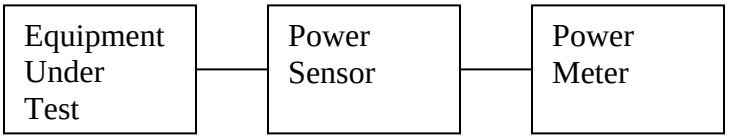
Measured Data

Measurement

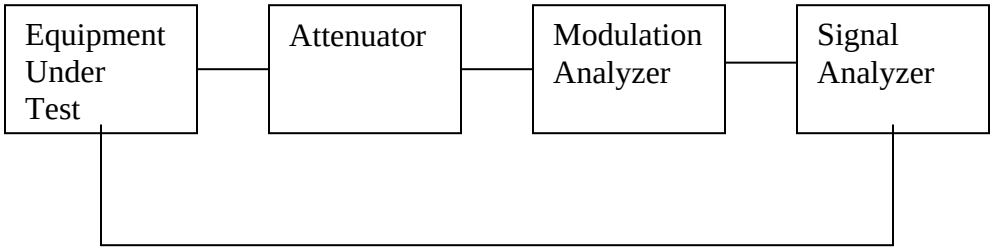
1. **RF Output Power**

Test Method: TIA/EIA-603-A 2.2.1
Equipment Used: Rohde & Schwarz NRT Power Meter (04-18-10), Rohde & Schwarz NRT-Z14 Power Sensor (04-09-10), Agilent N6705A DC Power Analyzer (11-12-10)



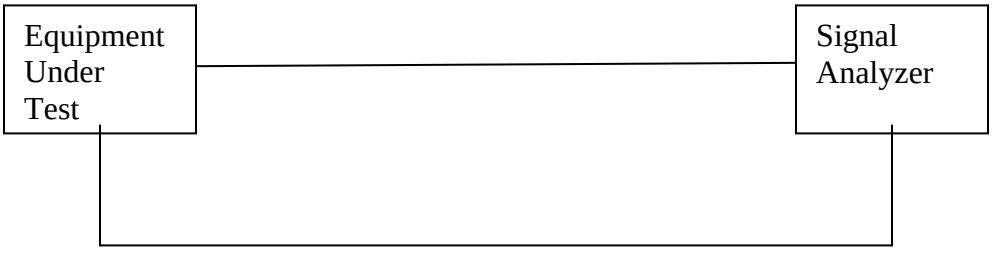
2. **Audio Frequency Response**

Test Method: TIA/EIA-603-A 2.2.6
Equipment Used: Agilent 8920B RF Communication Test Set Modulation Analyzer (02-19-09), Hewlett Packard 35670A Signal Analyzer (02-02-10). No filters were used on the modulation analyzer.



3. **Low Pass Filter Response**

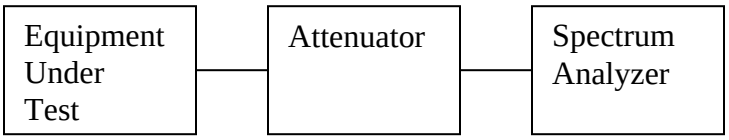
Test Method: TIA/EIA-603-A 2.2.15
Equipment Used: Hewlett Packard 35670A Signal Analyzer(02-02-10)



4. **Occupied Bandwidth /Emission Mask**

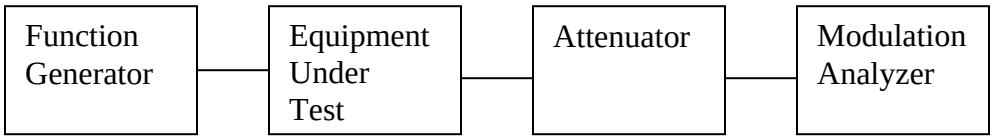
No Modulation
16K0F3E
11K0F3E
8K10F1E
8K10F1D

Test Method: TIA/EIA-603-A 2.2.11
Equipment Used: Rohde & Schwarz FSP Spectrum Analyzer (04-08-09)



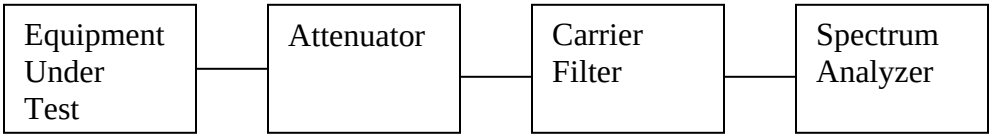
5. **Modulation Limiting**

Test Method: TIA/EIA-603-A 2.2.3
Equipment Used: Agilent 8920B RF Communication Test Set Modulation Analyzer (02-19-09), Agilent 8920B RF Communication Test Set Function Generator (02-19-09)



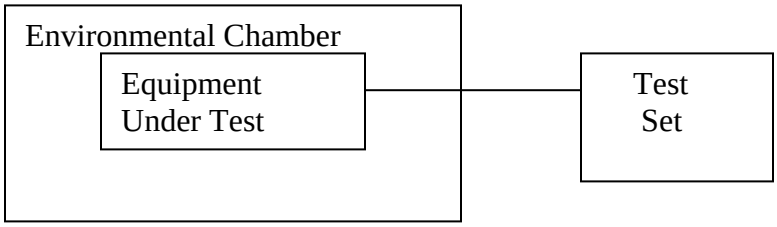
6. Conducted Spurious Emissions

Test Method: TIA/EIA-603-A 2.2.13
Equipment Used: Tektronix RSA 3308A Real-time Spectrum Analyzer (06-13-09)



7. Frequency Stability

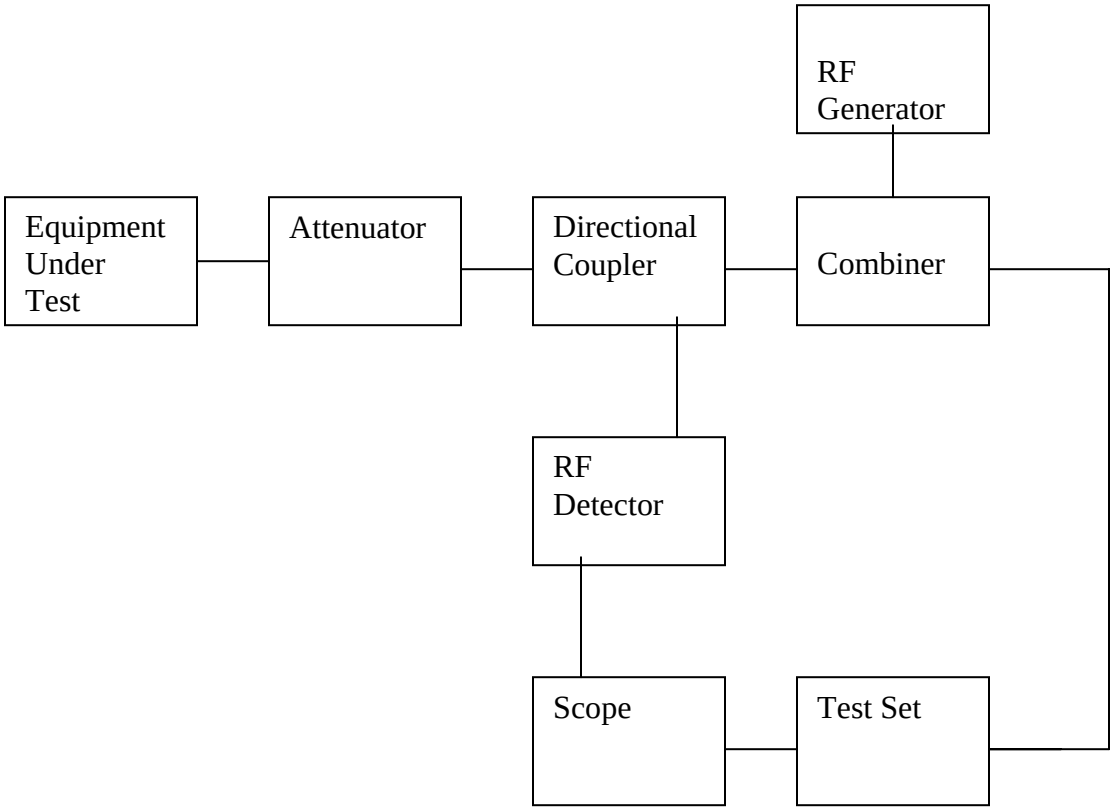
Test Method: TIA/EIA-603-A 2.2.2
Equipment Used: Agilent 8920B RF Communication Test Set (02-19-09)



8. Transient Frequency Behavior

Test Method: TIA/EIA-603-A 2.2.19.3

Equipment Used: Agilent 8920B RF Communication Test Set (02-19-09), Tektronix MSO4104 Scope (11-20-11), Rohde & Schwarz SMB100A Signal generator (09-14-10)

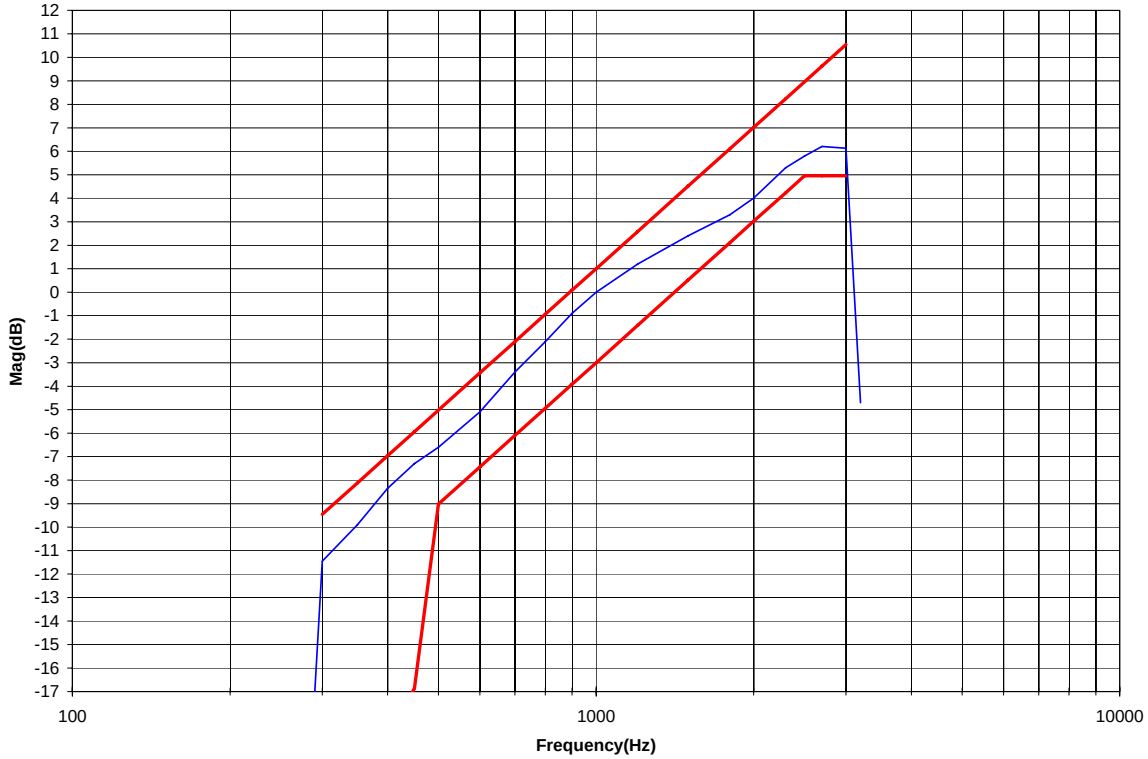


#1 RF Output Power

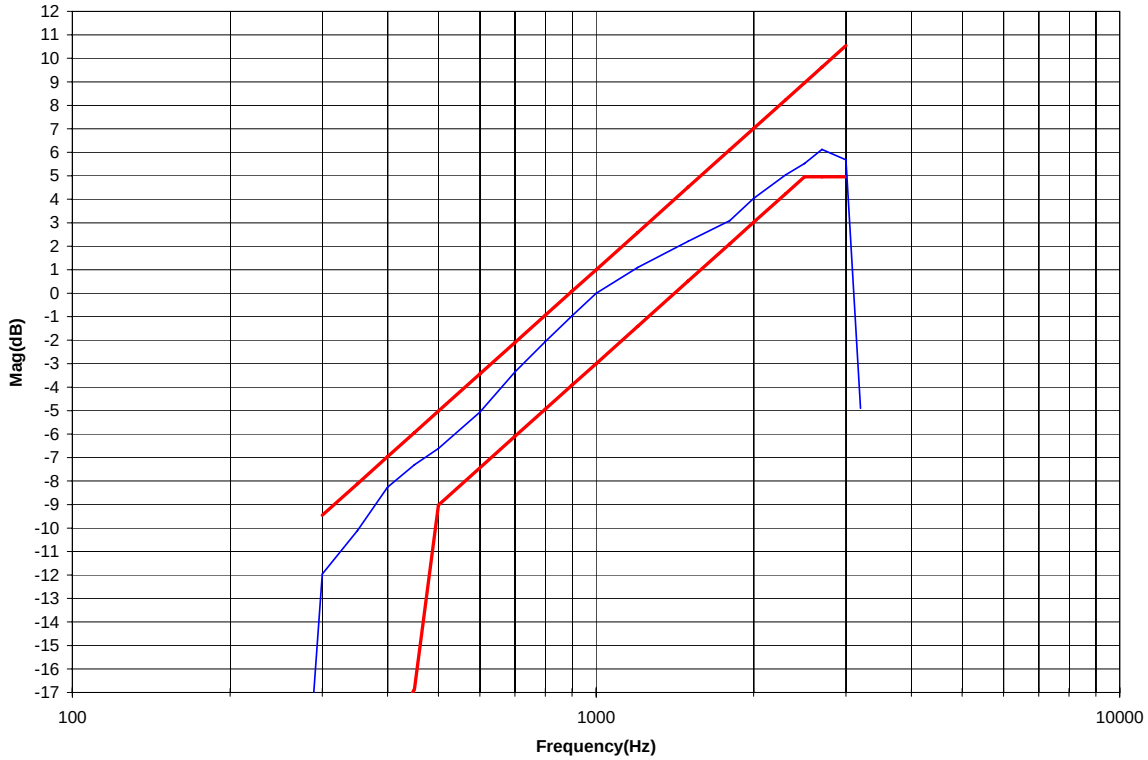
Frequency (MHz)	Power (Watts)	Voltage (Volts)	Current (PA Device) (Amperes)
440.0	5.7W	12.6V	1.458
467.0	5.7W	12.6V	1.348
480.0	5.7W	12.6V	1.358
493.0	5.7W	12.6V	1.388
520.0	5.7W	12.6V	1.438

#2 Audio Frequency Response

25KHz TX Audio Response 480MHz

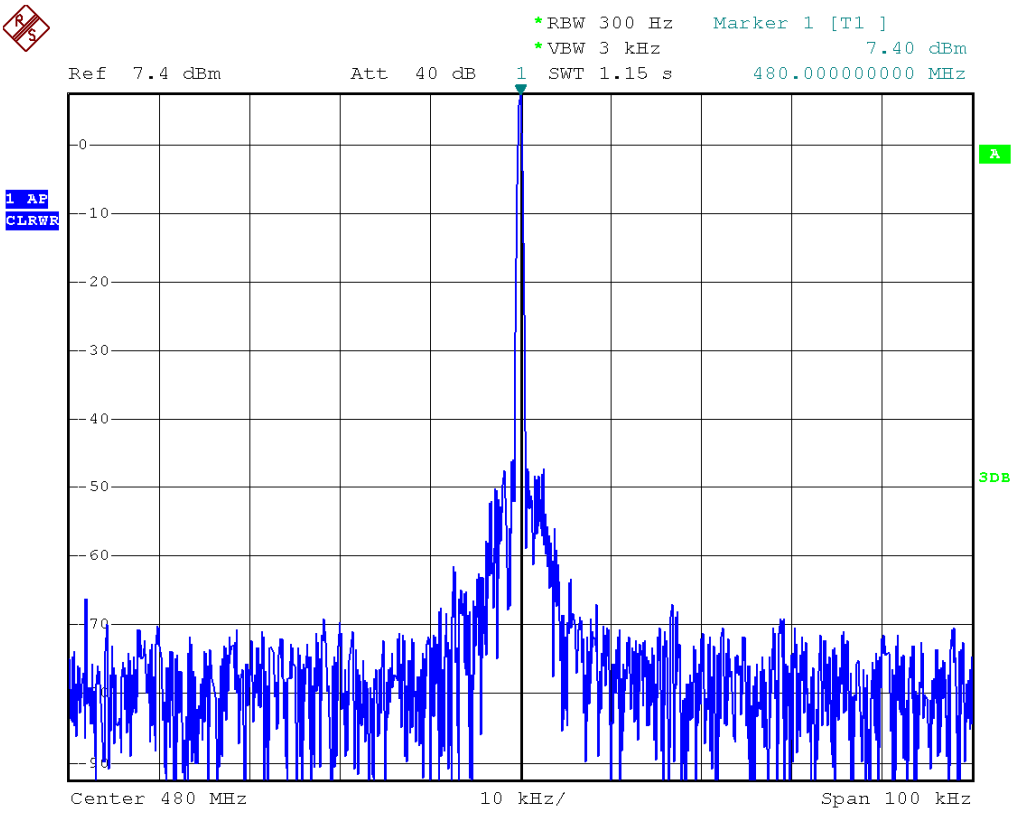


12.5KHz TX Audio Response 480MHz

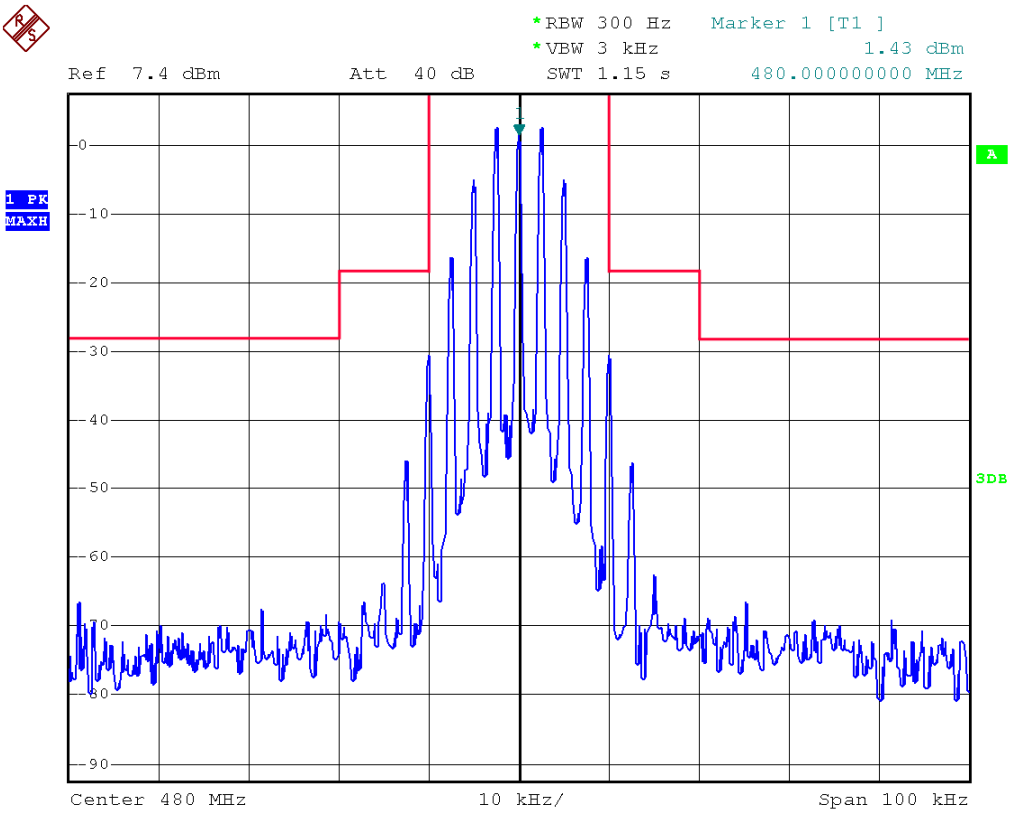


#3 Low Pass Filter Response

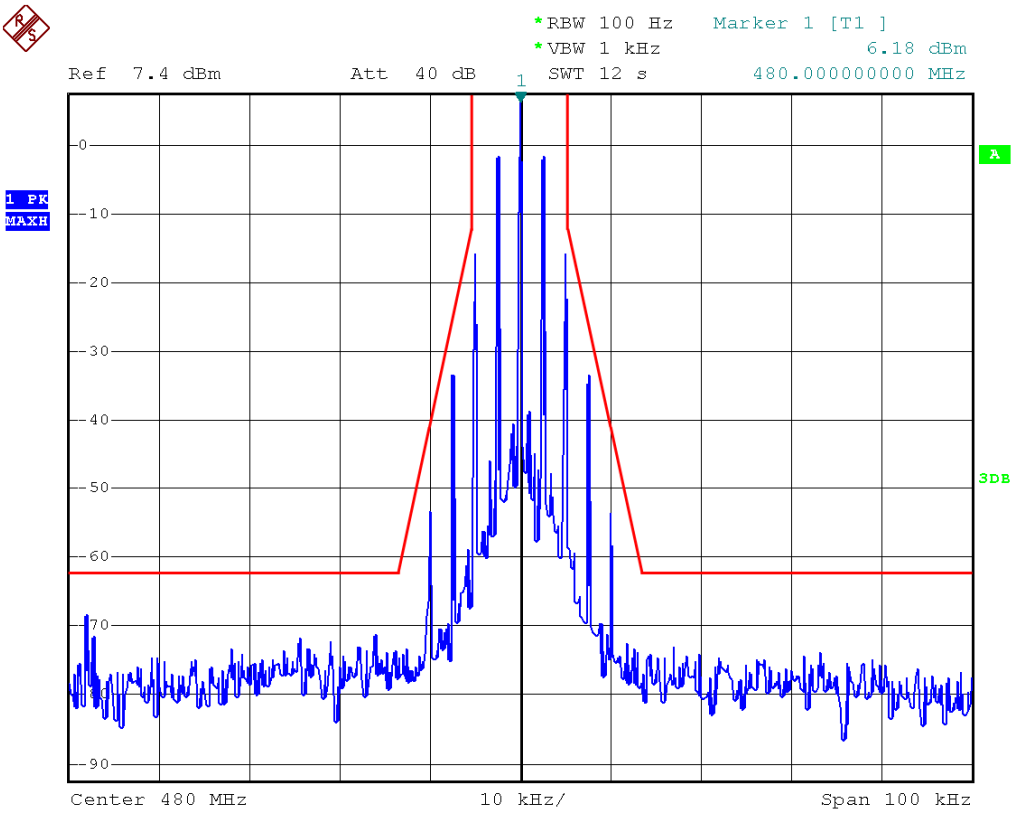
#4 Occupied Bandwidth No Modulation



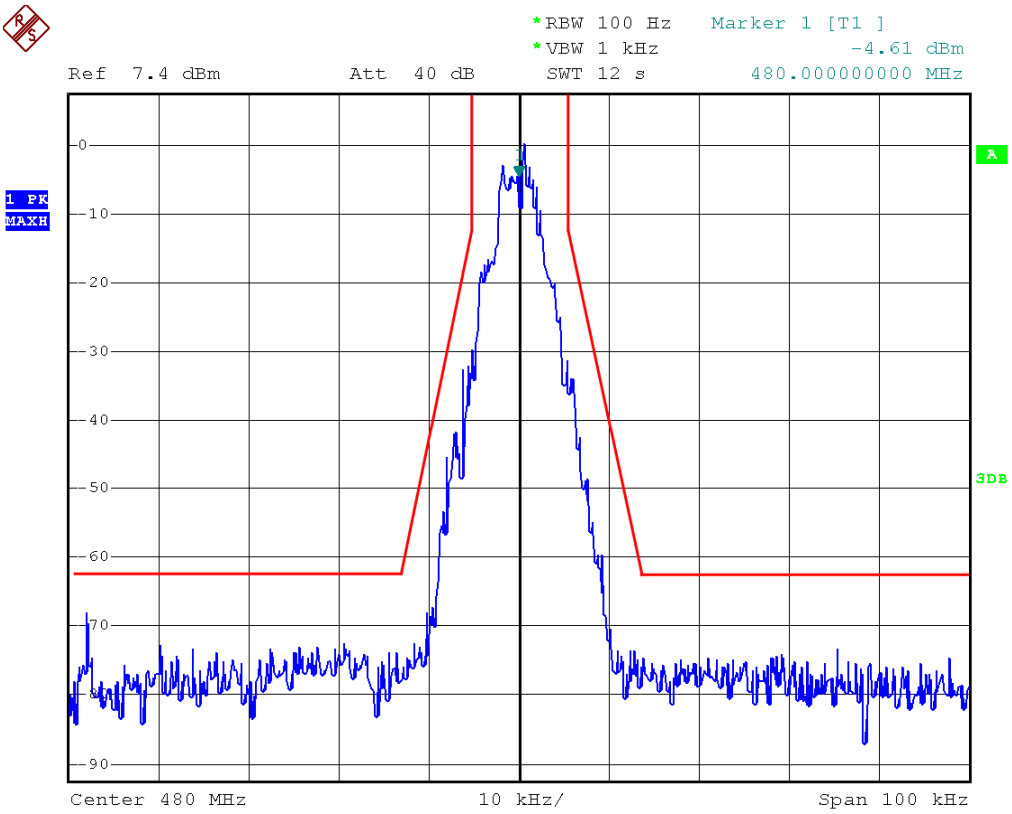
#4 Occupied Bandwidth Analog Voice 16K0F3E Mask B



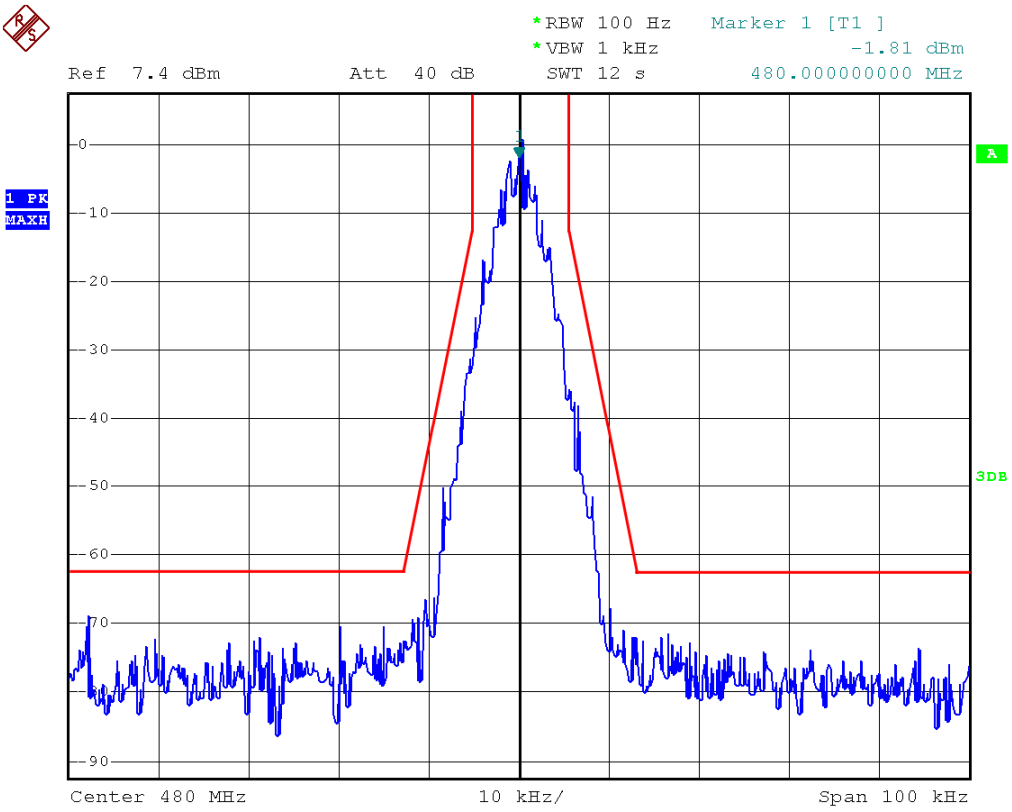
#4 Occupied Bandwidth Analog Voice 11K0F3E Mask D



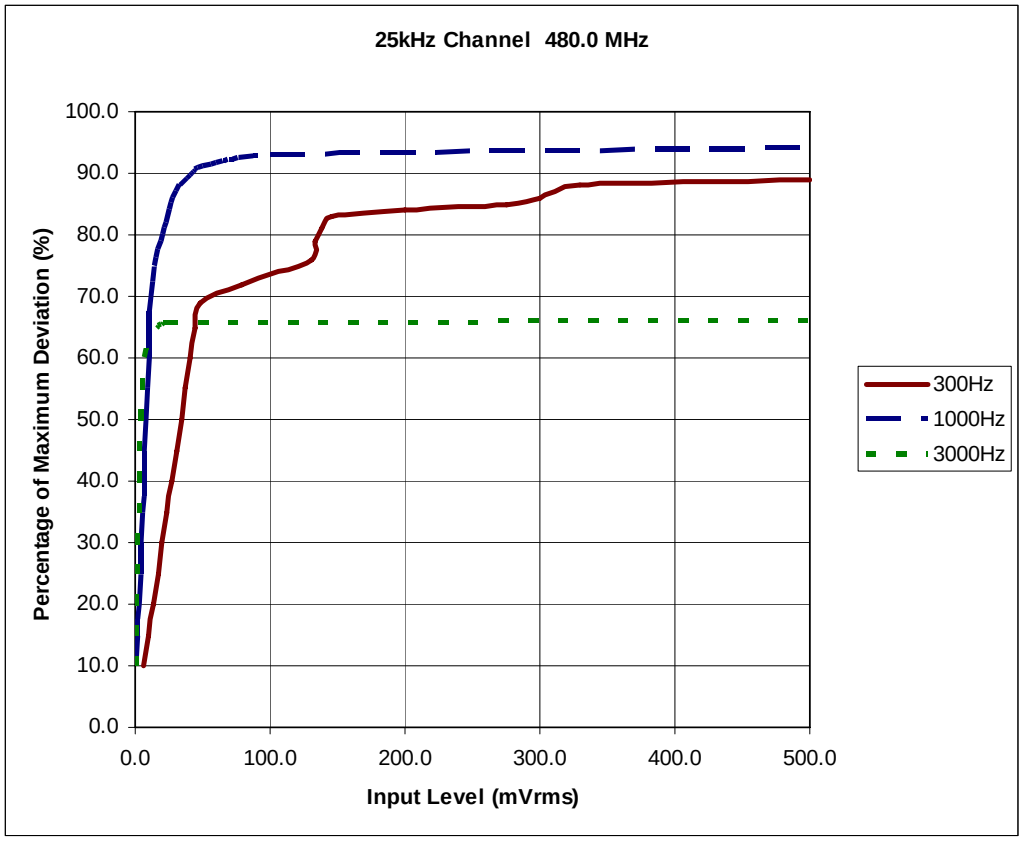
#4 Occupied Bandwidth Digital Voice 8K10F1E Mask D

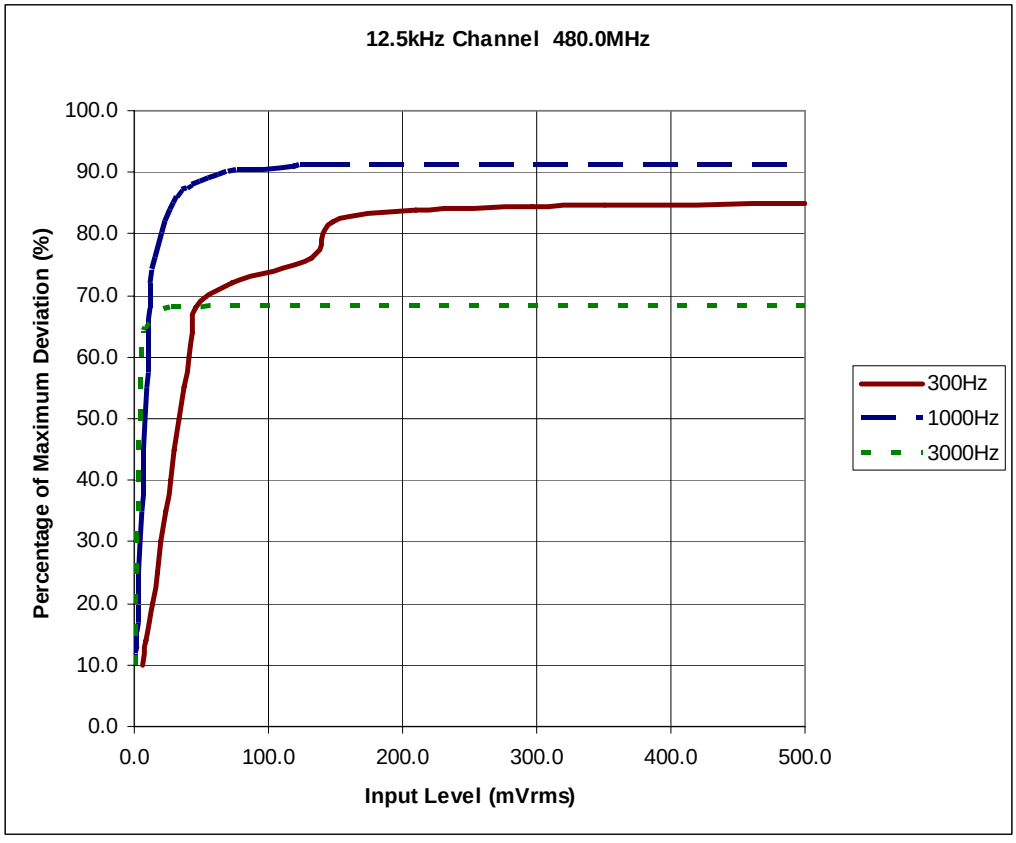


#4 Occupied Bandwidth Digital Data 8K10F1D Mask D

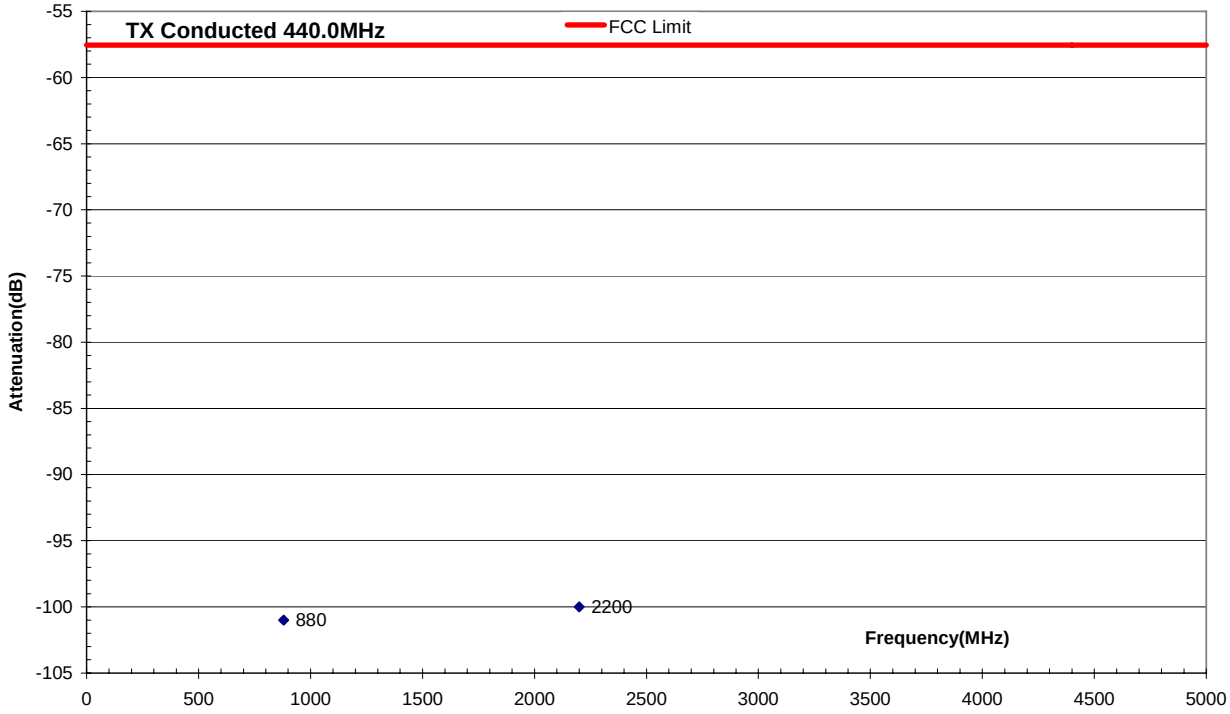


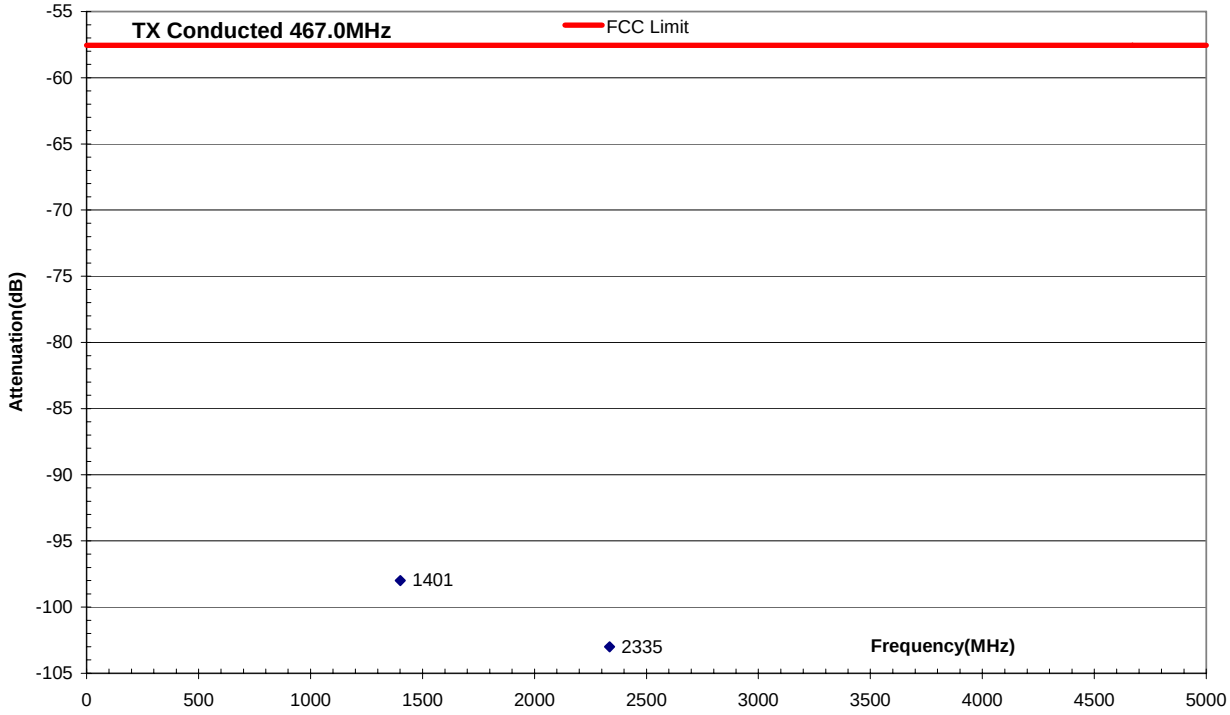
#5 Modulation Limiting

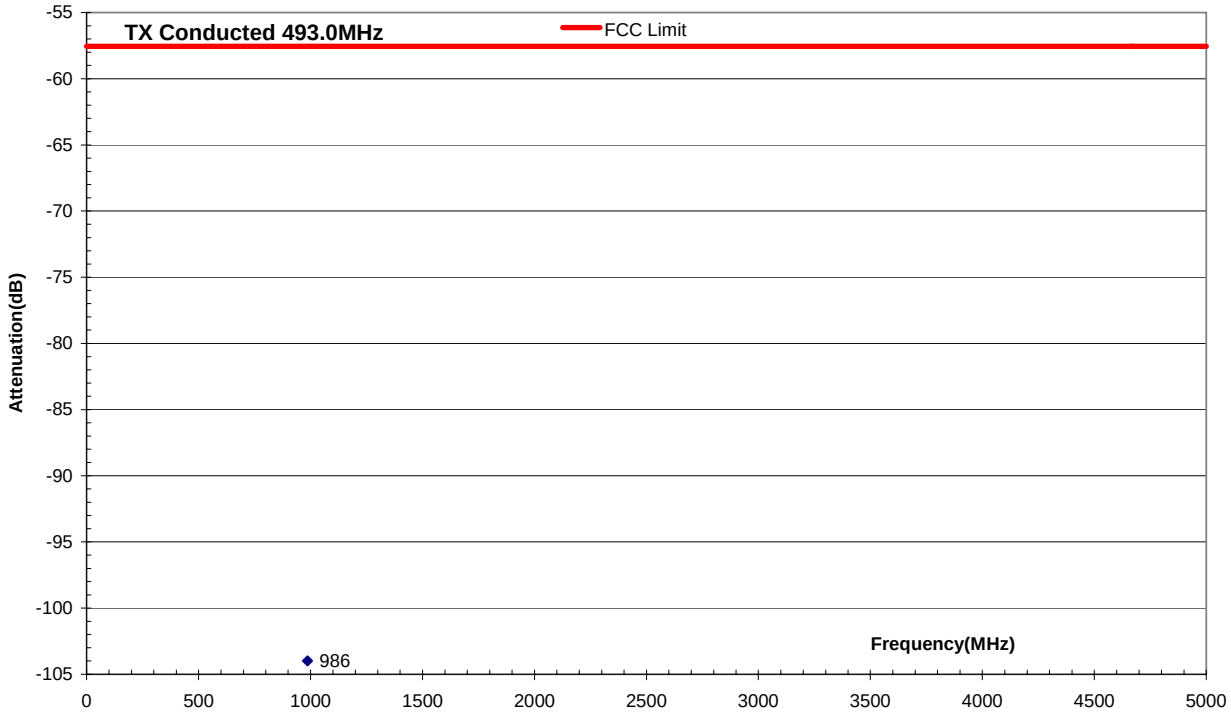


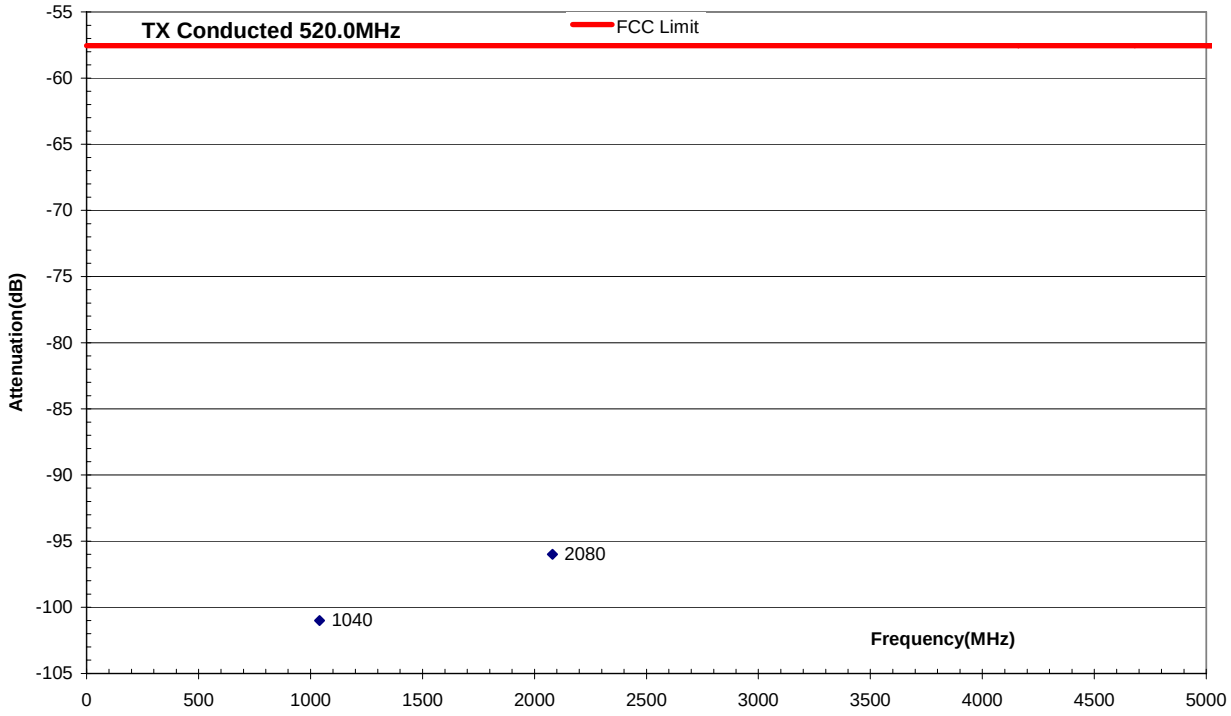


#6 Conducted Spurious Emissions



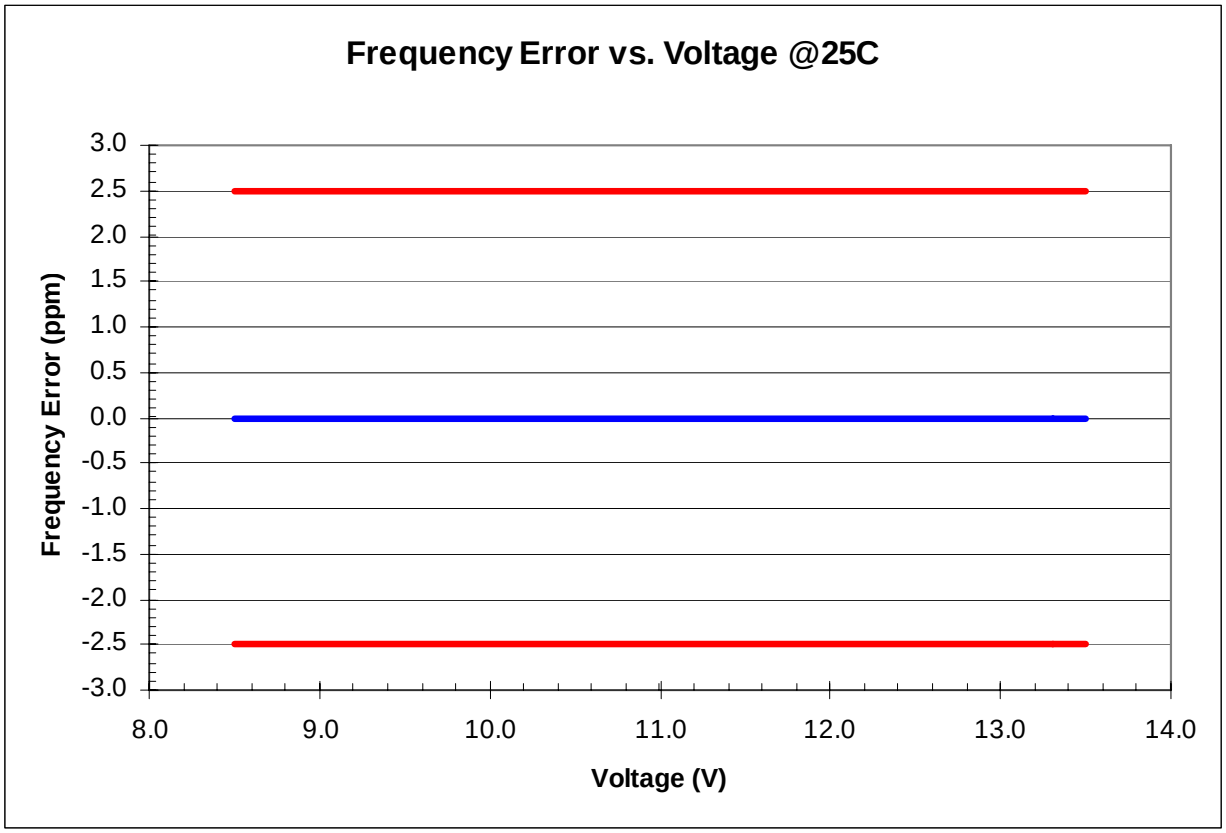


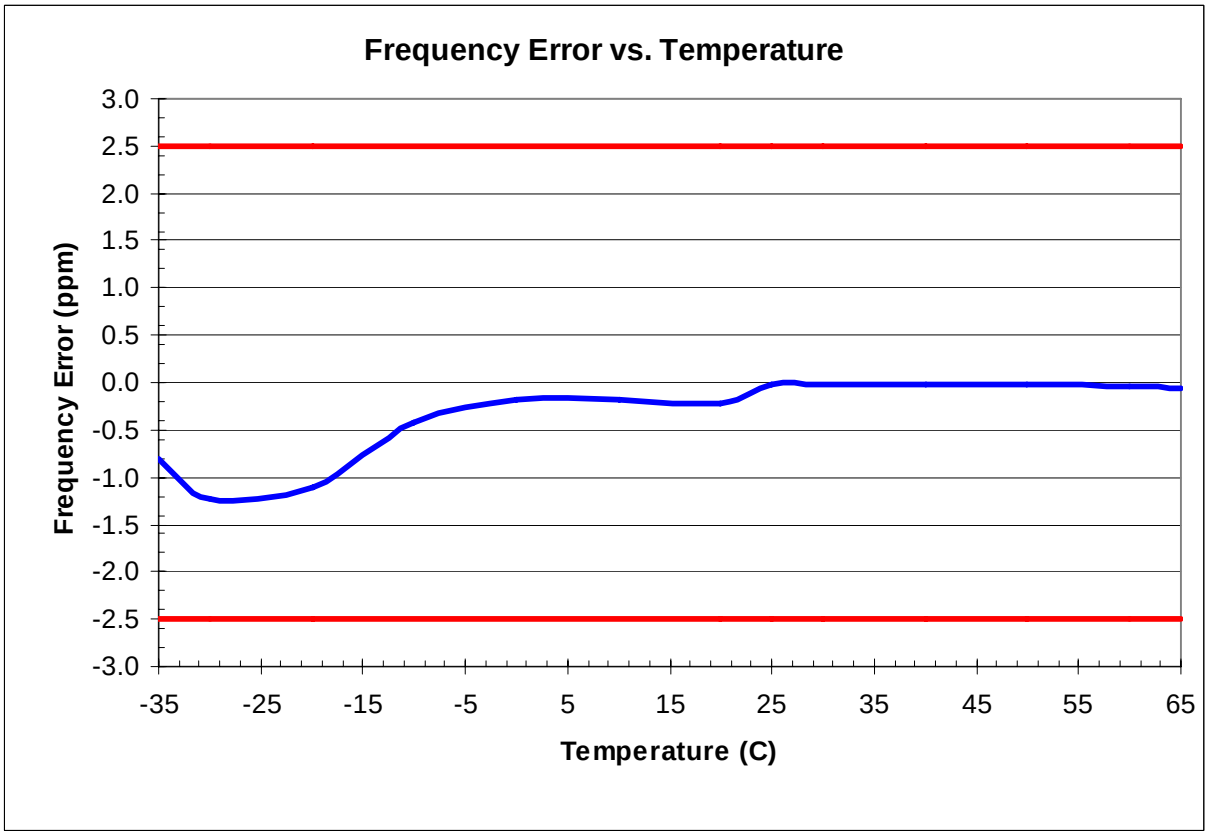

TX Conducted 493.0MHz
FCC Limit
Attenuation(dB)
-55
-60
-65
-70
-75
-80
-85
-90
-95
-100
-105
986
Frequency(MHz)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000


TX Conducted 520.0MHz
FCC Limit
Attenuation(dB)
-55
-60
-65
-70
-75
-80
-85
-90
-95
-100
-105
2080
1040
Frequency(MHz)
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000

#7 Frequency Stability

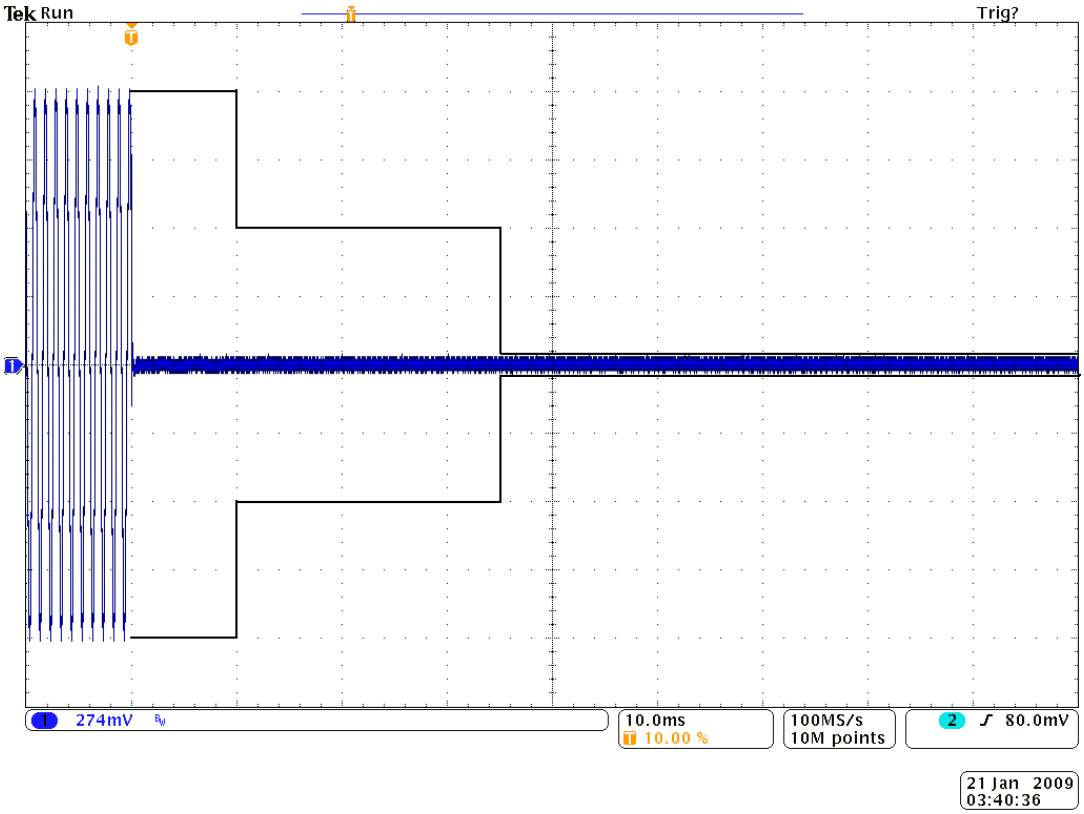
Channel Frequency 480 MHz



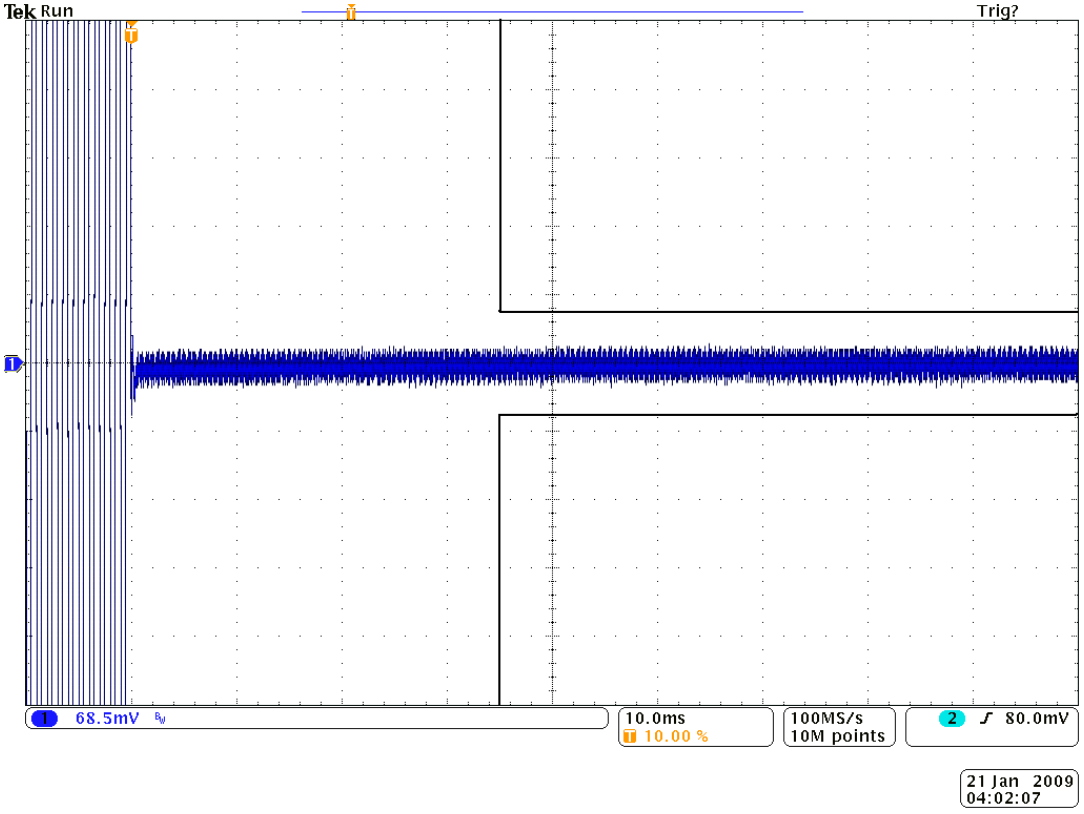


#8 Transmitter Transient Frequency Behavior

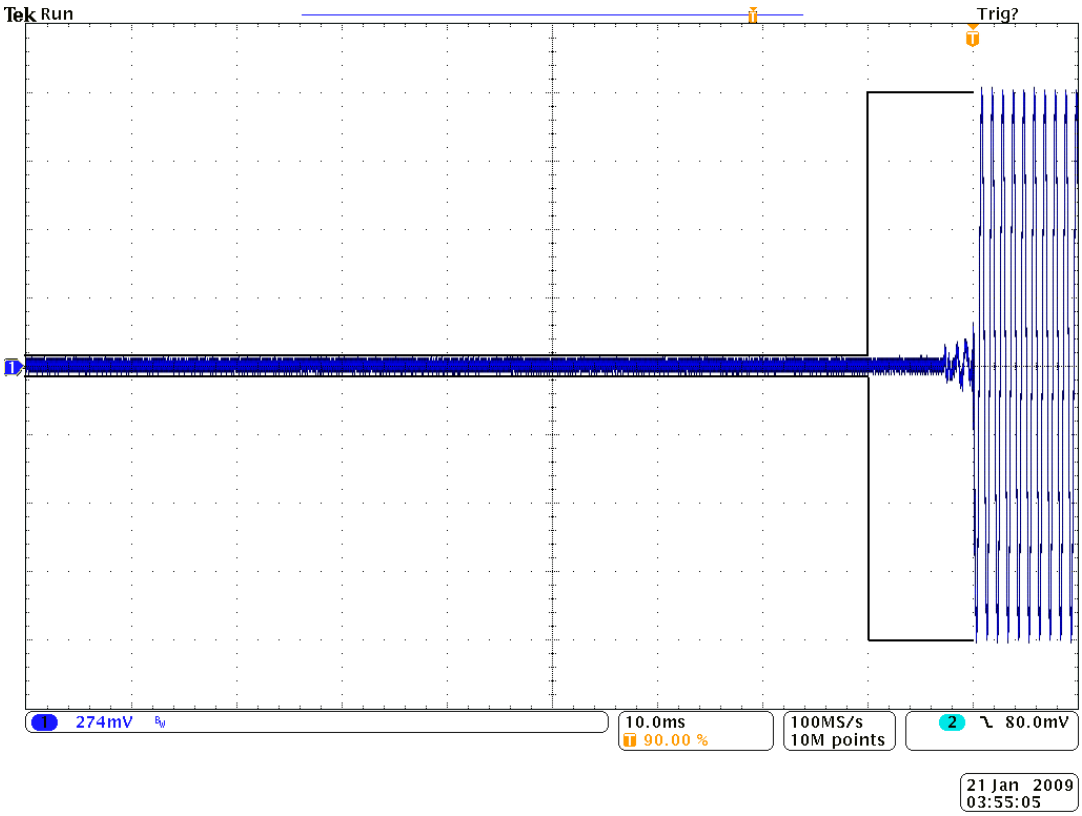
25Khz Channel 480.0MHz TX ON



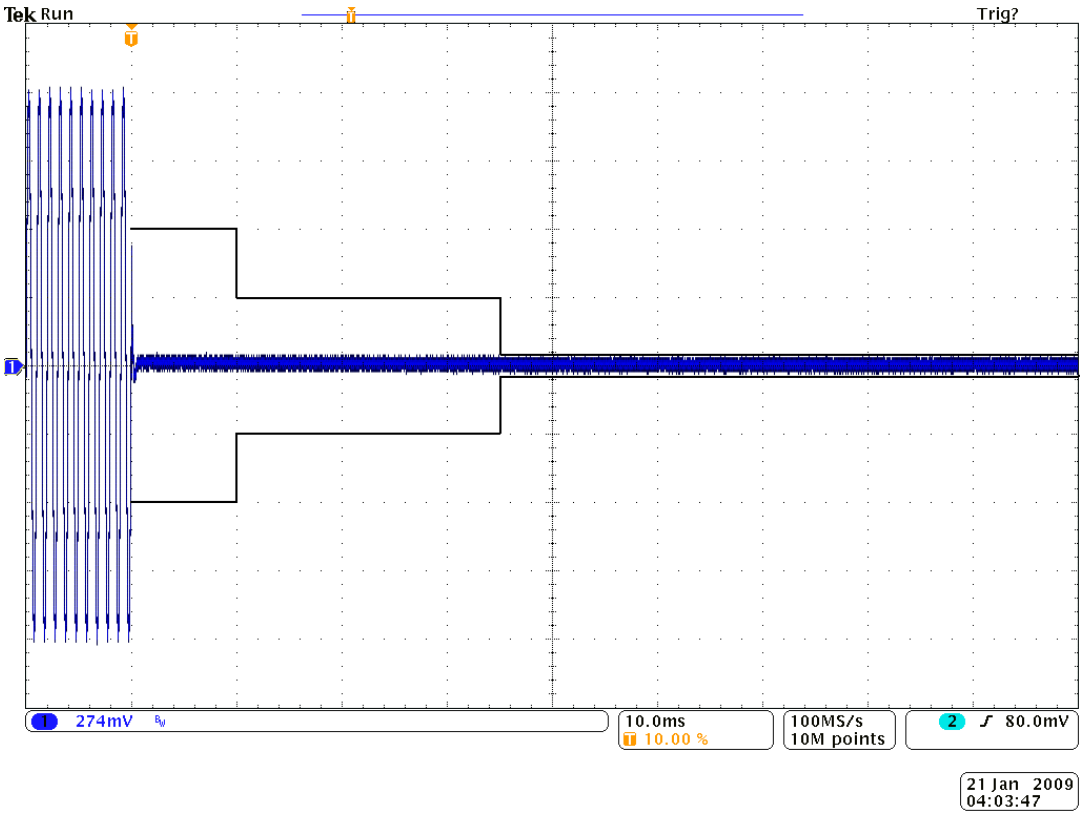
25KHz Channel 480.0MHz TX ON ZOOMED



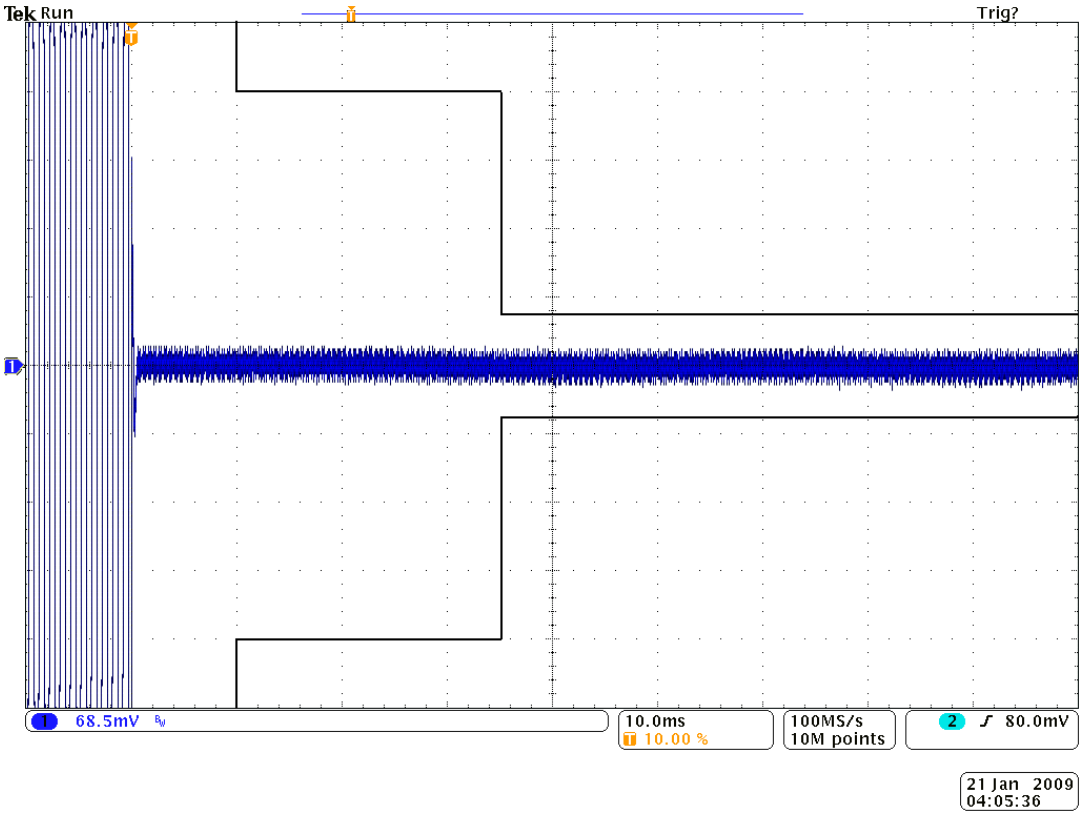
25Khz Channel 480.0MHz TX OFF



12.5Khz Channel 480.0MHz TX ON



12.5Khz Channel 480.0MHz TX ON ZOOMED



12.5Khz Channel 480.0MHz TX OFF