

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: P224333

Luminaire Tested: **LD2B05D010 EU2B05FL409027 2LBDSQC\*MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P224333  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14831)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD2B05D010 EU2B05FL409027 2LBDSQC\*MMS  
Description: 500 Lumen, 2inch Portfolio LED Downlight  
FLOOD OPTIC  
SQUARE CAST TRIM WITH MATTE METALLIC SILVER  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 565.2 lumens  
Efficiency: N/A  
Efficacy: 77.4 lumens/watt  
Spacing Criteria (0/90/45): 0.61 / 0.61 / 0.59  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

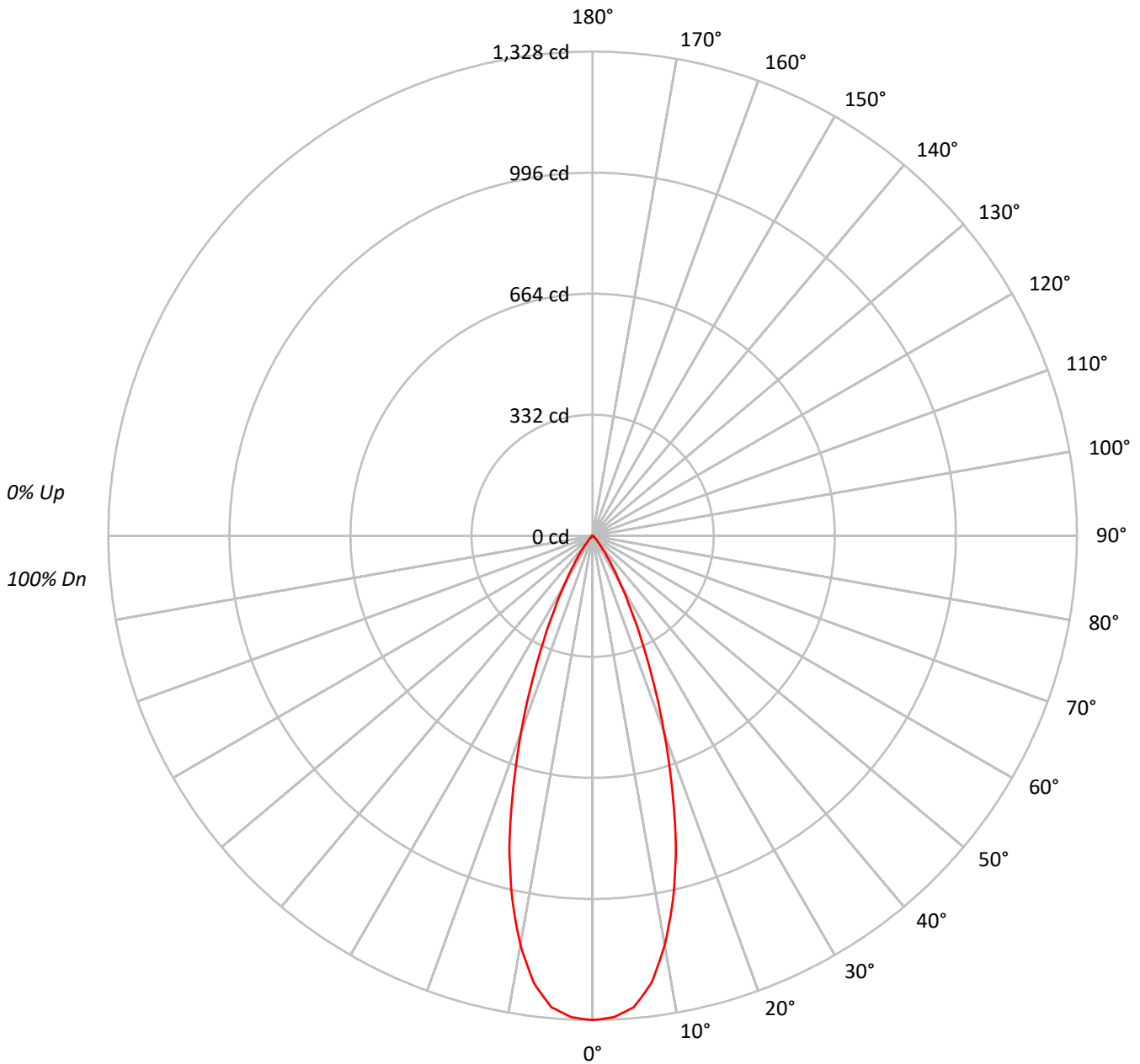
Input Watts (W): 7.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

|     |    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |    |  |  |  |  |  |  |  |  |   |
|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF  | 20 |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |     |     |     | 20  |     |     |     |     |     |  |  |  | 20 |  |  |  |  |  |  |  |  |   |
| 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  | 0   |  |  |  |    |  |  |  |  |  |  |  |  |   |
| RCR | 0  | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 | 100 | 100 | 100 |  |  |  |    |  |  |  |  |  |  |  |  |   |
|     | 1  | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 95  | 95  | 94  | 92  | 91  | 91  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|     | 2  | 110 | 106 | 102 | 100 | 108 | 104 | 101 | 99  | 101 | 99  | 96  | 98  | 96  | 94  | 95  | 94  | 92  | 91  | 91  | 90  | 88  | 87  | 87  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|     | 3  | 106 | 100 | 96  | 93  | 104 | 99  | 95  | 92  | 97  | 93  | 91  | 94  | 92  | 89  | 92  | 90  | 88  | 87  | 87  | 86  | 84  | 83  | 83  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|     | 4  | 102 | 95  | 91  | 87  | 100 | 94  | 90  | 87  | 92  | 89  | 86  | 90  | 87  | 85  | 89  | 86  | 84  | 83  | 83  | 82  | 80  | 79  | 79  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|     | 5  | 98  | 91  | 86  | 83  | 96  | 90  | 86  | 82  | 88  | 85  | 82  | 87  | 83  | 81  | 85  | 82  | 80  | 79  | 79  | 77  | 75  | 75  | 75  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|     | 6  | 94  | 87  | 82  | 78  | 93  | 86  | 82  | 78  | 85  | 81  | 78  | 83  | 80  | 77  | 82  | 79  | 77  | 75  | 75  | 74  | 72  | 72  | 72  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|     | 7  | 91  | 83  | 78  | 75  | 89  | 82  | 78  | 75  | 81  | 77  | 74  | 80  | 77  | 74  | 79  | 76  | 73  | 72  | 72  | 71  | 70  | 69  | 69  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|     | 8  | 87  | 80  | 75  | 71  | 86  | 79  | 75  | 71  | 78  | 74  | 71  | 77  | 73  | 71  | 76  | 73  | 70  | 69  | 69  | 68  | 67  | 67  | 67  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|     | 9  | 84  | 76  | 72  | 68  | 83  | 76  | 71  | 68  | 75  | 71  | 68  | 74  | 71  | 68  | 74  | 70  | 68  | 67  | 67  | 66  | 65  | 64  | 64  |  |  |  |    |  |  |  |  |  |  |  |  |   |
|     | 10 | 81  | 74  | 69  | 66  | 81  | 73  | 69  | 66  | 72  | 68  | 65  | 72  | 68  | 65  | 71  | 68  | 65  | 64  | 64  | 63  | 62  | 61  | 61  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 514473 |
| 5°  | 504618 |
| 10° | 448229 |
| 15° | 353731 |
| 20° | 235946 |
| 25° | 135781 |
| 30° | 68790  |
| 35° | 32249  |
| 40° | 13197  |
| 45° | 5971   |
| 50° | 3073   |
| 55° | 1958   |
| 60° | 1162   |
| 65° | 0      |
| 70° | 0      |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 118.8  | 21.0      |
| 10°-20°   | 238.4  | 42.2      |
| 20°-30°   | 149.3  | 26.4      |
| 30°-40°   | 46.2   | 8.2       |
| 40°-50°   | 9.6    | 1.7       |
| 50°-60°   | 2.7    | 0.5       |
| 60°-70°   | 0.4    | 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°    | 506.4  | 89.6      |
| 0°-40°    | 552.6  | 97.8      |
| 0°-60°    | 564.9  | 99.9      |
| 0°-90°    | 565.2  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 565.2  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1328 |      |
| 5°  | 1298 | 119  |
| 15° | 882  | 238  |
| 25° | 318  | 149  |
| 35° | 68   | 46   |
| 45° | 11   | 10   |
| 55° | 3    | 3    |
| 65° | 0    | 0    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 1328.2 |
| 2.5°  | 1321.7 |
| 5°    | 1297.8 |
| 7.5°  | 1236.8 |
| 10°   | 1139.6 |
| 12.5° | 1019.9 |
| 15°   | 882.1  |
| 17.5° | 723.2  |
| 20°   | 572.4  |
| 22.5° | 435.3  |
| 25°   | 317.7  |
| 27.5° | 223.4  |
| 30°   | 153.8  |
| 32.5° | 103.0  |
| 35°   | 68.2   |
| 37.5° | 42.8   |
| 40°   | 26.1   |
| 42.5° | 16.7   |
| 45°   | 10.9   |
| 47.5° | 7.3    |
| 50°   | 5.1    |
| 52.5° | 3.6    |
| 55°   | 2.9    |
| 57.5° | 2.2    |
| 60°   | 1.5    |
| 62.5° | 0.7    |
| 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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Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report







— 0°-180°







(END OF REPORT)