

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: P264473

Luminaire Tested: **LD2B20D010 EU2B2010SP159050 2LBD*MW**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P264473
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1805-787-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD2B20D010 EU2B2010SP159050 2LBD*MW
Description: 2000 Lumen, 2inch Portfolio LED Downlight
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1537.0 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Spacing Criteria (0/90/45): 0.28 / 0.28 / 0.28
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

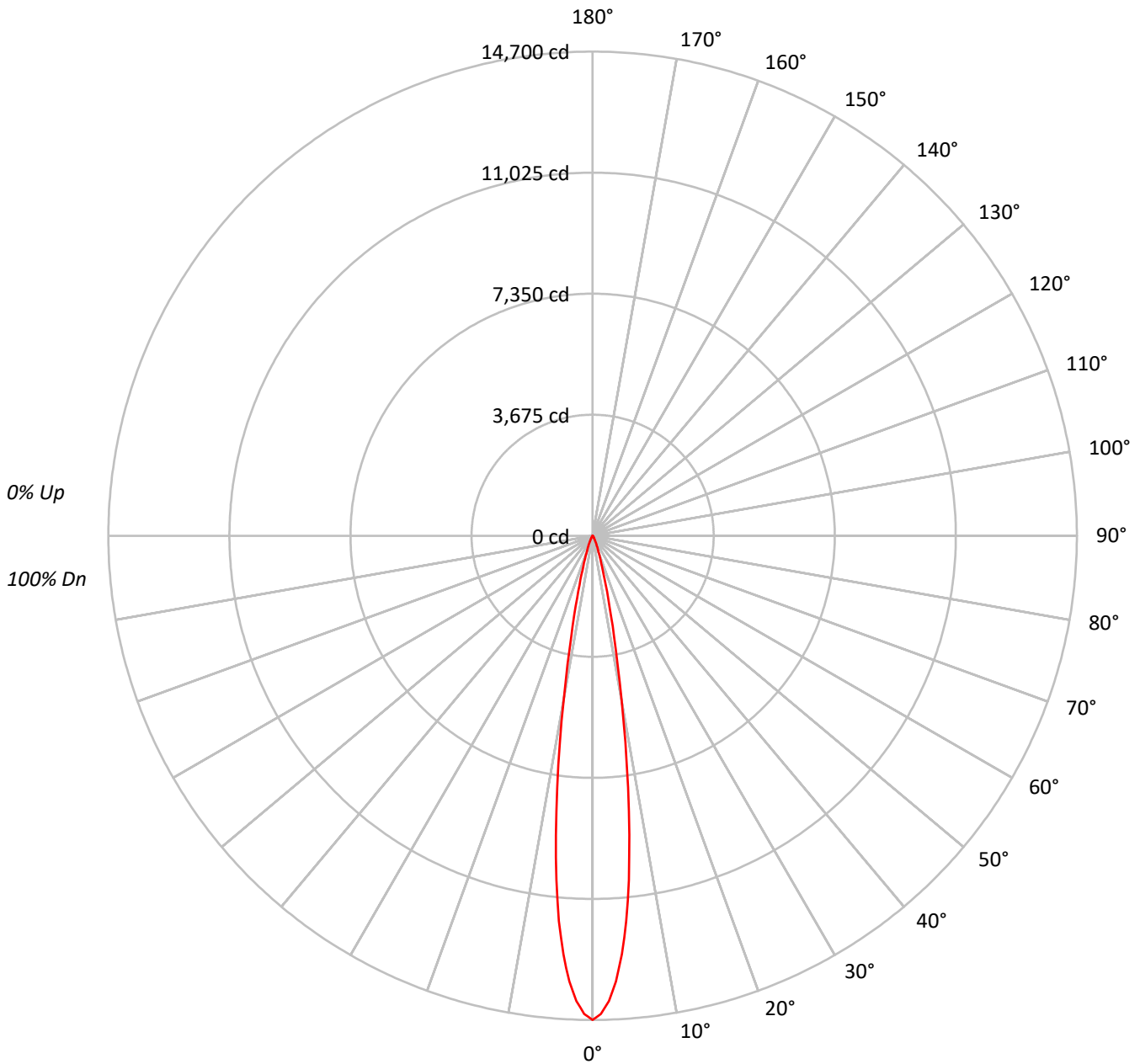
Input Watts (W): 20.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 | 116 | 114 | 112 | 111 | 113 | 112 | 110 | 109 | 108 | 107 | 106 | 104 | 103 | 102 | 101 | 100 | 100 | 98 | | | 98 |
| 2 | 113 | 109 | 107 | 105 | 111 | 108 | 106 | 104 | 105 | 103 | 101 | 102 | 101 | 99 | 99 | 98 | 97 | 96 | | | 96 |
| 3 | 110 | 106 | 103 | 100 | 108 | 105 | 102 | 100 | 102 | 100 | 98 | 100 | 98 | 97 | 98 | 96 | 95 | 94 | | | 94 |
| 4 | 107 | 103 | 99 | 97 | 106 | 102 | 99 | 96 | 100 | 97 | 95 | 98 | 96 | 94 | 96 | 95 | 93 | 92 | | | 92 |
| 5 | 105 | 100 | 97 | 94 | 104 | 99 | 96 | 94 | 98 | 95 | 93 | 96 | 94 | 92 | 95 | 93 | 91 | 90 | | | 90 |
| 6 | 103 | 98 | 94 | 92 | 102 | 97 | 94 | 91 | 96 | 93 | 91 | 95 | 92 | 90 | 93 | 91 | 90 | 89 | | | 89 |
| 7 | 101 | 95 | 92 | 90 | 100 | 95 | 92 | 89 | 94 | 91 | 89 | 93 | 90 | 89 | 92 | 90 | 88 | 87 | | | 87 |
| 8 | 99 | 93 | 90 | 88 | 98 | 93 | 90 | 88 | 92 | 89 | 87 | 91 | 89 | 87 | 91 | 88 | 87 | 86 | | | 86 |
| 9 | 97 | 92 | 88 | 86 | 96 | 91 | 88 | 86 | 91 | 88 | 86 | 90 | 87 | 86 | 89 | 87 | 85 | 85 | | | 85 |
| 10 | 95 | 90 | 87 | 85 | 95 | 90 | 87 | 85 | 89 | 86 | 85 | 89 | 86 | 84 | 88 | 86 | 84 | 83 | | | 83 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 7252517 |
| 5° | 5813251 |
| 10° | 2537226 |
| 15° | 786273 |
| 20° | 274115 |
| 25° | 121067 |
| 30° | 54804 |
| 35° | 28488 |
| 40° | 16230 |
| 45° | 7675 |
| 50° | 4835 |
| 55° | 2752 |
| 60° | 1579 |
| 65° | 1868 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 891.4 | 58.0 |
| 10°-20° | 488.2 | 31.8 |
| 20°-30° | 111.3 | 7.2 |
| 30°-40° | 32.0 | 2.1 |
| 40°-50° | 9.9 | 0.6 |
| 50°-60° | 3.0 | 0.2 |
| 60°-70° | 1.4 | 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° | 1490.8 | 97.0 |
| 0°-40° | 1522.8 | 99.1 |
| 0°-60° | 1535.6 | 99.9 |
| 0°-90° | 1537.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1537.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 14700 | |
| 5° | 11738 | 891 |
| 15° | 1539 | 488 |
| 25° | 222 | 111 |
| 35° | 47 | 32 |
| 45° | 11 | 10 |
| 55° | 3 | 3 |
| 65° | 2 | 1 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|---------|
| 0° | 14700.2 |
| 1° | 14517.2 |
| 2° | 14137.1 |
| 3° | 13547.2 |
| 4° | 12736.5 |
| 5° | 11738.1 |
| 6° | 10514.1 |
| 7° | 9146.6 |
| 8° | 7719.2 |
| 9° | 6337.5 |
| 10° | 5064.6 |
| 11° | 3987.3 |
| 12° | 3138.8 |
| 13° | 2470.0 |
| 14° | 1951.1 |
| 15° | 1539.4 |
| 16° | 1214.5 |
| 17° | 966.9 |
| 18° | 777.6 |
| 19° | 632.5 |
| 20° | 522.1 |
| 22.5° | 337.5 |
| 25° | 222.4 |
| 26° | 187.7 |
| 27° | 159.3 |
| 28° | 134.1 |
| 29° | 112.0 |
| 30° | 96.2 |
| 32.5° | 66.2 |
| 35° | 47.3 |
| 37.5° | 34.7 |
| 40° | 25.2 |
| 42.5° | 17.3 |
| 45° | 11.0 |
| 47.5° | 7.9 |
| 50° | 6.3 |
| 52.5° | 4.7 |
| 55° | 3.2 |
| 57.5° | 1.6 |
| 60° | 1.6 |
| 62.5° | 1.6 |
| 65° | 1.6 |
| 67.5° | 1.6 |



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CANDELA DISTRIBUTION (continued):

| | 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°







| | | |
|-------|--|-----|
| 70° | | 0.0 |
| 72.5° | | 0.0 |



(END OF REPORT)