

Abstracts

Electromagnetic Energy Deposition in an Inhomogeneous Block Model of Man for Near-Field Irradiation Conditions

I. Chatterjee, M.J. Hagmann and O.P. Gandhi. "Electromagnetic Energy Deposition in an Inhomogeneous Block Model of Man for Near-Field Irradiation Conditions." 1980 MTT-S International Microwave Symposium Digest 80.1 (1980 [MWSYM]): 337-340.

The plane wave spectrum approach is used to calculate the electromagnetic energy absorption and its distribution in a 180-cell, inhomogeneous model of man for a prescribed vector electric field generated by RF sealers and other electronic equipment. The whole-body-averaged absorption density increases approximately as $(\Delta/\lambda)^2$ to the asymptotic plane wave value where Δ/λ is the width in wavelengths of the best-fit half-cycle cosine function to prescribed E-values.

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