

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: P734009

Luminaire Tested: **24FCZ2-30-S-B2750-W2D-CP375-4000K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P734009
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P272125)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 1/5/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24FCZ2-30-S-B2750-W2D-CP375-4000K
Description: 2X4 3000 LUMEN SEALED CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT
AND SMOOTH LENS, WITH, CP375 BOTTOM LENS

Light Source: -
Ballast/Driver: -

Summary

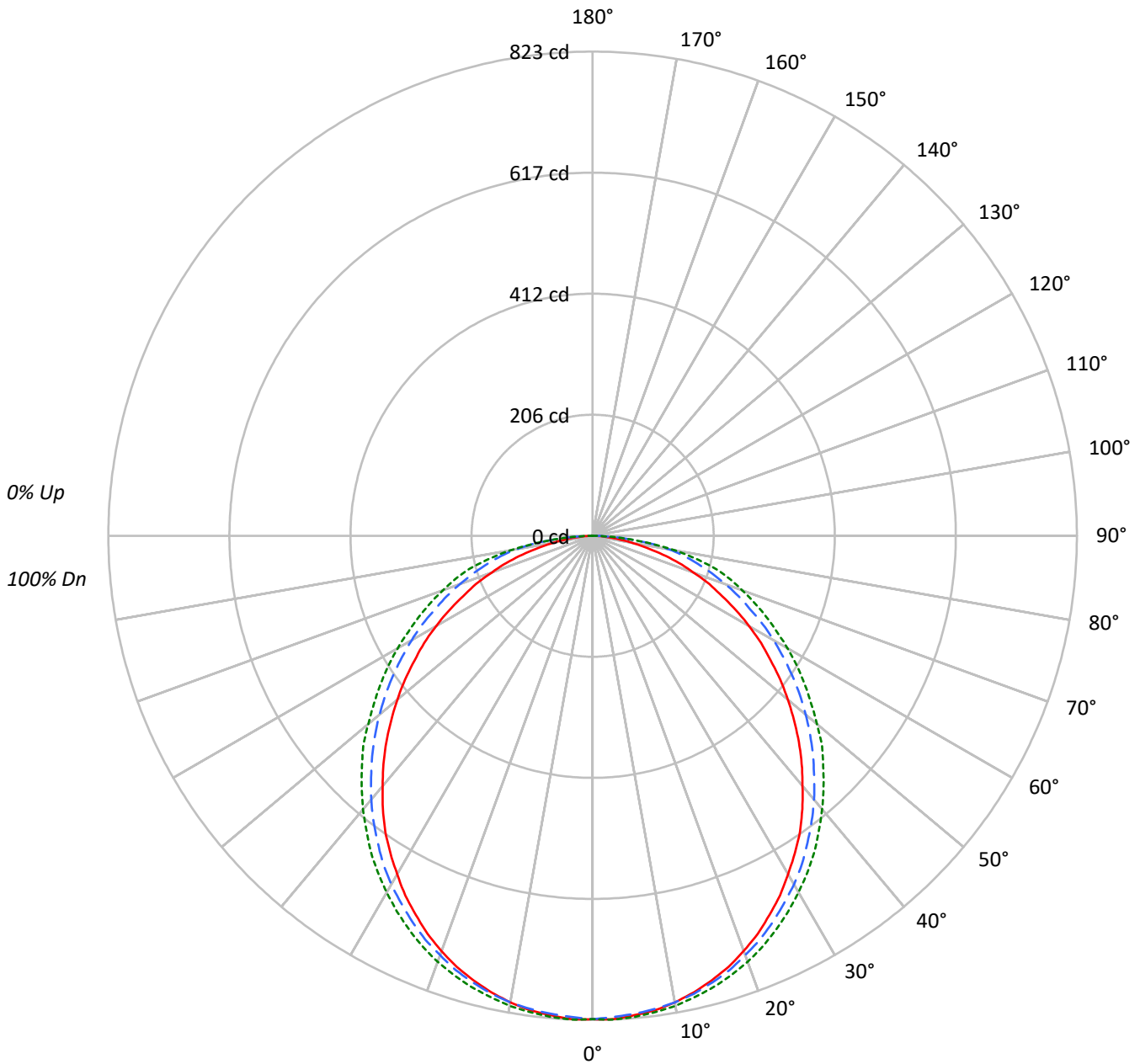
Lumens per Lamp: N/A
Luminaire Lumens: 2339.0 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

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





TEST NUMBER: P734009

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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 | 106 | 101 | 97 | 93 | 97 | 93 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 | | | | | | | | | | | | | | | | | | | |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 76 | 72 | 78 | 74 | 71 | 69 | | | | | | | | | | | | | | | | | | | |
| 3 | 89 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 | | | | | | | | | | | | | | | | | | | |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 54 | 66 | 59 | 53 | 63 | 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 | 70 | 56 | 47 | 40 | 68 | 55 | 47 | 40 | 53 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 39 | 37 | | | | | | | | | | | | | | | | | | | |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 48 | 41 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 33 | | | | | | | | | | | | | | | | | | | |
| 8 | 60 | 46 | 38 | 32 | 58 | 46 | 37 | 32 | 44 | 37 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 29 | | | | | | | | | | | | | | | | | | | |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 26 | | | | | | | | | | | | | | | | | | | |
| 10 | 53 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | 36 | 30 | 26 | 24 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 1160 | 1160 | 1160 |
| 5° | 1159 | 1156 | 1163 |
| 10° | 1154 | 1154 | 1163 |
| 15° | 1143 | 1148 | 1161 |
| 20° | 1128 | 1139 | 1157 |
| 25° | 1107 | 1128 | 1150 |
| 30° | 1082 | 1115 | 1140 |
| 35° | 1059 | 1097 | 1132 |
| 40° | 1023 | 1079 | 1118 |
| 45° | 989 | 1057 | 1106 |
| 50° | 951 | 1037 | 1093 |
| 55° | 908 | 1018 | 1082 |
| 60° | 866 | 1002 | 1080 |
| 65° | 811 | 985 | 1087 |
| 70° | 751 | 990 | 1116 |
| 75° | 673 | 1009 | 1179 |
| 80° | 544 | 1069 | 1153 |
| 85° | 408 | 938 | 915 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 77.8 | 3.3 |
| 10°-20° | 222.3 | 9.5 |
| 20°-30° | 334.1 | 14.3 |
| 30°-40° | 398.0 | 17.0 |
| 40°-50° | 407.3 | 17.4 |
| 50°-60° | 366.7 | 15.7 |
| 60°-70° | 288.0 | 12.3 |
| 70°-80° | 186.9 | 8.0 |
| 80°-90° | 57.8 | 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° | 634.2 | 27.1 |
| 0°-40° | 1032.2 | 44.1 |
| 0°-60° | 1806.3 | 77.2 |
| 0°-90° | 2339.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2339.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 822 | 822 | 822 | 822 | 822 | |
| 5° | 818 | 820 | 816 | 820 | 821 | 78 |
| 15° | 782 | 785 | 786 | 793 | 794 | 221 |
| 25° | 711 | 717 | 724 | 736 | 738 | 328 |
| 35° | 614 | 622 | 637 | 652 | 657 | 383 |
| 45° | 496 | 508 | 530 | 550 | 554 | 382 |
| 55° | 369 | 386 | 414 | 435 | 440 | 331 |
| 65° | 243 | 262 | 295 | 320 | 325 | 242 |
| 75° | 123 | 147 | 185 | 210 | 216 | 131 |
| 85° | 25 | 47 | 58 | 56 | 56 | 31 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P734009

CATALOG NUMBER: 24FCZ2-30-S-B2750-W2D-CP375-4000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 821.7 | 821.7 | 821.7 | 821.7 | 821.7 |
| 2.5° | 822.5 | 822.5 | 818.7 | 822.5 | 823.2 |
| 5° | 818.0 | 819.5 | 815.7 | 820.2 | 820.9 |
| 7.5° | 813.5 | 813.5 | 811.3 | 815.7 | 816.6 |
| 10° | 805.4 | 806.1 | 805.4 | 810.6 | 811.3 |
| 12.5° | 795.0 | 796.4 | 797.2 | 802.4 | 803.1 |
| 15° | 782.4 | 784.6 | 786.0 | 792.7 | 794.3 |
| 17.5° | 768.2 | 770.5 | 774.1 | 781.6 | 783.1 |
| 20° | 751.1 | 754.1 | 758.5 | 768.2 | 770.5 |
| 22.5° | 732.6 | 735.5 | 743.0 | 751.8 | 755.6 |
| 25° | 711.0 | 716.9 | 724.4 | 736.3 | 738.5 |
| 27.5° | 689.4 | 694.6 | 704.3 | 716.9 | 720.0 |
| 30° | 664.2 | 672.3 | 684.2 | 696.9 | 699.8 |
| 32.5° | 639.7 | 647.8 | 662.0 | 675.4 | 679.1 |
| 35° | 614.4 | 621.9 | 636.7 | 652.3 | 656.8 |
| 37.5° | 585.4 | 595.1 | 611.5 | 627.0 | 631.5 |
| 40° | 555.0 | 566.9 | 585.4 | 601.8 | 607.0 |
| 42.5° | 526.0 | 538.6 | 557.2 | 575.0 | 580.9 |
| 45° | 495.6 | 507.5 | 529.7 | 549.8 | 554.3 |
| 47.5° | 464.3 | 477.7 | 501.5 | 521.5 | 528.9 |
| 50° | 433.2 | 447.3 | 472.5 | 493.3 | 497.8 |
| 52.5° | 401.9 | 416.8 | 443.5 | 465.8 | 468.1 |
| 55° | 369.2 | 385.6 | 413.8 | 435.4 | 439.9 |
| 57.5° | 339.5 | 353.7 | 384.1 | 406.4 | 411.6 |
| 60° | 306.9 | 322.4 | 355.1 | 376.0 | 382.6 |
| 62.5° | 275.6 | 292.0 | 326.2 | 347.0 | 352.9 |
| 65° | 242.9 | 261.6 | 295.0 | 319.5 | 325.4 |
| 67.5° | 214.7 | 232.6 | 268.2 | 292.0 | 297.9 |
| 70° | 182.0 | 202.1 | 240.0 | 264.5 | 270.4 |
| 72.5° | 153.8 | 174.6 | 212.5 | 236.2 | 245.2 |
| 75° | 123.4 | 147.1 | 185.0 | 210.3 | 216.2 |
| 77.5° | 93.6 | 121.1 | 159.7 | 179.0 | 179.0 |
| 80° | 66.9 | 95.9 | 131.5 | 140.4 | 141.9 |
| 82.5° | 43.9 | 72.1 | 97.3 | 96.6 | 96.6 |
| 85° | 25.2 | 46.8 | 57.9 | 56.5 | 56.5 |
| 87.5° | 9.7 | 19.3 | 20.8 | 20.8 | 20.1 |
| 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)