

# Abstracts

## Comparative analysis of mode reflection and transmission in presence of a cutoff cross section of nonuniform waveguide by using the cross section and the mode-matching and generalized scattering-matrix

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*I. Ederra, M.S. Ayza, M. Thumm and B.Z. Katsenelenbaum. "Comparative analysis of mode reflection and transmission in presence of a cutoff cross section of nonuniform waveguide by using the cross section and the mode-matching and generalized scattering-matrix." 2001 Transactions on Microwave Theory and Techniques 49.4 (Apr. 2001, Part I [T-MTT]): 637-645.*

By using the cross-section method, waveguide transitions containing parts where modes are in cutoff are analyzed. The problem of infinite value of coupling coefficients for modes in cutoff has been solved. Formulas for the calculation of reflection coefficients are presented. The results have been compared with the mode-matching and generalized scattering matrix methods.

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