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Subject: Re: directivity

Posted by [Earl Geddes](#) on Thu, 11 Aug 2005 19:43:07 GMT

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I have posted a reply to this twice now and so far nothing has made it to the web. So this one will be brief. Thanks for actually supplying supporting data for your position. This is Soooo refreshing to see in a world dominated by hype and voodoo! Science and audio seem to be unrelated on these sites sometimes. For a 500 mm rectangle the lowest frequency for which the directivity could be 90° is 620 Hz. It will narrow above that. IMHO, to have CD from 350 Hz up with this source is not possible. At least not within the laws of physics as I know them. I have often heard CD claimed and have sometimes tested this claim. Never has it actually been shown to be true. I posted my measurements to prove my claim, as it is the first, and only, time that I have actually measured a true CD system (at least above 800 Hz). It is one thing to make the claim of CD because it "should be" or "I think it is" and quite another to actually achieve it. That is why I am always skeptical of this claim until it has been shown with actual measurements. The Toole references do not "prove" your point. They describe circumstantial evidence, but do not show a cause and effect relationship. Neither does the audio engineer reference. Perhaps the engineers can't afford high directivity speakers at home, and maybe there was something else in the speakers in Floyd's test that the listeners objected to. Who knows. Yes my speakers are 90°, and yes it would be nice to have a narrower vertical coverage. But then the coverage would not match between the woofer and the waveguide and the resulting system would not be CD and would not have a smooth power response. I choose CD. I recommend and use floor absorption and ceiling dispersion to alleviate the vertical reflections in short height rooms. My room has a clean 10 ms of direct sound before there are significant reflections. This has also been measured and is posted on my site. Thanks for the discussion.

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