

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: **LSR2WM2B20WFL558035D010 2LBD\*WMH**

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 (P14805)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LSR2WM2B20WFL558035D010 2LBD\*WMH  
Description: 2000 Lumen, 2inch Portfolio LED Cylinder  
WIDE FLOOD OPTIC  
SPUN ROUND TRIM WITH WHEAT METALLIC HAZE FINISH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1763.7 lumens  
Efficiency: N/A  
Efficacy: 84.4 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.78 / 0.83  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

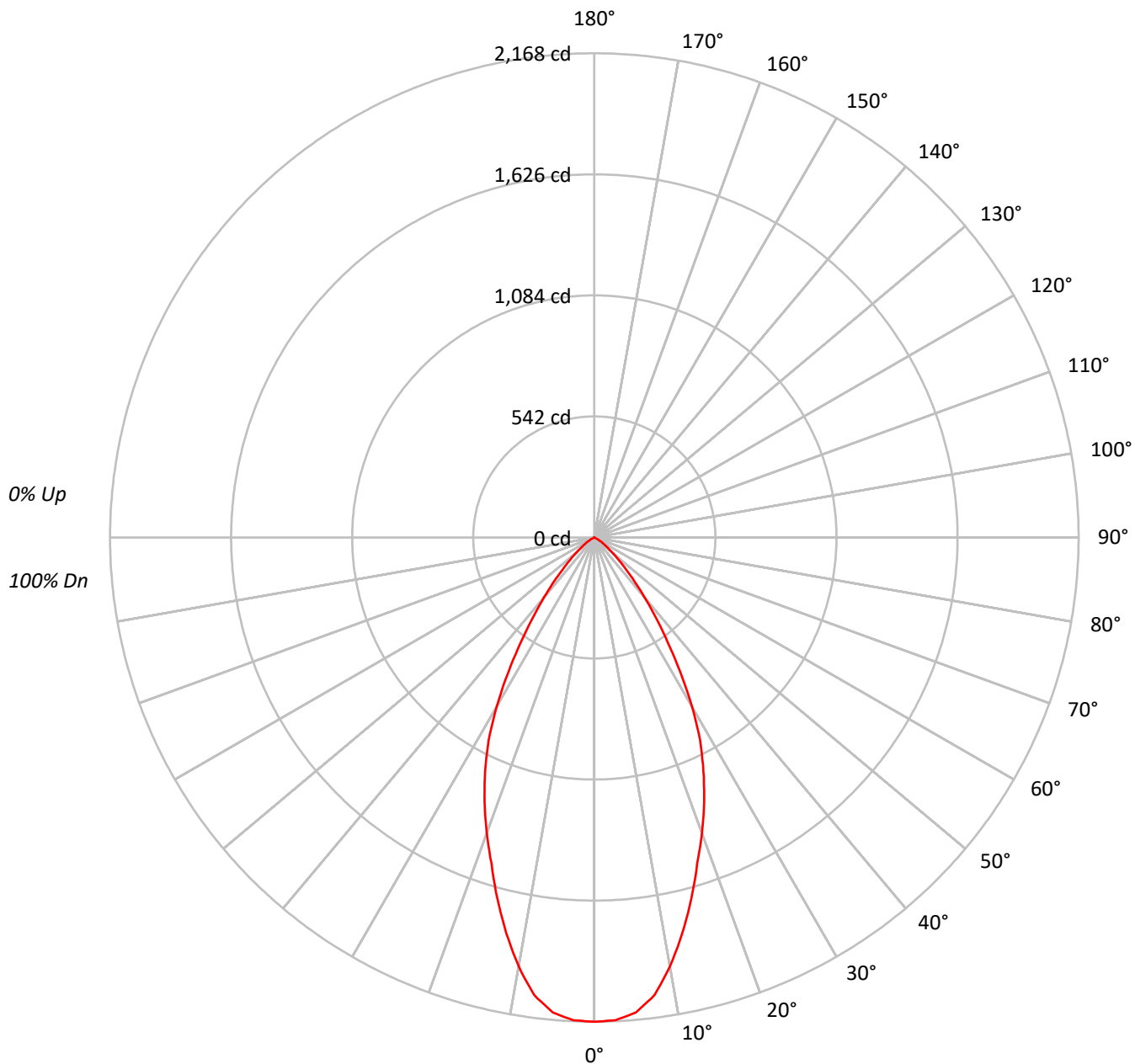
Input Watts (W): 20.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 108 | 106 | 104 |  | 104 | 103 | 101 |  | 101 | 99  | 98  |  | 97  | 96  | 95  |
| 2   | 108 | 103 | 99  | 95  |  | 105 | 101 | 97  | 94  |  | 98  | 95  | 92  |  | 95  | 92  | 90  |  | 92  | 90  | 88  |
| 3   | 102 | 95  | 90  | 86  |  | 100 | 94  | 89  | 86  |  | 91  | 87  | 84  |  | 89  | 86  | 83  |  | 87  | 84  | 82  |
| 4   | 97  | 89  | 83  | 79  |  | 95  | 88  | 83  | 79  |  | 86  | 81  | 78  |  | 84  | 80  | 77  |  | 82  | 78  | 76  |
| 5   | 92  | 83  | 77  | 73  |  | 90  | 82  | 77  | 72  |  | 80  | 75  | 72  |  | 79  | 74  | 71  |  | 77  | 73  | 70  |
| 6   | 87  | 78  | 72  | 67  |  | 85  | 77  | 71  | 67  |  | 75  | 70  | 67  |  | 74  | 70  | 66  |  | 73  | 69  | 66  |
| 7   | 82  | 73  | 67  | 63  |  | 81  | 72  | 67  | 62  |  | 71  | 66  | 62  |  | 70  | 65  | 62  |  | 69  | 65  | 61  |
| 8   | 78  | 69  | 63  | 58  |  | 77  | 68  | 62  | 58  |  | 67  | 62  | 58  |  | 66  | 61  | 58  |  | 65  | 61  | 58  |
| 9   | 75  | 65  | 59  | 55  |  | 73  | 64  | 59  | 55  |  | 63  | 58  | 54  |  | 62  | 58  | 54  |  | 62  | 57  | 54  |
| 10  | 71  | 61  | 55  | 51  |  | 70  | 61  | 55  | 51  |  | 60  | 55  | 51  |  | 59  | 54  | 51  |  | 58  | 54  | 51  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 839960 |
| 5°  | 829948 |
| 10° | 767134 |
| 15° | 672333 |
| 20° | 580261 |
| 25° | 493933 |
| 30° | 391226 |
| 35° | 271517 |
| 40° | 176419 |
| 45° | 106162 |
| 50° | 61345  |
| 55° | 34374  |
| 60° | 15029  |
| 65° | 0      |
| 70° | 0      |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 197.9  | 11.2      |
| 10°-20°   | 467.1  | 26.5      |
| 20°-30°   | 525.8  | 29.8      |
| 30°-40°   | 363.2  | 20.6      |
| 40°-50°   | 157.4  | 8.9       |
| 50°-60°   | 48.8   | 2.8       |
| 60°-70°   | 3.5    | 0.2       |
| 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°    | 1190.9 | 67.5      |
| 0°-40°    | 1554.1 | 88.1      |
| 0°-60°    | 1760.2 | 99.8      |
| 0°-90°    | 1763.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1763.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2168 |      |
| 5°  | 2134 | 198  |
| 15° | 1677 | 467  |
| 25° | 1156 | 526  |
| 35° | 574  | 363  |
| 45° | 194  | 157  |
| 55° | 51   | 49   |
| 65° | 0    | 3    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 2168.5 |
| 2.5°  | 2163.6 |
| 5°    | 2134.5 |
| 7.5°  | 2066.7 |
| 10°   | 1950.4 |
| 12.5° | 1817.1 |
| 15°   | 1676.6 |
| 17.5° | 1531.2 |
| 20°   | 1407.7 |
| 22.5° | 1284.1 |
| 25°   | 1155.7 |
| 27.5° | 1024.9 |
| 30°   | 874.7  |
| 32.5° | 717.2  |
| 35°   | 574.2  |
| 37.5° | 450.7  |
| 40°   | 348.9  |
| 42.5° | 264.1  |
| 45°   | 193.8  |
| 47.5° | 142.9  |
| 50°   | 101.8  |
| 52.5° | 72.7   |
| 55°   | 50.9   |
| 57.5° | 36.3   |
| 60°   | 19.4   |
| 62.5° | 4.8    |
| 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)