



5.2.1.2.1.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 08:35:10 AM Sep 19, 2014

Center Freq 2.50000000 GHz Avg Type: Pwr(RMS) Trace 1 2 3 4 5 6
PASS PNO: Far Trig: Free Run Avg|Hold: 7/100 TYPE M W W W W W W W W W
IF Gain: Low #Atten: 36 dB DET A A A A A A

Ref Offset 7.3 dB Mkr1 2.499 995 GHz
Ref 30.00 dBm -26.561 dBm

10 dB/div
Log

Trace 1 Pass

Center 2.500000 GHz Span 19.00 MHz
#Res BW 120 kHz #VBW 360 kHz* #Sweep 1.00 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
2.500000000 GHz

Start Freq
2.490500000 GHz

Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Auto Man

Freq Offset
0 Hz



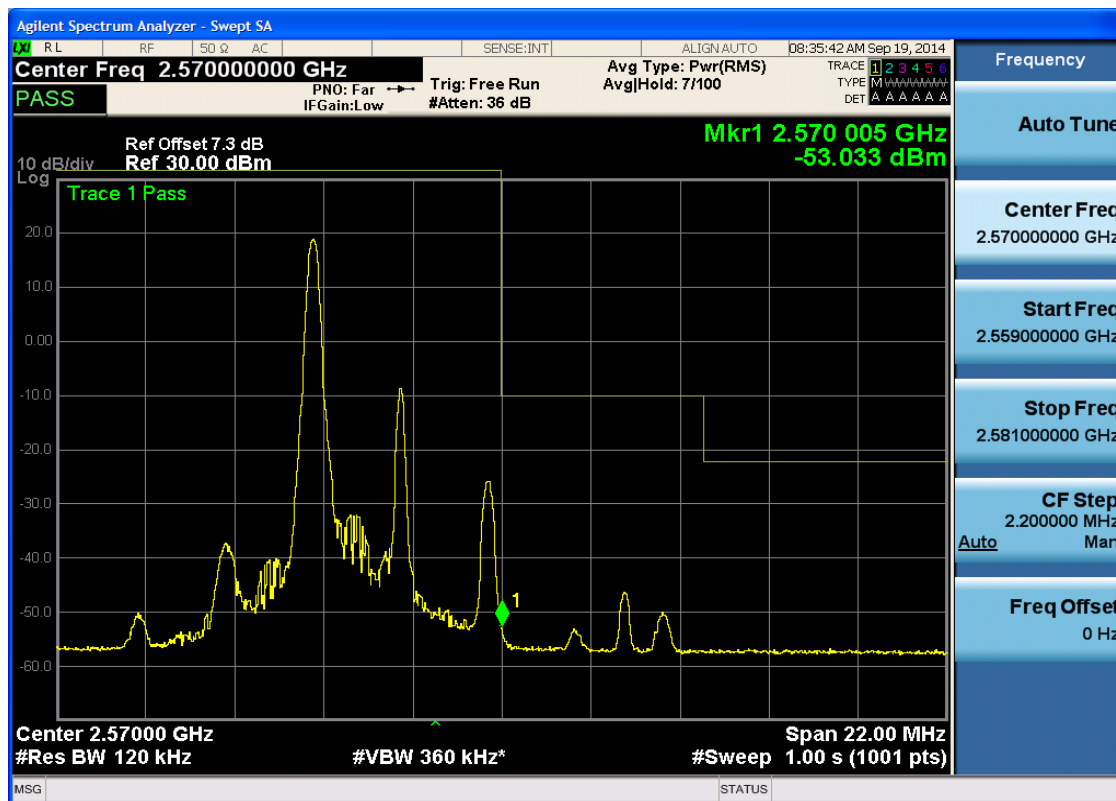
5.2.1.2.1.1.4 Test RB = RB25#0





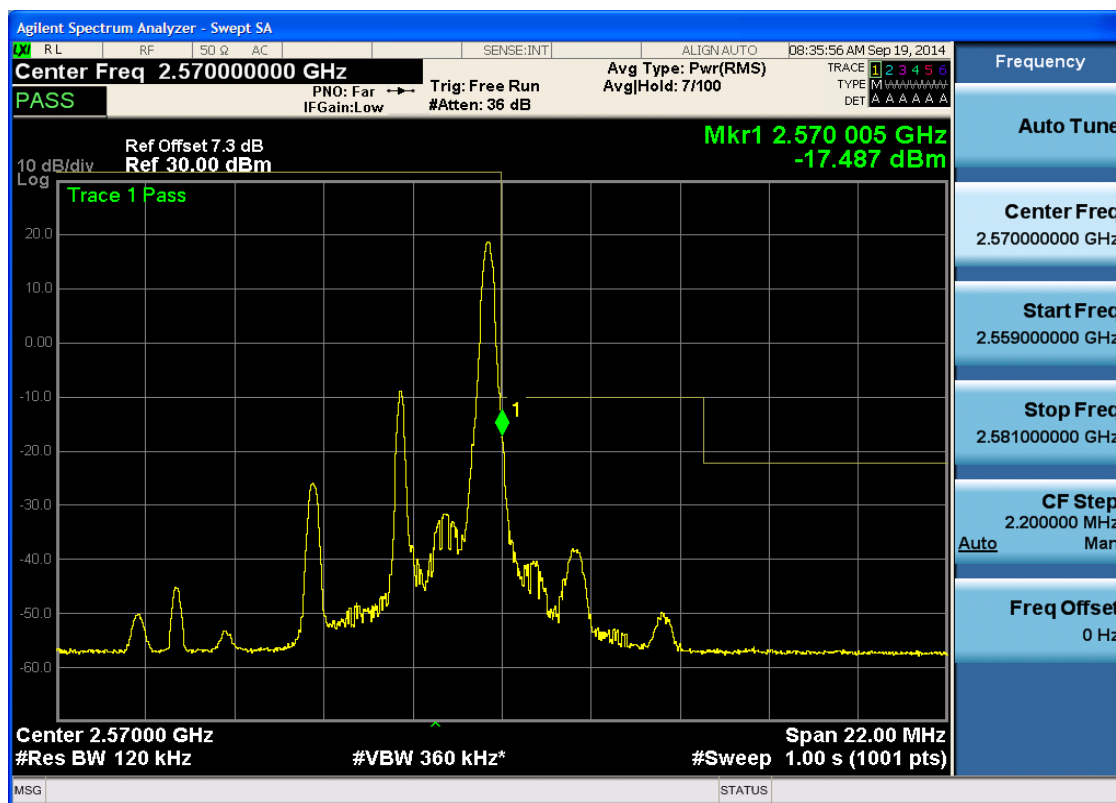
5.2.1.2.1.2 Test Channel = HCH

5.2.1.2.1.2.1 Test RB = RB1#0



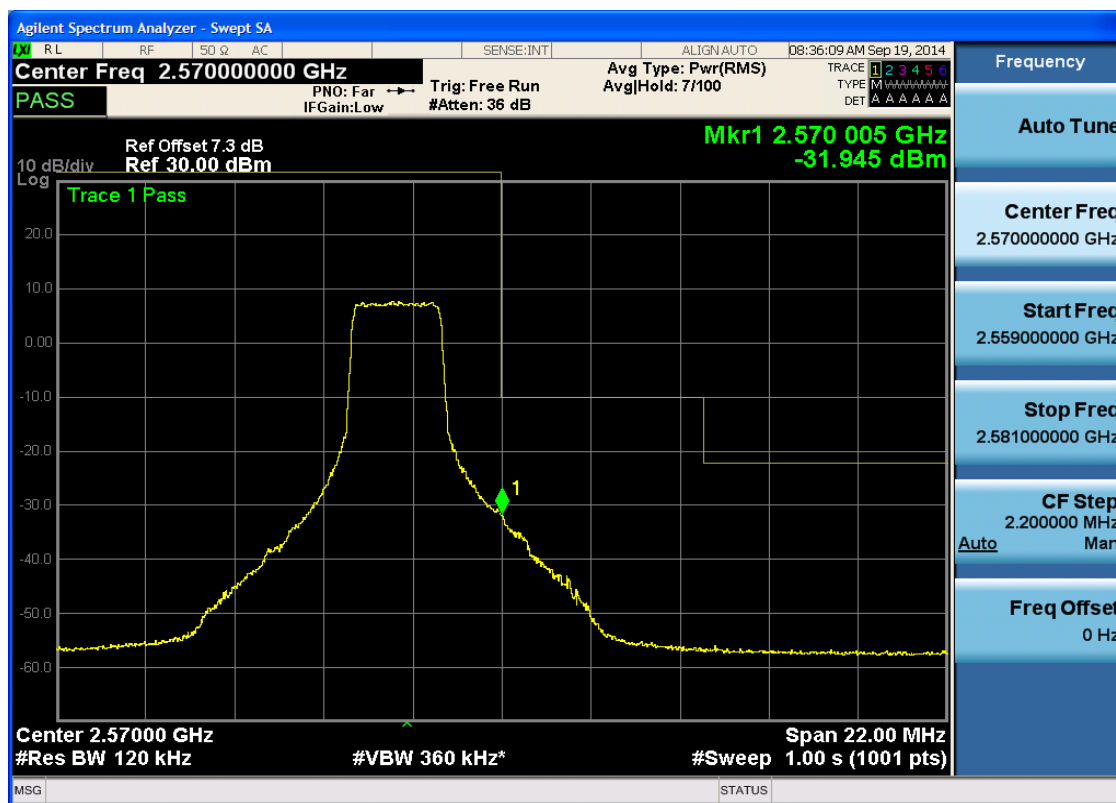


5.2.1.2.1.2.2 Test RB = RB1#24



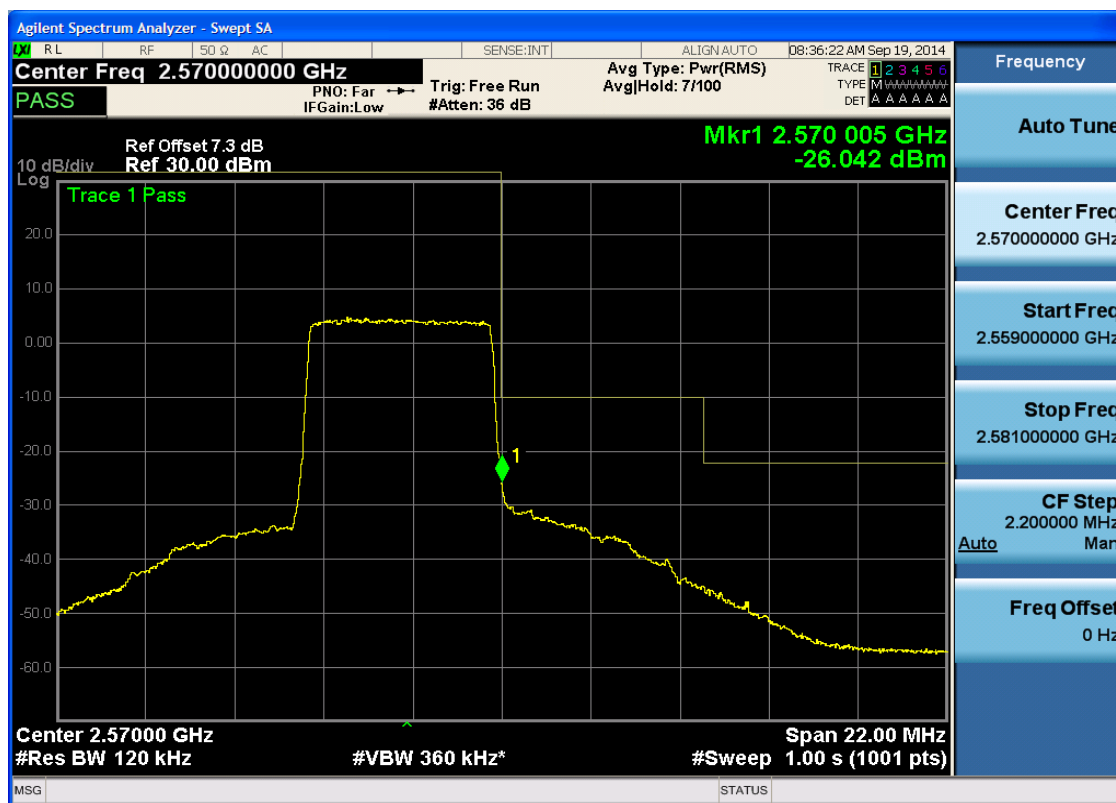


5.2.1.2.1.2.3 Test RB = RB12#6



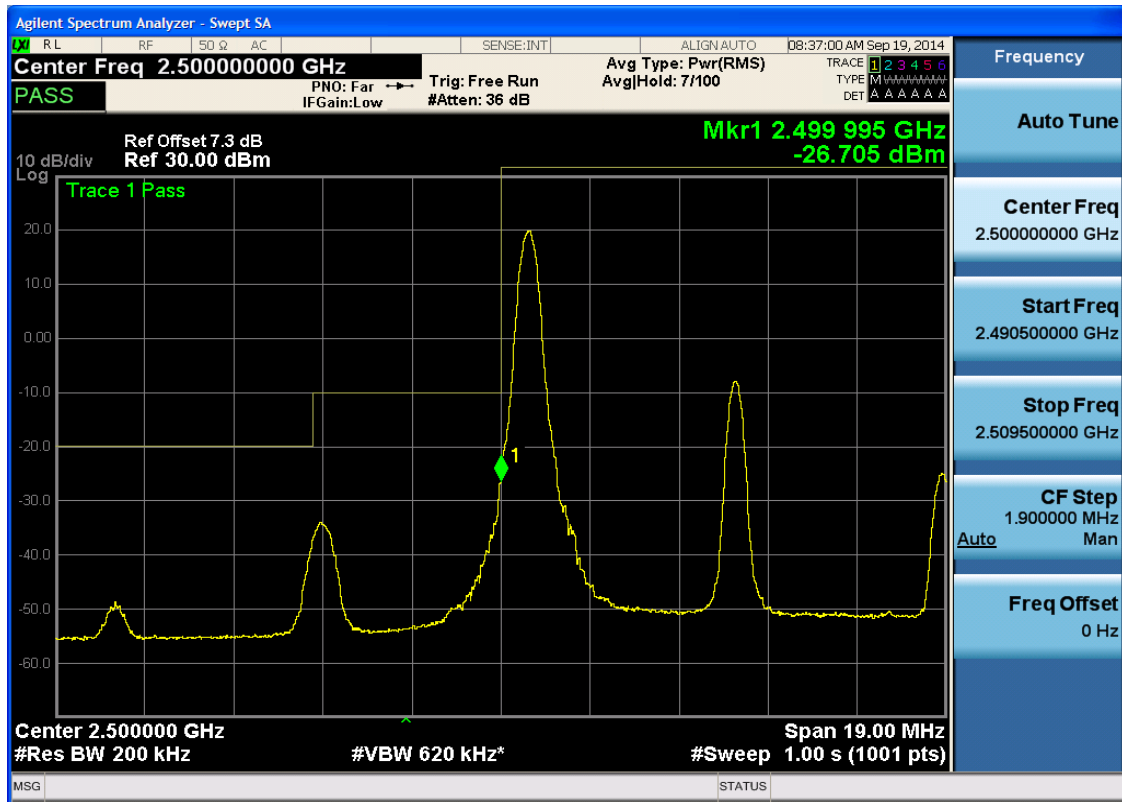


5.2.1.2.1.2.4 Test RB = RB25#0



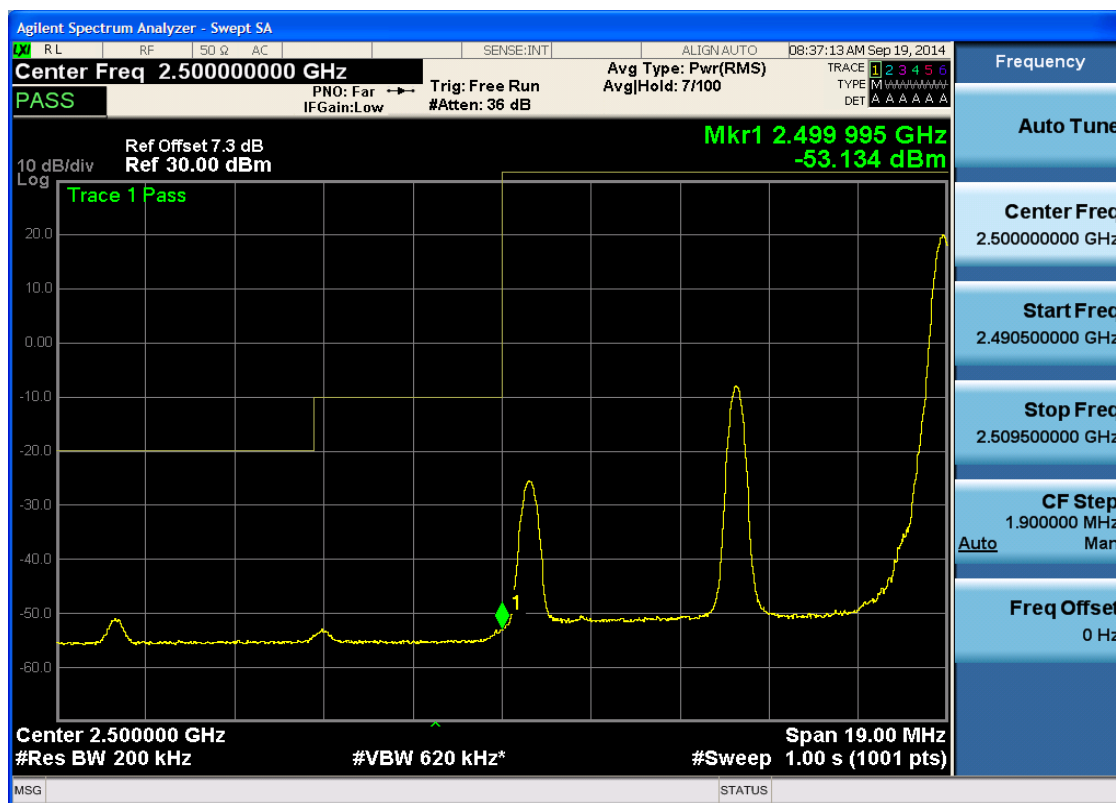


5.2.1.2.2.1.1 Test RB = RB1#0



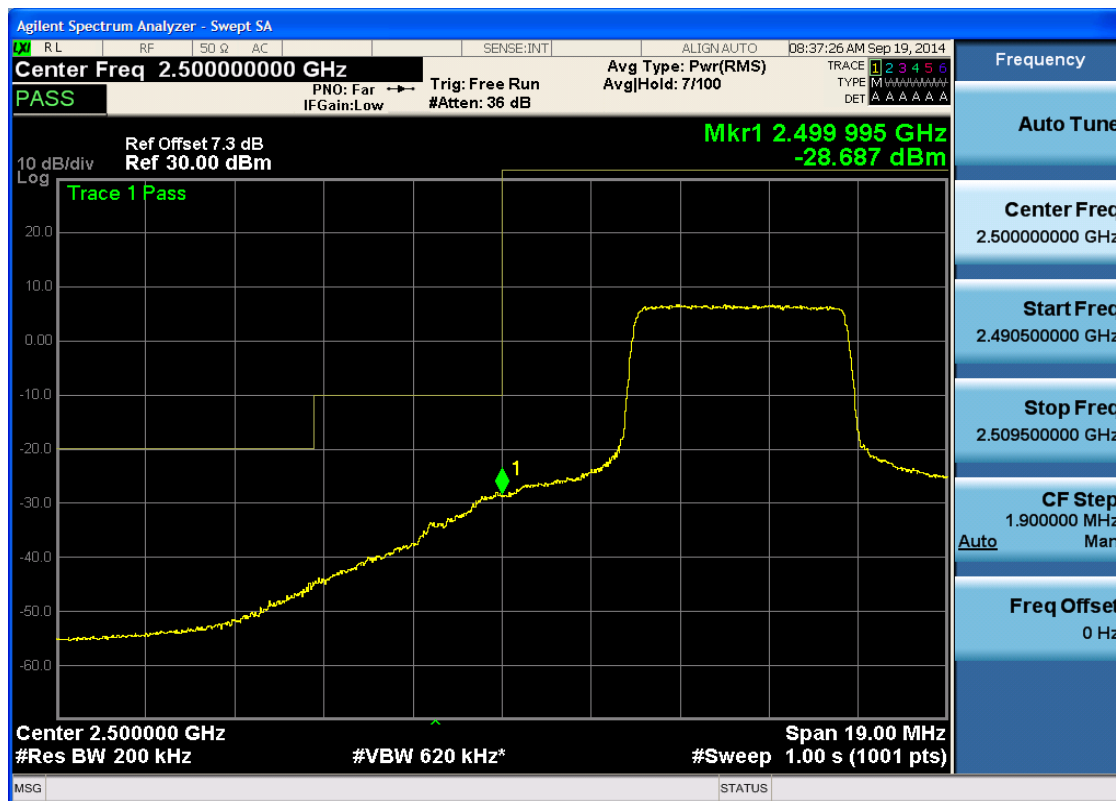


5.2.1.2.2.1.2 Test RB = RB1#49





5.2.1.2.2.1.3 Test RB = RB25#13





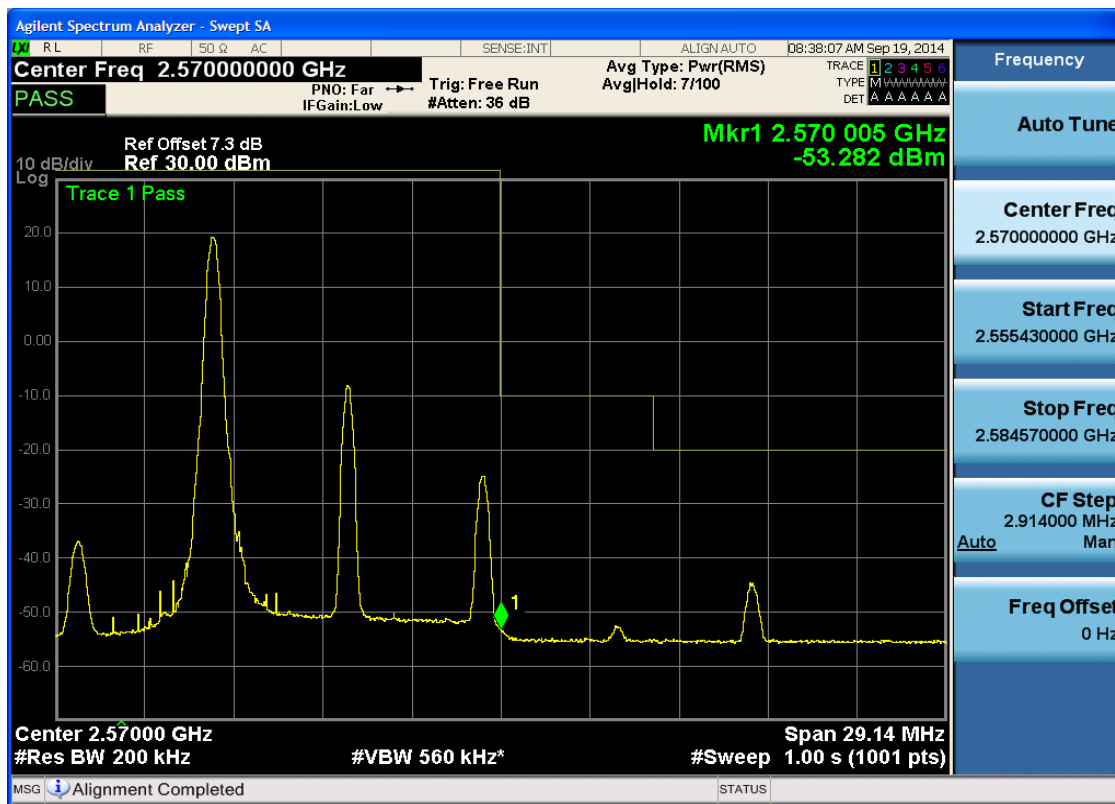
5.2.1.2.2.1.4 Test RB = RB50#0





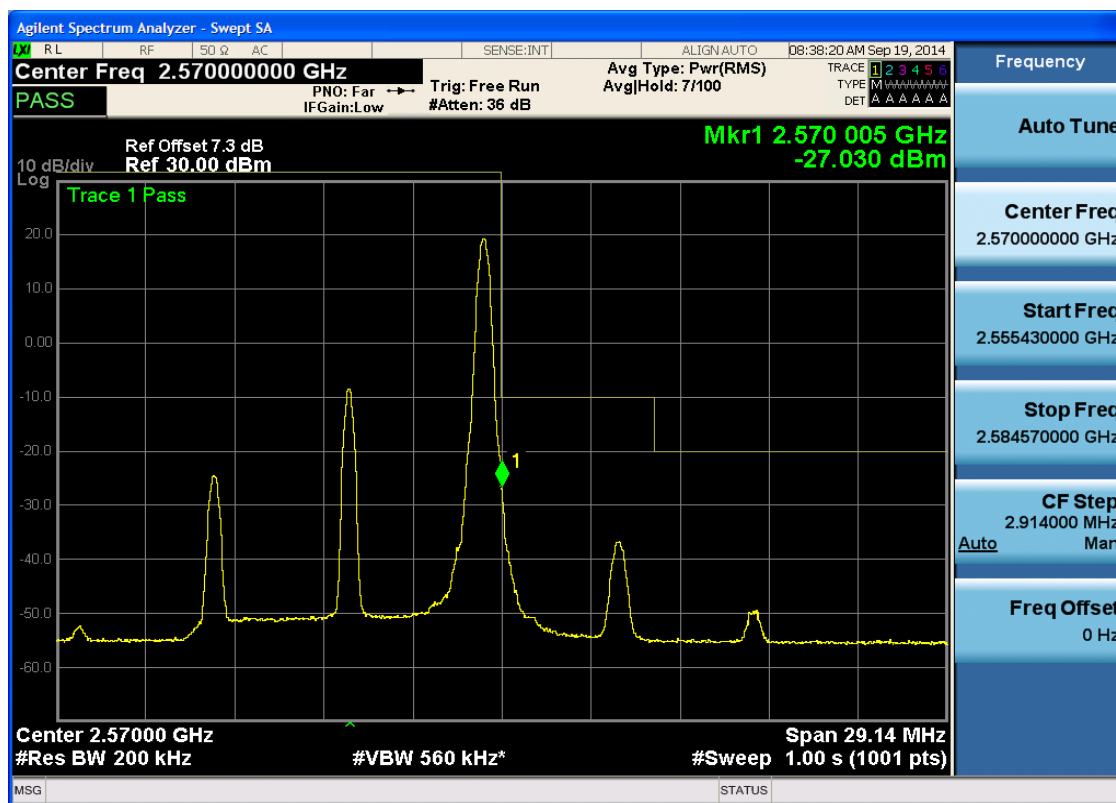
5.2.1.2.2.2 Test Channel = HCH

5.2.1.2.2.2.1 Test RB = RB1#0



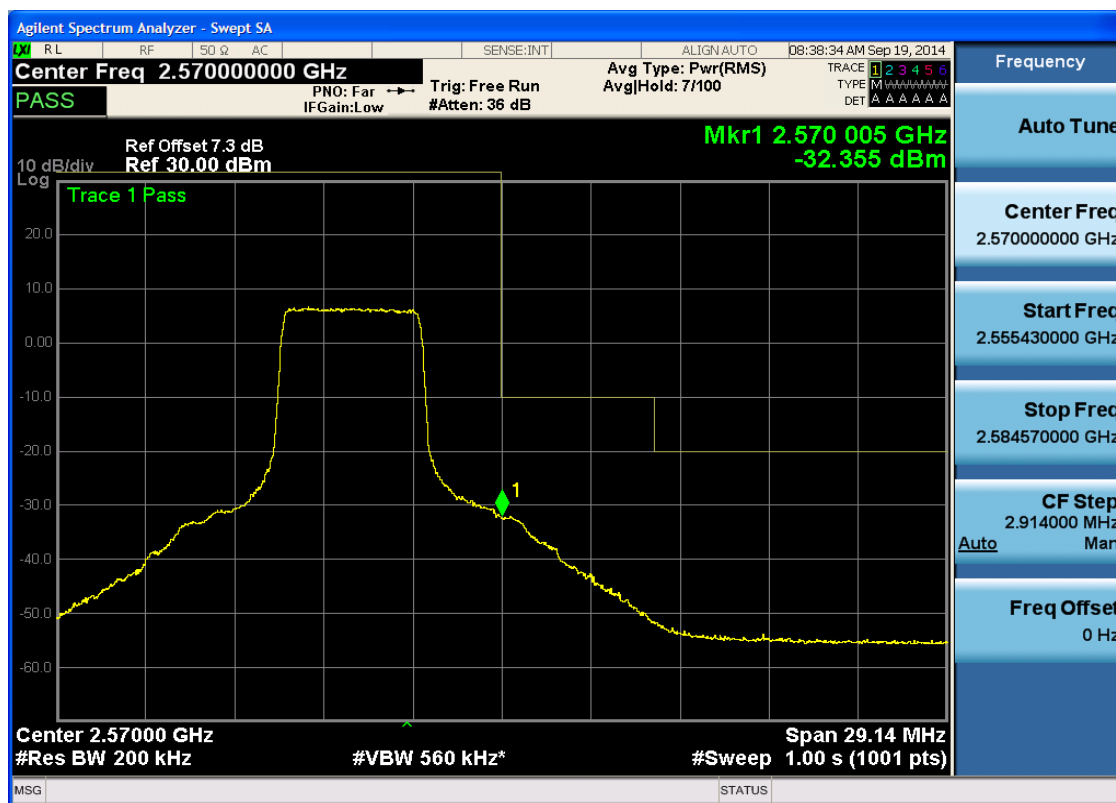


5.2.1.2.2.2 Test RB = RB1#49





5.2.1.2.2.3 Test RB = RB25#13





5.2.1.2.2.4 Test RB = RB50#0

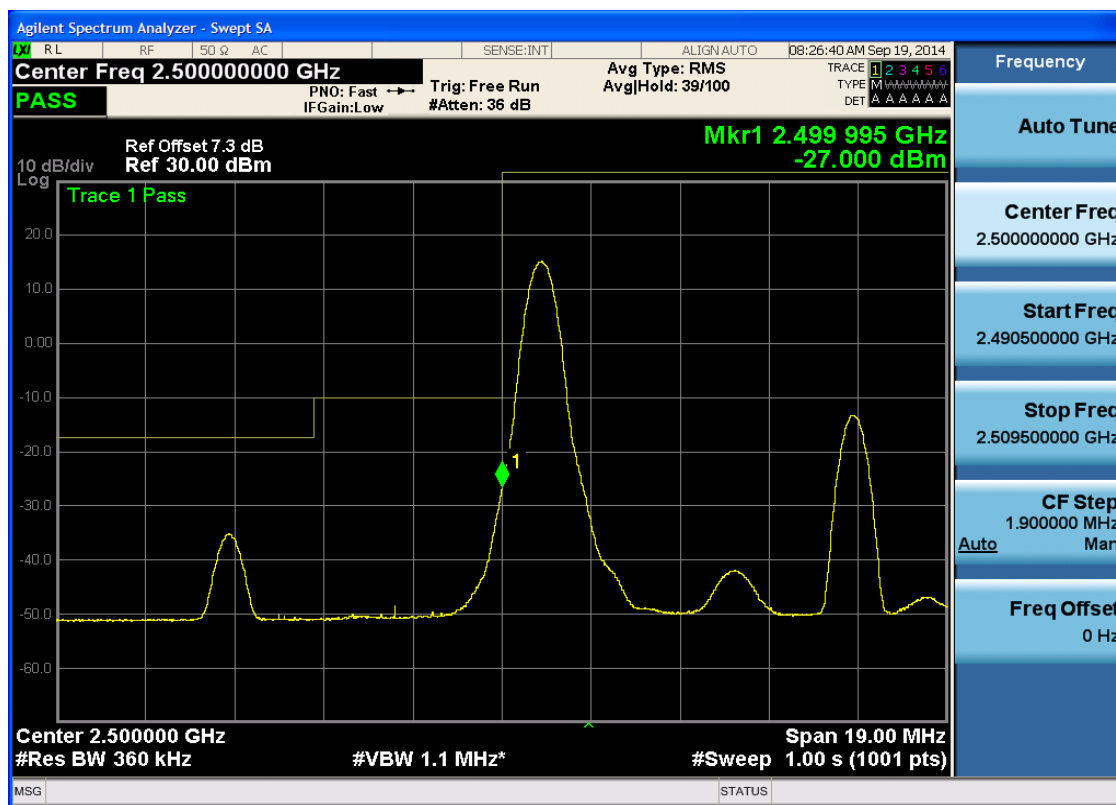




5.2.1.2.3 Test Bandwidth = 15

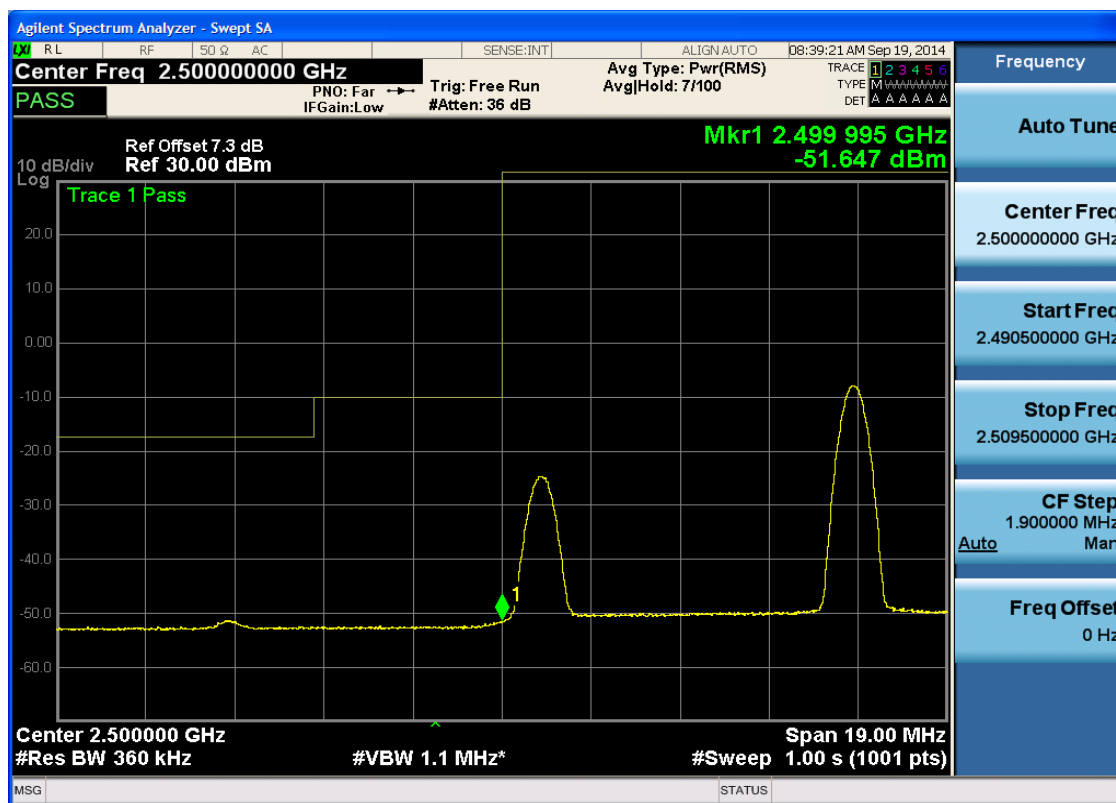
5.2.1.2.3.1 Test Channel = LCH

5.2.1.2.3.1.1 Test RB = RB1#0



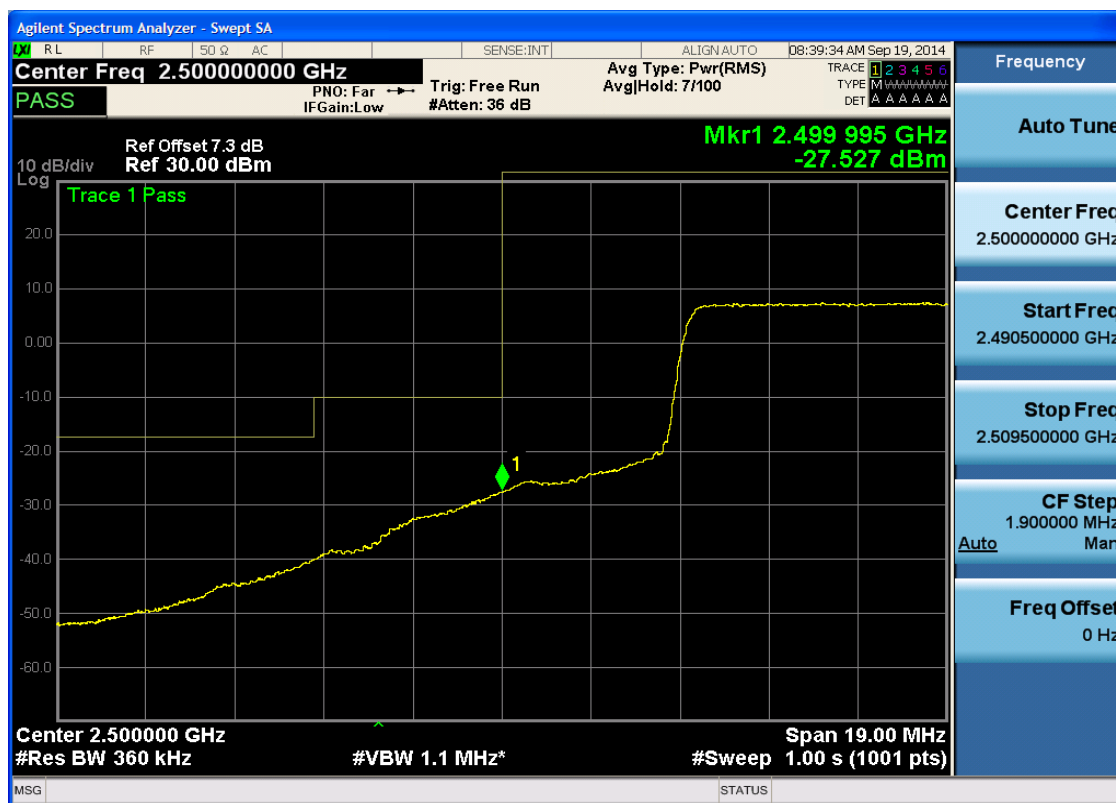


5.2.1.2.3.1.2 Test RB = RB1#74



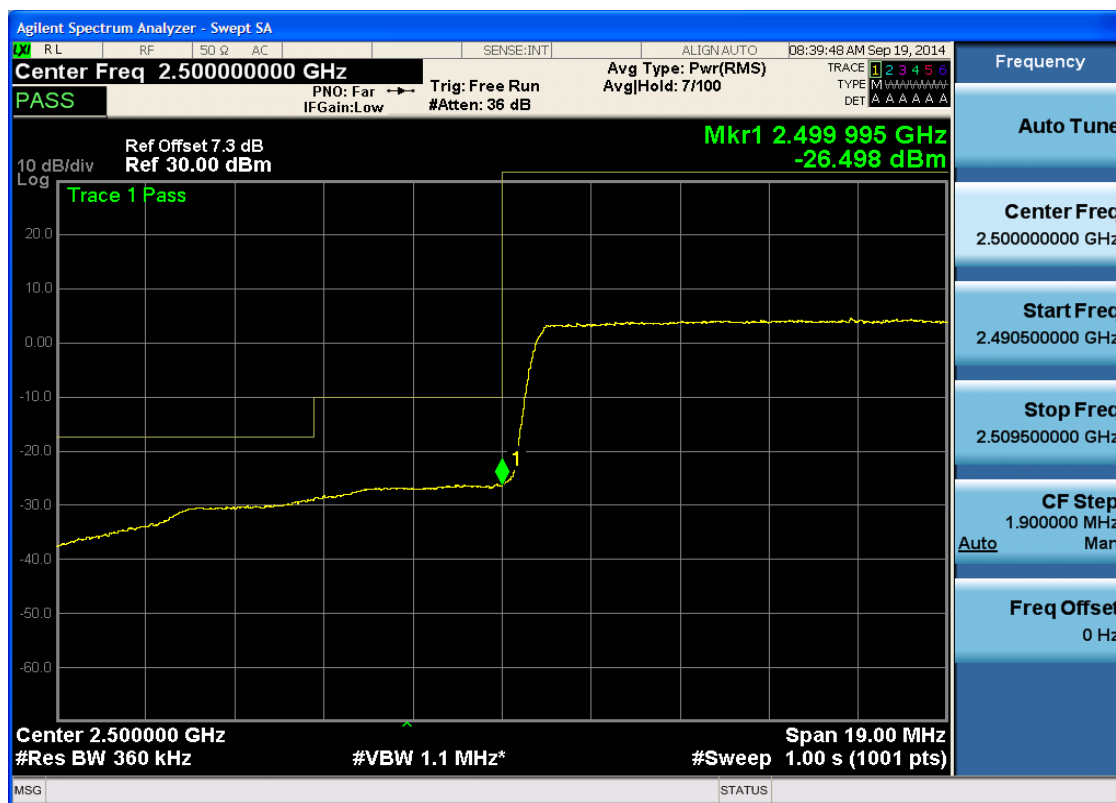


5.2.1.2.3.1.3 Test RB = RB36#18



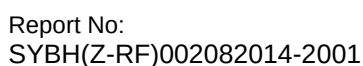


5.2.1.2.3.1.4 Test RB = RB75#0



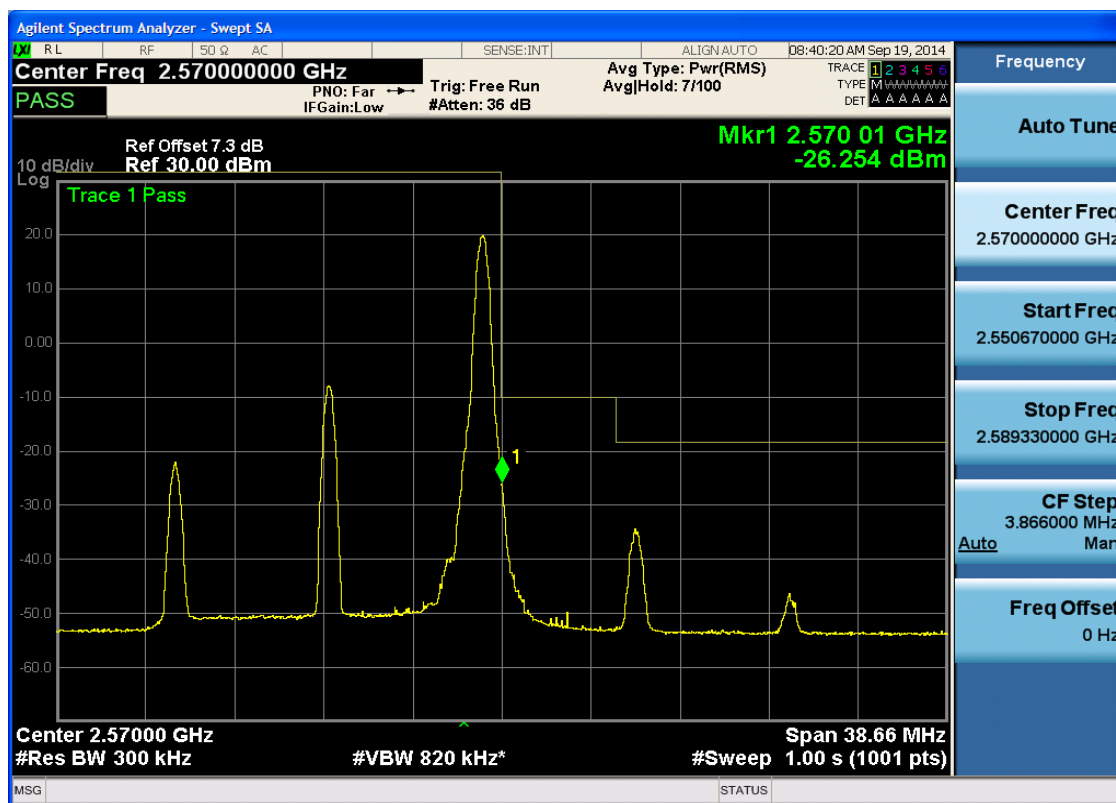


5.2.1.2.3.2.1 Test RB = RB1#0



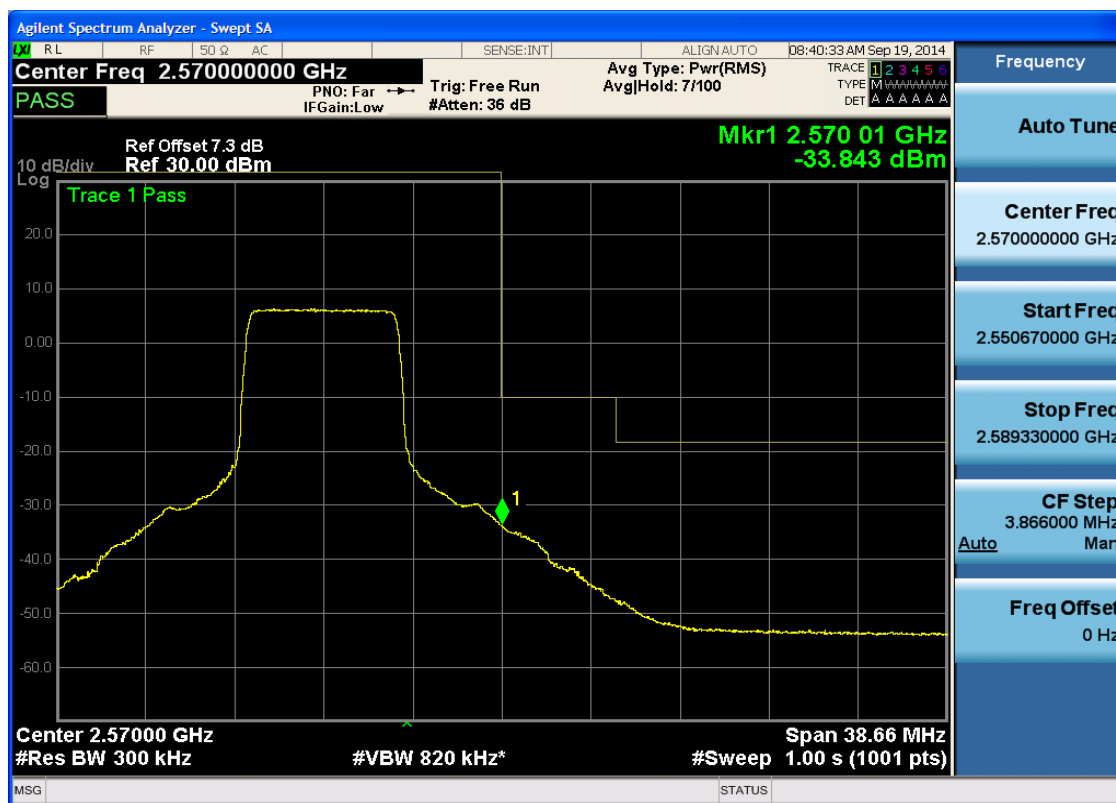


5.2.1.2.3.2.2 Test RB = RB1#74



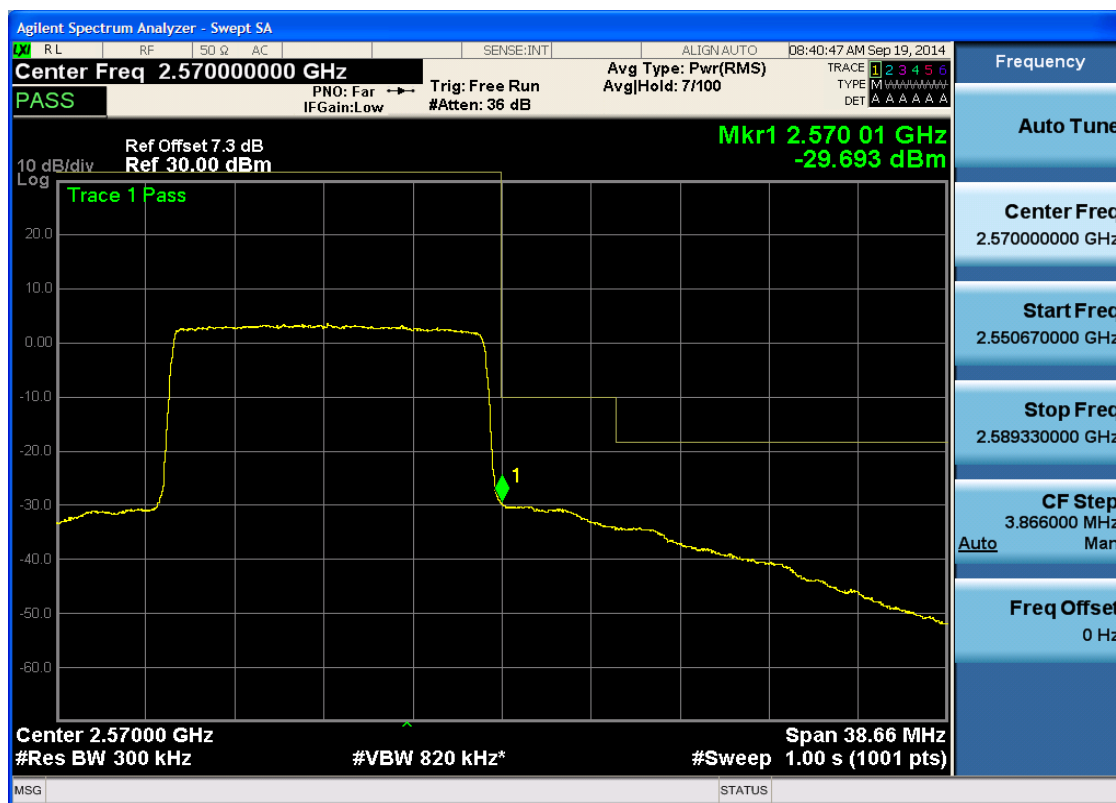


5.2.1.2.3.2.3 Test RB = RB36#18





5.2.1.2.3.2.4 Test RB = RB75#0

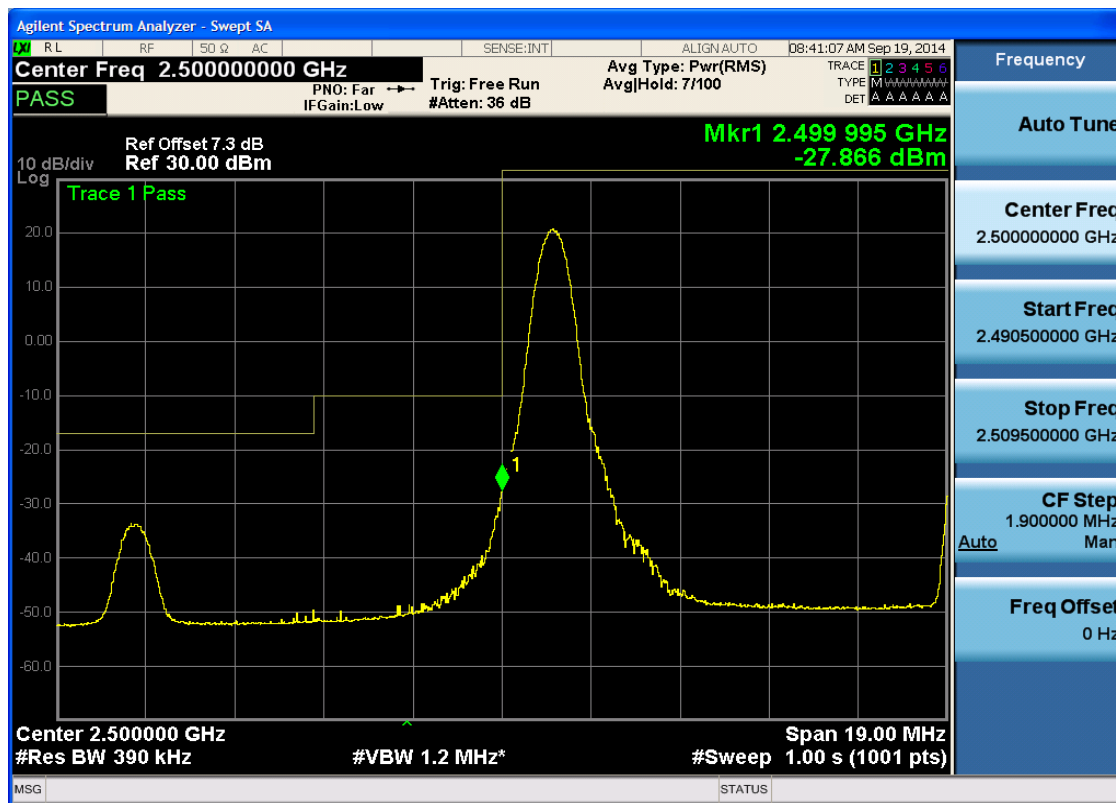




5.2.1.2.4 Test Bandwidth = 20

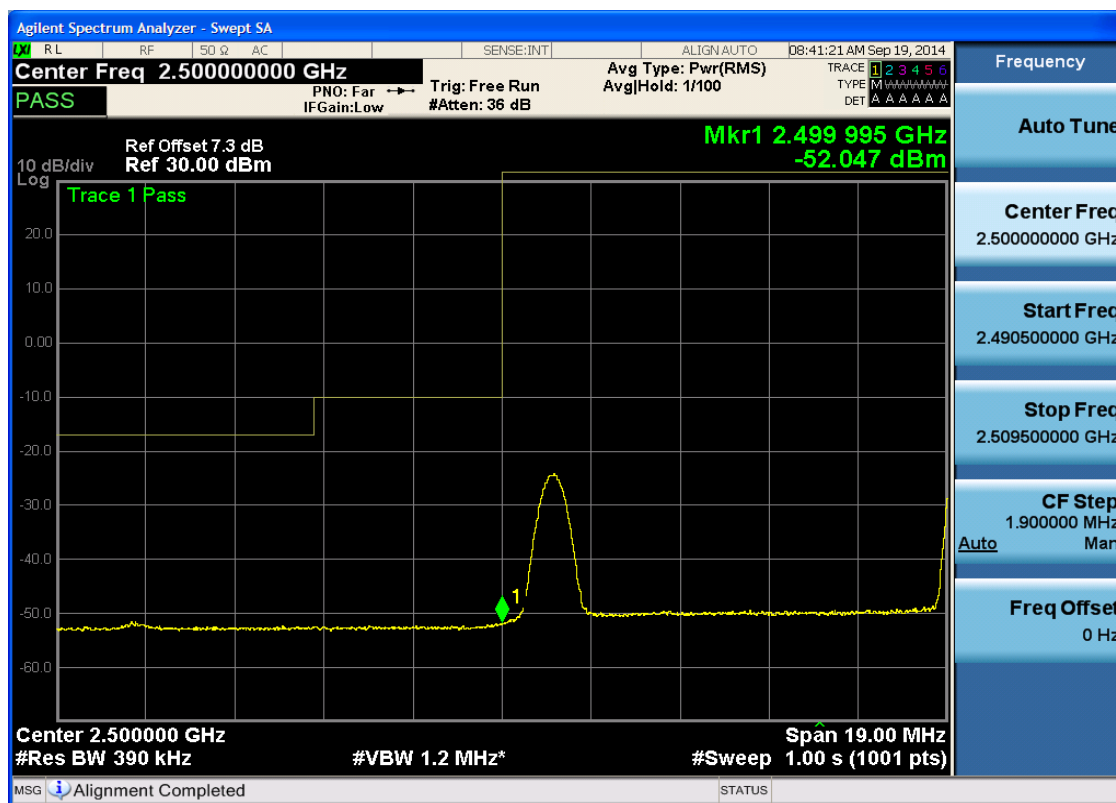
5.2.1.2.4.1 Test Channel = LCH

5.2.1.2.4.1.1 Test RB = RB1#0



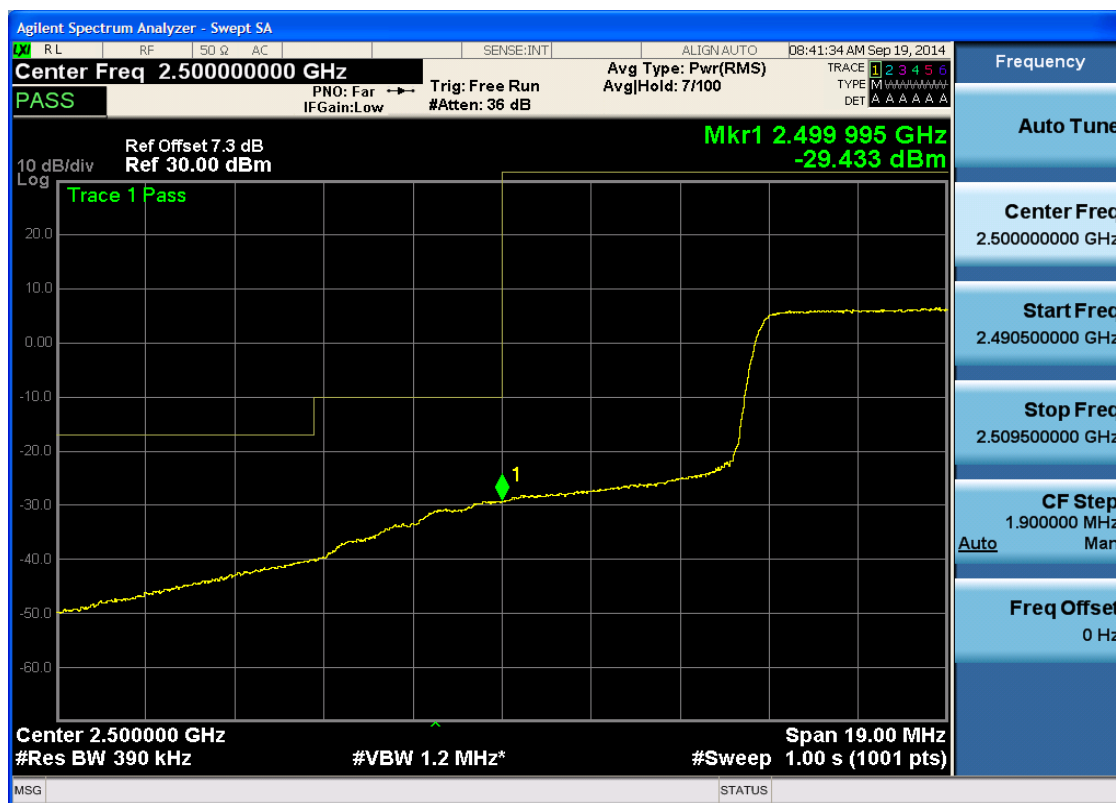


5.2.1.2.4.1.2 Test RB = RB1#99





5.2.1.2.4.1.3 Test RB = RB50#25





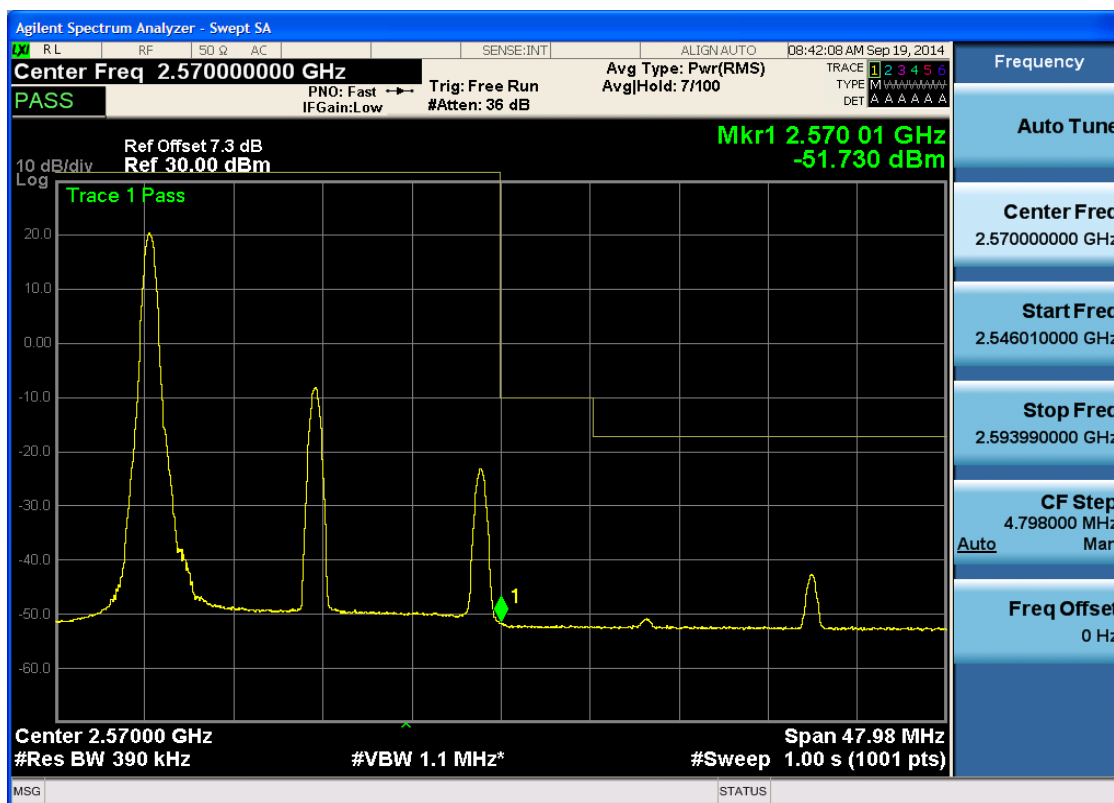
5.2.1.2.4.1.4 Test RB = RB100#0





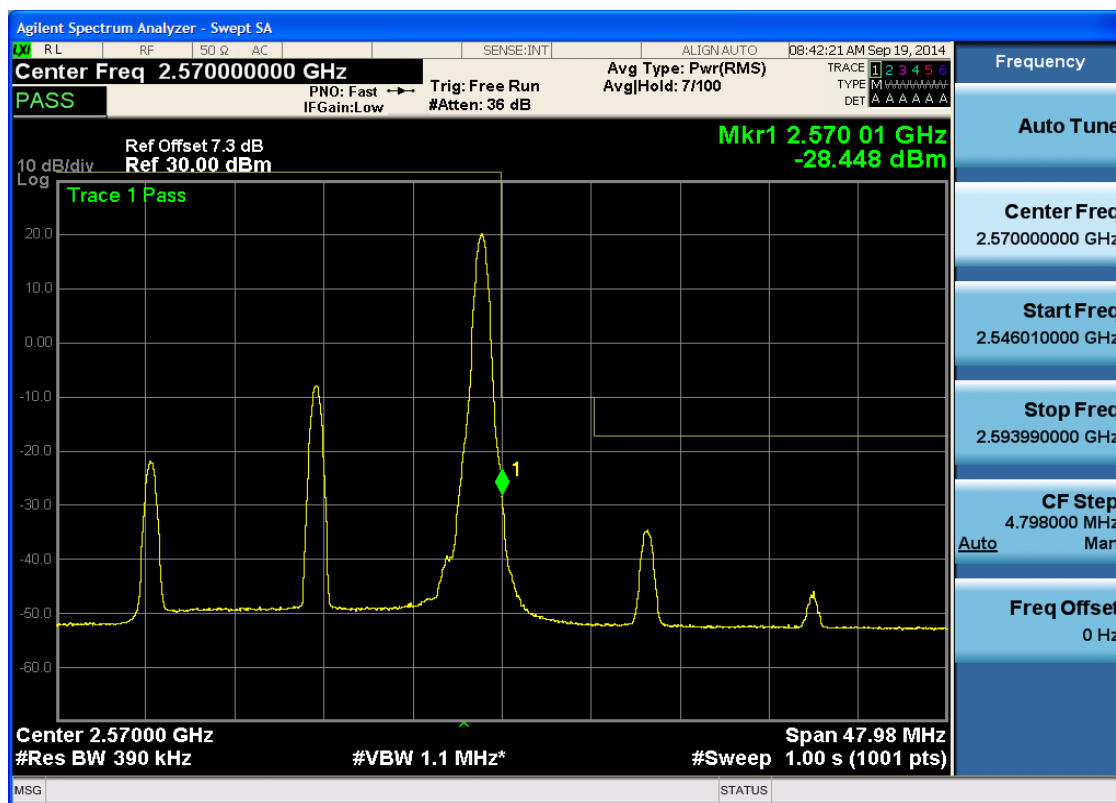
5.2.1.2.4.2 Test Channel = HCH

5.2.1.2.4.2.1 Test RB = RB1#0



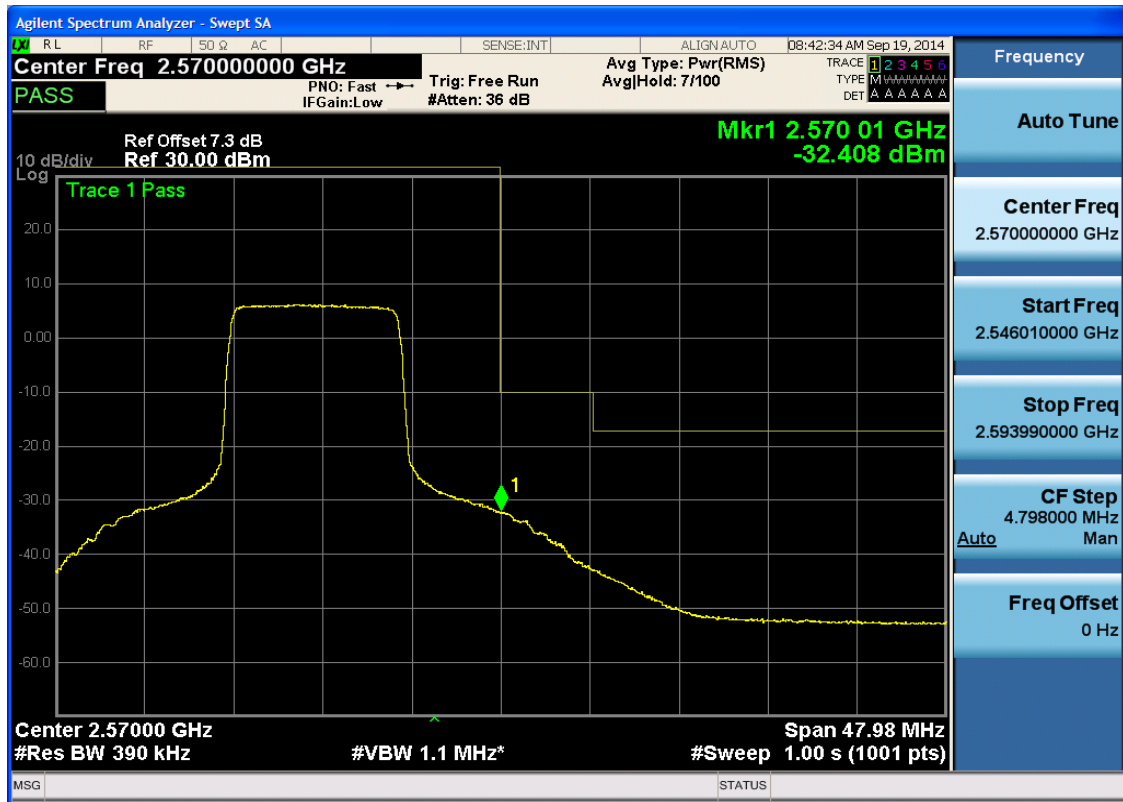


5.2.1.2.4.2.2 Test RB = RB1#99





5.2.1.2.4.2.3 Test RB = RB50#25





5.2.1.2.4.2.4 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.

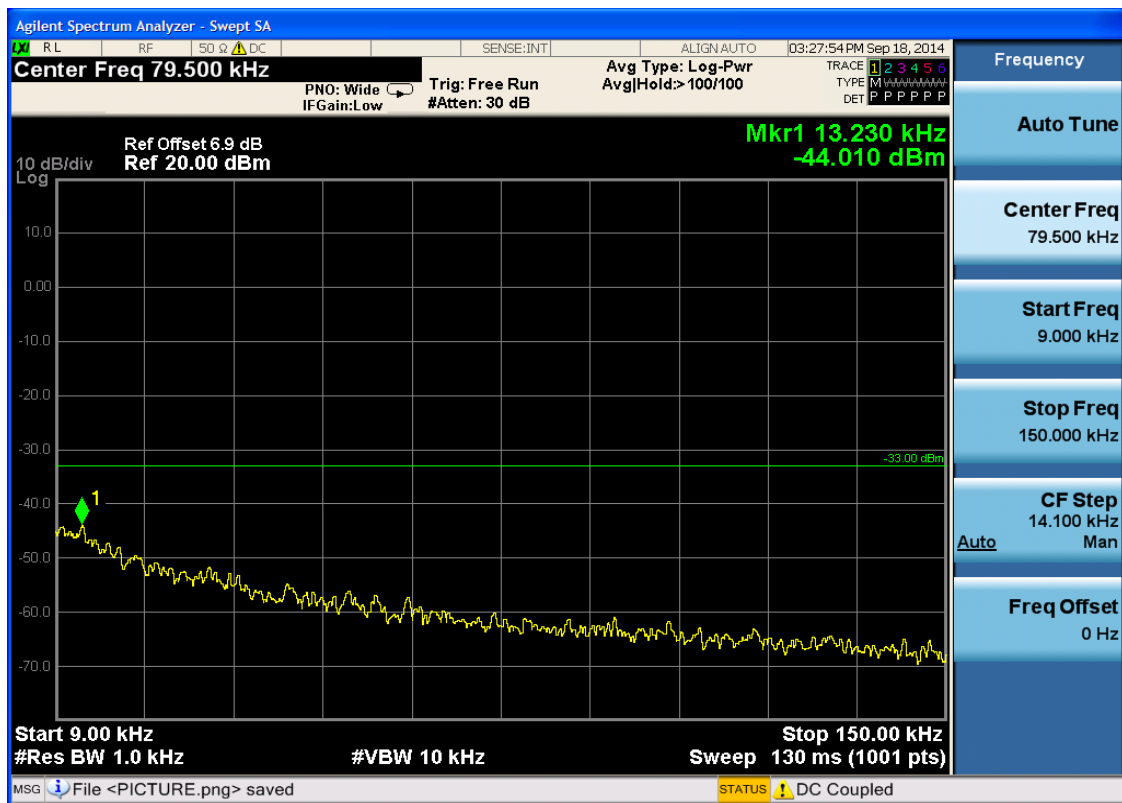
Part I - Test Plots

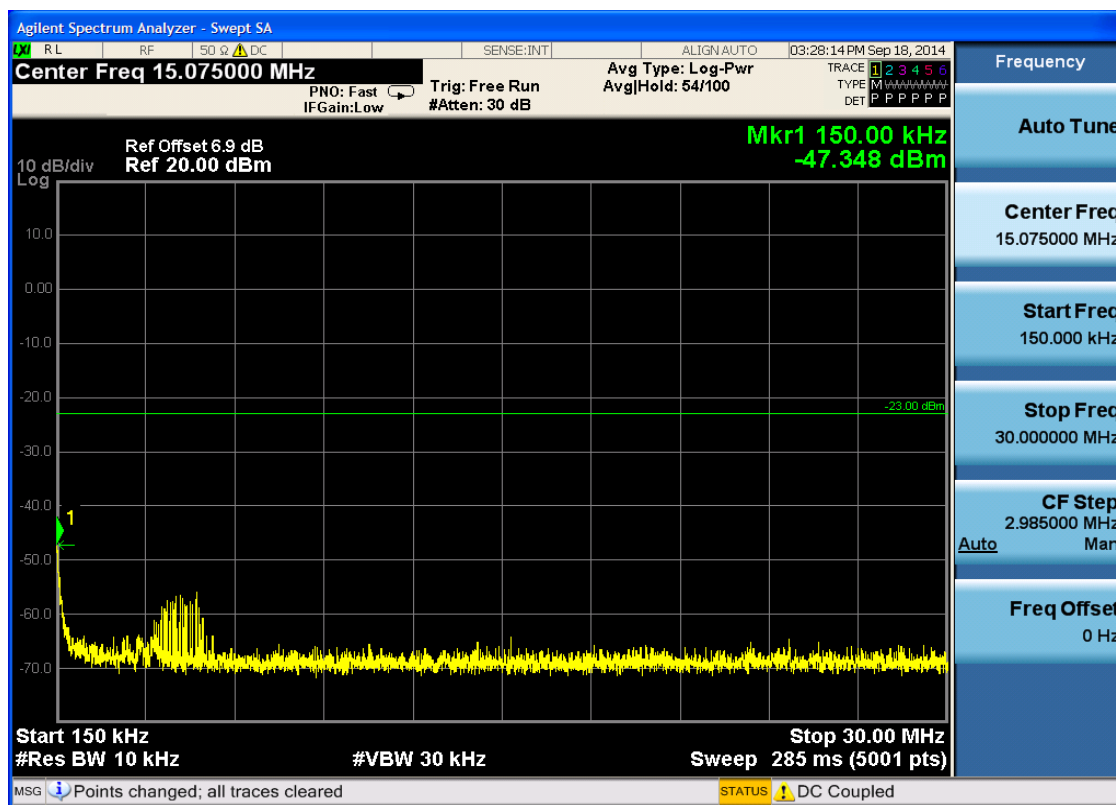
6.1 For GSM

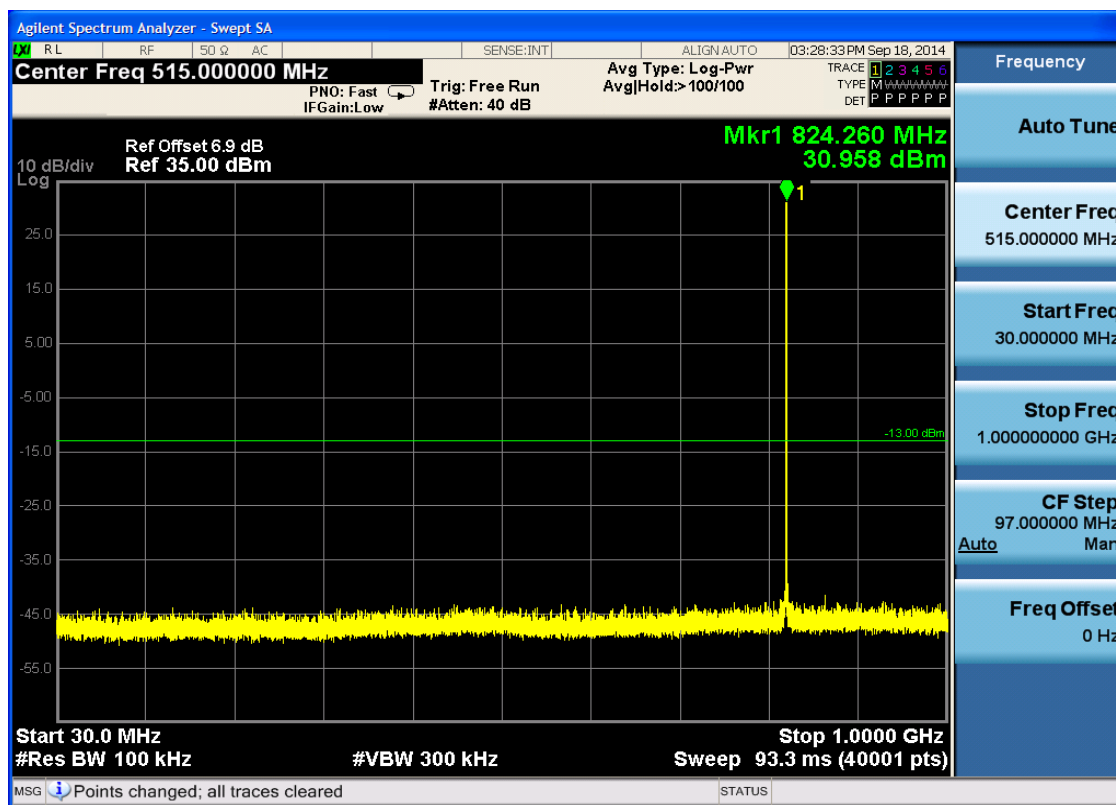
6.1.1 Test Band = GSM850

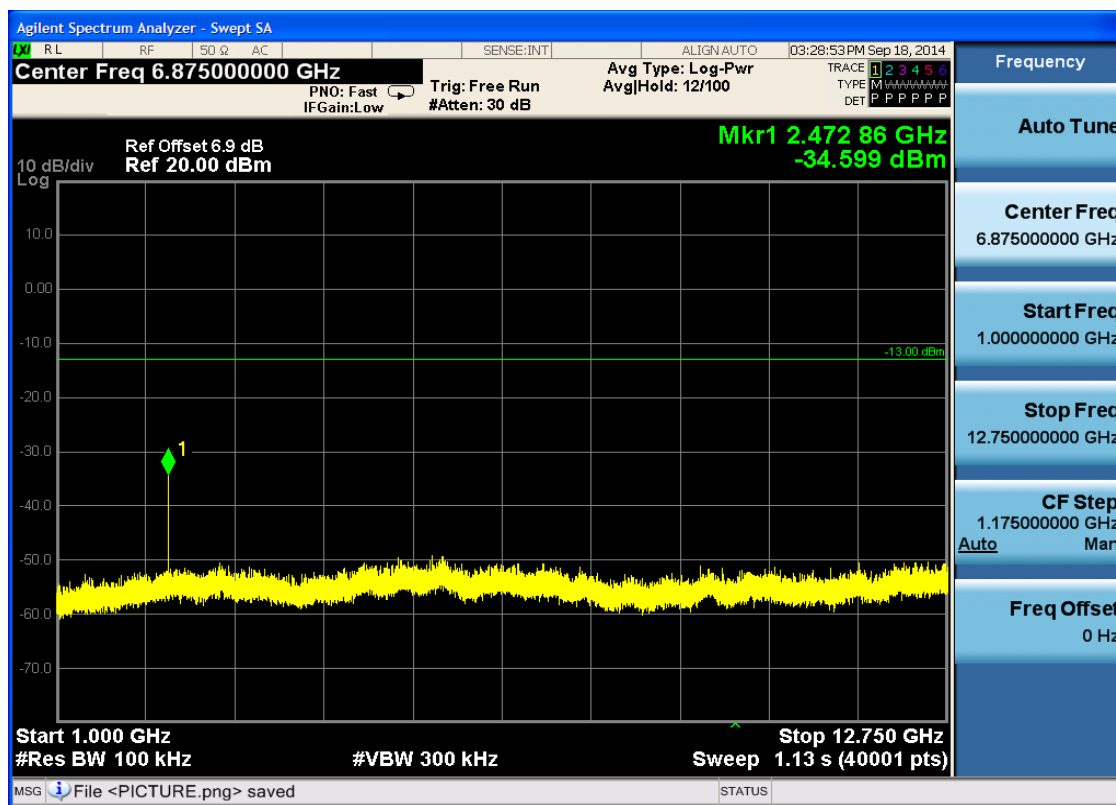
6.1.1.1 Test Mode = GSM/TM1

6.1.1.1.1 Test Channel = LCH











Agilent Spectrum Analyzer - Swept SA

☒ R.L. RF 50 Ω ☒ DC SENSE:INT ALIGN:AUTO 03:29:14 PM Sep 18, 2014

Center Freq 79.500 kHz PNO: Wide Trig: Free Run Avg Type: Log-Pwr TRACE 1 2 3 4 5 6
 IFGain:Low #Atten: 30 dB AvgHold:> 100/100 TYPE M P P P P P P
 DET P P P P P P P

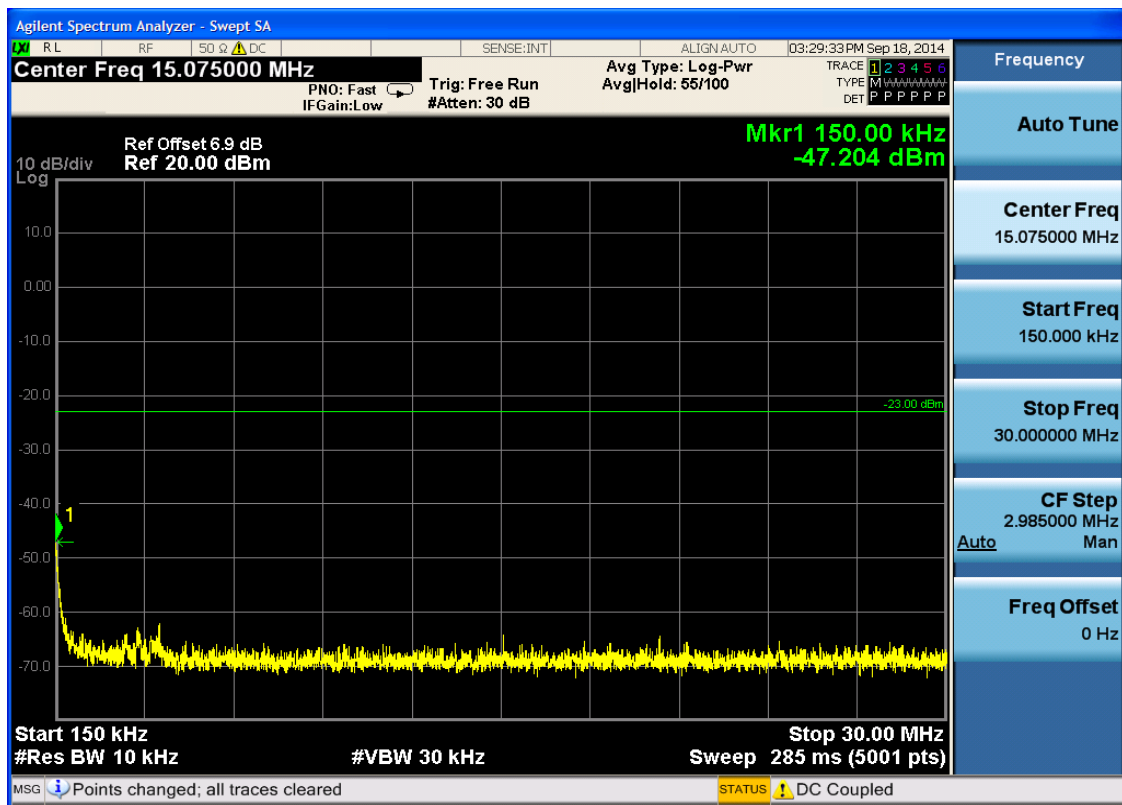
Ref Offset 6.9 dB **Mkr1 10.269 kHz**
 Ref 20.00 dBm **-42.688 dBm**

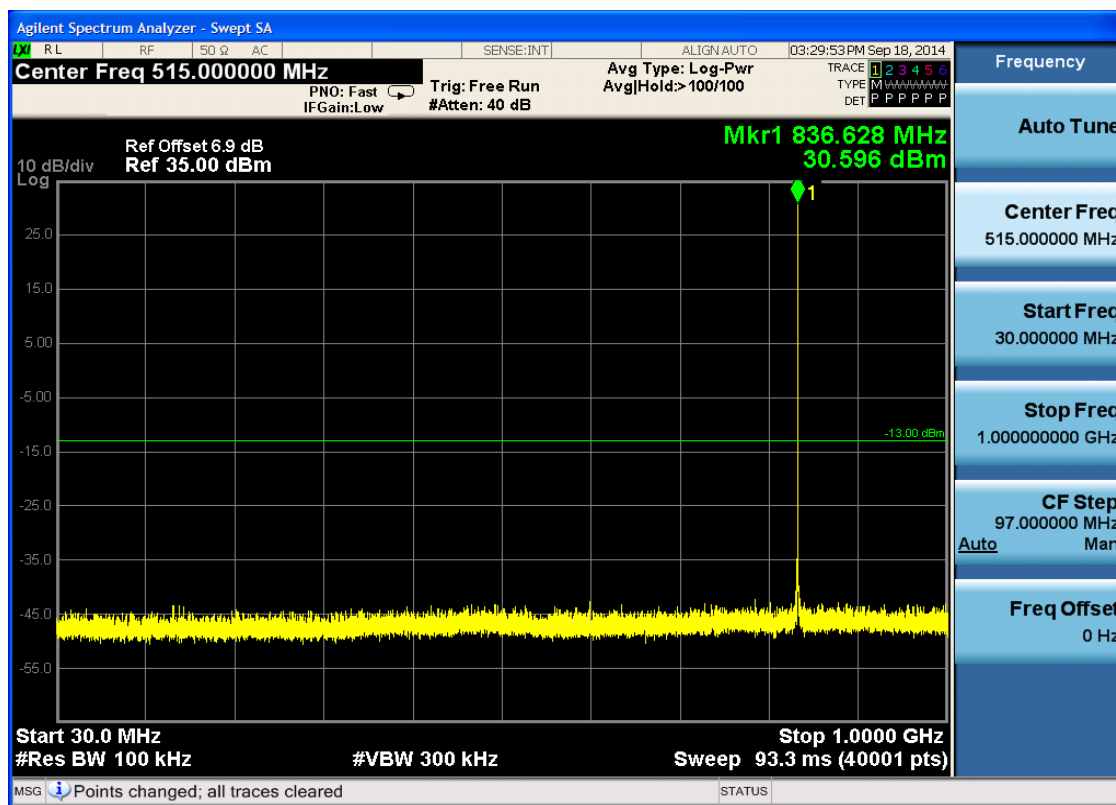
10 dB/div
Log

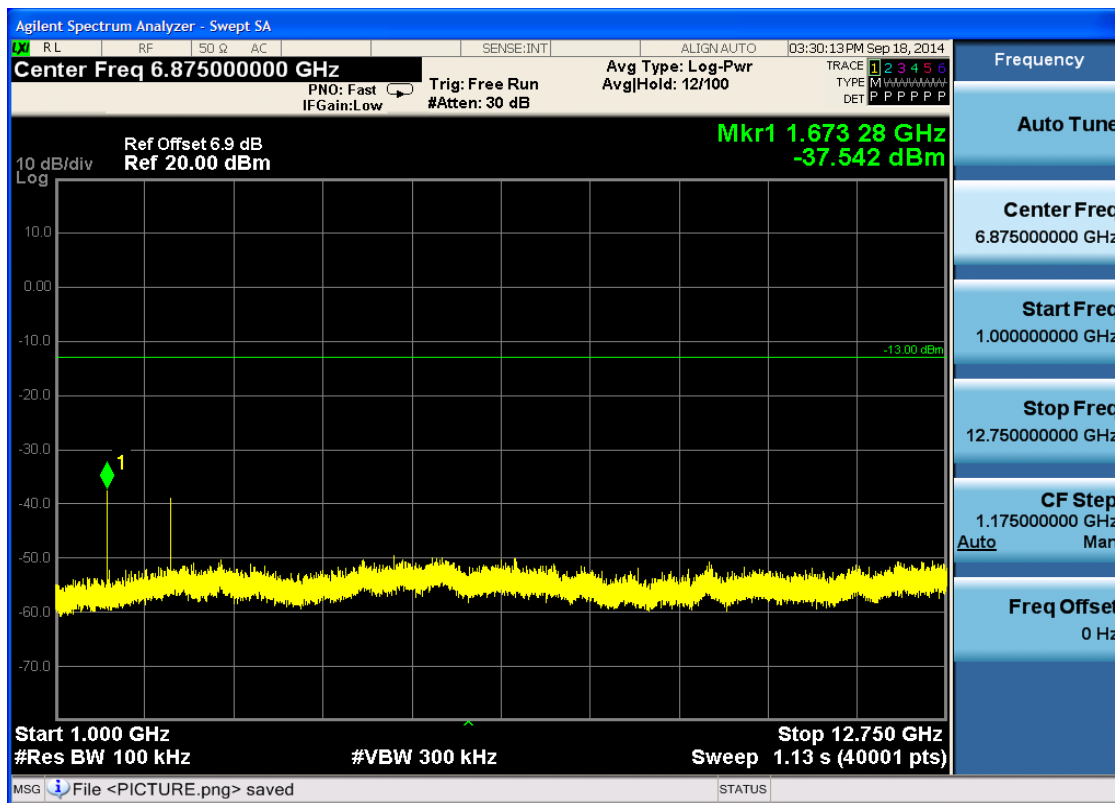
Start 9.00 kHz Stop 150.00 kHz
 #Res BW 1.0 kHz #VBW 10 kHz Sweep 130 ms (1001 pts)

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
 Man
 Auto
 Freq Offset
 0 Hz

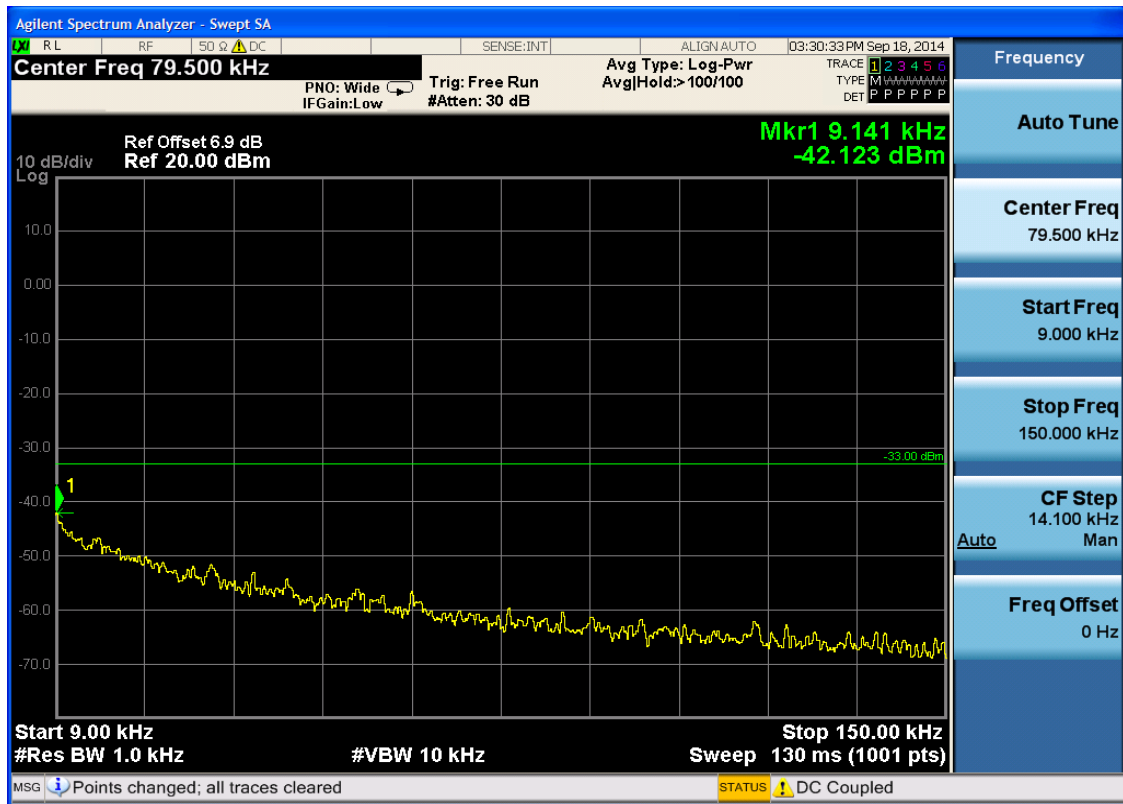


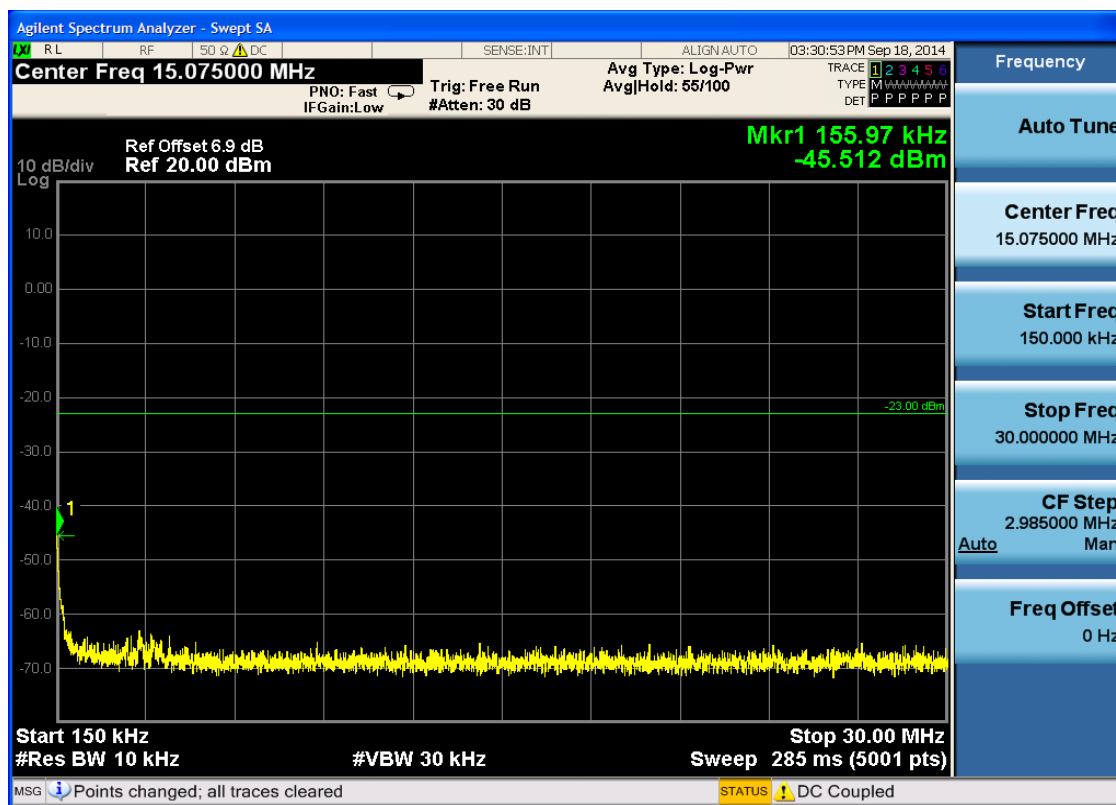


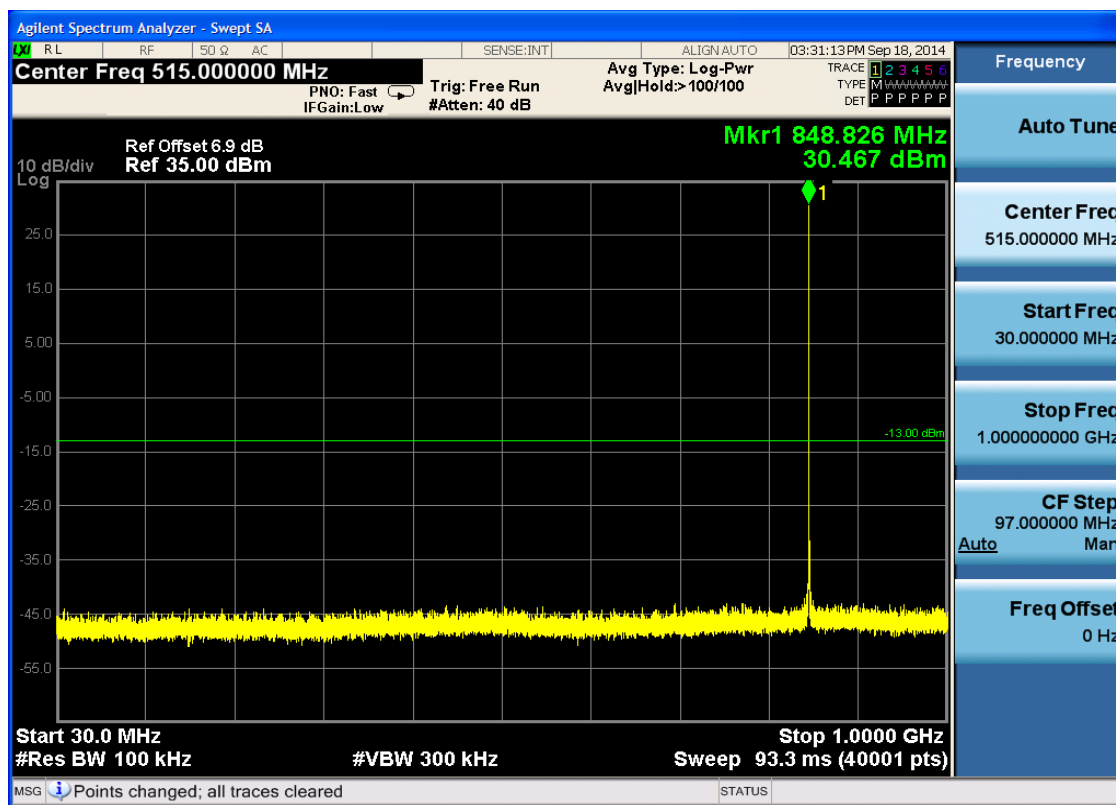


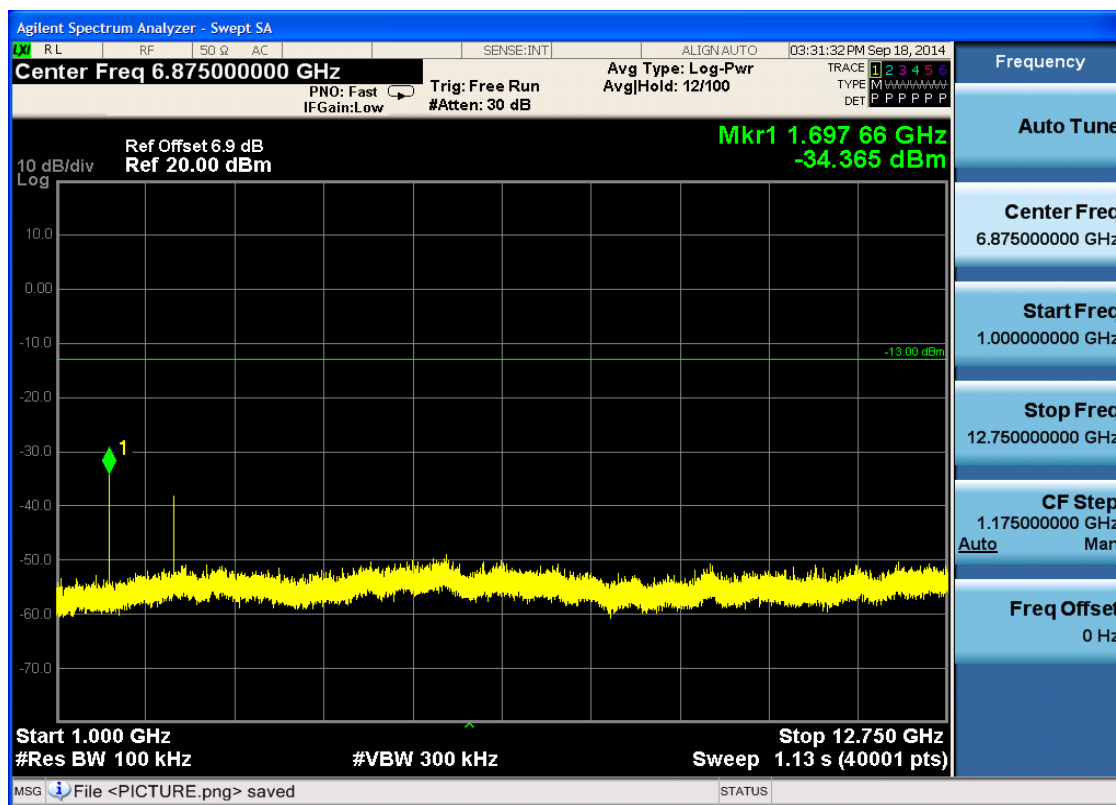


6.1.1.1.3 Test Channel = HCH



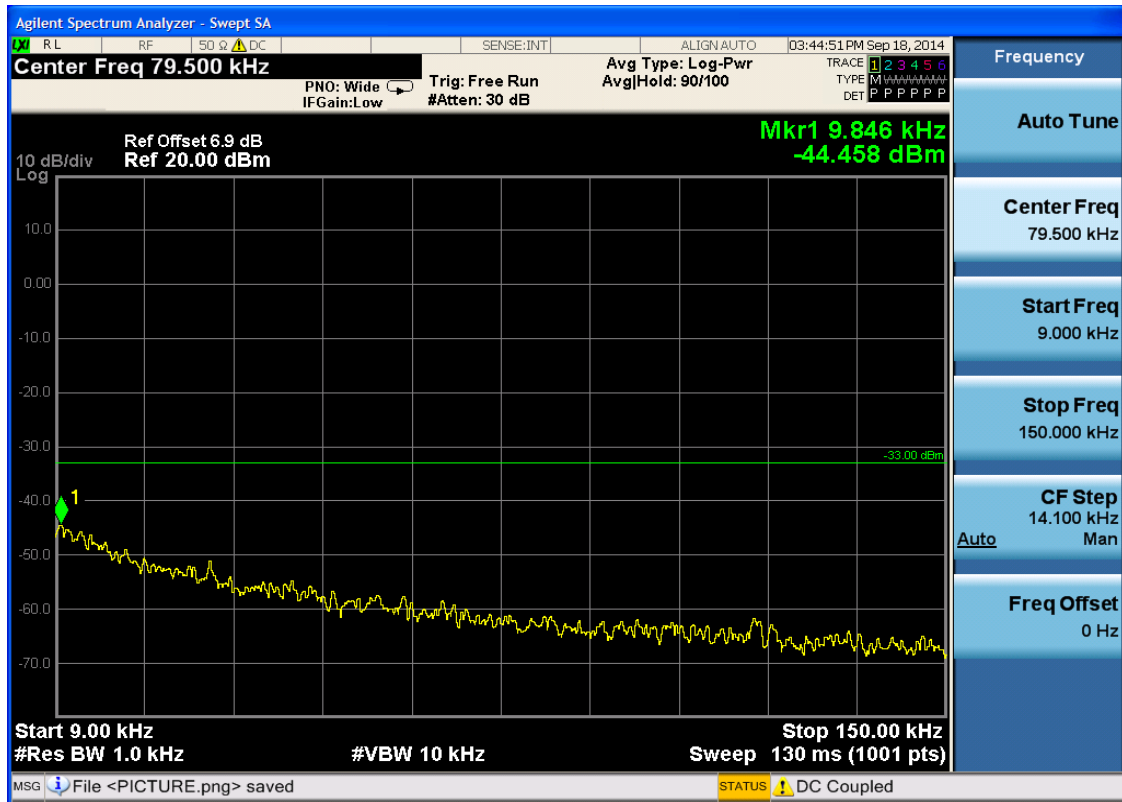


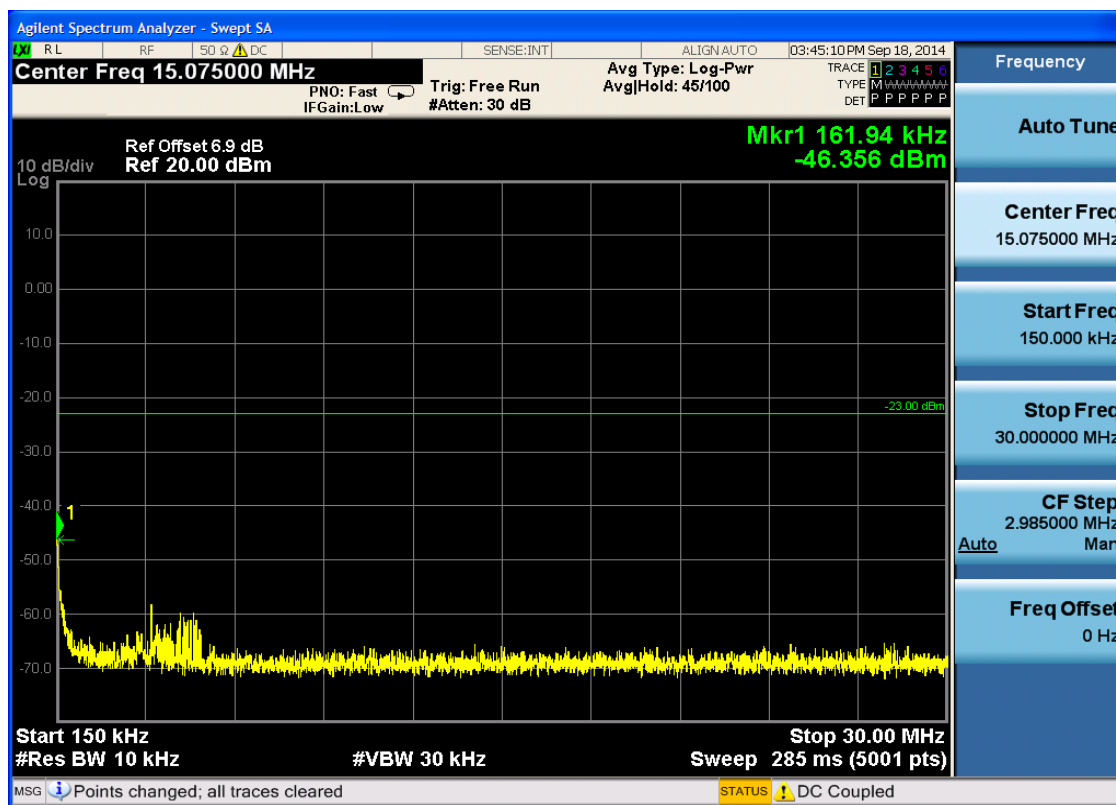


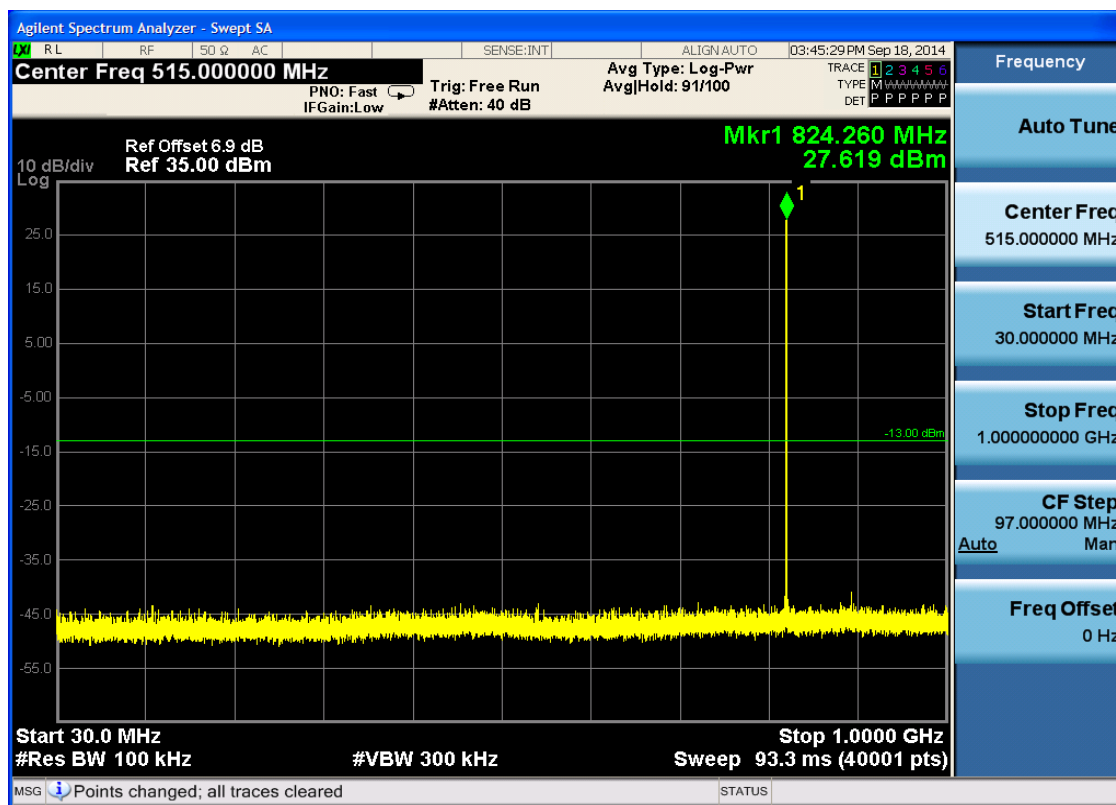


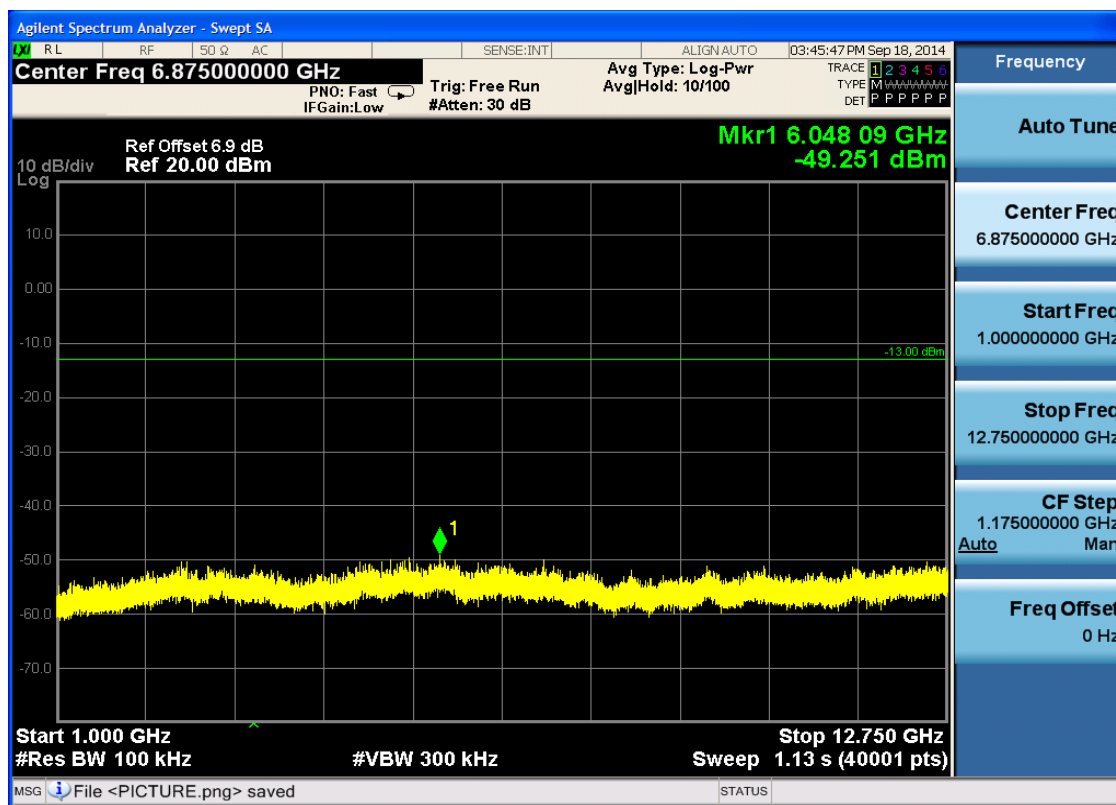
6.1.1.2 Test Mode = GSM/TM2

6.1.1.2.1 Test Channel = LCH











Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω DC SENSE:INT ALIGN:AUTO 03:46:07 PM Sep 18, 2014

Center Freq 79.500 kHz PNO: Wide Trg: Free Run Avg Type: Log-Pwr Avg/Hold: 90/100

IFGain:Low #Atten: 30 dB TRACE 1 2 3 4 5 6 TYPE M M M M M M M M DET P P P P P P

Ref Offset 6.9 dB Mkr1 9.000 kHz
Ref 20.00 dBm -44.314 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

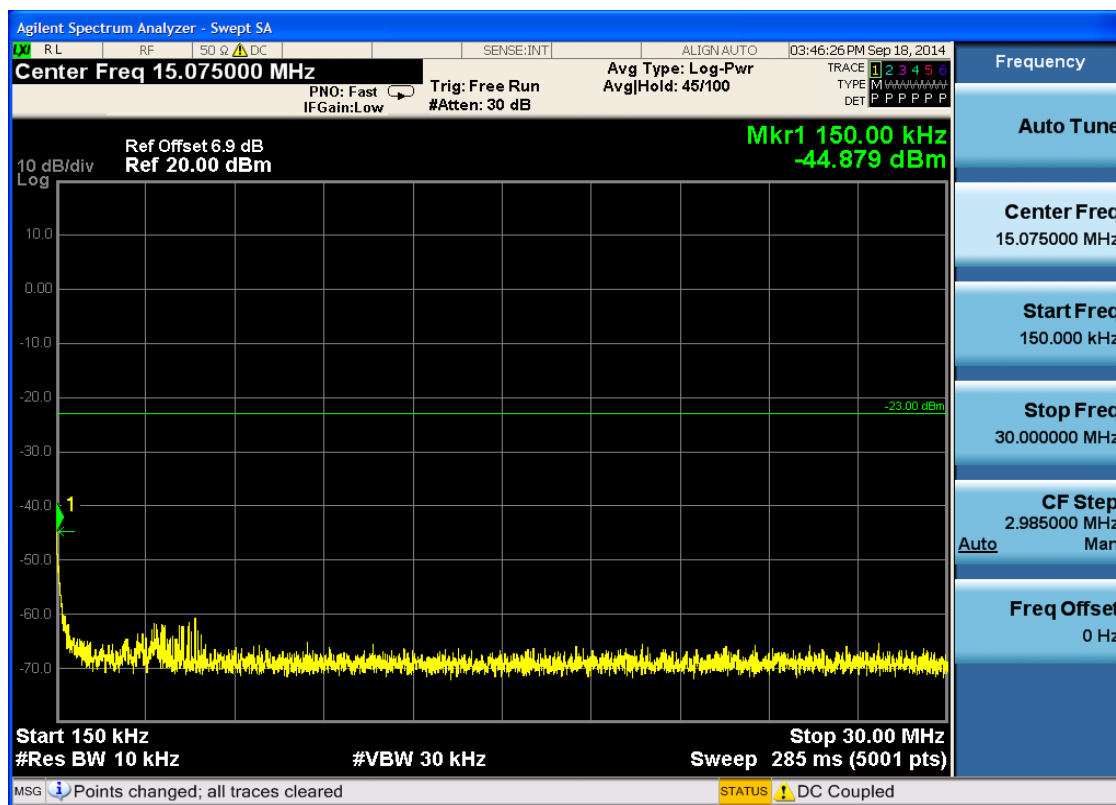
Center Freq
79.500 kHz

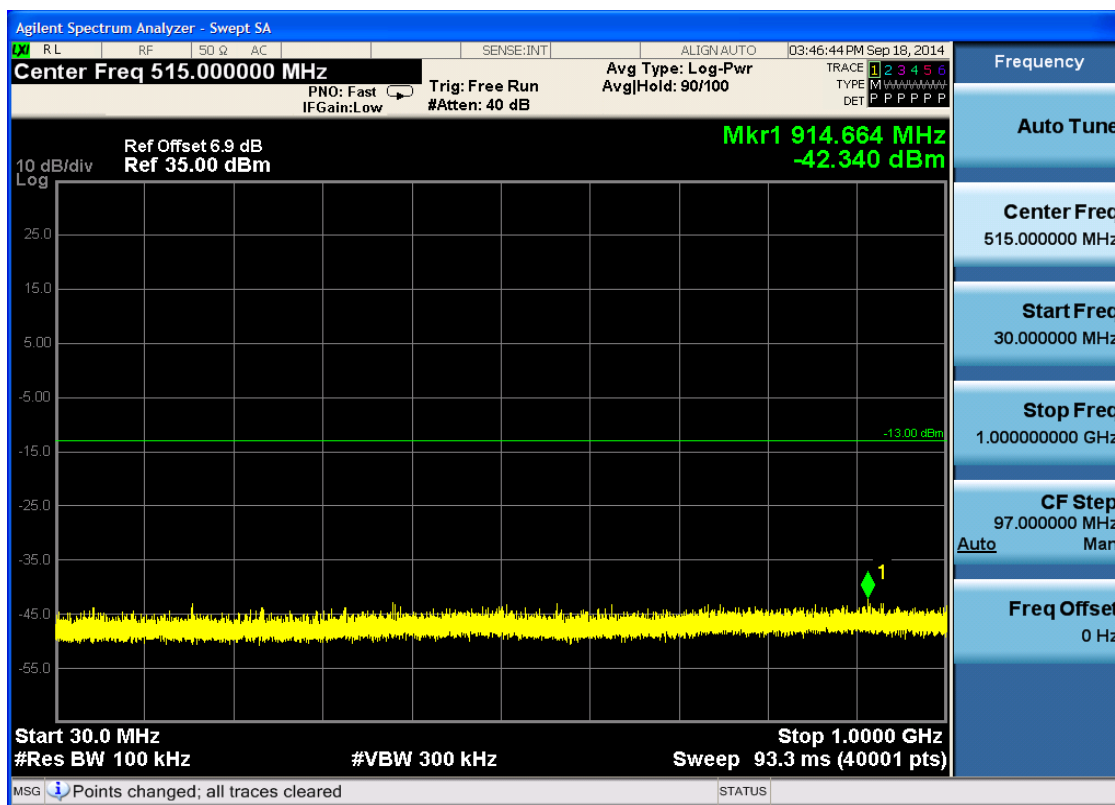
Start Freq
9.000 kHz

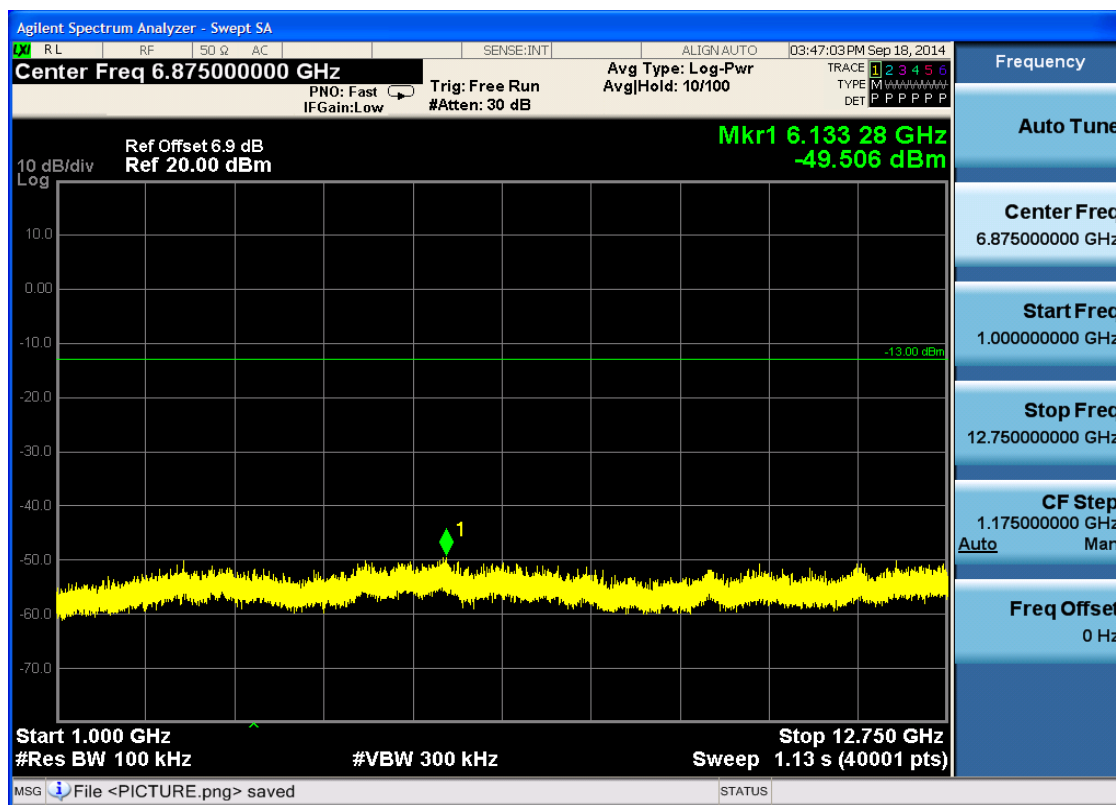
Stop Freq
150.000 kHz

CF Step
14.100 kHz
Auto Man

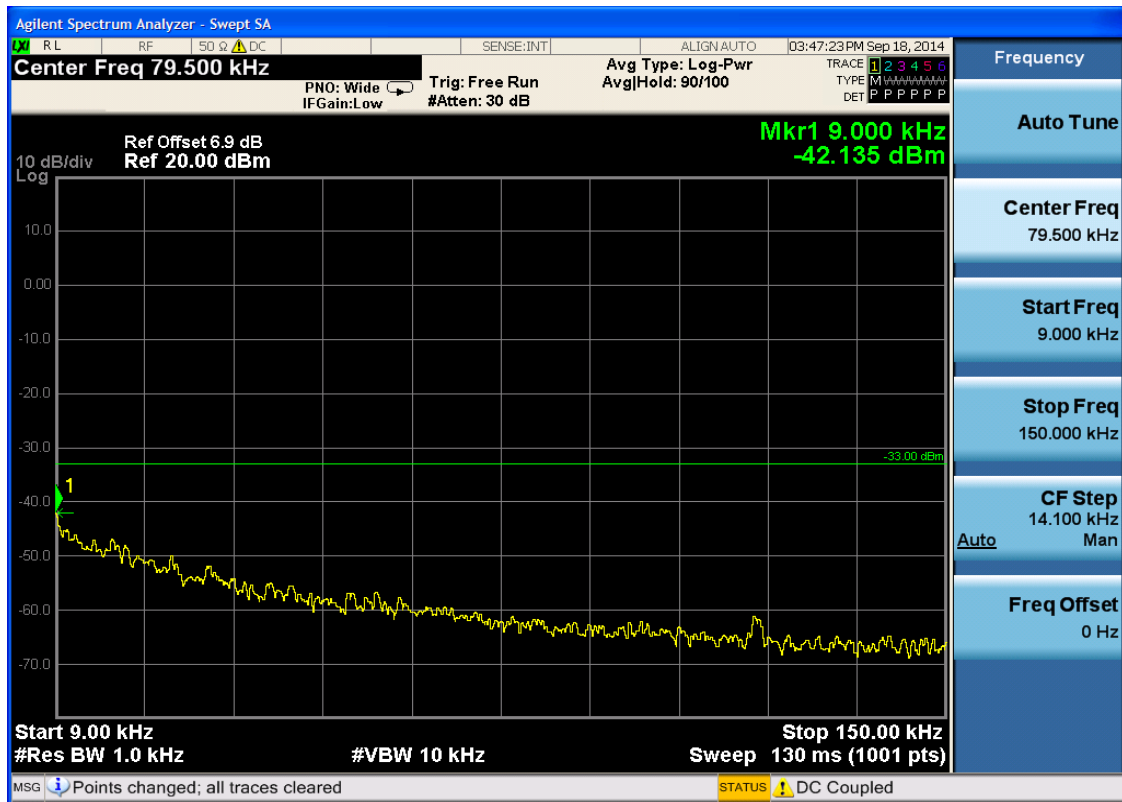
Freq Offset
0 Hz

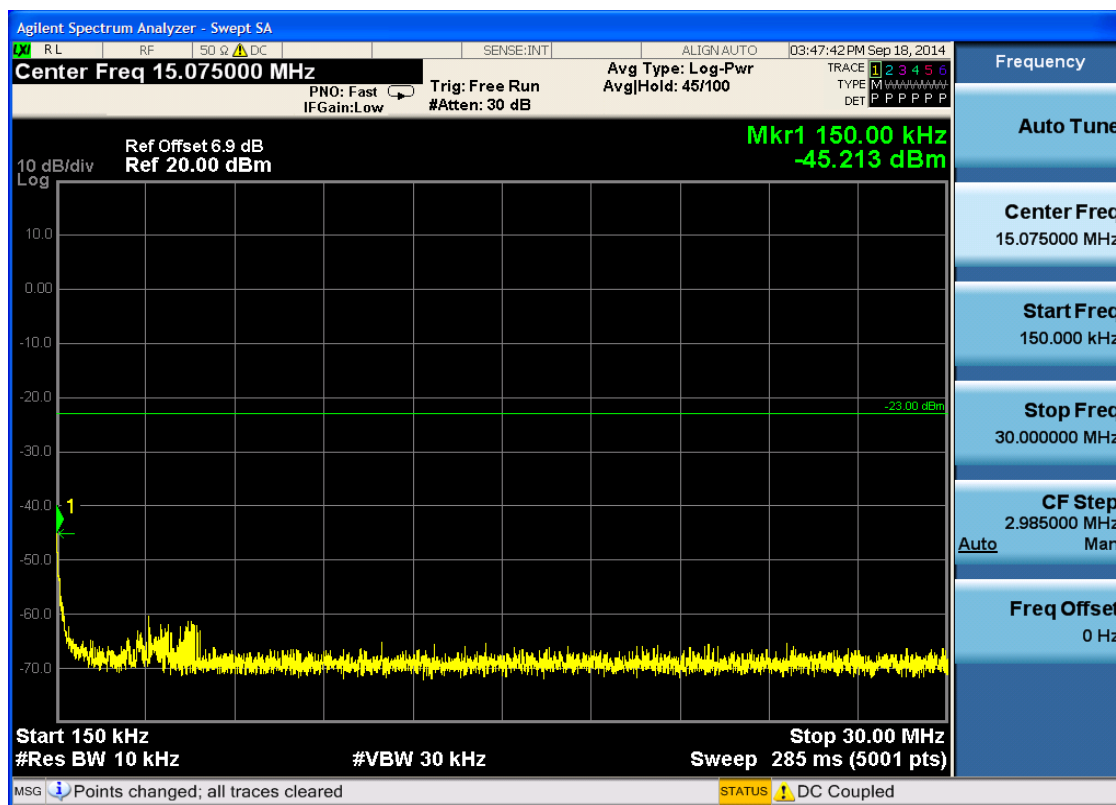


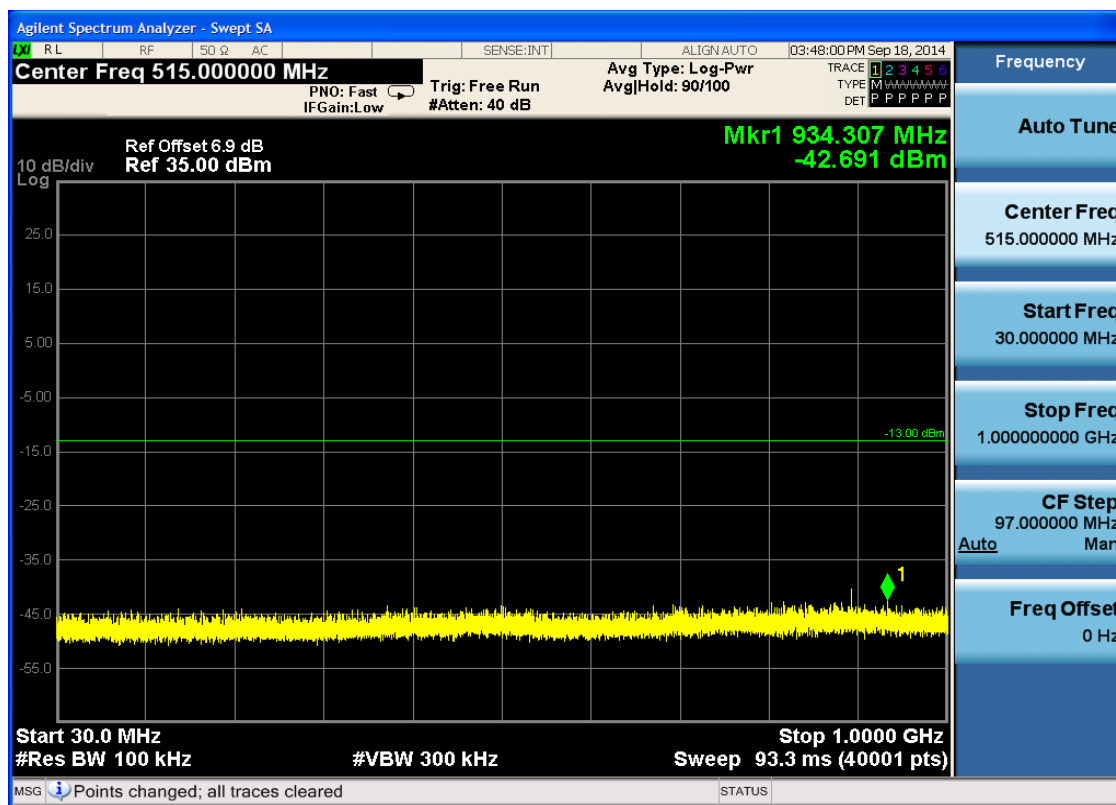


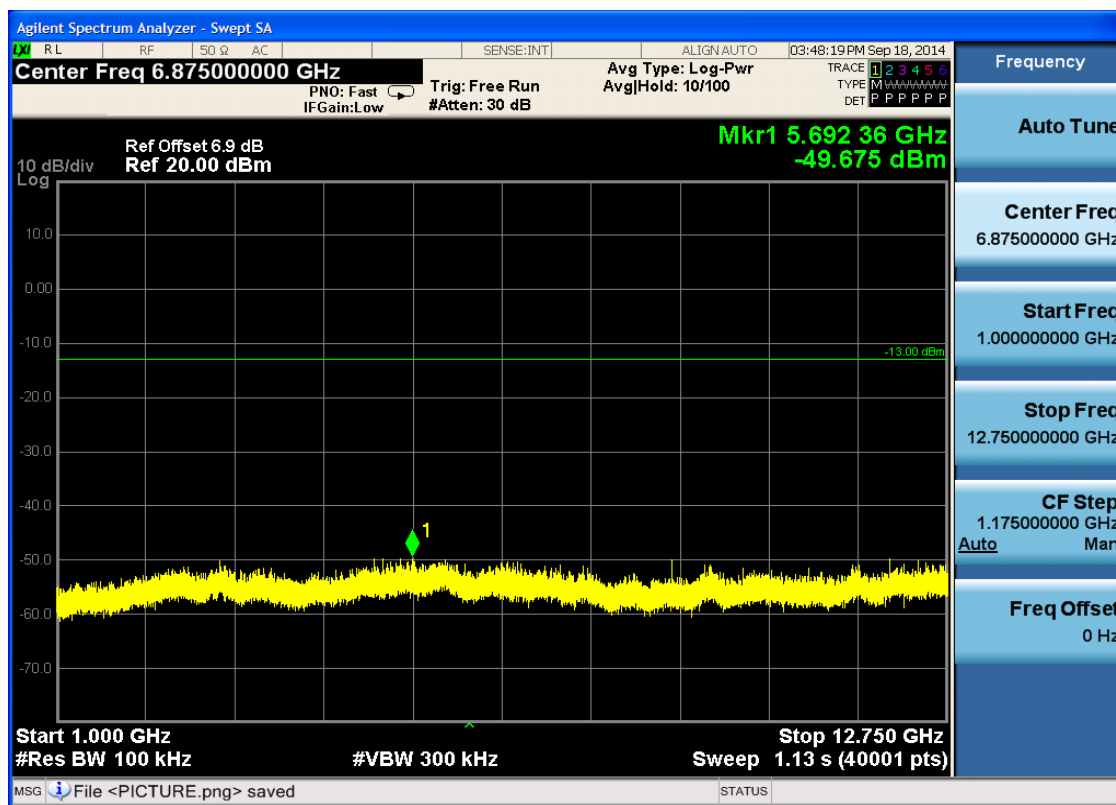


6.1.1.2.3 Test Channel = HCH





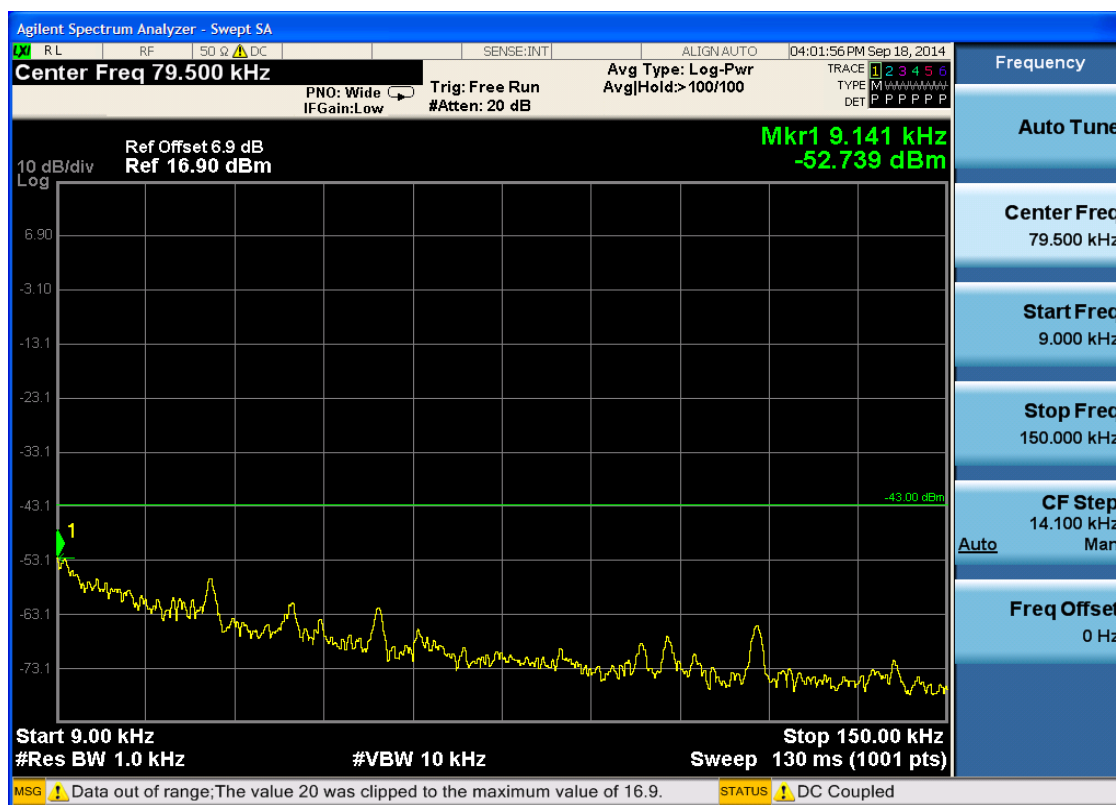


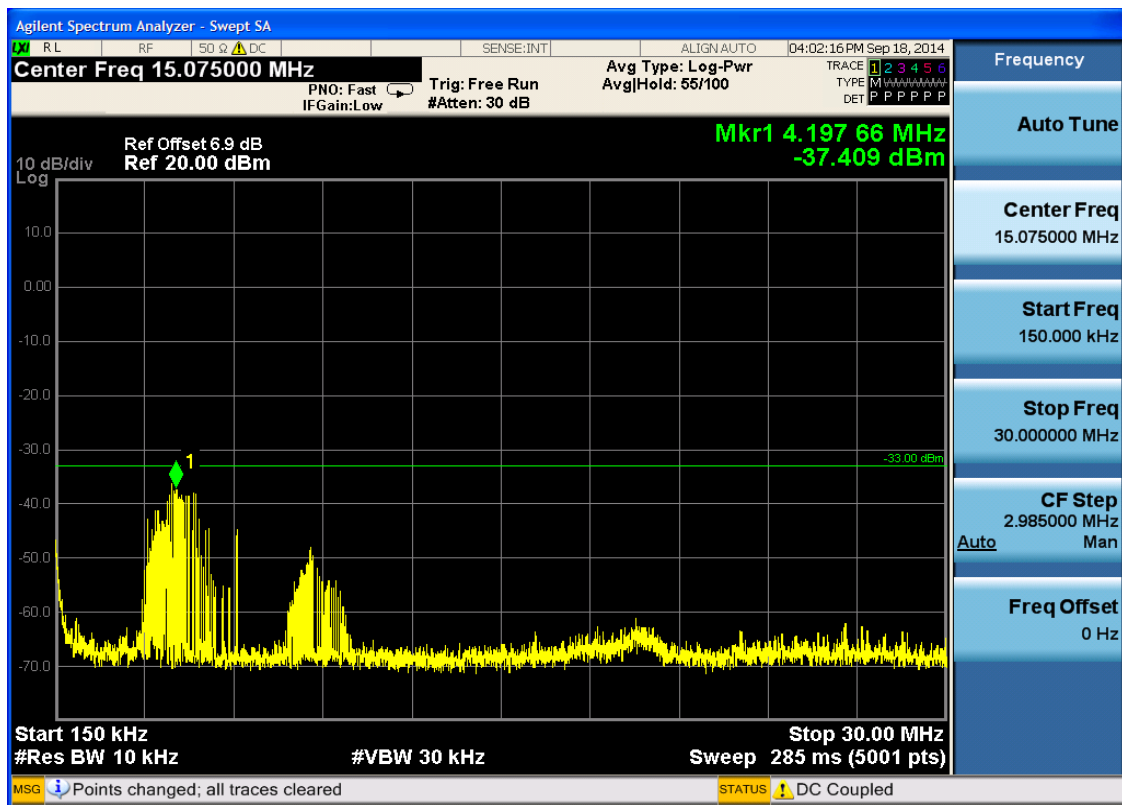


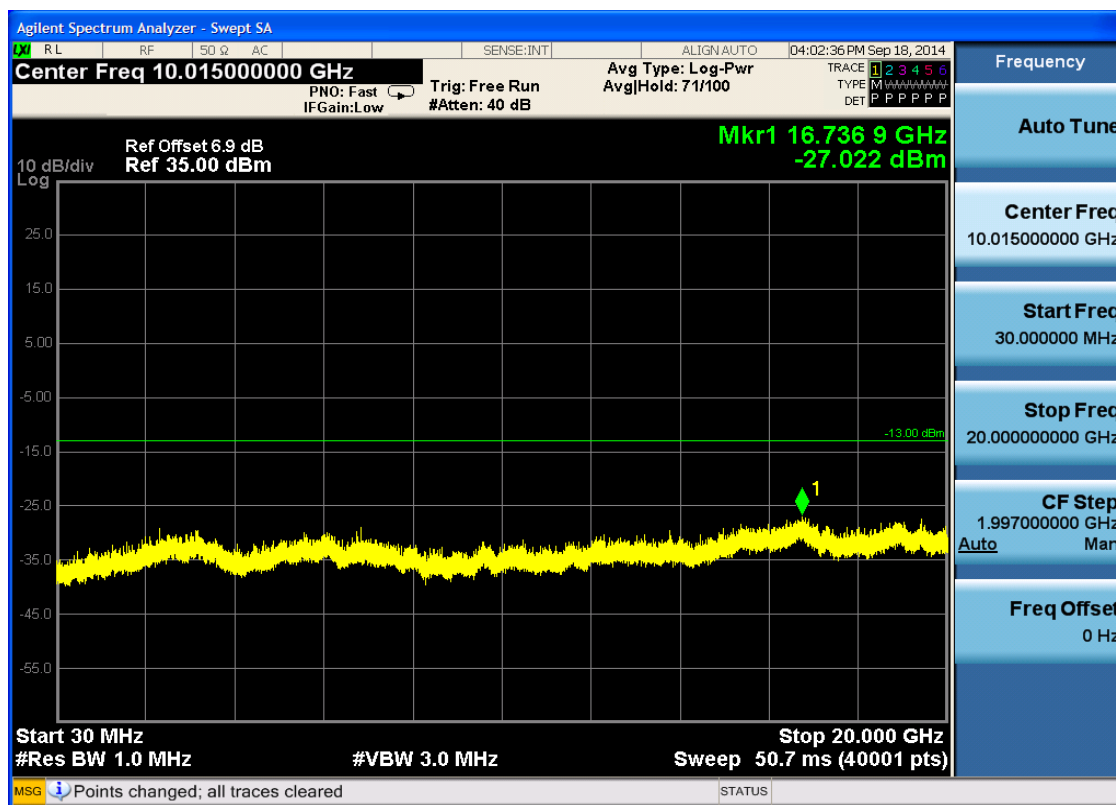
6.1.2 Test Band = GSM1900

6.1.2.1 Test Mode = GSM/TM1

6.1.2.1.1 Test Channel = LCH









Agilent Spectrum Analyzer - Swept SA

R.L. RF 50 Ω DC SENSE:INT ALIGN:AUTO 04:02:57 PM Sep 18, 2014

Center Freq 79.500 kHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 20 dB Avg Type: Log-Pwr Avg/Hold: > 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 6.9 dB Ref 16.90 dB Mkr1 10.551 kHz -54.027 dBm

10 dB/div Log

6.90
-3.10
-13.1
-23.1
-33.1
-43.1
-53.1
-63.1
-73.1

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

Frequency

Auto Tune

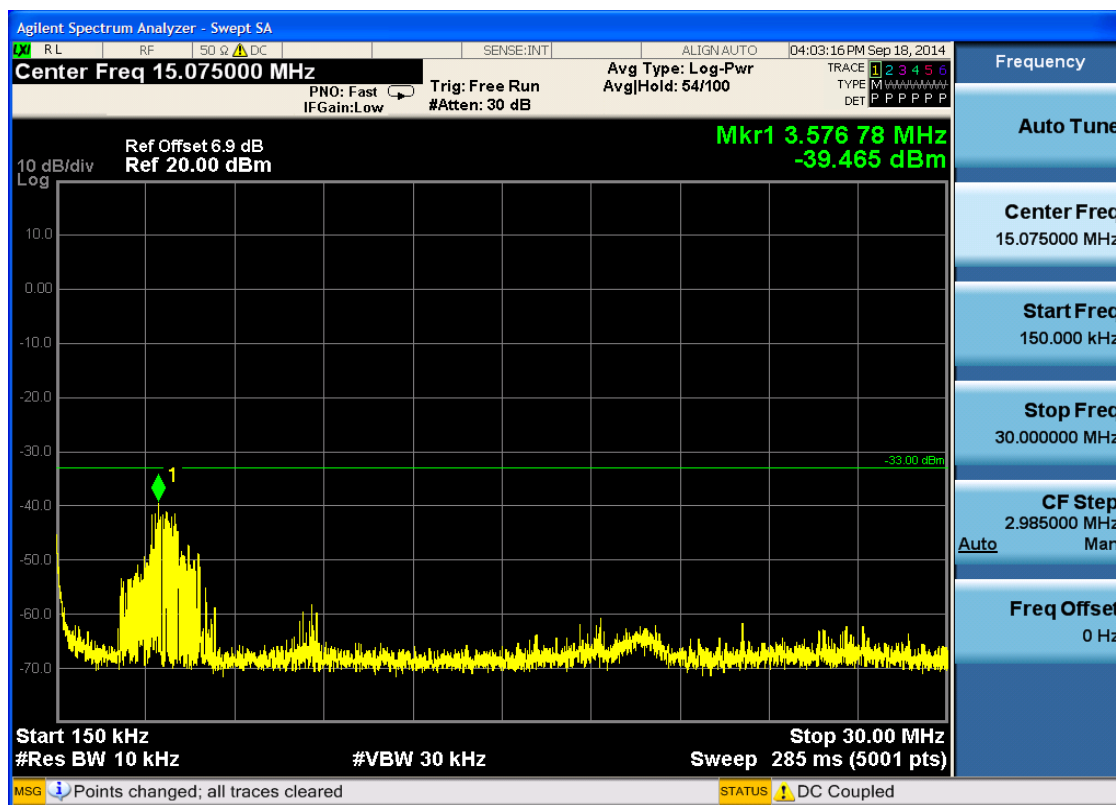
Center Freq
79.500 kHz

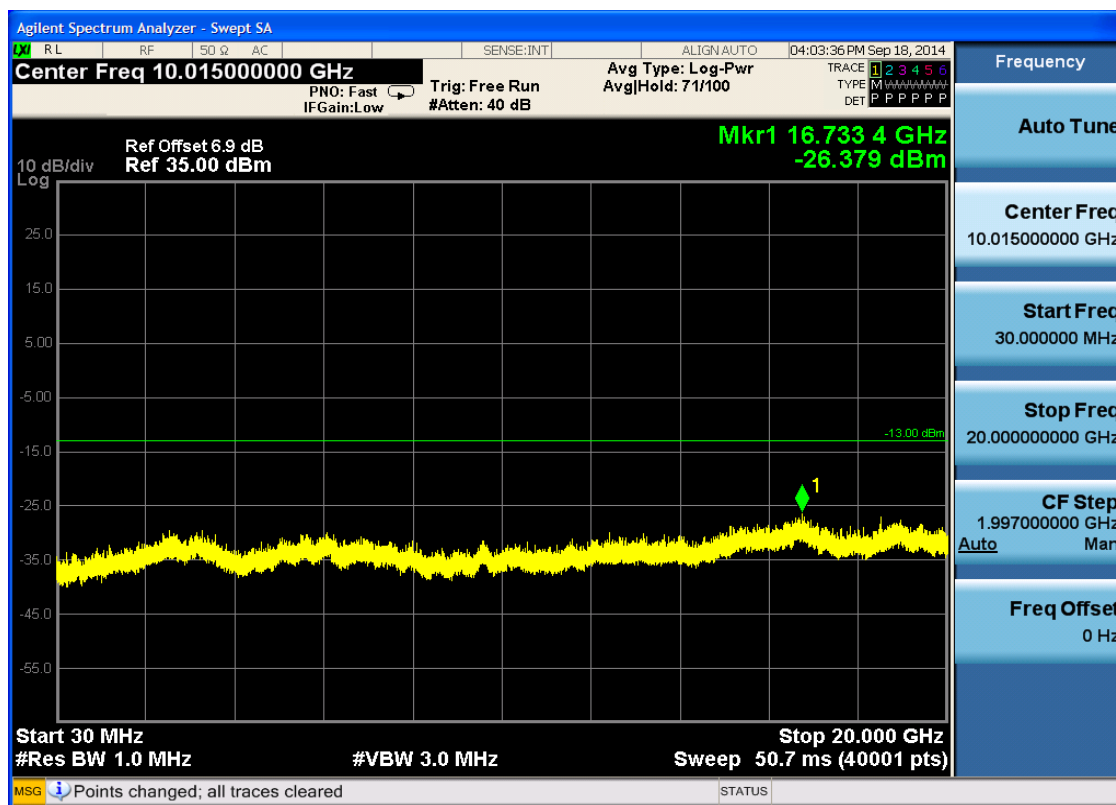
Start Freq
9.000 kHz

Stop Freq
150.000 kHz

CF Step
14.100 kHz
Auto Man

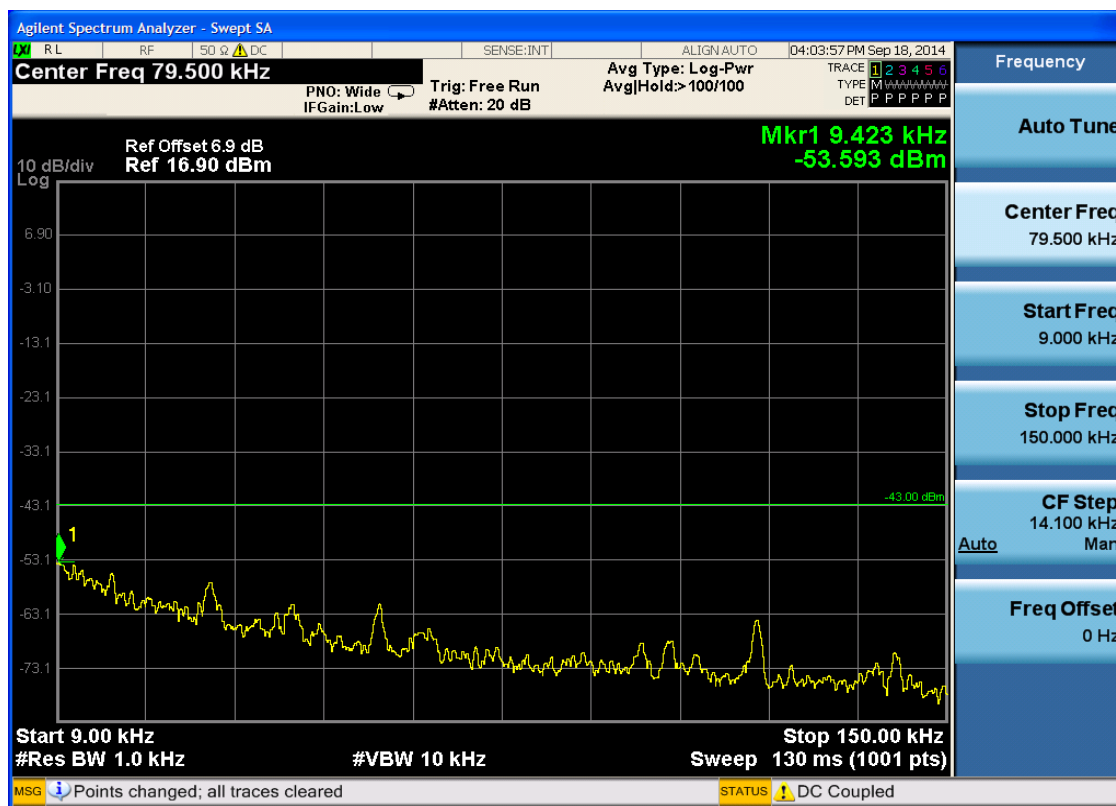
Freq Offset
0 Hz

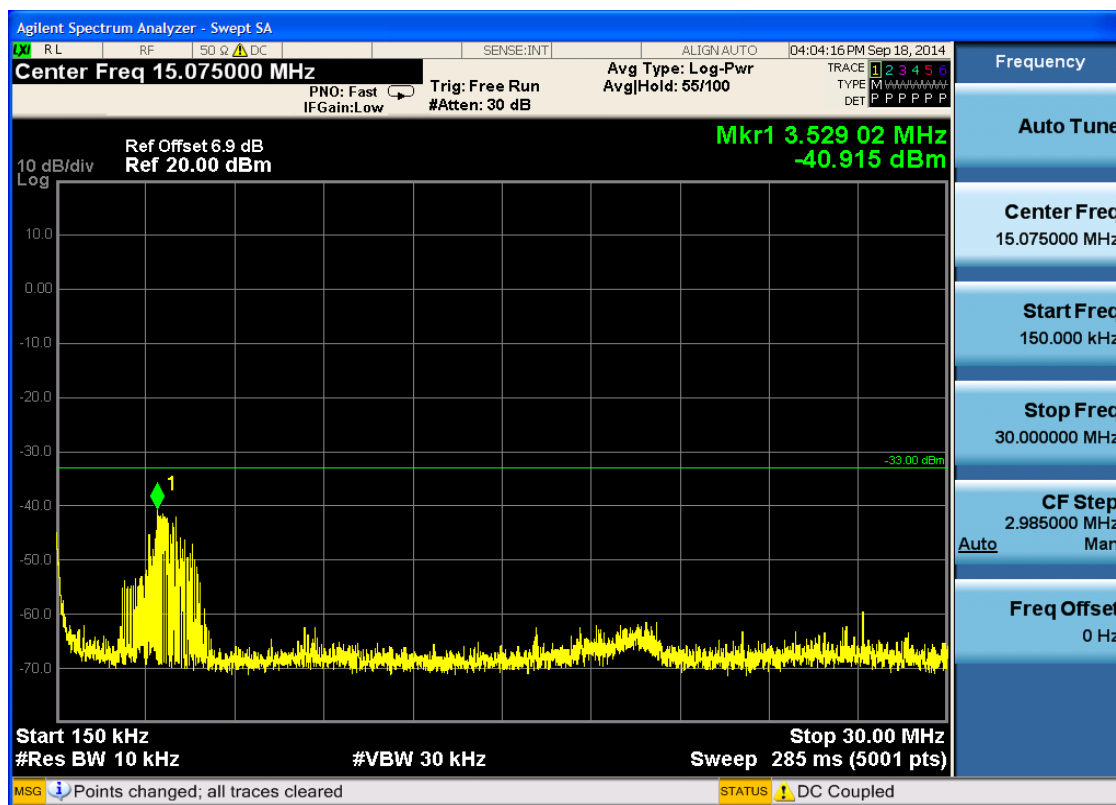


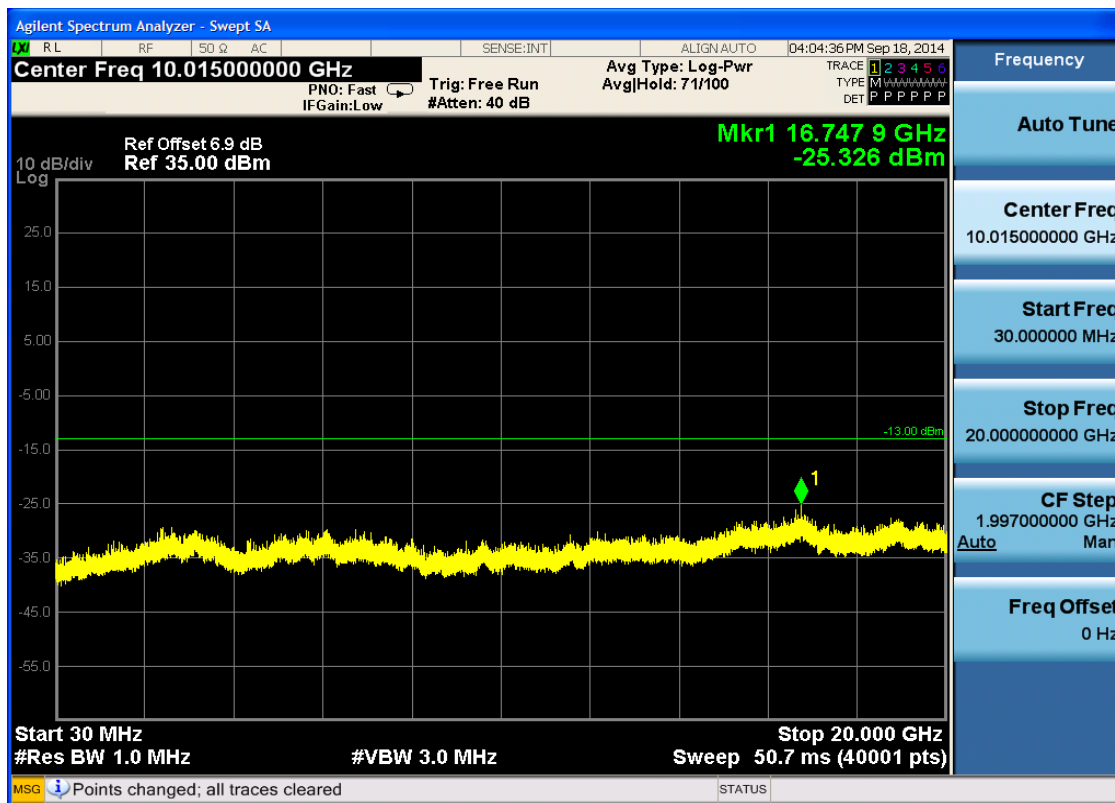




6.1.2.1.3 Test Channel = HCH

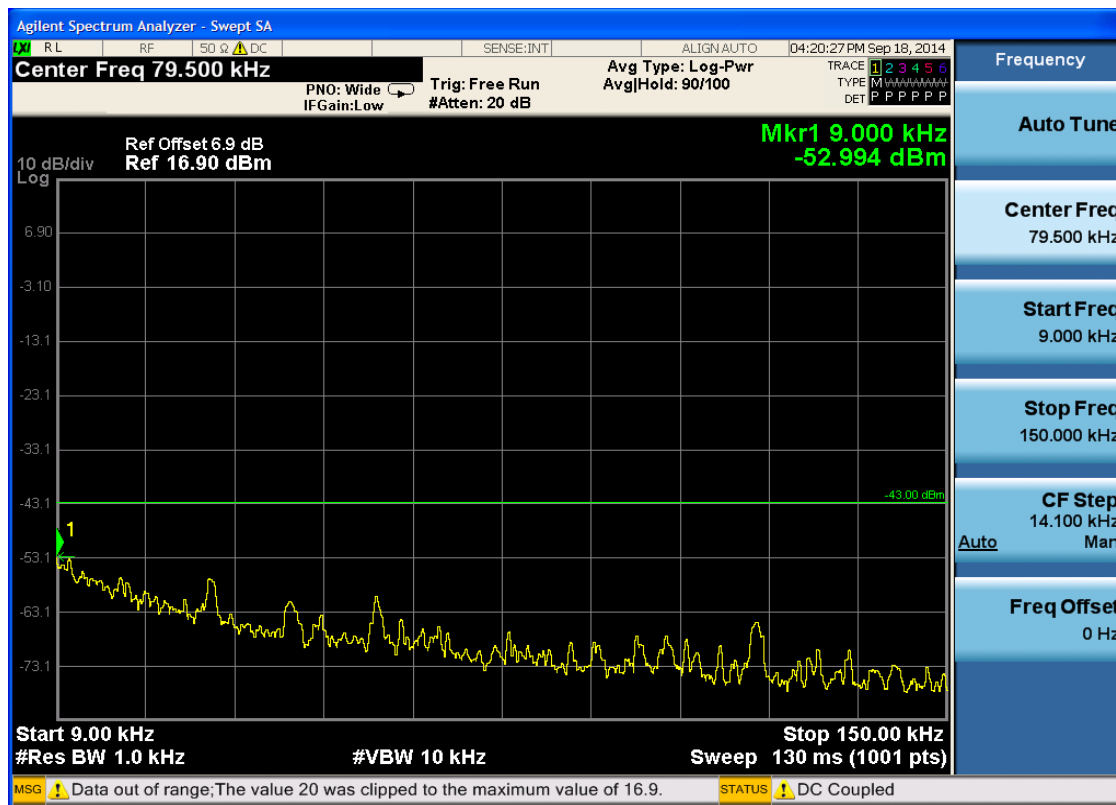


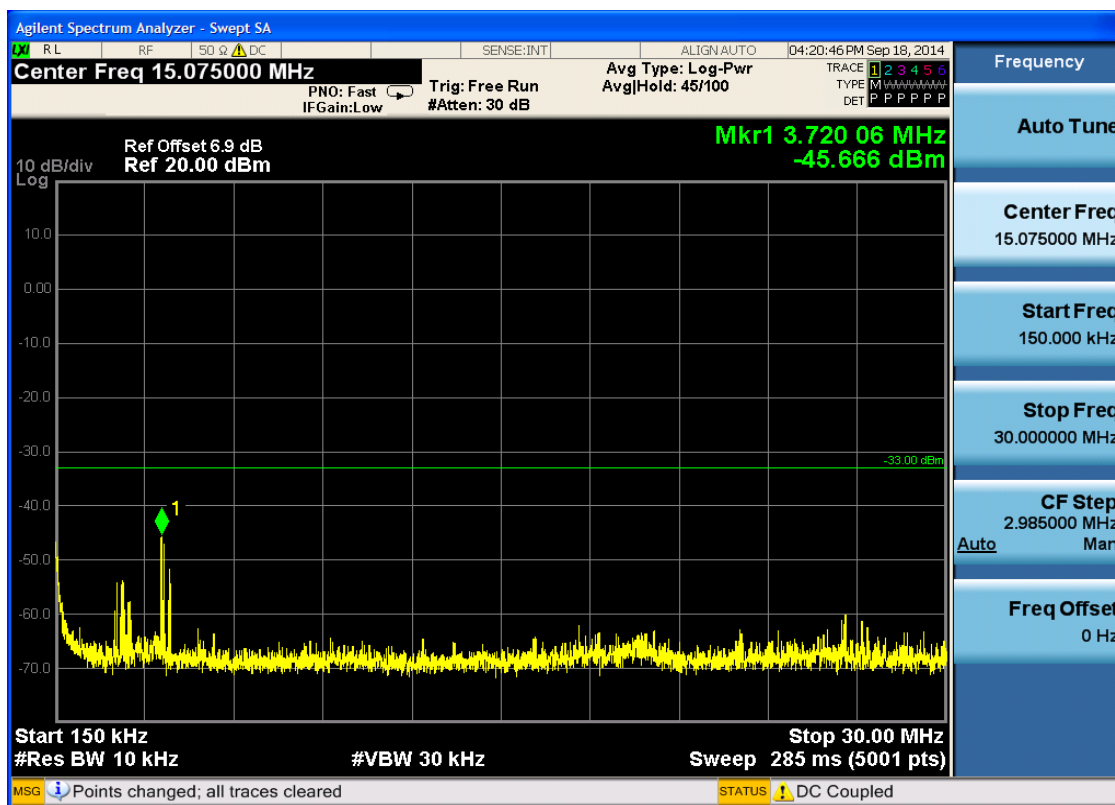


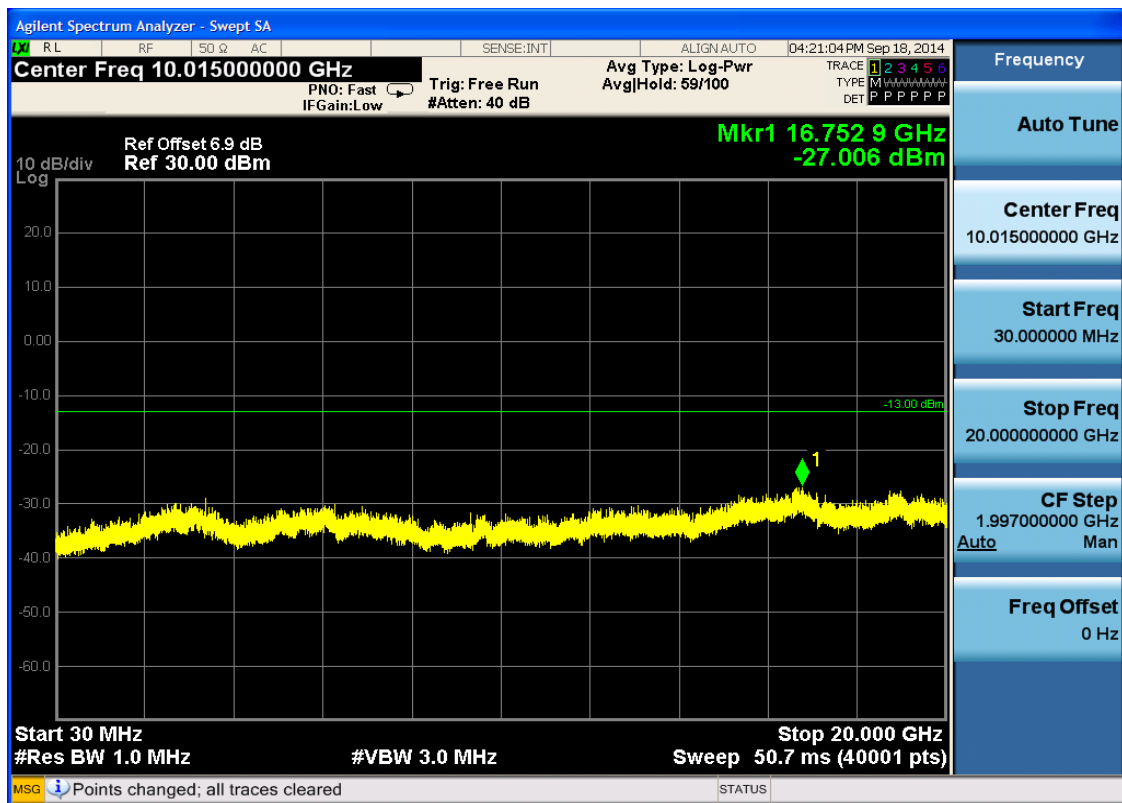


6.1.2.2 Test Mode = GSM/TM2

6.1.2.2.1 Test Channel = LCH









Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω DC SENSE:INT ALIGN AUTO 04:21:24 PM Sep 18, 2014

Center Freq 79.500 kHz PNO: Wide IFGain:Low Trig: Free Run #Atten: 20 dB Avg Type: Log-Pwr Avg/Hold: 90/100

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

Ref Offset 6.9 dB
Ref 16.90 dBm

**Mkr1 9.141 kHz
-53.228 dBm**

10 dB/div
Log

6.90
-3.10
-13.1
-23.1
-33.1
-43.1
-53.1
-63.1
-73.1

Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 10 kHz

Stop 150.00 kHz
Sweep 130 ms (1001 pts)

-43.00 dBm

Frequency

Auto Tune

Center Freq
79.500 kHz

Start Freq
9.000 kHz

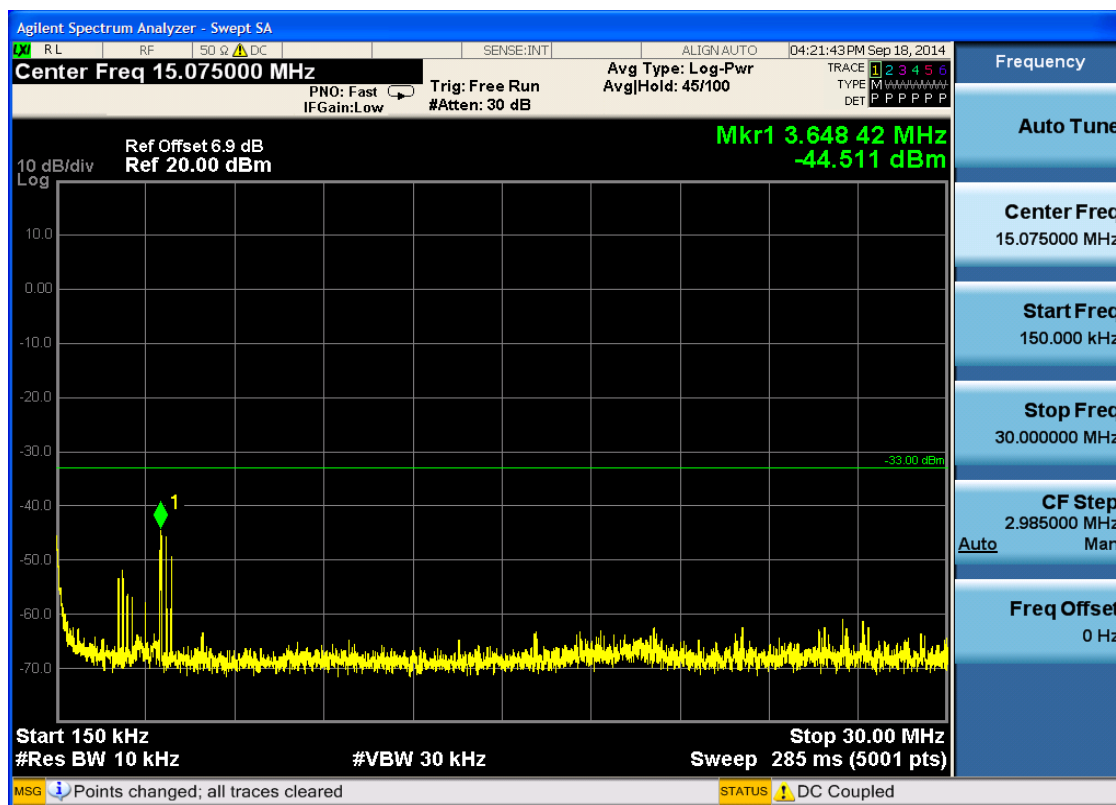
Stop Freq
150.000 kHz

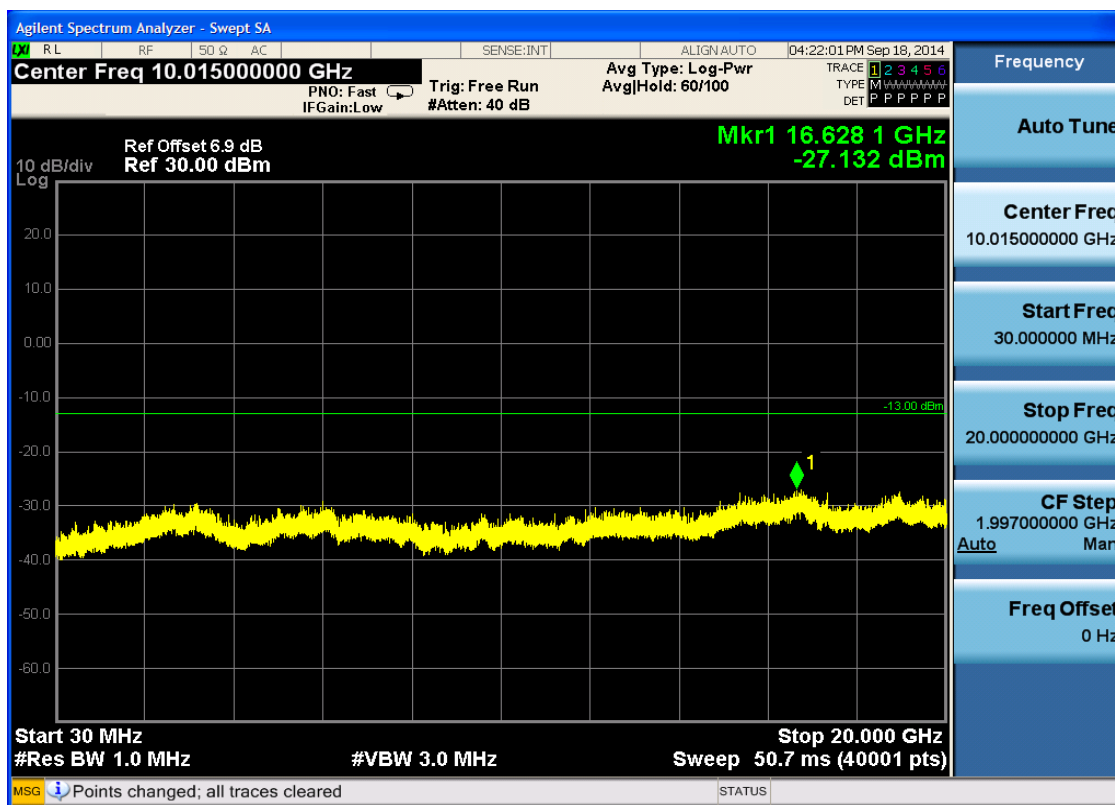
CF Step
14.100 kHz
Man

Auto

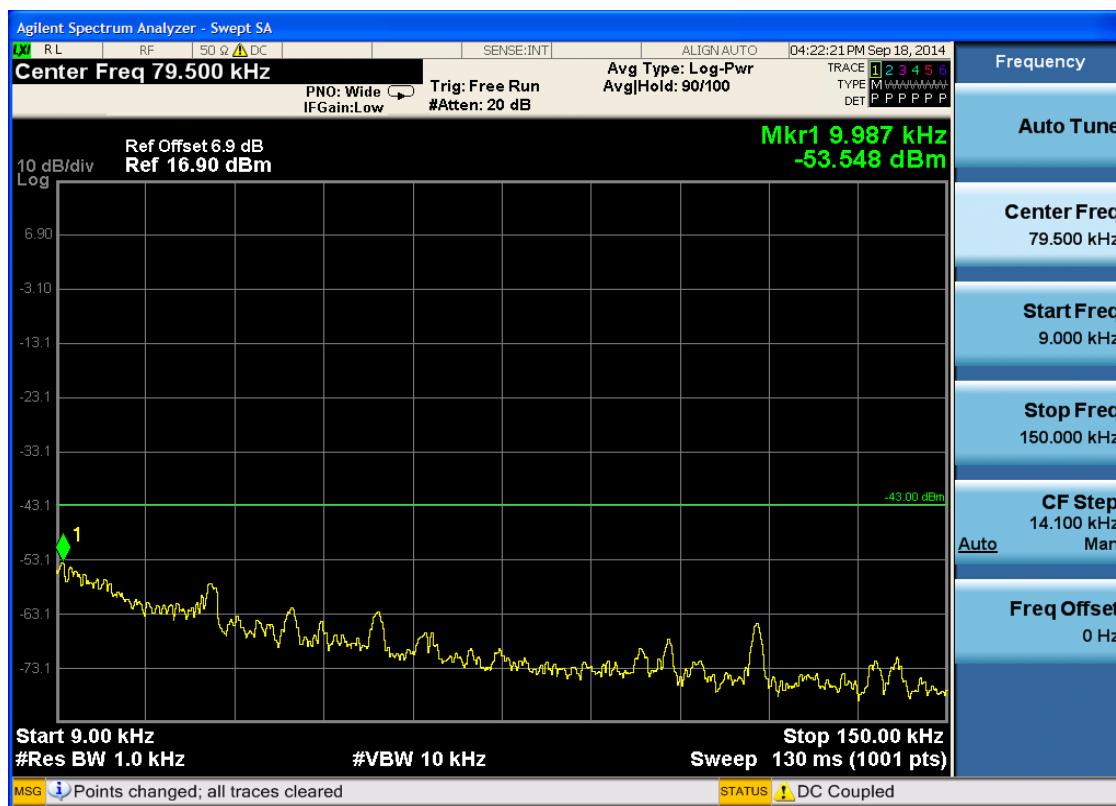
Freq Offset
0 Hz

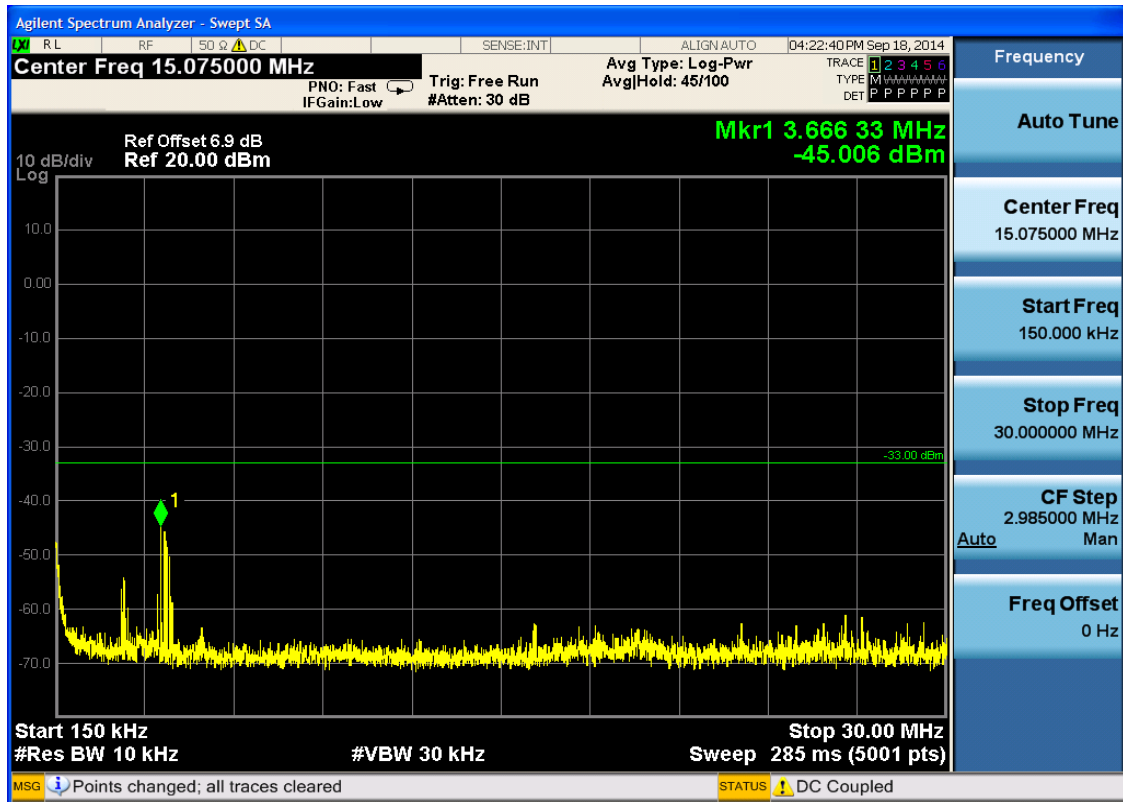
MSG Points changed; all traces cleared STATUS DC Coupled

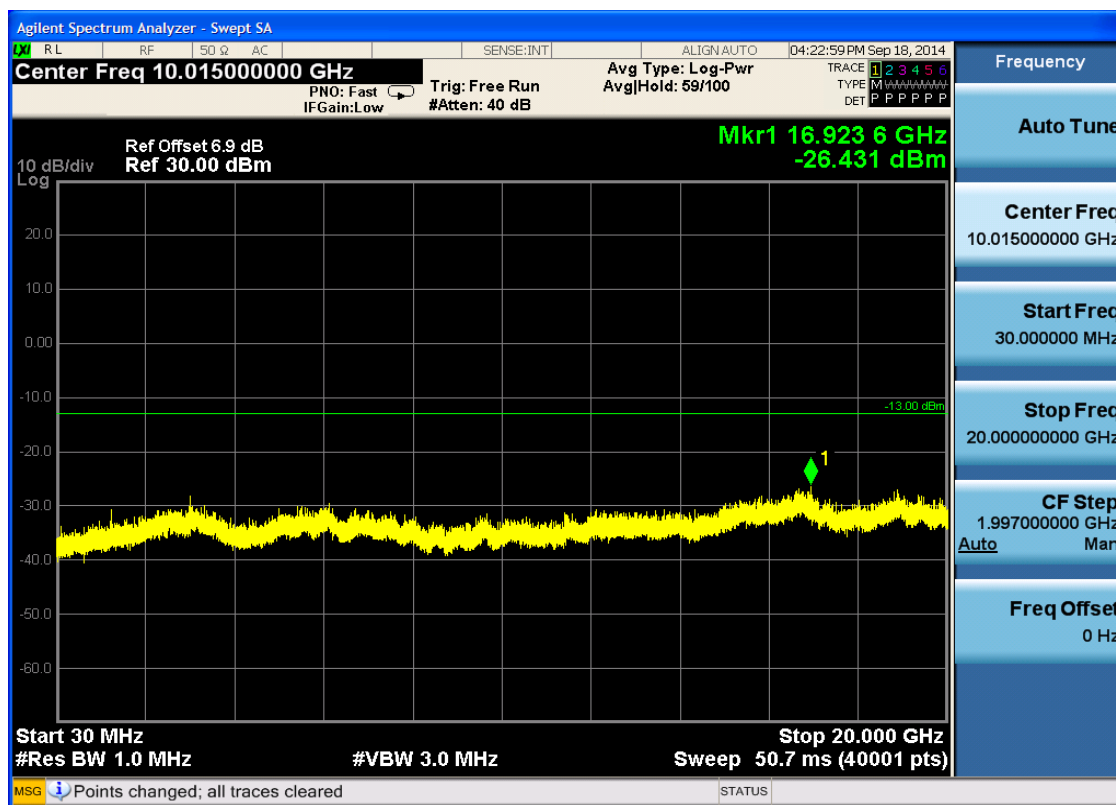




6.1.2.2.3 Test Channel = HCH

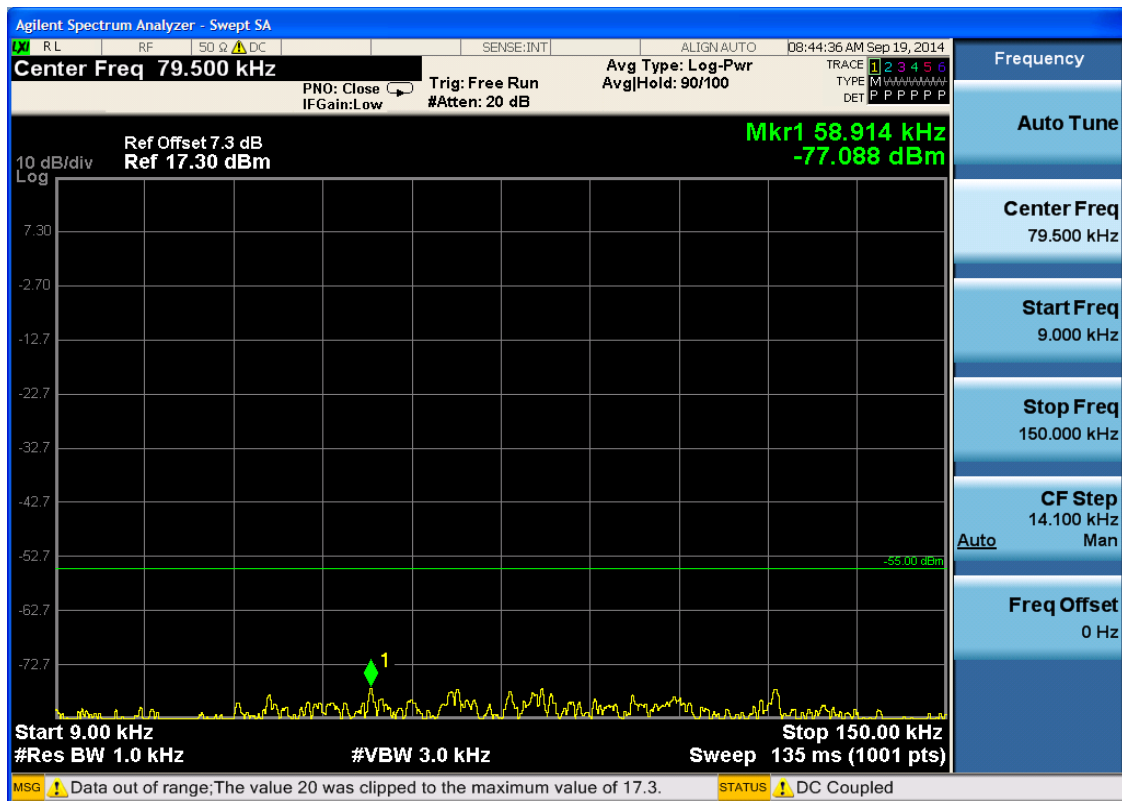


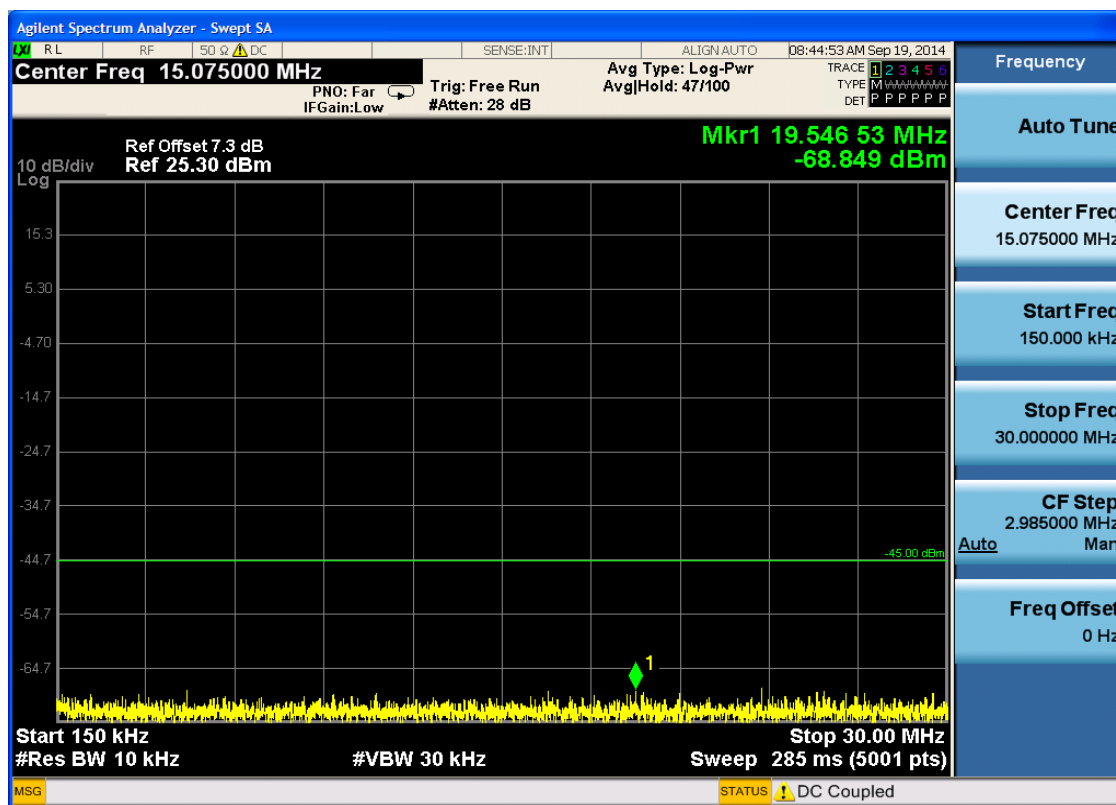


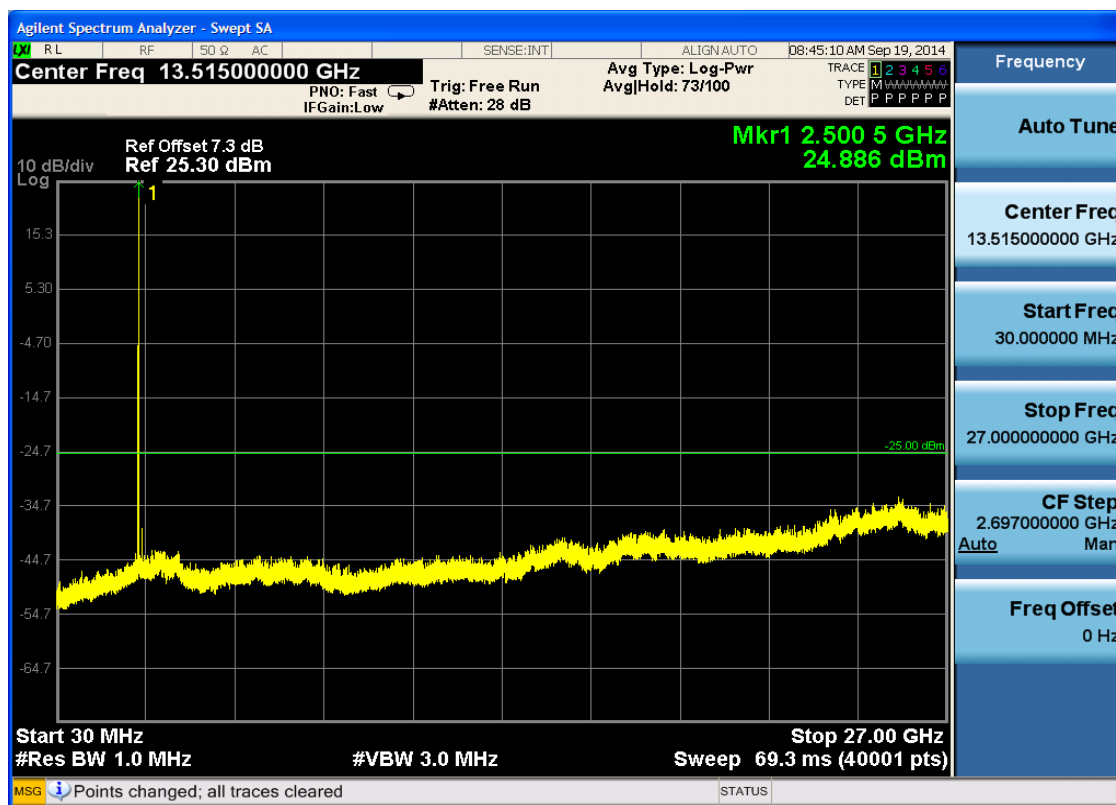




6.2.1.1.1.1.1 Test RB = RB1#0

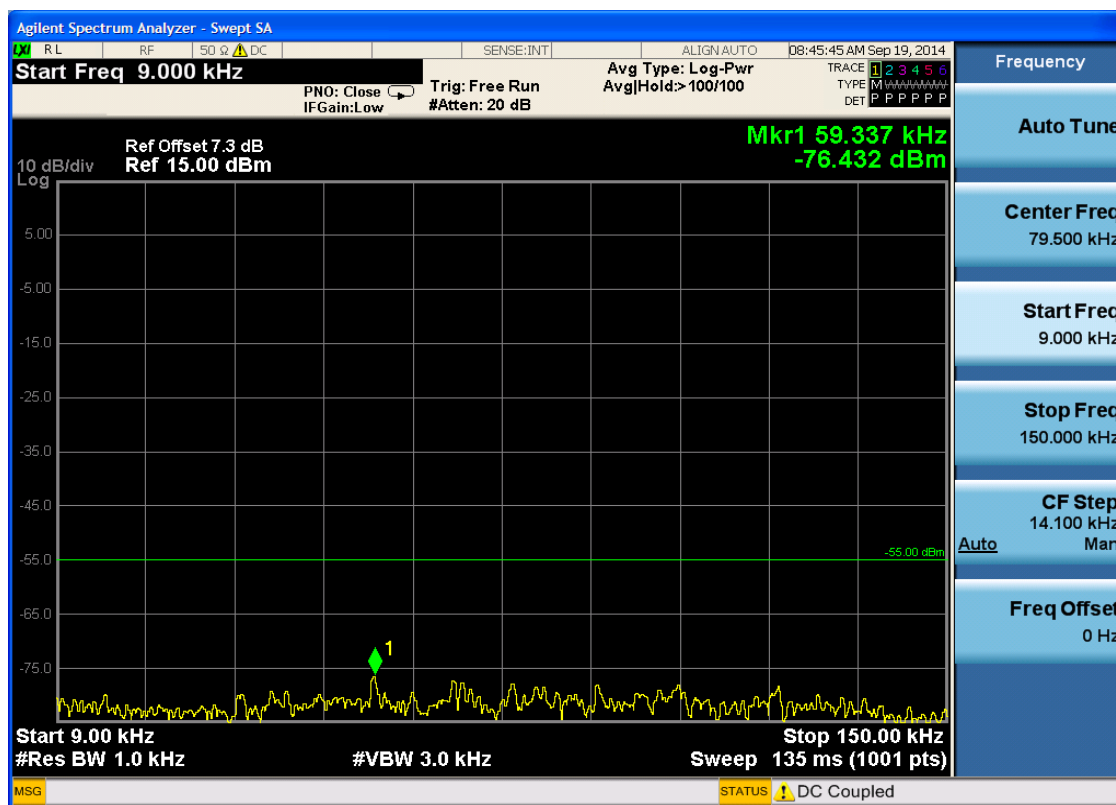


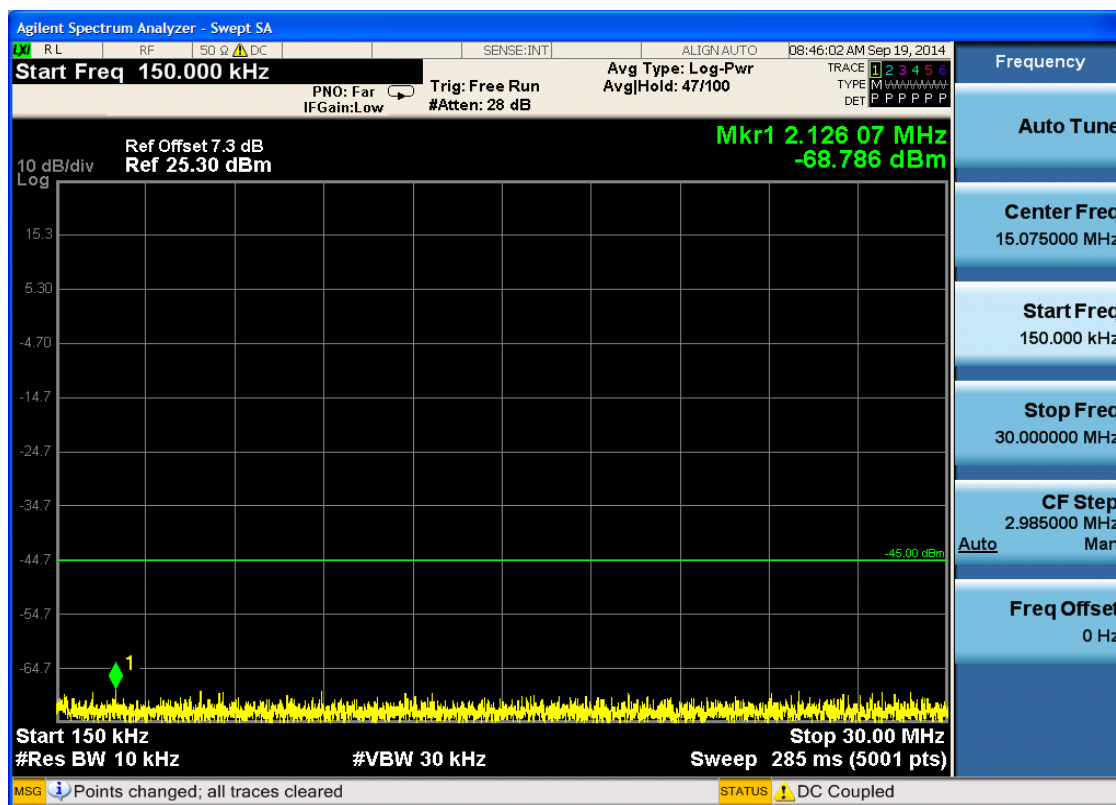


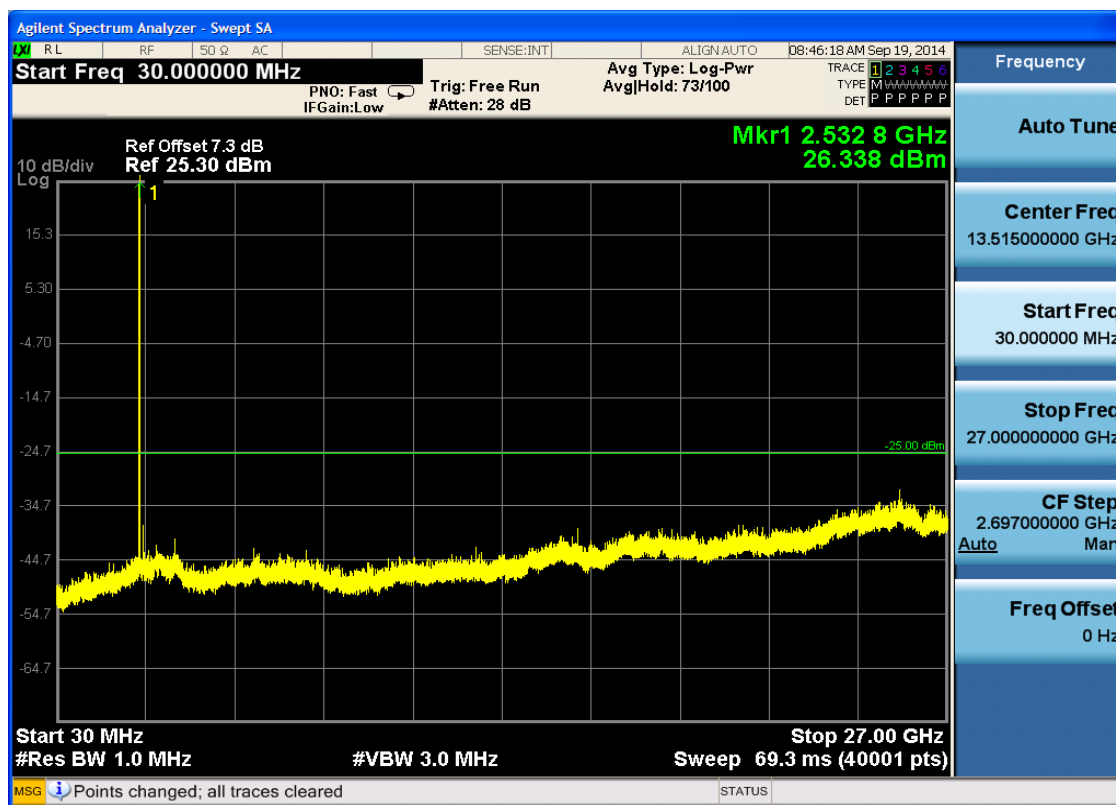


6.2.1.1.1.2 Test Channel = MCH

6.2.1.1.1.2.1 Test RB = RB1#0

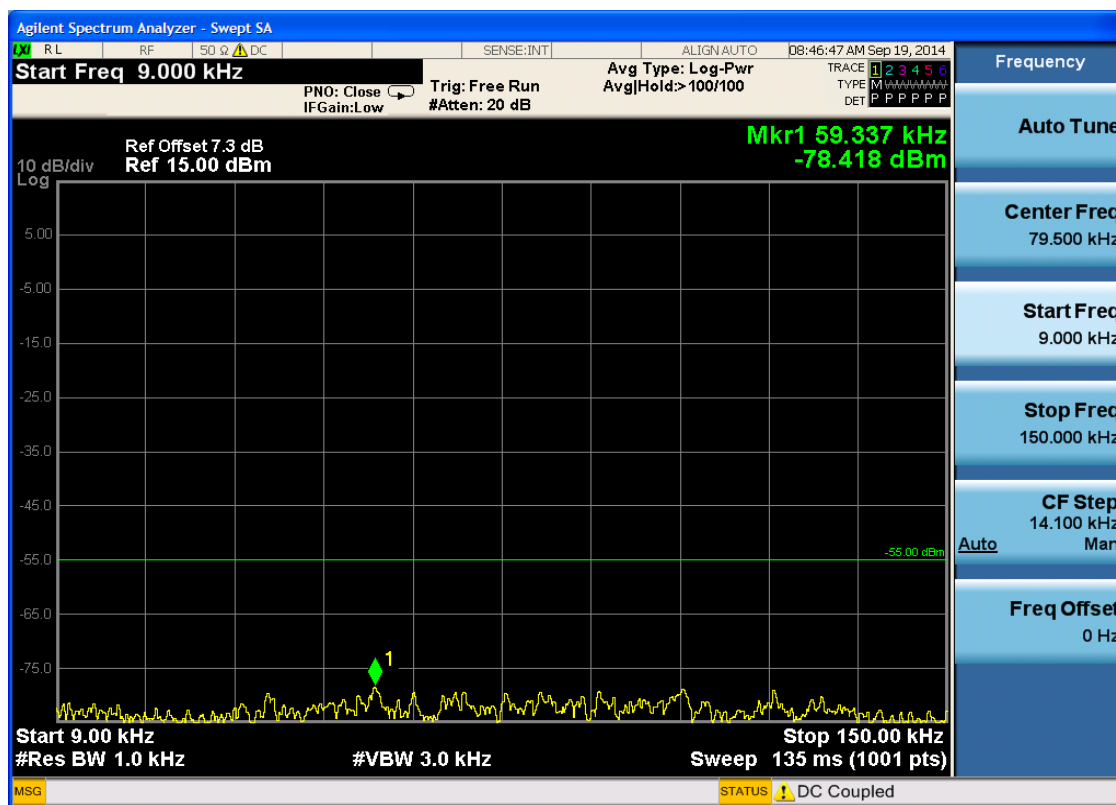


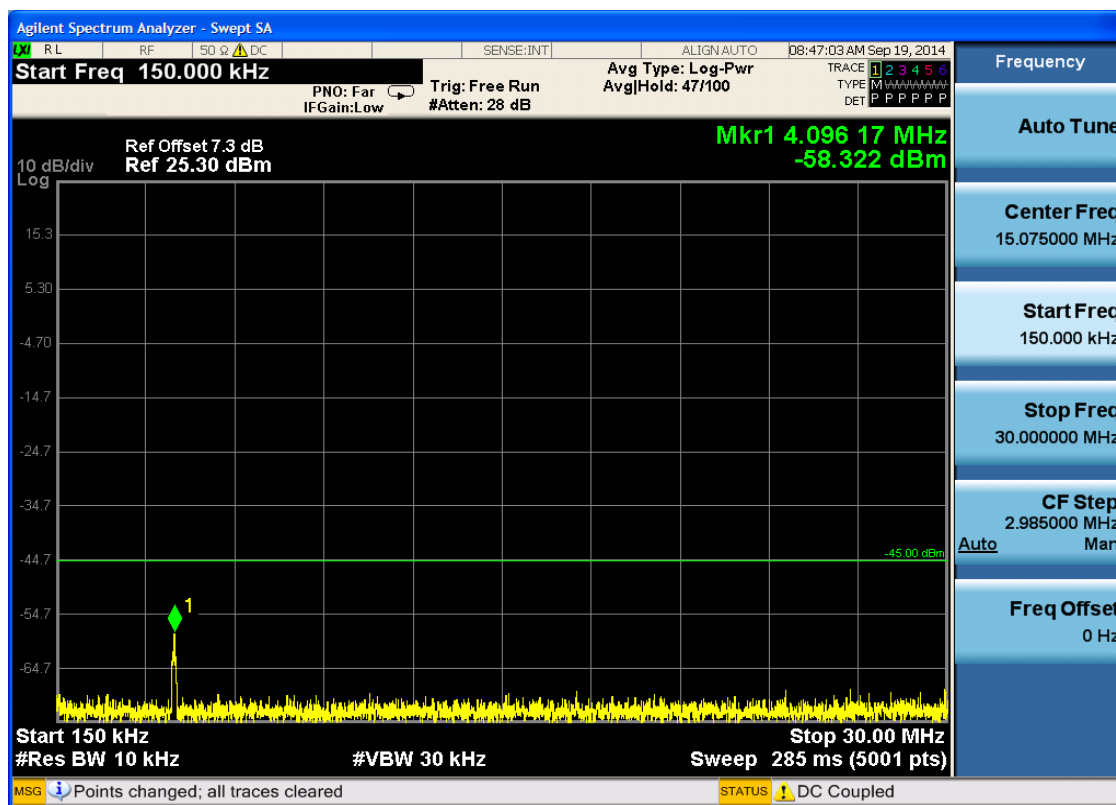


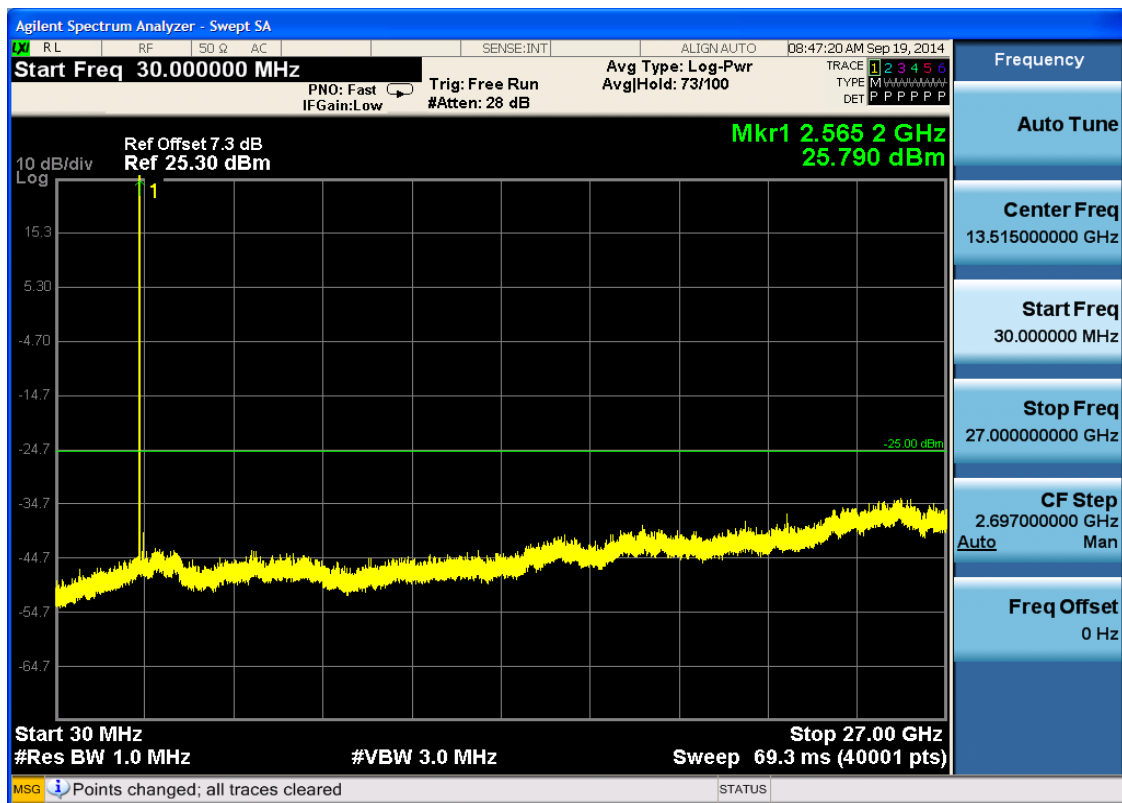


6.2.1.1.1.3 Test Channel = HCH

6.2.1.1.1.3.1 Test RB = RB1#0



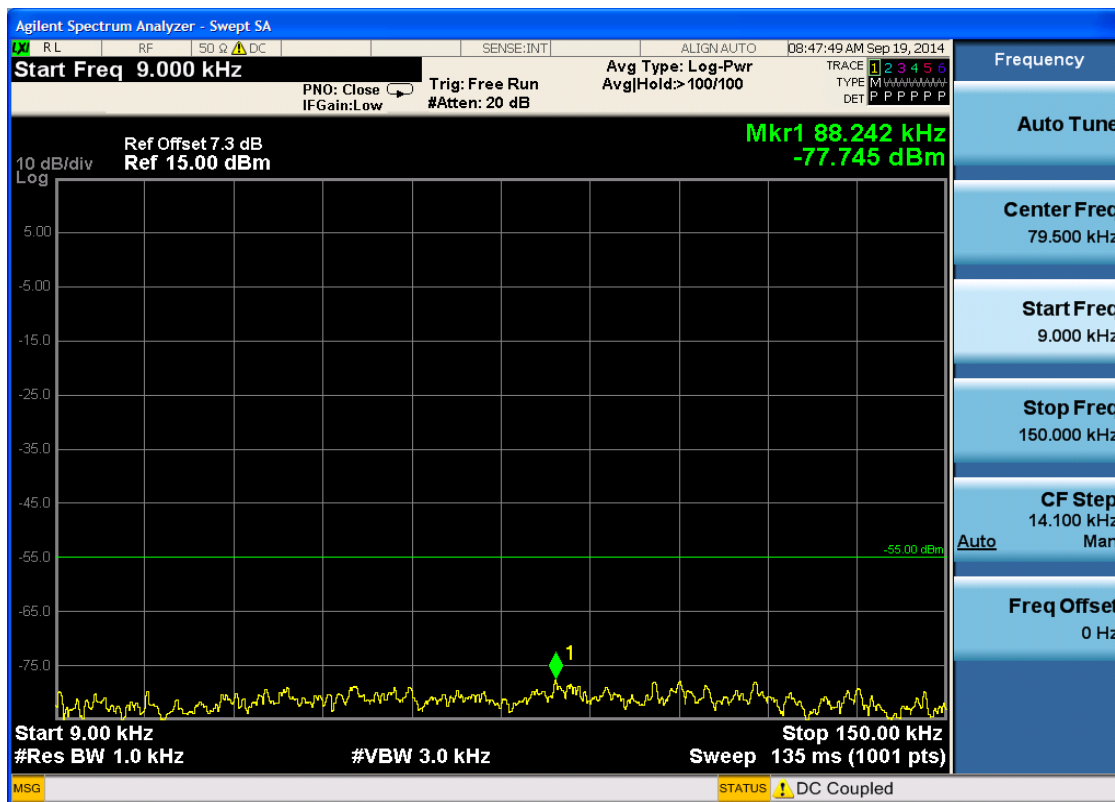


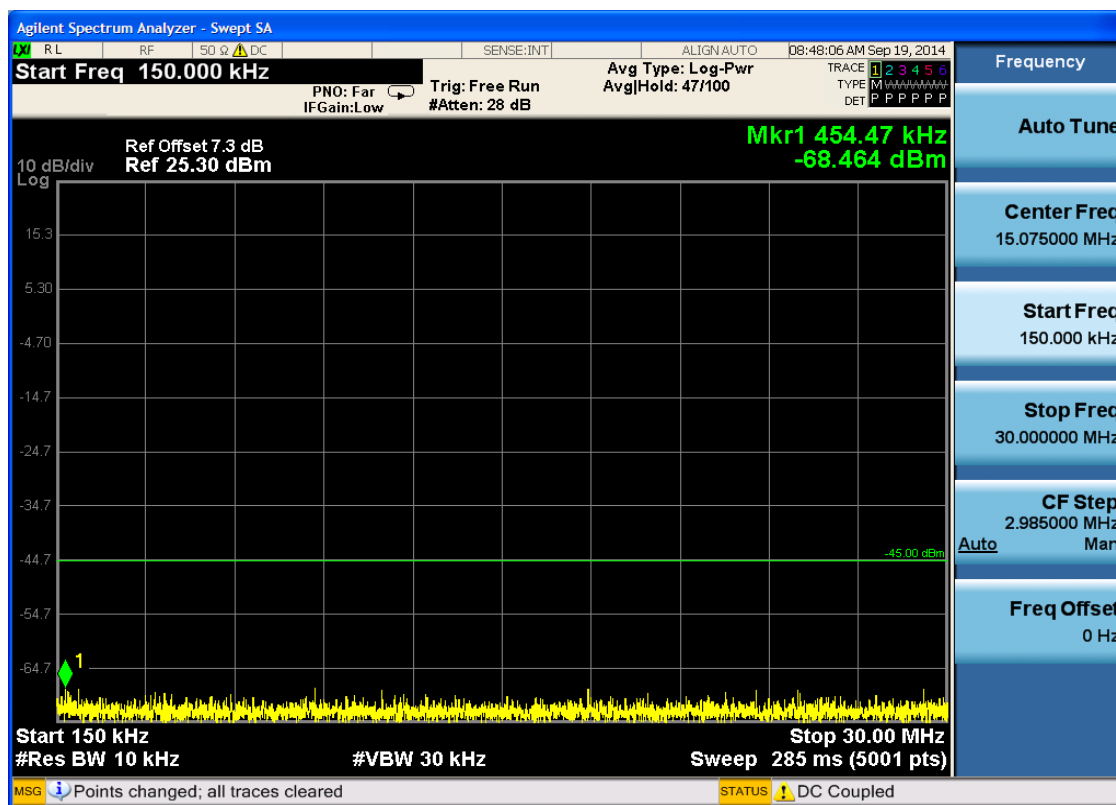


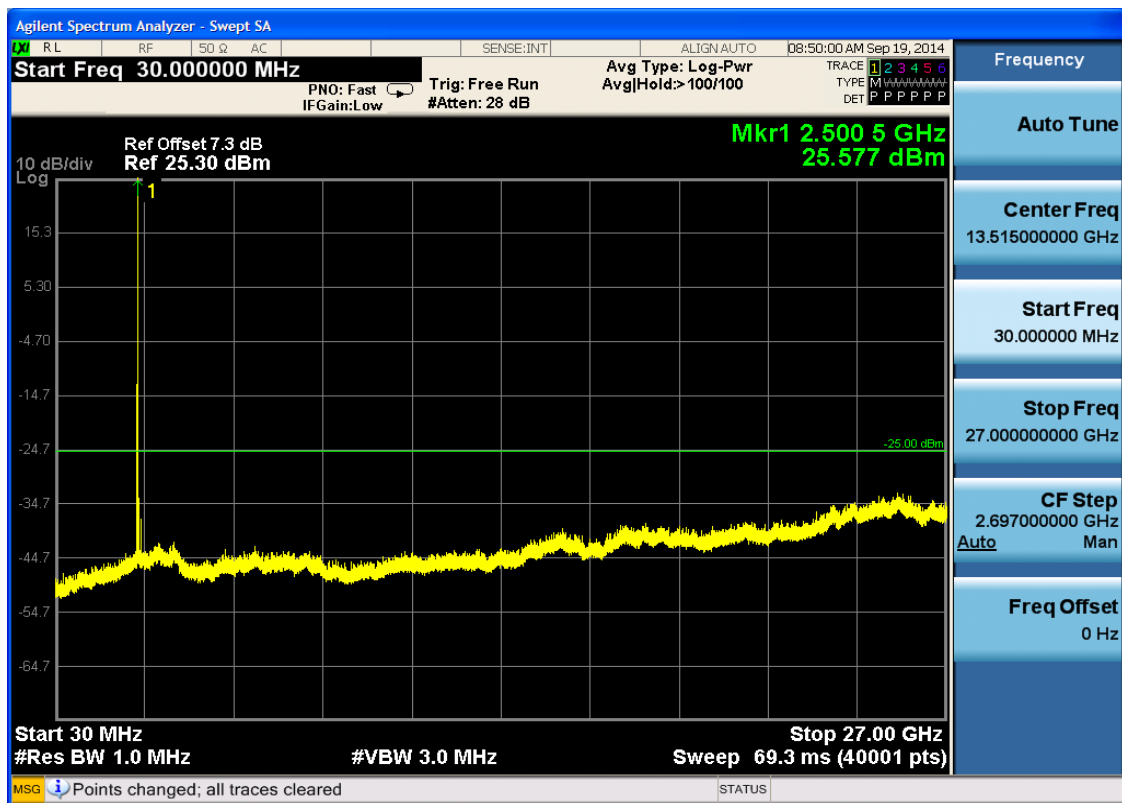
6.2.1.1.2 Test Bandwidth = 10

6.2.1.1.2.1 Test Channel = LCH

6.2.1.1.2.1.1 Test RB = RB1#0

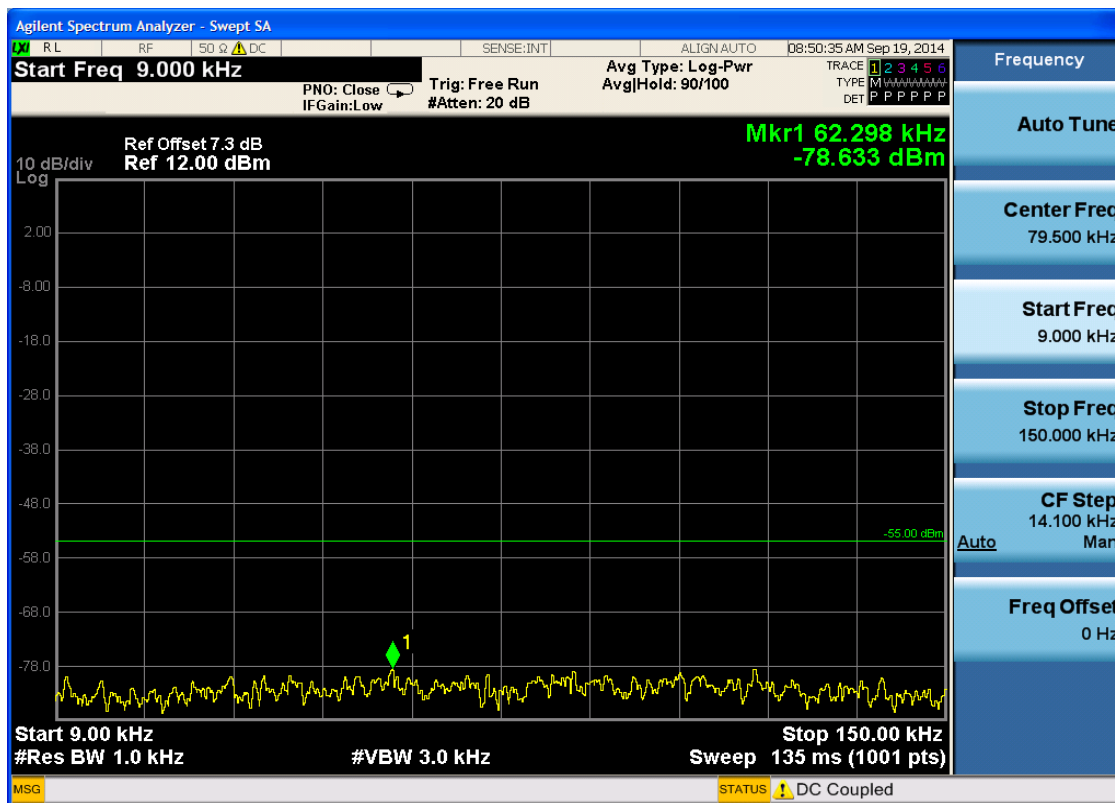


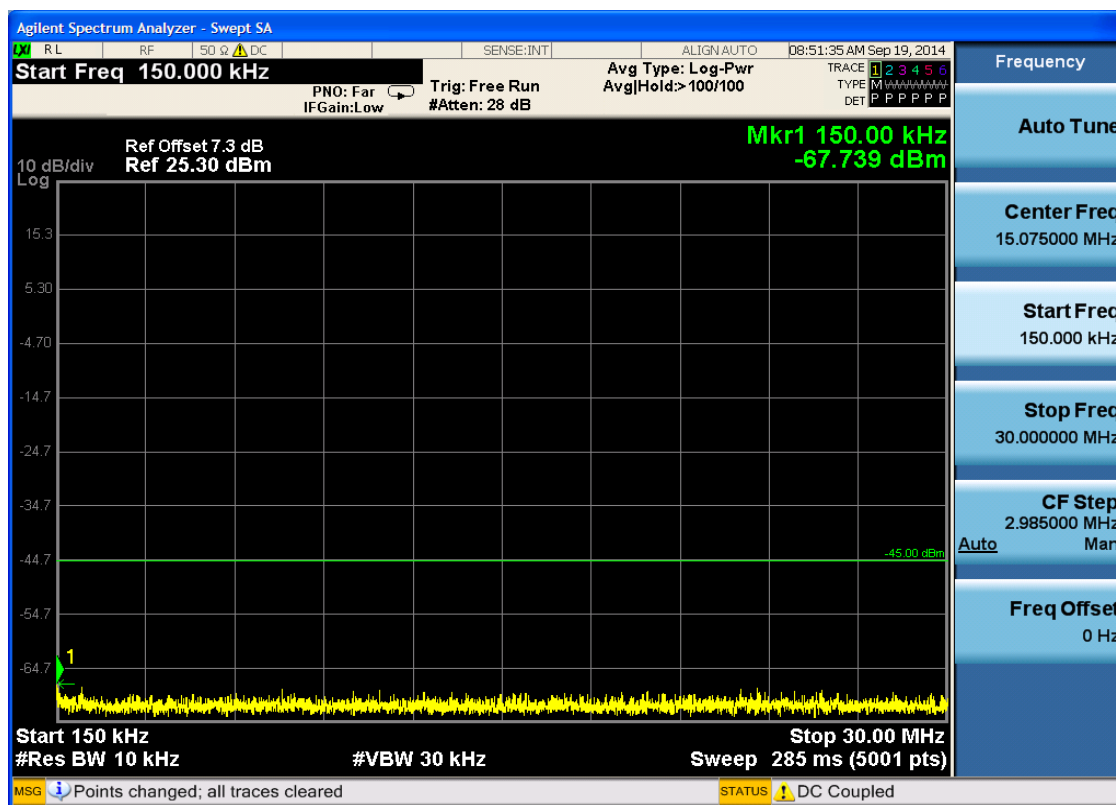


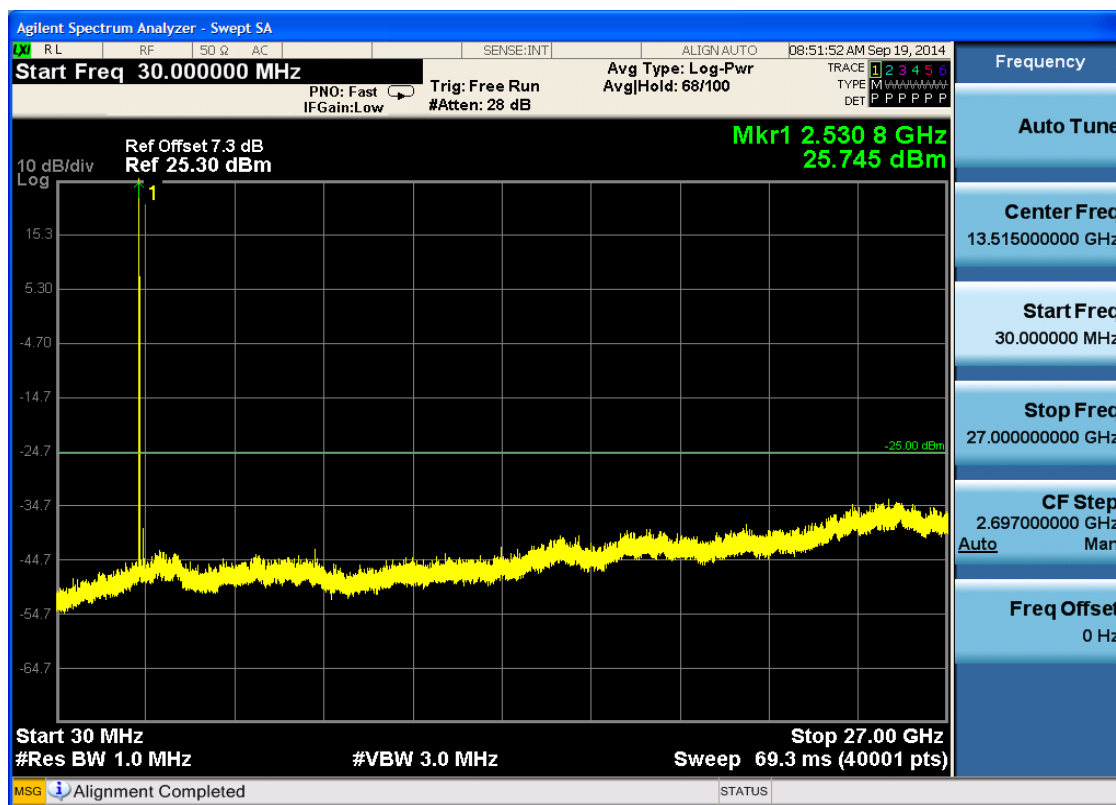


6.2.1.1.2.2 Test Channel = MCH

6.2.1.1.2.2.1 Test RB = RB1#0

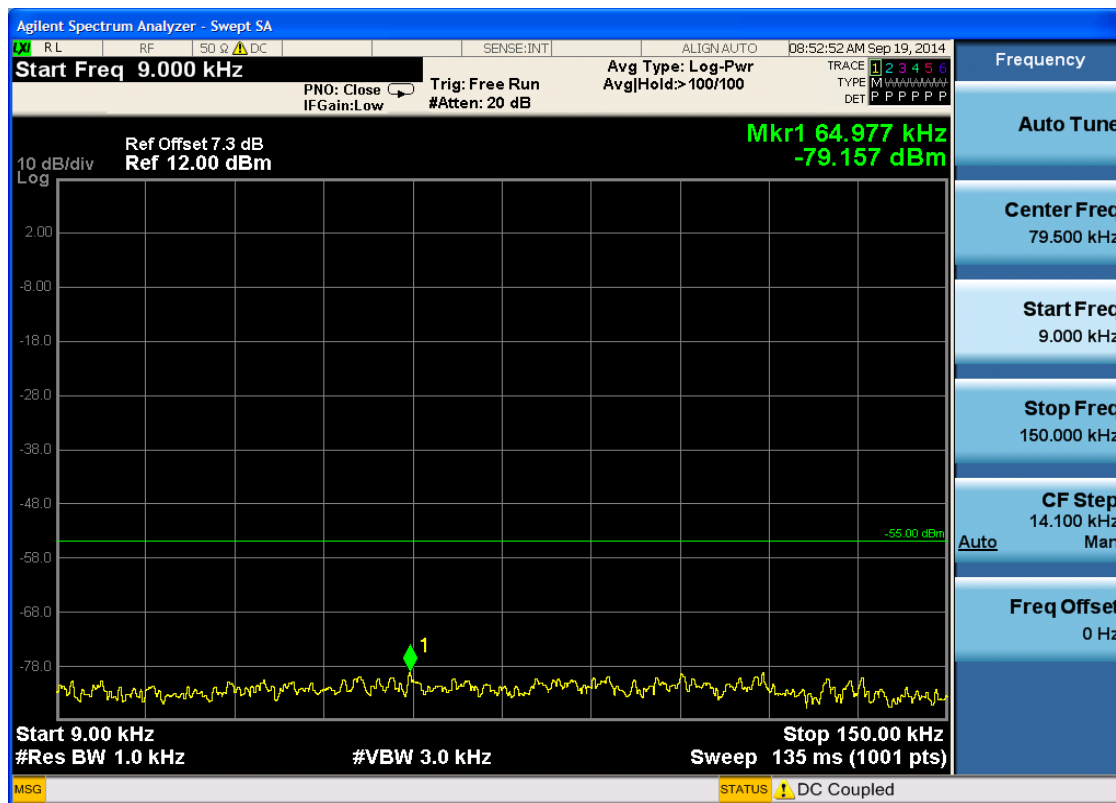


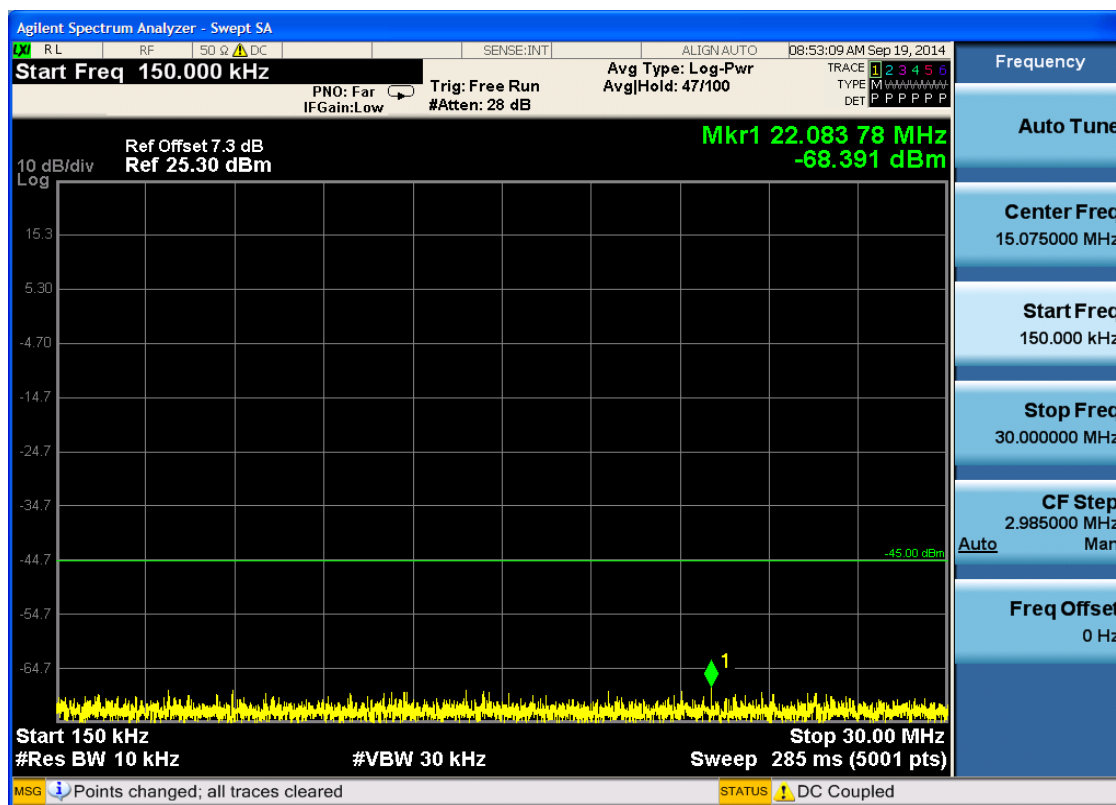


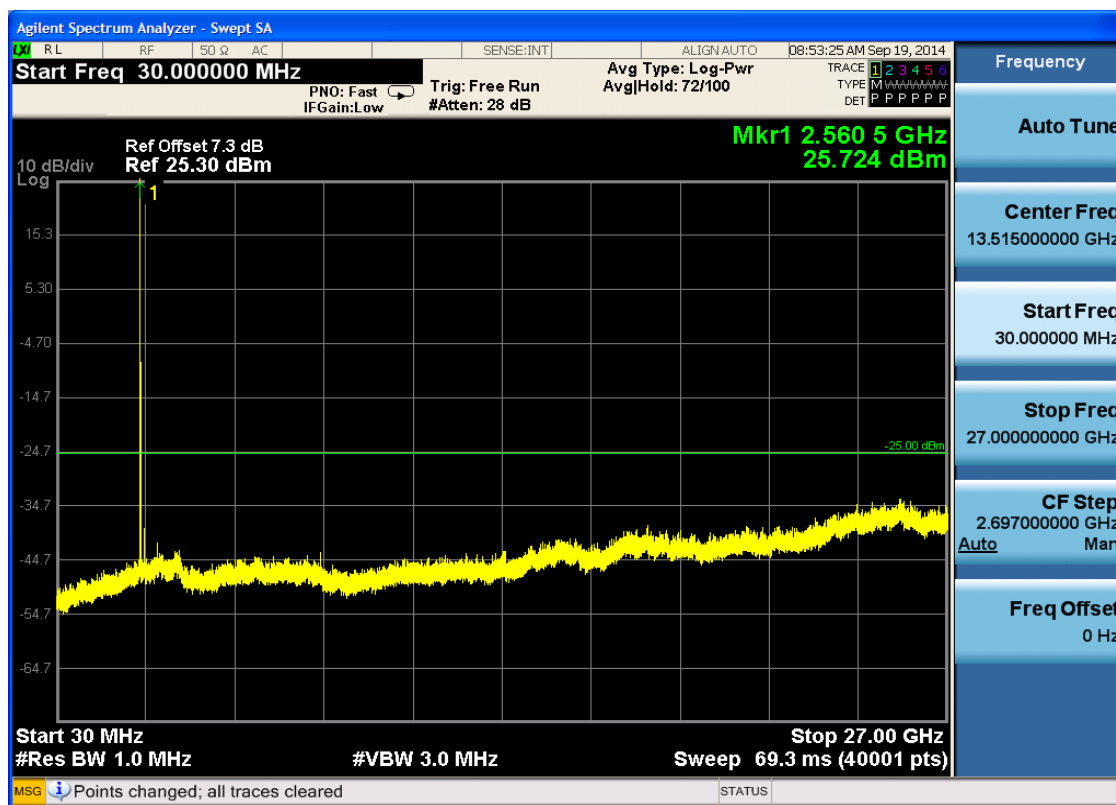


6.2.1.1.2.3 Test Channel = HCH

6.2.1.1.2.3.1 Test RB = RB1#0







6.2.1.1.3 Test Bandwidth = 15

6.2.1.1.3.1 Test Channel = LCH

6.2.1.1.3.1.1 Test RB = RB1#0

