Subject: Re: Midhorn implementation
Posted by Wayne Parham on Wed, 05 Jan 2005 23:59:24 GMT
View Forum Message <> Reply to Message

You're right, conical horns rolloff on the bottom end higher than exponential and hyperbolic of the same size. Tractrix horns rolloff on the bottom too. But like you said, corner loading can really boost the bottom end. It not only confines the radiating pattern but also makes the horn act as if it were larger, extending the flare in both area and length.

Have you ever tried Hornresp? It does a very good job of calculating response, and I like to use it to do "what if" analysis before building a horn prototype. It can't model vented rear chambers or other acoustic devices like that, but they can be modeled separately. And it cannot model a phase plug or deal with non-pistonic diaphragm motion, so frequency response up past cone breakup is usually higher than predicted. But I think Hornresp does a great job of predicting response from lower cutoff up to the end of the diaphragm's pistonic range for traditional horn shapes.