

# Abstracts

## A high-impedance ground plane applied to a cellphone handset geometry

---

*R.F.J. Broas, D.F. Sievenpiper and E. Yablonovitch. "A high-impedance ground plane applied to a cellphone handset geometry." 2001 Transactions on Microwave Theory and Techniques 49.7 (Jul. 2001 [T-MTT]): 1262-1265.*

A high-impedance electromagnetic surface is a new type of metallic structure exhibiting high surface impedance and the suppression of propagating surface currents at a particular frequency band. We experimentally characterize such a high-impedance surface designed near 2.4 GHz. We describe an antenna built on such a surface, integrated into a printed circuit board that was designed for the form factor of a portable handset. Measurement shows high radiation efficiency near 2.4 GHz.

[Return to main document.](#)