

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: P577648

Luminaire Tested: **FLD6C-45-D010 FEU6C-X-90-50 F6X-M-X-H**

Issue Date: 3/1/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P577648  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P203254)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/1/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FLD6C-45-D010 FEU6C-X-90-50 F6X-M-X-H  
Description: 6 INCH FAIL-SAFE LED DOWNLIGHT WITH 5000K, 90 CRI LEDS, 6LBMH TRIM

Light Source: -  
Ballast/Driver: -

**Summary**

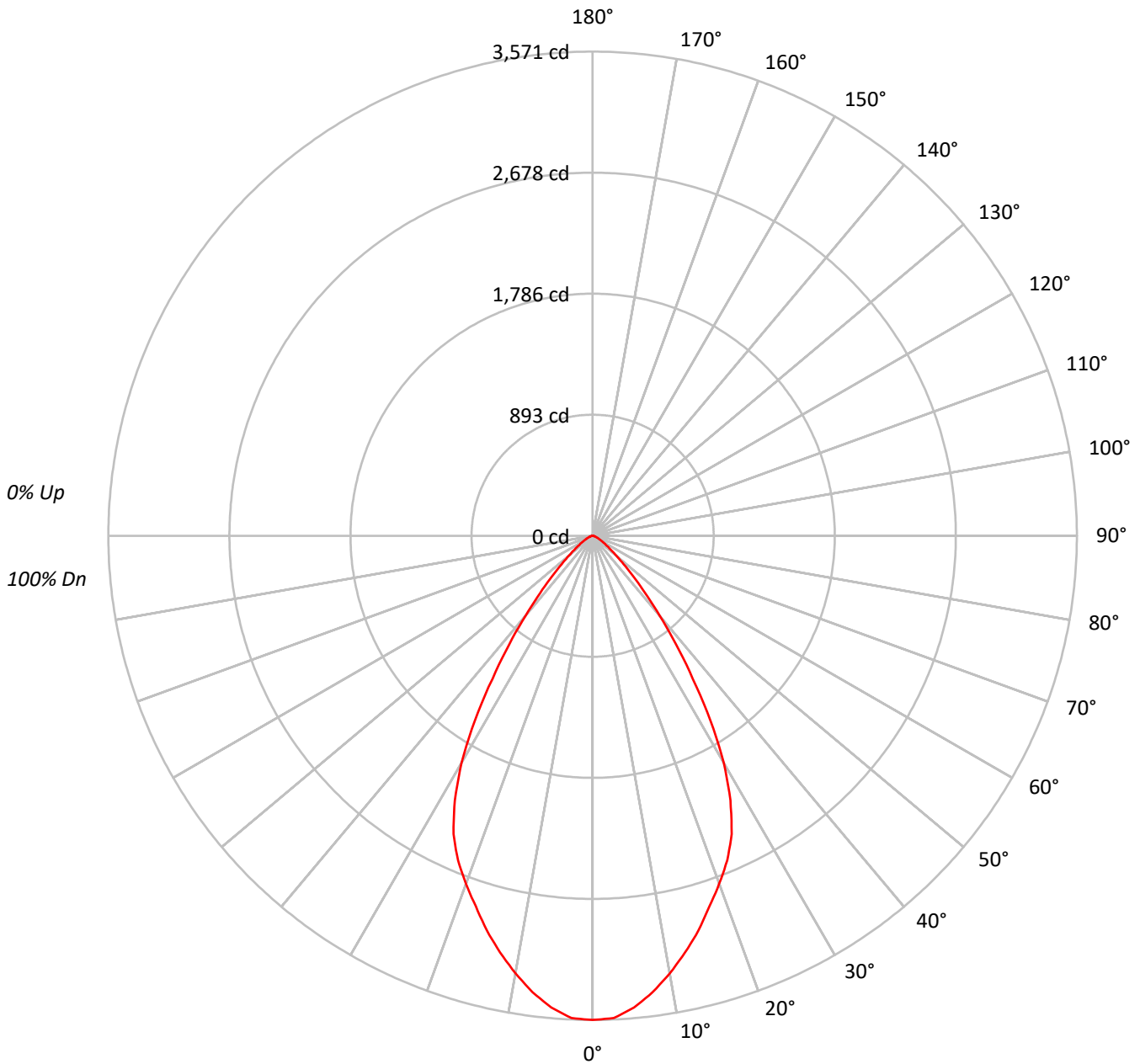
Lumens per Lamp: N/A  
Luminaire Lumens: 3608.0 lumens  
Efficiency: N/A  
Efficacy: 72.7 lumens/watt  
Spacing Criteria (0/90/45): 0.94 / 0.94 / 0.93  
Luminous Opening: Circular (Dia: 0.5' x H: 0')  
CIE Type: Direct

Input Watts (W): 49.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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 |  |  |  |  |  |  |  |  |   |
| RC  | 80  |     |     |     |     |     |     |     |     | 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 |    |    | 100 |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 113 | 110 | 107 | 105 | 111 | 108 | 105 | 103 | 104 | 102 | 100 | 100 | 99  | 97  | 97  | 95  | 94  | 92  |    |    | 92  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 107 | 102 | 97  | 93  | 105 | 100 | 96  | 92  | 97  | 93  | 90  | 94  | 91  | 88  | 91  | 89  | 87  | 85  |    |    | 85  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 101 | 94  | 88  | 84  | 99  | 92  | 87  | 84  | 90  | 86  | 82  | 87  | 84  | 81  | 85  | 82  | 80  | 78  |    |    | 78  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 95  | 87  | 81  | 76  | 93  | 86  | 80  | 76  | 84  | 79  | 75  | 82  | 78  | 74  | 80  | 76  | 73  | 72  |    |    | 72  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 90  | 81  | 75  | 70  | 88  | 80  | 74  | 70  | 78  | 73  | 69  | 76  | 72  | 68  | 75  | 71  | 68  | 66  |    |    | 66  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 85  | 75  | 69  | 64  | 83  | 75  | 69  | 64  | 73  | 68  | 64  | 72  | 67  | 63  | 70  | 66  | 63  | 61  |    |    | 61  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 80  | 70  | 64  | 59  | 79  | 70  | 64  | 59  | 68  | 63  | 59  | 67  | 62  | 59  | 66  | 62  | 58  | 57  |    |    | 57  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 76  | 66  | 60  | 55  | 75  | 65  | 59  | 55  | 64  | 59  | 55  | 63  | 58  | 55  | 62  | 58  | 54  | 53  |    |    | 53  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 72  | 62  | 56  | 51  | 71  | 61  | 55  | 51  | 60  | 55  | 51  | 60  | 55  | 51  | 59  | 54  | 51  | 49  |    |    | 49  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 69  | 58  | 52  | 48  | 68  | 58  | 52  | 48  | 57  | 52  | 48  | 56  | 51  | 48  | 55  | 51  | 48  | 46  |    |    | 46  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 195746 |
| 5°  | 192240 |
| 10° | 182417 |
| 15° | 171062 |
| 20° | 159311 |
| 25° | 146785 |
| 30° | 122310 |
| 35° | 86204  |
| 40° | 54939  |
| 45° | 32763  |
| 50° | 19343  |
| 55° | 12301  |
| 60° | 8475   |
| 65° | 6019   |
| 70° | 4135   |
| 75° | 3283   |
| 80° | 1610   |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 326.5  | 9.0       |
| 10°-20°   | 844.6  | 23.4      |
| 20°-30°   | 1094.4 | 30.3      |
| 30°-40°   | 812.5  | 22.5      |
| 40°-50°   | 343.0  | 9.5       |
| 50°-60°   | 121.8  | 3.4       |
| 60°-70°   | 47.0   | 1.3       |
| 70°-80°   | 16.3   | 0.5       |
| 80°-90°   | 2.1    | 0.1       |
| 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°    | 2265.4 | 62.8      |
| 0°-40°    | 3077.9 | 85.3      |
| 0°-60°    | 3542.7 | 98.2      |
| 0°-90°    | 3608.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3608.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 3571 |      |
| 5°  | 3493 | 326  |
| 15° | 3014 | 845  |
| 25° | 2427 | 1094 |
| 35° | 1288 | 812  |
| 45° | 423  | 343  |
| 55° | 129  | 122  |
| 65° | 46   | 47   |
| 75° | 16   | 16   |
| 85° | 0    | 2    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°    |        |
|-------|--------|
| 0°    | 3570.7 |
| 2.5°  | 3560.3 |
| 5°    | 3493.4 |
| 7.5°  | 3395.4 |
| 10°   | 3277.0 |
| 12.5° | 3148.1 |
| 15°   | 3014.1 |
| 17.5° | 2864.8 |
| 20°   | 2730.8 |
| 22.5° | 2591.7 |
| 25°   | 2426.7 |
| 27.5° | 2200.0 |
| 30°   | 1932.2 |
| 32.5° | 1617.8 |
| 35°   | 1288.1 |
| 37.5° | 1009.9 |
| 40°   | 767.7  |
| 42.5° | 571.9  |
| 45°   | 422.6  |
| 47.5° | 309.1  |
| 50°   | 226.8  |
| 52.5° | 170.0  |
| 55°   | 128.7  |
| 57.5° | 97.8   |
| 60°   | 77.3   |
| 62.5° | 56.7   |
| 65°   | 46.4   |
| 67.5° | 36.0   |
| 70°   | 25.8   |
| 72.5° | 20.5   |
| 75°   | 15.5   |
| 77.5° | 10.4   |
| 80°   | 5.1    |
| 82.5° | 5.1    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 90°   | 0.0    |



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°







(END OF REPORT)