

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: **LD2B20D010 EU2B20WFL559030 2LBDSQC*MW**

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 (P14810)
Test Lab: INNOVATION CENTER (G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD2B20D010 EU2B20WFL559030 2LBDSQC*MW
Description: 2000 Lumen, 2inch Portfolio LED Downlight
WIDE FLOOD OPTIC
SQUARE CAST TRIM WITH MATTE WHITE FINISH
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1366.4 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.84
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

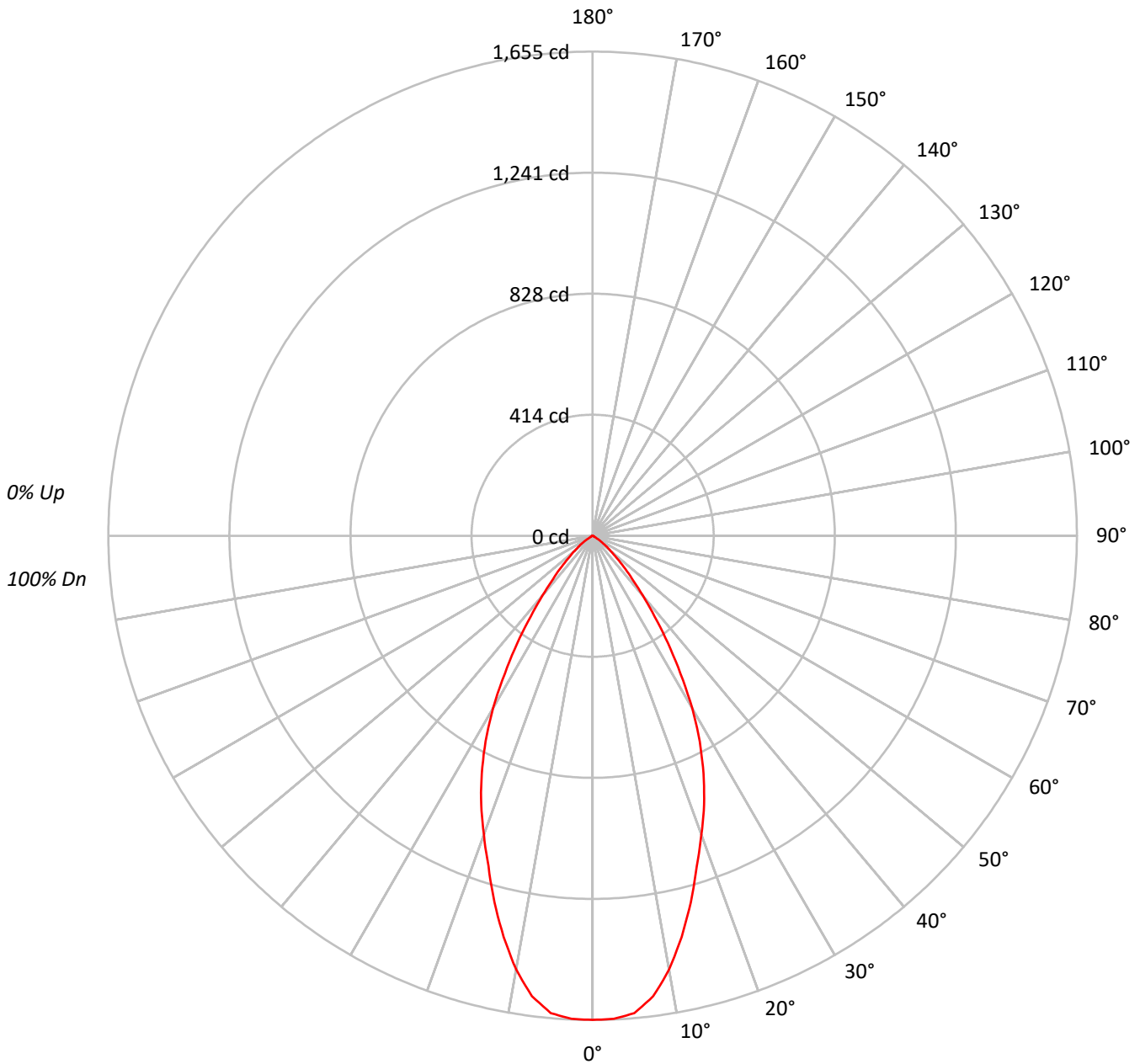
Input Watts (W): 20.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | |
| 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 | | | |
| 1 | 113 | 110 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 93 | | | |
| 2 | 108 | 102 | 98 | 95 | 105 | 101 | 97 | 94 | 98 | 94 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 86 | | | |
| 3 | 102 | 95 | 90 | 86 | 100 | 94 | 89 | 85 | 91 | 87 | 84 | 89 | 85 | 83 | 87 | 84 | 81 | 80 | | | |
| 4 | 97 | 89 | 83 | 79 | 95 | 88 | 82 | 78 | 85 | 81 | 77 | 83 | 80 | 76 | 82 | 78 | 76 | 74 | | | |
| 5 | 91 | 83 | 77 | 72 | 90 | 82 | 76 | 72 | 80 | 75 | 71 | 78 | 74 | 71 | 77 | 73 | 70 | 69 | | | |
| 6 | 87 | 78 | 71 | 67 | 85 | 77 | 71 | 67 | 75 | 70 | 66 | 74 | 69 | 66 | 73 | 69 | 65 | 64 | | | |
| 7 | 82 | 73 | 67 | 62 | 81 | 72 | 66 | 62 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 64 | 61 | 60 | | | |
| 8 | 78 | 69 | 62 | 58 | 77 | 68 | 62 | 58 | 67 | 62 | 58 | 66 | 61 | 58 | 65 | 61 | 57 | 56 | | | |
| 9 | 74 | 65 | 59 | 55 | 73 | 64 | 58 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 61 | 57 | 54 | 53 | | | |
| 10 | 71 | 61 | 55 | 51 | 70 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 58 | 54 | 51 | 49 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° |
|-----|--------|
| 0° | 640980 |
| 5° | 636857 |
| 10° | 592067 |
| 15° | 519789 |
| 20° | 448067 |
| 25° | 383154 |
| 30° | 304053 |
| 35° | 211937 |
| 40° | 134097 |
| 45° | 81840 |
| 50° | 48389 |
| 55° | 26472 |
| 60° | 5810 |
| 65° | 5133 |
| 70° | 4190 |
| 75° | 5537 |
| 80° | 4238 |
| 85° | 8444 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 152.0 | 11.1 |
| 10°-20° | 361.0 | 26.4 |
| 20°-30° | 407.3 | 29.8 |
| 30°-40° | 281.7 | 20.6 |
| 40°-50° | 120.1 | 8.8 |
| 50°-60° | 34.7 | 2.5 |
| 60°-70° | 5.1 | 0.4 |
| 70°-80° | 3.2 | 0.2 |
| 80°-90° | 1.3 | 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° | 920.3 | 67.4 |
| 0°-40° | 1202.0 | 88.0 |
| 0°-60° | 1356.8 | 99.3 |
| 0°-90° | 1366.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1366.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1655 | |
| 5° | 1638 | 152 |
| 15° | 1296 | 361 |
| 25° | 896 | 407 |
| 35° | 448 | 282 |
| 45° | 149 | 120 |
| 55° | 39 | 35 |
| 65° | 6 | 5 |
| 75° | 4 | 3 |
| 85° | 2 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1654.8 |
| 2.5° | 1652.9 |
| 5° | 1637.9 |
| 7.5° | 1587.5 |
| 10° | 1505.3 |
| 12.5° | 1404.5 |
| 15° | 1296.2 |
| 17.5° | 1184.1 |
| 20° | 1087.0 |
| 22.5° | 995.5 |
| 25° | 896.5 |
| 27.5° | 791.9 |
| 30° | 679.8 |
| 32.5° | 558.4 |
| 35° | 448.2 |
| 37.5° | 347.4 |
| 40° | 265.2 |
| 42.5° | 199.8 |
| 45° | 149.4 |
| 47.5° | 108.3 |
| 50° | 80.3 |
| 52.5° | 57.9 |
| 55° | 39.2 |
| 57.5° | 16.8 |
| 60° | 7.5 |
| 62.5° | 5.6 |
| 65° | 5.6 |
| 67.5° | 3.7 |
| 70° | 3.7 |
| 72.5° | 3.7 |
| 75° | 3.7 |
| 77.5° | 1.9 |
| 80° | 1.9 |
| 82.5° | 1.9 |
| 85° | 1.9 |
| 87.5° | 0.0 |
| 90° | 0.0 |



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— 0°-180°







(END OF REPORT)