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Subject: Re: So you are saying  
Posted by [Earl Geddes](#) on Mon, 28 Feb 2005 17:36:23 GMT  
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First I ballpark the design by calculating what a 15" piston directivity would be and what a waveguide should be to match at 90°. Then I set up the system and measure the complete polar response of both drivers in the actual enclosure. Finally a crossover is designed and optimized with a computer program that I wrote to give the flattest response over all angles in the forward 90° arc, with a slight preference for 22.5° (the direct angle). Finally, of course, the crossovers and systems are tested at all polar angles (these results are shown on my web site). I have never seen a situation where the measurements and computer predictions were not the same, so this last step is a simple confirmation.

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