Abstracts

A Highly Sensitive Millimeter Wave Quasi-Optical FM Noise Measurement System (Dec. 1991 [T-MTT])

G.M. Smith and J.C.G. Lesurf. "A Highly Sensitive Millimeter Wave Quasi-Optical FM Noise Measurement System (Dec. 1991 [T-MTT])." 1991 Transactions on Microwave Theory and Techniques 39.12 (Dec. 1991 [T-MTT] (1991 Symposium Issue)): 2229-2236.

A highly sensitive, tunable, low loss quasi-optical millimeter wave FM noise measurement system has been constructed, with state of the art performance. It utilizes a novel matched, easily tuneable quasi-optical cavity in reflection, to act as a carrier suppression filter. This can operate with matched cavity Q's of several hundred thousand with almost zero insertion loss to provide an extremely high discriminator slope at low power levels. The FM noise measurement system can allow direct measurement of phase locked sources at low input power levels over ultra-wideband frequency ranges.

❑ Return to main document.