

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: P1191624

Luminaire Tested: **LDA4A20930D010TE LAR25NF 4LA1**

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: P1191624  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25629)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA4A20930D010TE LAR25NF 4LA1  
Description: PORTFOLIO 4" Adjustable Reflector, Self-flange Trim Ring, 25° Narrow Flood Optic, at 0° tilt  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

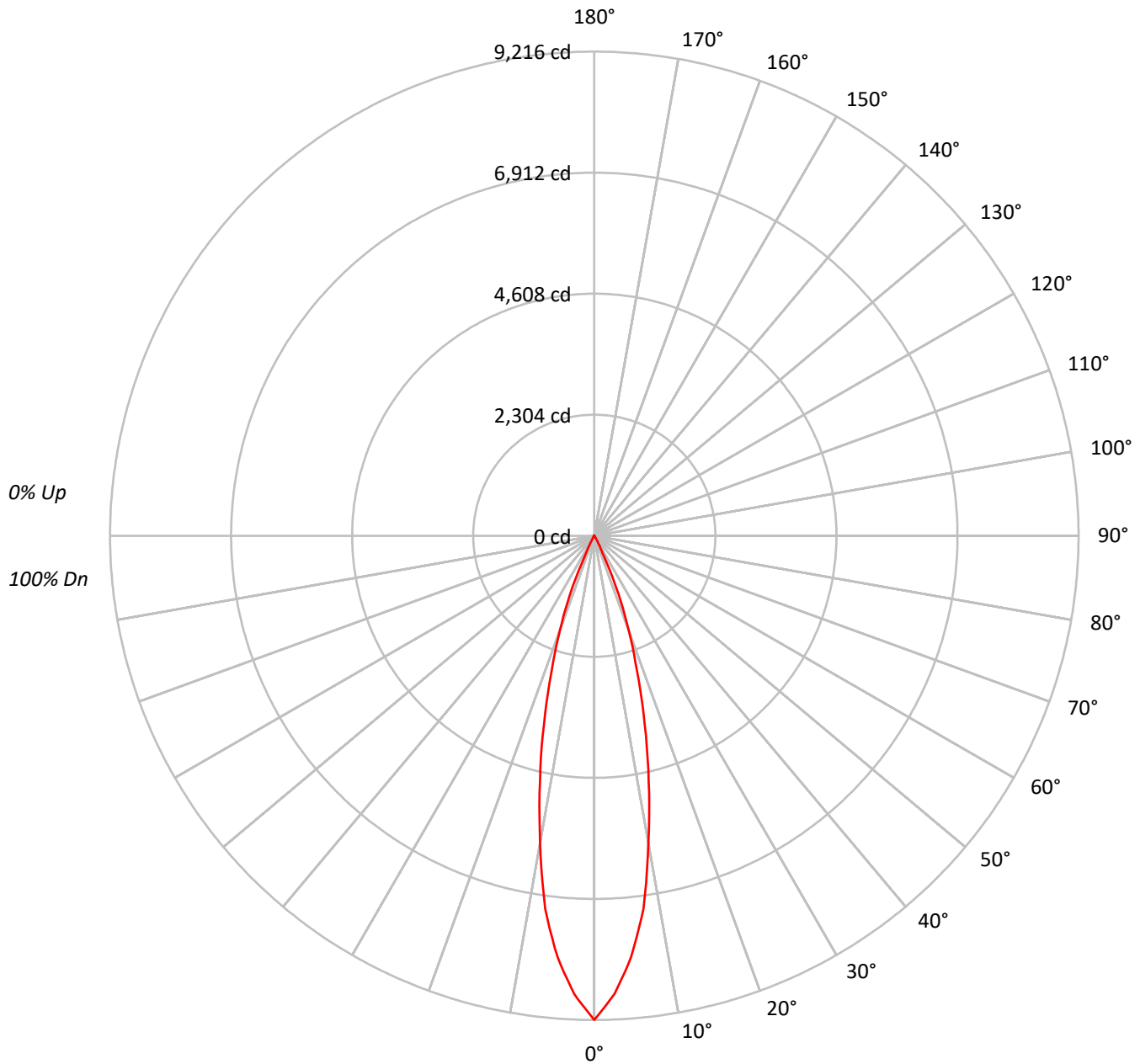
Lumens per Lamp: N/A  
Luminaire Lumens: 2040.1 lumens  
Efficiency: N/A  
Efficacy: 70.8 lumens/watt  
Spacing Criteria (0/90/45): 0.43 / 0.43 / 0.45  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.8  
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 | 105 |  |  | 103 | 102 | 101 |  |  | 100 |
| 2   | 112 | 108 | 105 | 103 | 109 | 106 | 104 | 102 |  | 103 | 101 | 99  |  |  | 100 | 99  | 97  |  |  | 98  |
| 3   | 108 | 104 | 100 | 97  | 106 | 102 | 99  | 97  |  | 100 | 97  | 95  |  |  | 98  | 96  | 94  |  |  | 96  |
| 4   | 105 | 100 | 96  | 93  | 103 | 99  | 95  | 93  |  | 97  | 94  | 92  |  |  | 95  | 93  | 91  |  |  | 93  |
| 5   | 102 | 96  | 92  | 89  | 101 | 95  | 92  | 89  |  | 94  | 91  | 88  |  |  | 92  | 90  | 88  |  |  | 91  |
| 6   | 99  | 93  | 89  | 86  | 98  | 93  | 89  | 86  |  | 91  | 88  | 85  |  |  | 90  | 87  | 85  |  |  | 89  |
| 7   | 97  | 90  | 86  | 83  | 95  | 90  | 86  | 83  |  | 89  | 85  | 83  |  |  | 88  | 85  | 83  |  |  | 87  |
| 8   | 94  | 88  | 84  | 81  | 93  | 87  | 83  | 81  |  | 86  | 83  | 81  |  |  | 85  | 82  | 80  |  |  | 85  |
| 9   | 92  | 85  | 81  | 79  | 91  | 85  | 81  | 79  |  | 84  | 81  | 78  |  |  | 83  | 80  | 78  |  |  | 83  |
| 10  | 89  | 83  | 79  | 76  | 89  | 83  | 79  | 76  |  | 82  | 79  | 76  |  |  | 81  | 78  | 76  |  |  | 81  |

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 1136741 |
| 5°  | 996453  |
| 10° | 743212  |
| 15° | 472785  |
| 20° | 250710  |
| 25° | 56575   |
| 30° | 13588   |
| 35° | 3900    |
| 40° | 1336    |
| 45° | 401     |
| 50° | 230     |
| 55° | 258     |
| 60° | 296     |
| 65° | 0       |
| 70° | 0       |
| 75° | 0       |
| 80° | 0       |
| 85° | 0       |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 704.0  | 34.5      |
| 10°-20°   | 1011.5 | 49.6      |
| 20°-30°   | 299.1  | 14.7      |
| 30°-40°   | 21.2   | 1.0       |
| 40°-50°   | 2.5    | 0.1       |
| 50°-60°   | 1.1    | 0.1       |
| 60°-70°   | 0.7    | 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°    | 2014.6 | 98.8      |
| 0°-40°    | 2035.8 | 99.8      |
| 0°-60°    | 2039.3 | 100.0     |
| 0°-90°    | 2040.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2040.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 9216 |      |
| 5°  | 8048 | 704  |
| 15° | 3702 | 1011 |
| 25° | 416  | 299  |
| 35° | 26   | 21   |
| 45° | 2    | 2    |
| 55° | 1    | 1    |
| 65° | 0    | 1    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 9215.9 |
| 2.5°  | 8732.0 |
| 5°    | 8047.8 |
| 7.5°  | 7158.6 |
| 10°   | 5933.9 |
| 12.5° | 4782.3 |
| 15°   | 3702.4 |
| 17.5° | 2697.9 |
| 20°   | 1910.0 |
| 22.5° | 1209.4 |
| 25°   | 415.7  |
| 27.5° | 181.3  |
| 30°   | 95.4   |
| 32.5° | 48.2   |
| 35°   | 25.9   |
| 37.5° | 15.3   |
| 40°   | 8.3    |
| 42.5° | 4.8    |
| 45°   | 2.3    |
| 47.5° | 1.2    |
| 50°   | 1.2    |
| 52.5° | 1.2    |
| 55°   | 1.2    |
| 57.5° | 1.2    |
| 60°   | 1.2    |
| 62.5° | 1.2    |
| 65°   | 0.0    |
| 67.5° | 1.2    |
| 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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Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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## Scaled Data Report



— 0°-180°

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