

### 3.5 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>3.625</b>		ID inches = <b>3.425</b>		Metal = <b>Copper</b> < Click to Select							
Wall = 0.100 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	137 1/16	30 3/4	3481.4	780.5	C5	523.30	34 1/4	7 11/16	870.0	195.0
E	41.21	122 1/8	27 3/8	3102.0	695.5	E	659.30	30 9/16	6 7/8	776.3	174.0
G	49.00	112	25 1/8	2844.8	637.8	G	784.00	28	6 1/4	711.2	159.5
A <sup>#</sup> /B <sup>b</sup>	58.30	102 11/16	23	2608.3	584.8	A <sup>#</sup> /B <sup>b</sup>	932.30	25 11/16	5 3/4	652.5	146.3
D2	73.41	91 1/2	20 1/2	2324.1	521.1	D6	1,174.61	22 7/8	5 1/8	581.0	130.3
Total feet =		47.1	Total cm=	1436.1		Total feet required		11.8	Total cm=	359.1	
C2	65.40	96 15/16	21 3/4	2462.2	552.0	C6	1,046.50	24 1/4	5 7/16	616.0	138.1
E	82.40	86 3/8	19 3/8	2193.9	491.9	E	1,318.50	21 9/16	4 13/16	547.7	122.8
G	98.01	79 3/16	17 3/4	2011.4	450.9	G	1,568.00	19 13/16	4 7/16	503.2	112.8
A <sup>#</sup> /B <sup>b</sup>	116.50	72 5/8	16 5/16	1844.7	413.6	A <sup>#</sup> /B <sup>b</sup>	1,864.60	18 1/8	4 1/16	460.4	103.2
D3	146.80	64 11/16	14 1/2	1643.1	368.4	D7	2,349.20	16 3/16	3 5/8	411.2	92.2
Total feet required		33.3	Total cm=	1015.5		Total feet required		8.3	Total cm=	253.8	
C3	130.81	68 9/16	15 3/8	1741.5	390.4	C7	2,093.00	17 1/8	3 13/16	435.0	97.5
E	164.80	61 1/16	13 11/16	1551.0	347.7	E	2,637.00	15 1/4	3 7/16	387.4	86.8
G	196.00	56	12 9/16	1422.4	318.9	G	3,136.00	14	3 1/8	355.6	79.7
A <sup>#</sup> /B <sup>b</sup>	233.10	51 3/8	11 1/2	1304.9	292.6	A <sup>#</sup> /B <sup>b</sup>	3,729.20	12 13/16	2 7/8	325.4	73.0
D4	293.70	45 3/4	10 1/4	1162.1	260.5	D8	4,698.40	11 7/16	2 9/16	290.5	65.1
Total feet required		23.6	Total cm=	718.2		Total feet required		5.9	Total cm=	179.4	
C4	261.60	48 1/2	10 7/8	1231.9	276.2						
E	329.61	43 3/16	9 11/16	1097.0	245.9						
G	392.00	39 5/8	8 7/8	1006.5	225.7						
A <sup>#</sup> /B <sup>b</sup>	466.20	36 5/16	8 1/8	922.3	206.8						
D5	587.30	32 3/8	7 1/4	822.3	184.4						
Total feet required		16.7	Total cm=	508.0							
<b>Calculate Length or Frequency for ID &amp; OD entered above</b>											
Enter F=	<b>220.00</b>	52 7/8	11 7/8	1343.0	301.1	<b>Convert</b>	<b>2.000</b>	inches to	50.8	mm	
		Enter L ↓					<b>60</b>	mm to	2 3/8	inches	
F=	1321.85	<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>					