

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: P264630

Luminaire Tested: **LD2B20D010 EU2B2010SP158027 2LBDL\*GPH**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P264630  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-432-2)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD2B20D010 EU2B2010SP158027 2LBDL\*GPH  
Description: 2000 Lumen, 2inch Portfolio LED Downlight  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1638.0 lumens  
Efficiency: N/A  
Efficacy: 78.4 lumens/watt  
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.32  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

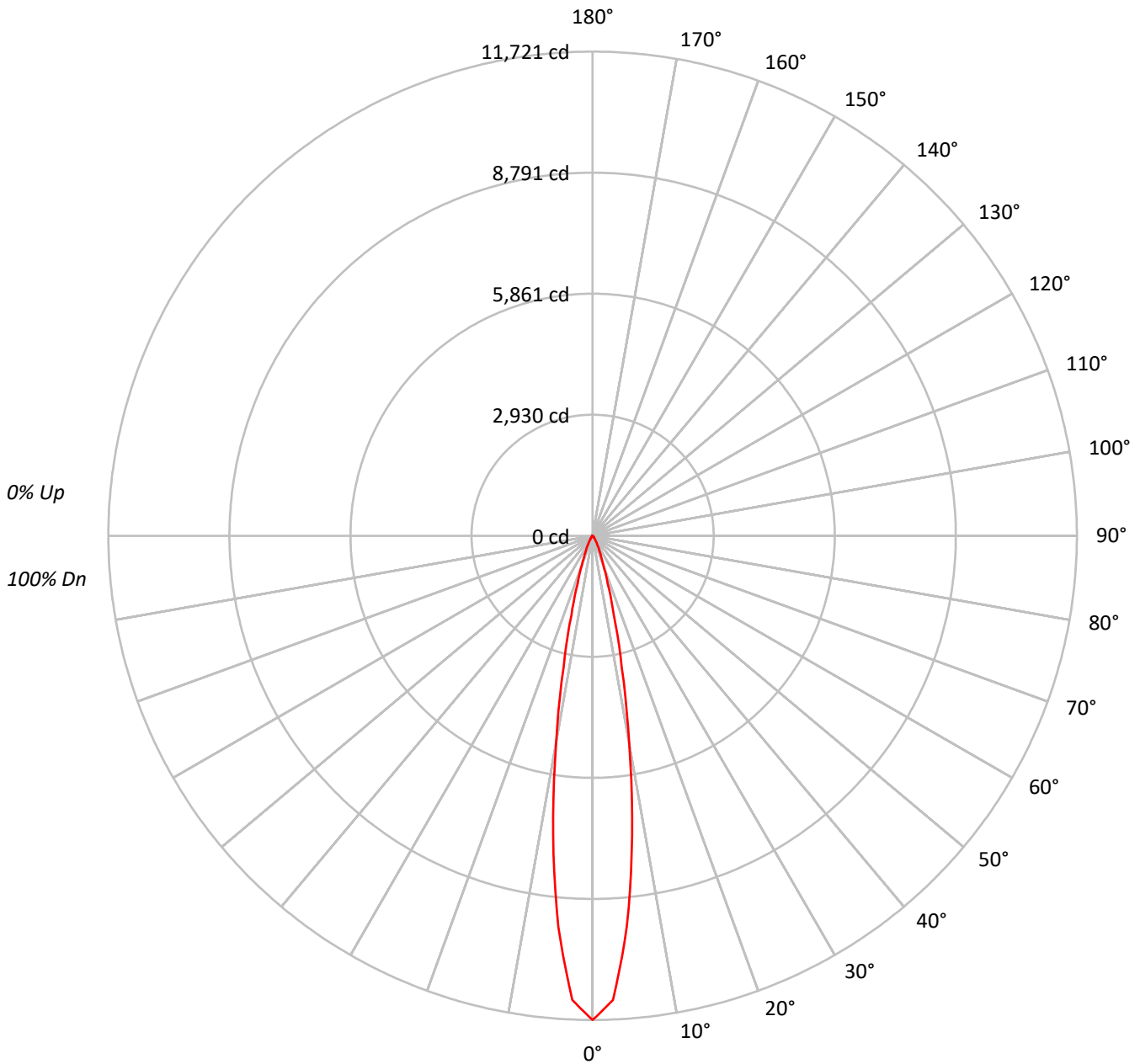
Input Watts (W): 20.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|
| RF  | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |     | 20 |    |    |    |    |    |    |    |    | 20 |    |   |  |  |  |  |  |  | 20 |  |  |  |  |  |  |  |  |
| RC  | 80  |     |     |     |     |     |     |     |     | 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 | 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 | 110 | 108 | 107 | 106 | 105 | 104 | 103 | 102 | 100 | 99  | 99  | 97  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 2   | 112 | 108 | 106 | 103 | 110 | 107 | 104 | 102 | 104 | 102 | 100 | 101 | 99  | 98  | 98  | 97  | 96  | 94  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 3   | 109 | 104 | 101 | 98  | 107 | 103 | 100 | 97  | 100 | 98  | 96  | 98  | 96  | 94  | 96  | 94  | 93  | 92  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 4   | 105 | 100 | 97  | 94  | 104 | 99  | 96  | 93  | 97  | 95  | 92  | 96  | 93  | 91  | 94  | 92  | 90  | 89  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 5   | 103 | 97  | 93  | 91  | 101 | 96  | 93  | 90  | 95  | 92  | 89  | 93  | 91  | 89  | 92  | 90  | 88  | 87  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 6   | 100 | 94  | 90  | 88  | 99  | 94  | 90  | 87  | 92  | 89  | 87  | 91  | 88  | 86  | 90  | 88  | 86  | 85  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 7   | 98  | 92  | 88  | 85  | 97  | 91  | 88  | 85  | 90  | 87  | 85  | 89  | 86  | 84  | 88  | 86  | 84  | 83  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 8   | 95  | 89  | 86  | 83  | 94  | 89  | 85  | 83  | 88  | 85  | 82  | 87  | 84  | 82  | 86  | 84  | 82  | 81  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 9   | 93  | 87  | 83  | 81  | 92  | 87  | 83  | 81  | 86  | 83  | 81  | 85  | 82  | 80  | 85  | 82  | 80  | 79  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |
| 10  | 91  | 85  | 82  | 79  | 91  | 85  | 81  | 79  | 84  | 81  | 79  | 84  | 81  | 79  | 83  | 80  | 78  | 78  |    |    |    |    |    |    |    |    |    |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 5782496 |
| 5°  | 4706376 |
| 10° | 2542236 |
| 15° | 1013666 |
| 20° | 406474  |
| 25° | 194665  |
| 30° | 100891  |
| 35° | 53362   |
| 40° | 29561   |
| 45° | 18280   |
| 50° | 12588   |
| 55° | 8429    |
| 60° | 6512    |
| 65° | 0       |
| 70° | 0       |
| 75° | 0       |
| 80° | 0       |
| 85° | 0       |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 764.2  | 46.7      |
| 10°-20°   | 603.0  | 36.8      |
| 20°-30°   | 177.9  | 10.9      |
| 30°-40°   | 59.2   | 3.6       |
| 40°-50°   | 22.2   | 1.4       |
| 50°-60°   | 9.8    | 0.6       |
| 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°    | 1545.1 | 94.3      |
| 0°-40°    | 1604.3 | 97.9      |
| 0°-60°    | 1636.4 | 99.9      |
| 0°-90°    | 1638.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1638.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 11721 |      |
| 5°  | 9503  | 764  |
| 15° | 1985  | 603  |
| 25° | 358   | 178  |
| 35° | 89    | 59   |
| 45° | 26    | 22   |
| 55° | 10    | 10   |
| 65° | 0     | 2    |
| 75° | 0     | 0    |
| 85° | 0     | 0    |
| 90° | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      |
|-------|---------|
| 0°    | 11720.6 |
| 2.5°  | 11248.2 |
| 5°    | 9503.1  |
| 7.5°  | 7321.7  |
| 10°   | 5074.6  |
| 12.5° | 3247.5  |
| 15°   | 1984.6  |
| 17.5° | 1210.4  |
| 20°   | 774.2   |
| 22.5° | 518.3   |
| 25°   | 357.6   |
| 27.5° | 252.6   |
| 30°   | 177.1   |
| 32.5° | 124.7   |
| 35°   | 88.6    |
| 37.5° | 62.3    |
| 40°   | 45.9    |
| 42.5° | 36.1    |
| 45°   | 26.2    |
| 47.5° | 23.0    |
| 50°   | 16.4    |
| 52.5° | 13.1    |
| 55°   | 9.8     |
| 57.5° | 9.8     |
| 60°   | 6.6     |
| 62.5° | 3.3     |
| 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°







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