

Abstracts

Propagation Along a Braided Coaxial Cable in a Circular Tunnel

J.R. Wait and D.A. Hill. "Propagation Along a Braided Coaxial Cable in a Circular Tunnel." 1975 Transactions on Microwave Theory and Techniques 23.5 (May 1975 [T-MTT]): 401-405.

The modes of propagation along a coaxial structure contained within a circular tunnel are considered. The primary objective is to develop an approximate impedance boundary condition at the outer surface of the shielded cable that can be used in previously developed formalisms for axial conductors in tunnels. It is assumed that the metal braid can be characterized by a surface-transfer impedance. We also account for the possibility that a lossy film exists on the outer surface of the dielectric jacket of the cable.

[Return to main document.](#)