

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 2LBD*H**

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 (P29157)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD2B20D010 EU2B20WFL559030 2LBD*H
Description: 2000 Lumen, 2inch Portfolio LED Downlight
WIDE FLOOD OPTIC
SPUN ROUND TRIM WITH HAZE FINISH
Light Source: -
Ballast/Driver: -

Summary

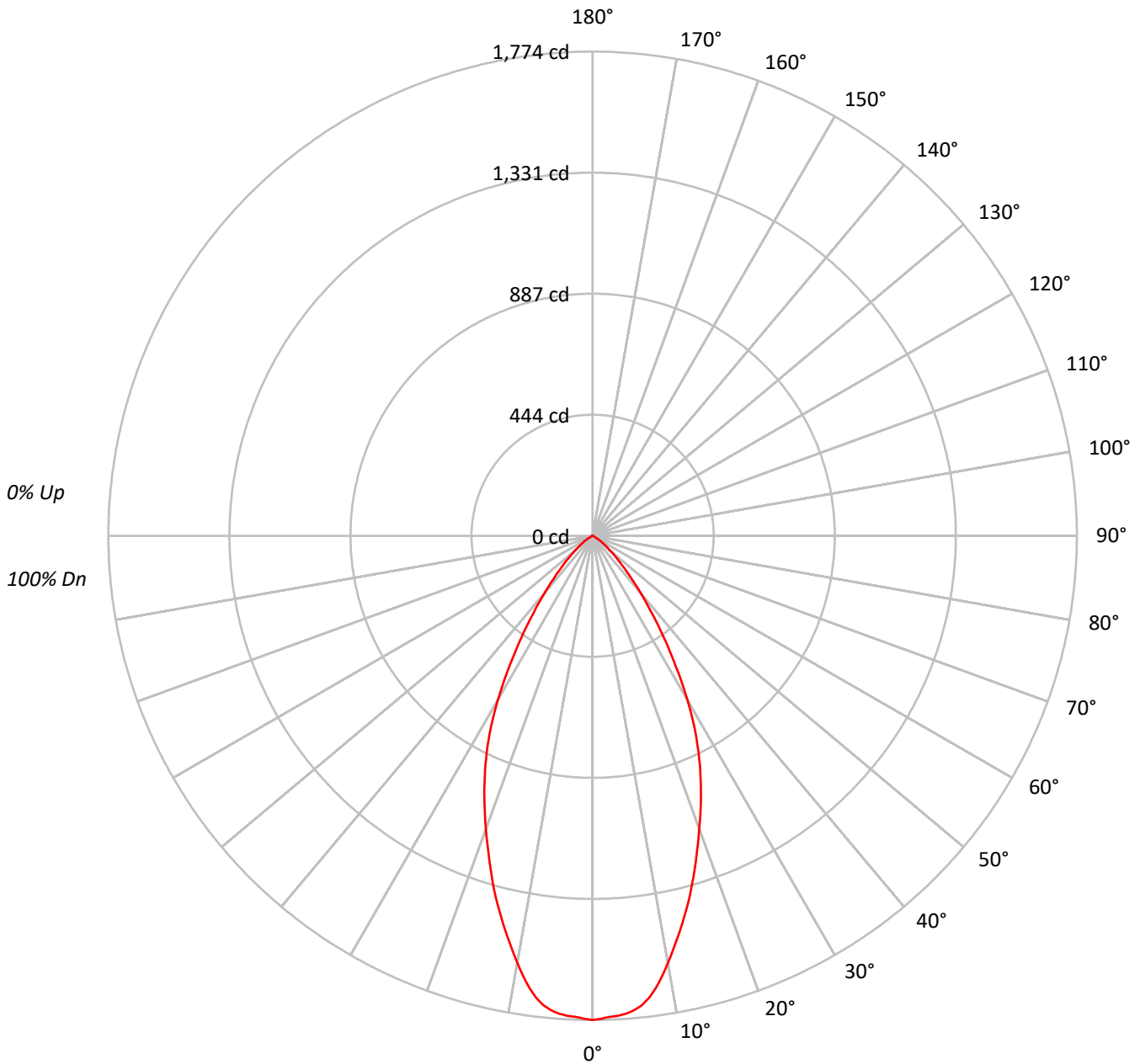
Lumens per Lamp: N/A
Luminaire Lumens: 1417.2 lumens
Efficiency: N/A
Efficacy: 67.8 lumens/watt
Spacing Criteria (0/90/45): 0.77 / 0.77 / 0.82
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

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 | 111 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 93 | | | |
| 2 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 87 | | | |
| 3 | 102 | 96 | 91 | 86 | 100 | 94 | 90 | 86 | 92 | 88 | 84 | 89 | 86 | 83 | 87 | 84 | 82 | 80 | | | |
| 4 | 97 | 89 | 83 | 79 | 95 | 88 | 83 | 79 | 86 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 76 | 74 | | | |
| 5 | 92 | 83 | 77 | 73 | 90 | 82 | 77 | 73 | 81 | 76 | 72 | 79 | 75 | 71 | 77 | 74 | 71 | 69 | | | |
| 6 | 87 | 78 | 72 | 68 | 86 | 77 | 71 | 67 | 76 | 71 | 67 | 74 | 70 | 66 | 73 | 69 | 66 | 64 | | | |
| 7 | 83 | 73 | 67 | 63 | 81 | 73 | 67 | 63 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 65 | 62 | 60 | | | |
| 8 | 79 | 69 | 63 | 59 | 77 | 68 | 63 | 59 | 67 | 62 | 58 | 66 | 62 | 58 | 65 | 61 | 58 | 56 | | | |
| 9 | 75 | 65 | 59 | 55 | 74 | 65 | 59 | 55 | 64 | 58 | 55 | 63 | 58 | 55 | 62 | 58 | 54 | 53 | | | |
| 10 | 71 | 62 | 56 | 52 | 70 | 61 | 55 | 52 | 60 | 55 | 52 | 59 | 55 | 51 | 59 | 54 | 51 | 50 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 687229 |
| 5° | 678578 |
| 10° | 624909 |
| 15° | 550025 |
| 20° | 471027 |
| 25° | 397386 |
| 30° | 310270 |
| 35° | 214348 |
| 40° | 137687 |
| 45° | 84086 |
| 50° | 49775 |
| 55° | 28363 |
| 60° | 8986 |
| 65° | 1283 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 161.7 | 11.4 |
| 10°-20° | 381.1 | 26.9 |
| 20°-30° | 422.5 | 29.8 |
| 30°-40° | 286.7 | 20.2 |
| 40°-50° | 123.8 | 8.7 |
| 50°-60° | 38.9 | 2.7 |
| 60°-70° | 2.4 | 0.2 |
| 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° | 965.3 | 68.1 |
| 0°-40° | 1252.1 | 88.3 |
| 0°-60° | 1414.7 | 99.8 |
| 0°-90° | 1417.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1417.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1774 | |
| 5° | 1745 | 162 |
| 15° | 1372 | 381 |
| 25° | 930 | 423 |
| 35° | 453 | 287 |
| 45° | 154 | 124 |
| 55° | 42 | 39 |
| 65° | 1 | 2 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1774.2 |
| 1° | 1769.8 |
| 2° | 1764.1 |
| 3° | 1761.2 |
| 4° | 1755.4 |
| 5° | 1745.2 |
| 6° | 1729.3 |
| 7° | 1704.7 |
| 8° | 1671.4 |
| 9° | 1632.3 |
| 10° | 1588.8 |
| 11° | 1545.4 |
| 12° | 1501.9 |
| 13° | 1458.5 |
| 14° | 1415.0 |
| 15° | 1371.6 |
| 17.5° | 1254.2 |
| 20° | 1142.7 |
| 22.5° | 1037.0 |
| 25° | 929.8 |
| 27.5° | 818.3 |
| 30° | 693.7 |
| 32.5° | 567.7 |
| 35° | 453.3 |
| 37.5° | 354.8 |
| 40° | 272.3 |
| 42.5° | 205.7 |
| 45° | 153.5 |
| 47.5° | 113.0 |
| 50° | 82.6 |
| 52.5° | 59.4 |
| 55° | 42.0 |
| 57.5° | 27.5 |
| 60° | 11.6 |
| 62.5° | 2.9 |
| 65° | 1.4 |
| 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 |



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CANDELA DISTRIBUTION (continued):

0°
90° | 0.0



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— 0°-180°







| | | |
|-------|--|-----|
| 85° | | 0.0 |
| 87.5° | | 0.0 |



(END OF REPORT)