

2.5 inch Copper M (Red) Chime Length Calculator for the C-9 Chord (C E G B^b D) Inches

A-440 For a Tube or Rod unrestricted at both ends

To determine the resonant frequency for a rod set the ID=0 and enter the OD and Metal Type

Enter values in **BLUE**, answers in **ORANGE (inches)** and in **YELLOW (mm)**

| OD inches = 2.625 | | ID inches = 2.495 | | Metal = Copper < Click to Select | | | | | | | |
|---|---------------|--|------------|---|------------|---|--------------|---------------|------------|-----------|------------|
| Wall = 0.065 inches | | Length calculated for fundamental F Hang Point is for fundamental F node | | | | | | | | | |
| Note | Freq Hz | Length inches | Hang Point | Length mm | Hang Point | Note | Freq Hz | Length inches | Hang Point | Length mm | Hang Point |
| C1 | 32.70 | 116 13/16 | 26 3/16 | 2967.0 | 665.2 | C5 | 523.30 | 29 3/16 | 6 9/16 | 741.4 | 166.2 |
| E | 41.21 | 104 1/16 | 23 5/16 | 2643.2 | 592.6 | E | 659.30 | 26 | 5 13/16 | 660.4 | 148.1 |
| G | 49.00 | 95 7/16 | 21 3/8 | 2424.1 | 543.5 | G | 784.00 | 23 7/8 | 5 3/8 | 606.4 | 136.0 |
| A [#] /B ^b | 58.30 | 87 1/2 | 19 5/8 | 2222.5 | 498.3 | A [#] /B ^b | 932.30 | 21 7/8 | 4 7/8 | 555.6 | 124.6 |
| D2 | 73.41 | 78 | 17 1/2 | 1981.2 | 444.2 | D6 | 1,174.61 | 19 1/2 | 4 3/8 | 495.3 | 111.0 |
| Total feet = | | 40.2 | Total cm= | 1223.8 | | Total feet required | | 10.0 | Total cm= | 305.9 | |
| C2 | 65.40 | 82 5/8 | 18 1/2 | 2098.7 | 470.5 | C6 | 1,046.50 | 20 5/8 | 4 5/8 | 523.9 | 117.5 |
| E | 82.40 | 73 5/8 | 16 1/2 | 1870.1 | 419.3 | E | 1,318.50 | 18 3/8 | 4 1/8 | 466.7 | 104.6 |
| G | 98.01 | 67 1/2 | 15 1/8 | 1714.5 | 384.4 | G | 1,568.00 | 16 7/8 | 3 13/16 | 428.6 | 96.1 |
| A [#] /B ^b | 116.50 | 61 7/8 | 13 7/8 | 1571.6 | 352.4 | A [#] /B ^b | 1,864.60 | 15 1/2 | 3 1/2 | 393.7 | 88.3 |
| D3 | 146.80 | 55 1/8 | 12 3/8 | 1400.2 | 313.9 | D7 | 2,349.20 | 13 13/16 | 3 1/8 | 350.8 | 78.7 |
| Total feet required | | 28.4 | Total cm= | 865.5 | | Total feet required | | 7.1 | Total cm= | 216.4 | |
| C3 | 130.81 | 58 7/16 | 13 1/8 | 1484.3 | 332.8 | C7 | 2,093.00 | 14 5/8 | 3 1/4 | 371.5 | 83.3 |
| E | 164.80 | 52 1/16 | 11 11/16 | 1322.4 | 296.5 | E | 2,637.00 | 13 | 2 15/16 | 330.2 | 74.0 |
| G | 196.00 | 47 11/16 | 10 11/16 | 1211.3 | 271.6 | G | 3,136.00 | 11 15/16 | 2 11/16 | 303.2 | 68.0 |
| A [#] /B ^b | 233.10 | 43 3/4 | 9 13/16 | 1111.3 | 249.1 | A [#] /B ^b | 3,729.20 | 10 15/16 | 2 7/16 | 277.8 | 62.3 |
| D4 | 293.70 | 39 | 8 3/4 | 990.6 | 222.1 | D8 | 4,698.40 | 9 3/4 | 2 3/16 | 247.7 | 55.5 |
| Total feet required | | 20.1 | Total cm= | 612.0 | | Total feet required | | 5.0 | Total cm= | 153.0 | |
| C4 | 261.60 | 41 5/16 | 9 1/4 | 1049.3 | 235.3 | | | | | | |
| E | 329.61 | 36 13/16 | 8 1/4 | 935.0 | 209.6 | | | | | | |
| G | 392.00 | 33 3/4 | 7 9/16 | 857.3 | 192.2 | | | | | | |
| A [#] /B ^b | 466.20 | 30 15/16 | 6 15/16 | 785.8 | 176.2 | | | | | | |
| D5 | 587.30 | 27 9/16 | 6 3/16 | 700.1 | 157.0 | | | | | | |
| Total feet required | | 14.2 | Total cm= | 432.8 | | | | | | | |
| Calculate Length or Frequency for ID & OD entered above | | | | | | | | | | | |
| Enter F= | 220.00 | 45 1/16 | 10 1/8 | 1144.6 | 256.6 | Convert | 2.000 | inches to | 50.8 | mm | |
| | | Enter L ↓ | | | | | 60 | mm to | 2 3/8 | inches | |
| F= | 959.90 | 21 9/16 | 4 13/16 | 547.7 | 122.8 | https://leehite.org/Chimes.htm | | | | | |