

Abstracts

Exact Image Theory for Field Calculation in Layered Biological Medium

E. Alanen and I.V. Lindell. "Exact Image Theory for Field Calculation in Layered Biological Medium." 1985 MTT-S International Microwave Symposium Digest 85.1 (1985 [MWSYM]): 78-81.

A method based on the exact image theory to calculate the near field distribution of a horn antenna in direct contact with the skin is introduced. Being exact, the method is not restricted by parameter values and can be applied in optimization of horn aperture function to produce focus fields in the human body. The method observes the effect of the skin layer and can be applied for an arbitrary aperture function. The optimization is demonstrated with few examples.

 [Return to main document.](#)