

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P572338

Luminaire Tested: **FLD4C-10-D010 FEU4C-X-90-50 F4X-N-X-H-BL89AM**

Issue Date: 3/1/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P572338  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P207666)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/1/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FLD4C-10-D010 FEU4C-X-90-50 F4X-N-X-H-BL89AM  
Description: 4 INCH FAIL-SAFE LED DOWNLIGHT WITH 5000K, 90 CRI LEDS, 4LBNH TRIM  
AND BOTTOM LENS, 0.125" OPAL POLYCARBONATE  
  
Light Source: -  
Ballast/Driver: -

**Summary**

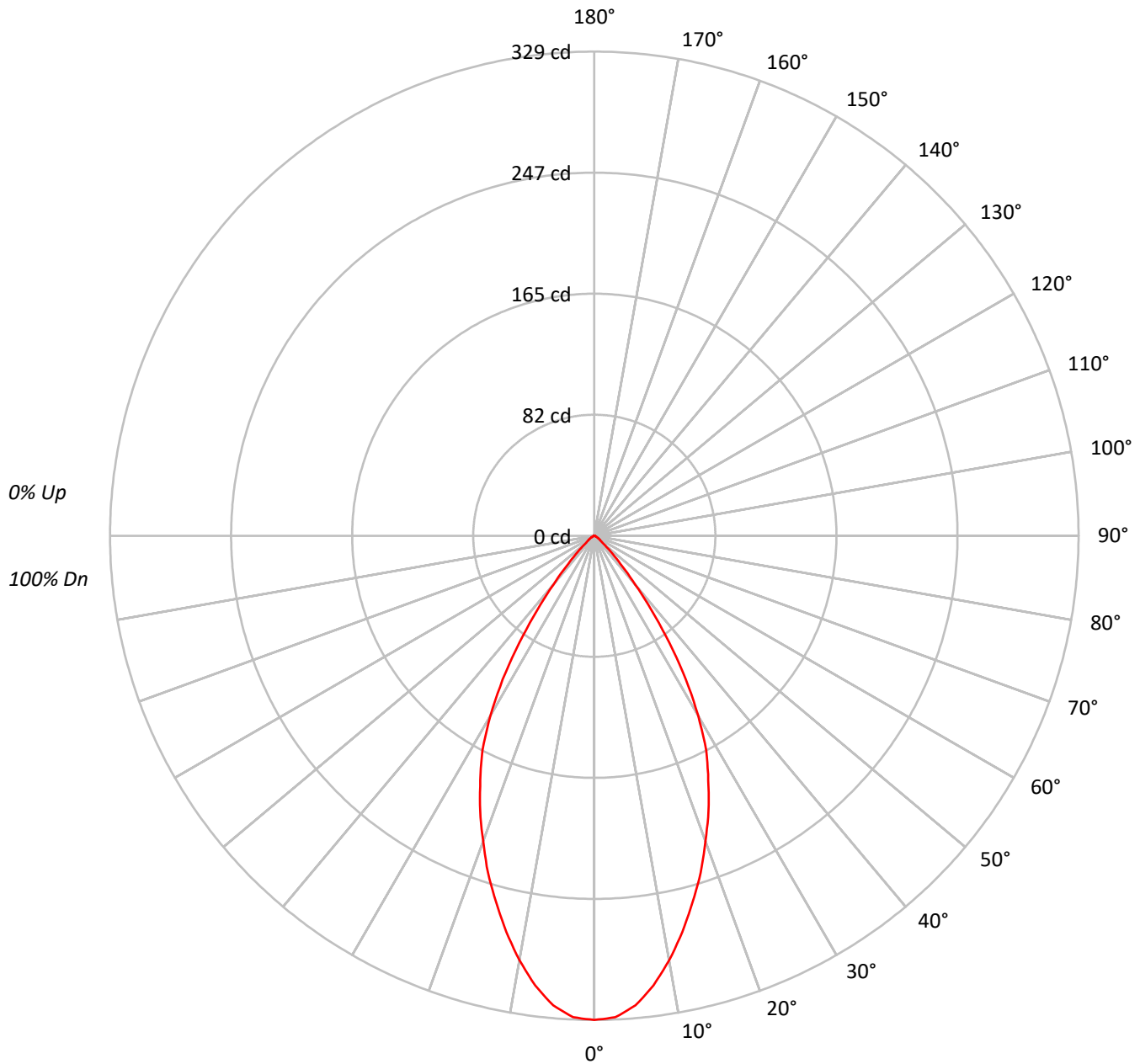
Lumens per Lamp: N/A  
Luminaire Lumens: 262.0 lumens  
Efficiency: N/A  
Efficacy: 26.9 lumens/watt  
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 9.75  
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

TEST NUMBER: P572338

CATALOG NUMBER: FLD4C-10-D010 FEU4C-X-90-50 F4X-N-X-H-BL89AM

### Luminous Intensity Polar Plot





TEST NUMBER: P572338

CATALOG NUMBER: FLD4C-10-D010 FEU4C-X-90-50 F4X-N-X-H-BL89AM

**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  | 30  | 10  |
| RCR |     |     |     |     |  |     |     |     |     |  |     |     |     |  |     |     |     |  |     |     |     |
| 0   | 119 | 119 | 119 | 119 |  | 116 | 116 | 116 | 116 |  | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 |
| 1   | 113 | 111 | 108 | 106 |  | 111 | 109 | 106 | 104 |  | 105 | 103 | 101 |  | 101 | 99  | 98  |  | 97  | 96  | 95  |
| 2   | 108 | 103 | 99  | 96  |  | 106 | 101 | 98  | 94  |  | 98  | 95  | 92  |  | 95  | 93  | 90  |  | 92  | 90  | 89  |
| 3   | 102 | 96  | 91  | 87  |  | 100 | 95  | 90  | 86  |  | 92  | 88  | 85  |  | 90  | 86  | 84  |  | 87  | 85  | 82  |
| 4   | 97  | 90  | 84  | 80  |  | 95  | 89  | 83  | 79  |  | 86  | 82  | 78  |  | 84  | 81  | 78  |  | 83  | 79  | 77  |
| 5   | 92  | 84  | 78  | 74  |  | 91  | 83  | 78  | 73  |  | 81  | 76  | 73  |  | 80  | 75  | 72  |  | 78  | 74  | 72  |
| 6   | 88  | 79  | 73  | 69  |  | 86  | 78  | 72  | 68  |  | 76  | 72  | 68  |  | 75  | 71  | 67  |  | 74  | 70  | 67  |
| 7   | 83  | 74  | 68  | 64  |  | 82  | 73  | 68  | 64  |  | 72  | 67  | 63  |  | 71  | 66  | 63  |  | 70  | 66  | 63  |
| 8   | 79  | 70  | 64  | 60  |  | 78  | 69  | 64  | 60  |  | 68  | 63  | 59  |  | 67  | 63  | 59  |  | 66  | 62  | 59  |
| 9   | 76  | 66  | 60  | 56  |  | 74  | 65  | 60  | 56  |  | 65  | 59  | 56  |  | 64  | 59  | 56  |  | 63  | 59  | 55  |
| 10  | 72  | 62  | 57  | 53  |  | 71  | 62  | 56  | 53  |  | 61  | 56  | 53  |  | 60  | 56  | 52  |  | 60  | 55  | 52  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 40419 |
| 5°  | 39513 |
| 10° | 36539 |
| 15° | 32776 |
| 20° | 28854 |
| 25° | 24833 |
| 30° | 20002 |
| 35° | 13318 |
| 40° | 6928  |
| 45° | 3127  |
| 50° | 1357  |
| 55° | 921   |
| 60° | 590   |
| 65° | 407   |
| 70° | 359   |
| 75° | 237   |
| 80° | 0     |
| 85° | 0     |



TEST NUMBER: P572338

CATALOG NUMBER: FLD4C-10-D010 FEU4C-X-90-50 F4X-N-X-H-BL89AM

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 29.7   | 11.3      |
| 10°-20°   | 72.0   | 27.5      |
| 20°-30°   | 83.6   | 31.9      |
| 30°-40°   | 55.4   | 21.1      |
| 40°-50°   | 15.5   | 5.9       |
| 50°-60°   | 3.9    | 1.5       |
| 60°-70°   | 1.5    | 0.6       |
| 70°-80°   | 0.5    | 0.2       |
| 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°    | 185.3  | 70.7      |
| 0°-40°    | 240.6  | 91.8      |
| 0°-60°    | 260.0  | 99.2      |
| 0°-90°    | 262.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 262.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 329 |      |
| 5°  | 320 | 30   |
| 15° | 258 | 72   |
| 25° | 183 | 84   |
| 35° | 89  | 55   |
| 45° | 18  | 16   |
| 55° | 4   | 4    |
| 65° | 1   | 1    |
| 75° | 0   | 1    |
| 85° | 0   | 0    |
| 90° | 0   |      |



TEST NUMBER: P572338

CATALOG NUMBER: FLD4C-10-D010 FEU4C-X-90-50 F4X-N-X-H-BL89AM

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 329.0 |
| 2.5°  | 327.5 |
| 5°    | 320.4 |
| 7.5°  | 308.1 |
| 10°   | 292.9 |
| 12.5° | 275.8 |
| 15°   | 257.7 |
| 17.5° | 240.2 |
| 20°   | 220.7 |
| 22.5° | 202.7 |
| 25°   | 183.2 |
| 27.5° | 164.7 |
| 30°   | 141.0 |
| 32.5° | 115.8 |
| 35°   | 88.8  |
| 37.5° | 63.6  |
| 40°   | 43.2  |
| 42.5° | 28.0  |
| 45°   | 18.0  |
| 47.5° | 10.9  |
| 50°   | 7.1   |
| 52.5° | 5.2   |
| 55°   | 4.3   |
| 57.5° | 3.3   |
| 60°   | 2.4   |
| 62.5° | 1.9   |
| 65°   | 1.4   |
| 67.5° | 1.0   |
| 70°   | 1.0   |
| 72.5° | 0.5   |
| 75°   | 0.5   |
| 77.5° | 0.5   |
| 80°   | 0.0   |
| 82.5° | 0.0   |
| 85°   | 0.0   |
| 87.5° | 0.0   |
| 90°   | 0.0   |



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180°







(END OF REPORT)