

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: P264996

Luminaire Tested: **LD2B20D010 EU2B2010SP159030 2LBDL*WMH**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P264996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-432-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD2B20D010 EU2B2010SP159030 2LBDL*WMH
Description: 2000 Lumen, 2inch Portfolio LED Downlight
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1337.0 lumens
Efficiency: N/A
Efficacy: 64.0 lumens/watt
Spacing Criteria (0/90/45): 0.31 / 0.31 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

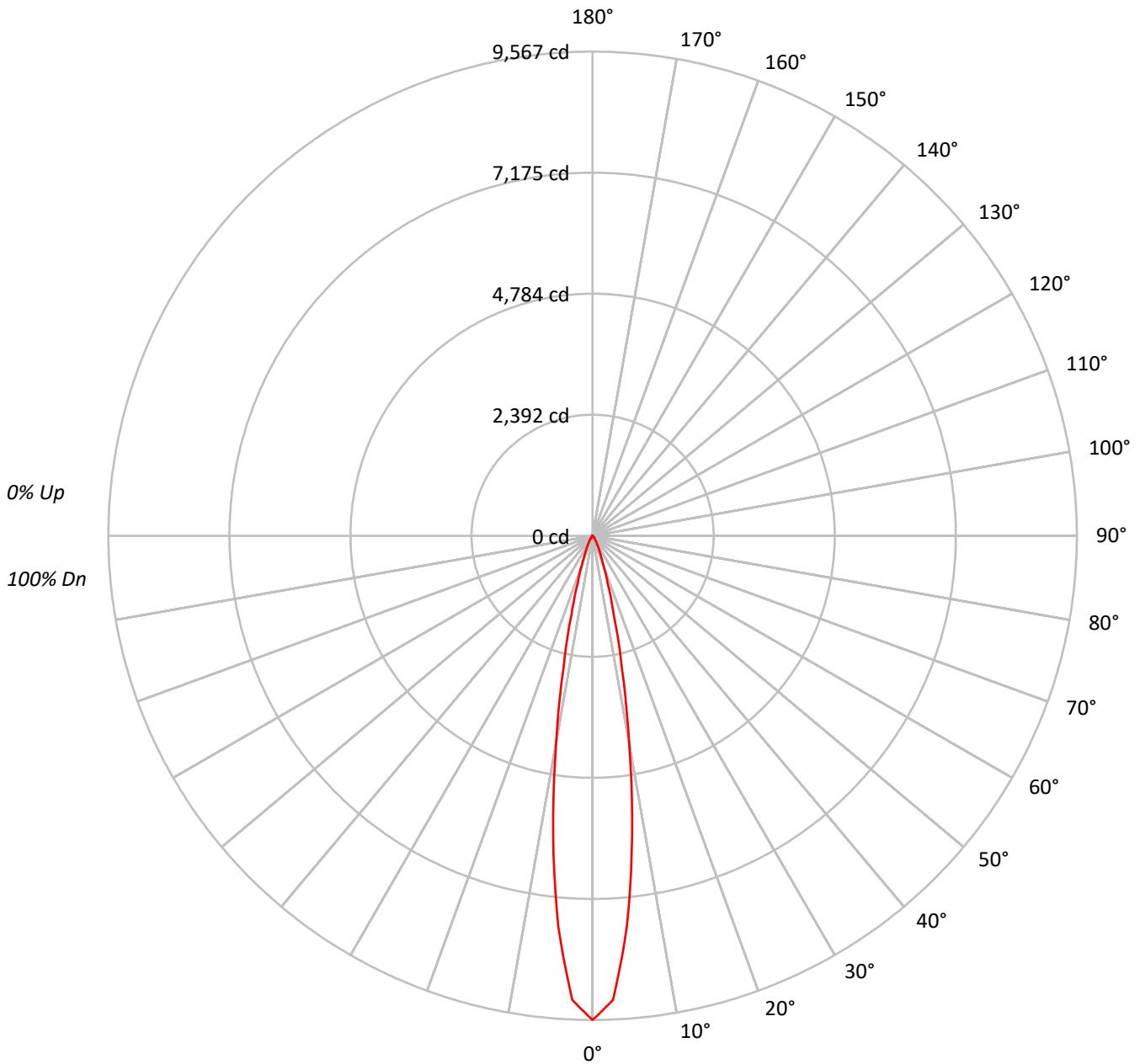
Input Watts (W): 20.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 115 | 113 | 111 | 110 | 113 | 111 | 110 | 108 | 107 | 106 | 105 | 104 | 103 | 102 | 100 | 99 | 99 | 97 |
| 2 | 112 | 108 | 106 | 103 | 110 | 107 | 104 | 102 | 104 | 102 | 100 | 101 | 99 | 98 | 98 | 97 | 96 | 94 |
| 3 | 109 | 104 | 101 | 98 | 107 | 103 | 100 | 97 | 100 | 98 | 96 | 98 | 96 | 94 | 96 | 94 | 93 | 92 |
| 4 | 105 | 100 | 97 | 94 | 104 | 99 | 96 | 93 | 97 | 95 | 92 | 96 | 93 | 91 | 94 | 92 | 90 | 89 |
| 5 | 103 | 97 | 93 | 91 | 101 | 96 | 93 | 90 | 95 | 92 | 89 | 93 | 91 | 89 | 92 | 90 | 88 | 87 |
| 6 | 100 | 94 | 90 | 88 | 99 | 94 | 90 | 87 | 92 | 89 | 87 | 91 | 88 | 86 | 90 | 88 | 86 | 85 |
| 7 | 98 | 92 | 88 | 85 | 97 | 91 | 88 | 85 | 90 | 87 | 85 | 89 | 86 | 84 | 88 | 86 | 84 | 83 |
| 8 | 95 | 89 | 86 | 83 | 94 | 89 | 85 | 83 | 88 | 85 | 82 | 87 | 84 | 82 | 86 | 84 | 82 | 81 |
| 9 | 93 | 87 | 83 | 81 | 92 | 87 | 83 | 81 | 86 | 83 | 81 | 85 | 82 | 80 | 85 | 82 | 80 | 79 |
| 10 | 91 | 85 | 82 | 79 | 91 | 85 | 81 | 79 | 84 | 81 | 79 | 84 | 81 | 79 | 83 | 80 | 78 | 78 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 4719894 |
| 5° | 3841527 |
| 10° | 2075079 |
| 15° | 827389 |
| 20° | 331763 |
| 25° | 158846 |
| 30° | 82376 |
| 35° | 43545 |
| 40° | 24151 |
| 45° | 14931 |
| 50° | 10285 |
| 55° | 6881 |
| 60° | 5328 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 623.8 | 46.7 |
| 10°-20° | 492.2 | 36.8 |
| 20°-30° | 145.2 | 10.9 |
| 30°-40° | 48.3 | 3.6 |
| 40°-50° | 18.2 | 1.4 |
| 50°-60° | 8.0 | 0.6 |
| 60°-70° | 1.3 | 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° | 1261.2 | 94.3 |
| 0°-40° | 1309.5 | 97.9 |
| 0°-60° | 1335.7 | 99.9 |
| 0°-90° | 1337.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1337.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 9567 | |
| 5° | 7757 | 624 |
| 15° | 1620 | 492 |
| 25° | 292 | 145 |
| 35° | 72 | 48 |
| 45° | 21 | 18 |
| 55° | 8 | 8 |
| 65° | 0 | 1 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 9566.8 |
| 2.5° | 9181.2 |
| 5° | 7756.8 |
| 7.5° | 5976.2 |
| 10° | 4142.1 |
| 12.5° | 2650.7 |
| 15° | 1619.9 |
| 17.5° | 988.0 |
| 20° | 631.9 |
| 22.5° | 423.0 |
| 25° | 291.8 |
| 27.5° | 206.2 |
| 30° | 144.6 |
| 32.5° | 101.7 |
| 35° | 72.3 |
| 37.5° | 50.9 |
| 40° | 37.5 |
| 42.5° | 29.5 |
| 45° | 21.4 |
| 47.5° | 18.7 |
| 50° | 13.4 |
| 52.5° | 10.7 |
| 55° | 8.0 |
| 57.5° | 8.0 |
| 60° | 5.4 |
| 62.5° | 2.7 |
| 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)