

# Abstracts

## Reconstruction of the Constitutive Parameters for an Omega Material in a Rectangular Waveguide

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*M. Norgren and S. He. "Reconstruction of the Constitutive Parameters for an Omega Material in a Rectangular Waveguide." 1995 Transactions on Microwave Theory and Techniques 43.6 (Jun. 1995 [T-MTT]): 1315-1321.*

The inverse problem of determining the constitutive parameters of an Omega material is considered. The dispersive bianisotropic Omega sample is placed in a rectangular waveguide. All the constitutive parameters except one are reconstructed using the reflection and transmission data for some TE<sub>sub m0/</sub> and TE<sub>sub 0n/</sub> modes. The remaining one can be obtained, e.g., from reflection of normally incident plane waves. Numerical results for the reconstruction are presented.

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