

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: P175415

Luminaire Tested: **LDA6A10827D010TE LARL20NF 6LFC1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P175415  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26263)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA6A10827D010TE LARL20NF 6LFC1  
Description: PORTFOLIO 6" Flat Cone, Self-flange Trim Ring, 20° Narrow Flood  
Optic, at 0° tilt  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 822.5 lumens  
Efficiency: N/A  
Efficacy: 59.4 lumens/watt  
Spacing Criteria (0/90/45): 0.35 / 0.35 / 0.34  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

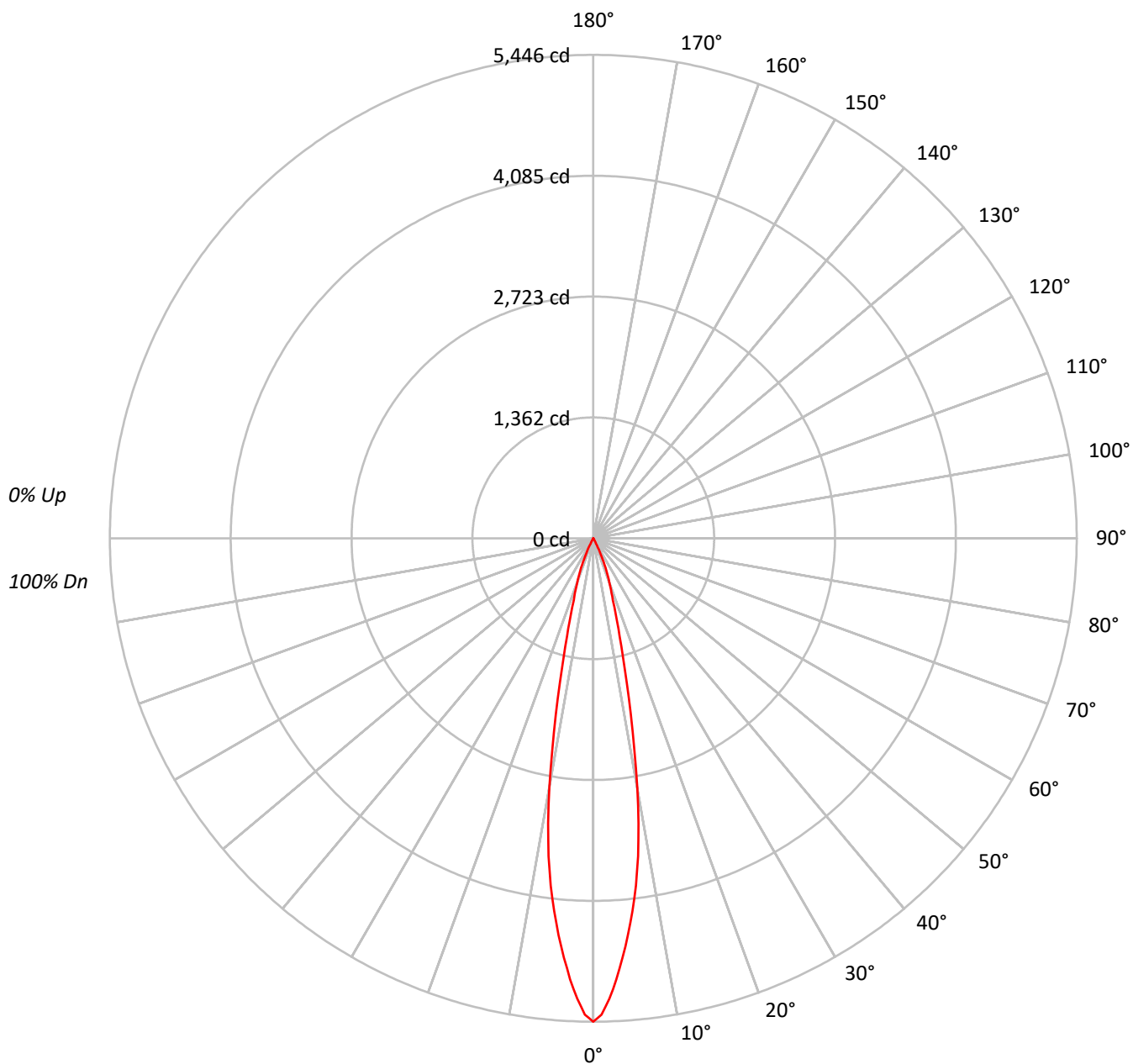
Input Watts (W): 13.84  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |
| 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   | 115 | 114 | 112 | 110 | 113 | 111 | 110 | 108 | 107 | 106 | 105 |  | 104 | 103 | 102 |  | 100 |
| 2   | 112 | 109 | 106 | 104 | 110 | 107 | 105 | 103 | 104 | 102 | 101 |  | 101 | 100 | 98  |  | 99  |
| 3   | 109 | 105 | 102 | 99  | 107 | 104 | 101 | 98  | 101 | 99  | 97  |  | 99  | 97  | 95  |  | 97  |
| 4   | 106 | 102 | 98  | 95  | 105 | 101 | 97  | 95  | 99  | 96  | 94  |  | 97  | 95  | 93  |  | 95  |
| 5   | 104 | 99  | 95  | 92  | 102 | 98  | 94  | 92  | 96  | 93  | 91  |  | 95  | 92  | 90  |  | 93  |
| 6   | 101 | 96  | 92  | 90  | 100 | 95  | 92  | 89  | 94  | 91  | 89  |  | 93  | 90  | 88  |  | 92  |
| 7   | 99  | 93  | 90  | 87  | 98  | 93  | 89  | 87  | 92  | 89  | 87  |  | 91  | 88  | 86  |  | 90  |
| 8   | 97  | 91  | 87  | 85  | 96  | 91  | 87  | 85  | 90  | 87  | 85  |  | 89  | 86  | 84  |  | 88  |
| 9   | 95  | 89  | 85  | 83  | 94  | 89  | 85  | 83  | 88  | 85  | 83  |  | 87  | 84  | 82  |  | 86  |
| 10  | 93  | 87  | 84  | 81  | 92  | 87  | 83  | 81  | 86  | 83  | 81  |  | 85  | 83  | 81  |  | 85  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 298578 |
| 5°  | 246863 |
| 10° | 158753 |
| 15° | 64717  |
| 20° | 30890  |
| 25° | 11577  |
| 30° | 829    |
| 35° | 161    |
| 40° | 64     |
| 45° | 23     |
| 50° | 26     |
| 55° | 0      |
| 60° | 0      |
| 65° | 0      |
| 70° | 0      |
| 75° | 0      |
| 80° | 0      |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 378.3  | 46.0      |
| 10°-20°   | 346.5  | 42.1      |
| 20°-30°   | 95.0   | 11.5      |
| 30°-40°   | 2.3    | 0.3       |
| 40°-50°   | 0.3    | 0.0       |
| 50°-60°   | 0.0    | 0.0       |
| 60°-70°   | 0.0    | 0.0       |
| 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°    | 819.8  | 99.7      |
| 0°-40°    | 822.1  | 100.0     |
| 0°-60°    | 822.5  | 100.0     |
| 0°-90°    | 822.5  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 822.5  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 5446 |      |
| 5°  | 4486 | 378  |
| 15° | 1140 | 347  |
| 25° | 191  | 95   |
| 35° | 2    | 2    |
| 45° | 0    | 0    |
| 55° | 0    | 0    |
| 65° | 0    | 0    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 5446.5 |
| 1°    | 5367.2 |
| 2°    | 5191.1 |
| 3°    | 4975.9 |
| 4°    | 4734.5 |
| 5°    | 4486.0 |
| 6°    | 4224.1 |
| 7°    | 3940.9 |
| 8°    | 3617.4 |
| 9°    | 3253.9 |
| 10°   | 2851.9 |
| 11°   | 2427.1 |
| 12°   | 2031.2 |
| 13°   | 1673.8 |
| 14°   | 1383.8 |
| 15°   | 1140.3 |
| 17.5° | 730.7  |
| 20°   | 529.5  |
| 22.5° | 358.0  |
| 25°   | 191.4  |
| 27.5° | 64.1   |
| 30°   | 13.1   |
| 32.5° | 4.6    |
| 35°   | 2.4    |
| 37.5° | 1.5    |
| 40°   | 0.9    |
| 42.5° | 0.6    |
| 45°   | 0.3    |
| 47.5° | 0.3    |
| 50°   | 0.3    |
| 52.5° | 0.0    |
| 55°   | 0.0    |
| 57.5° | 0.0    |
| 60°   | 0.0    |
| 62.5° | 0.0    |
| 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    |



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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)