

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: P572974

Luminaire Tested: **FLD4C-30-D010 FEU4C-X-90-35 F4X-M-X-H-BL89AM**

Issue Date: 3/1/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P572974  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P207151)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/1/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FLD4C-30-D010 FEU4C-X-90-35 F4X-M-X-H-BL89AM  
Description: 4 INCH FAIL-SAFE LED DOWNLIGHT WITH 3500K, 90 CRI LEDS, 4LBMH TRIM  
AND BOTTOM LENS, 0.125" OPAL POLYCARBONATE  
  
Light Source: -  
Ballast/Driver: -

**Summary**

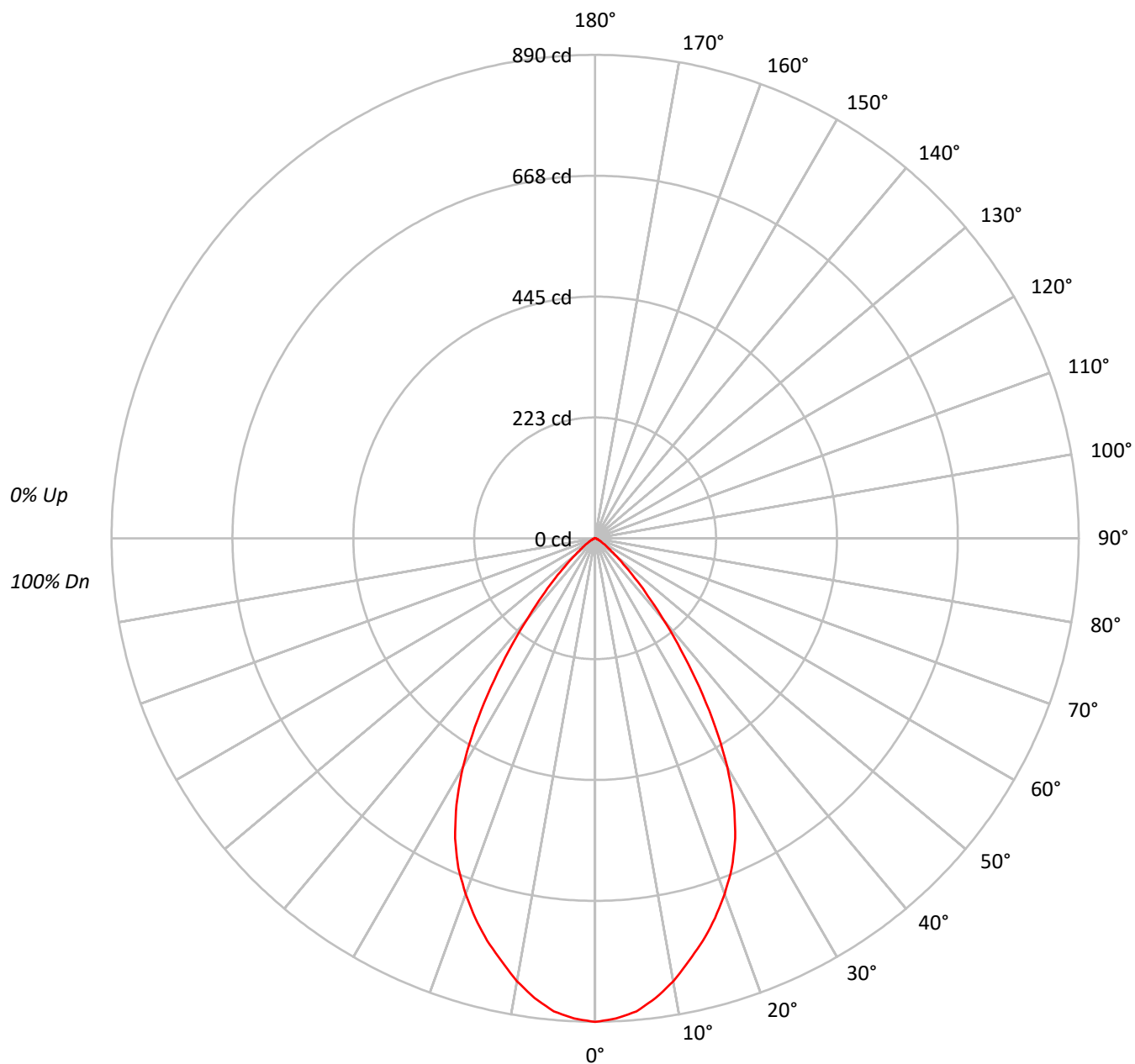
Lumens per Lamp: N/A  
Luminaire Lumens: 898.1 lumens  
Efficiency: N/A  
Efficacy: 28.4 lumens/watt  
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 31.6  
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   | 113 | 110 | 108 | 105 |  | 111 | 108 | 106 | 104 |  | 104 | 102 | 100 |  |  | 100 | 99  | 97  |  |  | 97  |
| 2   | 107 | 102 | 98  | 94  |  | 105 | 100 | 96  | 93  |  | 97  | 94  | 91  |  |  | 94  | 91  | 89  |  |  | 91  |
| 3   | 101 | 94  | 89  | 85  |  | 99  | 93  | 88  | 84  |  | 90  | 86  | 83  |  |  | 88  | 84  | 82  |  |  | 86  |
| 4   | 96  | 88  | 82  | 77  |  | 94  | 86  | 81  | 77  |  | 84  | 80  | 76  |  |  | 82  | 78  | 75  |  |  | 80  |
| 5   | 90  | 82  | 75  | 71  |  | 89  | 81  | 75  | 70  |  | 79  | 74  | 70  |  |  | 77  | 73  | 69  |  |  | 75  |
| 6   | 86  | 76  | 70  | 65  |  | 84  | 75  | 69  | 65  |  | 74  | 68  | 64  |  |  | 72  | 68  | 64  |  |  | 71  |
| 7   | 81  | 71  | 65  | 60  |  | 80  | 70  | 64  | 60  |  | 69  | 64  | 60  |  |  | 68  | 63  | 59  |  |  | 67  |
| 8   | 77  | 67  | 60  | 56  |  | 75  | 66  | 60  | 56  |  | 65  | 59  | 56  |  |  | 64  | 59  | 55  |  |  | 63  |
| 9   | 73  | 63  | 56  | 52  |  | 72  | 62  | 56  | 52  |  | 61  | 56  | 52  |  |  | 60  | 55  | 52  |  |  | 59  |
| 10  | 69  | 59  | 53  | 49  |  | 68  | 59  | 53  | 49  |  | 58  | 52  | 49  |  |  | 57  | 52  | 48  |  |  | 56  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 109389 |
| 5°  | 107809 |
| 10° | 103304 |
| 15° | 97565  |
| 20° | 91072  |
| 25° | 82674  |
| 30° | 69029  |
| 35° | 50002  |
| 40° | 31305  |
| 45° | 17895  |
| 50° | 9327   |
| 55° | 5226   |
| 60° | 3342   |
| 65° | 1977   |
| 70° | 1473   |
| 75° | 665    |
| 80° | 990    |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 81.9   | 9.1       |
| 10°-20°   | 214.9  | 23.9      |
| 20°-30°   | 276.2  | 30.8      |
| 30°-40°   | 207.8  | 23.1      |
| 40°-50°   | 83.5   | 9.3       |
| 50°-60°   | 23.7   | 2.6       |
| 60°-70°   | 7.5    | 0.8       |
| 70°-80°   | 2.2    | 0.2       |
| 80°-90°   | 0.2    | 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°    | 573.1  | 63.8      |
| 0°-40°    | 781.0  | 87.0      |
| 0°-60°    | 888.2  | 98.9      |
| 0°-90°    | 898.1  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 898.1  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 890 |      |
| 5°  | 874 | 82   |
| 15° | 767 | 215  |
| 25° | 610 | 276  |
| 35° | 333 | 208  |
| 45° | 103 | 83   |
| 55° | 24  | 24   |
| 65° | 7   | 8    |
| 75° | 1   | 2    |
| 85° | 0   | 0    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 890.4 |
| 2.5°  | 885.0 |
| 5°    | 874.2 |
| 7.5°  | 853.8 |
| 10°   | 828.1 |
| 12.5° | 796.9 |
| 15°   | 767.1 |
| 17.5° | 733.2 |
| 20°   | 696.6 |
| 22.5° | 657.3 |
| 25°   | 609.9 |
| 27.5° | 552.9 |
| 30°   | 486.6 |
| 32.5° | 412.0 |
| 35°   | 333.4 |
| 37.5° | 260.2 |
| 40°   | 195.2 |
| 42.5° | 143.7 |
| 45°   | 103.0 |
| 47.5° | 70.5  |
| 50°   | 48.8  |
| 52.5° | 33.9  |
| 55°   | 24.4  |
| 57.5° | 17.6  |
| 60°   | 13.6  |
| 62.5° | 9.5   |
| 65°   | 6.8   |
| 67.5° | 5.4   |
| 70°   | 4.1   |
| 72.5° | 2.7   |
| 75°   | 1.4   |
| 77.5° | 1.4   |
| 80°   | 1.4   |
| 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)