

# Abstracts

## The Characteristic Impedance of Rectangular Transmission Lines with Thin Center Conductor and Air Dielectric

---

C.M. Weil. "The Characteristic Impedance of Rectangular Transmission Lines with Thin Center Conductor and Air Dielectric." 1978 *Transactions on Microwave Theory and Techniques* 26.4 (Apr. 1978 [T-MTT]): 238-242.

The characteristic impedance of large-scale rectangular strip transmission line facilities used for such purposes as EMI susceptibility testing, biological exposures, etc., is discussed. These lines are characterized by a thin center conductor and an air dielectric. Impedance data obtained by earlier workers, using different analytical and numerical techniques, are reviewed and compared. Exact data are available for the problem involving a center conductor of zero thickness while for the center conductor of finite thickness data are available which are accurate to less than 1.25 percent.

 [Return to main document.](#)