

Industrial Sound and Vision, LLC

Room Mode Calculator

Version 6.41

Client: H. Jones
Project: Jones Home Theater
Date: January 9, 2005

Project Status: PRELIMINARY

Distance Between L & R Speakers For Best Modal Response (ft)

Speed of Sound = 1,131 (ft / sec)

Treated Schroeder Frequency =	91.37	Hz
Target Schroeder Frequency =	89.24	Hz

4/5 W =	15.57 ft = 186.8 in
3/4 W =	14.59 ft = 175.13 in
2/3 W =	12.97 ft = 155.67 in
1/2 W =	9.73 ft = 116.75 in

Room Dimensions:

Length 327.750 (in) = 27.31250 (ft) = 27' - 3.75" 2.2220 = Length Ratio (L/H)
 Width 233.500 (in) = 19.45833 (ft) = 19' - 5.5" 1.5831 = Width Ratio (W/H)
 Height 147.500 (in) = 12.29167 (ft) = 12' - 3.5"

Room Meets Bolt's Criteria
 Yes

531.46 = Room Floor Area (ft²)
 6,532.48 = Room Volume (ft³)

Harmonic Number	All Axial Modes (< 400 Hz) Within First 15 Harmonics			Harmonics Axial Modes Sorted	Mode Type	Bonello 5% Criterion			1/6 th Octave Criterion				
	Length	Width	Height			Difference (Hz)	Percentage %	Flag	Lower Edge (Hz)	Upper Edge (Hz)	LE Test Overlap (Hz)	UE Test Overlap (Hz)	
1	20.70	29.06	46.01	20.70	Length	-	-	-	19.54	21.94	-	-	-
2	41.41	58.12	92.01	29.06	Width	8.36	28.76%		27.43	30.79			
3	62.11	87.19	138.02	41.41	Length	12.35	29.82%		39.09	43.87			
4	82.82	116.25	184.03	46.01	Height	4.60	9.99%		43.42	48.74			
5	103.52	145.31	230.03	58.12	Width	12.12	20.85%		54.86	61.58			
6	124.23	174.37	276.04	62.11	Length	3.99	6.42%		58.63	65.81			
7	144.93	203.43	322.05	82.82	Length	20.70	25.00%		78.17	87.74			0.56
8	165.64	232.50	368.05	87.19	Width	4.37	5.01%		82.29	92.37	0.53		0.36
9	186.34	261.56		92.01	Height	4.83	5.25%		86.85	97.48	0.34		
10	207.05	290.62		103.52	Length	11.51	11.12%		97.71	109.68			
11	227.75	319.68		116.25	Width	12.72	10.95%		109.72	123.16			
12	248.46	348.75		138.02	Height	21.77	15.77%		130.27	146.23			0.92
13	269.16			145.31	Width	7.29	5.02%		137.15	153.95	0.87		
14	289.87			184.03	Height	38.72	21.04%		173.70	194.97			
15	310.57			230.03	Height	46.01	20.00%		217.12	243.71			

