

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: P732708

Luminaire Tested: **14FCZ2-29-HRP-B2750-W2D-CP375-3500K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P732708
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P294787)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-29-HRP-B2750-W2D-CP375-3500K
Description: 1X4 2900 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT
AND HRP LENS, WITH, CP375 BOTTOM LENS

Light Source: -
Ballast/Driver: -

Summary

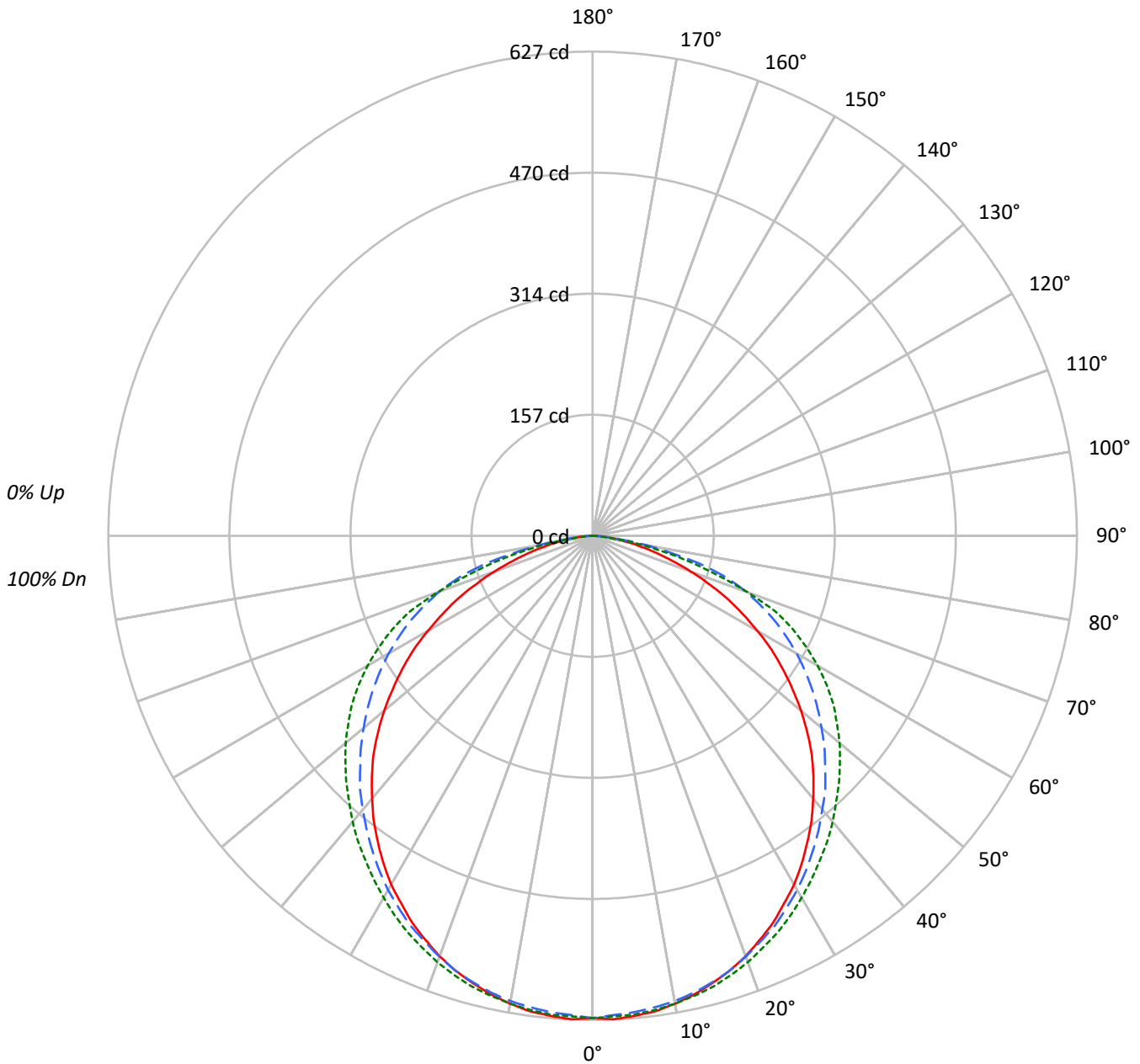
Lumens per Lamp: N/A
Luminaire Lumens: 1839.0 lumens
Efficiency: N/A
Efficacy: 80.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 23
Input Voltage (V): NR
Input Current (A_{in}): 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 | | | | | | | | | | | | | | | | | | | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 97 | 94 | 91 | 93 | 91 | 88 | 90 | 88 | 86 | 84 | | | | | | | | | | | | | | | | | | | |
| 2 | 99 | 90 | 83 | 78 | 96 | 88 | 82 | 77 | 85 | 79 | 75 | 82 | 77 | 73 | 78 | 75 | 71 | 69 | | | | | | | | | | | | | | | | | | | |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 64 | 74 | 68 | 62 | 72 | 66 | 61 | 69 | 64 | 60 | 58 | | | | | | | | | | | | | | | | | | | |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 51 | 49 | | | | | | | | | | | | | | | | | | | |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 53 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 | | | | | | | | | | | | | | | | | | | |
| 6 | 69 | 56 | 47 | 40 | 68 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 45 | 39 | 50 | 44 | 39 | 37 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 35 | 33 | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 46 | 38 | 32 | 58 | 45 | 37 | 32 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 29 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 41 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 24 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1763 | 1763 | 1763 |
| 5° | 1768 | 1755 | 1763 |
| 10° | 1763 | 1754 | 1763 |
| 15° | 1752 | 1749 | 1766 |
| 20° | 1740 | 1742 | 1765 |
| 25° | 1722 | 1736 | 1765 |
| 30° | 1700 | 1726 | 1764 |
| 35° | 1670 | 1714 | 1767 |
| 40° | 1637 | 1705 | 1781 |
| 45° | 1602 | 1699 | 1800 |
| 50° | 1546 | 1699 | 1833 |
| 55° | 1480 | 1708 | 1873 |
| 60° | 1390 | 1720 | 1897 |
| 65° | 1282 | 1738 | 1908 |
| 70° | 1117 | 1741 | 1756 |
| 75° | 920 | 1622 | 1419 |
| 80° | 723 | 1165 | 949 |
| 85° | 564 | 450 | 223 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 59.1 | 3.2 |
| 10°-20° | 169.7 | 9.2 |
| 20°-30° | 257.6 | 14.0 |
| 30°-40° | 312.2 | 17.0 |
| 40°-50° | 329.0 | 17.9 |
| 50°-60° | 307.1 | 16.7 |
| 60°-70° | 245.4 | 13.3 |
| 70°-80° | 135.1 | 7.3 |
| 80°-90° | 23.8 | 1.3 |
| 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° | 486.4 | 26.5 |
| 0°-40° | 798.6 | 43.4 |
| 0°-60° | 1434.7 | 78.0 |
| 0°-90° | 1839.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1839.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 624 | 624 | 624 | 624 | 624 | |
| 5° | 624 | 622 | 619 | 623 | 622 | 59 |
| 15° | 600 | 600 | 599 | 604 | 604 | 169 |
| 25° | 553 | 554 | 557 | 566 | 567 | 255 |
| 35° | 485 | 489 | 497 | 510 | 513 | 303 |
| 45° | 401 | 409 | 426 | 445 | 451 | 309 |
| 55° | 301 | 316 | 347 | 371 | 380 | 268 |
| 65° | 192 | 216 | 260 | 282 | 286 | 189 |
| 75° | 84 | 121 | 149 | 134 | 130 | 91 |
| 85° | 17 | 22 | 14 | 9 | 7 | 21 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P732708

CATALOG NUMBER: 14FCZ2-29-HRP-B2750-W2D-CP375-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 624.5 | 624.5 | 624.5 | 624.5 | 624.5 |
| 2.5° | 626.8 | 625.0 | 621.1 | 624.5 | 622.9 |
| 5° | 624.0 | 622.3 | 619.3 | 623.4 | 622.3 |
| 7.5° | 621.1 | 618.8 | 615.8 | 620.5 | 619.3 |
| 10° | 615.2 | 613.5 | 611.9 | 615.8 | 615.2 |
| 12.5° | 608.4 | 607.8 | 606.0 | 610.7 | 610.1 |
| 15° | 599.7 | 599.7 | 598.6 | 604.3 | 604.3 |
| 17.5° | 590.4 | 589.8 | 590.4 | 596.8 | 596.2 |
| 20° | 579.4 | 579.4 | 580.0 | 587.6 | 587.6 |
| 22.5° | 566.1 | 566.7 | 568.4 | 577.6 | 577.0 |
| 25° | 552.9 | 553.9 | 557.4 | 565.5 | 566.7 |
| 27.5° | 536.7 | 539.6 | 543.5 | 553.3 | 554.5 |
| 30° | 521.6 | 523.3 | 529.6 | 539.0 | 541.2 |
| 32.5° | 503.7 | 507.1 | 514.1 | 524.5 | 527.4 |
| 35° | 484.6 | 489.2 | 497.3 | 510.0 | 512.9 |
| 37.5° | 465.5 | 469.6 | 480.6 | 493.8 | 499.0 |
| 40° | 444.2 | 451.0 | 462.6 | 477.7 | 483.4 |
| 42.5° | 423.2 | 430.3 | 445.9 | 461.4 | 466.7 |
| 45° | 401.3 | 408.9 | 425.6 | 444.7 | 451.0 |
| 47.5° | 377.0 | 385.8 | 407.1 | 427.3 | 434.2 |
| 50° | 352.1 | 363.1 | 386.8 | 409.5 | 417.5 |
| 52.5° | 326.2 | 340.0 | 367.2 | 390.9 | 398.5 |
| 55° | 300.7 | 315.7 | 347.0 | 371.3 | 380.5 |
| 57.5° | 274.7 | 290.9 | 326.2 | 353.9 | 359.1 |
| 60° | 246.3 | 266.1 | 304.7 | 329.0 | 336.0 |
| 62.5° | 218.6 | 241.2 | 282.7 | 305.9 | 311.7 |
| 65° | 192.0 | 216.3 | 260.2 | 281.6 | 285.7 |
| 67.5° | 163.0 | 192.0 | 235.3 | 255.1 | 256.1 |
| 70° | 135.4 | 168.9 | 211.0 | 220.3 | 212.8 |
| 72.5° | 108.1 | 144.0 | 182.8 | 175.2 | 168.9 |
| 75° | 84.4 | 120.9 | 148.7 | 133.6 | 130.1 |
| 77.5° | 62.5 | 98.9 | 106.4 | 98.3 | 91.9 |
| 80° | 44.5 | 78.0 | 71.7 | 61.3 | 58.4 |
| 82.5° | 30.6 | 49.2 | 39.4 | 30.6 | 26.6 |
| 85° | 17.4 | 22.0 | 13.9 | 8.6 | 6.9 |
| 87.5° | 7.5 | 5.3 | 2.9 | 2.3 | 2.3 |
| 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)