

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: P1192172

Luminaire Tested: **LDA6A40927D010TE LARH20SP 6LAL1LI**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P1192172  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26662)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDA6A40927D010TE LARH20SP 6LAL1LI  
Description: PORTFOLIO 6" Lensed Adjustable, Self-flanged, 20° Spot  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

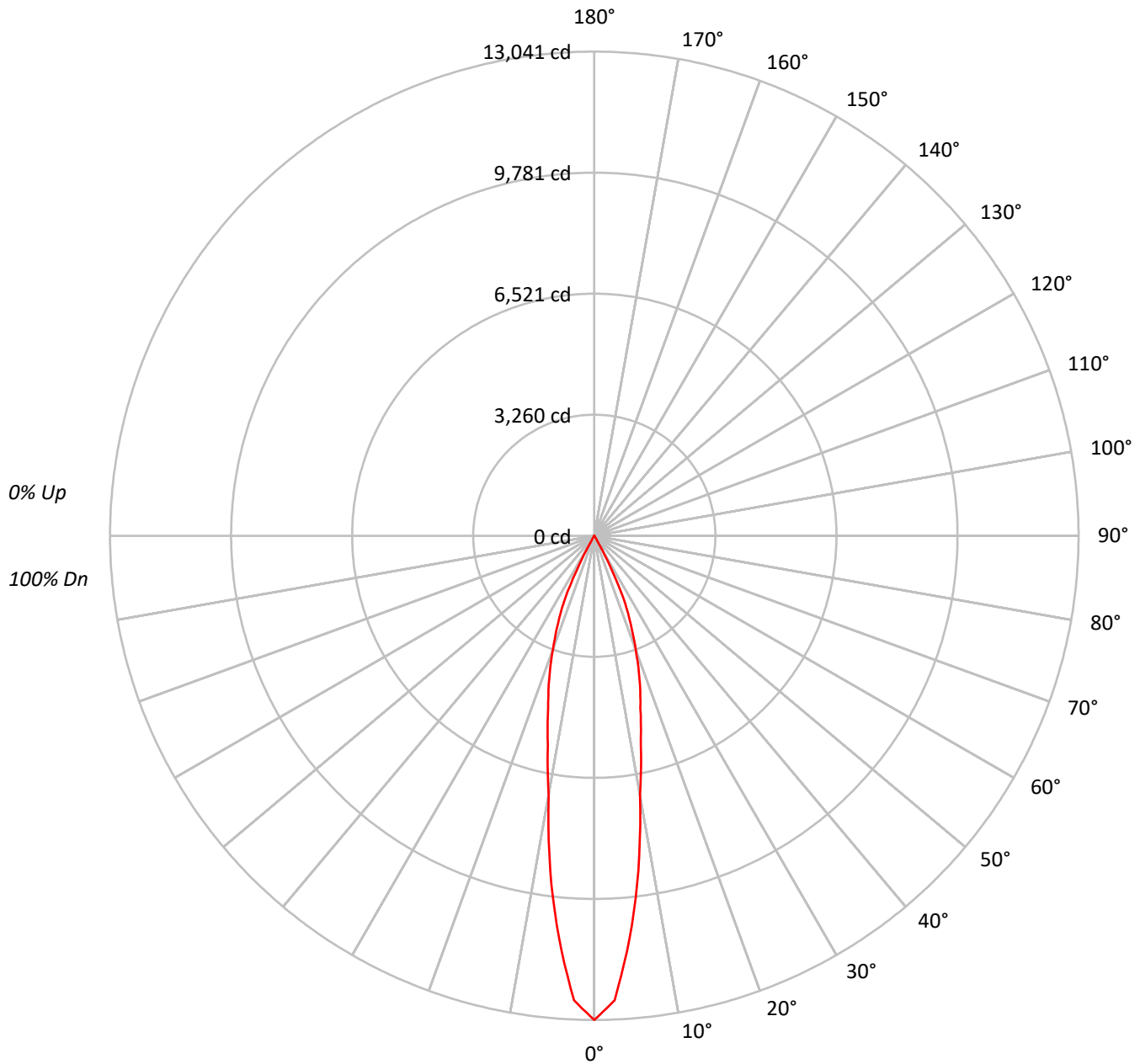
Lumens per Lamp: N/A  
Luminaire Lumens: 3080.2 lumens  
Efficiency: N/A  
Efficacy: 61.9 lumens/watt  
Spacing Criteria (0/90/45): 0.37 / 0.37 / 0.47  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 49.8  
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



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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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  | 30  | 10  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 115 | 113 | 111 | 109 | 113 | 111 | 109 | 107 | 107 | 105 | 104 | 103 | 102 | 101 | 100 | 99  | 98  | 96  |    |    |
| 2   | 111 | 107 | 104 | 102 | 109 | 106 | 103 | 100 | 102 | 100 | 98  | 100 | 98  | 96  | 97  | 96  | 94  | 93  |    |    |
| 3   | 107 | 102 | 99  | 96  | 105 | 101 | 98  | 95  | 99  | 96  | 94  | 96  | 94  | 92  | 94  | 92  | 91  | 89  |    |    |
| 4   | 104 | 98  | 94  | 91  | 102 | 97  | 93  | 91  | 95  | 92  | 90  | 93  | 91  | 89  | 92  | 89  | 88  | 86  |    |    |
| 5   | 101 | 94  | 90  | 87  | 99  | 94  | 90  | 87  | 92  | 89  | 86  | 90  | 88  | 85  | 89  | 87  | 85  | 83  |    |    |
| 6   | 97  | 91  | 87  | 84  | 96  | 90  | 86  | 83  | 89  | 85  | 83  | 88  | 85  | 82  | 87  | 84  | 82  | 81  |    |    |
| 7   | 94  | 88  | 83  | 80  | 93  | 87  | 83  | 80  | 86  | 83  | 80  | 85  | 82  | 79  | 84  | 81  | 79  | 78  |    |    |
| 8   | 92  | 85  | 81  | 78  | 91  | 84  | 80  | 77  | 83  | 80  | 77  | 83  | 79  | 77  | 82  | 79  | 77  | 76  |    |    |
| 9   | 89  | 82  | 78  | 75  | 88  | 82  | 78  | 75  | 81  | 77  | 75  | 80  | 77  | 75  | 79  | 76  | 74  | 73  |    |    |
| 10  | 87  | 80  | 75  | 73  | 86  | 79  | 75  | 73  | 79  | 75  | 72  | 78  | 75  | 72  | 77  | 74  | 72  | 71  |    |    |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 714926 |
| 5°  | 599371 |
| 10° | 394448 |
| 15° | 272130 |
| 20° | 189646 |
| 25° | 113045 |
| 30° | 11660  |
| 35° | 1111   |
| 40° | 680    |
| 45° | 488    |
| 50° | 478    |
| 55° | 679    |
| 60° | 691    |
| 65° | 610    |
| 70° | 513    |
| 75° | 508    |
| 80° | 474    |
| 85° | 503    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 922.2  | 29.9      |
| 10°-20°   | 1349.6 | 43.8      |
| 20°-30°   | 767.3  | 24.9      |
| 30°-40°   | 22.0   | 0.7       |
| 40°-50°   | 5.3    | 0.2       |
| 50°-60°   | 5.9    | 0.2       |
| 60°-70°   | 4.7    | 0.2       |
| 70°-80°   | 2.5    | 0.1       |
| 80°-90°   | 0.6    | 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°    | 3039.1 | 98.7      |
| 0°-40°    | 3061.2 | 99.4      |
| 0°-60°    | 3072.3 | 99.7      |
| 0°-90°    | 3080.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3080.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 13041 |      |
| 5°  | 10892 | 922  |
| 15° | 4795  | 1350 |
| 25° | 1869  | 767  |
| 35° | 17    | 22   |
| 45° | 6     | 5    |
| 55° | 7     | 6    |
| 65° | 5     | 5    |
| 75° | 2     | 2    |
| 85° | 1     | 1    |
| 90° | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      |
|-------|---------|
| 0°    | 13041.3 |
| 2.5°  | 12521.9 |
| 5°    | 10891.8 |
| 7.5°  | 9101.9  |
| 10°   | 7086.0  |
| 12.5° | 5780.7  |
| 15°   | 4794.9  |
| 17.5° | 4050.9  |
| 20°   | 3250.8  |
| 22.5° | 2551.2  |
| 25°   | 1868.9  |
| 27.5° | 866.5   |
| 30°   | 184.2   |
| 32.5° | 22.9    |
| 35°   | 16.6    |
| 37.5° | 12.7    |
| 40°   | 9.5     |
| 42.5° | 7.9     |
| 45°   | 6.3     |
| 47.5° | 5.6     |
| 50°   | 5.6     |
| 52.5° | 6.3     |
| 55°   | 7.1     |
| 57.5° | 7.1     |
| 60°   | 6.3     |
| 62.5° | 5.6     |
| 65°   | 4.7     |
| 67.5° | 3.9     |
| 70°   | 3.2     |
| 72.5° | 3.2     |
| 75°   | 2.4     |
| 77.5° | 1.5     |
| 80°   | 1.5     |
| 82.5° | 0.8     |
| 85°   | 0.8     |
| 87.5° | 0.0     |
| 90°   | 0.0     |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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Scaled Data Report





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## Scaled Data Report



— 0°-180°

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Scaled Data Report



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