

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: P#

Luminaire Tested: **LSSQWM2B20WFL559030D010 2LBDL\*B**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14809)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LSSQWM2B20WFL559030D010 2LBDL\*B  
Description: 2000 Lumen, 2inch Portfolio LED Cylinder  
WIDE FLOOD OPTIC  
LENSED SPUN ROUND TRIM WITH BLACK FINISH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1305.8 lumens  
Efficiency: N/A  
Efficacy: 62.5 lumens/watt  
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.84  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

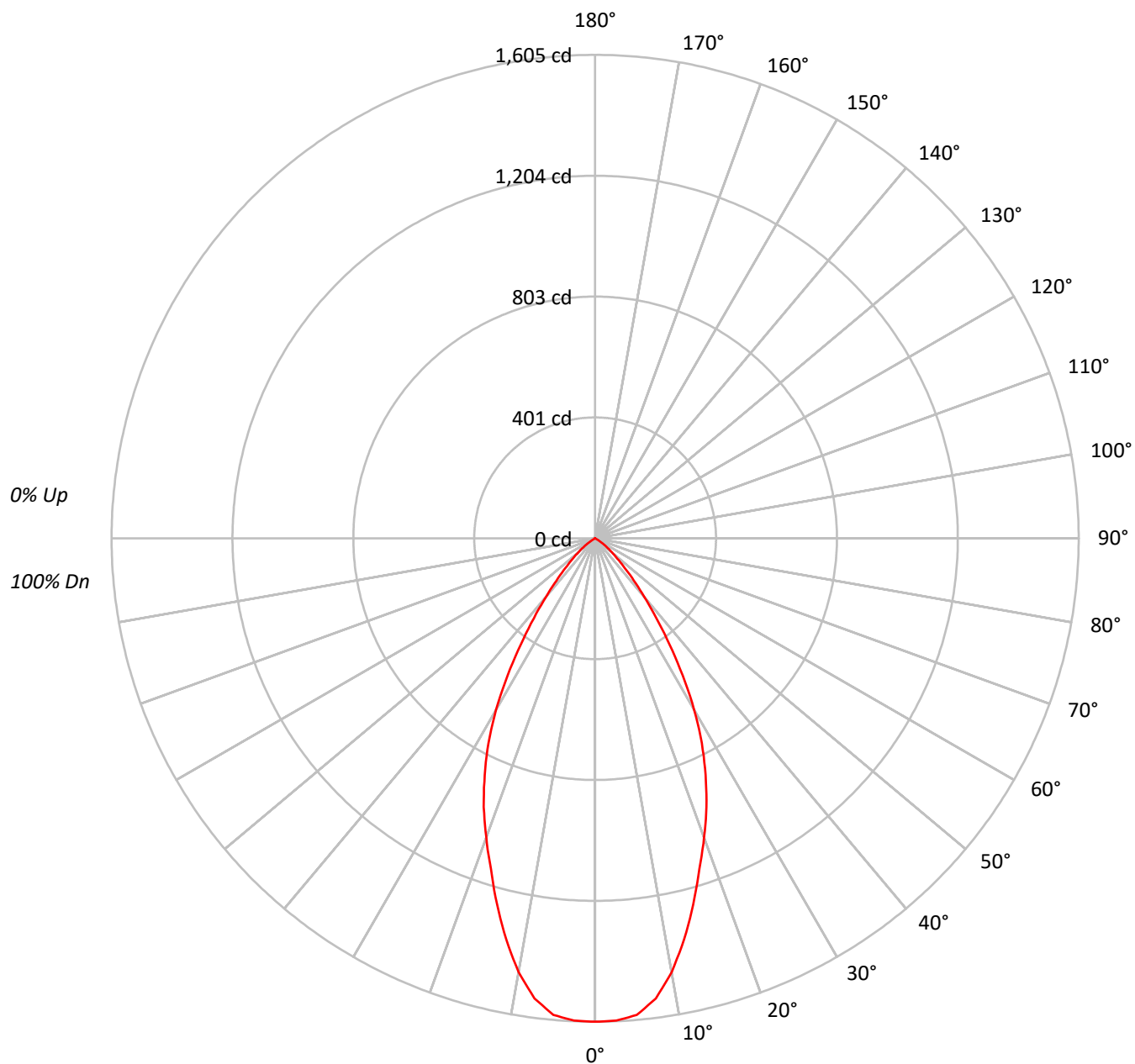
Input Watts (W): 20.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |     |     |     |  | 70  |     |     |     |  | 50  |     |     |  |     | 30  |     |  |     |     | 10  |
| RW  | 70  | 50  | 30  | 10  |  | 70  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  | 30  | 10  |
| RCR |     |     |     |     |  |     |     |     |     |  |     |     |     |  |     |     |     |  |     |     |     |
| 0   | 119 | 119 | 119 | 119 |  | 116 | 116 | 116 | 116 |  | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 |
| 1   | 113 | 111 | 108 | 106 |  | 111 | 109 | 106 | 104 |  | 104 | 103 | 101 |  | 101 | 99  | 98  |  | 97  | 96  | 95  |
| 2   | 108 | 103 | 99  | 95  |  | 106 | 101 | 97  | 94  |  | 98  | 95  | 92  |  | 95  | 92  | 90  |  | 92  | 90  | 88  |
| 3   | 102 | 96  | 91  | 87  |  | 100 | 94  | 90  | 86  |  | 92  | 88  | 85  |  | 89  | 86  | 83  |  | 87  | 84  | 82  |
| 4   | 97  | 89  | 84  | 79  |  | 95  | 88  | 83  | 79  |  | 86  | 82  | 78  |  | 84  | 80  | 77  |  | 82  | 79  | 76  |
| 5   | 92  | 83  | 78  | 73  |  | 90  | 83  | 77  | 73  |  | 81  | 76  | 72  |  | 79  | 75  | 72  |  | 77  | 74  | 71  |
| 6   | 87  | 78  | 72  | 68  |  | 86  | 77  | 72  | 68  |  | 76  | 71  | 67  |  | 74  | 70  | 67  |  | 73  | 69  | 66  |
| 7   | 83  | 73  | 67  | 63  |  | 81  | 73  | 67  | 63  |  | 71  | 66  | 63  |  | 70  | 66  | 62  |  | 69  | 65  | 62  |
| 8   | 79  | 69  | 63  | 59  |  | 78  | 69  | 63  | 59  |  | 67  | 62  | 59  |  | 66  | 62  | 58  |  | 65  | 61  | 58  |
| 9   | 75  | 65  | 59  | 55  |  | 74  | 65  | 59  | 55  |  | 64  | 59  | 55  |  | 63  | 58  | 55  |  | 62  | 58  | 55  |
| 10  | 71  | 62  | 56  | 52  |  | 70  | 61  | 56  | 52  |  | 60  | 55  | 52  |  | 60  | 55  | 52  |  | 59  | 55  | 51  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 621652 |
| 5°  | 617611 |
| 10° | 575193 |
| 15° | 504471 |
| 20° | 435742 |
| 25° | 370632 |
| 30° | 293990 |
| 35° | 202905 |
| 40° | 127422 |
| 45° | 76033  |
| 50° | 43990  |
| 55° | 22218  |
| 60° | 1394   |
| 65° | 0      |
| 70° | 0      |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 147.5  | 11.3      |
| 10°-20°   | 350.6  | 26.8      |
| 20°-30°   | 394.6  | 30.2      |
| 30°-40°   | 271.1  | 20.8      |
| 40°-50°   | 112.6  | 8.6       |
| 50°-60°   | 29.1   | 2.2       |
| 60°-70°   | 0.2    | 0.0       |
| 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°    | 892.8  | 68.4      |
| 0°-40°    | 1163.9 | 89.1      |
| 0°-60°    | 1305.6 | 100.0     |
| 0°-90°    | 1305.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1305.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1605 |      |
| 5°  | 1588 | 148  |
| 15° | 1258 | 351  |
| 25° | 867  | 395  |
| 35° | 429  | 271  |
| 45° | 139  | 113  |
| 55° | 33   | 29   |
| 65° | 0    | 0    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1604.9 |
| 2.5°  | 1603.0 |
| 5°    | 1588.4 |
| 7.5°  | 1540.9 |
| 10°   | 1462.4 |
| 12.5° | 1363.8 |
| 15°   | 1258.0 |
| 17.5° | 1150.2 |
| 20°   | 1057.1 |
| 22.5° | 965.8  |
| 25°   | 867.2  |
| 27.5° | 766.8  |
| 30°   | 657.3  |
| 32.5° | 540.4  |
| 35°   | 429.1  |
| 37.5° | 334.1  |
| 40°   | 252.0  |
| 42.5° | 189.9  |
| 45°   | 138.8  |
| 47.5° | 100.4  |
| 50°   | 73.0   |
| 52.5° | 51.1   |
| 55°   | 32.9   |
| 57.5° | 11.0   |
| 60°   | 1.8    |
| 62.5° | 0.0    |
| 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°







(END OF REPORT)