

4 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 = 4.125		ID inches = 3.935		Metal = Copper < Click to Select							
Wall = 0.095 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 9/16	32 7/8	3722.7	834.6	C5	523.30	36 5/8	8 3/16	930.3	208.6
E	41.21	130 9/16	29 1/4	3316.3	743.5	E	659.30	32 5/8	7 5/16	828.7	185.8
G	49.00	119 3/4	26 7/8	3041.7	681.9	G	784.00	29 15/16	6 11/16	760.4	170.5
A [#] /B ^b	58.30	109 3/4	24 5/8	2787.7	625.0	A [#] /B ^b	932.30	27 7/16	6 1/8	696.9	156.2
D2	73.41	97 13/16	21 15/16	2484.4	557.0	D6	1,174.61	24 7/16	5 1/2	620.7	139.2
Total feet =		50.4	Total cm=	1535.3		Total feet required		12.6	Total cm=	383.7	
C2	65.40	103 5/8	23 1/4	2632.1	590.1	C6	1,046.50	25 15/16	5 13/16	658.8	147.7
E	82.40	92 5/16	20 11/16	2344.7	525.7	E	1,318.50	23 1/16	5 3/16	585.8	131.3
G	98.01	84 11/16	19	2151.1	482.3	G	1,568.00	21 3/16	4 3/4	538.2	120.7
A [#] /B ^b	116.50	77 5/8	17 3/8	1971.7	442.0	A [#] /B ^b	1,864.60	19 7/16	4 3/8	493.7	110.7
D3	146.80	69 3/16	15 1/2	1757.4	394.0	D7	2,349.20	17 5/16	3 7/8	439.7	98.6
Total feet required		35.6	Total cm=	1085.7		Total feet required		8.9	Total cm=	271.6	
C3	130.81	73 5/16	16 7/16	1862.1	417.5	C7	2,093.00	18 5/16	4 1/8	465.1	104.3
E	164.80	65 5/16	14 5/8	1658.9	371.9	E	2,637.00	16 5/16	3 11/16	414.3	92.9
G	196.00	59 7/8	13 7/16	1520.8	341.0	G	3,136.00	14 15/16	3 3/8	379.4	85.1
A [#] /B ^b	233.10	54 7/8	12 5/16	1393.8	312.5	A [#] /B ^b	3,729.20	13 3/4	3 1/16	349.3	78.3
D4	293.70	48 15/16	11	1243.0	278.7	D8	4,698.40	12 1/4	2 3/4	311.2	69.8
Total feet required		25.2	Total cm=	767.9		Total feet required		6.3	Total cm=	191.9	
C4	261.60	51 13/16	11 5/8	1316.0	295.1						
E	329.61	46 3/16	10 3/8	1173.2	263.0						
G	392.00	42 5/16	9 1/2	1074.7	241.0						
A [#] /B ^b	466.20	38 13/16	8 11/16	985.8	221.0						
D5	587.30	34 9/16	7 3/4	877.9	196.8						
Total feet required		17.8	Total cm=	542.8							
Calculate Length or Frequency for ID & OD entered above											
Enter F=	220.00	56 1/2	12 11/16	1435.1	321.7	Convert	2.000	inches to	50.8	mm	
		Enter L ↓					60	mm to	2 3/8	inches	
F=	1511.03	21 9/16	4 13/16	547.7	122.8	https://leehite.org/Chimes.htm					