

---

Subject: Re: What measurements matter to audibility?  
Posted by [robertG](#) on Mon, 19 Dec 2005 22:53:39 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Floyd Toole wrote very interesting papers a while back when he was at the CNRC. He also wrote less interesting papers at the head of Harman International R&D! For one, he wrote that any half decent engineer (or hobbyist for that matter) could design a "flat" speaker. That is true. On the other hand, he also noted that flat frequency response did not matter much, unless a broad resonance was present in the system. That is also true. But how come modern-day JBL, Revel and Infinity (all Harman products) were NOT considered true audiophile stuff? In my opinion, the answer is musical coherent contrast, that is the ability for a speaker system to convey a true sense of scale by rendering both infinitely small musical detail and infinitely variable loudness in a phase and time coherent way. Call it dynamics, but coherent dynamics: all drivers equally efficient and able to respond to minute amplifier signal. I guess only full range drivers in a back horn can achieve this. For sure, I'm very partial about fullrange driven horns as I design those. But I also like to design regular BR boxes too. The overall best is horn loaded as the efficiency is very high and thus able to render both detail and loudness. Of course, I also like other types of speakers, but all things being equal, only a horn has the ability to give musical contrast. And THAT cannot be measured as accurately as a FR plot...

---