

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: **LSRWM2B05WFL559040D010 2LBDDELETELC\*MB**

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 (P14812)  
Test Lab: INNOVATION CENTER (G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LSRWM2B05WFL559040D010 2LBDDELETELC\*MB  
Description: 500 Lumen, 2inch Portfolio LED Cylinder  
WIDE FLOOD OPTIC  
LENSED SQUARE CAST TRIM WITH MATTE BLACK FINISH  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 536.0 lumens  
Efficiency: N/A  
Efficacy: 73.4 lumens/watt  
Spacing Criteria (0/90/45): 0.78 / 0.76 / 0.83  
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')  
CIE Type: Direct

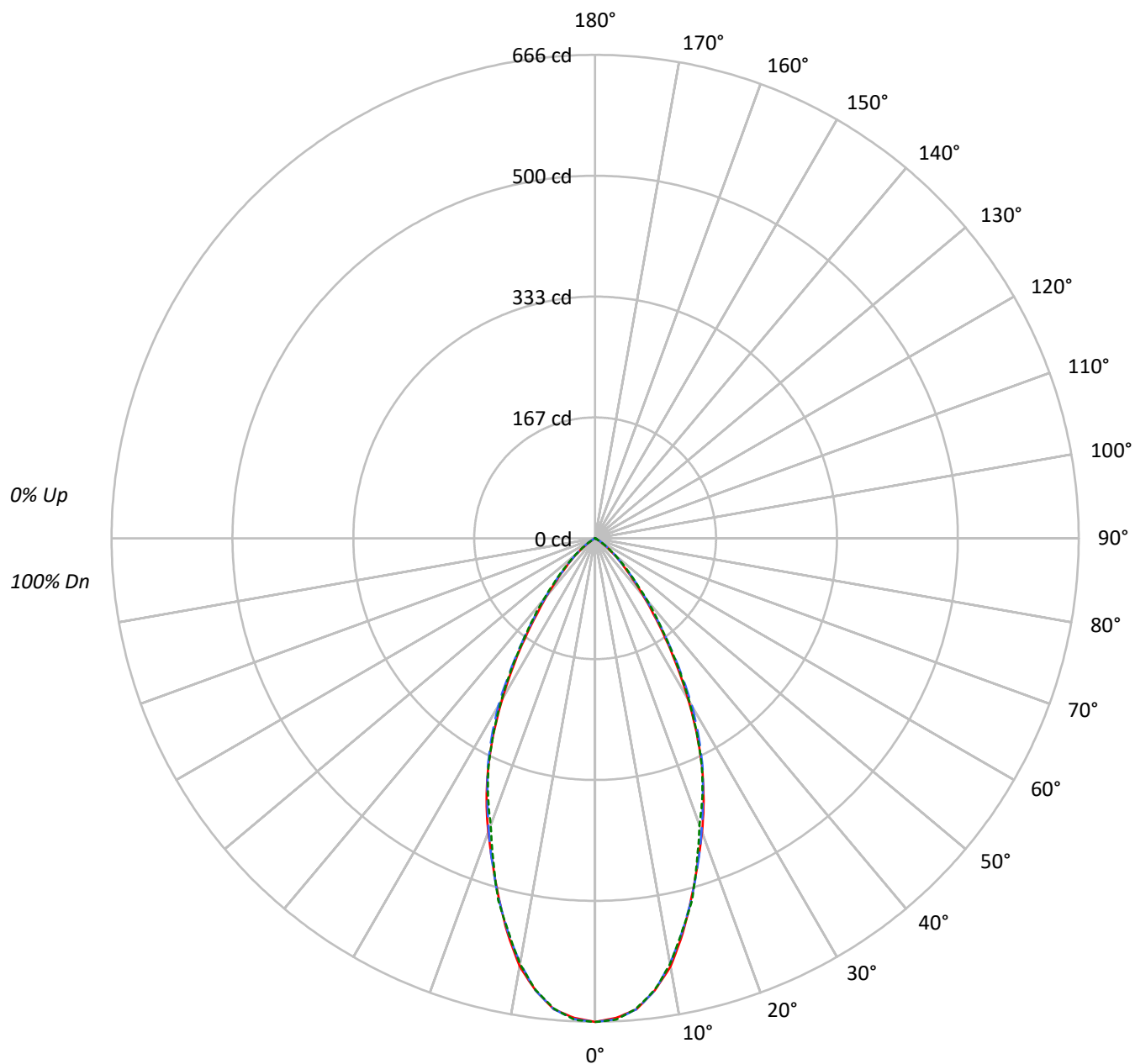
Input Watts (W): 7.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P#

CATALOG NUMBER: LSRWM2B05WFL559040D010 2LBDDELETEL\*MB

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LSRWM2B05WFL559040D010 2LBDDELETELC\*MB

**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  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 113 | 111 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 103 | 101 |  | 101 | 99  | 98  |  | 97  |
| 2   | 108 | 103 | 99  | 95  | 105 | 101 | 97  | 94  | 98  | 95  | 92  |  | 95  | 92  | 90  |  | 92  |
| 3   | 102 | 95  | 90  | 86  | 100 | 94  | 89  | 86  | 91  | 88  | 84  |  | 89  | 86  | 83  |  | 87  |
| 4   | 97  | 89  | 83  | 79  | 95  | 88  | 83  | 79  | 86  | 81  | 78  |  | 84  | 80  | 77  |  | 82  |
| 5   | 92  | 83  | 77  | 73  | 90  | 82  | 77  | 72  | 80  | 75  | 72  |  | 79  | 74  | 71  |  | 77  |
| 6   | 87  | 78  | 72  | 67  | 85  | 77  | 71  | 67  | 76  | 70  | 67  |  | 74  | 70  | 66  |  | 73  |
| 7   | 83  | 73  | 67  | 63  | 81  | 72  | 67  | 62  | 71  | 66  | 62  |  | 70  | 65  | 62  |  | 69  |
| 8   | 78  | 69  | 63  | 58  | 77  | 68  | 62  | 58  | 67  | 62  | 58  |  | 66  | 61  | 58  |  | 65  |
| 9   | 75  | 65  | 59  | 55  | 74  | 64  | 59  | 55  | 63  | 58  | 54  |  | 62  | 58  | 54  |  | 62  |
| 10  | 71  | 61  | 55  | 51  | 70  | 61  | 55  | 51  | 60  | 55  | 51  |  | 59  | 54  | 51  |  | 58  |

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 258127 | 258127 | 258127 |
| 5°  | 253203 | 253203 | 252853 |
| 10° | 235482 | 233830 | 234144 |
| 15° | 205518 | 205838 | 206881 |
| 20° | 177413 | 176753 | 173250 |
| 25° | 148902 | 149629 | 148560 |
| 30° | 114590 | 119152 | 115753 |
| 35° | 79961  | 83176  | 82373  |
| 40° | 52182  | 54306  | 56025  |
| 45° | 31991  | 33799  | 35223  |
| 50° | 18861  | 20368  | 21392  |
| 55° | 7969   | 10265  | 9725   |
| 60° | 1317   | 2634   | 1937   |
| 65° | 733    | 733    | 733    |
| 70° | 0      | 0      | 0      |
| 75° | 0      | 0      | 0      |
| 80° | 0      | 0      | 0      |
| 85° | 0      | 0      | 0      |



TEST NUMBER: P#

CATALOG NUMBER: LSRWM2B05WFL559040D010 2LBDDELETELC\*MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 60.4   | 11.3      |
| 10°-20°   | 142.8  | 26.6      |
| 20°-30°   | 158.2  | 29.5      |
| 30°-40°   | 110.1  | 20.5      |
| 40°-50°   | 49.6   | 9.2       |
| 50°-60°   | 14.0   | 2.6       |
| 60°-70°   | 1.0    | 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°    | 361.4  | 67.4      |
| 0°-40°    | 471.5  | 88.0      |
| 0°-60°    | 535.0  | 99.8      |
| 0°-90°    | 536.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 536.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 666 | 666   | 666 | 666   | 666 |      |
| 5°  | 651 | 654   | 651 | 649   | 650 | 60   |
| 15° | 512 | 515   | 513 | 512   | 516 | 143  |
| 25° | 348 | 351   | 350 | 346   | 348 | 158  |
| 35° | 169 | 174   | 176 | 176   | 174 | 107  |
| 45° | 58  | 60    | 62  | 63    | 64  | 47   |
| 55° | 12  | 14    | 15  | 15    | 14  | 12   |
| 65° | 1   | 1     | 1   | 1     | 1   | 1    |
| 75° | 0   | 0     | 0   | 0     | 0   | 0    |
| 85° | 0   | 0     | 0   | 0     | 0   | 0    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



TEST NUMBER: P#

CATALOG NUMBER: LSRWM2B05WFL559040D010 2LBDDELETEL\*MB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 |
| 2.5°  | 661.3 | 664.7 | 663.0 | 663.0 | 663.8 |
| 5°    | 651.2 | 653.7 | 651.2 | 648.6 | 650.3 |
| 7.5°  | 628.3 | 630.9 | 628.3 | 626.6 | 627.5 |
| 10°   | 598.7 | 597.0 | 594.5 | 592.8 | 595.3 |
| 12.5° | 557.3 | 556.4 | 554.8 | 553.9 | 553.9 |
| 15°   | 512.5 | 515.0 | 513.3 | 512.5 | 515.9 |
| 17.5° | 469.3 | 471.9 | 470.2 | 467.7 | 466.0 |
| 20°   | 430.4 | 431.3 | 428.8 | 424.5 | 420.3 |
| 22.5° | 390.7 | 391.5 | 387.3 | 385.6 | 385.6 |
| 25°   | 348.4 | 351.0 | 350.1 | 345.9 | 347.6 |
| 27.5° | 302.7 | 307.0 | 308.7 | 303.6 | 303.6 |
| 30°   | 256.2 | 259.6 | 266.4 | 259.6 | 258.8 |
| 32.5° | 210.6 | 215.6 | 219.0 | 218.2 | 215.6 |
| 35°   | 169.1 | 174.2 | 175.9 | 175.9 | 174.2 |
| 37.5° | 131.9 | 137.0 | 138.7 | 140.4 | 140.4 |
| 40°   | 103.2 | 105.7 | 107.4 | 109.9 | 110.8 |
| 42.5° | 77.8  | 80.3  | 82.9  | 84.6  | 83.7  |
| 45°   | 58.4  | 60.0  | 61.7  | 63.4  | 64.3  |
| 47.5° | 44.0  | 44.0  | 45.7  | 47.4  | 47.4  |
| 50°   | 31.3  | 33.0  | 33.8  | 34.7  | 35.5  |
| 52.5° | 21.1  | 22.0  | 23.7  | 24.5  | 23.7  |
| 55°   | 11.8  | 13.5  | 15.2  | 15.2  | 14.4  |
| 57.5° | 5.1   | 7.6   | 8.5   | 8.5   | 6.8   |
| 60°   | 1.7   | 3.4   | 3.4   | 4.2   | 2.5   |
| 62.5° | 0.8   | 1.7   | 1.7   | 1.7   | 0.8   |
| 65°   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   |
| 67.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°    - - 45°-225°    - - - 90°-270°







(END OF REPORT)