

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: **LD2B05D010 EU2B05WFL559027 2LBDSQC*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 (P14813)
Test Lab: INNOVATION CENTER (G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD2B05D010 EU2B05WFL559027 2LBDSQC*MB
Description: 500 Lumen, 2inch Portfolio LED Downlight
WIDE FLOOD OPTIC
SQUARE CAST TRIM WITH MATTE BLACK FINISH
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 485.0 lumens
Efficiency: N/A
Efficacy: 66.4 lumens/watt
Spacing Criteria (0/90/45): 0.78 / 0.77 / 0.83
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

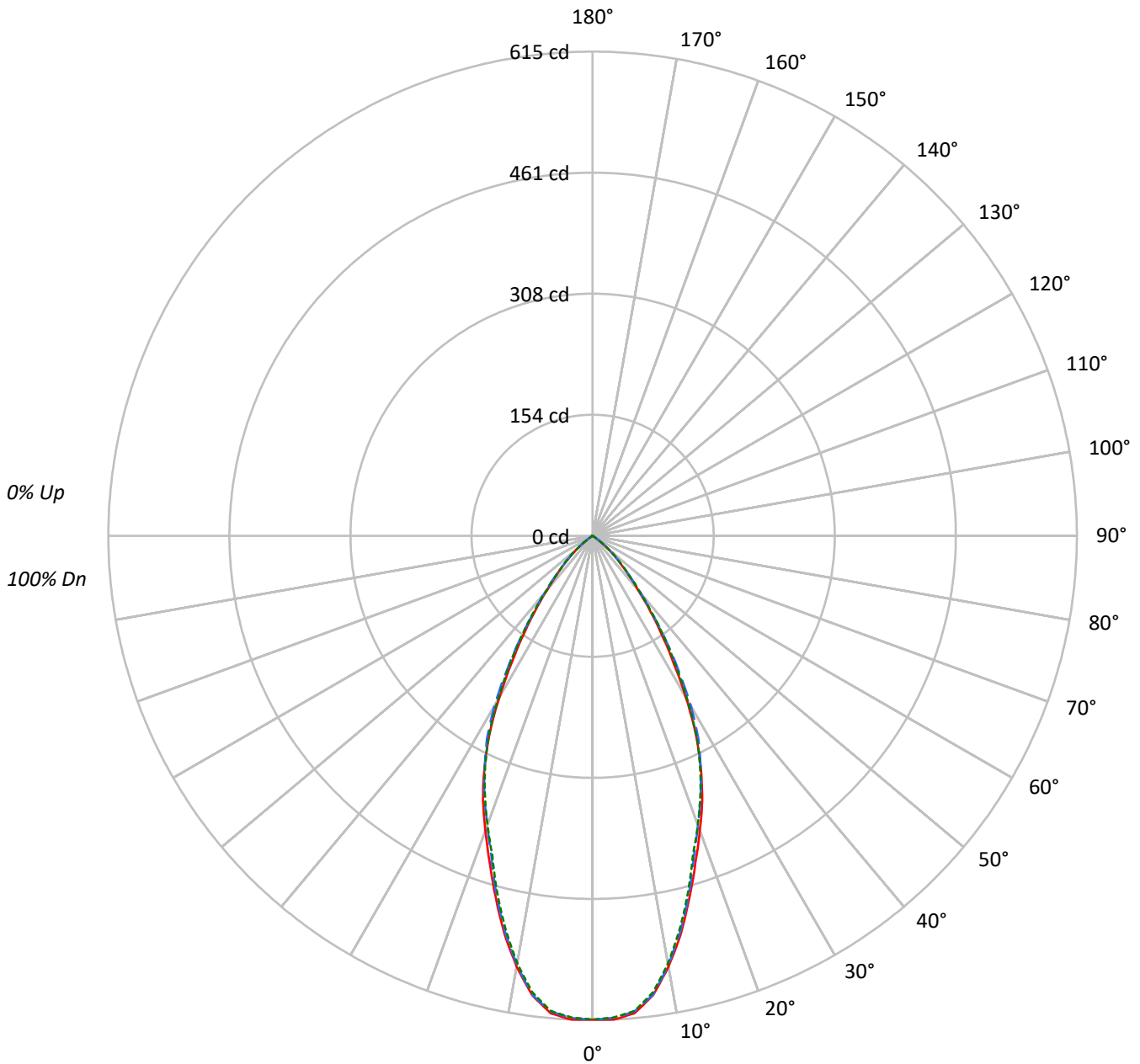
Input Watts (W): 7.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P#

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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 | 114 | 111 | 108 | 106 | 111 | 109 | 106 | 104 | 105 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 94 | | | | | | | | | | | | | | | | | | | |
| 2 | 108 | 103 | 99 | 96 | 106 | 101 | 98 | 94 | 98 | 95 | 92 | 95 | 93 | 90 | 92 | 90 | 89 | 87 | | | | | | | | | | | | | | | | | | | |
| 3 | 102 | 96 | 91 | 87 | 100 | 95 | 90 | 86 | 92 | 88 | 85 | 89 | 86 | 84 | 87 | 85 | 82 | 81 | | | | | | | | | | | | | | | | | | | |
| 4 | 97 | 90 | 84 | 80 | 95 | 88 | 83 | 79 | 86 | 82 | 78 | 84 | 80 | 77 | 82 | 79 | 77 | 75 | | | | | | | | | | | | | | | | | | | |
| 5 | 92 | 84 | 78 | 74 | 91 | 83 | 77 | 73 | 81 | 76 | 73 | 79 | 75 | 72 | 78 | 74 | 71 | 70 | | | | | | | | | | | | | | | | | | | |
| 6 | 87 | 79 | 73 | 68 | 86 | 78 | 72 | 68 | 76 | 71 | 68 | 75 | 70 | 67 | 74 | 70 | 67 | 65 | | | | | | | | | | | | | | | | | | | |
| 7 | 83 | 74 | 68 | 64 | 82 | 73 | 67 | 63 | 72 | 67 | 63 | 71 | 66 | 63 | 70 | 65 | 62 | 61 | | | | | | | | | | | | | | | | | | | |
| 8 | 79 | 70 | 64 | 59 | 78 | 69 | 63 | 59 | 68 | 63 | 59 | 67 | 62 | 59 | 66 | 62 | 58 | 57 | | | | | | | | | | | | | | | | | | | |
| 9 | 75 | 66 | 60 | 56 | 74 | 65 | 59 | 56 | 64 | 59 | 55 | 63 | 59 | 55 | 62 | 58 | 55 | 54 | | | | | | | | | | | | | | | | | | | |
| 10 | 72 | 62 | 56 | 52 | 71 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 52 | 59 | 55 | 52 | 51 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 238024 | 238024 | 238024 |
| 5° | 236756 | 235939 | 235667 |
| 10° | 218490 | 217664 | 216838 |
| 15° | 190640 | 189237 | 187833 |
| 20° | 164140 | 160966 | 160966 |
| 25° | 138987 | 138688 | 138047 |
| 30° | 105868 | 111504 | 107747 |
| 35° | 72064 | 76367 | 75705 |
| 40° | 45457 | 47935 | 47581 |
| 45° | 28102 | 28485 | 28869 |
| 50° | 14402 | 16090 | 15668 |
| 55° | 1891 | 5673 | 2364 |
| 60° | 542 | 542 | 542 |
| 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° | 56.2 | 11.6 |
| 10°-20° | 131.4 | 27.1 |
| 20°-30° | 147.4 | 30.4 |
| 30°-40° | 100.1 | 20.6 |
| 40°-50° | 41.9 | 8.6 |
| 50°-60° | 7.8 | 1.6 |
| 60°-70° | 0.1 | 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° | 335.0 | 69.1 |
| 0°-40° | 435.2 | 89.7 |
| 0°-60° | 484.9 | 100.0 |
| 0°-90° | 485.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 485.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 614 | 614 | 614 | 614 | 614 | |
| 5° | 609 | 608 | 607 | 605 | 606 | 56 |
| 15° | 475 | 474 | 472 | 468 | 468 | 133 |
| 25° | 325 | 328 | 324 | 324 | 323 | 147 |
| 35° | 152 | 157 | 162 | 158 | 160 | 97 |
| 45° | 51 | 51 | 52 | 53 | 53 | 41 |
| 55° | 3 | 6 | 8 | 6 | 4 | 6 |
| 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 |



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 614.5 | 614.5 | 614.5 | 614.5 | 614.5 |
| 2.5° | 615.2 | 613.8 | 613.1 | 612.4 | 612.4 |
| 5° | 608.9 | 608.2 | 606.8 | 605.4 | 606.1 |
| 7.5° | 588.5 | 587.8 | 587.8 | 585.0 | 585.0 |
| 10° | 555.5 | 555.5 | 553.4 | 553.4 | 551.3 |
| 12.5° | 517.6 | 514.8 | 514.8 | 512.7 | 511.3 |
| 15° | 475.4 | 474.0 | 471.9 | 467.7 | 468.4 |
| 17.5° | 434.7 | 431.9 | 427.7 | 425.6 | 424.2 |
| 20° | 398.2 | 397.5 | 390.5 | 389.1 | 390.5 |
| 22.5° | 363.8 | 364.5 | 358.9 | 357.5 | 357.5 |
| 25° | 325.2 | 328.0 | 324.5 | 323.7 | 323.0 |
| 27.5° | 283.7 | 288.6 | 290.7 | 285.8 | 285.1 |
| 30° | 236.7 | 245.1 | 249.3 | 244.4 | 240.9 |
| 32.5° | 191.0 | 199.4 | 203.7 | 200.1 | 198.0 |
| 35° | 152.4 | 157.3 | 161.5 | 158.0 | 160.1 |
| 37.5° | 119.4 | 122.2 | 123.6 | 123.6 | 123.6 |
| 40° | 89.9 | 92.7 | 94.8 | 95.5 | 94.1 |
| 42.5° | 68.1 | 69.5 | 70.9 | 71.6 | 70.9 |
| 45° | 51.3 | 50.6 | 52.0 | 52.7 | 52.7 |
| 47.5° | 37.2 | 37.2 | 37.9 | 38.6 | 38.6 |
| 50° | 23.9 | 25.3 | 26.7 | 26.0 | 26.0 |
| 52.5° | 10.5 | 14.7 | 17.6 | 14.7 | 11.9 |
| 55° | 2.8 | 6.3 | 8.4 | 6.3 | 3.5 |
| 57.5° | 0.7 | 2.1 | 2.8 | 2.1 | 1.4 |
| 60° | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 62.5° | 0.7 | 0.0 | 0.0 | 0.0 | 0.7 |
| 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)