Abstracts

Convergence of Numerical Solutions of Open-Ended Waveguide by Modal Analysis and Hybrid Modal-Spectral Techniques (Jul. 1986 [T-MTT])

J.A. Encinar and J.M. Rebollar. "Convergence of Numerical Solutions of Open-Ended Waveguide by Modal Analysis and Hybrid Modal-Spectral Techniques (Jul. 1986 [T-MTT])." 1986 Transactions on Microwave Theory and Techniques 34.7 (Jul. 1986 [T-MTT]): 809-814.

Two different methods are considered to deal with open-ended waveguides with an infinite metallic flange. The first one, modal analysis, is valid only when the aperture is radiating into a lossy medium. The second one is based on a hybrid modal-spectral technique, and it is valid for any medium, with or without losses. The rectangular aperture problem is solved by both methods, and the influence of different parameters on the convergence of numerical solutions is studied for each method. Finally, a comparison between both methods is presented for lossy and low-loss media.

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