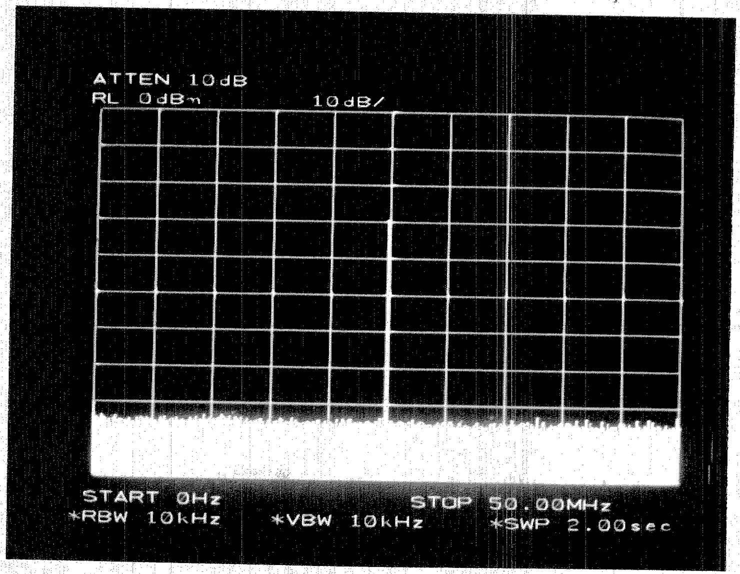
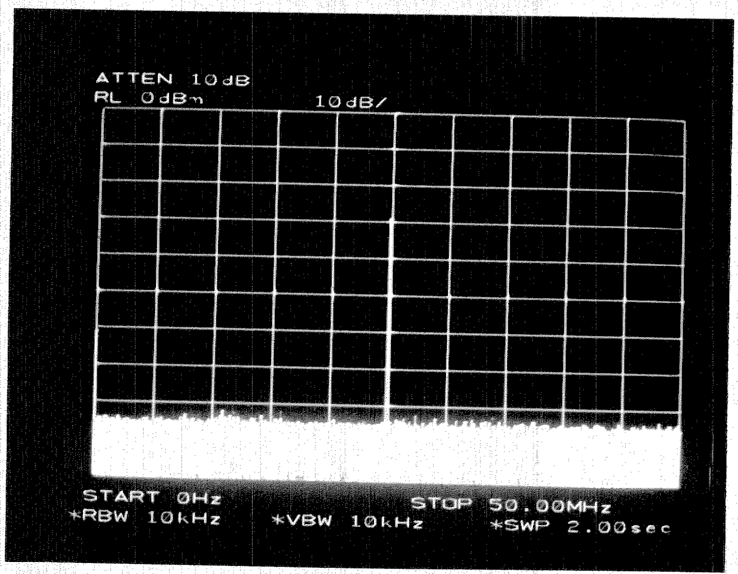
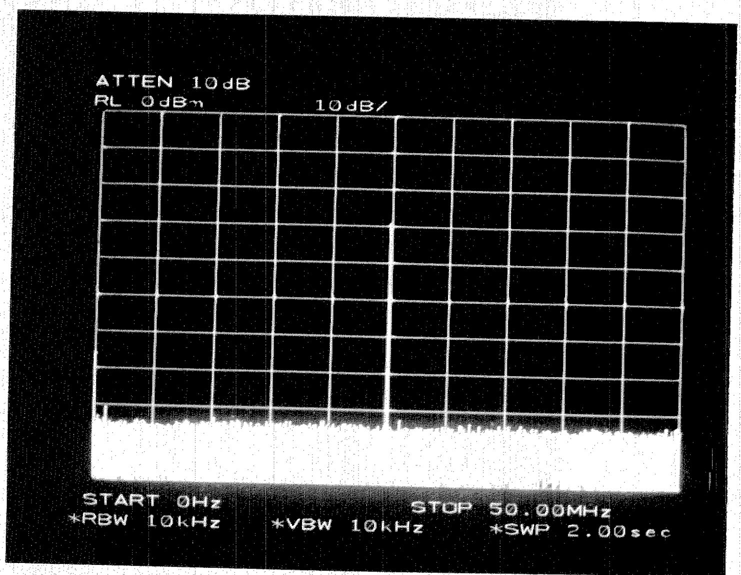
TEST #3 Frequency Band: 0～50MHz　　　Log Ref. Level:14.5 dBm



Ambient



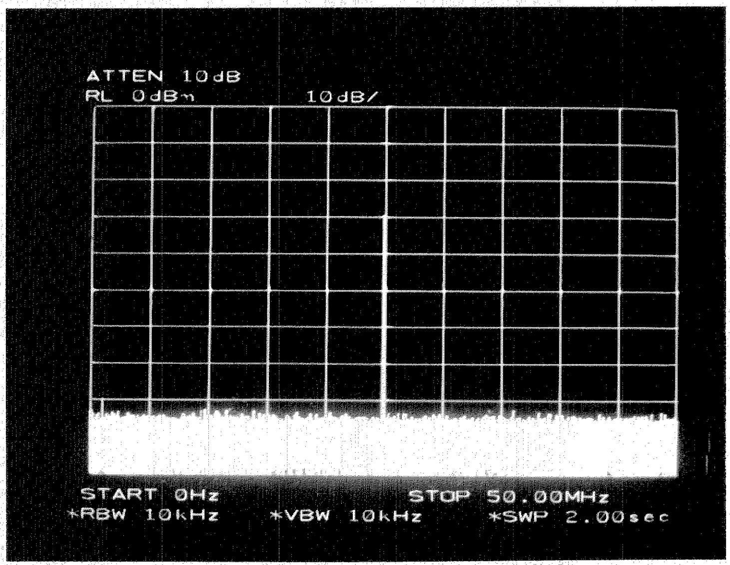
Stand-By



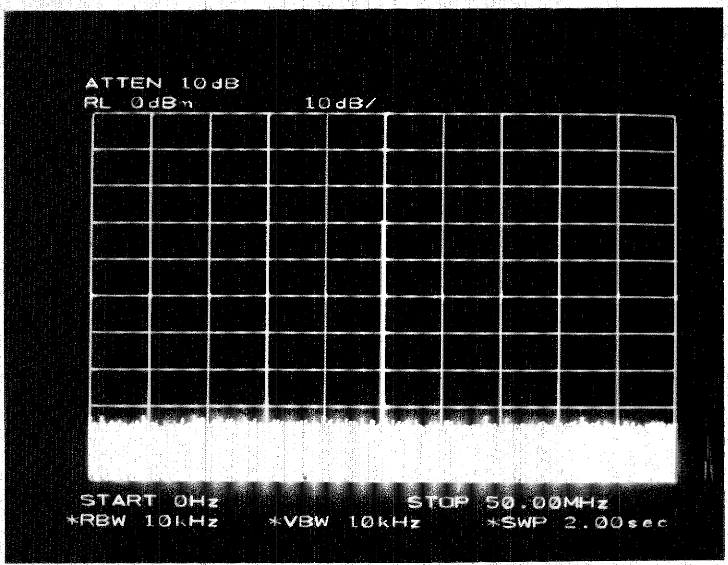
0.08 μS Pulse

TEST #3 Frequency Band: 0～50MHz

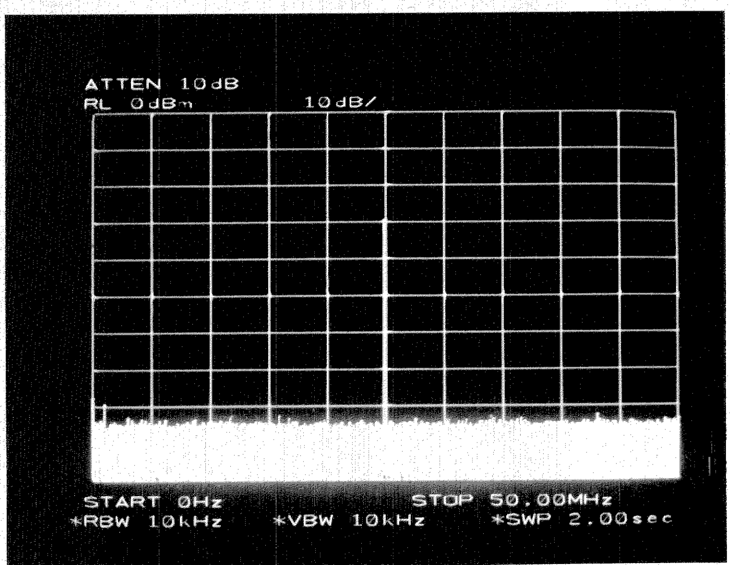
Log Ref. Level:14.5 dBm



0.25μS Pulse



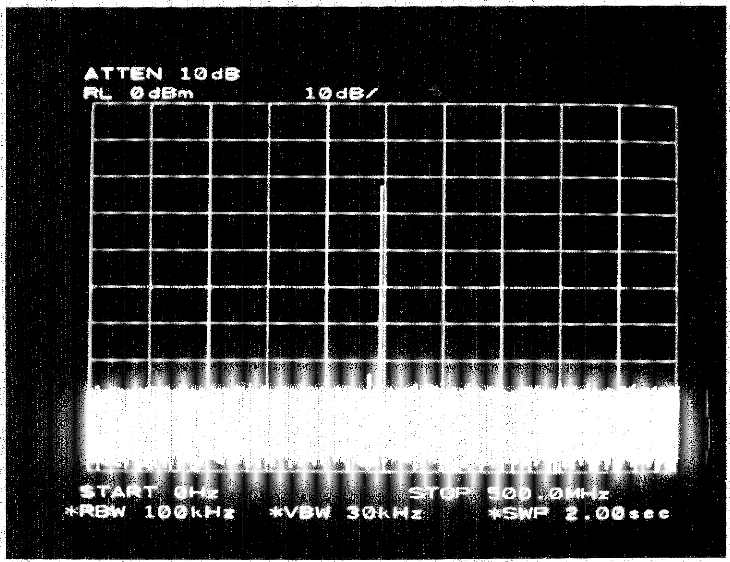
0.5μS Pulse



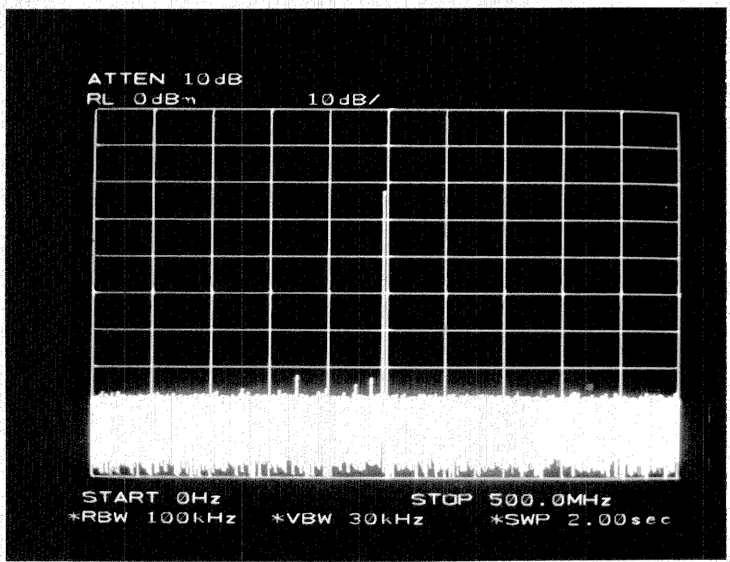
1.0μS Pulse

TEST #4 Frequency Band: 0～500MHz

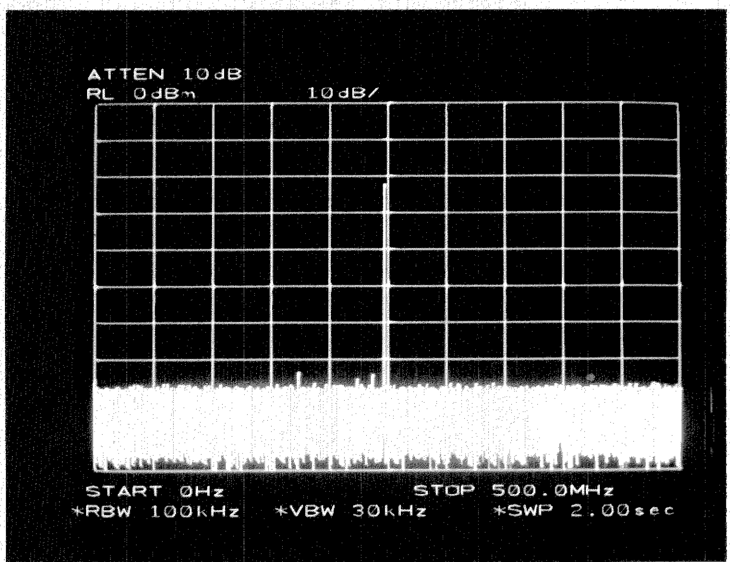
Log Ref. Level:11.0 dBm



Ambient

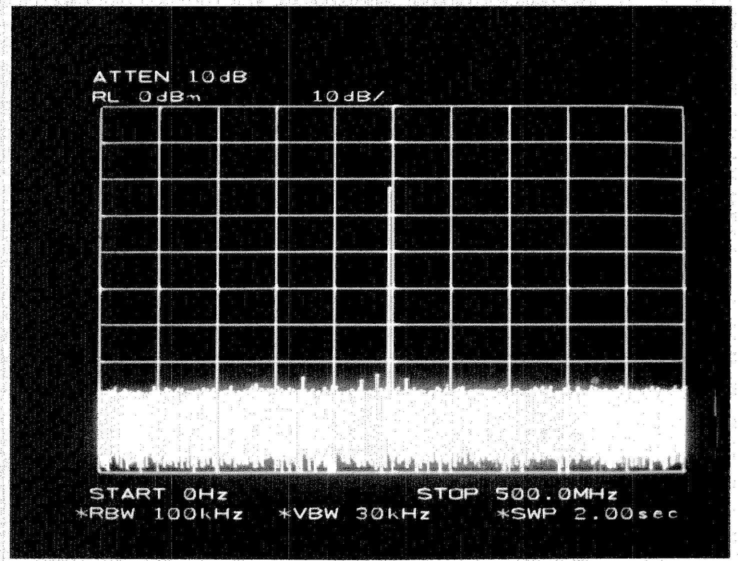


Stand-By

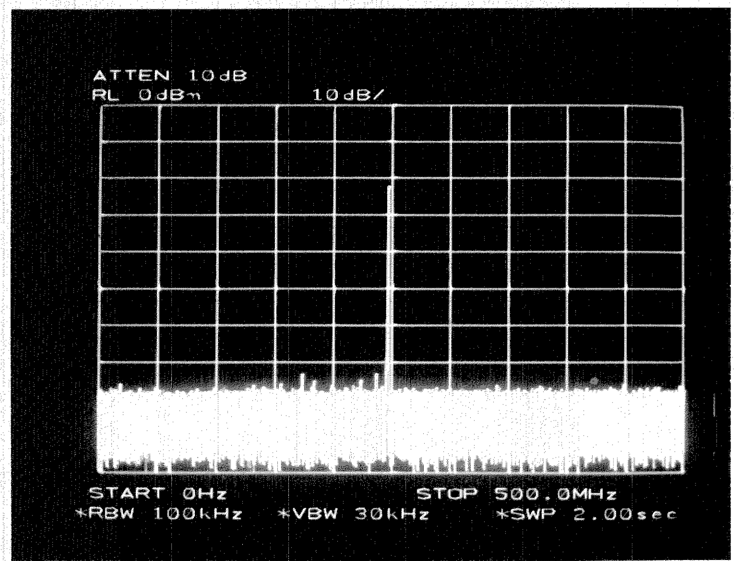


0.08 μ S Pulse

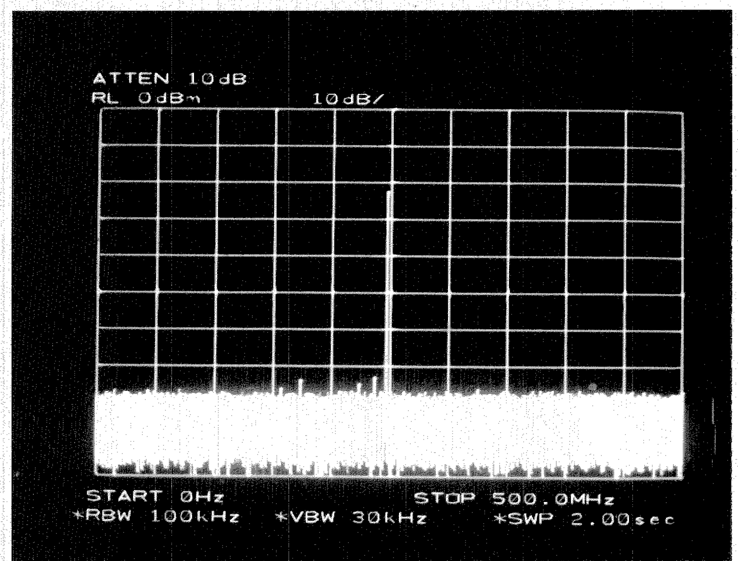
TEST #4 Frequency Band: 0～500MHz Log Ref. Level:11.0 dBm



0.25 μS Pulse

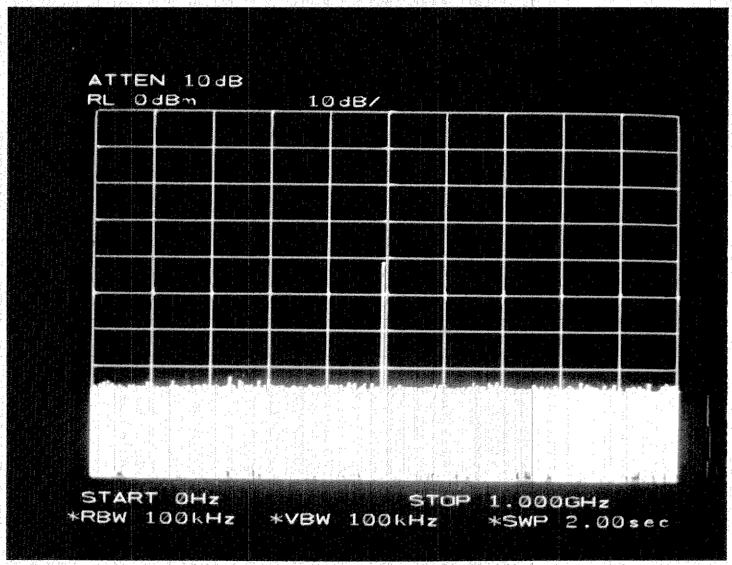


0.5 μS Pulse

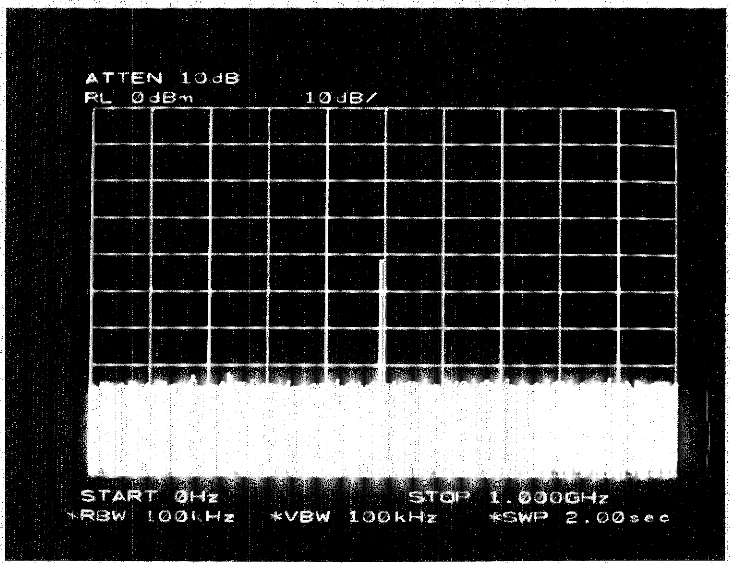


1.0 μS Pulse

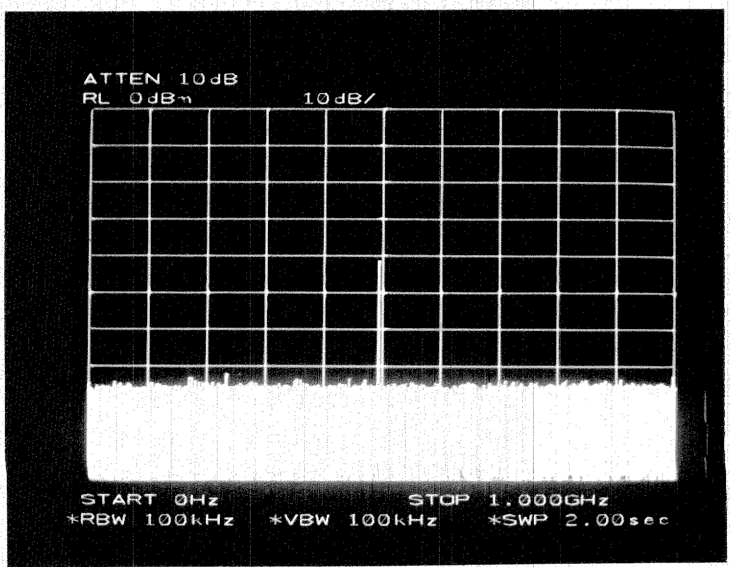
TEST #5 Frequency Band: 0～1GHz Log Ref. Level:20.5 dBm



Ambient

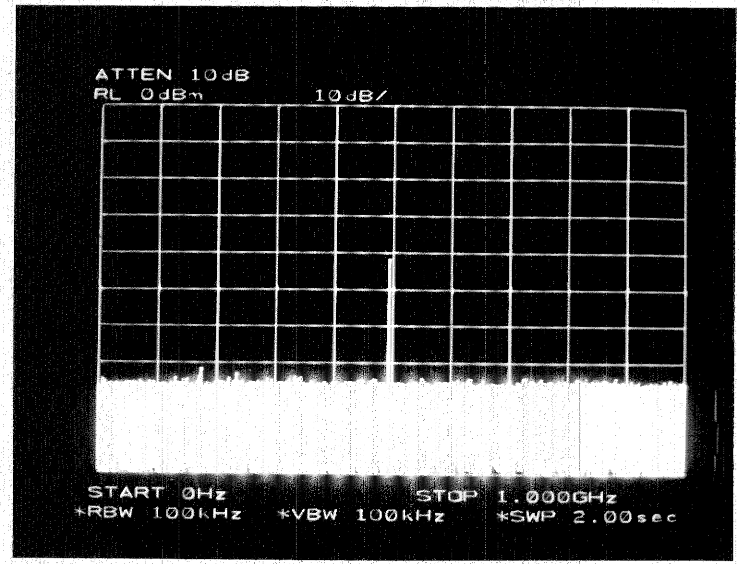


Stand-By

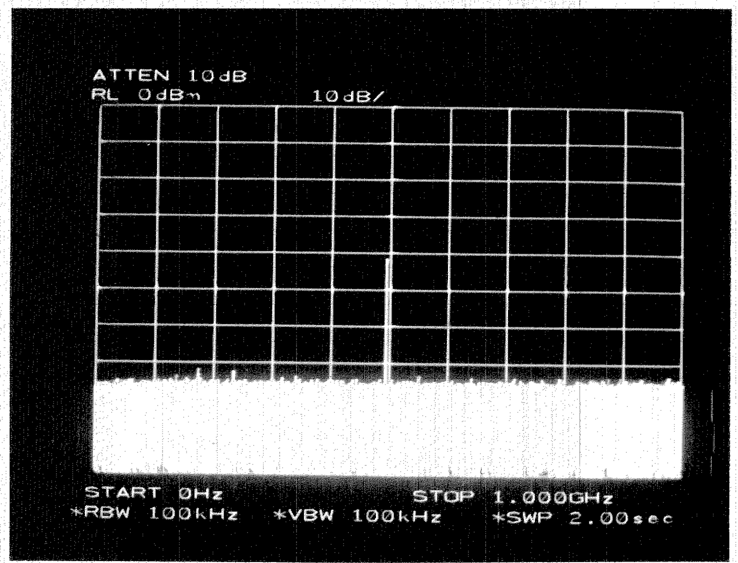


0.08 μ S Pulse

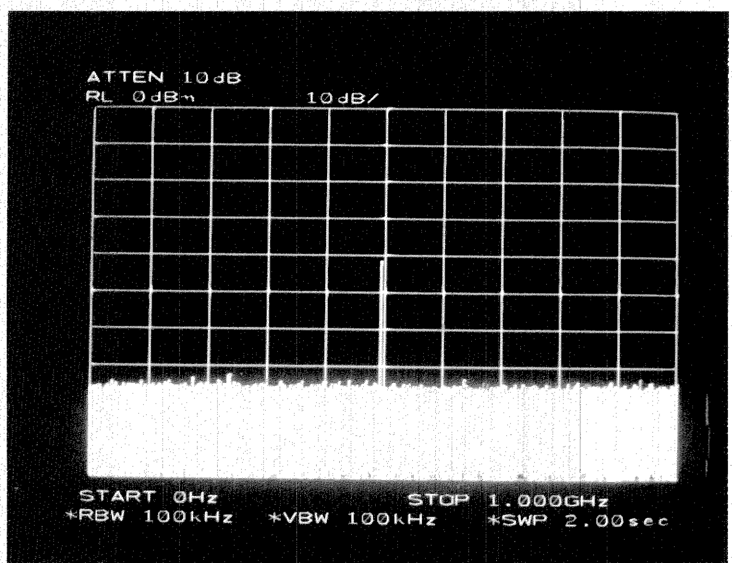
TEST #5 Frequency Band: 0～1GHz　　Log Ref. Level:20.5 dBm



0.25 μS Pulse



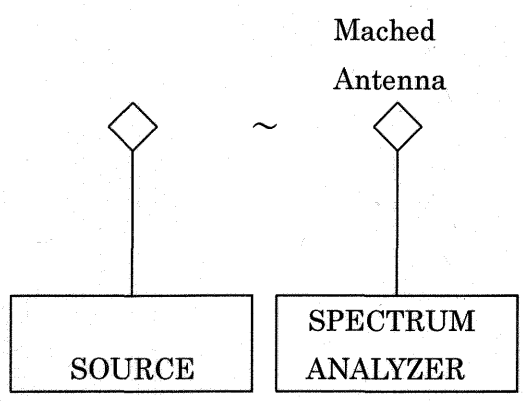
0.5 μS Pulse



1.0 μS Pulse

CALIBRATION OF TESTS 6～11 (1～50 GHz)

Instead of using a signal source of known amplitude to calibrate the receiving system, the path and antenna characteristics were computed.



The power density at distance R is : $P = \dfrac{1.64\ Pt}{4\pi R2}$

Where Pt is power transmitted.

The power to the analyzer is : $Psa = PAr = \dfrac{PG\lambda 2}{4\pi}$

Where G is the receiving antenna gain and Ar is the effective area of the receiving antenna

$$\text{Hence } Psa = \frac{1.64\ Pt}{4\pi R2} \times \frac{PG\lambda 2}{4\pi} = \frac{1.6\ G\lambda 2}{16\pi 2} \times \text{ Pt at 1 meter}$$

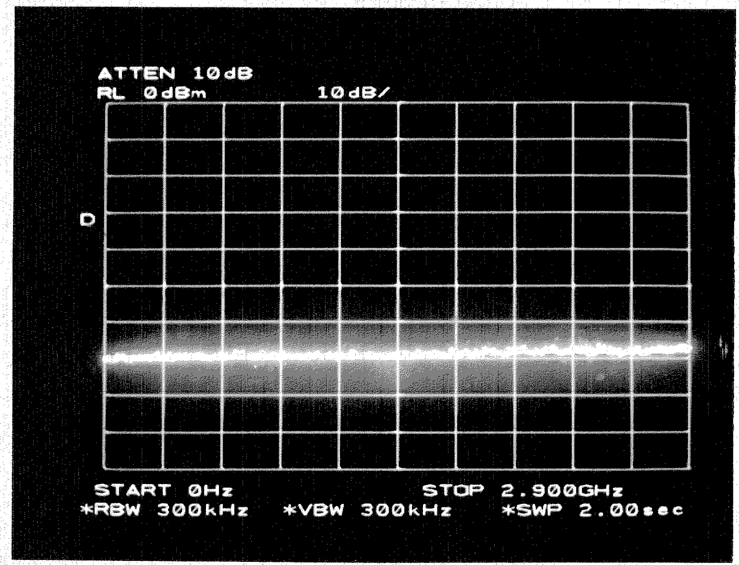
$$\text{and} \quad Pt = \frac{16\pi 2Psa}{1.64G\lambda 2} = \frac{96.3\ Psa}{G\lambda 2}$$

$$= Psa\ (dBm) + 19.8\ (dB) - G\ (dB) - 20 \log \lambda\ (dB)$$

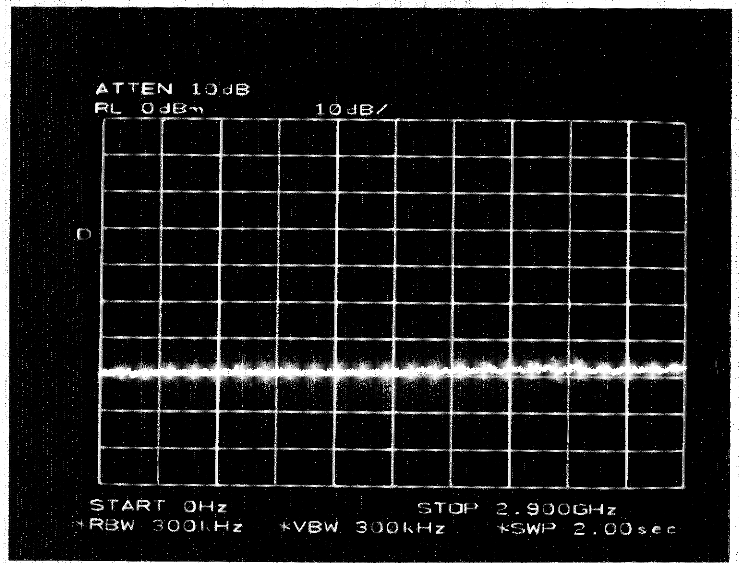
TEST	HORN GAIN (AVG) dB		WAVELENGTH (dB)		Pt - Psa		LOG REF LEVEL	
	LO	HI	LO	HI	LO	HI		
6	6		-10.5	-21.6	24.3	35.4	0 dBm	0 – 2.9 G
7	6		-21.3	-28.0	35.1	41.8	0 dBm	2.9 – 6.4 G
8	6		-27.6	-34.1	41.4	47.9	0 dBm	6.4 – 12.5G
9	6		-31.2	-35.6	45.0	49.4	0 dBm	12.5 – 20 G
10	23.3	24.9	-35.6	-38.8	32.1	33.7	0 dBm	12.4 – 28 G
11	23.6	25.1	-39.4	-42.5	35.6	37.2	0 dBm	28 – 50 G

TEST #6 Frequency Band: 0～2.9 GHz

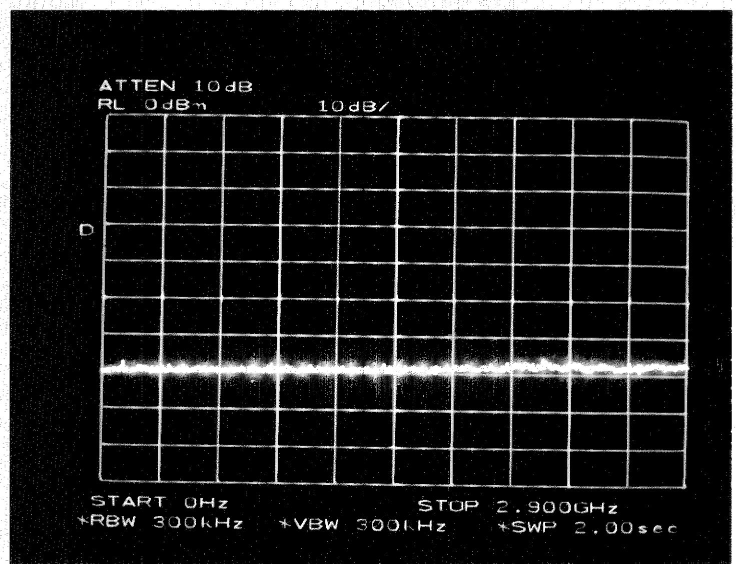
Log Ref. Level:0 dBm



Ambient

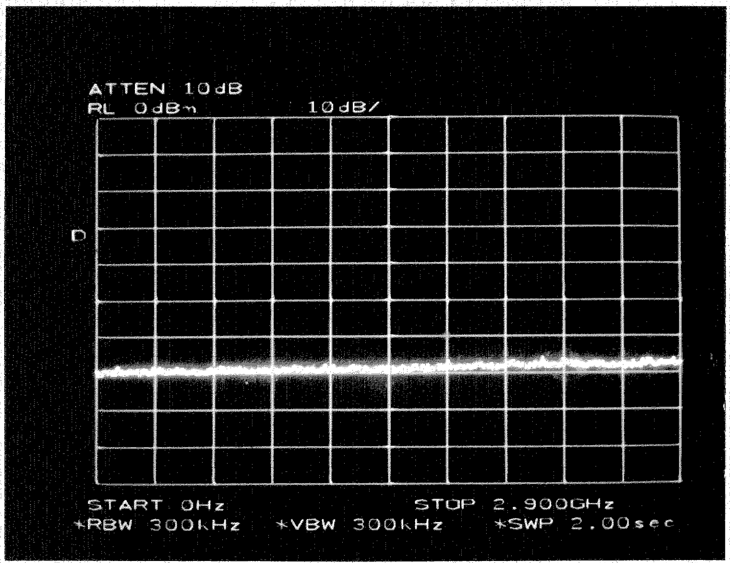


Stand-By

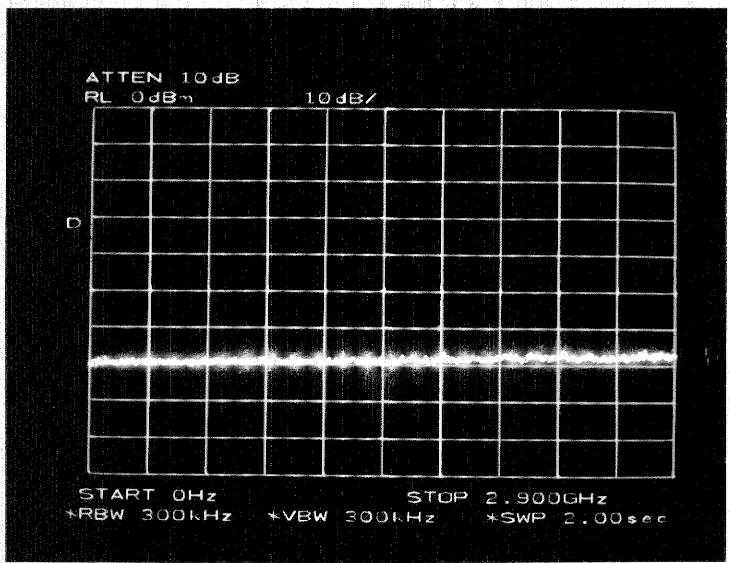


0.08 μS Pulse

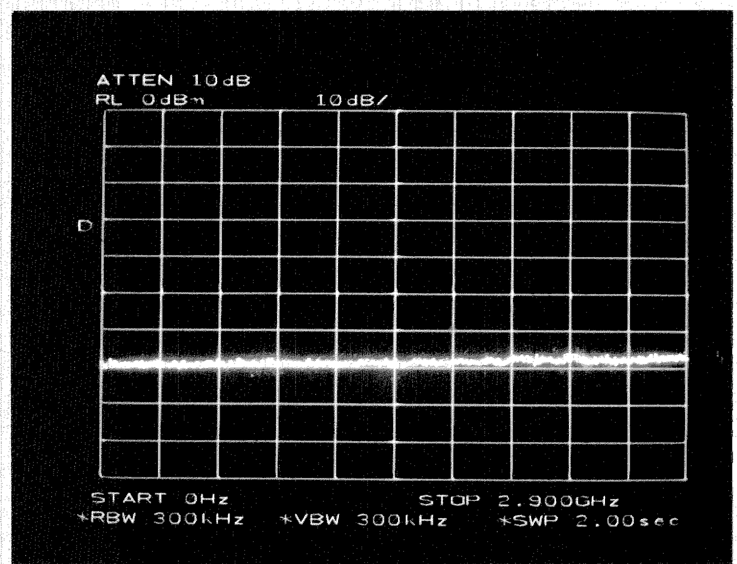
TEST #6 Frequency Band: 0～2.9 GHz Log Ref. Level:0 dBm



0.25μS Pulse



0.5μS Pulse



1.0μS Pulse