Abstracts

A Method of Calibrating Coaxial Noise Sources in Terms of a Waveguide Standard

G.F. Engen. "A Method of Calibrating Coaxial Noise Sources in Terms of a Waveguide Standard." 1968 Transactions on Microwave Theory and Techniques 16.9 (Sep. 1968 [T-MTT] (Special Issue on Noise)): 636-639.

The UHF and microwave portion of the radio frequency spectrum is characterized by the use of several different types of transmission lines, the most common being coaxial line and rectangular waveguide. A frequent and recurring problem is that of calibrating an item which is fitted with one type of output (or input) terminals, in terms of a "standard" having a different set of terminals or connector. By an extension of certain techniques that were developed in an earlier paper on power calibration transfer, it is possible to make a similar comparison of noise sources. The procedure requires a suitable adaptor and a pair of measurements that are combined in such a way that the adaptor losses approximately cancel.

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