

# 1.25 inch Copper L (Blue) Chime Length Calculator for the C-9 Chord (C E G B<sup>b</sup> 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 = <b>1.375</b>   |               | ID inches = <b>1.265</b>   |            | Metal = <b>Copper</b> < Click to Select |            |   |              |               |            |           |            |
|--|---------------|--|------------|---|------------|---|--------------|---------------|------------|-----------|------------|
| Wall = 0.055 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         | 83 15/16   | 18 13/16   | 2132.0                                  | 478.0      | C5  | 523.30       | 21            | 4 11/16    | 533.4     | 119.6      |
| E  | 41.21         | 74 3/4   | 16 3/4     | 1898.7                                  | 425.7      | E   | 659.30       | 18 11/16      | 4 3/16     | 474.7     | 106.4      |
| G  | 49.00         | 68 9/16  | 15 3/8     | 1741.5                                  | 390.4      | G   | 784.00       | 17 1/8        | 3 13/16    | 435.0     | 97.5       |
| A <sup>#</sup> /B <sup>b</sup>                                     | 58.30         | 62 7/8   | 14 1/8     | 1597.0                                  | 358.1      | A <sup>#</sup> /B <sup>b</sup>  | 932.30       | 15 11/16      | 3 1/2      | 398.5     | 89.3       |
| D2   | 73.41         | 56   | 12 9/16    | 1422.4                                  | 318.9      | D6  | 1,174.61     | 14            | 3 1/8      | 355.6     | 79.7       |
| Total feet =   |               | 28.8   | Total cm=  | 879.2                                   |            | Total feet required   |              | 7.2           | Total cm=  | 219.7     |            |
| C2   | 65.40         | 59 5/16  | 13 5/16    | 1506.5                                  | 337.8      | C6  | 1,046.50     | 14 13/16      | 3 5/16     | 376.2     | 84.4       |
| E  | 82.40         | 52 7/8   | 11 7/8     | 1343.0                                  | 301.1      | E   | 1,318.50     | 13 3/16       | 2 15/16    | 335.0     | 75.1       |
| G  | 98.01         | 48 1/2   | 10 7/8     | 1231.9                                  | 276.2      | G   | 1,568.00     | 12 1/8        | 2 11/16    | 308.0     | 69.0       |
| A <sup>#</sup> /B <sup>b</sup>                                     | 116.50        | 44 7/16  | 9 15/16    | 1128.7                                  | 253.1      | A <sup>#</sup> /B <sup>b</sup>  | 1,864.60     | 11 1/8        | 2 1/2      | 282.6     | 63.4       |
| D3   | 146.80        | 39 5/8   | 8 7/8      | 1006.5                                  | 225.7      | D7  | 2,349.20     | 9 7/8         | 2 3/16     | 250.8     | 56.2       |
| Total feet required  |               | 20.4   | Total cm=  | 621.7                                   |            | Total feet required   |              | 5.1           | Total cm=  | 155.3     |            |
| C3   | 130.81        | 41 15/16   | 9 3/8      | 1065.2                                  | 238.8      | C7  | 2,093.00     | 10 1/2        | 2 3/8      | 266.7     | 59.8       |
| E  | 164.80        | 37 3/8   | 8 3/8      | 949.3                                   | 212.8      | E   | 2,637.00     | 9 3/8         | 2 1/8      | 238.1     | 53.4       |
| G  | 196.00        | 34 1/4   | 7 11/16    | 870.0                                   | 195.0      | G   | 3,136.00     | 8 9/16        | 1 15/16    | 217.5     | 48.8       |
| A <sup>#</sup> /B <sup>b</sup>                                     | 233.10        | 31 7/16  | 7 1/16     | 798.5                                   | 179.0      | A <sup>#</sup> /B <sup>b</sup>  | 3,729.20     | 7 7/8         | 1 3/4      | 200.0     | 44.8       |
| D4   | 293.70        | 28   | 6 1/4      | 711.2                                   | 159.5      | D8  | 4,698.40     | 7             | 1 9/16     | 177.8     | 39.9       |
| Total feet required  |               | 14.4   | Total cm=  | 439.4                                   |            | Total feet required   |              | 3.6           | Total cm=  | 110.0     |            |
| C4   | 261.60        | 29 11/16   | 6 5/8      | 754.1                                   | 169.1      |   |              |               |            |           |            |
| E  | 329.61        | 26 7/16  | 5 15/16    | 671.5                                   | 150.6      |   |              |               |            |           |            |
| G  | 392.00        | 24 1/4   | 5 7/16     | 616.0                                   | 138.1      |   |              |               |            |           |            |
| A <sup>#</sup> /B <sup>b</sup>                                     | 466.20        | 22 1/4   | 5          | 565.2                                   | 126.7      |   |              |               |            |           |            |
| D5   | 587.30        | 19 13/16   | 4 7/16     | 503.2                                   | 112.8      |   |              |               |            |           |            |
| Total feet required  |               | 10.2   | Total cm=  | 311.0                                   |            |   |              |               |            |           |            |
| <b>Calculate Length or Frequency for ID &amp; OD entered above</b> |               |  |            |   |            |   |              |               |            |           |            |
| Enter F=   | <b>220.00</b> | 32 3/8   | 7 1/4      | 822.3                                   | 184.4      | <b>Convert</b>  | <b>2.000</b> | inches to     | 50.8       | mm        |            |
|  | Enter L ↓     |  |            |   |            |   | <b>60</b>    | mm to         | 2 3/8      | inches    |            |
| F=   | 495.22        | <b>21 9/16</b>   | 4 13/16    | 547.7                                   | 122.8      | <a href="https://leehite.org/Chimes.htm">https://leehite.org/Chimes.htm</a> |              |               |            |           |            |