

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: P224780

Luminaire Tested: **LSR2B15FL409727D010 2LBDL\*MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P224780  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14835)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LSR2B15FL409727D010 2LBDL\*MW  
Description: 1500 Lumen, 2inch Portfolio LED Cylinder  
FLOOD OPTIC  
LENSED SPUN ROUND TRIM WITH MATTE WHITE FINISH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 897.9 lumens  
Efficiency: N/A  
Efficacy: 62.8 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

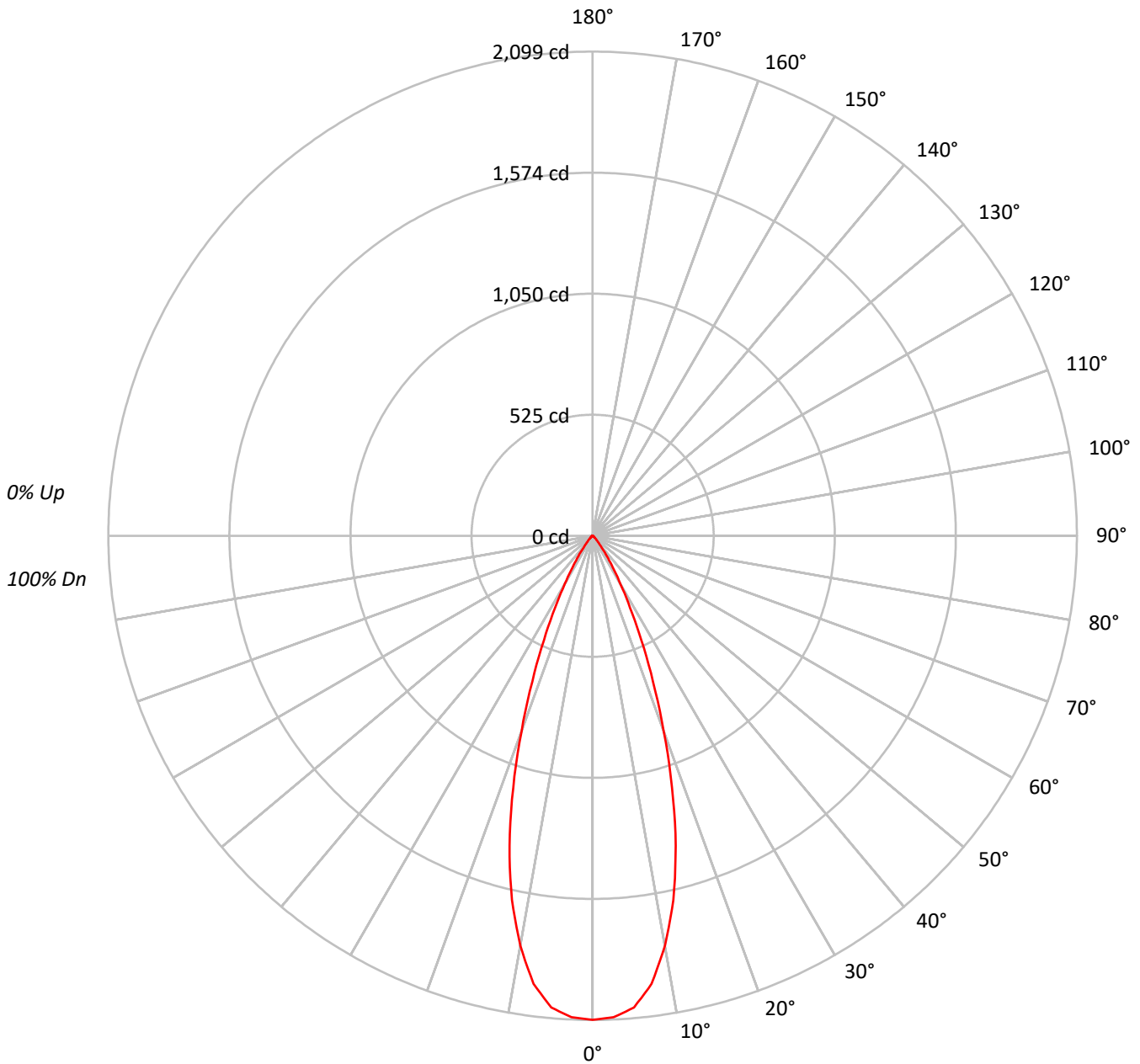
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 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 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 95  |    |    |   |
| 2   | 110 | 106 | 102 | 99  | 108 | 104 | 101 | 98  | 101 | 98  | 96  | 98  | 96  | 94  | 95  | 94  | 92  | 91  |    |    |   |
| 3   | 105 | 100 | 96  | 93  | 104 | 99  | 95  | 92  | 96  | 93  | 90  | 94  | 91  | 89  | 92  | 90  | 88  | 86  |    |    |   |
| 4   | 101 | 95  | 90  | 87  | 100 | 94  | 90  | 86  | 92  | 88  | 85  | 90  | 87  | 85  | 88  | 86  | 84  | 82  |    |    |   |
| 5   | 98  | 91  | 86  | 82  | 96  | 90  | 85  | 82  | 88  | 84  | 81  | 86  | 83  | 80  | 85  | 82  | 80  | 79  |    |    |   |
| 6   | 94  | 86  | 82  | 78  | 93  | 86  | 81  | 78  | 84  | 80  | 77  | 83  | 79  | 77  | 82  | 79  | 76  | 75  |    |    |   |
| 7   | 90  | 83  | 78  | 74  | 89  | 82  | 77  | 74  | 81  | 77  | 74  | 80  | 76  | 73  | 79  | 76  | 73  | 72  |    |    |   |
| 8   | 87  | 79  | 74  | 71  | 86  | 79  | 74  | 71  | 78  | 74  | 71  | 77  | 73  | 70  | 76  | 73  | 70  | 69  |    |    |   |
| 9   | 84  | 76  | 71  | 68  | 83  | 76  | 71  | 68  | 75  | 71  | 68  | 74  | 70  | 67  | 73  | 70  | 67  | 66  |    |    |   |
| 10  | 81  | 73  | 68  | 65  | 80  | 73  | 68  | 65  | 72  | 68  | 65  | 71  | 68  | 65  | 71  | 67  | 65  | 64  |    |    |   |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 812884 |
| 5°  | 798065 |
| 10° | 709434 |
| 15° | 557965 |
| 20° | 371273 |
| 25° | 213139 |
| 30° | 107658 |
| 35° | 50644  |
| 40° | 20377  |
| 45° | 10079  |
| 50° | 5544   |
| 55° | 3917   |
| 60° | 3564   |
| 65° | 2108   |
| 70° | 2605   |
| 75° | 1796   |
| 80° | 2677   |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 188.0  | 20.9      |
| 10°-20°   | 376.9  | 42.0      |
| 20°-30°   | 234.5  | 26.1      |
| 30°-40°   | 72.1   | 8.0       |
| 40°-50°   | 15.8   | 1.8       |
| 50°-60°   | 5.6    | 0.6       |
| 60°-70°   | 2.9    | 0.3       |
| 70°-80°   | 1.7    | 0.2       |
| 80°-90°   | 0.5    | 0.1       |
| 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°    | 799.3  | 89.0      |
| 0°-40°    | 871.4  | 97.0      |
| 0°-60°    | 892.9  | 99.4      |
| 0°-90°    | 897.9  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 897.9  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2099 |      |
| 5°  | 2052 | 188  |
| 15° | 1391 | 377  |
| 25° | 499  | 234  |
| 35° | 107  | 72   |
| 45° | 18   | 16   |
| 55° | 6    | 6    |
| 65° | 2    | 3    |
| 75° | 1    | 2    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 2098.6 |
| 2.5°  | 2089.4 |
| 5°    | 2052.5 |
| 7.5°  | 1959.2 |
| 10°   | 1803.7 |
| 12.5° | 1617.1 |
| 15°   | 1391.4 |
| 17.5° | 1144.9 |
| 20°   | 900.7  |
| 22.5° | 683.0  |
| 25°   | 498.7  |
| 27.5° | 351.3  |
| 30°   | 240.7  |
| 32.5° | 162.4  |
| 35°   | 107.1  |
| 37.5° | 64.5   |
| 40°   | 40.3   |
| 42.5° | 27.6   |
| 45°   | 18.4   |
| 47.5° | 12.7   |
| 50°   | 9.2    |
| 52.5° | 8.1    |
| 55°   | 5.8    |
| 57.5° | 4.6    |
| 60°   | 4.6    |
| 62.5° | 3.5    |
| 65°   | 2.3    |
| 67.5° | 2.3    |
| 70°   | 2.3    |
| 72.5° | 2.3    |
| 75°   | 1.2    |
| 77.5° | 1.2    |
| 80°   | 1.2    |
| 82.5° | 1.2    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 90°   | 0.0    |



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— 0°-180°







(END OF REPORT)