

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: P279178

Luminaire Tested: **LDA2B209730D010 EU2B20NFL259730 2LBALD1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P279178
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: LDA2B209730D010 EU2B20NFL259730 2LBALD1LI
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC
AND 2in ADJ spun Refl w/lens Self-Flanged, H
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1448.7 lumens
Efficiency: N/A
Efficacy: 70.3 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

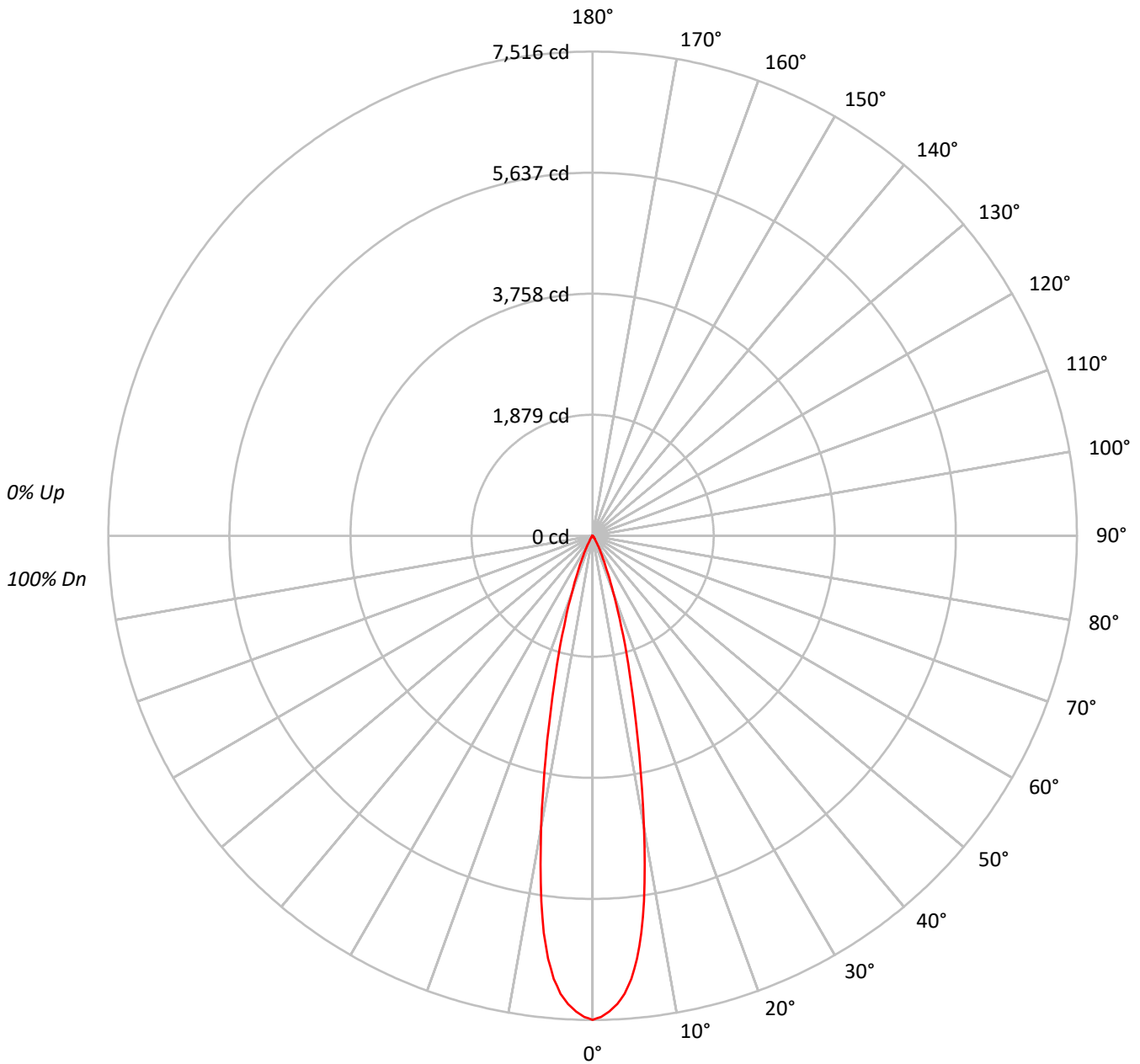
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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 | 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° | 3707959 |
| 5° | 3419676 |
| 10° | 2304424 |
| 15° | 1136198 |
| 20° | 485333 |
| 25° | 190800 |
| 30° | 75141 |
| 35° | 32945 |
| 40° | 15843 |
| 45° | 7605 |
| 50° | 4221 |
| 55° | 2322 |
| 60° | 1381 |
| 65° | 817 |
| 70° | 1010 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 584.9 | 40.4 |
| 10°-20° | 629.9 | 43.5 |
| 20°-30° | 181.9 | 12.6 |
| 30°-40° | 38.4 | 2.7 |
| 40°-50° | 9.4 | 0.7 |
| 50°-60° | 2.7 | 0.2 |
| 60°-70° | 0.9 | 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° | 1396.7 | 96.4 |
| 0°-40° | 1435.1 | 99.1 |
| 0°-60° | 1447.3 | 99.9 |
| 0°-90° | 1448.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1448.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 7516 | |
| 5° | 6905 | 585 |
| 15° | 2224 | 630 |
| 25° | 350 | 182 |
| 35° | 55 | 38 |
| 45° | 11 | 9 |
| 55° | 3 | 3 |
| 65° | 1 | 1 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 7515.7 |
| 1° | 7468.6 |
| 2° | 7388.7 |
| 3° | 7280.7 |
| 4° | 7127.7 |
| 5° | 6905.0 |
| 6° | 6604.4 |
| 7° | 6212.2 |
| 8° | 5729.9 |
| 9° | 5167.6 |
| 10° | 4599.9 |
| 11° | 4026.0 |
| 12° | 3484.2 |
| 13° | 3003.3 |
| 14° | 2580.4 |
| 15° | 2224.5 |
| 17.5° | 1470.2 |
| 20° | 924.4 |
| 22.5° | 568.4 |
| 25° | 350.5 |
| 27.5° | 213.8 |
| 30° | 131.9 |
| 32.5° | 83.3 |
| 35° | 54.7 |
| 37.5° | 36.2 |
| 40° | 24.6 |
| 42.5° | 17.1 |
| 45° | 10.9 |
| 47.5° | 6.8 |
| 50° | 5.5 |
| 52.5° | 4.1 |
| 55° | 2.7 |
| 57.5° | 2.0 |
| 60° | 1.4 |
| 62.5° | 1.4 |
| 65° | 0.7 |
| 67.5° | 0.7 |
| 70° | 0.7 |
| 72.5° | 0.7 |
| 75° | 0.0 |
| 77.5° | 0.7 |
| 80° | 0.0 |
| 82.5° | 0.0 |



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CANDELA DISTRIBUTION (continued):

0°
90° | 0.0



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— 0°-180°







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



(END OF REPORT)