

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: P283866

Luminaire Tested: **LDA2B059727D010 EU2B05WFL559727 2LBALPINSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P283866
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-61)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B059727D010 EU2B05WFL559727 2LBALPINSQ1MB
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH WIDE FLOOD OPTIC AND
2in Adj SQ Pinhole w-lens, MB

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 460.1 lumens
Efficiency: N/A
Efficacy: 65.7 lumens/watt
Spacing Criteria (0/90/45): 0.68 / 0.68 / 0.68
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

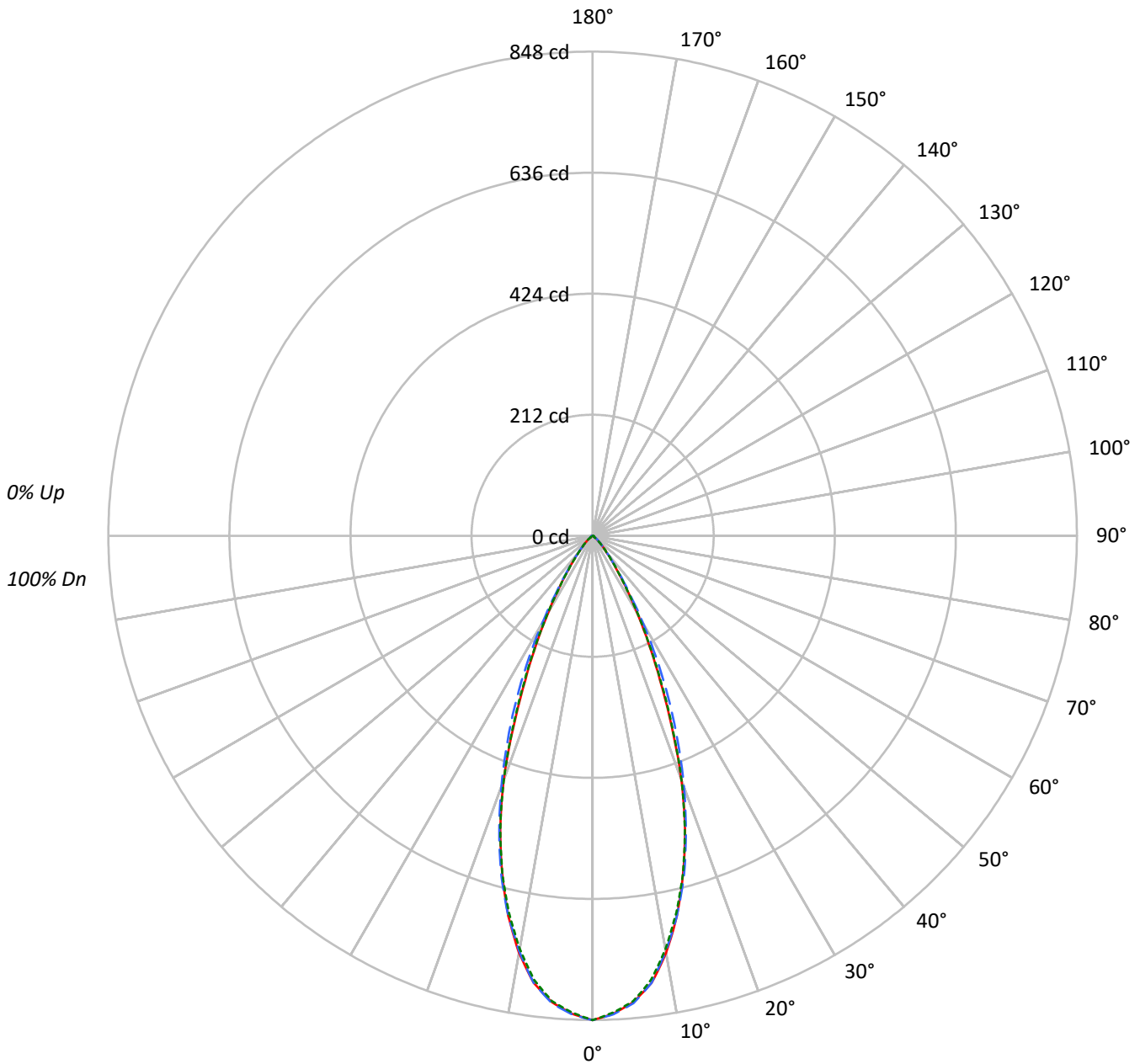
Input Watts (W): 7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| 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 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 104 | 102 | 101 | 100 | 99 | 98 | 97 | 96 | 94 | | | | | | | | | | | | | | | | | | | |
| 2 | 109 | 104 | 101 | 98 | 107 | 103 | 99 | 96 | 100 | 97 | 94 | 97 | 94 | 92 | 94 | 92 | 90 | 89 | | | | | | | | | | | | | | | | | | | |
| 3 | 104 | 98 | 94 | 90 | 102 | 97 | 93 | 89 | 94 | 91 | 88 | 92 | 89 | 87 | 90 | 87 | 85 | 84 | | | | | | | | | | | | | | | | | | | |
| 4 | 100 | 93 | 88 | 84 | 98 | 92 | 87 | 83 | 90 | 86 | 82 | 88 | 84 | 81 | 86 | 83 | 81 | 79 | | | | | | | | | | | | | | | | | | | |
| 5 | 95 | 88 | 82 | 79 | 94 | 87 | 82 | 78 | 85 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 76 | 75 | | | | | | | | | | | | | | | | | | | |
| 6 | 91 | 83 | 78 | 74 | 90 | 82 | 77 | 74 | 81 | 77 | 73 | 80 | 76 | 73 | 78 | 75 | 72 | 71 | | | | | | | | | | | | | | | | | | | |
| 7 | 87 | 79 | 74 | 70 | 86 | 78 | 73 | 70 | 77 | 73 | 69 | 76 | 72 | 69 | 75 | 71 | 69 | 67 | | | | | | | | | | | | | | | | | | | |
| 8 | 84 | 75 | 70 | 66 | 83 | 75 | 70 | 66 | 74 | 69 | 66 | 73 | 69 | 66 | 72 | 68 | 65 | 64 | | | | | | | | | | | | | | | | | | | |
| 9 | 81 | 72 | 67 | 63 | 80 | 71 | 66 | 63 | 71 | 66 | 63 | 70 | 66 | 63 | 69 | 65 | 62 | 61 | | | | | | | | | | | | | | | | | | | |
| 10 | 77 | 69 | 64 | 60 | 76 | 68 | 63 | 60 | 68 | 63 | 60 | 67 | 63 | 60 | 66 | 62 | 60 | 58 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 418568 | 418568 | 418568 |
| 5° | 406003 | 406944 | 405112 |
| 10° | 371622 | 370119 | 367914 |
| 15° | 312589 | 315500 | 312078 |
| 20° | 239044 | 245397 | 238624 |
| 25° | 151769 | 171148 | 154763 |
| 30° | 88301 | 99695 | 89839 |
| 35° | 46677 | 49628 | 46797 |
| 40° | 24602 | 25762 | 24602 |
| 45° | 13745 | 14303 | 13954 |
| 50° | 6447 | 8136 | 6447 |
| 55° | 2322 | 4473 | 2580 |
| 60° | 2664 | 2664 | 2664 |
| 65° | 2918 | 3152 | 2918 |
| 70° | 3606 | 3173 | 3606 |
| 75° | 3241 | 3241 | 3241 |
| 80° | 3409 | 2841 | 3409 |
| 85° | 2830 | 2830 | 2830 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 75.7 | 16.5 |
| 10°-20° | 168.6 | 36.6 |
| 20°-30° | 136.2 | 29.6 |
| 30°-40° | 53.8 | 11.7 |
| 40°-50° | 16.5 | 3.6 |
| 50°-60° | 4.3 | 0.9 |
| 60°-70° | 2.6 | 0.6 |
| 70°-80° | 1.9 | 0.4 |
| 80°-90° | 0.5 | 0.1 |
| 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° | 380.5 | 82.7 |
| 0°-40° | 434.3 | 94.4 |
| 0°-60° | 455.1 | 98.9 |
| 0°-90° | 460.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 460.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 848 | 848 | 848 | 848 | 848 | |
| 5° | 820 | 821 | 822 | 820 | 818 | 76 |
| 15° | 612 | 614 | 618 | 615 | 611 | 168 |
| 25° | 279 | 292 | 314 | 298 | 284 | 130 |
| 35° | 78 | 80 | 82 | 80 | 78 | 52 |
| 45° | 20 | 20 | 20 | 20 | 20 | 16 |
| 55° | 3 | 4 | 5 | 4 | 3 | 3 |
| 65° | 2 | 3 | 3 | 3 | 2 | 3 |
| 75° | 2 | 2 | 2 | 2 | 2 | 2 |
| 85° | 0 | 0 | 0 | 0 | 0 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 848.4 | 848.4 | 848.4 | 848.4 | 848.4 |
| 2.5° | 837.8 | 838.3 | 839.0 | 838.0 | 835.5 |
| 5° | 819.8 | 821.2 | 821.7 | 820.0 | 818.0 |
| 7.5° | 790.1 | 788.4 | 789.9 | 786.9 | 784.5 |
| 10° | 741.8 | 739.6 | 738.8 | 734.4 | 734.4 |
| 12.5° | 682.1 | 681.3 | 681.8 | 679.6 | 676.1 |
| 15° | 612.0 | 613.7 | 617.7 | 615.2 | 611.0 |
| 17.5° | 537.7 | 540.2 | 543.6 | 542.9 | 537.2 |
| 20° | 455.3 | 462.4 | 467.4 | 462.7 | 454.5 |
| 22.5° | 361.5 | 376.8 | 389.4 | 379.5 | 366.2 |
| 25° | 278.8 | 292.2 | 314.4 | 297.6 | 284.3 |
| 27.5° | 211.5 | 221.1 | 241.3 | 224.8 | 215.7 |
| 30° | 155.0 | 160.9 | 175.0 | 164.1 | 157.7 |
| 32.5° | 110.8 | 115.0 | 120.9 | 114.5 | 111.3 |
| 35° | 77.5 | 79.7 | 82.4 | 80.0 | 77.7 |
| 37.5° | 54.5 | 55.3 | 57.2 | 55.3 | 54.3 |
| 40° | 38.2 | 38.5 | 40.0 | 38.7 | 38.2 |
| 42.5° | 27.6 | 27.6 | 28.4 | 27.9 | 27.6 |
| 45° | 19.7 | 20.0 | 20.5 | 20.2 | 20.0 |
| 47.5° | 14.1 | 14.6 | 14.6 | 14.8 | 13.8 |
| 50° | 8.4 | 10.4 | 10.6 | 10.4 | 8.4 |
| 52.5° | 4.4 | 6.2 | 7.6 | 6.2 | 4.4 |
| 55° | 2.7 | 3.7 | 5.2 | 3.7 | 3.0 |
| 57.5° | 2.7 | 2.7 | 3.5 | 3.0 | 2.7 |
| 60° | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| 62.5° | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| 65° | 2.5 | 2.7 | 2.7 | 2.7 | 2.5 |
| 67.5° | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 |
| 70° | 2.5 | 2.5 | 2.2 | 2.5 | 2.5 |
| 72.5° | 2.2 | 2.2 | 2.0 | 2.2 | 2.2 |
| 75° | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 77.5° | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 80° | 1.2 | 1.2 | 1.0 | 1.2 | 1.2 |
| 82.5° | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| 85° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 87.5° | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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







(END OF REPORT)