

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: P734143

Luminaire Tested: **24FCZ2-30HE-SQR-B2750-W2D-CA125-3500K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P734143
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P388488)
Test Lab: INNOVATION CENTER (G2)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-30HE-SQR-B2750-W2D-CA125-3500K
Description: 2X4 3000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT
AND SQR LENS, WITH, CA125 BOTTOM LENS

Light Source: -
Ballast/Driver: -

Summary

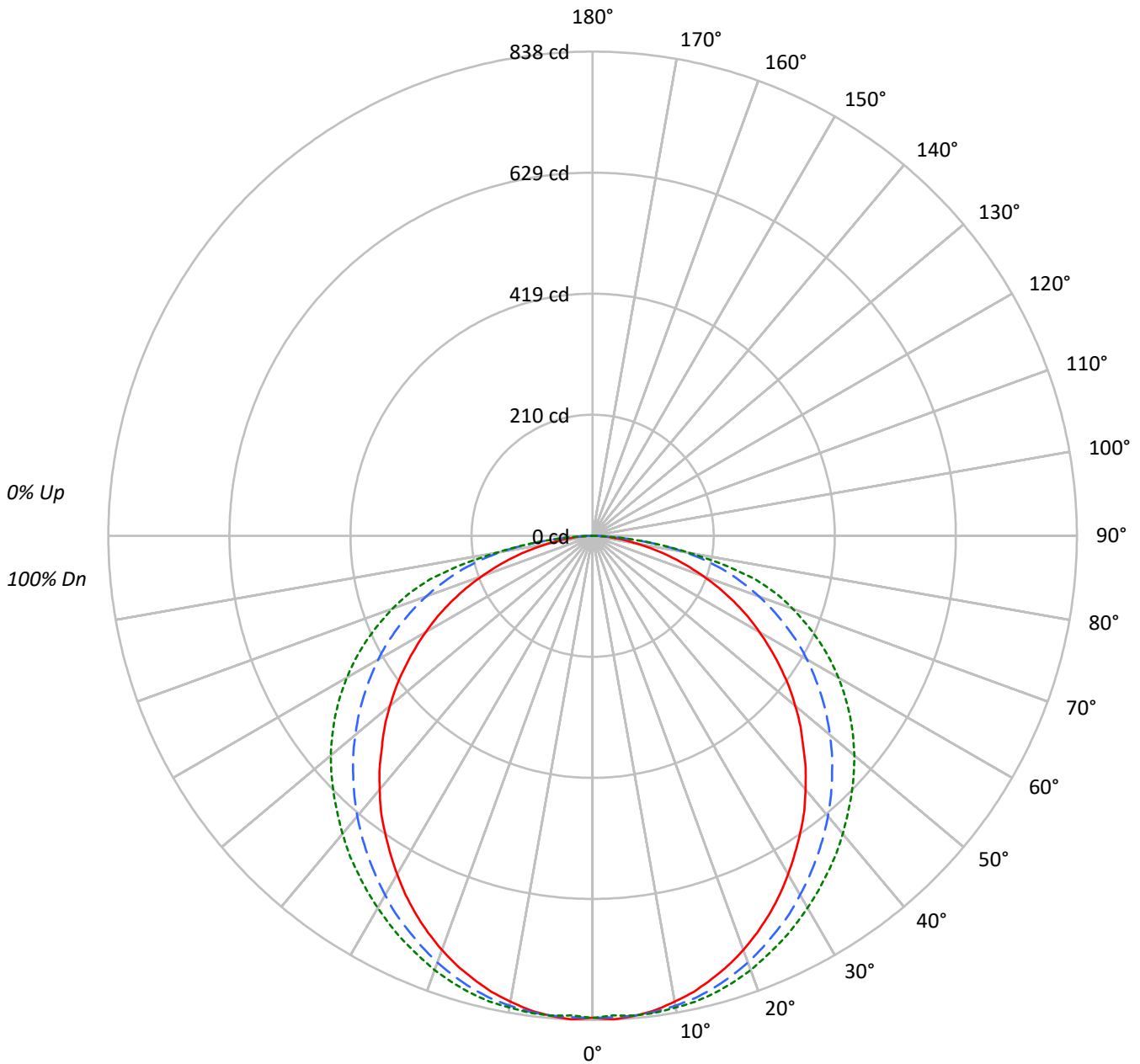
Lumens per Lamp: N/A
Luminaire Lumens: 2610.0 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 22
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: P734143

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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 | 98 | 94 | 105 | 100 | 96 | 92 | 96 | 93 | 89 | 92 | 89 | 87 | 89 | 86 | 84 | 82 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 89 | 81 | 75 | 95 | 87 | 80 | 74 | 83 | 78 | 73 | 80 | 75 | 71 | 77 | 73 | 69 | 67 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 77 | 69 | 62 | 86 | 76 | 68 | 61 | 73 | 66 | 60 | 70 | 64 | 59 | 67 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | |
| 4 | 81 | 68 | 59 | 52 | 78 | 67 | 58 | 52 | 64 | 57 | 51 | 62 | 55 | 50 | 60 | 54 | 49 | 47 | | | | | | | | | | | | | | | | | | | |
| 5 | 74 | 61 | 51 | 44 | 72 | 60 | 51 | 44 | 57 | 50 | 44 | 55 | 49 | 43 | 54 | 48 | 43 | 41 | | | | | | | | | | | | | | | | | | | |
| 6 | 68 | 55 | 45 | 39 | 66 | 54 | 45 | 38 | 52 | 44 | 38 | 50 | 43 | 38 | 48 | 42 | 37 | 35 | | | | | | | | | | | | | | | | | | | |
| 7 | 63 | 49 | 40 | 34 | 62 | 49 | 40 | 34 | 47 | 39 | 34 | 45 | 39 | 33 | 44 | 38 | 33 | 31 | | | | | | | | | | | | | | | | | | | |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 35 | 30 | 42 | 35 | 30 | 40 | 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° | 1177 | 1177 | 1177 |
| 5° | 1182 | 1181 | 1181 |
| 10° | 1173 | 1183 | 1188 |
| 15° | 1161 | 1184 | 1196 |
| 20° | 1146 | 1181 | 1201 |
| 25° | 1126 | 1174 | 1205 |
| 30° | 1102 | 1170 | 1212 |
| 35° | 1080 | 1167 | 1223 |
| 40° | 1056 | 1167 | 1240 |
| 45° | 1029 | 1170 | 1264 |
| 50° | 1005 | 1177 | 1298 |
| 55° | 976 | 1190 | 1338 |
| 60° | 942 | 1209 | 1387 |
| 65° | 901 | 1232 | 1445 |
| 70° | 836 | 1263 | 1519 |
| 75° | 757 | 1307 | 1588 |
| 80° | 637 | 1310 | 1365 |
| 85° | 487 | 991 | 991 |



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CATALOG NUMBER: 24FCZ2-30HE-SQR-B2750-W2D-CA125-3500K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 79.2 | 3.0 |
| 10°-20° | 227.9 | 8.7 |
| 20°-30° | 346.1 | 13.3 |
| 30°-40° | 421.0 | 16.1 |
| 40°-50° | 448.2 | 17.2 |
| 50°-60° | 426.9 | 16.4 |
| 60°-70° | 357.0 | 13.7 |
| 70°-80° | 238.0 | 9.1 |
| 80°-90° | 65.8 | 2.5 |
| 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° | 653.1 | 25.0 |
| 0°-40° | 1074.1 | 41.2 |
| 0°-60° | 1949.2 | 74.7 |
| 0°-90° | 2610.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2610.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 834 | 834 | 834 | 834 | 834 | |
| 5° | 834 | 829 | 834 | 834 | 834 | 79 |
| 15° | 795 | 796 | 810 | 816 | 819 | 224 |
| 25° | 723 | 732 | 754 | 767 | 774 | 333 |
| 35° | 627 | 645 | 677 | 700 | 710 | 392 |
| 45° | 515 | 543 | 586 | 619 | 634 | 398 |
| 55° | 396 | 431 | 484 | 526 | 544 | 354 |
| 65° | 270 | 309 | 369 | 414 | 433 | 266 |
| 75° | 139 | 183 | 240 | 280 | 291 | 147 |
| 85° | 30 | 56 | 61 | 60 | 61 | 36 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P734143

CATALOG NUMBER: 24FCZ2-30HE-SQR-B2750-W2D-CA125-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 834.2 | 834.2 | 834.2 | 834.2 | 834.2 |
| 2.5° | 837.7 | 831.7 | 834.2 | 834.2 | 830.9 |
| 5° | 834.2 | 829.1 | 833.5 | 833.5 | 833.5 |
| 7.5° | 828.3 | 823.9 | 830.9 | 832.6 | 832.6 |
| 10° | 818.8 | 817.1 | 825.7 | 828.3 | 829.1 |
| 12.5° | 808.5 | 807.6 | 819.7 | 823.0 | 825.7 |
| 15° | 794.6 | 796.4 | 810.2 | 816.2 | 818.8 |
| 17.5° | 780.0 | 783.4 | 799.0 | 807.6 | 810.2 |
| 20° | 762.8 | 767.9 | 786.1 | 794.6 | 799.9 |
| 22.5° | 743.8 | 751.6 | 770.5 | 780.8 | 786.9 |
| 25° | 723.1 | 732.5 | 754.2 | 767.0 | 774.0 |
| 27.5° | 700.7 | 712.8 | 737.8 | 752.4 | 759.3 |
| 30° | 676.5 | 690.3 | 718.0 | 735.2 | 743.8 |
| 32.5° | 651.6 | 667.9 | 698.1 | 717.1 | 727.4 |
| 35° | 626.6 | 644.7 | 677.4 | 699.8 | 710.1 |
| 37.5° | 601.6 | 619.6 | 655.9 | 680.0 | 693.0 |
| 40° | 573.1 | 594.7 | 633.5 | 660.2 | 673.2 |
| 42.5° | 545.6 | 568.8 | 610.2 | 639.5 | 653.3 |
| 45° | 515.3 | 543.0 | 586.0 | 618.8 | 633.5 |
| 47.5° | 487.8 | 515.3 | 561.9 | 596.4 | 612.8 |
| 50° | 457.7 | 486.9 | 536.1 | 574.0 | 591.3 |
| 52.5° | 428.3 | 458.6 | 510.2 | 550.7 | 568.0 |
| 55° | 396.5 | 430.9 | 483.5 | 525.8 | 543.8 |
| 57.5° | 364.6 | 401.7 | 455.9 | 499.9 | 518.0 |
| 60° | 333.6 | 371.4 | 428.3 | 472.3 | 491.3 |
| 62.5° | 302.5 | 340.4 | 399.9 | 444.7 | 462.8 |
| 65° | 269.7 | 309.4 | 368.8 | 414.5 | 432.7 |
| 67.5° | 237.0 | 278.3 | 337.8 | 383.5 | 400.8 |
| 70° | 202.5 | 246.5 | 306.0 | 350.8 | 368.1 |
| 72.5° | 170.7 | 214.6 | 273.2 | 317.2 | 333.6 |
| 75° | 138.8 | 182.7 | 239.6 | 280.1 | 291.3 |
| 77.5° | 107.8 | 151.7 | 202.5 | 229.3 | 231.9 |
| 80° | 78.4 | 119.8 | 161.2 | 168.9 | 168.0 |
| 82.5° | 52.5 | 89.6 | 111.2 | 112.0 | 114.6 |
| 85° | 30.1 | 56.0 | 61.2 | 60.4 | 61.2 |
| 87.5° | 12.1 | 19.8 | 17.2 | 12.9 | 12.9 |
| 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)