Subject: Re: horn surfaces
Posted by Earl Geddes on Sun, 09 Jan 2005 18:35:40 GMT
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WayneAgreed to your post. IF the wall roughness is small relative to the wavelength then it will not be much of an effect.I was thinking more about how one could use a deliberate roughness at the wall to shape the wavefront by creating a boundary layer effect. from my book it is obviuos that one wants the wavefront to diminish at the edges of the waveguide.Also, please remember that I do not use waveguides or horns at LF. They need to be too big to do any real good. Sure they offer some gain, but remember that I always use big high performance drivers for directional reasons and so gain is not really very important to me. (True unless I am doing a pro sound system, but then the waveguides can be big.) I use waveguides strictly for their directivity qualities, not for their loading ability. SO when I think about horns or waveguides I never think about low frequencies. In essence, if the wavelength is bigger than the waveguide dimensions then the waveguide is no longer a directional control device and I don't really consider it.