

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: P204070

Luminaire Tested: **LD6B20D010 EU6B10209727 6LBNMW1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P204070  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B20D010 EU6B10209727 6LBNMW1  
Description: PORTFOLIO 6 INCH 50 DEGREE CUTOFF RECESSED DOWNLIGHT  
NARROW DISTRIBUTION WITH MATTE WHITE TRIM  
WATTAGE D010TR-21.86 W DE010-20.46 W D5LT-21.24 W DMX-20.89 W DL2-22.5 W  
DL3-21.8 6 W DLE-22.46 W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1050.7 lumens  
Efficiency: N/A  
Efficacy: 50.5 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 0.99 / 0.97  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

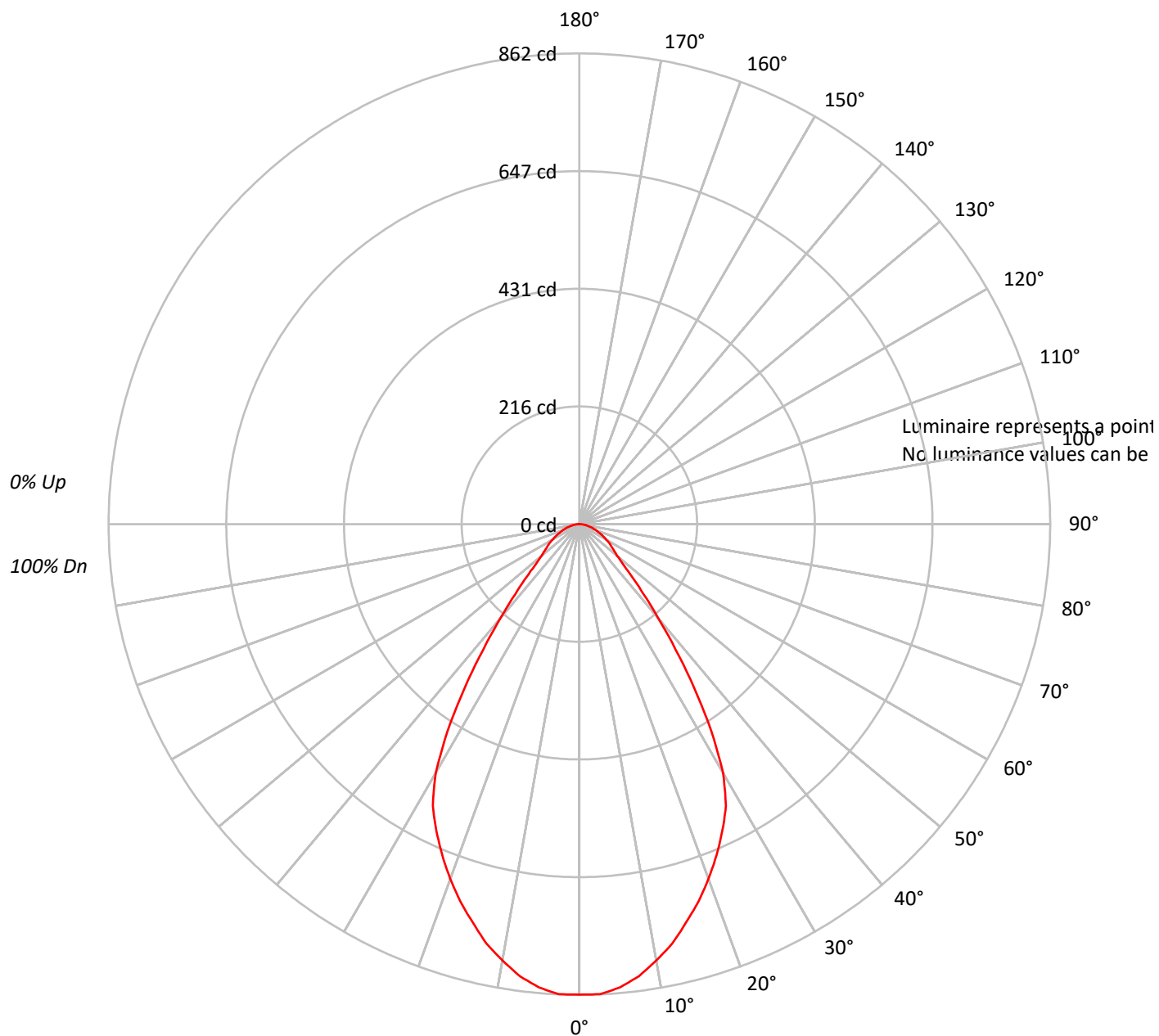
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  |  | 50  | 30  | 10  |  |  | 50  | 30  | 10  |  |  | 50  |
| RCR |     |     |     |     |     |     |     |     |  |     |     |     |  |  |     |     |     |  |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 |  | 111 | 111 | 111 |  |  | 106 | 106 | 106 |  |  | 102 |
| 1   | 112 | 108 | 105 | 103 | 109 | 106 | 103 | 101 |  | 102 | 100 | 98  |  |  | 98  | 97  | 95  |  |  | 95  |
| 2   | 105 | 99  | 94  | 90  | 102 | 97  | 92  | 89  |  | 94  | 90  | 87  |  |  | 91  | 87  | 85  |  |  | 88  |
| 3   | 98  | 90  | 84  | 79  | 96  | 89  | 83  | 79  |  | 86  | 81  | 77  |  |  | 84  | 80  | 76  |  |  | 81  |
| 4   | 92  | 83  | 76  | 71  | 90  | 82  | 76  | 71  |  | 80  | 74  | 70  |  |  | 77  | 73  | 69  |  |  | 75  |
| 5   | 87  | 77  | 70  | 64  | 85  | 76  | 69  | 64  |  | 74  | 68  | 64  |  |  | 72  | 67  | 63  |  |  | 70  |
| 6   | 81  | 71  | 64  | 59  | 80  | 70  | 63  | 59  |  | 68  | 63  | 58  |  |  | 67  | 62  | 58  |  |  | 66  |
| 7   | 77  | 66  | 59  | 54  | 75  | 65  | 59  | 54  |  | 64  | 58  | 54  |  |  | 63  | 57  | 53  |  |  | 61  |
| 8   | 72  | 61  | 55  | 50  | 71  | 61  | 54  | 50  |  | 60  | 54  | 49  |  |  | 59  | 53  | 49  |  |  | 58  |
| 9   | 69  | 58  | 51  | 46  | 67  | 57  | 51  | 46  |  | 56  | 50  | 46  |  |  | 55  | 50  | 46  |  |  | 54  |
| 10  | 65  | 54  | 47  | 43  | 64  | 54  | 47  | 43  |  | 53  | 47  | 43  |  |  | 52  | 46  | 43  |  |  | 51  |

**AVERAGE LUMINANCE (cd/sqm):**





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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 80.0   | 7.6       |
| 10°-20°   | 212.1  | 20.2      |
| 20°-30°   | 283.1  | 26.9      |
| 30°-40°   | 228.4  | 21.7      |
| 40°-50°   | 109.5  | 10.4      |
| 50°-60°   | 64.9   | 6.2       |
| 60°-70°   | 43.1   | 4.1       |
| 70°-80°   | 23.1   | 2.2       |
| 80°-90°   | 6.4    | 0.6       |
| 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°    | 575.2  | 54.7      |
| 0°-40°    | 803.7  | 76.5      |
| 0°-60°    | 978.1  | 93.1      |
| 0°-90°    | 1050.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1050.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 862 |      |
| 5°  | 852 | 80   |
| 15° | 755 | 212  |
| 25° | 620 | 283  |
| 35° | 366 | 228  |
| 45° | 135 | 110  |
| 55° | 72  | 65   |
| 65° | 43  | 43   |
| 75° | 22  | 23   |
| 85° | 5   | 6    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 861.7 |
| 2.5°  | 861.7 |
| 5°    | 851.6 |
| 7.5°  | 834.9 |
| 10°   | 811.6 |
| 12.5° | 786.5 |
| 15°   | 754.8 |
| 17.5° | 724.7 |
| 20°   | 691.3 |
| 22.5° | 656.3 |
| 25°   | 619.5 |
| 27.5° | 581.1 |
| 30°   | 526.0 |
| 32.5° | 449.2 |
| 35°   | 365.7 |
| 37.5° | 288.9 |
| 40°   | 223.8 |
| 42.5° | 173.7 |
| 45°   | 135.3 |
| 47.5° | 106.9 |
| 50°   | 90.2  |
| 52.5° | 80.2  |
| 55°   | 71.8  |
| 57.5° | 65.1  |
| 60°   | 56.8  |
| 62.5° | 50.1  |
| 65°   | 43.4  |
| 67.5° | 36.7  |
| 70°   | 31.7  |
| 72.5° | 26.7  |
| 75°   | 21.7  |
| 77.5° | 16.7  |
| 80°   | 13.4  |
| 82.5° | 10.0  |
| 85°   | 5.0   |
| 87.5° | 1.7   |
| 90°   | 0.0   |



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— 0°-180°







(END OF REPORT)