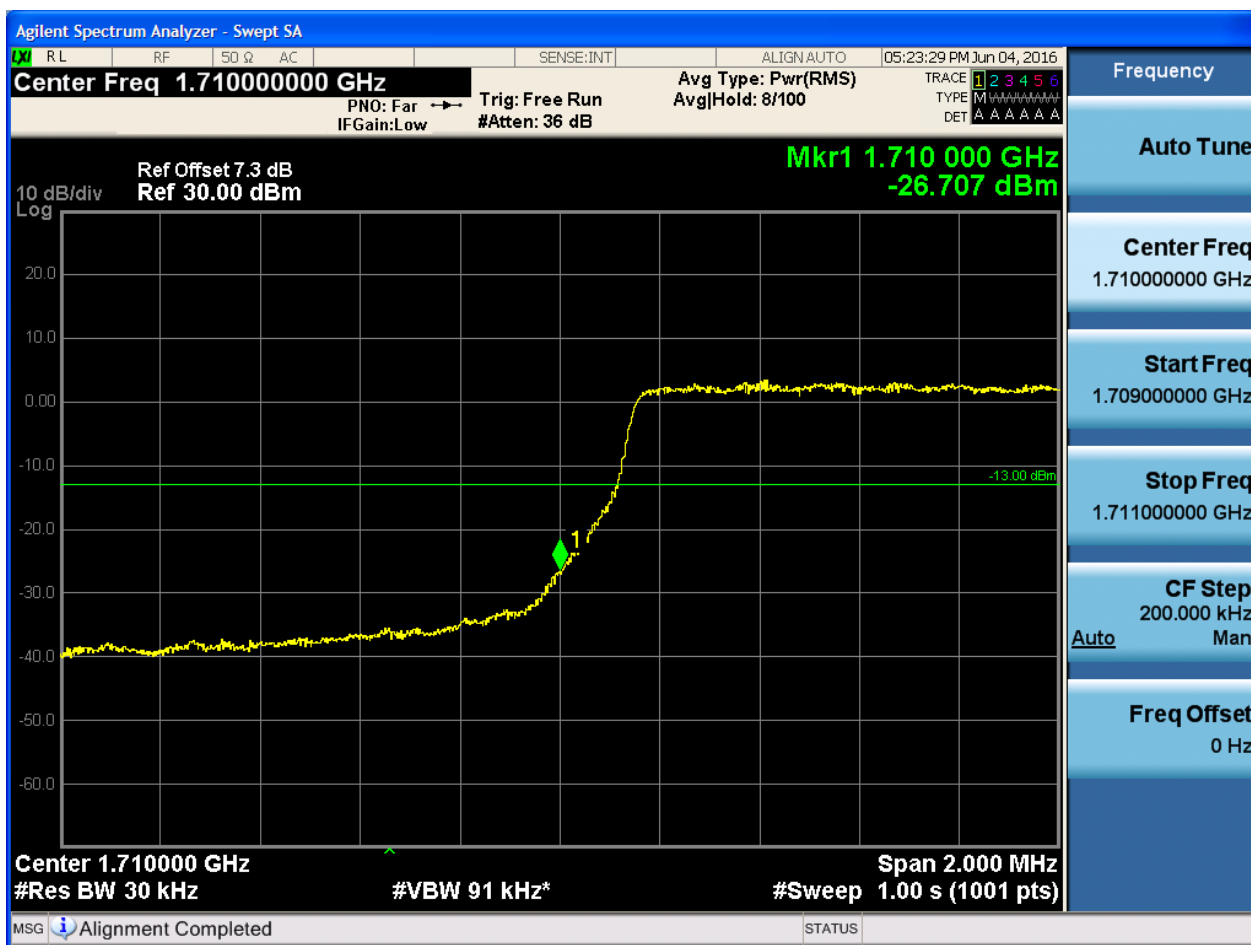


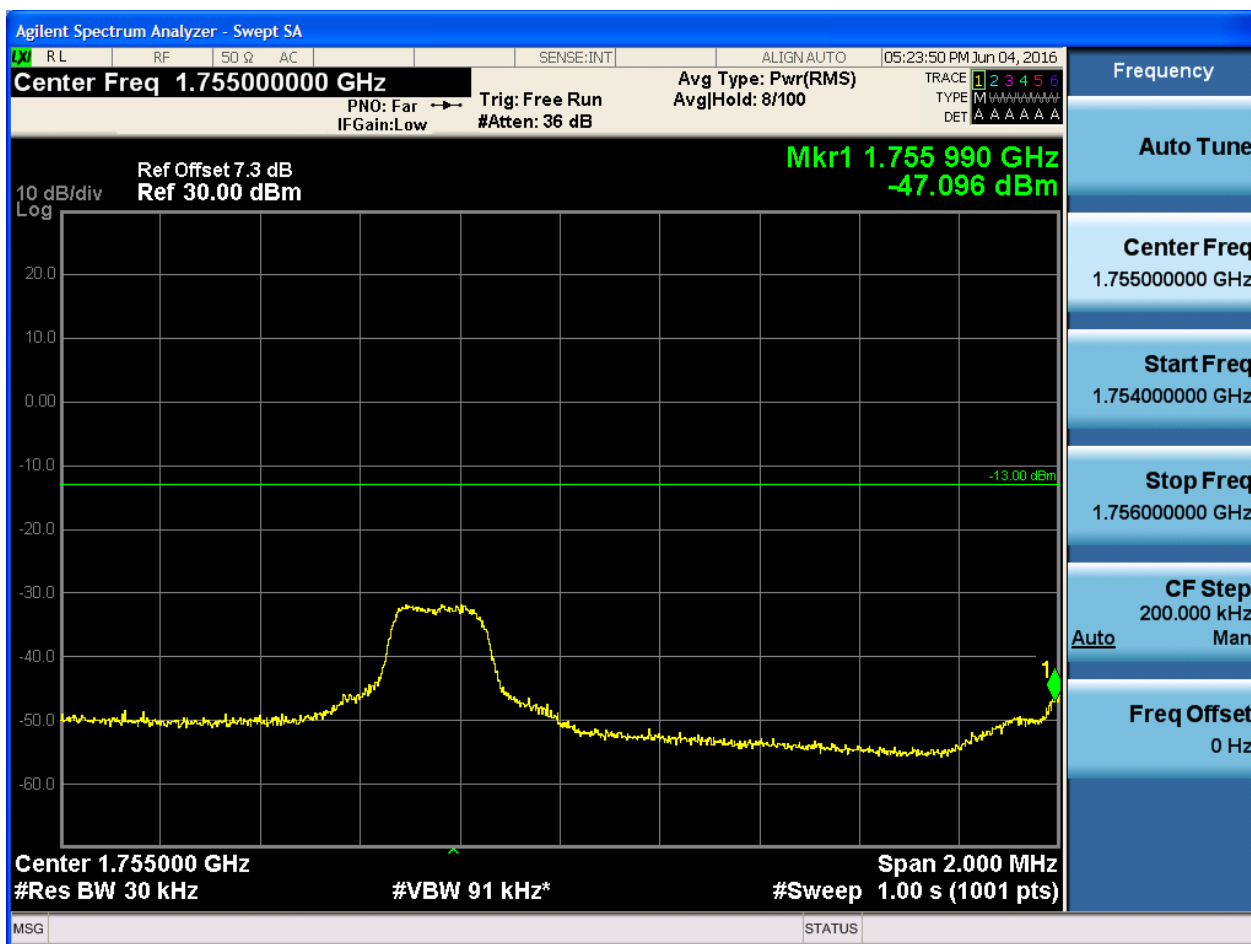


5.1.1.2.2.1.4 Test RB = RB15#0



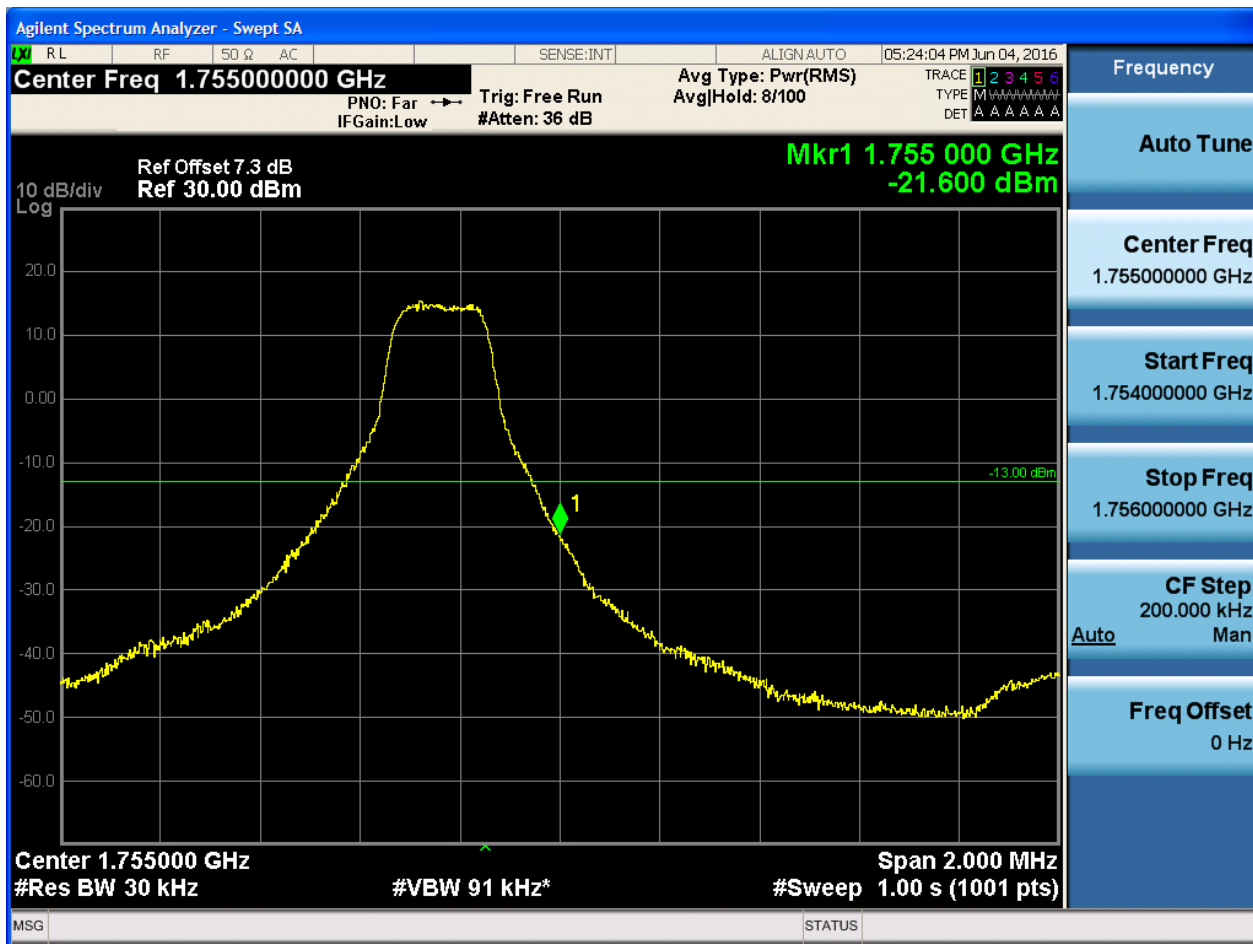
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0





5.1.1.2.2.2 Test RB = RB1#14





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:24:19 PM Jun 04, 2016

Center Freq 1.755000000 GHz Avg Type: Pwr(RMS) TRACE 1 2 3 4 5 6
PNO: Far Trig: Free Run Avg|Hold: 8/100 TYPE [M] M
IFGain:Low #Atten: 36 dB DET A A A A A A

Ref Offset 7.3 dB Mkr1 1.755 000 GHz
Ref 30.00 dBm -33.321 dBm

10 dB/div Log

Center 1.755000 GHz Span 2.000 MHz
#Res BW 30 kHz #VBW 91 kHz* #Sweep 1.00 s (1001 pts)

MSG STATUS

Frequency
Auto Tune
Center Freq 1.755000000 GHz
Start Freq 1.754000000 GHz
Stop Freq 1.756000000 GHz
CF Step 200.000 kHz
Auto Man
Freq Offset 0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 1.75500000 GHz

PNO: Far → Trg: Free Run
IFGain: Low #Atten: 36 dB

Avg Type: Pwr(RMS)
Avg/Hold: 8/100

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 7.3 dB
Ref 30.00 dBm

Mkr1 1.755 GHz
-28.629 dBm

10 dB/div
Log

-13.00 dBm

Center 1.755000 GHz
#Res BW 30 kHz
#VBW 91 kHz*

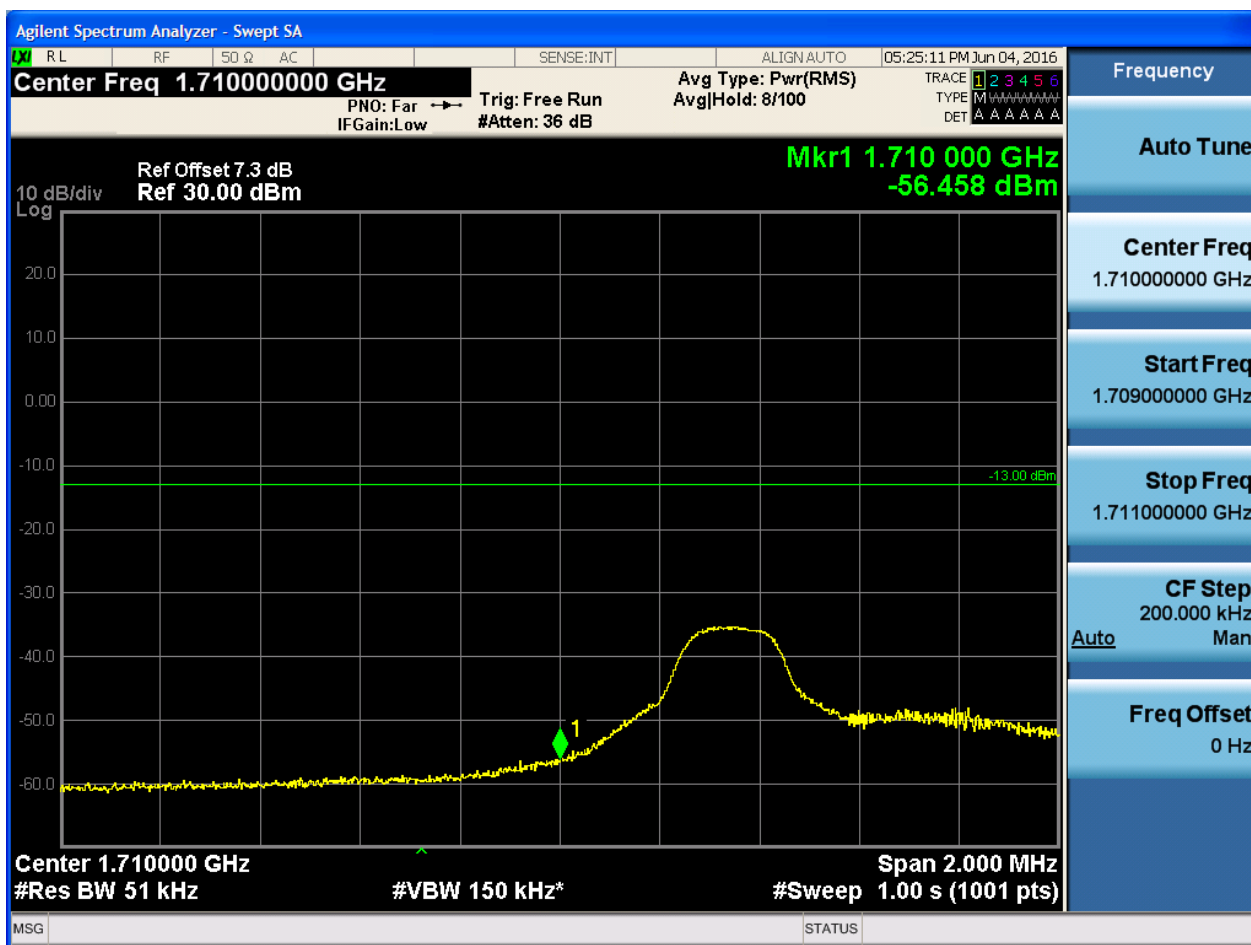
Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency
Auto Tune
Center Freq 1.75500000 GHz
Start Freq 1.754000000 GHz
Stop Freq 1.756000000 GHz
CF Step 200.000 kHz Man
Auto
Freq Offset 0 Hz





5.1.1.2.3.1.2 Test RB = RB1#24



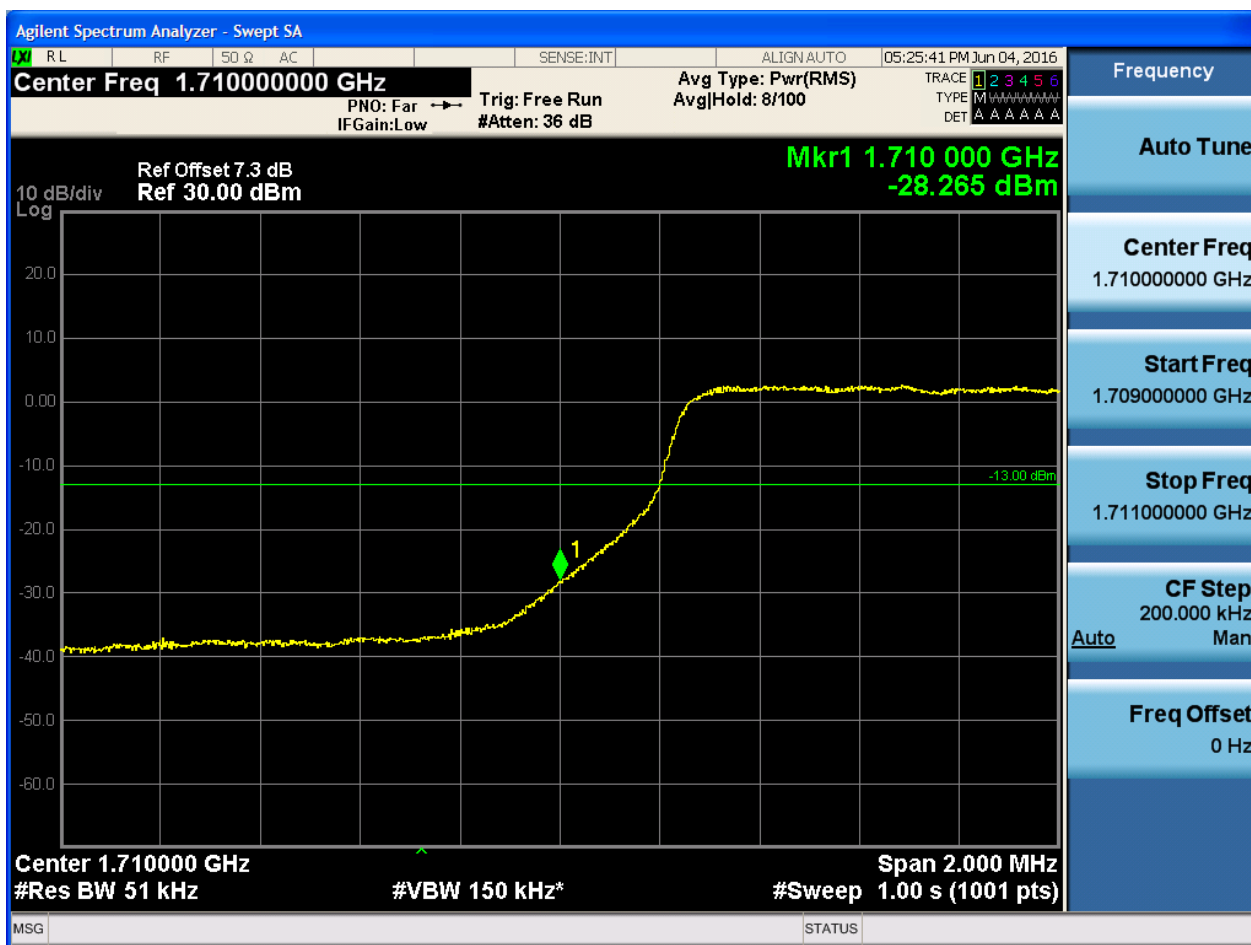


5.1.1.2.3.1.3 Test RB = RB12#6



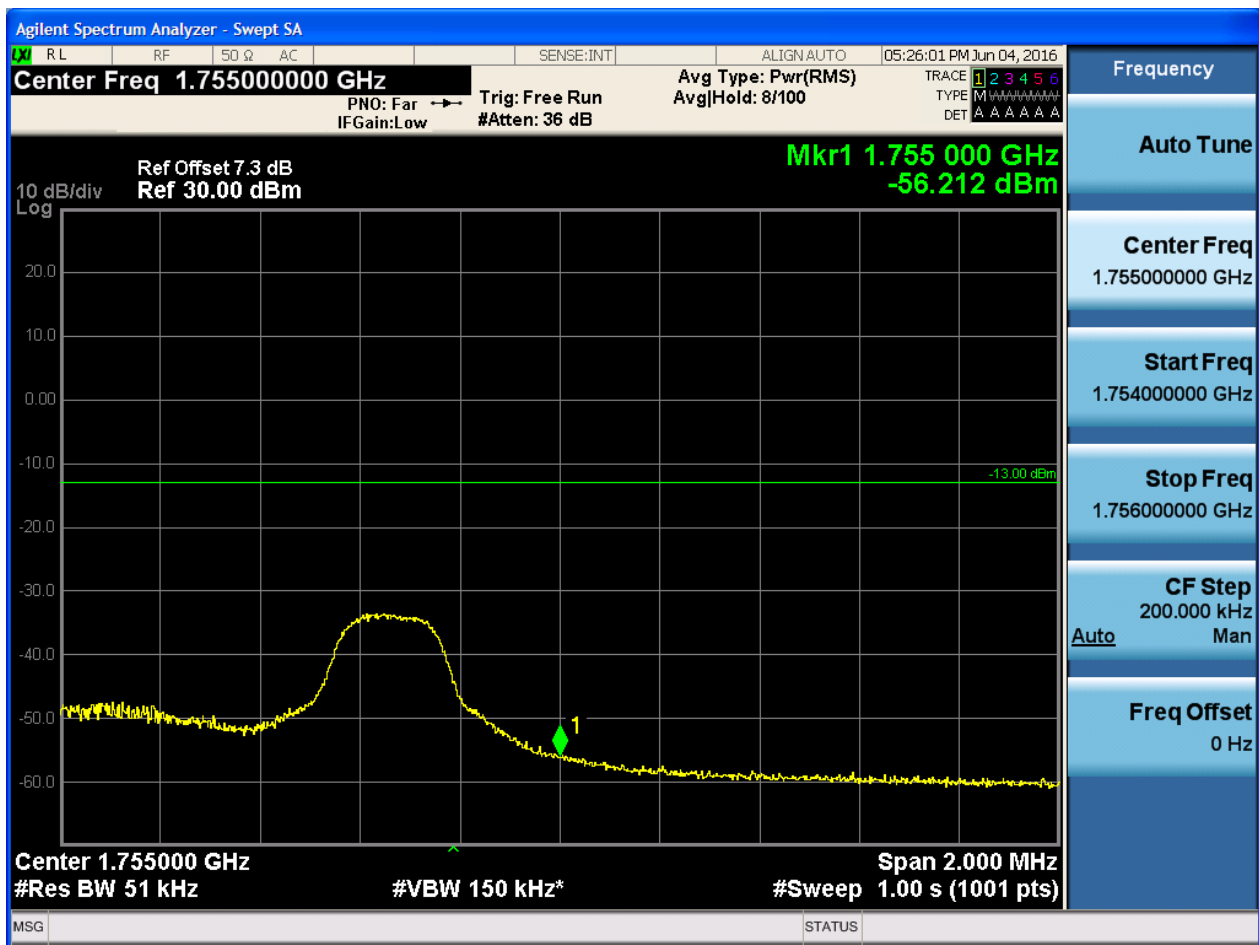


5.1.1.2.3.1.4 Test RB = RB25#0



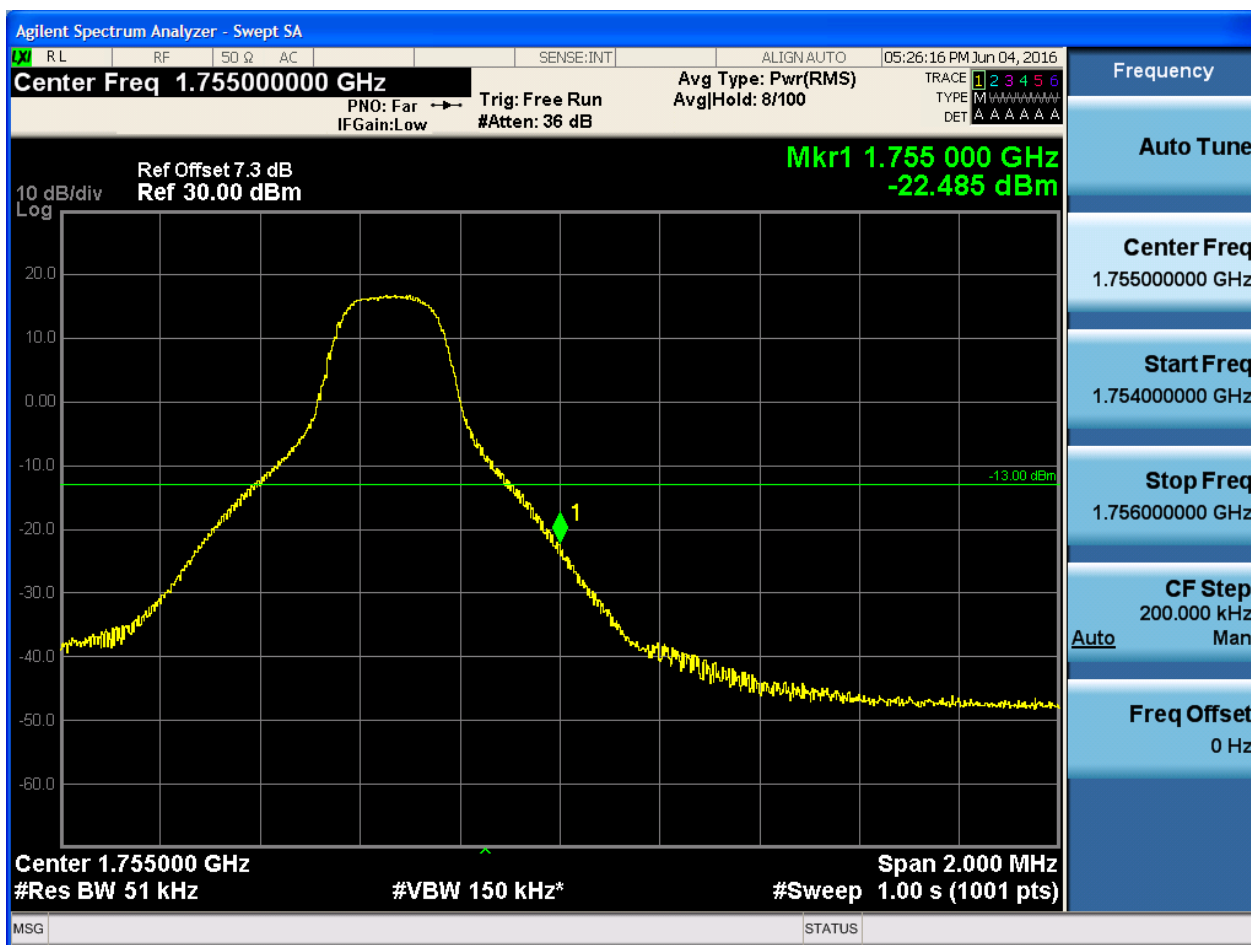
5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





5.1.1.2.3.2.2 Test RB = RB1#24





5.1.1.2.3.2.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

Center Freq 1.755000000 GHz

Ref Offset 7.3 dB
Ref 30.00 dBm

Mkr1 1.755 000 GHz
-29.679 dBm

10 dB/div
Log

Center 1.755000 GHz
#Res BW 51 kHz
#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq 1.755000000 GHz

Start Freq 1.754000000 GHz

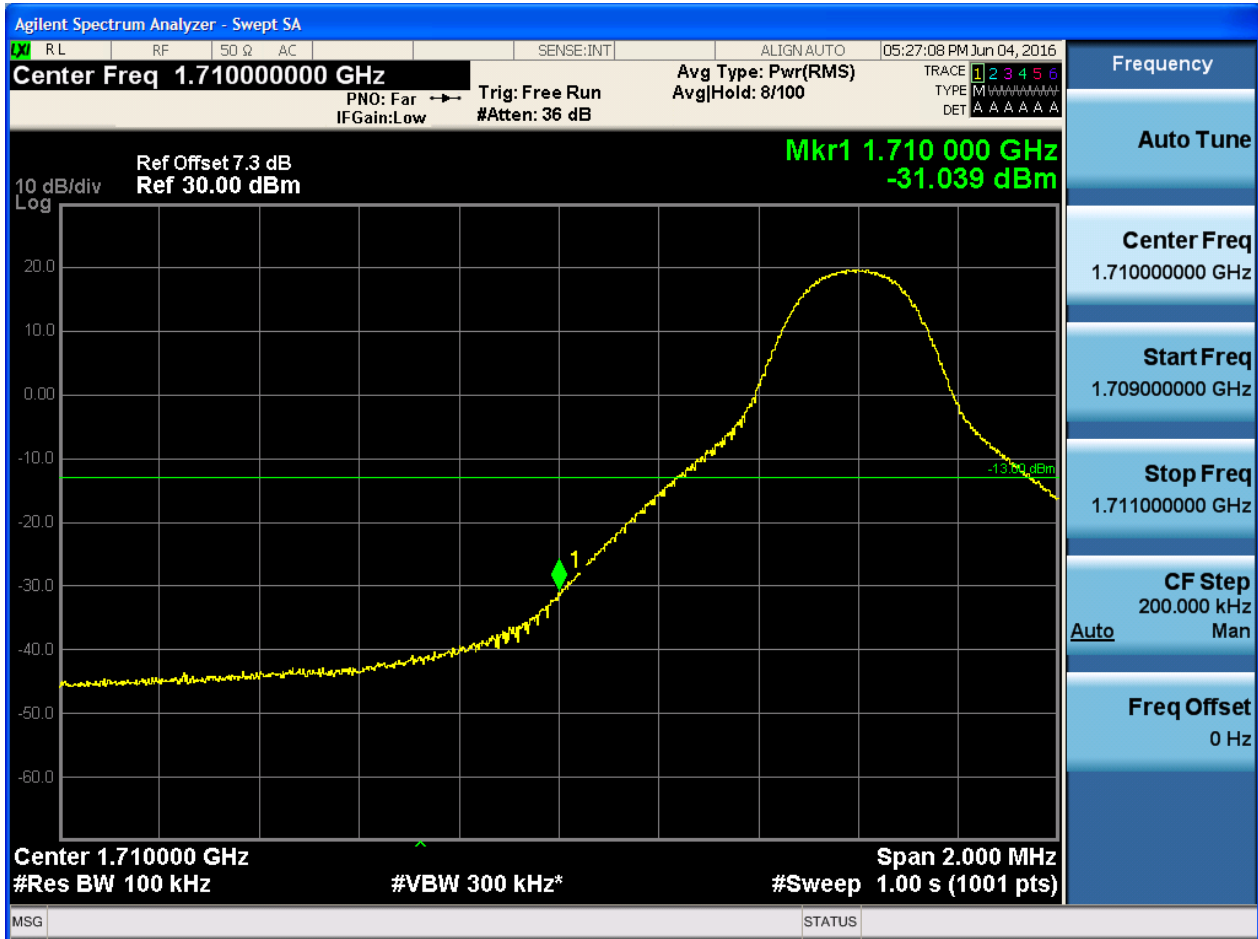
Stop Freq 1.756000000 GHz

CF Step 200.000 kHz
Auto Man

Freq Offset 0 Hz

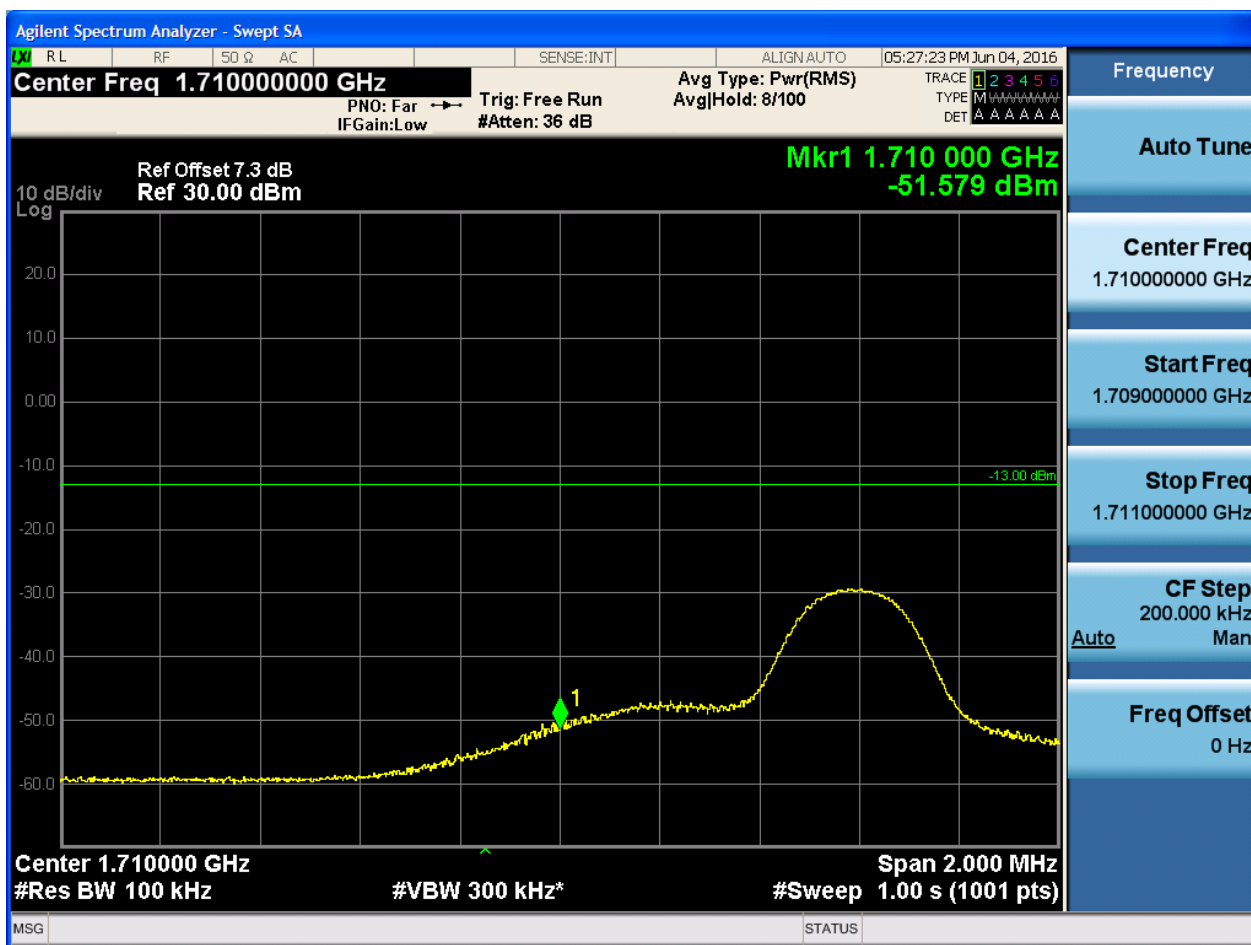


5.1.1.2.4.1.1 Test RB = RB1#0



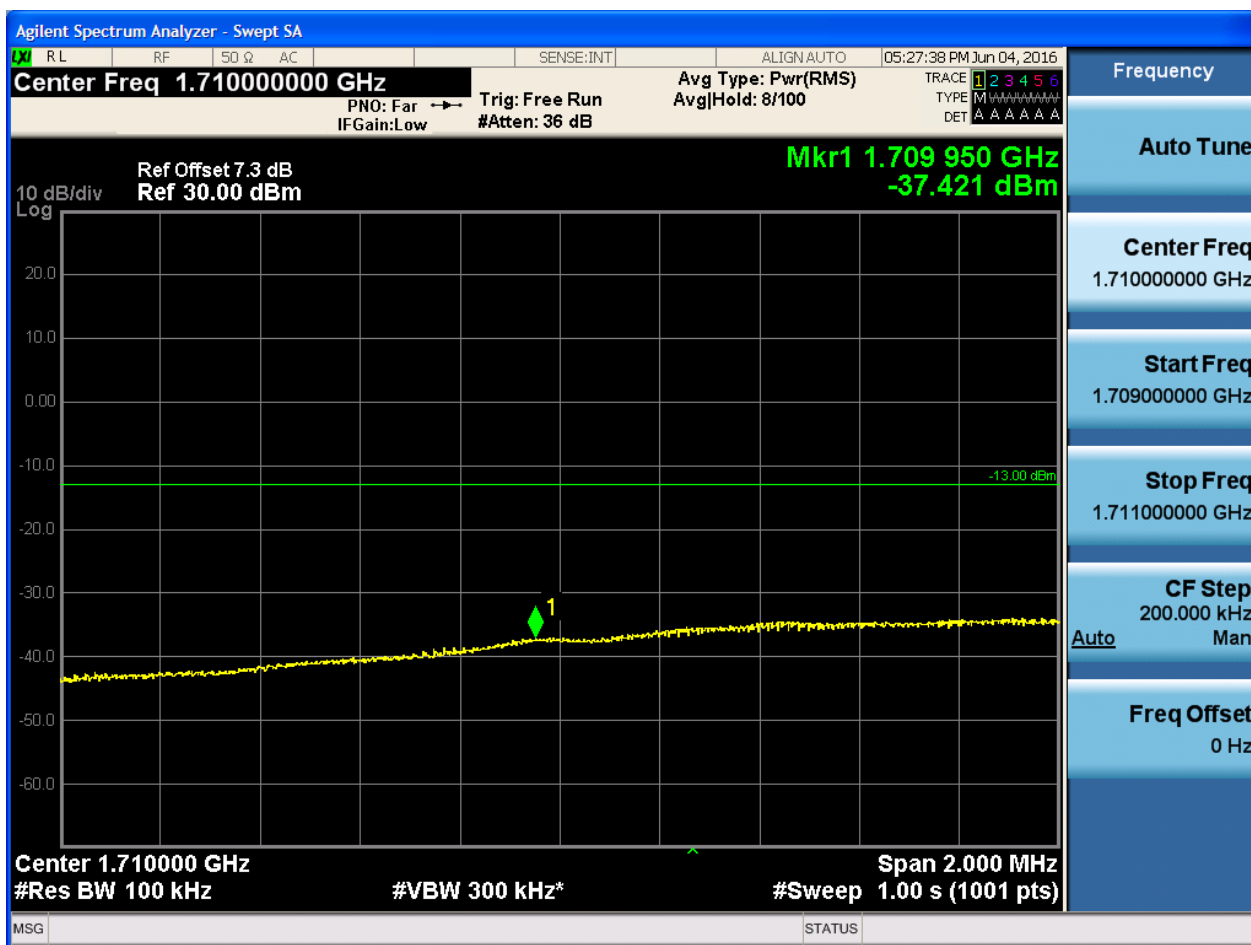


5.1.1.2.4.1.2 Test RB = RB1#49





5.1.1.2.4.1.3 Test RB = RB25#13



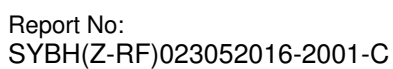


5.1.1.2.4.1.4 Test RB = RB50#0

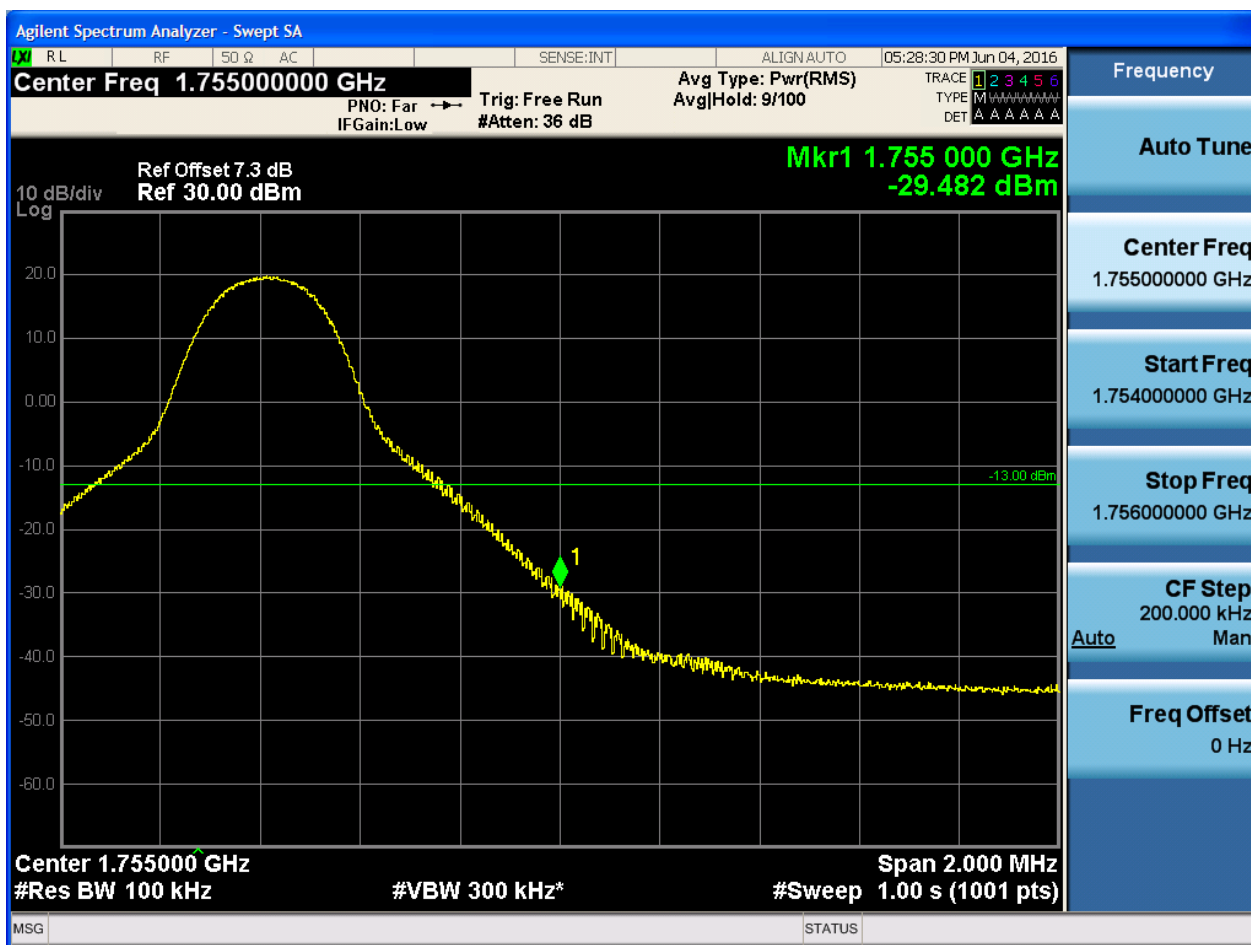




5.1.1.2.4.2.1 Test RB = RB1#0



5.1.1.2.4.2.2 Test RB = RB1#49





5.1.1.2.4.2.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

Center Freq 1.75500000 GHz

Ref Offset 7.3 dB
Ref 30.00 dBm

Mkr1 1.755 000 GHz
-32.391 dBm

10 dB/div
Log

Center 1.755000 GHz
#Res BW 100 kHz
#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq 1.75500000 GHz

Start Freq 1.754000000 GHz

Stop Freq 1.756000000 GHz

CF Step 200.000 kHz
Auto Man

Freq Offset 0 Hz

Frequency

Auto Tune

Center Freq 1.75500000 GHz

Start Freq 1.754000000 GHz

Stop Freq 1.756000000 GHz

CF Step 200.000 kHz
Auto Man

Freq Offset 0 Hz

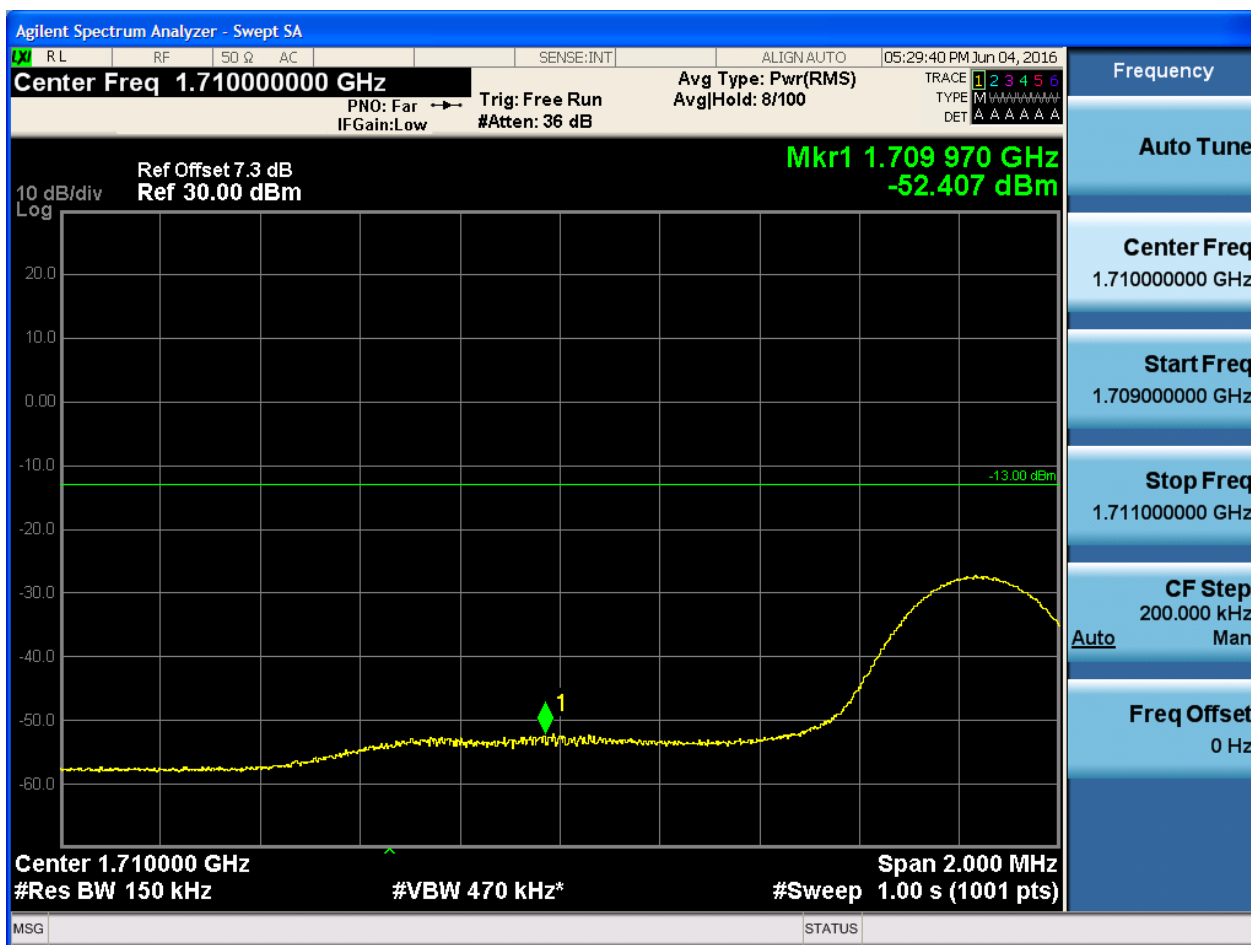


5.1.1.2.5.1.1 Test RB = RB1#0





5.1.1.2.5.1.2 Test RB = RB1#74





5.1.1.2.5.1.3 Test RB = RB38#19





Agilent Spectrum Analyzer - Swept SA

Center Freq 1.710000000 GHz

Ref Offset 7.3 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 1.710 GHz
-34.804 dBm

Center 1.710000 GHz
#Res BW 150 kHz
#VBW 470 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq
1.710000000 GHz

Start Freq
1.709000000 GHz

Stop Freq
1.711000000 GHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

5.1.1.2.5.2 Test Channel = HCH

5.1.1.2.5.2.1 Test RB = RB1#0





5.1.1.2.5.2.2 Test RB = RB1#74





5.1.1.2.5.2.3 Test RB = RB38#19





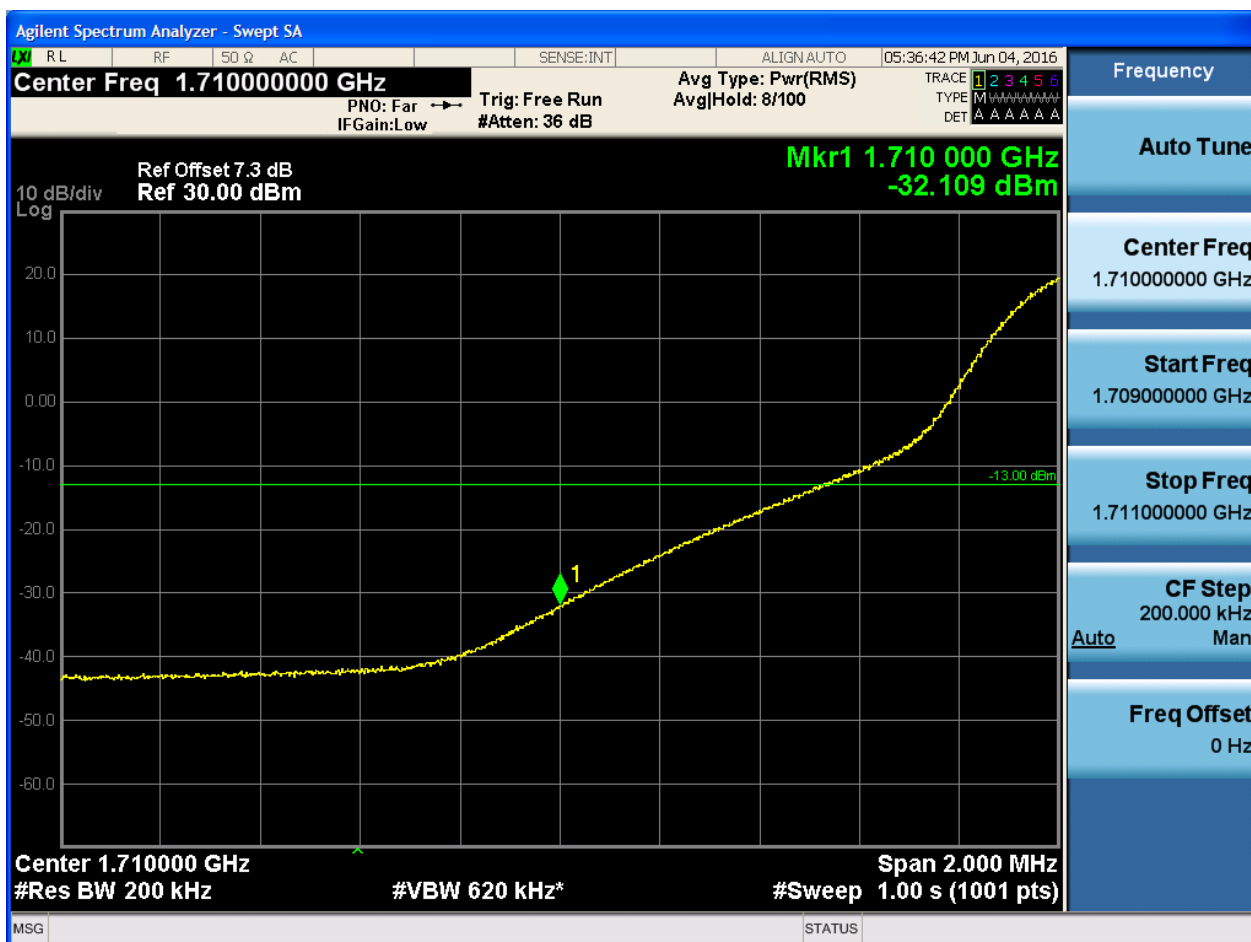
5.1.1.2.5.2.4 Test RB = RB75#0



5.1.1.2.6 Test Bandwidth = 20

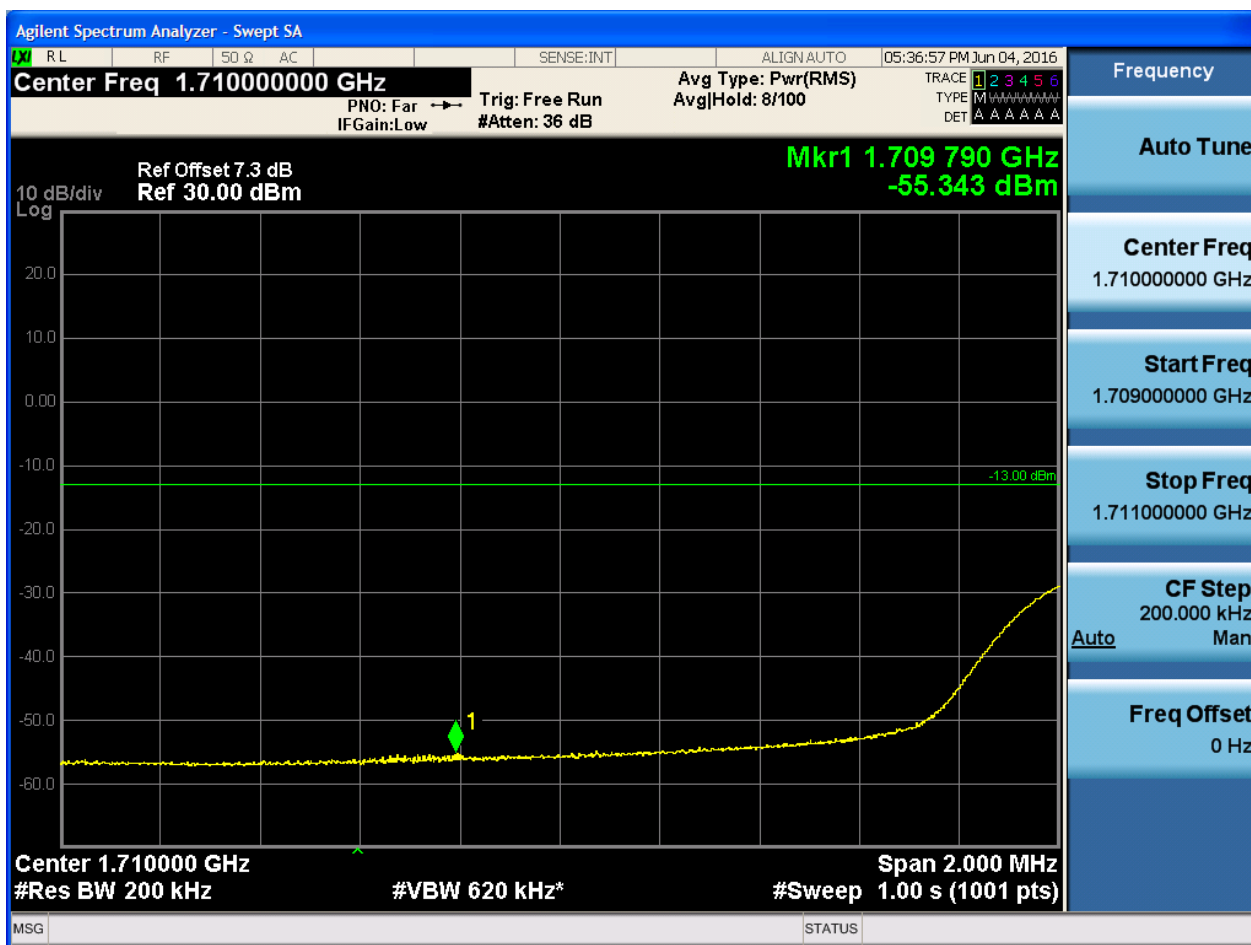
5.1.1.2.6.1 Test Channel = LCH

5.1.1.2.6.1.1 Test RB = RB1#0





5.1.1.2.6.1.2 Test RB = RB1#99



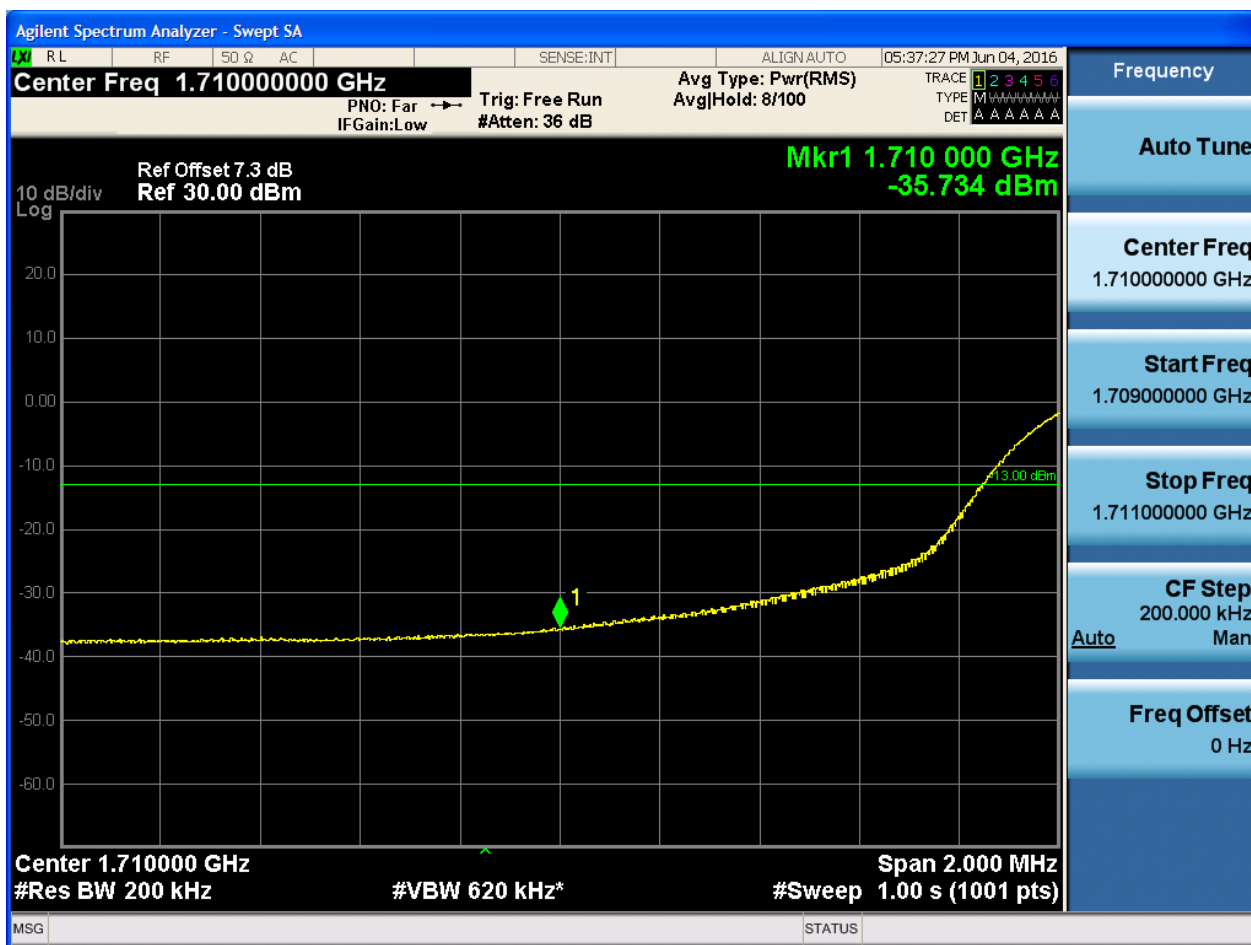


5.1.1.2.6.1.3 Test RB = RB50#25





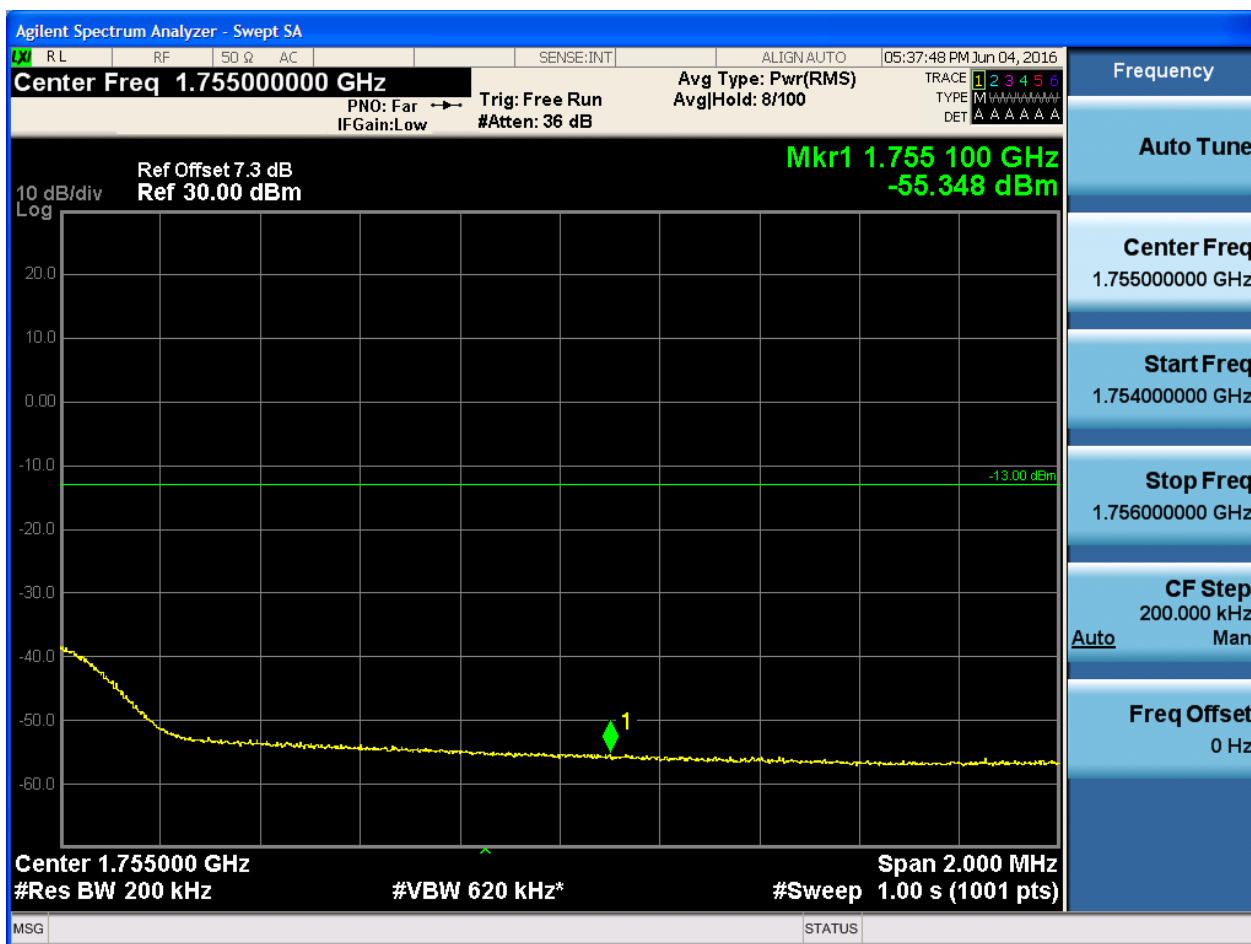
5.1.1.2.6.1.4 Test RB = RB100#0





5.1.1.2.6.2 Test Channel = HCH

5.1.1.2.6.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 1.755000000 GHz

Ref Offset 7.3 dB
Ref 30.00 dBm

Mkr1 1.755 000 GHz
-32.207 dBm

10 dB/div
Log

Center 1.755000 GHz
#Res BW 200 kHz
#VBW 620 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq
1.755000000 GHz

Start Freq
1.754000000 GHz

Stop Freq
1.756000000 GHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

MSG STATUS



5.1.1.2.6.2.3 Test RB = RB50#25





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 05:38:32 PM Jun 04, 2016

Center Freq 1.755000000 GHz Avg Type: Pwr(RMS) Trace 1 2 3 4 5 6
PNO: Far Trig: Free Run TYPE M W W W W W W W W
IFGain: Low #Atten: 36 dB DET A A A A A A

Ref Offset 7.3 dB Mkr1 1.755 000 GHz
Ref 30.00 dBm -37.207 dBm

10 dB/div Log

-13.00 dBm

Center 1.755000 GHz Span 2.000 MHz
#Res BW 200 kHz #VBW 620 kHz* #Sweep 1.00 s (1001 pts)

MSG Alignment Completed STATUS

Frequency

Auto Tune

Center Freq
1.755000000 GHz

Start Freq
1.754000000 GHz

Stop Freq
1.756000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

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 LTE

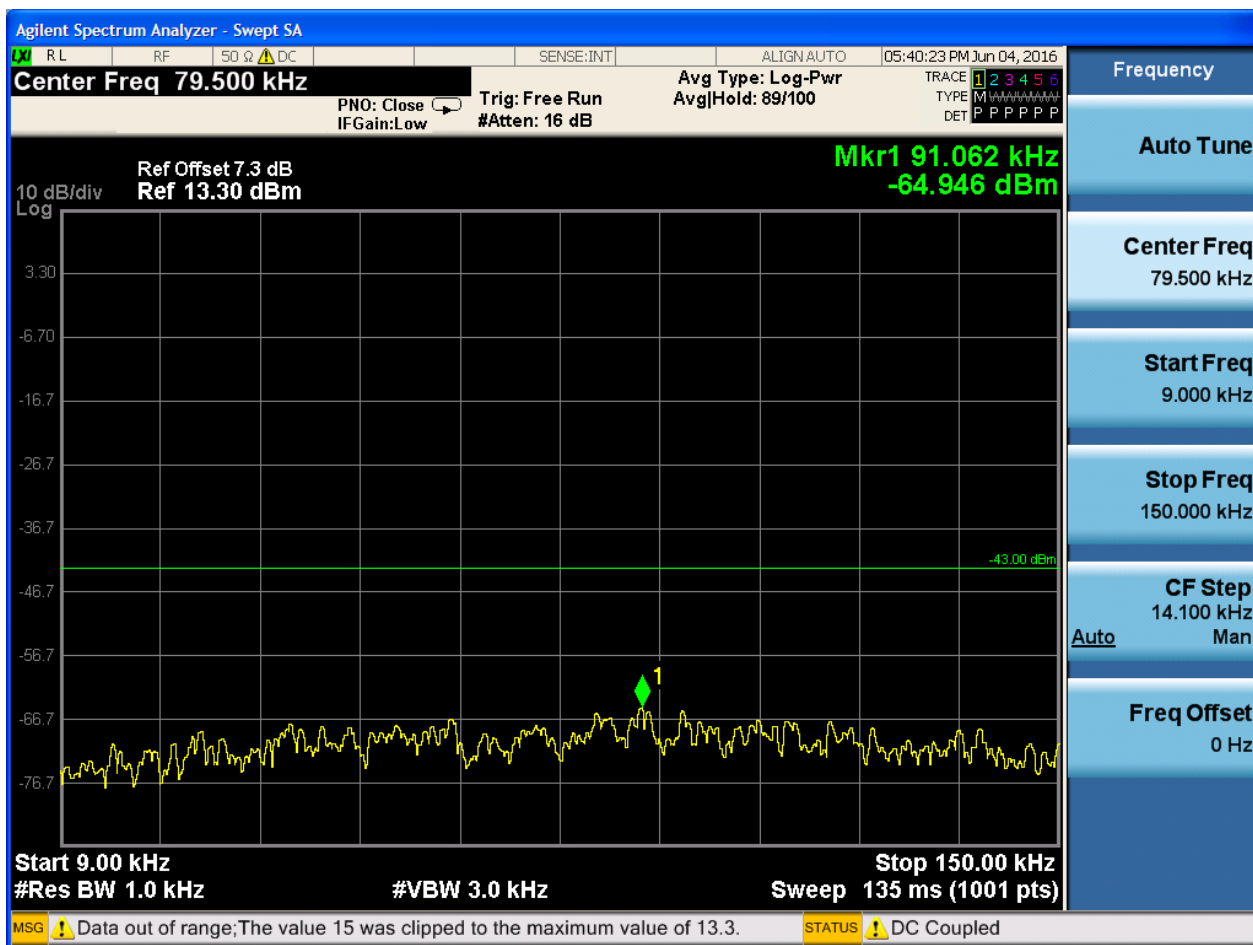
6.1.1 Test Band = BAND4

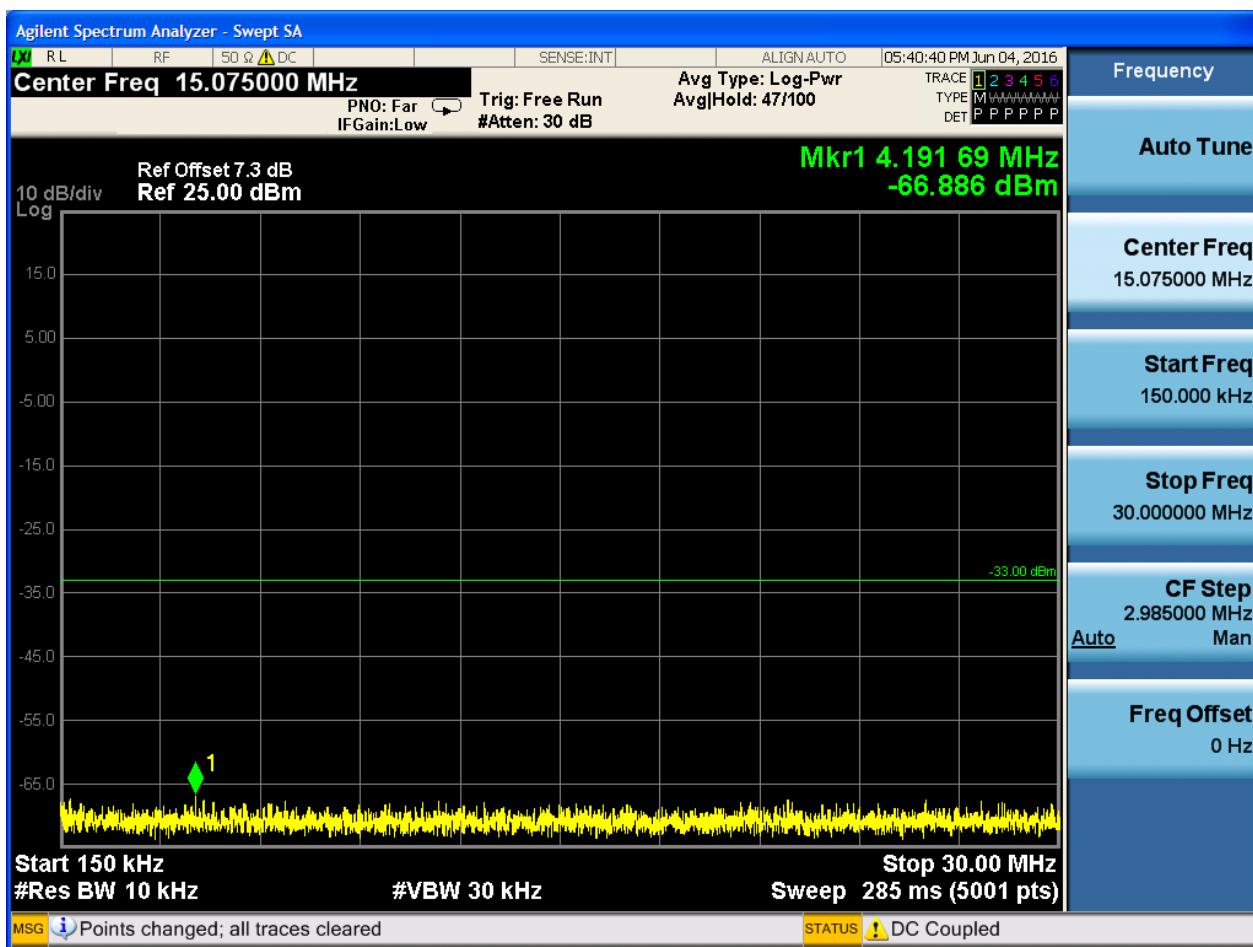
6.1.1.1 Test Mode = LTE/TM1

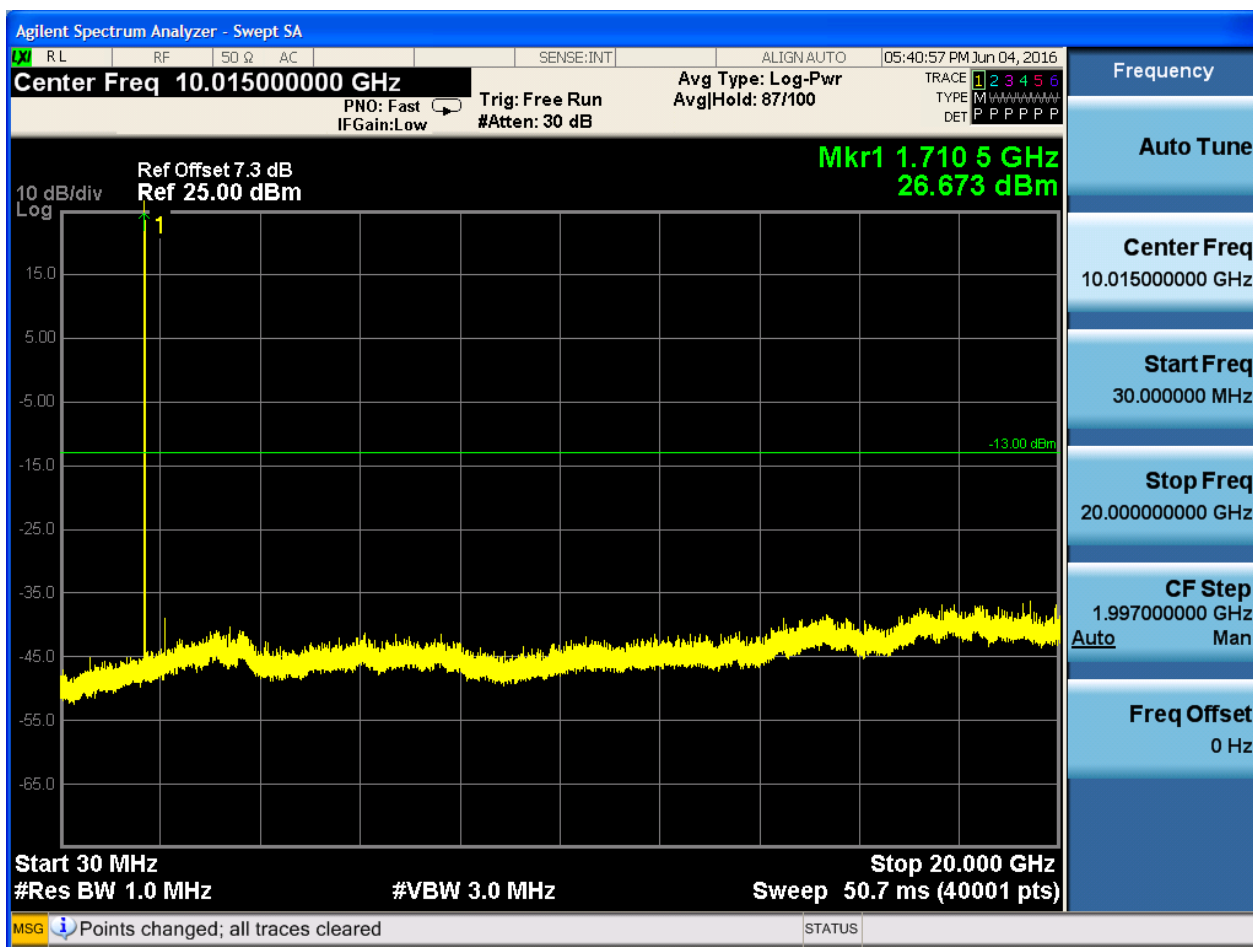
6.1.1.1.1 Test Bandwidth = 1.4

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0

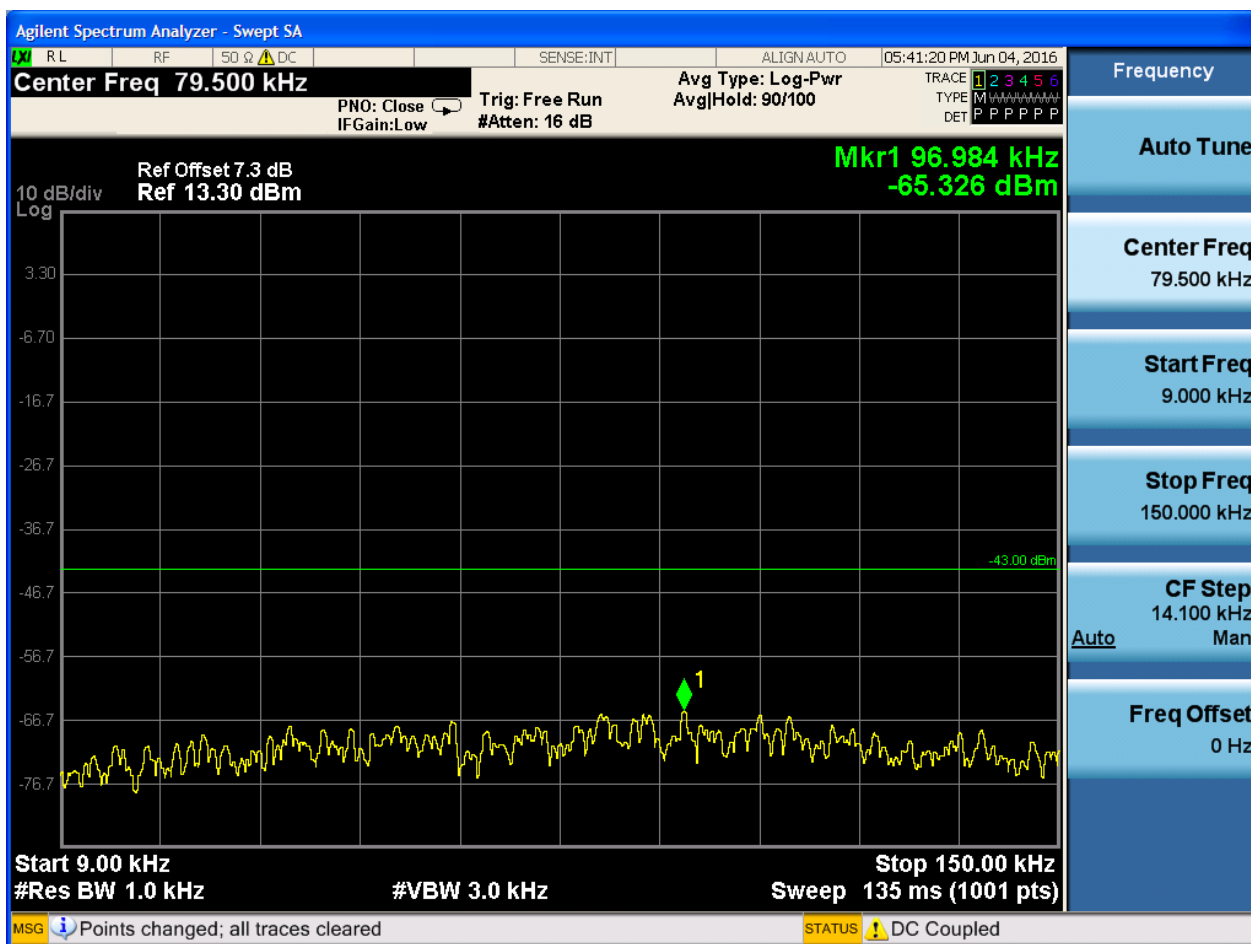




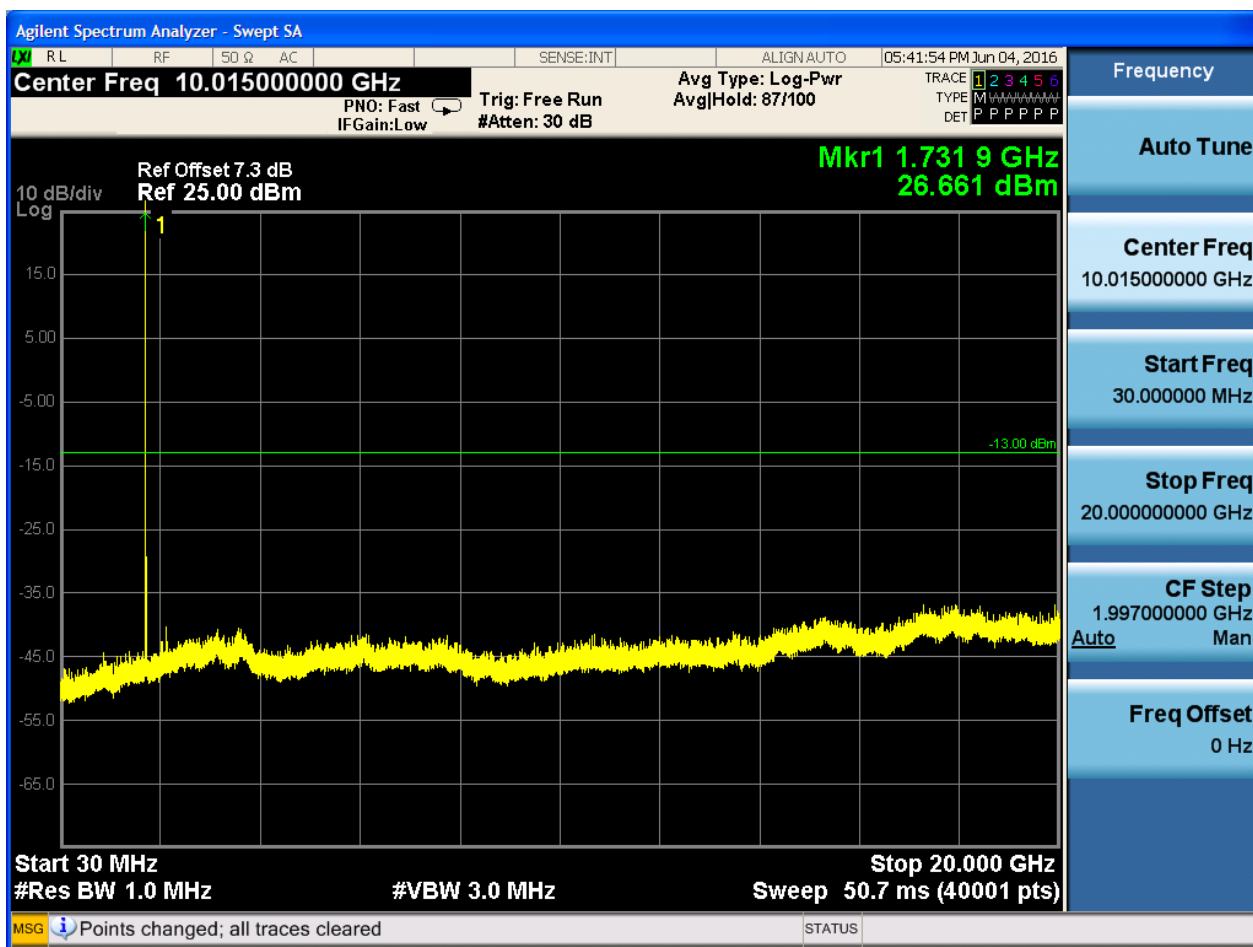


6.1.1.1.2 Test Channel = MCH

6.1.1.1.2.1 Test RB = RB1#0

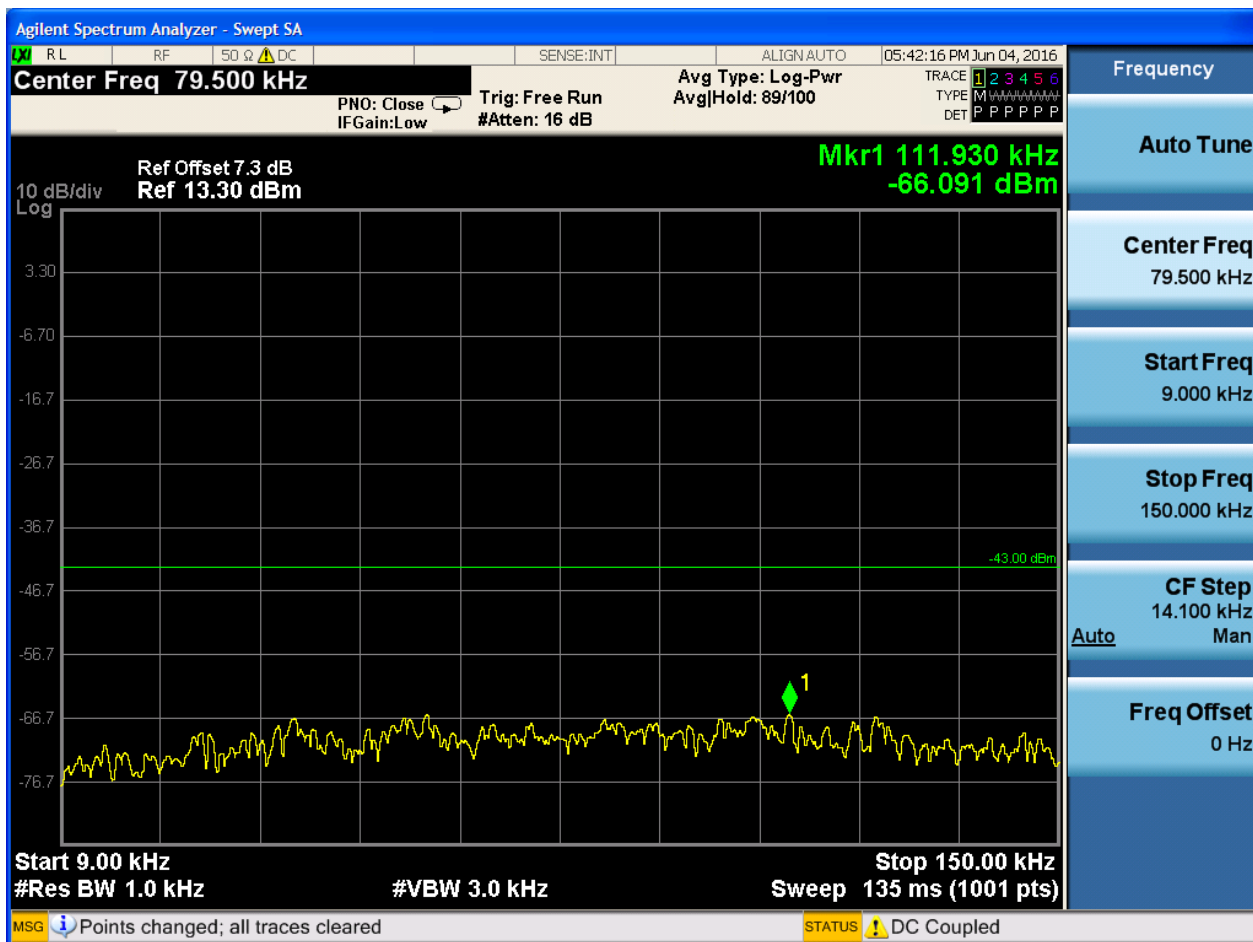


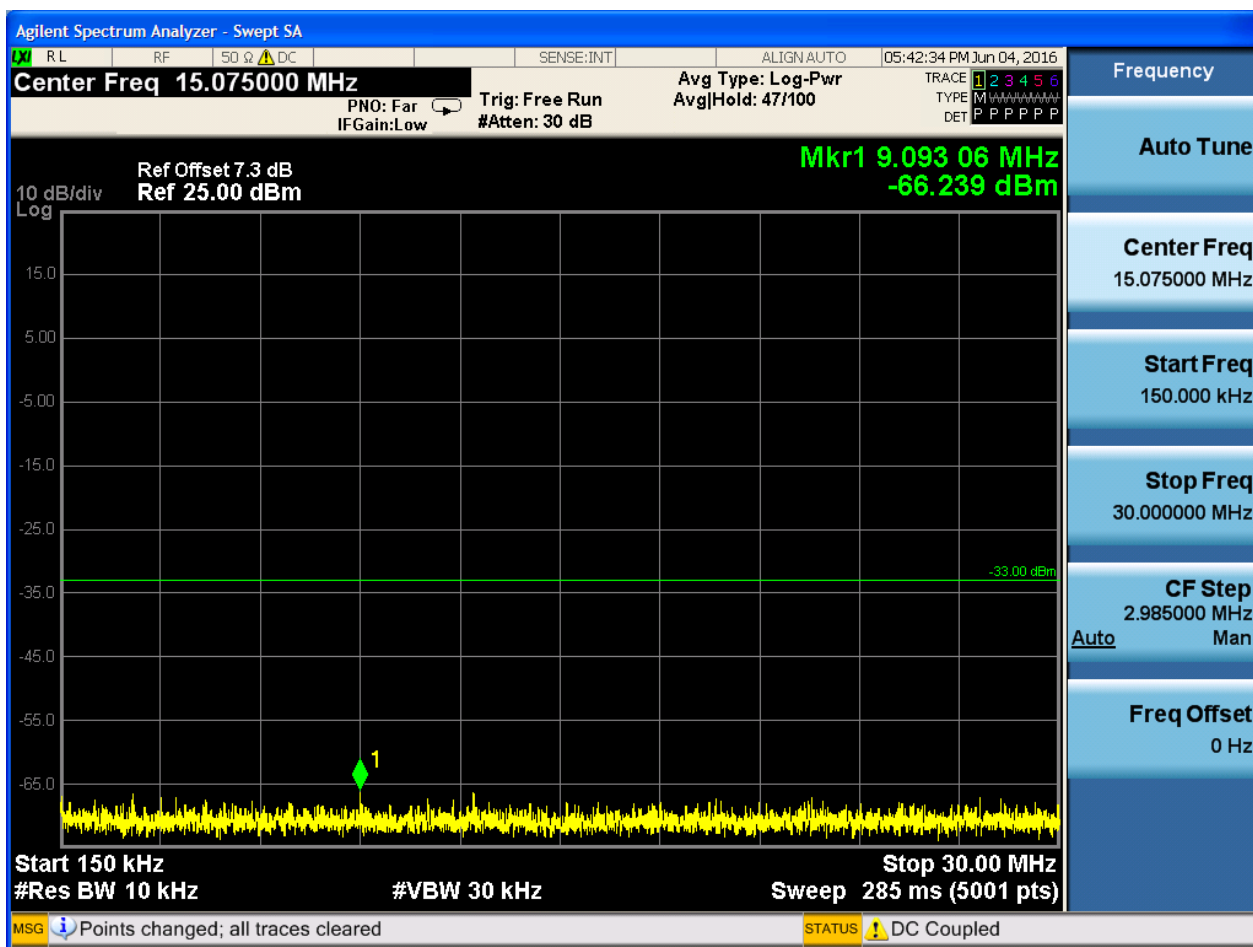


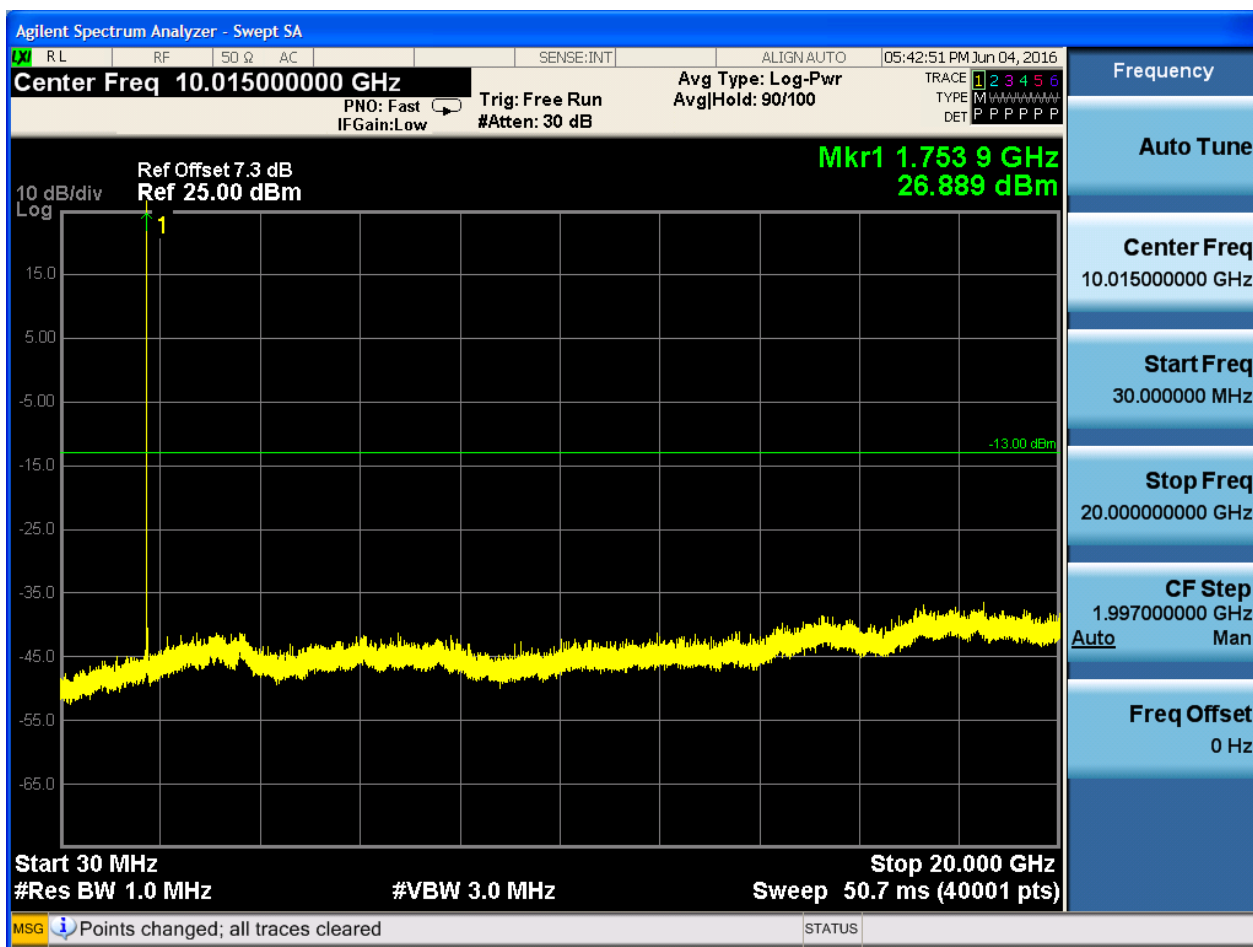


6.1.1.1.3 Test Channel = HCH

6.1.1.1.3.1 Test RB = RB1#0



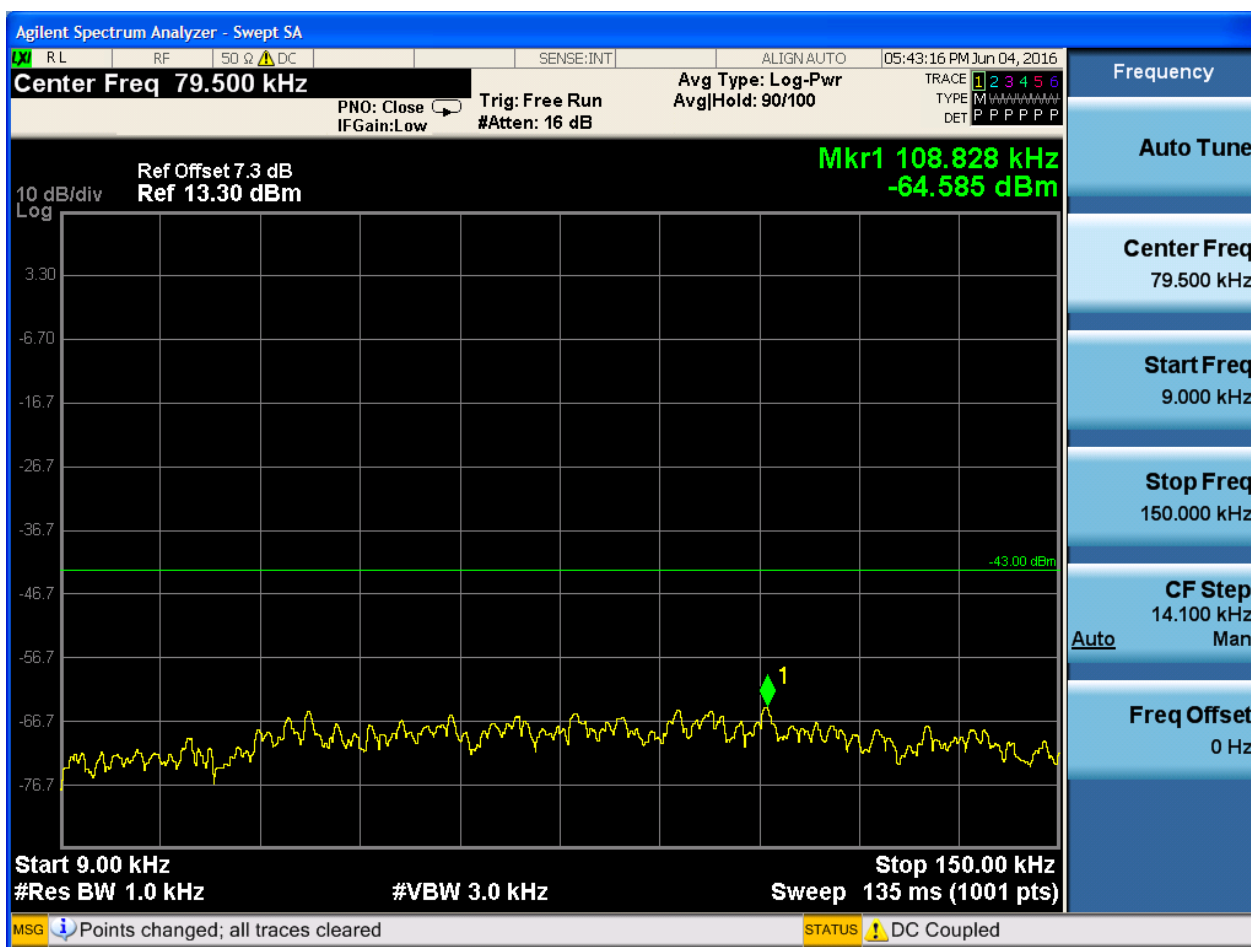


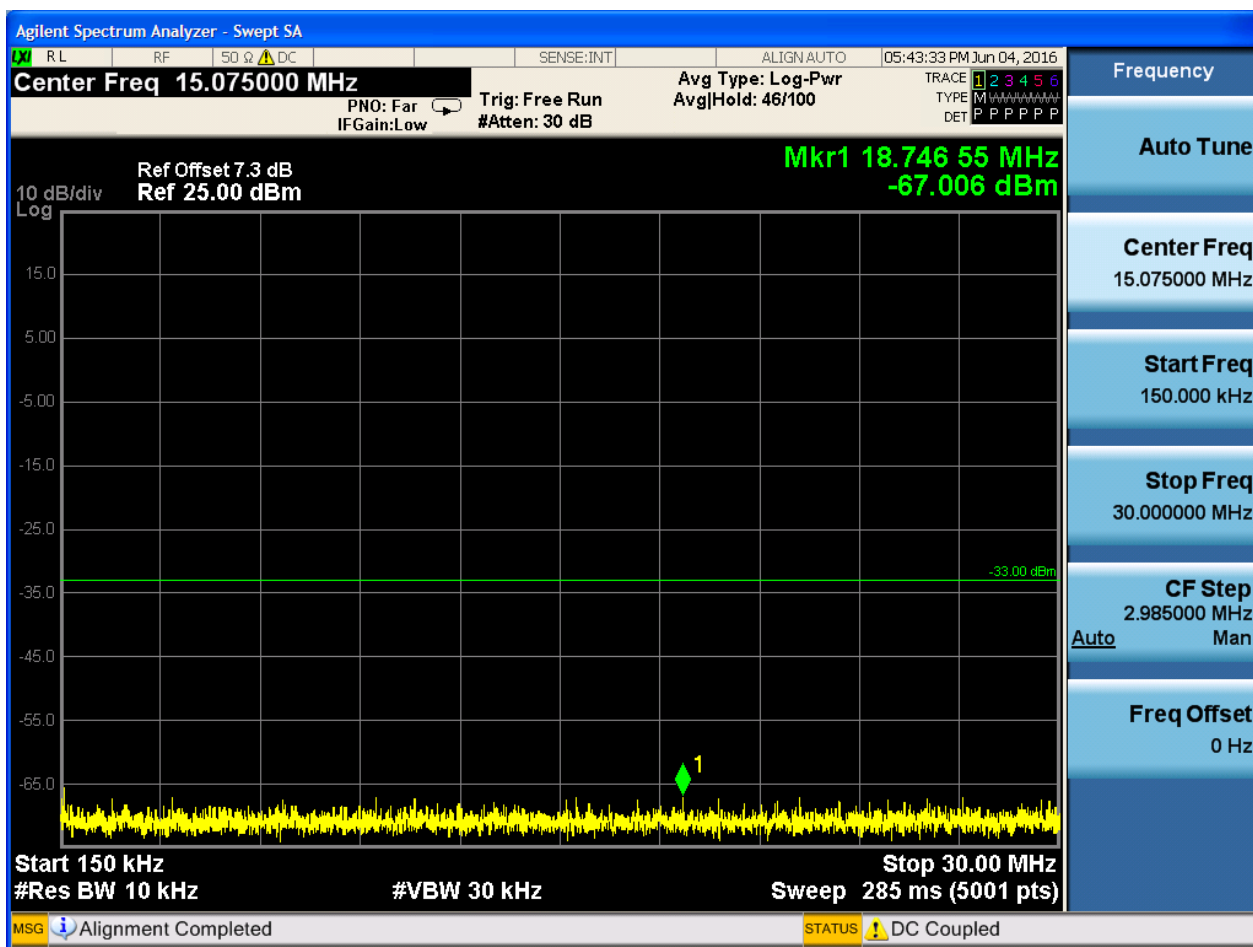


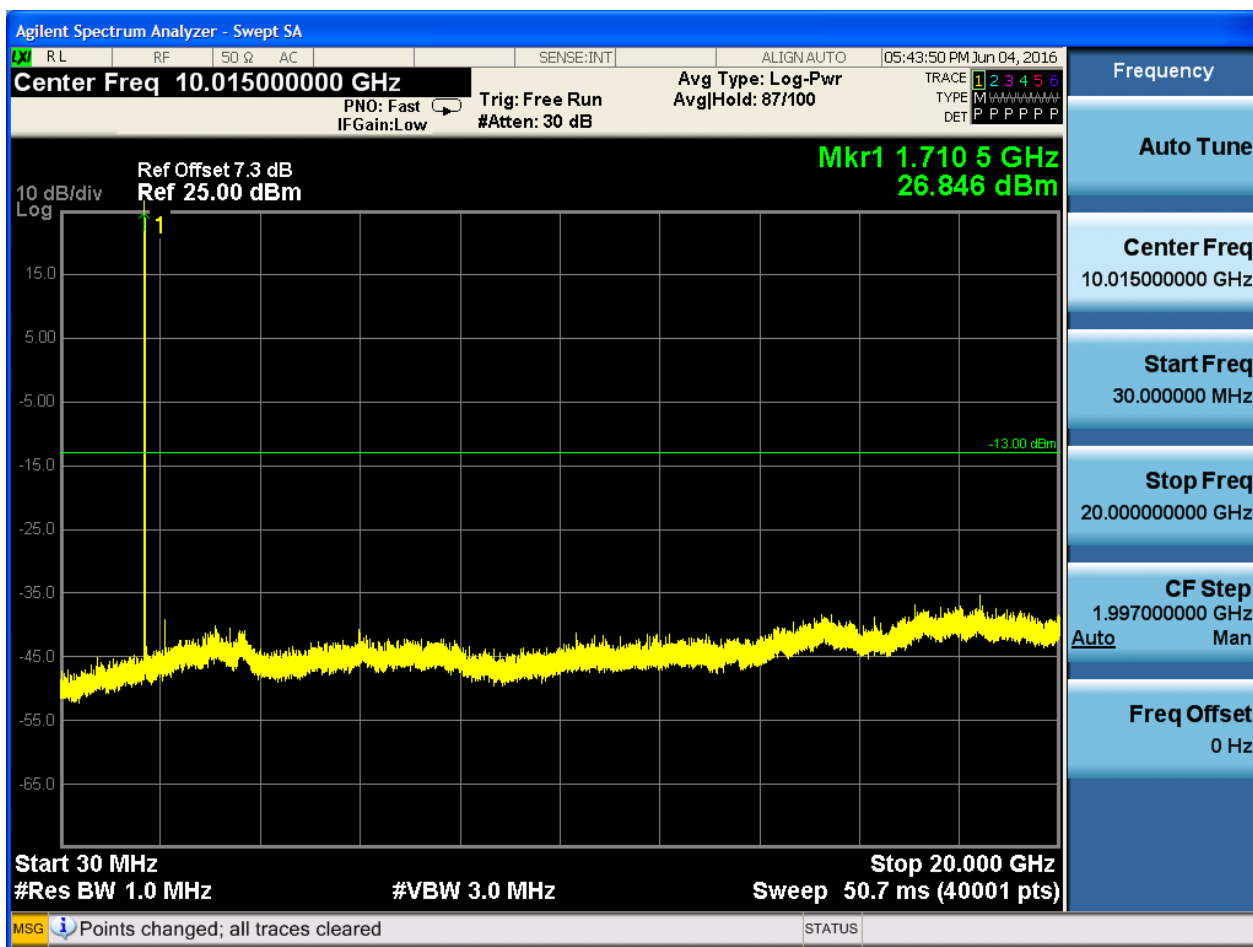
6.1.1.1.2 Test Bandwidth = 3

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0

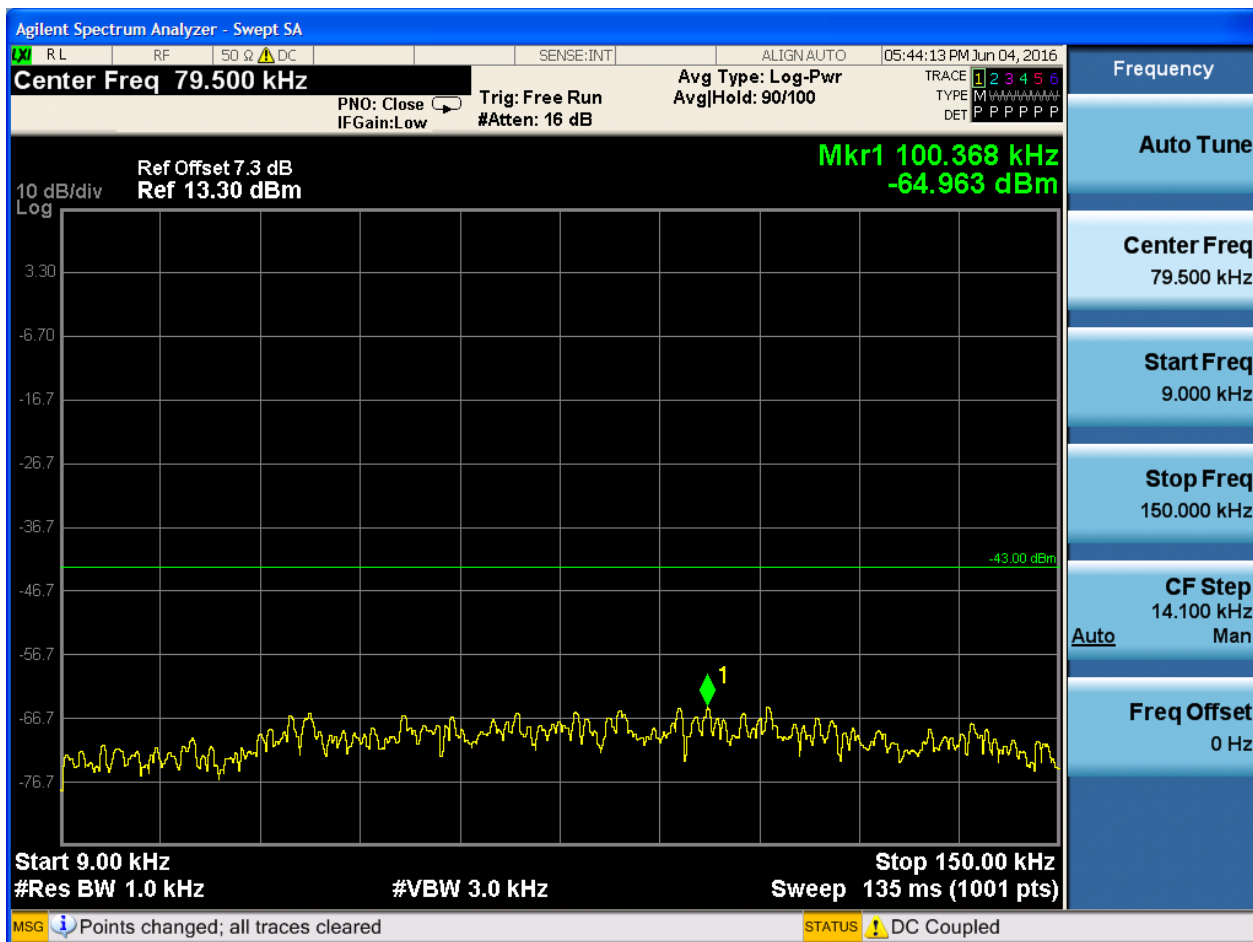


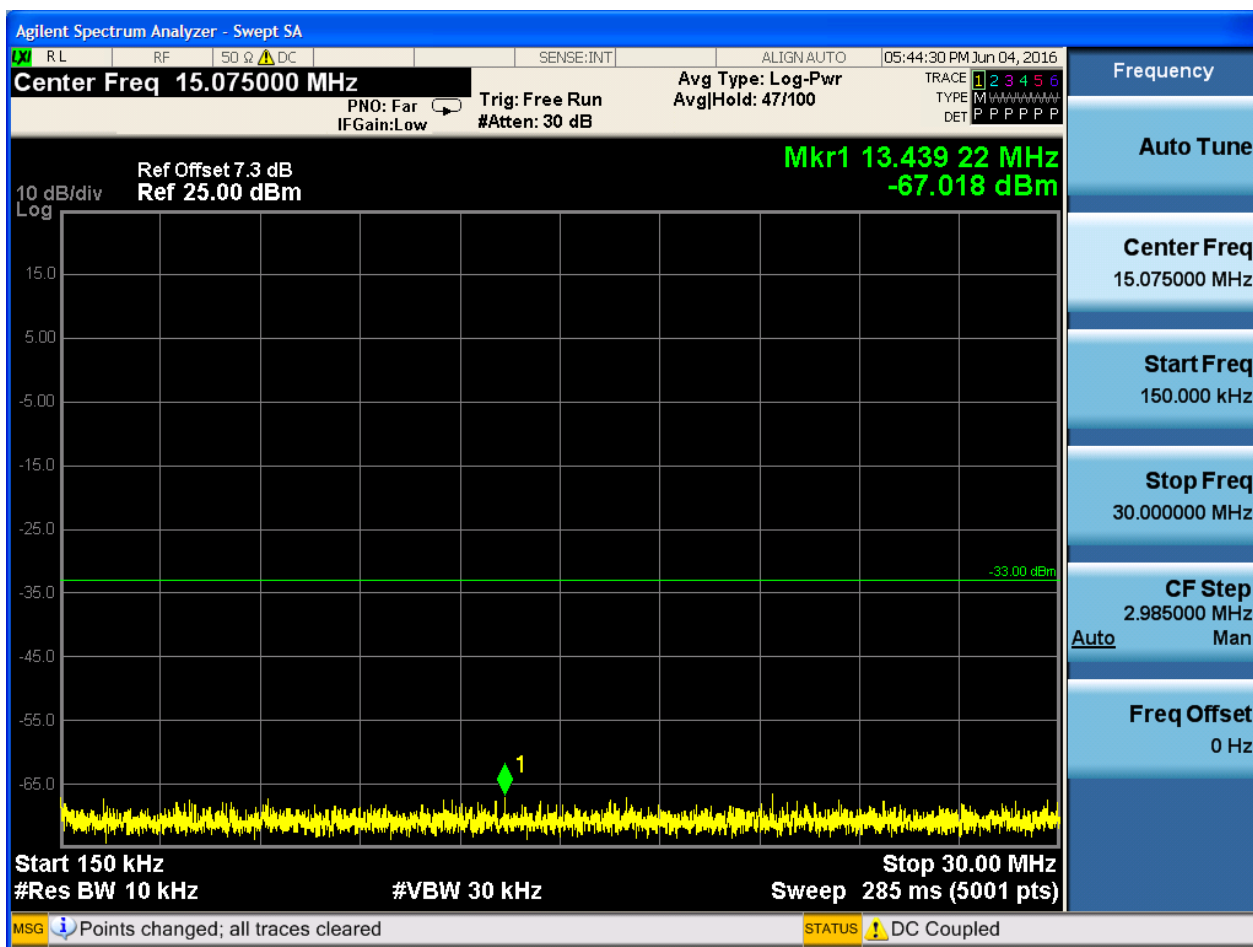


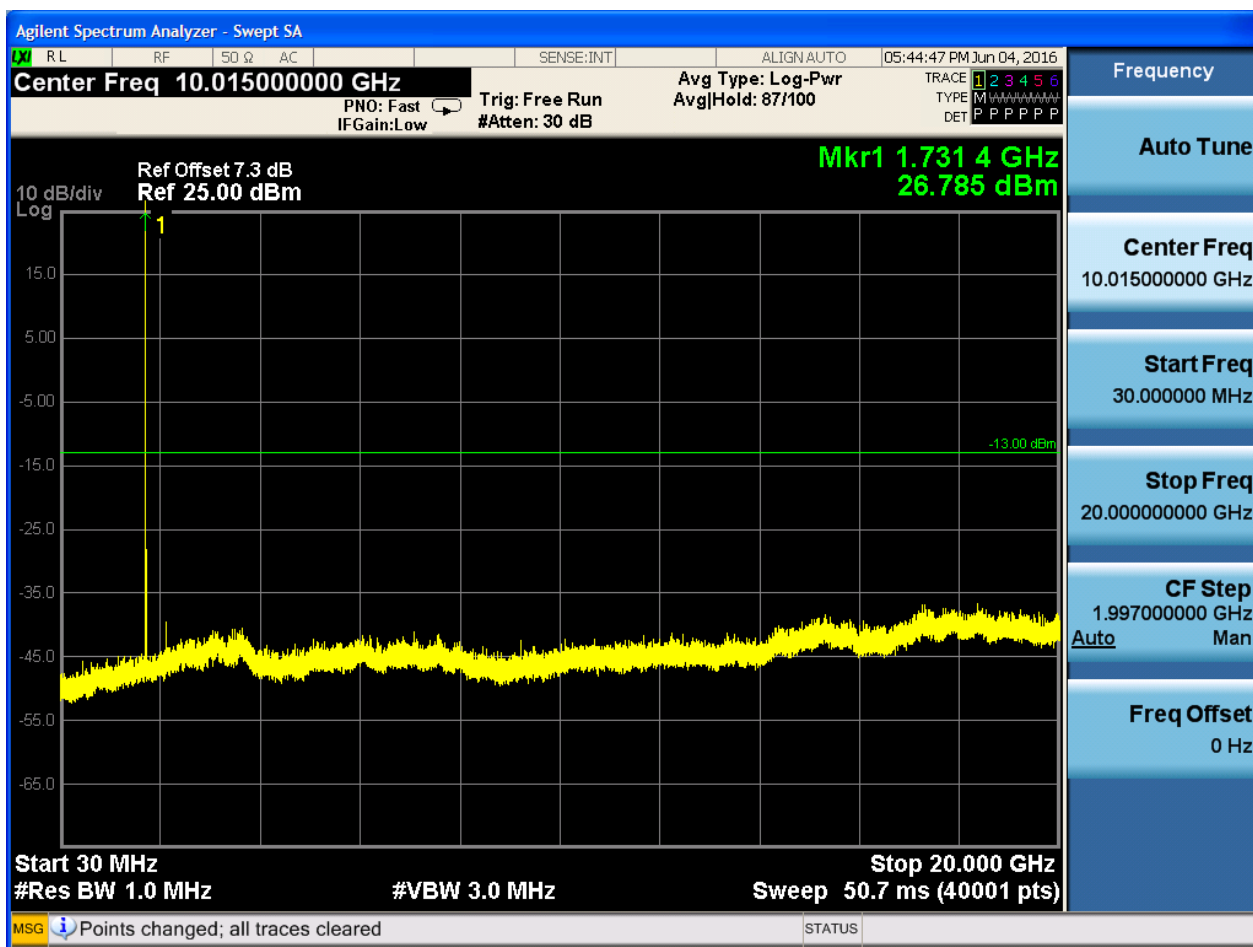


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0

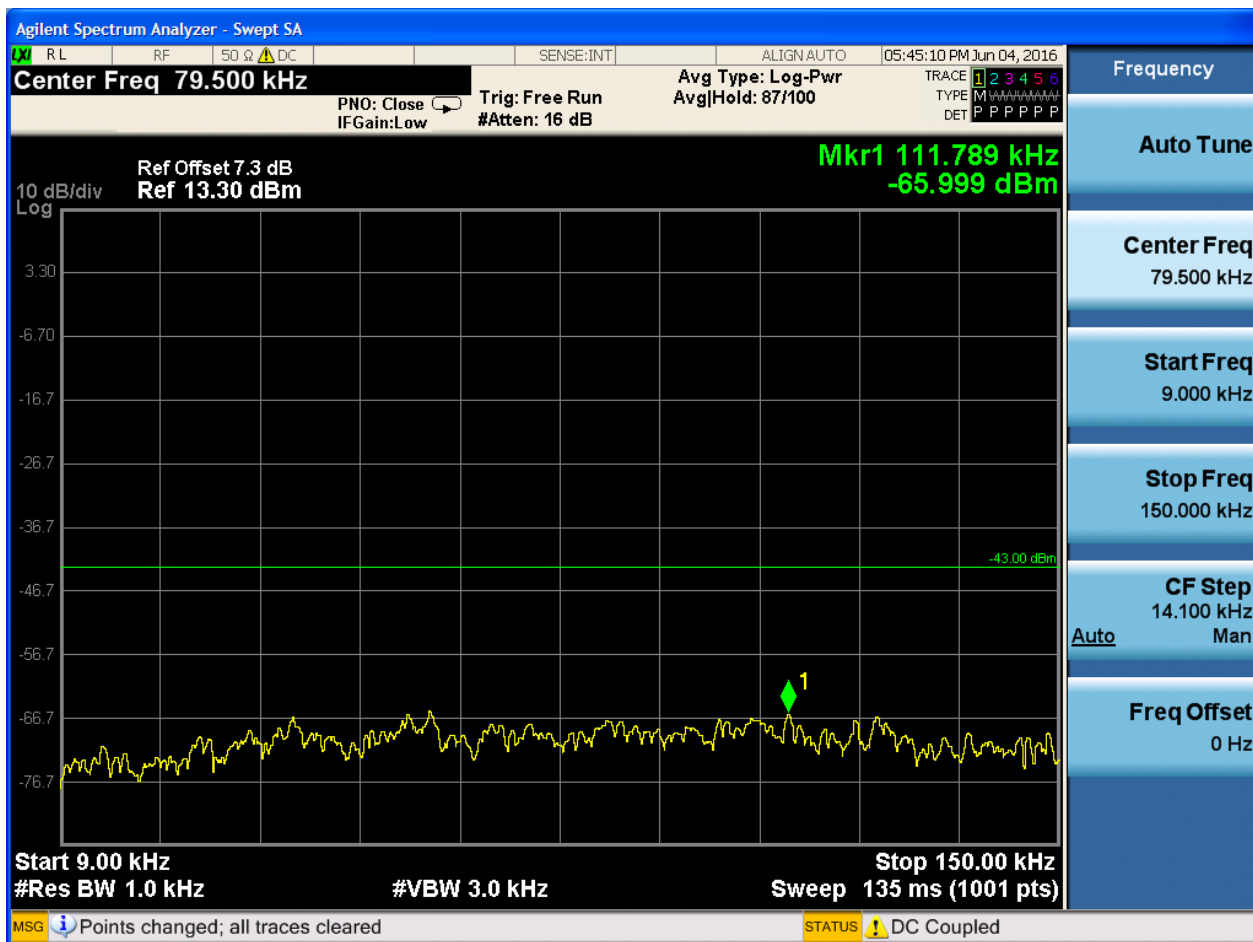


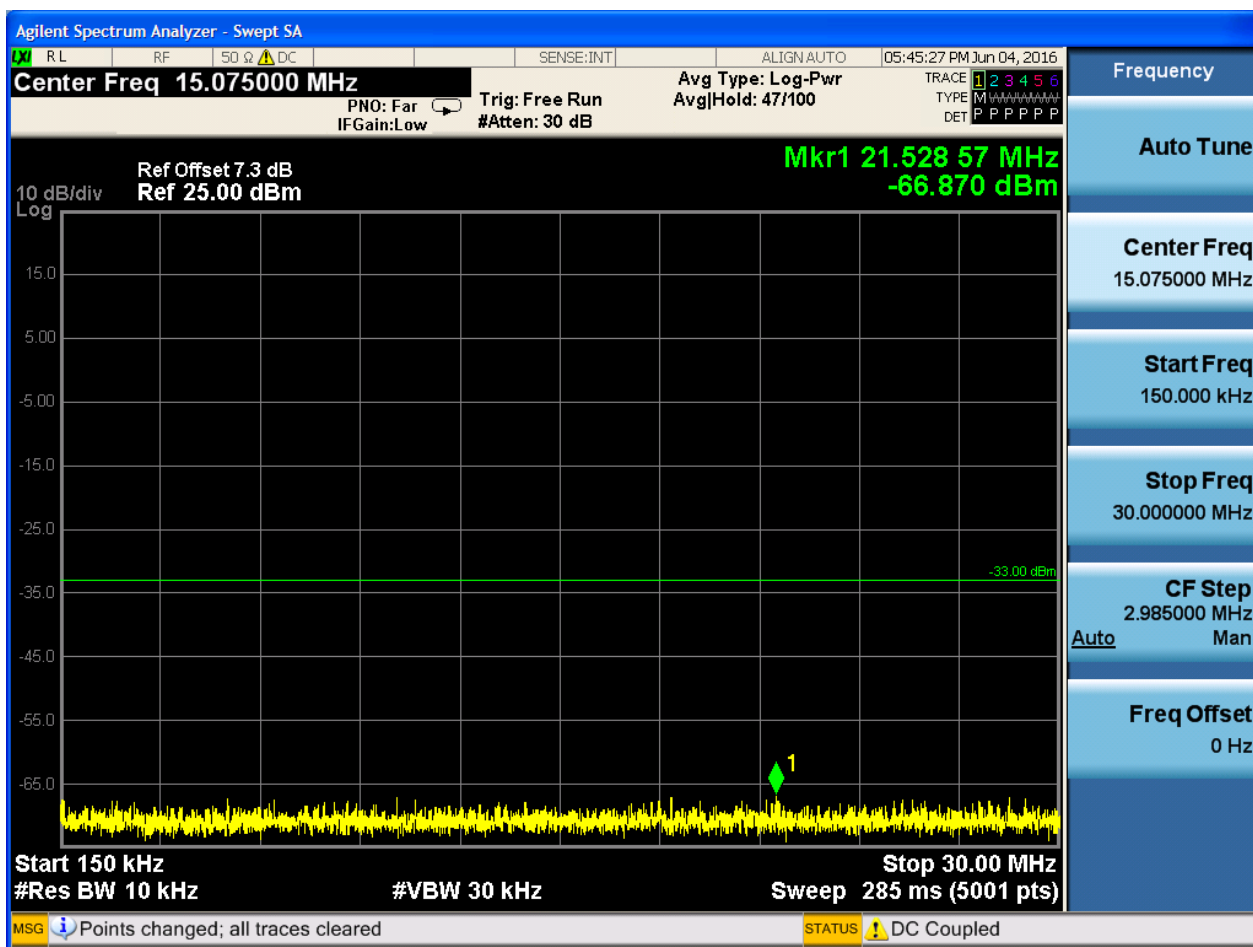


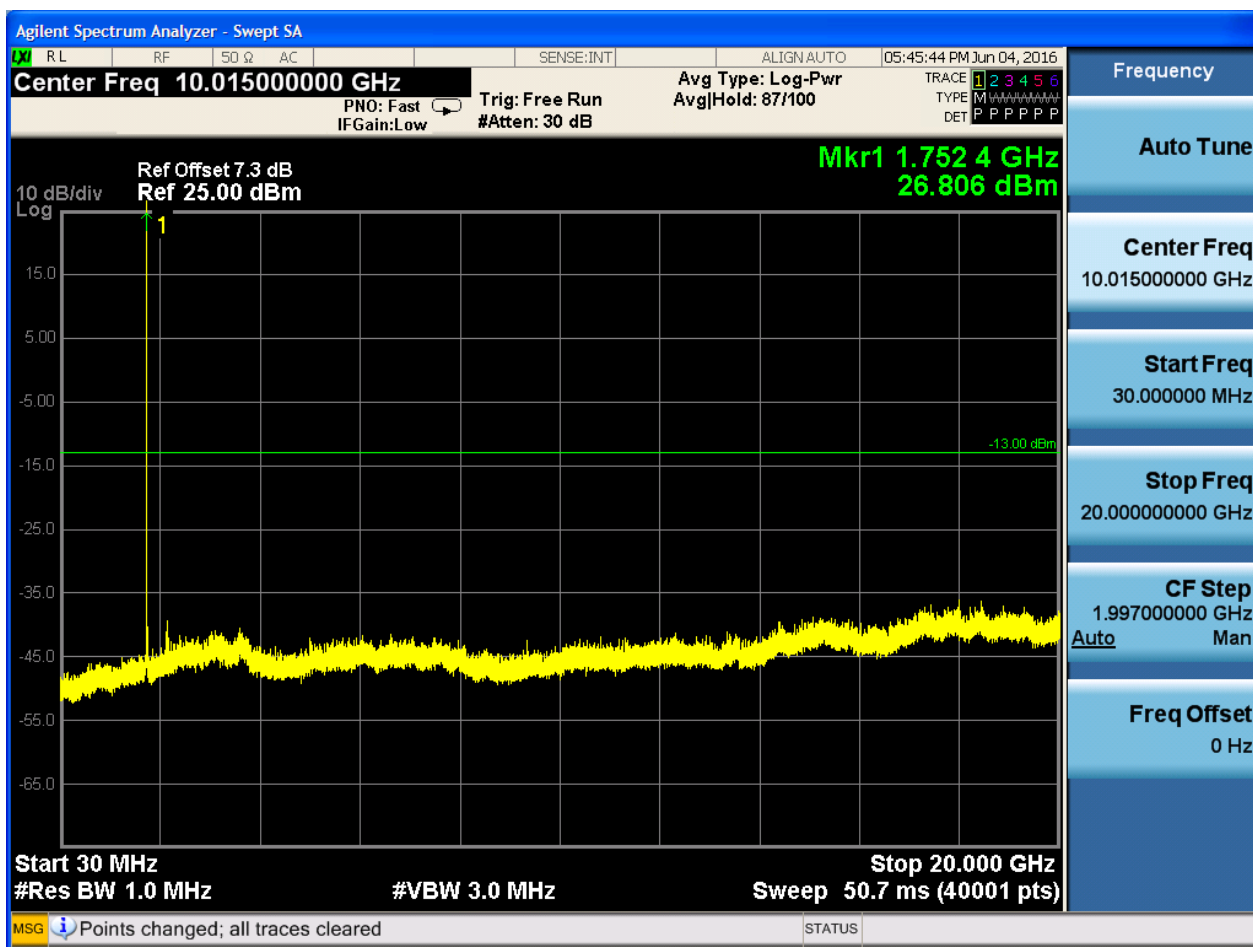


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0



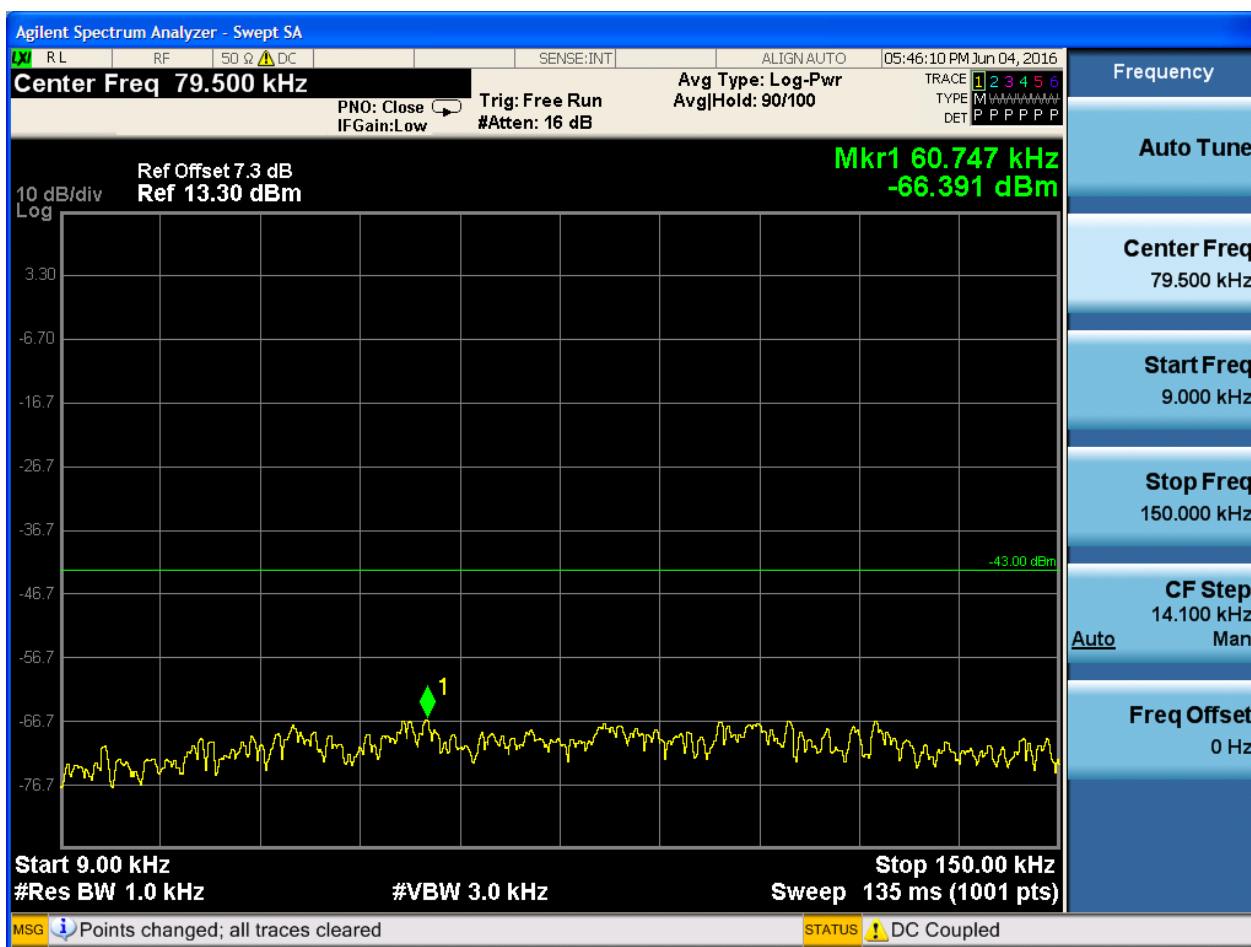


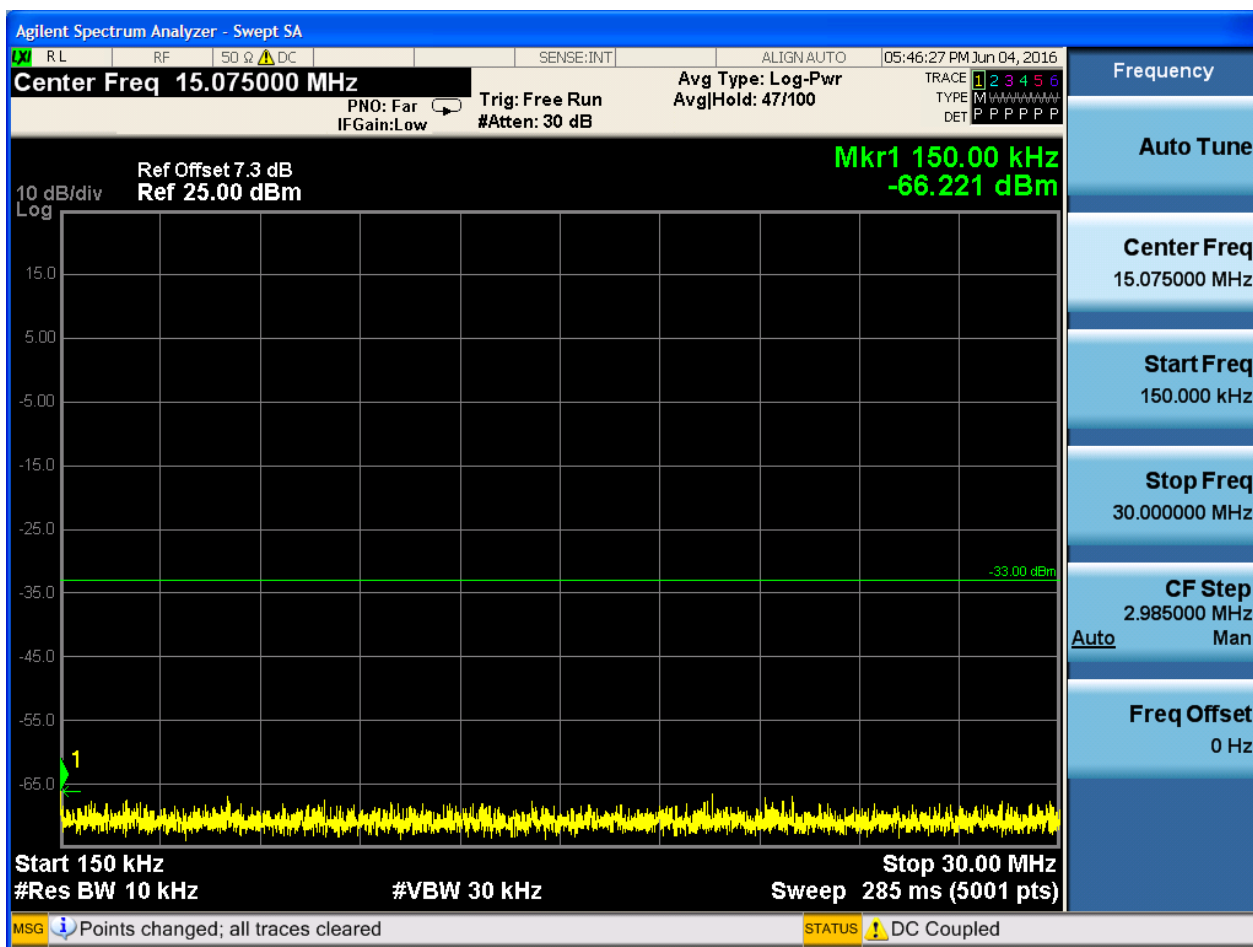


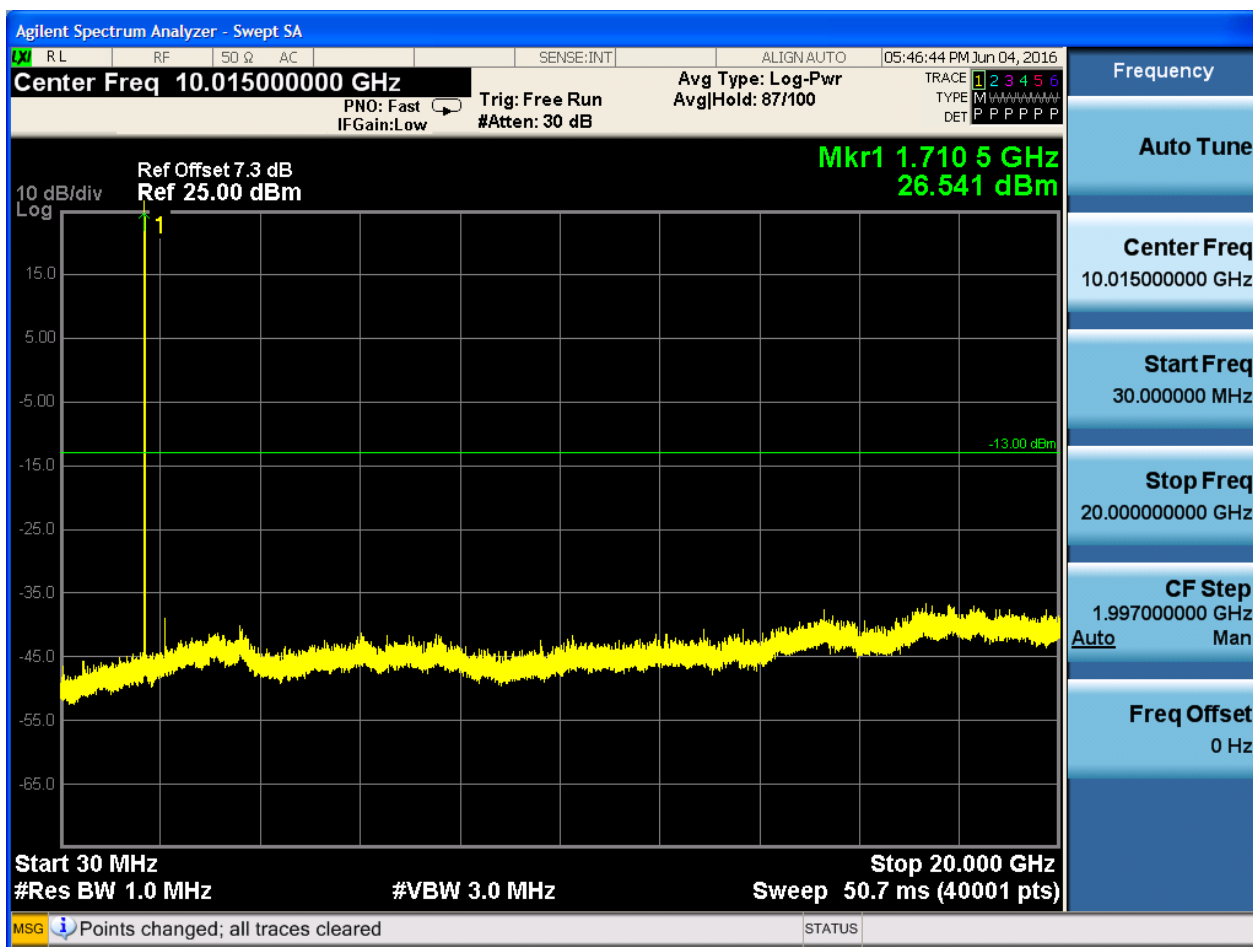
6.1.1.1.3 Test Bandwidth = 5

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0

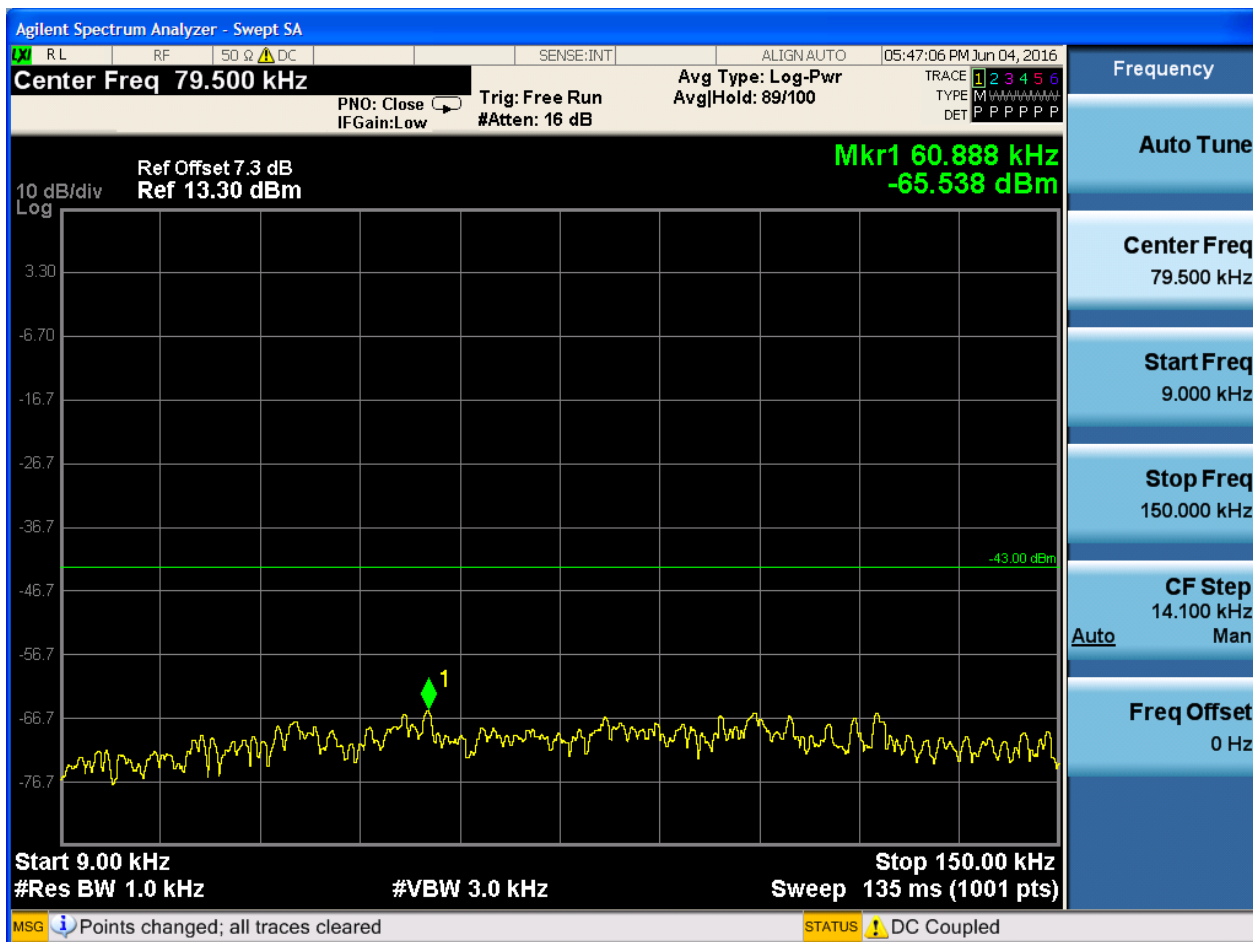


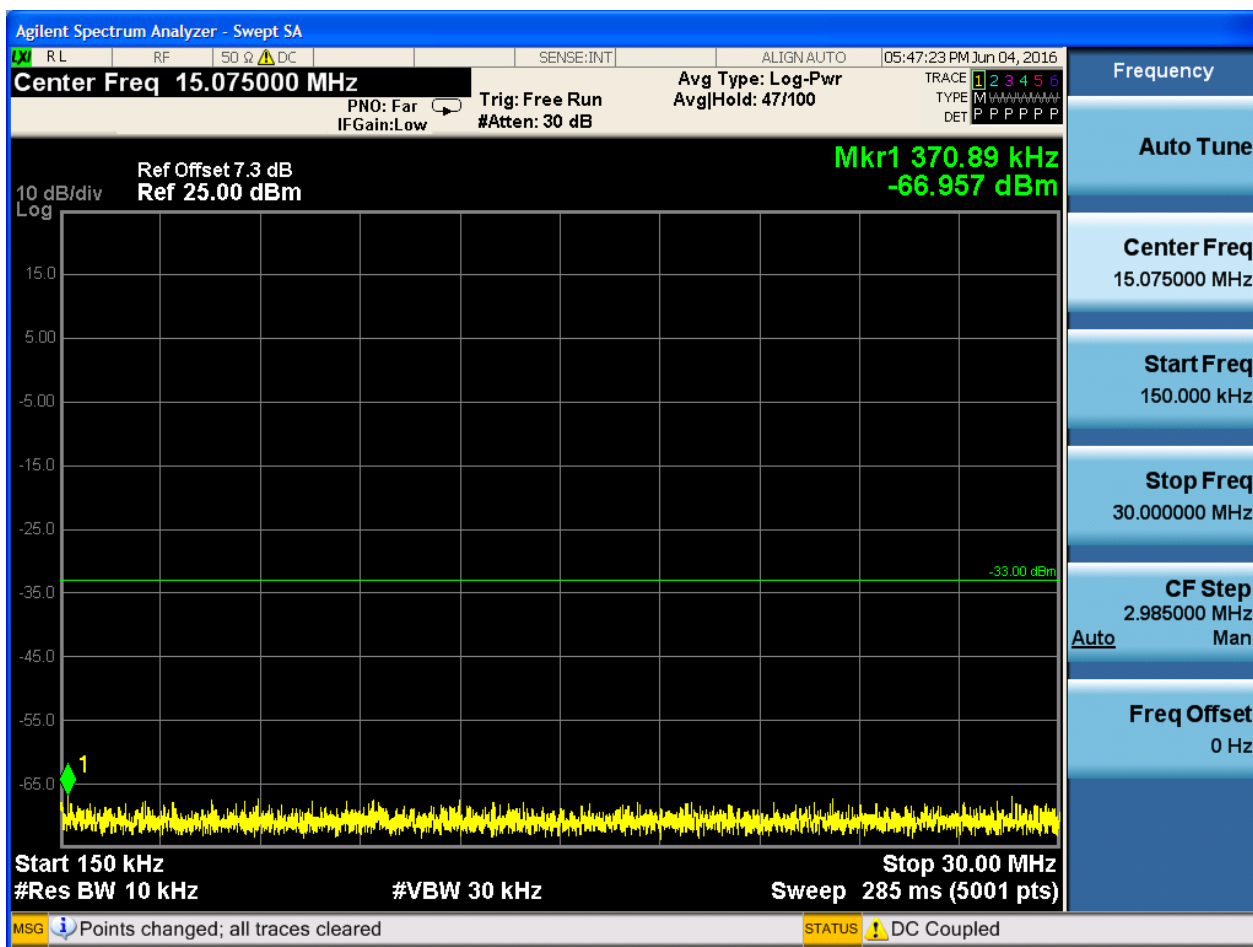


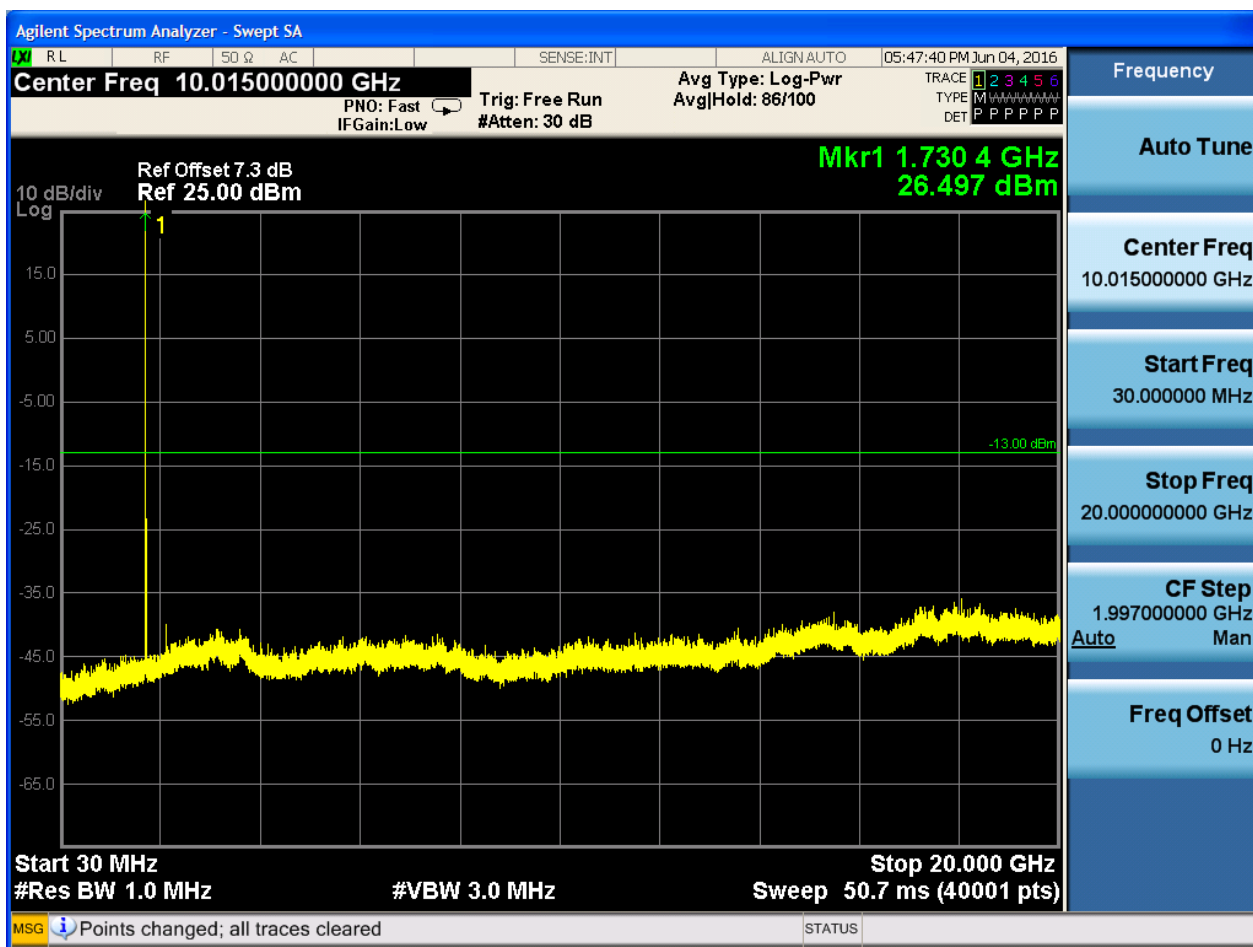


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0



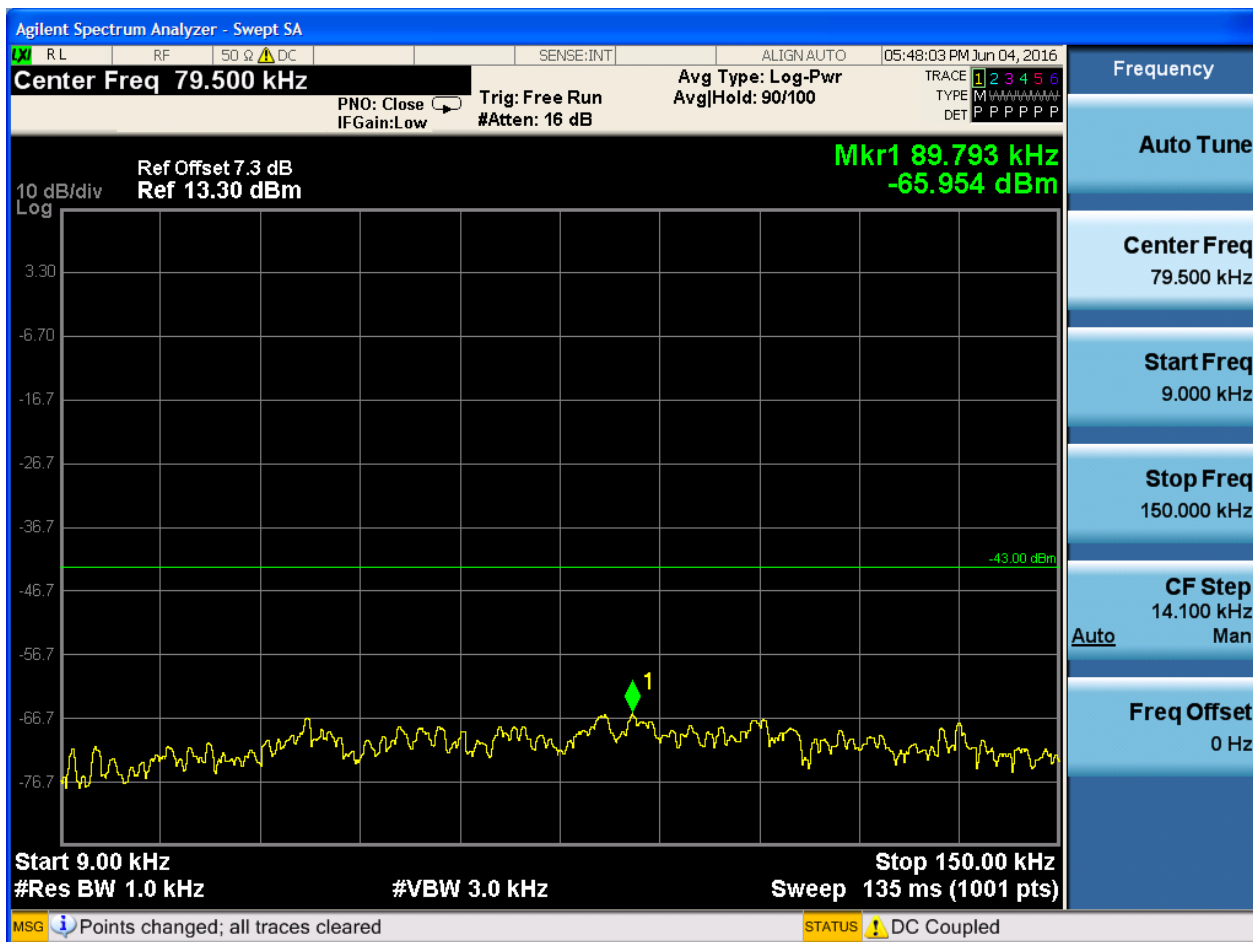




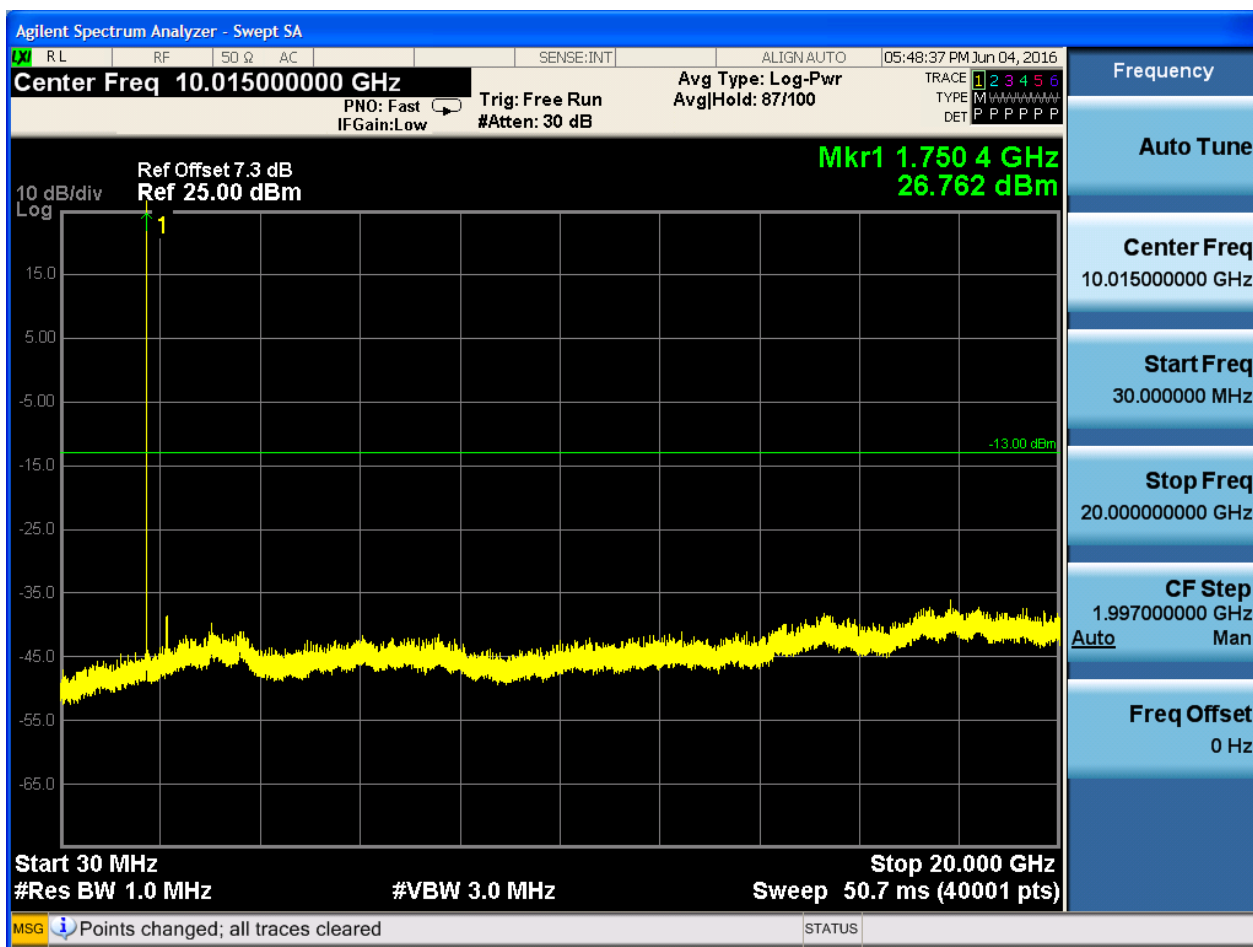


6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0





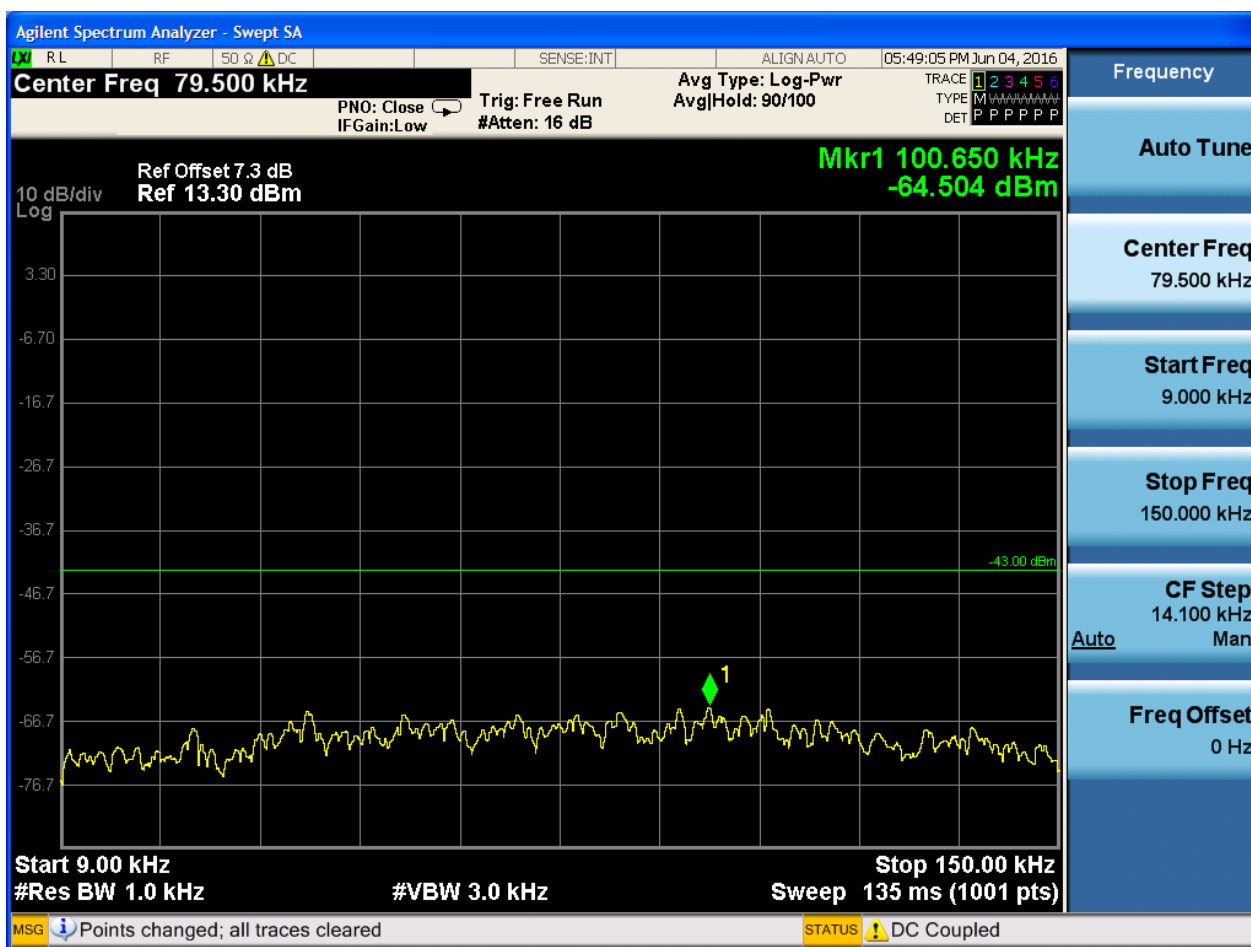


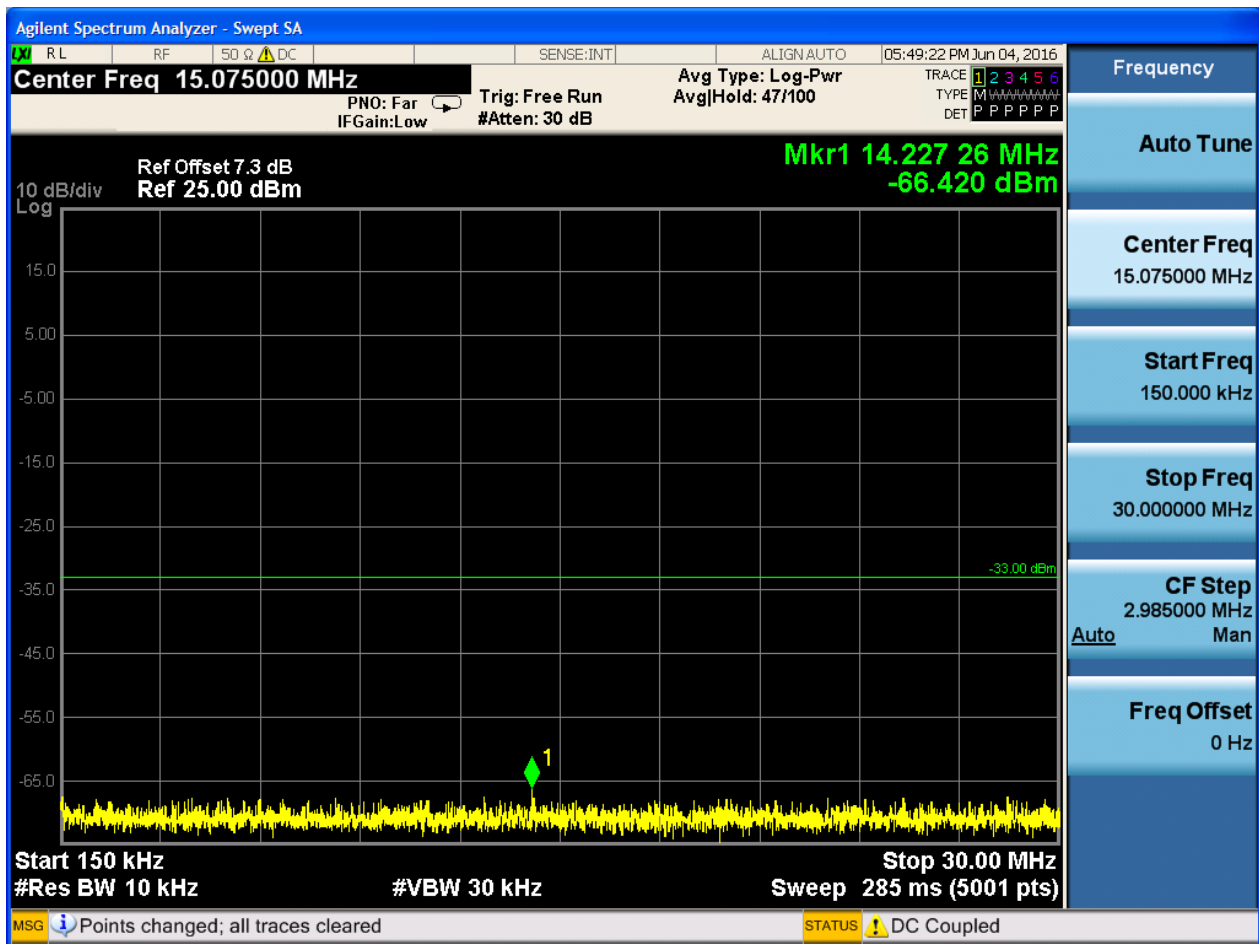


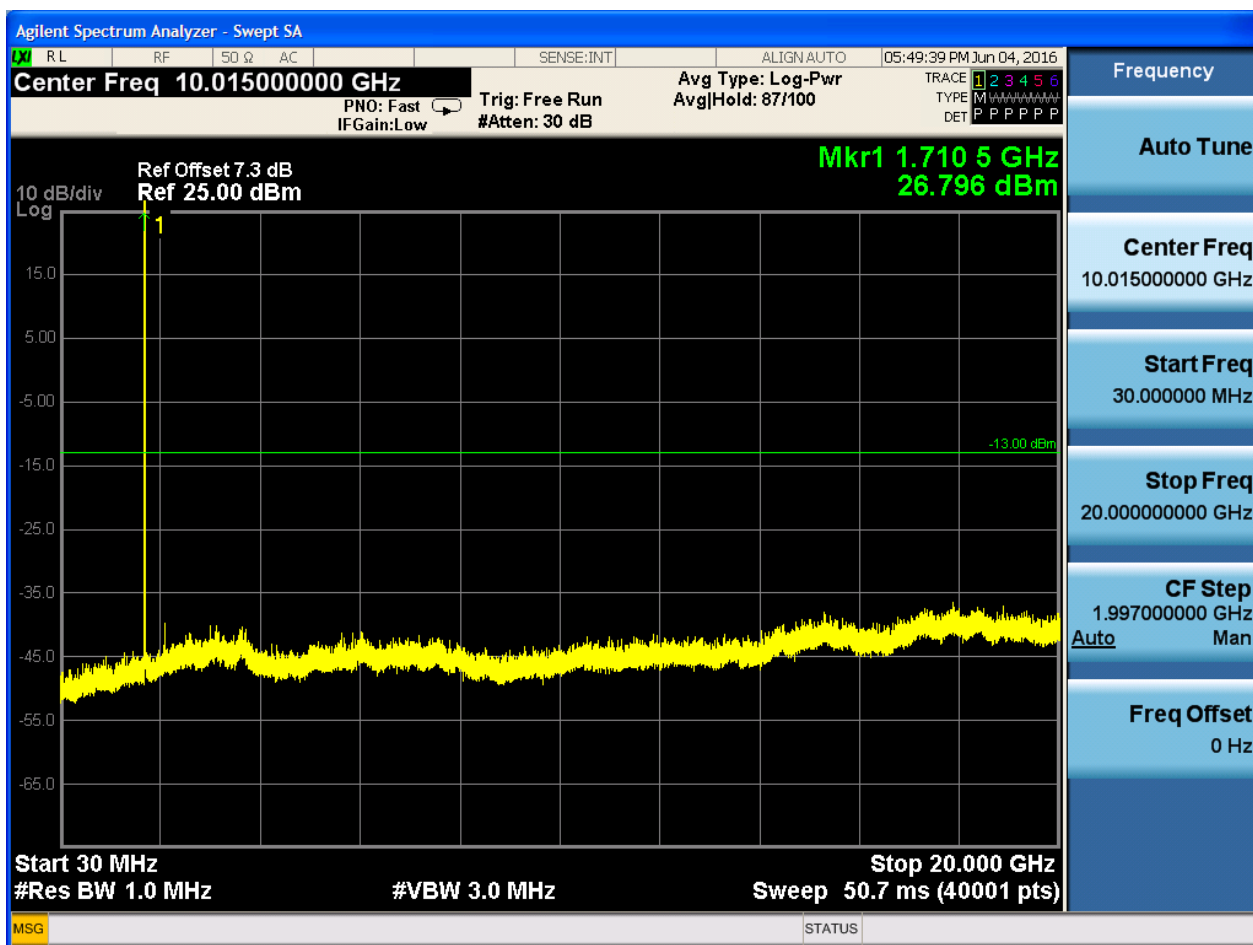
6.1.1.1.4 Test Bandwidth = 10

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0

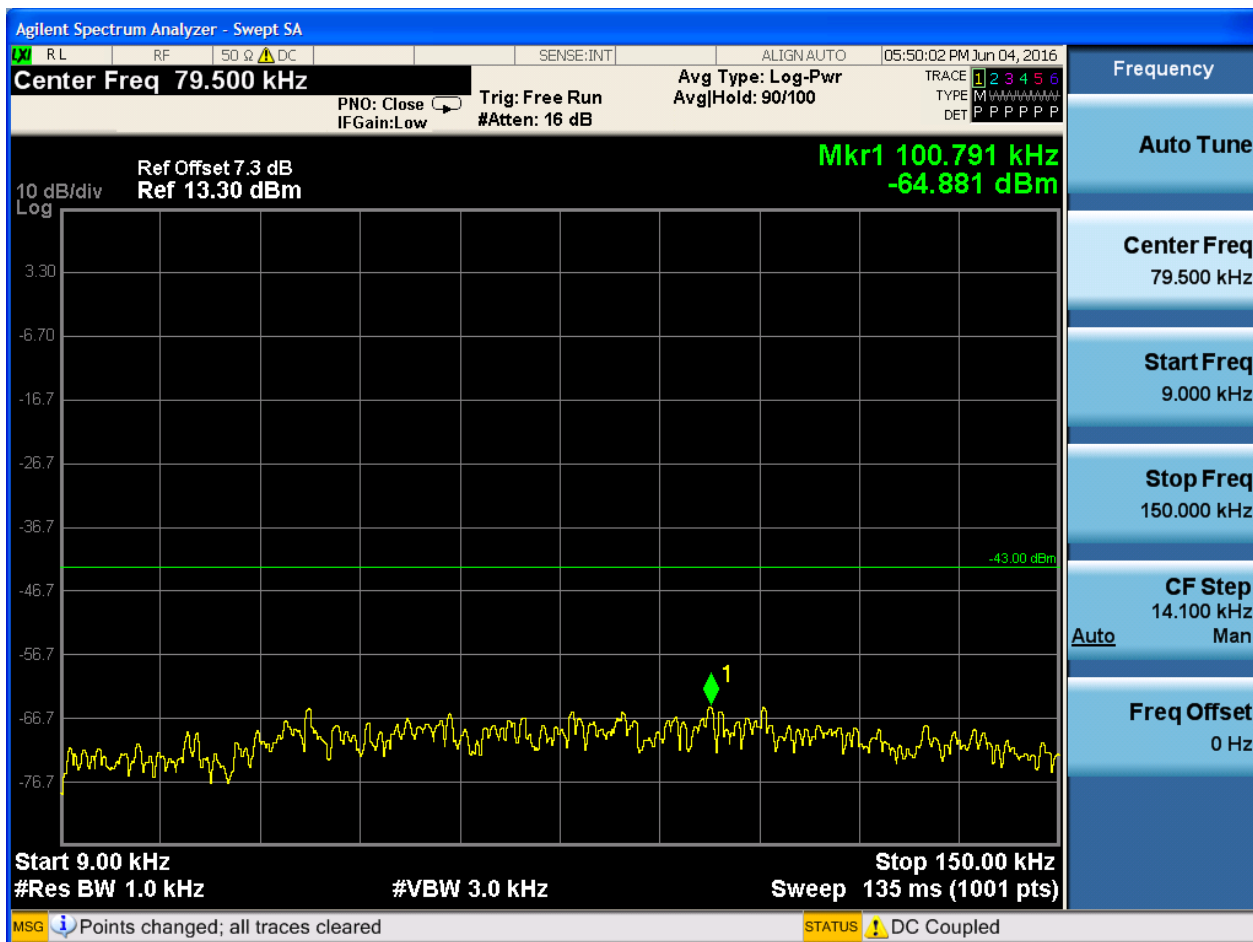


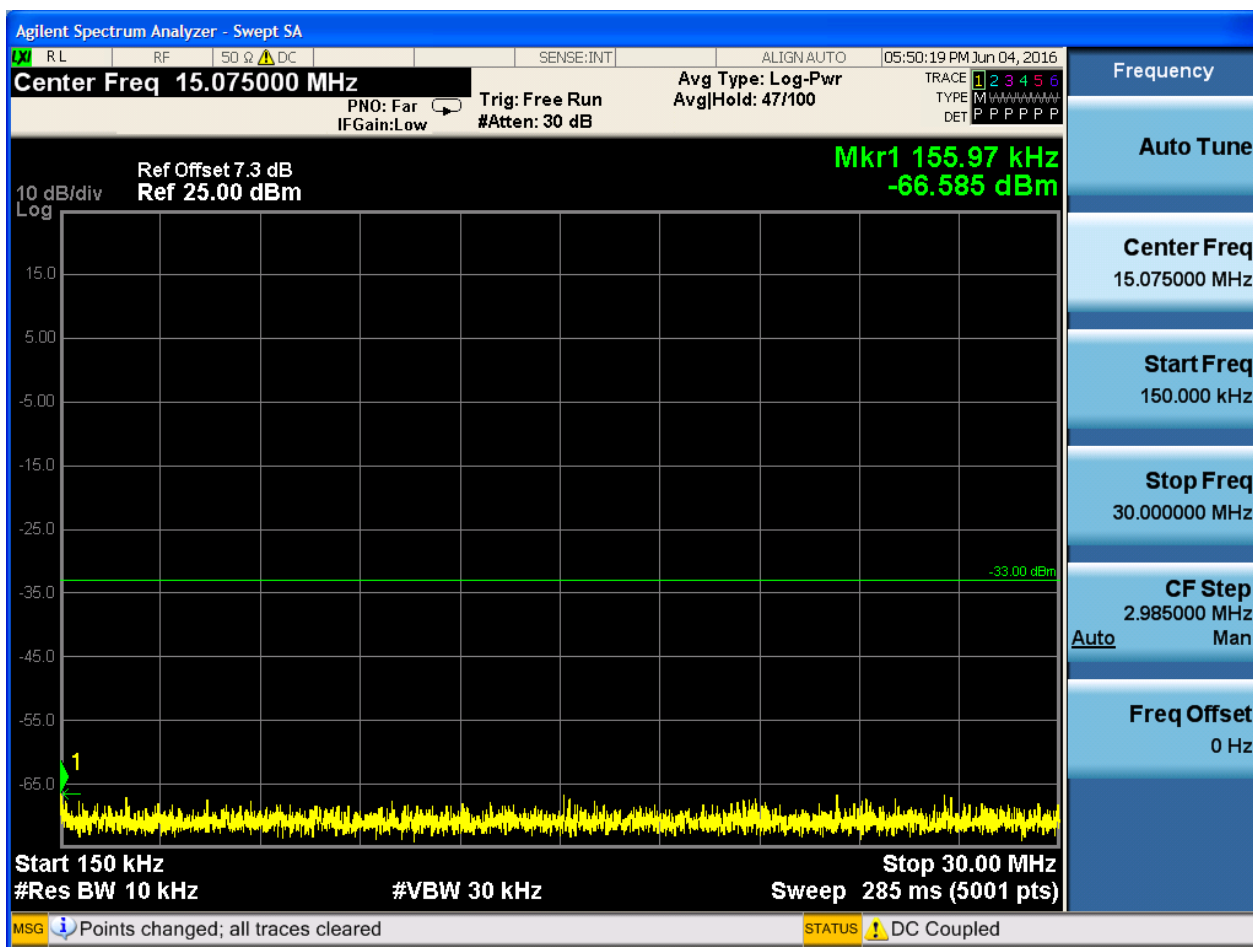


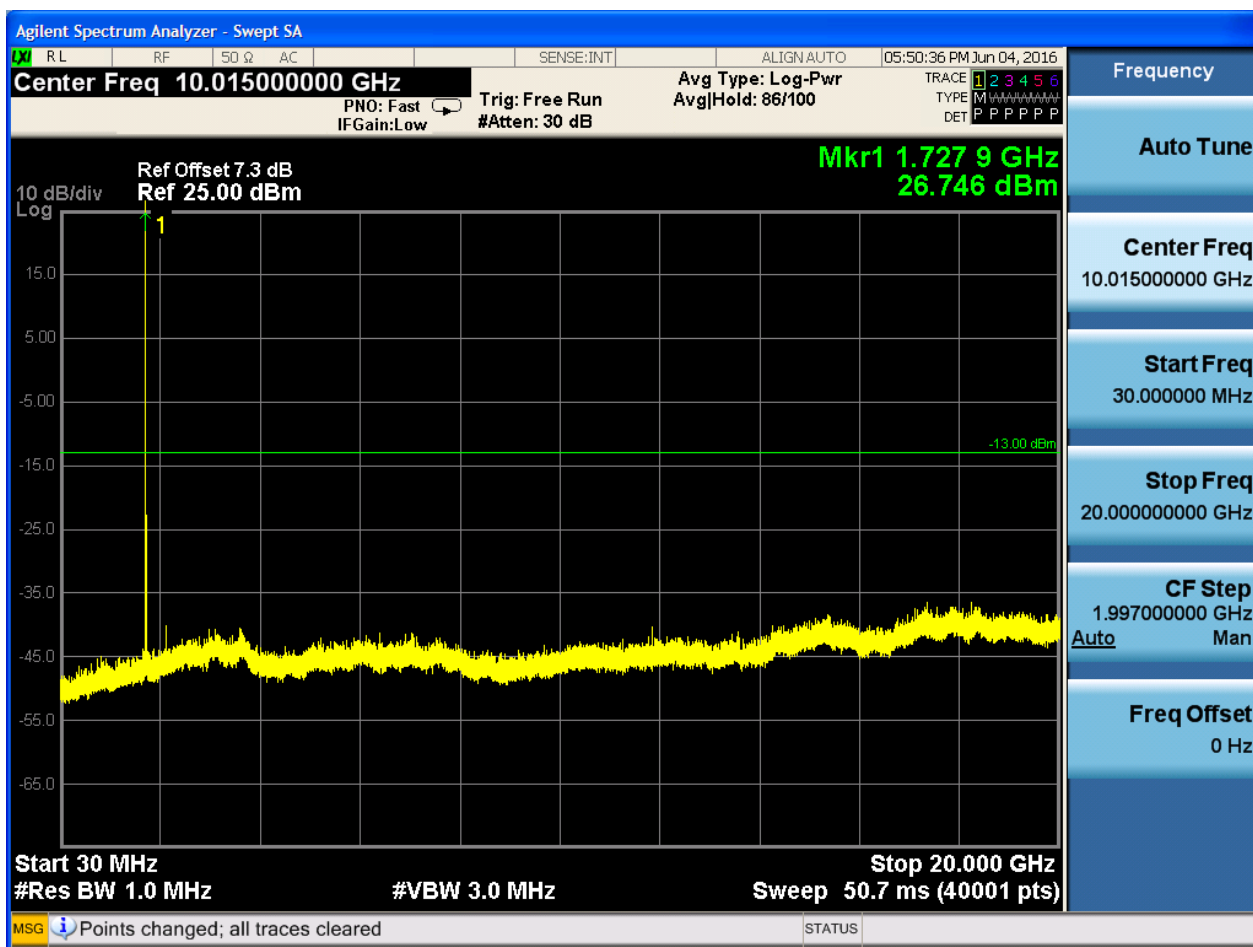


6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0

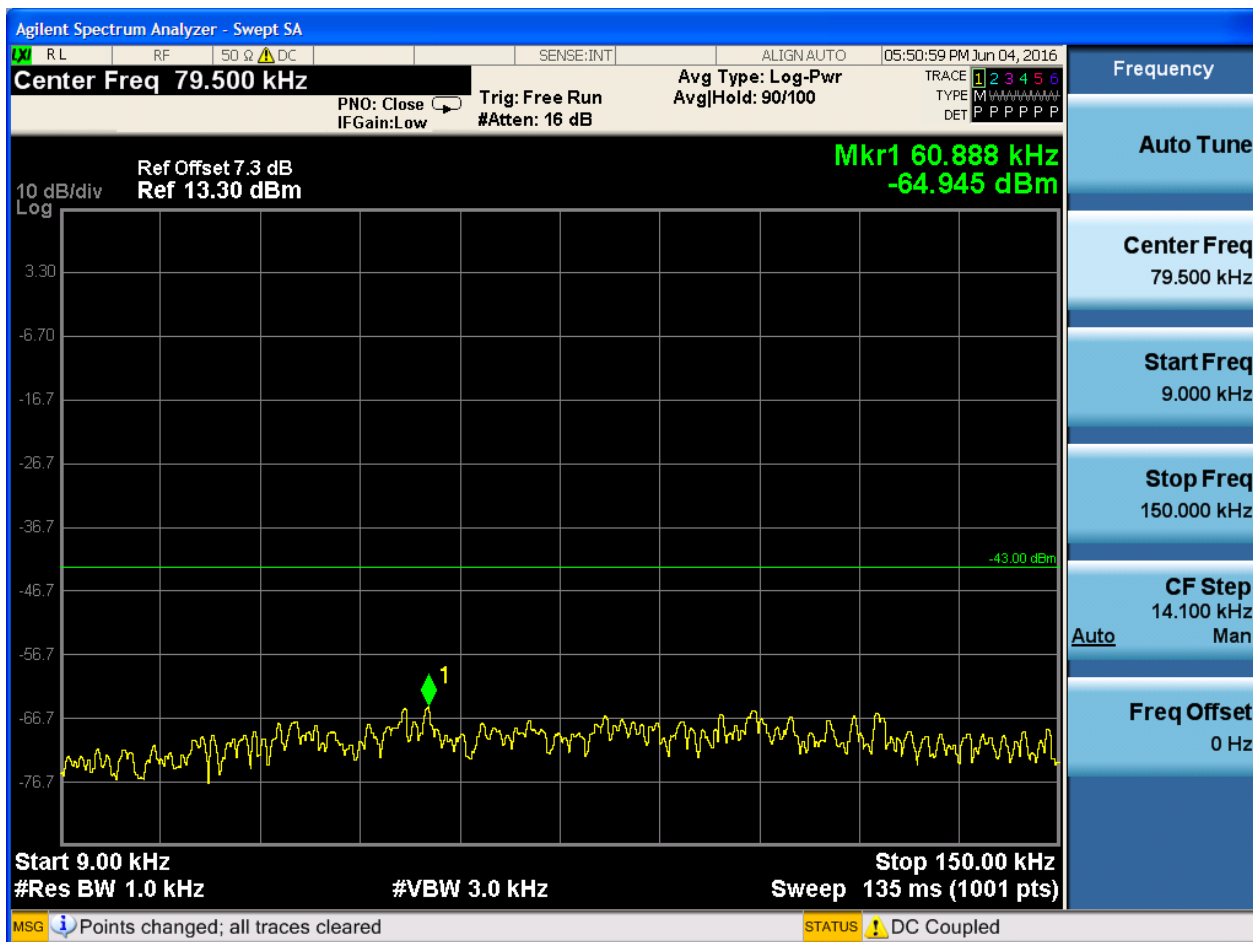


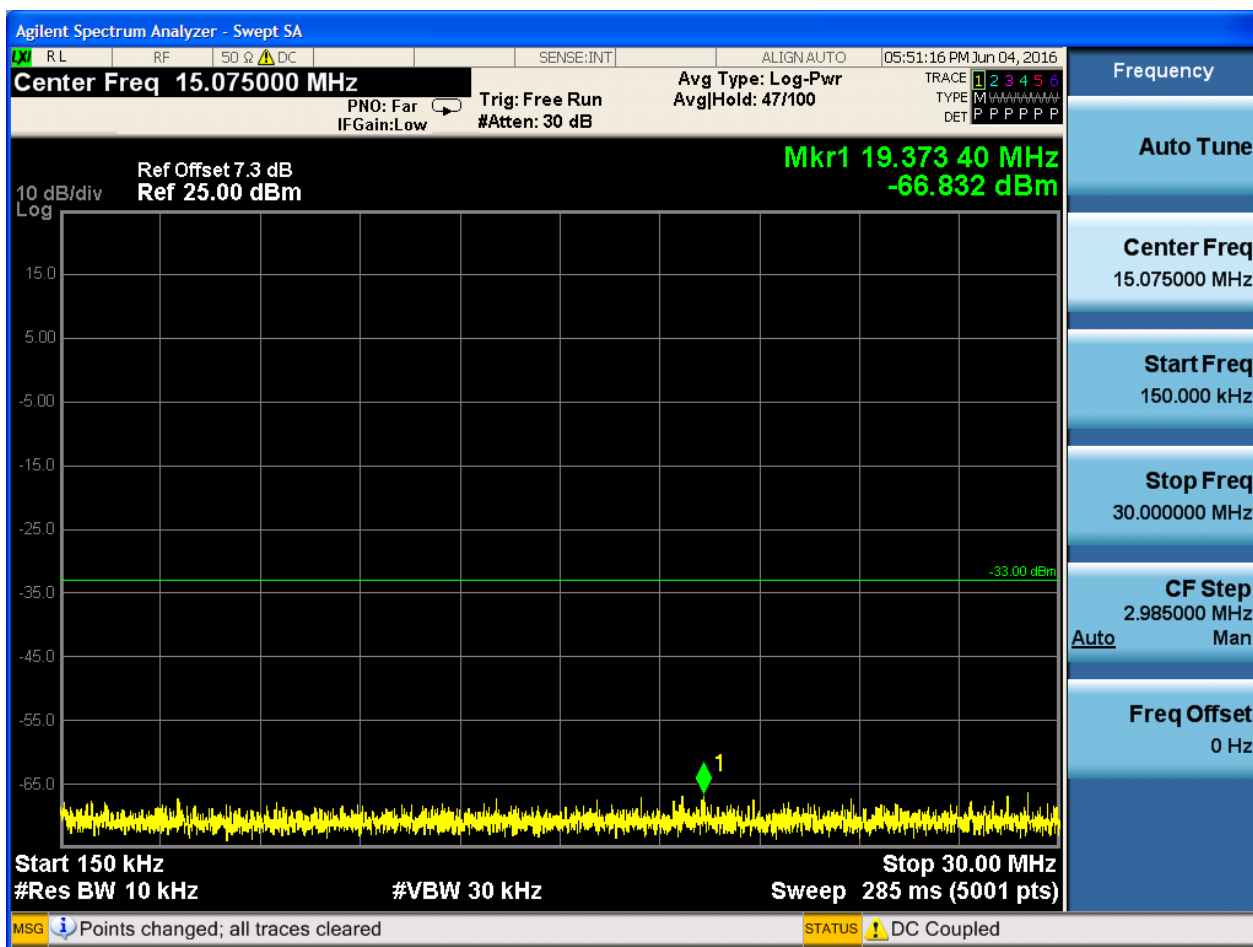




6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0



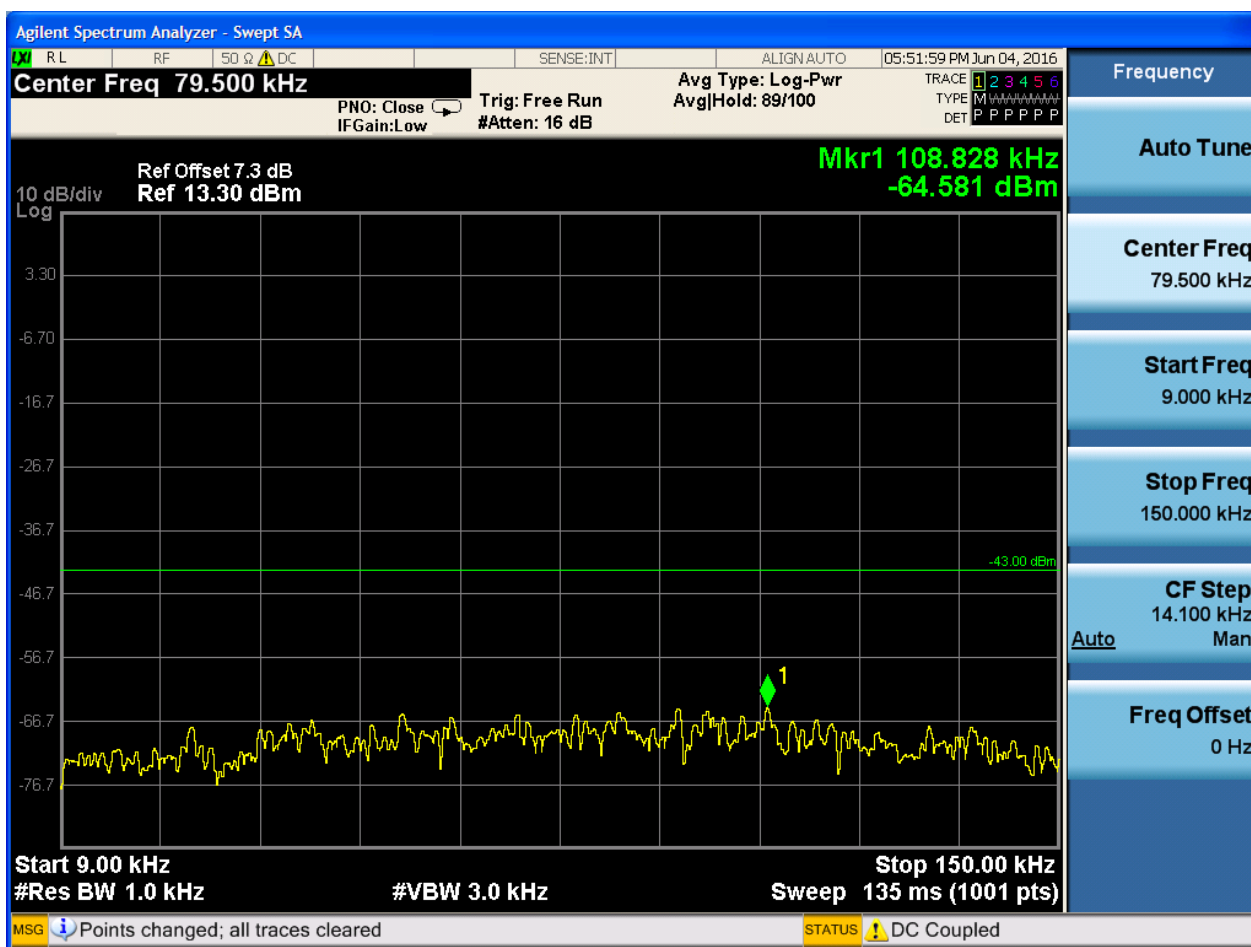


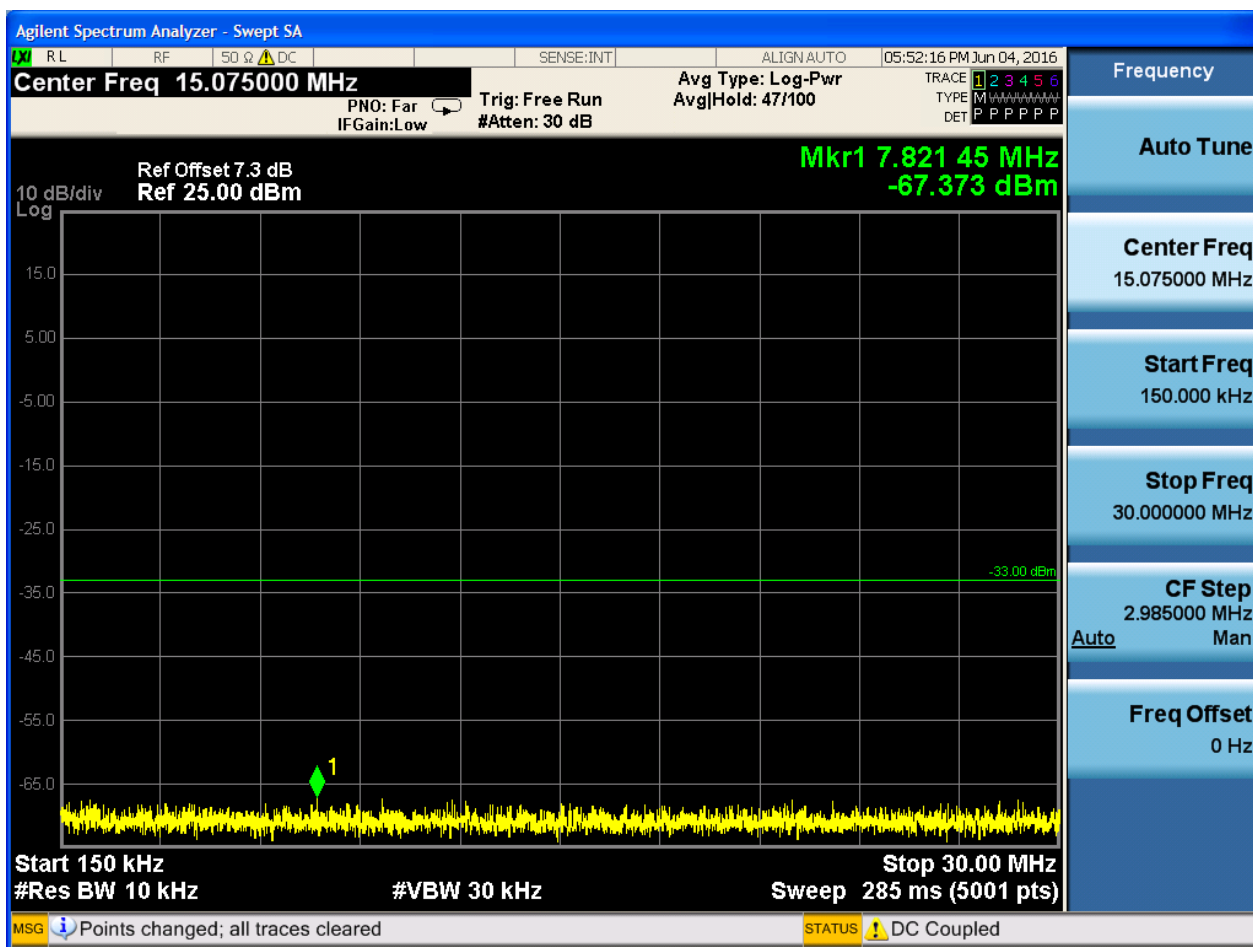


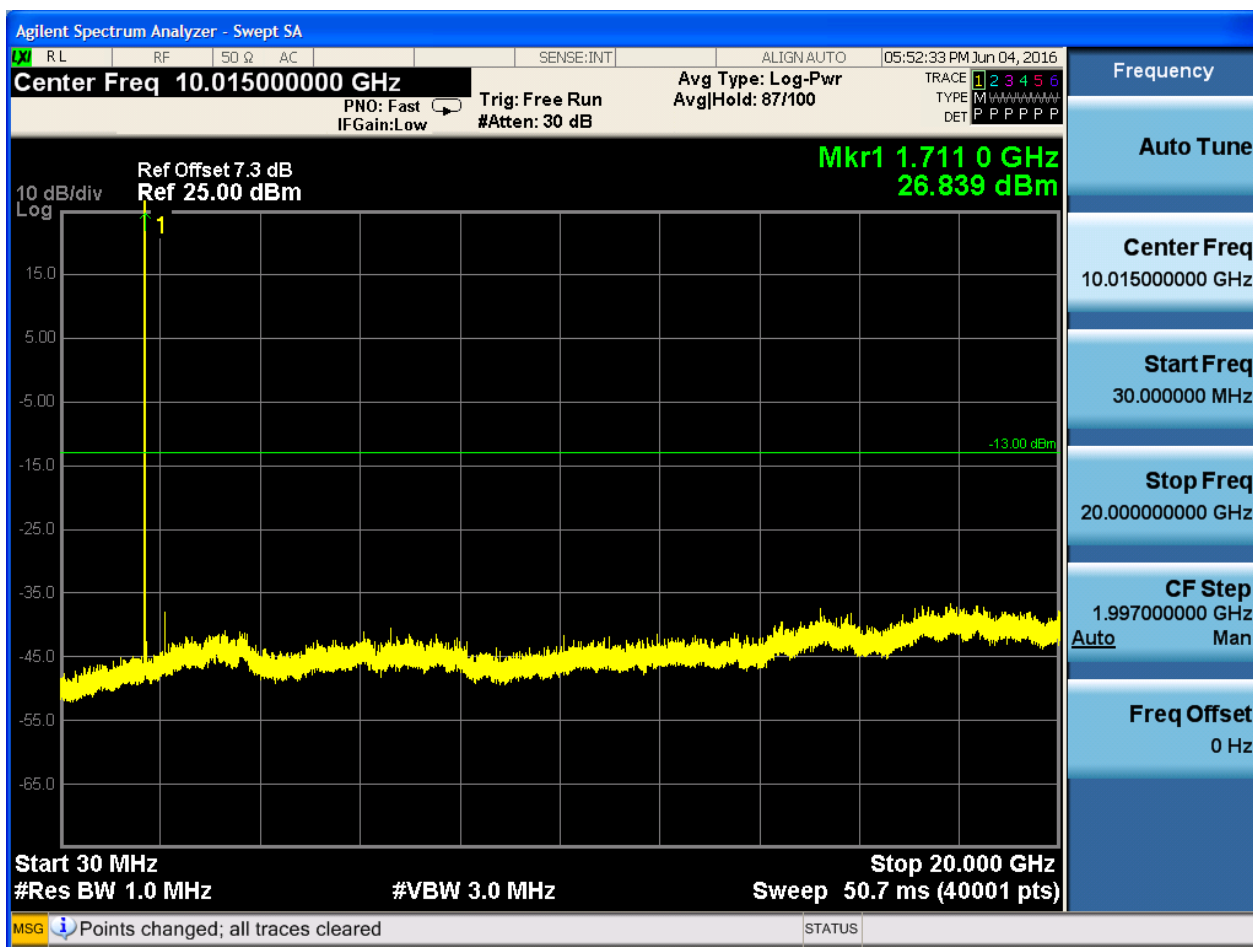
6.1.1.1.5 Test Bandwidth = 15

6.1.1.1.5.1 Test Channel = LCH

6.1.1.1.5.1.1 Test RB = RB1#0



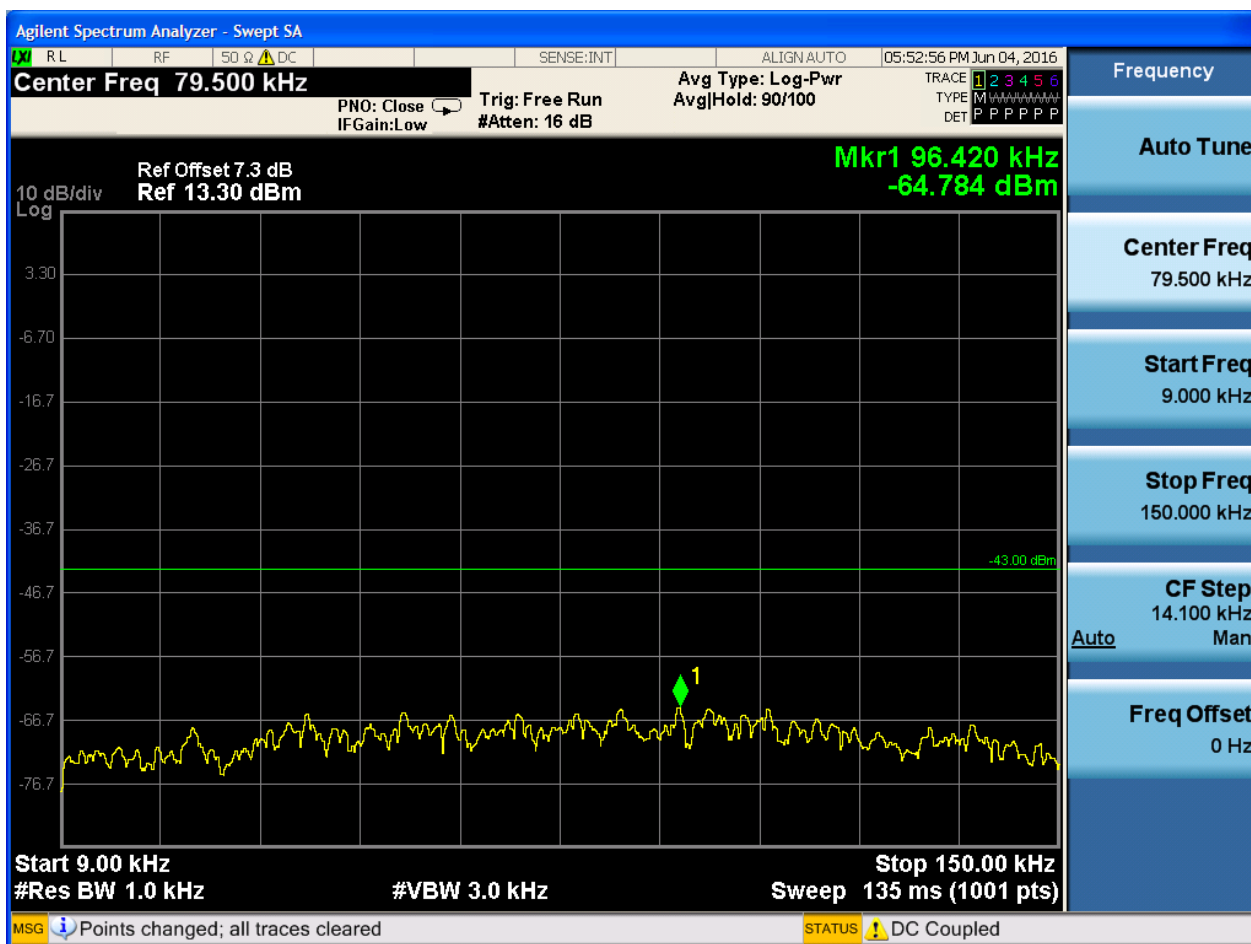


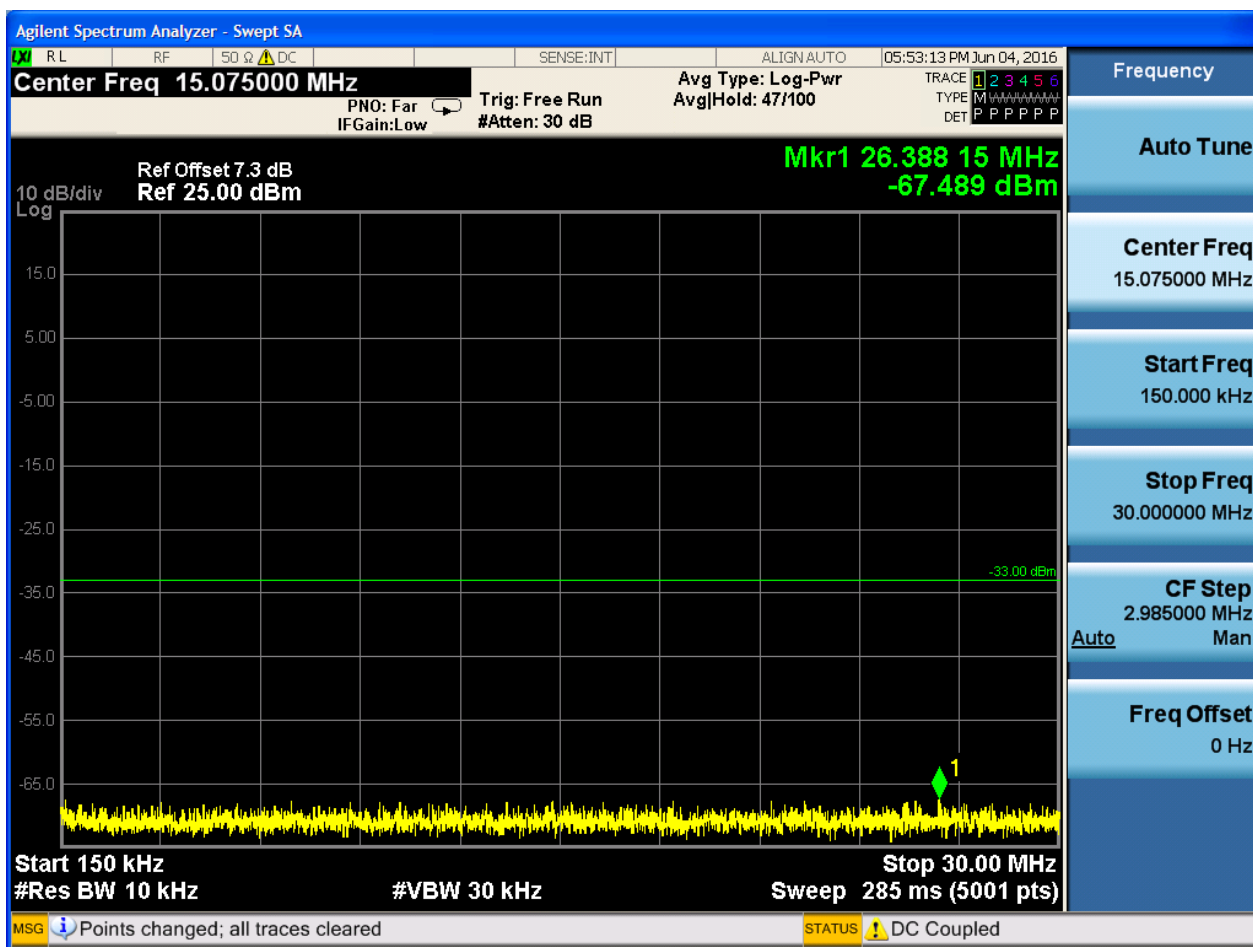


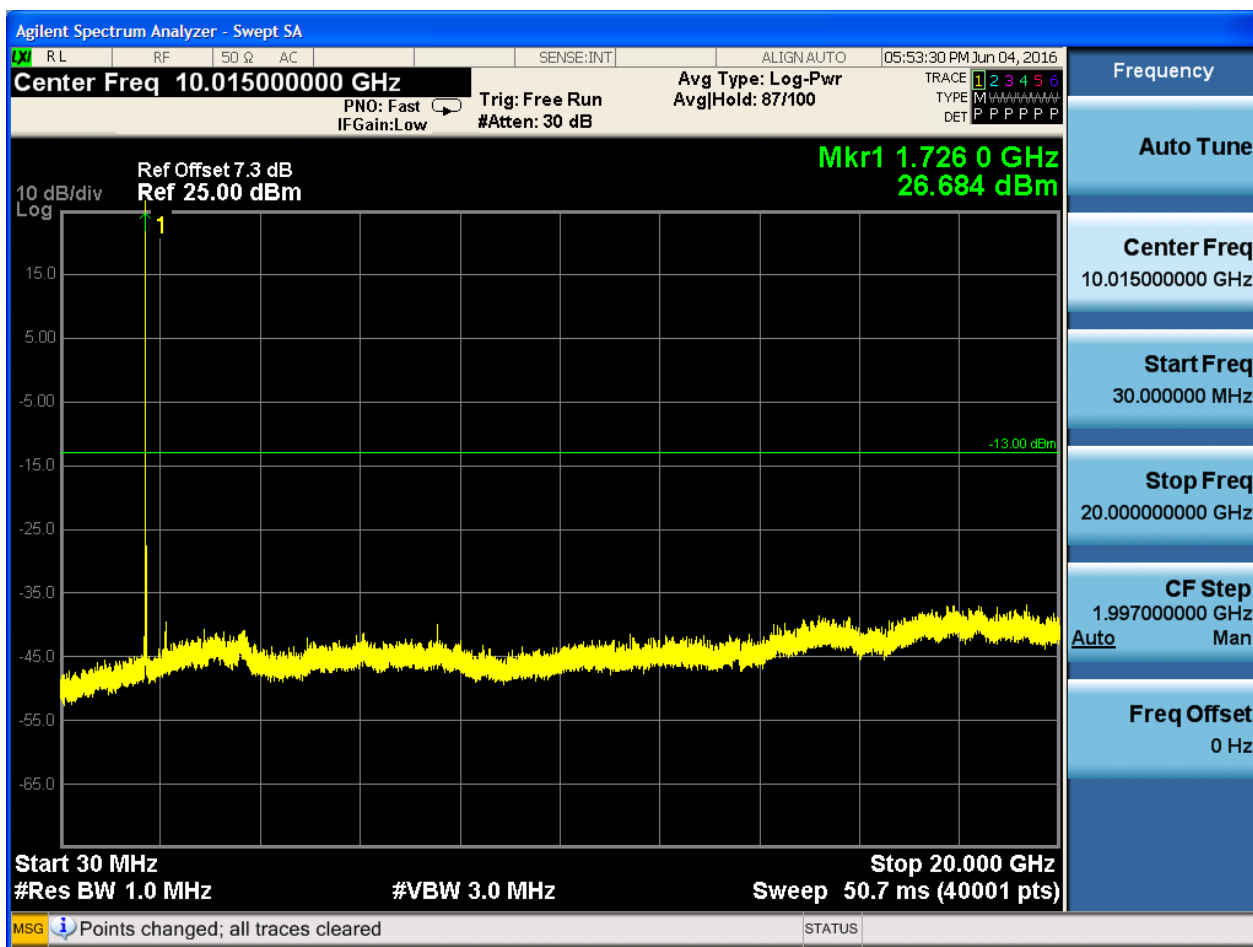


6.1.1.1.5.2 Test Channel = MCH

6.1.1.1.5.2.1 Test RB = RB1#0

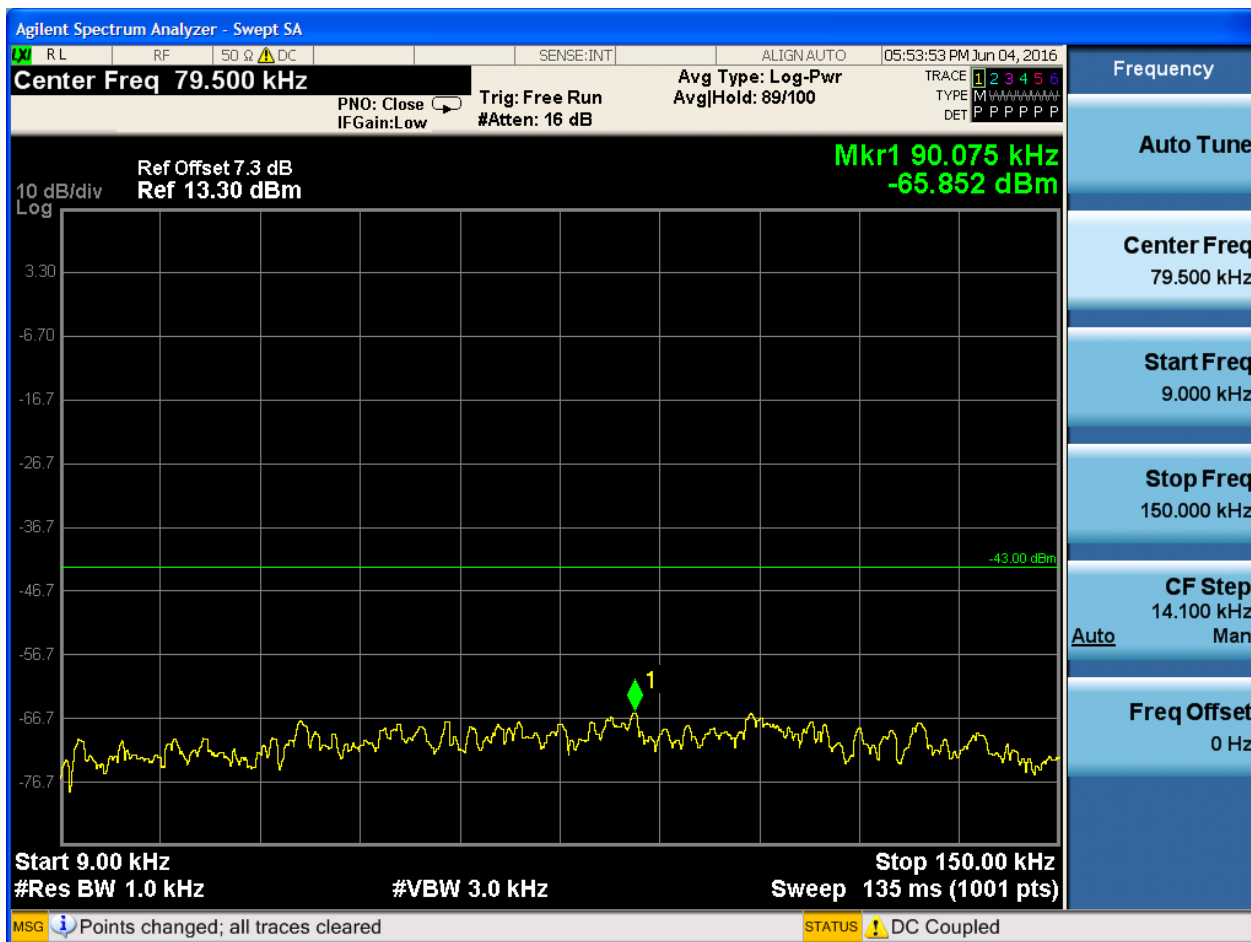


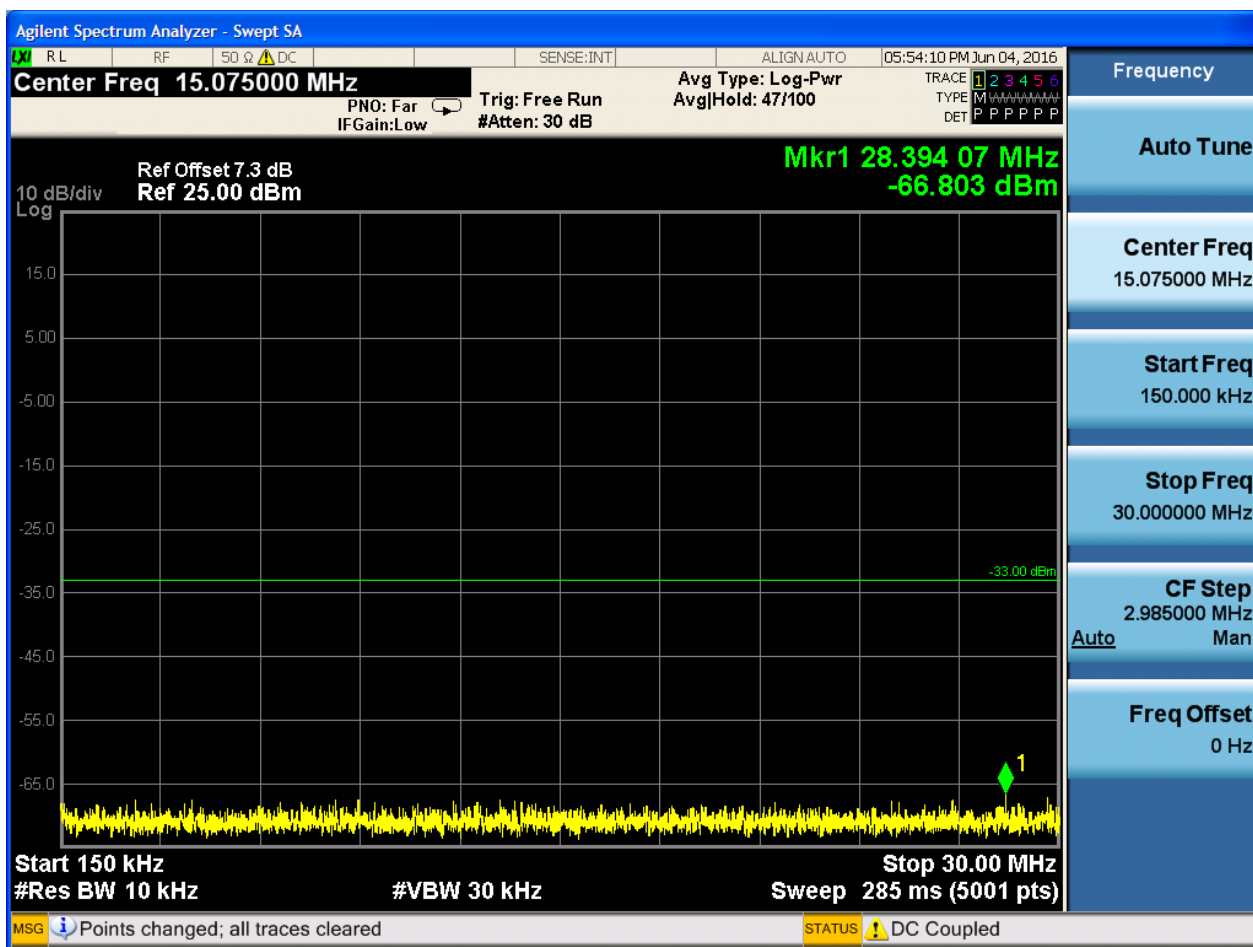


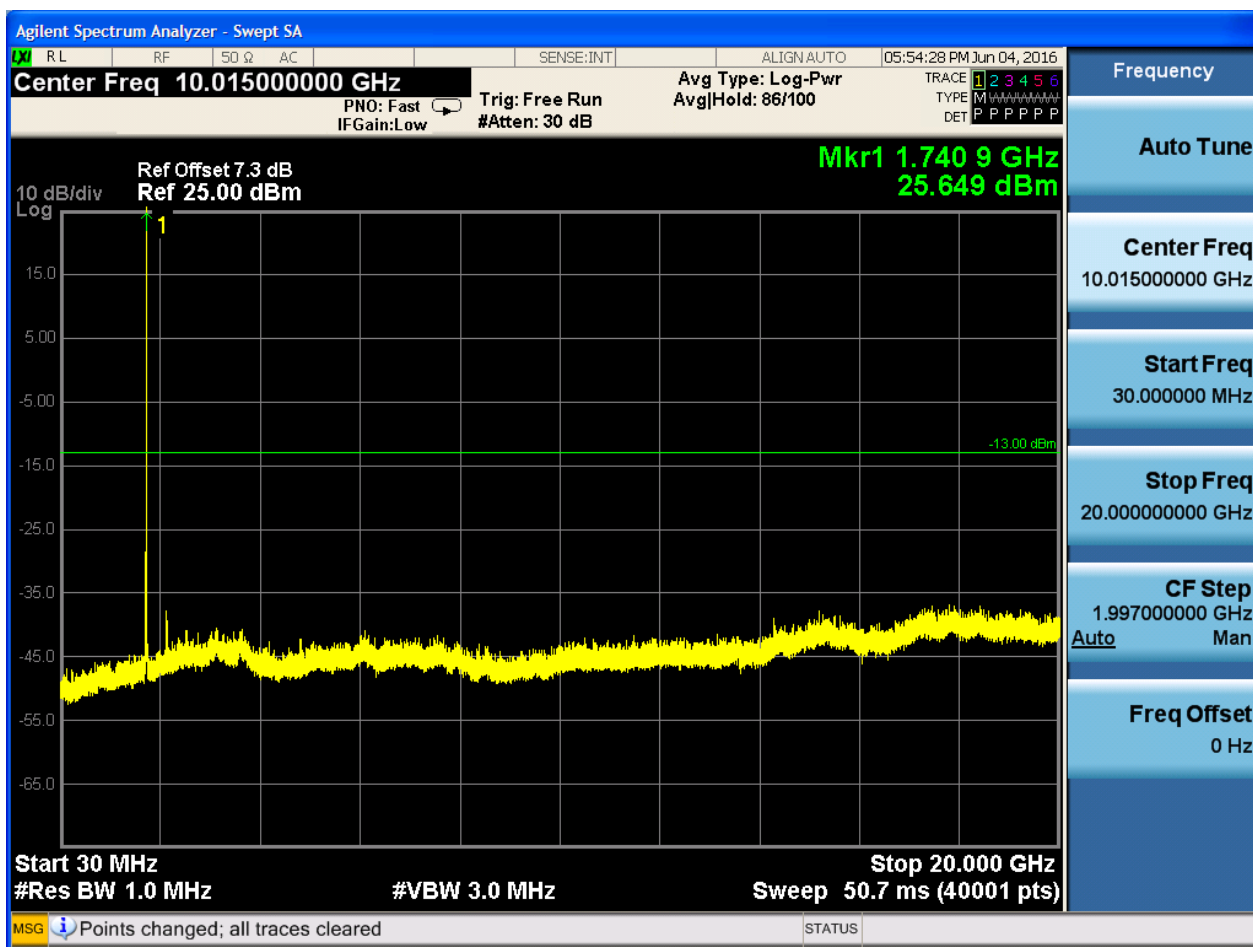


6.1.1.1.5.3 Test Channel = HCH

6.1.1.1.5.3.1 Test RB = RB1#0





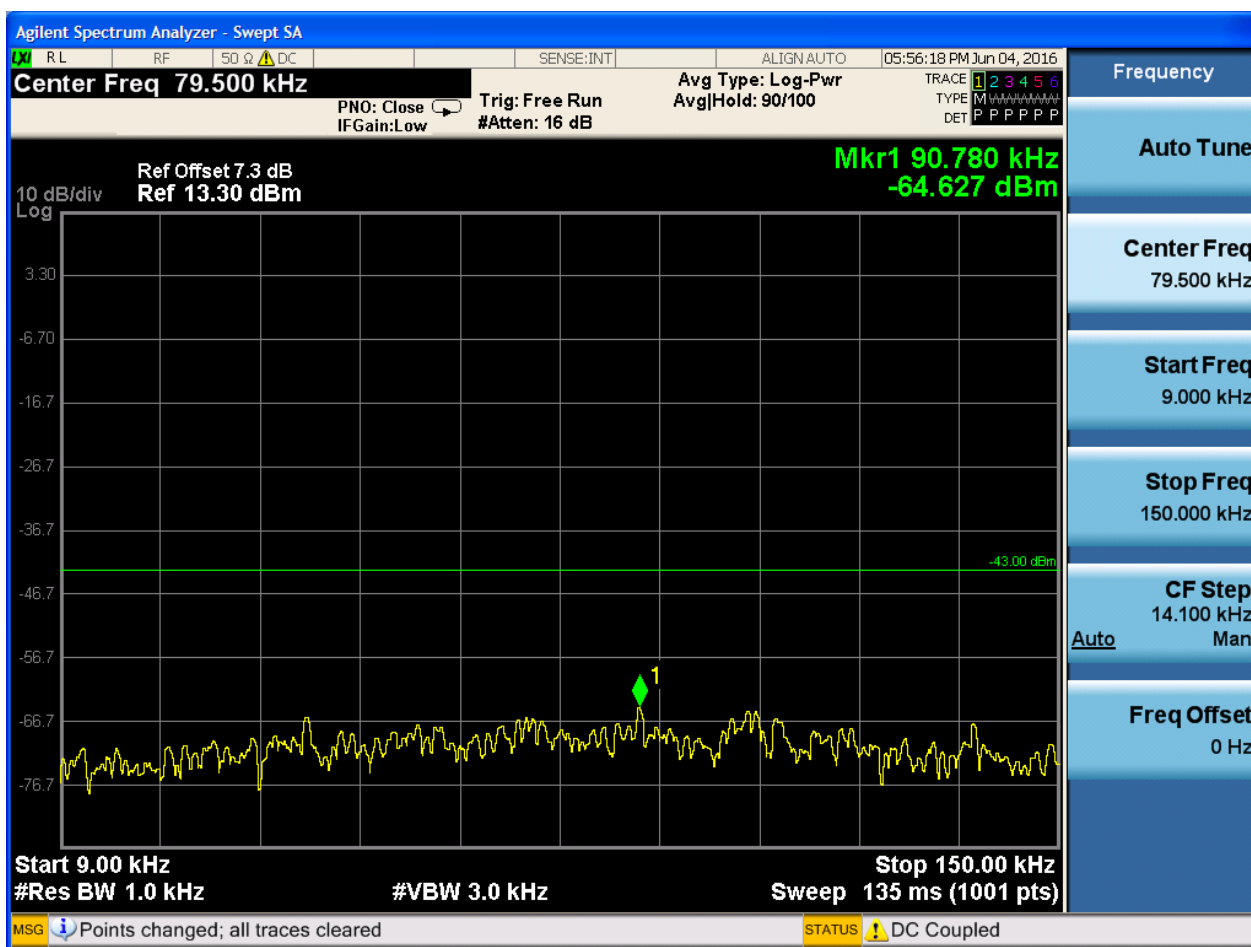


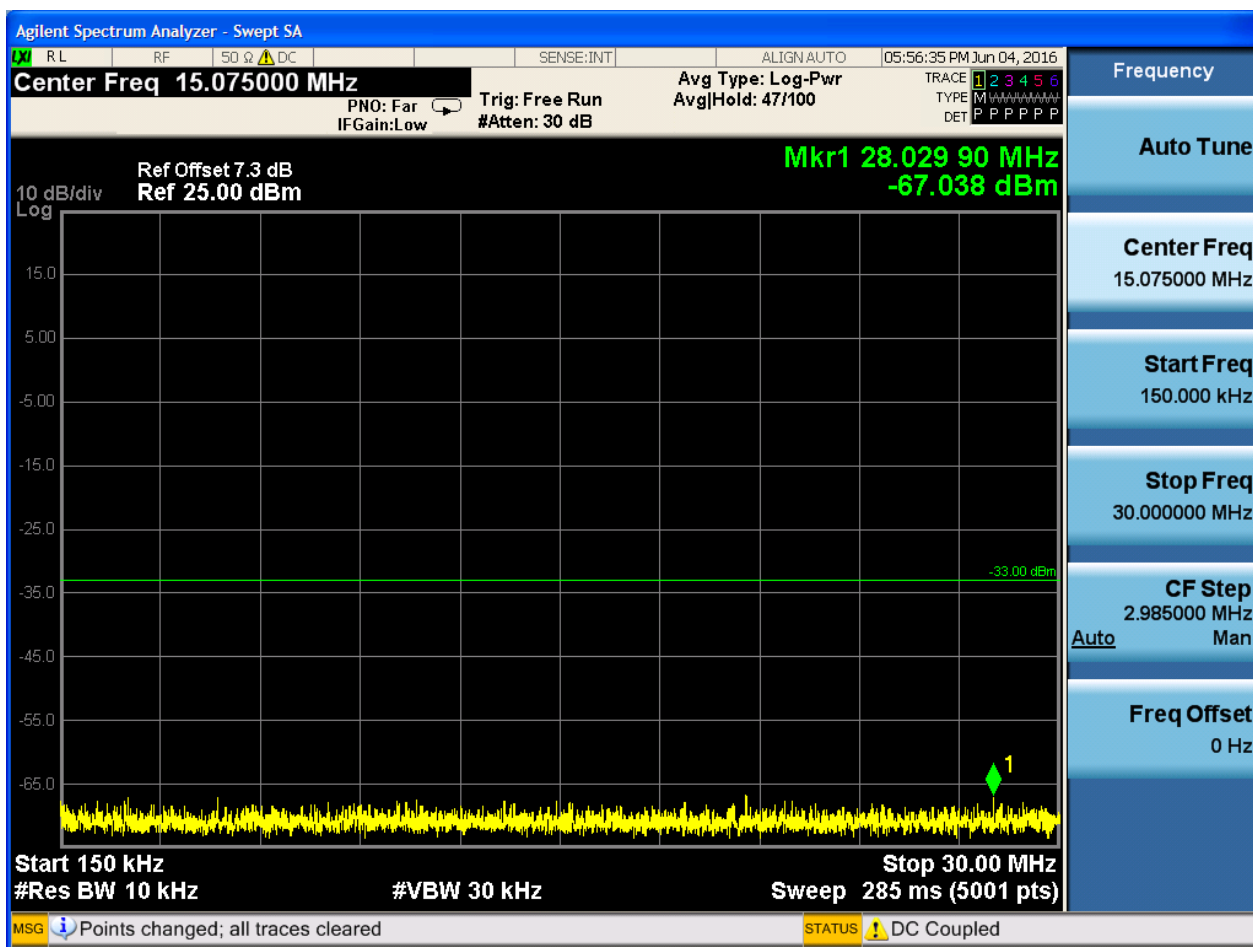


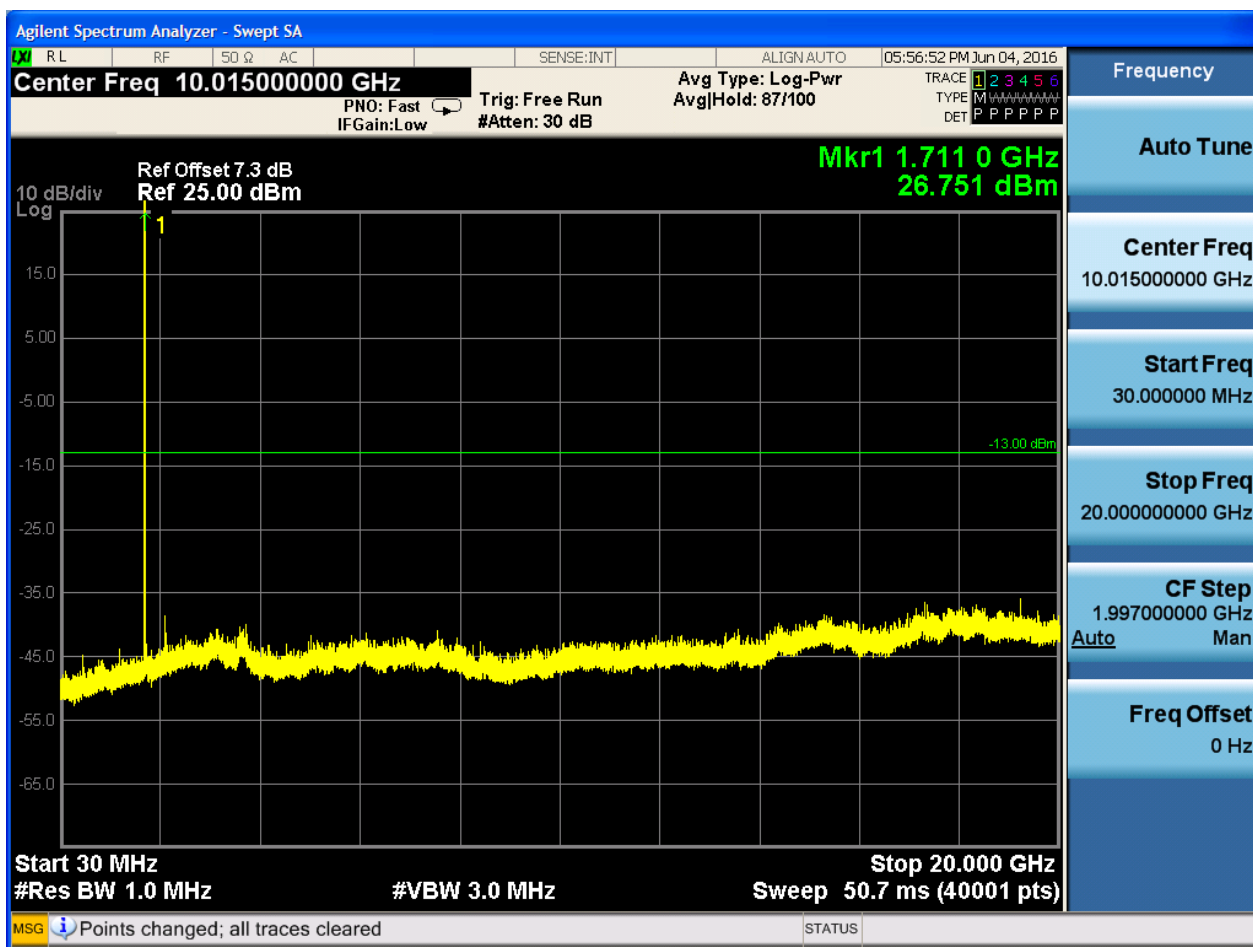
6.1.1.1.6 Test Bandwidth = 20

6.1.1.1.6.1 Test Channel = LCH

6.1.1.1.6.1.1 Test RB = RB1#0



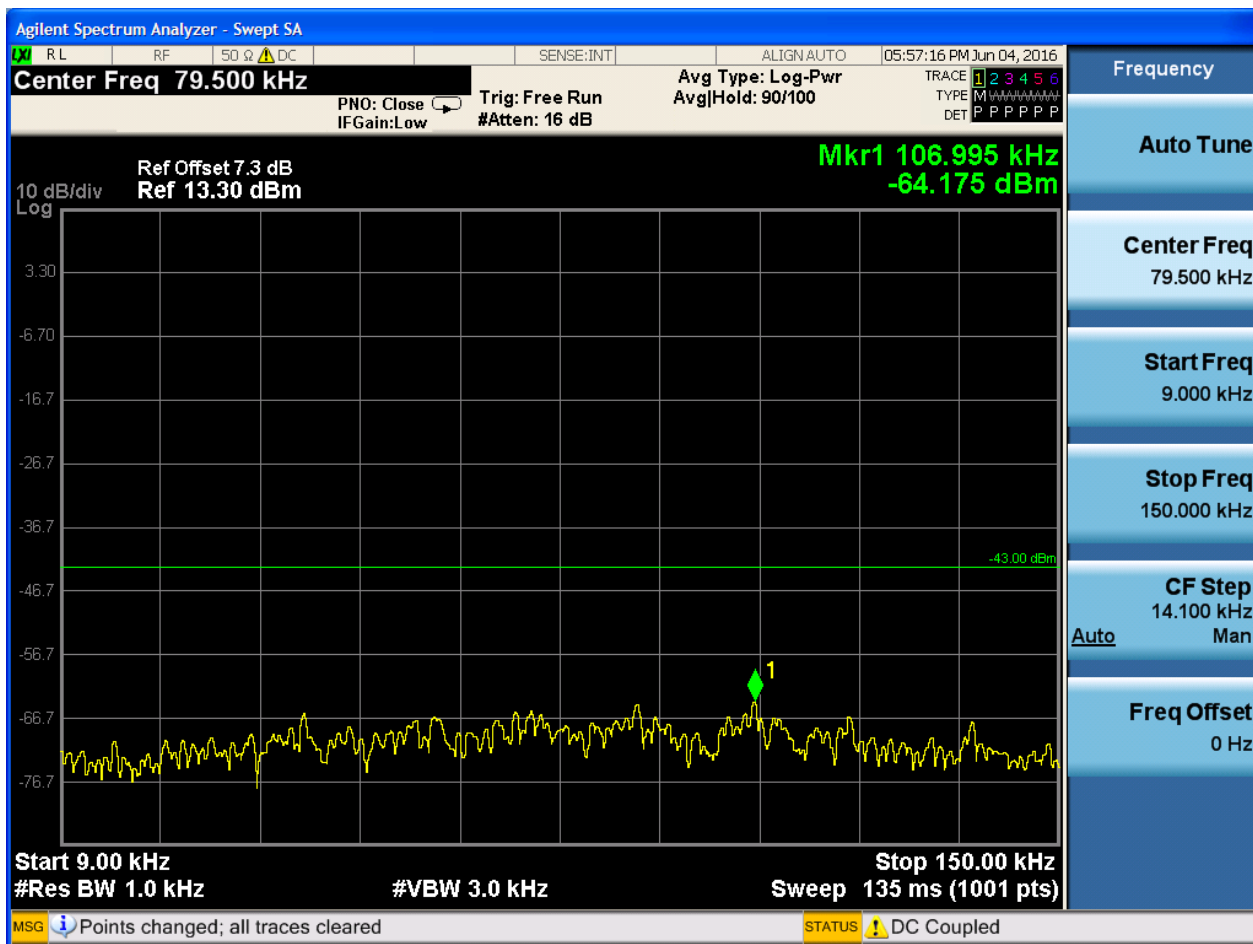


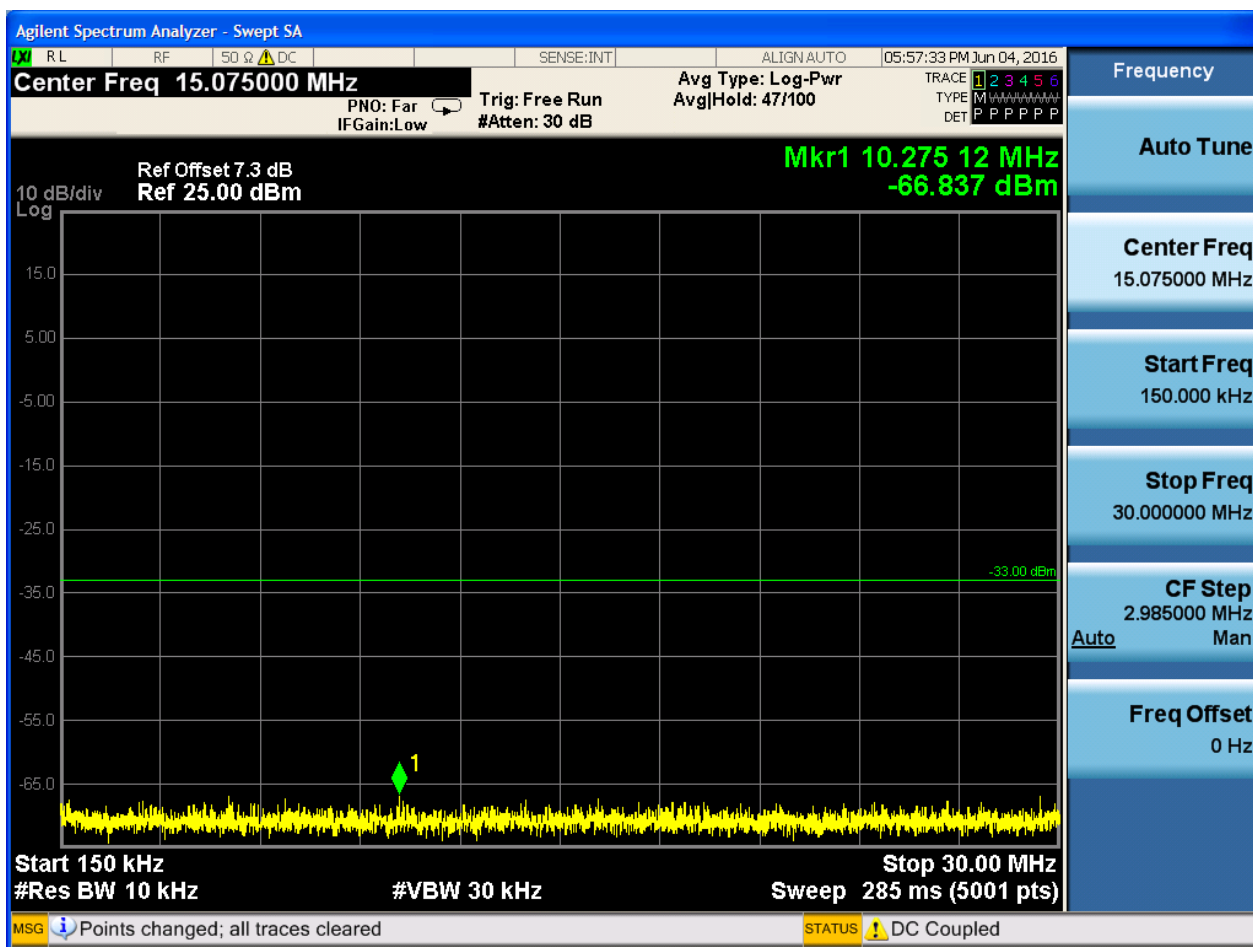


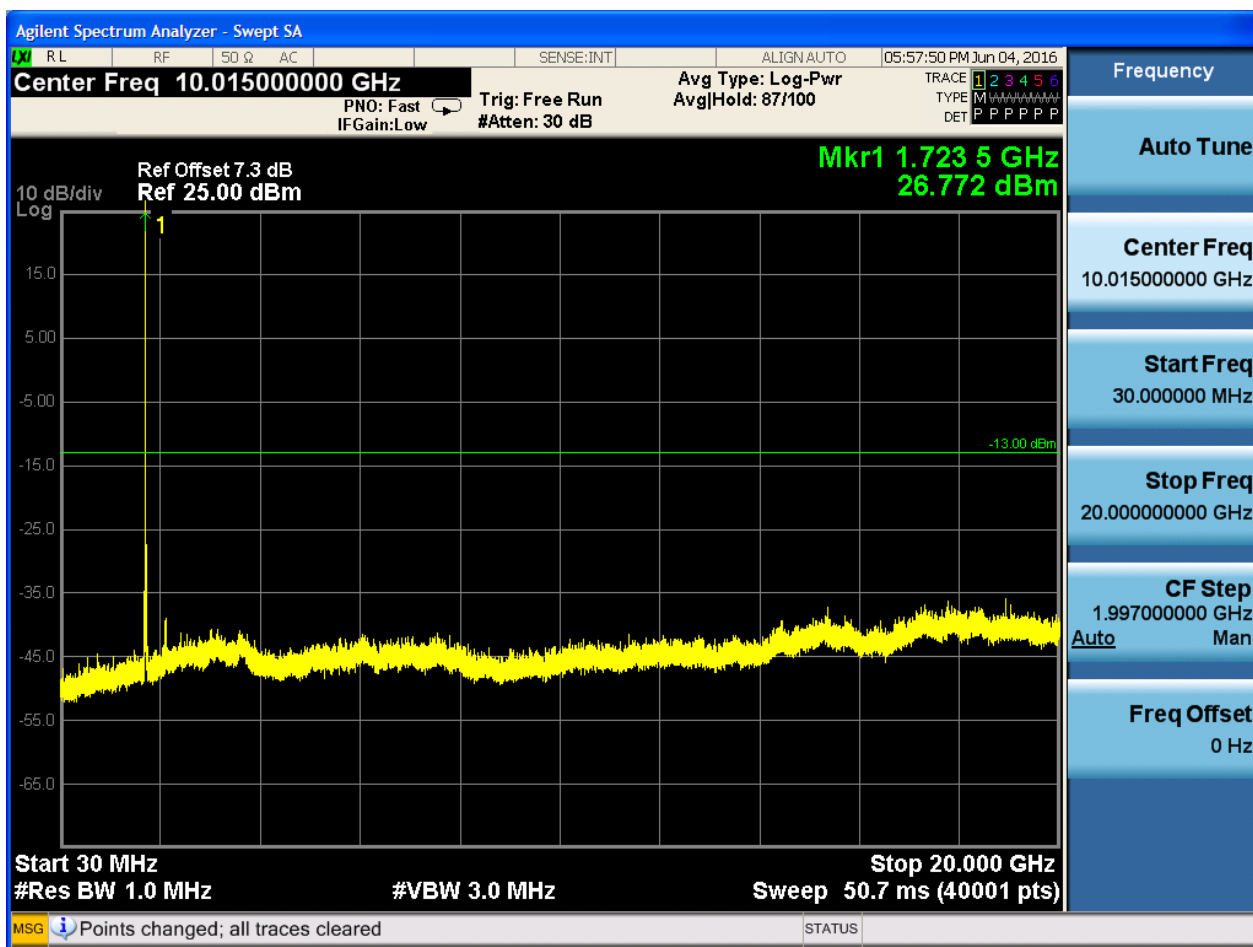


6.1.1.1.6.2 Test Channel = MCH

6.1.1.1.6.2.1 Test RB = RB1#0

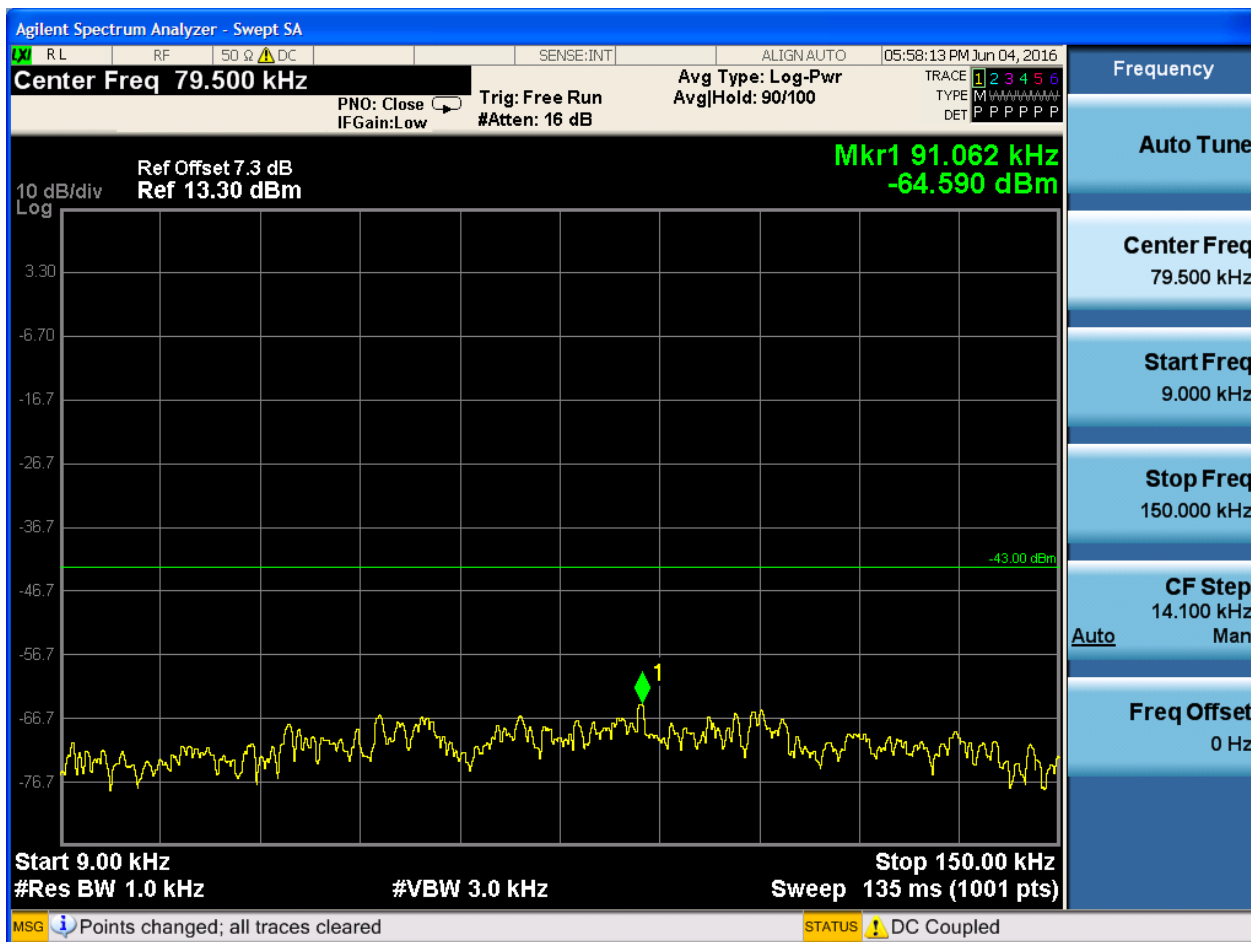


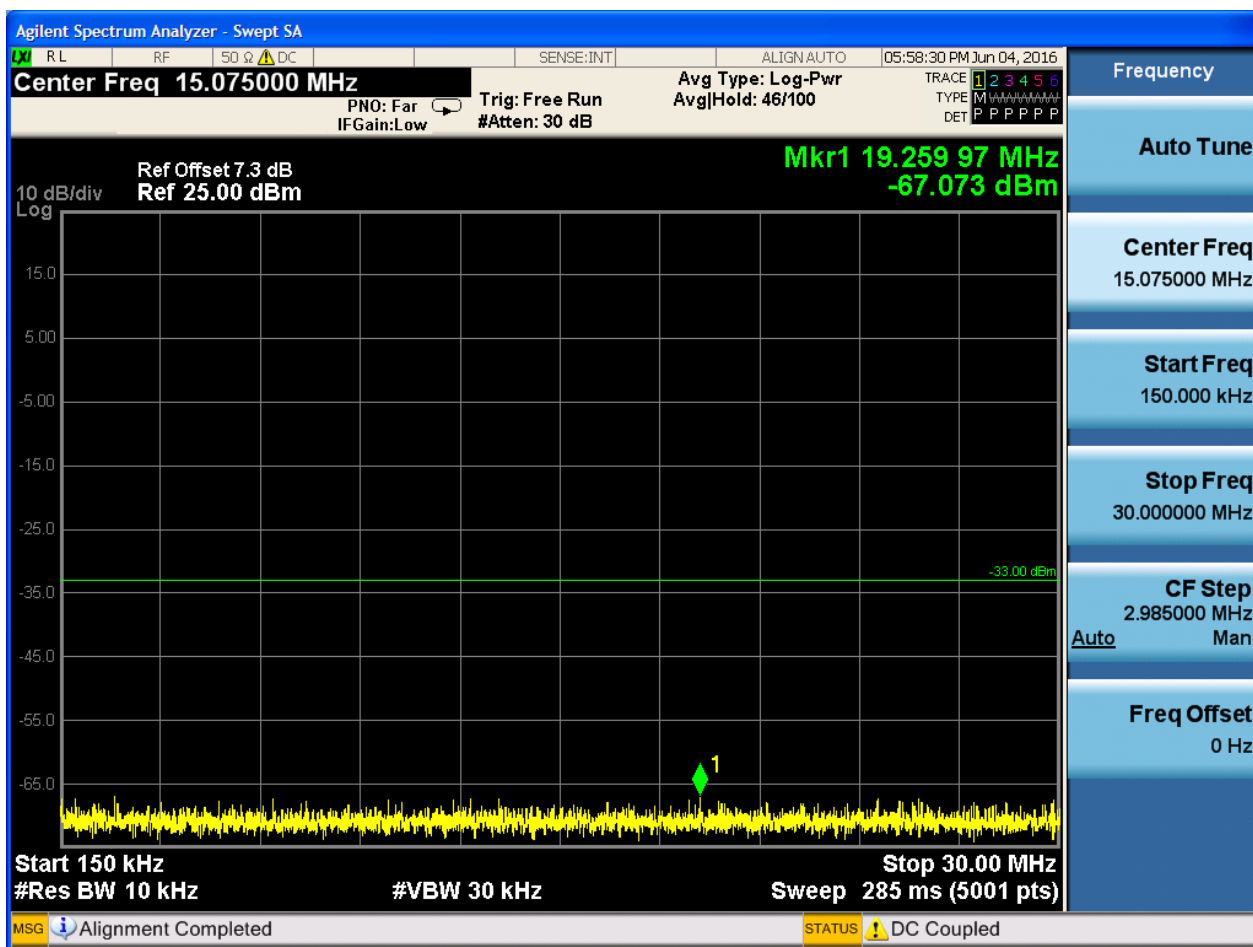


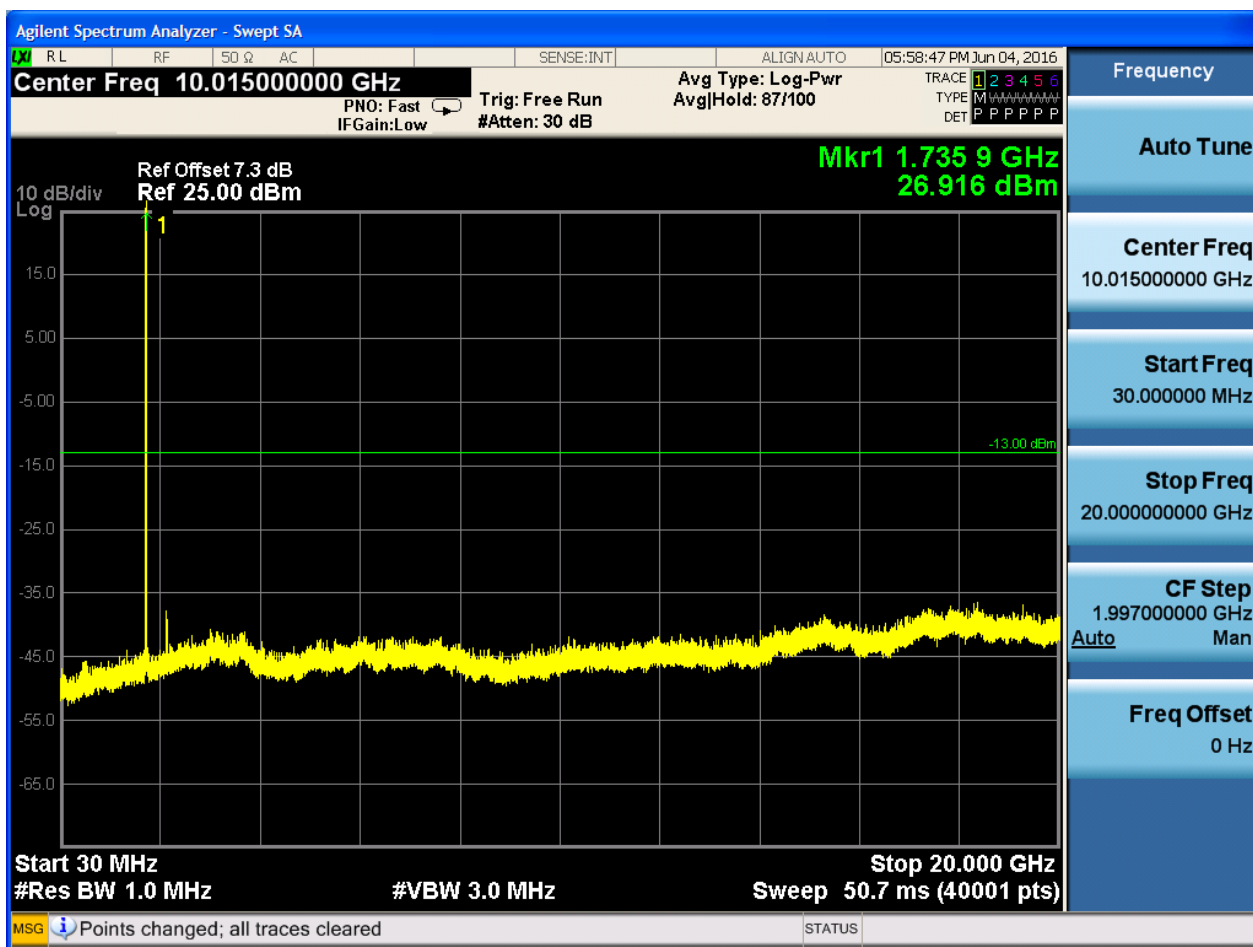


6.1.1.1.6.3 Test Channel = HCH

6.1.1.1.6.3.1 Test RB = RB1#0





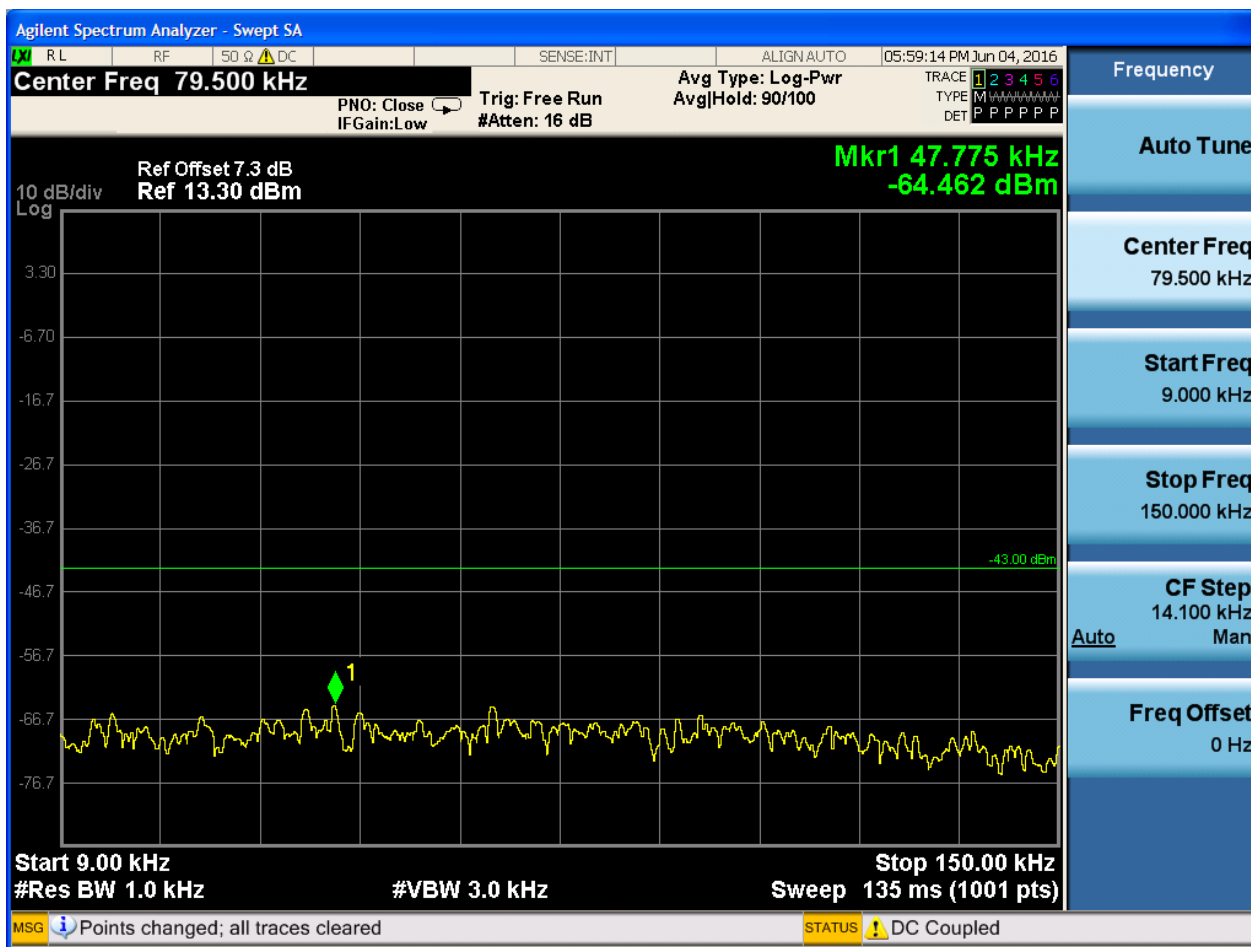


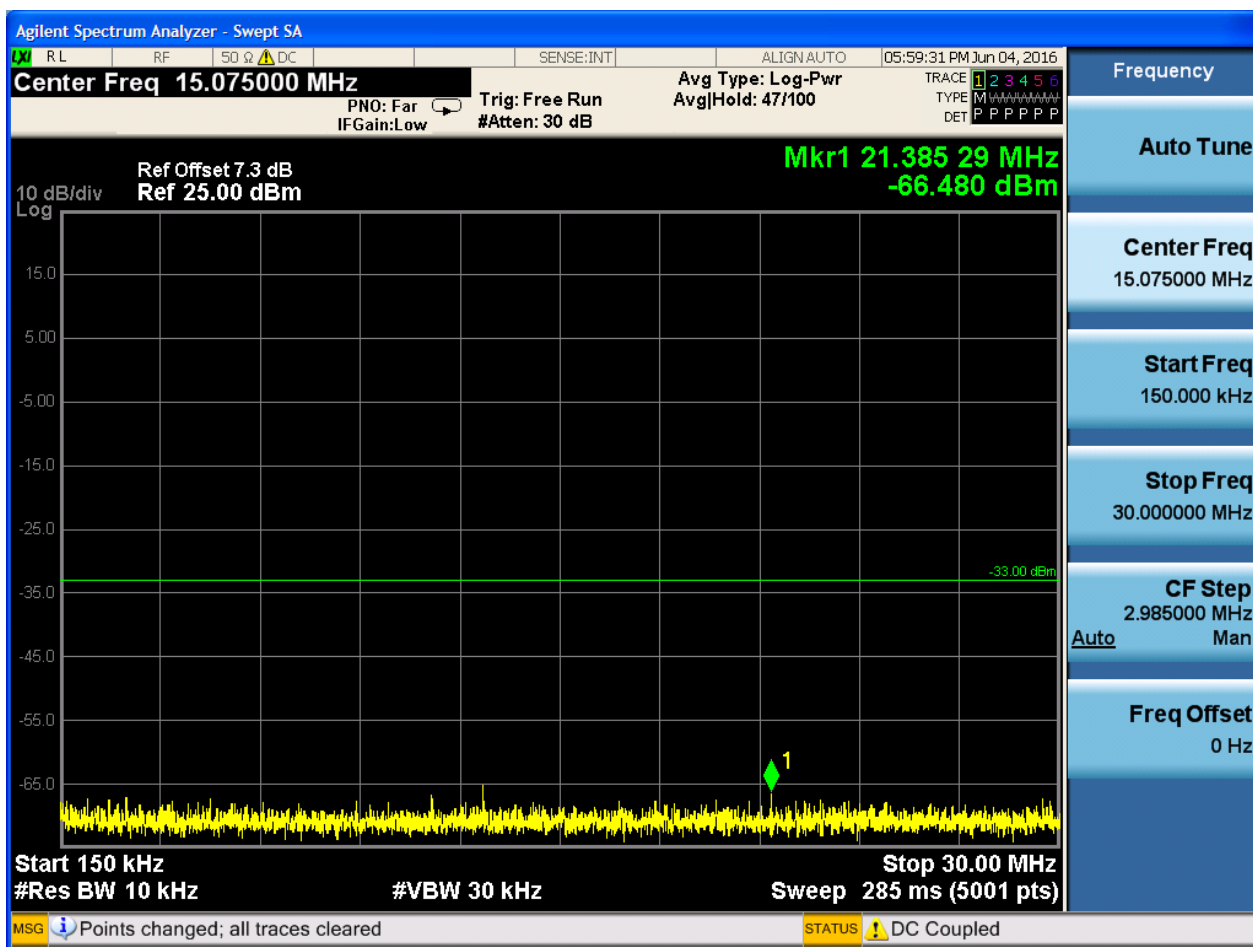
6.1.1.2 Test Mode = LTE/TM2

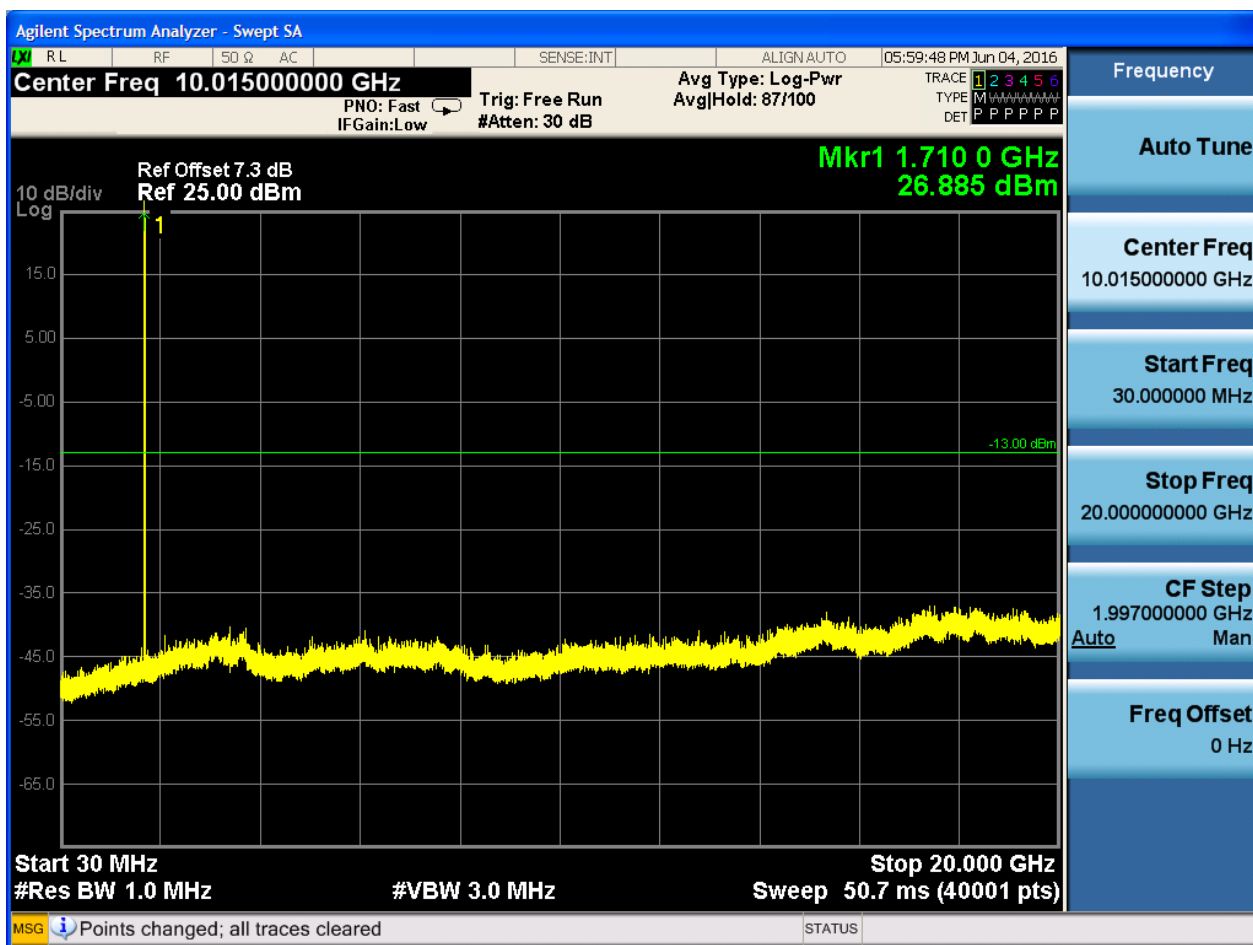
6.1.1.2.1 Test Bandwidth = 1.4

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0

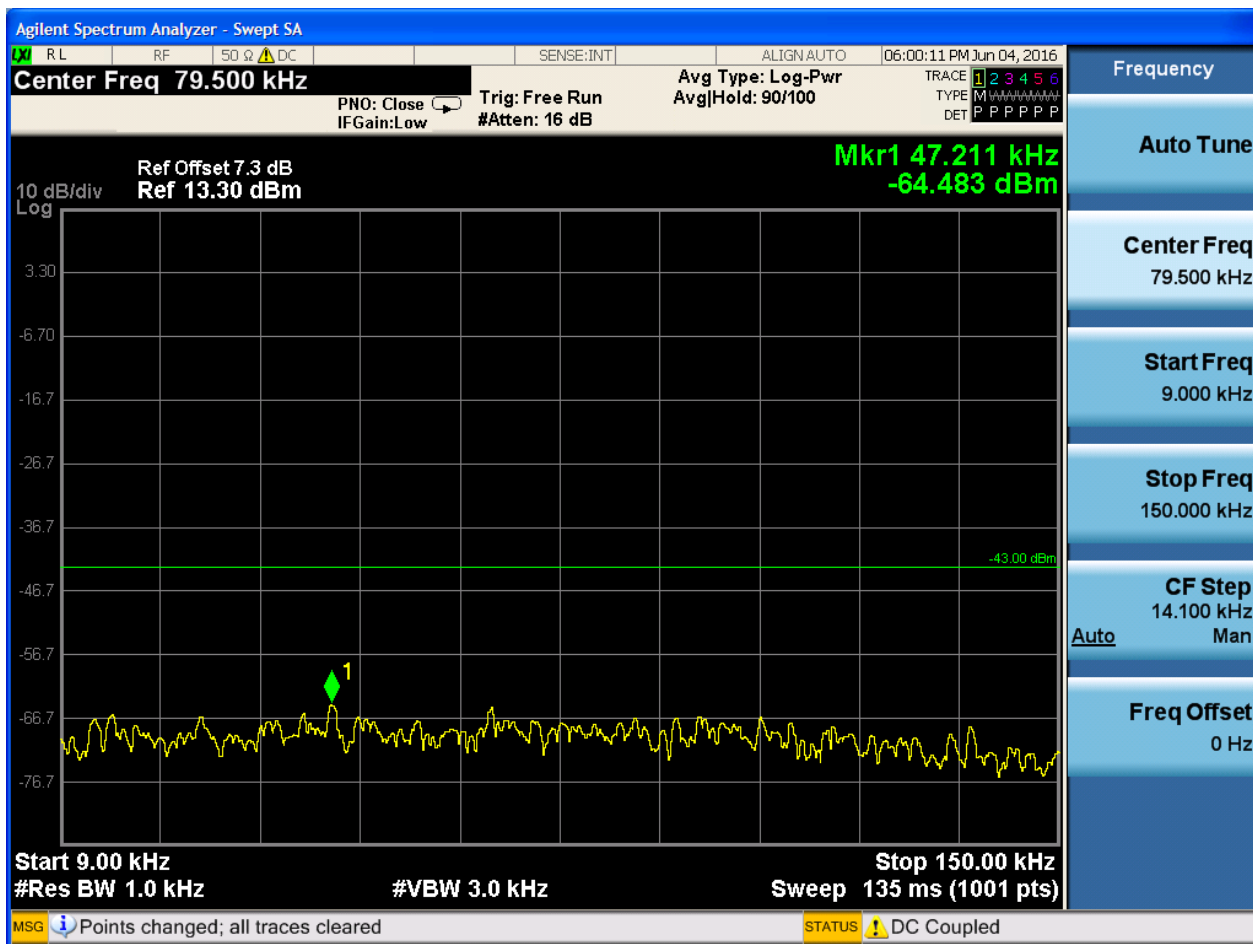


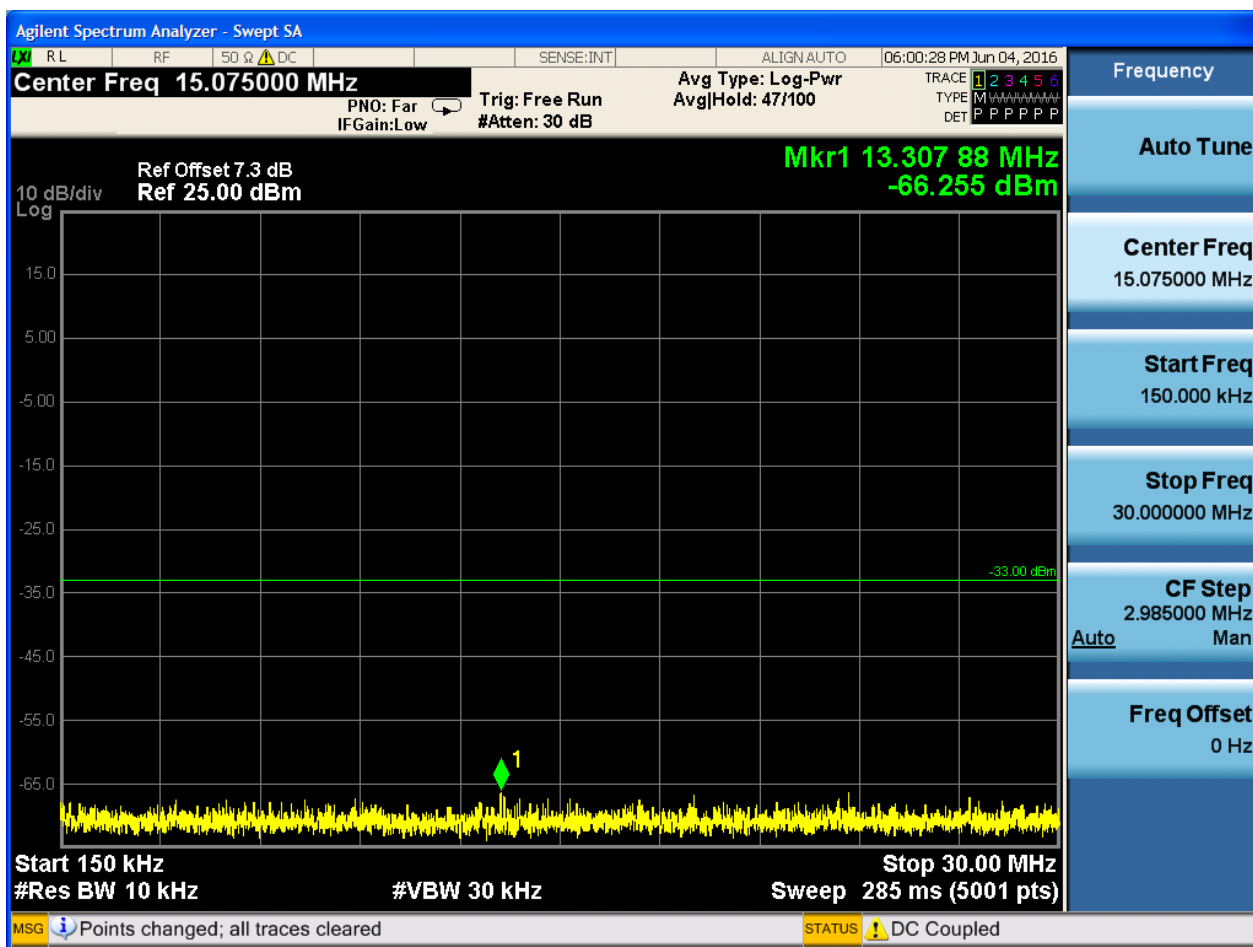




6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0

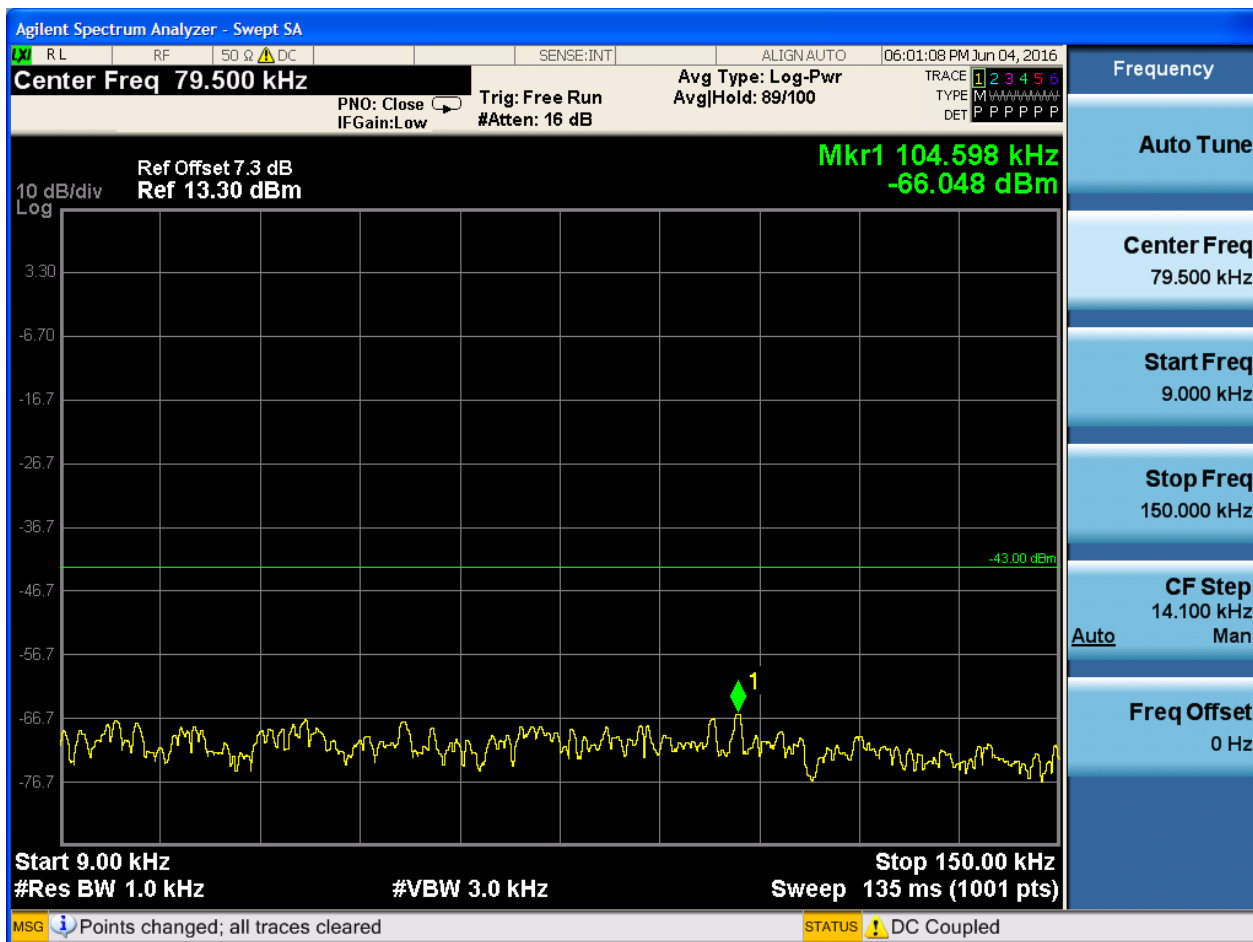


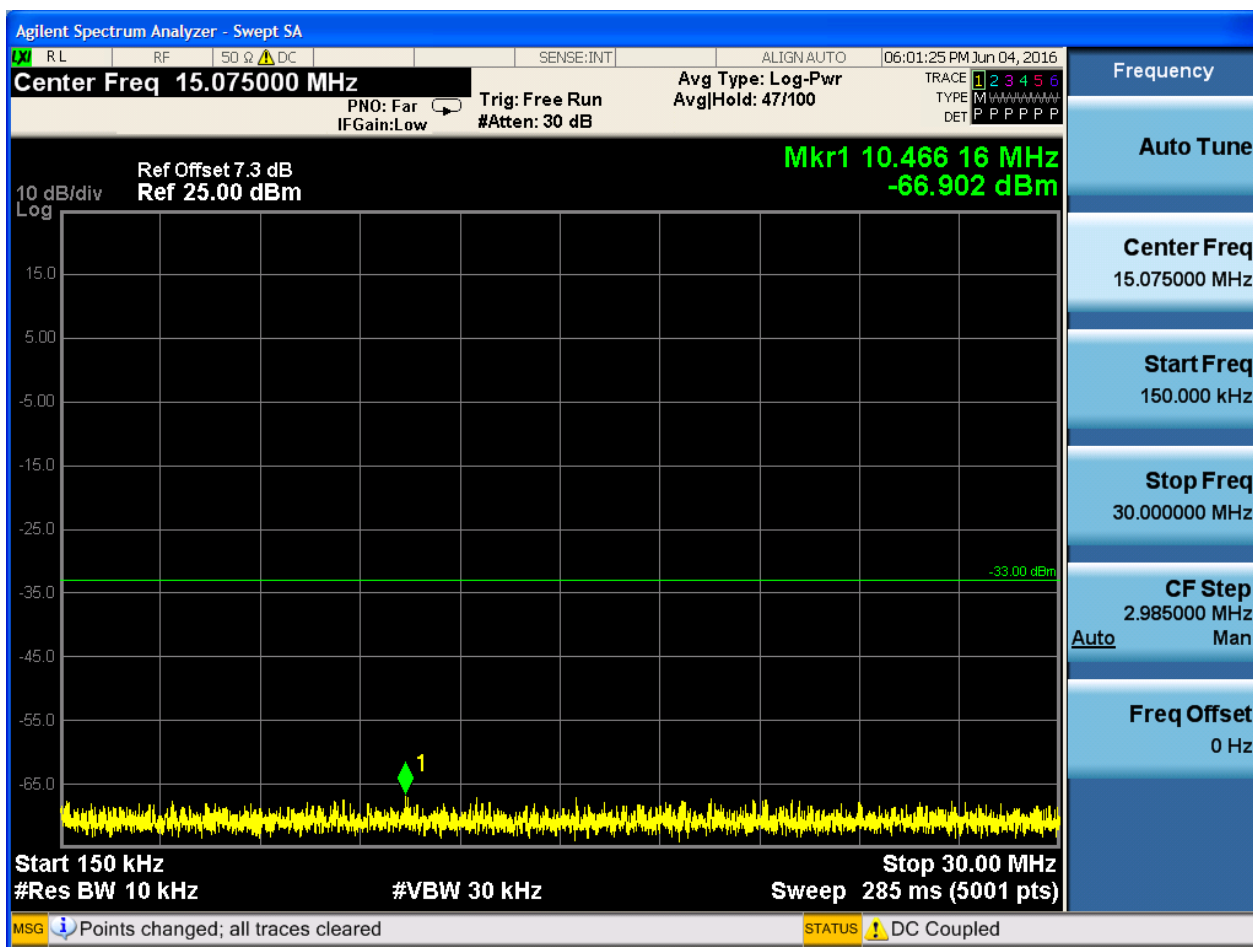


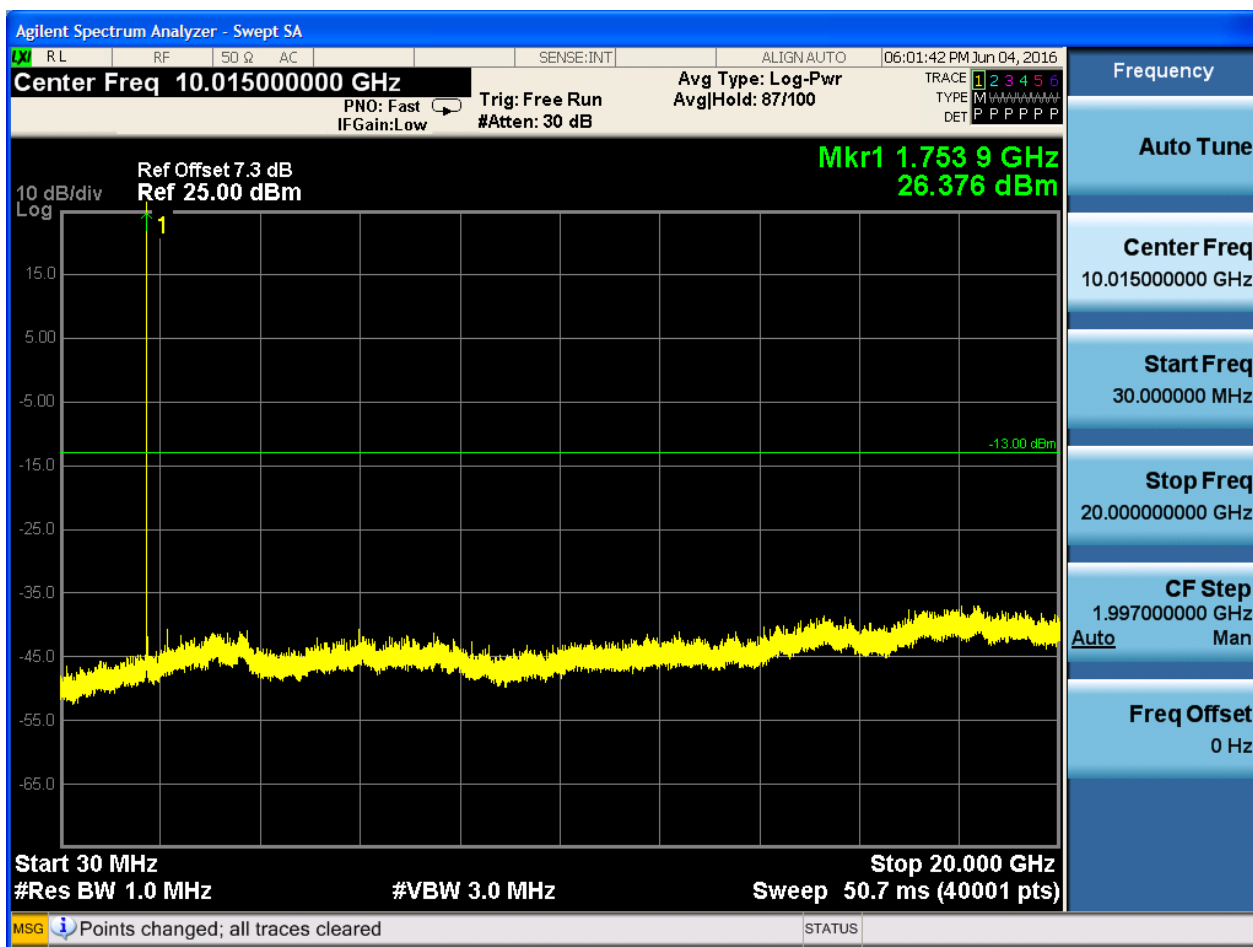


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0



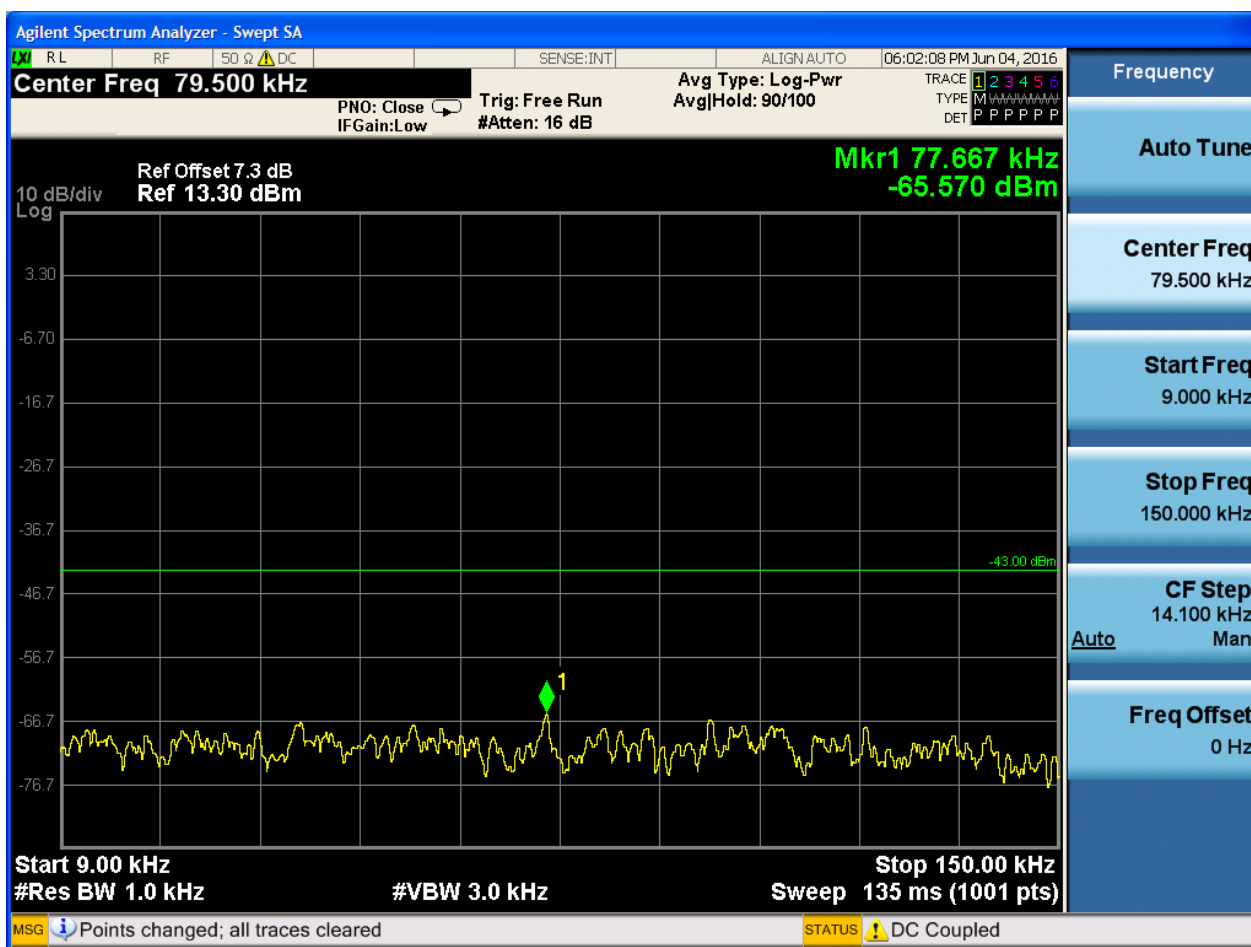




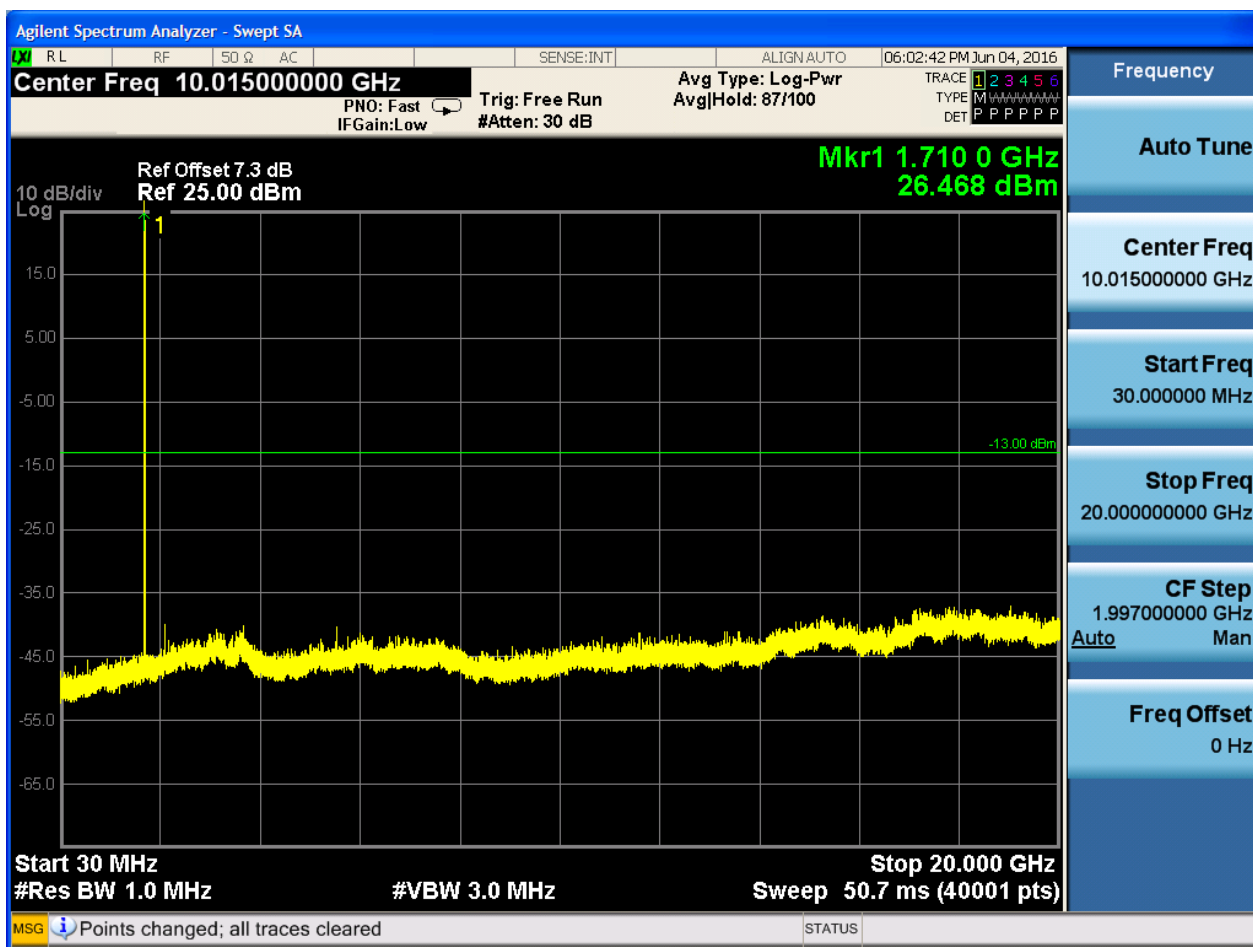
6.1.1.2.2 Test Bandwidth = 3

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0

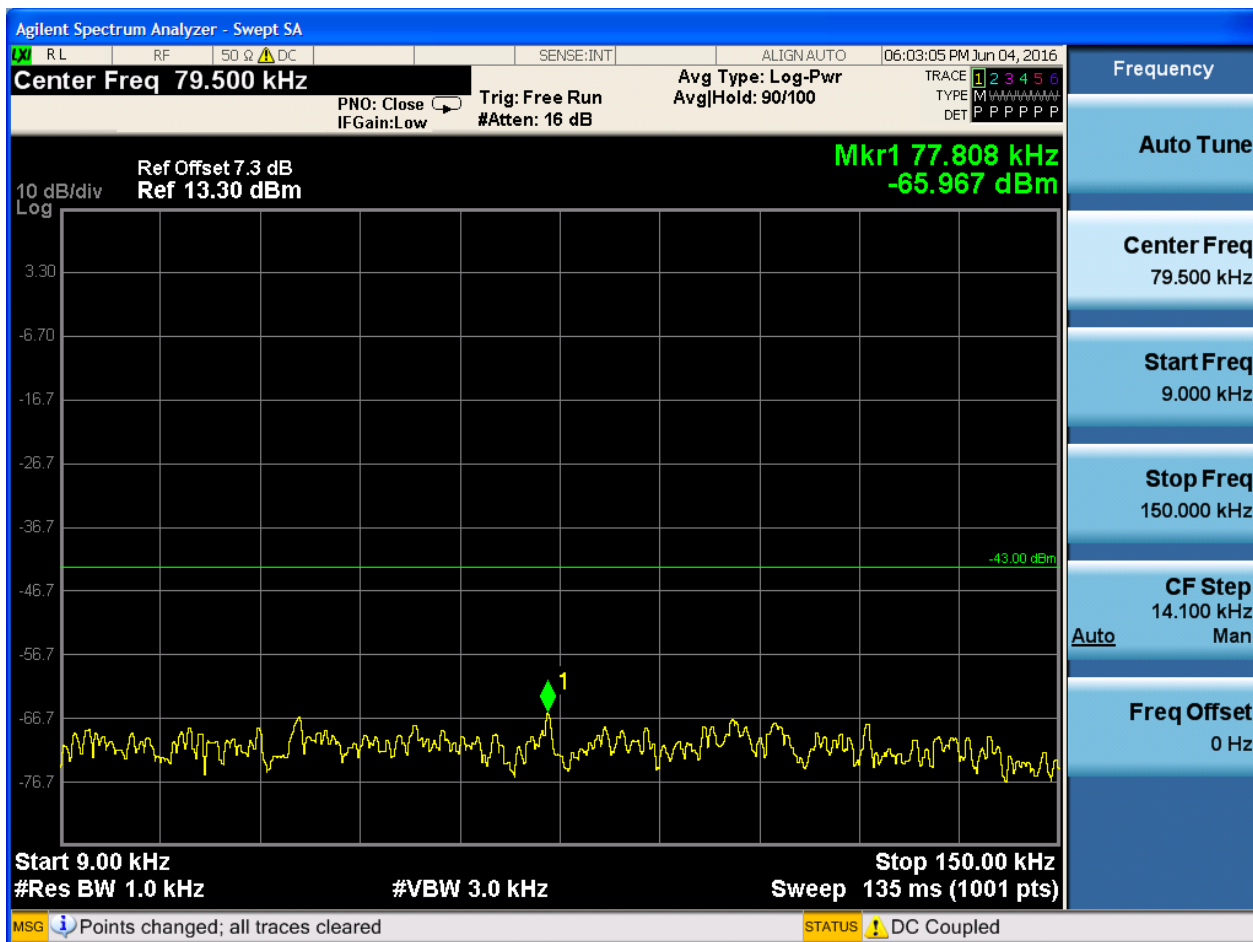


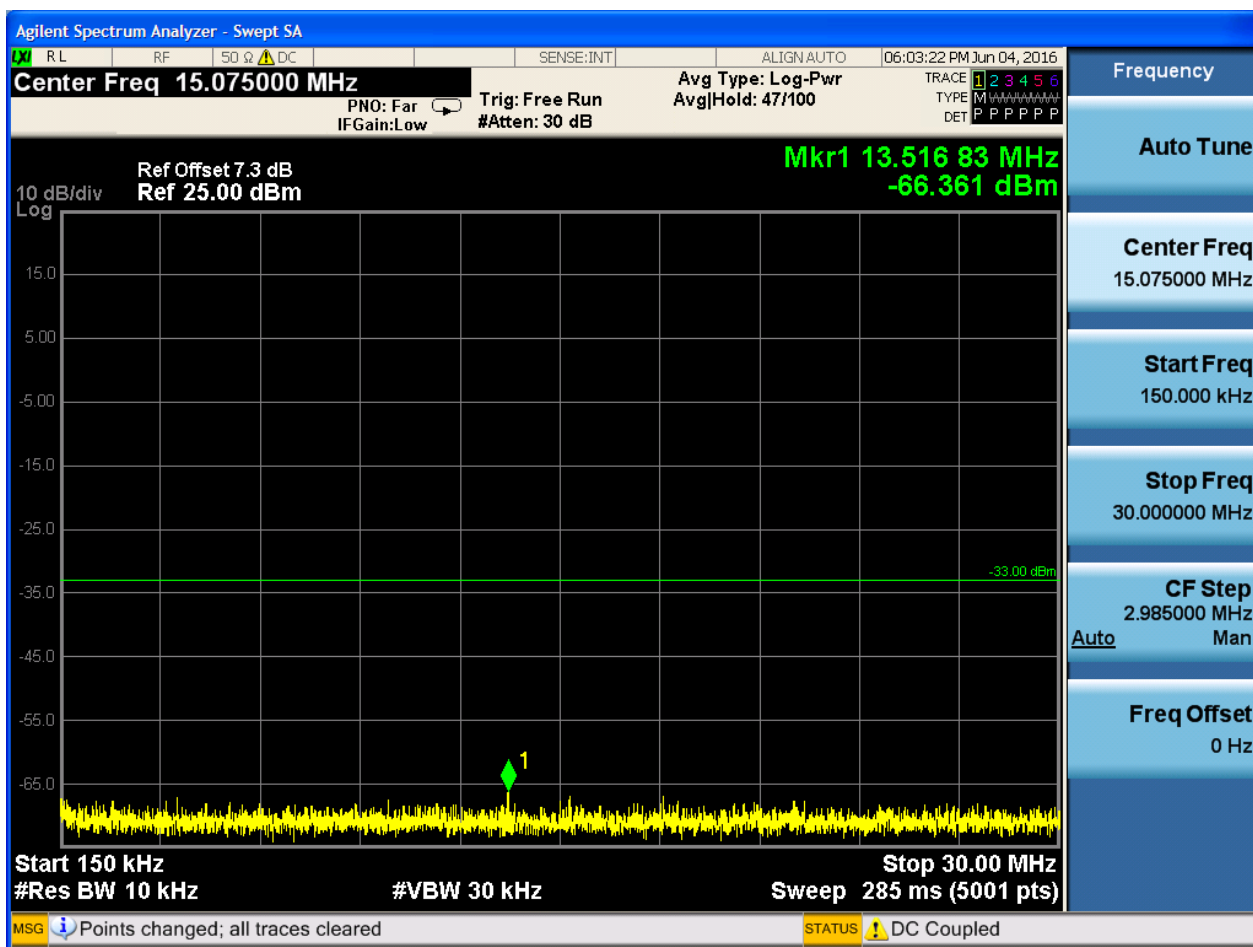


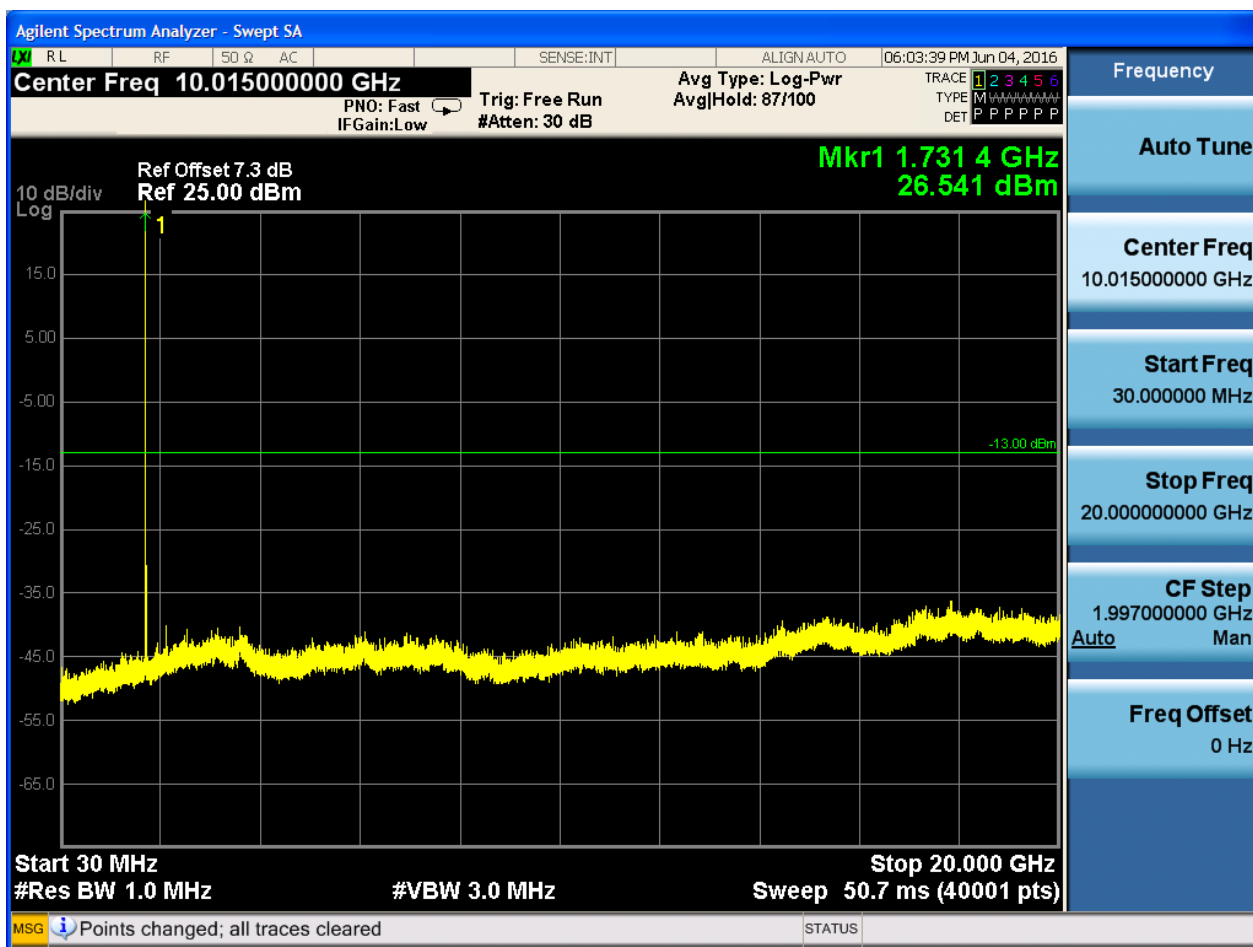


6.1.1.2.2.2 Test Channel = MCH

6.1.1.2.2.2.1 Test RB = RB1#0

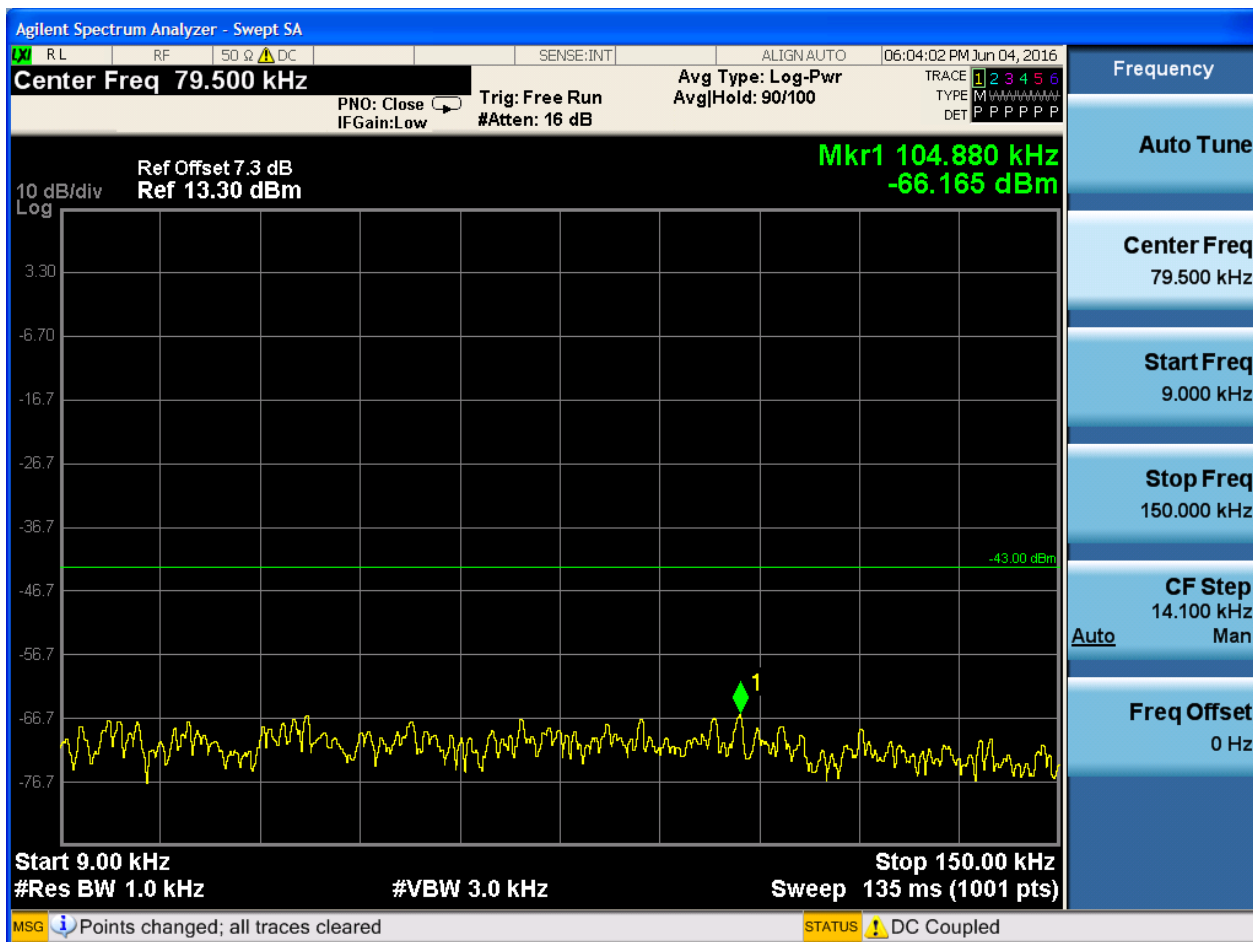


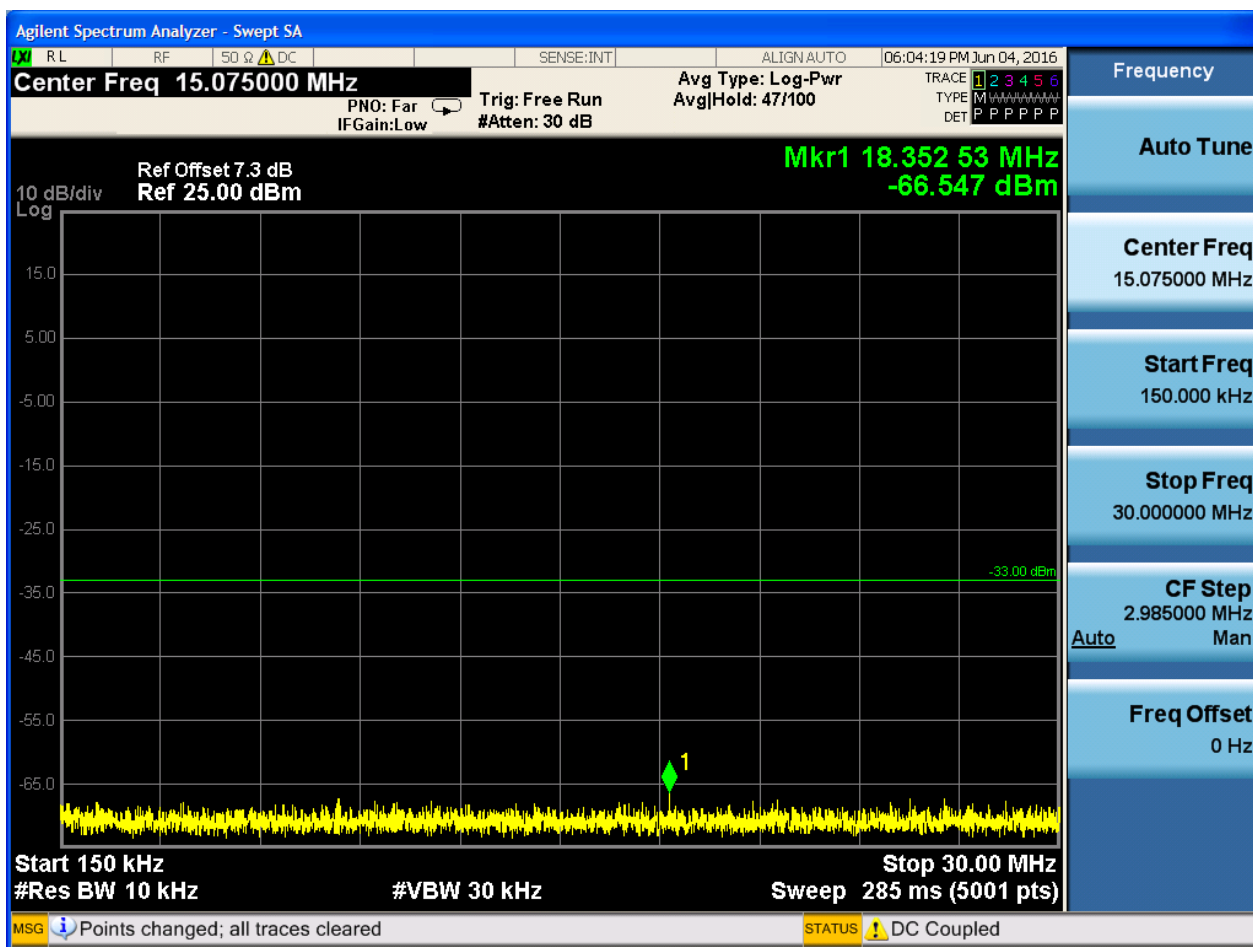


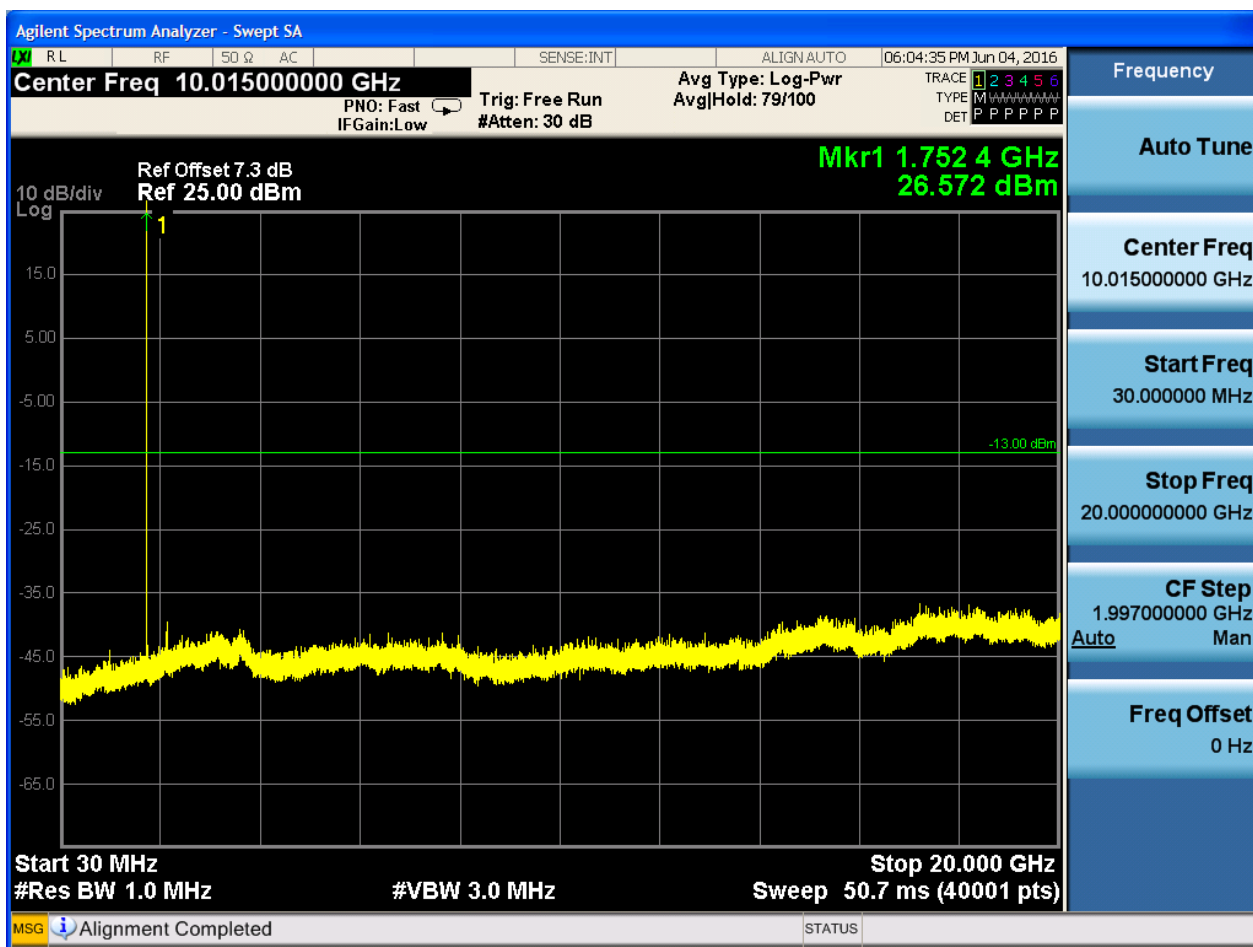


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0







6.1.1.2.3 Test Bandwidth = 5

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0

