Abstracts

Optimization of the array parameters in waveguide-based spatial power combiners with hard horn feeds

M. Ozkar and A. Mortazawi. "Optimization of the array parameters in waveguide-based spatial power combiners with hard horn feeds." 2002 MTT-S International Microwave Symposium Digest 02.2 (2002 Vol. II [MWSYM]): 1301-1304 vol.2.

A generalized scattering matrix (GSM) approach, which utilizes finite difference time domain (FDTD) and mode matching (MM) techniques, is used to analyze waveguide based spatial power combiners with hard horn feeds. The simulation results are experimentally verified for a complete spatial power dividing/combining system with a 3/spl times/3 patch antenna array and a hard horn. Different array parameters are varied in order to optimize a 3/spl times/3 spatial power combining array.

❑ Return to main document.