |
| 50° | 1025    |
| 55° | 1148    |
| 60° | 0       |
| 65° | 0       |
| 70° | 0       |
| 75° | 0       |
| 80° | 0       |
| 85° | 0       |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 610.8  | 47.6      |
| 10°-20°   | 510.3  | 39.8      |
| 20°-30°   | 123.4  | 9.6       |
| 30°-40°   | 31.9   | 2.5       |
| 40°-50°   | 5.3    | 0.4       |
| 50°-60°   | 0.9    | 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°    | 1244.4 | 97.0      |
| 0°-40°    | 1276.3 | 99.5      |
| 0°-60°    | 1282.5 | 100.0     |
| 0°-90°    | 1282.5 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1282.5 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 7772 |      |
| 5°  | 7190 | 611  |
| 15° | 1568 | 510  |
| 25° | 253  | 123  |
| 35° | 39   | 32   |
| 45° | 7    | 5    |
| 55° | 2    | 1    |
| 65° | 0    | 0    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 7771.8 |
| 2.5°  | 7641.8 |
| 5°    | 7189.6 |
| 7.5°  | 6253.2 |
| 10°   | 4830.8 |
| 12.5° | 2988.2 |
| 15°   | 1567.5 |
| 17.5° | 847.0  |
| 20°   | 518.0  |
| 22.5° | 357.7  |
| 25°   | 253.1  |
| 27.5° | 178.9  |
| 30°   | 124.9  |
| 32.5° | 87.7   |
| 35°   | 38.8   |
| 37.5° | 16.9   |
| 40°   | 13.5   |
| 42.5° | 10.1   |
| 45°   | 6.7    |
| 47.5° | 3.4    |
| 50°   | 1.7    |
| 52.5° | 1.7    |
| 55°   | 1.7    |
| 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)