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Subject: Re: The right waveguide

Posted by [Wayne Parham](#) on Mon, 07 May 2012 20:32:01 GMT

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As much as I like the Econowave concept, which is a derivative of my three Pi and four Pi loudspeakers, it is no match for constant directivity cornerhorns. The problem is not every room has the right corners. So for rooms that can't support constant directivity cornerhorns, a set of three Pi or four Pi main speakers with flanking subs is the next best thing.

The SEOS waveguides look really nice. In fact, I considered using them for a while. However, on closer inspection I found the SEOS12 is much too shallow, being only 3.5" deep. This doesn't provide enough acoustic loading, and the source location isn't right. In fact, a horn this short will be reactive in the passband so the source location will appear to shift. It will also suffer excessive ripple, and possibly higher distortion. Further, the flare profile isn't purely oblate spheroidal, most of it is a secondary flare, an arbitrary radius. So even though it's a pretty shape, it's not the right shape. At least not for me.