

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: P732628

Luminaire Tested: **14FCZ2-25-S-B2750-W2D-CP250-3500K**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P732628  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P275670)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 14FCZ2-25-S-B2750-W2D-CP250-3500K  
Description: 1X4 2500 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT  
AND SMOOTH LENS, WITH, CP250 BOTTOM LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

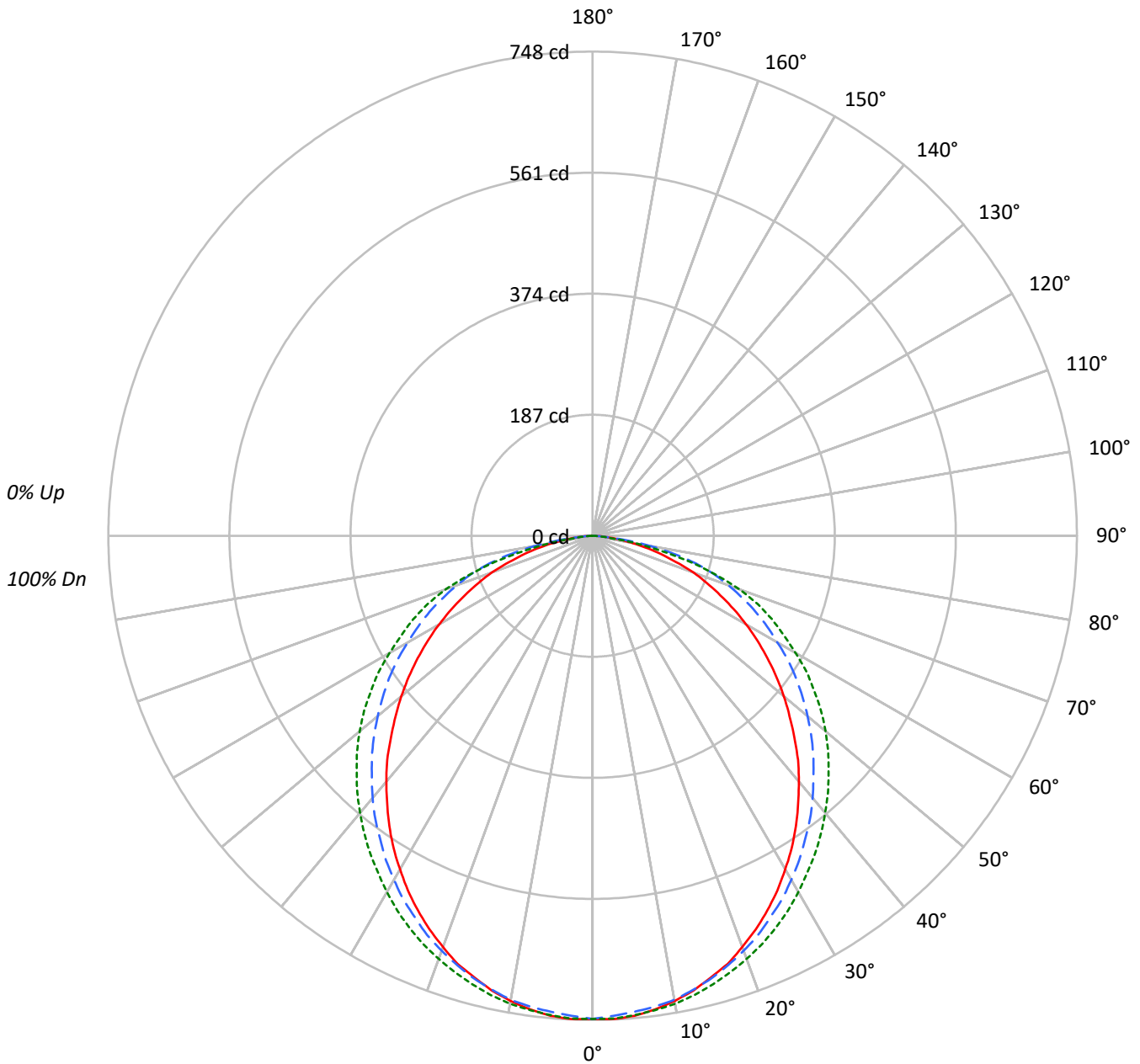
Lumens per Lamp: N/A  
Luminaire Lumens: 2091.0 lumens  
Efficiency: N/A  
Efficacy: 110.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 19  
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

TEST NUMBER: P732628

CATALOG NUMBER: 14FCZ2-25-S-B2750-W2D-CP250-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P732628

CATALOG NUMBER: 14FCZ2-25-S-B2750-W2D-CP250-3500K

**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 |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 94  | 91  | 89  | 90  | 88  | 86  | 84  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 2   | 99  | 90  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  | 82  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 3   | 90  | 79  | 71  | 65  | 87  | 78  | 70  | 64  | 75  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 58  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  | 64  | 58  | 53  | 62  | 56  | 52  | 50  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 56  | 50  | 45  | 43  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  | 38  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 41  | 35  | 46  | 40  | 35  | 33  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 8   | 60  | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 32  | 30  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 9   | 56  | 43  | 35  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 28  | 27  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |
| 10  | 53  | 40  | 32  | 26  | 52  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 31  | 26  | 36  | 30  | 26  | 24  |    |    |   |  |  |  |  |  |  |    |  |  |  |  |  |  |  |  |   |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 2107 | 2107 | 2107 |
| 5°  | 2109 | 2092 | 2106 |
| 10° | 2092 | 2086 | 2104 |
| 15° | 2063 | 2069 | 2096 |
| 20° | 2031 | 2049 | 2089 |
| 25° | 1989 | 2024 | 2083 |
| 30° | 1939 | 2000 | 2072 |
| 35° | 1886 | 1972 | 2065 |
| 40° | 1826 | 1948 | 2059 |
| 45° | 1759 | 1924 | 2057 |
| 50° | 1694 | 1903 | 2062 |
| 55° | 1623 | 1888 | 2056 |
| 60° | 1546 | 1861 | 2042 |
| 65° | 1454 | 1855 | 2043 |
| 70° | 1369 | 1840 | 1985 |
| 75° | 1188 | 1798 | 1696 |
| 80° | 961  | 1450 | 1130 |
| 85° | 638  | 502  | 337  |



TEST NUMBER: P732628

CATALOG NUMBER: 14FCZ2-25-S-B2750-W2D-CP250-3500K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 70.5   | 3.4       |
| 10°-20°   | 200.6  | 9.6       |
| 20°-30°   | 300.9  | 14.4      |
| 30°-40°   | 358.9  | 17.2      |
| 40°-50°   | 371.0  | 17.7      |
| 50°-60°   | 338.8  | 16.2      |
| 60°-70°   | 266.6  | 12.7      |
| 70°-80°   | 155.2  | 7.4       |
| 80°-90°   | 28.6   | 1.4       |
| 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°    | 571.9  | 27.4      |
| 0°-40°    | 930.8  | 44.5      |
| 0°-60°    | 1640.6 | 78.5      |
| 0°-90°    | 2091.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2091.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 746 | 746   | 746 | 746   | 746 |      |
| 5°  | 744 | 742   | 738 | 744   | 743 | 71   |
| 15° | 706 | 707   | 708 | 717   | 717 | 199  |
| 25° | 639 | 642   | 650 | 666   | 669 | 294  |
| 35° | 547 | 555   | 572 | 594   | 599 | 342  |
| 45° | 441 | 455   | 482 | 509   | 515 | 340  |
| 55° | 330 | 347   | 384 | 412   | 418 | 295  |
| 65° | 218 | 240   | 278 | 300   | 306 | 216  |
| 75° | 109 | 135   | 165 | 162   | 156 | 116  |
| 85° | 20  | 28    | 16  | 12    | 10  | 26   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



TEST NUMBER: P732628

CATALOG NUMBER: 14FCZ2-25-S-B2750-W2D-CP250-3500K

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 746.5 | 746.5 | 746.5 | 746.5 | 746.5 |
| 2.5°  | 747.5 | 745.4 | 742.3 | 747.5 | 746.5 |
| 5°    | 744.4 | 742.3 | 738.2 | 744.4 | 743.3 |
| 7.5°  | 738.2 | 736.0 | 734.0 | 740.2 | 739.2 |
| 10°   | 729.8 | 728.8 | 727.8 | 735.0 | 734.0 |
| 12.5° | 719.5 | 719.5 | 718.5 | 726.8 | 726.8 |
| 15°   | 706.1 | 707.1 | 708.1 | 717.4 | 717.4 |
| 17.5° | 693.6 | 692.6 | 695.6 | 706.1 | 707.1 |
| 20°   | 676.0 | 678.0 | 682.2 | 694.6 | 695.6 |
| 22.5° | 658.3 | 660.5 | 667.7 | 680.1 | 683.2 |
| 25°   | 638.6 | 641.8 | 650.0 | 665.5 | 668.7 |
| 27.5° | 617.9 | 622.1 | 633.4 | 650.0 | 653.1 |
| 30°   | 595.0 | 601.3 | 613.7 | 632.4 | 635.6 |
| 32.5° | 572.3 | 578.5 | 594.0 | 612.7 | 616.9 |
| 35°   | 547.4 | 554.6 | 572.3 | 594.0 | 599.2 |
| 37.5° | 521.5 | 530.8 | 551.6 | 573.3 | 579.5 |
| 40°   | 495.6 | 506.0 | 528.7 | 551.6 | 558.8 |
| 42.5° | 469.6 | 480.1 | 504.8 | 530.8 | 538.1 |
| 45°   | 440.6 | 455.2 | 482.1 | 509.0 | 515.3 |
| 47.5° | 412.6 | 428.2 | 458.2 | 485.1 | 493.5 |
| 50°   | 385.7 | 401.2 | 433.3 | 461.4 | 469.6 |
| 52.5° | 357.7 | 374.2 | 408.4 | 437.5 | 444.8 |
| 55°   | 329.7 | 347.3 | 383.6 | 411.6 | 417.8 |
| 57.5° | 301.7 | 320.4 | 357.7 | 384.7 | 391.9 |
| 60°   | 273.8 | 293.5 | 329.7 | 356.6 | 361.8 |
| 62.5° | 245.7 | 266.4 | 303.7 | 327.6 | 332.8 |
| 65°   | 217.7 | 240.5 | 277.8 | 299.7 | 305.9 |
| 67.5° | 190.8 | 213.5 | 249.9 | 270.6 | 275.8 |
| 70°   | 165.9 | 186.6 | 222.9 | 238.4 | 240.5 |
| 72.5° | 134.8 | 160.7 | 195.9 | 204.3 | 199.1 |
| 75°   | 108.9 | 134.8 | 164.9 | 161.7 | 155.5 |
| 77.5° | 83.0  | 108.9 | 128.6 | 118.1 | 109.9 |
| 80°   | 59.1  | 85.0  | 89.2  | 73.6  | 69.5  |
| 82.5° | 38.4  | 59.1  | 49.8  | 38.4  | 31.1  |
| 85°   | 19.7  | 27.9  | 15.5  | 12.4  | 10.4  |
| 87.5° | 6.2   | 4.2   | 2.0   | 2.0   | 1.0   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°







(END OF REPORT)