

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: P224671

Luminaire Tested: **LSSQ2B15FL409030D010 2LBDLC\**MW***

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P224671  
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: LSSQ2B15FL409030D010 2LBDLC\*MW  
Description: 1500 Lumen, 2inch Portfolio LED Cylinder  
FLOOD OPTIC  
LENSED CAST ROUND TRIM WITH MATTE WHITE FINISH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1030.7 lumens  
Efficiency: N/A  
Efficacy: 72.1 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

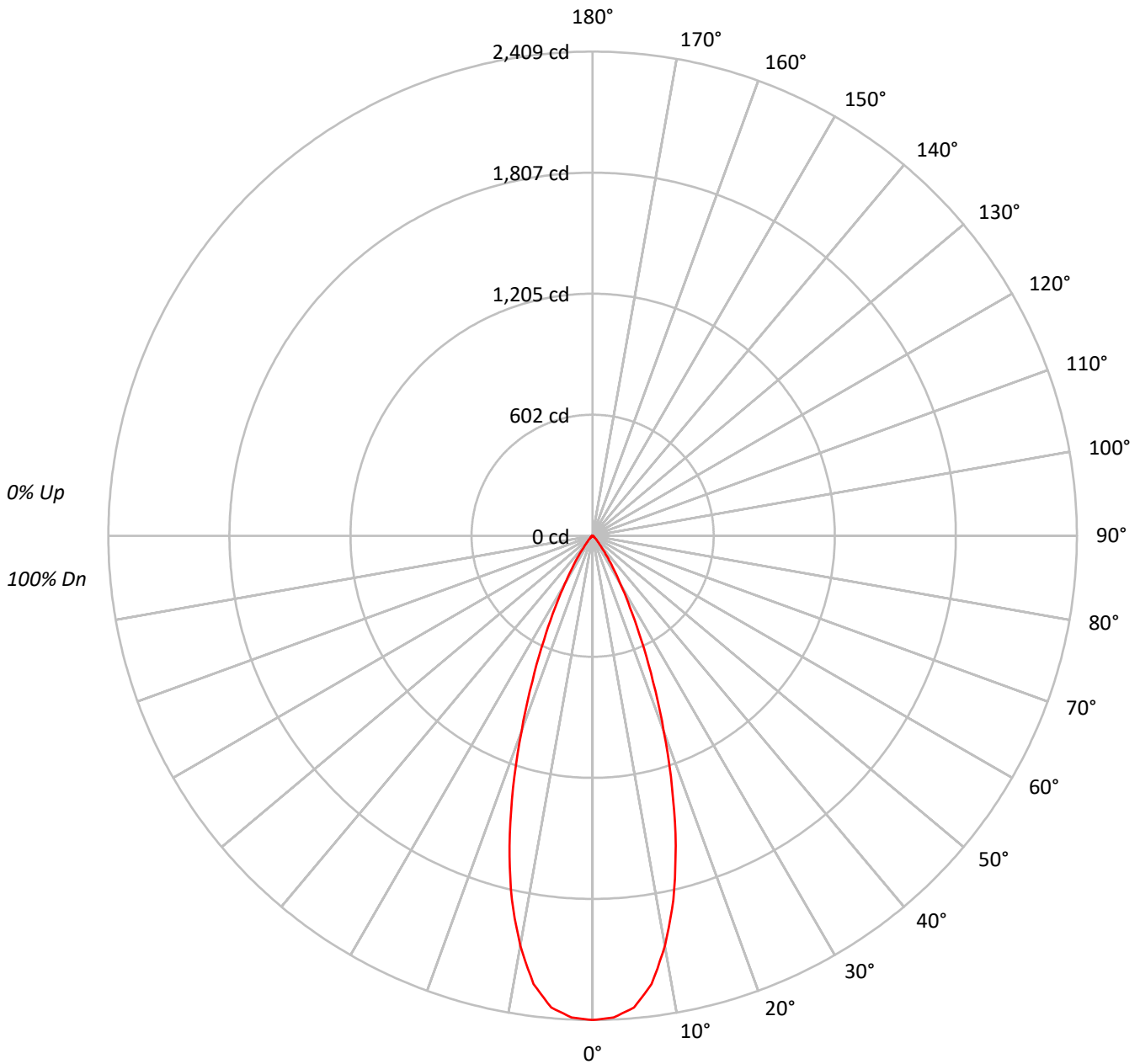
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 |    |    | 100 |
| 1   | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 95  |    |    | 95  |
| 2   | 110 | 106 | 102 | 99  | 108 | 104 | 101 | 98  | 101 | 98  | 96  | 98  | 96  | 94  | 95  | 94  | 92  | 91  |    |    | 91  |
| 3   | 105 | 100 | 96  | 93  | 104 | 99  | 95  | 92  | 96  | 93  | 90  | 94  | 91  | 89  | 92  | 90  | 88  | 86  |    |    | 86  |
| 4   | 101 | 95  | 90  | 87  | 100 | 94  | 90  | 86  | 92  | 88  | 85  | 90  | 87  | 85  | 88  | 86  | 84  | 82  |    |    | 82  |
| 5   | 98  | 91  | 86  | 82  | 96  | 90  | 85  | 82  | 88  | 84  | 81  | 86  | 83  | 80  | 85  | 82  | 80  | 79  |    |    | 79  |
| 6   | 94  | 87  | 82  | 78  | 93  | 86  | 81  | 78  | 84  | 80  | 77  | 83  | 80  | 77  | 82  | 79  | 76  | 75  |    |    | 75  |
| 7   | 90  | 83  | 78  | 74  | 89  | 82  | 77  | 74  | 81  | 77  | 74  | 80  | 76  | 73  | 79  | 76  | 73  | 72  |    |    | 72  |
| 8   | 87  | 79  | 74  | 71  | 86  | 79  | 74  | 71  | 78  | 74  | 71  | 77  | 73  | 70  | 76  | 73  | 70  | 69  |    |    | 69  |
| 9   | 84  | 76  | 71  | 68  | 83  | 76  | 71  | 68  | 75  | 71  | 68  | 74  | 70  | 67  | 73  | 70  | 67  | 66  |    |    | 66  |
| 10  | 81  | 73  | 68  | 65  | 80  | 73  | 68  | 65  | 72  | 68  | 65  | 71  | 68  | 65  | 71  | 67  | 65  | 64  |    |    | 64  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 933194 |
| 5°  | 916190 |
| 10° | 814451 |
| 15° | 640533 |
| 20° | 426220 |
| 25° | 244680 |
| 30° | 123625 |
| 35° | 58162  |
| 40° | 23411  |
| 45° | 11613  |
| 50° | 6388   |
| 55° | 4457   |
| 60° | 4106   |
| 65° | 2383   |
| 70° | 2945   |
| 75° | 1946   |
| 80° | 2900   |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone            | Lumens        | % Fixture    |
|-----------------|---------------|--------------|
| 0°-10°          | 215.8         | 20.9         |
| 10°-20°         | 432.7         | 42.0         |
| 20°-30°         | 269.2         | 26.1         |
| 30°-40°         | 82.8          | 8.0          |
| 40°-50°         | 18.2          | 1.8          |
| 50°-60°         | 6.5           | 0.6          |
| 60°-70°         | 3.2           | 0.3          |
| 70°-80°         | 1.9           | 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°          | 917.7         | 89.0         |
| 0°-40°          | 1000.4        | 97.1         |
| 0°-60°          | 1025.1        | 99.5         |
| <b>0°-90°</b>   | <b>1030.7</b> | <b>100.0</b> |
| 90°-120°        | 0.0           | 0.0          |
| 90°-150°        | 0.0           | 0.0          |
| <b>90°-180°</b> | <b>0.0</b>    | <b>0.0</b>   |
| 0°-180°         | 1030.7        | 100.0        |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2409 |      |
| 5°  | 2356 | 216  |
| 15° | 1597 | 433  |
| 25° | 572  | 269  |
| 35° | 123  | 83   |
| 45° | 21   | 18   |
| 55° | 7    | 6    |
| 65° | 3    | 3    |
| 75° | 1    | 2    |
| 85° | 0    | 1    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 2409.2 |
| 2.5°  | 2398.6 |
| 5°    | 2356.3 |
| 7.5°  | 2249.2 |
| 10°   | 2070.7 |
| 12.5° | 1856.5 |
| 15°   | 1597.3 |
| 17.5° | 1314.4 |
| 20°   | 1034.0 |
| 22.5° | 784.1  |
| 25°   | 572.5  |
| 27.5° | 403.3  |
| 30°   | 276.4  |
| 32.5° | 186.4  |
| 35°   | 123.0  |
| 37.5° | 74.0   |
| 40°   | 46.3   |
| 42.5° | 31.7   |
| 45°   | 21.2   |
| 47.5° | 14.5   |
| 50°   | 10.6   |
| 52.5° | 9.3    |
| 55°   | 6.6    |
| 57.5° | 5.3    |
| 60°   | 5.3    |
| 62.5° | 4.0    |
| 65°   | 2.6    |
| 67.5° | 2.6    |
| 70°   | 2.6    |
| 72.5° | 2.6    |
| 75°   | 1.3    |
| 77.5° | 1.3    |
| 80°   | 1.3    |
| 82.5° | 1.3    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 90°   | 0.0    |



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— 0°-180°







(END OF REPORT)