

Abstracts

Experiments of Device Failures in a Spatial Power-Combining Array

J. Lin and T. Itoh. "Experiments of Device Failures in a Spatial Power-Combining Array." 1995 Transactions on Microwave Theory and Techniques 43.2 (Feb. 1995 [T-MTT]): 267-271.

The performance of a spatial power-combining array with device failure is investigated. Experimental results show that the array still combines the power in the broadside direction when the DC open-circuit failure occurs. Analysis of measured radiation patterns indicated that the power radiated from the patch antenna attached to the failed device is much smaller than the power radiated from other patch antennas. The effects of the chip resistor and the RF impedance of failed device are discussed.

[Return to main document.](#)