

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: P573580

Luminaire Tested: **FLD4C-45-D010 FEU4C-X-90-40 F4X-W-X-LI-BL89AM**

Issue Date: 3/1/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P573580  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P208077)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/1/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FLD4C-45-D010 FEU4C-X-90-40 F4X-W-X-LI-BL89AM  
Description: 4 INCH FAIL-SAFE LED DOWNLIGHT WITH 4000K, 90 CRI LEDS, 4LBWLI TRIM  
AND BOTTOM LENS, 0.125" OPAL POLYCARBONATE  
  
Light Source: -  
Ballast/Driver: -

**Summary**

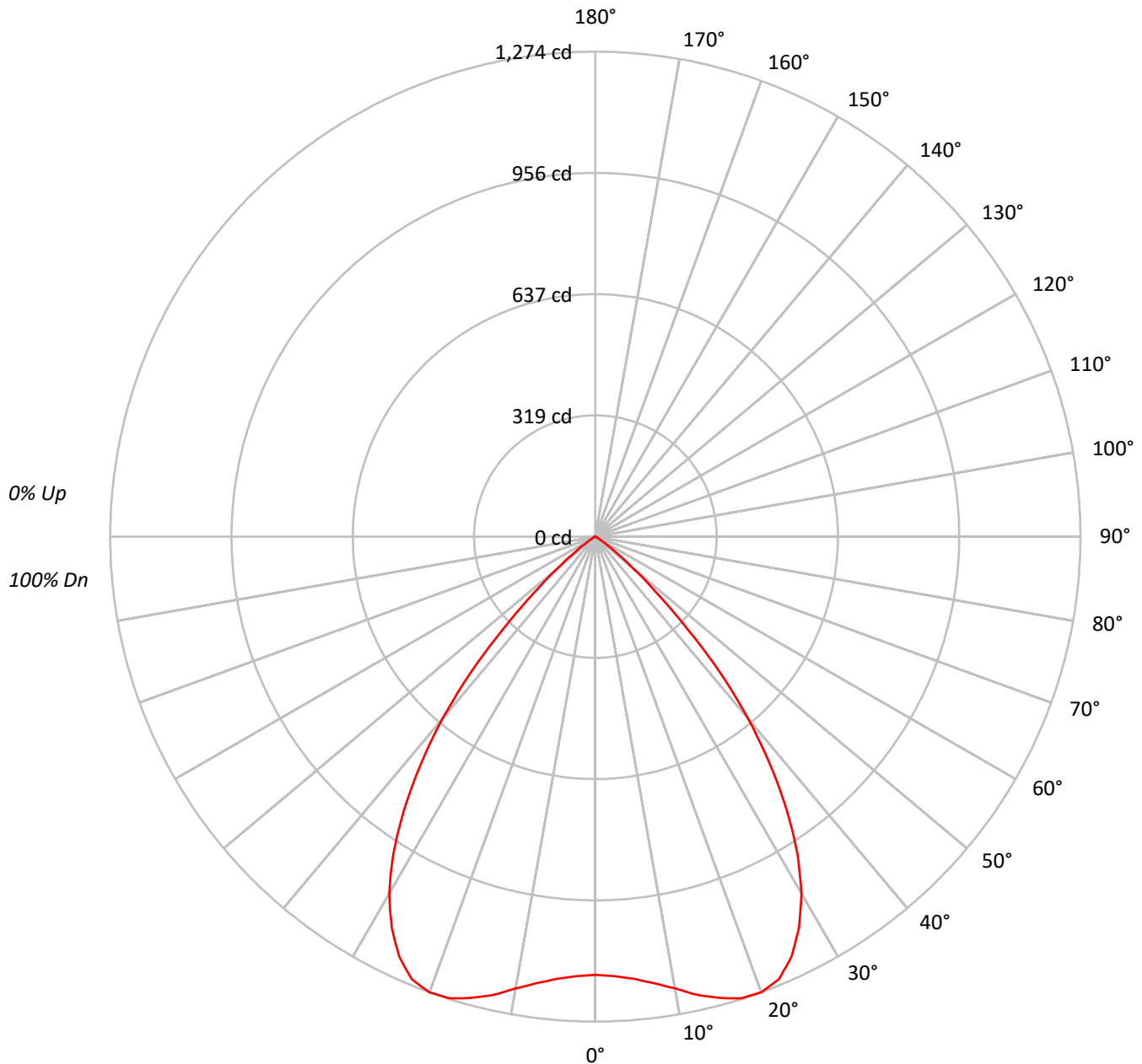
Lumens per Lamp: N/A  
Luminaire Lumens: 1879.0 lumens  
Efficiency: N/A  
Efficacy: 37.9 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.18  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 49.6  
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

TEST NUMBER: P573580

CATALOG NUMBER: FLD4C-45-D010 FEU4C-X-90-40 F4X-W-X-LI-BL89AM

### Luminous Intensity Polar Plot



TEST NUMBER: P573580

CATALOG NUMBER: FLD4C-45-D010 FEU4C-X-90-40 F4X-W-X-LI-BL89AM

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |    |    |   |  |  |  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |     |     | 10  |     |    |    | 0 |  |  |  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 10 | 0 |  |  |  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |  |  |  |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |   |  |  |  |
| 1   | 113 | 110 | 107 | 105 | 110 | 108 | 105 | 103 | 104 | 102 | 100 | 100 | 98  | 97  | 96  | 95  | 94  | 92  |    |    |   |  |  |  |
| 2   | 106 | 101 | 97  | 93  | 104 | 99  | 95  | 92  | 96  | 93  | 90  | 93  | 90  | 88  | 90  | 88  | 86  | 84  |    |    |   |  |  |  |
| 3   | 100 | 93  | 87  | 83  | 98  | 92  | 86  | 82  | 89  | 85  | 81  | 86  | 83  | 80  | 84  | 81  | 78  | 77  |    |    |   |  |  |  |
| 4   | 94  | 86  | 79  | 75  | 92  | 84  | 79  | 74  | 82  | 77  | 73  | 80  | 76  | 72  | 78  | 75  | 72  | 70  |    |    |   |  |  |  |
| 5   | 88  | 79  | 72  | 68  | 87  | 78  | 72  | 67  | 76  | 71  | 67  | 74  | 70  | 66  | 73  | 69  | 65  | 64  |    |    |   |  |  |  |
| 6   | 83  | 73  | 66  | 62  | 82  | 72  | 66  | 61  | 71  | 65  | 61  | 69  | 64  | 60  | 68  | 63  | 60  | 58  |    |    |   |  |  |  |
| 7   | 78  | 68  | 61  | 56  | 77  | 67  | 61  | 56  | 66  | 60  | 56  | 64  | 59  | 55  | 63  | 59  | 55  | 54  |    |    |   |  |  |  |
| 8   | 74  | 63  | 56  | 52  | 72  | 62  | 56  | 51  | 61  | 55  | 51  | 60  | 55  | 51  | 59  | 54  | 51  | 49  |    |    |   |  |  |  |
| 9   | 69  | 59  | 52  | 48  | 68  | 58  | 52  | 47  | 57  | 51  | 47  | 56  | 51  | 47  | 55  | 50  | 47  | 45  |    |    |   |  |  |  |
| 10  | 66  | 55  | 48  | 44  | 65  | 54  | 48  | 44  | 53  | 48  | 44  | 53  | 47  | 44  | 52  | 47  | 43  | 42  |    |    |   |  |  |  |

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

|     | 0°     |
|-----|--------|
| 0°  | 141441 |
| 5°  | 143831 |
| 10° | 150335 |
| 15° | 159569 |
| 20° | 166560 |
| 25° | 165105 |
| 30° | 153548 |
| 35° | 131364 |
| 40° | 100089 |
| 45° | 58707  |
| 50° | 25076  |
| 55° | 7390   |
| 60° | 2113   |
| 65° | 1250   |
| 70° | 790    |
| 75° | 1044   |
| 80° | 0      |
| 85° | 0      |



TEST NUMBER: P573580

CATALOG NUMBER: FLD4C-45-D010 FEU4C-X-90-40 F4X-W-X-LI-BL89AM

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 112.6  | 6.0       |
| 10°-20°   | 355.3  | 18.9      |
| 20°-30°   | 554.3  | 29.5      |
| 30°-40°   | 539.3  | 28.7      |
| 40°-50°   | 269.4  | 14.3      |
| 50°-60°   | 41.7   | 2.2       |
| 60°-70°   | 5.1    | 0.3       |
| 70°-80°   | 1.4    | 0.1       |
| 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°    | 1022.2 | 54.4      |
| 0°-40°    | 1561.5 | 83.1      |
| 0°-60°    | 1872.6 | 99.7      |
| 0°-90°    | 1879.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1879.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1151 |      |
| 5°  | 1166 | 113  |
| 15° | 1255 | 355  |
| 25° | 1218 | 554  |
| 35° | 876  | 539  |
| 45° | 338  | 269  |
| 55° | 34   | 42   |
| 65° | 4    | 5    |
| 75° | 2    | 1    |
| 85° | 0    | 0    |
| 90° | 0    |      |



TEST NUMBER: P573580

CATALOG NUMBER: FLD4C-45-D010 FEU4C-X-90-40 F4X-W-X-LI-BL89AM

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1151.3 |
| 2.5°  | 1155.6 |
| 5°    | 1166.3 |
| 7.5°  | 1183.6 |
| 10°   | 1205.1 |
| 12.5° | 1233.0 |
| 15°   | 1254.6 |
| 17.5° | 1271.8 |
| 20°   | 1274.0 |
| 22.5° | 1258.9 |
| 25°   | 1218.0 |
| 27.5° | 1157.7 |
| 30°   | 1082.4 |
| 32.5° | 987.8  |
| 35°   | 875.9  |
| 37.5° | 753.1  |
| 40°   | 624.1  |
| 42.5° | 486.4  |
| 45°   | 337.9  |
| 47.5° | 217.3  |
| 50°   | 131.2  |
| 52.5° | 71.0   |
| 55°   | 34.5   |
| 57.5° | 15.1   |
| 60°   | 8.6    |
| 62.5° | 6.5    |
| 65°   | 4.3    |
| 67.5° | 4.3    |
| 70°   | 2.2    |
| 72.5° | 2.2    |
| 75°   | 2.2    |
| 77.5° | 0.0    |
| 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)