Test Report

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RF POWER OUTPUT DATA

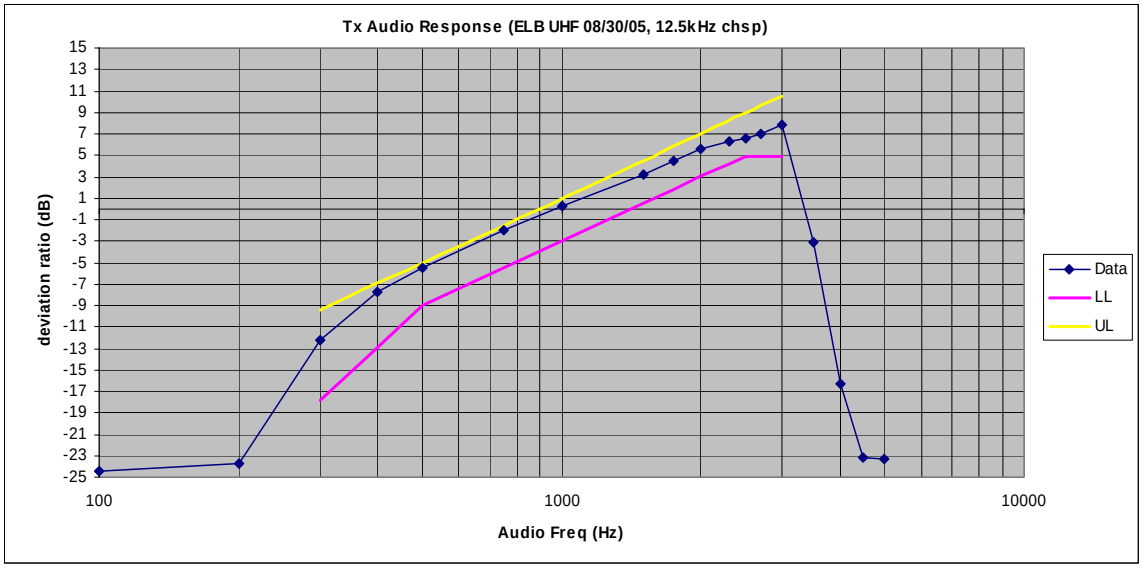
The RF power output was measured with the indicated voltage applied to and current into the final RF amplifying device.

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

TX Audio Response: 12.5 kHz



TX Audio Response: 25 kHz

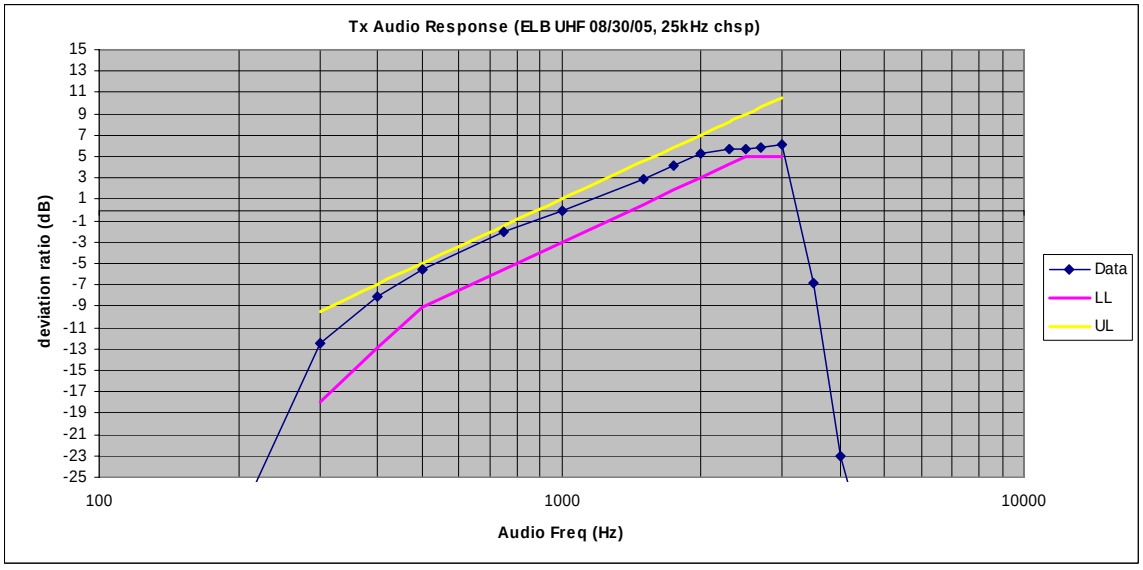
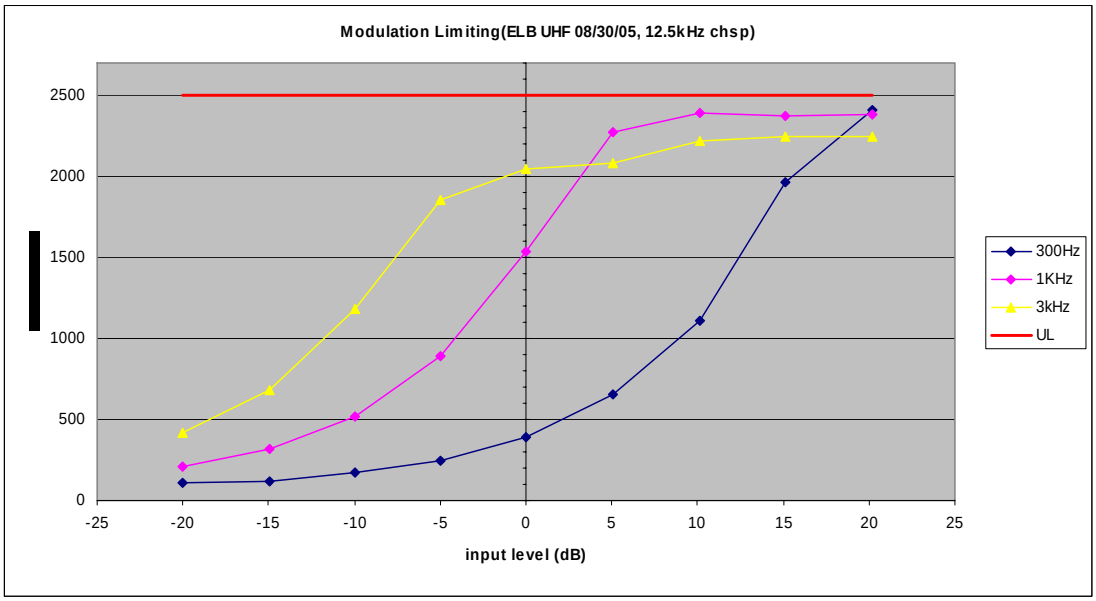
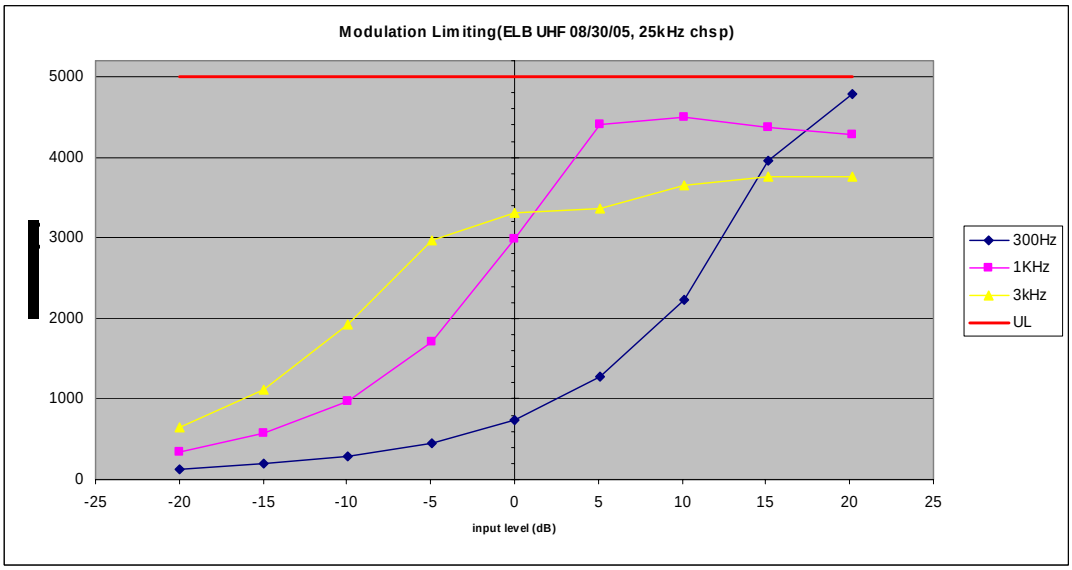


EXHIBIT 6B

MODULATION LIMITING 12.5 kHz



MODULATION LIMITING 25 kHz



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

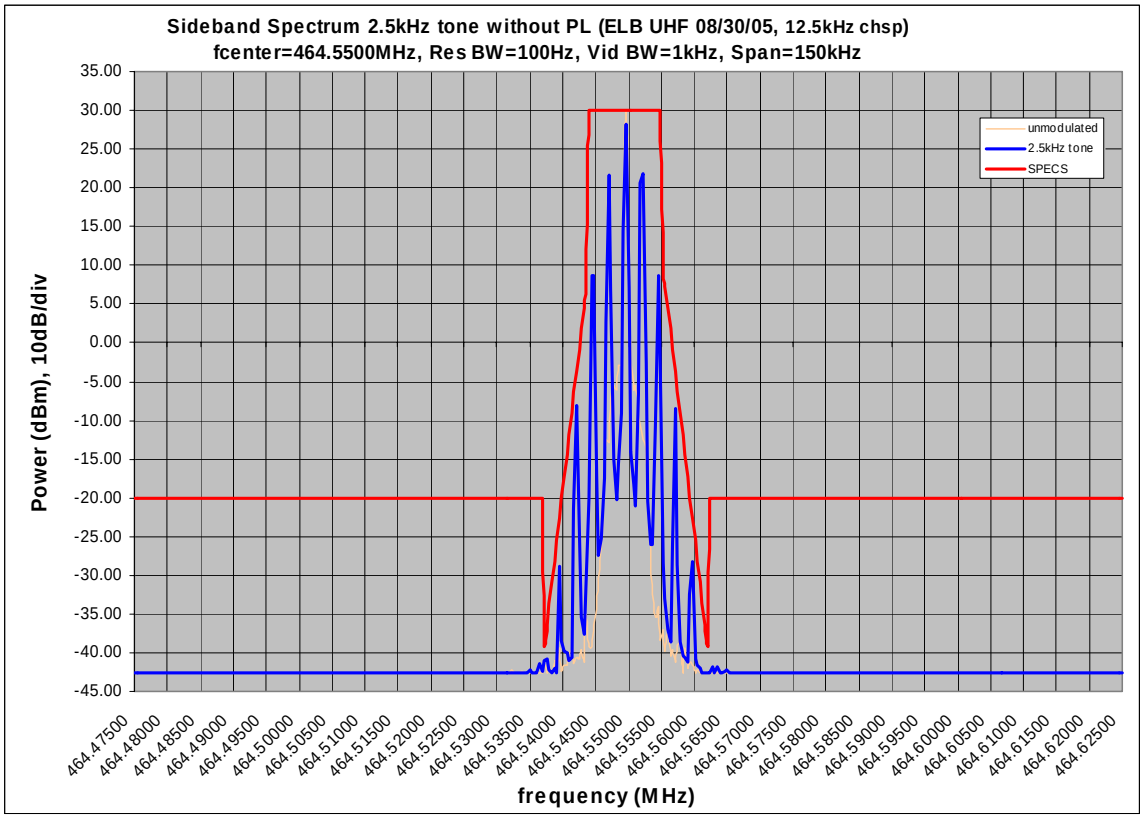
CARSON'S RULE: **11K0F3E**

BW= 2(M+D)
BW=2 (3 kHz maximum modulation frequency +2.5 kHz deviation)
BW=2 (5.5)
BW= 11K0

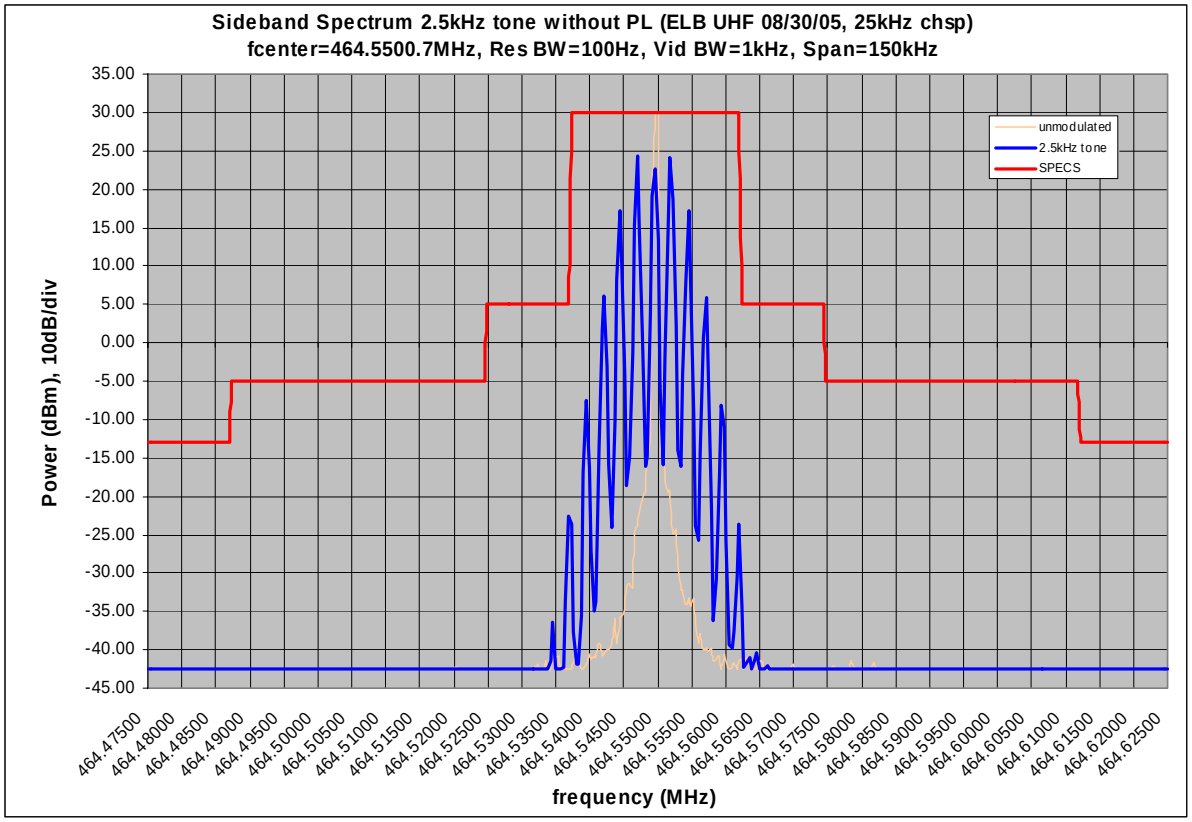
CARSON'S RULE: **16K0F3E**

BW= 2(M+D)
BW=2 (3 kHz maximum modulation frequency +5 kHz deviation)
BW=2 (8)
BW= 16K0

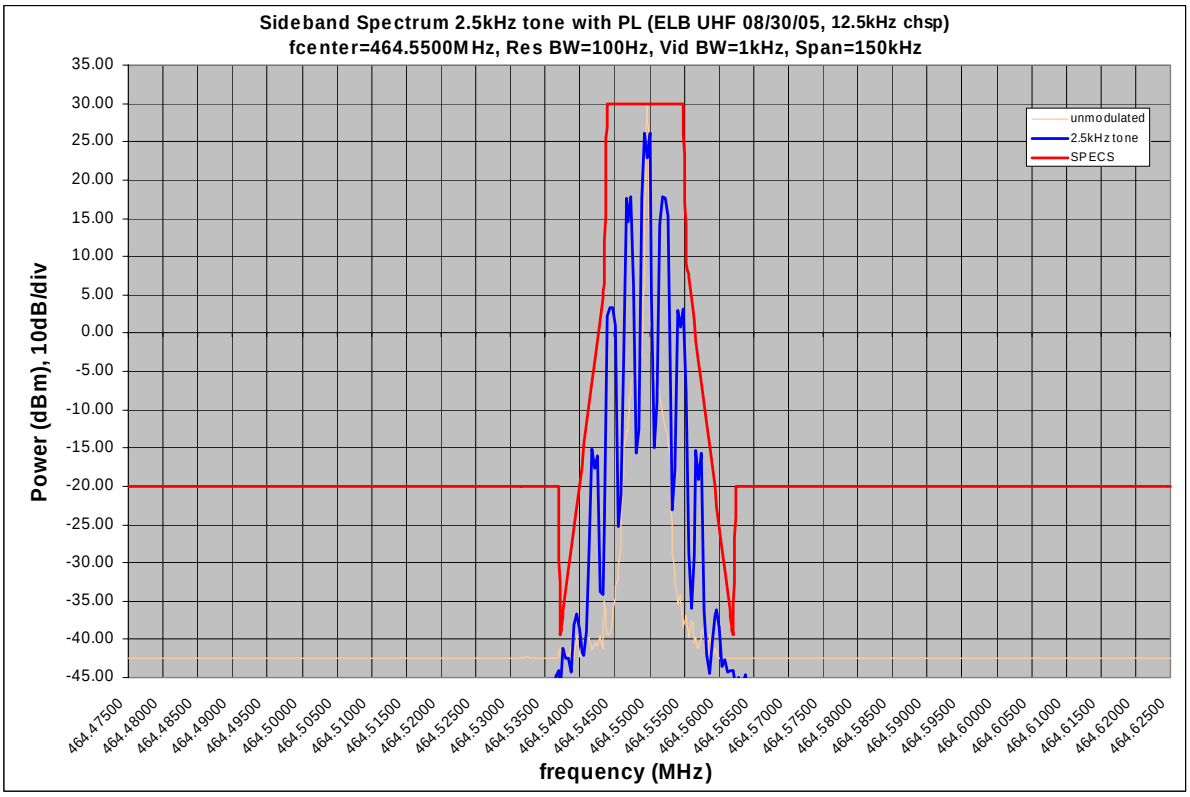
1- Watt 12.5 kHz
Mask D, Rule Part: 90.210
Emission Type: 11K0F3E



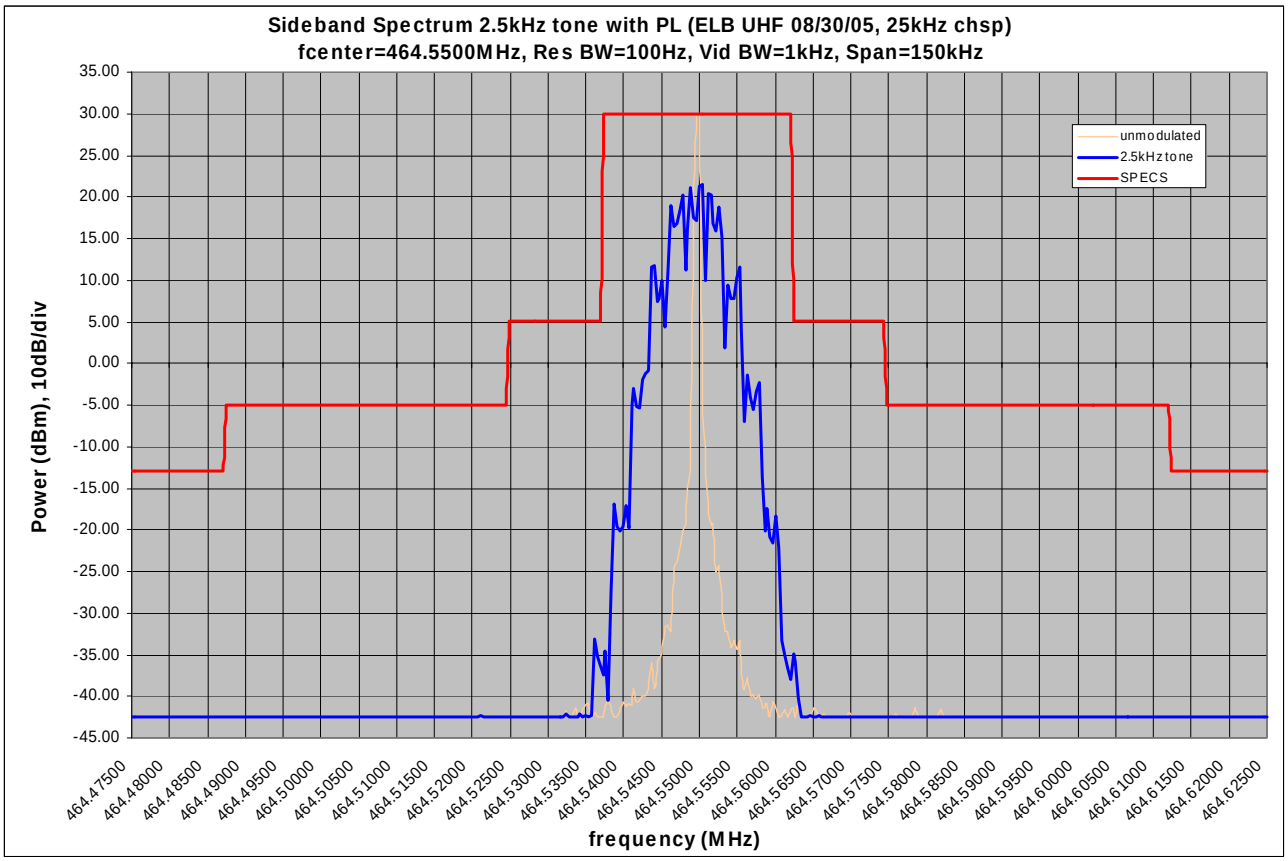
1- Watt 25 kHz
Mask B, Rule Part: 90.210
Emission Type: 16K0F3E



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



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



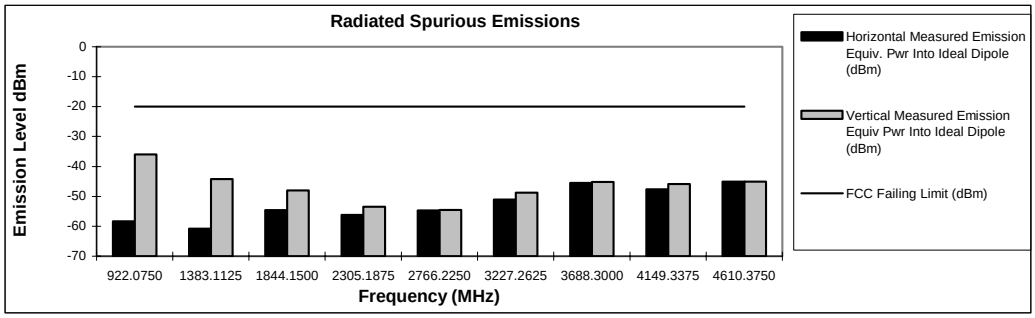
Motorola Inc. **FCC ID:AZ489FT4874**

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

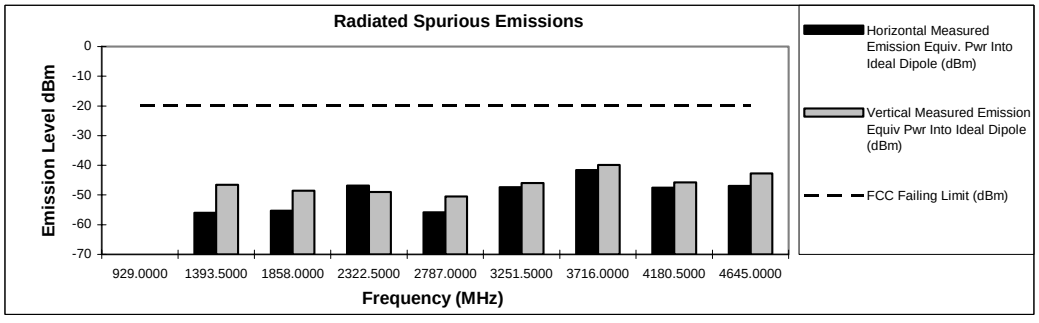


Transmit Radiated Spurious Emissions: Two-Way Radio

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.

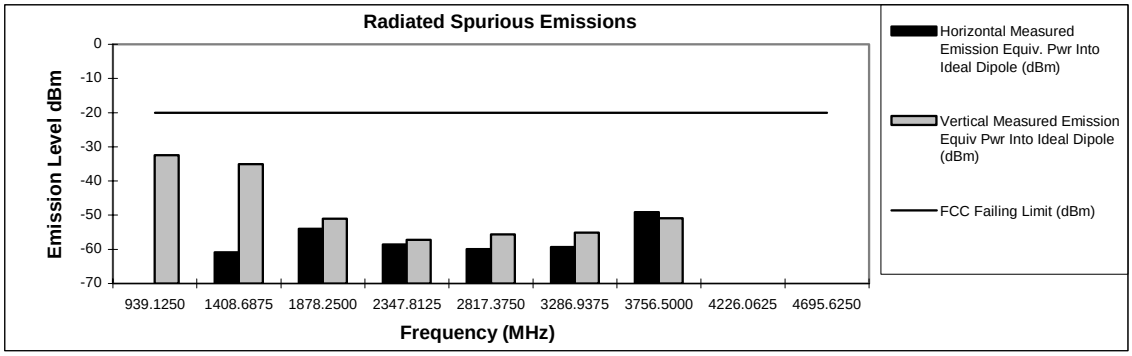
The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.

Motorola Plantation EMC Lab – Test Performed by: Frank Baader **November 11, 2005**
FCC Registration: 91932 / Industry Canada: IC3679

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.

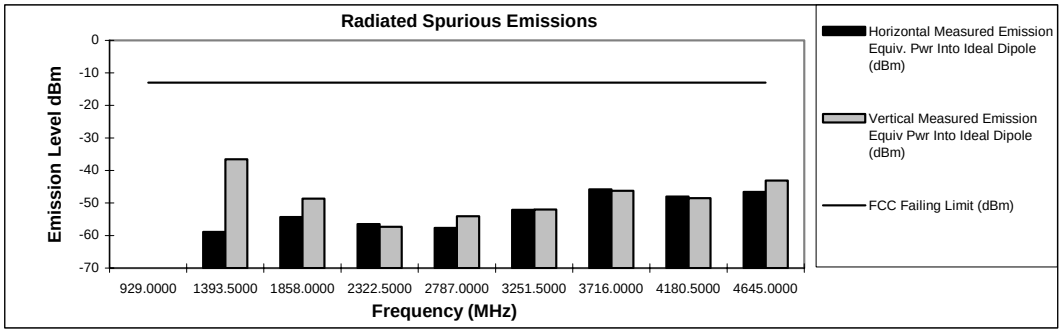
Motorola Plantation EMC Lab – Test Performed by: Frank Baader **November 11, 2005**
FCC Registration: 91932 / Industry Canada: IC3679

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

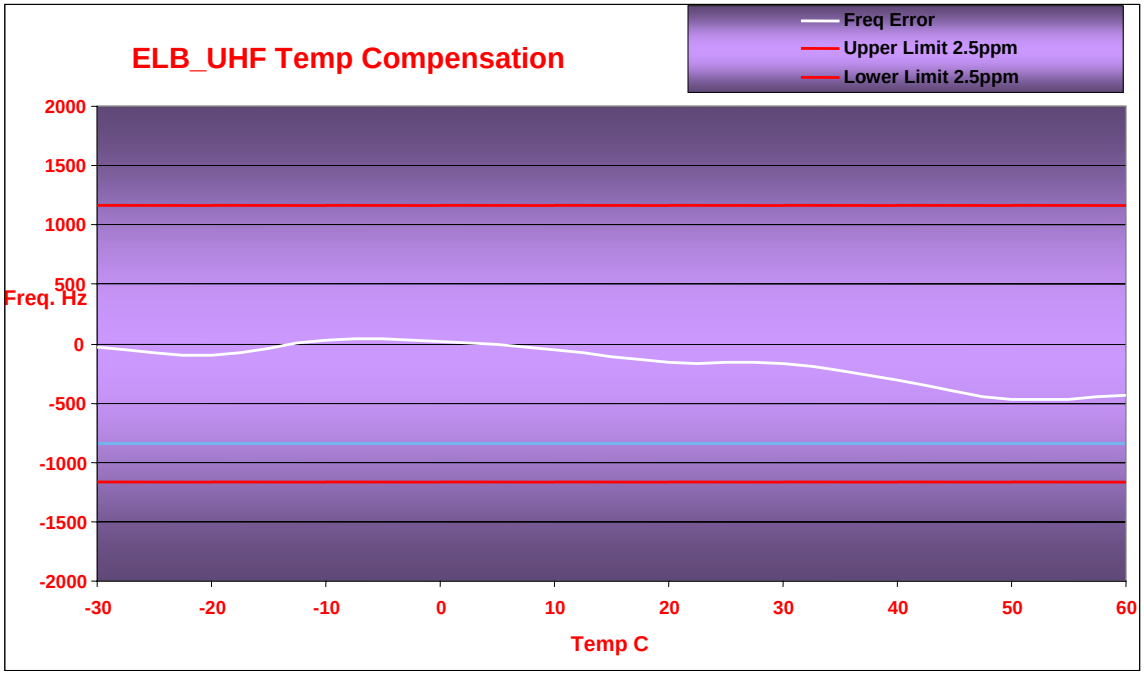


* Indicates the spurious emission could not be detected due to noise limitations or ambients.

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

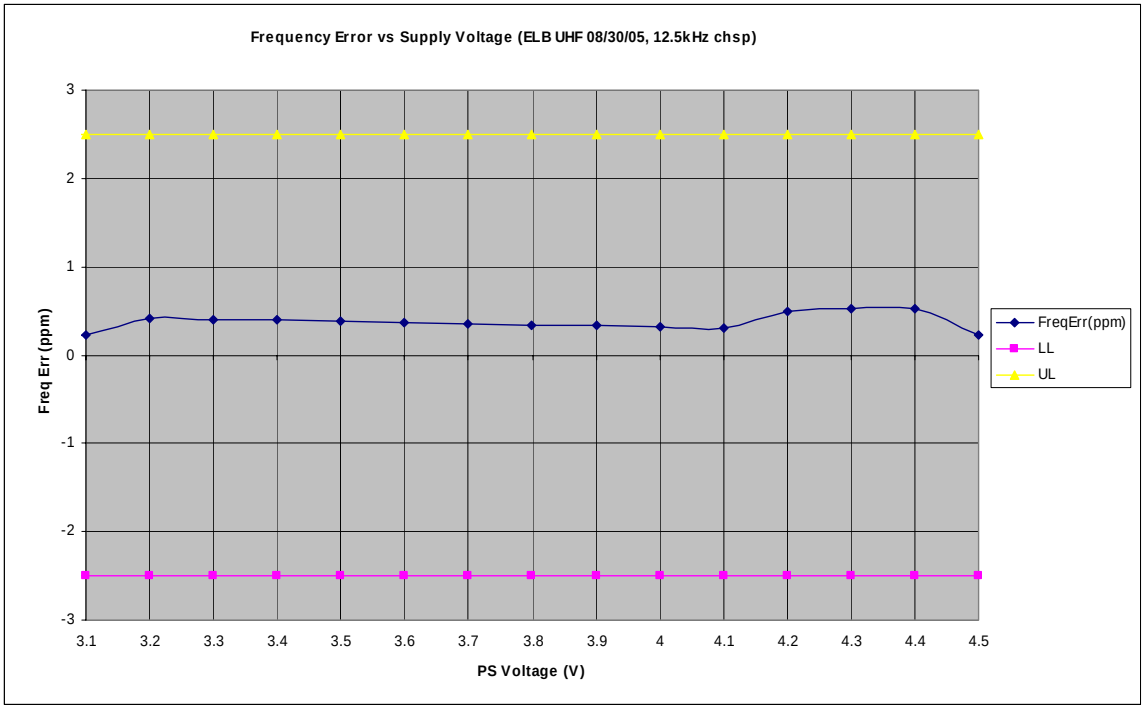
Motorola Plantation EMC Lab – Test Performed by: Frank Baader **November 11, 2005**
FCC Registration: 91932 / Industry Canada: IC3679

Frequency Stability over Temperature

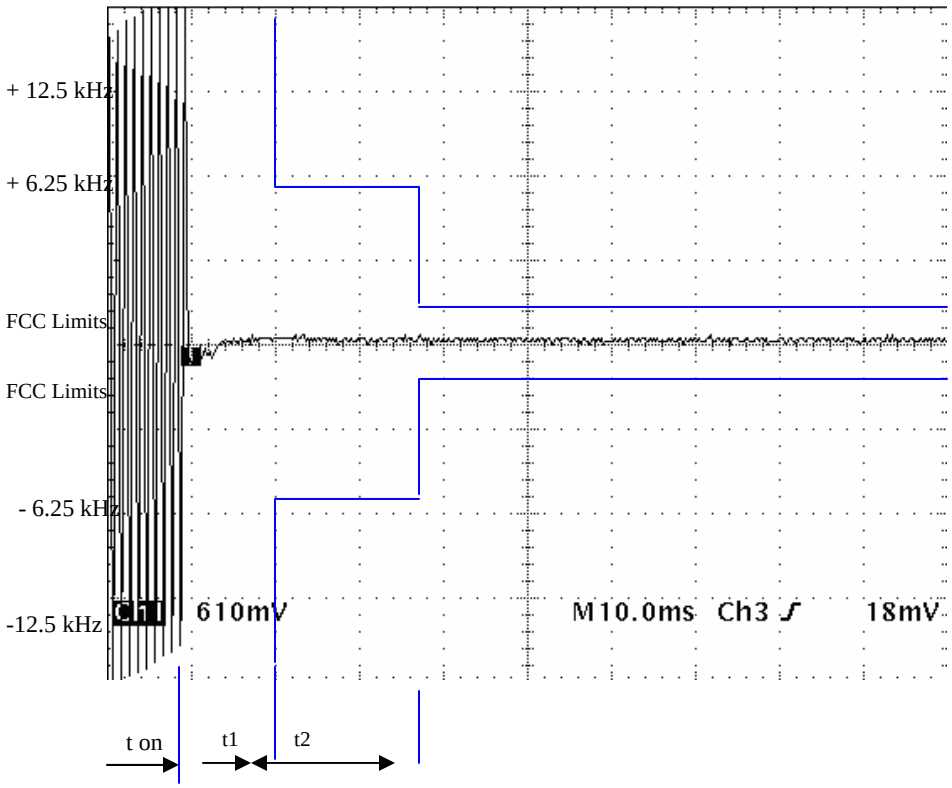


Reset Voltage 3.0V

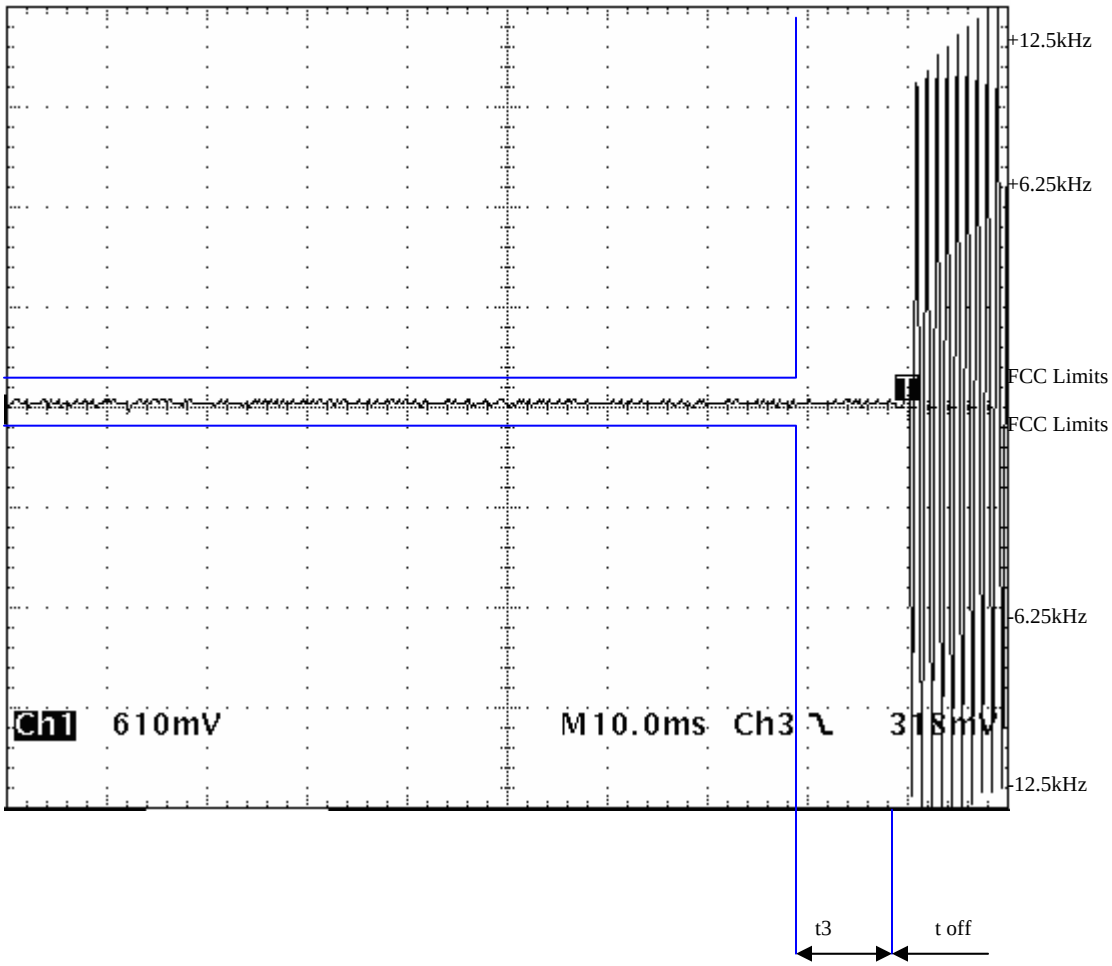
1Watt
Frequency Error over Voltage



Transient Frequency Response Tx on 1 Watt 12.5 kHz



Transient Frequency Response Tx off 1 Watt 12.5 kHz



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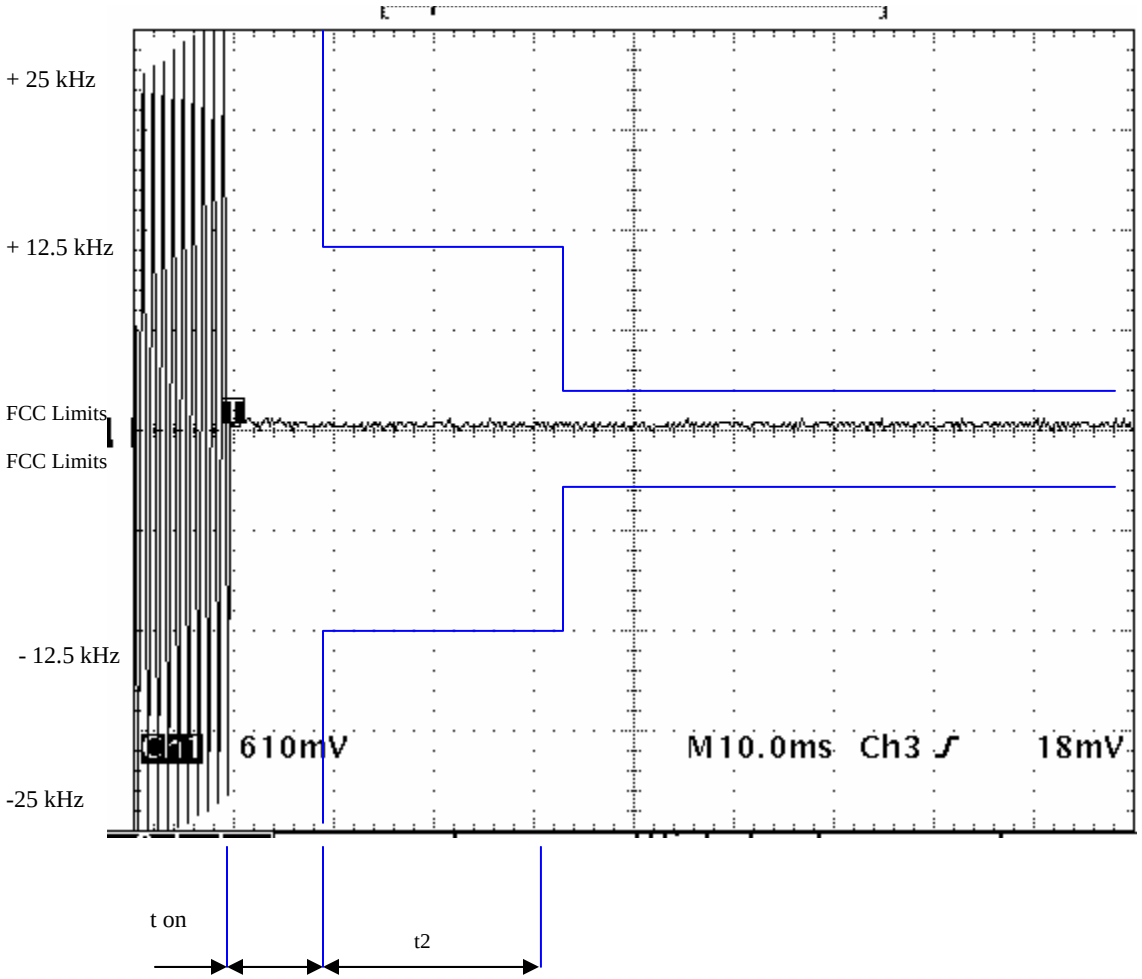
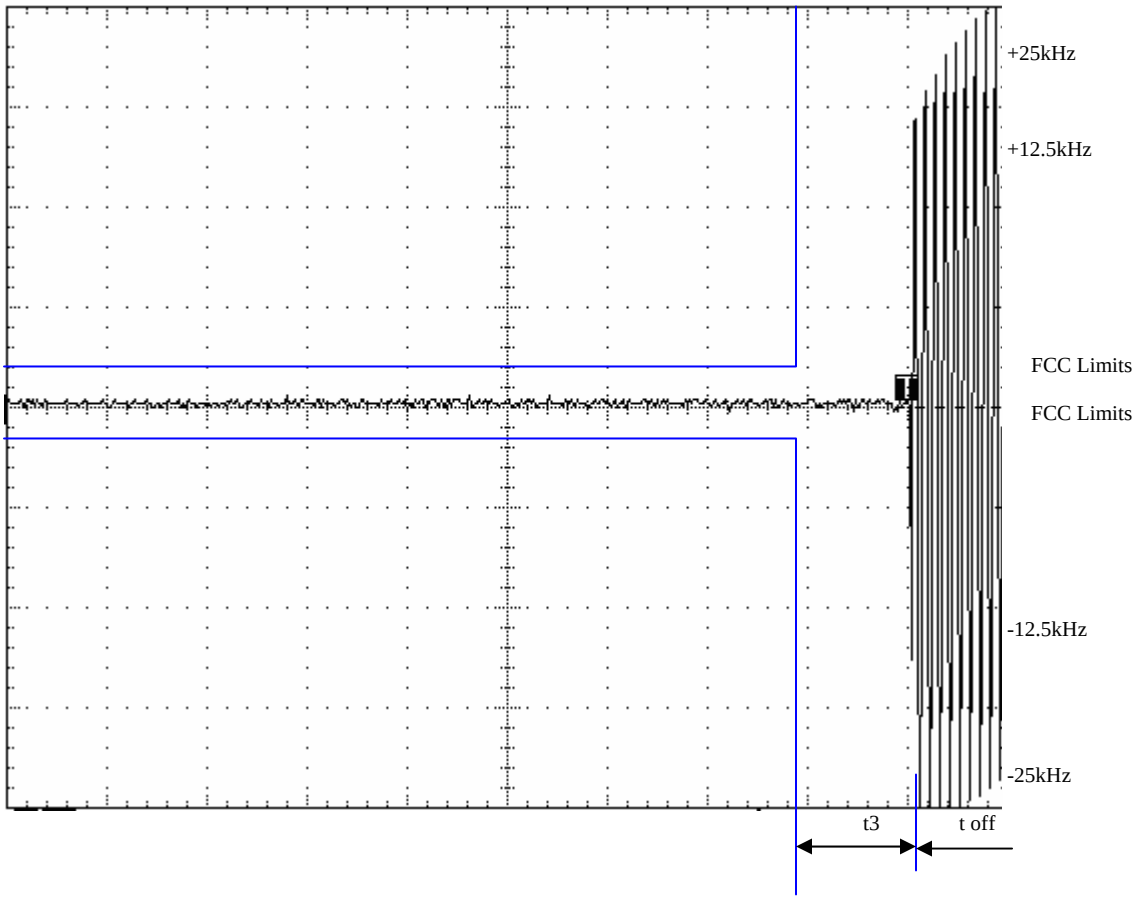
Transient Frequency Response Tx on1 Watt 25 kHz



Transient Frequency Response Tx off 1 Watt 25 kHz