

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: P263959

Luminaire Tested: **LD2B20D010 EU2B2010SP158027 2LBDC\*MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P263959  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1805-787-1)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD2B20D010 EU2B2010SP158027 2LBDC\*MW  
Description: 2000 Lumen, 2inch Portfolio LED Downlight  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1717.1 lumens  
Efficiency: N/A  
Efficacy: 82.2 lumens/watt  
Spacing Criteria (0/90/45): 0.28 / 0.28 / 0.28  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

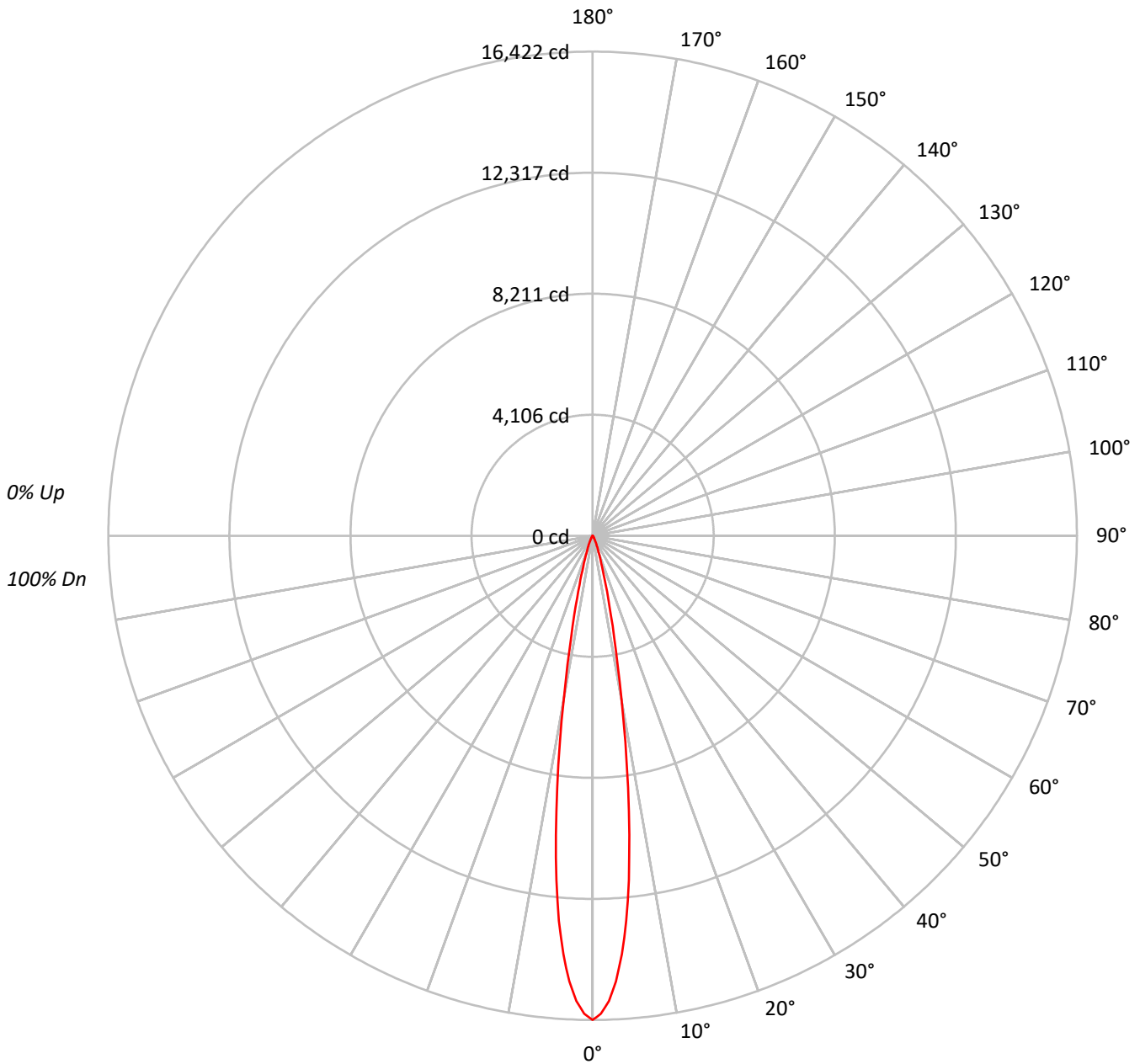
Input Watts (W): 20.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |    |    | 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 |
| 1   | 116 | 114 | 112 | 111 | 113 | 112 | 110 | 109 | 108 | 107 | 106 | 104 | 103 | 102 | 101 | 100 | 100 | 98  |    |    |    | 98  |
| 2   | 113 | 109 | 107 | 105 | 111 | 108 | 106 | 104 | 105 | 103 | 101 | 102 | 101 | 99  | 99  | 98  | 97  | 96  |    |    |    | 96  |
| 3   | 110 | 106 | 103 | 100 | 108 | 105 | 102 | 100 | 102 | 100 | 98  | 100 | 98  | 97  | 98  | 96  | 95  | 94  |    |    |    | 94  |
| 4   | 107 | 103 | 99  | 97  | 106 | 102 | 99  | 96  | 100 | 97  | 95  | 98  | 96  | 94  | 96  | 95  | 93  | 92  |    |    |    | 92  |
| 5   | 105 | 100 | 97  | 94  | 104 | 99  | 96  | 94  | 98  | 95  | 93  | 96  | 94  | 92  | 95  | 93  | 91  | 90  |    |    |    | 90  |
| 6   | 103 | 98  | 94  | 92  | 102 | 97  | 94  | 91  | 96  | 93  | 91  | 95  | 92  | 90  | 93  | 91  | 90  | 89  |    |    |    | 89  |
| 7   | 101 | 95  | 92  | 90  | 100 | 95  | 92  | 89  | 94  | 91  | 89  | 93  | 90  | 89  | 92  | 90  | 88  | 87  |    |    |    | 87  |
| 8   | 99  | 93  | 90  | 88  | 98  | 93  | 90  | 88  | 92  | 89  | 87  | 91  | 89  | 87  | 91  | 88  | 87  | 86  |    |    |    | 86  |
| 9   | 97  | 92  | 88  | 86  | 96  | 91  | 88  | 86  | 91  | 88  | 86  | 90  | 87  | 86  | 89  | 87  | 85  | 85  |    |    |    | 85  |
| 10  | 95  | 90  | 87  | 85  | 95  | 90  | 87  | 85  | 89  | 86  | 85  | 89  | 86  | 84  | 88  | 86  | 84  | 83  |    |    |    | 83  |

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 8101839 |
| 5°  | 6494017 |
| 10° | 2834353 |
| 15° | 878364  |
| 20° | 306194  |
| 25° | 135220  |
| 30° | 61241   |
| 35° | 31861   |
| 40° | 18162   |
| 45° | 8582    |
| 50° | 5373    |
| 55° | 3011    |
| 60° | 1776    |
| 65° | 2101    |
| 70° | 0       |
| 75° | 0       |
| 80° | 0       |
| 85° | 0       |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 995.8  | 58.0      |
| 10°-20°   | 545.3  | 31.8      |
| 20°-30°   | 124.3  | 7.2       |
| 30°-40°   | 35.7   | 2.1       |
| 40°-50°   | 11.0   | 0.6       |
| 50°-60°   | 3.3    | 0.2       |
| 60°-70°   | 1.6    | 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°    | 1665.4 | 97.0      |
| 0°-40°    | 1701.2 | 99.1      |
| 0°-60°    | 1715.5 | 99.9      |
| 0°-90°    | 1717.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1717.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 16422 |      |
| 5°  | 13113 | 996  |
| 15° | 1720  | 545  |
| 25° | 248   | 124  |
| 35° | 53    | 36   |
| 45° | 12    | 11   |
| 55° | 4     | 3    |
| 65° | 2     | 2    |
| 75° | 0     | 0    |
| 85° | 0     | 0    |
| 90° | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      |
|-------|---------|
| 0°    | 16421.7 |
| 1°    | 16217.3 |
| 2°    | 15792.7 |
| 3°    | 15133.7 |
| 4°    | 14228.1 |
| 5°    | 13112.7 |
| 6°    | 11745.4 |
| 7°    | 10217.8 |
| 8°    | 8623.2  |
| 9°    | 7079.7  |
| 10°   | 5657.7  |
| 11°   | 4454.3  |
| 12°   | 3506.4  |
| 13°   | 2759.3  |
| 14°   | 2179.6  |
| 15°   | 1719.7  |
| 16°   | 1356.7  |
| 17°   | 1080.1  |
| 18°   | 868.7   |
| 19°   | 706.6   |
| 20°   | 583.2   |
| 22.5° | 377.1   |
| 25°   | 248.4   |
| 26°   | 209.7   |
| 27°   | 178.0   |
| 28°   | 149.8   |
| 29°   | 125.1   |
| 30°   | 107.5   |
| 32.5° | 74.0    |
| 35°   | 52.9    |
| 37.5° | 38.8    |
| 40°   | 28.2    |
| 42.5° | 19.4    |
| 45°   | 12.3    |
| 47.5° | 8.8     |
| 50°   | 7.0     |
| 52.5° | 5.3     |
| 55°   | 3.5     |
| 57.5° | 1.8     |
| 60°   | 1.8     |
| 62.5° | 1.8     |
| 65°   | 1.8     |
| 67.5° | 1.8     |



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**CANDELA DISTRIBUTION (continued):**

|       | 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°







|       |  |     |
|-------|--|-----|
| 70°   |  | 0.0 |
| 72.5° |  | 0.0 |



(END OF REPORT)