

Abstracts

Microwave Modeling of Rectangular Tunnels

B. Jacard and O. Maldonado. "Microwave Modeling of Rectangular Tunnels." 1984 Transactions on Microwave Theory and Techniques 32.6 (Jun. 1984 [T-MTT]): 576-581.

Natural propagation of electromagnetic waves in rectangular tunnels is investigated experimentally at microwave frequencies (1-10 GHz) using a tunnel model of reduced dimensions made of a lossy mixture of sand, water, and salt. The experimental results for the propagation constant of the low-order modes agree satisfactorily with theoretical predictions. Practical applications of the experimental technique are discussed.

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