

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: PORTFOLIO

Report Number: P432955

Luminaire Tested: **LAM4B308R609730DE01021MB**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P432955  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2009-969-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAM4B308R609730DE01021MB  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 60 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2092.6 lumens  
Efficiency: N/A  
Efficacy: 65.6 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.89  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

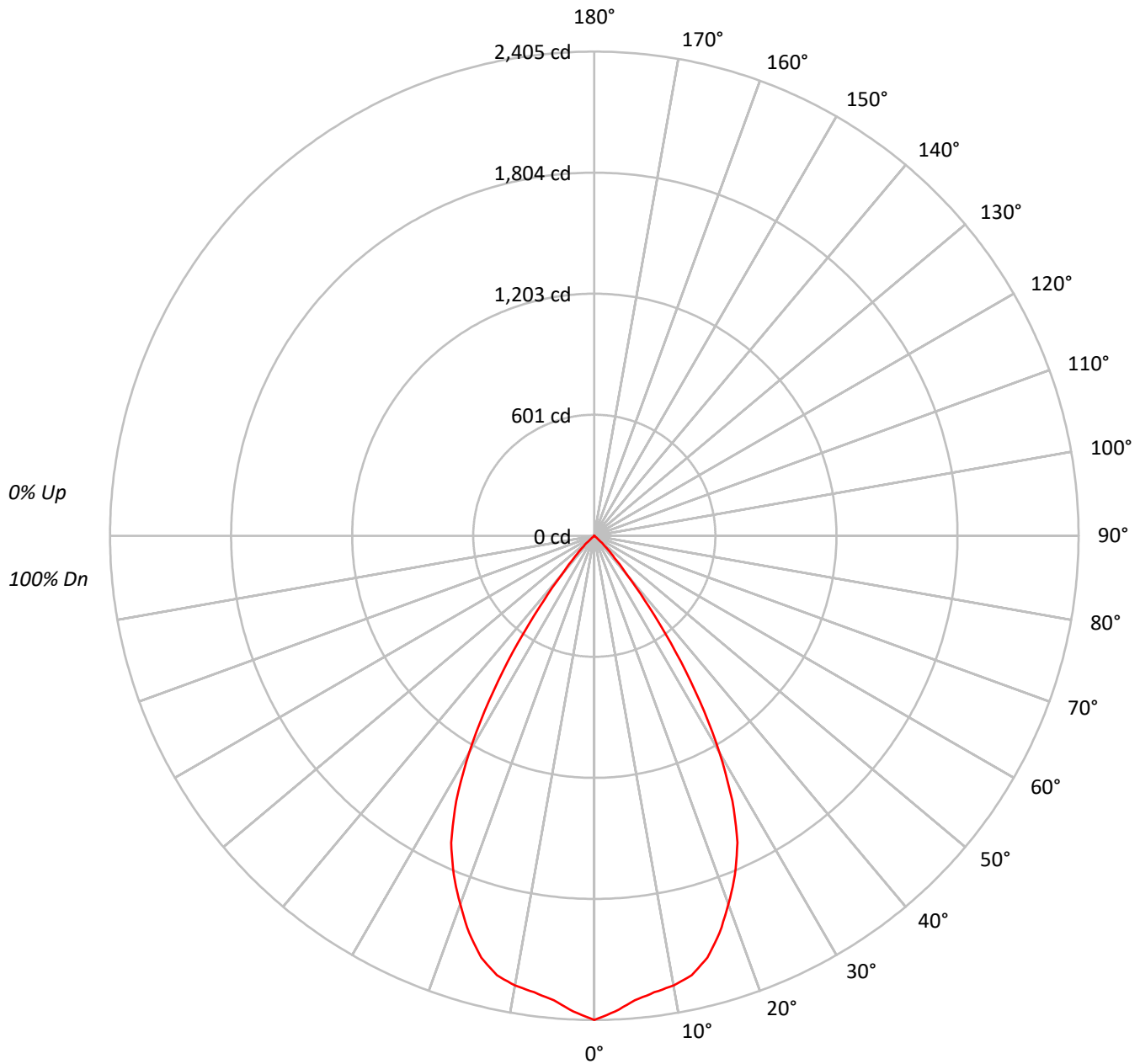
Input Watts (W): 31.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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   | 114 | 111 | 109 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 102 |  | 101 | 100 | 99  |  | 98  |
| 2   | 108 | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 99  | 96  | 93  |  | 96  | 93  | 91  |  | 93  |
| 3   | 103 | 97  | 92  | 88  | 101 | 96  | 91  | 88  | 93  | 89  | 86  |  | 91  | 87  | 85  |  | 88  |
| 4   | 98  | 91  | 85  | 81  | 96  | 90  | 85  | 81  | 88  | 83  | 80  |  | 86  | 82  | 79  |  | 84  |
| 5   | 93  | 85  | 80  | 75  | 92  | 84  | 79  | 75  | 83  | 78  | 74  |  | 81  | 77  | 74  |  | 79  |
| 6   | 89  | 80  | 74  | 70  | 87  | 79  | 74  | 70  | 78  | 73  | 69  |  | 76  | 72  | 69  |  | 75  |
| 7   | 84  | 75  | 70  | 66  | 83  | 75  | 69  | 65  | 74  | 69  | 65  |  | 72  | 68  | 65  |  | 71  |
| 8   | 80  | 71  | 65  | 61  | 79  | 71  | 65  | 61  | 70  | 65  | 61  |  | 69  | 64  | 61  |  | 68  |
| 9   | 77  | 67  | 62  | 58  | 76  | 67  | 61  | 58  | 66  | 61  | 57  |  | 65  | 60  | 57  |  | 64  |
| 10  | 73  | 64  | 58  | 54  | 72  | 63  | 58  | 54  | 62  | 58  | 54  |  | 62  | 57  | 54  |  | 61  |

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 1186627 |
| 5°  | 1146834 |
| 10° | 1136147 |
| 15° | 1107993 |
| 20° | 1022522 |
| 25° | 915654  |
| 30° | 708543  |
| 35° | 424444  |
| 40° | 163076  |
| 45° | 59587   |
| 50° | 2379    |
| 55° | 1720    |
| 60° | 1974    |
| 65° | 1167    |
| 70° | 1443    |
| 75° | 1906    |
| 80° | 2841    |
| 85° | 0       |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 219.9  | 10.5      |
| 10°-20°   | 603.4  | 28.8      |
| 20°-30°   | 752.8  | 36.0      |
| 30°-40°   | 438.5  | 21.0      |
| 40°-50°   | 73.2   | 3.5       |
| 50°-60°   | 1.9    | 0.1       |
| 60°-70°   | 1.4    | 0.1       |
| 70°-80°   | 1.1    | 0.1       |
| 80°-90°   | 0.4    | 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°    | 1576.1 | 75.3      |
| 0°-40°    | 2014.7 | 96.3      |
| 0°-60°    | 2089.8 | 99.9      |
| 0°-90°    | 2092.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2092.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2405 |      |
| 5°  | 2316 | 220  |
| 15° | 2169 | 603  |
| 25° | 1682 | 753  |
| 35° | 705  | 439  |
| 45° | 85   | 73   |
| 55° | 2    | 2    |
| 65° | 1    | 1    |
| 75° | 1    | 1    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2405.1 |
| 2.5°  | 2365.4 |
| 5°    | 2315.6 |
| 7.5°  | 2287.1 |
| 10°   | 2267.8 |
| 12.5° | 2236.3 |
| 15°   | 2169.2 |
| 17.5° | 2068.5 |
| 20°   | 1947.5 |
| 22.5° | 1824.4 |
| 25°   | 1682.0 |
| 27.5° | 1484.8 |
| 30°   | 1243.7 |
| 32.5° | 974.2  |
| 35°   | 704.7  |
| 37.5° | 444.4  |
| 40°   | 253.2  |
| 42.5° | 148.5  |
| 45°   | 85.4   |
| 47.5° | 29.5   |
| 50°   | 3.1    |
| 52.5° | 2.0    |
| 55°   | 2.0    |
| 57.5° | 2.0    |
| 60°   | 2.0    |
| 62.5° | 2.0    |
| 65°   | 1.0    |
| 67.5° | 1.0    |
| 70°   | 1.0    |
| 72.5° | 1.0    |
| 75°   | 1.0    |
| 77.5° | 1.0    |
| 80°   | 1.0    |
| 82.5° | 1.0    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 90°   | 0.0    |



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— 0°-180°







(END OF REPORT)