



MOTOROLA

FCC ID: AZ489FT3820

Test Report

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EXHIBIT 6



MOTOROLA

FCC ID: AZ489FT3820

RF POWER OUTPUT DATA

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

2.0 Watts

Frequency	151.8800MHz
Measured Conducted RF output*	2.02 Watts
Normal DC Voltage	7.80 Volts
Normal DC Current	745 milli amps
Primary Supply Voltage	7.80 Volts

5.0 Watts

Frequency	151.7000MHz
Measured Conducted RF output*	4.780 Watts
Normal DC Voltage	7.80 Volts
Normal DC Current	.979 mAmps
Primary Supply Voltage	7.80 Volts

5.25 Watts

Frequency	151.7000MHz
Measured Conducted RF output*	5.25 Watts
Max DC Voltage	8.40 Volts
Max DC Current	1.2 Amps
Primary Supply Voltage	7.80 Volts

*Note: RF Conducted output power measured at 7.80Volts

EXHIBIT 6A



MOTOROLA

FCC ID: AZ489FT3820

Audio Response

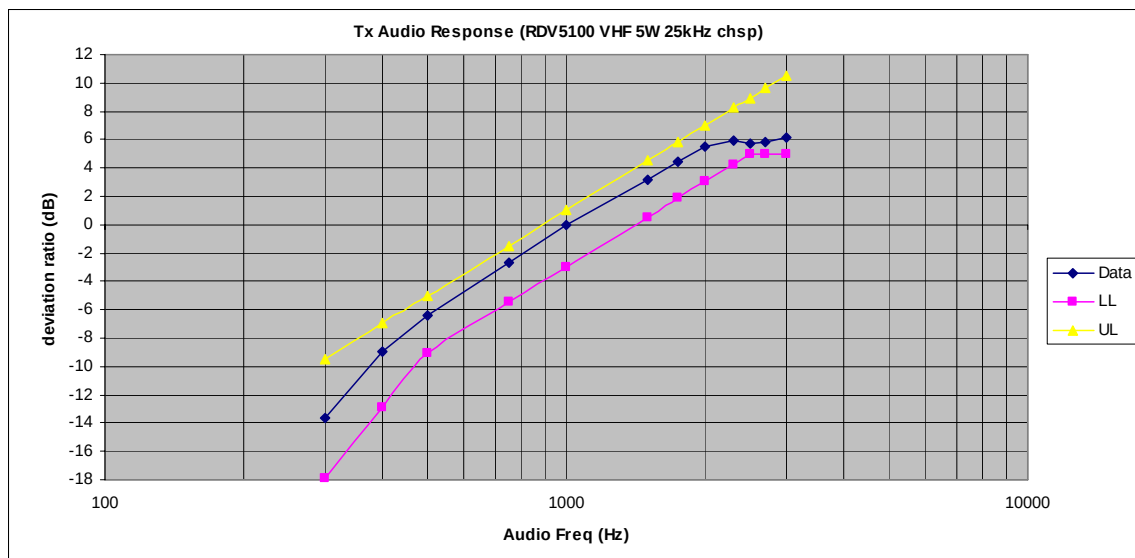
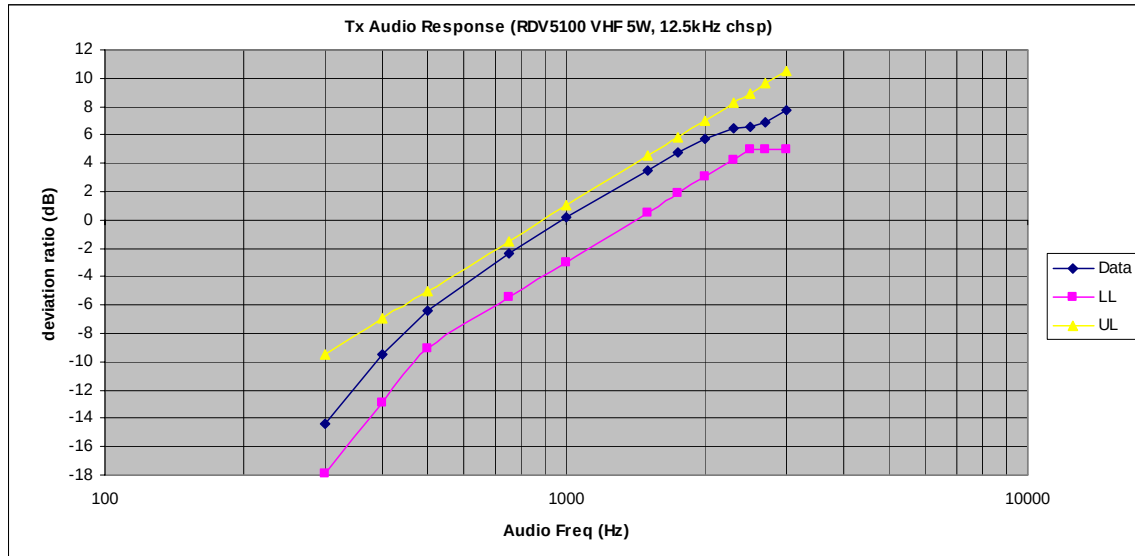


EXHIBIT 6B



MOTOROLA

FCC ID: AZ489FT3820

MODULATION LIMITING

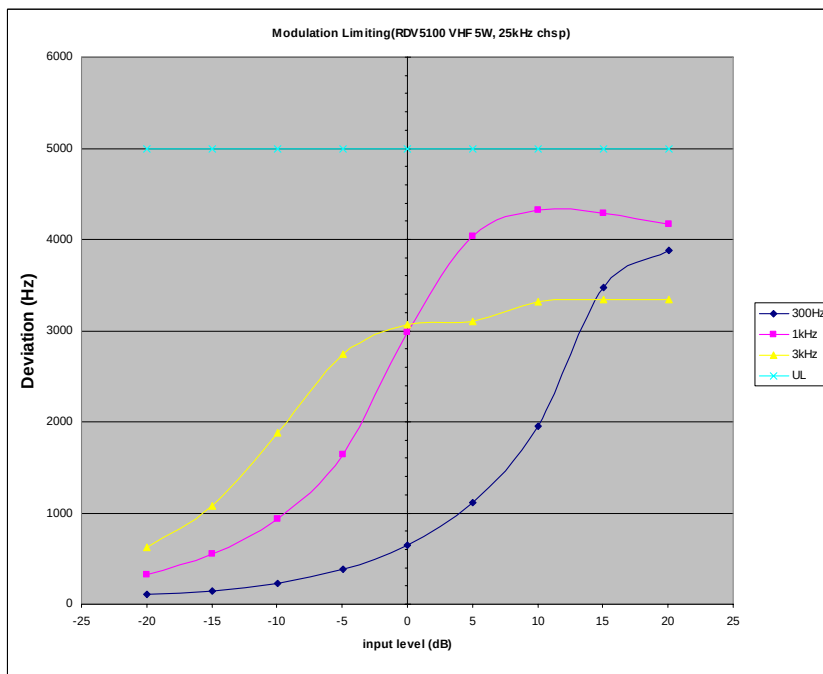
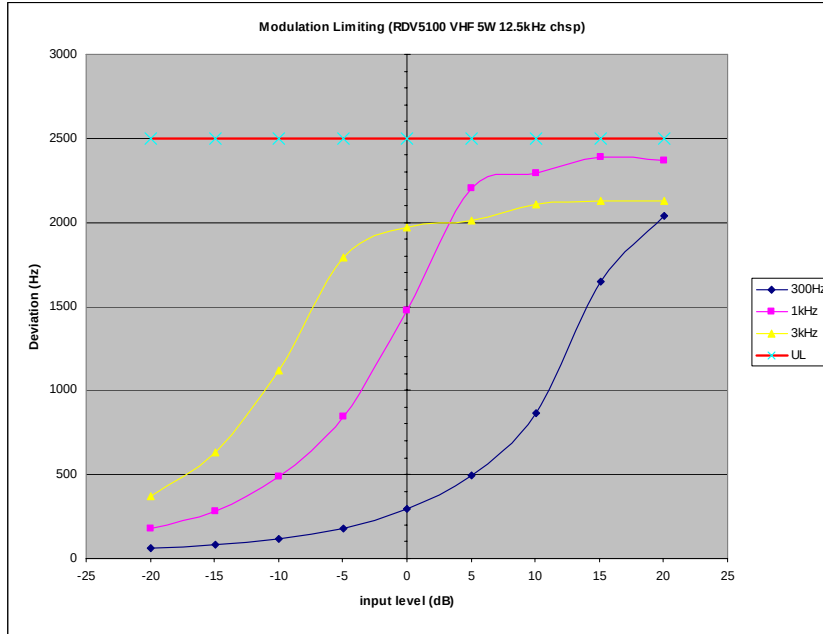


EXHIBIT 6C



MOTOROLA

FCC ID: AZ489FT3820

OCCUPIED BANDWIDTH DATA

5Watt

12.5 / 2kHzkHz 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: AZ489FT3820

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

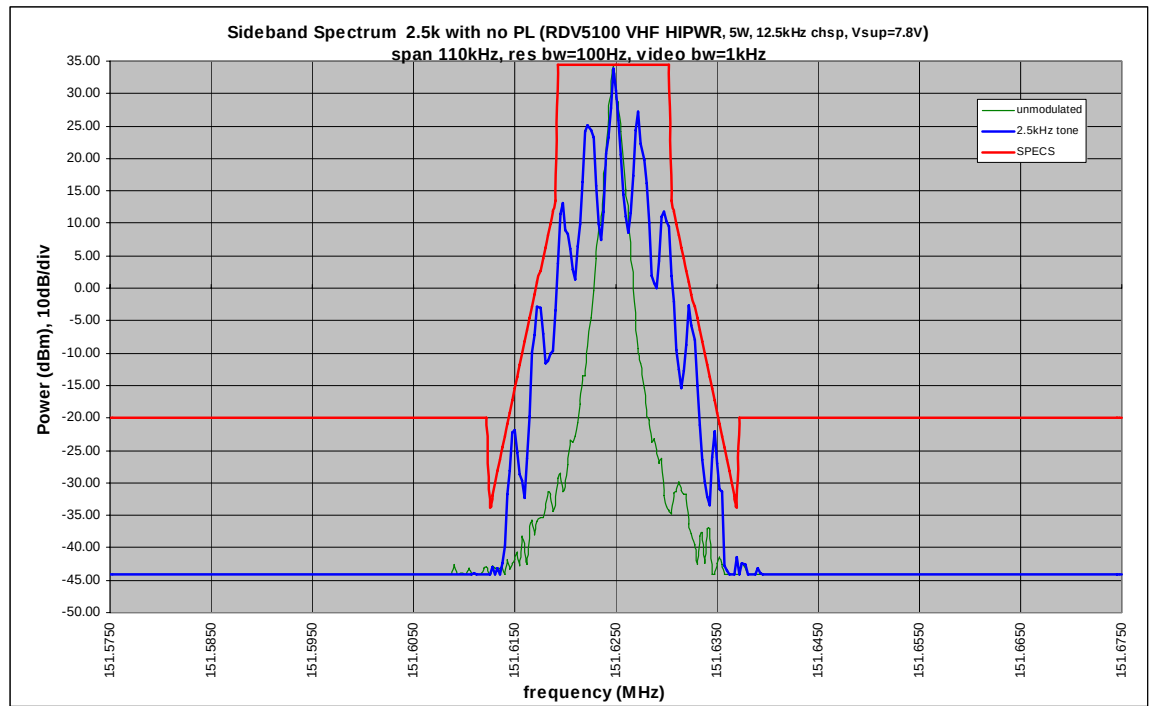


EXHIBIT 6D-1



MOTOROLA

FCC ID: AZ489FT3820

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

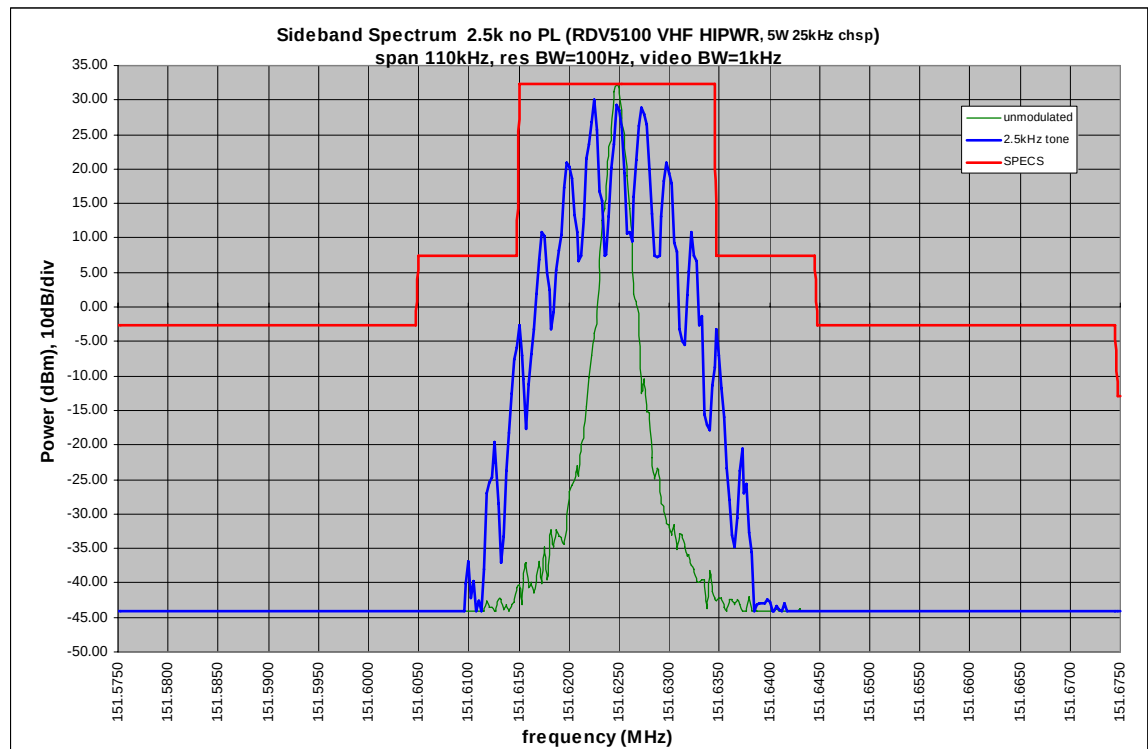


EXHIBIT 6D-2



MOTOROLA

FCC ID: AZ489FT3820

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

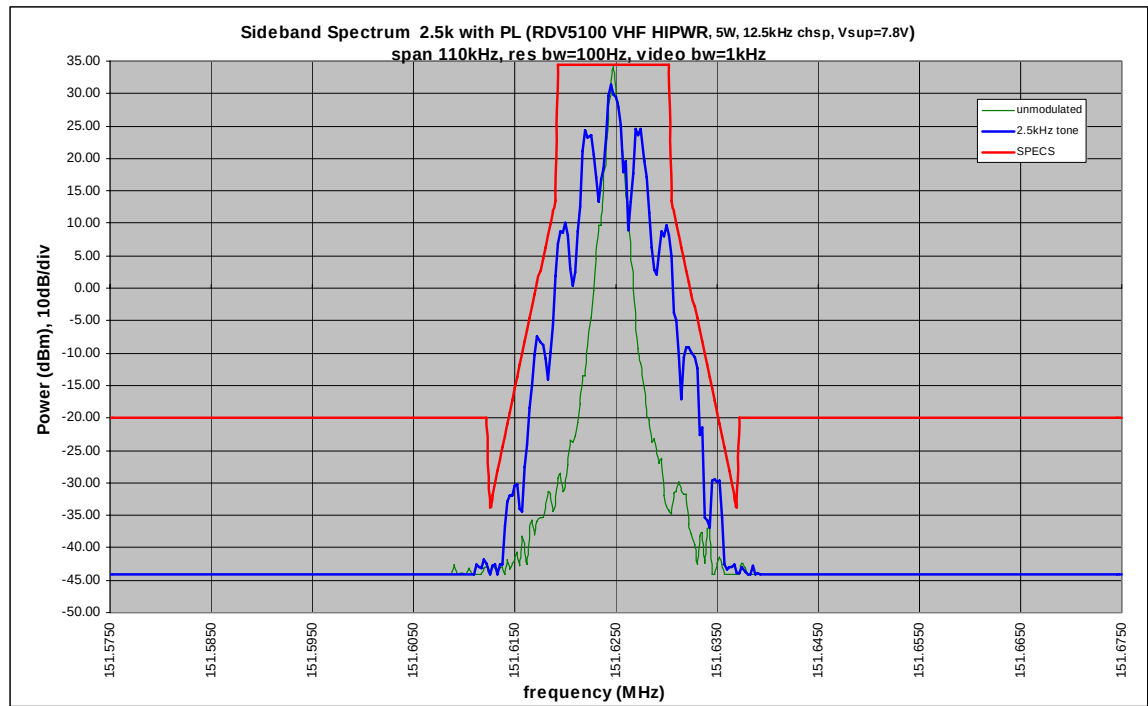


EXHIBIT 6D-3



MOTOROLA

FCC ID: AZ489FT3820

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

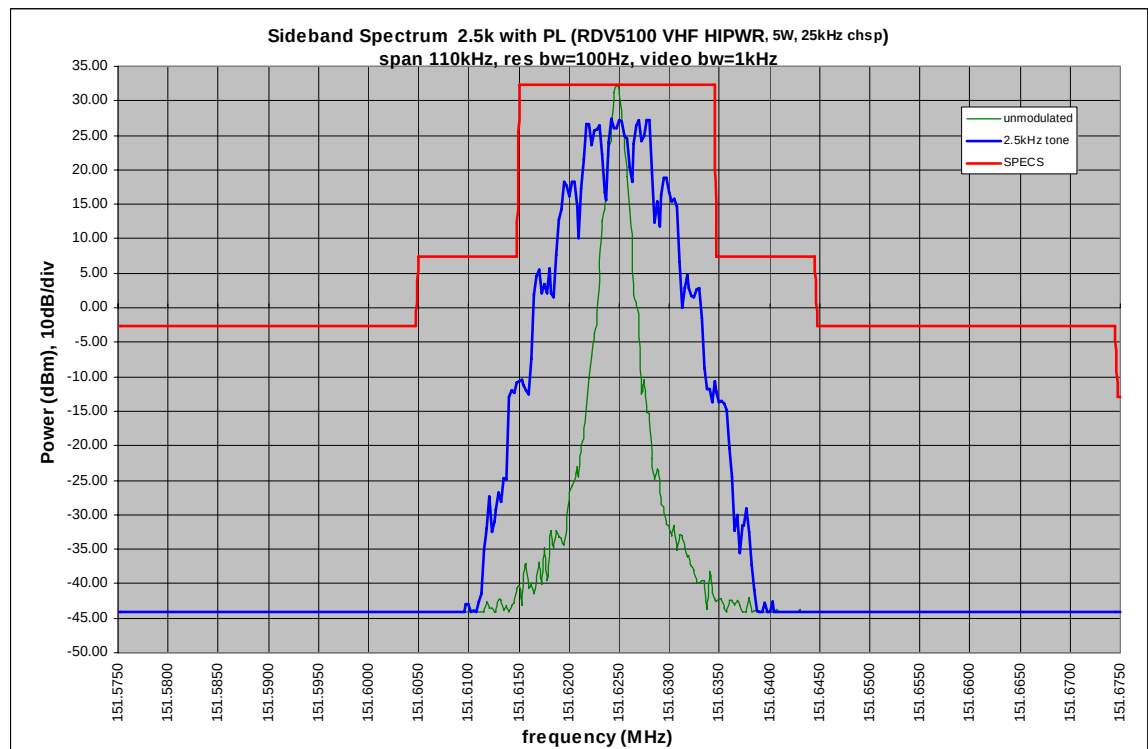


EXHIBIT 6D-4



MOTOROLA

FCC ID: AZ489FT3820

2 Watt / 12.5kHz

Motorola Inc.

FCC ID:AZ489FT3820

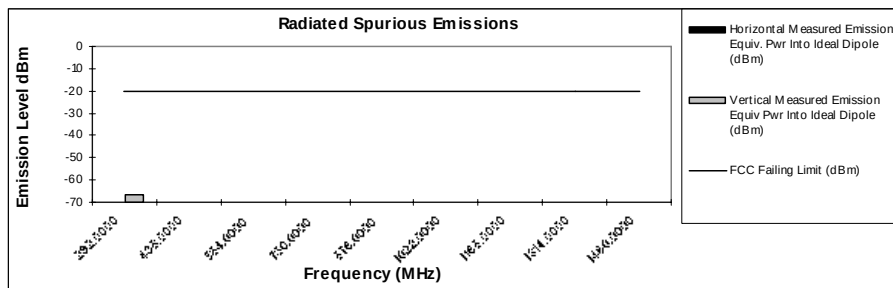
Transmit Radiated Spurious Emissions:RDV5100

Tx Power: 2 Watts

146 MHz

Channel Spacing 12.5kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
292.0000	-20	-70.55	-66.91
438.0000	-20	*	*
584.0000	-20	*	*
730.0000	-20	*	*
876.0000	-20	*	*
1022.0000	-20	*	*
1168.0000	-20	*	*
1314.0000	-20	*	*
1460.0000	-20	*	*



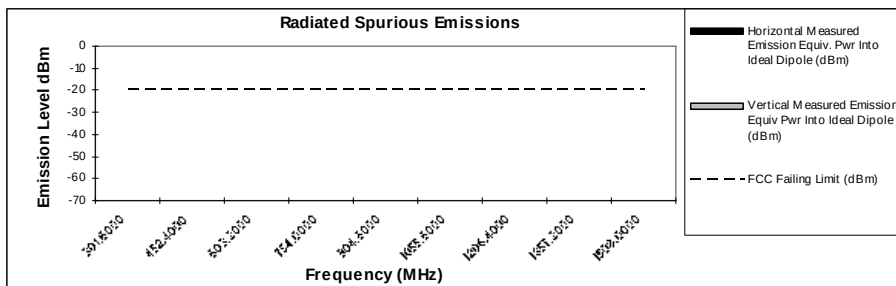
Transmit Radiated Spurious Emissions: RDV5100

Tx Power: 2 Watts

150.8 MHz

Channel Spacing 12.5kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
301.6000	-20	-70.79	-72.73
452.4000	-20	*	*
603.2000	-20	*	*
754.0000	-20	*	*
904.8000	-20	*	*
1055.6000	-20	*	*
1206.4000	-20	*	*
1357.2000	-20	*	*
1508.0000	-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: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679A-1

August 24, 2007

EXHIBIT 6E-1



MOTOROLA

FCC ID: AZ489FT3820

2 Watt / 12.5kHz

Motorola Inc.

FCC ID:AZ489FT3820

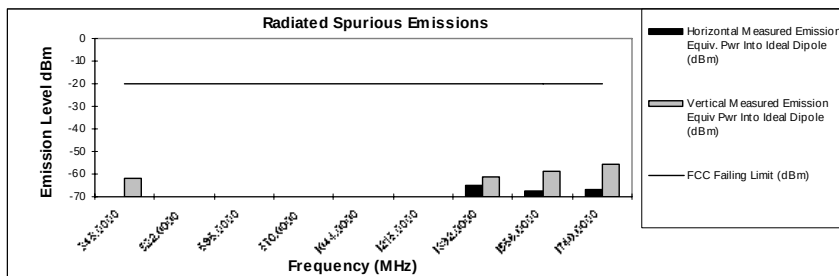
Transmit Radiated Spurious Emissions: RDV5100

Tx Power: 2 Watts

174 MHz

Channel Spacing 12.5kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
348.0000	-20	-70.99	-61.97
522.0000	-20	*	*
696.0000	-20	*	*
870.0000	-20	*	*
1044.0000	-20	*	*
1218.0000	-20	*	*
1392.0000	-20	-65.01	-61.36
1566.0000	-20	-67.22	-58.49
1740.0000	-20	-66.58	-55.47



* 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: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679A-1

August 24, 2007

EXHIBIT 6E-1A

**MOTOROLA**

FCC ID: AZ489FT3820

2 Watt / 25kHz

Motorola Inc.

FCC ID:AZ489FT3820

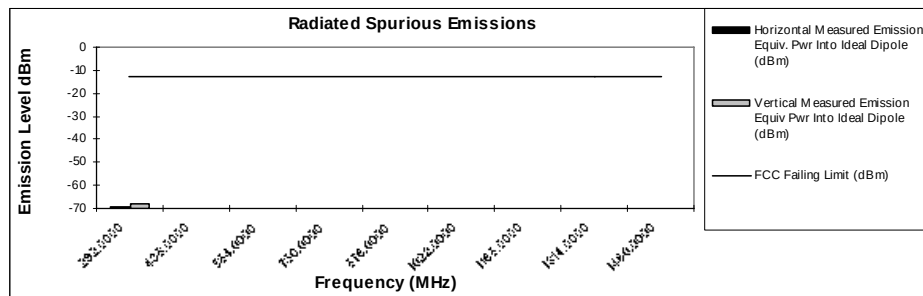
Transmit Radiated Spurious Emissions: RDV5100

Tx Power: 2 Watts

146 MHz

Channel Spacing 25kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
292.0000	-13	-69.65	-68.03
438.0000	-13	*	*
584.0000	-13	*	*
730.0000	-13	*	*
876.0000	-13	*	*
1022.0000	-13	*	*
1168.0000	-13	*	*
1314.0000	-13	*	*
1460.0000	-13	*	*

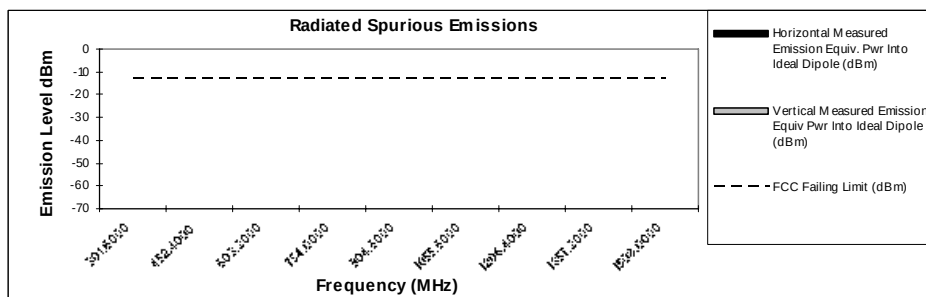
**Transmit Radiated Spurious Emissions: RDV5100**

Tx Power: 2 Watts

150.8 MHz

Channel Spacing 25kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
301.6000	-13	-74.14	-73.24
452.4000	-13	-70.54	*
603.2000	-13	*	*
754.0000	-13	*	*
904.8000	-13	*	*
1055.6000	-13	*	*
1206.4000	-13	*	*
1357.2000	-13	*	*
1508.0000	-13	*	*



* 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: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679A-1

August 25, 2007

EXHIBIT 6E-2



MOTOROLA

FCC ID: AZ489FT3820

2 Watt / 25kHz

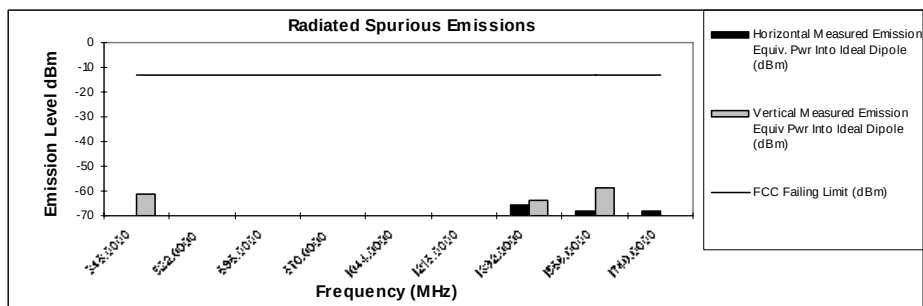
Motorola Inc.

FCC ID:AZ489FT3820

Transmit Radiated Spurious Emissions: RDV5100

Tx Power: 2 Watts

174 MHz		Channel Spacing 25kHz S/N 2	
Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
348.0000	-13	-71.29	-61.27
522.0000	-13	*	*
696.0000	-13	*	*
870.0000	-13	*	*
1044.0000	-13	*	*
1218.0000	-13	*	*
1392.0000	-13	-65.90	-63.53
1566.0000	-13	-67.88	-58.49
1740.0000	-13	-68.26	*



* 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: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679A-1

August 25, 2007

EXHIBIT 6E-2A



MOTOROLA

FCC ID: AZ489FT3820

5Watts / 12.5 kHz

Motorola Inc.

FCC ID:AZ489FT3820

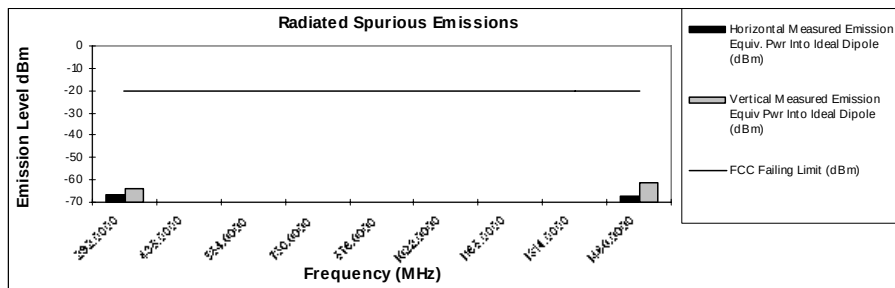
Transmit Radiated Spurious Emissions:RDV5100

Tx Power: 5.25 Watts

146 MHz

Channel Spacing 12.5kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr r Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pw r Into Ideal Dipole (dBm)
292.0000	-20	-66.32	-63.97
438.0000	-20	-75.89	*
584.0000	-20	*	*
730.0000	-20	*	*
876.0000	-20	*	*
1022.0000	-20	*	*
1168.0000	-20	*	*
1314.0000	-20	*	*
1460.0000	-20	-66.98	-61.01



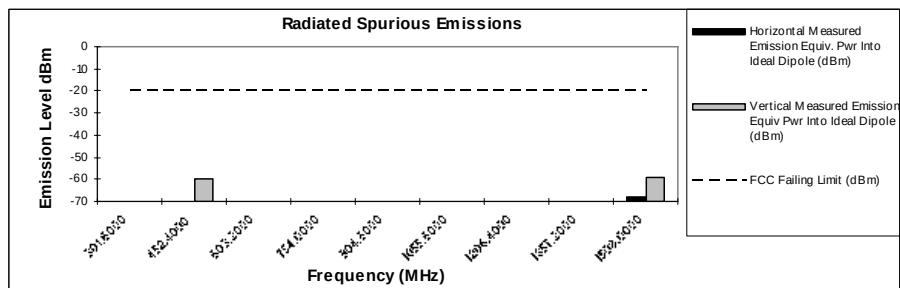
Transmit Radiated Spurious Emissions: RDV5100

Tx Power: 5.25 Watts

150.8 MHz

Channel Spacing 12.5kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr r Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr r Into Ideal Dipole (dBm)
301.6000	-20	-72.21	-70.36
452.4000	-20	-74.99	-59.70
603.2000	-20	*	*
754.0000	-20	*	*
904.8000	-20	*	*
1055.6000	-20	*	*
1206.4000	-20	*	*
1357.2000	-20	-71.73	*
1508.0000	-20	-67.82	-59.16



* 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: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679A-1

August 24, 2007

EXHIBIT 6E-3



MOTOROLA

FCC ID: AZ489FT3820

5Watts / 12.5 kHz

Motorola Inc.

FCC ID:AZ489FT3820

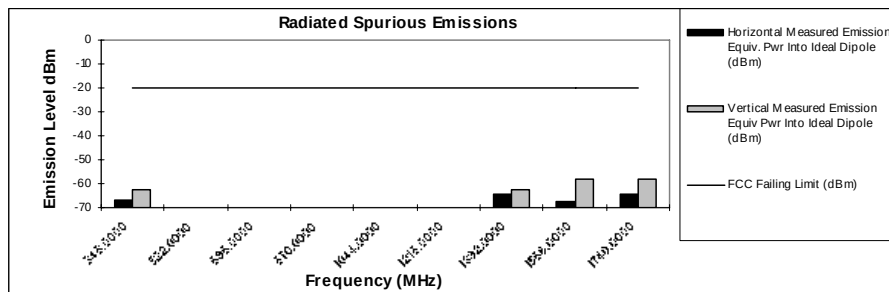
Transmit Radiated Spurious Emissions: RDV5100

Tx Power: 5.25 Watts

174 MHz

Channel Spacing 12.5kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
348.0000	-20	-66.99	-62.63
522.0000	-20	*	*
696.0000	-20	*	*
870.0000	-20	*	*
1044.0000	-20	*	*
1218.0000	-20	*	*
1392.0000	-20	-64.14	-62.32
1566.0000	-20	-67.66	-57.98
1740.0000	-20	-64.30	-58.25



* 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: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679A-1

August 24, 2007

EXHIBIT 6E-3A

**MOTOROLA**

FCC ID: AZ489FT3820

5Watts / 25 kHz

Motorola Inc.

FCC ID:AZ489FT3820

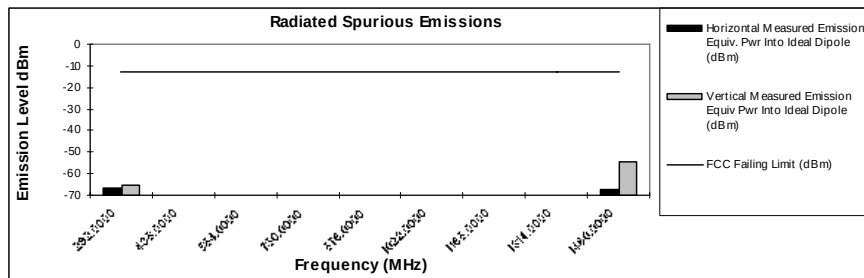
Transmit Radiated Spurious Emissions:RDV5100

Tx Power: 5.25 Watts

146 MHz

Channel Spacing 25kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
292.0000	-13	-66.59	-65.24
438.0000	-13	-73.70	*
584.0000	-13	*	*
730.0000	-13	*	*
876.0000	-13	*	*
1022.0000	-13	*	*
1168.0000	-13	*	*
1314.0000	-13	*	*
1460.0000	-13	-67.42	-54.63

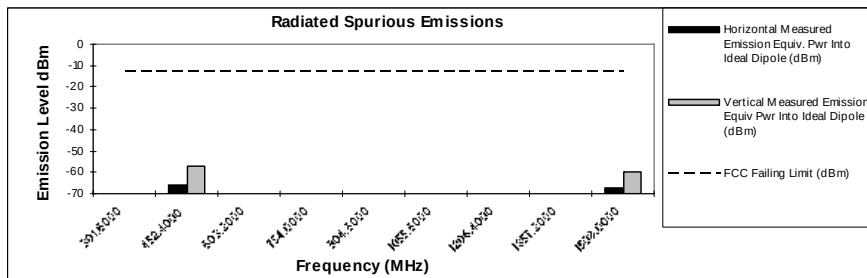
**Transmit Radiated Spurious Emissions: RDV5100**

Tx Power: 5.25 Watts

150.8 MHz

Channel Spacing 25kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
301.6000	-13	-72.54	-70.46
452.4000	-13	-66.16	-57.12
603.2000	-13	*	*
754.0000	-13	*	*
904.8000	-13	-72.43	*
1055.6000	-13	*	*
1206.4000	-13	*	*
1357.2000	-13	*	*
1508.0000	-13	-67.47	-60.12



* 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: Curt Mc Lennan

August 25, 2007

FCC Registration: 91932 / Industry Canada: IC3679A-1

EXHIBIT 6E-4



MOTOROLA

FCC ID: AZ489FT3820

5Watts / 25 kHz

Motorola Inc.

FCC ID:AZ489FT3820

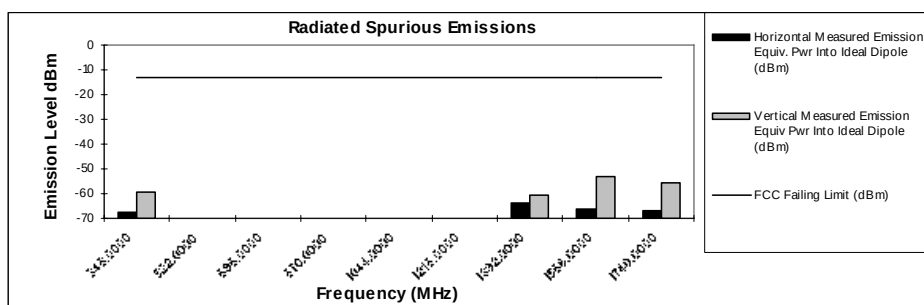
Transmit Radiated Spurious Emissions: RDV5100

Tx Power: 5.25 Watts

174 MHz

Channel Spacing 25kHz | S/N 2

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
348.0000	-13	-67.38	-59.40
522.0000	-13	*	*
696.0000	-13	*	*
870.0000	-13	*	*
1044.0000	-13	*	*
1218.0000	-13	*	*
1392.0000	-13	-63.73	-60.53
1566.0000	-13	-66.26	-53.31
1740.0000	-13	-66.63	-55.79



* 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: Curt Mc Lennan
FCC Registration: 91932 / Industry Canada: IC3679A-1

August 25, 2007

EXHIBIT 6E-4A



MOTOROLA

FCC ID: AZ489FT3820

Conducted Emissions

5Watt TX Frequency 146.0000MHz (12.5 kHz Channel spacing)

Transmitter Conducted Spurious Emissions

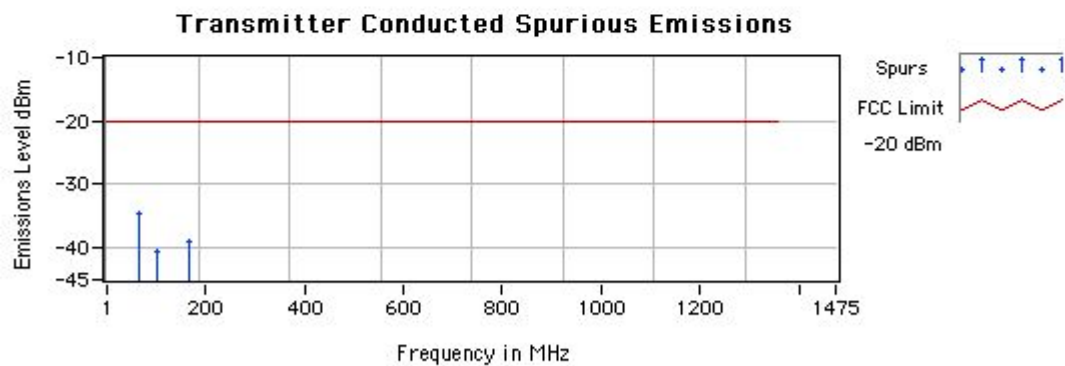
FREQ: 146.00000 MHz

FCC ID: AZ489FT3820

Power 5.5 W

Channel Spacing: 12.50 kHz

Spurious Frequency	FCC Limit	Measured Value (dBm)
72.10000	-20.0	-34.6
108.10000	-20.0	-40.5
180.00000	-20.0	-39.0



All Transmitter Spurious Emissions tested to the 10th Harmonic

Motorola Plantation ATE Lab

Monday, 17th September 2007

Test Performed By :

EXHIBIT 6E-5



MOTOROLA

FCC ID: AZ489FT3820

Conducted Emissions

5Watt TX Frequency 146.000MHz (25 kHz Channel spacing)

Transmitter Conducted Spurious Emissions

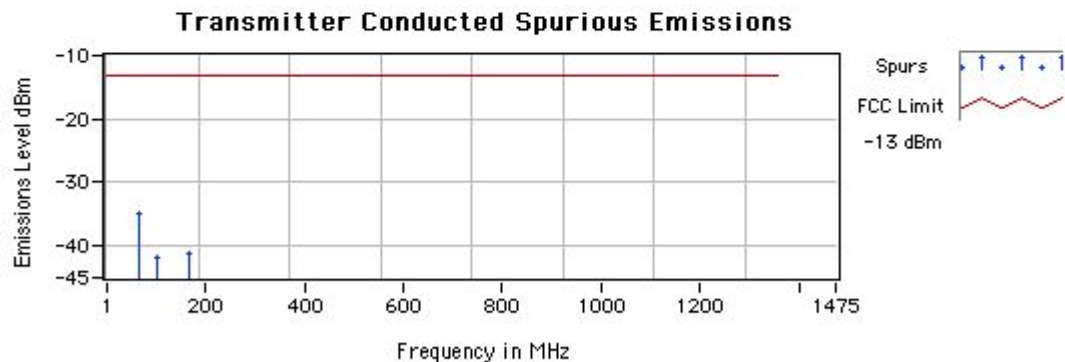
FREQ: 146.00000 MHz

FCC ID: AZ489FT3820

Power 5.5 W

Channel Spacing: 25.00 kHz

Spurious Frequency	FCC Limit	Measured Value (dBm)
72.10000	-13.0	-35.0
108.10000	-13.0	-41.7
180.00000	-13.0	-41.1



All Transmitter Spurious Emissions tested to the 10th Harmonic

Motorola Plantation ATE Lab

Monday, 17th September 2007

Test Performed By :

EXHIBIT 6E-6



MOTOROLA

FCC ID: AZ489FT3820

Conducted Emissions

5Watt TX Frequency 150.8000MHz (12.5 kHz Channel spacing)

Transmitter Conducted Spurious Emissions

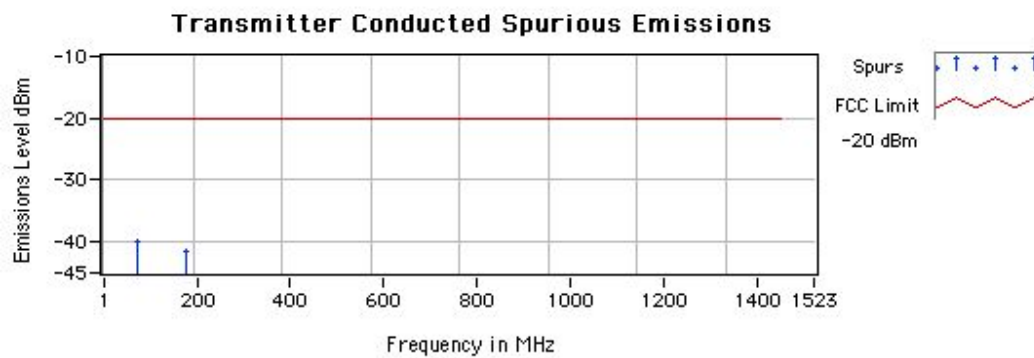
FREQ: 150.80000 MHz

FCC ID: AZ489FT3820

Power 5.5 W

Channel Spacing: 12.50 kHz

Spurious Frequency	FCC Limit	Measured Value (dBm)
74.60000	-20.0	-40.0
186.00000	-20.0	-41.4



All Transmitter Spurious Emissions tested to the 10th Harmonic

Motorola Plantation ATE Lab

Monday, 17th September 2007

Test Performed By:

EXHIBIT 6E-7



MOTOROLA

FCC ID: AZ489FT3820

Conducted Emissions

5Watt TX Frequency 150.8000MHz (25 kHz Channel spacing)

Transmitter Conducted Spurious Emissions

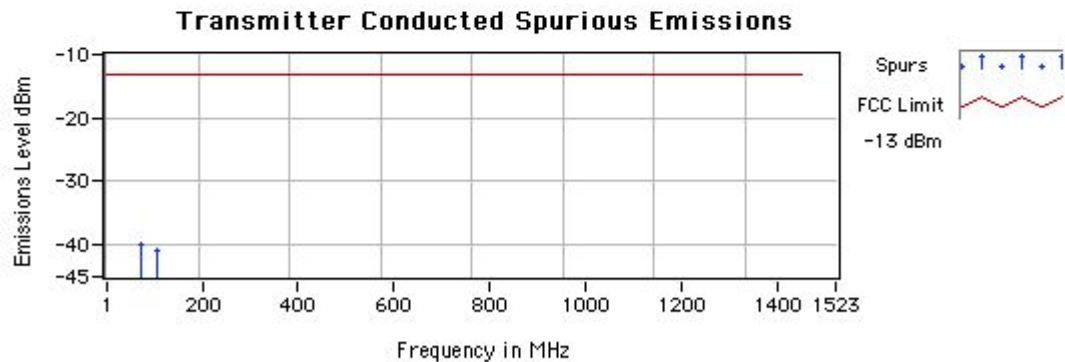
FREQ: 150.80000 MHz

FCC ID: AZ489FT3820

Power 5.5 W

Channel Spacing: 25.00 kHz

Spurious Frequency	FCC Limit	Measured Value (dBm)
74.60000	-13.0	-40.0
111.60000	-13.0	-40.9



All Transmitter Spurious Emissions tested to the 10th Harmonic

Motorola Plantation ATE Lab

Monday, 17th September 2007

Test Performed By :

EXHIBIT 6E-8



MOTOROLA

FCC ID: AZ489FT3820

Conducted Emissions

5Watt TX Frequency 174.0000MHz (12.5 kHz Channel spacing)

Transmitter Conducted Spurious Emissions

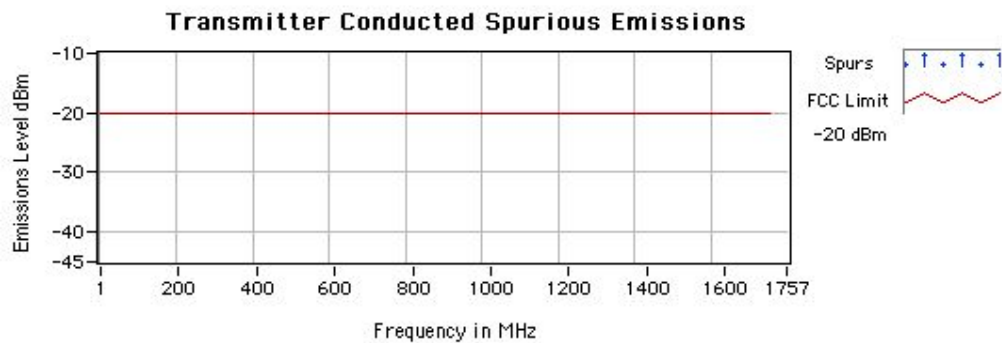
FREQ: 174.00000 MHz

FCC ID: AZ489FT3820

Power 5.5 W

Channel Spacing: 12.50 kHz

Spurious Frequency	FCC Limit	Measured Value (dBm)
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All Transmitter Spurious Emissions tested to the 10th Harmonic

No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab

Monday, 17th September 2007

Test Performed By :

EXHIBIT 6E-9



MOTOROLA

FCC ID: AZ489FT3820

Conducted Emissions

5Watt TX Frequency 174.0000MHz (25 kHz Channel spacing)

Transmitter Conducted Spurious Emissions

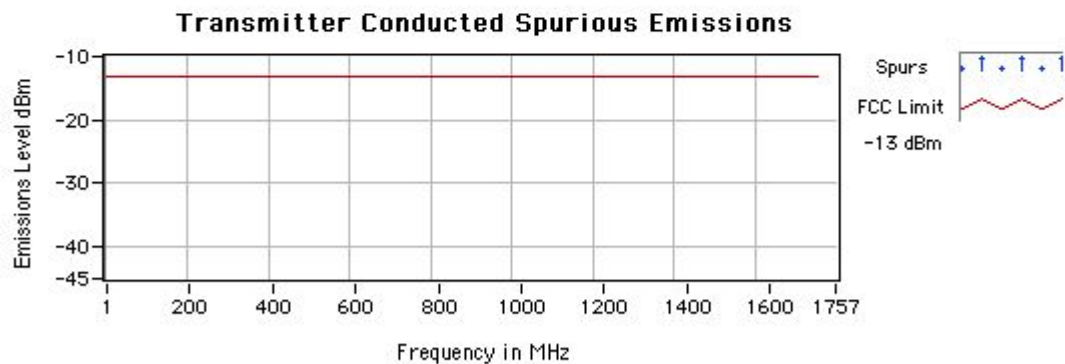
FREQ: 174.00000 MHz

FCC ID: AZ489FT3820

Power 5.5 W

Channel Spacing: 25.00 kHz

Spurious Frequency	FCC Limit	Measured Value (dBm)
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All Transmitter Spurious Emissions tested to the 10th Harmonic

No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab

Monday, 17th September 2007

Test Performed By :

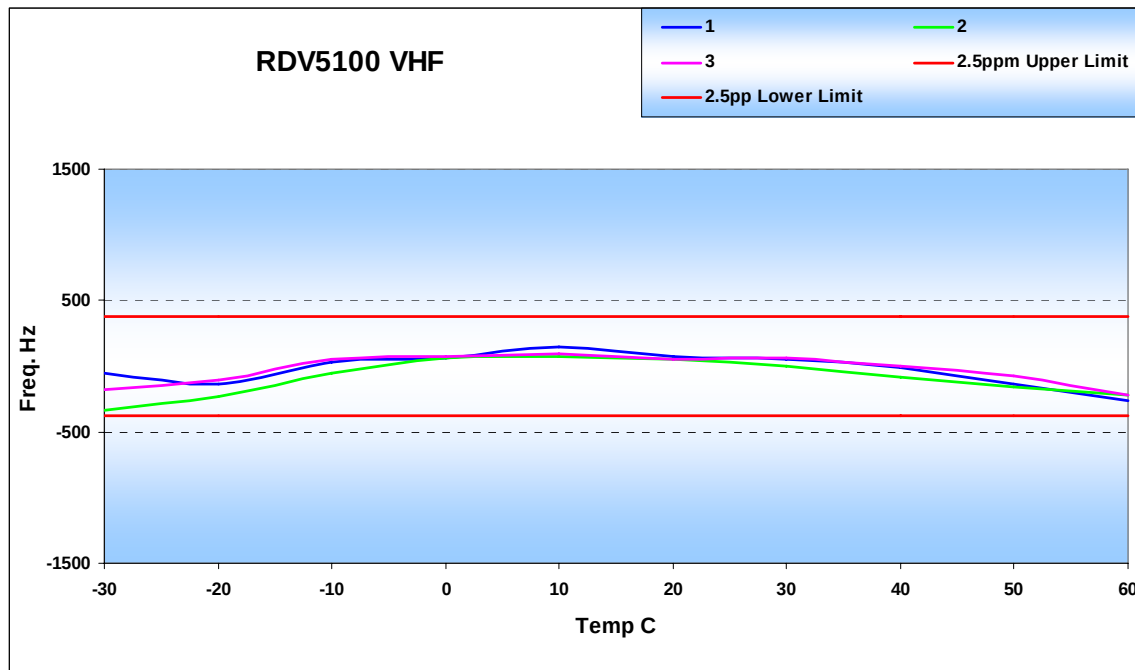
EXHIBIT 6E-10



MOTOROLA

FCC ID: AZ489FT3820

Frequency Stability over Temperature



Center Frequency 151.7MHz

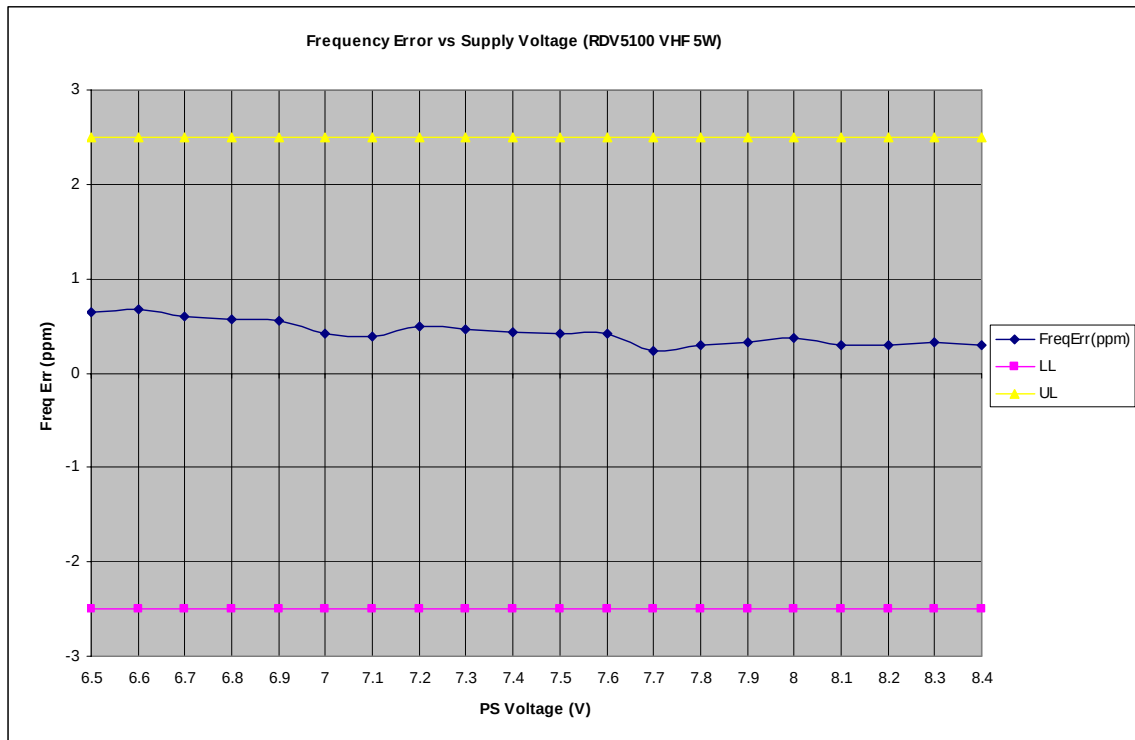
EXHIBIT 6F-1



MOTOROLA

FCC ID: AZ489FT3820

Frequency Error over Voltage



Reset Voltage 5.0volts

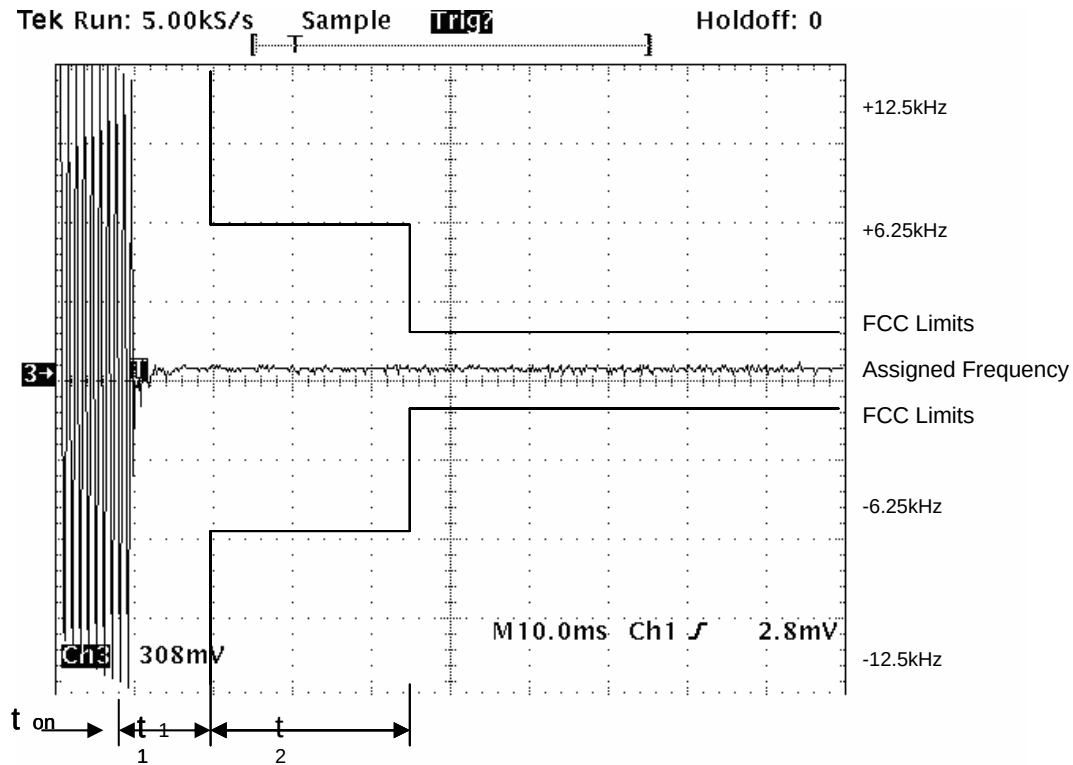
EXHIBIT 6F-2



MOTOROLA

FCC ID: AZ489FT3820

Transient Frequency Response TX on 12.5 kHz



$$\frac{(\text{Freq})X(\text{PPM})X(\pm 4)}{\text{BW}}$$



MOTOROLA

FCC ID: AZ489FT3820

Transient Frequency Response TX off 12.5 kHz

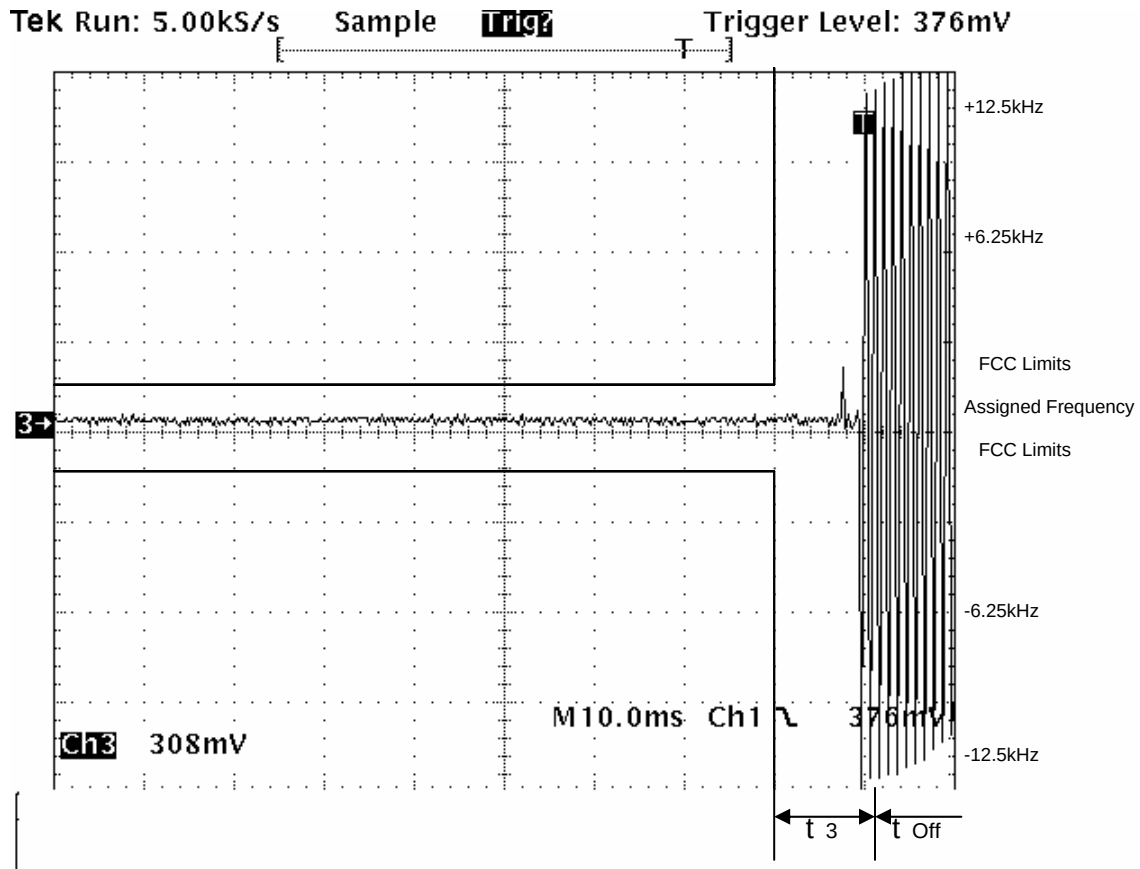


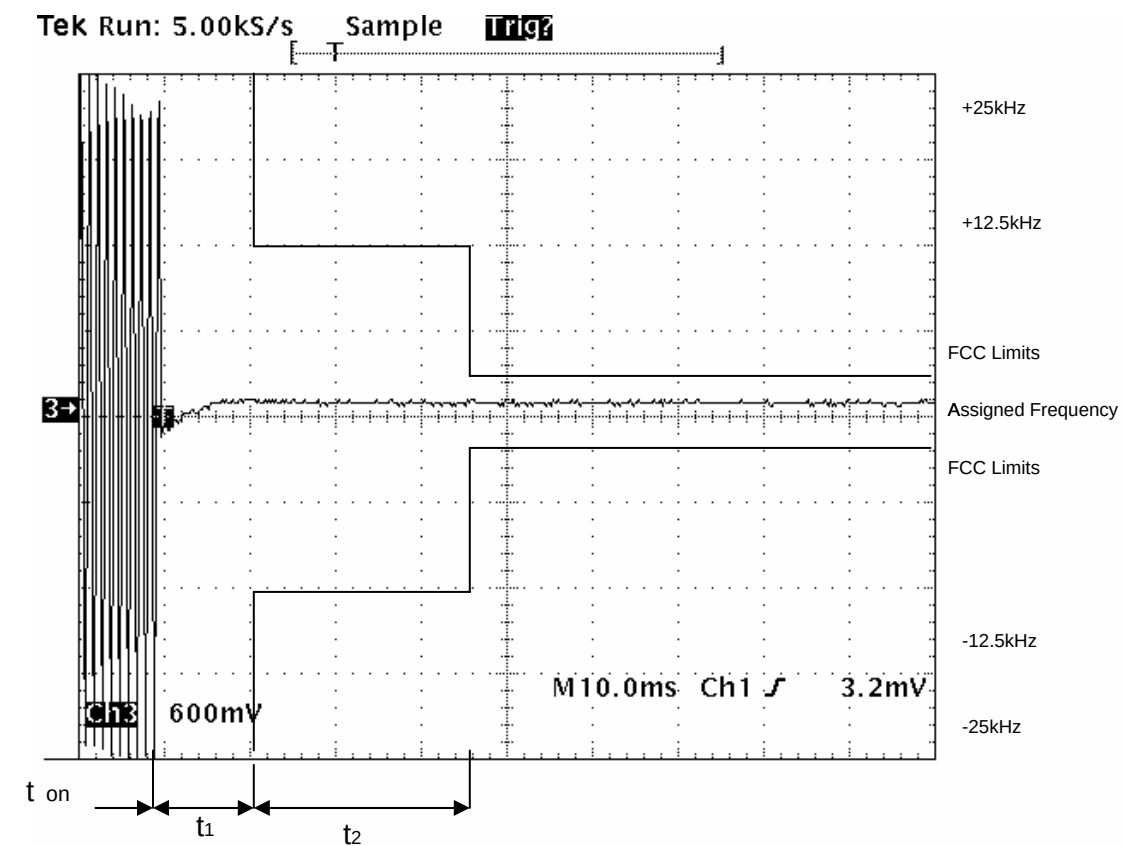
EXHIBIT 6G-2



MOTOROLA

FCC ID: AZ489FT3820

Transient Frequency Response TX on 25 kHz



$$\frac{(\text{Freq})X(\text{PPM})X(\pm 4)}{\text{BW}}$$

EXHIBIT 6G-3



MOTOROLA

FCC ID: AZ489FT3820

Transient Frequency Response TX off 25 kHz

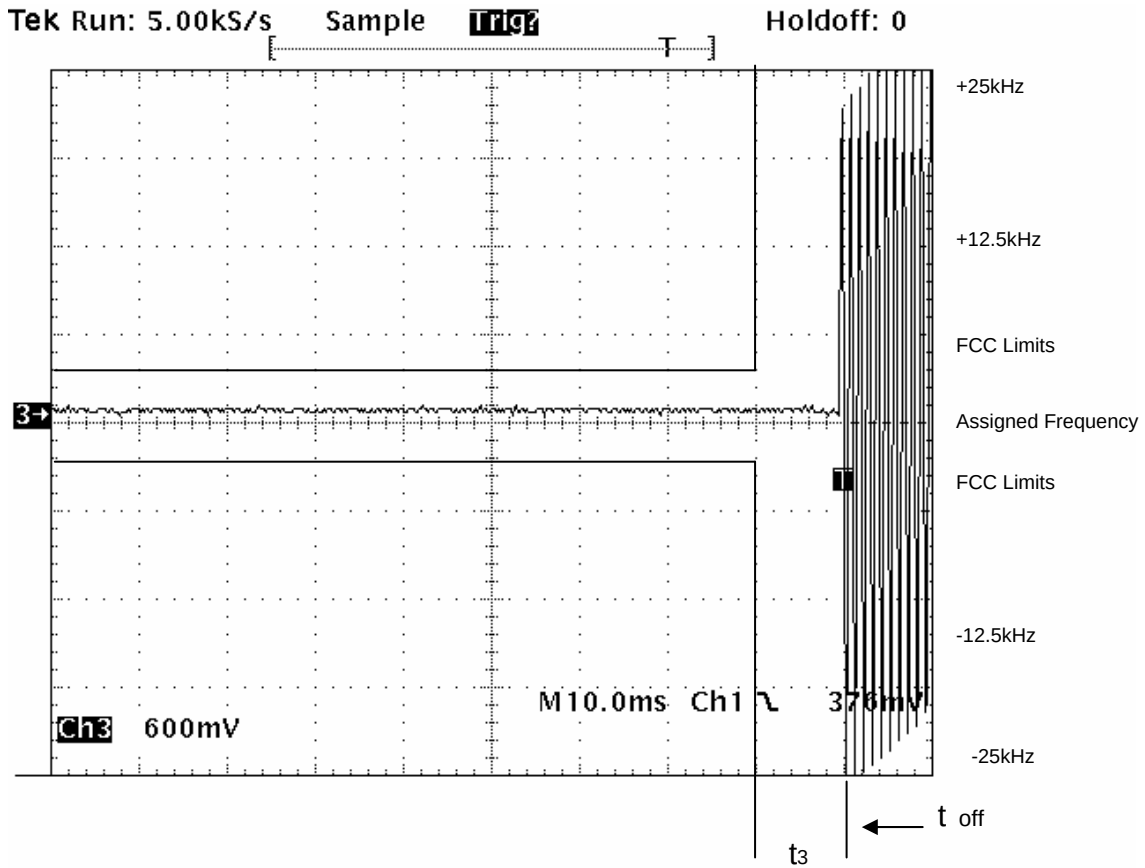


EXHIBIT 6G-4