

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.

775.9875 MHz

Measured RF output	3.0 Watts
Nominal DC voltage	7.5 Volts
Nominal DC Current	1.25 Amps
Primary Supply Voltage	7.5 Volts

Measured RF output	2.0 Watts
Nominal DC voltage	7.5 Volts
Nominal DC Current	1.00 Amps
Primary Supply Voltage	7.5 Volts

Measured RF output	1.0 Watt
Nominal DC voltage	7.5 Volts
Nominal DC Current	0.75 Amps
Primary Supply Voltage	7.5 Volts

851.0125 MHz

Measured RF output	3.0 Watts
Nominal DC voltage	7.5 Volts
Nominal DC Current	1.20 Amps
Primary Supply Voltage	7.5 Volts

Measured RF output	2.0 Watts
Nominal DC voltage	7.5 Volts
Nominal DC Current	0.95 Amps
Primary Supply Voltage	7.5 Volts

Measured RF output	1.0 Watt
Nominal DC voltage	7.5 Volts
Nominal DC Current	0.70 Amps
Primary Supply Voltage	7.5 Volts

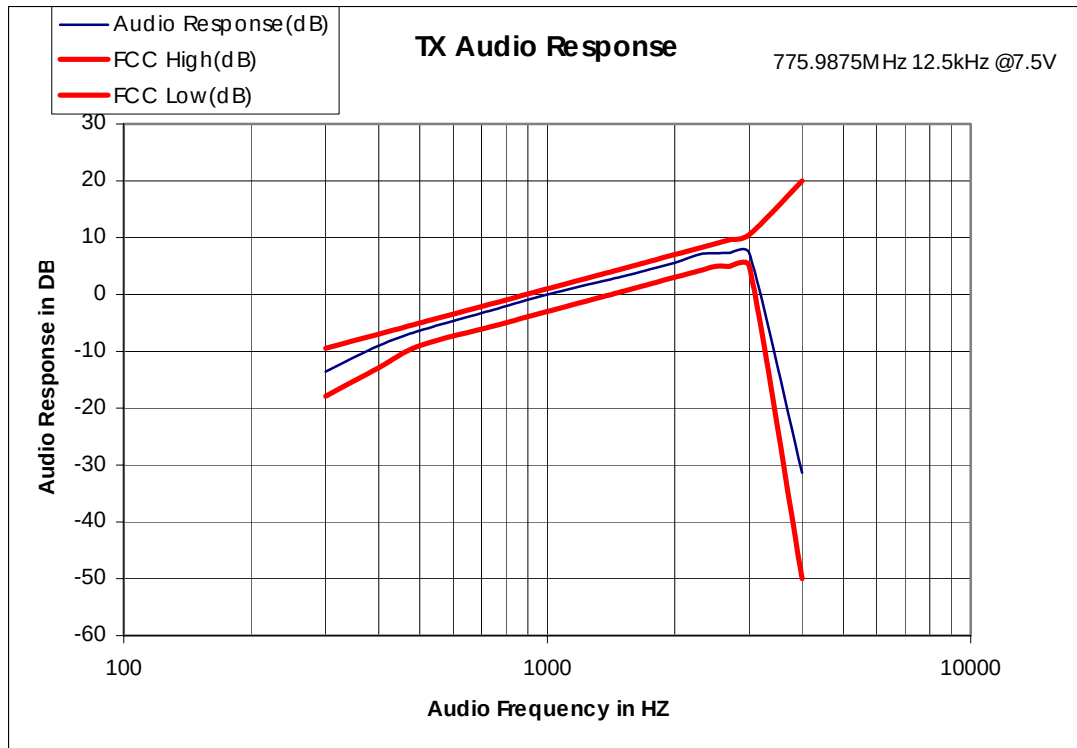


EXHIBIT 6B-1

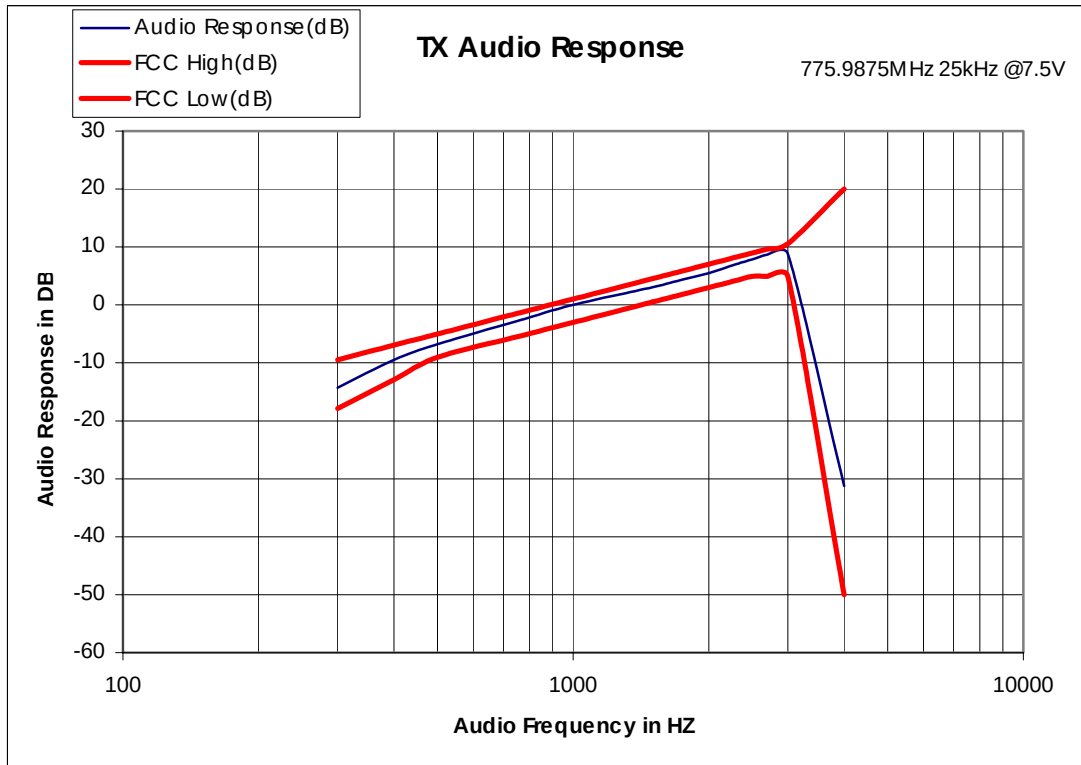


EXHIBIT 6B-2

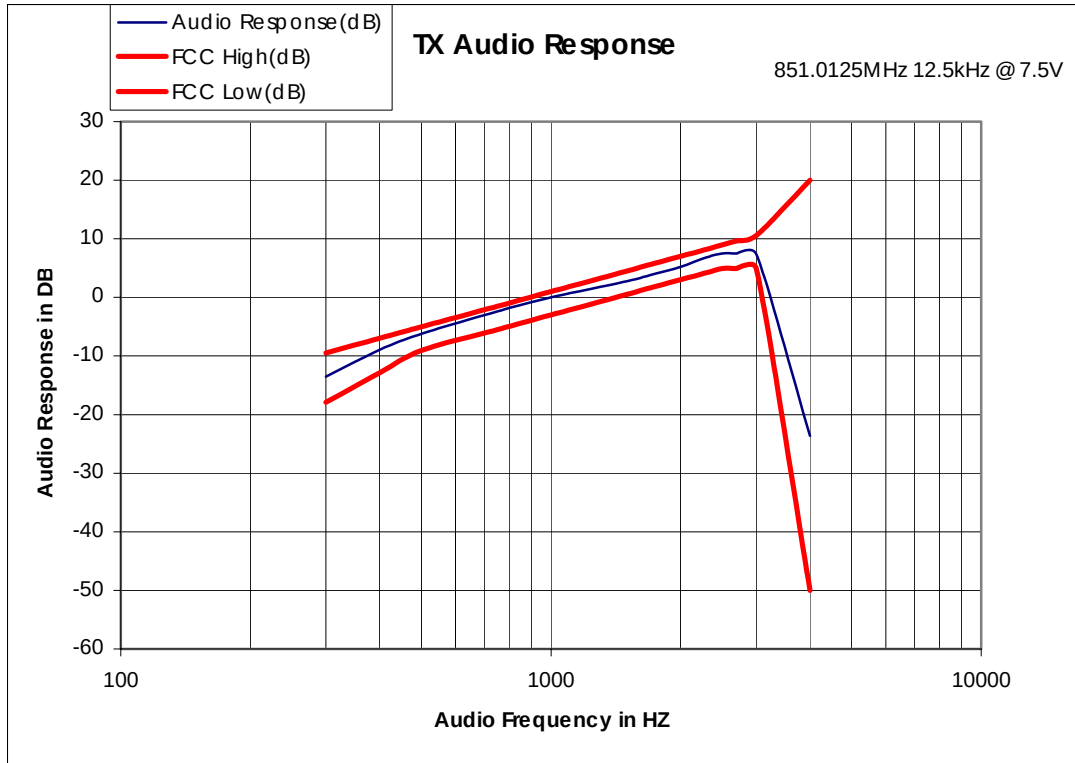


EXHIBIT 6B-3

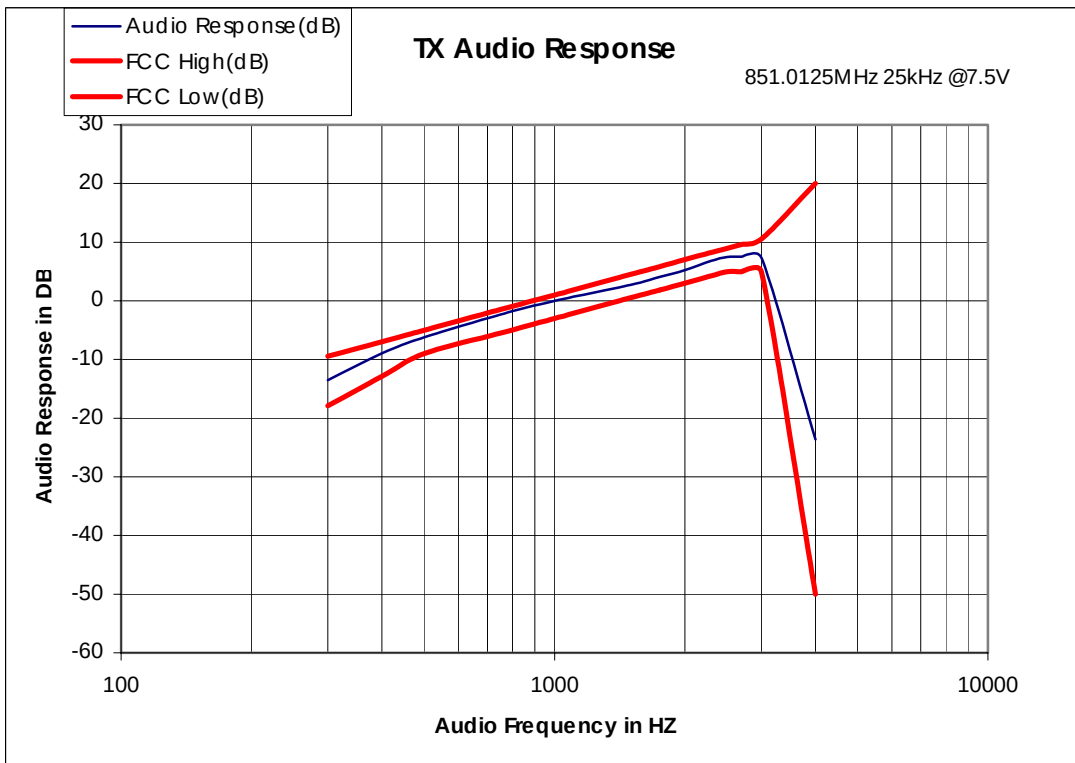
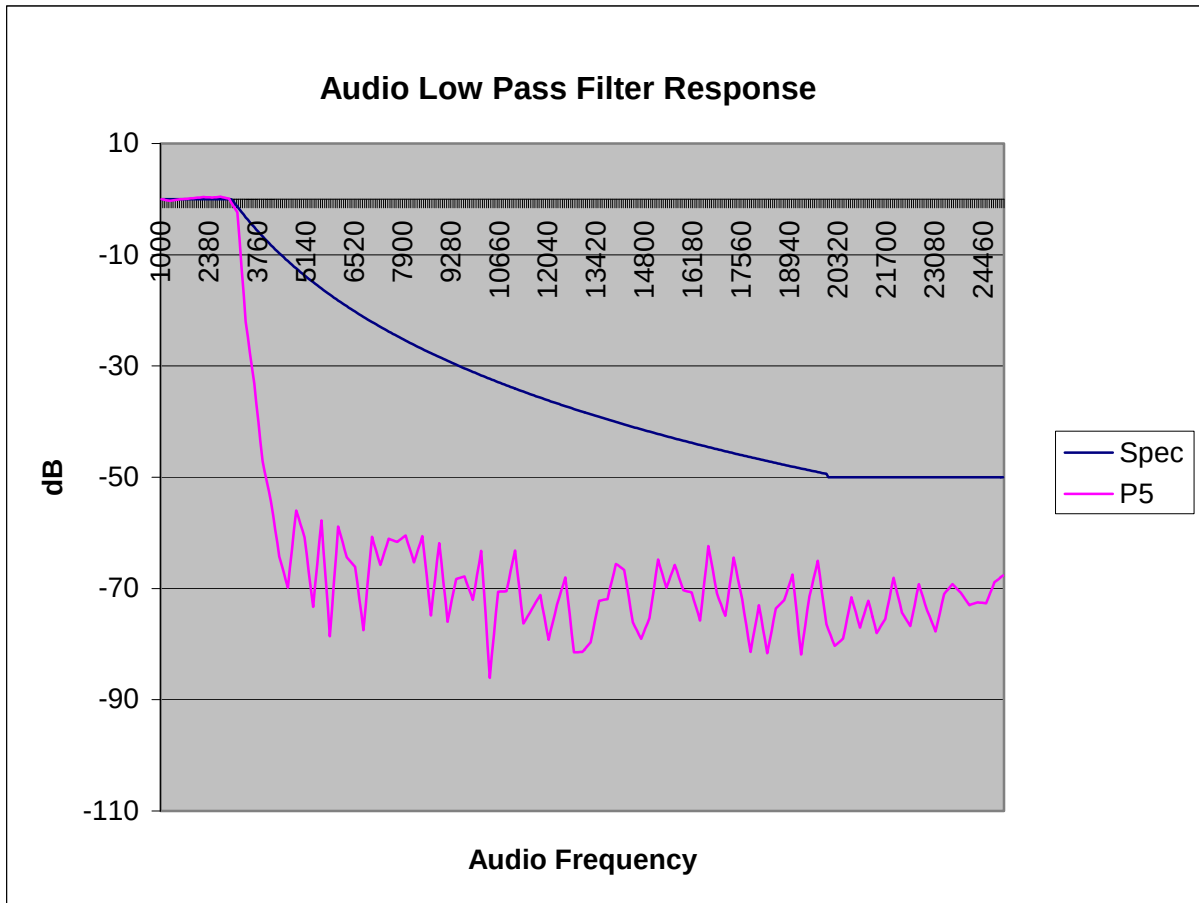


EXHIBIT 6B-4



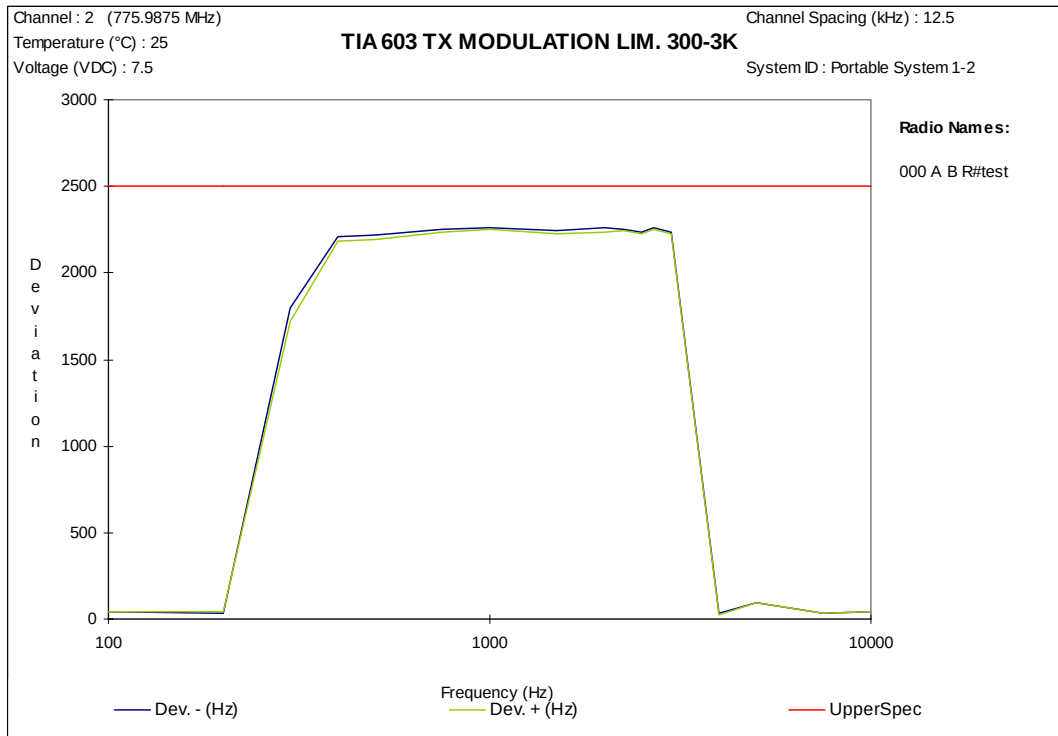


EXHIBIT 6D-1

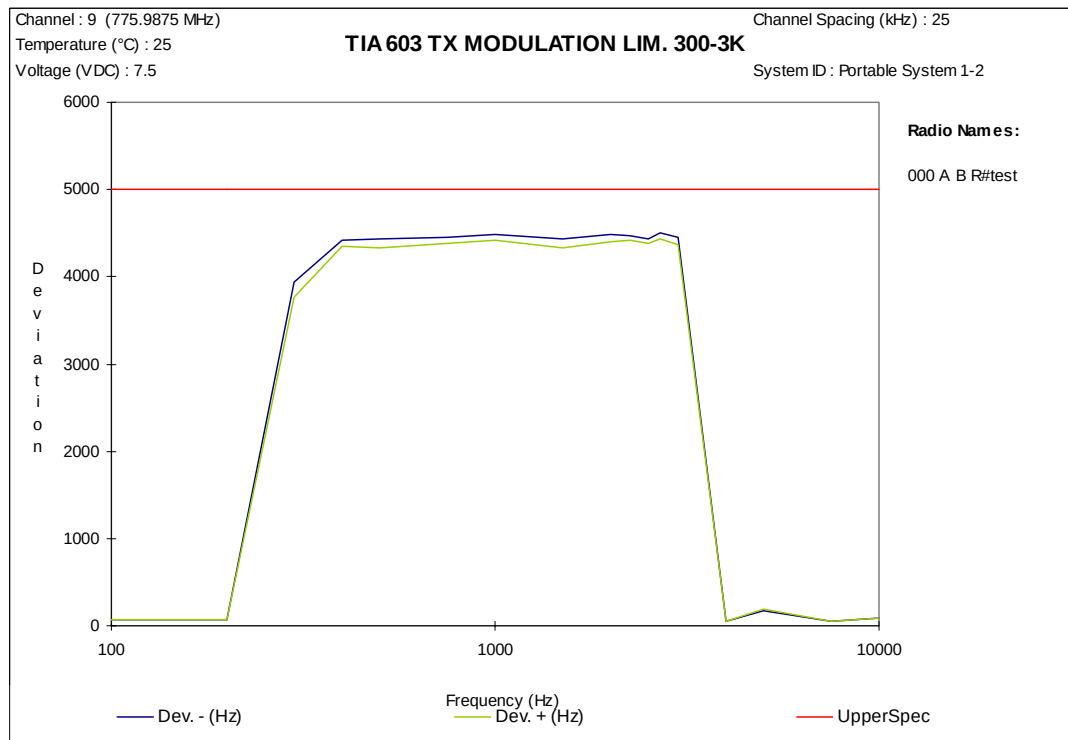


EXHIBIT 6D-2

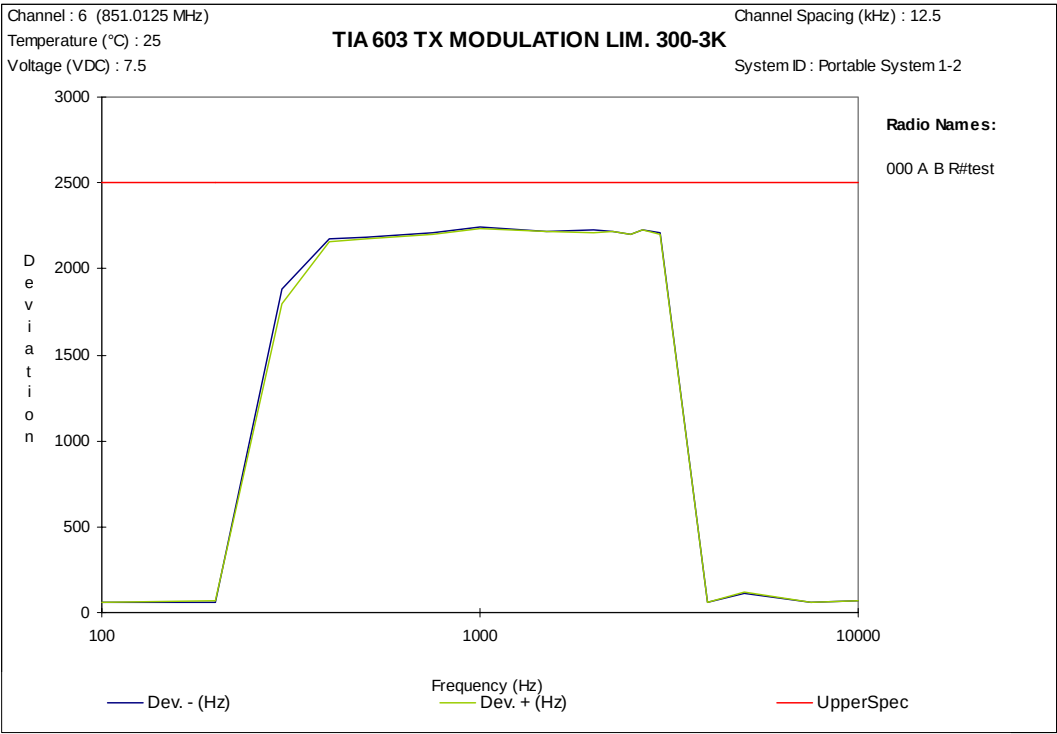


EXHIBIT 6D-3

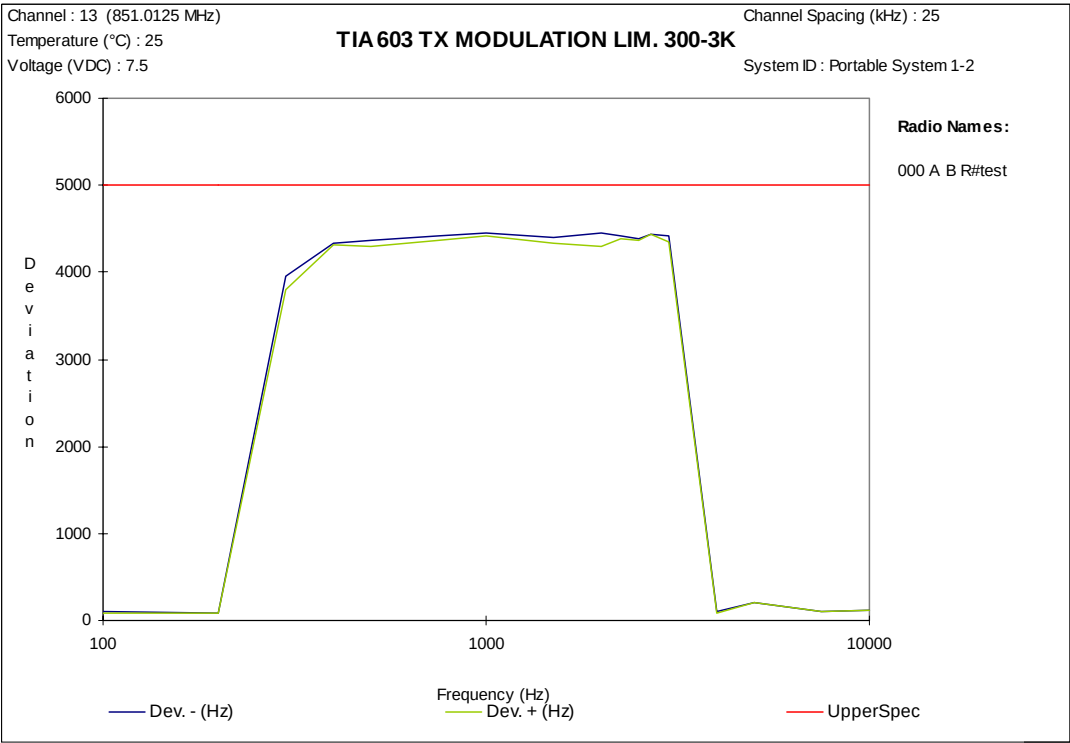


EXHIBIT 6D-4

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: AZ489FT5804.

EXHIBIT 6E-1

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.

EXHIBIT 6E-2

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 6E-3

Digital (12.5 kHz Channelization, Digital Data):

Emission Designator 8K10F1D

Measurements per Rule Part 2.202 Section C (4) were done because Part 2.202 Section g Table III A, 1 formulation produces an excessive result using the value of K recommended in the Table. Therefore, the 99% energy rule (title 47CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It basically states that 99% of the modulation energy falls within X KHz, in this case, 8.10 kHz. Measurements were performed in accordance with TIA/EIA TSB102.CAAB Section 2.2.5.2. The emission mask was obtained from 47CFR 90.210(d).

F1D portion of the designator indicates digital data.

Therefore, the entire designator for 12.5 kHz channelization digital data is 8K10F1D.

EXHIBIT 6E-4

Digital (12.5 kHz Channelization, Digital Voice):

Emission Designator 8K10F1E

Measurements per Rule Part 2.202 Section C (4) were done because Part 2.202 Section g Table III A, 1 formulation produces an excessive result using the value of K recommended in the Table. Therefore, the 99% energy rule (title 47CFR 2.989) was used for digital mode and is more accurate than Carson's rule. It basically states that 99% of the modulation energy falls within X KHz, in this case, 8.10 kHz. Measurements were performed in accordance with TIA/EIA TSB102.CAAB Section 2.2.5.2. The emission mask was obtained from 47CFR 90.210(d).

F1E portion of the designator indicates digital voice.

Therefore, the entire designator for 12.5 kHz channelization digital voice is 8K10F1E.

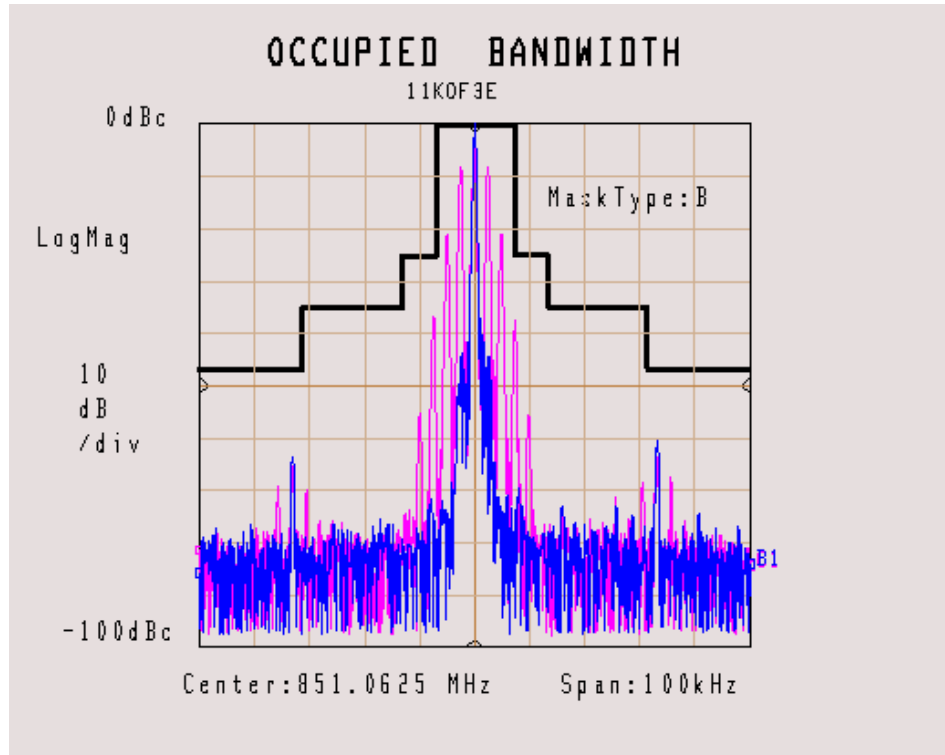


EXHIBIT 6E-1

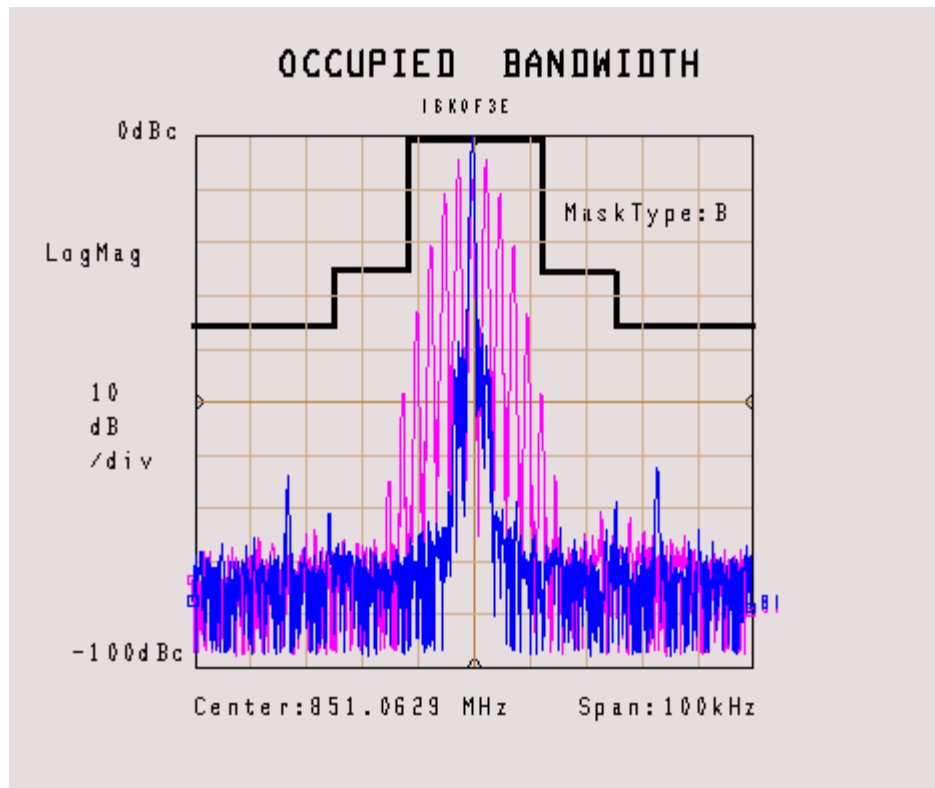


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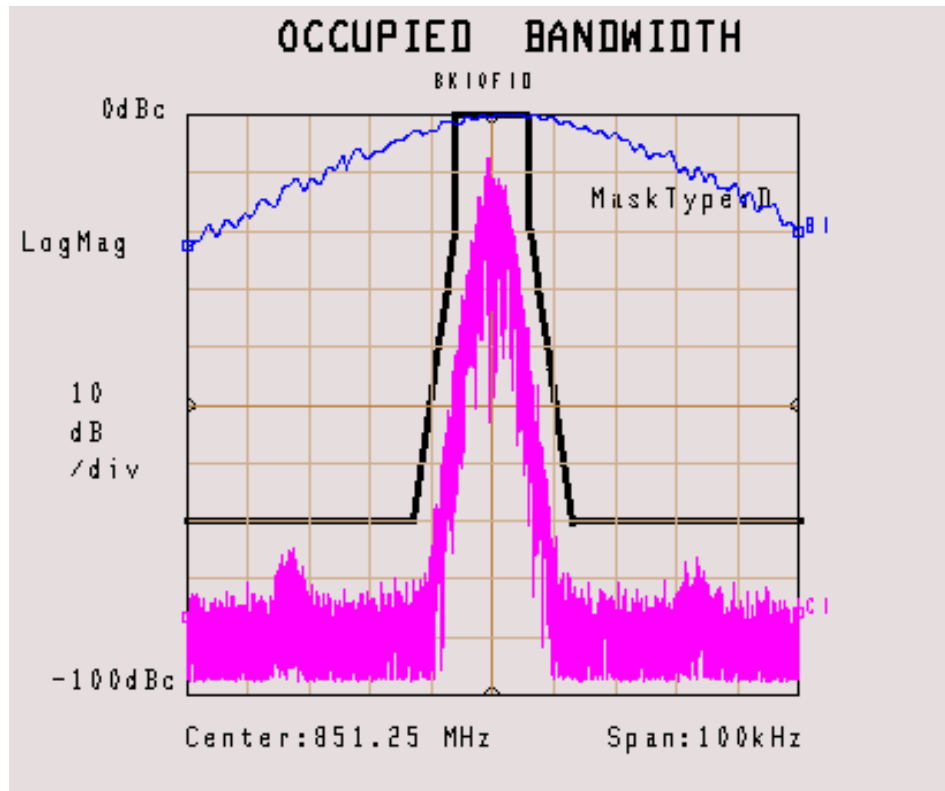


EXHIBIT 6E-3

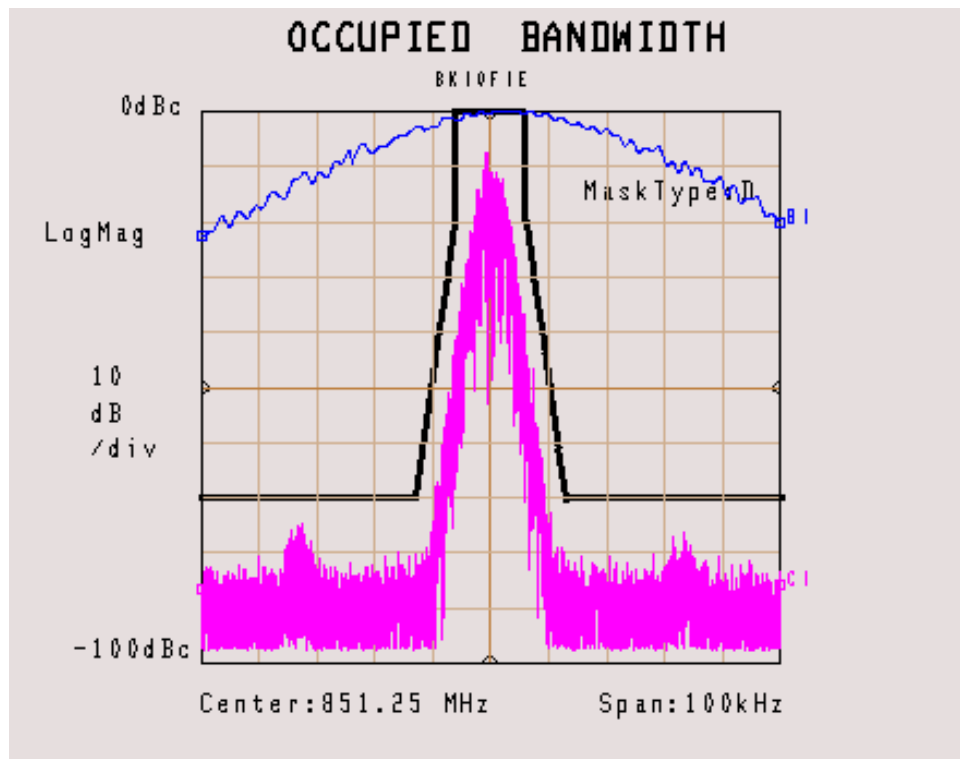


EXHIBIT 6E-4

Adjacent Channel Power

794.375 MHz		2.9 Watts		Channel Spacing: 12.5kHz Digital		
Offset from Center Frequency (kHz)	Nominal Resolution	Measurement Bandwidth	ACP (dBc)		FCC limit	
			low side	high side		
9.375	100	6.25	-42.4	-42.3	-40	
15.625	100	6.25	-74.2	-72.1	-60	
21.875	100	6.25	-75.1	-73.1	-60	
37.5	300	25	-66.6	-64.3	-60	
62.5	300	25	-74.7	-74.3	-65	
87.5	300	25	-78.8	-79	-65	
150	1100	100	-75.8	-76	-65	
250	1100	100	-66.2	-66.7	-65	
350	1100	100	-80.2	-80.1	-65	
>400KHz to 12MHz	30000	30 (swept)	<-75		-75	
12MHz to paired Receive Band	30000	30 (swept)	<-75		-75	
In the paired RX Band	30000	30 (swept)	<-100		-100	
*** NOTE: This transmitter does not incorporate automatic power control. Therefore, it was tested to comply to the Maximum ACCP Relative (dBc) limits of FCC Rule Part 90.543(a).						

EXHIBIT 6F-1

Adjacent Channel Power

794.075 MHz		2.9 Watts		Channel Spacing: 12.5kHz Analog		
Offset from Center Frequency (kHz)	Nominal Resolution	Measurement Bandwidth	ACP (dBc)		FCC limit	
			low side	high side		
9.375	100	6.25	-53.8	-50.1	-40	
15.625	100	6.25	-70.5	-66.9	-60	
21.875	100	6.25	-71.6	-70.2	-60	
37.5	300	25	-68.6	-67	-60	
62.5	300	25	-69	-68.7	-65	
87.5	300	25	-70.1	-70.7	-65	
150	1100	100	-74.2	-73.9	-65	
250	1100	100	-67	-67.7	-65	
350	1100	100	-76.5	-76.3	-65	
>400KHz to 12MHz	30000	30 (swept)	<-75		-75	
12MHz to paired Receive Band	30000	30 (swept)	<-75		-75	
In the paired RX Band	30000	30 (swept)	<-100		-100	
*** NOTE: This transmitter does not incorporate automatic power control. Therefore, it was tested to comply to the Maximum ACCP Relative (dBc) limits of FCC Rule Part 90.543(a).						

EXHIBIT 6F-2

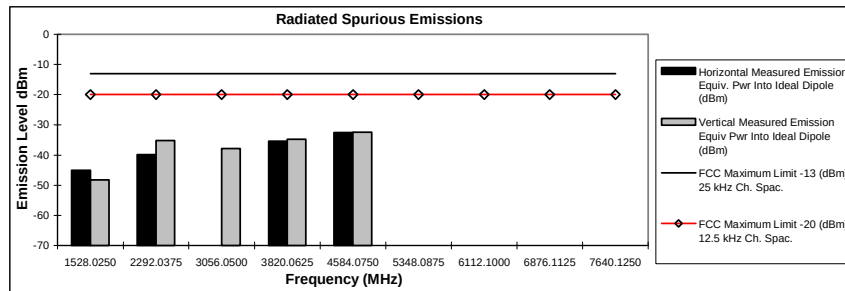
Adjacent Channel Power

794.075 MHz		2.9 Watts		Channel Spacing: 25kHz Analog		
Offset from Center Frequency (kHz)	Nominal Resolution	Measurement Bandwidth	ACP (dBc)		FCC limit	
			low side	high side		
15.625	100	6.25	-70.75	-66.9	-40	
21.875	100	6.25	-71.7	-69.3	-60	
37.5	300	25	-65.2	-63.5	-60	
62.5	300	25	-69.8	-69.5	-65	
87.5	300	25	-68	-69	-65	
150	1100	100	-71.3	-71.2	-65	
250	1100	100	-67	-67.4	-65	
350	1100	100	-76.3	-76.4	-65	
>400KHz to 12MHz	30000	30 (swept)	<-75		-75	
12MHz to paired						
Receive Band	30000	30 (swept)	<-75		-75	
In the paired RX Band	30000	30 (swept)	<-100		-100	
*** NOTE: This transmitter does not incorporate automatic power control. Therefore, it was tested to comply to the Maximum ACCP Relative (dBc) limits of FCC Rule Part 90.543(a).						

EXHIBIT 6F-3

Transmitter Radiated Spurious Emissions: XTS2500

764.0125 MHz		2.9 Watts		Channel Spacing 12.5kHz	
Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	
1528.0250	-13	-20	-45.01	-48.24	
2292.0375	-13	-20	-39.89	-35.17	
3056.0500	-13	-20	*	-37.84	
3820.0625	-13	-20	-35.39	-34.76	
4584.0750	-13	-20	-32.57	-32.43	
5348.0875	-13	-20	*	*	
6112.1000	-13	-20	*	*	
6876.1125	-13	-20	*	*	
7640.1250	-13	-20	*	*	



* Indicates the spurious emission was less than -70dBm or 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.

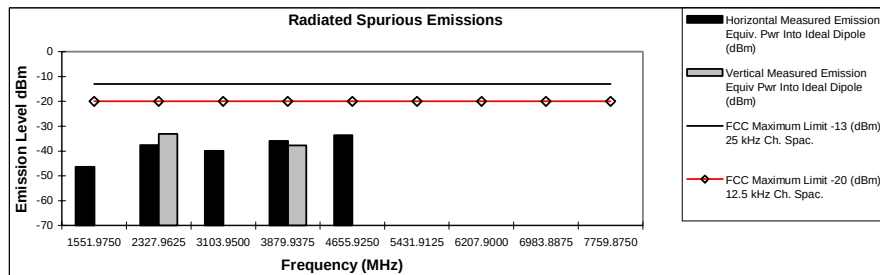
Motorola Plantation EMC Lab – Test Performed by: Philip Bagwell
FCC Registration: 91932 / Industry Canada: IC3679

August 23, 2001

EXHIBIT 6G-1

Transmitter Radiated Spurious Emissions: XTS2500

775.9875 MHz		2.9 Watts		Channel Spacing 12.5kHz	
Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)	
1551.9750	-13	-20	-46.33	*	
2327.9625	-13	-20	-37.62	-33.17	
3103.9500	-13	-20	-39.87	*	
3879.9375	-13	-20	-35.98	-37.68	
4655.9250	-13	-20	-33.60	*	
5431.9125	-13	-20	*	*	
6207.9000	-13	-20	*	*	
6983.8875	-13	-20	*	*	
7759.8750	-13	-20	*	*	



* Indicates the spurious emission was less than -70dBm or 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: Philip Bagwell
FCC Registration: 91932 / Industry Canada: IC3679

August 23, 2001

EXHIBIT 6G-2

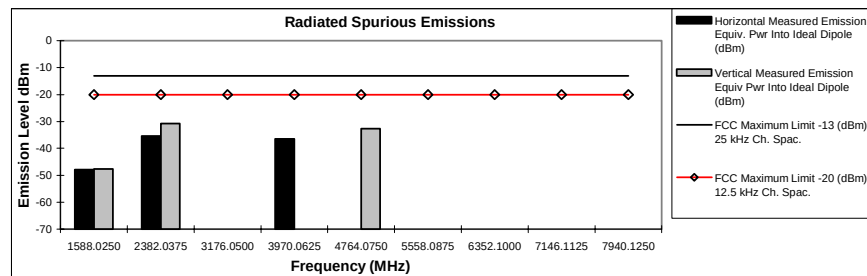
Transmitter Radiated Spurious Emissions: XTS2500

794.0125 MHz

2.9 Watts

Channel Spacing 12.5kHz

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1588.0250	-13	-20	-47.92	-47.58
2382.0375	-13	-20	-35.38	-30.79
3176.0500	-13	-20	*	*
3970.0625	-13	-20	-36.42	*
4764.0750	-13	-20	*	-32.59
5558.0875	-13	-20	*	*
6352.1000	-13	-20	*	*
7146.1125	-13	-20	*	*
7940.1250	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or 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: Philip Bagwell
FCC Registration: 91932 / Industry Canada: IC3679

August 23, 2001

EXHIBIT 6G-3

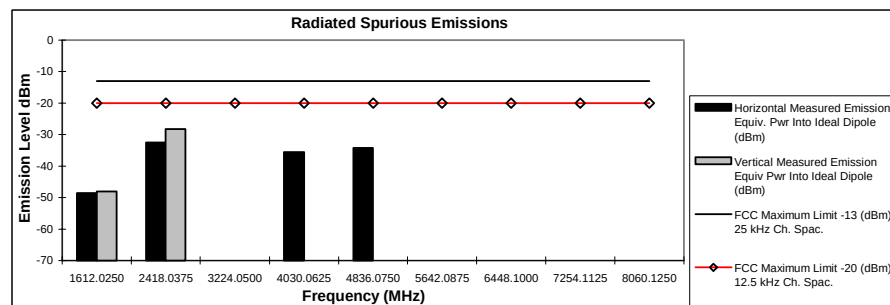
Transmitter Radiated Spurious Emissions: XTS2500

806.0125 MHz

3.3 Watts

Channel Spacing 12.5kHz

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1612.0250	-13	-20	-48.55	-48.00
2418.0375	-13	-20	-32.47	-28.24
3224.0500	-13	-20	*	*
4030.0625	-13	-20	-35.51	*
4836.0750	-13	-20	-34.28	*
5642.0875	-13	-20	*	*
6448.1000	-13	-20	*	*
7254.1125	-13	-20	*	*
8060.1250	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or 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: Philip Bagwell
FCC Registration: 91932 / Industry Canada: IC3679

August 23, 2001

EXHIBIT 6G-4

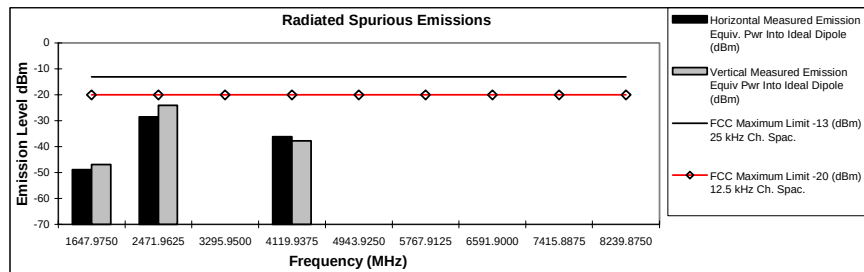
Transmitter Radiated Spurious Emissions: XTS2500

823.9875 MHz

3.3 Watts

Channel Spacing 12.5kHz

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1647.9750	-13	-20	-48.88	-46.86
2471.9625	-13	-20	-28.56	-24.05
3295.9500	-13	-20	*	*
4119.9375	-13	-20	-36.23	-37.78
4943.9250	-13	-20	*	*
5767.9125	-13	-20	*	*
6591.9000	-13	-20	*	*
7415.8875	-13	-20	*	*
8239.8750	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or 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: Philip Bagwell
FCC Registration: 91932 / Industry Canada: IC3679

August 23, 2001

EXHIBIT 6G-5

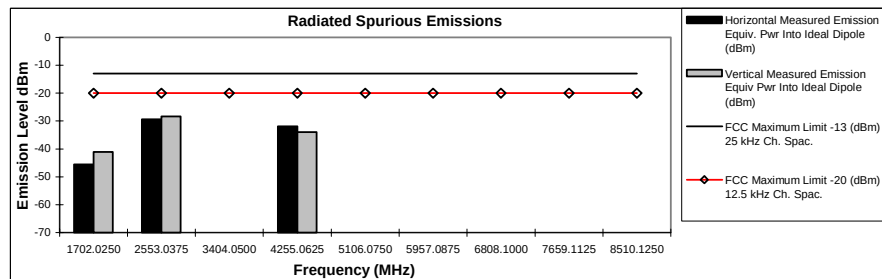
Transmitter Radiated Spurious Emissions: XTS2500

851.0125 MHz

3.3 Watts

Channel Spacing 12.5kHz

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1702.0250	-13	-20	-45.50	-41.15
2553.0375	-13	-20	-29.37	-28.41
3404.0500	-13	-20	*	*
4255.0625	-13	-20	-31.98	-33.95
5106.0750	-13	-20	*	*
5957.0875	-13	-20	*	*
6808.1000	-13	-20	*	*
7659.1125	-13	-20	*	*
8510.1250	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or 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.

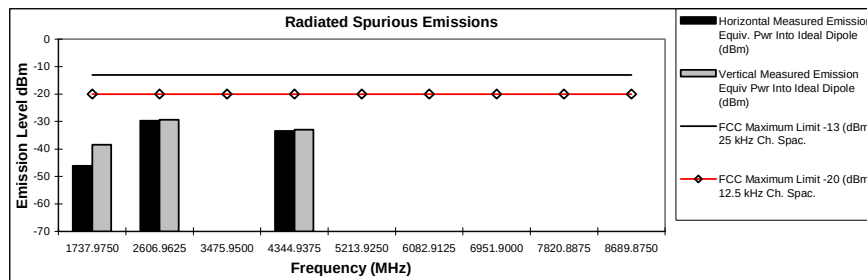
Motorola Plantation EMC Lab – Test Performed by: Philip Bagwell
FCC Registration: 91932 / Industry Canada: IC3679

August 23, 2001

EXHIBIT 6G-6

Transmitter Radiated Spurious Emissions: XTS2500**868.9875 MHz****3.3 Watts****Channel Spacing 12.5kHz**

Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
1737.9750	-13	-20	-46.18	-38.50
2606.9625	-13	-20	-29.62	-29.35
3475.9500	-13	-20	*	*
4344.9375	-13	-20	-33.40	-32.89
5213.9250	-13	-20	*	*
6082.9125	-13	-20	*	*
6951.9000	-13	-20	*	*
7820.8875	-13	-20	*	*
8689.8750	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or 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: Philip Bagwell
FCC Registration: 91932 / Industry Canada: IC3679

August 23, 2001

EXHIBIT 6G-7

1559 - 1610MHz Radiated Emissions (GNSS) Testing (At 3 Meters EIRP)				
Date: 8/15/01		EMC#: EMC08152001-178		Temp: 87F 71%
Product: XTS 2500 700/800 MHz		Mode: 12.5kHz Digital		
Tx Freq. 794.0125		Notes: NAF5080 Antenna / NTN9857 Battery, 2.9W		
		Horizontal Radiated	Vertical Radiated	FCC Limit
Spur	Frequency	Spur. Emiss.	Spur. Emiss.	
	MHz	(dBm)	(dBm)	(dBm)
2XFund	1588.0250	-51.62	-49.49	-40
Tx Freq. 805.0000		Notes: NAF5080 Antenna / NTN9857 Battery, 2.9W		
		Horizontal Radiated	Vertical Radiated	FCC Limit
Spur	Frequency	Spur. Emiss.	Spur. Emiss.	
	MHz	(dBm)	(dBm)	(dBm)
2XFund	1610.0000	-52.12	-49.41	-40

Note 1: Spurious emissions are independent of modulation type. For the reported results, 4-level FM digital modulation was used.

Note 2: The reported emissions are wideband (>700Hz) spurs.

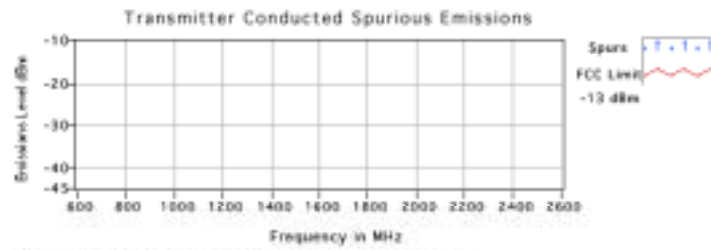
Note 3: Emissions more than 20dB below the limit are not reported.

Transmitter Conducted Spurious Emissions

FREQ: 764.01250 MHz

Power 3.0W

Spur 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

Wed, Aug 22, 2001

Test Performed By: Jerry Simpson

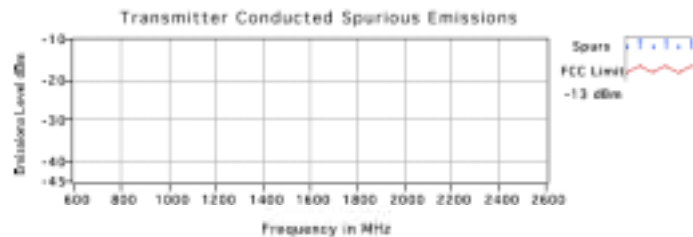
Exhibit 6I – 1 (12.5kHz Ch Sp)

Transmitter Conducted Spurious Emissions

FREQ: 775.98750 MHz

Power 3.0W

Spur 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

Wed, Aug 22, 2001

Test Performed By: Jerry Simpson

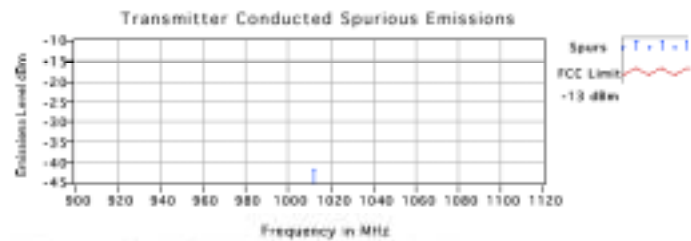
Exhibit 6I – 2 (12.5kHz Ch Sp)

Transmitter Conducted Spurious Emissions

FREQ: 794.01250 MHz

Power 3.0W

Spur Frequency	FCC Limit	Measured Value (dBm)
1012.50000	-13.0	-41.8



All Transmitter Spurious Emissions Tested to the 10th Harmonic

Motorola Plantation ATE Lab

Wed, Aug 22, 2001

Test Performed By: Jerry Simpson

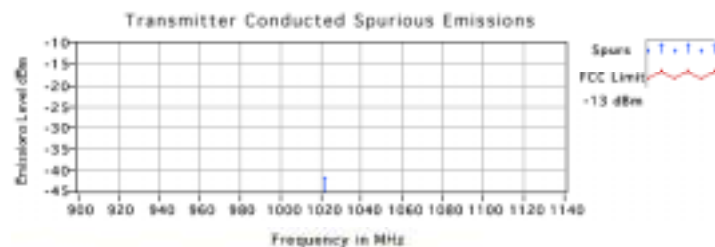
Exhibit 6I – 3 (12.5kHz Ch Sp)

Transmitter Conducted Spurious Emissions

FREQ: 806.01250 MHz

Power 3.0W

Spur Frequency	FCC Limit	Measured Value (dBm)
1022.00000	-13.0	-42.0



All Transmitter Spurious Emissions Tested to the 10th Harmonic

Motorola Plantation ATE Lab

Wed, Aug 22, 2001

Test Performed By: Jerry Simpson

Exhibit 6I – 4 (12.5kHz Ch Sp)

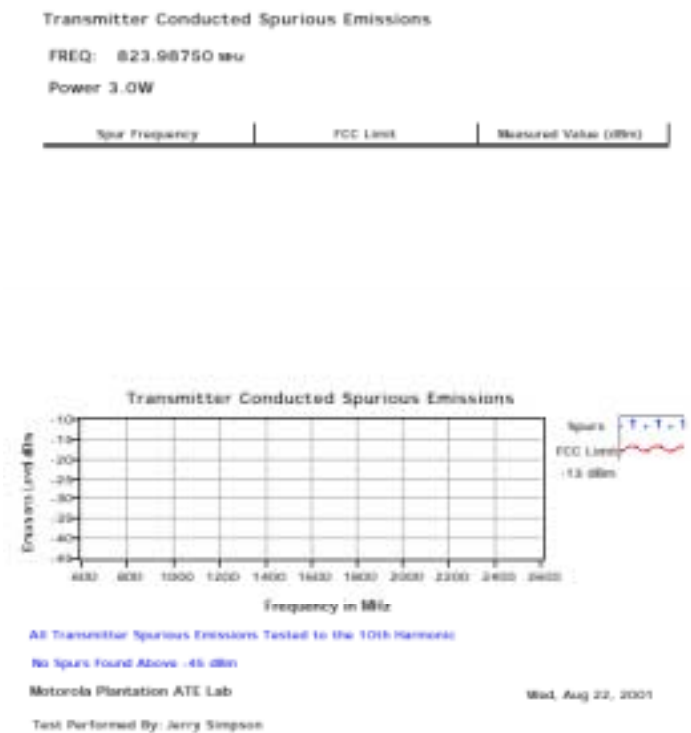


Exhibit 6I – 5 (12.5kHz Ch Sp)

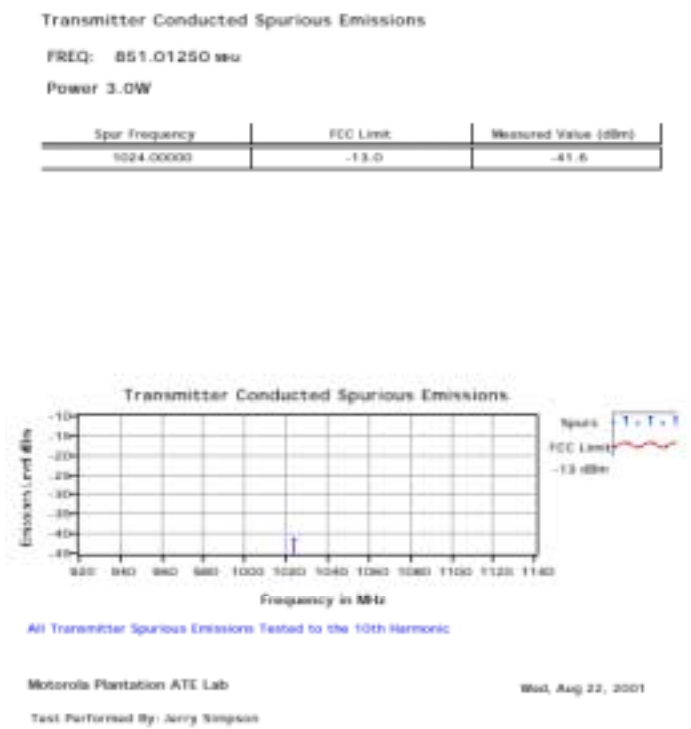


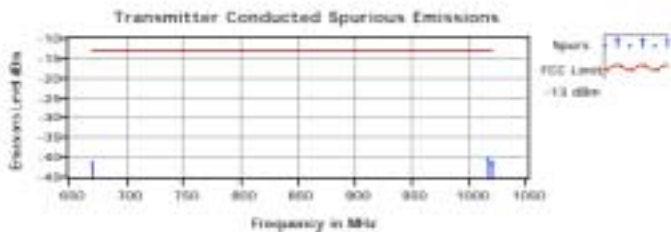
Exhibit 6I – 6 (12.5kHz Ch Sp)

Transmitter Conducted Spurious Emissions

FREQ: 868.98750 MHz

Power 3.0W

Spur Frequency	FCC Limit	Measured Value (dBm)
870.00000	-13.0	-41.6
1017.50000	-13.0	-40.6
1020.00000	-13.0	-41.4



All Transmitter Spurious Emissions Tested to the 10th Harmonic

Motorola Plantation ATE Lab

Wed, Aug 22, 2001

Test Performed By: Jerry Simpson

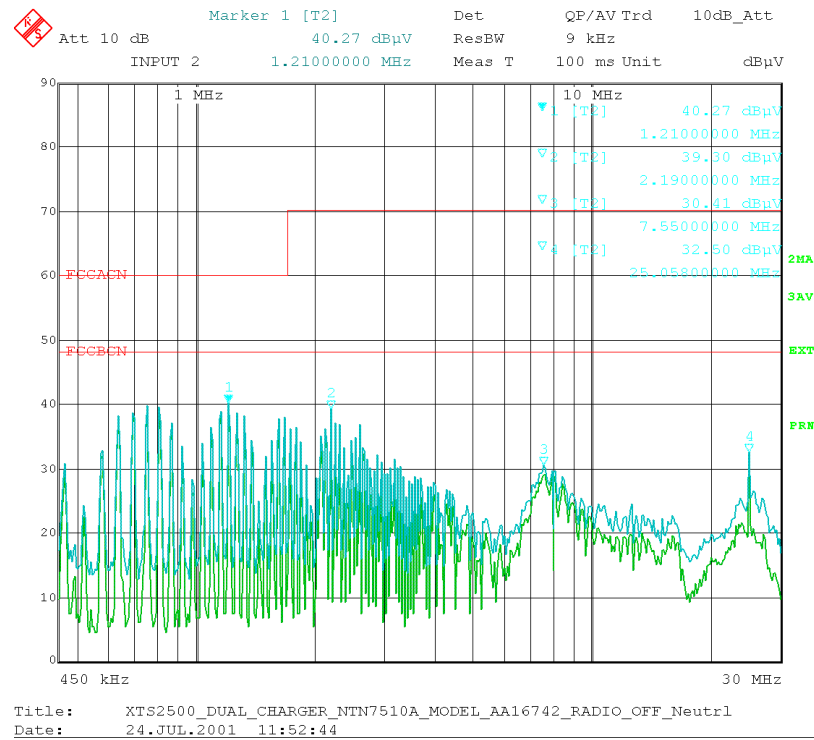
Power Line Conducted Spurious Emissions

EXHIBIT 6J-1

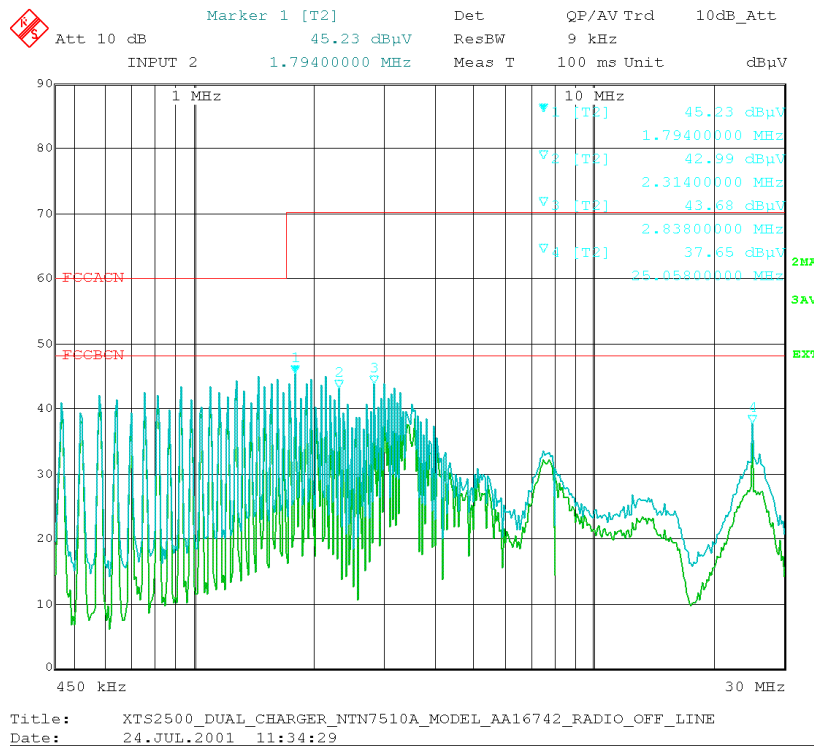


EXHIBIT 6J-2

Marker 1 [T2] 20.69 dBμV
 Att 10 dB INPUT 2 2.10600000 MHz Meas T 100 ms Unit dBμV

1 MHz 10 MHz 20.69 dBμV 2.10600000 MHz
 24.86 dBμV 10.68200000 MHz
 22.28 dBμV 13.63000000 MHz
 35.24 dBμV 25.05800000 MHz

2MA 3AV PRN

450 kHz 30 MHz

Title: XTS2500_DUAL_CHARGER_NTN7510A_RADIO_ON_TX_NEUTRAL
 Date: 24.JUL.2001 14:13:29

Marker 1 [T2] Det QF/AV Trd 10dB Att

Att 10 dB 23.99 dBuV ResBW 9 kHz

INPUT 2 1.89800000 MHz Meas T 100 ms Unit dBuV

1 MHz 10 MHz

▼1 [T2] 23.99 dBuV
1.89800000 MHz

▼2 [T2] 21.94 dBuV
9.99800000 MHz

▼3 [T2] 23.32 dBuV
13.63000000 MHz

▼4 [T2] 33.68 dBuV
25.05800000 MHz

FPGAEN

FPGAEN

2MA

3AV

PRN

450 kHz 30 MHz

Title: XTS2500_DUAL_CHARGER_NTN7510A_RADIO_ON_TX_LINE

Date: 24.JUL.2001 14:06:22

EXHIBIT 6J-4

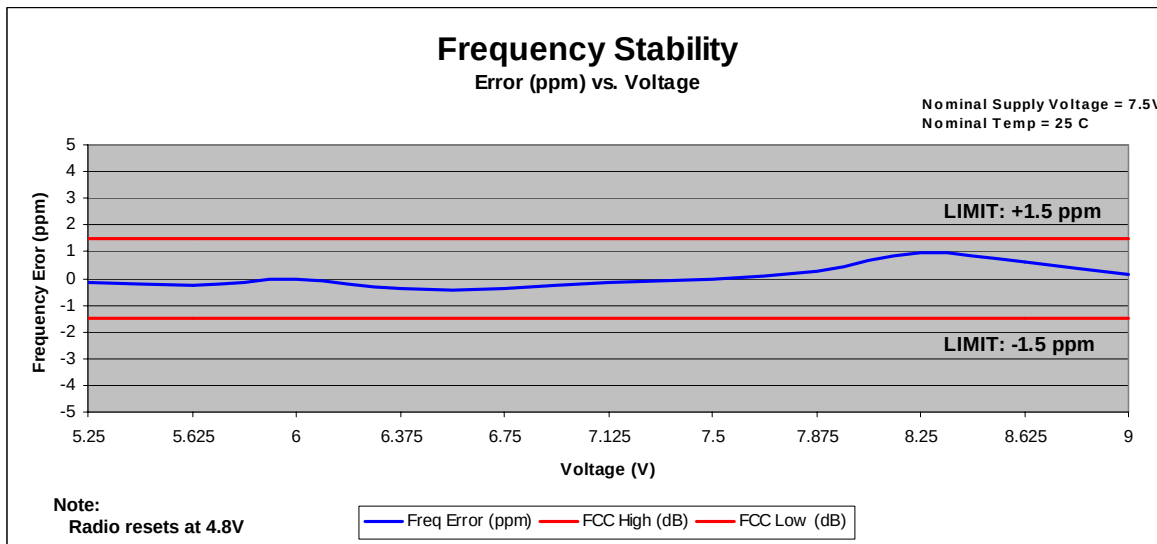


EXHIBIT 6K-1

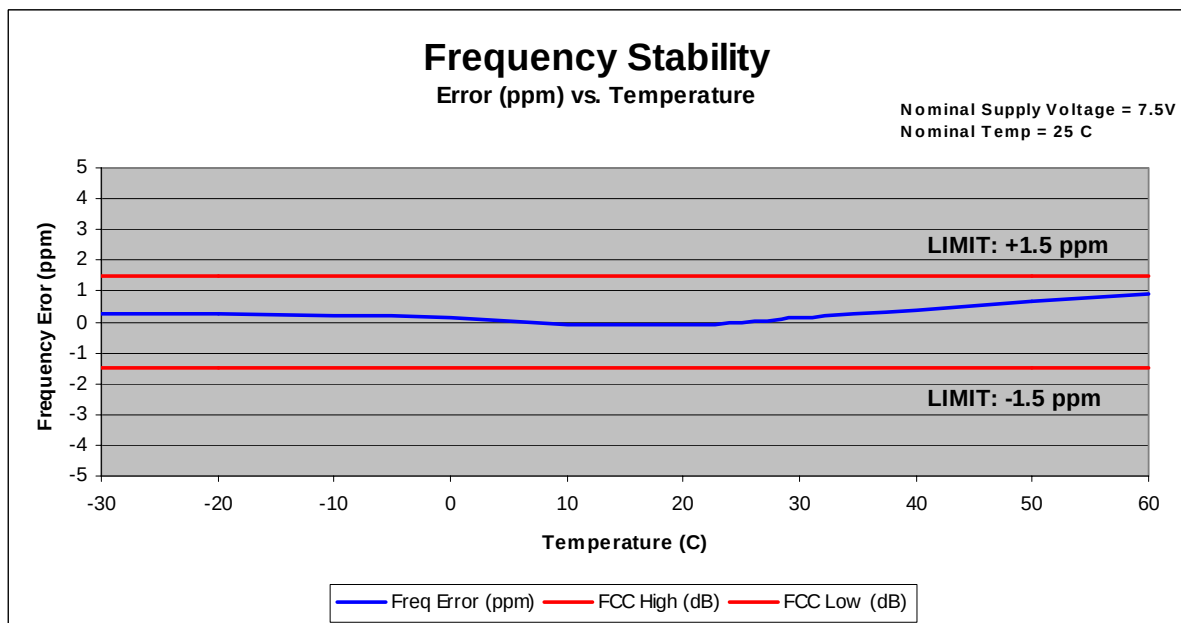


EXHIBIT 6K-2