



MOTOROLA

FCC ID: AZ489FT4860

Test Report

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EXHIBIT 6



MOTOROLA

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RF POWER OUTPUT DATA

The RF power output was measured according to the TIA/EIA-603-A Radiated power out methods of Measurement for Transmitters. See Exhibit 7 for method of measurement.

Maximum Radiated Power

1.07Watts

Measured Conducted RF output: **Not applicable. Equipment has integral antenna.**

EXHIBIT 6A



MOTOROLA

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Radiated Power Output

2/7/03

EMC02032003-060 CLS 1410 S/N 134ABC004

	ERP	Horn			
	Frequency	Turn Table Deg.	SA Reading (dBm)	Path Loss	Radiated Spur Emiss. (dBm)
Horiz.	464.5	0	-13.67	30.28	16.61
Horiz.	464.5	45	-23.59	30.28	6.69
Horiz.	464.5	90	-20.61	30.28	9.67
Horiz.	464.5	135	-15.87	30.28	14.41
Horiz.	464.5	180	-18.72	30.28	11.56
Horiz.	464.5	225	-22.47	30.28	7.81
Horiz.	464.5	270	-21.07	30.28	9.21
Horiz.	464.5	315	-13.89	30.28	16.39
Vert.	464.5	0	-1.03	31.31	30.28
Vert.	464.5	45	-3.33	31.31	27.98
Vert.	464.5	90	-6.06	31.31	25.25
Vert.	464.5	135	-3.32	31.31	27.99
Vert.	464.5	180	-2.12	31.31	29.19
Vert.	464.5	225	-4.34	31.31	26.97
Vert.	464.5	270	-5.04	31.31	26.27
Vert.	464.5	315	-3.56	31.31	27.75

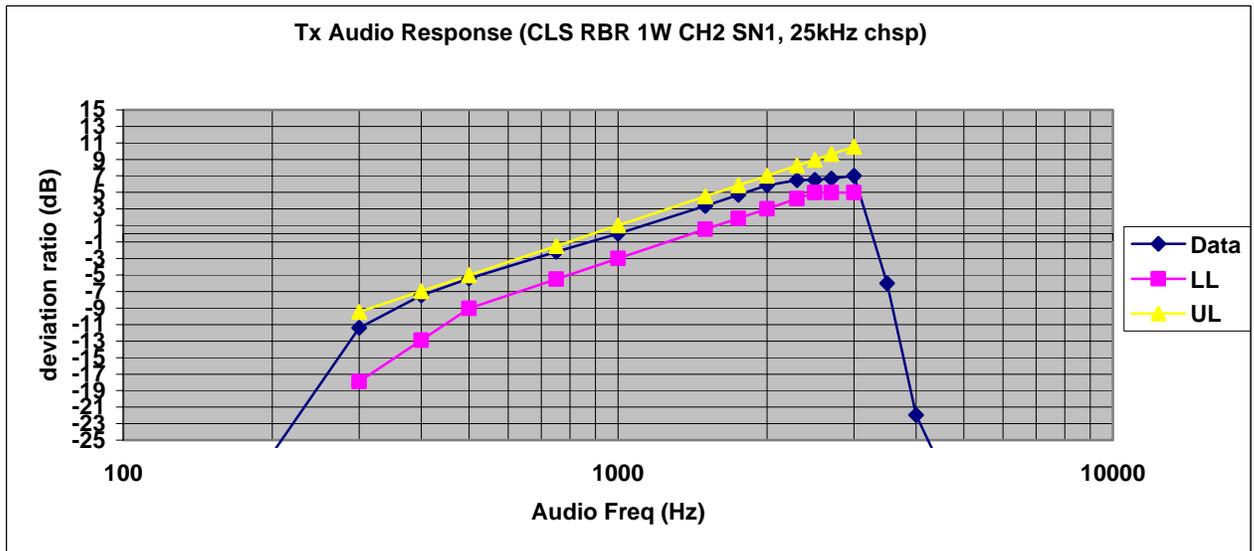
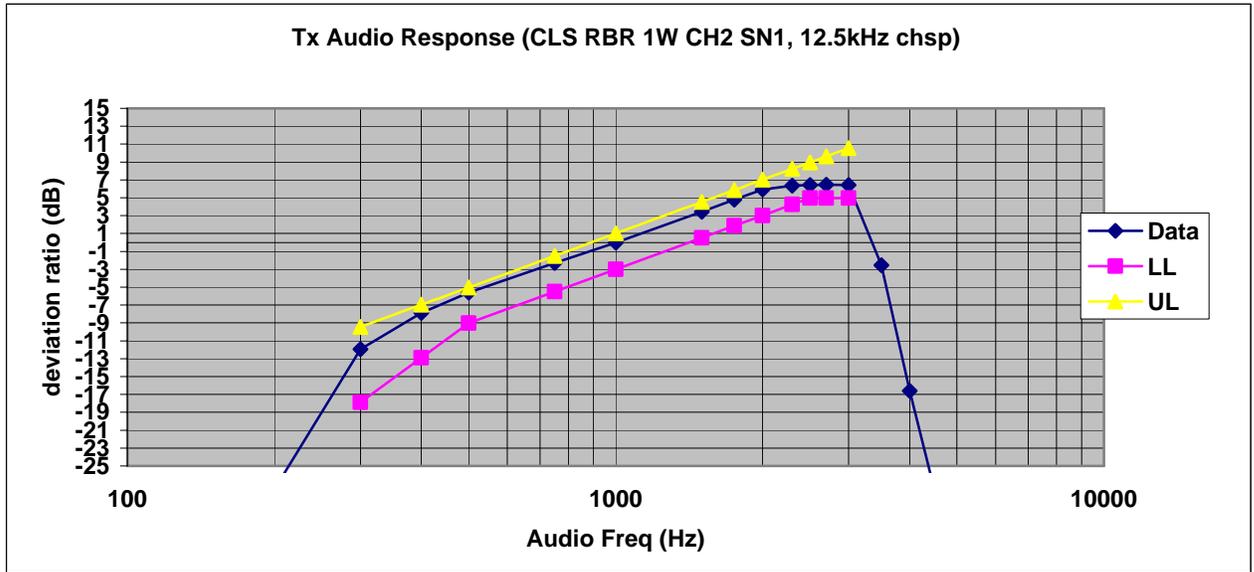
	ERP	Horn			
	Frequency	Turn Table Deg.	SA Reading (dBm)	Path Loss	Radiated Spur Emiss. (dBm)
Horiz.	467.925	0	-12.3	30.43	18.13
Horiz.	467.925	45	-22.74	30.43	7.69
Horiz.	467.925	90	-21.92	30.43	8.51
Horiz.	467.925	135	-15.31	30.43	15.12
Horiz.	467.925	180	-17.06	30.43	13.37
Horiz.	467.925	225	-21.52	30.43	8.91
Horiz.	467.925	270	-22.59	30.43	7.84
Horiz.	467.925	315	-13.96	30.43	16.47
Vert.	467.925	0	-1.89	31.46	29.57
Vert.	467.925	45	-4.31	31.46	27.15
Vert.	467.925	90	-6.98	31.46	24.48
Vert.	467.925	135	-3.95	31.46	27.51
Vert.	467.925	180	-2.94	31.46	28.52
Vert.	467.925	225	-5.48	31.46	25.98
Vert.	467.925	270	-6.03	31.46	25.43
Vert.	467.925	315	-4.39	31.46	27.07

Maximum Radiated Power = **30.28dBm (1.07W)** at 464.5000MHz

EXHIBIT 6A1

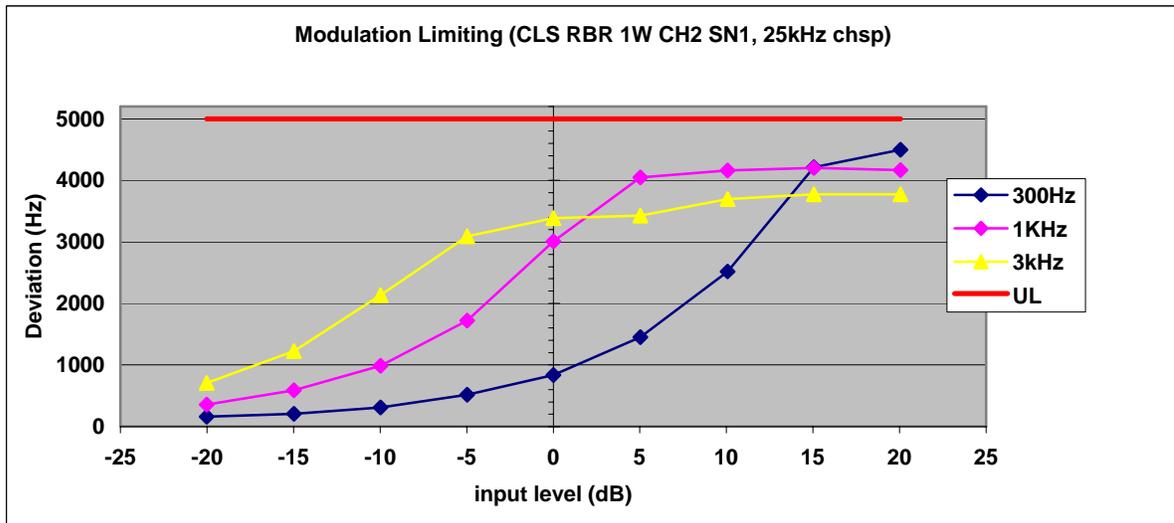
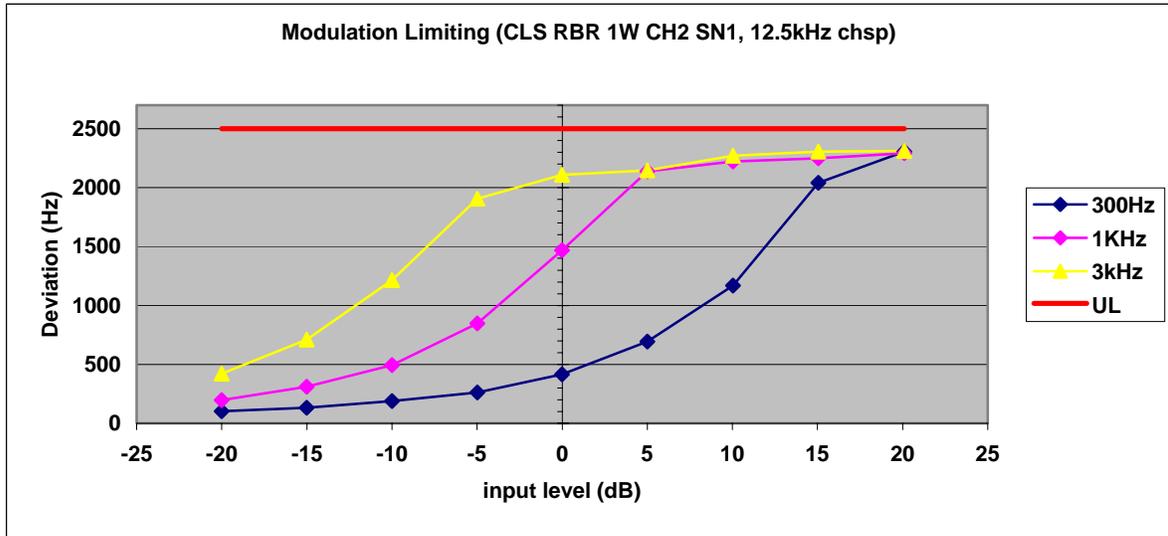


AUDIO RESPONSE





MODULATION LIMITING





MOTOROLA

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OCCUPIED BANDWIDTH DATA

12.5KHz / 25KHz Channel Spacing

EXHIBIT 6D-1

2500 Hz Audio Modulation

Emission Type: 11K0F3E / 16K0F3E

Specification Mask D, 90.210 – 12.5KHz

Specification Mask B, 90.210 – 25Khz

EXHIBIT 6D-2

2500 Hz & 77Hz Tone “PL” Modulation

Emission Type: 11K0F3E / 16K0F3E

Specification Mask D, 90.210 – 12.5KHz

Specification Mask B, 90.210 – 25Khz

CARSON’S RULE: **11K0F3E**

BW= 2(M+D)

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

CARSON’S RULE: **16K0F3E**

BW= 2(M+D)

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

BW=2 (8)

BW= 16K0

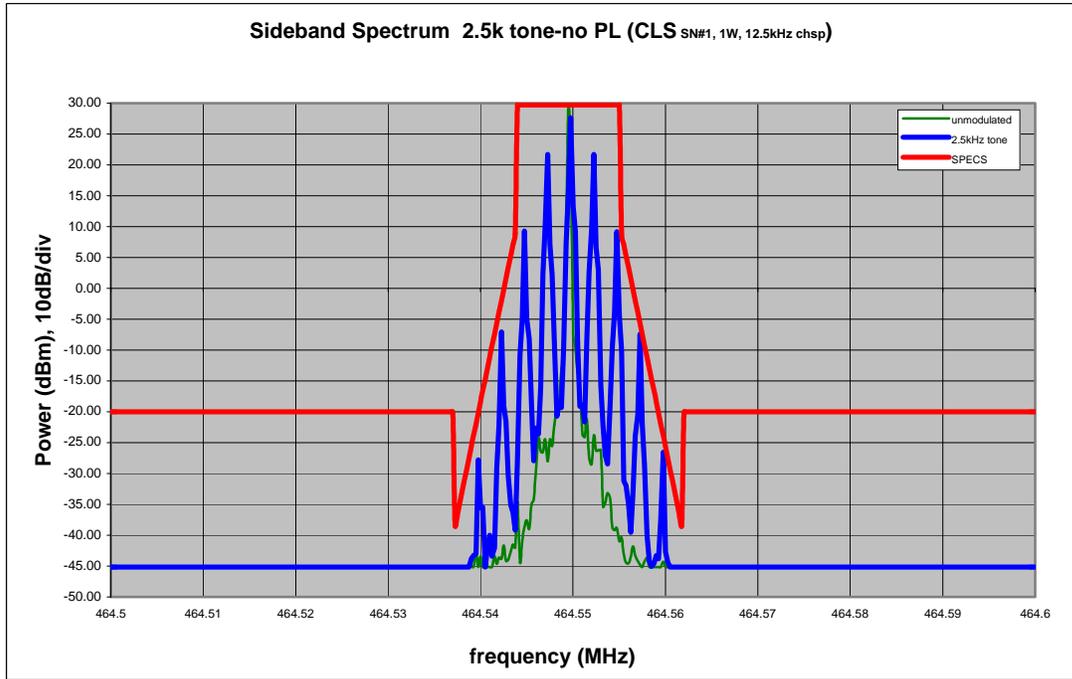
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EXHIBIT 6D



MOTOROLA

FCC ID: AZ489FT4860

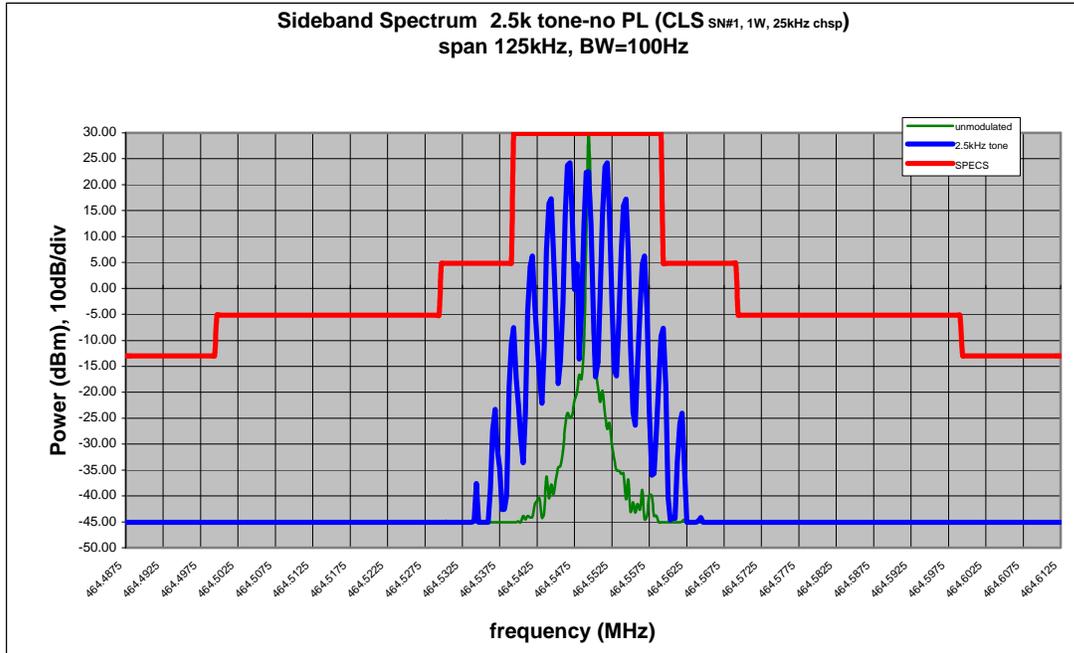


11K0F3E
MASK D



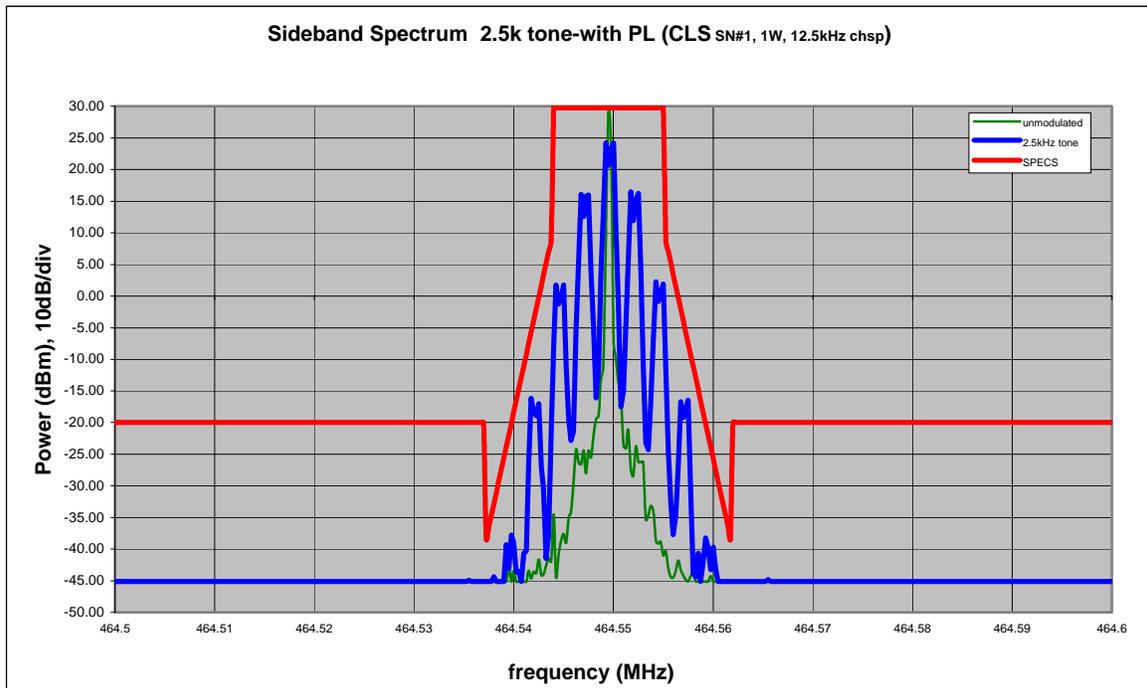
MOTOROLA

FCC ID: AZ489FT4860



16K0F3E
MASK B

EXHIBIT6D-1

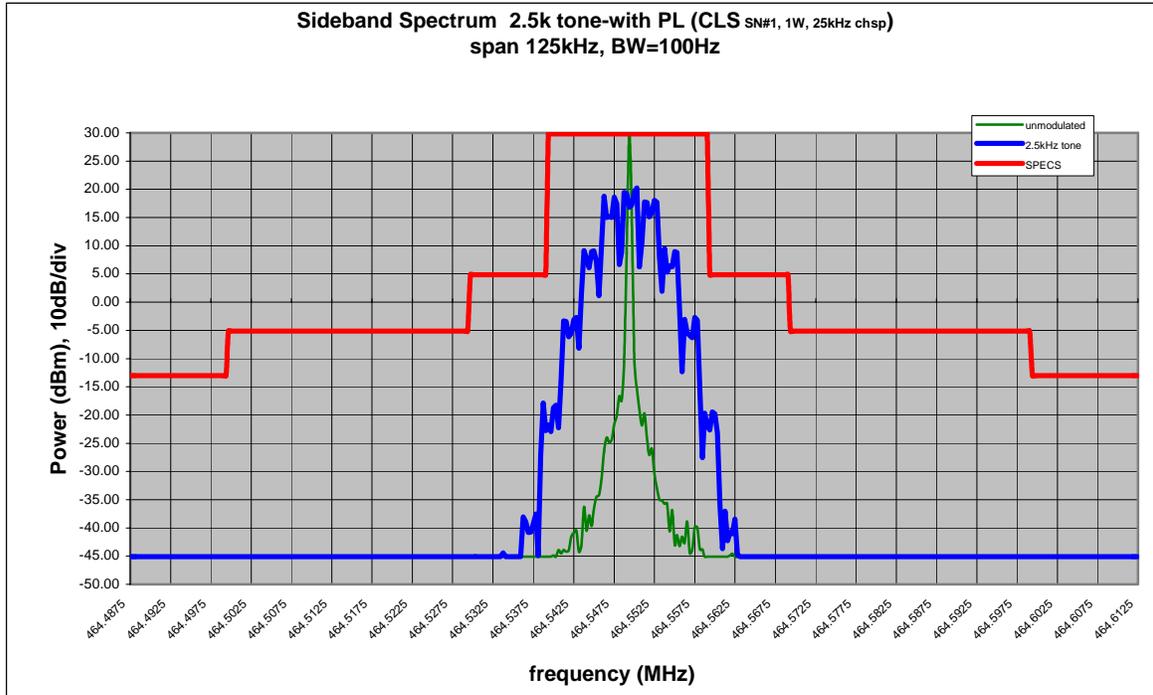


11K0F3E
MASK D



MOTOROLA

FCC ID: AZ489FT4860



16K0F3E
MASK B

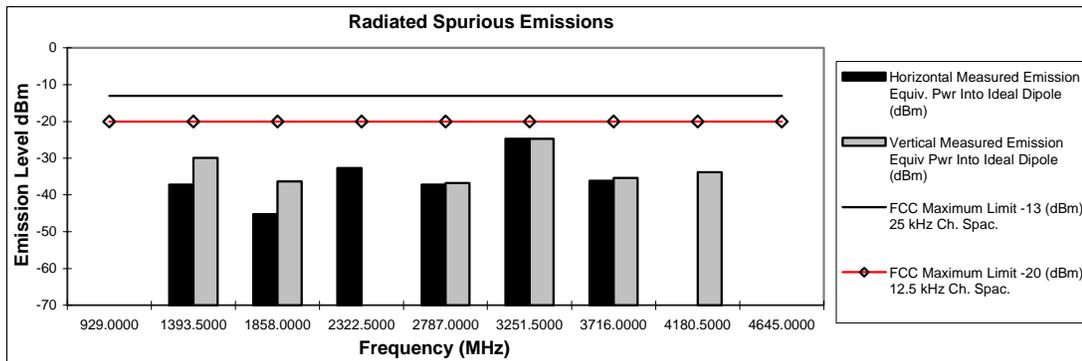
EXHIBIT 6D-2



Transmitter Radiated Spurious Emissions: TalkAbout CLS

464.5 MHz 1 Watts Channel Spacing 12.5kHz | S/N 134ABC0004

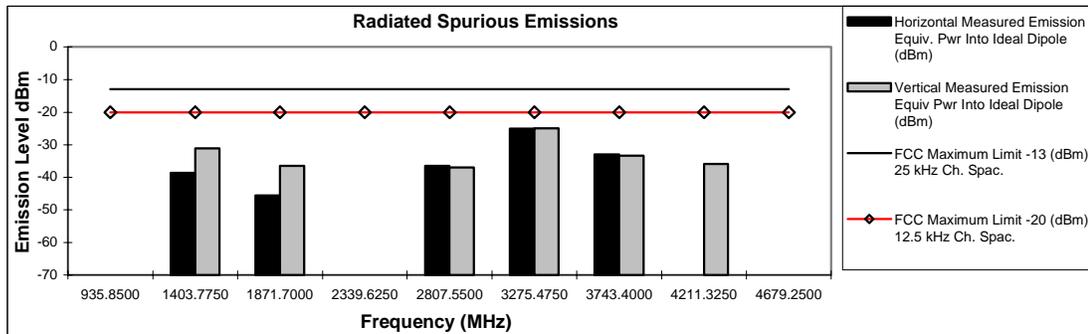
Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
929.0000	-13	-20	*	*
1393.5000	-13	-20	-37.14	-29.90
1858.0000	-13	-20	-45.23	-36.32
2322.5000	-13	-20	-32.71	*
2787.0000	-13	-20	-37.17	-36.68
3251.5000	-13	-20	-24.65	-24.79
3716.0000	-13	-20	-36.07	-35.38
4180.5000	-13	-20	*	-33.84
4645.0000	-13	-20	*	*



Transmitter Radiated Spurious Emissions: TalkAbout CLS

467.925 MHz 1 Watts Channel Spacing 12.5kHz | S/N 134ABC0004

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	*	*
1403.7750	-13	-20	-38.58	-31.15
1871.7000	-13	-20	-45.61	-36.46
2339.6250	-13	-20	*	*
2807.5500	-13	-20	-36.43	-36.97
3275.4750	-13	-20	-24.99	-24.95
3743.4000	-13	-20	-32.96	-33.33
4211.3250	-13	-20	*	-35.88
4679.2500	-13	-20	*	*



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

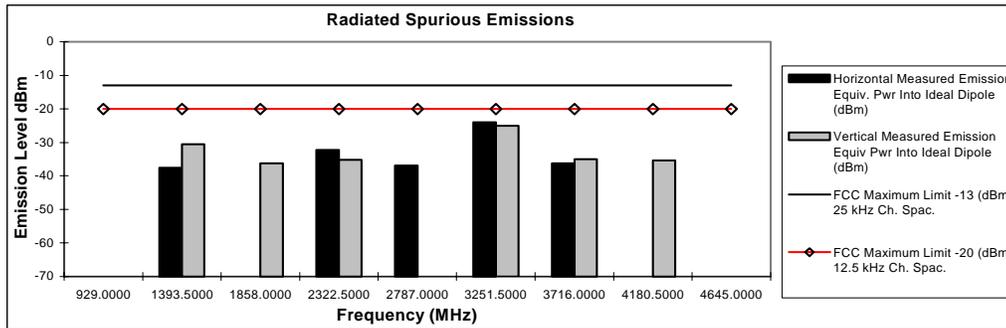
The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.



Transmitter Radiated Spurious Emissions: TalkAbout CLS

464.5 MHz 1 Watts Channel Spacing 25kHz | S/N 134ABC0004

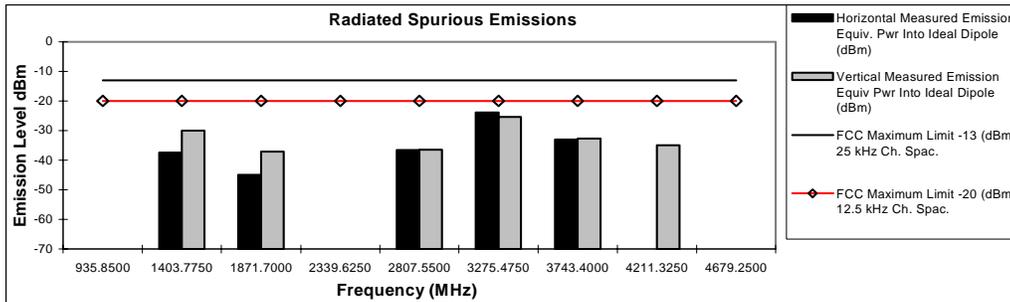
Frequency (MHz)	FCC Maximum Limit -13 (dBm) 25 kHz Ch. Spac.	FCC Maximum Limit -20 (dBm) 12.5 kHz Ch. Spac.	Horizontal Measured Emission Equiv. Pwr Into Ideal Dipole (dBm)	Vertical Measured Emission Equiv Pwr Into Ideal Dipole (dBm)
929.0000	-13	-20	*	*
1393.5000	-13	-20	-37.55	-30.56
1858.0000	-13	-20	*	-36.24
2322.5000	-13	-20	-32.22	-35.23
2787.0000	-13	-20	-36.84	*
3251.5000	-13	-20	-23.99	-24.97
3716.0000	-13	-20	-36.26	-35.02
4180.5000	-13	-20	*	-35.35
4645.0000	-13	-20	*	*



Transmitter Radiated Spurious Emissions: TalkAbout CLS

467.925 MHz 1 Watts Channel Spacing 25kHz | S/N 134ABC0004

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	*	*
1403.7750	-13	-20	-37.45	-30.05
1871.7000	-13	-20	-44.94	-37.14
2339.6250	-13	-20	*	*
2807.5500	-13	-20	-36.56	-36.40
3275.4750	-13	-20	-23.80	-25.37
3743.4000	-13	-20	-32.99	-32.76
4211.3250	-13	-20	*	-34.90
4679.2500	-13	-20	*	*

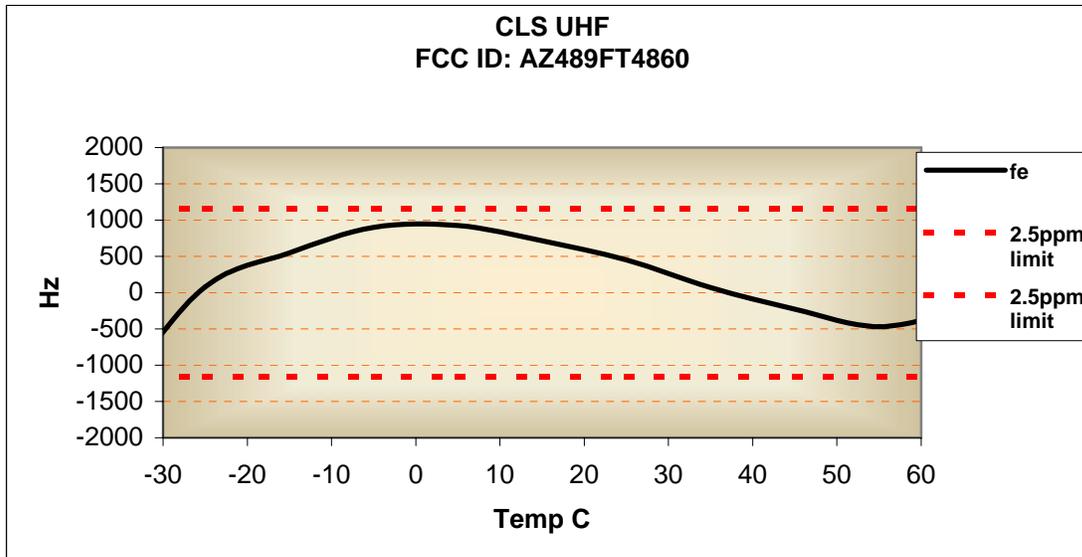


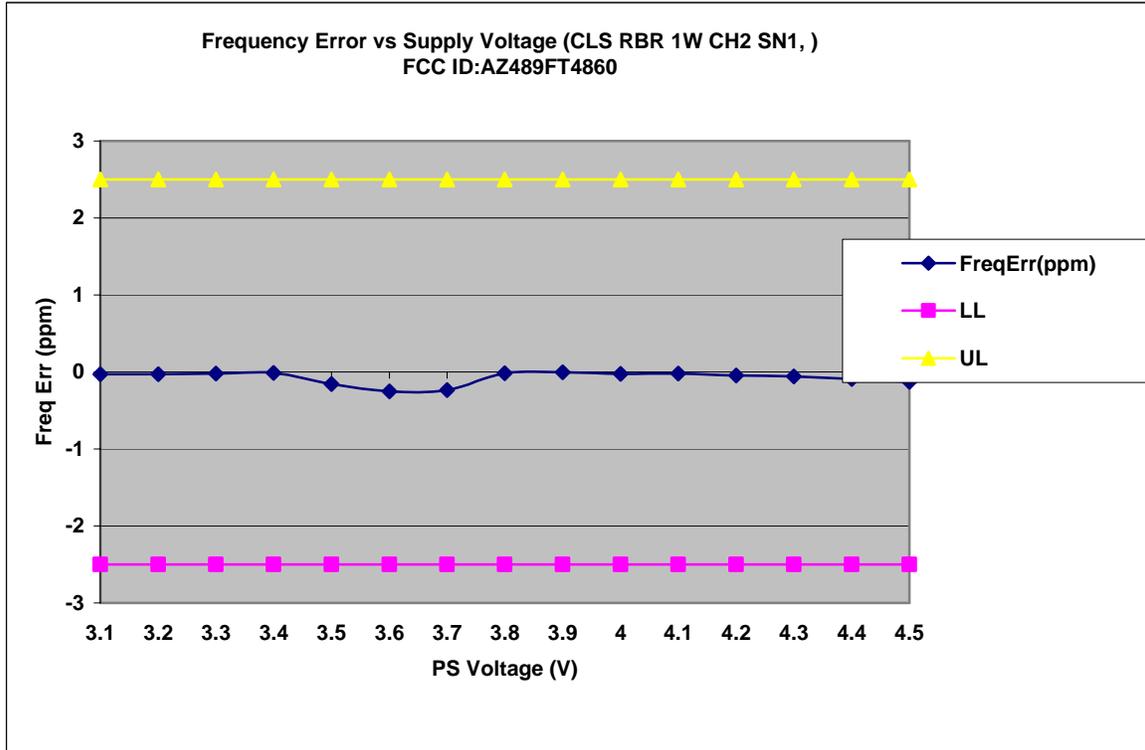
* Indicates the spurious emission was less than -70dBm or could not be detected due to noise limitations or ambients.

The data presented here was taken using the substitution method as found in the TIA/EIA-603 document.



Frequency Stability over Temperature





Reset Voltage: 3.1 Volts



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Transient Frequency response TX on 25 kHz

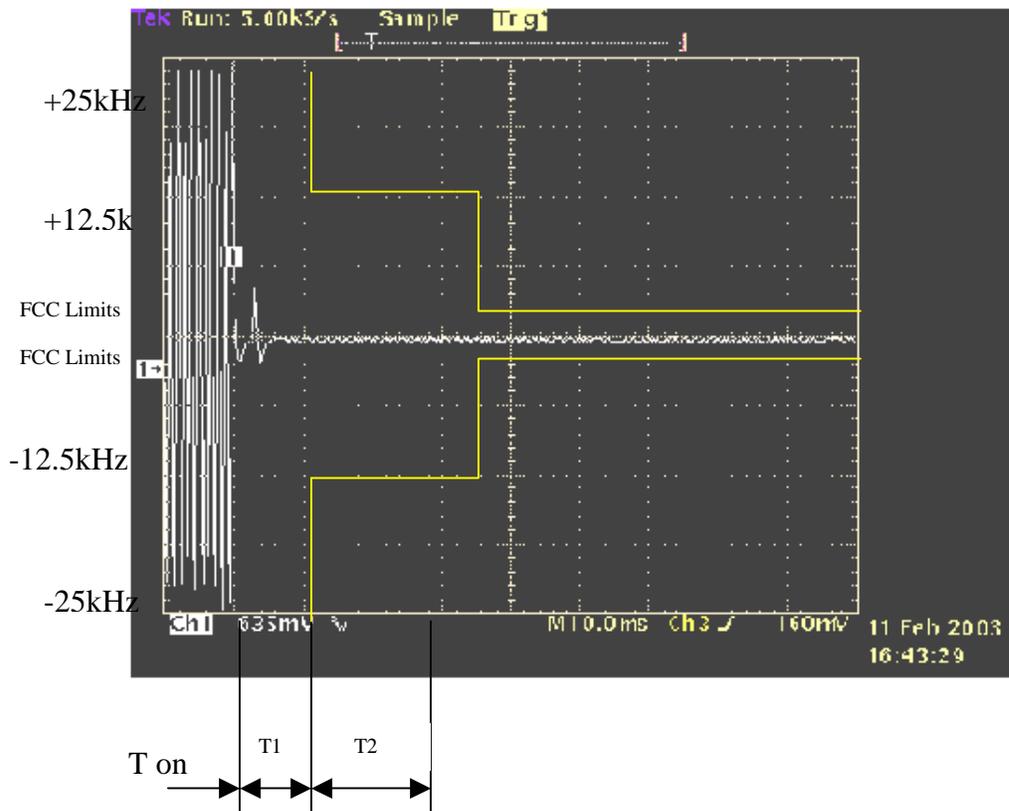


EXHIBIT 6H



MOTOROLA

FCC ID: AZ489FT4860

Transient Frequency response TX off 25 kHz

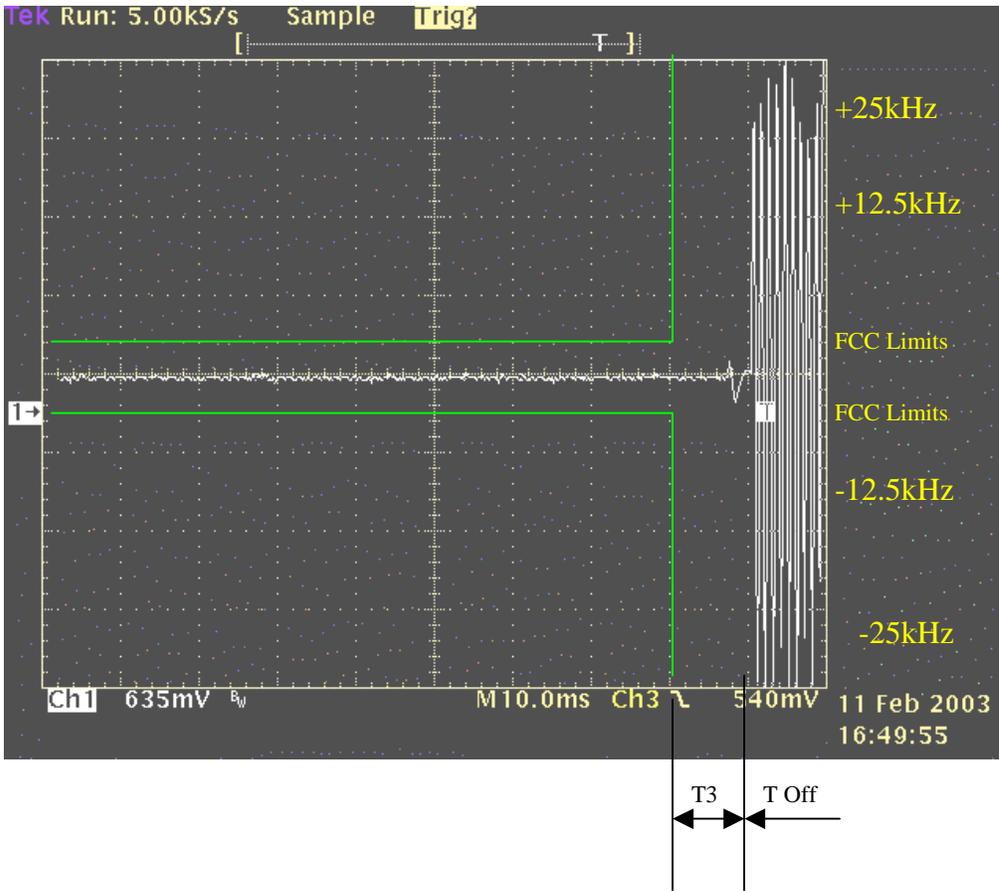


EXHIBIT 6I



MOTOROLA

FCC ID: AZ489FT4860

Transient Frequency response TX on 12.5 kHz

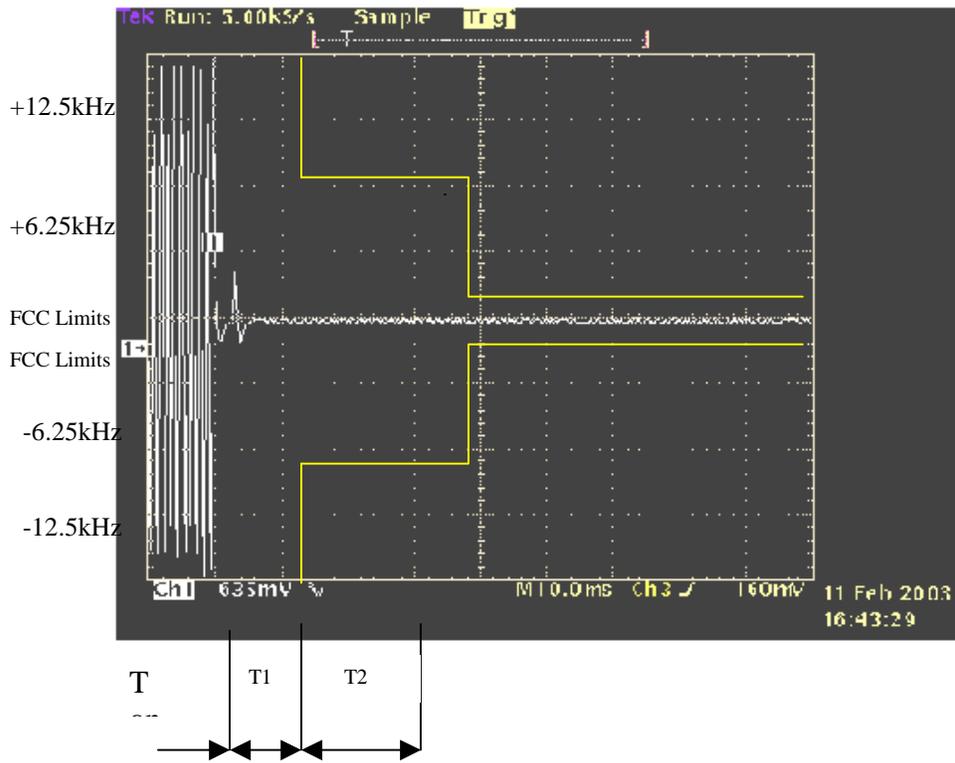


EXHIBIT 6J



MOTOROLA

FCC ID: AZ489FT4860

Transient Frequency response TX off 12.5 kHz

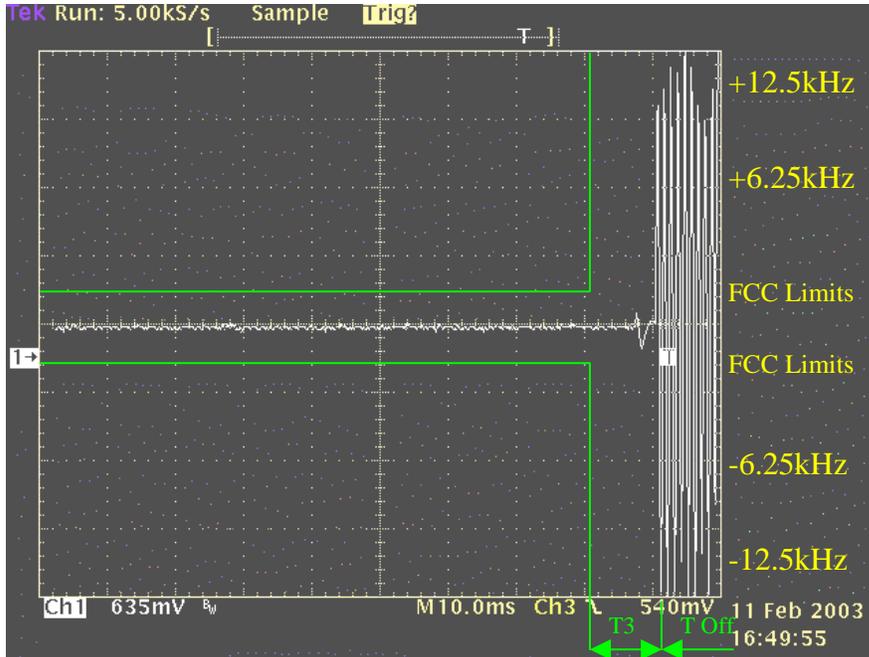


EXHIBIT 6K