

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: METALUX

Report Number: P732208

Luminaire Tested: **24CZ2-40-SQR-B2750-W2D-3500K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P732208
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: METALUX
Catalog Number: 24CZ2-40-SQR-B2750-W2D-3500K
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Summary

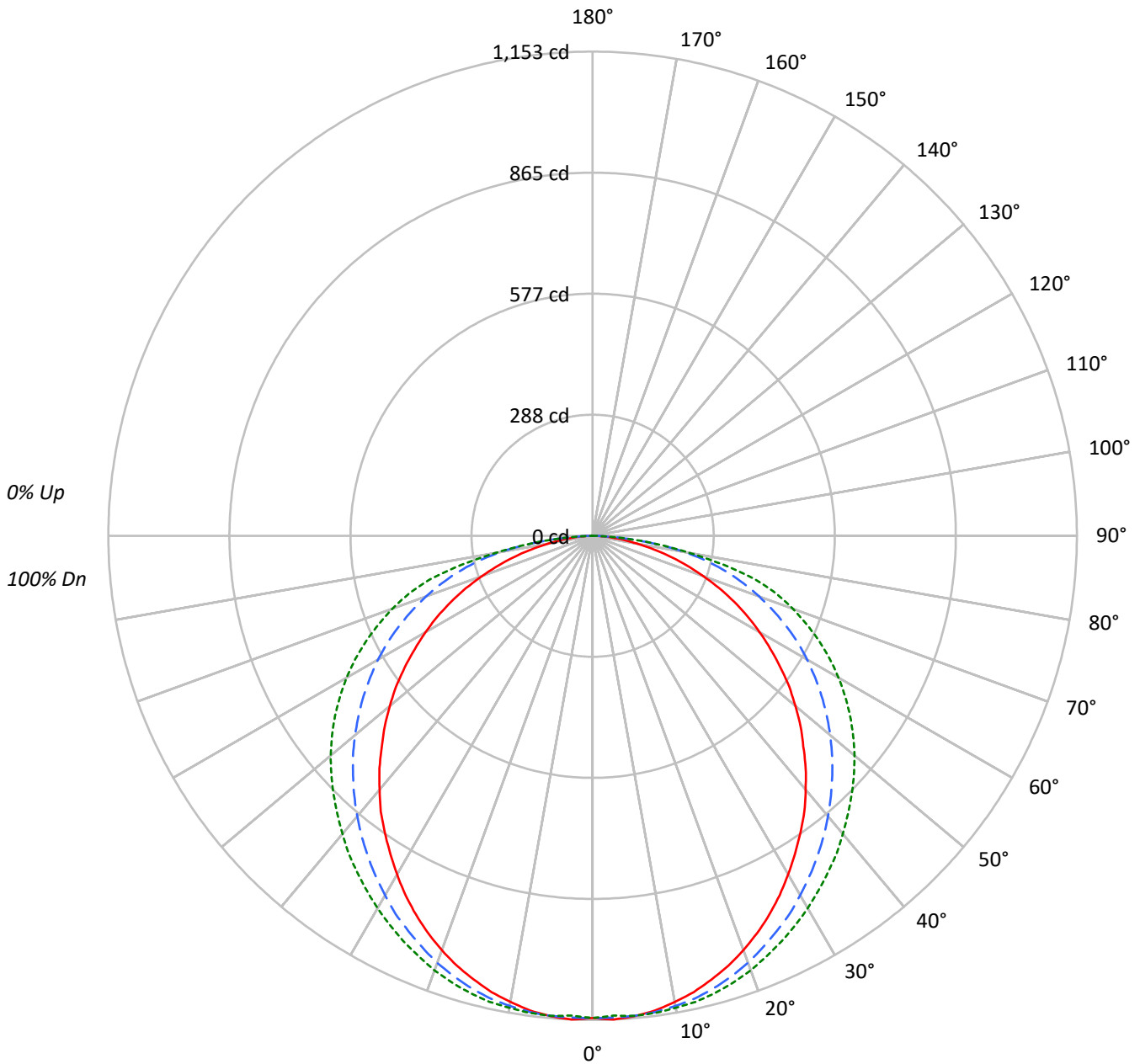
Lumens per Lamp: N/A
Luminaire Lumens: 3593.0 lumens
Efficiency: N/A
Efficacy: 115.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 31
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 | 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° | 1621 | 1621 | 1621 |
| 5° | 1627 | 1626 | 1626 |
| 10° | 1615 | 1629 | 1636 |
| 15° | 1598 | 1630 | 1647 |
| 20° | 1577 | 1625 | 1654 |
| 25° | 1550 | 1617 | 1659 |
| 30° | 1518 | 1611 | 1669 |
| 35° | 1486 | 1607 | 1684 |
| 40° | 1454 | 1607 | 1707 |
| 45° | 1416 | 1610 | 1741 |
| 50° | 1383 | 1620 | 1787 |
| 55° | 1343 | 1638 | 1842 |
| 60° | 1296 | 1664 | 1909 |
| 65° | 1240 | 1696 | 1989 |
| 70° | 1150 | 1738 | 2091 |
| 75° | 1042 | 1798 | 2187 |
| 80° | 877 | 1804 | 1880 |
| 85° | 672 | 1363 | 1363 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 109.0 | 3.0 |
| 10°-20° | 313.7 | 8.7 |
| 20°-30° | 476.4 | 13.3 |
| 30°-40° | 579.5 | 16.1 |
| 40°-50° | 617.0 | 17.2 |
| 50°-60° | 587.7 | 16.4 |
| 60°-70° | 491.4 | 13.7 |
| 70°-80° | 327.7 | 9.1 |
| 80°-90° | 90.6 | 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° | 899.1 | 25.0 |
| 0°-40° | 1478.6 | 41.2 |
| 0°-60° | 2683.3 | 74.7 |
| 0°-90° | 3593.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3593.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1148 | 1148 | 1148 | 1148 | 1148 | |
| 5° | 1148 | 1141 | 1147 | 1147 | 1147 | 109 |
| 15° | 1094 | 1096 | 1115 | 1124 | 1127 | 309 |
| 25° | 996 | 1008 | 1038 | 1056 | 1066 | 458 |
| 35° | 863 | 888 | 933 | 963 | 978 | 540 |
| 45° | 709 | 748 | 807 | 852 | 872 | 548 |
| 55° | 546 | 593 | 666 | 724 | 749 | 488 |
| 65° | 371 | 426 | 508 | 571 | 596 | 367 |
| 75° | 191 | 252 | 330 | 386 | 401 | 202 |
| 85° | 42 | 77 | 84 | 83 | 84 | 50 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P732208

CATALOG NUMBER: 24CZ2-40-SQR-B2750-W2D-3500K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1148.4 | 1148.4 | 1148.4 | 1148.4 | 1148.4 |
| 2.5° | 1153.2 | 1144.9 | 1148.4 | 1148.4 | 1143.8 |
| 5° | 1148.4 | 1141.3 | 1147.4 | 1147.4 | 1147.4 |
| 7.5° | 1140.3 | 1134.2 | 1143.8 | 1146.1 | 1146.1 |
| 10° | 1127.2 | 1124.8 | 1136.7 | 1140.3 | 1141.3 |
| 12.5° | 1113.0 | 1111.7 | 1128.4 | 1133.0 | 1136.7 |
| 15° | 1093.8 | 1096.3 | 1115.3 | 1123.6 | 1127.2 |
| 17.5° | 1073.8 | 1078.4 | 1099.9 | 1111.7 | 1115.3 |
| 20° | 1050.1 | 1057.2 | 1082.1 | 1093.8 | 1101.1 |
| 22.5° | 1024.0 | 1034.6 | 1060.7 | 1074.9 | 1083.2 |
| 25° | 995.5 | 1008.4 | 1038.2 | 1055.9 | 1065.5 |
| 27.5° | 964.6 | 981.3 | 1015.7 | 1035.7 | 1045.3 |
| 30° | 931.3 | 950.3 | 988.4 | 1012.1 | 1024.0 |
| 32.5° | 896.9 | 919.5 | 961.1 | 987.1 | 1001.3 |
| 35° | 862.6 | 887.5 | 932.6 | 963.4 | 977.6 |
| 37.5° | 828.2 | 853.0 | 903.0 | 936.1 | 954.0 |
| 40° | 789.0 | 818.6 | 872.1 | 908.8 | 926.7 |
| 42.5° | 751.1 | 783.0 | 840.0 | 880.3 | 899.4 |
| 45° | 709.4 | 747.5 | 806.7 | 851.9 | 872.1 |
| 47.5° | 671.5 | 709.4 | 773.6 | 821.1 | 843.6 |
| 50° | 630.0 | 670.3 | 738.0 | 790.2 | 814.0 |
| 52.5° | 589.6 | 631.3 | 702.4 | 758.2 | 781.9 |
| 55° | 545.8 | 593.2 | 665.7 | 723.8 | 748.6 |
| 57.5° | 501.9 | 552.9 | 627.6 | 688.2 | 713.1 |
| 60° | 459.2 | 511.3 | 589.6 | 650.2 | 676.3 |
| 62.5° | 416.5 | 468.6 | 550.5 | 612.1 | 637.1 |
| 65° | 371.3 | 425.9 | 507.8 | 570.7 | 595.7 |
| 67.5° | 326.3 | 383.2 | 465.0 | 528.0 | 551.7 |
| 70° | 278.8 | 339.4 | 421.3 | 482.9 | 506.7 |
| 72.5° | 235.0 | 295.4 | 376.1 | 436.7 | 459.2 |
| 75° | 191.0 | 251.5 | 329.8 | 385.6 | 401.1 |
| 77.5° | 148.3 | 208.8 | 278.8 | 315.6 | 319.2 |
| 80° | 107.9 | 165.0 | 221.9 | 232.5 | 231.3 |
| 82.5° | 72.3 | 123.4 | 153.1 | 154.2 | 157.7 |
| 85° | 41.5 | 77.1 | 84.2 | 83.1 | 84.2 |
| 87.5° | 16.7 | 27.3 | 23.7 | 17.7 | 17.7 |
| 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)