

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: P315186

Luminaire Tested: **LDA2B20NFL9050D010 PINW1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P315186
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1811-033-2)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B20NFL9050D010 PINW1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj PinHole, White oculus, matte metallic silver finish
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1613.7 lumens
Efficiency: N/A
Efficacy: 78.3 lumens/watt
Spacing Criteria (0/90/45): 0.39 / 0.39 / 0.39
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

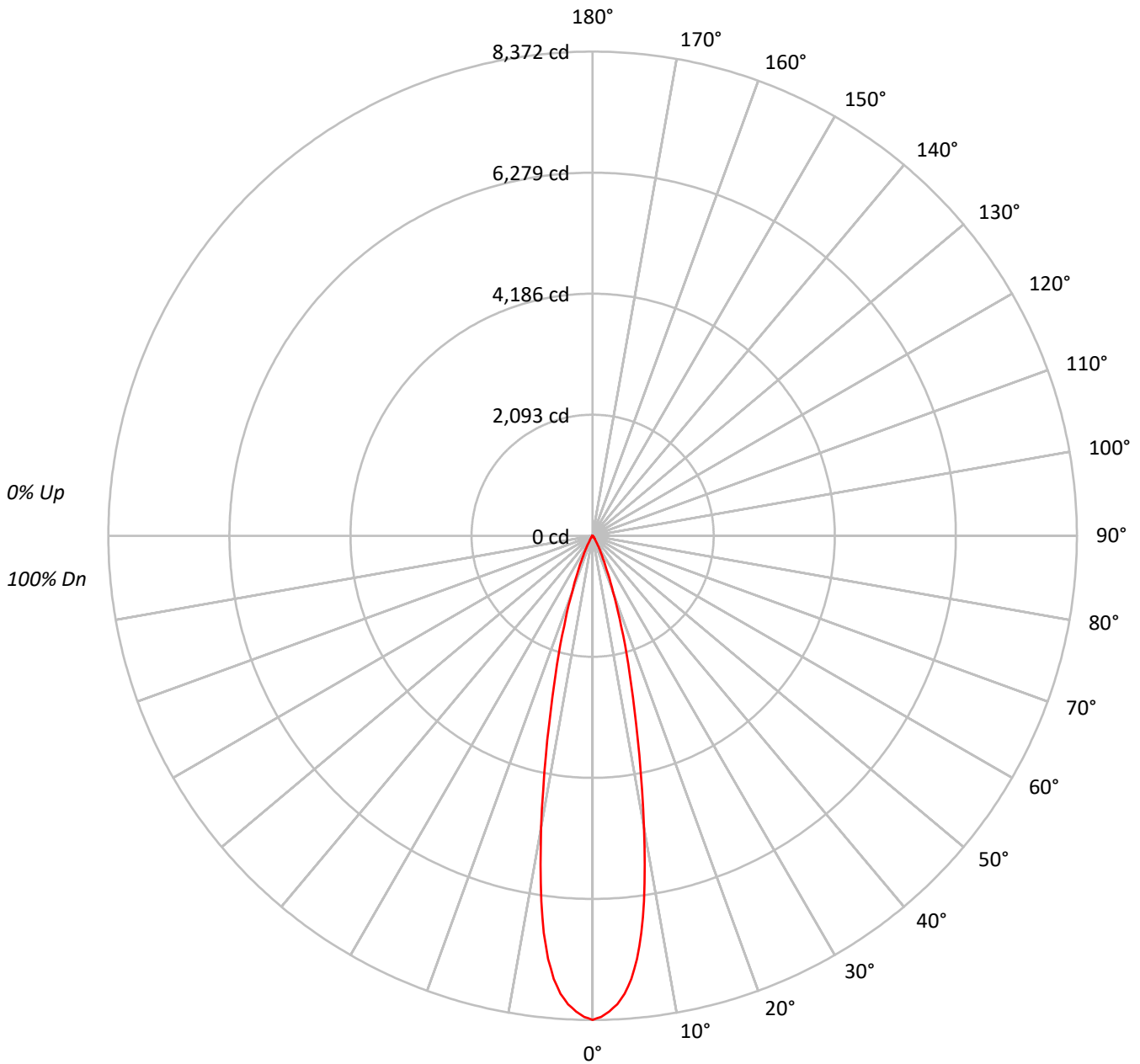
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P315186

CATALOG NUMBER: LDA2B20NFL9050D010 PINW1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P315186

CATALOG NUMBER: LDA2B20NFL9050D010 PINW1MMS

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 4130425 |
| 5° | 3809237 |
| 10° | 2566934 |
| 15° | 1265626 |
| 20° | 540618 |
| 25° | 212520 |
| 30° | 83687 |
| 35° | 36679 |
| 40° | 17647 |
| 45° | 8512 |
| 50° | 4682 |
| 55° | 2580 |
| 60° | 1480 |
| 65° | 934 |
| 70° | 1154 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



TEST NUMBER: P315186

CATALOG NUMBER: LDA2B20NFL9050D010 PINW1MMS

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 651.5 | 40.4 |
| 10°-20° | 701.7 | 43.5 |
| 20°-30° | 202.6 | 12.6 |
| 30°-40° | 42.8 | 2.6 |
| 40°-50° | 10.5 | 0.7 |
| 50°-60° | 3.0 | 0.2 |
| 60°-70° | 1.0 | 0.1 |
| 70°-80° | 0.5 | 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° | 1555.8 | 96.4 |
| 0°-40° | 1598.6 | 99.1 |
| 0°-60° | 1612.2 | 99.9 |
| 0°-90° | 1613.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1613.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 8372 | |
| 5° | 7692 | 652 |
| 15° | 2478 | 702 |
| 25° | 390 | 203 |
| 35° | 61 | 43 |
| 45° | 12 | 11 |
| 55° | 3 | 3 |
| 65° | 1 | 1 |
| 75° | 0 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



TEST NUMBER: P315186

CATALOG NUMBER: LDA2B20NFL9050D010 PINW1MMS

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 8372.0 |
| 1° | 8319.5 |
| 2° | 8230.4 |
| 3° | 8110.2 |
| 4° | 7939.7 |
| 5° | 7691.6 |
| 6° | 7356.8 |
| 7° | 6919.9 |
| 8° | 6382.7 |
| 9° | 5756.3 |
| 10° | 5123.9 |
| 11° | 4484.7 |
| 12° | 3881.2 |
| 13° | 3345.4 |
| 14° | 2874.4 |
| 15° | 2477.9 |
| 17.5° | 1637.7 |
| 20° | 1029.7 |
| 22.5° | 633.2 |
| 25° | 390.4 |
| 27.5° | 238.2 |
| 30° | 146.9 |
| 32.5° | 92.8 |
| 35° | 60.9 |
| 37.5° | 40.3 |
| 40° | 27.4 |
| 42.5° | 19.0 |
| 45° | 12.2 |
| 47.5° | 7.6 |
| 50° | 6.1 |
| 52.5° | 4.6 |
| 55° | 3.0 |
| 57.5° | 2.3 |
| 60° | 1.5 |
| 62.5° | 1.5 |
| 65° | 0.8 |
| 67.5° | 0.8 |
| 70° | 0.8 |
| 72.5° | 0.8 |
| 75° | 0.0 |
| 77.5° | 0.8 |
| 80° | 0.0 |
| 82.5° | 0.0 |



TEST NUMBER: P315186

CATALOG NUMBER: LDA2B20NFL9050D010 PINW1MMS

CANDELA DISTRIBUTION (continued):

0°
90° | 0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







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



(END OF REPORT)