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Subject: What measurements matter to audibility?

Posted by [akhilesh](#) on Fri, 16 Dec 2005 20:05:20 GMT

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Very interesting discussion below on the goodness of Voigt pipes versus folded VPs versus Straight MLTL versus back loaded horn. The bottom line question from a listening perspective is: which of these issues are audible? For example, is the superiority of a certain box design over another (while measurable) really audible? Of course, the only way to answer this is through scientific objective testing, but there is some work already done in that area (notably by Floyd Toole). It seems that low distortion, flatness of frequency curve and to some degree, a uniform off axis decay are preferable over others. A uniform FR curve is +/- 3 db. So, the question is, as long as a design manages to do these, or comes close, is it worth going the trouble to do the rest? For example, people spend a lot of money on back loaded horns. I prefer to use a simple BR box, but to use subs & supertweeter. If I were using ONLY a BR box, versus a BLH, clearly I would hear the difference. But with a sub, and a crossover at say 80-90 hz, what difference does it make if I am using a BR or a BLH? Can I really hear it? I think we should all be cautious about designs that, while they measure better, may not be audibly better. (Of course, this should not prevent us from creating better designs!) Anyway, just my thoughts for the day! See you all the meeting tomorrow at my place!-akhilesh

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