

3.5 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 = 3.625		ID inches = 3.459		Metal = Copper < Click to Select							
Wall = 0.083 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 7/16	30 13/16	3490.9	782.7	C5	523.30	34 3/8	7 11/16	873.1	195.8
E	41.21	122 7/16	27 7/16	3109.9	697.2	E	659.30	30 5/8	6 7/8	777.9	174.4
G	49.00	112 1/4	25 3/16	2851.2	639.2	G	784.00	28 1/16	6 5/16	712.8	159.8
A [#] /B ^b	58.30	102 15/16	23 1/16	2614.6	586.2	A [#] /B ^b	932.30	25 3/4	5 3/4	654.1	146.6
D2	73.41	91 11/16	20 9/16	2328.9	522.1	D6	1,174.61	22 15/16	5 1/8	582.6	130.6
Total feet =		47.2	Total cm=	1439.5		Total feet required		11.8	Total cm=	360.0	
C2	65.40	97 3/16	21 13/16	2468.6	553.5	C6	1,046.50	24 5/16	5 7/16	617.5	138.5
E	82.40	86 9/16	19 7/16	2198.7	492.9	E	1,318.50	21 5/8	4 7/8	549.3	123.1
G	98.01	79 3/8	17 13/16	2016.1	452.0	G	1,568.00	19 7/8	4 7/16	504.8	113.2
A [#] /B ^b	116.50	72 13/16	16 5/16	1849.4	414.6	A [#] /B ^b	1,864.60	18 3/16	4 1/16	462.0	103.6
D3	146.80	64 7/8	14 9/16	1647.8	369.4	D7	2,349.20	16 3/16	3 5/8	411.2	92.2
Total feet required		33.4	Total cm=	1018.1		Total feet required		8.3	Total cm=	254.5	
C3	130.81	68 11/16	15 3/8	1744.7	391.2	C7	2,093.00	17 3/16	3 7/8	436.6	97.9
E	164.80	61 3/16	13 11/16	1554.2	348.4	E	2,637.00	15 5/16	3 7/16	388.9	87.2
G	196.00	56 1/8	12 9/16	1425.6	319.6	G	3,136.00	14 1/16	3 1/8	357.2	80.1
A [#] /B ^b	233.10	51 7/16	11 9/16	1306.5	292.9	A [#] /B ^b	3,729.20	12 7/8	2 7/8	327.0	73.3
D4	293.70	45 7/8	10 5/16	1165.2	261.2	D8	4,698.40	11 7/16	2 9/16	290.5	65.1
Total feet required		23.6	Total cm=	719.6		Total feet required		5.9	Total cm=	180.0	
C4	261.60	48 9/16	10 7/8	1233.5	276.5						
E	329.61	43 5/16	9 11/16	1100.1	246.7						
G	392.00	39 11/16	8 7/8	1008.1	226.0						
A [#] /B ^b	466.20	36 3/8	8 1/8	923.9	207.1						
D5	587.30	32 7/16	7 1/4	823.9	184.7						
Total feet required		16.7	Total cm=	509.0							
Calculate Length or Frequency for ID & OD entered above											
Enter F=	220.00	53	11 7/8	1346.2	301.8	Convert	2.000	inches to	50.8	mm	
		Enter L ↓					60	mm to	2 3/8	inches	
F=	1328.05	21 9/16	4 13/16	547.7	122.8	https://leehite.org/Chimes.htm					