# Abstracts

## A method for determining noise coupling in a phased array antenna

*J.P. Weem and Z. Popovic. "A method for determining noise coupling in a phased array antenna." 2001 MTT-S International Microwave Symposium Digest 01.1 (2001 Vol. I [MWSYM]): 271-274 vol.1.*

A method for the calculation and accurate prediction of the noise coupling in a phased antenna array is introduced. The noise coupling is shown to be related to the scan reflection coefficient, a measurable antenna parameter. This leads to a method of calculating the noise coupling of the array using scattering parameters, which can then be used in design of a receive-mode phased array. A 49-element dipole array at 1 GHz using HPMGA-82563 LNAs is used as an example to calculate the parameters of interest for a low-noise phased array design.

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