

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: P225469

Luminaire Tested: **LD2B20D010 EU2B20FL408040 2LBDLC*MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P225469
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14833)
Test Lab: INNOVATION CENTER (G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD2B20D010 EU2B20FL408040 2LBDLC*MB
Description: 2000 Lumen, 2inch Portfolio LED Downlight
FLOOD OPTIC
LENSED CAST ROUND TRIM WITH MATTE BLACK FINISH
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1790.3 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 0.6 / 0.6 / 0.6
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

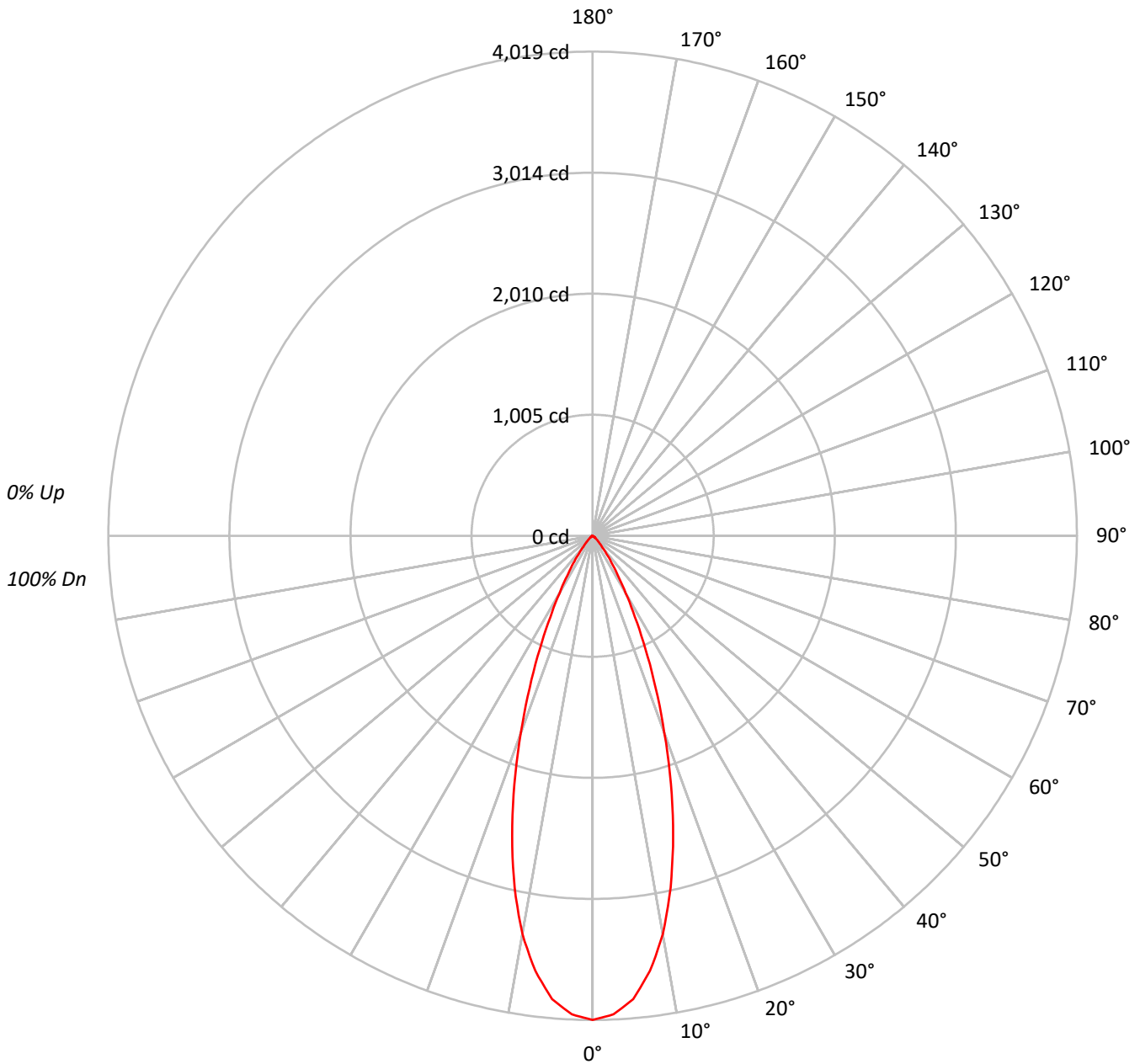
Input Watts (W): 20.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 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 | | | | 100 |
| 1 | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 95 | | | | 95 |
| 2 | 110 | 105 | 102 | 99 | 107 | 104 | 101 | 98 | 101 | 98 | 96 | 98 | 96 | 94 | 95 | 93 | 92 | 90 | | | | 90 |
| 3 | 105 | 100 | 95 | 92 | 103 | 98 | 94 | 91 | 96 | 92 | 90 | 93 | 91 | 88 | 91 | 89 | 87 | 86 | | | | 86 |
| 4 | 101 | 94 | 90 | 86 | 99 | 93 | 89 | 86 | 91 | 87 | 85 | 89 | 86 | 84 | 88 | 85 | 83 | 81 | | | | 81 |
| 5 | 97 | 90 | 85 | 81 | 95 | 89 | 84 | 81 | 87 | 83 | 80 | 85 | 82 | 79 | 84 | 81 | 79 | 77 | | | | 77 |
| 6 | 93 | 85 | 80 | 77 | 92 | 85 | 80 | 76 | 83 | 79 | 76 | 82 | 78 | 75 | 81 | 77 | 75 | 74 | | | | 74 |
| 7 | 89 | 81 | 76 | 73 | 88 | 81 | 76 | 73 | 80 | 75 | 72 | 79 | 75 | 72 | 78 | 74 | 72 | 70 | | | | 70 |
| 8 | 86 | 78 | 73 | 69 | 85 | 77 | 73 | 69 | 76 | 72 | 69 | 75 | 72 | 69 | 75 | 71 | 68 | 67 | | | | 67 |
| 9 | 83 | 75 | 70 | 66 | 82 | 74 | 69 | 66 | 73 | 69 | 66 | 72 | 69 | 66 | 72 | 68 | 65 | 64 | | | | 64 |
| 10 | 80 | 72 | 67 | 63 | 79 | 71 | 66 | 63 | 70 | 66 | 63 | 70 | 66 | 63 | 69 | 65 | 63 | 62 | | | | 62 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 1556782 |
| 5° | 1500983 |
| 10° | 1320144 |
| 15° | 1034726 |
| 20° | 716701 |
| 25° | 441536 |
| 30° | 245685 |
| 35° | 131077 |
| 40° | 64975 |
| 45° | 33141 |
| 50° | 18199 |
| 55° | 11886 |
| 60° | 5888 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 352.1 | 19.7 |
| 10°-20° | 704.8 | 39.4 |
| 20°-30° | 481.5 | 26.9 |
| 30°-40° | 183.5 | 10.3 |
| 40°-50° | 51.0 | 2.8 |
| 50°-60° | 15.9 | 0.9 |
| 60°-70° | 1.5 | 0.1 |
| 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° | 1538.3 | 85.9 |
| 0°-40° | 1721.9 | 96.2 |
| 0°-60° | 1788.8 | 99.9 |
| 0°-90° | 1790.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1790.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4019 | |
| 5° | 3860 | 352 |
| 15° | 2580 | 705 |
| 25° | 1033 | 481 |
| 35° | 277 | 184 |
| 45° | 60 | 51 |
| 55° | 18 | 16 |
| 65° | 0 | 2 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 4019.1 |
| 2.5° | 3976.2 |
| 5° | 3860.3 |
| 7.5° | 3643.6 |
| 10° | 3356.4 |
| 12.5° | 2991.0 |
| 15° | 2580.3 |
| 17.5° | 2159.5 |
| 20° | 1738.7 |
| 22.5° | 1365.7 |
| 25° | 1033.1 |
| 27.5° | 758.5 |
| 30° | 549.3 |
| 32.5° | 390.6 |
| 35° | 277.2 |
| 37.5° | 194.0 |
| 40° | 128.5 |
| 42.5° | 85.7 |
| 45° | 60.5 |
| 47.5° | 42.8 |
| 50° | 30.2 |
| 52.5° | 22.7 |
| 55° | 17.6 |
| 57.5° | 12.6 |
| 60° | 7.6 |
| 62.5° | 2.5 |
| 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)