

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: P225248

Luminaire Tested: **LD2B10D010 EU2B10FL408027 2LBDSQLC*MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P225248
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14838)
Test Lab: INNOVATION CENTER (G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD2B10D010 EU2B10FL408027 2LBDSQLC*MB
Description: 1000 Lumen, 2inch Portfolio LED Downlight
FLOOD OPTIC
LENSED SQUARE CAST TRIM WITH MATTE BLACK FINISH
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 876.6 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.61 / 0.59
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

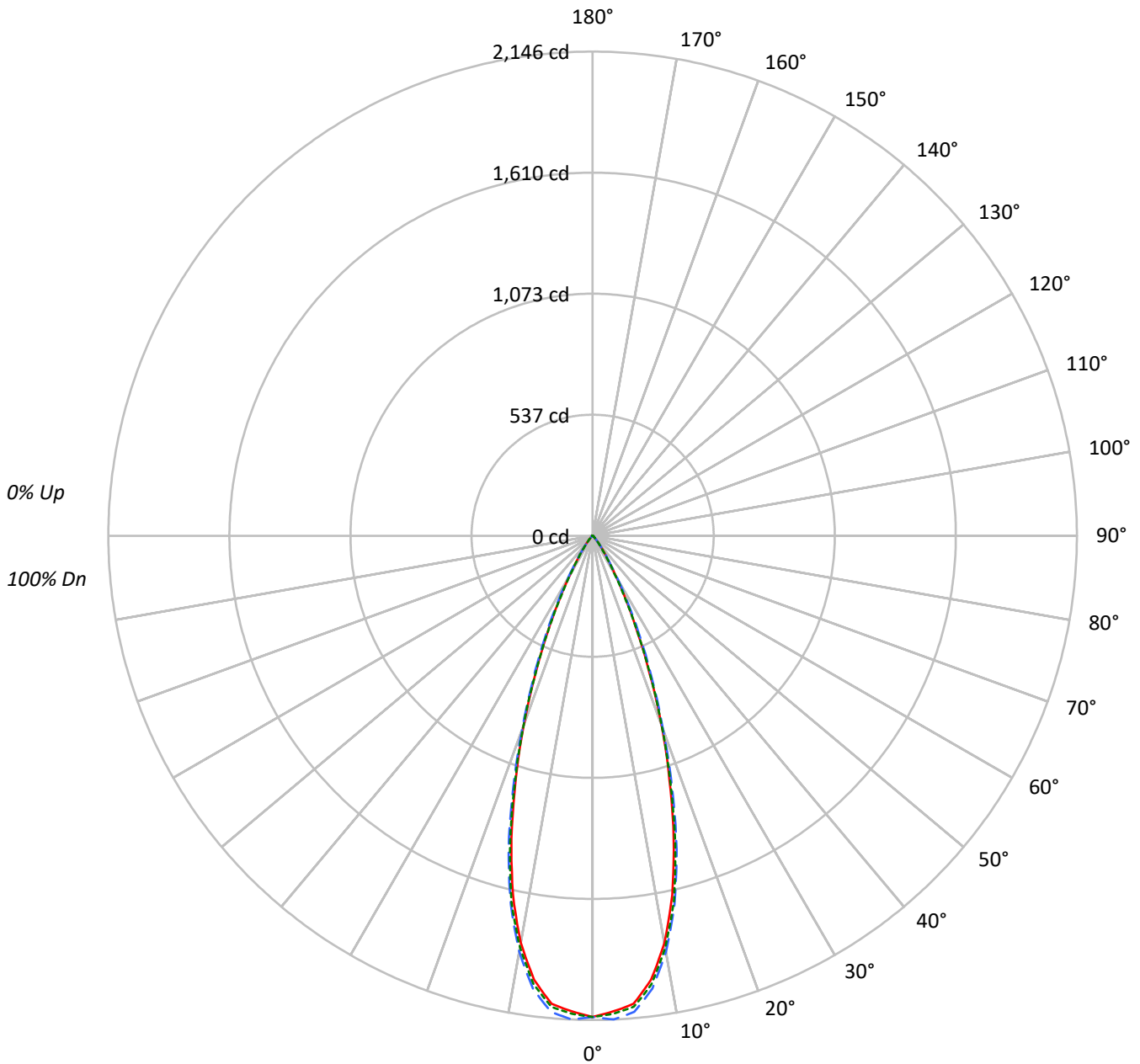
Input Watts (W): 10.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 115 | 112 | 110 | 108 | 112 | 110 | 108 | 107 | 106 | 105 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | | | | | | | | | | | | | | | | | | | |
| 2 | 110 | 106 | 103 | 100 | 108 | 105 | 102 | 99 | 101 | 99 | 97 | 98 | 97 | 95 | 96 | 94 | 93 | 91 | | | | | | | | | | | | | | | | | | | |
| 3 | 106 | 101 | 97 | 94 | 104 | 99 | 96 | 93 | 97 | 94 | 91 | 95 | 92 | 90 | 92 | 90 | 89 | 87 | | | | | | | | | | | | | | | | | | | |
| 4 | 102 | 96 | 92 | 88 | 100 | 95 | 91 | 88 | 93 | 89 | 87 | 91 | 88 | 86 | 89 | 87 | 85 | 83 | | | | | | | | | | | | | | | | | | | |
| 5 | 98 | 92 | 87 | 84 | 97 | 91 | 86 | 83 | 89 | 85 | 82 | 88 | 84 | 82 | 86 | 83 | 81 | 80 | | | | | | | | | | | | | | | | | | | |
| 6 | 95 | 88 | 83 | 79 | 93 | 87 | 82 | 79 | 86 | 82 | 79 | 84 | 81 | 78 | 83 | 80 | 78 | 77 | | | | | | | | | | | | | | | | | | | |
| 7 | 91 | 84 | 79 | 76 | 90 | 83 | 79 | 76 | 82 | 78 | 75 | 81 | 78 | 75 | 80 | 77 | 75 | 73 | | | | | | | | | | | | | | | | | | | |
| 8 | 88 | 81 | 76 | 73 | 87 | 80 | 76 | 73 | 79 | 75 | 72 | 78 | 75 | 72 | 77 | 74 | 72 | 71 | | | | | | | | | | | | | | | | | | | |
| 9 | 85 | 78 | 73 | 70 | 84 | 77 | 73 | 70 | 76 | 72 | 69 | 75 | 72 | 69 | 75 | 71 | 69 | 68 | | | | | | | | | | | | | | | | | | | |
| 10 | 82 | 75 | 70 | 67 | 82 | 74 | 70 | 67 | 74 | 70 | 67 | 73 | 69 | 67 | 72 | 69 | 66 | 65 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 826093 | 826093 | 826093 |
| 5° | 809768 | 823688 | 814862 |
| 10° | 720604 | 736101 | 728589 |
| 15° | 556762 | 576853 | 566788 |
| 20° | 367275 | 375148 | 369253 |
| 25° | 200360 | 214122 | 201343 |
| 30° | 90169 | 99741 | 86412 |
| 35° | 38917 | 40051 | 35512 |
| 40° | 16282 | 16889 | 15068 |
| 45° | 6519 | 7176 | 7176 |
| 50° | 2892 | 3616 | 3616 |
| 55° | 1621 | 1621 | 2431 |
| 60° | 930 | 930 | 930 |
| 65° | 0 | 0 | 0 |
| 70° | 0 | 0 | 0 |
| 75° | 0 | 0 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 192.8 | 22.0 |
| 10°-20° | 383.7 | 43.8 |
| 20°-30° | 226.7 | 25.9 |
| 30°-40° | 59.0 | 6.7 |
| 40°-50° | 11.7 | 1.3 |
| 50°-60° | 2.6 | 0.3 |
| 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° | 803.1 | 91.6 |
| 0°-40° | 862.2 | 98.4 |
| 0°-60° | 876.4 | 100.0 |
| 0°-90° | 876.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 876.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2133 | 2133 | 2133 | 2133 | 2133 | |
| 5° | 2083 | 2099 | 2118 | 2104 | 2096 | 191 |
| 15° | 1388 | 1419 | 1438 | 1417 | 1413 | 377 |
| 25° | 469 | 484 | 501 | 482 | 471 | 221 |
| 35° | 82 | 86 | 85 | 84 | 75 | 58 |
| 45° | 12 | 14 | 13 | 13 | 13 | 11 |
| 55° | 2 | 2 | 2 | 2 | 4 | 3 |
| 65° | 0 | 0 | 0 | 0 | 0 | 0 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 2132.7 | 2132.7 | 2132.7 | 2132.7 | 2132.7 |
| 2.5° | 2110.0 | 2131.5 | 2145.8 | 2133.9 | 2120.8 |
| 5° | 2082.6 | 2099.3 | 2118.4 | 2104.1 | 2095.7 |
| 7.5° | 1984.8 | 2009.8 | 2024.1 | 2017.0 | 2003.9 |
| 10° | 1832.1 | 1851.2 | 1871.5 | 1864.3 | 1852.4 |
| 12.5° | 1630.5 | 1656.8 | 1675.8 | 1659.1 | 1661.5 |
| 15° | 1388.4 | 1419.4 | 1438.5 | 1417.0 | 1413.4 |
| 17.5° | 1131.9 | 1155.8 | 1168.9 | 1155.8 | 1146.3 |
| 20° | 891.0 | 905.3 | 910.1 | 904.1 | 895.8 |
| 22.5° | 658.4 | 673.9 | 688.2 | 673.9 | 663.2 |
| 25° | 468.8 | 484.3 | 501.0 | 481.9 | 471.1 |
| 27.5° | 316.1 | 325.6 | 339.9 | 322.0 | 306.5 |
| 30° | 201.6 | 212.3 | 223.0 | 209.9 | 193.2 |
| 32.5° | 127.6 | 134.8 | 136.0 | 133.6 | 119.3 |
| 35° | 82.3 | 85.9 | 84.7 | 83.5 | 75.1 |
| 37.5° | 52.5 | 52.5 | 53.7 | 52.5 | 47.7 |
| 40° | 32.2 | 34.6 | 33.4 | 32.2 | 29.8 |
| 42.5° | 19.1 | 21.5 | 20.3 | 20.3 | 19.1 |
| 45° | 11.9 | 14.3 | 13.1 | 13.1 | 13.1 |
| 47.5° | 8.3 | 9.5 | 8.3 | 8.3 | 9.5 |
| 50° | 4.8 | 6.0 | 6.0 | 6.0 | 6.0 |
| 52.5° | 3.6 | 3.6 | 3.6 | 3.6 | 4.8 |
| 55° | 2.4 | 2.4 | 2.4 | 2.4 | 3.6 |
| 57.5° | 2.4 | 2.4 | 1.2 | 1.2 | 2.4 |
| 60° | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| 62.5° | 1.2 | 0.0 | 0.0 | 0.0 | 1.2 |
| 65° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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 |



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







(END OF REPORT)