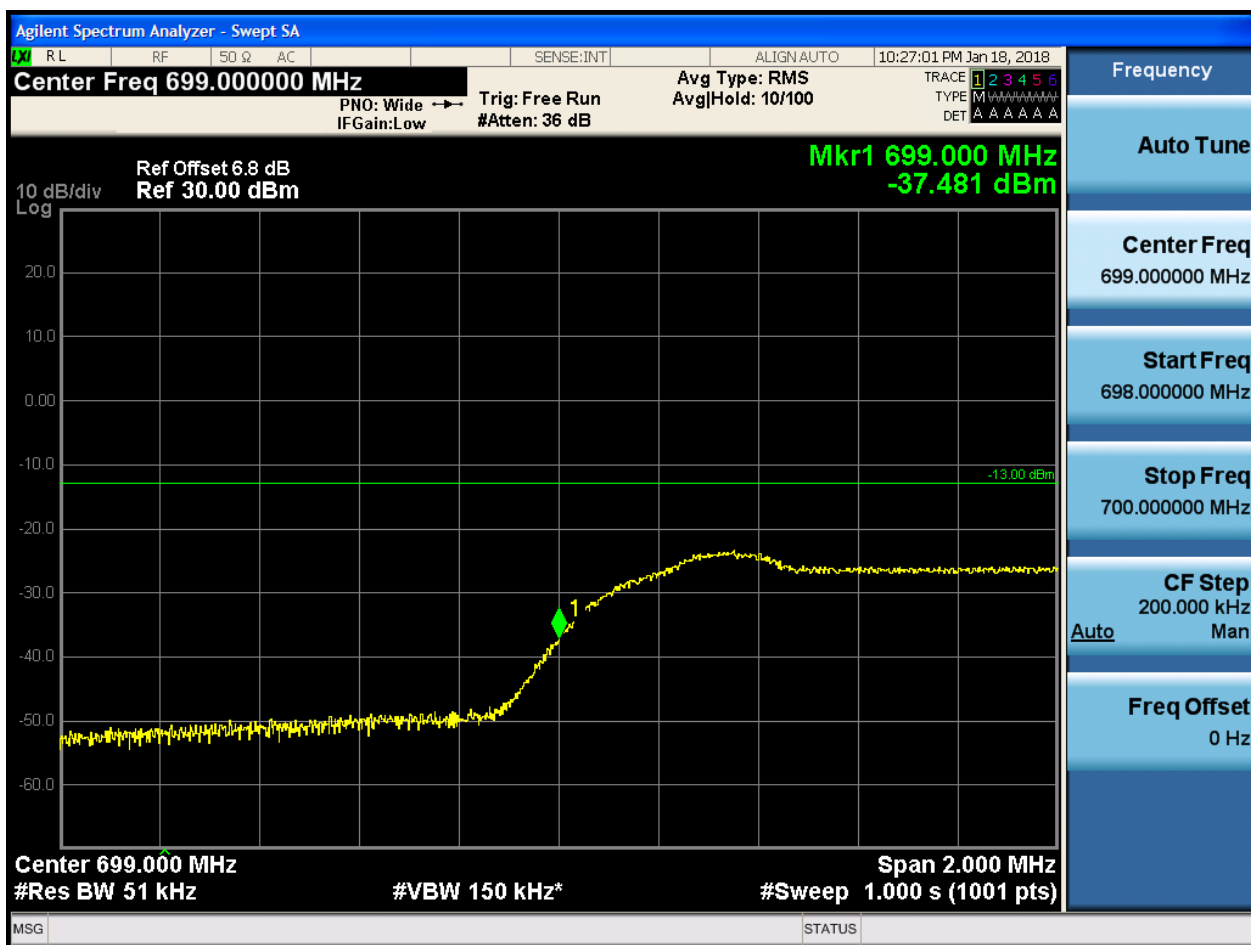




5.1.1.1.3.1.2 Test RB = RB1#24



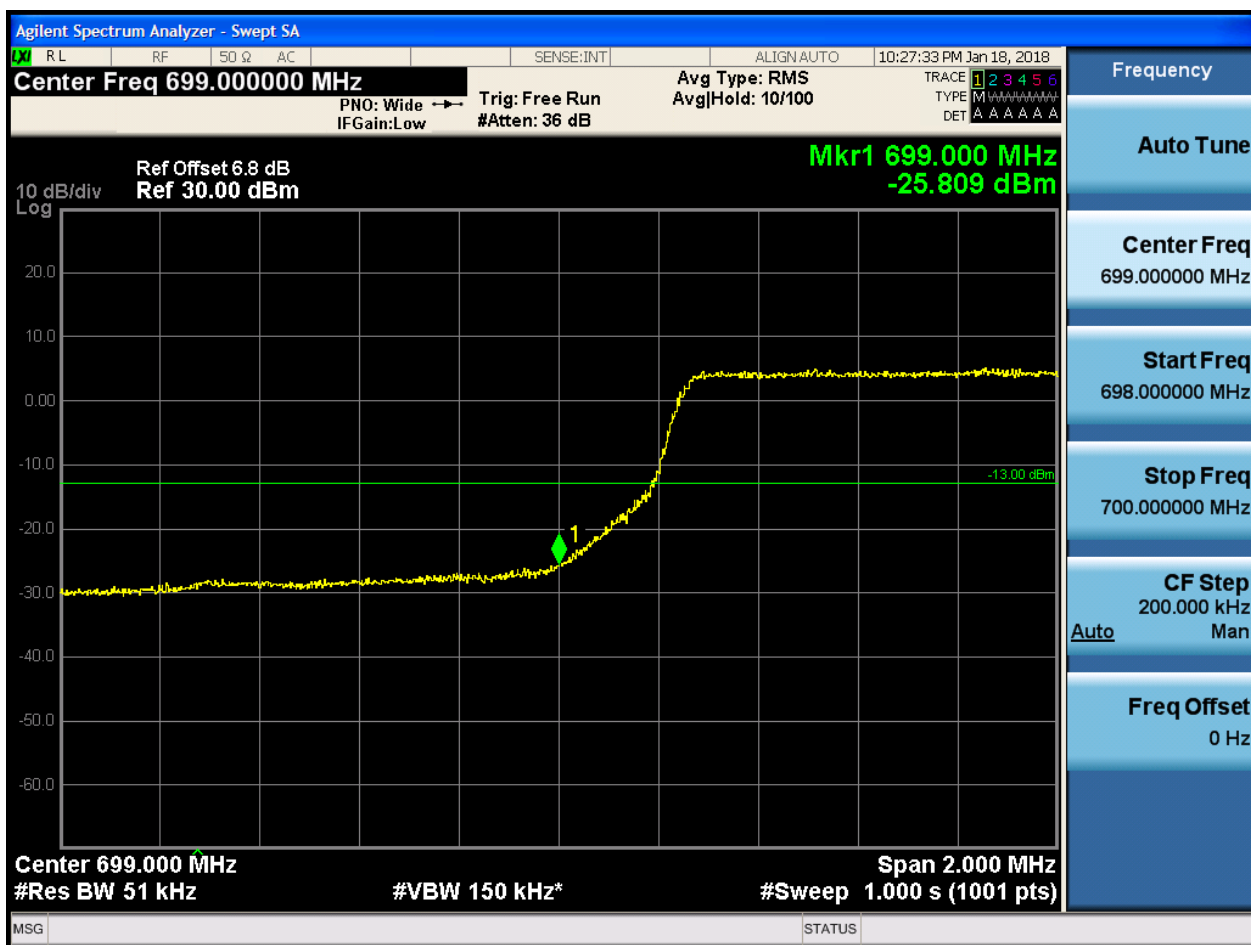


5.1.1.1.3.1.3 Test RB = RB12#6



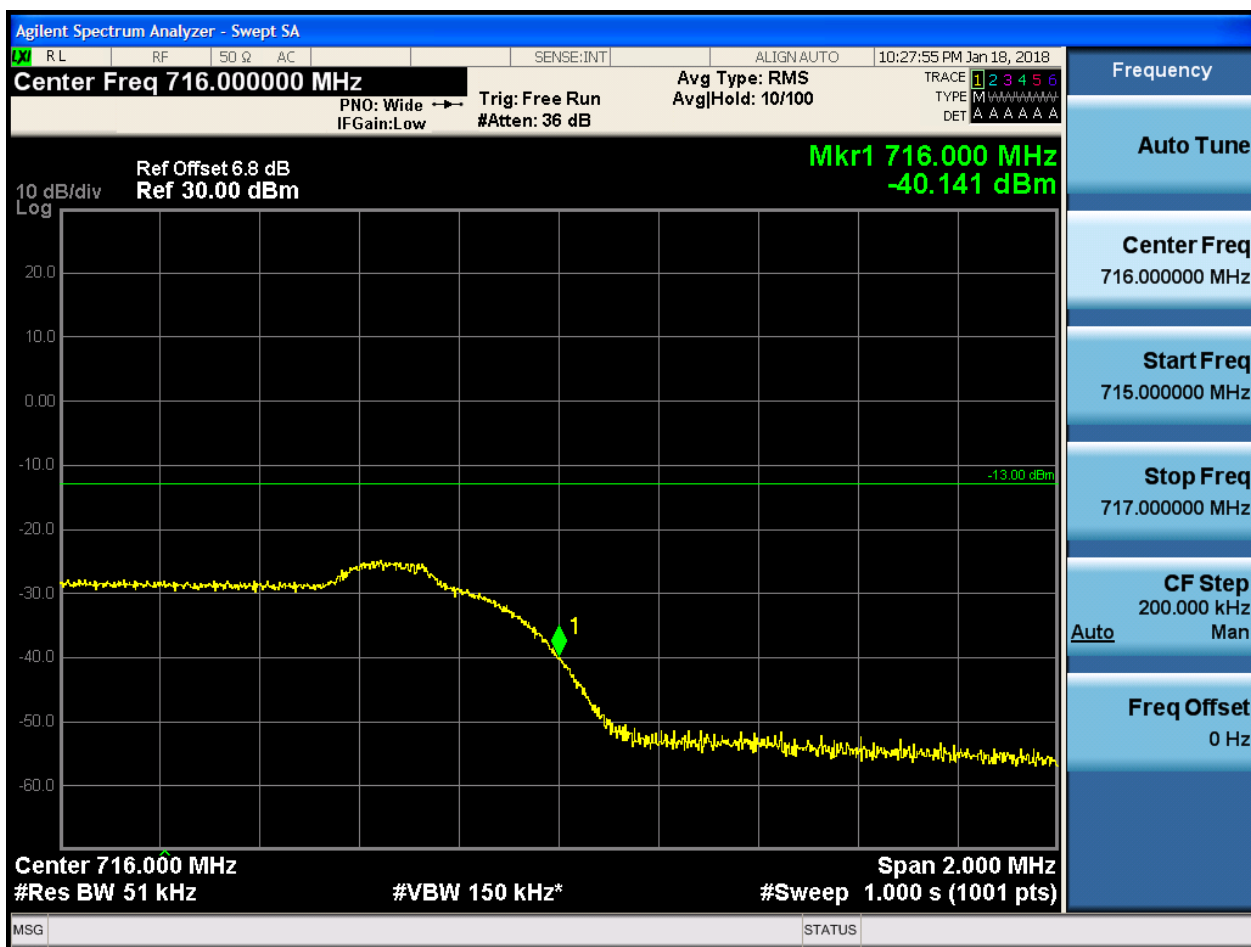


5.1.1.1.3.1.4 Test RB = RB25#0



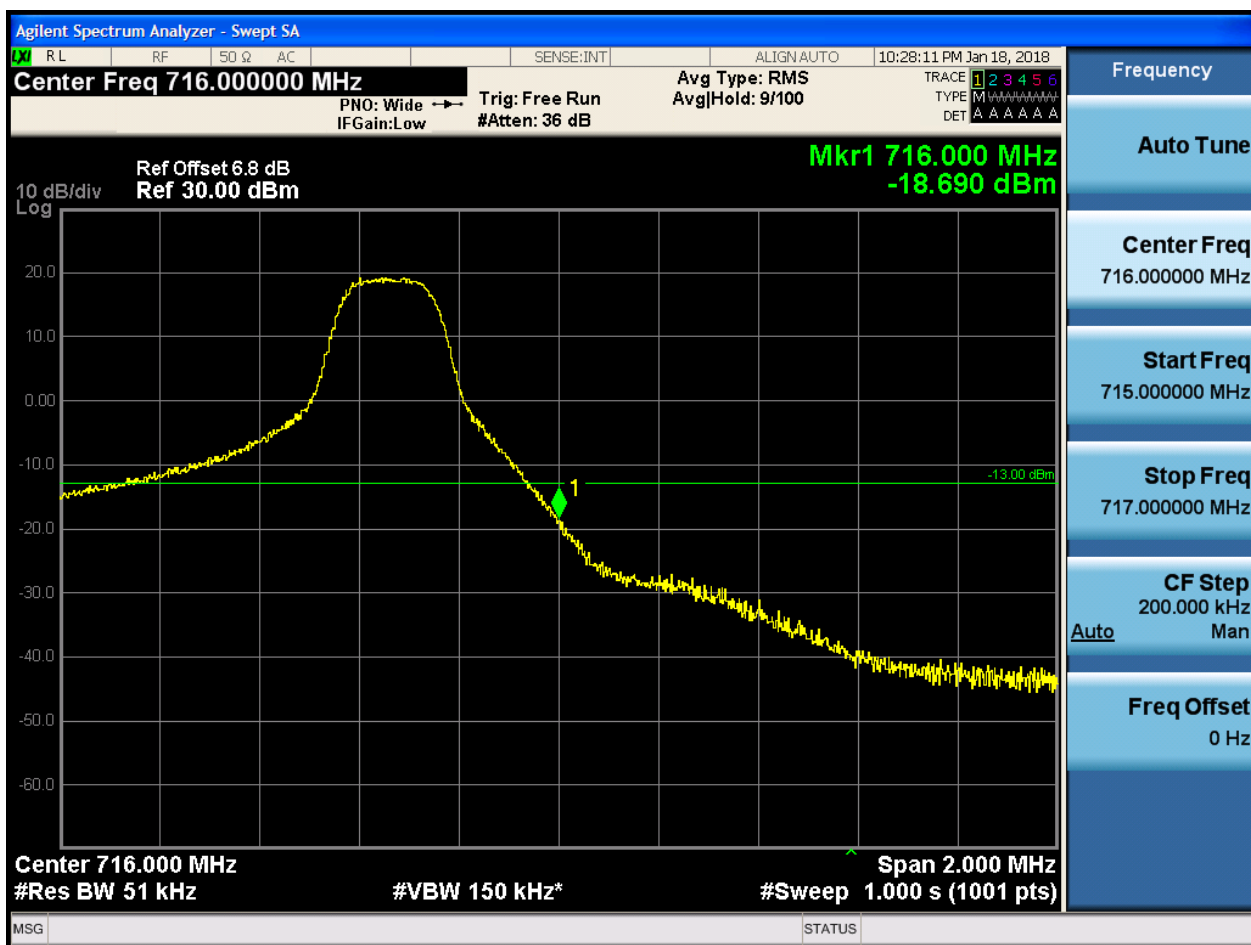
5.1.1.1.3.2 Test Channel = HCH

5.1.1.1.3.2.1 Test RB = RB1#0





5.1.1.1.3.2.2 Test RB = RB1#24



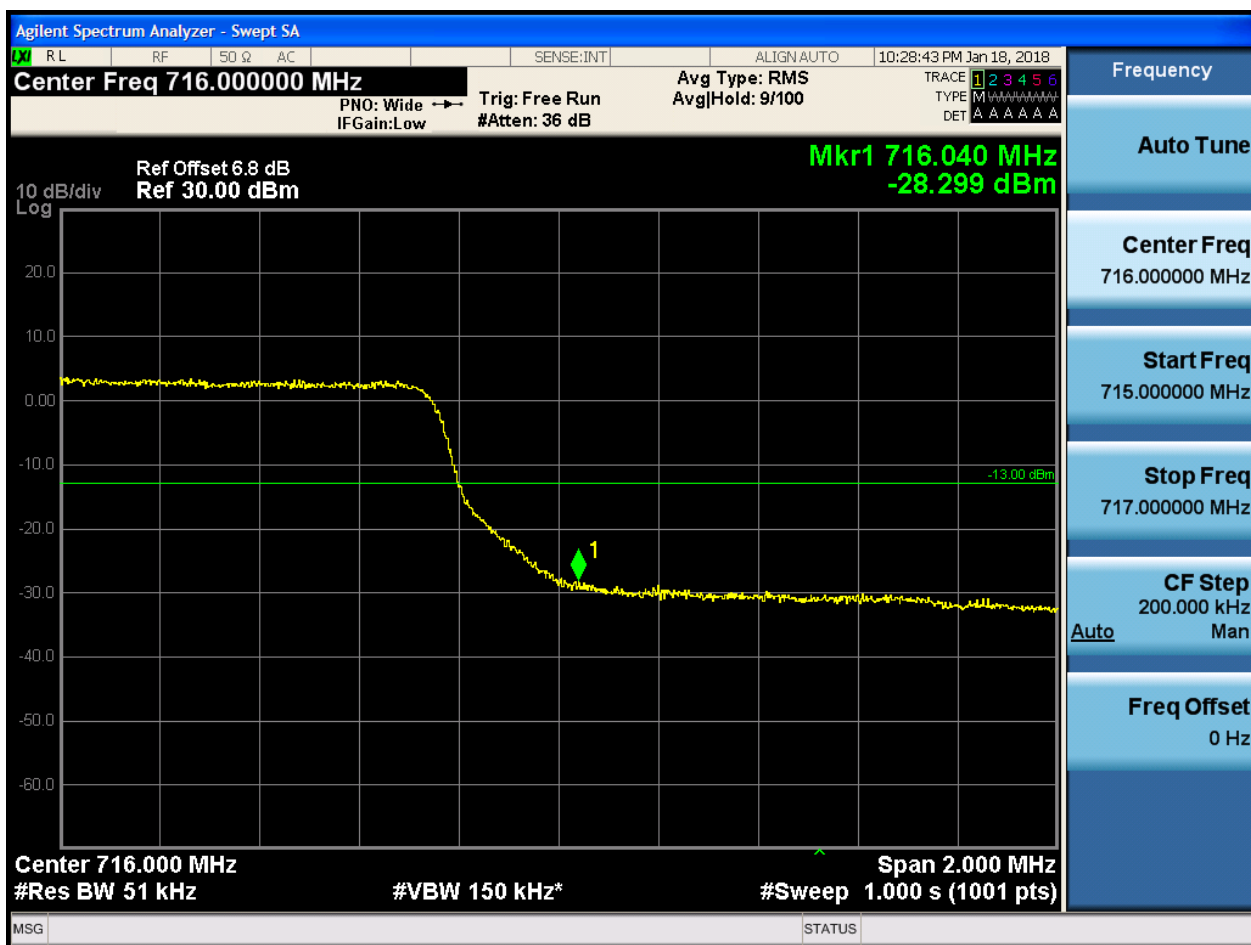


5.1.1.1.3.2.3 Test RB = RB12#6





5.1.1.1.3.2.4 Test RB = RB25#0

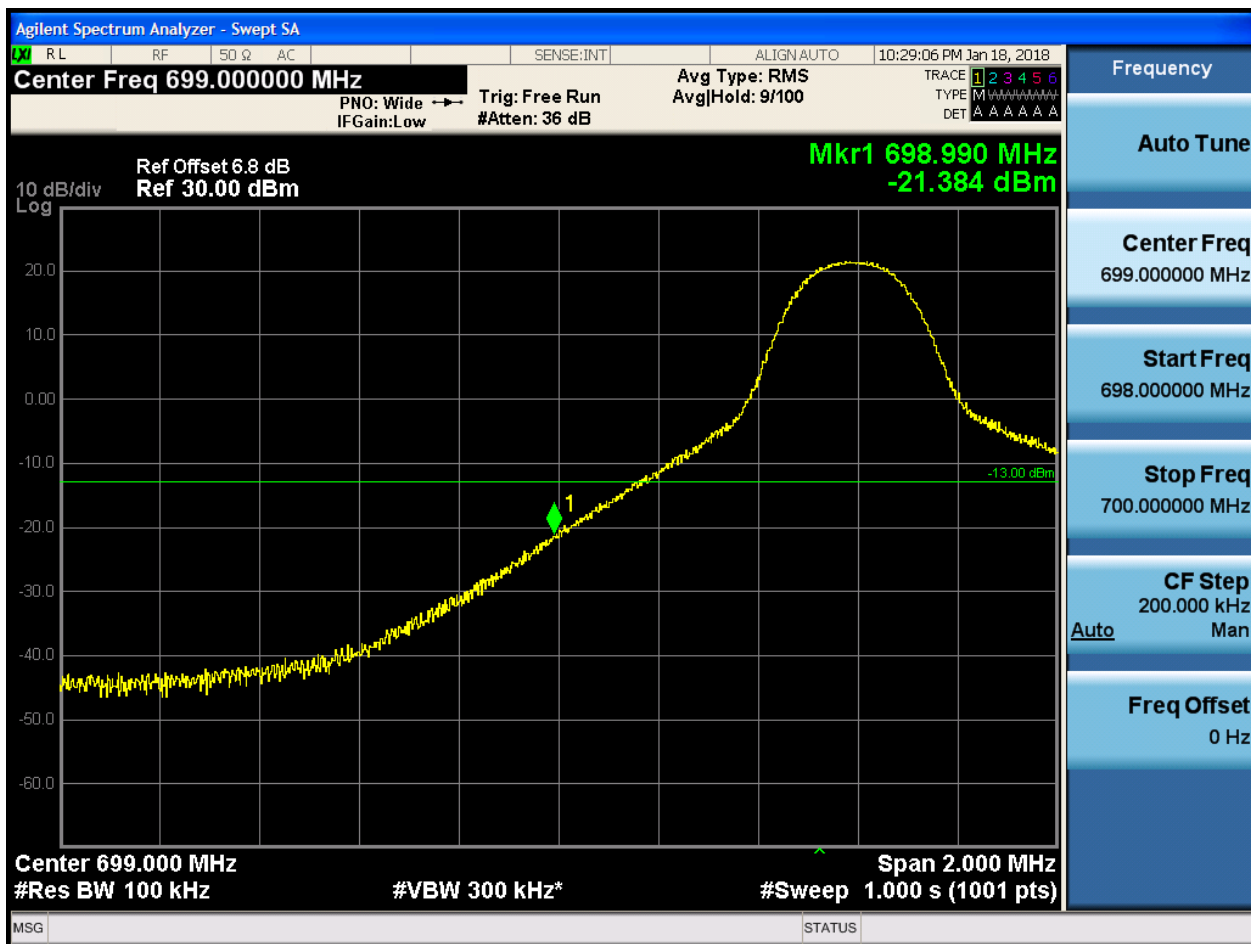




5.1.1.1.4 Test Bandwidth = 10

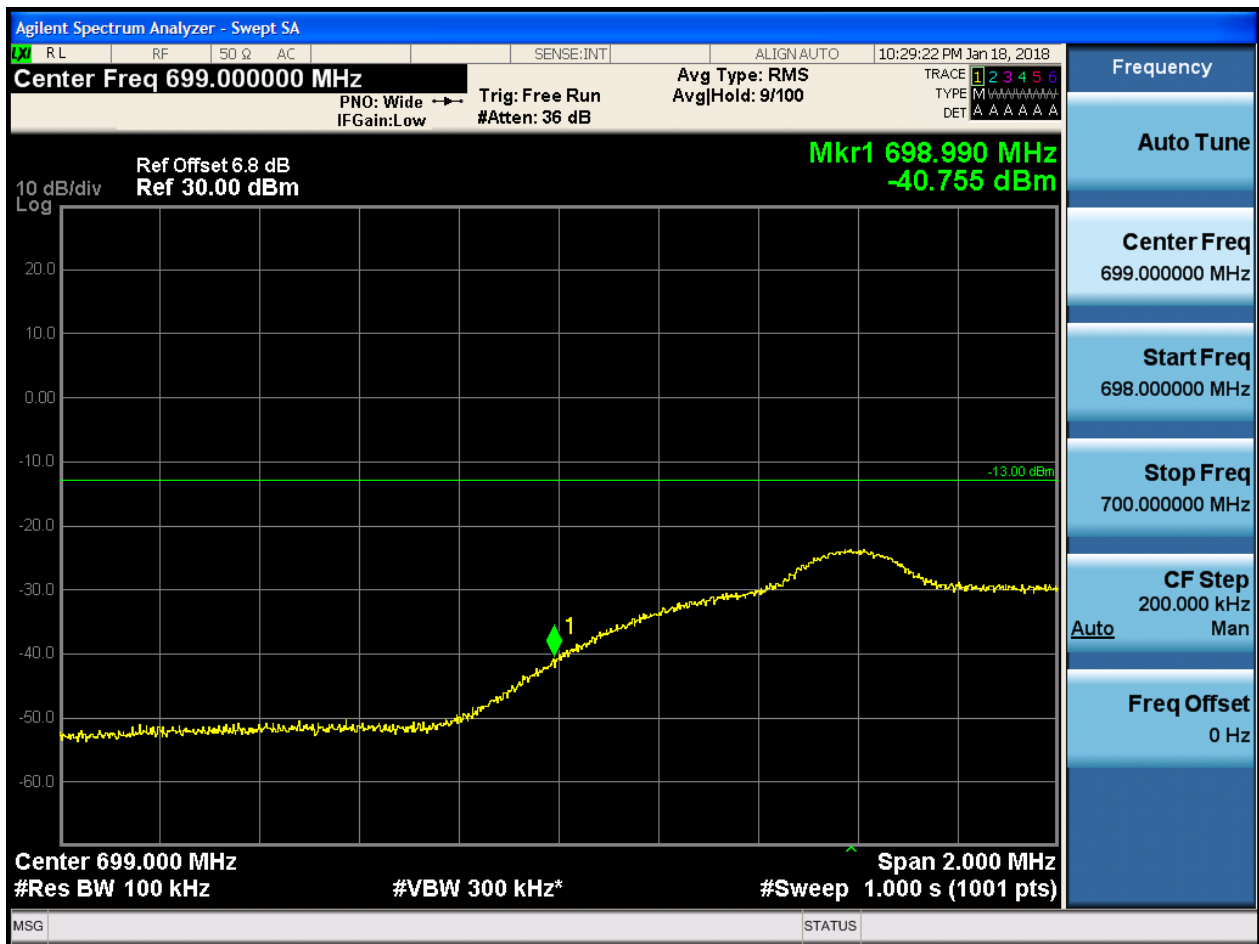
5.1.1.1.4.1 Test Channel = LCH

5.1.1.1.4.1.1 Test RB = RB1#0



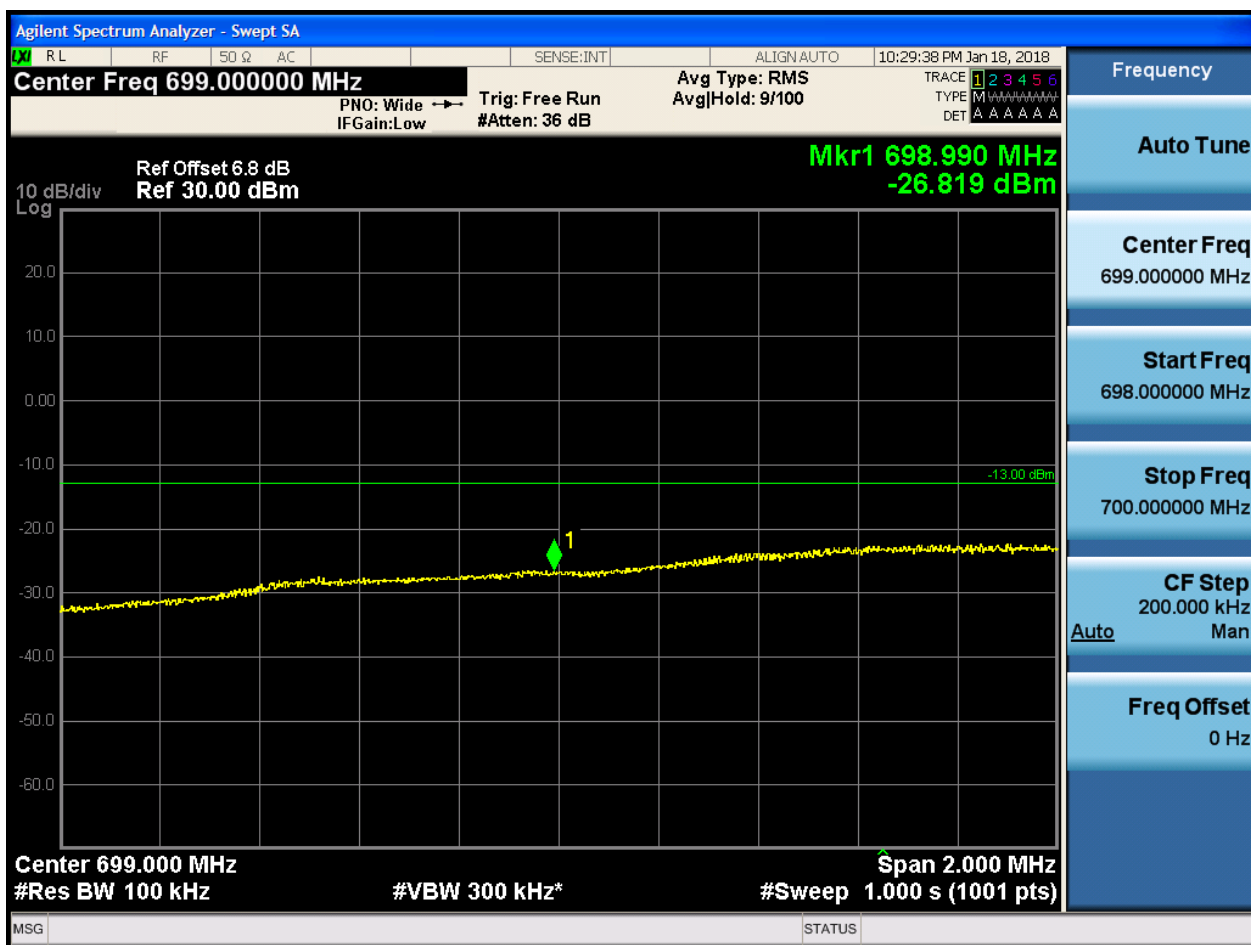


5.1.1.1.4.1.2 Test RB = RB1#49





5.1.1.1.4.1.3 Test RB = RB25#13



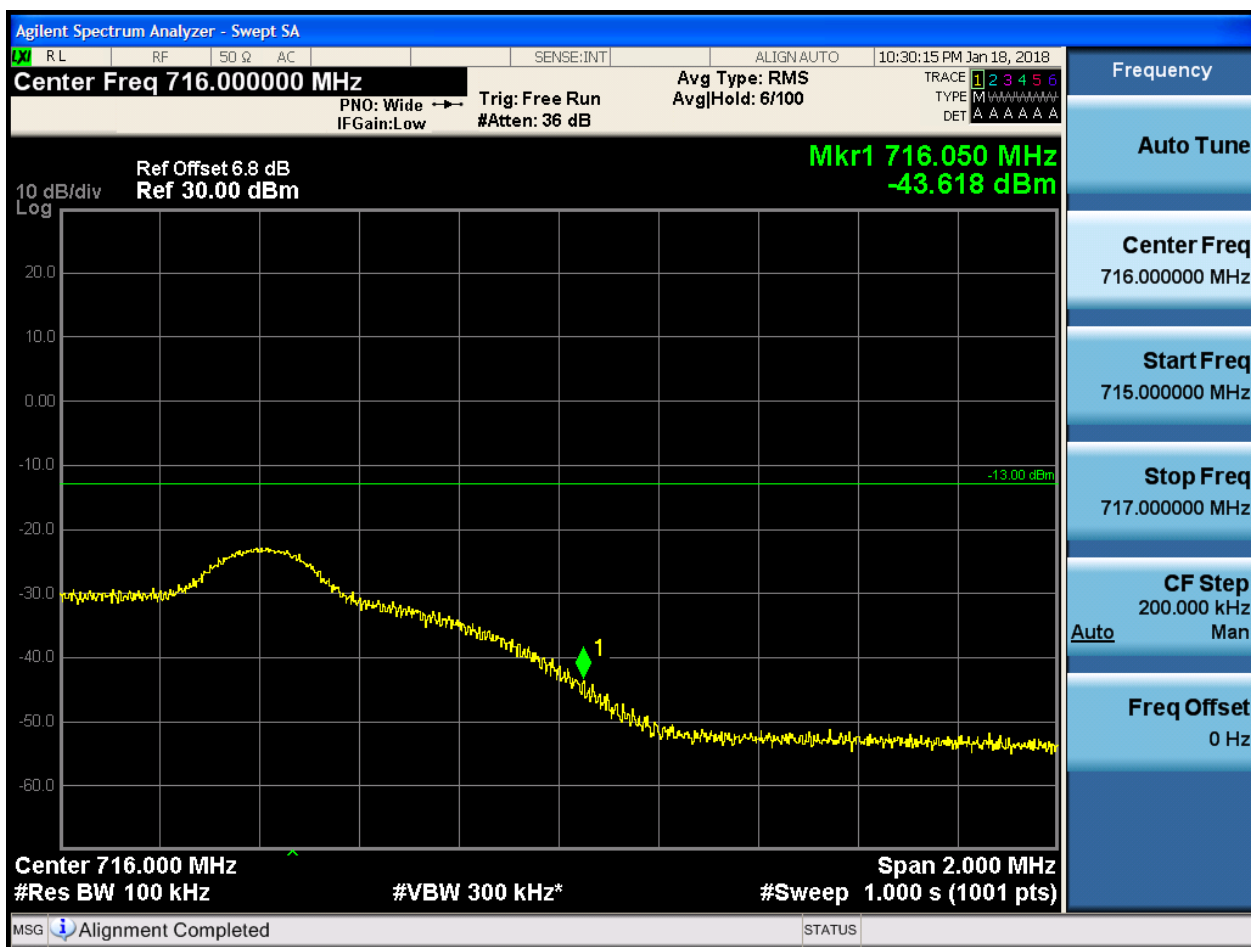


5.1.1.1.4.1.4 Test RB = RB50#0



5.1.1.1.4.2 Test Channel = HCH

5.1.1.1.4.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.000 MHz
-20.653 dBm

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

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.030 MHz
-30.285 dBm

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

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

Mkr1 716.060 MHz
-28.411 dBm

10 dB/div
Log

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

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz

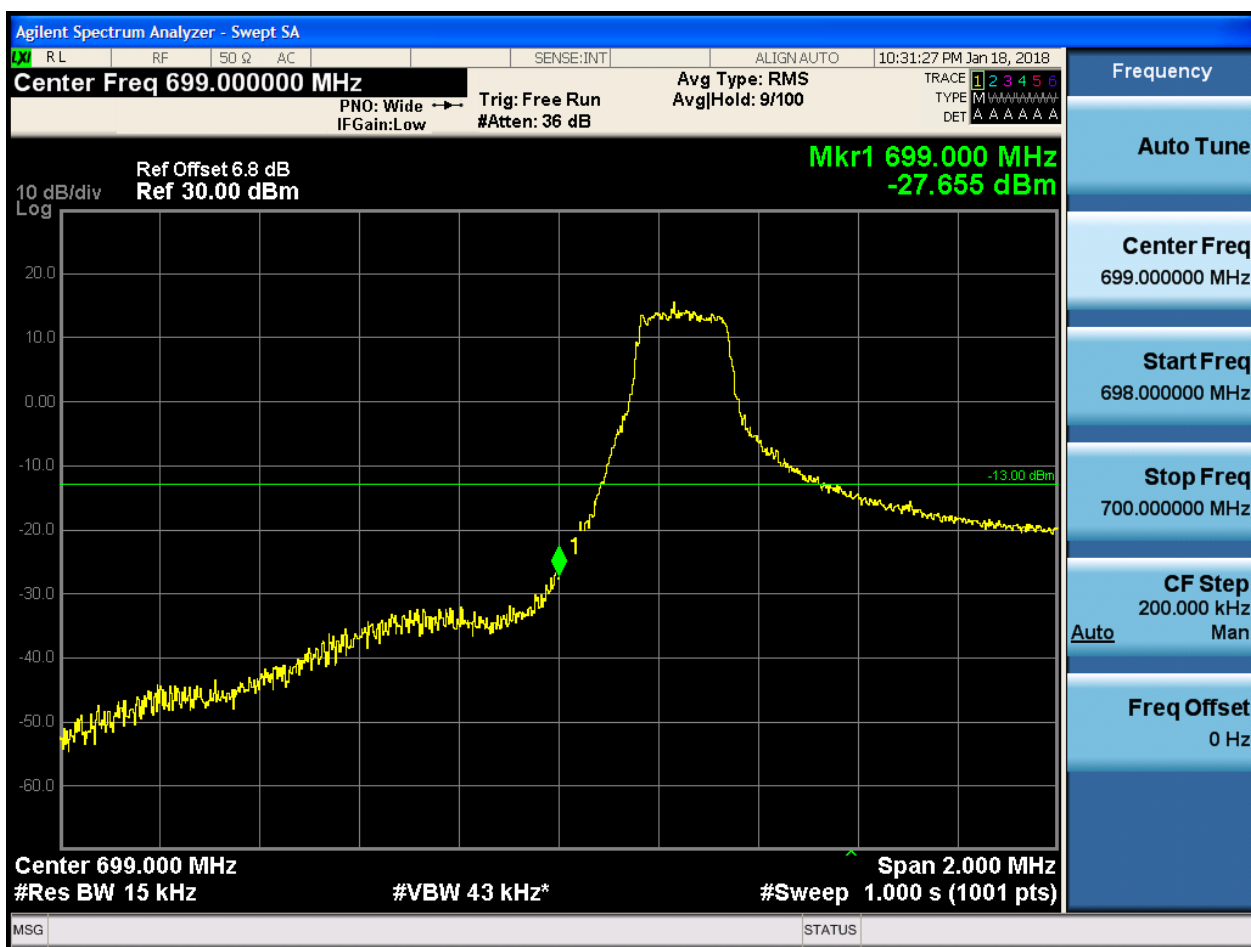


5.1.1.2 Test Mode = LTE/TM2

5.1.1.2.1 Test Bandwidth = 1.4

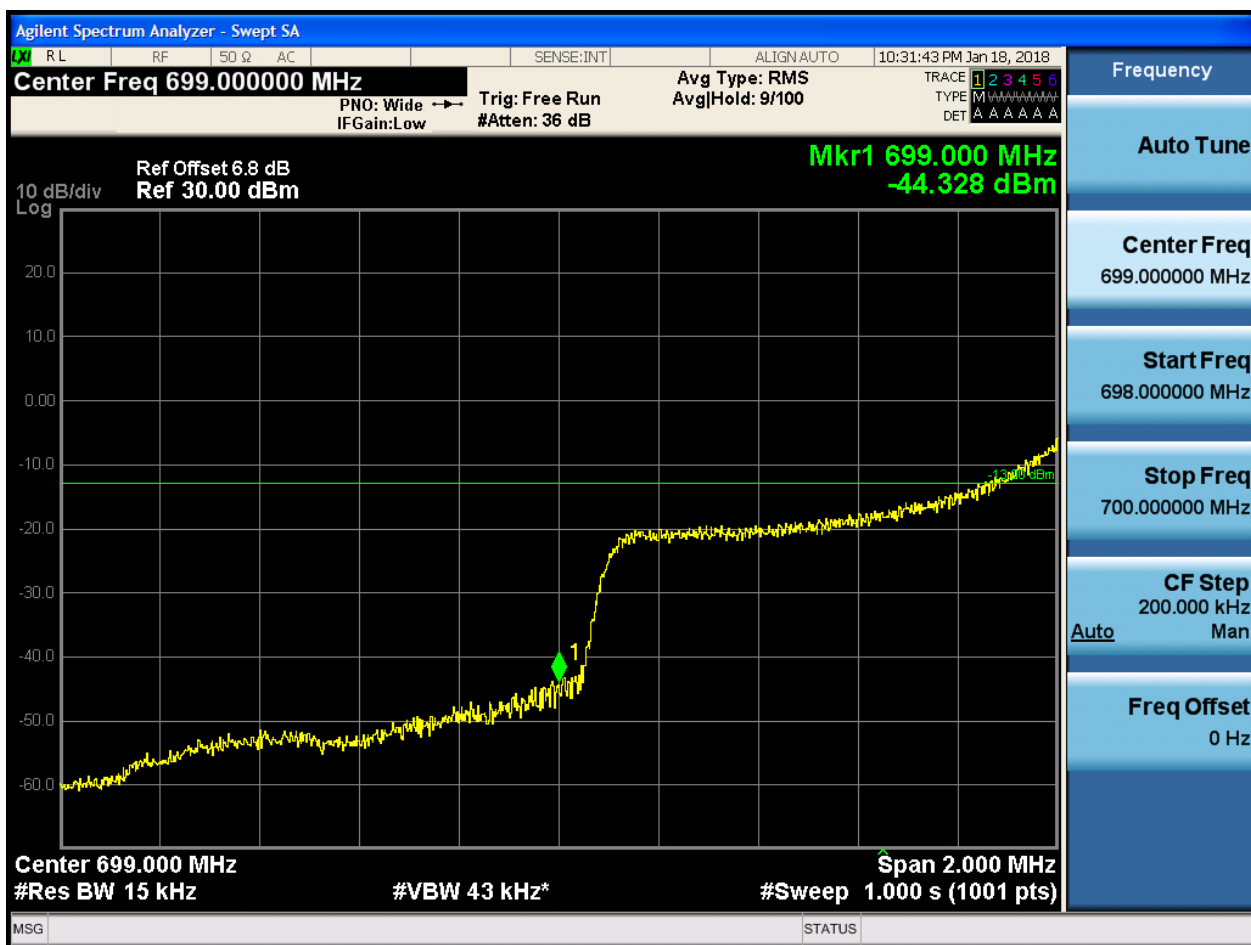
5.1.1.2.1.1 Test Channel = LCH

5.1.1.2.1.1.1 Test RB = RB1#0



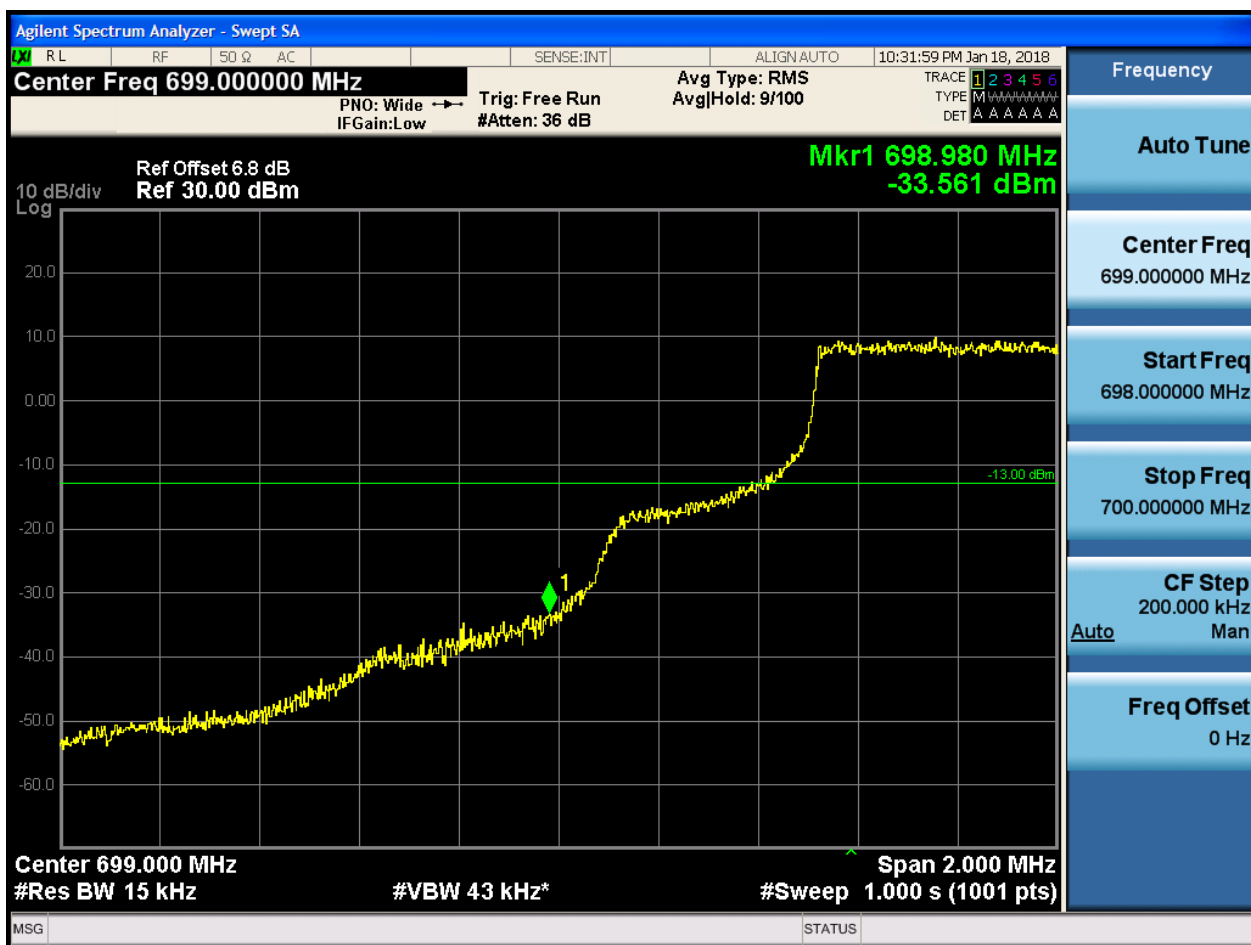


5.1.1.2.1.1.2 Test RB = RB1#5





5.1.1.2.1.1.3 Test RB = RB3#2





Agilent Spectrum Analyzer - Swept SA

Center Freq 699.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 698.910 MHz
-27.590 dBm

Center 699.000 MHz
#Res BW 15 kHz
#VBW 43 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
699.000000 MHz

Start Freq
698.000000 MHz

Stop Freq
700.000000 MHz

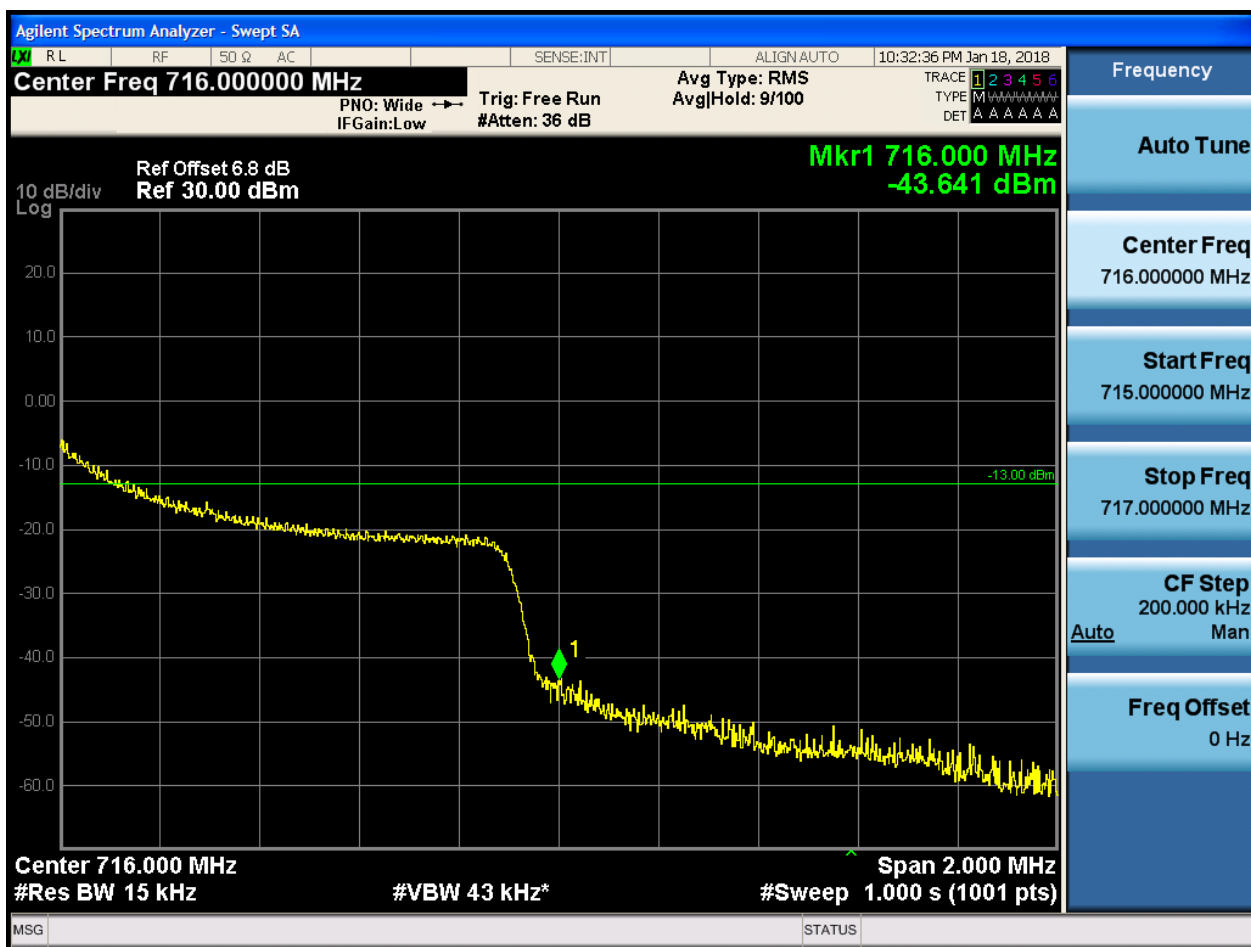
CF Step
200.000 kHz
Auto

Freq Offset
0 Hz



5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.010 MHz
-25.841 dBm

Center 716.000 MHz
#Res BW 15 kHz
#VBW 43 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 10:33:08 PM Jan 18, 2018

Center Freq 716.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100
#Atten: 36 dB

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

Ref Offset 6.8 dB
Ref 30.00 dBm

Mkr1 716.010 MHz
-24.387 dBm

10 dB/div
Log

Center 716.000 MHz
#Res BW 15 kHz
#VBW 43 kHz*
Span 2.000 MHz
#Sweep 1.000 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



5.1.1.2.1.2.4 Test RB = RB6#0

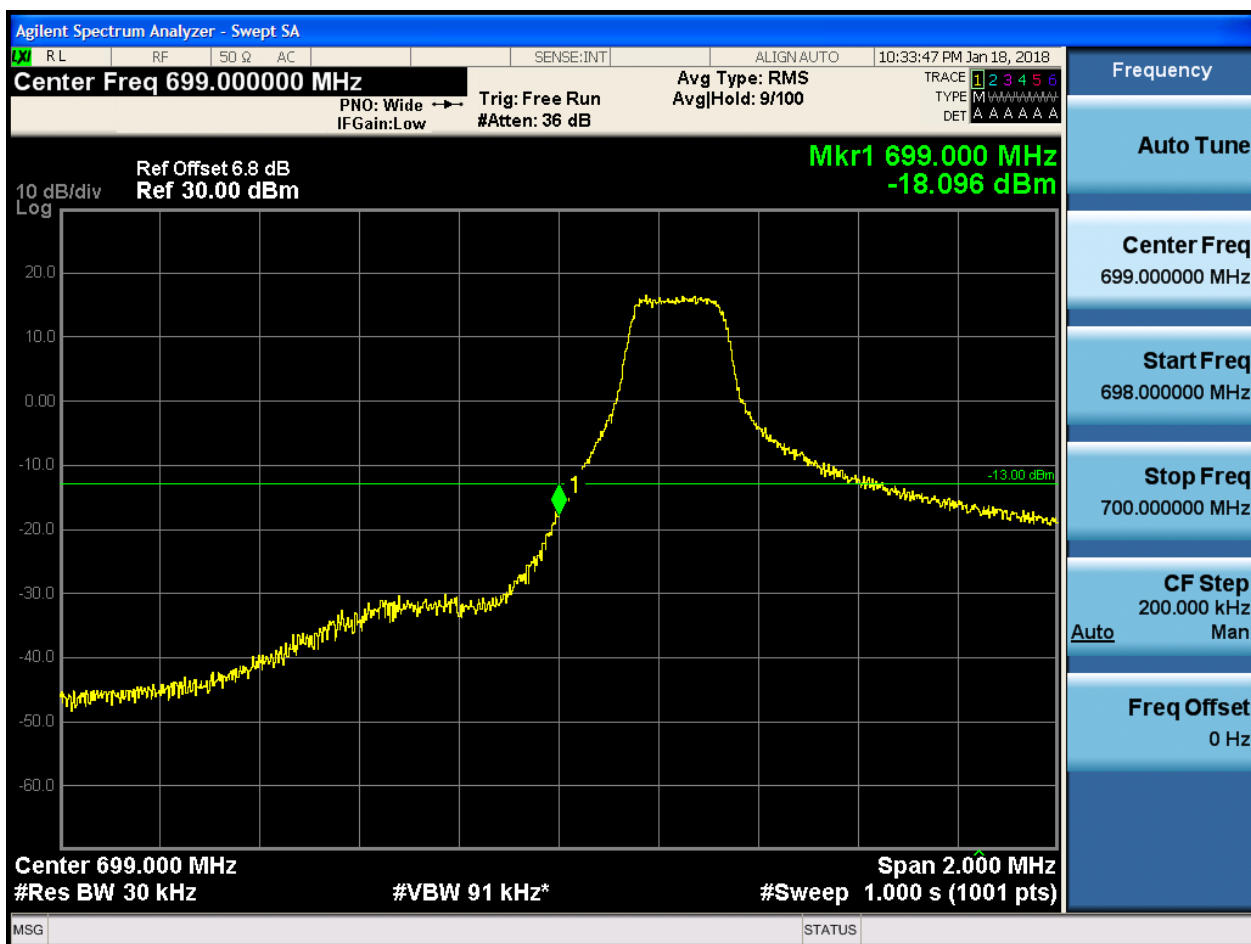




5.1.1.2.2 Test Bandwidth = 3

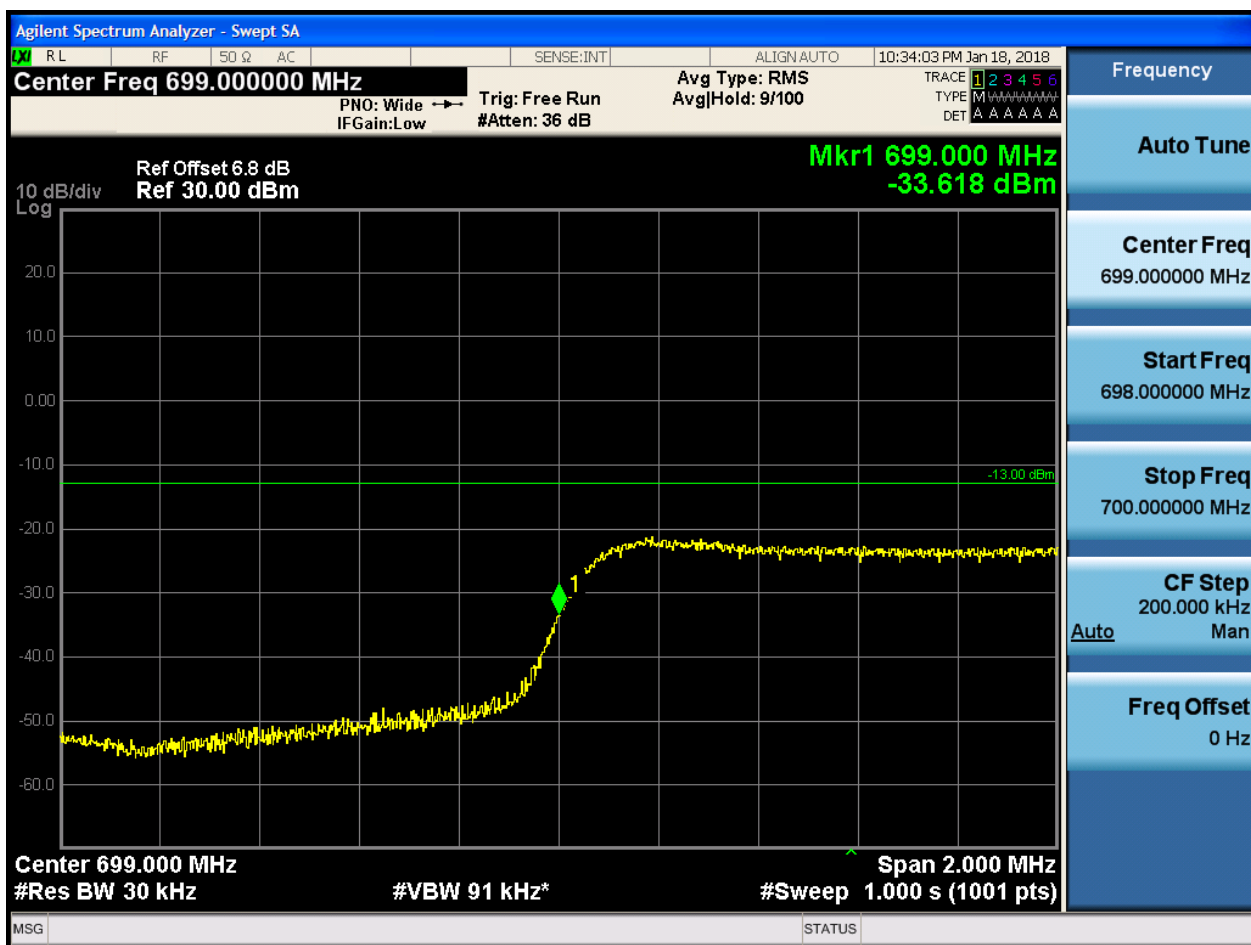
5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0



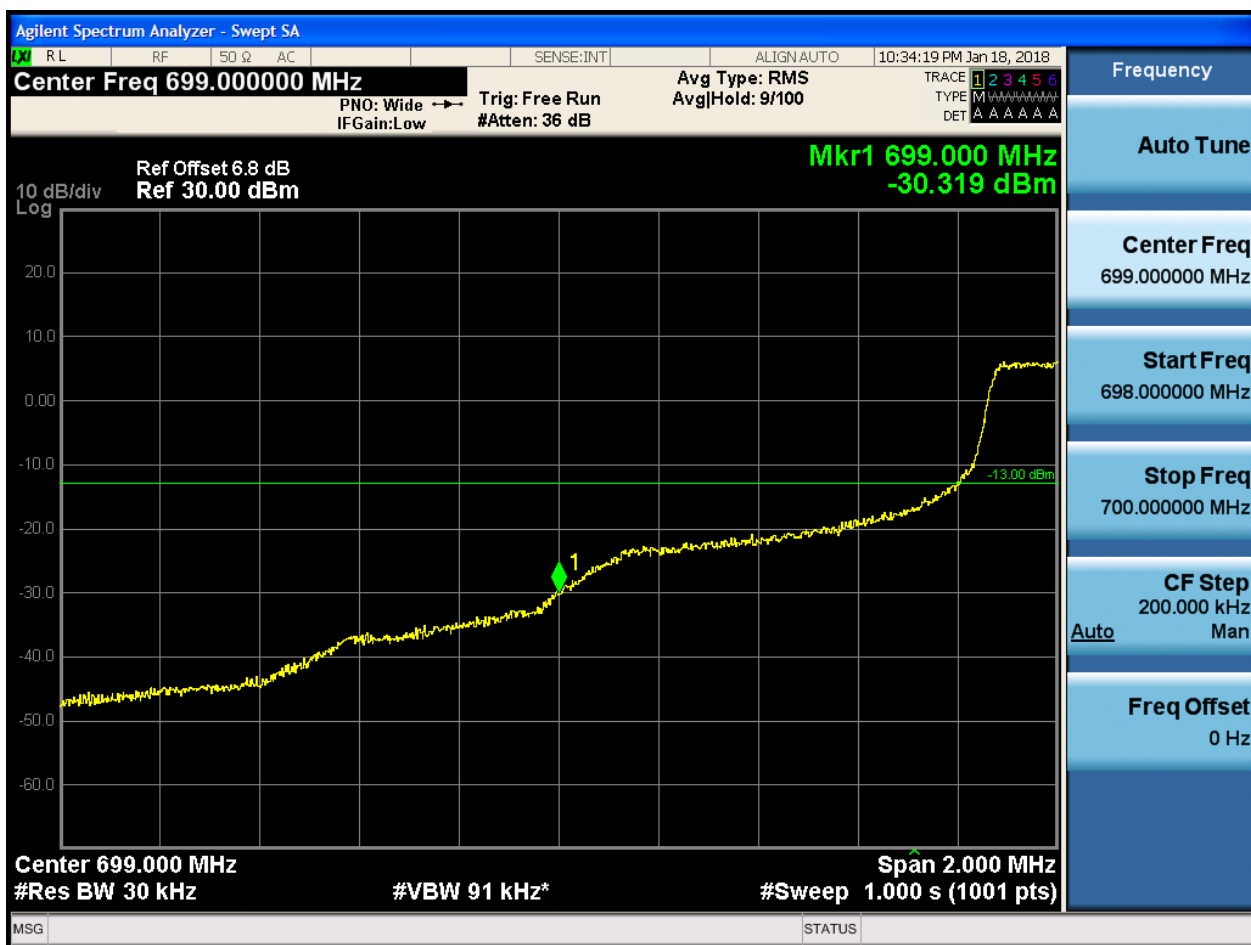


5.1.1.2.2.1.2 Test RB = RB1#14





5.1.1.2.2.1.3 Test RB = RB8#4





Agilent Spectrum Analyzer - Swept SA

Center Freq 699.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 699.000 MHz
-27.856 dBm

Center 699.000 MHz
#Res BW 30 kHz

#VBW 91 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
699.000000 MHz

Start Freq
698.000000 MHz

Stop Freq
700.000000 MHz

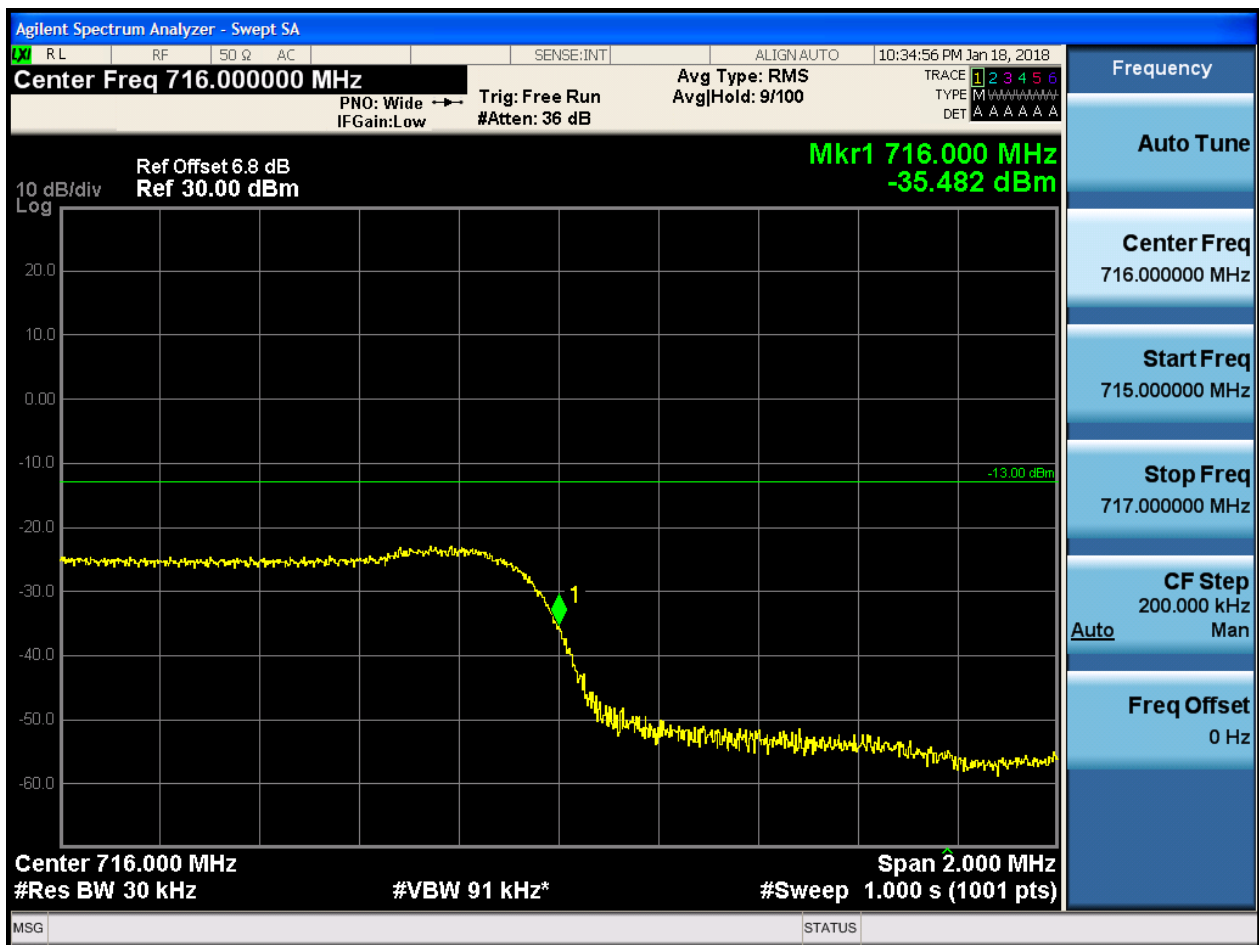
CF Step
200.000 kHz
Auto

Freq Offset
0 Hz



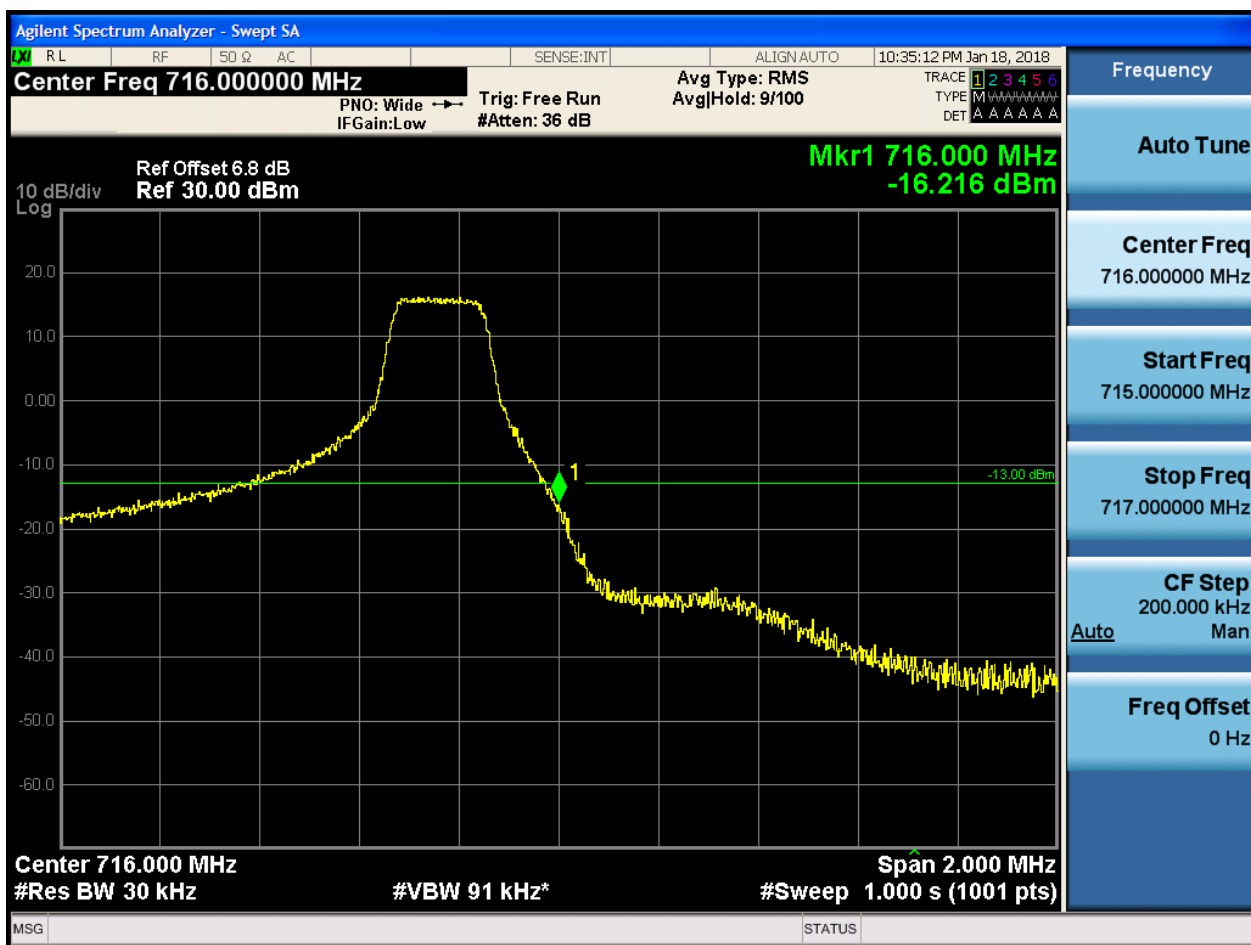
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0





5.1.1.2.2.2 Test RB = RB1#14



[illegible]



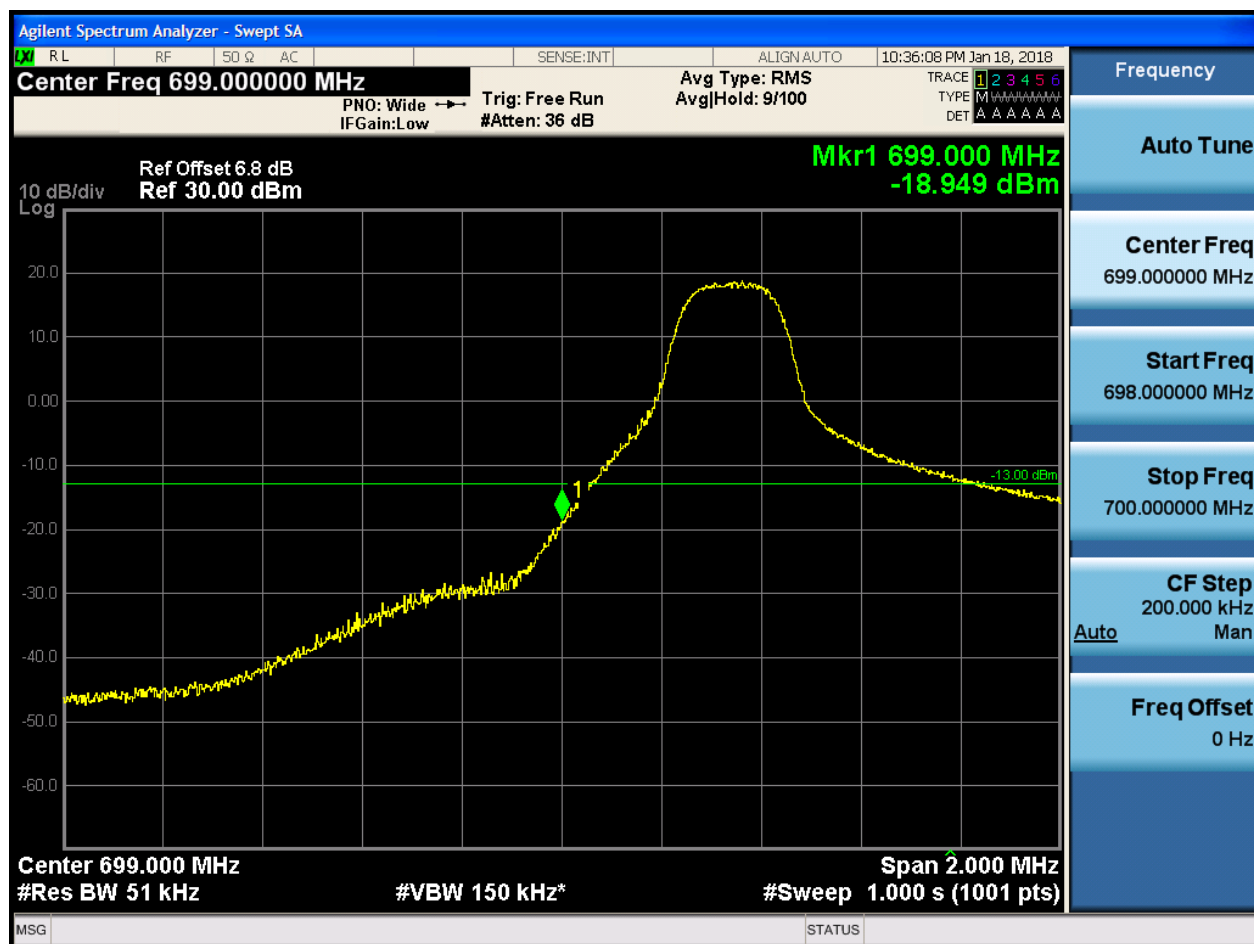
5.1.1.2.2.4 Test RB = RB15#0



5.1.1.2.3 Test Bandwidth = 5

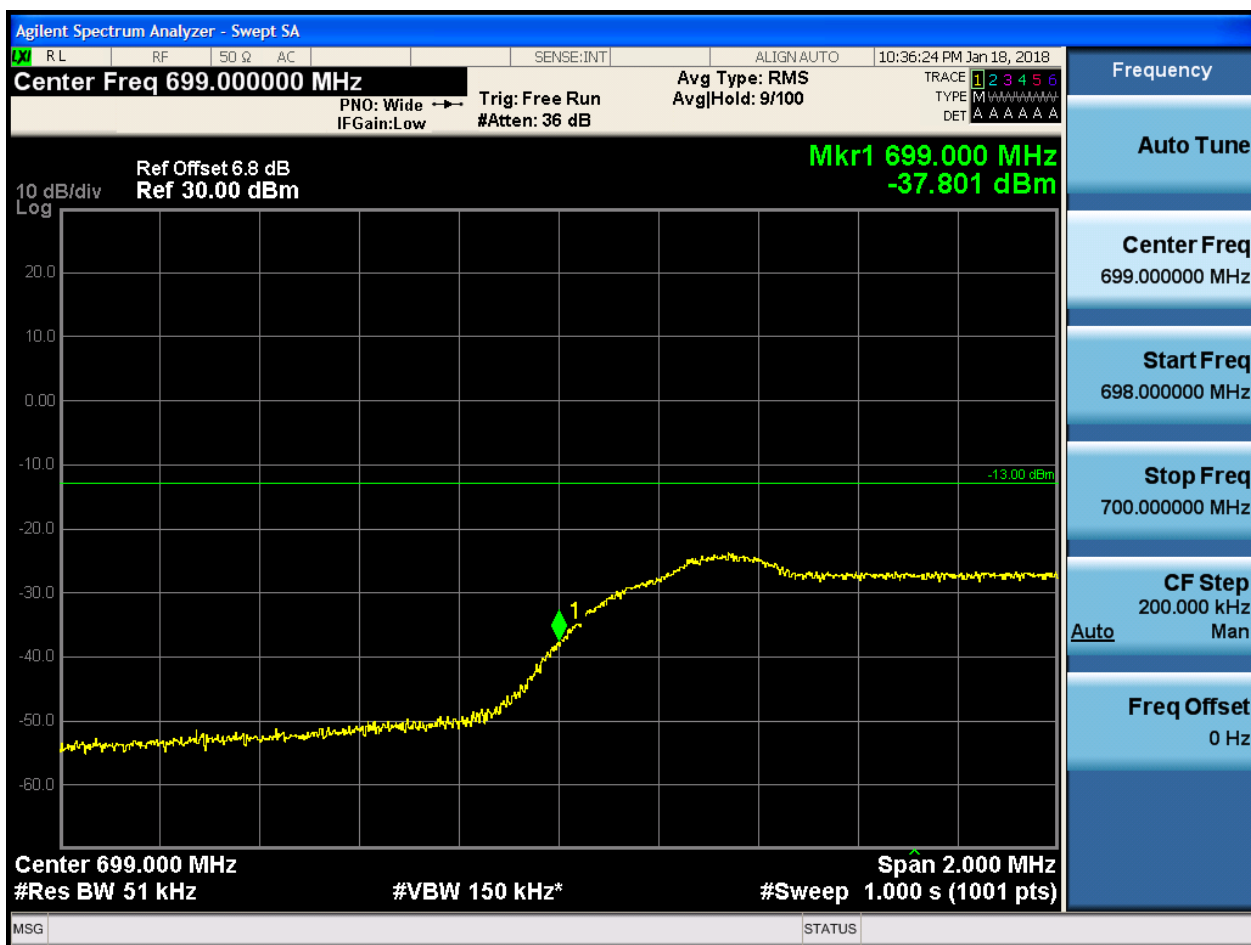
5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0





5.1.1.2.3.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 10:36:40 PM Jan 18, 2018

Center Freq 699.000000 MHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100
#Atten: 36 dB

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

Ref Offset 6.8 dB
Ref 30.00 dBm

Mkr1 698.990 MHz
-30.869 dBm

10 dB/div
Log

-13.00 dBm

Center 699.000 MHz Span 2.000 MHz
#Res BW 51 kHz #VBW 150 kHz* #Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
699.000000 MHz

Start Freq
698.000000 MHz

Stop Freq
700.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 699.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

Mkr1 699.000 MHz
-27.666 dBm

10 dB/div
Log

Center 699.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
699.000000 MHz

Start Freq
698.000000 MHz

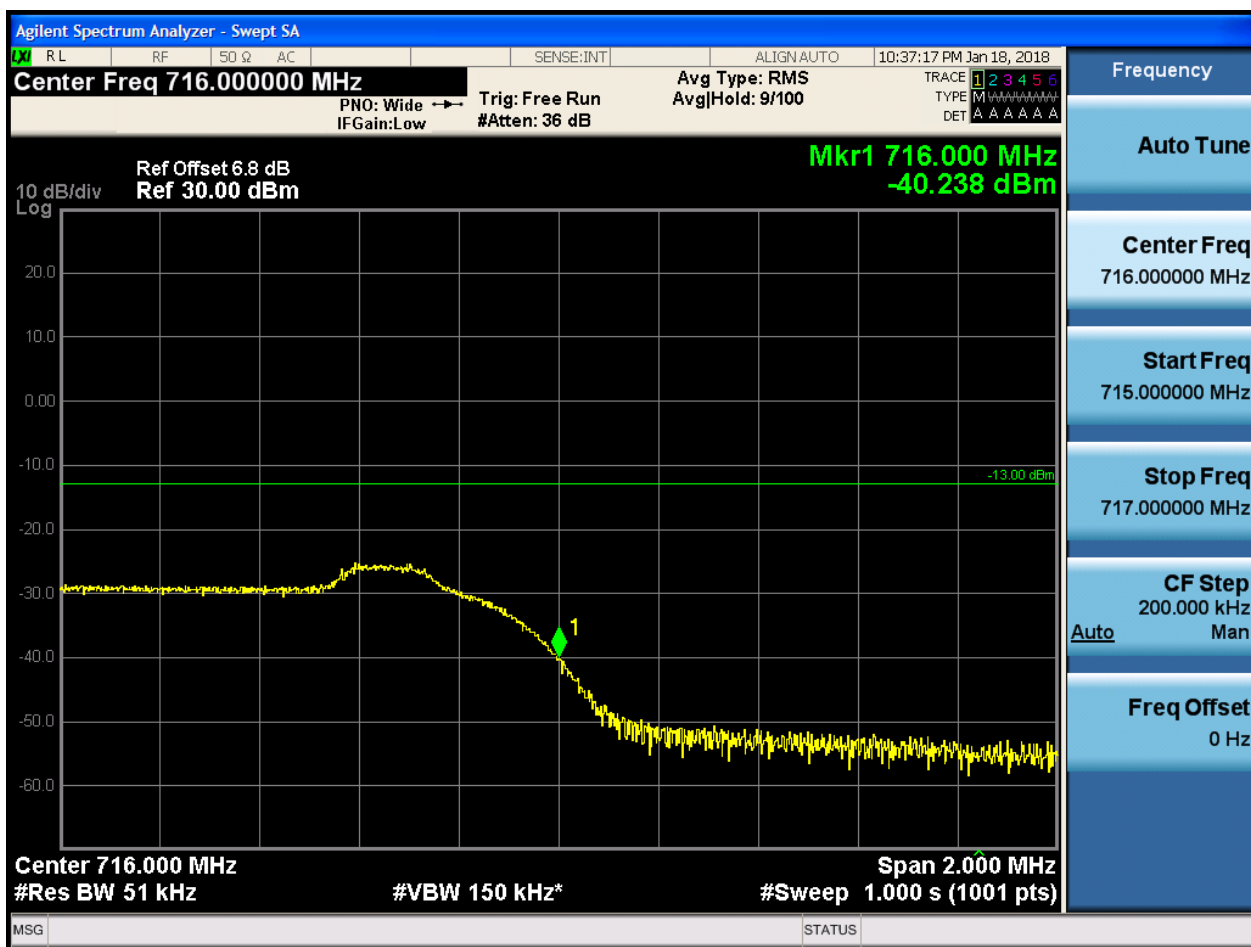
Stop Freq
700.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz

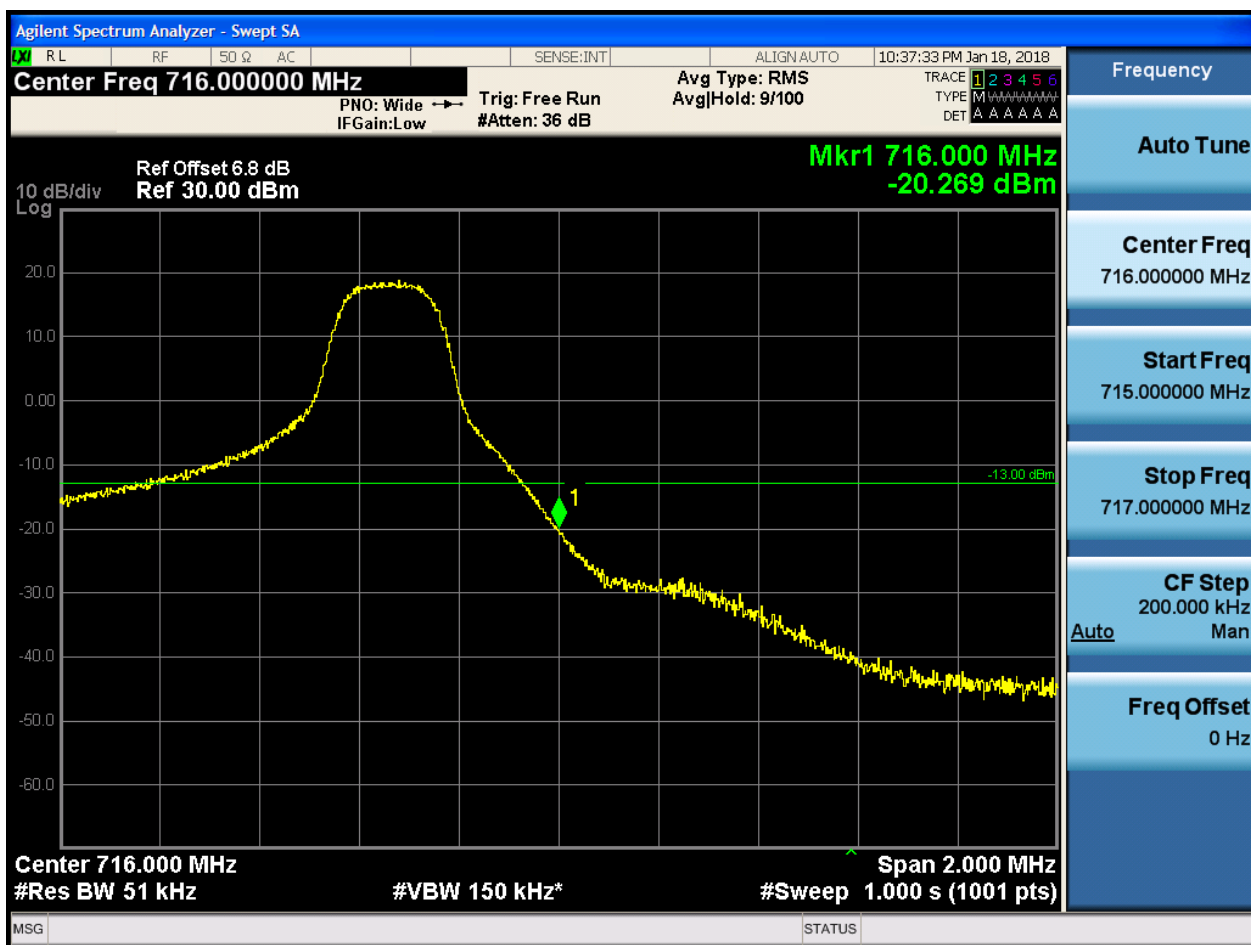
5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





5.1.1.2.3.2.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

10 dB/div
Log

Center 716.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Trig: Free Run
#Atten: 36 dB

Avg Type: RMS
Avg|Hold: 9/100

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

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

Center Freq 716.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

Mkr1 716.000 MHz
-29.177 dBm

10 dB/div
Log

Center 716.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz

The screenshot displays a swept spectrum on a logarithmic scale. The y-axis represents power in dBm, ranging from -60.0 to 20.0. The x-axis represents frequency in MHz, with a center frequency of 716.000 MHz and a span of 2.000 MHz. A yellow trace shows a relatively flat signal level around 0 dBm until approximately 715.5 MHz, where it drops sharply to about -30 dBm. A green horizontal line is drawn at -13.00 dBm. A green marker labeled '1' is placed on the trace at the point of the sharp drop. The right side of the screen features a control panel with various settings for frequency, auto-tune, and resolution bandwidth.

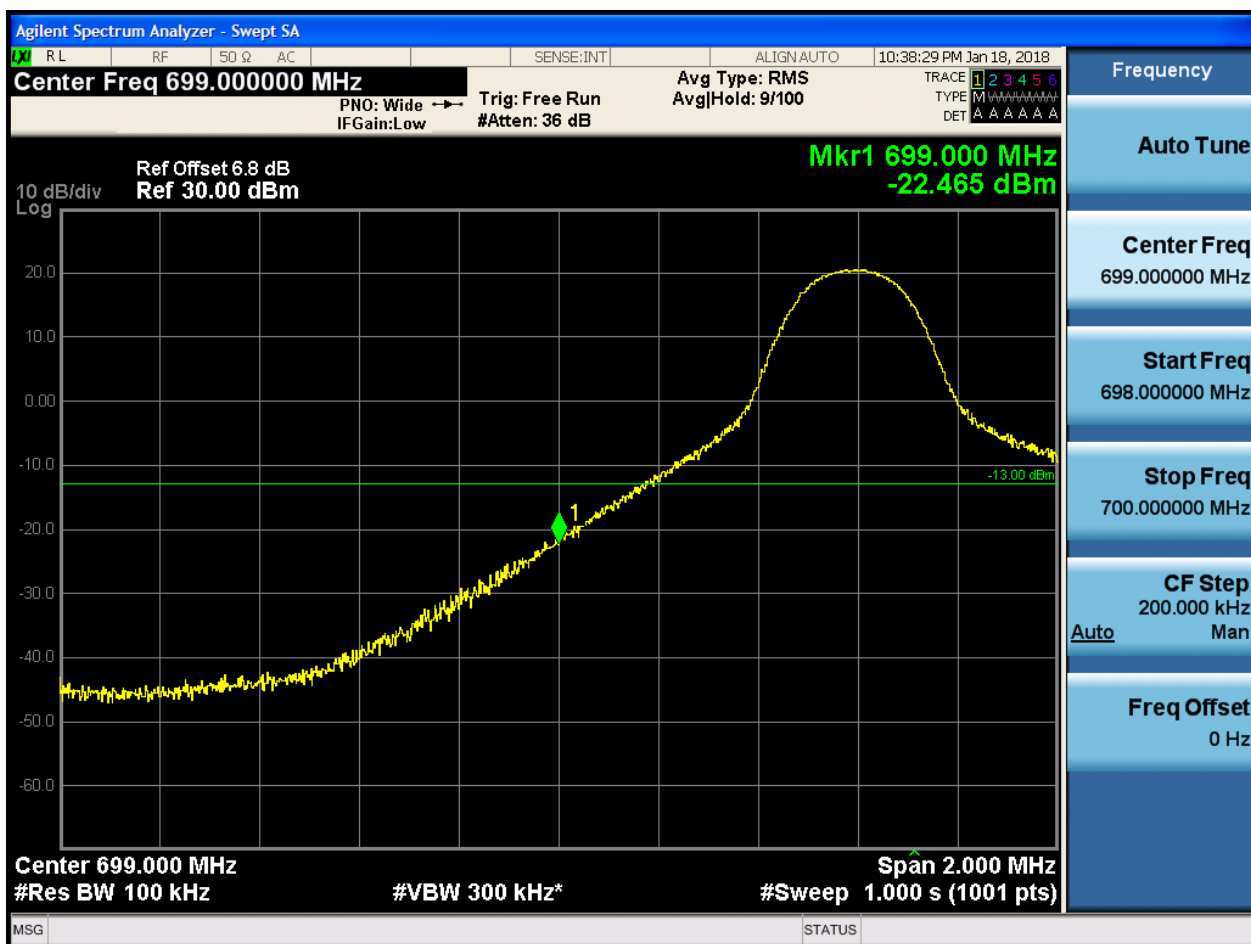
Frequency
Auto Tune
Center Freq 716.000000 MHz
Start Freq 715.000000 MHz
Stop Freq 717.000000 MHz
CF Step 200.000 kHz Auto
Freq Offset 0 Hz



5.1.1.2.4 Test Bandwidth = 10

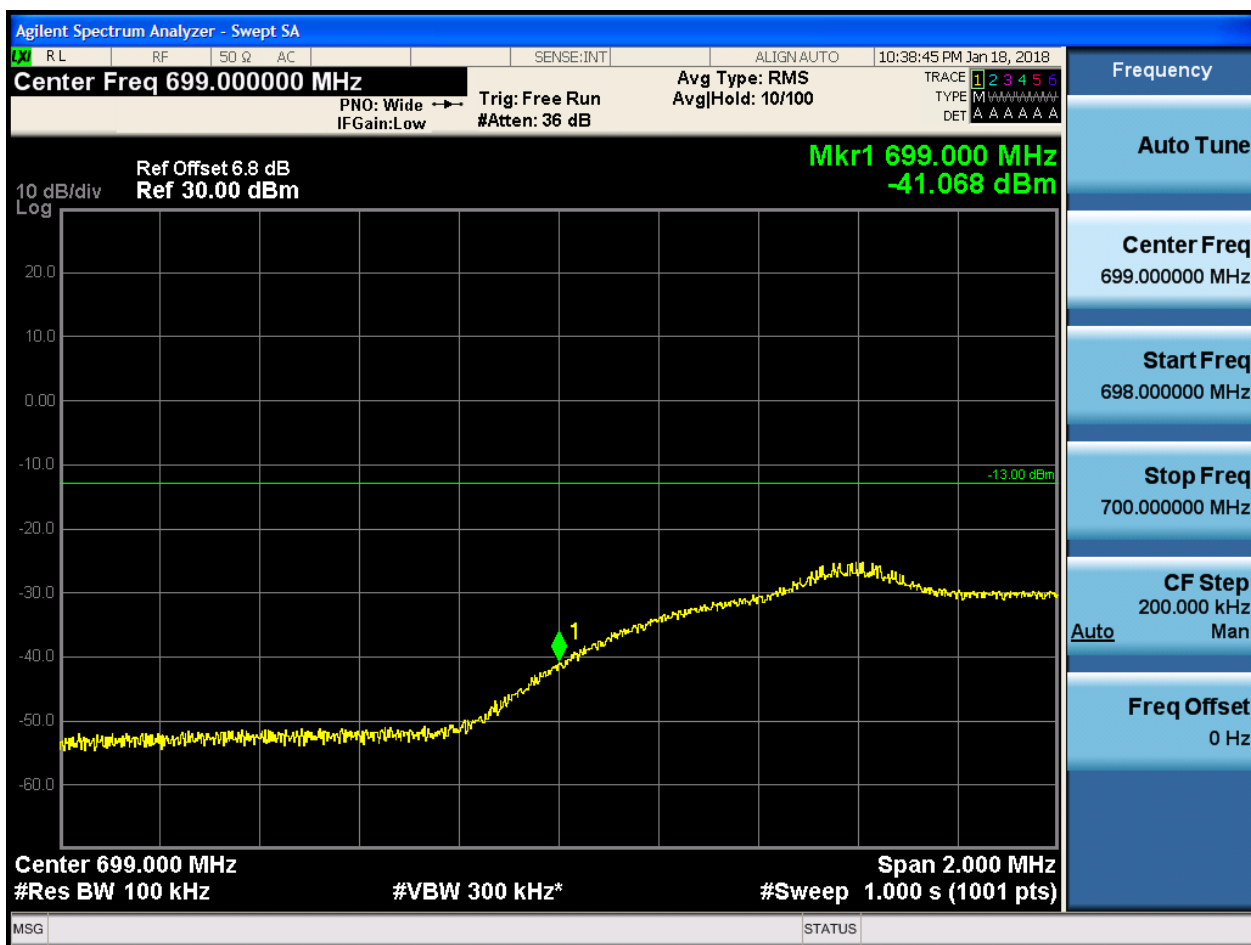
5.1.1.2.4.1 Test Channel = LCH

5.1.1.2.4.1.1 Test RB = RB1#0



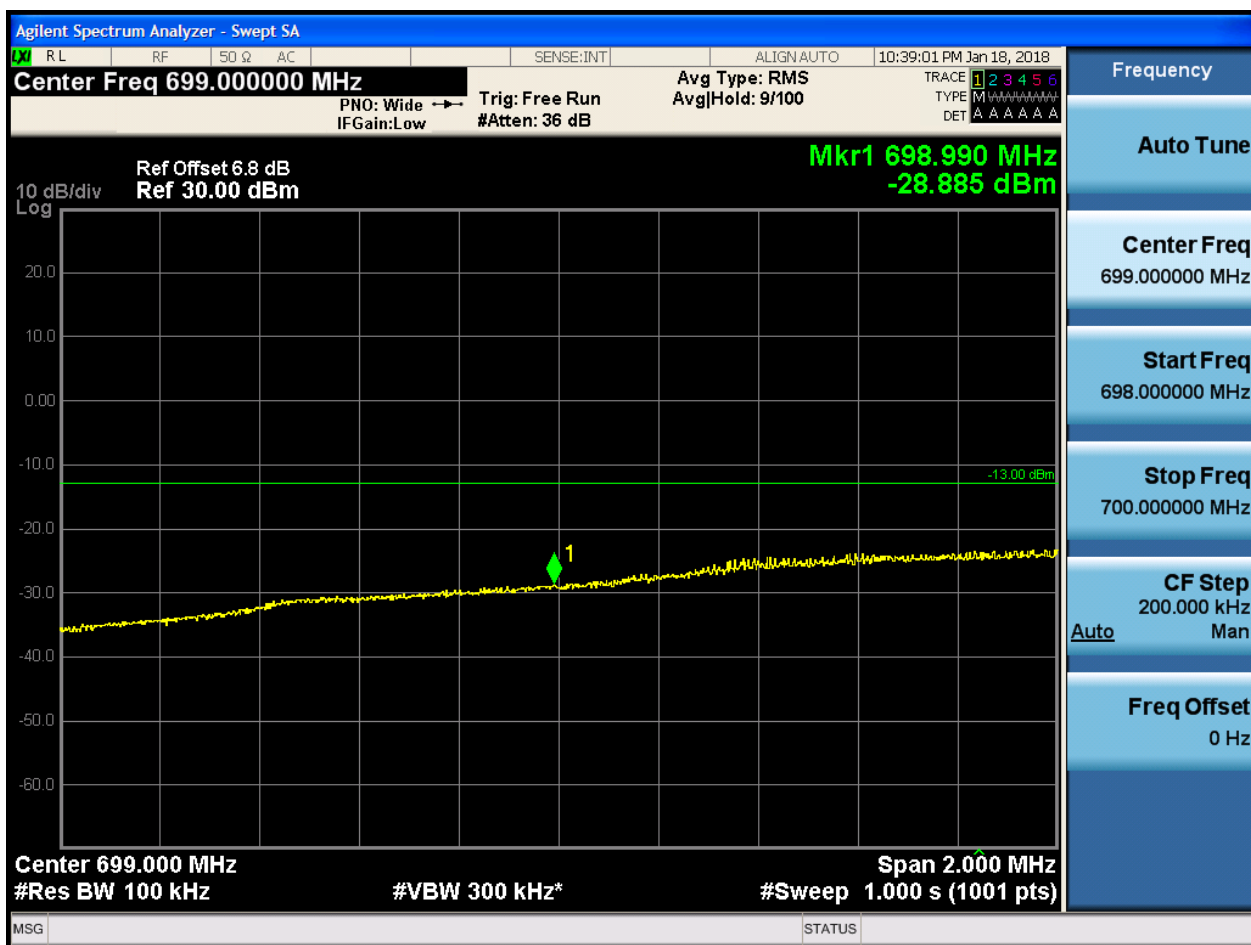


5.1.1.2.4.1.2 Test RB = RB1#49





5.1.1.2.4.1.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

Center Freq 699.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 699.000 MHz
-26.957 dBm

Center 699.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Auto Tune

Center Freq
699.000000 MHz

Start Freq
698.000000 MHz

Stop Freq
700.000000 MHz

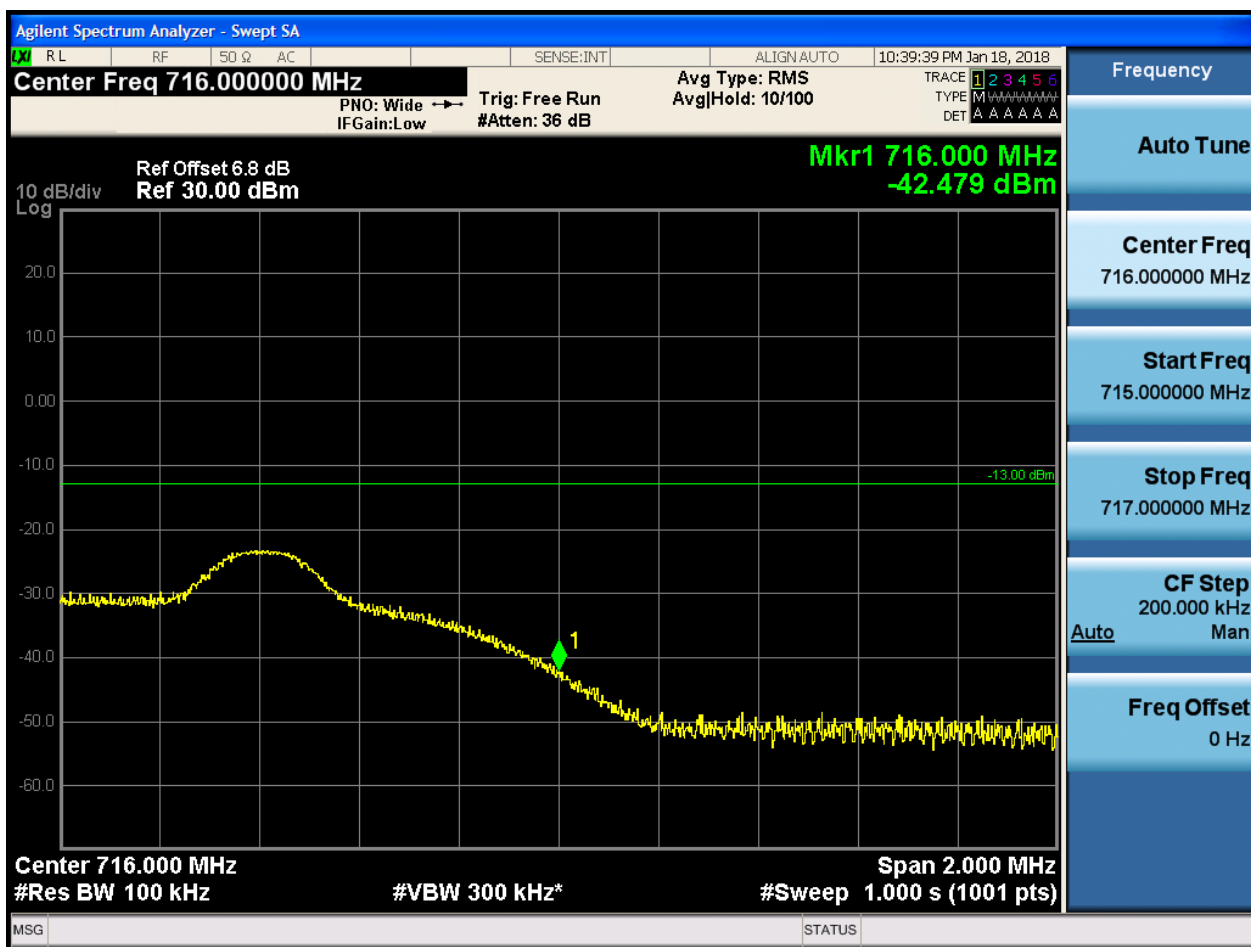
CF Step
200.000 kHz
Auto

Freq Offset
0 Hz

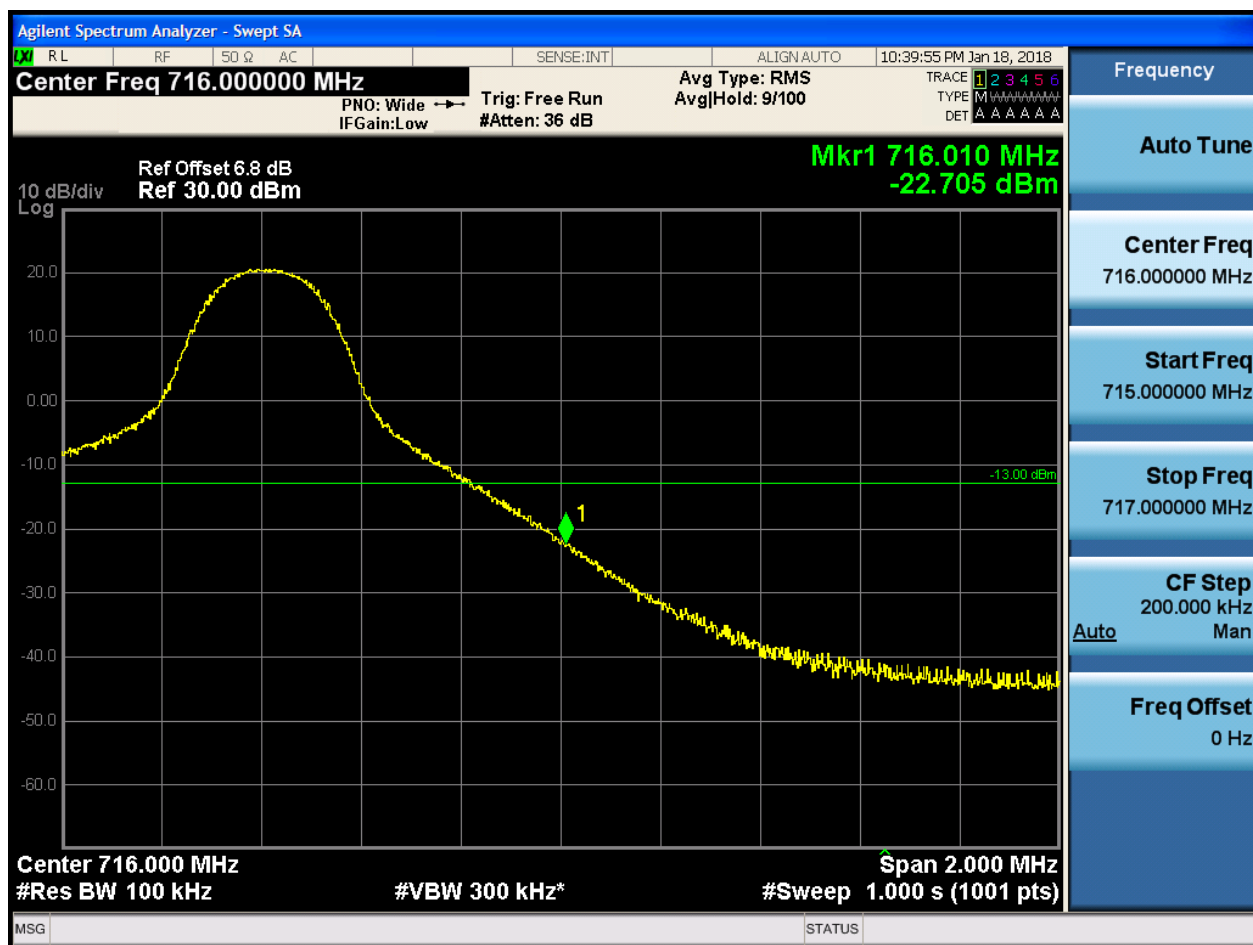


5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0

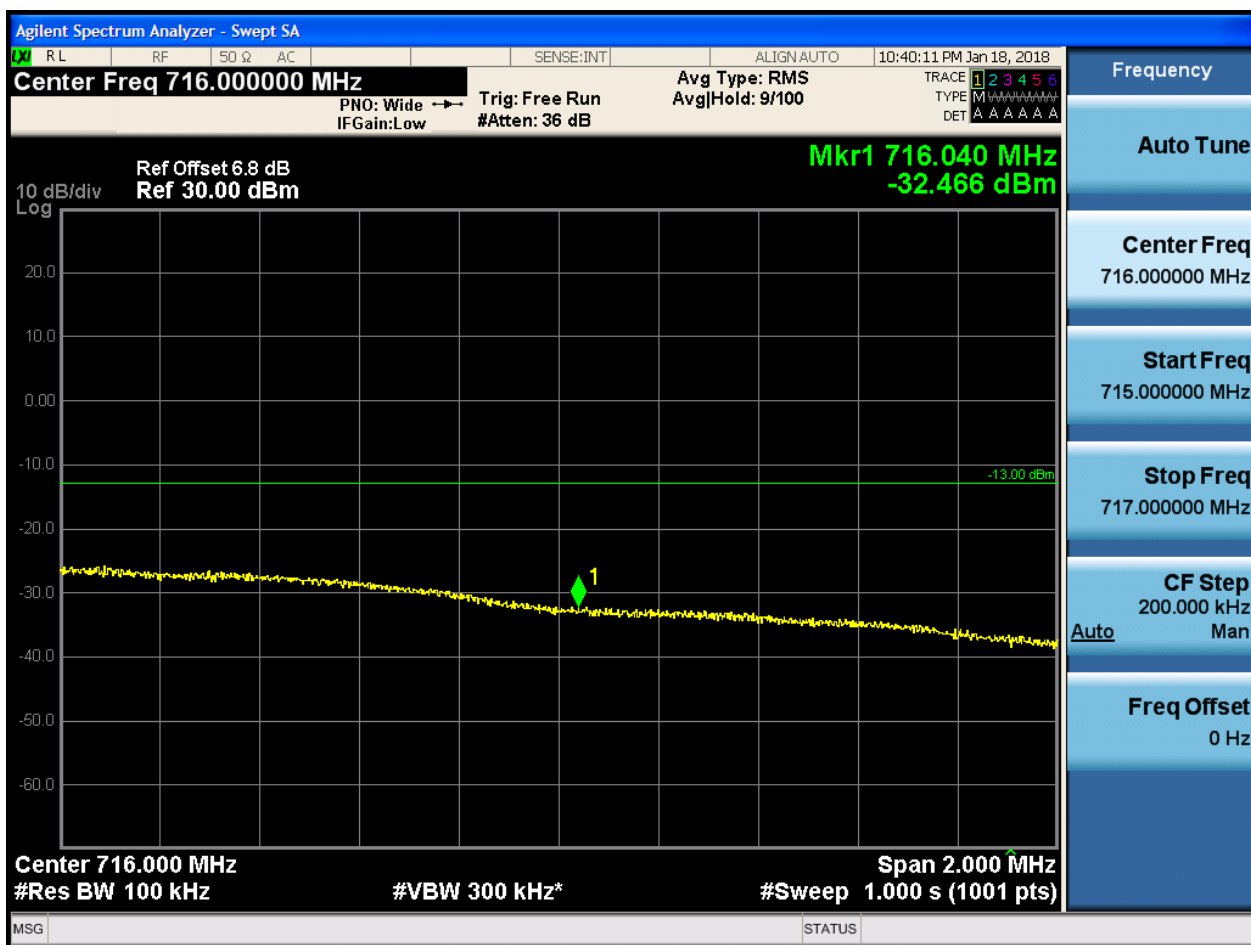


5.1.1.2.4.2.2 Test RB = RB1#49





5.1.1.2.4.2.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

Center Freq 716.000000 MHz

Ref Offset 6.8 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 716.010 MHz
-30.210 dBm

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

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq
716.000000 MHz

Start Freq
715.000000 MHz

Stop Freq
717.000000 MHz

CF Step
200.000 kHz
Auto

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

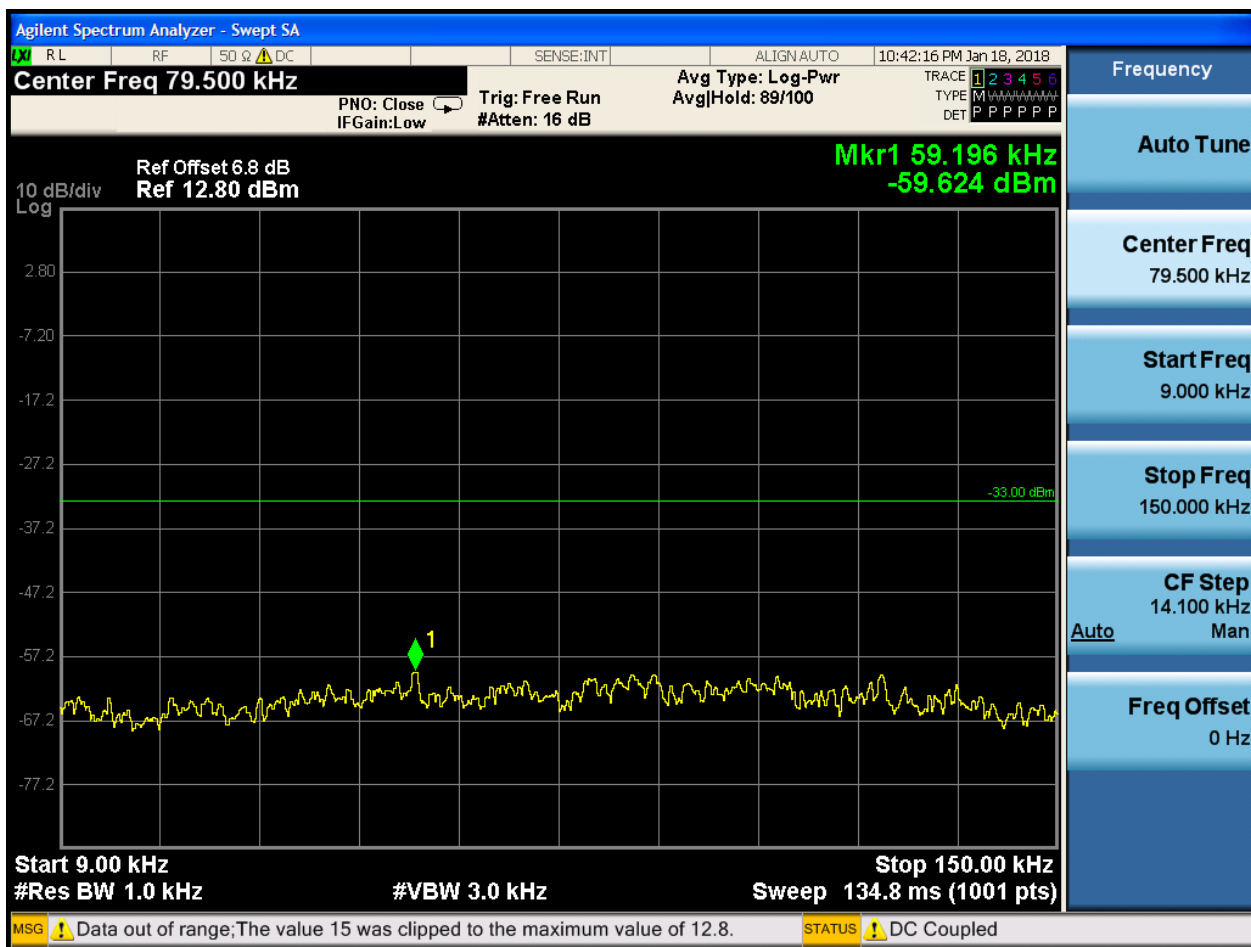
6.1.1 Test Band = BAND12

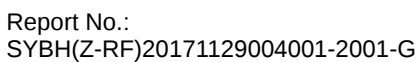
6.1.1.1 Test Mode = LTE/TM1

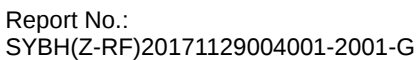
6.1.1.1.1 Test Bandwidth = 1.4

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



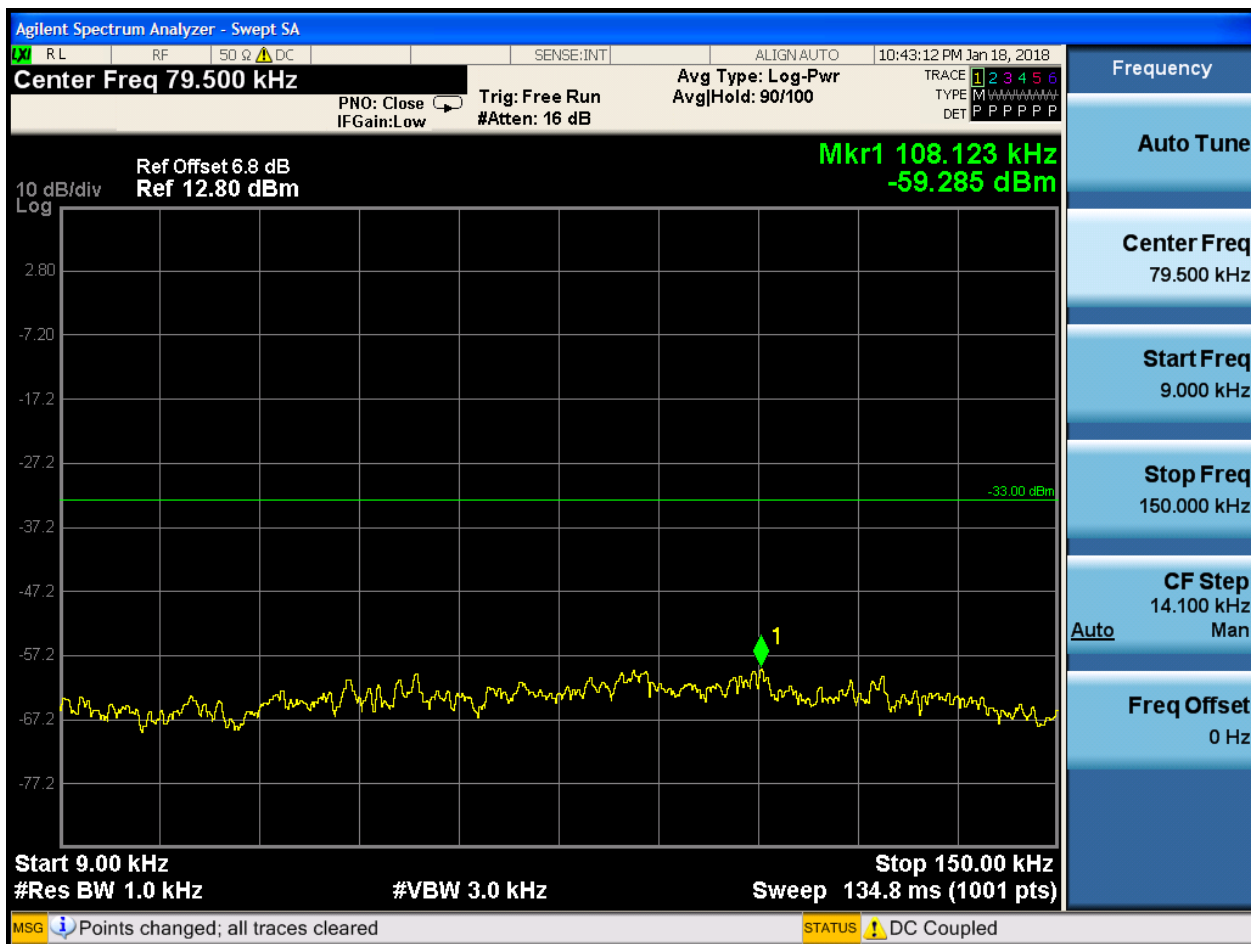


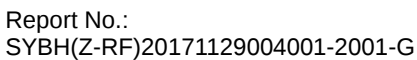


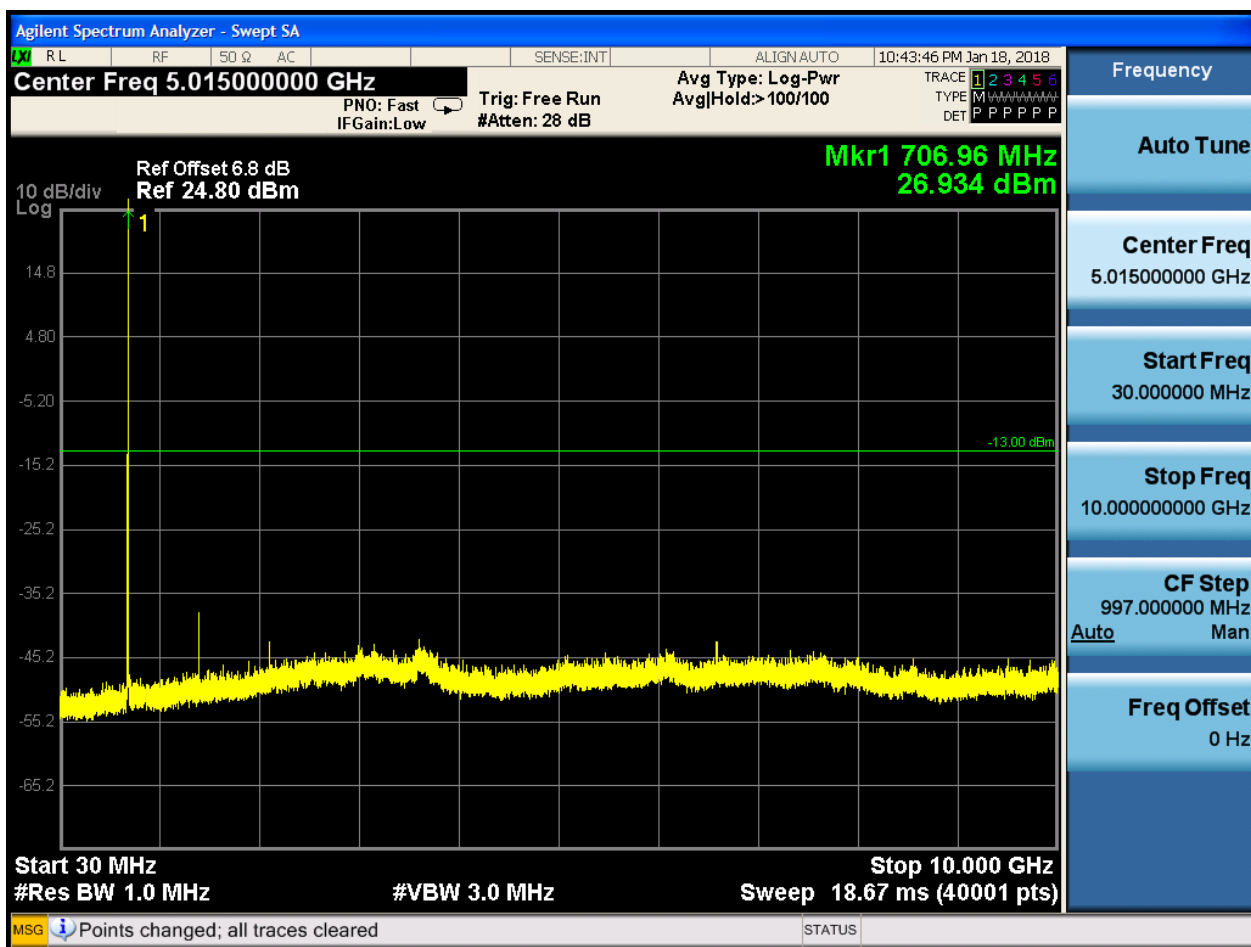


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0

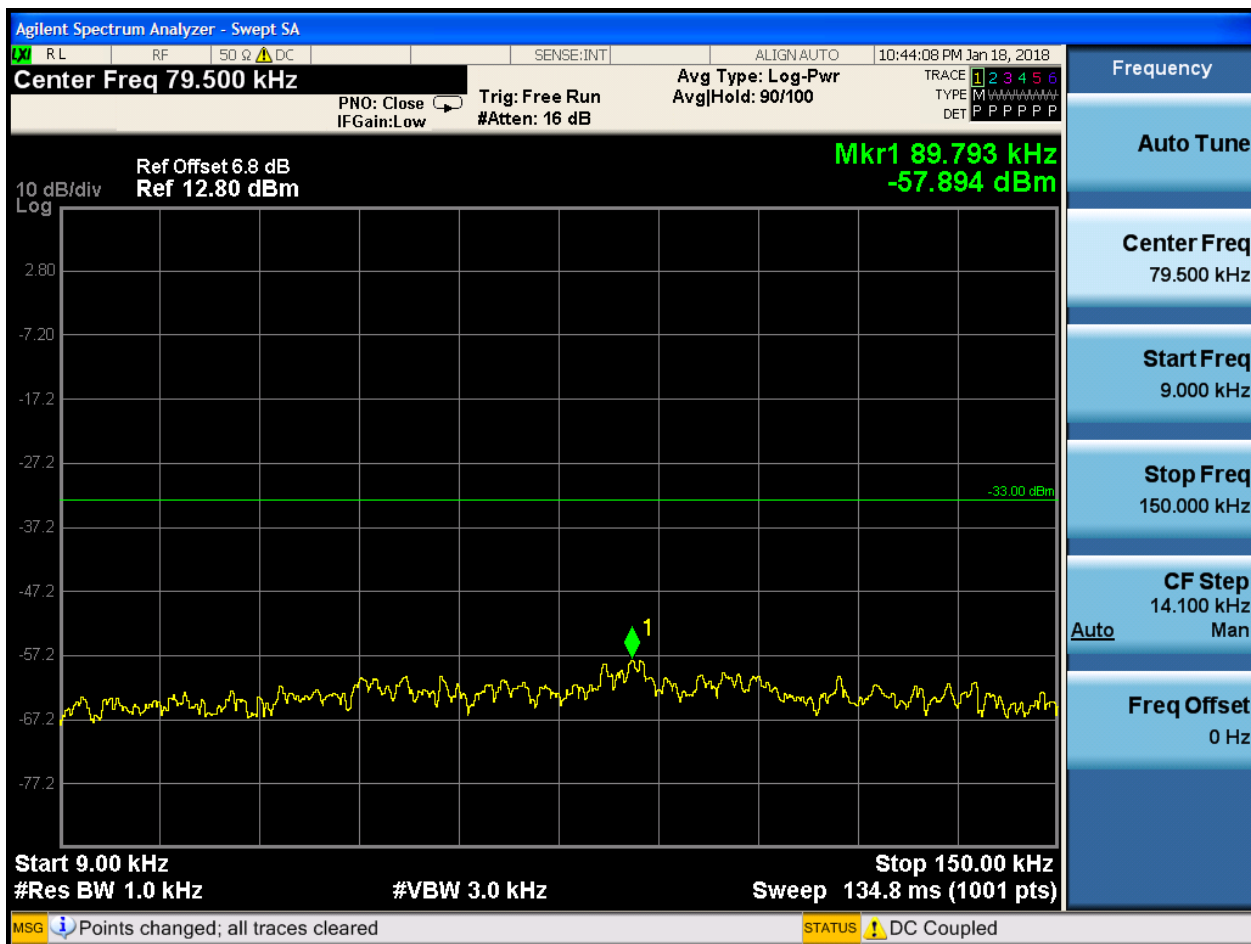


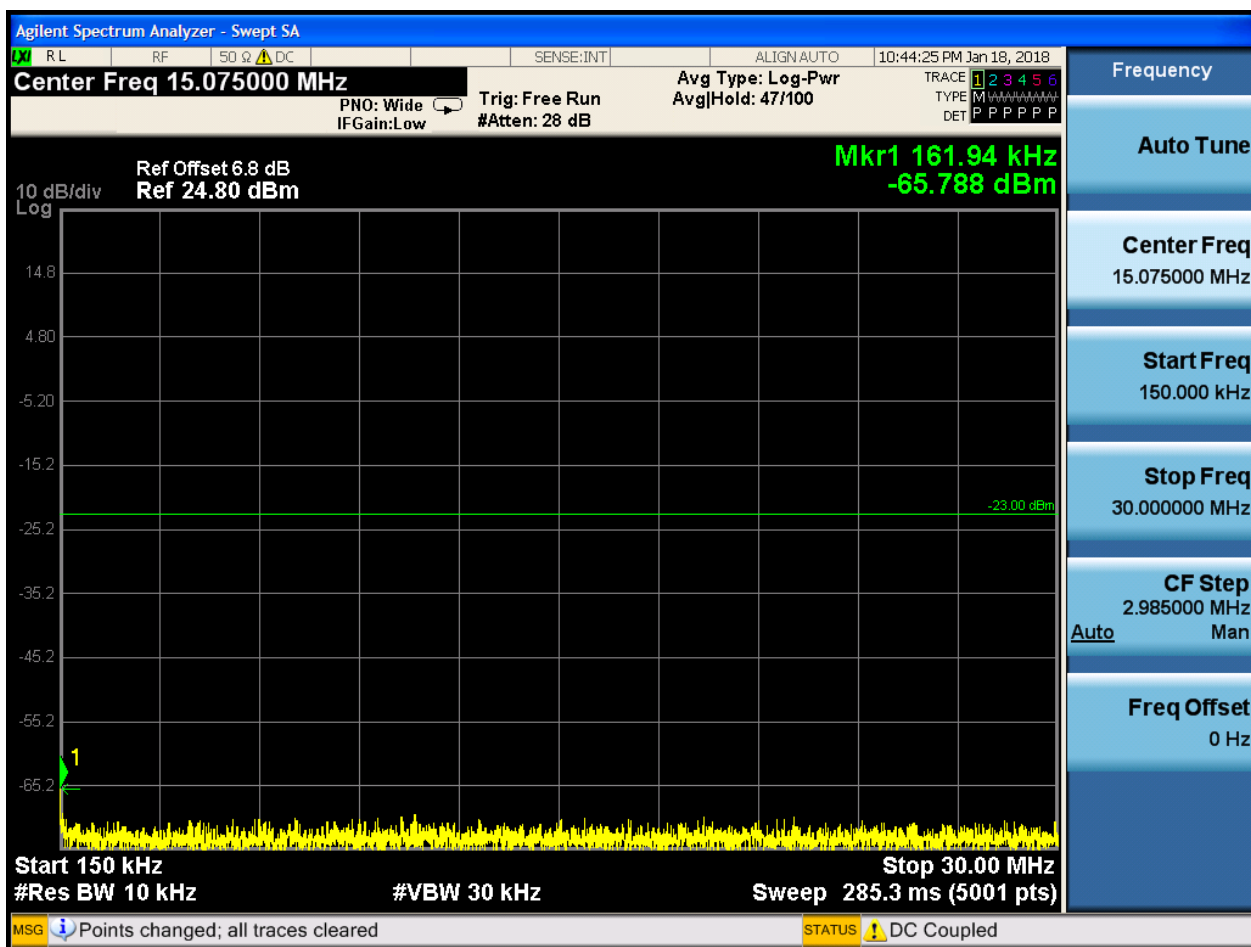


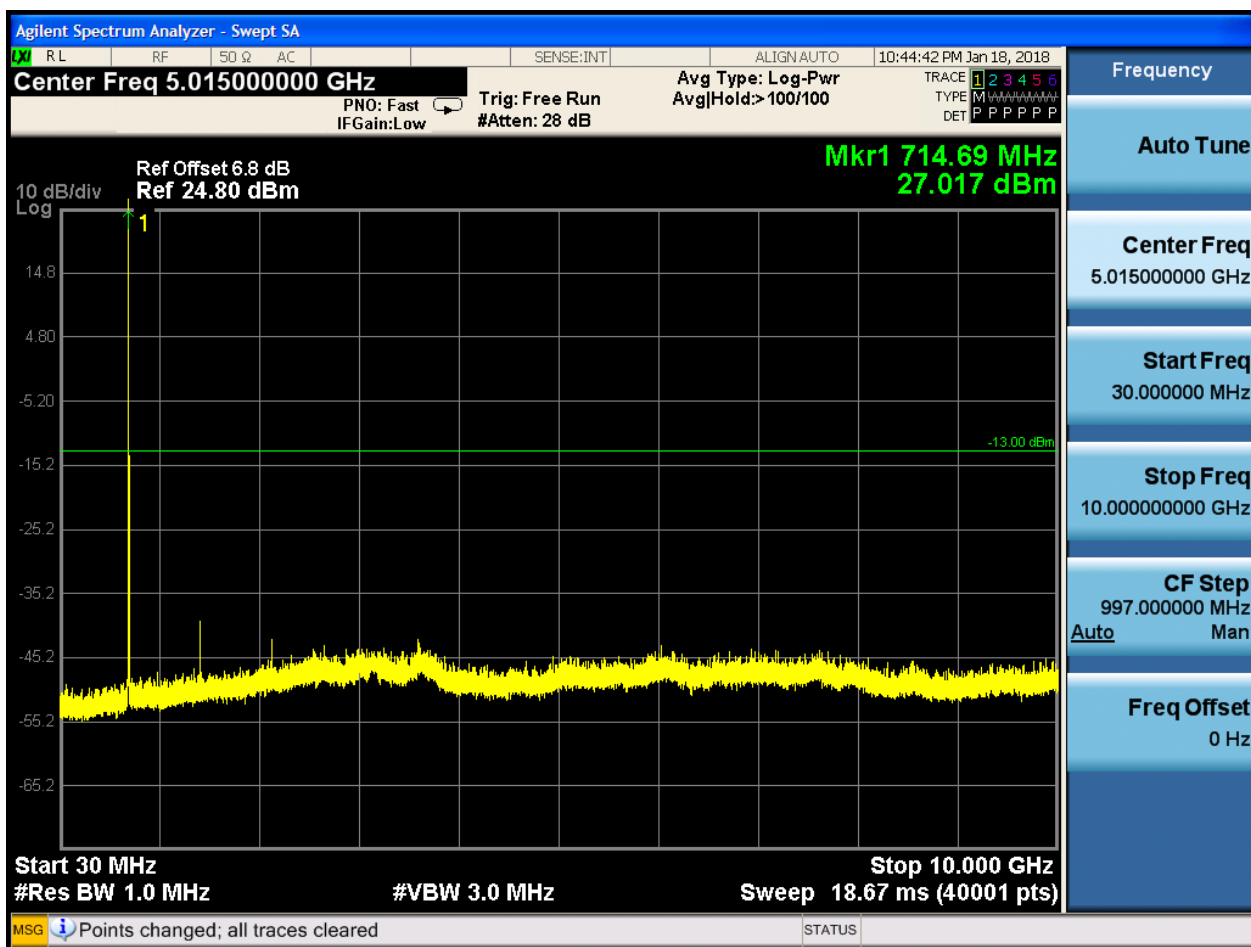


6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0



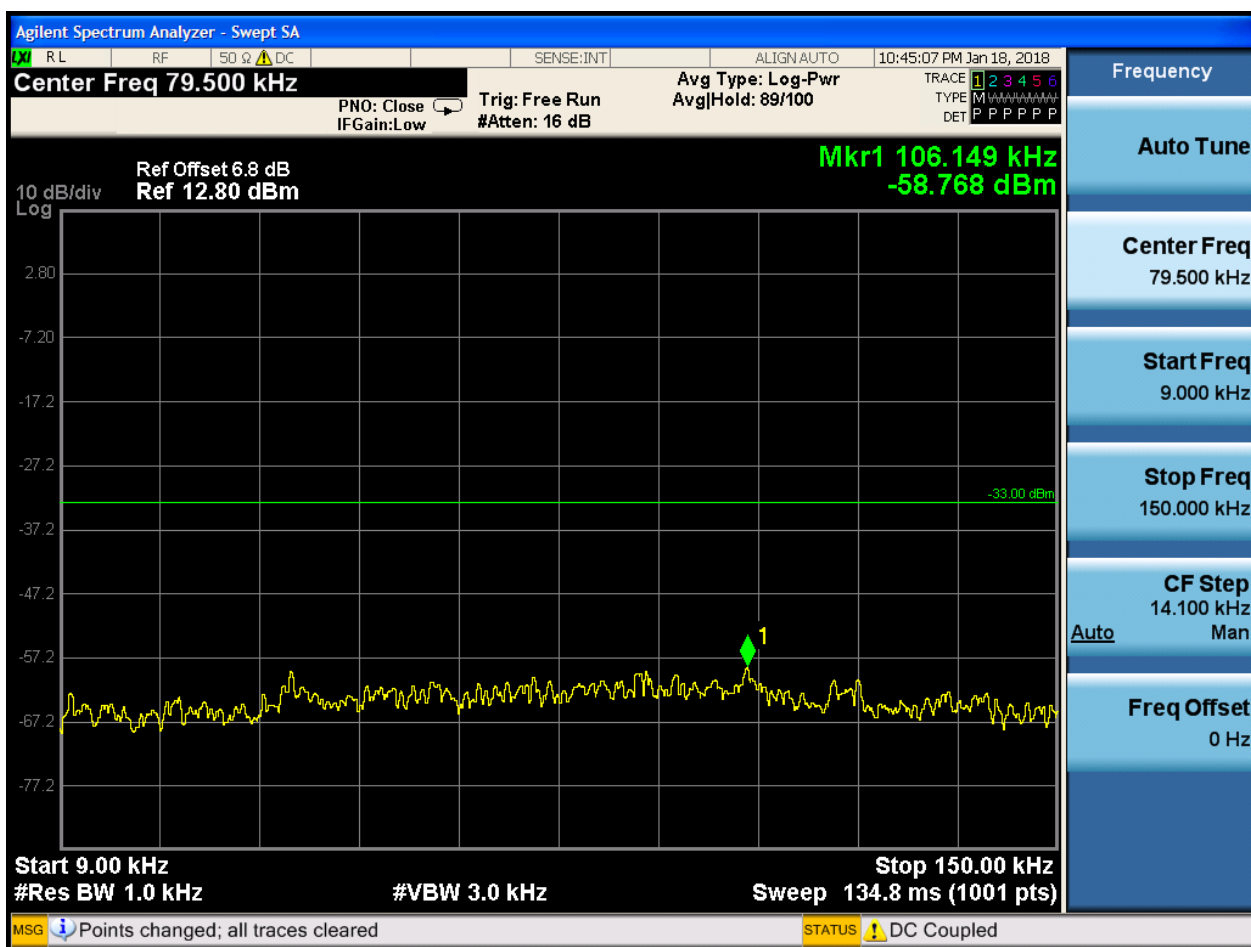


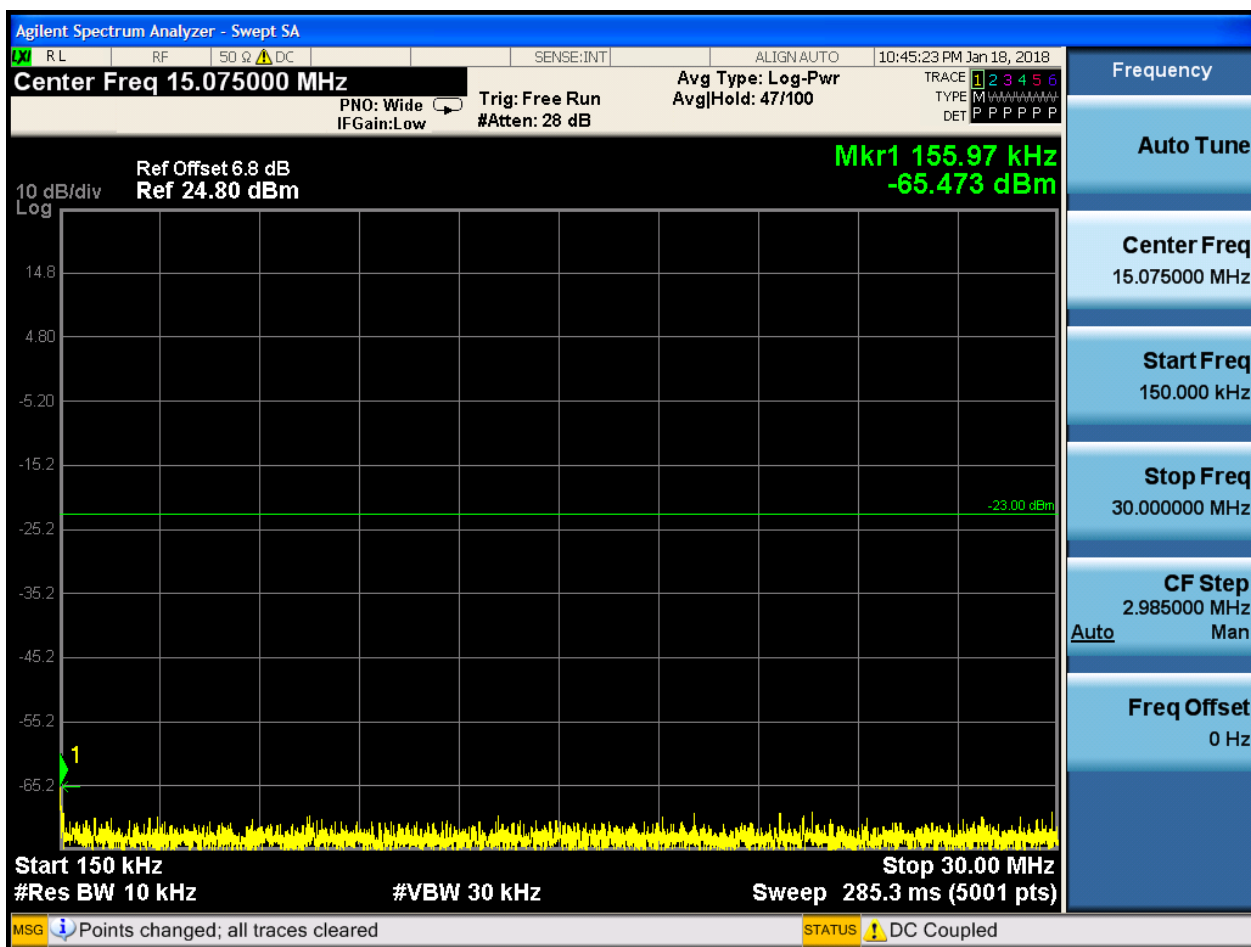


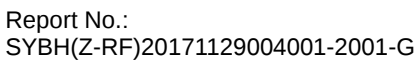
6.1.1.1.2 Test Bandwidth = 3

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0

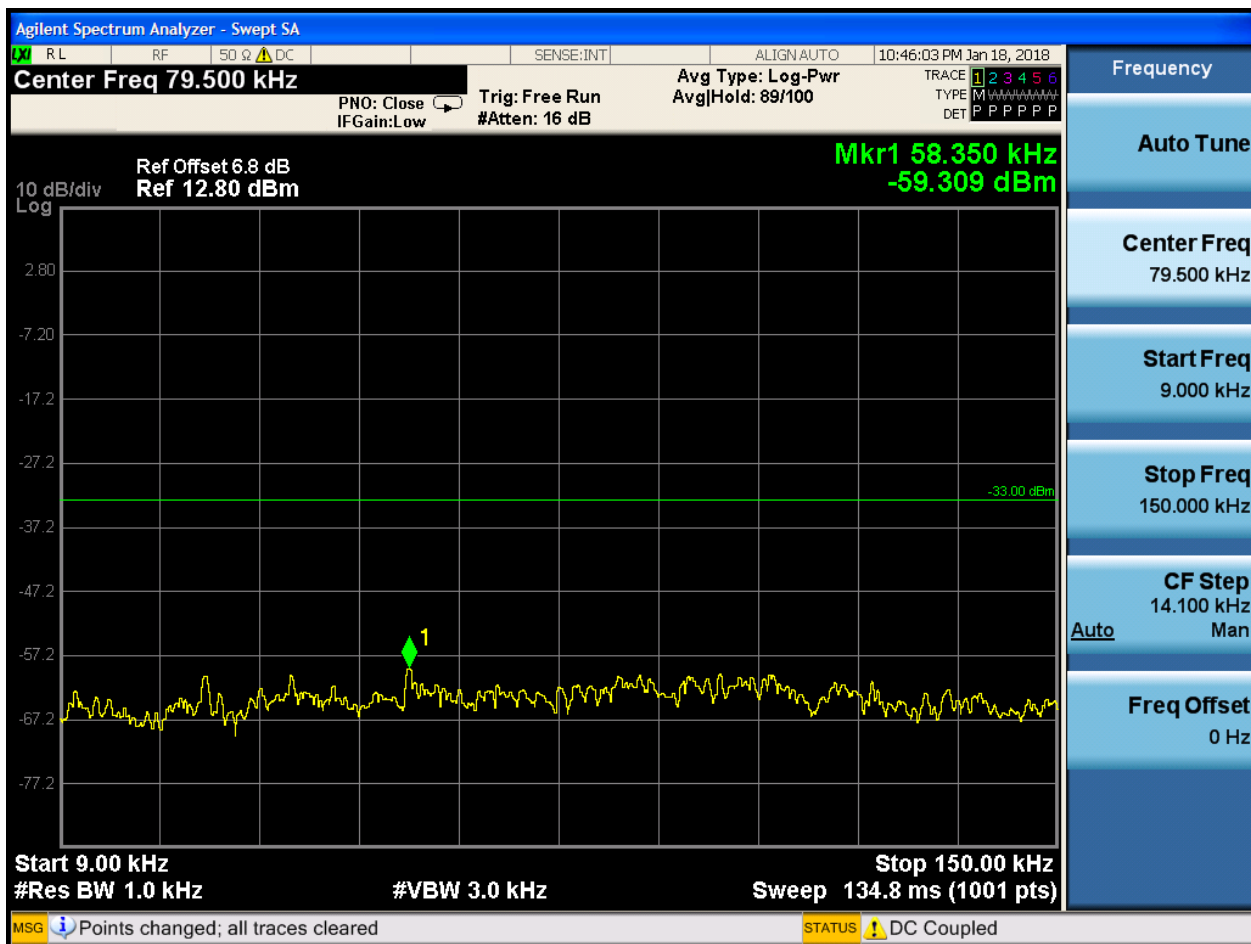


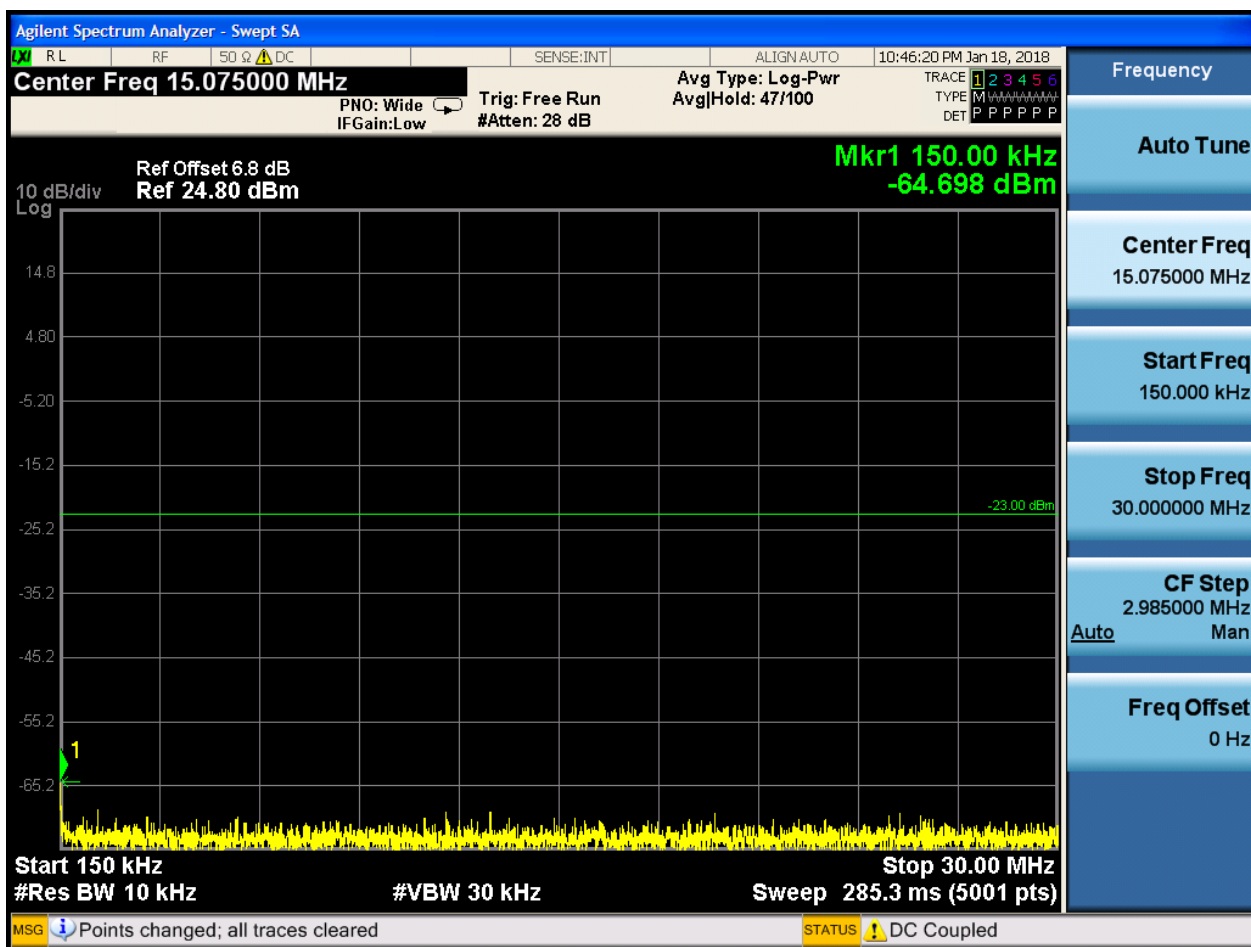


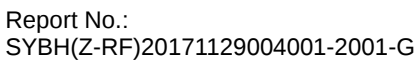


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0

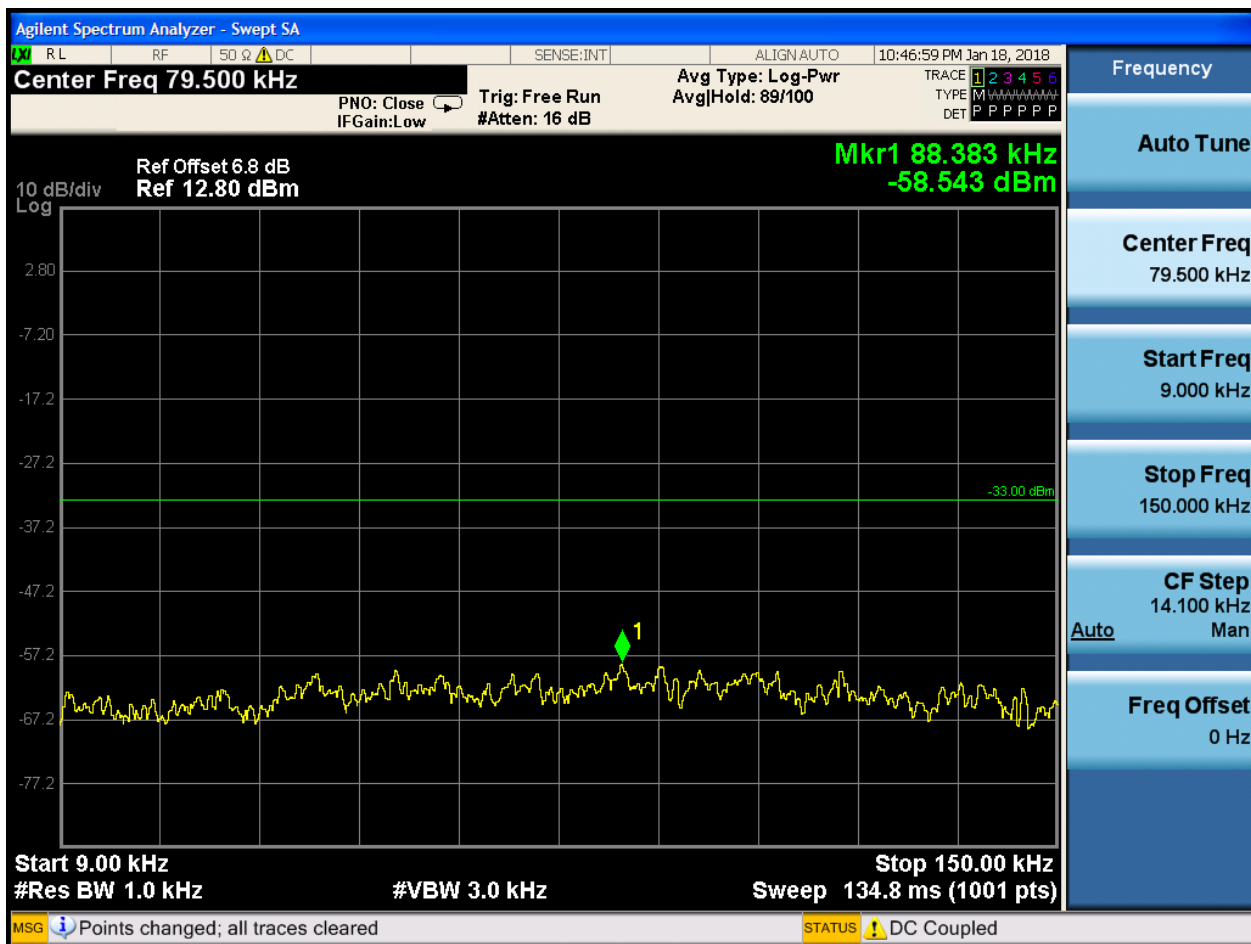


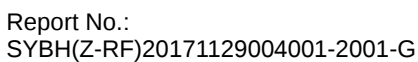


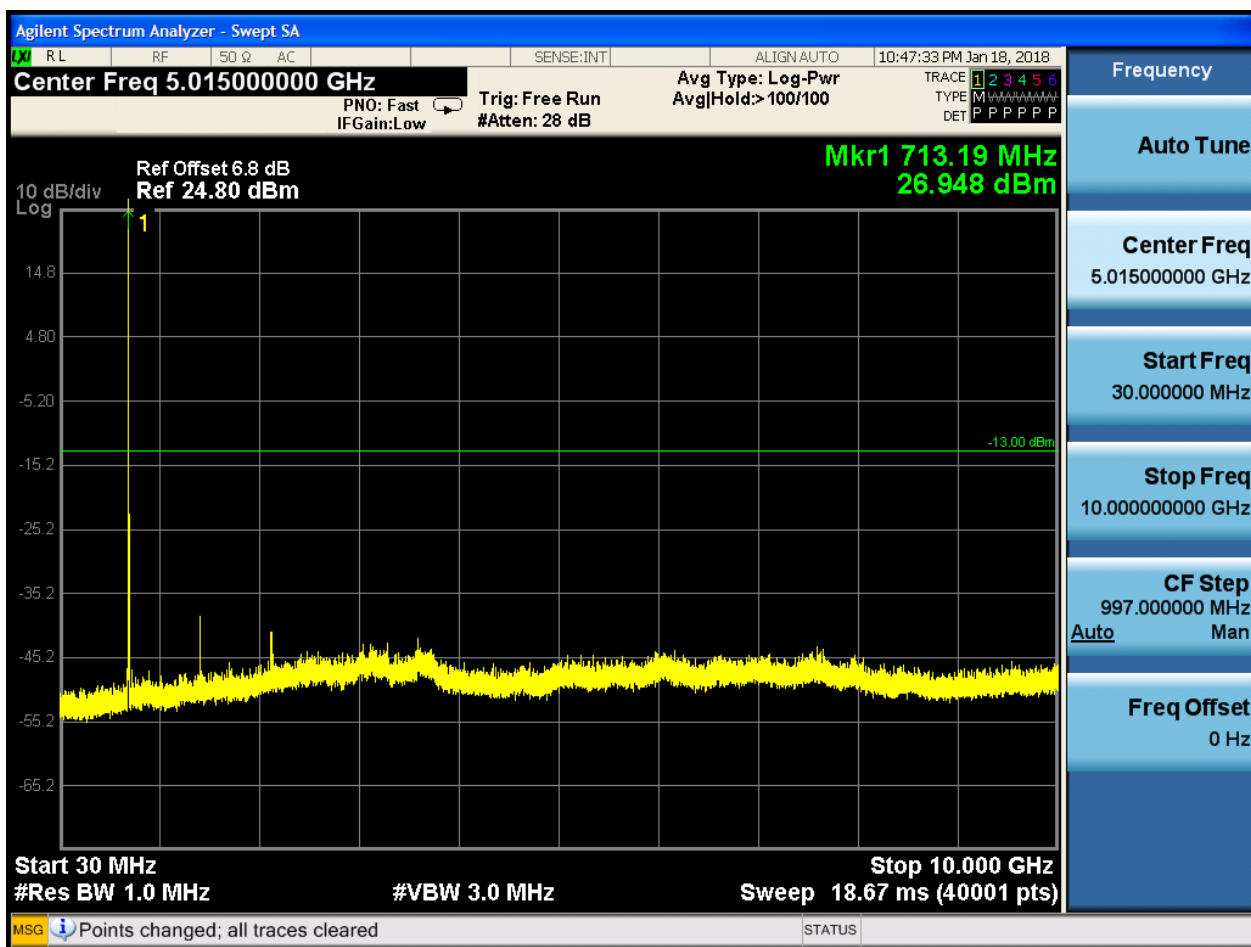


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0







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

