Subject: Re: please reference the tests
Posted by Earl Geddes on Thu, 13 Jan 2005 21:33:14 GMT
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The link does not show measured data only an estimated comparison. And it is not the horn that yields the efficiency increase in this comparison, it is the nature of the rotary motor structure. The rotary motor is far more efficient than a moving coil motor - thats the point. The horn loading has almost nothing to do with the comparison. The rotary motors downside is frequency response - it has a very limited bandwidth capability. Sorry, but your reference does not support your claim.The lever is not really shown on my site, but is well described in various AES and SAE papers (see my resume for references). The bottom line is that a horn increases the acoustic coupling as the square root of the mouth to throat area ratio, but a lever does this as a direct ratio. So with an area ratio that would double the output due to the horn, the lever would quadruple it. In reality the two things are hard to compare because they both have completely different sets of tradeoffs and problems.But I stand by my statement that I do not see the advantage of horns at low frequencies.