



# Appendix for test report



## 1 Appendix\_A: Effective (Isotropic) Radiated Power Output Data

### Part I - Test Results

| Test Band | Test Mode | Test Channel | Conducted Power [dBm] | ERP [dBm] | Limit [dBm] | Verdict |
|-----------|-----------|--------------|-----------------------|-----------|-------------|---------|
| GSM850    | GSM/TM1   | LCH          | 31.7                  | 29.05     | 38.5        | PASS    |
|           |           | MCH          | 32.08                 | 29.43     | 38.5        | PASS    |
|           |           | HCH          | 32.16                 | 29.51     | 38.5        | PASS    |
|           | GSM/TM2   | LCH          | 25.94                 | 23.29     | 38.5        | PASS    |
|           |           | MCH          | 25.92                 | 23.27     | 38.5        | PASS    |
|           |           | HCH          | 25.93                 | 23.28     | 38.5        | PASS    |

| Test Band | Test Mode | Test Channel | Conducted Power [dBm] | EIRP [dBm] | Limit [dBm] | Verdict |
|-----------|-----------|--------------|-----------------------|------------|-------------|---------|
| GSM1900   | GSM/TM1   | LCH          | 29.36                 | 29.86      | 33          | PASS    |
|           |           | MCH          | 29.29                 | 29.79      | 33          | PASS    |
|           |           | HCH          | 29.32                 | 29.82      | 33          | PASS    |
|           | GSM/TM2   | LCH          | 25.44                 | 25.94      | 33          | PASS    |
|           |           | MCH          | 25.48                 | 25.98      | 33          | PASS    |
|           |           | HCH          | 25.38                 | 25.88      | 33          | PASS    |



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:

$$\text{SET Span} = 1.5 * \text{OBW}$$

$$\text{SET RBW} = 1\% \text{ of the OBW, not to exceed 1MHz}$$

$$\text{SET VBW} \geq 3 * \text{RBW}$$

SET Sweep time=auto-couple.

Detector:RMS

## 2Appendix\_B: Peak-to-Average Ratio

### Part I - Test Results

| Test Band | Test Mode | Test Channel | Measured[dB] | Limit [dB] | Verdict |
|-----------|-----------|--------------|--------------|------------|---------|
| GSM850    | GSM/TM1   | LCH          | 0.36         | 13         | PASS    |
|           |           | MCH          | 0.33         | 13         | PASS    |
|           |           | HCH          | 0.34         | 13         | PASS    |
|           | GSM/TM2   | LCH          | 2.94         | 13         | PASS    |
|           |           | MCH          | 2.78         | 13         | PASS    |
|           |           | HCH          | 2.86         | 13         | PASS    |
| GSM1900   | GSM/TM1   | LCH          | 0.38         | 13         | PASS    |
|           |           | MCH          | 0.4          | 13         | PASS    |
|           |           | HCH          | 0.37         | 13         | PASS    |
|           | GSM/TM2   | LCH          | 2.98         | 13         | PASS    |
|           |           | MCH          | 3.07         | 13         | PASS    |
|           |           | HCH          | 2.95         | 13         | PASS    |

### 3Appendix\_C: Modulation Characteristics

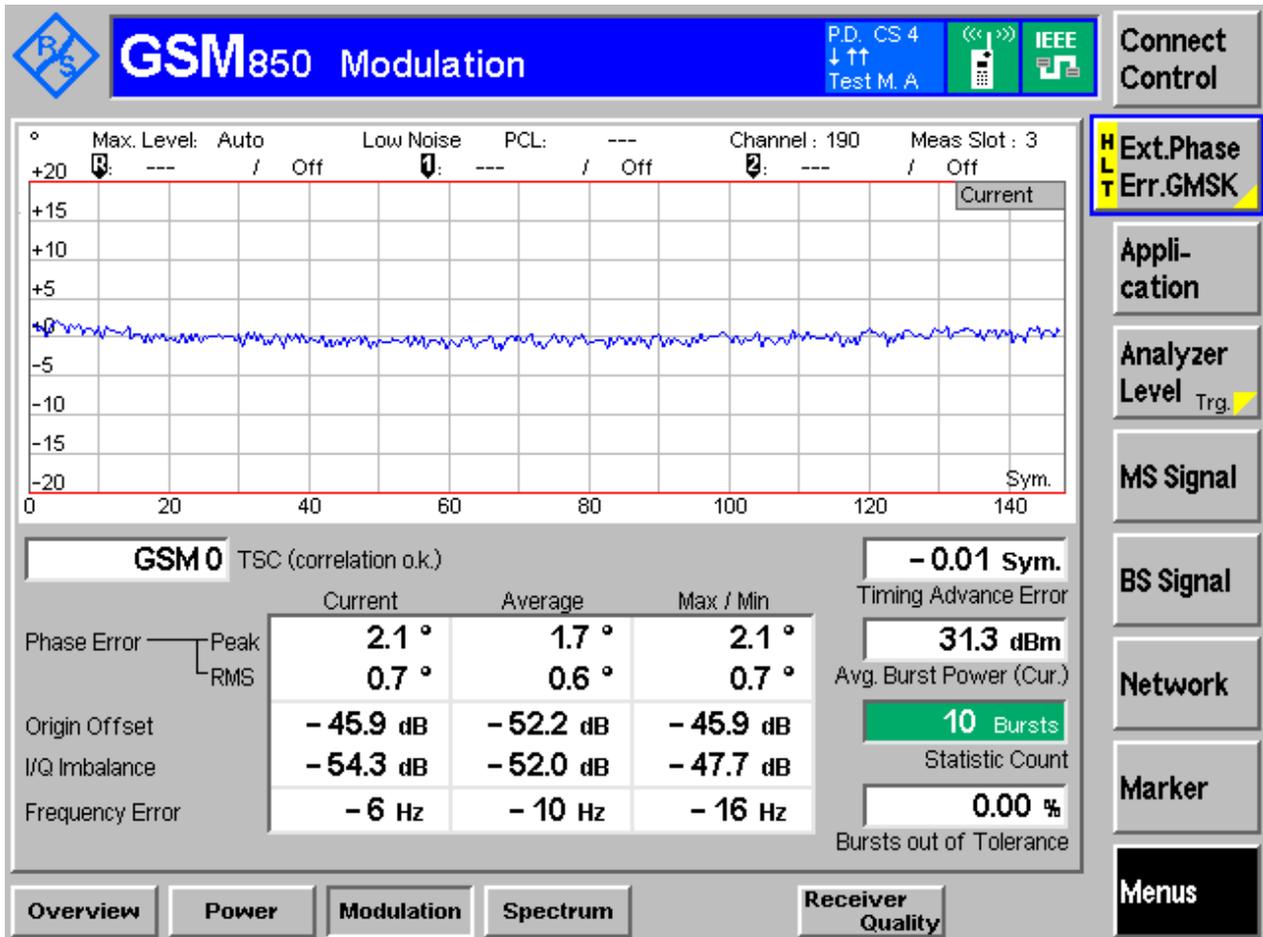
#### Part I - Test Plots

#### 3.1 For GSM

#### 3.1.1 Test Band = GSM850

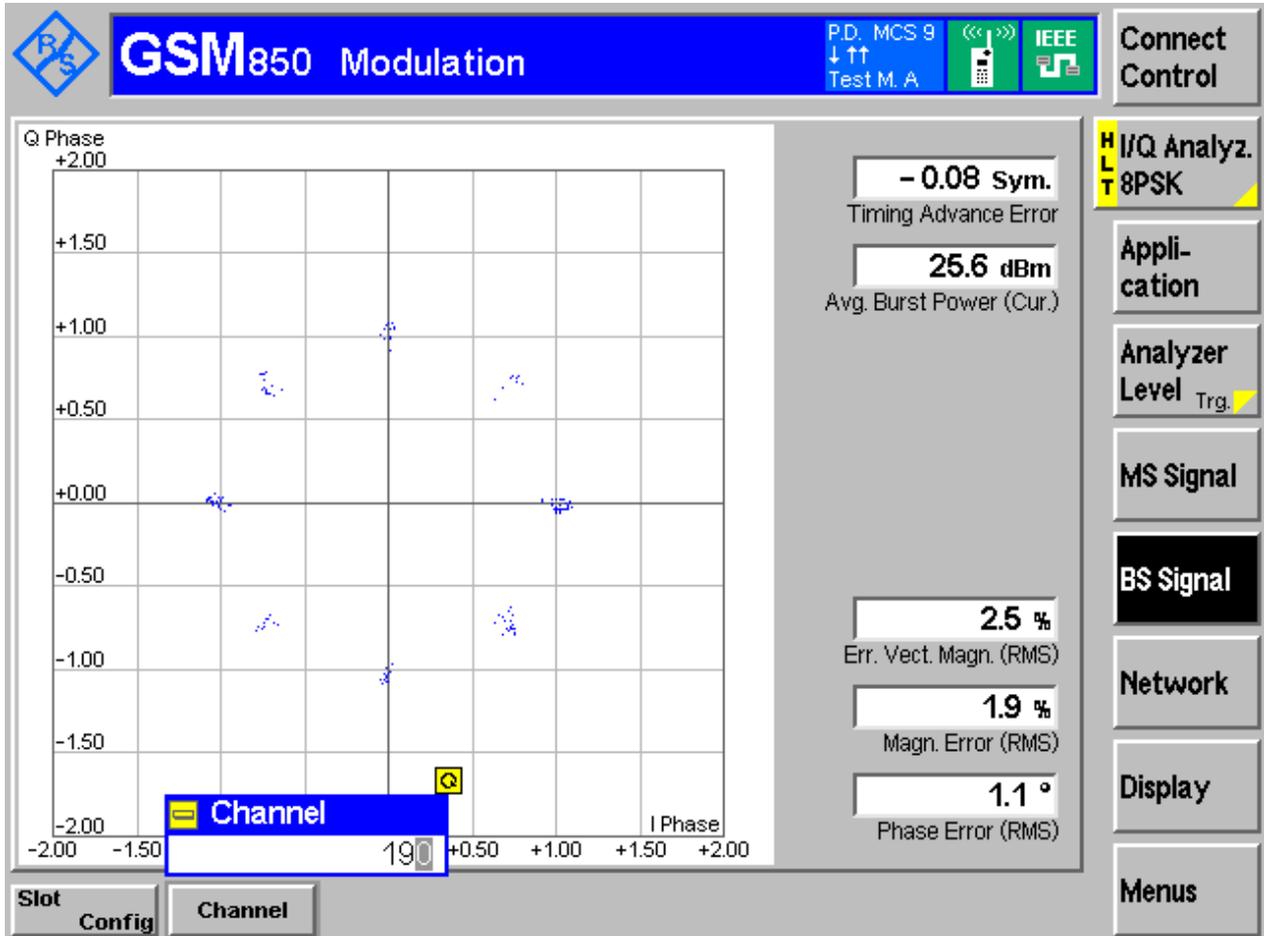
#### 3.1.1.1 Test Mode = GSM/TM1

#### 3.1.1.1.1 Test Channel = MCH



### 3.1.1.2 Test Mode = GSM/TM2

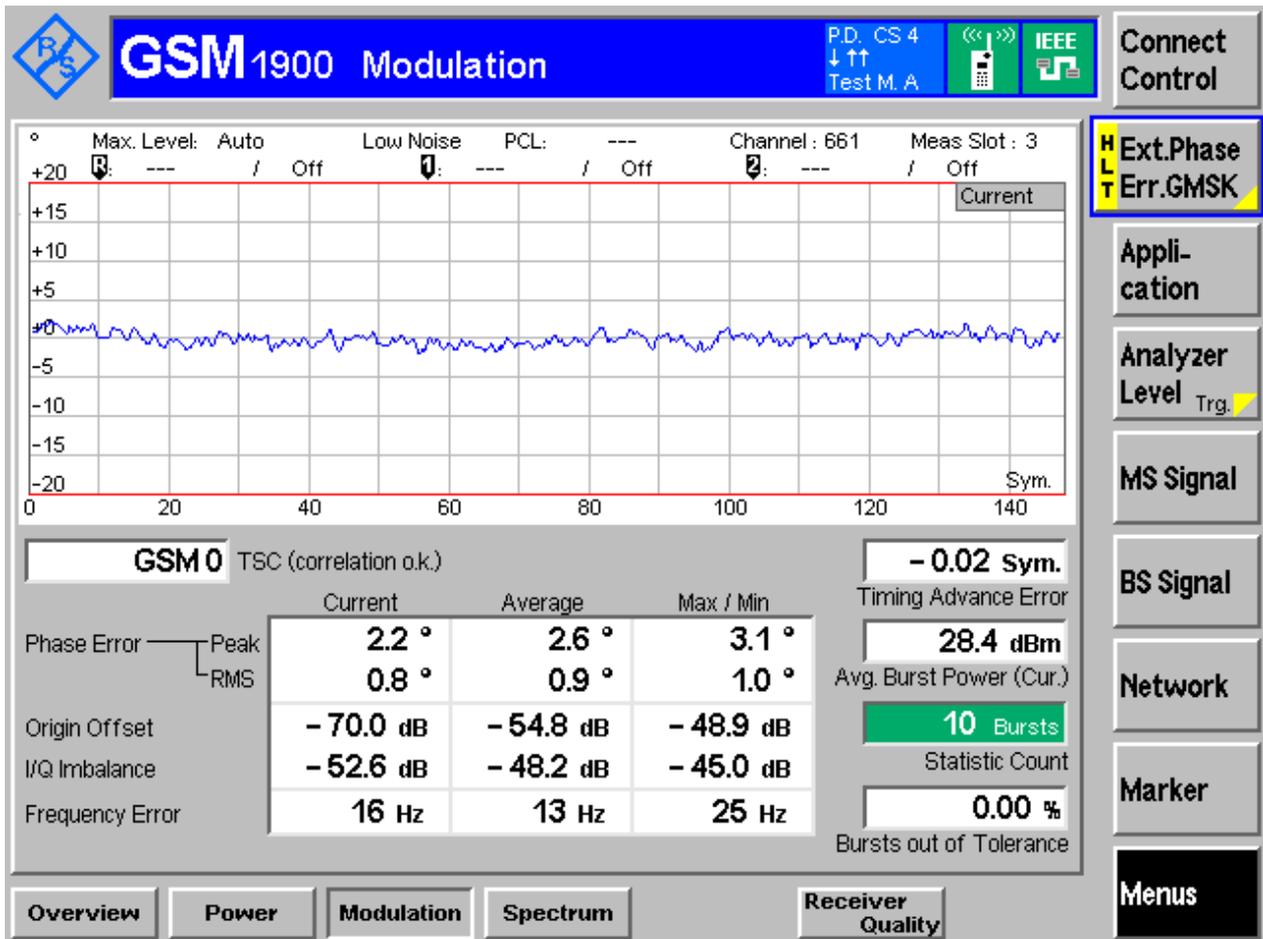
#### 3.1.1.2.1 Test Channel = MCH



3.1.2 Test Band = GSM1900

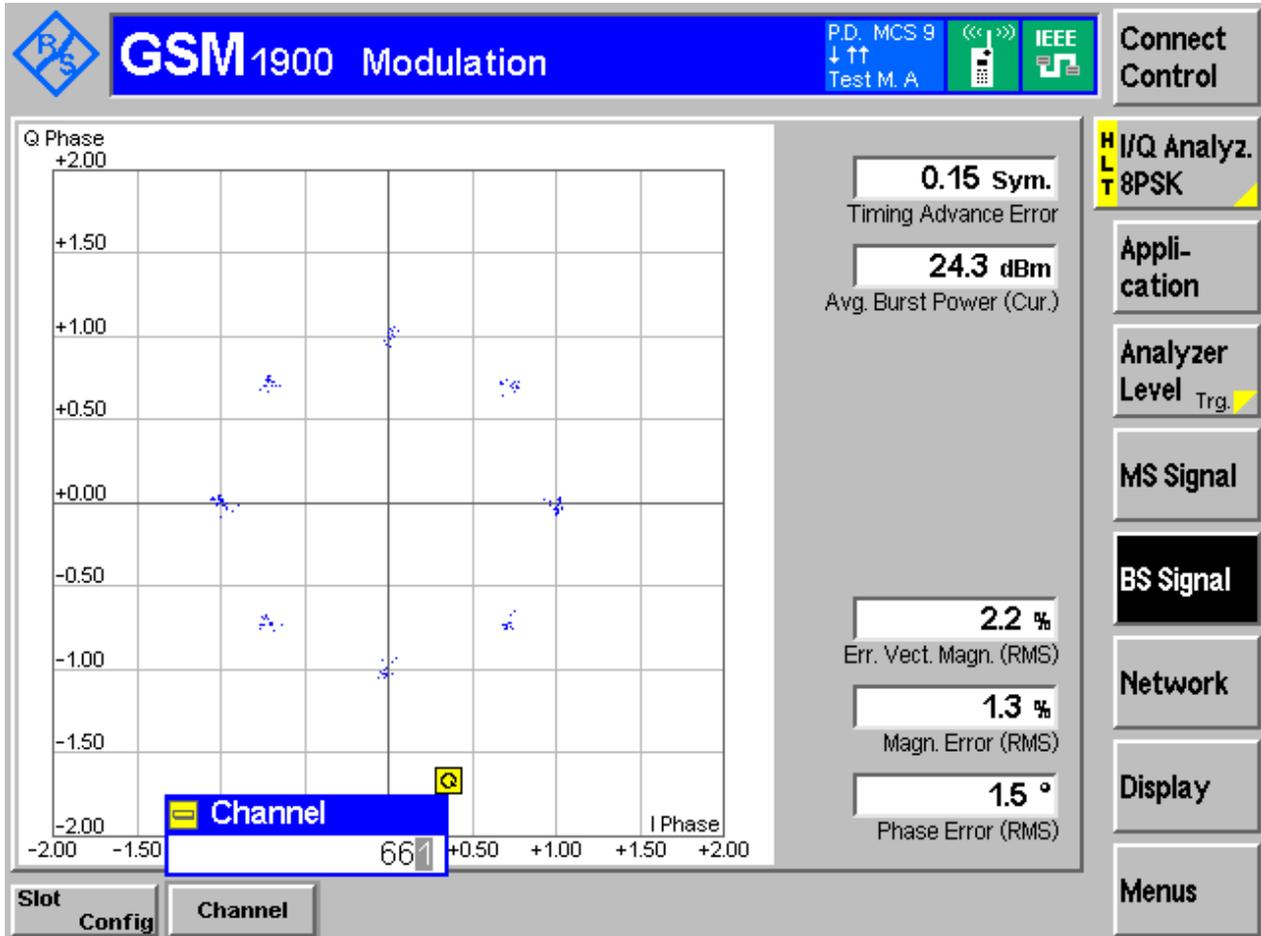
3.1.2.1 Test Mode = GSM/TM1

3.1.2.1.1 Test Channel = MCH



### 3.1.2.2 Test Mode = GSM/TM2

#### 3.1.2.2.1 Test Channel = MCH



## 4Appendix\_D: Bandwidth

### Part I - Test Results

| Test Band | Test Mode | Test Channel | Occupied Bandwidth [kHz] | Emission Bandwidth [kHz] | Verdict |
|-----------|-----------|--------------|--------------------------|--------------------------|---------|
| GSM850    | GSM/TM1   | LCH          | 244.12                   | 314.28                   | Pass    |
|           |           | MCH          | 246.47                   | 311.02                   | Pass    |
|           |           | HCH          | 243.50                   | 306.99                   | Pass    |
|           | GSM/TM2   | LCH          | 247.76                   | 309.71                   | Pass    |
|           |           | MCH          | 251.39                   | 322.22                   | Pass    |
|           |           | HCH          | 247.23                   | 317.80                   | Pass    |
| GSM1900   | GSM/TM1   | LCH          | 244.21                   | 317.42                   | Pass    |
|           |           | MCH          | 243.52                   | 308.89                   | Pass    |
|           |           | HCH          | 244.62                   | 316.81                   | Pass    |
|           | GSM/TM2   | LCH          | 248.60                   | 313.50                   | Pass    |
|           |           | MCH          | 247.67                   | 314.96                   | Pass    |
|           |           | HCH          | 246.06                   | 315.91                   | Pass    |



Part II - Test Plots

4.1 For GSM

4.1.1 Test Band = GSM850

4.1.1.1 Test Mode = GSM/TM1

4.1.1.1.1 Test Channel = LCH



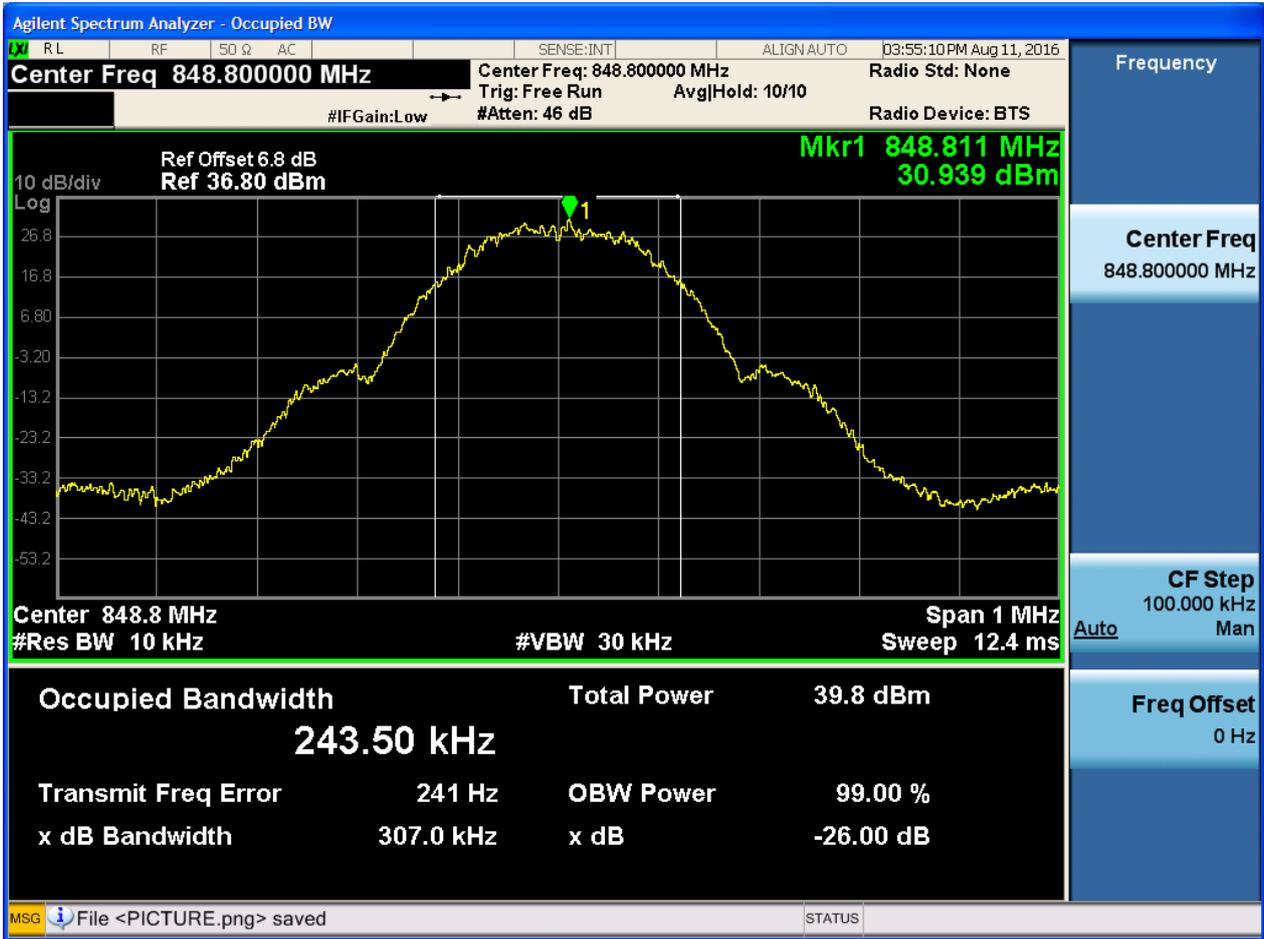


4.1.1.1.2 Test Channel = MCH





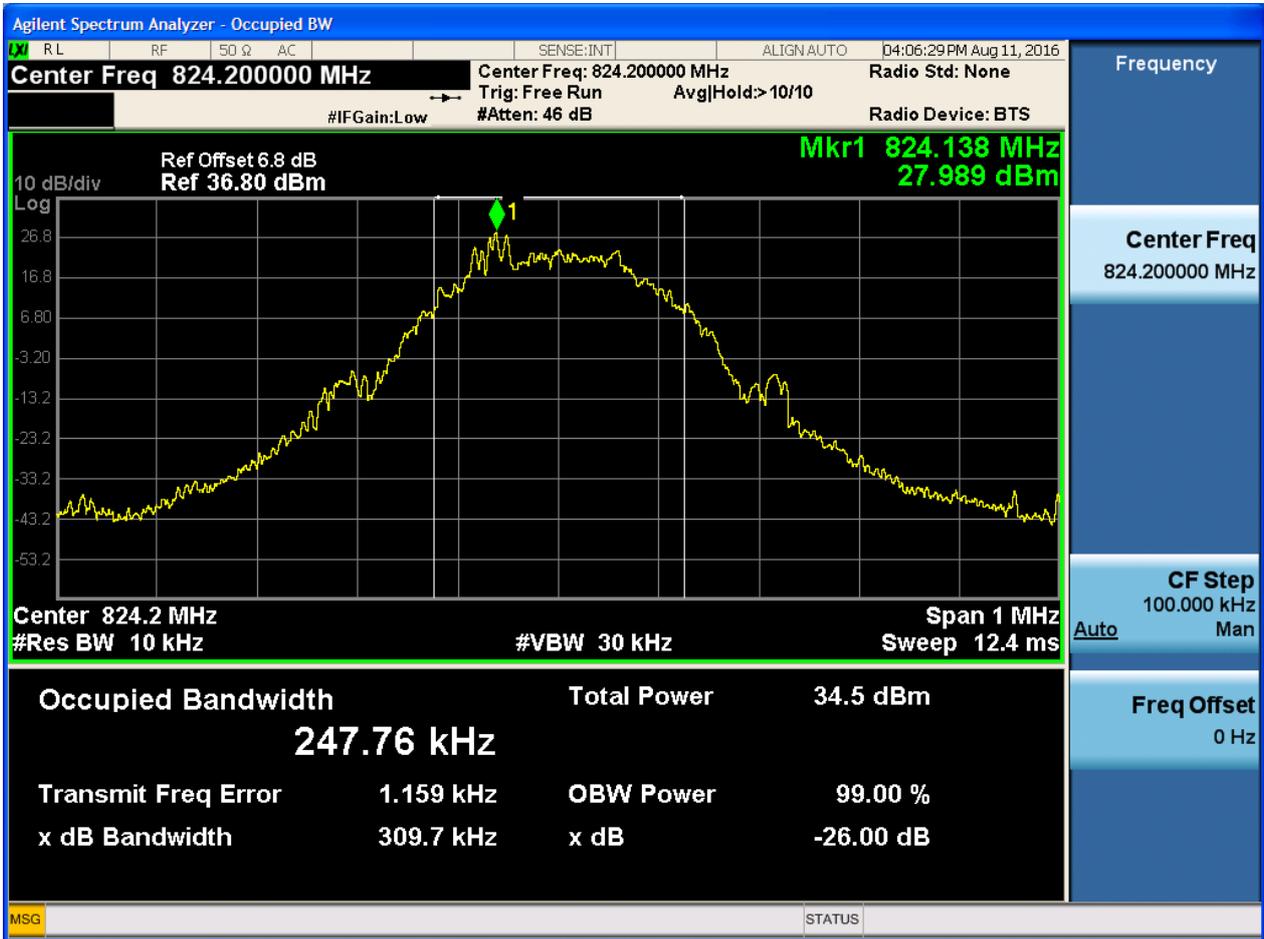
4.1.1.1.3 Test Channel = HCH





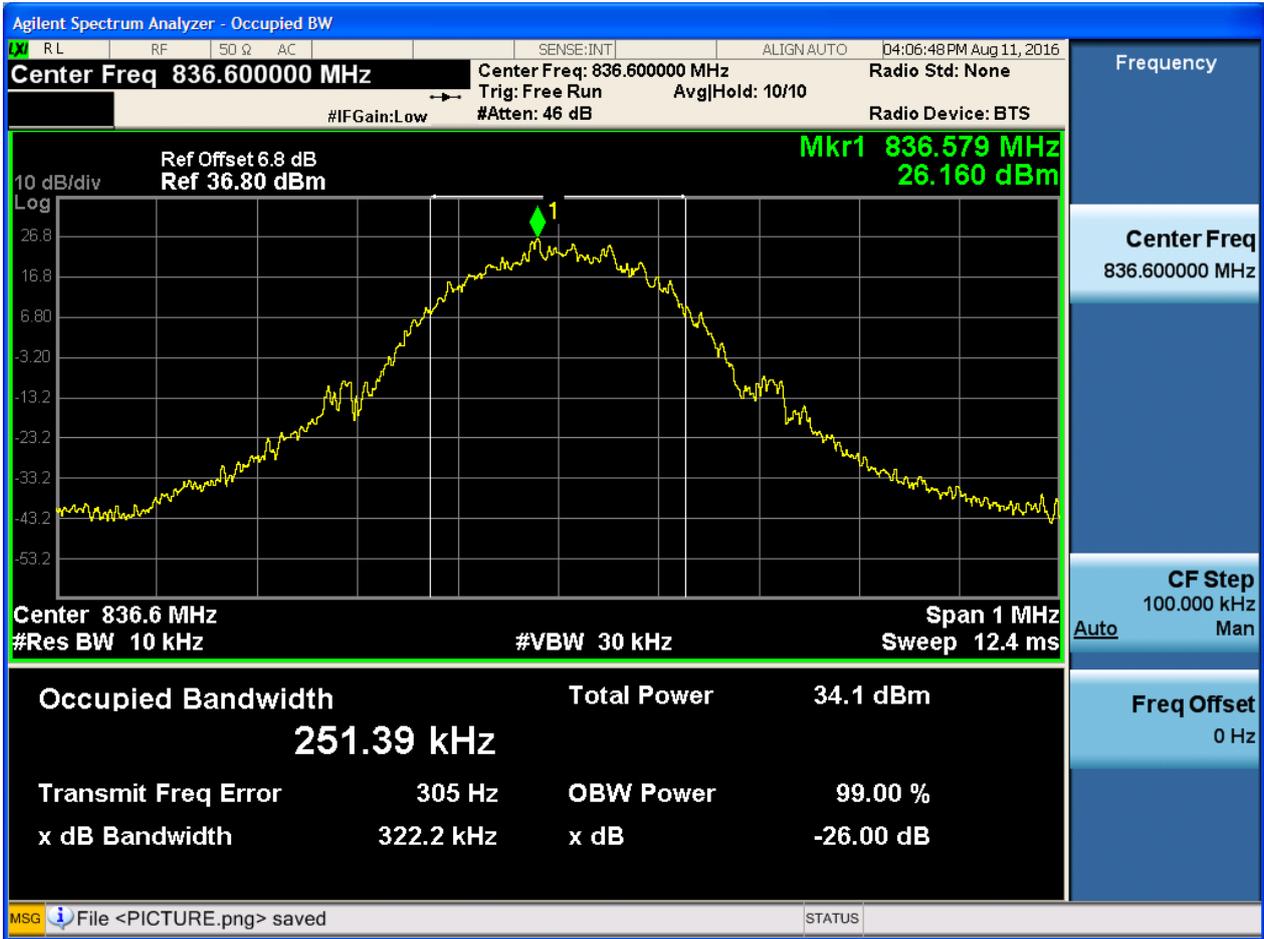
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4.1.1.2.1 Test Channel = LCH





4.1.1.2.2 Test Channel = MCH





4.1.1.2.3 Test Channel = HCH





4.1.2 Test Band = GSM1900

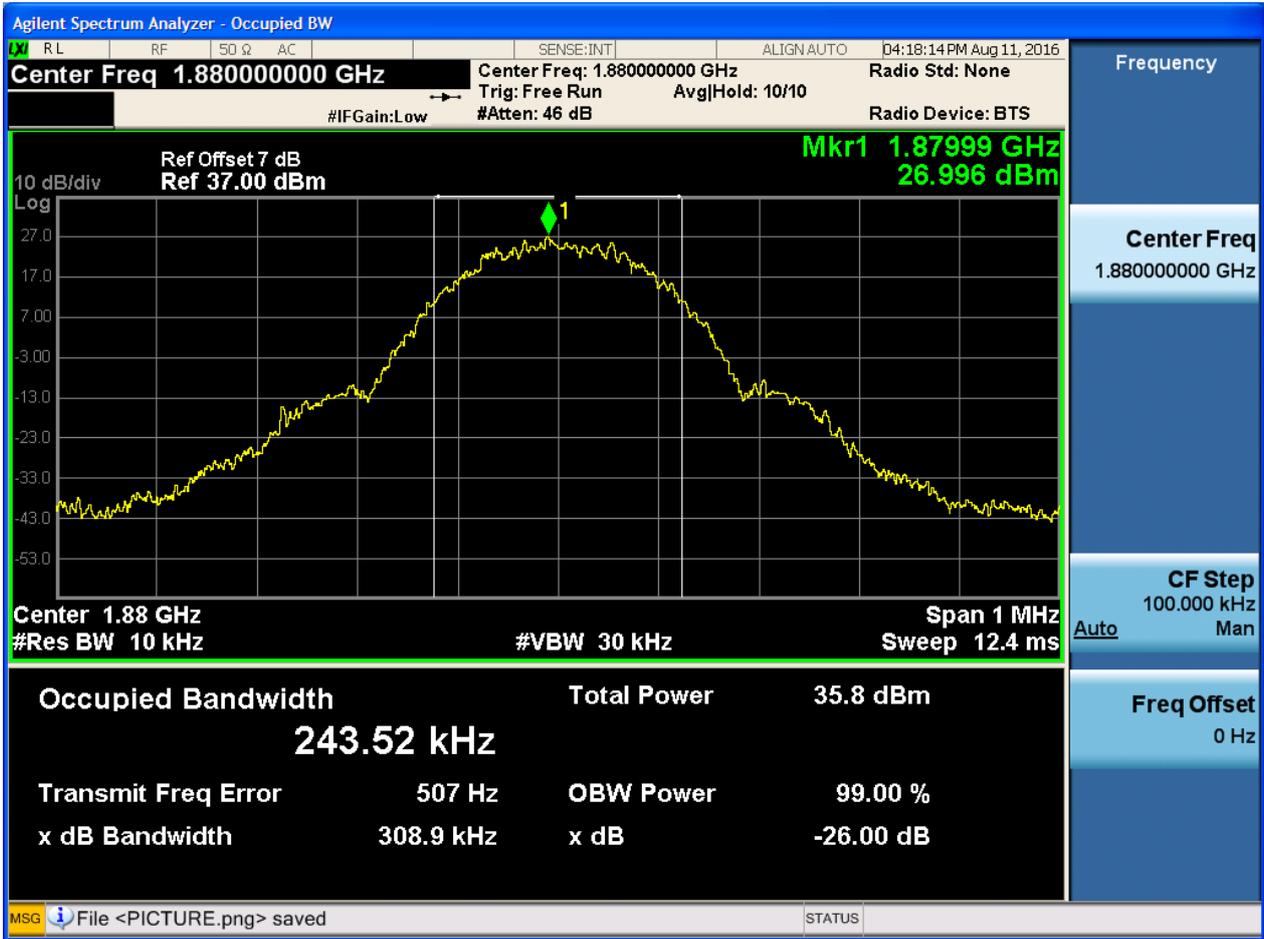
4.1.2.1 Test Mode = GSM/TM1

4.1.2.1.1 Test Channel = LCH



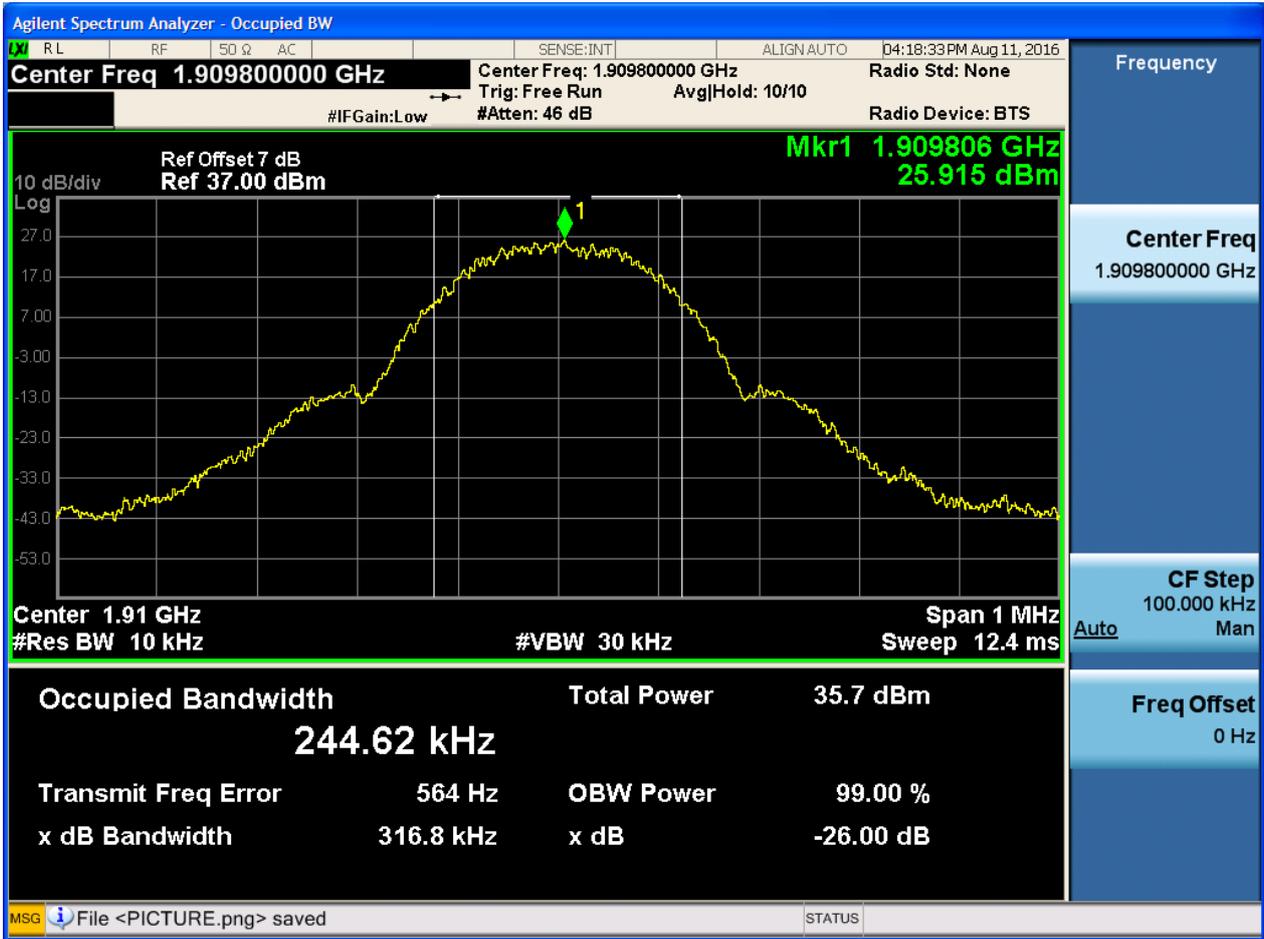


### 4.1.2.1.2 Test Channel = MCH





4.1.2.1.3 Test Channel = HCH





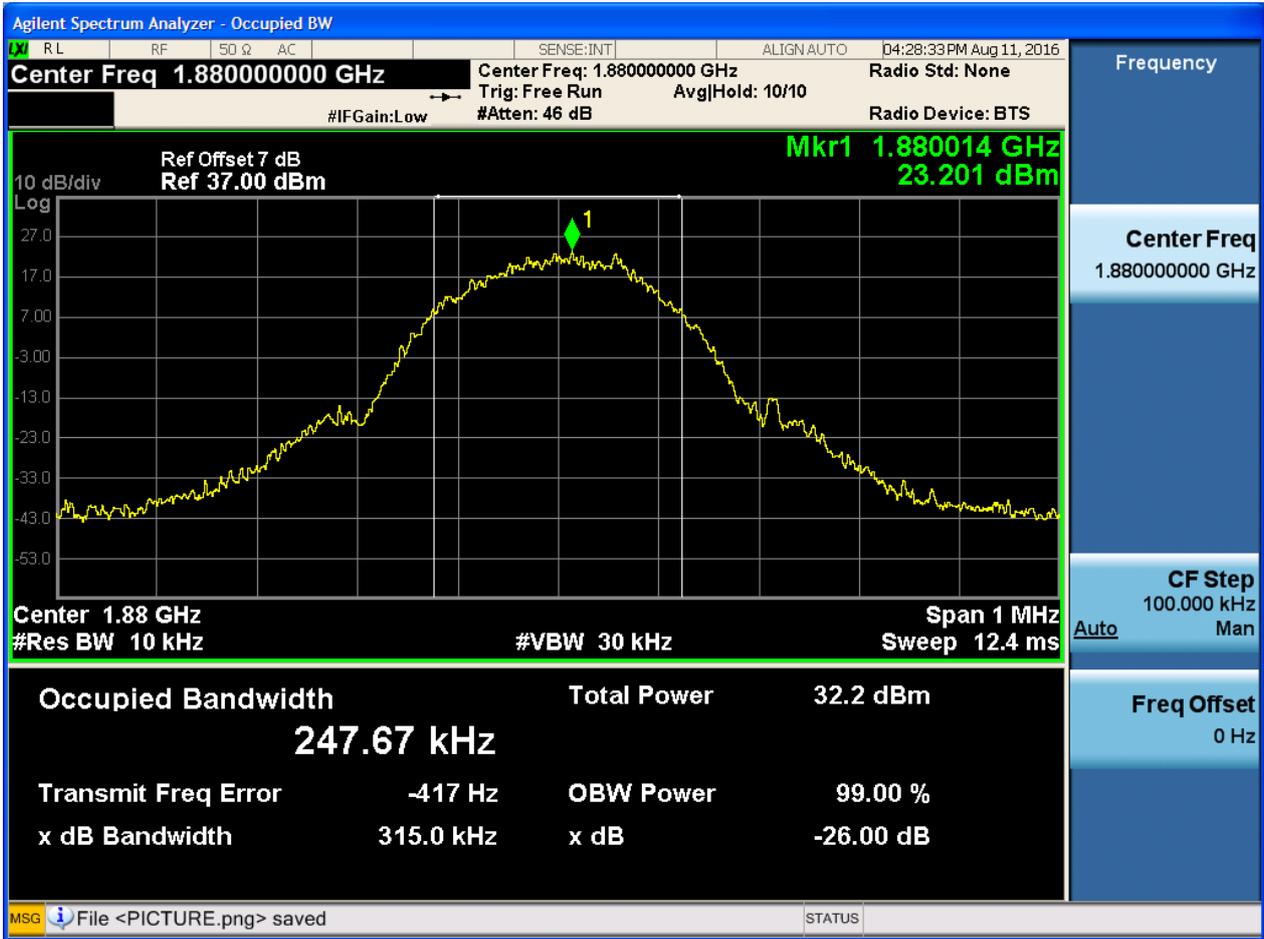
### 4.1.2.2 Test Mode = GSM/TM2

#### 4.1.2.2.1 Test Channel = LCH



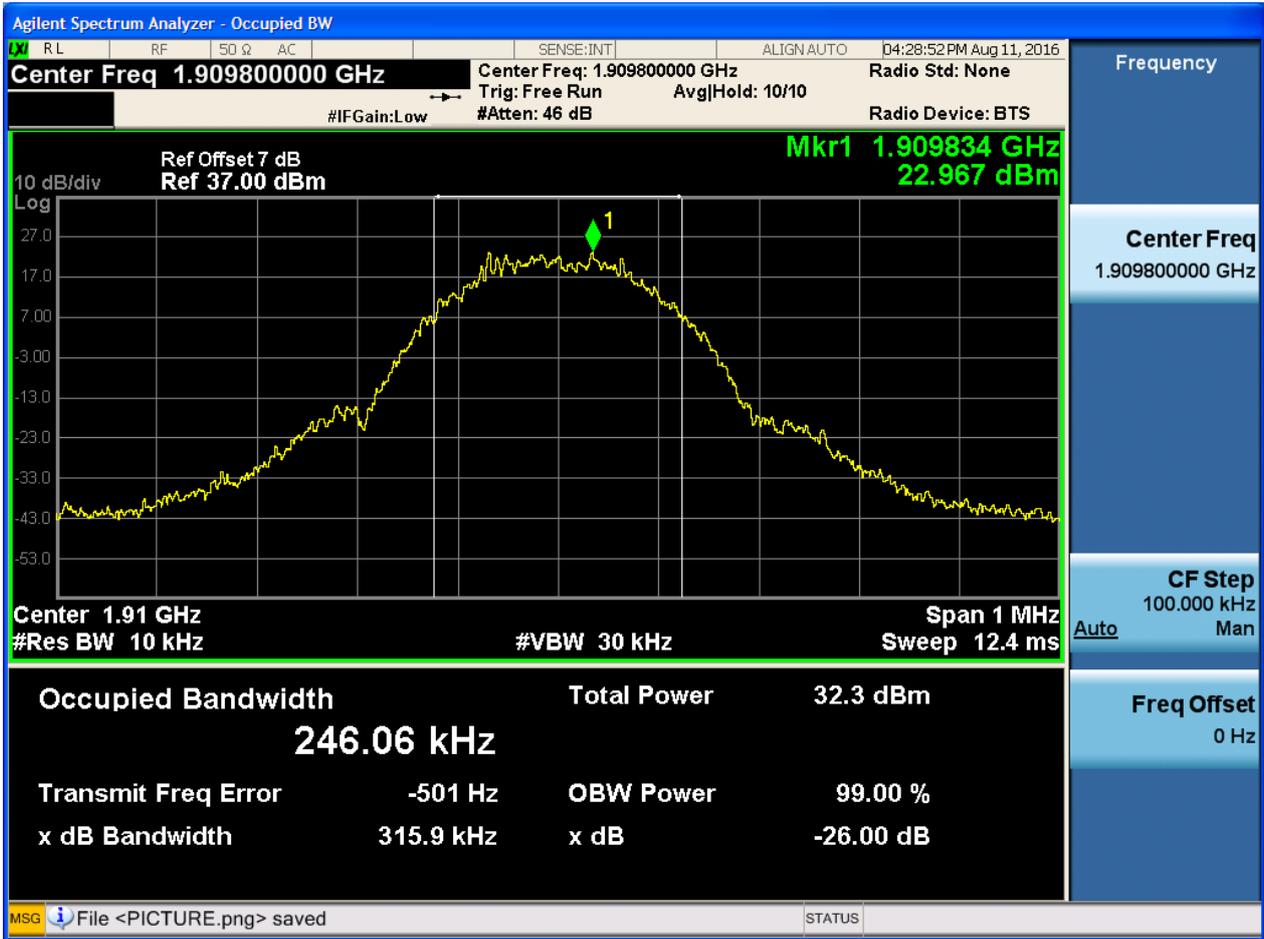


4.1.2.2.2 Test Channel = MCH





4.1.2.2.3 Test Channel = HCH





# 5Appendix\_E: Band Edges Compliance

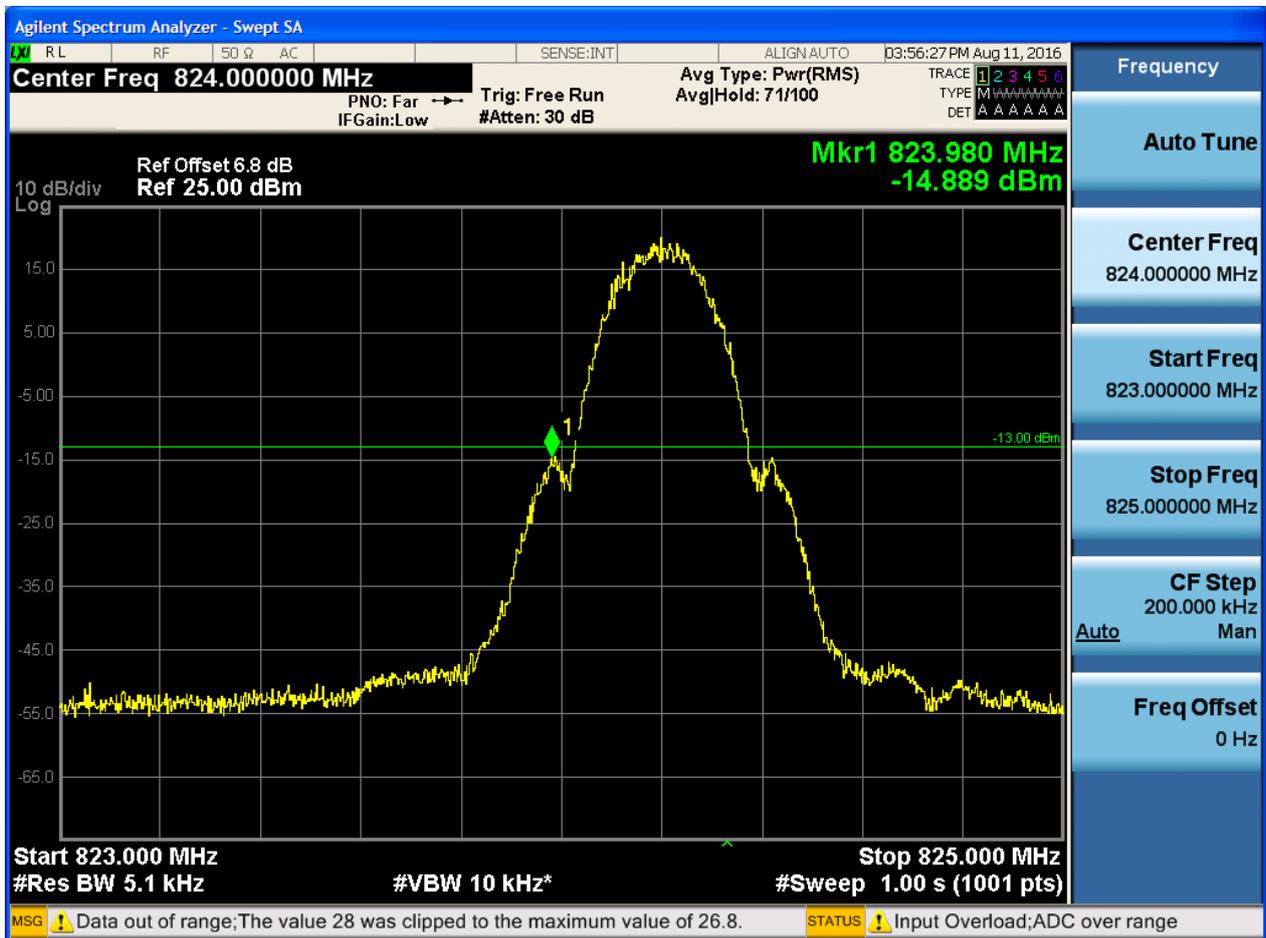
## Part I - Test Plots

### 5.1 For GSM

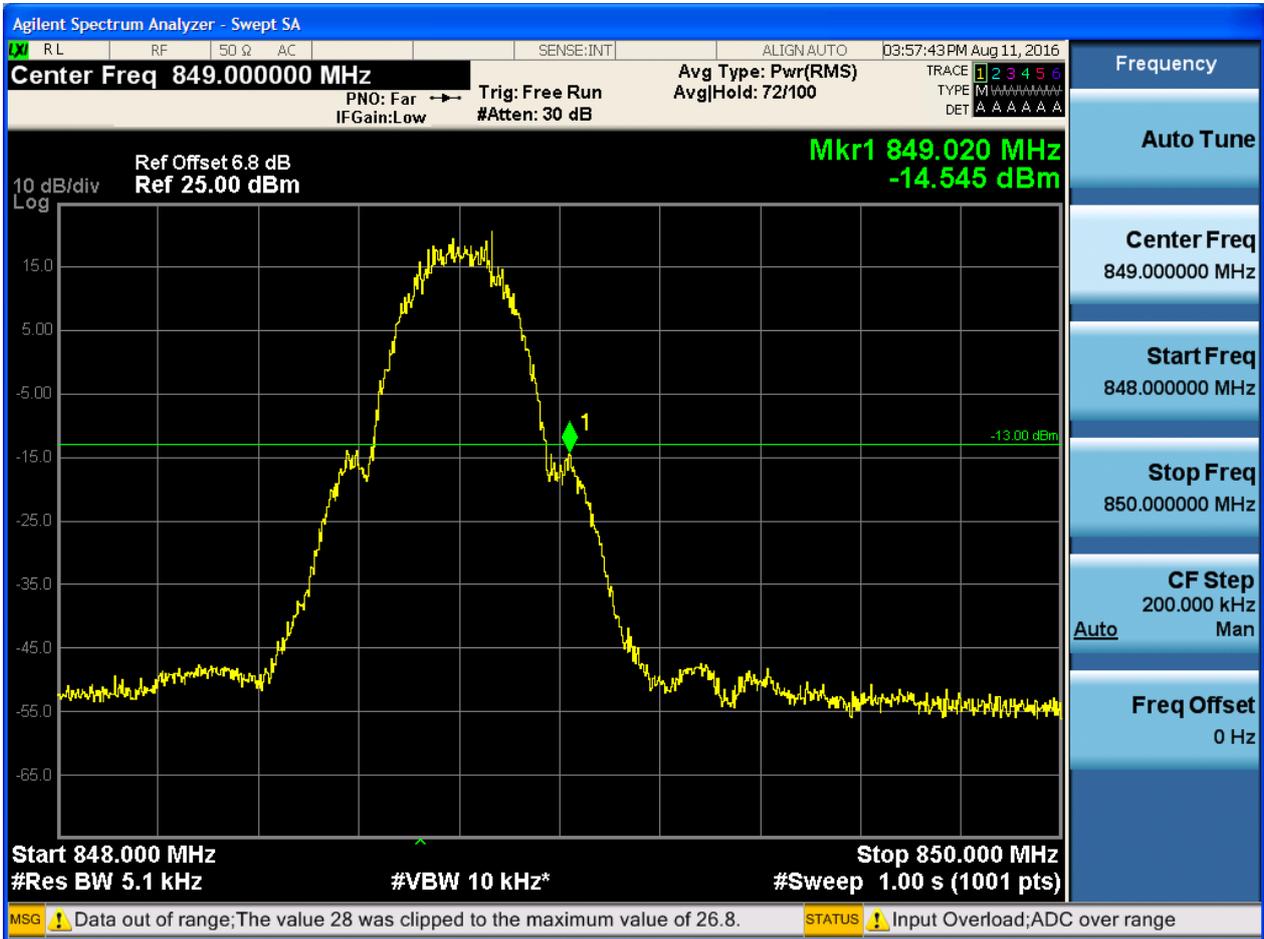
#### 5.1.1 Test Band = GSM850

##### 5.1.1.1 Test Mode = GSM/TM1

##### 5.1.1.1.1 Test Channel = LCH



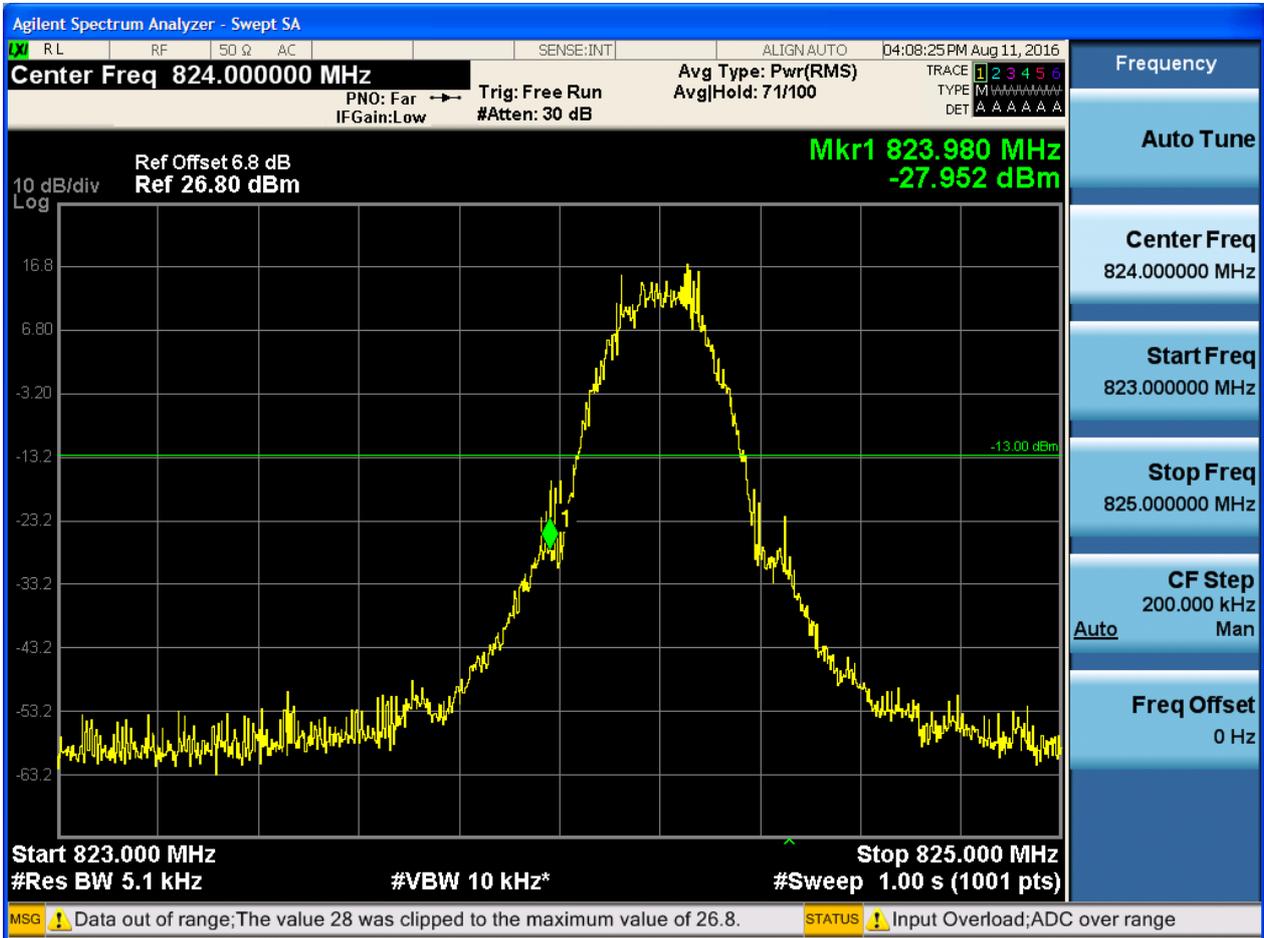
5.1.1.1.2 Test Channel = HCH





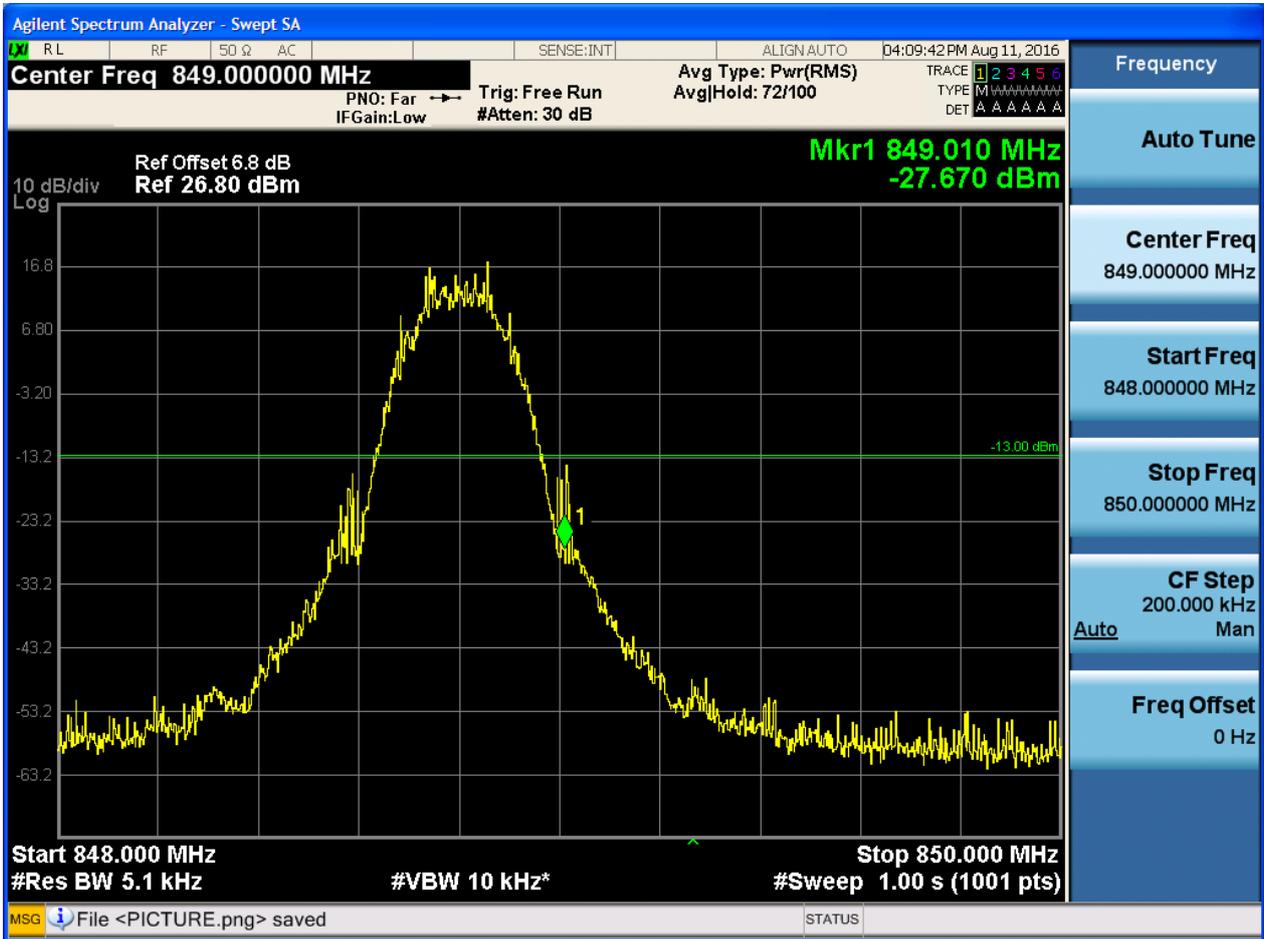
5.1.1.2 Test Mode = GSM/TM2

5.1.1.2.1 Test Channel = LCH





5.1.1.2.2 Test Channel = HCH

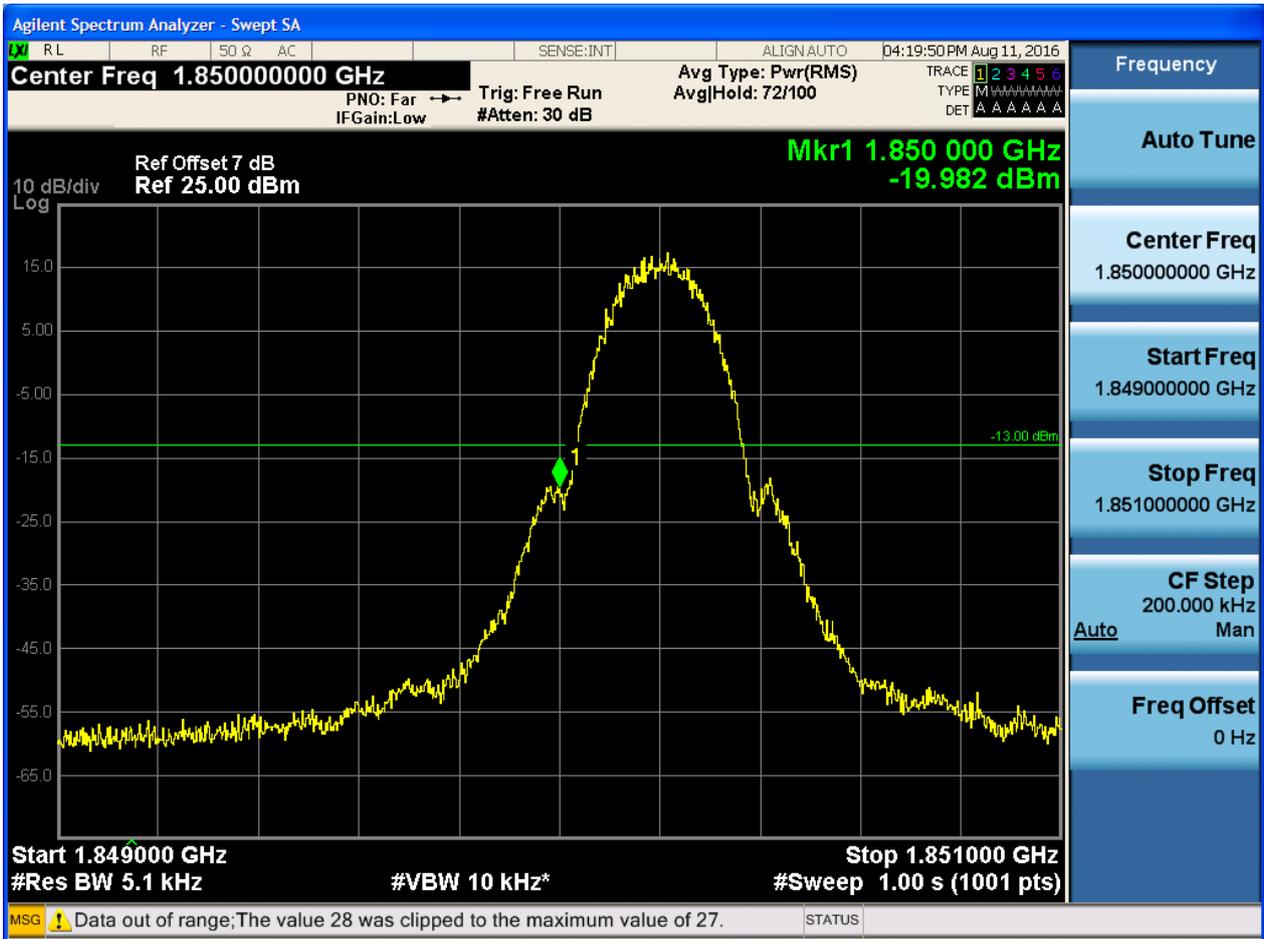




5.1.2 Test Band = GSM1900

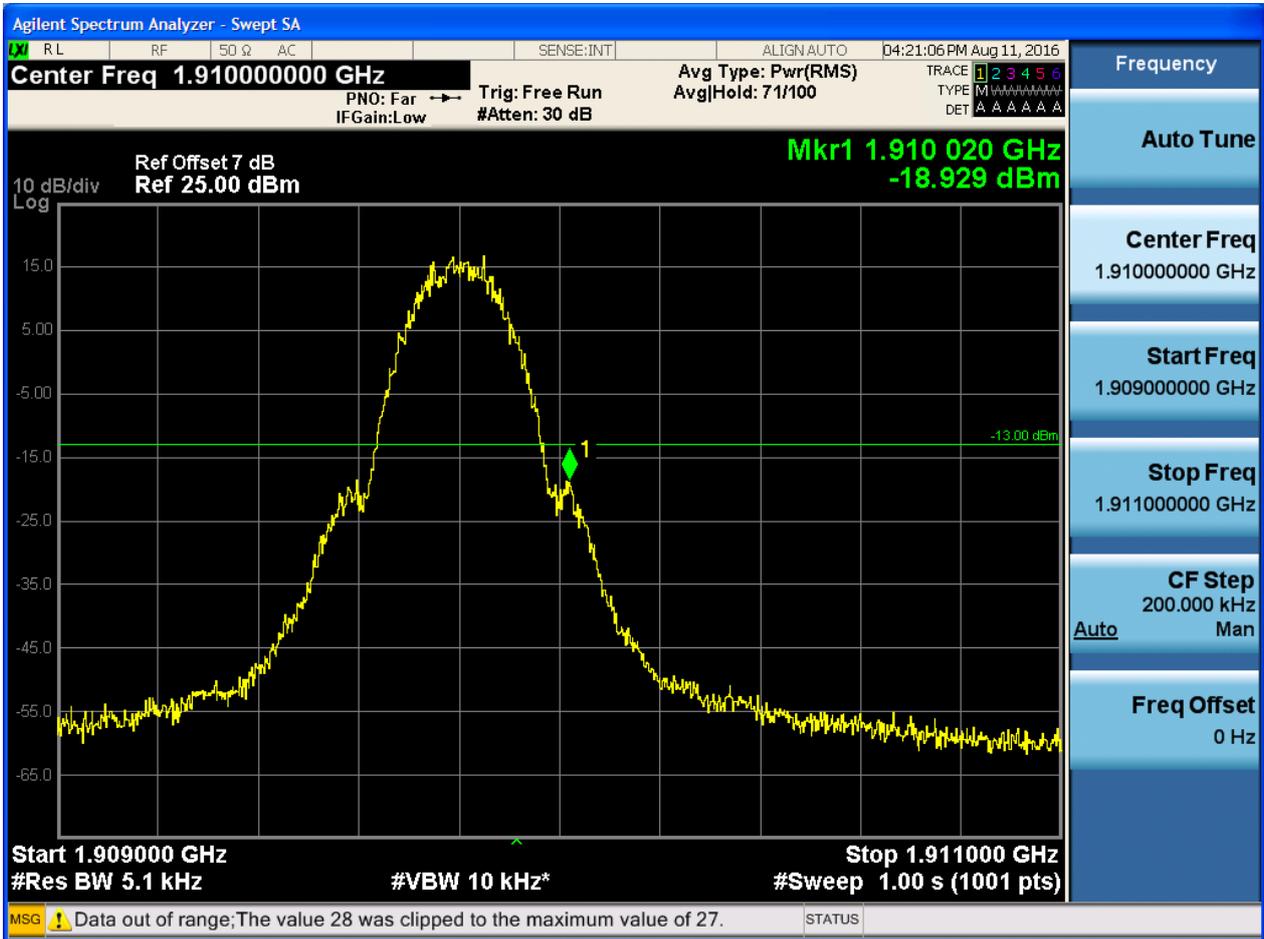
5.1.2.1 Test Mode = GSM/TM1

5.1.2.1.1 Test Channel = LCH





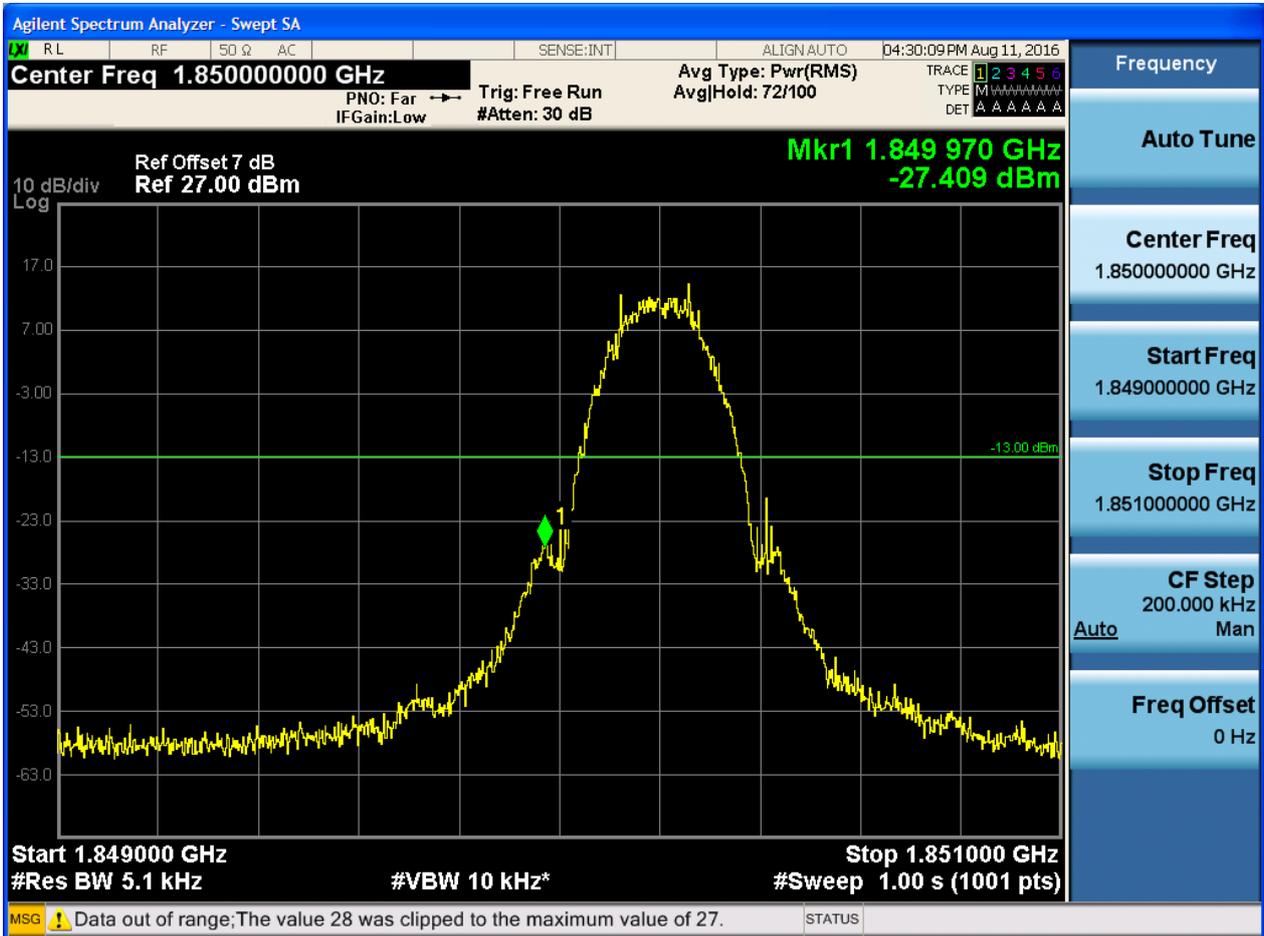
5.1.2.1.2 Test Channel = HCH



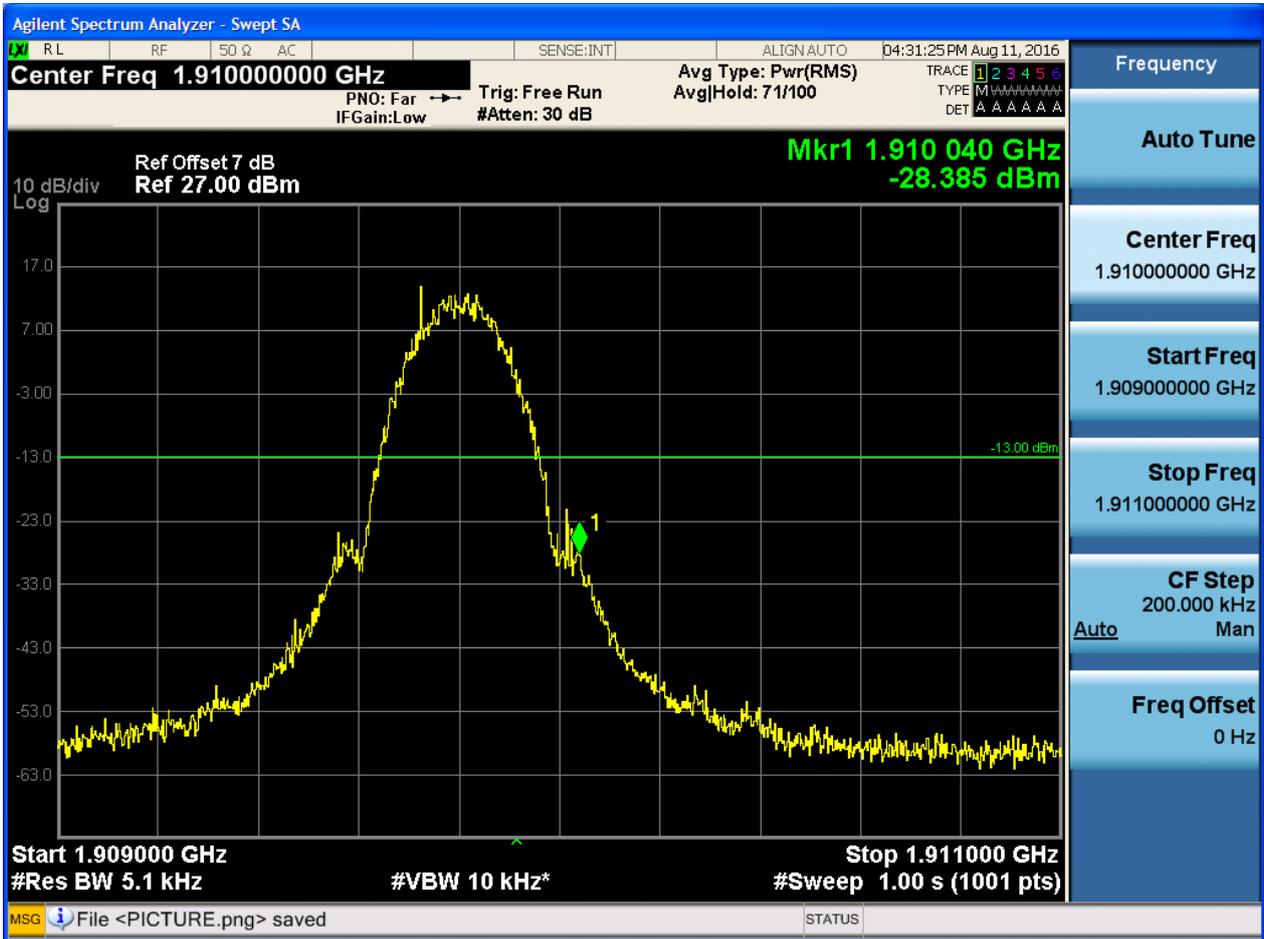


5.1.2.2 Test Mode = GSM/TM2

5.1.2.2.1 Test Channel = LCH



5.1.2.2.2 Test Channel = HCH





## 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.

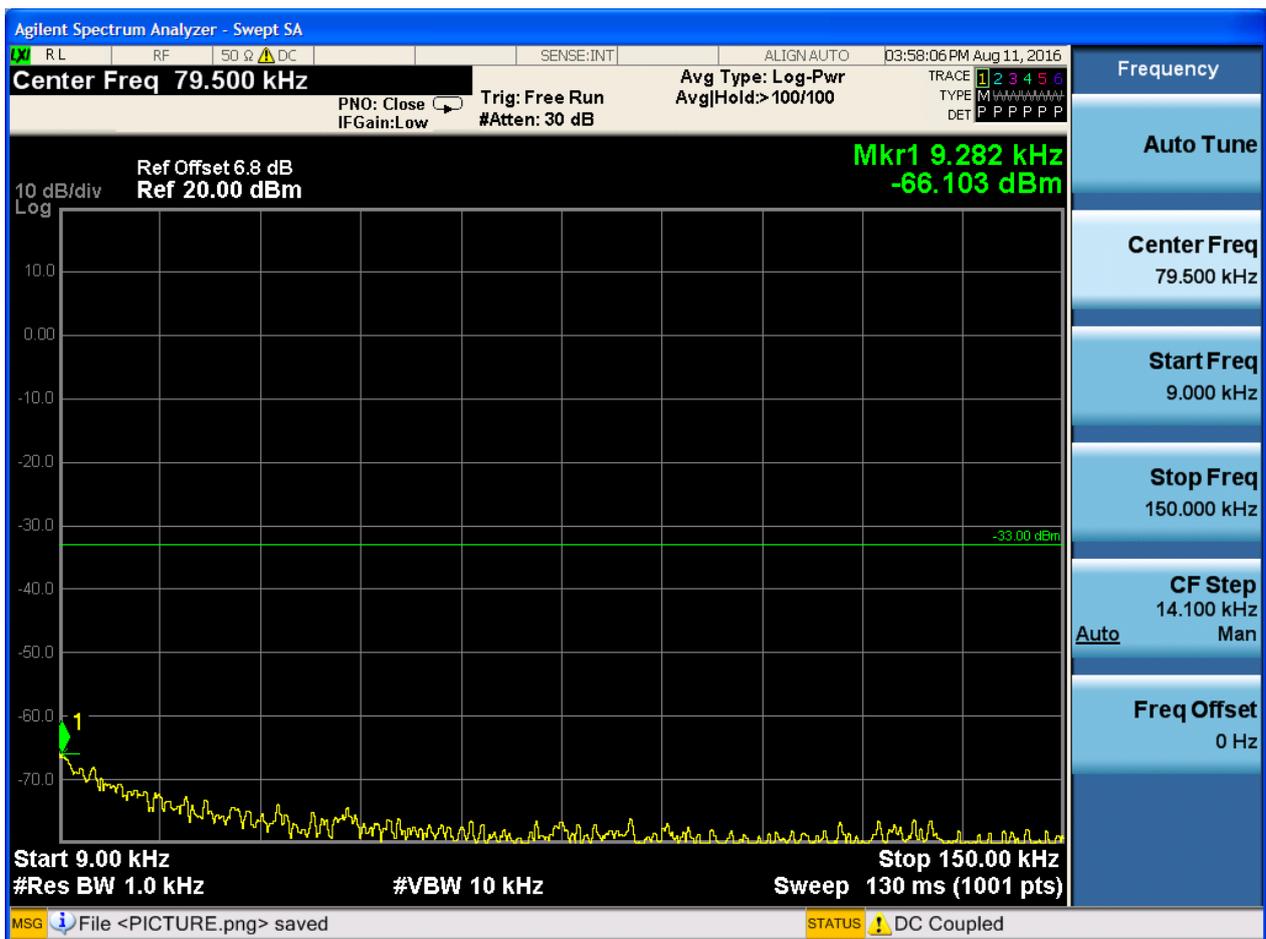
### Part I - Test Plots

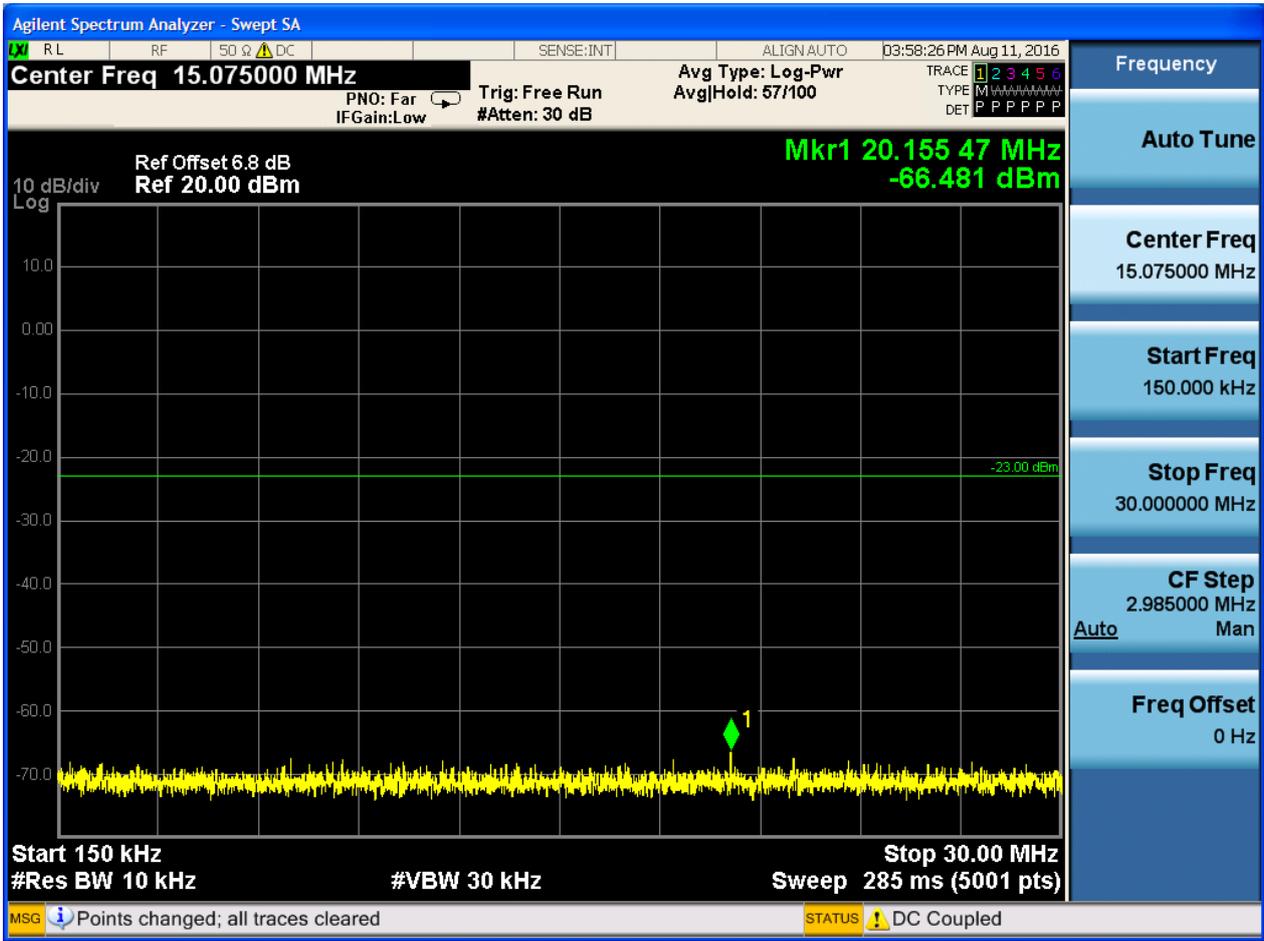
#### 6.1 For GSM

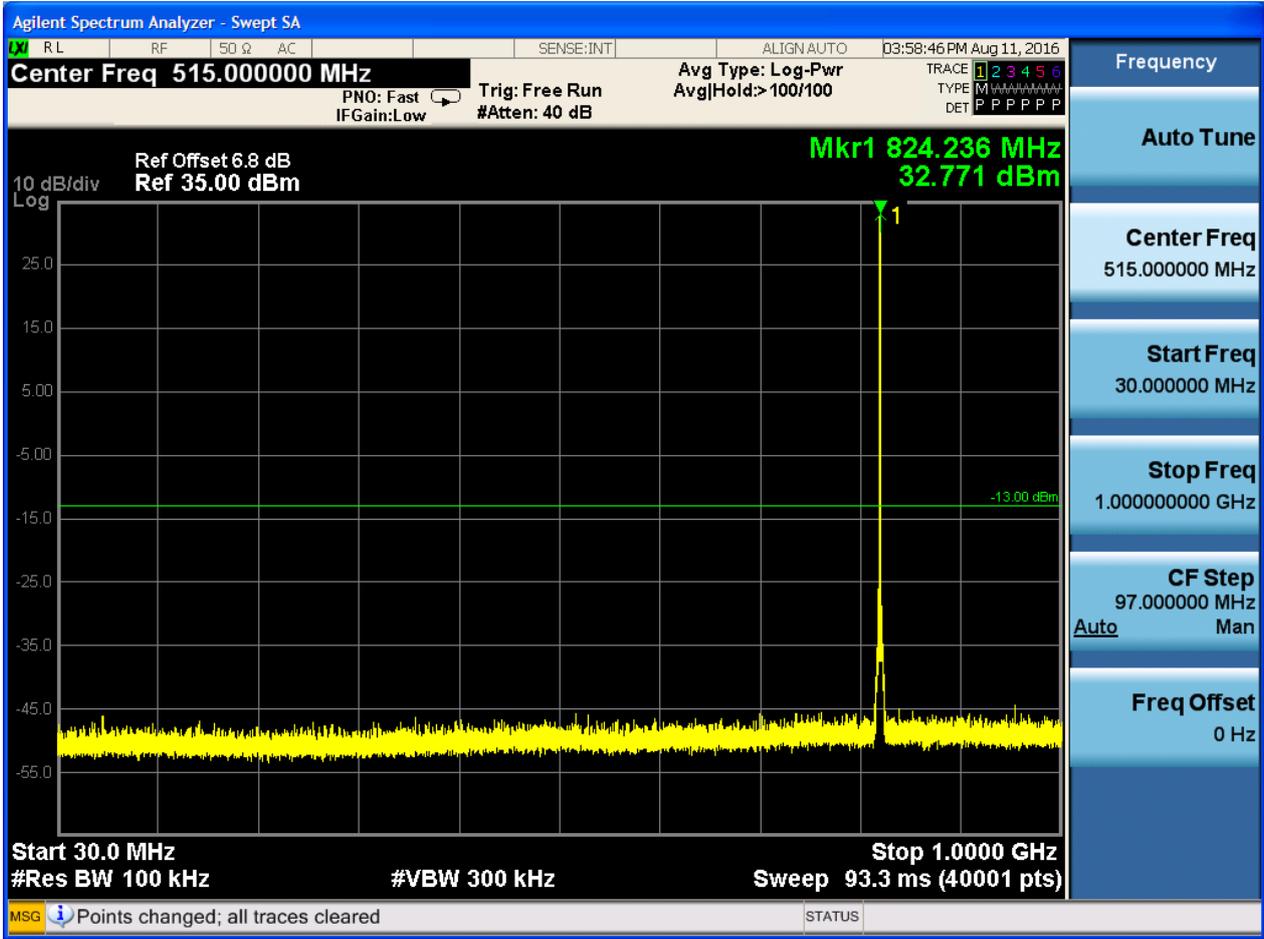
##### 6.1.1 Test Band = GSM850

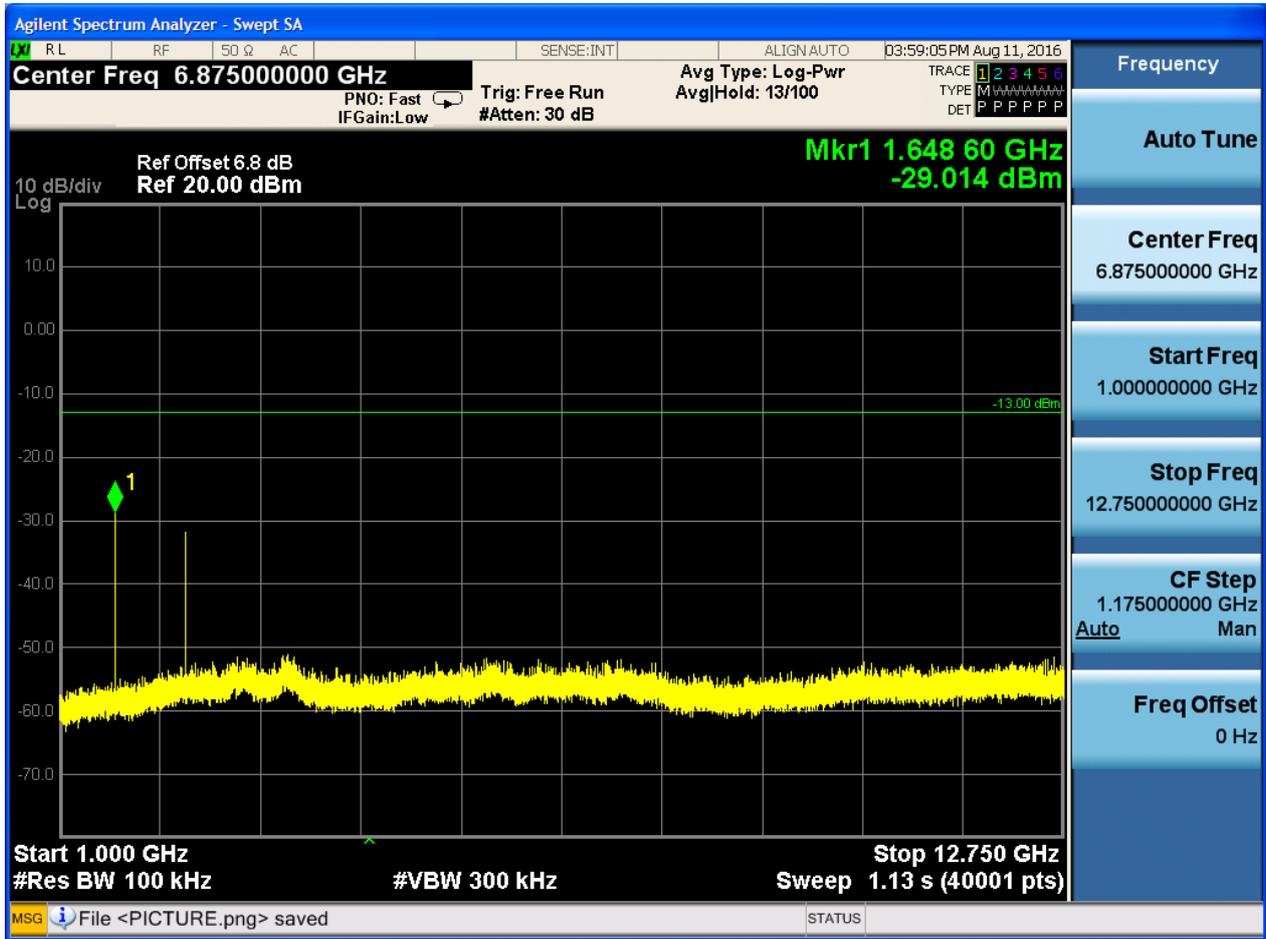
##### 6.1.1.1 Test Mode = GSM/TM1

##### 6.1.1.1.1 Test Channel = LCH



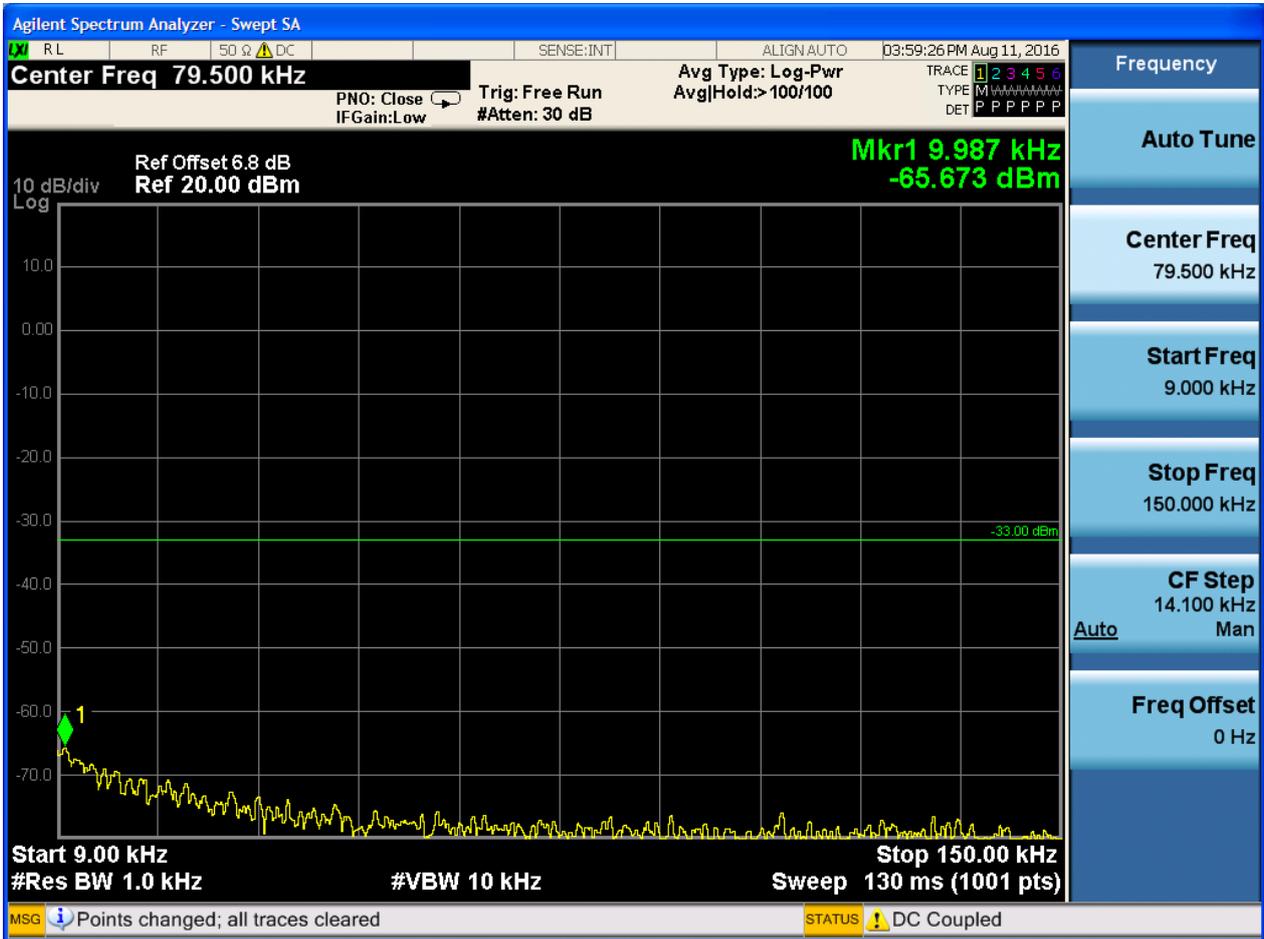


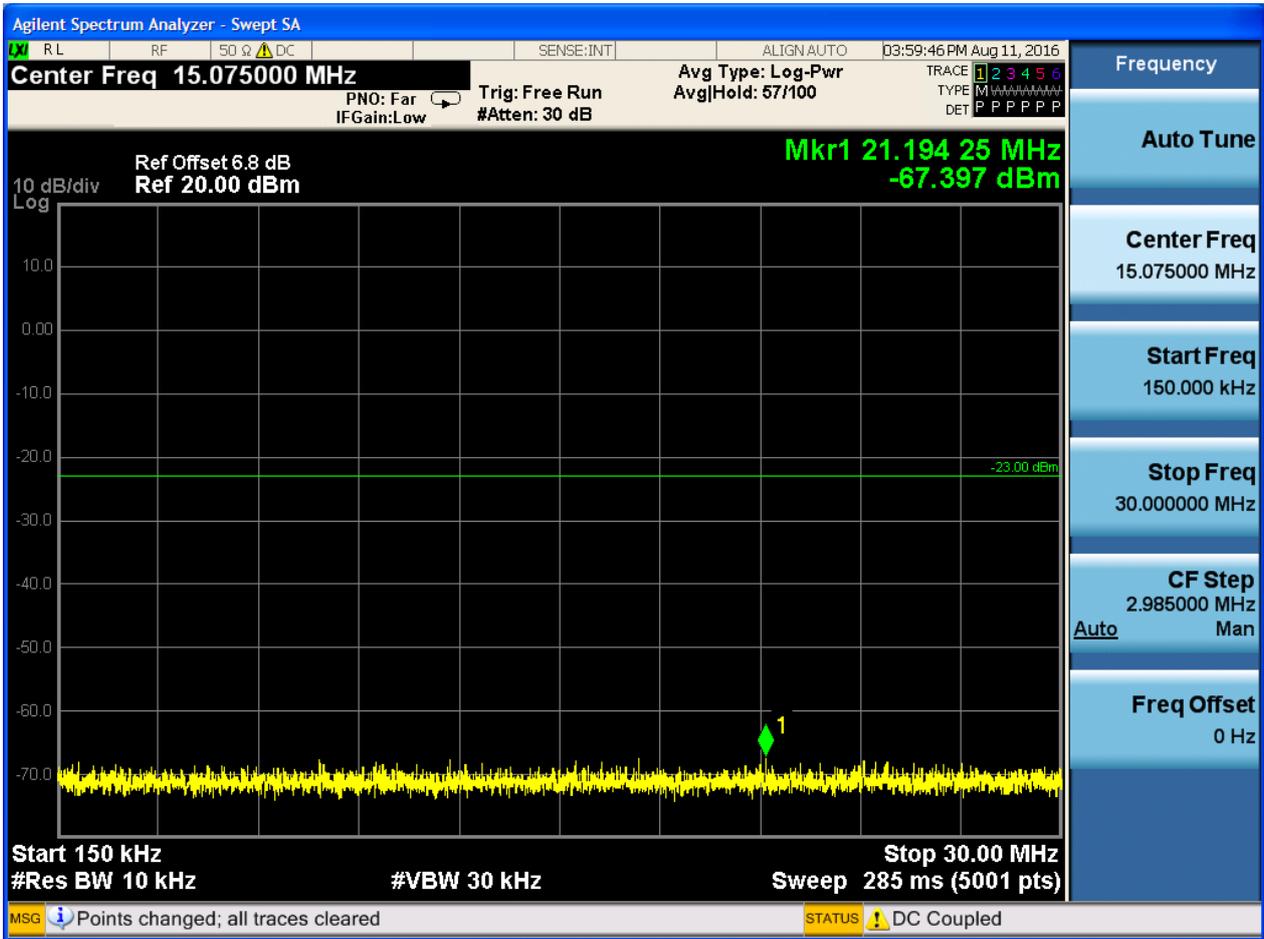


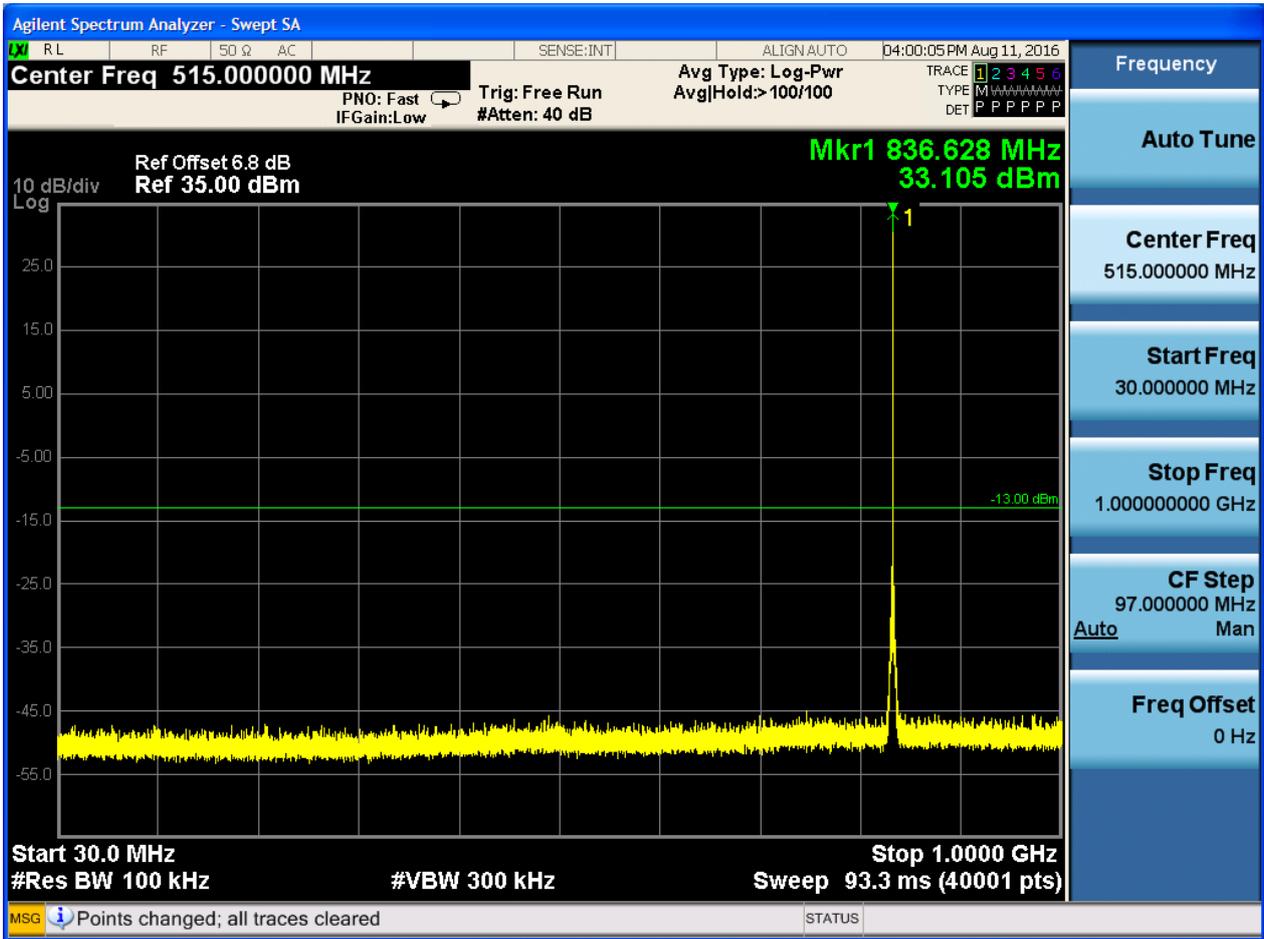


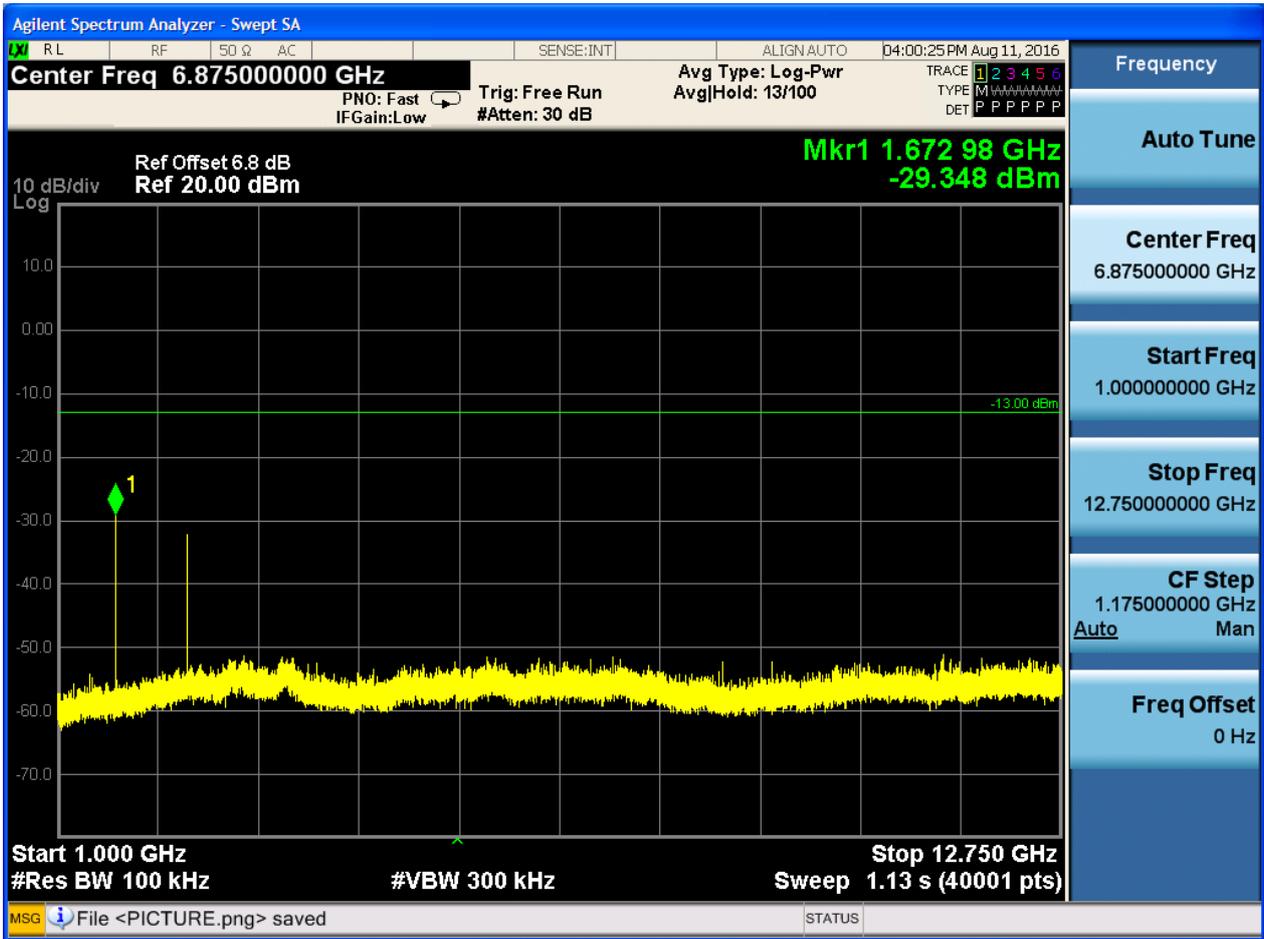


### 6.1.1.1.2 Test Channel = MCH



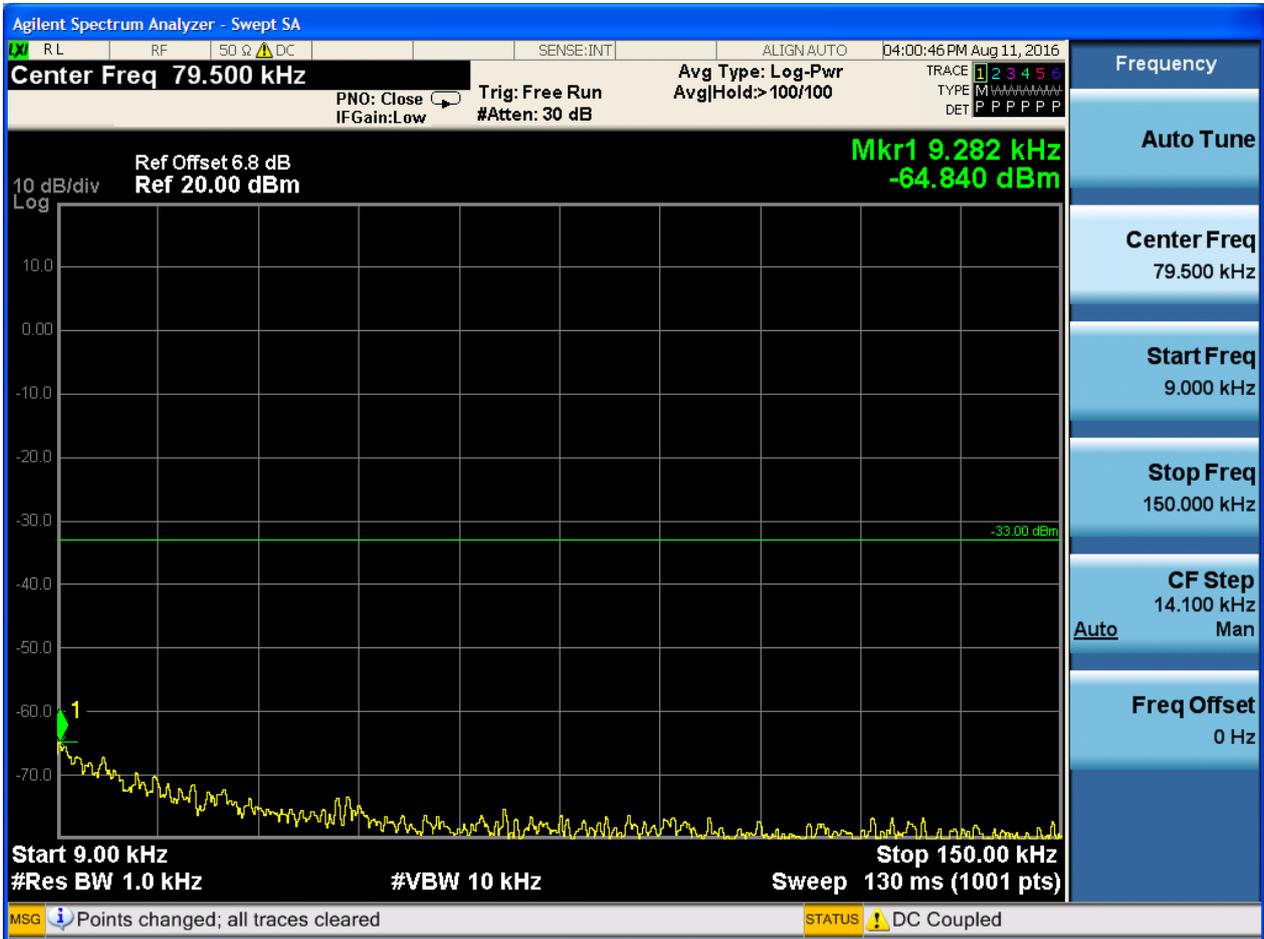


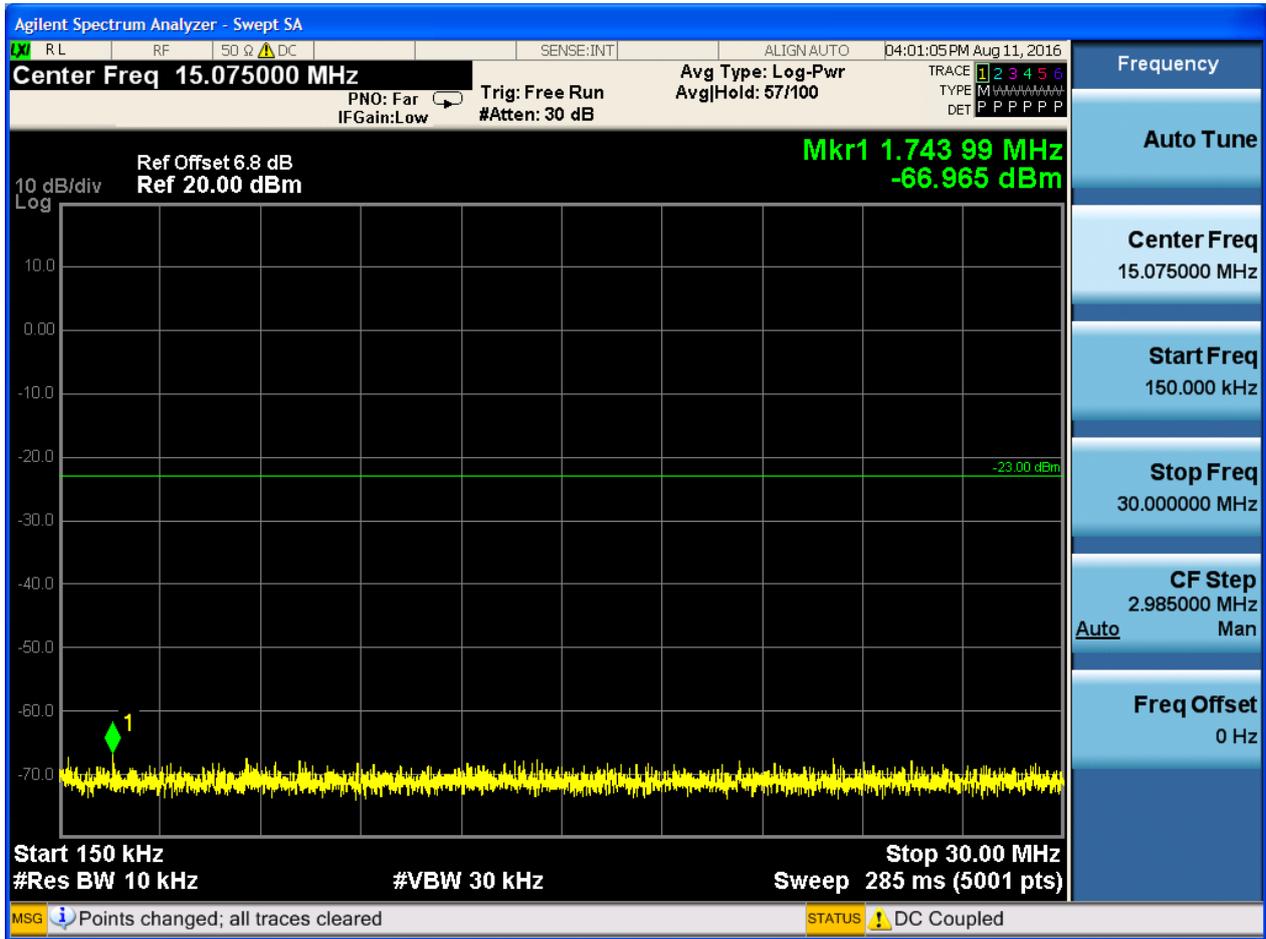


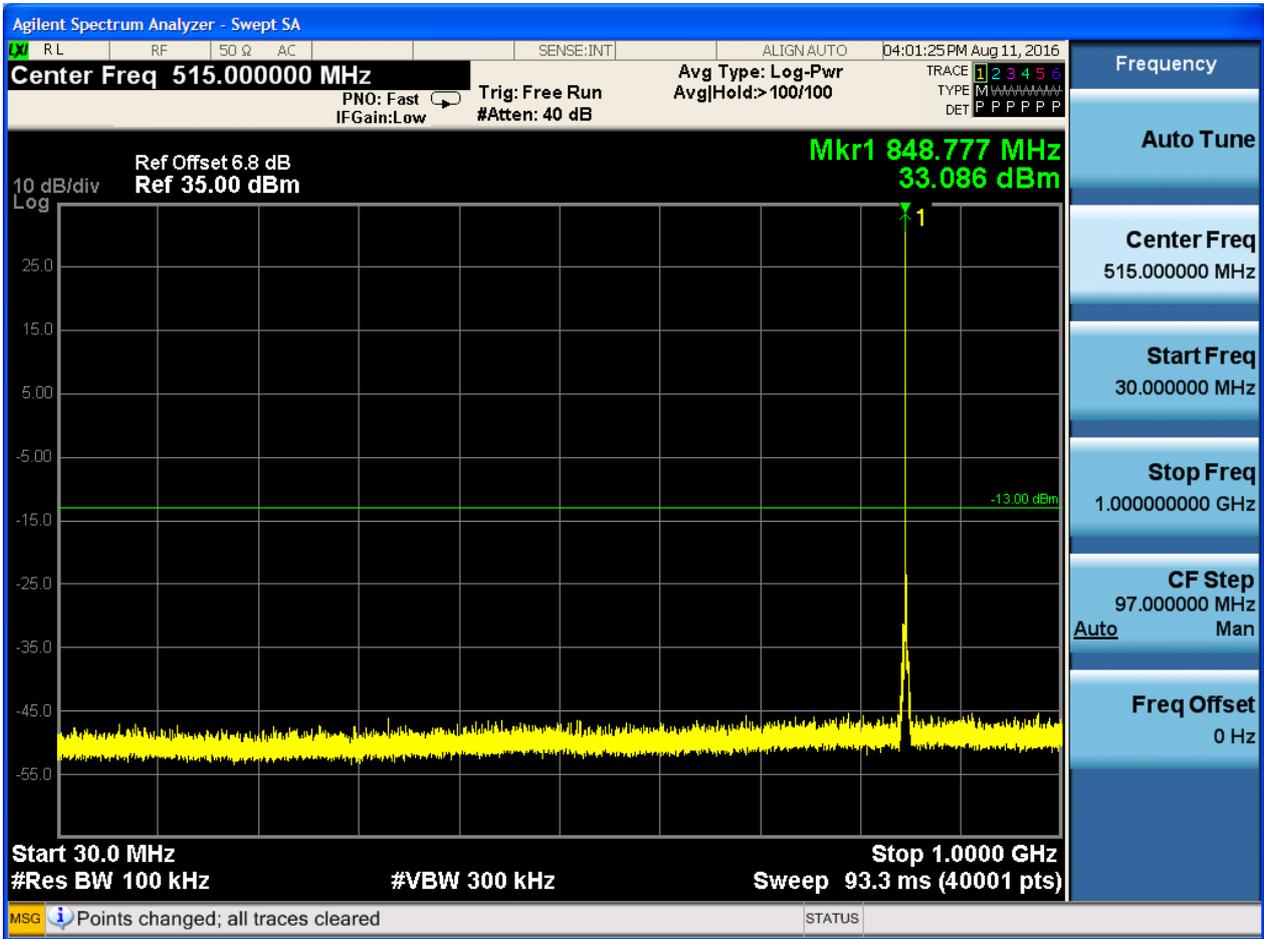


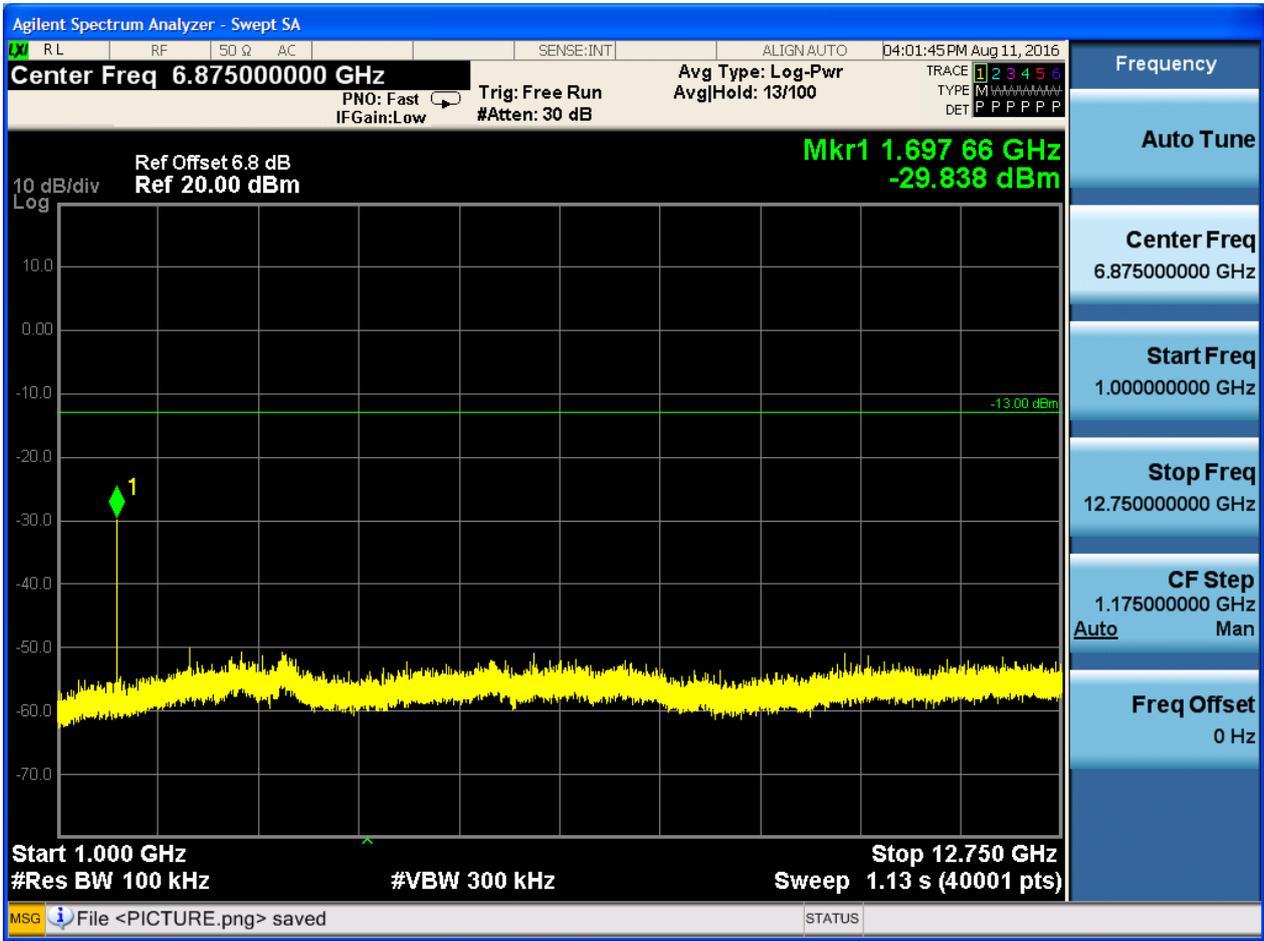


### 6.1.1.1.3 Test Channel = HCH

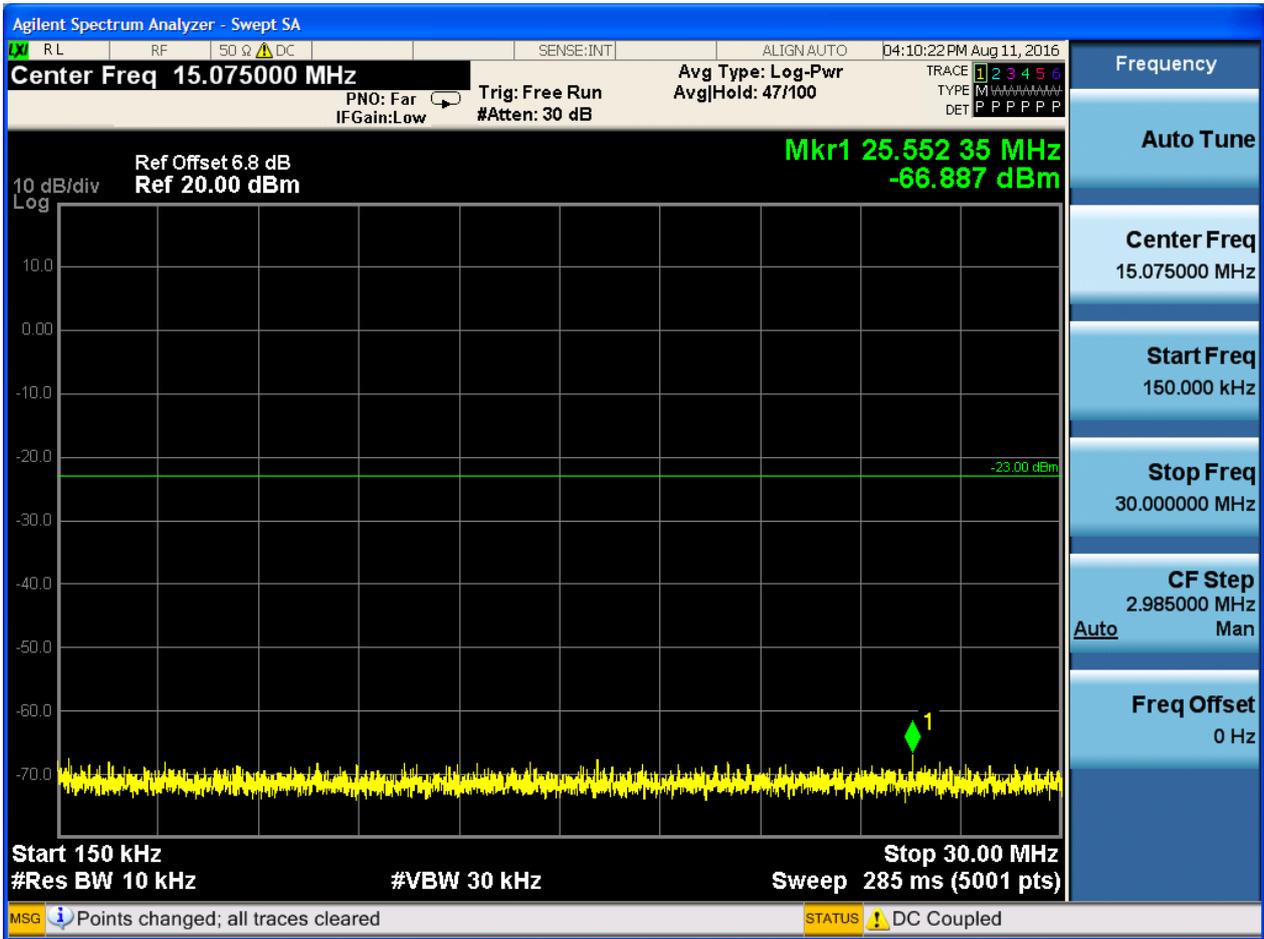


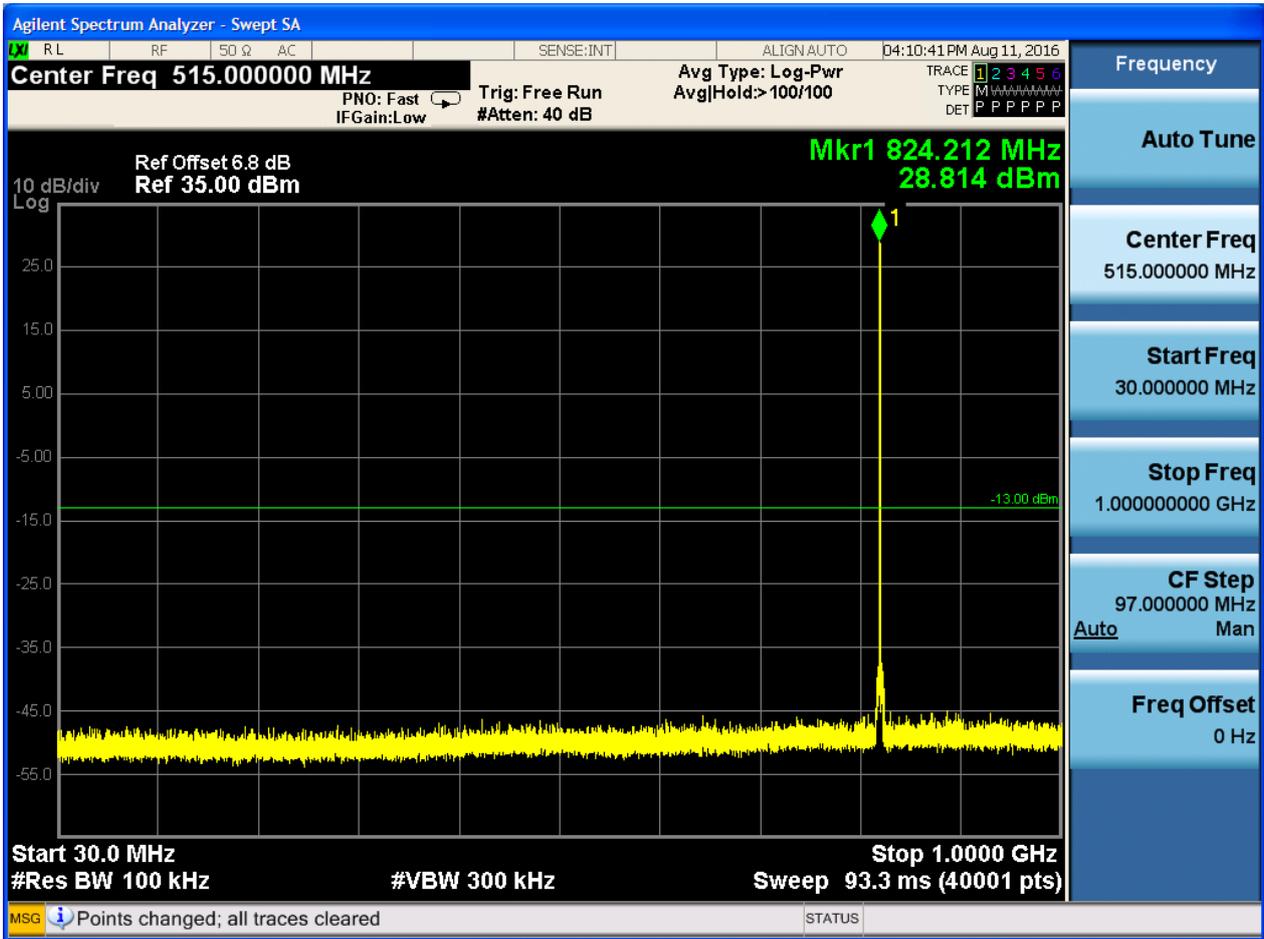


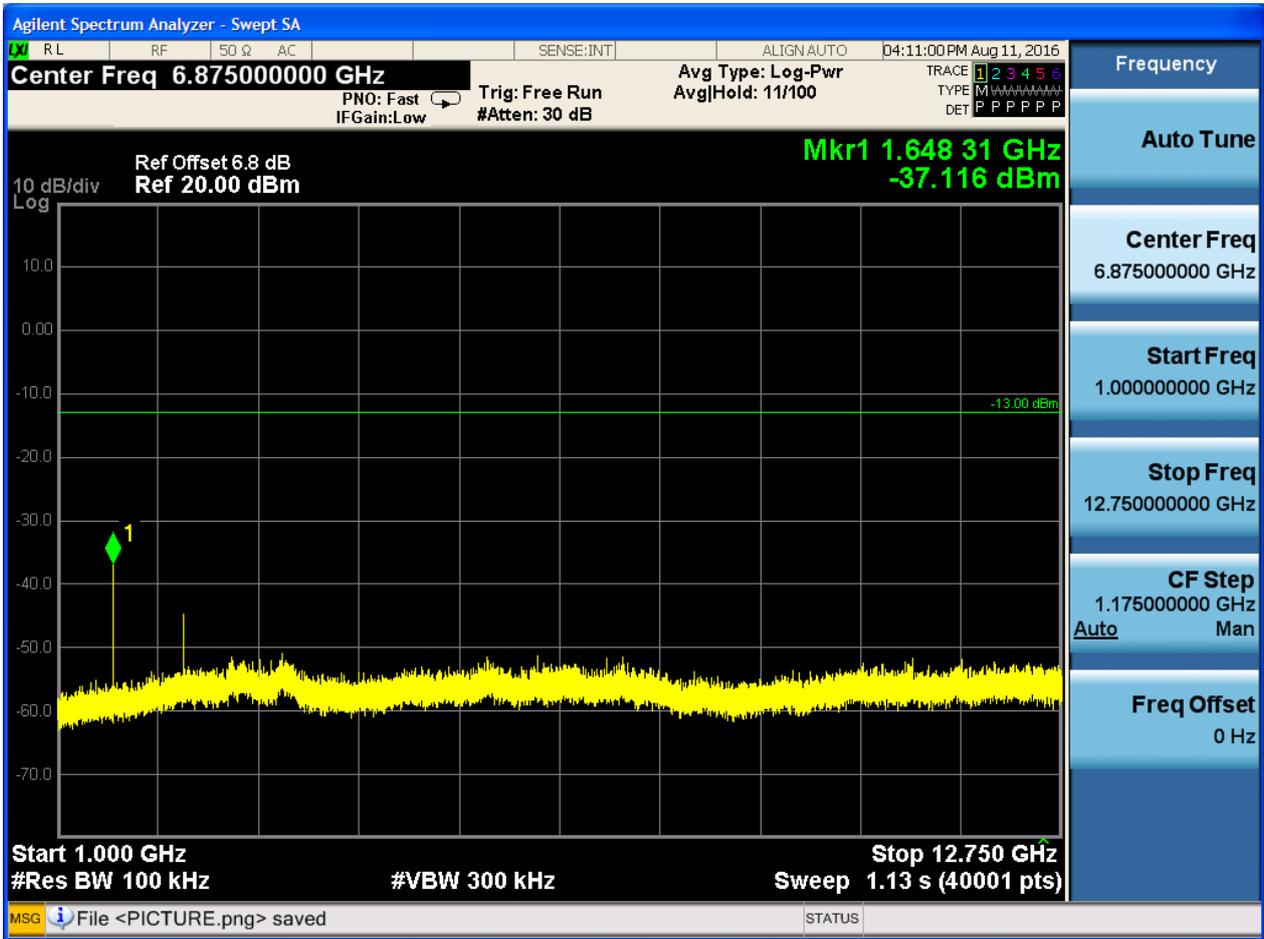






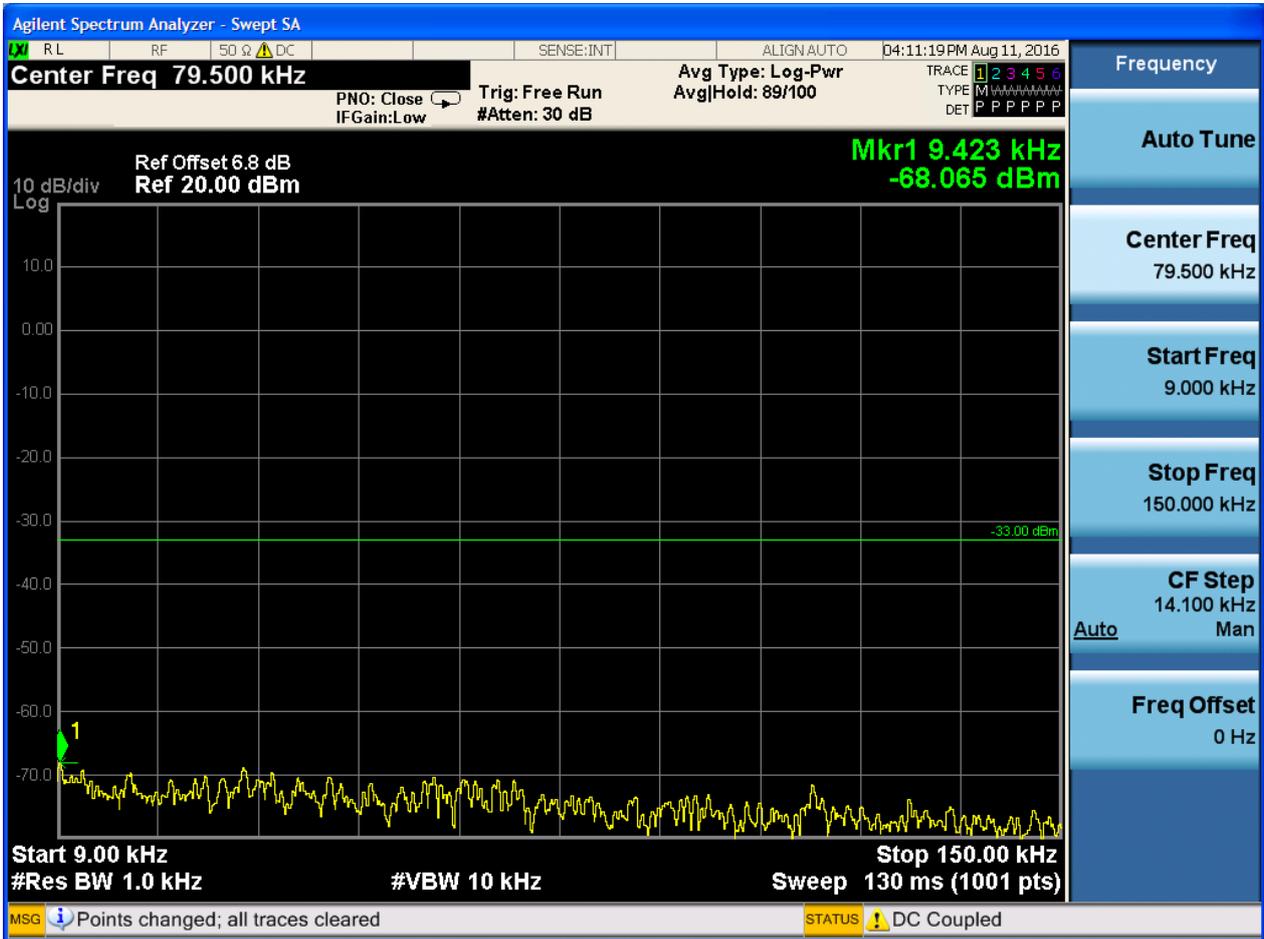


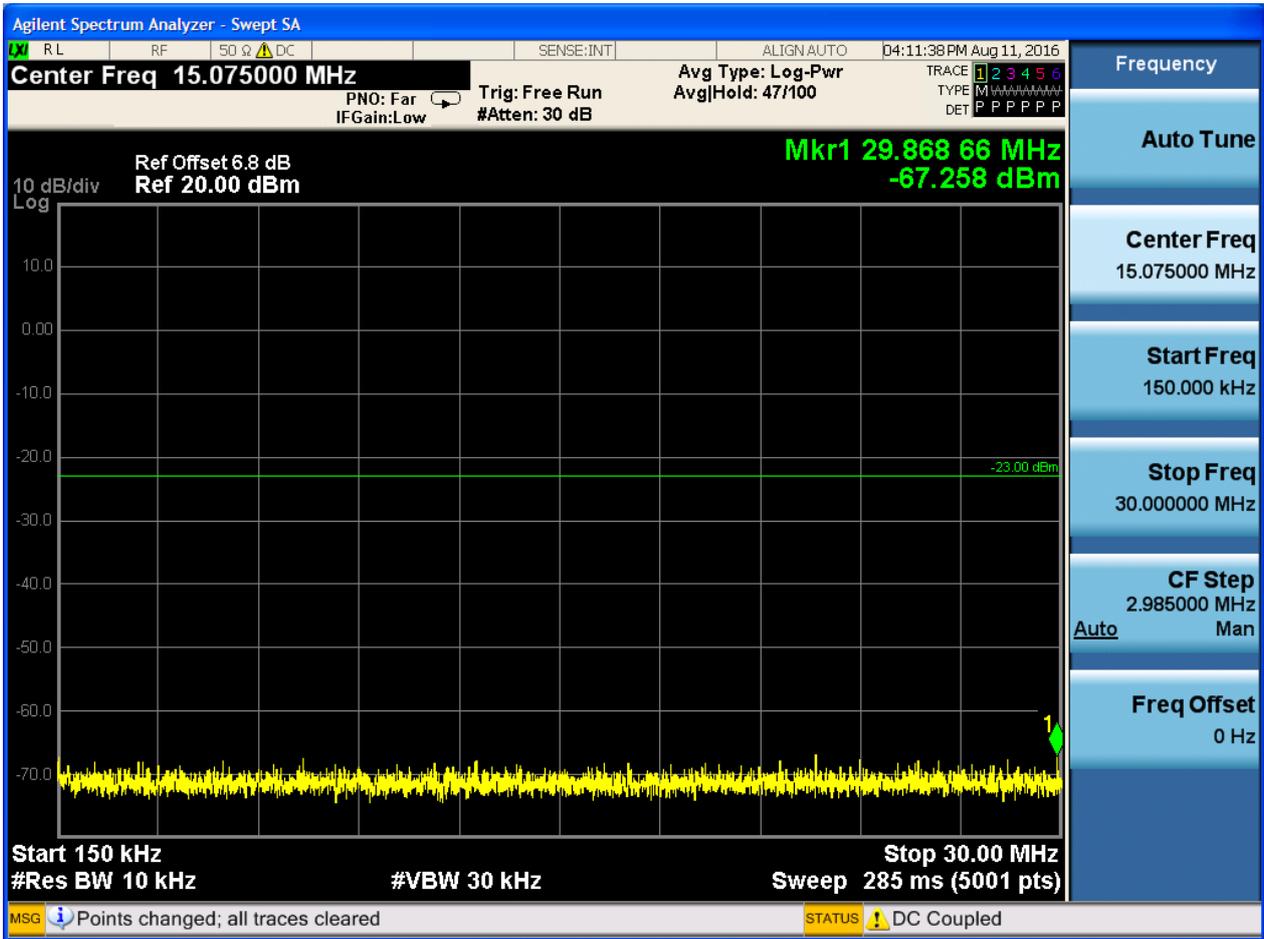


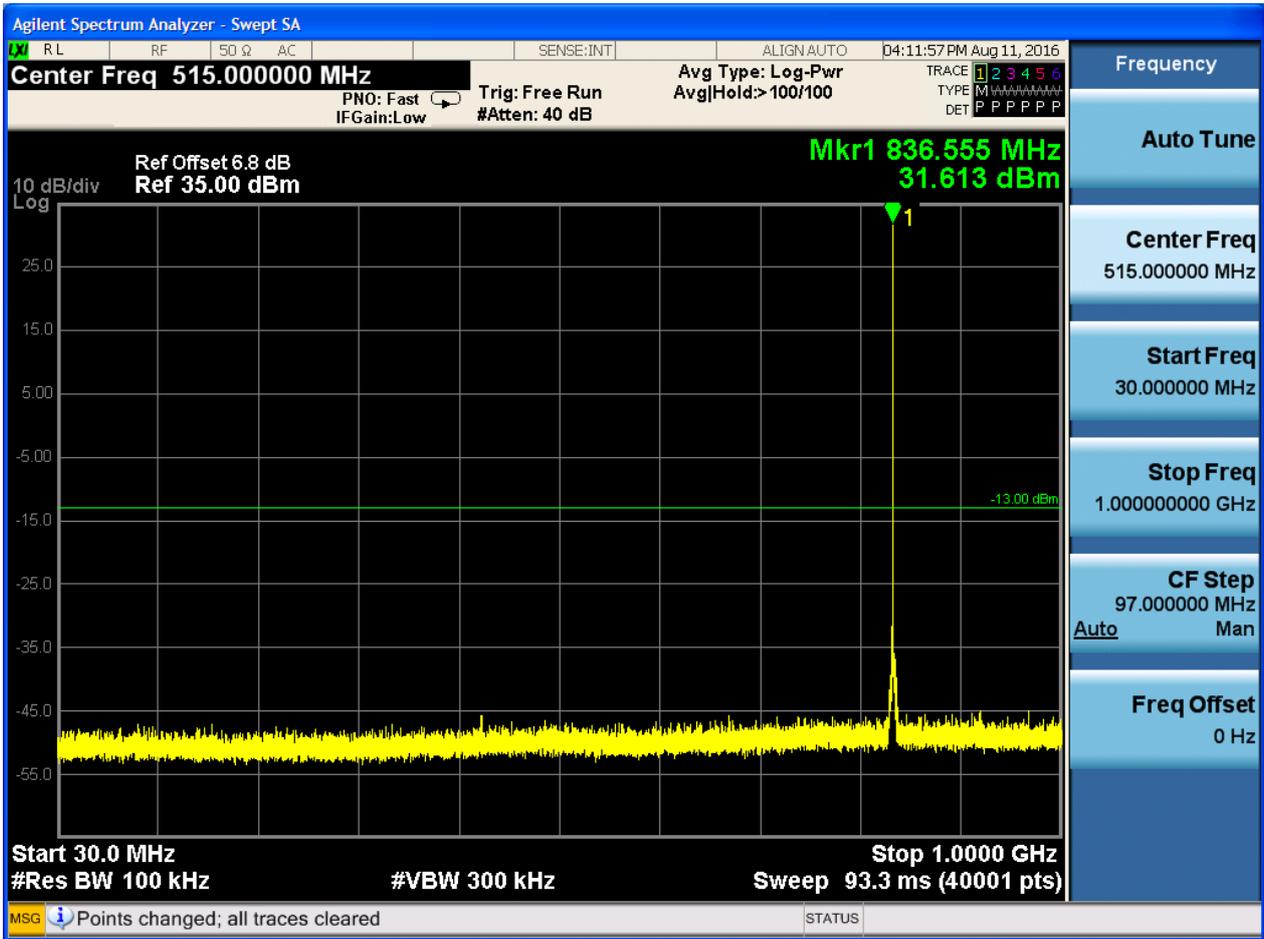


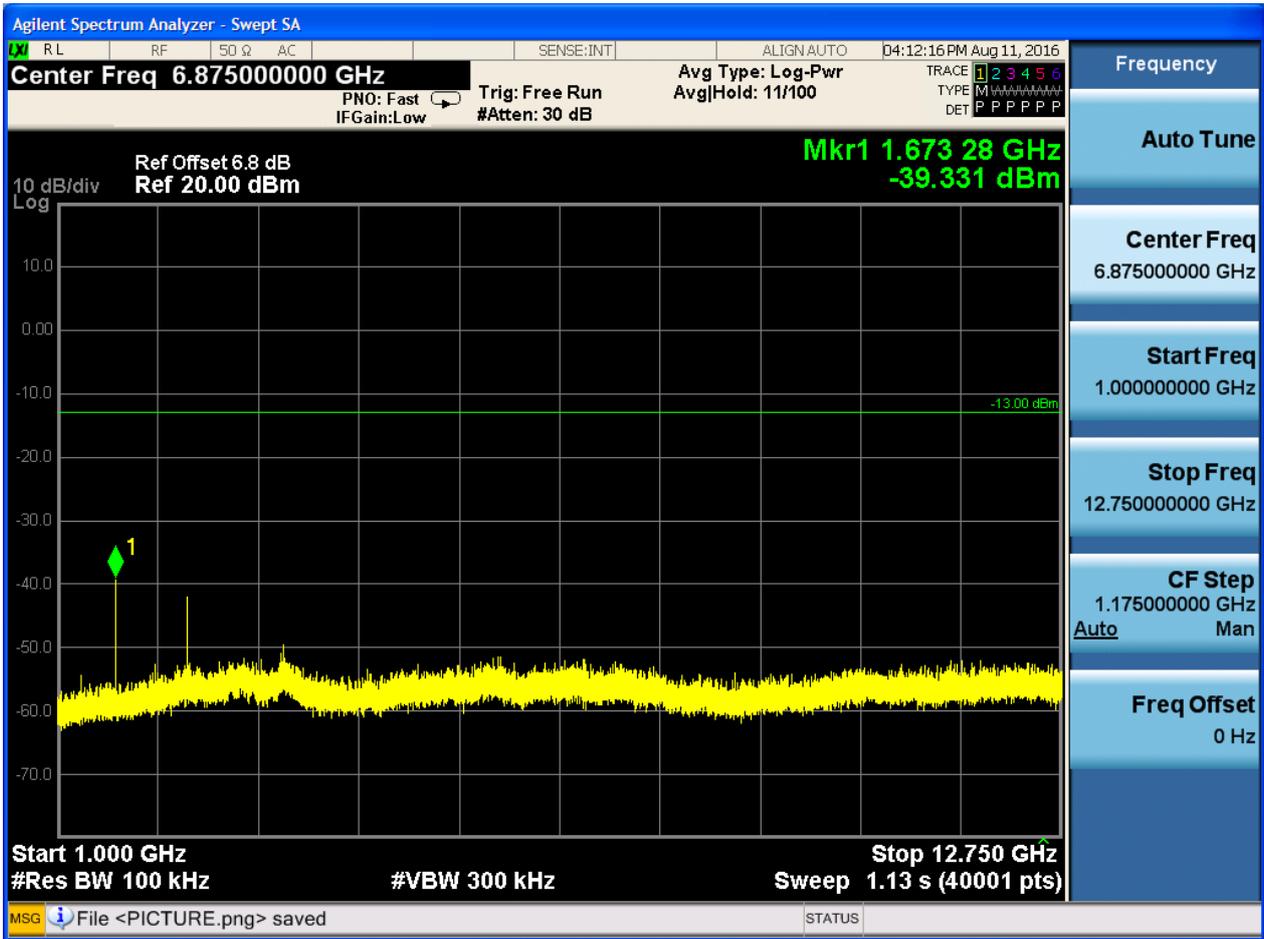


6.1.1.2.2 Test Channel = MCH



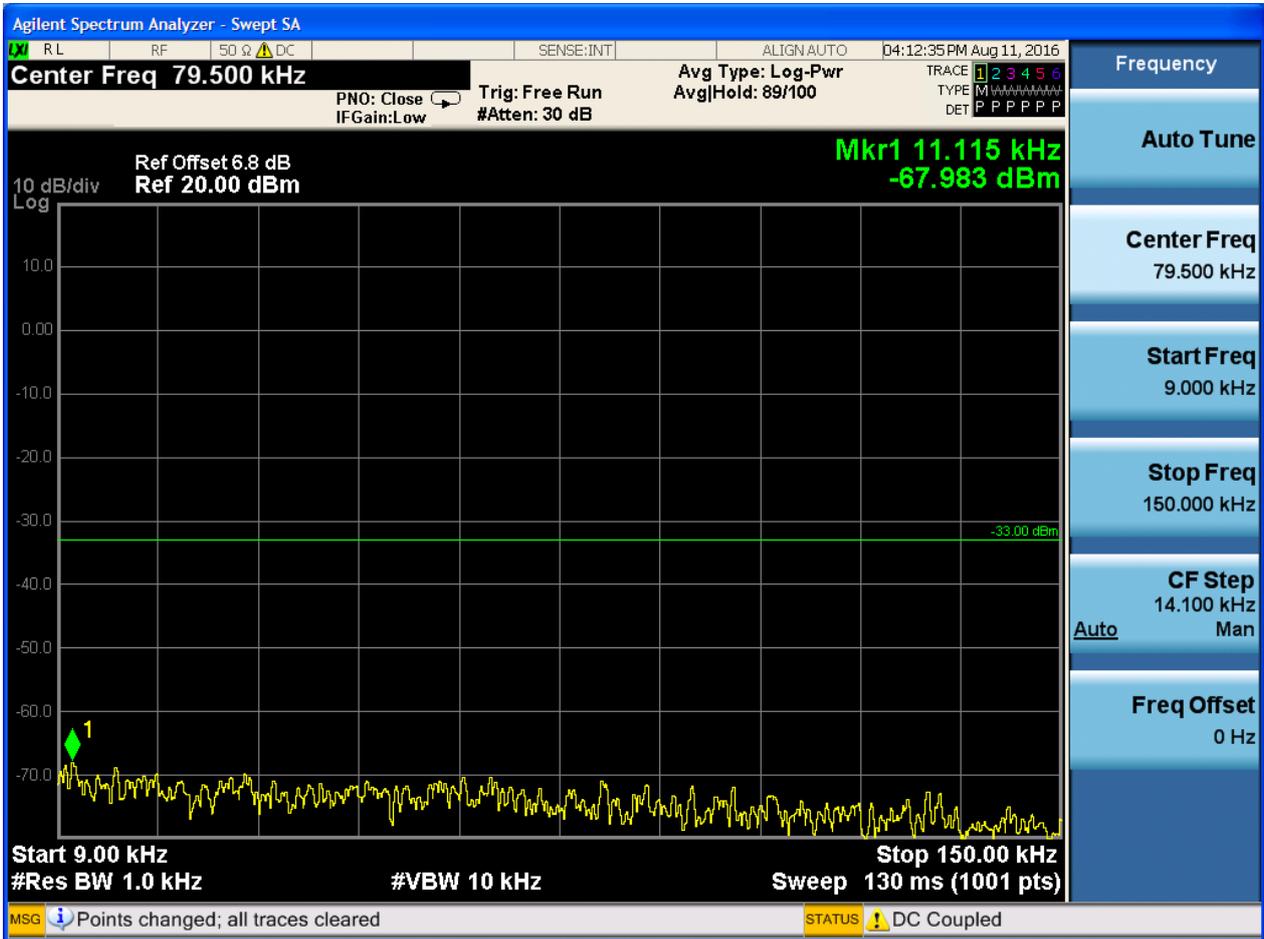


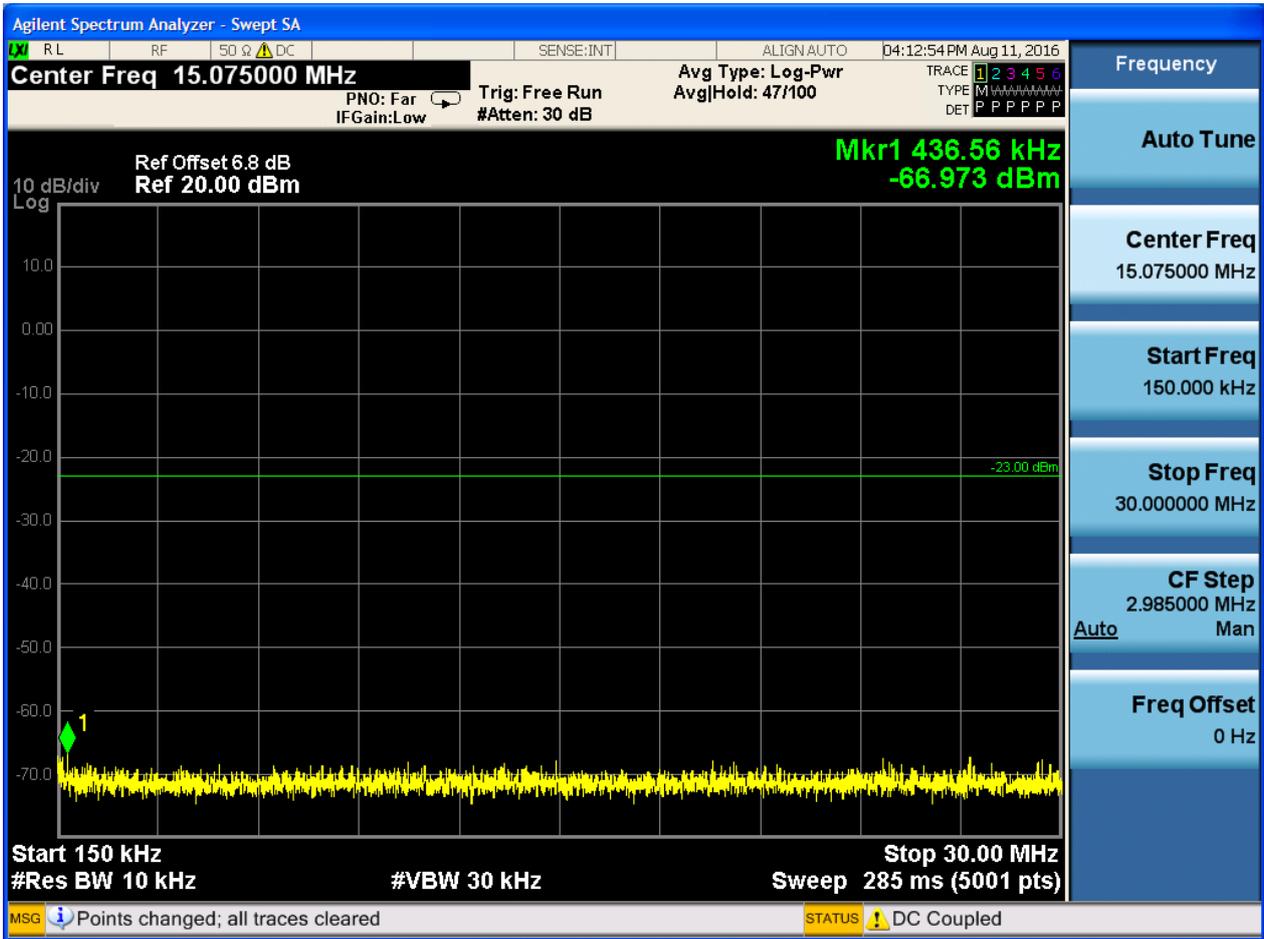




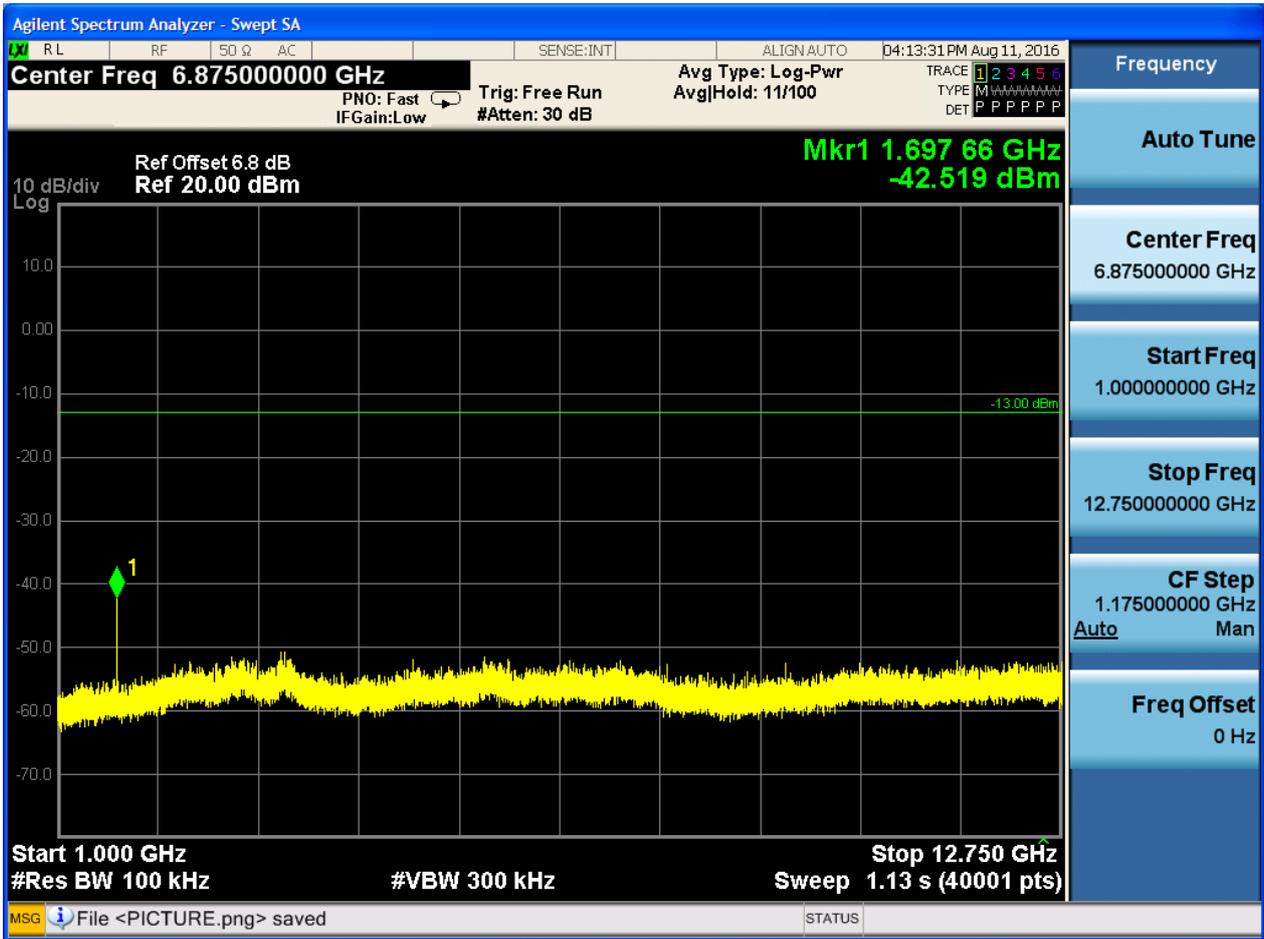


6.1.1.2.3 Test Channel = HCH









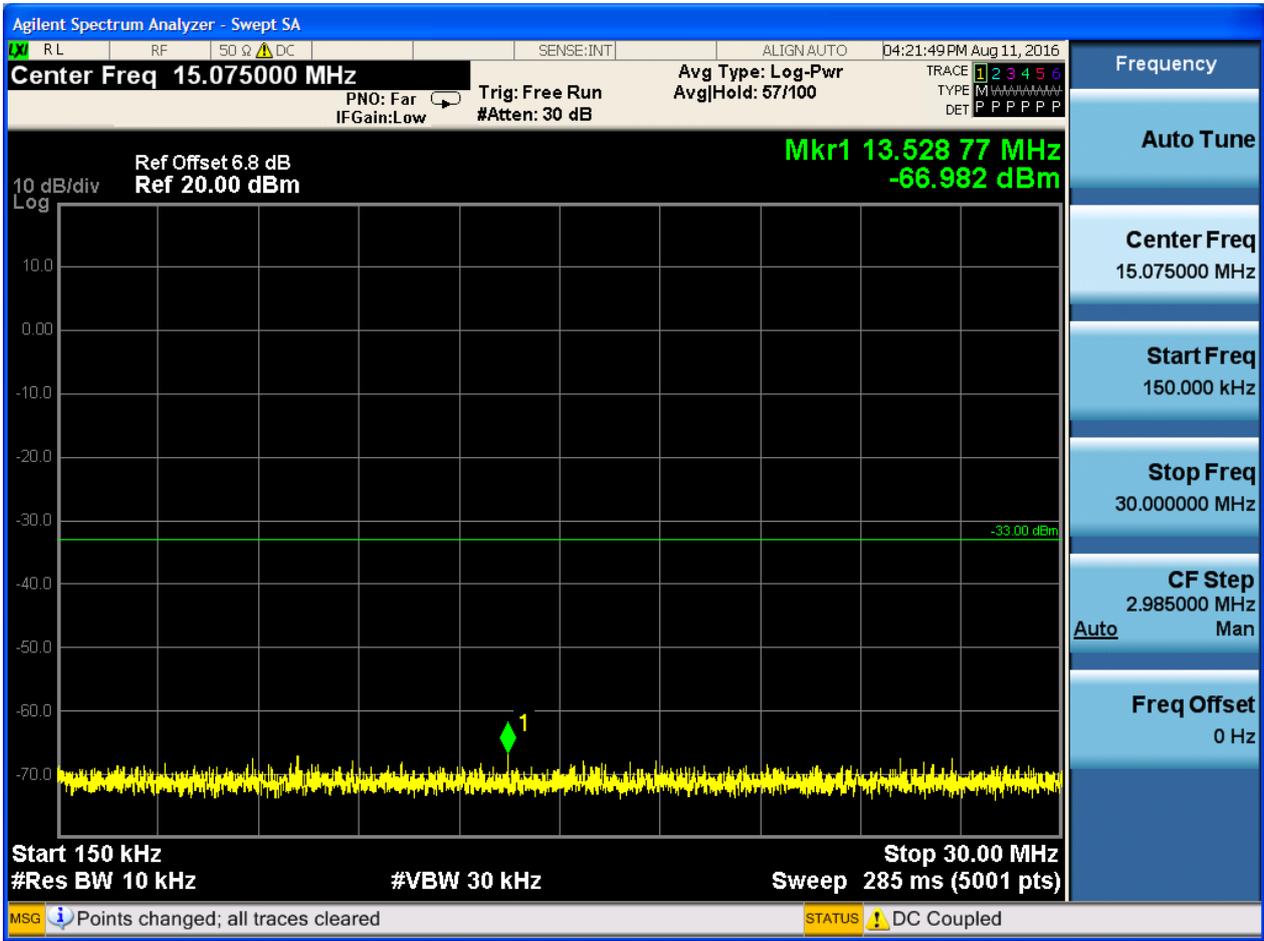


6.1.2 Test Band = GSM1900

6.1.2.1 Test Mode = GSM/TM1

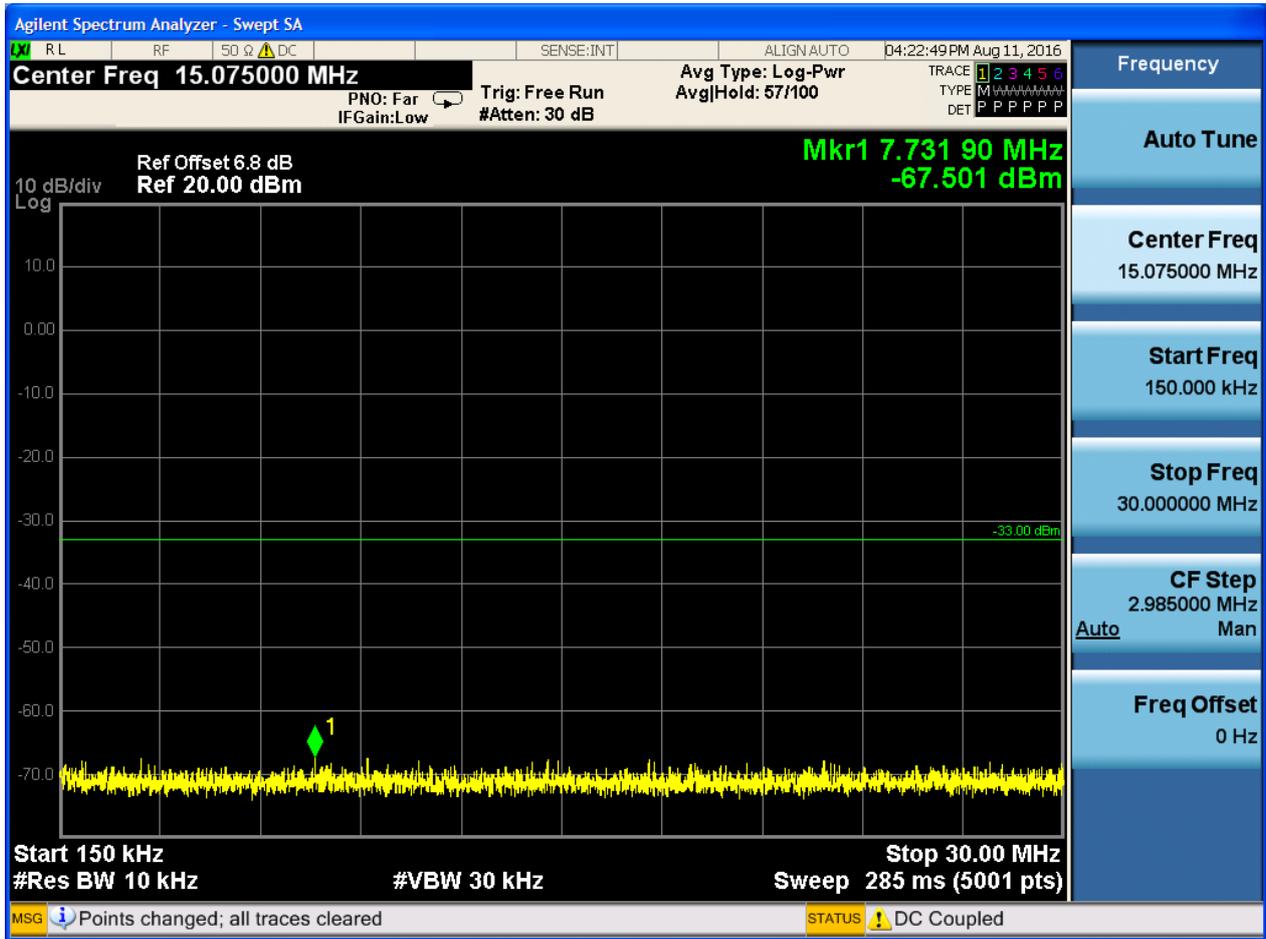
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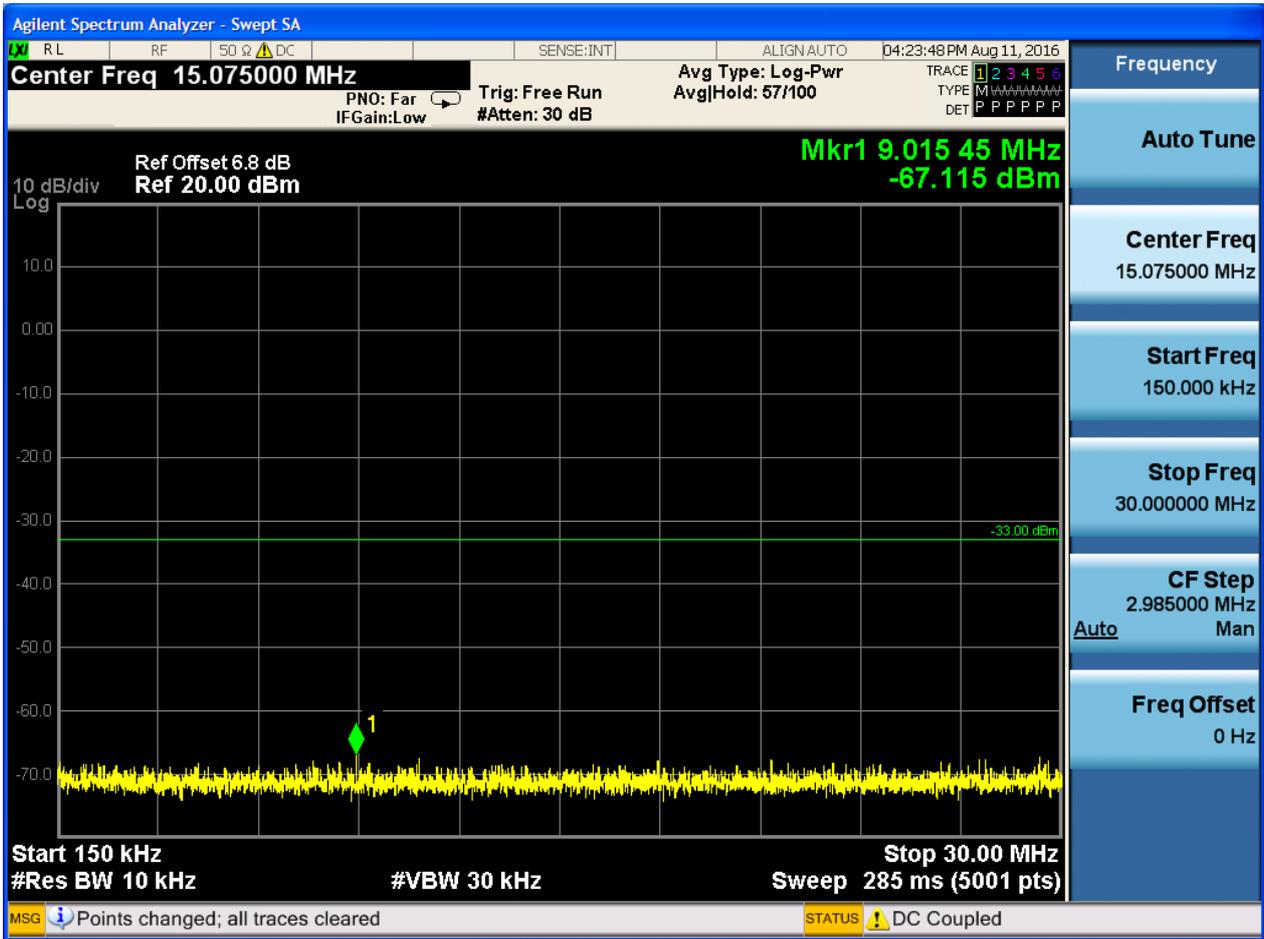


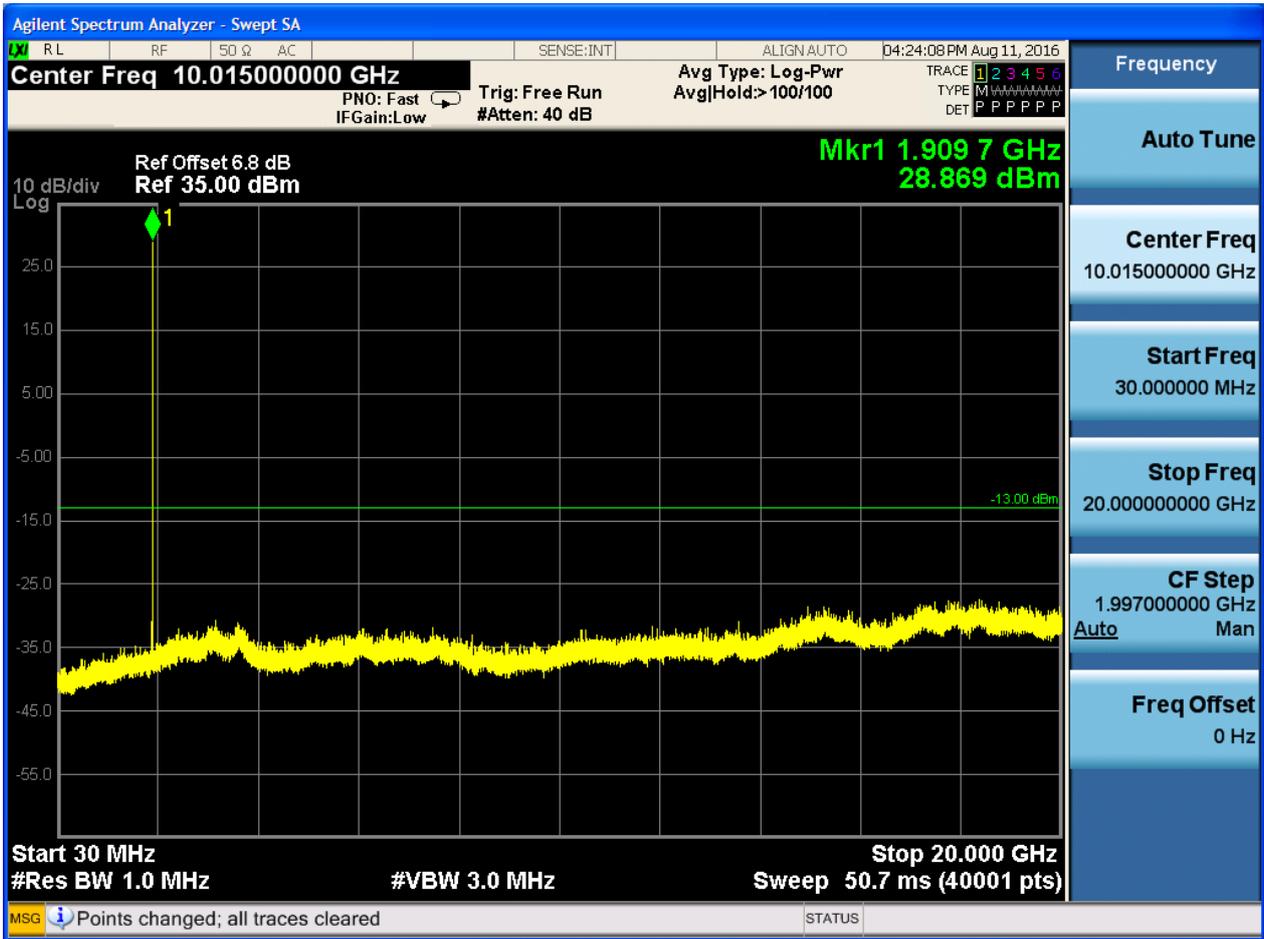




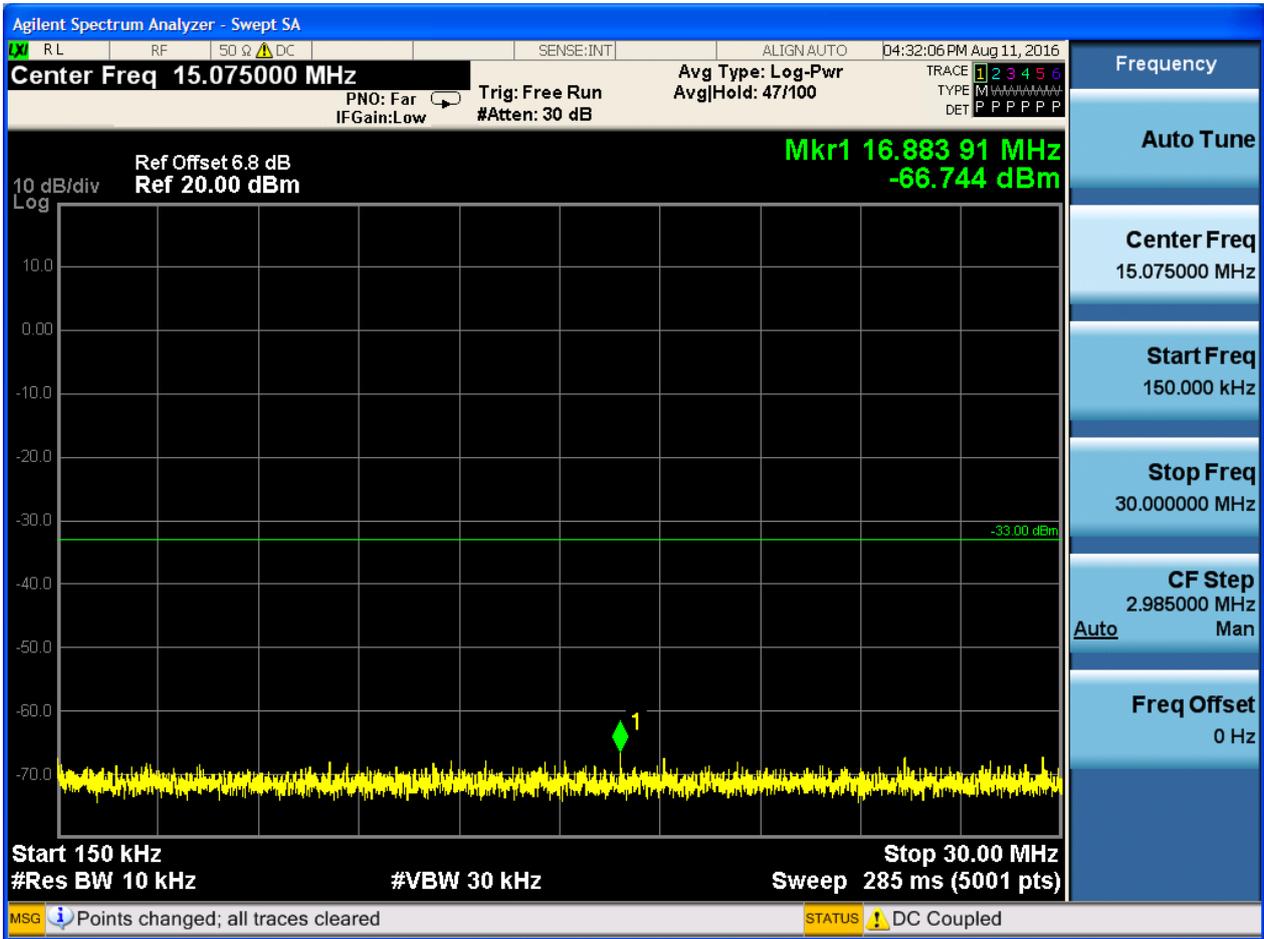
6.1.2.1.3 Test Channel = HCH







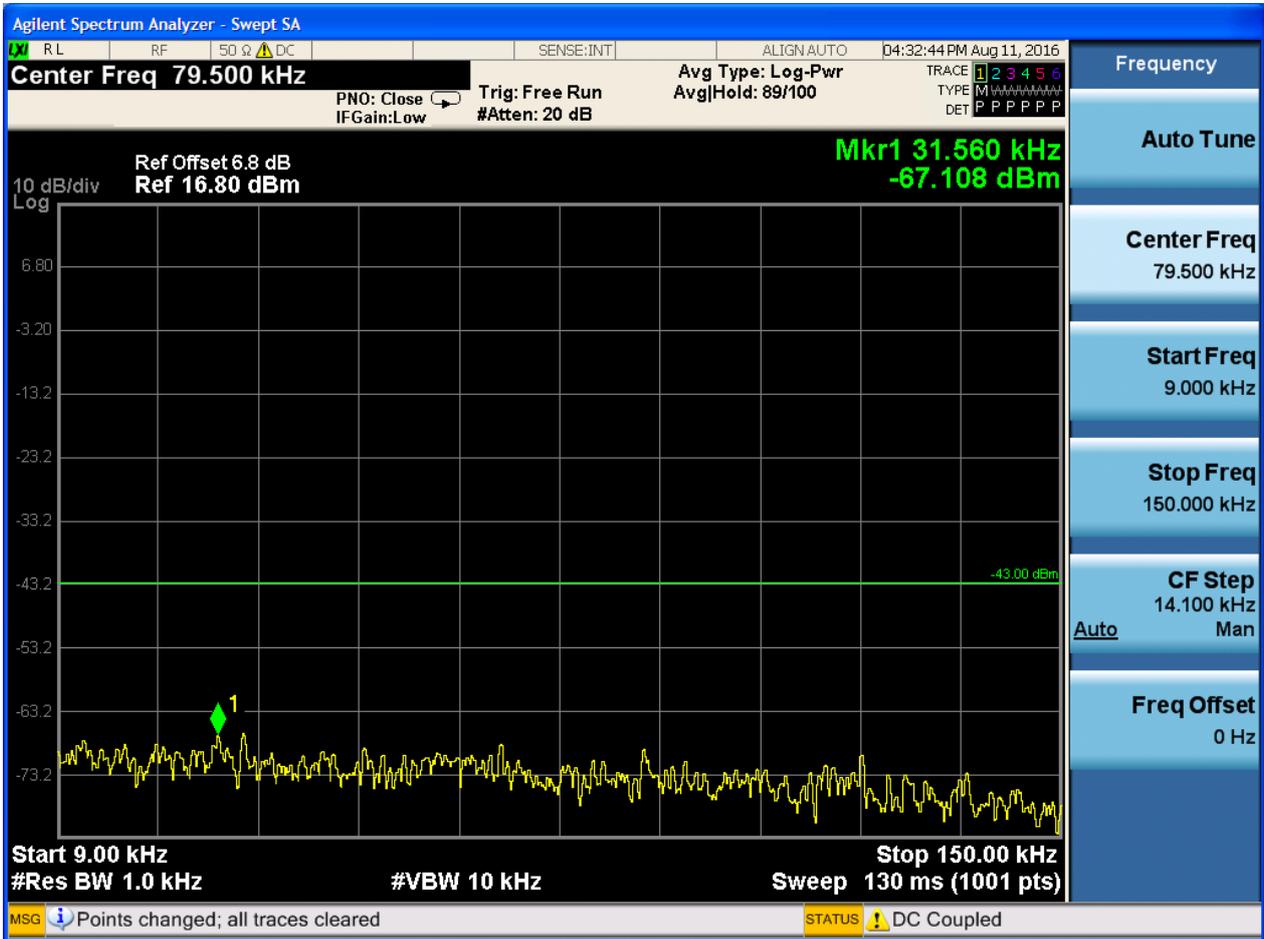


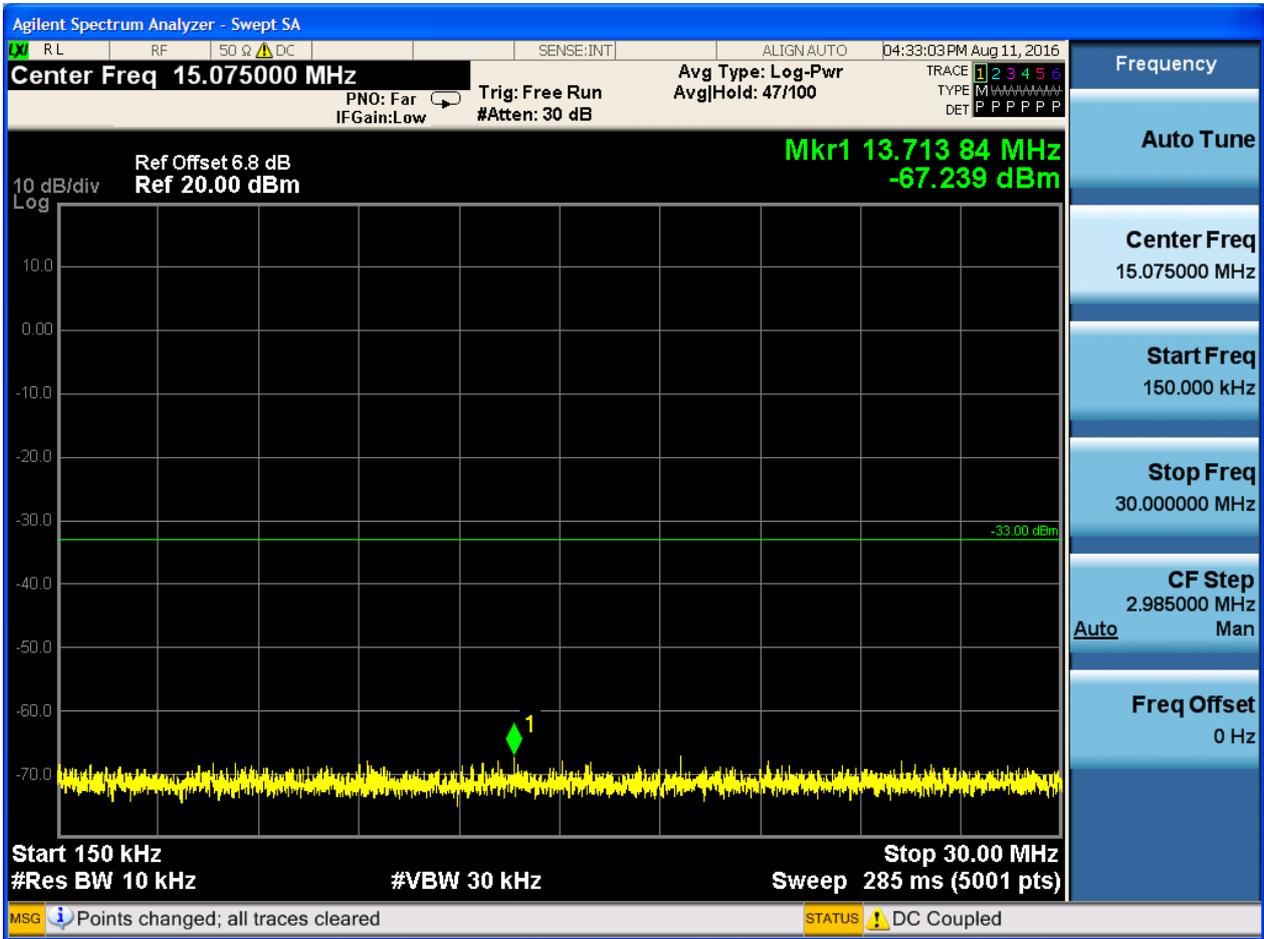


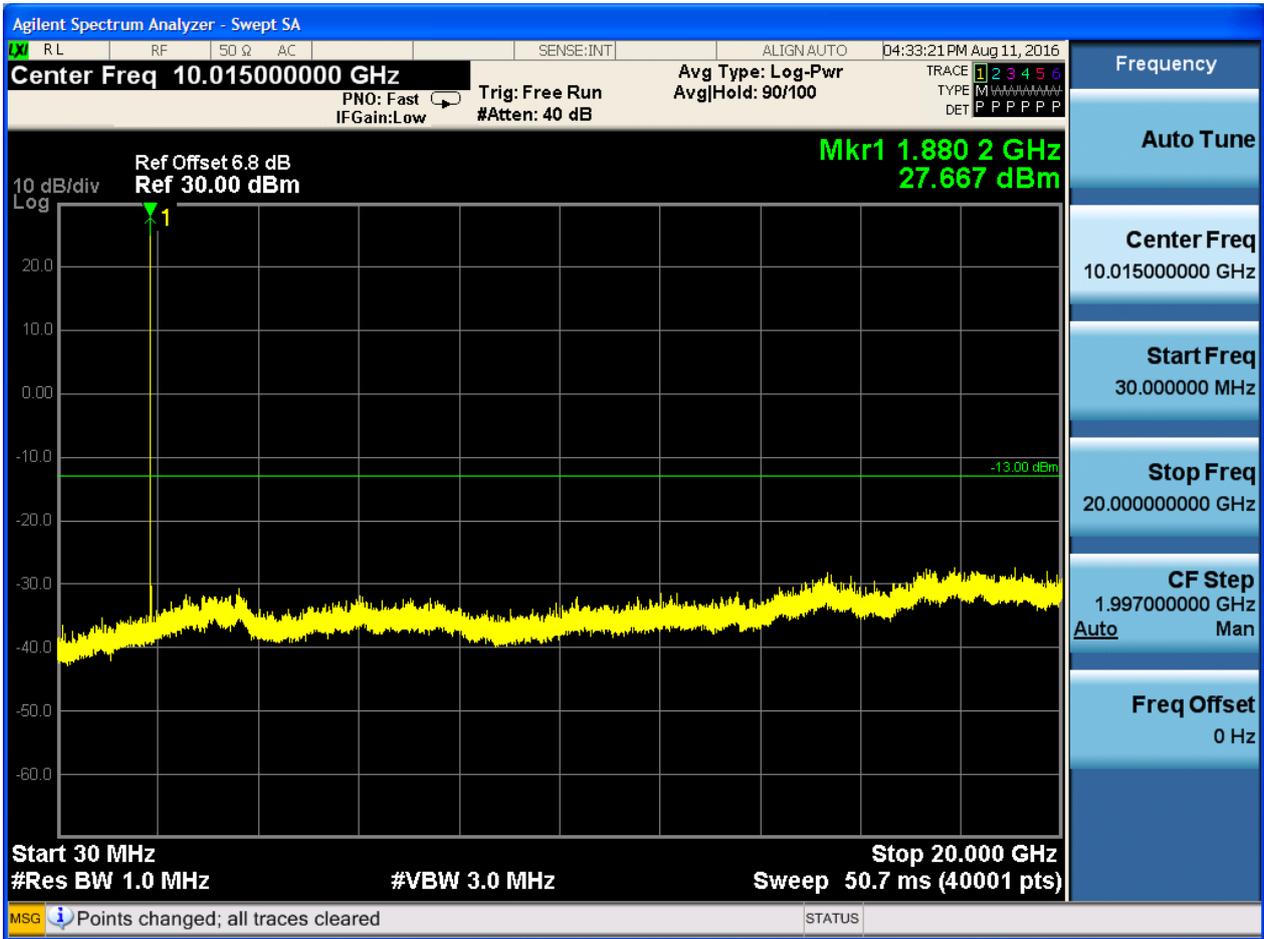




6.1.2.2.2 Test Channel = MCH

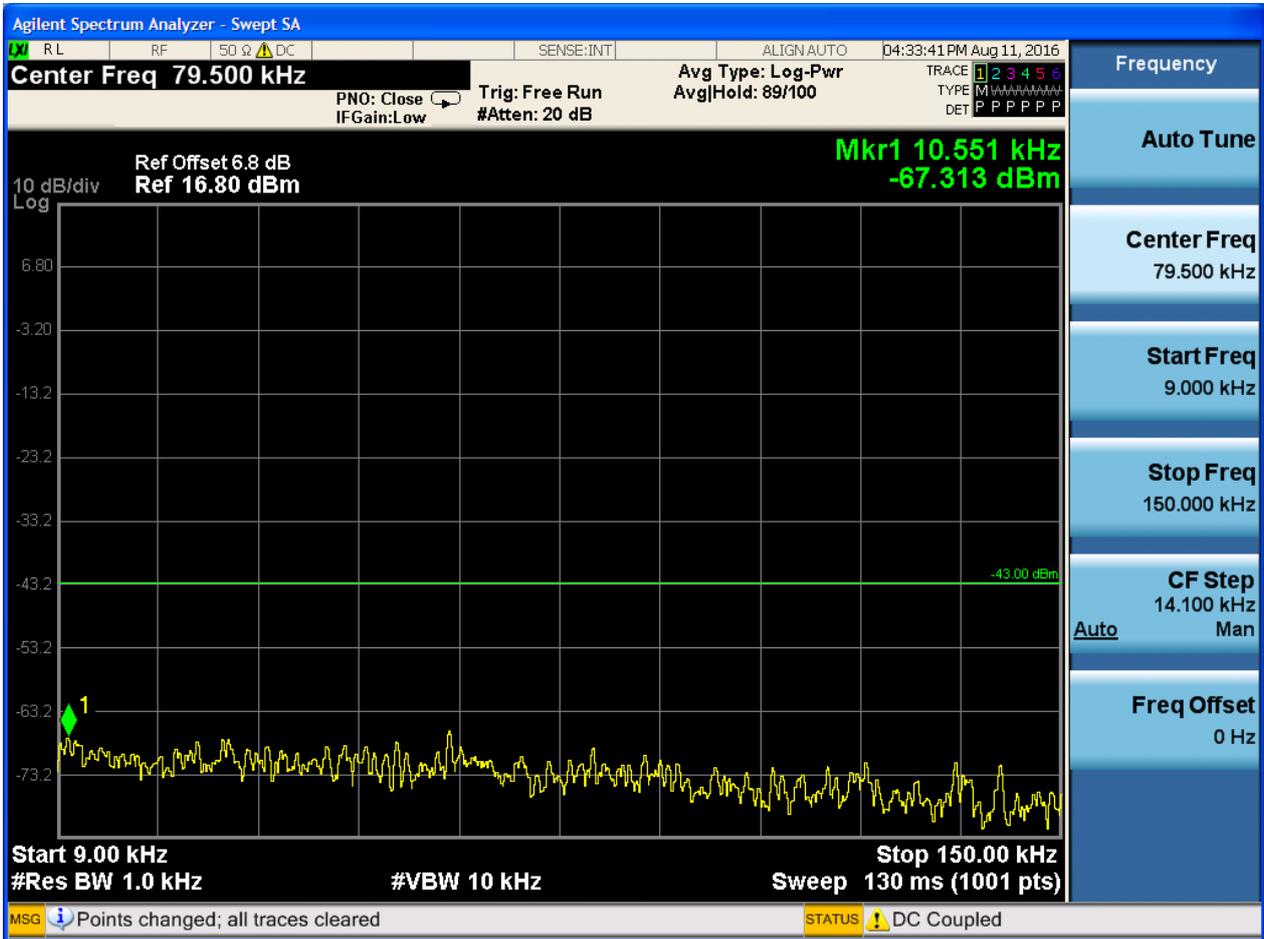


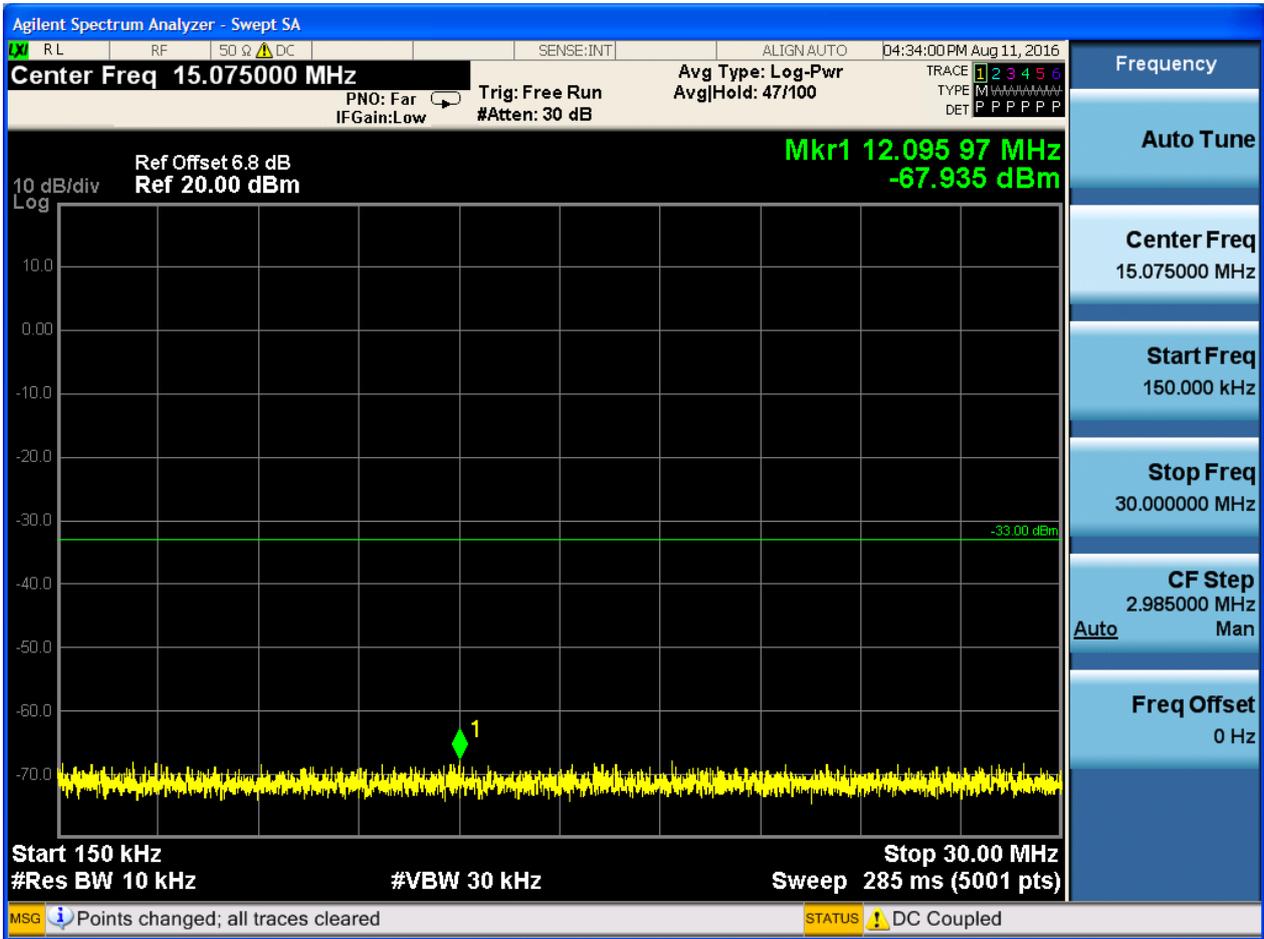


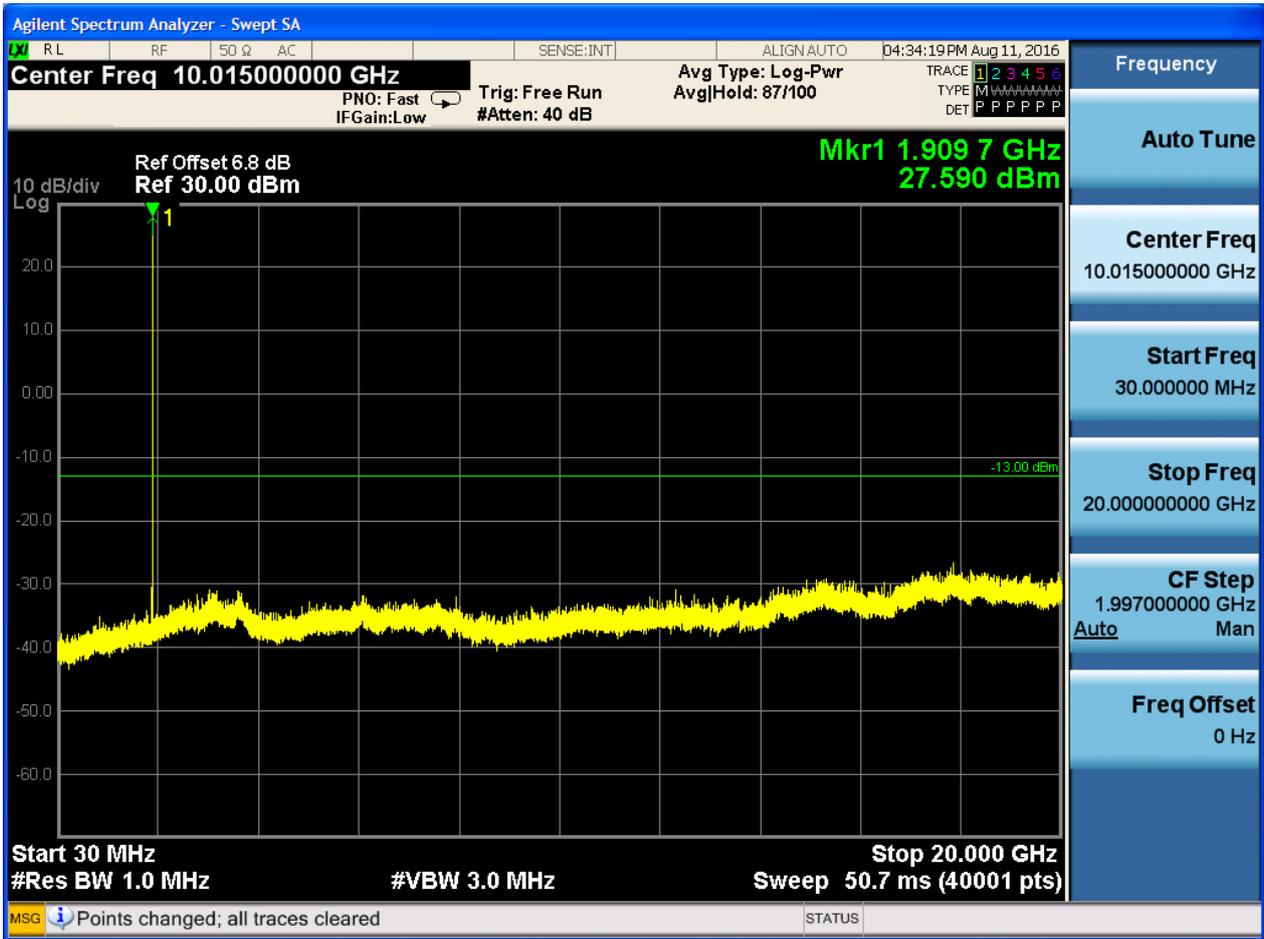




### 6.1.2.2.3 Test Channel = HCH







## 7Appendix\_G: Field Strength of Spurious Radiation

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

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

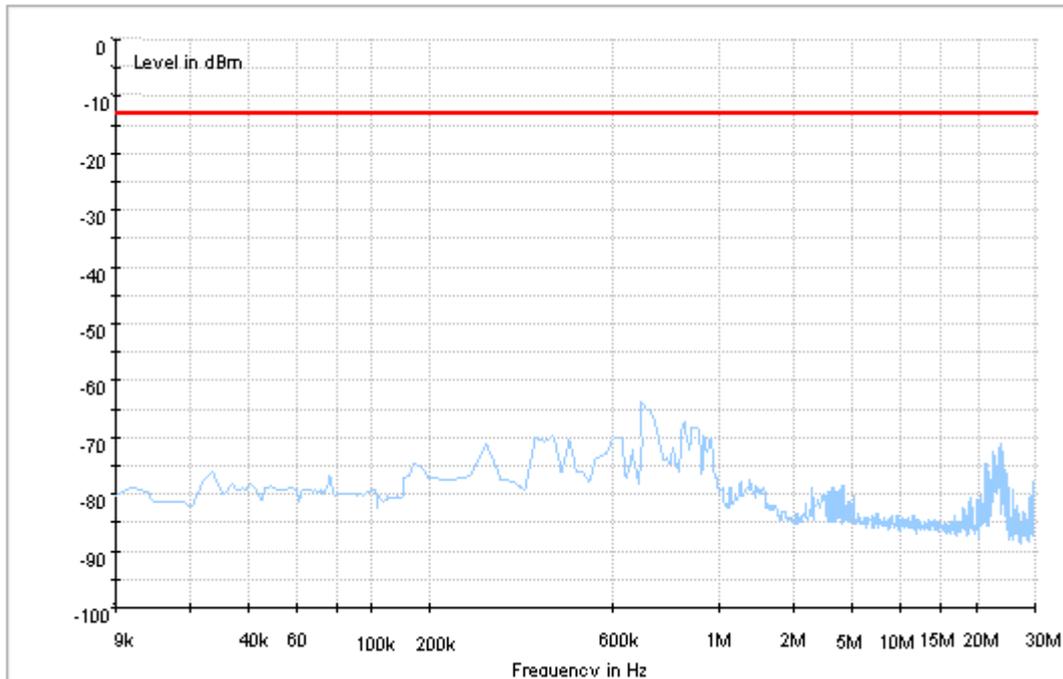
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

### Part I - Test Plots

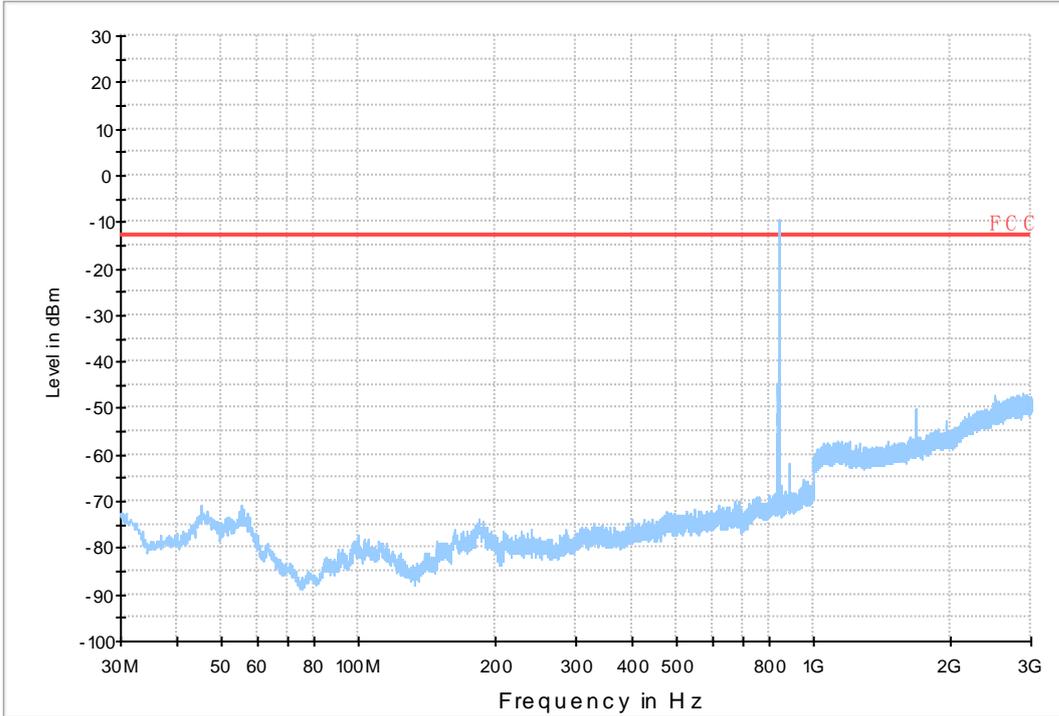
#### 7.1 For GSM

##### 7.1.1 Test Band = GSM850\_Ant1

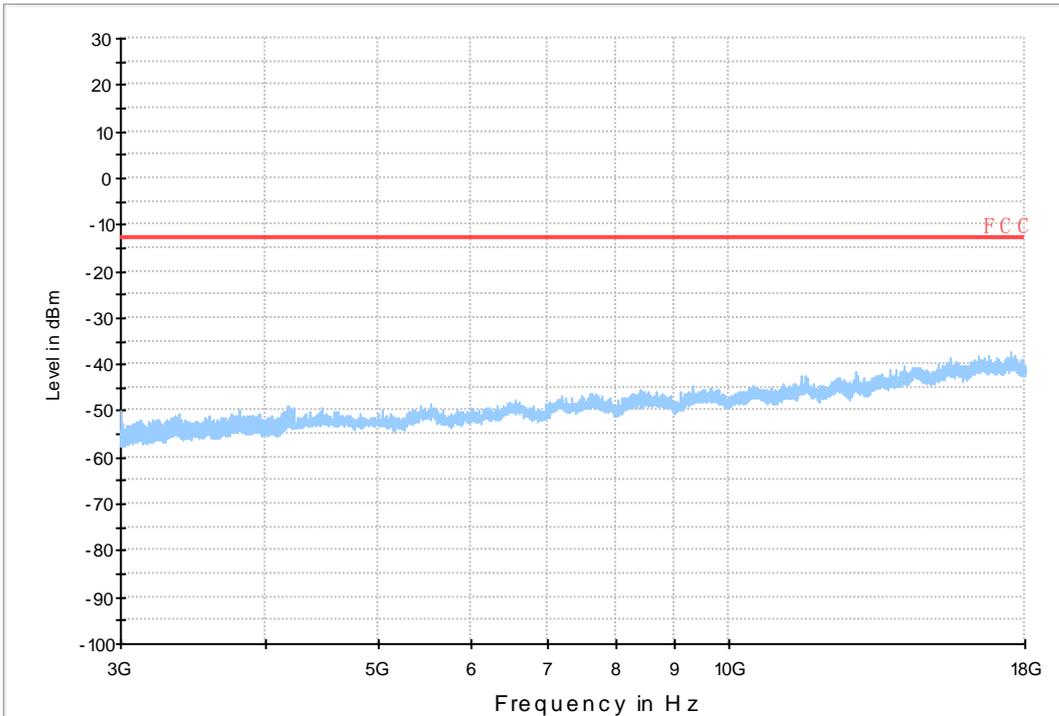
##### 7.1.1.1 Test Mode = GSM/TM1



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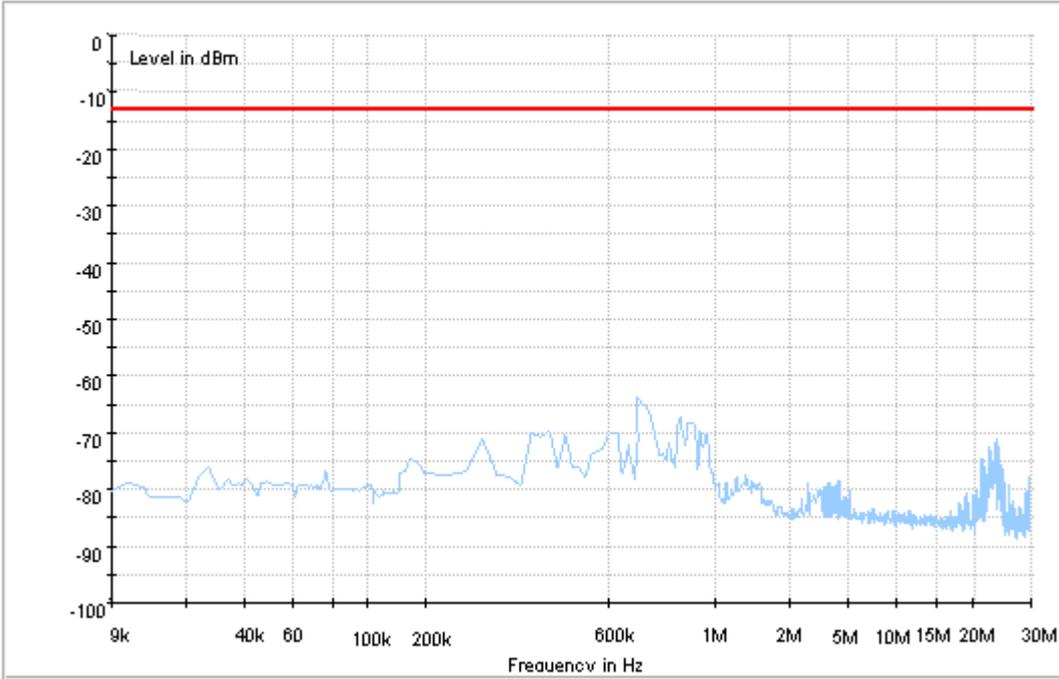


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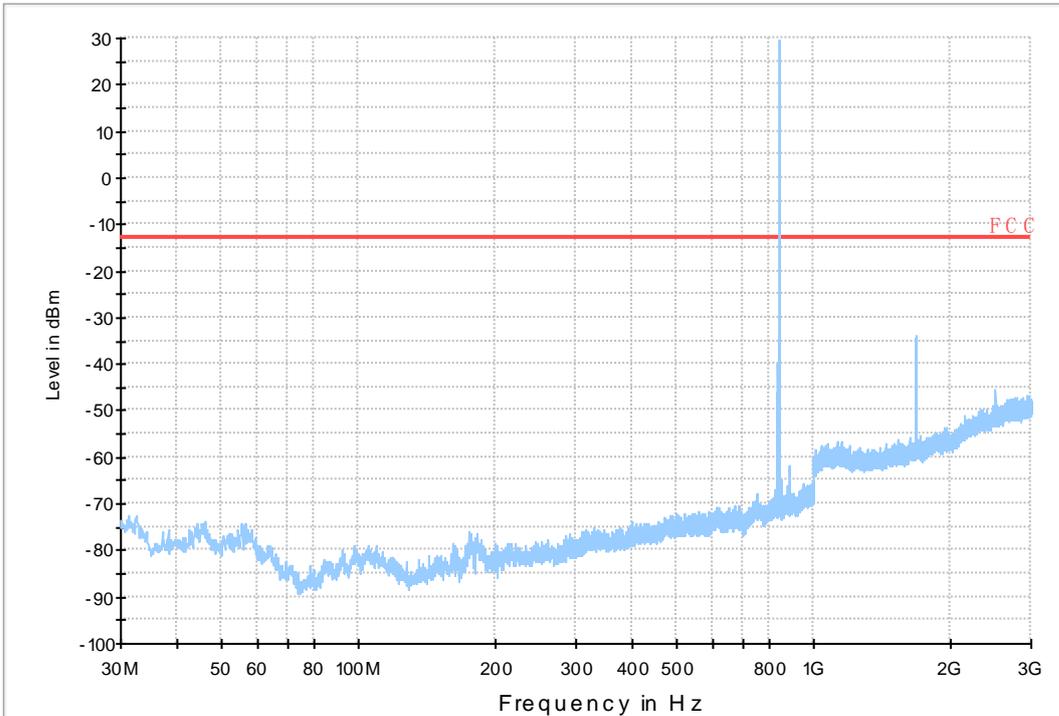


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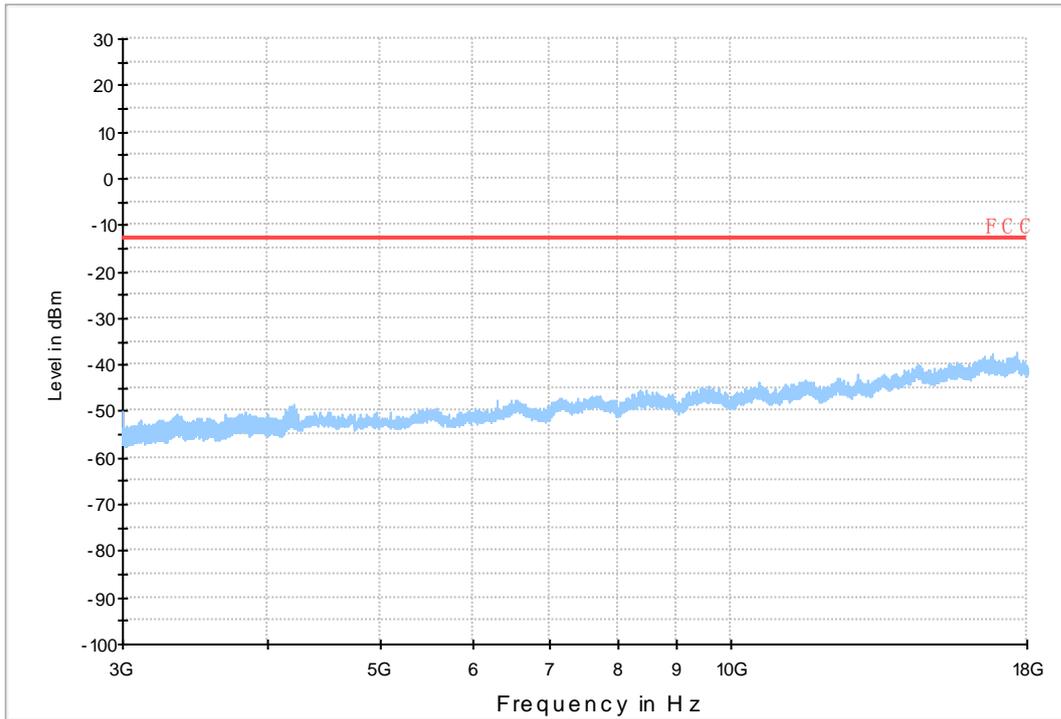
#### 7.1.2.1 Test Mode = GSM/TM1



Copy of FCC PART22 GSM850\_L

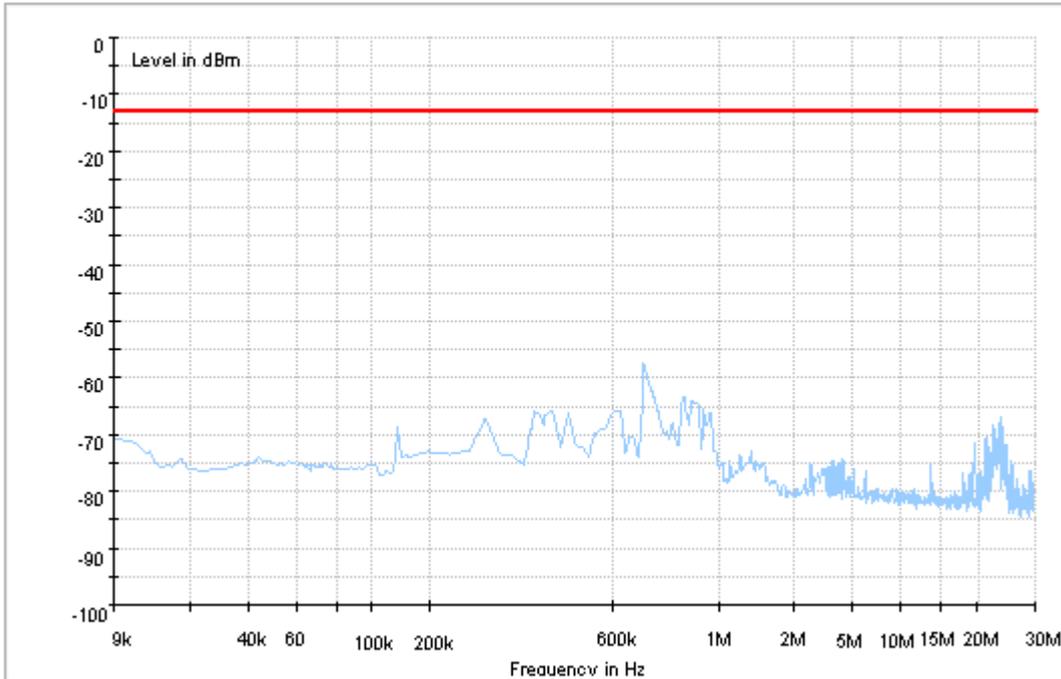


Copy of FCC PART22 GSM850\_H

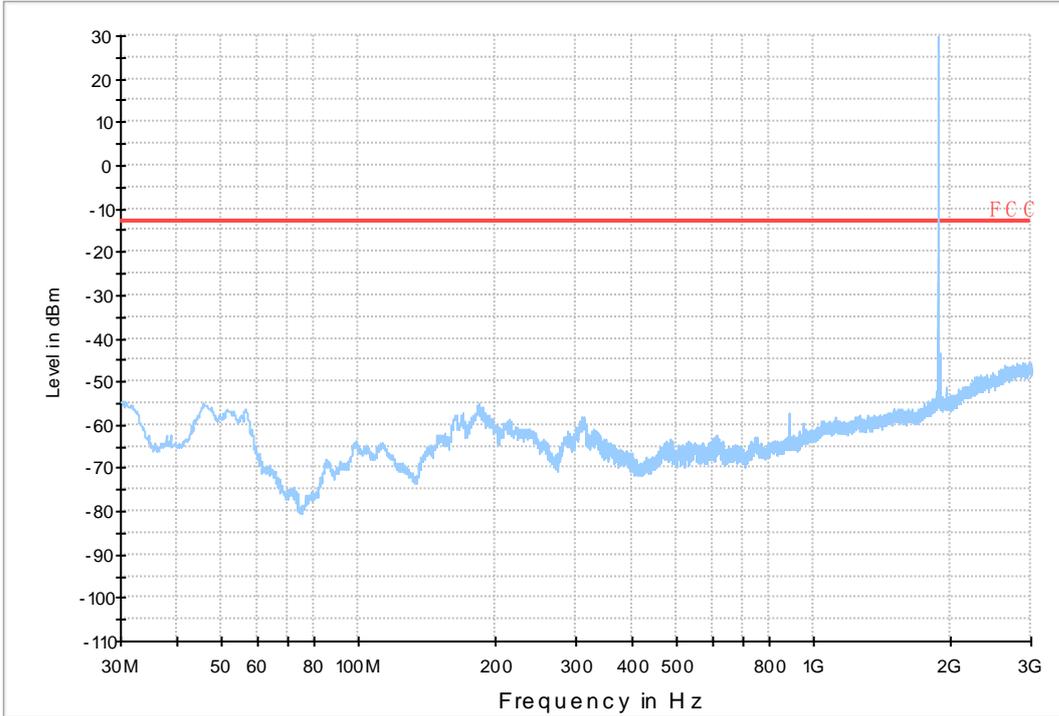


### 7.1.3 Test Band = GSM1900\_Ant1

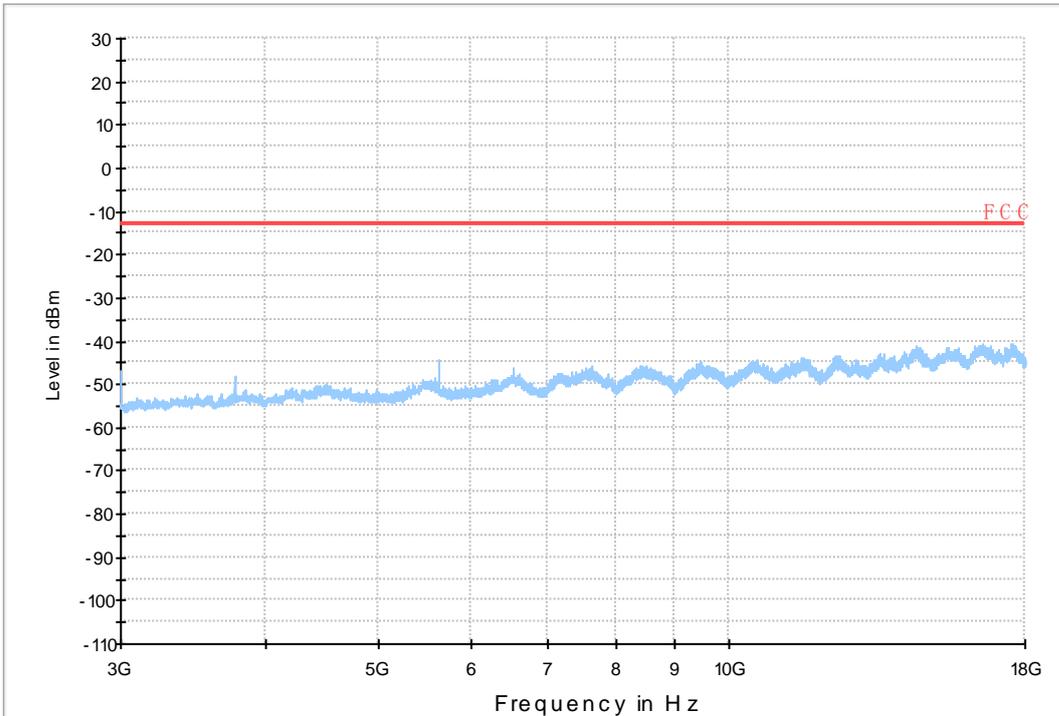
#### 7.1.3.1 Test Mode = GSM/TM1

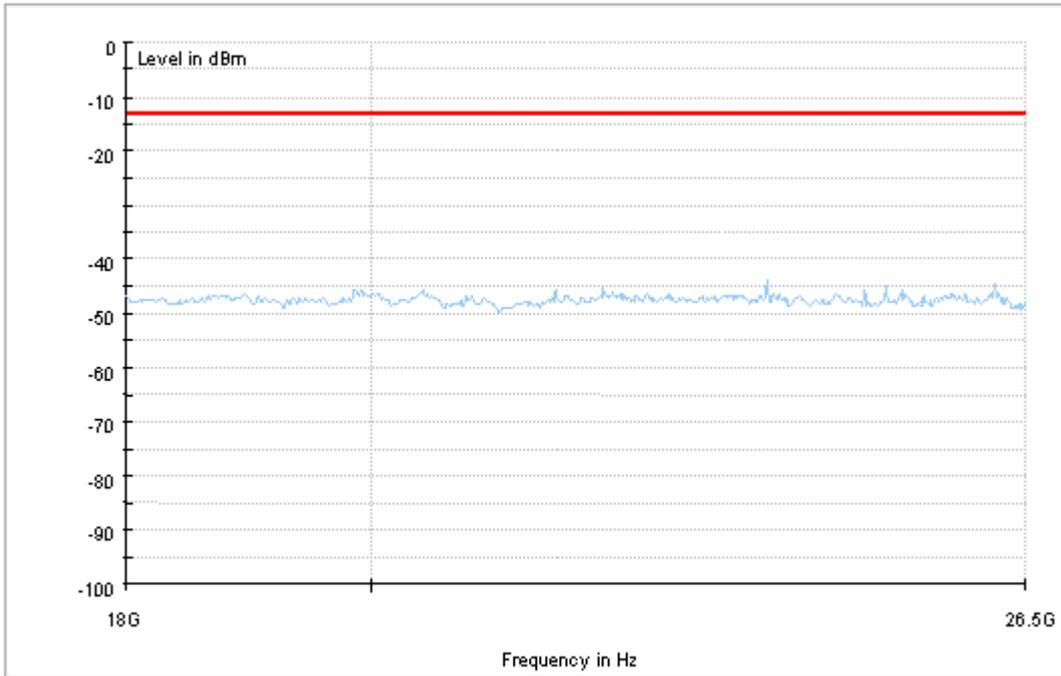


Copy of FCC PART24 GSM1900\_L



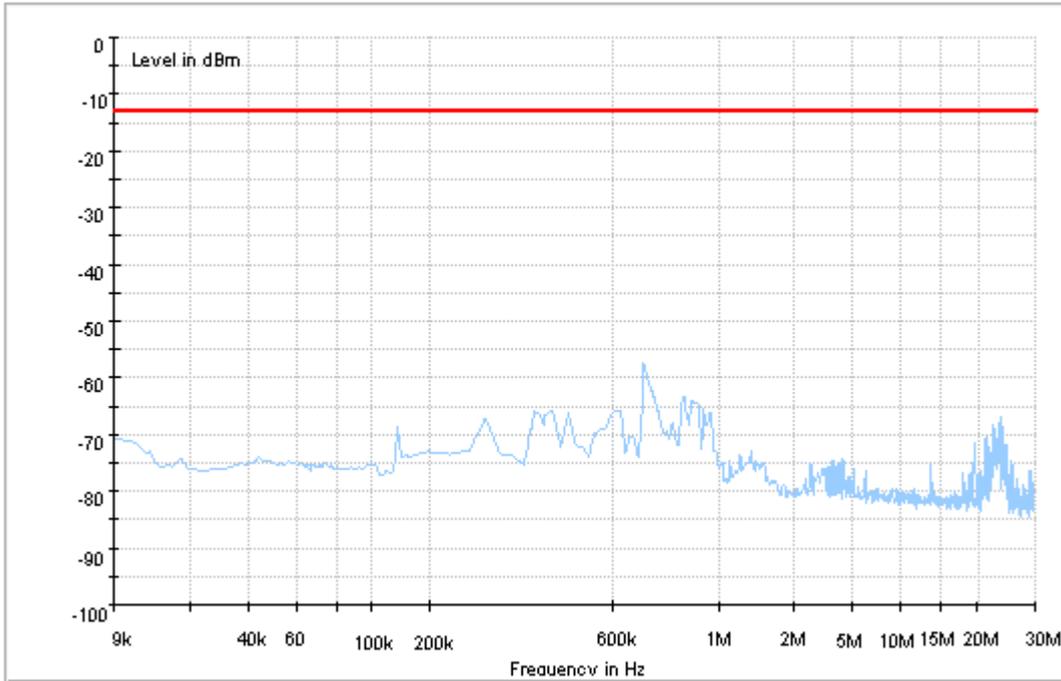
Copy of FCC PART24 GSM1900\_H



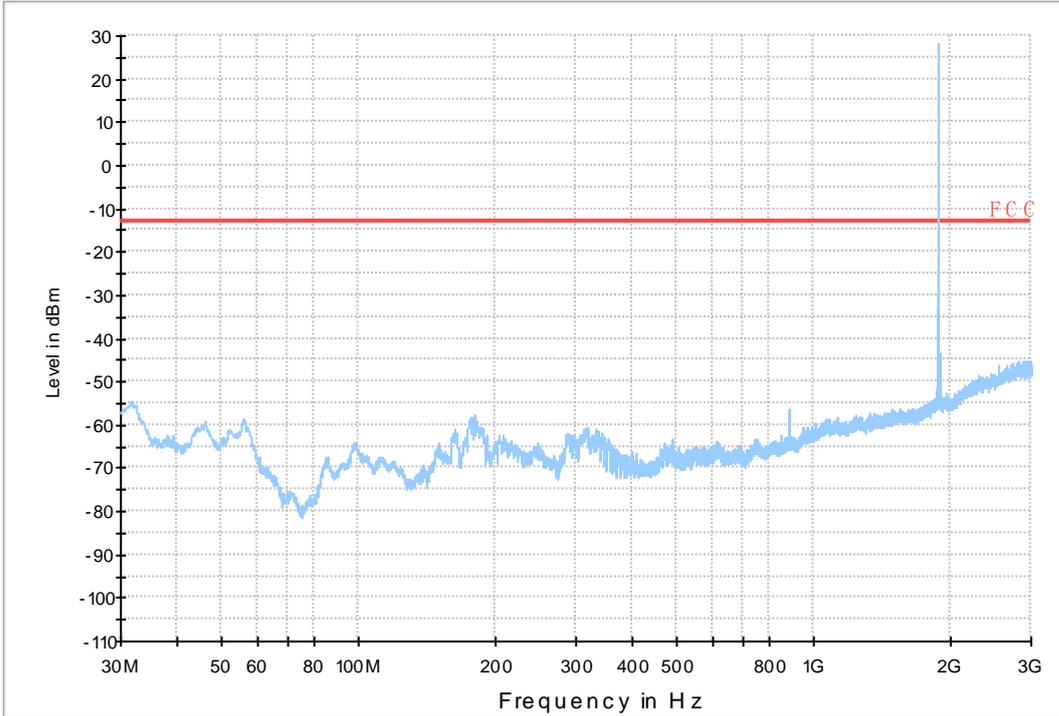


### 7.1.4 Test Band = GSM1900\_Ant2

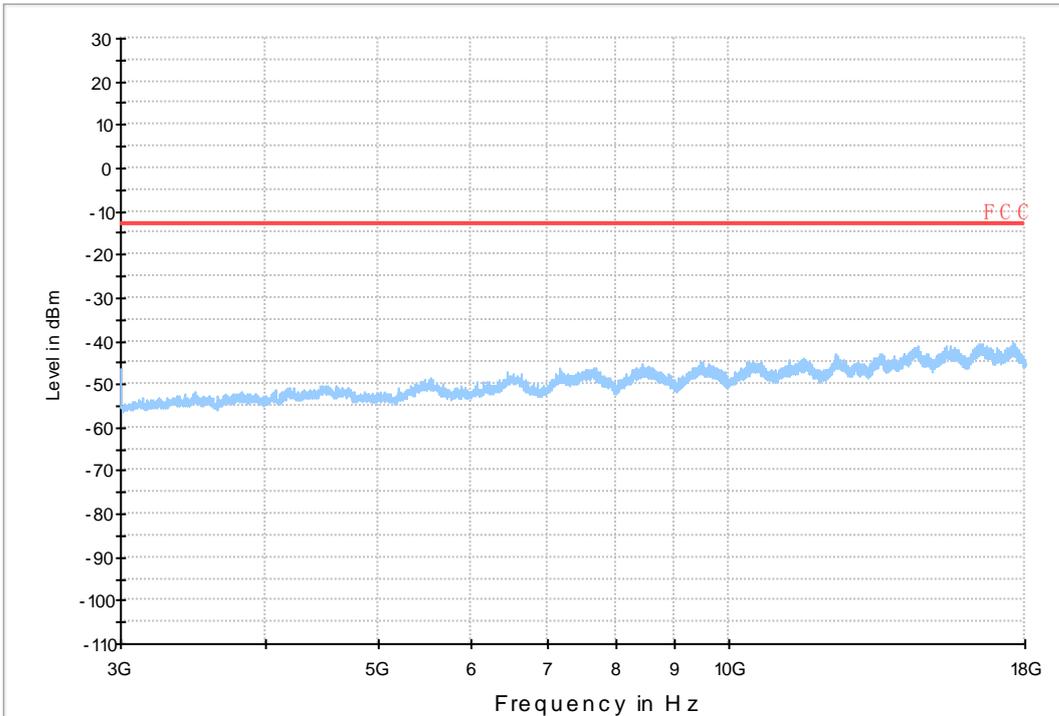
#### 7.1.4.1 Test Mode = GSM/TM1

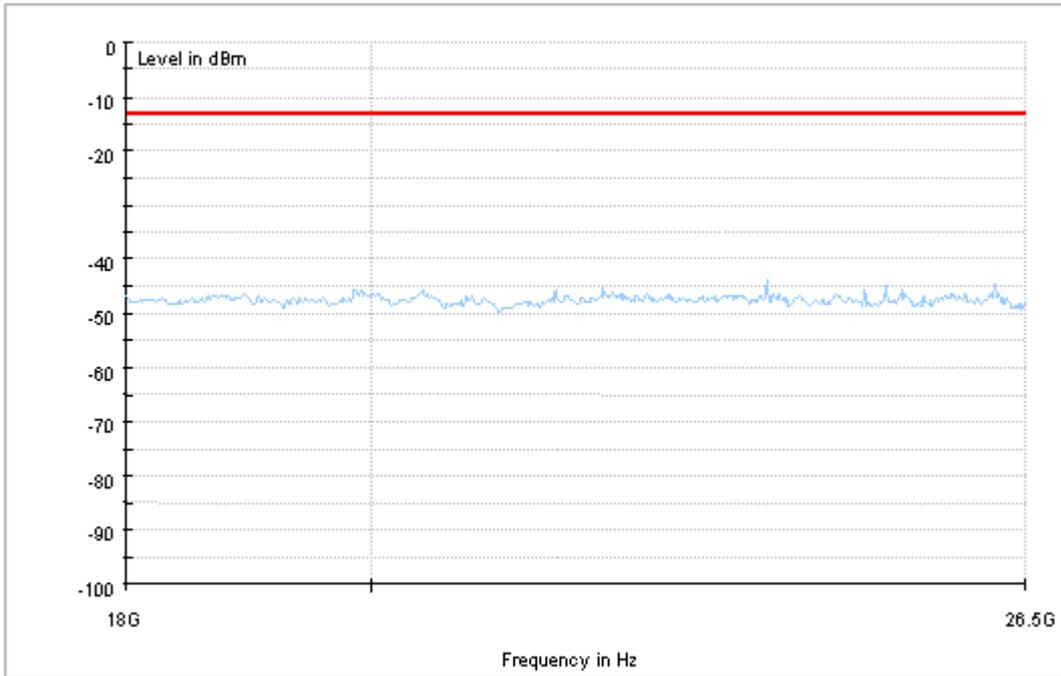


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## 8Appendix\_H: Frequency Stability

### 8.1 For GSM

#### 8.1.1 Frequency Error vs. Voltage:

| Test Band | Test Mode | Test Channel | Test Temp. | Test Volt. | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|-----------|-----------|--------------|------------|------------|------------------|-----------------------|---------|
| GSM850    | GSM/TM1   | LCH          | TN         | VL         | -11.62           | -0.0141               | PASS    |
|           |           |              |            | VN         | -12.85           | -0.01559              | PASS    |
|           |           |              |            | VH         | -6.78            | -0.00823              | PASS    |
|           |           | MCH          | TN         | VL         | -13.56           | -0.01621              | PASS    |
|           |           |              |            | VN         | -5.94            | -0.0071               | PASS    |
|           |           |              |            | VH         | -2.78            | -0.00332              | PASS    |
|           |           | HCH          | TN         | VL         | -6.33            | -0.00746              | PASS    |
|           |           |              |            | VN         | -6.20            | -0.0073               | PASS    |
|           |           |              |            | VH         | -4.78            | -0.00563              | PASS    |
|           | GSM/TM2   | LCH          | TN         | VL         | -16.05           | -0.01947              | PASS    |
|           |           |              |            | VN         | -17.79           | -0.02158              | PASS    |
|           |           |              |            | VH         | -16.24           | -0.0197               | PASS    |
|           |           | MCH          | TN         | VL         | -10.82           | -0.01293              | PASS    |
|           |           |              |            | VN         | -15.53           | -0.01856              | PASS    |
|           |           |              |            | VH         | -6.72            | -0.00803              | PASS    |
|           |           | HCH          | TN         | VL         | -11.20           | -0.0132               | PASS    |
|           |           |              |            | VN         | -7.88            | -0.00928              | PASS    |
|           |           |              |            | VH         | -7.52            | -0.00886              | PASS    |
| GSM1900   | GSM/TM1   | LCH          | TN         | VL         | 11.49            | 0.00621               | PASS    |
|           |           |              |            | VN         | 8.33             | 0.0045                | PASS    |
|           |           |              |            | VH         | 19.69            | 0.01064               | PASS    |
|           |           | MCH          | TN         | VL         | 15.56            | 0.00828               | PASS    |
|           |           |              |            | VN         | 10.40            | 0.00553               | PASS    |
|           |           |              |            | VH         | 9.17             | 0.00488               | PASS    |
|           |           | HCH          | TN         | VL         | 20.53            | 0.01075               | PASS    |
|           |           |              |            | VN         | 16.47            | 0.00862               | PASS    |
|           |           |              |            | VH         | 20.34            | 0.01065               | PASS    |
|           | GSM/TM2   | LCH          | TN         | VL         | -3.03            | -0.00164              | PASS    |
|           |           |              |            | VN         | -13.46           | -0.00727              | PASS    |
|           |           |              |            | VH         | -15.40           | -0.00832              | PASS    |
|           |           | MCH          | TN         | VL         | -9.75            | -0.00519              | PASS    |
|           |           |              |            | VN         | -0.58            | -0.00031              | PASS    |
|           |           |              |            | VH         | 2.03             | 0.00108               | PASS    |
|           |           | HCH          | TN         | VL         | 19.79            | 0.01036               | PASS    |



| Test Band | Test Mode | Test Channel | Test Temp. | Test Volt. | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|-----------|-----------|--------------|------------|------------|------------------|-----------------------|---------|
|           |           |              |            | VN         | 5.55             | 0.00291               | PASS    |
|           |           |              |            | VH         | 1.32             | 0.00069               | PASS    |

## 8.1.2 Frequency Error vs. Temperature:

| Test Band | Test Mode | Test Channel | Test Volt. | Test Temp. | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|-----------|-----------|--------------|------------|------------|------------------|-----------------------|---------|
| GSM850    | GSM/TM1   | LCH          | VN         | -30        | -5.62            | -0.00682              | PASS    |
|           |           |              |            | -20        | -6.52            | -0.00791              | PASS    |
|           |           |              |            | -10        | -8.52            | -0.01034              | PASS    |
|           |           |              |            | 0          | -10.53           | -0.01278              | PASS    |
|           |           |              |            | 10         | -3.87            | -0.0047               | PASS    |
|           |           |              |            | 20         | -9.23            | -0.0112               | PASS    |
|           |           |              |            | 30         | -11.17           | -0.01355              | PASS    |
|           |           |              |            | 40         | -9.04            | -0.01097              | PASS    |
|           |           | 50           | -8.72      | -0.01058   | PASS             |                       |         |
|           |           | MCH          | VN         | -30        | -12.91           | -0.01543              | PASS    |
|           |           |              |            | -20        | -6.72            | -0.00803              | PASS    |
|           |           |              |            | -10        | -8.52            | -0.01018              | PASS    |
|           |           |              |            | 0          | -3.16            | -0.00378              | PASS    |
|           |           |              |            | 10         | -11.95           | -0.01428              | PASS    |
|           |           |              |            | 20         | -6.20            | -0.00741              | PASS    |
|           |           |              |            | 30         | -11.43           | -0.01366              | PASS    |
|           |           |              |            | 40         | -8.72            | -0.01042              | PASS    |
|           |           | HCH          | VN         | -30        | -5.23            | -0.00616              | PASS    |
|           |           |              |            | -20        | -12.59           | -0.01483              | PASS    |
|           |           |              |            | -10        | -7.94            | -0.00935              | PASS    |
|           |           |              |            | 0          | -5.04            | -0.00594              | PASS    |
|           |           |              |            | 10         | -8.72            | -0.01027              | PASS    |
|           |           |              |            | 20         | -7.49            | -0.00882              | PASS    |
|           |           |              |            | 30         | -6.84            | -0.00806              | PASS    |
|           | 40        |              |            | -15.37     | -0.01811         | PASS                  |         |
|           | 50        | -6.01        | -0.00708   | PASS       |                  |                       |         |
|           | GSM/TM2   | LCH          | VN         | -30        | -11.27           | -0.01367              | PASS    |
|           |           |              |            | -20        | -15.05           | -0.01826              | PASS    |
|           |           |              |            | -10        | -12.85           | -0.01559              | PASS    |
|           |           |              |            | 0          | -9.27            | -0.01125              | PASS    |
| 10        |           |              |            | -7.23      | -0.00877         | PASS                  |         |
| 20        |           |              |            | -10.46     | -0.01269         | PASS                  |         |



| Test Band | Test Mode | Test Channel | Test Volt. | Test Temp. | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |          |      |         |        |          |      |  |  |     |       |         |      |
|-----------|-----------|--------------|------------|------------|------------------|-----------------------|---------|----------|------|---------|--------|----------|------|--|--|-----|-------|---------|------|
|           |           |              |            | 30         | -11.98           | -0.01454              | PASS    |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            | 40         | -5.23            | -0.00635              | PASS    |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            | 50         | -19.73           | -0.02394              | PASS    |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           | MCH          | VN         |            |                  | -30                   | -18.11  | -0.02165 | PASS |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            |            |                  | -20                   | -14.82  | -0.01771 | PASS |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            |            |                  | -10                   | -12.43  | -0.01486 | PASS |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            |            |                  | 0                     | -11.95  | -0.01428 | PASS |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            |            |                  | 10                    | -13.98  | -0.01671 | PASS |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            |            |                  | 20                    | -8.68   | -0.01038 | PASS |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            |            |                  | 30                    | -6.72   | -0.00803 | PASS |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            |            |                  | 40                    | -4.55   | -0.00544 | PASS |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            |            |                  | 50                    | -14.50  | -0.01733 | PASS |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            |            |                  | HCH                   | VN      |          |      | -30     | -16.27 | -0.01917 | PASS |  |  |     |       |         |      |
|           |           |              |            |            |                  |                       |         |          |      | -20     | -15.85 | -0.01867 | PASS |  |  |     |       |         |      |
|           |           | -10          | -8.78      | -0.01034   | PASS             |                       |         |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           | 0            | -11.43     | -0.01347   | PASS             |                       |         |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           | 10           | -16.72     | -0.0197    | PASS             |                       |         |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           | 20           | -23.15     | -0.02727   | PASS             |                       |         |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           | 30           | -13.20     | -0.01555   | PASS             |                       |         |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           | 40           | -10.33     | -0.01217   | PASS             |                       |         |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           | GSM1900      | GSM/TM1    | LCH        | VN               |                       |         |          |      | -30     | 13.50  | 0.0073   | PASS |  |  |     |       |         |      |
|           |           |              |            |            |                  |                       |         |          |      | -20     | 12.85  | 0.00695  | PASS |  |  |     |       |         |      |
|           |           |              |            |            |                  |                       |         |          |      | -10     | 13.11  | 0.00709  | PASS |  |  |     |       |         |      |
|           |           |              |            |            |                  |                       |         |          |      | 0       | 7.94   | 0.00429  | PASS |  |  |     |       |         |      |
| 10        | 10.78     |              |            |            |                  |                       |         |          |      | 0.00583 | PASS   |          |      |  |  |     |       |         |      |
| 20        | 6.65      |              |            |            |                  |                       |         |          |      | 0.00359 | PASS   |          |      |  |  |     |       |         |      |
| 30        | 4.78      |              |            |            |                  |                       |         |          |      | 0.00258 | PASS   |          |      |  |  |     |       |         |      |
| 40        | 16.98     |              |            |            |                  |                       |         |          |      | 0.00918 | PASS   |          |      |  |  |     |       |         |      |
| 50        | 11.75     |              |            |            |                  |                       |         |          |      | 0.00635 | PASS   |          |      |  |  |     |       |         |      |
| MCH       | VN        |              |            |            |                  |                       |         |          |      |         |        |          |      |  |  | -30 | 11.88 | 0.00632 | PASS |
|           |           |              |            |            |                  |                       |         |          |      |         |        |          |      |  |  | -20 | 20.99 | 0.01116 | PASS |
|           |           |              |            | -10        | 6.84             | 0.00364               | PASS    |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            | 0          | 14.08            | 0.00749               | PASS    |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            | 10         | 14.08            | 0.00749               | PASS    |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            | 20         | 4.65             | 0.00247               | PASS    |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            | 30         | 18.47            | 0.00982               | PASS    |          |      |         |        |          |      |  |  |     |       |         |      |
|           |           |              |            | 40         | 22.79            | 0.01212               | PASS    |          |      |         |        |          |      |  |  |     |       |         |      |
| 50        | 8.85      |              |            | 0.00471    | PASS             |                       |         |          |      |         |        |          |      |  |  |     |       |         |      |
| HCH       | VN        |              |            |            |                  | -30                   | 13.30   | 0.00696  | PASS |         |        |          |      |  |  |     |       |         |      |

| Test Band | Test Mode | Test Channel | Test Volt. | Test Temp. | Freq. Error [Hz] | Freq. vs. rated [ppm] | Verdict |
|-----------|-----------|--------------|------------|------------|------------------|-----------------------|---------|
|           |           |              |            | -20        | 18.02            | 0.00944               | PASS    |
|           |           |              |            | -10        | 10.46            | 0.00548               | PASS    |
|           |           |              |            | 0          | 18.73            | 0.00981               | PASS    |
|           |           |              |            | 10         | 23.70            | 0.01241               | PASS    |
|           |           |              |            | 20         | 15.95            | 0.00835               | PASS    |
|           |           |              |            | 30         | 16.47            | 0.00862               | PASS    |
|           |           |              |            | 40         | 12.72            | 0.00666               | PASS    |
|           |           |              |            | 50         | 18.66            | 0.00977               | PASS    |
|           | GSM/TM2   | LCH          | VN         | -30        | -4.91            | -0.00265              | PASS    |
|           |           |              |            | -20        | -0.03            | -0.00002              | PASS    |
|           |           |              |            | -10        | -6.68            | -0.00361              | PASS    |
|           |           |              |            | 0          | -4.16            | -0.00225              | PASS    |
|           |           |              |            | 10         | -13.04           | -0.00705              | PASS    |
|           |           |              |            | 20         | -4.49            | -0.00243              | PASS    |
|           |           |              |            | 30         | -1.97            | -0.00106              | PASS    |
|           |           |              |            | 40         | 5.94             | 0.00321               | PASS    |
|           |           |              |            | 50         | -16.08           | -0.00869              | PASS    |
|           |           |              |            | MCH        | VN               | -30                   | 8.23    |
|           |           | -20          | -4.13      |            |                  | -0.0022               | PASS    |
|           |           | -10          | 4.04       |            |                  | 0.00215               | PASS    |
|           |           | 0            | -4.29      |            |                  | -0.00228              | PASS    |
|           |           | 10           | -8.68      |            |                  | -0.00462              | PASS    |
|           |           | 20           | -1.65      |            |                  | -0.00088              | PASS    |
|           |           | 30           | 11.49      |            |                  | 0.00611               | PASS    |
|           |           | 40           | -8.52      |            |                  | -0.00453              | PASS    |
|           |           | HCH          | VN         | -30        | 0.48             | 0.00025               | PASS    |
|           |           |              |            | -20        | 6.26             | 0.00328               | PASS    |
|           |           |              |            | -10        | -10.91           | -0.00571              | PASS    |
|           |           |              |            | 0          | -0.74            | -0.00039              | PASS    |
|           |           |              |            | 10         | 11.82            | 0.00619               | PASS    |
|           |           |              |            | 20         | 8.91             | 0.00467               | PASS    |
|           |           |              |            | 30         | 1.29             | 0.00068               | PASS    |
|           | 40        |              |            | 2.55       | 0.00134          | PASS                  |         |
| 50        | 4.58      | 0.0024       | PASS       |            |                  |                       |         |

END