Subject: There is no simple answer
Posted by Earl Geddes on Mon, 18 Jul 2005 18:48:08 GMT
View Forum Message <> Reply to Message

There were a lot of answers to this post and I found that I really didn't agree with many of them.I did an entire chapter on this subject in my book and from what I found, the prevailing philosophy was mostly incorrect.There are three things that have to be considered - dimensions, numbers of units, and mouth wavefront shape, including frame gaps. They are all more and less important depending on the specific configuration.Some say the wavefront shape is the most important and some the spacing, others the gaps between the drivers. In what I found, all of these factor interplay in a complex way for short lines of a few units. At two units the wavefront and the gap are more important then the spacing, at three and four the gap becomes unimportant and the wavefront shape and spacing are the most important. But above about four units, these factors all have almost no effect, the total height of the array being dominate.There are also near field and far field differences, etc. In detail, the subject is very complex. A complete analysis can be found in my book where techniques are also given to analyze any specific configuration.One well know reviewer of the book found this chapter the most interesting because it dispelled a lot of prevailing beliefs about line arrays.