

SUBMITTED MEASURED DATA

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RF POWER OUTPUT DATA

The RF power output was measured with the indicated voltage applied to and current into the final RF amplifying device.

Measured RF output	5	Watt
Normal DC Voltage	7.5	Volts
Normal DC Current	1.55	Amps
Primary Supply Voltage	7.5	Volts

Measured RF output	3	Watt
Normal DC Voltage	7.5	Volts
Normal DC Current	1.1	Amps
Primary Supply Voltage	7.5	Volts

Measured RF output	1	Watt
Normal DC Voltage	7.5	Volts
Normal DC Current	0.75	Amps
Primary Supply Voltage	7.5	Volts

AUDIO FILTER RESPONSE

Attached as Exhibit 9B.

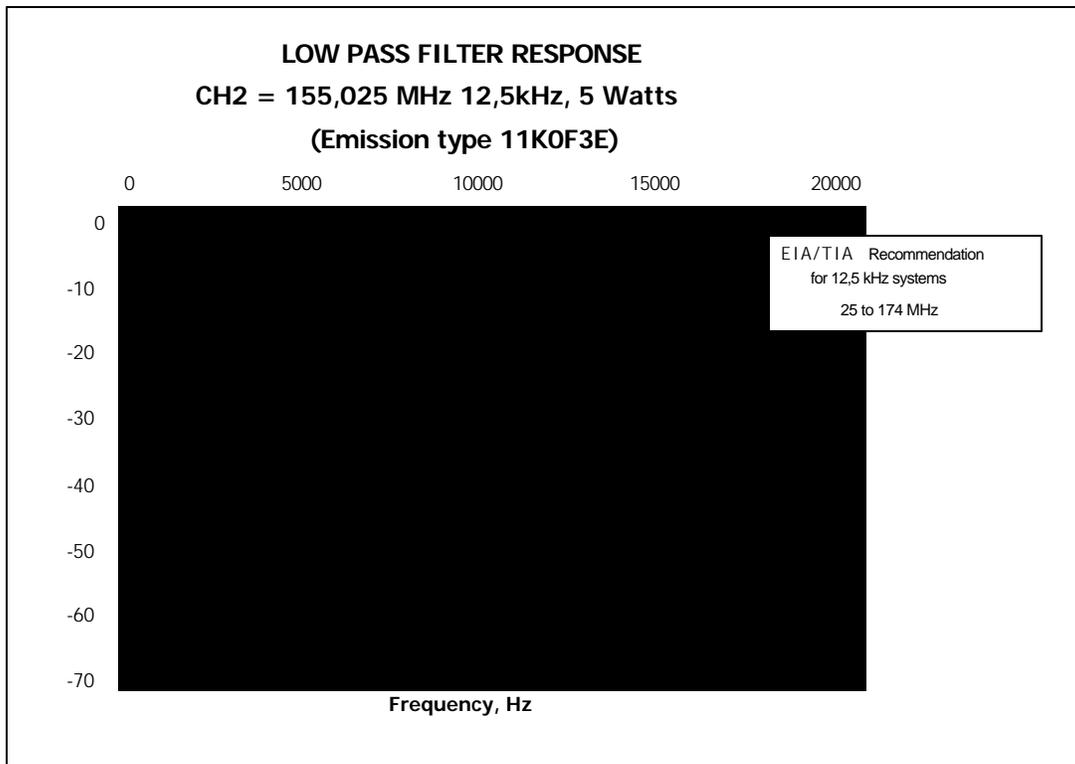
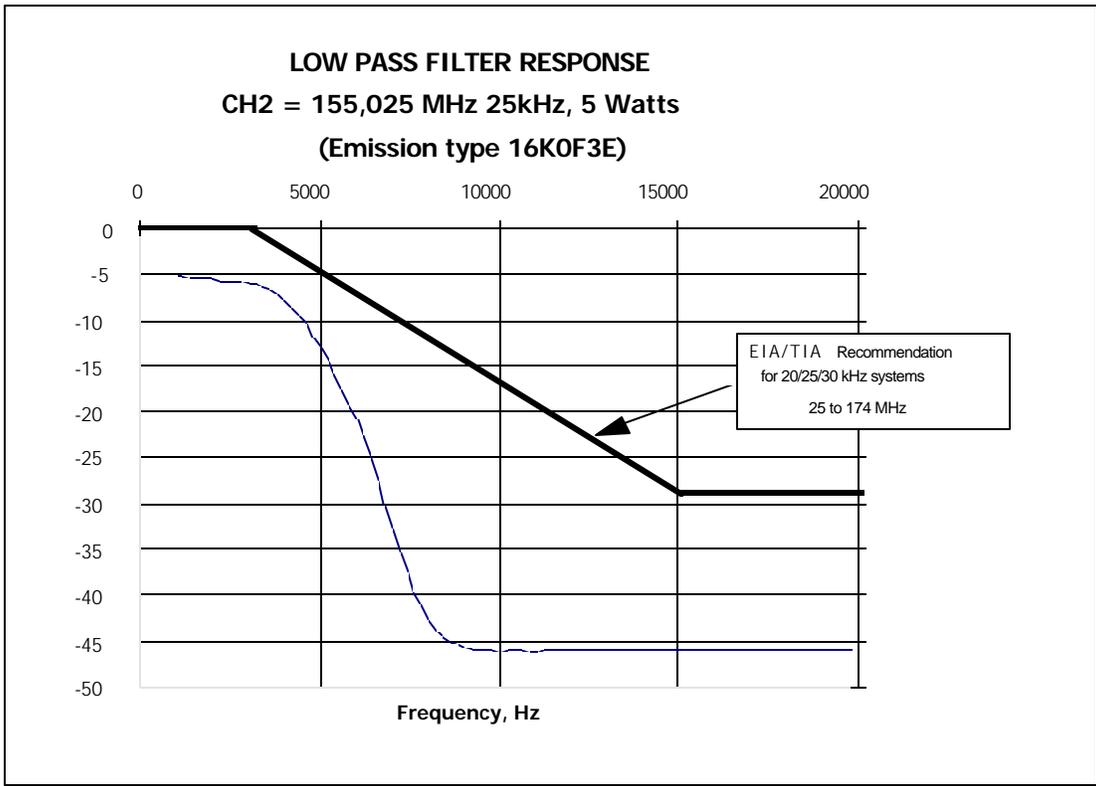
EXHIBIT 9B

AUDIO FILTER RESPONSE

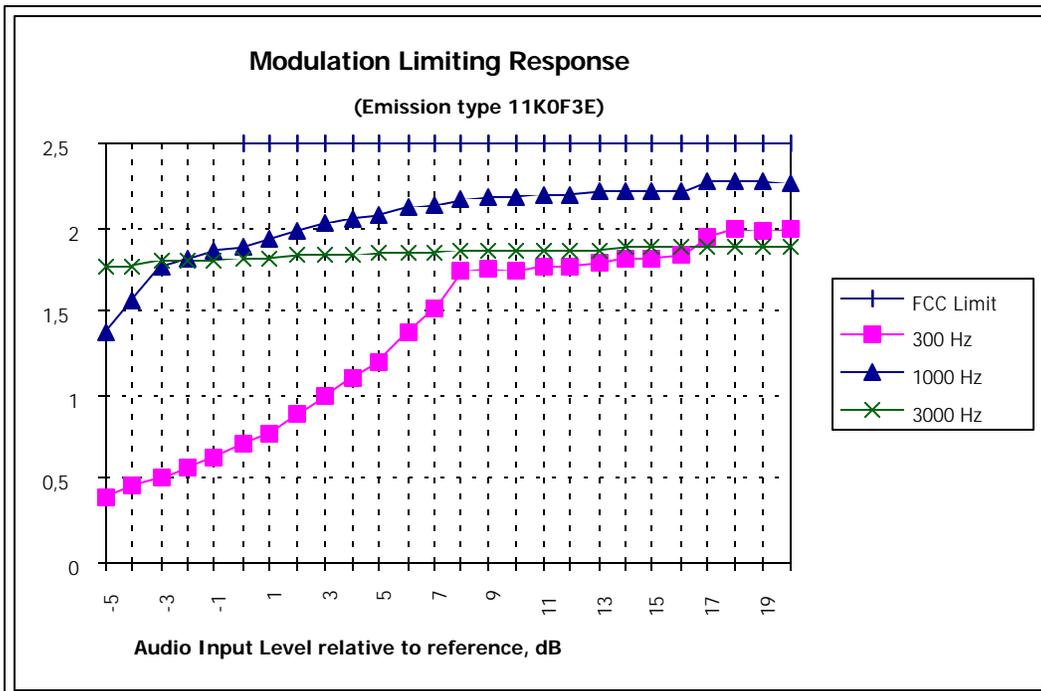
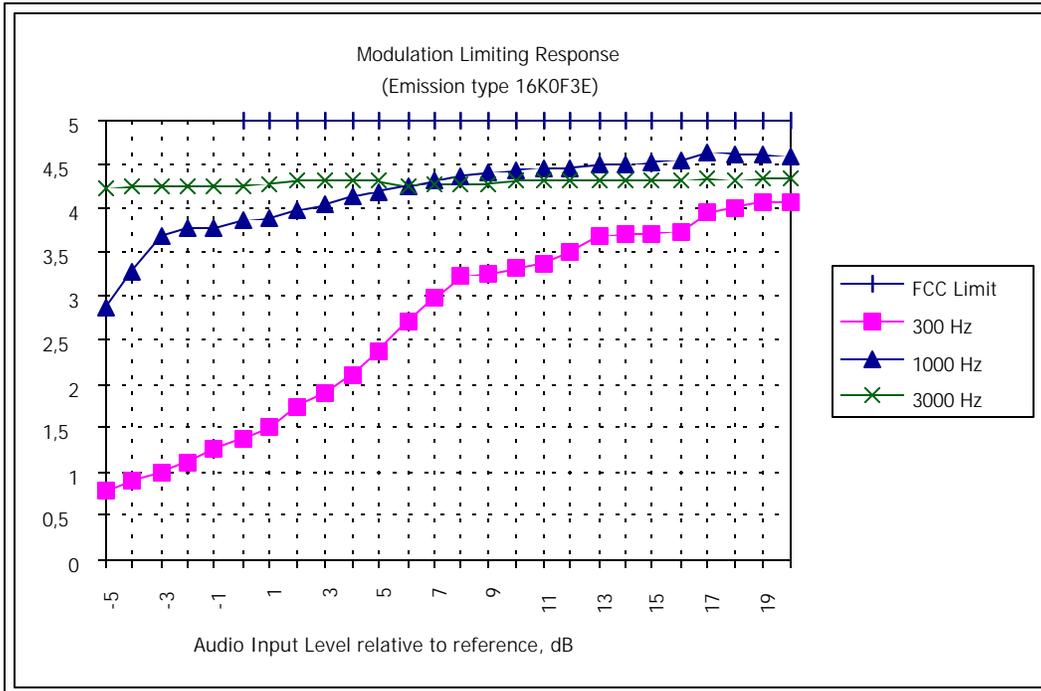
Attached as Exhibit 9B.

EXHIBIT 9B

LOW PASS FILTER RESPONSE



MODULATION LIMITING



OCCUPIED BANDWIDTH DATA

BANDWIDTH CALCULATIONS:

Carson's Rule for FM modulation is utilized to compute the bandwidth shown in the FCC emission designator. Carson's Rule is:

$$BW = 2 * (M + D) \quad \text{where:} \quad \begin{array}{l} BW = \text{Bandwidth} \\ M = \text{Maximum modulating frequency} \\ D = \text{Deviation} \end{array}$$

Shown below are the calculations required for FCC ID: AZ489FT3794.

EXHIBIT 9E-1

Standard Audio Modulation (25 kHz Channelization, Analog Voice):
Emission Designator 16K0F3E

In this case, the maximum modulating frequency is 3 kHz with a 5 kHz deviation.

$$BW = 2(M+D) = 2*(3 \text{ kHz} + 5 \text{ kHz}) = 16 \text{ kHz} \implies 16K0$$

F3E portion of the designator indicates voice.

Therefore, the entire designator for 25 kHz channelization analog voice is 16K0F3E.

EXHIBIT 9E-2

Standard Audio Modulation (12.5 kHz Channelization, analog voice):
Emission Designator 11K0F3E

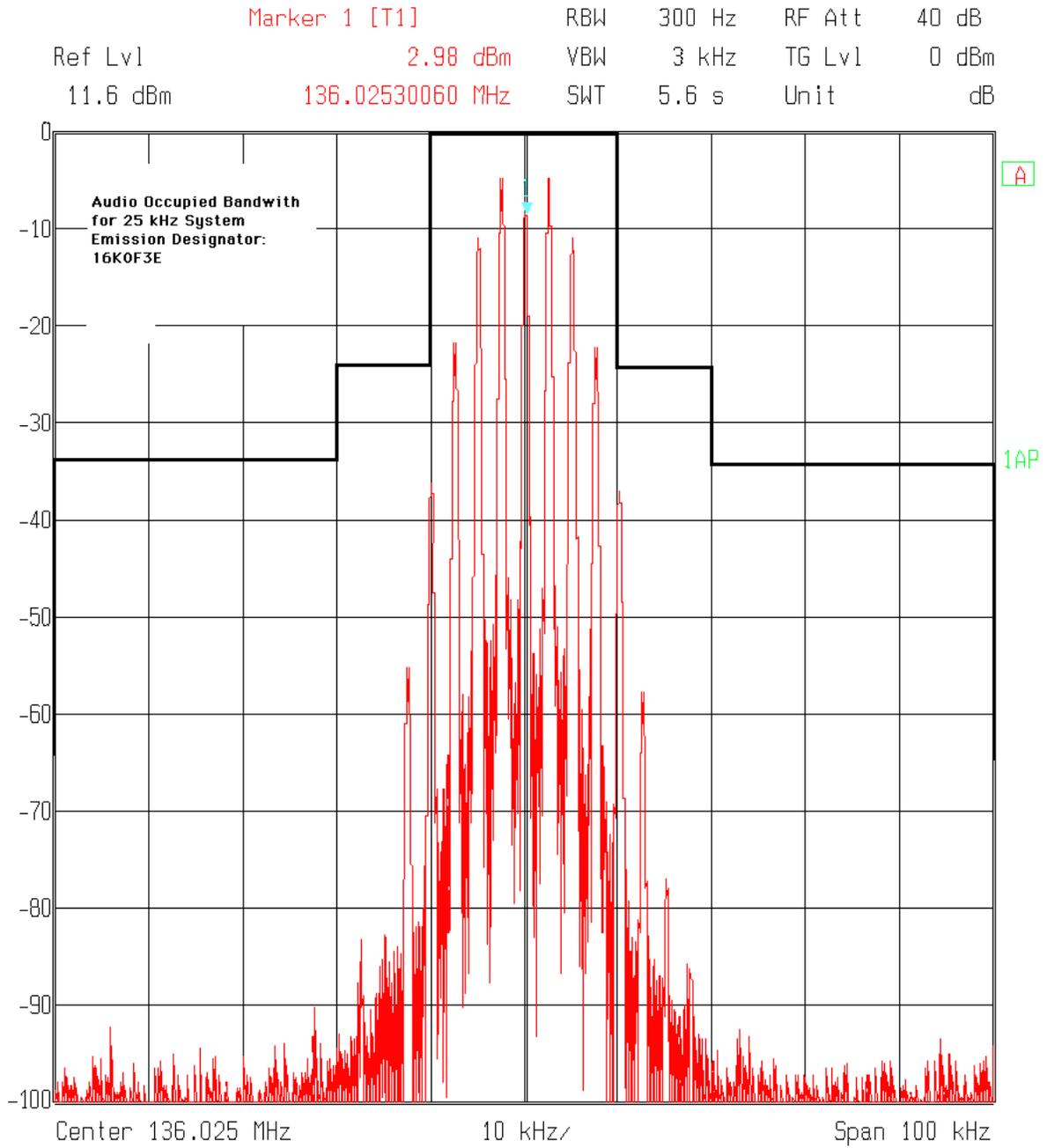
In this case, the maximum modulating frequency is 3.0 kHz with a 2.5 kHz deviation.

$$BW = 2(M+D) = 2*(3.0 \text{ kHz} + 2.5 \text{ kHz}) = 11 \text{ kHz} \implies 11K0$$

F3E portion of the designator indicates voice.

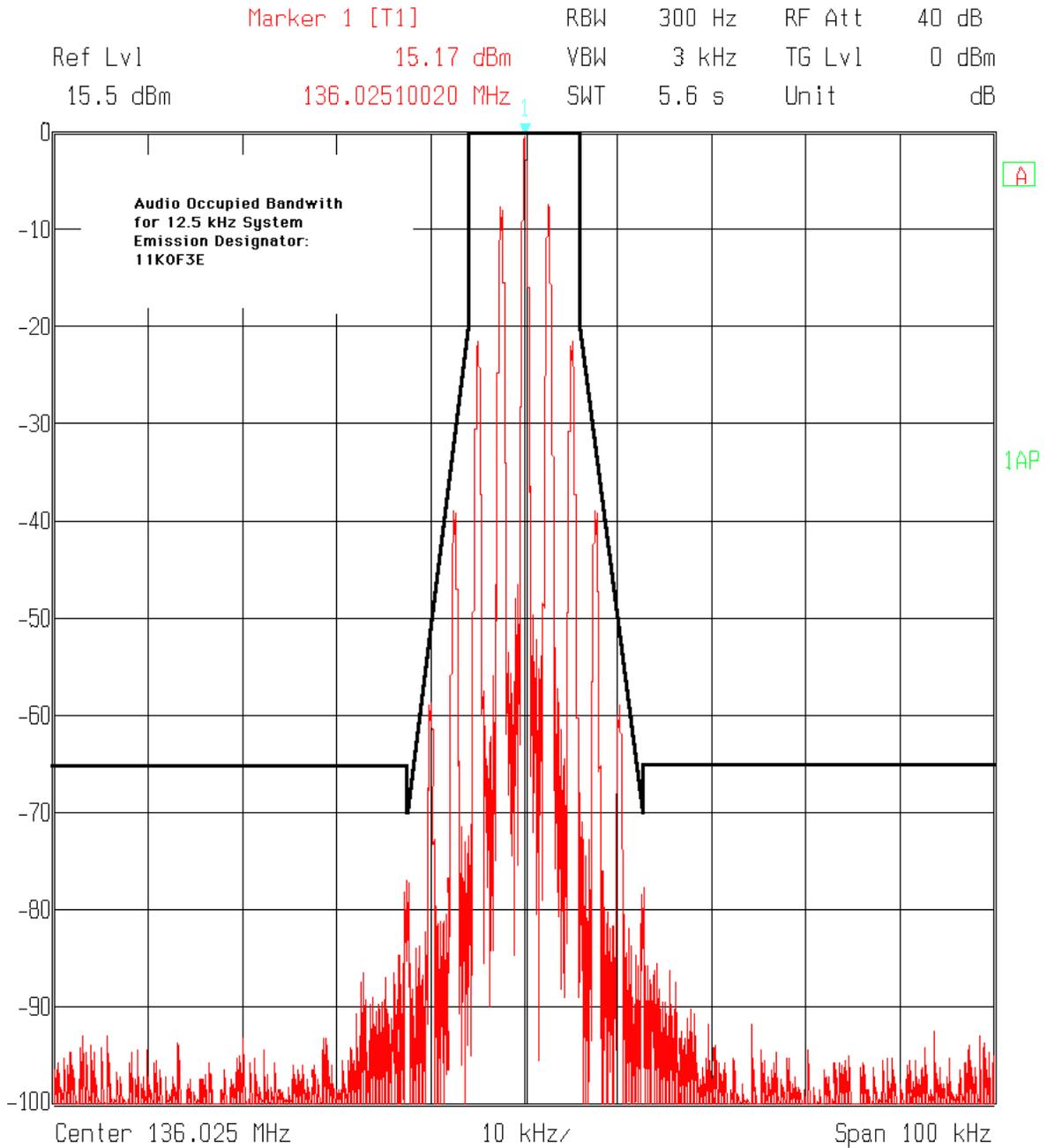
Therefore, the entire designator for 12.5 kHz channelization analog voice is 11K0F3E.

OCCUPIED BANDWIDTH



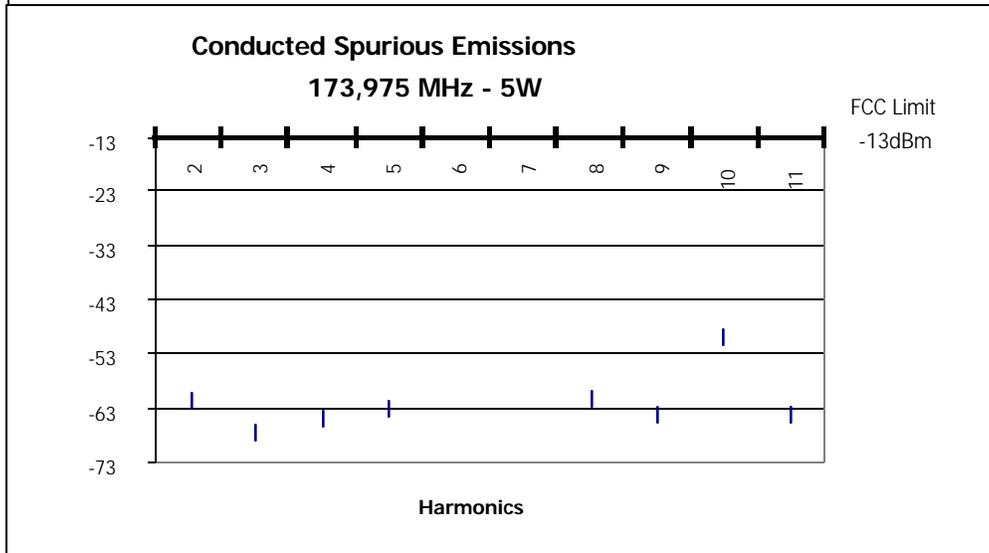
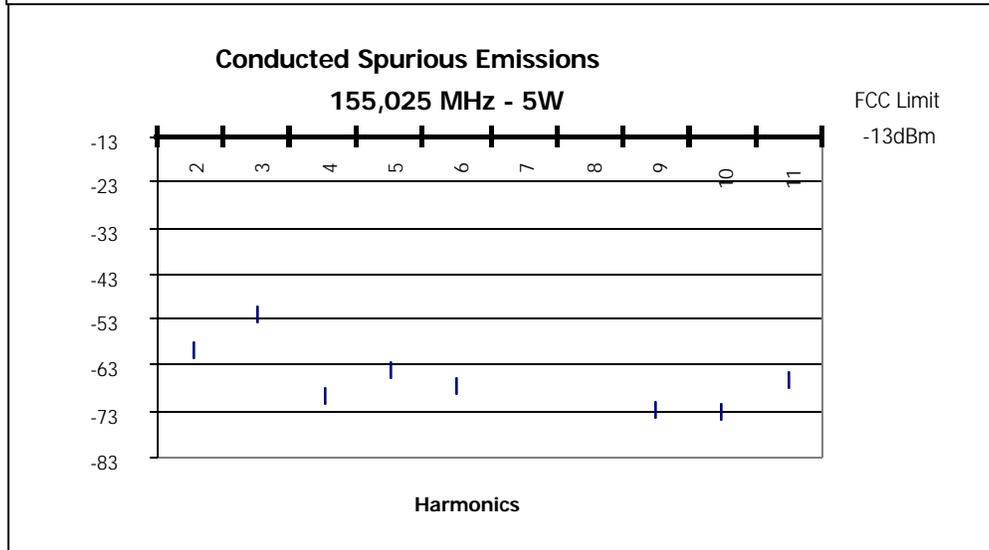
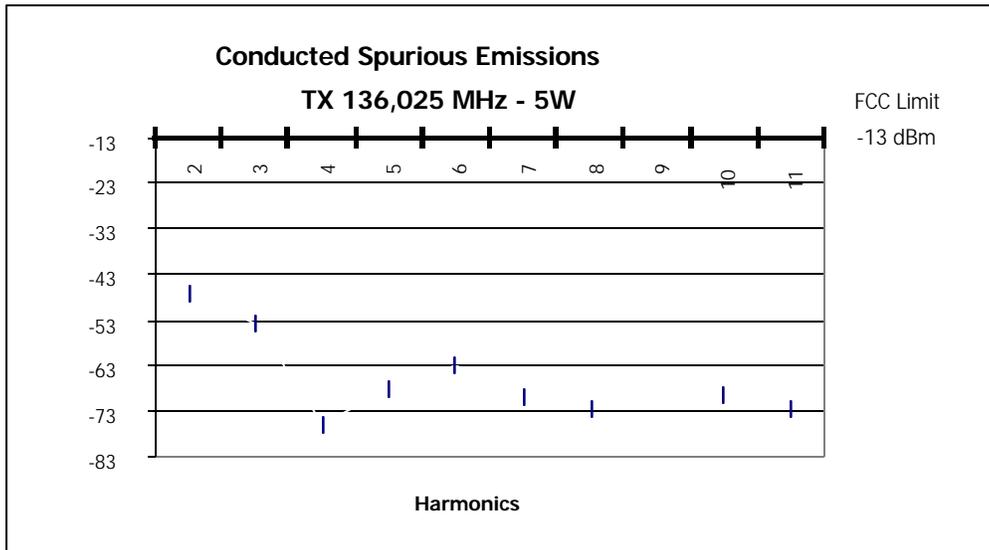
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OCCUPIED BANDWIDTH

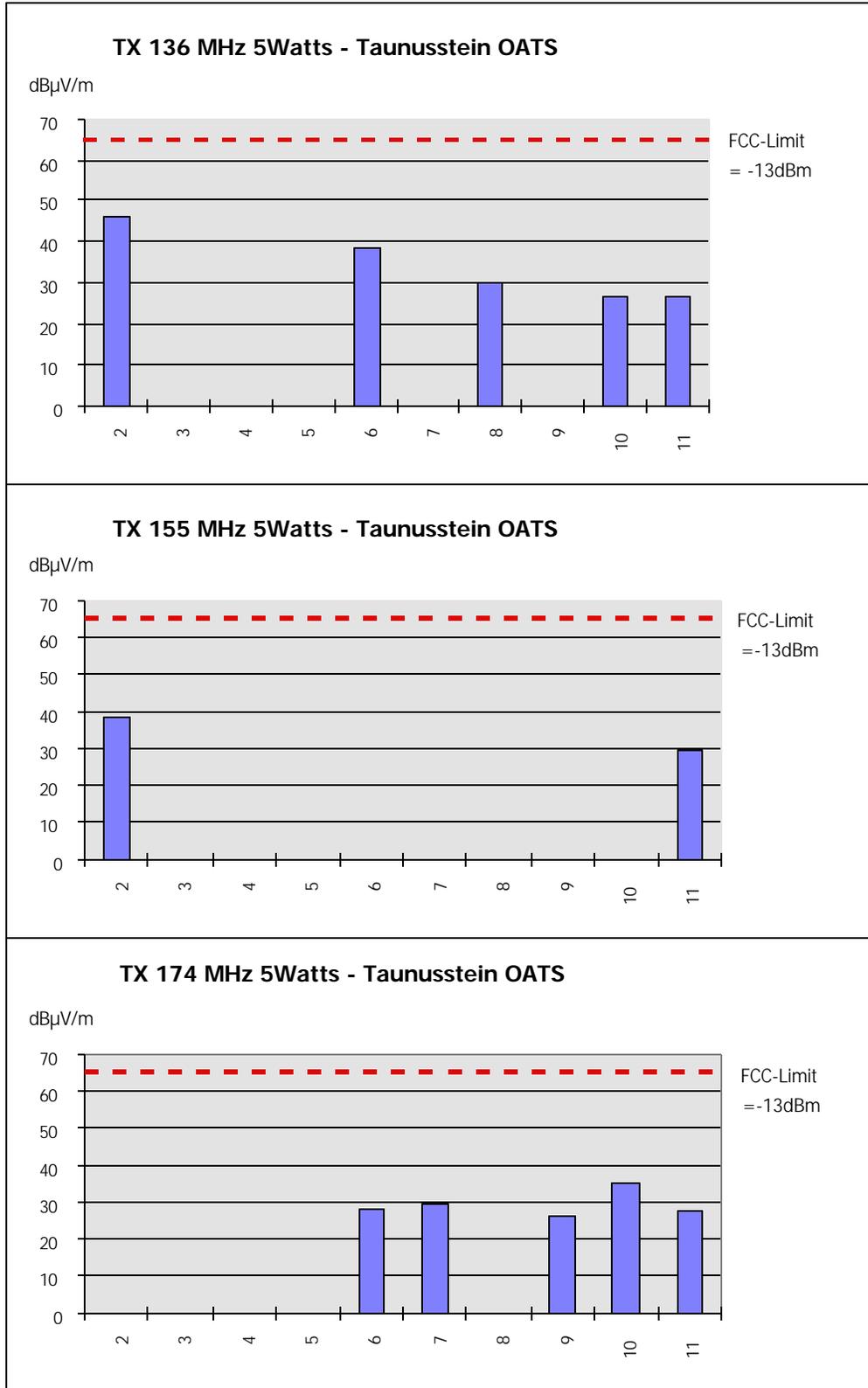


Date: 12.JUN.98 13:56:48

CONDUCTED SPURIOUS EMISSIONS



RADIATED SPURIOUS EMISSIONS

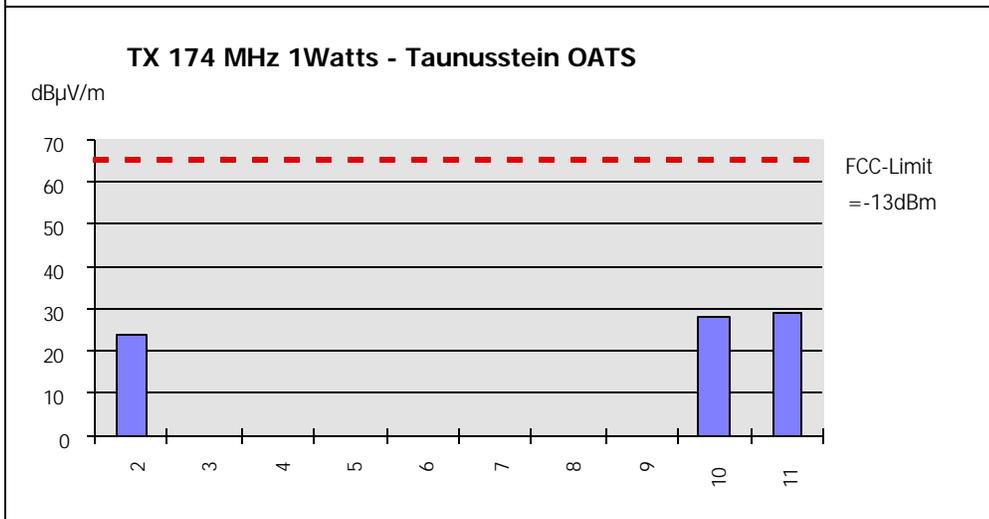
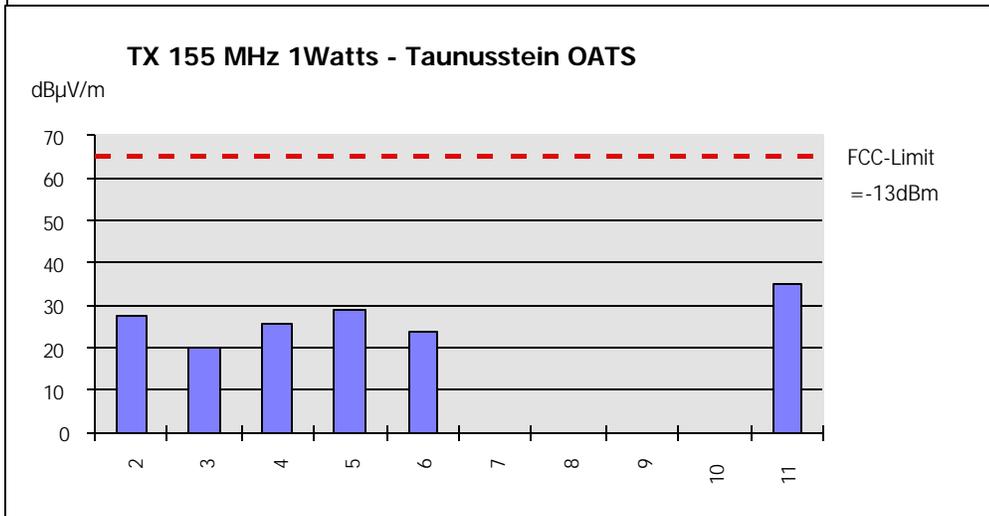
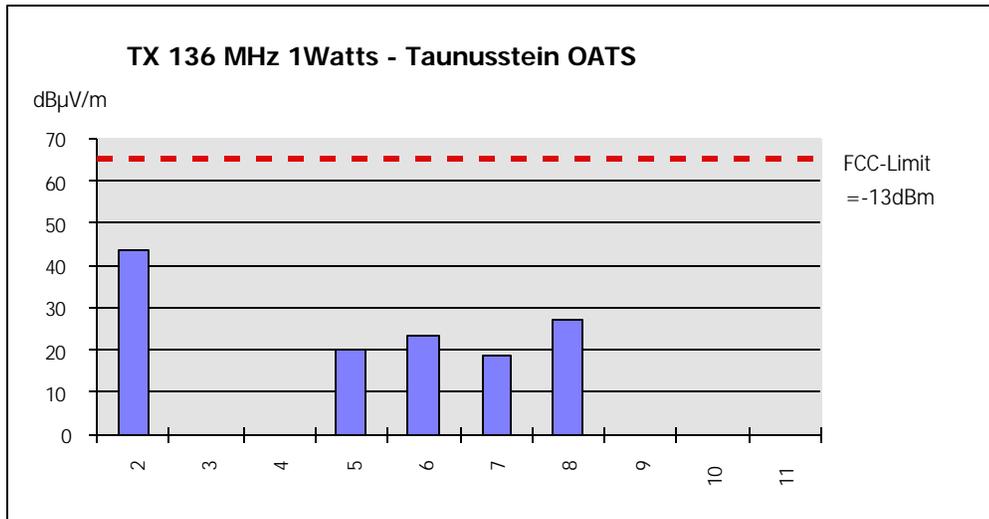


MOTOROLA INC

FCC ID: AZ489FT3794

EXHIBIT 9G-1

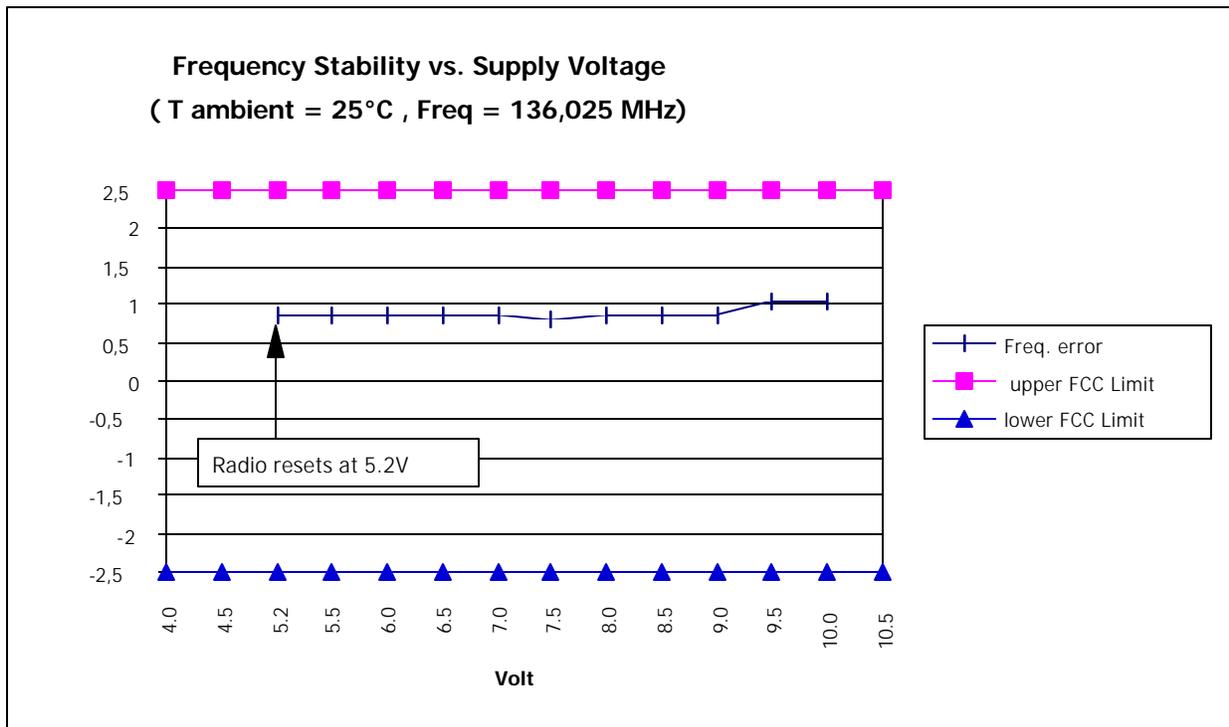
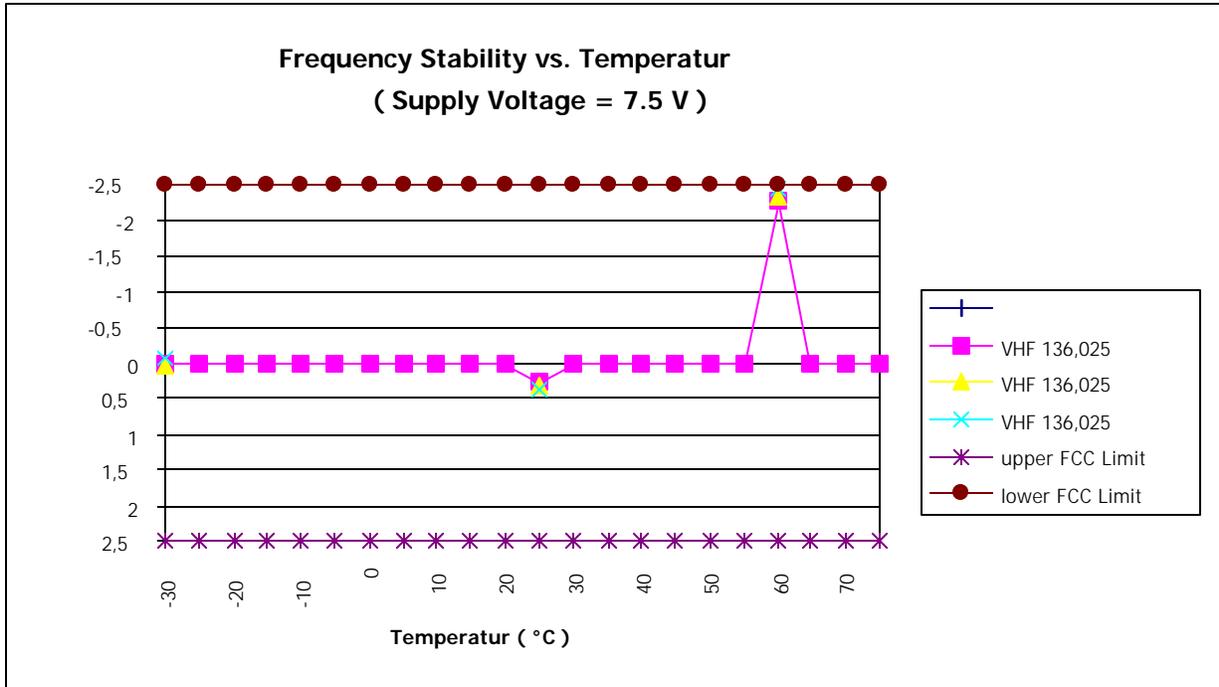
RADIATED SPURIOUS EMISSIONS



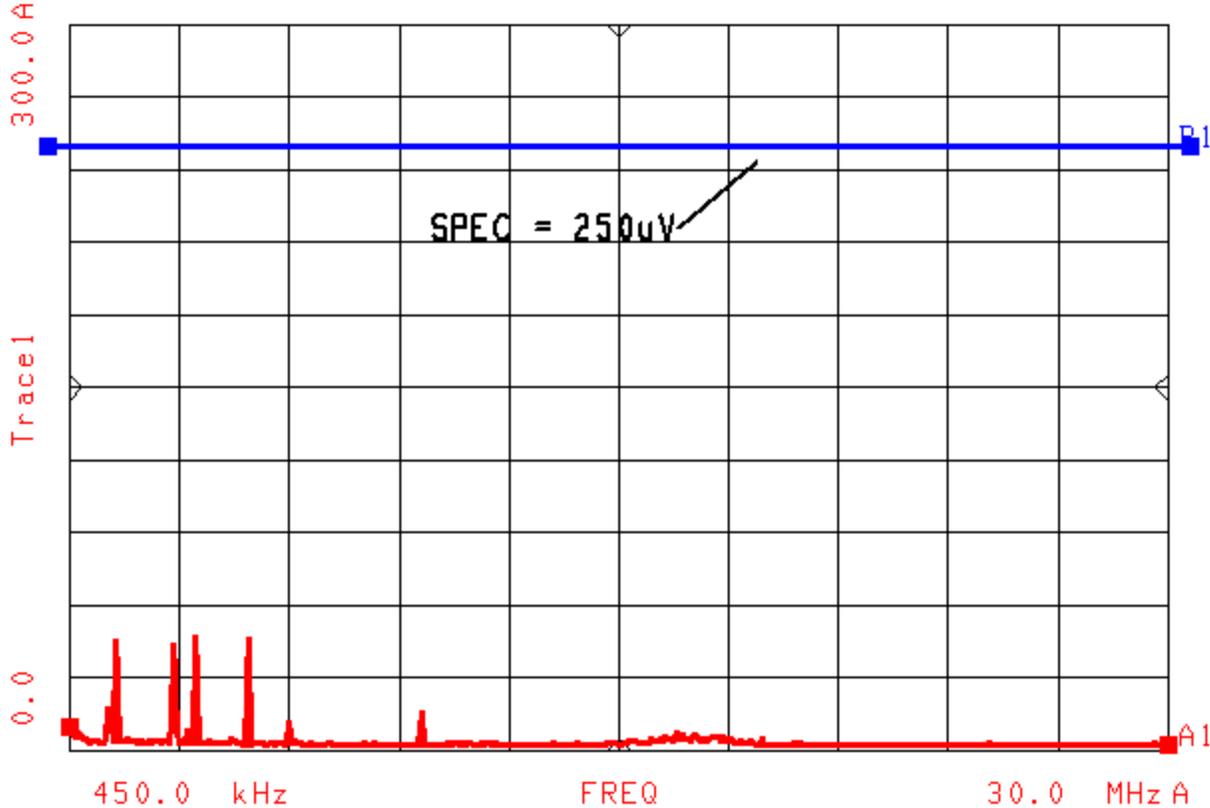
MOTOROLA INC

FCC ID: AZ489FT3794
EXHIBIT 9G-2

FREQUENCY STABILITY DATA



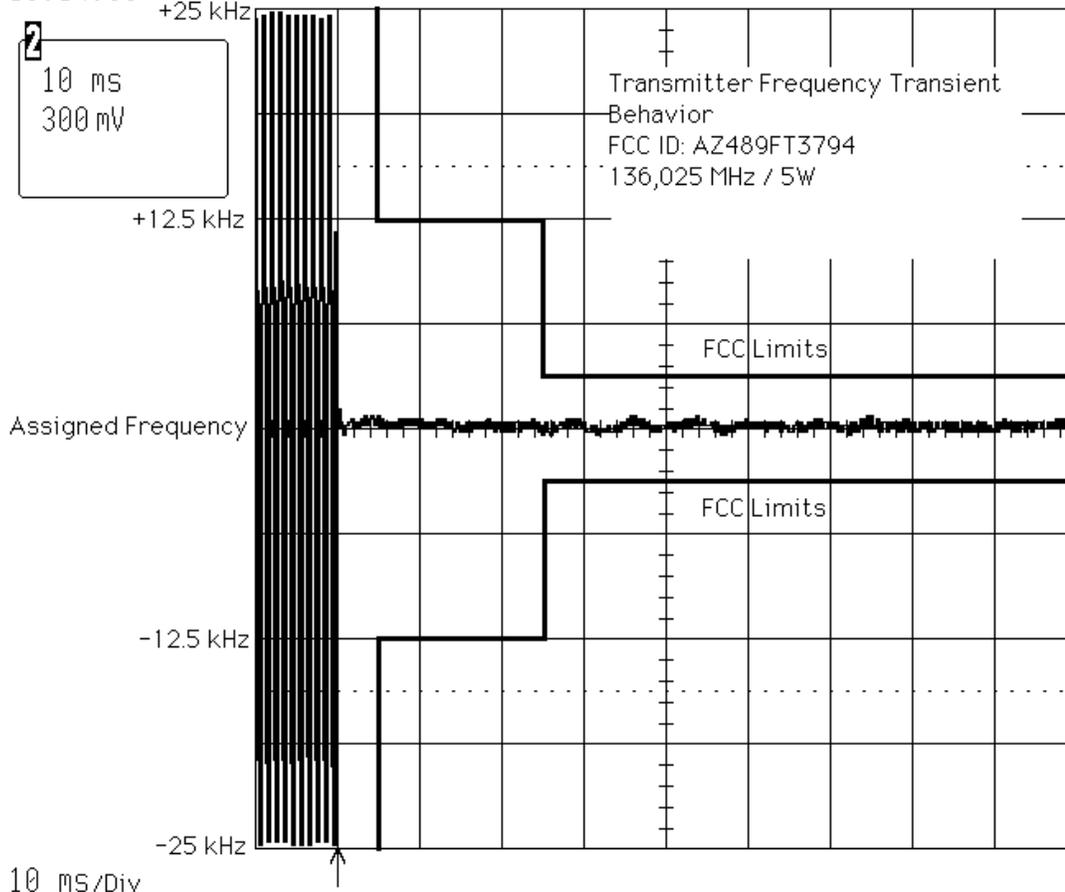
POWER LINE CONDUCTED SPURIOUS



TRANSIENT FREQUENCY BEHAVIOR

28-May-98
13:14:09

TRIGGER SETUP



Edge **SMART** (GLITCH)

SETUP SMART TRIGGER

trigger on **1 2 3 4**
Ext Ext10

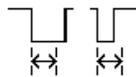
coupling **1**
DC AC
LFREJ HFREJ

at end of **Neg** Pos pulse

width < **OFF** On

width > 10.0 ns
OFF **On**

- 1** .5 V DC
- 2** 300 mV DC
- 3** 2 V DC
- 4** .1 V DC



1 DC 0.57 V
10.0 ns < pulse

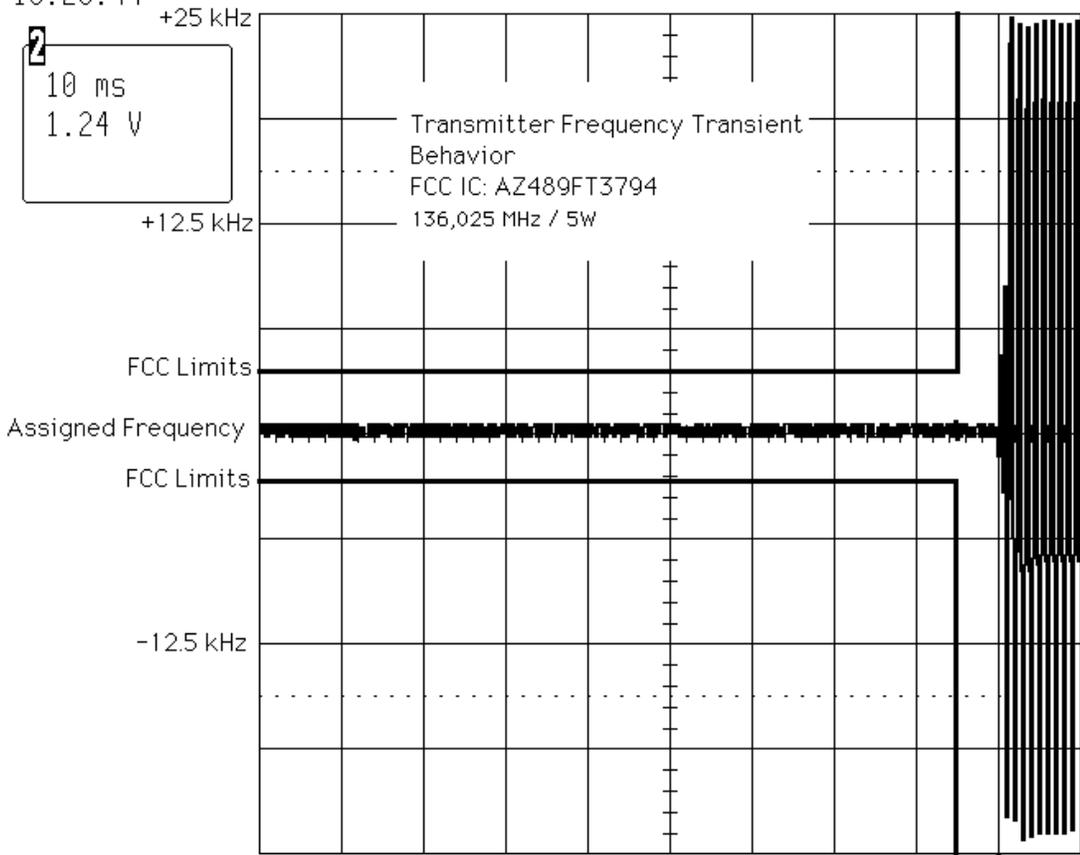
NORMAL
100 ks/s

Measured values identical for 12.5 kHz and 25 kHz channel spacing

TRANSIENT FREQUENCY BEHAVIOR

28-May-98
13:28:44

TRIGGER SETUP



Edge **SMART** (GLITCH)

SETUP SMART TRIGGER

trigger on **2** 3 4
Ext Ext10

coupling **1**
DC AC
LFREJ HFREJ

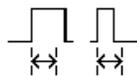
at end of
Neg **Pos**
pulse

width < ---
OFF On

width > ---
10.0 ns
OFF **On**

10 ms/Div

- 1** .5 V DC
- 2** 1.24 V DC
- 3** 2 V DC
- 4** .1 V DC



1 DC 0.57 V
10.0 ns < pulse

NORMAL
100 ks/s

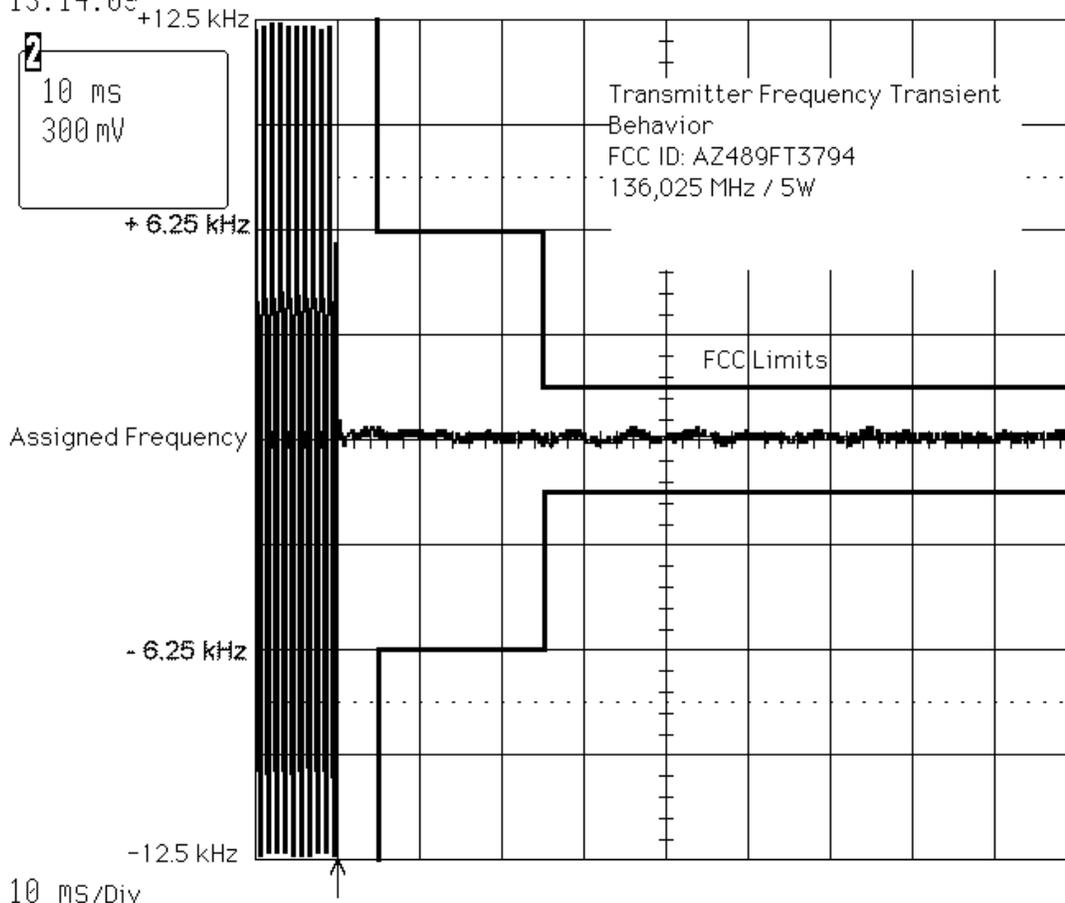
Measured values identical for 12,5 kHz and 25 kHz channel spacing

TRANSIENT FREQUENCY BEHAVIOR

28-May-98

13:14:00

TRIGGER SETUP



Edge **SMART** (GLITCH)

SETUP SMART TRIGGER

trigger on **1 2 3 4**
Ext Ext10

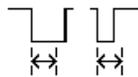
coupling **1**
DC AC
LFREJ HFREJ

at end of **Neg** Pos pulse

width < **OFF** On

width > 10.0 ns **On**

- 1** .5 V DC
- 2** 300 mV DC
- 3** 2 V DC
- 4** .1 V DC



1 DC 0.57 V
10.0 ns < pulse

NORMAL
100 ks/s

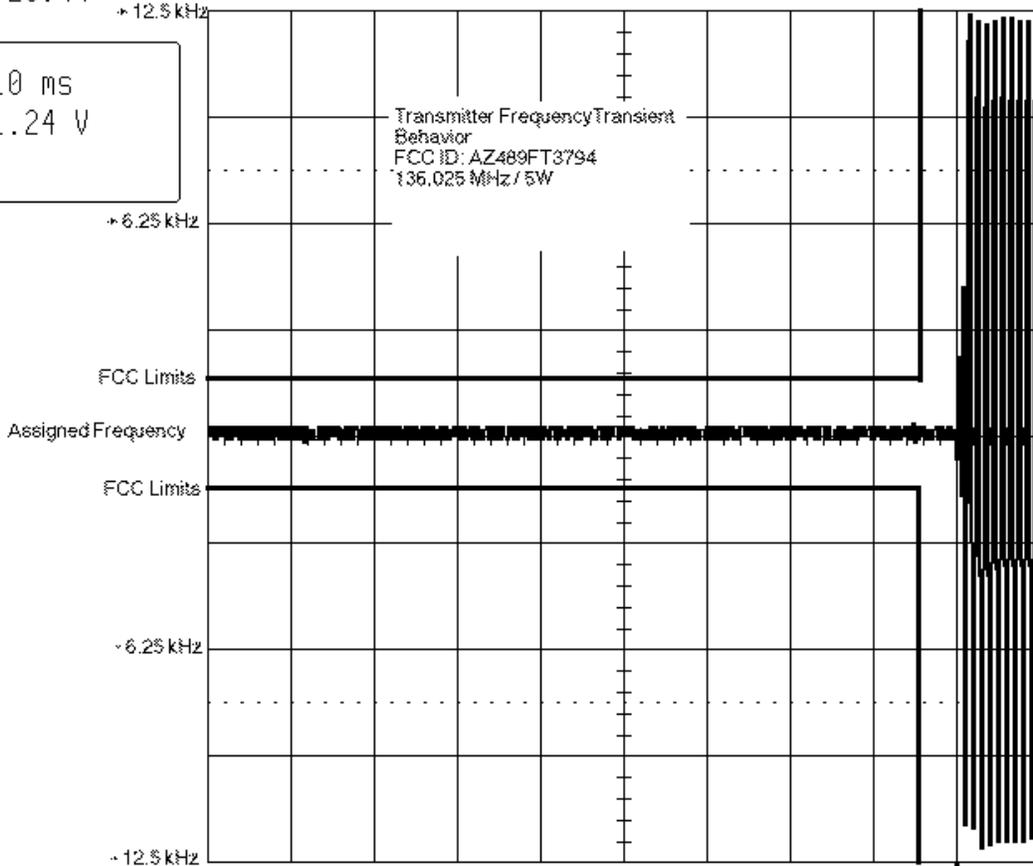
Measured values identical for 12,5 kHz and 25 kHz channel spacing

TRANSIENT FREQUENCY BEHAVIOR

28-May-98
13:28:44

TRIGGER SETUP

2
10 ms
1.24 V



Edge **SMART**
(GLITCH)

SETUP SMART TRIGGER

trigger on
1 2 3 4
Ext Ext10

coupling 1
DC AC
LFREJ HFREJ

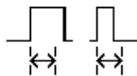
at end of
Neg **Pos**
pulse

width <
- - -
OFF On

width >
10.0 ns
OFF **On**

10 ms

- 1 .5 V DC
- 2 1.24 V DC
- 3 2 V DC
- 4 .1 V DC



1 DC 0.57 V
10.0 ns < pulse

NORMAL
100 ks/s

Measured values identical for 12,5 kHz and 25 kHz channel spacing