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Subject: Re: Driver Center to Center Spacing for Line Arrays

Posted by [Jim Griffin](#) on Tue, 10 Aug 2004 13:16:21 GMT

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Josh, Q is the directivity factor. It is the ratio of the sound power emitted by a non-directional (omnidirectional) point source to the sound emitted by a directional source. Directivity index is the logarithm (base 10) of Q and is expressed in dB. Line arrays gain their advantage versus point source speakers by concentrating some of their radiated energy in the vertical axis. What this does is to make their vertical radiation greater so that the overall directivity increases. This is similar to horn loudspeakers which constrain their radiation (usually in both horizontal and vertical directions) to specific angles so that the sound produced is greater in one direction versus another. I'm like you--a little puzzled by the 4B figure in the JBL paper--but I think it shows the lobing due to the comb line effect. Jim

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