



MOTOROLA

FCC ID: AZ489FT4851

Test Report

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EXHIBIT 6



MOTOROLA

FCC ID: AZ489FT4851

RF POWER OUTPUT DATA

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

1Watt	467.9250 MHz
Measured Conducted RF output	1.212 Watts
Normal DC Voltage	4.80 Volts
Normal DC Curent	760 ma
Primary Supply Voltage	4.8 Volts
RF Conducted output measured at 5.0 Volts	

2Watt	467.9250 MHz
Measured Conducted RF output	2.200 Watts
Normal DC Voltage	4.80 Volts
Normal DC Curent	1.15 Amps
Primary Supply Voltage	4.8 Volts
RF Conducted output measured at 5.0 Volts	

EXHIBIT 6A



MOTOROLA

FCC ID: AZ489FT4851

AUDIO RESPONSE

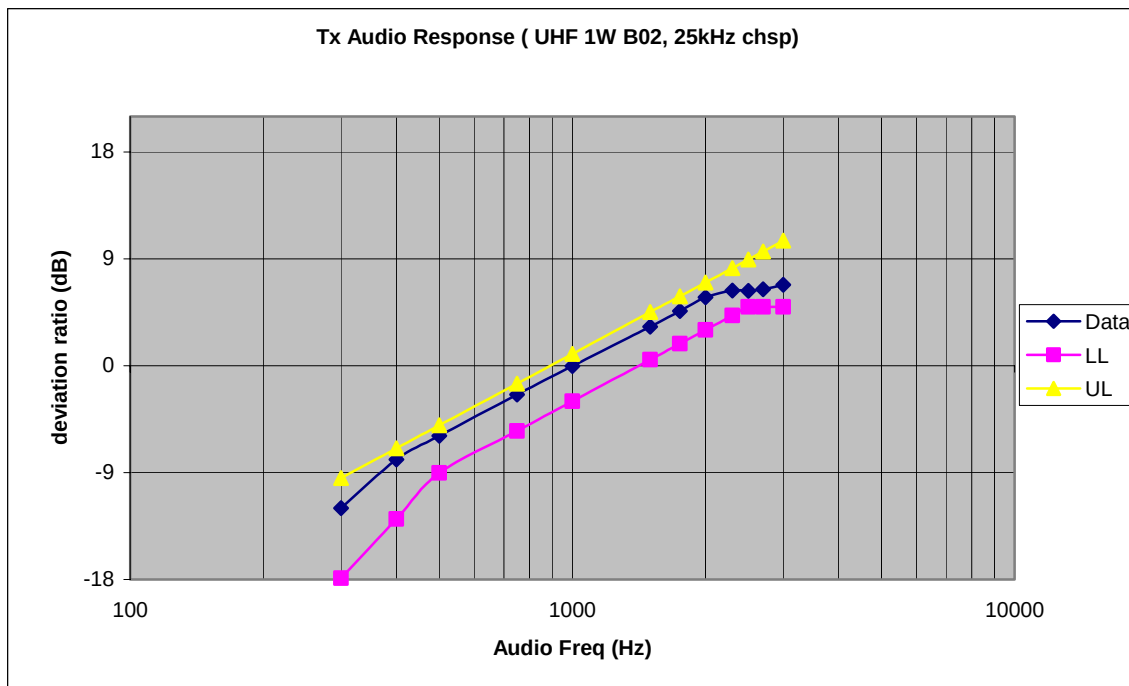
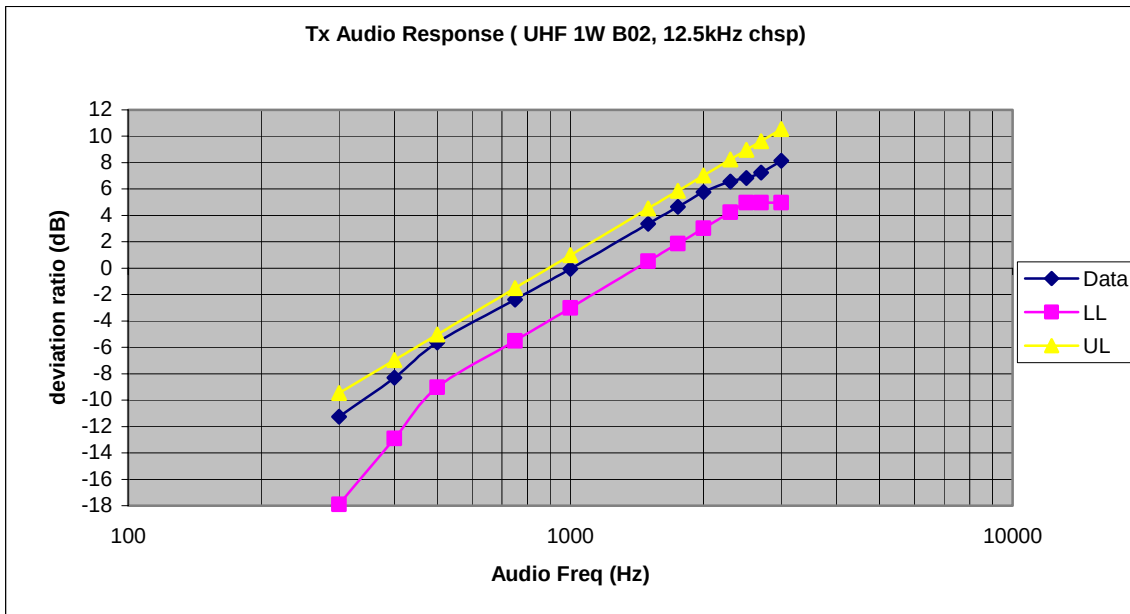


EXHIBIT 6B-1



MOTOROLA

FCC ID: AZ489FT4851

AUDIO RESPONSE

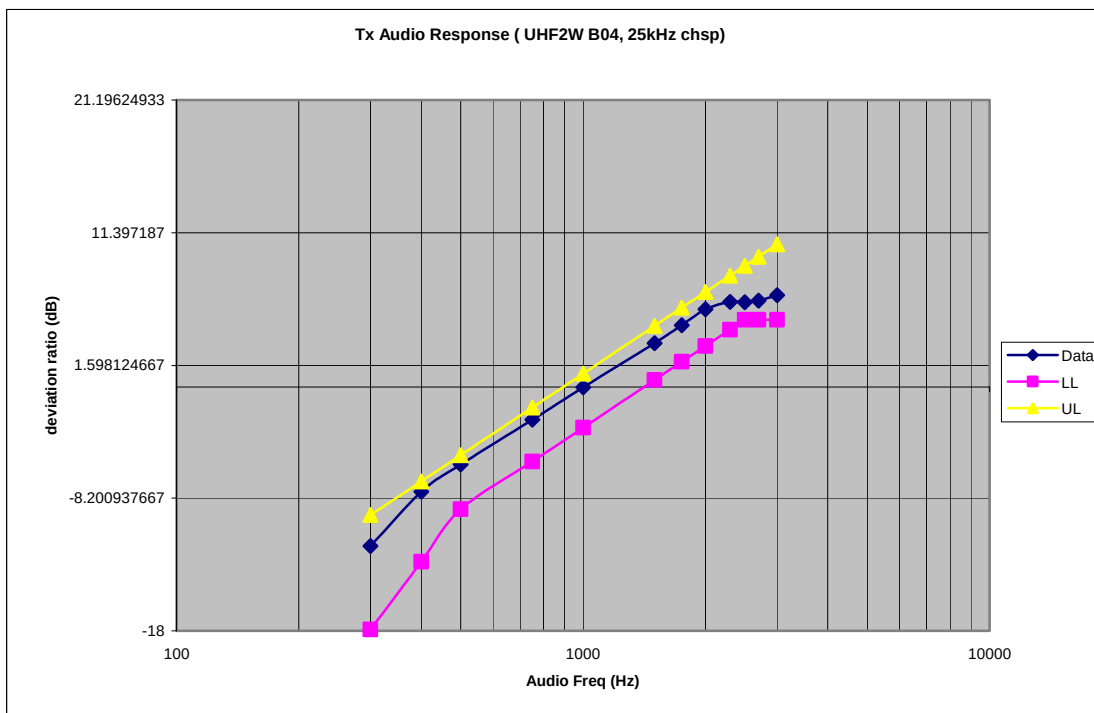
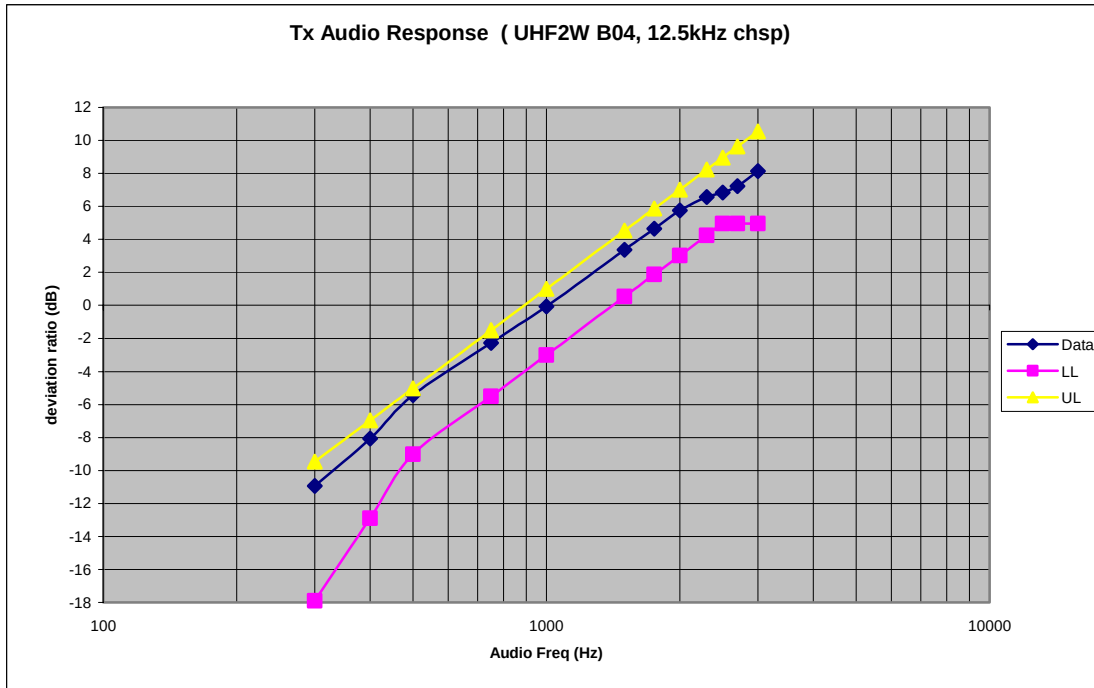


EXHIBIT 6B-2



MOTOROLA

FCC ID: AZ489FT4851

MODULATION LIMITING

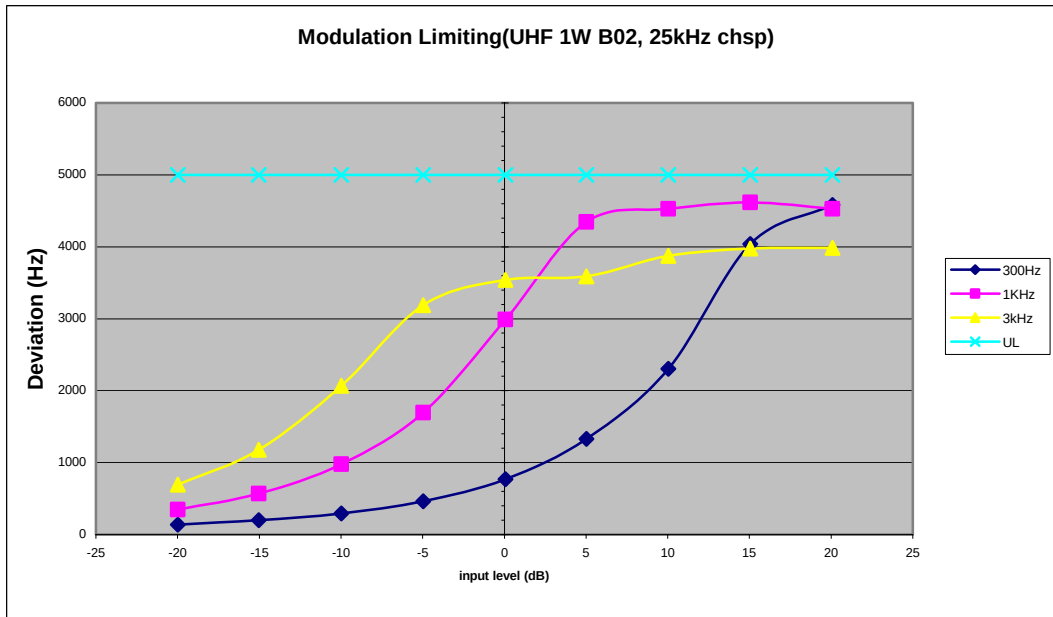
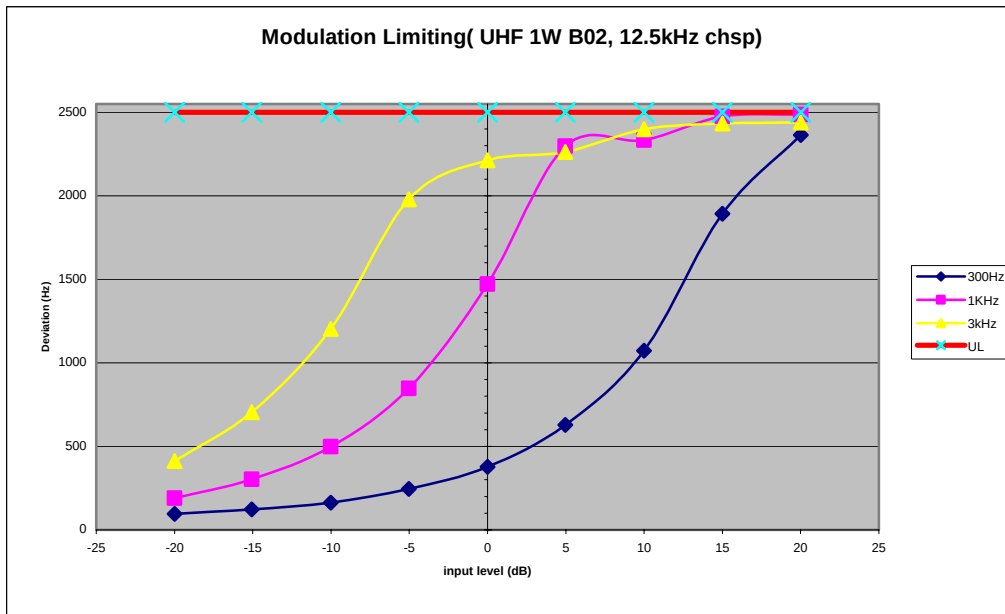


EXHIBIT 6C-1



MOTOROLA

FCC ID: AZ489FT4851

MODULATION LIMITING

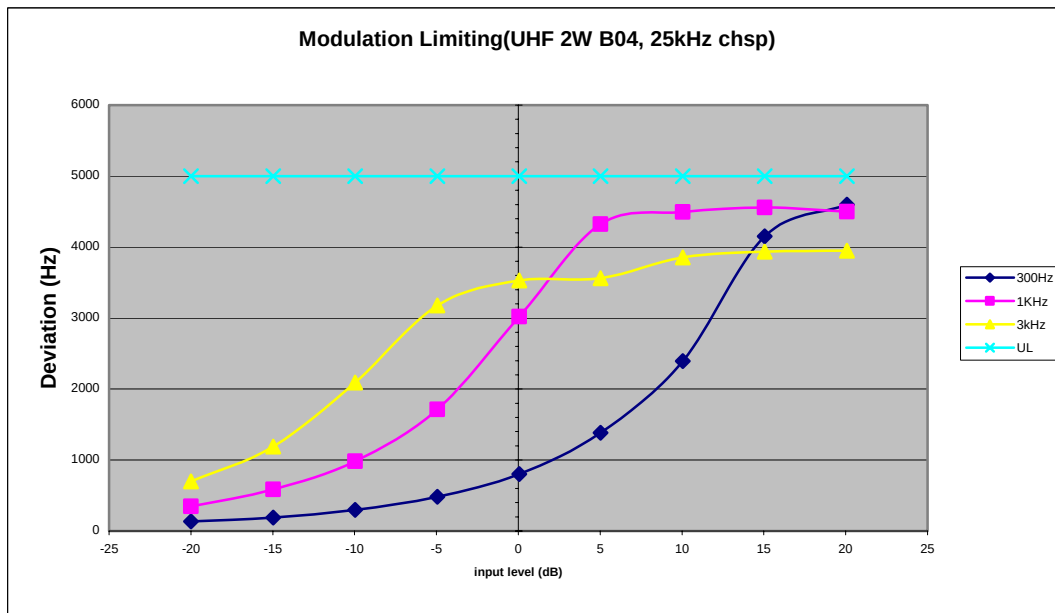
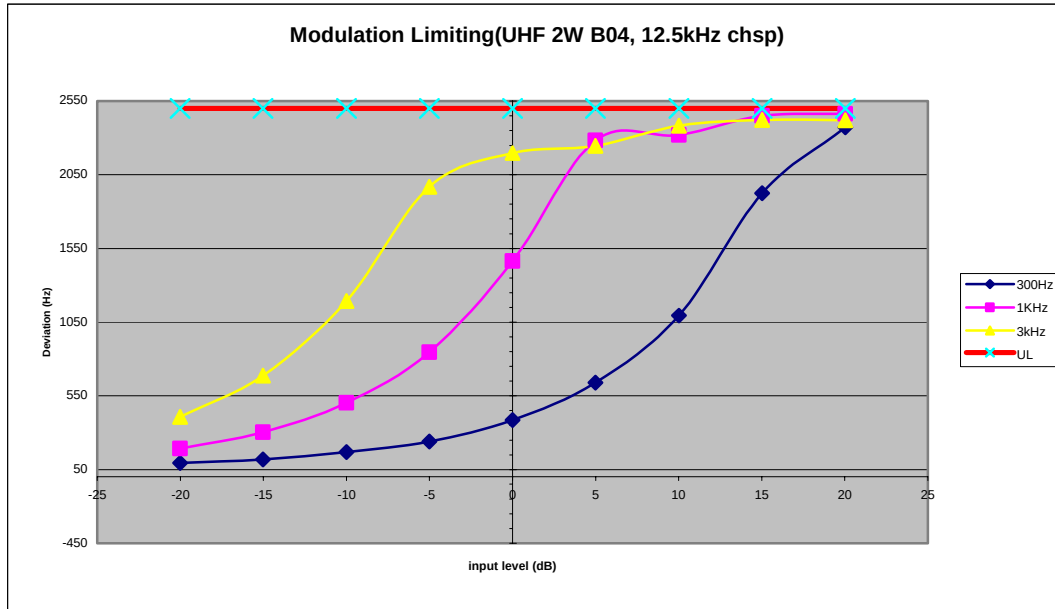


EXHIBIT 6C-2



MOTOROLA

FCC ID: AZ489FT4851

OCCUPIED BANDWIDTH DATA

12.5KHz / 25KHz Channel Spacing

EXHIBIT 6D1

1Watt

2500 Hz Audio Modulation

Emission Type: 11K0F3E

Specification Mask D, 90.210 – 12.5 kHz

EXHIBIT 6D2

1Watt

2500 Hz Audio Modulation

Emission Type: 16K0F3E

Specification Mask B, 90.210 – 25 kHz

EXHIBIT 6D3

2.2Watts

2500 Hz Audio Modulation

Emission Type: 11K0F3E

Specification Mask D, 90.210 – 12.5 kHz

EXHIBIT 6D4

2.2Watts

2500 Hz Audio Modulation

Emission Type: 16K0F3E

Specification Mask B, 90.210 – 25 kHz

EXHIBIT 6D-5

1Watt

2500 Hz & 77Hz Tone "PL" Modulation

Emission Type: 11K0F3E

Specification Mask D, 90.210 – 12.5 kHz

EXHIBIT 6D-6

1Watt

2500 Hz & 77Hz Tone "PL" Modulation

Emission Type: 16K0F3E

Specification Mask B, 90.210 – 25 kHz

EXHIBIT 6D-7

2.2Watts

2500 Hz & 77Hz Tone "PL" Modulation

Emission Type: 11K0F3E

Specification Mask D, 90.210 – 12.5 kHz

EXHIBIT 6D-8

2.2Watts

2500 Hz & 77Hz Tone "PL" Modulation

Emission Type: 16K0F3E

Specification Mask B, 90.210 – 25 kHz



MOTOROLA

FCC ID: AZ489FT4851

CARSON'S RULE: **11K0F3E**

$BW = 2(M+D)$

$BW = 2$ (3KHz maximum modulation frequency +2.5 kHz deviation)

$BW = 2$ (5.5)

$BW = 11K0$

CARSON'S RULE: **16K0F3E**

$BW = 2(M+D)$

$BW = 2$ (3KHz maximum modulation frequency +5 kHz deviation)

$BW = 2$ (8)

$BW = 16K0$

EXHIBIT 6D



MOTOROLA

FCC ID: AZ489FT4851

1Watt UHF

12.5 kHz Channel spacing: Mask D

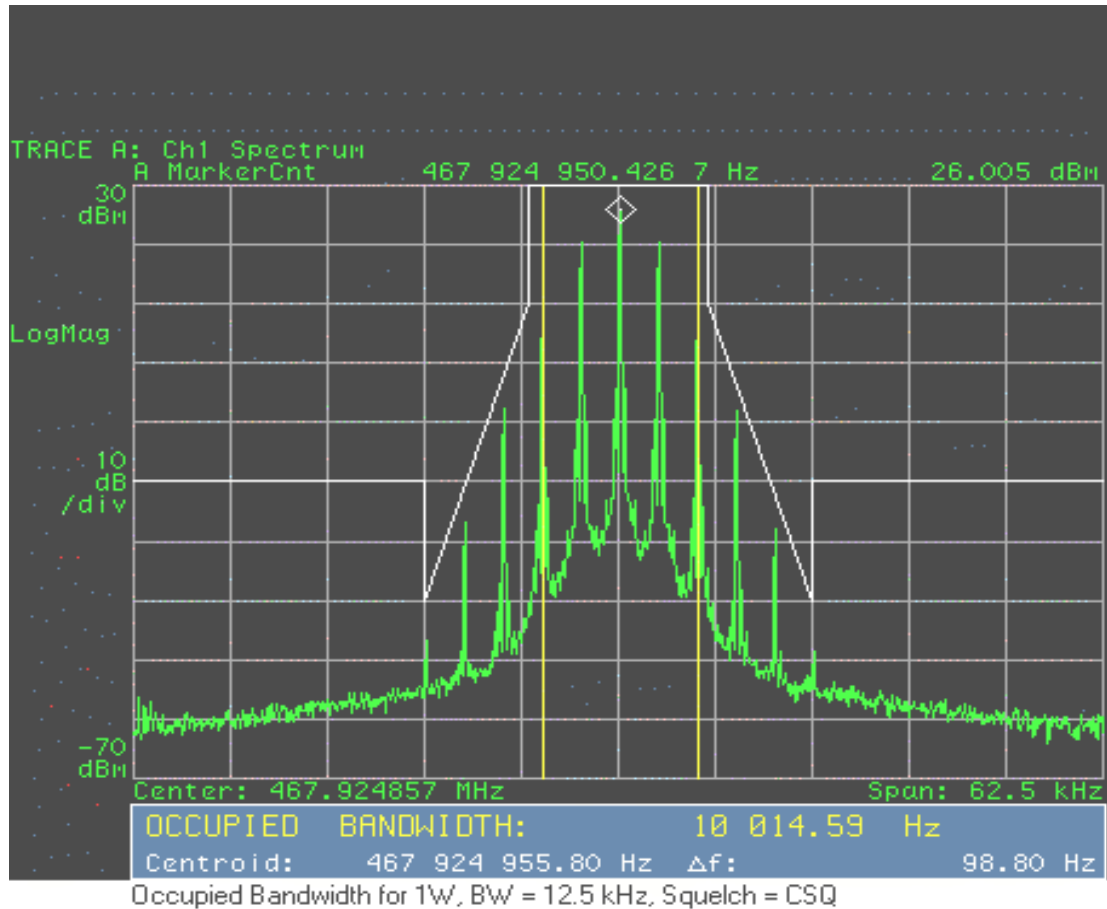


EXHIBIT6D-1

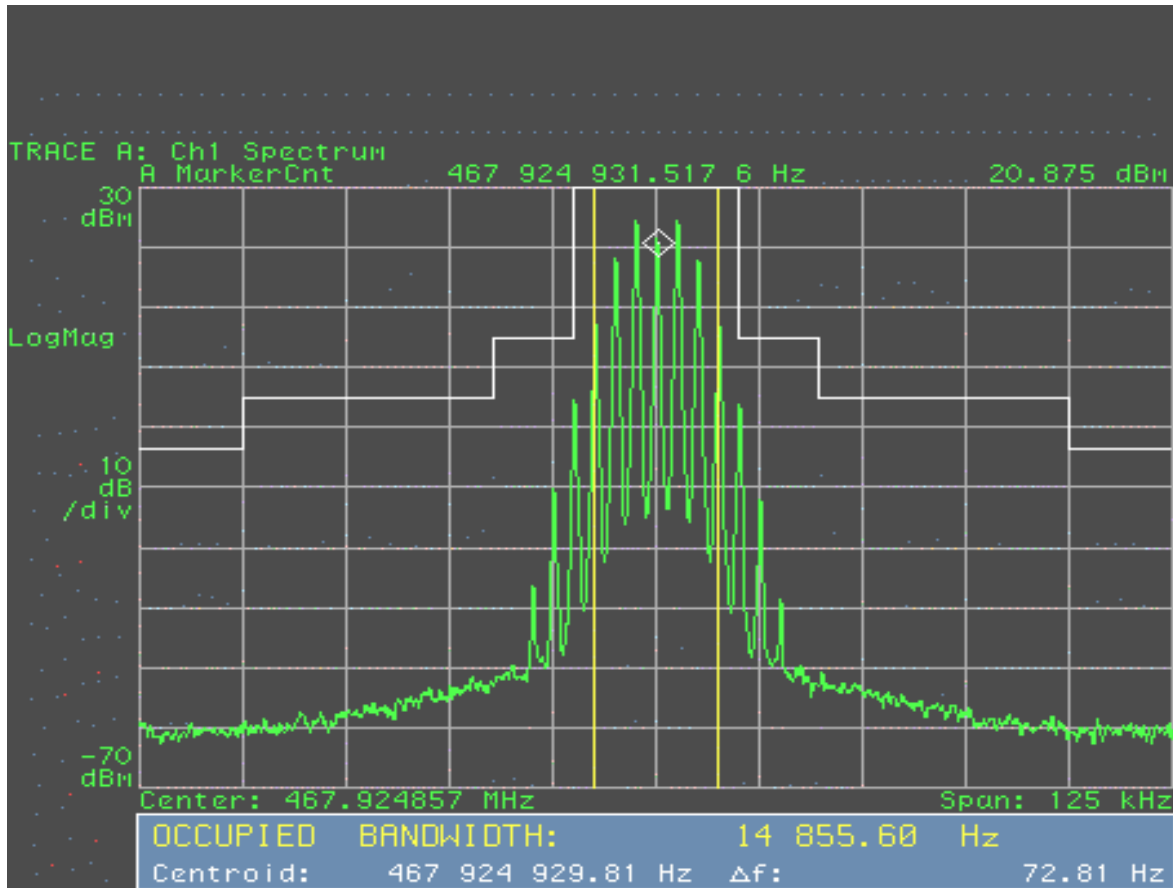


MOTOROLA

FCC ID: AZ489FT4851

1Watt UHF

25 kHz Channel spacing: Mask B



Occupied Bandwidth for 1W, BW = 25 kHz, Squelch = CSQ

EXHIBIT6D-2



MOTOROLA

FCC ID: AZ489FT4851

2.2Watt UHF

12.5 kHz Channel spacing: Mask D

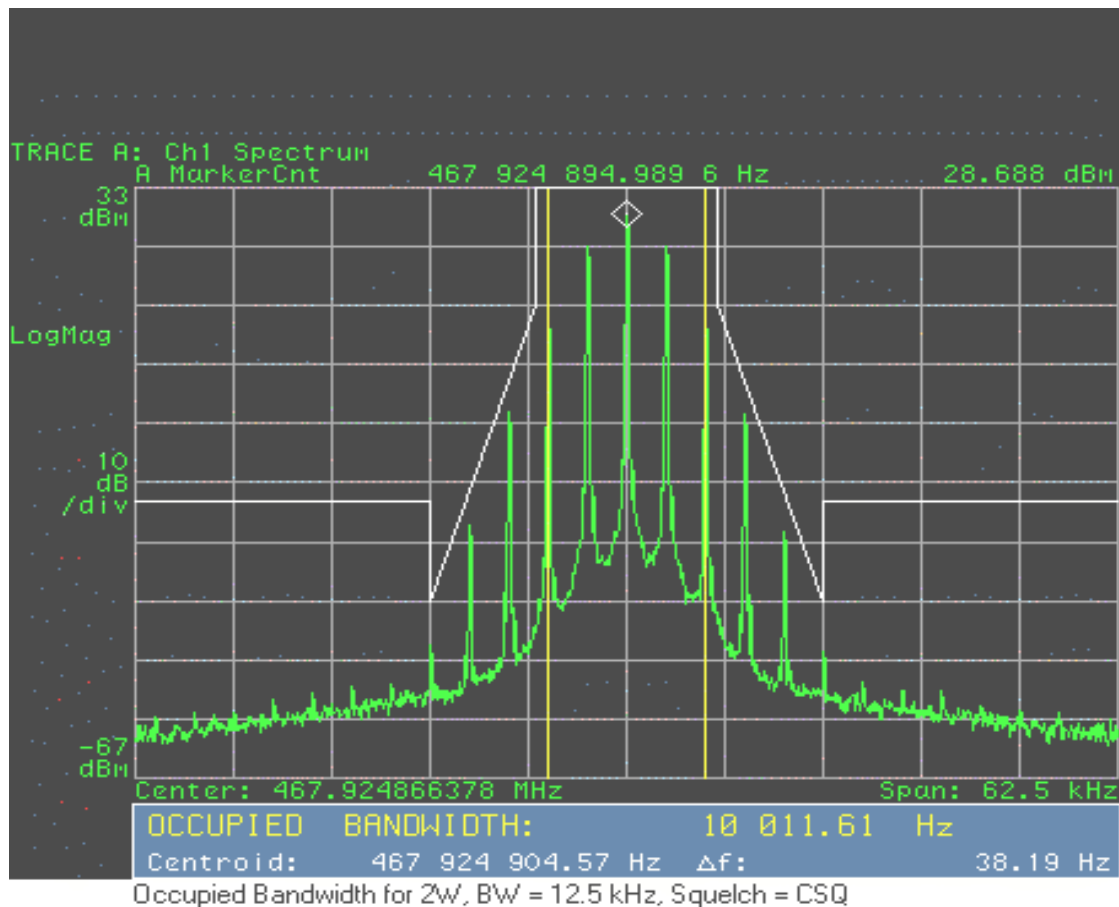


EXHIBIT 6D-3

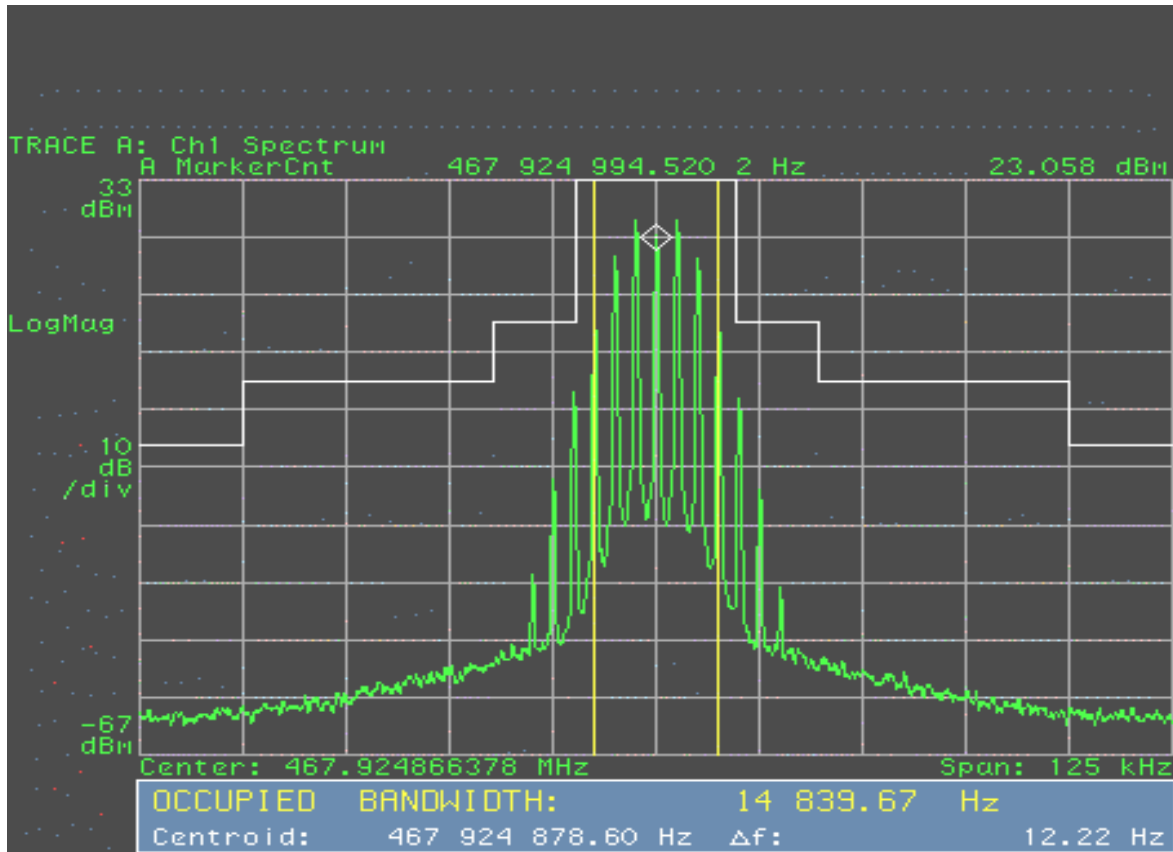


MOTOROLA

FCC ID: AZ489FT4851

2.2Watt UHF

25 kHz Channel spacing: Mask B



Occupied Bandwidth for 2W, BW = 25 kHz, Squelch = CSQ

EXHIBIT 6D-4



MOTOROLA

FCC ID: AZ489FT4851

1Watt UHF

12.5 kHz Channel spacing: Mask D

77Hz Tone "PL" Modulation

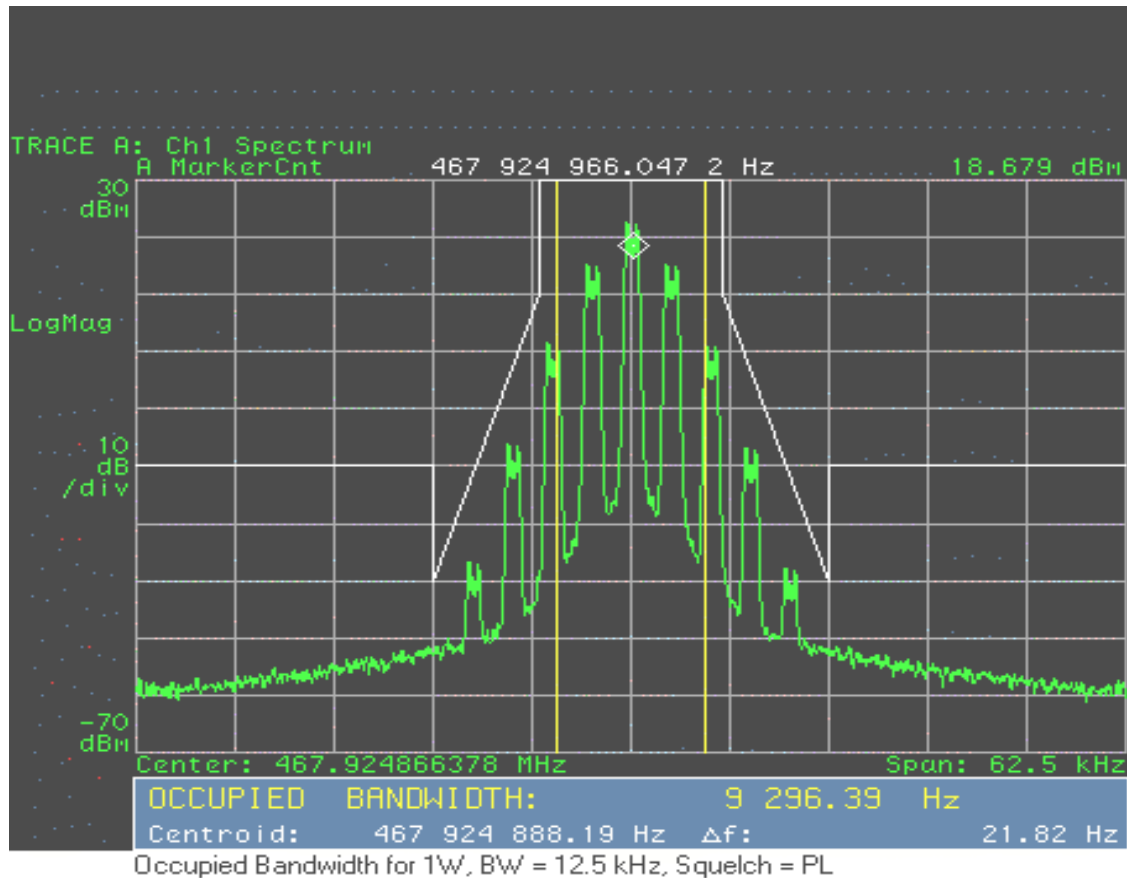


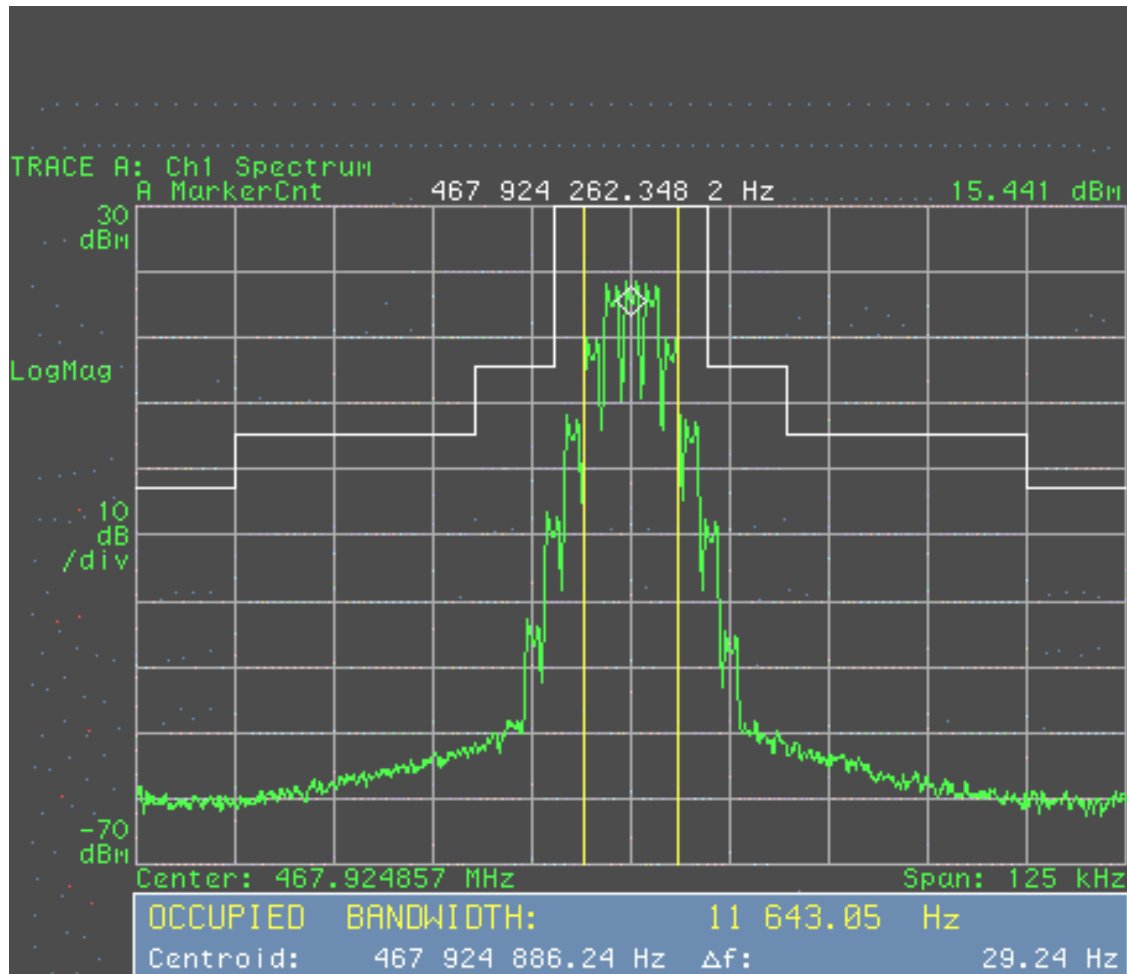
EXHIBIT 6D-5



MOTOROLA

FCC ID: AZ489FT4851

1Watt UHF
25 kHz Channel spacing: Mask B
77Hz Tone "PL" Modulation



Occupied Bandwidth for 1W, B'W = 25 kHz, Squelch = PL

EXHIBIT 6D-6



MOTOROLA

FCC ID: AZ489FT4851

2.2Watt UHF
12.5 kHz Channel spacing: Mask D
77Hz Tone "PL" Modulation

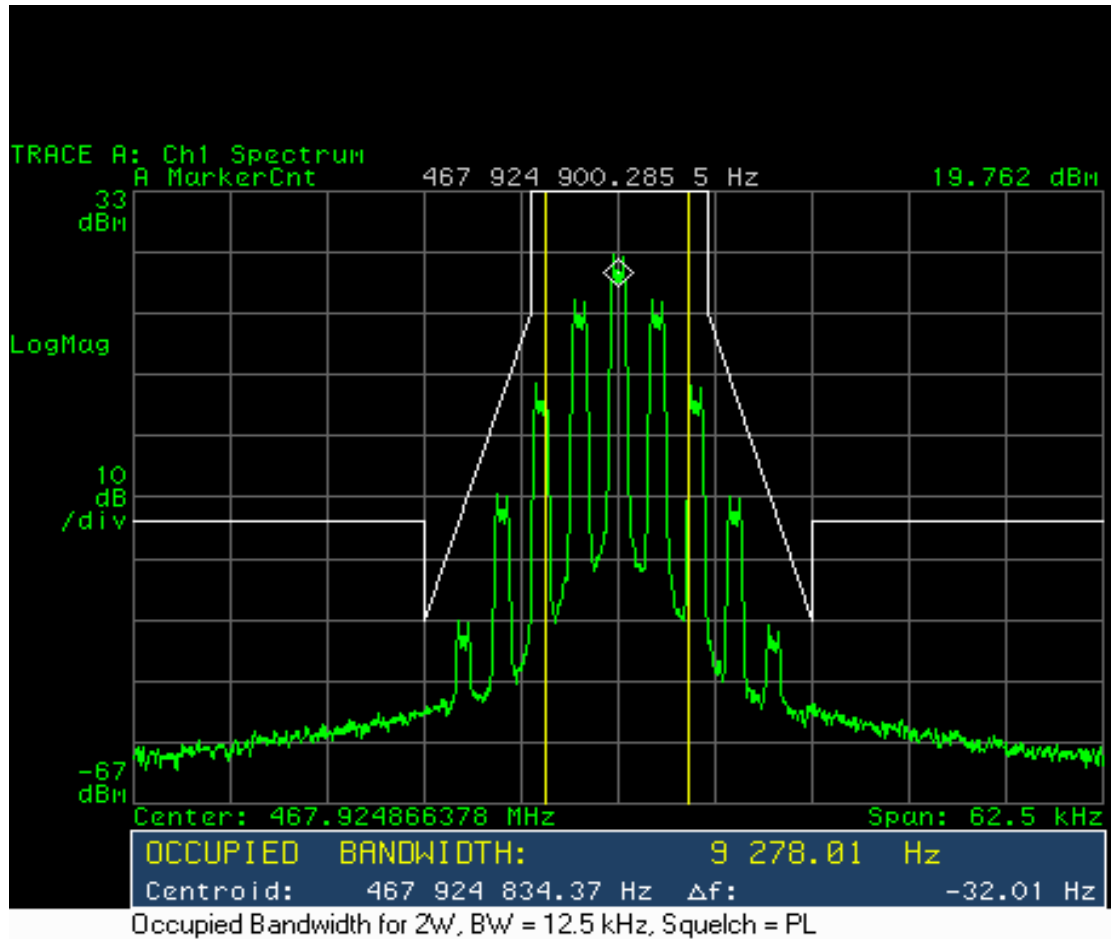


EXHIBIT 6D-7



MOTOROLA

FCC ID: AZ489FT4851

2.2Watt UHF
25 kHz Channel spacing: Mask B
77Hz Tone "PL" Modulation

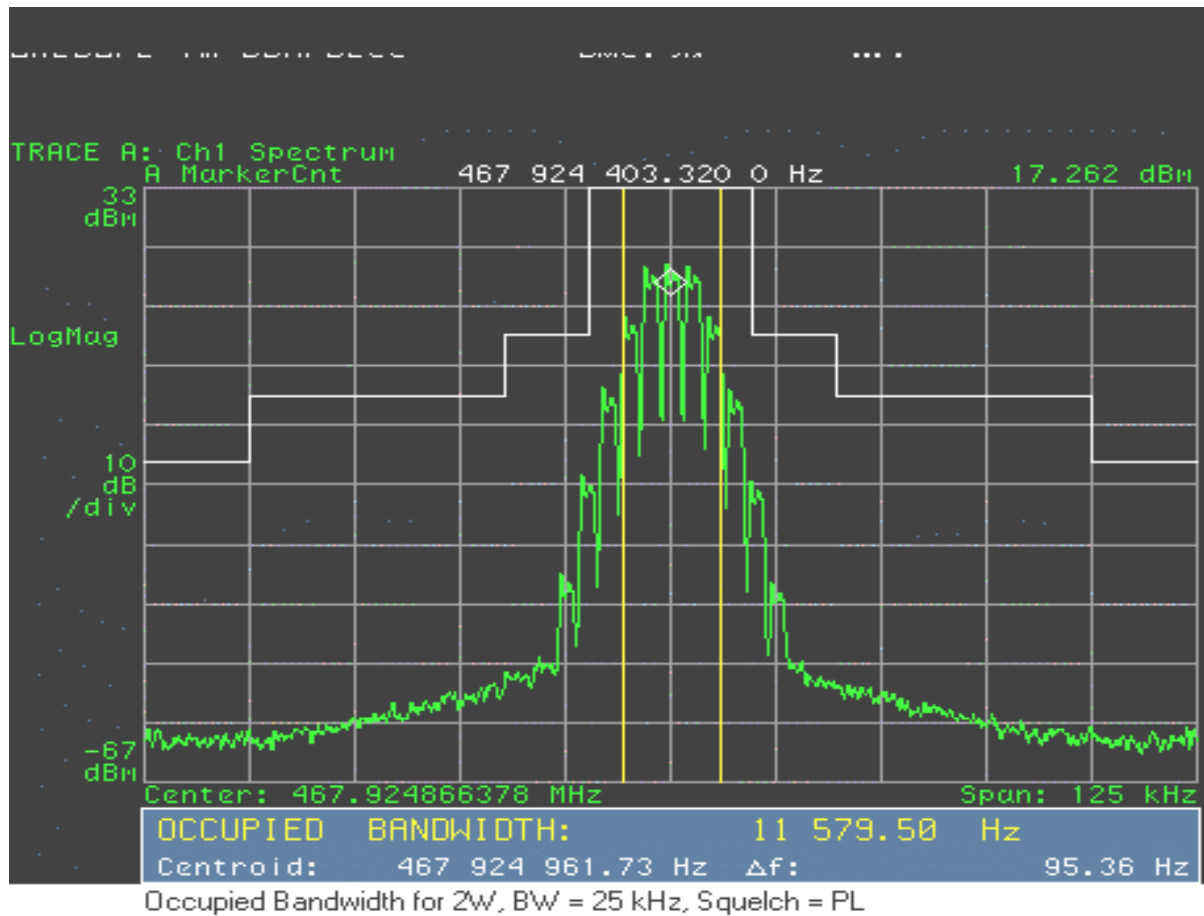


EXHIBIT6D-8

**MOTOROLA**

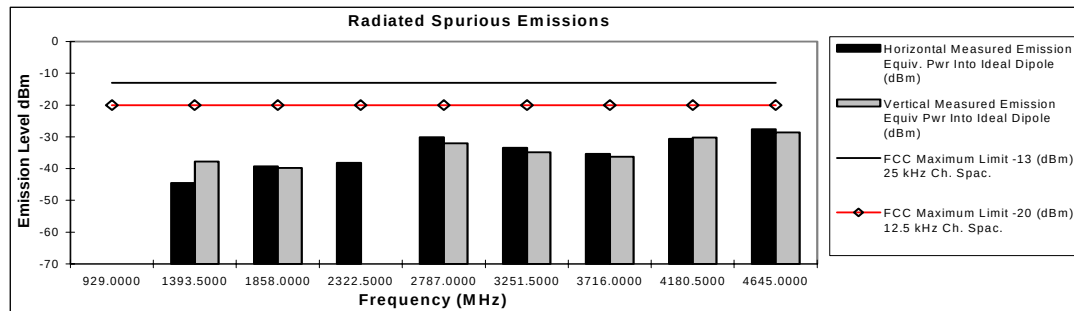
FCC ID: AZ489FT4851

Motorola Inc.

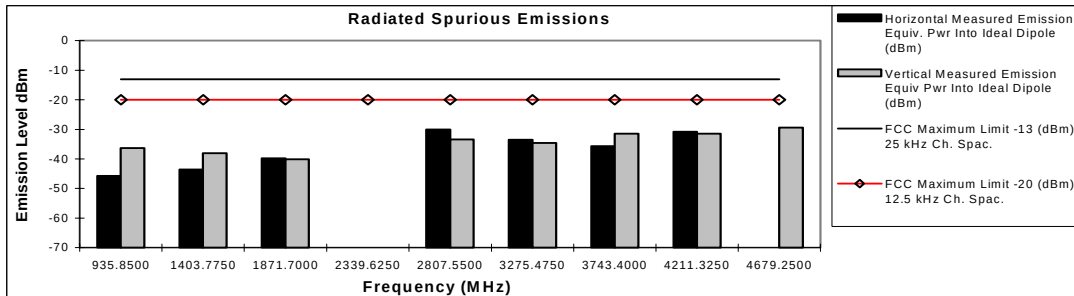
FCC ID:AZ489FT4851

Transmitter Radiated Spurious Emissions:**464.5 MHz****1 Watts****Channel Spacing 12.5kHz | S/N 567AAB0010**

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)
929.0000	-13	-20	*	*
1393.5000	-13	-20	-44.57	-37.78
1858.0000	-13	-20	-39.33	-39.77
2322.5000	-13	-20	-38.25	*
2787.0000	-13	-20	-30.07	-32.03
3251.5000	-13	-20	-33.42	-34.78
3716.0000	-13	-20	-35.31	-36.23
4180.5000	-13	-20	-30.58	-30.22
4645.0000	-13	-20	-27.56	-28.63

**Transmitter Radiated Spurious Emissions:****467.925 MHz****1 Watts****Channel Spacing 12.5kHz | S/N 567AAB0010**

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)
935.8500	-13	-20	-45.71	-36.36
1403.7750	-13	-20	-43.61	-38.09
1871.7000	-13	-20	-39.78	-40.09
2339.6250	-13	-20	*	*
2807.5500	-13	-20	-30.00	-33.40
3275.4750	-13	-20	-33.51	-34.62
3743.4000	-13	-20	-35.72	-31.54
4211.3250	-13	-20	-30.81	-31.41
4679.2500	-13	-20		-29.46



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

**MOTOROLA**

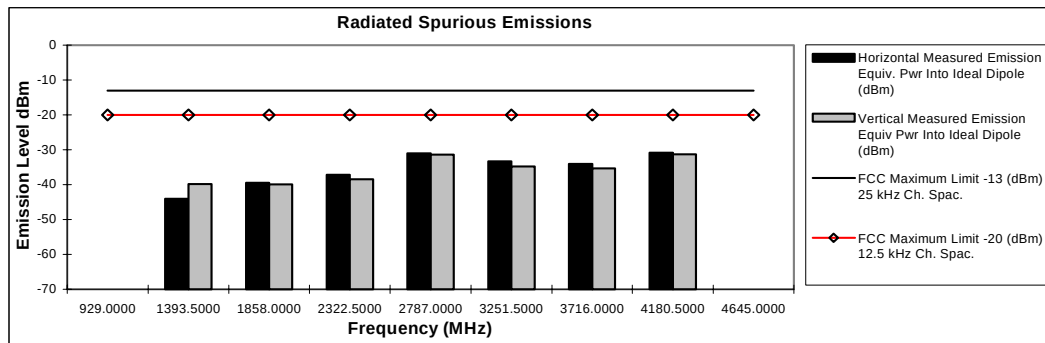
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Motorola Inc.

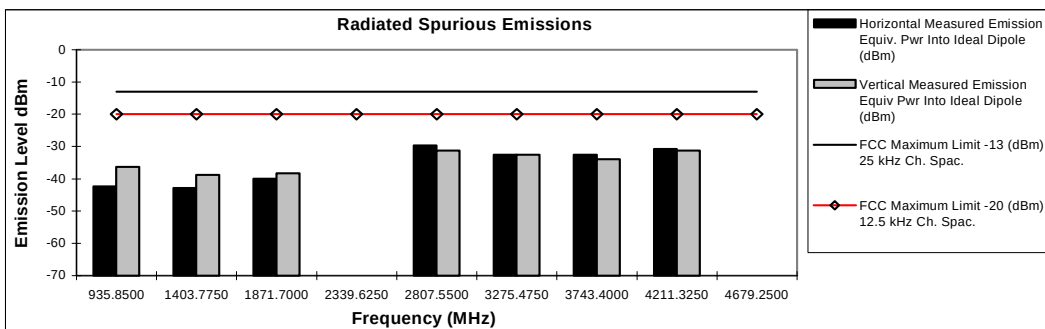
FCC ID:AZ489FT4851

Transmitter Radiated Spurious Emissions:**464.5 MHz 1 Watts Channel Spacing 25kHz | S/N 567AAB0010**

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)
929.0000	-13	-20	*	*
1393.5000	-13	-20	-44.07	-39.84
1858.0000	-13	-20	-39.45	-39.92
2322.5000	-13	-20	-37.18	-38.46
2787.0000	-13	-20	-30.98	-31.31
3251.5000	-13	-20	-33.29	-34.85
3716.0000	-13	-20	-33.98	-35.35
4180.5000	-13	-20	-30.79	-31.29
4645.0000	-13	-20	*	*

**Transmitter Radiated Spurious Emissions:****467.925 MHz 1 Watts Channel Spacing 25kHz | S/N 567AAB0010**

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)
935.8500	-13	-20	-42.32	-36.27
1403.7750	-13	-20	-42.86	-38.75
1871.7000	-13	-20	-39.98	-38.25
2339.6250	-13	-20	*	*
2807.5500	-13	-20	-29.65	-31.21
3275.4750	-13	-20	-32.52	-32.54
3743.4000	-13	-20	-32.55	-33.90
4211.3250	-13	-20	-30.78	-31.24
4679.2500	-13	-20	*	*



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

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

July 30, 2001

Exhibit 6E-2

**MOTOROLA**

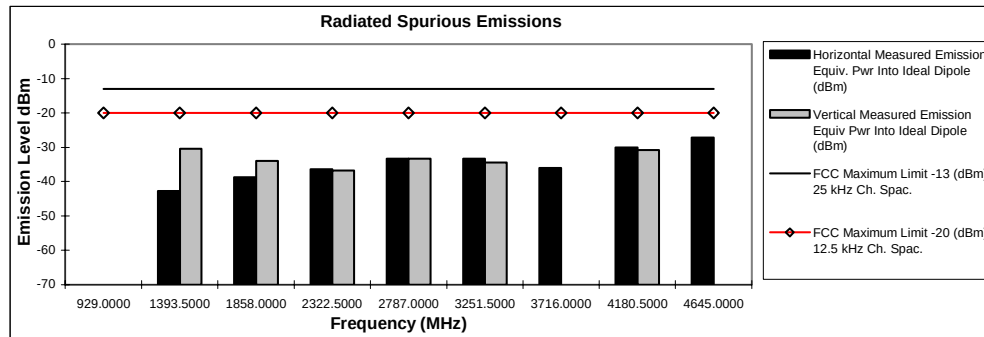
FCC ID: AZ489FT4851

Motorola Inc.

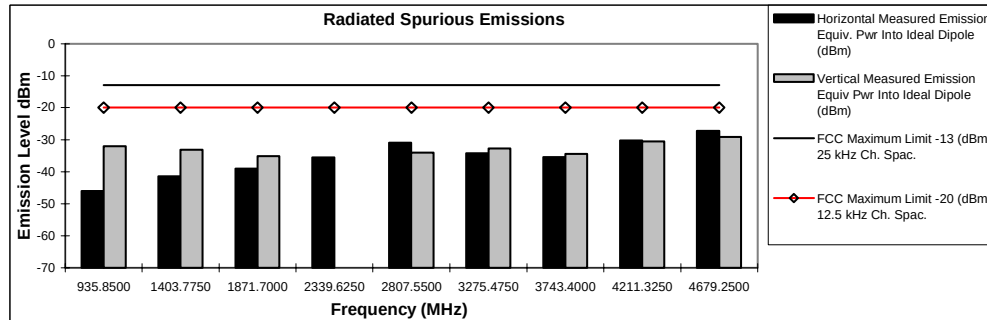
FCC ID:AZ489FT4851

Transmitter Radiated Spurious Emissions: Consumer Business Radio**464.5 MHz 2 Watts Channel Spacing 12.5kHz | S/N 567AAB0010**

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)
929.0000	-13	-20	*	*
1393.5000	-13	-20	-42.77	-30.51
1858.0000	-13	-20	-38.73	-33.97
2322.5000	-13	-20	-36.40	-36.76
2787.0000	-13	-20	-33.40	-33.40
3251.5000	-13	-20	-33.30	-34.50
3716.0000	-13	-20	-36.02	*
4180.5000	-13	-20	-30.08	-30.81
4645.0000	-13	-20	-27.16	*

**Transmitter Radiated Spurious Emissions: Consumer Business Radio****467.925 MHz 2 Watts Channel Spacing 12.5kHz | S/N 567AAB0010**

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)
935.8500	-13	-20	-45.96	-32.04
1403.7750	-13	-20	-41.33	-33.06
1871.7000	-13	-20	-38.96	-35.13
2339.6250	-13	-20	-35.58	*
2807.5500	-13	-20	-30.93	-33.99
3275.4750	-13	-20	-34.17	-32.71
3743.4000	-13	-20	-35.36	-34.40
4211.3250	-13	-20	-30.23	-30.50
4679.2500	-13	-20	-27.17	-29.09



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

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

July 30, 2001

Exhibit 6E-3

**MOTOROLA**

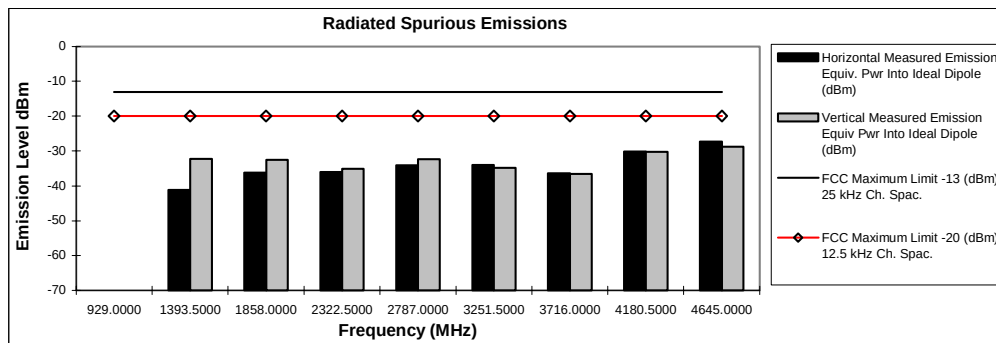
FCC ID: AZ489FT4851

Motorola Inc.

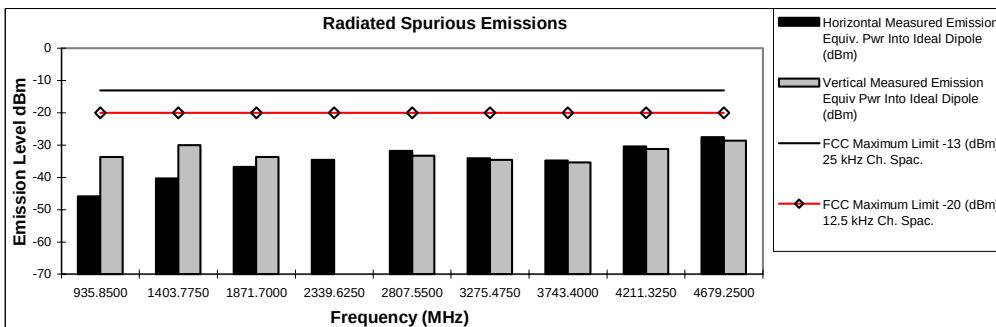
FCC ID:AZ489FT4851

Transmitter Radiated Spurious Emissions:**464.5 MHz 2 Watts Channel Spacing 25kHz | S/N 567AAB0010**

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)
929.0000	-13	-20	*	*
1393.5000	-13	-20	-41.17	-32.26
1858.0000	-13	-20	-36.20	-32.45
2322.5000	-13	-20	-36.07	-35.11
2787.0000	-13	-20	-34.12	-32.35
3251.5000	-13	-20	-33.99	-34.75
3716.0000	-13	-20	-36.41	-36.53
4180.5000	-13	-20	-30.11	-30.26
4645.0000	-13	-20	-27.33	-28.78

**Transmitter Radiated Spurious Emissions:****467.925 MHz 2 Watts Channel Spacing 25kHz | S/N 567AAB0010**

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)
935.8500	-13	-20	-45.88	-33.70
1403.7750	-13	-20	-40.37	-29.95
1871.7000	-13	-20	-36.78	-33.61
2339.6250	-13	-20	-34.58	*
2807.5500	-13	-20	-31.81	-33.24
3275.4750	-13	-20	-34.01	-34.60
3743.4000	-13	-20	-34.79	-35.43
4211.3250	-13	-20	-30.39	-31.17
4679.2500	-13	-20	-27.45	-28.58



* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

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

July 30, 2001

Exhibit 6E-4



MOTOROLA

FCC ID: AZ489FT4851

Low Power 12.5 kHz Bandwidth

Transmitter Conducted Spurious Emissions FCC ID: AZ489FT4851

464.50000 MHz

Power 1.0W

Spur Frequency	FCC Limit	Measured Value (dBm)
475.80000	-13.0	-41.3
928.70000	-13.0	-28.0
1393.00000	-13.0	-22.5
1856.00000	-13.0	-47.2
2321.00000	-13.0	-32.6
2784.00000	-13.0	-33.7
3250.00000	-13.0	-40.9
3714.00000	-13.0	-37.8
4180.00000	-13.0	-39.3
4644.00000	-13.0	-51.5

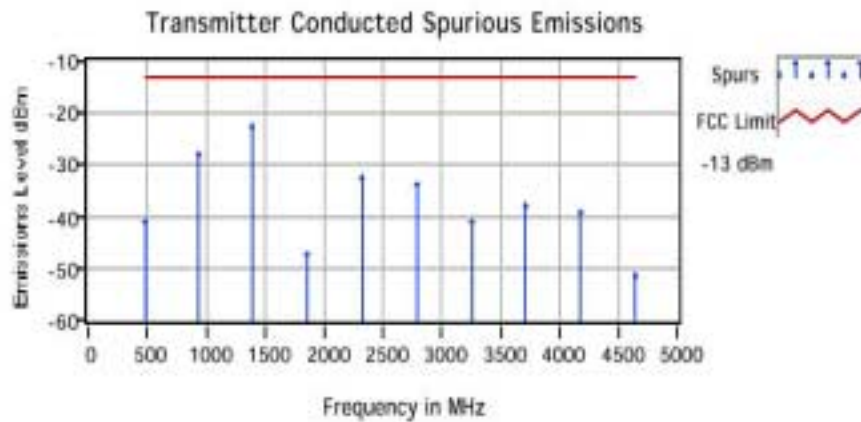


EXHIBIT 6F-1



MOTOROLA

FCC ID: AZ489FT4851

Low Power 25 kHz Bandwidth

Transmitter Conducted Spurious Emissions FCC ID: AZ489FT4851

464.50000 MHz

Power 1.0W

Spur Frequency	FCC Limit	Measured Value (dBm)
928.70000	-13.0	-27.9
1393.00000	-13.0	-22.4
1858.00000	-13.0	-47.0
2321.00000	-13.0	-32.9
2784.00000	-13.0	-33.4
3252.00000	-13.0	-40.7
3714.00000	-13.0	-37.8
4180.00000	-13.0	-39.9
4644.00000	-13.0	-51.5

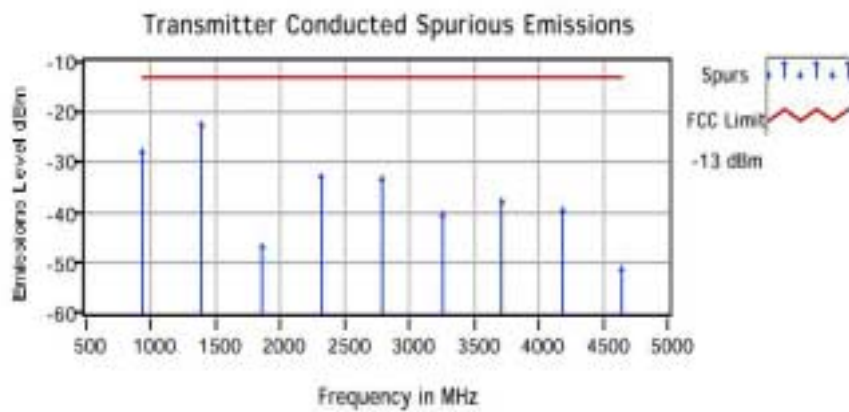


EXHIBIT 6F-2



MOTOROLA

FCC ID: AZ489FT4851

High Power 12.5 kHz Bandwidth

Transmitter Conducted Spurious Emissions FCC ID: AZ489FT4851

464.50000 MHz

Power 2.0W

Spur Frequency	FCC Limit	Measured Value (dBm)
928.90000	-13.0	-27.2
1393.00000	-13.0	-21.6
1856.00000	-13.0	-39.9
2321.00000	-13.0	-25.7
2784.00000	-13.0	-34.6
3251.00000	-13.0	-36.3
3714.00000	-13.0	-37.2
4180.00000	-13.0	-31.6
4644.00000	-13.0	-38.6

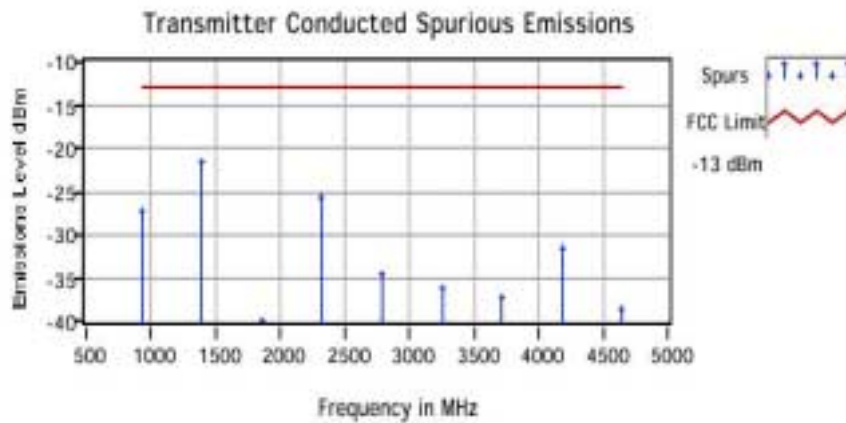


EXHIBIT6 F-3



MOTOROLA

FCC ID: AZ489FT4851

High Power 25 kHz Bandwidth

Transmitter Conducted Spurious Emissions FCC ID: AZ489FT4851

464.50000 MHz

Power 2.0W

Spur Frequency	FCC Limit	Measured Value (dBm)
928.70000	-13.0	-27.2
1393.00000	-13.0	-21.9
1856.00000	-13.0	-40.4
2321.00000	-13.0	-25.9
2784.00000	-13.0	-34.3
3251.00000	-13.0	-36.2
3714.00000	-13.0	-37.5
4180.00000	-13.0	-31.6
4644.00000	-13.0	-38.5

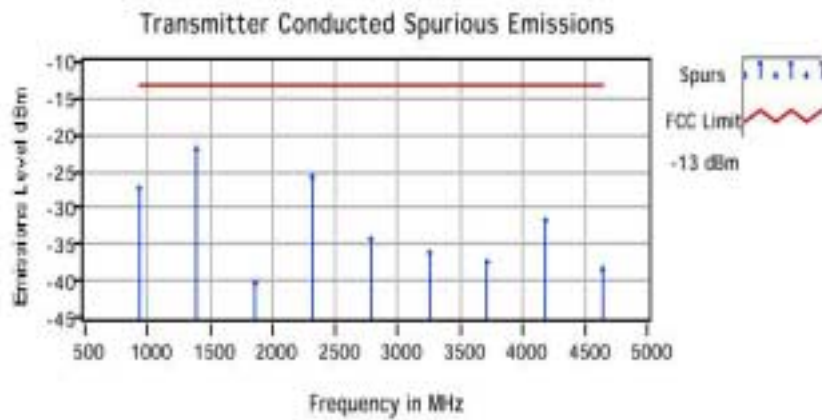


EXHIBIT 6F-4



MOTOROLA

FCC ID: AZ489FT4851

Frequency Stability over Temperature

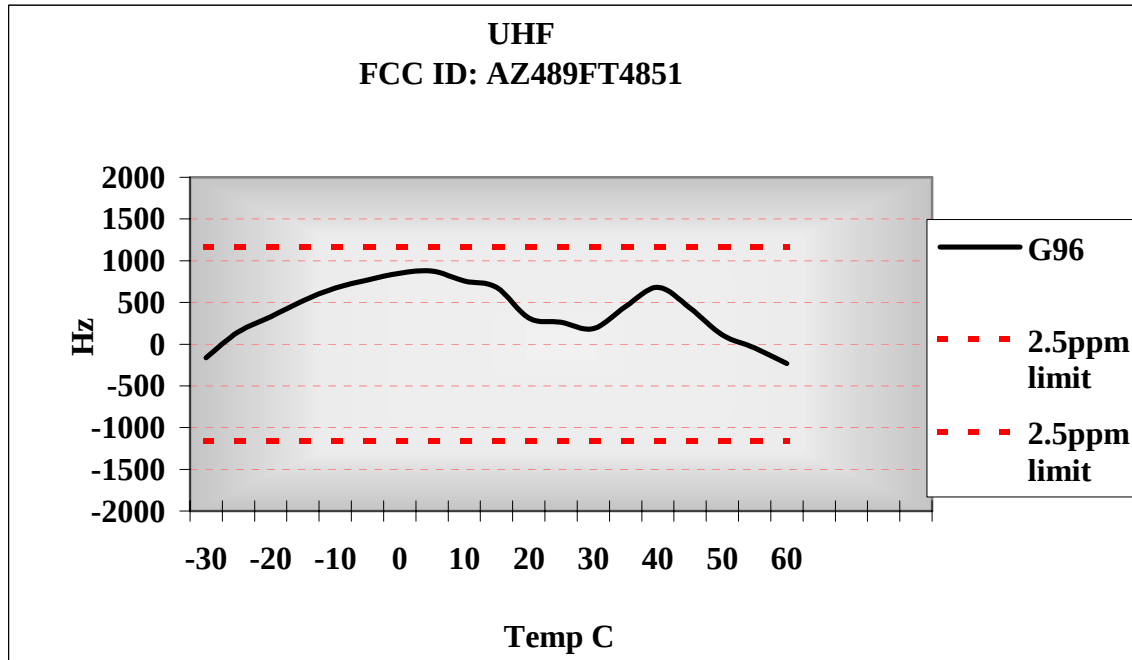
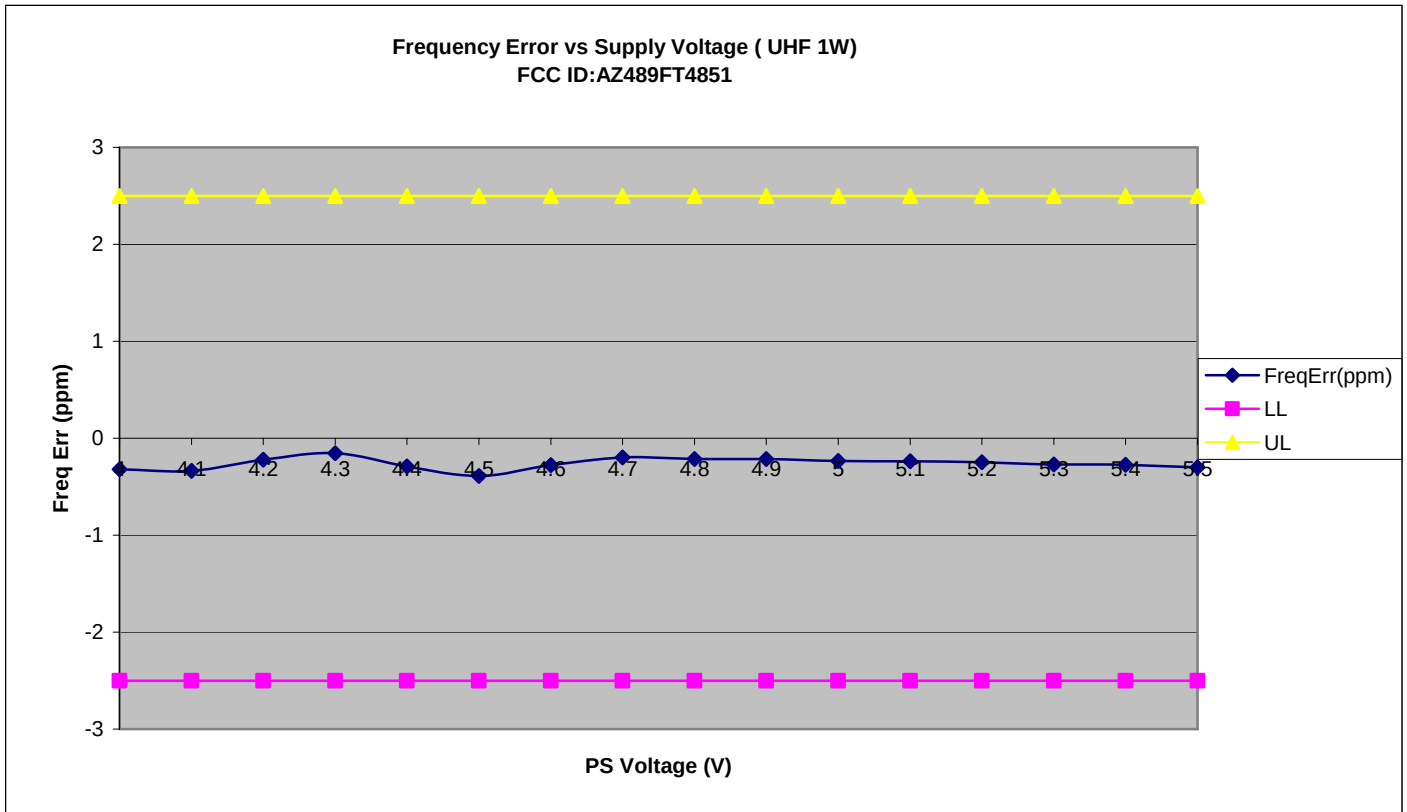


EXHIBIT 6G-1



MOTOROLA

FCC ID: AZ489FT4851



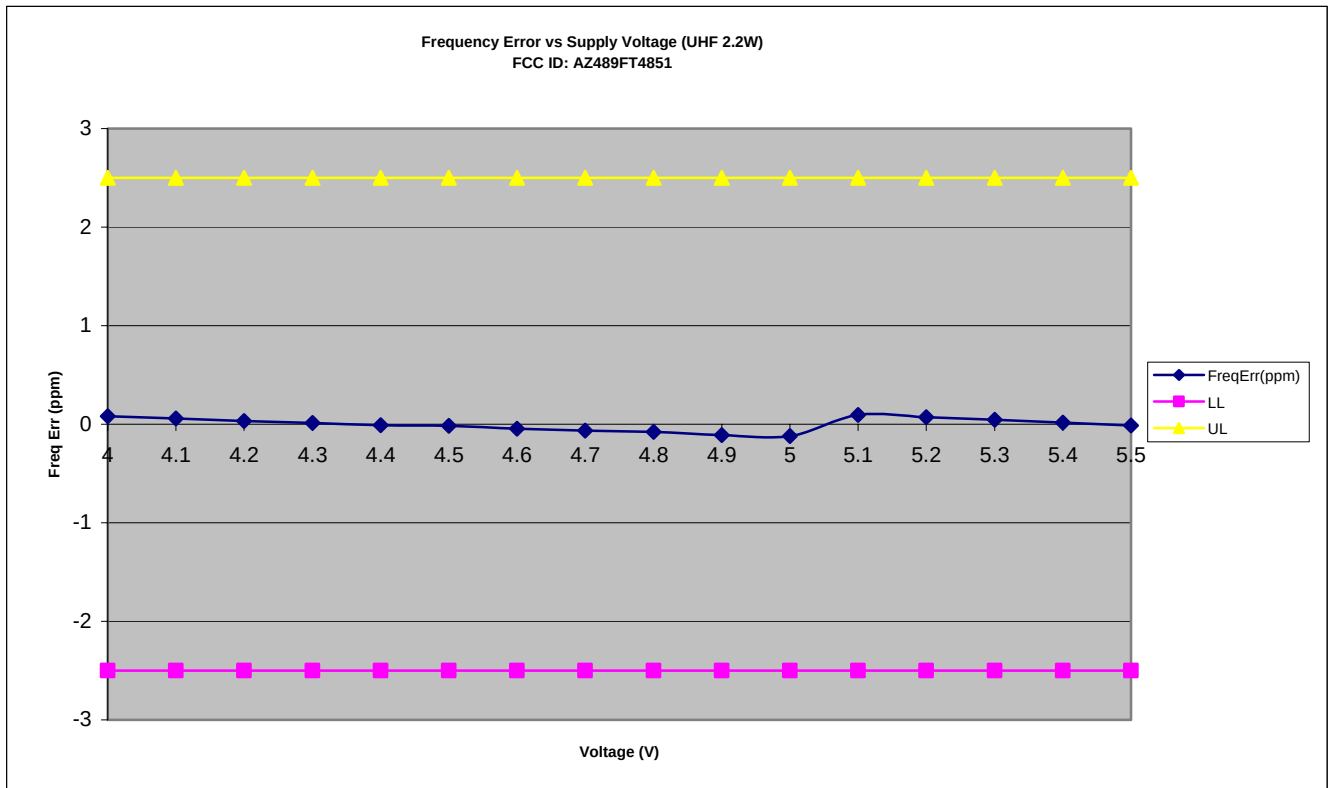
Radio resets at 2.7 Volts.

EXHIBIT 6G-2



MOTOROLA

FCC ID: AZ489FT4851



Radio resets at 2.7 Volts.

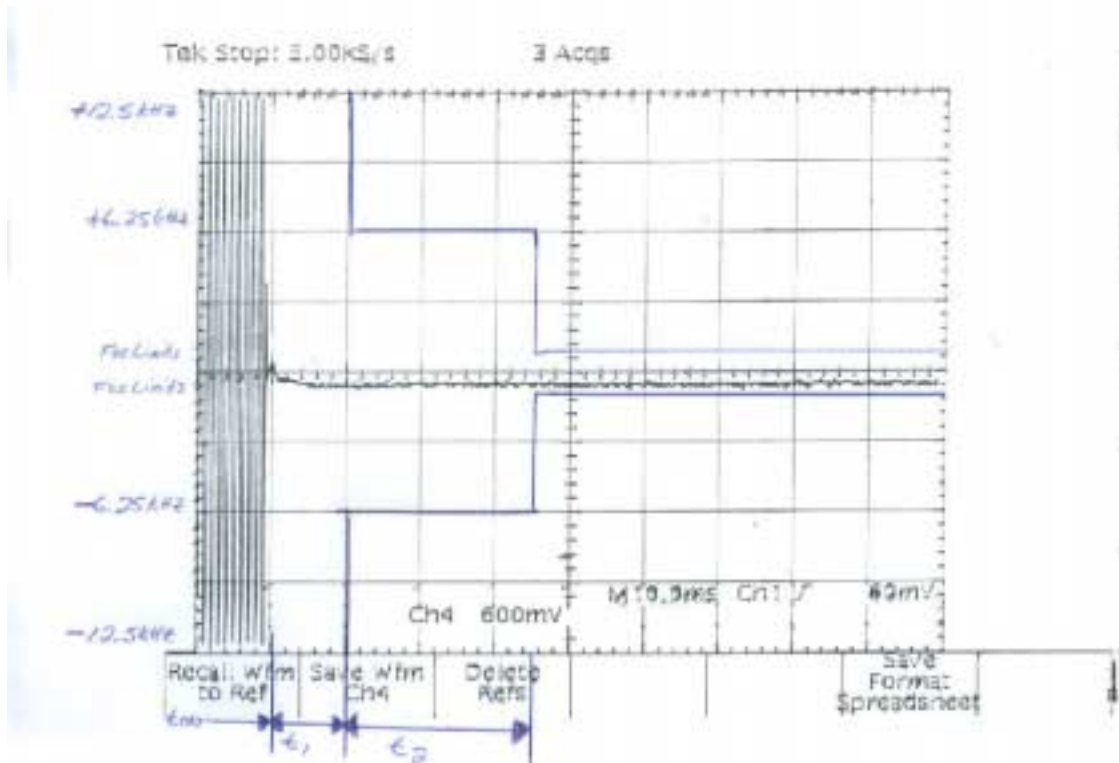
EXHIBIT 6G-3



MOTOROLA

FCC ID: AZ489FT4851

Transient Frequency Response TX on 1Watt 12.5 kHz





MOTOROLA

FCC ID: AZ489FT4851

Transient Frequency Response TX off 1 Watt 12.5 kHz

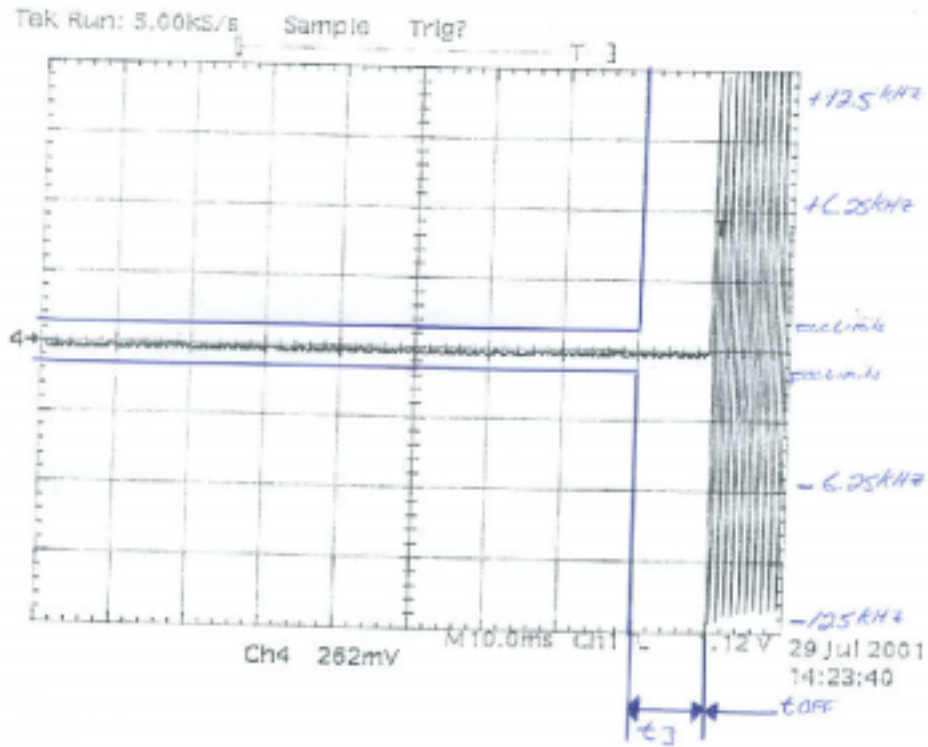


EXHIBIT 6H-2



MOTOROLA

FCC ID: AZ489FT4851

Transient Frequency Response TX on 1 Watt 25 kHz

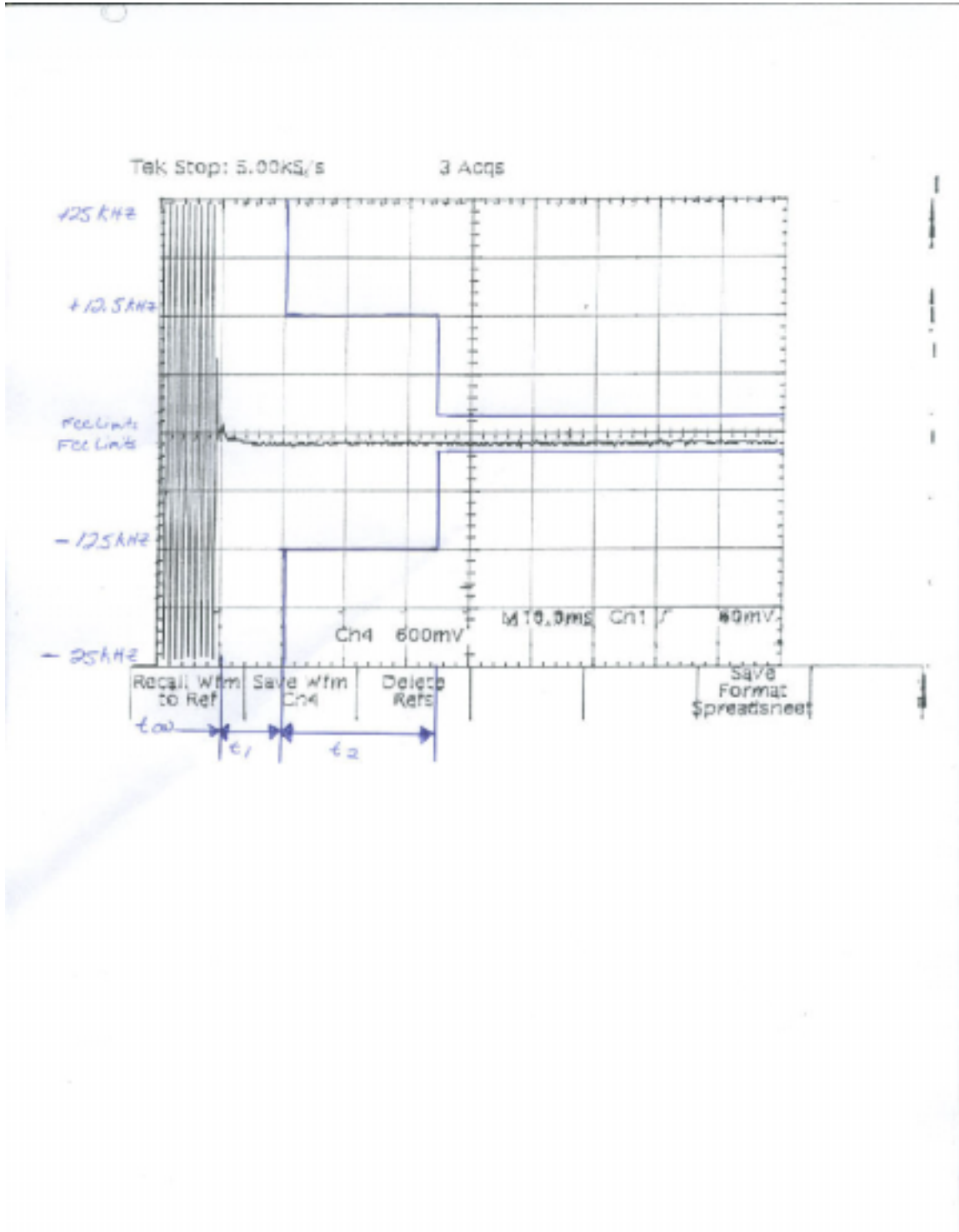


EXHIBIT 6H-3



Transient Frequency Response TX off 1 Watt 25 kHz

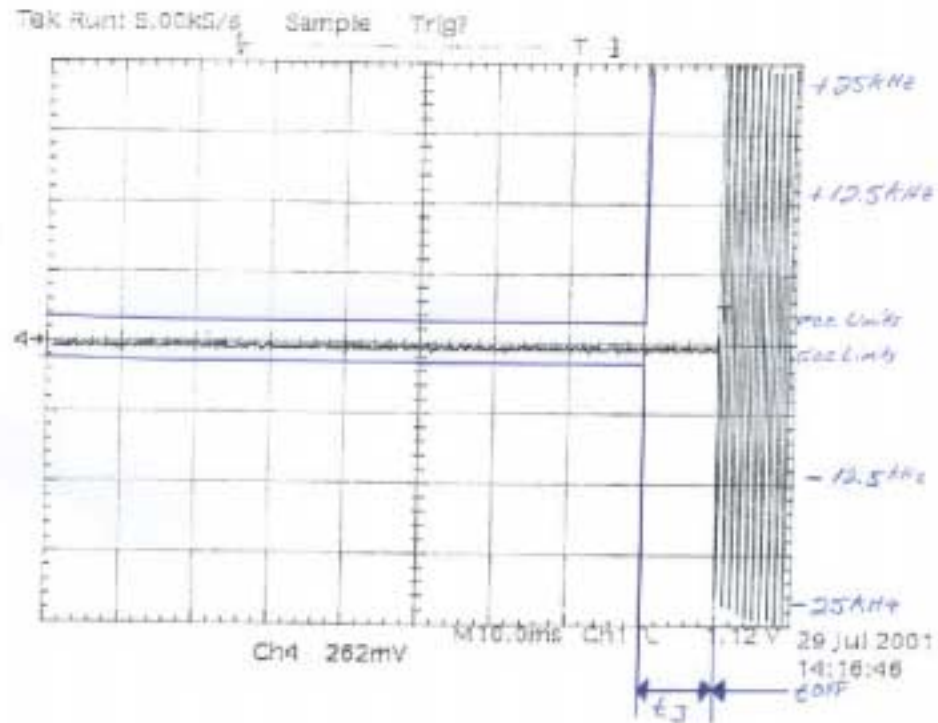


EXHIBIT 6H-4



MOTOROLA

FCC ID: AZ489FT4851

Transient Frequency Response TX on 2.2 Watt 12.5 kHz

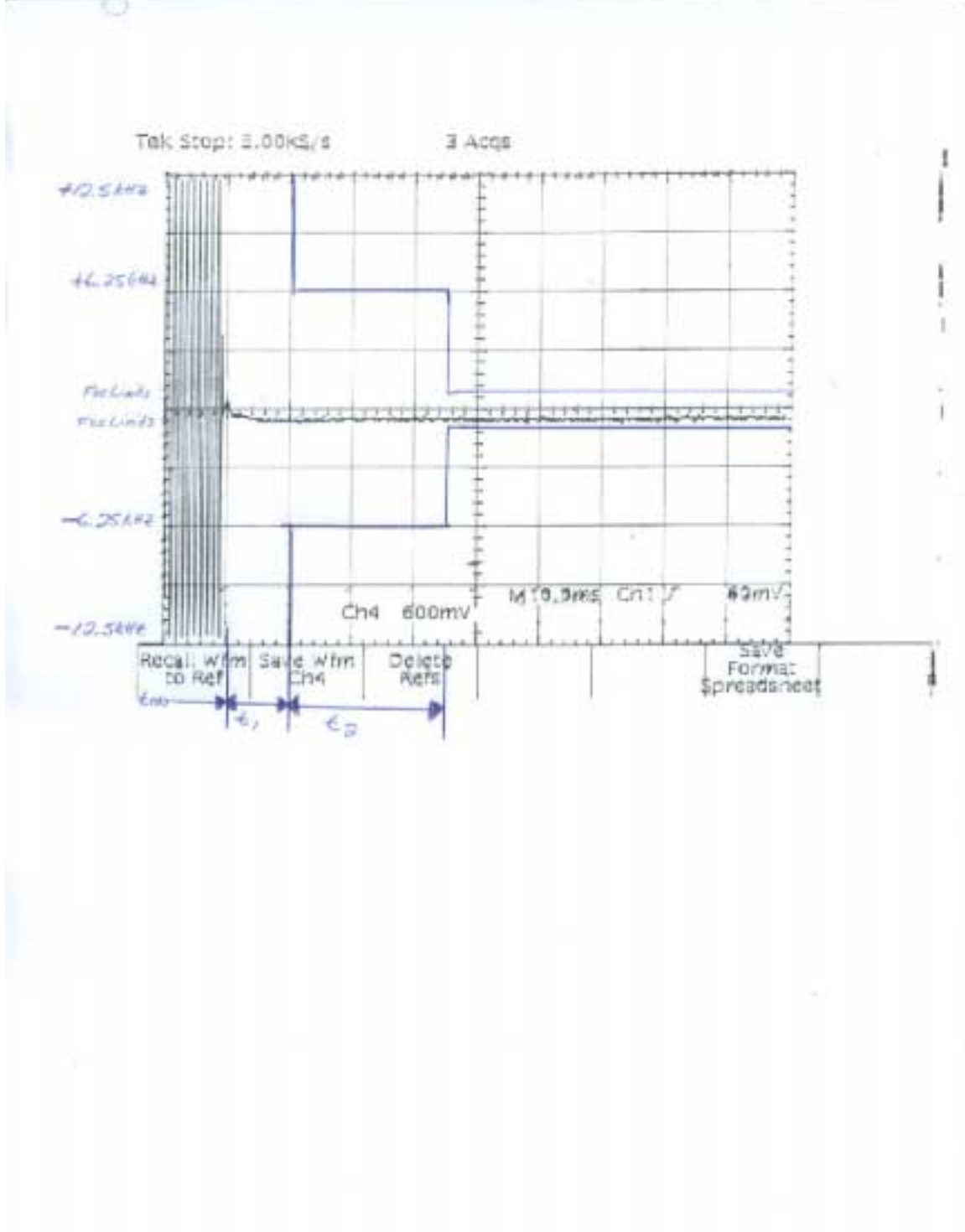


EXHIBIT 6H-5



MOTOROLA

FCC ID: AZ489FT4851

Transient Frequency Response TX off 2.2 Watt 12.5 kHz

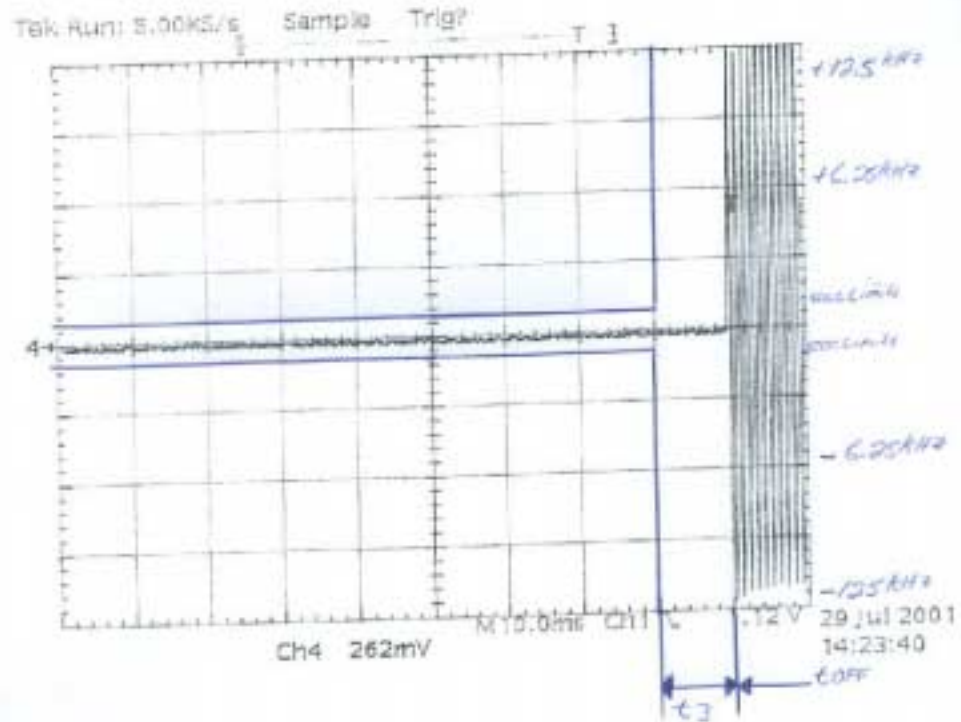


EXHIBIT 6H-6



MOTOROLA

FCC ID: AZ489FT4851

Transient Frequency Response TX on 2.2 Watt 25 kHz

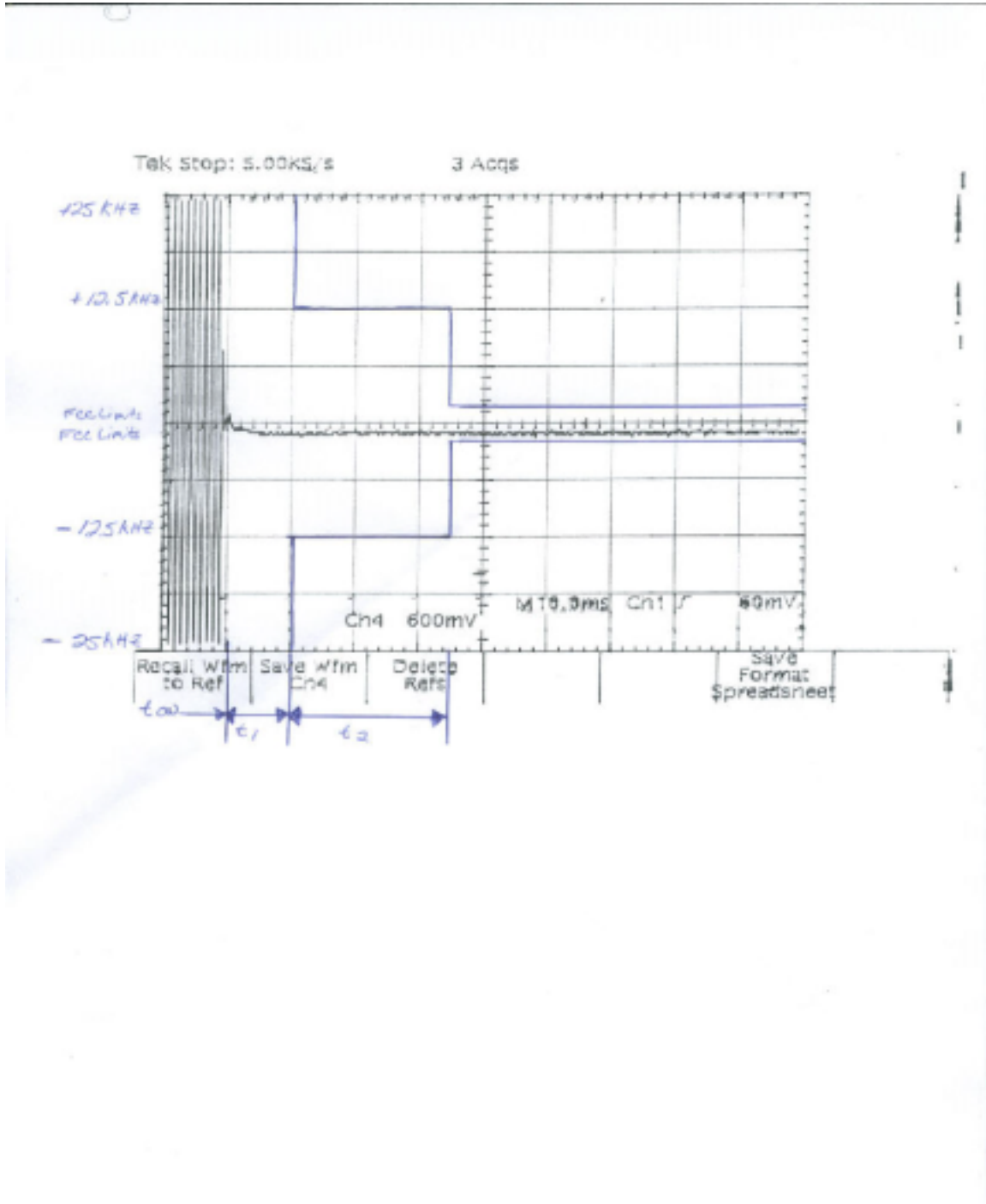


EXHIBIT 6H-7



MOTOROLA

FCC ID: AZ489FT4851

Transient Frequency Response TX off 2.2 Watt 25 kHz

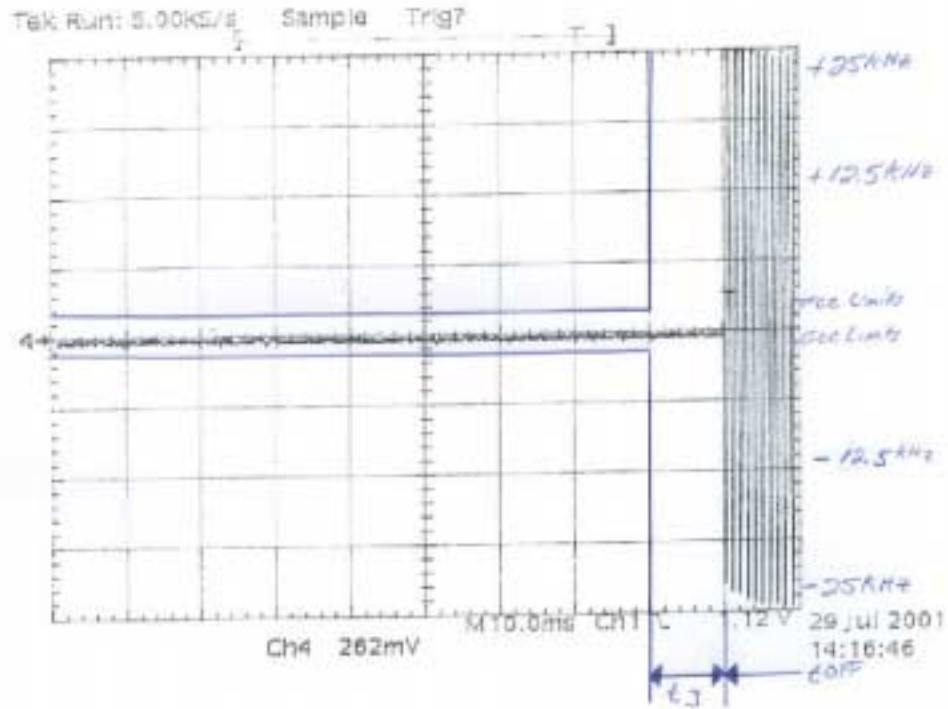


EXHIBIT 6H-8