

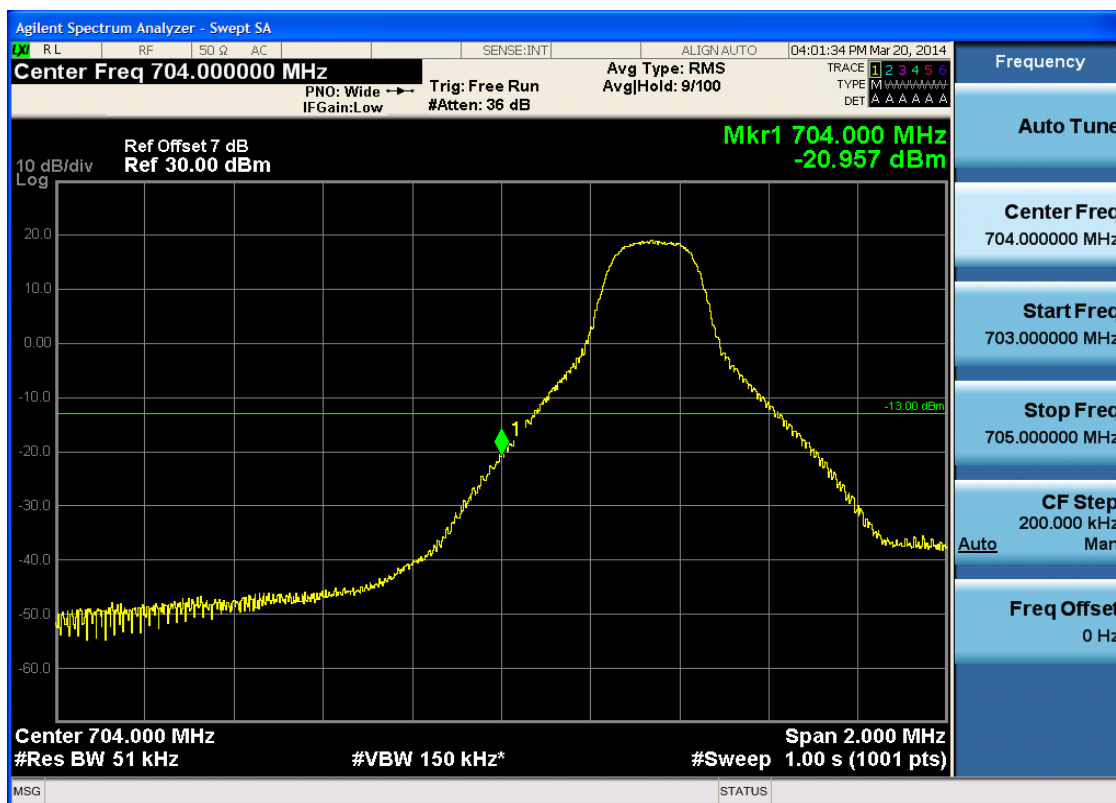
5.3.4 Test Band = BAND17

5.3.4.1 Test Mode = LTE/TM1

5.3.4.1.1 Test Bandwidth = 5

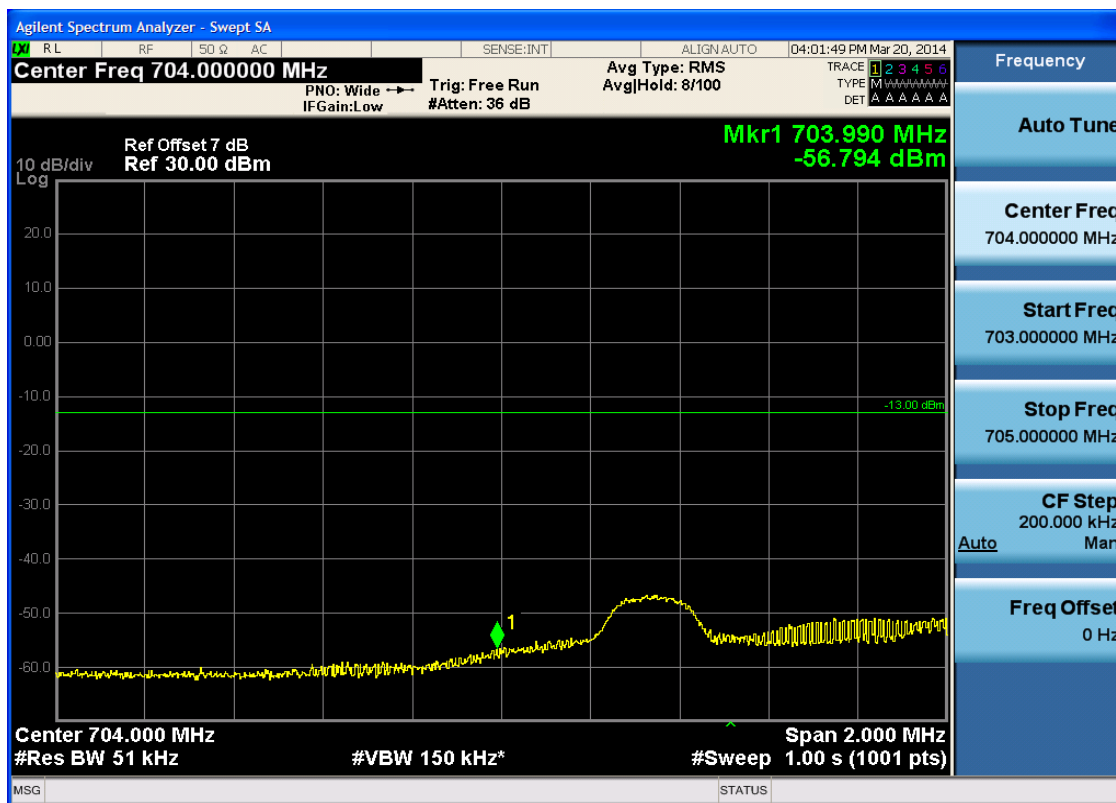
5.3.4.1.1.1 Test Channel = LCH

5.3.4.1.1.1.1 Test RB = RB1#0





5.3.4.1.1.2 Test RB = RB1#24



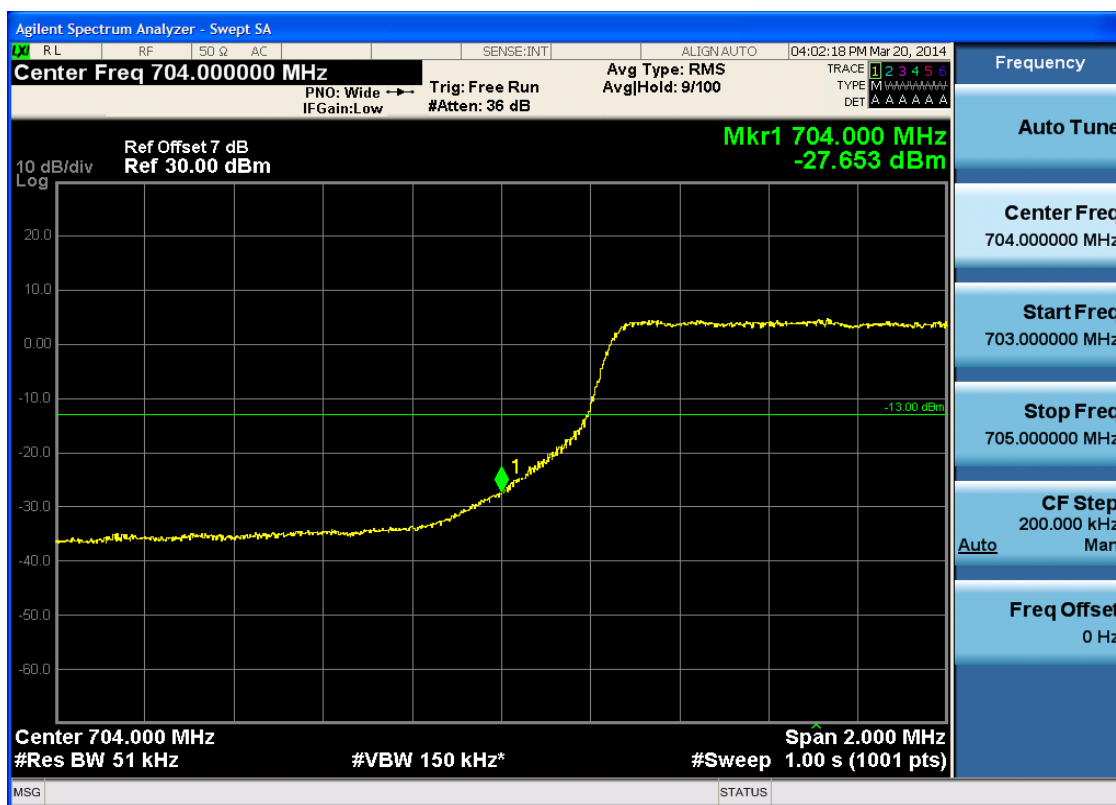


5.3.4.1.1.3 Test RB = RB12#6





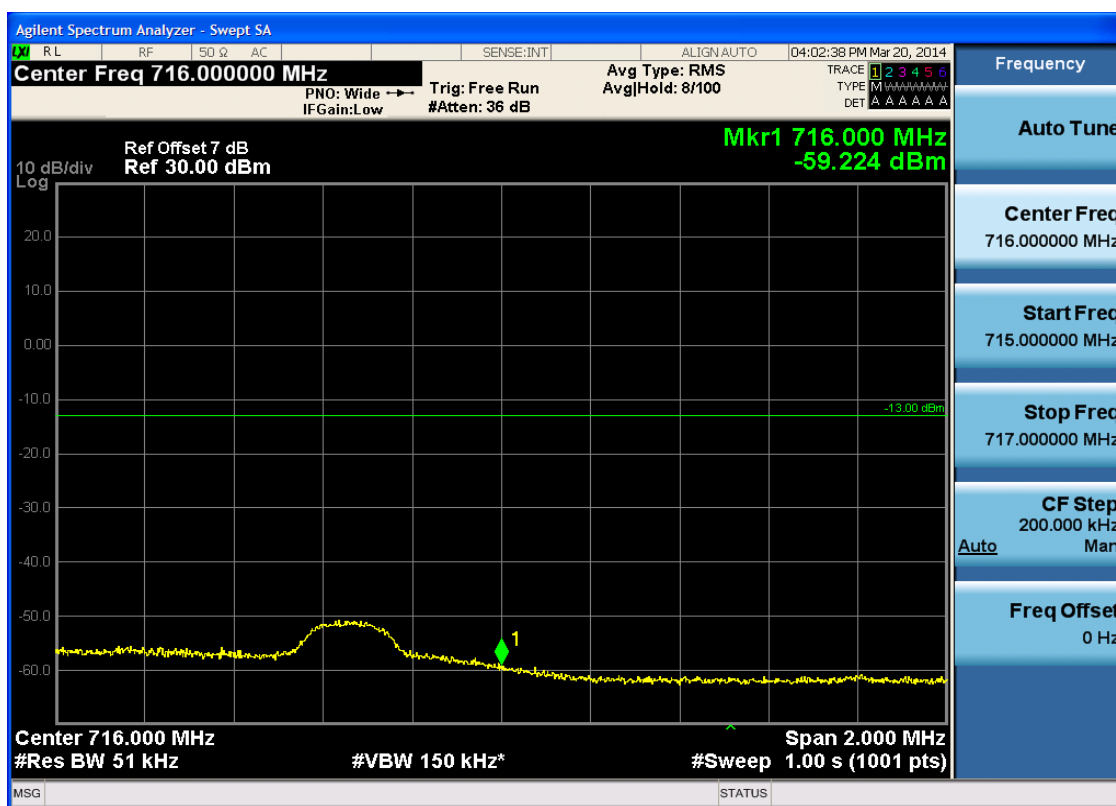
5.3.4.1.1.1.4 Test RB = RB25#0





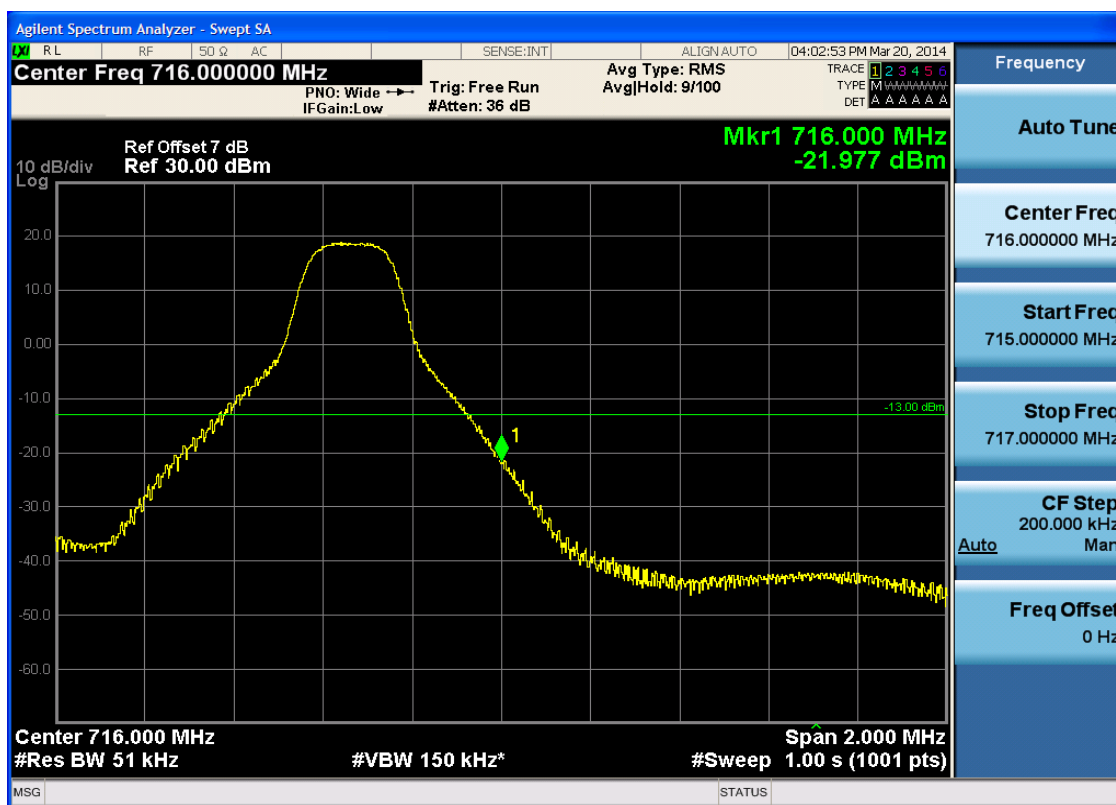
5.3.4.1.1.2 Test Channel = HCH

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





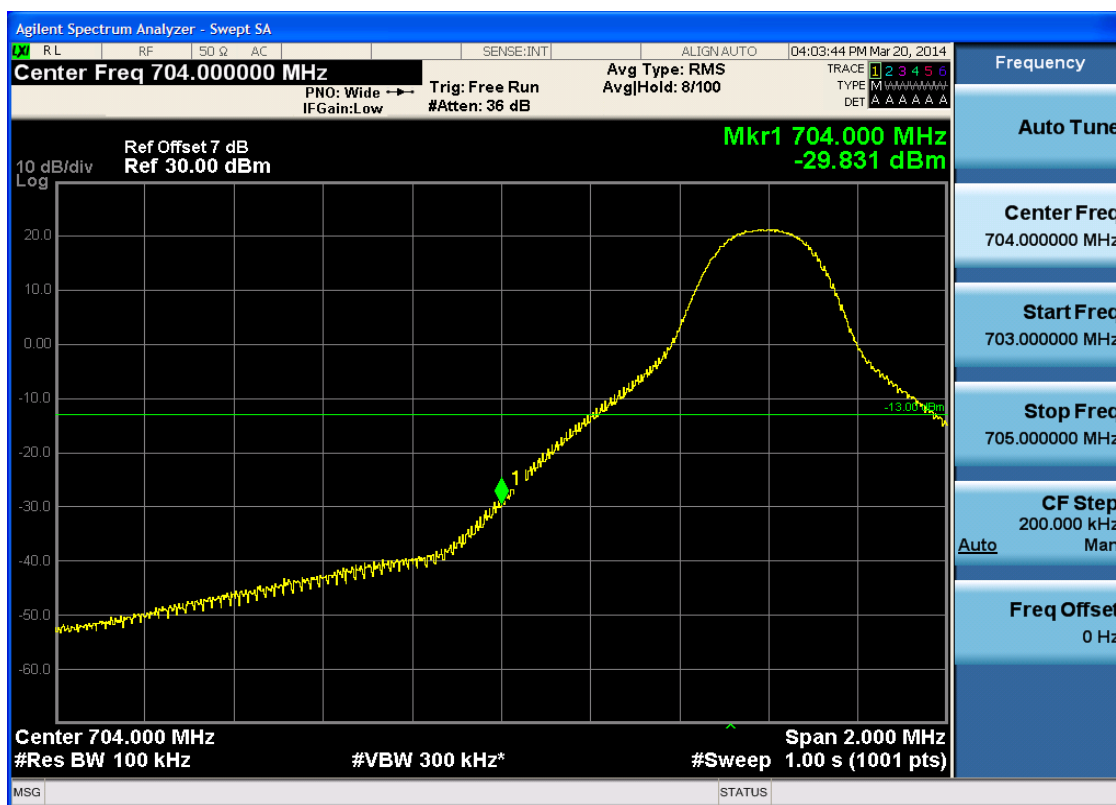
5.3.4.1.1.2.4 Test RB = RB25#0



5.3.4.1.2 Test Bandwidth = 10

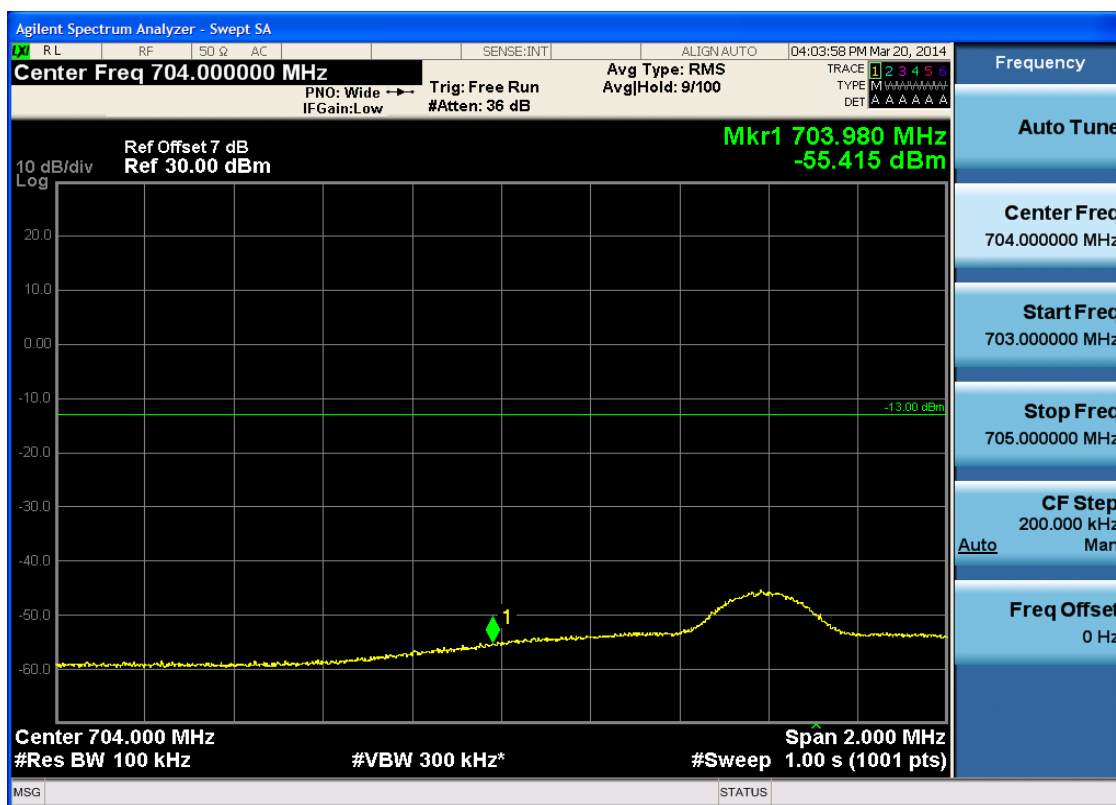
5.3.4.1.2.1 Test Channel = LCH

5.3.4.1.2.1.1 Test RB = RB1#0



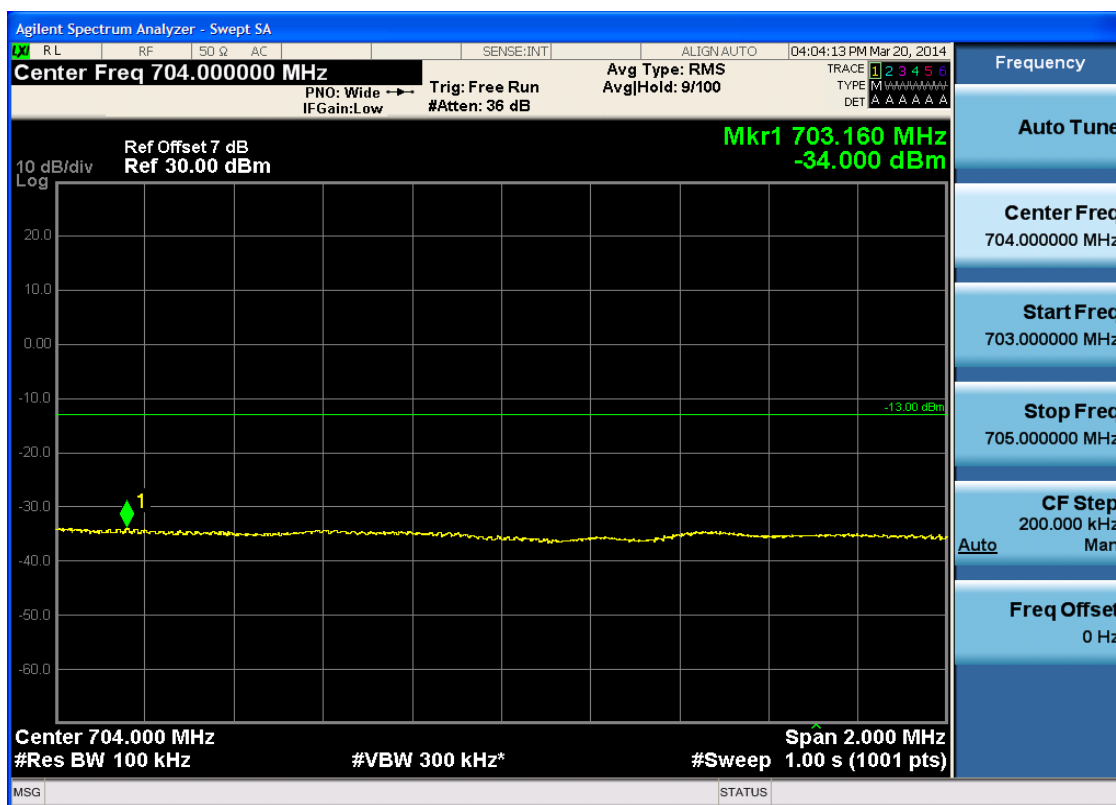


5.3.4.1.2.1.2 Test RB = RB1#49



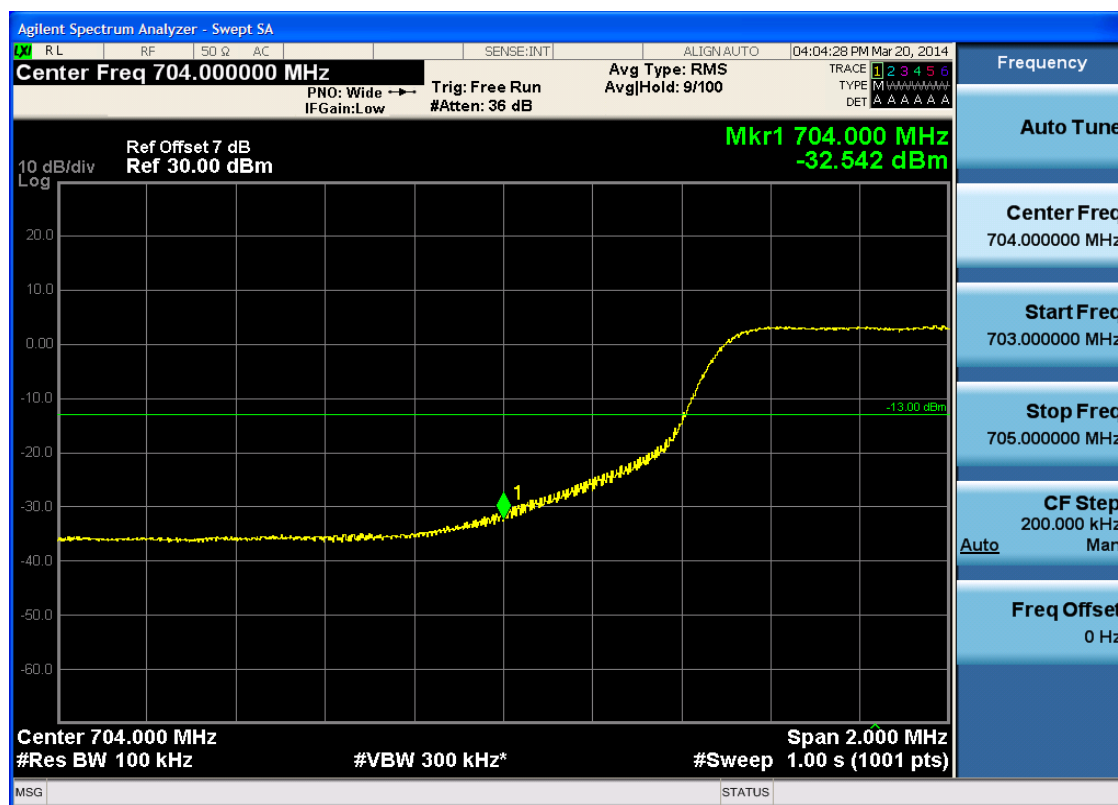


5.3.4.1.2.1.3 Test RB = RB25#13





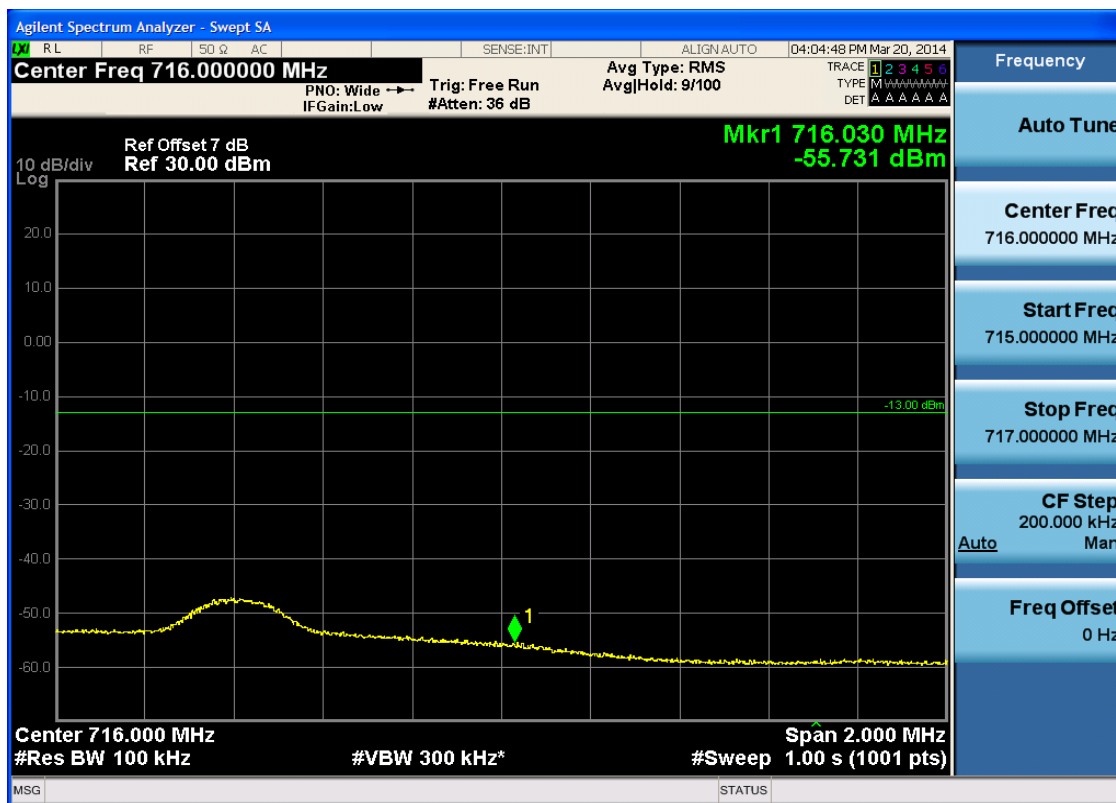
5.3.4.1.2.1.4 Test RB = RB50#0





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
PNO: Wide IFGain: Low Trig: Free Run AvgHold: 9/100
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

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 100 kHz
#VBW 300 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



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 → Trig: Free Run Avg Type: RMS
IFGain: Low #Atten: 36 dB Avg/Hold: 9/100

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W
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

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

-13.00 dBm

Center Freq 716.000 MHz
#Res BW 100 kHz
#VBW 300 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



5.3.4.1.2.2.4 Test RB = RB50#0

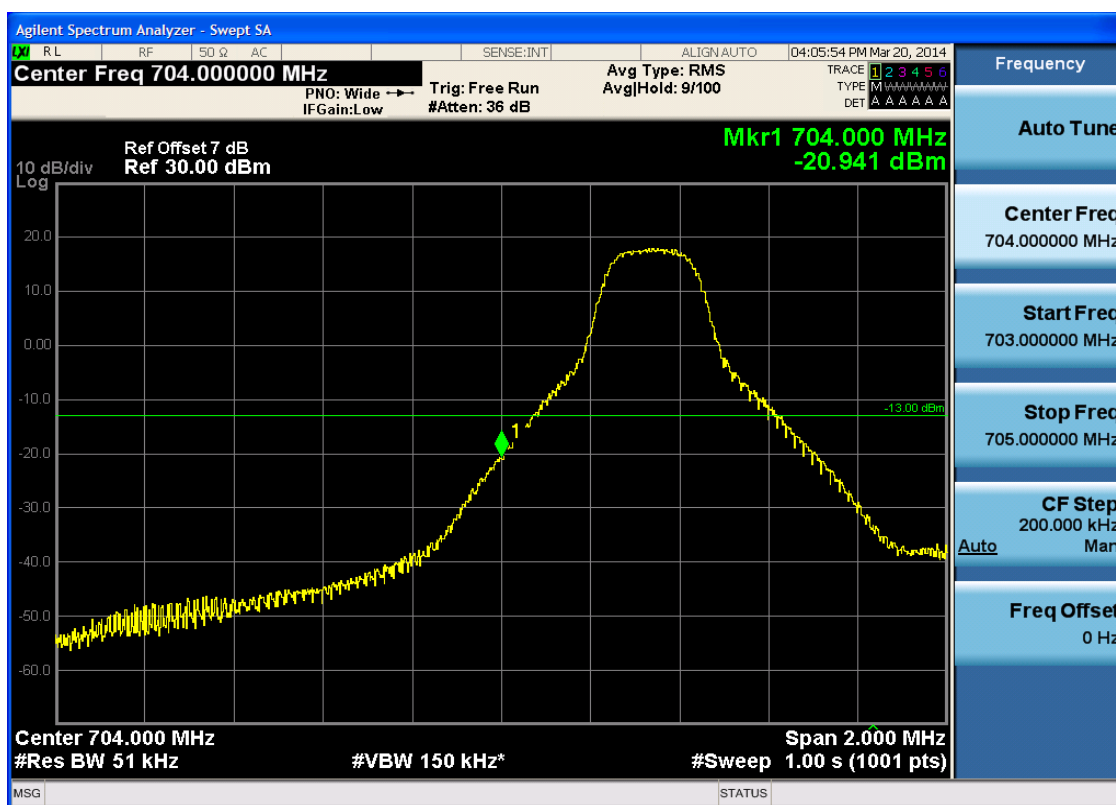


5.3.4.2 Test Mode = LTE/TM2

5.3.4.2.1 Test Bandwidth = 5

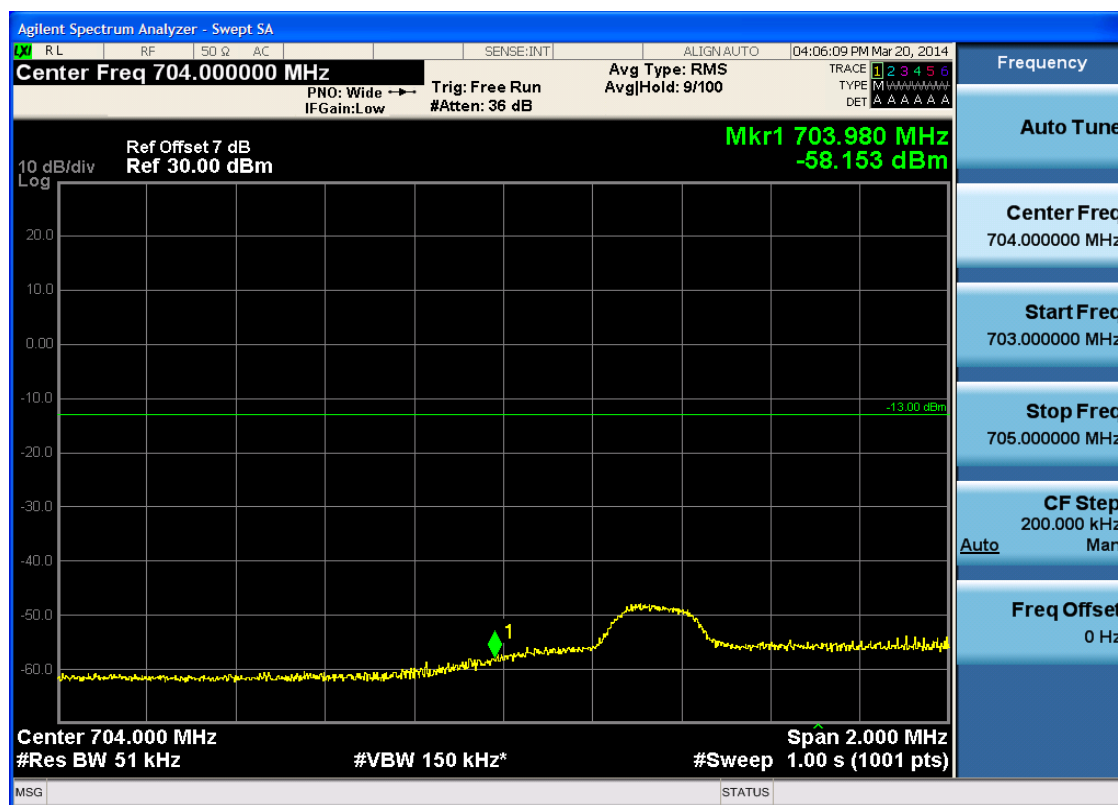
5.3.4.2.1.1 Test Channel = LCH

5.3.4.2.1.1.1 Test RB = RB1#0



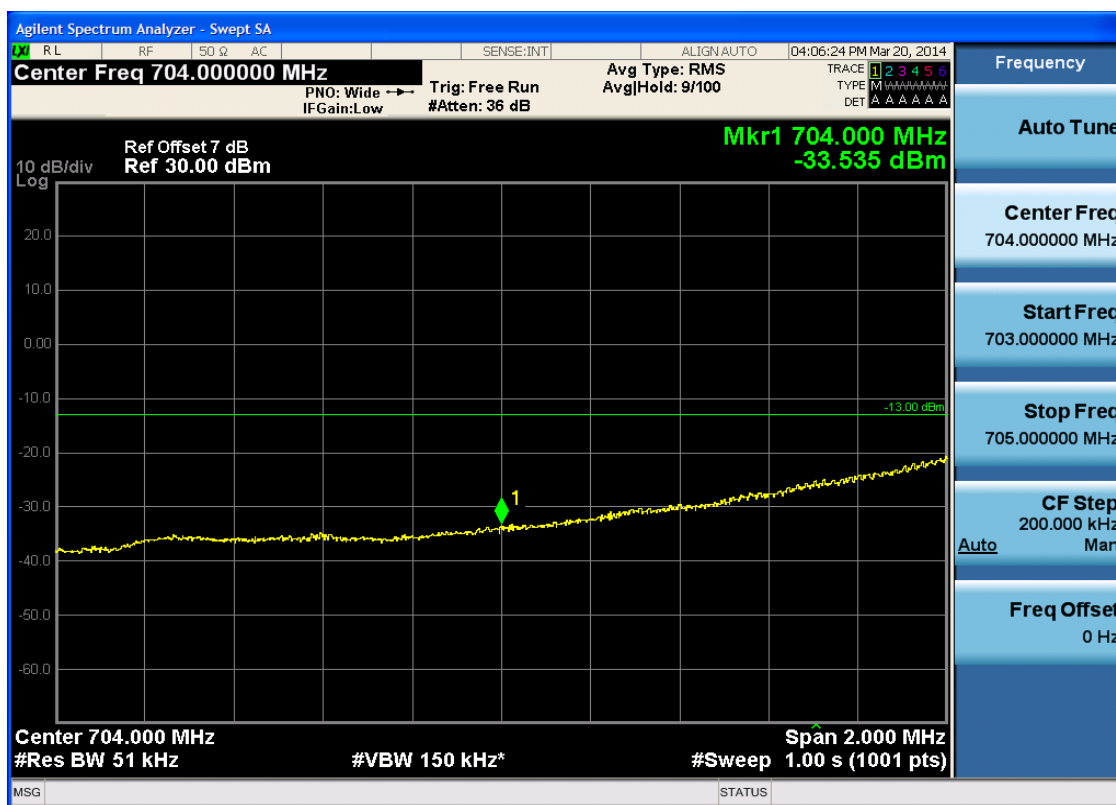


5.3.4.2.1.1.2 Test RB = RB1#24



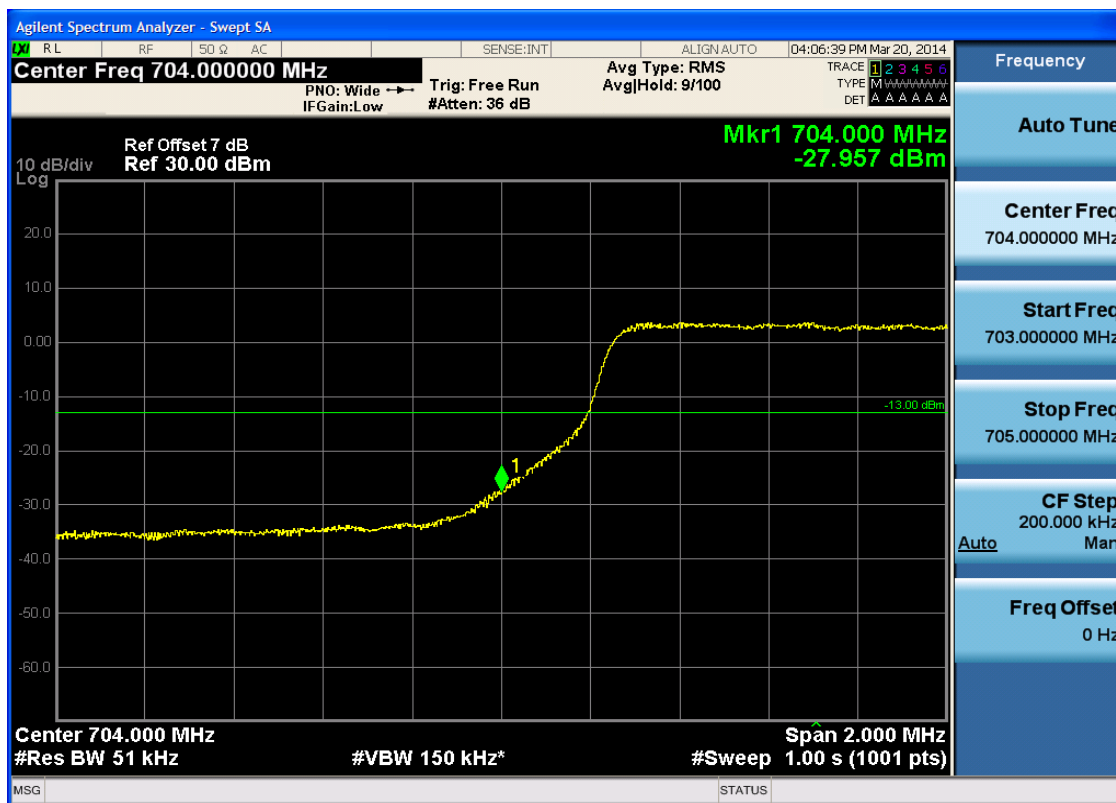


5.3.4.2.1.1.3 Test RB = RB12#6





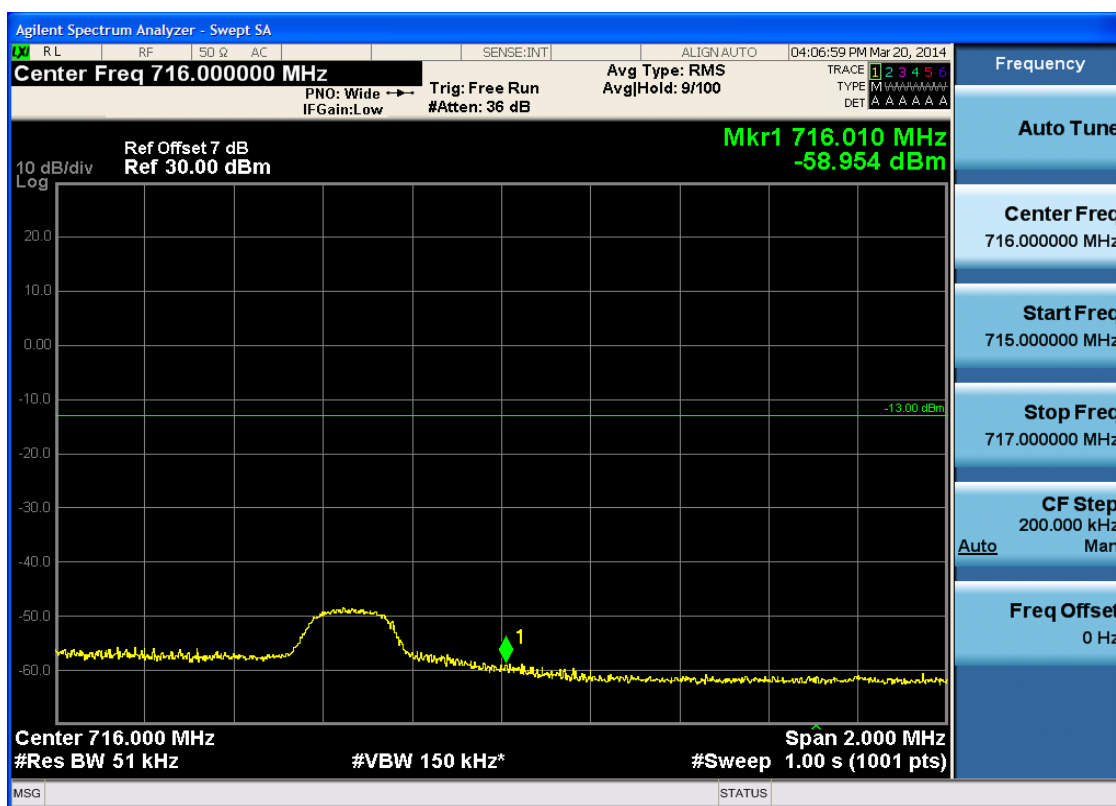
5.3.4.2.1.1.4 Test RB = RB25#0



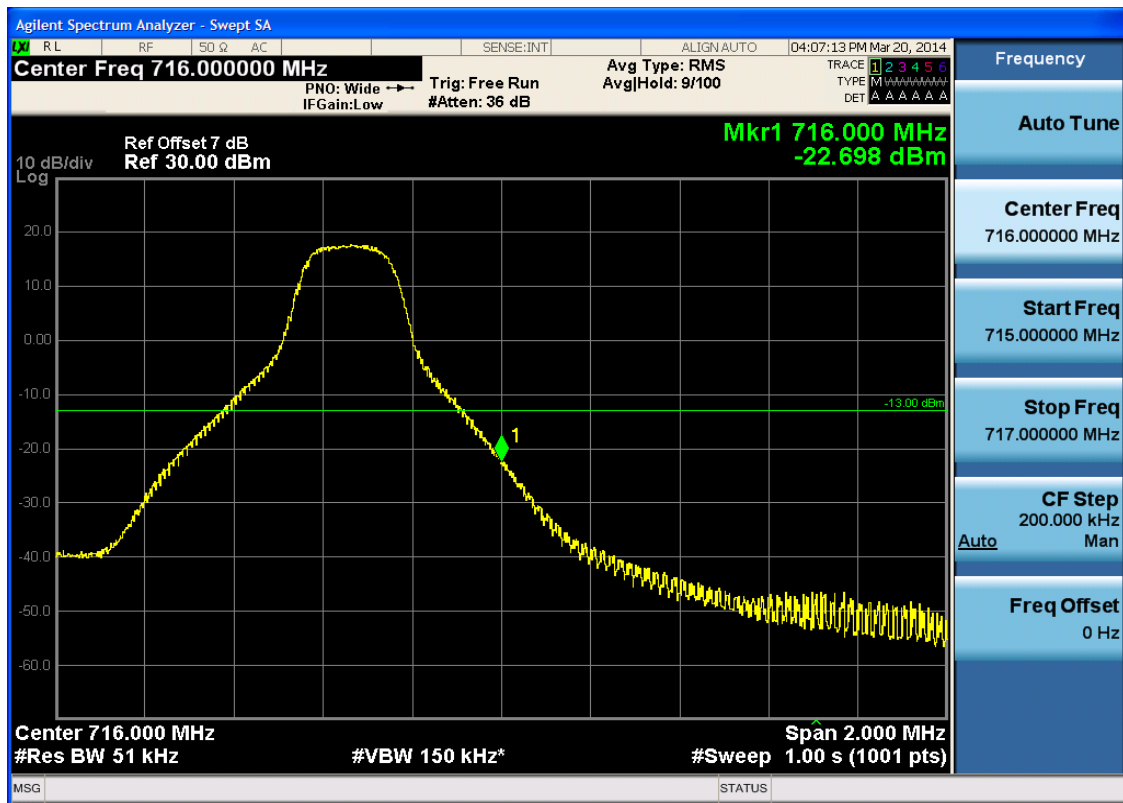


5.3.4.2.1.2 Test Channel = HCH

5.3.4.2.1.2.1 Test RB = RB1#0



5.3.4.2.1.2.2 Test RB = RB1#24





5.3.4.2.1.2.3 Test RB = RB12#6





5.3.4.2.1.2.4 Test RB = RB25#0

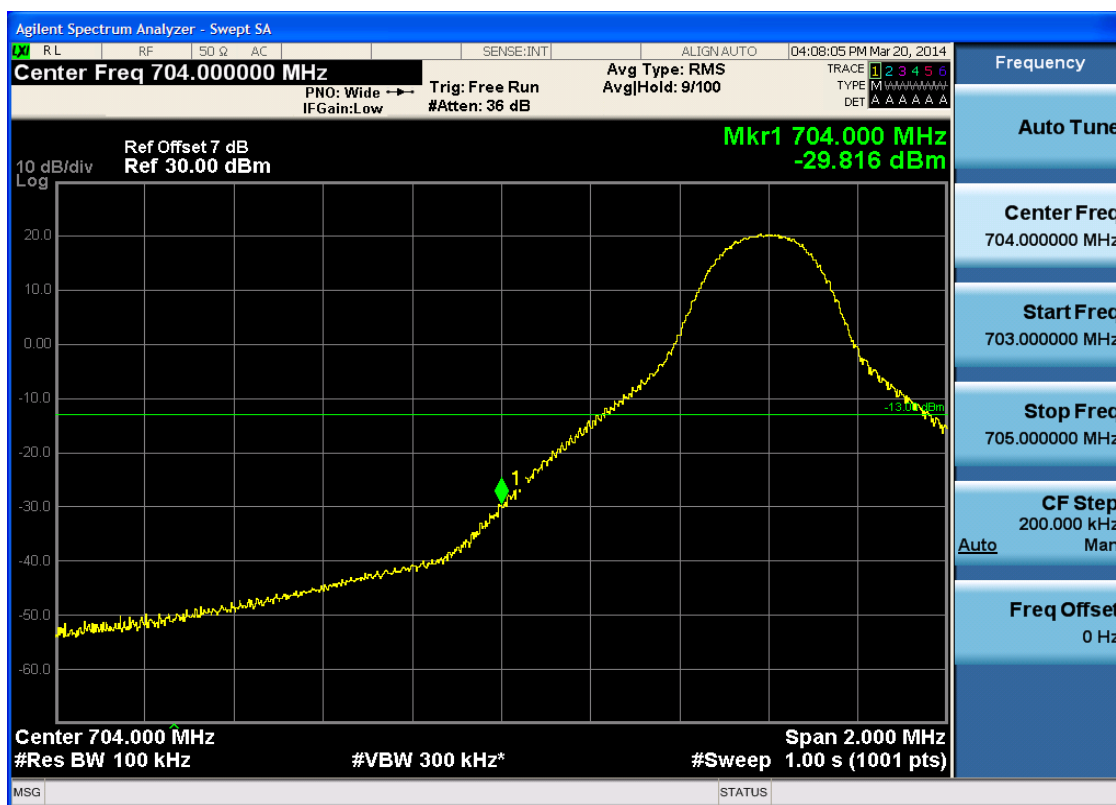




5.3.4.2.2 Test Bandwidth = 10

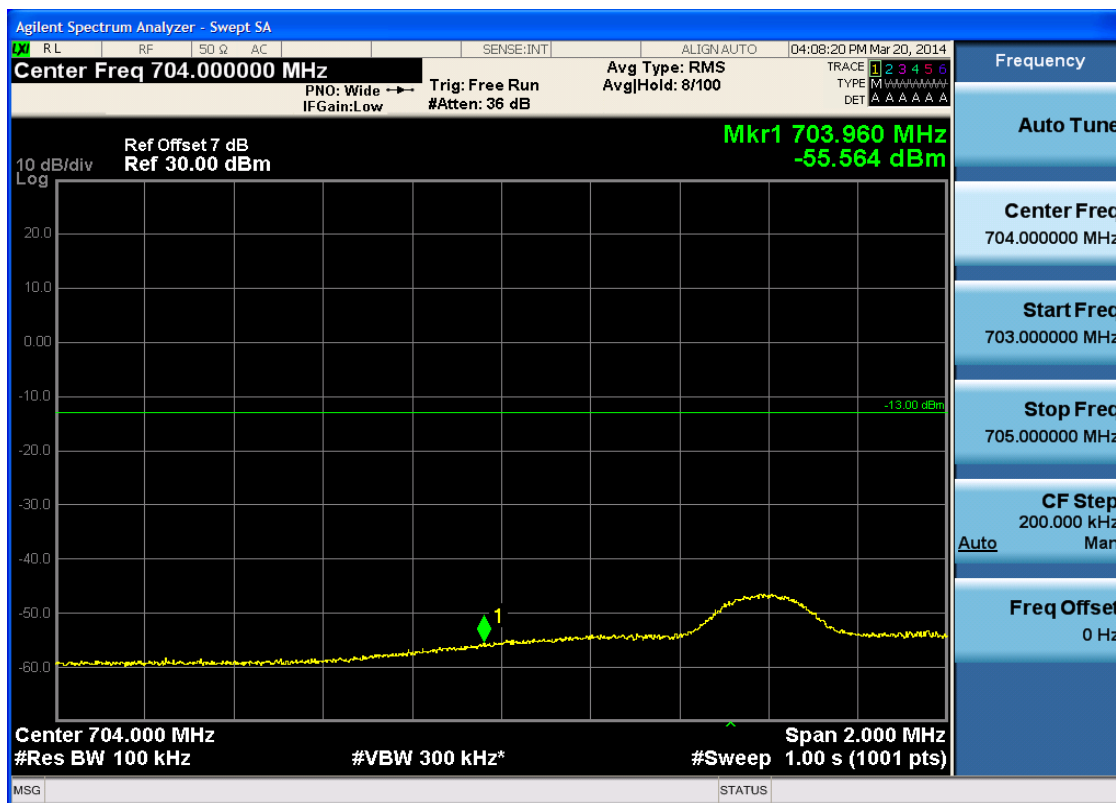
5.3.4.2.2.1 Test Channel = LCH

5.3.4.2.2.1.1 Test RB = RB1#0





5.3.4.2.2.1.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN:AUTO 04:08:34 PM Mar 20, 2014

Center Freq 704.000000 MHz

PNO: Wide Trig: Free Run Avg Type: RMS
IFGain: Low #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 703.930 MHz
-34.395 dBm

10 dB/div
Log

-13.00 dBm

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

Frequency

Auto Tune

Center Freq
704.000000 MHz

Start Freq
703.000000 MHz

Stop Freq
705.000000 MHz

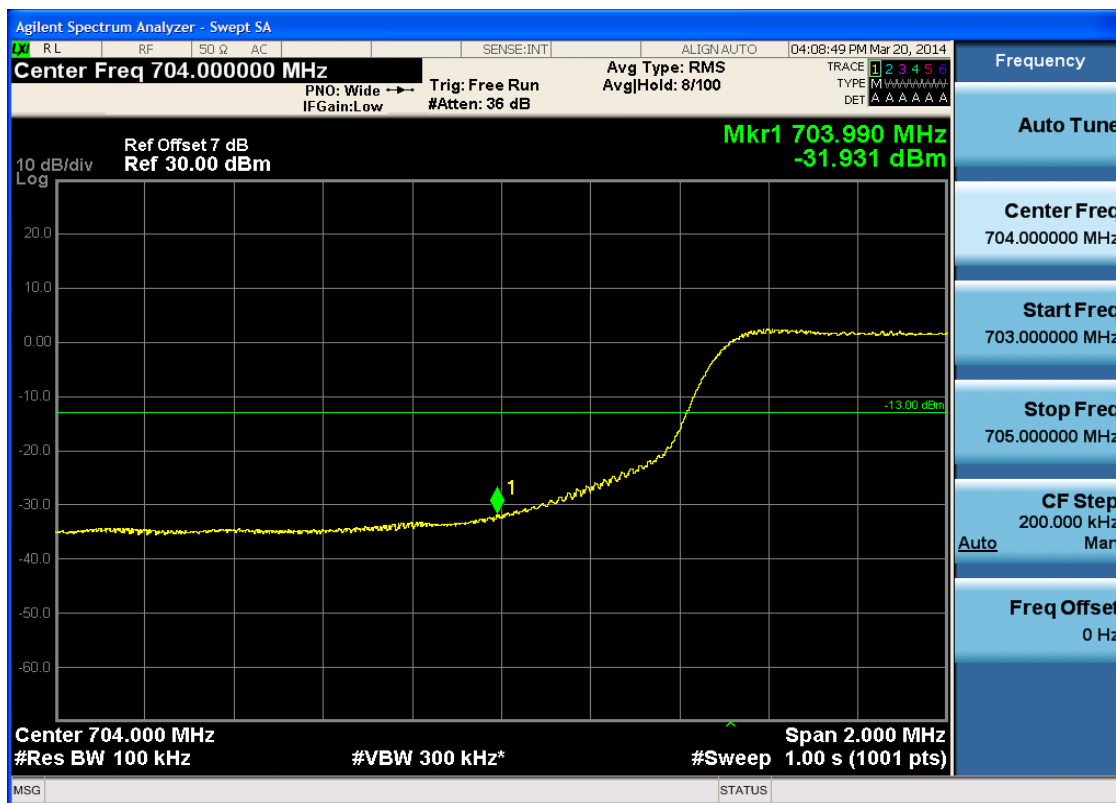
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

MSG STATUS



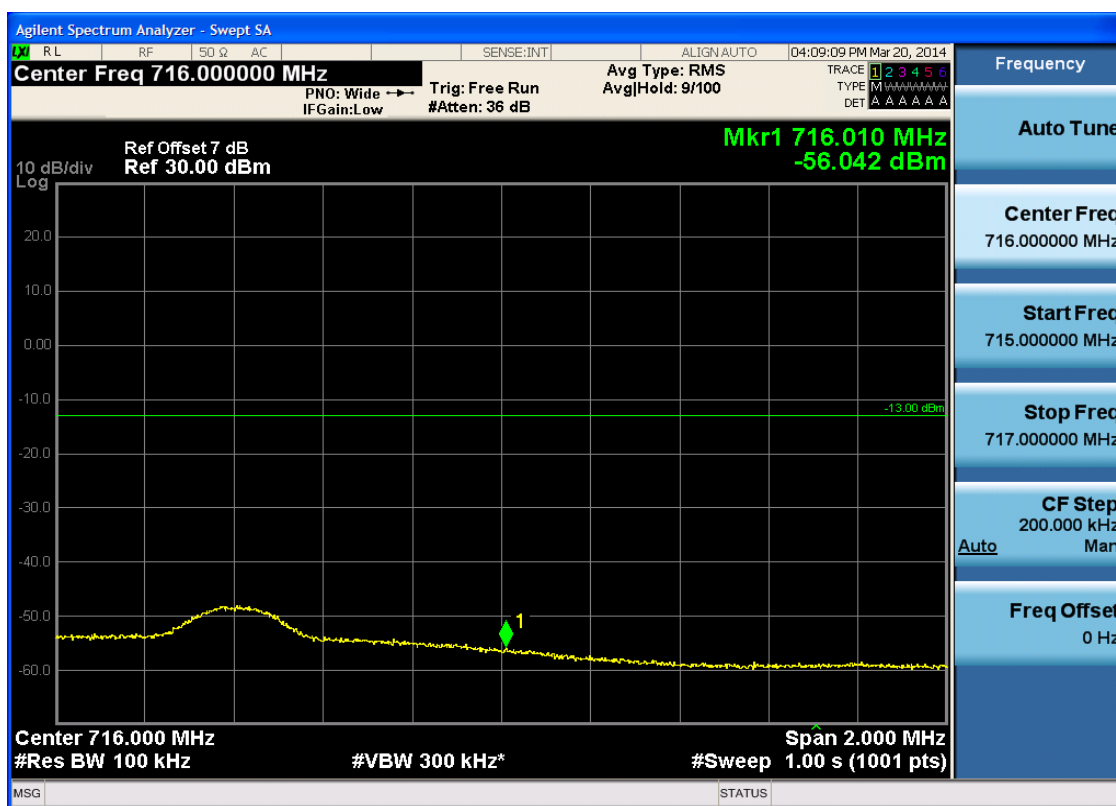
5.3.4.2.2.1.4 Test RB = RB50#0





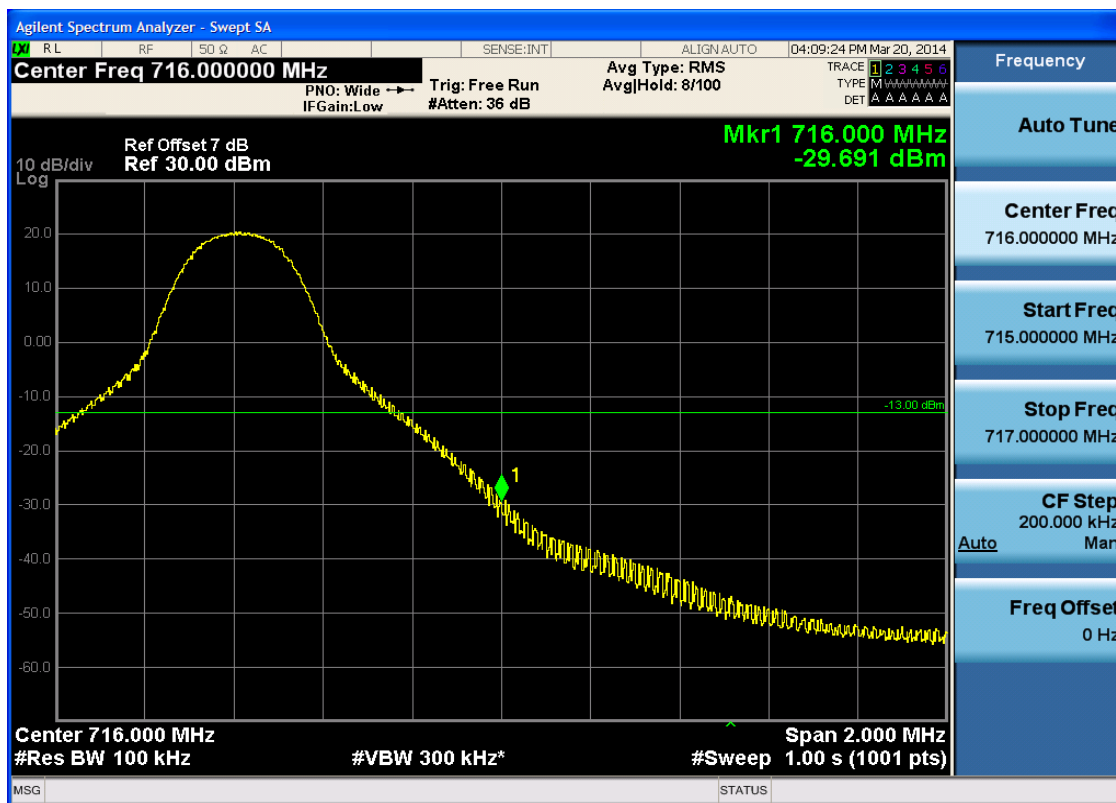
5.3.4.2.2.2 Test Channel = HCH

5.3.4.2.2.2.1 Test RB = RB1#0



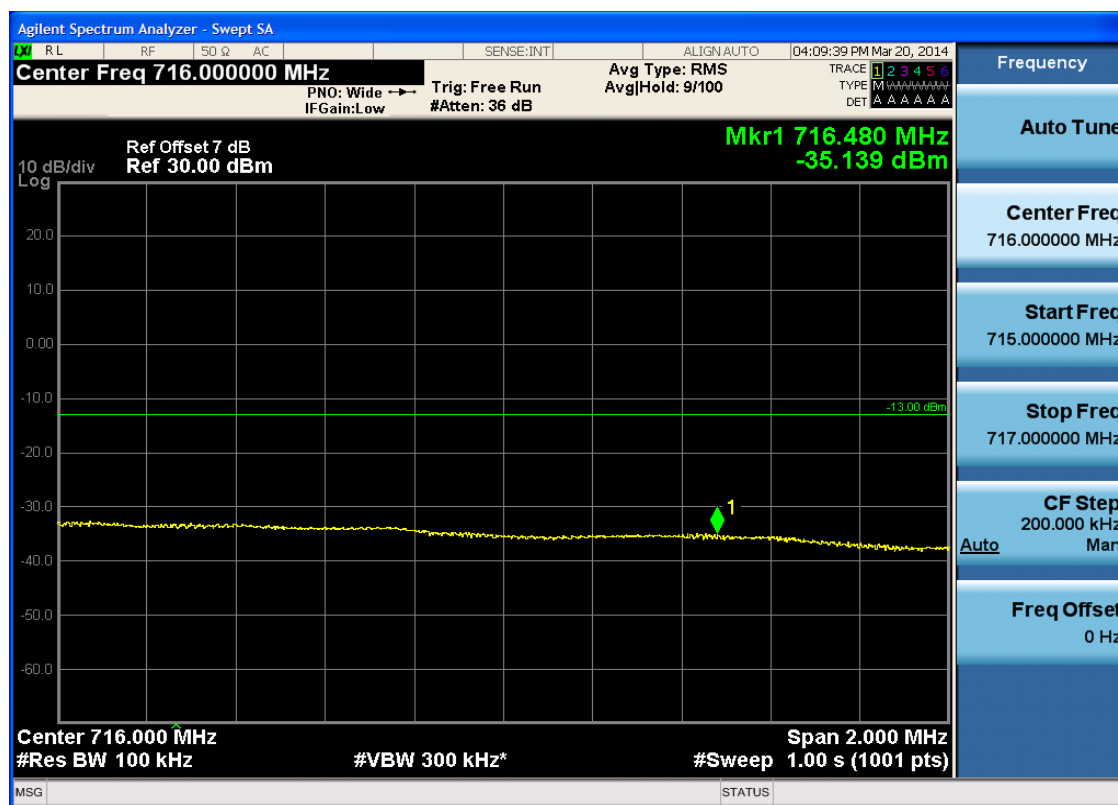


5.3.4.2.2.2 Test RB = RB1#49





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.

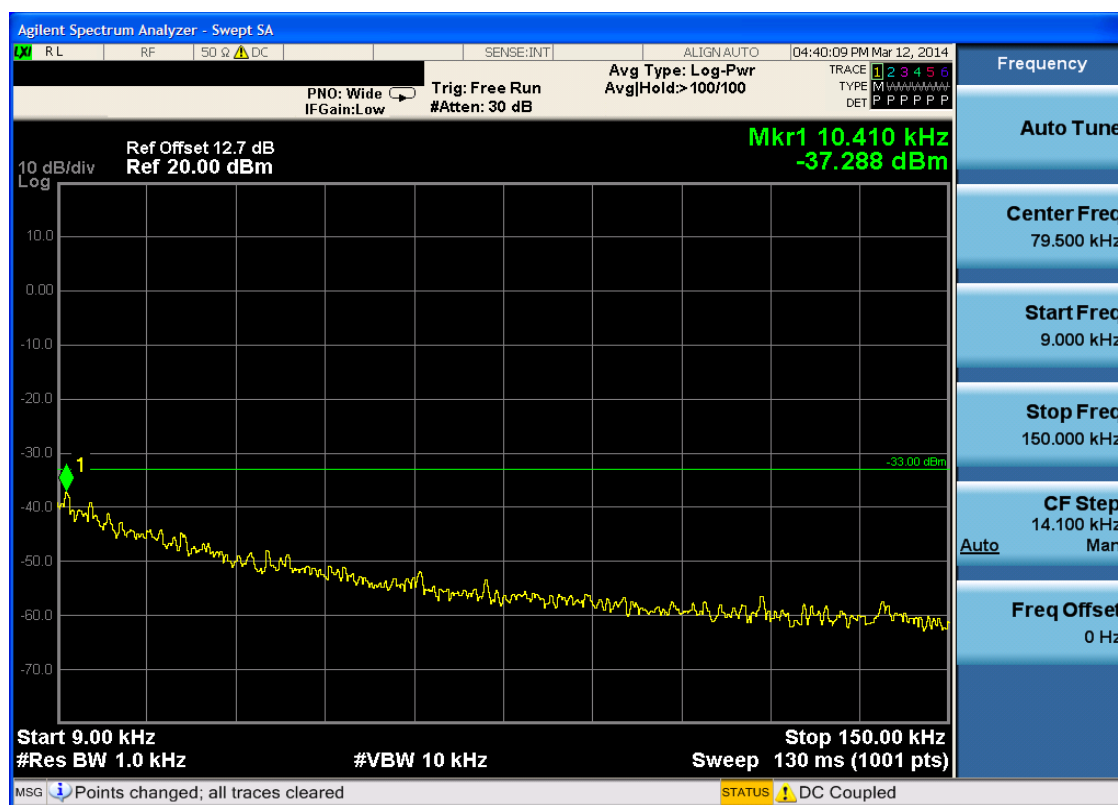
Part I - Test Plots

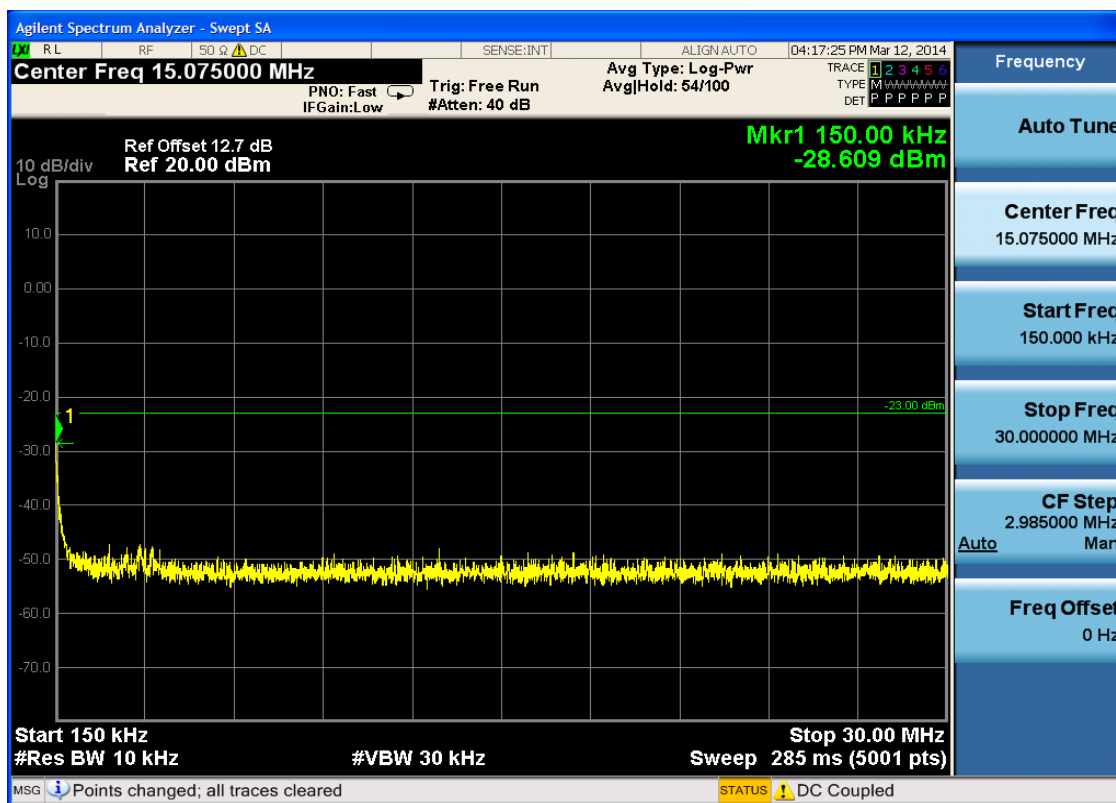
6.1 For GSM

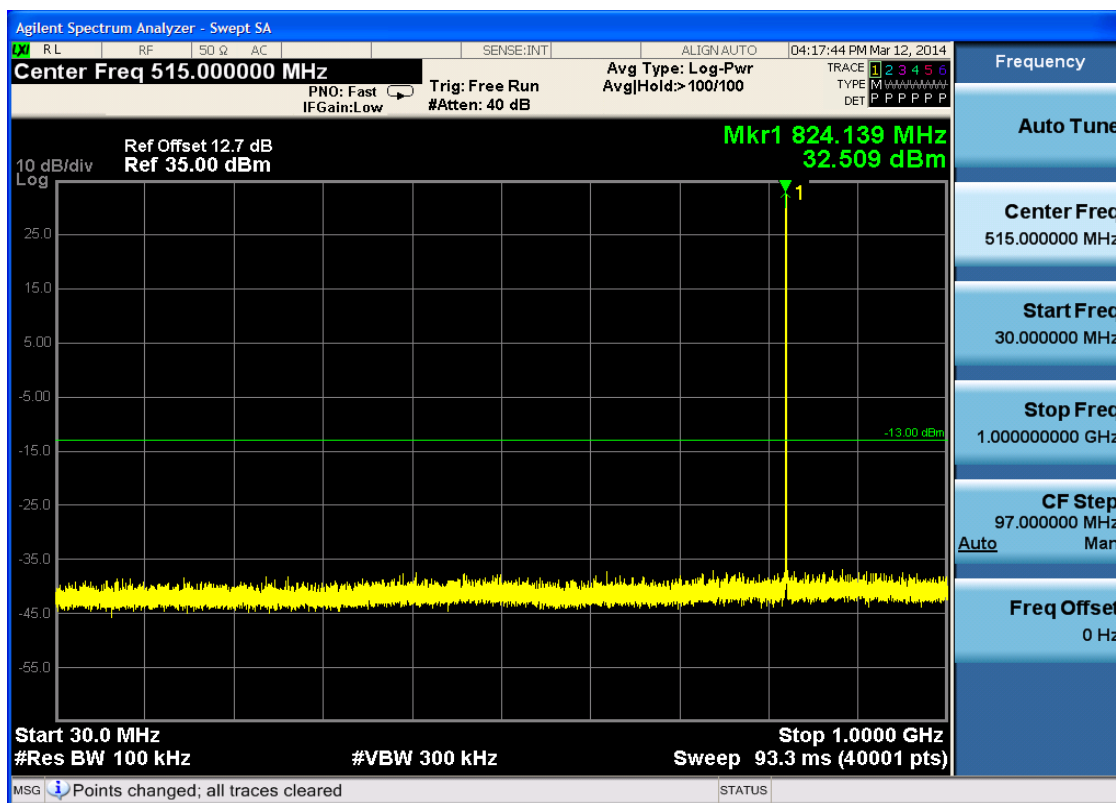
6.1.1 Test Band = GSM850

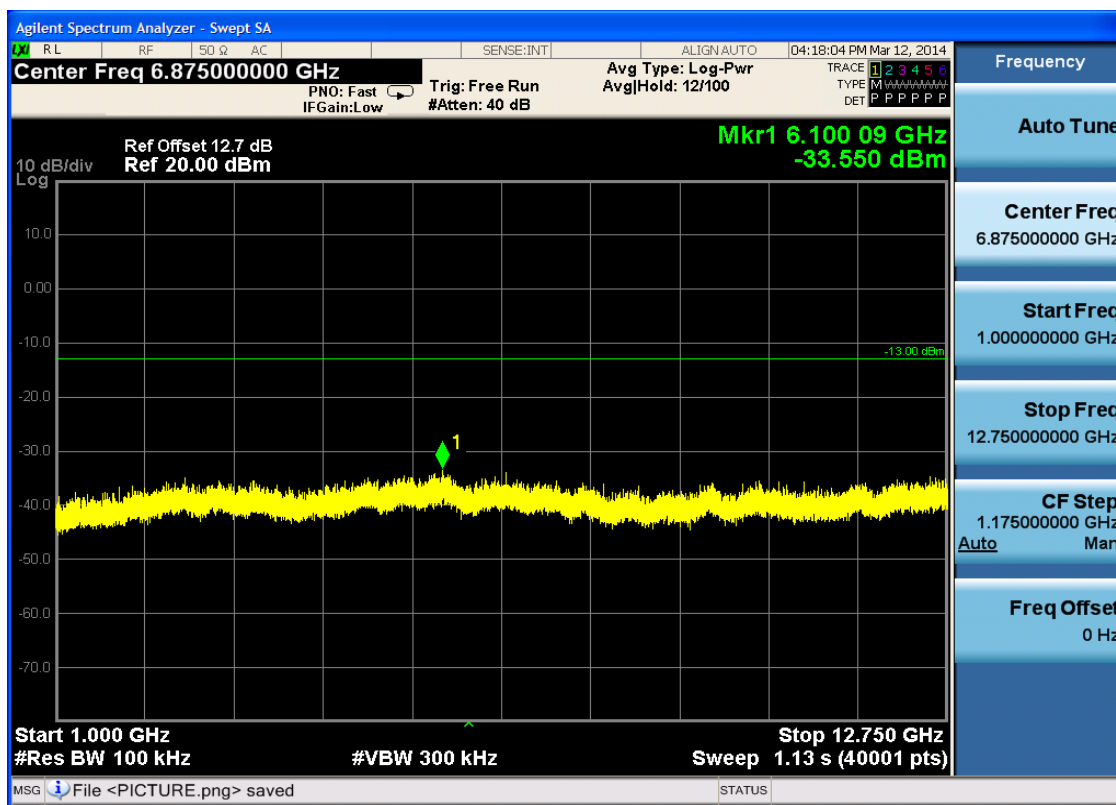
6.1.1.1 Test Mode = GSM/TM1

6.1.1.1.1 Test Channel = LCH

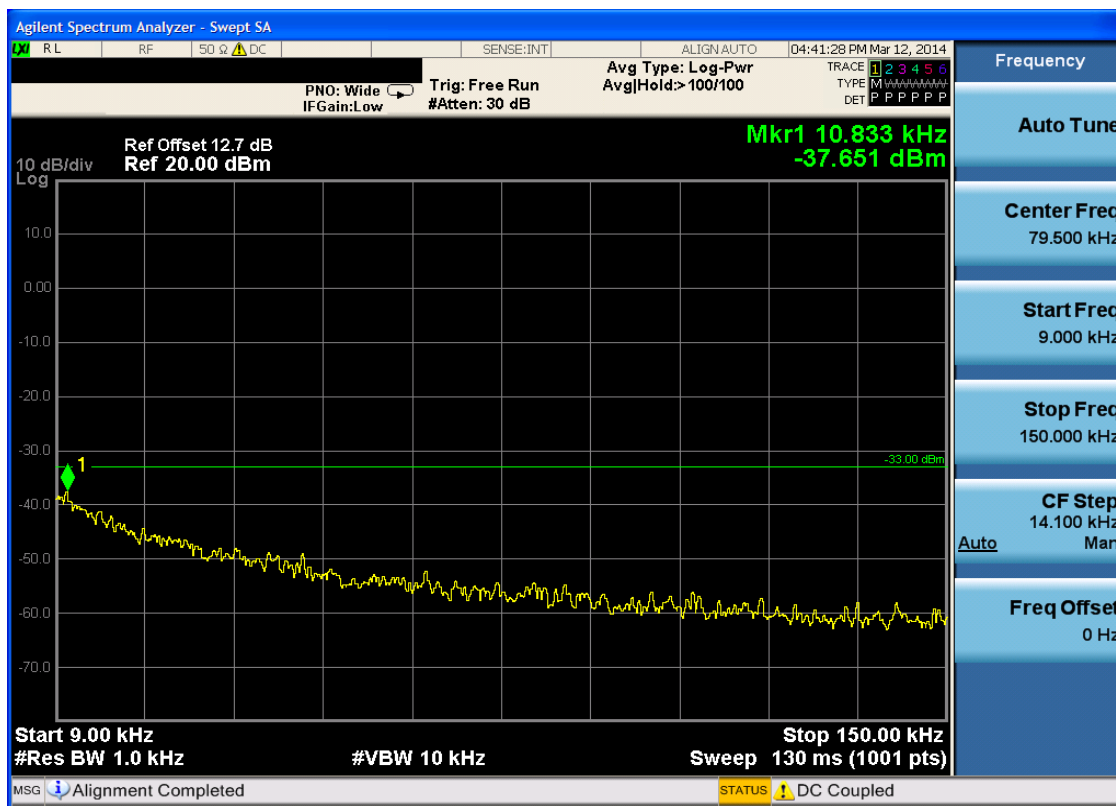


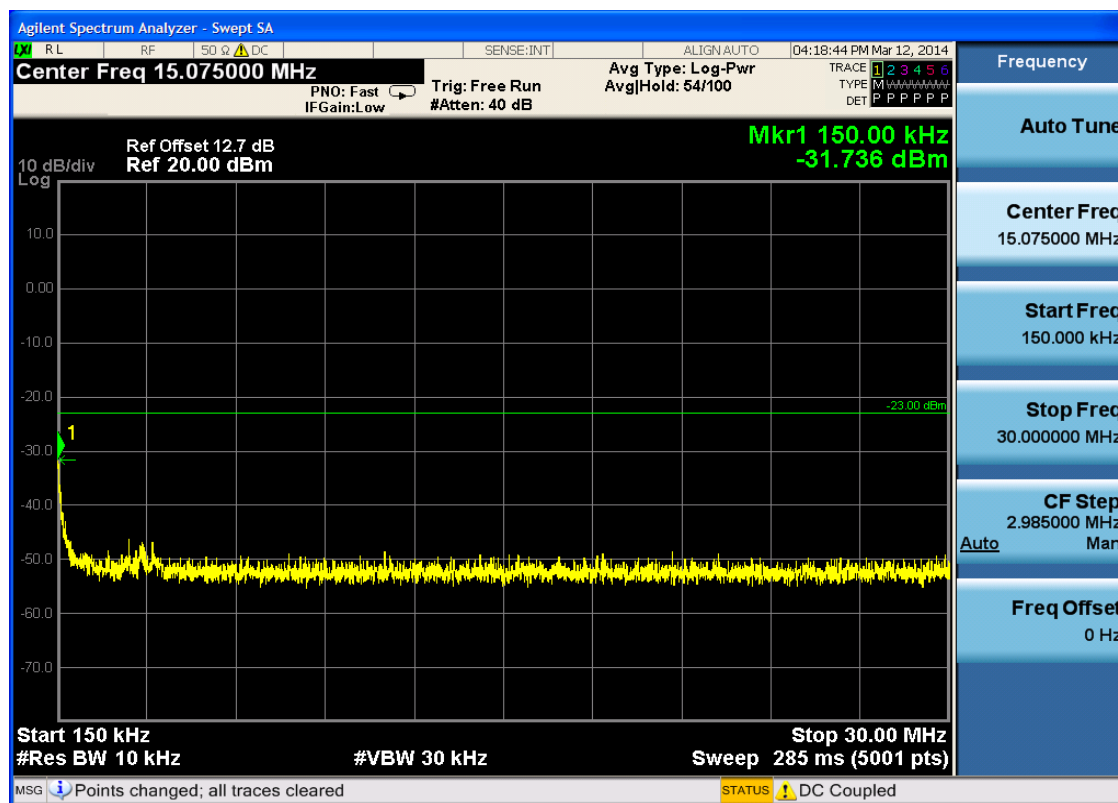


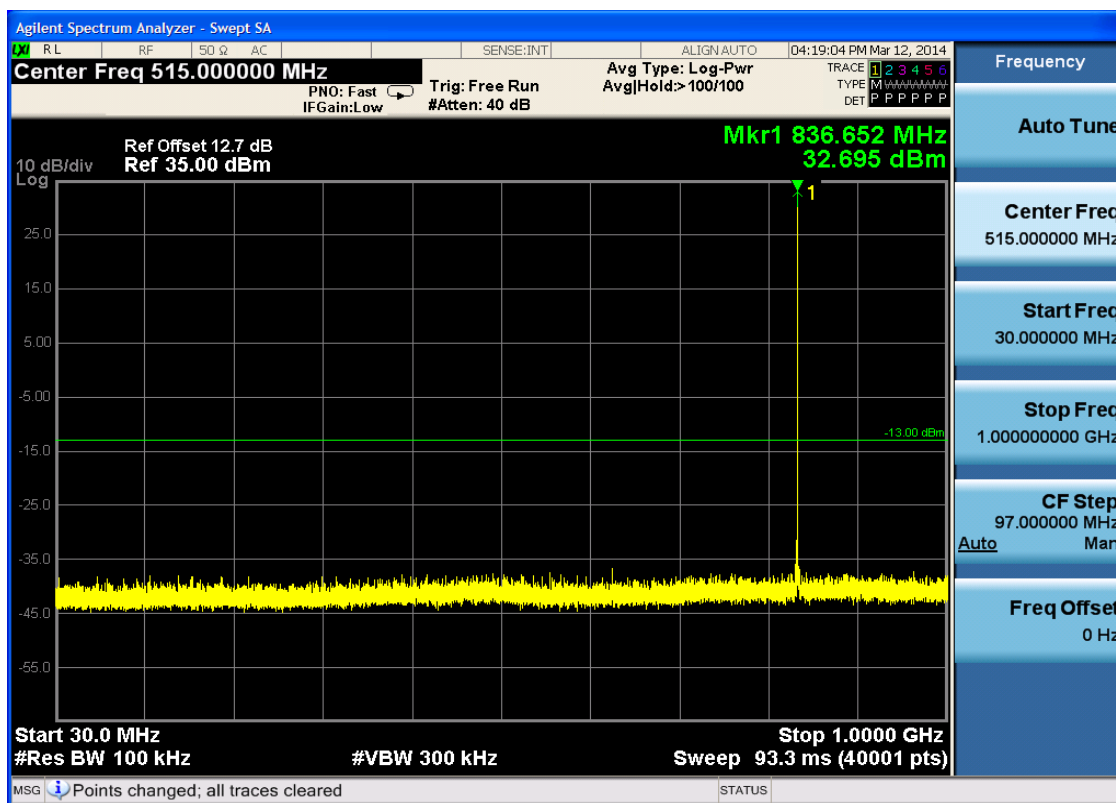


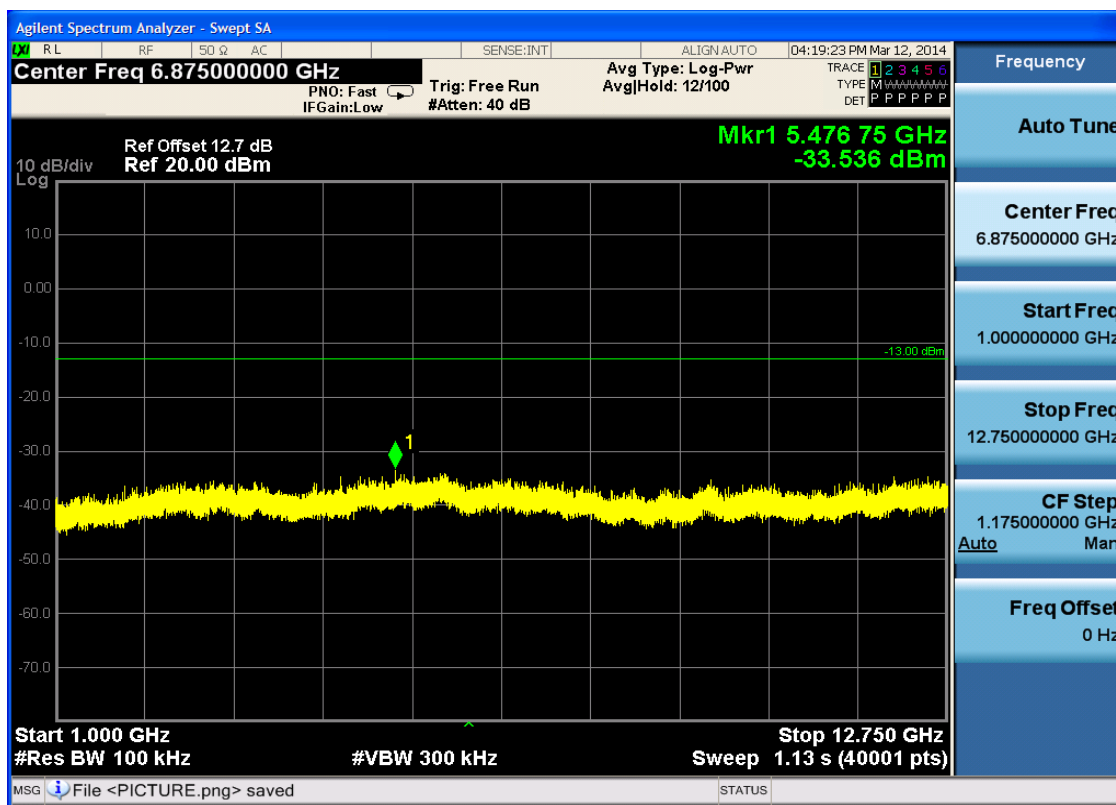


6.1.1.1.2 Test Channel = MCH



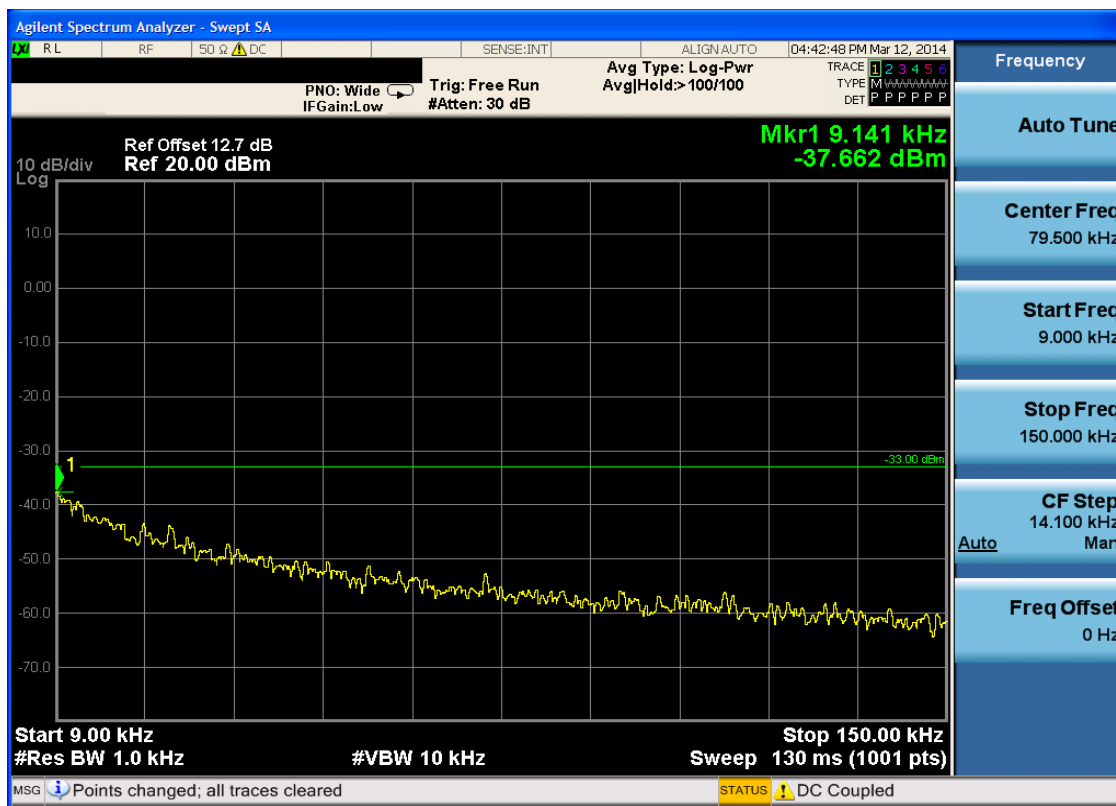


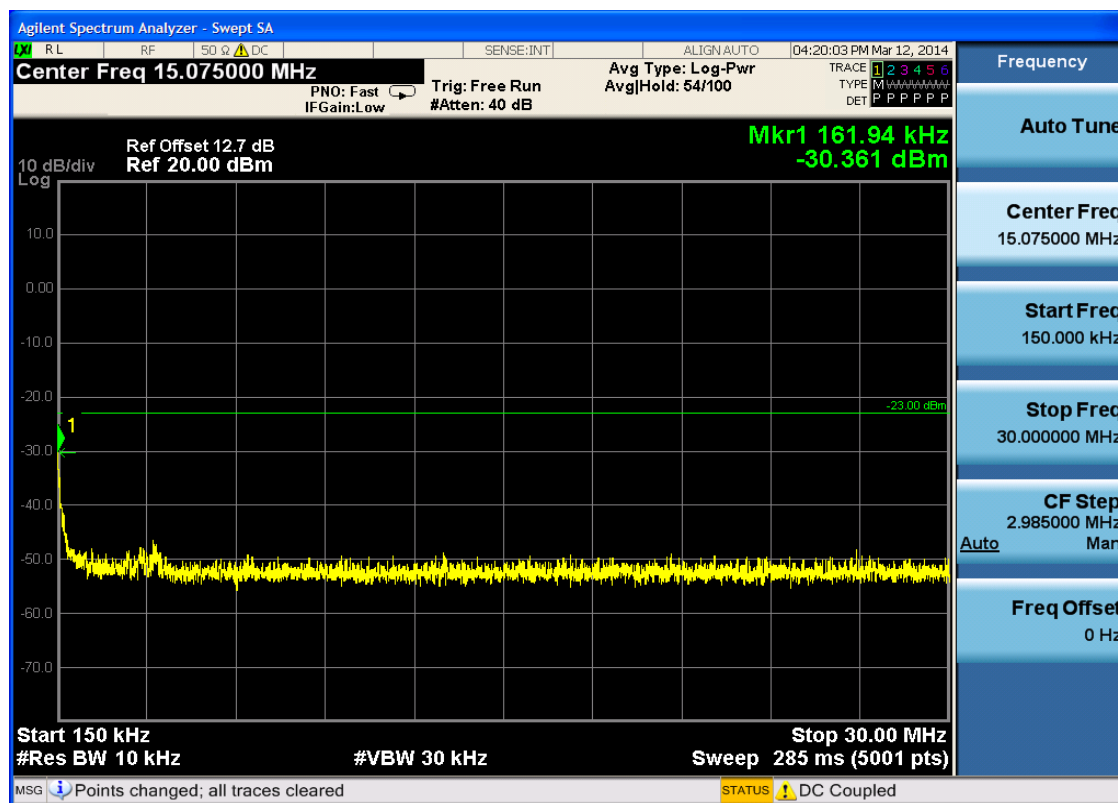


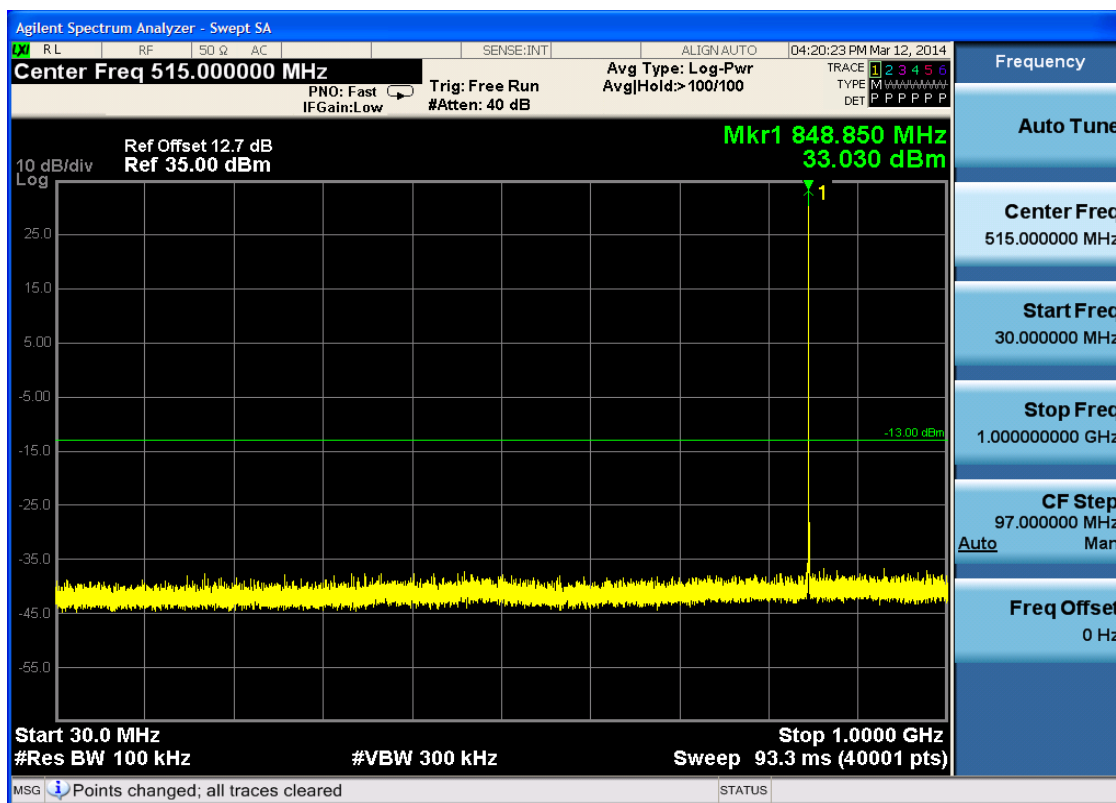


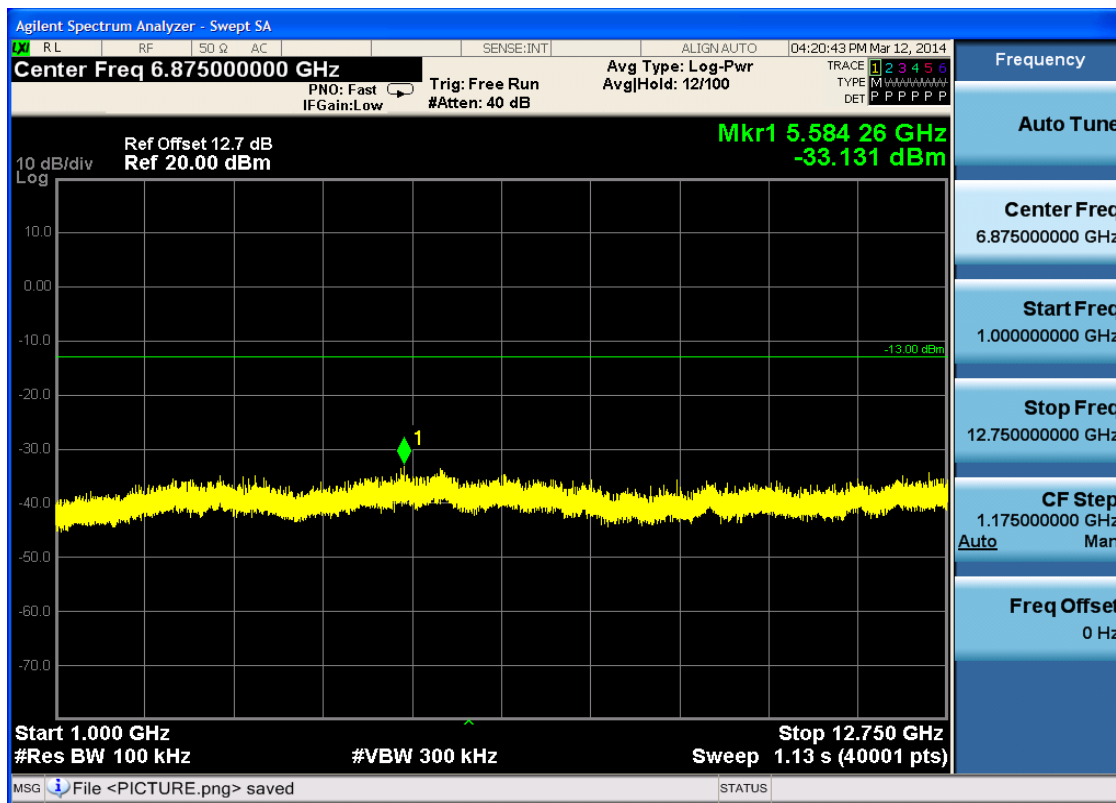


6.1.1.1.3 Test Channel = HCH



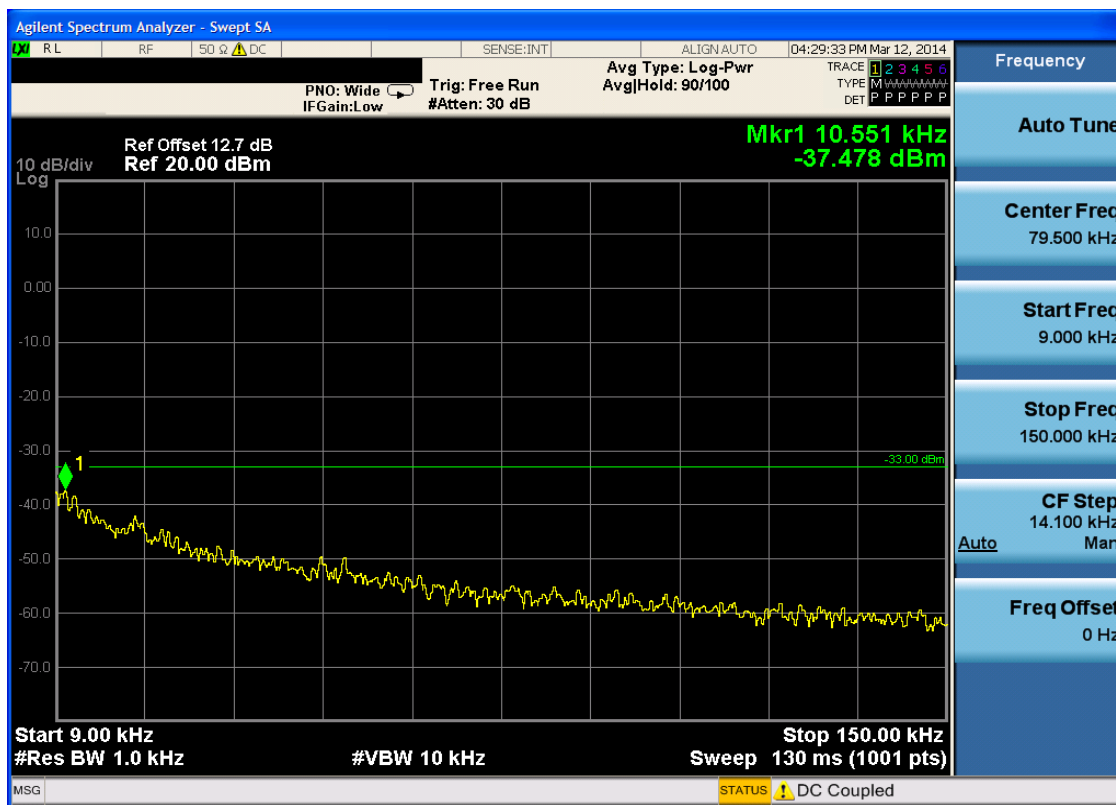


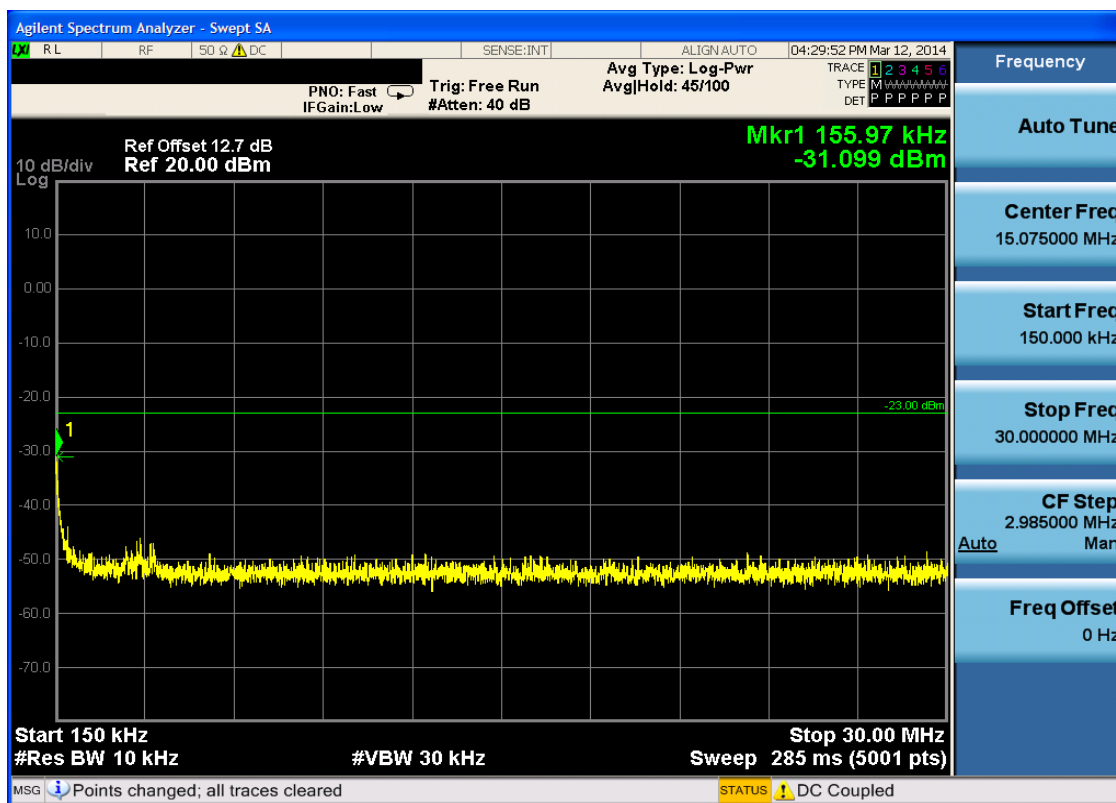


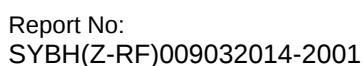


6.1.1.2 Test Mode = GSM/TM2

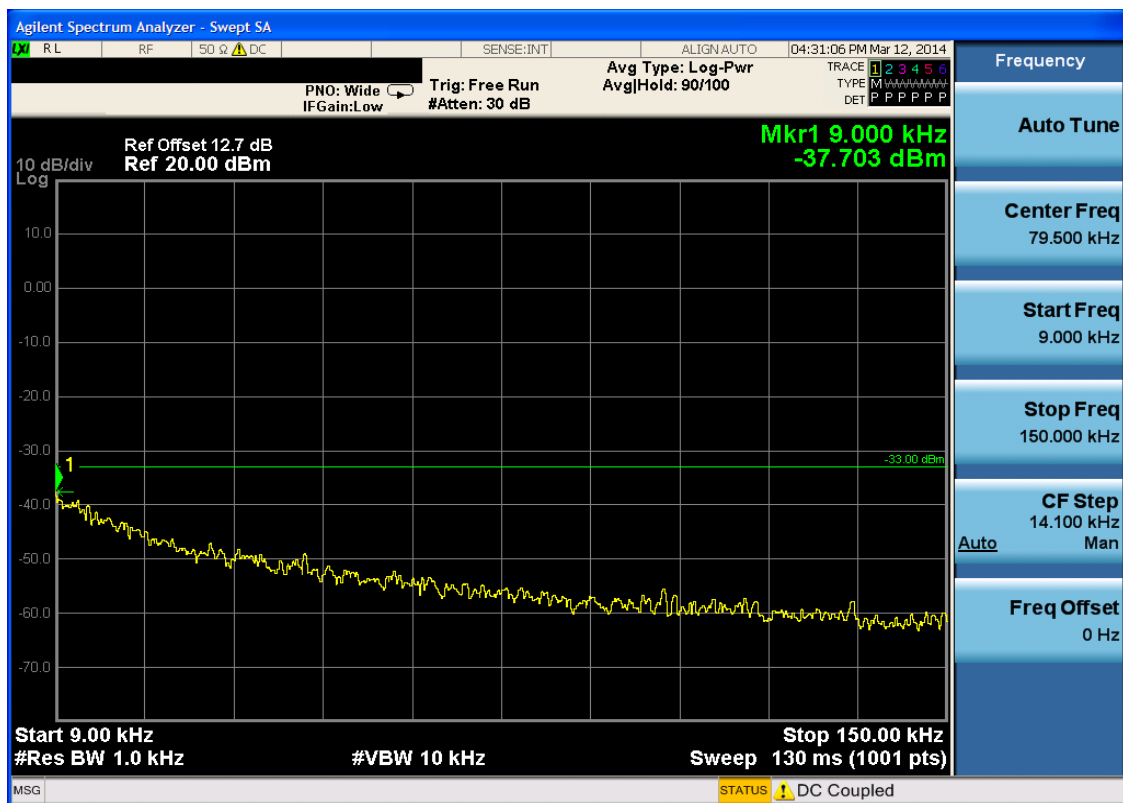
6.1.1.2.1 Test Channel = LCH

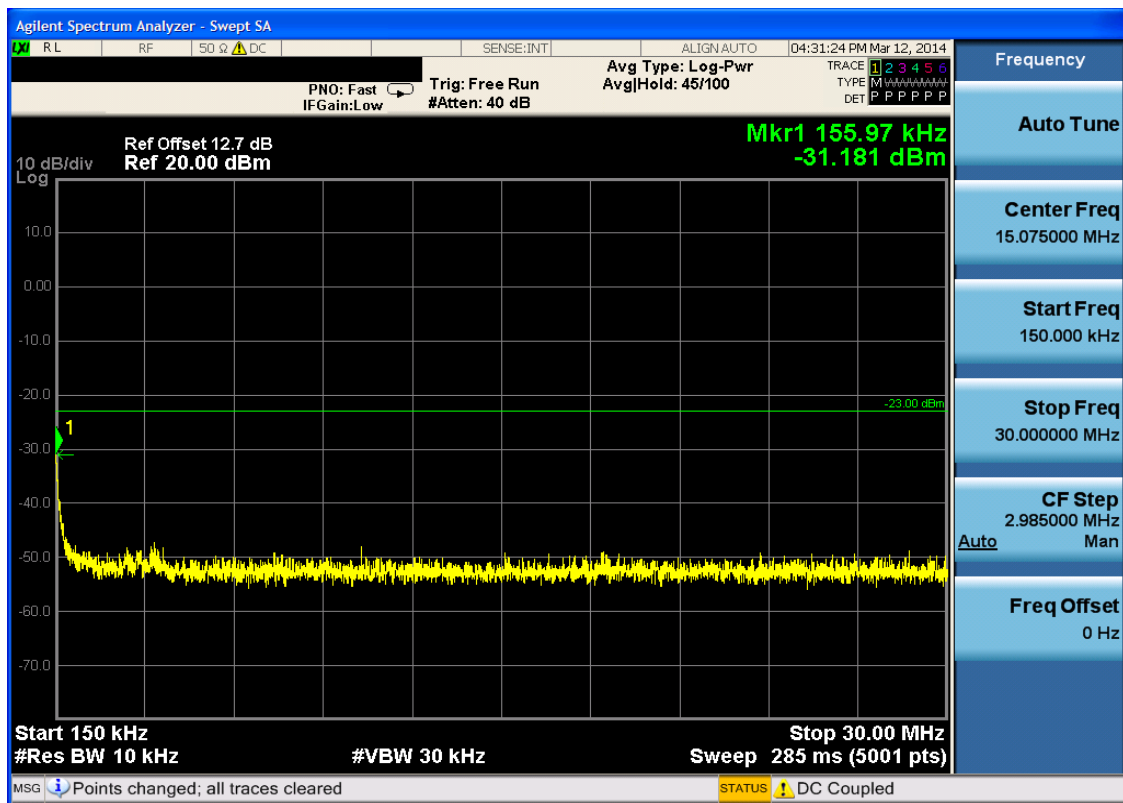


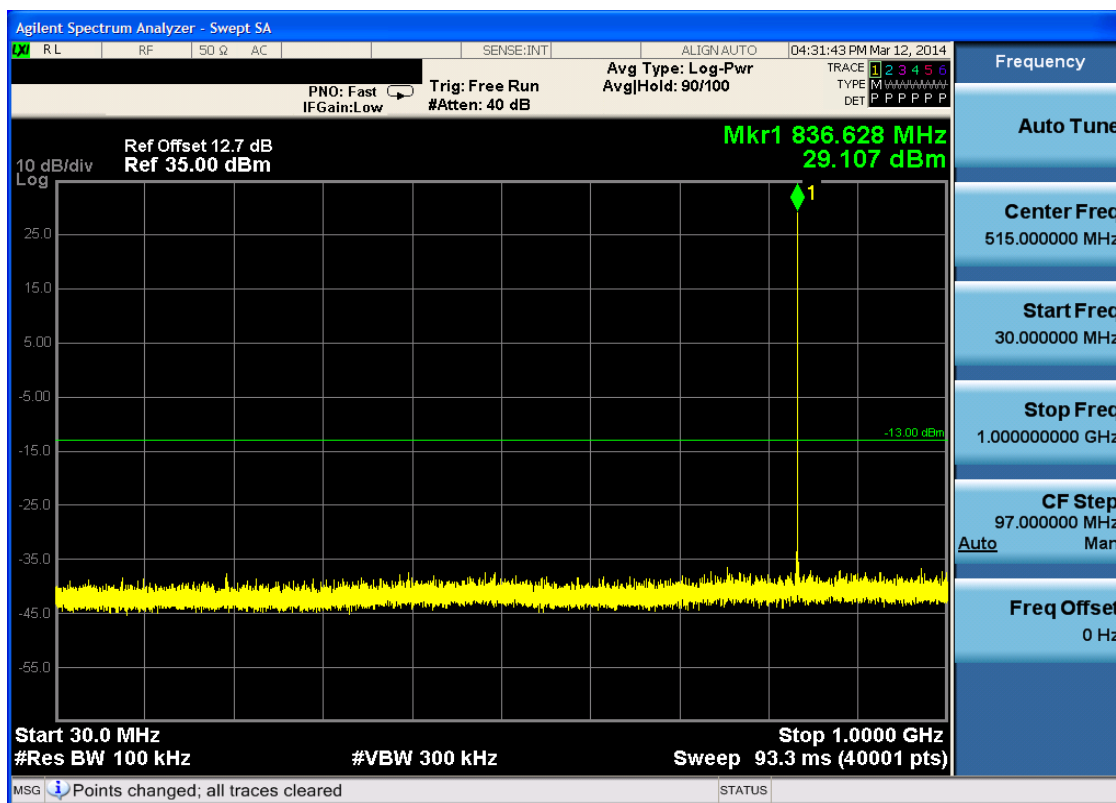


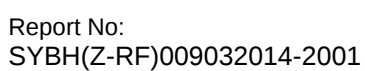


6.1.1.2.2 Test Channel = MCH



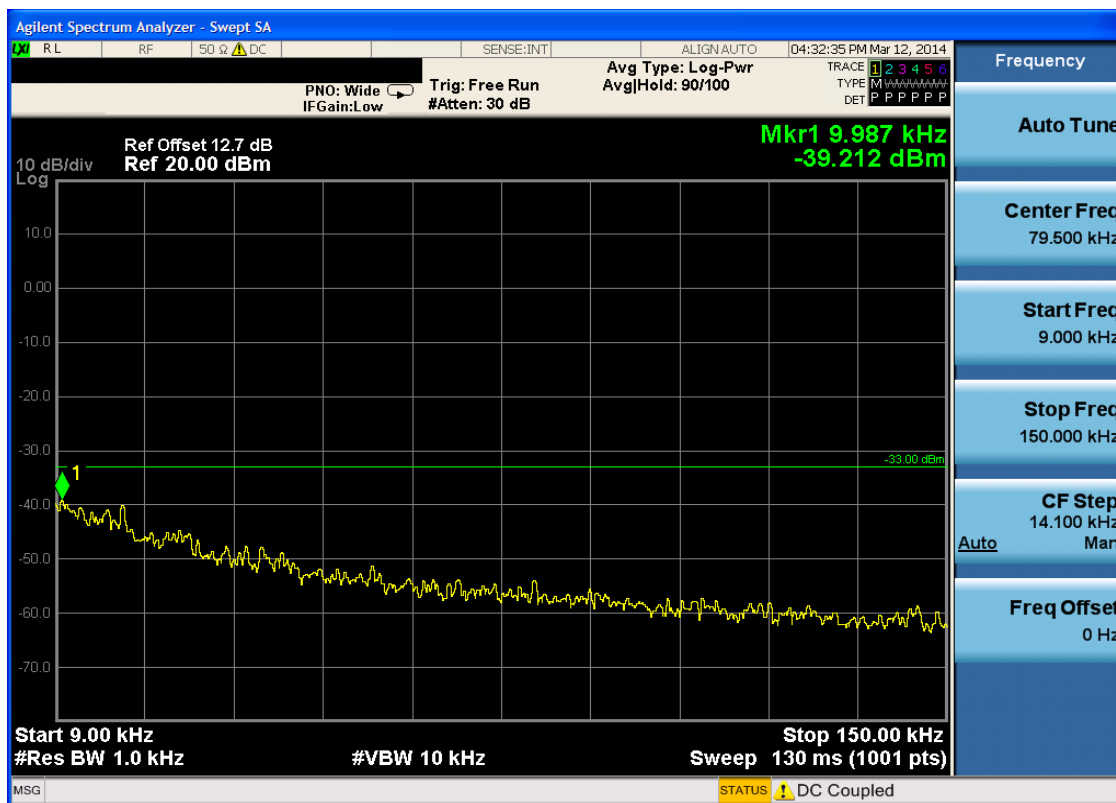


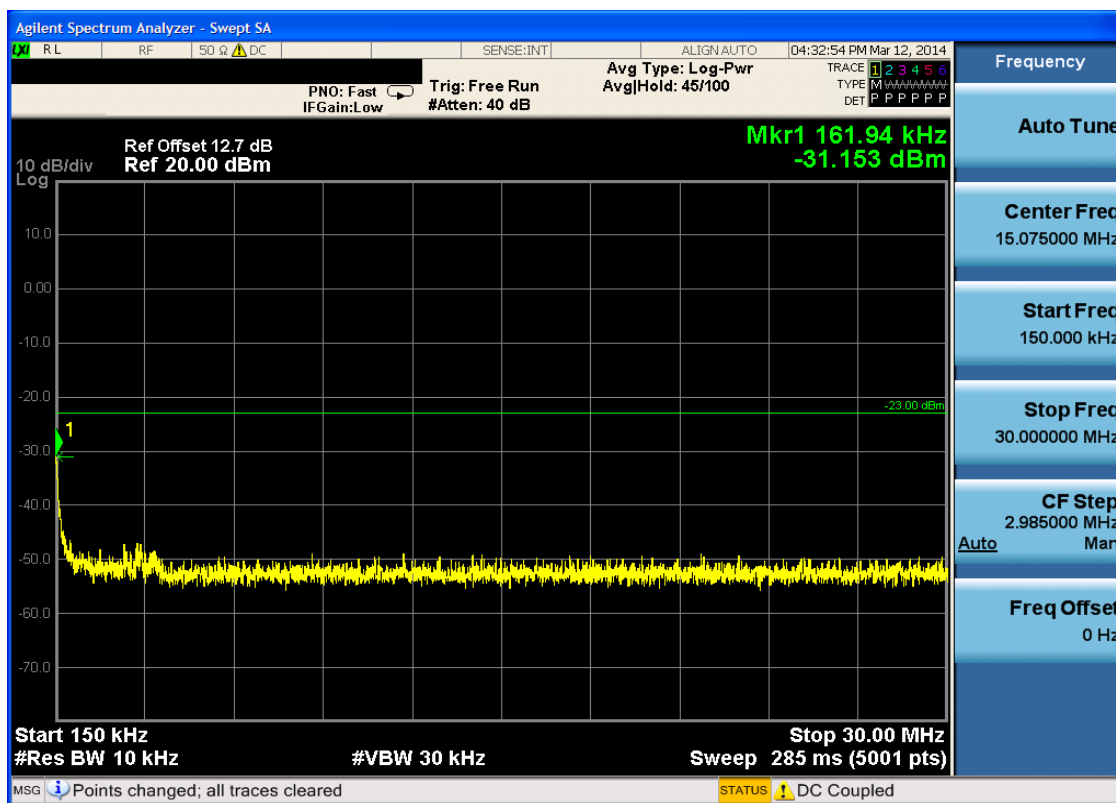


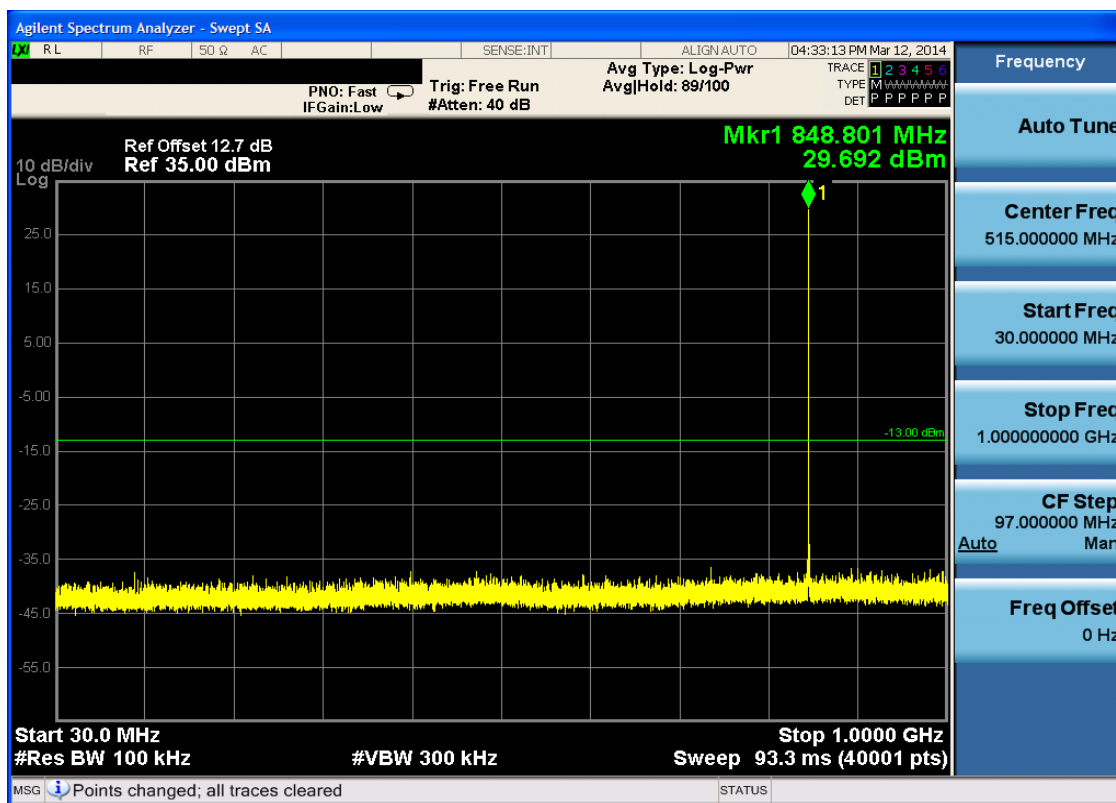


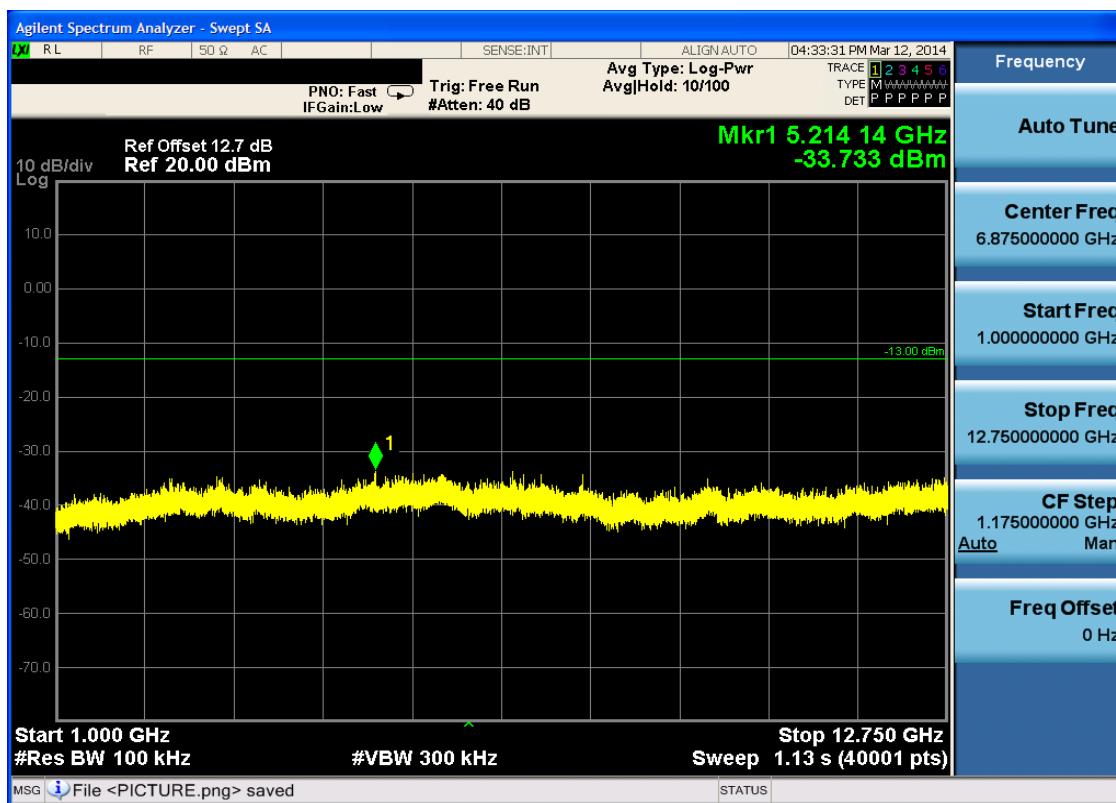


6.1.1.2.3 Test Channel = HCH







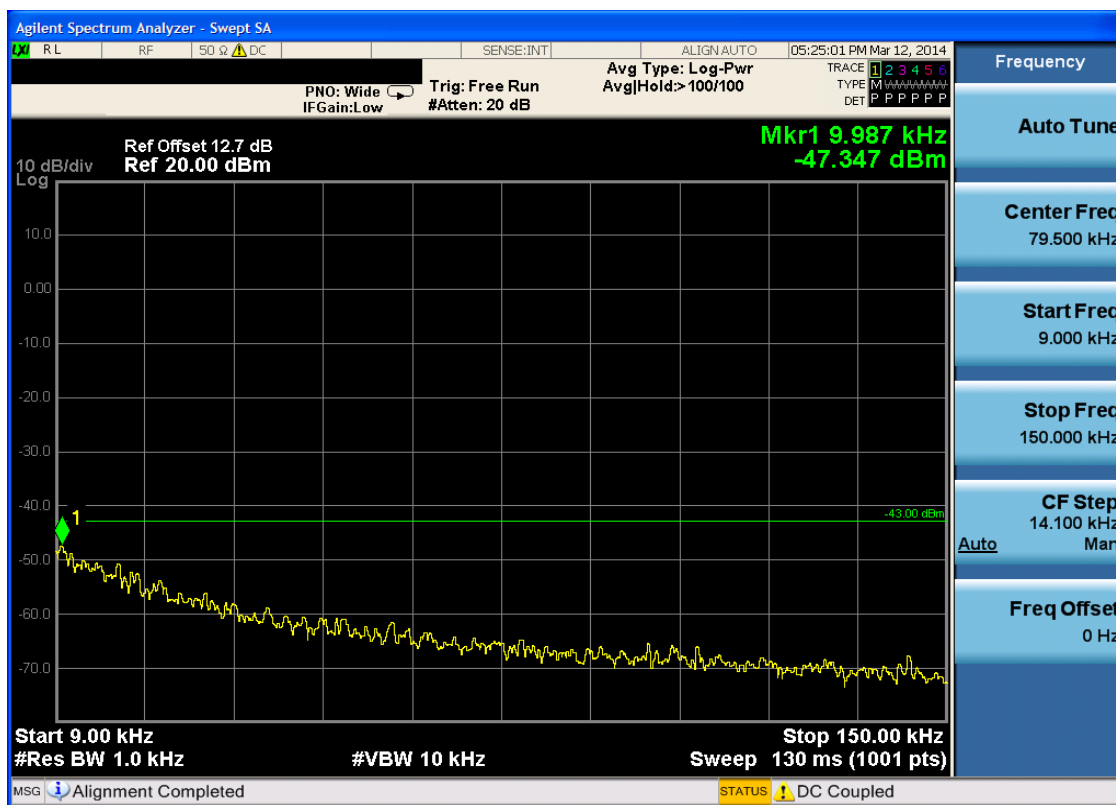


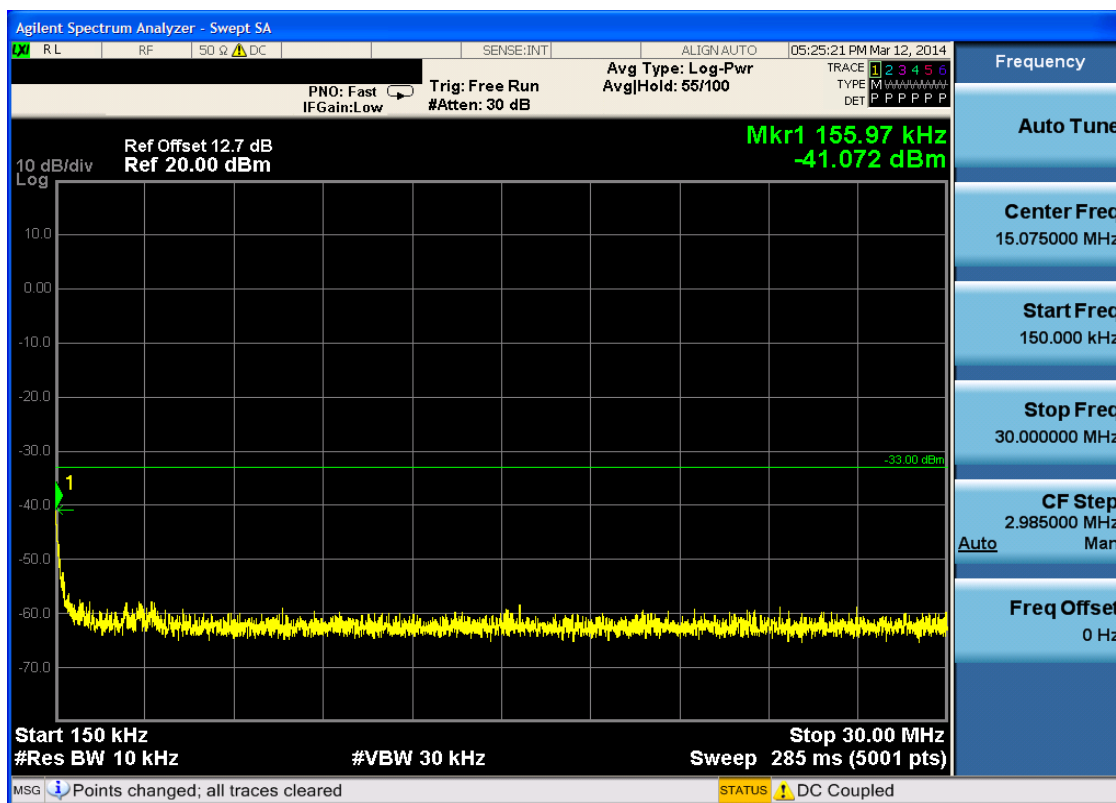


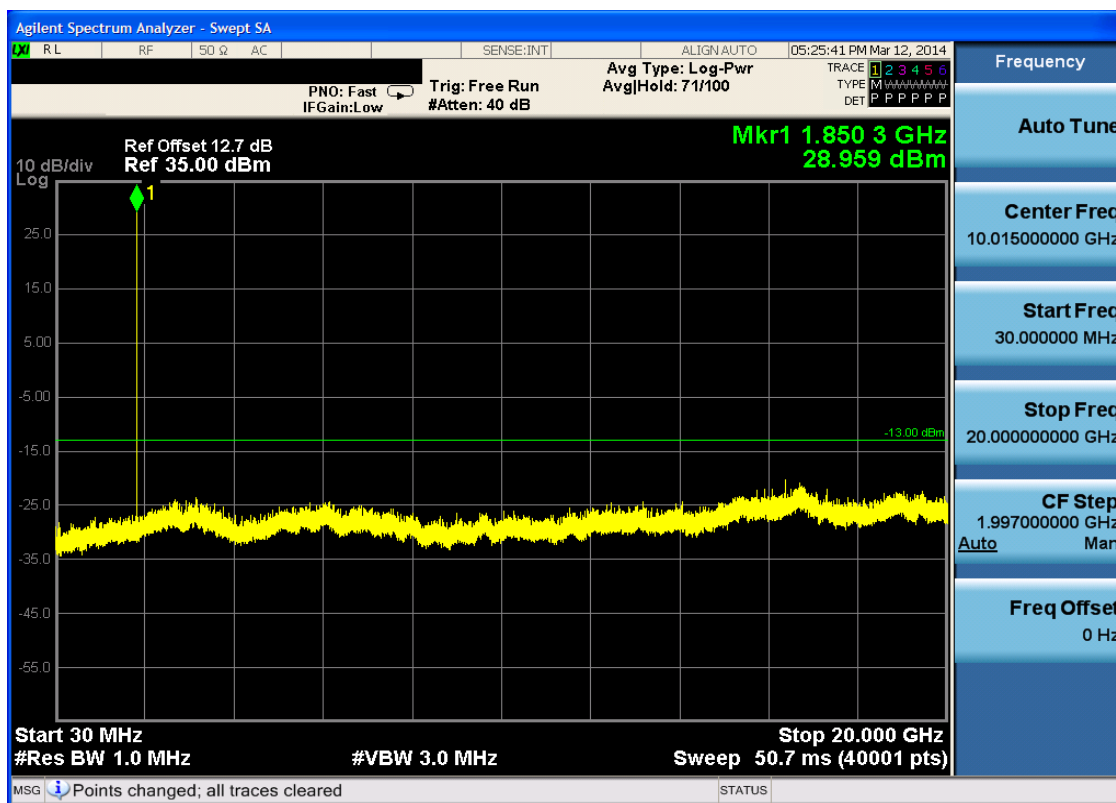
6.1.2 Test Band = GSM1900

6.1.2.1 Test Mode = GSM/TM1

6.1.2.1.1 Test Channel = LCH









Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω DC SENSE:INT ALIGN:AUTO 05:26:01 PM Mar 12, 2014

PNO: Wide Trig: Free Run Avg Type: Log-Pwr
IFGain:Low #Atten: 20 dB AvgHold>100/100

TRACE 1 2 3 4 5 6
TYPE M P P P P P
DET P P P P P P

Ref Offset 12.7 dB
Ref 20.00 dBm

Mkr1 10.833 kHz
-48.137 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

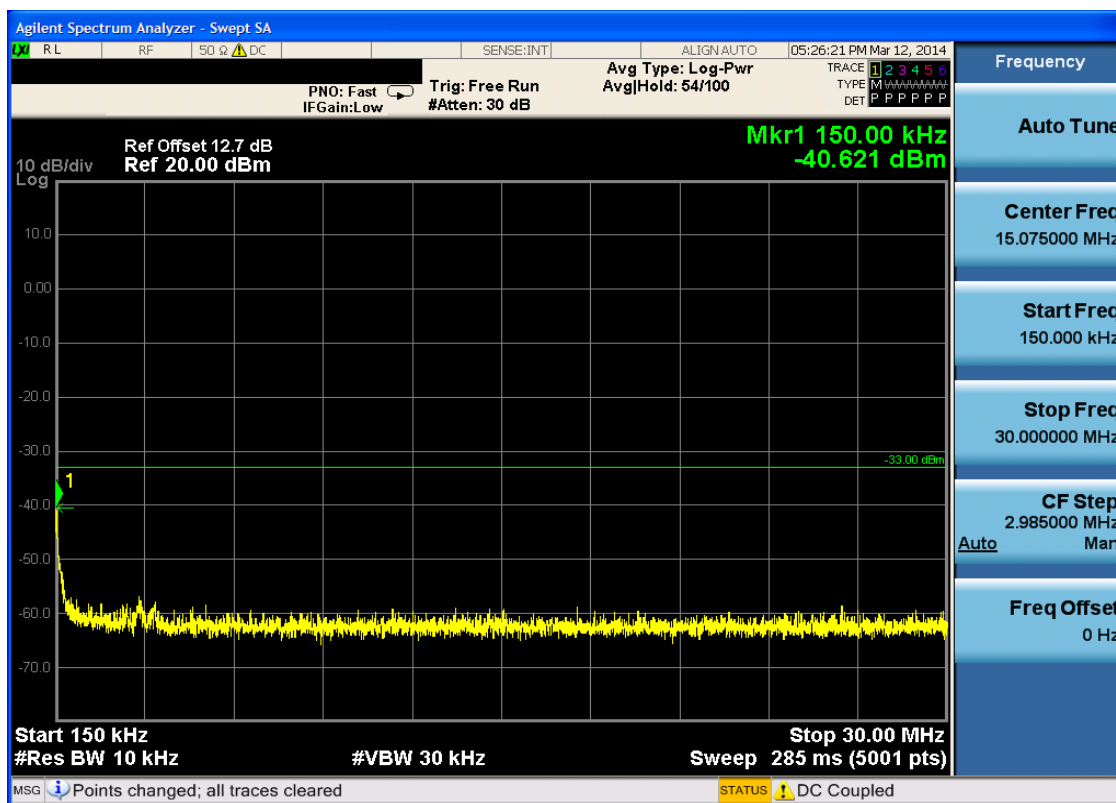
Start Freq 9.000 kHz

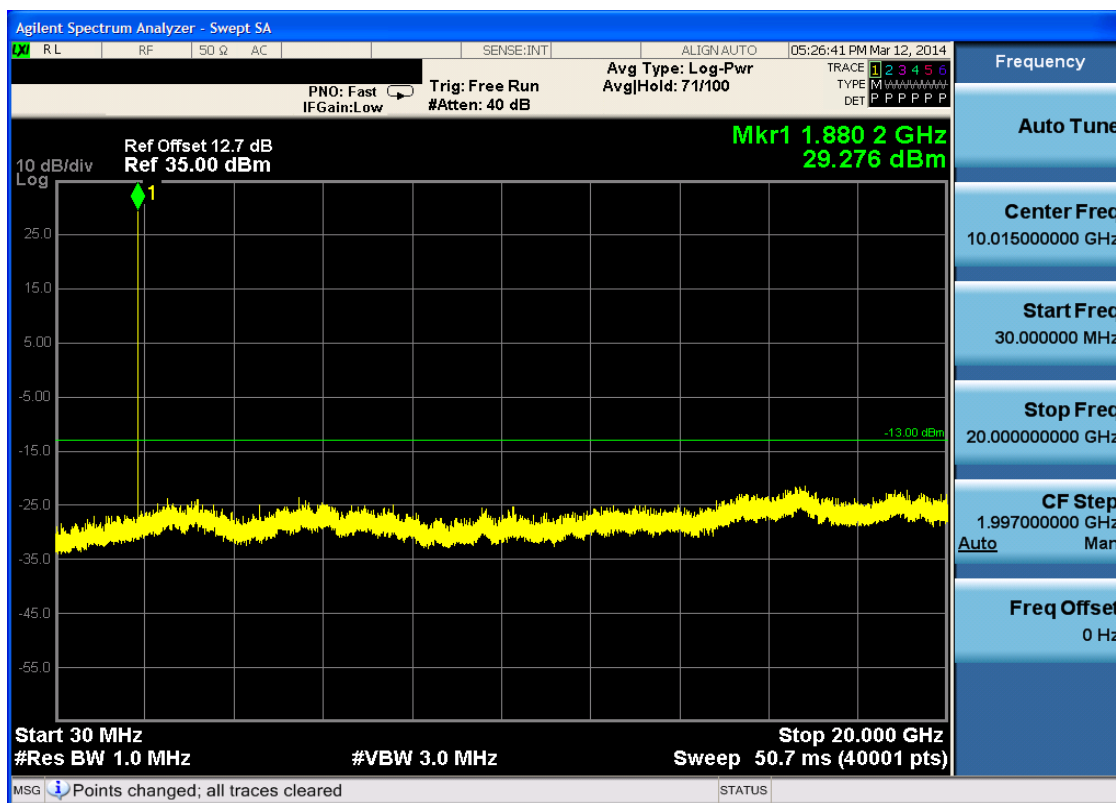
Stop Freq 150.000 kHz

CF Step 14.100 kHz

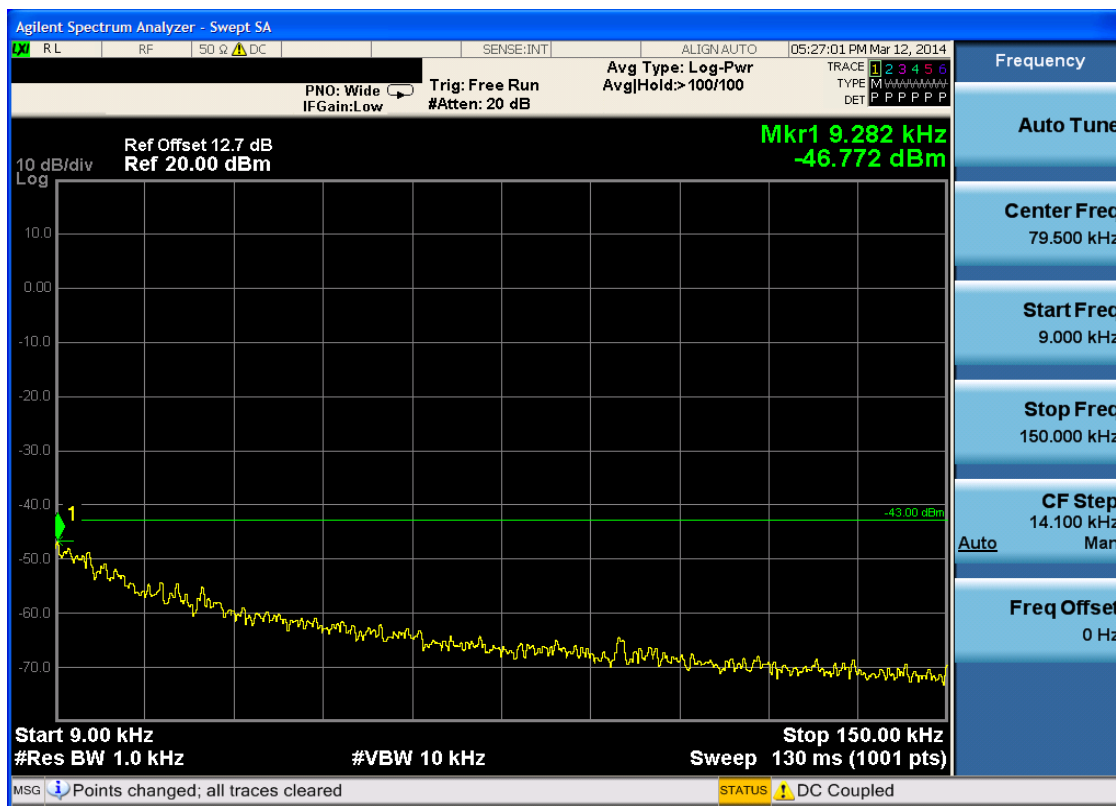
Auto Mar

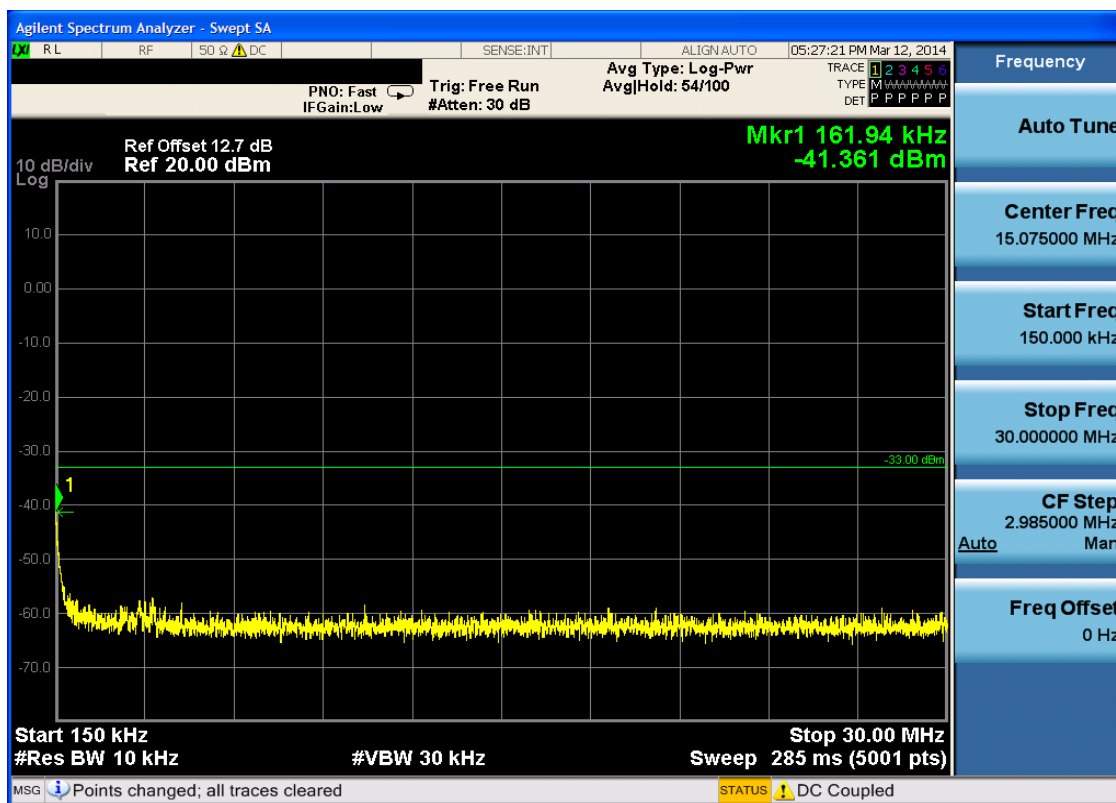
Freq Offset 0 Hz

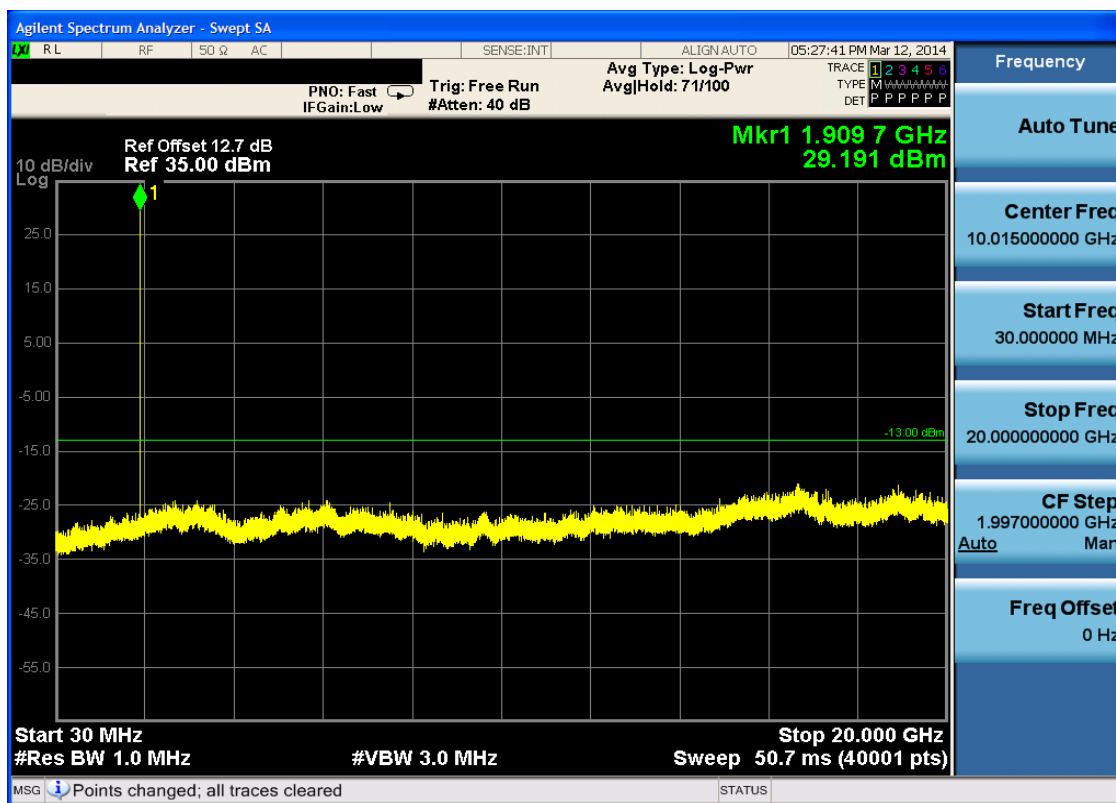




6.1.2.1.3 Test Channel = HCH

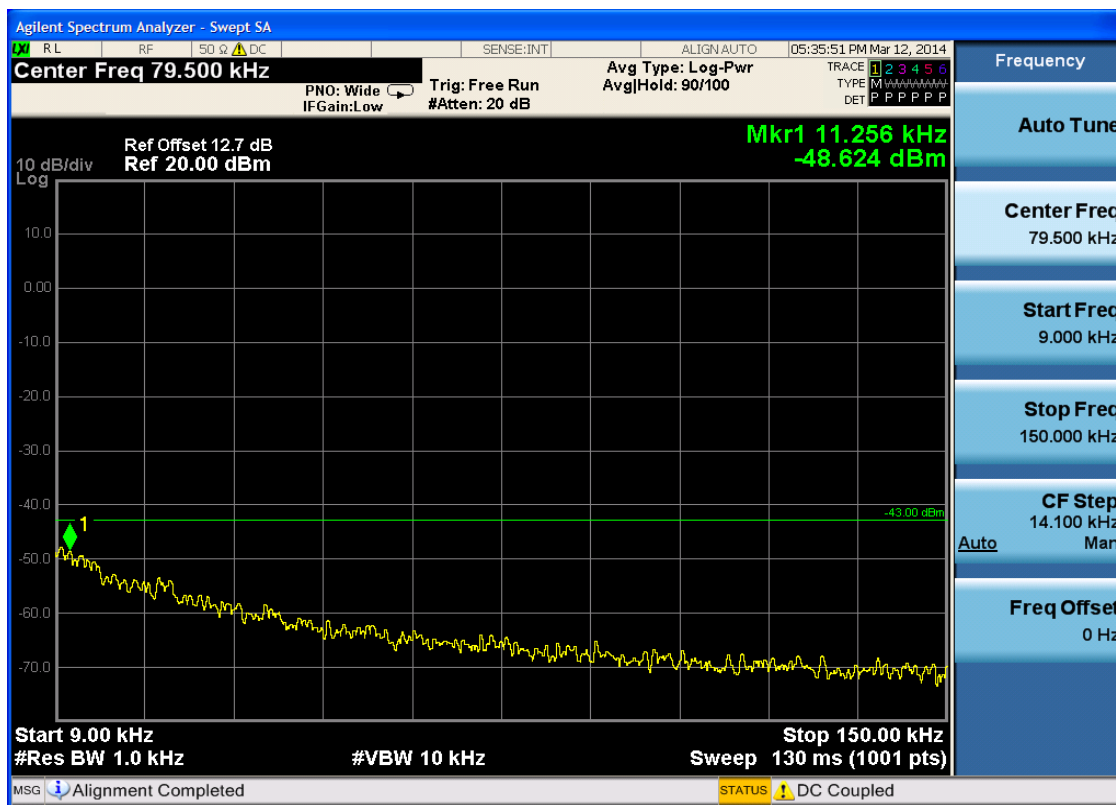


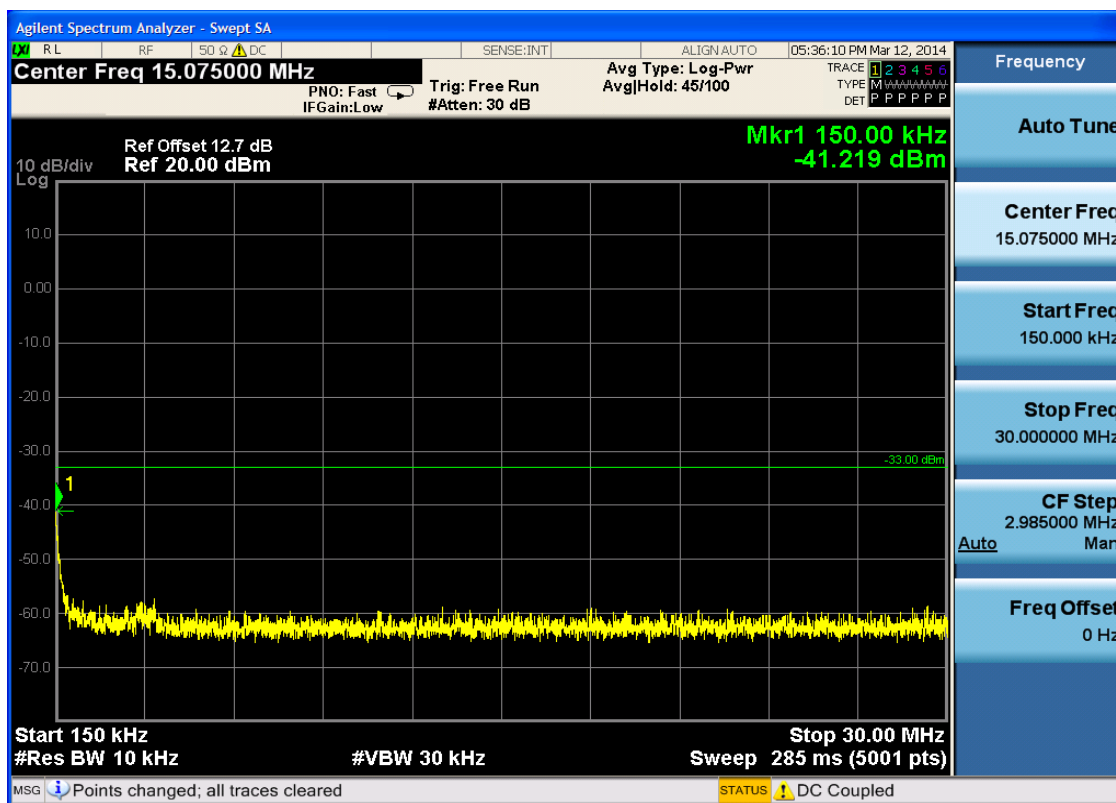


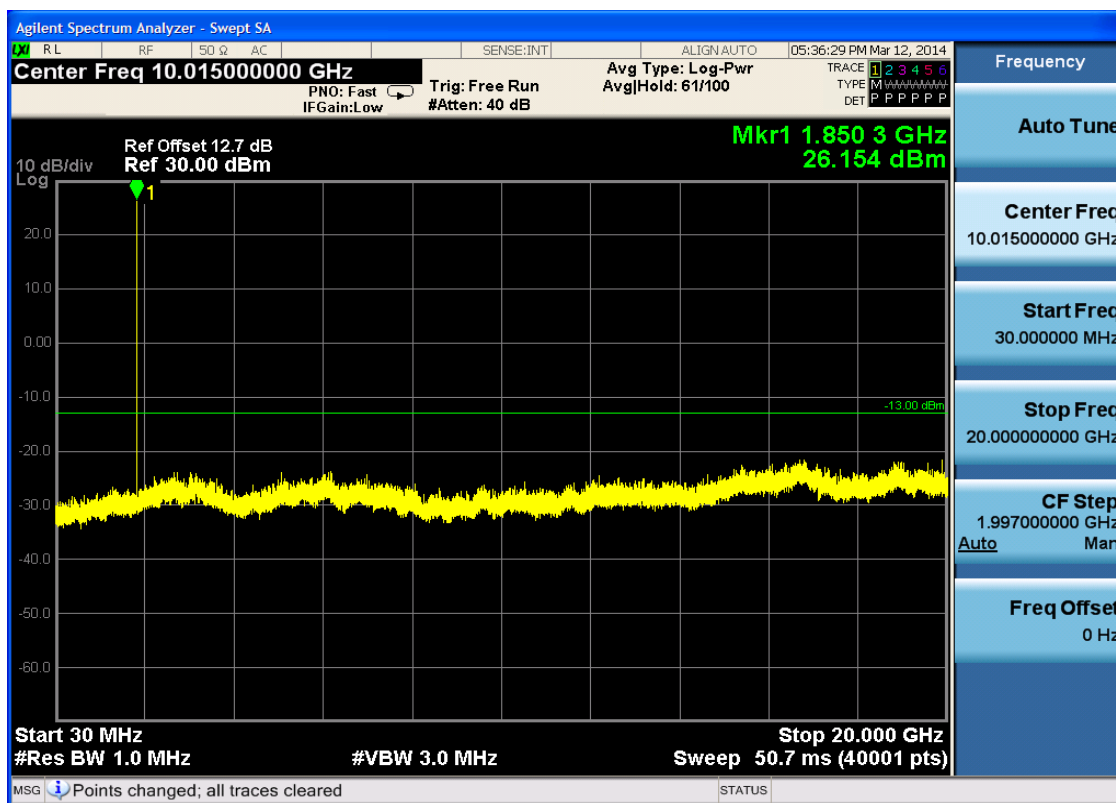


6.1.2.2 Test Mode = GSM/TM2

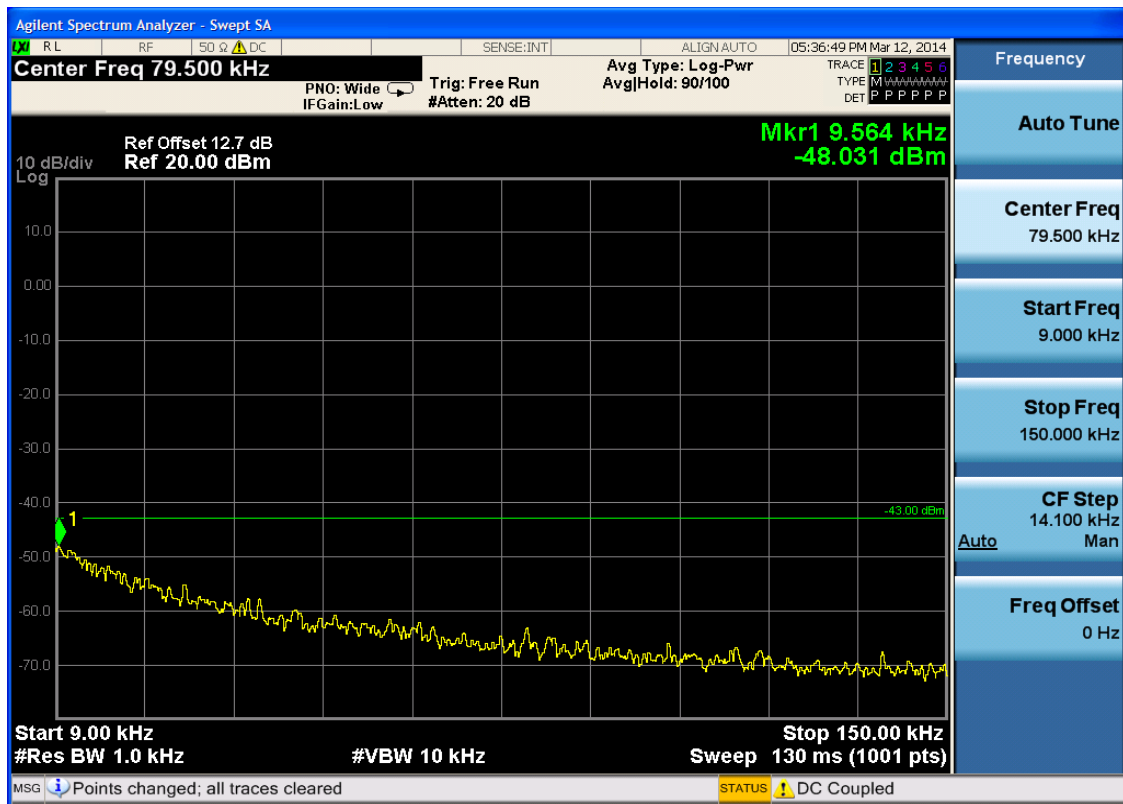
6.1.2.2.1 Test Channel = LCH

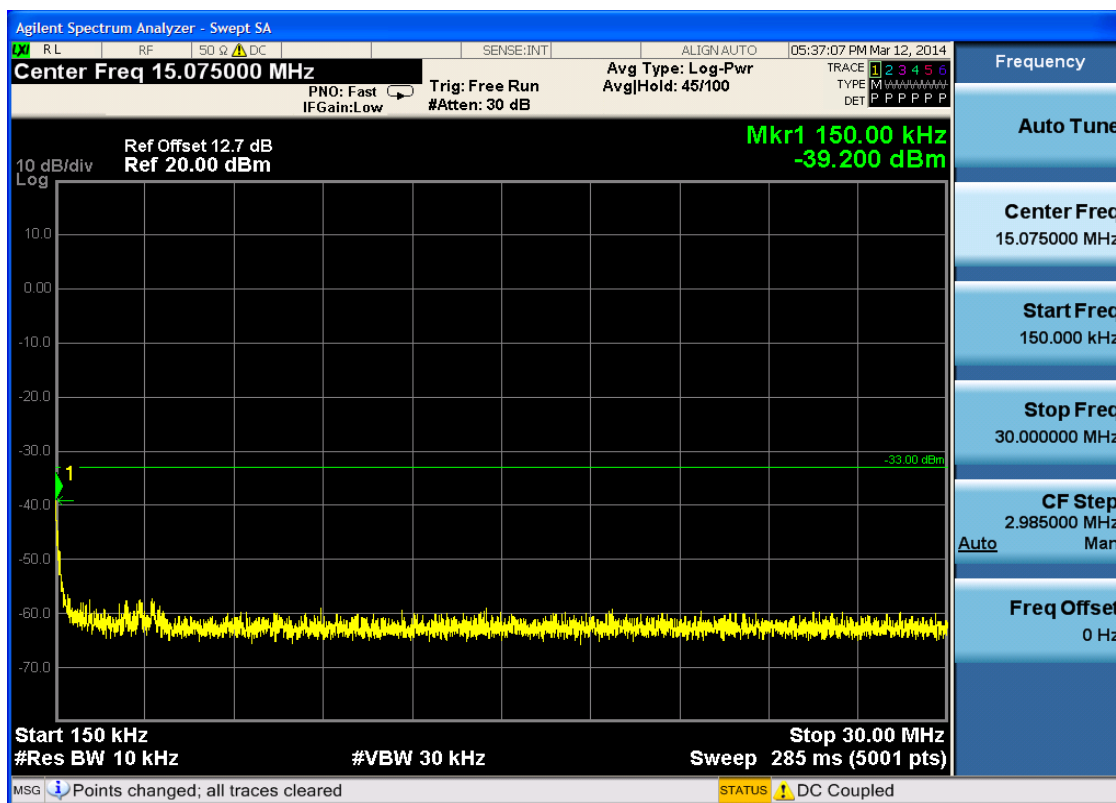


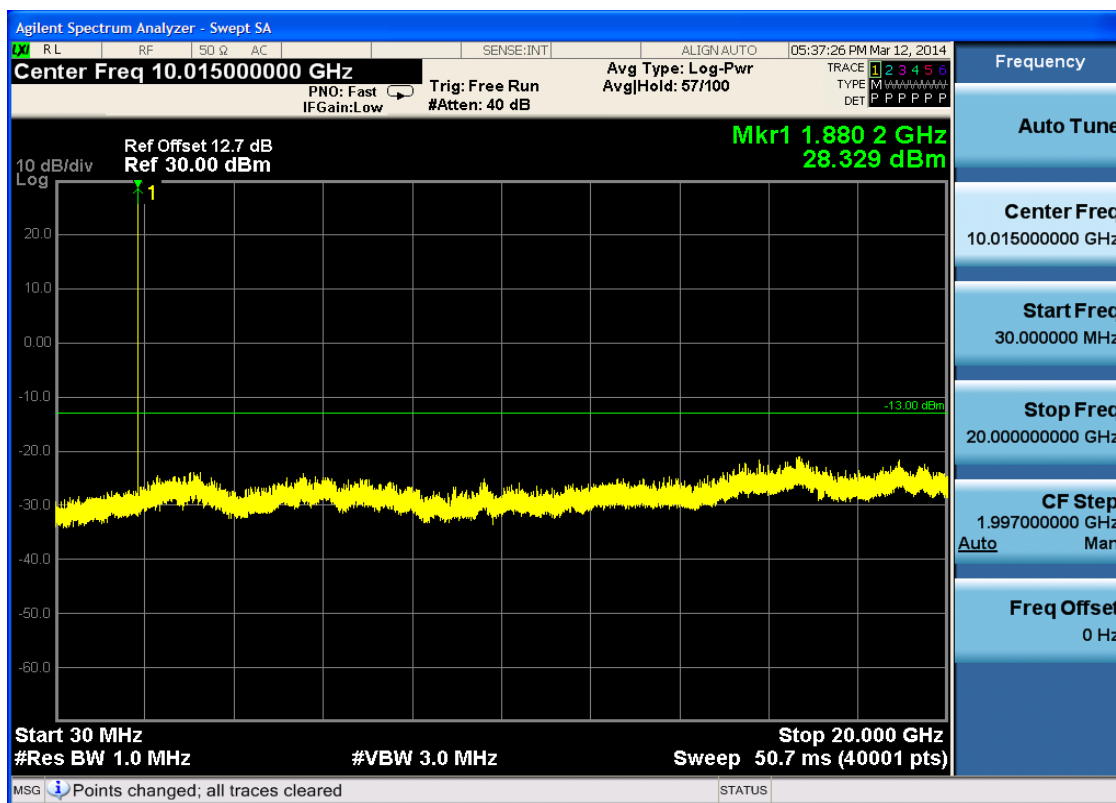




6.1.2.2.2 Test Channel = MCH









Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω DC SENSE:INT ALIGN:AUTO 05:37:46 PM Mar 12, 2014

Center Freq 79.500 kHz PNO: Wide Trg: Free Run Avg Type: Log-Pwr AvgHold: 77/100

IFGain:Low #Atten: 20 dB TRACE 1 2 3 4 5 6 TYPE M P P P P P P DET P P P P P P P

Ref Offset 12.7 dB Mkr1 9.000 kHz
Ref 20.00 dBm -47.296 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 Alignment Completed STATUS DC Coupled

Frequency

Auto Tune

Center Freq
79.500 kHz

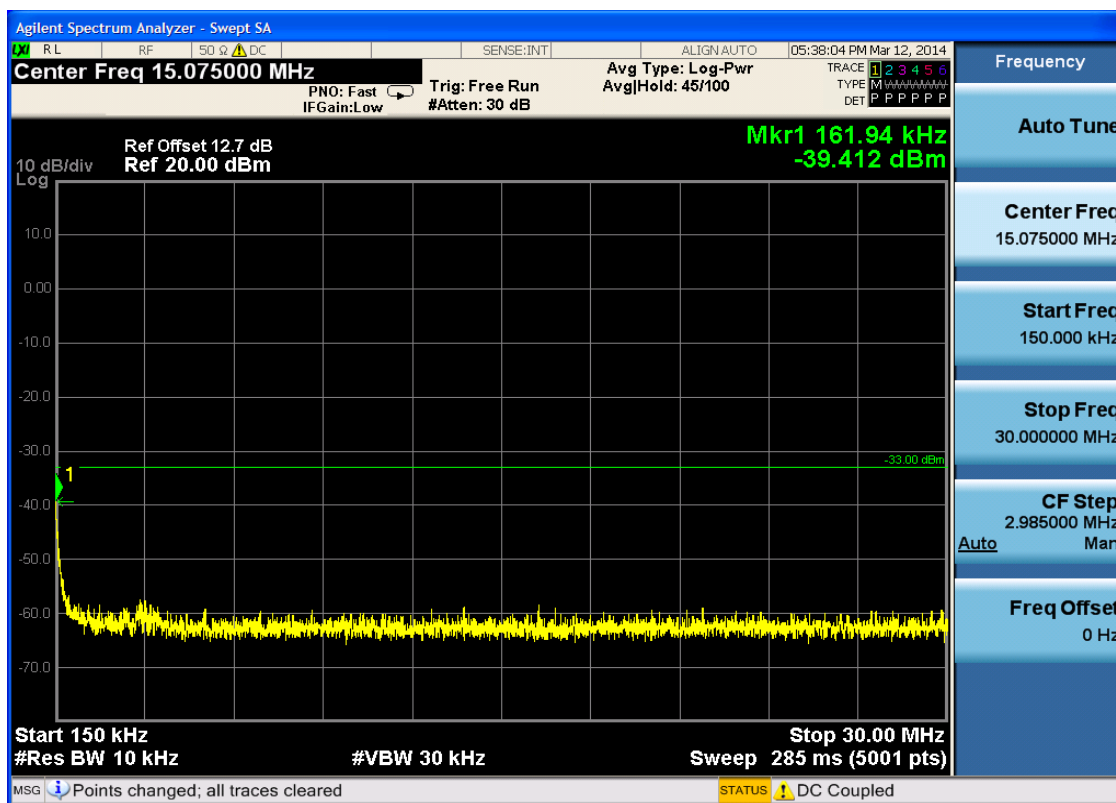
Start Freq
9.000 kHz

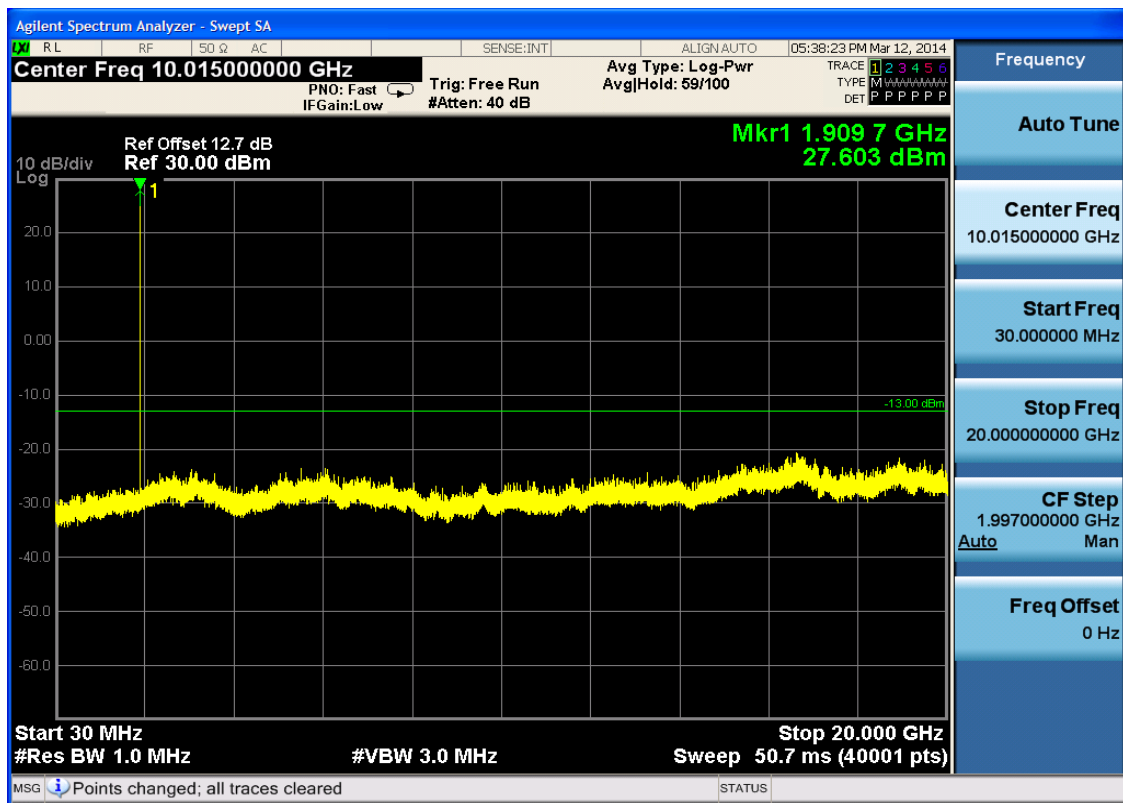
Stop Freq
150.000 kHz

CF Step
14.100 kHz

Auto

Freq Offset
0 Hz



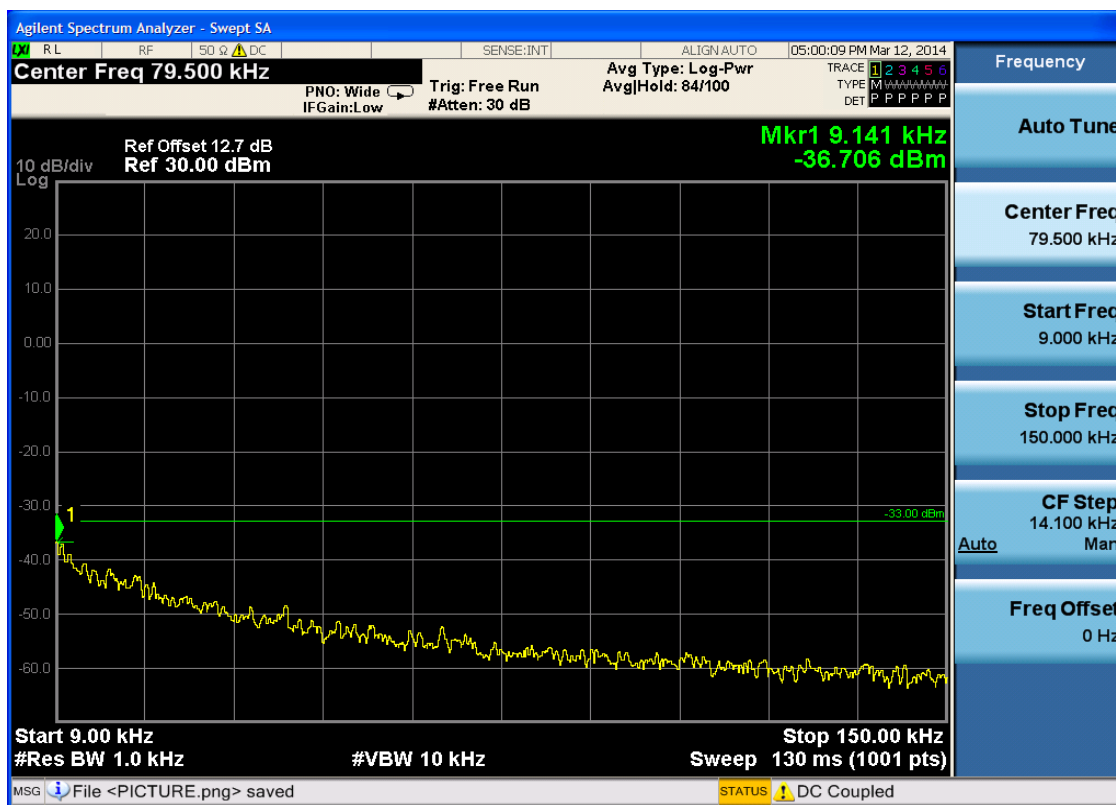


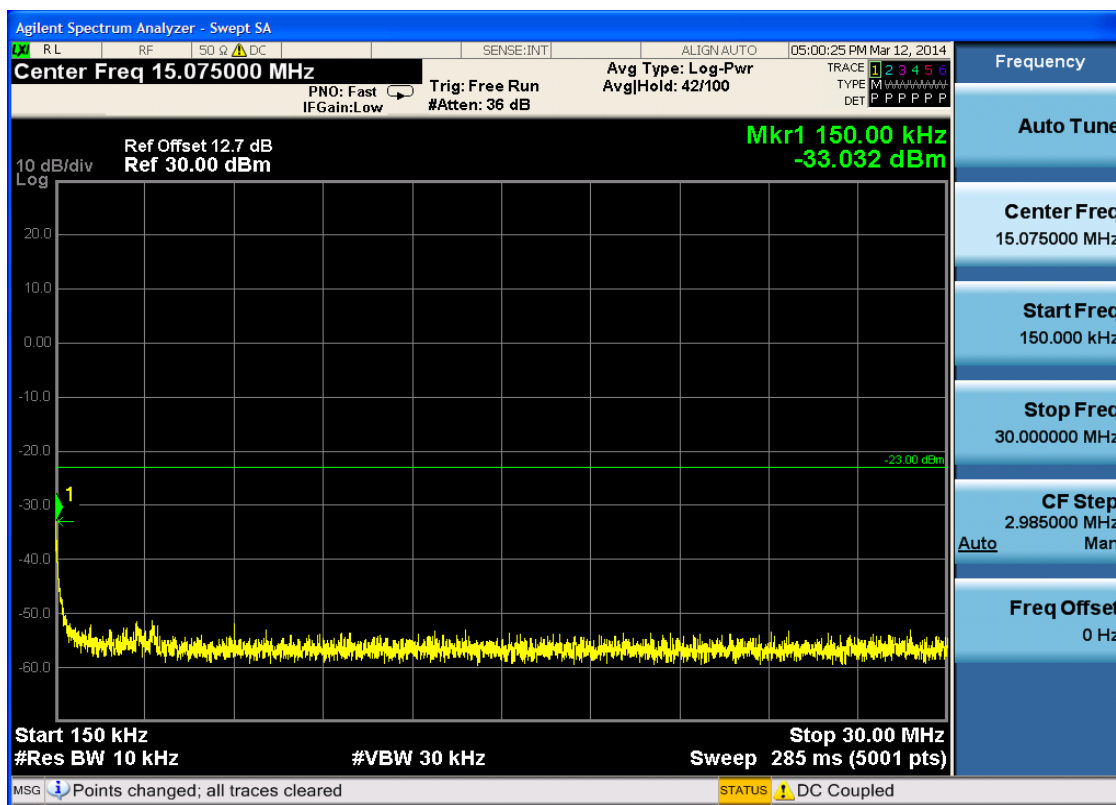
6.2 For UMTS

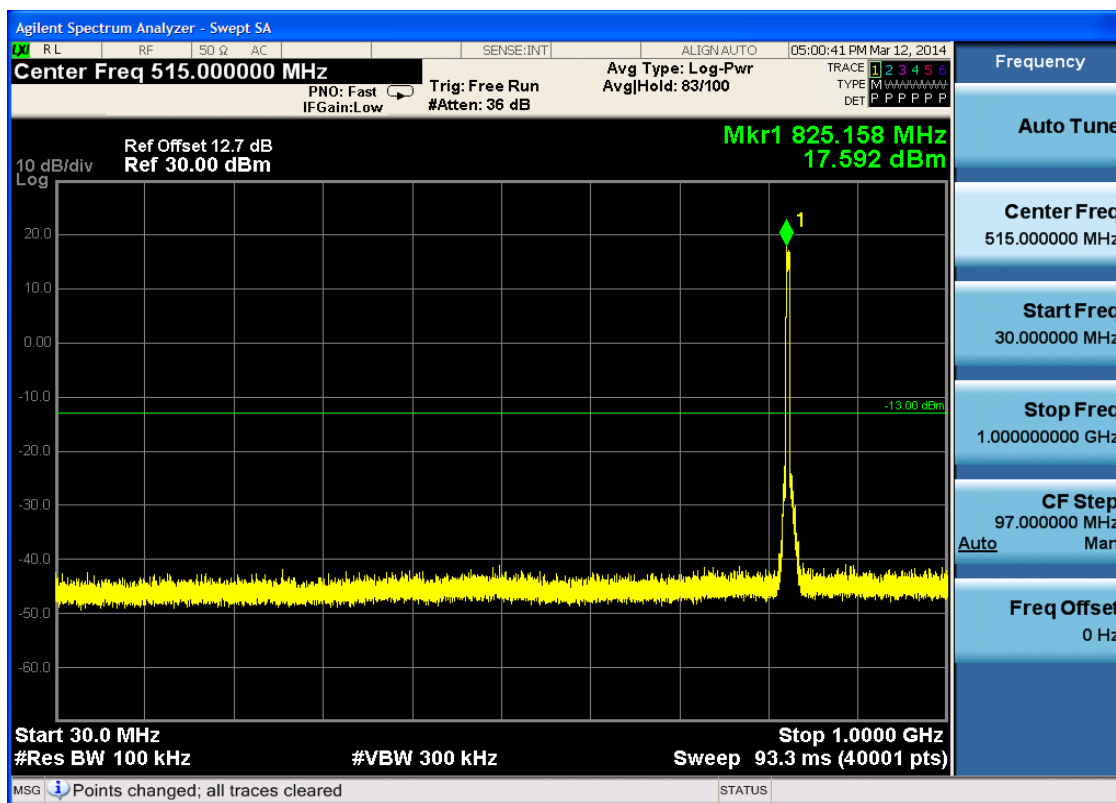
6.2.1 Test Band = WCDMA850

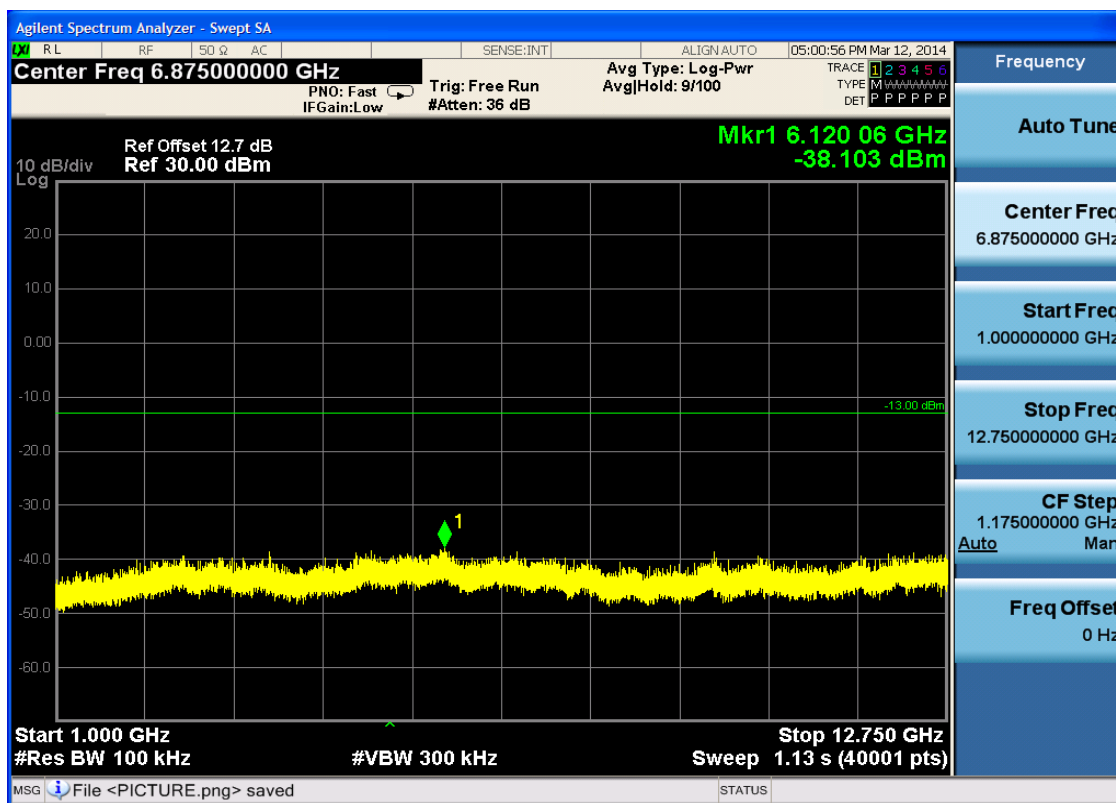
6.2.1.1 Test Mode = UMTS/TM1

6.2.1.1.1 Test Channel = LCH

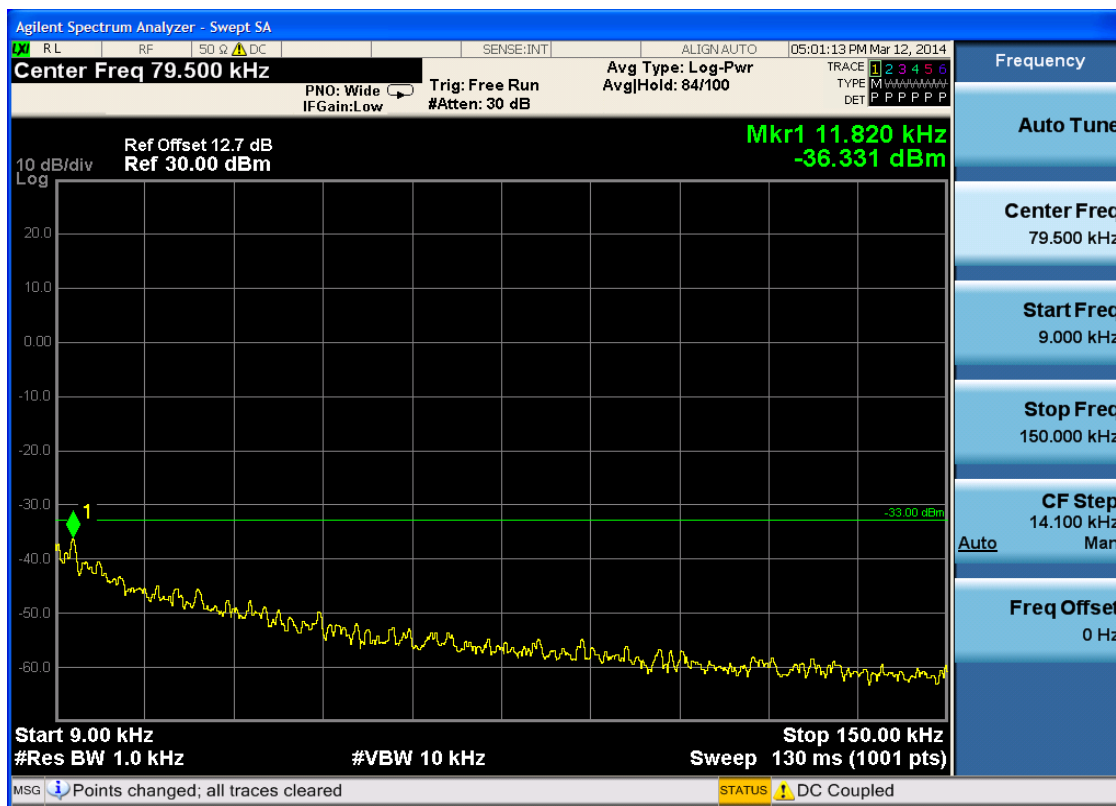


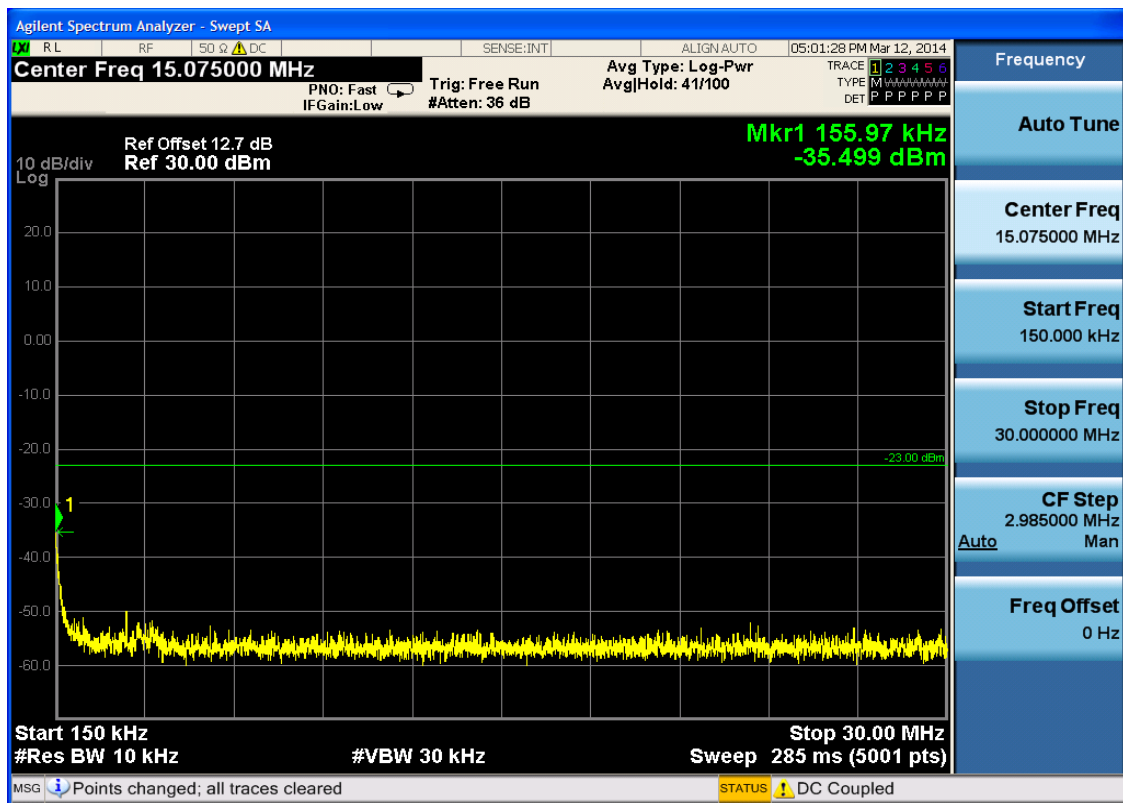


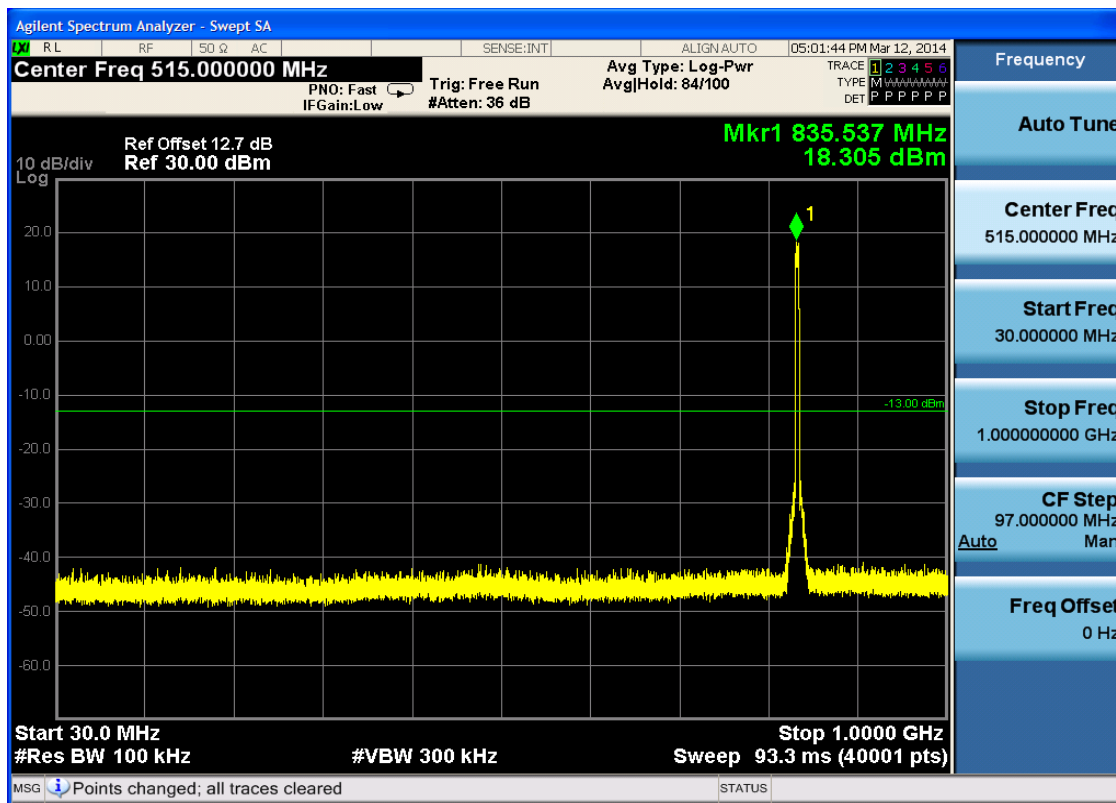


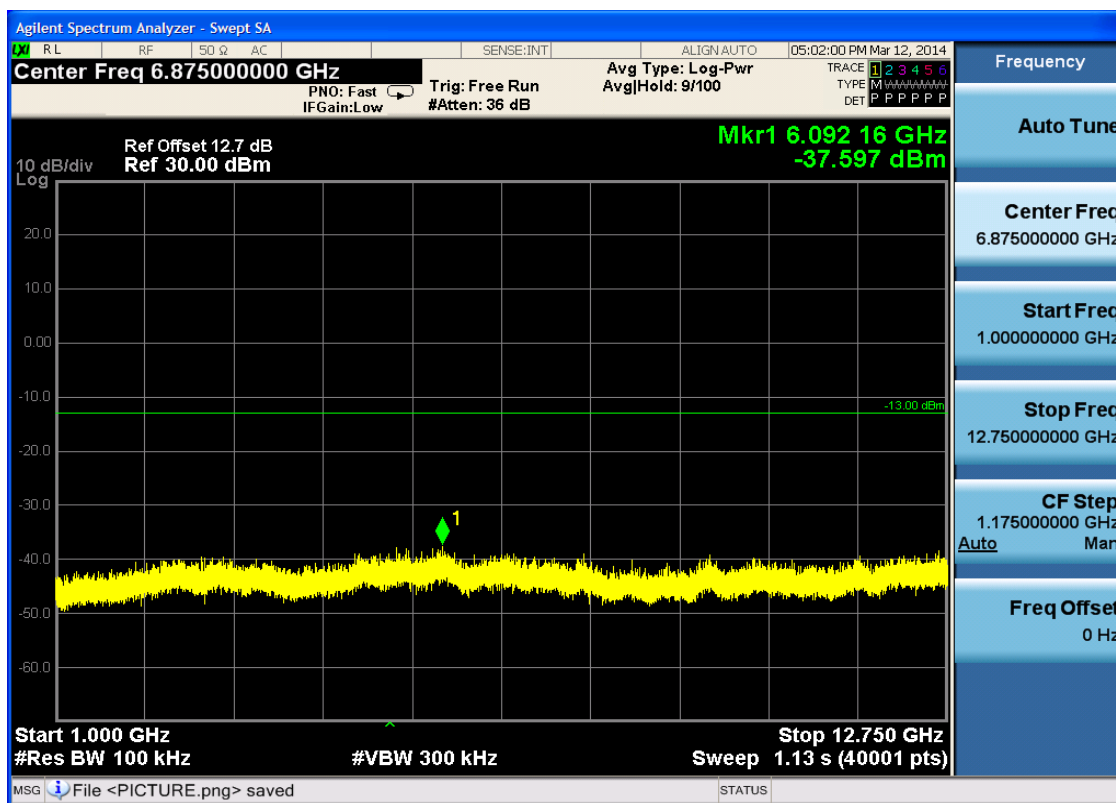


6.2.1.1.2 Test Channel = MCH

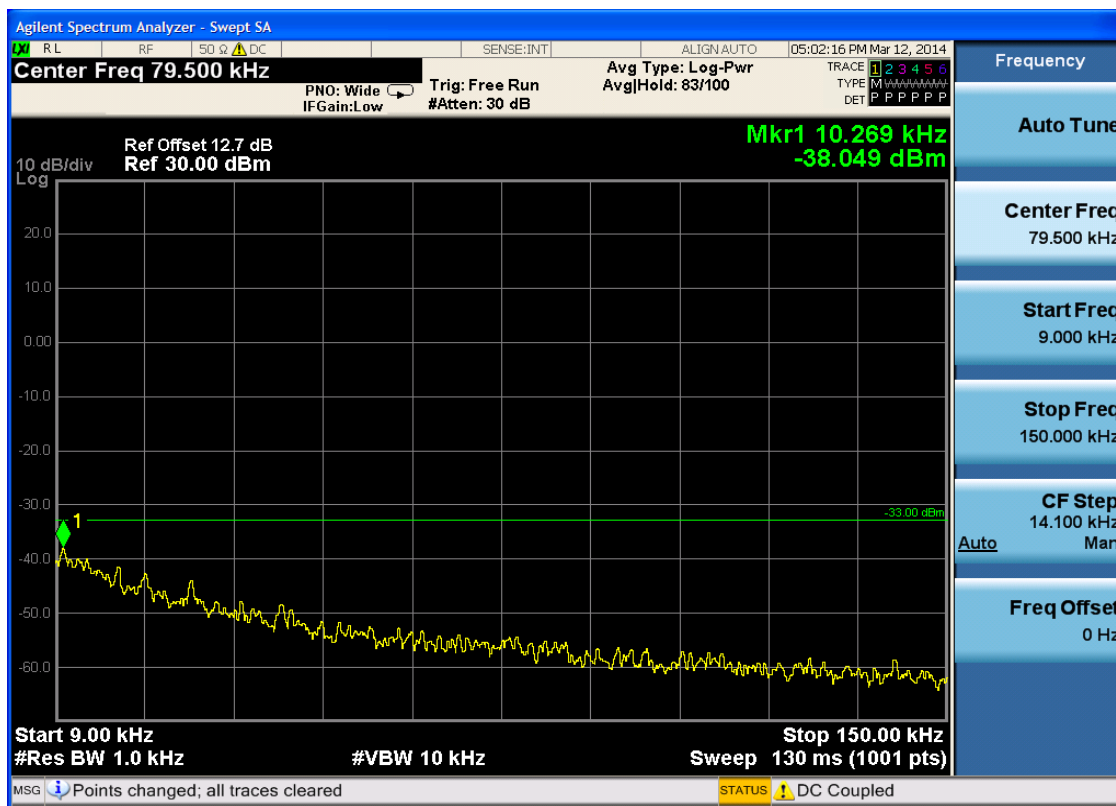


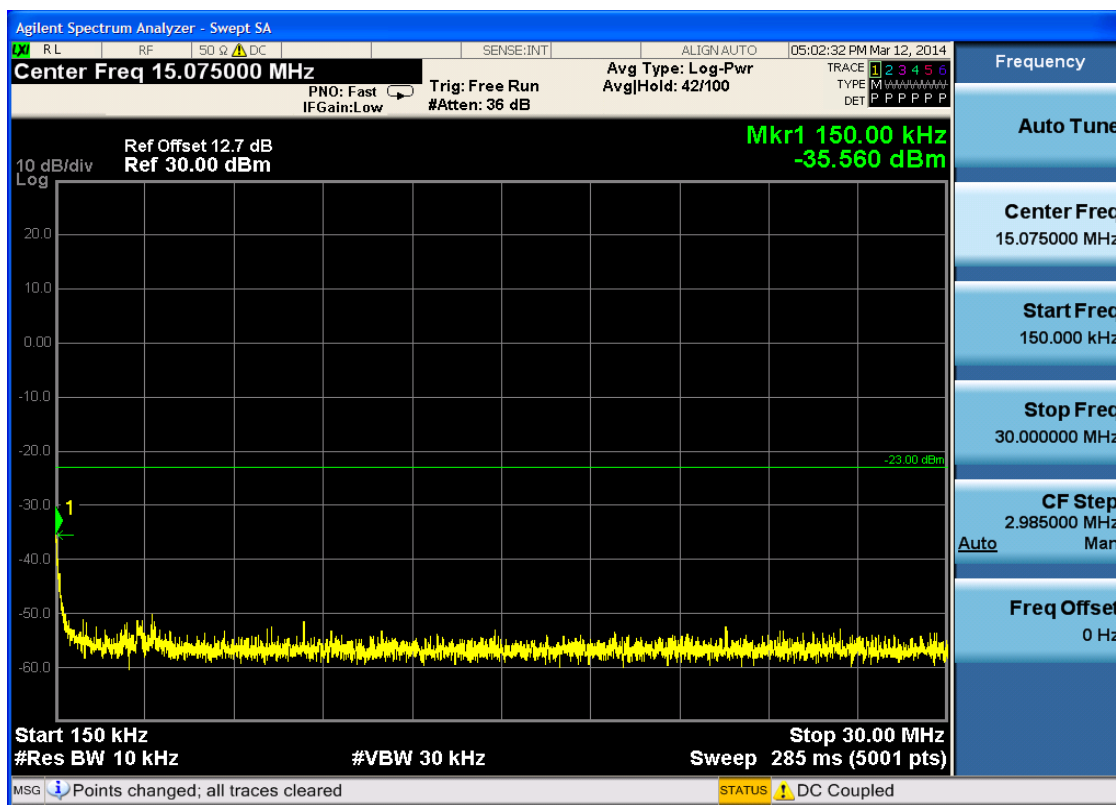


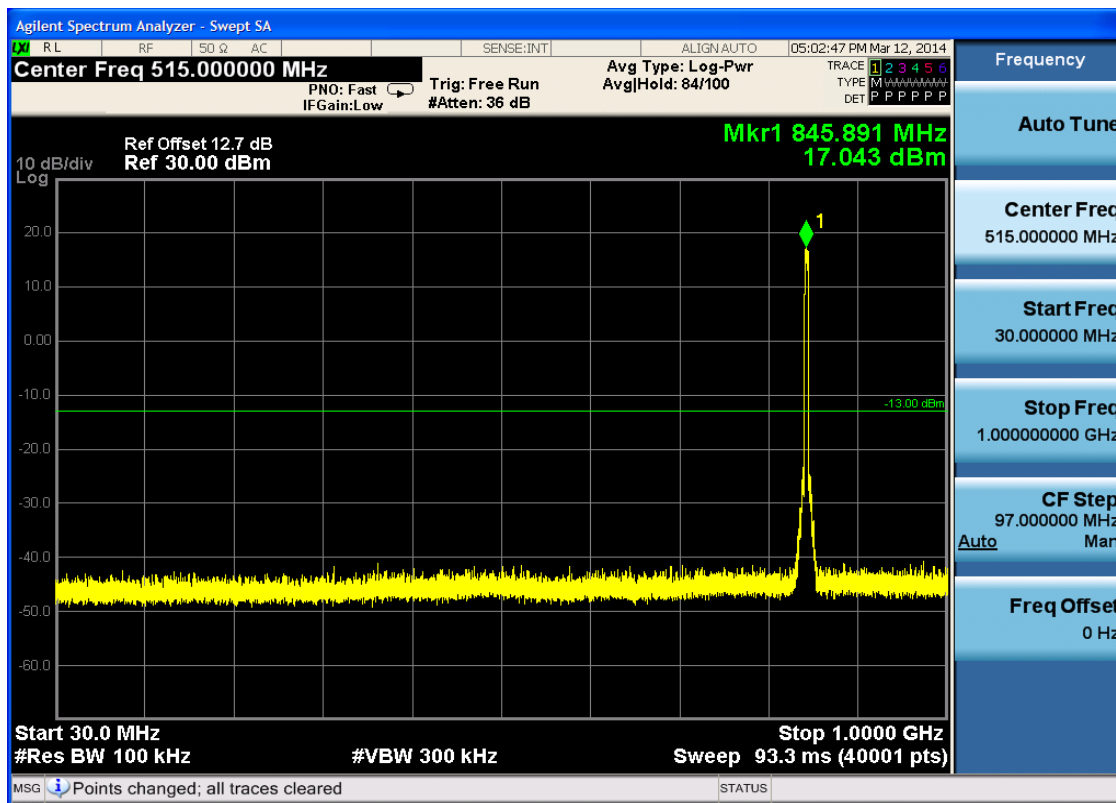


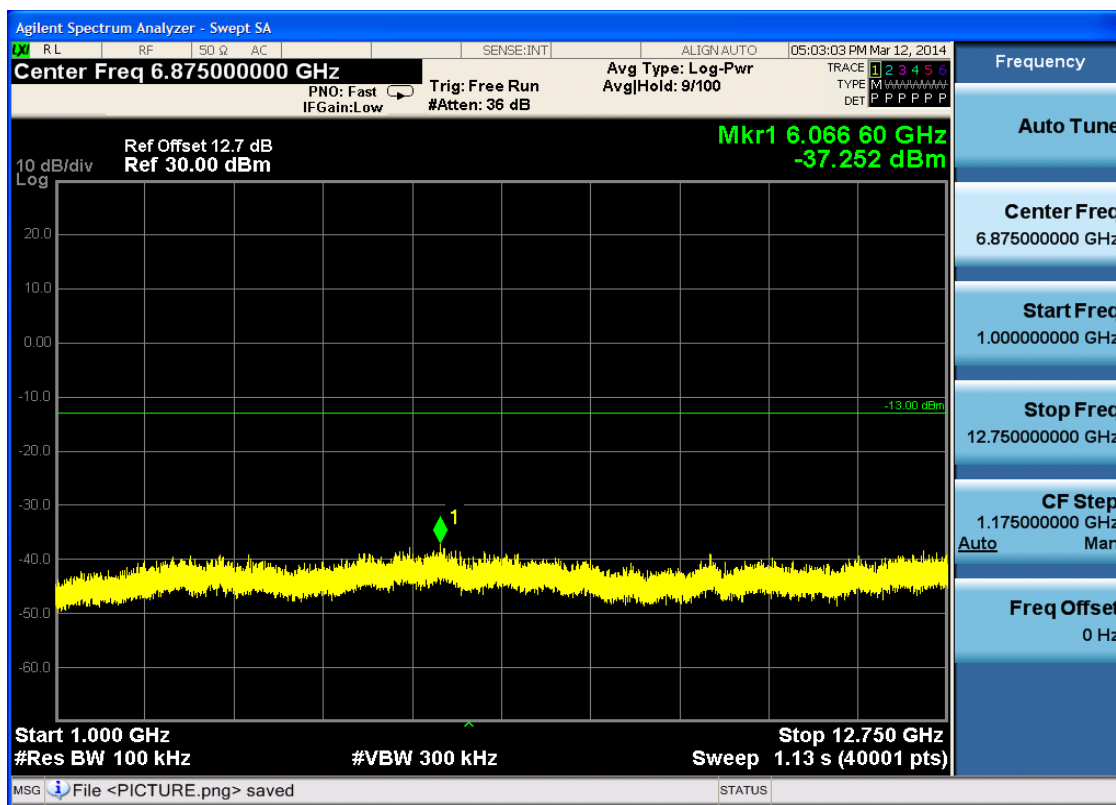


6.2.1.1.3 Test Channel = HCH





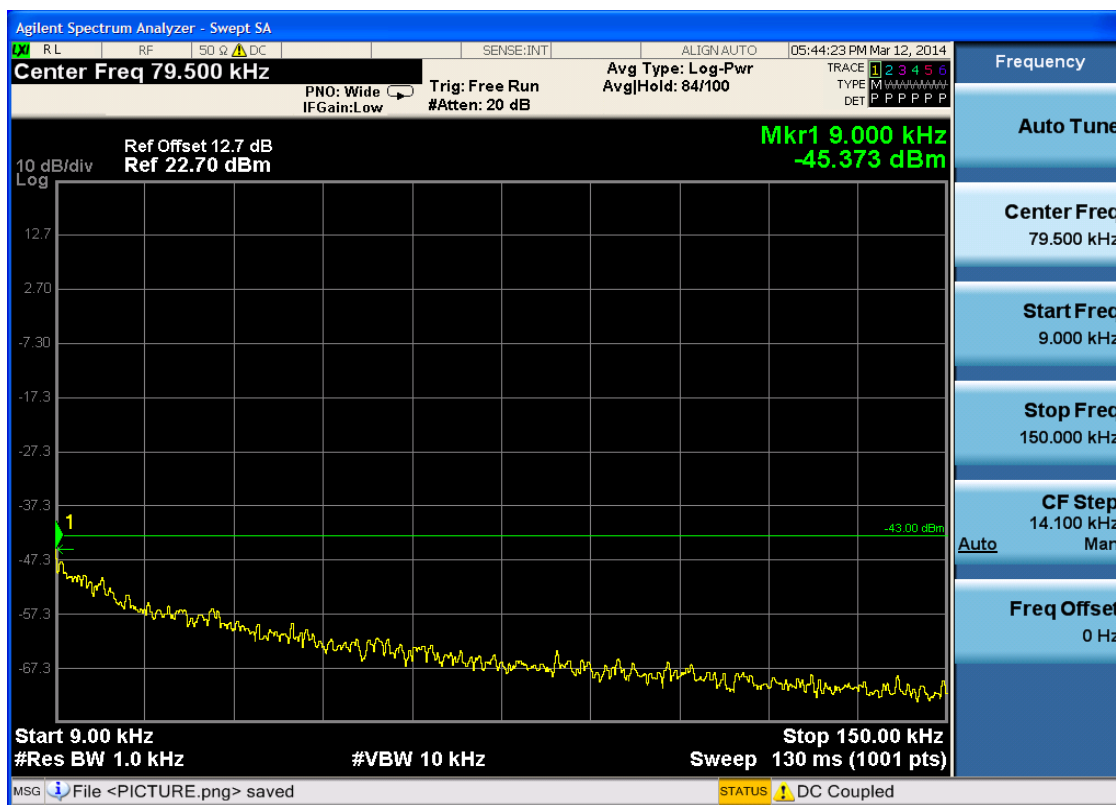


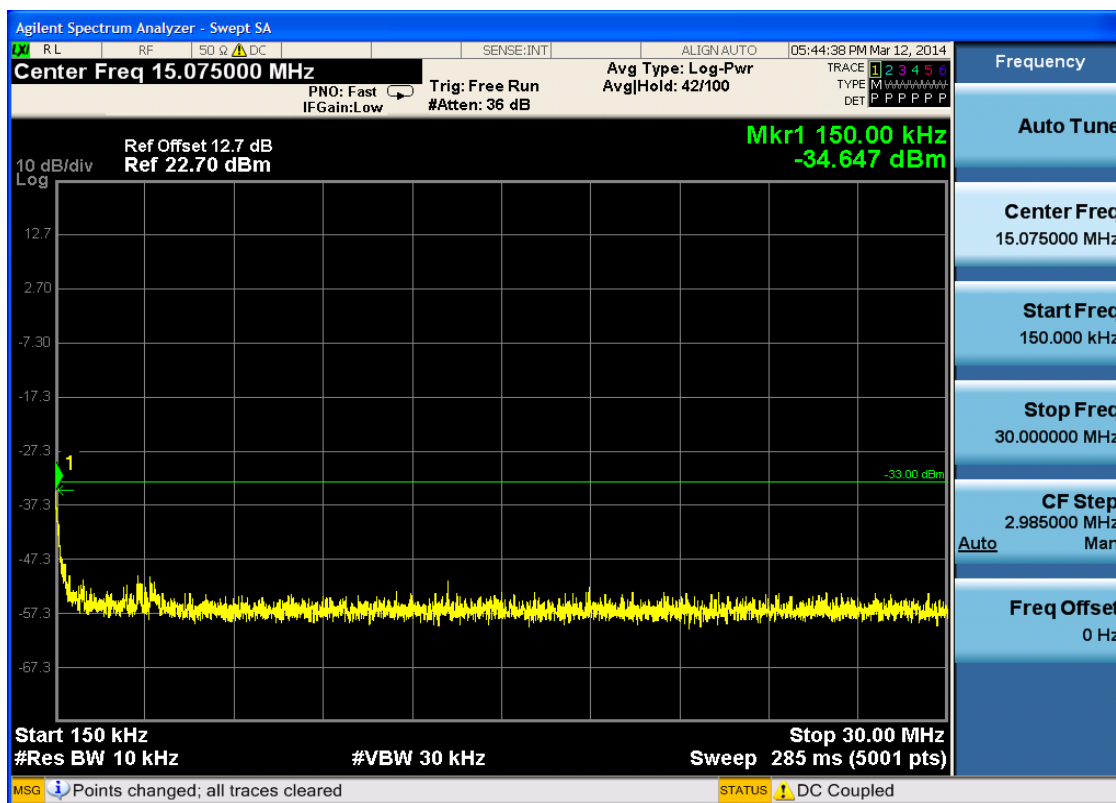


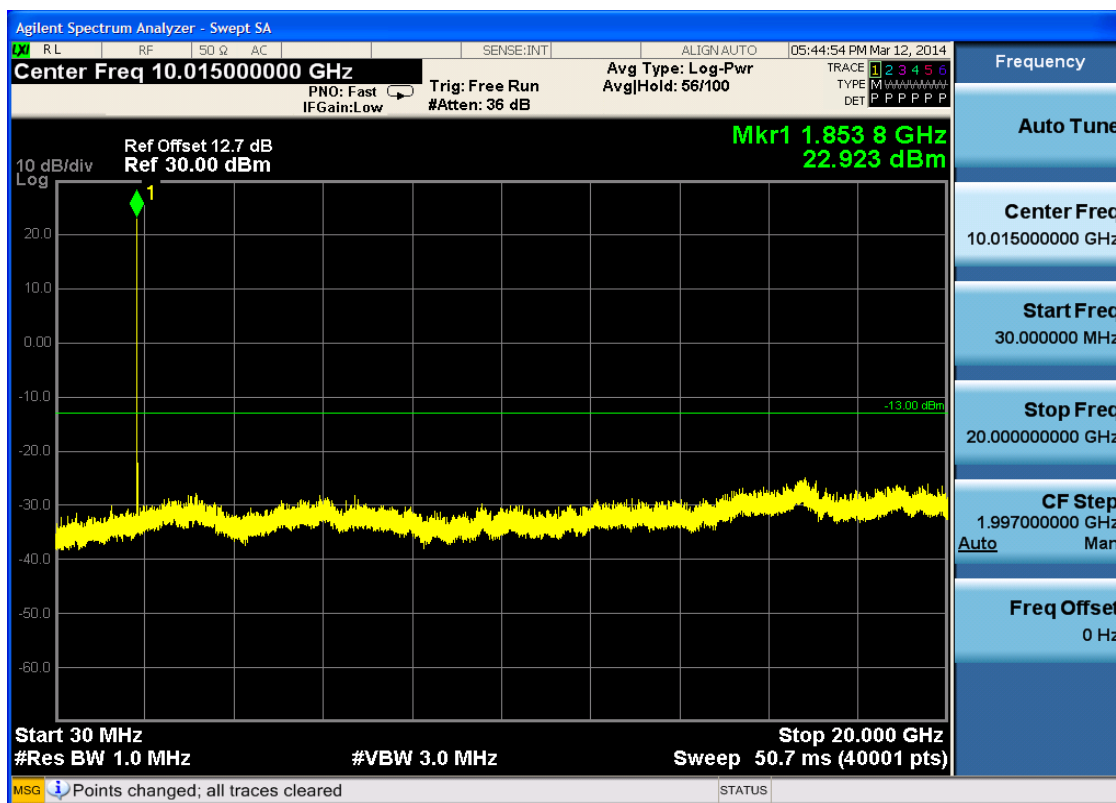
6.2.2 Test Band = WCDMA1900

6.2.2.1 Test Mode = UMTS/TM1

6.2.2.1.1 Test Channel = LCH

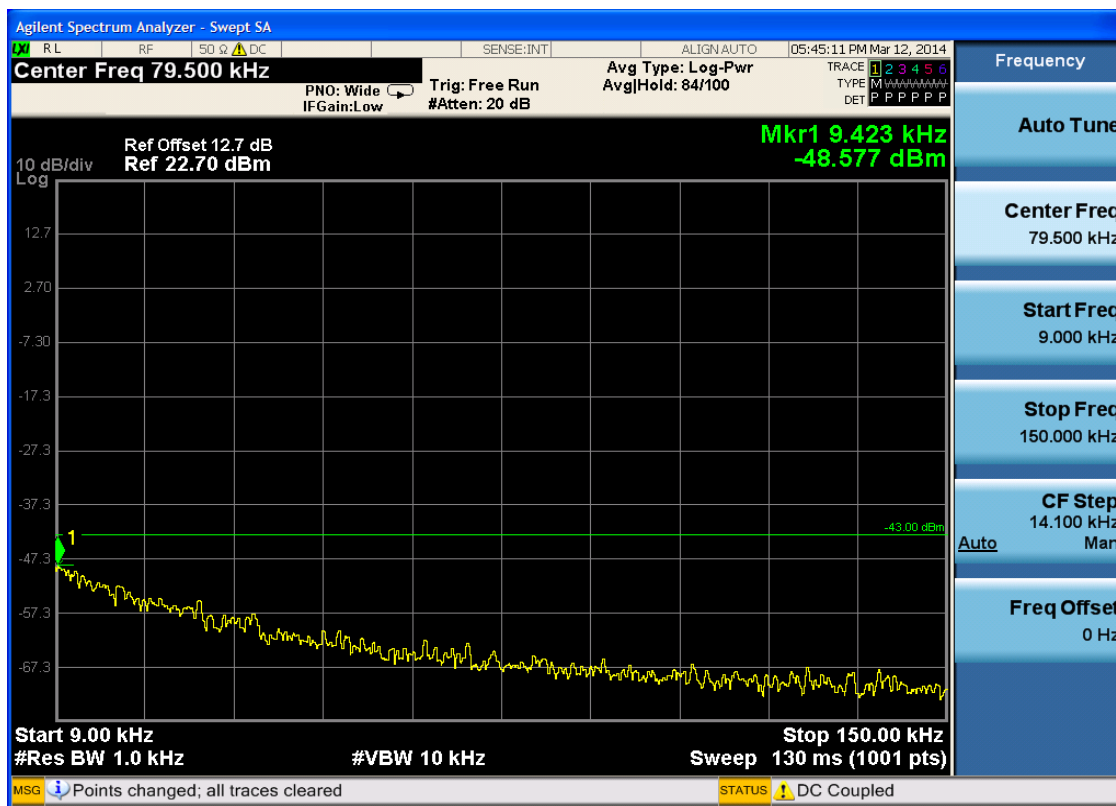


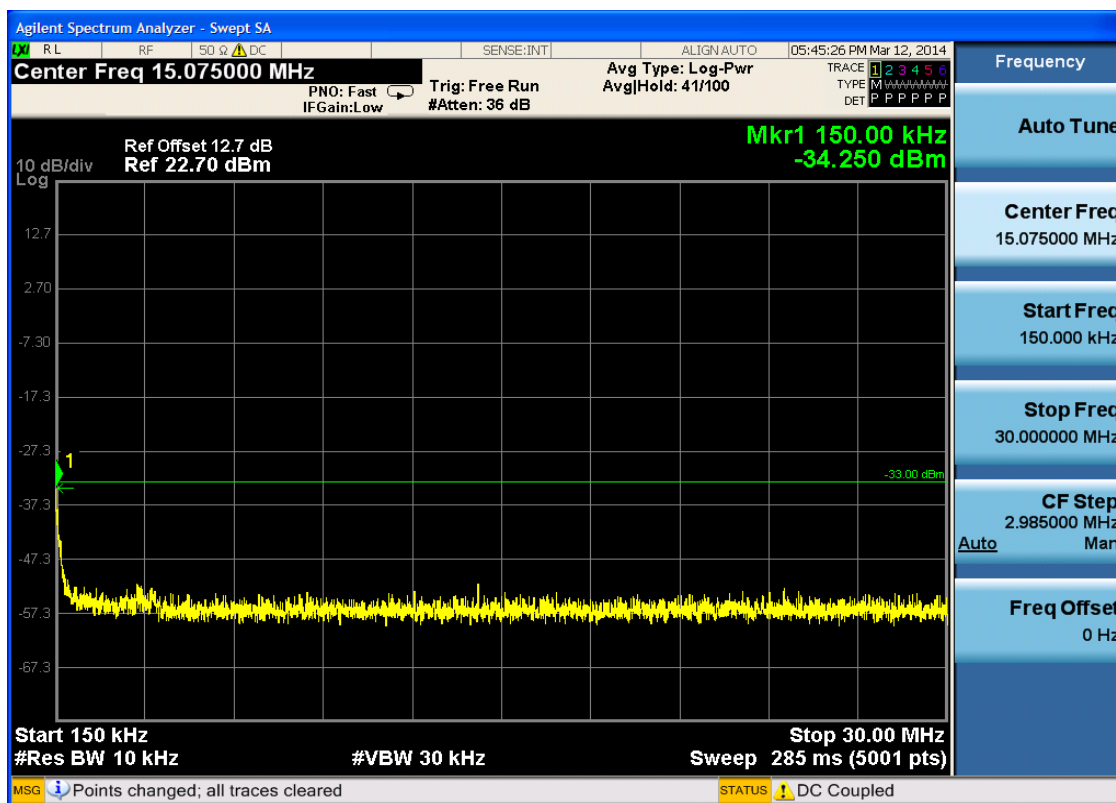


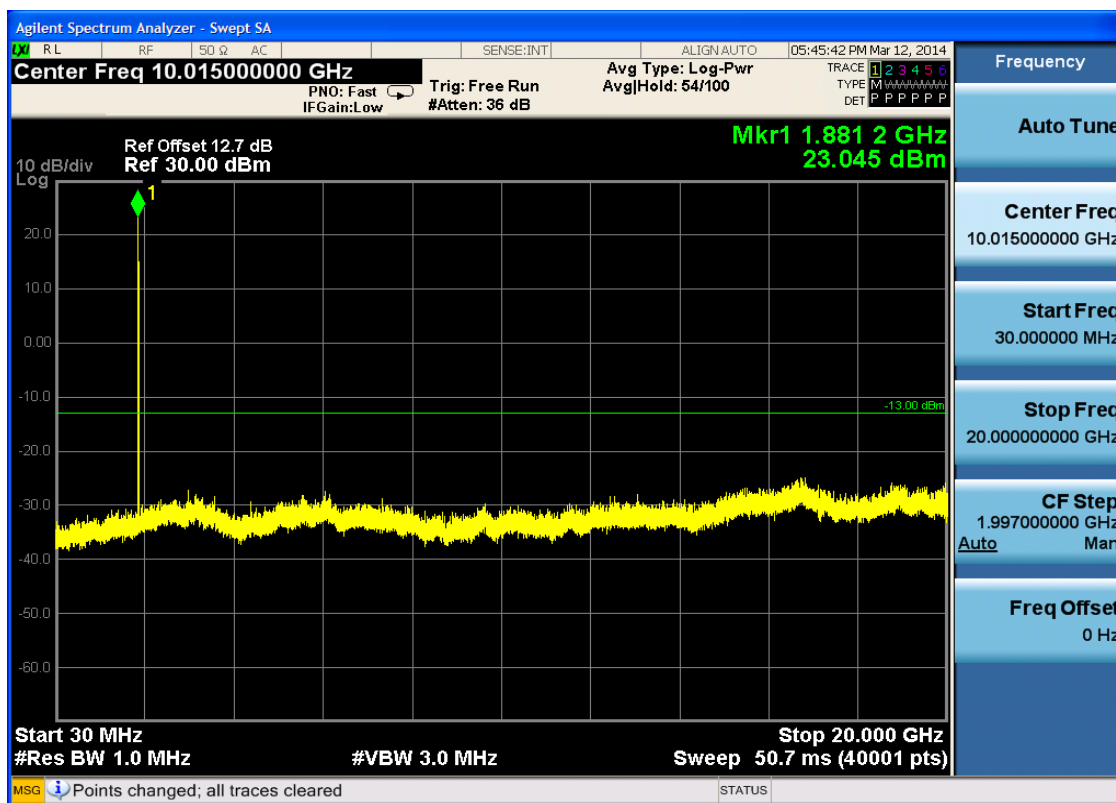




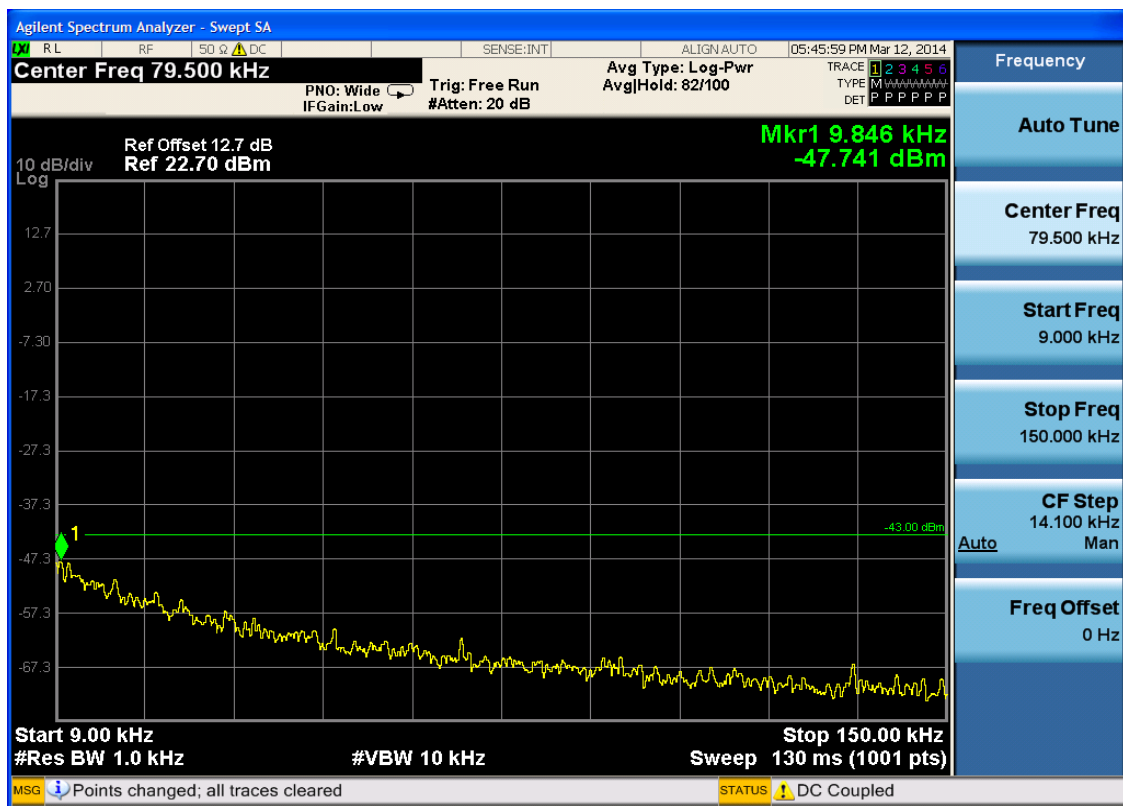
6.2.2.1.2 Test Channel = MCH

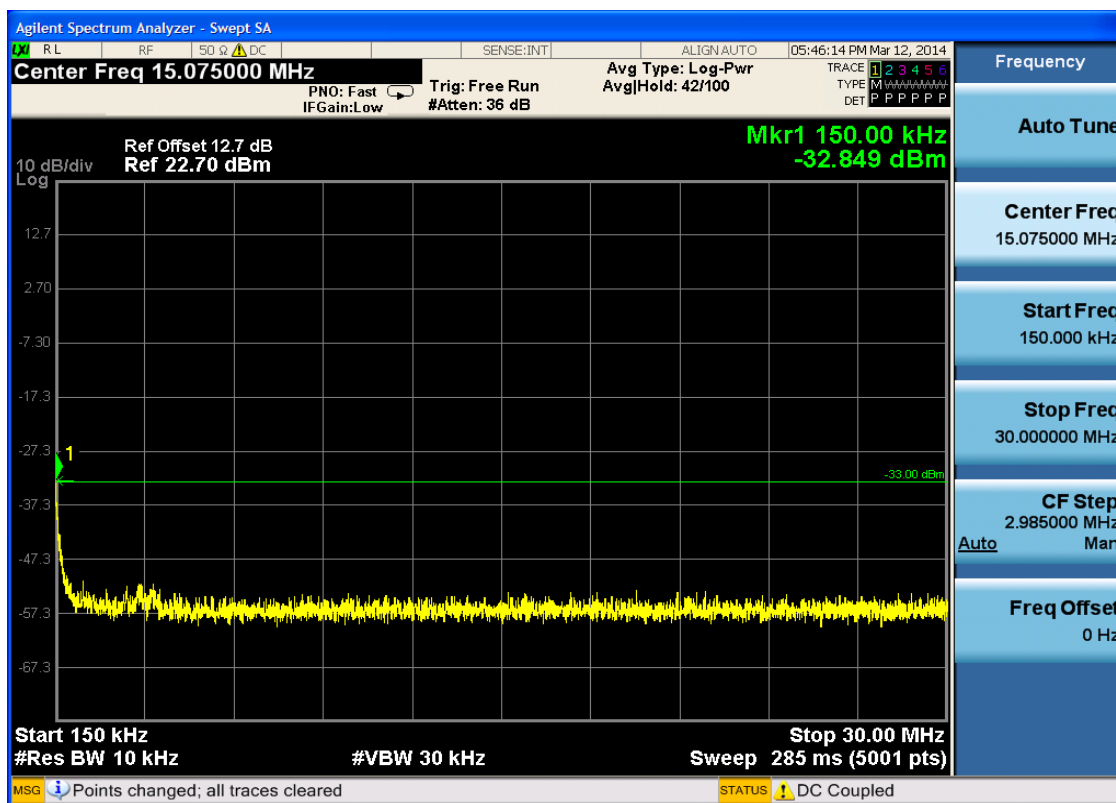


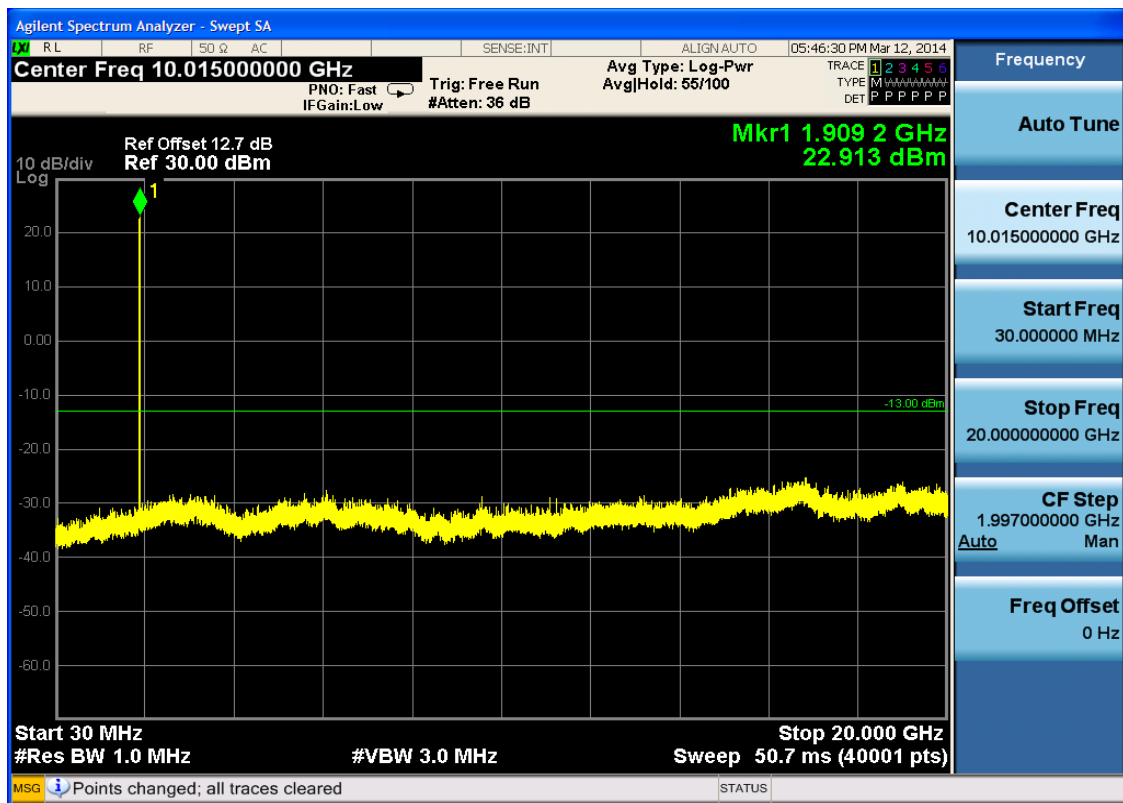




6.2.2.1.3 Test Channel = HCH



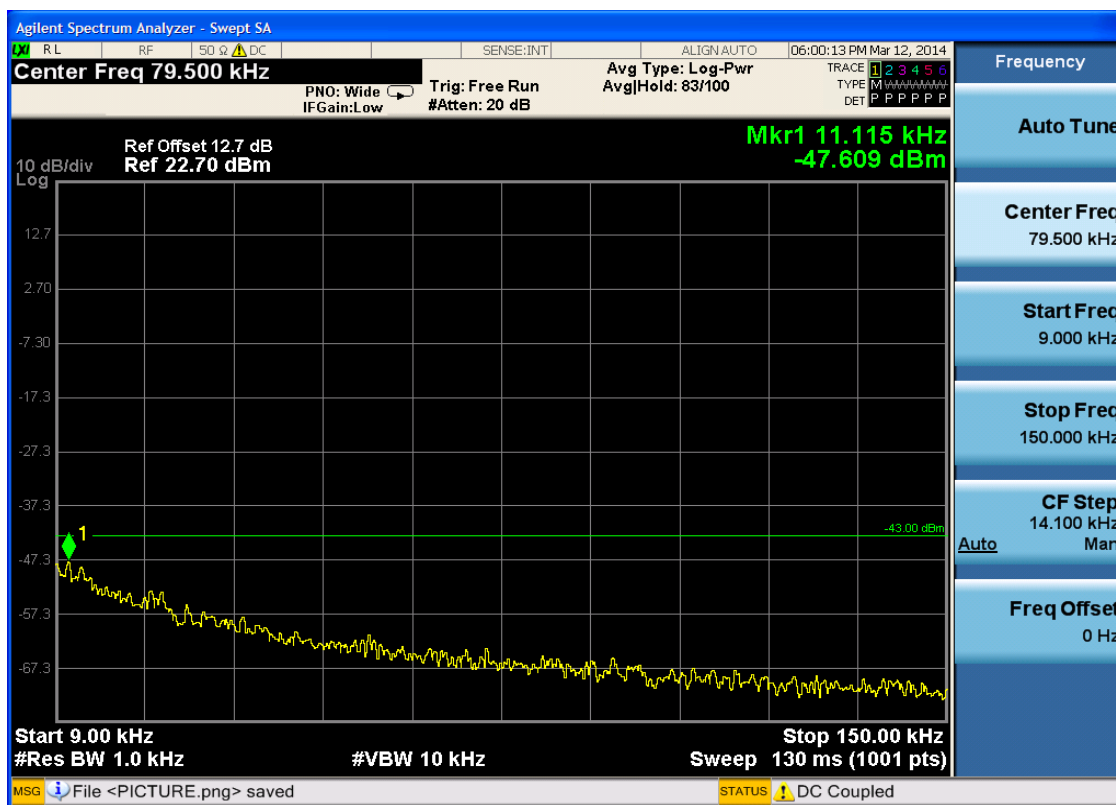


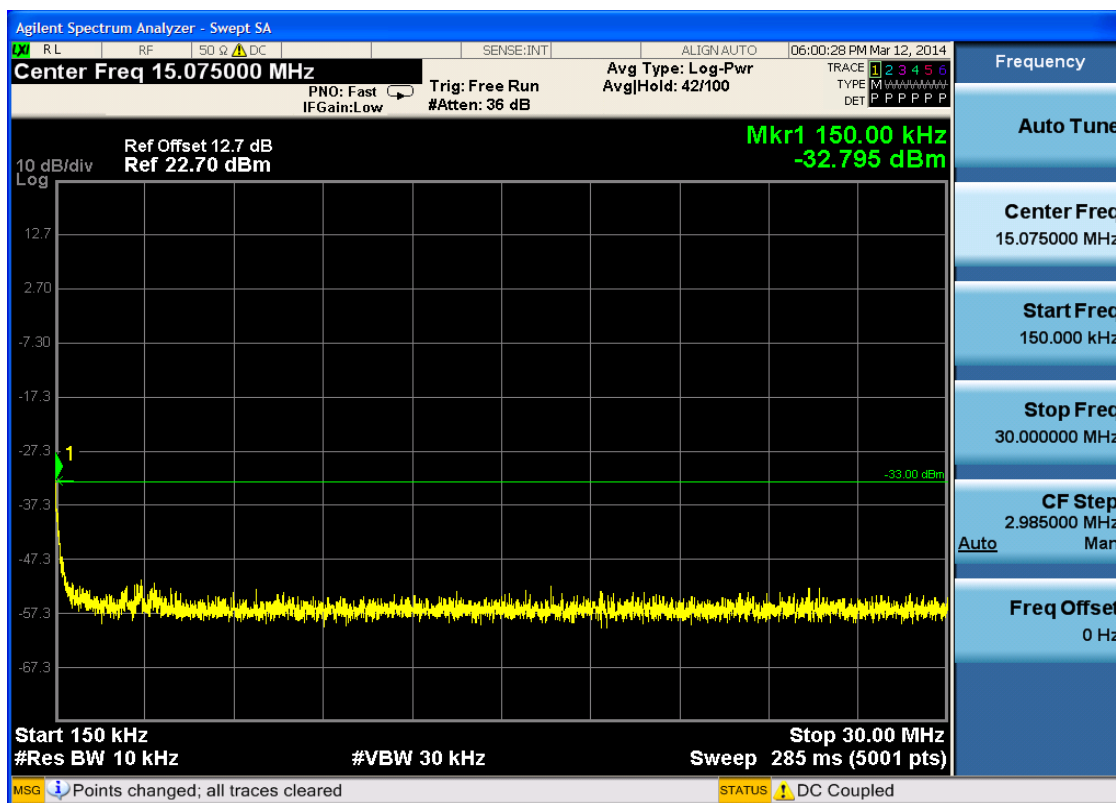


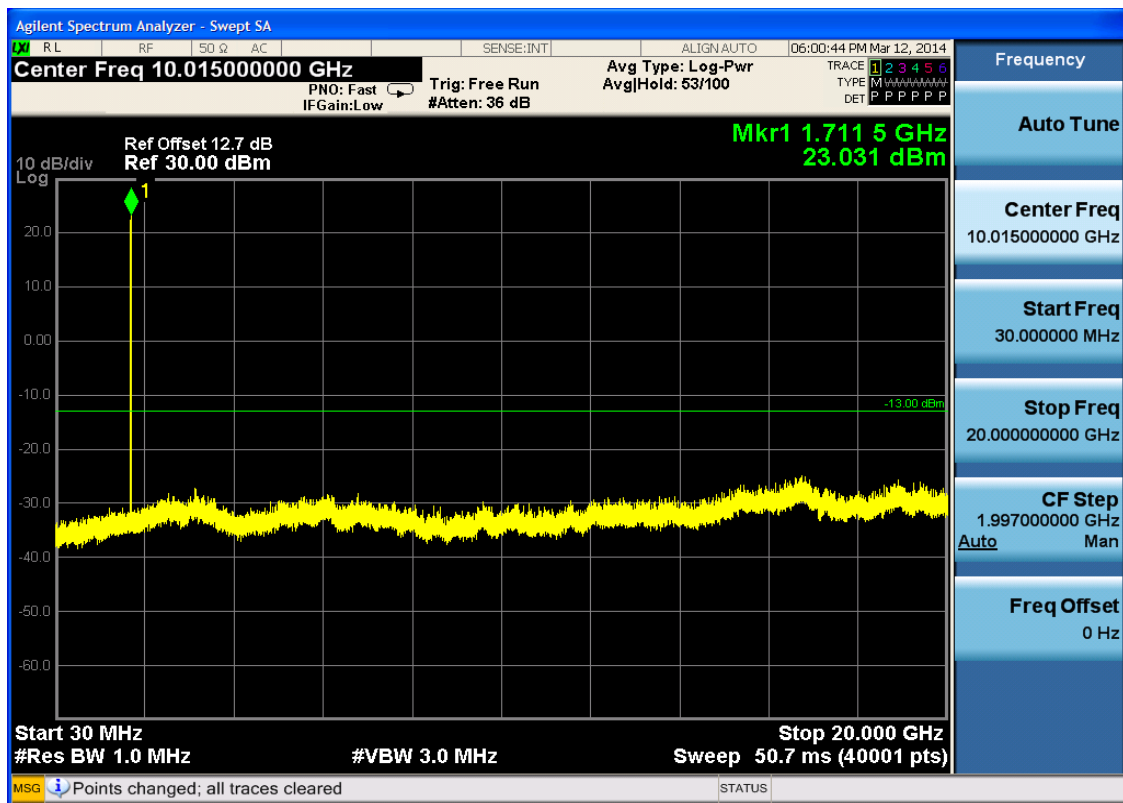
6.2.3 Test Band = WCDMA1700

6.2.3.1 Test Mode = UMTS/TM1

6.2.3.1.1 Test Channel = LCH









6.2.3.1.2 Test Channel = MCH

