

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: P170393

Luminaire Tested: **LDA4A18927D010TE LAR15SP 4LA1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P170393
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25628)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA4A18927D010TE LAR15SP 4LA1
Description: PORTFOLIO 4" Adjustable Reflector, Self-flange Trim Ring, 15° Spot
Optic, at 0° tilt
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

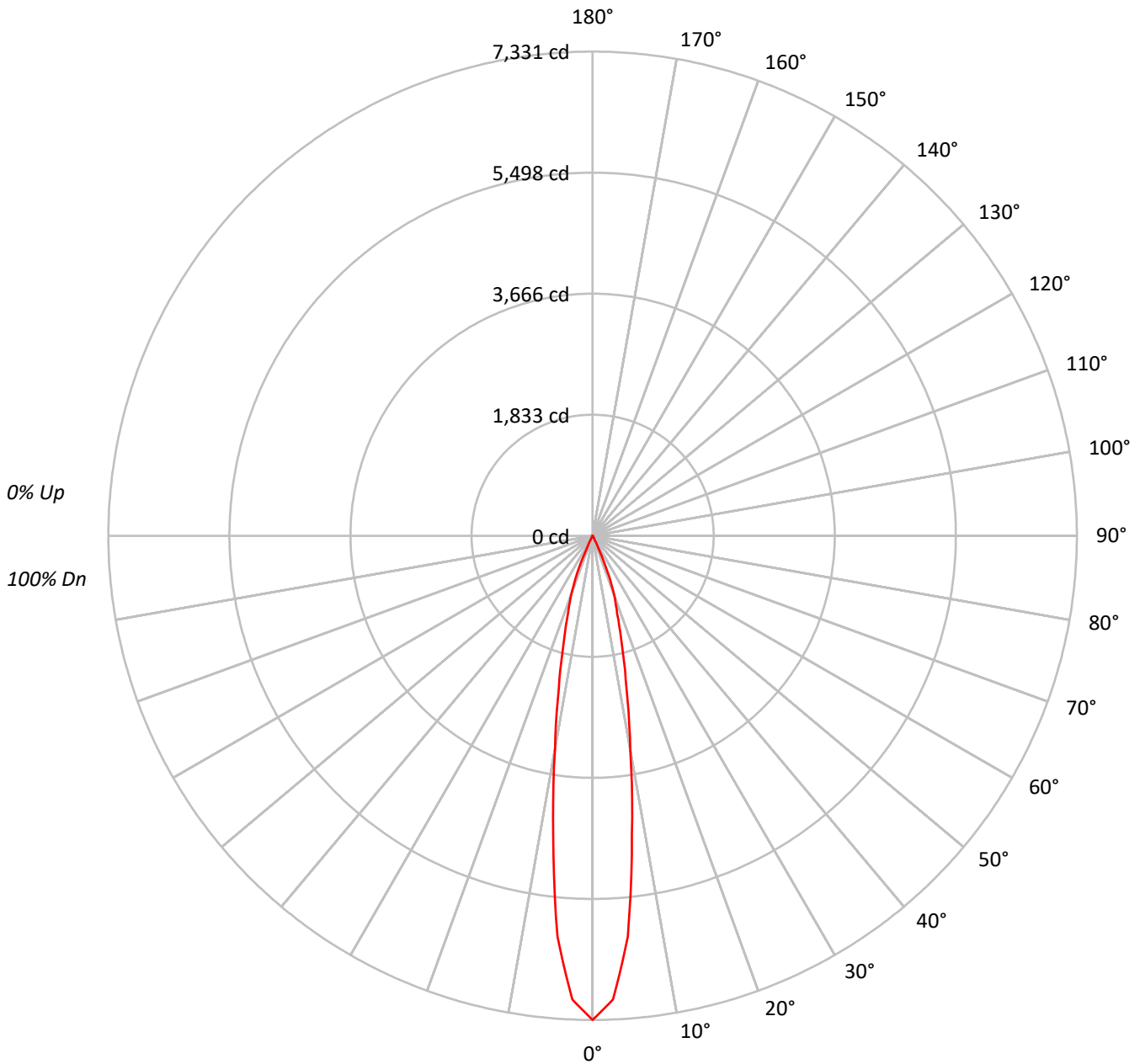
Lumens per Lamp: N/A
Luminaire Lumens: 1126.2 lumens
Efficiency: N/A
Efficacy: 38.7 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.32 / 0.35
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 29.12
Input Voltage (V): NR
Input Current (A_{in}): 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: P170393
CATALOG NUMBER: LDA4A18927D010TE LAR15SP 4LA1

Luminous Intensity Polar Plot





TEST NUMBER: P170393

CATALOG NUMBER: LDA4A18927D010TE LAR15SP 4LA1

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | 0 | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 99 | 97 |
| 1 | 115 | 113 | 112 | 110 | 113 | 111 | 110 | 108 | 107 | 106 | 105 | 104 | 103 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 95 |
| 2 | 112 | 109 | 106 | 104 | 110 | 107 | 105 | 102 | 104 | 102 | 100 | 101 | 100 | 98 | 98 | 97 | 96 | 95 | 95 | 94 | 92 |
| 3 | 109 | 105 | 101 | 99 | 107 | 103 | 100 | 98 | 101 | 98 | 96 | 99 | 97 | 95 | 97 | 95 | 94 | 92 | 92 | 91 | 90 |
| 4 | 106 | 101 | 97 | 95 | 104 | 100 | 97 | 94 | 98 | 95 | 93 | 96 | 94 | 92 | 95 | 93 | 91 | 90 | 89 | 88 | 86 |
| 5 | 103 | 98 | 94 | 91 | 102 | 97 | 94 | 91 | 95 | 92 | 90 | 94 | 91 | 89 | 93 | 90 | 89 | 88 | 87 | 86 | 84 |
| 6 | 101 | 95 | 91 | 89 | 99 | 94 | 91 | 88 | 93 | 90 | 88 | 92 | 89 | 87 | 91 | 88 | 87 | 86 | 85 | 84 | 82 |
| 7 | 98 | 92 | 89 | 86 | 97 | 92 | 88 | 86 | 91 | 88 | 85 | 90 | 87 | 85 | 89 | 86 | 85 | 84 | 83 | 82 | 80 |
| 8 | 96 | 90 | 86 | 84 | 95 | 90 | 86 | 84 | 89 | 86 | 83 | 88 | 85 | 83 | 87 | 85 | 83 | 82 | 81 | 80 | 78 |
| 9 | 94 | 88 | 84 | 82 | 93 | 87 | 84 | 82 | 87 | 84 | 81 | 86 | 83 | 81 | 85 | 83 | 81 | 80 | 79 | 78 | 76 |
| 10 | 92 | 86 | 82 | 80 | 91 | 85 | 82 | 80 | 85 | 82 | 80 | 84 | 81 | 79 | 84 | 81 | 79 | 78 | 77 | 76 | 74 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 904259 |
| 5° | 754391 |
| 10° | 410139 |
| 15° | 217863 |
| 20° | 124108 |
| 25° | 24293 |
| 30° | 5028 |
| 35° | 1491 |
| 40° | 564 |
| 45° | 244 |
| 50° | 134 |
| 55° | 151 |
| 60° | 173 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



TEST NUMBER: P170393

CATALOG NUMBER: LDA4A18927D010TE LAR15SP 4LA1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 483.0 | 42.9 |
| 10°-20° | 492.1 | 43.7 |
| 20°-30° | 141.2 | 12.5 |
| 30°-40° | 8.0 | 0.7 |
| 40°-50° | 1.2 | 0.1 |
| 50°-60° | 0.6 | 0.1 |
| 60°-70° | 0.1 | 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° | 1116.3 | 99.1 |
| 0°-40° | 1124.3 | 99.8 |
| 0°-60° | 1126.1 | 100.0 |
| 0°-90° | 1126.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1126.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 7331 | |
| 5° | 6093 | 483 |
| 15° | 1706 | 492 |
| 25° | 178 | 141 |
| 35° | 10 | 8 |
| 45° | 1 | 1 |
| 55° | 1 | 1 |
| 65° | 0 | 0 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



TEST NUMBER: P170393

CATALOG NUMBER: LDA4A18927D010TE LAR15SP 4LA1

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 7331.1 |
| 2.5° | 7027.7 |
| 5° | 6092.8 |
| 7.5° | 4564.5 |
| 10° | 3274.6 |
| 12.5° | 2361.6 |
| 15° | 1706.1 |
| 17.5° | 1234.8 |
| 20° | 945.5 |
| 22.5° | 596.2 |
| 25° | 178.5 |
| 27.5° | 68.4 |
| 30° | 35.3 |
| 32.5° | 18.3 |
| 35° | 9.9 |
| 37.5° | 5.6 |
| 40° | 3.5 |
| 42.5° | 2.1 |
| 45° | 1.4 |
| 47.5° | 0.7 |
| 50° | 0.7 |
| 52.5° | 0.7 |
| 55° | 0.7 |
| 57.5° | 0.7 |
| 60° | 0.7 |
| 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 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)