

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: P280019

Luminaire Tested: **LDA2B209040D010 EU2B20FL409040 2LBAD1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P280019
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1811-033-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B209040D010 EU2B20FL409040 2LBAD1LI
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in
ADJ spun Refl, Self-Flanged, LI
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1857.4 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 0.61 / 0.61 / 0.55
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

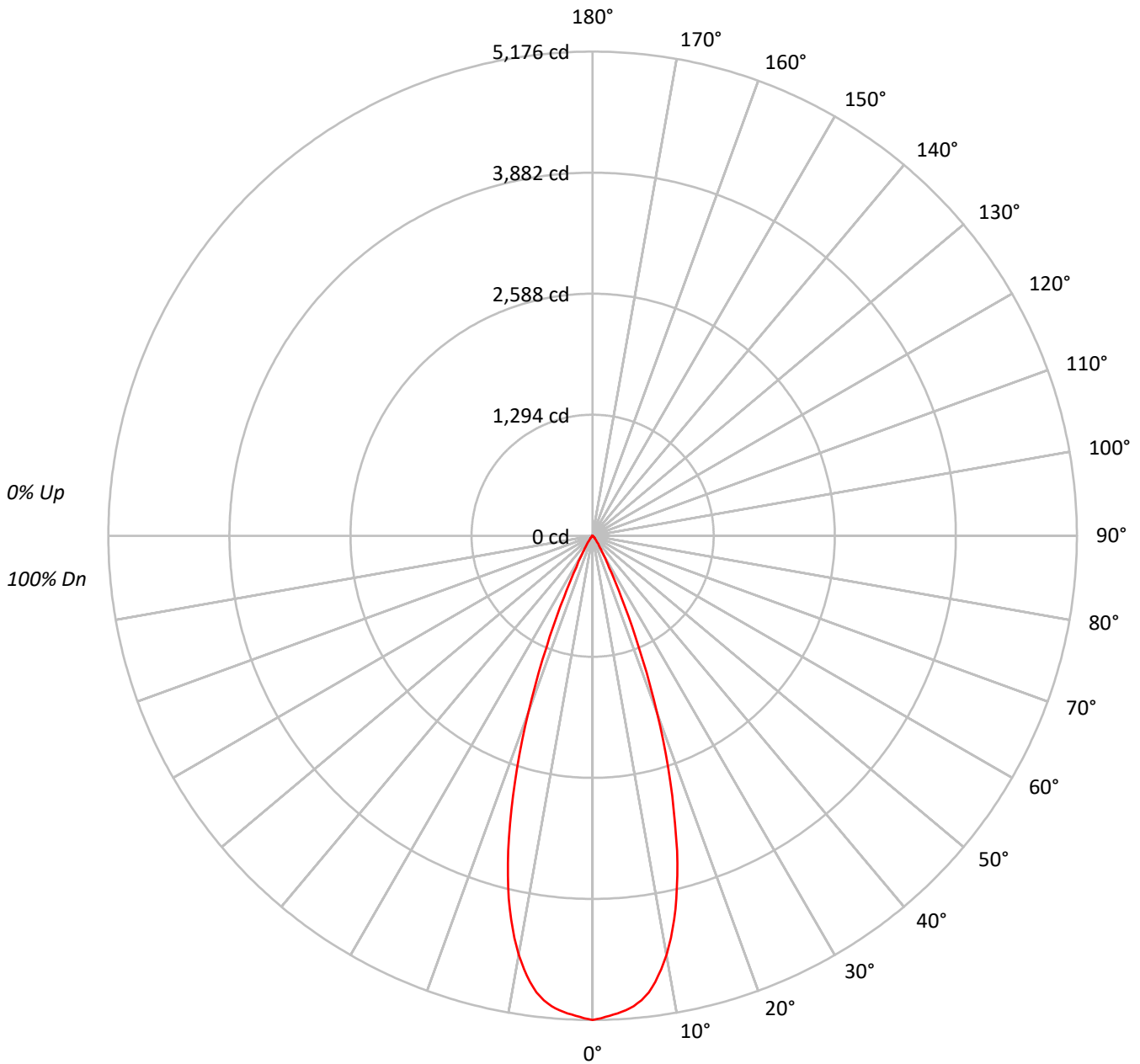
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|---|-----|--|--|--|--|--|----|--|--|--|--|--|--|--|--|----|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 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 | 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 | 109 | 112 | 110 | 109 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 99 | 99 | 98 | 96 | | | | | | | | | | | | | 96 | | | | | | | | | | | | | | | |
| 2 | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 100 | 102 | 100 | 98 | 99 | 97 | 96 | 97 | 95 | 94 | 92 | | | | | | | | | | | | | 92 | | | | | | | | | | | | | | | |
| 3 | 107 | 102 | 98 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 93 | 96 | 94 | 92 | 94 | 92 | 90 | 89 | | | | | | | | | | | | | 89 | | | | | | | | | | | | | | | |
| 4 | 103 | 98 | 93 | 90 | 102 | 97 | 93 | 90 | 95 | 91 | 89 | 93 | 90 | 88 | 91 | 89 | 87 | 85 | | | | | | | | | | | | | 85 | | | | | | | | | | | | | | | |
| 5 | 100 | 94 | 89 | 86 | 98 | 93 | 89 | 86 | 91 | 88 | 85 | 90 | 87 | 84 | 88 | 86 | 83 | 82 | | | | | | | | | | | | | 82 | | | | | | | | | | | | | | | |
| 6 | 97 | 90 | 85 | 82 | 95 | 89 | 85 | 82 | 88 | 84 | 81 | 87 | 83 | 81 | 85 | 83 | 80 | 79 | | | | | | | | | | | | | 79 | | | | | | | | | | | | | | | |
| 7 | 94 | 87 | 82 | 79 | 92 | 86 | 82 | 79 | 85 | 81 | 78 | 84 | 81 | 78 | 83 | 80 | 78 | 77 | | | | | | | | | | | | | 77 | | | | | | | | | | | | | | | |
| 8 | 91 | 84 | 79 | 76 | 90 | 83 | 79 | 76 | 82 | 78 | 76 | 81 | 78 | 75 | 80 | 77 | 75 | 74 | | | | | | | | | | | | | 74 | | | | | | | | | | | | | | | |
| 9 | 88 | 81 | 76 | 73 | 87 | 80 | 76 | 73 | 79 | 76 | 73 | 79 | 75 | 73 | 78 | 75 | 73 | 72 | | | | | | | | | | | | | 72 | | | | | | | | | | | | | | | |
| 10 | 85 | 78 | 74 | 71 | 84 | 78 | 74 | 71 | 77 | 73 | 71 | 76 | 73 | 70 | 76 | 72 | 70 | 69 | | | | | | | | | | | | | 69 | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 2553887 |
| 5° | 2499855 |
| 10° | 2278474 |
| 15° | 1779916 |
| 20° | 1053777 |
| 25° | 391725 |
| 30° | 122425 |
| 35° | 54446 |
| 40° | 25246 |
| 45° | 11931 |
| 50° | 6524 |
| 55° | 3699 |
| 60° | 1677 |
| 65° | 1051 |
| 70° | 1298 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 466.6 | 25.1 |
| 10°-20° | 927.9 | 50.0 |
| 20°-30° | 380.0 | 20.5 |
| 30°-40° | 62.9 | 3.4 |
| 40°-50° | 14.9 | 0.8 |
| 50°-60° | 4.0 | 0.2 |
| 60°-70° | 1.0 | 0.1 |
| 70°-80° | 0.1 | 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° | 1774.5 | 95.5 |
| 0°-40° | 1837.4 | 98.9 |
| 0°-60° | 1856.2 | 99.9 |
| 0°-90° | 1857.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1857.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5176 | |
| 5° | 5048 | 467 |
| 15° | 3485 | 928 |
| 25° | 720 | 380 |
| 35° | 90 | 63 |
| 45° | 17 | 15 |
| 55° | 4 | 4 |
| 65° | 1 | 1 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 5176.5 |
| 1° | 5158.6 |
| 2° | 5134.7 |
| 3° | 5113.4 |
| 4° | 5085.2 |
| 5° | 5047.7 |
| 6° | 4992.3 |
| 7° | 4919.8 |
| 8° | 4816.6 |
| 9° | 4691.3 |
| 10° | 4548.1 |
| 11° | 4381.8 |
| 12° | 4194.2 |
| 13° | 3980.2 |
| 14° | 3742.3 |
| 15° | 3484.8 |
| 17.5° | 2763.5 |
| 20° | 2007.1 |
| 22.5° | 1284.9 |
| 25° | 719.6 |
| 27.5° | 379.4 |
| 30° | 214.9 |
| 32.5° | 136.4 |
| 35° | 90.4 |
| 37.5° | 59.7 |
| 40° | 39.2 |
| 42.5° | 25.6 |
| 45° | 17.1 |
| 47.5° | 11.9 |
| 50° | 8.5 |
| 52.5° | 6.0 |
| 55° | 4.3 |
| 57.5° | 2.6 |
| 60° | 1.7 |
| 62.5° | 0.9 |
| 65° | 0.9 |
| 67.5° | 0.9 |
| 70° | 0.9 |
| 72.5° | 0.0 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 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)