

# Abstracts

## A Highly Sensitive Millimetre Wave Quasi-Optical F.M. Noise Measurement System (1991 Vol. III [MWSYM])

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*G.M. Smith and J.C.G. Lesurf. "A Highly Sensitive Millimetre Wave Quasi-Optical F.M. Noise Measurement System (1991 Vol. III [MWSYM])." 1991 MTT-S International Microwave Symposium Digest 91.3 (1991 Vol. III [MWSYM]): 1023-1026.*

A highly sensitive, tuneable, low loss quasi-optical millimetre wave F.M. noise measurement system has been constructed, with state of the art performance. It utilises 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 F.M. noise measurement system can allow direct measurement of phase locked sources at low input power levels over ultra-wideband frequency ranges.

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