

## Full multimodal analysis of an open rectangular groove waveguide

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*M. Fernyhough and D.V. Evans. "Full multimodal analysis of an open rectangular groove waveguide." 1998 Transactions on Microwave Theory and Techniques 46.1 (Jan. 1998 [T-MTT]): 97-107.*

In this paper, a full multimodal analysis of an open rectangular-shaped groove waveguide is presented for both TE and TM modes. The method of solution involves the formulation of the problem in terms of an integral-equation representation to which a Galerkin approximation, which incorporates the anticipated singularities at the edges of the guide, is then applied. The method proves to be extremely accurate and numerically efficient to compute, and results are presented for both the lower and higher order modes.

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