

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: P732310

Luminaire Tested: **24CZ2-50-SQR-B2750-W2D-5000K**

Issue Date: 1/5/2024



Test Information

Test Method: LM-79-08
Report Number: P732310
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: 24CZ2-50-SQR-B2750-W2D-5000K
Description: 2X4 5000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Summary

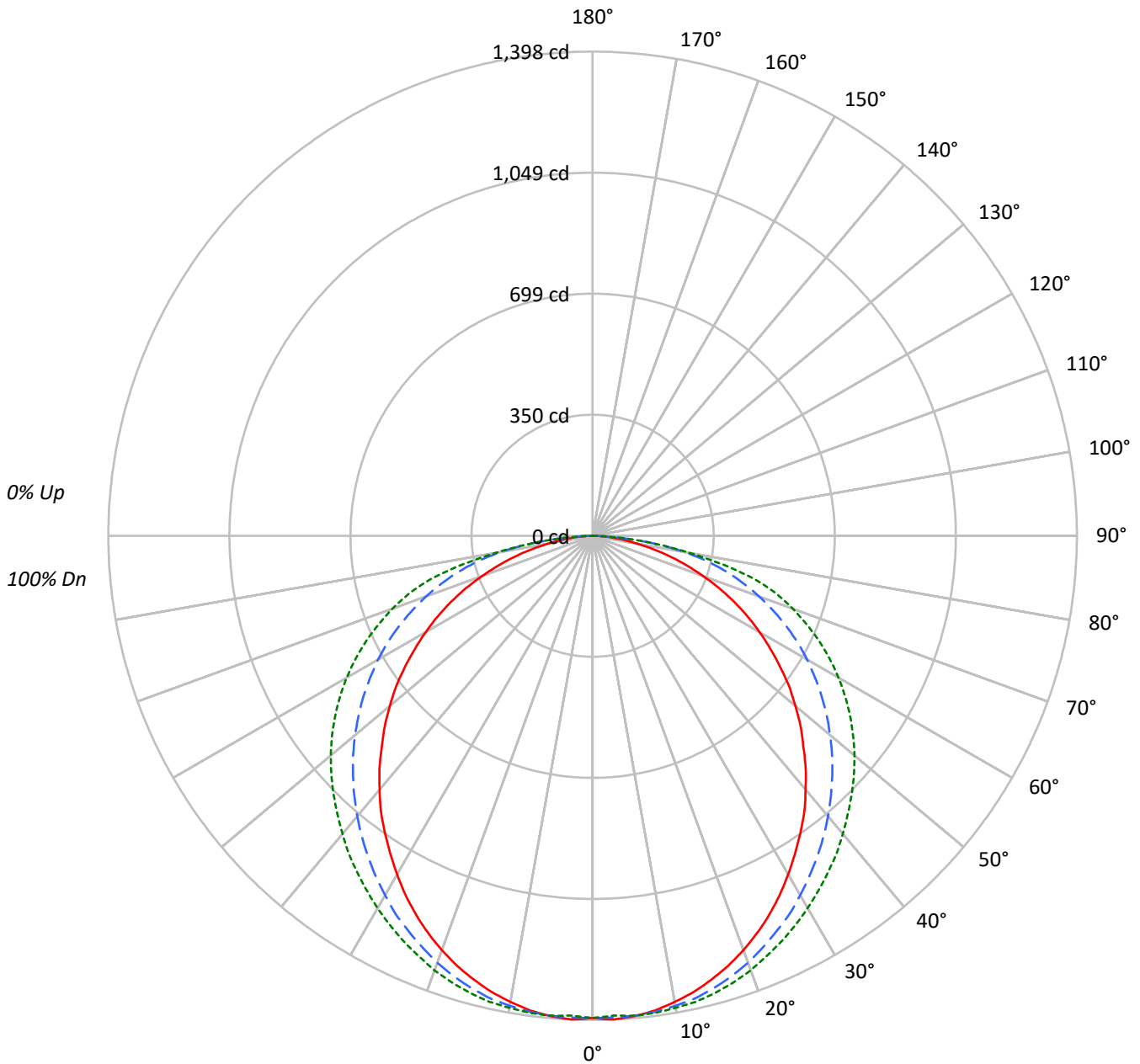
Lumens per Lamp: N/A
Luminaire Lumens: 4356.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 40
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

TEST NUMBER: P732310

CATALOG NUMBER: 24CZ2-50-SQR-B2750-W2D-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P732310

CATALOG NUMBER: 24CZ2-50-SQR-B2750-W2D-5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | |
| RC | 80 | | | | 70 | | | | 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° | 1965 | 1965 | 1965 |
| 5° | 1973 | 1971 | 1971 |
| 10° | 1958 | 1975 | 1983 |
| 15° | 1938 | 1976 | 1997 |
| 20° | 1912 | 1970 | 2005 |
| 25° | 1879 | 1960 | 2011 |
| 30° | 1840 | 1953 | 2023 |
| 35° | 1802 | 1948 | 2042 |
| 40° | 1762 | 1948 | 2070 |
| 45° | 1717 | 1952 | 2110 |
| 50° | 1677 | 1964 | 2167 |
| 55° | 1628 | 1986 | 2233 |
| 60° | 1571 | 2018 | 2314 |
| 65° | 1503 | 2056 | 2411 |
| 70° | 1395 | 2107 | 2535 |
| 75° | 1263 | 2181 | 2651 |
| 80° | 1064 | 2186 | 2279 |
| 85° | 815 | 1653 | 1653 |



TEST NUMBER: P732310

CATALOG NUMBER: 24CZ2-50-SQR-B2750-W2D-5000K

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 132.2 | 3.0 |
| 10°-20° | 380.3 | 8.7 |
| 20°-30° | 577.6 | 13.3 |
| 30°-40° | 702.6 | 16.1 |
| 40°-50° | 748.0 | 17.2 |
| 50°-60° | 712.5 | 16.4 |
| 60°-70° | 595.8 | 13.7 |
| 70°-80° | 397.2 | 9.1 |
| 80°-90° | 109.9 | 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° | 1090.0 | 25.0 |
| 0°-40° | 1792.6 | 41.2 |
| 0°-60° | 3253.1 | 74.7 |
| 0°-90° | 4356.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4356.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1392 | 1392 | 1392 | 1392 | 1392 | |
| 5° | 1392 | 1384 | 1391 | 1391 | 1391 | 132 |
| 15° | 1326 | 1329 | 1352 | 1362 | 1366 | 374 |
| 25° | 1207 | 1223 | 1259 | 1280 | 1292 | 556 |
| 35° | 1046 | 1076 | 1131 | 1168 | 1185 | 654 |
| 45° | 860 | 906 | 978 | 1033 | 1057 | 665 |
| 55° | 662 | 719 | 807 | 878 | 908 | 592 |
| 65° | 450 | 516 | 616 | 692 | 722 | 445 |
| 75° | 232 | 305 | 400 | 468 | 486 | 245 |
| 85° | 50 | 94 | 102 | 101 | 102 | 61 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P732310

CATALOG NUMBER: 24CZ2-50-SQR-B2750-W2D-5000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1392.3 | 1392.3 | 1392.3 | 1392.3 | 1392.3 |
| 2.5° | 1398.1 | 1388.0 | 1392.3 | 1392.3 | 1386.7 |
| 5° | 1392.3 | 1383.7 | 1391.0 | 1391.0 | 1391.0 |
| 7.5° | 1382.4 | 1375.1 | 1386.7 | 1389.5 | 1389.5 |
| 10° | 1366.5 | 1363.7 | 1378.1 | 1382.4 | 1383.7 |
| 12.5° | 1349.3 | 1347.8 | 1368.0 | 1373.6 | 1378.1 |
| 15° | 1326.1 | 1329.1 | 1352.1 | 1362.2 | 1366.5 |
| 17.5° | 1301.8 | 1307.4 | 1333.4 | 1347.8 | 1352.1 |
| 20° | 1273.0 | 1281.6 | 1311.9 | 1326.1 | 1334.9 |
| 22.5° | 1241.5 | 1254.4 | 1285.9 | 1303.1 | 1313.2 |
| 25° | 1206.9 | 1222.6 | 1258.7 | 1280.2 | 1291.7 |
| 27.5° | 1169.5 | 1189.7 | 1231.4 | 1255.7 | 1267.3 |
| 30° | 1129.1 | 1152.1 | 1198.3 | 1227.1 | 1241.5 |
| 32.5° | 1087.4 | 1114.7 | 1165.2 | 1196.8 | 1214.0 |
| 35° | 1045.7 | 1076.0 | 1130.6 | 1168.0 | 1185.2 |
| 37.5° | 1004.0 | 1034.1 | 1094.7 | 1134.9 | 1156.6 |
| 40° | 956.6 | 992.5 | 1057.3 | 1101.8 | 1123.5 |
| 42.5° | 910.6 | 949.3 | 1018.4 | 1067.2 | 1090.4 |
| 45° | 860.1 | 906.3 | 978.1 | 1032.8 | 1057.3 |
| 47.5° | 814.1 | 860.1 | 937.9 | 995.4 | 1022.7 |
| 50° | 763.8 | 812.6 | 894.7 | 958.1 | 986.8 |
| 52.5° | 714.9 | 765.3 | 851.5 | 919.2 | 948.0 |
| 55° | 661.8 | 719.1 | 807.0 | 877.5 | 907.6 |
| 57.5° | 608.5 | 670.4 | 760.8 | 834.3 | 864.6 |
| 60° | 556.7 | 619.9 | 714.9 | 788.3 | 819.9 |
| 62.5° | 504.9 | 568.1 | 667.4 | 742.1 | 772.4 |
| 65° | 450.1 | 516.3 | 615.6 | 691.9 | 722.1 |
| 67.5° | 395.6 | 464.5 | 563.8 | 640.1 | 668.9 |
| 70° | 338.0 | 411.5 | 510.7 | 585.5 | 614.3 |
| 72.5° | 284.9 | 358.2 | 455.9 | 529.4 | 556.7 |
| 75° | 231.6 | 304.9 | 399.9 | 467.5 | 486.2 |
| 77.5° | 179.8 | 253.1 | 338.0 | 382.7 | 387.0 |
| 80° | 130.9 | 200.0 | 269.0 | 281.9 | 280.4 |
| 82.5° | 87.7 | 149.6 | 185.6 | 186.9 | 191.2 |
| 85° | 50.3 | 93.5 | 102.1 | 100.8 | 102.1 |
| 87.5° | 20.2 | 33.1 | 28.8 | 21.5 | 21.5 |
| 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)