



Appendix for test report



APPENDIX FOR TEST REPORT..... 1

- 1APPENDIX_A: EFFECTIVE (ISOTROPIC) RADIATED POWER OUTPUT DATA3
 - Part I - Test Results*3
- 2APPENDIX_B: PEAK-TO-AVERAGE RATIO.....5
 - Part I - Test Results*5
- 3APPENDIX_C: MODULATION CHARACTERISTICS6
 - Part I - Test Plots*.....6
- 4APPENDIX_D: BANDWIDTH7
 - Part I - Test Results*7
- 5APPENDIX_E: BAND EDGES COMPLIANCE8
- 6APPENDIX_F: SPURIOUS EMISSION AT ANTENNA TERMINAL9
- 7APPENDIX_G: FIELD STRENGTH OF SPURIOUS RADIATION.....10
 - Part I - Test Plots*.....10
 - 7.2 For UMTS.....17
 - 7.2.1 Test Band = WCDMA850.....17
 - 7.2.2 Test Band = WCDMA190018
 - 7.2.3 Test Band = WCDMA170020
 - 7.3 For LTE.....22
 - 7.3.1 Test Band = BAND2.....22
 - 7.3.2 Test Band = BAND4.....28
 - 7.3.3 Test Band = BAND5.....33
 - 7.3.4 Test Band = BAND7.....36
- 8APPENDIX_H: FREQUENCY STABILITY.....40



1Appendix_A: Effective (Isotropic) Radiated Power Output Data

Part I - Test Results

Void



Note1:

a, For getting the ERP (Efficient Radiated Power) or EIRP (Efficient Isotropic Radiated Power) in substitution method, the following formula should be taken to calculate it,

$$\text{ERP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBd]}$$

$$\text{EIRP [dBm]} = \text{SGP [dBm]} - \text{Cable Loss [dB]} + \text{Gain [dBi]}$$

b, SGP=Signal Generator Level

Note2: RBW > emission bandwidth, VBW > 3 x RBW.

Detector: RMS



2Appendix_B: Peak-to-Average Ratio

Part I - Test Results

void



3Appendix_C: Modulation Characteristics

Part I - Test Plots



4Appendix_D: Bandwidth

Part I - Test Results

Void



5Appendix_E: Band Edges Compliance

Void



6Appendix_F: Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.



7Appendix_G: Field Strength of Spurious Radiation

9kHz~150kHz, VBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, VBW = 9kHz, VBW = 30k Hz, Detector: PK

30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Note1: No peak found in the Test Range of “9 kHz to 30MHz”

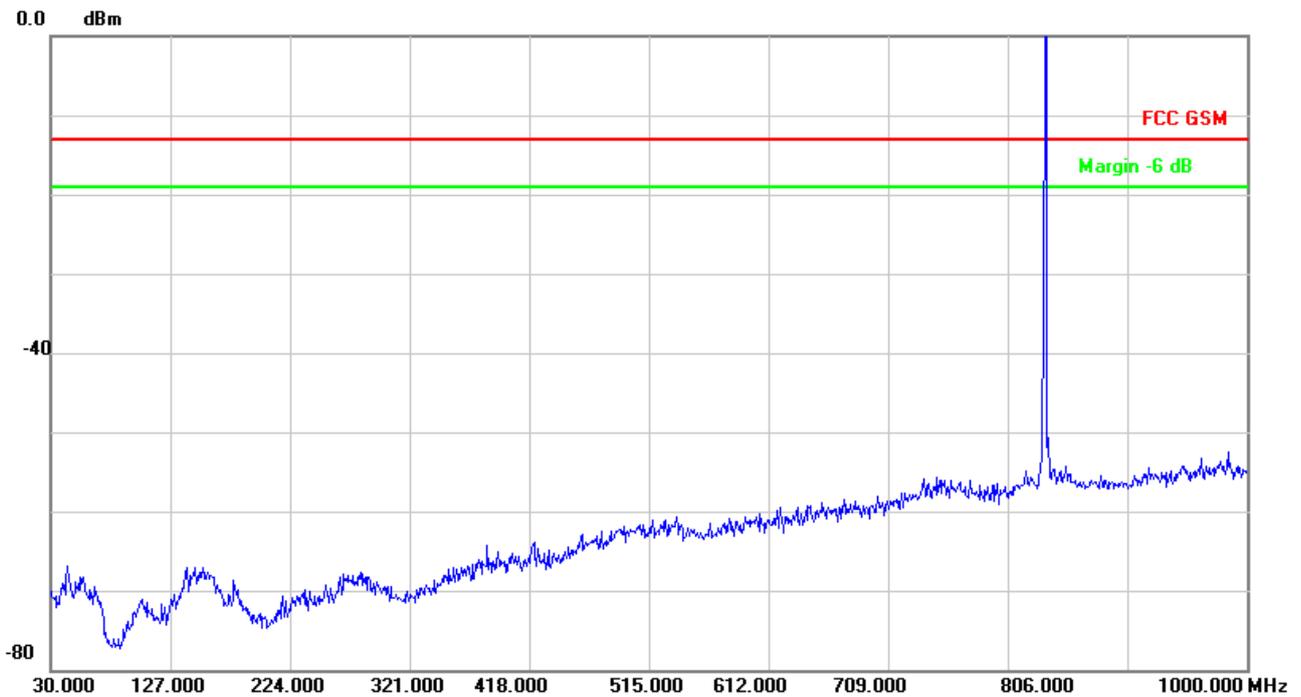
Note2: We tested all modes, but the data presented below is the worst case.

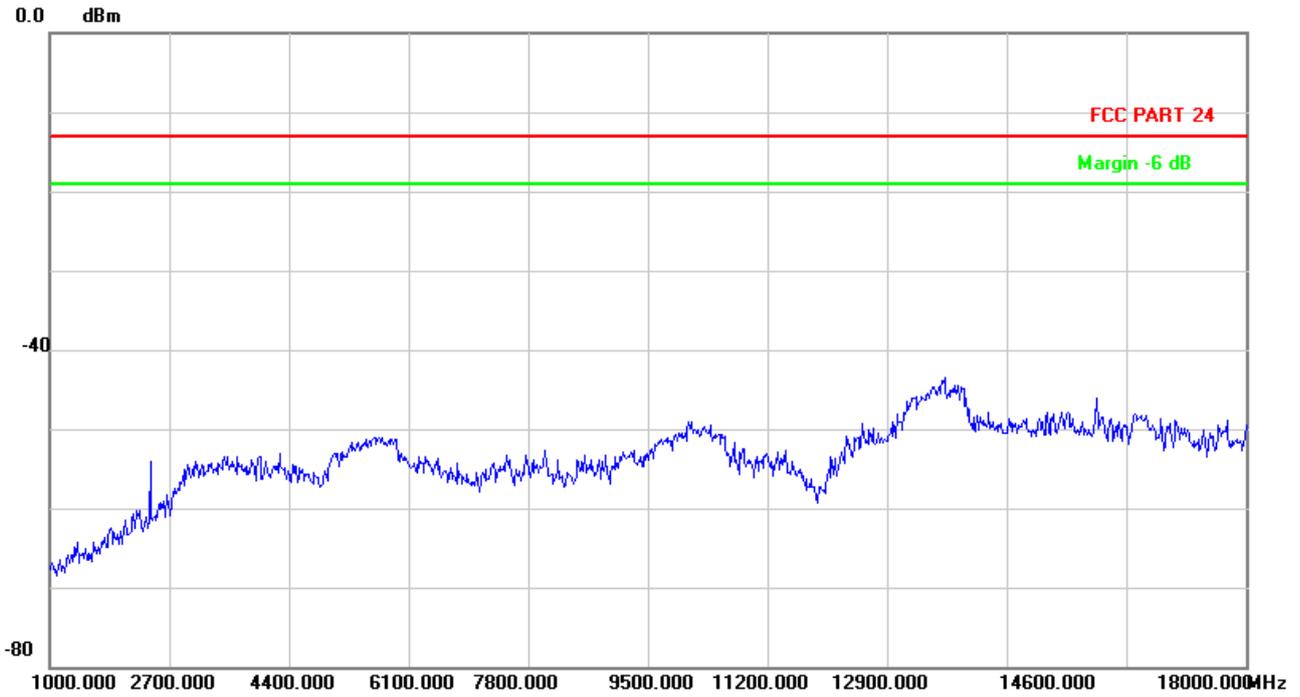
Part I - Test Plots

7.1 For GSM

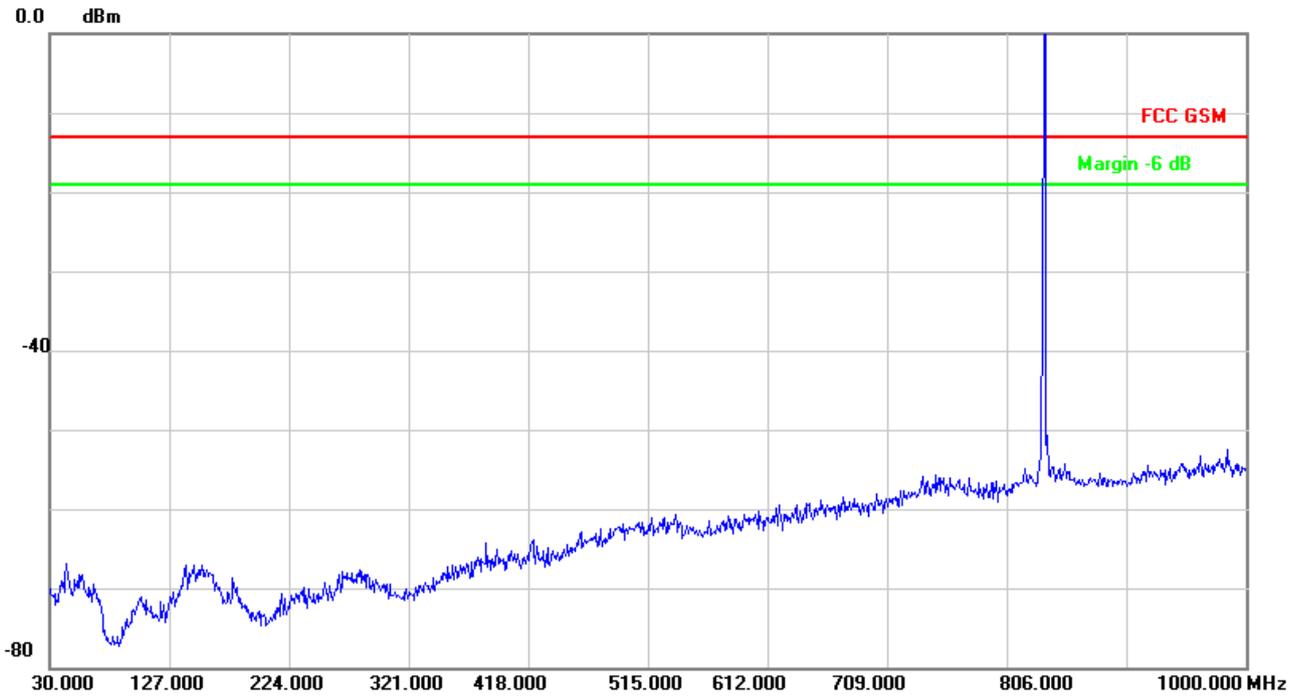
7.1.1 Test Band = GSM850

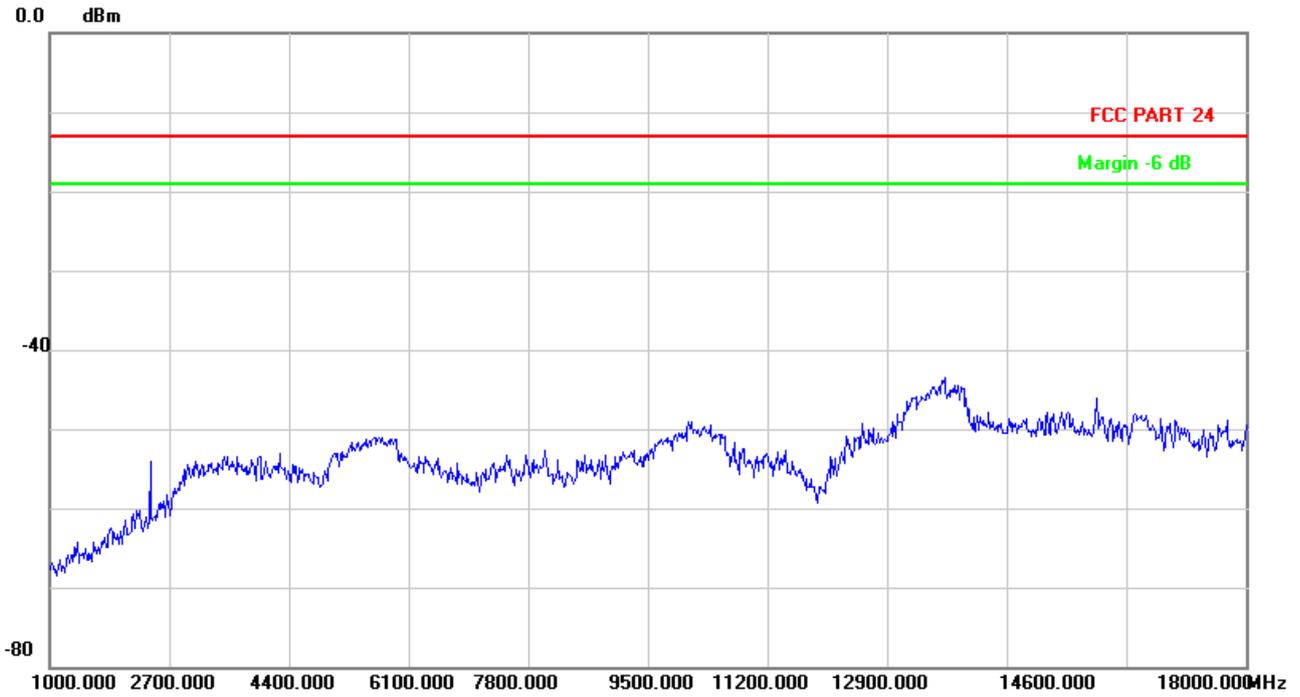
7.1.1.1 Test Mode = GSM/TM1





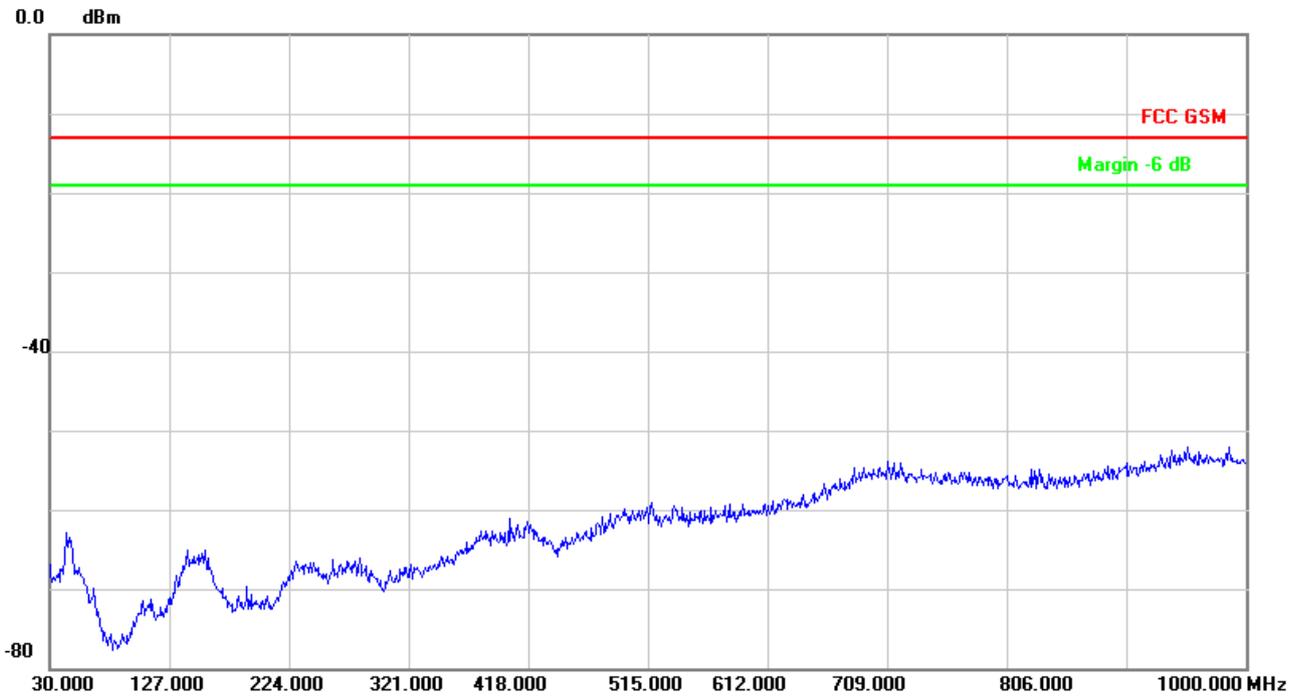
7.1.1.2 Test Mode = GSM/TM2

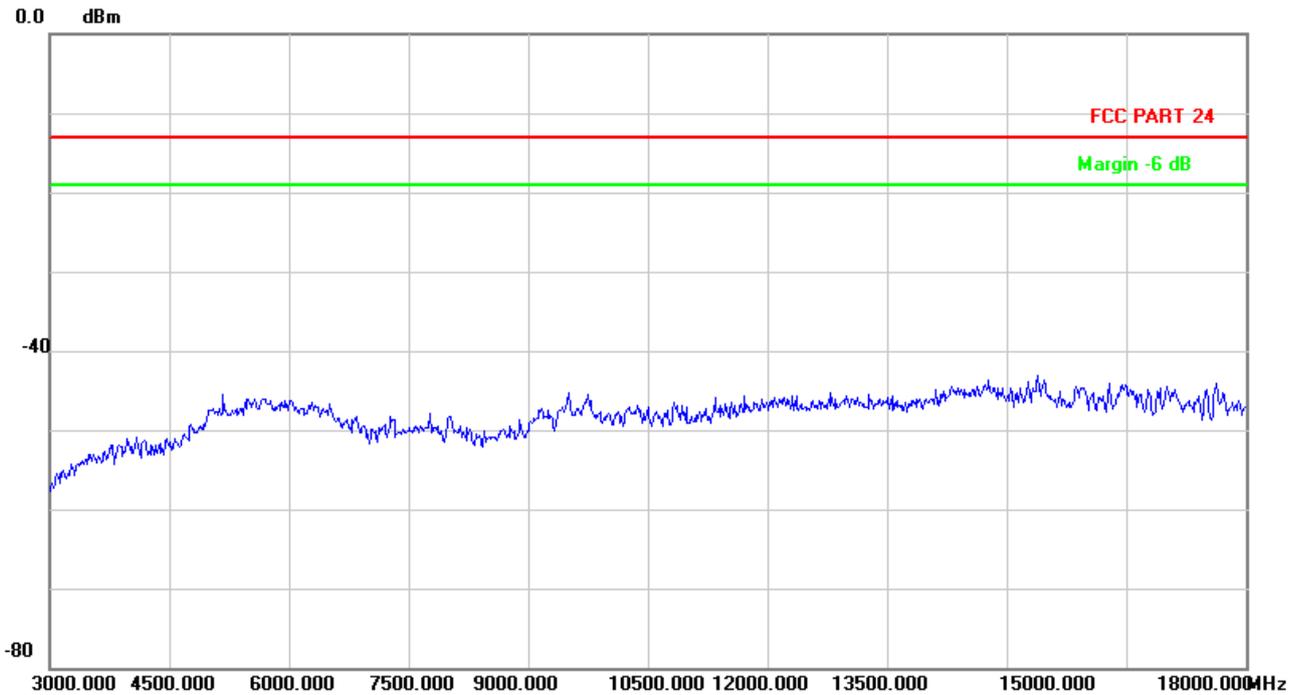
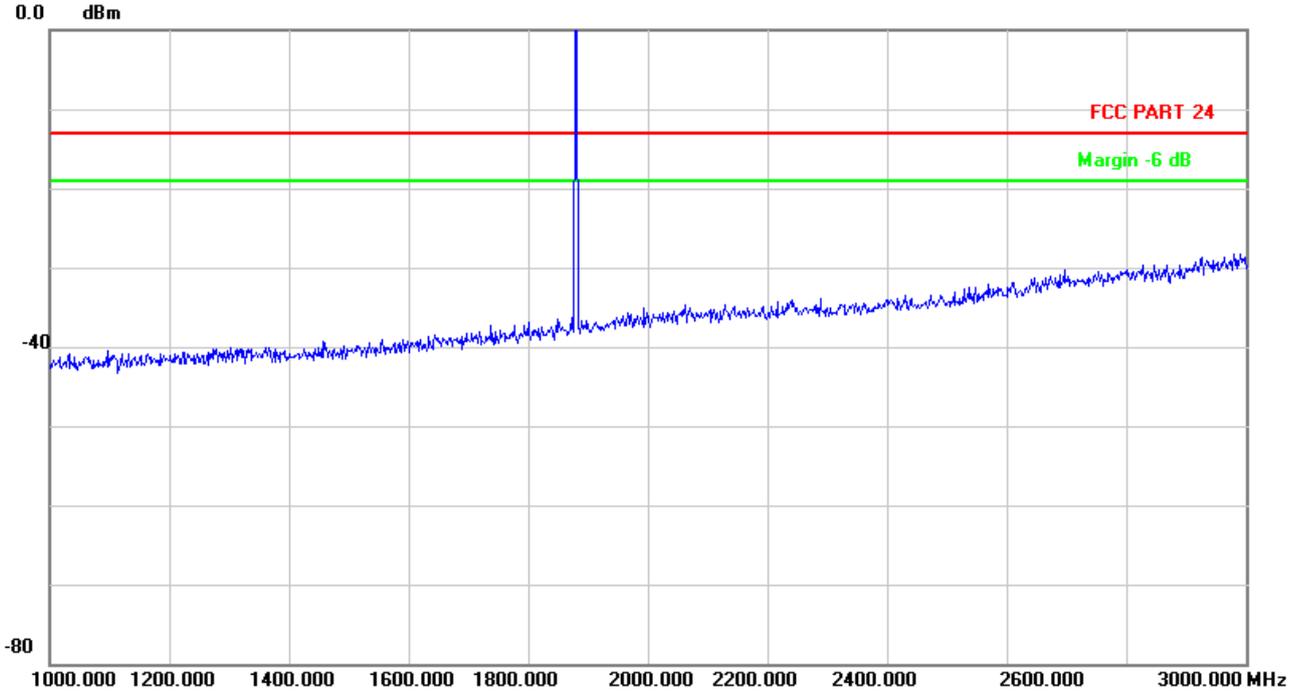


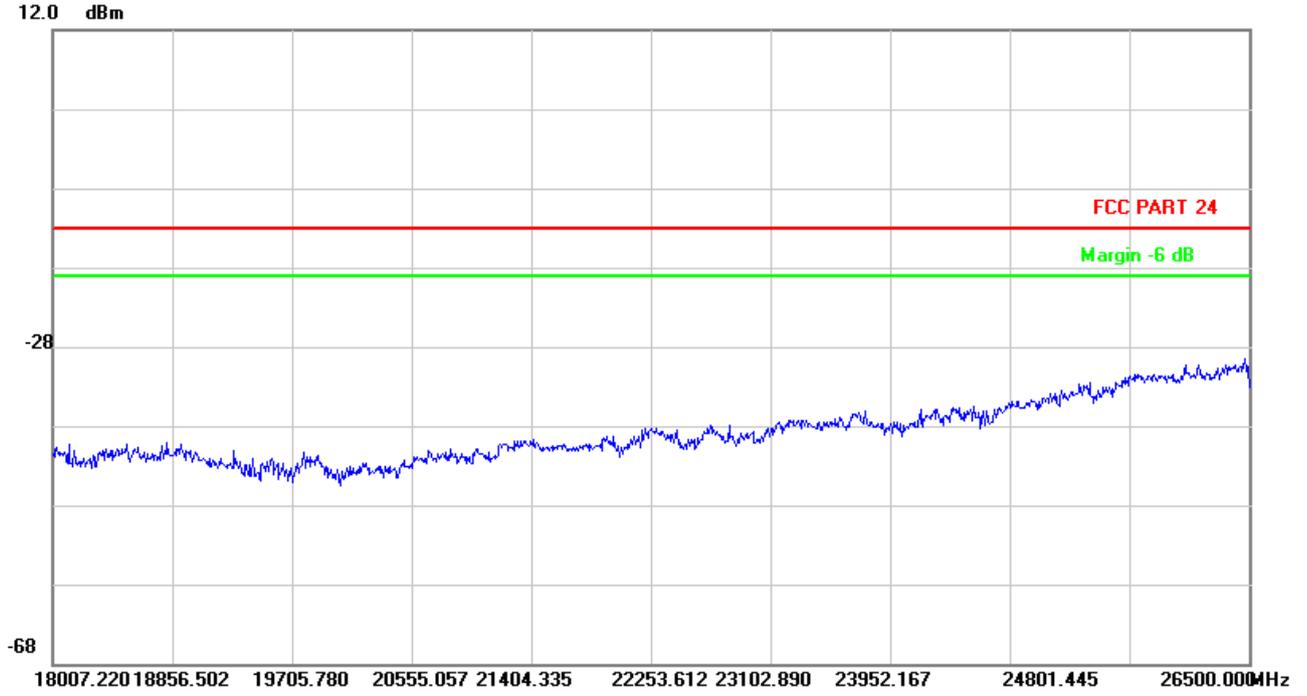


7.1.2 Test Band = GSM1900

7.1.2.1 Test Mode = GSM/TM1

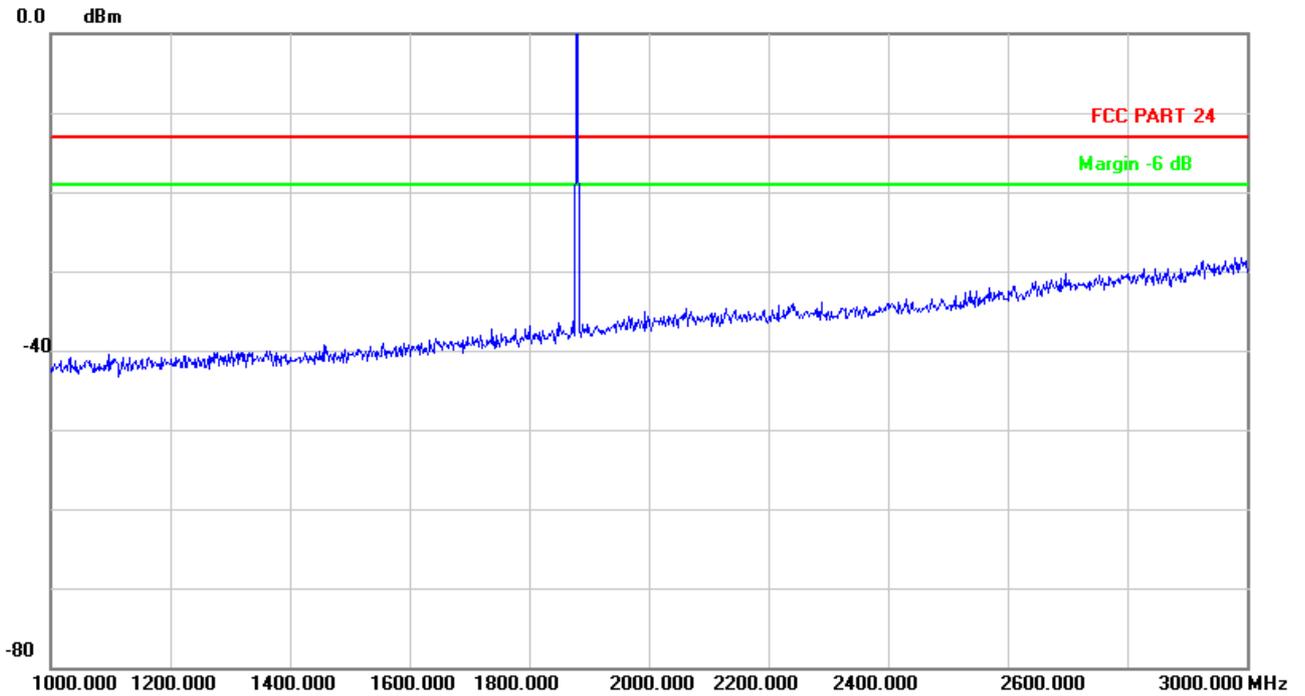
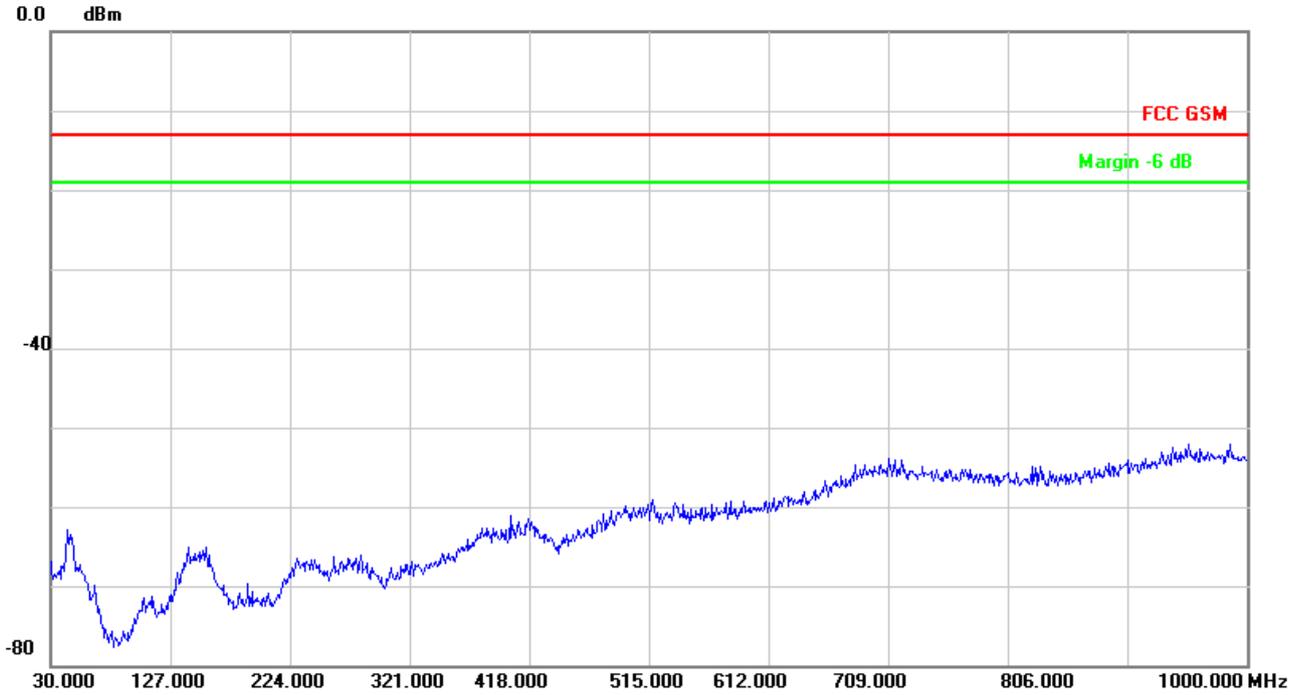


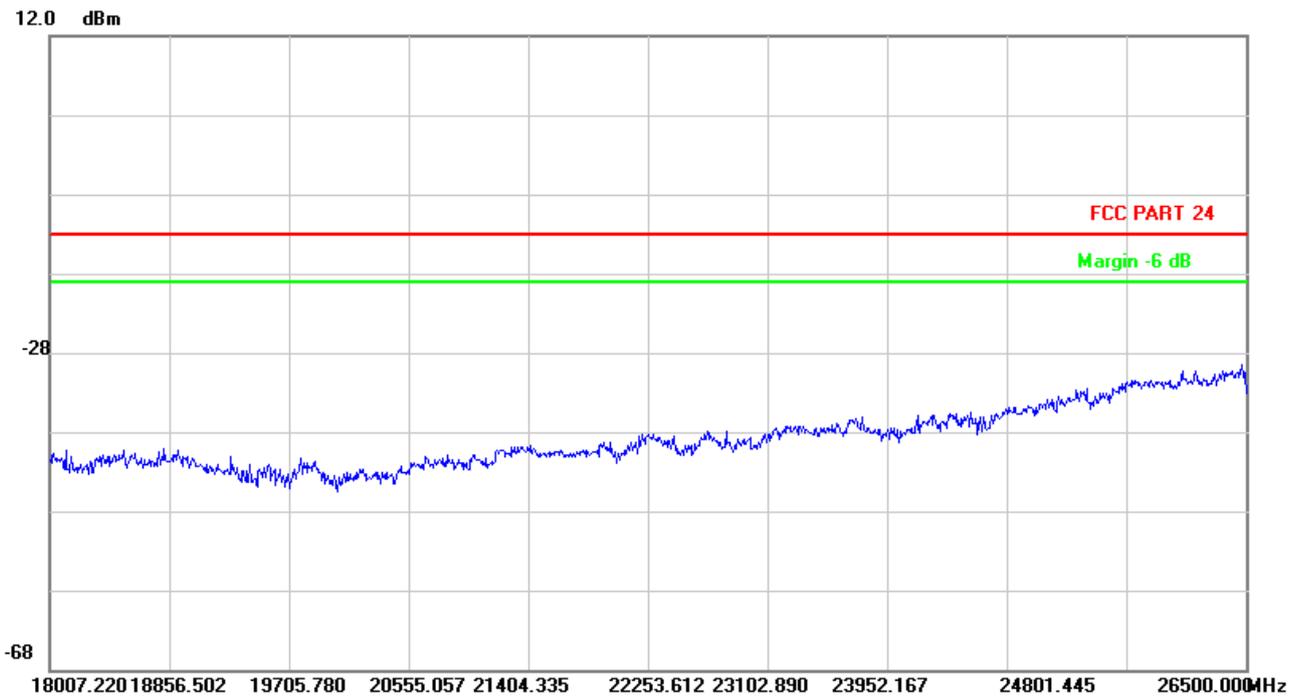
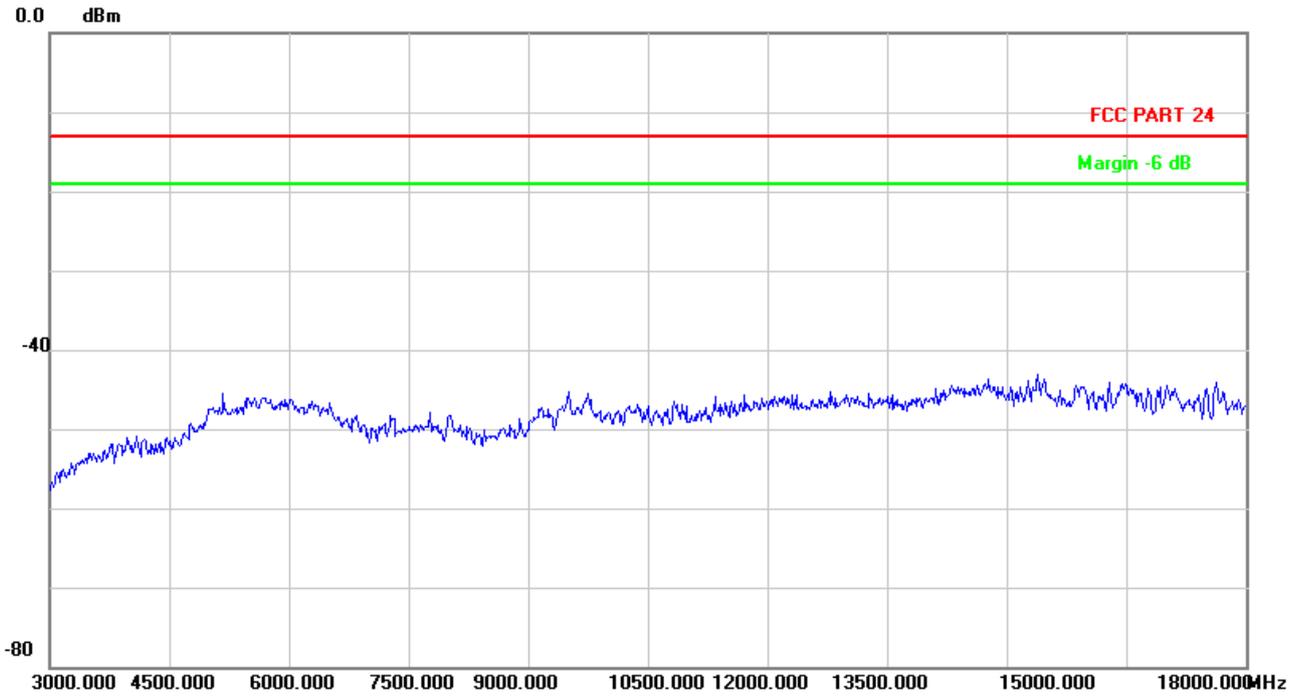






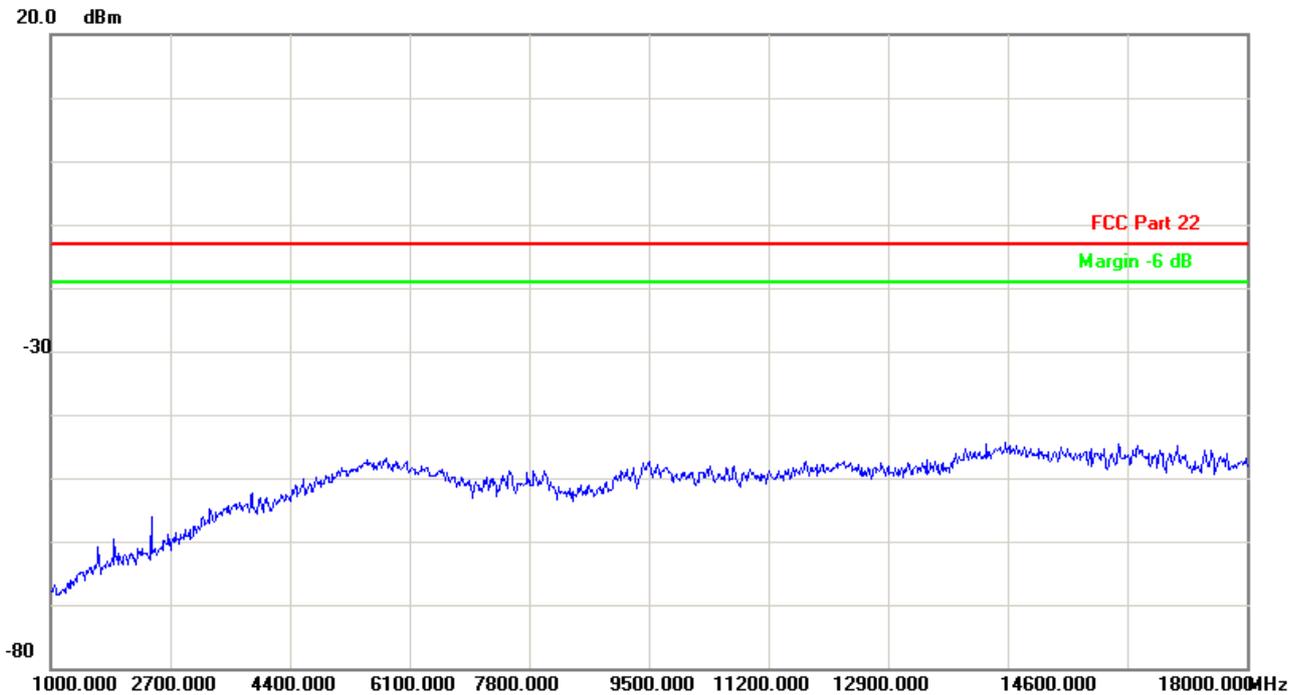
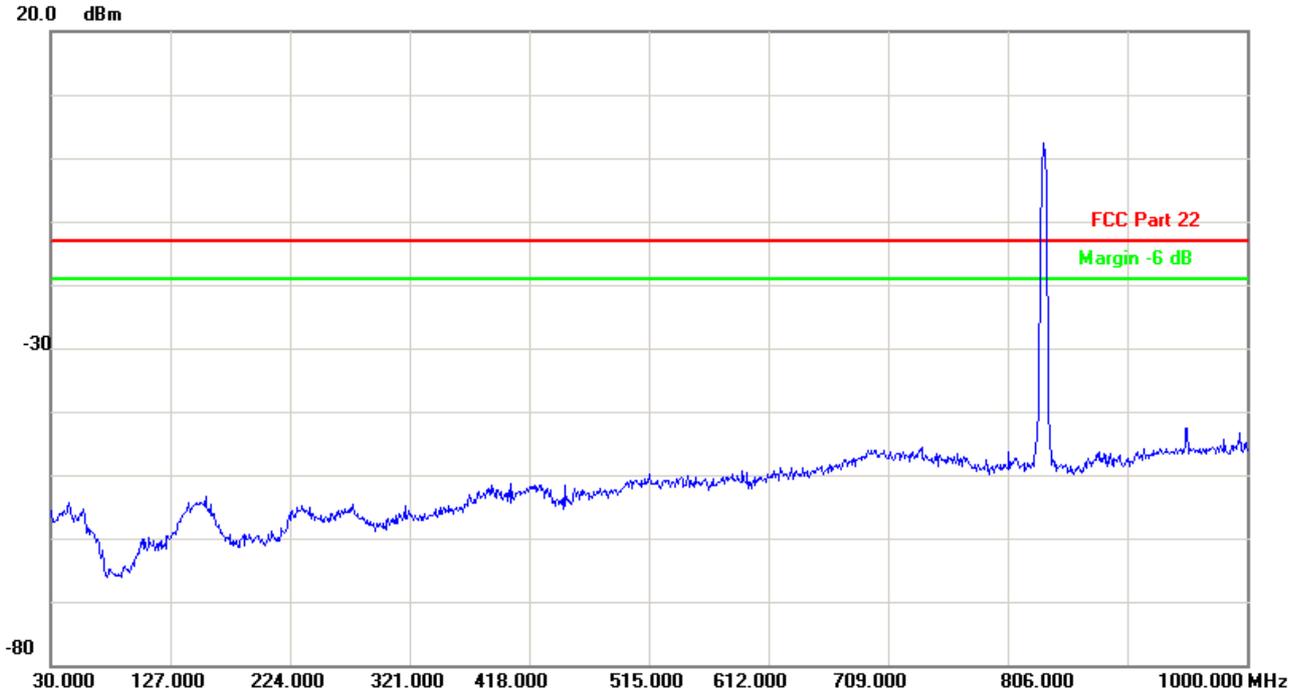
7.1.2.2 Test Mode = GSM/TM2



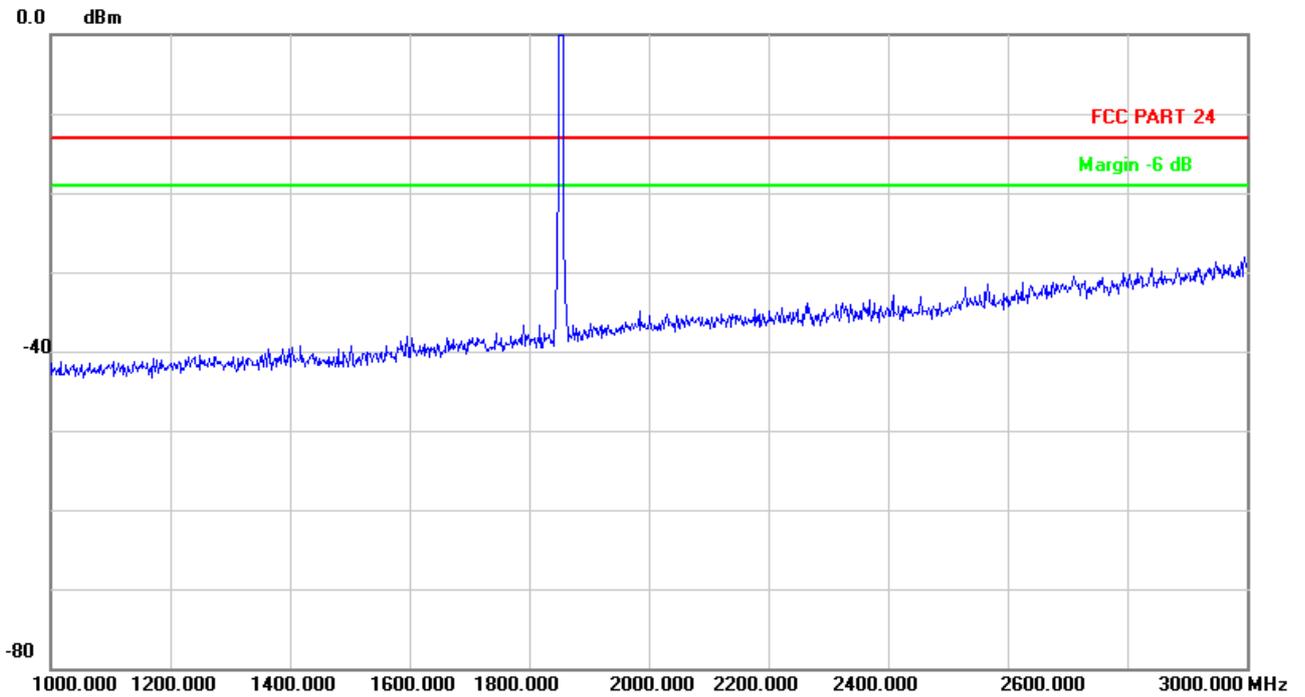
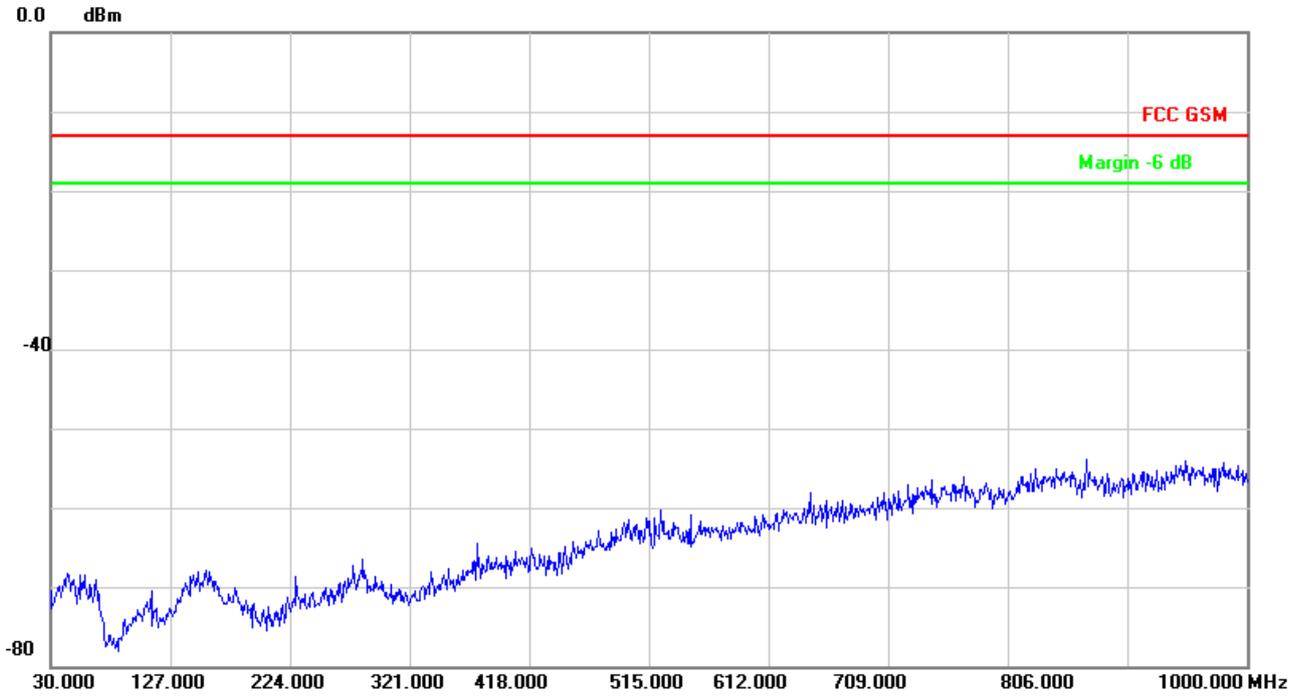


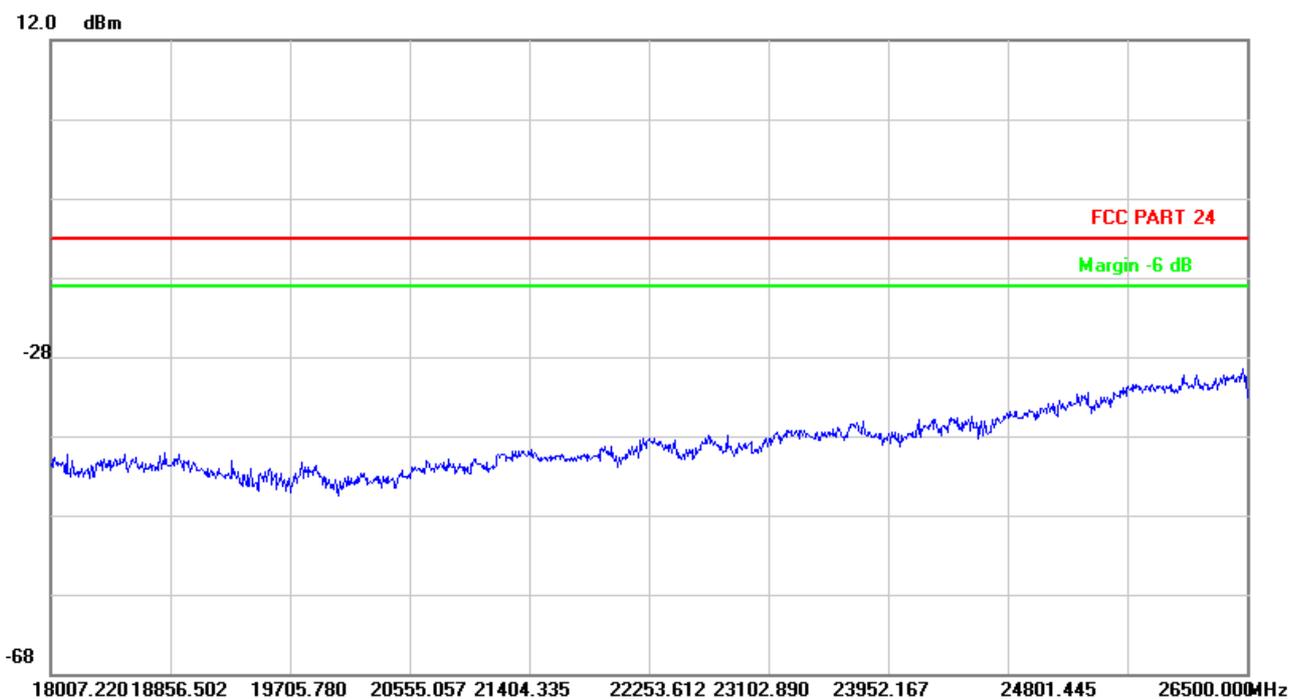
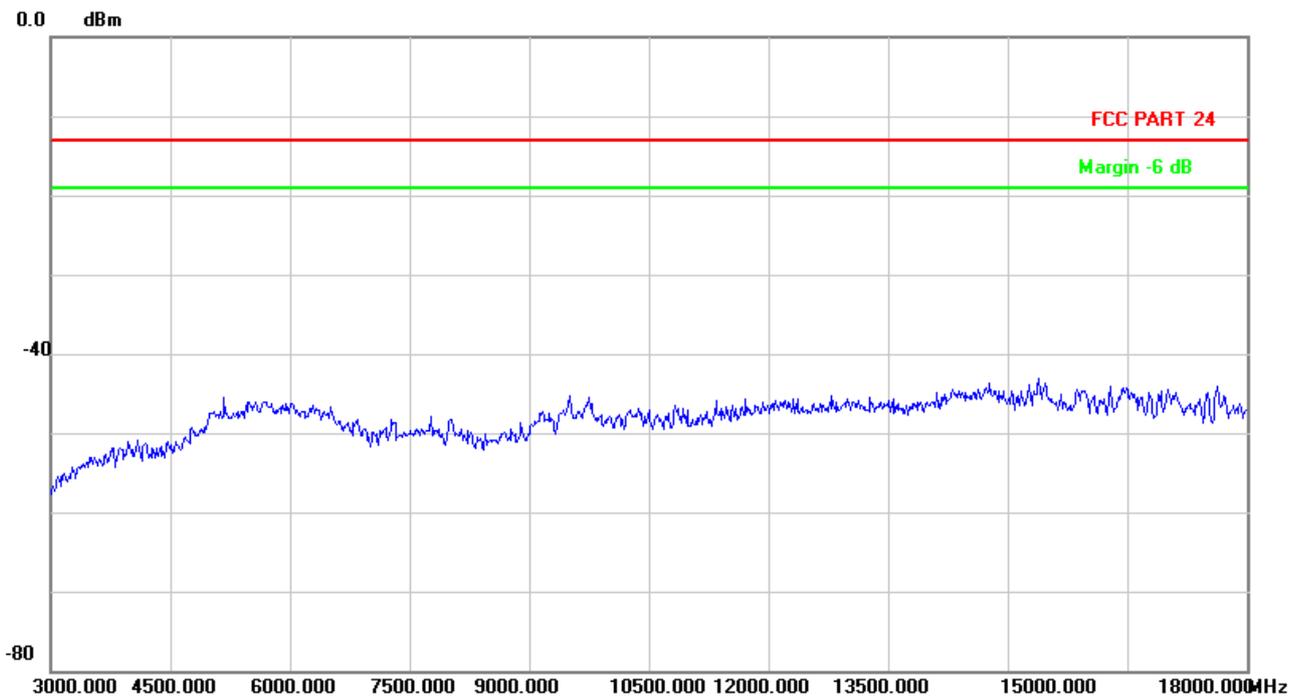
7.2 For UMTS

7.2.1 Test Band = WCDMA850

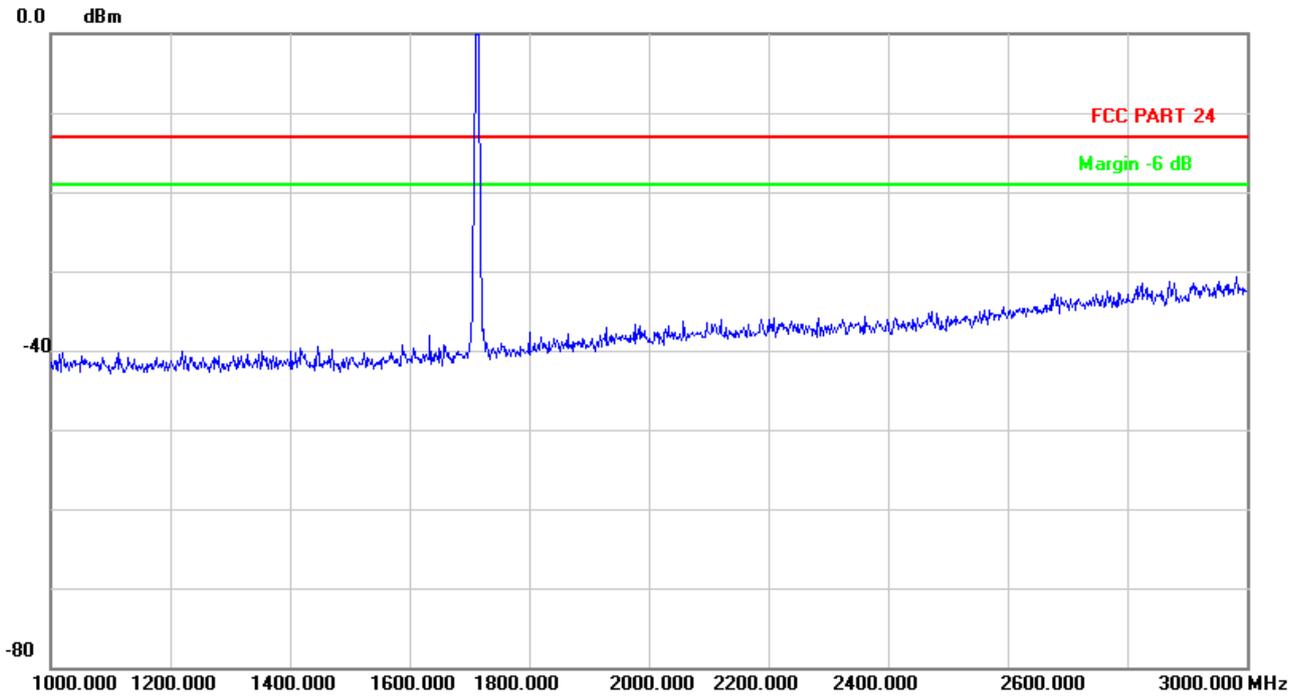
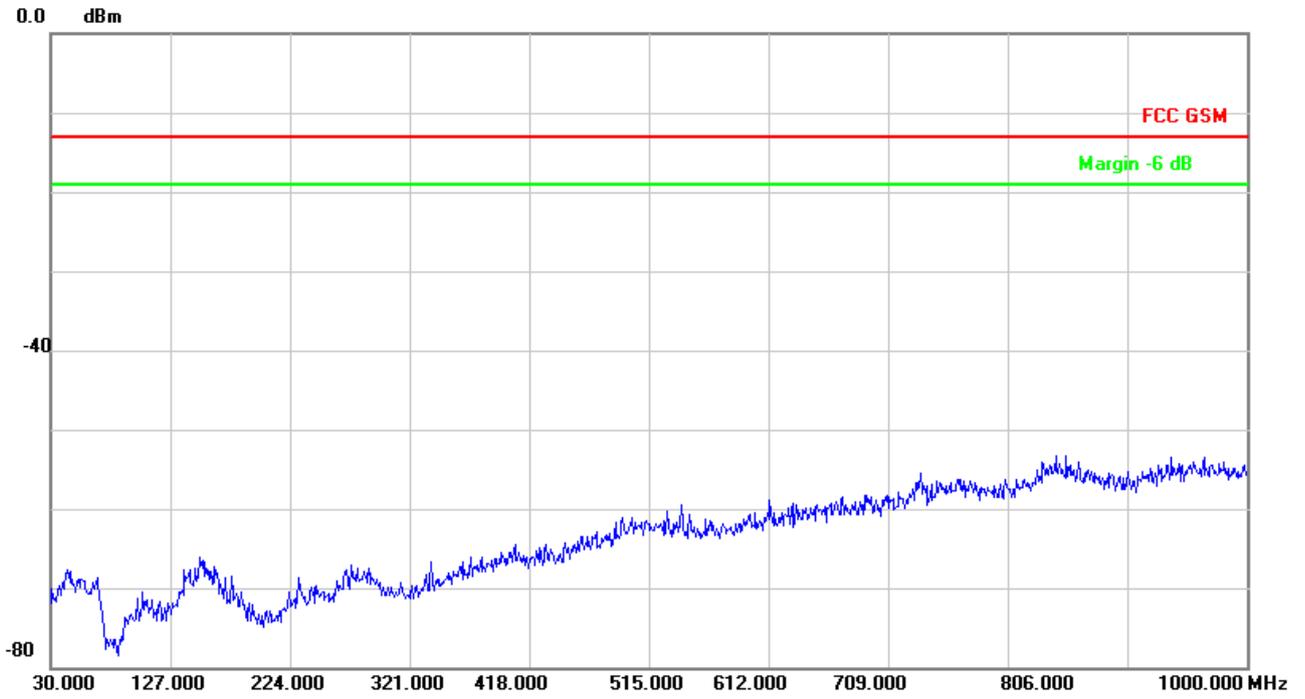


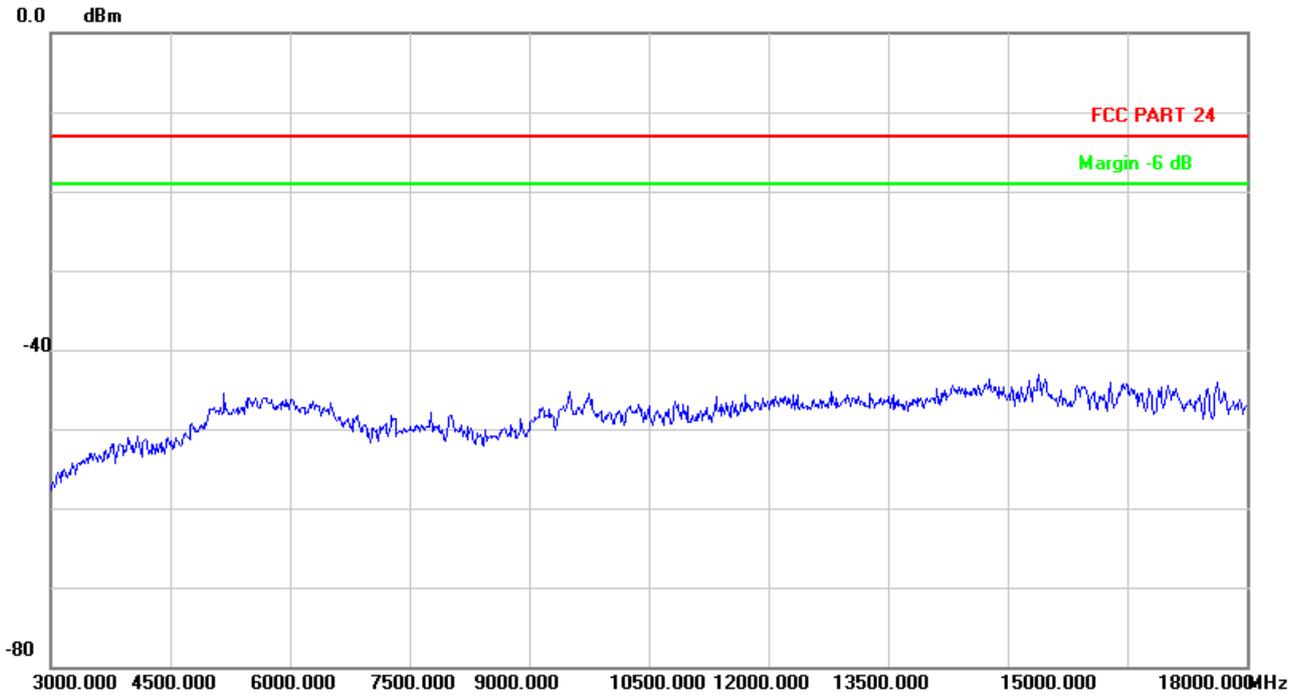
7.2.2 Test Band = WCDMA1900





7.2.3 Test Band = WCDMA1700



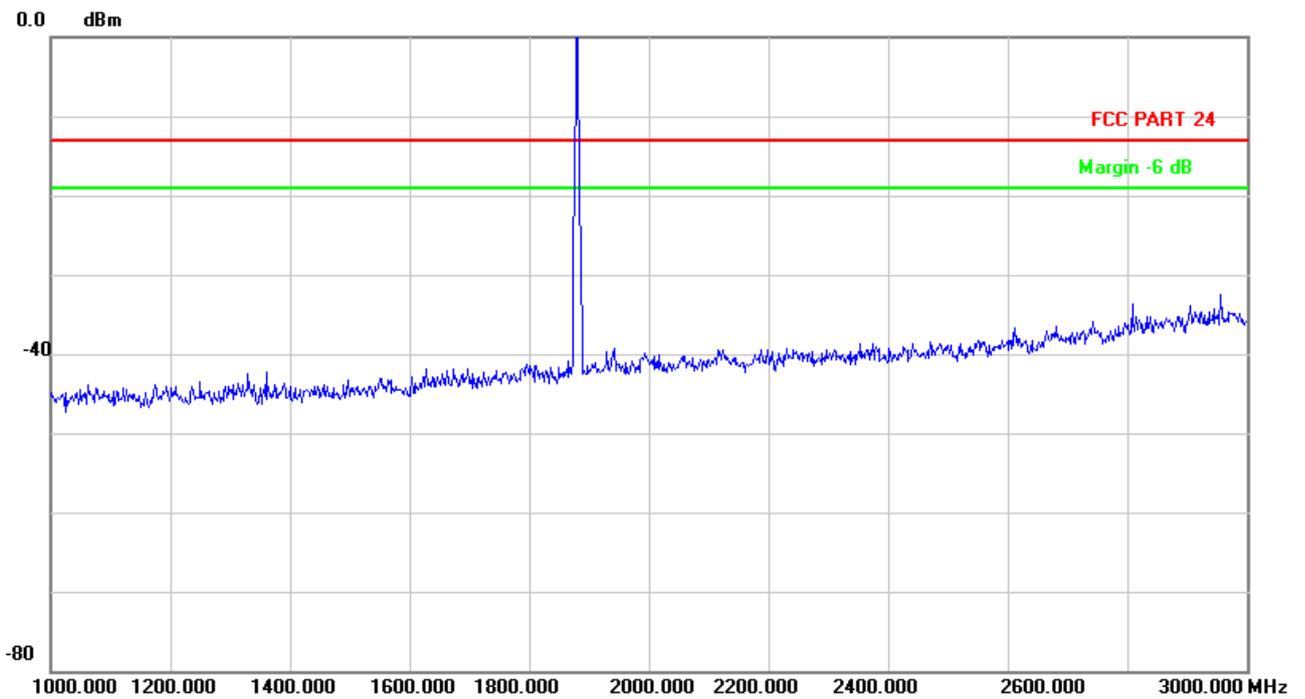
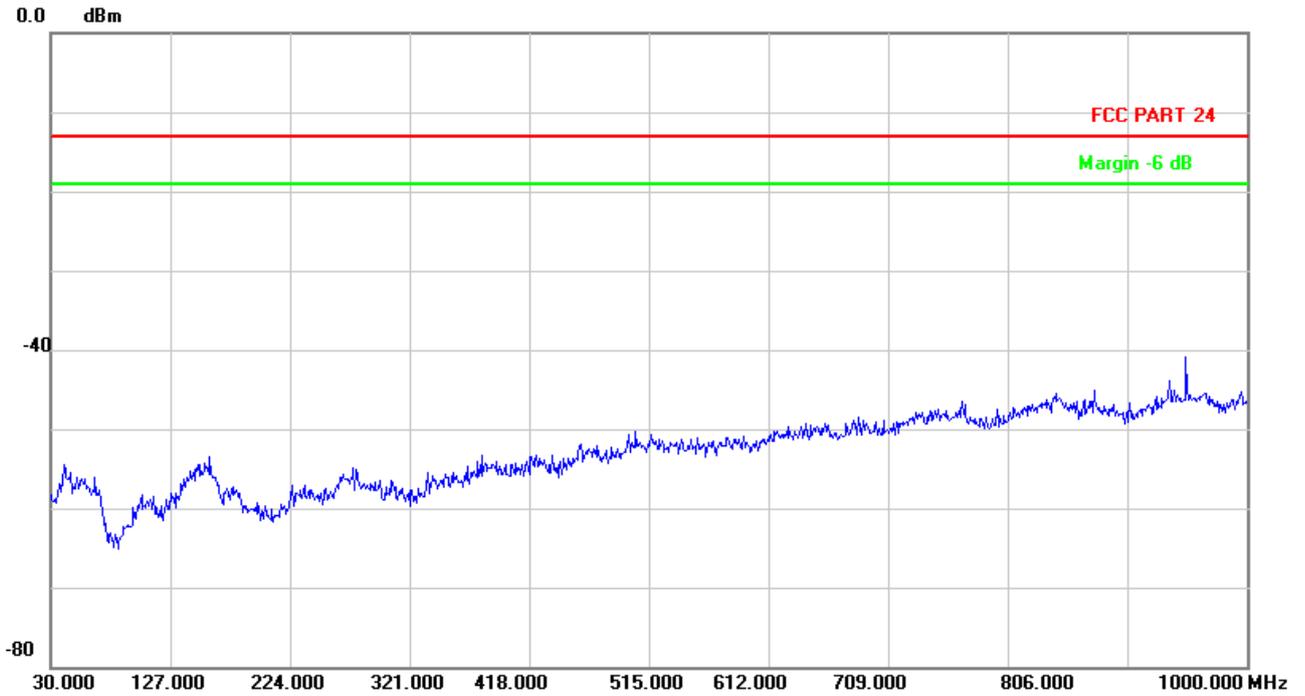


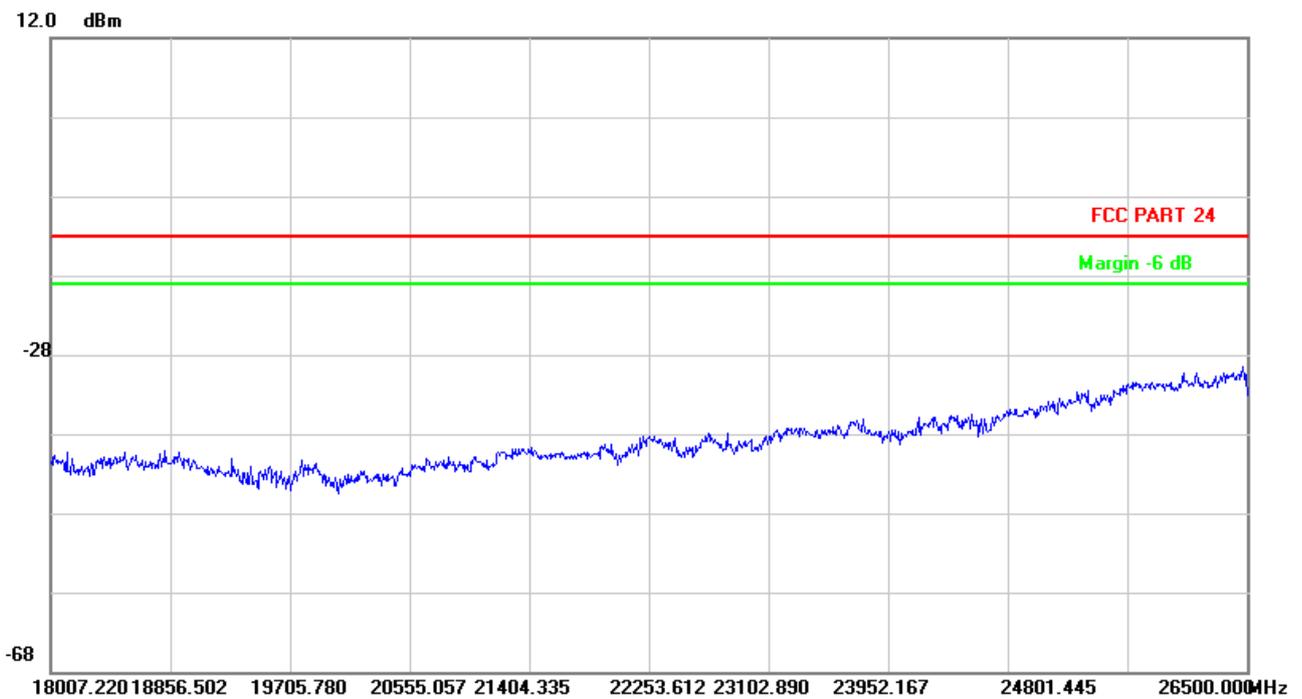
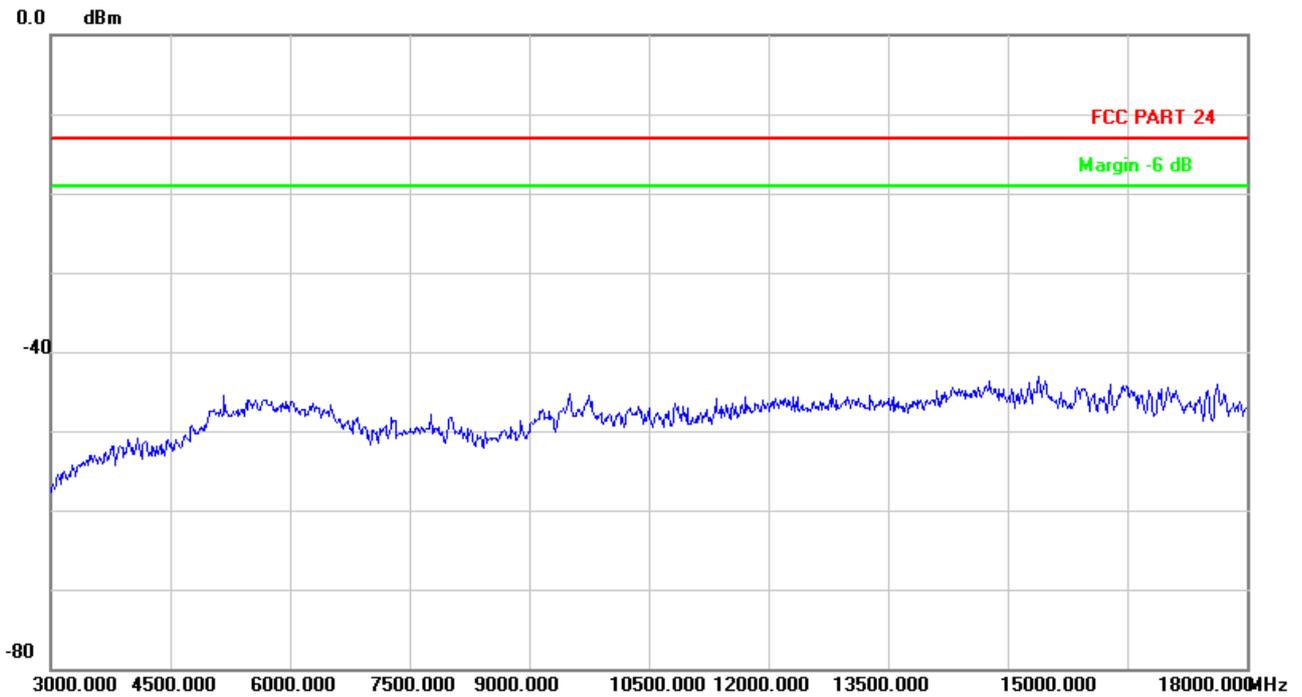


7.3 For LTE

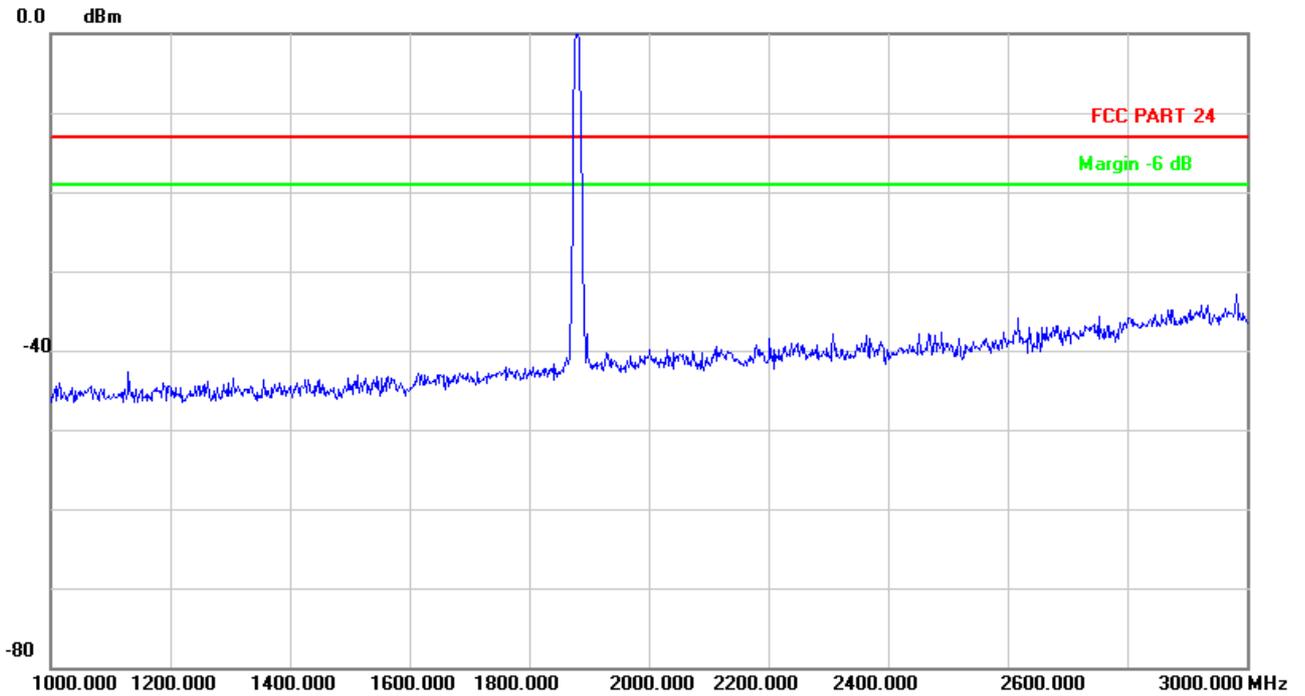
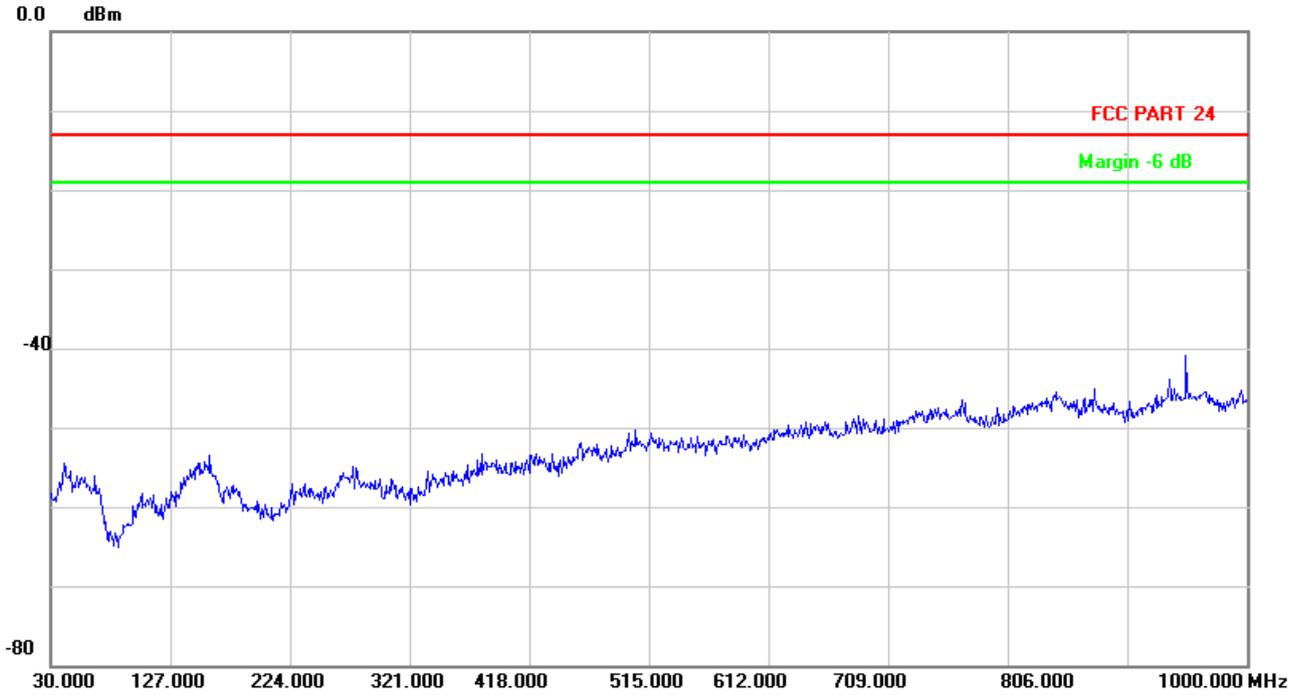
7.3.1 Test Band = BAND2

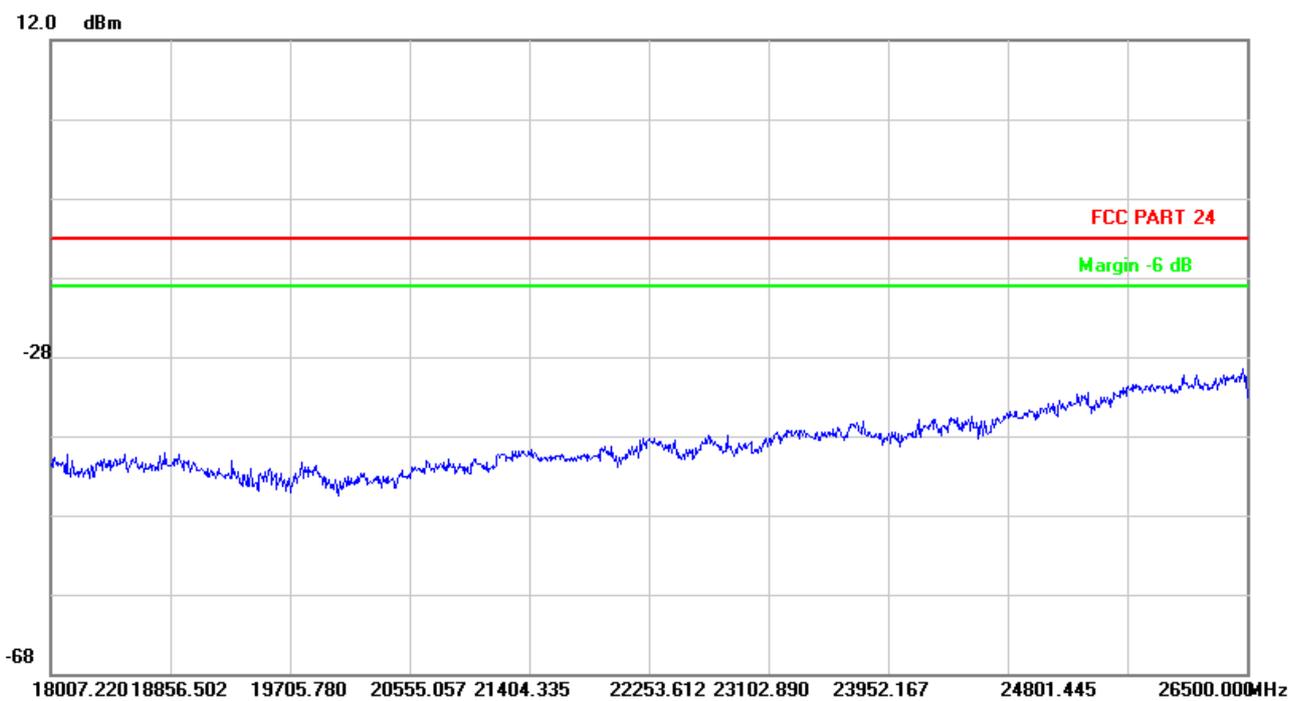
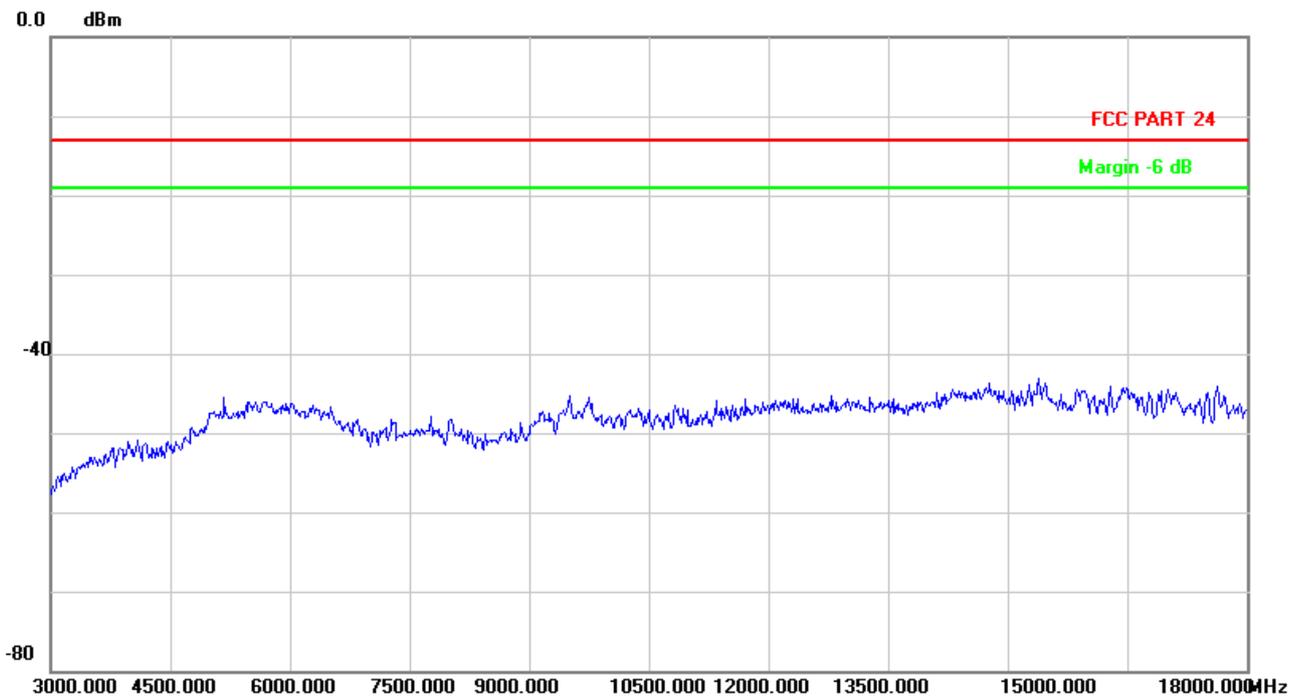
7.3.1.1 Test Bandwidth = 1.4



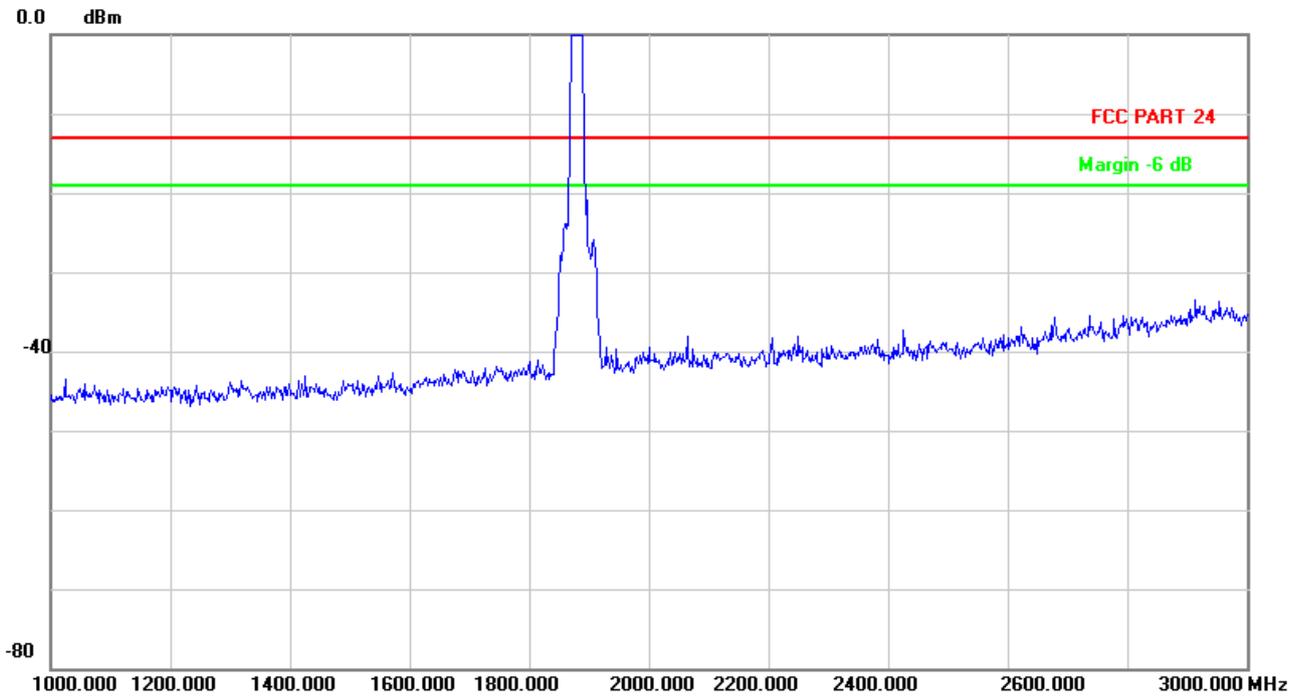
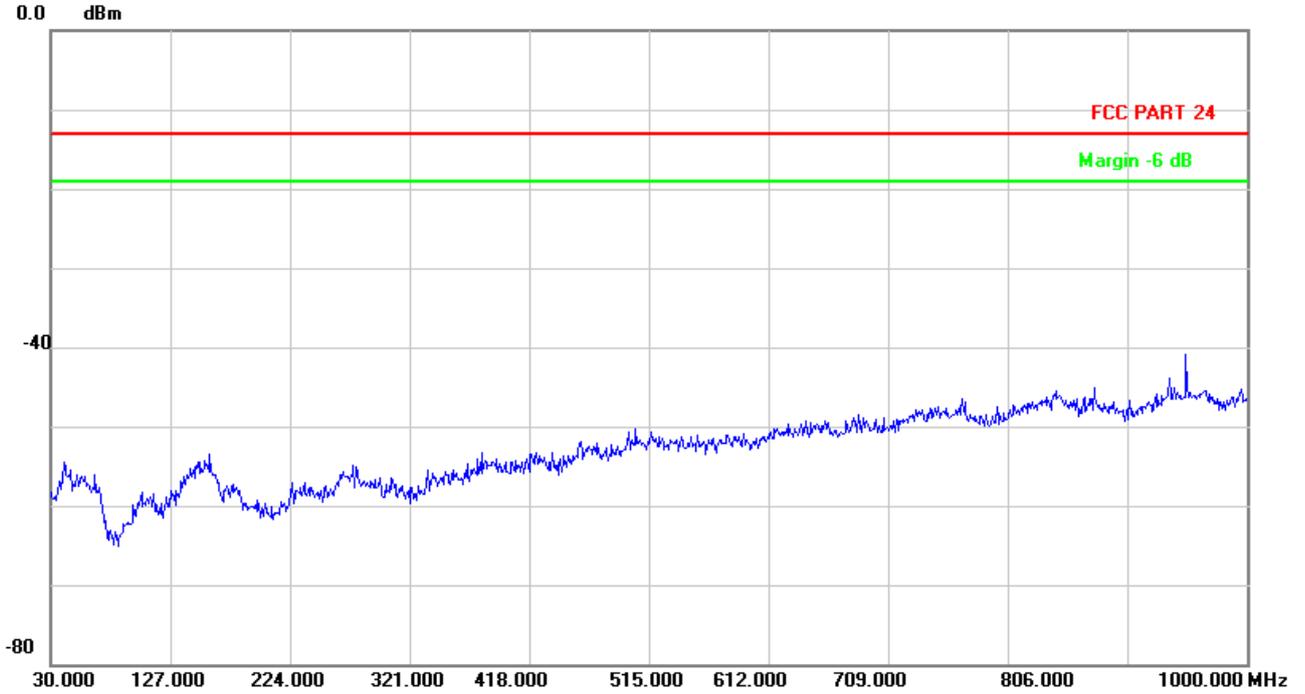


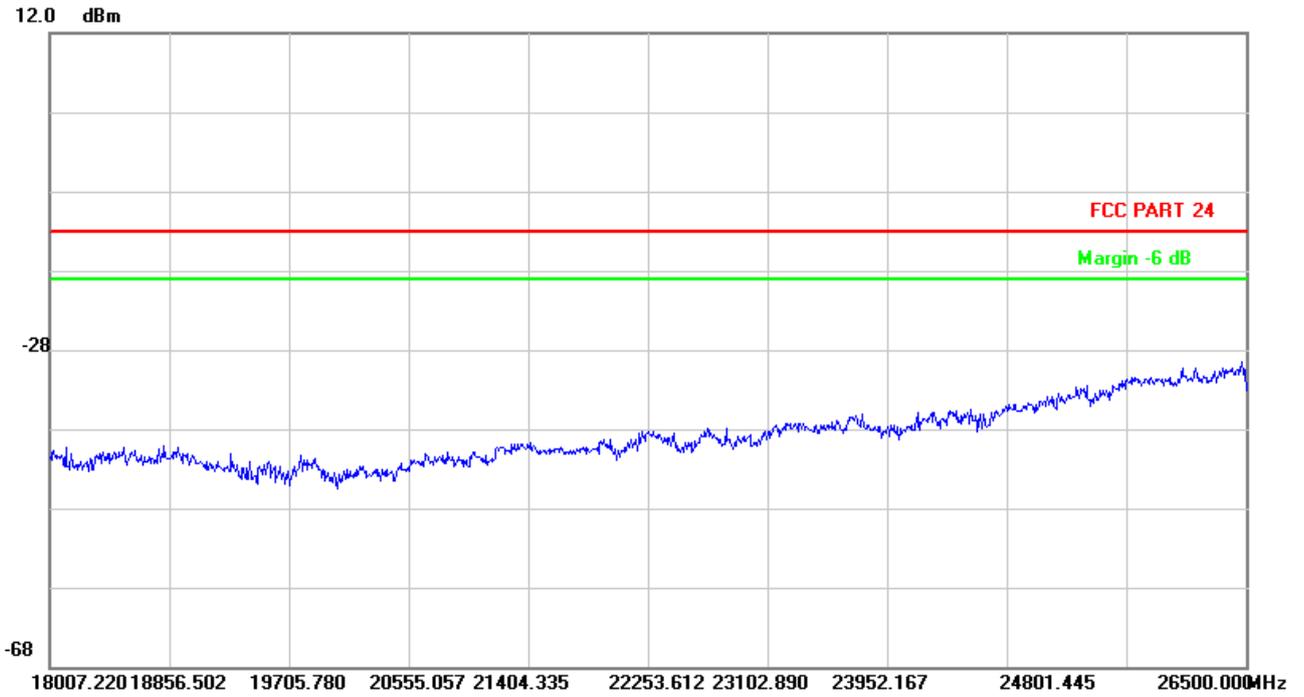
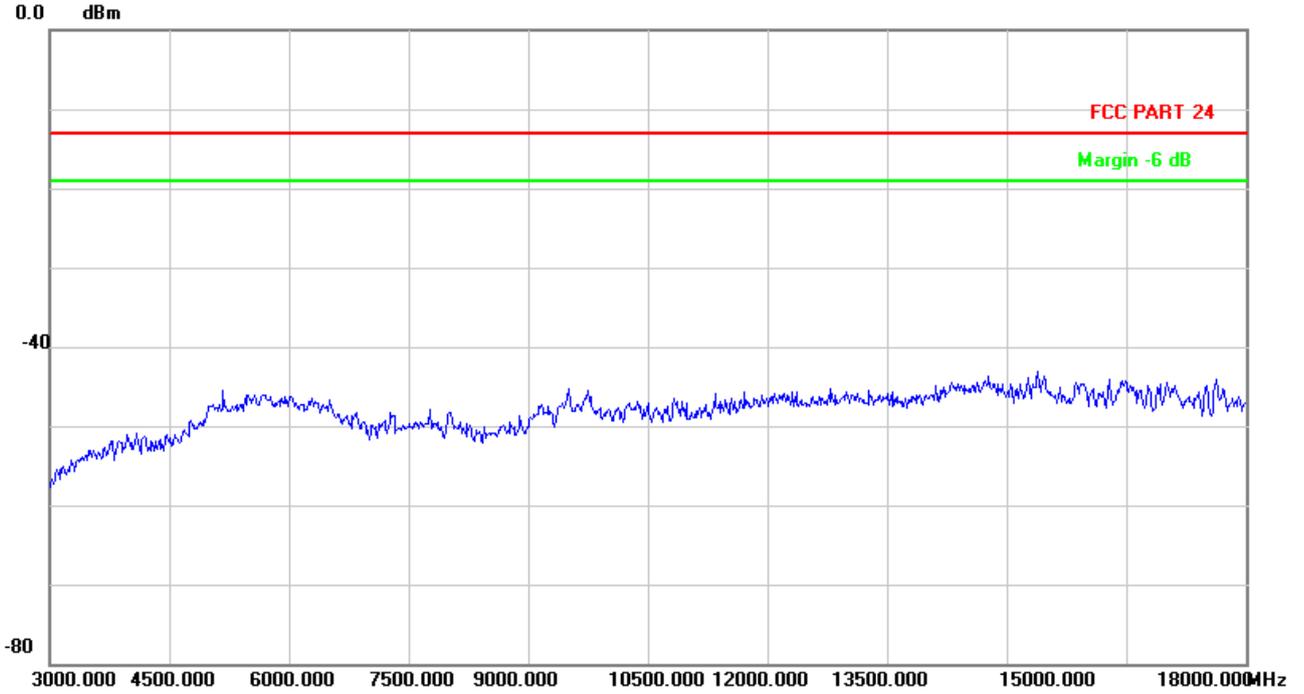
7.3.1.2 Test Bandwidth = 5





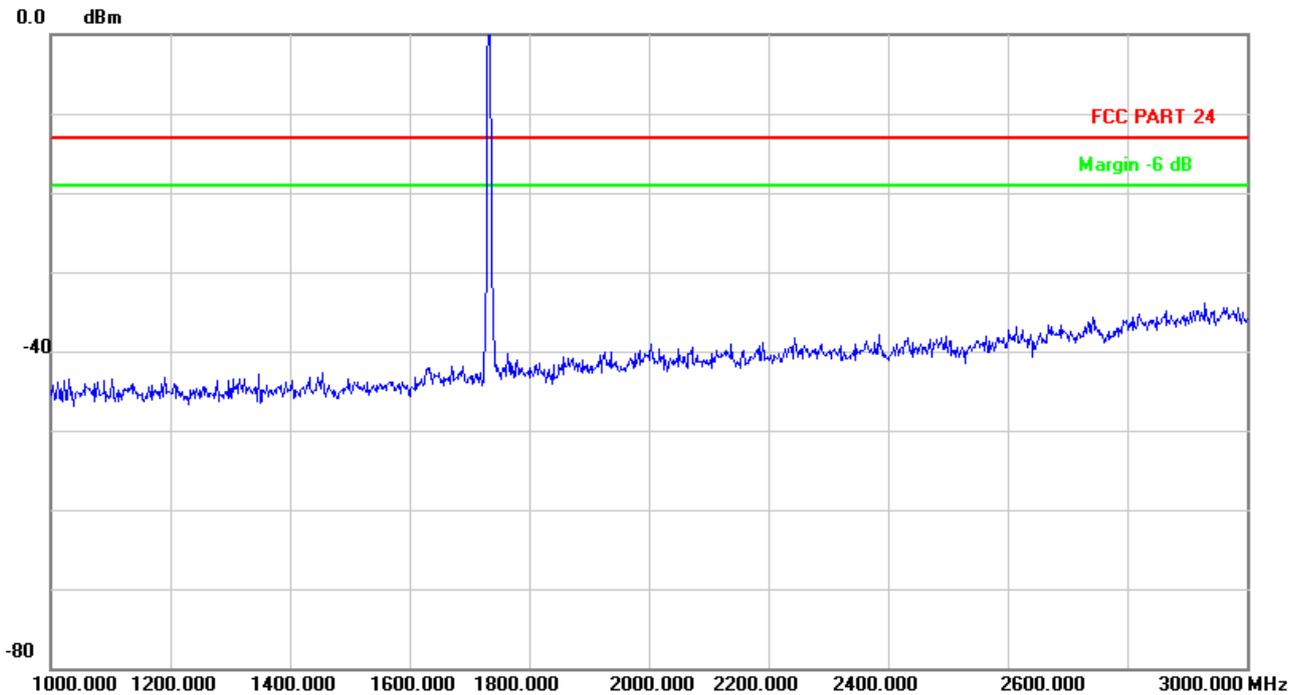
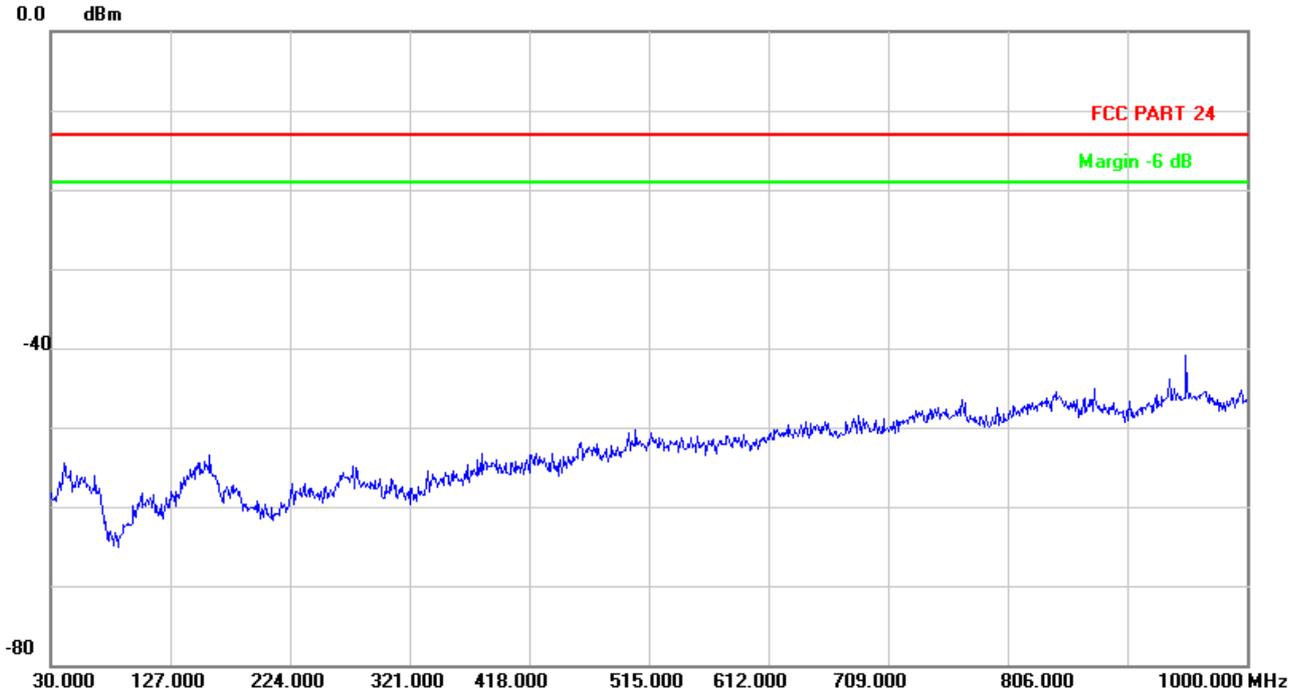
7.3.1.3 Test Bandwidth = 20

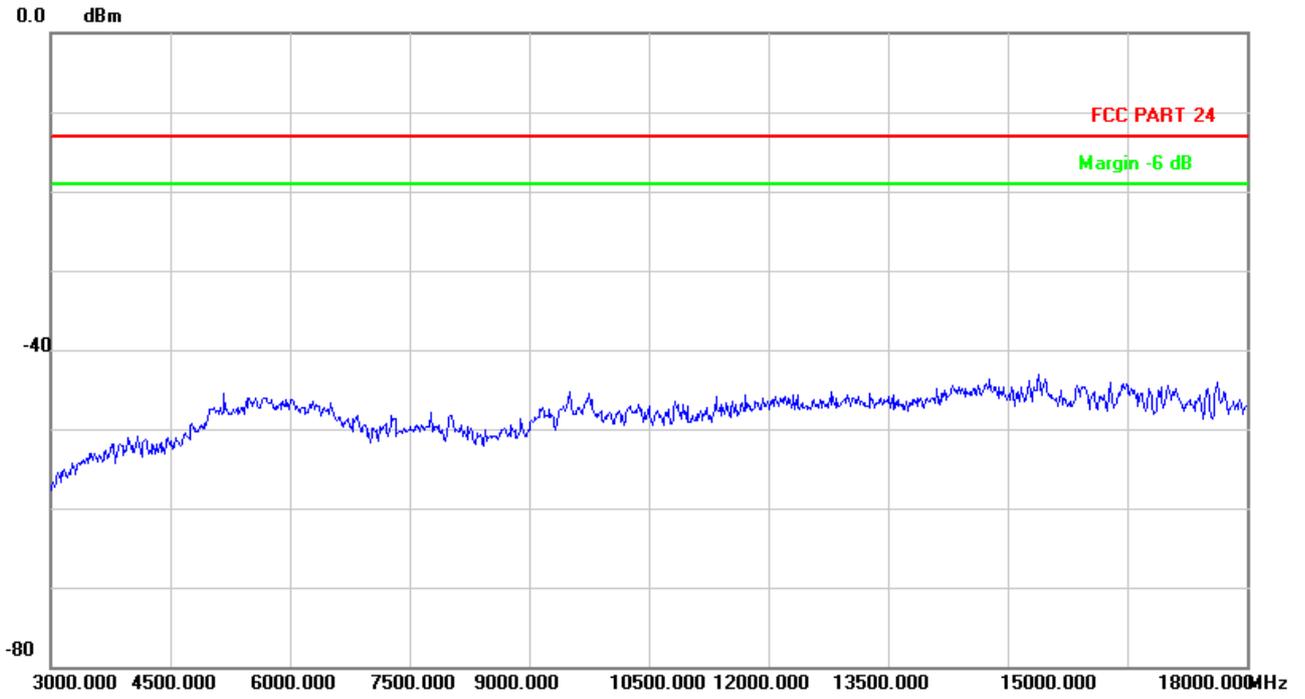




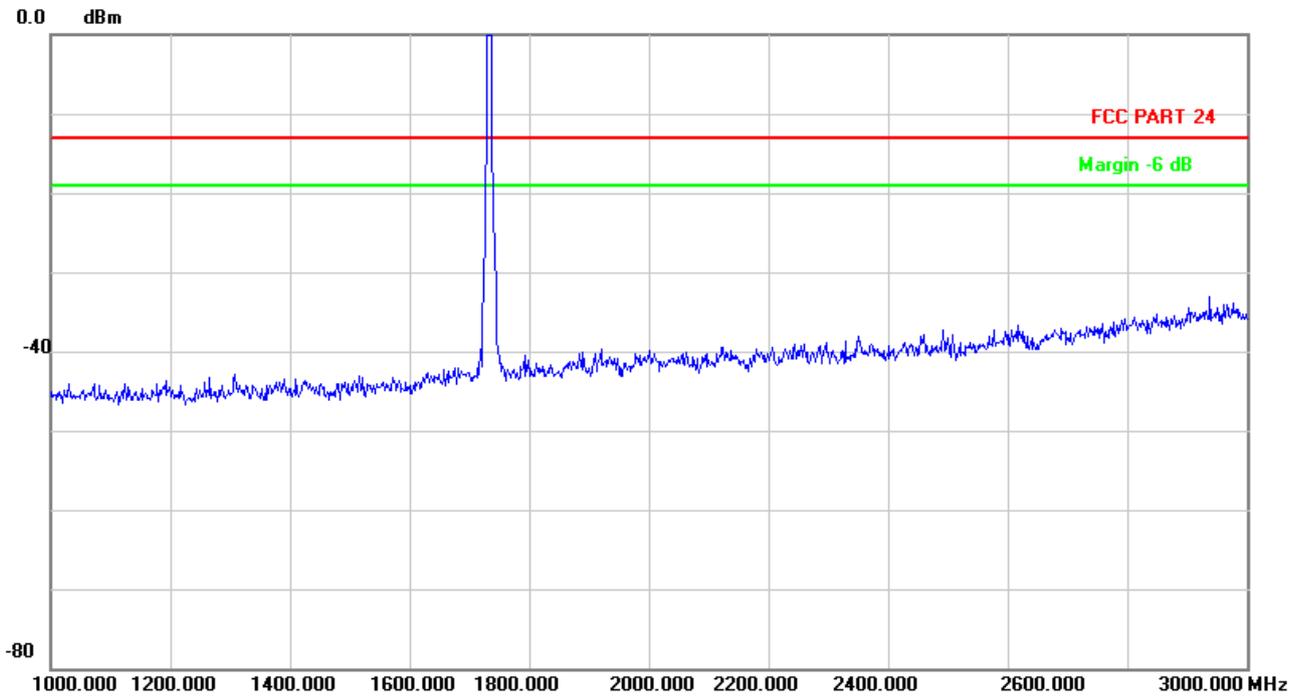
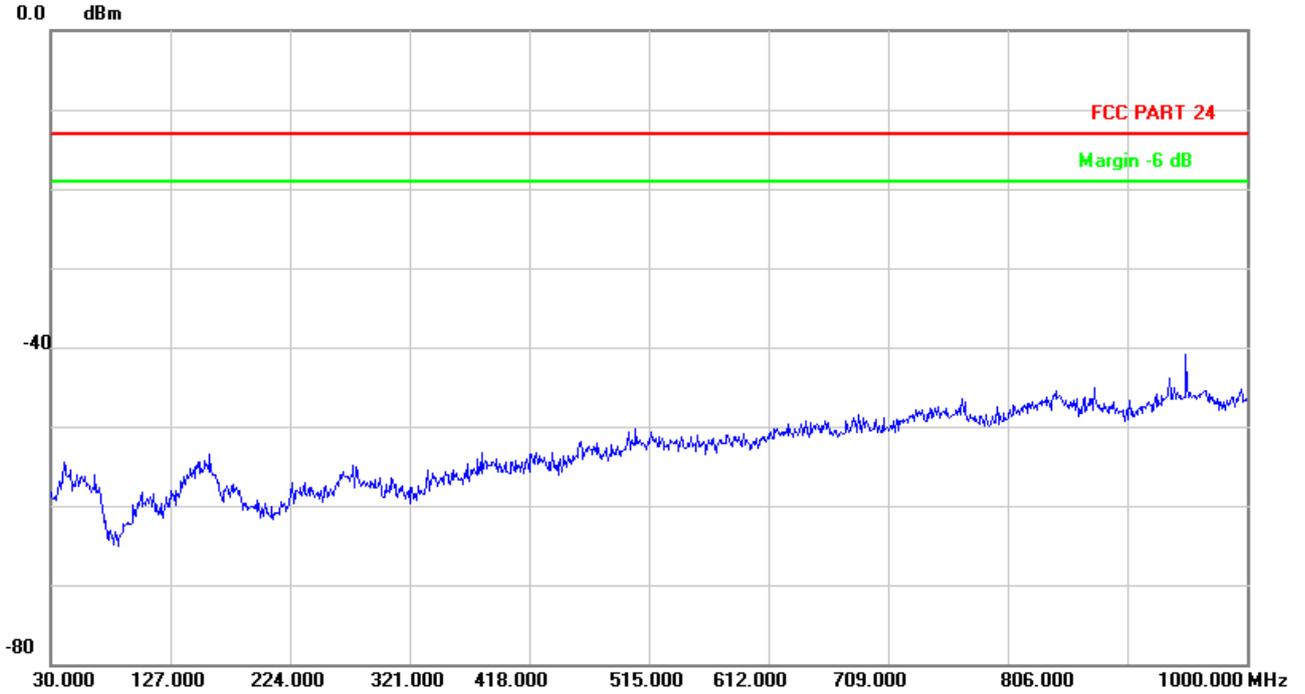
7.3.2 Test Band = BAND4

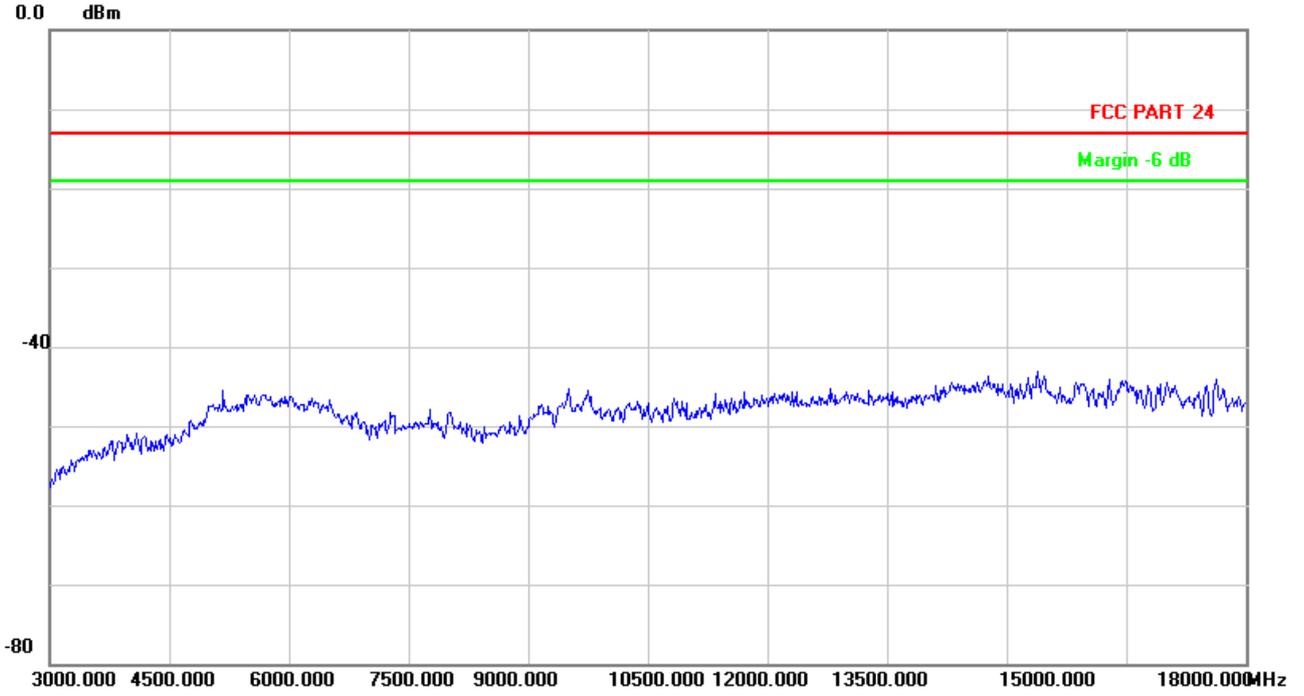
7.3.2.1 Test Bandwidth = 1.4



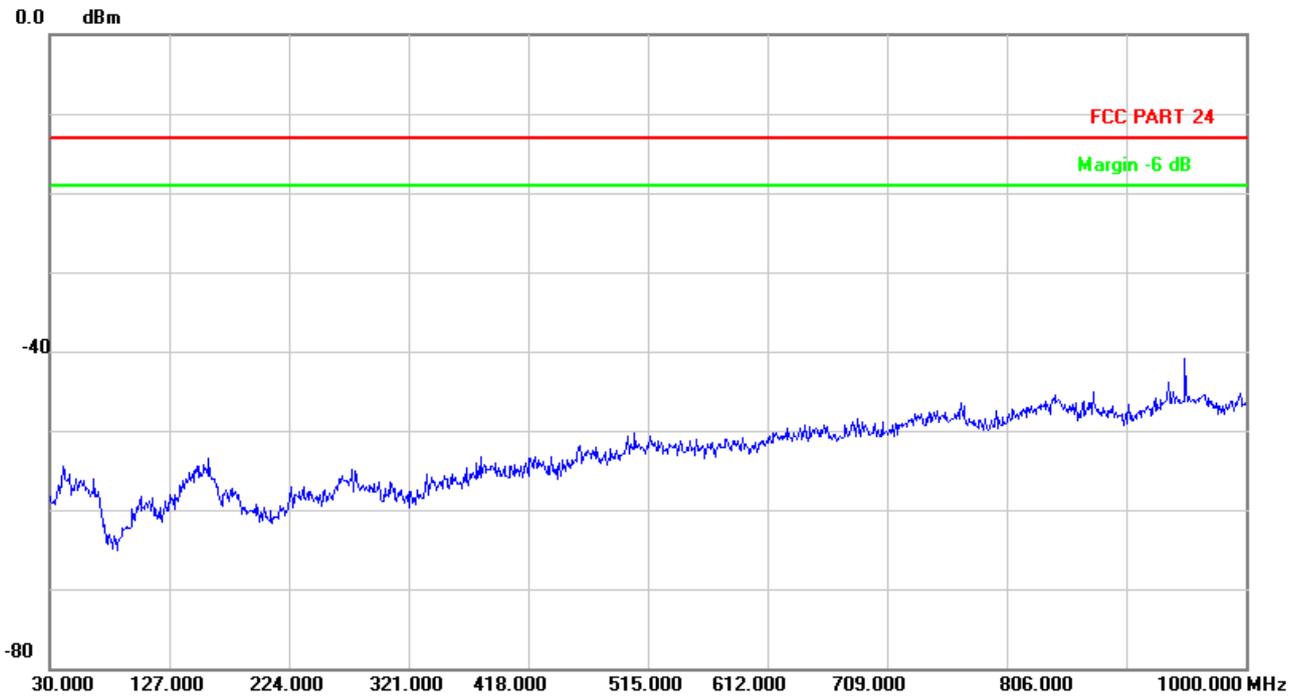


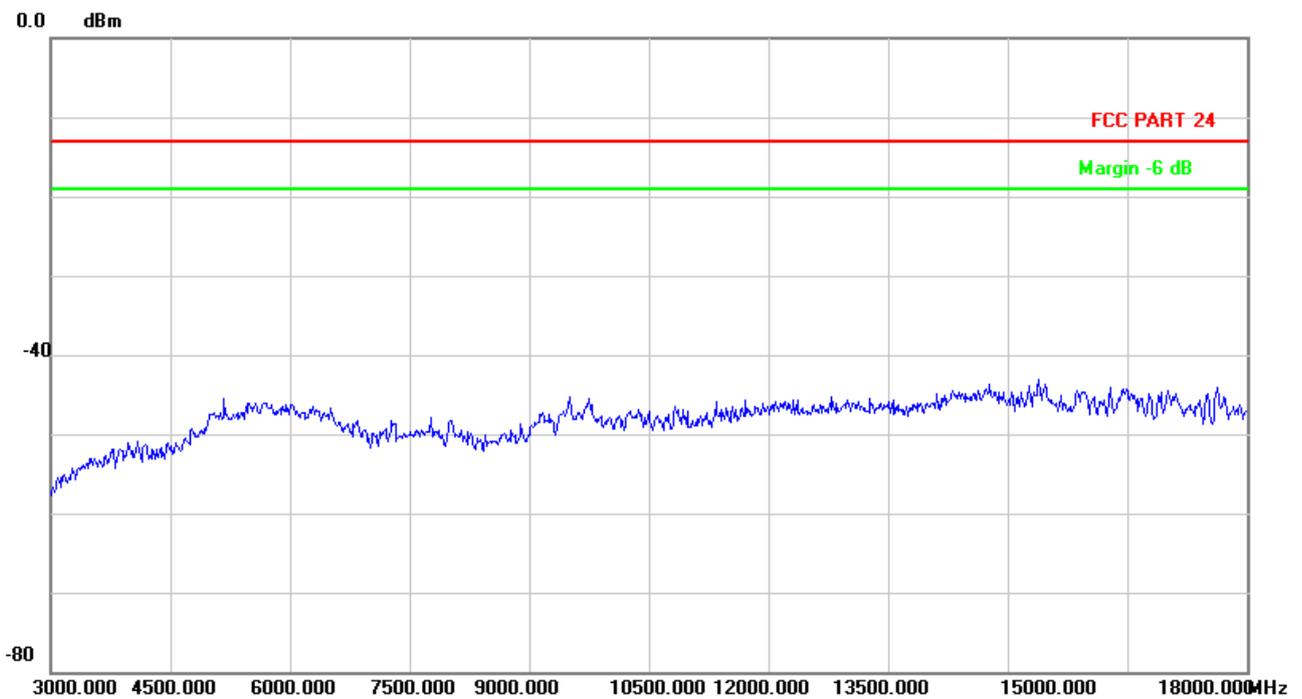
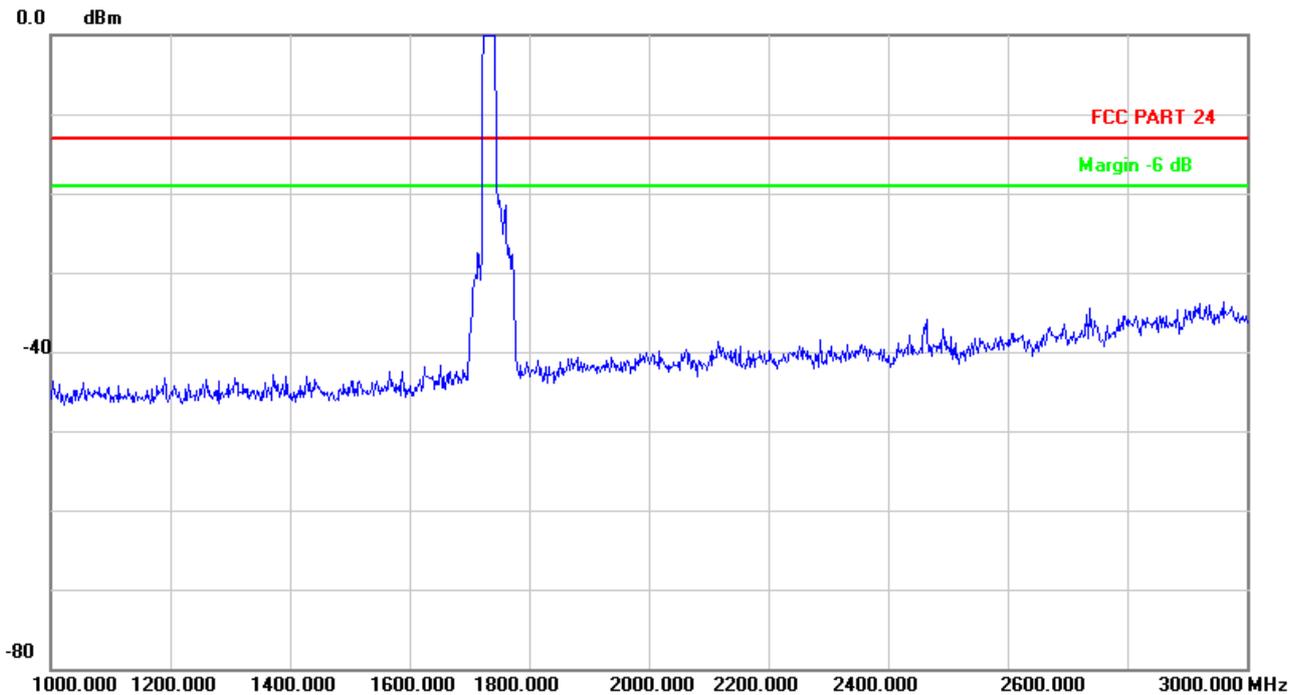
7.3.2.2 Test Bandwidth = 5





7.3.2.3 Test Bandwidth = 20

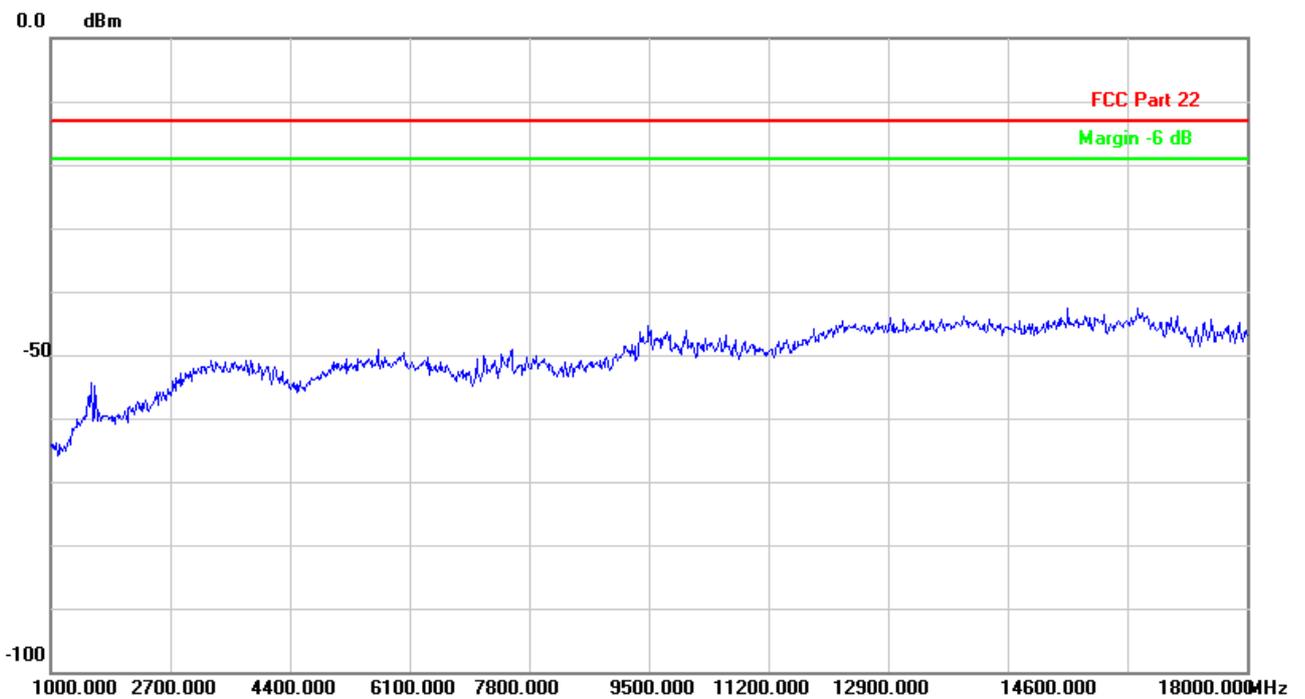
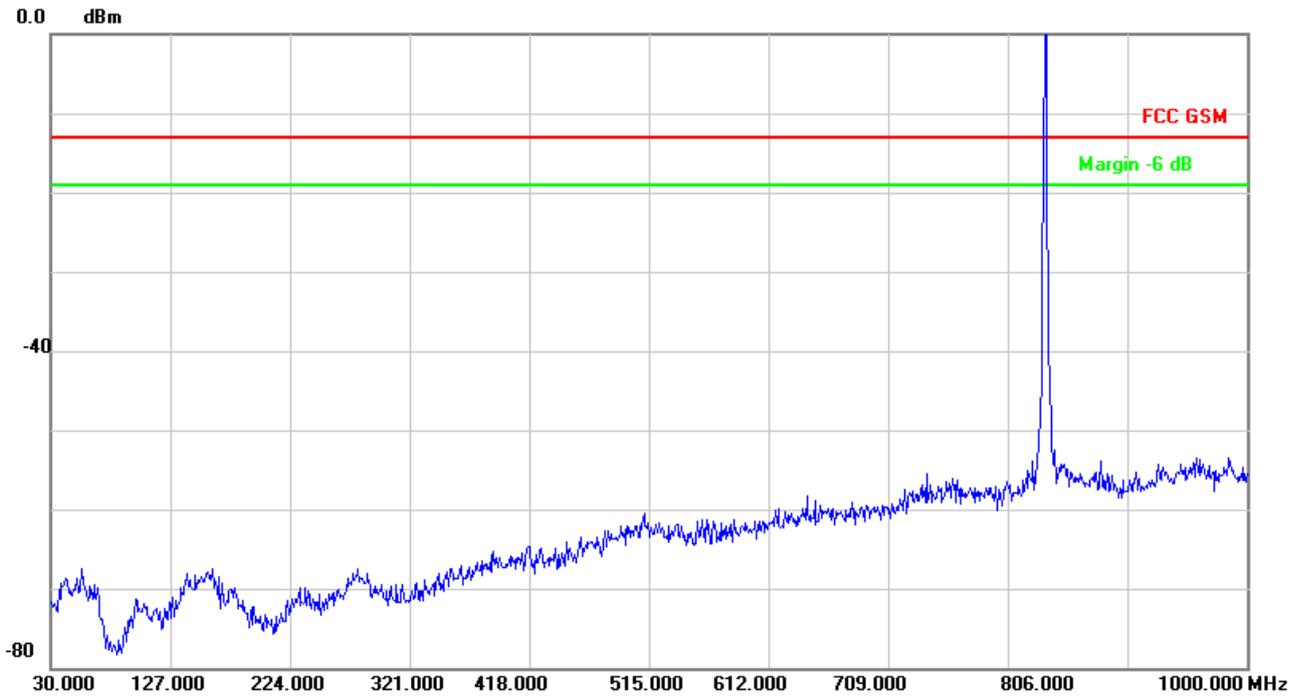




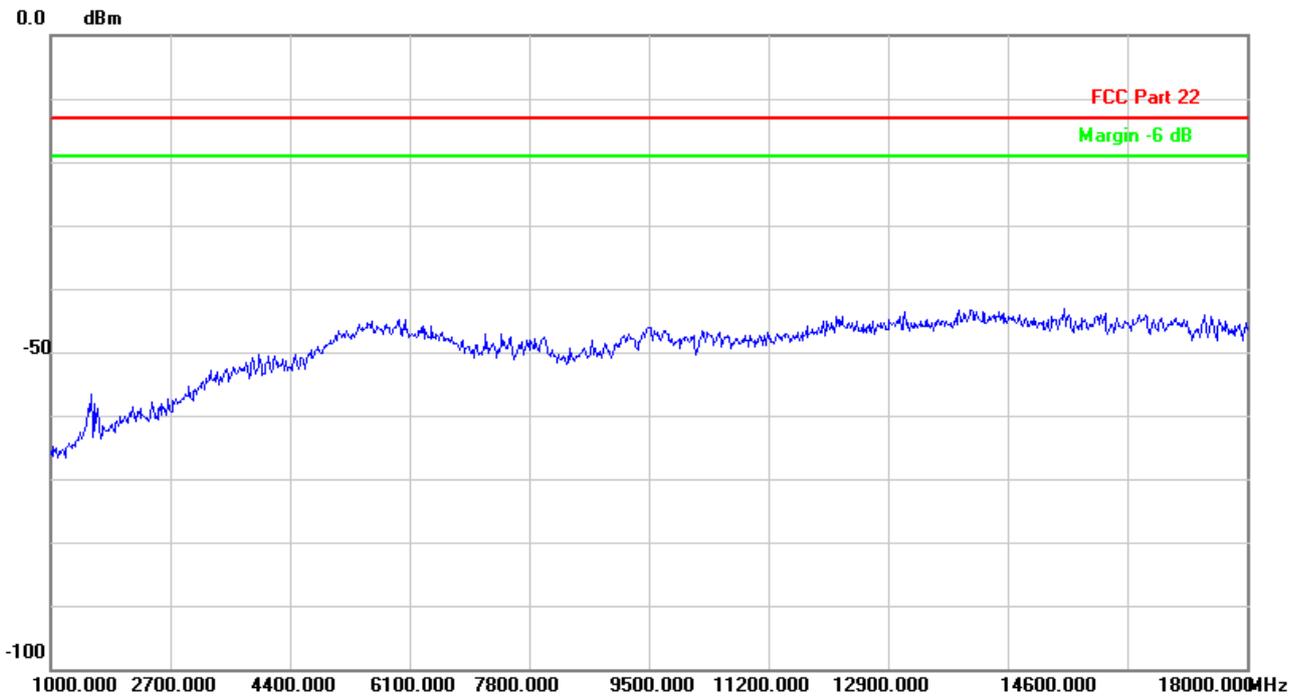
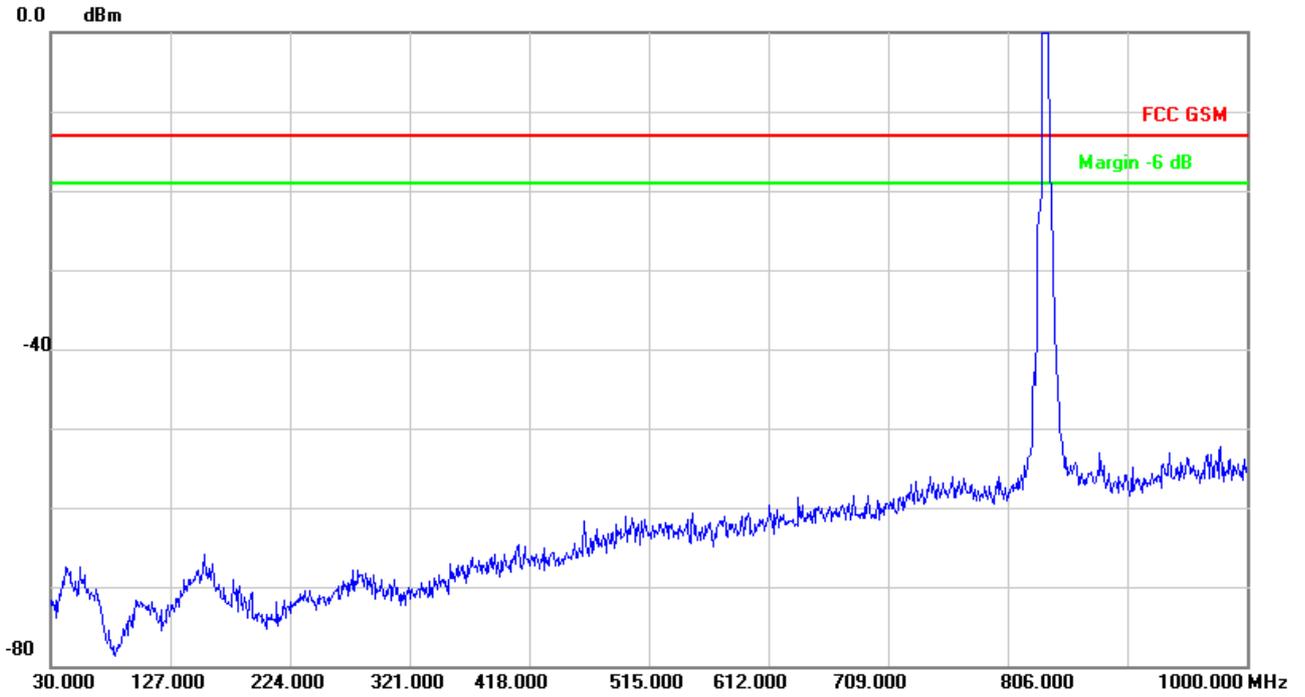


7.3.3 Test Band = BAND5

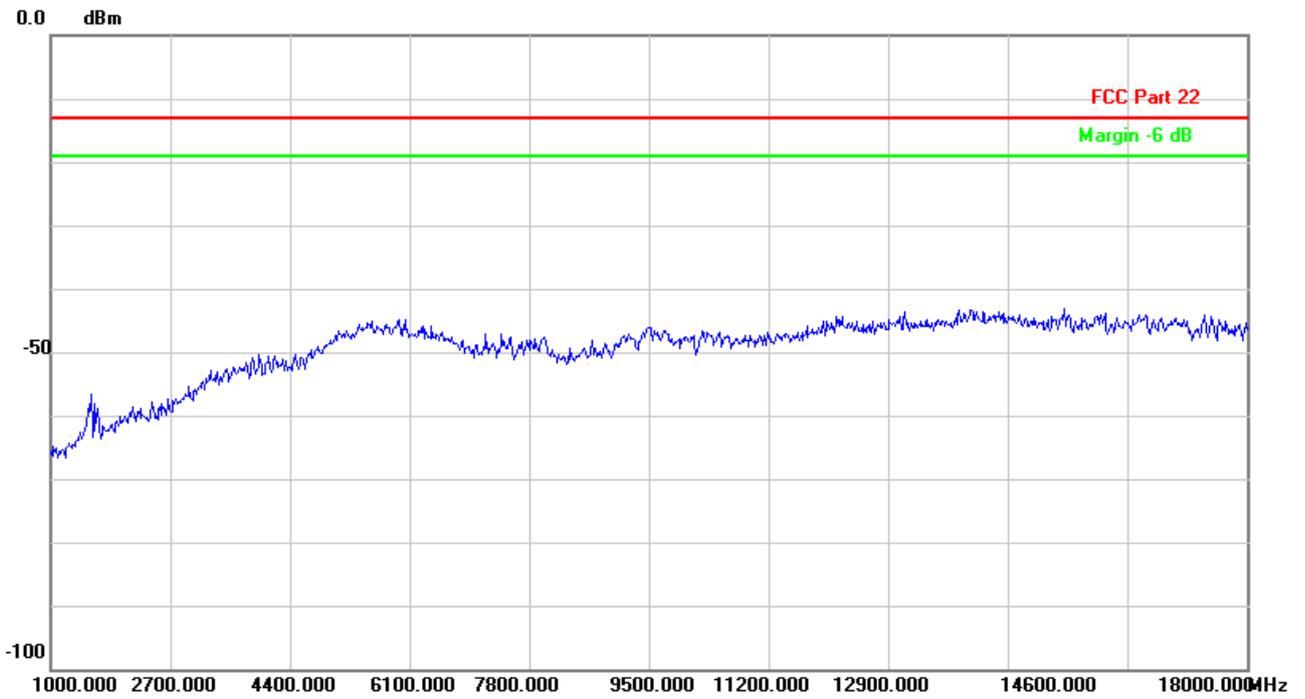
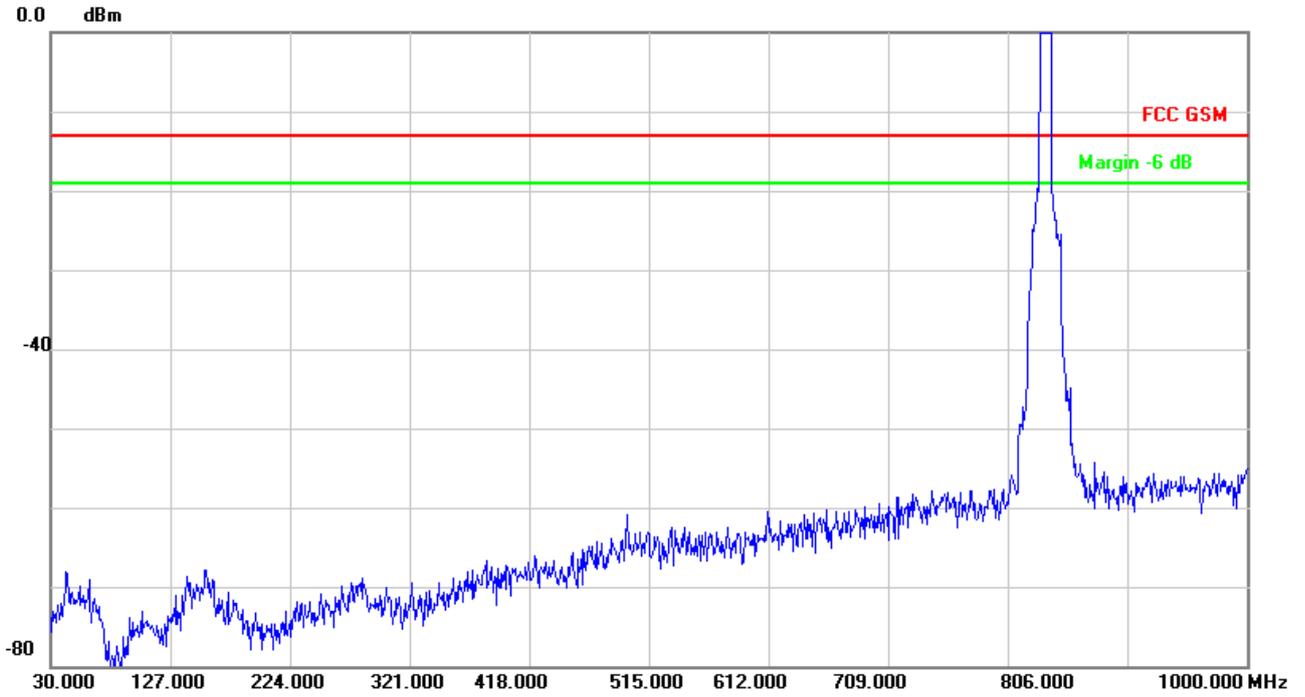
7.3.3.1 Test Bandwidth = 1.4



7.3.3.2 Test Bandwidth = 5

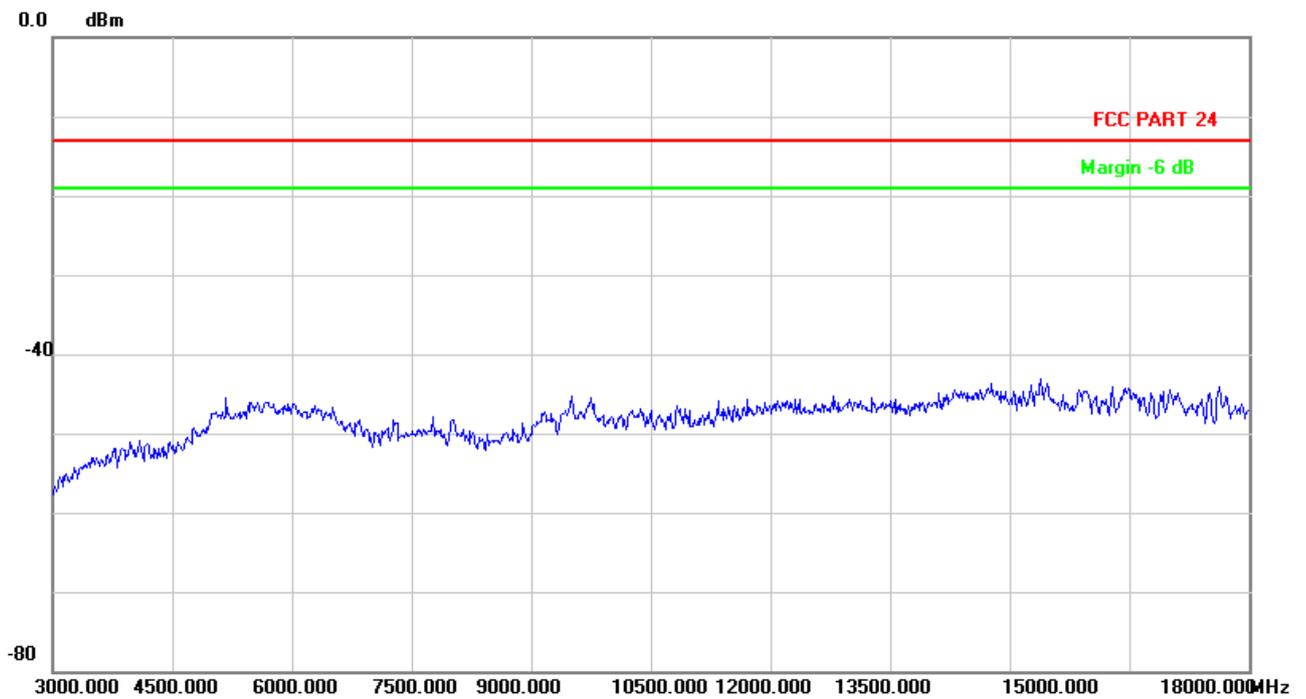
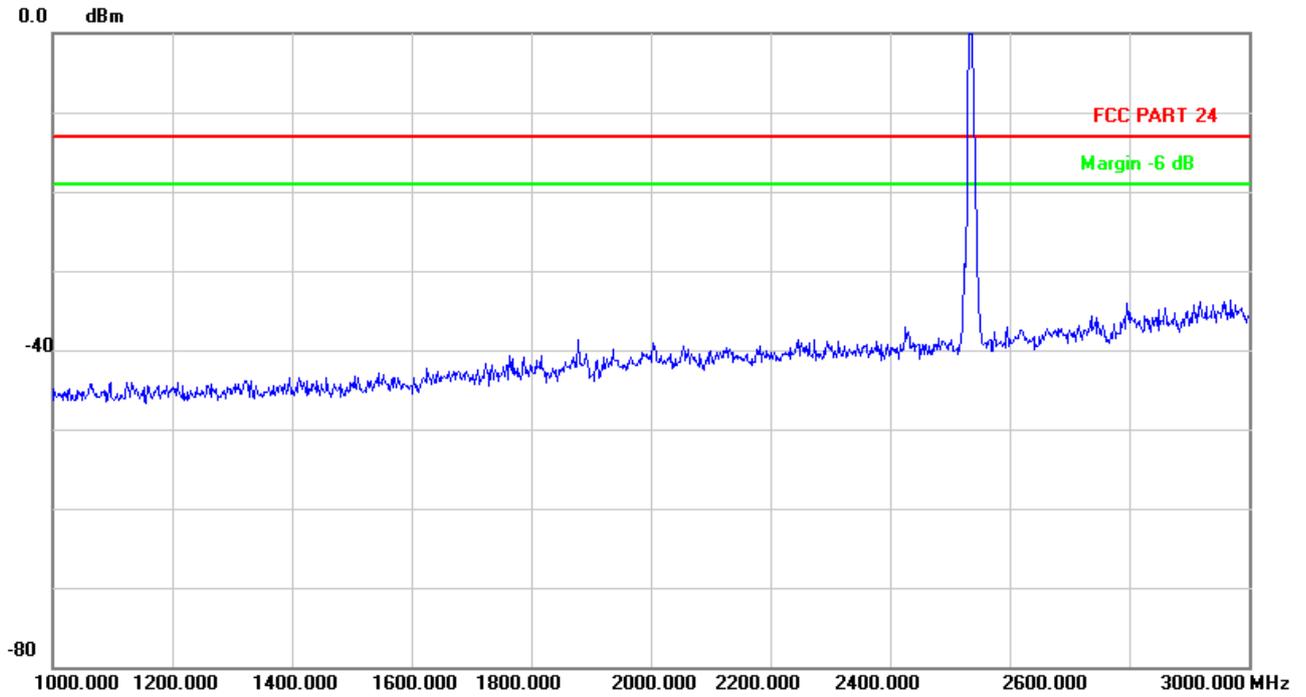


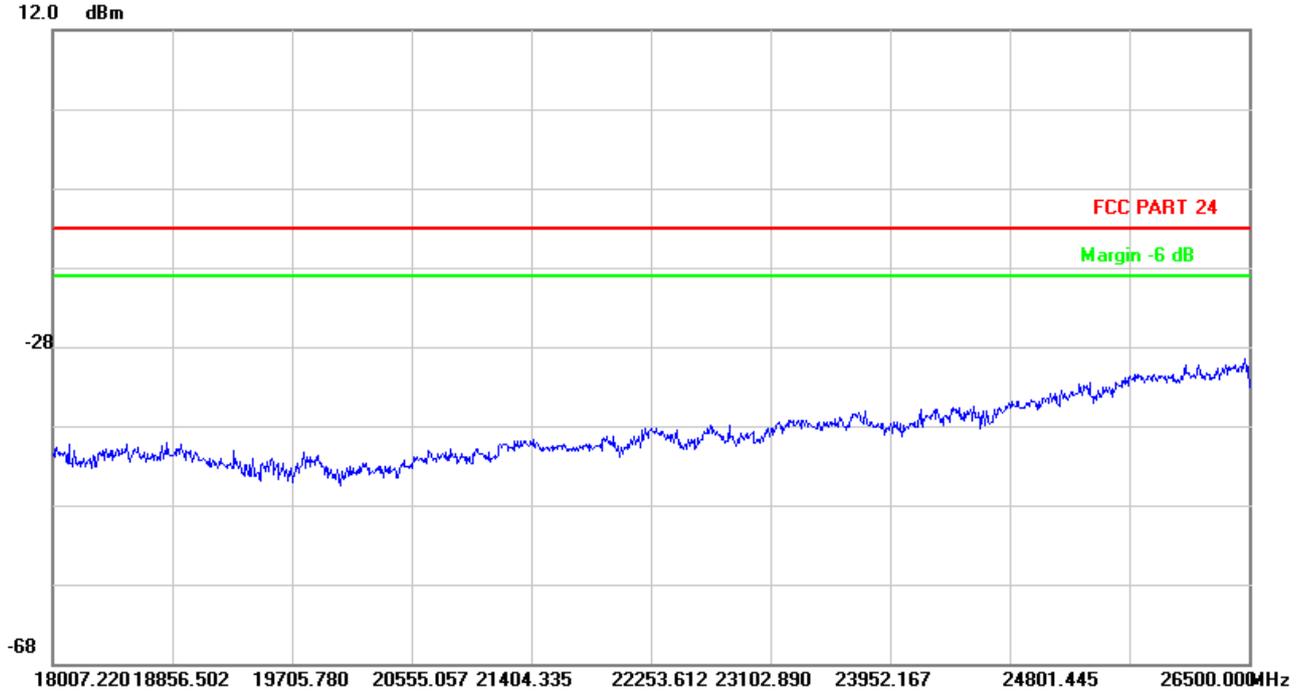
7.3.3.3 Test Bandwidth = 10



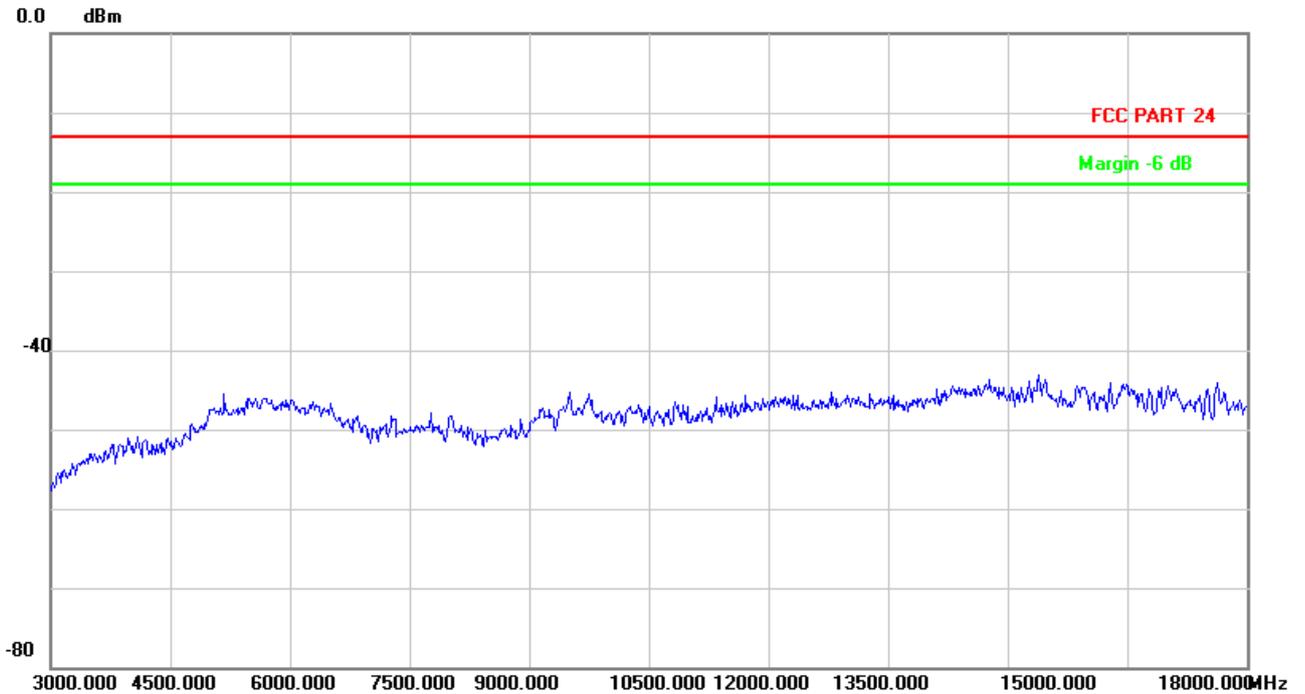
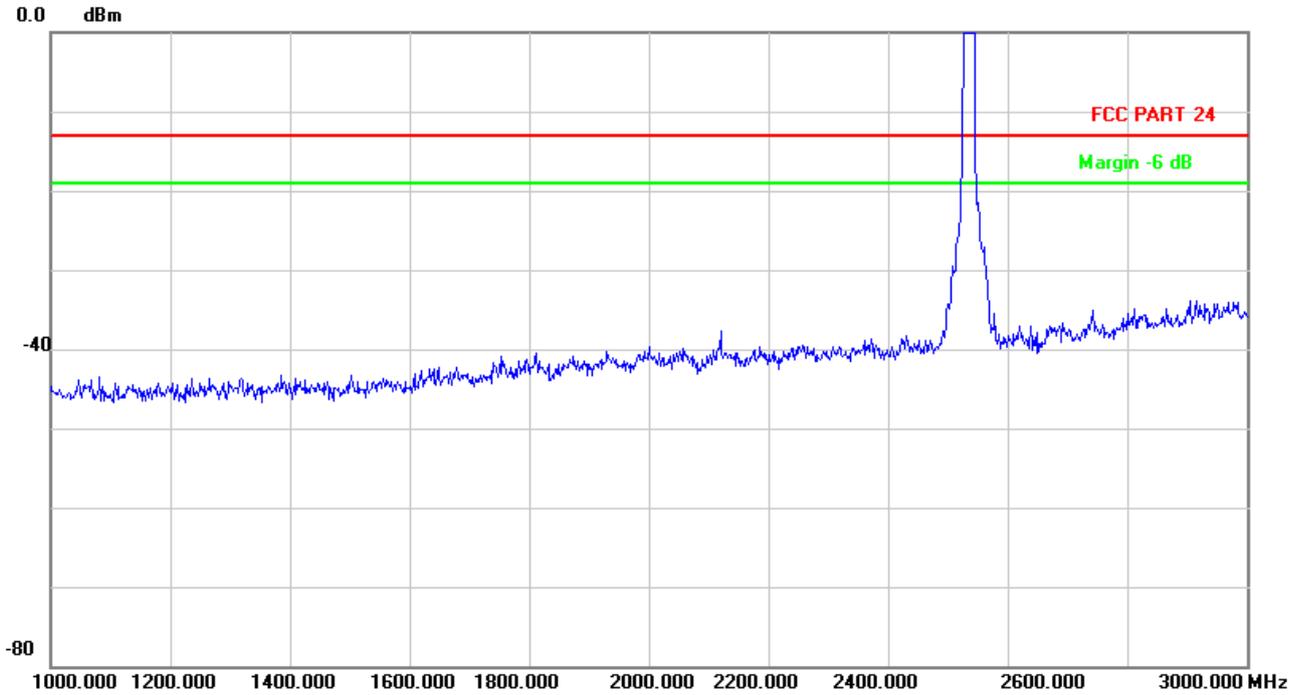
7.3.4 Test Band = BAND7

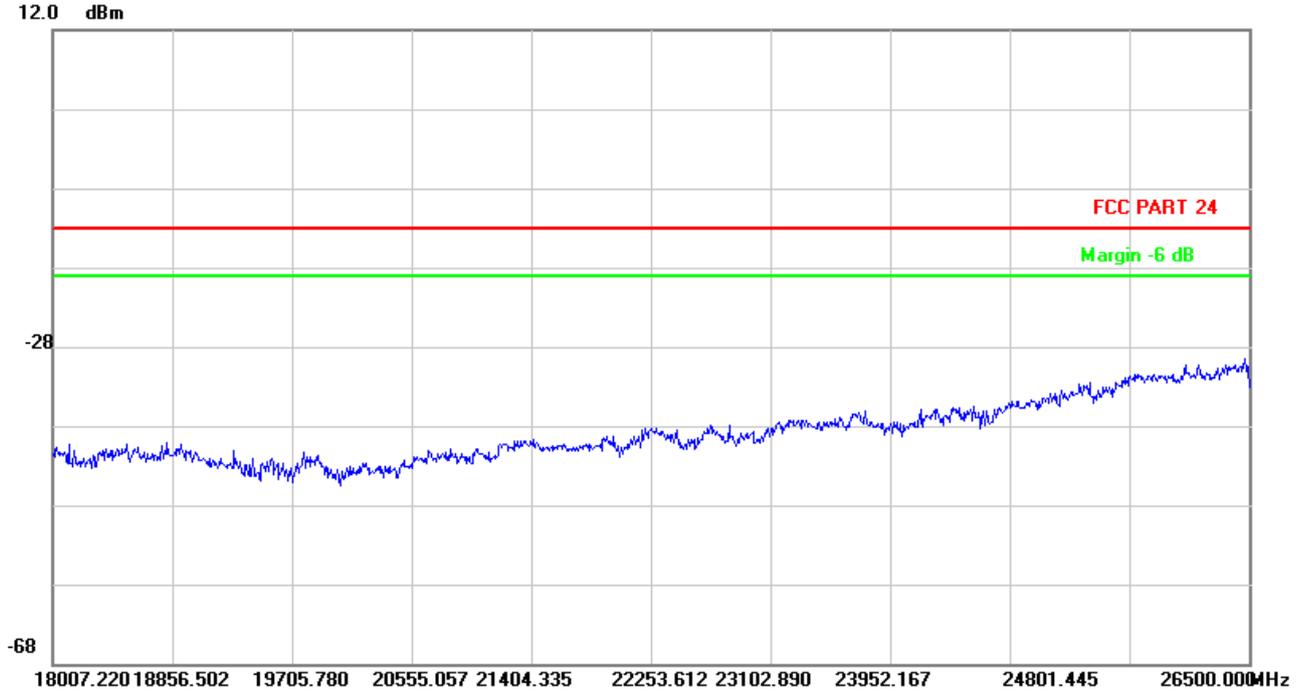
7.3.4.1 Test Bandwidth = 5





7.3.4.2 Test Bandwidth = 20







8Appendix_H: Frequency Stability

Void

END