

# Abstracts

## Electromagnetic Power Deposition in a Dielectric Cylinder in the Presence of a Reflecting Surface

---

*R. Ruppin. "Electromagnetic Power Deposition in a Dielectric Cylinder in the Presence of a Reflecting Surface." 1979 Transactions on Microwave Theory and Techniques 27.11 (Nov. 1979 [T-MTT]): 910-914.*

A method for calculating electromagnetic power absorption in a dielectric cylinder in the presence of a reflecting plane, due to irradiation by a normally incident plane wave, is presented. The method, which combines imaging with point matching, is applied to the calculation of the absorbed power density in tissue cylinders of arm and thigh size.

 [Return to main document.](#)