

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: P572216

Luminaire Tested: **FLD4C-10-D010 FEU4C-X-90-30 F4X-M-X-H-BL85**

Issue Date: 3/1/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P572216  
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-10-D010 FEU4C-X-90-30 F4X-M-X-H-BL85  
Description: 4 INCH FAIL-SAFE LED DOWNLIGHT WITH 3000K, 90 CRI LEDS, 4LBMH TRIM  
AND BOTTOM LENS, 0.187" CLEAR POLYCARBONATE  
  
Light Source: -  
Ballast/Driver: -

**Summary**

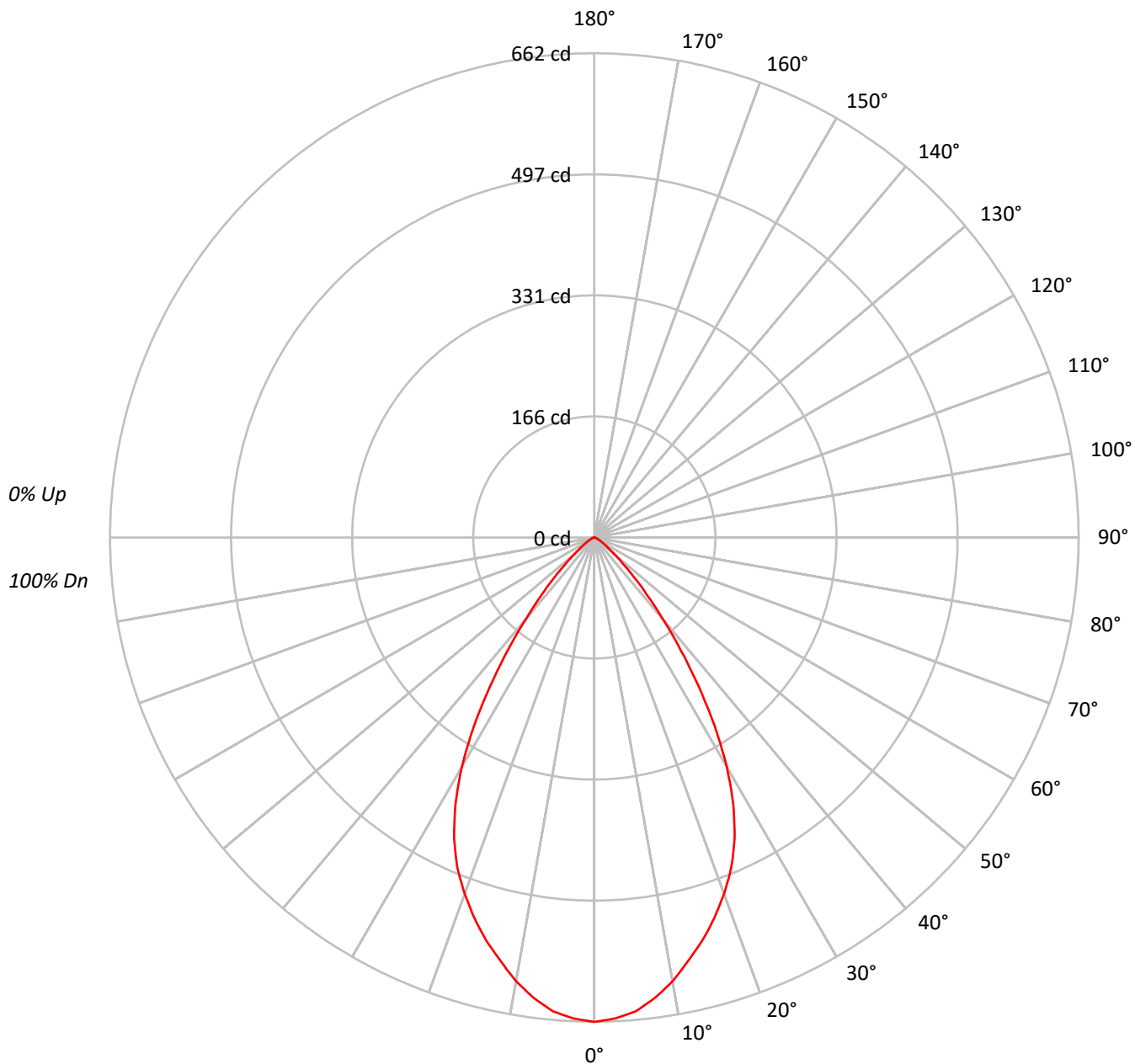
Lumens per Lamp: N/A  
Luminaire Lumens: 668.0 lumens  
Efficiency: N/A  
Efficacy: 68.5 lumens/watt  
Spacing Criteria (0/90/45): 0.95 / 0.95 / 0.93  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 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

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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°  | 81378 |
| 5°  | 80197 |
| 10° | 76845 |
| 15° | 72573 |
| 20° | 67748 |
| 25° | 61501 |
| 30° | 51339 |
| 35° | 37194 |
| 40° | 23286 |
| 45° | 13309 |
| 50° | 6938  |
| 55° | 3898  |
| 60° | 2482  |
| 65° | 1453  |
| 70° | 1078  |
| 75° | 475   |
| 80° | 707   |
| 85° | 0     |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 60.9   | 9.1       |
| 10°-20°   | 159.9  | 23.9      |
| 20°-30°   | 205.5  | 30.8      |
| 30°-40°   | 154.6  | 23.1      |
| 40°-50°   | 62.1   | 9.3       |
| 50°-60°   | 17.7   | 2.6       |
| 60°-70°   | 5.6    | 0.8       |
| 70°-80°   | 1.6    | 0.2       |
| 80°-90°   | 0.1    | 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°    | 426.3  | 63.8      |
| 0°-40°    | 580.9  | 87.0      |
| 0°-60°    | 660.7  | 98.9      |
| 0°-90°    | 668.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 668.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 662 |      |
| 5°  | 650 | 61   |
| 15° | 571 | 160  |
| 25° | 454 | 205  |
| 35° | 248 | 155  |
| 45° | 77  | 62   |
| 55° | 18  | 18   |
| 65° | 5   | 6    |
| 75° | 1   | 2    |
| 85° | 0   | 0    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 662.4 |
| 2.5°  | 658.3 |
| 5°    | 650.3 |
| 7.5°  | 635.1 |
| 10°   | 616.0 |
| 12.5° | 592.8 |
| 15°   | 570.6 |
| 17.5° | 545.4 |
| 20°   | 518.2 |
| 22.5° | 489.0 |
| 25°   | 453.7 |
| 27.5° | 411.3 |
| 30°   | 361.9 |
| 32.5° | 306.5 |
| 35°   | 248.0 |
| 37.5° | 193.6 |
| 40°   | 145.2 |
| 42.5° | 106.9 |
| 45°   | 76.6  |
| 47.5° | 52.4  |
| 50°   | 36.3  |
| 52.5° | 25.2  |
| 55°   | 18.2  |
| 57.5° | 13.1  |
| 60°   | 10.1  |
| 62.5° | 7.1   |
| 65°   | 5.0   |
| 67.5° | 4.0   |
| 70°   | 3.0   |
| 72.5° | 2.0   |
| 75°   | 1.0   |
| 77.5° | 1.0   |
| 80°   | 1.0   |
| 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)