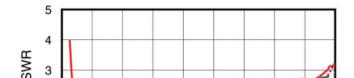


**Figure 7** Calculated gain vs. frequency. [Color figure can be viewed in the online issue, which is available at www.interscience.wiley.com]



## FLAT-PLATE PENTAGONAL MONOPOLE ANTENNA FOR LAPTOP WIRELESS COMMUNICATION AND MOBILE TV RECEPTION

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**ABSTRACT:** An improved novel printed wideband flat-plate monopole antenna is presented. The proposed antenna consists of a pentagonal monopole embedded in a corner notch in the antenna ground plane part. Simulated and measured results of the input return loss for the proposed antenna are in good agreement. The antenna has been shown to operate satisfactorily in the 0.47–6 GHz frequency range, and is therefore very suitable for use as antenna for laptop applications including Wi-Fi, WiMAX, and mobile TV reception. © 2009 Wiley Periodicals, Inc. Microwave Opt Technol Lett 51: 612–615, 2009; Published online in Wiley InterScience (www.interscience.wiley.com). DOI 10.1002/mop. 24133

Key words: mobile antenna; wideband antenna; pentagonal monopole