Abstracts

Measurement of Radiation Efficiency of Dielectric Resonator Antennas

R.K. Mongia, A. Ittipiboon and M. Cuhaci. "Measurement of Radiation Efficiency of Dielectric Resonator Antennas." 1994 Microwave and Guided Wave Letters 4.3 (Mar. 1994 [MGWL]): 80-82.

Radiation efficiency (due to conduction and dielectric losses) of dielectric resonator antennas has been measured. Results show that for dielectric resonators placed directly on a metallic plane, the conduction losses are quite small. A radiation efficiency of > 98% has been measured for dielectric resonantor antennas operated in the dominant hybrid (HE/sub 11delta) mode. Theoretical considerations show scope of further improvement in the radiation efficiency by choosing optimum resonator parameters.

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