

Abstracts

A Mode Transducing Antenna

*R.D. Wengenroth. "A Mode Transducing Antenna." 1978 *Transactions on Microwave Theory and Techniques* 26.5 (May 1978 [T-MTT] (Special Issue on High-Power Microwaves)): 332-334.*

At power levels above those readily handled by standard waveguide, and for long waveguide runs, the TE₁₁ mode in circular guide is a preferred transmission line approach. At the antenna, this mode is generally unsuited to radiation since it forms a conical, instead of a pencil beam. Phase and polarization shifting techniques at a reflecting surface cause the illumination to be transduced to form a pencil beam. The techniques have been demonstrated in a 33-GHz model.

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