Abstracts

Electromagnetic Standard Fields: Generation and Accuracy Levels from 100 KHz to 990 MHz (Short Papers)

S. Tofani, L. Anglesio, G. Agnesod and P. Ossola. "Electromagnetic Standard Fields: Generation and Accuracy Levels from 100 KHz to 990 MHz (Short Papers)." 1986 Transactions on Microwave Theory and Techniques 34.7 (Jul. 1986 [T-MTT]): 832-835.

The interest for problems concerning health protection against RF and MW electromagnetic fields is increasing more and more. This requires uniformity in performances supplied by the measurement instruments employed. It follows the importance of accurately evaluating the procedures of field generation and the overall indetermination on the obtainable field strength levels as well as the need of an intercomparison, carried out by means of a traveling standard too, between the laboratories operating in different countries. In this way, the need for standardizing the exposures techniques in the ever increasing number of experiments addressed to the study of biological effects is satisfied, too. For this purpose, an instrumental chain is described. This chain allows the generation of standard electromagnetic fields, in the context of the Italian National Health Service, with frequencies ranging from 100 KHz to 990 MHz and with field strength levels superior to the limits reported in recent international guidelines. Finally, the overall indetermination of the reached field strength levels is evaluated and discussed.

❑ Return to main document.