

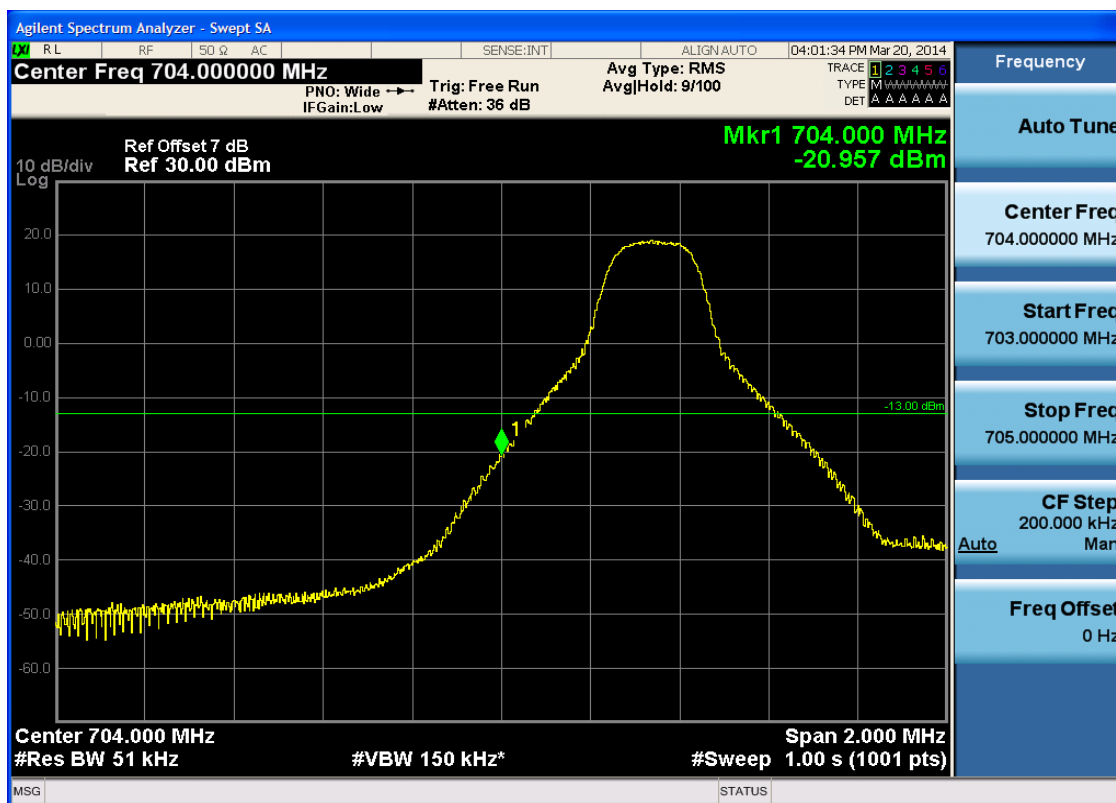
5.3.4 Test Band = BAND17

5.3.4.1 Test Mode = LTE/TM1

5.3.4.1.1 Test Bandwidth = 5

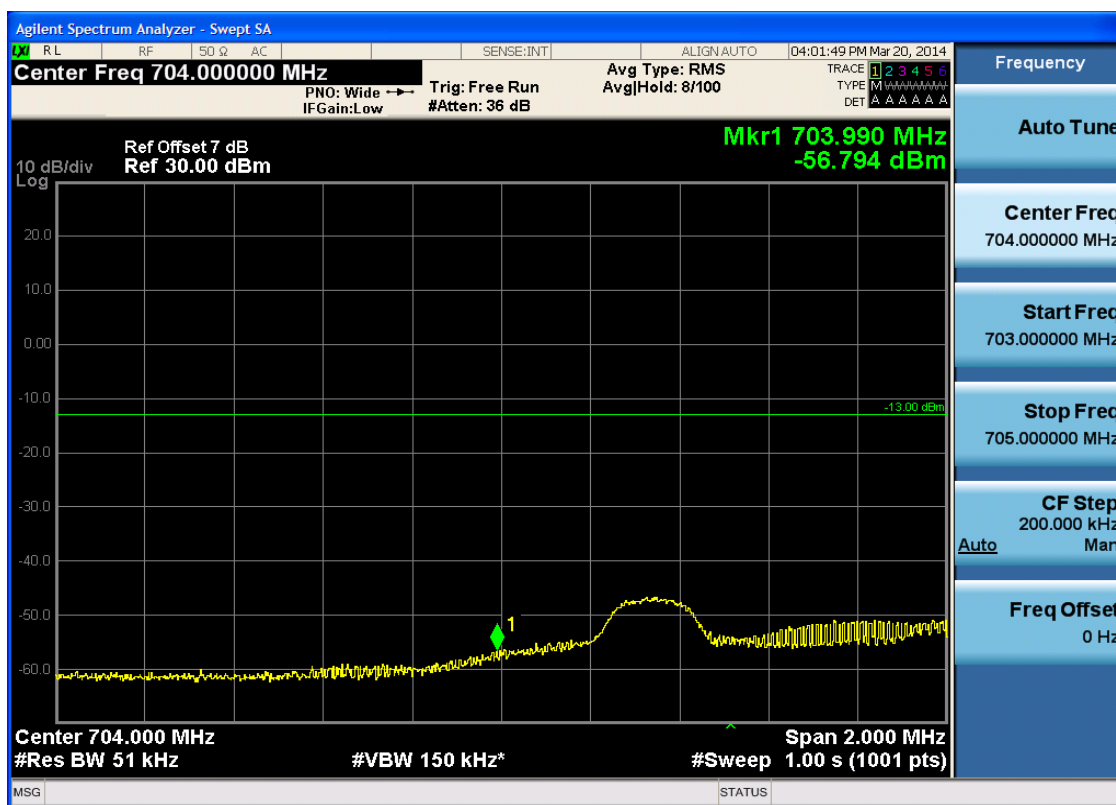
5.3.4.1.1.1 Test Channel = LCH

5.3.4.1.1.1.1 Test RB = RB1#0





5.3.4.1.1.2 Test RB = RB1#24

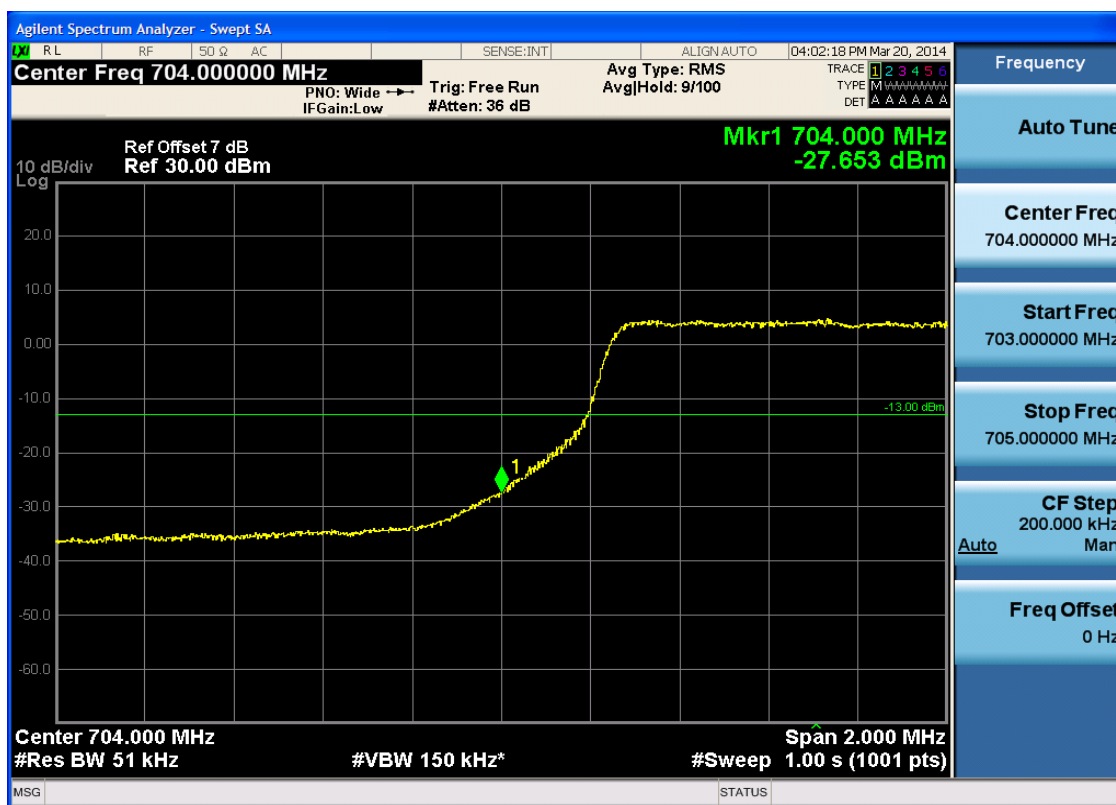




5.3.4.1.1.3 Test RB = RB12#6



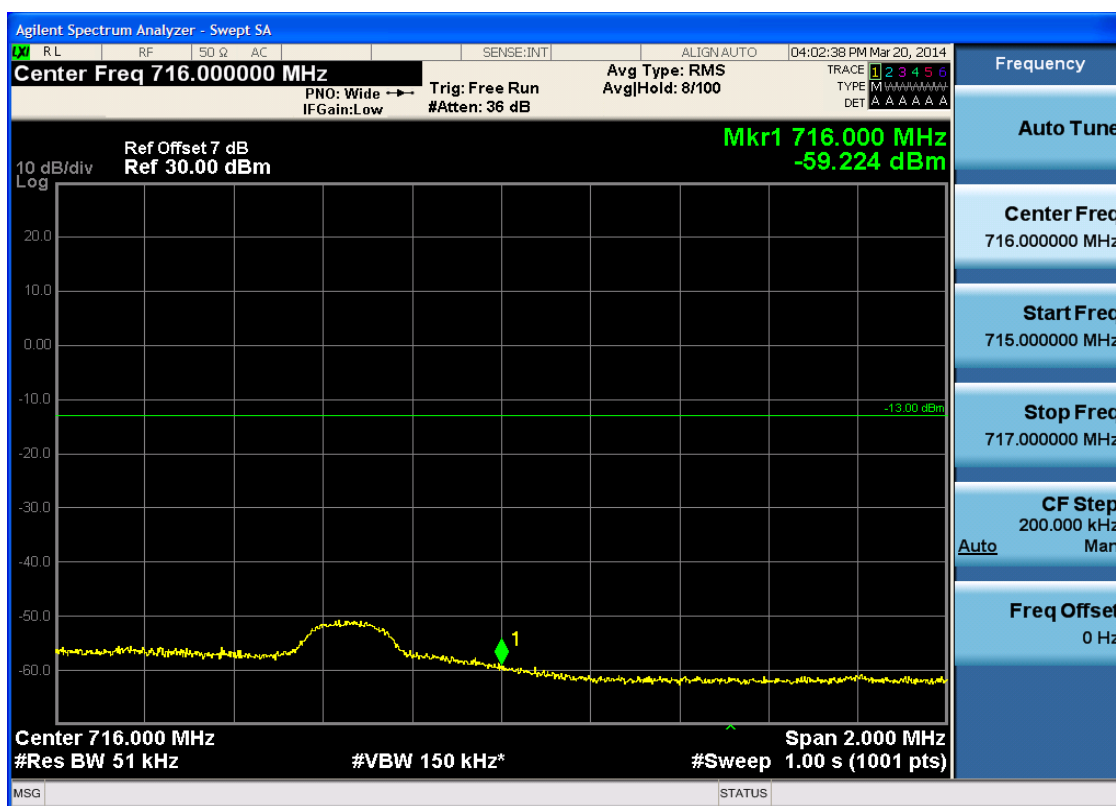
5.3.4.1.1.1.4 Test RB = RB25#0





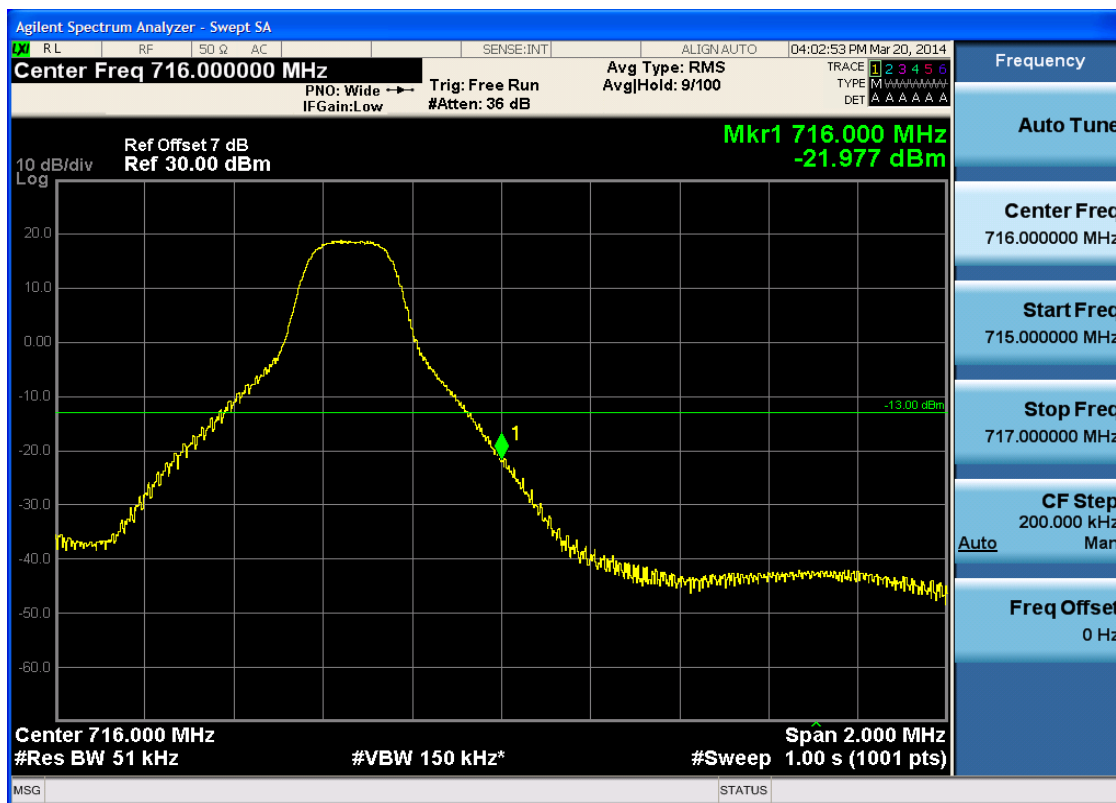
5.3.4.1.1.2 Test Channel = HCH

5.3.4.1.1.2.1 Test RB = RB1#0





5.3.4.1.1.2.2 Test RB = RB1#24





5.3.4.1.1.2.3 Test RB = RB12#6





5.3.4.1.1.2.4 Test RB = RB25#0

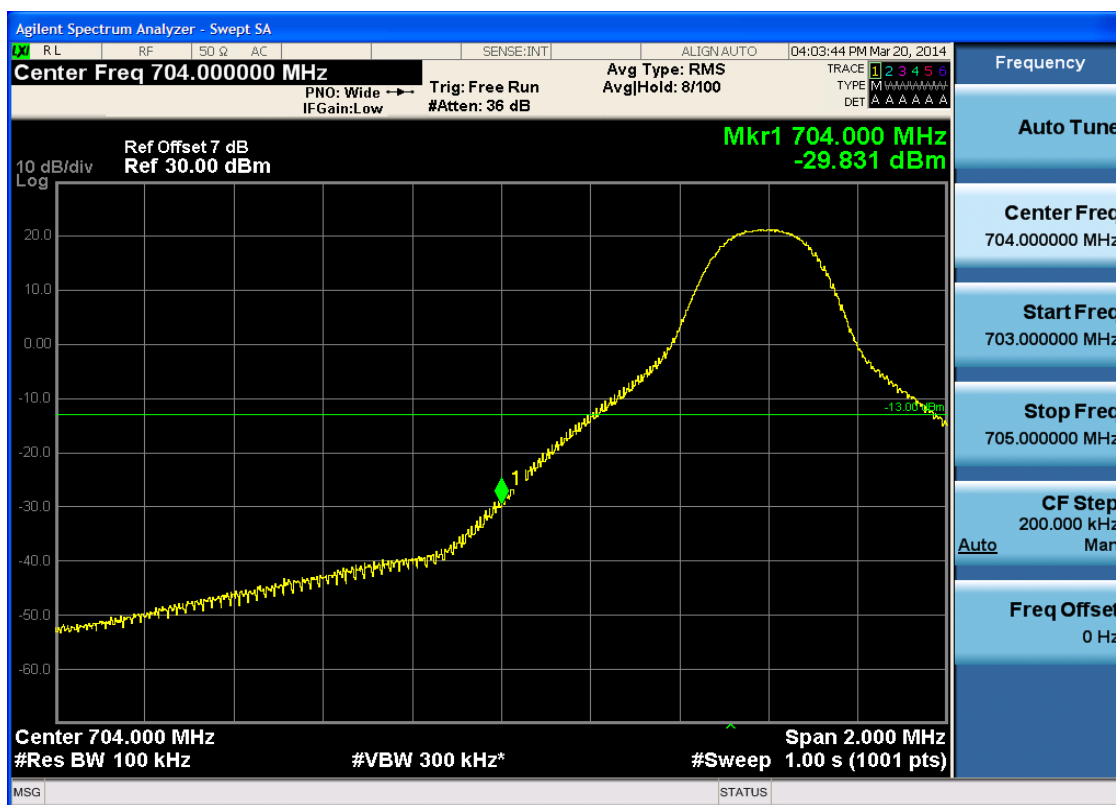




5.3.4.1.2 Test Bandwidth = 10

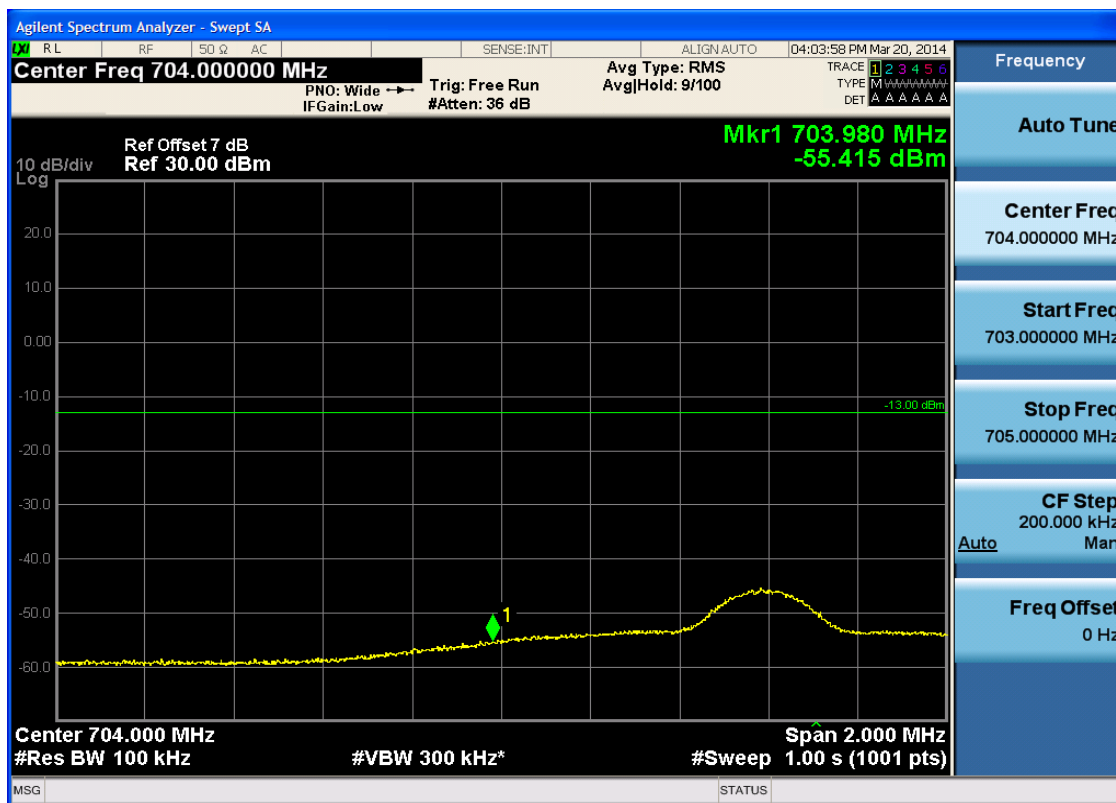
5.3.4.1.2.1 Test Channel = LCH

5.3.4.1.2.1.1 Test RB = RB1#0





5.3.4.1.2.1.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 04:04:13 PM Mar 20, 2014

Center Freq 704.000000 MHz Avg Type: RMS
PNO: Wide Trig: Free Run AvgHold: 9/100
IFGain: Low #Atten: 36 dB TYPE M DET A A A A A A

Ref Offset 7 dB Mkr1 703.160 MHz
Ref 30.00 dBm -34.00 dBm

10 dB/div Log

-13.00 dBm

Center 704.000 MHz Span 2.000 MHz
#Res BW 100 kHz #VBW 300 kHz* #Sweep 1.00 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
704.000000 MHz

Start Freq
703.000000 MHz

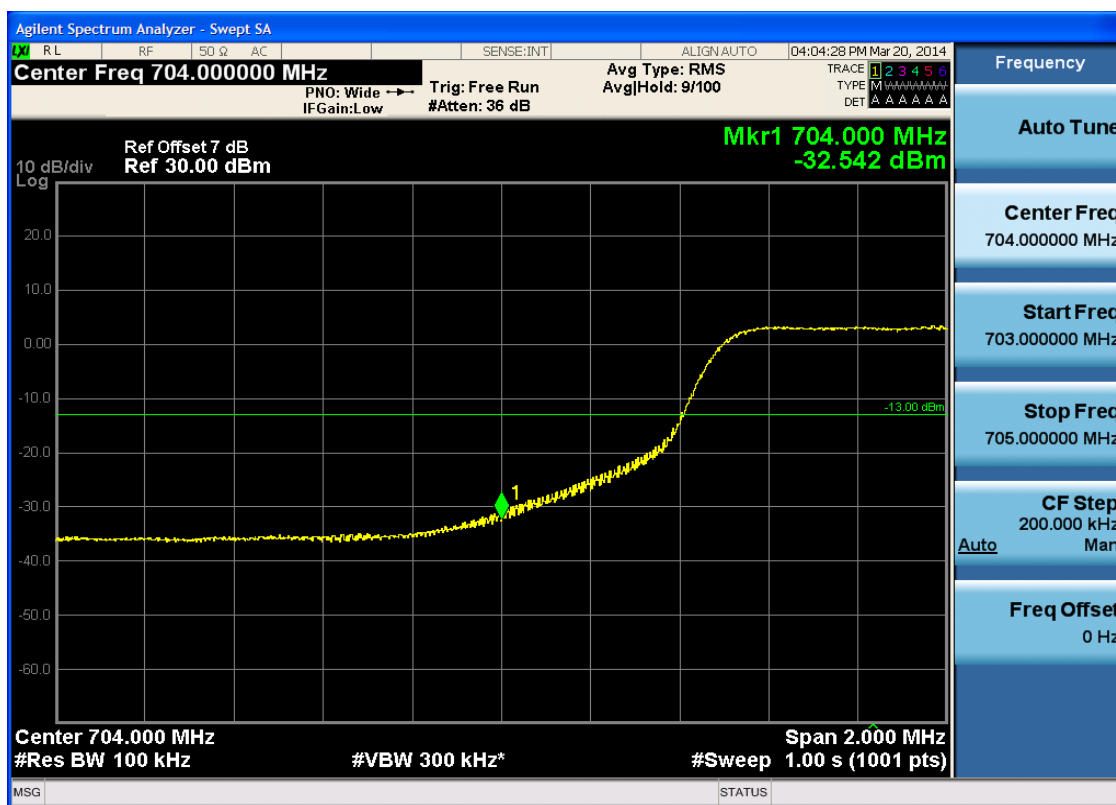
Stop Freq
705.000000 MHz

CF Step
200.000 kHz
Auto Mar

Freq Offset
0 Hz



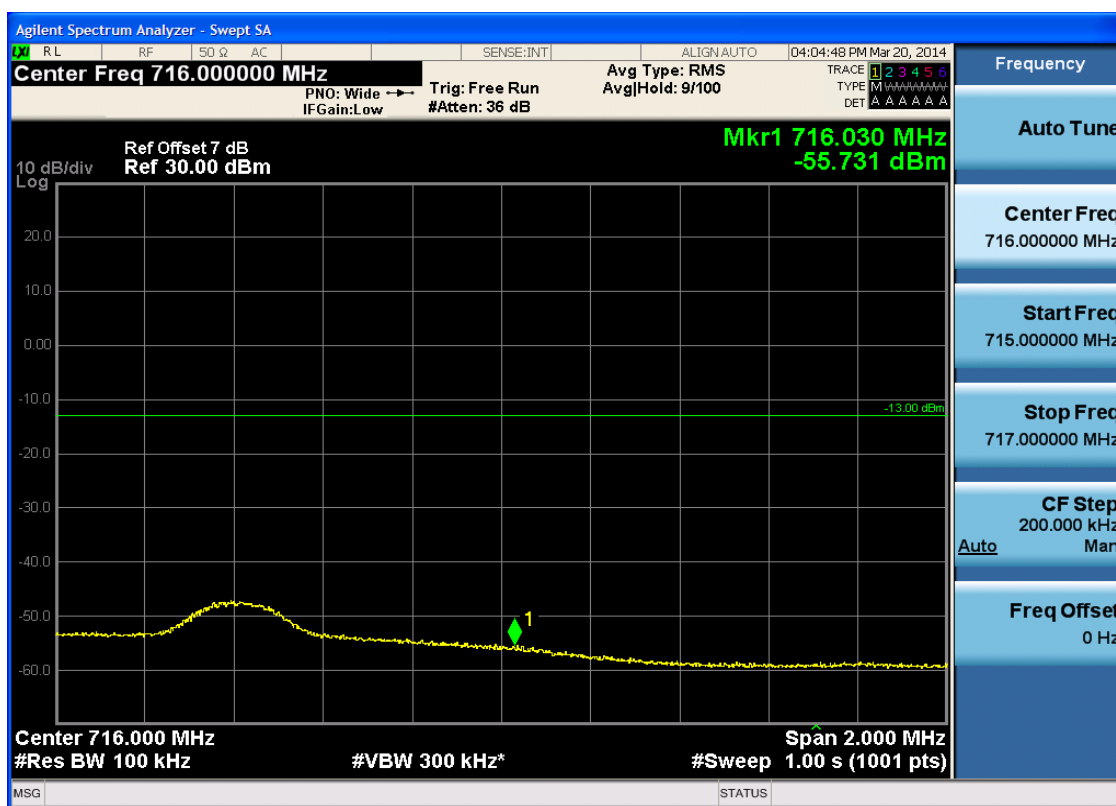
5.3.4.1.2.1.4 Test RB = RB50#0





5.3.4.1.2.2 Test Channel = HCH

5.3.4.1.2.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 04:05:03 PM Mar 20, 2014

Center Freq 716.000000 MHz Avg Type: RMS Avg/Hold: 9/100

PNO: Wide Trg: Free Run IF Gain: Low #Atten: 36 dB

TRACE 1 2 3 4 5 6 TYPE M ***** DET A A A A A A

Ref Offset 7 dB Ref 30.00 dBm

Mkr1 716.000 MHz -30.206 dBm

10 dB/div Log

Center 716.000 MHz Span 2.000 MHz

#Res BW 100 kHz #VBW 300 kHz* #Sweep 1.00 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq 716.000000 MHz

Start Freq 715.000000 MHz

Stop Freq 717.000000 MHz

CF Step 200.000 kHz

Auto Mar

Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 04:05:18 PM Mar 20, 2014

Center Freq 716.000000 MHz

PNO: Wide $\rightarrow$ Trig: Free Run Avg Type: RMS
IFGain: Low #Atten: 36 dB Avg|Hold: 9/100

TRACE 1 2 3 4 5 6
TYPE M I A A A A A A
DET A A A A A A

Ref Offset 7 dB
Ref 30.00 dBm

**Mkr1 716.600 MHz
-35.251 dBm**

10 dB/div
Log

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto Man

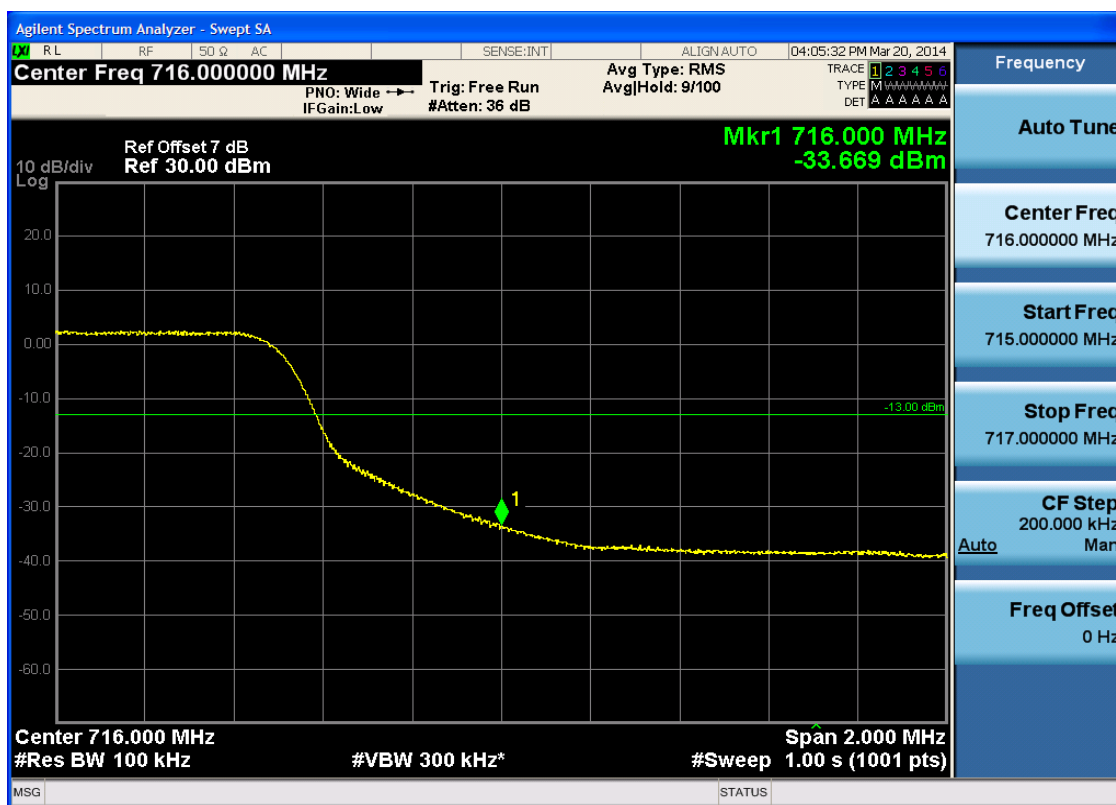
Freq Offset
0 Hz

Center 716.000 MHz
#Res BW 100 kHz #VBW 300 kHz* #Sweep 1.00 s (1001 pts) Span 2.000 MHz

MSG STATUS



5.3.4.1.2.2.4 Test RB = RB50#0



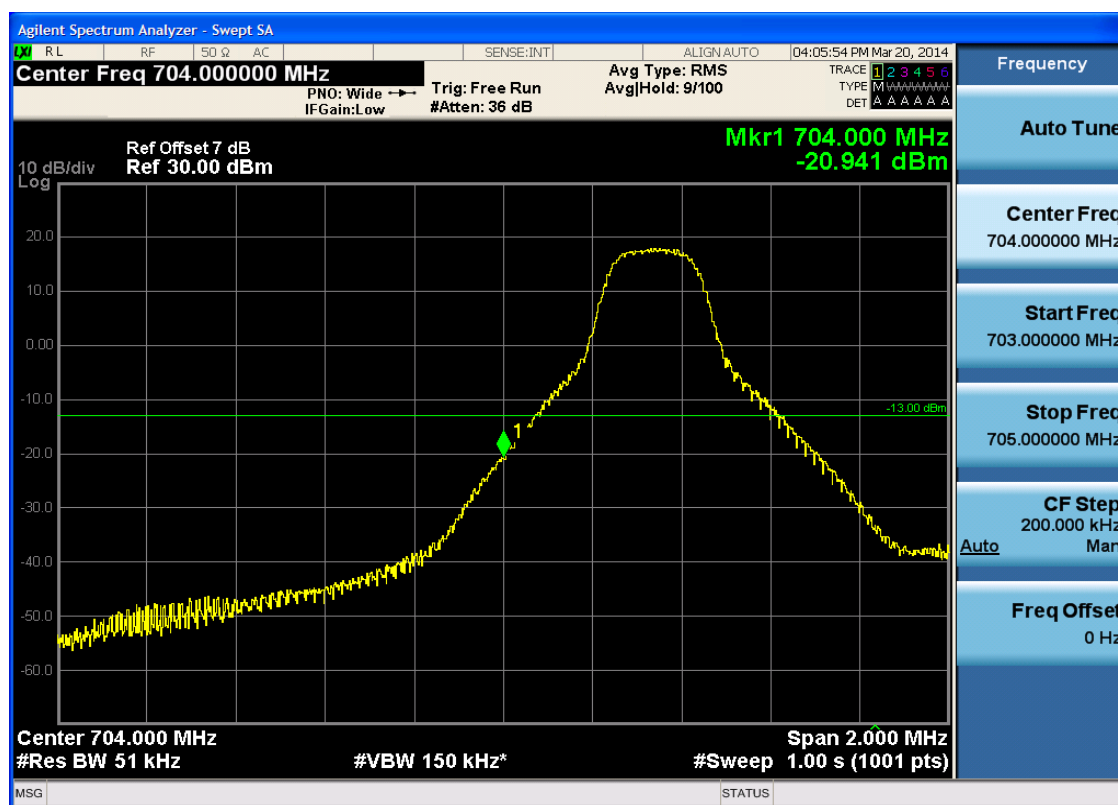


5.3.4.2 Test Mode = LTE/TM2

5.3.4.2.1 Test Bandwidth = 5

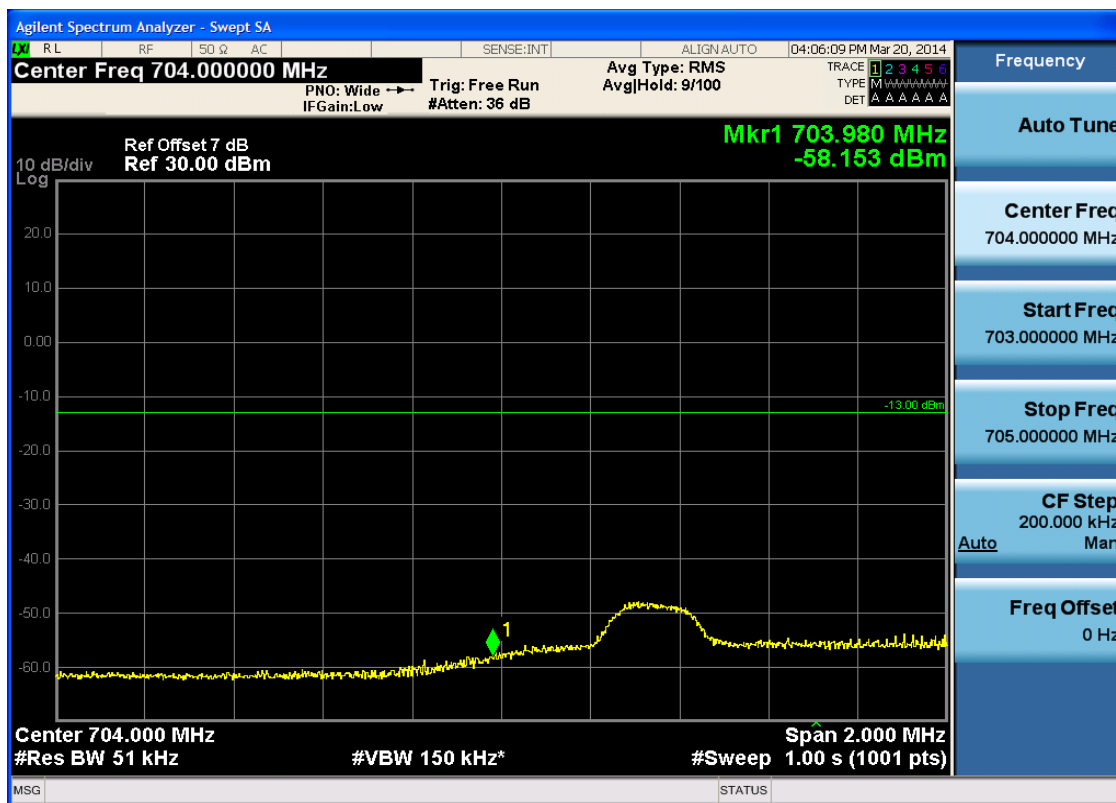
5.3.4.2.1.1 Test Channel = LCH

5.3.4.2.1.1.1 Test RB = RB1#0



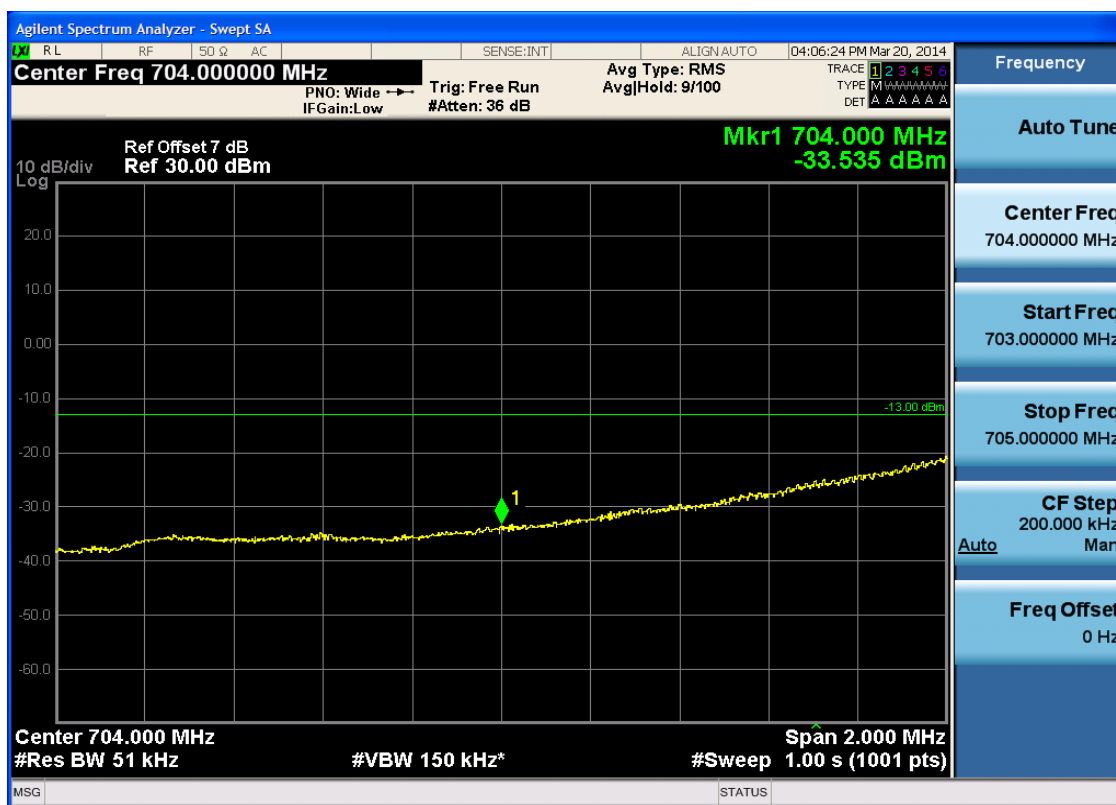


5.3.4.2.1.1.2 Test RB = RB1#24



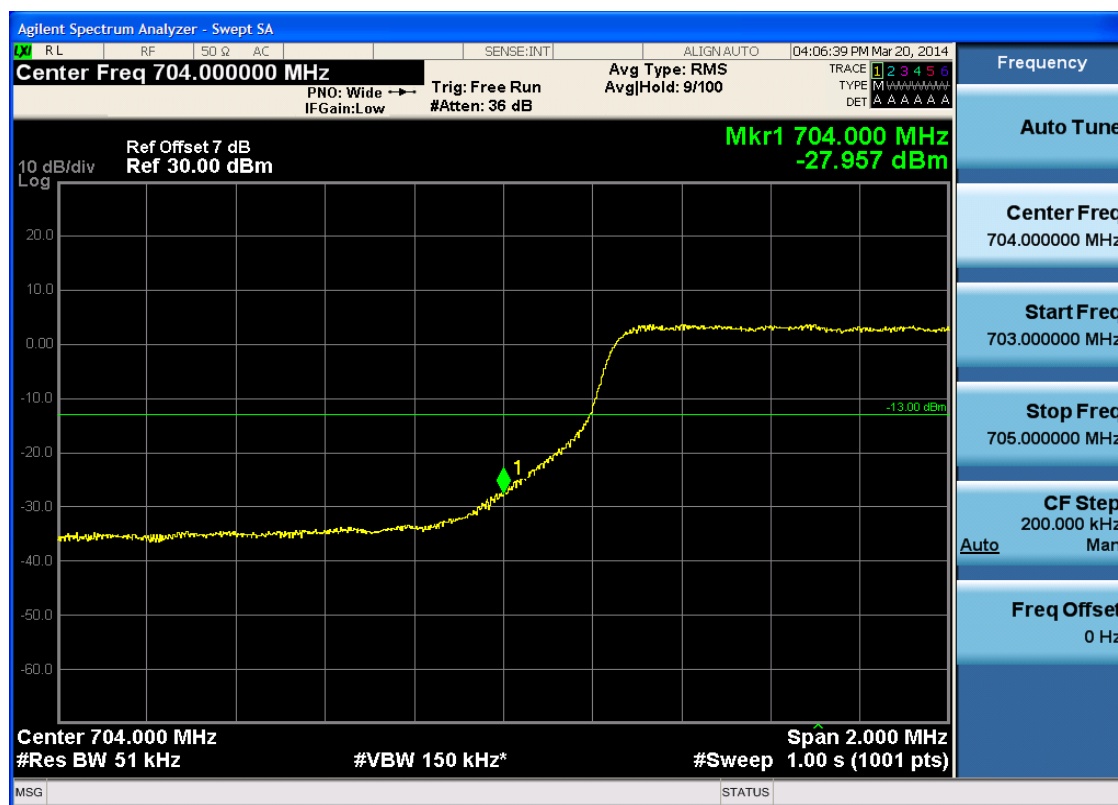


5.3.4.2.1.1.3 Test RB = RB12#6



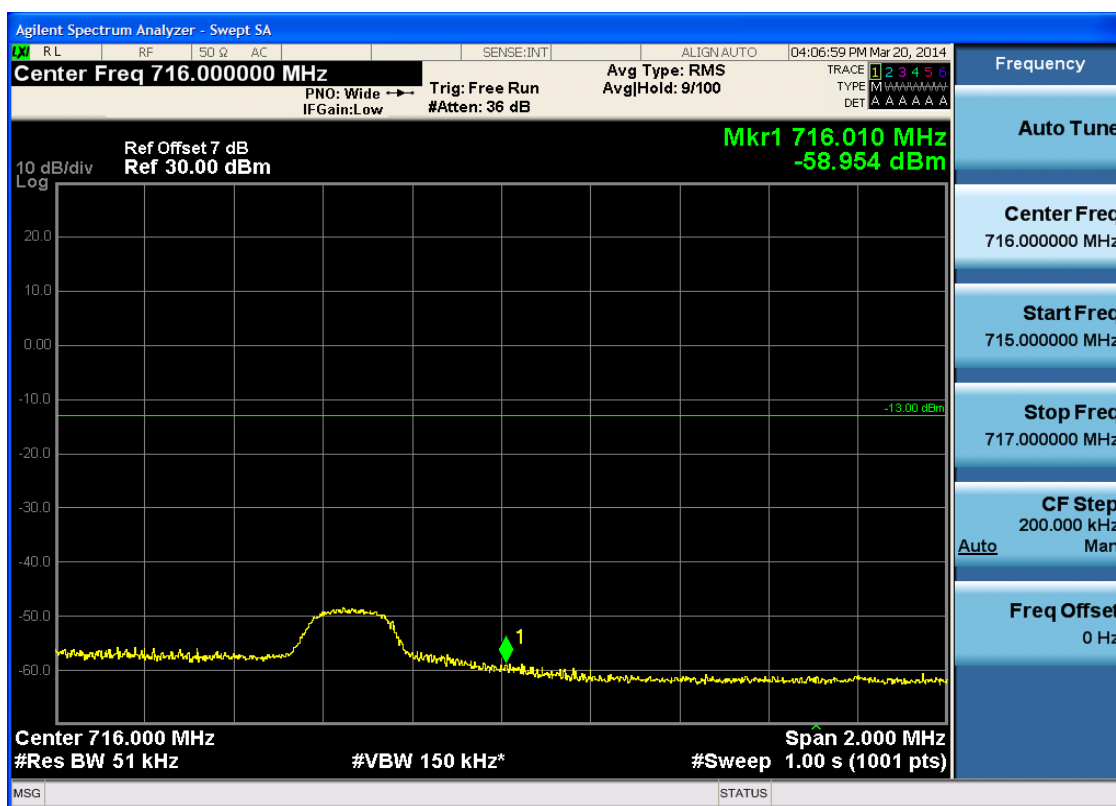


5.3.4.2.1.1.4 Test RB = RB25#0



5.3.4.2.1.2 Test Channel = HCH

5.3.4.2.1.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 04:07:13 PM Mar 20, 2014

Center Freq 716.000000 MHz Avg Type: RMS
PNO: Wide IFGain: Low Trig: Free Run #Atten: 36 dB AvgHold: 9/100
TRACE 1 2 3 4 5 6
TYPE M
DET A A A A A A

Ref Offset 7 dB
Ref 30.00 dBm

Mkr1 716.000 MHz
-22.698 dBm

10 dB/div
Log

20.0
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0

-13.00 dBm

Center 716.000 MHz
#Res BW 51 kHz #VBW 150 kHz* Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

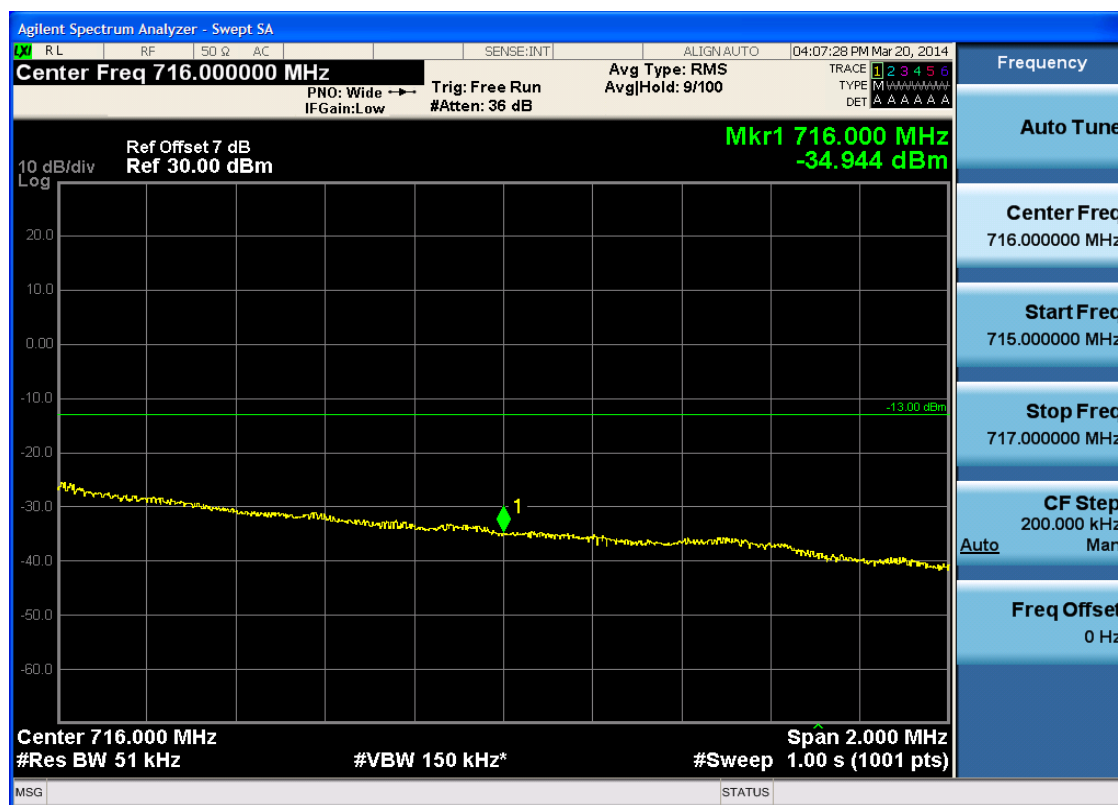
Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



5.3.4.2.1.2.3 Test RB = RB12#6





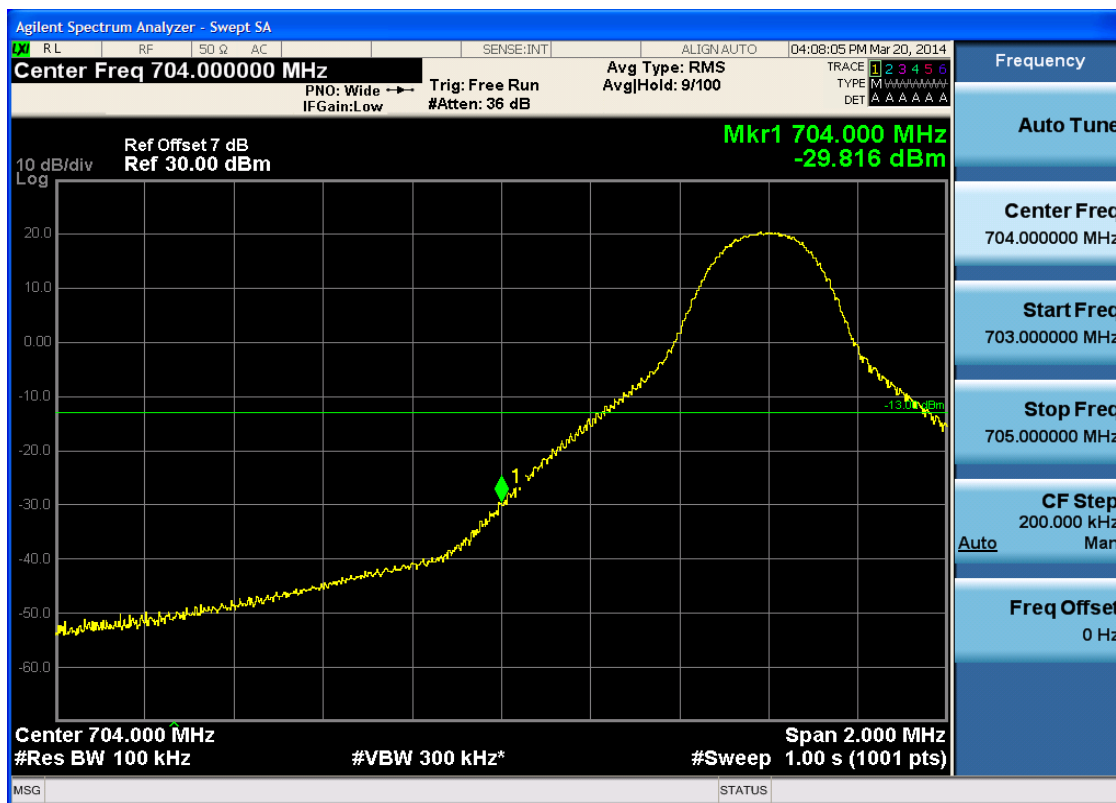
5.3.4.2.1.2.4 Test RB = RB25#0



5.3.4.2.2 Test Bandwidth = 10

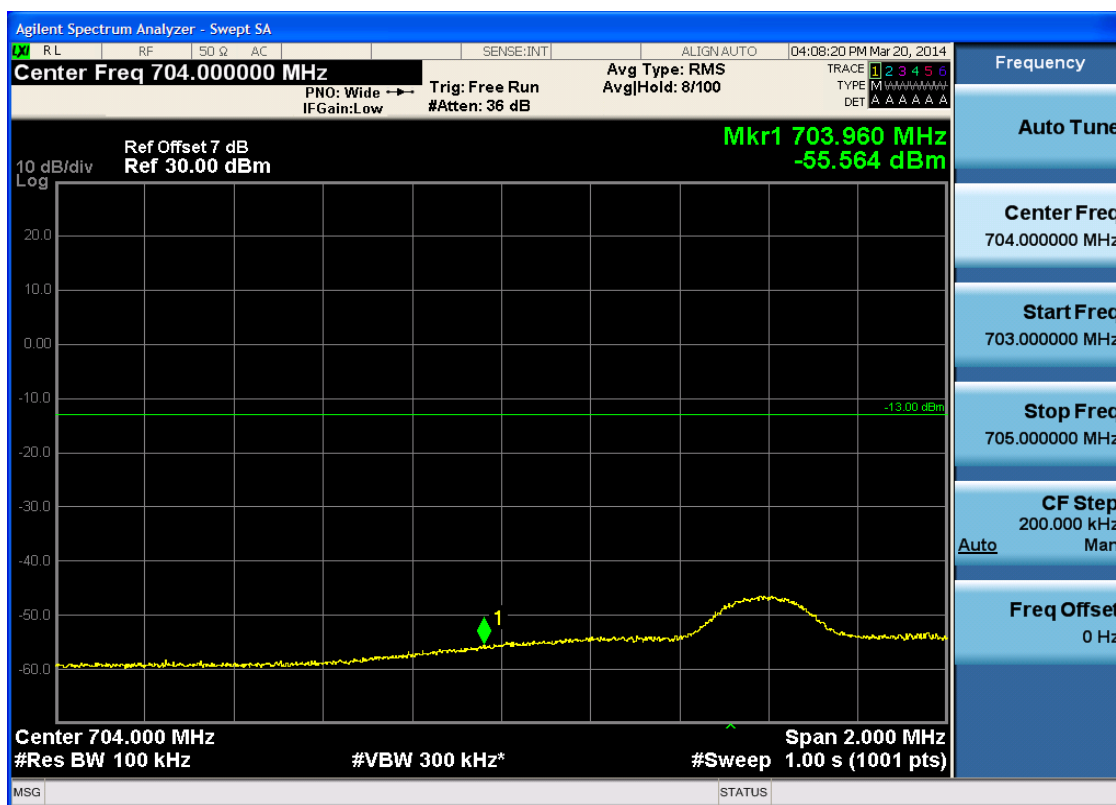
5.3.4.2.2.1 Test Channel = LCH

5.3.4.2.2.1.1 Test RB = RB1#0



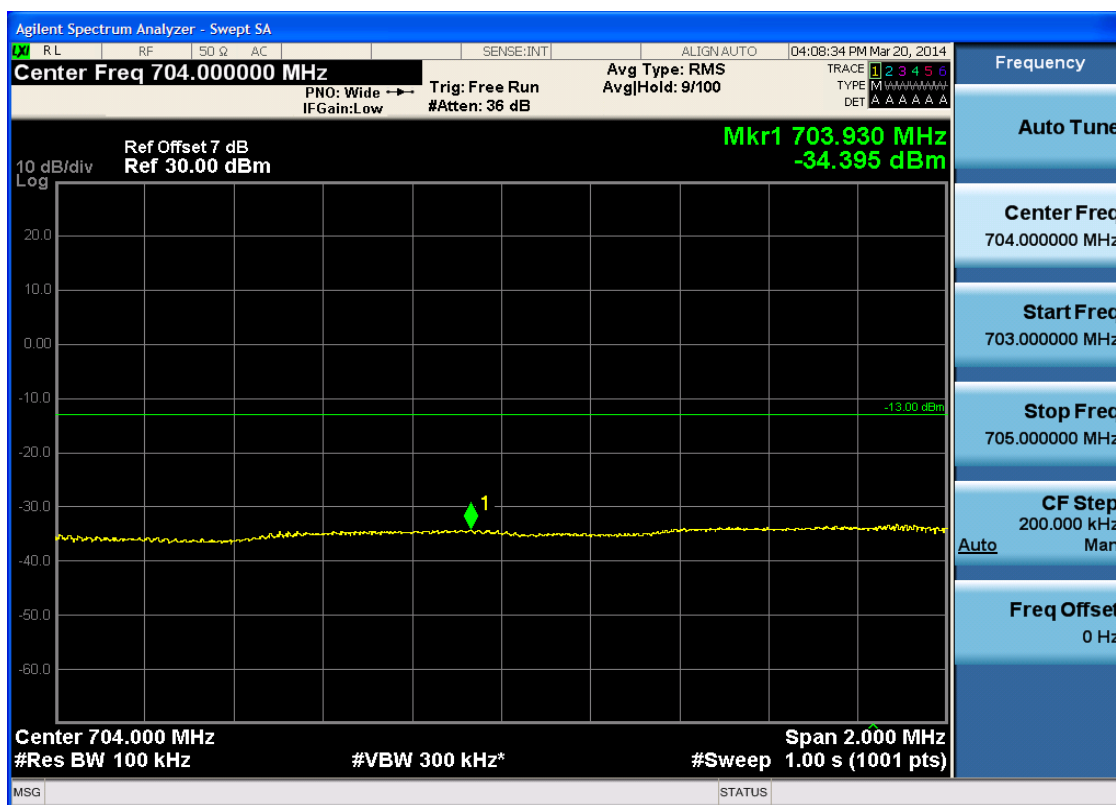


5.3.4.2.2.1.2 Test RB = RB1#49



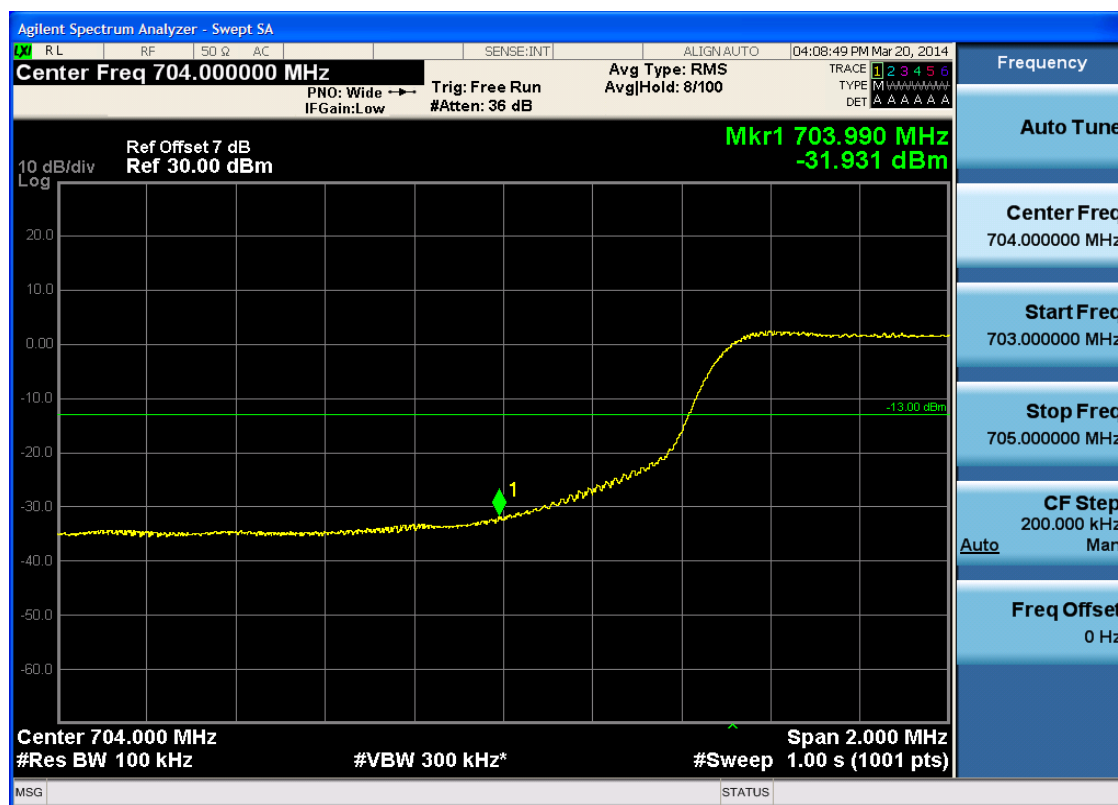


5.3.4.2.2.1.3 Test RB = RB25#13





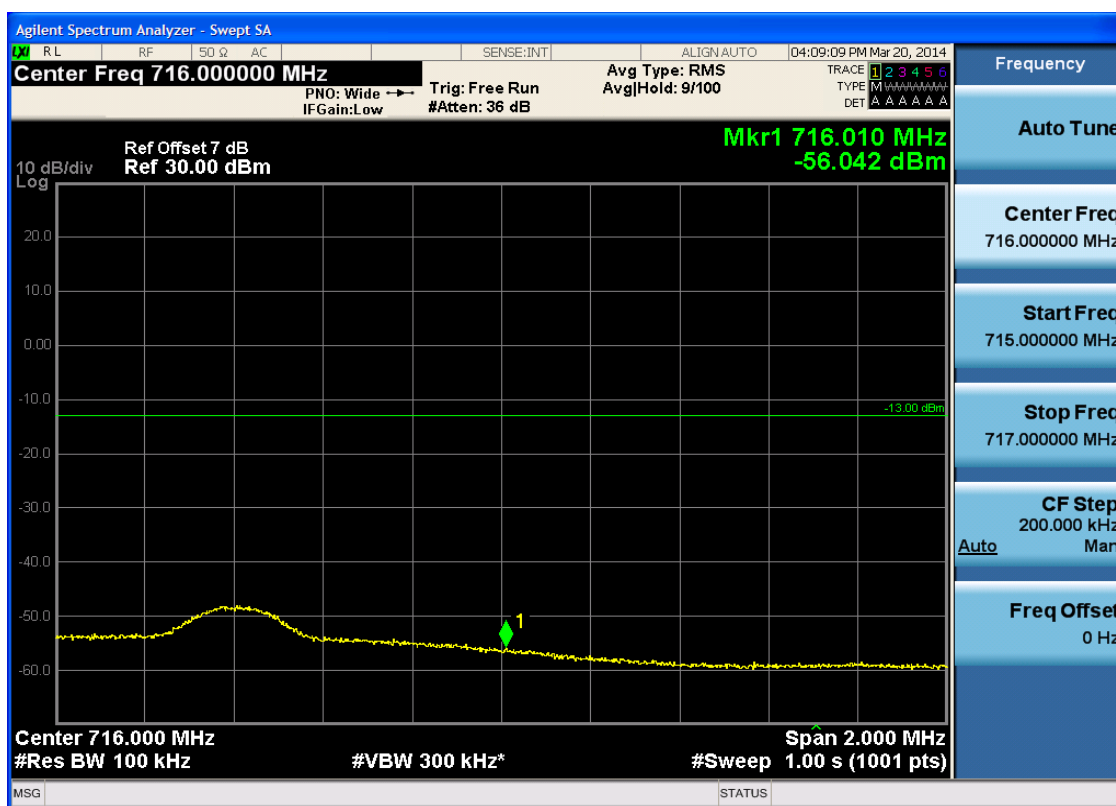
5.3.4.2.2.1.4 Test RB = RB50#0





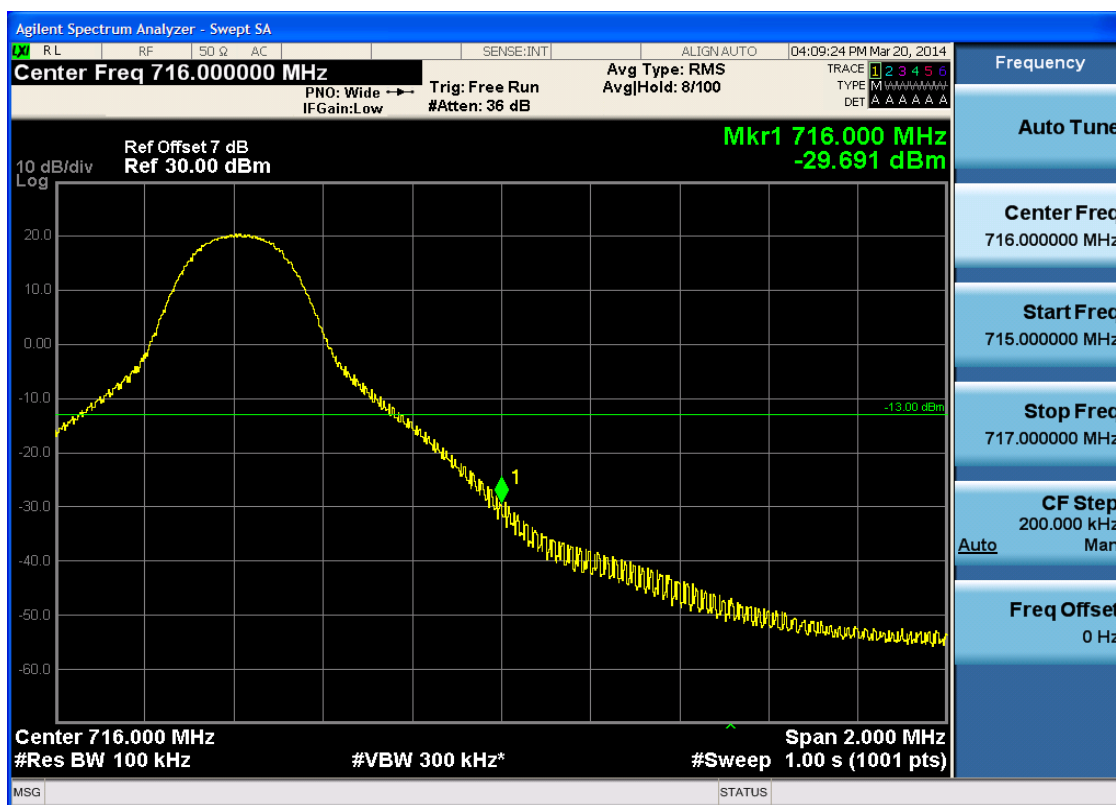
5.3.4.2.2.2 Test Channel = HCH

5.3.4.2.2.2.1 Test RB = RB1#0



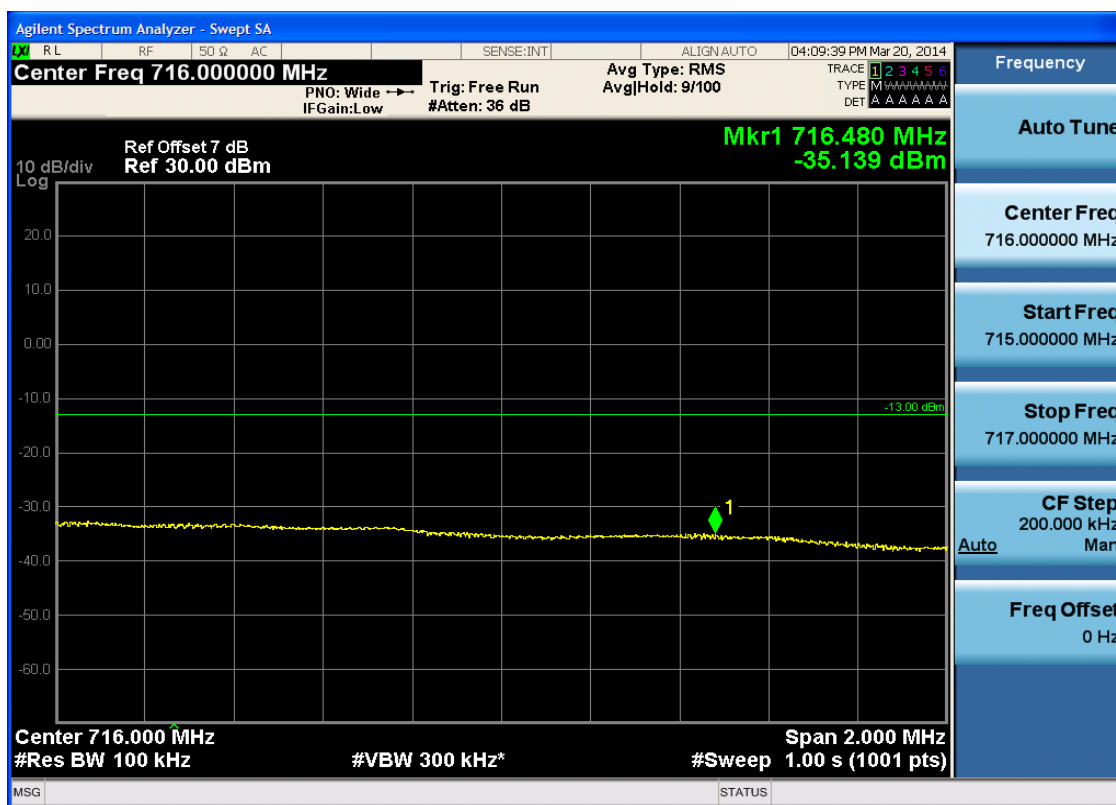


5.3.4.2.2.2 Test RB = RB1#49





5.3.4.2.2.3 Test RB = RB25#13





5.3.4.2.2.4 Test RB = RB50#0



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.

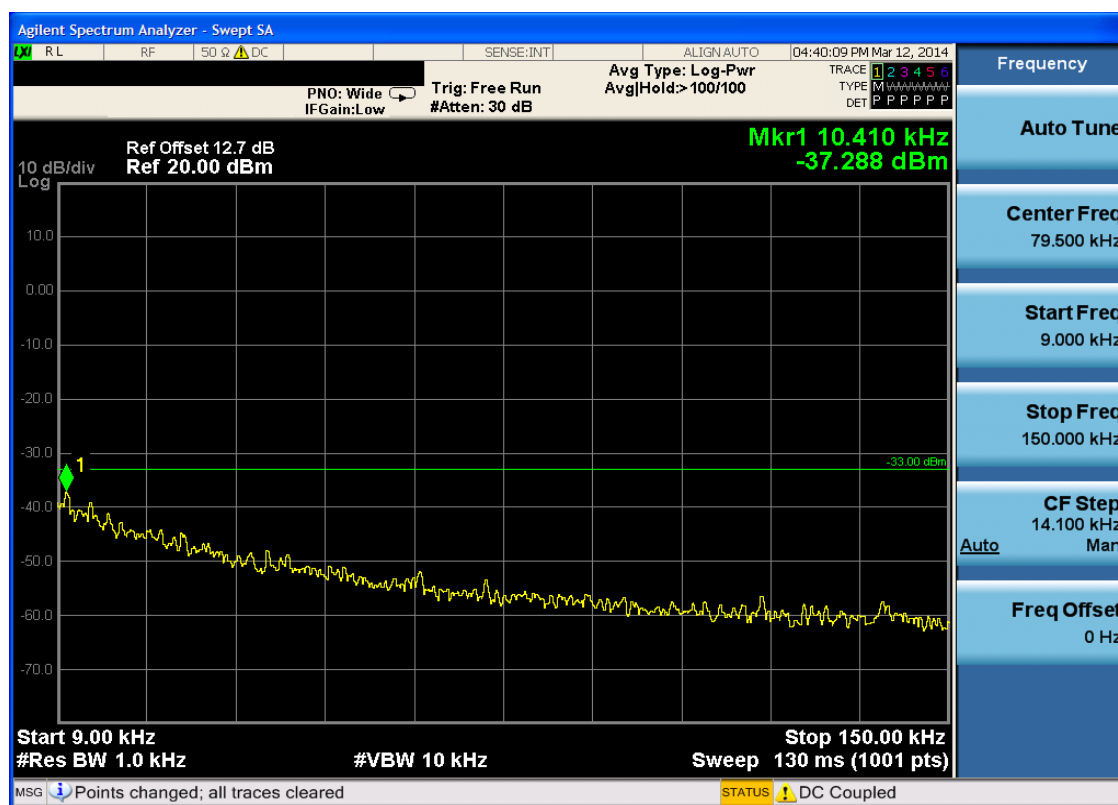
Part I - Test Plots

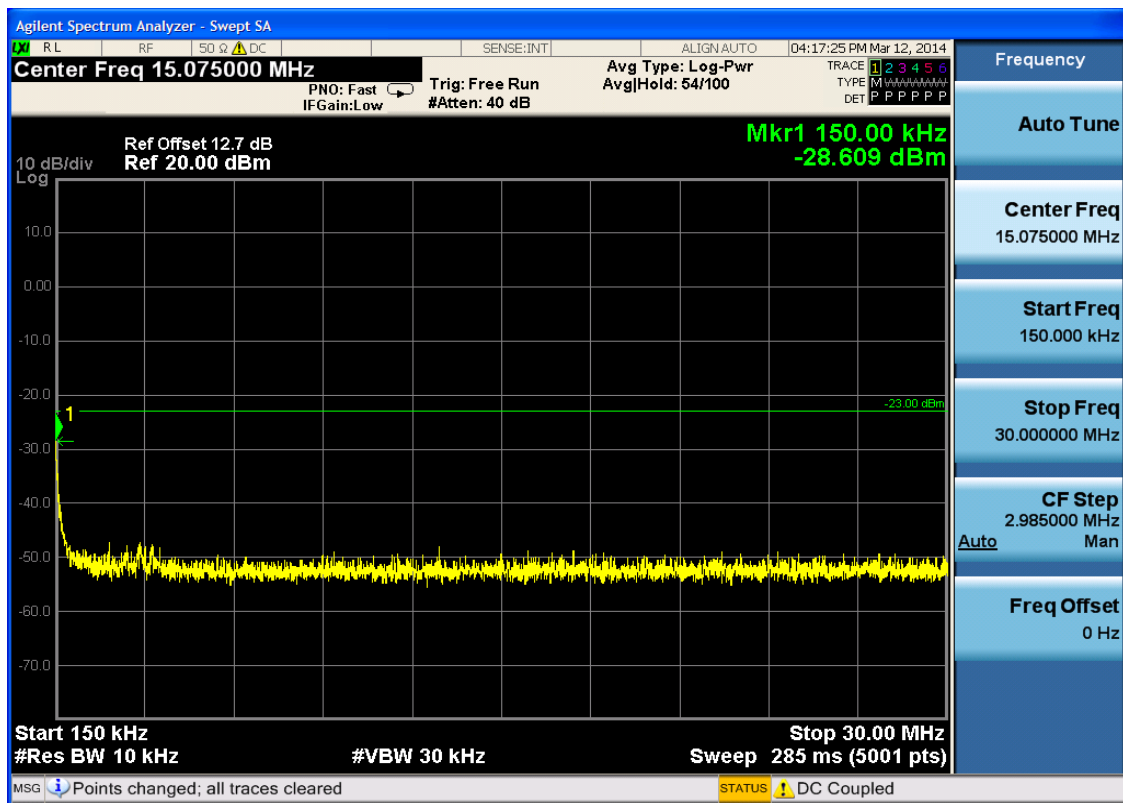
6.1 For GSM

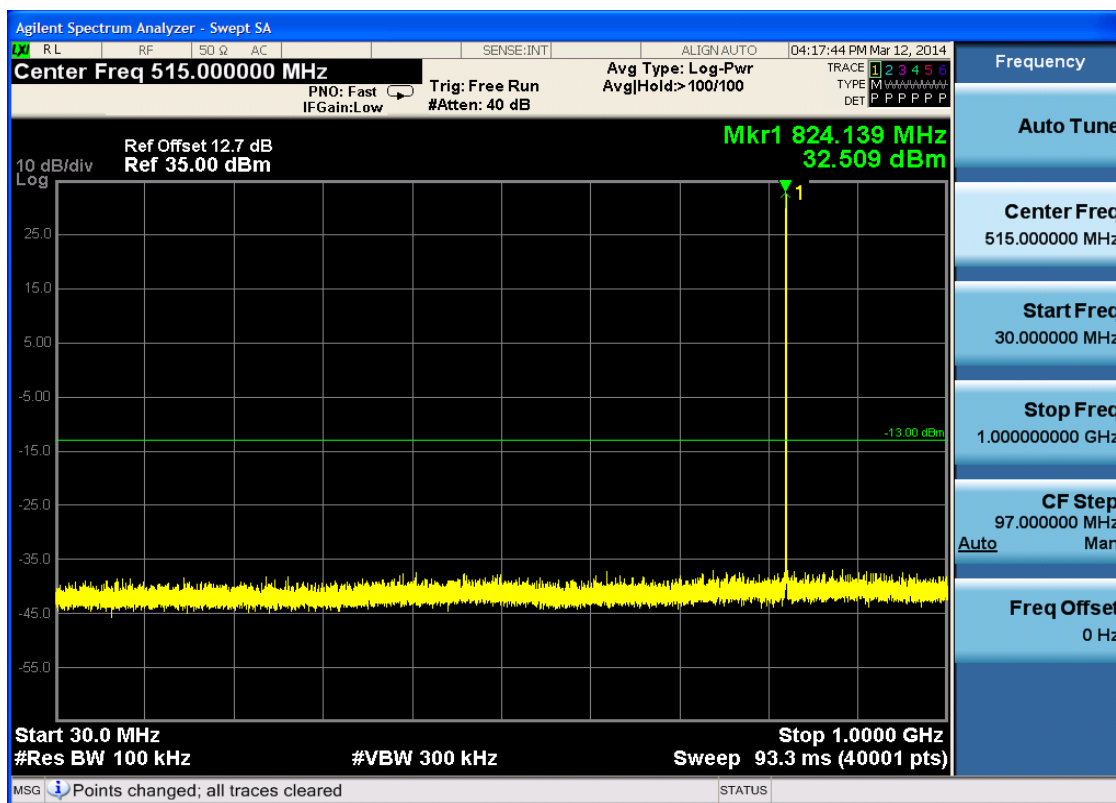
6.1.1 Test Band = GSM850

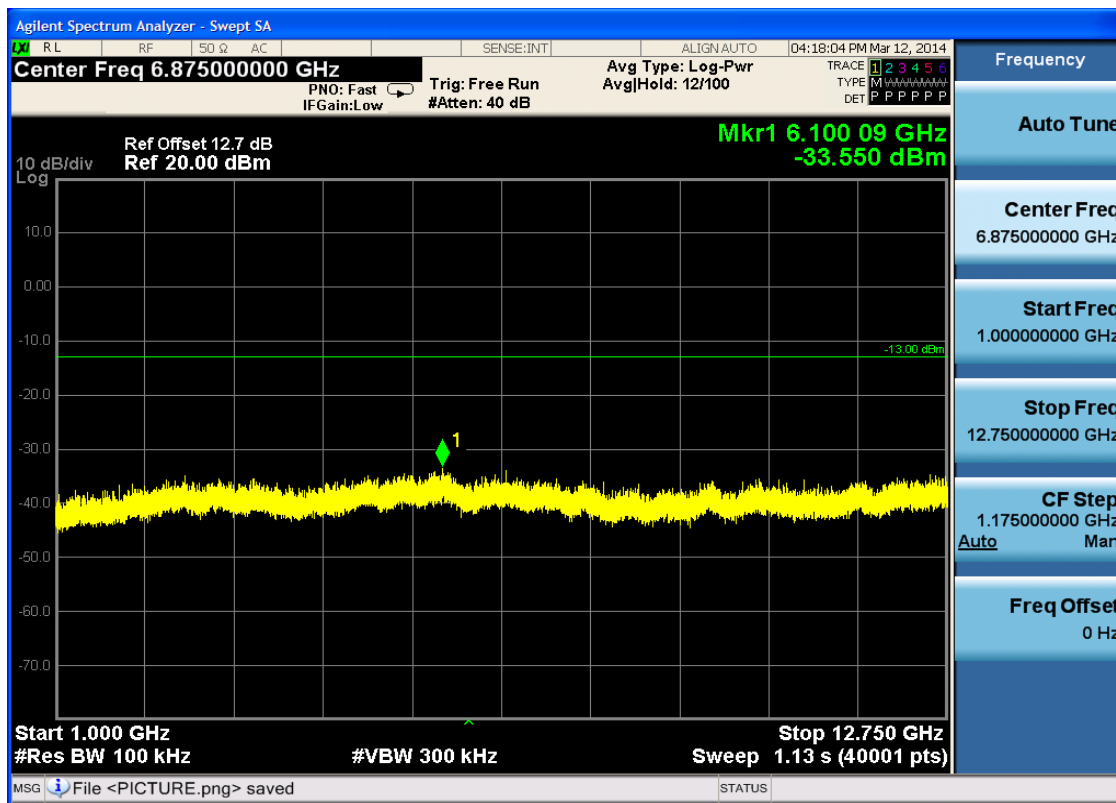
6.1.1.1 Test Mode = GSM/TM1

6.1.1.1.1 Test Channel = LCH



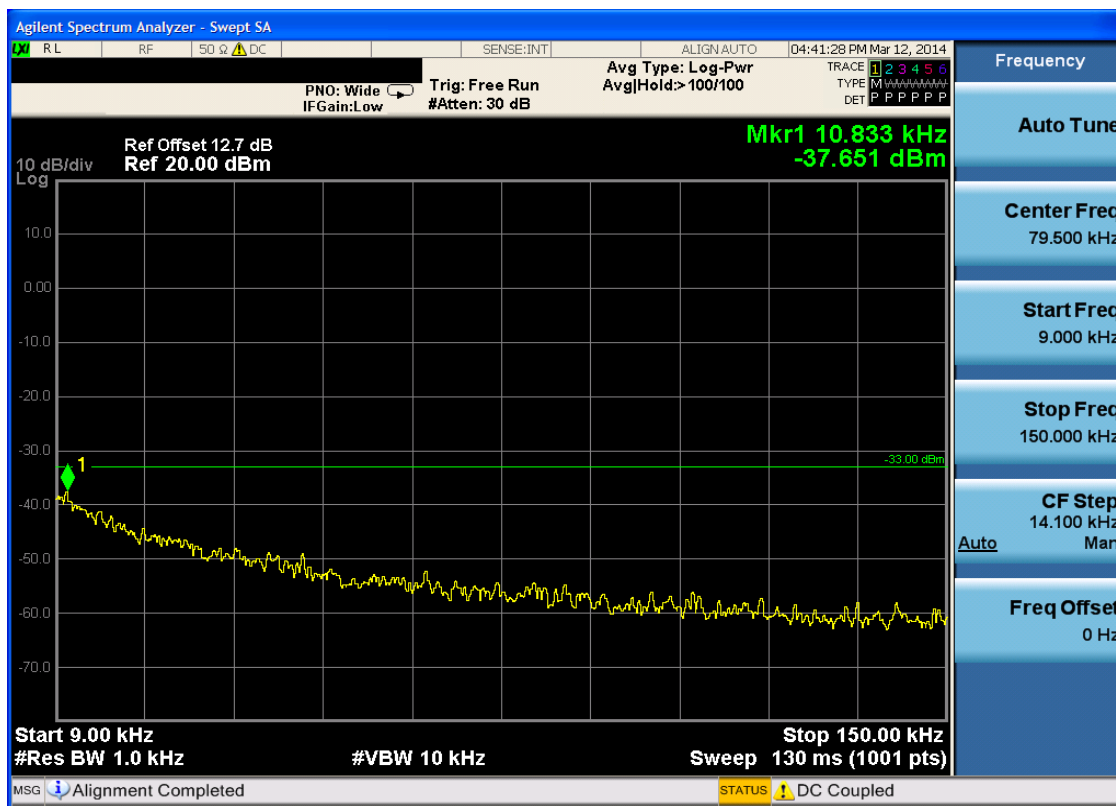


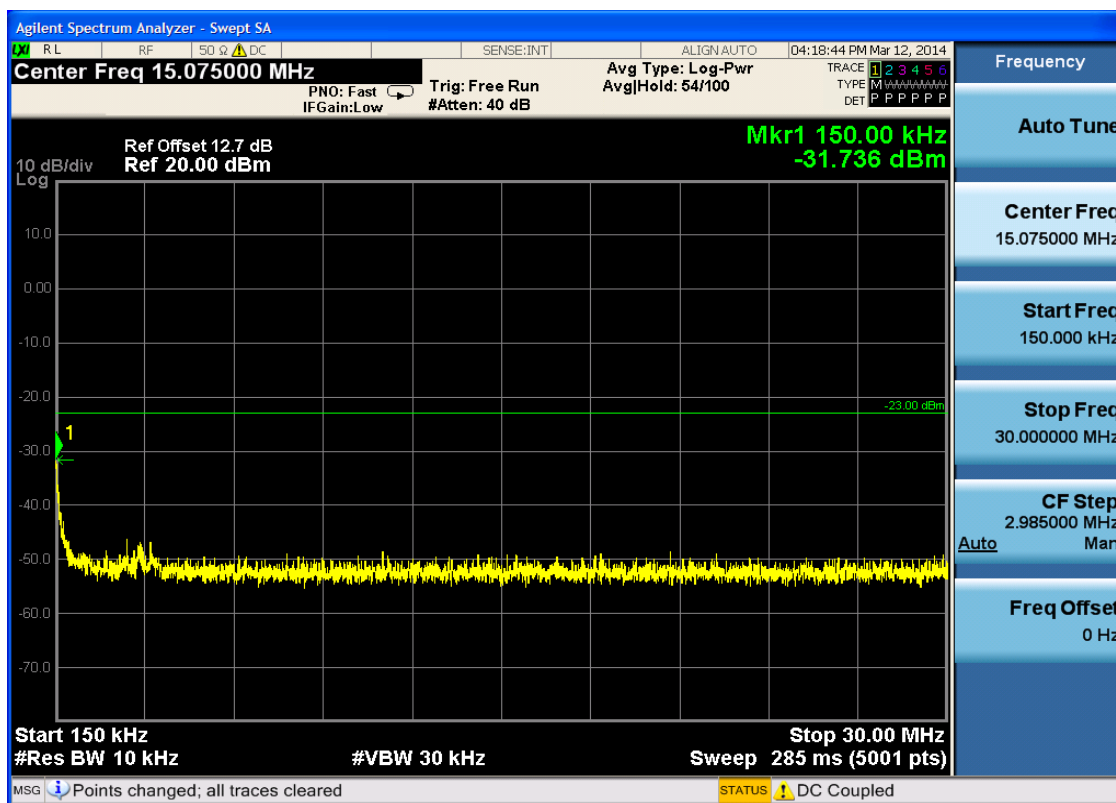


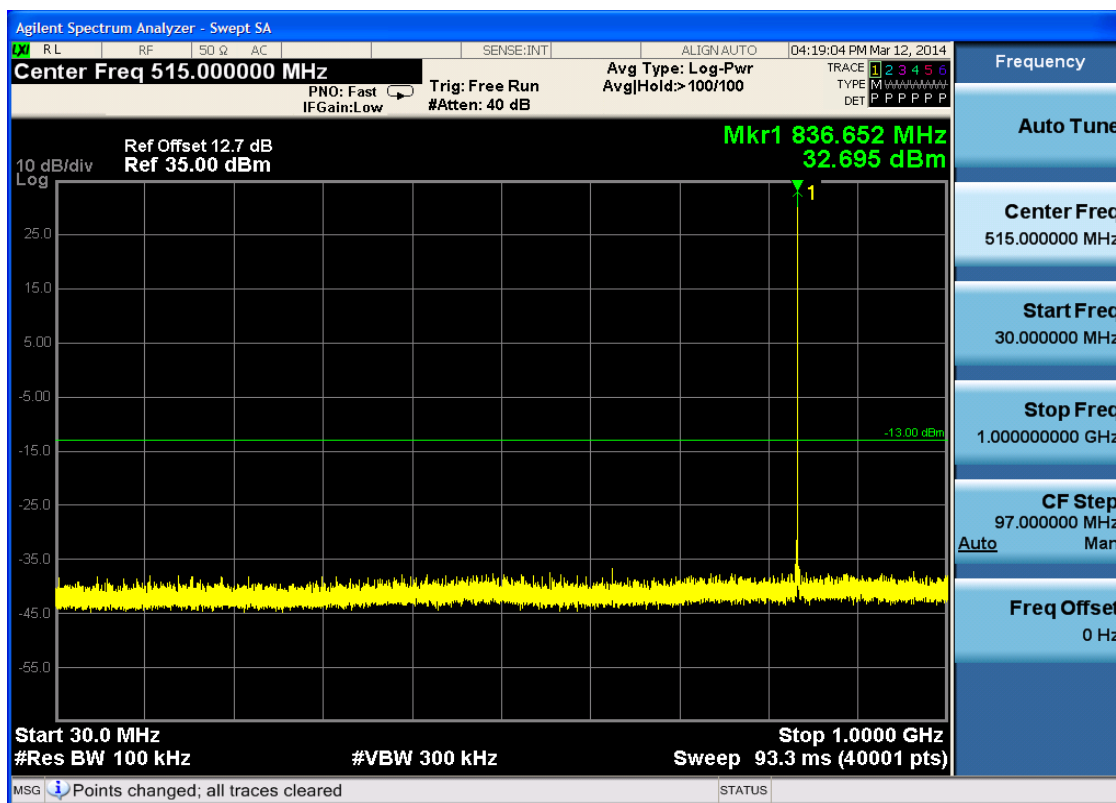


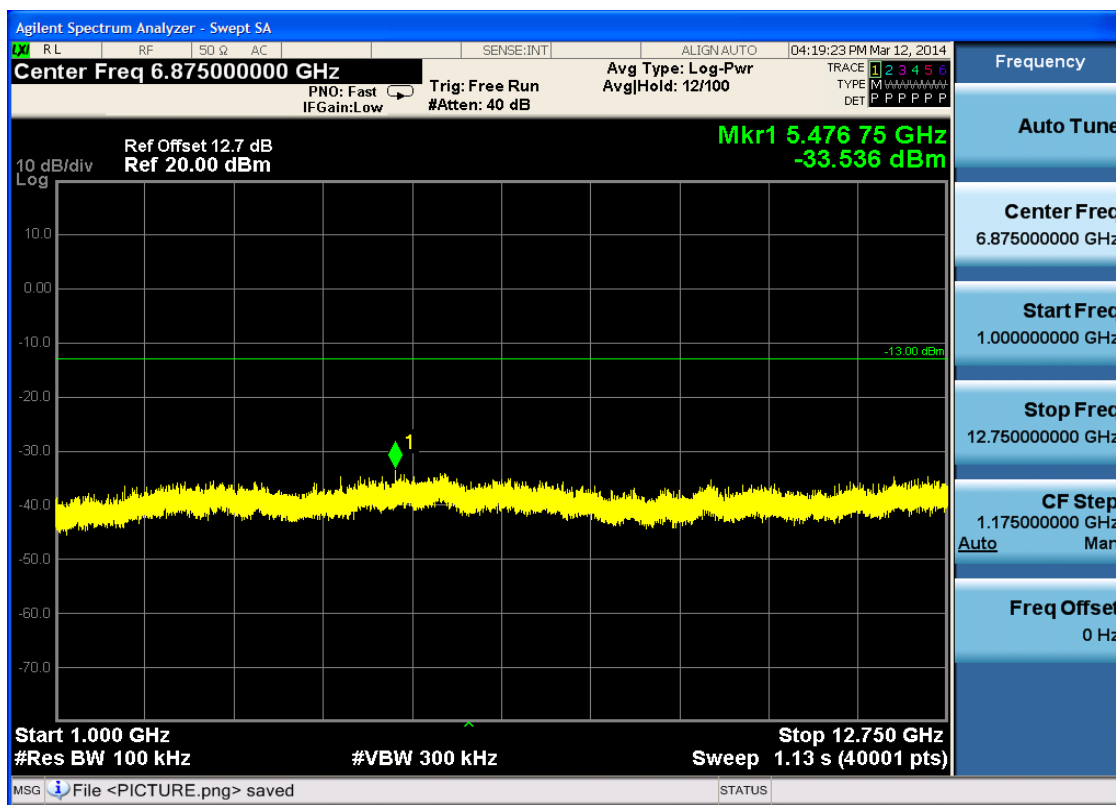


6.1.1.1.2 Test Channel = MCH











Agilent Spectrum Analyzer - Swept SA

☒ R L RF 50 Ω DC SENSE:INT ALIGN:AUTO 04:42:48 PM Mar 12, 2014

PNO: Wide Trig: Free Run Avg Type: Log-Pwr TRACE **1** 2 3 4 5 6
 IFGain:Low #Atten: 30 dB Avg/Hold: >100/100 TYPE: MAAAAAAA
 DET: P P P P P P

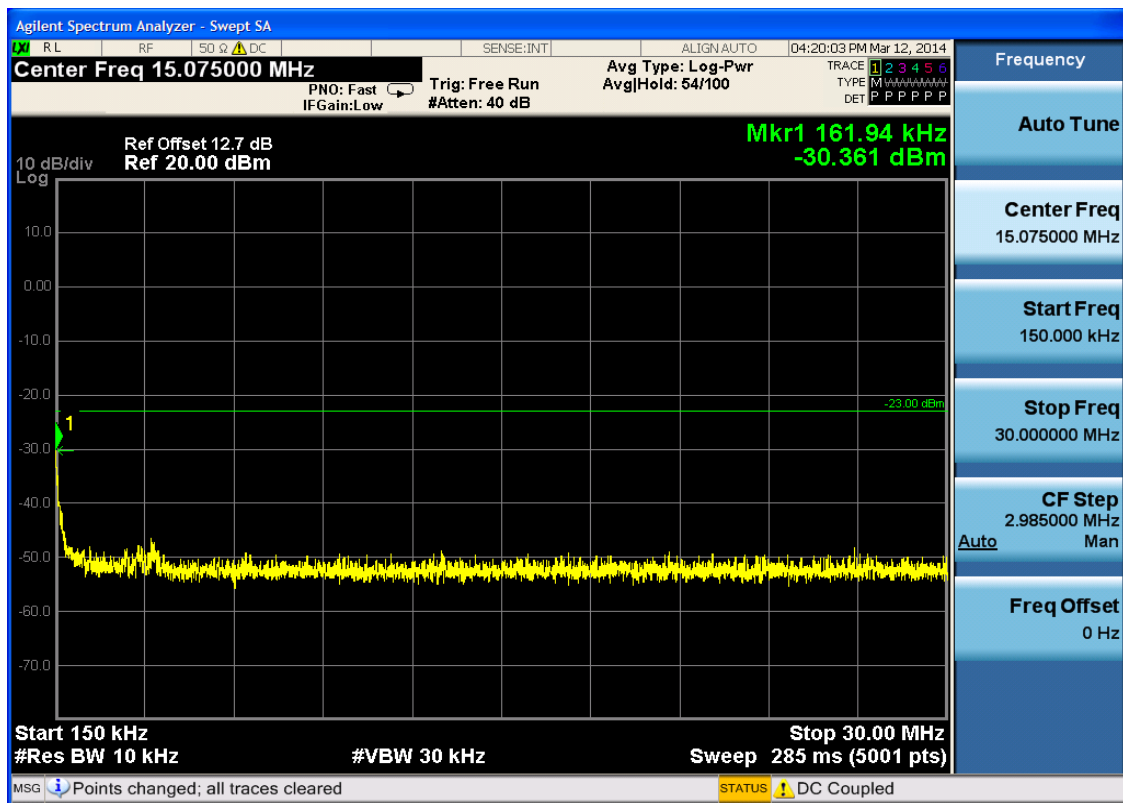
Ref Offset 12.7 dB Mkr1 9.141 kHz
 Ref 20.00 dBm -37.662 dBm

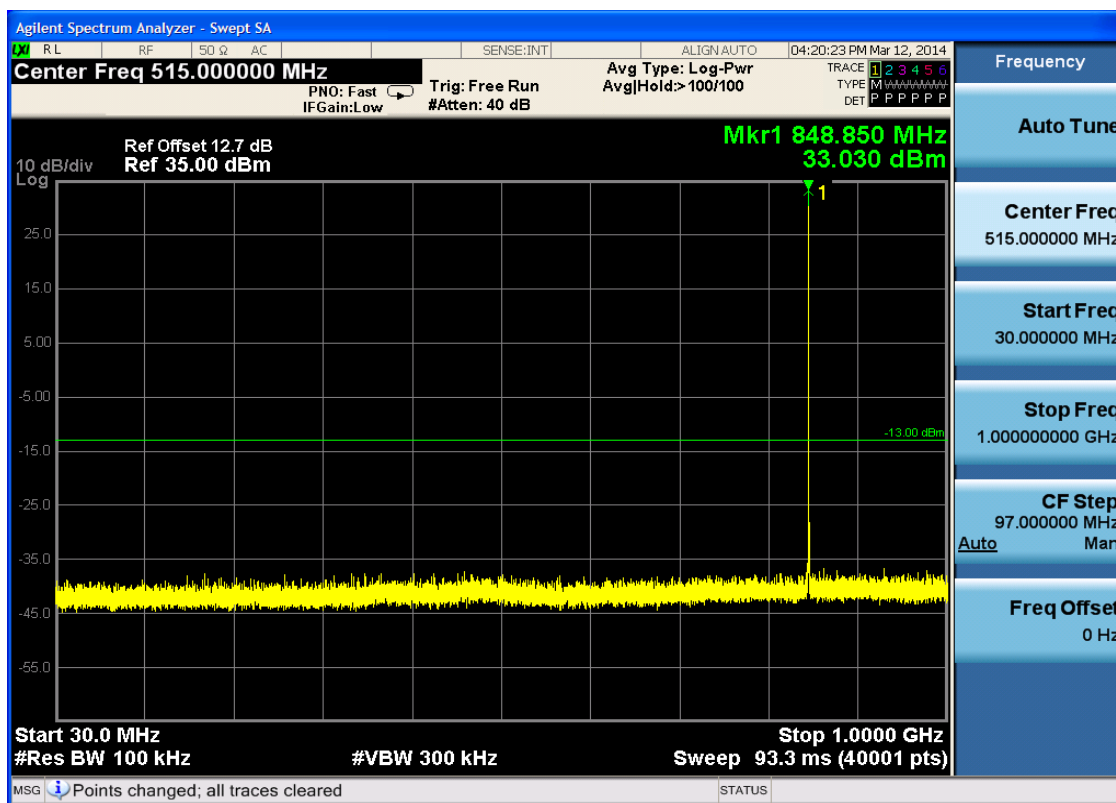
10 dB/div
Log

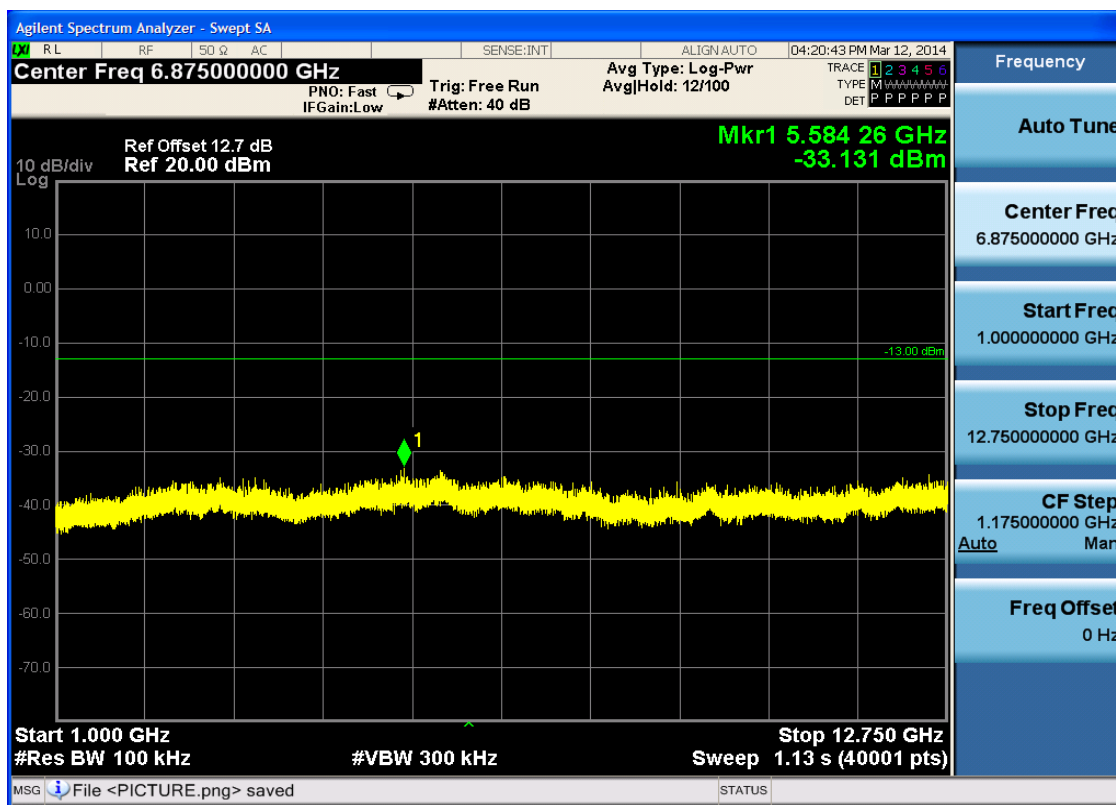
Start 9.00 kHz Stop 150.00 kHz
 #Res BW 1.0 kHz #VBW 10 kHz Sweep 130 ms (1001 pts)

MSG Points changed; all traces cleared STATUS DC Coupled

Frequency
 Auto Tune
 Center Freq 79.500 kHz
 Start Freq 9.000 kHz
 Stop Freq 150.000 kHz
 CF Step 14.100 kHz
 Auto Man
 Freq Offset 0 Hz

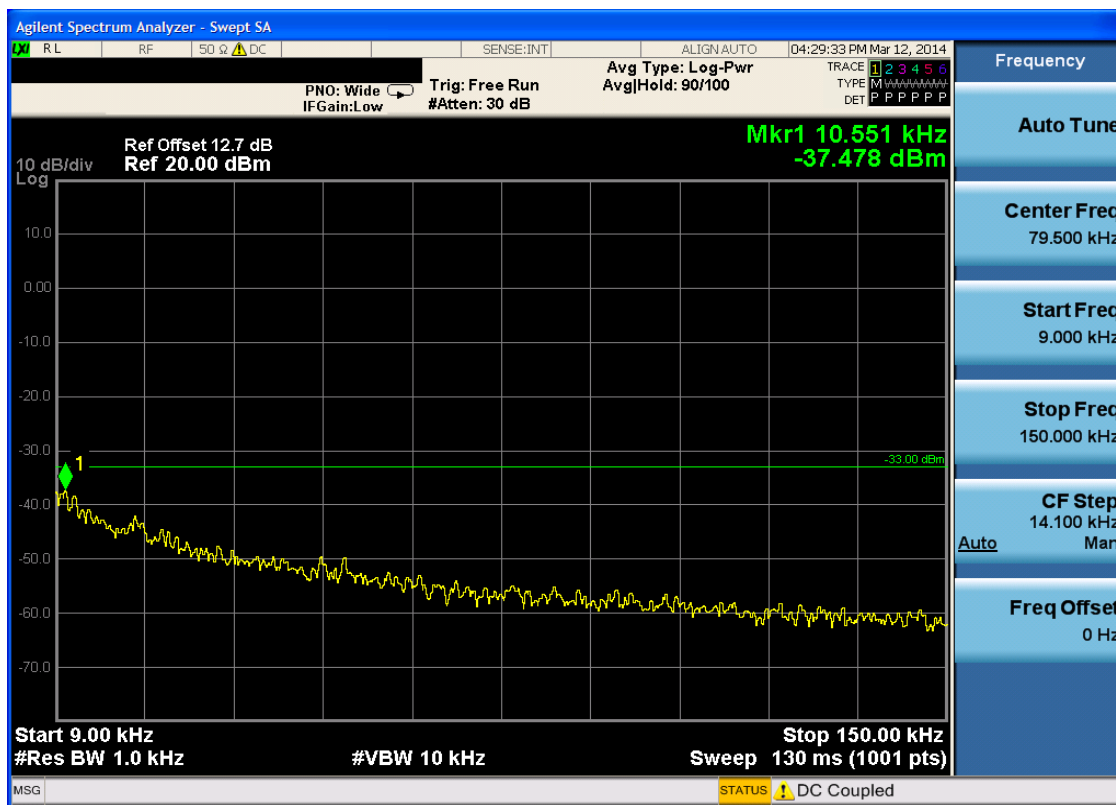


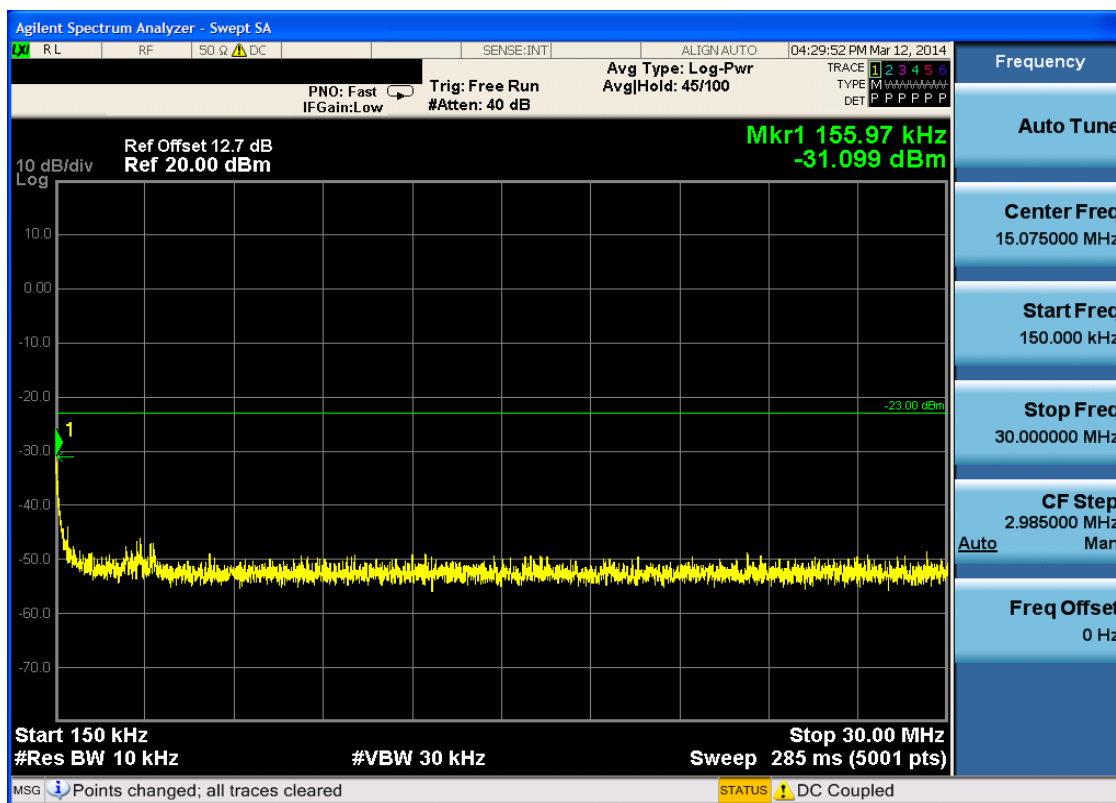


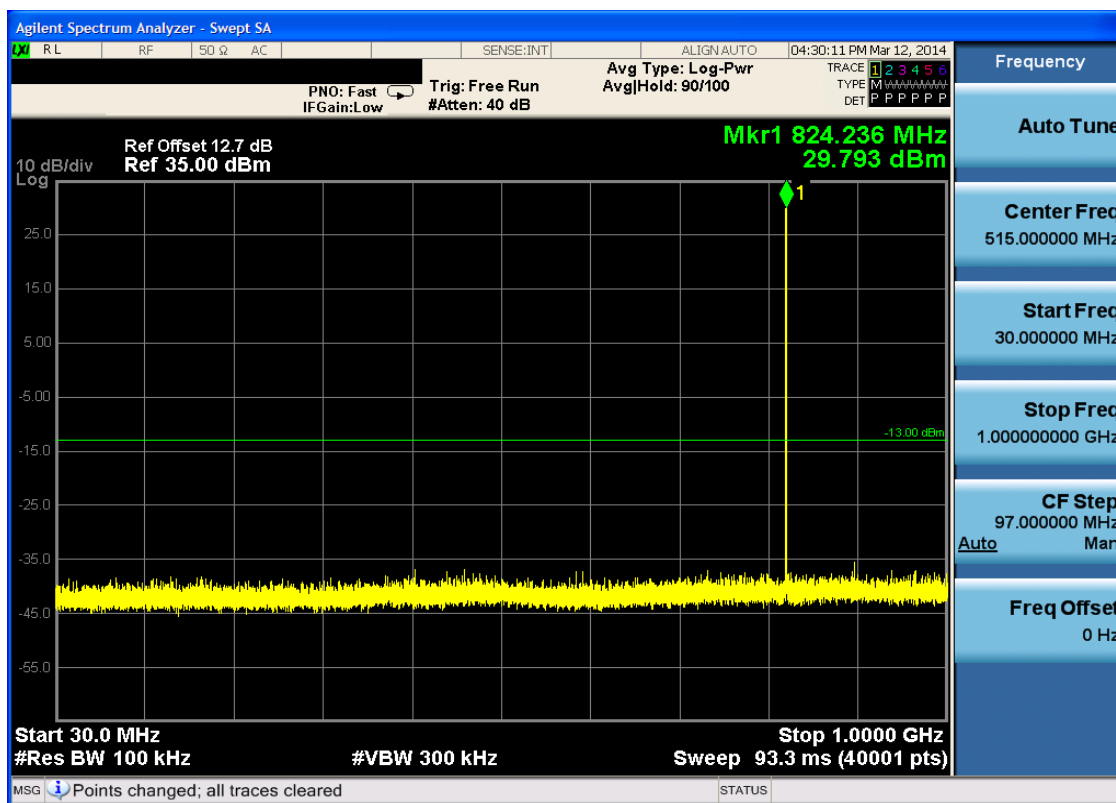


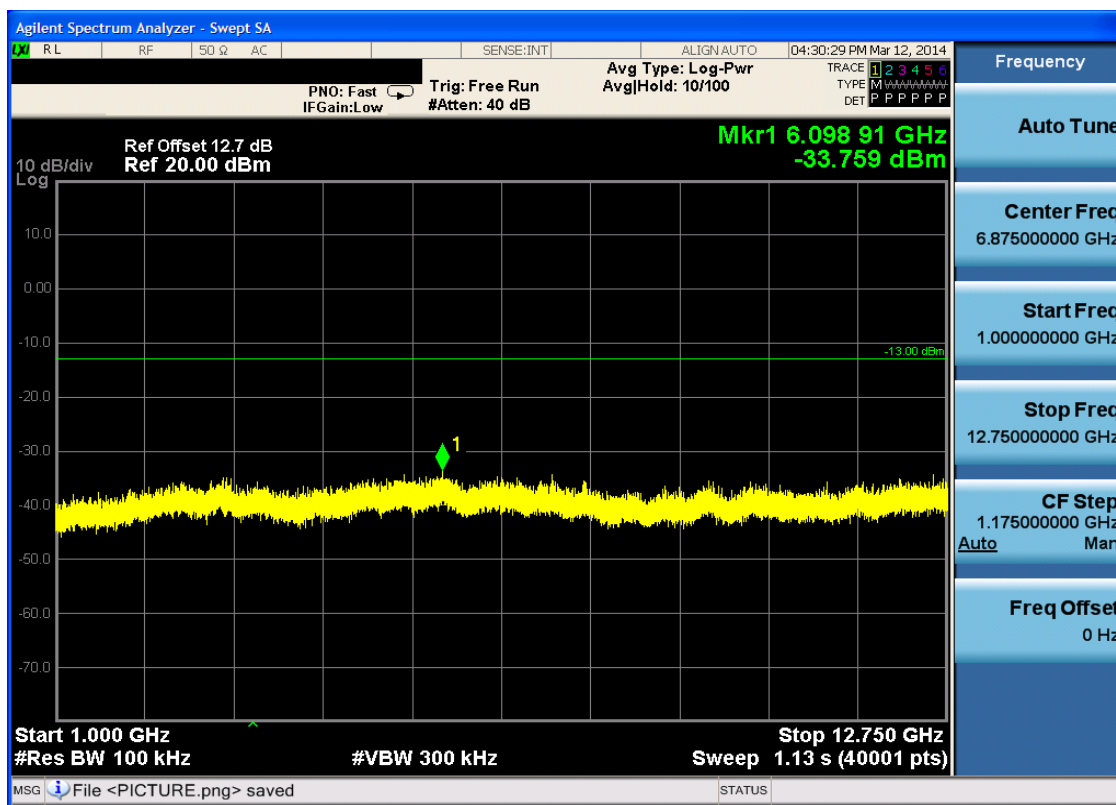
6.1.1.2 Test Mode = GSM/TM2

6.1.1.2.1 Test Channel = LCH



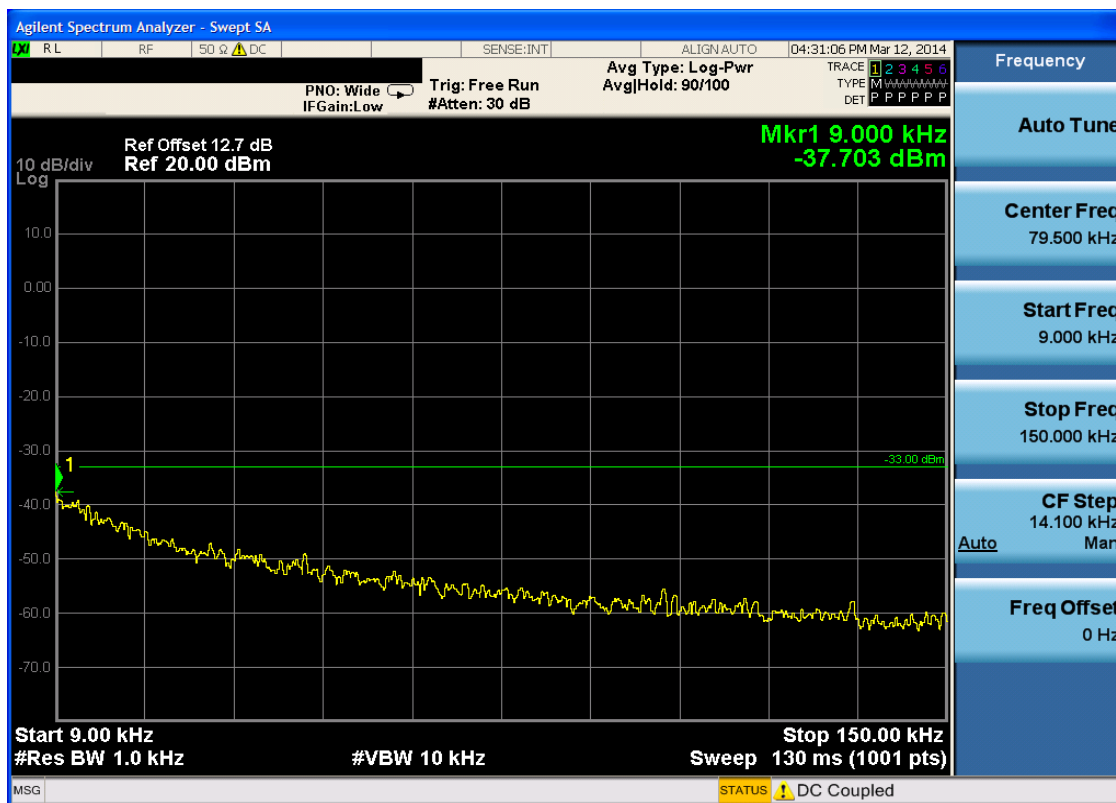


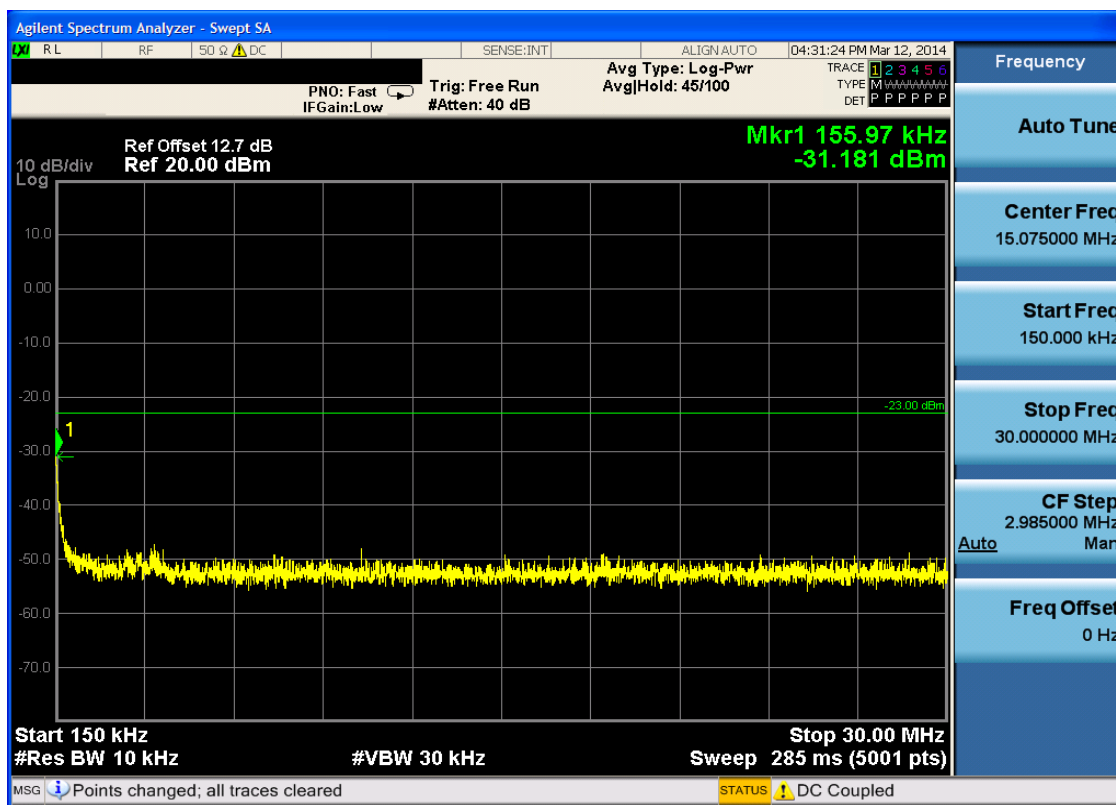


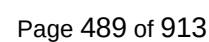


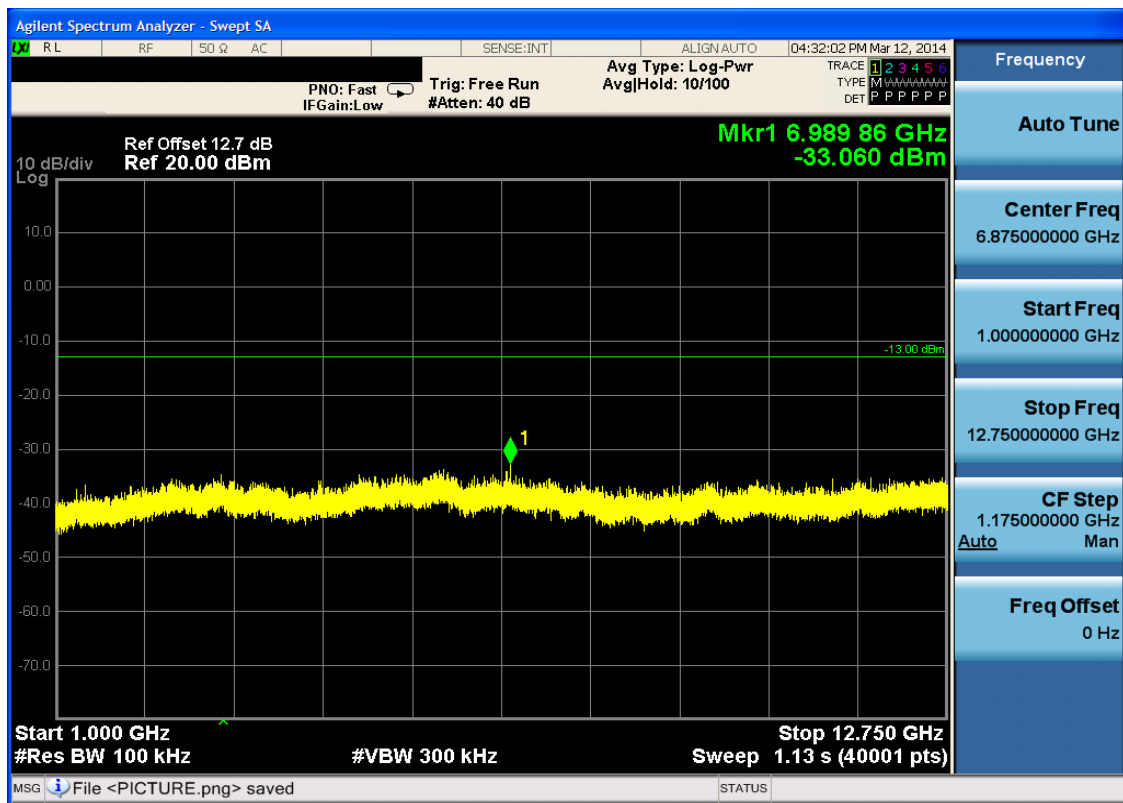


6.1.1.2.2 Test Channel = MCH

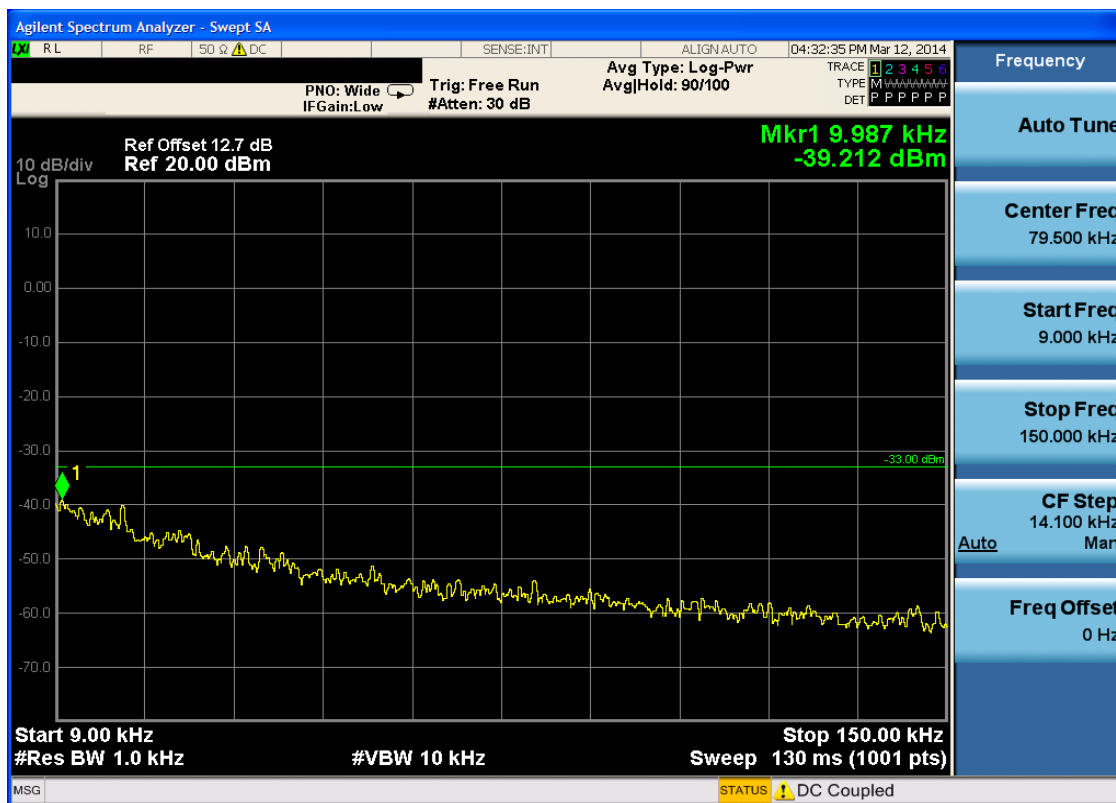


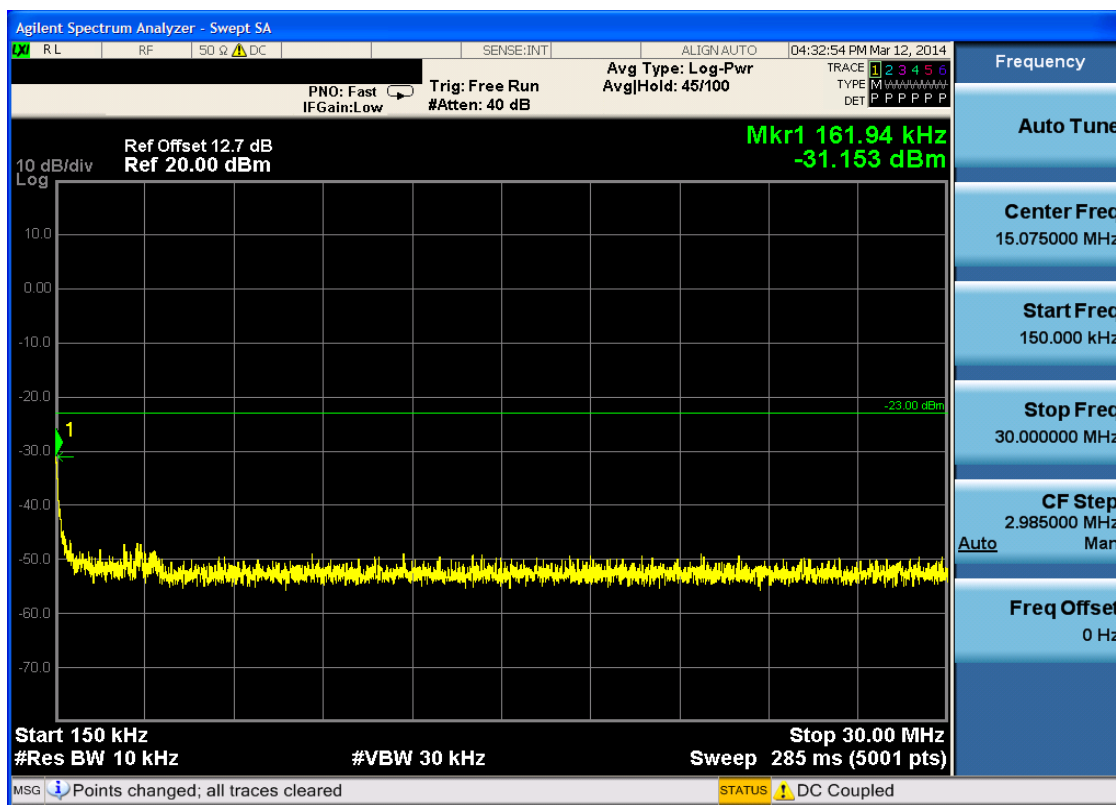


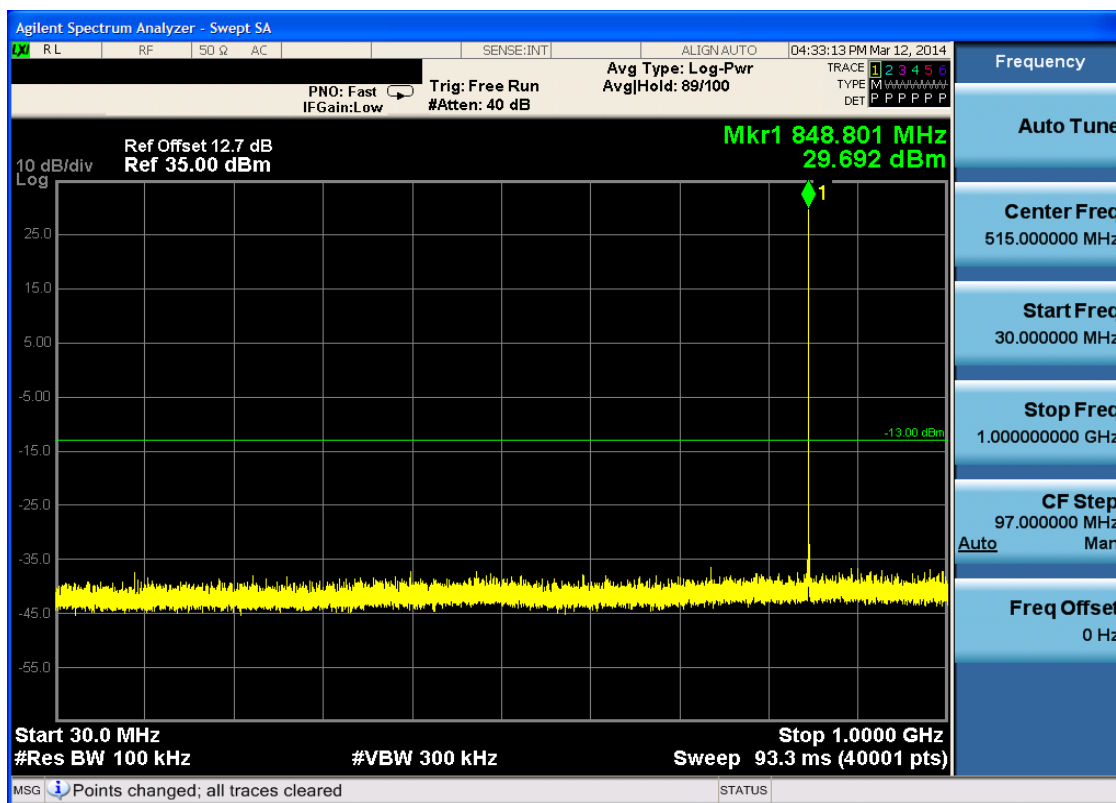


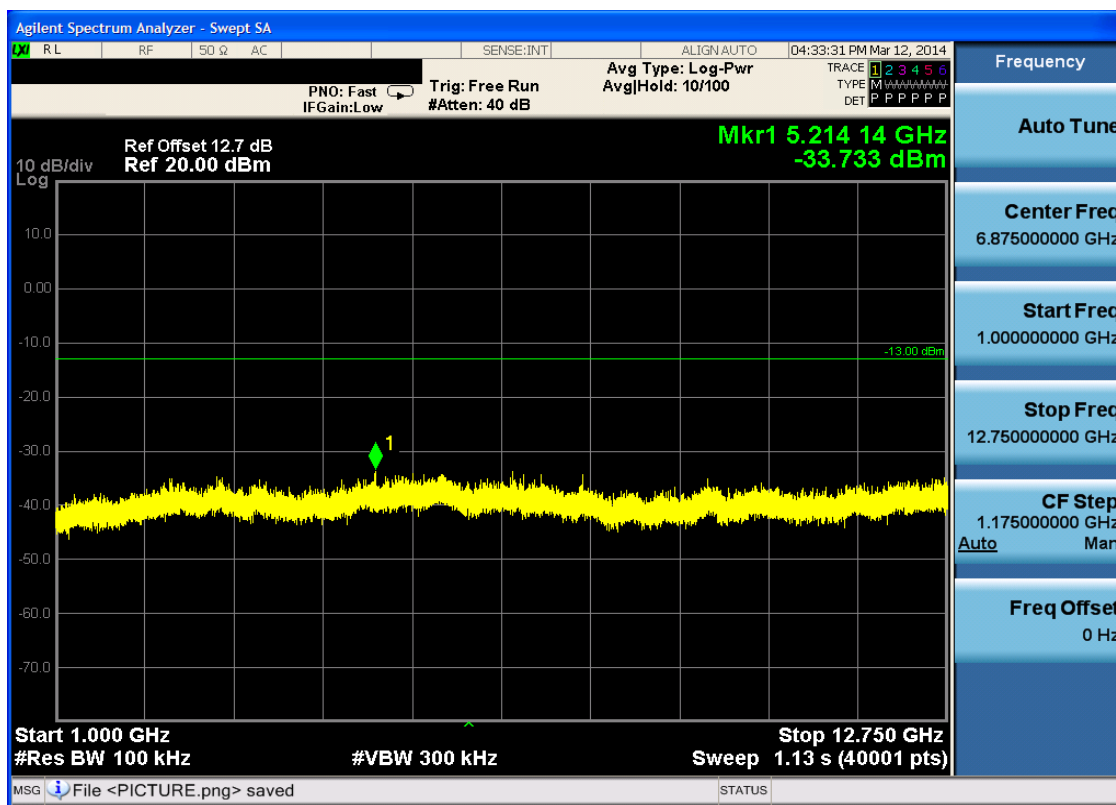


6.1.1.2.3 Test Channel = HCH





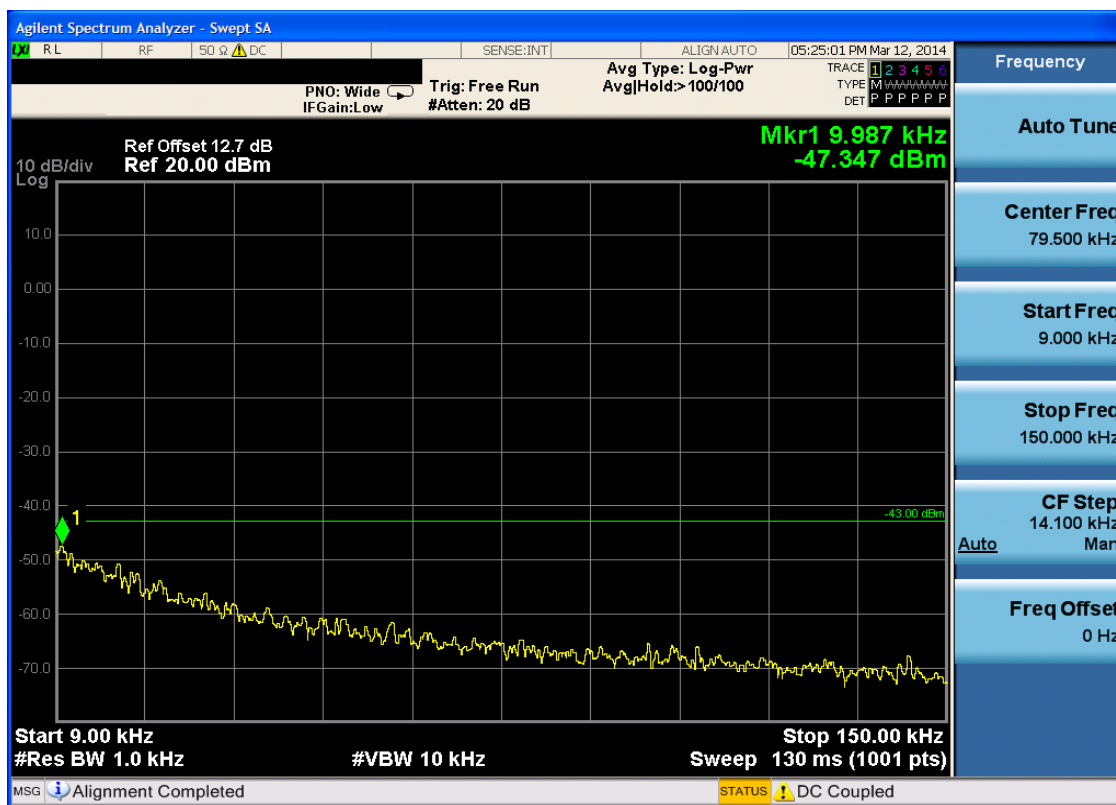


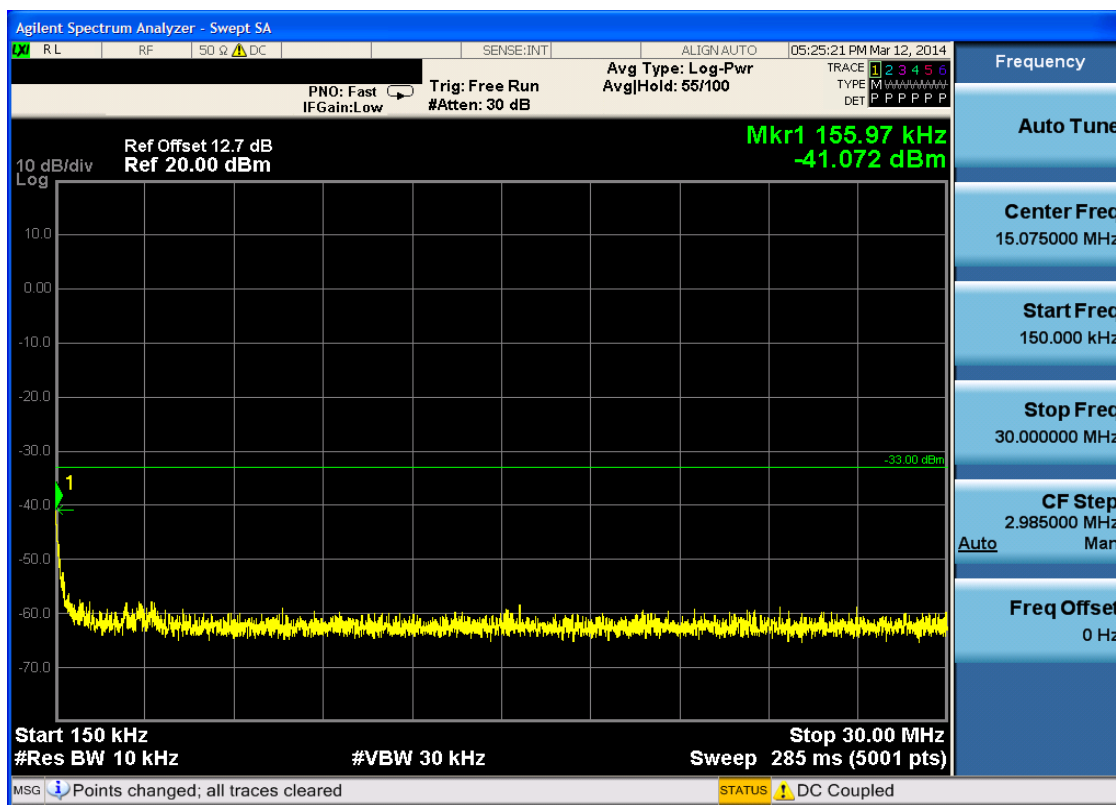


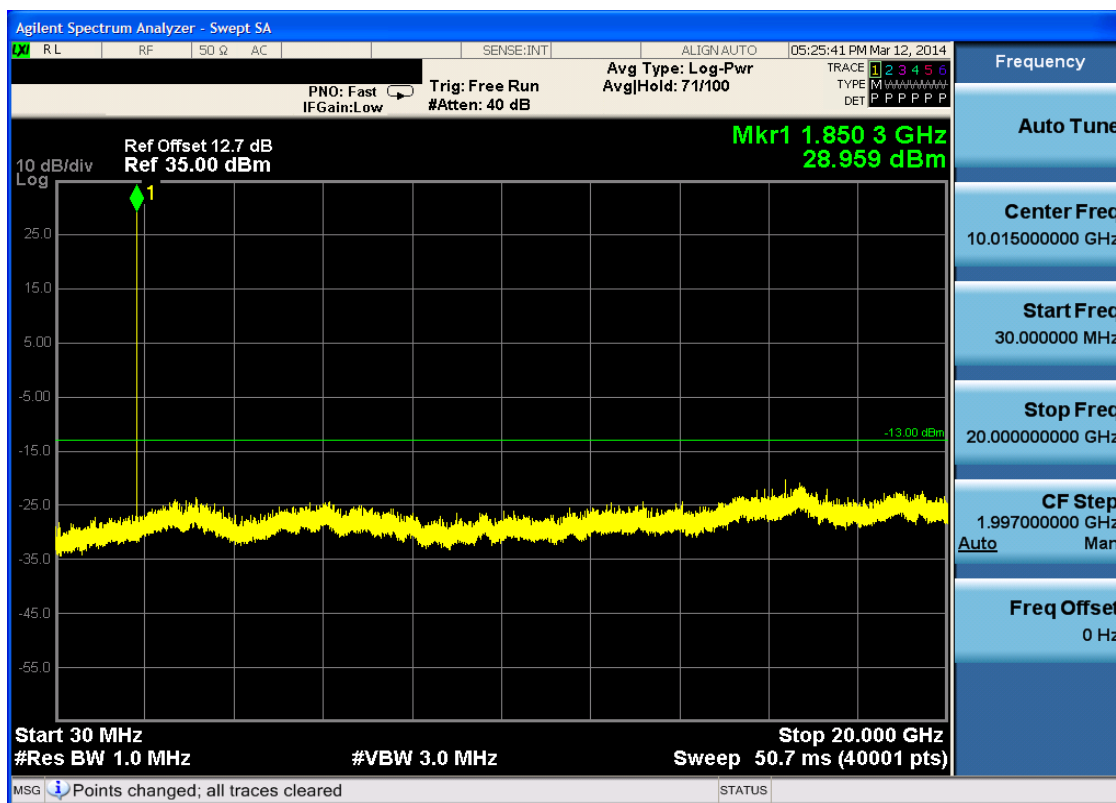
6.1.2 Test Band = GSM1900

6.1.2.1 Test Mode = GSM/TM1

6.1.2.1.1 Test Channel = LCH

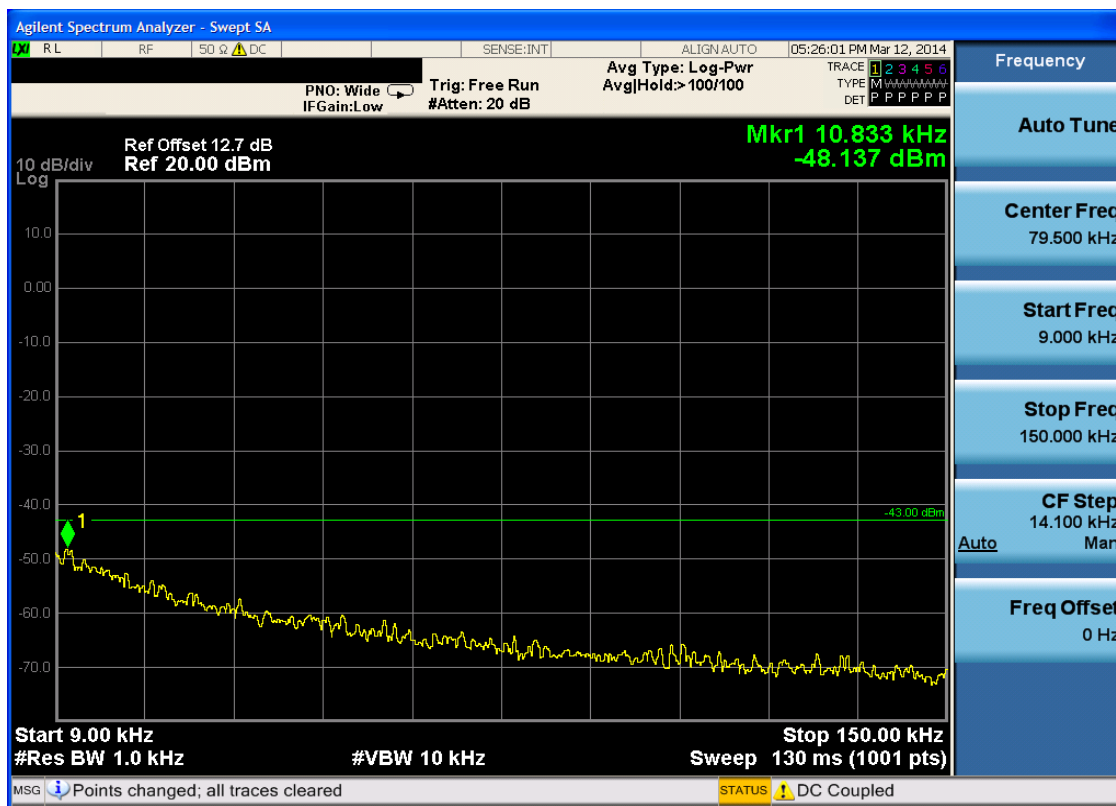


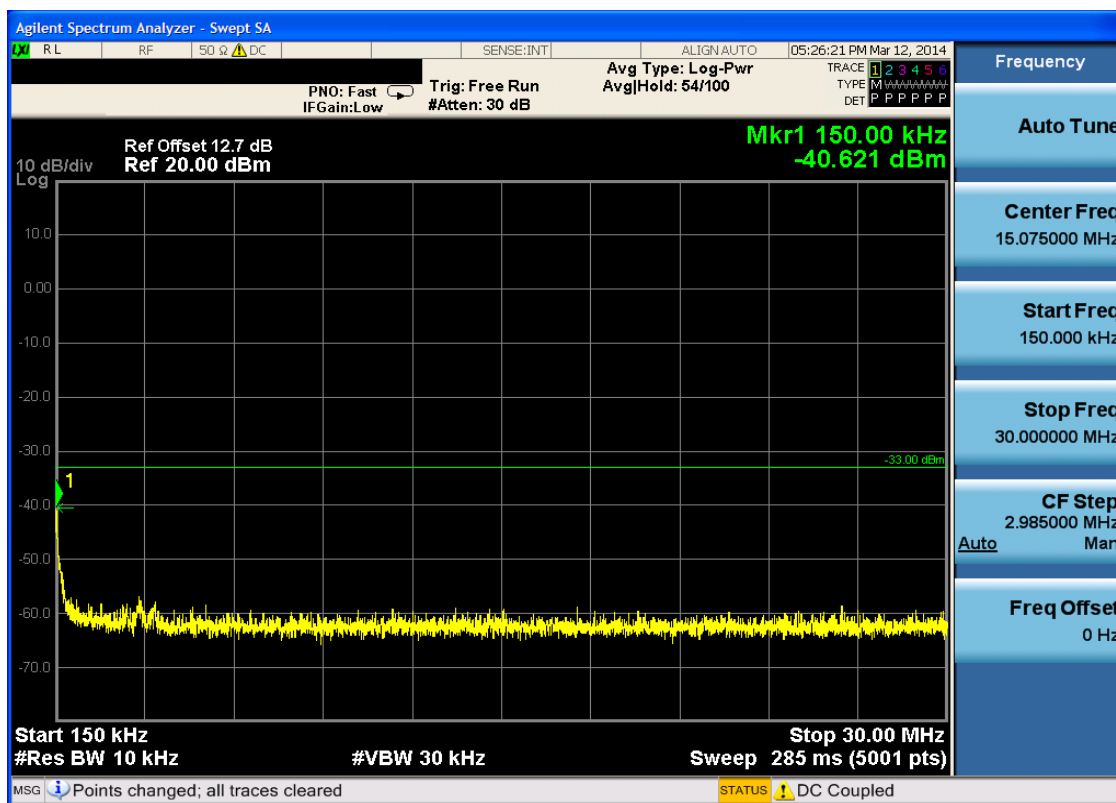


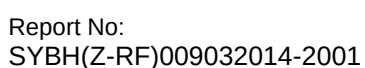




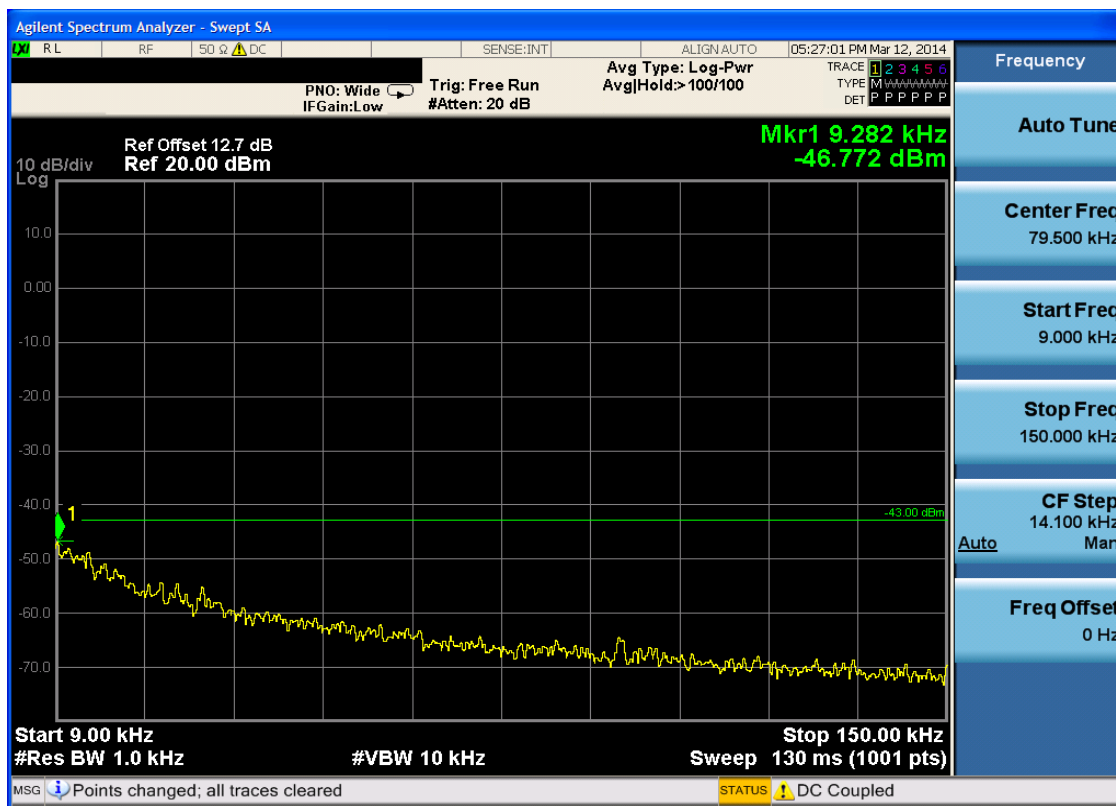
6.1.2.1.2 Test Channel = MCH

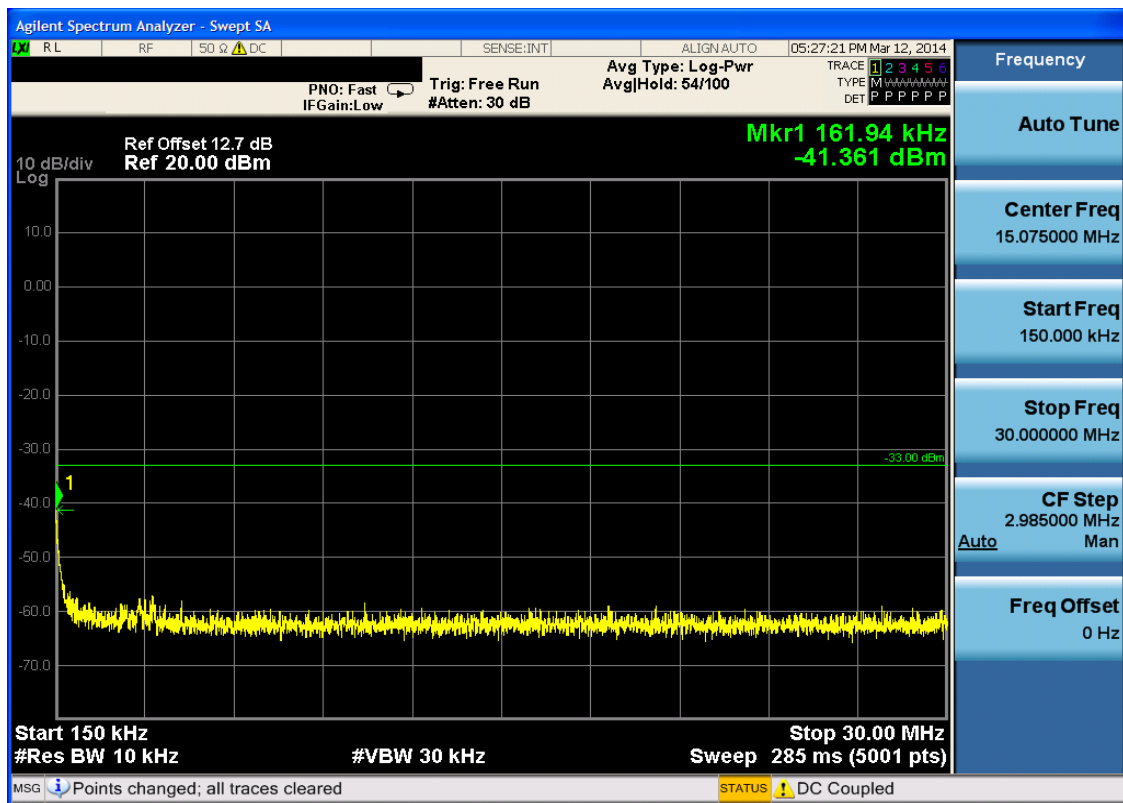


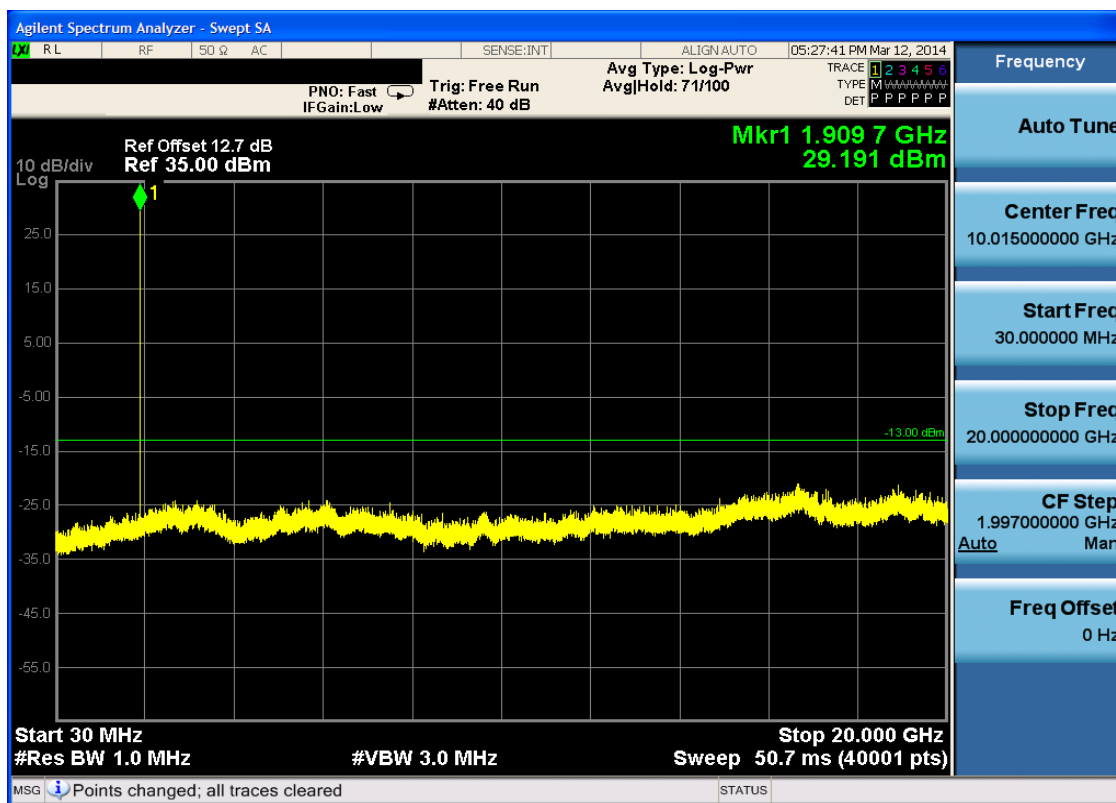




6.1.2.1.3 Test Channel = HCH

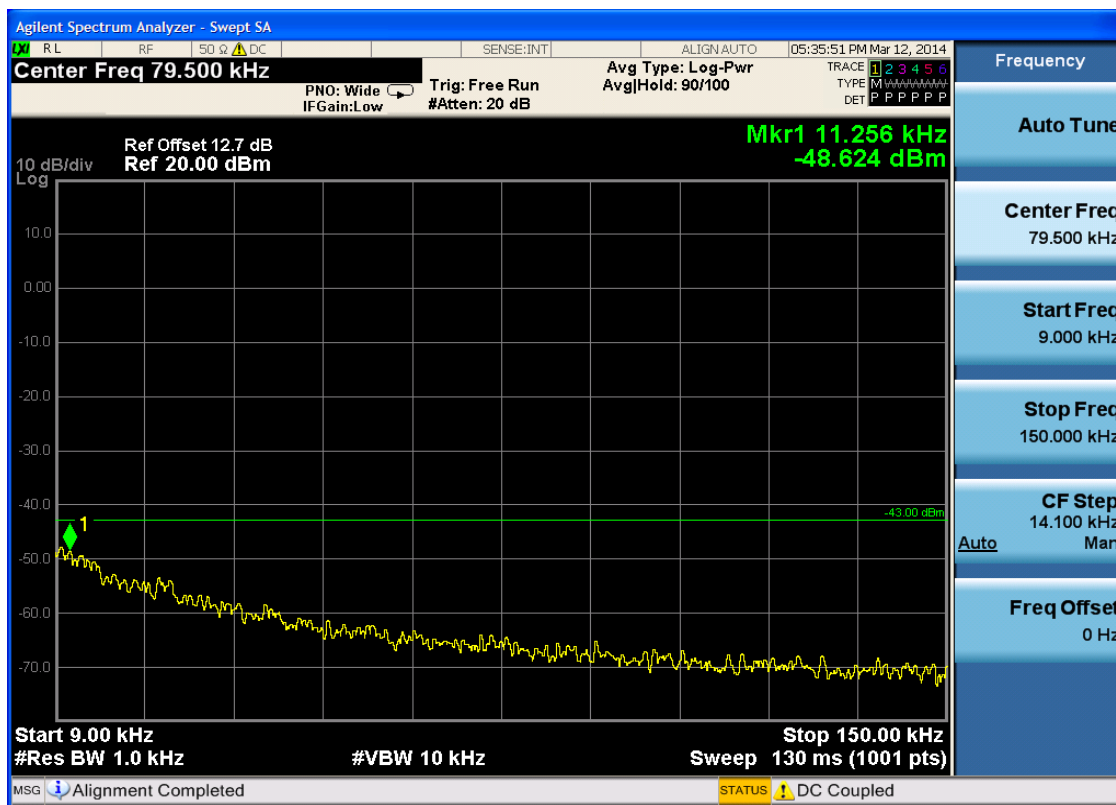


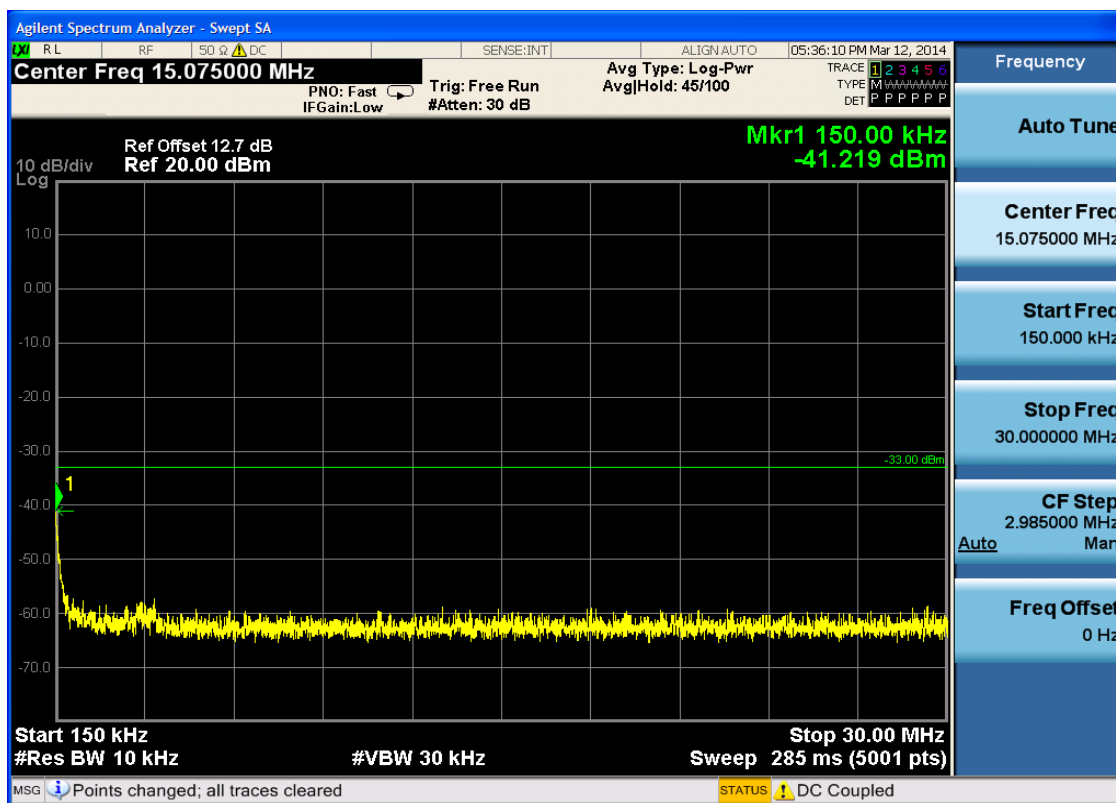


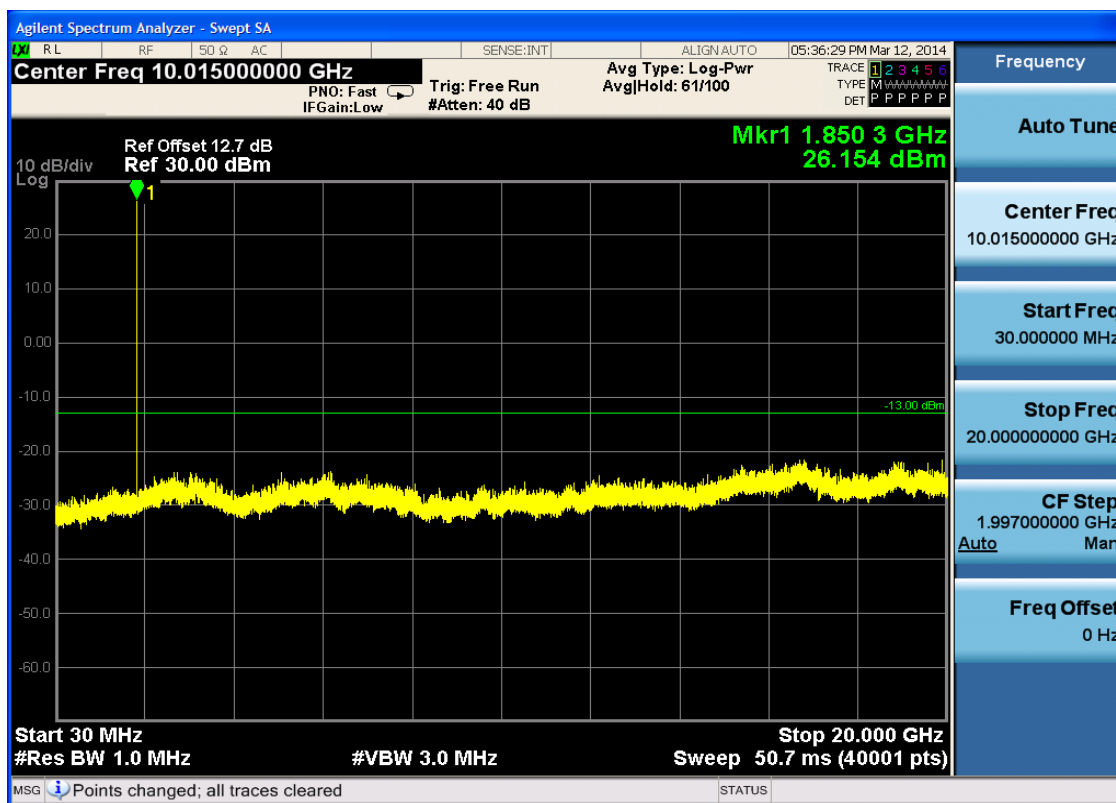


6.1.2.2 Test Mode = GSM/TM2

6.1.2.2.1 Test Channel = LCH

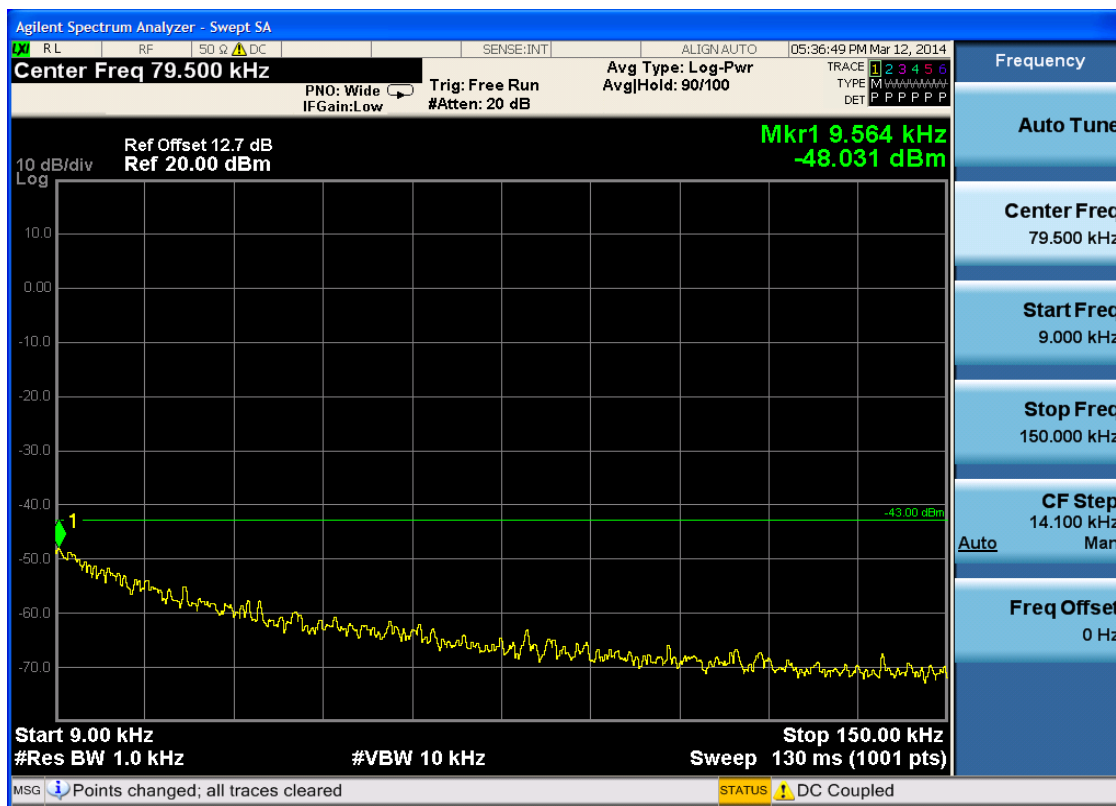


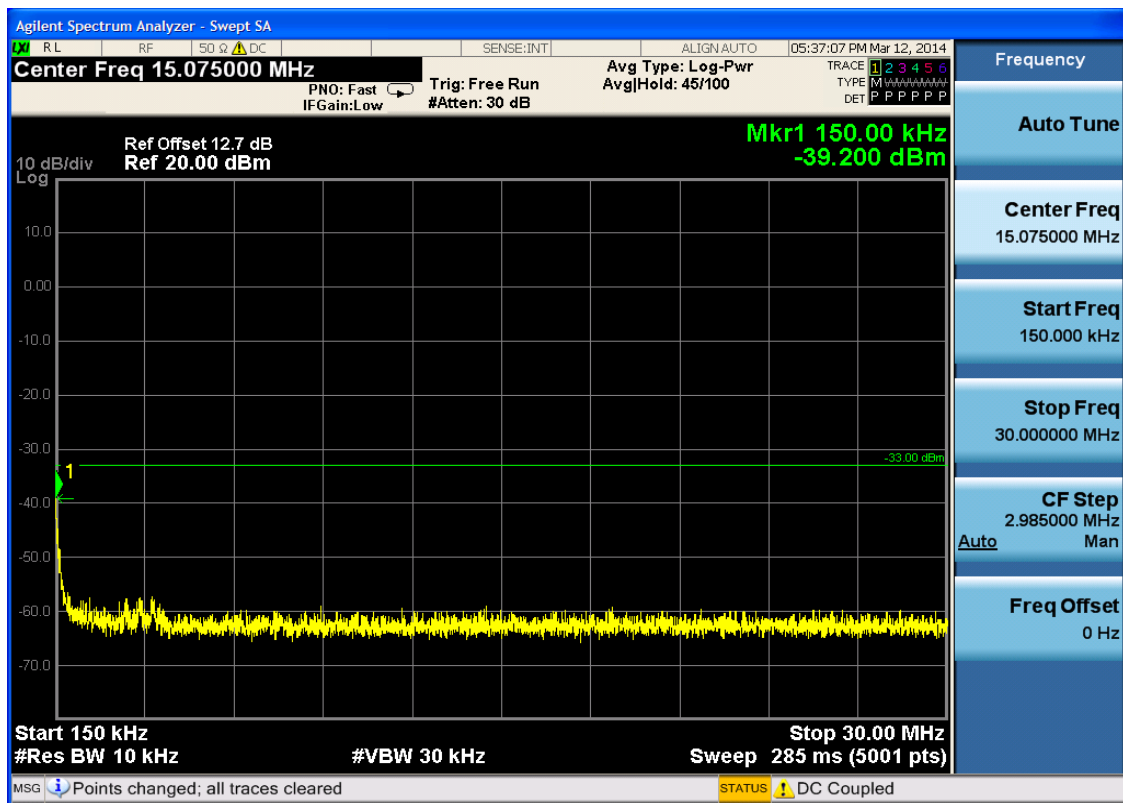


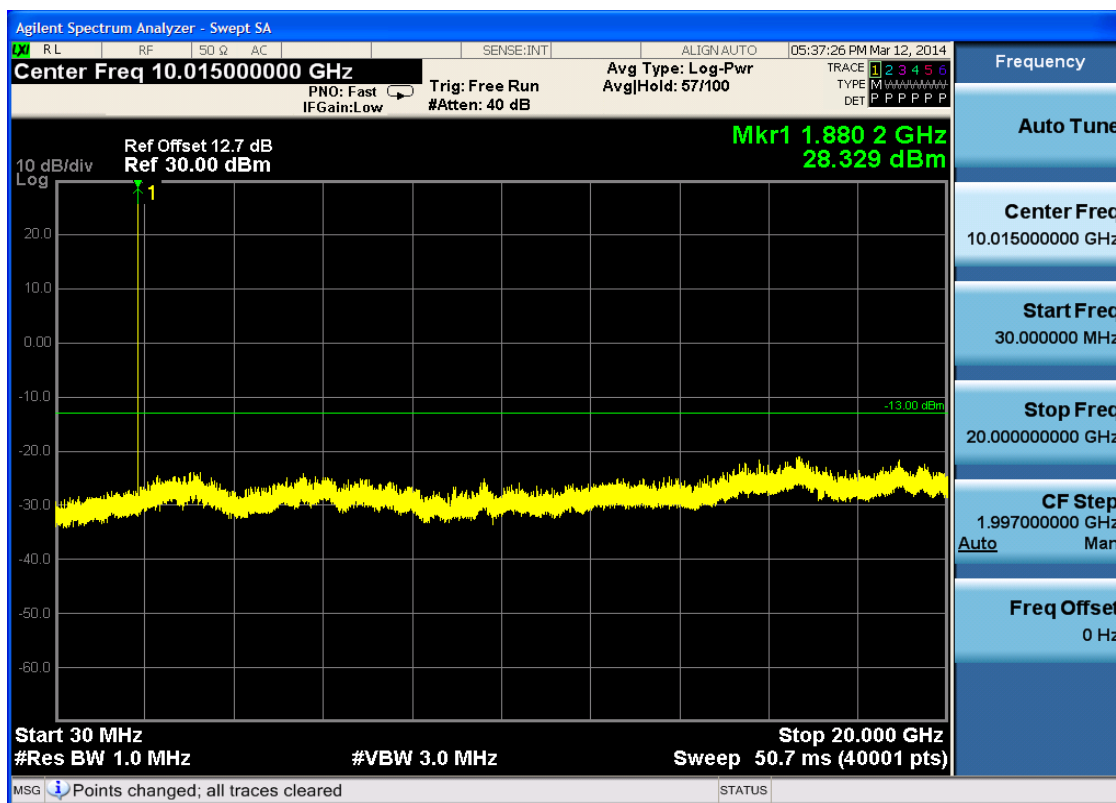




6.1.2.2.2 Test Channel = MCH

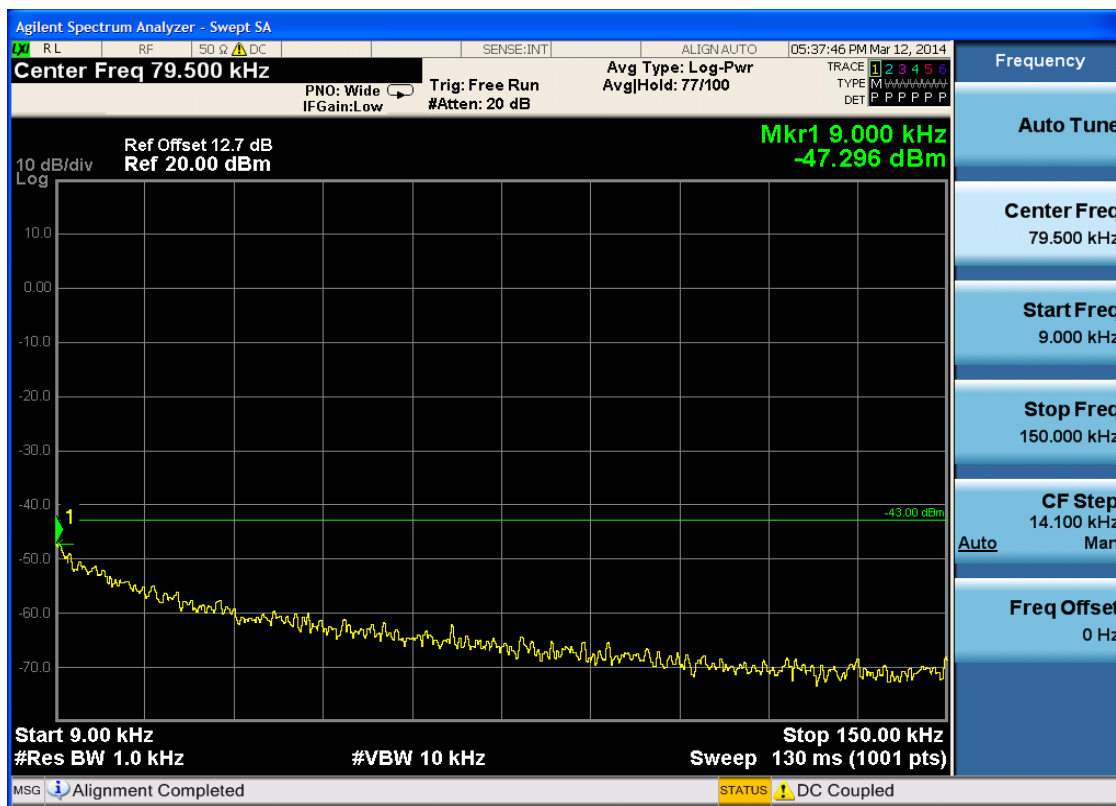


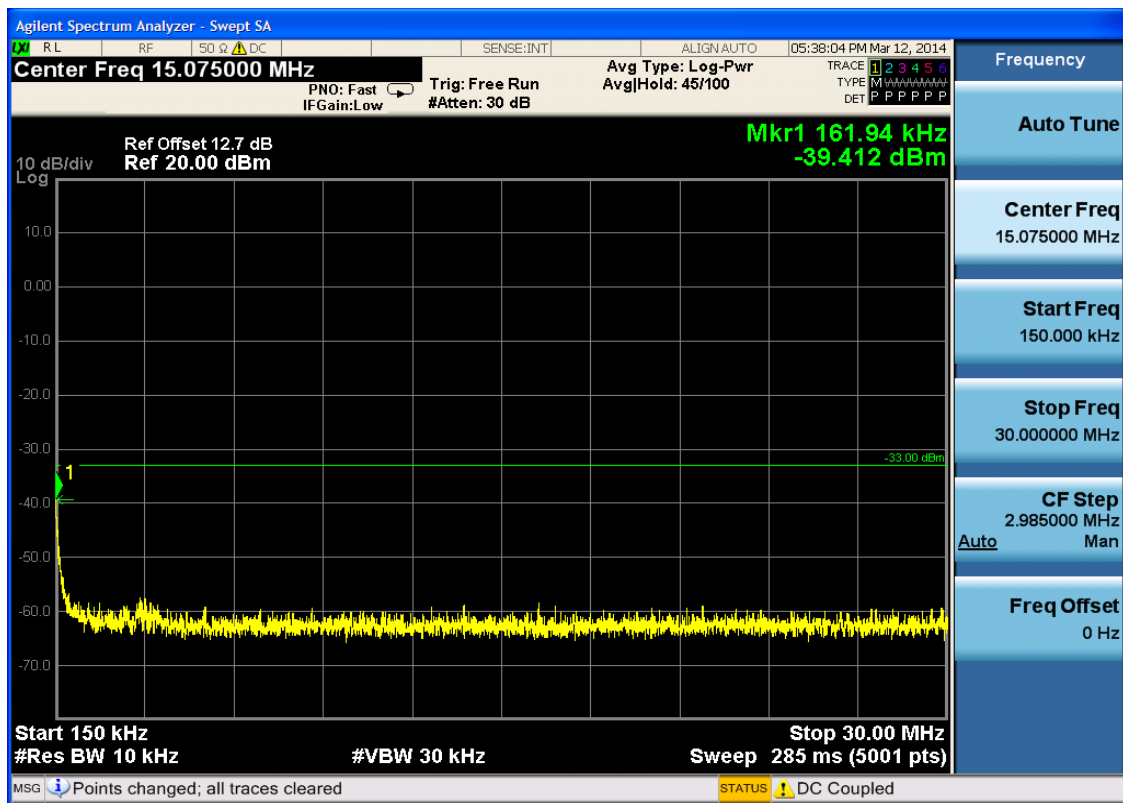


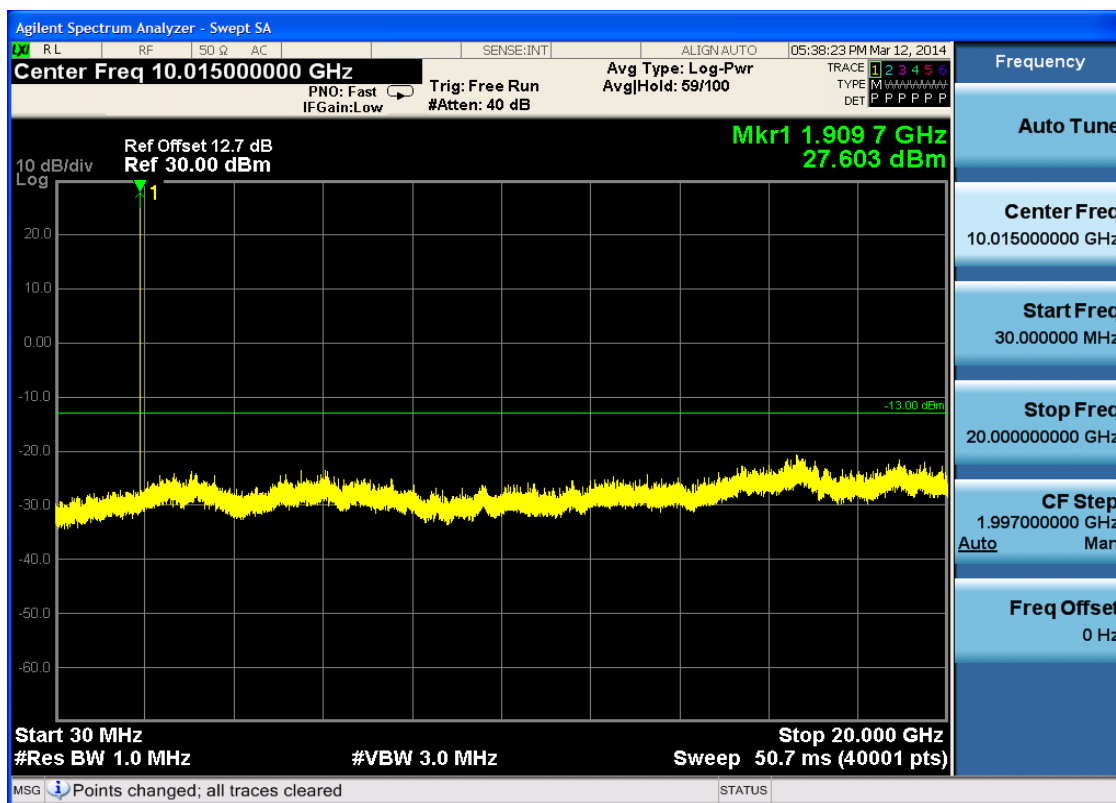




6.1.2.2.3 Test Channel = HCH





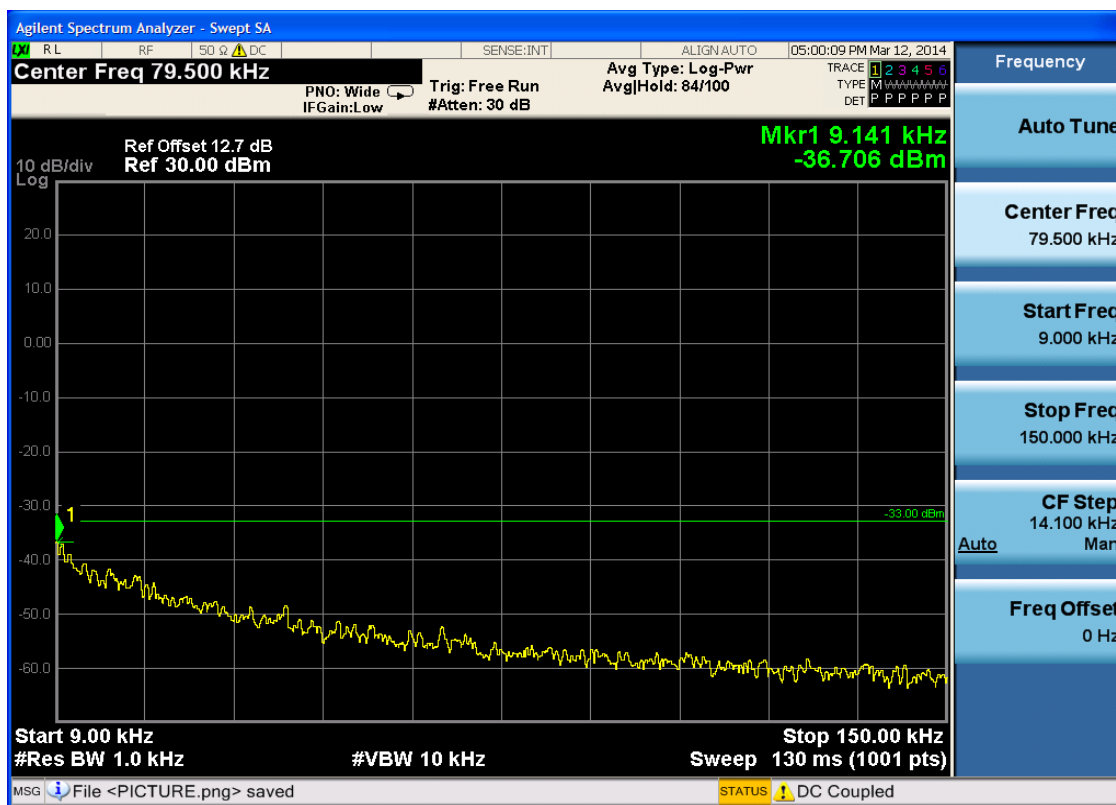


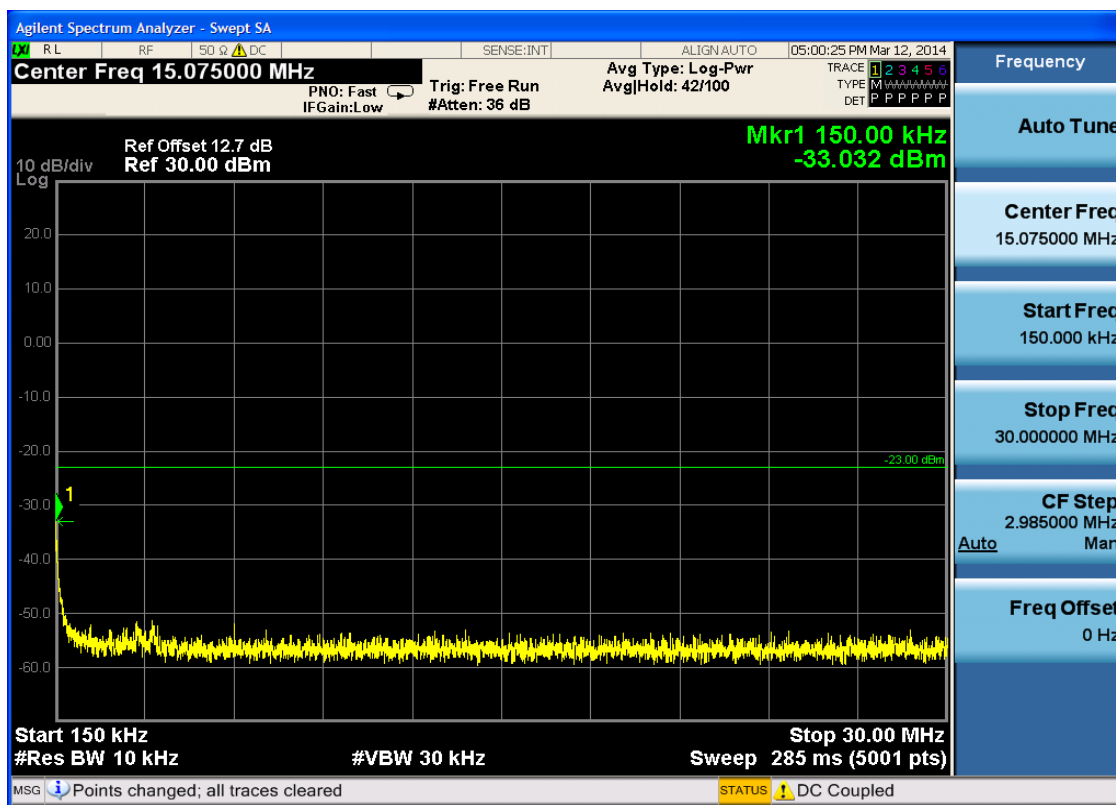
6.2 For UMTS

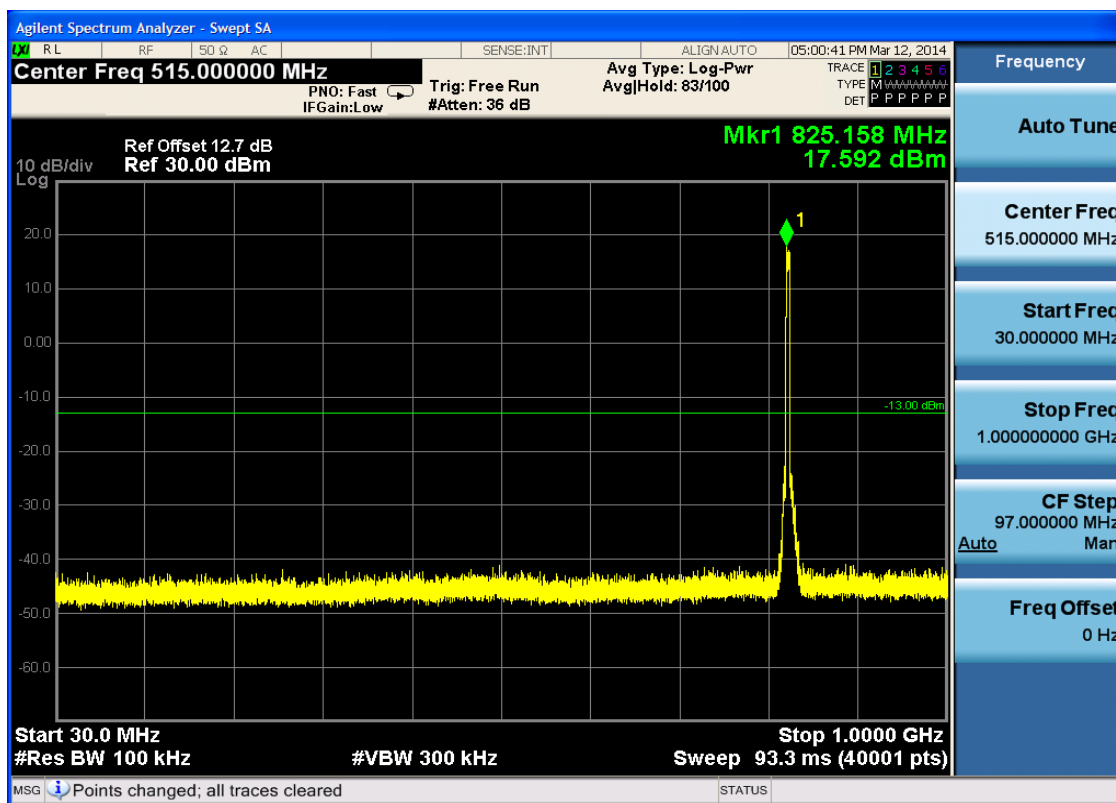
6.2.1 Test Band = WCDMA850

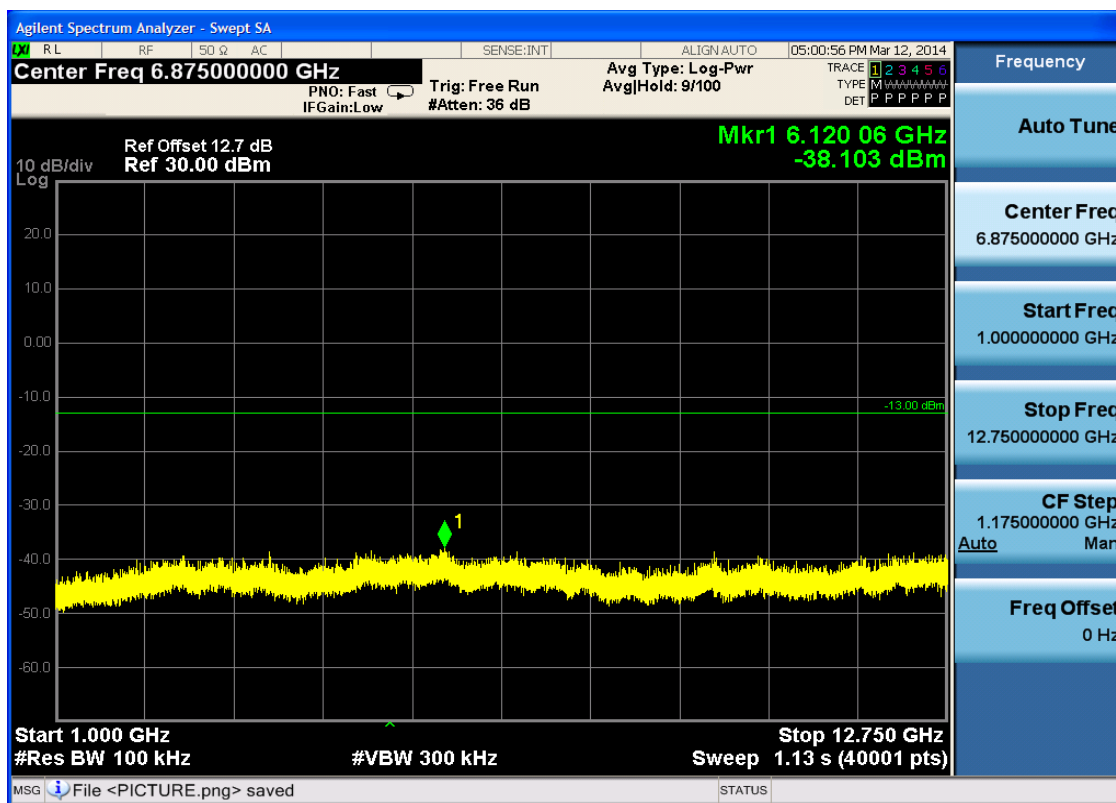
6.2.1.1 Test Mode = UMTS/TM1

6.2.1.1.1 Test Channel = LCH

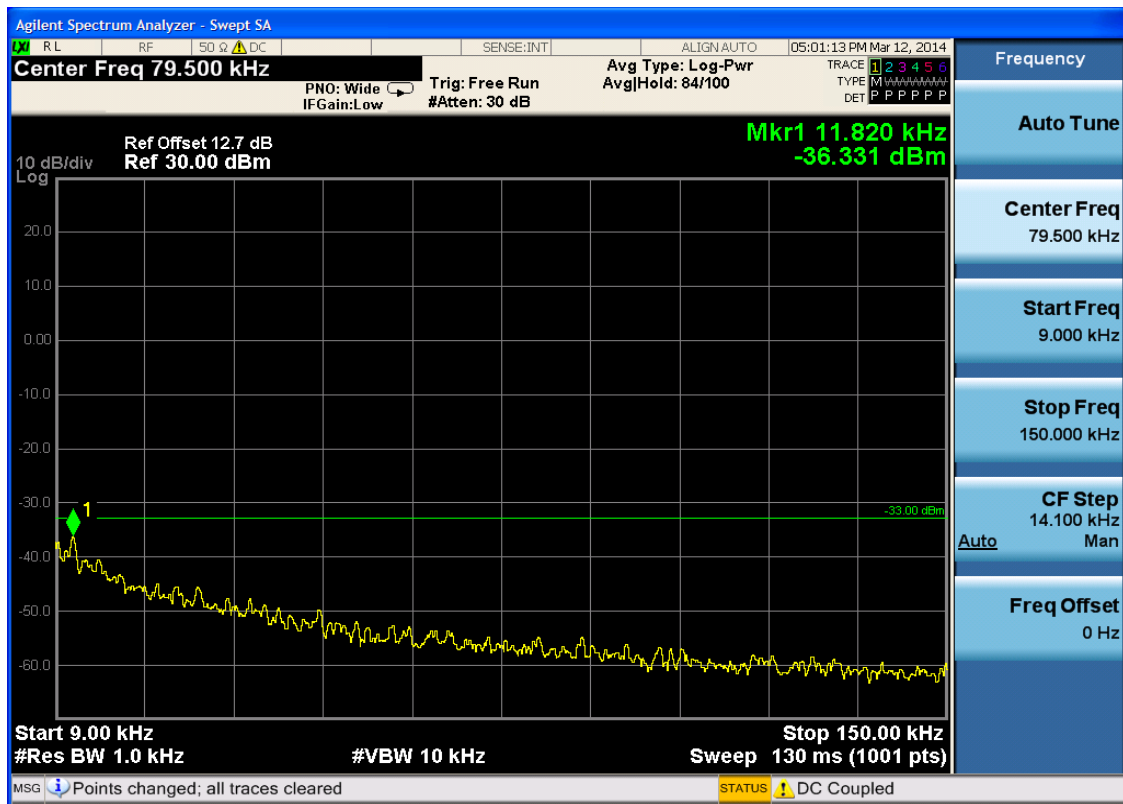


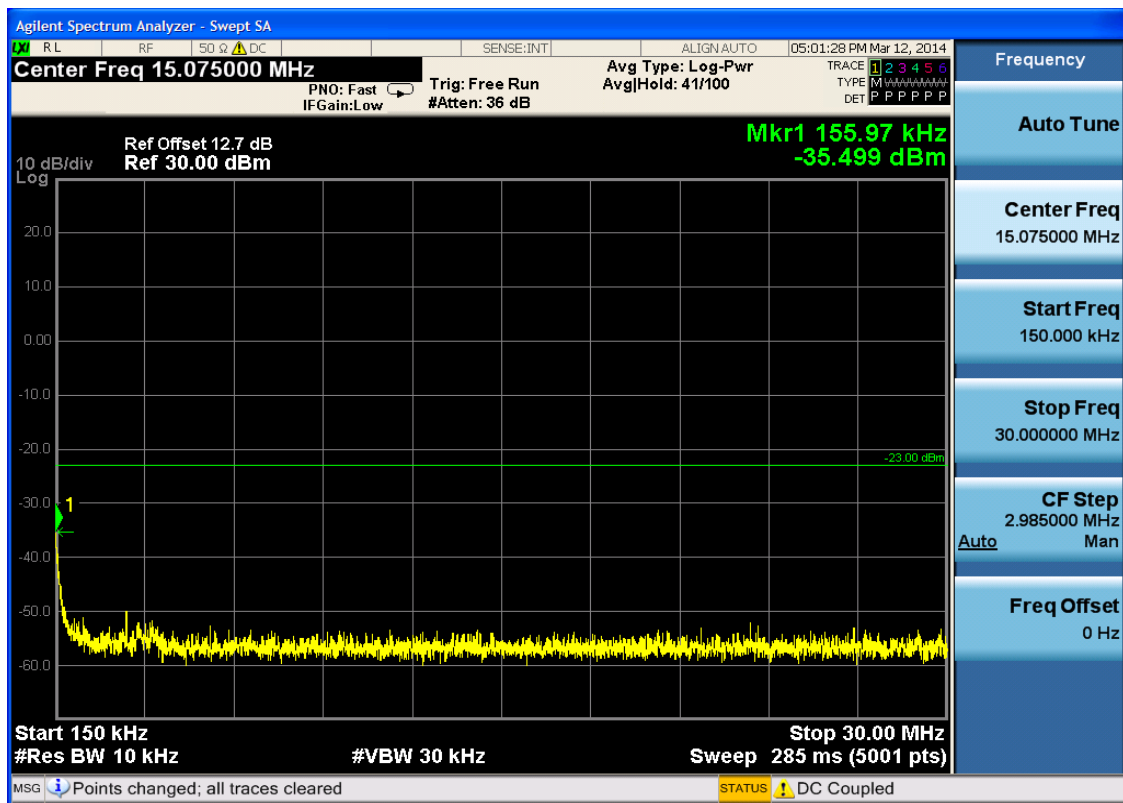


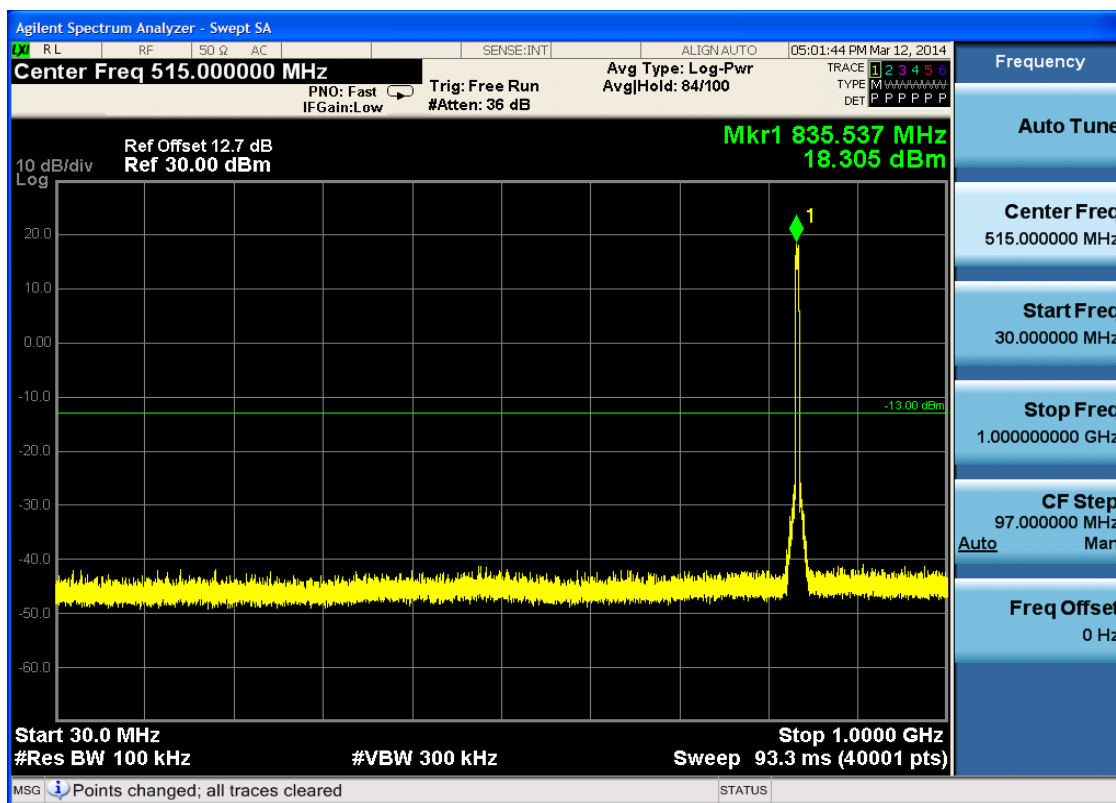


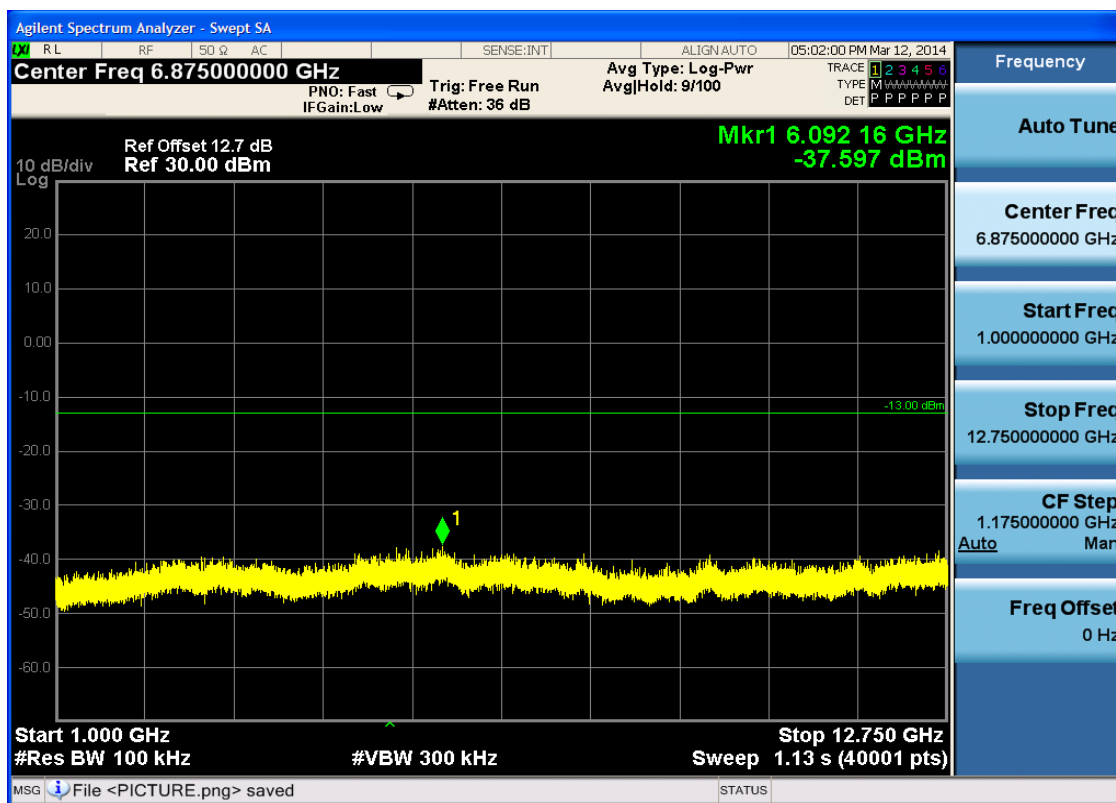


6.2.1.1.2 Test Channel = MCH

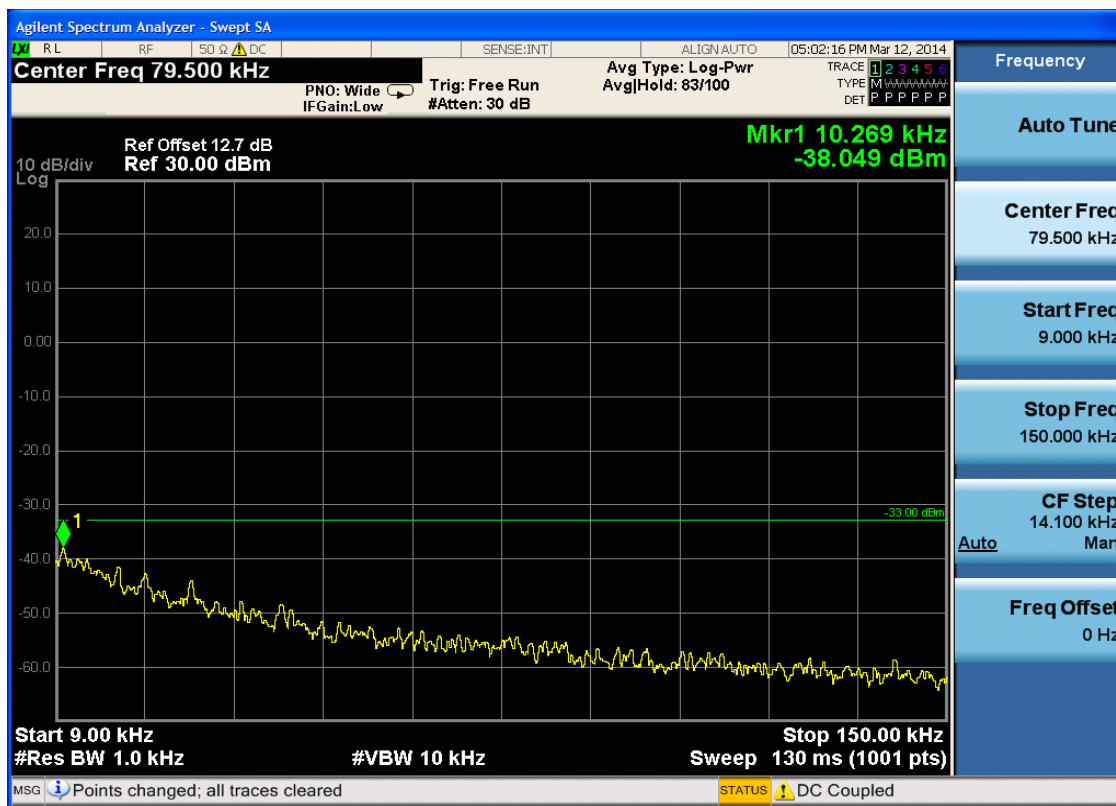


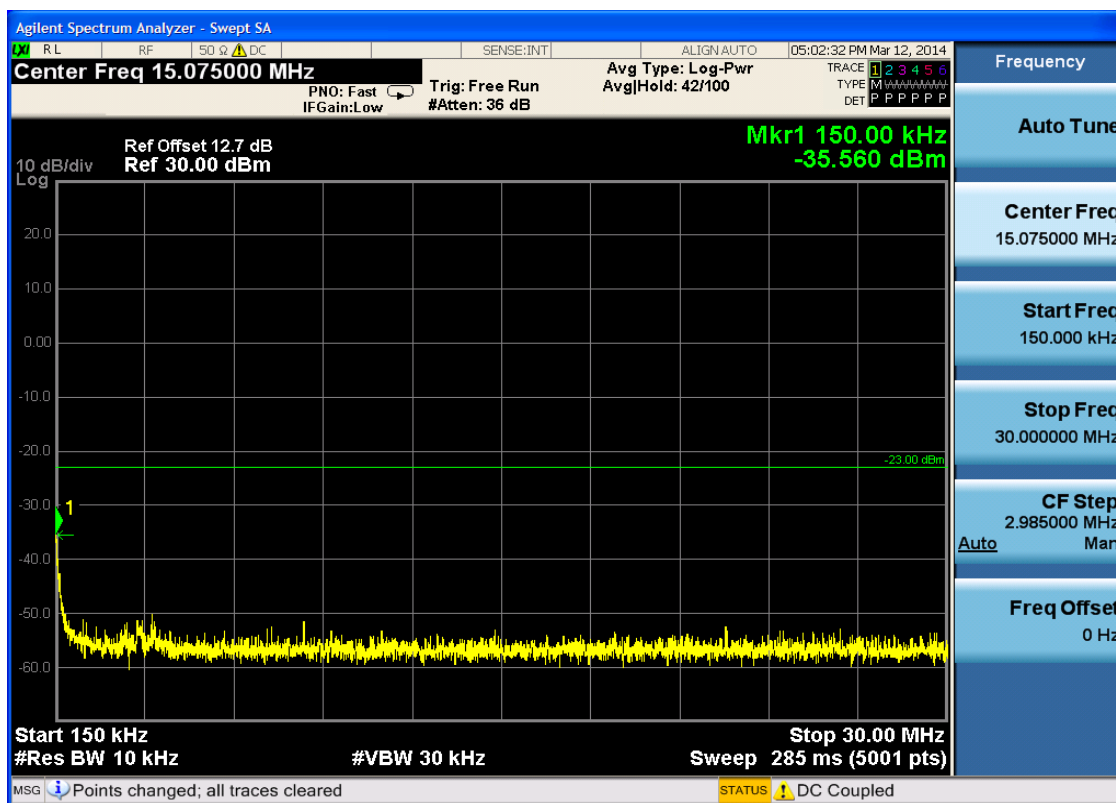


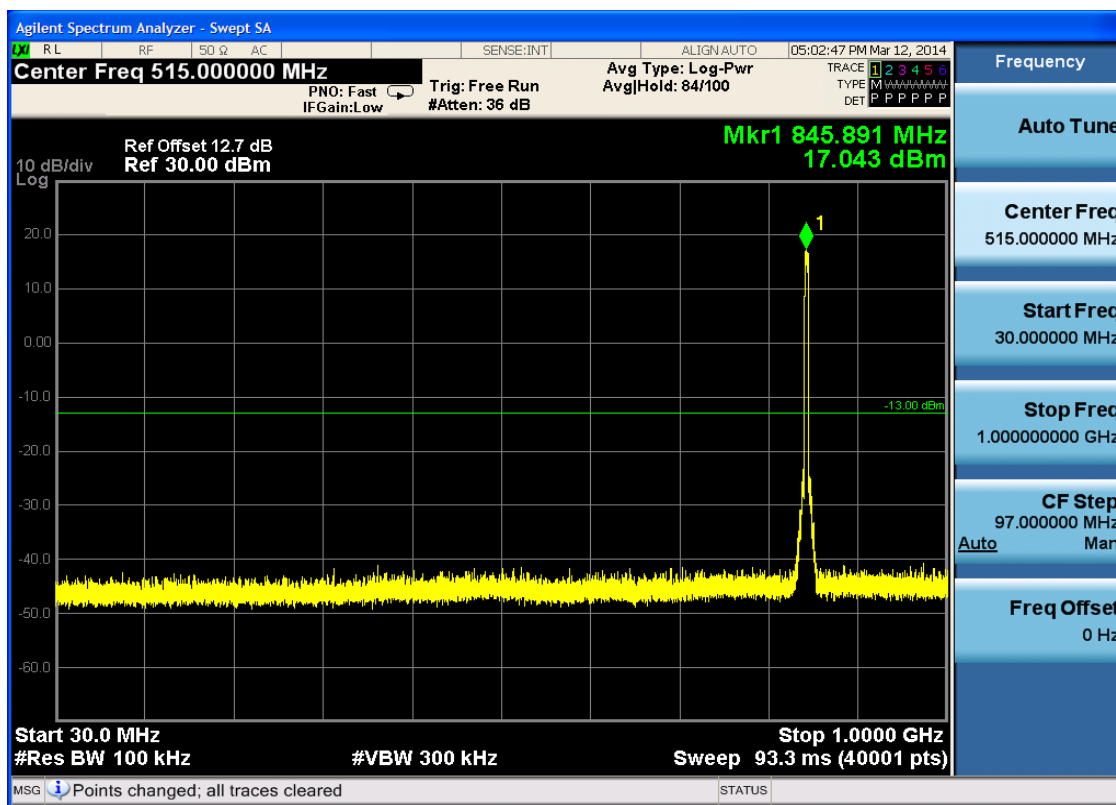


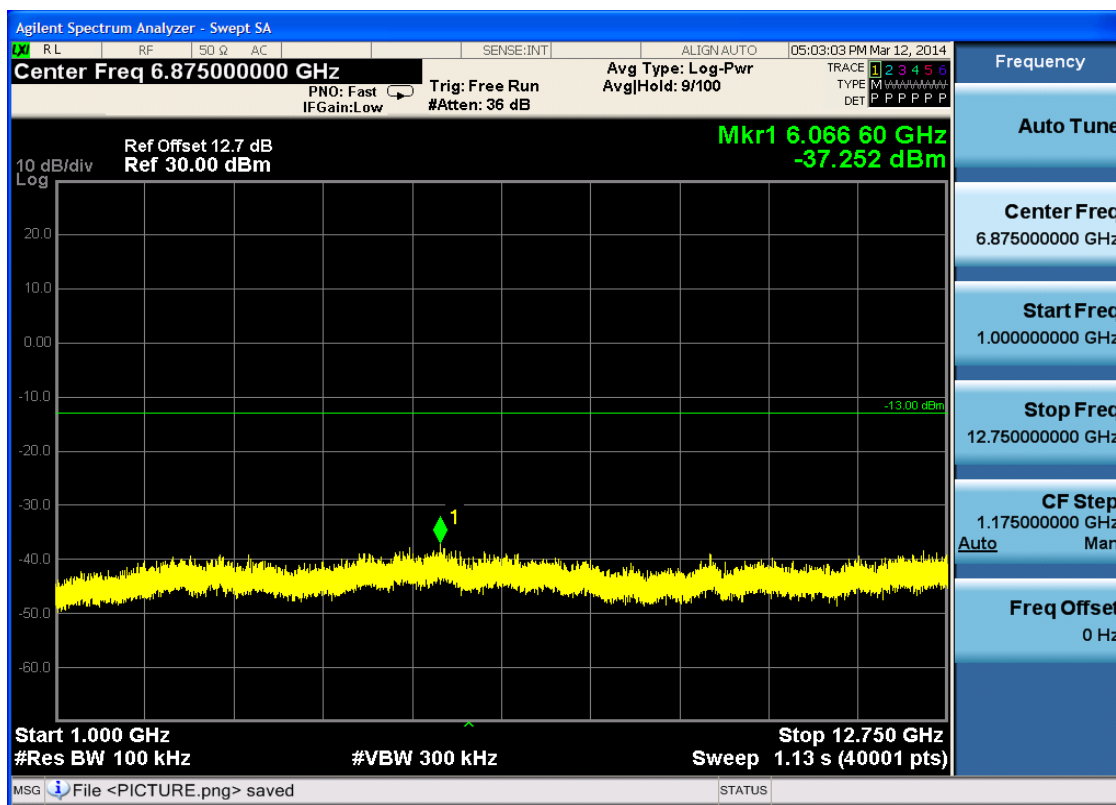


6.2.1.1.3 Test Channel = HCH





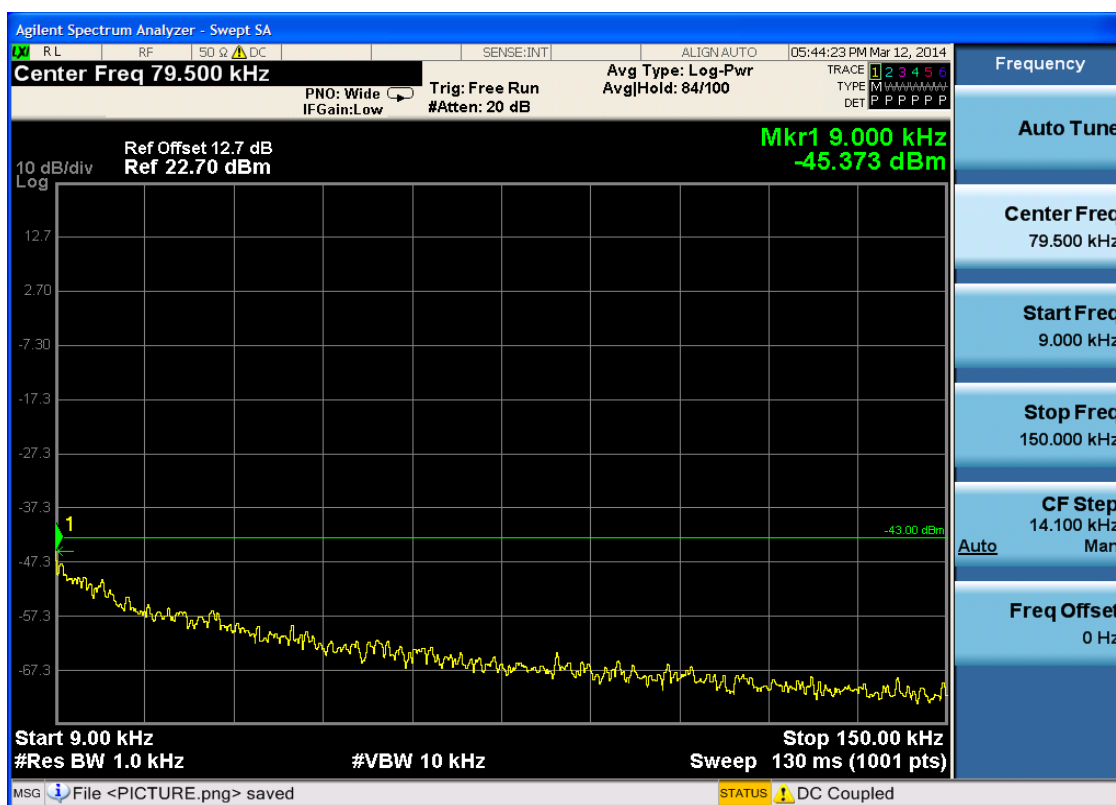


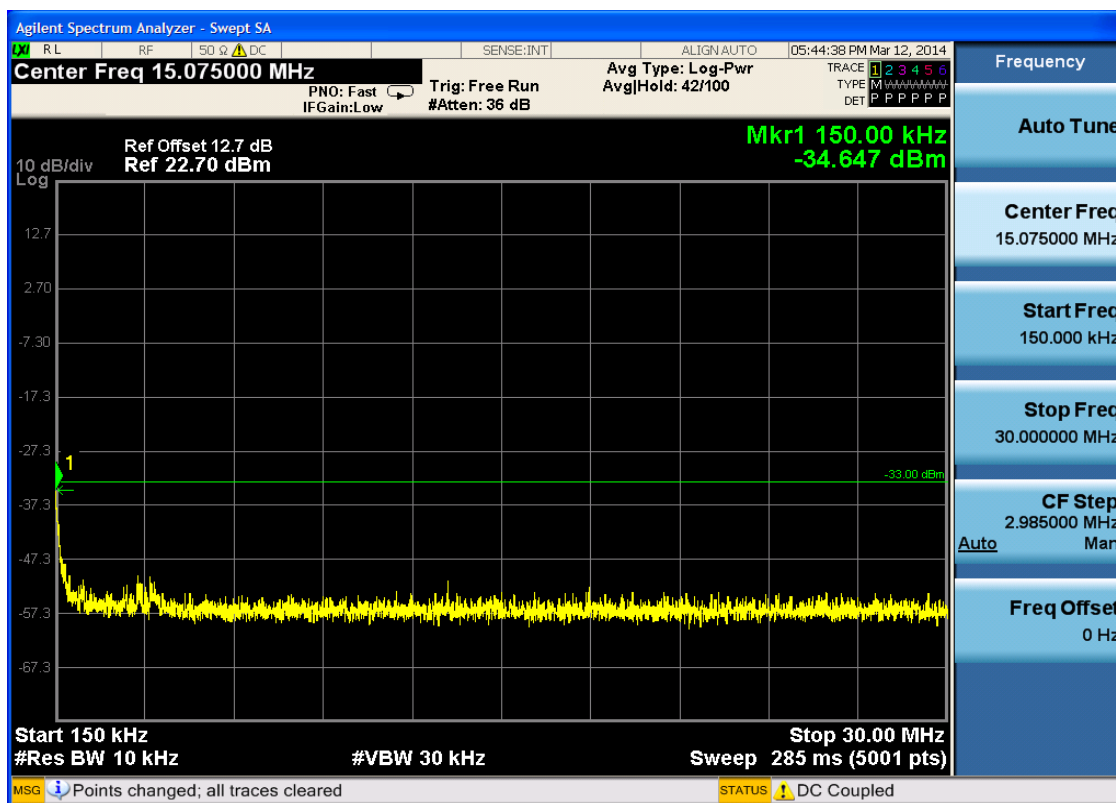


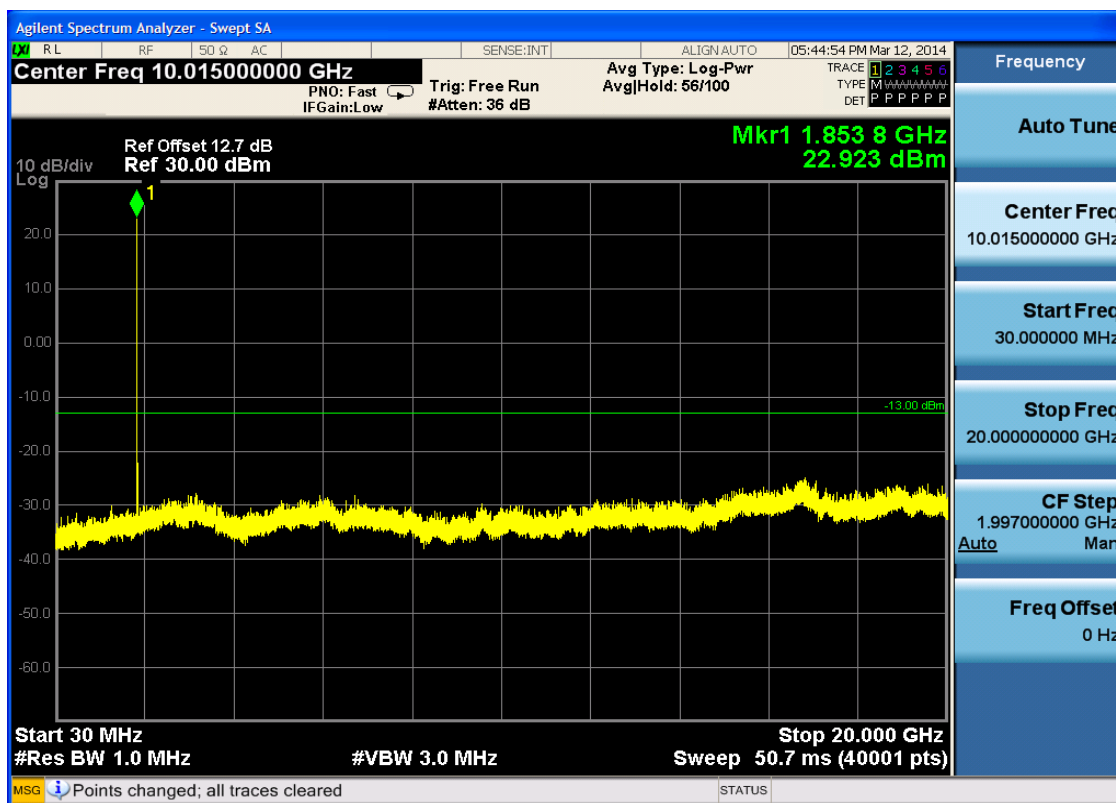
6.2.2 Test Band = WCDMA1900

6.2.2.1 Test Mode = UMTS/TM1

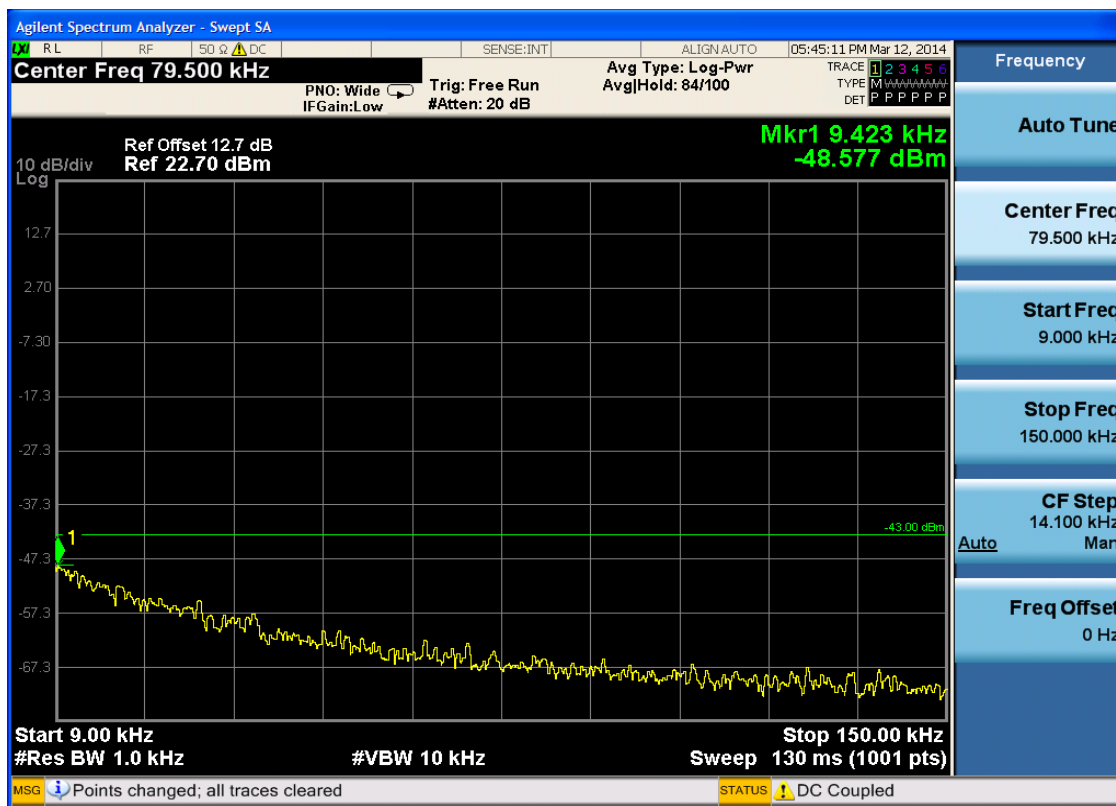
6.2.2.1.1 Test Channel = LCH

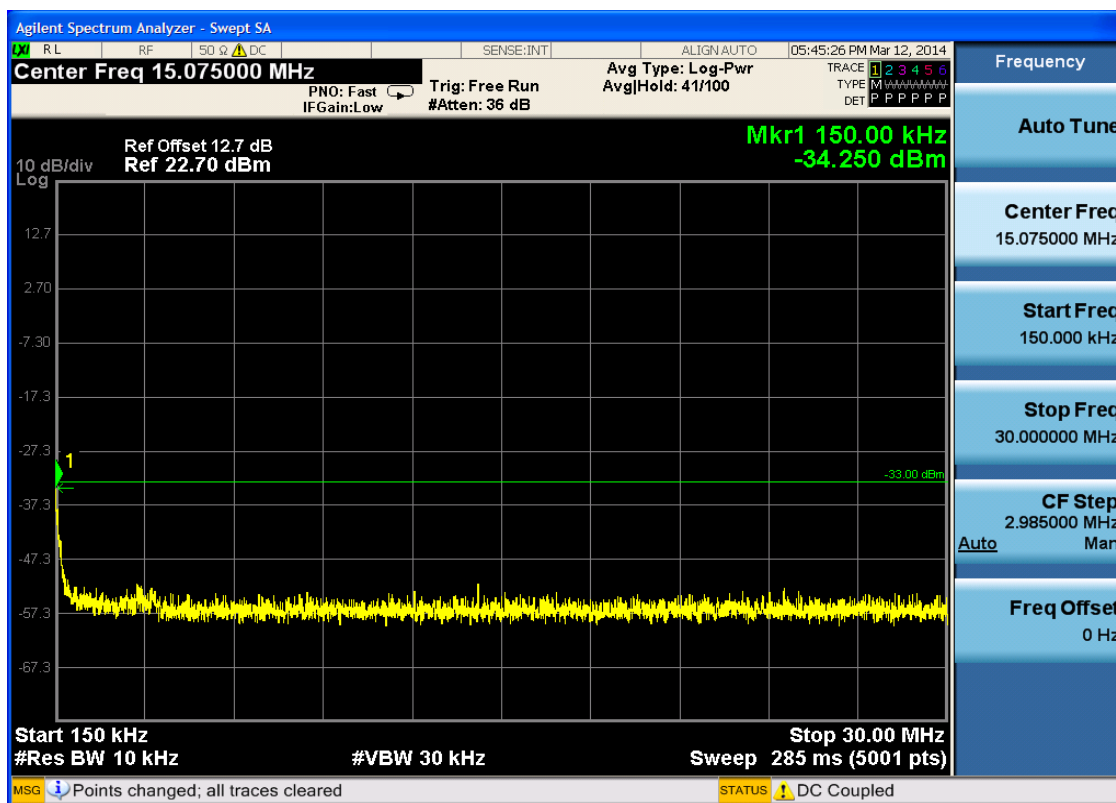


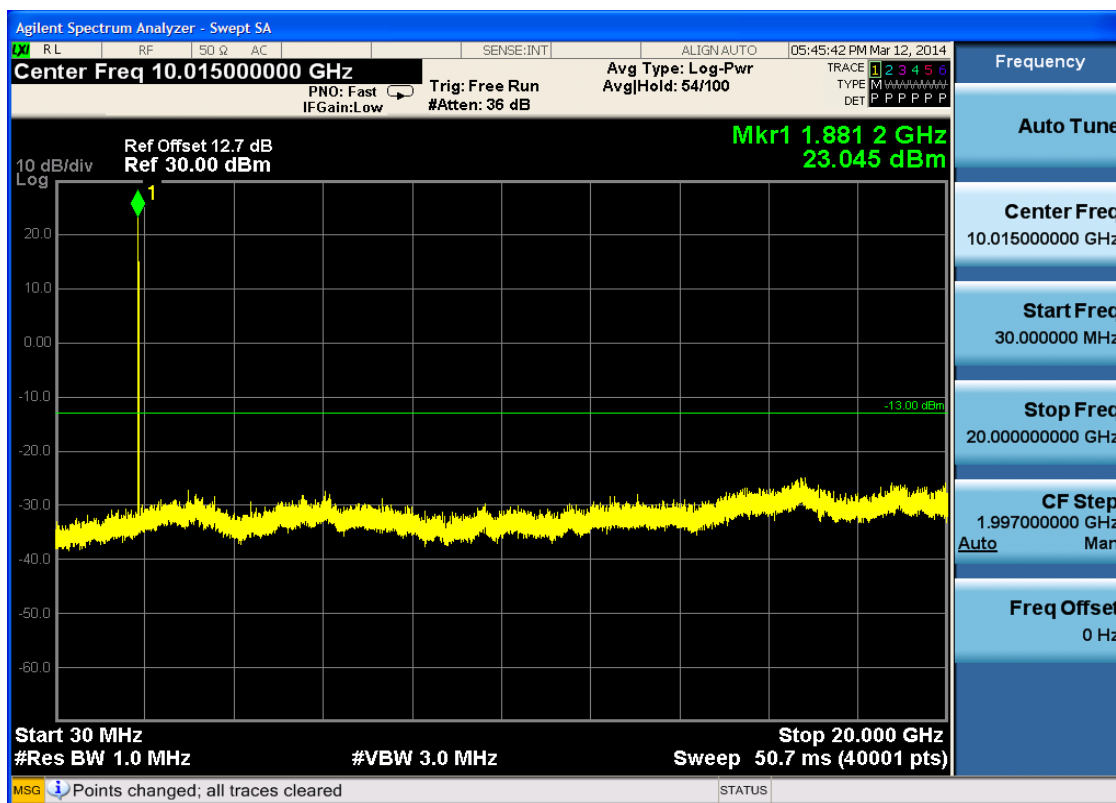




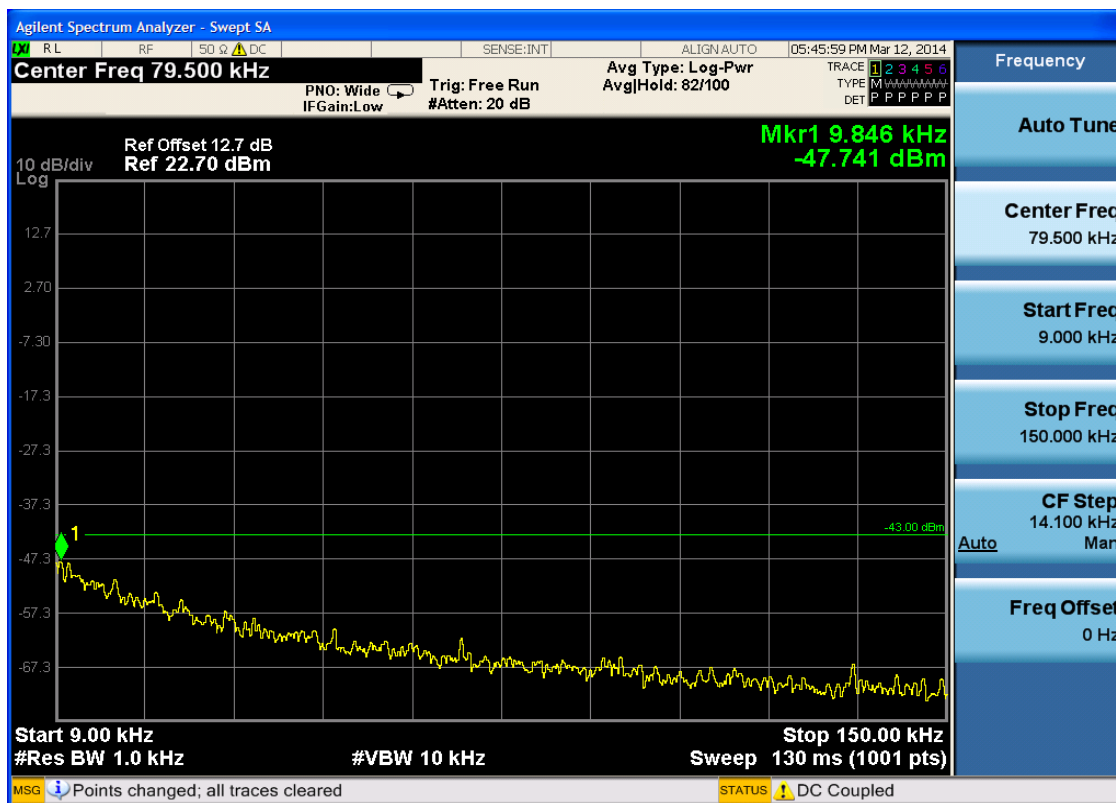
6.2.2.1.2 Test Channel = MCH

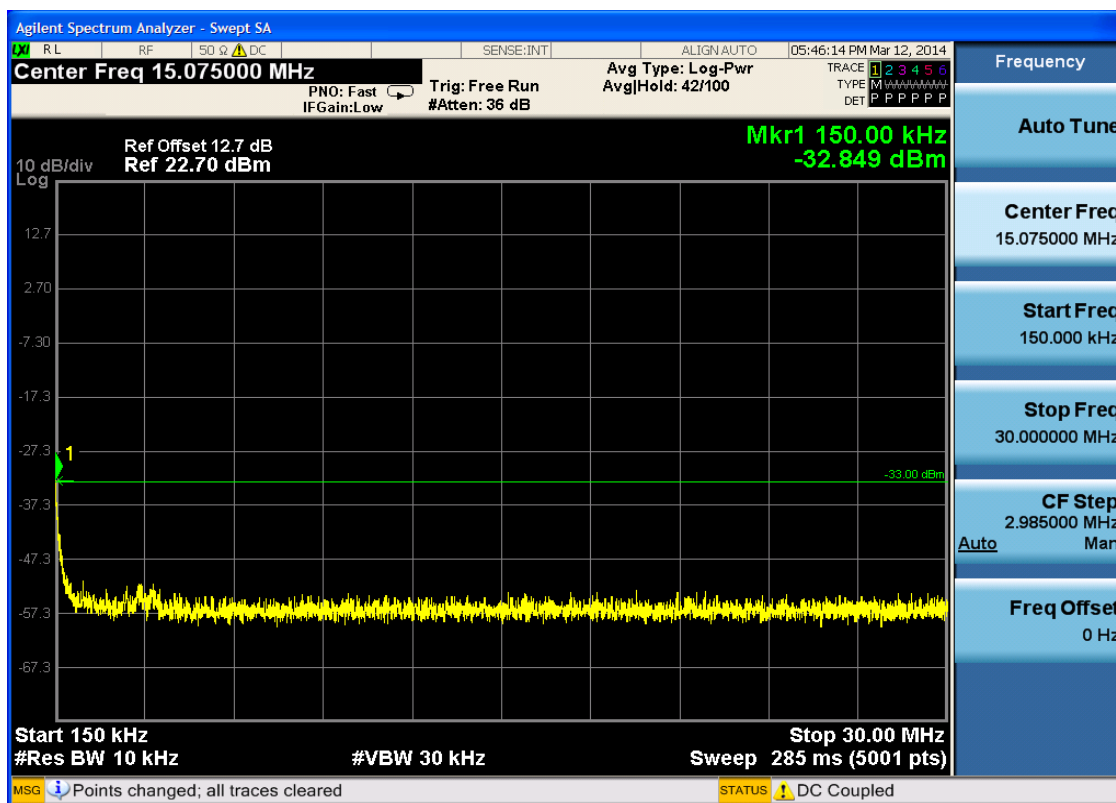


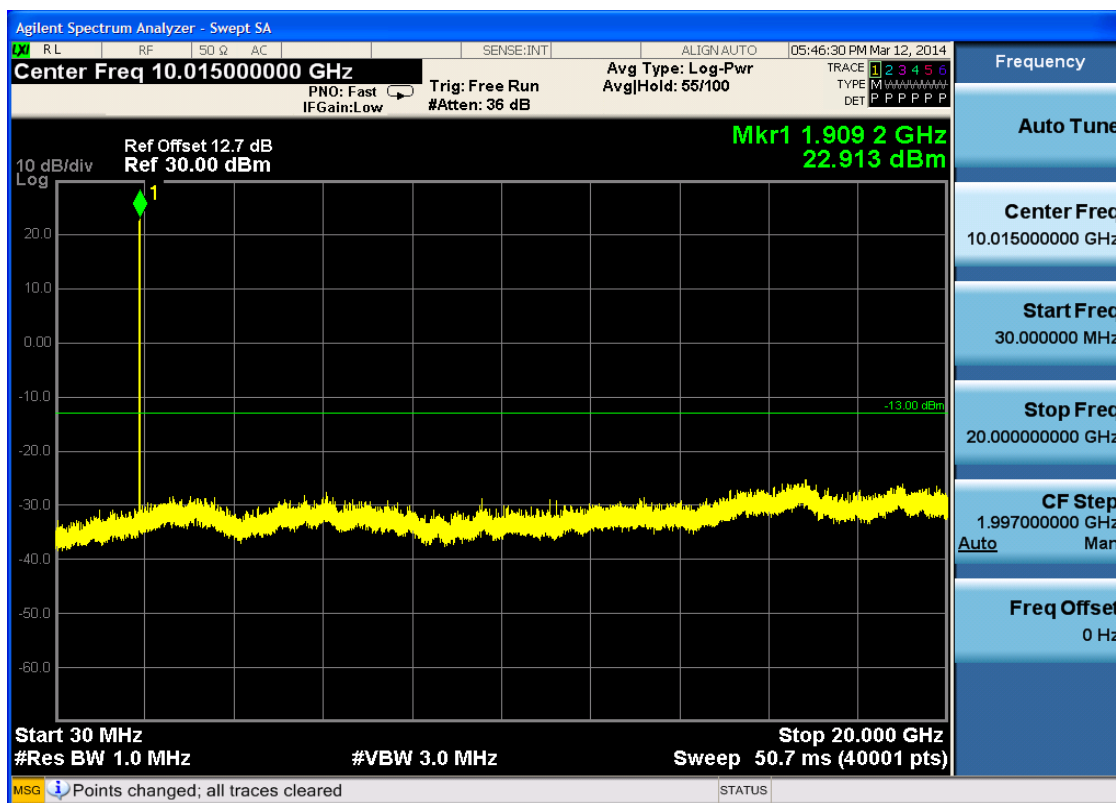




6.2.2.1.3 Test Channel = HCH



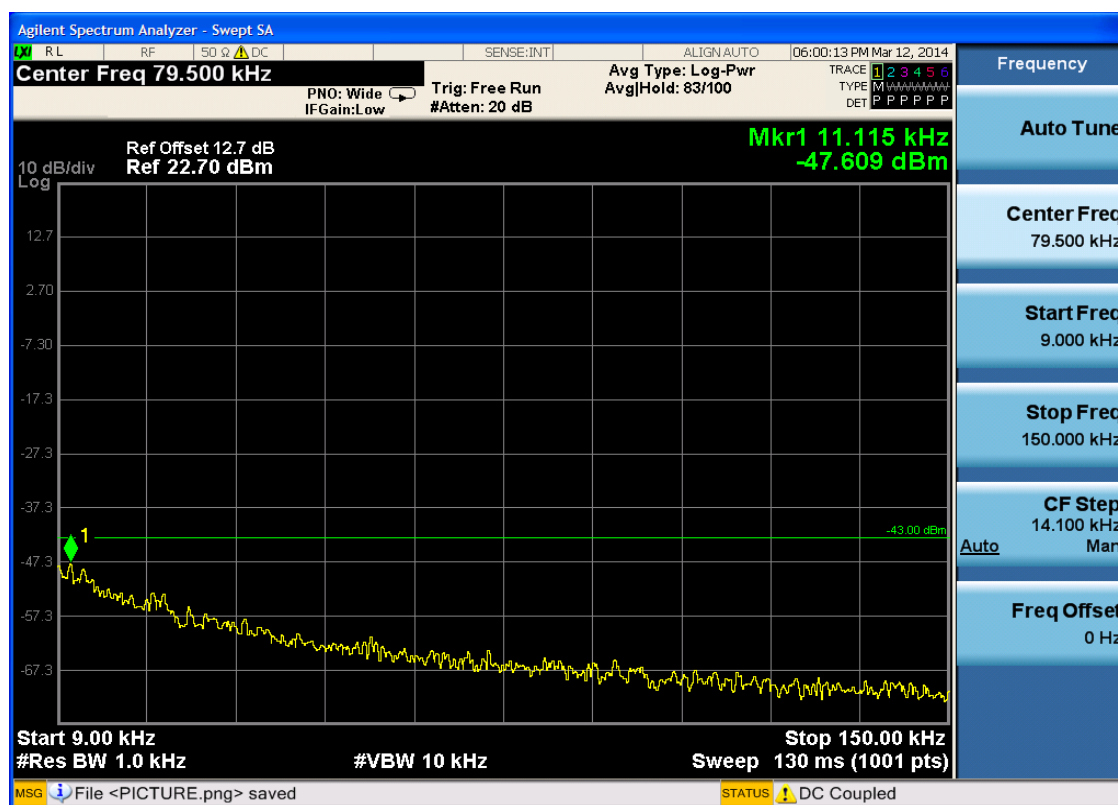


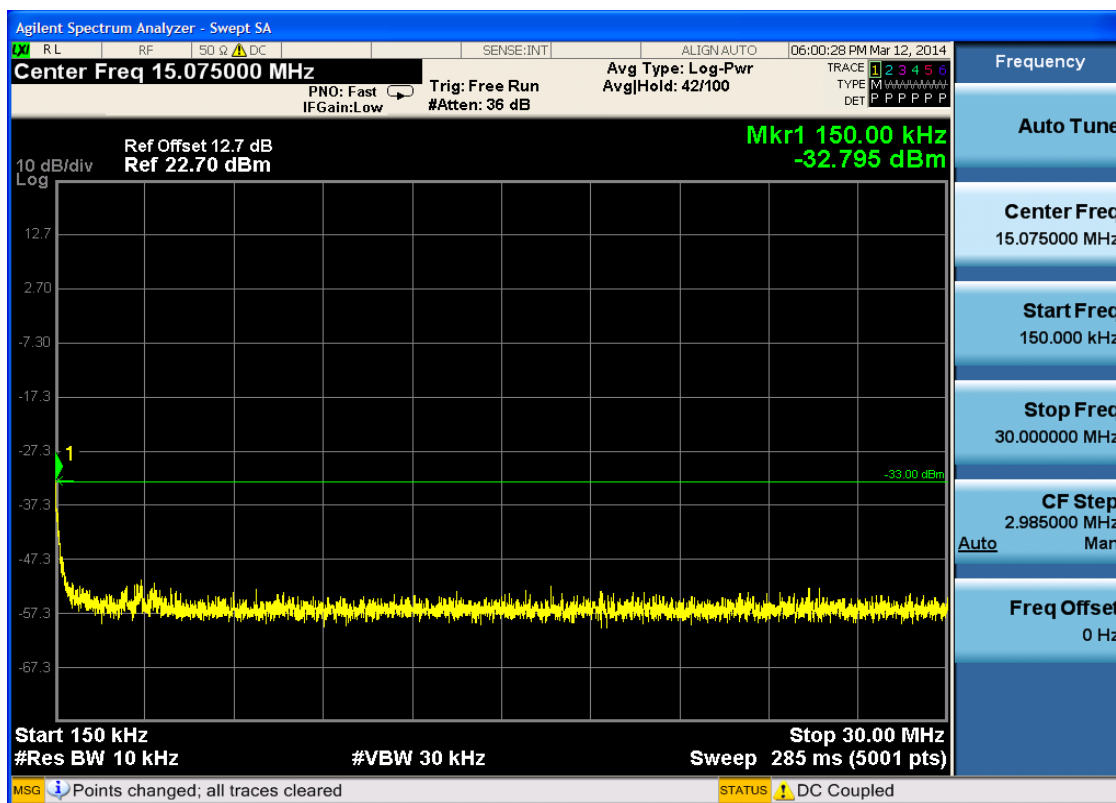


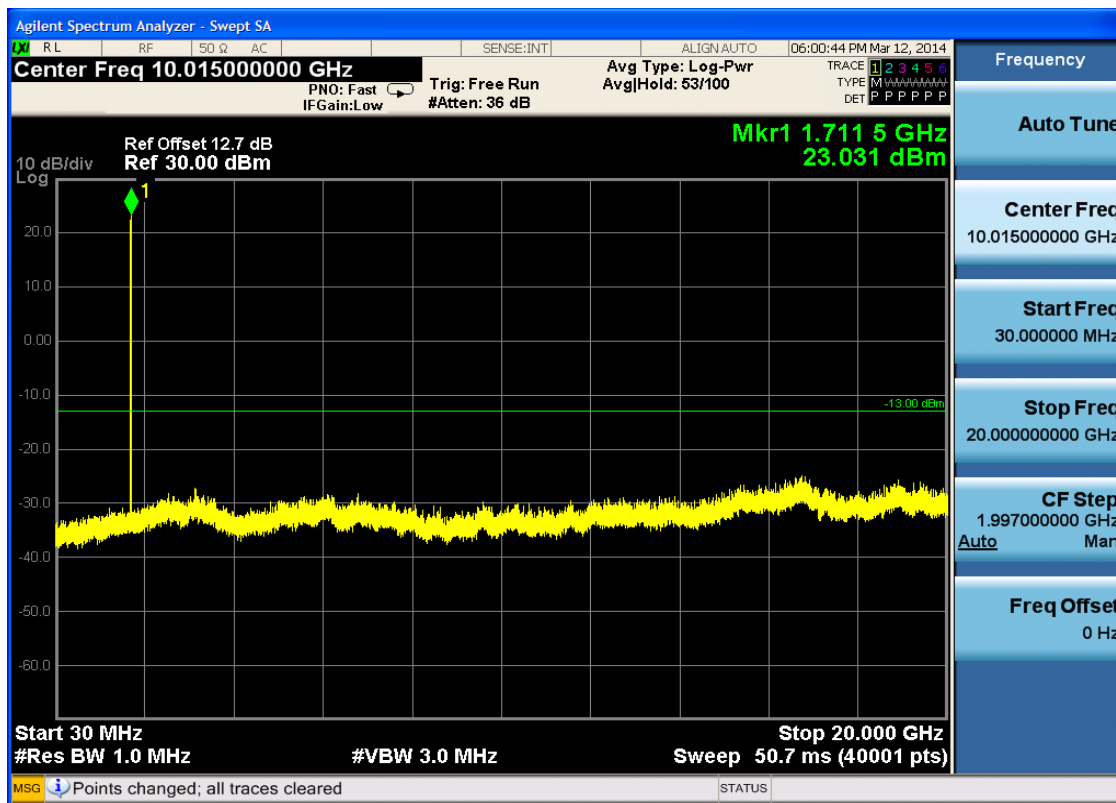
6.2.3 Test Band = WCDMA1700

6.2.3.1 Test Mode = UMTS/TM1

6.2.3.1.1 Test Channel = LCH







6.2.3.1.2 Test Channel = MCH

