

## 4 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>4.125</b>		ID inches = <b>3.897</b>		Metal = <b>Copper</b> < Click to Select							
Wall = 0.114 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	146 1/4	32 13/16	3714.8	832.8	C5	523.30	36 9/16	8 3/16	928.7	208.2
E	41.21	130 1/4	29 3/16	3308.4	741.7	E	659.30	32 9/16	7 5/16	827.1	185.4
G	49.00	119 7/16	26 3/4	3033.7	680.2	G	784.00	29 7/8	6 11/16	758.8	170.1
A <sup>#</sup> /B <sup>b</sup>	58.30	109 1/2	24 9/16	2781.3	623.6	A <sup>#</sup> /B <sup>b</sup>	932.30	27 3/8	6 1/8	695.3	155.9
D2	73.41	97 5/8	21 7/8	2479.7	555.9	D6	1,174.61	24 3/8	5 7/16	619.1	138.8
Total feet =		50.3	Total cm=	1531.8		Total feet required		12.6	Total cm=	382.9	
C2	65.40	103 7/16	23 3/16	2627.3	589.0	C6	1,046.50	25 7/8	5 13/16	657.2	147.3
E	82.40	92 1/8	20 5/8	2340.0	524.6	E	1,318.50	23	5 3/16	584.2	131.0
G	98.01	84 1/2	18 15/16	2146.3	481.2	G	1,568.00	21 1/8	4 3/4	536.6	120.3
A <sup>#</sup> /B <sup>b</sup>	116.50	77 1/2	17 3/8	1968.5	441.3	A <sup>#</sup> /B <sup>b</sup>	1,864.60	19 3/8	4 3/8	492.1	110.3
D3	146.80	69	15 1/2	1752.6	392.9	D7	2,349.20	17 1/4	3 7/8	438.2	98.2
Total feet required		35.5	Total cm=	1083.5		Total feet required		8.9	Total cm=	270.8	
C3	130.81	73 1/8	16 3/8	1857.4	416.4	C7	2,093.00	18 1/4	4 1/16	463.6	103.9
E	164.80	65 1/8	14 5/8	1654.2	370.9	E	2,637.00	16 5/16	3 11/16	414.3	92.9
G	196.00	59 3/4	13 3/8	1517.7	340.3	G	3,136.00	14 15/16	3 3/8	379.4	85.1
A <sup>#</sup> /B <sup>b</sup>	233.10	54 3/4	12 1/4	1390.7	311.8	A <sup>#</sup> /B <sup>b</sup>	3,729.20	13 11/16	3 1/16	347.7	77.9
D4	293.70	48 13/16	10 15/16	1239.8	278.0	D8	4,698.40	12 3/16	2 3/4	309.6	69.4
Total feet required		25.1	Total cm=	766.0		Total feet required		6.3	Total cm=	191.5	
C4	261.60	51 11/16	11 9/16	1312.9	294.3						
E	329.61	46 1/16	10 5/16	1170.0	262.3						
G	392.00	42 1/4	9 1/2	1073.2	240.6						
A <sup>#</sup> /B <sup>b</sup>	466.20	38 3/4	8 11/16	984.3	220.7						
D5	587.30	34 1/2	7 3/4	876.3	196.5						
Total feet required		17.8	Total cm=	541.7							
<b>Calculate Length or Frequency for ID &amp; OD entered above</b>											
Enter F=	<b>220.00</b>	56 3/8	12 5/8	1431.9	321.0	<b>Convert</b>	<b>2.000</b>	inches to	50.8	mm	
		Enter L ↓					<b>60</b>	mm to	2 3/8	inches	
F=	1504.10	<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>					