

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: P278986

Luminaire Tested: **LDA2B208027D010 EU2B20NFL258027 2LBALD1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P278986  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1811-033-2)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B208027D010 EU2B20NFL258027 2LBALD1LI  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC  
AND 2in ADJ spun Refl w/lens Self-Flanged, H  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1919.6 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Spacing Criteria (0/90/45): 0.39 / 0.39 / 0.39  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

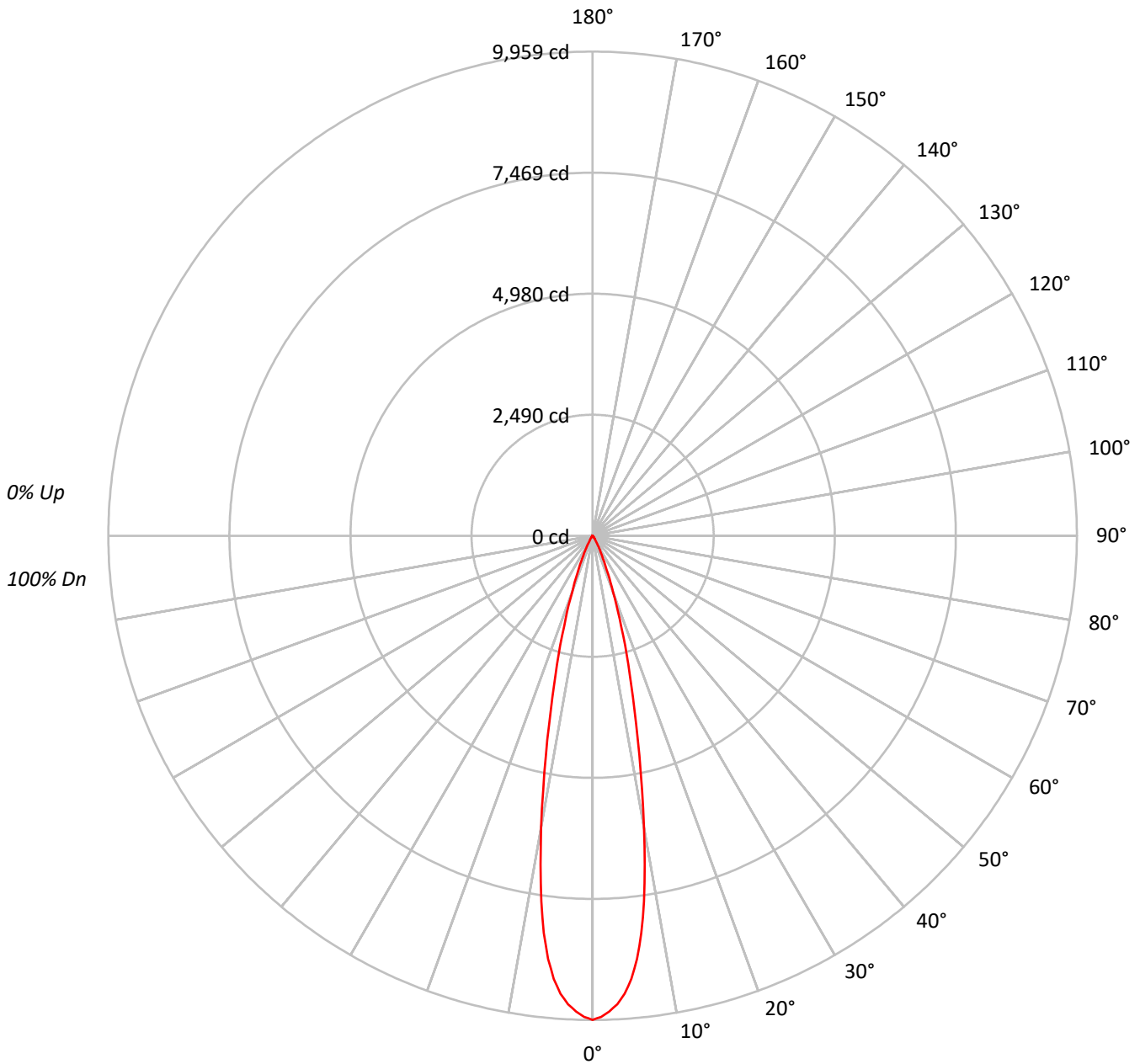
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 115 | 113 | 111 | 110 | 113 | 111 | 109 | 108 | 107 | 106 | 105 | 103 | 102 | 102 | 100 | 99  | 99  | 97  |
| 2   | 112 | 108 | 105 | 103 | 110 | 107 | 104 | 102 | 103 | 101 | 100 | 101 | 99  | 98  | 98  | 97  | 96  | 94  |
| 3   | 108 | 104 | 100 | 98  | 107 | 103 | 99  | 97  | 100 | 98  | 95  | 98  | 96  | 94  | 96  | 94  | 93  | 91  |
| 4   | 105 | 100 | 96  | 94  | 104 | 99  | 96  | 93  | 97  | 94  | 92  | 95  | 93  | 91  | 94  | 92  | 90  | 89  |
| 5   | 102 | 97  | 93  | 90  | 101 | 96  | 92  | 90  | 94  | 91  | 89  | 93  | 90  | 88  | 92  | 89  | 87  | 86  |
| 6   | 100 | 94  | 90  | 87  | 98  | 93  | 89  | 87  | 92  | 89  | 86  | 91  | 88  | 86  | 89  | 87  | 85  | 84  |
| 7   | 97  | 91  | 87  | 84  | 96  | 90  | 87  | 84  | 89  | 86  | 84  | 88  | 85  | 83  | 87  | 85  | 83  | 82  |
| 8   | 95  | 88  | 85  | 82  | 94  | 88  | 84  | 82  | 87  | 84  | 81  | 86  | 83  | 81  | 85  | 83  | 81  | 80  |
| 9   | 92  | 86  | 82  | 80  | 92  | 86  | 82  | 80  | 85  | 82  | 79  | 84  | 81  | 79  | 84  | 81  | 79  | 78  |
| 10  | 90  | 84  | 80  | 78  | 90  | 84  | 80  | 78  | 83  | 80  | 77  | 82  | 79  | 77  | 82  | 79  | 77  | 76  |

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 4913538 |
| 5°  | 4531455 |
| 10° | 3053629 |
| 15° | 1505584 |
| 20° | 643103  |
| 25° | 252803  |
| 30° | 99524   |
| 35° | 43605   |
| 40° | 20996   |
| 45° | 10117   |
| 50° | 5526    |
| 55° | 3097    |
| 60° | 1776    |
| 65° | 1051    |
| 70° | 1298    |
| 75° | 0       |
| 80° | 0       |
| 85° | 0       |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 775.1  | 40.4      |
| 10°-20°   | 834.7  | 43.5      |
| 20°-30°   | 241.0  | 12.6      |
| 30°-40°   | 50.9   | 2.6       |
| 40°-50°   | 12.5   | 0.7       |
| 50°-60°   | 3.6    | 0.2       |
| 60°-70°   | 1.2    | 0.1       |
| 70°-80°   | 0.6    | 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°    | 1850.8 | 96.4      |
| 0°-40°    | 1901.7 | 99.1      |
| 0°-60°    | 1917.8 | 99.9      |
| 0°-90°    | 1919.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1919.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 9959 |      |
| 5°  | 9150 | 775  |
| 15° | 2948 | 835  |
| 25° | 464  | 241  |
| 35° | 72   | 51   |
| 45° | 14   | 13   |
| 55° | 4    | 4    |
| 65° | 1    | 1    |
| 75° | 0    | 1    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 9959.3 |
| 1°    | 9896.8 |
| 2°    | 9790.9 |
| 3°    | 9647.8 |
| 4°    | 9445.0 |
| 5°    | 9149.9 |
| 6°    | 8751.6 |
| 7°    | 8231.9 |
| 8°    | 7592.8 |
| 9°    | 6847.7 |
| 10°   | 6095.4 |
| 11°   | 5335.0 |
| 12°   | 4617.1 |
| 13°   | 3979.7 |
| 14°   | 3419.3 |
| 15°   | 2947.7 |
| 17.5° | 1948.2 |
| 20°   | 1224.9 |
| 22.5° | 753.2  |
| 25°   | 464.4  |
| 27.5° | 283.4  |
| 30°   | 174.7  |
| 32.5° | 110.4  |
| 35°   | 72.4   |
| 37.5° | 48.0   |
| 40°   | 32.6   |
| 42.5° | 22.6   |
| 45°   | 14.5   |
| 47.5° | 9.1    |
| 50°   | 7.2    |
| 52.5° | 5.4    |
| 55°   | 3.6    |
| 57.5° | 2.7    |
| 60°   | 1.8    |
| 62.5° | 1.8    |
| 65°   | 0.9    |
| 67.5° | 0.9    |
| 70°   | 0.9    |
| 72.5° | 0.9    |
| 75°   | 0.0    |
| 77.5° | 0.9    |
| 80°   | 0.0    |
| 82.5° | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







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



(END OF REPORT)