Subject: Sensitivity ratings for Delta 15 etc Posted by BFP on Thu, 18 Jul 2002 12:40:41 GMT View Forum Message <> Reply to Message

Hi Wayne When I enter the Delta 15 parameters into a spreadsheet I have for calculating box volumes the calculated sensitivity comes out at 97.5 db not 101 as rated by Eminence. Unibox software that I have also calculates 97 db. I also noticed this difference with other Eminence woofers. Is this due to Anechoic versus half space ratings? Also, when building a speaker that will be used with High output Z amps, is it a valid strategy to include the increase in Qe of the driver caused by the series output resistance of the amplifier, into the driver parameters that you input. It seems to me that using a lower Qts driver like a JBL 2226 would allow more room to allow for an increased Qts while maintaining a reasonable box size. In a theatre 4 with the Delta 15 the Qts is already quite high for a vented box. I know that the system seems to work well subjectively with tube amps with high output Z, but I am looking for ways to optimise a speaker for use with High ouput impedance amps. I had thought of using a jbl 2226 would you use in this case? Thank youBrian

Subject: Re: Sensitivity ratings for Delta 15 etc Posted by Wayne Parham on Thu, 18 Jul 2002 16:35:30 GMT View Forum Message <> Reply to Message

You're right, there is some ambiguity because there is no accepted standard. Eminence measures in a chamber with the driver mounted to the baffle board and the microphone on-axis one meter from the baffle board. They then average response over the entire range. This means the rising response from collapsing DI and breakup modes are factored in. All-in-all, it is a pretty reliable indicator of overall sensitivity, but it does not take frequency range into account.