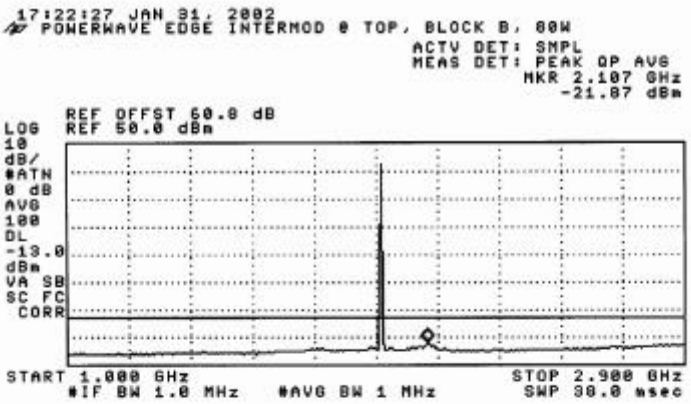

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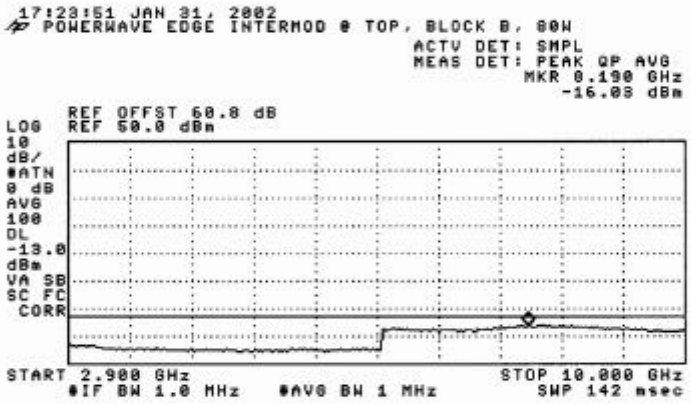

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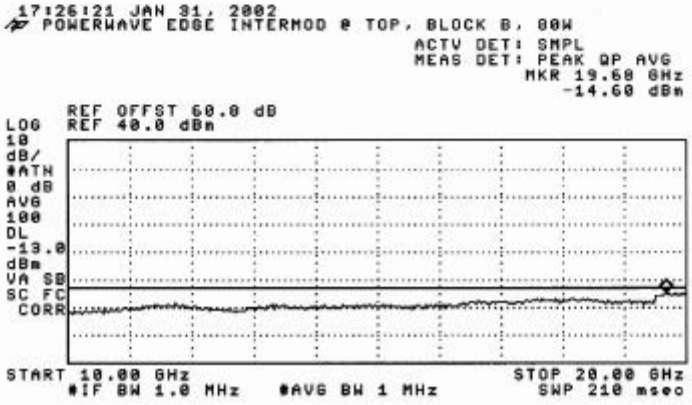

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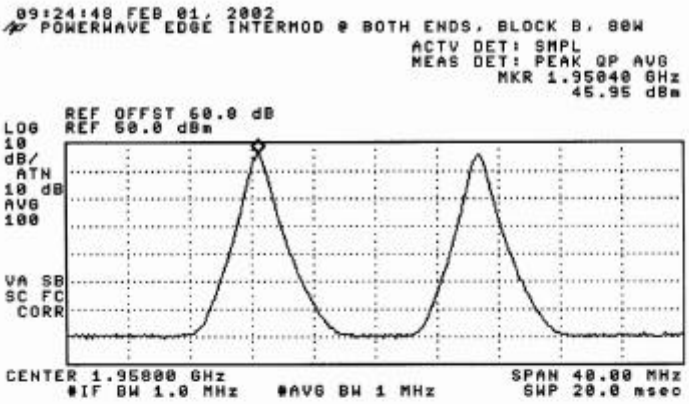

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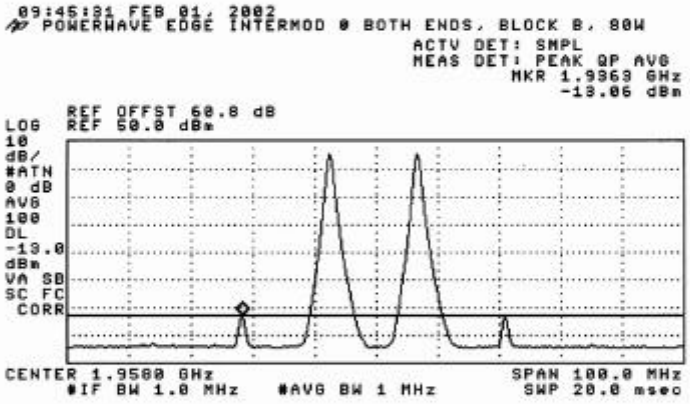

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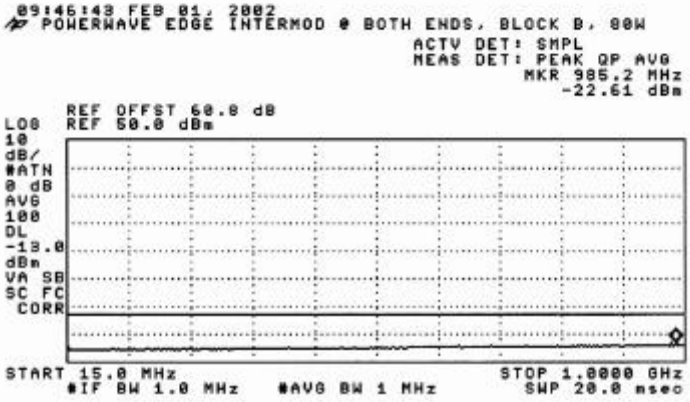

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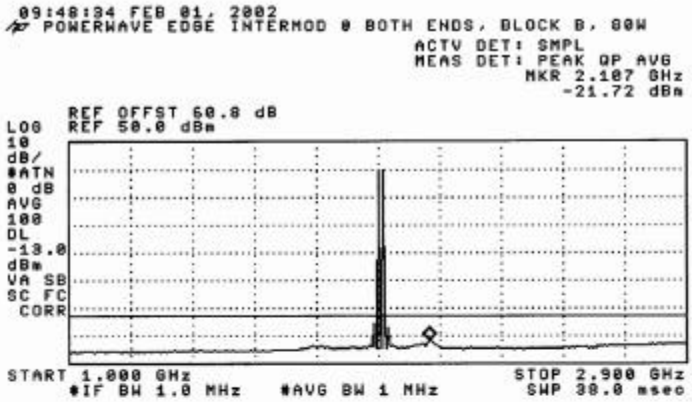

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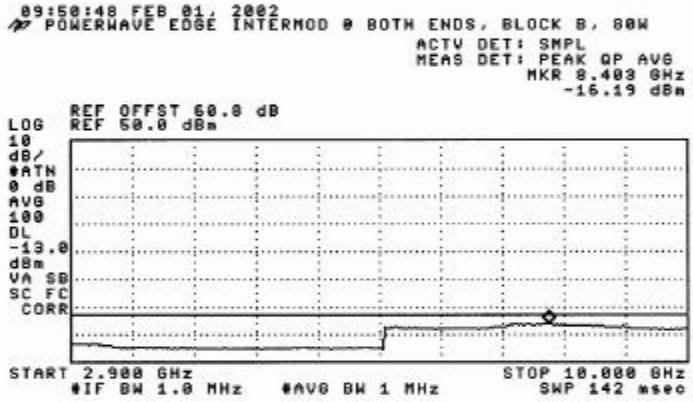

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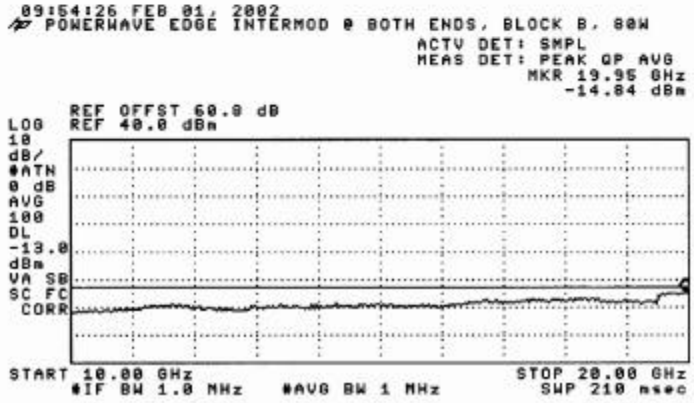
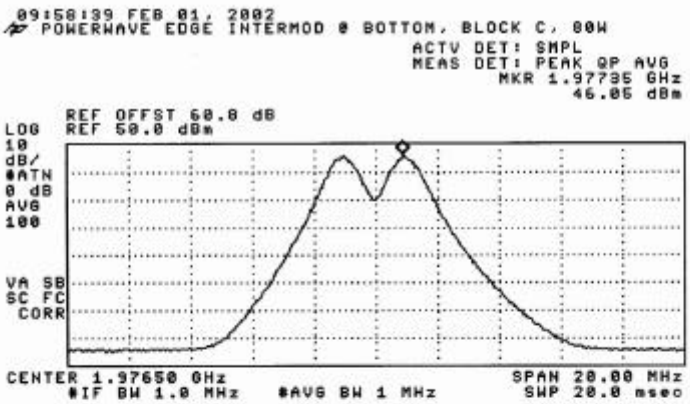


48

*** EDGE ***		
Plot#	**Description**	**Frequency Range (MHz)**
49	Block **C**: Intermod, 2 tone @ Bottom of block	1975.4, 1977.4 (20MHz span)
50	Block **C**: Intermod, 2 tone @ Bottom of block	1975.4, 1977.4 (100MHz span)
51	Block **C**: Intermod, 2 tone @ Bottom of block, out-of-band	15 to 1000
52	Block **C**: Intermod, 2 tone @ Bottom of block, out-of-band	1000 to 2900
53	Block **C**: Intermod, 2 tone @ Bottom of block, out-of-band	2900 to 10000
54	Block **C**: Intermod, 2 tone @ Bottom of block, out-of-band	10000 to 20000
55	Block **C**: Intermod, 2 tone @ Top of block	1987.6, 1989.6 (20MHz span)
56	Block **C**: Intermod, 2 tone @ Top of block	1987.6, 1989.6 (100MHz span)
57	Block **C**: Intermod, 2 tone @ Top of block, out-of-band	15 to 1000
58	Block **C**: Intermod, 2 tone @ Top of block, out-of-band	1000 to 2900
59	Block **C**: Intermod, 2 tone @ Top of block, out-of-band	2900 to 10000
60	Block **C**: Intermod, 2 tone @ Top of block, out-of-band	10000 to 20000
61	Block **C**: Intermod, 2 tone @ Both ends of block	1975.4, 1989.6 (20MHz span)
62	Block **C**: Intermod, 2 tone @ Both ends of block	1975.4, 1989.6 (100MHz span)
63	Block **C**: Intermod, 2 tone @ Both ends of block, out-of-band	15 to 1000
64	Block **C**: Intermod, 2 tone @ Both ends of block, out-of-band	1000 to 2900
65	Block **C**: Intermod, 2 tone @ Both ends of block, out-of-band	2900 to 10000
66	Block **C**: Intermod, 2 tone @ Both ends of block, out-of-band	10000 to 20000



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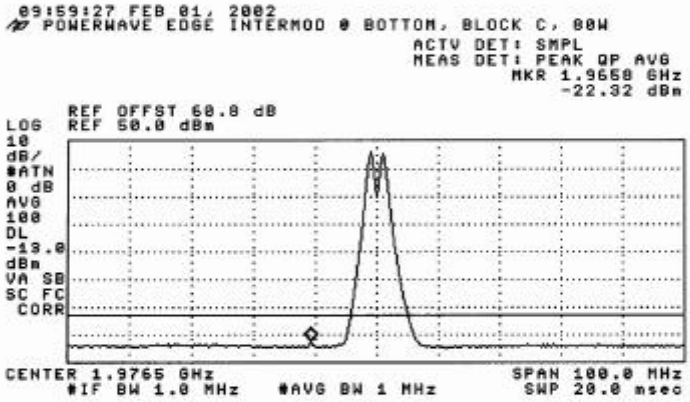

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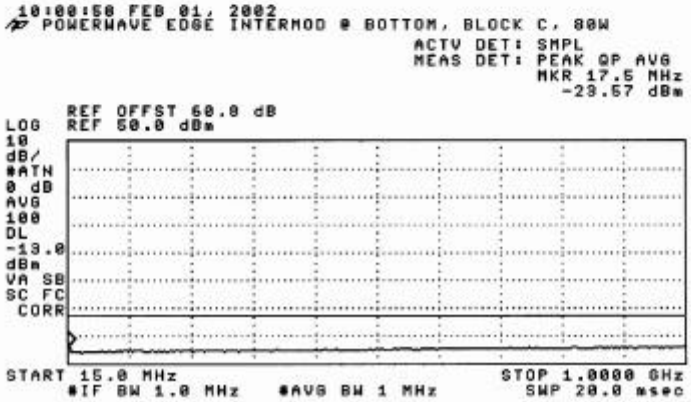

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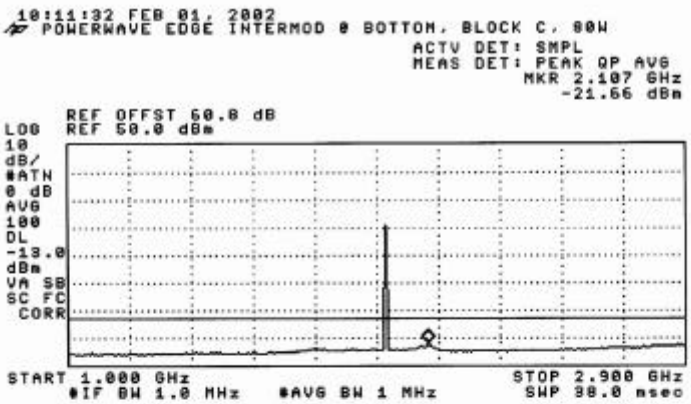

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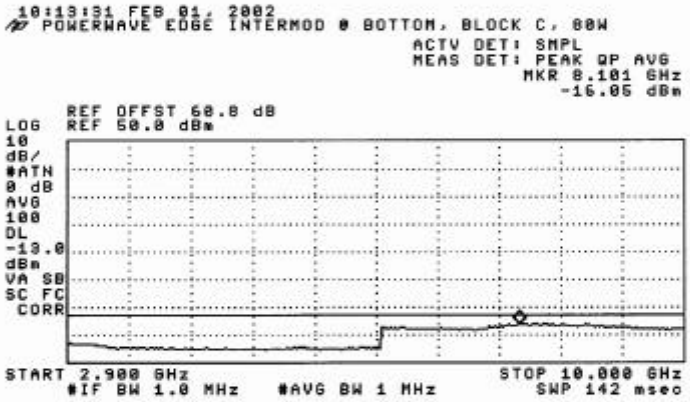

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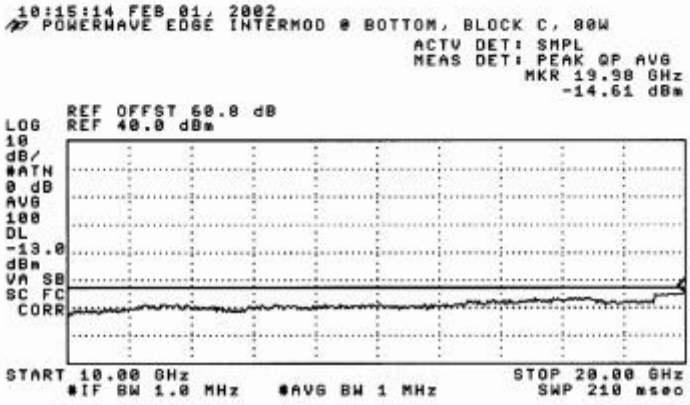

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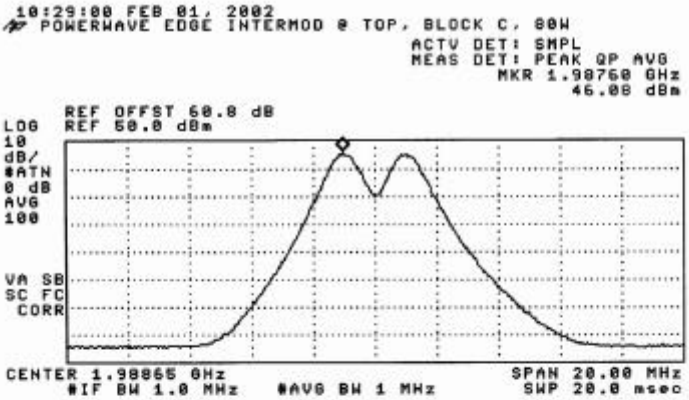

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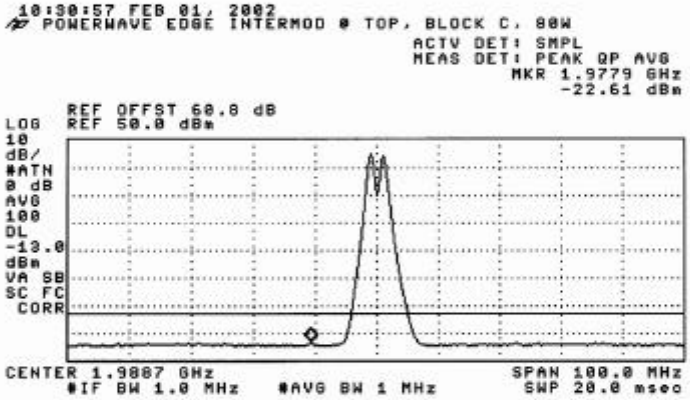

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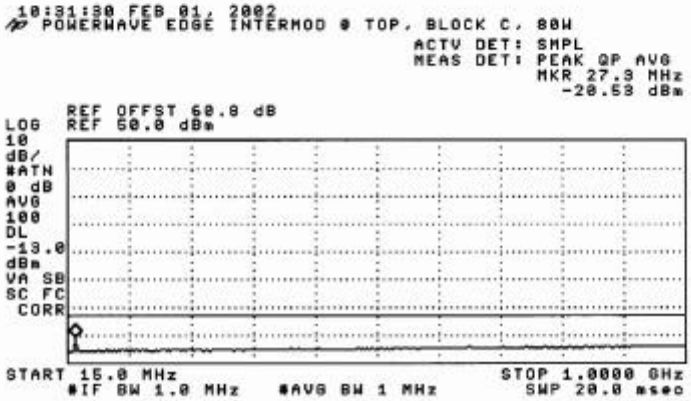

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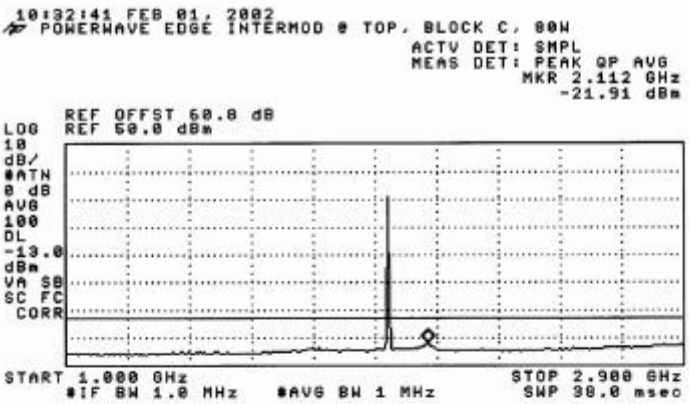

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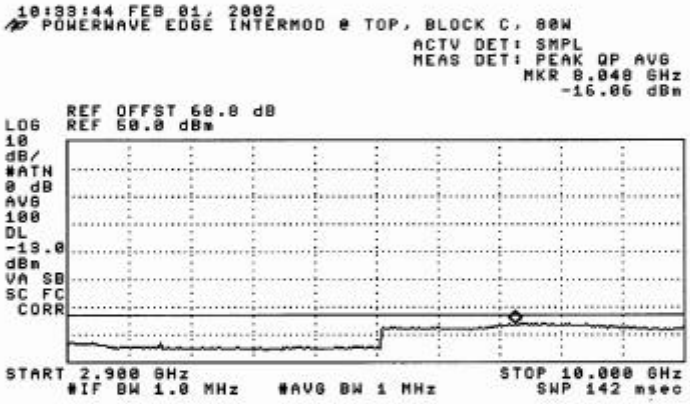

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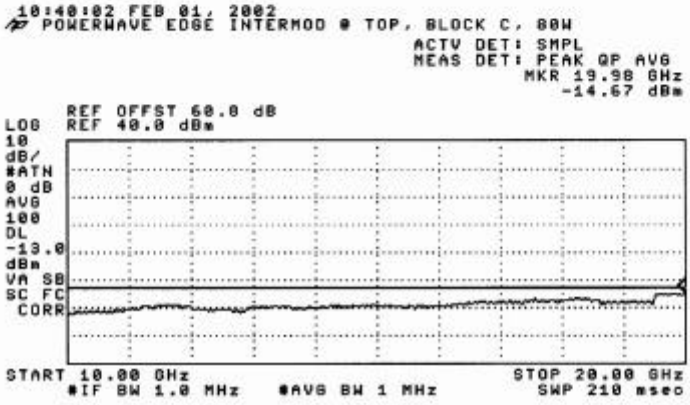

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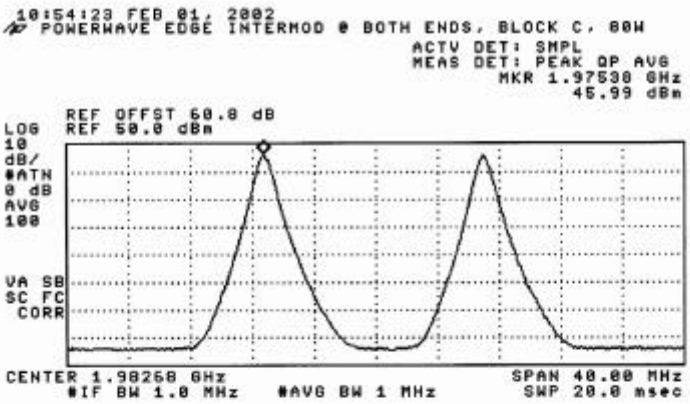

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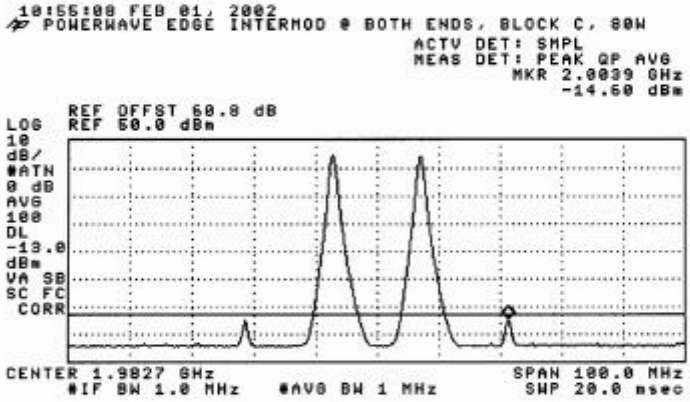

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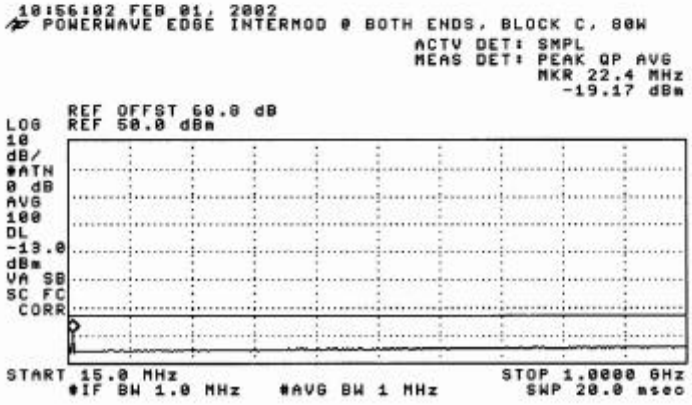

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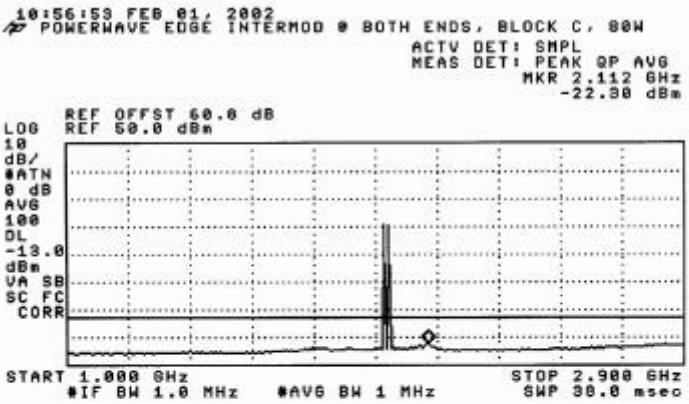

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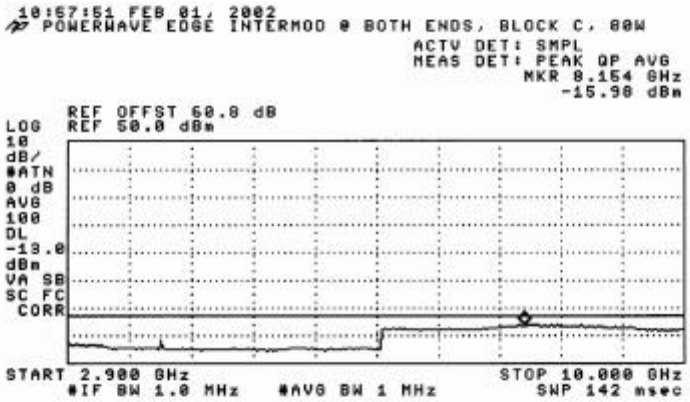

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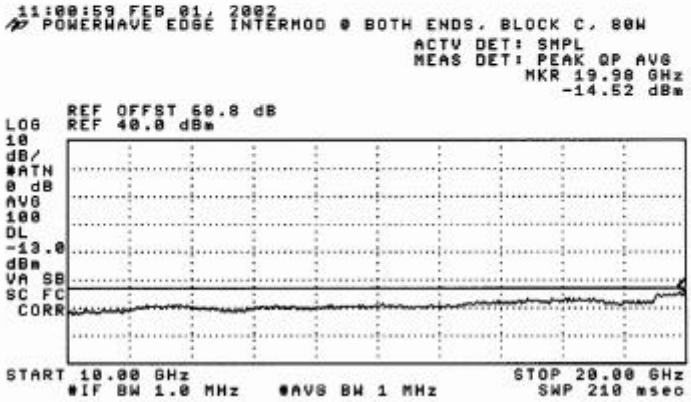

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9.5. SECTION 2.1053: FIELD STRENGTH OF SPURIOUS RADIATION

INSTRUMENTS LIST

EQUIPMENT	MANUFACTURE	MODEL NO.	SERIAL NO.	CAL. DUE DATE
Spectrum Analyzer	HP	8593EM	3710A00205	6/20/02
Amplifier	MITEQ	NSP2600-44	646456	4/12/02
Signal Generator	HP	83732B	US34490599	3/21/02
Rx Horn Antenna	EMCO	3115	9001-3245	6/20/02
Rx Horn Antenna	ARA	MWH1826/B	1013	7/26/02
Tx Horn Antenna	EMCO	3115	2238	6/20/02
HPF	MICROLAB	FH-2400H	N/A	N/A

Detector Function Setting of Test Receiver

Frequency Range (MHz)	Detector Function	Resolution Bandwidth	Video Bandwidth
Above 1000	☒ Peak ☐ Average	☒ 1 MHz ☐ 1 MHz	☒ 1 MHz ☐ 10 Hz

TEST SETUP

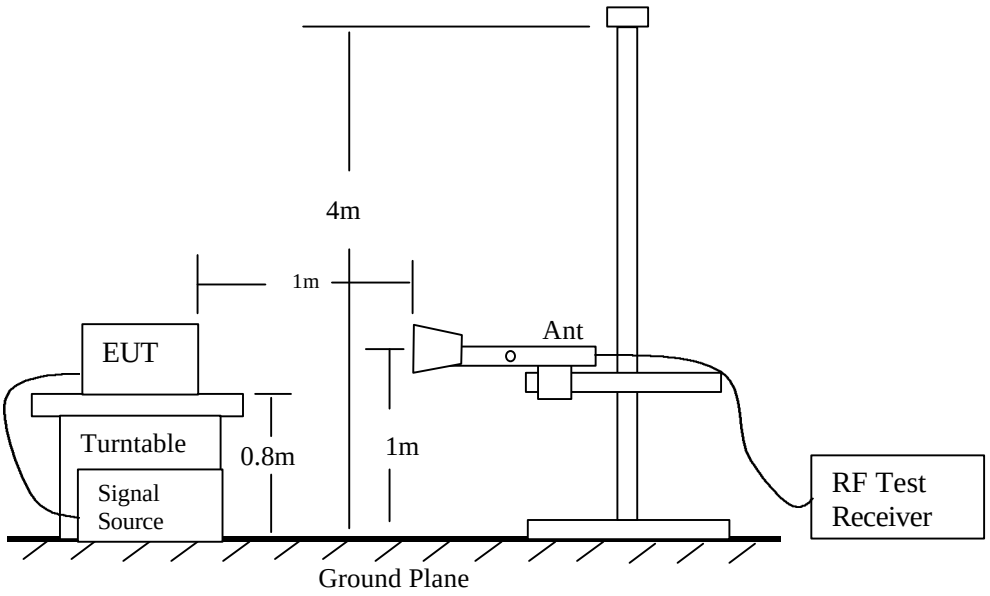

Fig 1: Radiated Emission Measurement

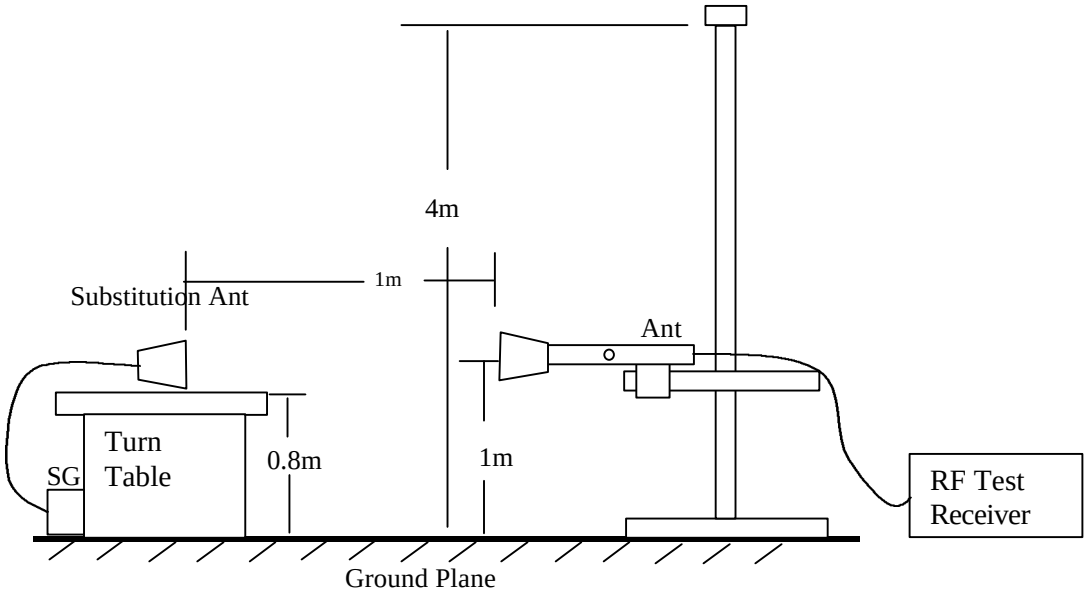

Fig 2: Radiated Emission – Substitution Method set-up

TEST PROCEDURE

1). On a test site, the EUT shall be placed on a turntable, and in the position closest to the normal use as declared by the user.
2). The test antenna shall be oriented initially for vertical polarization located 1m from the EUT to correspond to the frequency of the transmitter.
3). The output of the test antenna shall be connected to the measuring receiver and either a peak or average detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
4). The transmitter shall be switched on, if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
5). The test antenna shall be raised and lowered through the specified range of height until a maximum signal level is detected by the measuring receiver.
6). The transmitter shall than be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
7). The test antenna shall be raised and lowered again through the specified range of height until a maximum signal level is detected by the measuring receiver.
8). The maximum signal level detected by the measuring receiver shall be noted.

9). The transmitter shall be replaced by a substitution antenna.
10). The substitution antenna shall be oriented for vertical polarization.
11). The substitution antenna shall be connected to a calibrated signal generator.
12). If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
13). The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
14). The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
15). The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
16). The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.
17). The measure of the effective radiated power is the larger of the two levels recorded, at the input to the substitution antenna, corrected for the gain of the substitution antenna if necessary.

RESULT

Due to Class II Permissive Change, this test was not performed.

9.6. SECTION 2.1055: FREQUENCY STABILITY

INSTRUMENTS LIST

EQUIPMENT	MANUFACTURE	MODEL NO.	SERIAL NO.	CAL. DUE DATE
Spectrum Analyzer	HP	8593EM	3710A00205	6/20/02
Environmental Chamber	THERMOTRON	SE-600-10-10	29800	3/23/02

Detector Function Setting of Test Receiver

Frequency Range (MHz)	Detector Function	Resolution Bandwidth	Video Bandwidth
Above 1000	Peak	300 Hz	300 Hz

TEST SETUP

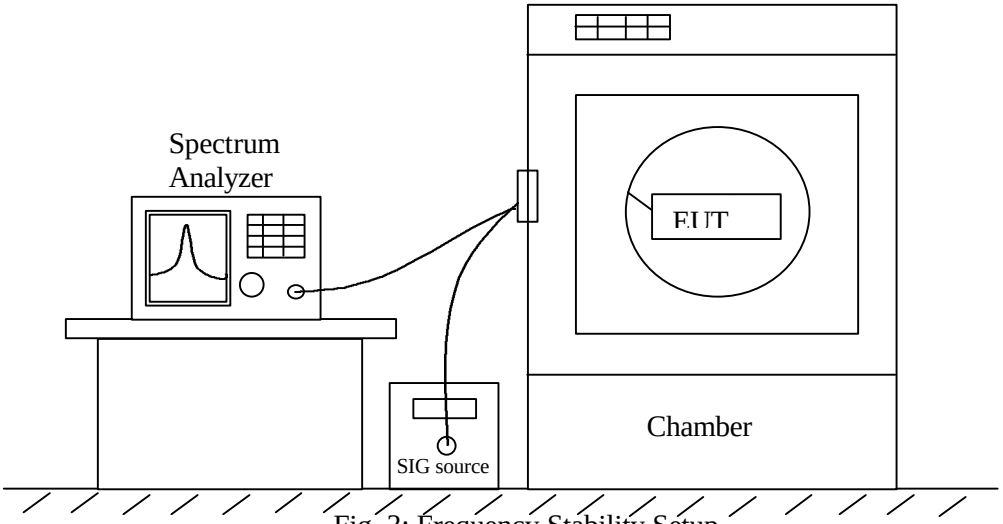

Fig. 3: Frequency Stability Setup

TEST PROCEDURE

- **Frequency stability versus environmental temperature**

1). Setup the configuration per figure 6 for frequencies measurement inside the environmental chamber. Set the temperature of the chamber to 20°C. Set SA Resolution Bandwidth low enough to obtain the desired frequency resolution and measure the EUT 20°C operating frequency as reference frequency.
2). Turn EUT off and set Chamber temperature to -30°C.
3). Allow sufficient time (approximately 20 to 30 minus after chamber reach the assigned temperature) for EUT to stabilize. Turn on EUT and measure the EUT operating frequency. Turn off EUT after the measurement.
4). Repeat step 3 with a 10°C increased per stage until the highest temperature of +50°C reached, record all measured frequencies on each temperature step.

- **Frequency stability versus AC input voltage**

1). Setup the configuration per figure 6 and set chamber temperature to 25°C. Use a variable AC power supply to power the EUT and set AC output voltage to EUT nominal input AC voltage. Set SA Resolution Bandwidth low enough to obtain the desired frequency resolution and measure the EUT 25°C operating frequency as reference frequency.
2). Slowly reduce the EUT input voltage to specified extreme voltage variation and record the maximum frequency change.

RESULT

(NOT APPLICABLE, EUT IS A POWER AMPLIFIER)