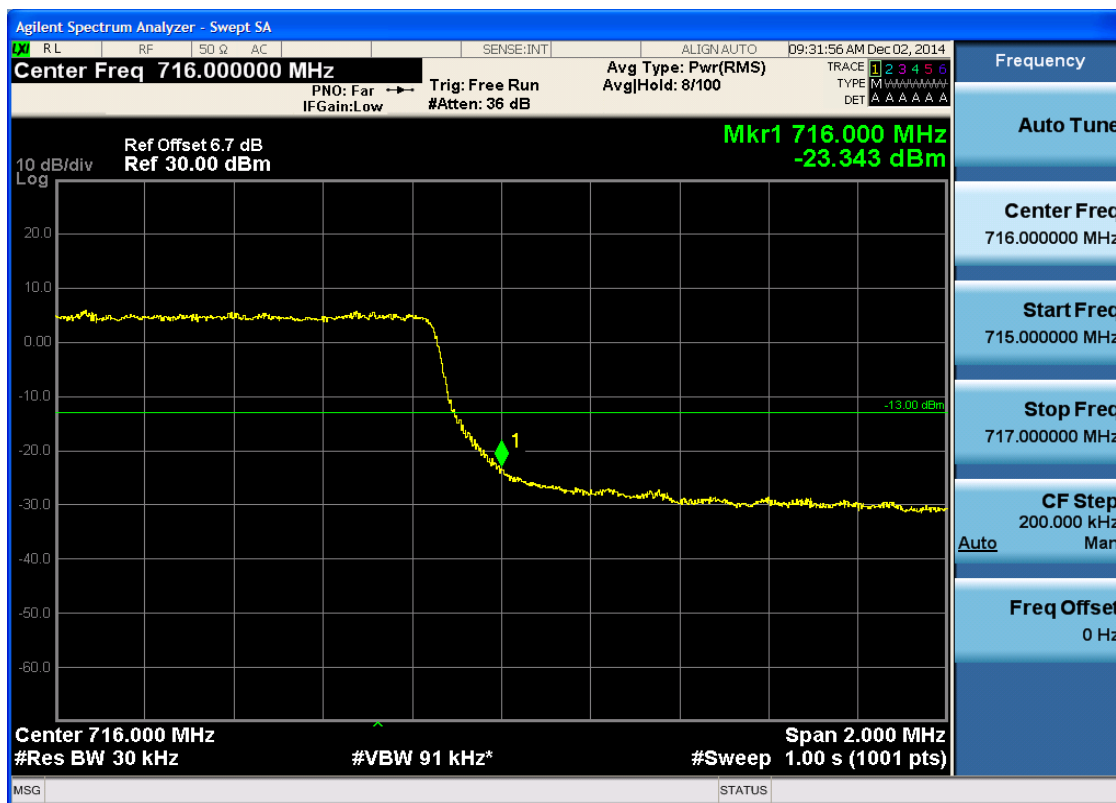




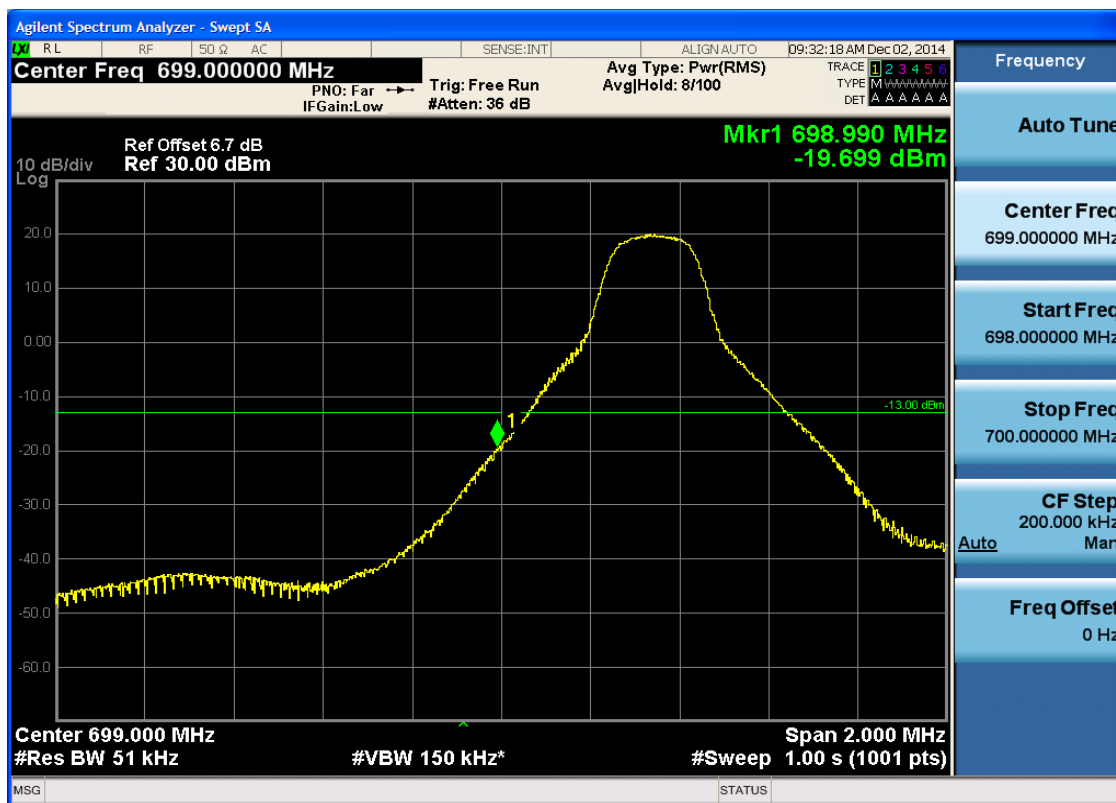
5.1.4.1.2.2.4 Test RB = RB15#0



5.1.4.1 .3 Test Bandwidth = 5

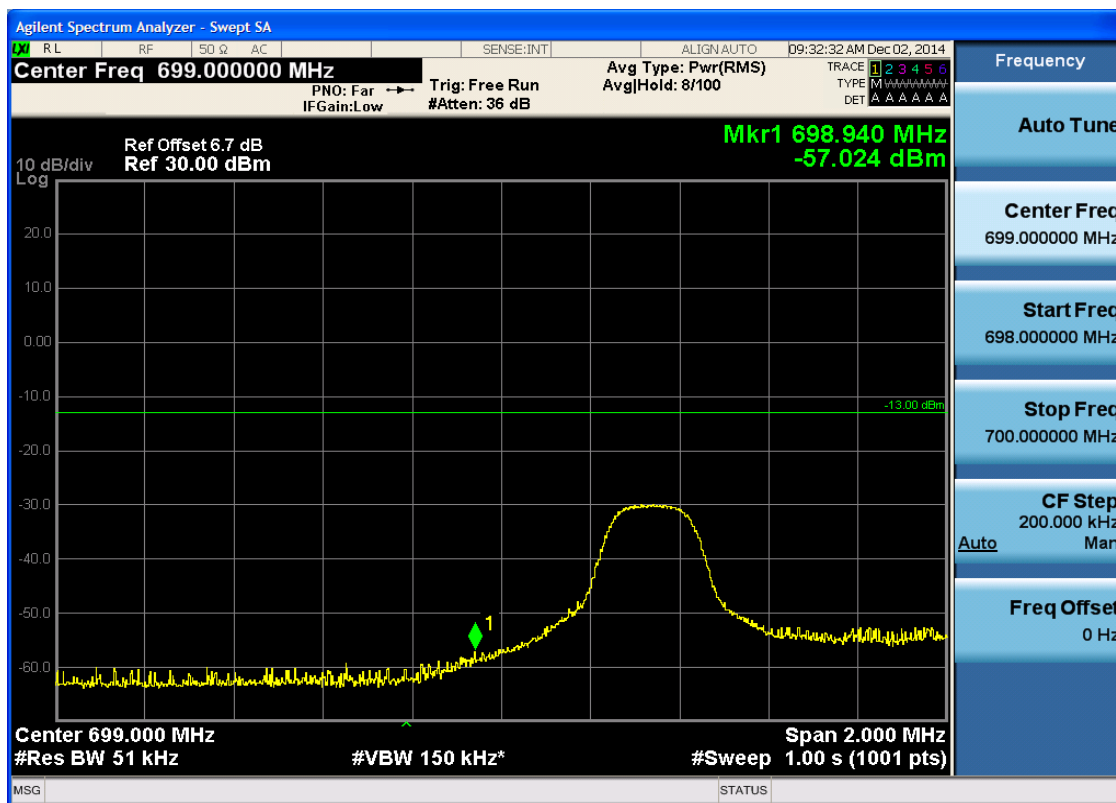
5.1.4.1 .3.1 Test Channel = LCH

5.1.4.1 .3.1.1 Test RB = RB1#0



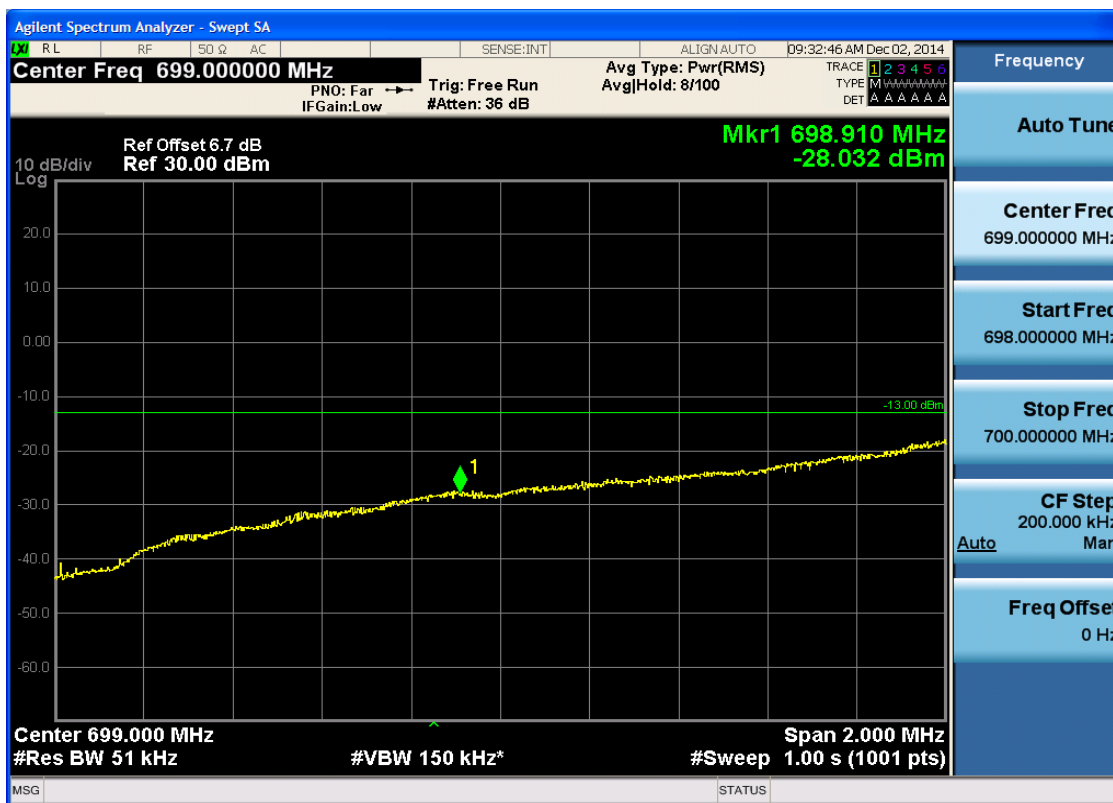


5.1.4.1 .3.1.2 Test RB = RB1#24



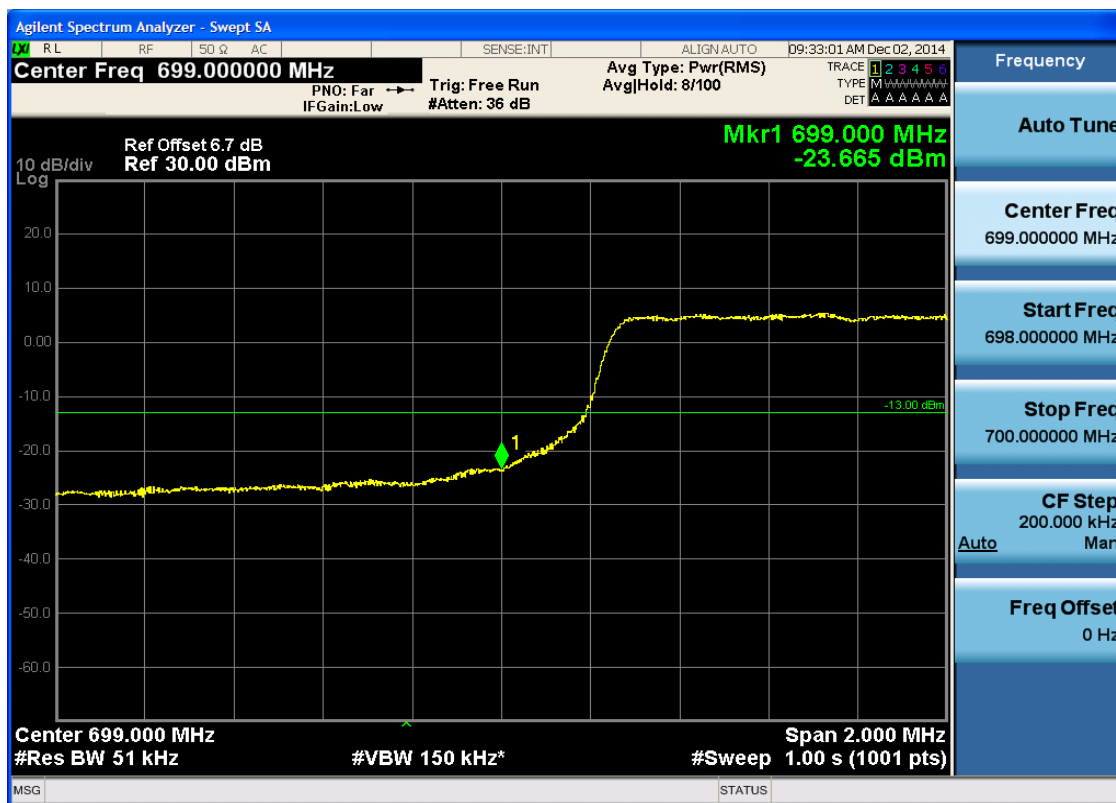


5.1.4.1 .3.1.3 Test RB = RB12#6





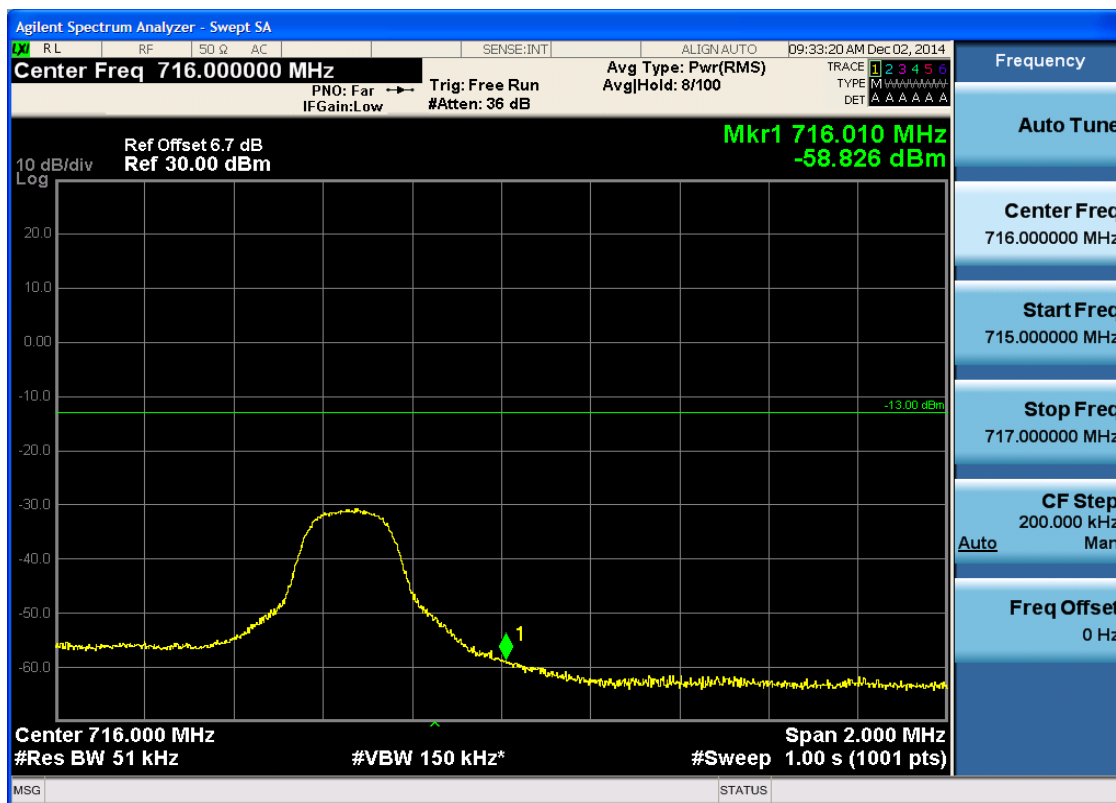
5.1.4.1 .3.1.4 Test RB = RB25#0





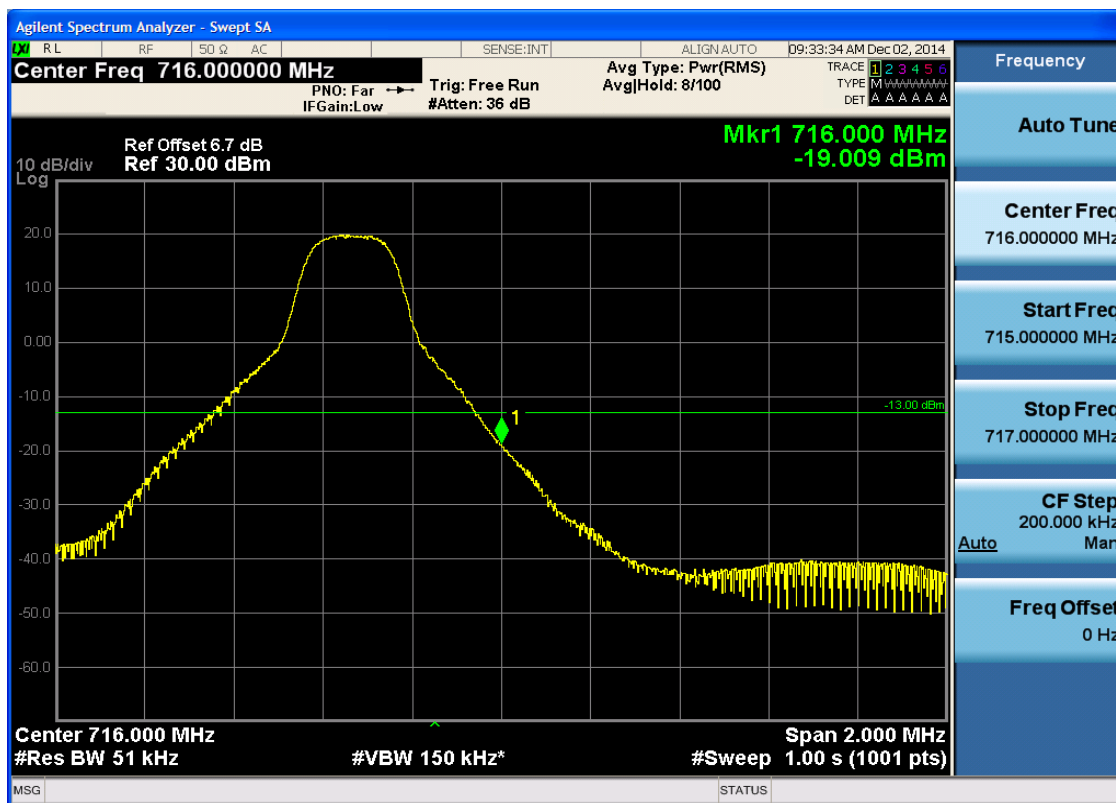
5.1.4.1 .3.2 Test Channel = HCH

5.1.4.1 .3.2.1 Test RB = RB1#0





5.1.4.1 .3.2.2 Test RB = RB1#24



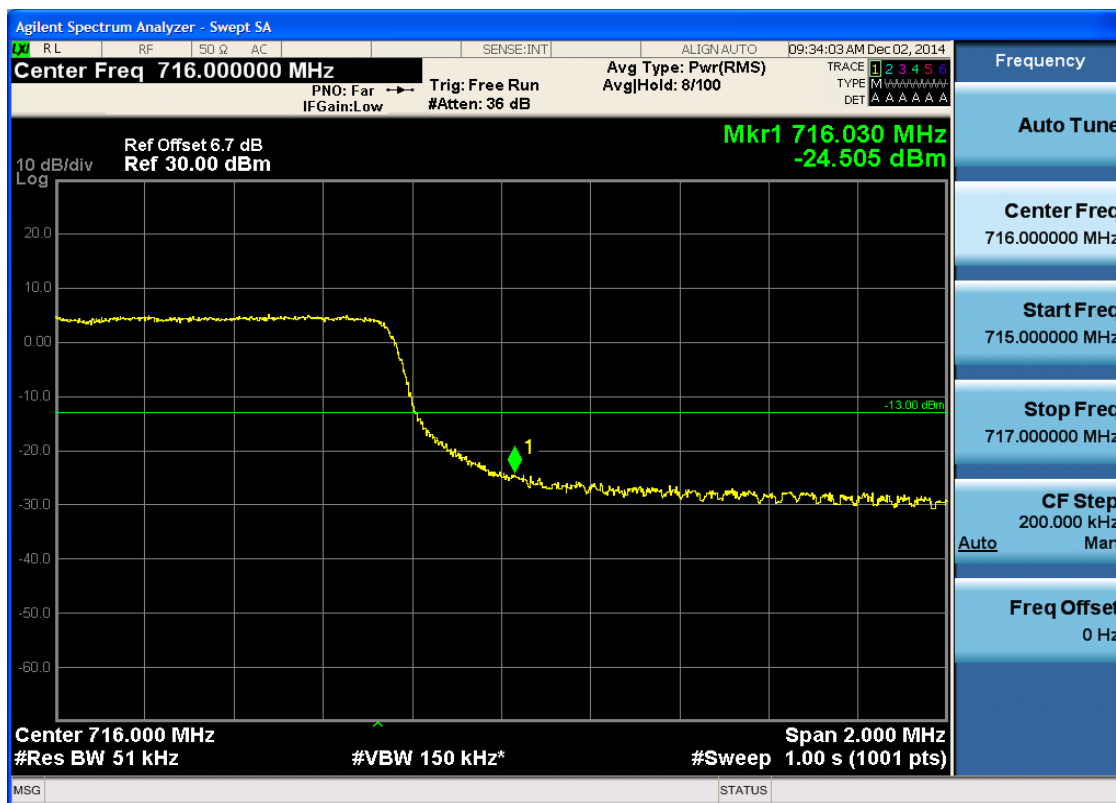


5.1.4.1 .3.2.3 Test RB = RB12#6





5.1.4.1 .3.2.4 Test RB = RB25#0

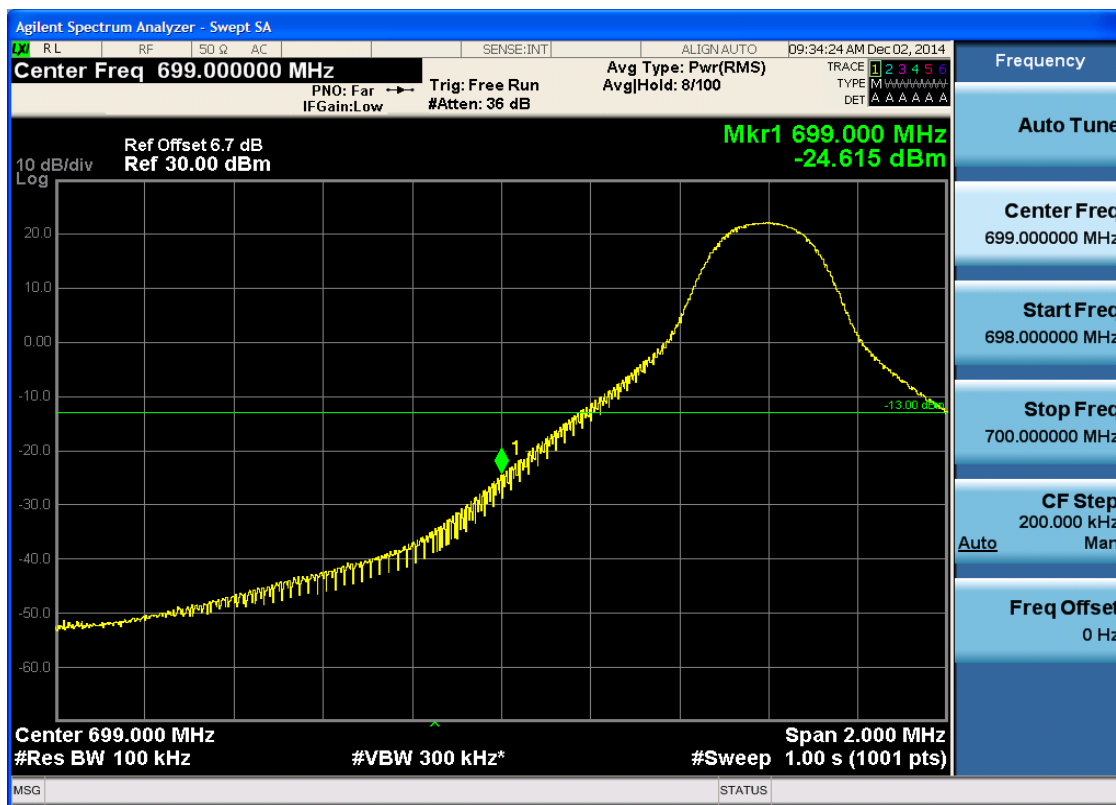




5.1.4.1 .4 Test Bandwidth = 10

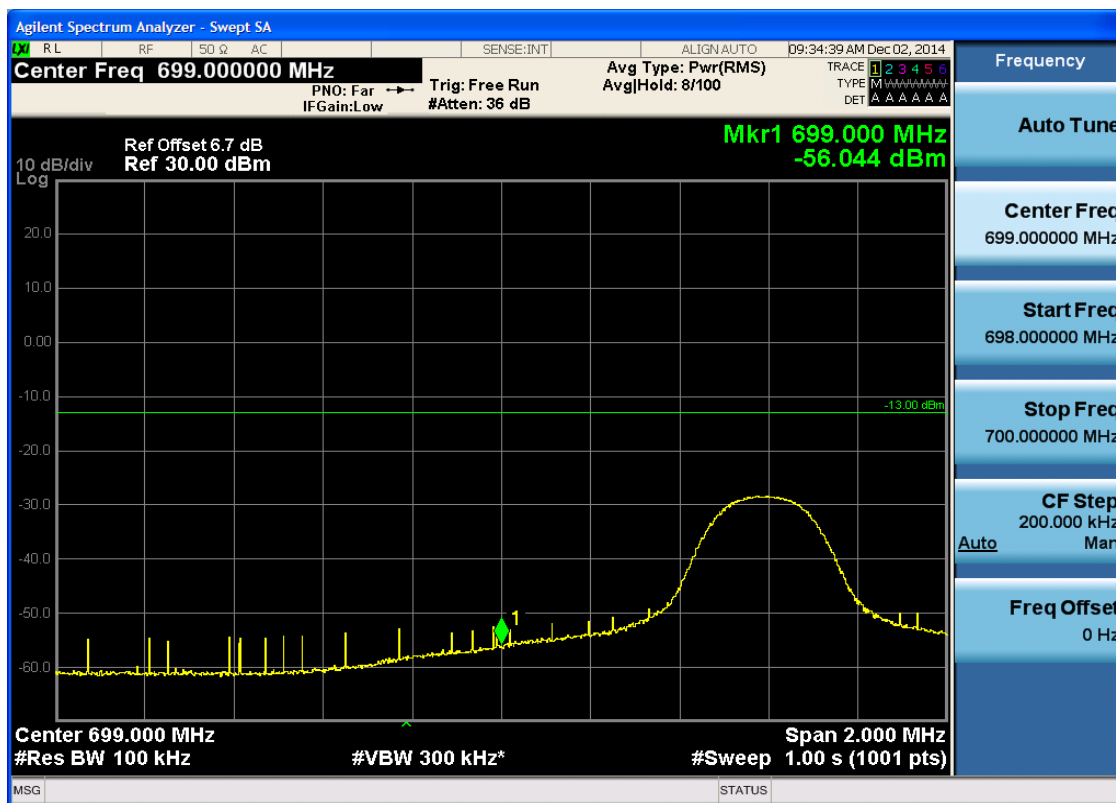
5.1.4.1 .4.1 Test Channel = LCH

5.1.4.1 .4.1.1 Test RB = RB1#0



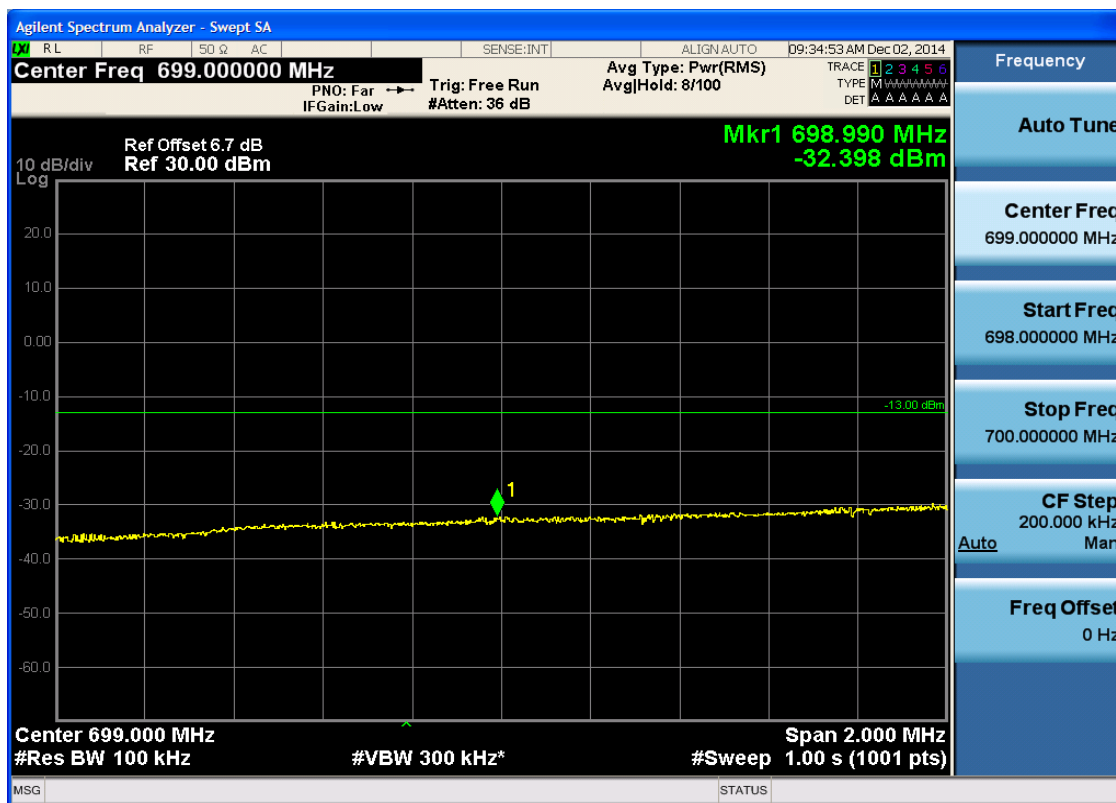


5.1.4.1 .4.1.2 Test RB = RB1#49



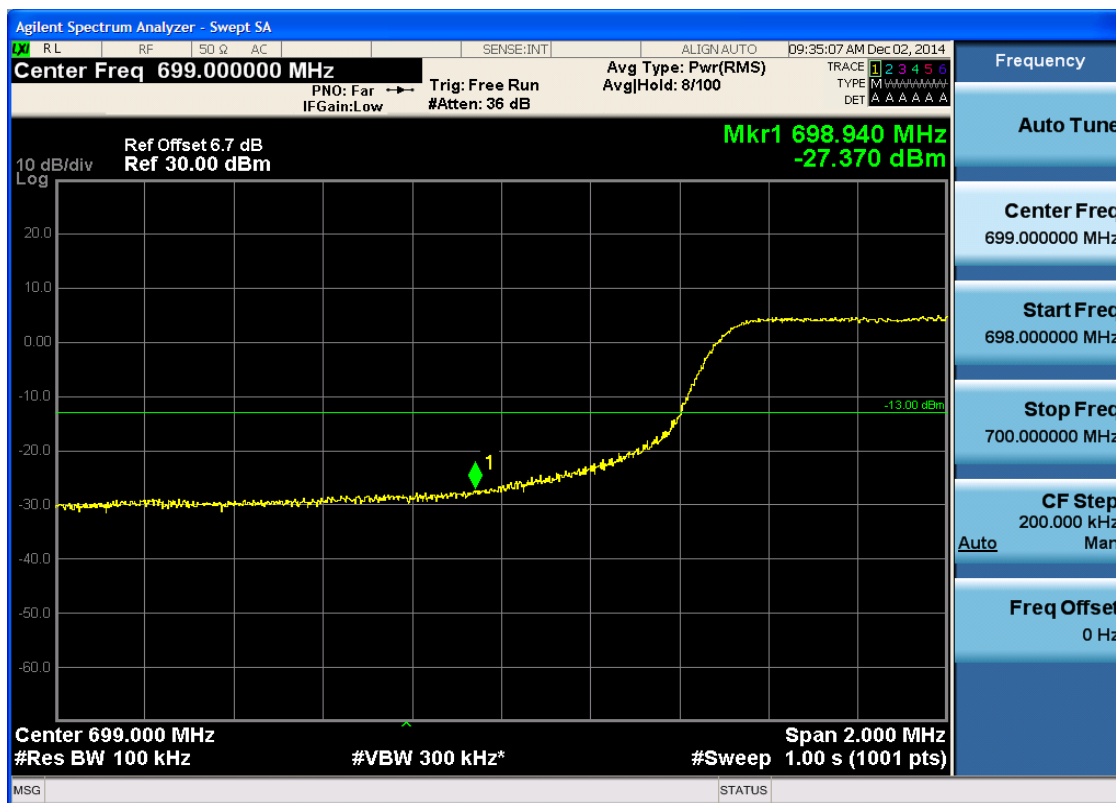


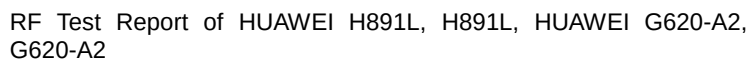
5.1.4.1 .4.1.3 Test RB = RB25#13



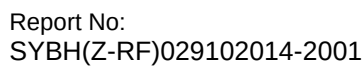


5.1.4.1 .4.1.4 Test RB = RB50#0



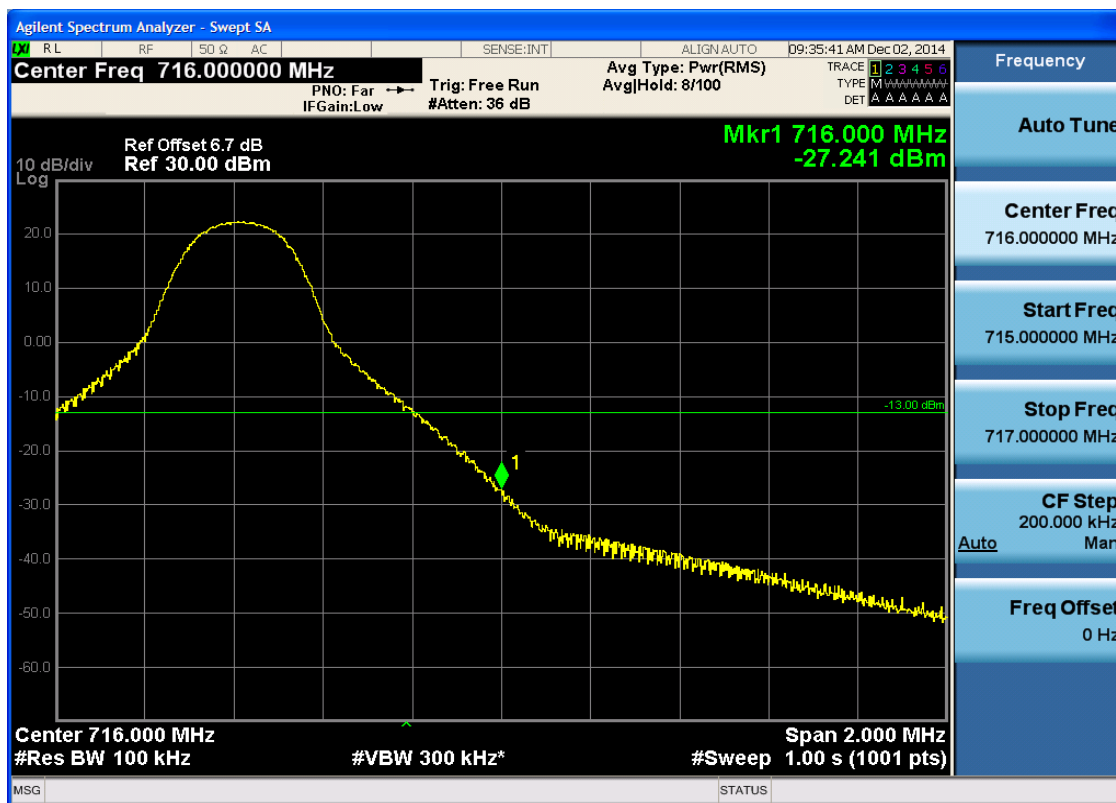


5.1.4.1 .4.2.1 Test RB = RB1#0



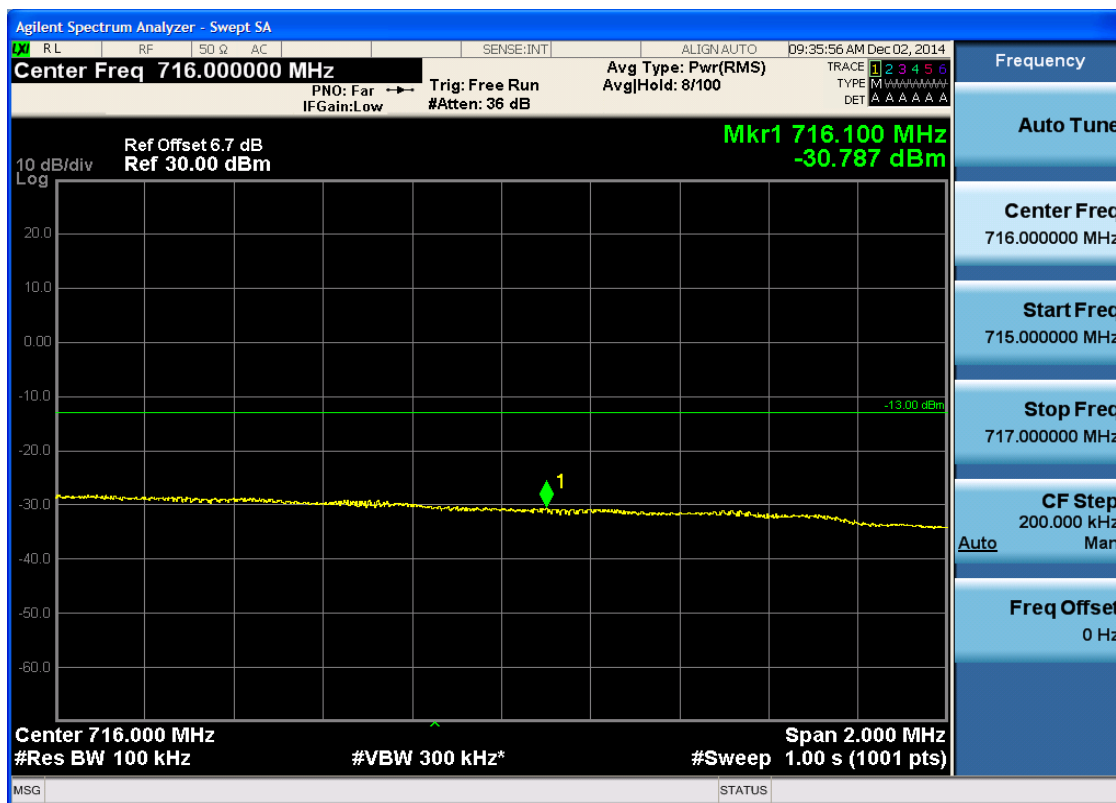


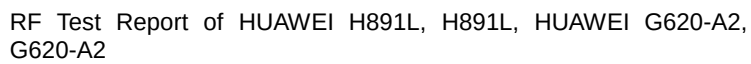
5.1.4.1 .4.2.2 Test RB = RB1#49





5.1.4.1 .4.2.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

☒ R L RF 50 Ω AC SENSE:INT ALIGN:AUTO 09:36:10 AM Dec 02, 2014

Center Freq 716.000000 MHz PNO: Far $\rightarrow$ Trig: Free Run Avg Type: Pwr(RMS) TRACE 1 2 3 4 5 6
 IF Gain: Low #Atten: 36 dB Avg/Hold: 8/100 TYPE [MANUAL] DET A A A A A A

Ref Offset 6.7 dB Mkr1 716.010 MHz
 Ref 30.00 dBm -27.870 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 Man
 Freq Offset
 0 Hz

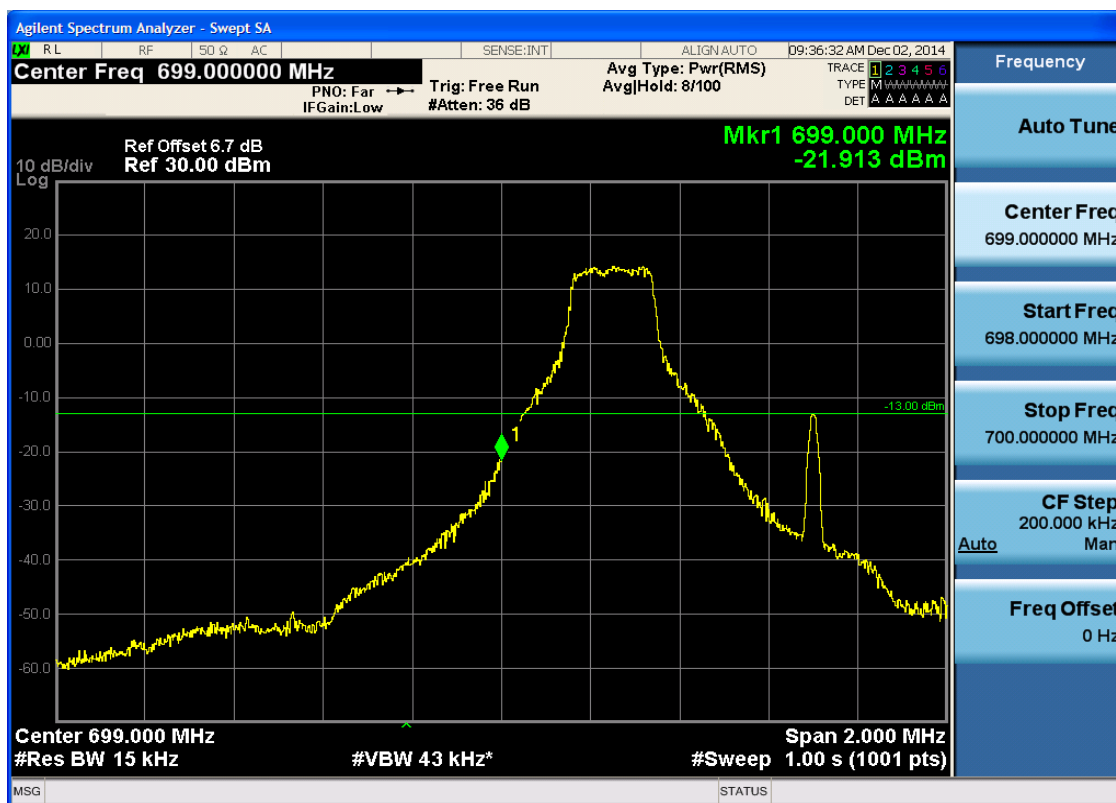


5.1.4.2 Test Mode = LTE/TM2

5.1.4.2.1 Test Bandwidth = 1.4

5.1.4.2.1.1 Test Channel = LCH

5.1.4.2.1.1.1 Test RB = RB1#0

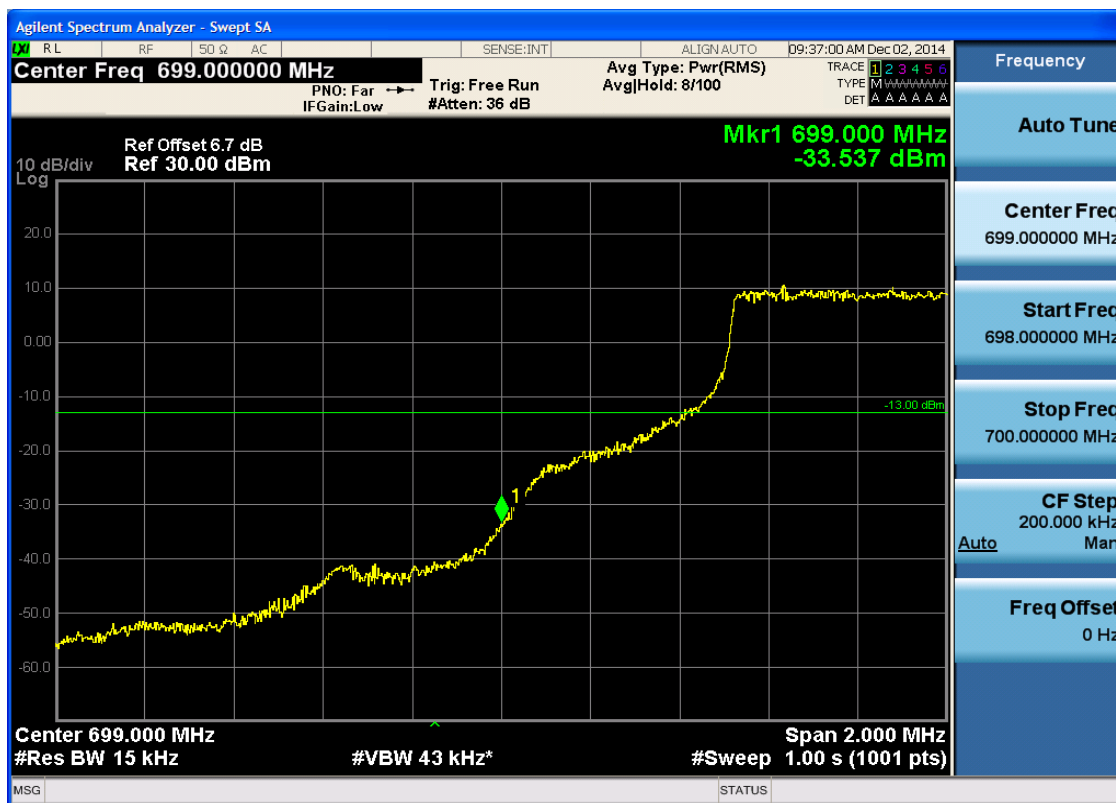


5.1.4.2.1.1.2 Test RB = RB1#5



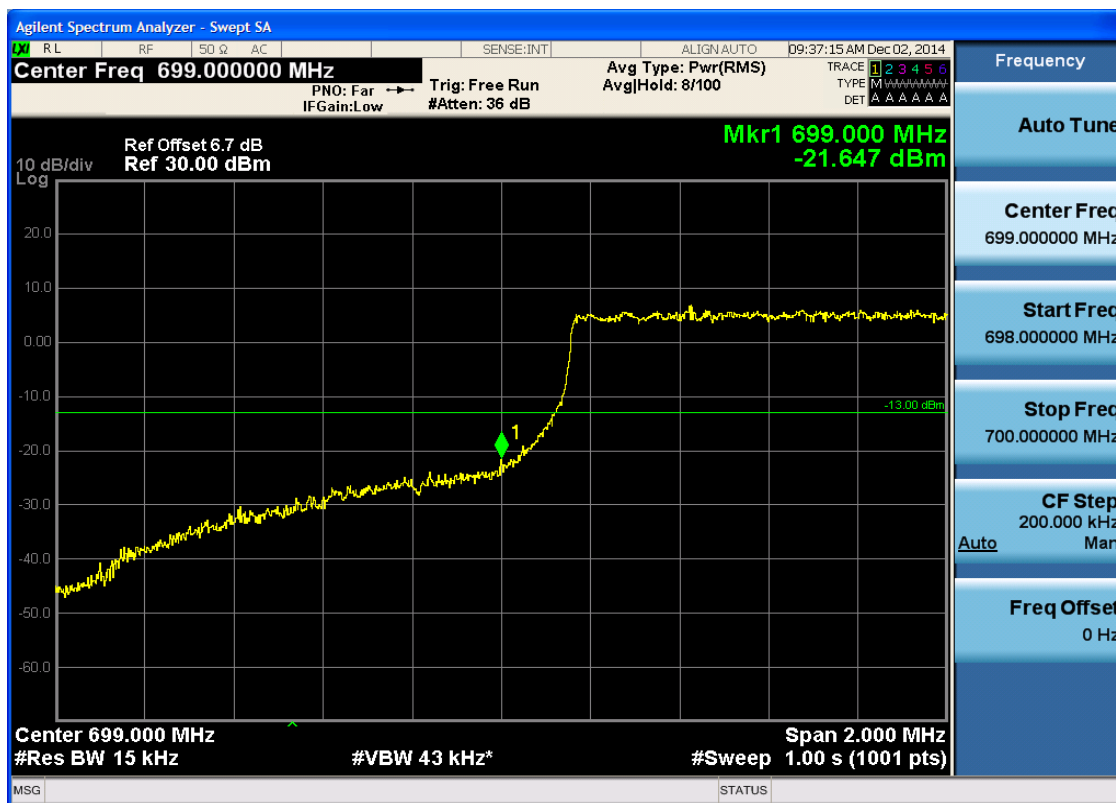


5.1.4.2.1.1.3 Test RB = RB3#2





5.1.4.2.1.1.4 Test RB = RB6#0





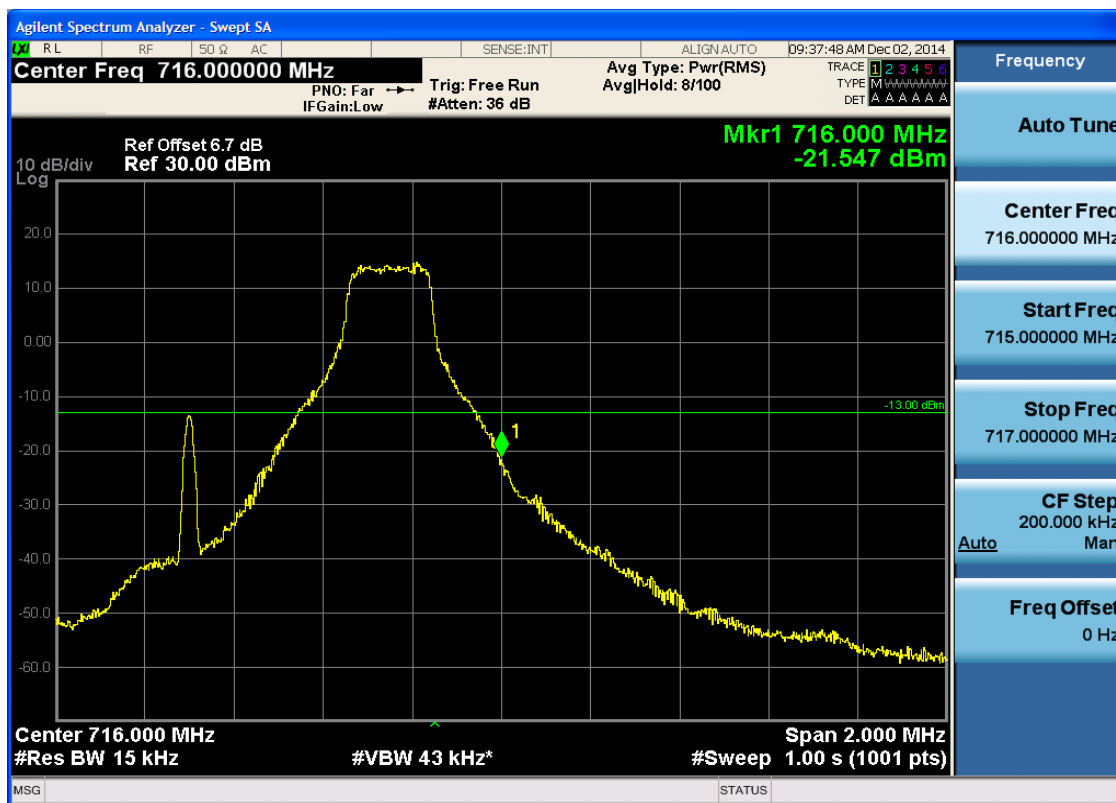
5.1.4.2.1.2 Test Channel = HCH

5.1.4.2.1.2.1 Test RB = RB1#0





5.1.4.2.1.2.2 Test RB = RB1#5





5.1.4.2.1.2.3 Test RB = RB3#2





5.1.4.2.1.2.4 Test RB = RB6#0

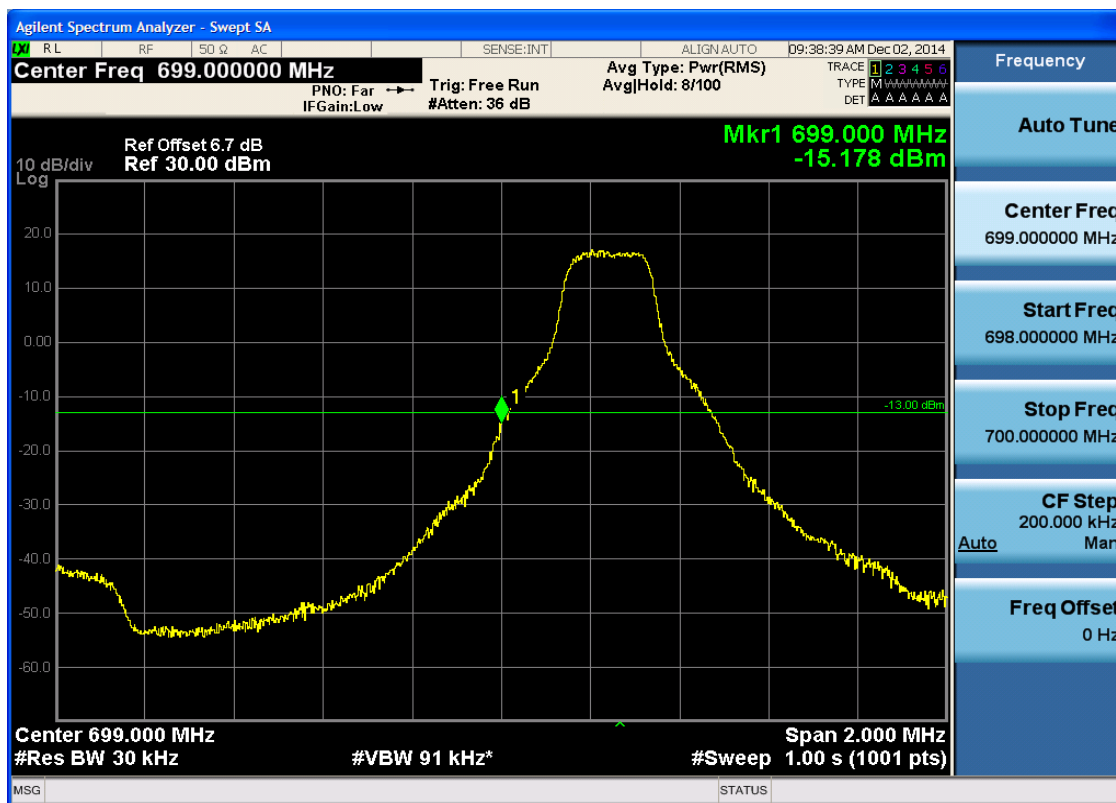




5.1.4.2.2 Test Bandwidth = 3

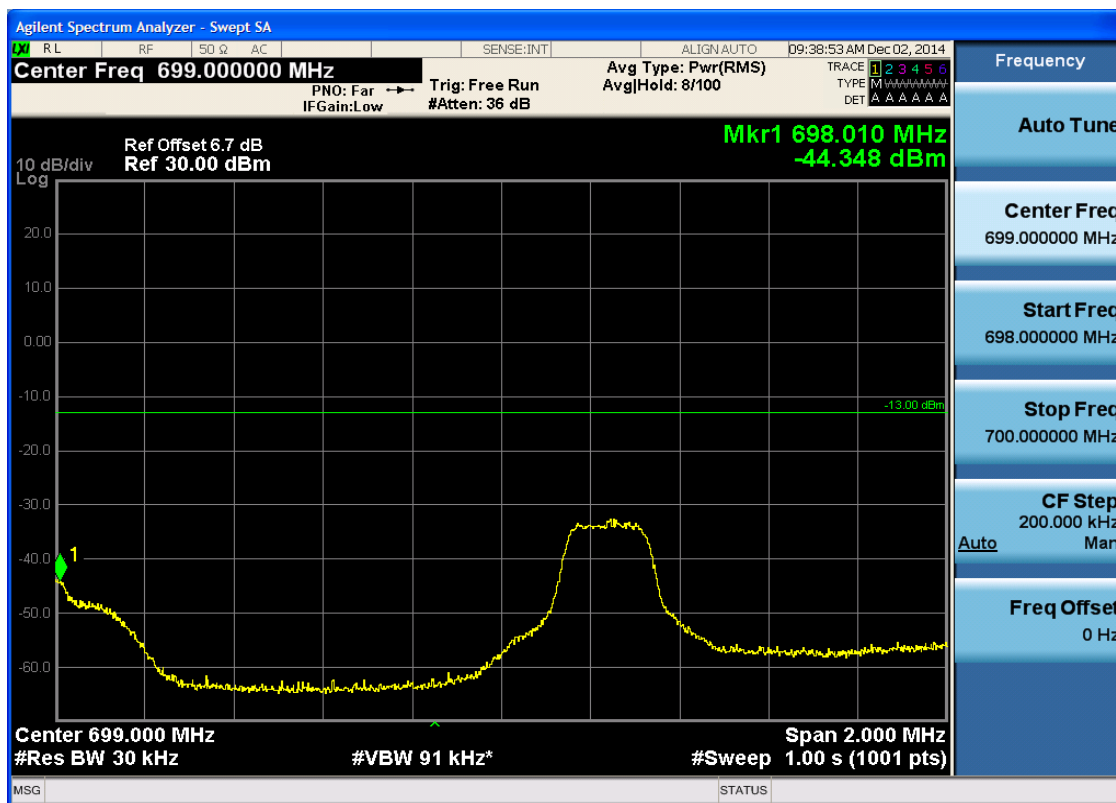
5.1.4.2.2.1 Test Channel = LCH

5.1.4.2.2.1.1 Test RB = RB1#0



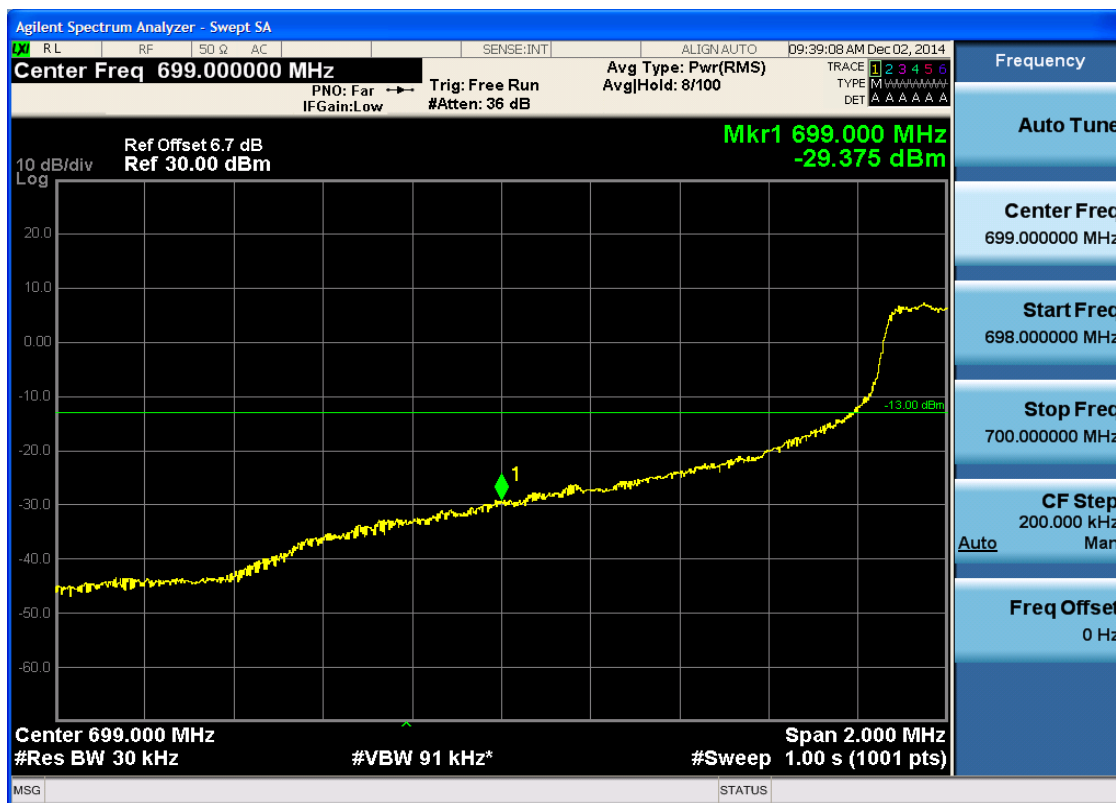


5.1.4.2.2.1.2 Test RB = RB1#14



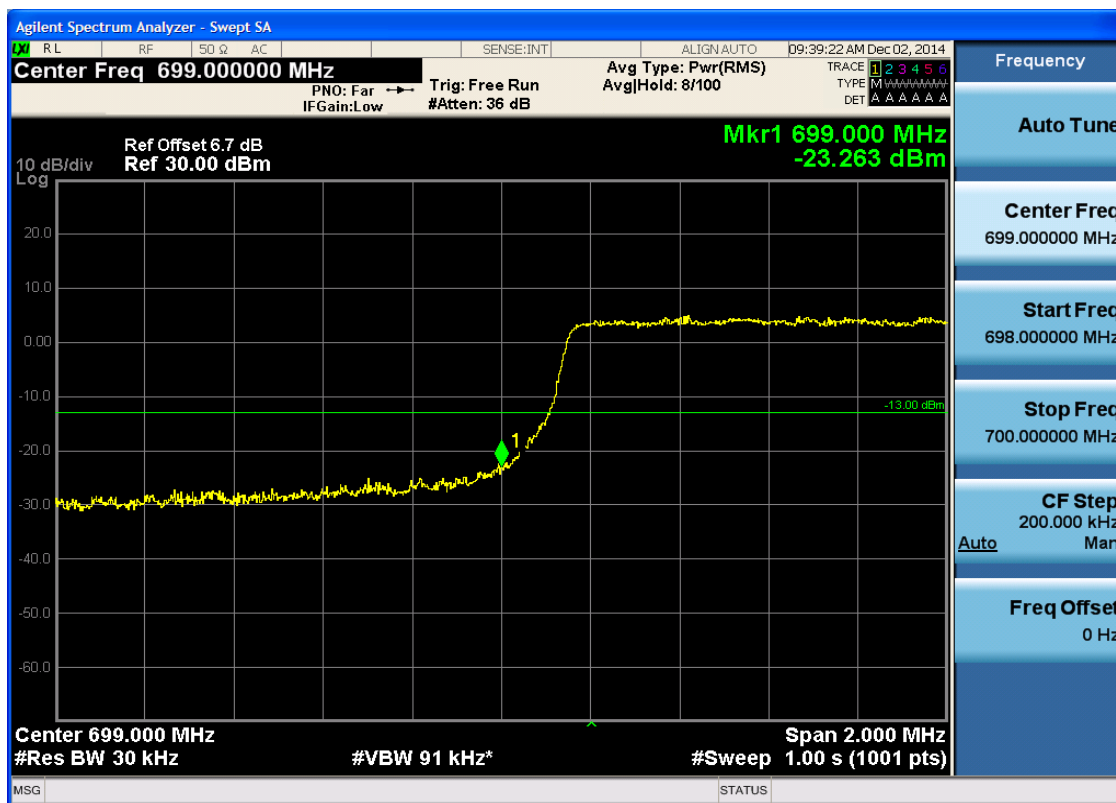


5.1.4.2.2.1.3 Test RB = RB8#4





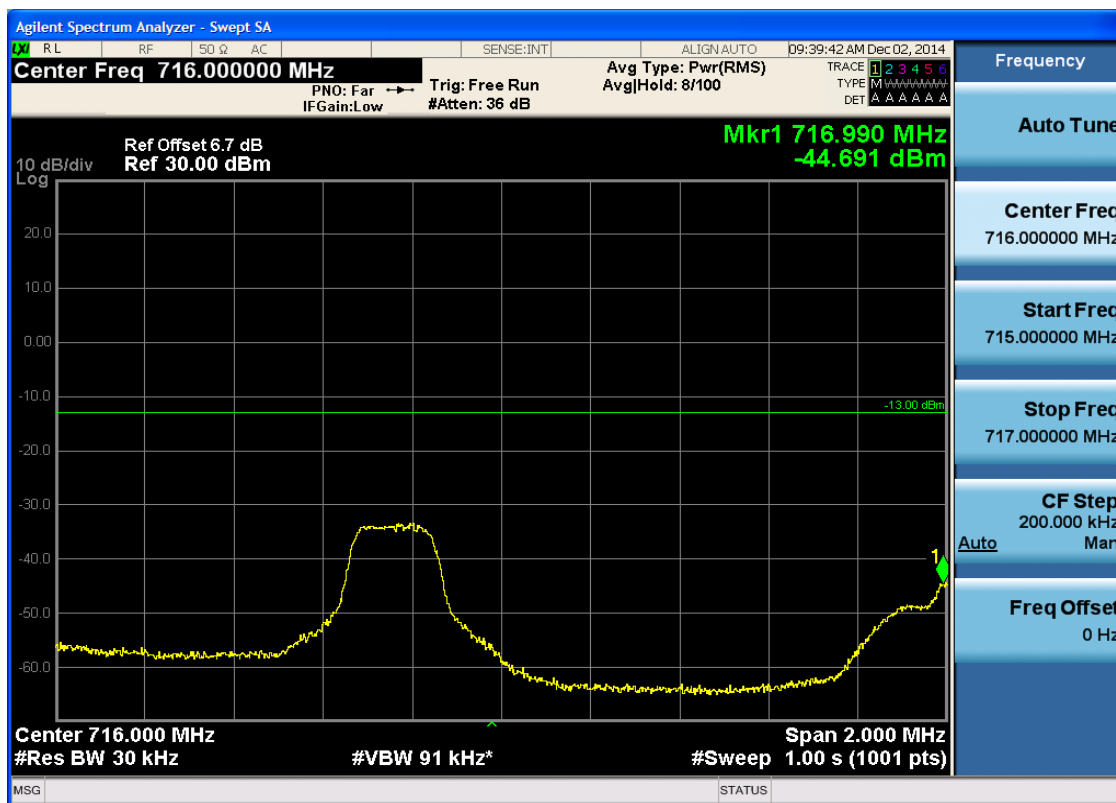
5.1.4.2.2.1.4 Test RB = RB15#0





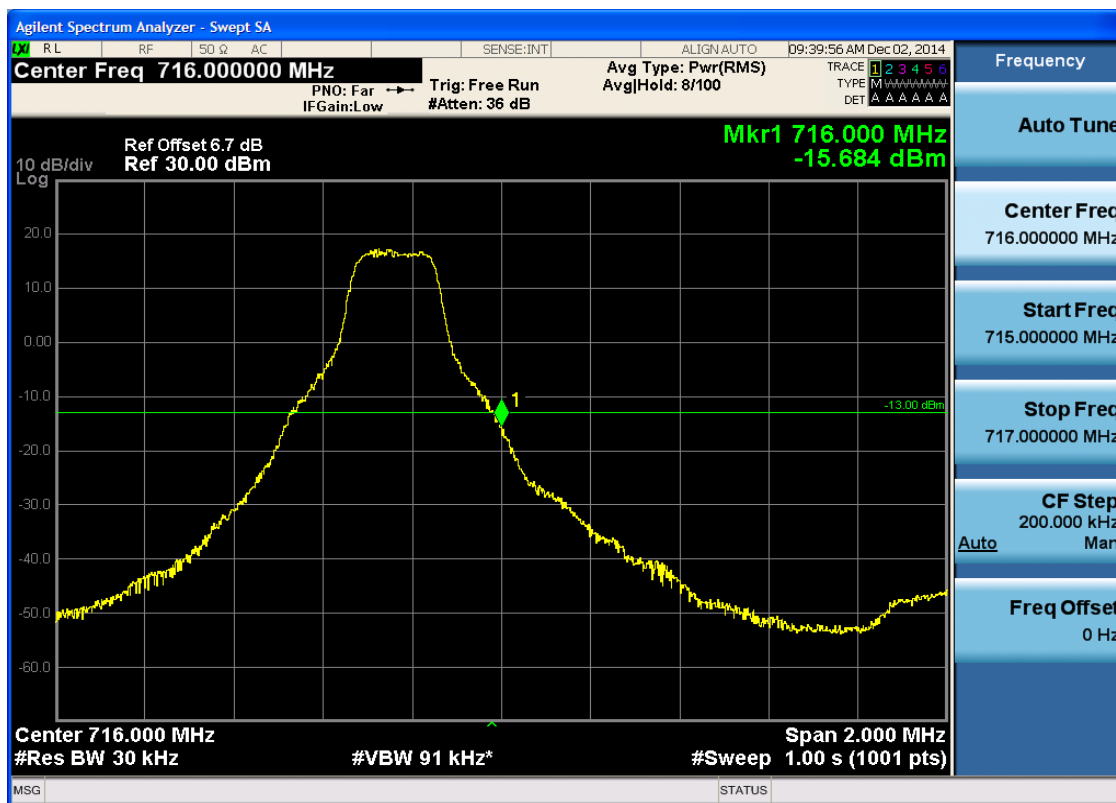
5.1.4.2.2.2 Test Channel = HCH

5.1.4.2.2.2.1 Test RB = RB1#0



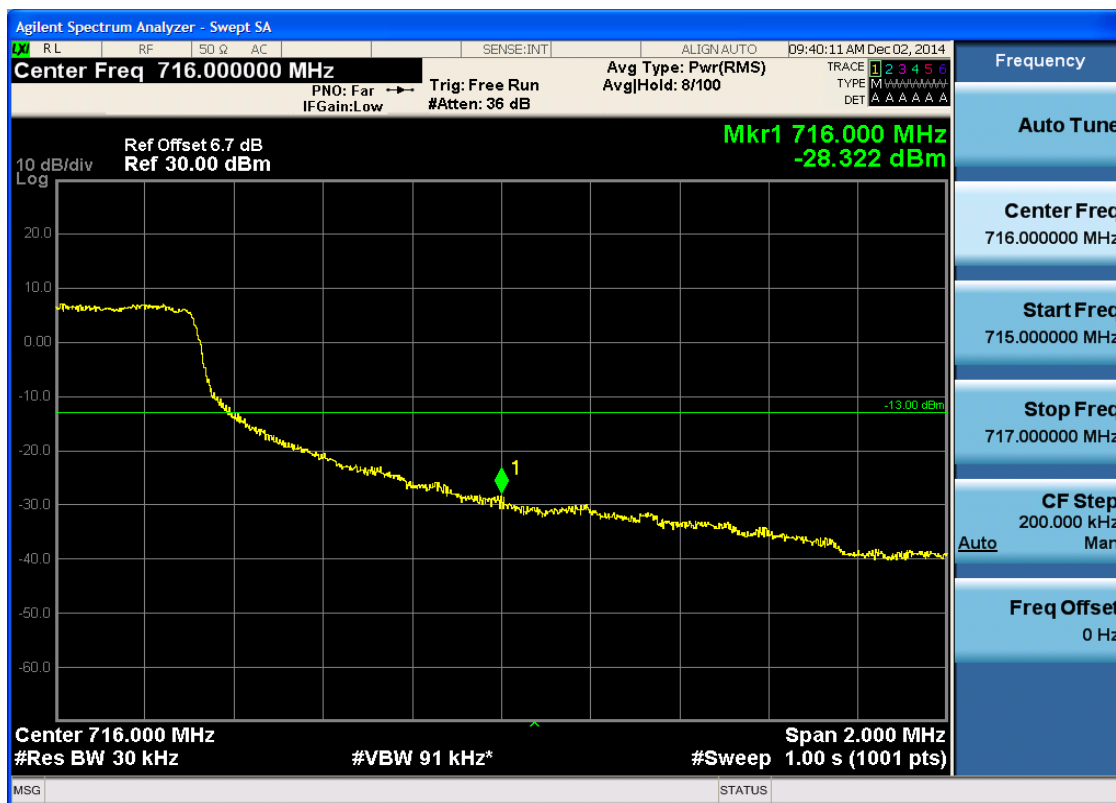


5.1.4.2.2.2 Test RB = RB1#14



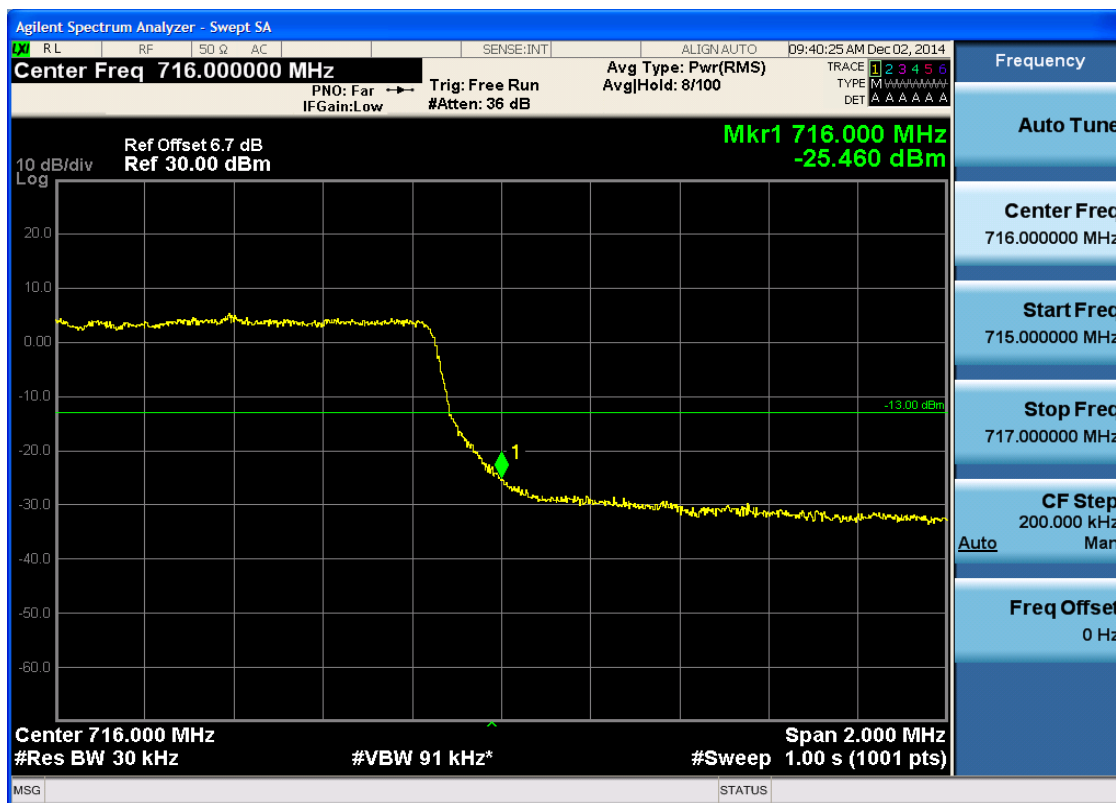


5.1.4.2.2.3 Test RB = RB8#4





5.1.4.2.2.4 Test RB = RB15#0

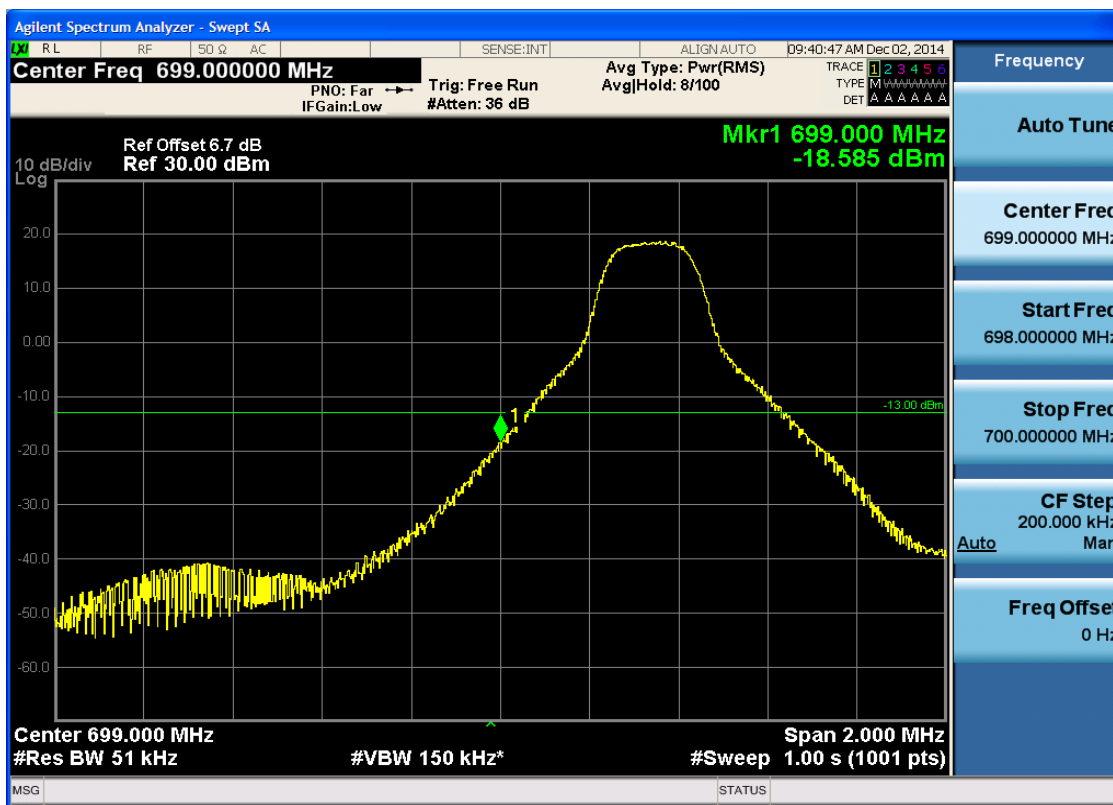




5.1.4.2.3 Test Bandwidth = 5

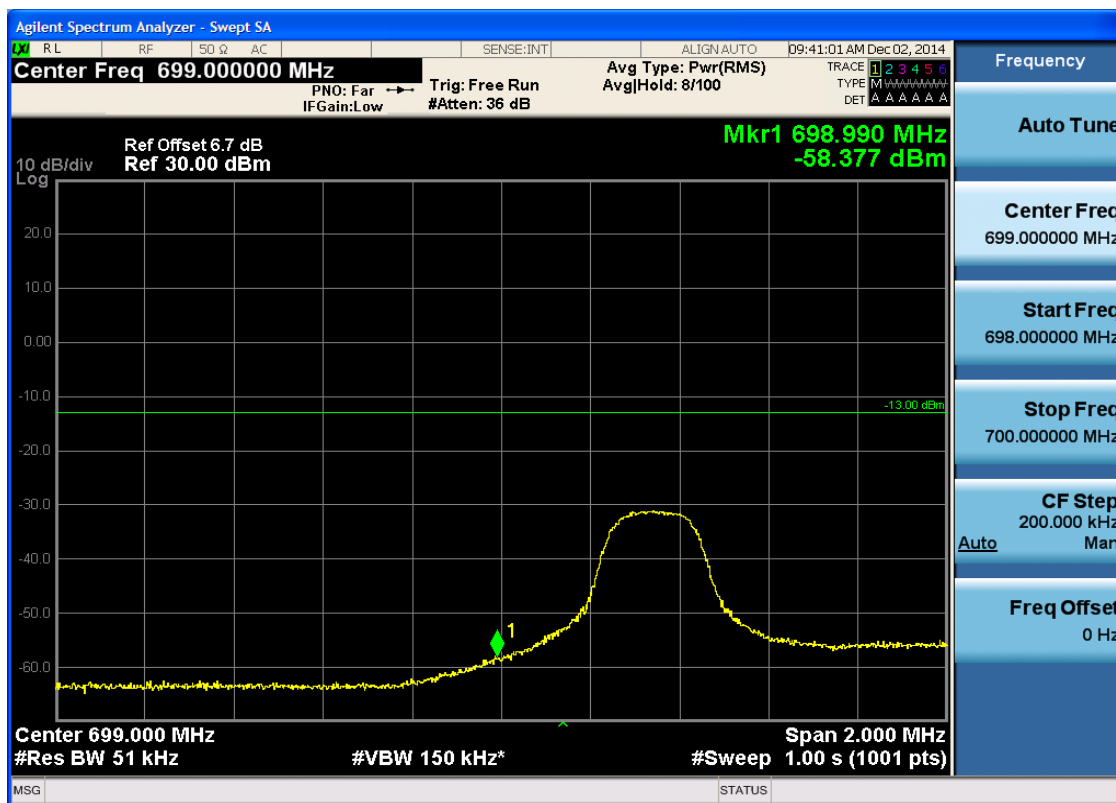
5.1.4.2.3.1 Test Channel = LCH

5.1.4.2.3.1.1 Test RB = RB1#0



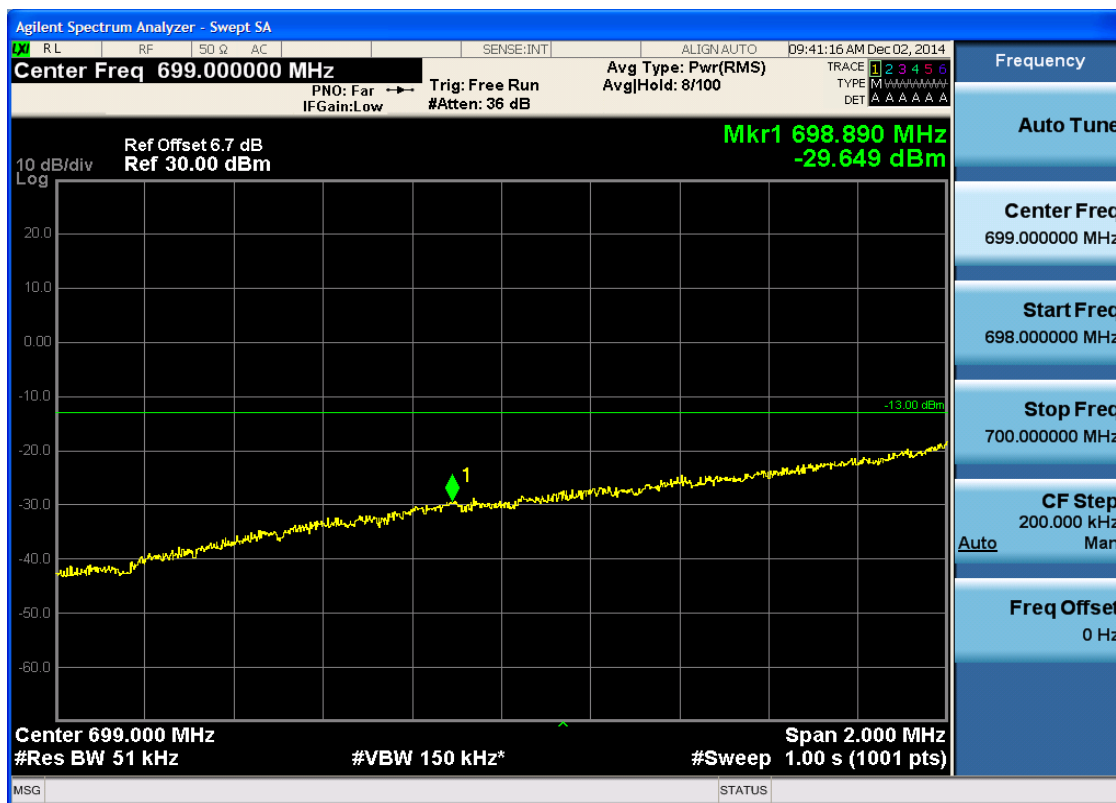


5.1.4.2.3.1.2 Test RB = RB1#24



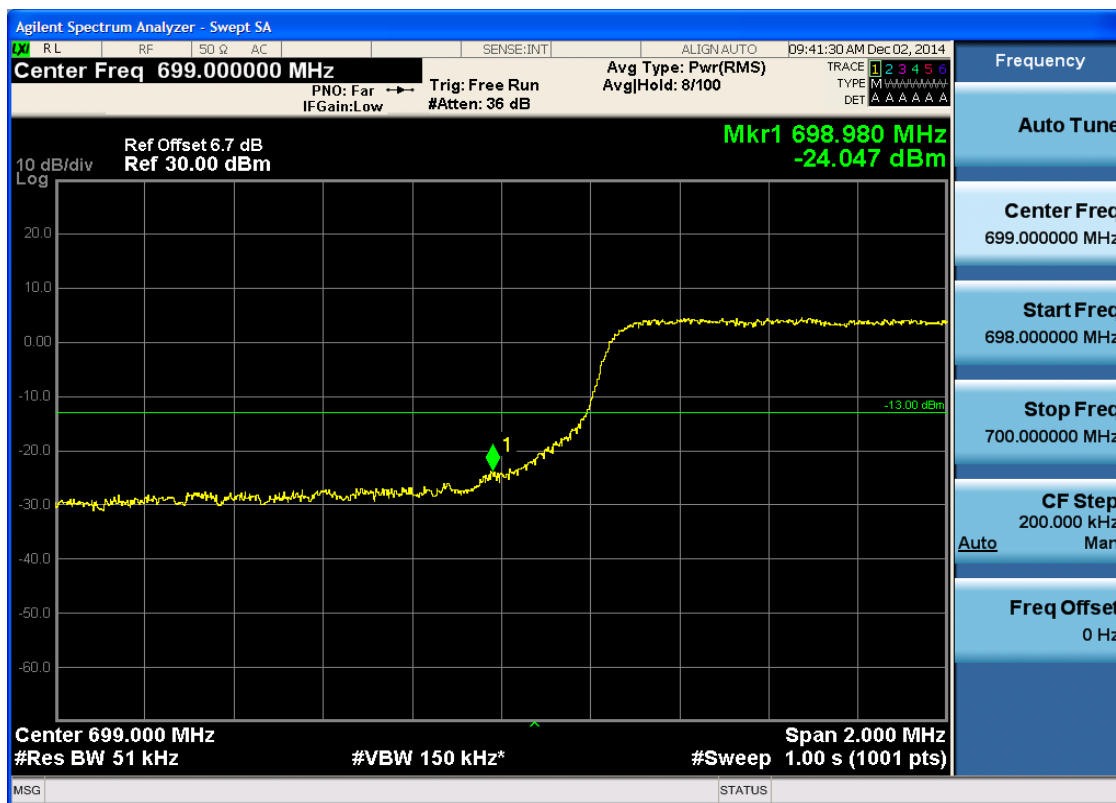


5.1.4.2.3.1.3 Test RB = RB12#6





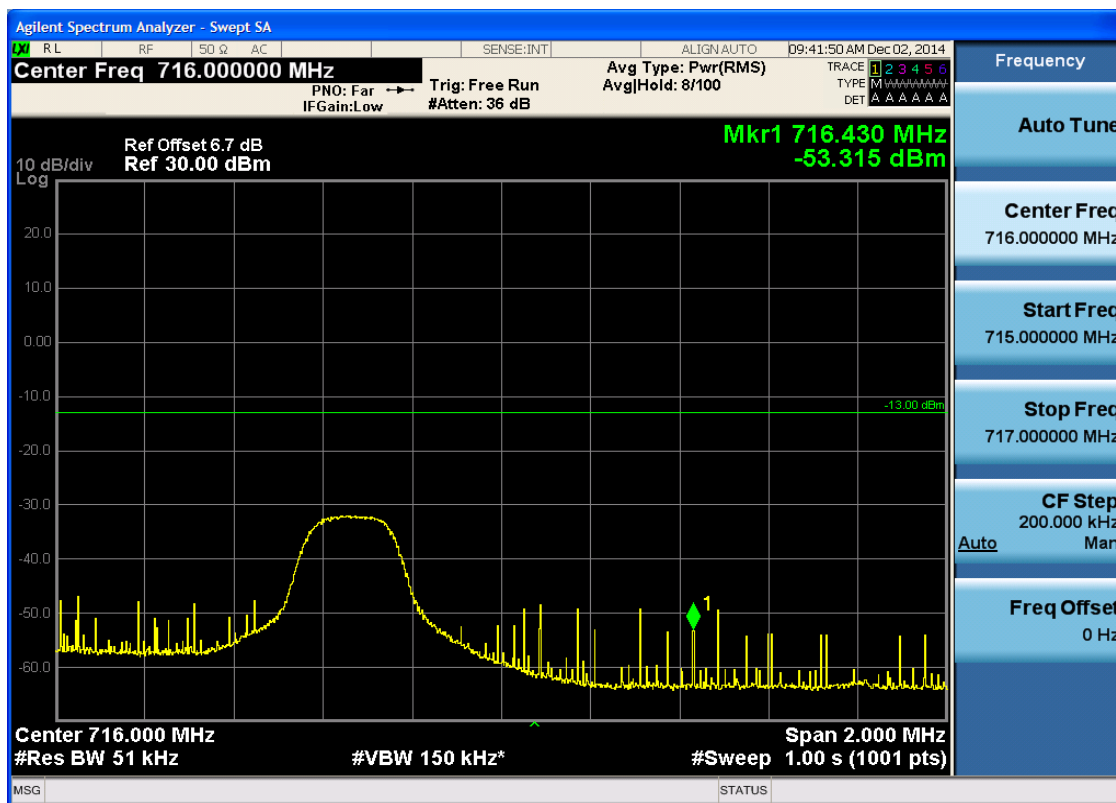
5.1.4.2.3.1.4 Test RB = RB25#0





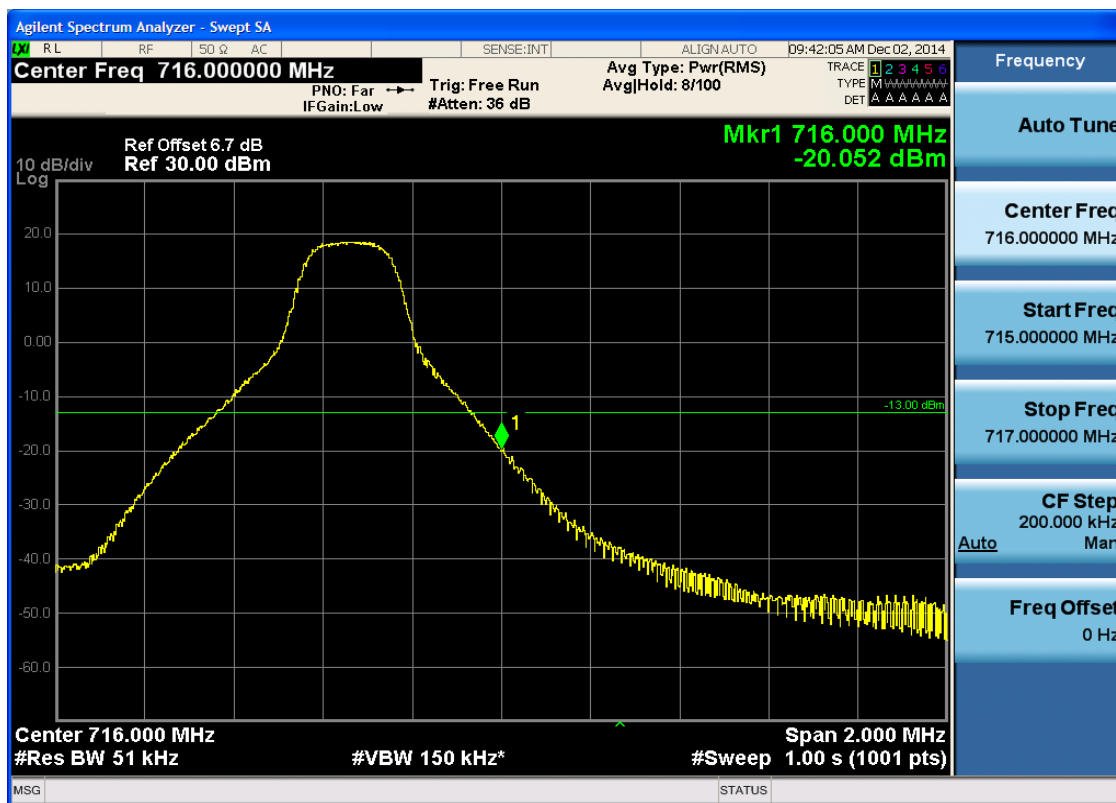
5.1.4.2.3.2 Test Channel = HCH

5.1.4.2.3.2.1 Test RB = RB1#0





5.1.4.2.3.2.2 Test RB = RB1#24





5.1.4.2.3.2.3 Test RB = RB12#6





5.1.4.2.3.2.4 Test RB = RB25#0

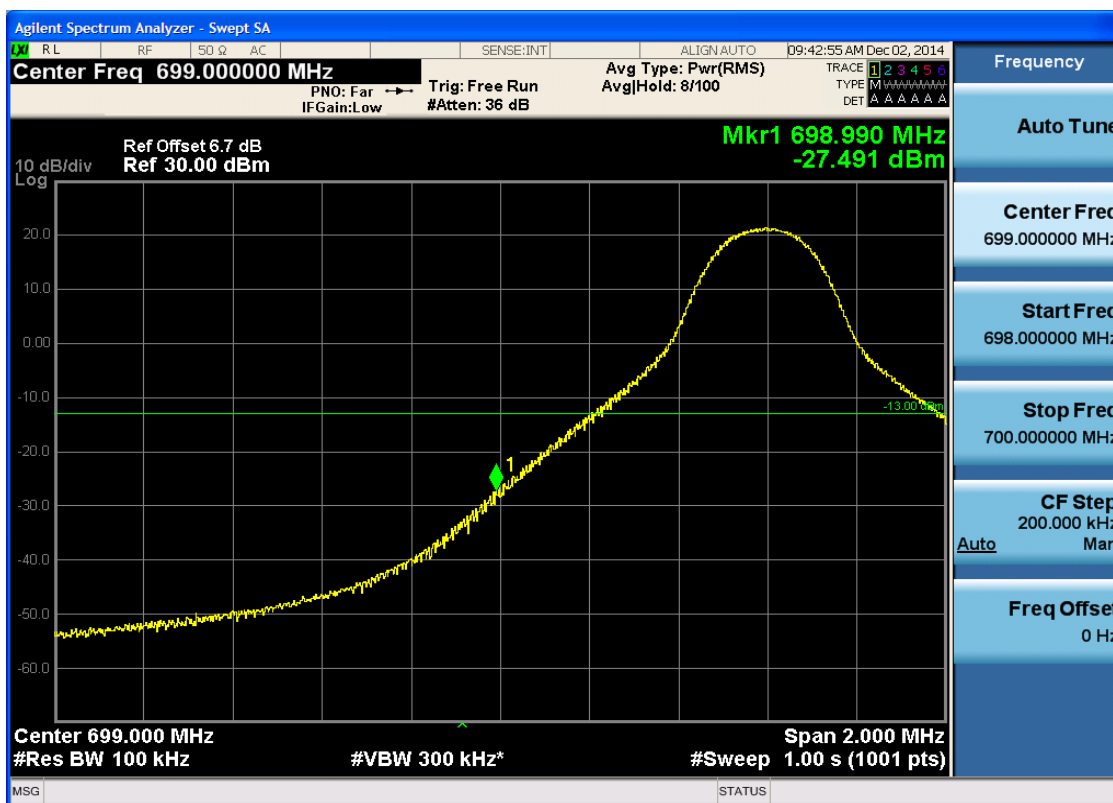




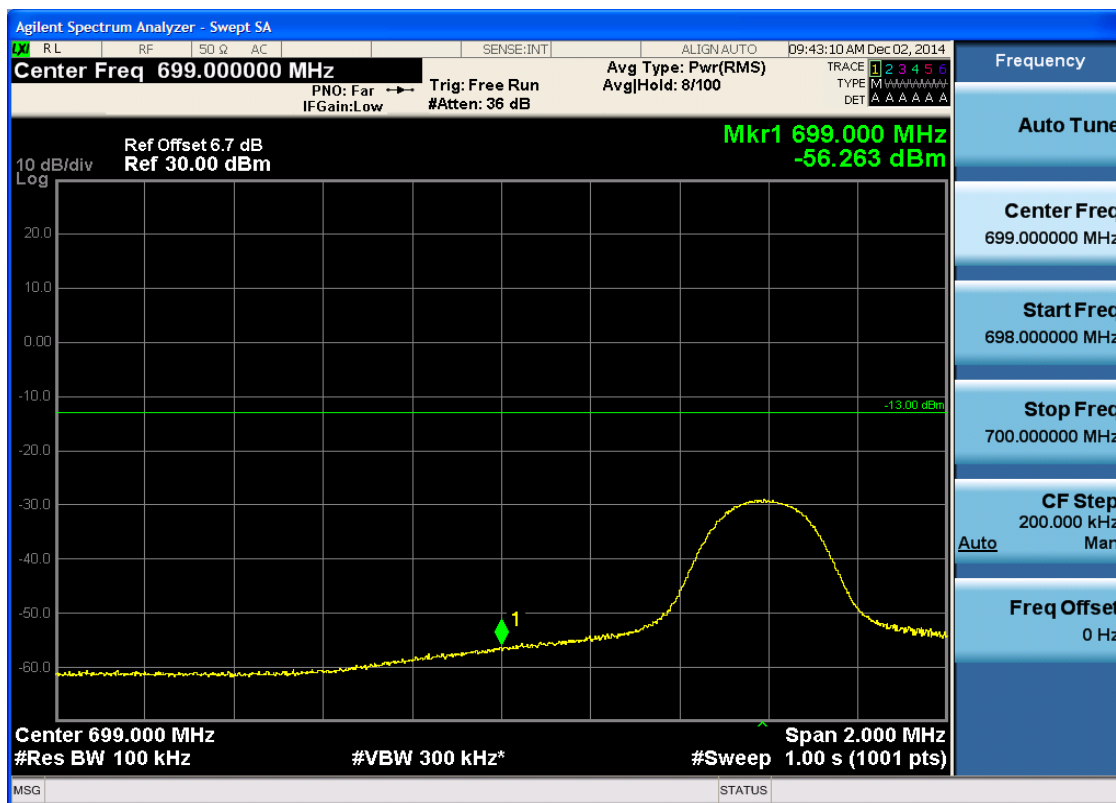
5.1.4.2.4 Test Bandwidth = 10

5.1.4.2.4.1 Test Channel = LCH

5.1.4.2.4.1.1 Test RB = RB1#0



5.1.4.2.4.1.2 Test RB = RB1#49





5.1.4.2.4.1.3 Test RB = RB25#13





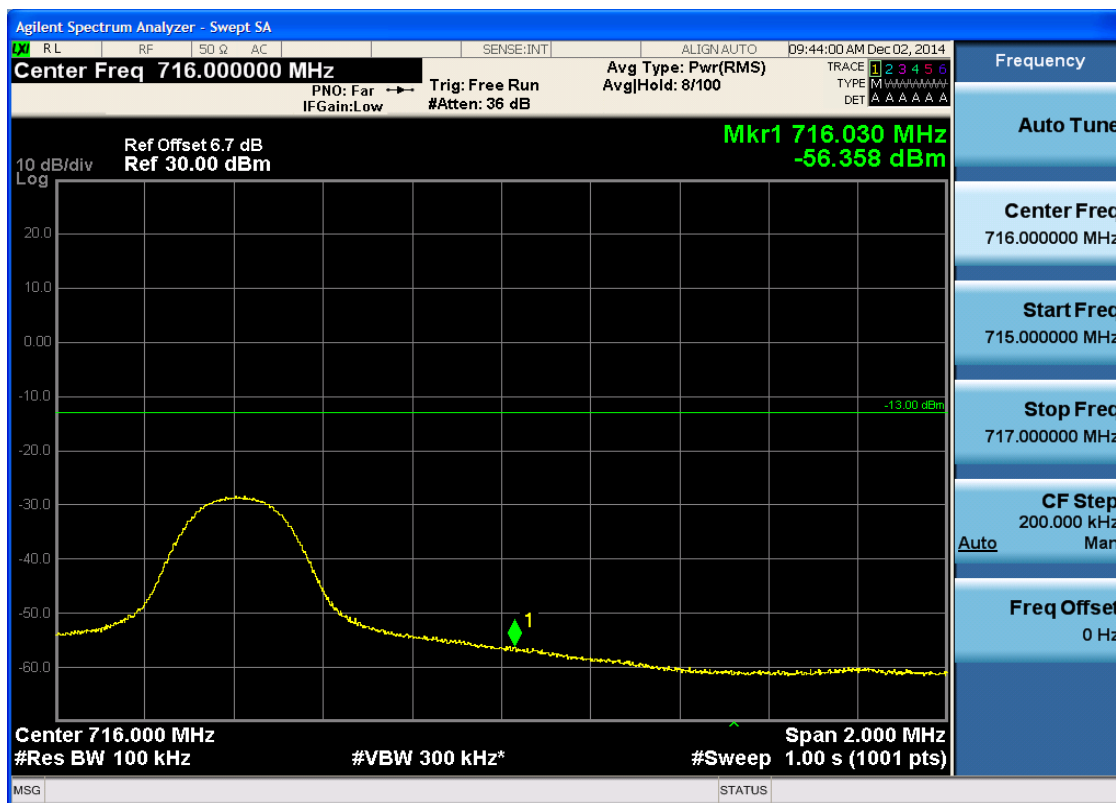
5.1.4.2.4.1.4 Test RB = RB50#0





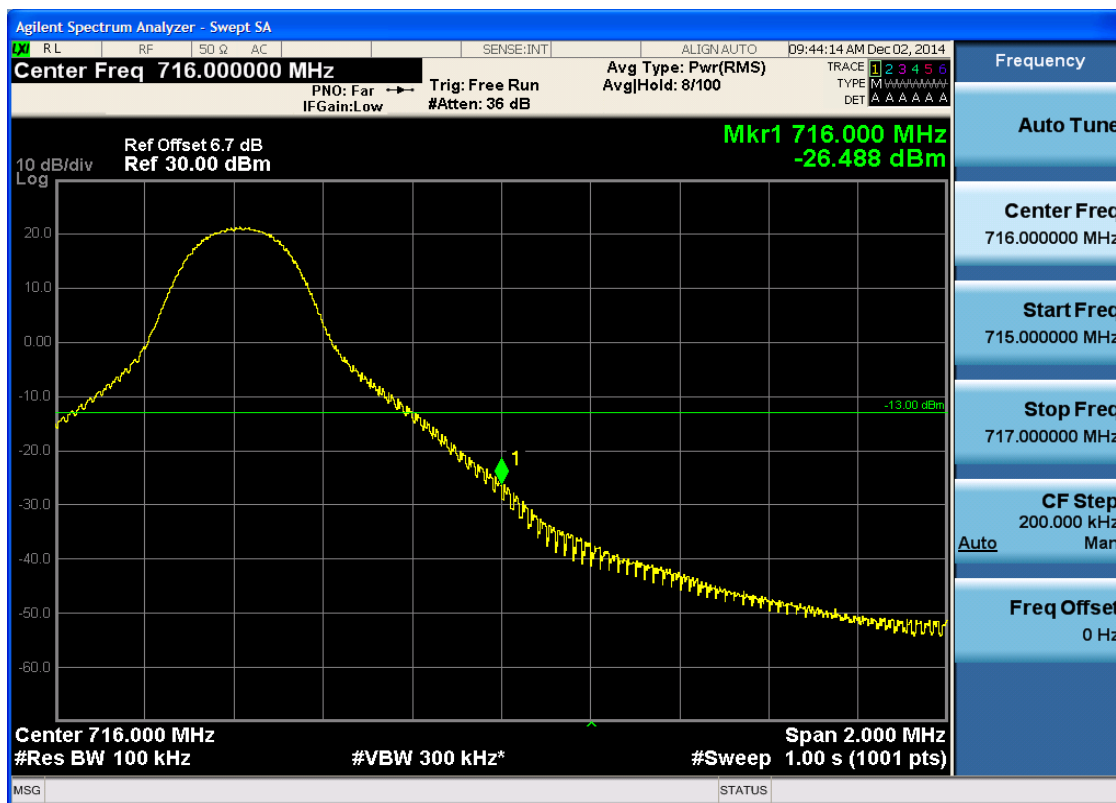
5.1.4.2.4.2 Test Channel = HCH

5.1.4.2.4.2.1 Test RB = RB1#0



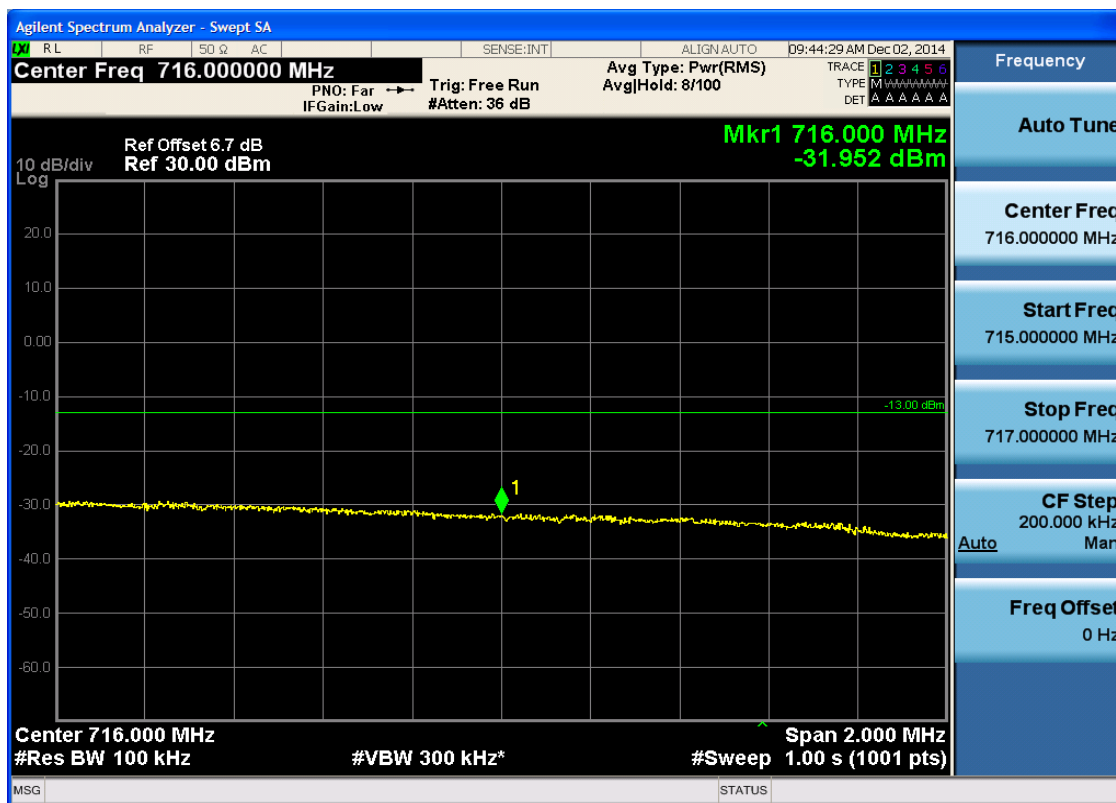


5.1.4.2.4.2.2 Test RB = RB1#49





5.1.4.2.4.2.3 Test RB = RB25#13





5.1.4.2.4.2.4 Test RB = RB50#0





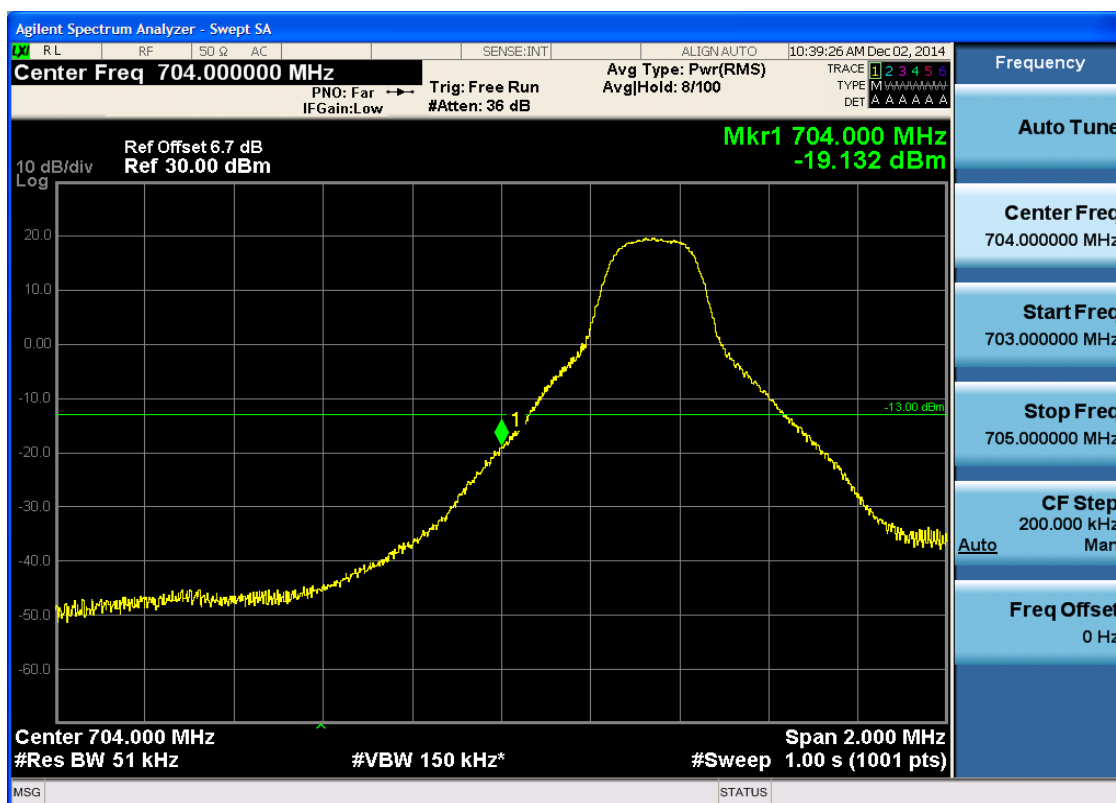
5.1.5 Test Band = BAND17

5.1.5.1 Test Mode = LTE/TM1

5.1.5.1.3 Test Bandwidth = 5

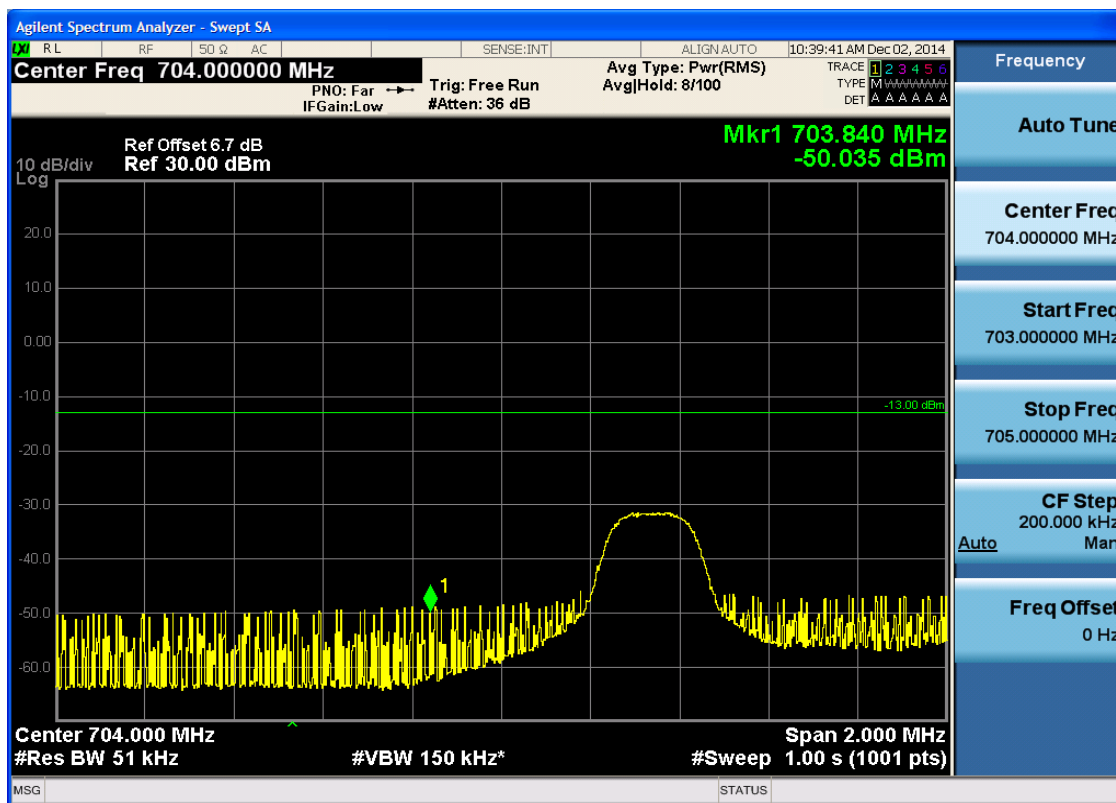
5.1.5.1.3.1 Test Channel = LCH

5.1.5.1.3.1.1 Test RB = RB1#0



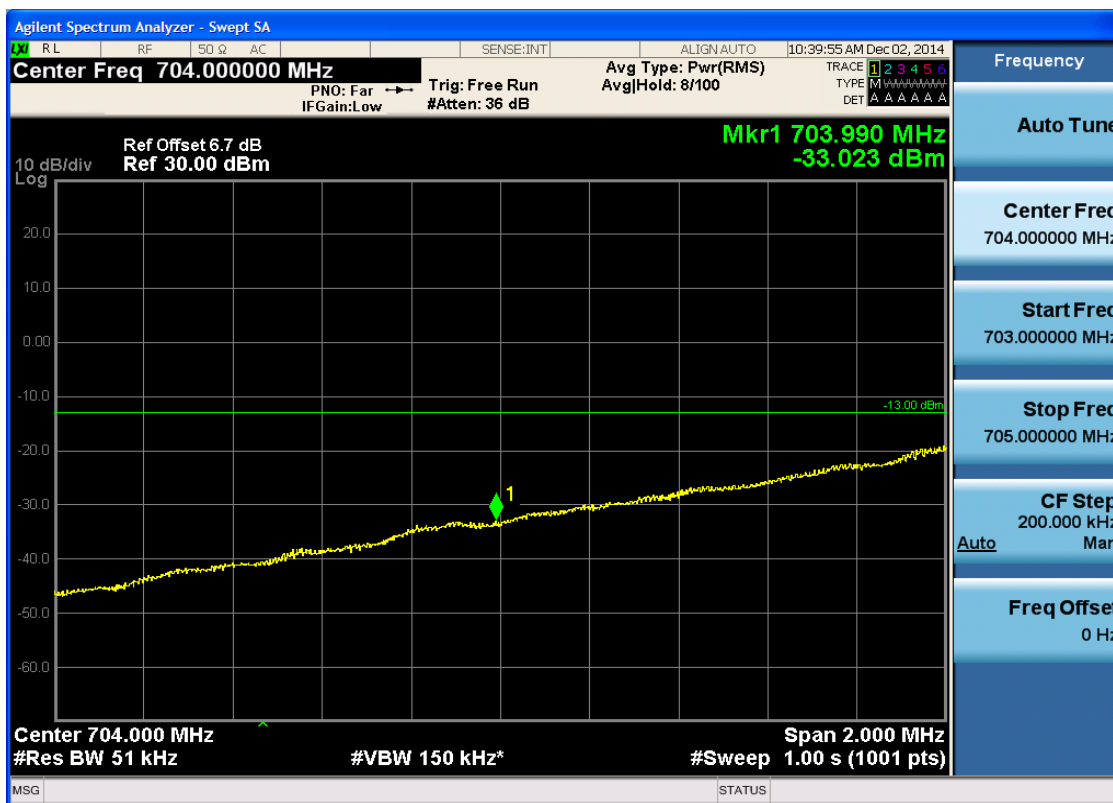


5.1.5.1 .3.1.2 Test RB = RB1#24

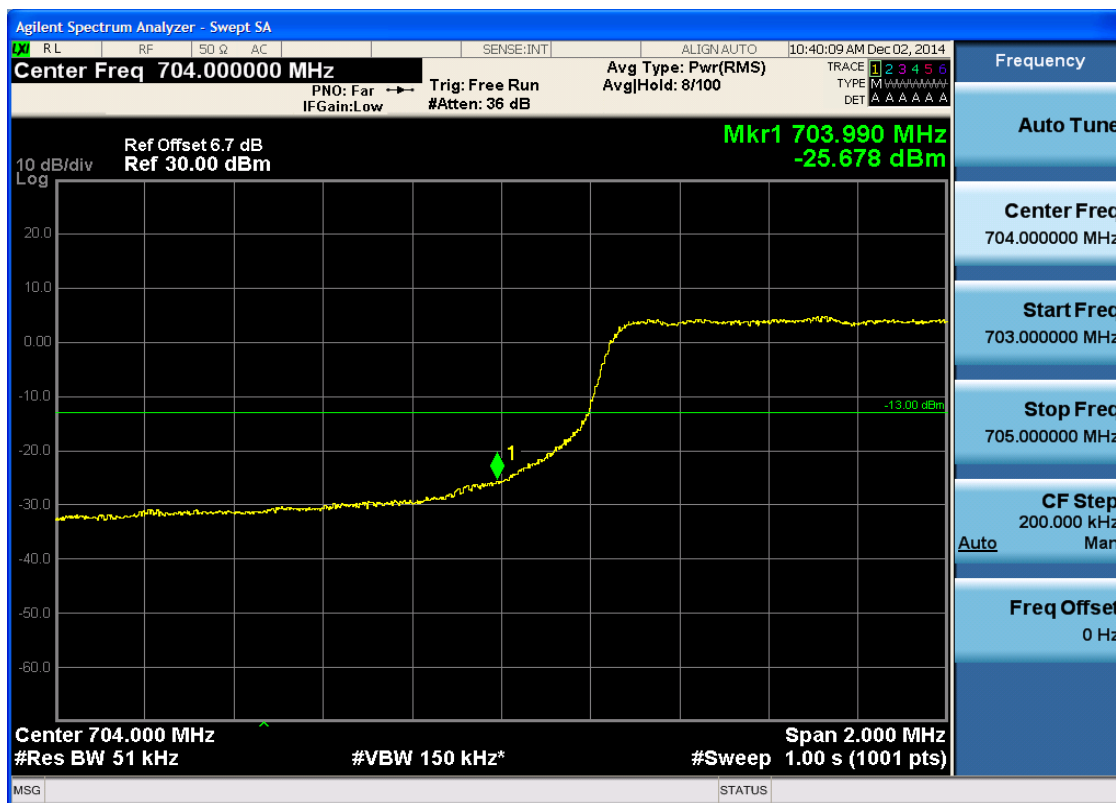




5.1.5.1 .3.1.3 Test RB = RB12#6



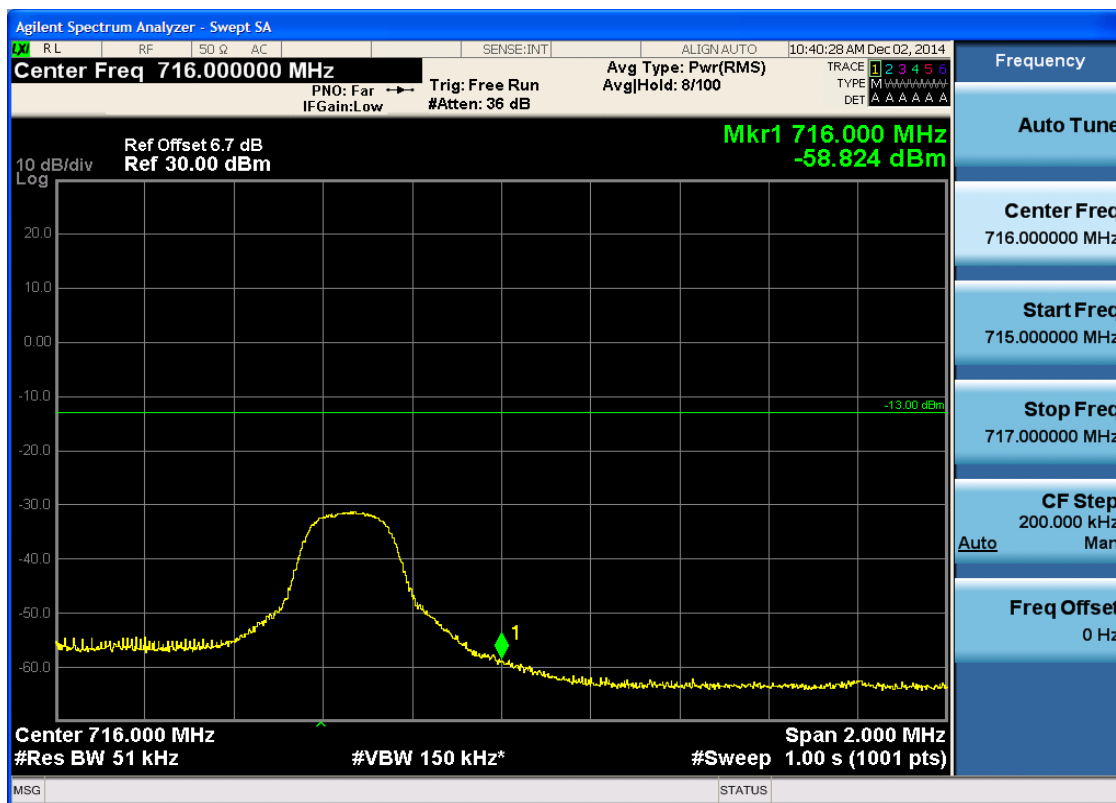
5.1.5.1 .3.1.4 Test RB = RB25#0





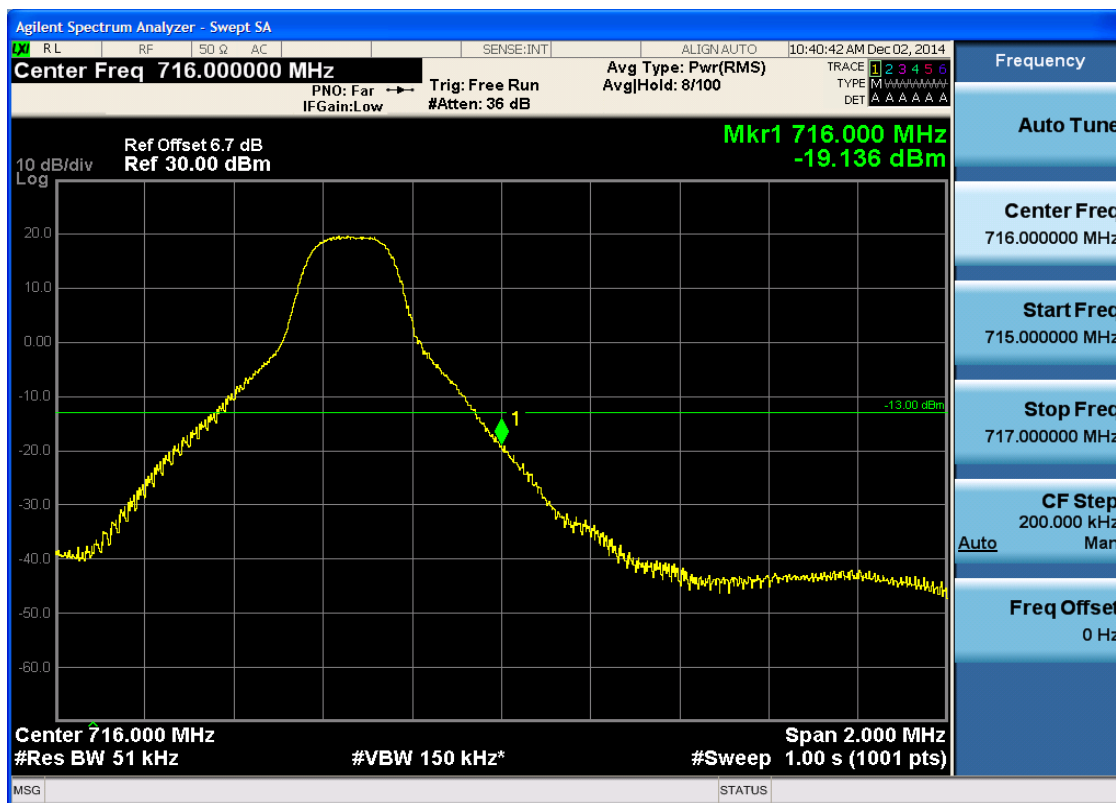
5.1.5.1 .3.2 Test Channel = HCH

5.1.5.1 .3.2.1 Test RB = RB1#0





5.1.5.1 .3.2.2 Test RB = RB1#24



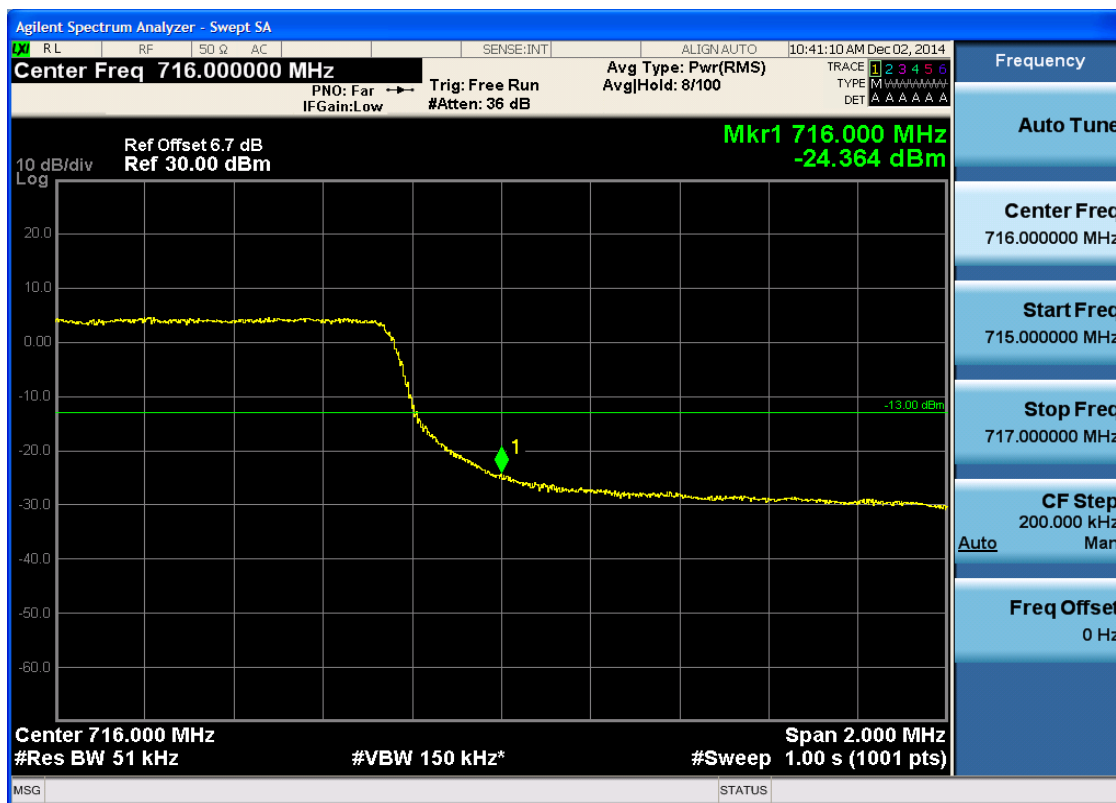


5.1.5.1 .3.2.3 Test RB = RB12#6





5.1.5.1 .3.2.4 Test RB = RB25#0

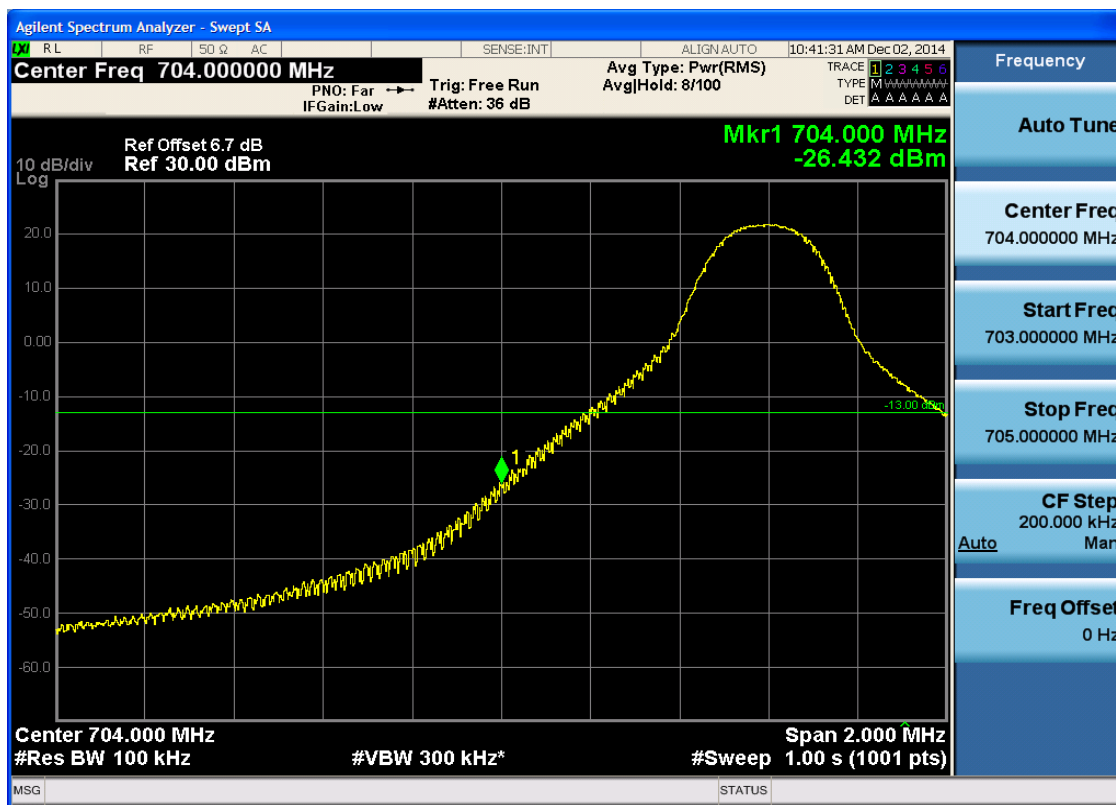




5.1.5.1 .4 Test Bandwidth = 10

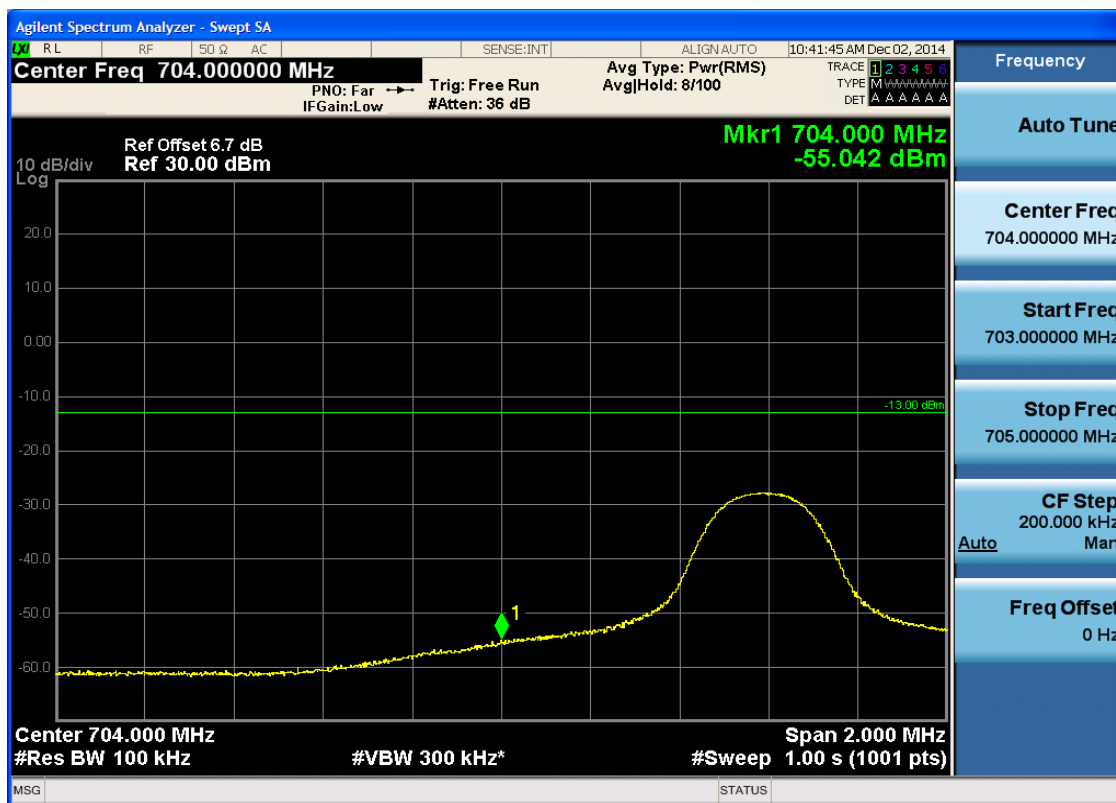
5.1.5.1 .4.1 Test Channel = LCH

5.1.5.1 .4.1.1 Test RB = RB1#0





5.1.5.1 .4.1.2 Test RB = RB1#49



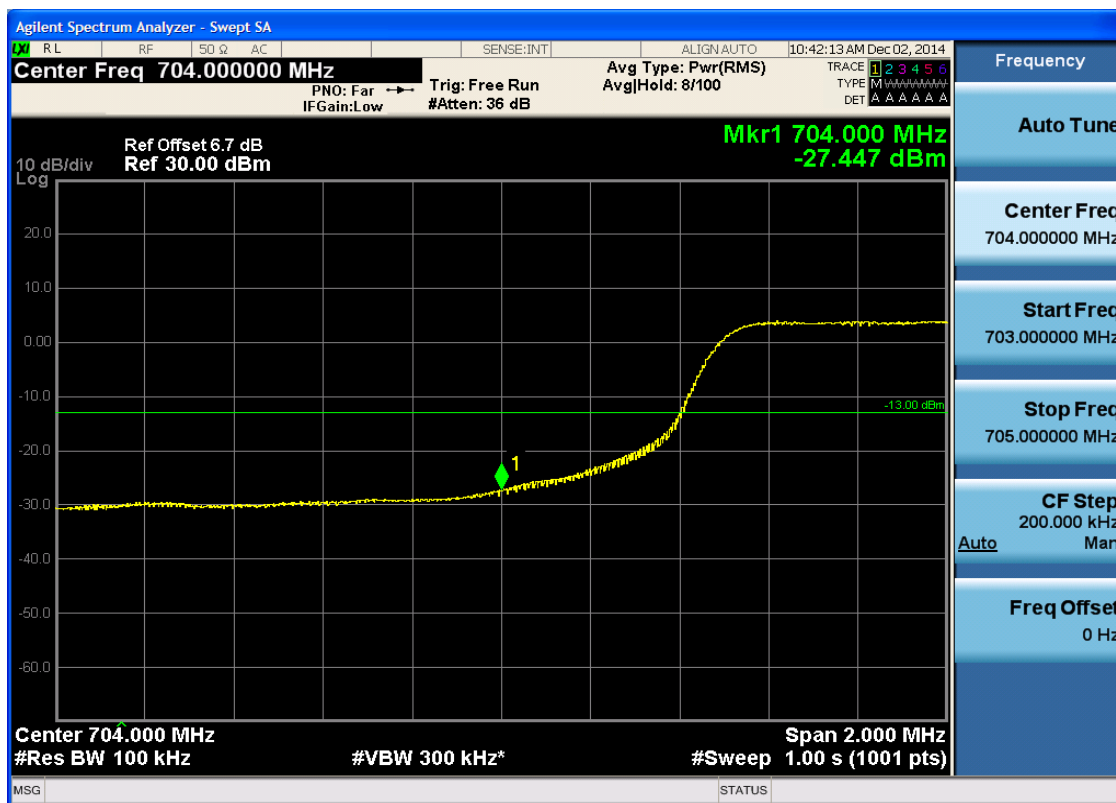


5.1.5.1 .4.1.3 Test RB = RB25#13





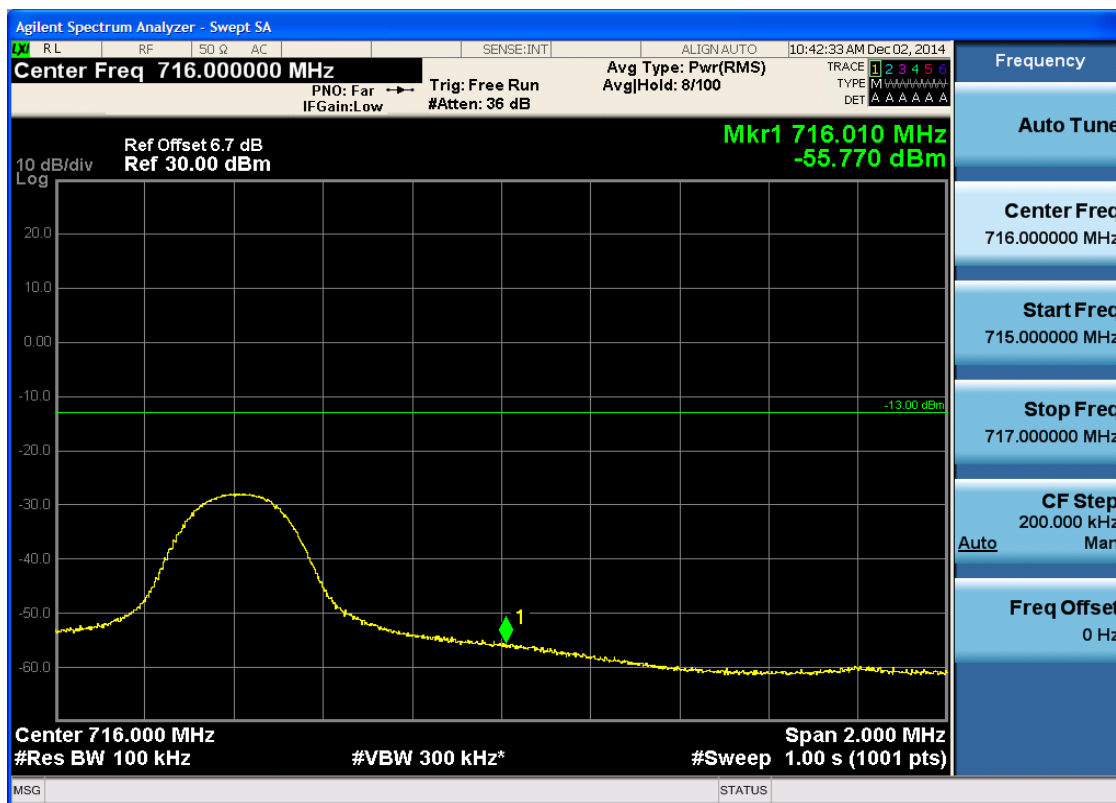
5.1.5.1 .4.1.4 Test RB = RB50#0

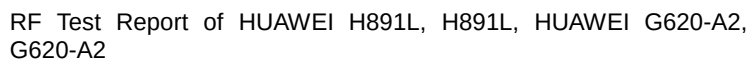




5.1.5.1 .4.2 Test Channel = HCH

5.1.5.1 .4.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT 10:42:46 AM Dec 02, 2014

Center Freq 716.000000 MHz Avg Type: Pwr(RMS) Avg/Hold: 8/100

PNO: Far → Trig: Free Run IF Gain: Low #Atten: 36 dB

TRACE 1 2 3 4 5 6 TYPE MAAAAA DET AAAAAA

Ref Offset 6.7 dB Mkr1 716.000 MHz
Ref 30.00 dBm -28.200 dBm

10 dB/div Log

Center Freq 716.000000 MHz

Start Freq 715.000000 MHz

Stop Freq 717.000000 MHz

CF Step 200.000 kHz

Auto Man

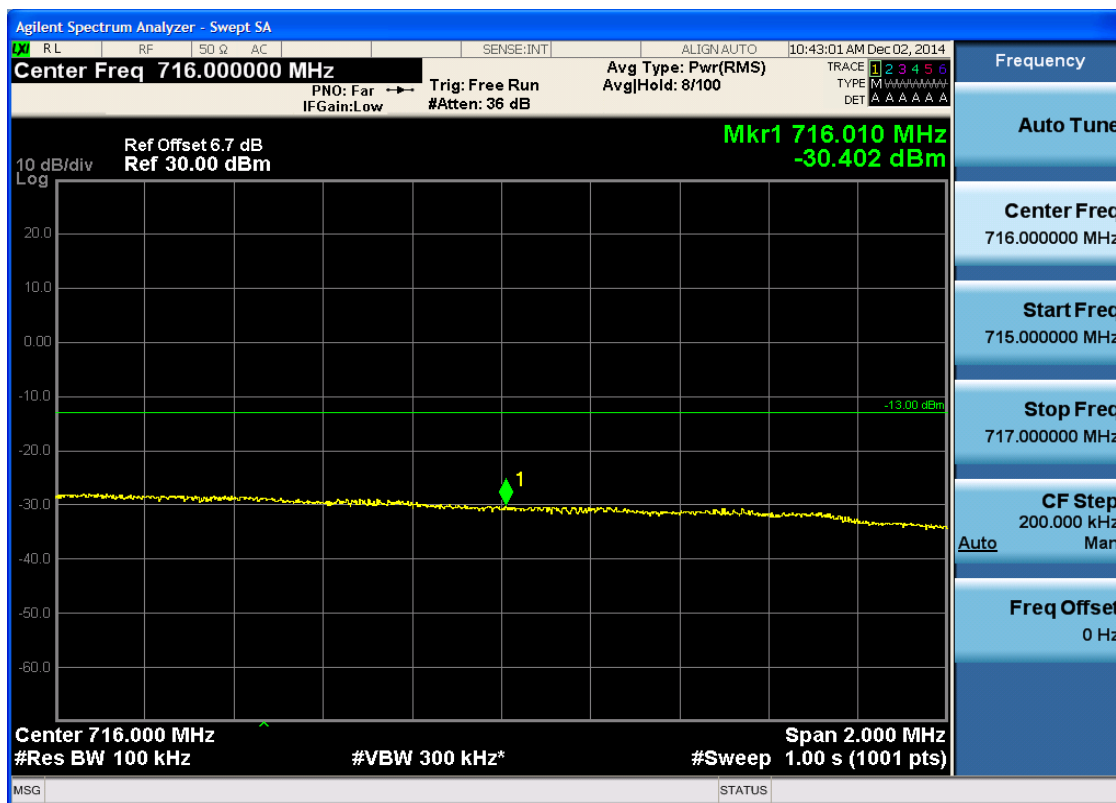
Freq Offset 0 Hz

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

MSG STATUS



5.1.5.1 .4.2.3 Test RB = RB25#13





5.1.5.1 .4.2.4 Test RB = RB50#0



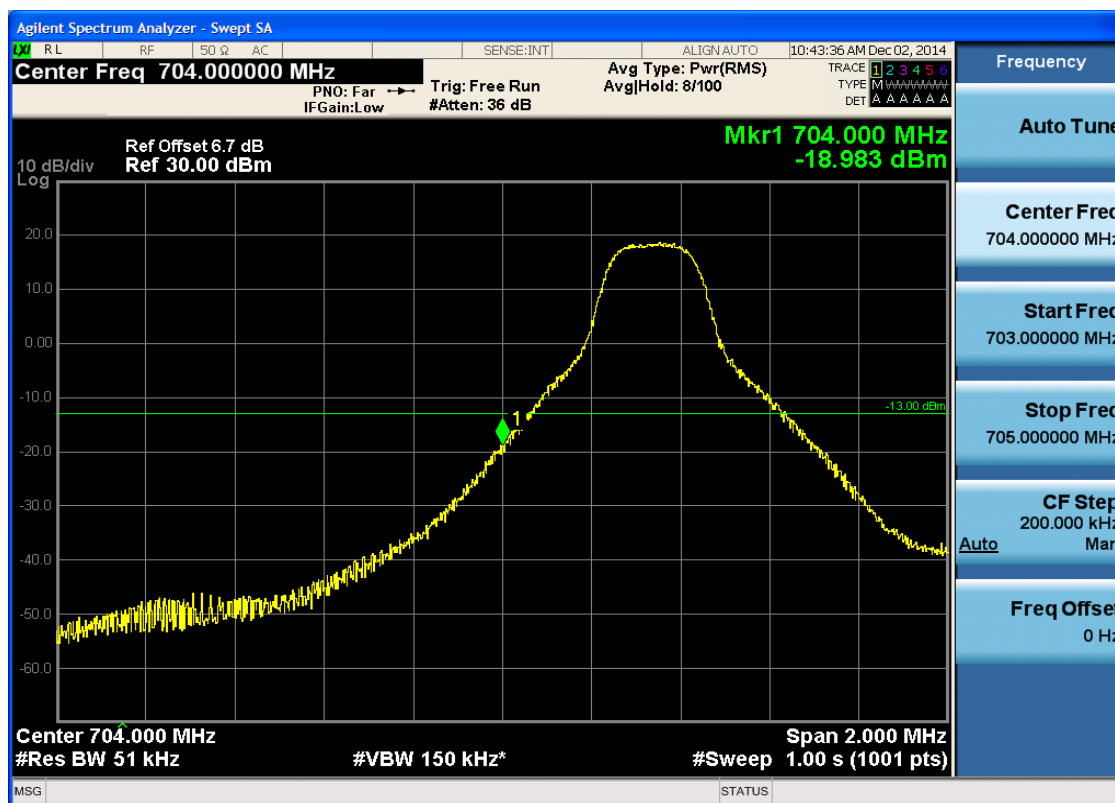


5.1.5.2 Test Mode = LTE/TM2

5.1.5.2.1 Test Bandwidth = 5

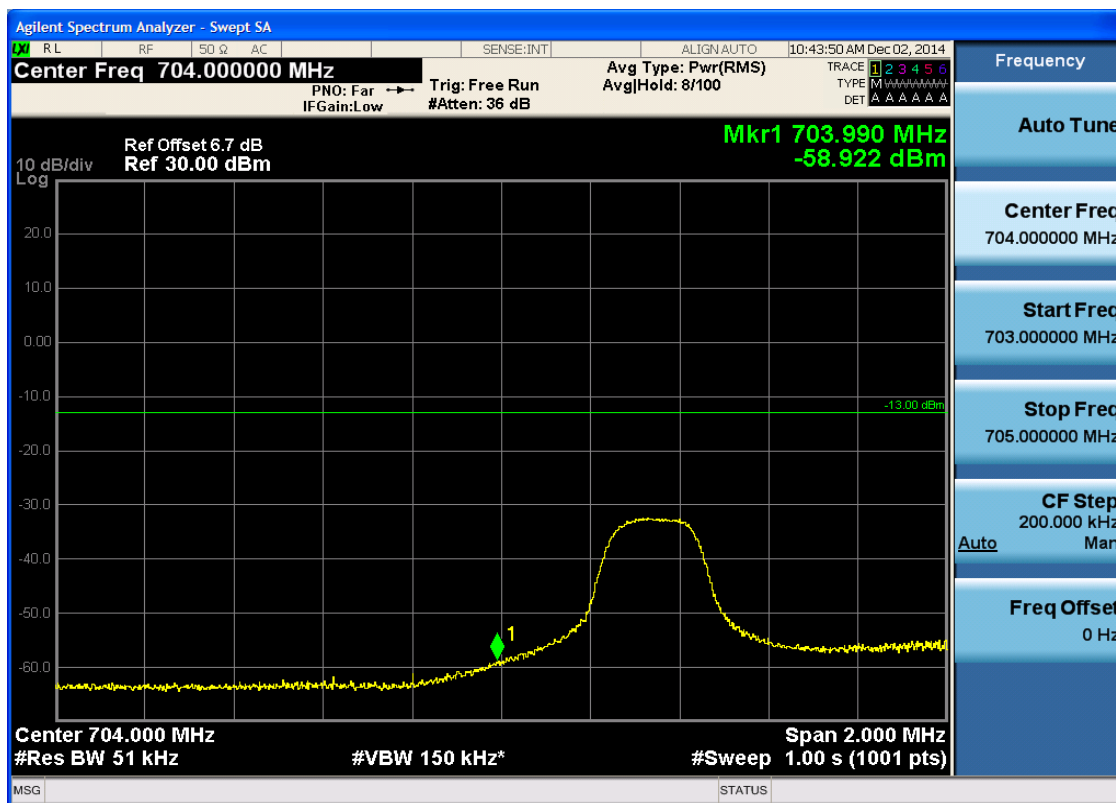
5.1.5.2.1.1 Test Channel = LCH

5.1.5.2.1.1.1 Test RB = RB1#0





5.1.5.2.1.1.2 Test RB = RB1#24



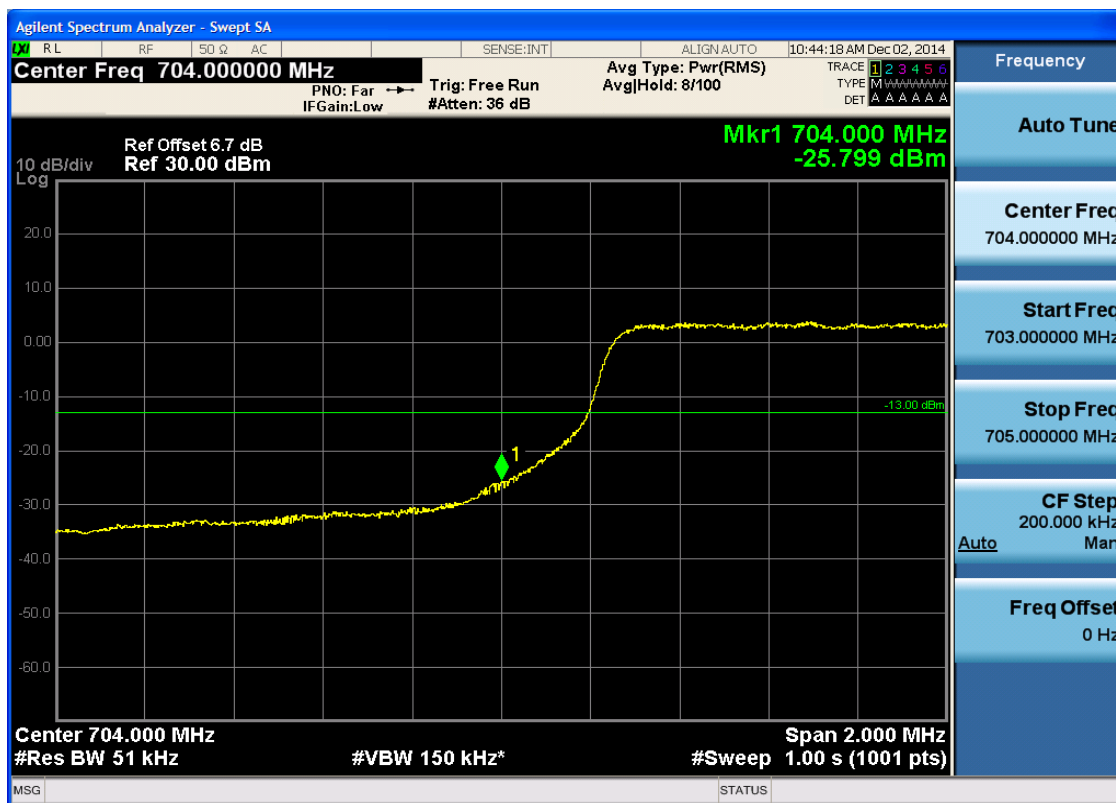


5.1.5.2.1.1.3 Test RB = RB12#6





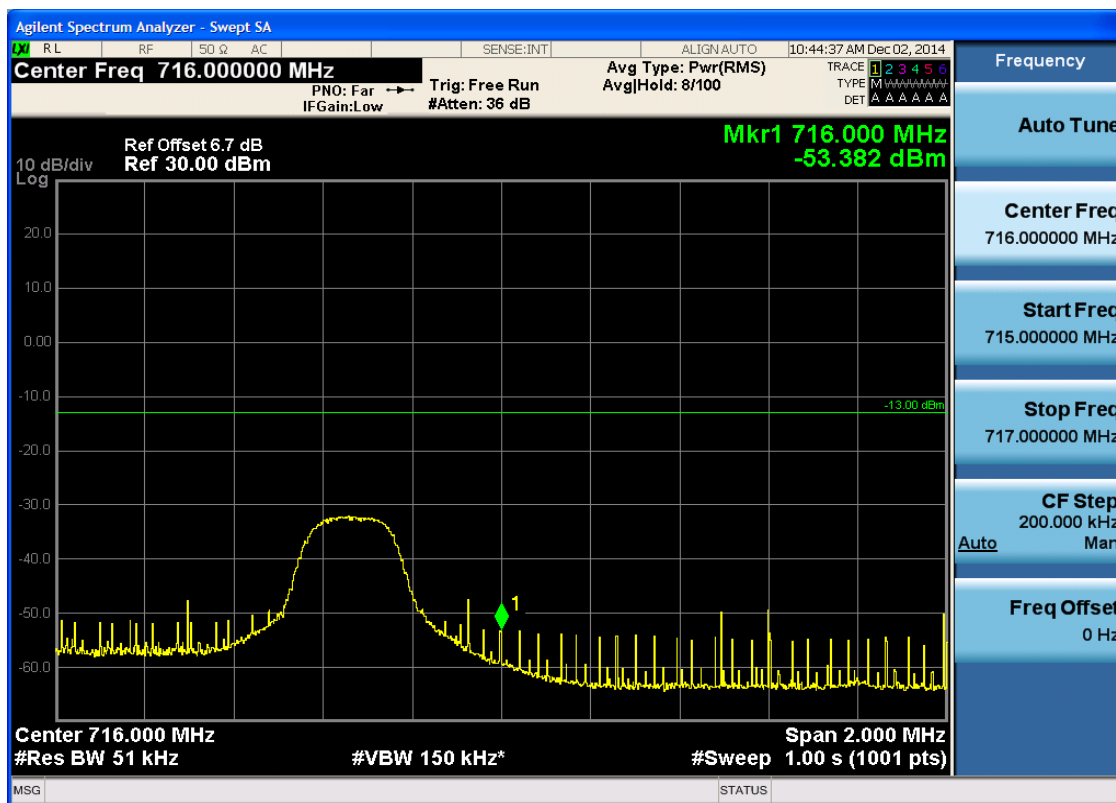
5.1.3.2.3.1.4 Test RB = RB25#0





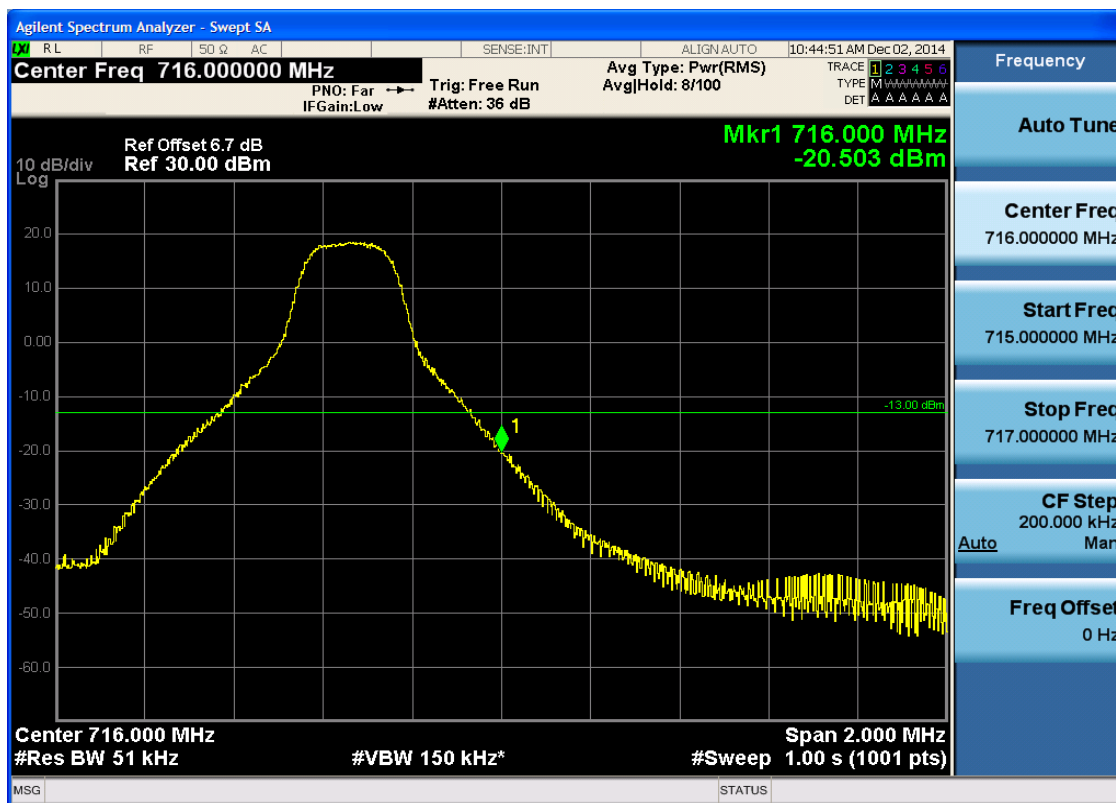
5.1.3.2.3.2 Test Channel = HCH

5.1.3.2.3.2.1 Test RB = RB1#0





5.1.3.2.3.2.2 Test RB = RB1#24





5.1.3.2.3.2.3 Test RB = RB12#6





5.1.3.2.3.2.4 Test RB = RB25#0

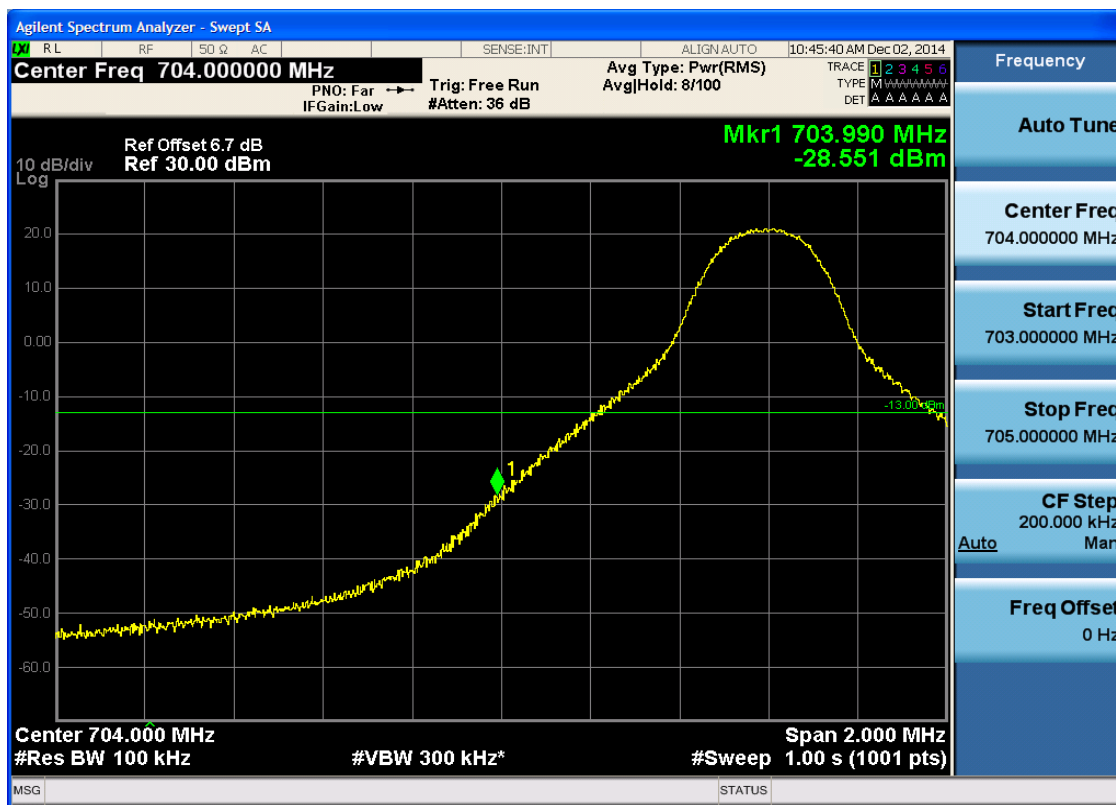


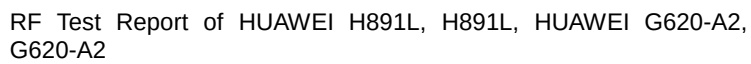


5.1.5.2.2 Test Bandwidth = 10

5.1.5.2.2.1 Test Channel = LCH

5.1.5.2.2.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 10:45:54 AM Dec 02, 2014

Center Freq 704.000000 MHz Avg Type: Pwr(RMS) Avg|Hold: 7/100

PNO: Far → Trig: Free Run IF Gain: Low #Atten: 36 dB

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 6.7 dB Ref 30.00 dBm

Mkr1 704.000 MHz -56.030 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 704.000 MHz #Res BW 100 kHz #VBW 300 kHz* Span 2.000 MHz #Sweep 1.00 s (1001 pts)

MSG Alignment Completed STATUS

Frequency

Auto Tune

Center Freq 704.000000 MHz

Start Freq 703.000000 MHz

Stop Freq 705.000000 MHz

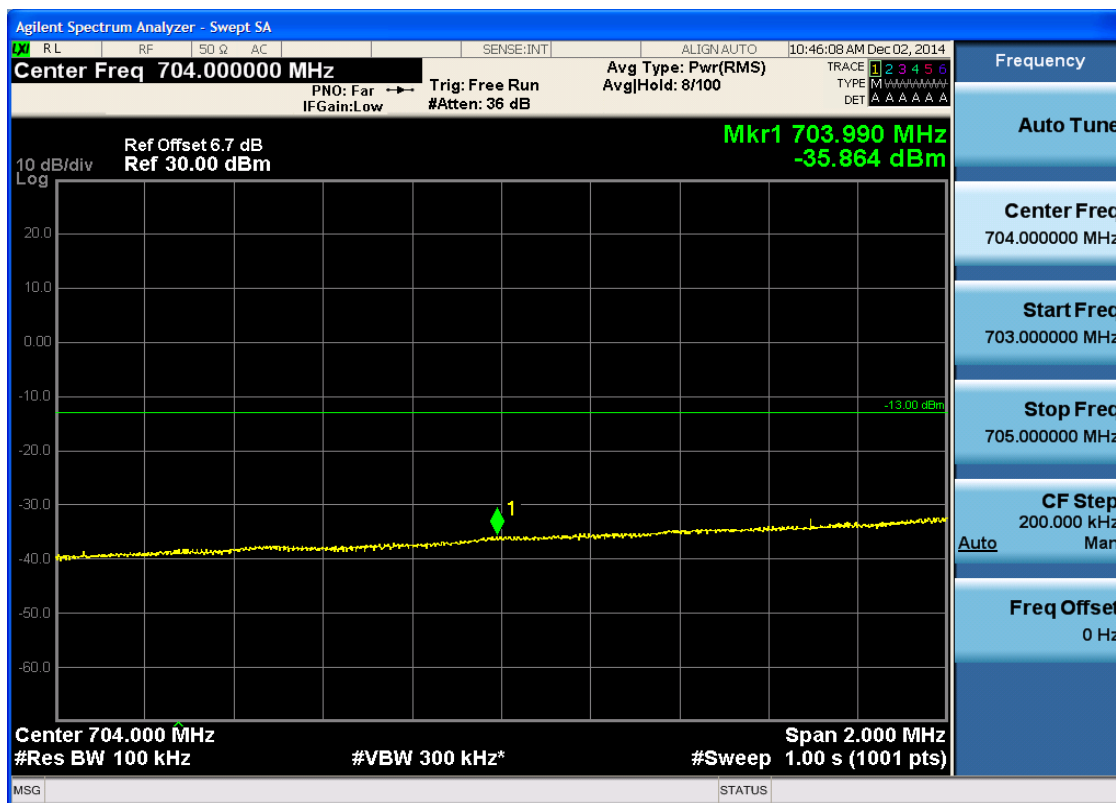
CF Step 200.000 kHz Mar

Auto

Freq Offset 0 Hz

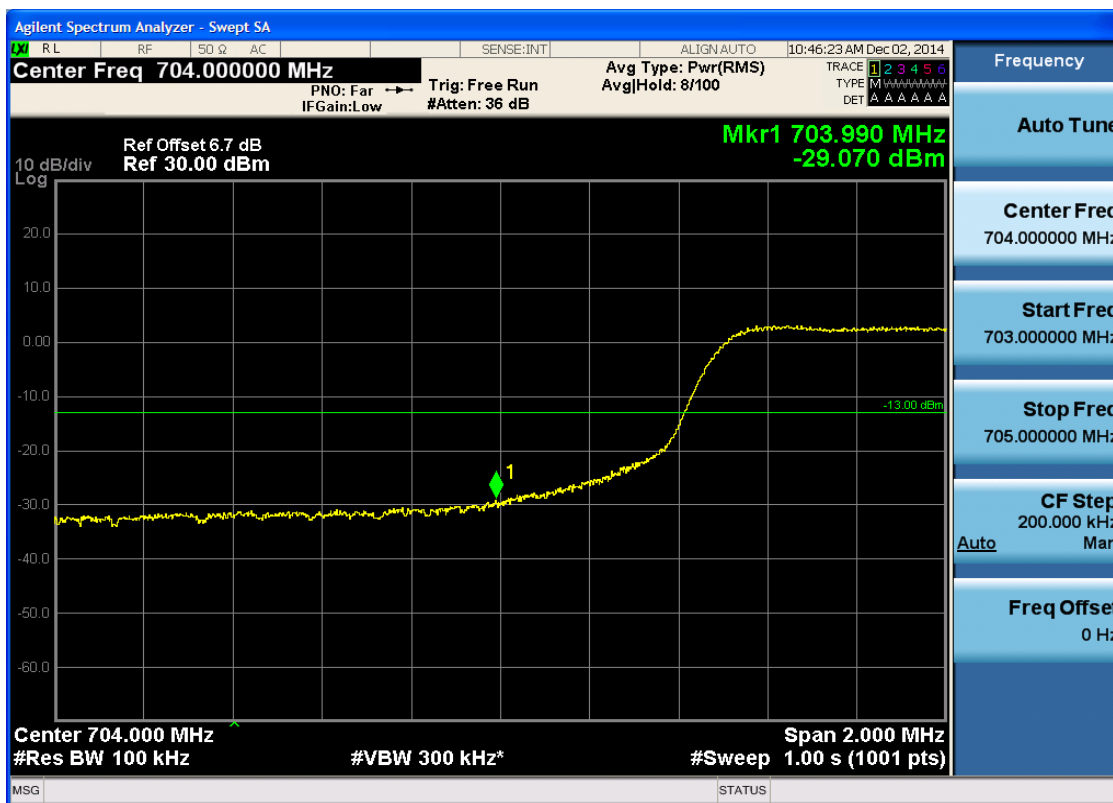


5.1.5.2.2.1.3 Test RB = RB25#13





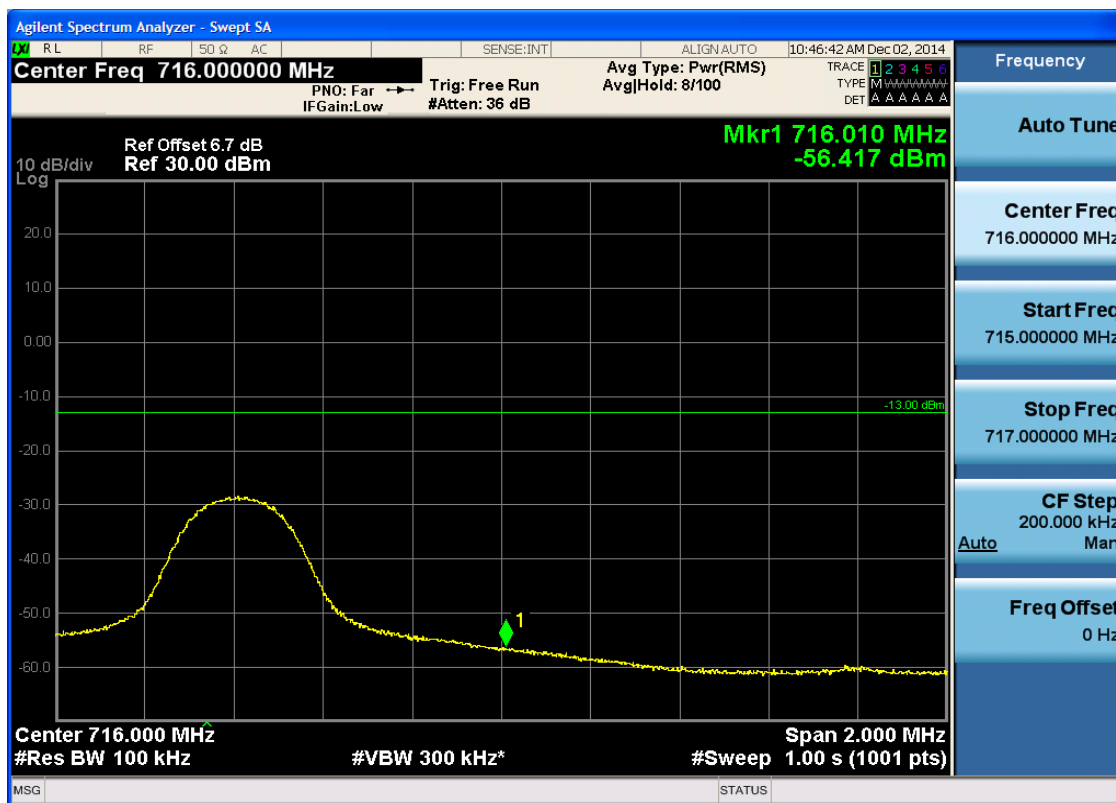
5.1.5.2.2.1.4 Test RB = RB50#0





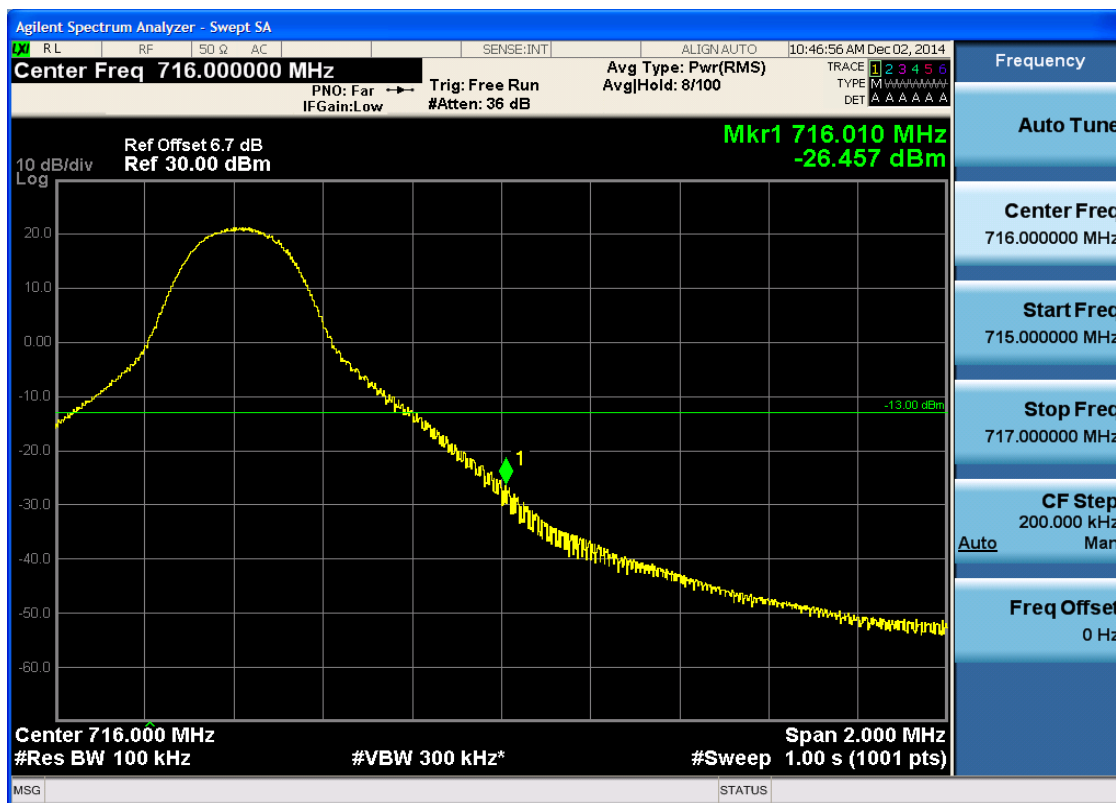
5.1.5.2.2.2 Test Channel = HCH

5.1.5.2.2.2.1 Test RB = RB1#0



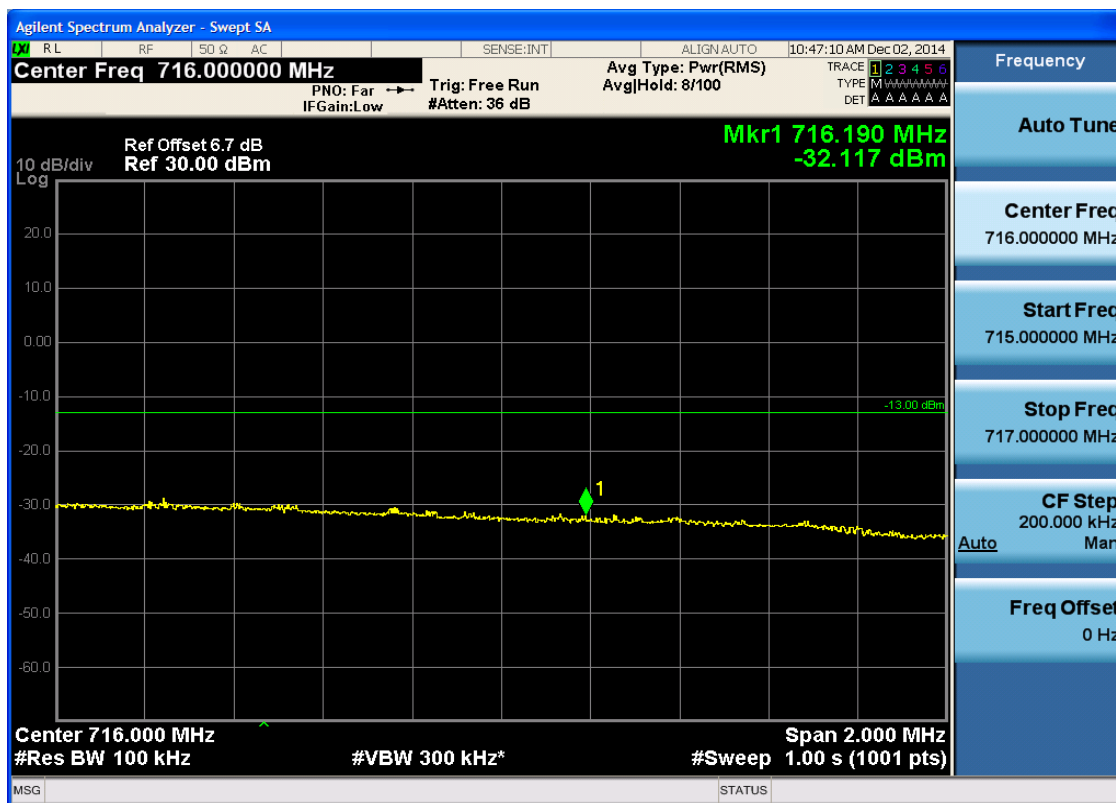


5.1.5.2.2.2 Test RB = RB1#49





5.1.5.2.2.3 Test RB = RB25#13





5.1.5.2.2.4 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 LTE

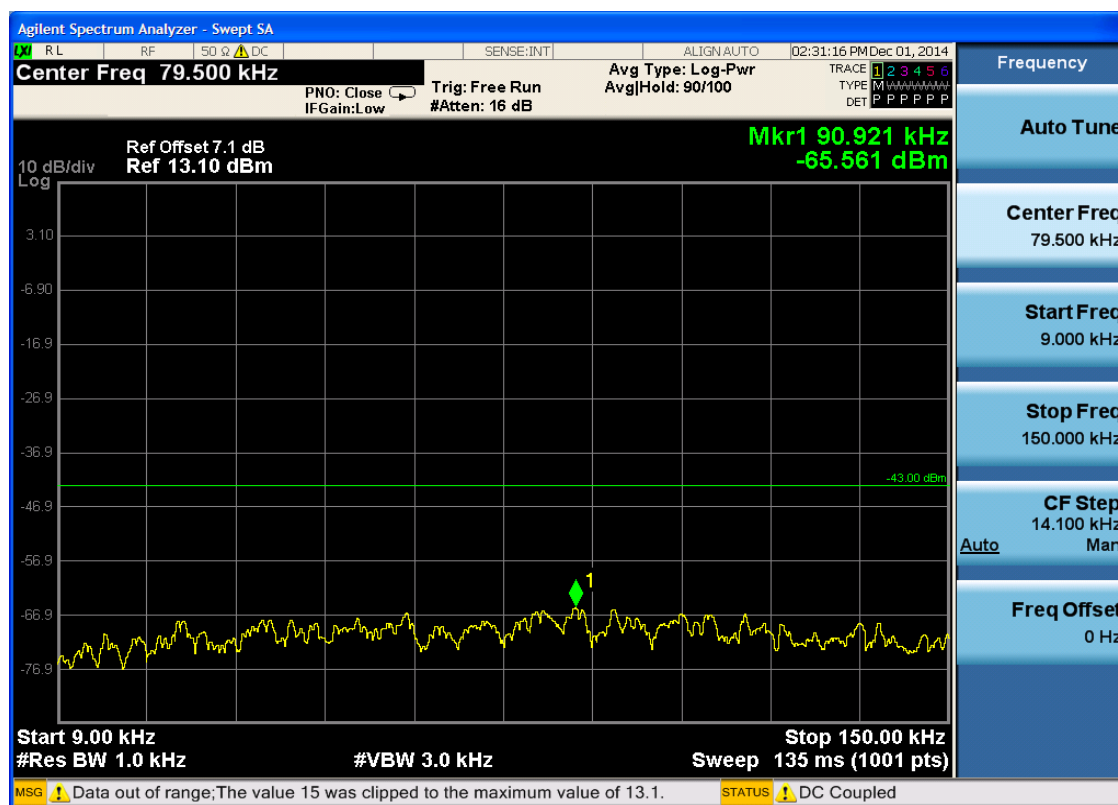
6.1.1 Test Band = BAND2

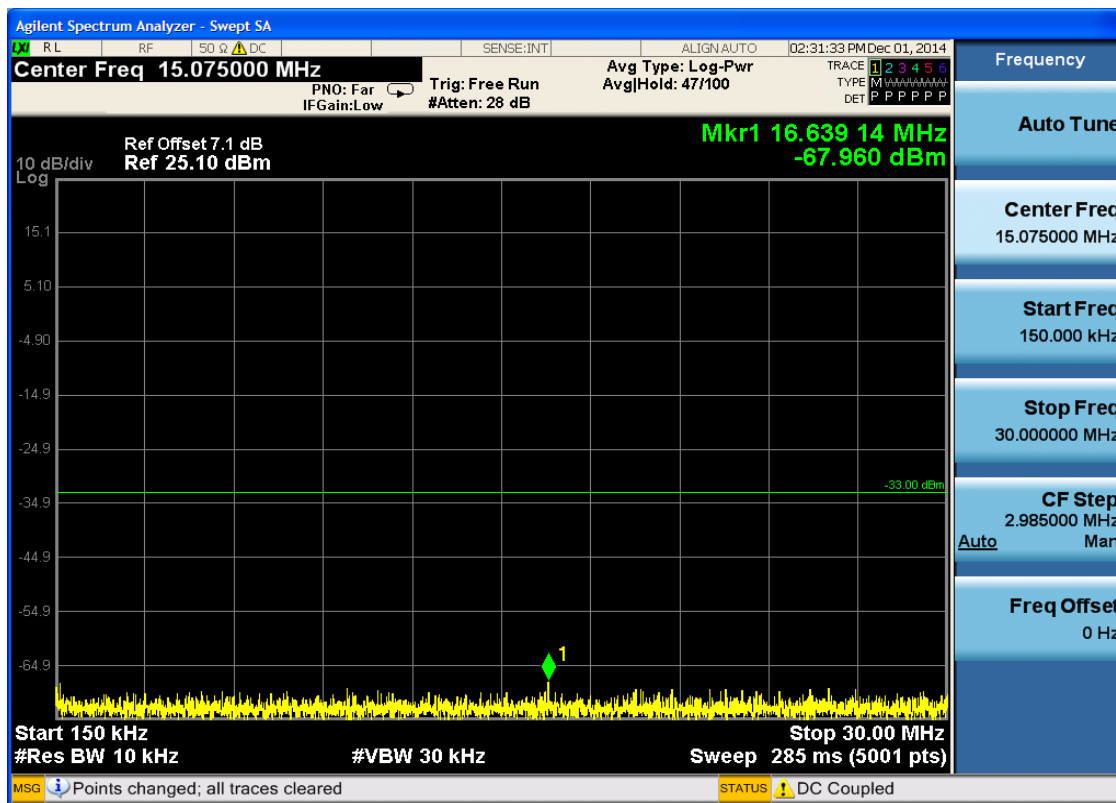
6.1.1.1 Test Mode = LTE/TM1

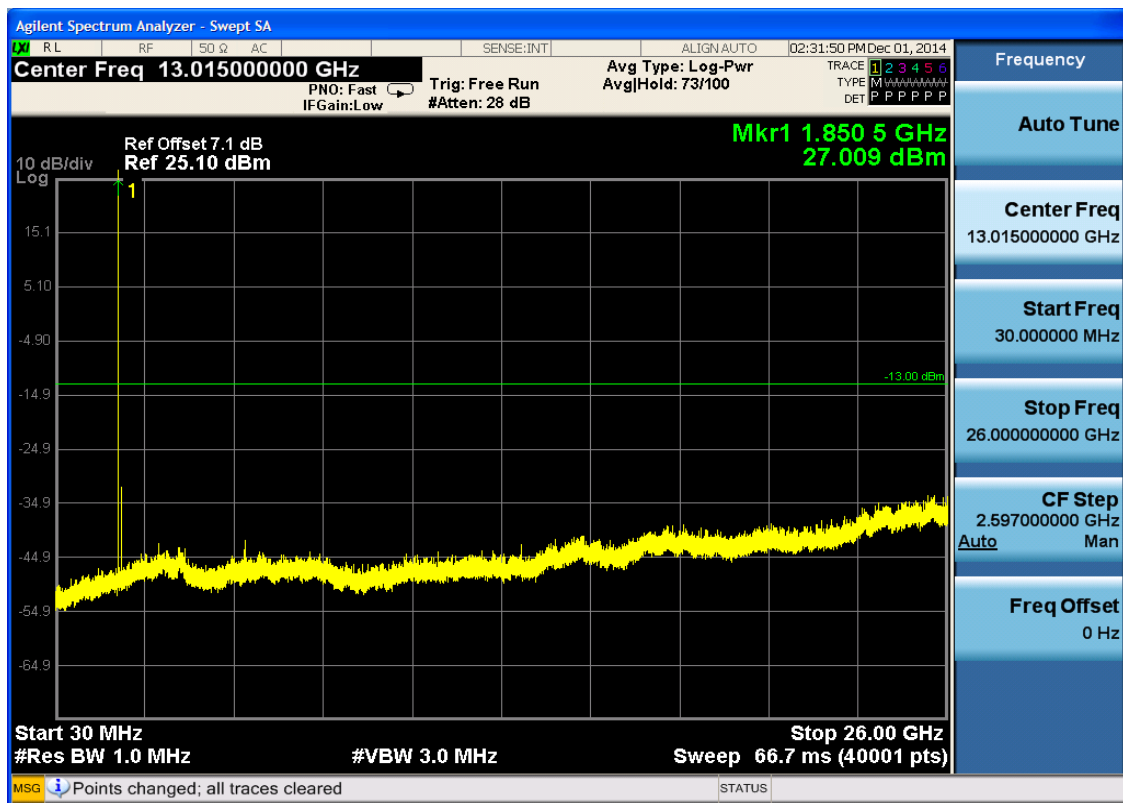
6.1.1.1.1 Test Bandwidth = 1.4

6.1.1.1.1 .1 Test Channel = LCH

6.1.1.1.1 .1.1 Test RB = RB1#0



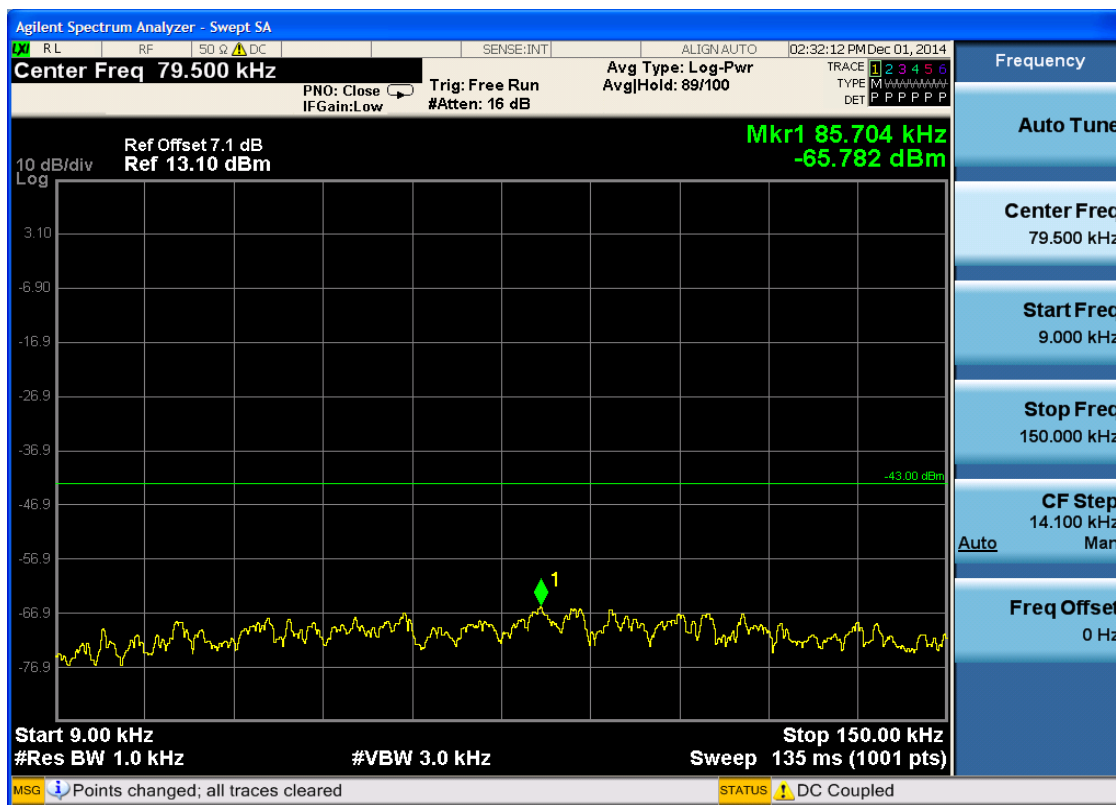


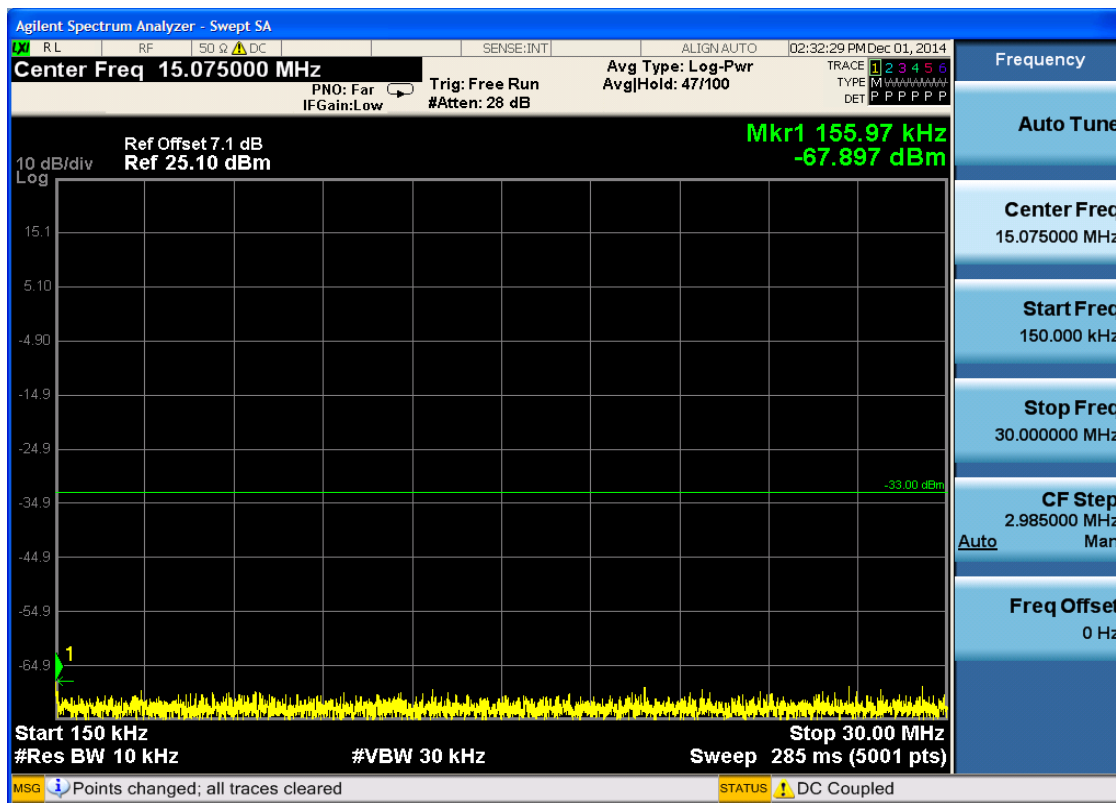


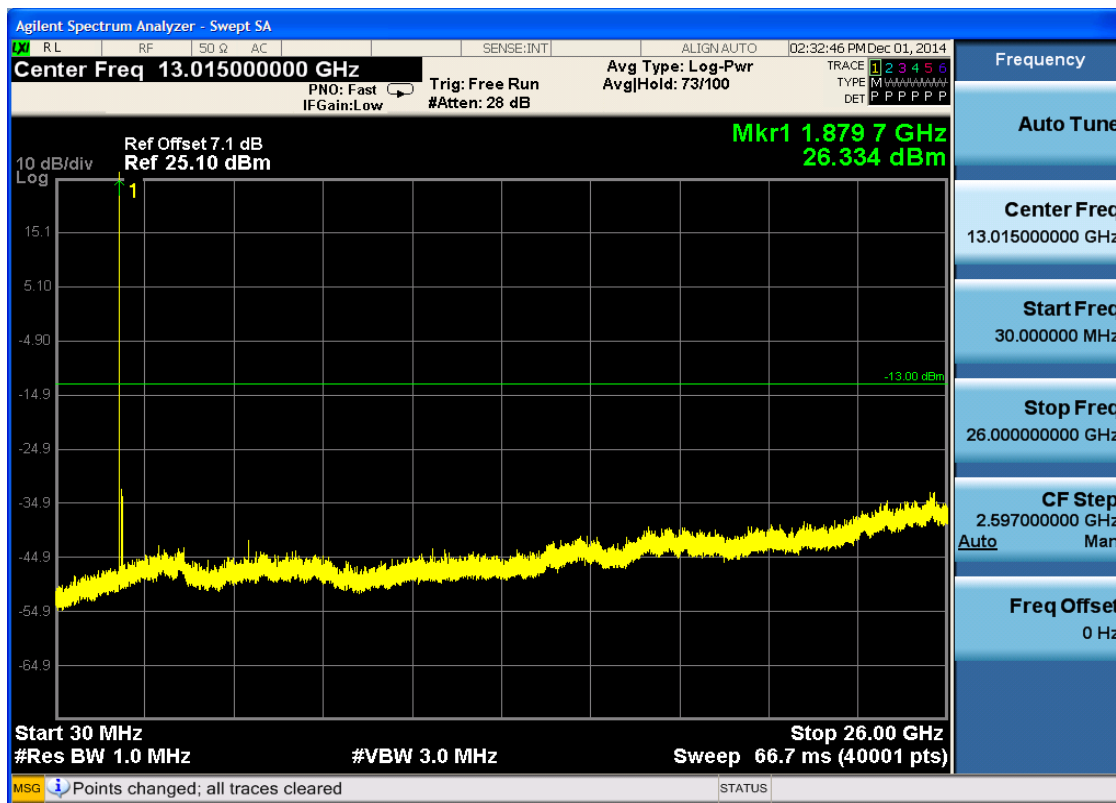


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0

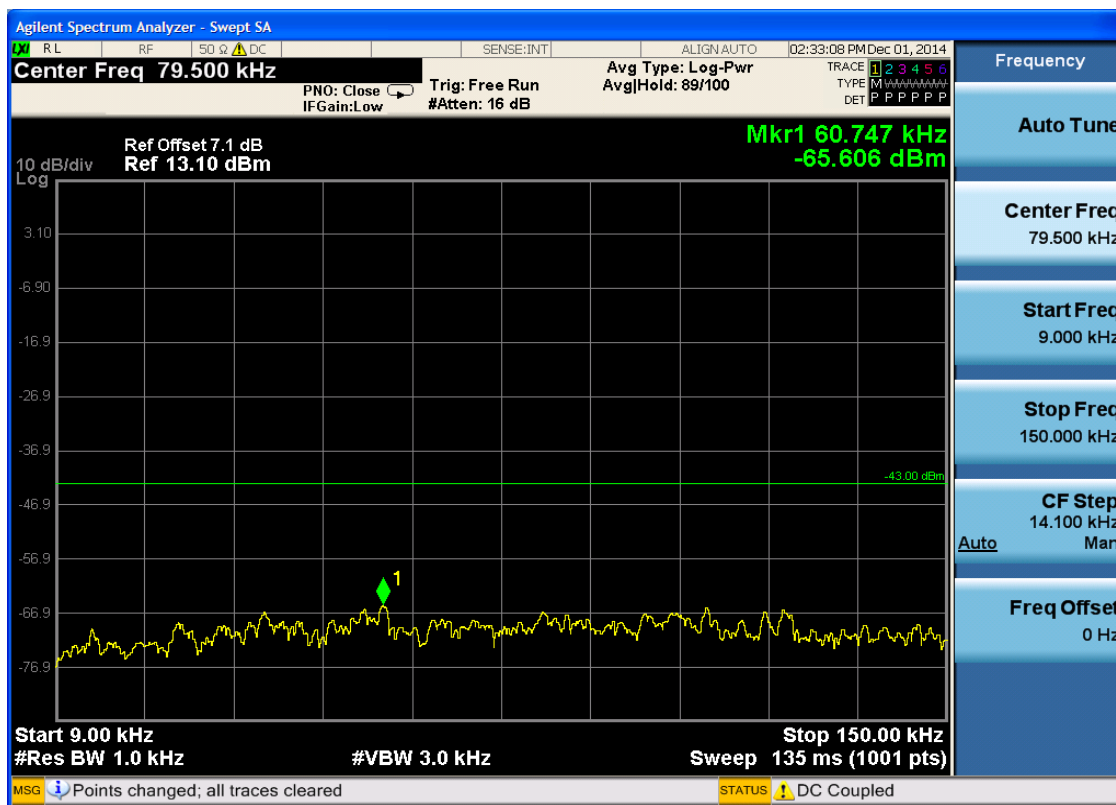


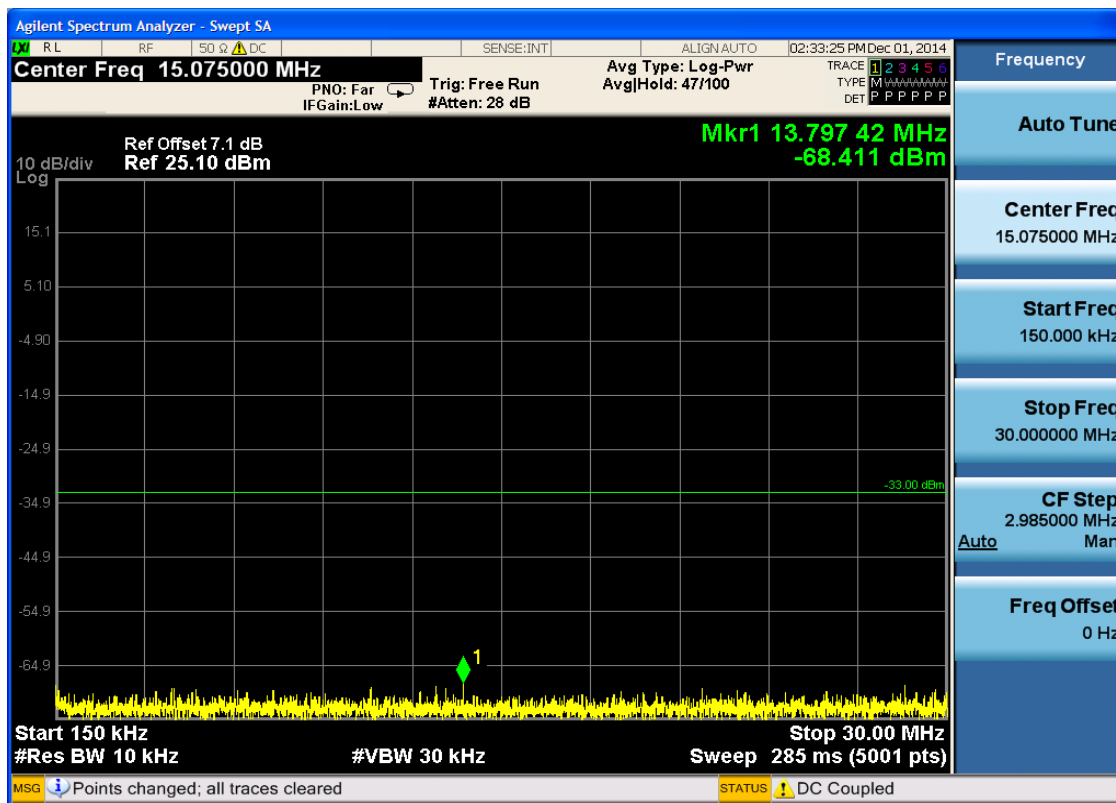


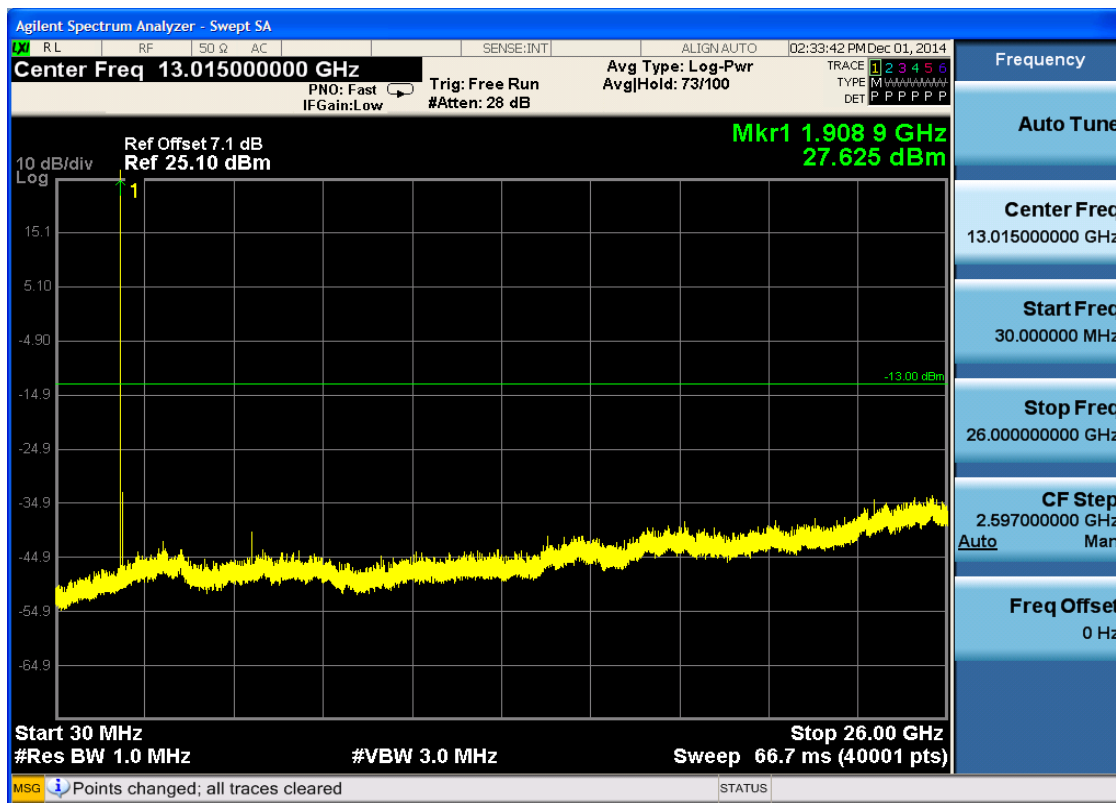


6.1.1.1.1 .3 Test Channel = HCH

6.1.1.1.1 .3.1 Test RB = RB1#0





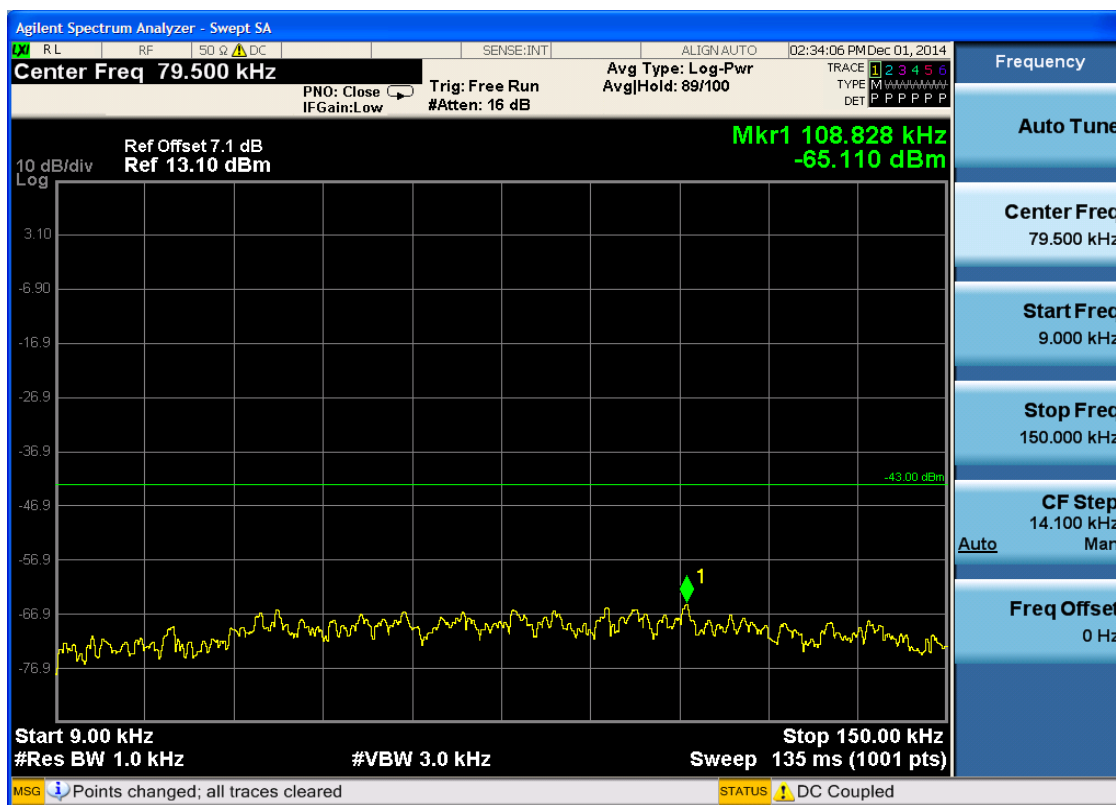


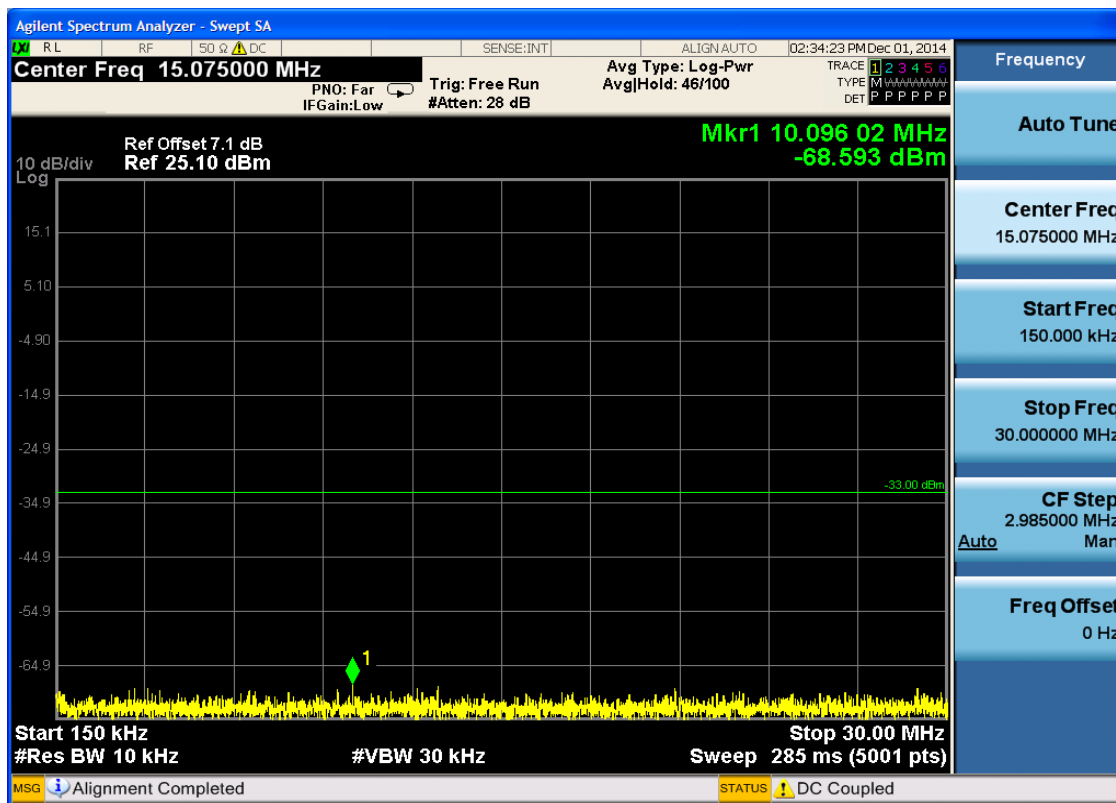


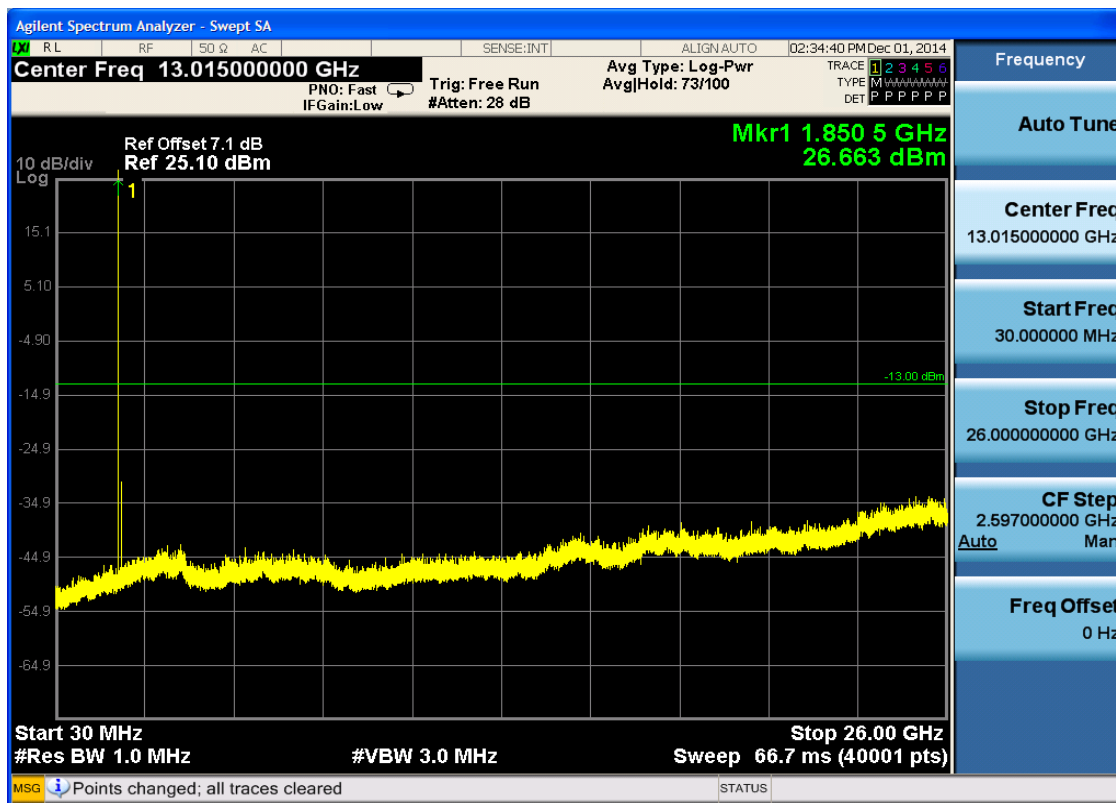
6.1.1.1.2 Test Bandwidth = 3

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0



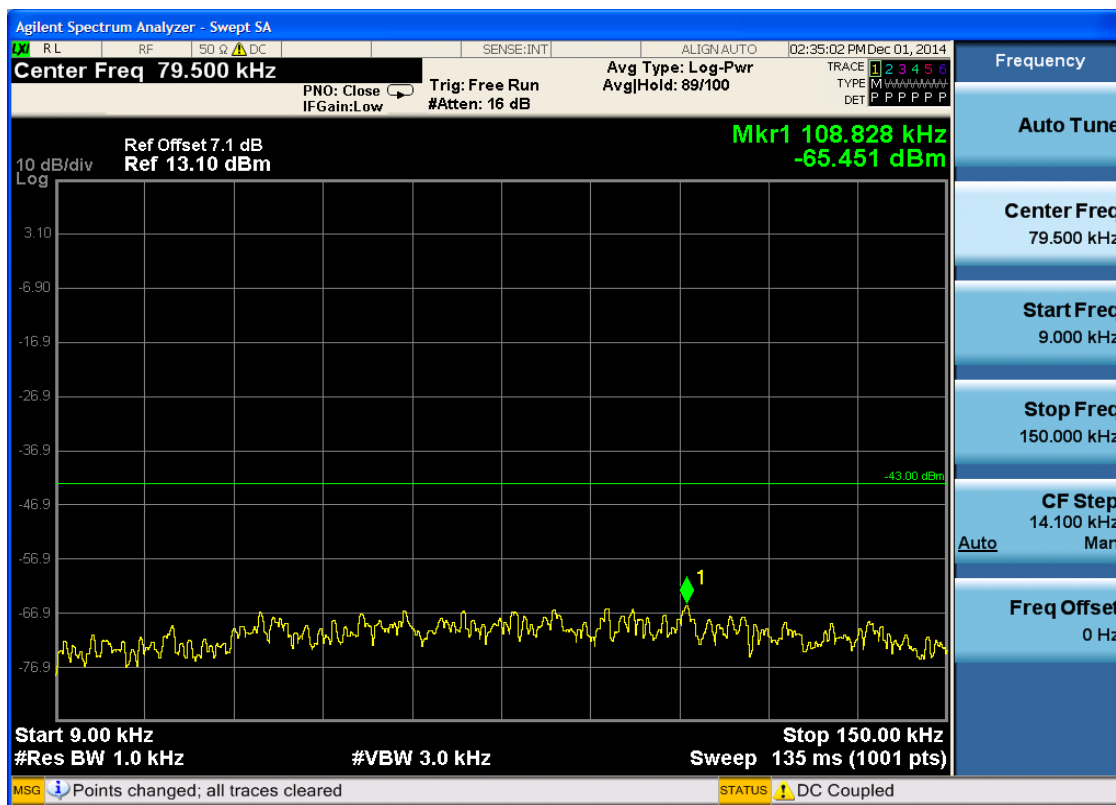


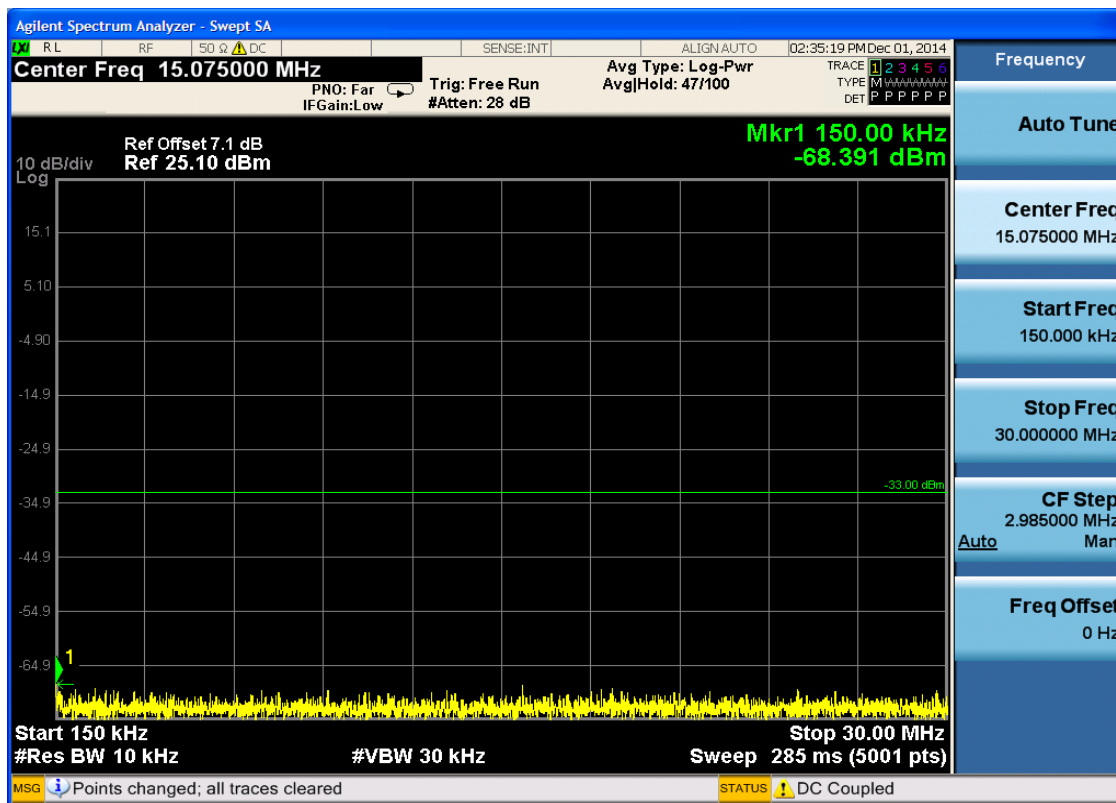


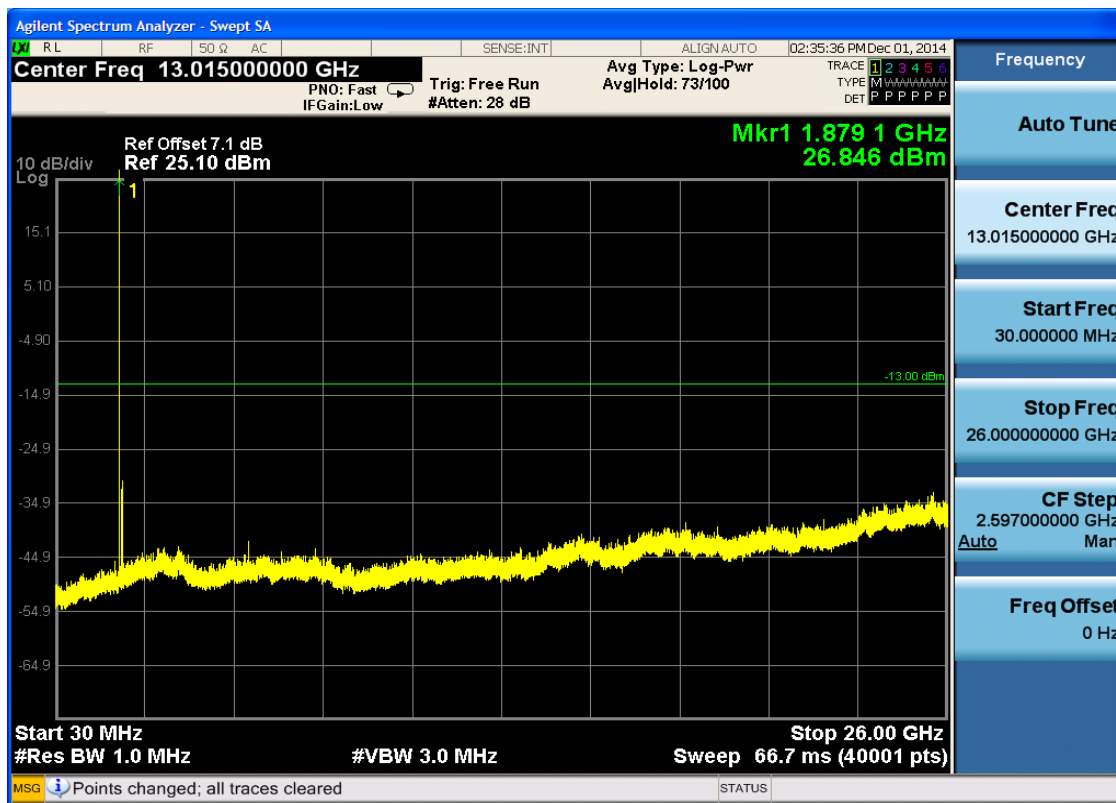


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



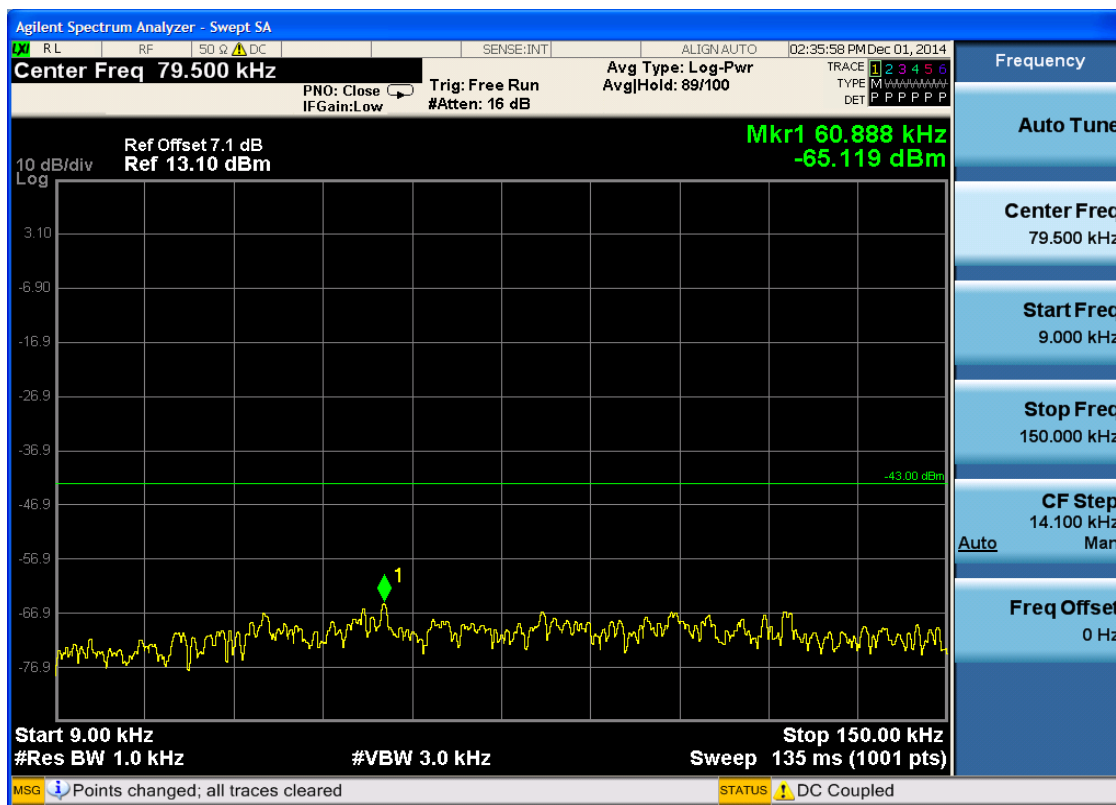


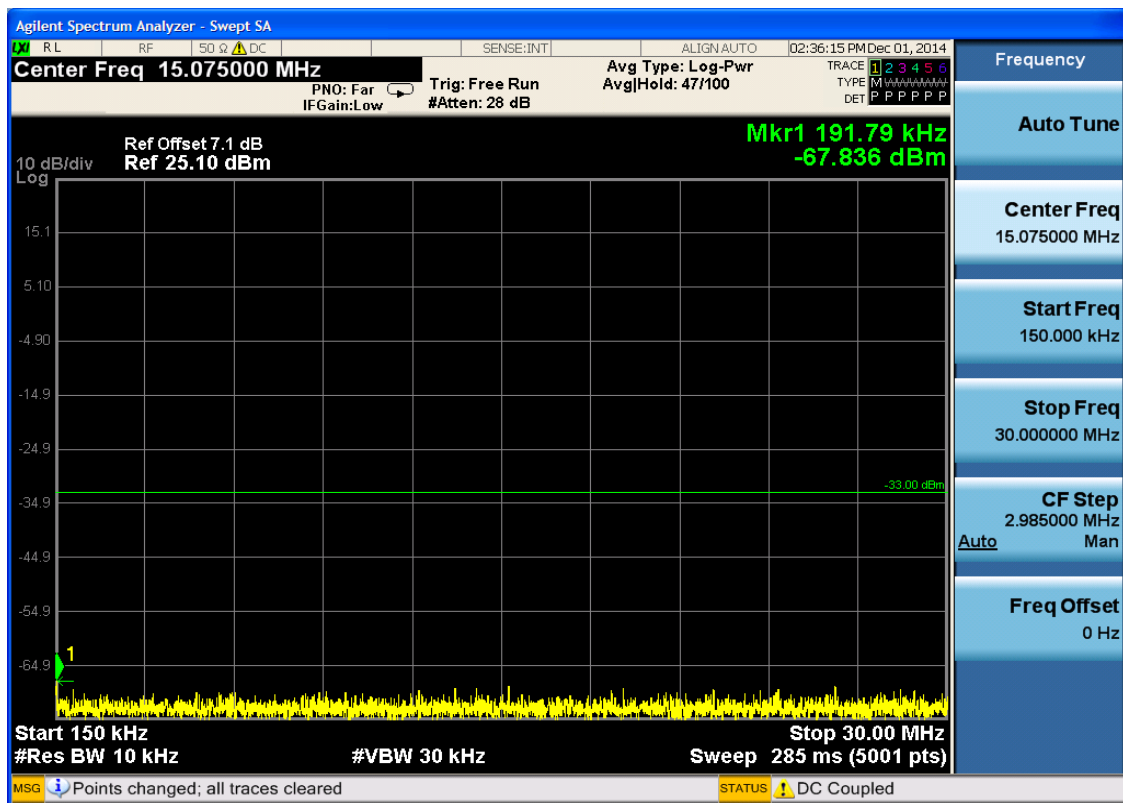


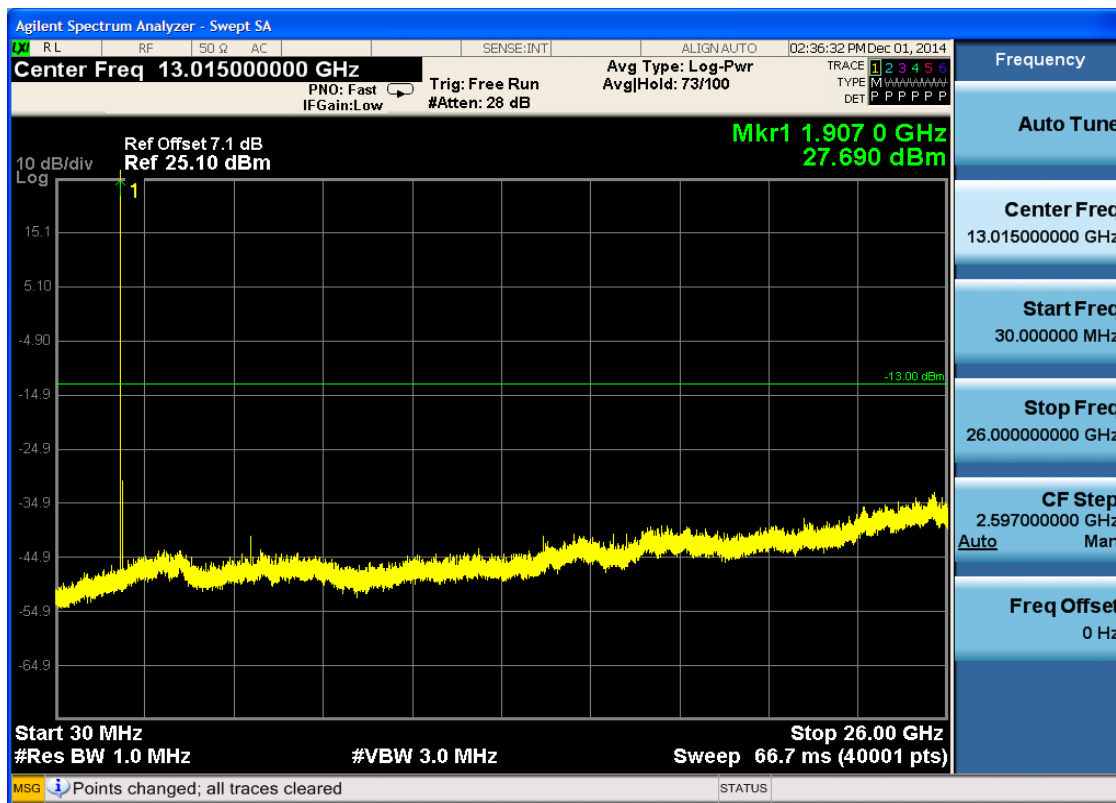


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0





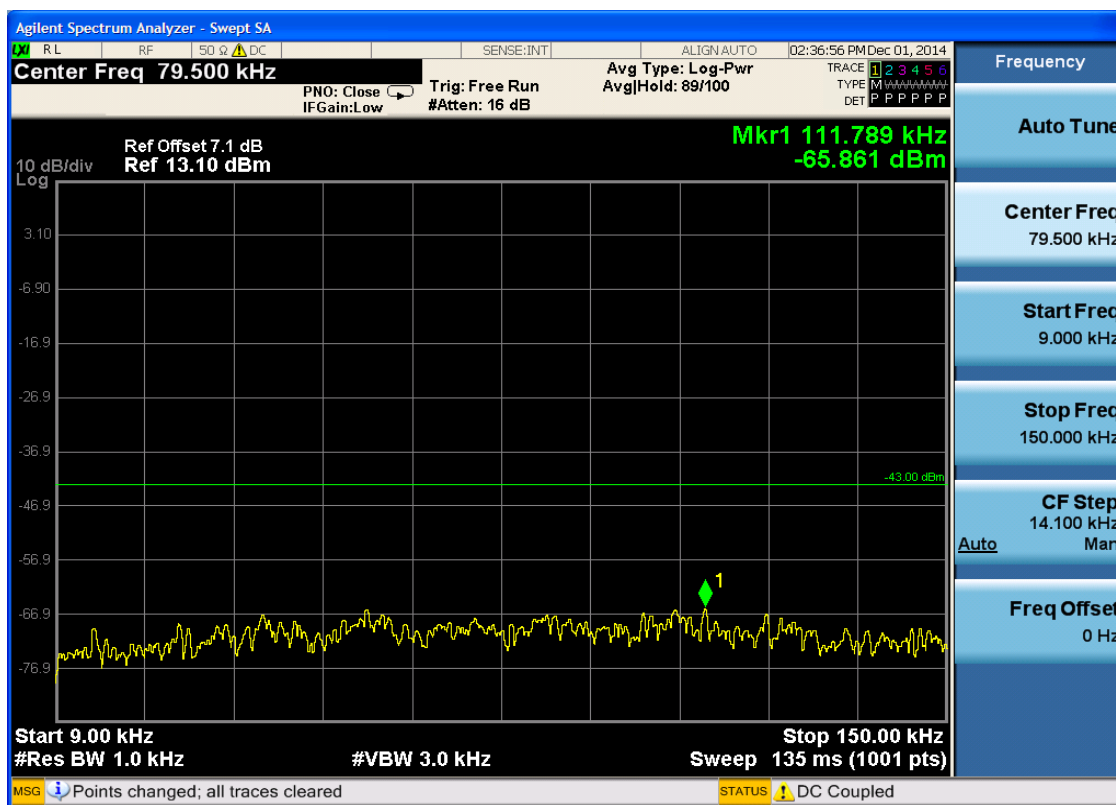


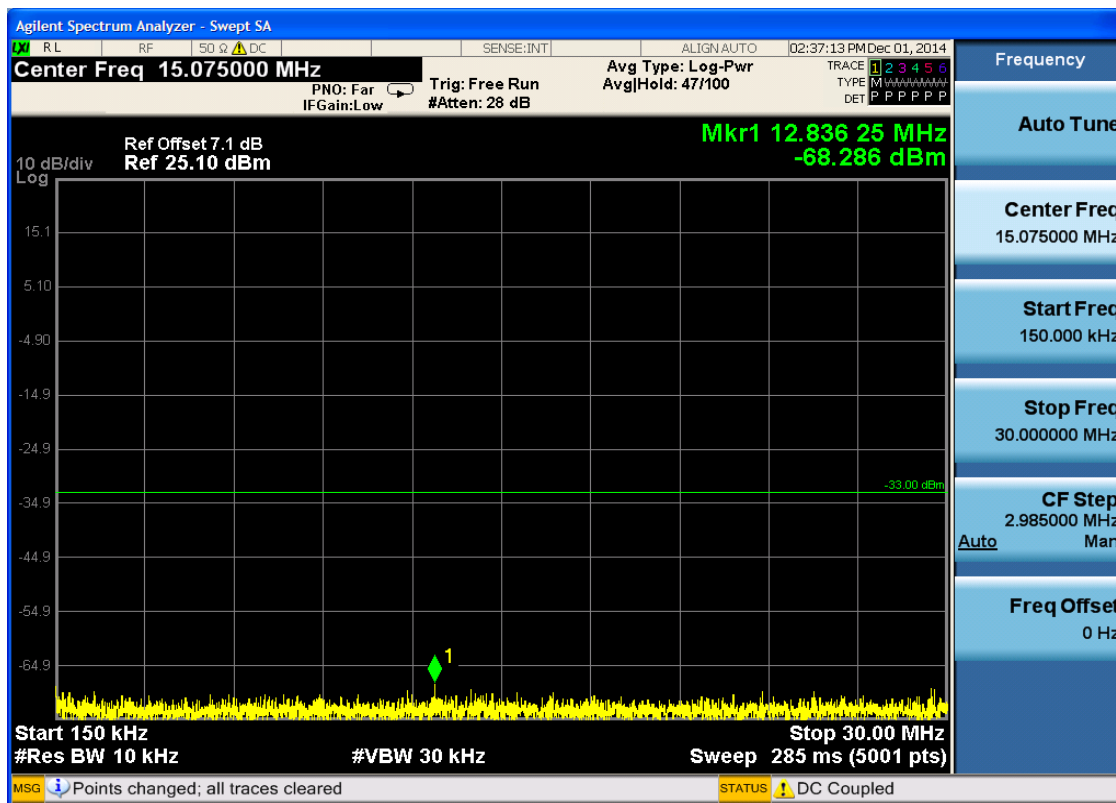


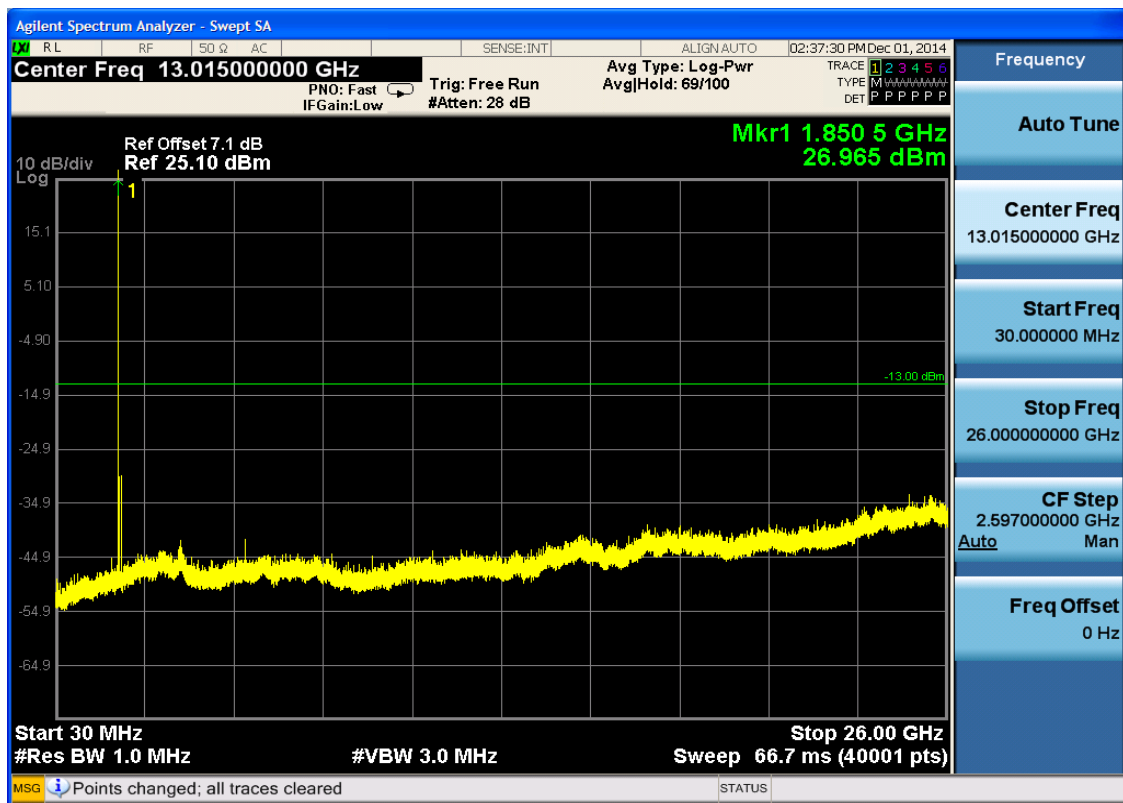
4.1.1.1.3 Test Bandwidth = 5

4.1.1.1.3.1 Test Channel = LCH

4.1.1.1.3.1.1 Test RB = RB1#0



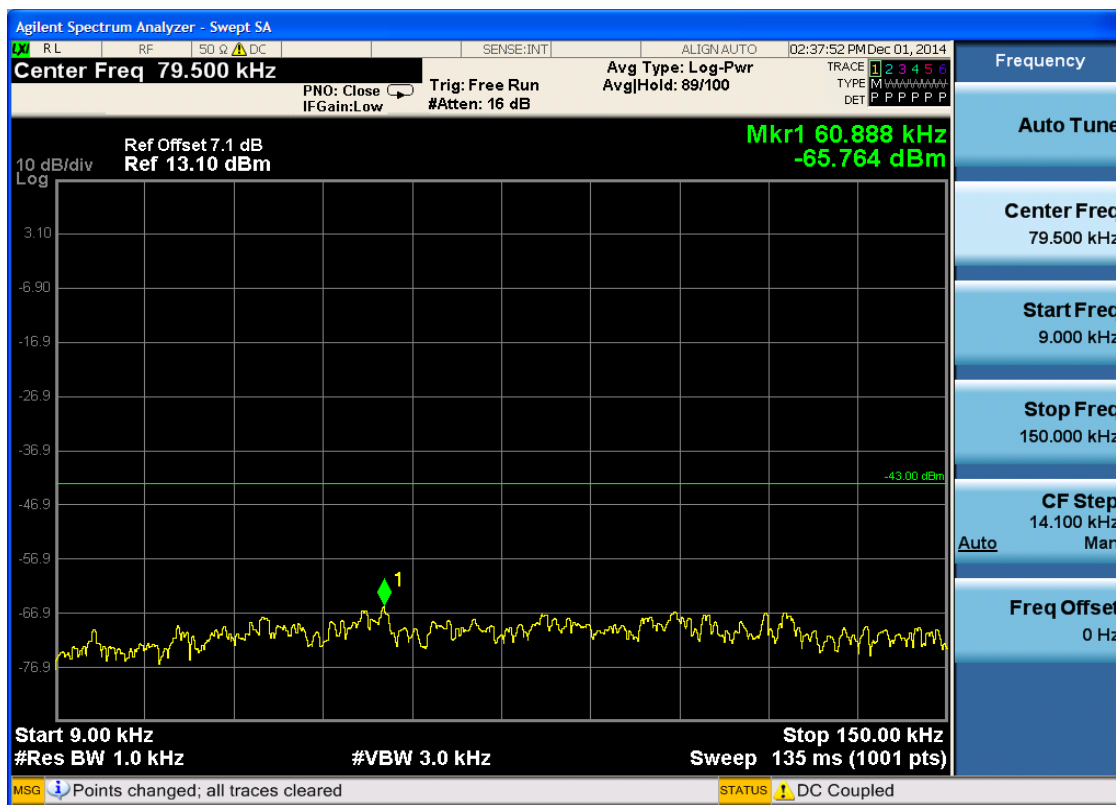


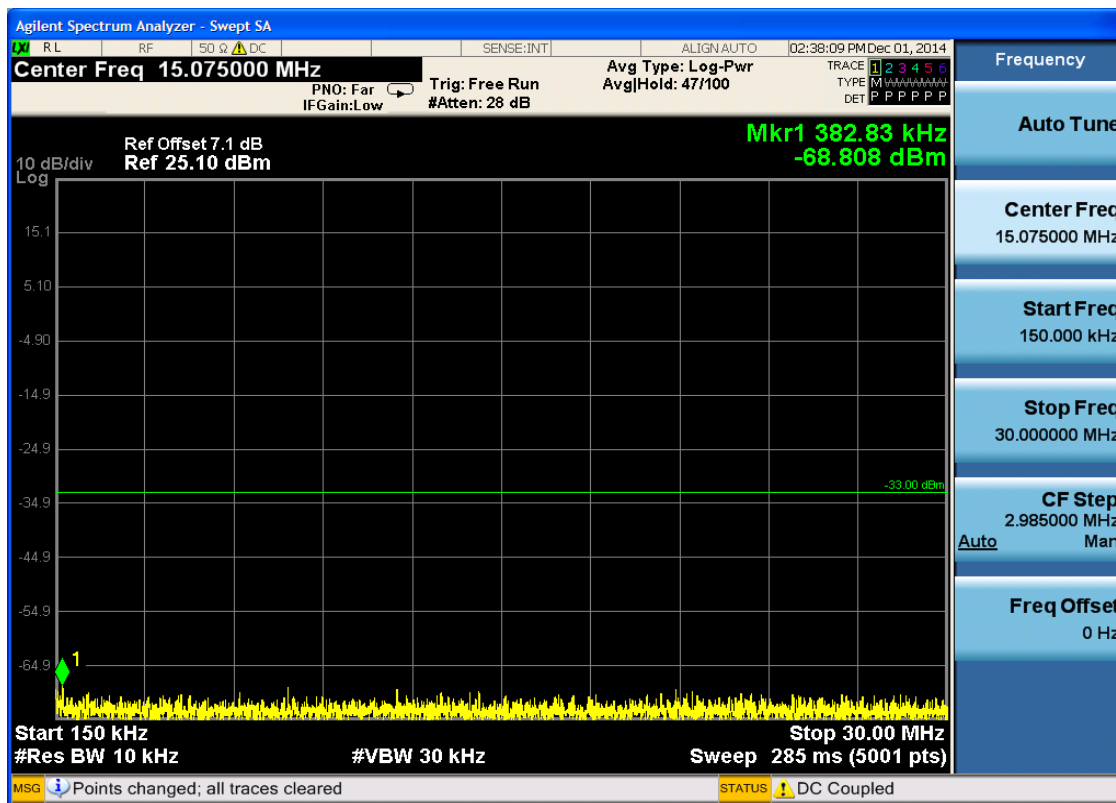


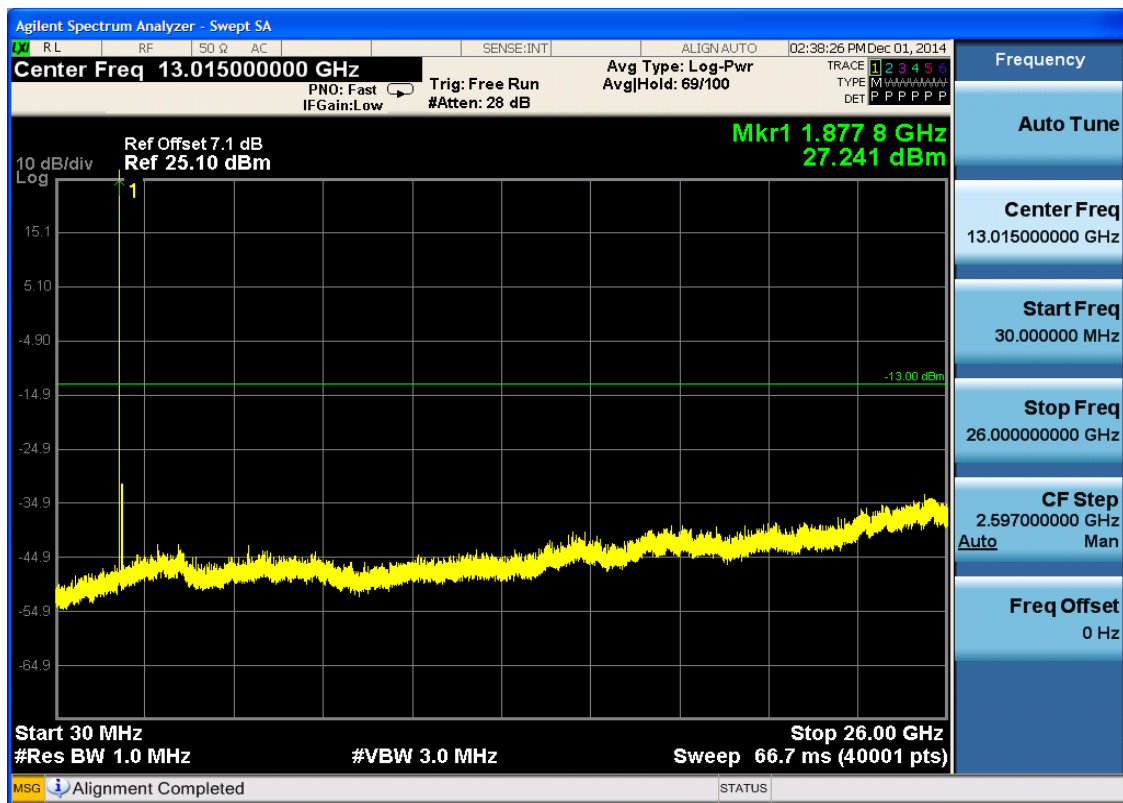


4.1.1.1.3.2 Test Channel = MCH

4.1.1.1.3.2.1 Test RB = RB1#0

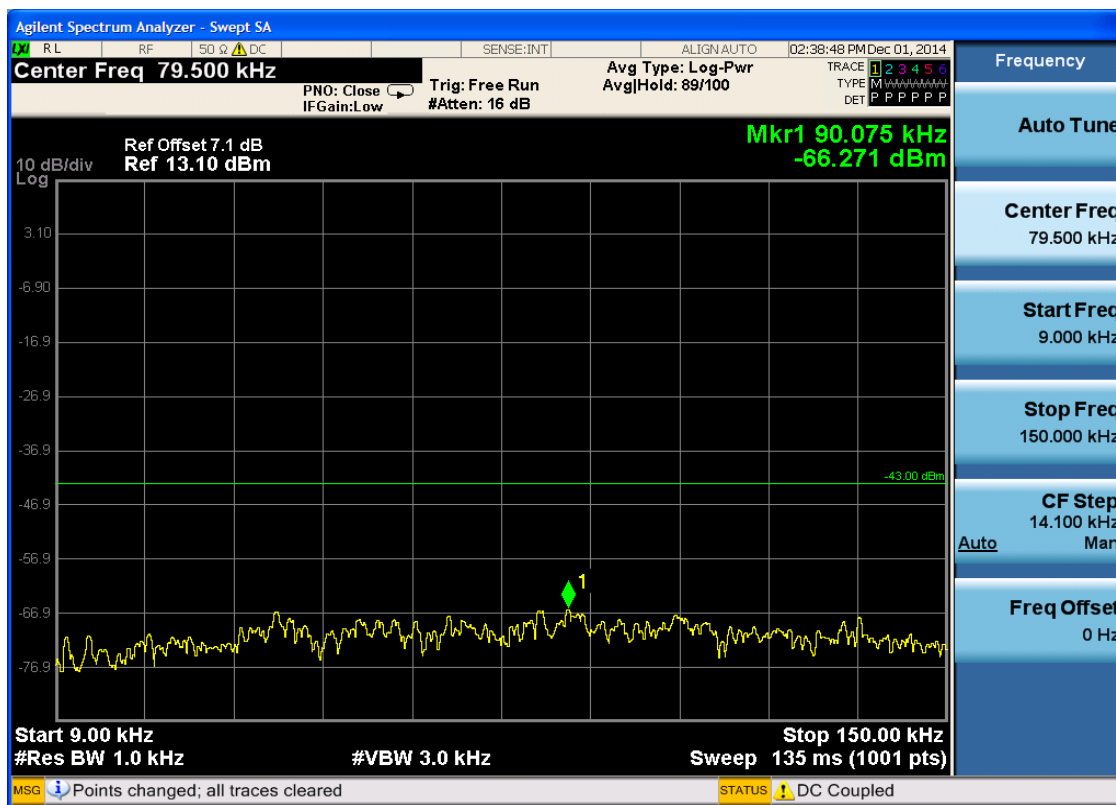


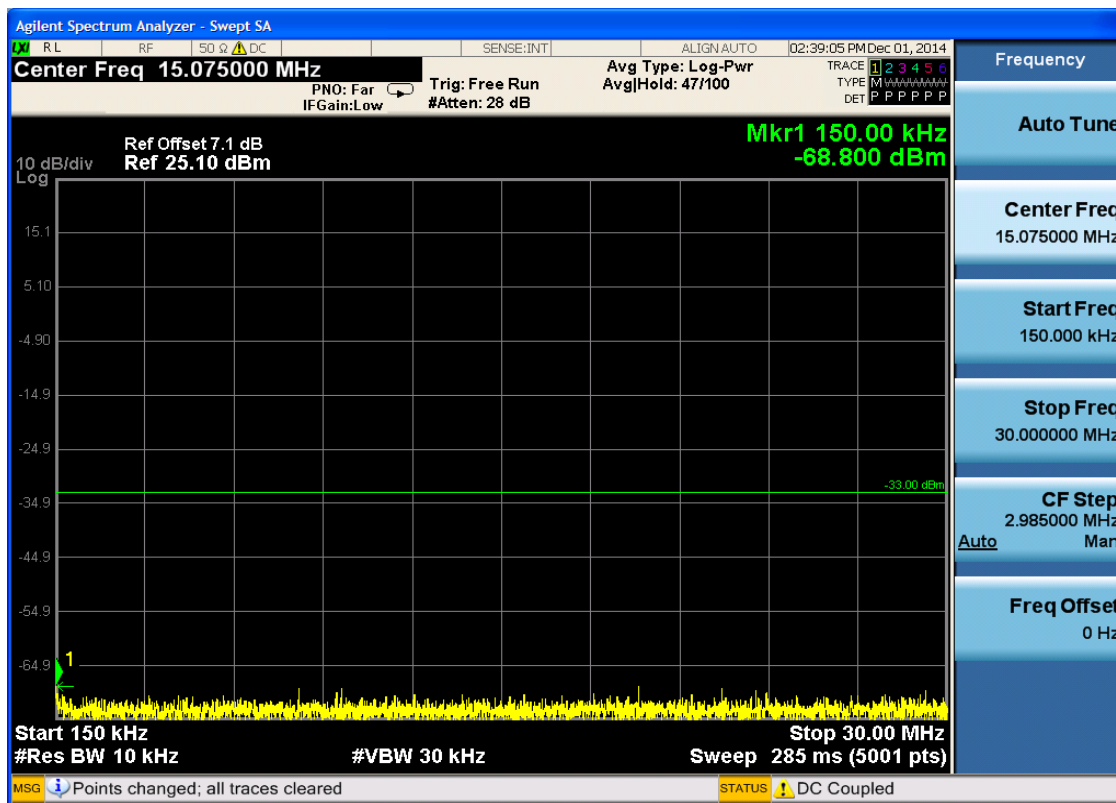


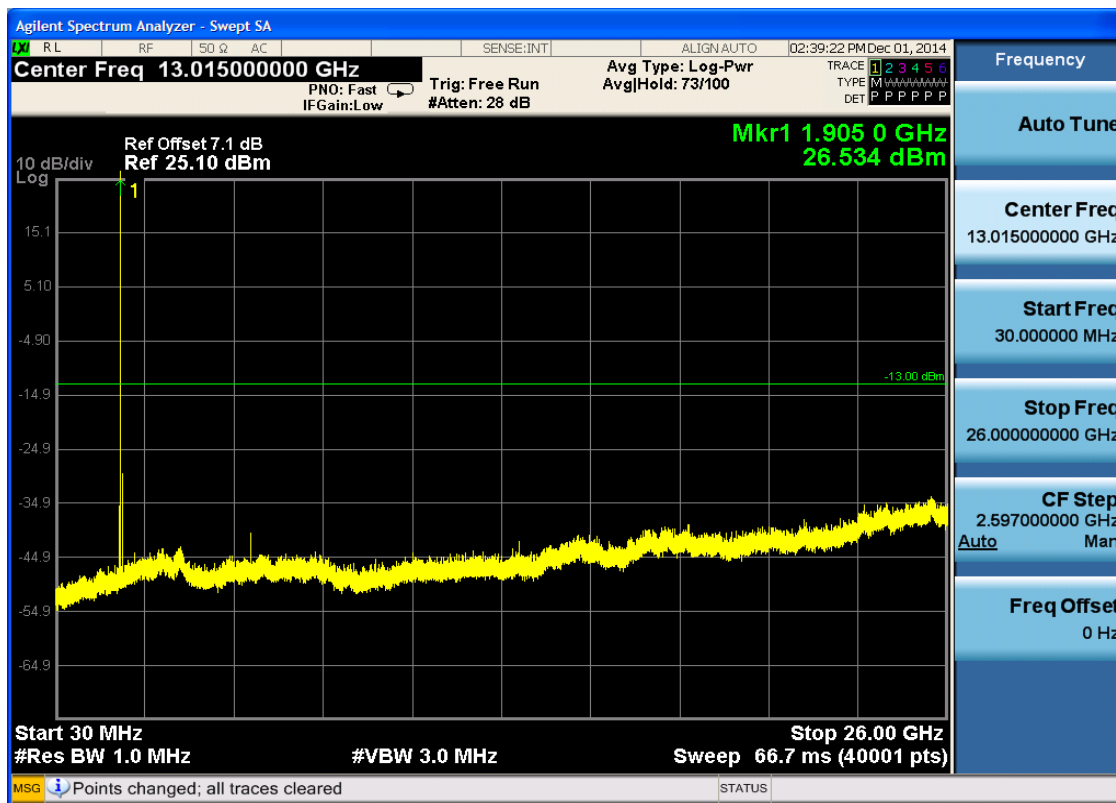


4.1.1.1.3.3 Test Channel = HCH

4.1.1.1.3.3.1 Test RB = RB1#0





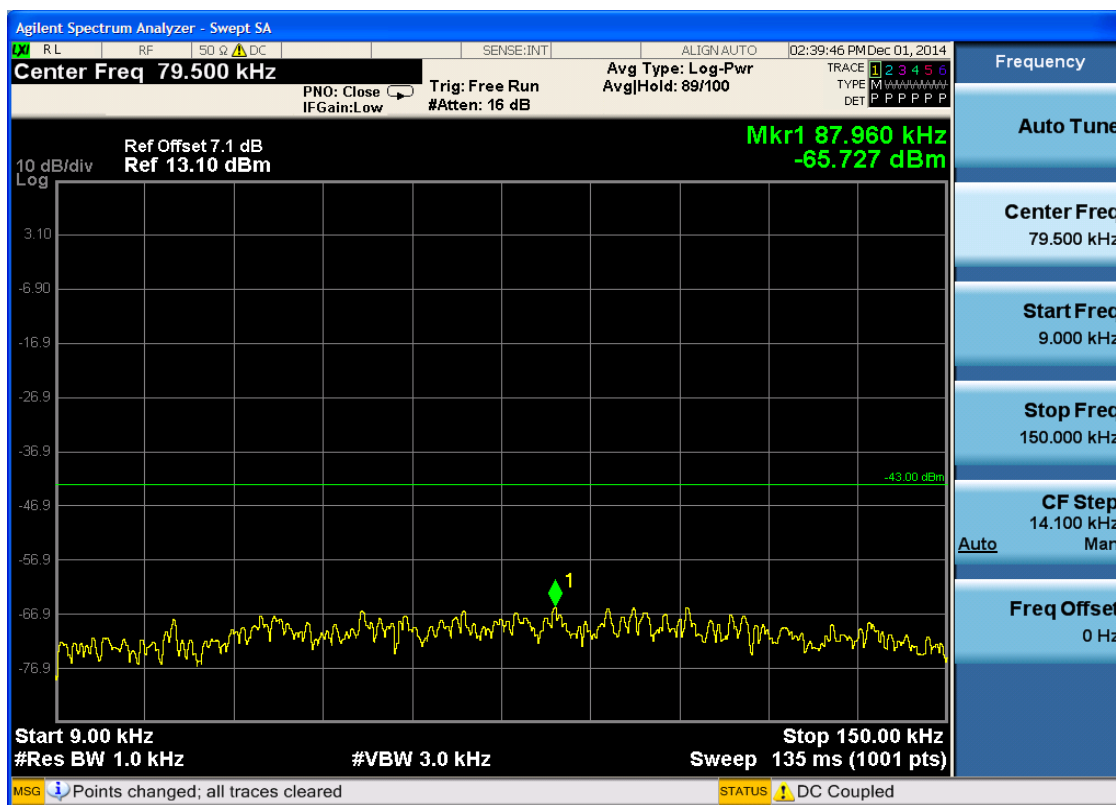


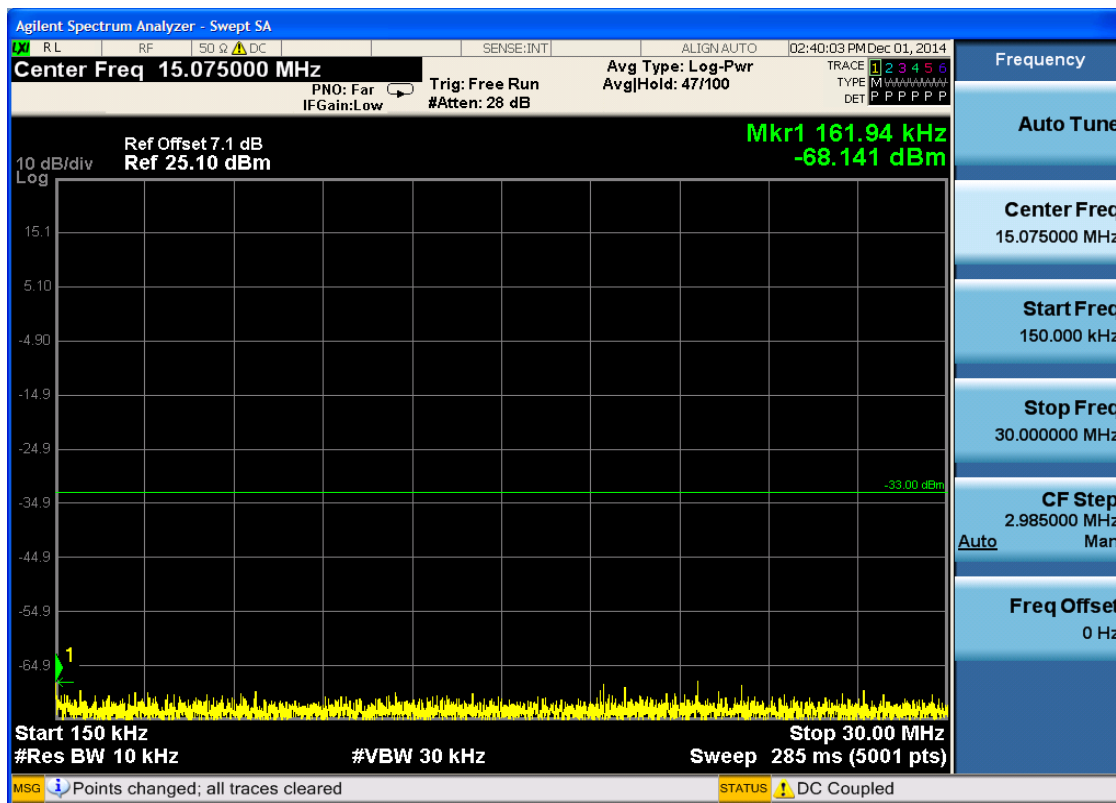


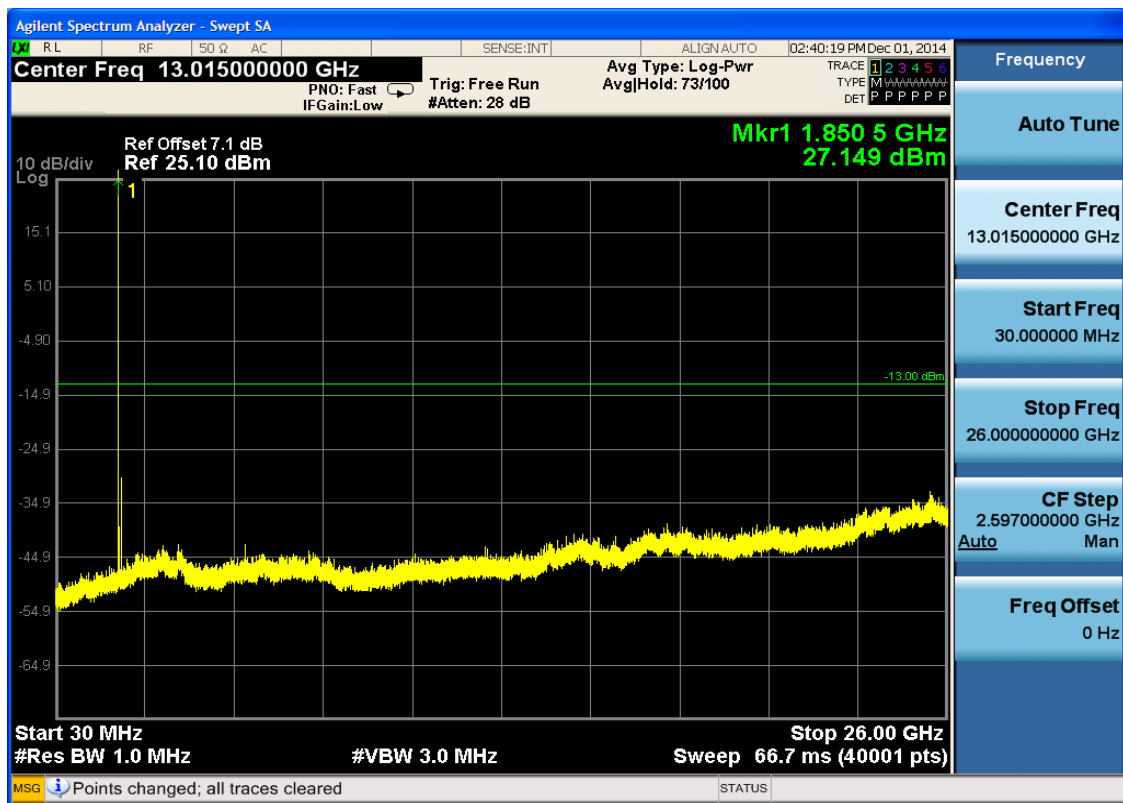
4.1.1.1.4 Test Bandwidth = 10

4.1.1.1.4.1 Test Channel = LCH

4.1.1.1.4.1.1 Test RB = RB1#0









4.1.1.1.4.2 Test Channel = MCH

4.1.1.1.4.2.1 Test RB = RB1#0

