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.

2.0 Watts

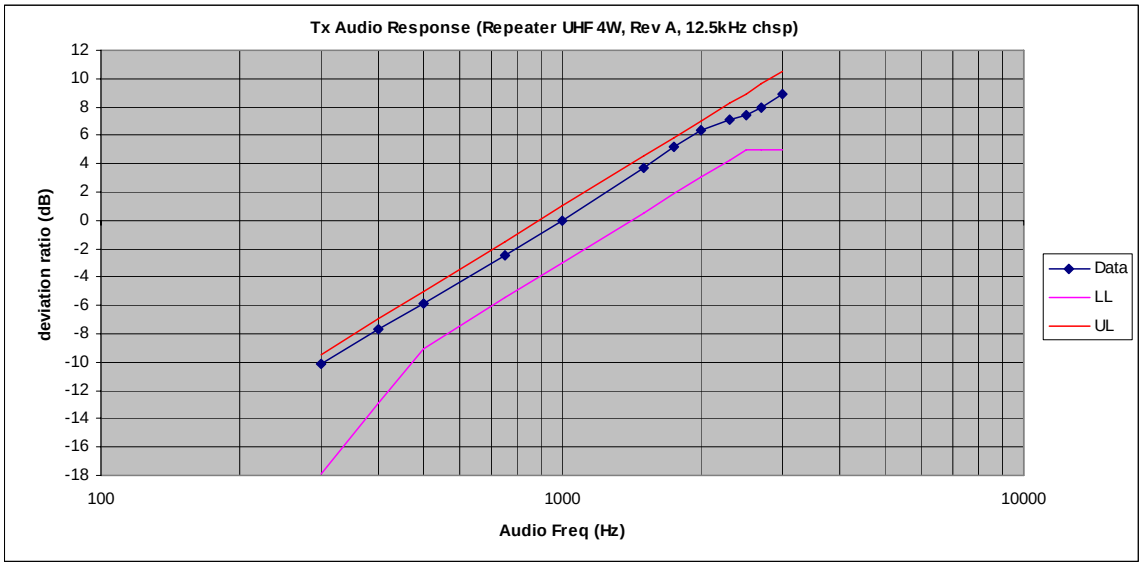
Frequency	451.1875 MHz
Measured Conducted RF output	2. 0 Watts
Normal DC Voltage	8.40 Volts
Normal DC Current	1.1Amps
Primary Supply Voltage	8.40 Volts

4.0 Watts

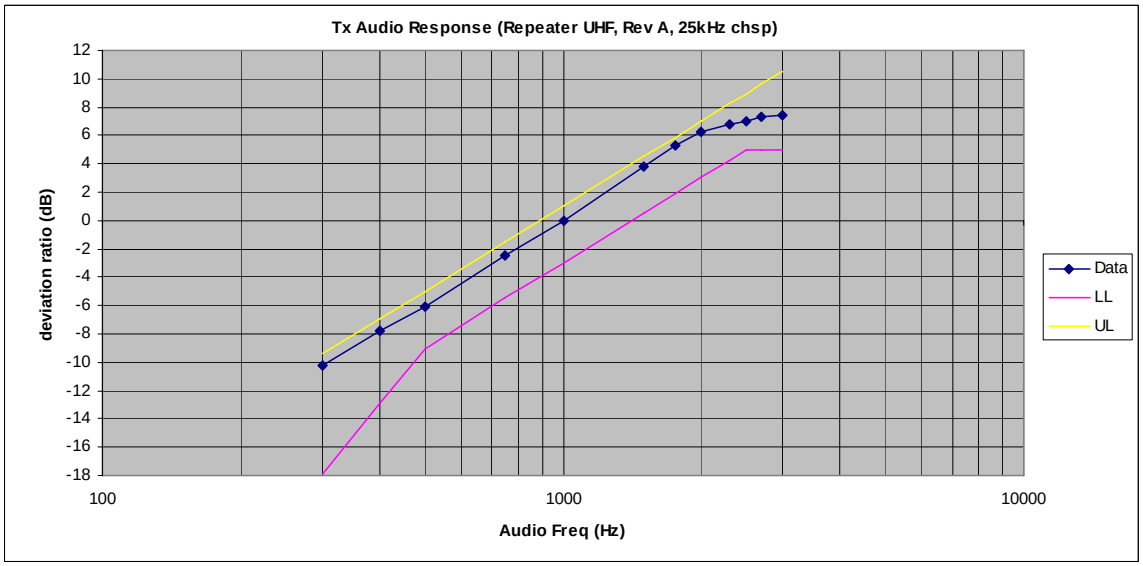
Frequency	464.5500 MHz
Measured Conducted RF output*	4.20 Watts
Normal DC Voltage	10.50 Volts
Normal DC Current	1.8 Amps
Primary Supply Voltage	10.50 Volts

*Note: RF Conducted output power measured at 10.50Volts

Audio Response

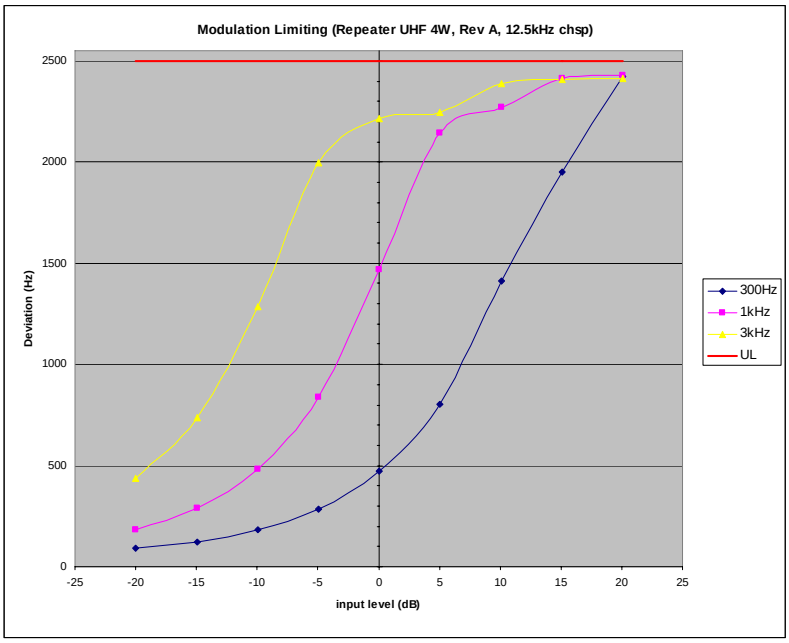


Audio Response 12.5 kHz

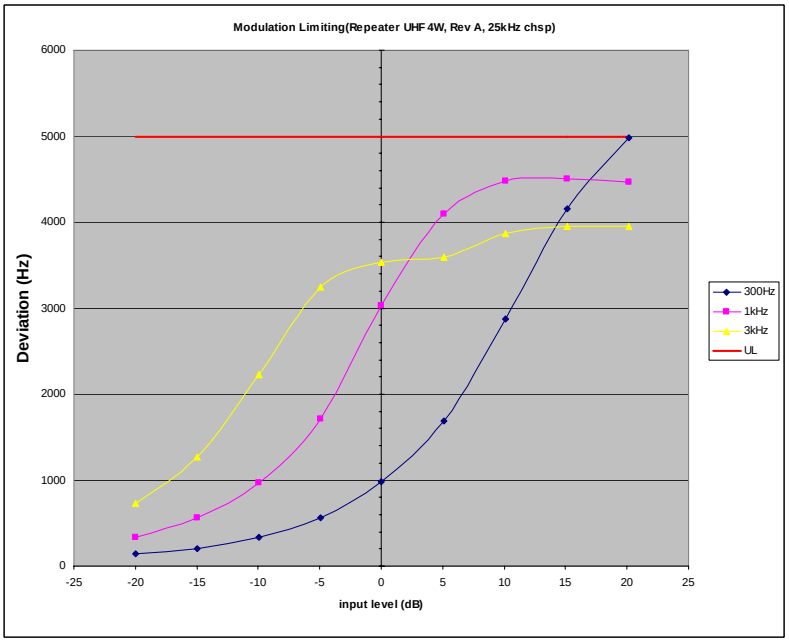


Audio Response 25 kHz

MODULATION LIMITING



12.5 kHz



25.0 kHz

OCCUPIED BANDWIDTH DATA

4Watt
12.5 / 25 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

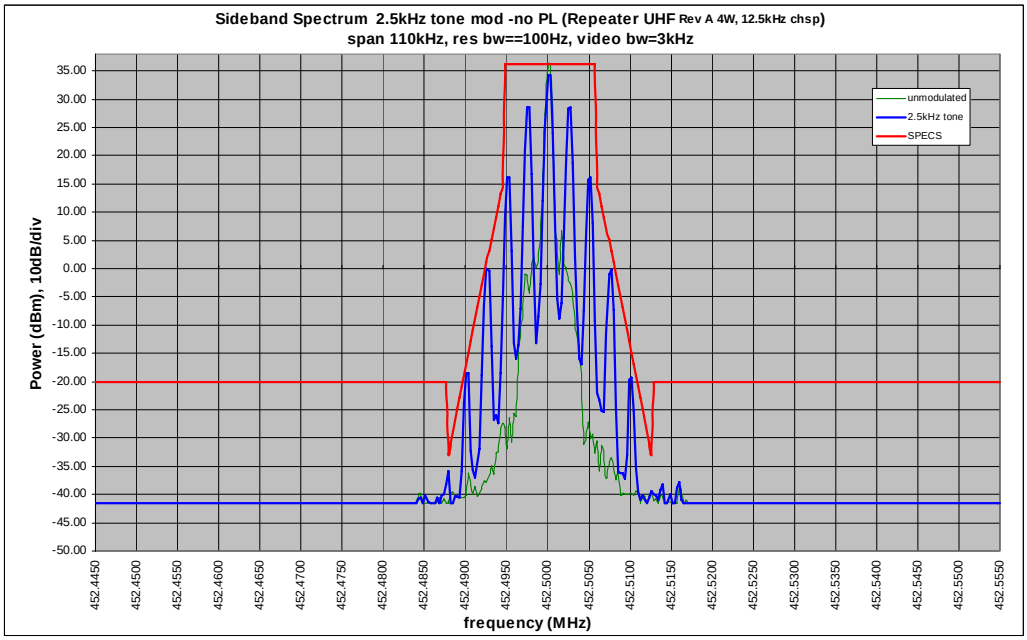
CARSON'S RULE: 11K0F3E

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

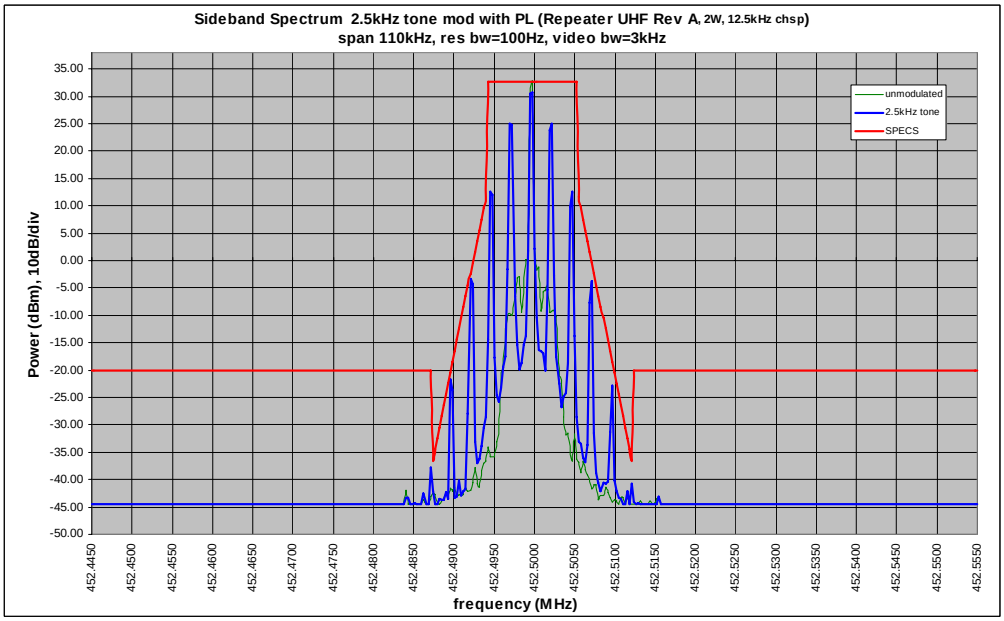
CARSON'S RULE: 16K0F3E

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

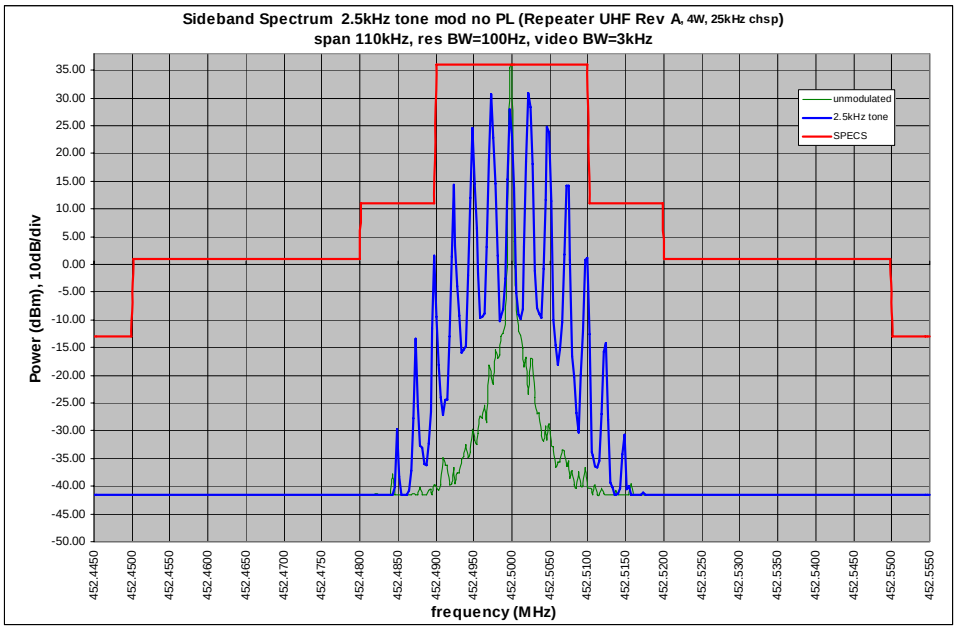
4- Watt 12.5 kHz Mask D, Rule Part: 90.210
Emission Type: 11K0F3E



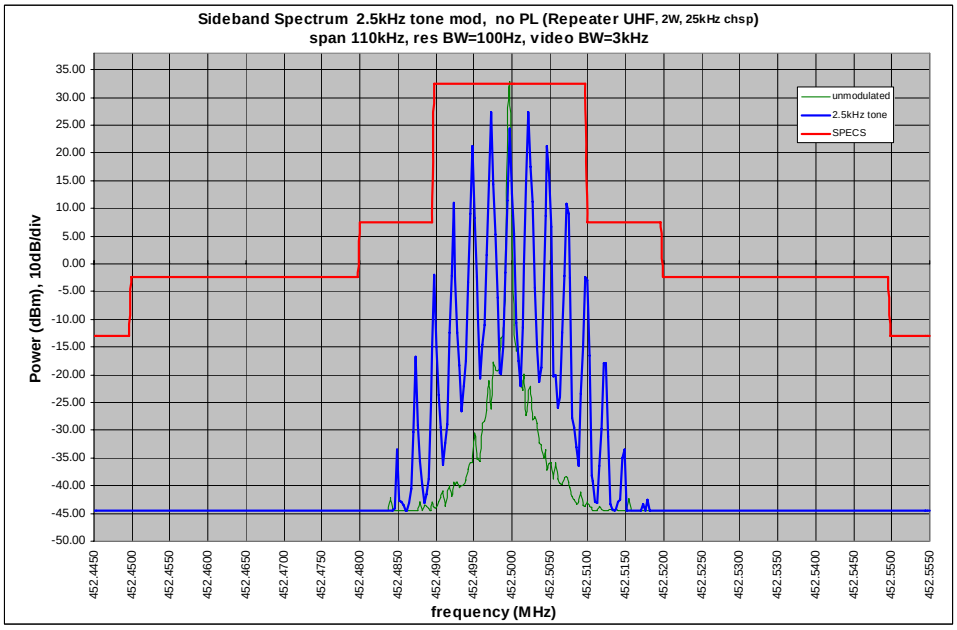
2- Watt 12.5 kHz Mask D, Rule Part: 90.210
Emission Type: 11K0F3E



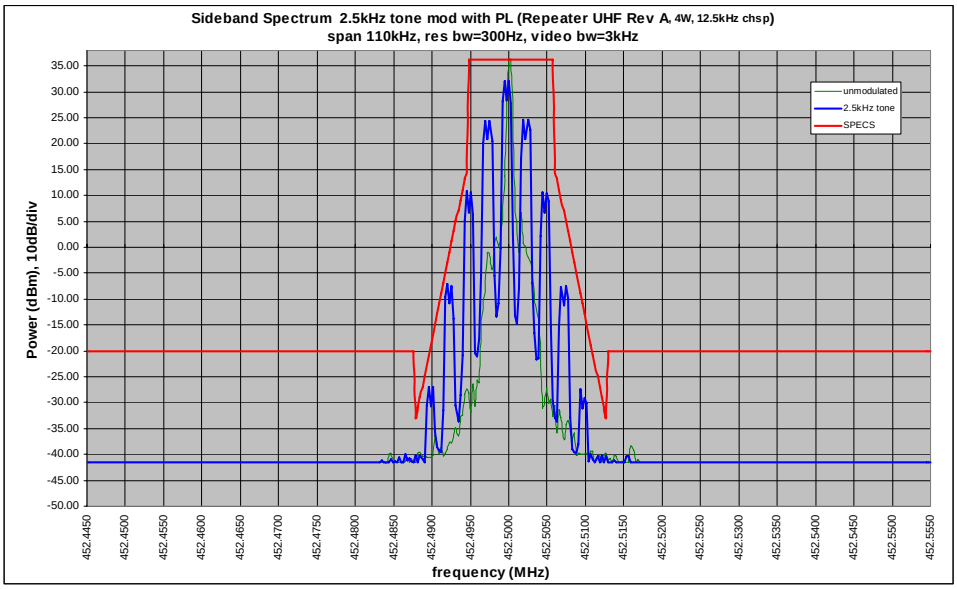
4- Watt 25 kHz Mask B, Rule Part: 90.210
Emission Type: 16K0F3E



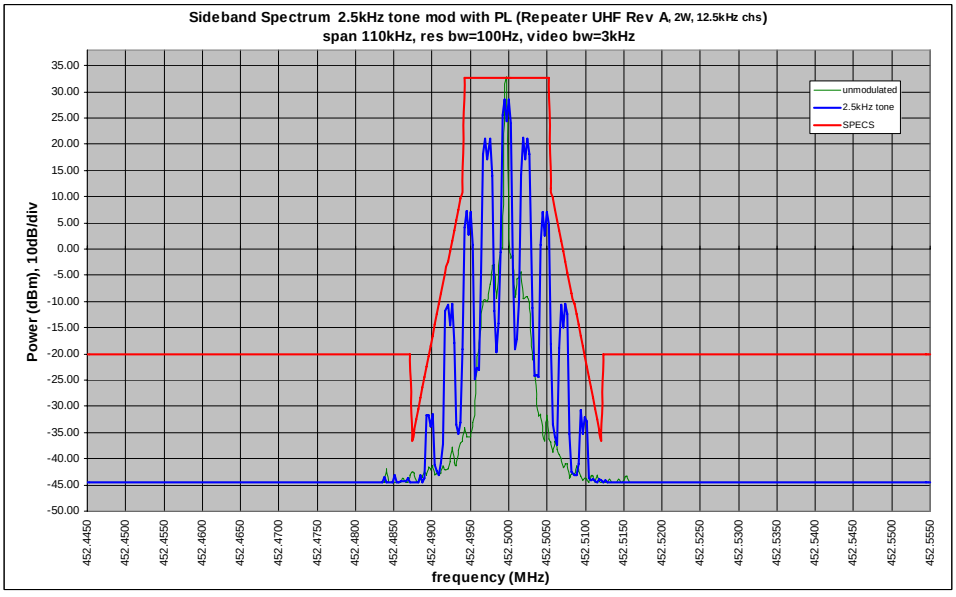
2- Watt 25 kHz Mask B, Rule Part: 90.210
Emission Type: 16K0F3E



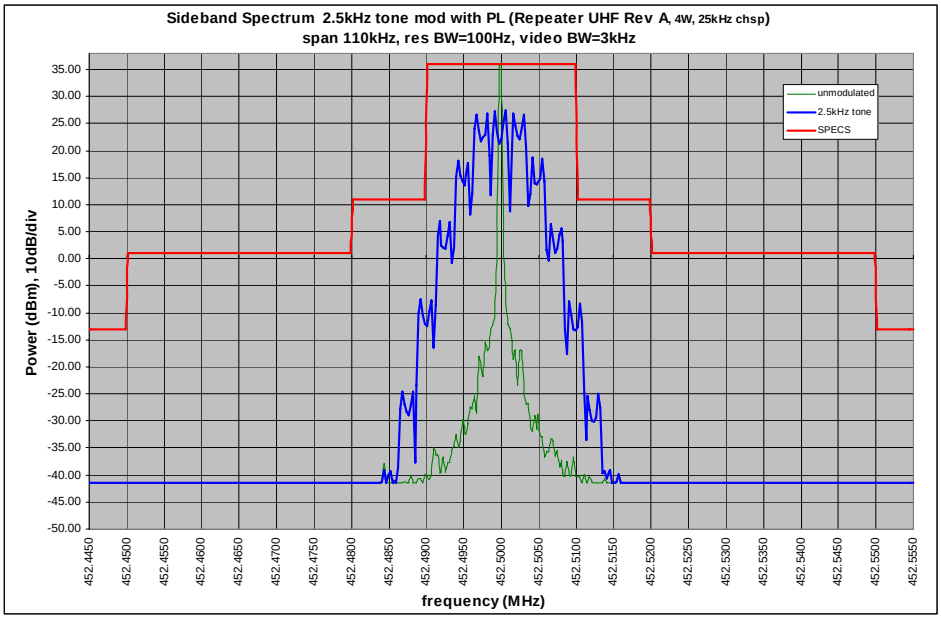
4- Watt 12.5 kHz 2500 Hz & 77 Hz Tone “PL” Modulations
Mask D, Rule Part: 90.210. Emission Type: 11K0F3E



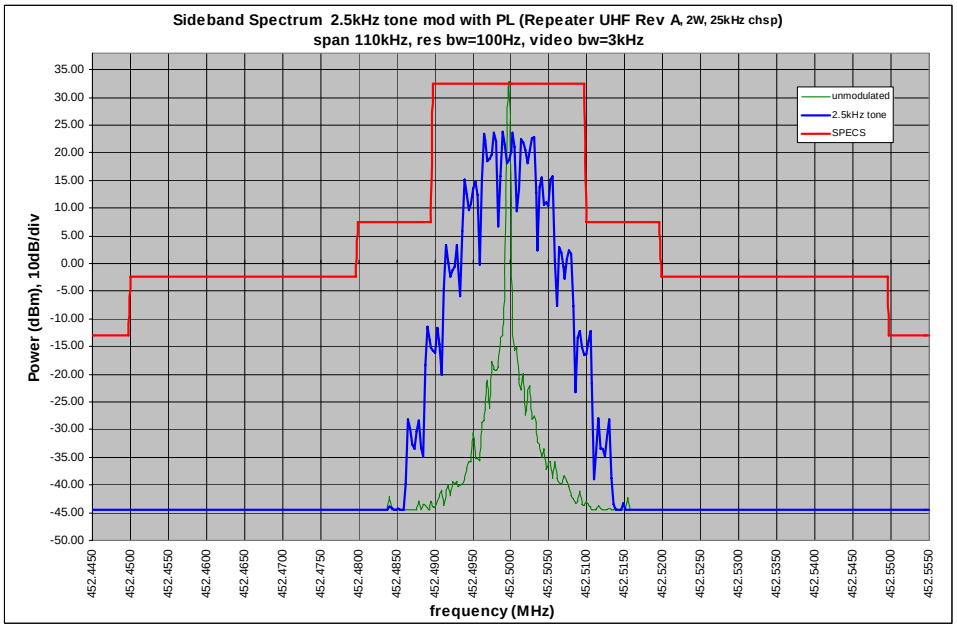
2- Watt 12.5 kHz 2500 Hz & 77 Hz Tone “PL” Modulations
Mask D, Rule Part: 90.210. Emission Type: 11K0F3E



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



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



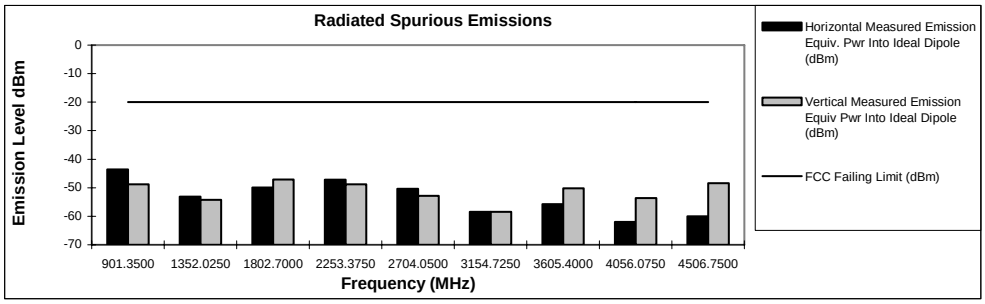
4 Watt 12.5 kHz

Motorola Inc. **FCC ID: AZ492FT4887**

Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A Supply
Tx Power: 4 Watts

450.675 MHz **Channel Spacing 12.5kHz | S/N 186TJW0053**

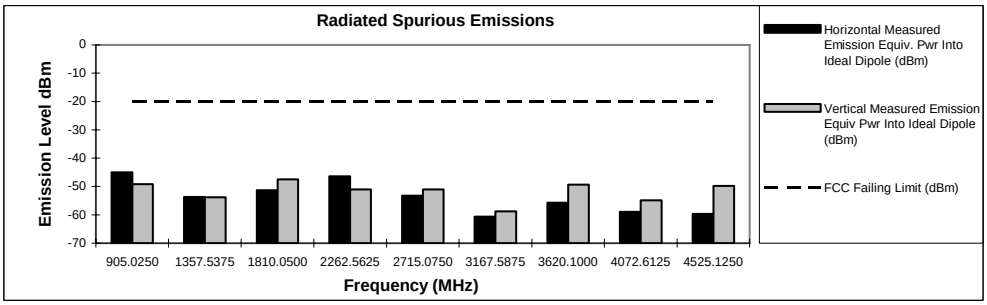
Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
901.3500	-20	-43.54	-48.80
1352.0250	-20	-53.14	-54.28
1802.7000	-20	-49.91	-47.15
2253.3750	-20	-47.18	-48.79
2704.0500	-20	-50.35	-52.89
3154.7250	-20	-58.45	-58.46
3605.4000	-20	-55.74	-50.18
4056.0750	-20	-61.97	-53.61
4506.7500	-20	-60.04	-48.46



Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A Supply
Tx Power: 4 Watts

452.5125 MHz **Channel Spacing 12.5kHz | S/N 186TJW0053**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
905.0250	-20	-44.97	-49.13
1357.5375	-20	-53.70	-53.83
1810.0500	-20	-51.32	-47.45
2262.5625	-20	-46.39	-51.07
2715.0750	-20	-53.25	-50.99
3167.5875	-20	-60.66	-58.76
3620.1000	-20	-55.78	-49.38
4072.6125	-20	-58.94	-54.82
4525.1250	-20	-59.70	-49.81



* 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 **April 23, 2009**
FCC Registration: 91932 / Industry Canada: IC109U-1

4 Watt 12.5 kHz

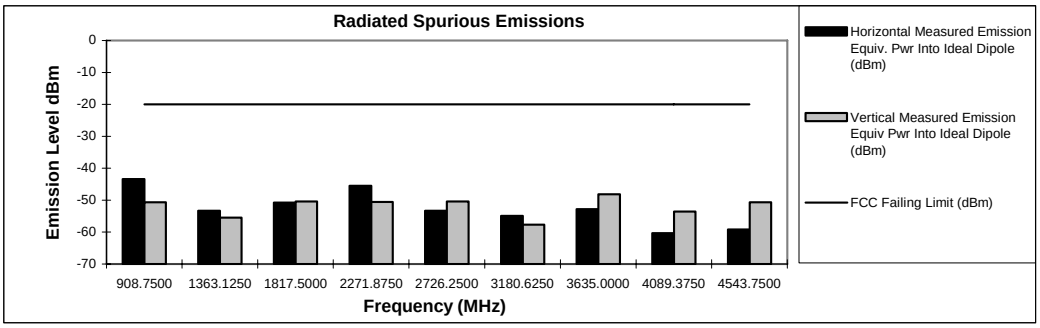
Motorola Inc. **FCC ID: AZ492FT4887**

Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A Supply

Tx Power: 4 Watts

454.375 MHz **Channel Spacing 12.5kHz | S/N 186TJW0053**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
908.7500	-20	-43.42	-50.65
1363.1250	-20	-53.34	-55.54
1817.5000	-20	-50.76	-50.44
2271.8750	-20	-45.49	-50.59
2726.2500	-20	-53.30	-50.44
3180.6250	-20	-54.95	-57.63
3635.0000	-20	-52.80	-48.15
4089.3750	-20	-60.32	-53.62
4543.7500	-20	-59.14	-50.71



* 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 **April 23, 2009**

FCC Registration: 91932 / Industry Canada: IC109U-1

4 Watt 25 kHz

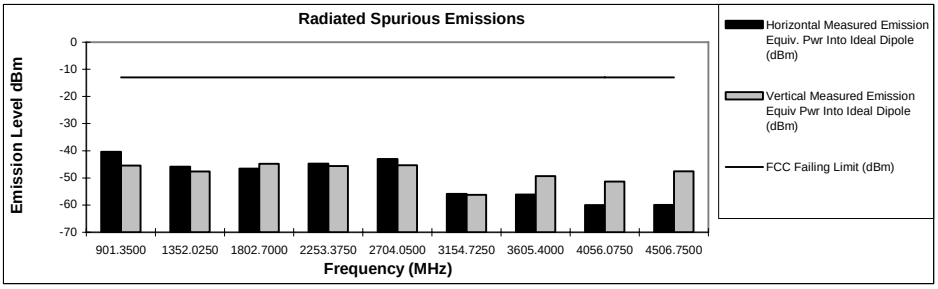
Motorola Inc. **FCC ID: AZ492FT4887**

Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A Supply

Tx Power: 4 Watts

450.675 MHz **Channel Spacing 25kHz | S/N 186TJW0053**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
901.3500	-13	-40.42	-45.42
1352.0250	-13	-45.87	-47.63
1802.7000	-13	-46.62	-44.83
2253.3750	-13	-44.75	-45.56
2704.0500	-13	-43.01	-45.33
3154.7250	-13	-55.88	-56.24
3605.4000	-13	-56.10	-49.29
4056.0750	-13	-60.01	-51.34
4506.7500	-13	-59.89	-47.53

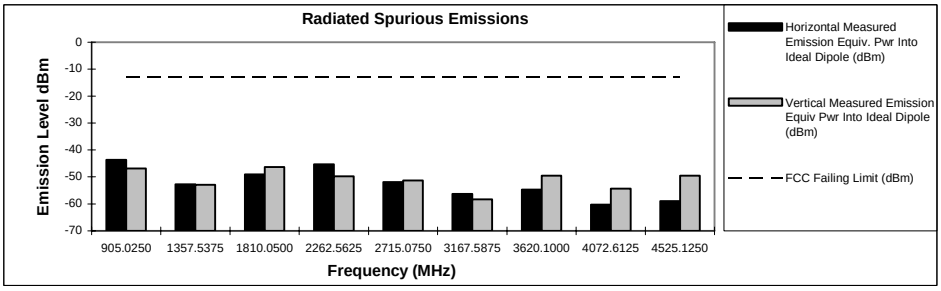


Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A Supply

Tx Power: 4 Watts

452.5125 MHz **Channel Spacing 25kHz | S/N 186TJW0053**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
905.0250	-13	-43.65	-46.81
1357.5375	-13	-52.68	-52.90
1810.0500	-13	-49.11	-46.32
2262.5625	-13	-45.35	-49.80
2715.0750	-13	-51.91	-51.34
3167.5875	-13	-56.29	-58.34
3620.1000	-13	-54.65	-49.51
4072.6125	-13	-60.30	-54.31
4525.1250	-13	-58.96	-49.48



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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 **April 23, 2009**
FCC Registration: 91932 / Industry Canada: IC109U-1

4 Watt 25 kHz

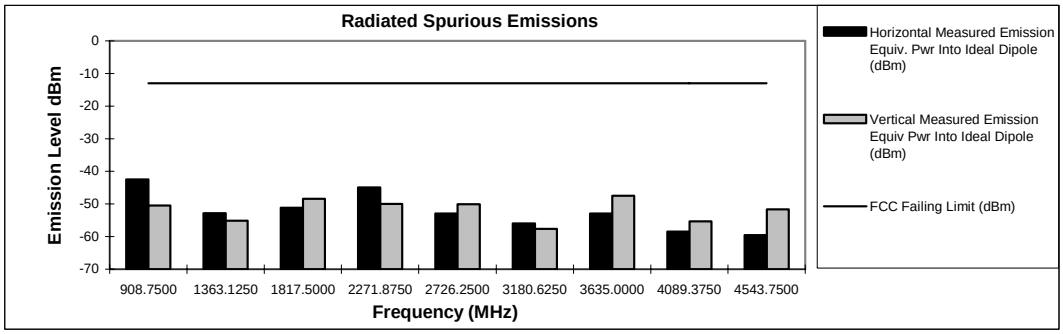
Motorola Inc. **FCC ID: AZ492FT4887**

Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A Supply

Tx Power: 4 Watts

454.375 MHz **Channel Spacing 25kHz | S/N 186TJW0053**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
908.7500	-13	-42.53	-50.54
1363.1250	-13	-52.81	-55.14
1817.5000	-13	-51.17	-48.44
2271.8750	-13	-44.92	-49.98
2726.2500	-13	-52.90	-50.04
3180.6250	-13	-55.98	-57.69
3635.0000	-13	-52.92	-47.47
4089.3750	-13	-58.48	-55.33
4543.7500	-13	-59.56	-51.63



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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 **April 23, 2009**

FCC Registration: 91932 / Industry Canada: IC109U-1

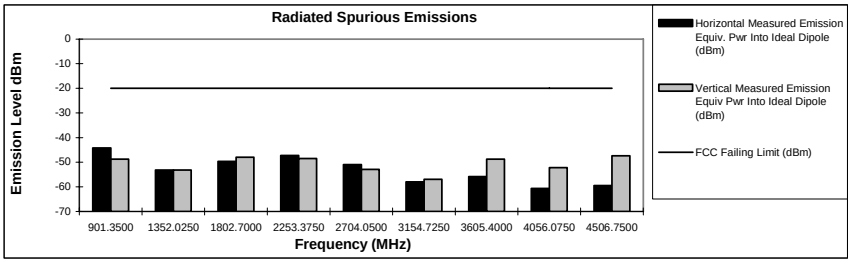
2 Watt 12.5 kHz

Motorola Inc. **FCC ID: AZ492FT4887**

Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A
Tx Power: 2 Watts

450.675 MHz **Channel Spacing 12.5kHz | S/N 186TJW0053**

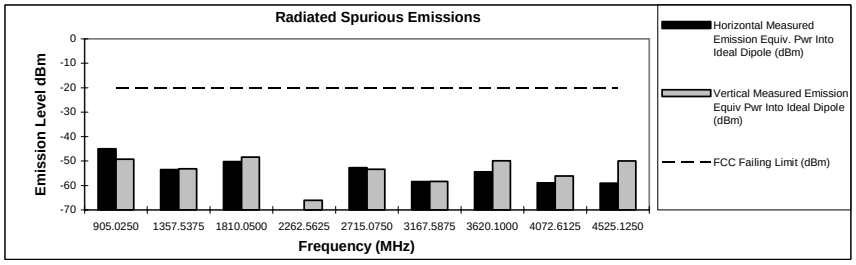
Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
901.3500	-20	-44.17	-48.82
1352.0250	-20	-53.19	-53.23
1802.7000	-20	-49.65	-48.02
2253.3750	-20	-47.29	-48.52
2704.0500	-20	-51.03	-52.98
3154.7250	-20	-58.01	-56.90
3605.4000	-20	-55.85	-48.80
4056.0750	-20	-60.62	-52.22
4506.7500	-20	-59.49	-47.38



Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A
Tx Power: 2 Watts

452.5125 MHz **Channel Spacing 12.5kHz | S/N 186TJW0053**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
905.0250	-20	-45.02	-49.21
1357.5375	-20	-53.52	-53.21
1810.0500	-20	-50.25	-48.40
2262.5625	-20	-70.22	-66.13
2715.0750	-20	-52.75	-53.38
3167.5875	-20	-58.41	-58.32
3620.1000	-20	-54.45	-49.86
4072.6125	-20	-58.94	-56.09
4525.1250	-20	-59.03	-49.92



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Motorola Plantation EMC Lab – Test Performed by: Frank Baader **April 23, 2009**
FCC Registration: 91932 / Industry Canada: IC109U-1

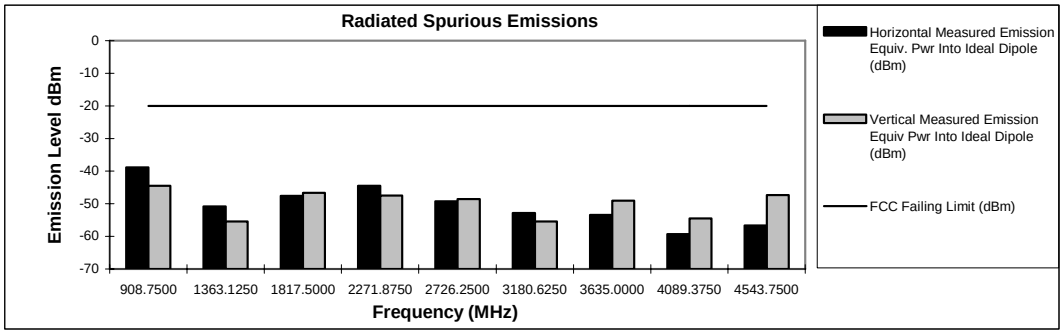
2 Watt 12.5 kHz

Motorola Inc. **FCC ID: AZ492FT4887**

Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A
Tx Power: 2 Watts

454.375 MHz **Channel Spacing 12.5kHz | S/N 186TJW0053**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
908.7500	-20	-38.87	-44.49
1363.1250	-20	-50.83	-55.46
1817.5000	-20	-47.59	-46.67
2271.8750	-20	-44.49	-47.51
2726.2500	-20	-49.27	-48.56
3180.6250	-20	-52.82	-55.44
3635.0000	-20	-53.38	-49.11
4089.3750	-20	-59.34	-54.54
4543.7500	-20	-56.63	-47.34



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Motorola Plantation EMC Lab – Test Performed by: Frank Baader **April 23, 2009**
FCC Registration: 91932 / Industry Canada: IC109U-1

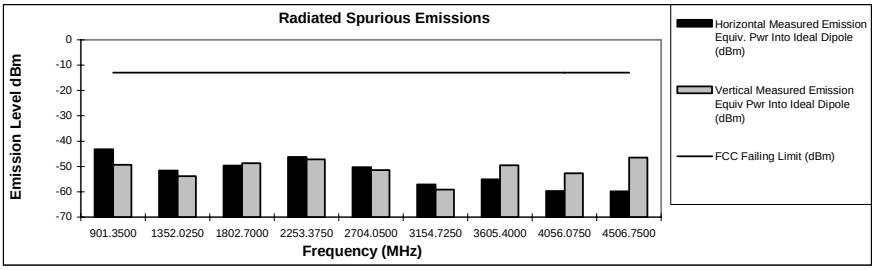
2 Watt 25 kHz

Motorola Inc. **FCC ID: AZ492FT4887**

Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A Supply
Tx Power: 2 Watts

450.675 MHz **Channel Spacing 25kHz | S/N 186TJW0053**

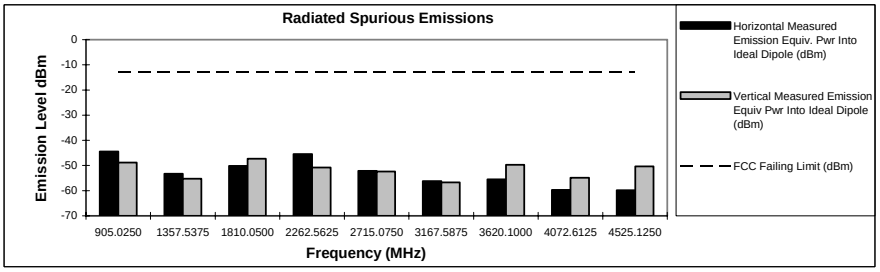
Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
901.3500	-13	-43.18	-49.30
1352.0250	-13	-51.58	-53.82
1802.7000	-13	-49.64	-48.71
2253.3750	-13	-46.20	-47.22
2704.0500	-13	-50.29	-51.42
3154.7250	-13	-57.11	-59.09
3605.4000	-13	-55.02	-49.48
4056.0750	-13	-59.70	-52.68
4506.7500	-13	-59.80	-46.53



Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A Supply
Tx Power: 2 Watts

452.5125 MHz **Channel Spacing 25kHz | S/N 186TJW0053**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
905.0250	-13	-44.47	-48.76
1357.5375	-13	-53.27	-55.26
1810.0500	-13	-50.17	-47.26
2262.5625	-13	-45.45	-50.74
2715.0750	-13	-52.09	-52.35
3167.5875	-13	-56.21	-56.71
3620.1000	-13	-55.45	-49.73
4072.6125	-13	-59.70	-54.84
4525.1250	-13	-59.82	-50.28



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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 **April 23, 2009**
FCC Registration: 91932 / Industry Canada: IC109U-1

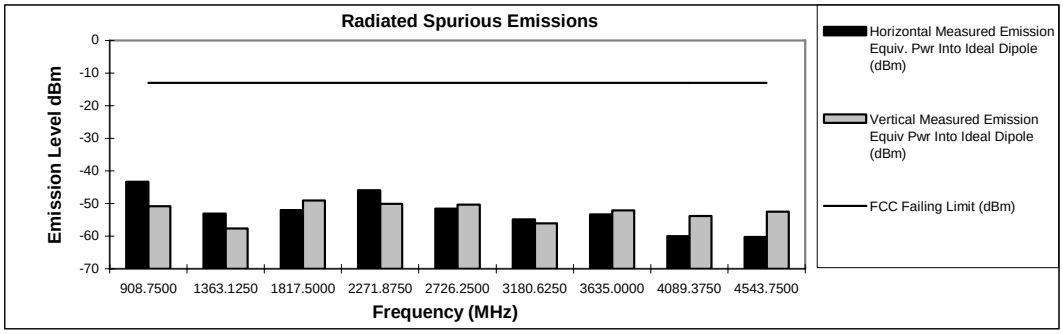
2 Watt 25 kHz

Motorola Inc. **FCC ID: AZ492FT4887**

Transmit Radiated Spurious Emissions: RPX Series & PMPN4003A Supply
Tx Power: 2 Watts

454.375 MHz **Channel Spacing 25kHz | S/N 186TJW0053**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
908.7500	-13	-43.33	-50.87
1363.1250	-13	-53.05	-57.69
1817.5000	-13	-51.98	-49.09
2271.8750	-13	-45.91	-50.11
2726.2500	-13	-51.60	-50.32
3180.6250	-13	-54.79	-56.04
3635.0000	-13	-53.32	-52.05
4089.3750	-13	-59.97	-53.83
4543.7500	-13	-60.22	-52.49



* 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 **April 23, 2009**
FCC Registration: 91932 / Industry Canada: IC109U-1

Conducted Emission 12.5 kHz

Transmitter Conducted Spurious Emissions

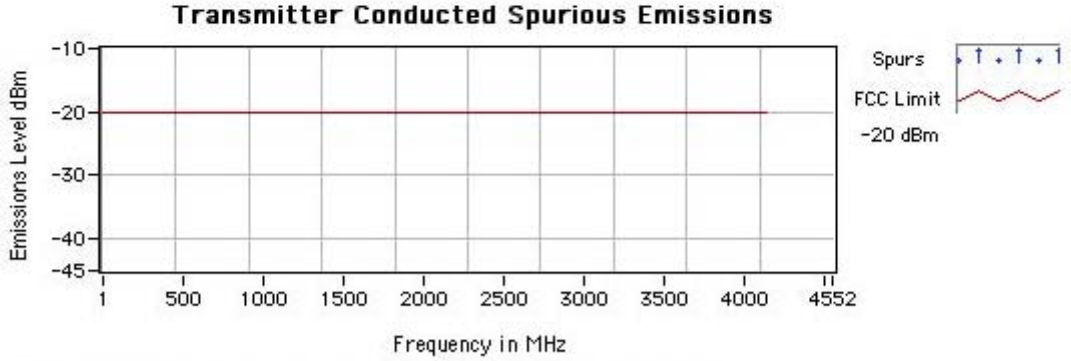
FREQ: 450.67500 MHz

Power 4.0 W

Channel Spacing: 12.50 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)



All Transmitter Spurious Emissions tested to the 10th Harmonic

No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

Test Performed By: **George Sirokie**

Conducted Emission 25 kHz

Transmitter Conducted Spurious Emissions

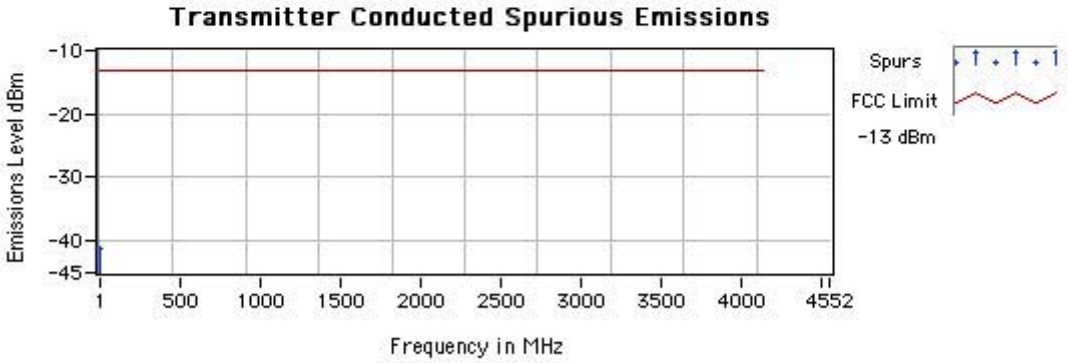
FREQ: 450.67500 MHz

Power 4.0 W

Channel Spacing: 25.00 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)
1.60000	-13.0	-41.3



All Transmitter Spurious Emissions tested to the 10th Harmonic

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

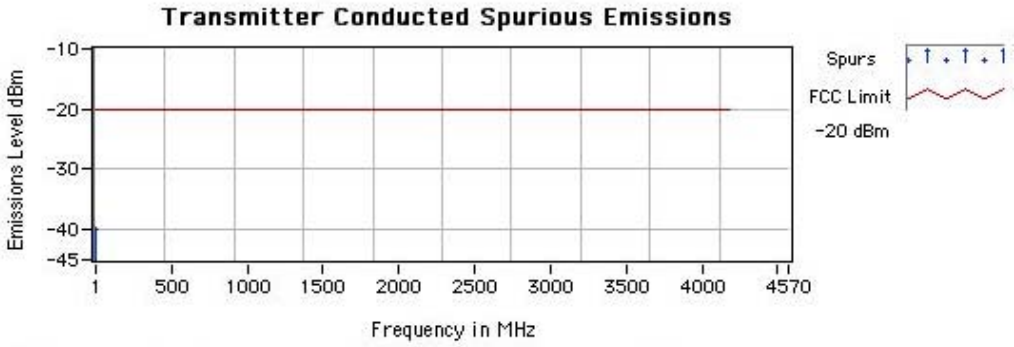
Test Performed By: **George Sirokie**

Conducted Emission 12.5 kHz

Transmitter Conducted Spurious Emissions
FREQ: 452.51250 MHz
Power 4.0 W
Channel Spacing: 12.50 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)
1.60000	-20.0	-40.1



All Transmitter Spurious Emissions tested to the 10th Harmonic

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

Test Performed By: **George Sirokie**

Conducted Emission 25 kHz

Transmitter Conducted Spurious Emissions

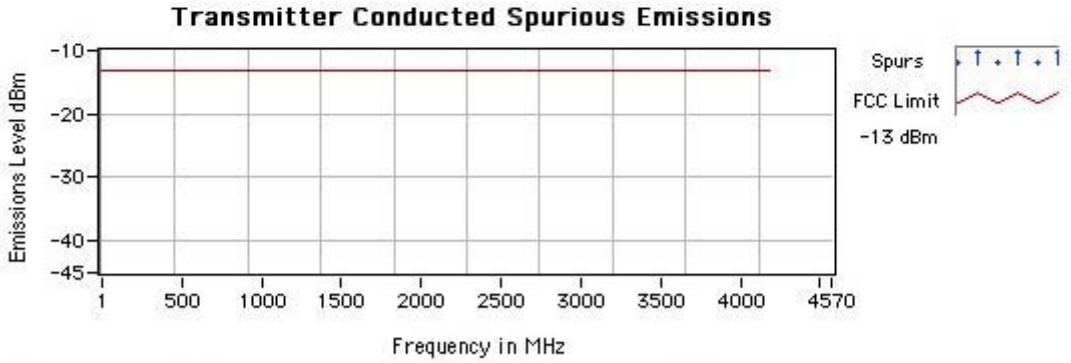
FREQ: 452.51250 MHz

Power 4.0 W

Channel Spacing: 25.00 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)



All Transmitter Spurious Emissions tested to the 10th Harmonic

No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

Test Performed By: **George Sirokie**

Conducted Emission 12.5 kHz

Transmitter Conducted Spurious Emissions

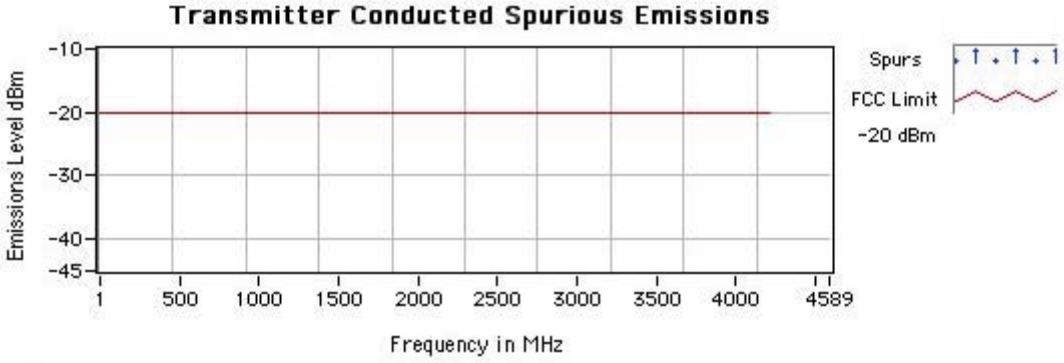
FREQ: 454.37500 MHz

Power 4.0 W

Channel Spacing: 12.50 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)



All Transmitter Spurious Emissions tested to the 10th Harmonic

No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

Test Performed By: **George Sirokie**

Conducted Emission 25 kHz

Transmitter Conducted Spurious Emissions

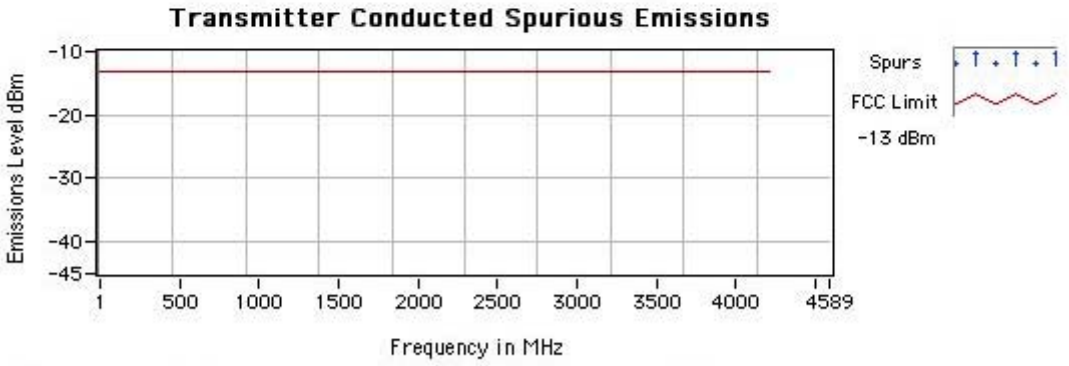
FREQ: 454.37500 MHz

Power 4.0 W

Channel Spacing: 25.00 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)



All Transmitter Spurious Emissions tested to the 10th Harmonic

No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

Test Performed By: **George Sirokie**

Conducted Emission 2 Watts 12.5 kHz

Transmitter Conducted Spurious Emissions

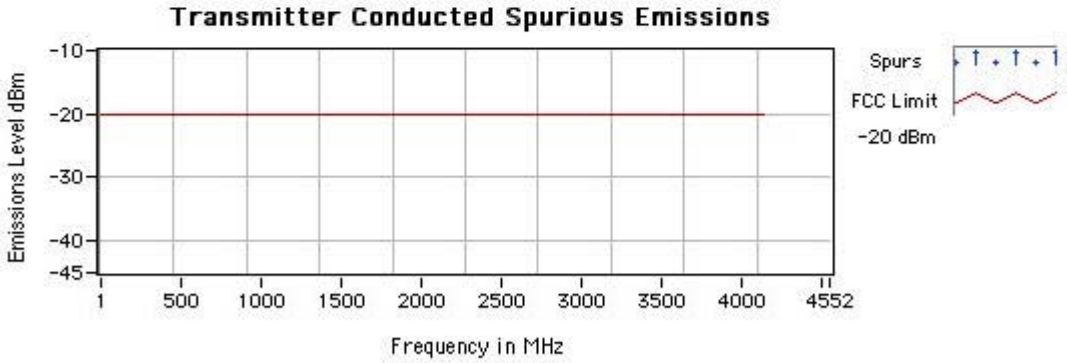
FREQ: 450.67500 MHz

Power 2.0 W

Channel Spacing: 12.50 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)



All Transmitter Spurious Emissions tested to the 10th Harmonic

No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

Test Performed By:

Conducted Emission 2 Watts 25 kHz

Transmitter Conducted Spurious Emissions

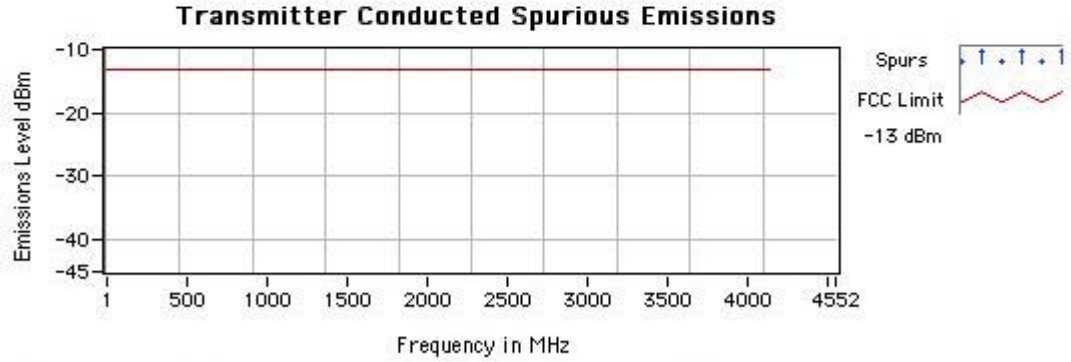
FREQ: 450.67500 MHz

Power 2.0 W

Channel Spacing: 25.00 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)



All Transmitter Spurious Emissions tested to the 10th Harmonic

No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

Test Performed By:

Conducted Emission 2 Watts 12.5 kHz

Transmitter Conducted Spurious Emissions

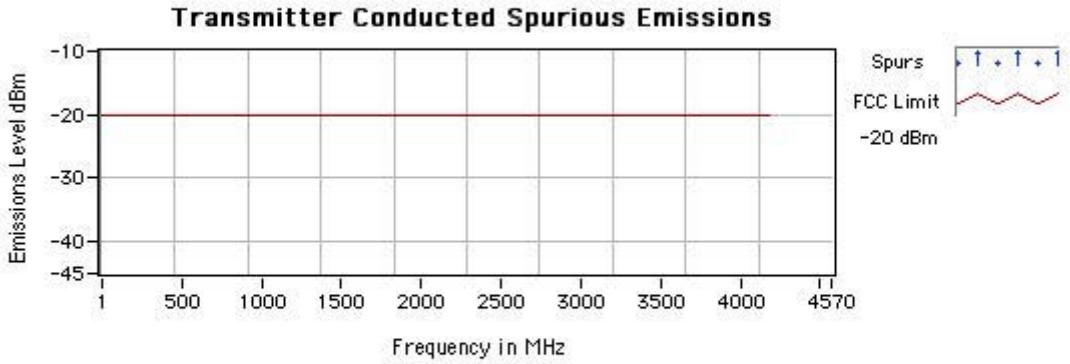
FREQ: 452.51250 MHz

Power 2.0 W

Channel Spacing: 12.50 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)



All Transmitter Spurious Emissions tested to the 10th Harmonic

No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

Test Performed By:

Conducted Emission 2 Watts 25 kHz

Transmitter Conducted Spurious Emissions

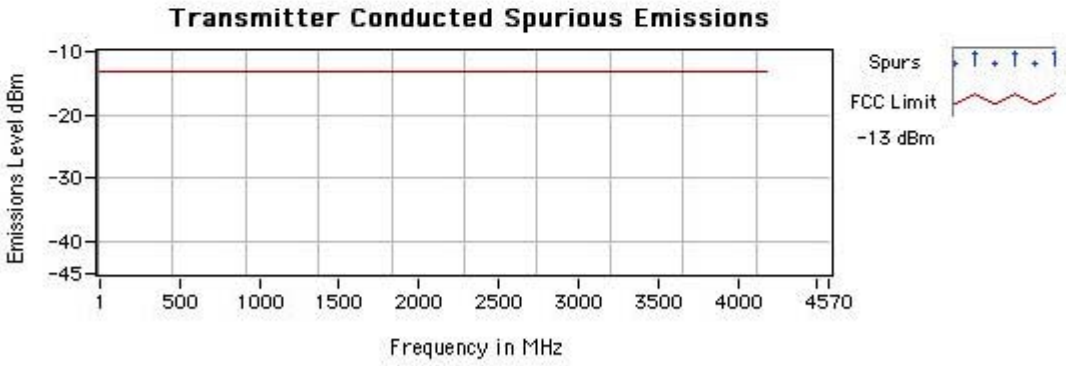
FREQ: 452.51250 MHz

Power 2.0 W

Channel Spacing: 25.00 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)



All Transmitter Spurious Emissions tested to the 10th Harmonic

No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

Test Performed By:

Conducted Emission 2 Watts 12.5 kHz

Transmitter Conducted Spurious Emissions

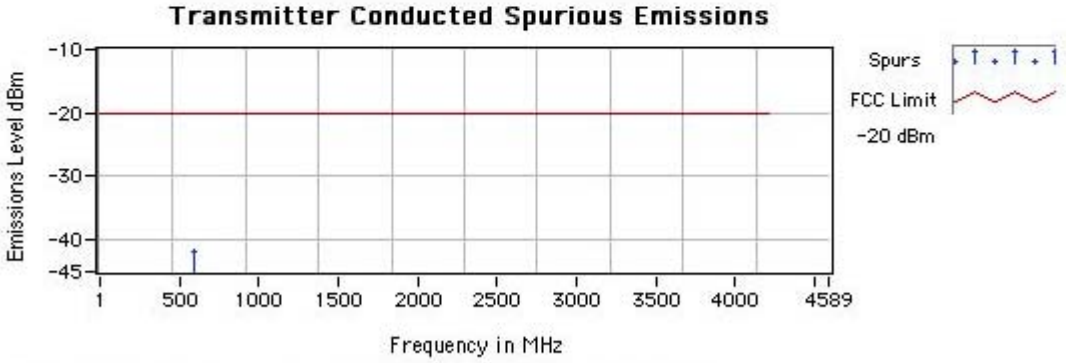
FREQ: 454.37500 MHz

Power 2.0 W

Channel Spacing: 12.50 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)
642.80000	-20.0	-41.9



All Transmitter Spurious Emissions tested to the 10th Harmonic

Motorola Plantation ATE Lab

Tuesday, 28th July 2009

Test Performed By:

Conducted Emission 2 Watts 25 kHz

Transmitter Conducted Spurious Emissions

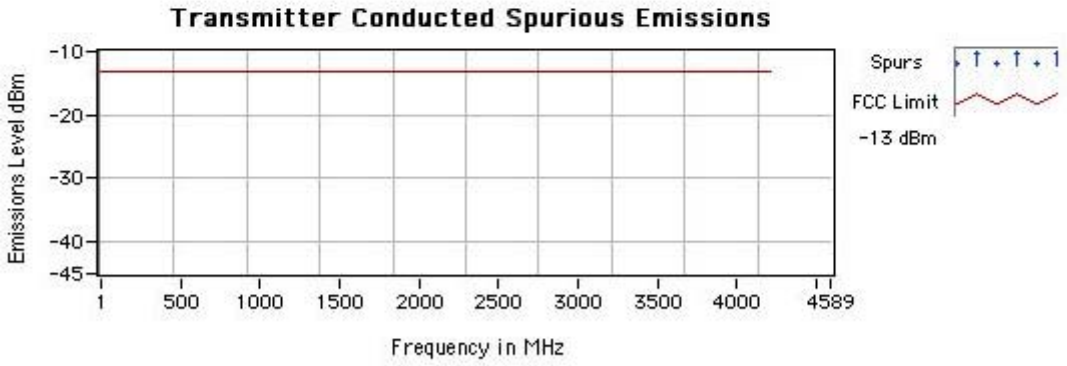
FREQ: 454.37500 MHz

Power 2.0 W

Channel Spacing: 25.00 kHz

FCC ID: AZ492FT4887

Spurious Frequency	FCC Limit	Measured Value (dBm)



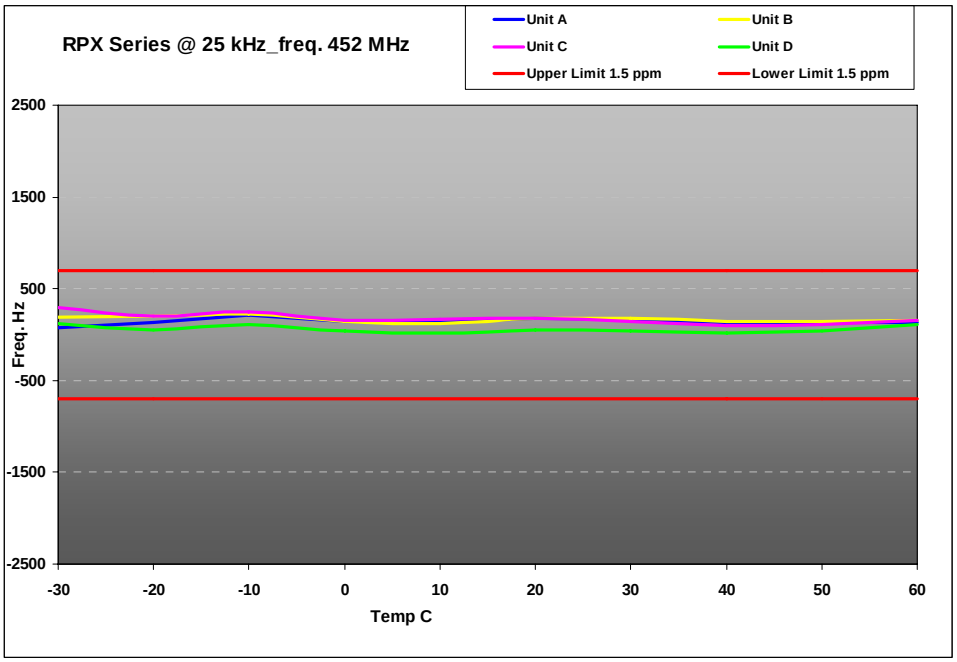
All Transmitter Spurious Emissions tested to the 10th Harmonic

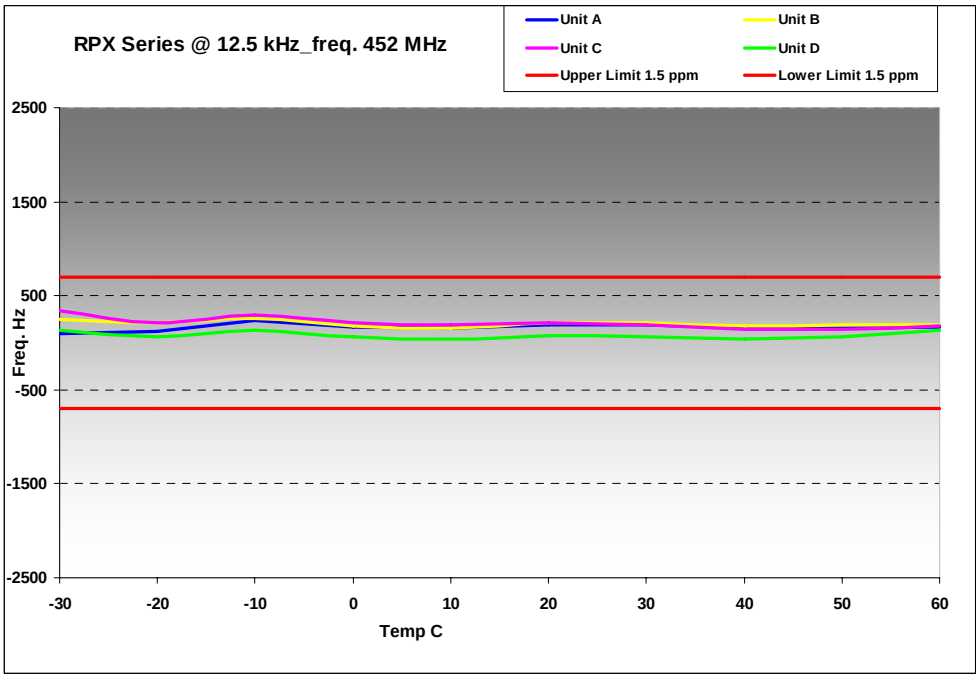
No Spurs Found Above -45 dBm

Motorola Plantation ATE Lab **Tuesday, 28th July 2009**

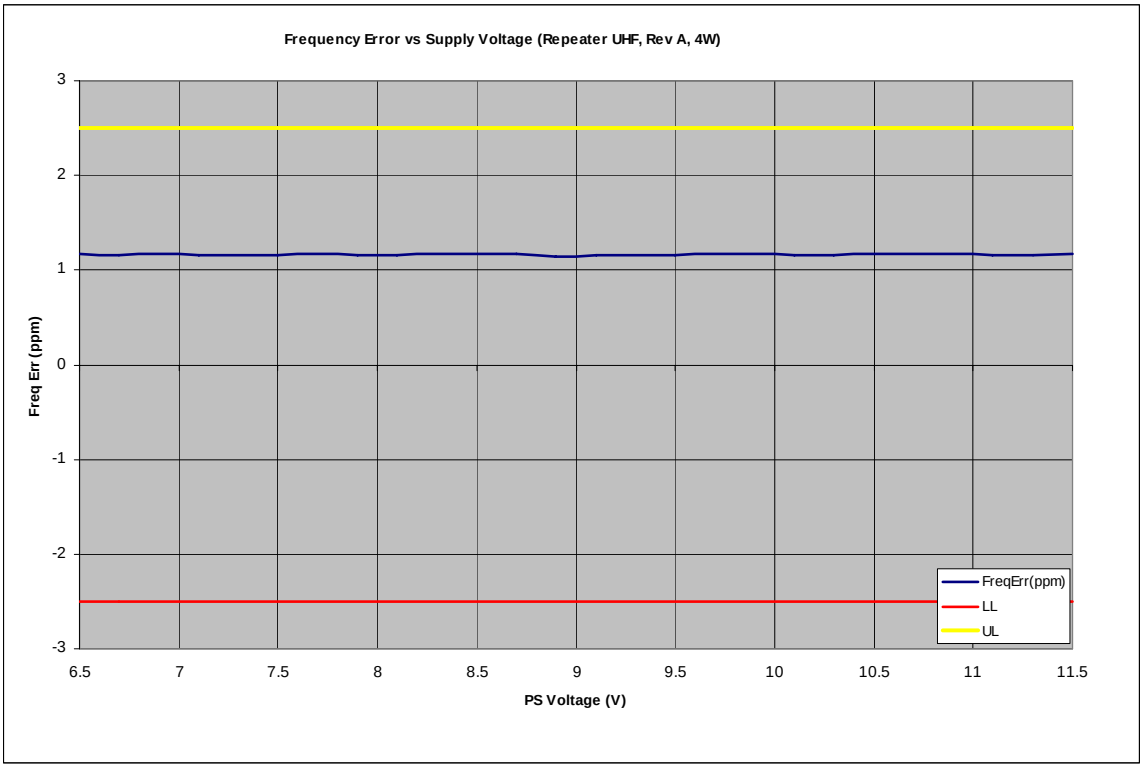
Test Performed By:

Frequency Stability over Temperature



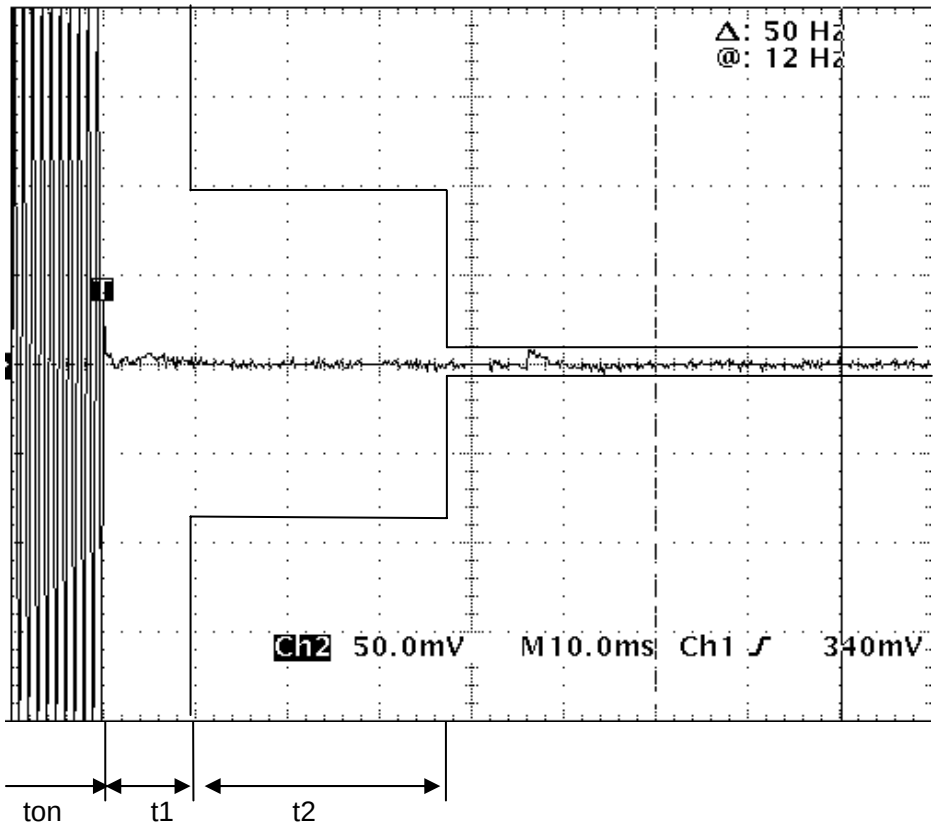


Frequency Error over Voltage



Reset Voltage 5.5Volts

Transient Frequency Behavior TX on 25 kHz (4Watts)



+25 kHz

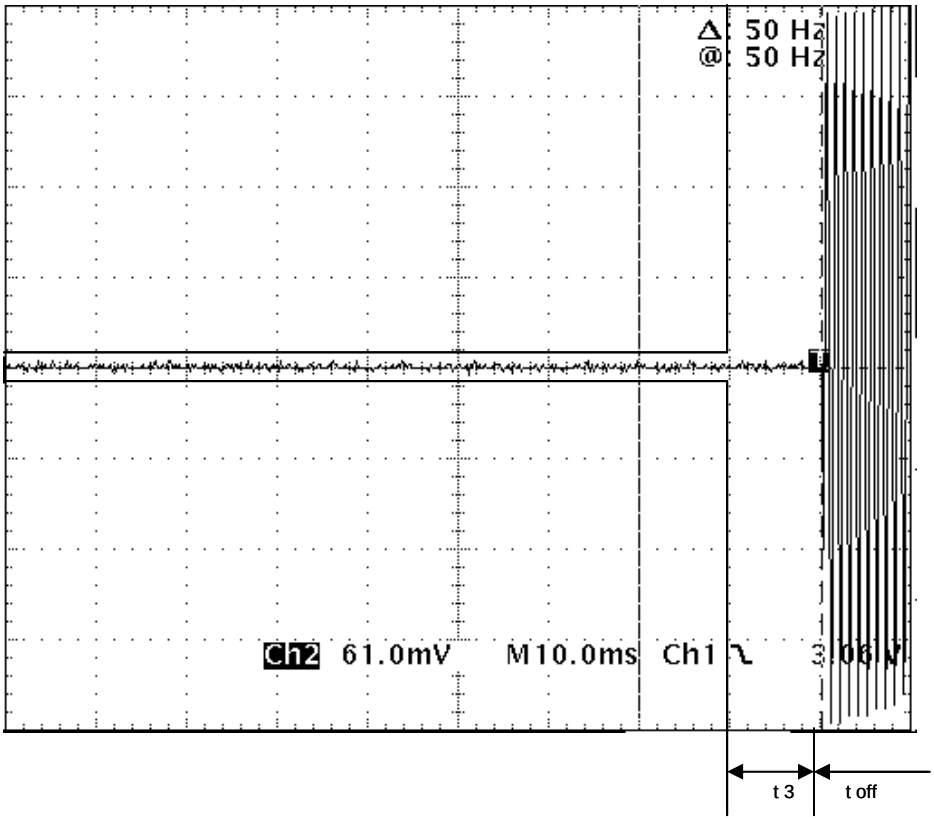
+12.5 kHz

FCC Limits
Assigned Frequency
FCC Limits

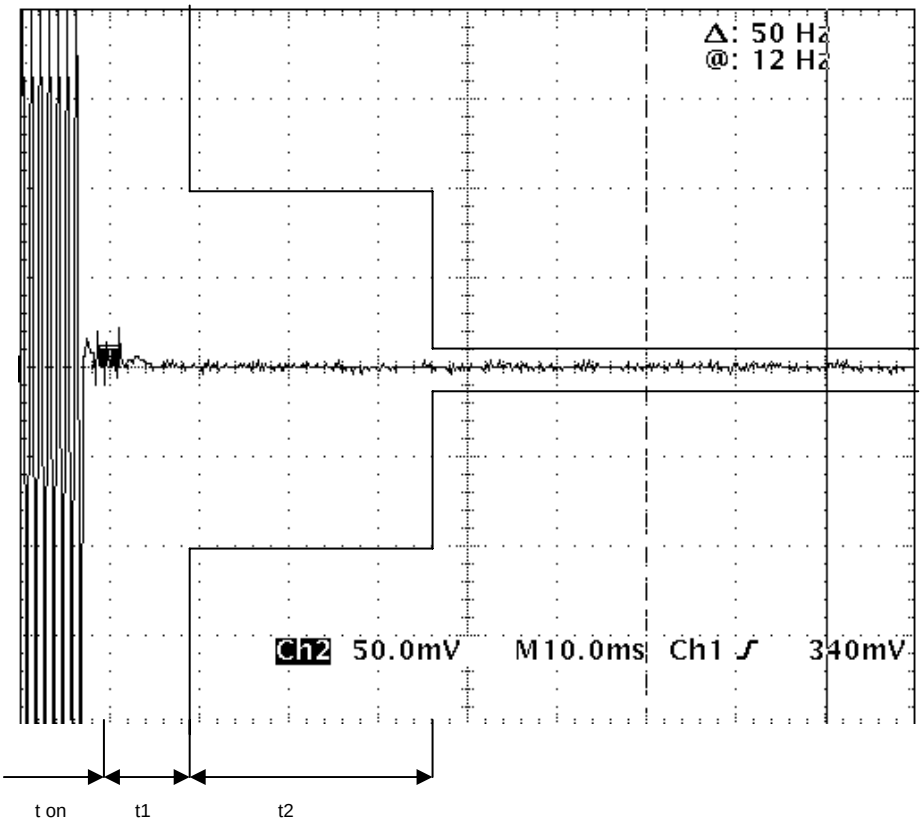
-12.5 kHz

-25 kHz

Transient Frequency Behavior TX off 25 kHz (4Watts)



Transient Frequency Behavior TX on 12.5 kHz (4Watts)



+12.5 kHz

+6.25 kHz

FCC Limits

Assigned Frequency

FCC Limits

-6.25 kHz

-12.5 kHz

Transient Frequency Behavior TX off 12.5 kHz (4Watts)

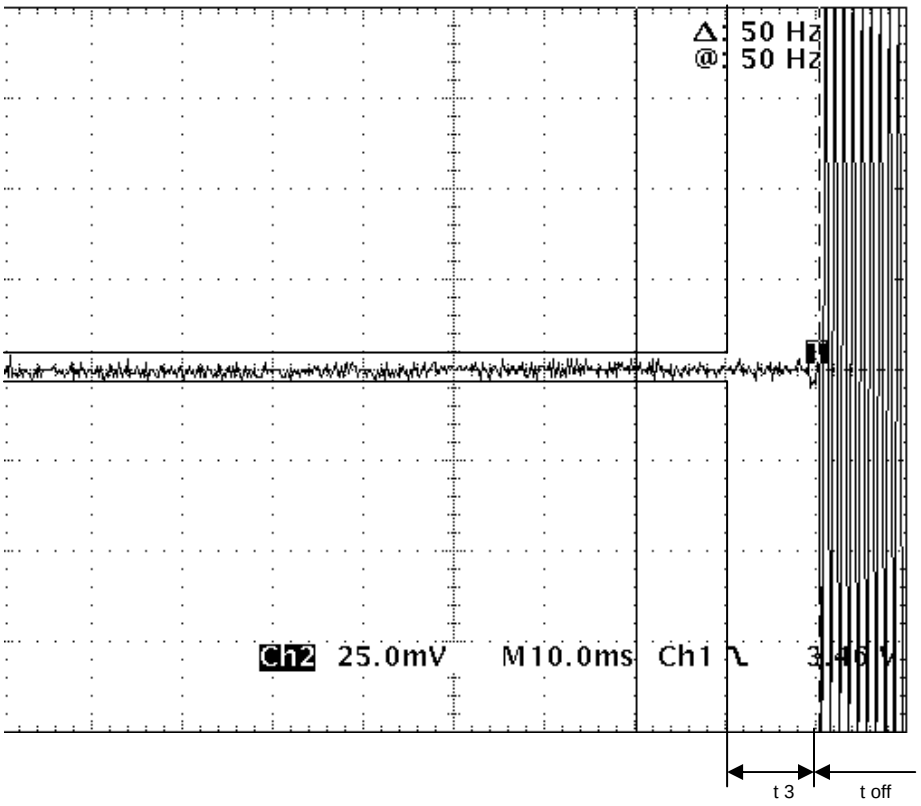
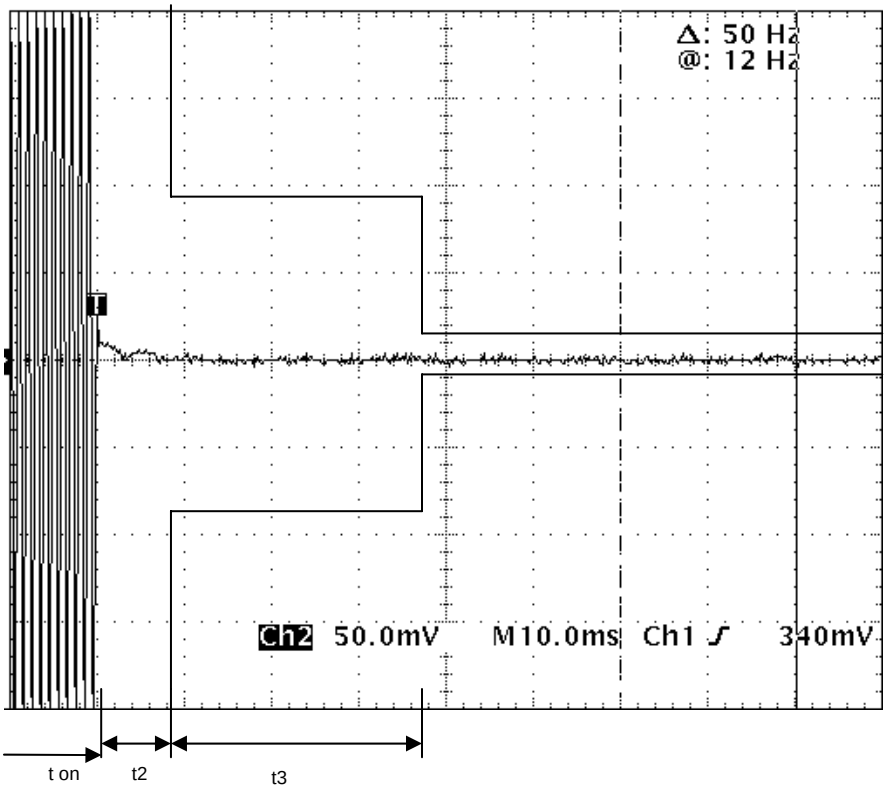


EXHIBIT 6G-4

Transient Frequency Behavior TX on 25 kHz (2Watts)



+25 kHz

+12.5 kHz

FCC Limits

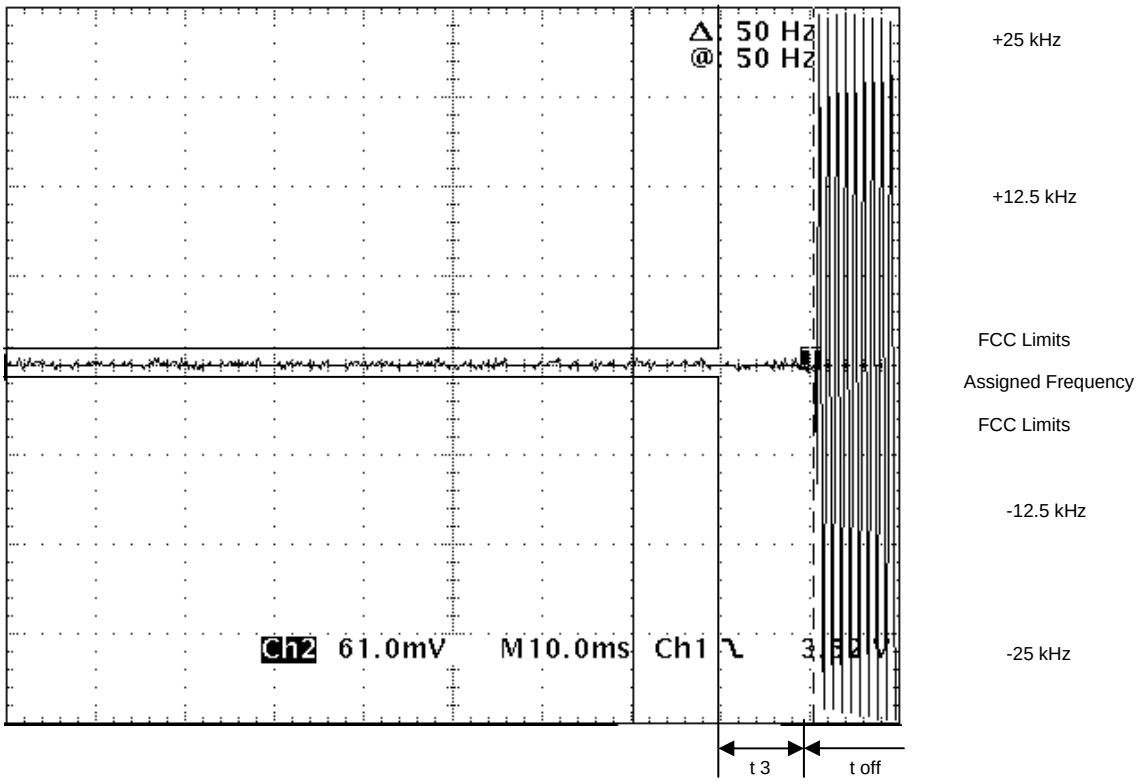
Assigned Frequency

FCC Limits

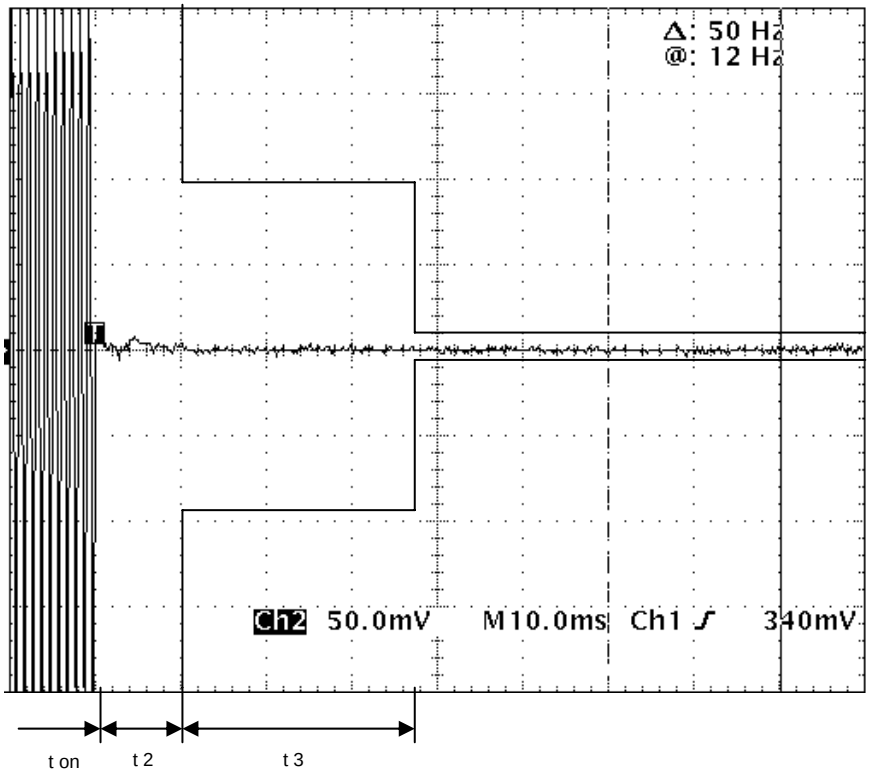
-12.5 kHz

-25 kHz

Transient Frequency Behavior TX off 25 kHz (2Watts)



Transient Frequency Behavior TX on 12.5 kHz (2Watts)



+12.5 kHz

+6.25 kHz

FCC Limits

Assigned Frequency

FCC Limits

-6.25 kHz

-12.5 kHz

Transient Frequency Behavior TX off 12.5 kHz (2Watts)