



5.3.1.2.6.2.4 Test RB = RB100#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.

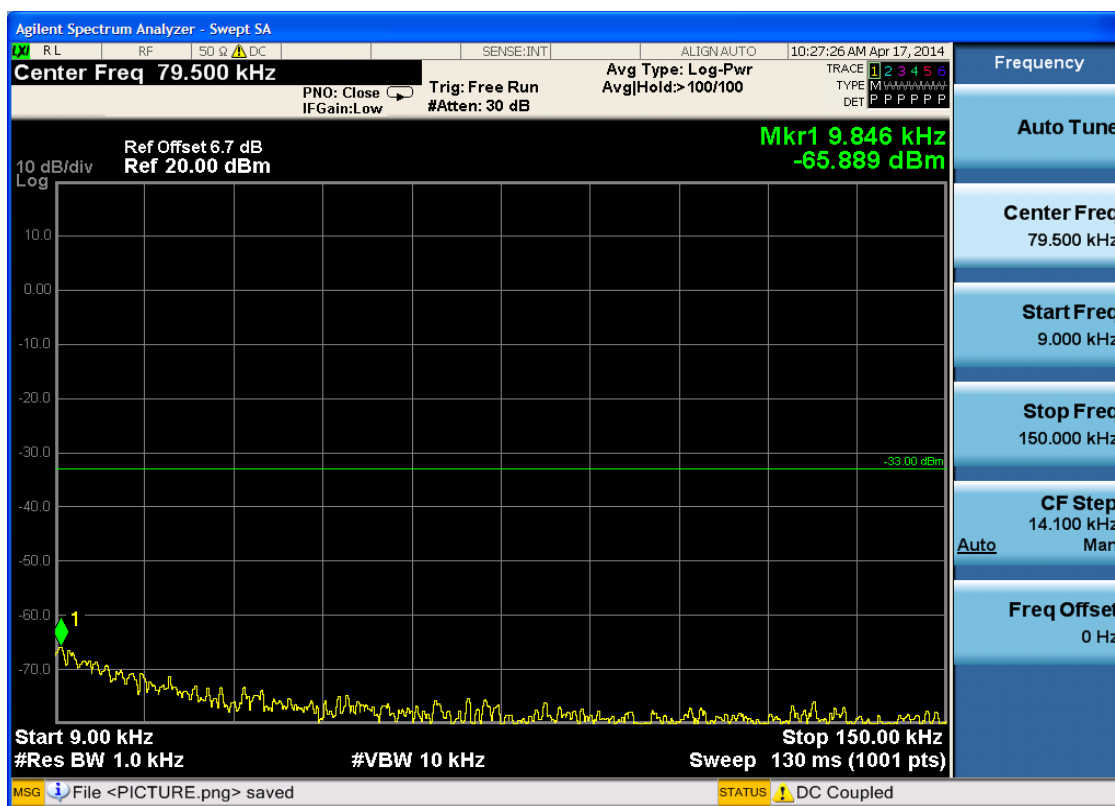
Part I - Test Plots

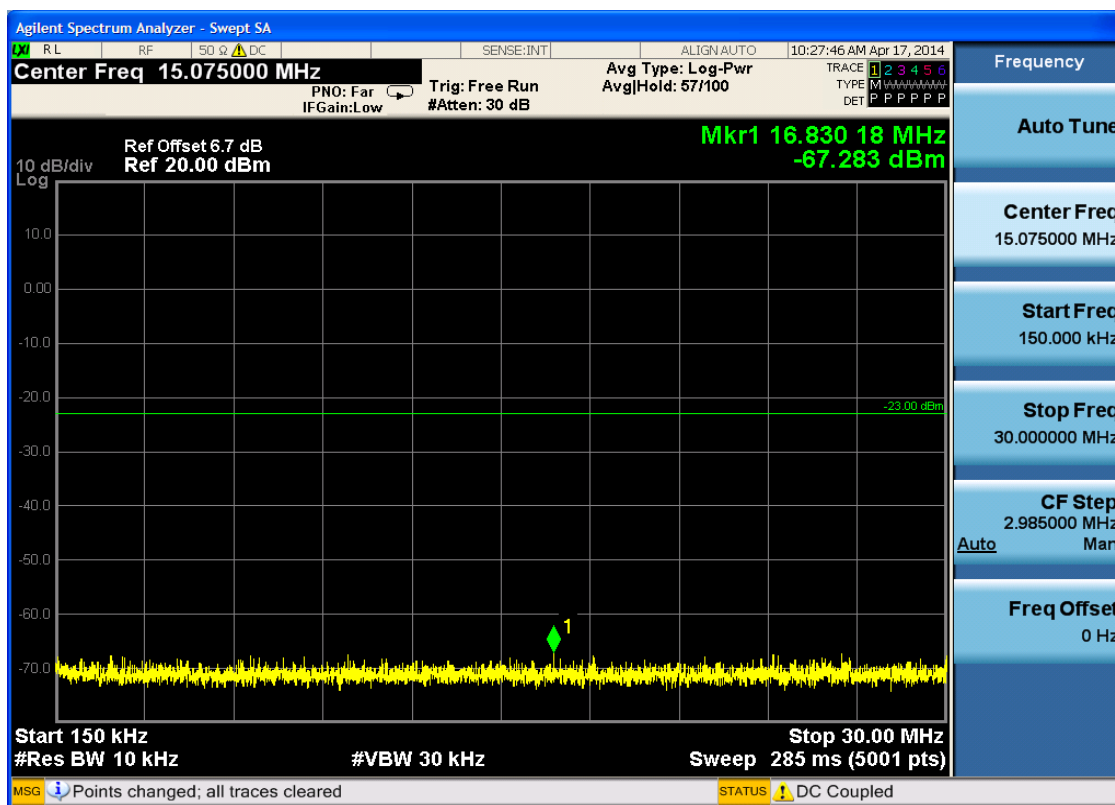
6.1 For GSM

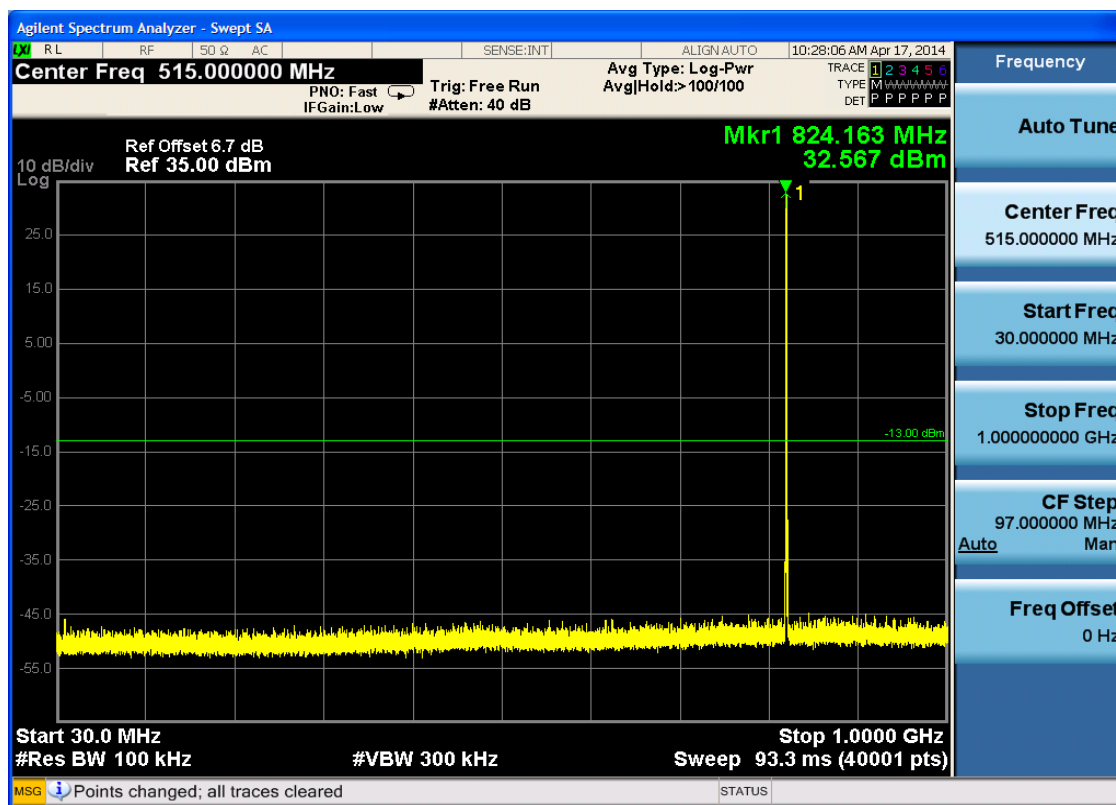
6.1.1 Test Band = GSM850

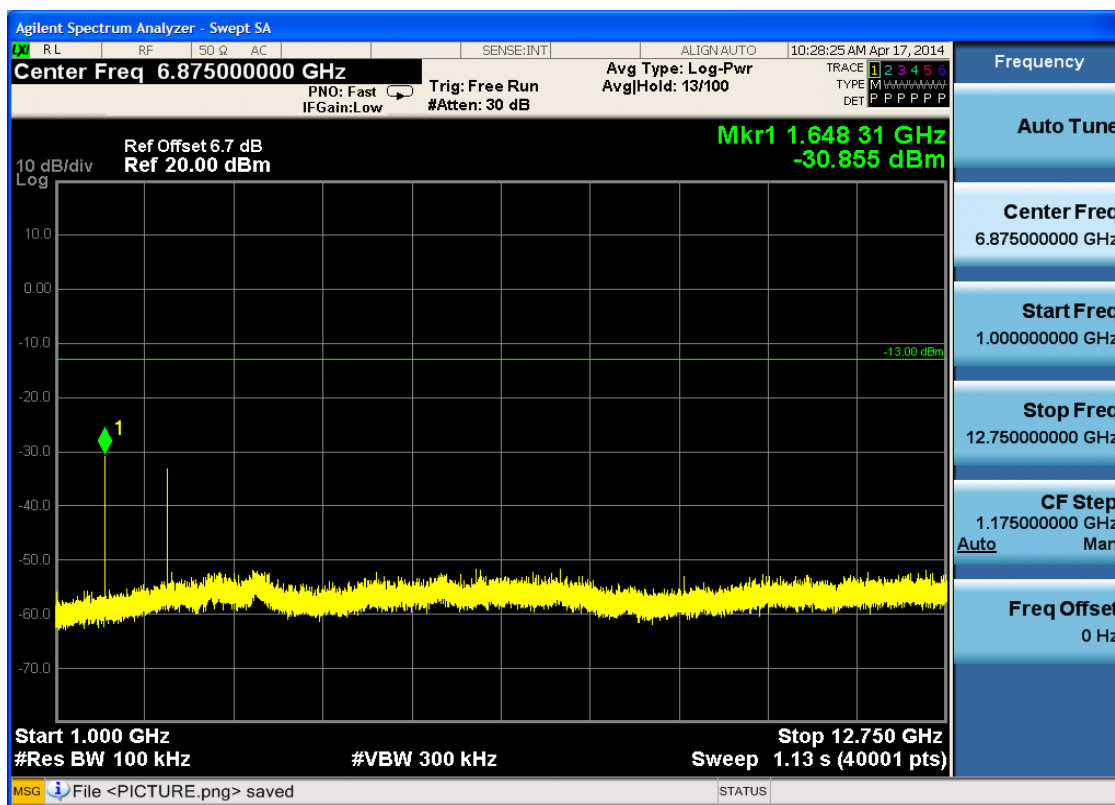
6.1.1.1 Test Mode = GSM/TM1

6.1.1.1.1 Test Channel = LCH











Agilent Spectrum Analyzer - Swept SA

R.L. RF 50 Ω DC SENSE:INT ALIGN:AUTO 10:28:46 AM Apr 17, 2014

Center Freq 79.500 kHz

PNO: Close Trig: Free Run Avg Type: Log-Pwr
IFGain:Low #Atten: 30 dB AvgHold:>100/100

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

Ref Offset 6.7 dB
Ref 20.00 dBm

Mkr1 9.705 kHz
-65.485 dBm

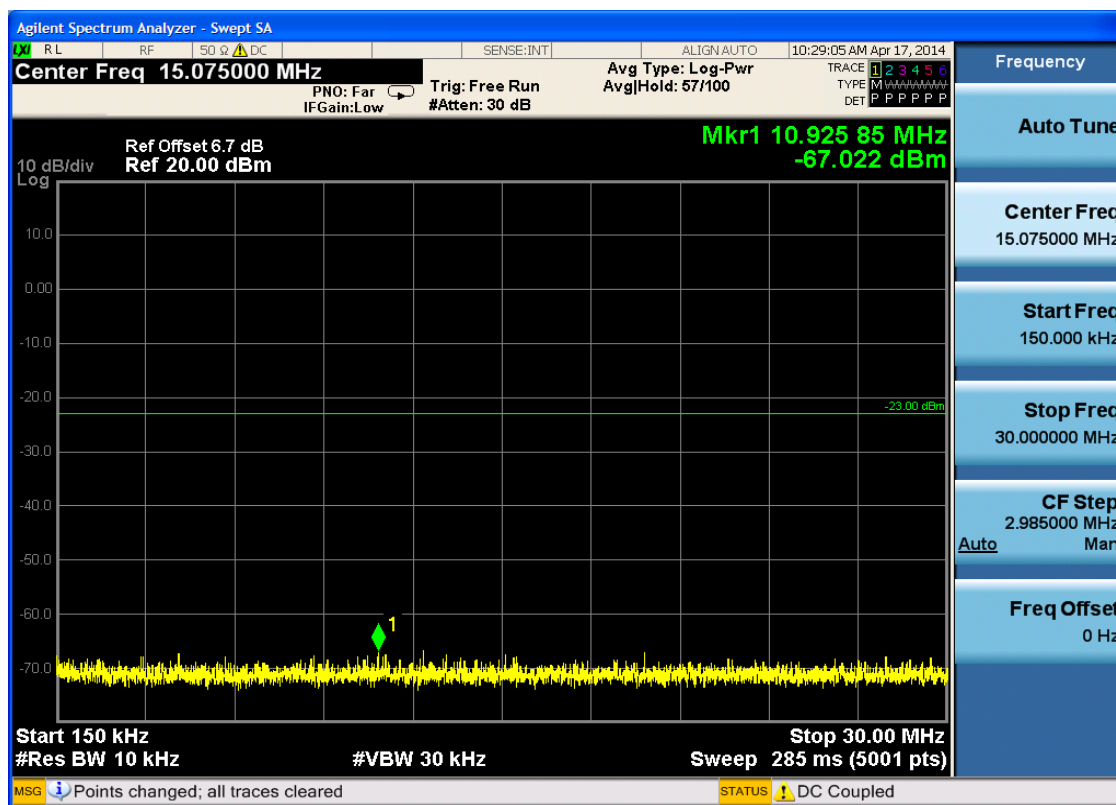
10 dB/div
Log

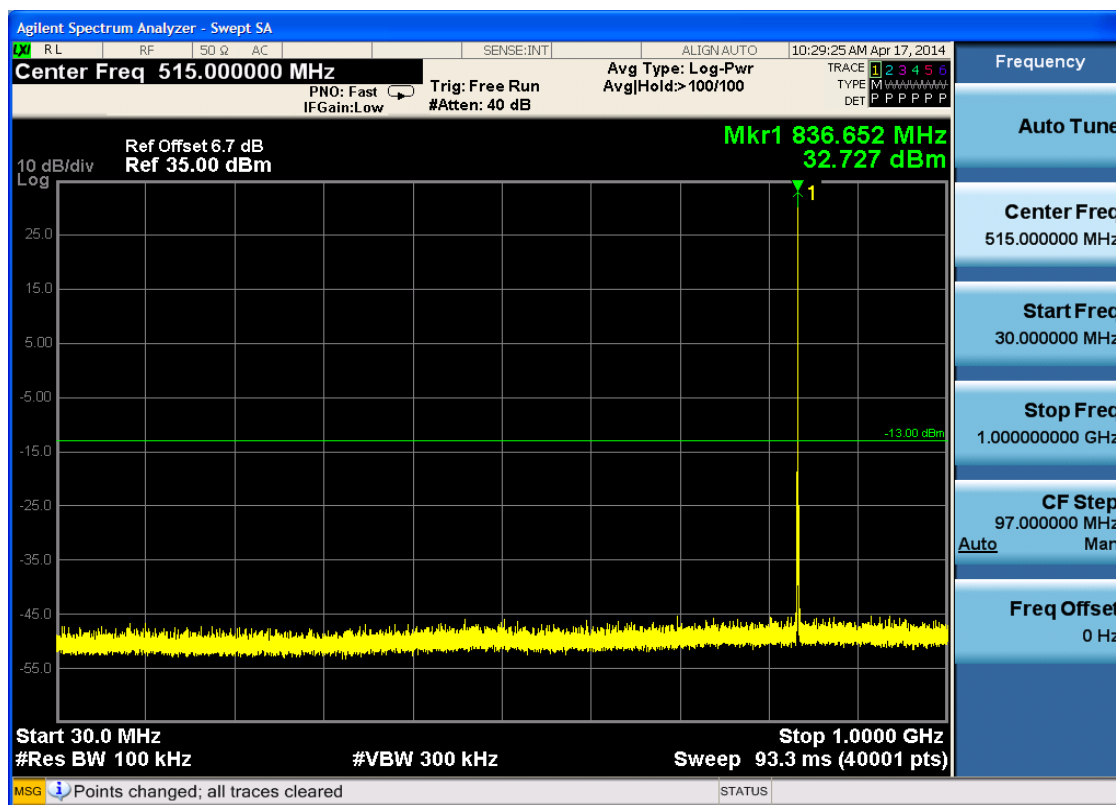
-33.00 dBm

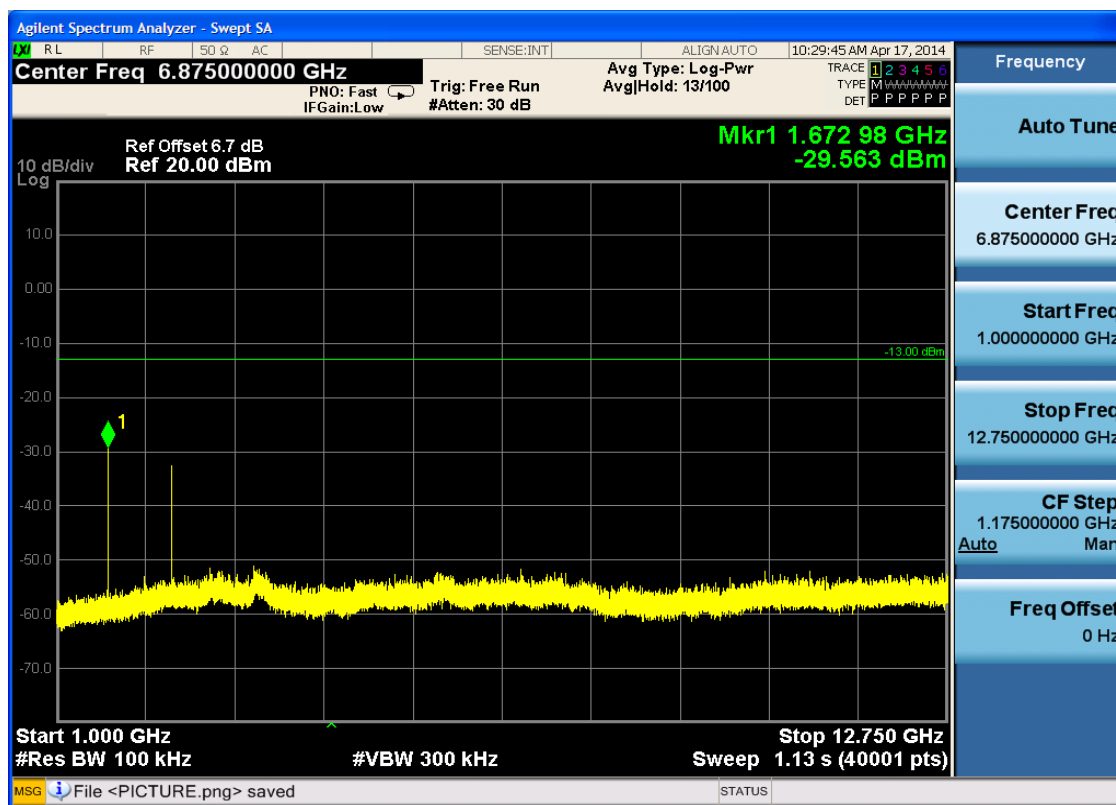
Start 9.00 kHz Stop 150.00 kHz
#Res BW 1.0 kHz #VBW 10 kHz Sweep 130 ms (1001 pts)

MSG Points changed; all traces cleared STATUS DC Coupled

Frequency Auto Tune Center Freq Start Freq Stop Freq CF Step Freq Offset

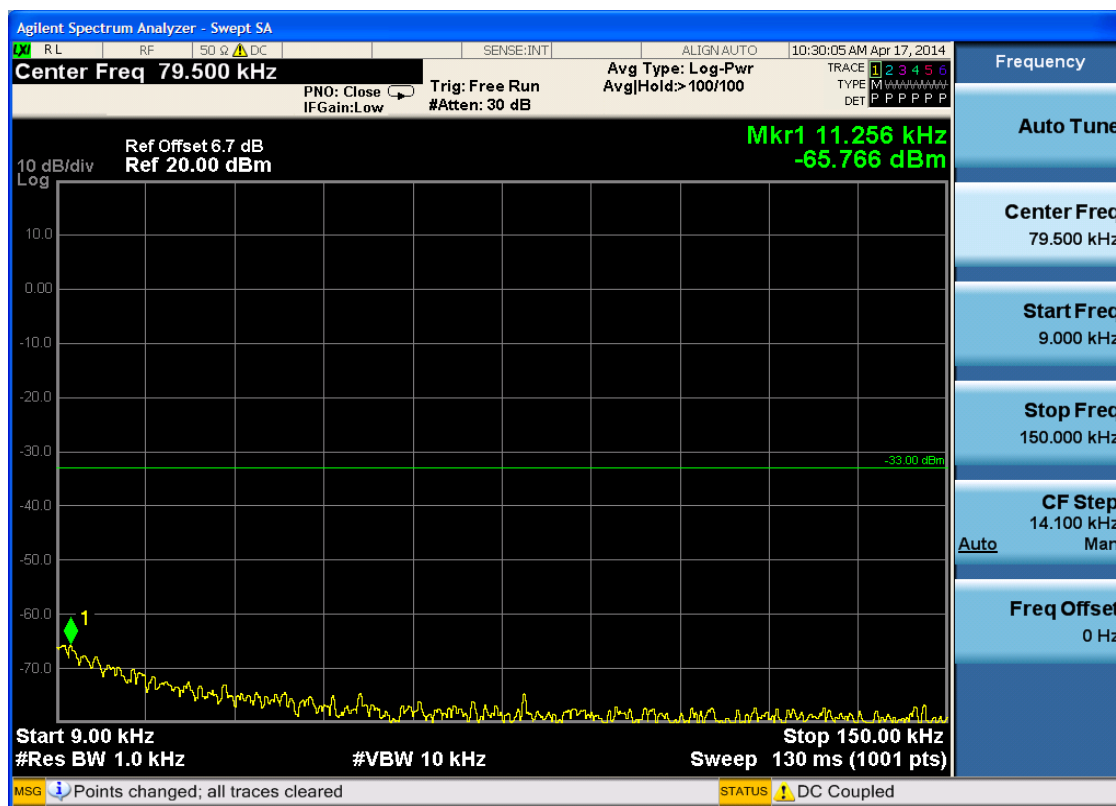


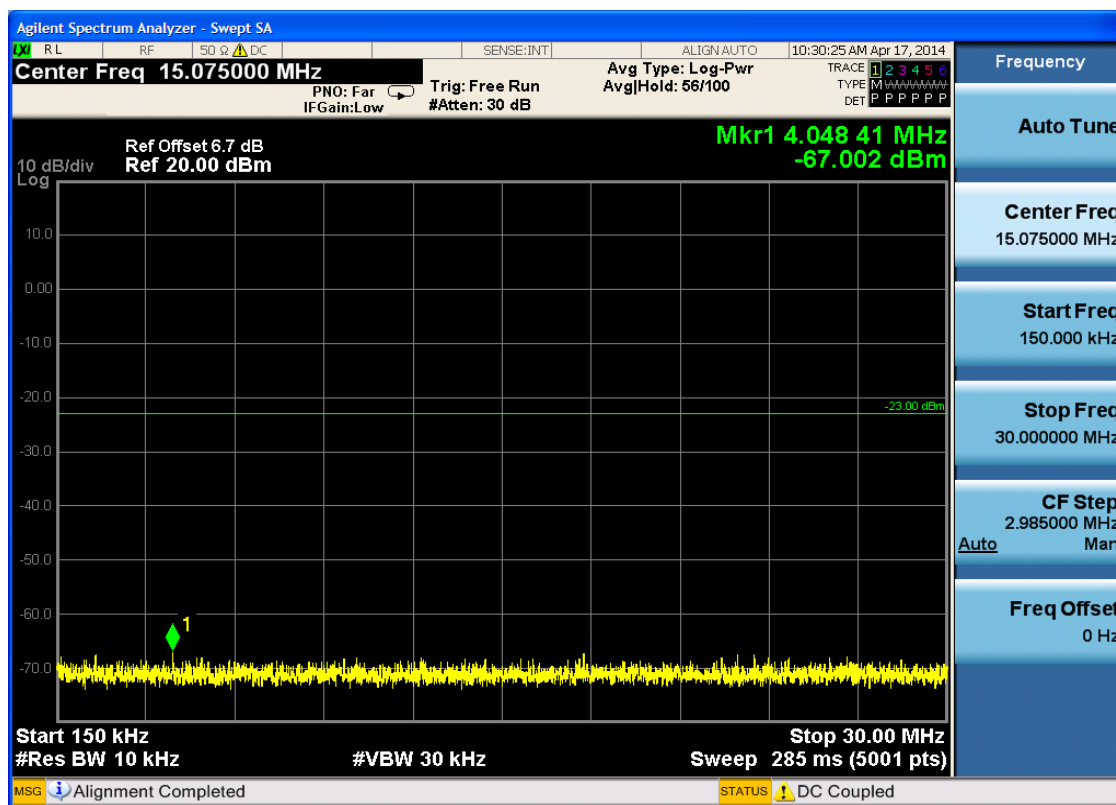


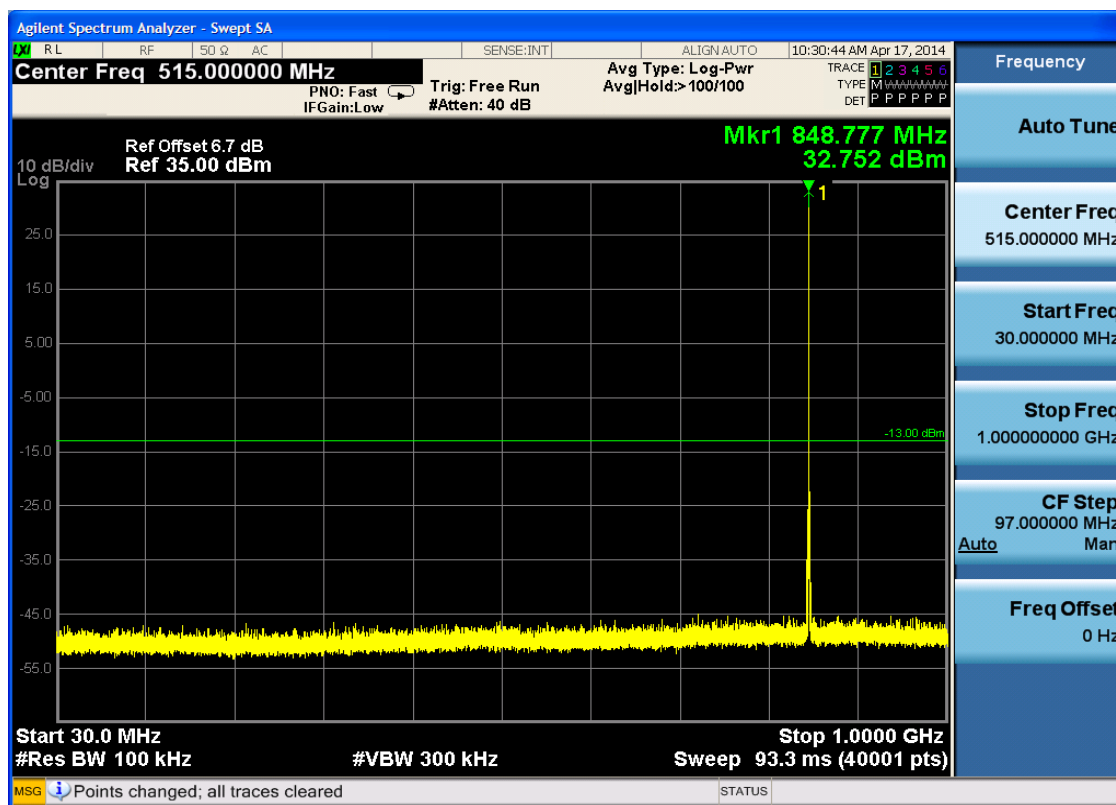


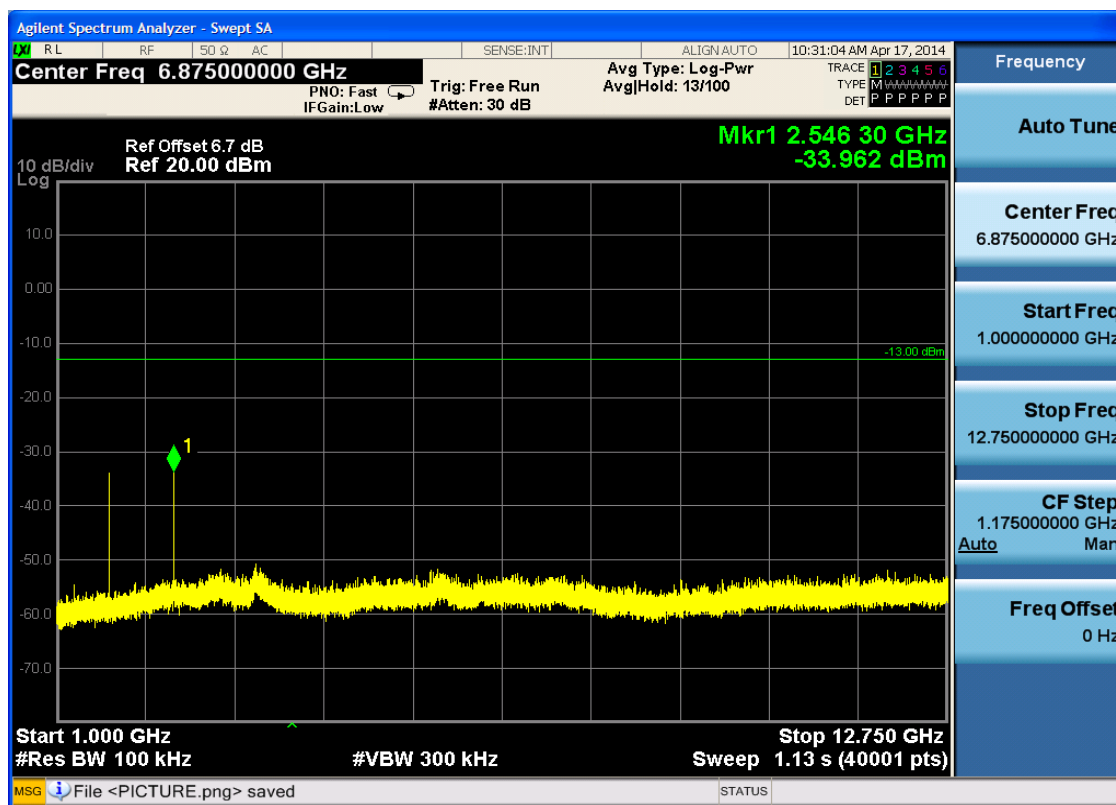


6.1.1.1.3 Test Channel = HCH



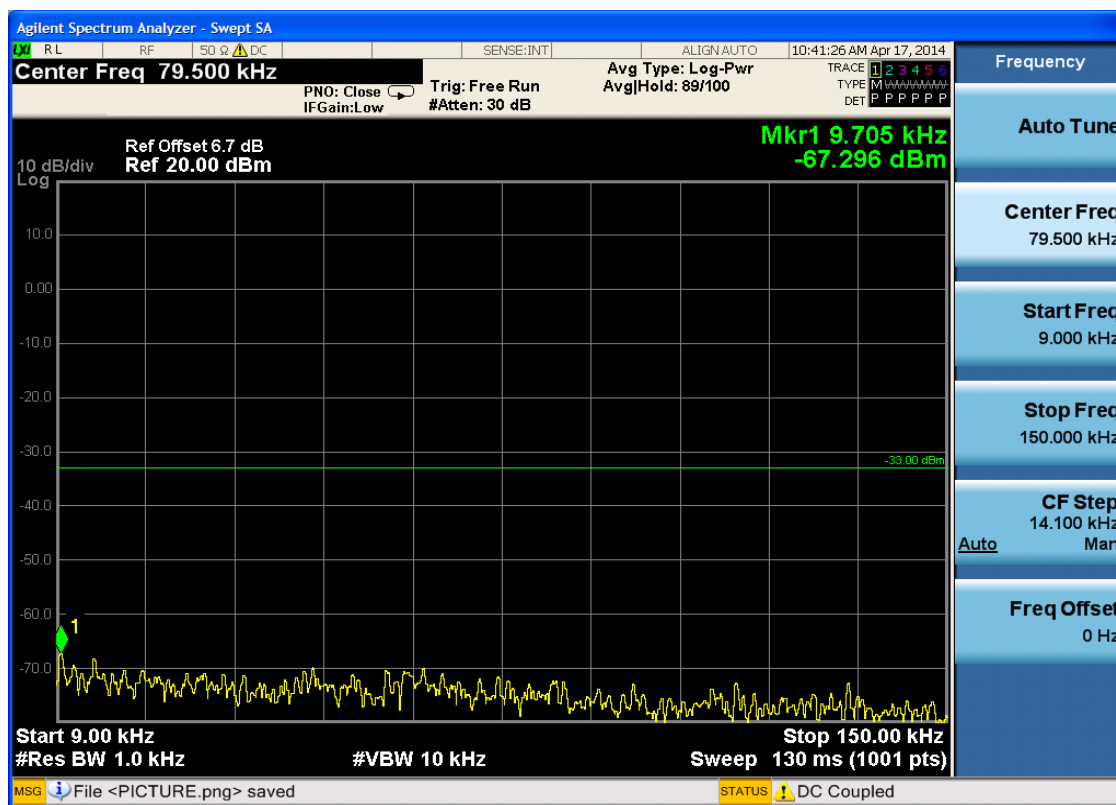


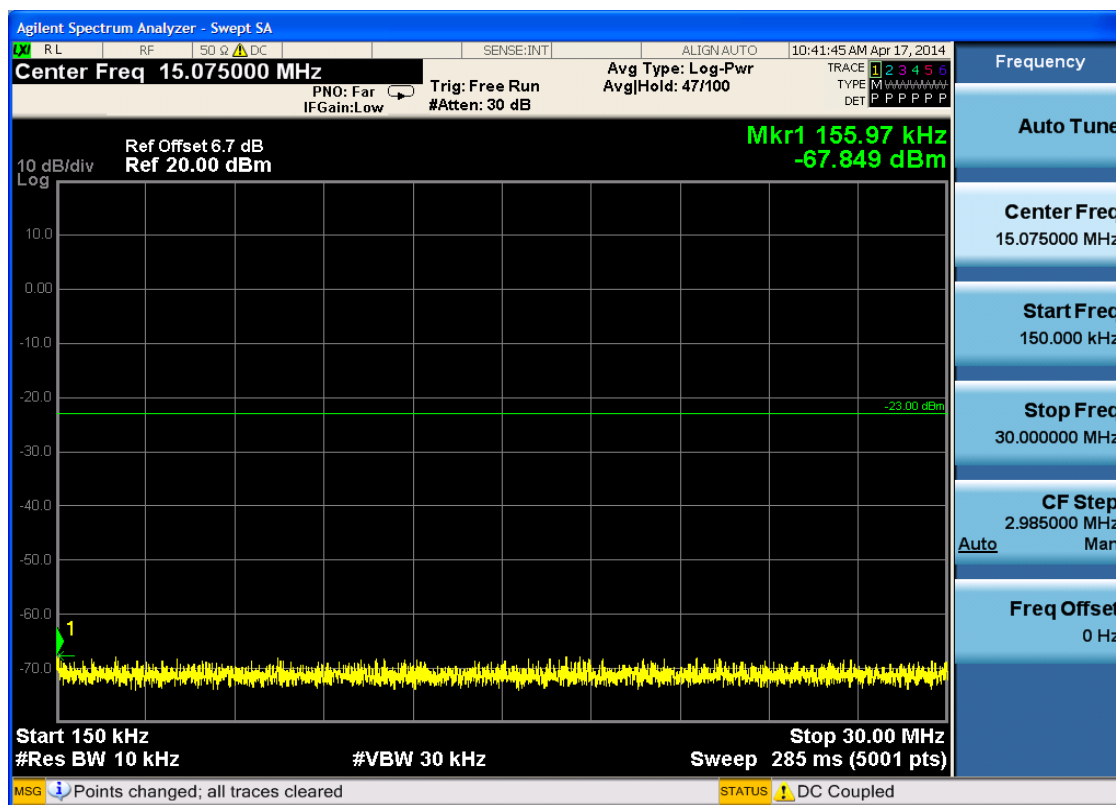


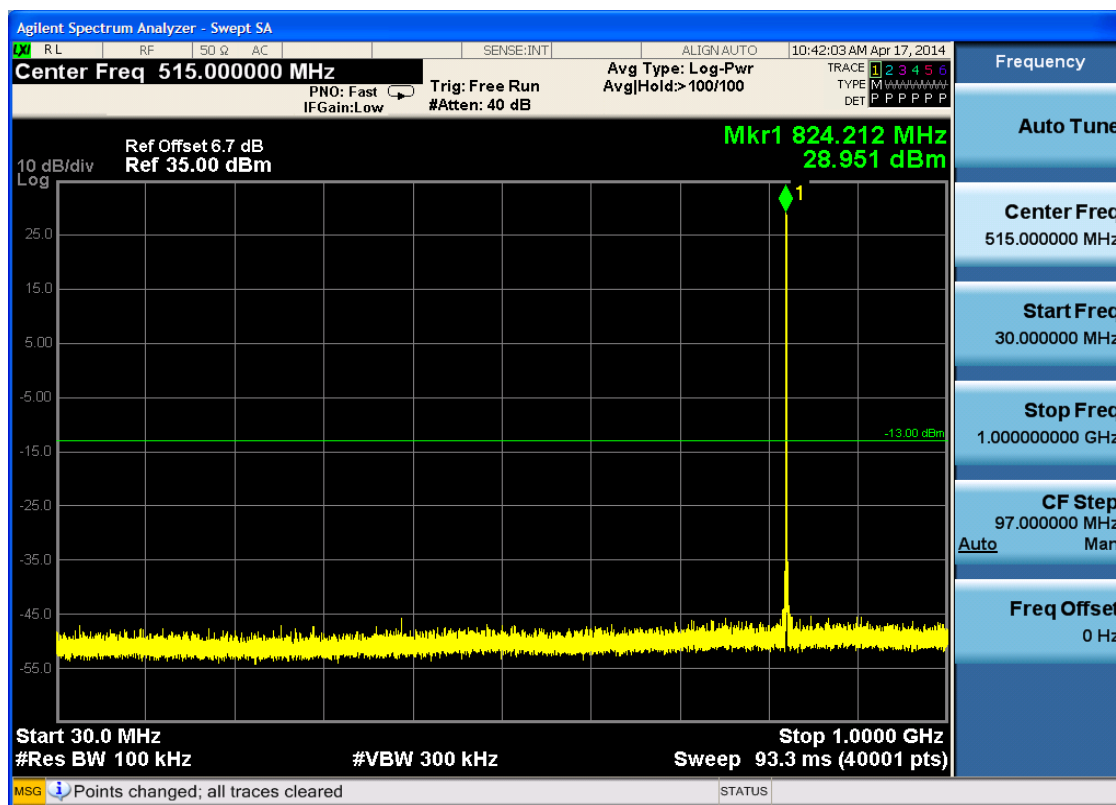


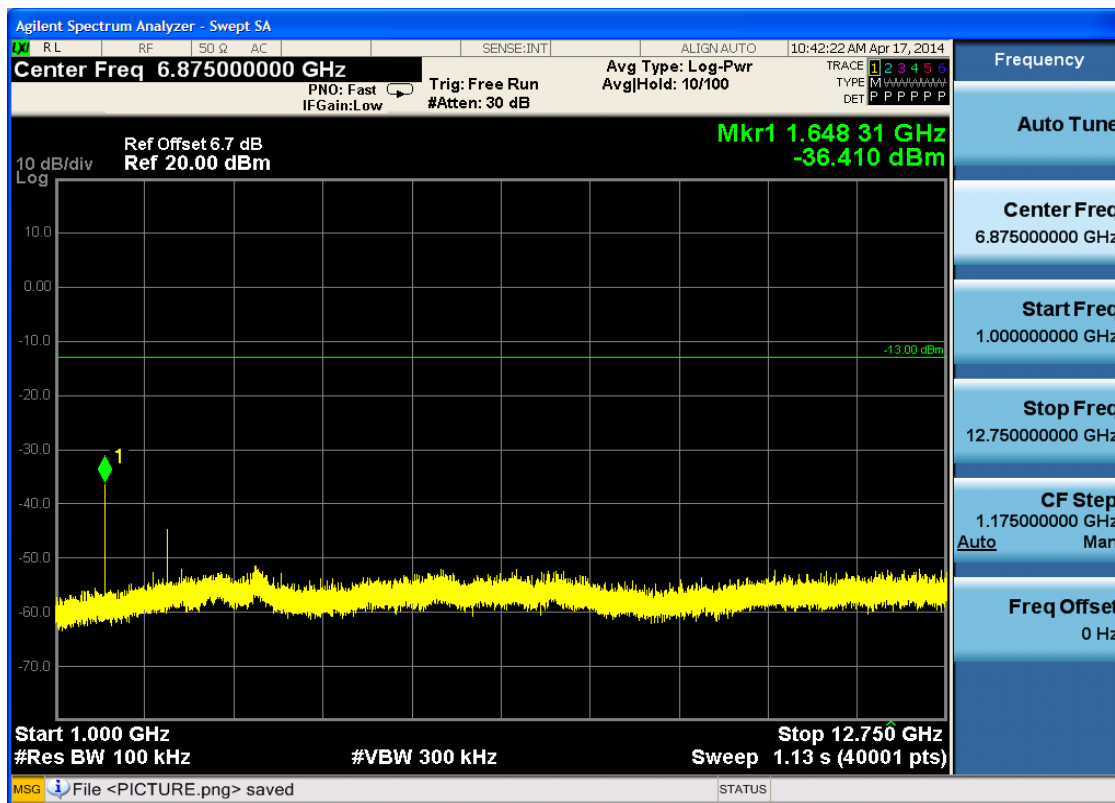
6.1.1.2 Test Mode = GSM/TM2

6.1.1.2.1 Test Channel = LCH











Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω Δ DC SENSE:INT ALIGN:AUTO 10:42:42AM Apr 17, 2014

Center Freq 79.500 kHz

PNO: Close Trig: Free Run Avg Type: Log-Pwr Avg|Hold: 89/100

IFGain:Low #Atten: 30 dB

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

Ref Offset 6.7 dB Mkr1 18.165 kHz
Ref 20.00 dBm -68.138 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

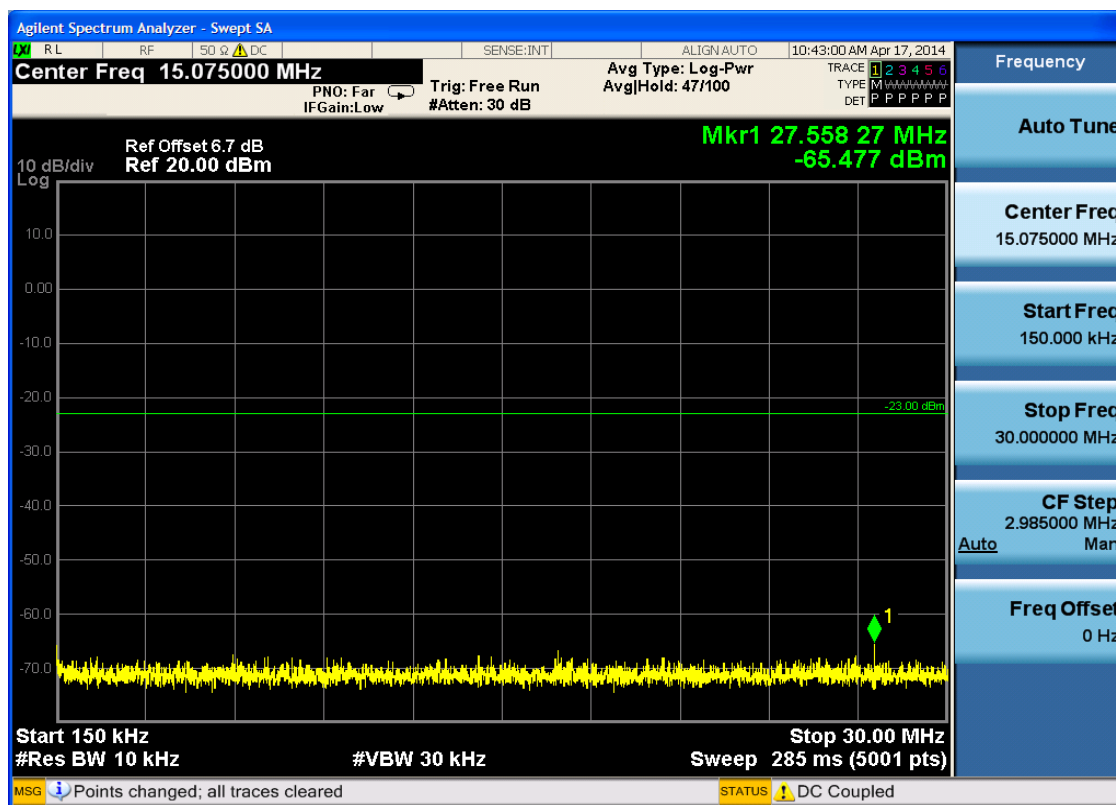
Start Freq 9.000 kHz

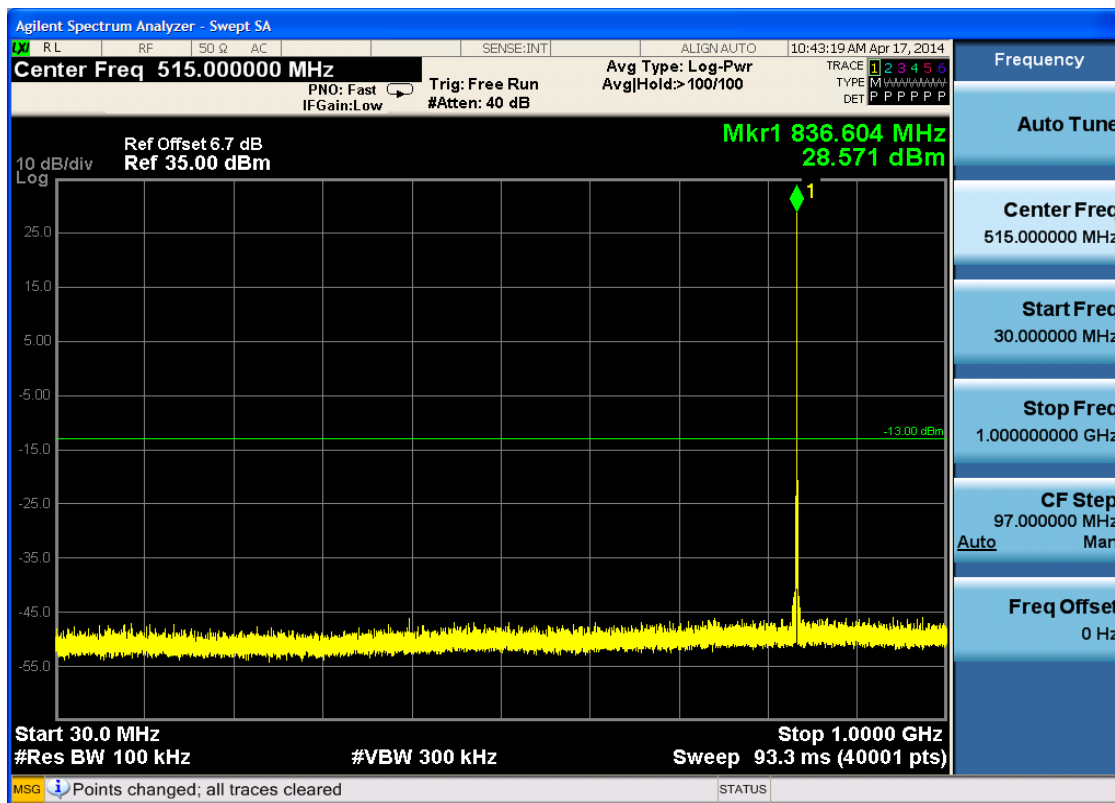
Stop Freq 150.000 kHz

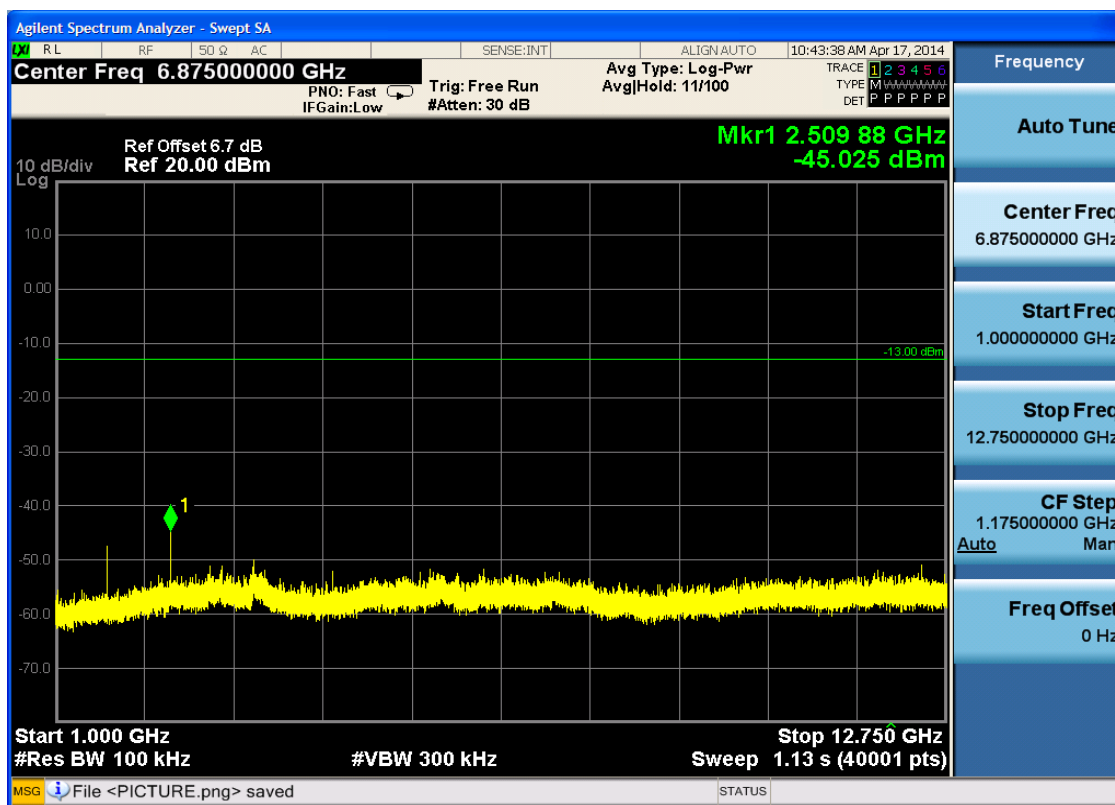
CF Step 14.100 kHz

Auto Man

Freq Offset 0 Hz









Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω DC SENSE:INT ALIGN AUTO 10:43:57 AM Apr 17, 2014

Center Freq 79.500 kHz

PNO: Close Trig: Free Run Avg Type: Log-Pwr
IFGain:Low #Atten: 30 dB AvgHold: 89/100

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

Frequency

Auto Tune

Center Freq 79.500 kHz

Start Freq 9.000 kHz

Stop Freq 150.000 kHz

CF Step 14.100 kHz
Man

Auto

Freq Offset 0 Hz

10 dB/div
Log

Ref Offset 6.7 dB
Ref 20.00 dBm

Mkr1 11.397 kHz
-65.723 dBm

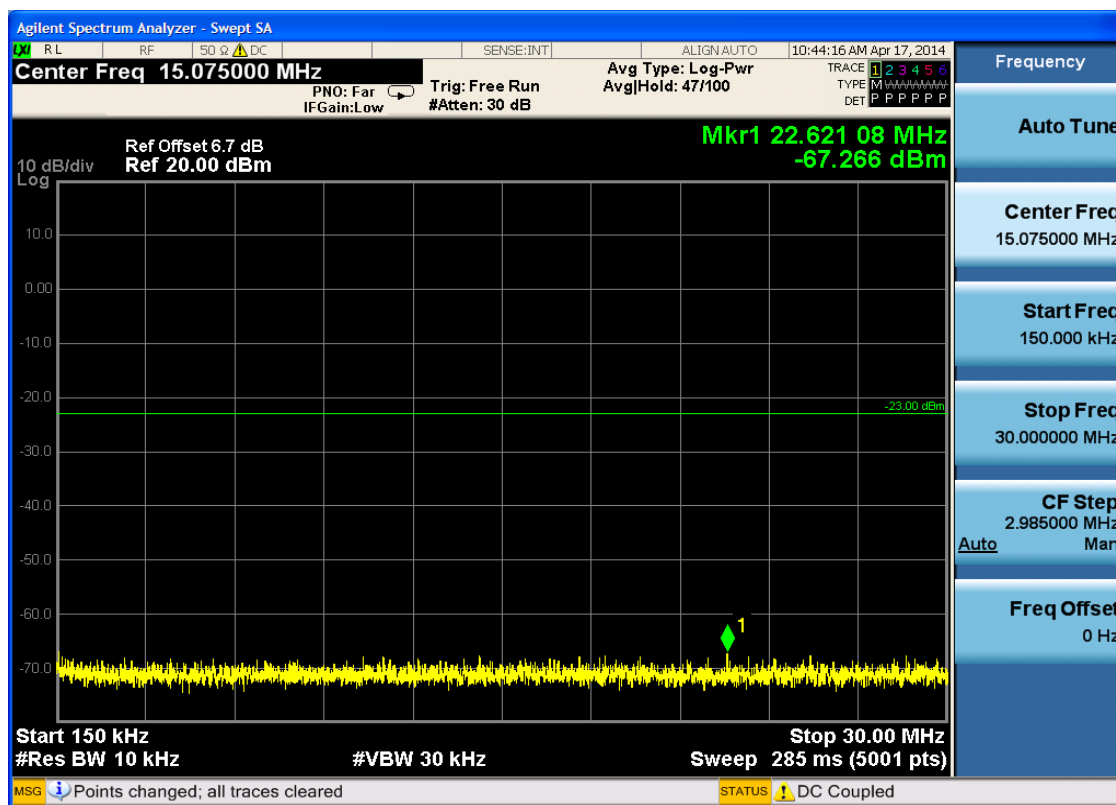
-33.00 dBm

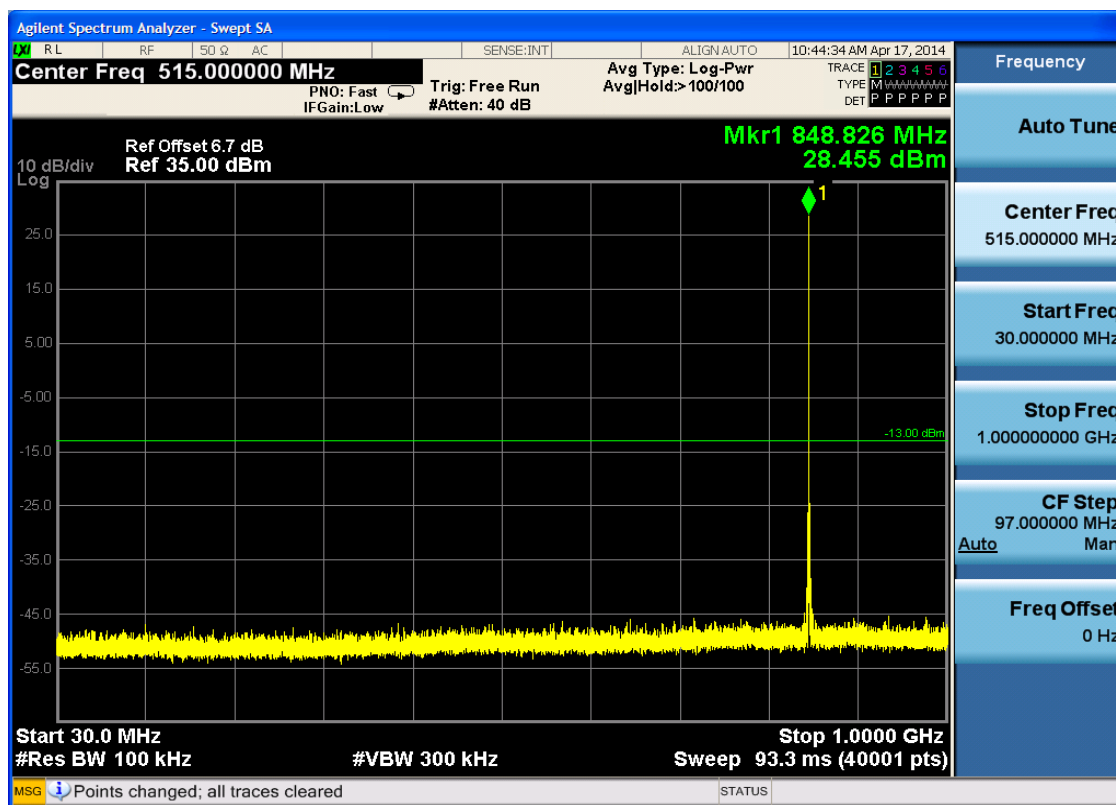
1

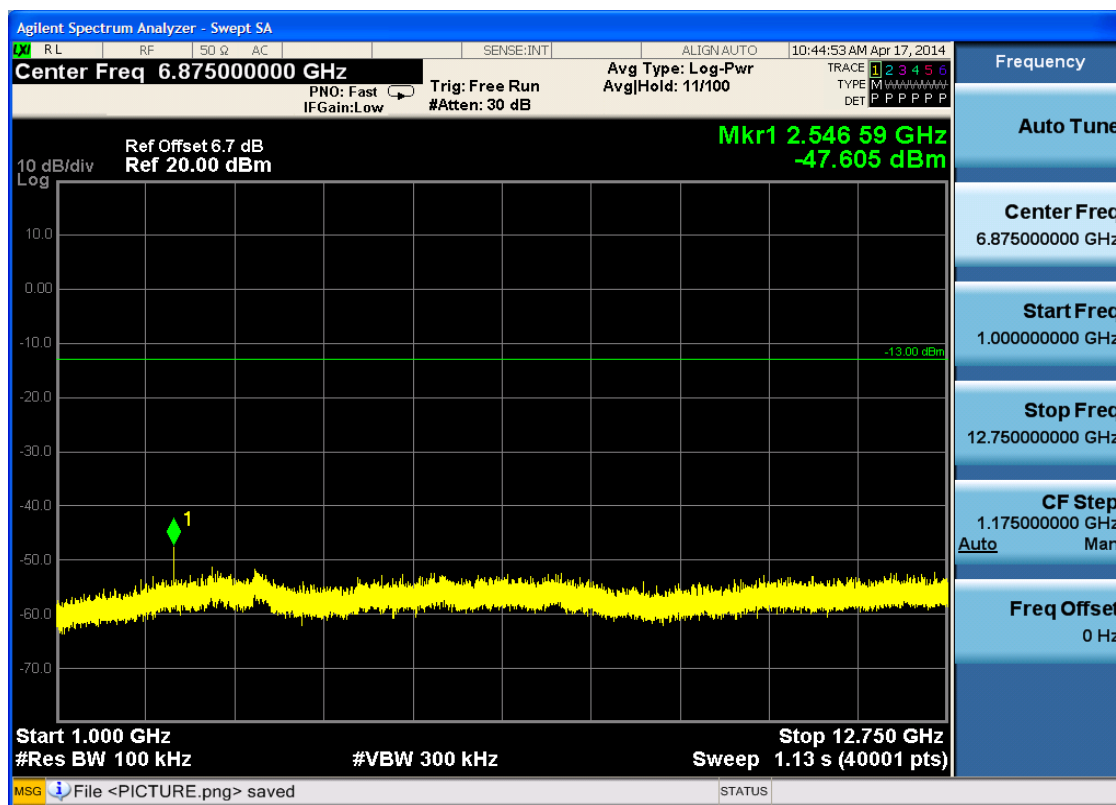
Start 9.00 kHz Stop 150.00 kHz
#Res BW 1.0 kHz #VBW 10 kHz Sweep 130 ms (1001 pts)

MSG Points changed; all traces cleared

STATUS DC Coupled







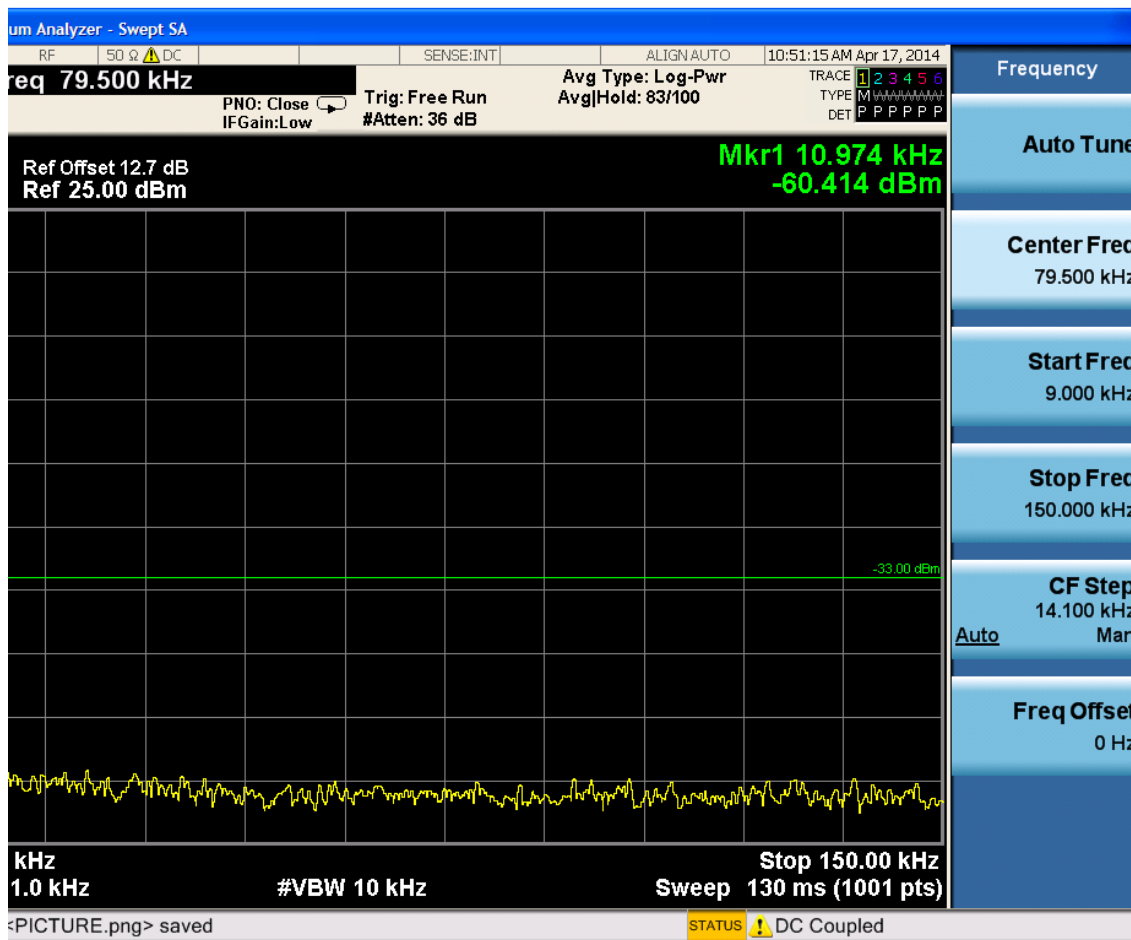


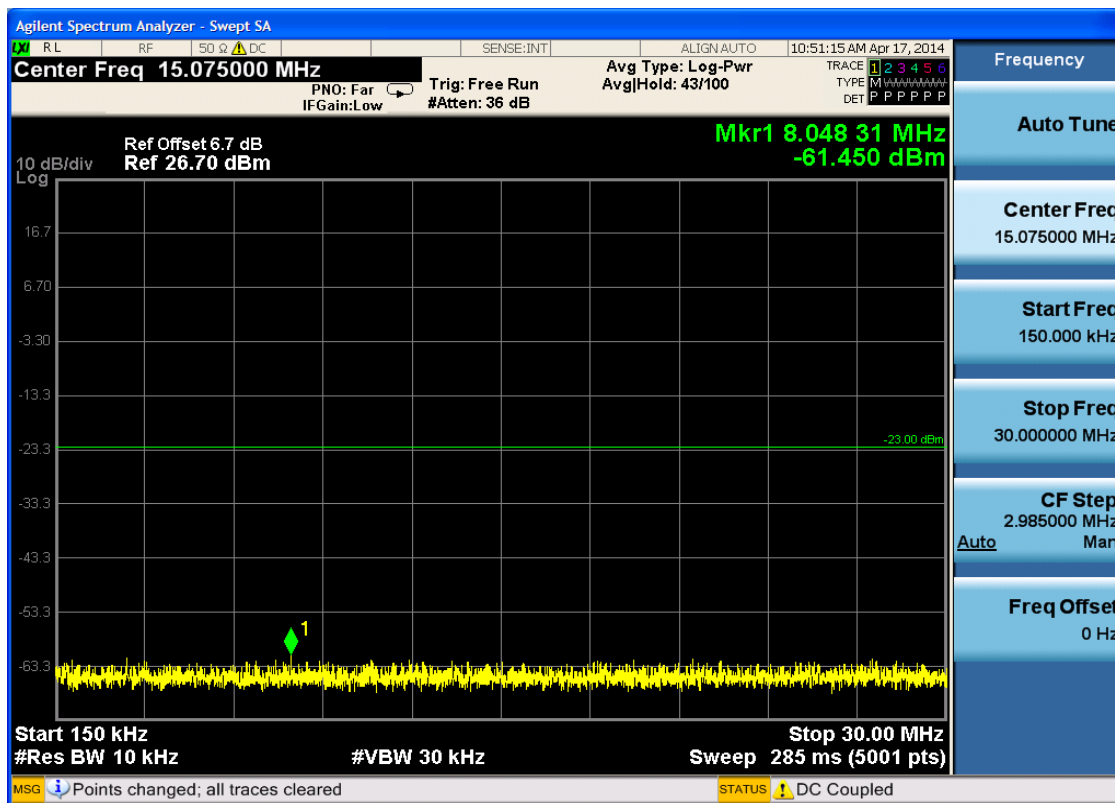
6.2 For UMTS

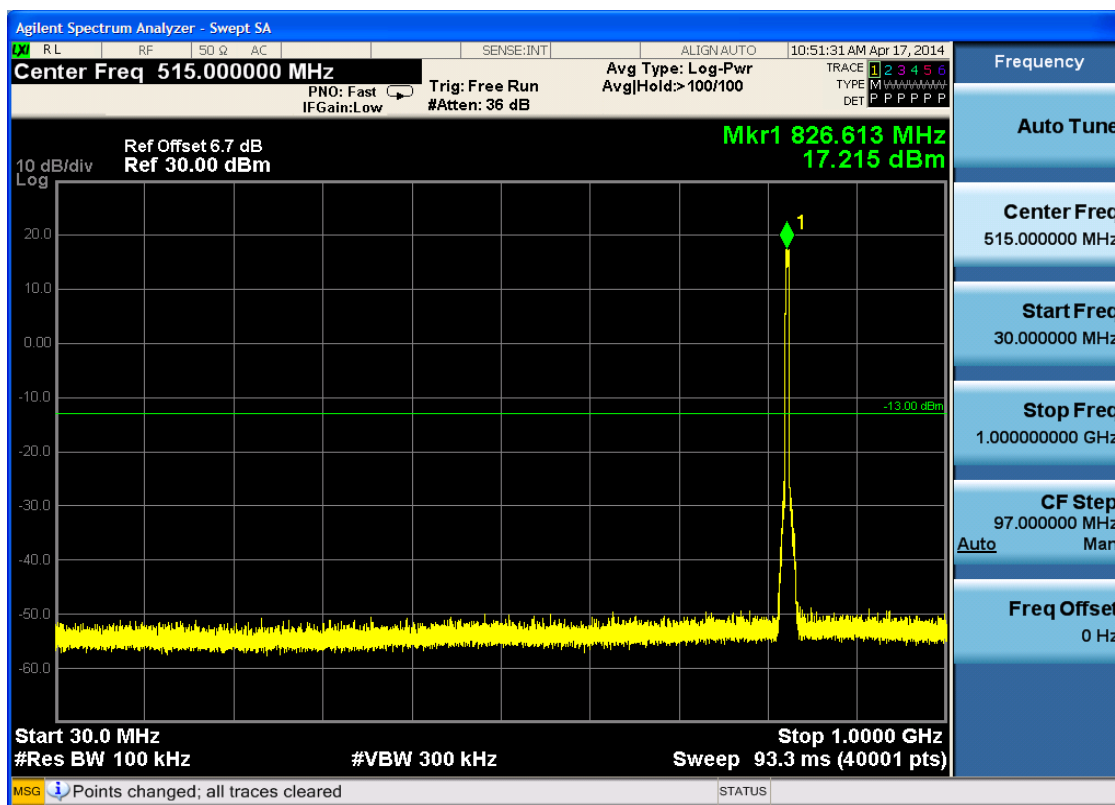
6.2.1 Test Band = WCDMA850

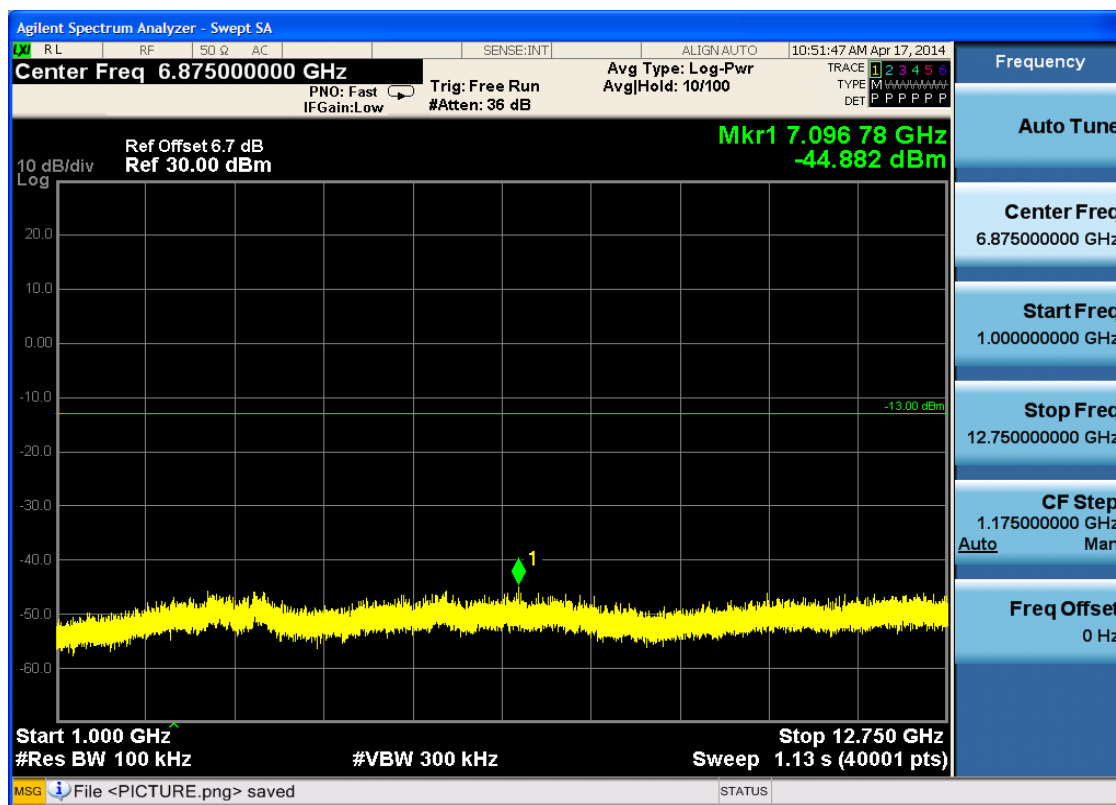
6.2.1.1 Test Mode = UMTS/TM1

6.2.1.1.1 Test Channel = LCH



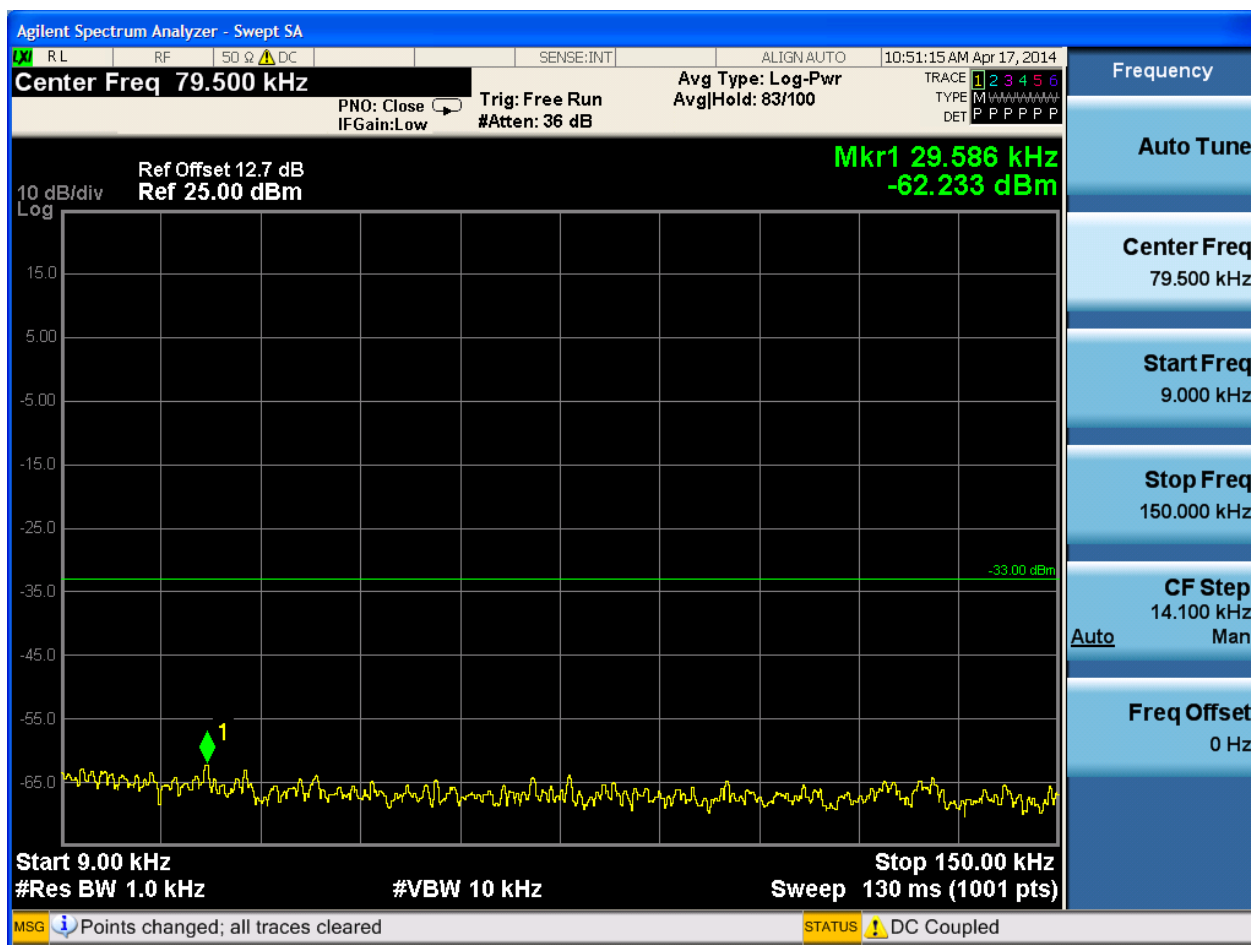


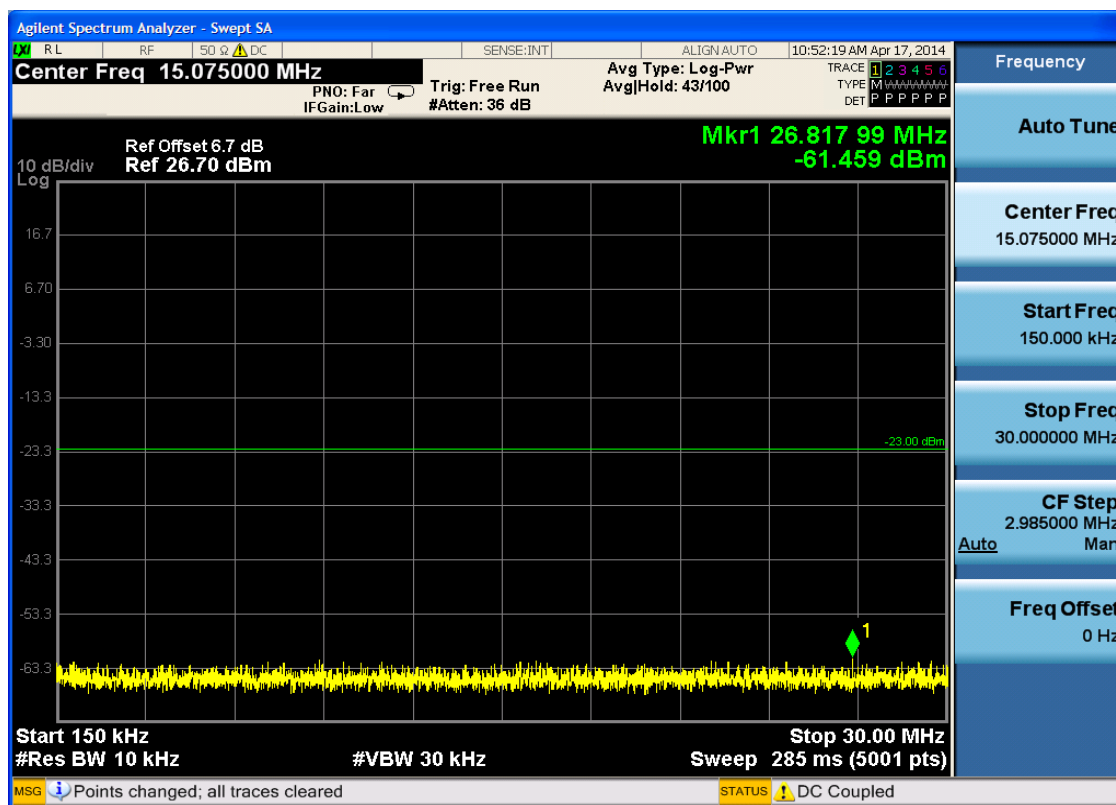


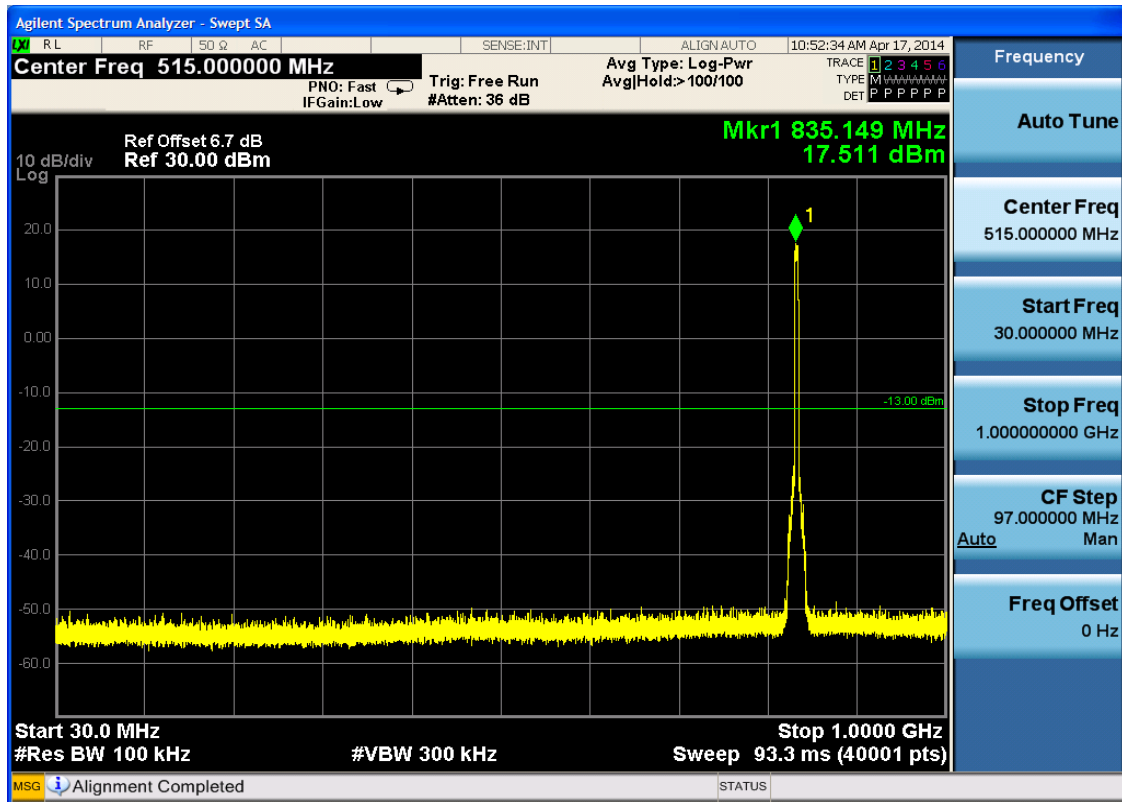


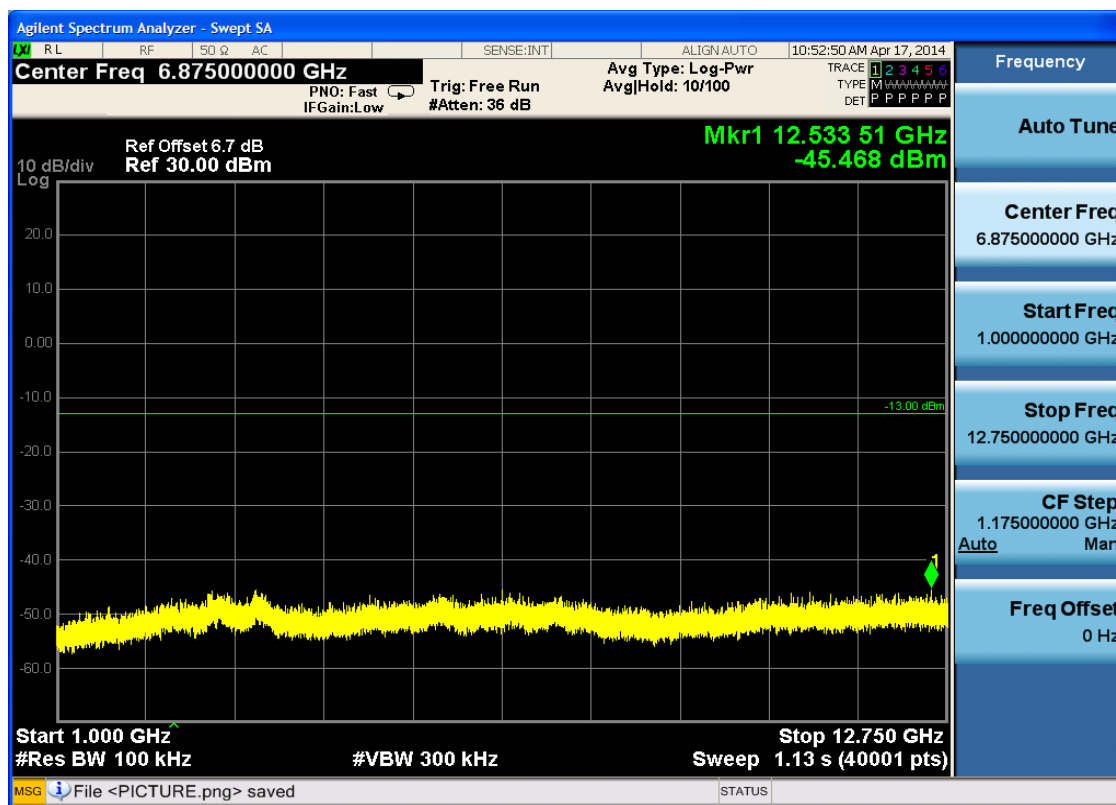


6.2.1.1.2 Test Channel = MCH











Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω DC SENSE:INT ALIGN: AUTO 10:51:15 AM Apr 17, 2014

Center Freq 79.500 kHz Avg Type: Log-Pwr Avg/Hold: 83/100

PNO: Close Trig: Free Run #Atten: 36 dB

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

Ref Offset 12.7 dB
Ref 25.00 dBm

Mkr1 15.486 kHz
-62.081 dBm

10 dB/div
Log

-33.00 dBm

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

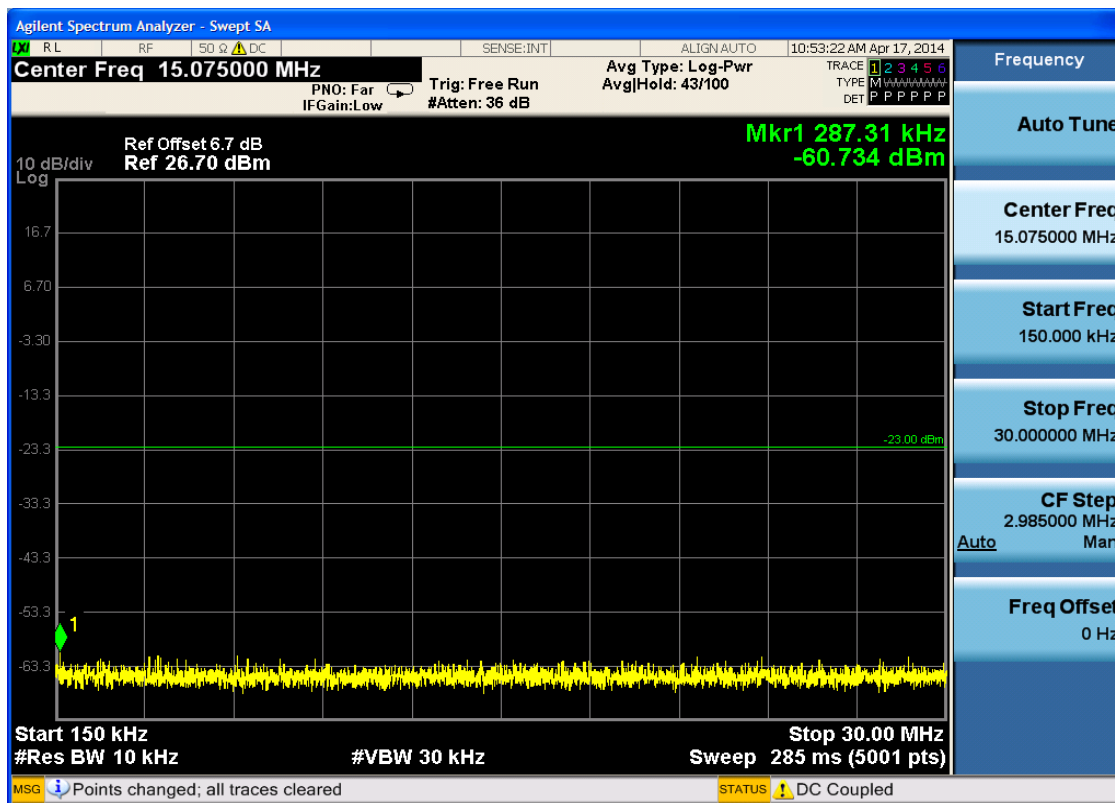
Center Freq 79.500 kHz

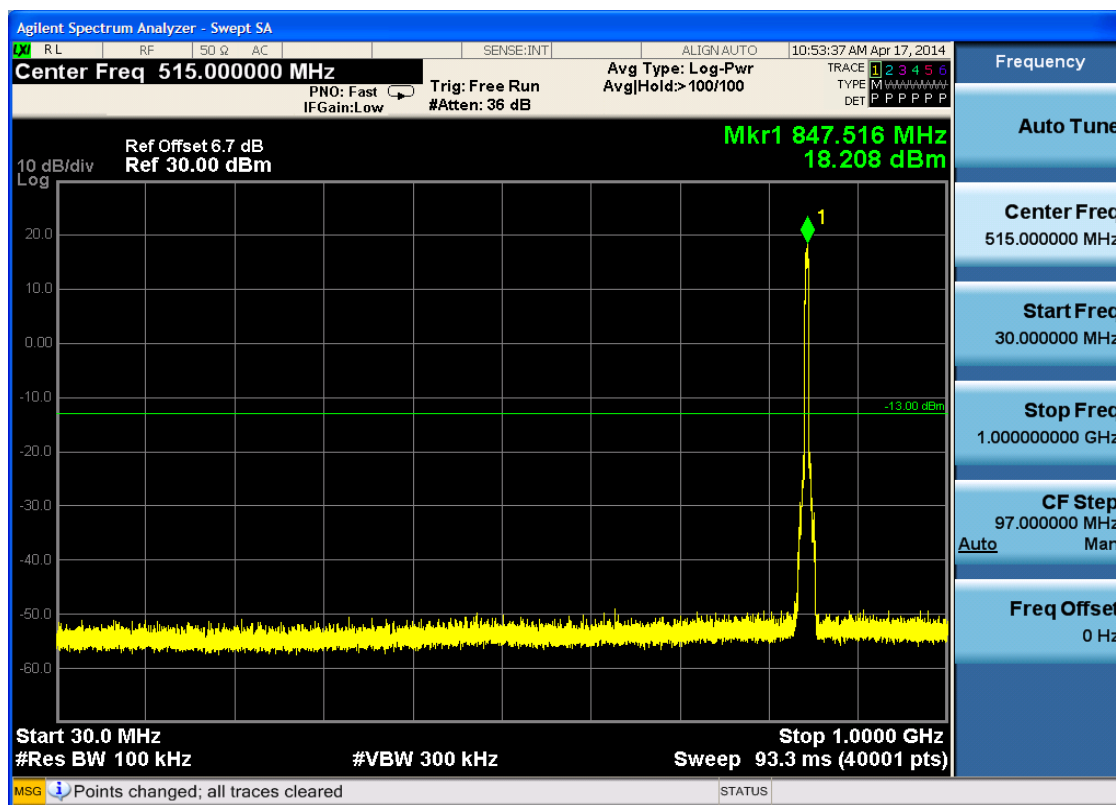
Start Freq 9.000 kHz

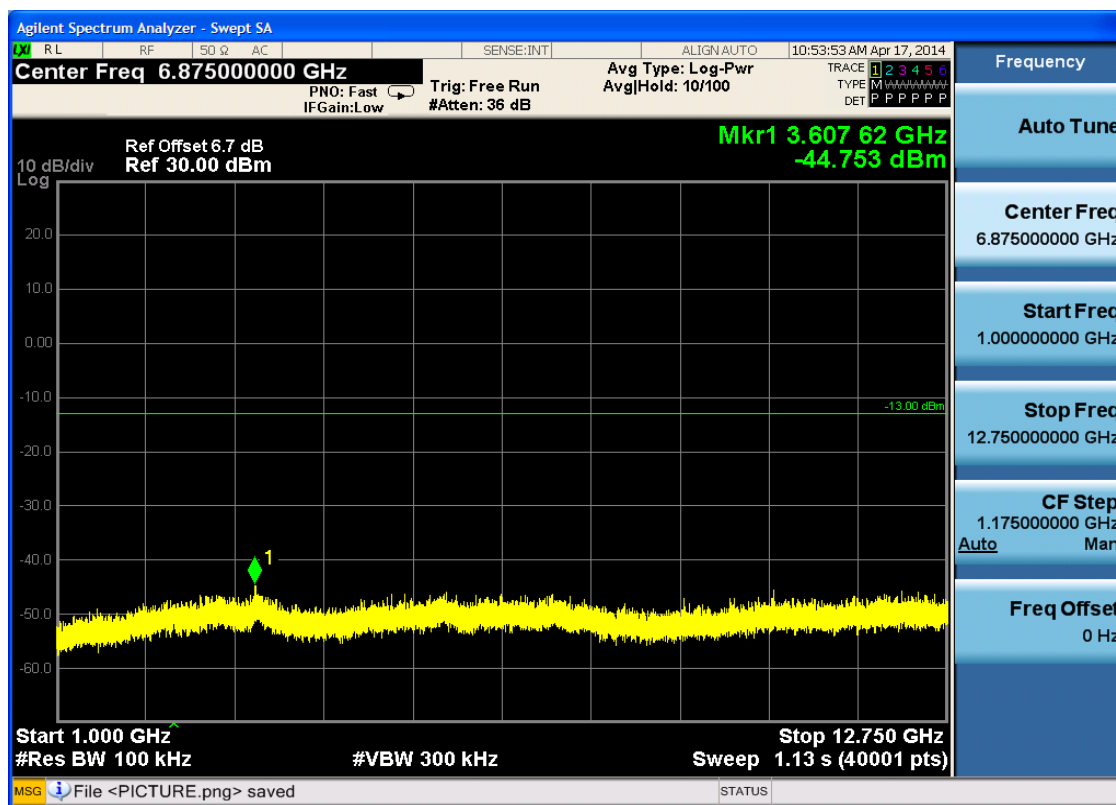
Stop Freq 150.000 kHz

CF Step 14.100 kHz
Man

Freq Offset 0 Hz





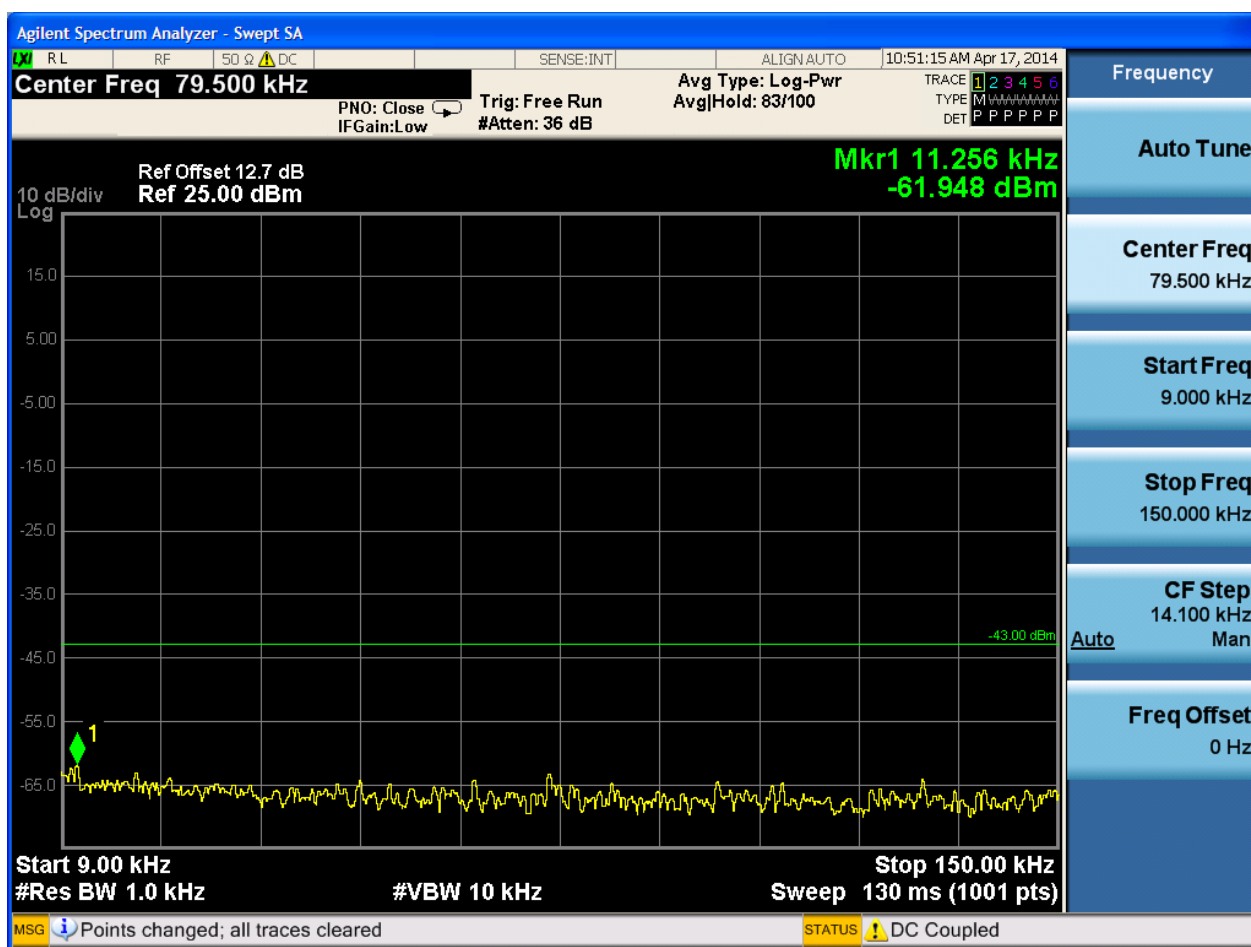


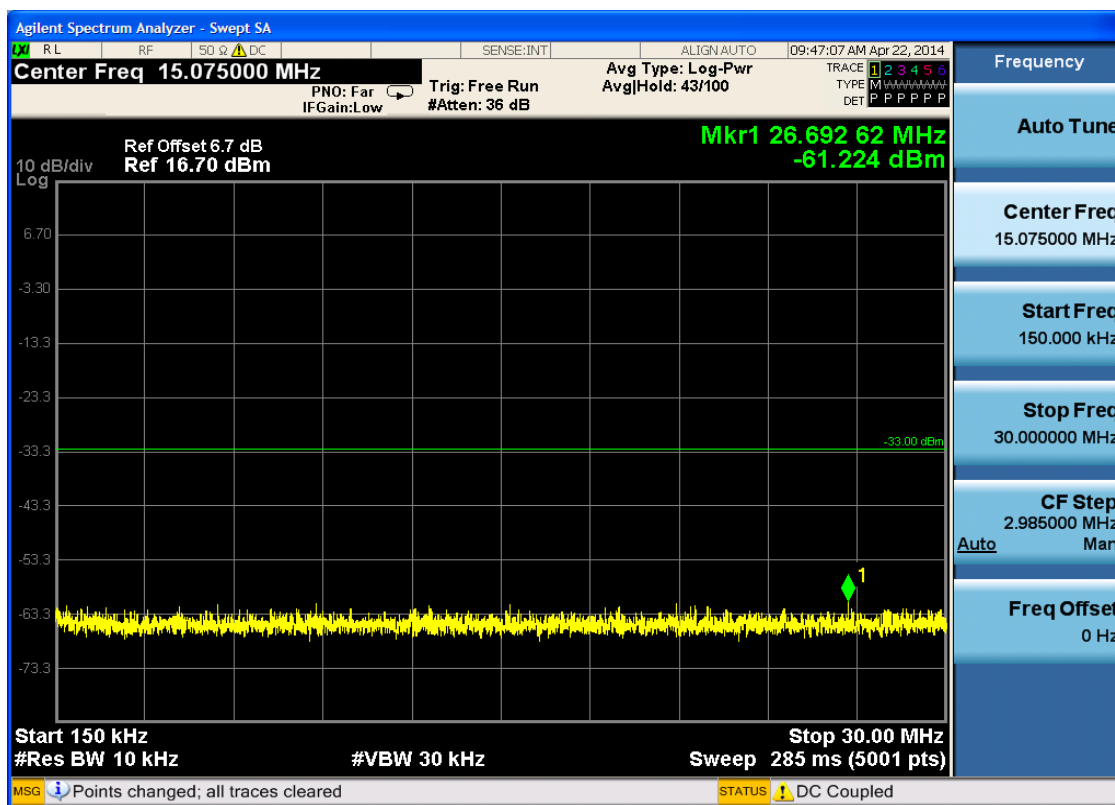


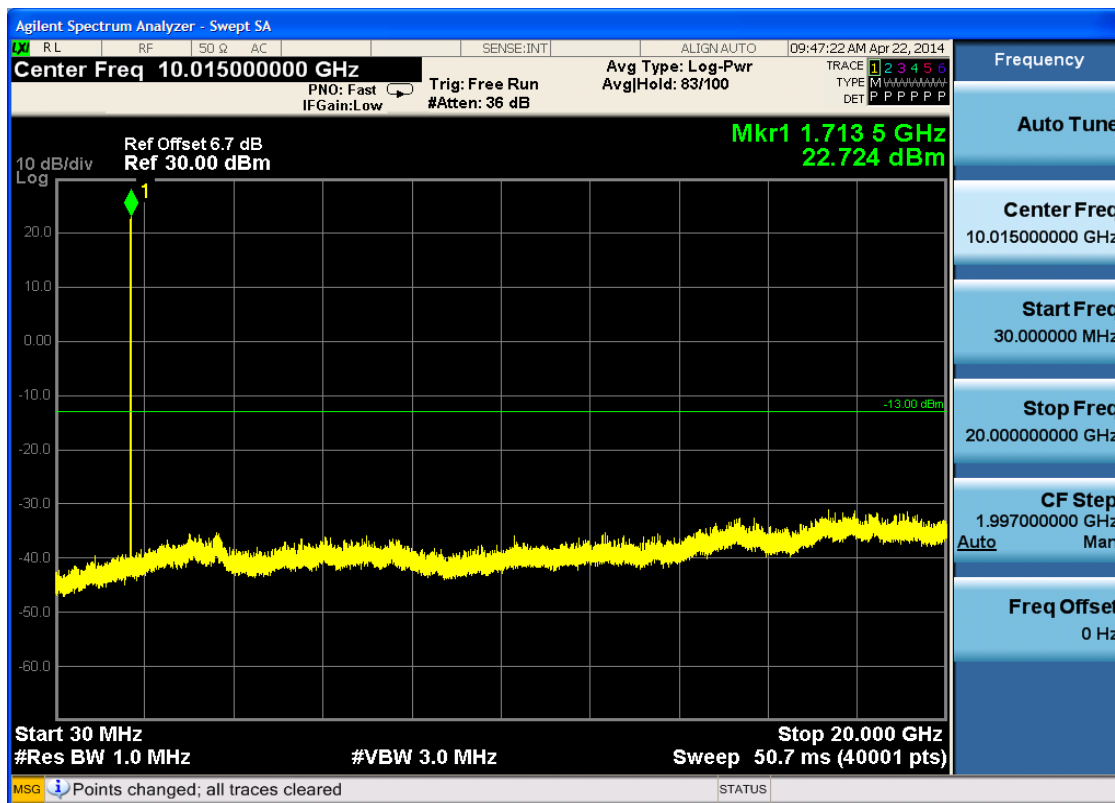
6.2.2 Test Band = WCDMA1700

6.2.2.1 Test Mode = UMTS/TM1

6.2.2.1.1 Test Channel = LCH

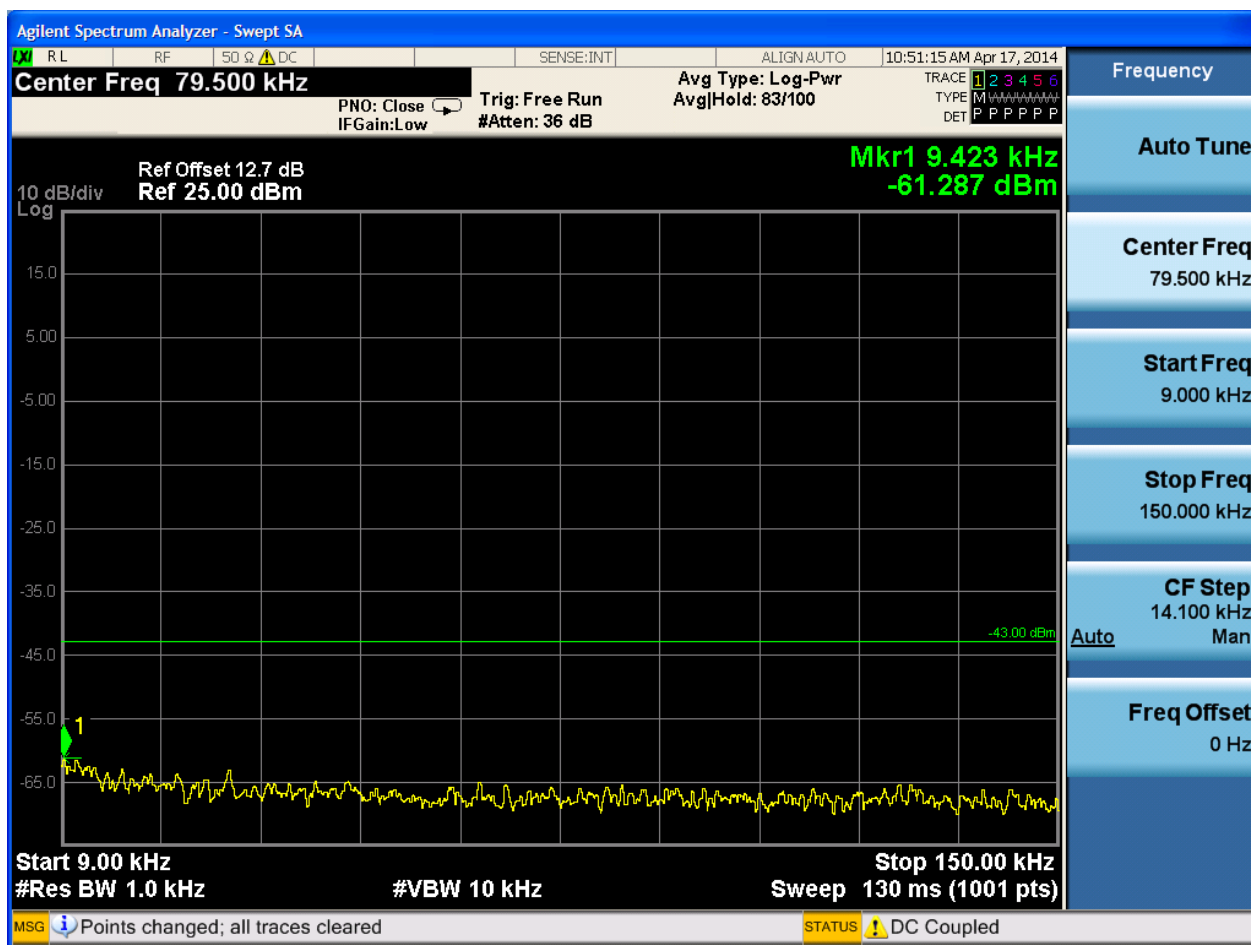


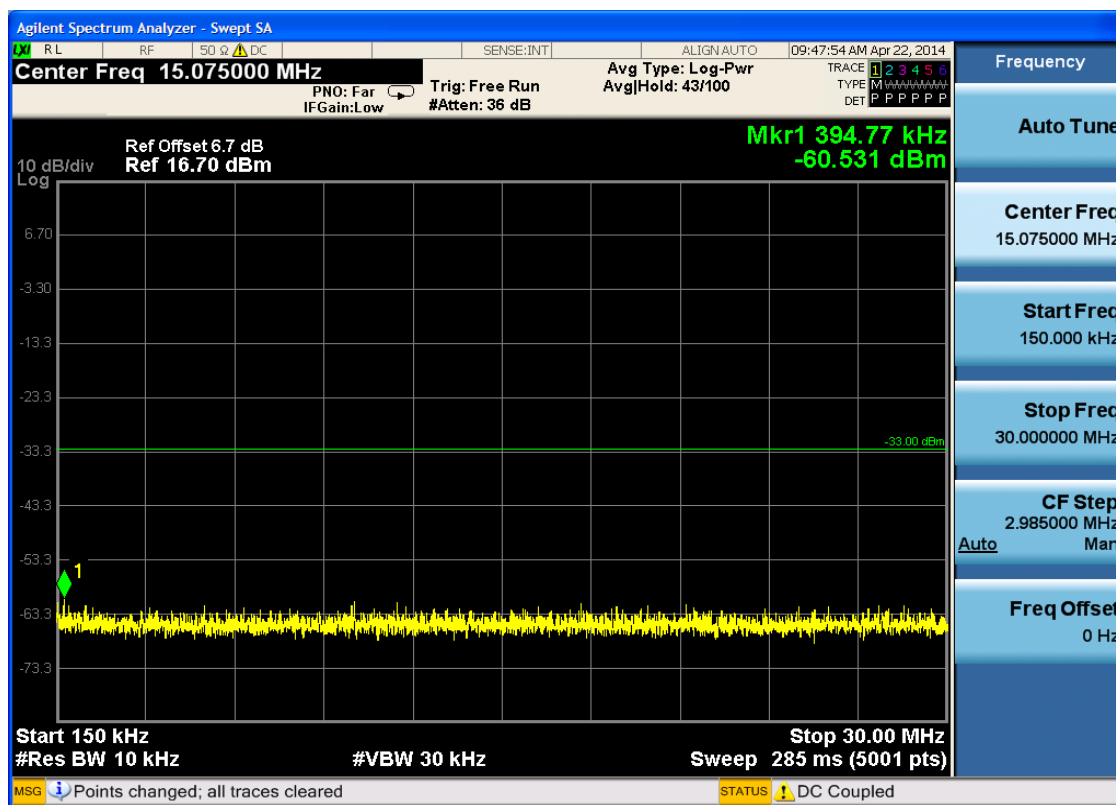


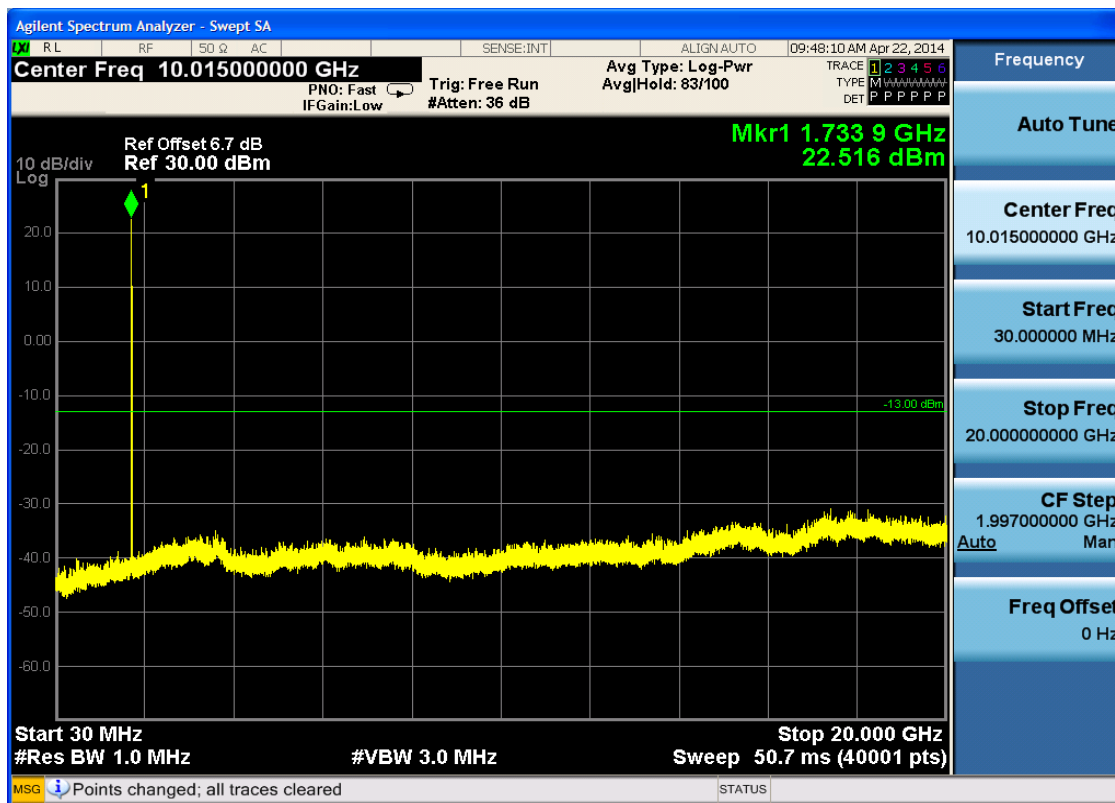




6.2.2.1.2 Test Channel = MCH

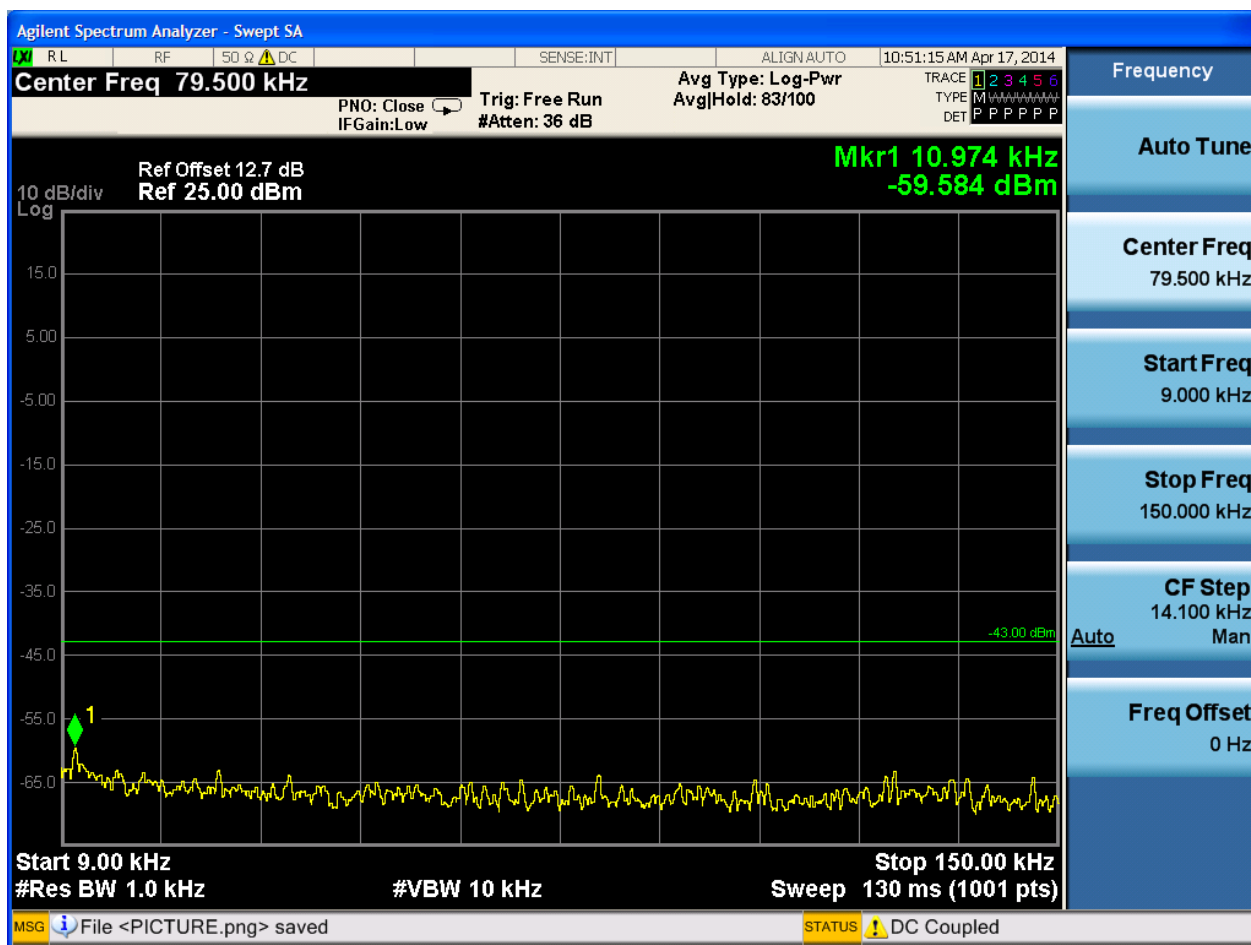


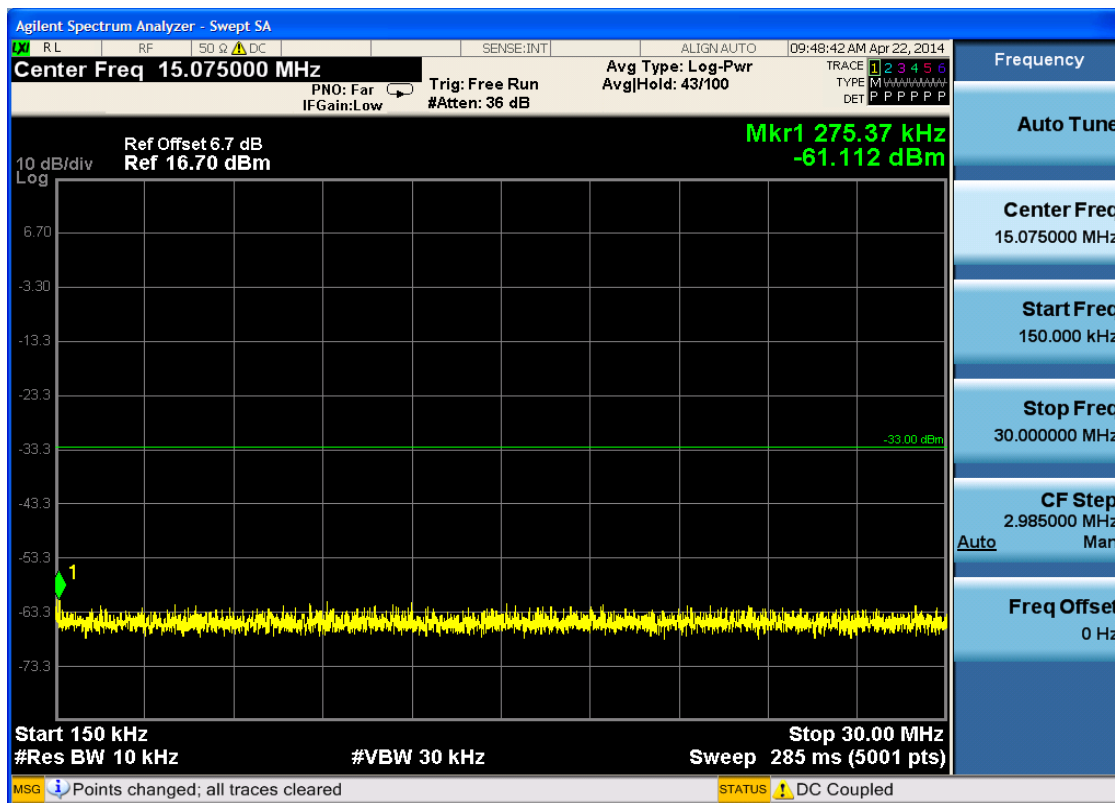


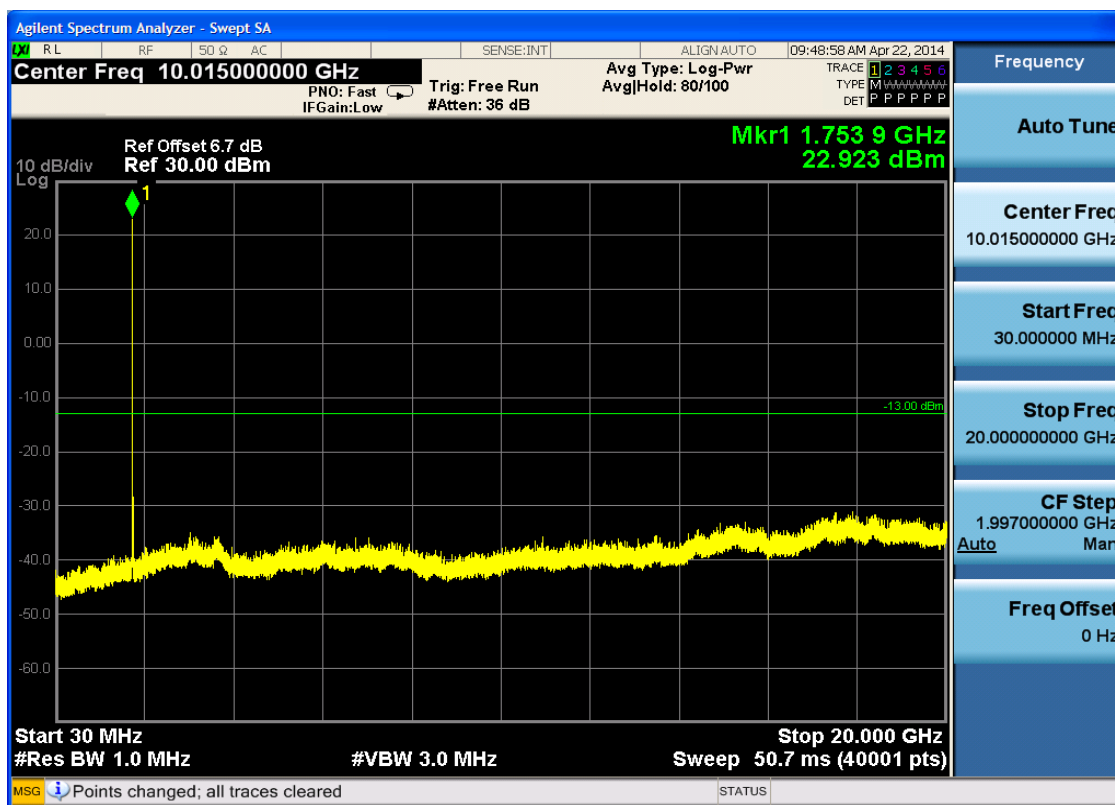




6.2.2.1.3 Test Channel = HCH







6.3 For LTE

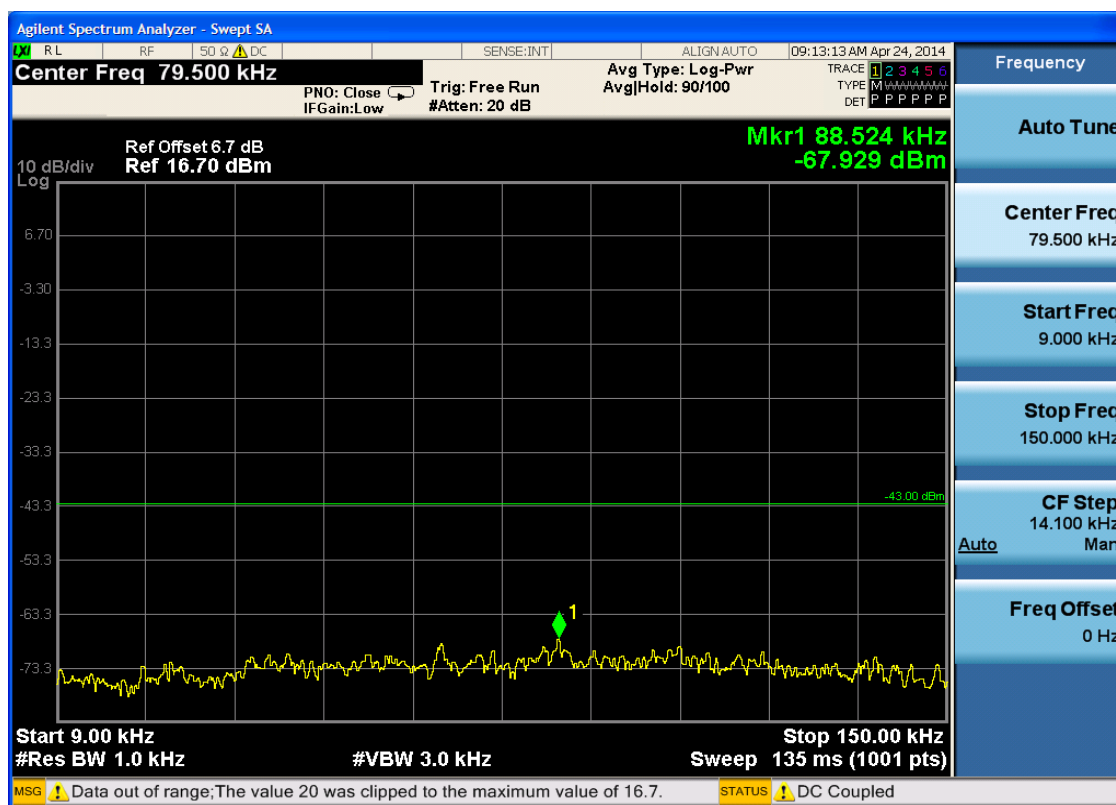
6.3.1 Test Band = BAND4

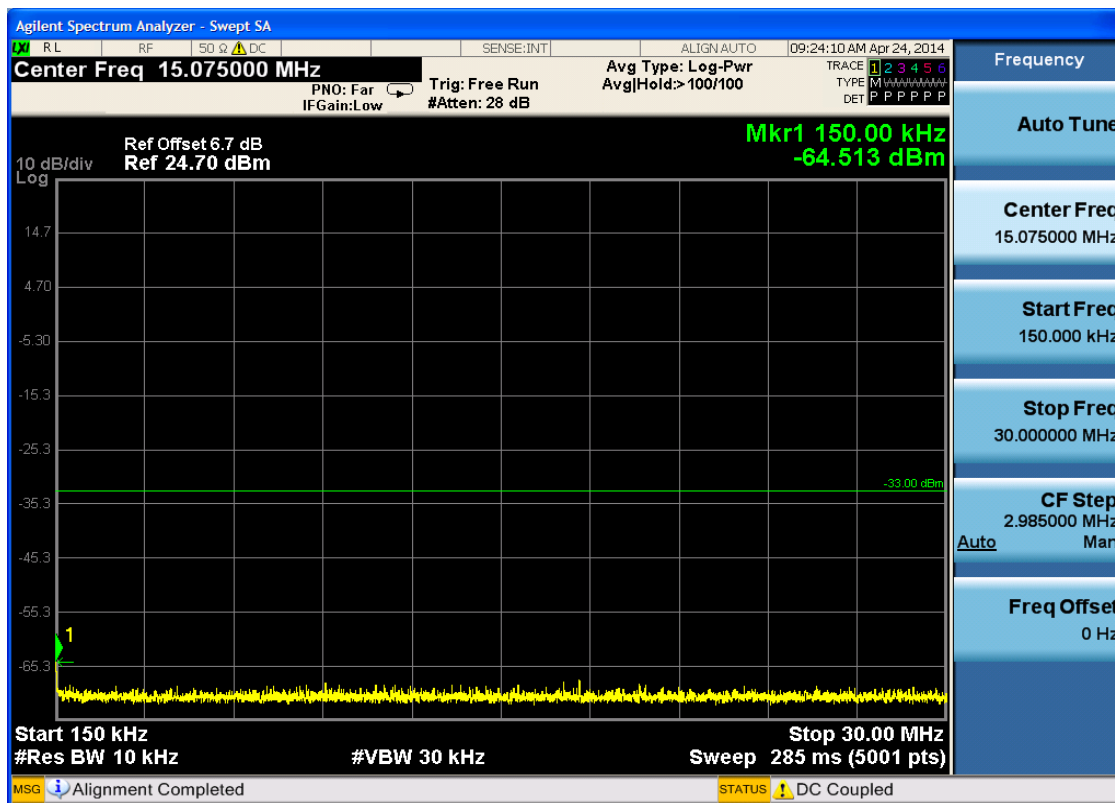
6.3.1.1 Test Mode = LTE/TM1

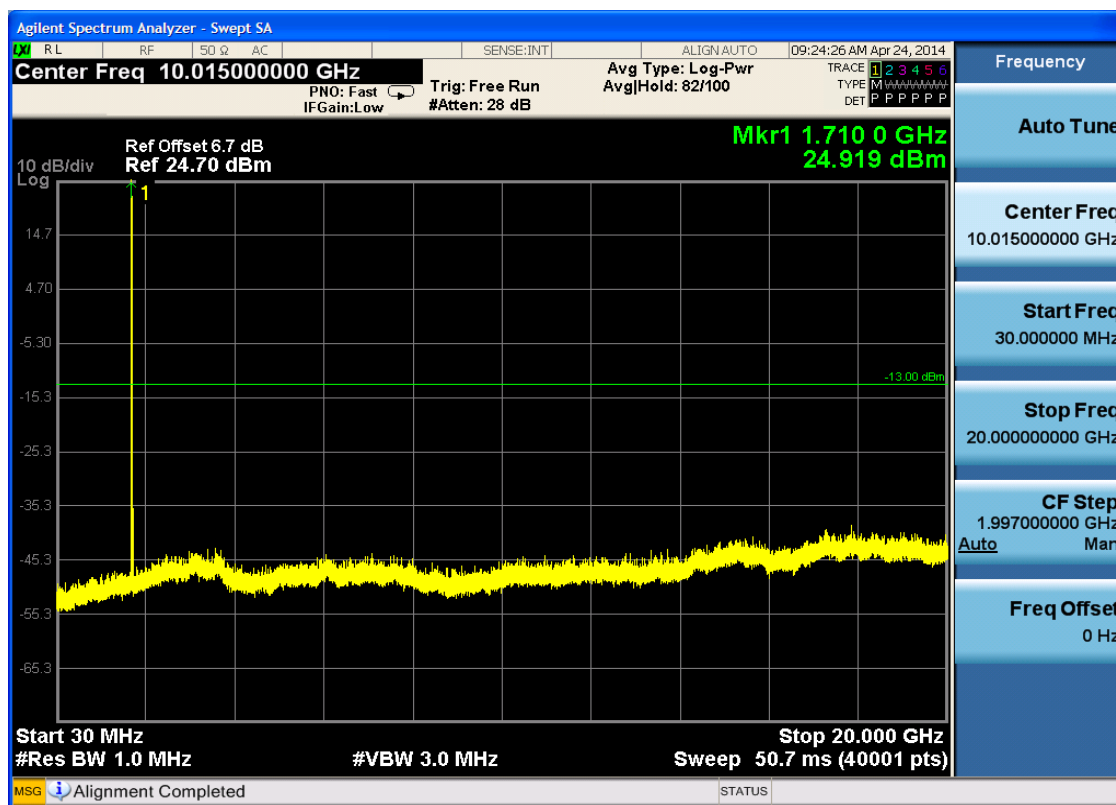
6.3.1.1.1 Test Bandwidth = 1.4

6.3.1.1.1.1 Test Channel = LCH

6.3.1.1.1.1.1 Test RB = RB1#0

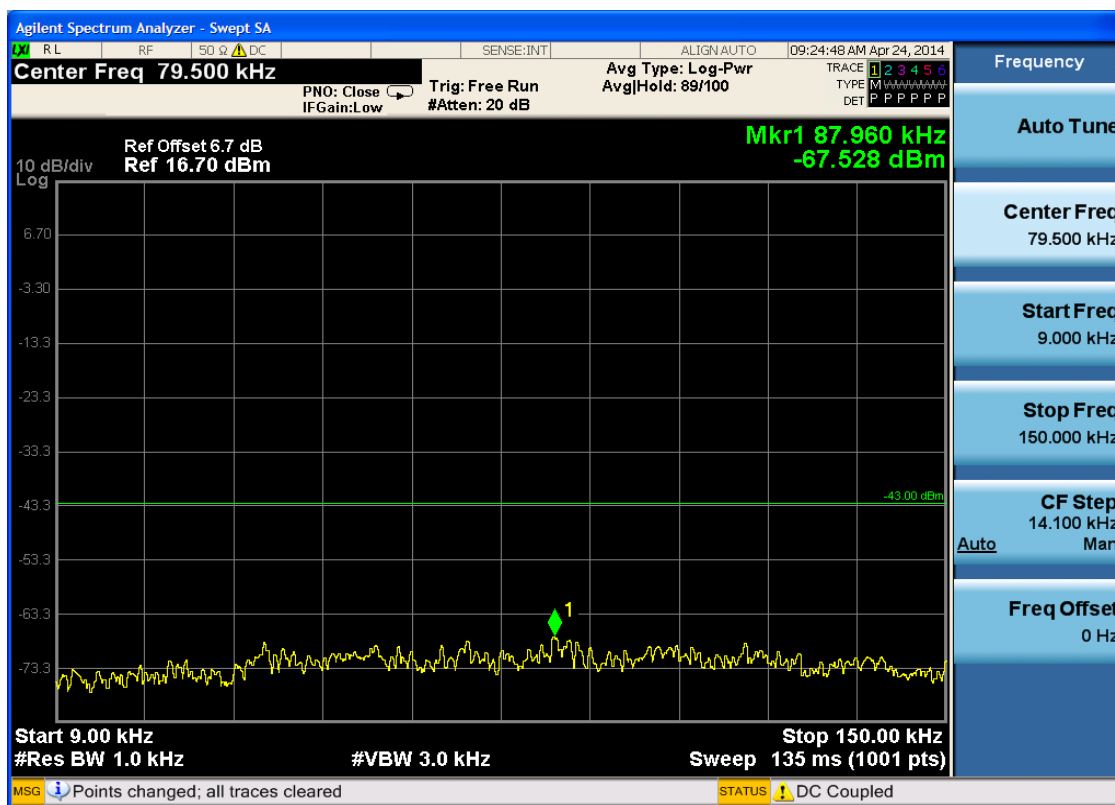


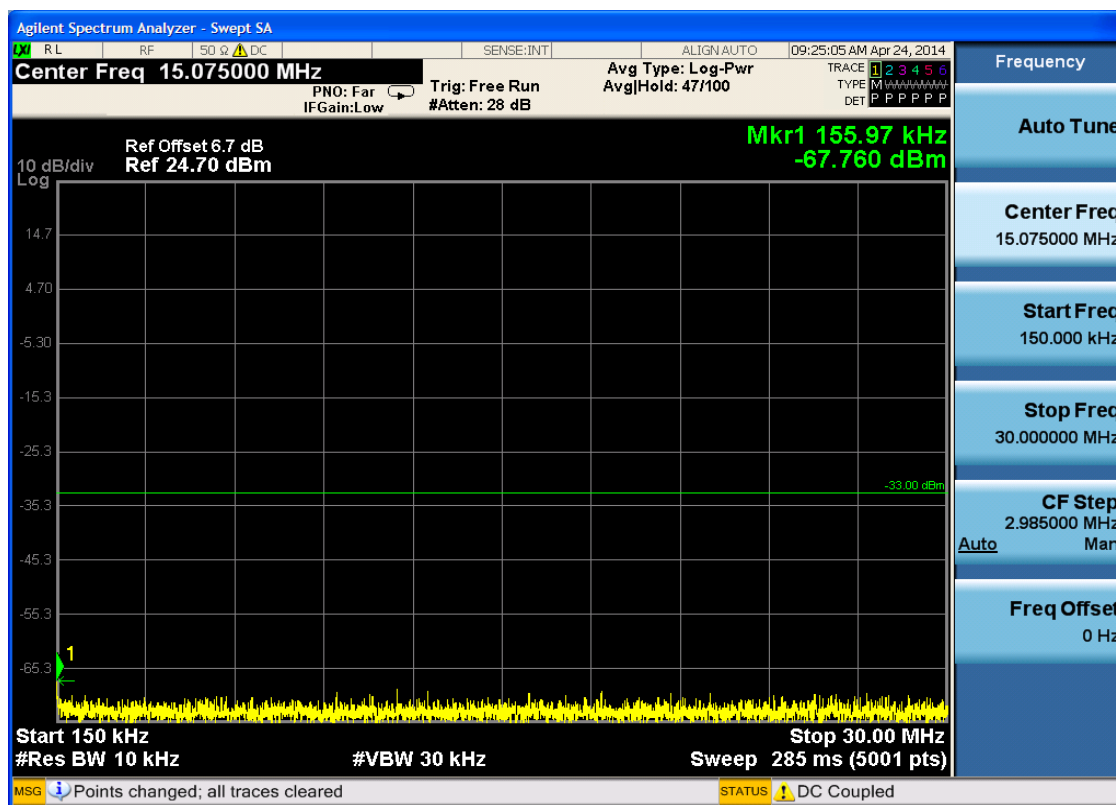


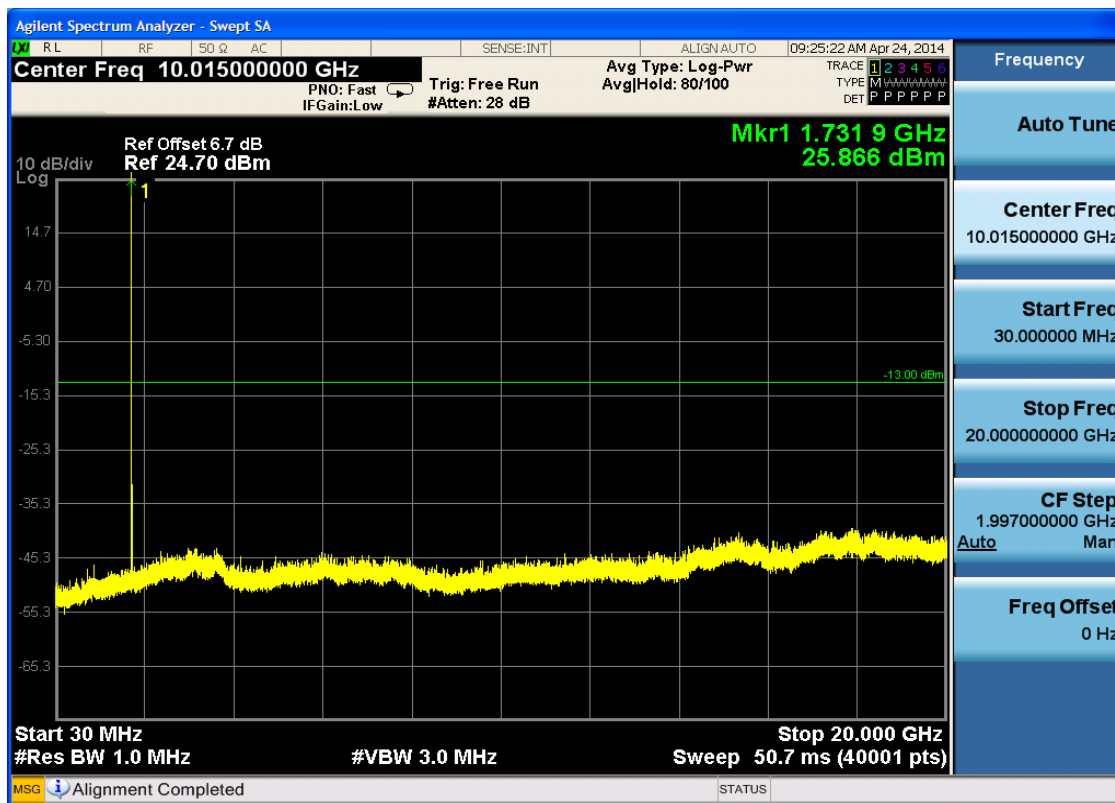


6.3.1.1.1.2 Test Channel = MCH

6.3.1.1.1.2.1 Test RB = RB1#0

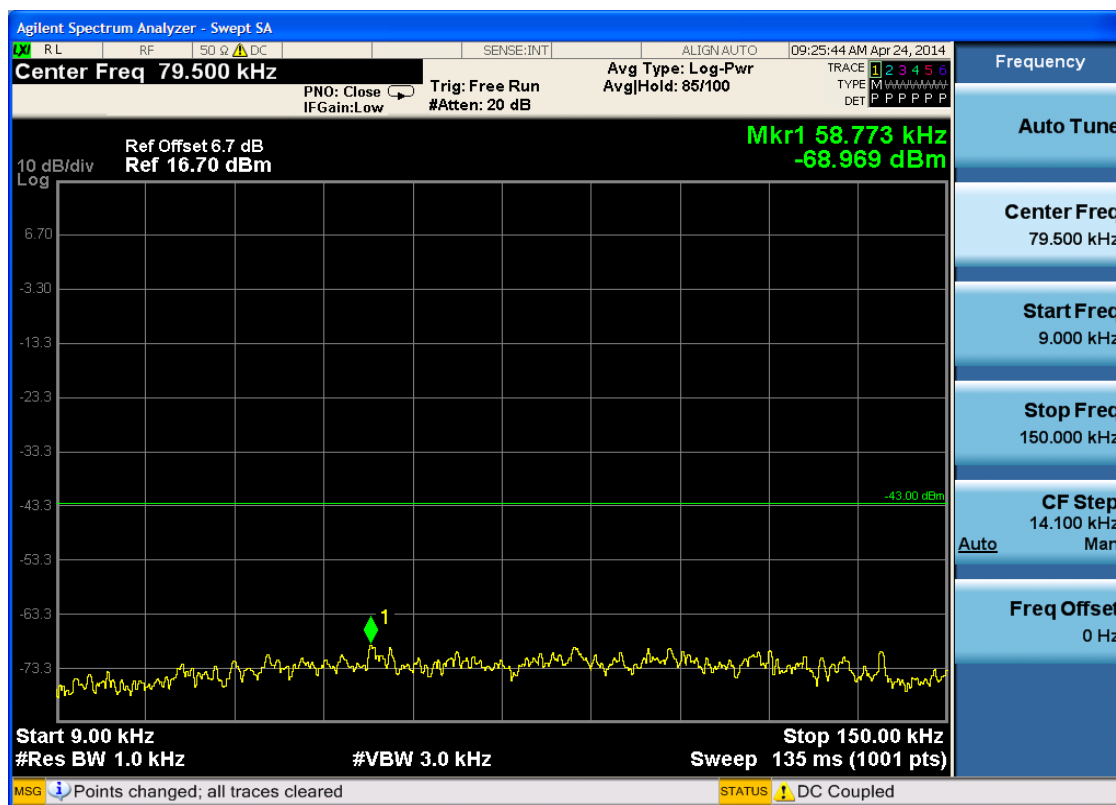


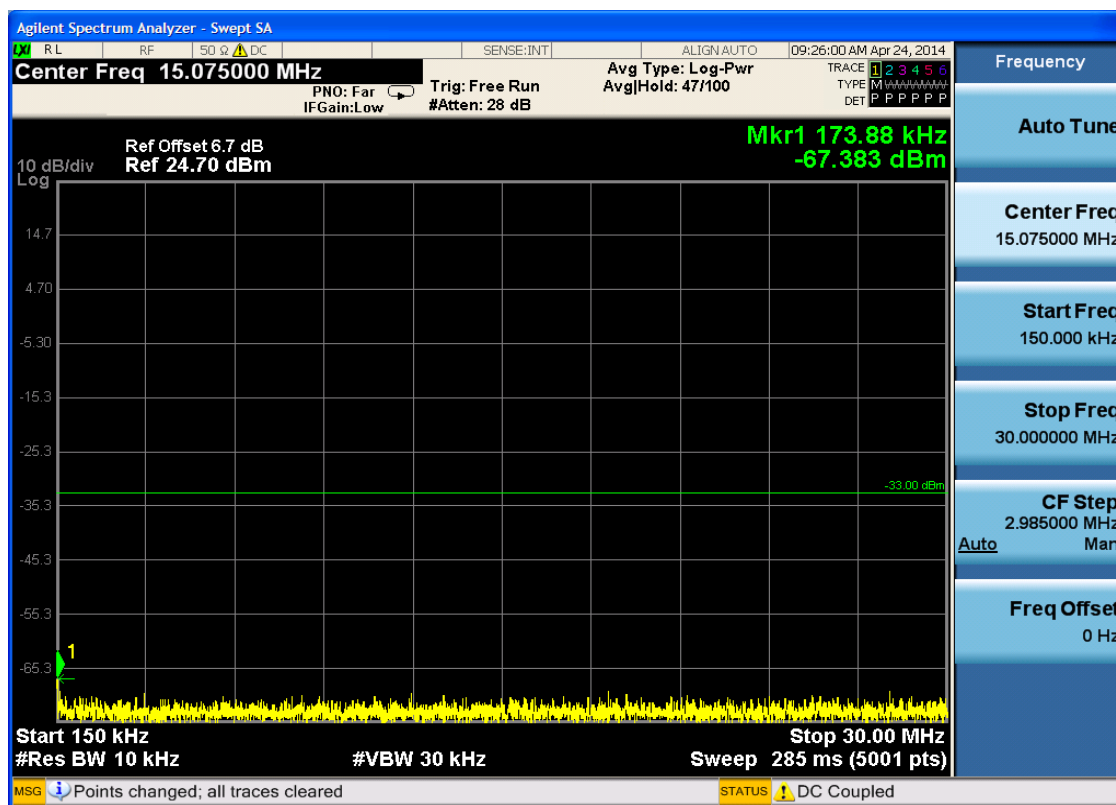


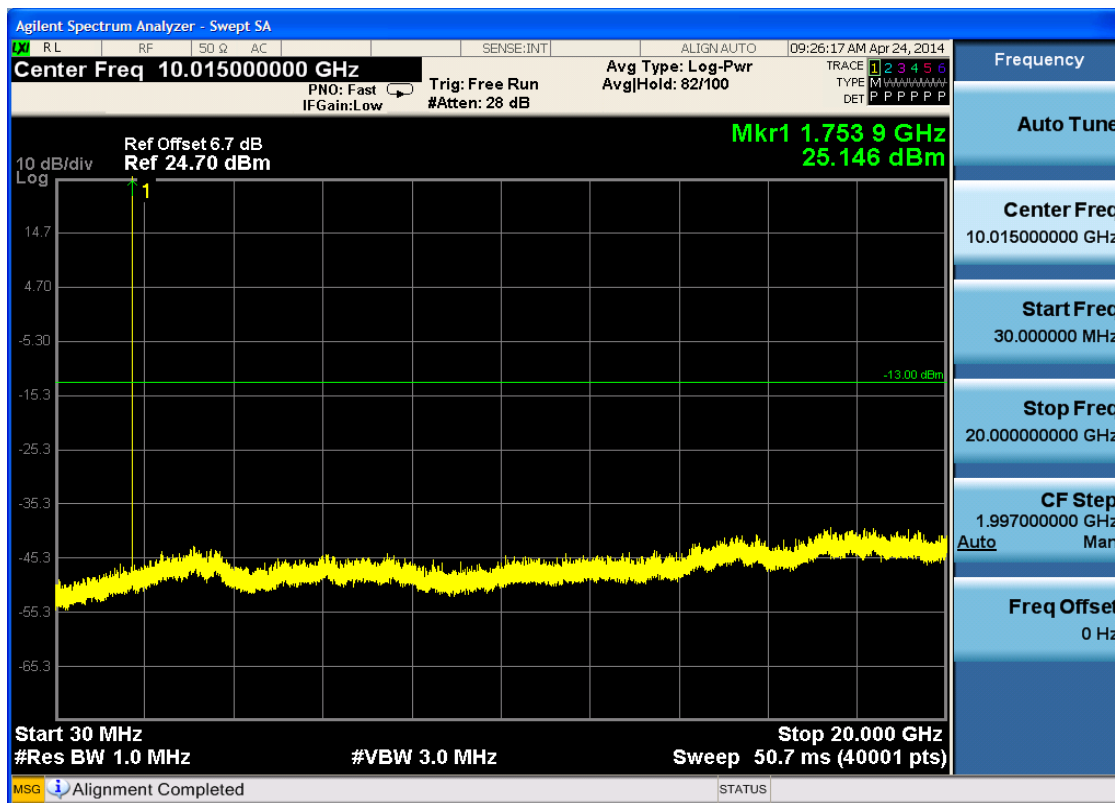


6.3.1.1.1.3 Test Channel = HCH

6.3.1.1.1.3.1 Test RB = RB1#0





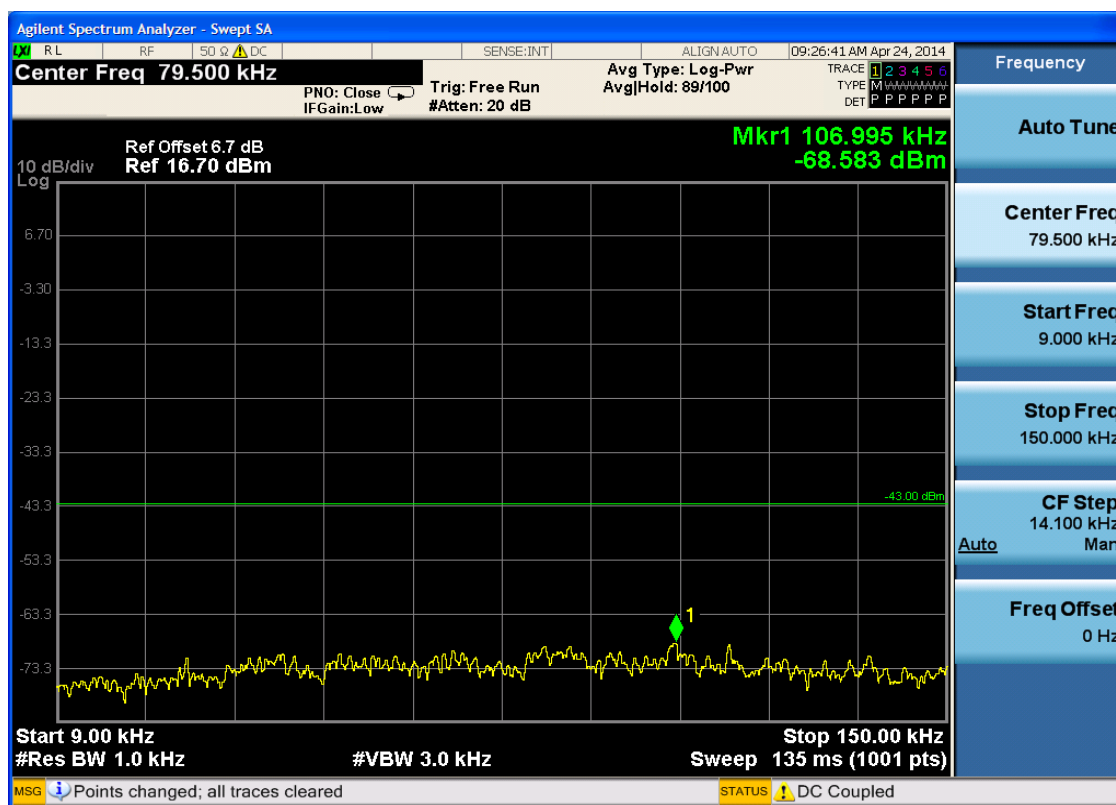


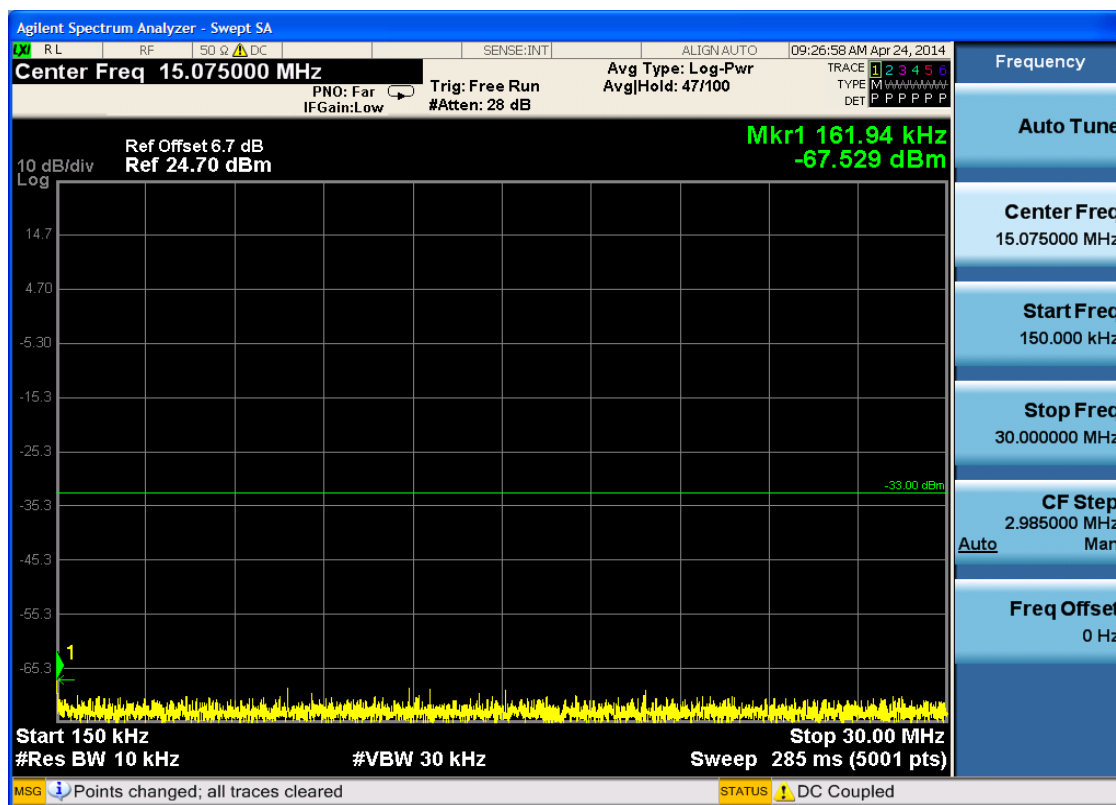


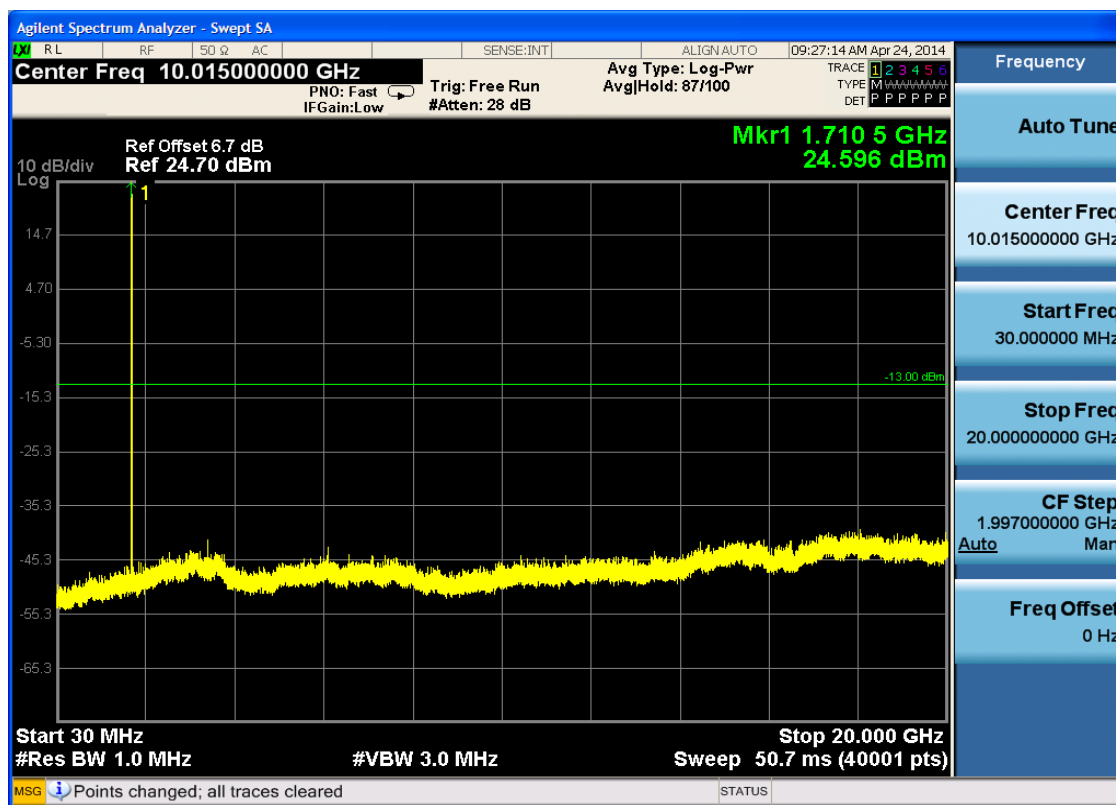
6.3.1.1.2 Test Bandwidth = 3

6.3.1.1.2.1 Test Channel = LCH

6.3.1.1.2.1.1 Test RB = RB1#0

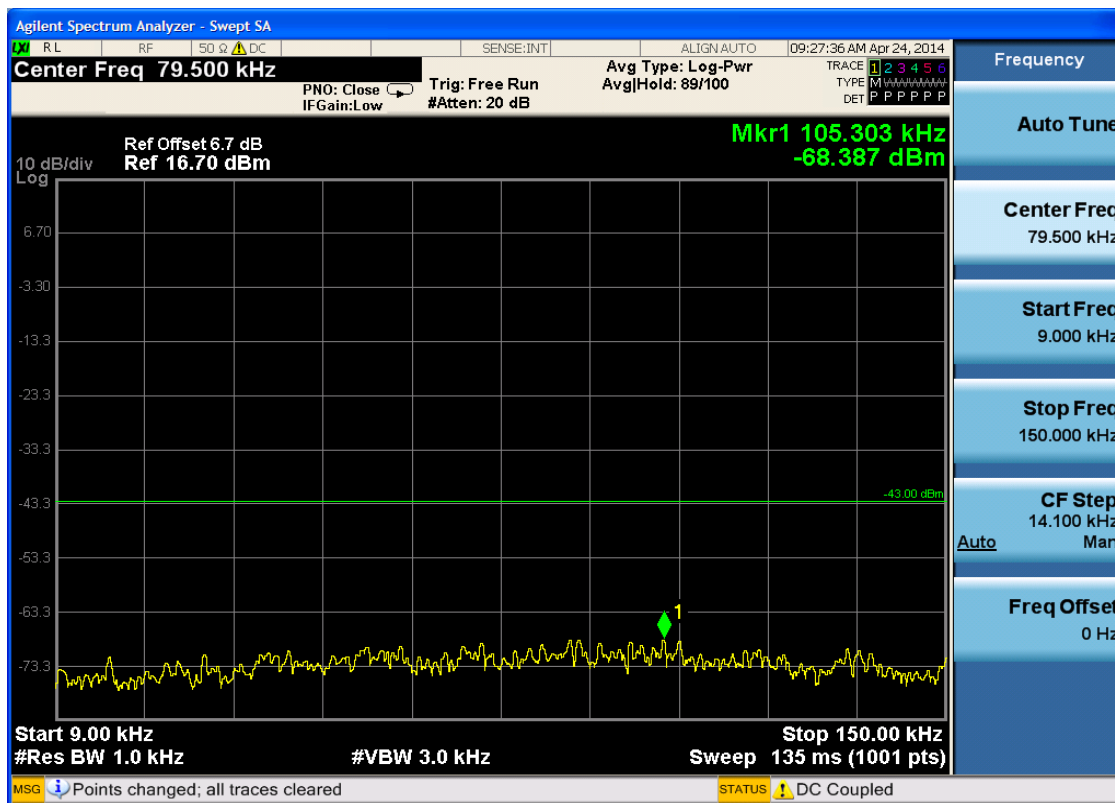


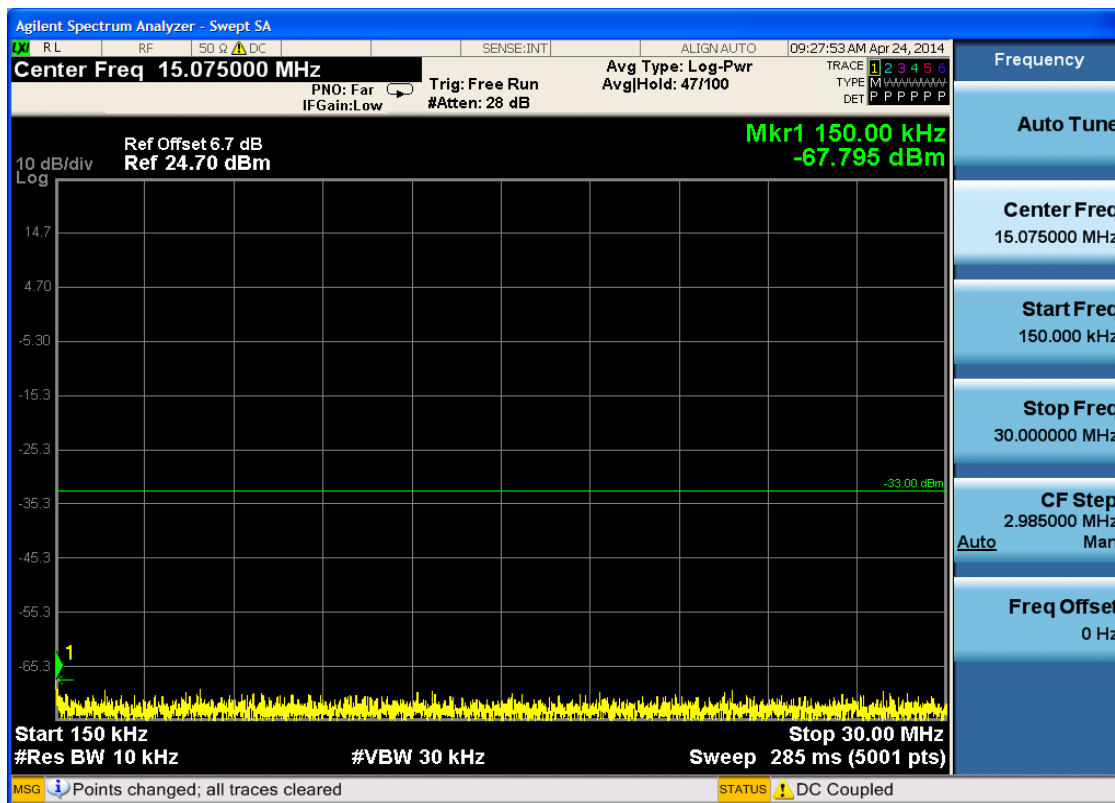


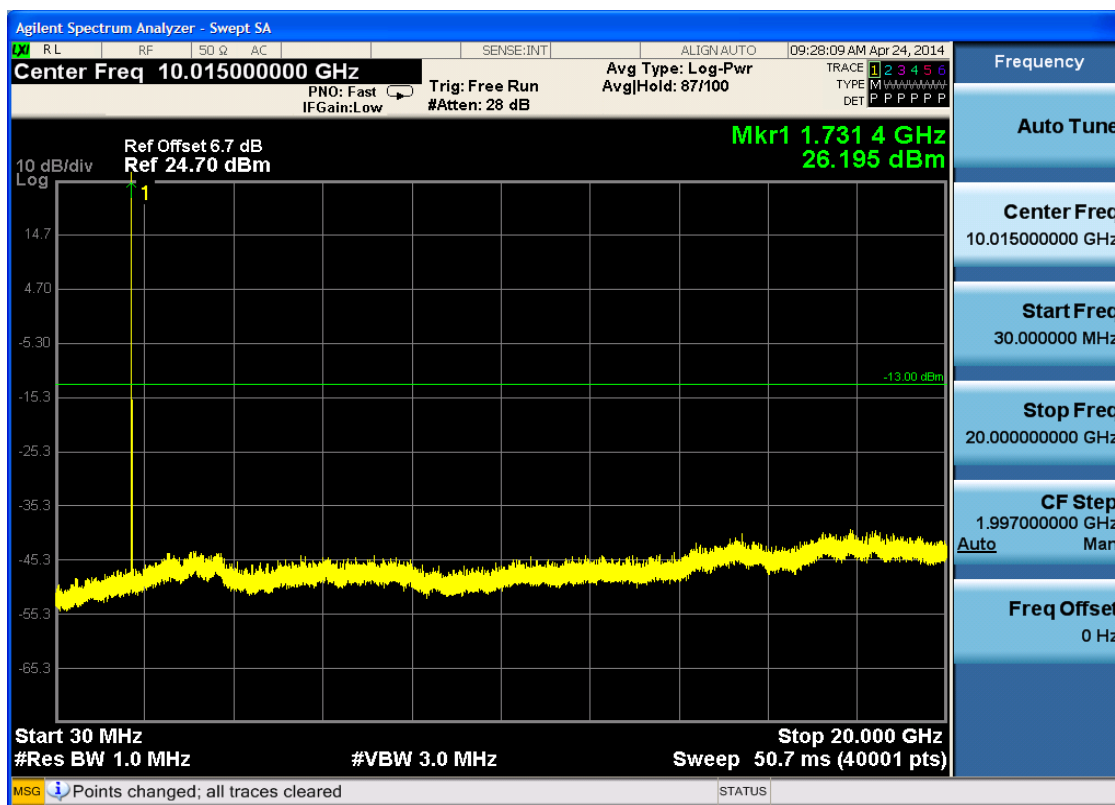


6.3.1.1.2.2 Test Channel = MCH

6.3.1.1.2.2.1 Test RB = RB1#0

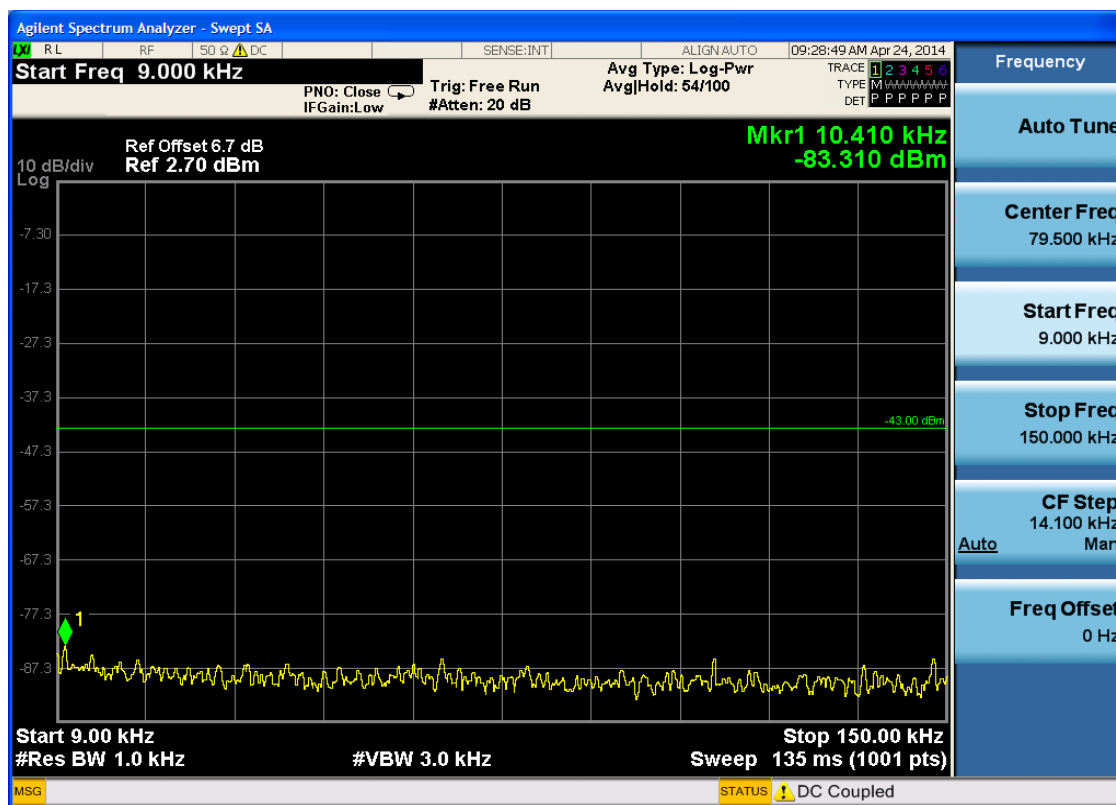


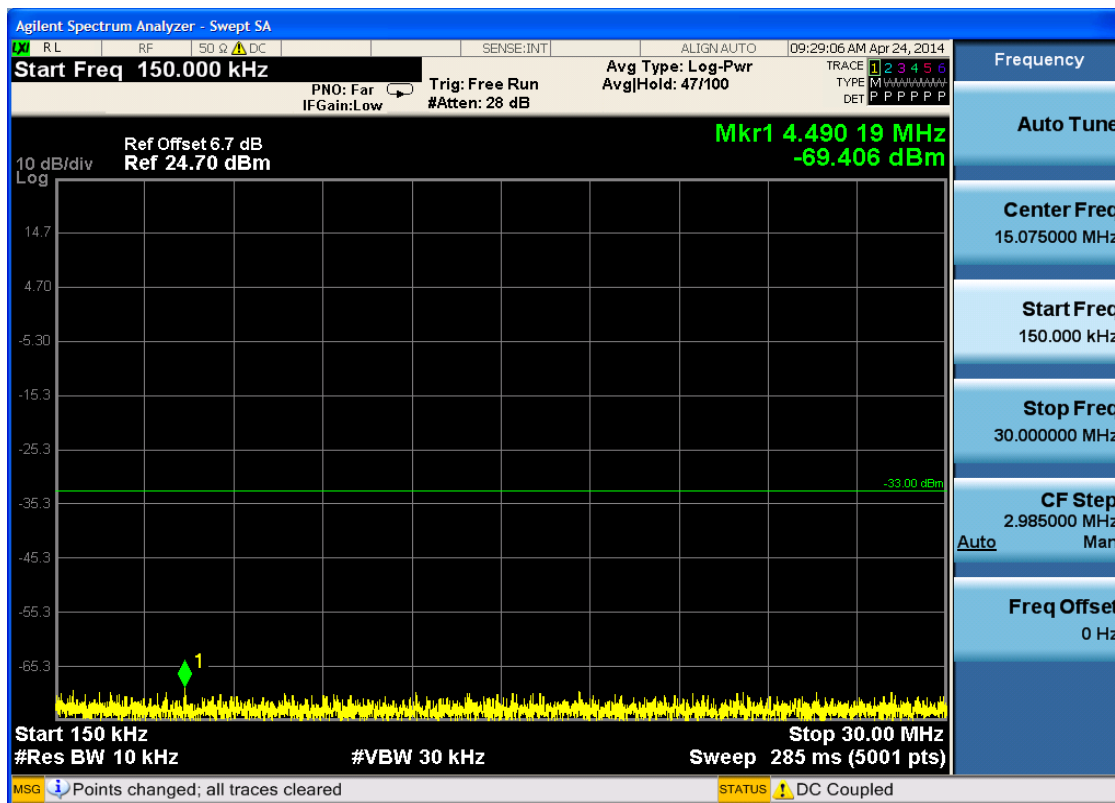


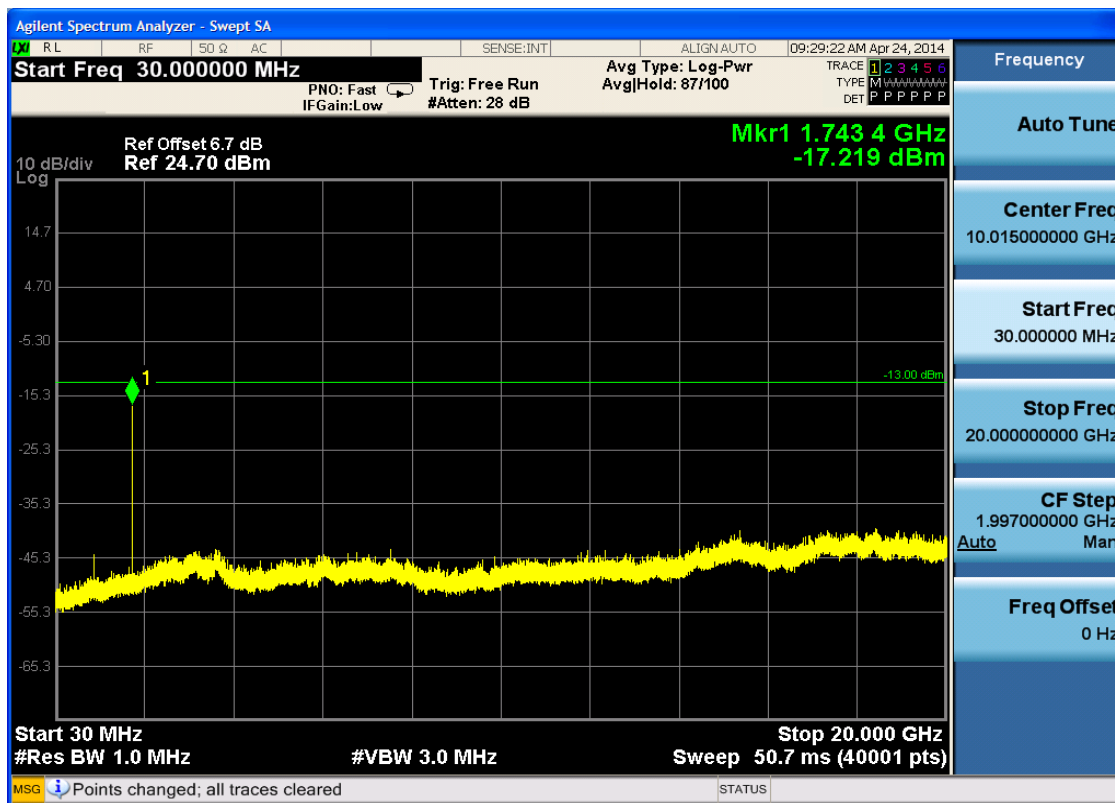


6.3.1.1.2.3 Test Channel = HCH

6.3.1.1.2.3.1 Test RB = RB1#0





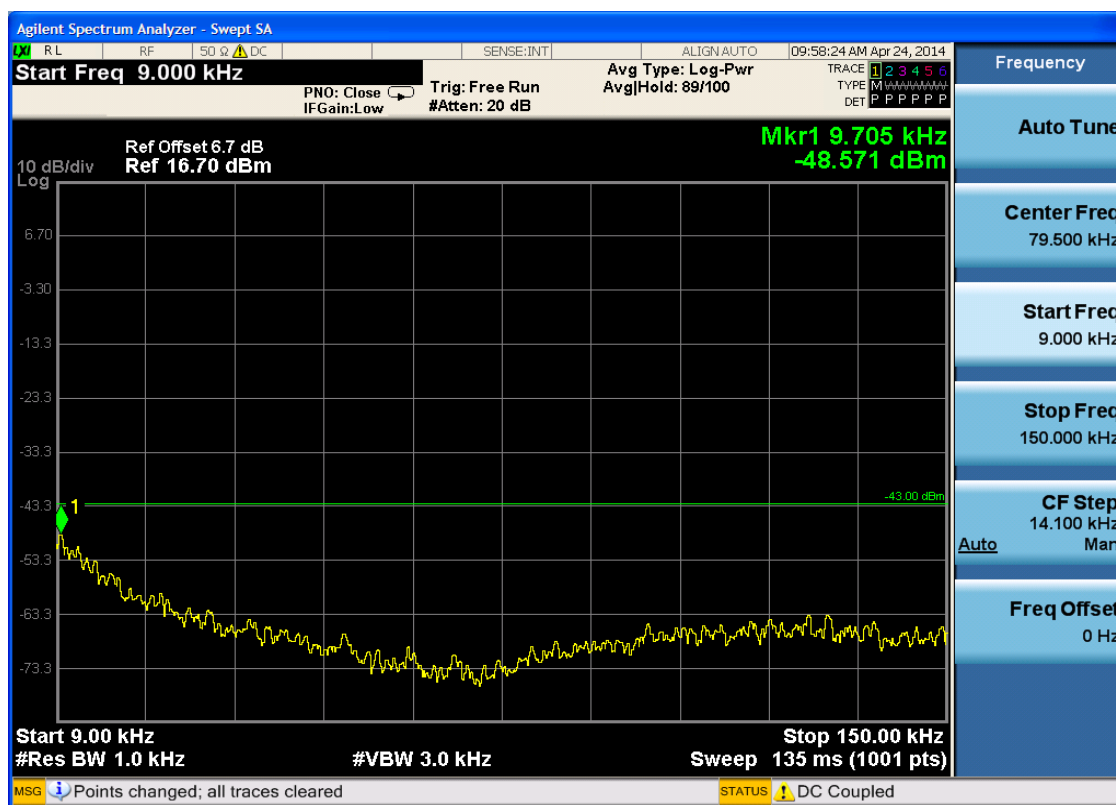


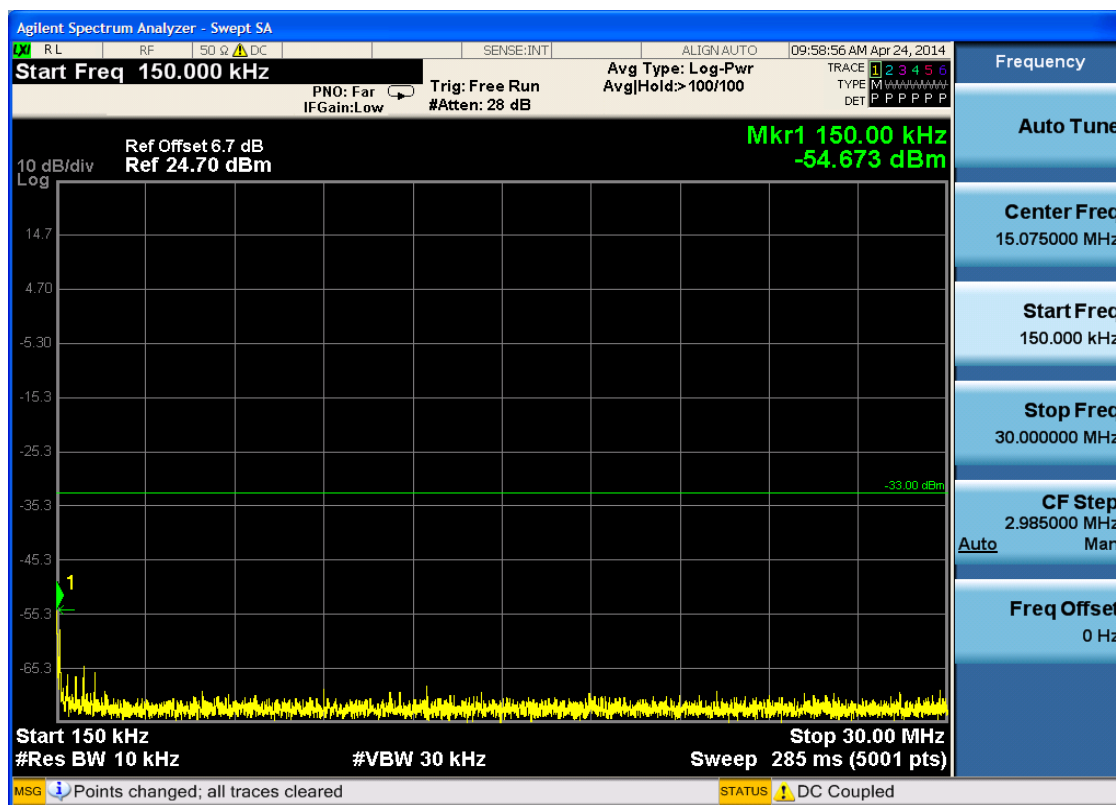


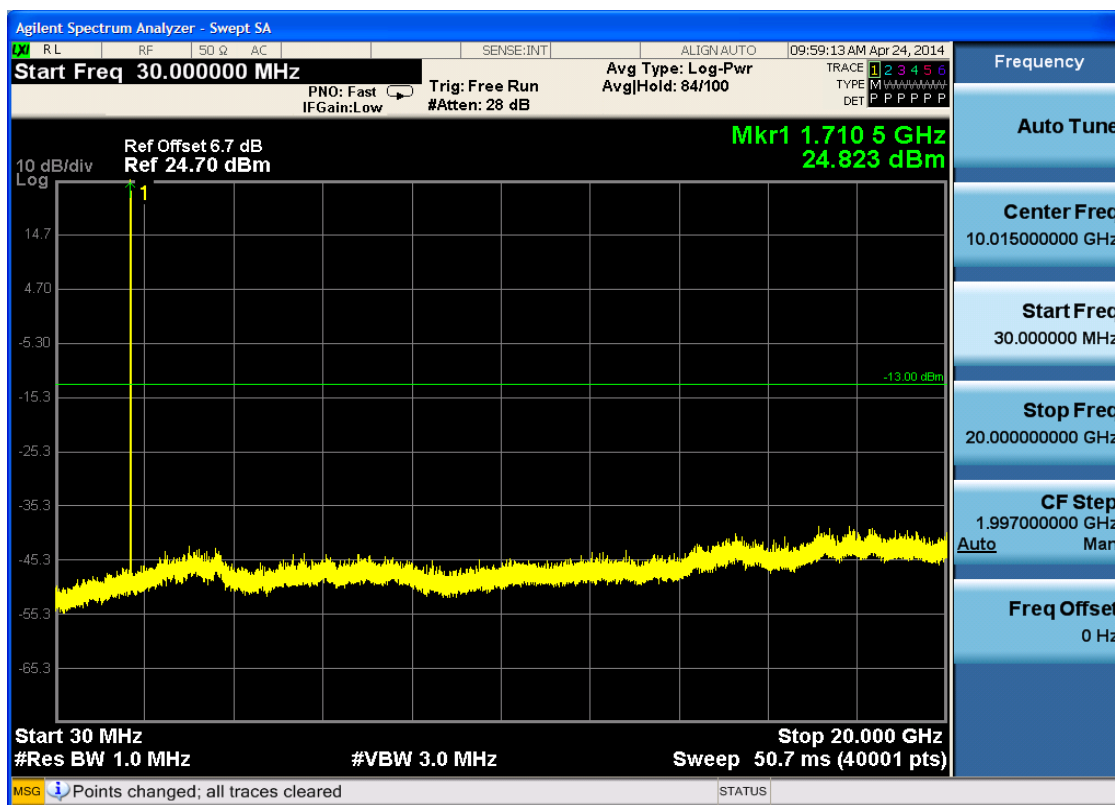
6.3.1.1.3 Test Bandwidth = 5

6.3.1.1.3.1 Test Channel = LCH

6.3.1.1.3.1.1 Test RB = RB1#0

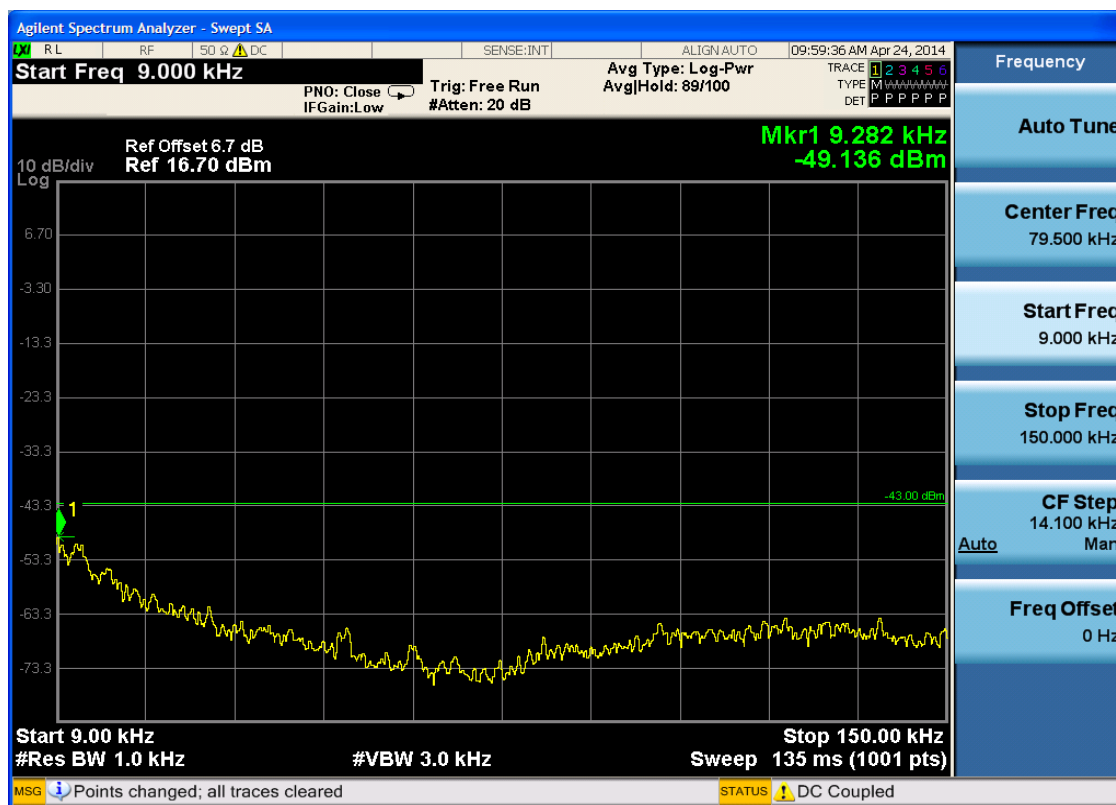


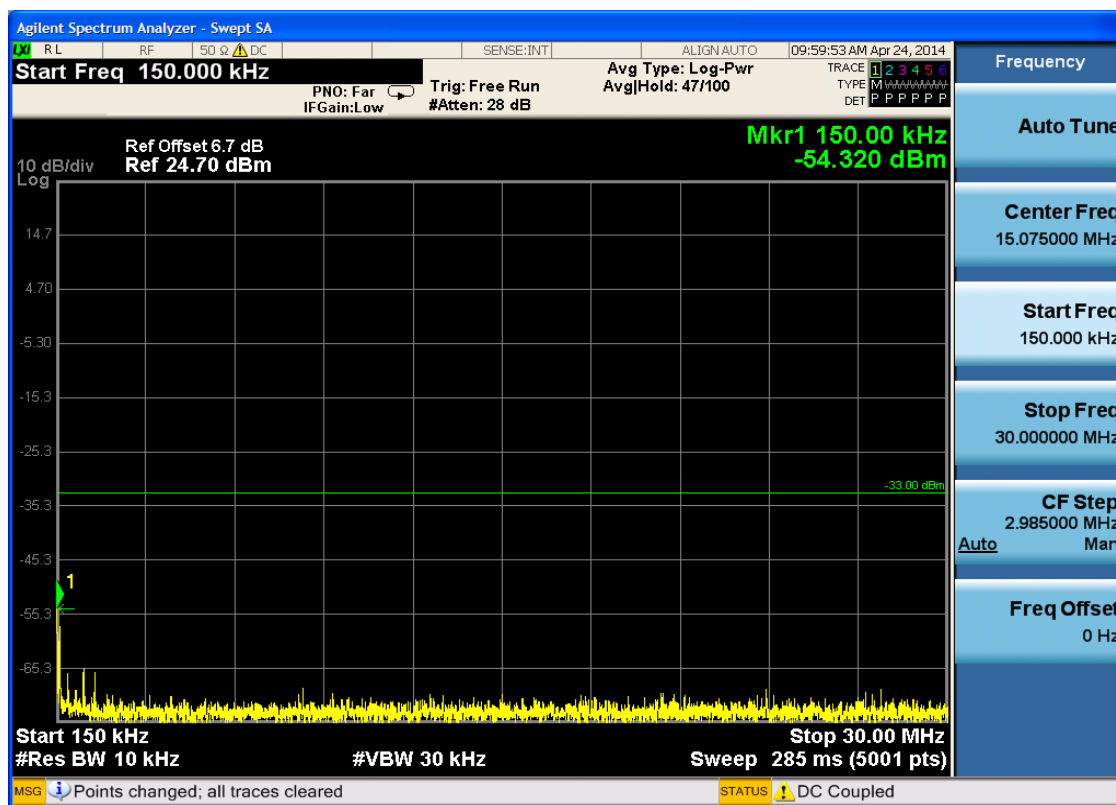


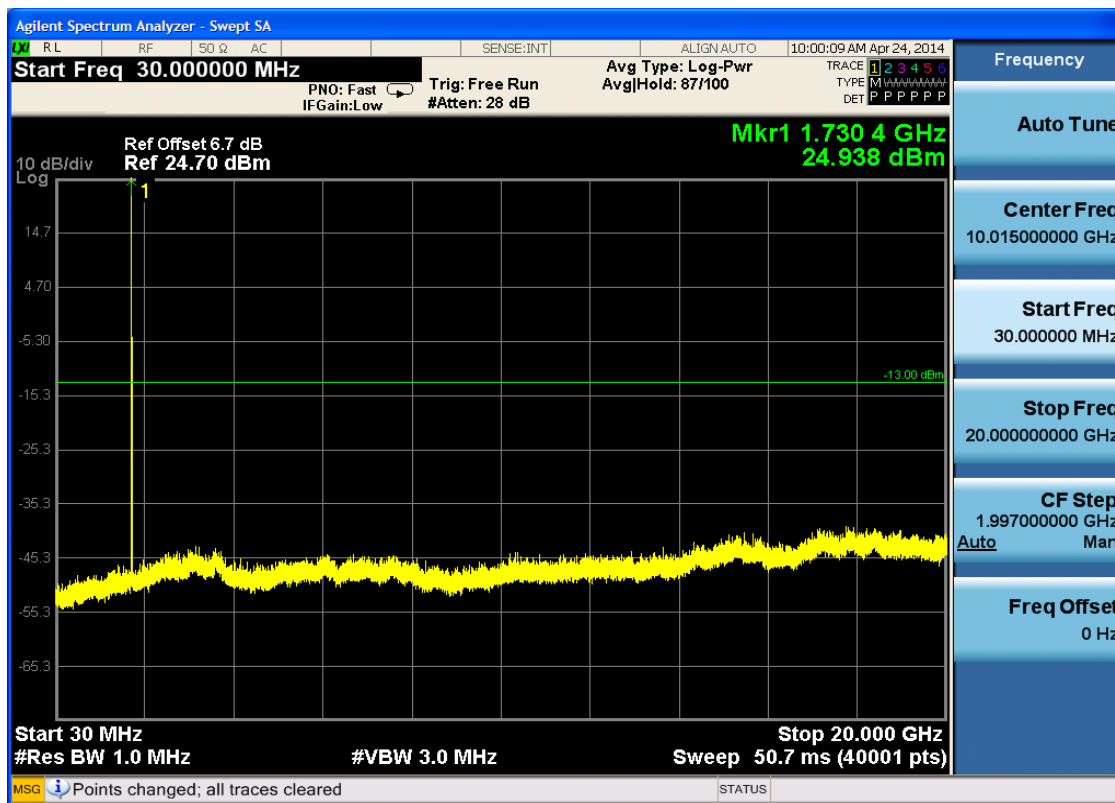


6.3.1.1.3.2 Test Channel = MCH

6.3.1.1.3.2.1 Test RB = RB1#0

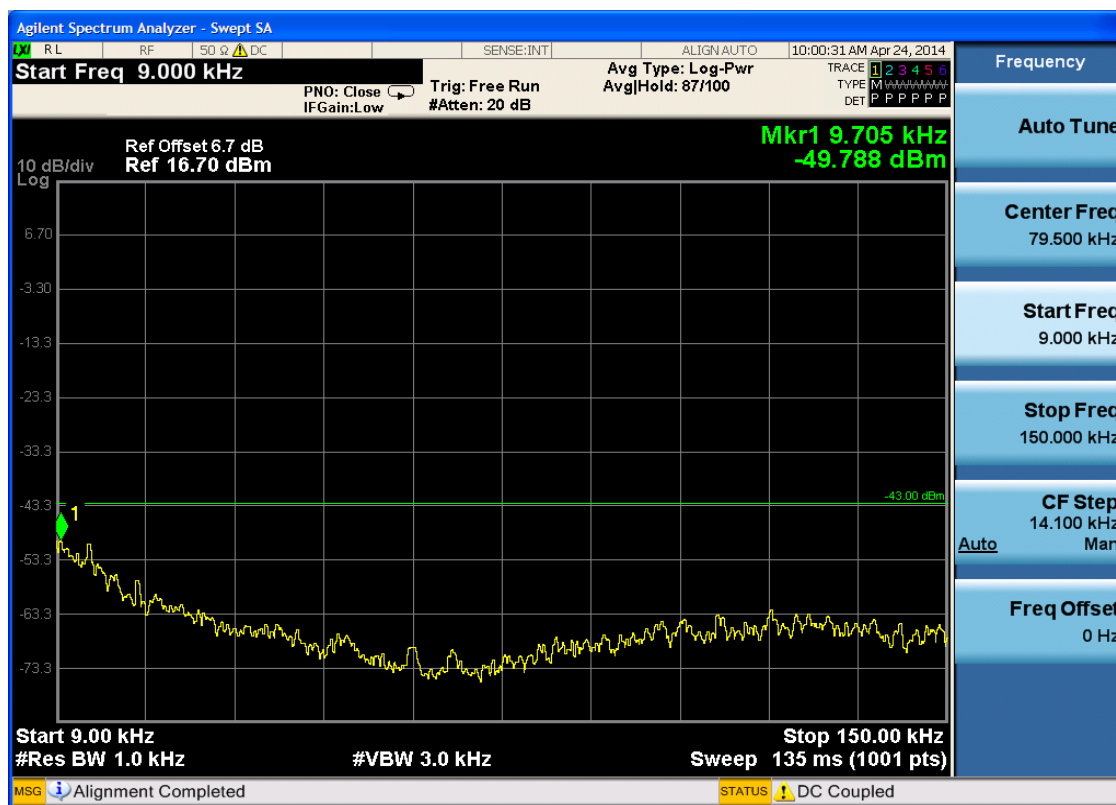


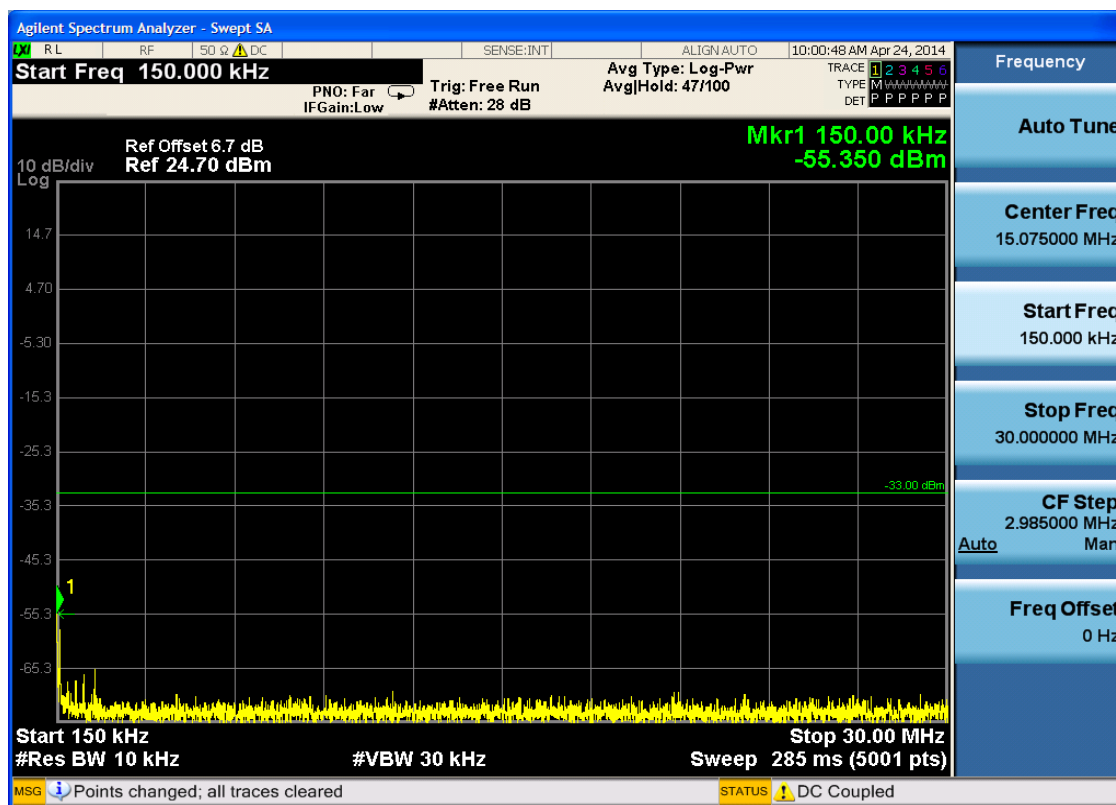


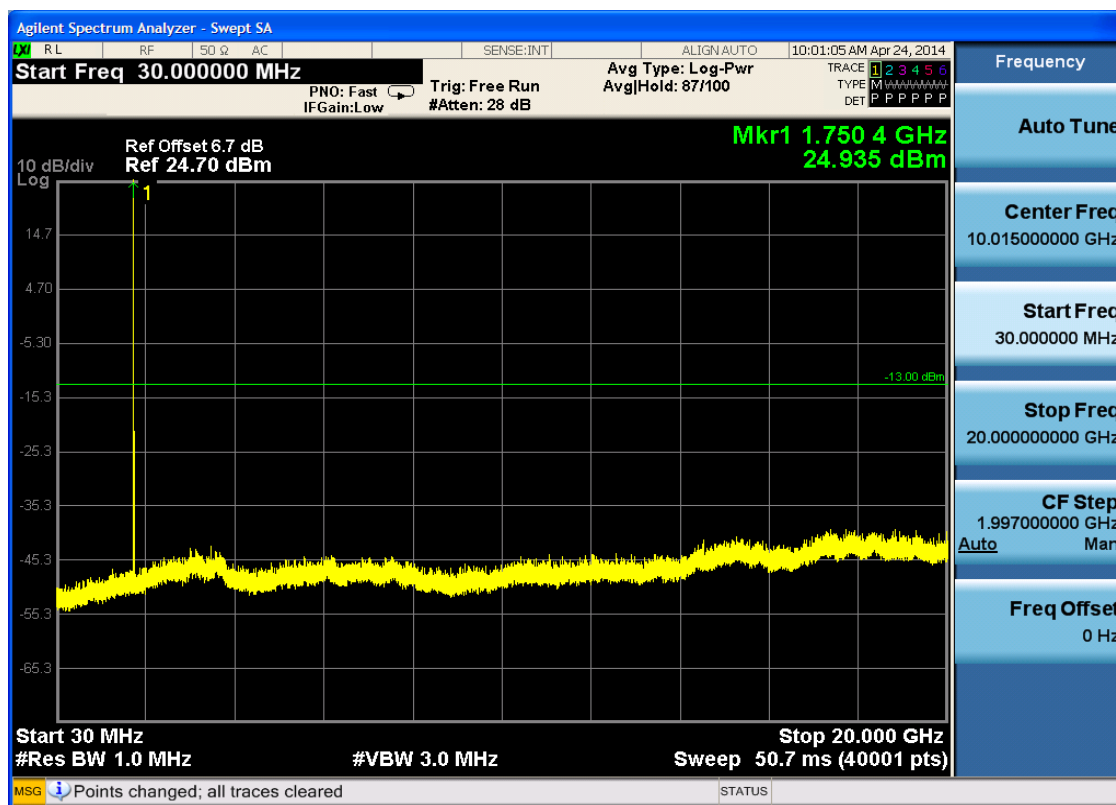


6.3.1.1.3.3 Test Channel = HCH

6.3.1.1.3.3.1 Test RB = RB1#0





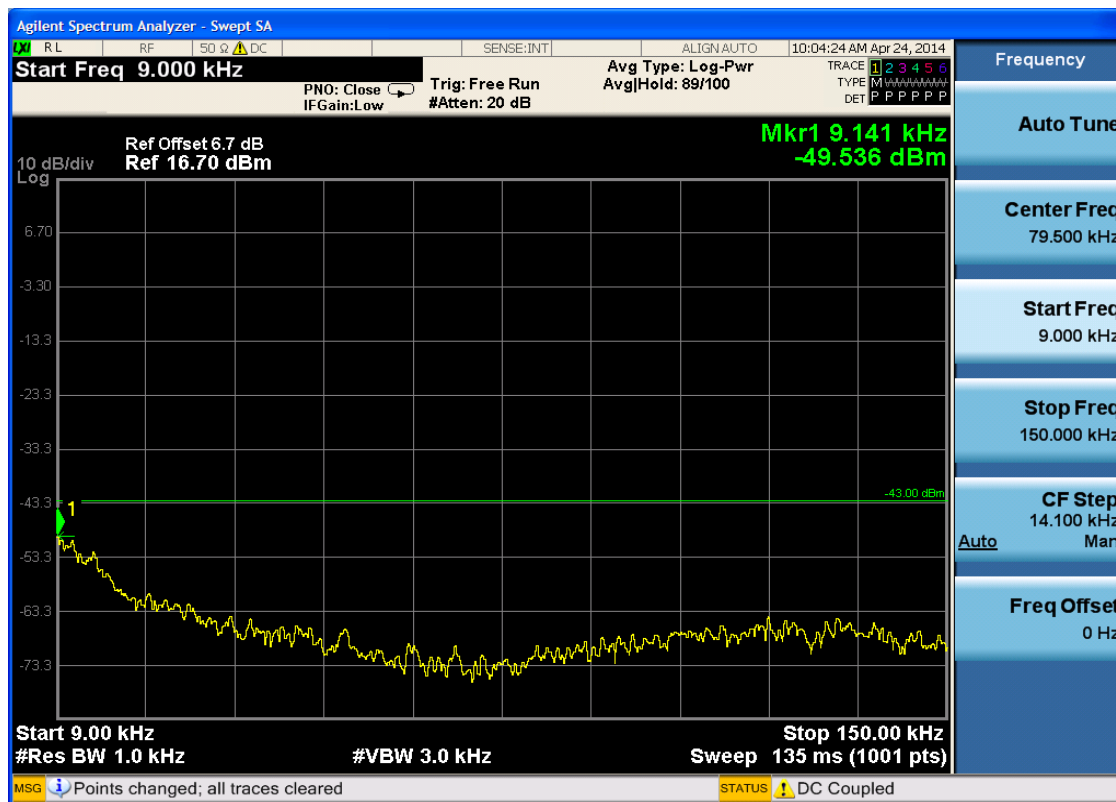


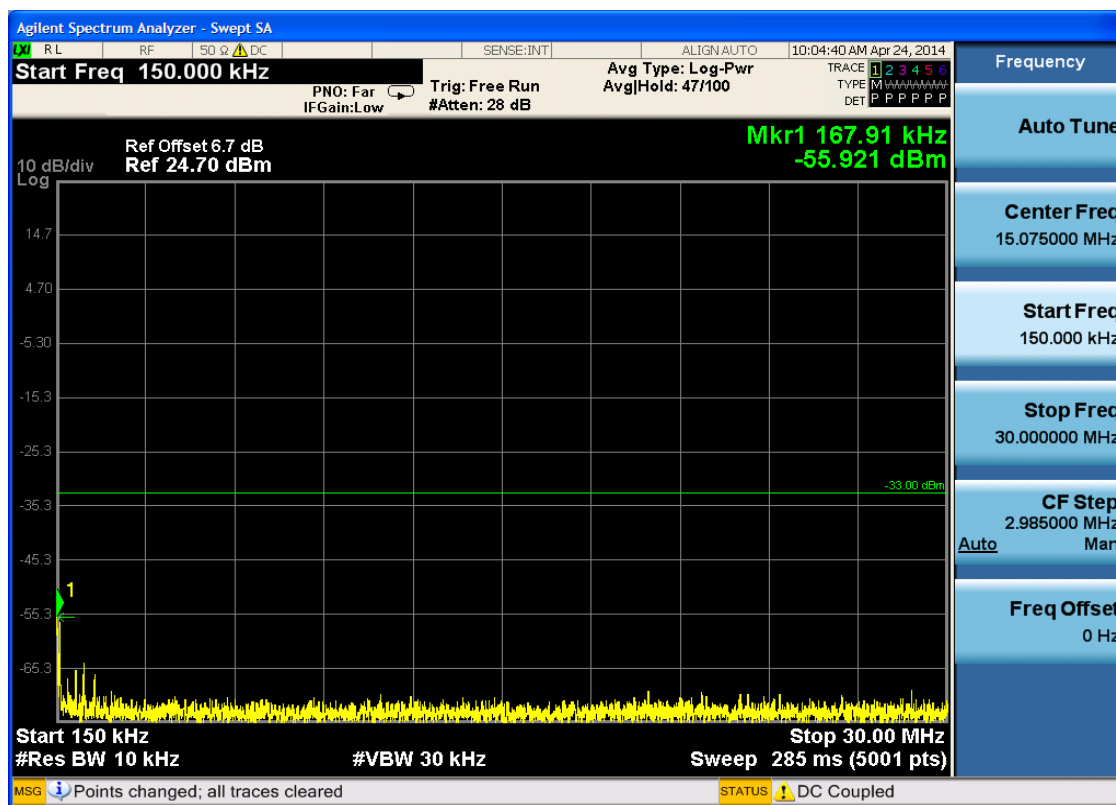


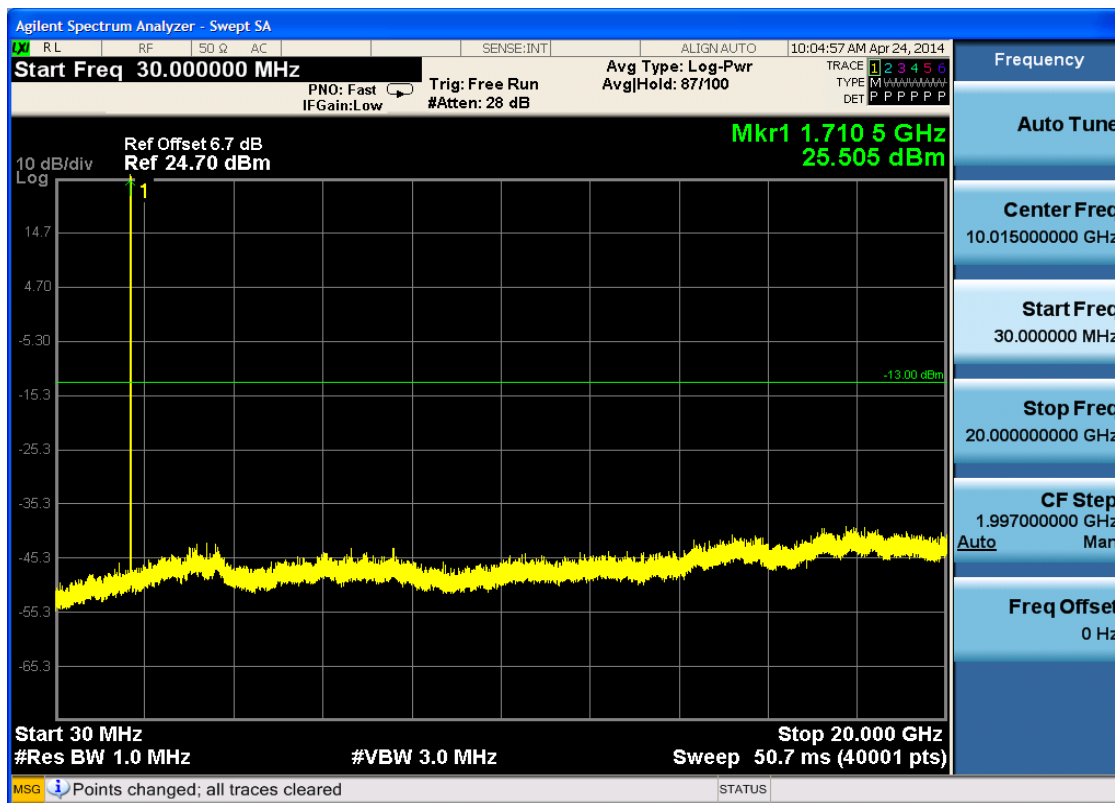
6.3.1.1.4 Test Bandwidth = 10

6.3.1.1.4.1 Test Channel = LCH

6.3.1.1.4.1.1 Test RB = RB1#0

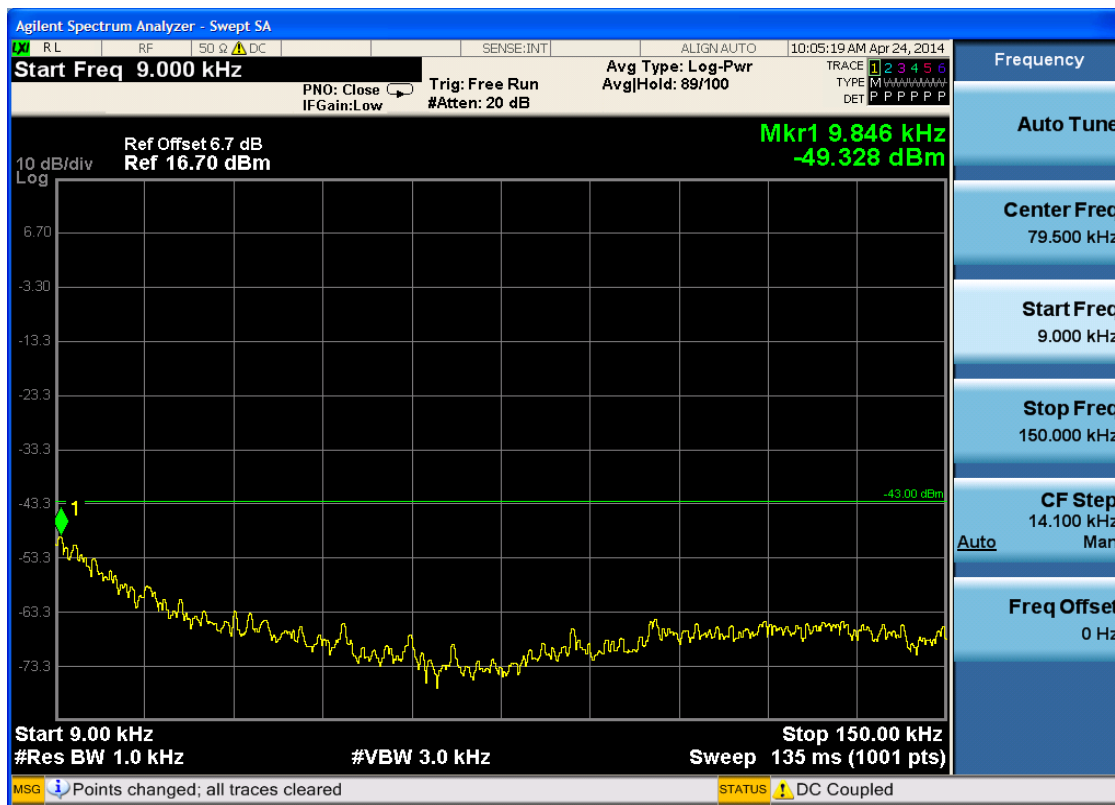


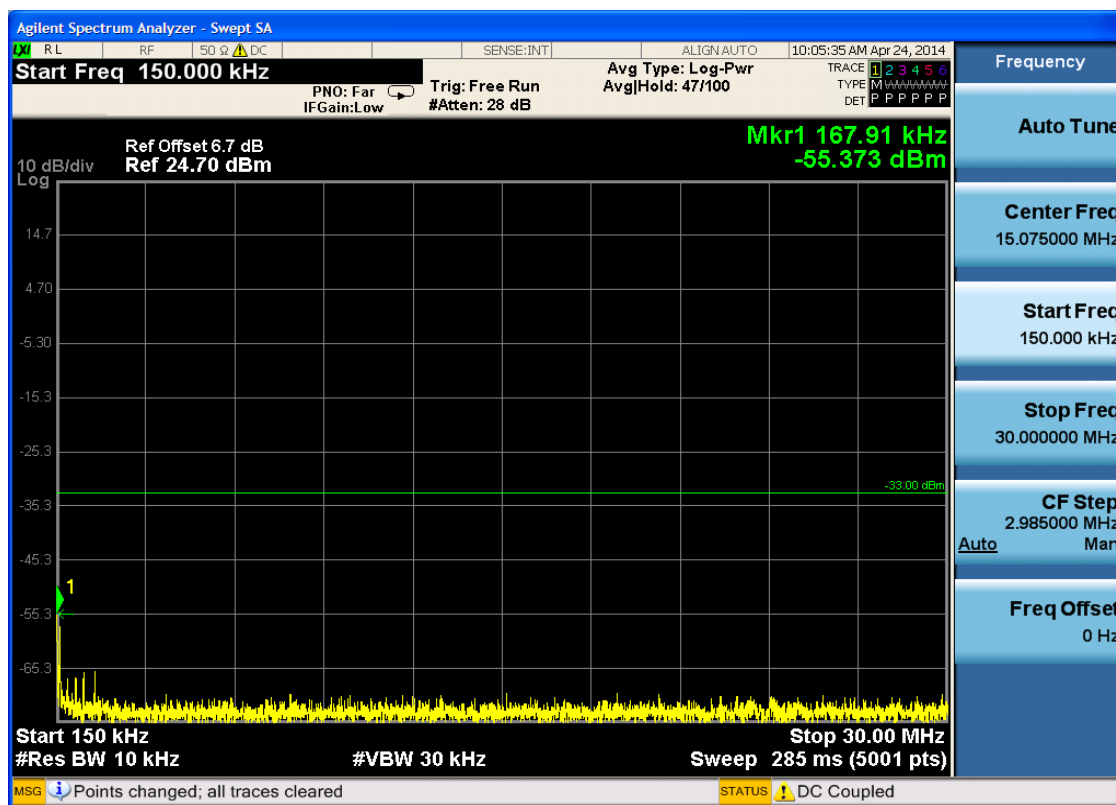


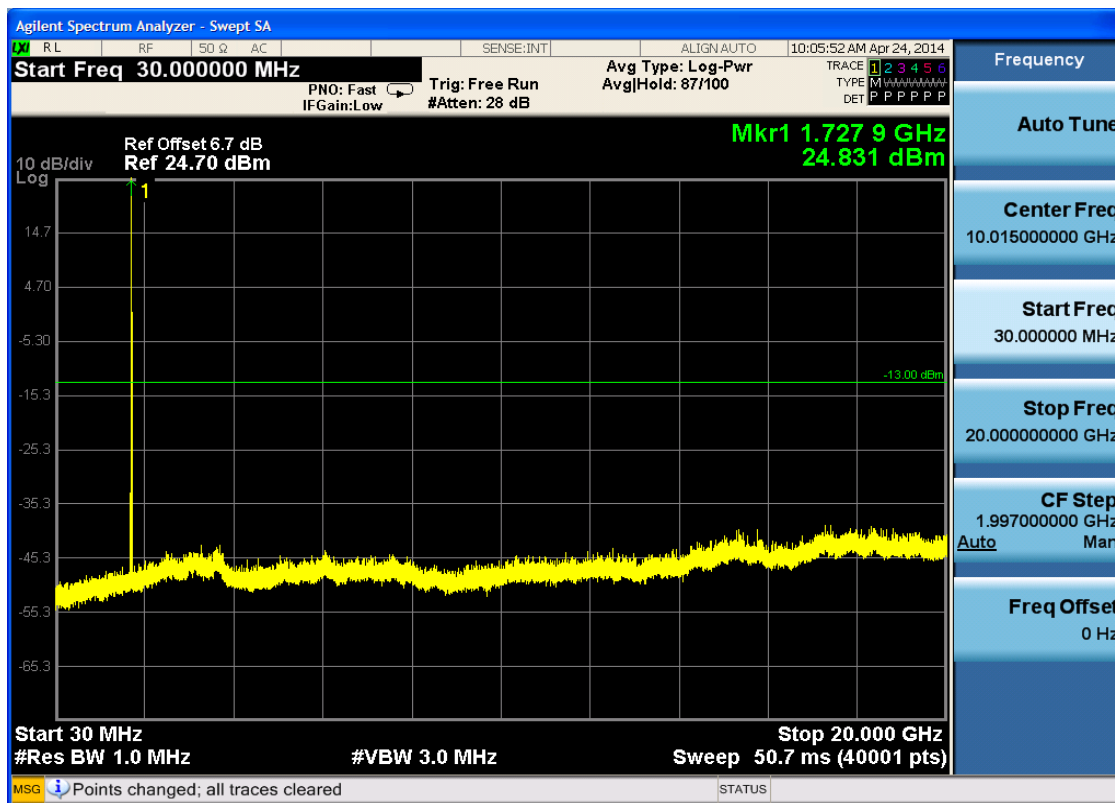


6.3.1.1.4.2 Test Channel = MCH

6.3.1.1.4.2.1 Test RB = RB1#0

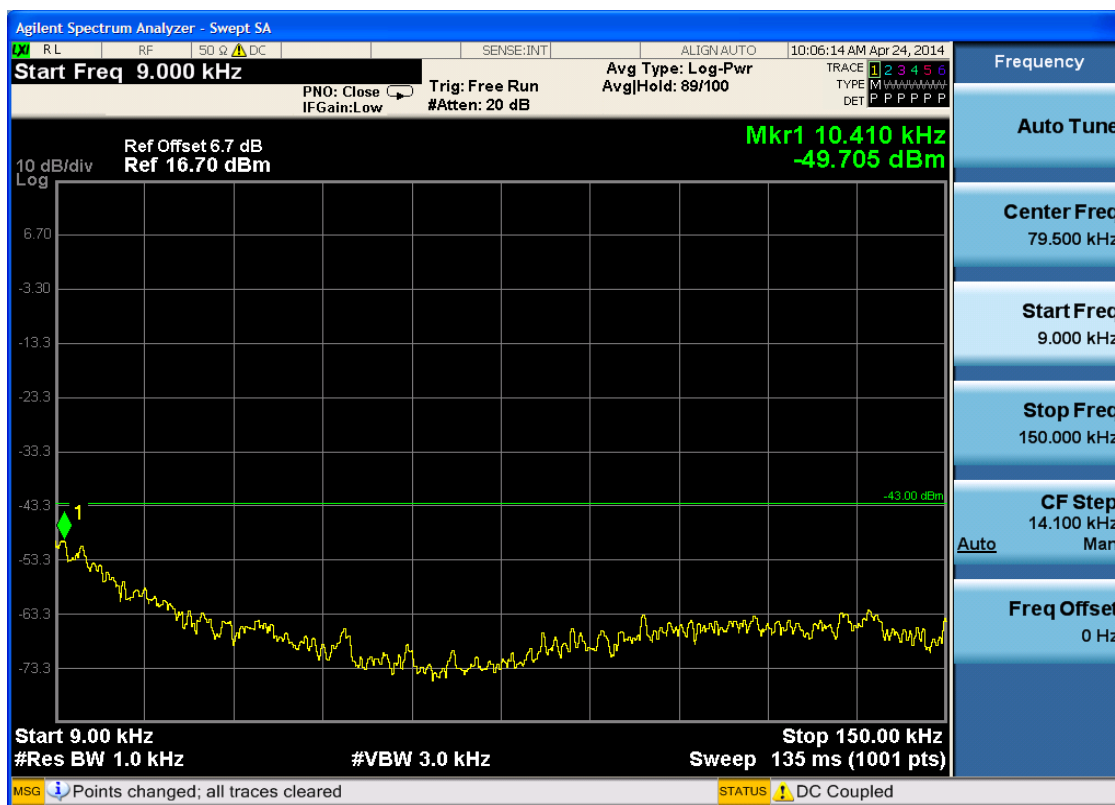


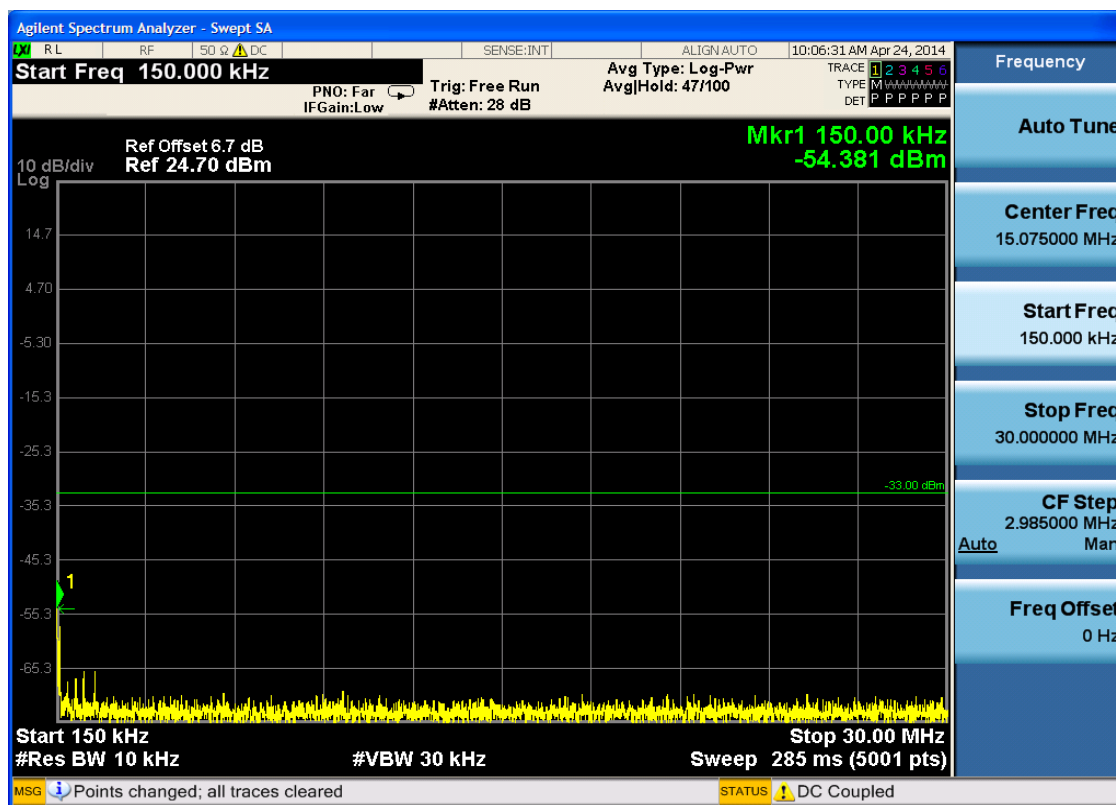


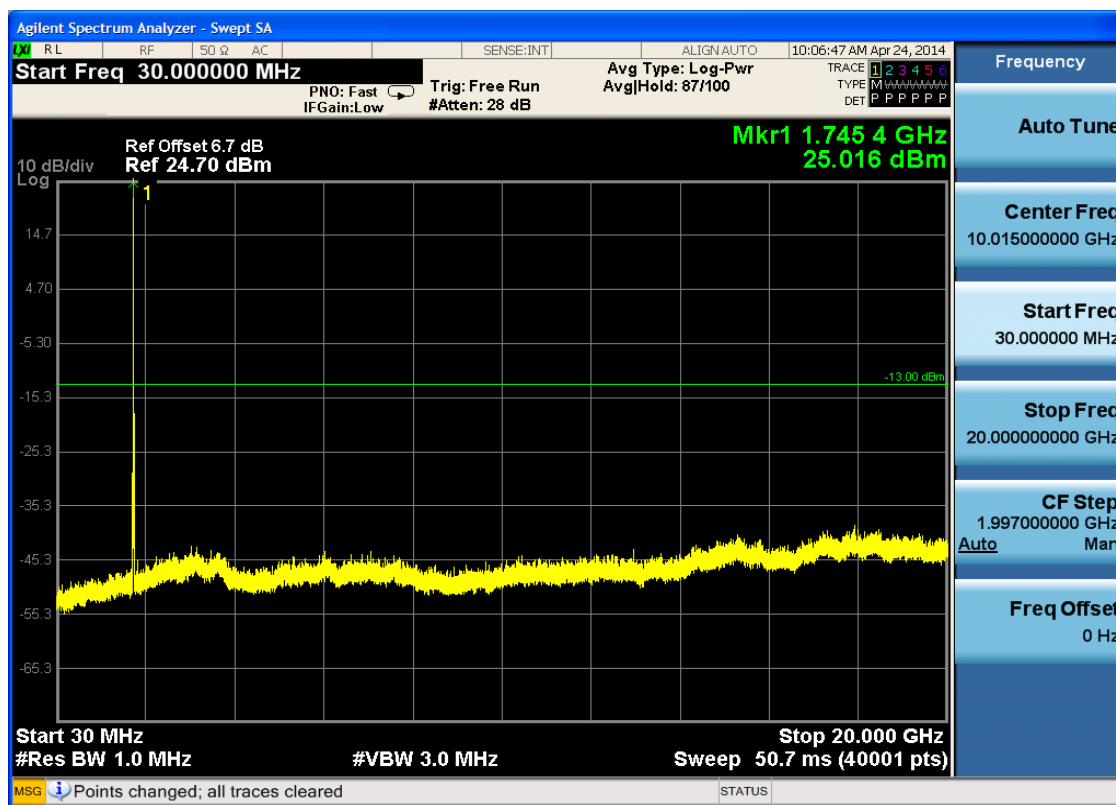


6.3.1.1.4.3 Test Channel = HCH

6.3.1.1.4.3.1 Test RB = RB1#0







6.3.1.1.5 Test Bandwidth = 15

6.3.1.1.5.1 Test Channel = LCH

6.3.1.1.5.1.1 Test RB = RB1#0

