Abstracts

The Thermal and Spatial Resolution of a Broad-Band Correlation Radiometer with Application to Medical Microwave Thermography (Short Papers)

J.C. Hill and R.B. Goldner. "The Thermal and Spatial Resolution of a Broad-Band Correlation Radiometer with Application to Medical Microwave Thermography (Short Papers)." 1985 Transactions on Microwave Theory and Techniques 33.8 (Aug. 1985 [T-MTT]): 718-722.

The improved spatial and thermal resolution of a broad-band microwave correlation radiometer is discussed. Theoretical upper and lower bounds of the combined spatial and thermal resolution in a dense transmission medium are presented along with data obtained for two thermal sources in air. The application of broad-band correlation techniques to medical microwave thermography is novel, and the results indicate that electronic scanning of tissue should be possible.

❑ Return to main document.