

# Abstracts

## Modification of Marcatili's method for the calculation of anisotropic rectangular dielectric waveguides

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*S.N. Dudorov, D.V. Lioubtchenko and A.V. Raisanen. "Modification of Marcatili's method for the calculation of anisotropic rectangular dielectric waveguides." 2002 Transactions on Microwave Theory and Techniques 50.6 (Jun. 2002 [T-MTT]): 1640-1642.*

Marcatili's method for the calculation of rectangular dielectric rod waveguides has been modified for uniaxial anisotropic dielectric materials. The averaging method without guessing the field distribution has been used to derive the equations. Experimental results for an anisotropic sapphire waveguide show a good agreement with those calculated using the approach developed here.

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