Abstracts

Thermographic and Behavioral Studies of Rats in the Near Field of 918-MHz Radiations

J.C. Lin, A.W. Guy and L.R. Caldwell. "Thermographic and Behavioral Studies of Rats in the Near Field of 918-MHz Radiations." 1977 Transactions on Microwave Theory and Techniques 25.10 (Oct. 1977 [T-MTT]): 833-836.

Patterns of thermalized energy of rat carcasses exposed to 918-MHz CW radiation in the near zone have been determined using a computerized thermograph. Peak absorption of energy in the body was estimated to be 0.9 W/kg per mW/cm² of incident energy. Operant responses of irradiated rats to schedules of fixed-ratio (food) reinforcement under the same conditions as the dosimetric test were observed to occur at averaged power densities of 30-40 mW/cm². This range of densities corresponds to absorbed peaks of energy of 27-36 W/kg. No change in behavior was observed for incident power densities and peaks of absorbed energy to 20-30 mW/cm² and to 18-27 W/kg, respectively, and all changes at higher values were reversible.

❑ Return to main document.