



**Test Report**

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**MOTOROLA**

FCC ID: AZ489FT4874

**RF POWER OUTPUT DATA**

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

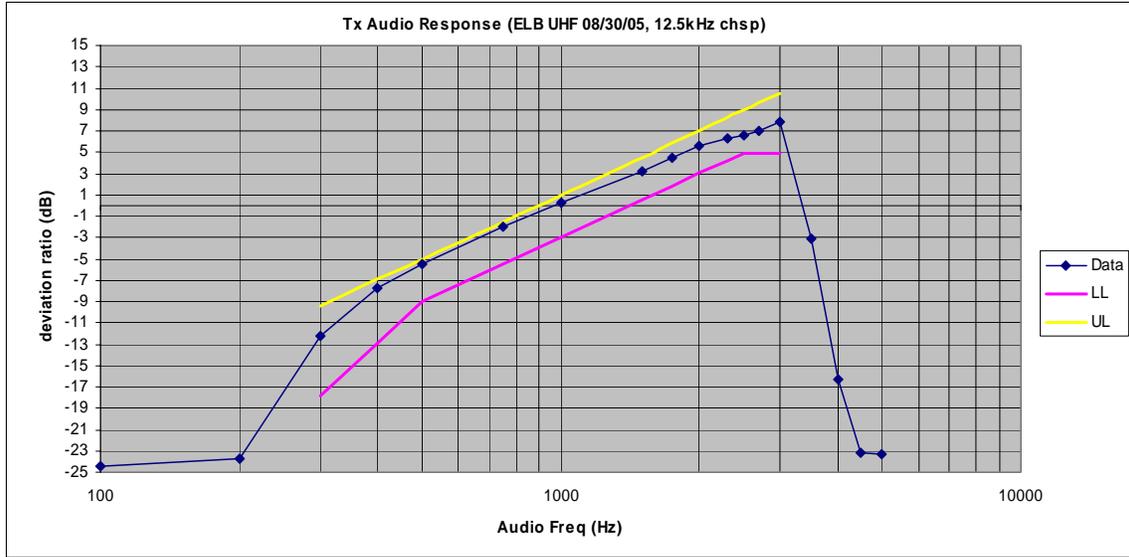
**1 Watt**

Frequency	464.5000MHz
Measured Conducted RF output	1.0 Watts
Normal DC Voltage	3.60 Volts
Normal DC Current	870 milli Amps
Primary Supply Voltage	3.80 Volts
RF Conducted output power measured at 3.80Volts	

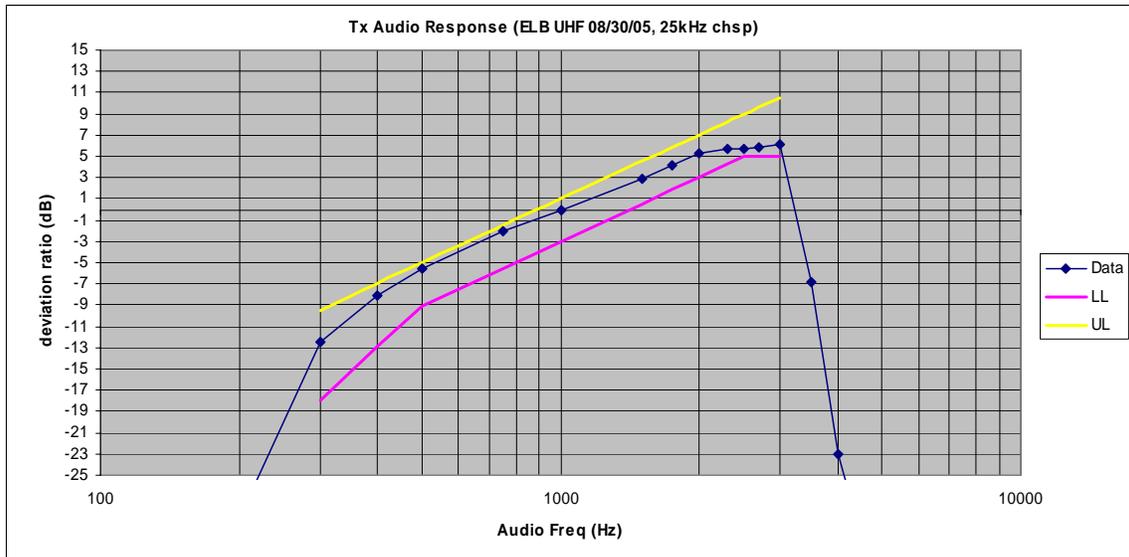
EXHIBIT 6A



TX Audio Response: 12.5 kHz

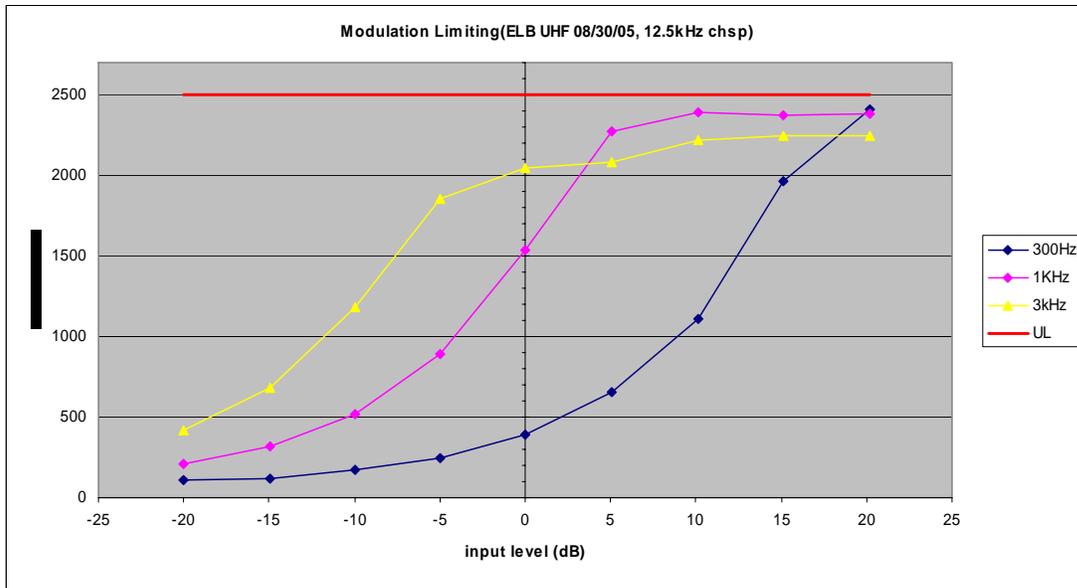


TX Audio Response: 25 kHz

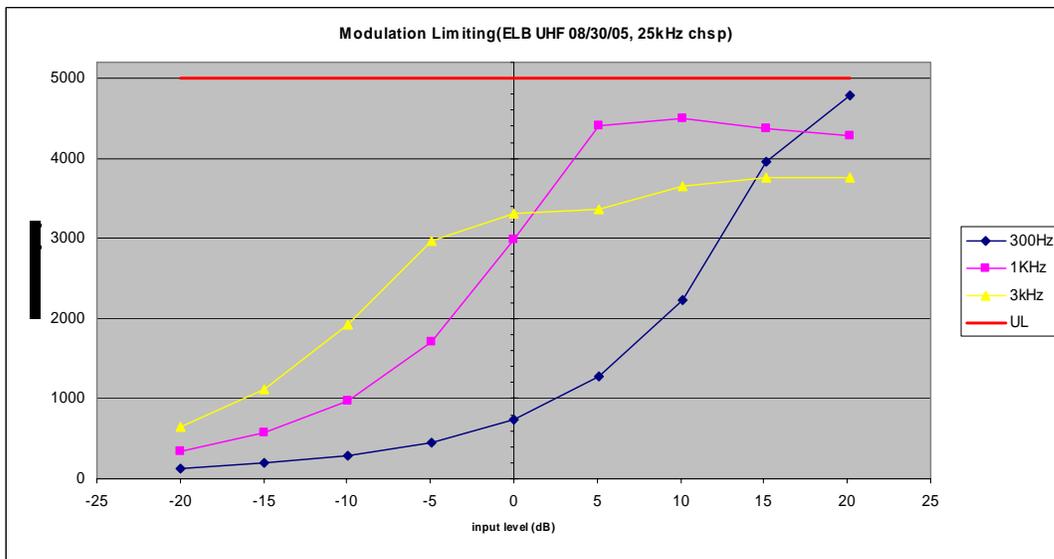




MODULATION LIMITING 12.5 kHz



MODULATION LIMITING 25 kHz





**MOTOROLA**

FCC ID: AZ489FT4874

**OCCUPIED BANDWIDTH DATA**

**1 Watt**

12.5 / 25.0 kHz Channel Spacing

**EXHIBIT 6D-1**

2500 Hz Audio Modulation

Emission Type: 11K0F3E

Specification Mask D, 90.210 – 12.5 kHz

**EXHIBIT 6D-2**

2500 Hz Audio Modulation

Emission Type: 16K0F3E

Specification Mask B, 90.210 – 25 kHz

**EXHIBIT 6D-3**

2500 Hz & 77Hz Tone "PL" Modulation

Emission Type: 11K0F3E

Specification Mask D, 90.210 – 12.5 kHz

**EXHIBIT 6D-4**

2500 Hz & 77Hz Tone "PL" Modulation

Emission Type: 16K0F3E

Specification Mask B, 90.210 – 25 kHz

**CARSON'S RULE: 11K0F3E**

BW= 2(M+D)

BW=2 (3 kHz maximum modulation frequency +2.5 kHz deviation)

BW=2 (5.5)

BW= 11K0

**CARSON'S RULE: 16K0F3E**

BW= 2(M+D)

BW=2 (3 kHz maximum modulation frequency +5 kHz deviation)

BW=2 (8)

BW= 16K0

EXHIBIT 6D



**MOTOROLA**

FCC ID: AZ489FT4874

1- Watt 12.5 kHz  
Mask D, Rule Part: 90.210  
Emission Type: 11K0F3E

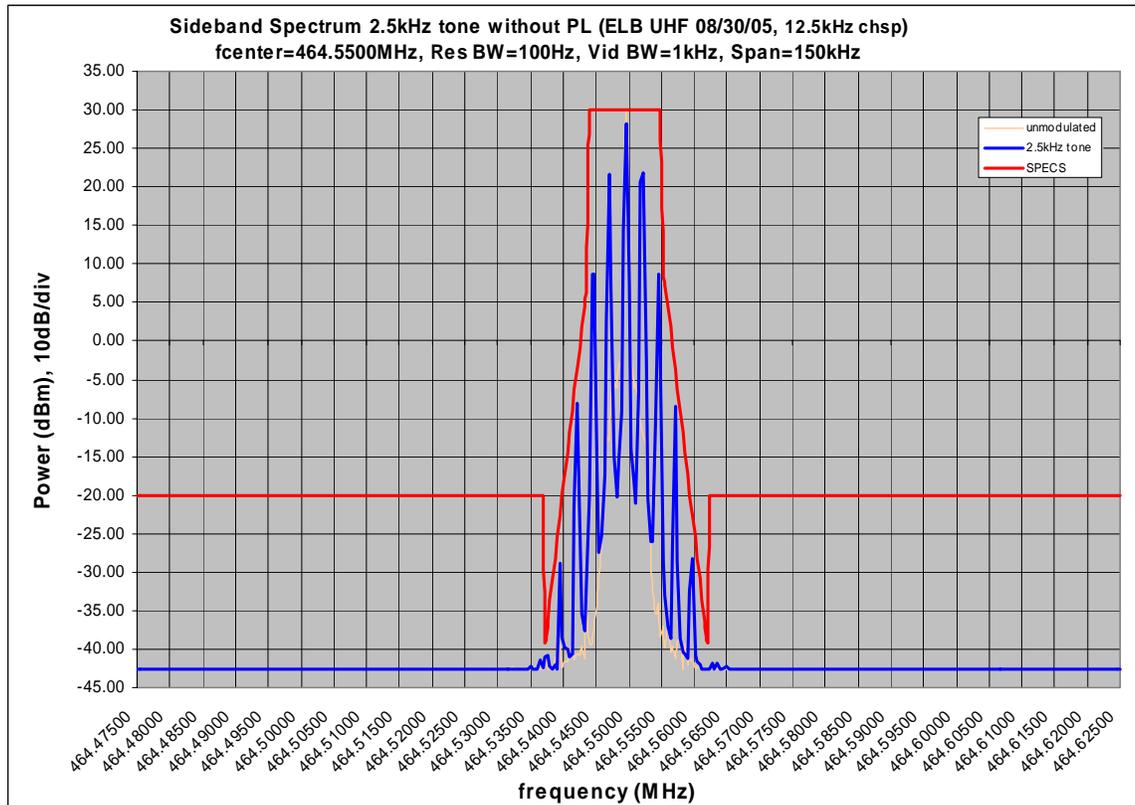


EXHIBIT 6D-1



**MOTOROLA**

FCC ID: AZ489FT4874

1- Watt 25 kHz  
Mask B, Rule Part: 90.210  
Emission Type: 16K0F3E

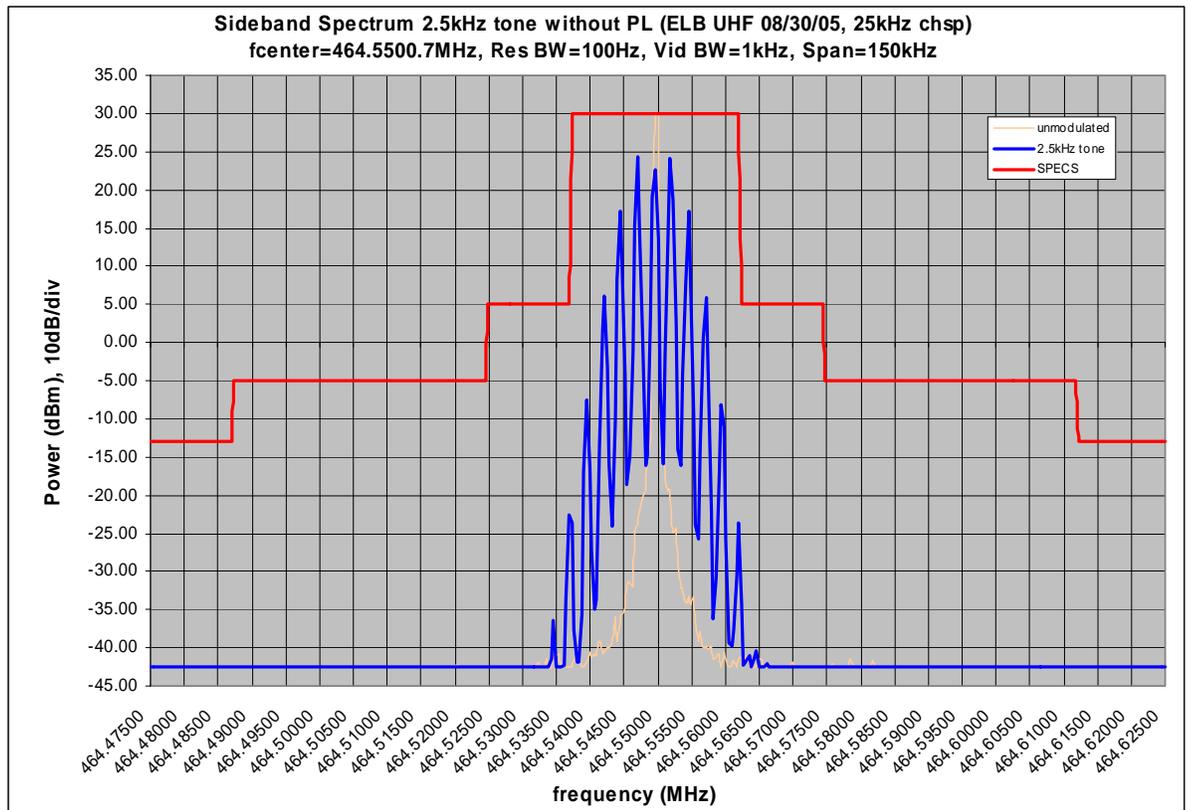


EXHIBIT 6D-2



**MOTOROLA**

FCC ID: AZ489FT4874

1- Watt 12.5 kHz  
2500 Hz & 77Hz Tone "PL" Modulation  
Mask D, Rule Part: 90.210  
Emission Type: 11K0F3E

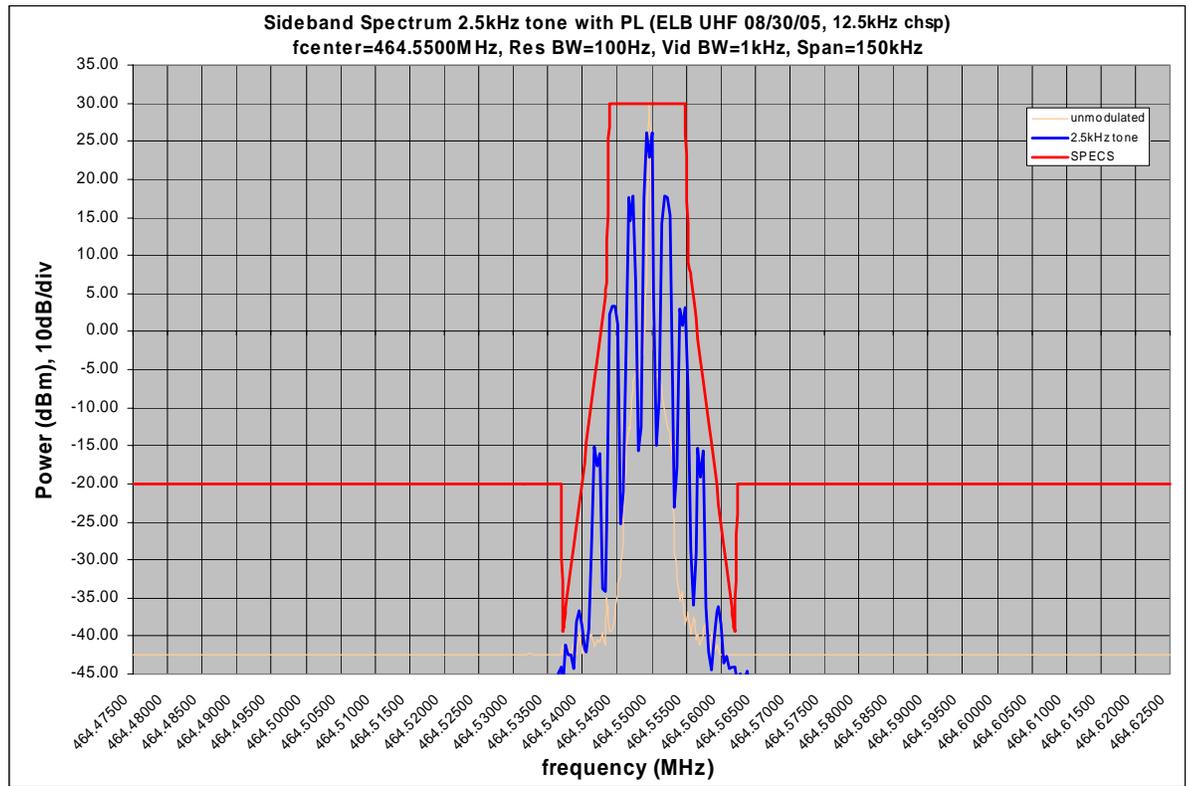


EXHIBIT 6D-3



**MOTOROLA**

FCC ID: AZ489FT4874

1- Watt 25 kHz  
2500 Hz & 77Hz Tone "PL" Modulation  
Mask B, Rule Part: 90.210  
Emission Type: 16K0F3E

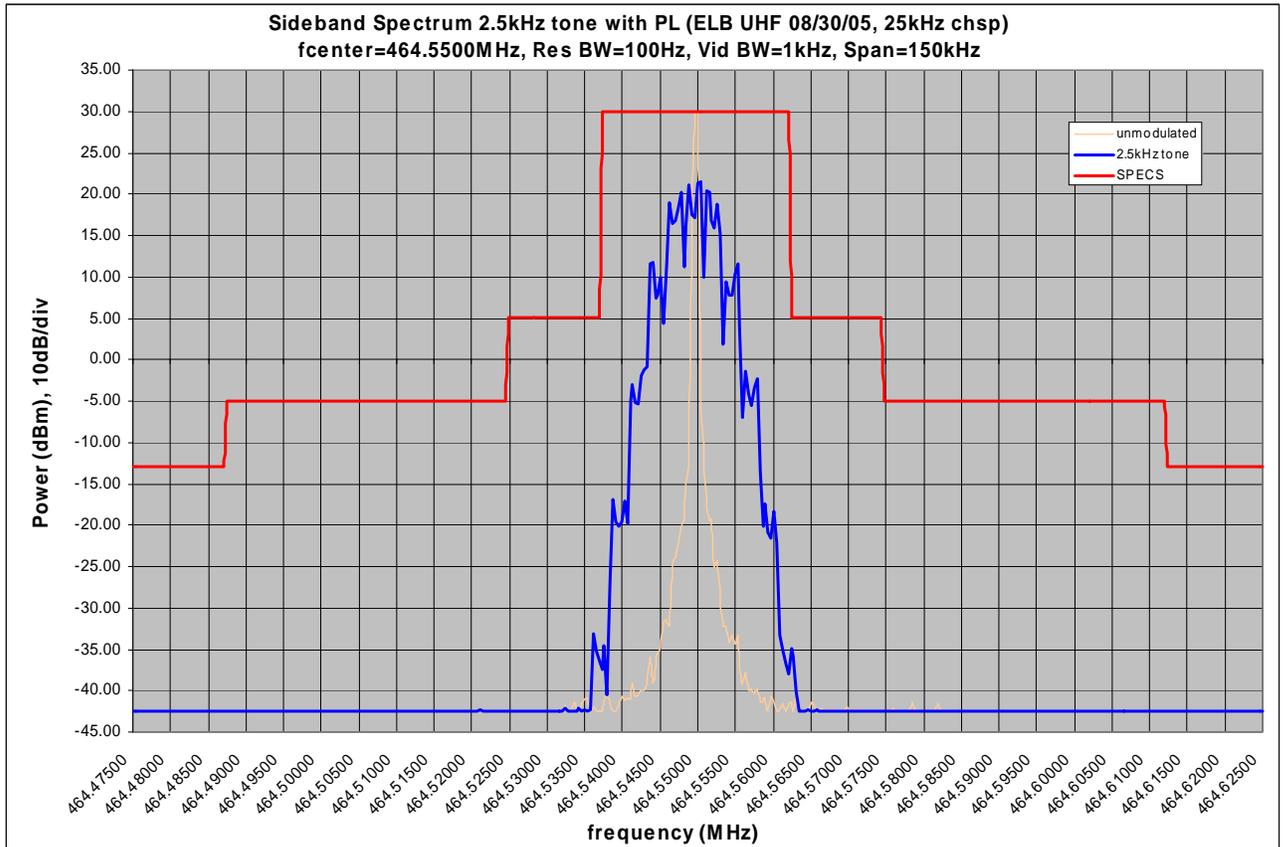


EXHIBIT 6D-4



**MOTOROLA**

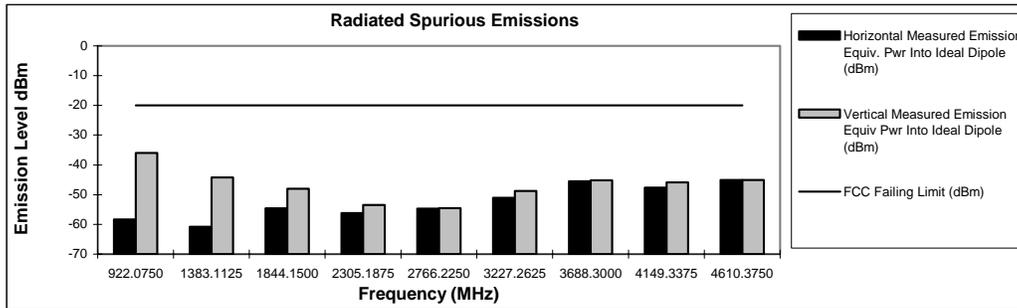
Motorola Inc.

FCC ID: AZ489FT4874  
 FCC ID:AZ489FT4874

**Transmit Radiated Spurious Emissions: Two-Way Radio**  
**Tx Power: 1 Watts**

**461.0375 MHz Channel Spacing 12.5kHz | S/N 3454FL0061**

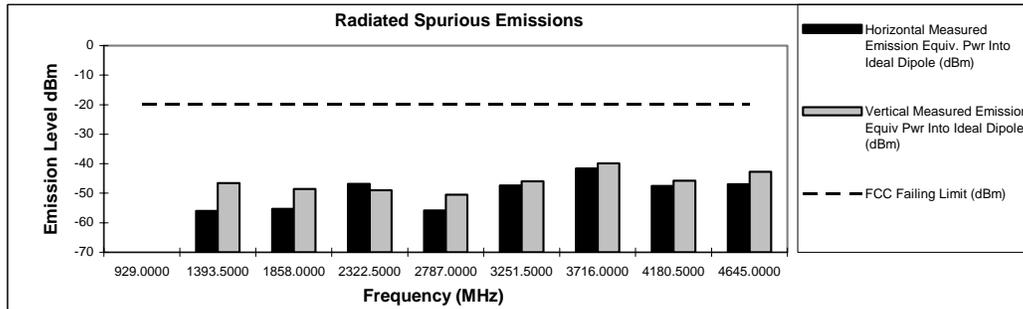
Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
922.0750	-20	-58.31	-35.97
1383.1125	-20	-60.82	-44.21
1844.1500	-20	-54.60	-47.98
2305.1875	-20	-56.25	-53.48
2766.2250	-20	-54.68	-54.51
3227.2625	-20	-51.12	-48.77
3688.3000	-20	-45.52	-45.14
4149.3375	-20	-47.66	-45.91
4610.3750	-20	-45.05	-45.04



**Transmit Radiated Spurious Emissions: Two-Way Radio**  
**Tx Power: 1 Watts**

**464.5 MHz Channel Spacing 12.5kHz | S/N 3454FL0061**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
929.0000	-20	*	*
1393.5000	-20	-56.01	-46.55
1858.0000	-20	-55.30	-48.54
2322.5000	-20	-46.86	-49.02
2787.0000	-20	-55.80	-50.47
3251.5000	-20	-47.38	-45.94
3716.0000	-20	-41.56	-39.92
4180.5000	-20	-47.57	-45.81
4645.0000	-20	-46.91	-42.74



\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Motorola Plantation EMC Lab – Test Performed by: Frank Baader  
 FCC Registration: 91932 / Industry Canada: IC3679

November 11, 2005

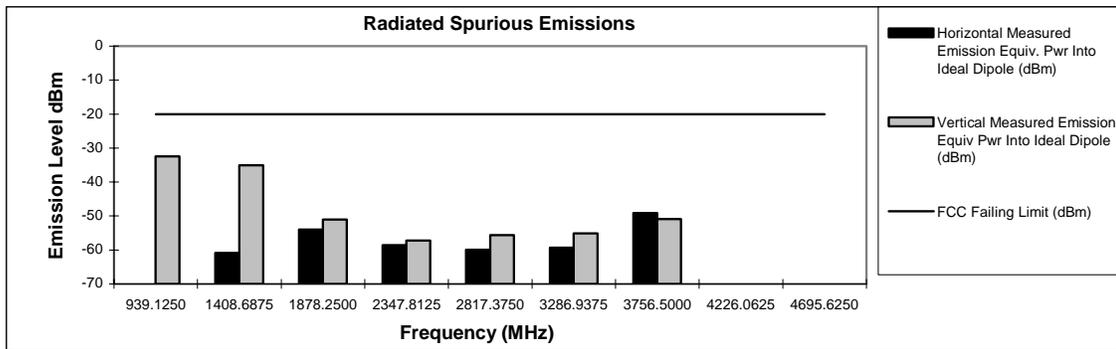


**Transmit Radiated Spurious Emissions: Two-Way Radio**  
**Tx Power: 1 Watts**

**469.5625 MHz**

**Channel Spacing 12.5kHz | S/N 3454FL0061**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
939.1250	-20	*	-32.47
1408.6875	-20	-60.89	-35.06
1878.2500	-20	-53.99	-51.05
2347.8125	-20	-58.59	-57.25
2817.3750	-20	-59.96	-55.59
3286.9375	-20	-59.31	-55.12
3756.5000	-20	-49.08	-50.86
4226.0625	-20	*	*
4695.6250	-20	*	*



\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

**Motorola Plantation EMC Lab – Test Performed by: Frank Baader**  
**FCC Registration: 91932 / Industry Canada: IC3679**

**November 11, 2005**



**MOTOROLA**

FCC ID: AZ489FT4874

Motorola Inc.

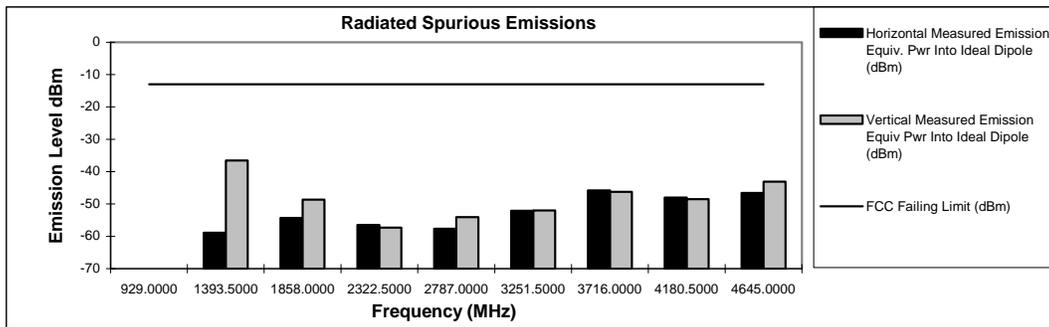
FCC ID:AZ489FT4874

**Transmit Radiated Spurious Emissions: Two-Way Radio**  
**Tx Power: 1 Watts**

**464.5 MHz**

**Channel Spacing 25kHz | S/N 3454FL0061**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
929.0000	-13	*	*
1393.5000	-13	-58.89	-36.61
1858.0000	-13	-54.33	-48.66
2322.5000	-13	-56.47	-57.30
2787.0000	-13	-57.70	-54.07
3251.5000	-13	-52.11	-52.04
3716.0000	-13	-45.81	-46.23
4180.5000	-13	-47.97	-48.52
4645.0000	-13	-46.60	-43.10



\* Indicates the spurious emission could not be detected due to noise limitations or ambients.

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Motorola Plantation EMC Lab – Test Performed by: Frank Baader  
FCC Registration: 91932 / Industry Canada: IC3679

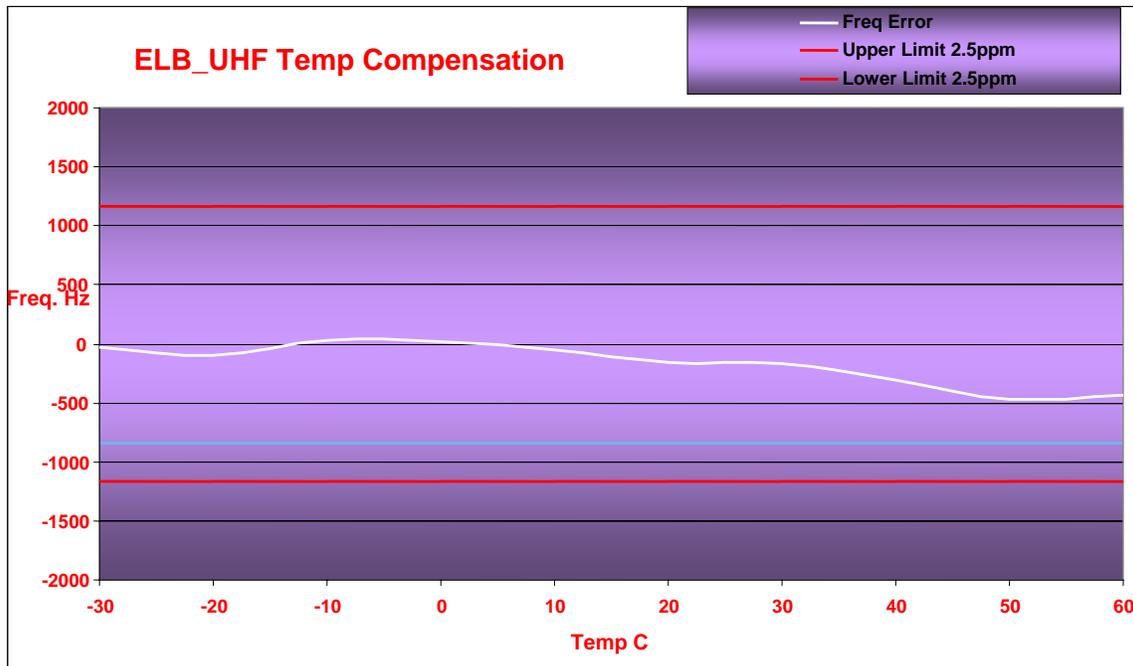
November 11, 2005



**MOTOROLA**

FCC ID: AZ489FT4874

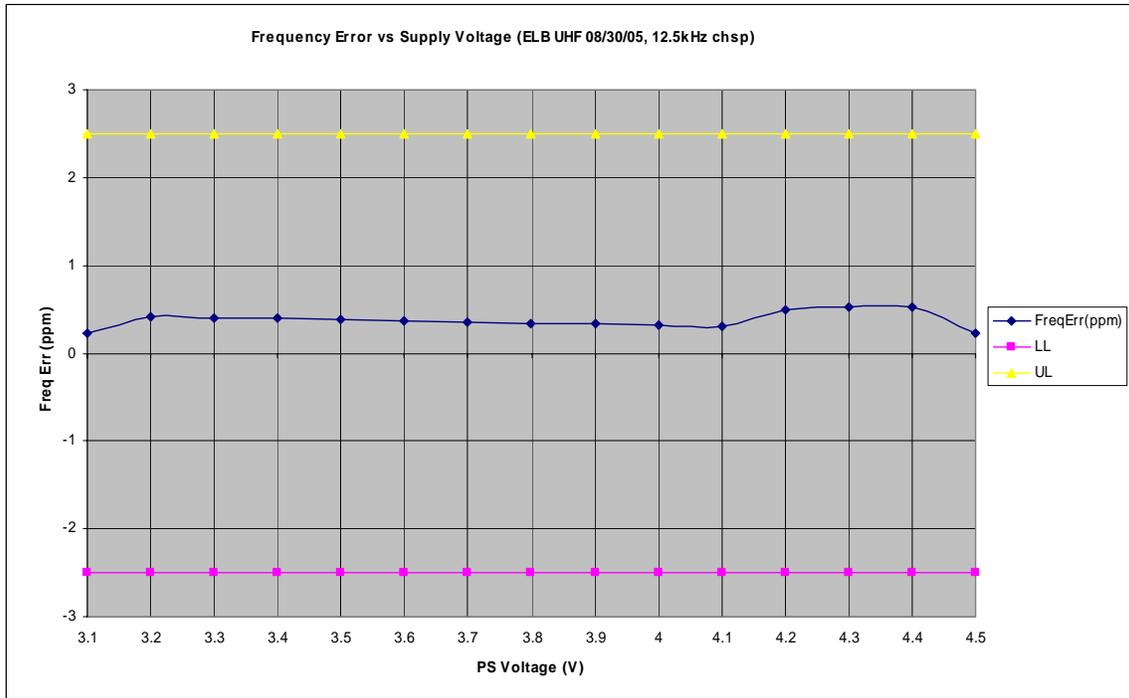
### Frequency Stability over Temperature



**Reset Voltage 3.0V**



**1Watt  
Frequency Error over Voltage**

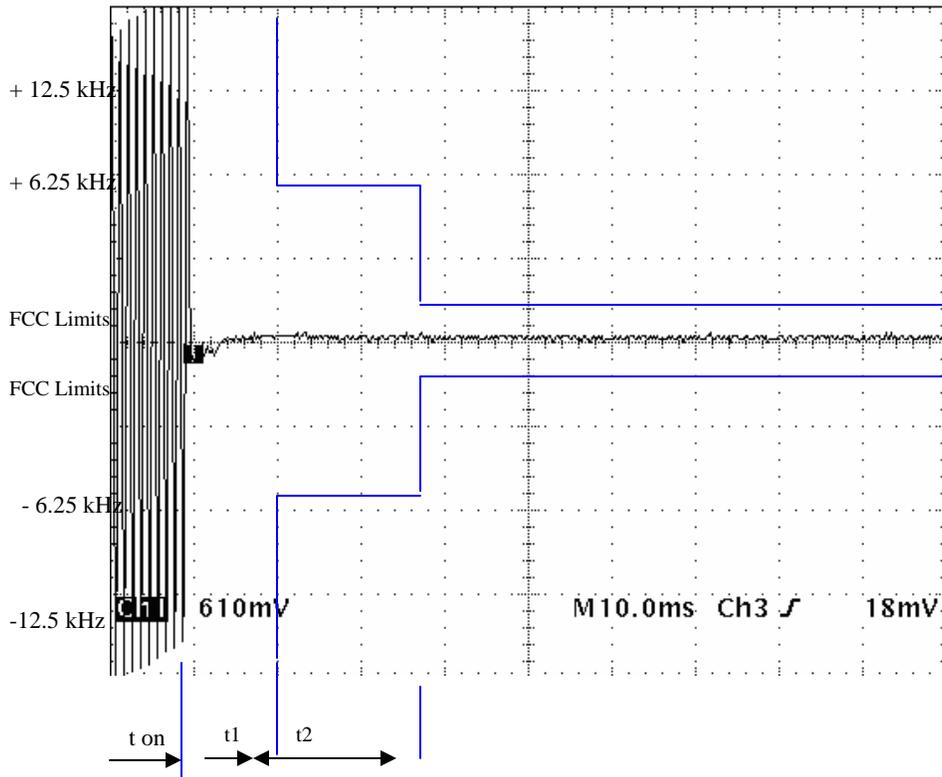




**MOTOROLA**

FCC ID: AZ489FT4874

### Transient Frequency Response Tx on 1 Watt 12.5 kHz

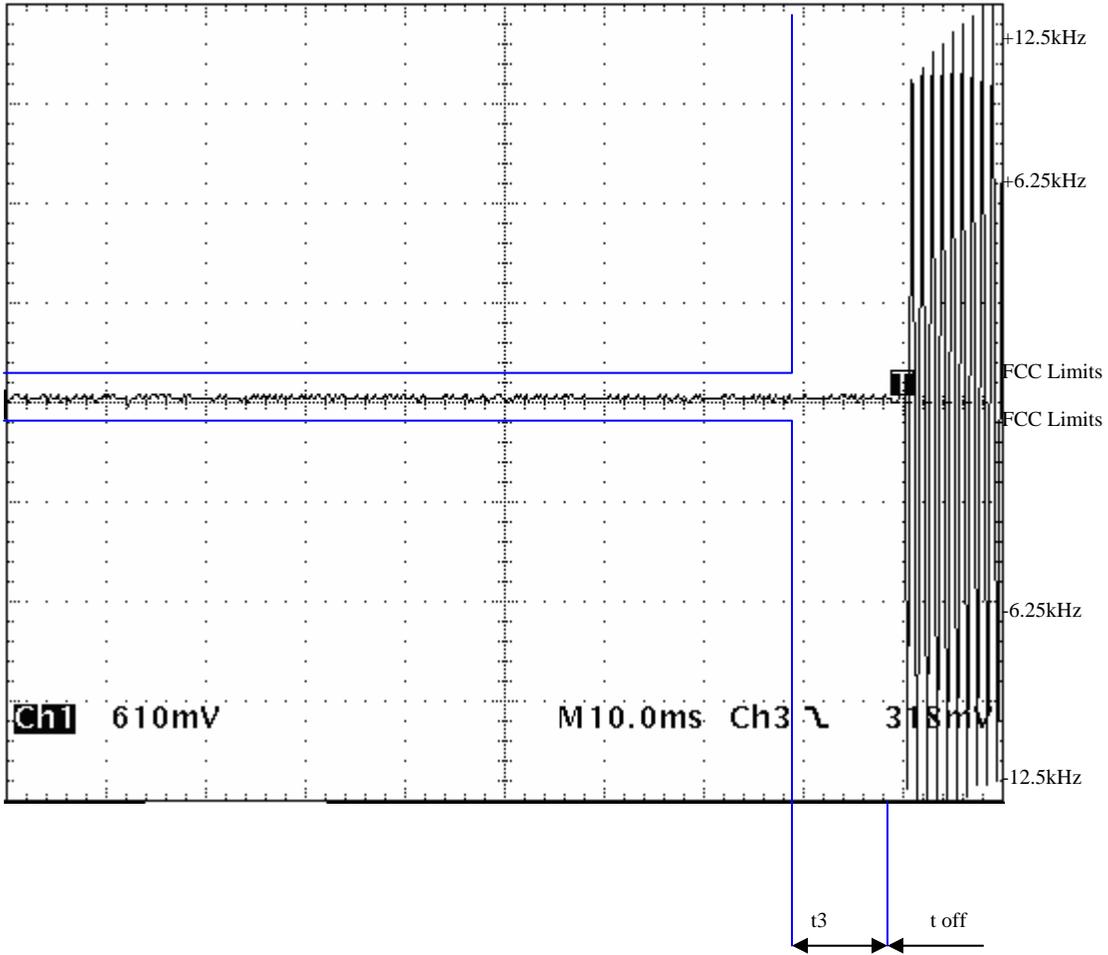




**MOTOROLA**

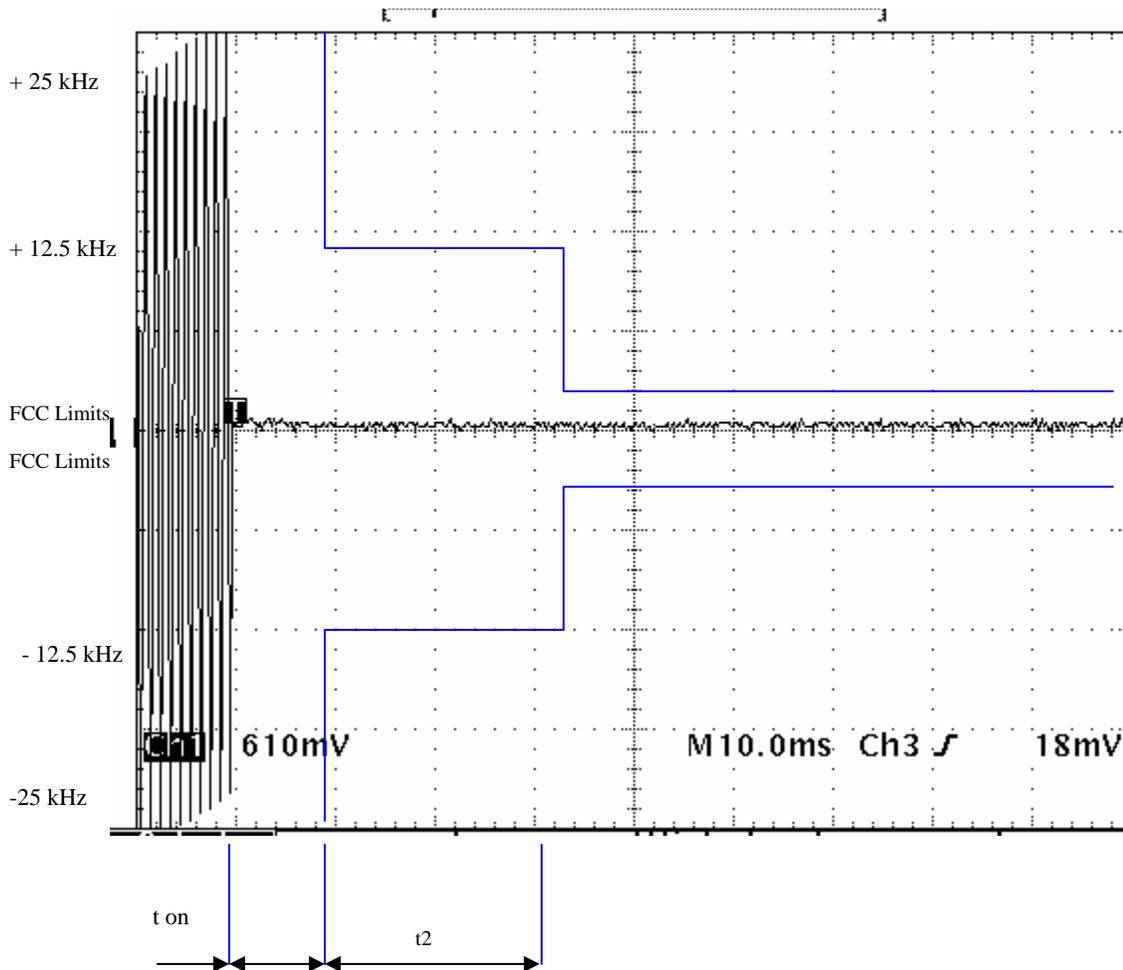
FCC ID: AZ489FT4874

**Transient Frequency Response Tx off 1 Watt 12.5 kHz**





**Transient Frequency Response Tx on1 Watt 25 kHz**





**MOTOROLA**

FCC ID: AZ489FT4874

**Transient Frequency Response Tx off 1 Watt 25 kHz**

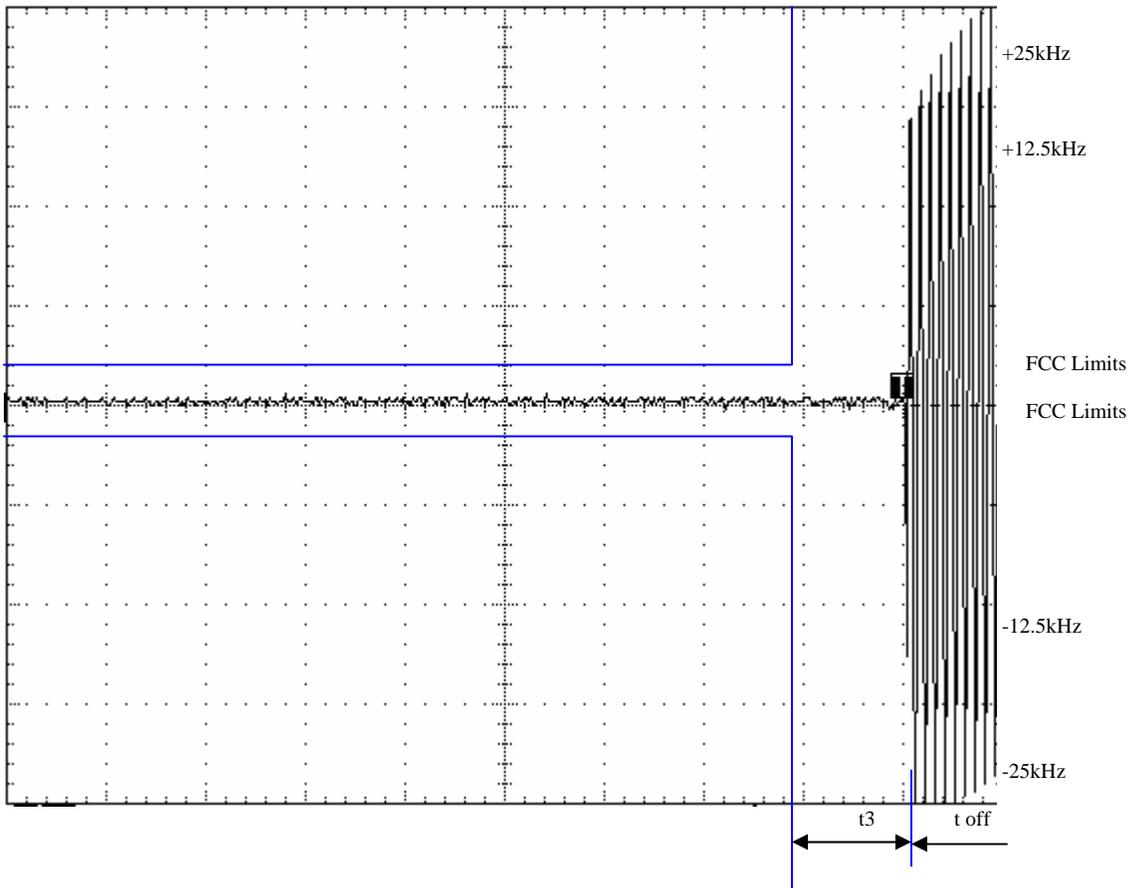


EXHIBIT 6G-4