

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: P732516

Luminaire Tested: **14FCZ2-20-SQR-B2750-W2D-CA125-2700K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P732516
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P387389)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 14FCZ2-20-SQR-B2750-W2D-CA125-2700K
Description: 1X4 2000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 2700K CCT
AND SQR LENS, WITH, CA125 BOTTOM LENS

Light Source: -
Ballast/Driver: -

Summary

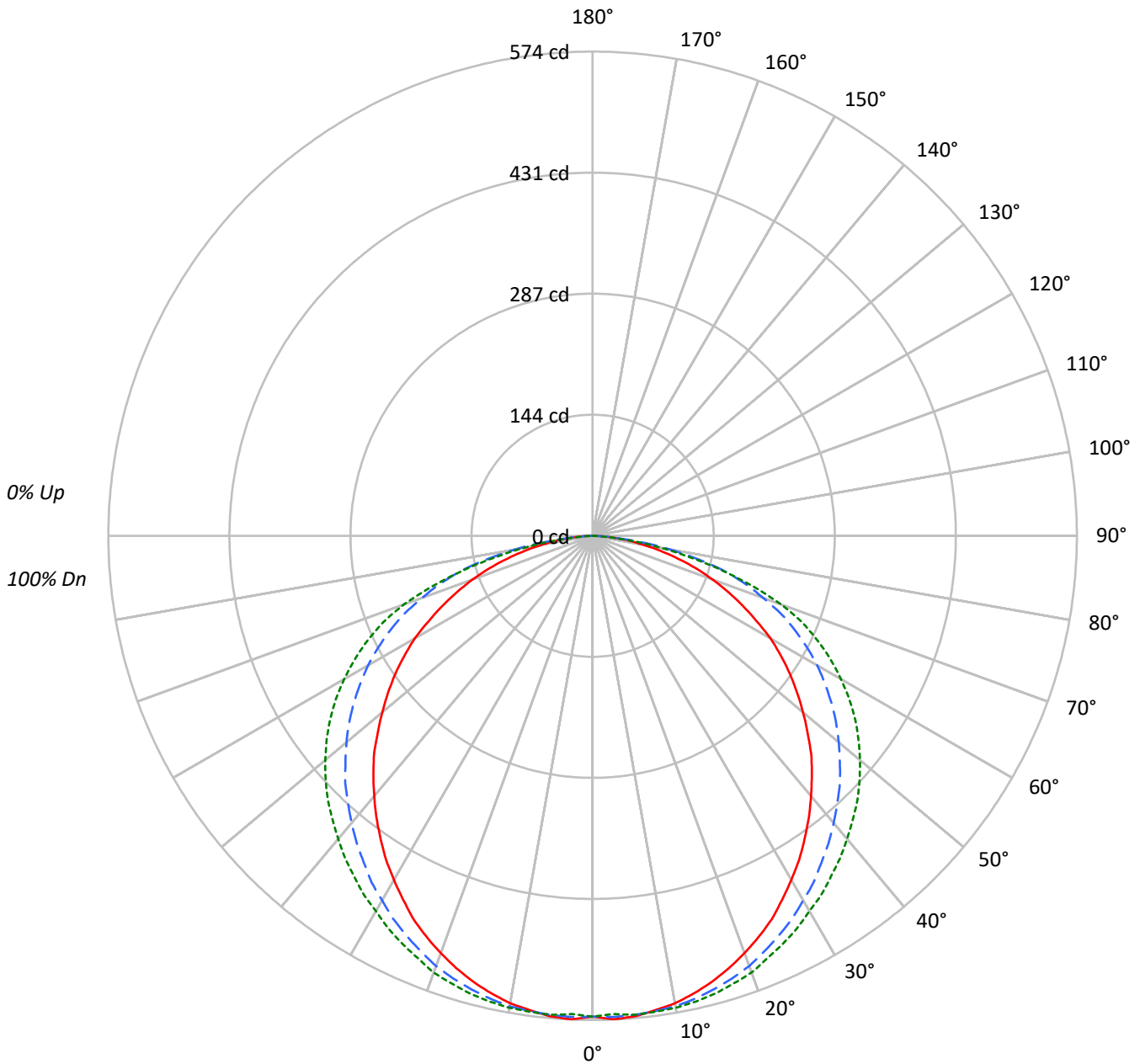
Lumens per Lamp: N/A
Luminaire Lumens: 1804.0 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 0.96' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 16
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: P732516

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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 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 87 | 89 | 87 | 85 | 83 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 81 | 75 | 84 | 78 | 73 | 80 | 76 | 72 | 77 | 73 | 70 | 68 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 78 | 69 | 62 | 86 | 76 | 68 | 62 | 73 | 66 | 61 | 70 | 64 | 60 | 68 | 63 | 59 | 56 | | | | | | | | | | | | | | | | | | | |
| 4 | 81 | 68 | 59 | 52 | 79 | 67 | 59 | 52 | 65 | 57 | 51 | 62 | 56 | 51 | 60 | 54 | 50 | 48 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 61 | 52 | 45 | 72 | 60 | 51 | 44 | 58 | 50 | 44 | 56 | 49 | 43 | 54 | 48 | 43 | 41 | | | | | | | | | | | | | | | | | | | |
| 6 | 68 | 55 | 45 | 39 | 67 | 54 | 45 | 39 | 52 | 44 | 38 | 50 | 43 | 38 | 49 | 42 | 38 | 35 | | | | | | | | | | | | | | | | | | | |
| 7 | 63 | 49 | 40 | 34 | 62 | 49 | 40 | 34 | 47 | 39 | 34 | 46 | 39 | 33 | 44 | 38 | 33 | 31 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 28 | | | | | | | | | | | | | | | | | | | |
| 9 | 55 | 41 | 33 | 27 | 54 | 41 | 33 | 27 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 | | | | | | | | | | | | | | | | | | | |
| 10 | 52 | 38 | 30 | 25 | 50 | 37 | 30 | 24 | 36 | 29 | 24 | 36 | 29 | 24 | 35 | 29 | 24 | 22 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1609 | 1609 | 1609 |
| 5° | 1620 | 1615 | 1615 |
| 10° | 1613 | 1624 | 1629 |
| 15° | 1599 | 1626 | 1642 |
| 20° | 1581 | 1630 | 1655 |
| 25° | 1563 | 1628 | 1662 |
| 30° | 1535 | 1627 | 1674 |
| 35° | 1510 | 1629 | 1698 |
| 40° | 1484 | 1638 | 1729 |
| 45° | 1463 | 1655 | 1771 |
| 50° | 1429 | 1673 | 1817 |
| 55° | 1405 | 1700 | 1870 |
| 60° | 1375 | 1735 | 1919 |
| 65° | 1312 | 1767 | 1968 |
| 70° | 1245 | 1770 | 1966 |
| 75° | 1141 | 1766 | 1735 |
| 80° | 975 | 1507 | 1346 |
| 85° | 768 | 852 | 502 |



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CATALOG NUMBER: 14FCZ2-20-SQR-B2750-W2D-CA125-2700K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 54.2 | 3.0 |
| 10°-20° | 156.5 | 8.7 |
| 20°-30° | 239.3 | 13.3 |
| 30°-40° | 293.4 | 16.3 |
| 40°-50° | 315.5 | 17.5 |
| 50°-60° | 303.2 | 16.8 |
| 60°-70° | 252.5 | 14.0 |
| 70°-80° | 155.0 | 8.6 |
| 80°-90° | 34.5 | 1.9 |
| 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° | 450.0 | 24.9 |
| 0°-40° | 743.4 | 41.2 |
| 0°-60° | 1362.1 | 75.5 |
| 0°-90° | 1804.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1804.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 570 | 570 | 570 | 570 | 570 | |
| 5° | 572 | 566 | 570 | 570 | 570 | 54 |
| 15° | 547 | 546 | 556 | 560 | 562 | 154 |
| 25° | 502 | 506 | 523 | 529 | 534 | 231 |
| 35° | 438 | 449 | 473 | 486 | 493 | 274 |
| 45° | 366 | 383 | 415 | 434 | 444 | 282 |
| 55° | 286 | 310 | 346 | 369 | 380 | 255 |
| 65° | 196 | 226 | 264 | 286 | 295 | 195 |
| 75° | 105 | 136 | 162 | 161 | 159 | 111 |
| 85° | 24 | 35 | 26 | 18 | 16 | 28 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P732516

CATALOG NUMBER: 14FCZ2-20-SQR-B2750-W2D-CA125-2700K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 570.1 | 570.1 | 570.1 | 570.1 | 570.1 |
| 2.5° | 573.7 | 568.2 | 571.0 | 570.1 | 567.4 |
| 5° | 571.9 | 566.5 | 570.1 | 570.1 | 570.1 |
| 7.5° | 567.4 | 562.8 | 568.2 | 569.1 | 569.1 |
| 10° | 562.8 | 559.2 | 566.5 | 567.4 | 568.2 |
| 12.5° | 555.5 | 552.8 | 561.9 | 563.7 | 565.5 |
| 15° | 547.3 | 545.6 | 556.4 | 560.1 | 561.9 |
| 17.5° | 537.4 | 538.3 | 550.1 | 554.6 | 556.4 |
| 20° | 526.4 | 529.2 | 542.8 | 547.3 | 551.0 |
| 22.5° | 514.6 | 518.2 | 532.8 | 538.3 | 541.9 |
| 25° | 501.9 | 506.4 | 522.8 | 529.2 | 533.7 |
| 27.5° | 486.4 | 493.7 | 511.9 | 520.1 | 524.7 |
| 30° | 471.0 | 479.2 | 499.2 | 509.2 | 513.7 |
| 32.5° | 455.5 | 464.6 | 487.4 | 497.3 | 504.6 |
| 35° | 438.2 | 449.2 | 472.8 | 485.5 | 492.8 |
| 37.5° | 421.0 | 433.7 | 459.2 | 473.7 | 481.8 |
| 40° | 402.7 | 416.4 | 444.6 | 460.9 | 469.1 |
| 42.5° | 384.6 | 400.1 | 429.2 | 447.3 | 456.4 |
| 45° | 366.4 | 382.8 | 414.6 | 433.7 | 443.7 |
| 47.5° | 345.5 | 365.6 | 397.3 | 419.1 | 429.2 |
| 50° | 325.5 | 347.3 | 380.9 | 403.7 | 413.7 |
| 52.5° | 305.5 | 328.3 | 363.7 | 387.4 | 397.3 |
| 55° | 285.5 | 310.0 | 345.5 | 369.1 | 380.0 |
| 57.5° | 264.5 | 290.0 | 326.4 | 351.0 | 360.9 |
| 60° | 243.6 | 270.1 | 307.4 | 330.0 | 340.0 |
| 62.5° | 219.1 | 250.0 | 286.4 | 309.1 | 318.2 |
| 65° | 196.4 | 226.4 | 264.5 | 286.4 | 294.6 |
| 67.5° | 173.7 | 204.6 | 241.9 | 261.9 | 269.1 |
| 70° | 150.9 | 181.9 | 214.5 | 233.7 | 238.2 |
| 72.5° | 128.2 | 159.1 | 190.1 | 200.9 | 199.2 |
| 75° | 104.6 | 136.4 | 161.9 | 161.0 | 159.1 |
| 77.5° | 81.9 | 112.7 | 128.2 | 121.8 | 119.2 |
| 80° | 60.0 | 90.1 | 92.7 | 86.4 | 82.8 |
| 82.5° | 40.9 | 64.5 | 58.2 | 50.9 | 47.2 |
| 85° | 23.7 | 35.4 | 26.3 | 18.1 | 15.5 |
| 87.5° | 10.0 | 9.1 | 2.8 | 2.8 | 1.8 |
| 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)