

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: P732571

Luminaire Tested: **14FCZ2-25-HRP-B2750-W2D-CP187-2700K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P732571
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: 14FCZ2-25-HRP-B2750-W2D-CP187-2700K
Description: 1X4 2500 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT
AND HRP LENS, WITH, CP187 BOTTOM LENS

Light Source: -
Ballast/Driver: -

Summary

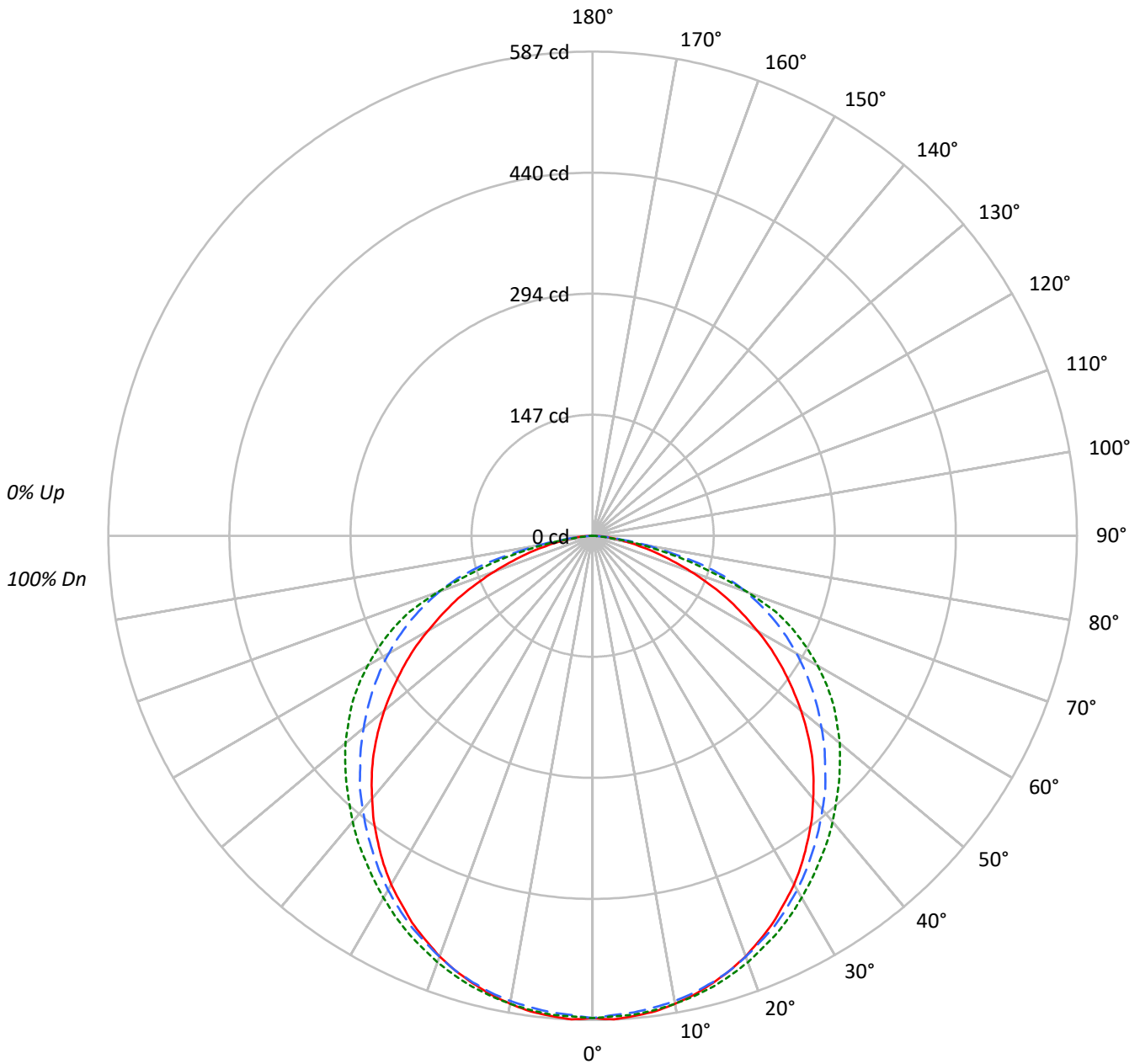
Lumens per Lamp: N/A
Luminaire Lumens: 1722.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 19
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





TEST NUMBER: P732571

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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° | 1650 | 1650 | 1650 |
| 5° | 1656 | 1643 | 1651 |
| 10° | 1651 | 1642 | 1651 |
| 15° | 1641 | 1638 | 1653 |
| 20° | 1630 | 1631 | 1653 |
| 25° | 1612 | 1626 | 1653 |
| 30° | 1592 | 1616 | 1652 |
| 35° | 1563 | 1604 | 1655 |
| 40° | 1532 | 1596 | 1668 |
| 45° | 1500 | 1591 | 1686 |
| 50° | 1448 | 1591 | 1717 |
| 55° | 1386 | 1599 | 1753 |
| 60° | 1302 | 1611 | 1776 |
| 65° | 1201 | 1627 | 1787 |
| 70° | 1046 | 1631 | 1644 |
| 75° | 863 | 1518 | 1328 |
| 80° | 678 | 1091 | 889 |
| 85° | 528 | 421 | 207 |



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CATALOG NUMBER: 14FCZ2-25-HRP-B2750-W2D-CP187-2700K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 55.4 | 3.2 |
| 10°-20° | 158.9 | 9.2 |
| 20°-30° | 241.2 | 14.0 |
| 30°-40° | 292.3 | 17.0 |
| 40°-50° | 308.0 | 17.9 |
| 50°-60° | 287.6 | 16.7 |
| 60°-70° | 229.8 | 13.3 |
| 70°-80° | 126.5 | 7.3 |
| 80°-90° | 22.3 | 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° | 455.5 | 26.5 |
| 0°-40° | 747.8 | 43.4 |
| 0°-60° | 1343.4 | 78.0 |
| 0°-90° | 1722.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1722.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 585 | 585 | 585 | 585 | 585 | |
| 5° | 584 | 583 | 580 | 584 | 583 | 56 |
| 15° | 562 | 562 | 560 | 566 | 566 | 158 |
| 25° | 518 | 519 | 522 | 530 | 531 | 238 |
| 35° | 454 | 458 | 466 | 478 | 480 | 284 |
| 45° | 376 | 383 | 398 | 416 | 422 | 289 |
| 55° | 282 | 296 | 325 | 348 | 356 | 251 |
| 65° | 180 | 202 | 244 | 264 | 268 | 177 |
| 75° | 79 | 113 | 139 | 125 | 122 | 85 |
| 85° | 16 | 21 | 13 | 8 | 6 | 20 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 584.7 | 584.7 | 584.7 | 584.7 | 584.7 |
| 2.5° | 586.9 | 585.3 | 581.6 | 584.7 | 583.2 |
| 5° | 584.3 | 582.7 | 579.9 | 583.8 | 582.7 |
| 7.5° | 581.6 | 579.4 | 576.6 | 581.0 | 579.9 |
| 10° | 576.1 | 574.5 | 572.9 | 576.6 | 576.1 |
| 12.5° | 569.7 | 569.1 | 567.5 | 571.8 | 571.3 |
| 15° | 561.6 | 561.6 | 560.5 | 565.8 | 565.8 |
| 17.5° | 552.8 | 552.3 | 552.8 | 558.8 | 558.3 |
| 20° | 542.5 | 542.5 | 543.1 | 550.2 | 550.2 |
| 22.5° | 530.1 | 530.6 | 532.2 | 540.9 | 540.3 |
| 25° | 517.7 | 518.7 | 522.0 | 529.5 | 530.6 |
| 27.5° | 502.5 | 505.3 | 509.0 | 518.1 | 519.2 |
| 30° | 488.4 | 490.0 | 495.9 | 504.7 | 506.8 |
| 32.5° | 471.7 | 474.8 | 481.4 | 491.1 | 493.9 |
| 35° | 453.7 | 458.1 | 465.6 | 477.6 | 480.3 |
| 37.5° | 435.9 | 439.7 | 450.0 | 462.4 | 467.3 |
| 40° | 415.9 | 422.3 | 433.2 | 447.3 | 452.6 |
| 42.5° | 396.3 | 402.9 | 417.5 | 432.1 | 437.0 |
| 45° | 375.8 | 382.9 | 398.5 | 416.5 | 422.3 |
| 47.5° | 353.0 | 361.2 | 381.2 | 400.1 | 406.6 |
| 50° | 329.7 | 340.0 | 362.2 | 383.4 | 391.0 |
| 52.5° | 305.5 | 318.3 | 343.8 | 366.0 | 373.1 |
| 55° | 281.6 | 295.6 | 324.9 | 347.7 | 356.3 |
| 57.5° | 257.2 | 272.4 | 305.5 | 331.4 | 336.3 |
| 60° | 230.6 | 249.1 | 285.3 | 308.1 | 314.6 |
| 62.5° | 204.7 | 225.8 | 264.8 | 286.4 | 291.9 |
| 65° | 179.8 | 202.5 | 243.6 | 263.7 | 267.5 |
| 67.5° | 152.7 | 179.8 | 220.4 | 238.9 | 239.8 |
| 70° | 126.8 | 158.1 | 197.6 | 206.2 | 199.2 |
| 72.5° | 101.3 | 134.8 | 171.2 | 164.0 | 158.1 |
| 75° | 79.1 | 113.2 | 139.2 | 125.1 | 121.8 |
| 77.5° | 58.5 | 92.6 | 99.6 | 92.1 | 86.1 |
| 80° | 41.7 | 73.0 | 67.1 | 57.4 | 54.7 |
| 82.5° | 28.6 | 46.0 | 36.9 | 28.6 | 24.9 |
| 85° | 16.3 | 20.6 | 13.0 | 8.1 | 6.4 |
| 87.5° | 7.0 | 4.9 | 2.7 | 2.2 | 2.2 |
| 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)