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Subject: Re: PiAlign port

Posted by [Wayne Parham](#) on Sun, 14 Sep 2003 10:10:09 GMT

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Standing wave resonant modes are just that - Resonant modes. They act very much like an electrical tank circuit, having components of inductance, capacitance and resistance. The amounts of each of these values will be set by the physical dimensions of the duct, and by its amount of coupling with the energy source, i.e. distance, orientation, etc. What this means is that there will be aberrations in the amplitude and phase response at each of these standing wave modes. The aberrations may be large or small, so I don't mean to imply that it is necessarily a big deal. But the point is that any resonance is a modifier of both amplitude and phase response, and so it is potentially an issue. Best to minimize those that aren't purpose-designed as part of the system.

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