

**Test Report**

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MOTOROLA

FCC ID: AZ489FT4900

RF POWER OUTPUT DATA

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

Frequency	464.5500 MHz
Measured Conducted RF output* Watts	0.502 Watts/1.01
Normal DC Voltage	3.70 Volts
Normal DC Current	850 ma/ 520ma
Primary Supply Voltage	3.80 Volts

*Note: RF Conducted output power measured at 3.80Volts

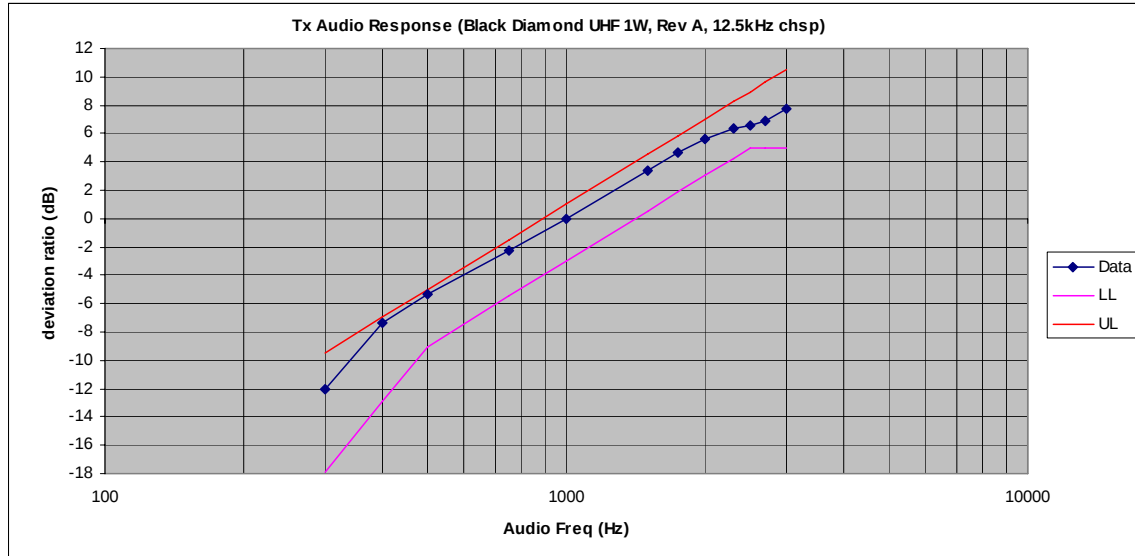
EXHIBIT 6A



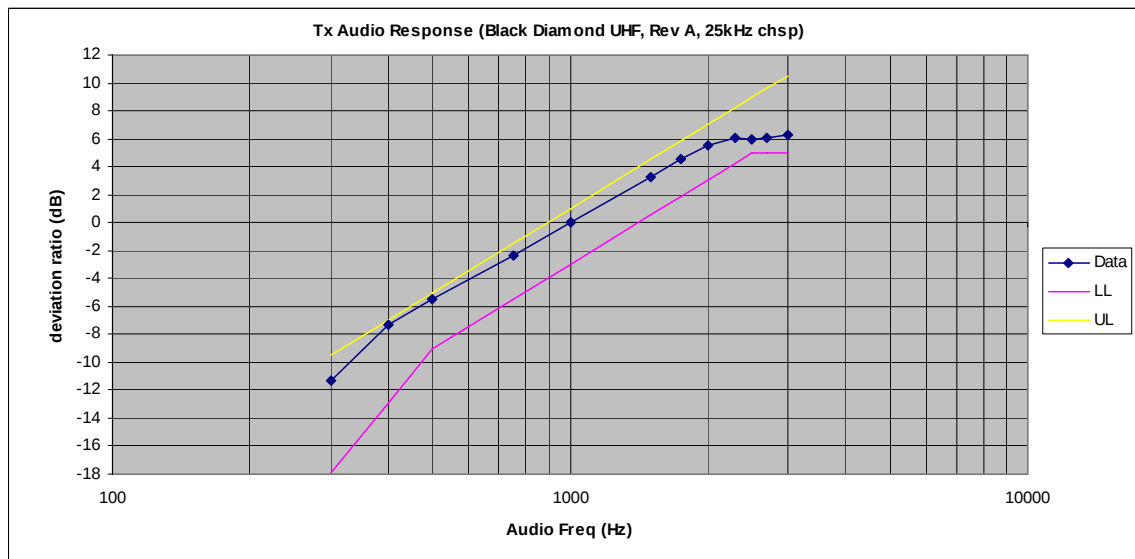
MOTOROLA

FCC ID: AZ489FT4900

Audio Response 12.5 kHz/25kHz



12.5 kHz



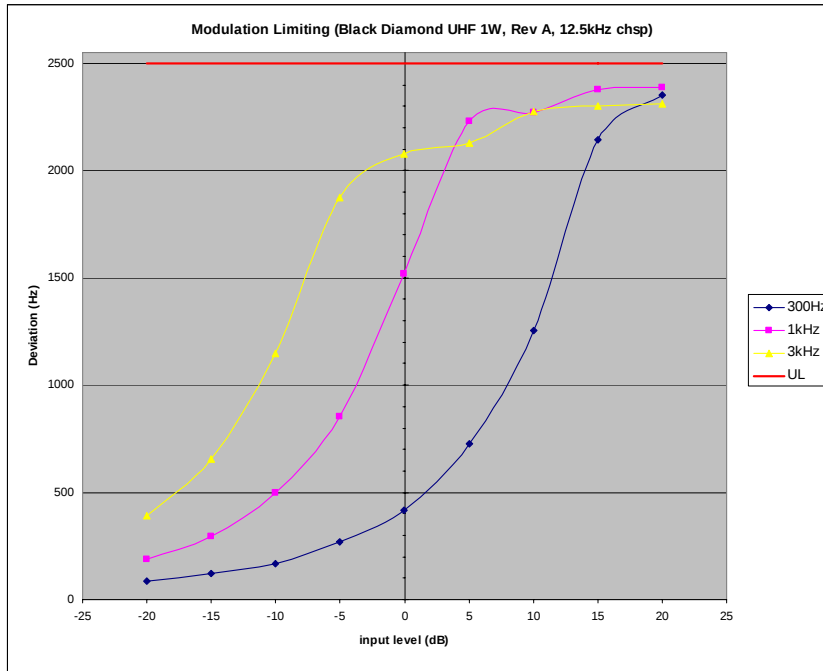
25 kHz



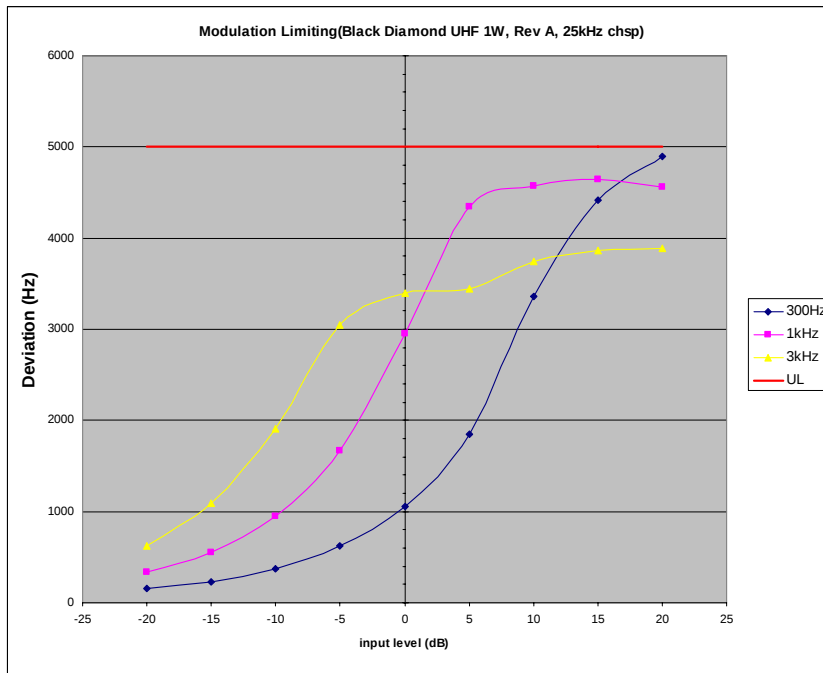
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FCC ID: AZ489FT4900

MODULATION LIMITING 12.5 kHz/ 25 kHz



12.5 kHz



25 kHz



MOTOROLA

FCC ID: AZ489FT4900

OCCUPIED BANDWIDTH DATA

1 Watt

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 & 77 Hz Tone "PL" Modulation

Emission Type: 11K0F3E

Specification Mask D, 90.210 – 12.5 kHz

EXHIBIT 6D-4

2500 Hz & 77 Hz 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: AZ489FT4900

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

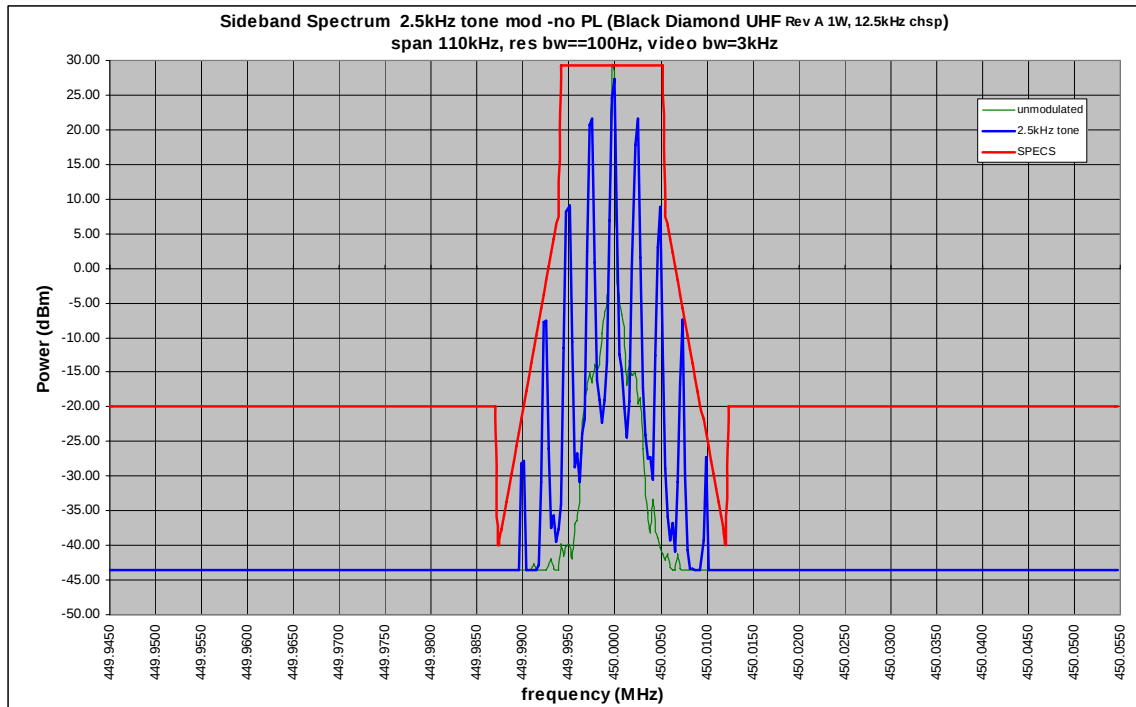


EXHIBIT 6D-1



MOTOROLA

FCC ID: AZ489FT4900

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

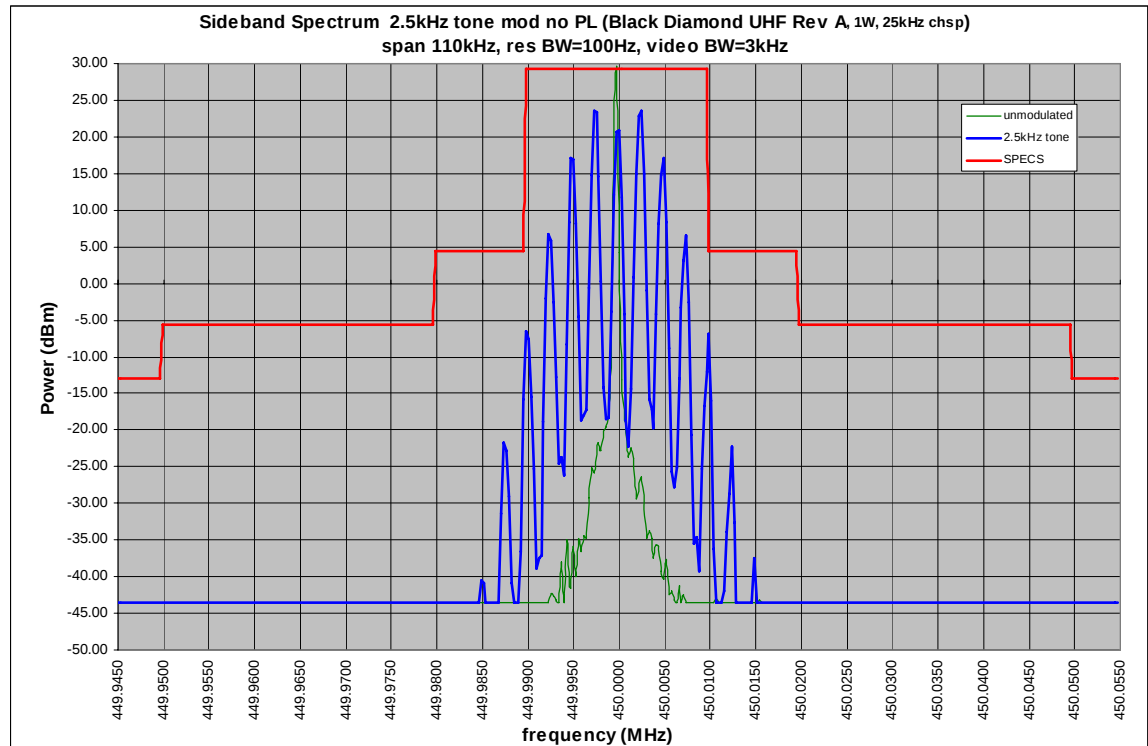


EXHIBIT 6D-2



MOTOROLA

FCC ID: AZ489FT4900

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

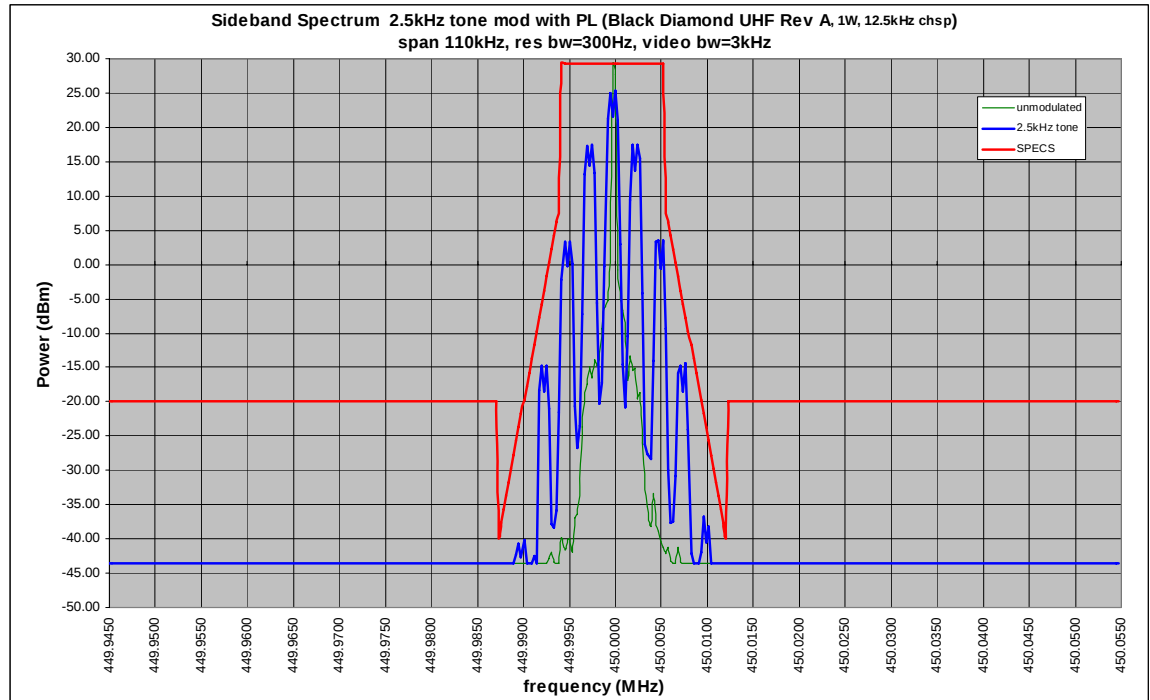


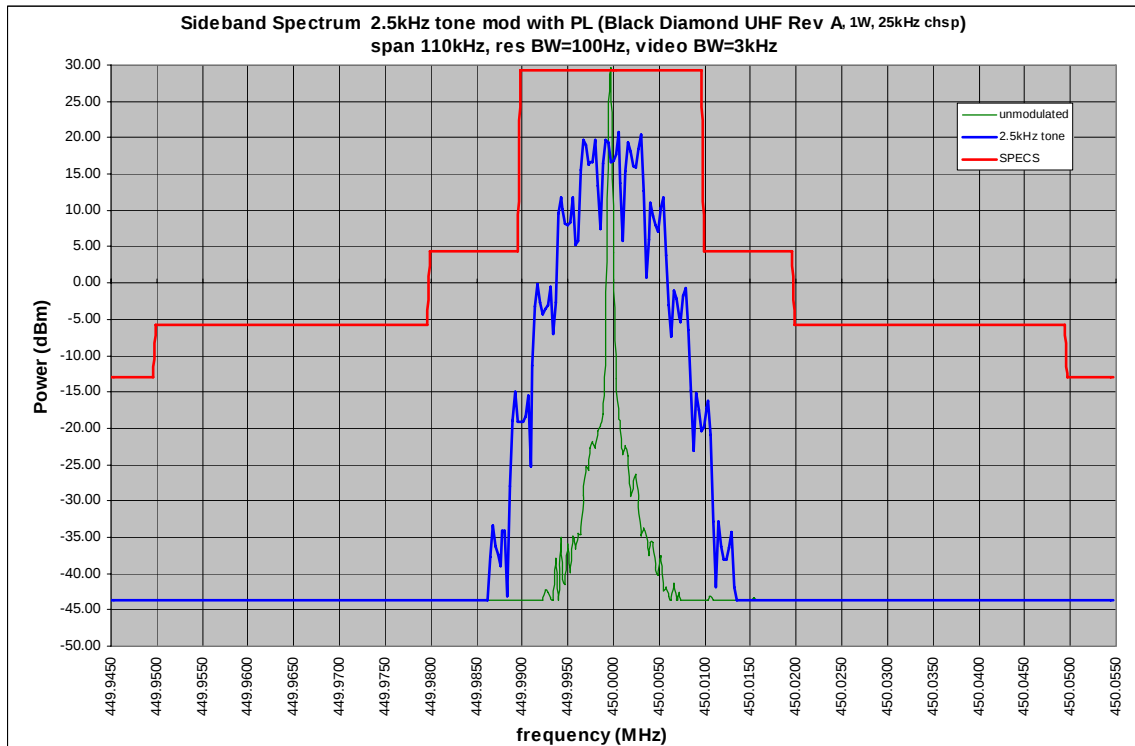
EXHIBIT 6D-3



MOTOROLA

FCC ID: AZ489FT4900

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





MOTOROLA

FCC ID: AZ489FT4900

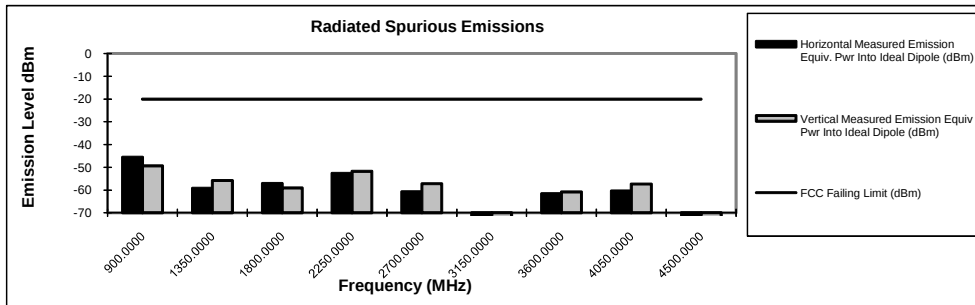
1 Watt

Motorola Inc.

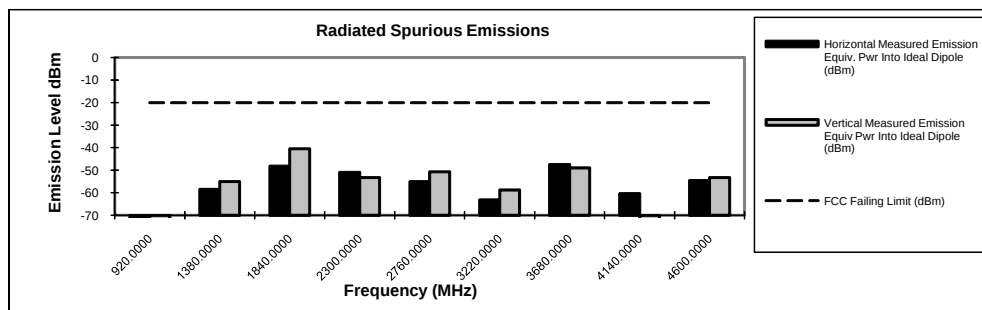
FCC ID:AZ489FT4900

Transmit Radiated Spurious Emissions: CLP Battery-BT90 Bluetooth Head Set**Tx Power: 1 Watts****450 MHz****Channel Spacing 12.5kHz | S/N Unit #1**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
900.0000	-20	-45.59	-49.41
1350.0000	-20	-59.21	-55.85
1800.0000	-20	-57.15	-59.06
2250.0000	-20	-52.67	-51.80
2700.0000	-20	-60.72	-57.22
3150.0000	-20	*	*
3600.0000	-20	-61.56	-60.82
4050.0000	-20	-60.35	-57.35
4500.0000	-20	*	*

**Transmit Radiated Spurious Emissions: CLP Battery-BT90 Bluetooth Head Set****Tx Power: 1 Watts****460 MHz****Channel Spacing 12.5kHz | S/N Unit #1**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
920.0000	-20	*	*
1380.0000	-20	-58.47	-55.01
1840.0000	-20	-48.16	-40.53
2300.0000	-20	-50.98	-53.28
2760.0000	-20	-55.08	-50.75
3220.0000	-20	-63.23	-58.80
3680.0000	-20	-47.42	-48.94
4140.0000	-20	-60.39	*
4600.0000	-20	-54.65	-53.30



* 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

November 29, 2010

FCC Registration: 91932 / Industry Canada: IC109U-1

EXHIBIT 6E-1

**MOTOROLA**

FCC ID: AZ489FT4900

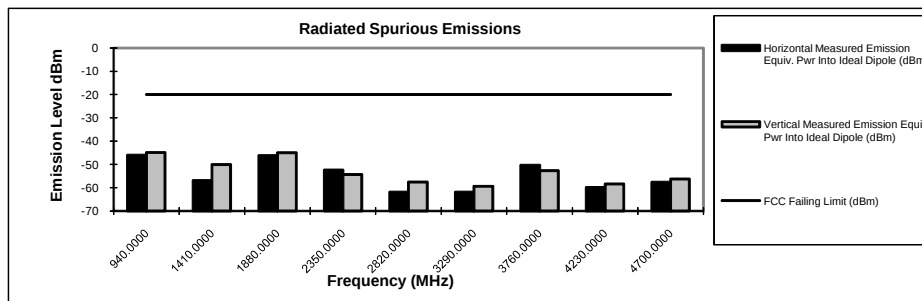
1 Watt

Motorola Inc.

FCC ID:AZ489FT4900

Transmit Radiated Spurious Emissions: CLP Battery-BT90 Bluetooth Head Set
Tx Power: 1 Watts**470 MHz****Channel Spacing 12.5kHz | S/N Unit #1**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
940.0000	-20	-46.02	-44.87
1410.0000	-20	-56.99	-50.06
1880.0000	-20	-46.23	-44.96
2350.0000	-20	-52.35	-54.34
2820.0000	-20	-61.93	-57.59
3290.0000	-20	-61.89	-59.43
3760.0000	-20	-50.39	-52.72
4230.0000	-20	-59.92	-58.36
4700.0000	-20	-57.67	-56.19



* 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: IC109U-1

November 29, 2010

EXHIBIT 6E-2

**MOTOROLA**

FCC ID: AZ489FT4900

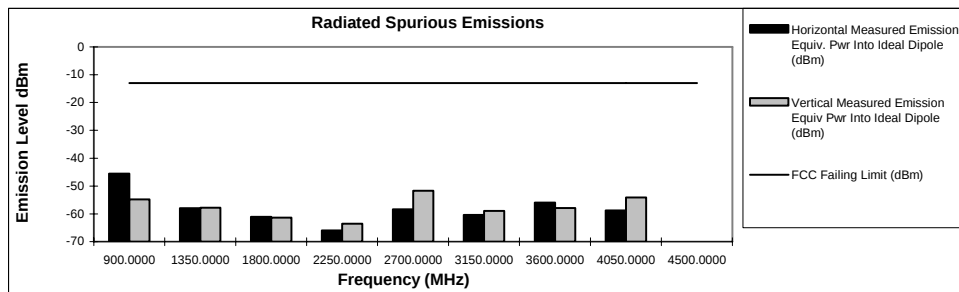
1 Watts

Motorola Inc.

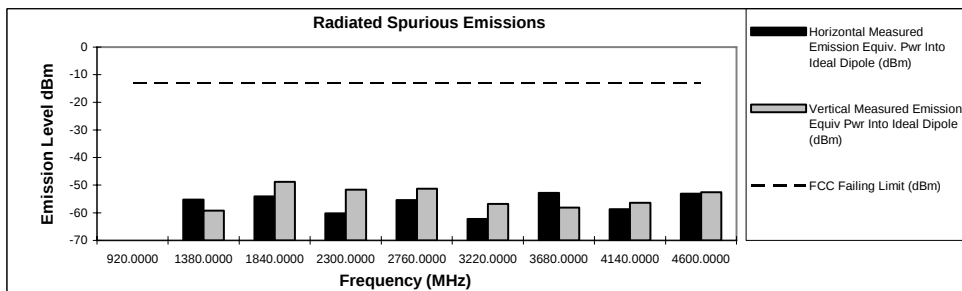
FCC ID:AZ489FT4900

Transmit Radiated Spurious Emissions: CLP Battery-BT90 Bluetooth Head Set**Tx Power: 1 Watts****450 MHz****Channel Spacing 25kHz | S/N Unit #1**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
900.0000	-13	-45.50	-54.81
1350.0000	-13	-57.99	-57.83
1800.0000	-13	-61.09	-61.36
2250.0000	-13	-65.93	-63.54
2700.0000	-13	-58.36	-51.75
3150.0000	-13	-60.40	-58.92
3600.0000	-13	-55.94	-57.94
4050.0000	-13	-58.76	-54.06
4500.0000	-13	*	*

**Transmit Radiated Spurious Emissions: CLP Battery-BT90 Bluetooth Head Set****Tx Power: 1 Watts****460 MHz****Channel Spacing 25kHz | S/N Unit #1**

Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
920.0000	-13	*	*
1380.0000	-13	-55.20	-59.20
1840.0000	-13	-54.03	-48.82
2300.0000	-13	-60.17	-51.65
2760.0000	-13	-55.36	-51.27
3220.0000	-13	-62.22	-56.79
3680.0000	-13	-52.83	-58.14
4140.0000	-13	-58.72	-56.41
4600.0000	-13	-53.05	-52.56



* 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: Alberto Cordero

December 6, 2010

FCC Registration: 91932 / Industry Canada: IC109U-1

EXHIBIT 6E-3



1 Watts

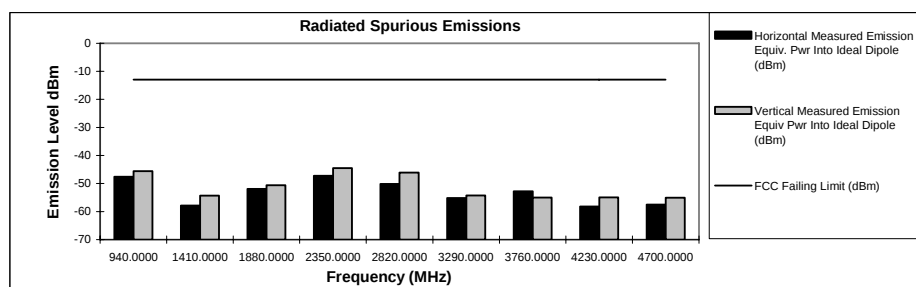
Motorola Inc.

FCC ID:AZ489FT4900

Transmit Radiated Spurious Emissions: CLP Battery-BT90 Bluetooth Head Set

Tx Power: 1 Watts

470 MHz		Channel Spacing 25kHz S/N Unit #1	
Frequency (MHz)	FCC Failing Limit (dBm)	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
940.0000	-13	-47.57	-45.55
1410.0000	-13	-57.86	-54.33
1880.0000	-13	-51.88	-50.58
2350.0000	-13	-47.29	-44.50
2820.0000	-13	-50.20	-46.08
3290.0000	-13	-55.13	-54.27
3760.0000	-13	-52.73	-55.04
4230.0000	-13	-58.13	-54.92
4700.0000	-13	-57.48	-55.08



* 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.

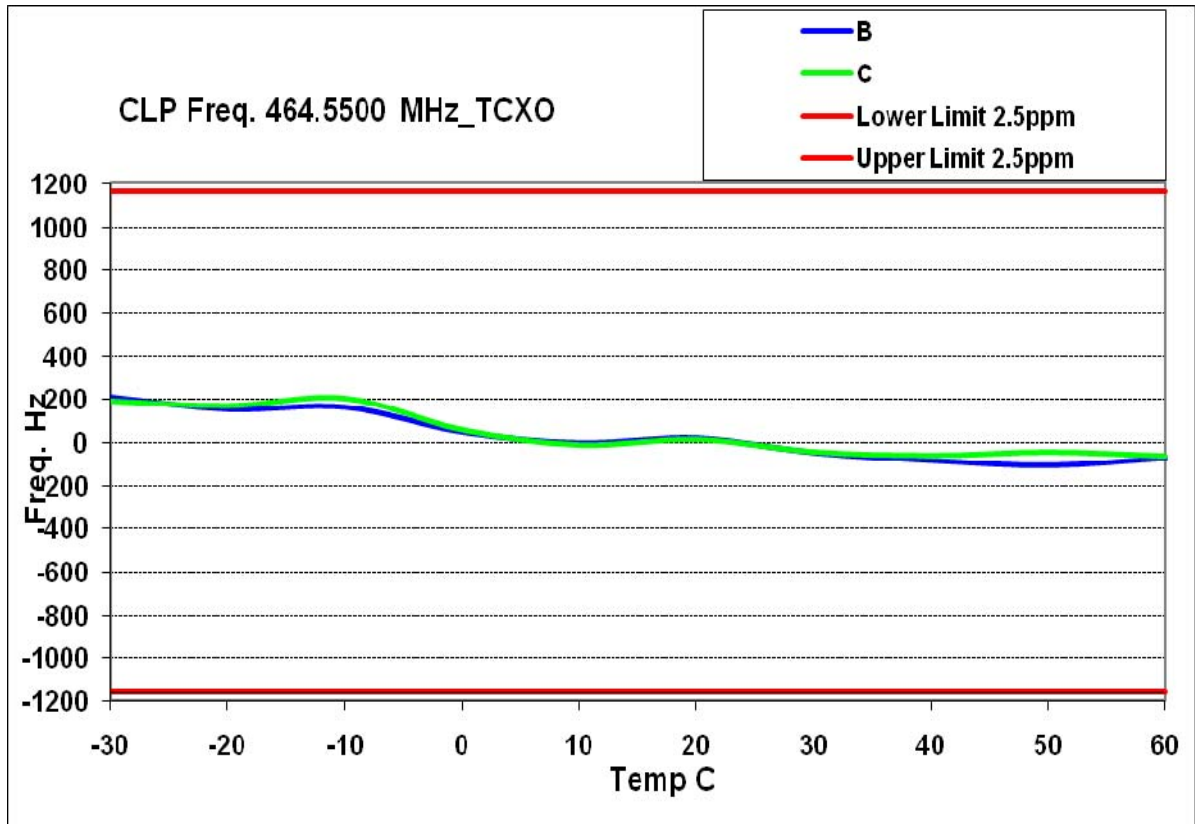
Motorola Plantation EMC Lab – Test Performed by: Alberto Cordero
FCC Registration: 91932 / Industry Canada: IC109U-1

December 6, 2010

EXHIBIT 6E-4

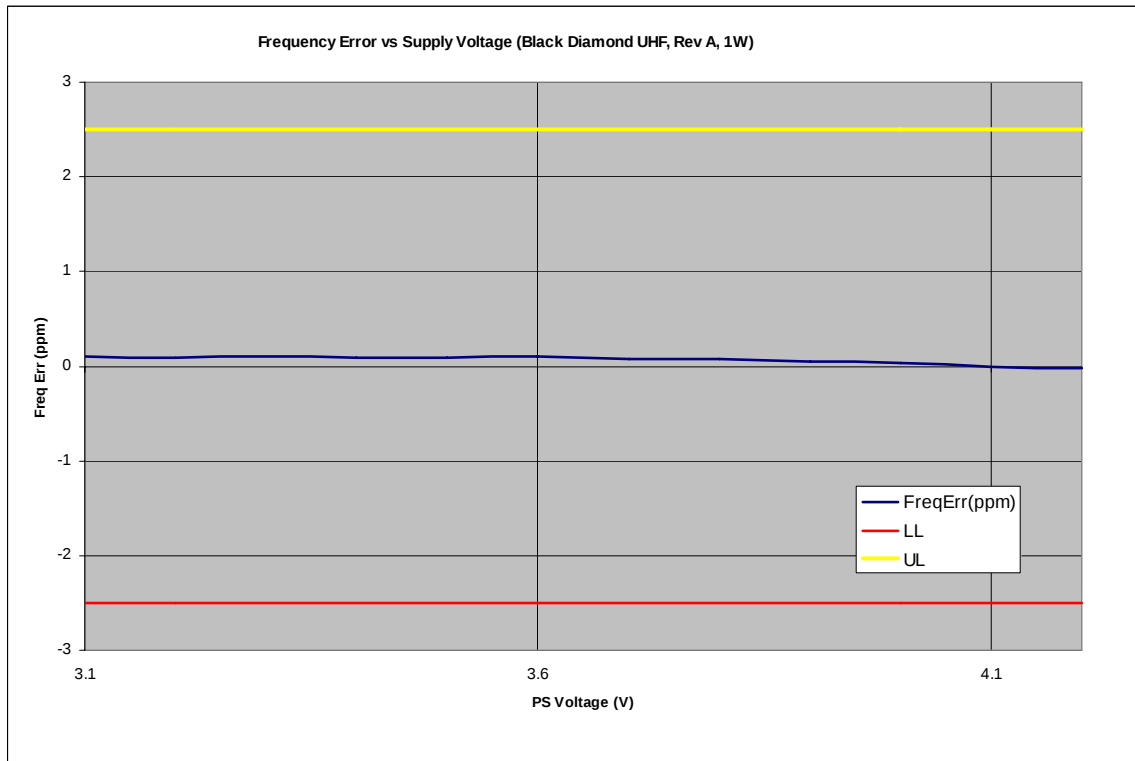


Frequency Stability over Temperature





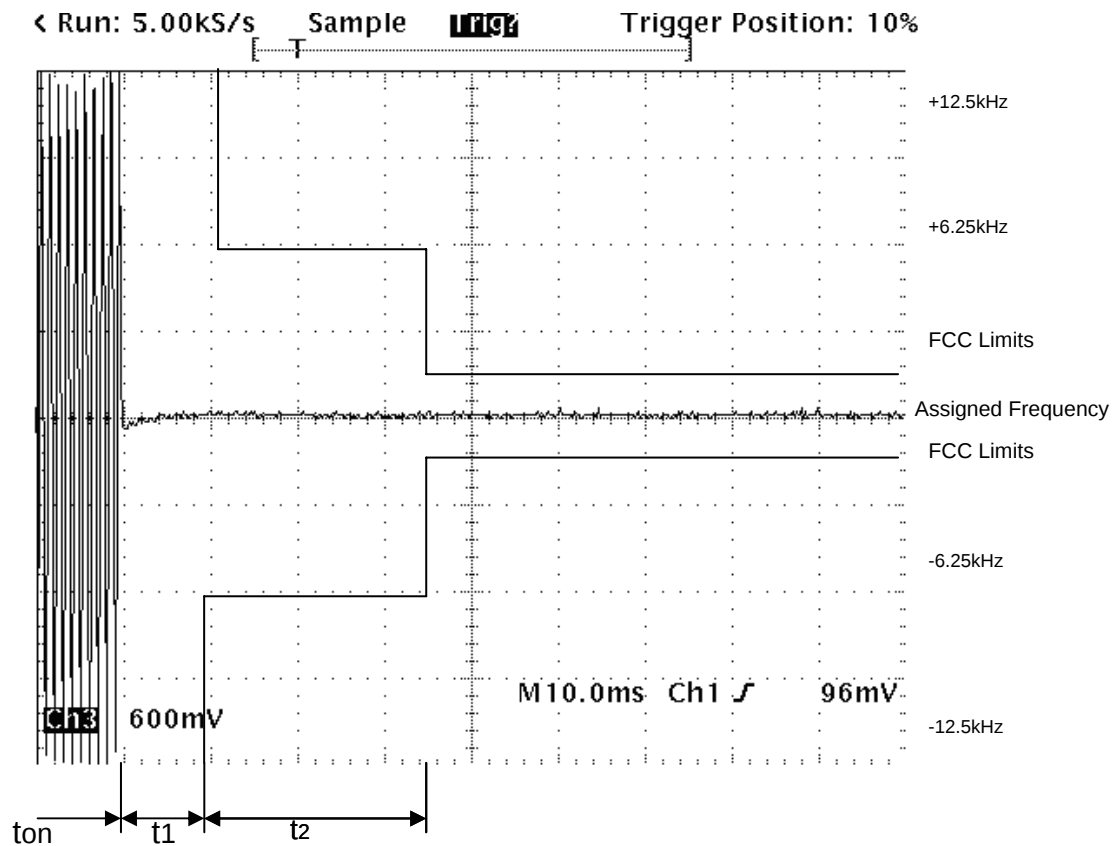
Frequency Error over Voltage



Reset Voltage 3.3Volts



Transient Frequency Response Tx on 1Watt 12.5 kHz



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

$$\frac{(264\text{MHz}) * (2.5\text{PPM}) * (\pm 4)}{12.5 \text{ kHz}}$$

$$= \pm 0.3712 \text{ div}$$



MOTOROLA

FCC ID: AZ489FT4900

Transient Frequency Response Tx off 1 Watt 12.5 kHz

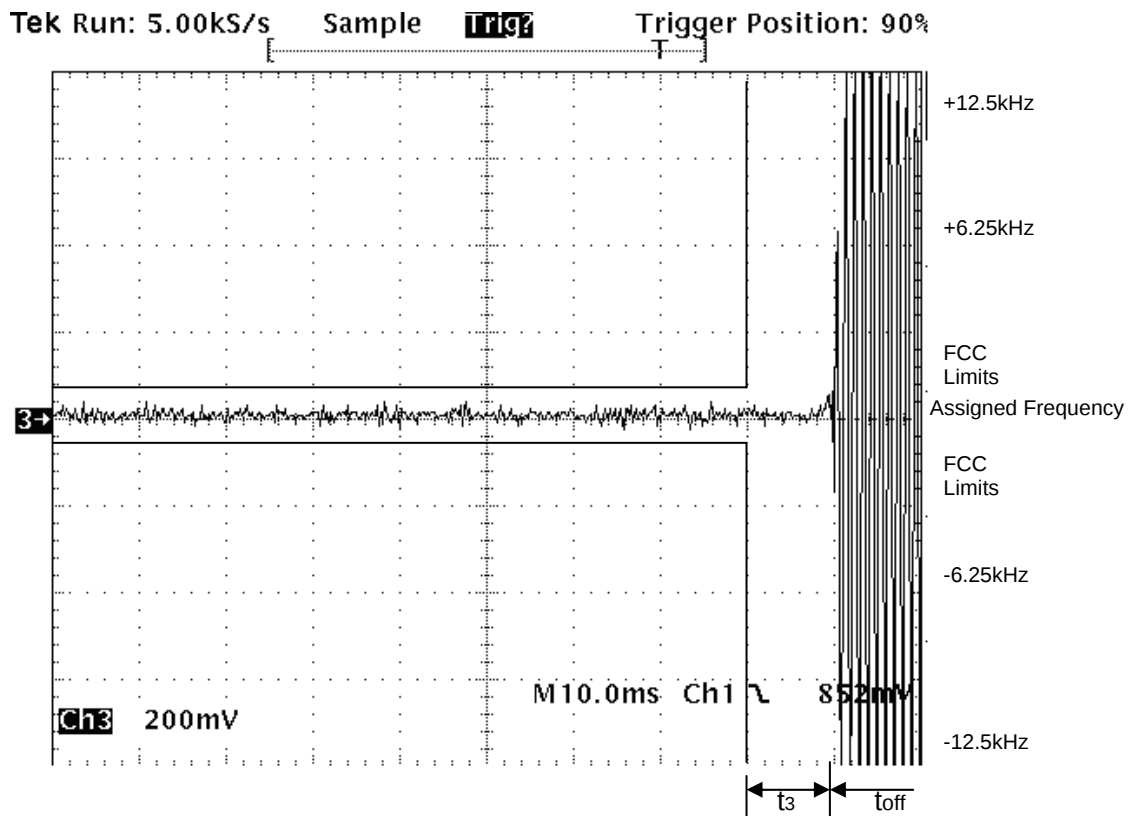


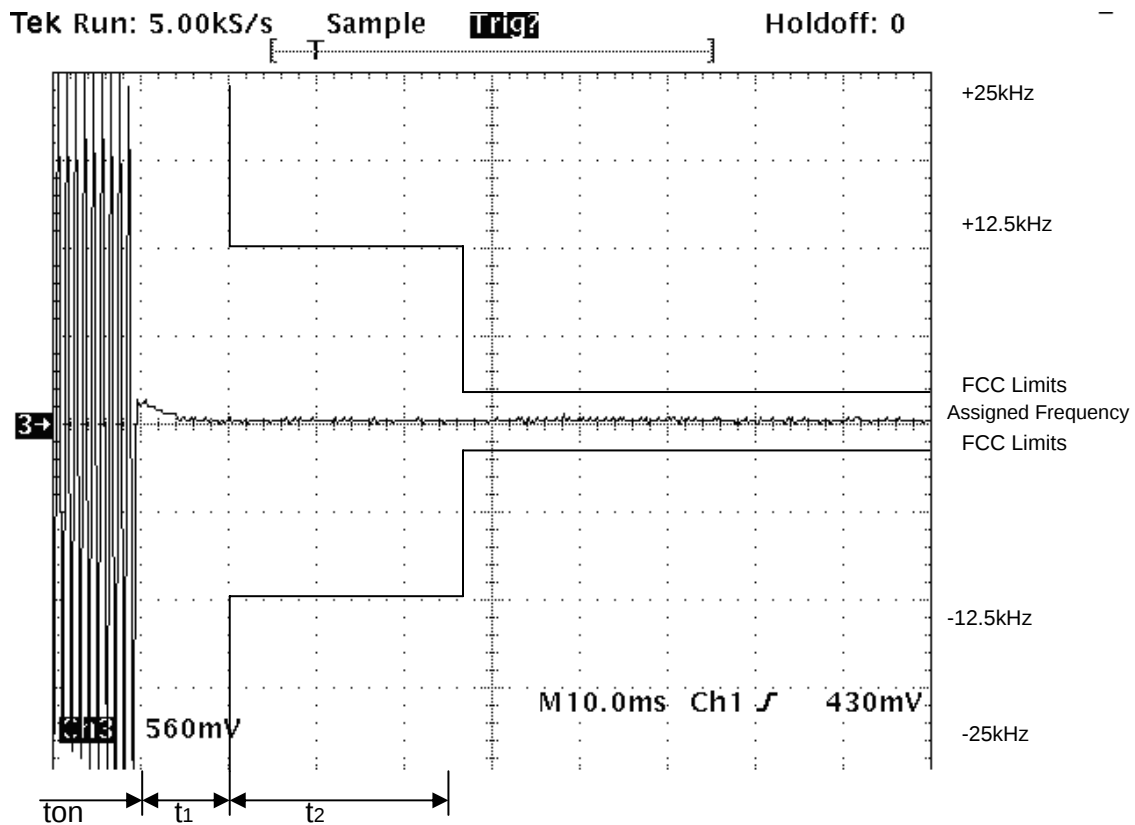
EXHIBIT 6G-2



MOTOROLA

FCC ID: AZ489FT4900

Transient Frequency Response Tx on 1 Watt 25 kHz



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

$$\frac{(264\text{MHz}) * (5\text{PPM}) * (\pm 4)}{25 \text{ kHz}}$$

$$= \pm 0.3712 \text{ div}$$

EXHIBIT 6G-3



MOTOROLA

FCC ID: AZ489FT4900

Transient Frequency Response Tx off 1 Watt 25 kHz

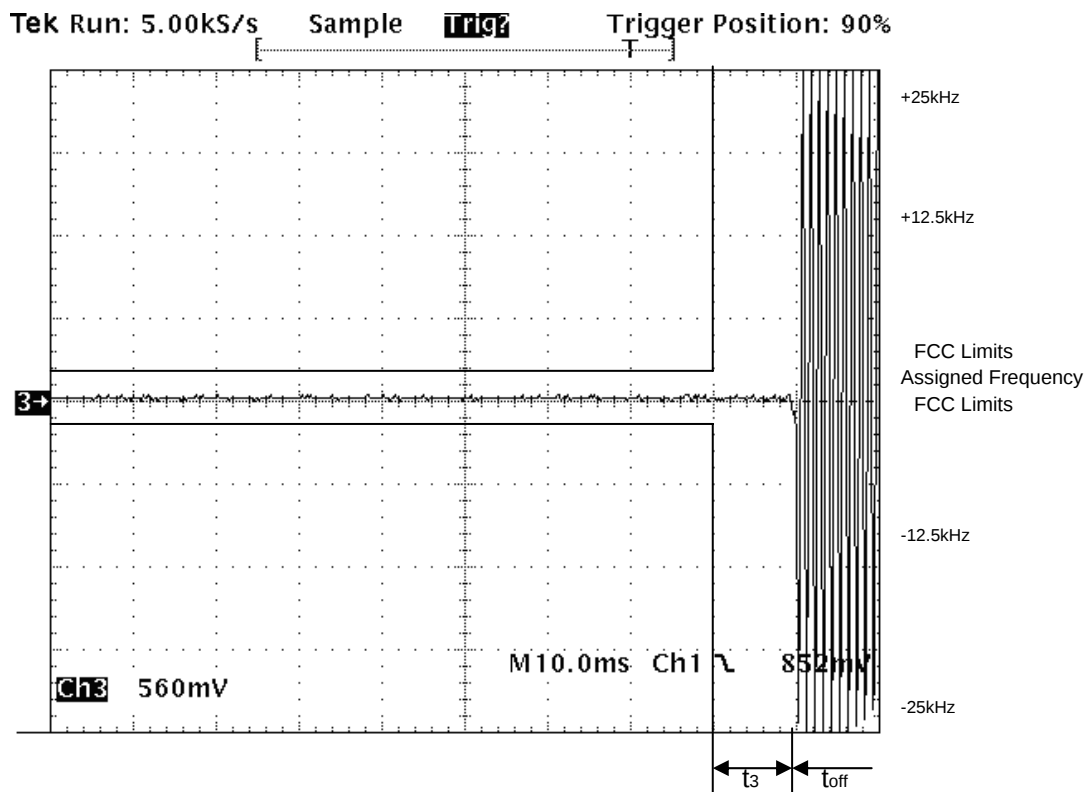


EXHIBIT 6G-4

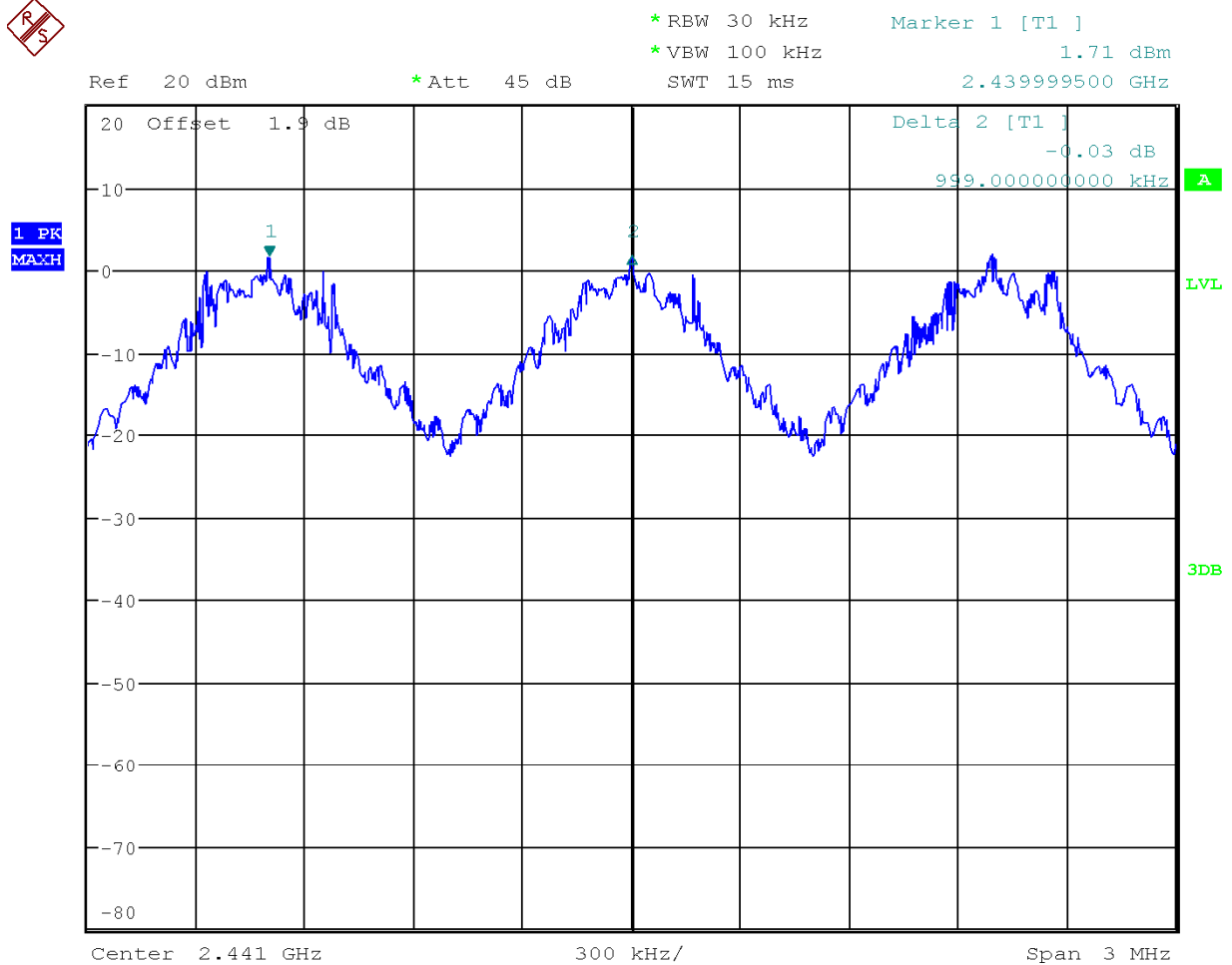


MOTOROLA

FCC ID: AZ489FT4900

BLUETOOTH MEASURED DATA – Pursuant 47 CFR 2.1041

Bluetooth Carrier Frequency Separation – Pursuant 47 CFR 15.247(a)(1)



Date: 19.OCT.2010 20:23:11

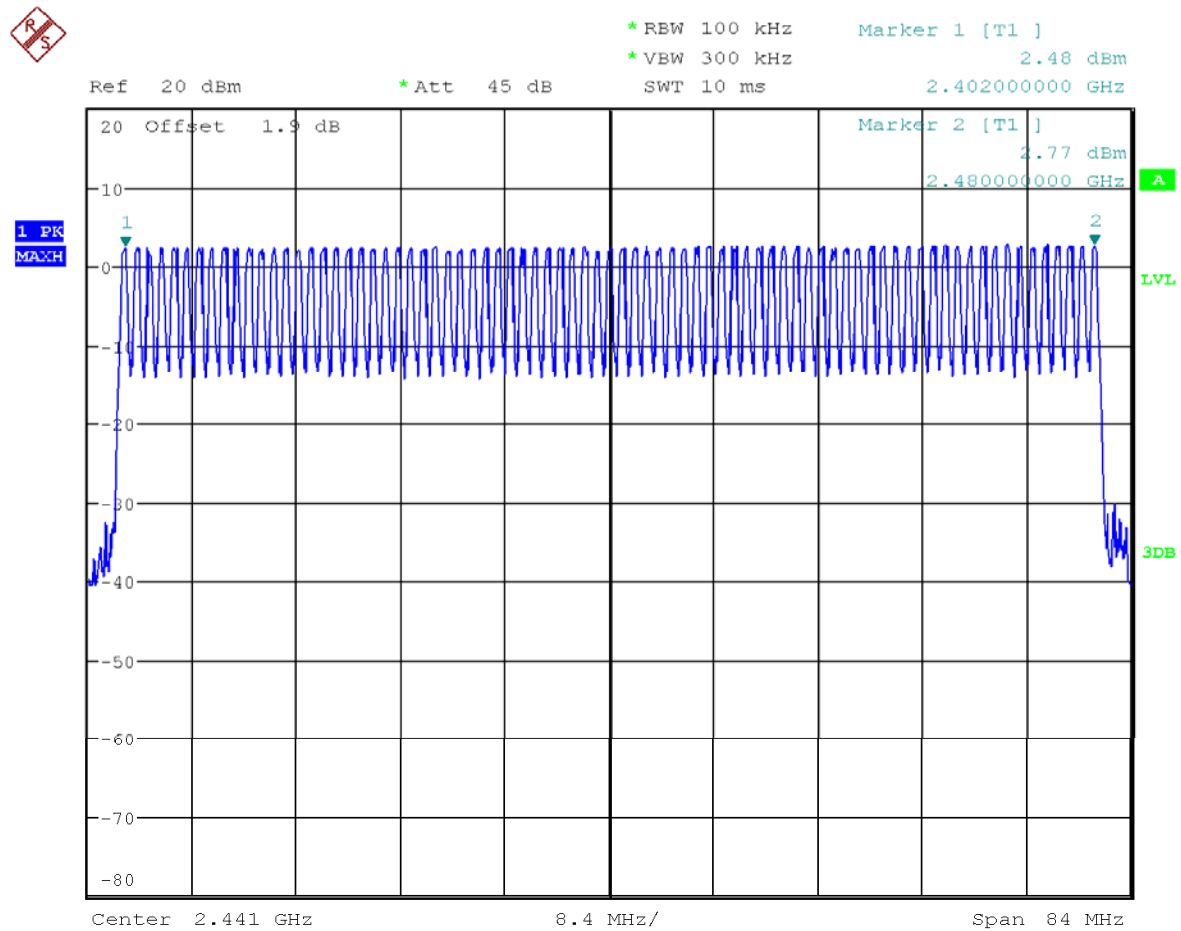
EXHIBIT 6H-1



MOTOROLA

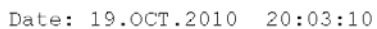
FCC ID: AZ489FT4900

**Bluetooth number of hopping frequencies – Pursuant 47 CFR
15.247(a)(1)(iii)**



Date: 19.OCT.2010 20:40:40

EXHIBIT 6H-2

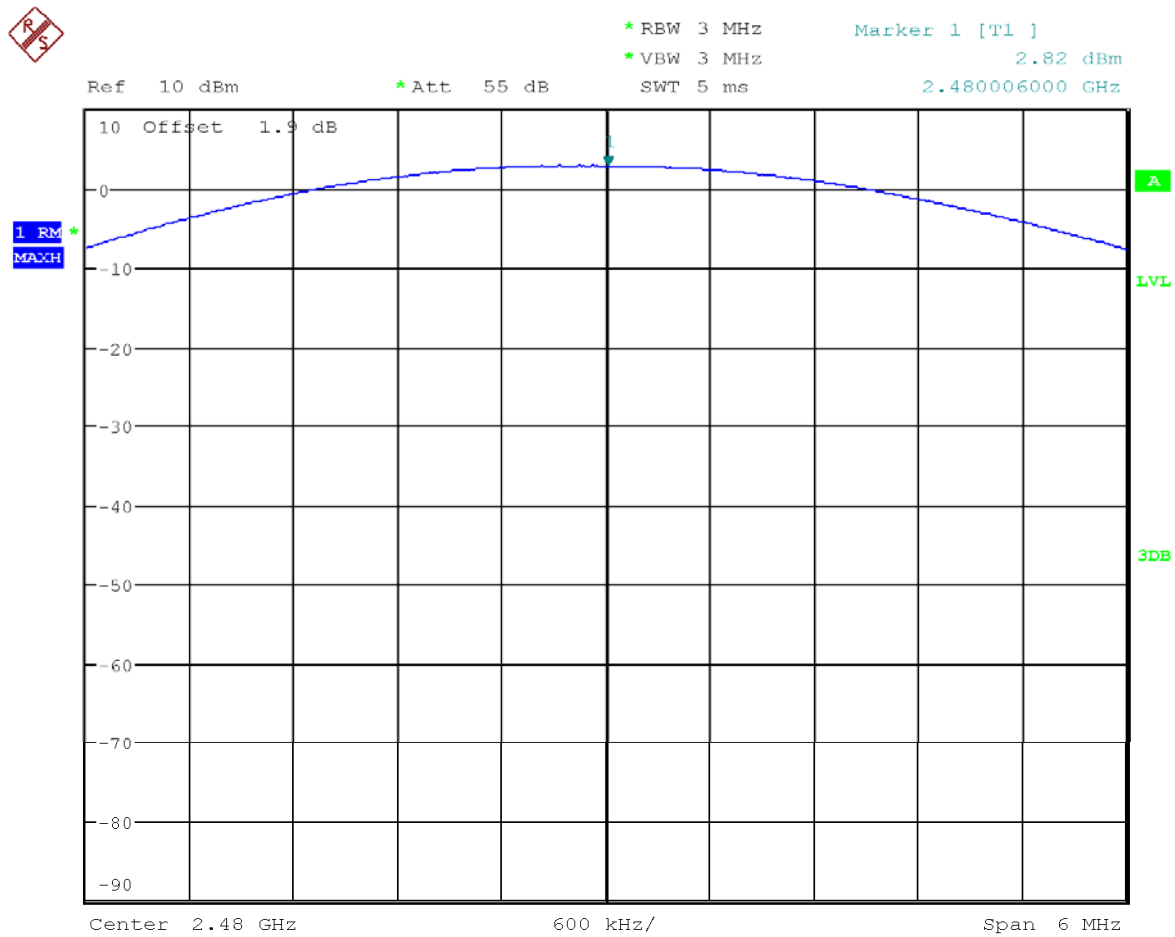




MOTOROLA

FCC ID: AZ489FT4900

Peak Bluetooth Output Power – Pursuant 47 CFR 15.247(b)(1)



Date: 15.OCT.2010 18:00:12

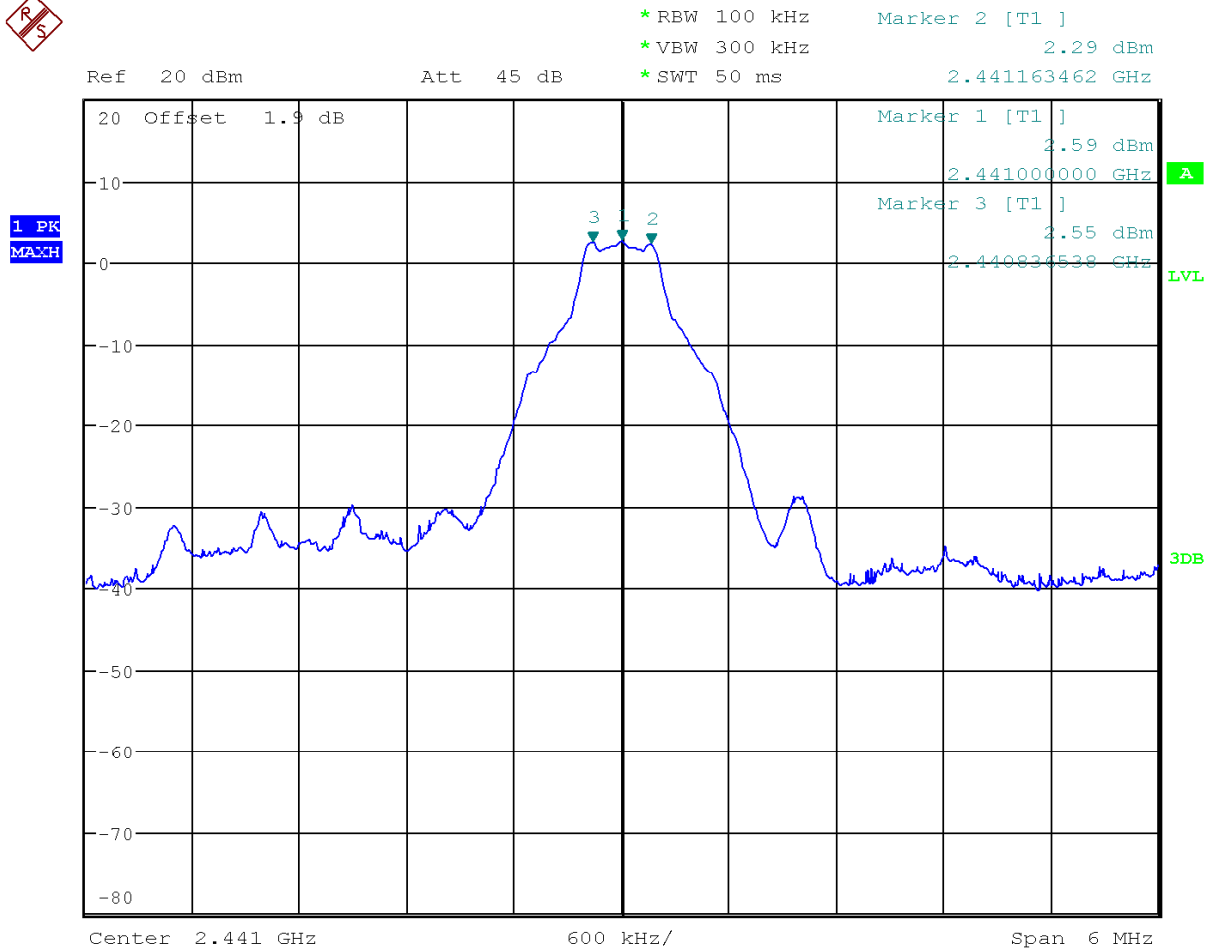
EXHIBIT 6H-4



MOTOROLA

FCC ID: AZ489FT4900

Band-Edge Compliance of RF Conducted Emissions- Pursuant 47 CFR 15.247(c)



Date: 18.OCT.2010 22:09:18

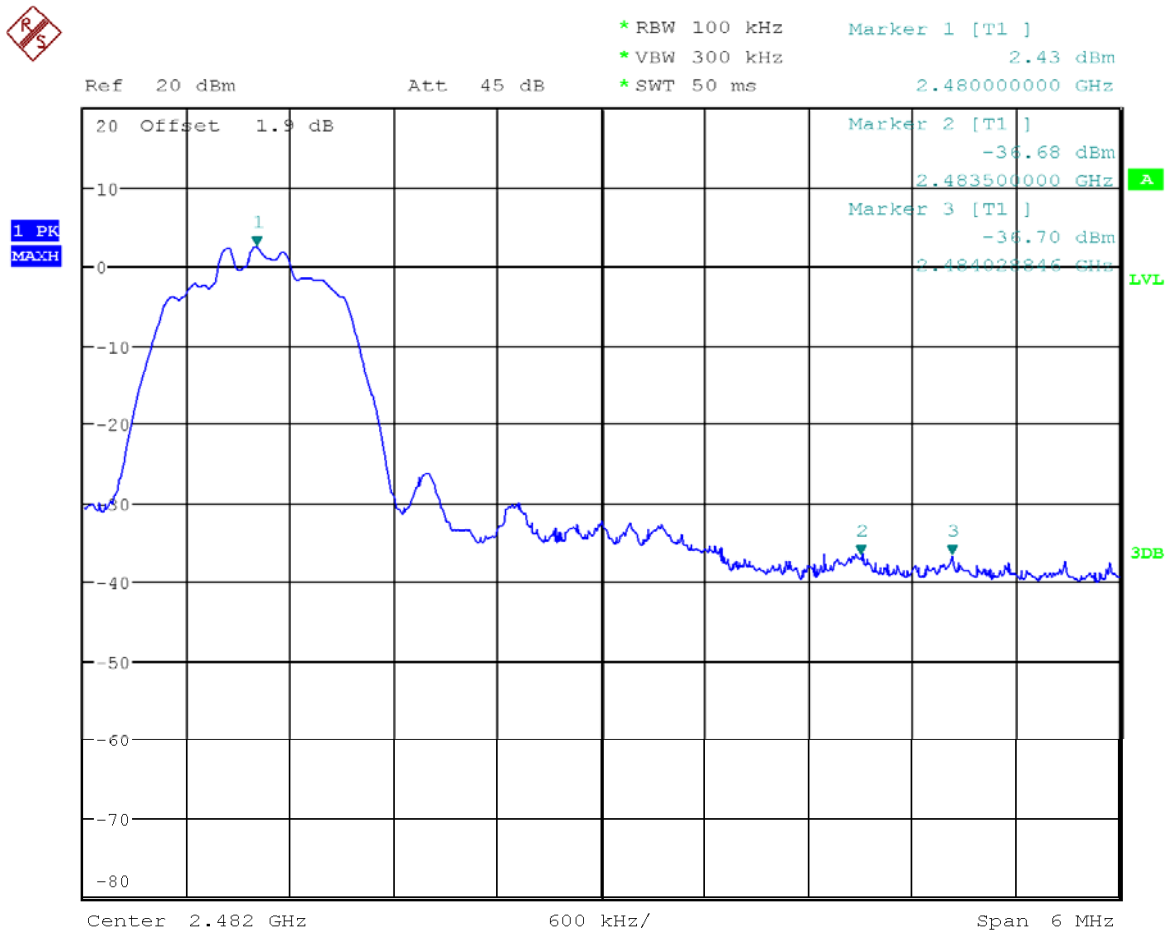
EXHIBIT 6H-5



MOTOROLA

FCC ID: AZ489FT4900

Upper band-edge conducted emissions with hopping disabled



Date: 19.OCT.2010 16:49:06

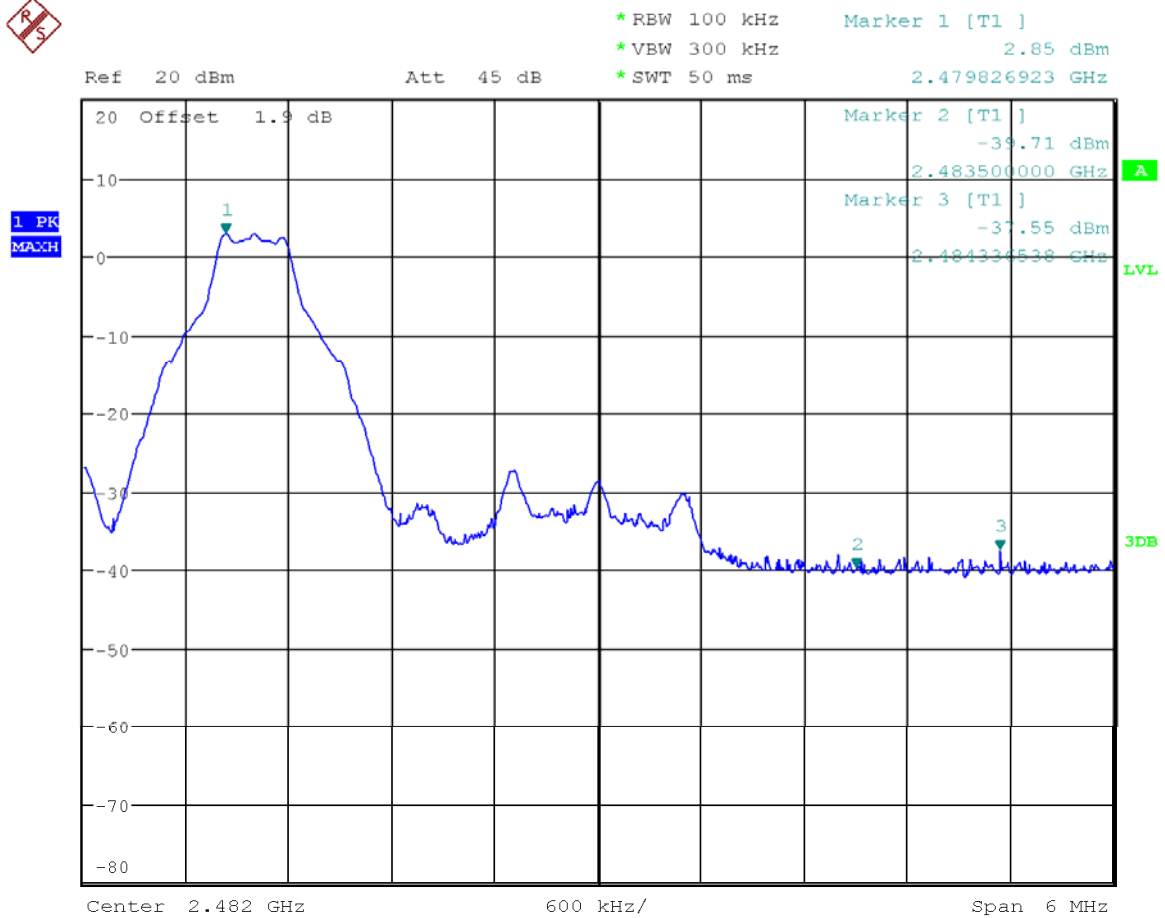
EXHIBIT 6H-6



MOTOROLA

FCC ID: AZ489FT4900

Upper band-edge conducted emissions with hopping enabled



Date: 19.OCT.2010 18:37:24

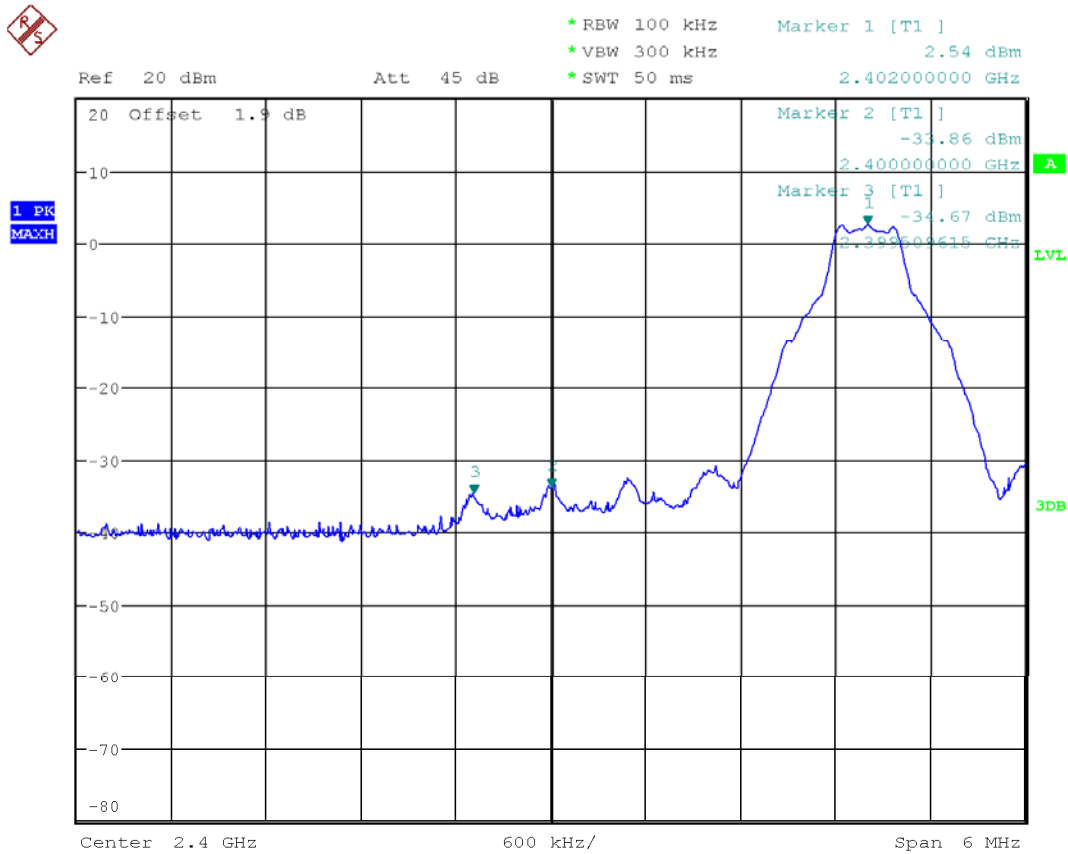
EXHIBIT 6H-7



MOTOROLA

FCC ID: AZ489FT4900

Lower band-edge conducted emissions with hopping enabled



Date: 19.OCT.2010 15:01:05

EXHIBIT 6H-8

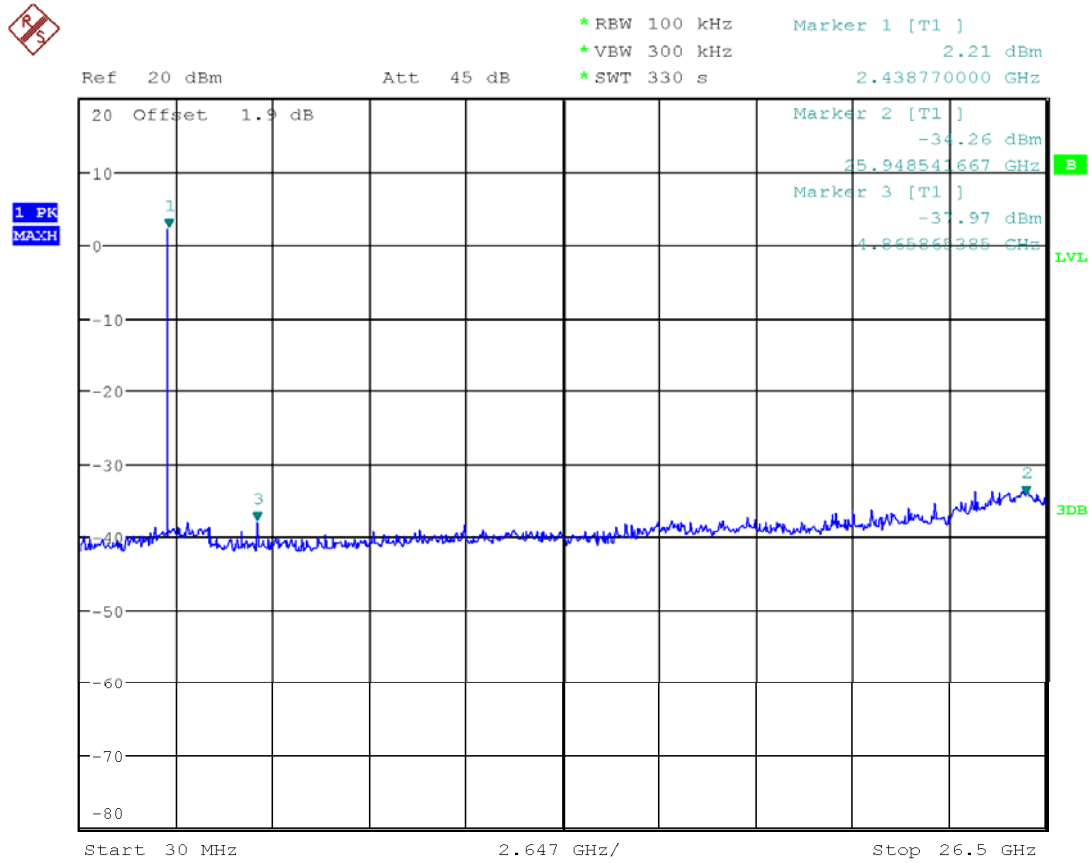


MOTOROLA

FCC ID: AZ489FT4900

Spurious RF Conducted Emissions – Pursuant 47CFR 15.247(c)

Spurious Conducted Emissions 30 MHz – 26.5 GHz



Date: 18.OCT.2010 22:07:03

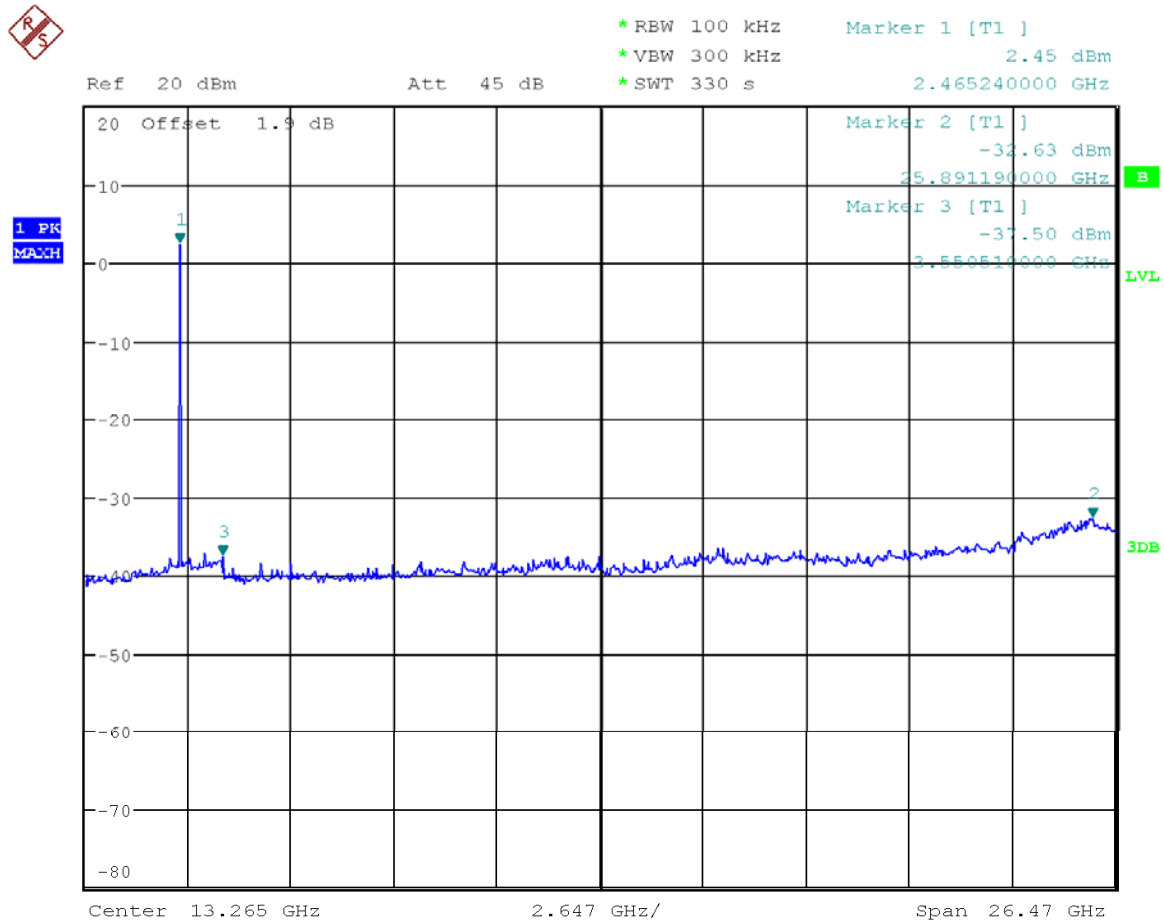
EXHIBIT 6H-9



MOTOROLA

FCC ID: AZ489FT4900

Spurious Conducted Emissions 13.26 GHz – 26.5 GHz



Date: 19.OCT.2010 18:33:12

EXHIBIT 6H-10