

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: P1191915

Luminaire Tested: **LDA4A35935D010TE LAR25NF 4LFC1**

Issue Date: 3/3/2020

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

**Test Information**

Test Method: LM-41-14  
Report Number: P1191915  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26142)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA4A35935D010TE LAR25NF 4LFC1  
Description: PORTFOLIO 4" Flat Cone, Self-flange Trim Ring, 25° Narrow Flood Optic, at 0° tilt  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

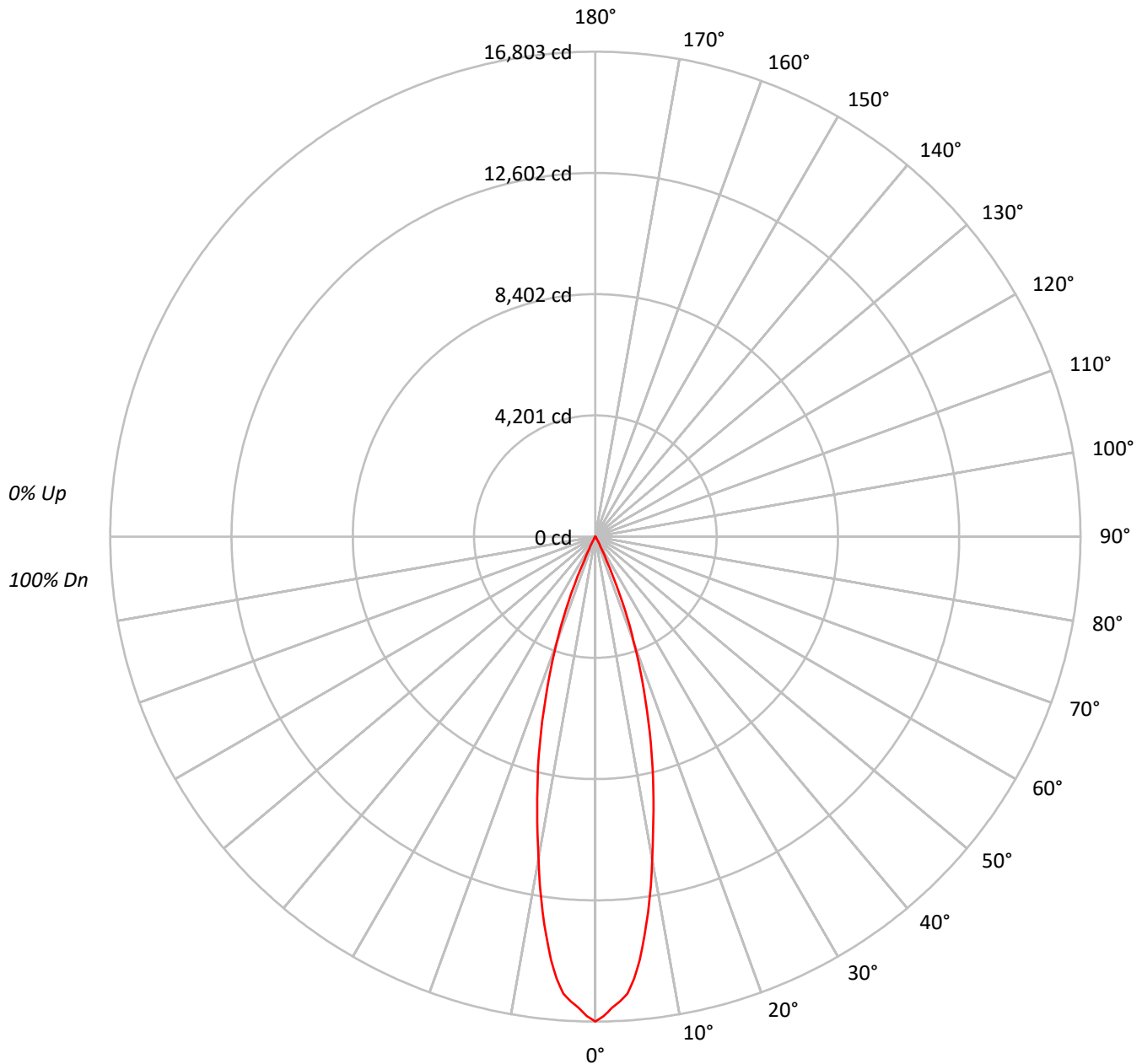
Lumens per Lamp: N/A  
Luminaire Lumens: 4003.8 lumens  
Efficiency: N/A  
Efficacy: 85.0 lumens/watt  
Spacing Criteria (0/90/45): 0.46 / 0.46 / 0.47  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 47.1  
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 | 113 | 111 | 110 | 113 | 111 | 109 | 108 | 107 | 106 | 104 |  | 103 | 102 | 101 |  | 100 |
| 2   | 111 | 108 | 105 | 103 | 109 | 106 | 104 | 101 | 103 | 101 | 99  |  | 100 | 99  | 97  |  | 98  |
| 3   | 108 | 104 | 100 | 97  | 106 | 102 | 99  | 96  | 100 | 97  | 95  |  | 98  | 95  | 94  |  | 95  |
| 4   | 105 | 100 | 96  | 93  | 103 | 99  | 95  | 92  | 97  | 94  | 91  |  | 95  | 92  | 90  |  | 93  |
| 5   | 102 | 96  | 92  | 89  | 100 | 95  | 92  | 89  | 94  | 91  | 88  |  | 92  | 89  | 87  |  | 91  |
| 6   | 99  | 93  | 89  | 86  | 98  | 92  | 88  | 86  | 91  | 88  | 85  |  | 90  | 87  | 85  |  | 89  |
| 7   | 96  | 90  | 86  | 83  | 95  | 89  | 86  | 83  | 88  | 85  | 83  |  | 87  | 84  | 82  |  | 86  |
| 8   | 94  | 87  | 83  | 81  | 93  | 87  | 83  | 80  | 86  | 83  | 80  |  | 85  | 82  | 80  |  | 84  |
| 9   | 91  | 85  | 81  | 78  | 90  | 84  | 81  | 78  | 84  | 80  | 78  |  | 83  | 80  | 78  |  | 82  |
| 10  | 89  | 82  | 79  | 76  | 88  | 82  | 78  | 76  | 81  | 78  | 76  |  | 81  | 78  | 76  |  | 80  |

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 2072552 |
| 5°  | 1903287 |
| 10° | 1421758 |
| 15° | 947012  |
| 20° | 512997  |
| 25° | 122378  |
| 30° | 28656   |
| 35° | 8146    |
| 40° | 2786    |
| 45° | 994     |
| 50° | 384     |
| 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°    | 1332.2 | 33.3      |
| 10°-20°   | 2008.8 | 50.2      |
| 20°-30°   | 613.3  | 15.3      |
| 30°-40°   | 44.3   | 1.1       |
| 40°-50°   | 5.1    | 0.1       |
| 50°-60°   | 0.2    | 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°    | 3954.3 | 98.8      |
| 0°-40°    | 3998.5 | 99.9      |
| 0°-60°    | 4003.8 | 100.0     |
| 0°-90°    | 4003.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4003.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 16803 |      |
| 5°  | 15372 | ###  |
| 15° | 7416  | 2009 |
| 25° | 899   | 613  |
| 35° | 54    | 44   |
| 45° | 6     | 5    |
| 55° | 0     | 0    |
| 65° | 0     | 0    |
| 75° | 0     | 0    |
| 85° | 0     | 0    |
| 90° | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      |
|-------|---------|
| 0°    | 16802.8 |
| 1°    | 16613.3 |
| 2°    | 16340.7 |
| 3°    | 16135.7 |
| 4°    | 15874.6 |
| 5°    | 15371.8 |
| 6°    | 14739.5 |
| 7°    | 13948.5 |
| 8°    | 13132.5 |
| 9°    | 12262.3 |
| 10°   | 11351.5 |
| 11°   | 10483.2 |
| 12°   | 9688.4  |
| 13°   | 8926.5  |
| 14°   | 8191.6  |
| 15°   | 7416.1  |
| 17.5° | 5571.3  |
| 20°   | 3908.2  |
| 22.5° | 2438.5  |
| 25°   | 899.2   |
| 27.5° | 363.6   |
| 30°   | 201.2   |
| 32.5° | 100.5   |
| 35°   | 54.1    |
| 37.5° | 30.9    |
| 40°   | 17.3    |
| 42.5° | 9.6     |
| 45°   | 5.7     |
| 47.5° | 2.0     |
| 50°   | 2.0     |
| 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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## Scaled Data Report



— 0°-180°

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

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Scaled Data Report



(END OF REPORT)