Abstracts

Average SAR and SAR Distributions in Man Exposed to 450-MHz Radiofrequency Radiation

A.W. Guy, C.-K. Chou and B. Neuhaus. "Average SAR and SAR Distributions in Man Exposed to 450-MHz Radiofrequency Radiation." 1984 Transactions on Microwave Theory and Techniques 32.8 (Aug. 1984 [T-MTT] (Special Issue on Electromagnetic-Wave Interactions with Biological Systems)): 752-763.

Fifth-scale phantom models were exposed to 2450-MHz electromagnetic fields to obtain the average specific absorption rate (SAR) and SAR distribution in man exposed to 1 mW/cm² 450-MHz radiofrequency radiation for various polarizations and body positions. The average SAR was measured calorimetrically and SAR distribution was determined thermographically using an interactive computer system, The mean SAR, as averaged over the body, remained relatively constant at 0.050 W/kg, with a standard deviation of ±0.007 W/kg for all polarizations and body postures considered in the study. Peak SAR values were as high as 0.650 W/kg, occuring typicaly in the wrist.

❑ Return to main document.