

Date: October 5, 2018

Federal Aviation Administration
Office of Spectrum Policy and Management
ASR-1
800 Independence AVE. SW
Washington, DC 20591

Dear Sir/Madam,

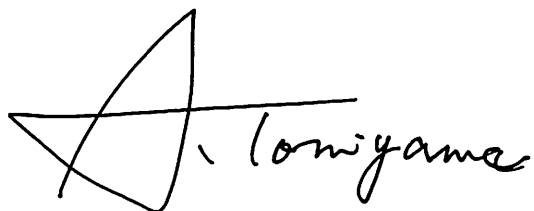
As required under FCC Rule Part 87.147(d), Please consider this letter as notification of an application for the certification of the equipment described below.

Equipment:	IC-A120 (FCC ID AFJ369710)
Manufacturer Identification:	Icom Inc.
Antenna Characteristics:	50 Ω
Rated Output Power:	9W (carrier power)
Emission Type & Characteristics:	6K00A3E/5K60A3E (Amplitude Modulation Voice)
Frequency of Operation:	(TX/RX) 118.000 to 136.9917MHz
Essential Receiver Characteristics:	Sensitivity 1 μ V; Spurious Response 74dB μ

Sincerely,

Icom Incorporated

Atsushi Tomiyama
General Manager of Quality Assurance Department



Information Necessary for FAA Review of FCC
Certification Application for VHF Transmitters/Receiver.

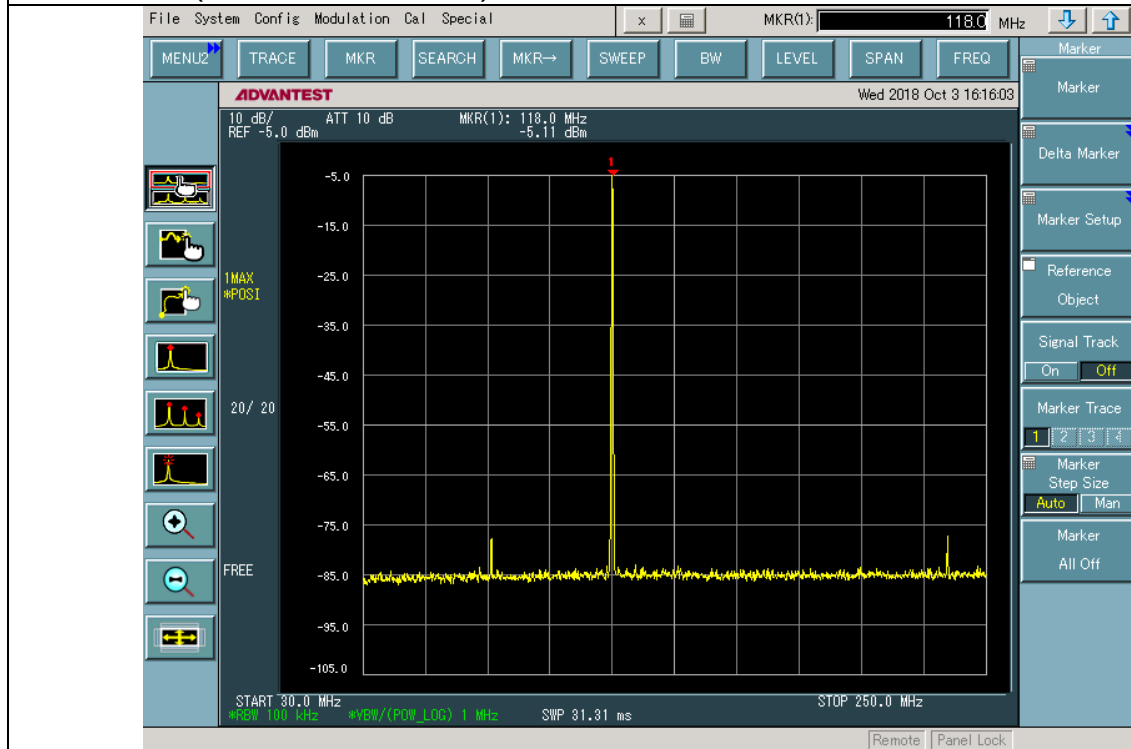
- 1.) FCC identification number
AFJ369710
- 2.) Manufacture and model number
Manufacture: Icom Inc.
Model number: IC-A120
- 3.) Rated transmitter output power
Rated output power: 9 W
- 4.) Frequency range (capable of tuning)
Frequency capable/tuning range: 118.000 to 136.9917 MHz
- 5.) Method of tuning
Microprocessor controlled phased lock loop (PLL) arrangement
- 6.) Channeling capability
The radio comes with 25 KHz and 8.33 KHz channel spacing.
- 7.) Frequency stability (transmitter)
+/- 5ppm
- 8.) Emission bandwidth(s)
25 KHz: 6K00A3E
8.33 KHz: 5K60A3E
- 9.) Emission type(s)
Amplitude modulation (AM)
- 10.) Spectral emission plots
All harmonics and spurious emissions are more than 20dB below the specified attenuation limit.
- 11.) Receiver RF characteristics
Sensitivity: 6 dB S/N 1 uV
Spurious Response: 74 dBu
Audio output power: 10 W (EXT Speaker, 8ohm, 10% distortion)
Receive System: Double conversion superheterodyne

Plot 1 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

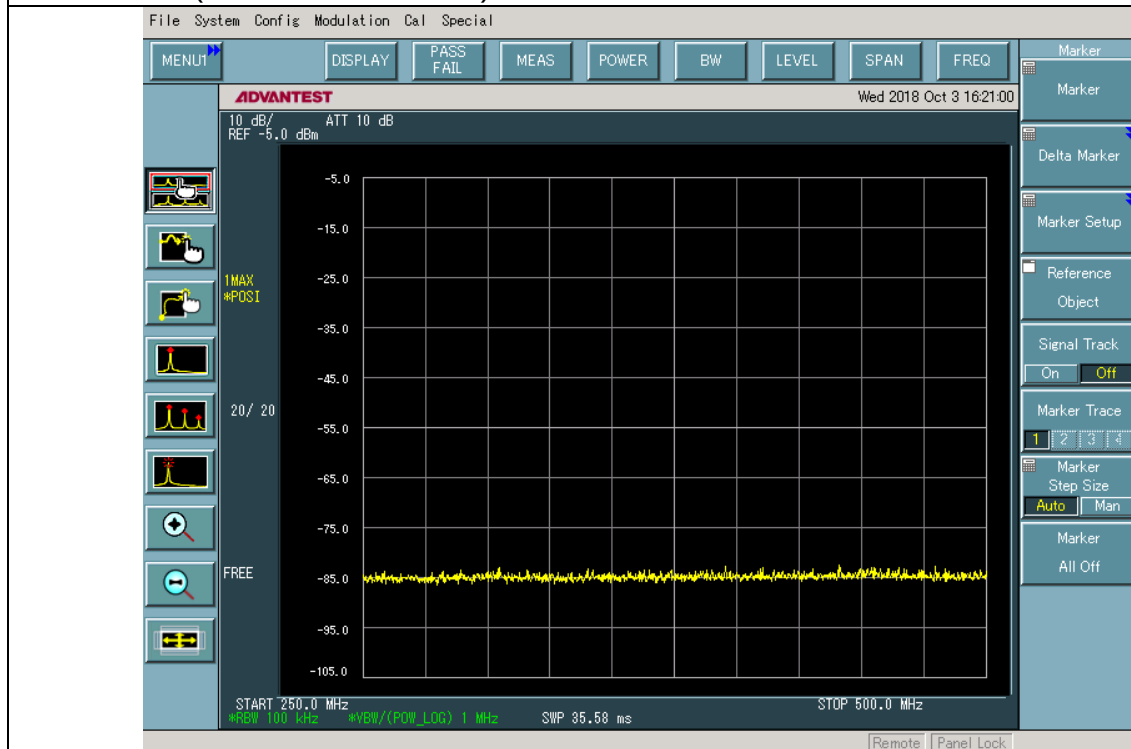


Plot 2 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

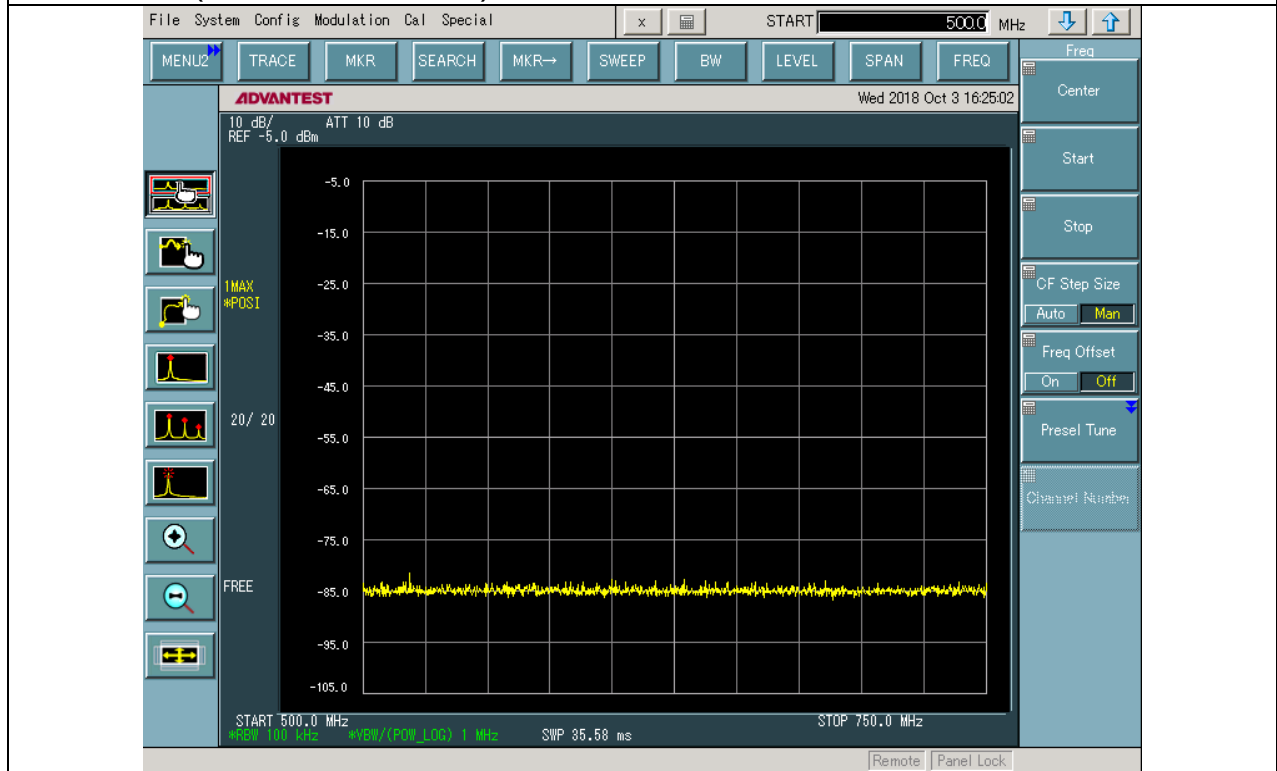


Plot 3 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

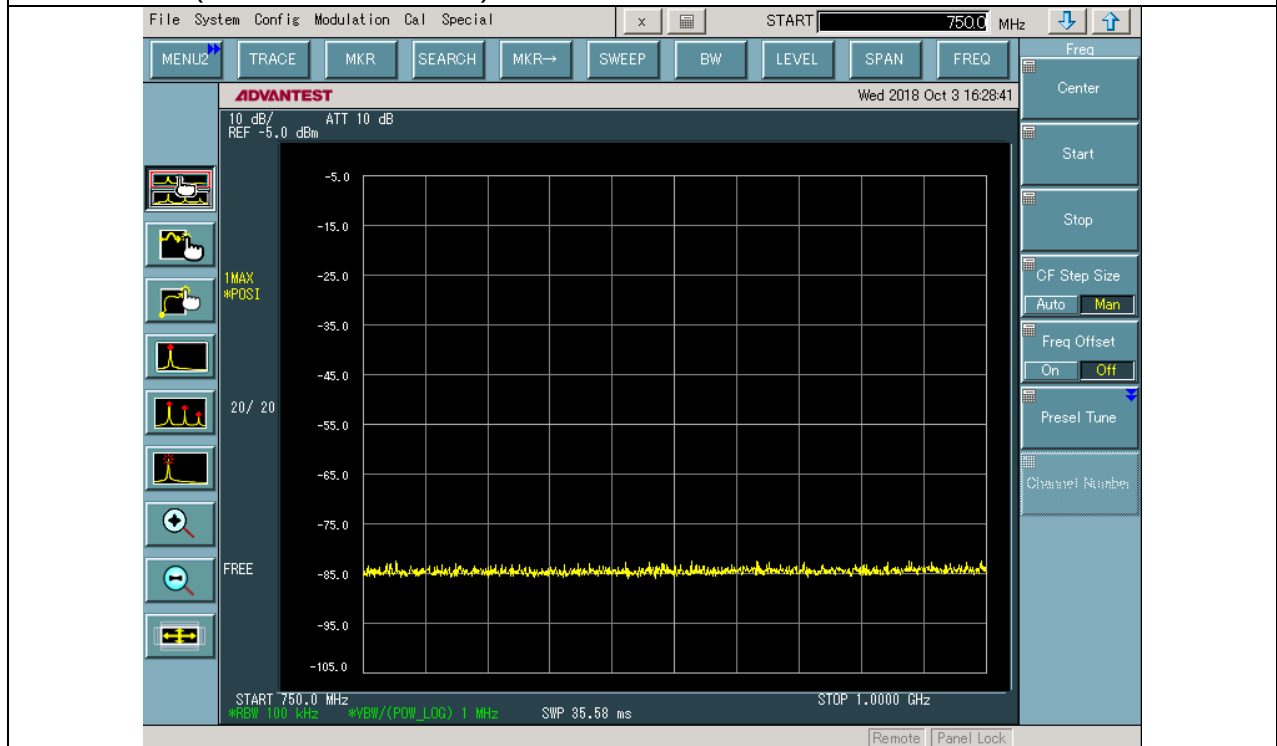


Plot 4 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

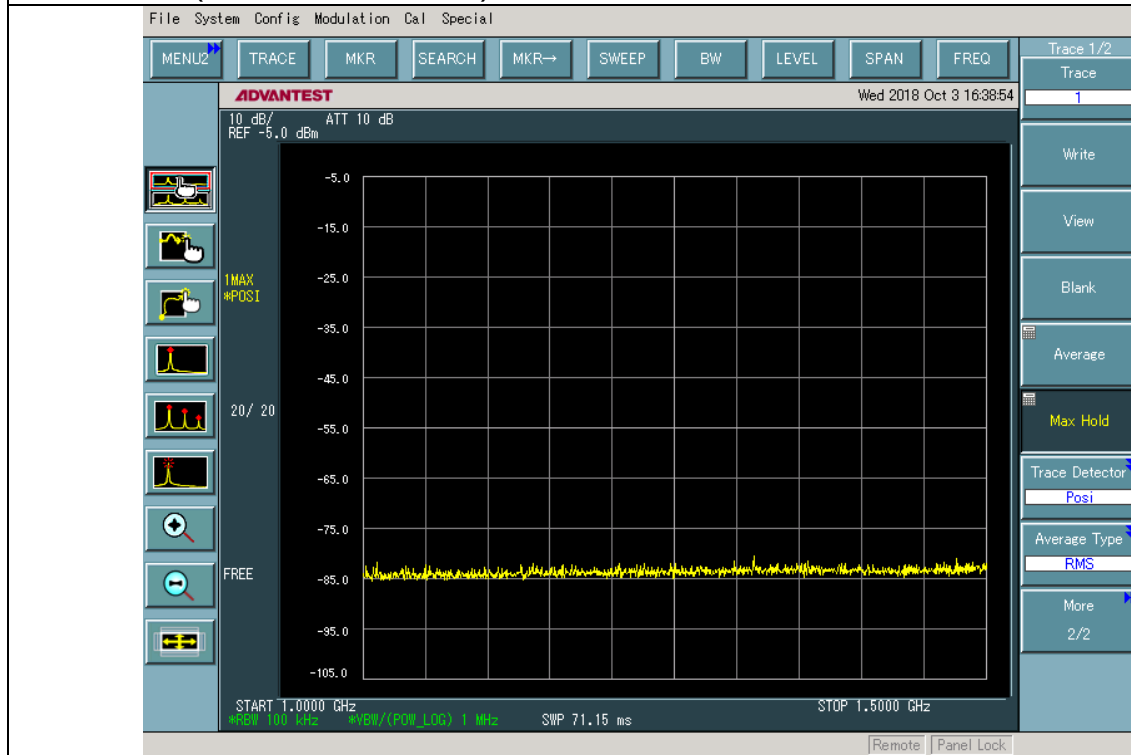


Plot 5 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

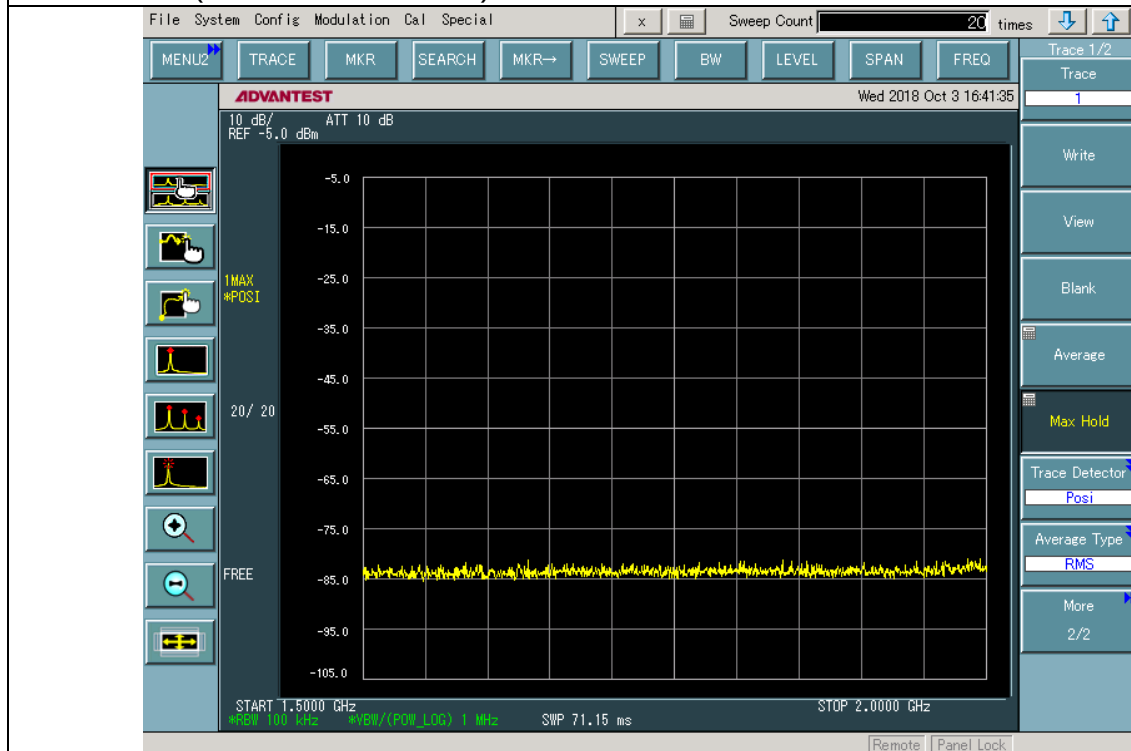


Plot 6 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

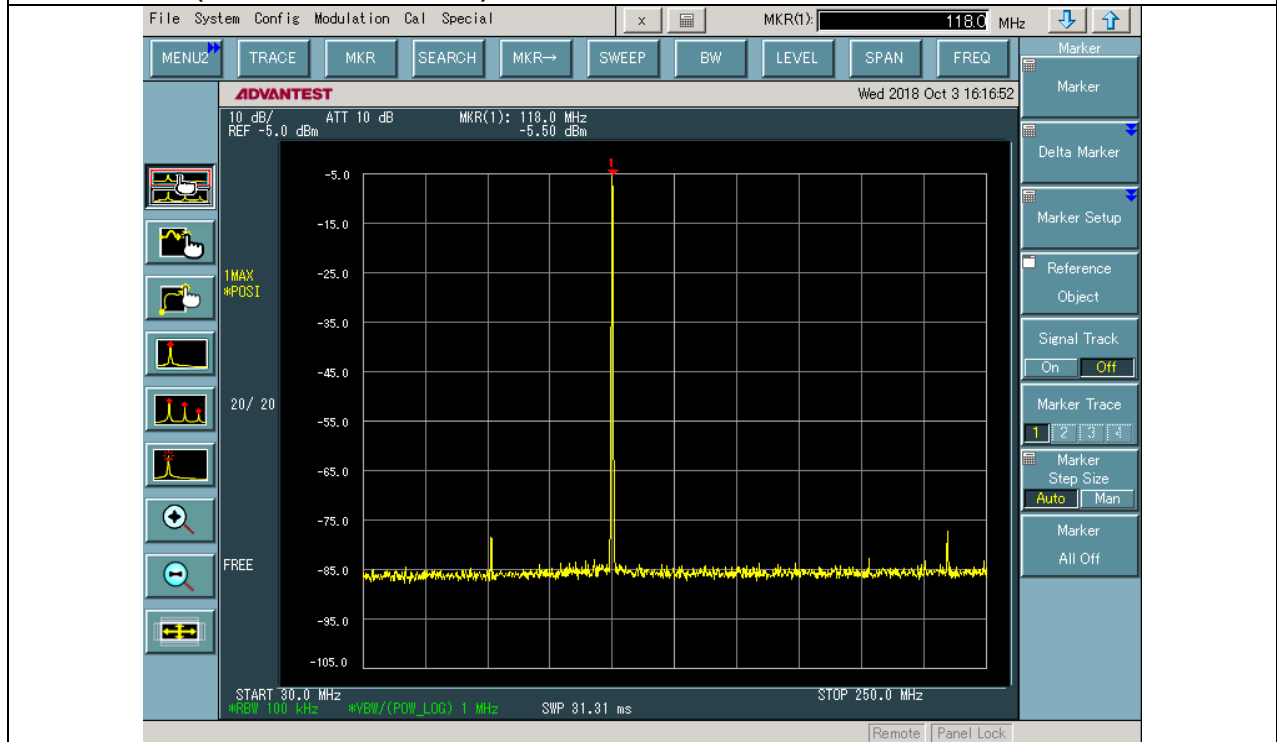


Plot 7 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

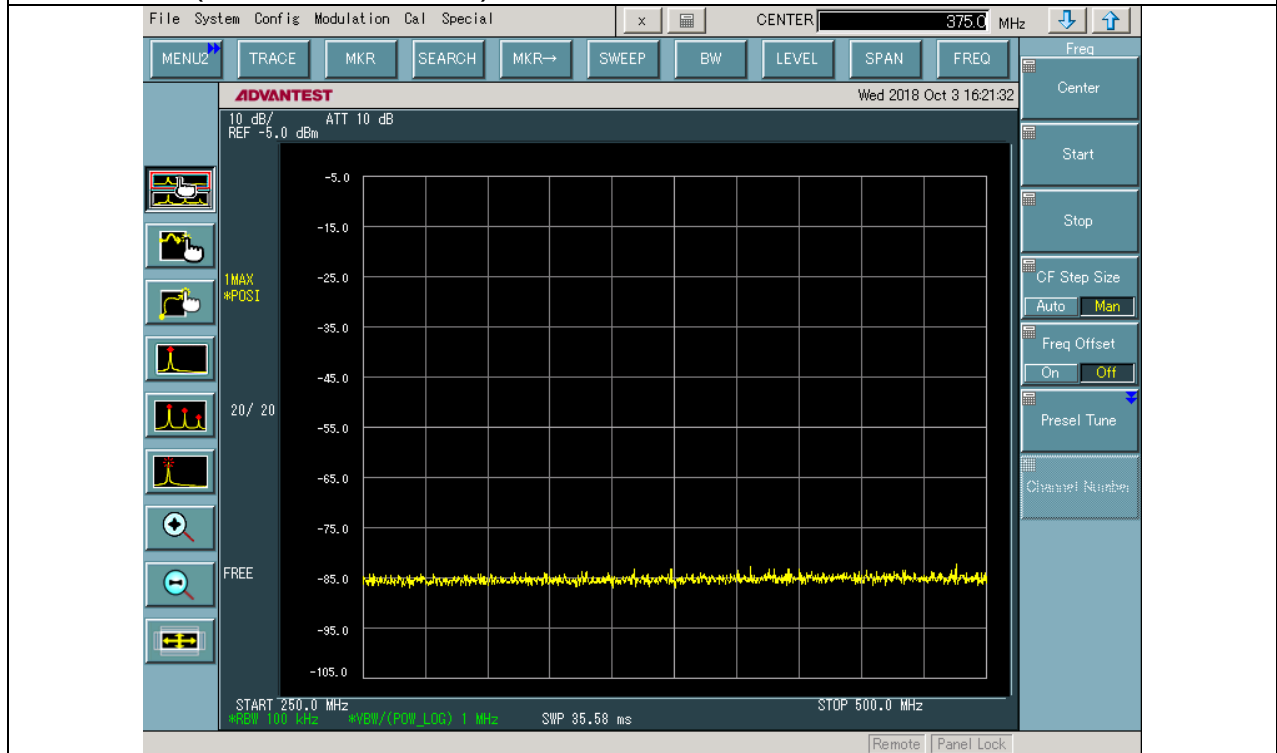


Plot 8 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

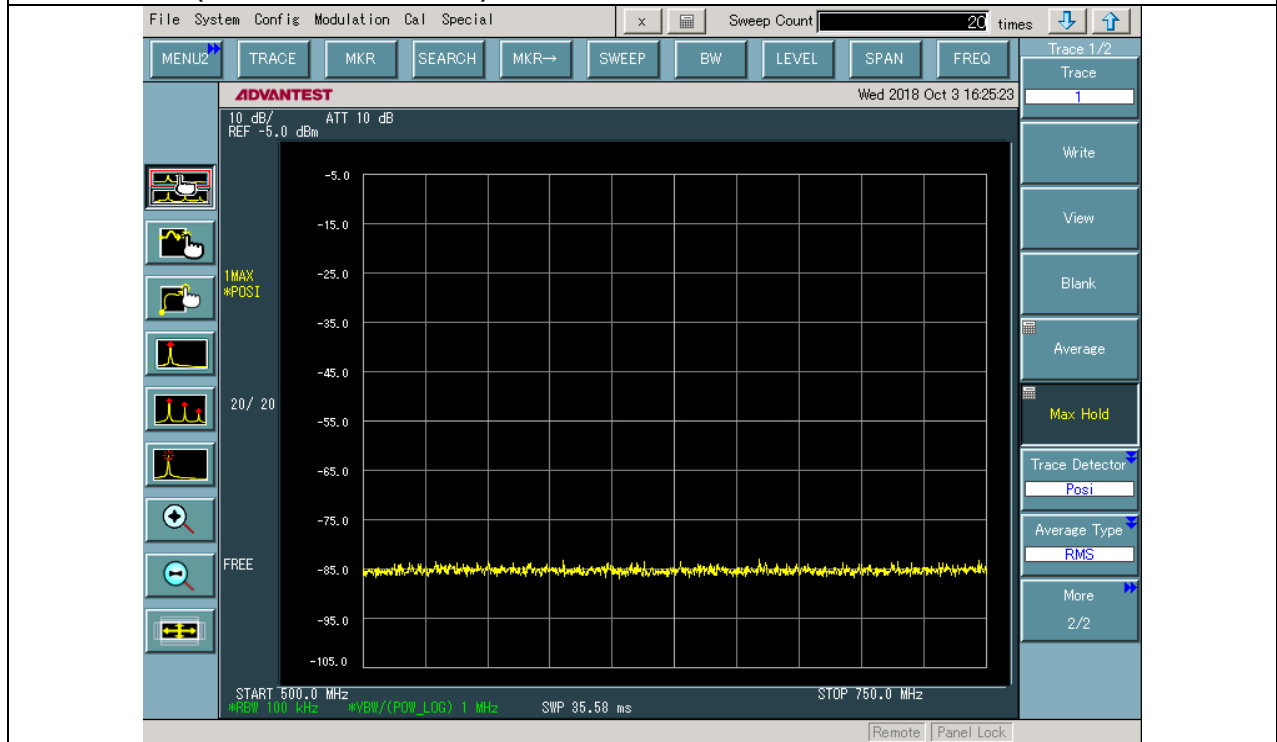


Plot 9 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

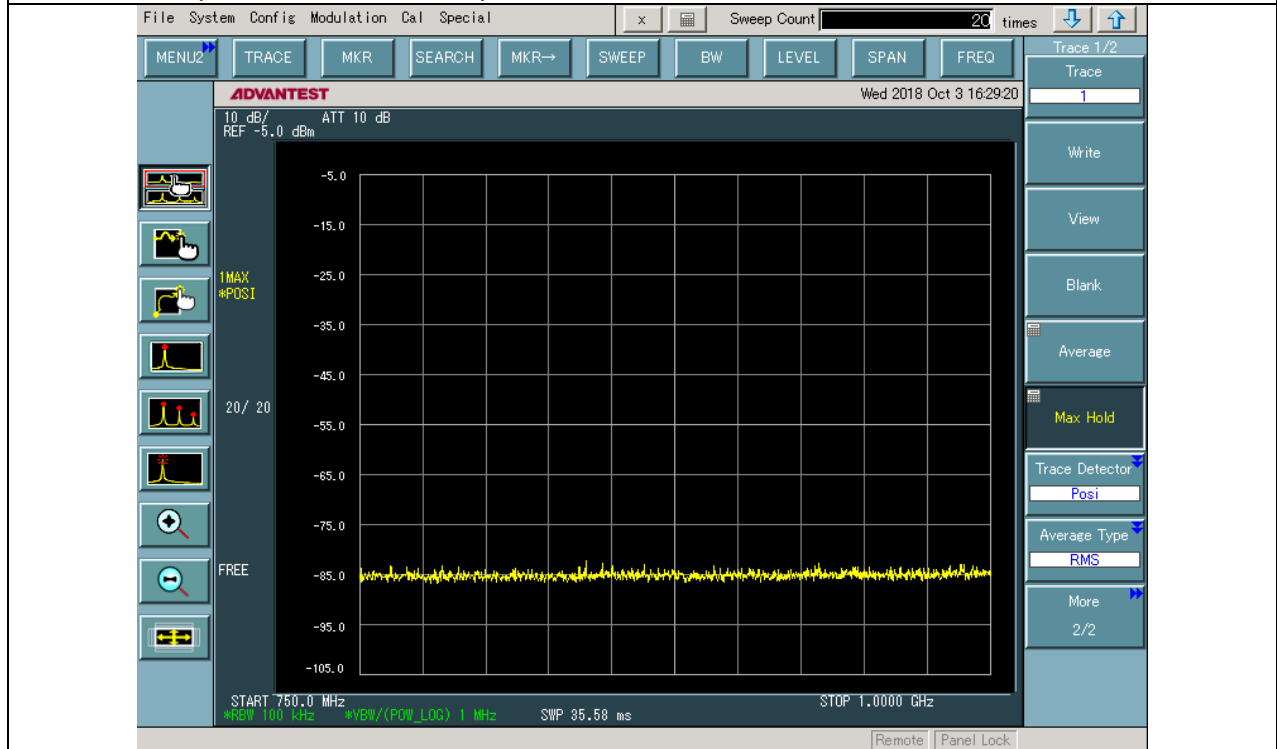


Plot 10 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

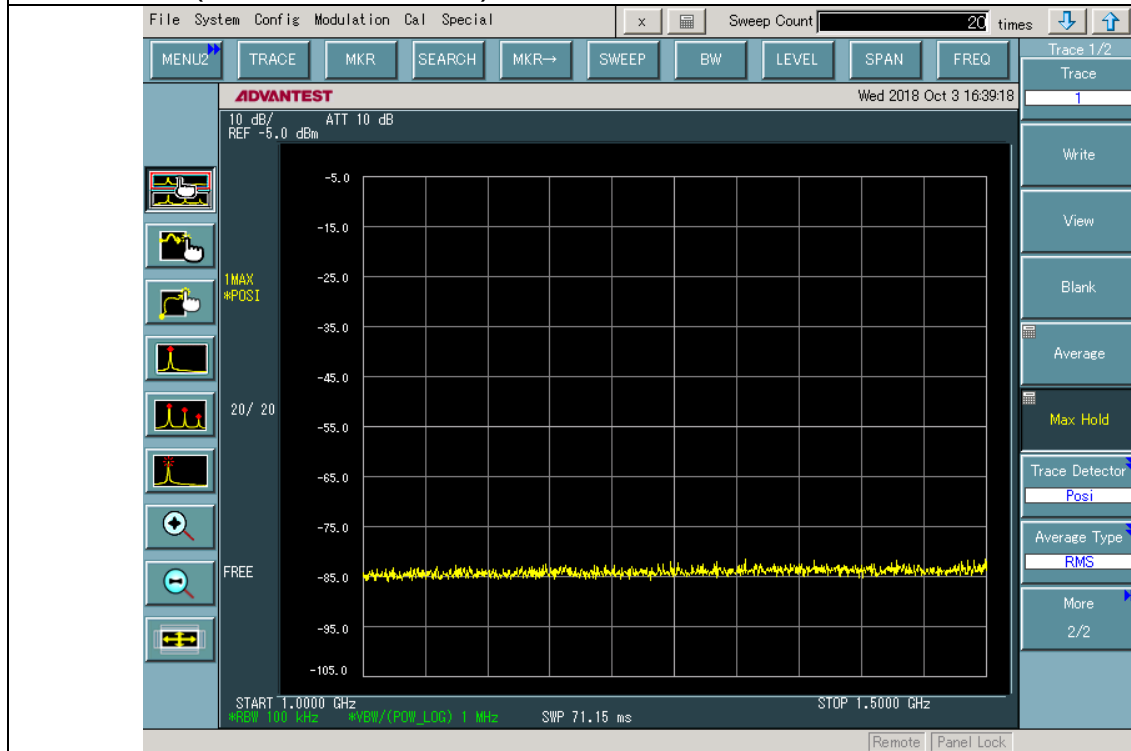


Plot 11 TX Conducted Emission

Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

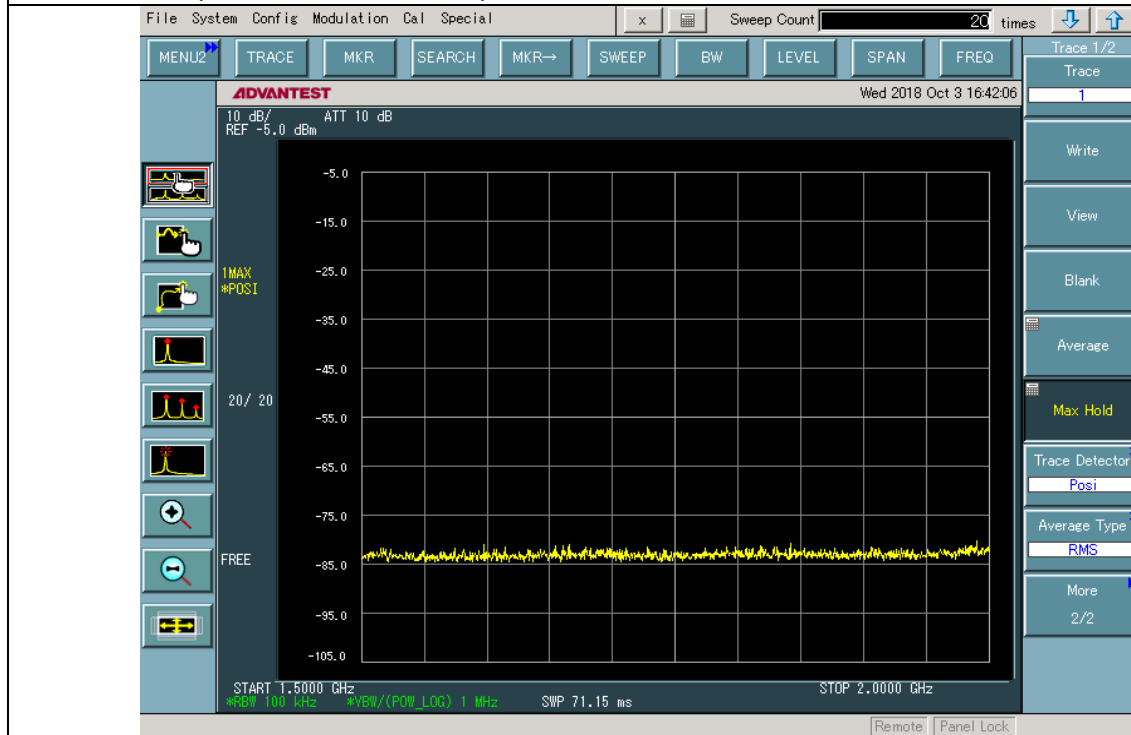


Plot 12 TX Conducted Emission

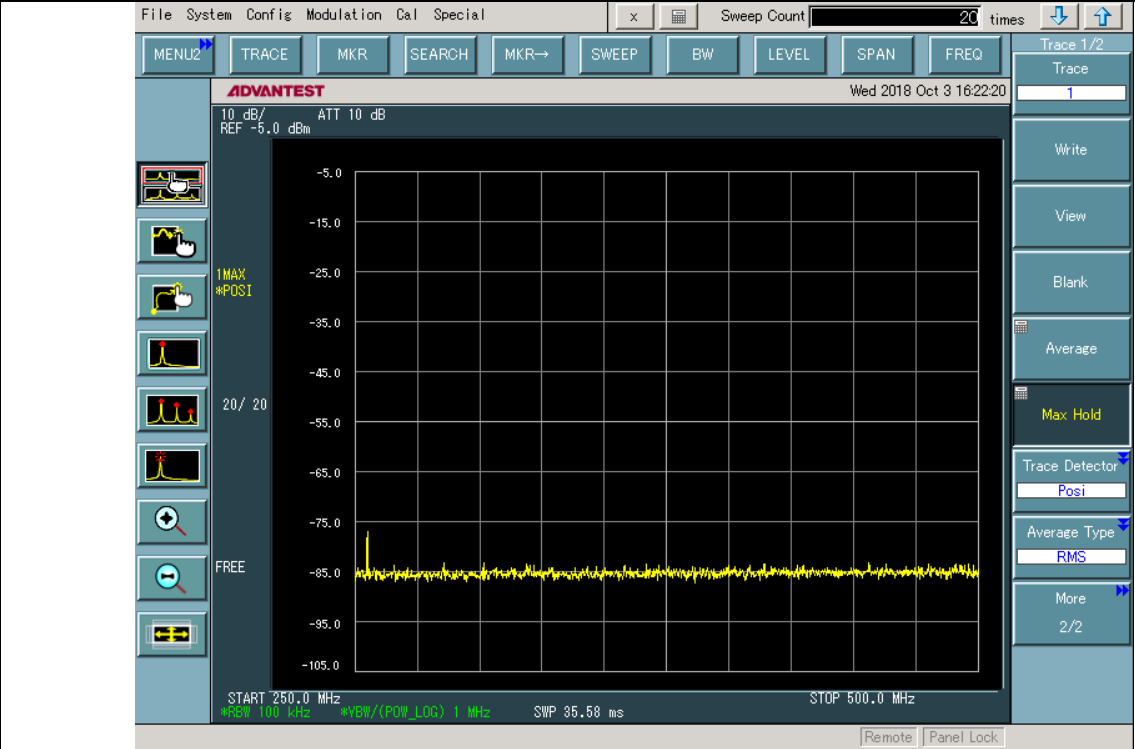
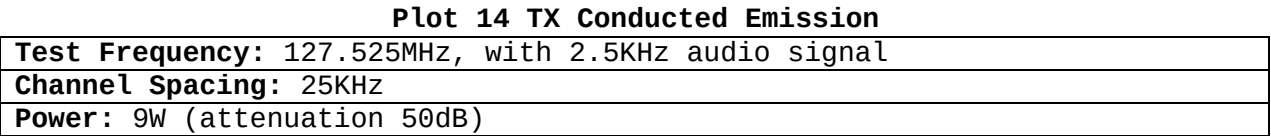
Test Frequency: 118.025MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)



Plot 13 TX Conducted Emission
Test Frequency: 127.525MHz, with 2.5KHz audio signal
Channel Spacing: 25KHz
Power: 9W (attenuation 50dB)

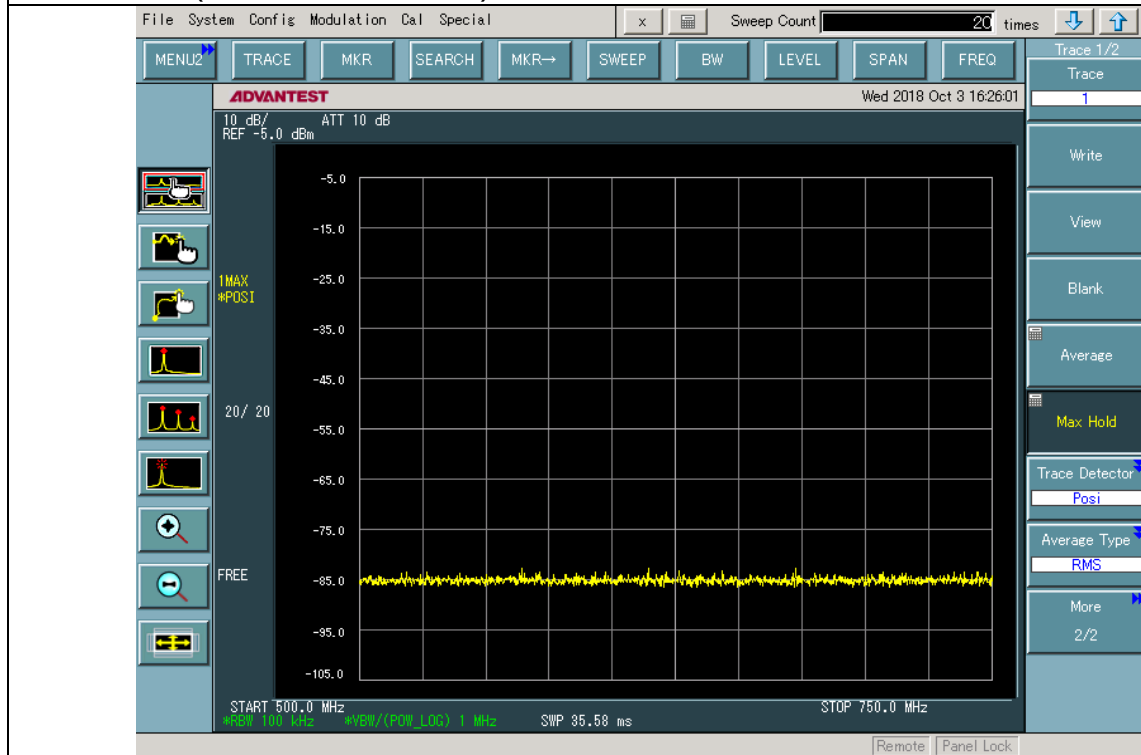


Plot 15 TX Conducted Emission

Test Frequency: 127.525MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

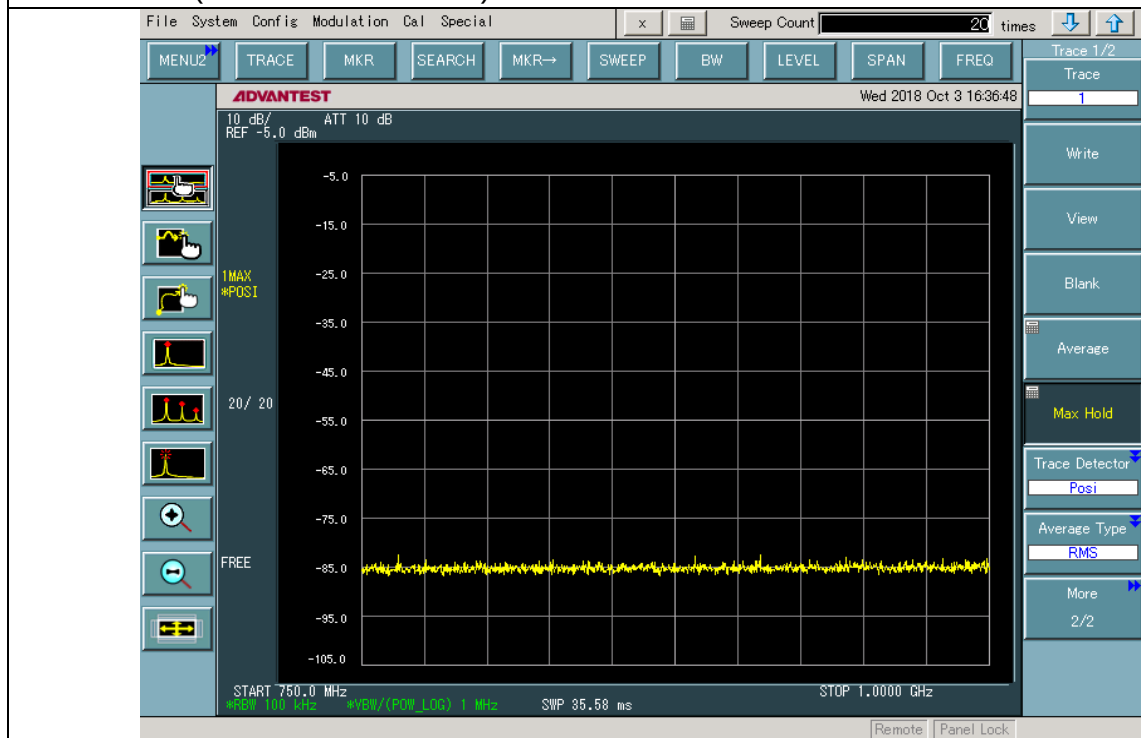


Plot 16 TX Conducted Emission

Test Frequency: 127.525MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

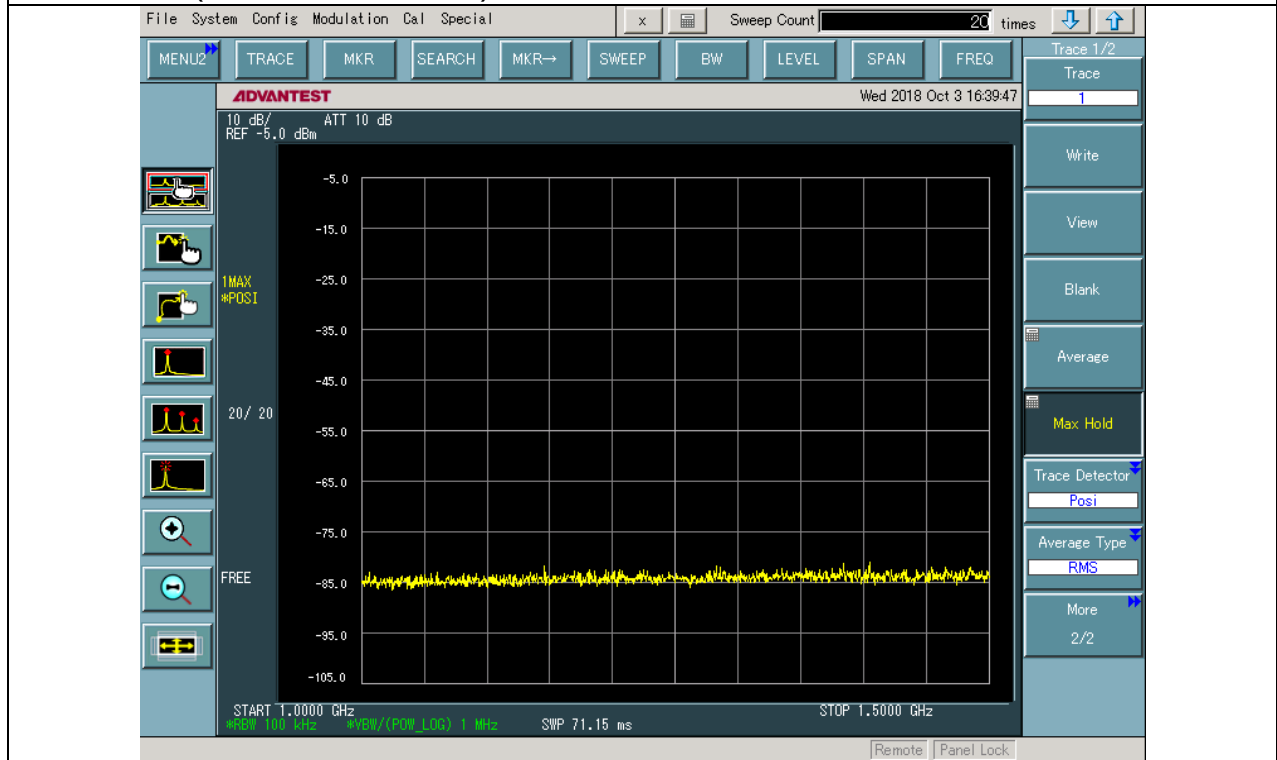


Plot 17 TX Conducted Emission

Test Frequency: 127.525MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

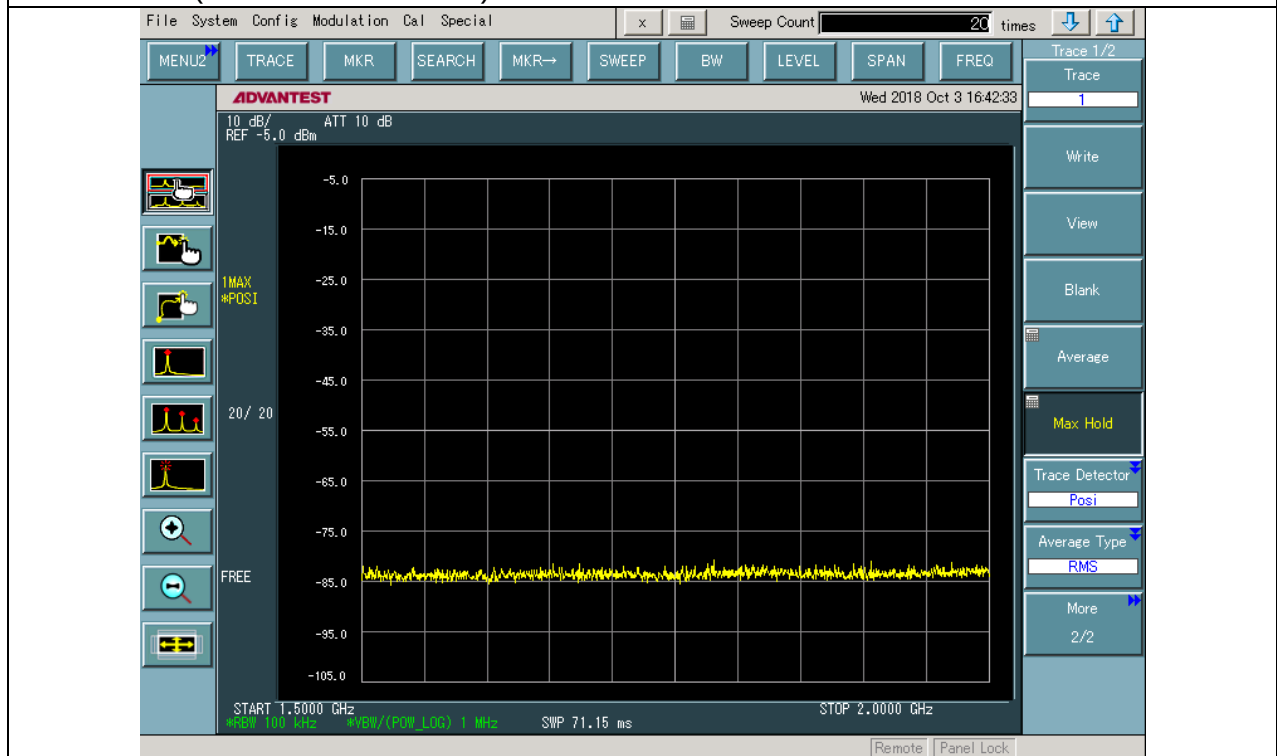


Plot 18 TX Conducted Emission

Test Frequency: 127.525MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

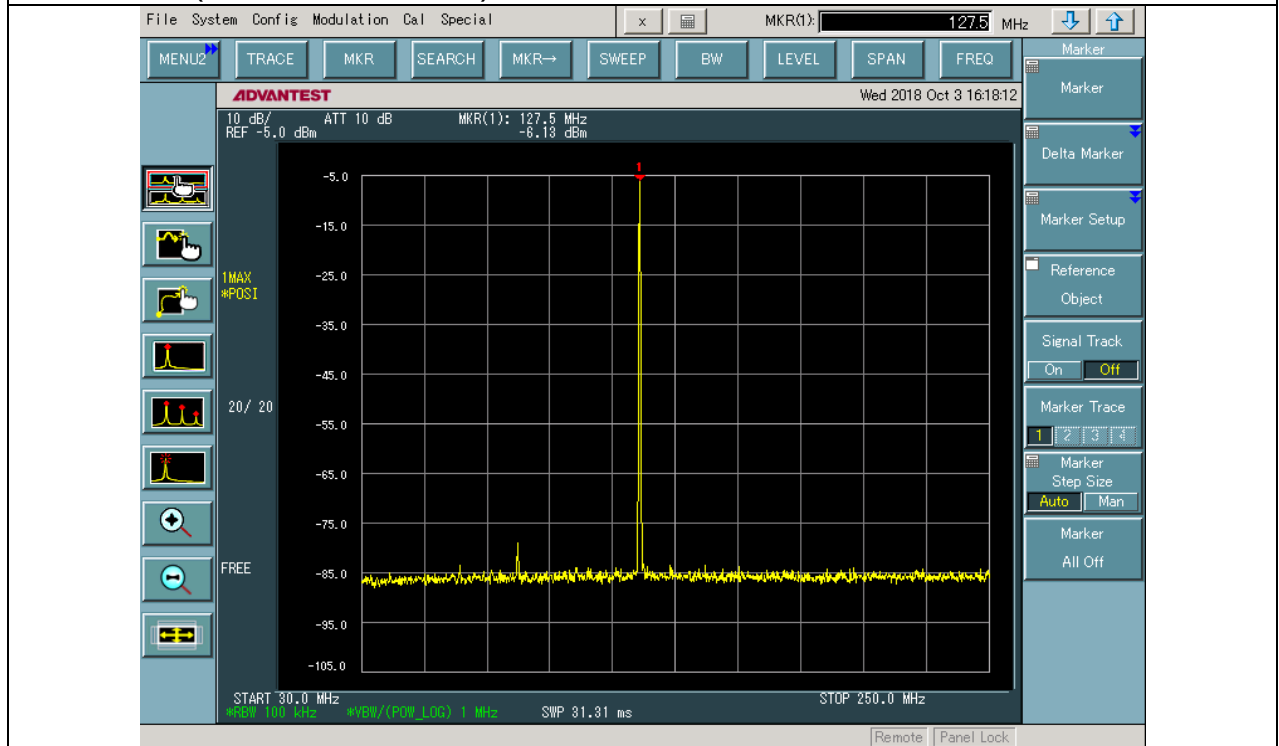


Plot 19 TX Conducted Emission

Test Frequency: 127.525MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

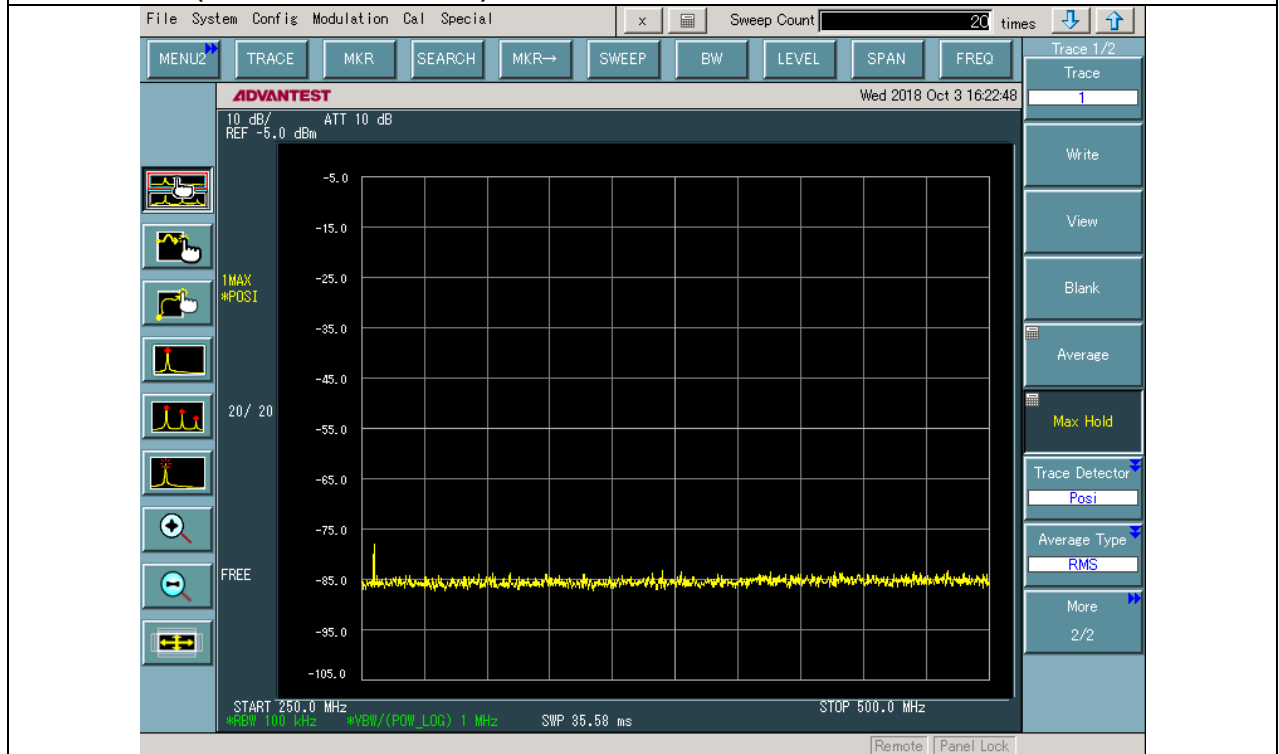


Plot 20 TX Conducted Emission

Test Frequency: 127.525MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

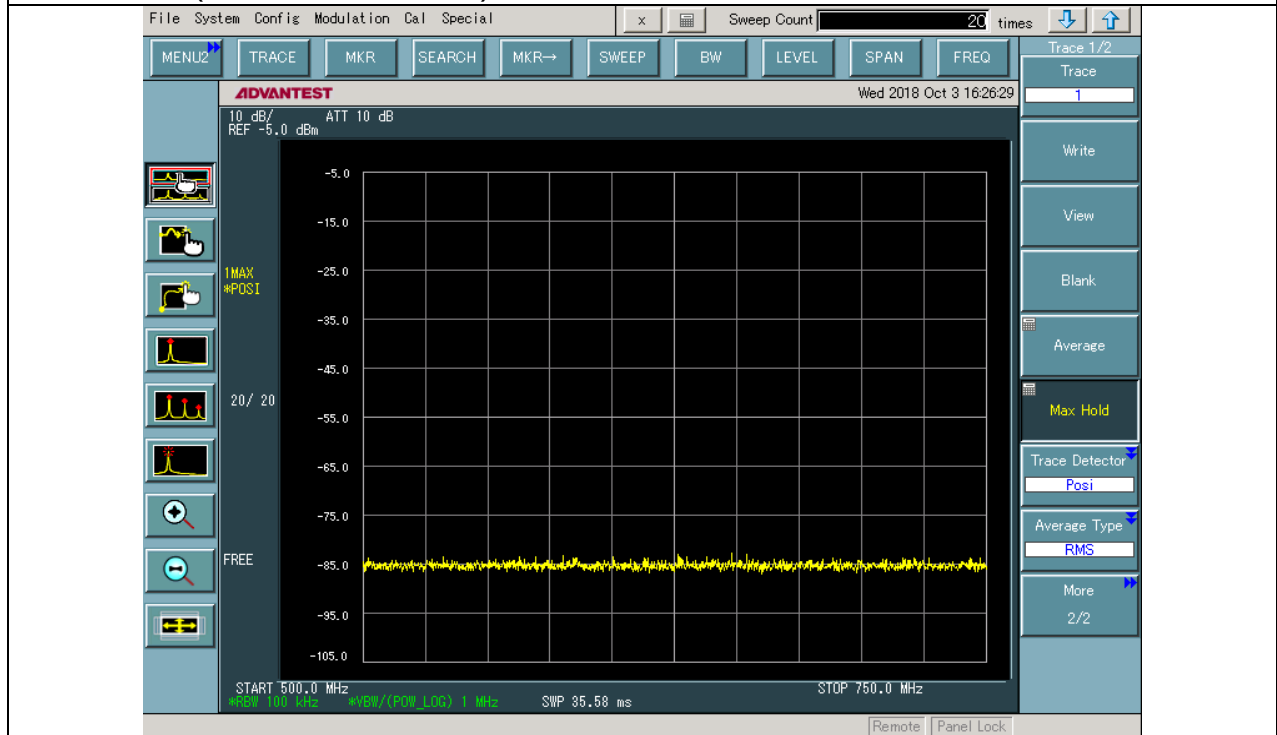


Plot 21 TX Conducted Emission

Test Frequency: 127.525MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

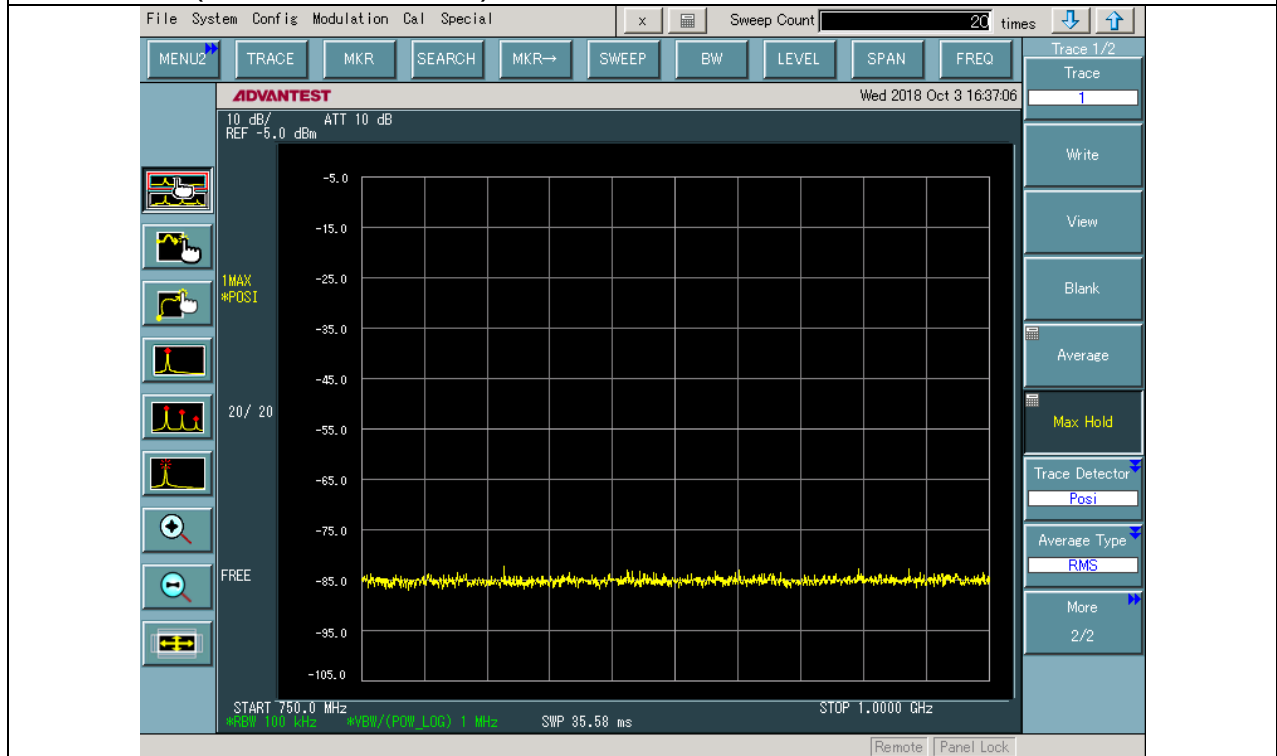


Plot 22 TX Conducted Emission

Test Frequency: 127.525MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

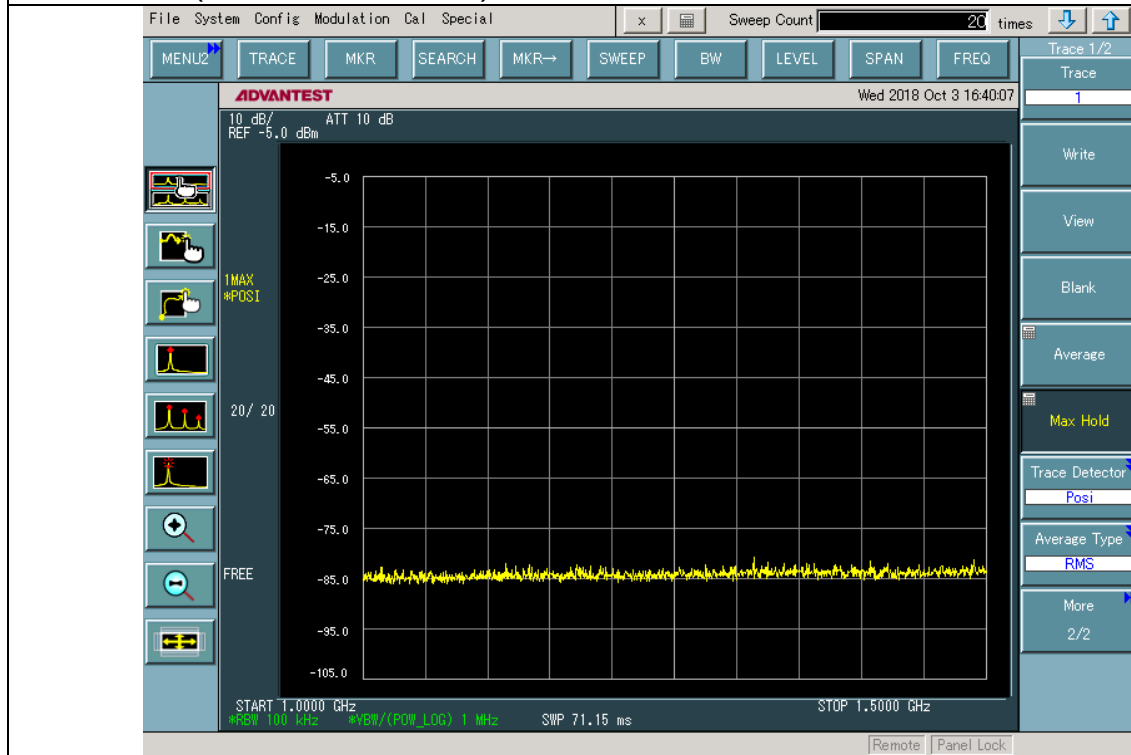


Plot 23 TX Conducted Emission

Test Frequency: 127.525MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

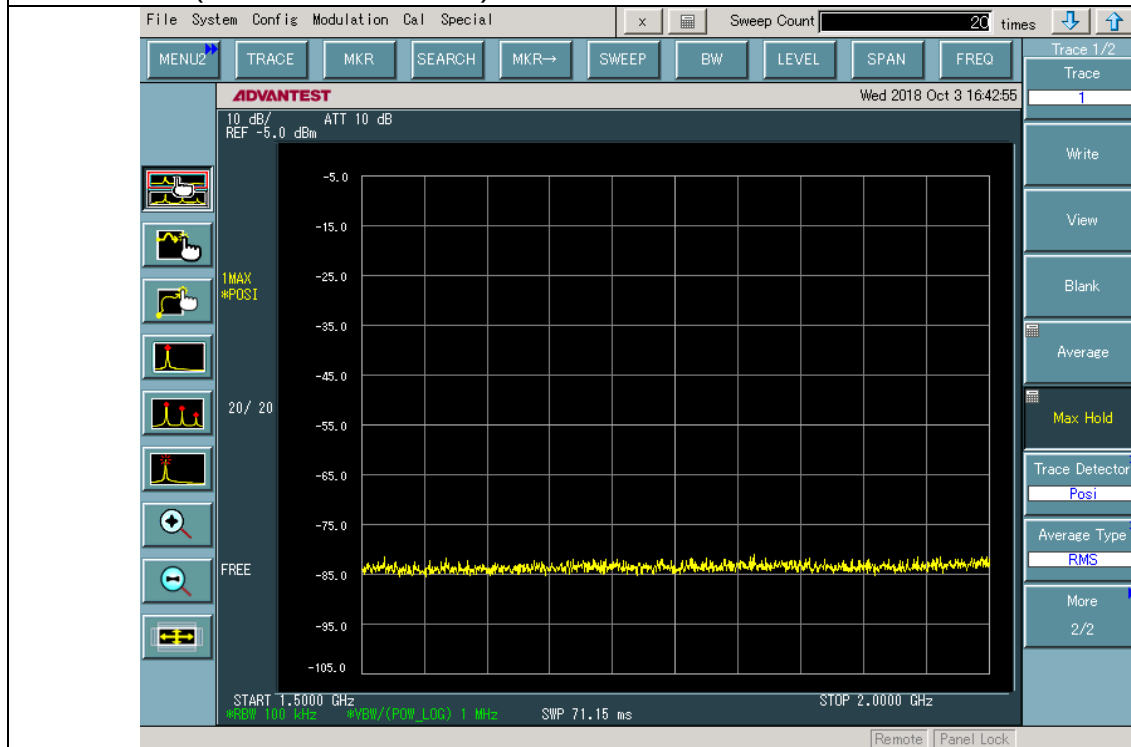


Plot 24 TX Conducted Emission

Test Frequency: 127.525MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

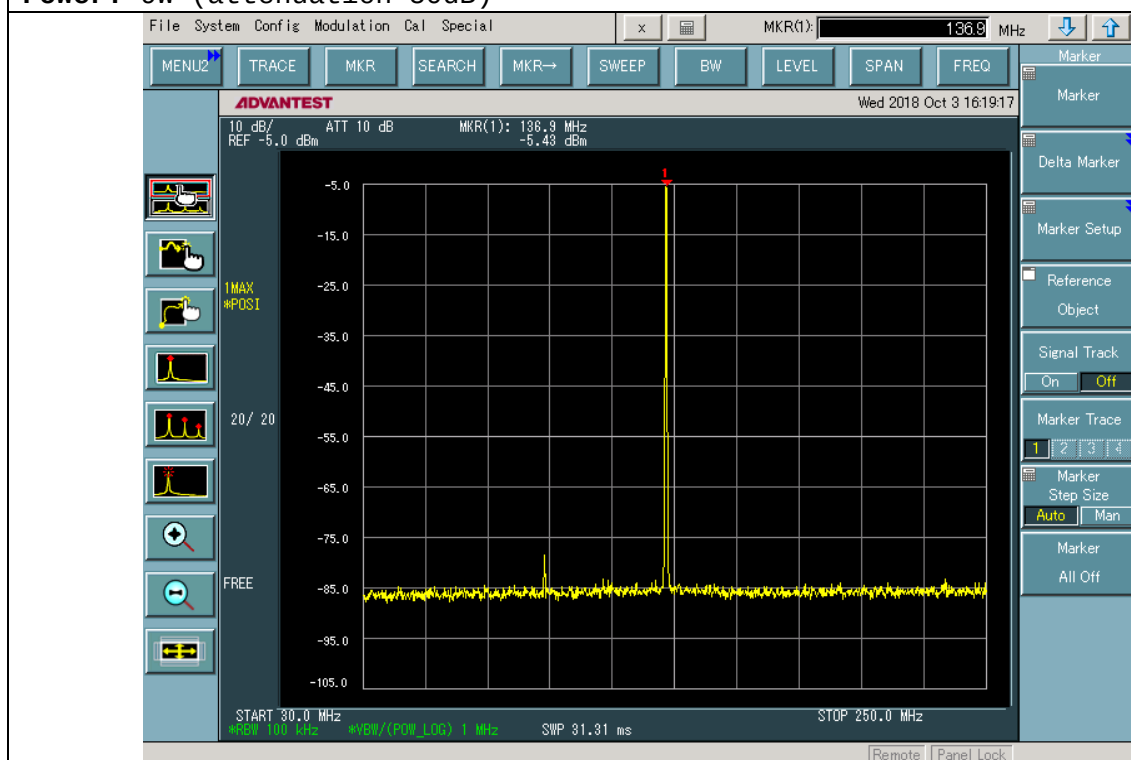


Plot 25 TX Conducted Emission

Test Frequency: 136.975MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

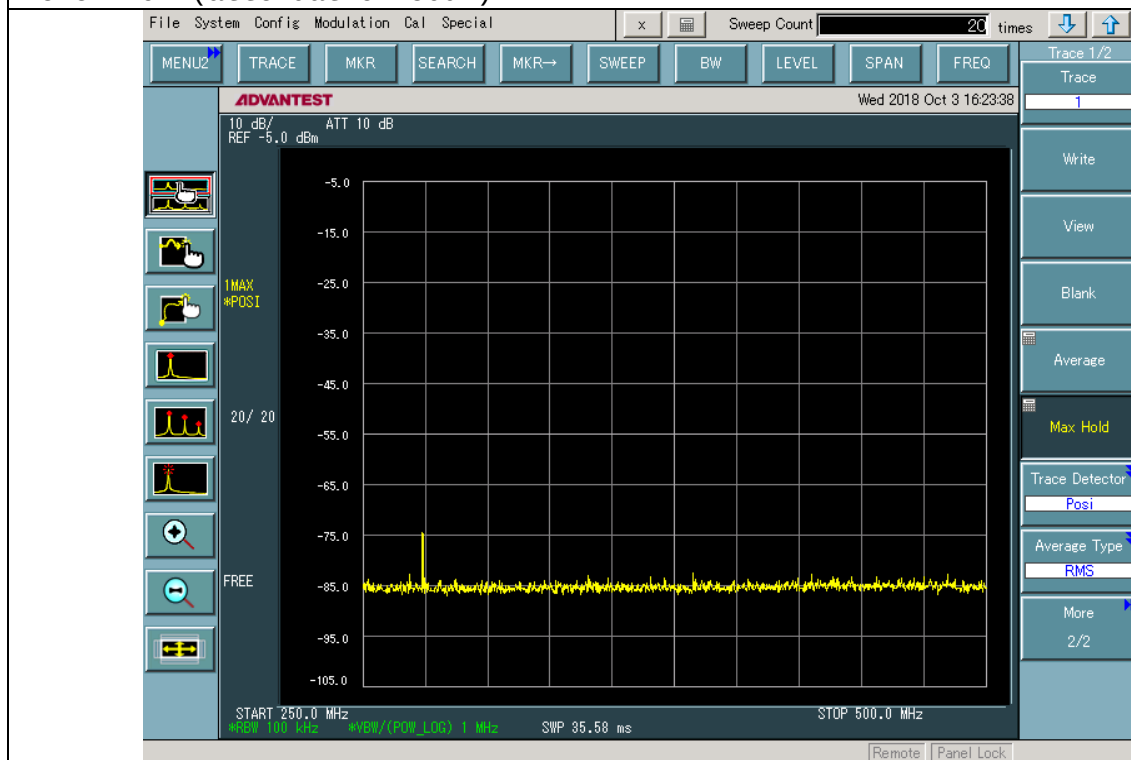


Plot 26 TX Conducted Emission

Test Frequency: 136.975MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

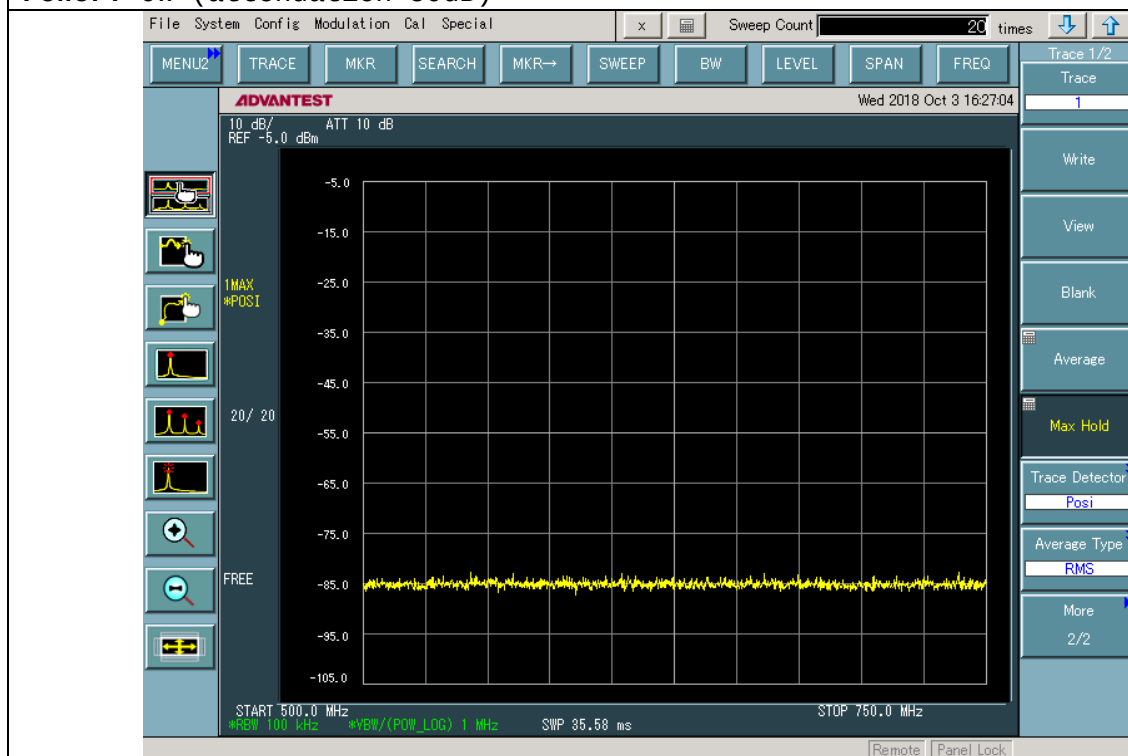


Plot 27 TX Conducted Emission

Test Frequency: 136.975MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

Power: 9W (attenuation 50dB)

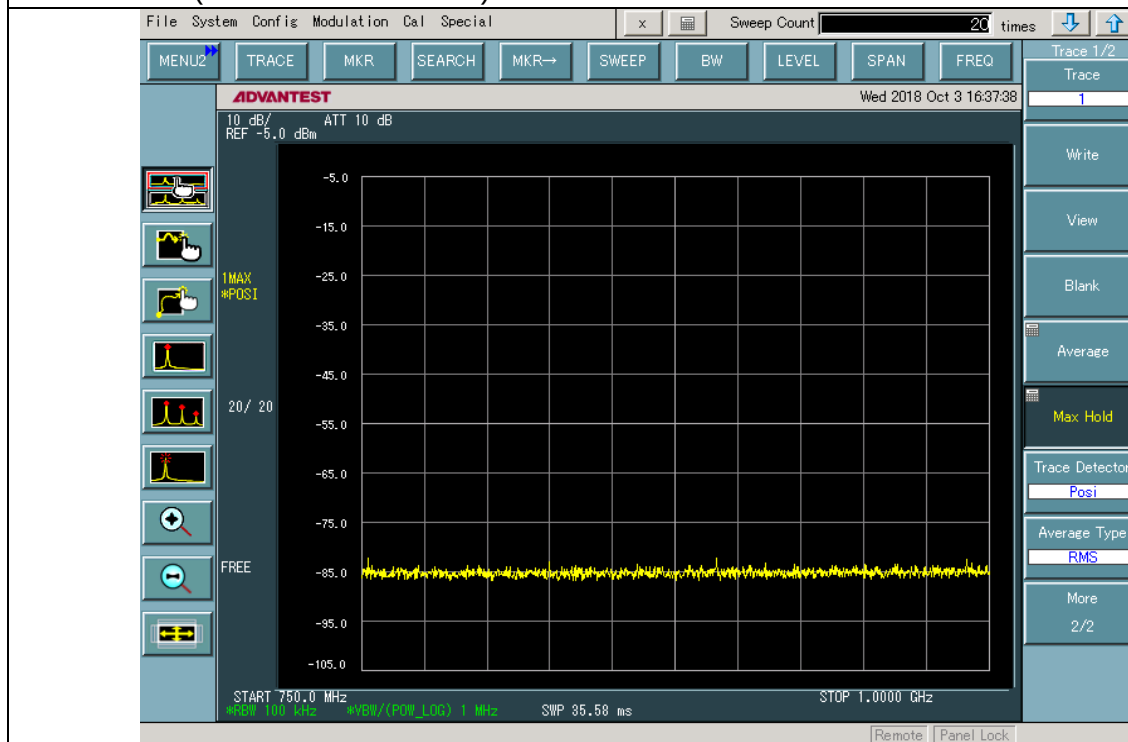


Plot 28 TX Conducted Emission

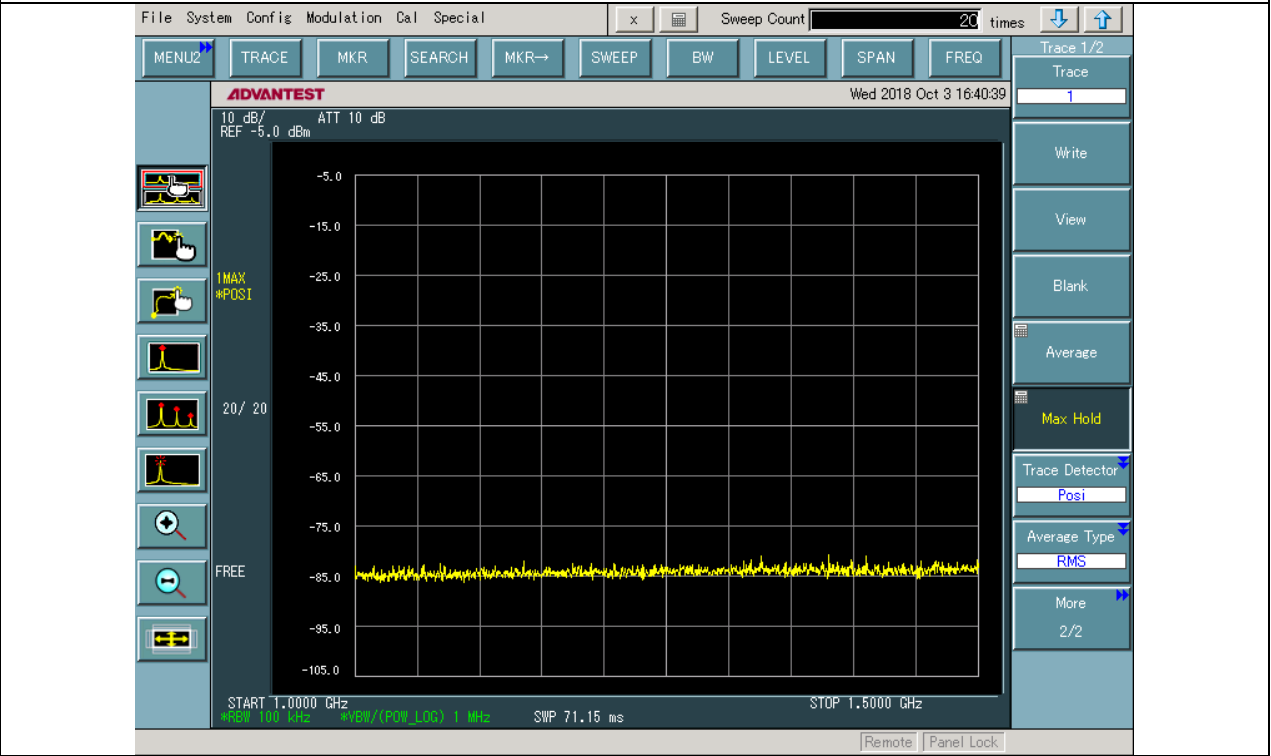
Test Frequency: 136.975MHz, with 2.5KHz audio signal

Channel Spacing: 25KHz

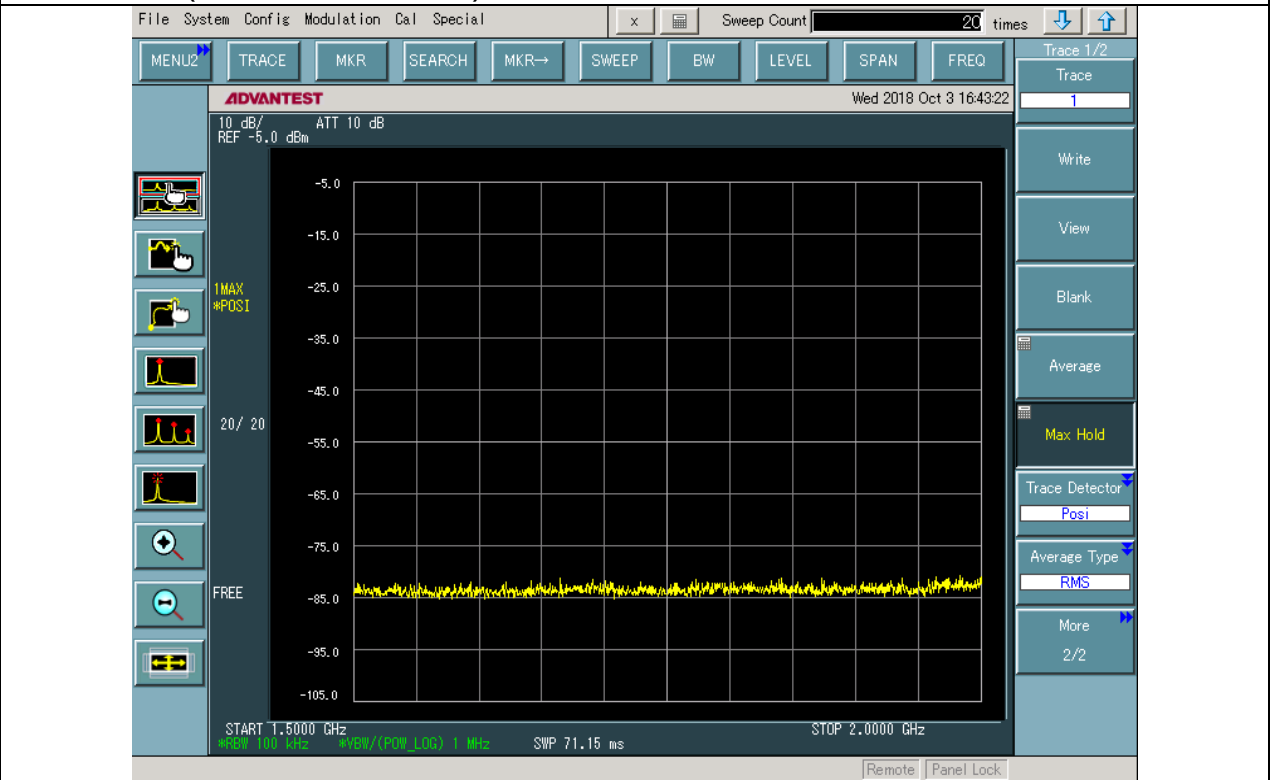
Power: 9W (attenuation 50dB)



Plot 29 TX Conducted Emission
Test Frequency: 136.975MHz, with 2.5KHz audio signal
Channel Spacing: 25KHz
Power: 9W (attenuation 50dB)



Plot 30 TX Conducted Emission
Test Frequency: 136.975MHz, with 2.5KHz audio signal
Channel Spacing: 25KHz
Power: 9W (attenuation 50dB)

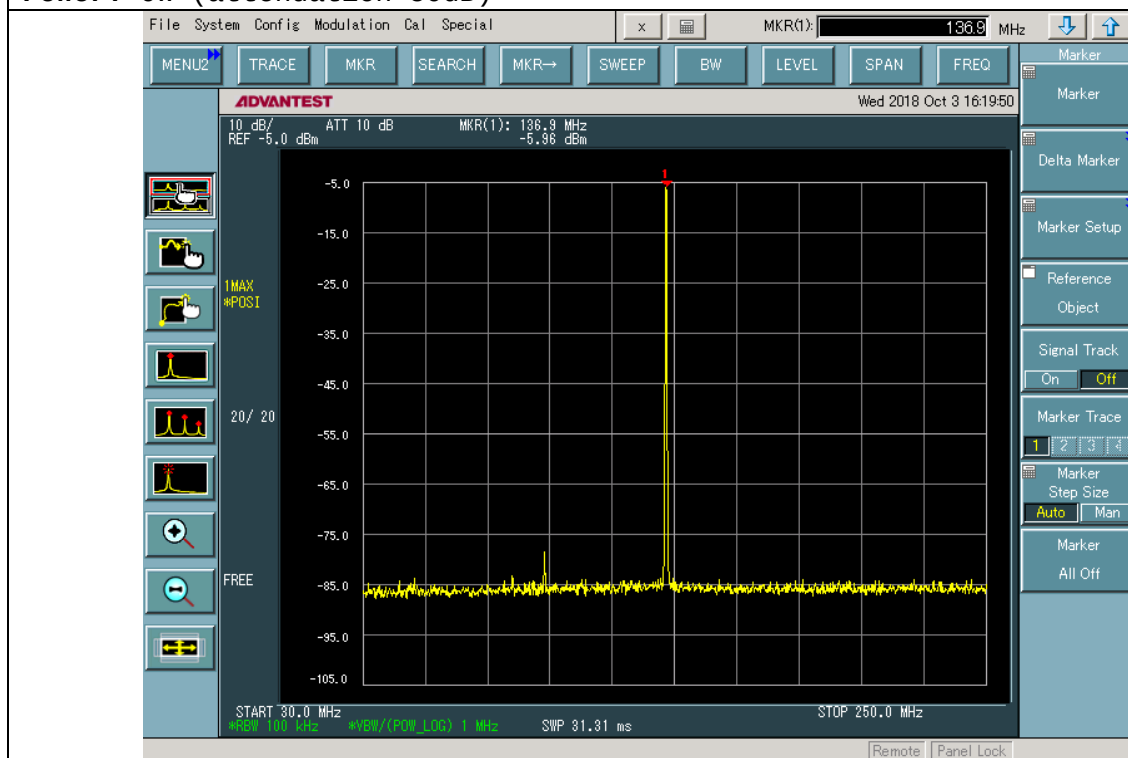


Plot 31 TX Conducted Emission

Test Frequency: 136.975MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

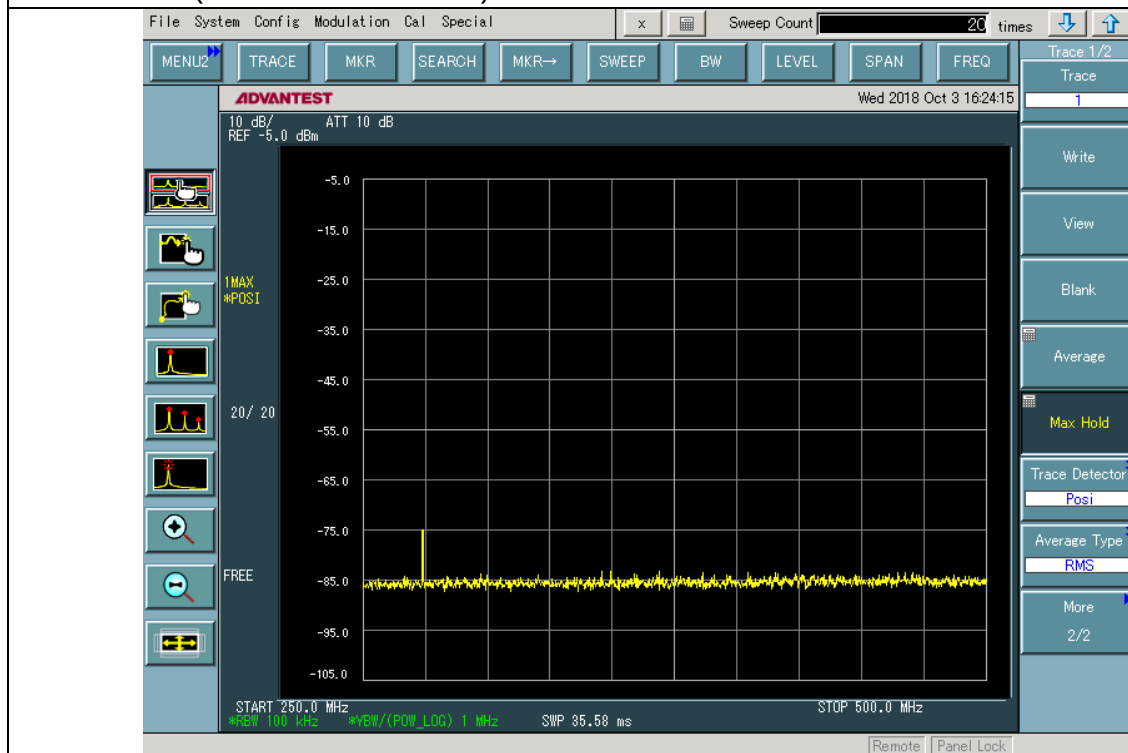


Plot 32 TX Conducted Emission

Test Frequency: 136.975MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

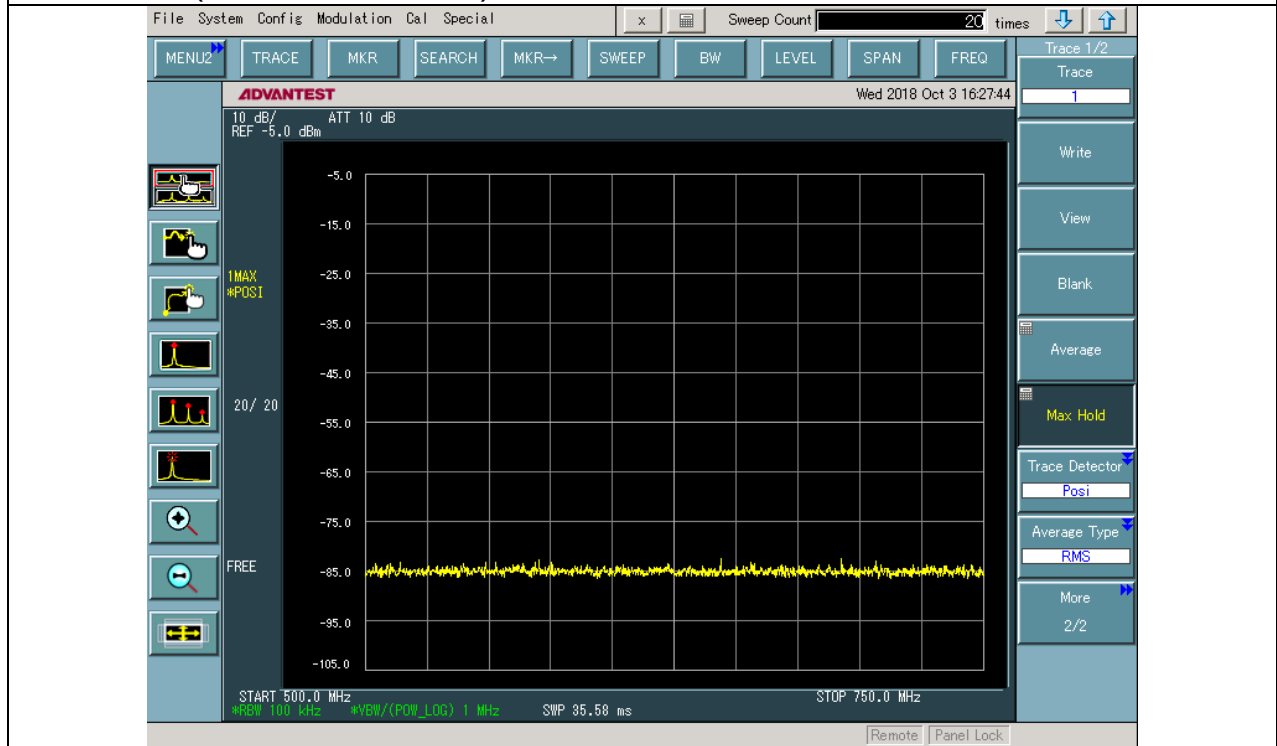


Plot 33 TX Conducted Emission

Test Frequency: 136.975MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

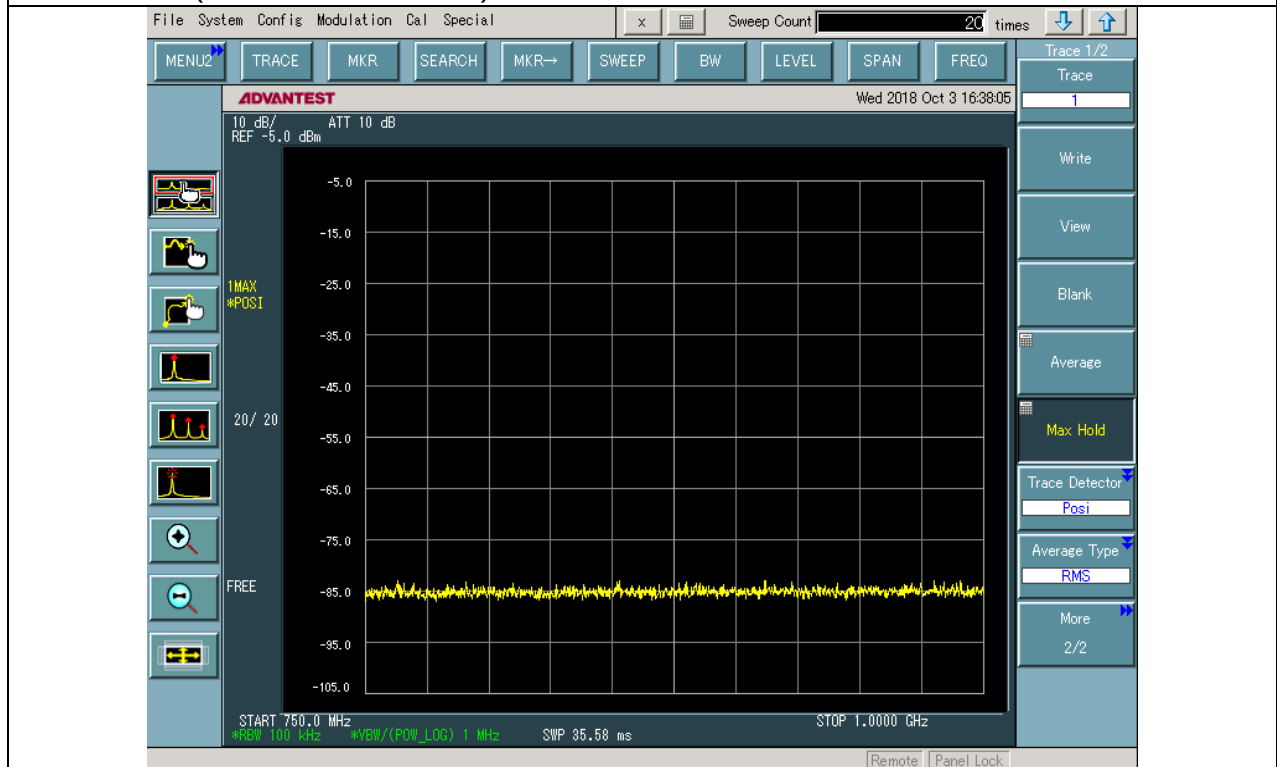


Plot 34 TX Conducted Emission

Test Frequency: 136.975MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

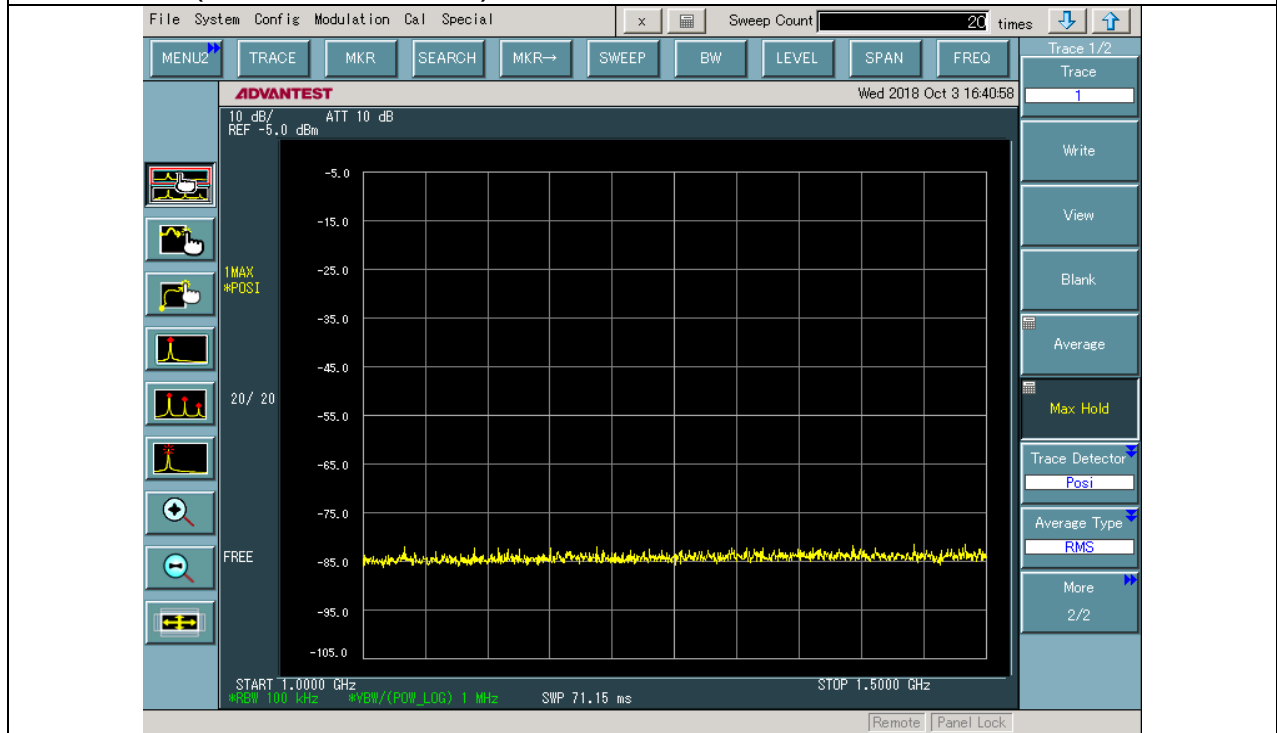


Plot 35 TX Conducted Emission

Test Frequency: 136.975MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)



Plot 36 TX Conducted Emission

Test Frequency: 136.975MHz, with 2.5KHz audio signal

Channel Spacing: 8.33KHz

Power: 9W (attenuation 50dB)

