

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: P280880

Luminaire Tested: **LDA2B209027D010 EU2B20WFL559027 2LBALD1WHH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P280880  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1811-033-5)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA2B209027D010 EU2B20WFL559027 2LBALD1WHH  
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH WIDE FLOOD OPTIC AND  
2in ADJ spun Refl w/lens Self-Flanged, WHH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1639.0 lumens  
Efficiency: N/A  
Efficacy: 79.6 lumens/watt  
Spacing Criteria (0/90/45): 0.74 / 0.74 / 0.73  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

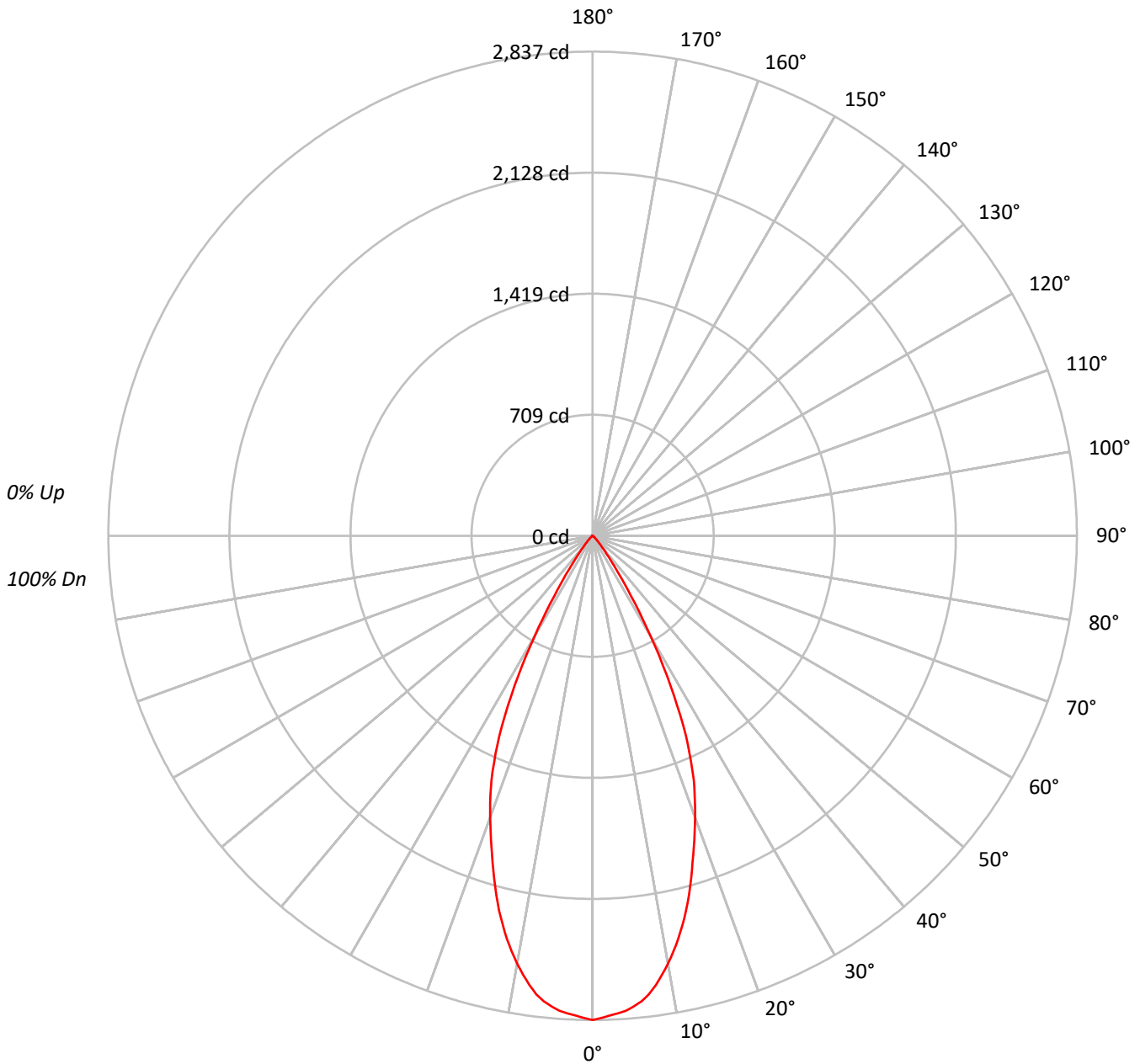
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 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 | 112 | 109 | 107 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 99  | 98  | 97  | 97  | 95  |    |    |   |
| 2   | 109 | 105 | 101 | 98  | 107 | 103 | 100 | 97  | 100 | 98  | 95  | 97  | 95  | 93  | 95  | 93  | 91  | 90  |    |    |   |
| 3   | 105 | 99  | 95  | 91  | 103 | 98  | 94  | 91  | 95  | 92  | 89  | 93  | 90  | 88  | 91  | 88  | 86  | 85  |    |    |   |
| 4   | 100 | 94  | 89  | 85  | 99  | 93  | 88  | 85  | 91  | 87  | 84  | 89  | 85  | 83  | 87  | 84  | 82  | 80  |    |    |   |
| 5   | 96  | 89  | 84  | 80  | 95  | 88  | 83  | 80  | 86  | 82  | 79  | 85  | 81  | 78  | 83  | 80  | 78  | 76  |    |    |   |
| 6   | 92  | 84  | 79  | 75  | 91  | 84  | 79  | 75  | 82  | 78  | 75  | 81  | 77  | 74  | 80  | 76  | 74  | 72  |    |    |   |
| 7   | 88  | 80  | 75  | 71  | 87  | 80  | 75  | 71  | 78  | 74  | 71  | 77  | 73  | 70  | 76  | 73  | 70  | 69  |    |    |   |
| 8   | 85  | 76  | 71  | 68  | 84  | 76  | 71  | 67  | 75  | 70  | 67  | 74  | 70  | 67  | 73  | 69  | 67  | 65  |    |    |   |
| 9   | 81  | 73  | 68  | 64  | 80  | 72  | 68  | 64  | 72  | 67  | 64  | 71  | 67  | 64  | 70  | 66  | 64  | 62  |    |    |   |
| 10  | 78  | 70  | 65  | 61  | 77  | 69  | 64  | 61  | 69  | 64  | 61  | 68  | 64  | 61  | 67  | 63  | 61  | 59  |    |    |   |

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 1399766 |
| 5°  | 1371238 |
| 10° | 1275176 |
| 15° | 1113367 |
| 20° | 921786  |
| 25° | 705006  |
| 30° | 385791  |
| 35° | 142801  |
| 40° | 49462   |
| 45° | 22257   |
| 50° | 10515   |
| 55° | 5247    |
| 60° | 1480    |
| 65° | 934     |
| 70° | 1154    |
| 75° | 0       |
| 80° | 0       |
| 85° | 0       |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 257.3  | 15.7      |
| 10°-20°   | 602.5  | 36.8      |
| 20°-30°   | 569.4  | 34.7      |
| 30°-40°   | 175.3  | 10.7      |
| 40°-50°   | 27.7   | 1.7       |
| 50°-60°   | 5.9    | 0.4       |
| 60°-70°   | 0.9    | 0.1       |
| 70°-80°   | 0.1    | 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°    | 1429.2 | 87.2      |
| 0°-40°    | 1604.5 | 97.9      |
| 0°-60°    | 1638.0 | 99.9      |
| 0°-90°    | 1639.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1639.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2837 |      |
| 5°  | 2769 | 257  |
| 15° | 2180 | 602  |
| 25° | 1295 | 569  |
| 35° | 237  | 175  |
| 45° | 32   | 28   |
| 55° | 6    | 6    |
| 65° | 1    | 1    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2837.2 |
| 1°    | 2826.6 |
| 2°    | 2813.6 |
| 3°    | 2803.0 |
| 4°    | 2789.3 |
| 5°    | 2768.8 |
| 6°    | 2742.2 |
| 7°    | 2706.5 |
| 8°    | 2658.6 |
| 9°    | 2603.1 |
| 10°   | 2545.4 |
| 11°   | 2481.5 |
| 12°   | 2413.9 |
| 13°   | 2340.1 |
| 14°   | 2263.4 |
| 15°   | 2179.8 |
| 17.5° | 1958.6 |
| 20°   | 1755.7 |
| 22.5° | 1549.7 |
| 25°   | 1295.1 |
| 27.5° | 988.0  |
| 30°   | 677.2  |
| 32.5° | 415.7  |
| 35°   | 237.1  |
| 37.5° | 132.2  |
| 40°   | 76.8   |
| 42.5° | 47.9   |
| 45°   | 31.9   |
| 47.5° | 21.3   |
| 50°   | 13.7   |
| 52.5° | 9.1    |
| 55°   | 6.1    |
| 57.5° | 3.8    |
| 60°   | 1.5    |
| 62.5° | 0.8    |
| 65°   | 0.8    |
| 67.5° | 0.8    |
| 70°   | 0.8    |
| 72.5° | 0.0    |
| 75°   | 0.0    |
| 77.5° | 0.0    |
| 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)