

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: P433857

Luminaire Tested: **LAMR4B208R559035DE010x1MW**

Issue Date: 11/23/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P433857  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2007-898-142)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 11/23/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LAMR4B208R559035DE010x1MW  
Description: PORTFOLIO 4INCH ADJUSTABLE MULTIPLE, 55 DEG TIR OPTIC  
Light Source: HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1655.2 lumens  
Efficiency: N/A  
Efficacy: 80.4 lumens/watt  
Spacing Criteria (0/90/45): 0.92 / 0.92 / 0.81  
Luminous Opening: Circular (Dia: 0.17' x H: 0')  
CIE Type: Direct

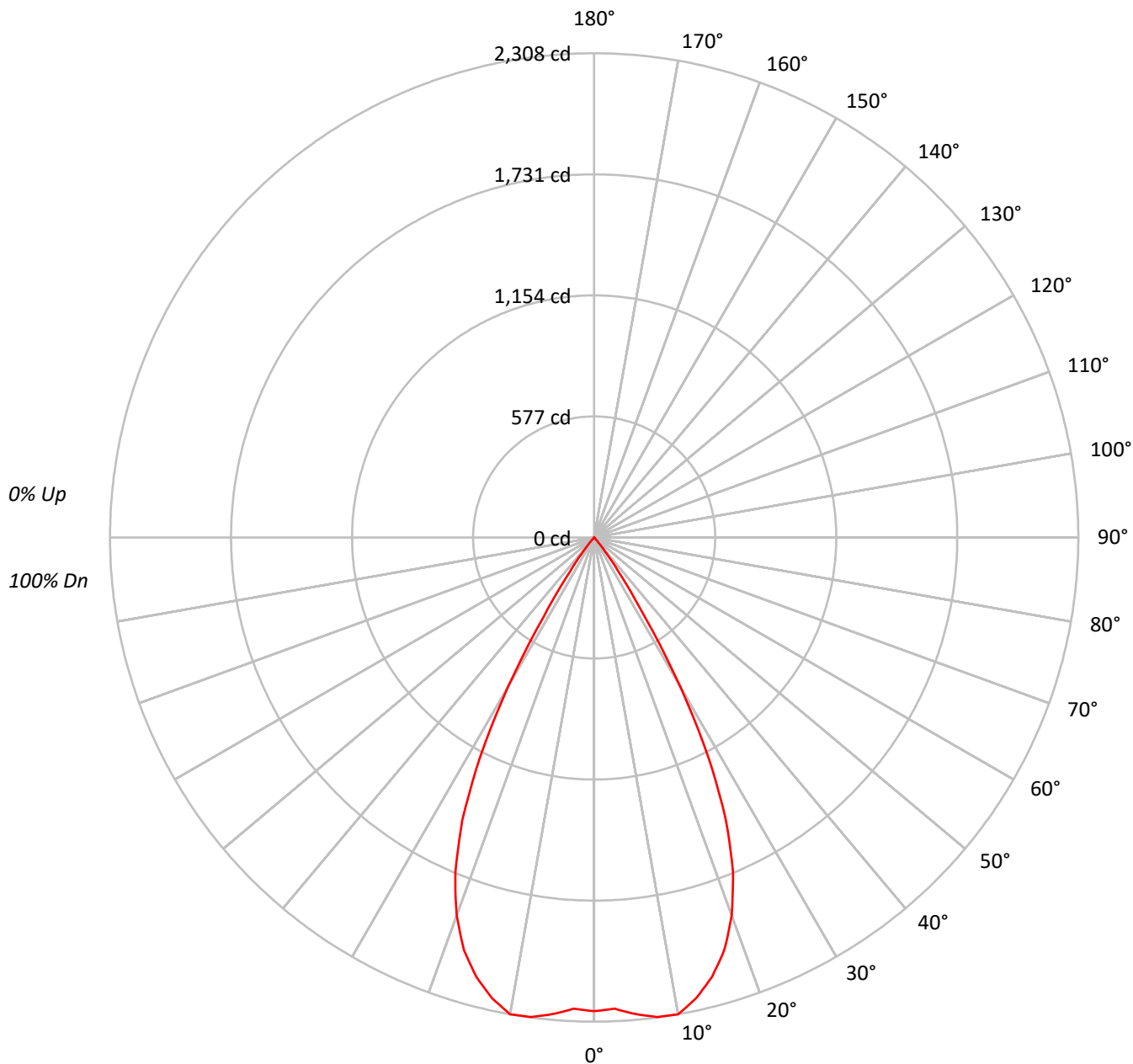
Input Watts (W): 20.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 112 | 109 | 107 | 112 | 110 | 108 | 106 | 105 | 104 | 102 |  | 102 | 101 | 99  |  | 98  |
| 2   | 109 | 105 | 101 | 98  | 107 | 103 | 100 | 97  | 100 | 97  | 95  |  | 97  | 95  | 93  |  | 94  |
| 3   | 105 | 99  | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 92  | 89  |  | 93  | 90  | 88  |  | 91  |
| 4   | 100 | 94  | 89  | 85  | 99  | 92  | 88  | 85  | 90  | 87  | 84  |  | 88  | 85  | 83  |  | 87  |
| 5   | 96  | 89  | 83  | 80  | 94  | 88  | 83  | 79  | 86  | 82  | 79  |  | 84  | 81  | 78  |  | 83  |
| 6   | 92  | 84  | 79  | 75  | 91  | 83  | 78  | 75  | 82  | 78  | 74  |  | 81  | 77  | 74  |  | 79  |
| 7   | 88  | 80  | 75  | 71  | 87  | 79  | 74  | 71  | 78  | 74  | 70  |  | 77  | 73  | 70  |  | 76  |
| 8   | 84  | 76  | 71  | 67  | 83  | 75  | 70  | 67  | 74  | 70  | 67  |  | 73  | 69  | 66  |  | 73  |
| 9   | 81  | 72  | 67  | 64  | 80  | 72  | 67  | 63  | 71  | 66  | 63  |  | 70  | 66  | 63  |  | 69  |
| 10  | 78  | 69  | 64  | 60  | 77  | 69  | 64  | 60  | 68  | 63  | 60  |  | 67  | 63  | 60  |  | 66  |

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

|     |         |
|-----|---------|
|     | 0°      |
| 0°  | 1114051 |
| 5°  | 1129648 |
| 10° | 1156086 |
| 15° | 1107737 |
| 20° | 1006456 |
| 25° | 808791  |
| 30° | 465620  |
| 35° | 135097  |
| 40° | 20610   |
| 45° | 0       |
| 50° | 0       |
| 55° | 0       |
| 60° | 0       |
| 65° | 0       |
| 70° | 0       |
| 75° | 0       |
| 80° | 0       |
| 85° | 0       |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 218.7  | 13.2      |
| 10°-20°   | 603.4  | 36.5      |
| 20°-30°   | 651.3  | 39.3      |
| 30°-40°   | 178.1  | 10.8      |
| 40°-50°   | 3.7    | 0.2       |
| 50°-60°   | 0.0    | 0.0       |
| 60°-70°   | 0.0    | 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°    | 1473.4 | 89.0      |
| 0°-40°    | 1651.5 | 99.8      |
| 0°-60°    | 1655.2 | 100.0     |
| 0°-90°    | 1655.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1655.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 2258 |      |
| 5°  | 2281 | 219  |
| 15° | 2169 | 603  |
| 25° | 1486 | 651  |
| 35° | 224  | 178  |
| 45° | 0    | 4    |
| 55° | 0    | 0    |
| 65° | 0    | 0    |
| 75° | 0    | 0    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 2258.0 |
| 2.5°  | 2248.8 |
| 5°    | 2280.9 |
| 7.5°  | 2306.1 |
| 10°   | 2307.6 |
| 12.5° | 2248.8 |
| 15°   | 2168.7 |
| 17.5° | 2062.6 |
| 20°   | 1916.9 |
| 22.5° | 1729.2 |
| 25°   | 1485.7 |
| 27.5° | 1175.2 |
| 30°   | 817.3  |
| 32.5° | 447.9  |
| 35°   | 224.3  |
| 37.5° | 96.1   |
| 40°   | 32.0   |
| 42.5° | 4.6    |
| 45°   | 0.0    |
| 47.5° | 0.0    |
| 50°   | 0.0    |
| 52.5° | 0.0    |
| 55°   | 0.0    |
| 57.5° | 0.0    |
| 60°   | 0.0    |
| 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    |



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— 0°-180°







(END OF REPORT)