

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: P208948

Luminaire Tested: **LDSQA6A55827D010TE LARH30NF 6LSQA1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P208948  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26623)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDSQA6A55827D010TE LARH30NF 6LSQA1H  
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,  
SELF-FLANGED, 30° NARROW FLOOD  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4859.1 lumens  
Efficiency: N/A  
Efficacy: 79.9 lumens/watt  
Spacing Criteria (0/90/45): 0.57 / 0.57 / 0.55  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

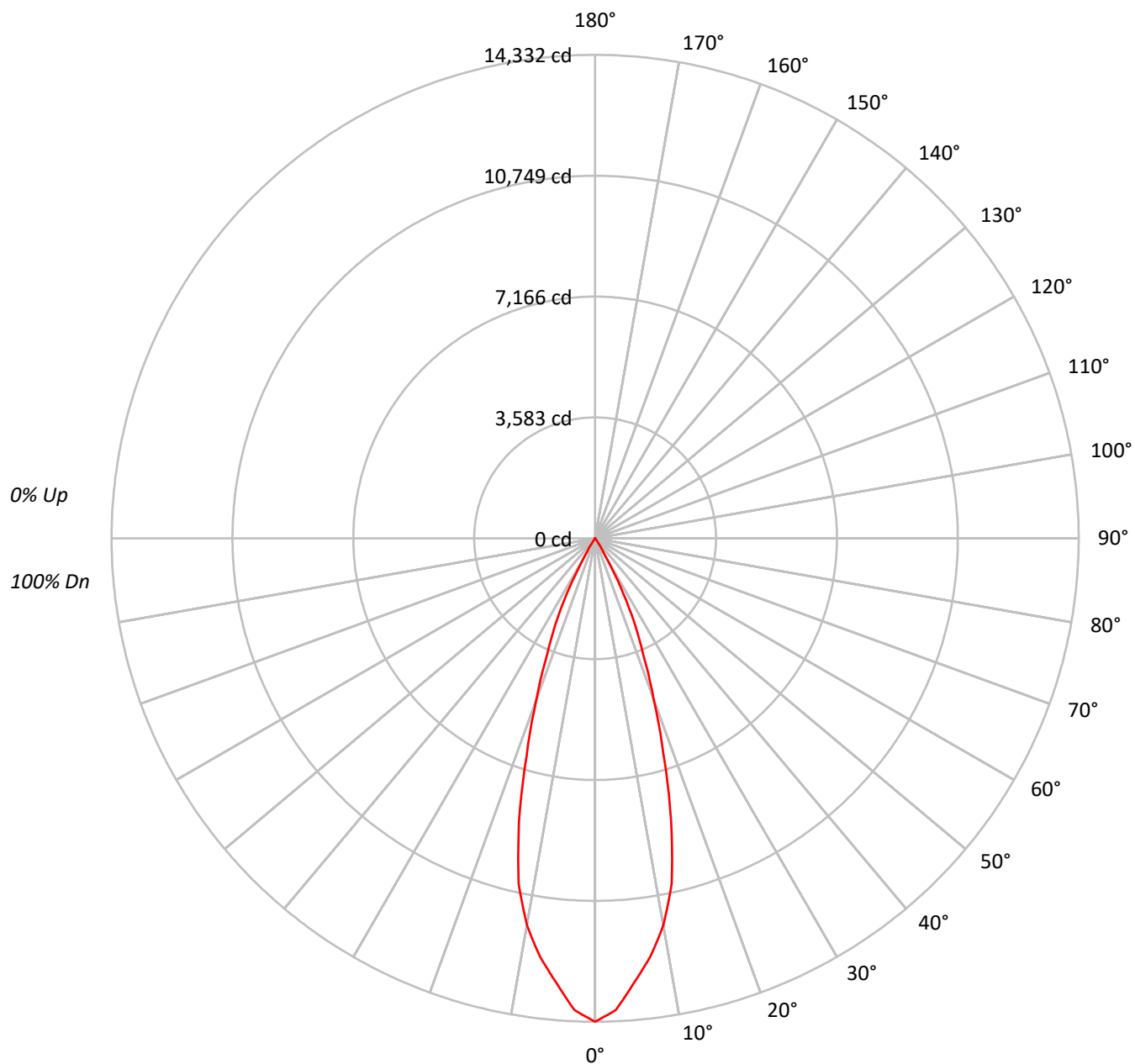
Input Watts (W): 60.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P208948

CATALOG NUMBER: LDSQA6A55827D010TE LARH30NF 6LSQA1H

### Luminous Intensity Polar Plot





TEST NUMBER: P208948

CATALOG NUMBER: LDSQA6A55827D010TE LARH30NF 6LSQA1H

**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 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 |  | 103 | 102 | 101 |  | 99  |
| 2   | 111 | 107 | 104 | 101 | 109 | 105 | 103 | 100 | 102 | 100 | 98  |  | 99  | 98  | 96  |  | 97  |
| 3   | 107 | 102 | 98  | 95  | 105 | 101 | 97  | 95  | 98  | 95  | 93  |  | 96  | 94  | 92  |  | 94  |
| 4   | 103 | 98  | 94  | 90  | 102 | 97  | 93  | 90  | 95  | 91  | 89  |  | 93  | 90  | 88  |  | 91  |
| 5   | 100 | 94  | 89  | 86  | 99  | 93  | 89  | 86  | 91  | 88  | 85  |  | 90  | 87  | 84  |  | 88  |
| 6   | 97  | 90  | 86  | 82  | 95  | 89  | 85  | 82  | 88  | 84  | 82  |  | 87  | 84  | 81  |  | 86  |
| 7   | 94  | 87  | 82  | 79  | 93  | 86  | 82  | 79  | 85  | 81  | 79  |  | 84  | 81  | 78  |  | 83  |
| 8   | 91  | 84  | 79  | 76  | 90  | 83  | 79  | 76  | 82  | 78  | 76  |  | 81  | 78  | 75  |  | 80  |
| 9   | 88  | 81  | 76  | 73  | 87  | 80  | 76  | 73  | 80  | 76  | 73  |  | 79  | 75  | 73  |  | 78  |
| 10  | 85  | 78  | 74  | 71  | 84  | 78  | 74  | 71  | 77  | 73  | 71  |  | 76  | 73  | 70  |  | 76  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 617074 |
| 5°  | 571560 |
| 10° | 509179 |
| 15° | 388543 |
| 20° | 232939 |
| 25° | 128377 |
| 30° | 31759  |
| 35° | 2455   |
| 40° | 691    |
| 45° | 268    |
| 50° | 121    |
| 55° | 135    |
| 60° | 155    |
| 65° | 92     |
| 70° | 113    |
| 75° | 150    |
| 80° | 223    |
| 85° | 0      |



TEST NUMBER: P208948

CATALOG NUMBER: LDSQA6A55827D010TE LARH30NF 6LSQA1H

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1216.7 | 25.0      |
| 10°-20°   | 2332.4 | 48.0      |
| 20°-30°   | 1204.5 | 24.8      |
| 30°-40°   | 97.6   | 2.0       |
| 40°-50°   | 4.0    | 0.1       |
| 50°-60°   | 1.6    | 0.0       |
| 60°-70°   | 1.2    | 0.0       |
| 70°-80°   | 1.0    | 0.0       |
| 80°-90°   | 0.1    | 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°    | 4753.6 | 97.8      |
| 0°-40°    | 4851.2 | 99.8      |
| 0°-60°    | 4856.8 | 100.0     |
| 0°-90°    | 4859.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 4859.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | Flux |
|-----|-------|------|
| 0°  | 14332 |      |
| 5°  | 13224 | ###  |
| 15° | 8717  | 2332 |
| 25° | 2702  | 1205 |
| 35° | 47    | 98   |
| 45° | 4     | 4    |
| 55° | 2     | 2    |
| 65° | 1     | 1    |
| 75° | 1     | 1    |
| 85° | 0     | 0    |
| 90° | 0     |      |



TEST NUMBER: P208948

CATALOG NUMBER: LDSQA6A55827D010TE LARH30NF 6LSQA1H

**CANDELA DISTRIBUTION (FULL):**

| 0°    |         |
|-------|---------|
| 0°    | 14332.0 |
| 2.5°  | 14005.1 |
| 5°    | 13224.4 |
| 7.5°  | 12513.4 |
| 10°   | 11646.4 |
| 12.5° | 10480.7 |
| 15°   | 8716.7  |
| 17.5° | 6758.0  |
| 20°   | 5083.9  |
| 22.5° | 3727.1  |
| 25°   | 2702.3  |
| 27.5° | 1627.4  |
| 30°   | 638.8   |
| 32.5° | 271.4   |
| 35°   | 46.7    |
| 37.5° | 22.9    |
| 40°   | 12.3    |
| 42.5° | 7.0     |
| 45°   | 4.4     |
| 47.5° | 2.6     |
| 50°   | 1.8     |
| 52.5° | 1.8     |
| 55°   | 1.8     |
| 57.5° | 1.8     |
| 60°   | 1.8     |
| 62.5° | 1.8     |
| 65°   | 0.9     |
| 67.5° | 0.9     |
| 70°   | 0.9     |
| 72.5° | 0.9     |
| 75°   | 0.9     |
| 77.5° | 0.9     |
| 80°   | 0.9     |
| 82.5° | 0.0     |
| 85°   | 0.0     |
| 87.5° | 0.0     |
| 90°   | 0.0     |



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)