



Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 824.000 MHz
-34.070 dBm

Center 824.000 MHz
#Res BW 30 kHz

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq
824.000000 MHz

Start Freq
823.000000 MHz

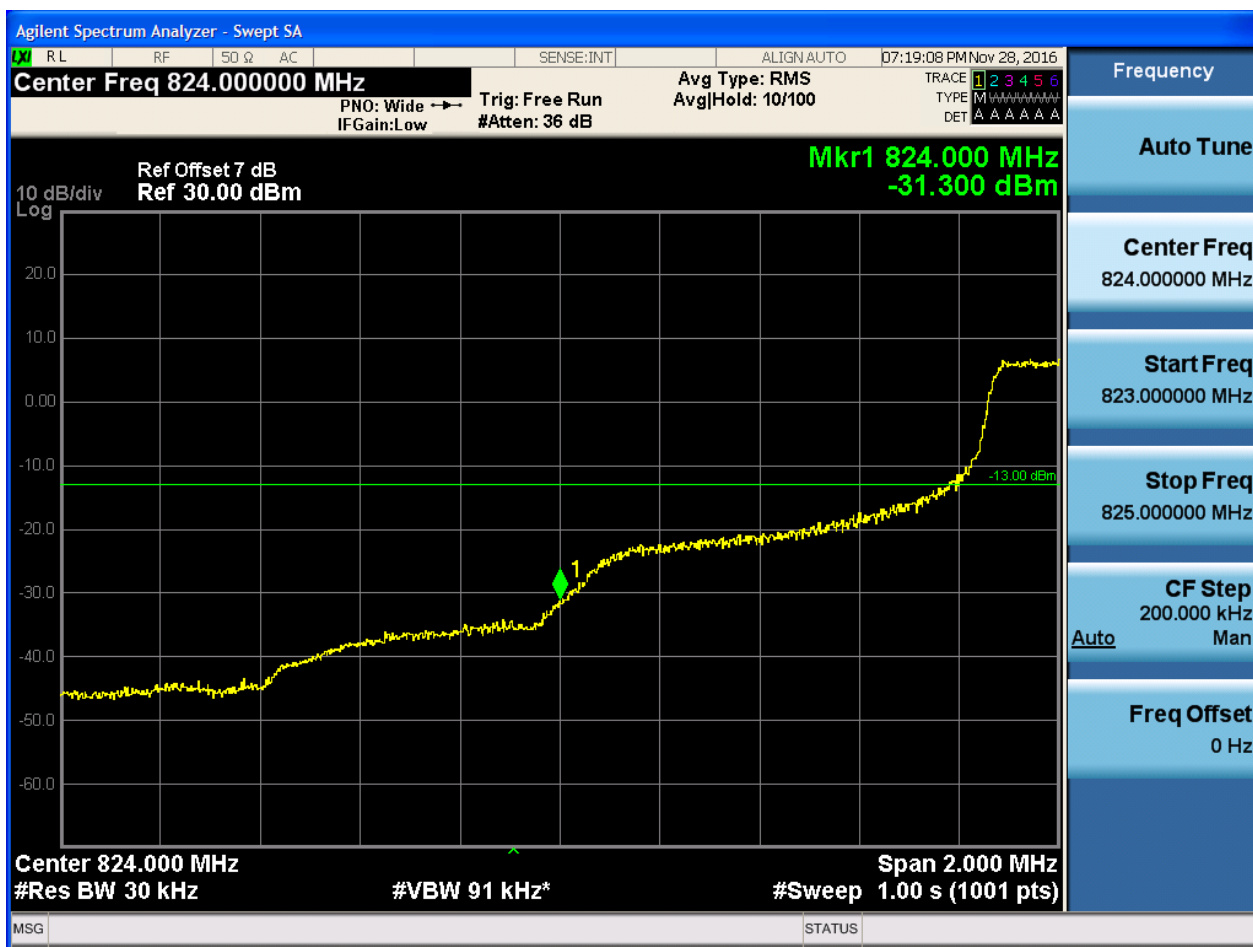
Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

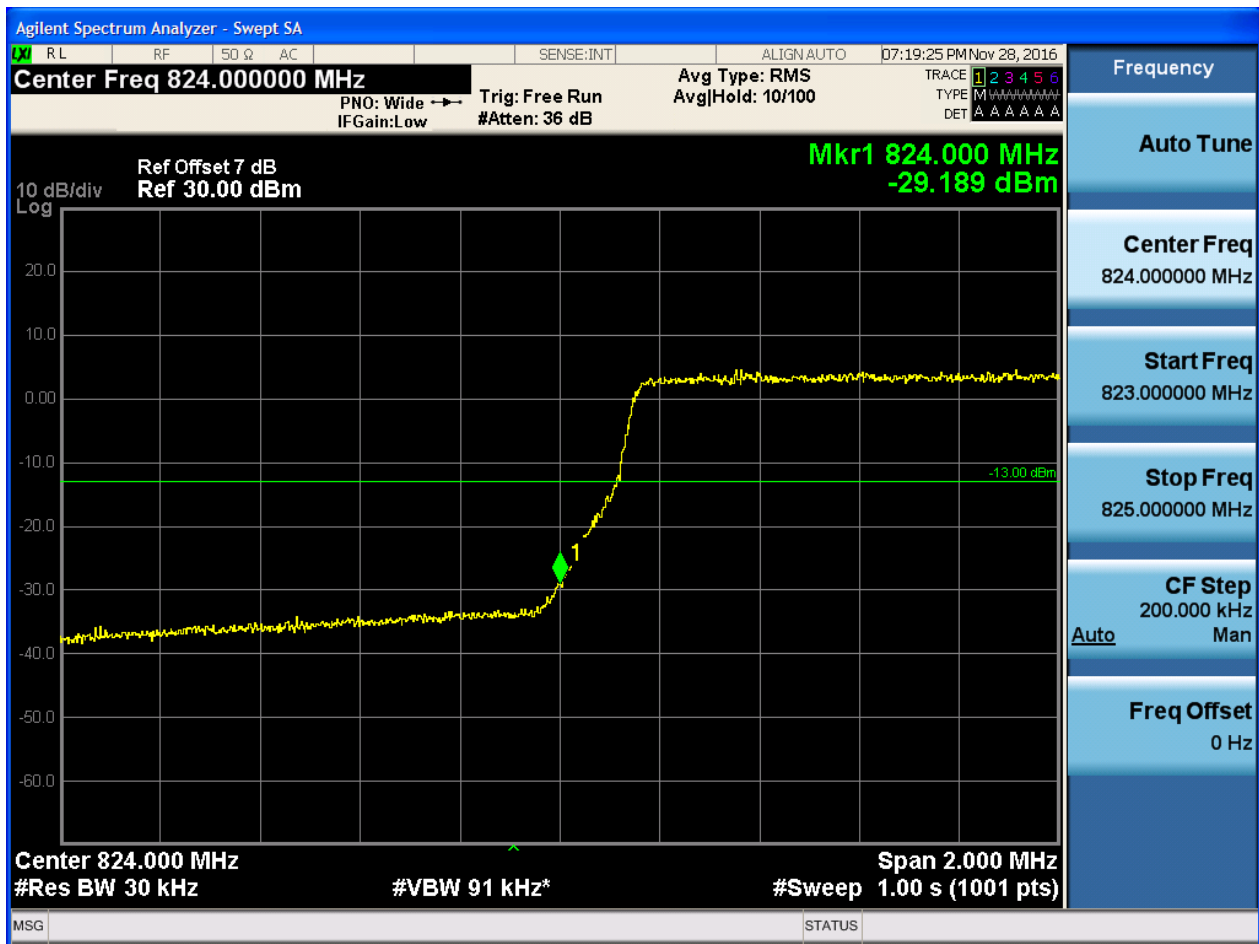


5.1.3.1.2.1.3 Test RB = RB8#4





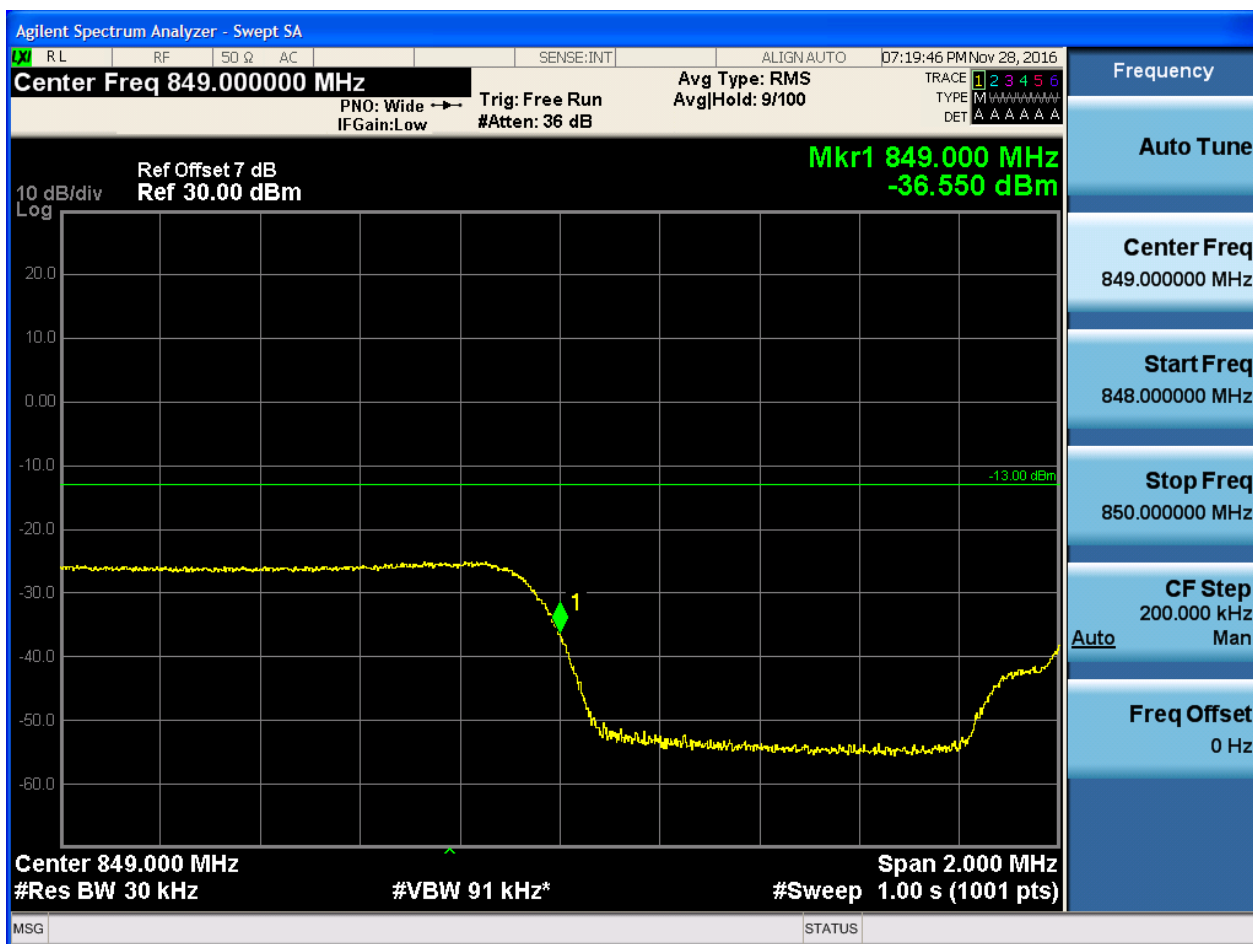
5.1.3.1.2.1.4 Test RB = RB15#0





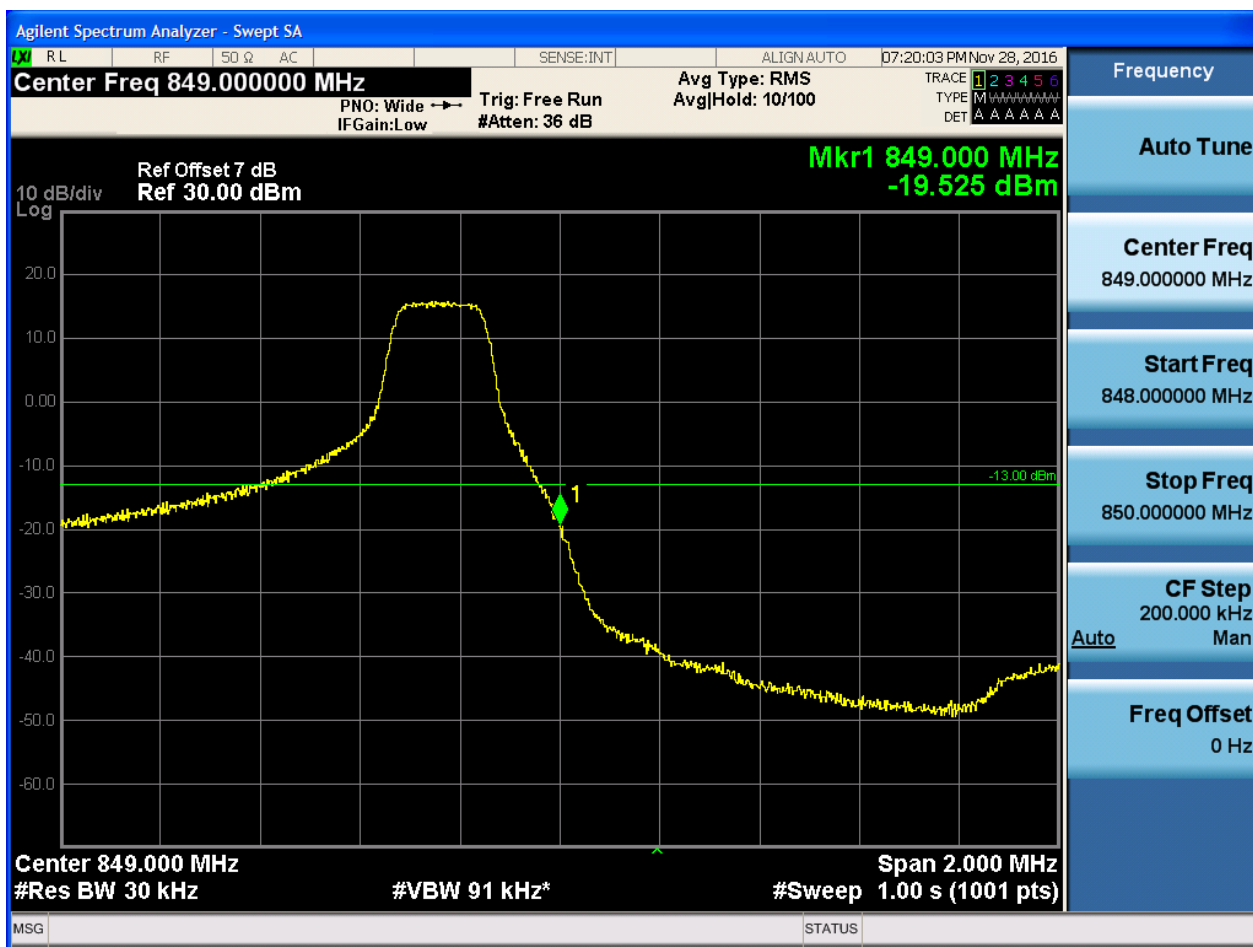
5.1.3.1.2.2 Test Channel = HCH

5.1.3.1.2.2.1 Test RB = RB1#0





5.1.3.1.2.2.2 Test RB = RB1#14





5.1.3.1.2.2.3 Test RB = RB8#4





Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-28.717 dBm

Center 849.000 MHz
#Res BW 30 kHz

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

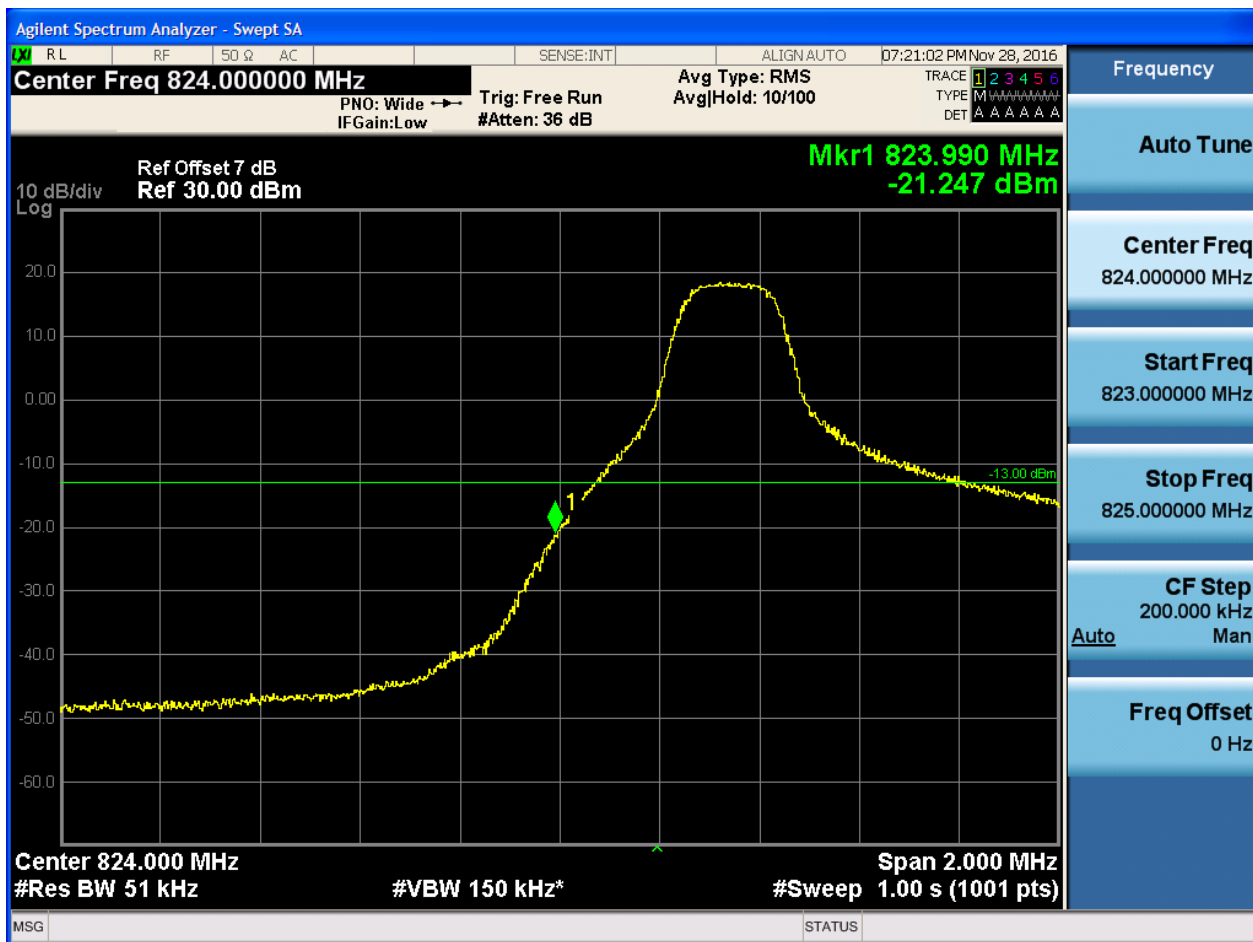
The screenshot displays a swept spectrum on a grid. The vertical axis represents power in dBm, ranging from -60.0 to 20.0, with a 10 dB/div scale. The horizontal axis represents frequency in MHz, with a 2.000 MHz span centered at 849.000 MHz. A yellow trace shows a relatively flat signal at approximately 0 dBm from 848.0 MHz to 848.8 MHz, followed by a sharp drop to about -35 dBm at 849.0 MHz, and then remains flat. A green horizontal line is drawn at -13.00 dBm. A green marker labeled '1' is placed on the trace at the drop point. The right side of the screen features a blue sidebar with various settings: Frequency (849.000000 MHz), Auto Tune, Center Freq (849.000000 MHz), Start Freq (848.000000 MHz), Stop Freq (850.000000 MHz), CF Step (200.000 kHz, Manual), and Freq Offset (0 Hz). The top status bar shows the center frequency, reference levels, and other parameters like PNO: Wide, IF Gain: Low, Trig: Free Run, and #Atten: 36 dB.



5.1.3.1.3 Test Bandwidth = 5

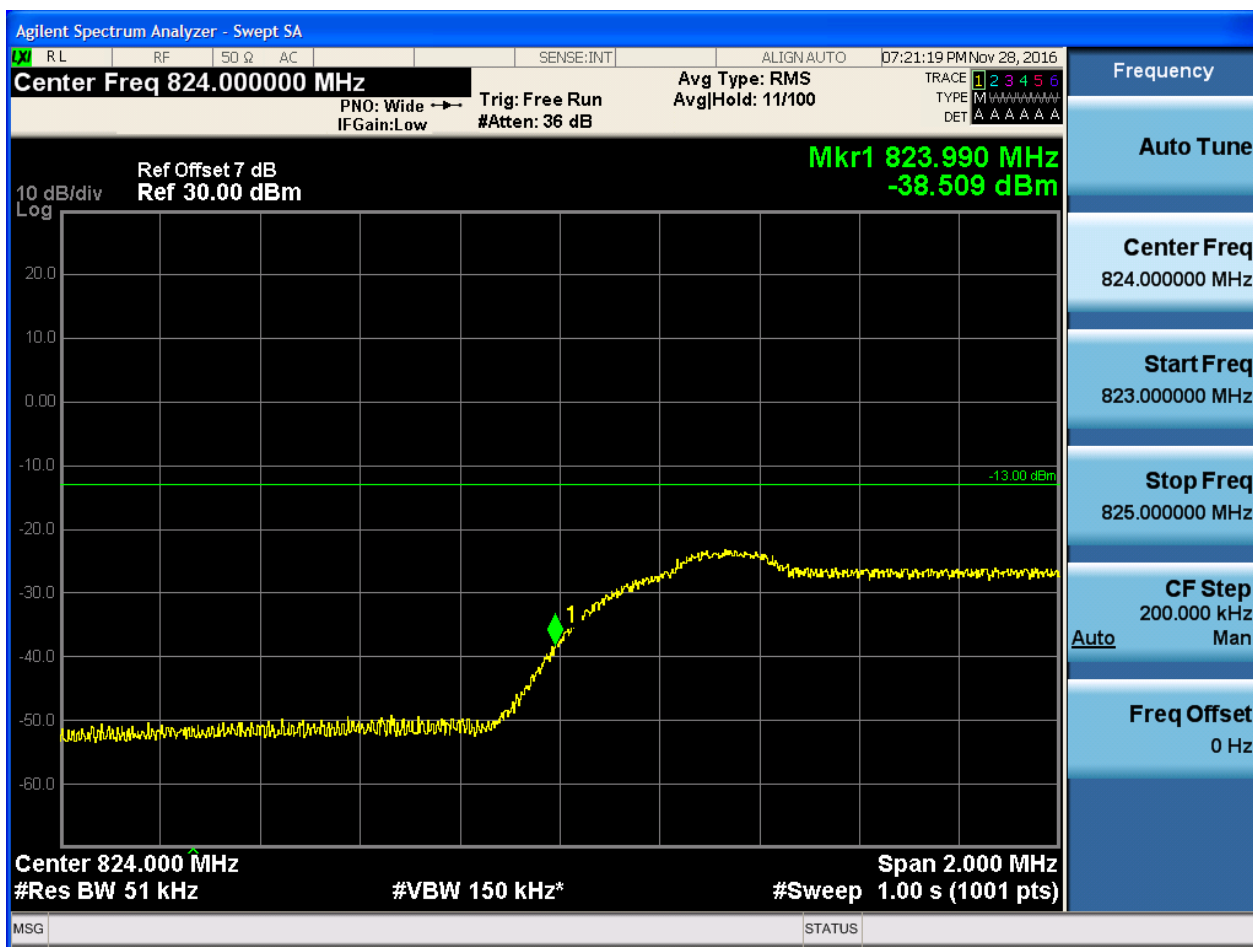
5.1.3.1.3.1 Test Channel = LCH

5.1.3.1.3.1.1 Test RB = RB1#0





5.1.3.1.3.1.2 Test RB = RB1#24



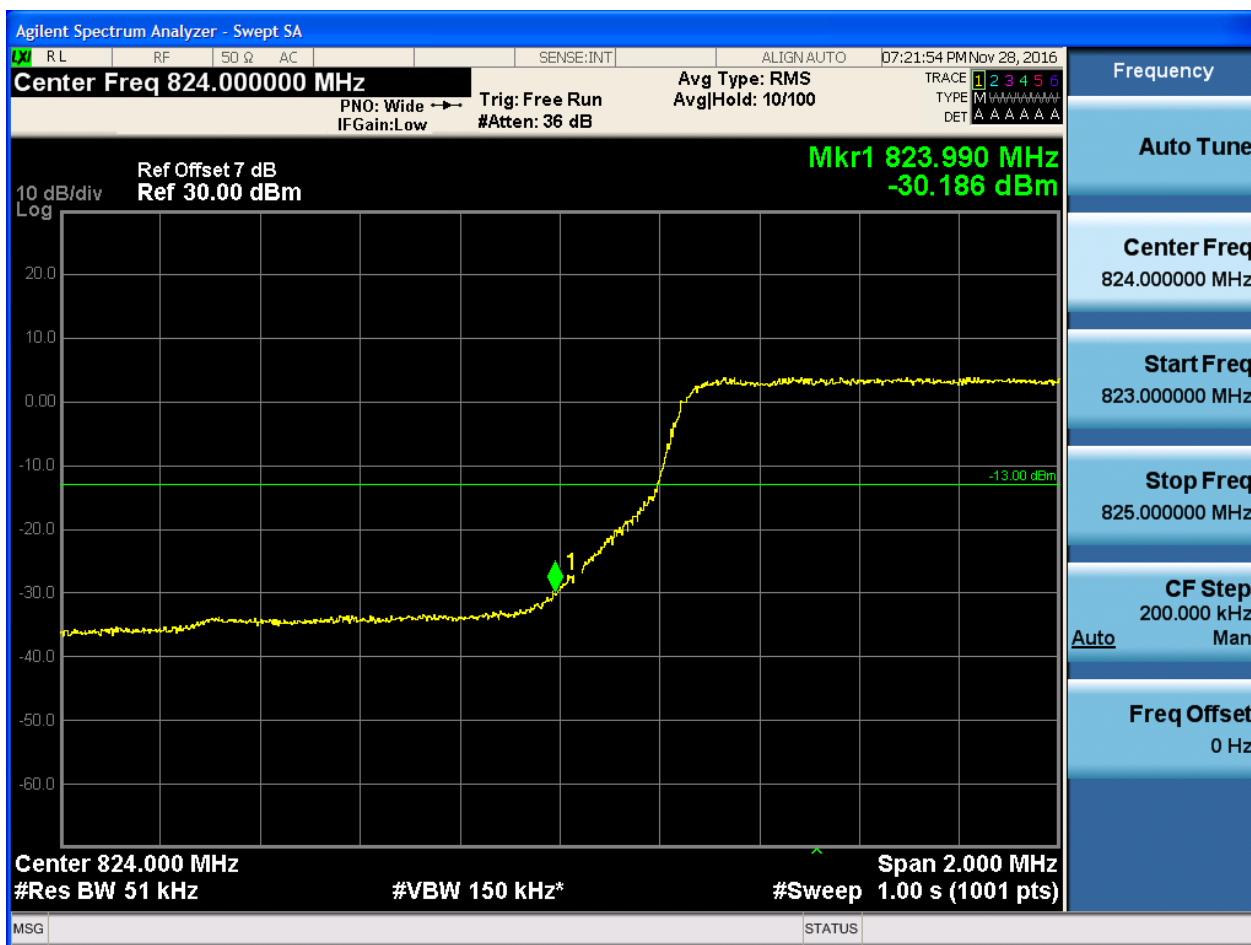


5.1.3.1.3.1.3 Test RB = RB12#6





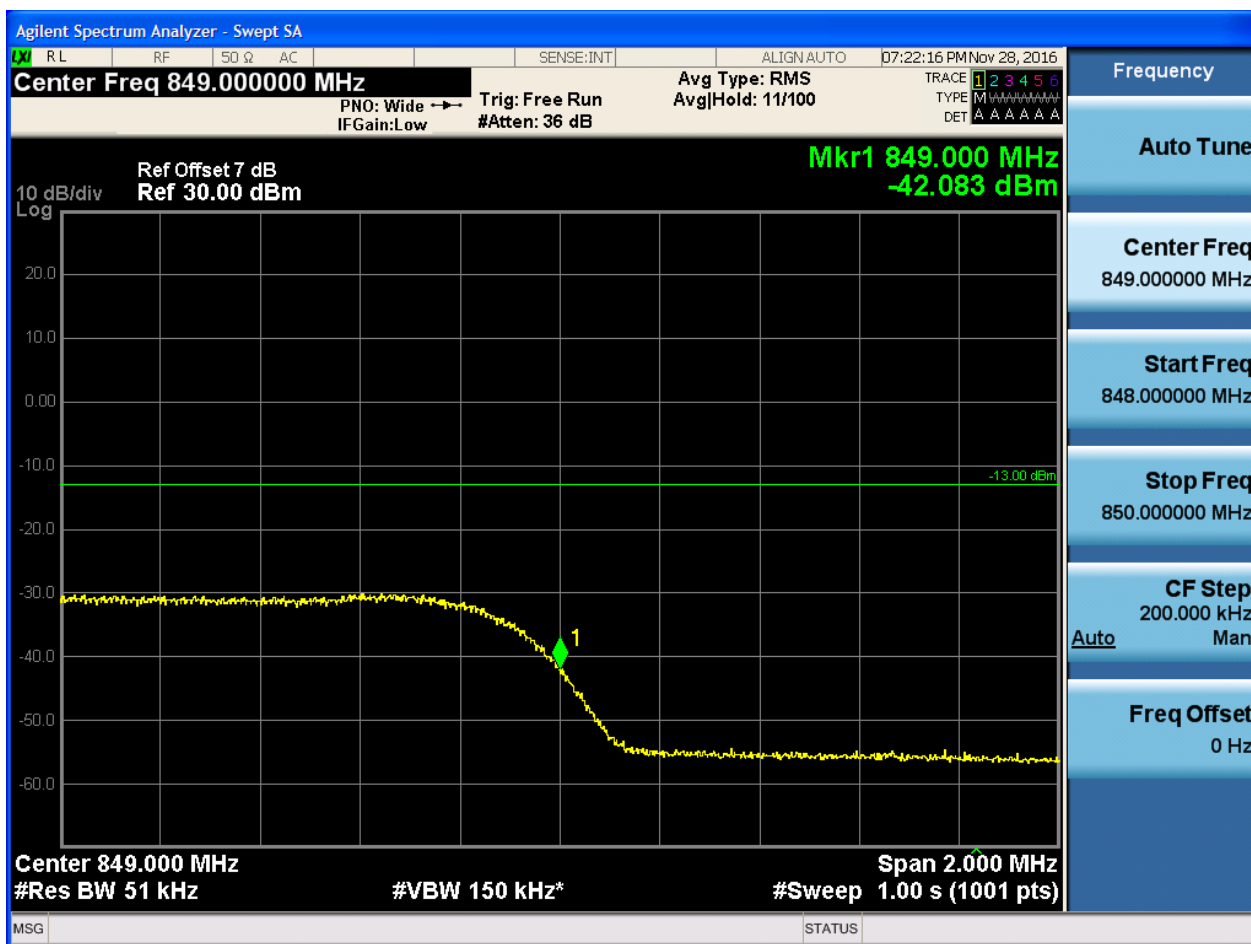
5.1.3.1.3.1.4 Test RB = RB25#0





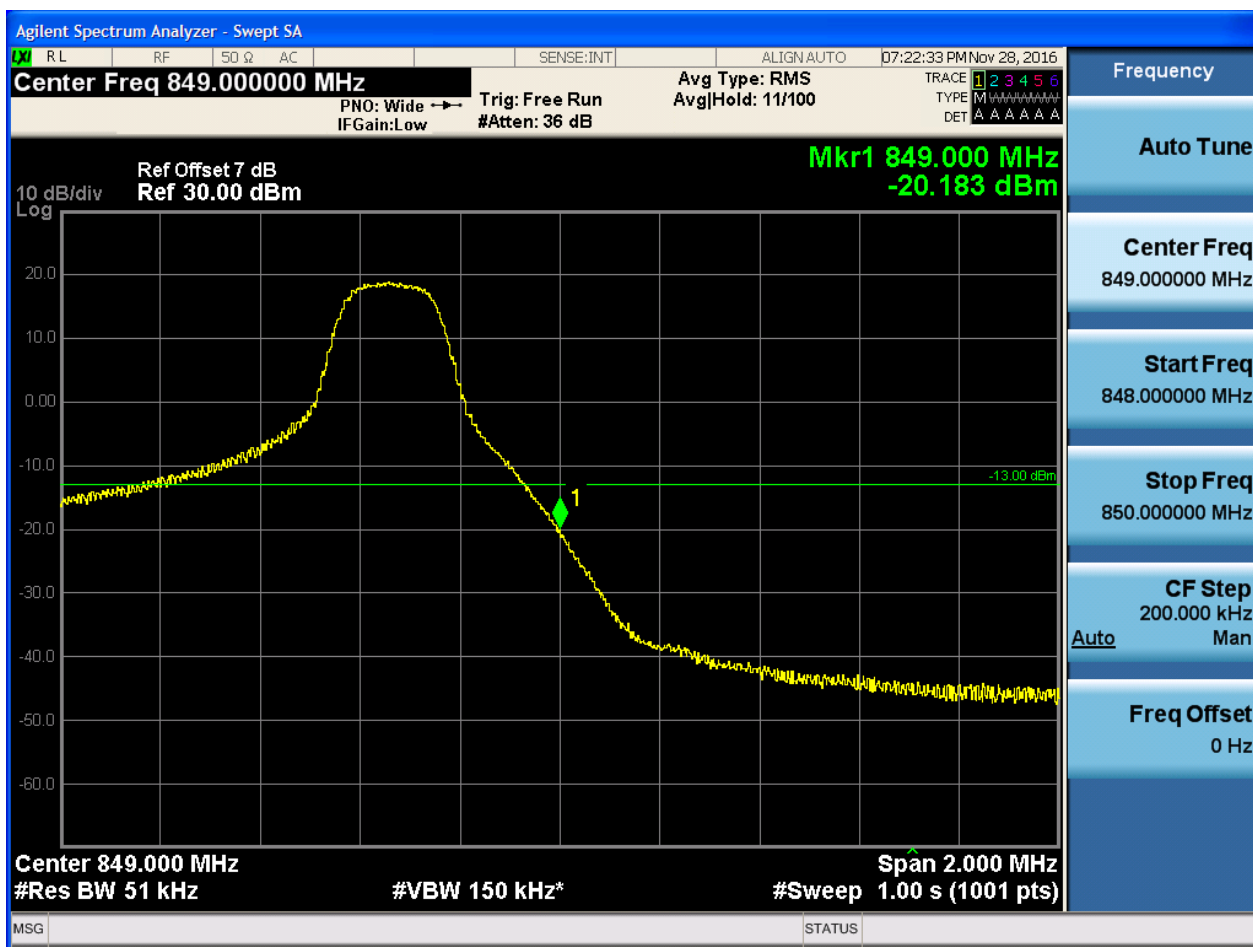
5.1.3.1.3.2 Test Channel = HCH

5.1.3.1.3.2.1 Test RB = RB1#0





5.1.3.1.3.2.2 Test RB = RB1#24





5.1.3.1.3.2.3 Test RB = RB12#6





5.1.3.1.3.2.4 Test RB = RB25#0

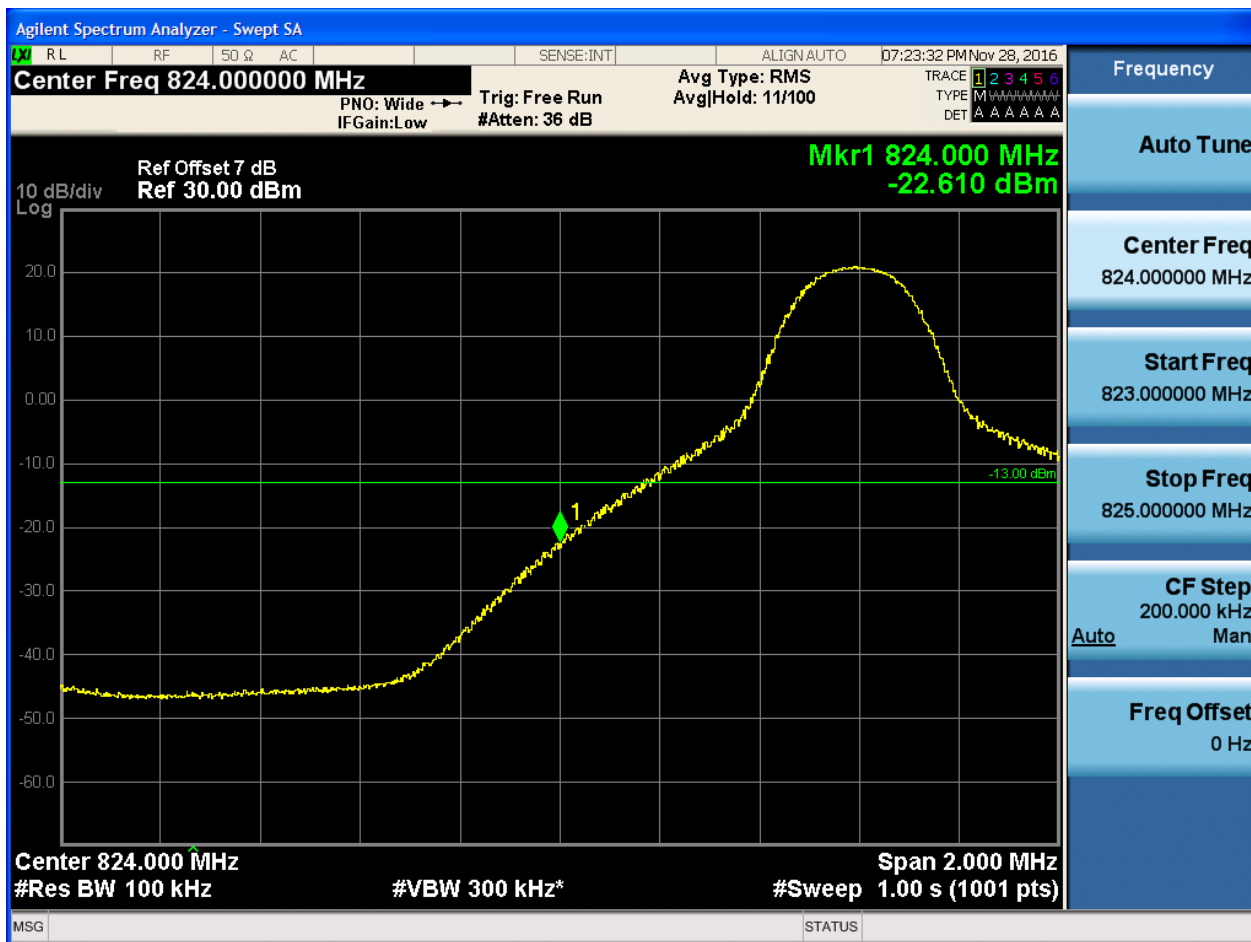




5.1.3.1.4 Test Bandwidth = 10

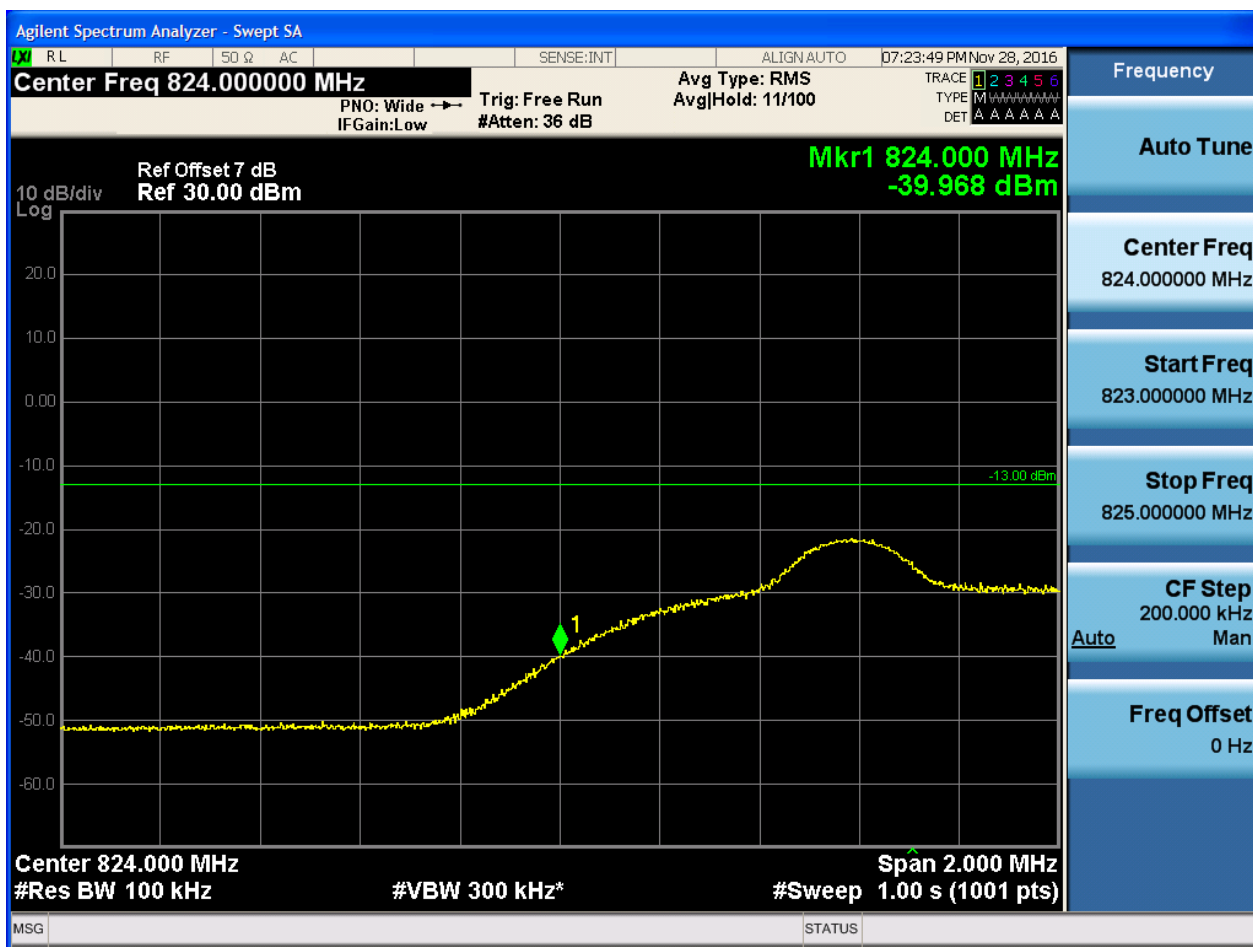
5.1.3.1.4.1 Test Channel = LCH

5.1.3.1.4.1.1 Test RB = RB1#0



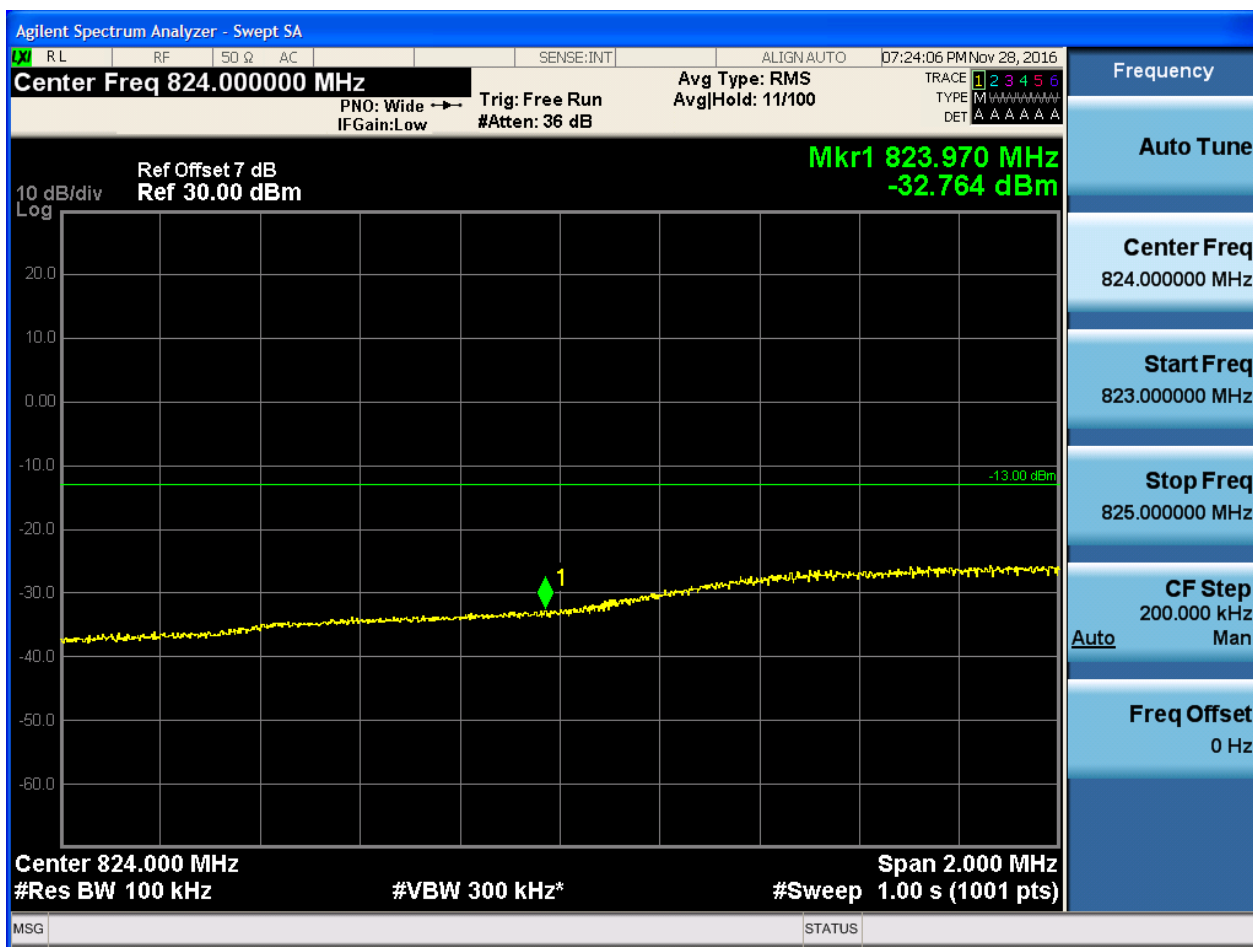


5.1.3.1.4.1.2 Test RB = RB1#49





5.1.3.1.4.1.3 Test RB = RB25#13





5.1.3.1.4.1.4 Test RB = RB50#0





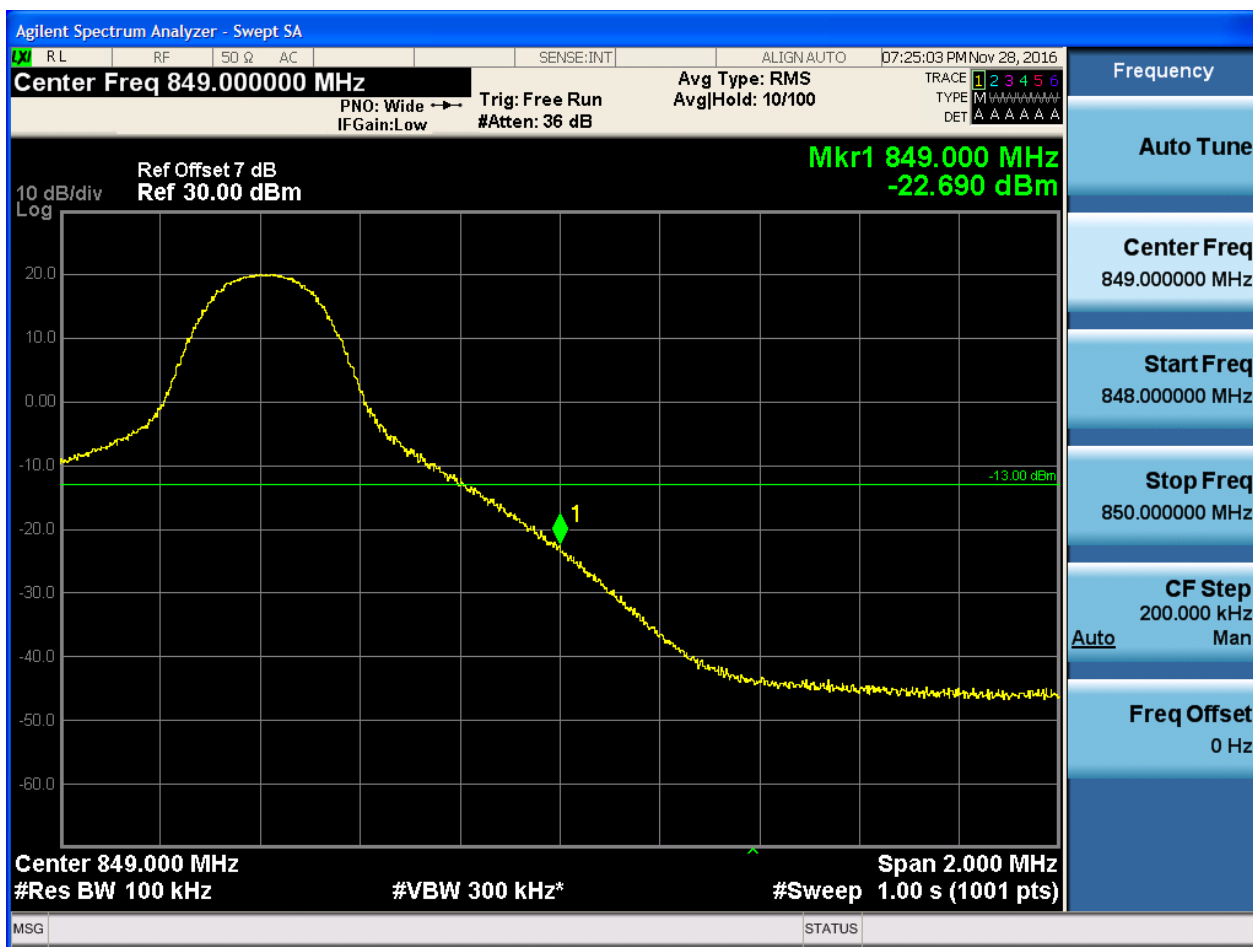
5.1.3.1.4.2 Test Channel = HCH

5.1.3.1.4.2.1 Test RB = RB1#0





5.1.3.1.4.2.2 Test RB = RB1#49





5.1.3.1.4.2.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-31.411 dBm

Trig: Free Run
#Atten: 36 dB

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

#Res BW 100 kHz
#VBW 300 kHz*

Auto Tune

Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Man

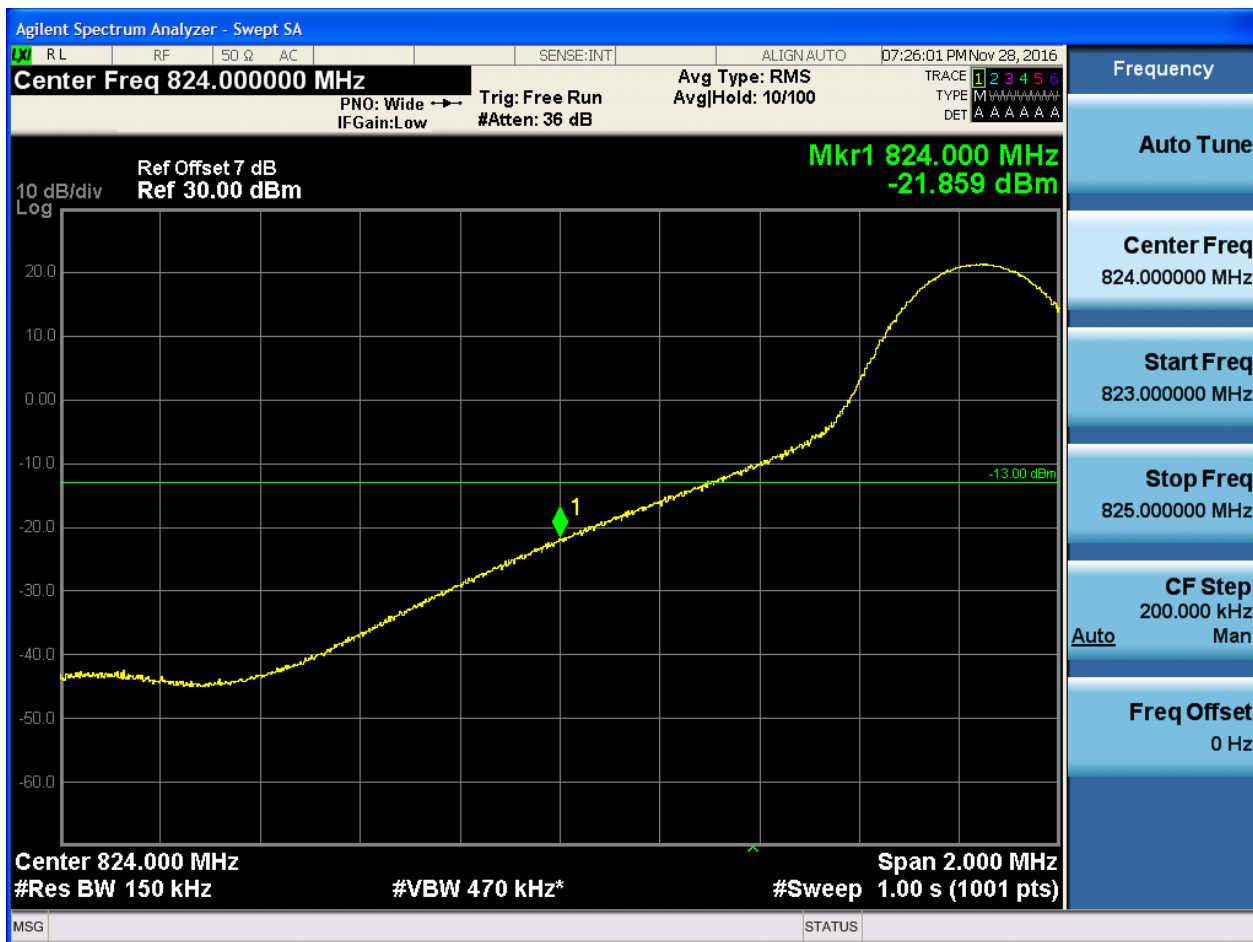
Freq Offset
0 Hz



5.1.3.1.5 Test Bandwidth = 15

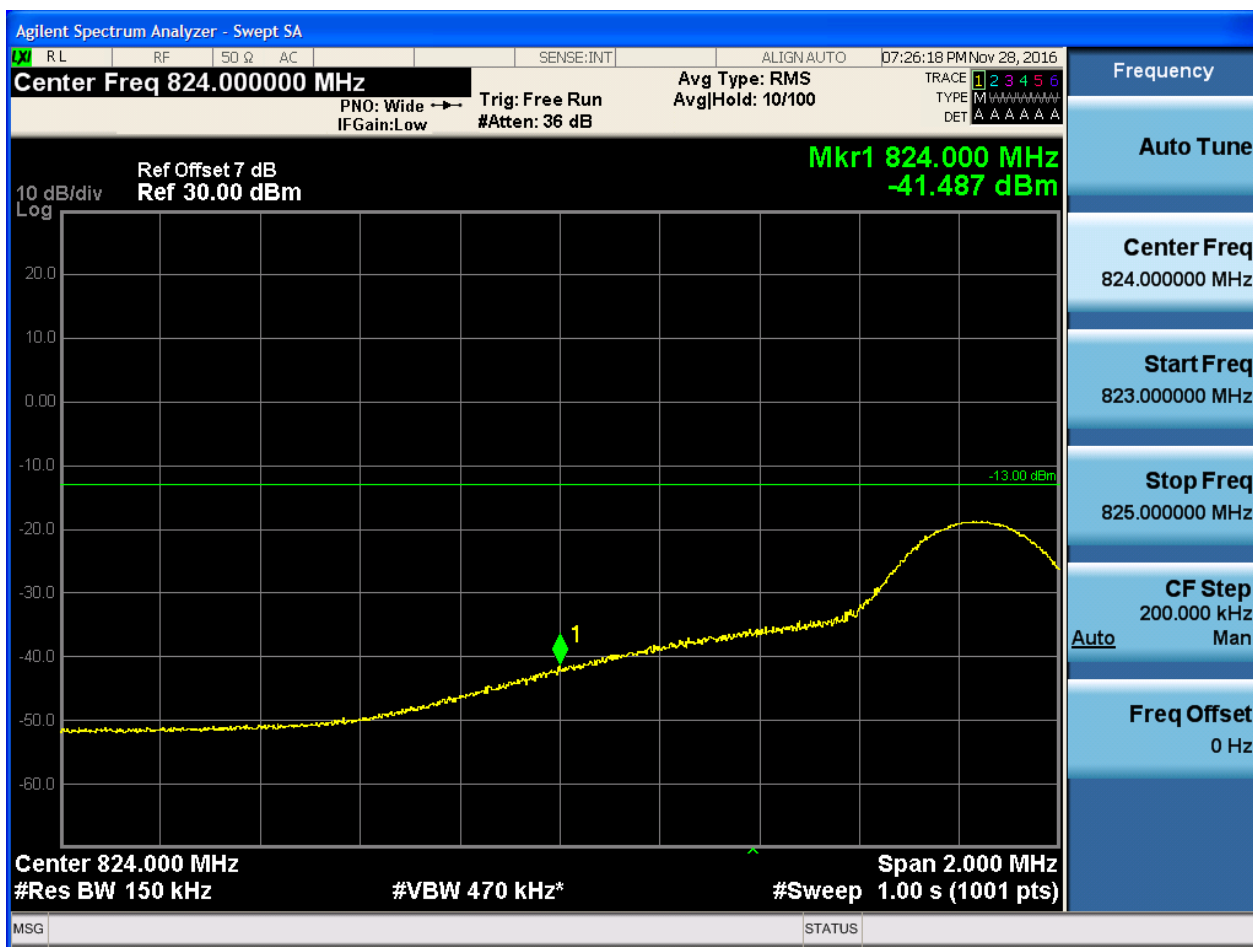
5.1.3.1.5.1 Test Channel = LCH

5.1.3.1.5.1.1 Test RB = RB1#0



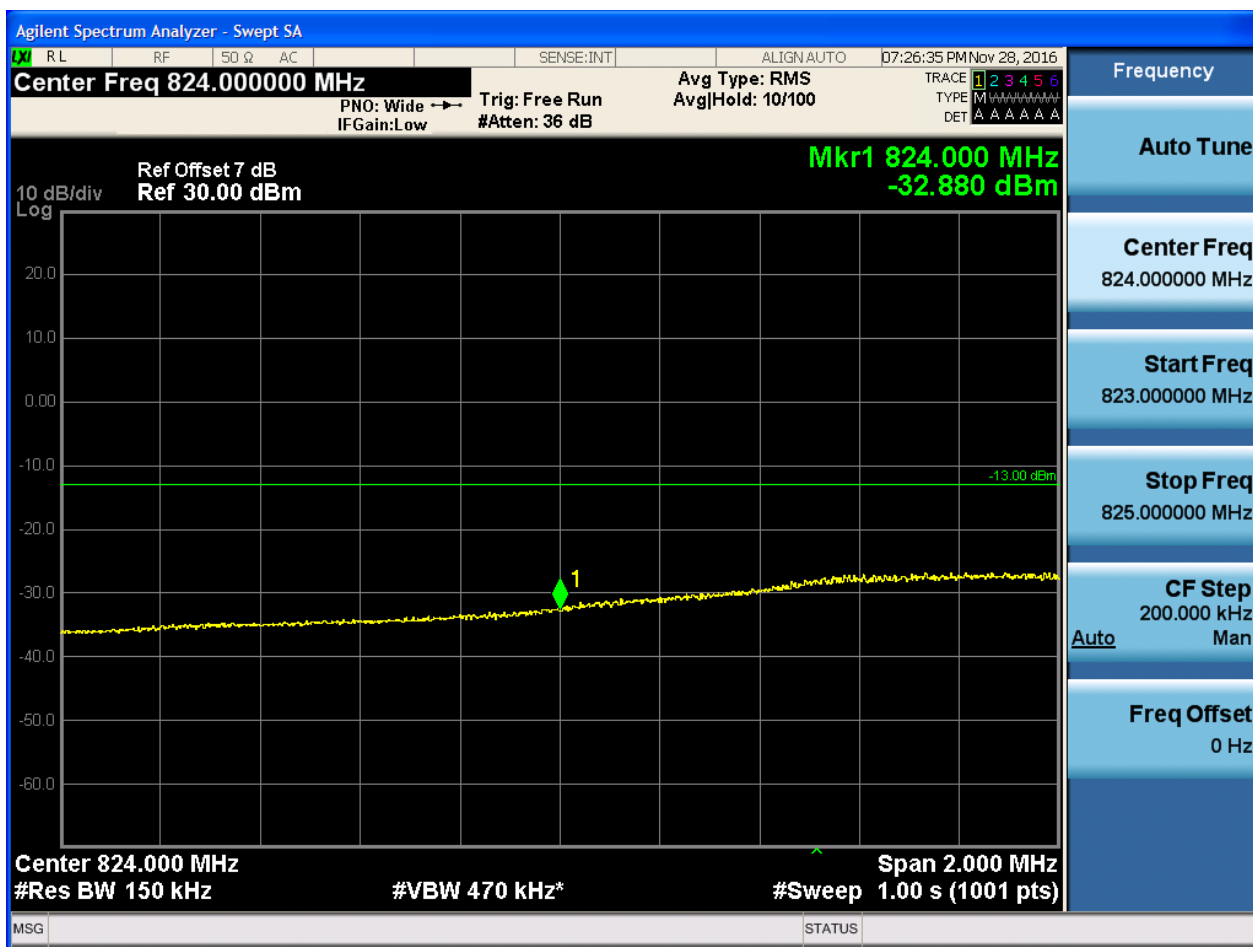


5.1.3.1.5.1.2 Test RB = RB1#74





5.1.3.1.5.1.3 Test RB = RB38#19



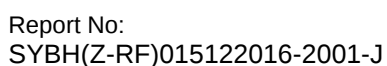


5.1.3.1.5.1.4 Test RB = RB75#0



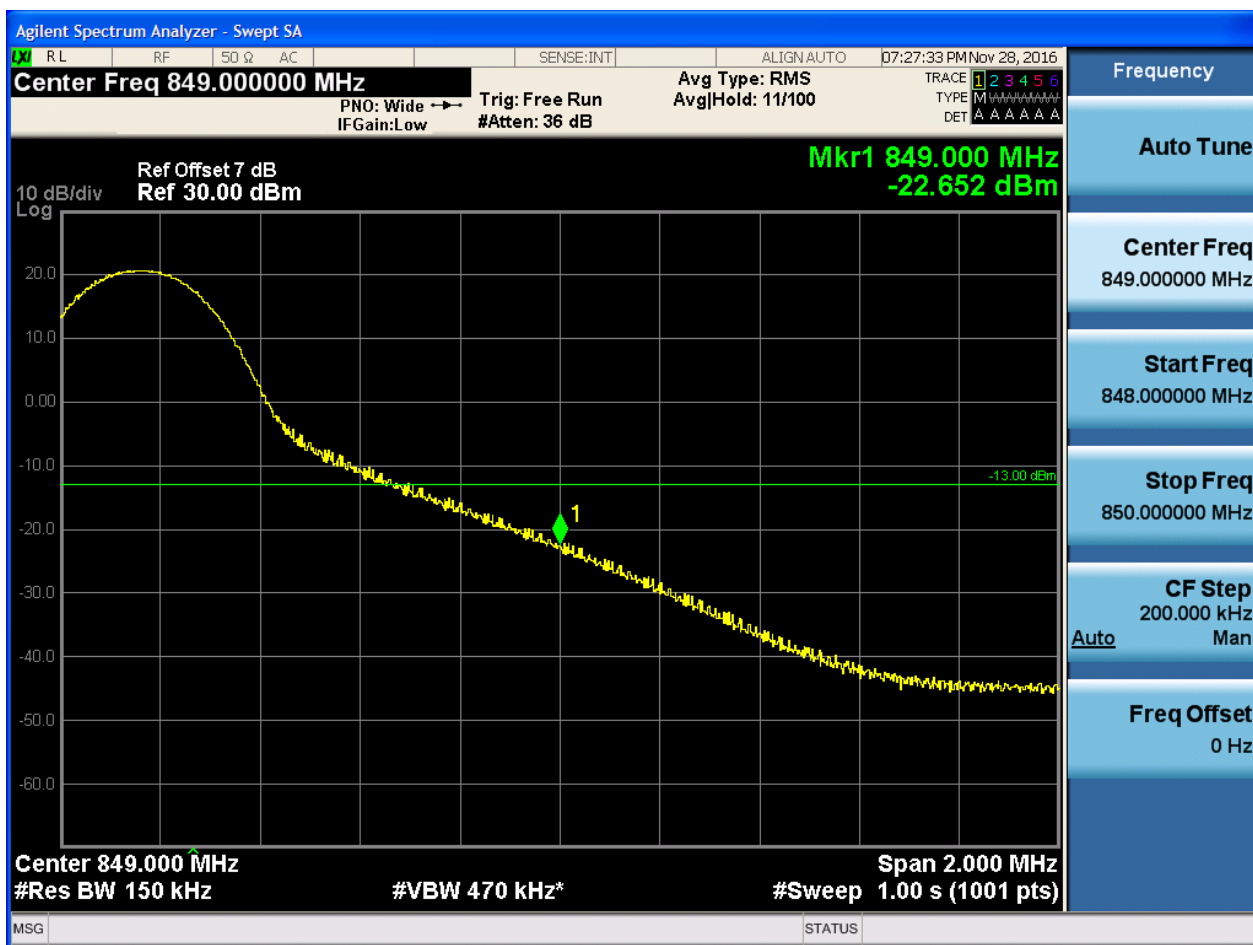


5.1.3.1.5.2.1 Test RB = RB1#0





5.1.3.1.5.2.2 Test RB = RB1#74





5.1.3.1.5.2.3 Test RB = RB38#19





5.1.3.1.5.2.4 Test RB = RB75#0



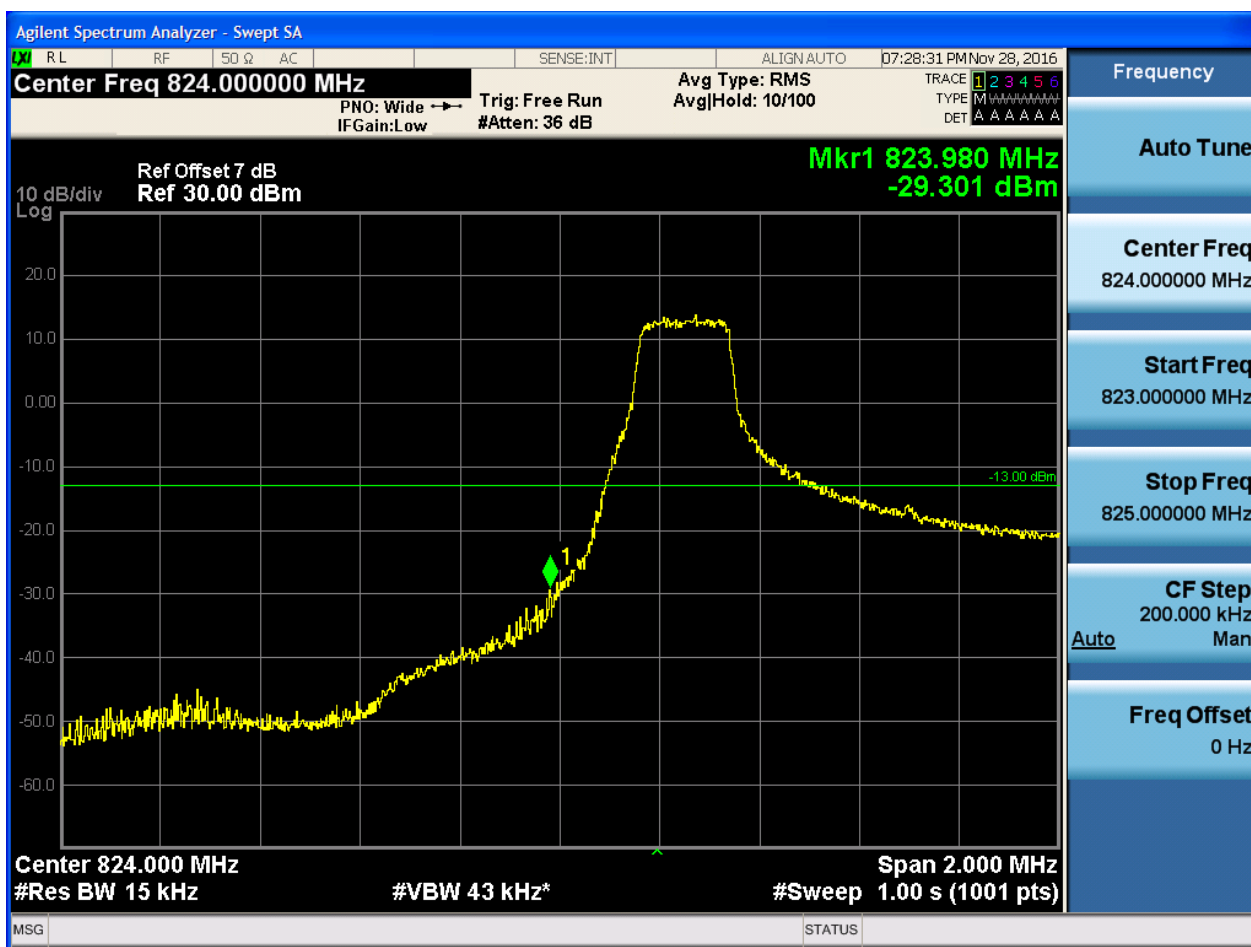


5.1.3.2 Test Mode = LTE/TM2

5.1.3.2.1 Test Bandwidth = 1.4

5.1.3.2.1.1 Test Channel = LCH

5.1.3.2.1.1.1 Test RB = RB1#0



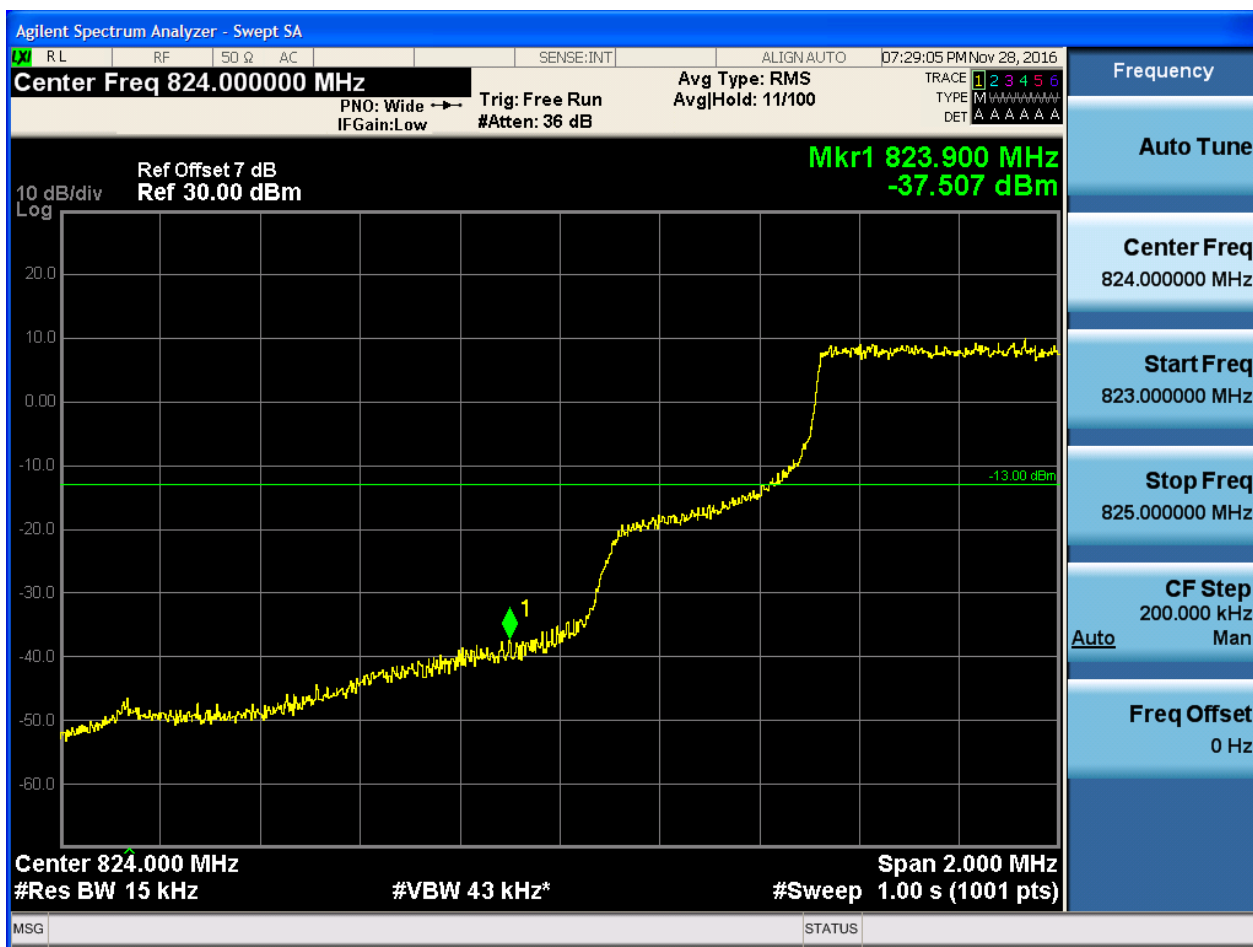


5.1.3.2.1.1.2 Test RB = RB1#5



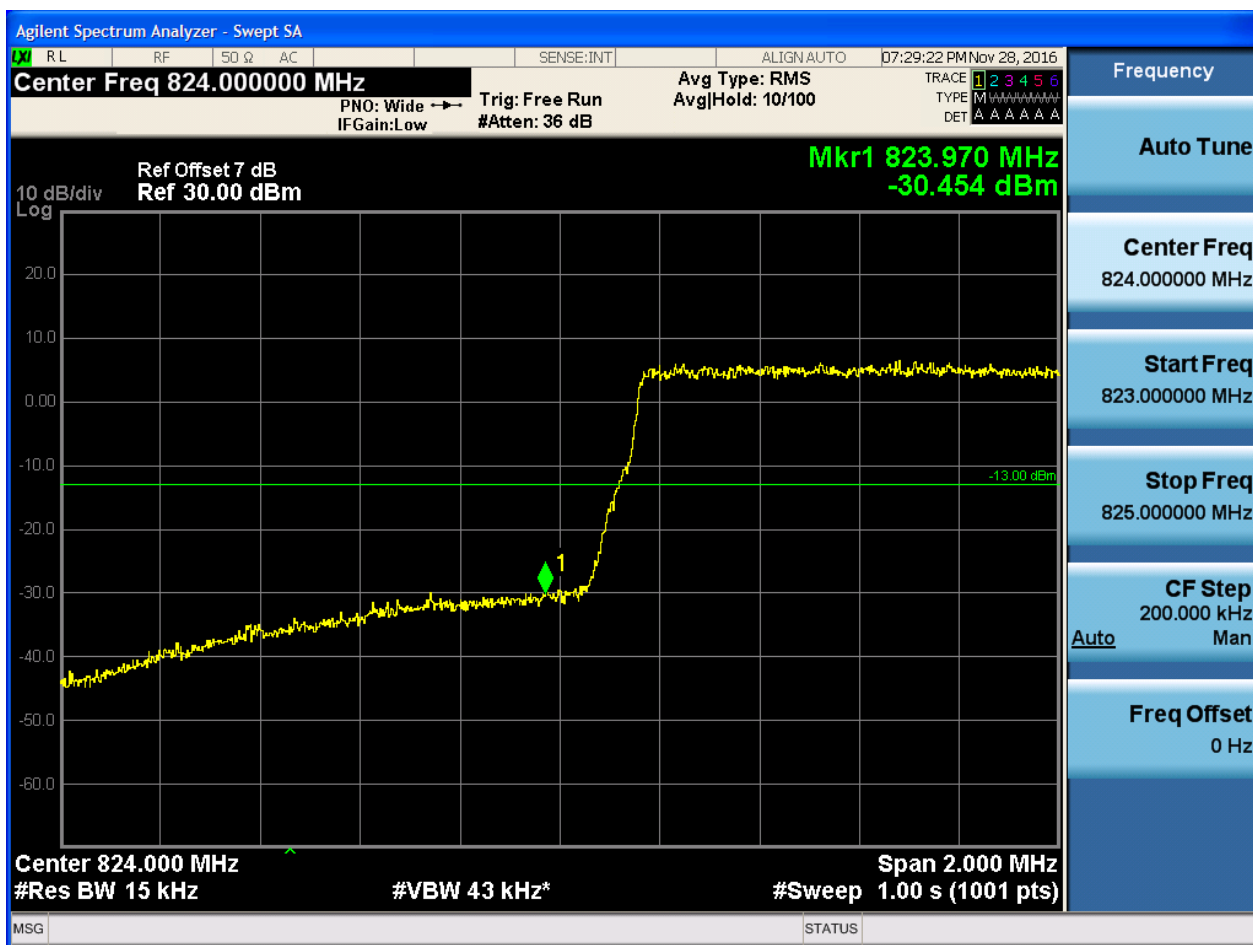


5.1.3.2.1.1.3 Test RB = RB3#2





5.1.3.2.1.1.4 Test RB = RB6#0



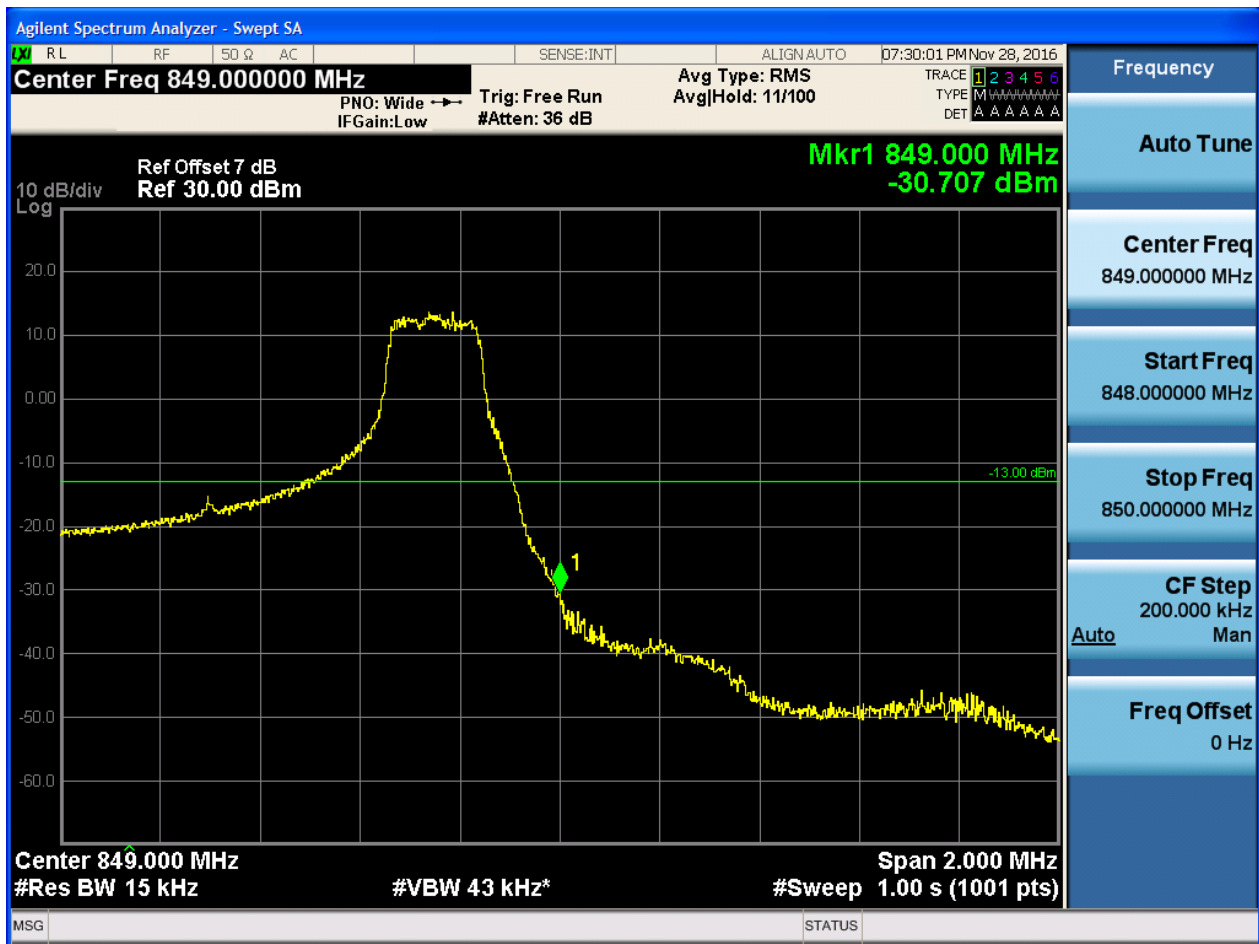


5.1.3.2.1.2.1 Test RB = RB1#0





5.1.3.2.1.2.2 Test RB = RB1#5





5.1.3.2.1.2.3 Test RB = RB3#2





5.1.3.2.1.2.4 Test RB = RB6#0

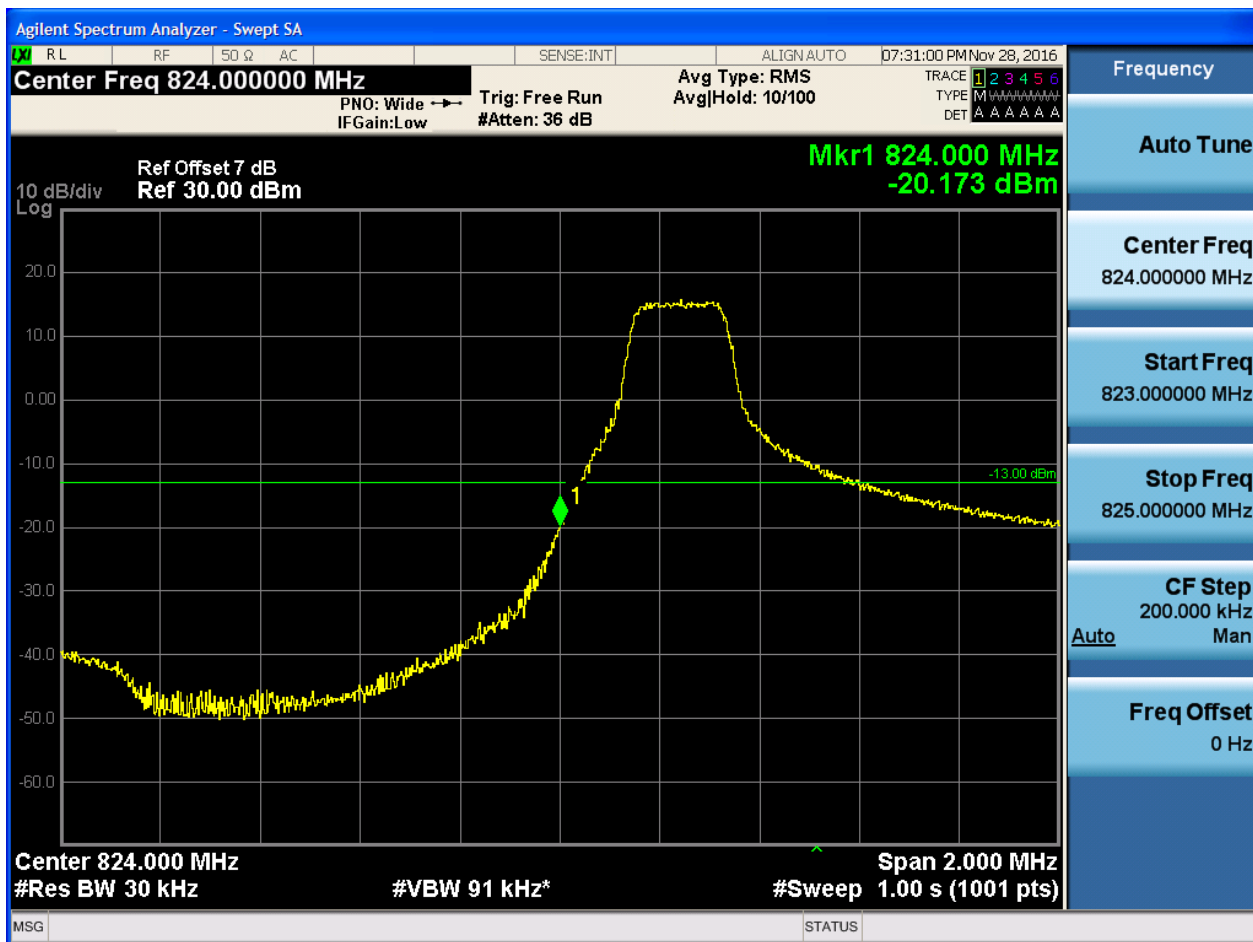




5.1.3.2.2 Test Bandwidth = 3

5.1.3.2.2.1 Test Channel = LCH

5.1.3.2.2.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 7 dB
Ref 30.00 dBm

10 dB/div
Log

Trig: Free Run
#Atten: 36 dB

Avg Type: RMS
Avg/Hold: 11/100

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

Mkr1 824.000 MHz
-34.805 dBm

-13.00 dBm

Center 824.000 MHz
#Res BW 30 kHz

#VBW 91 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
824.000000 MHz

Start Freq
823.000000 MHz

Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz

MSG STATUS

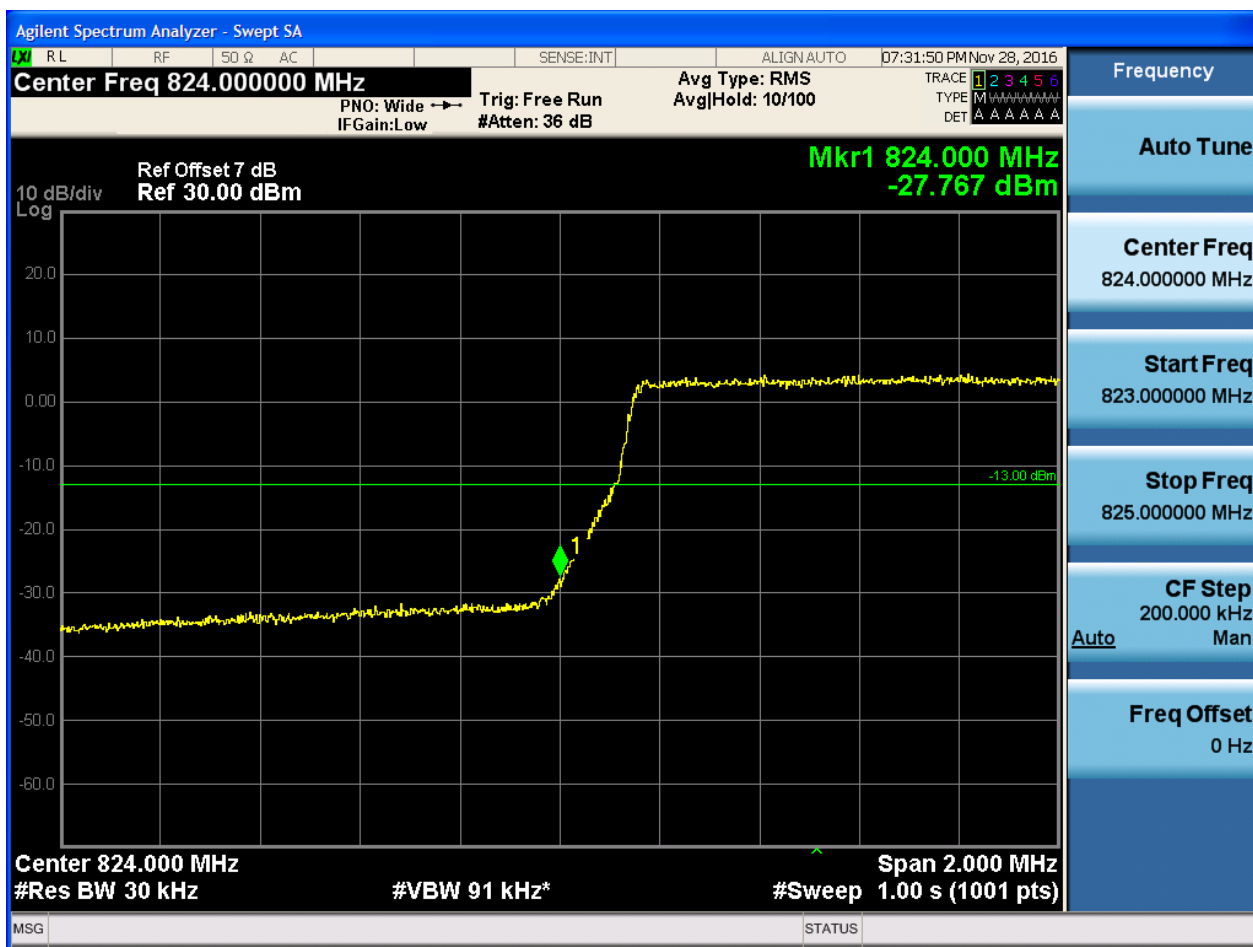


5.1.3.2.2.1.3 Test RB = RB8#4





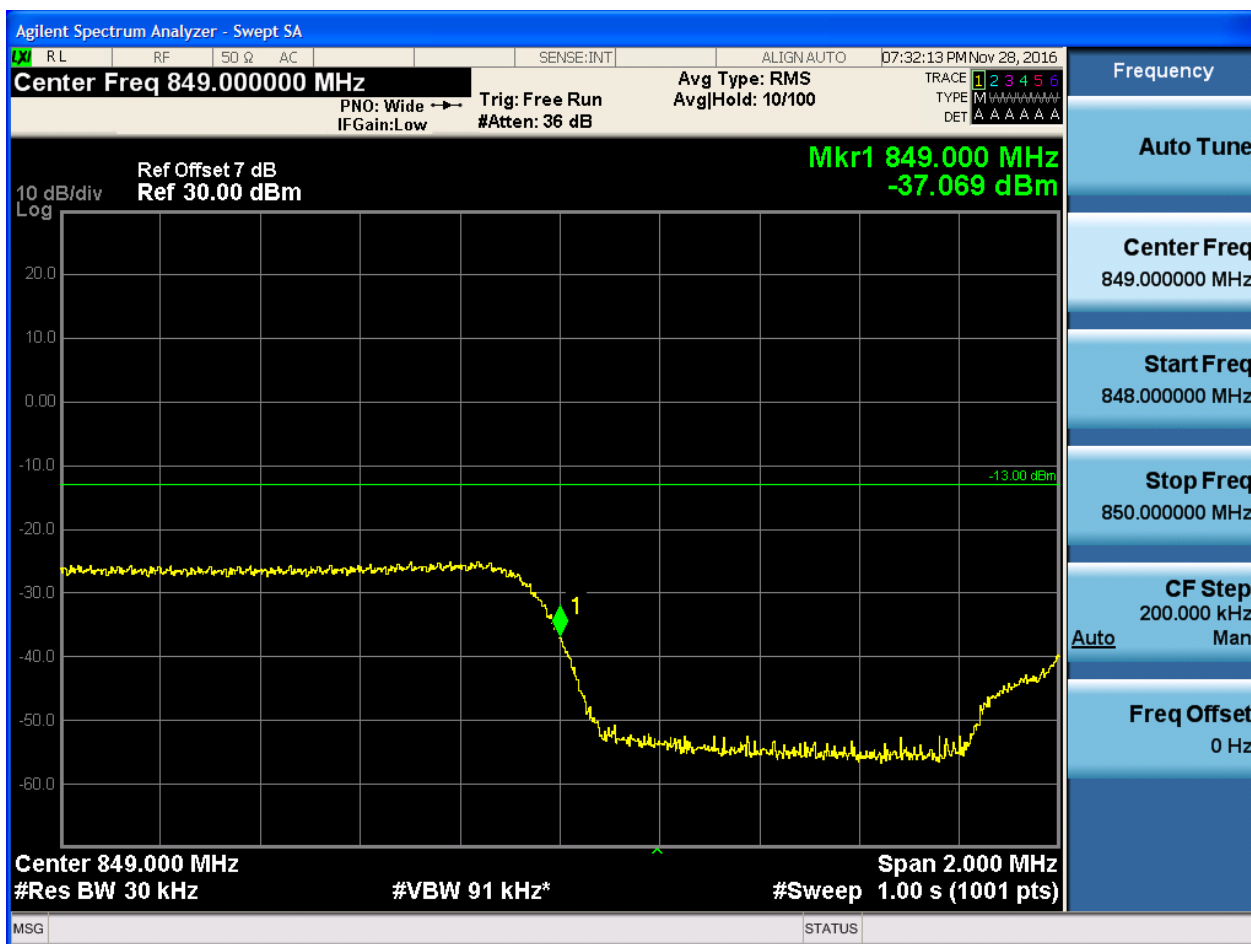
5.1.3.2.2.1.4 Test RB = RB15#0





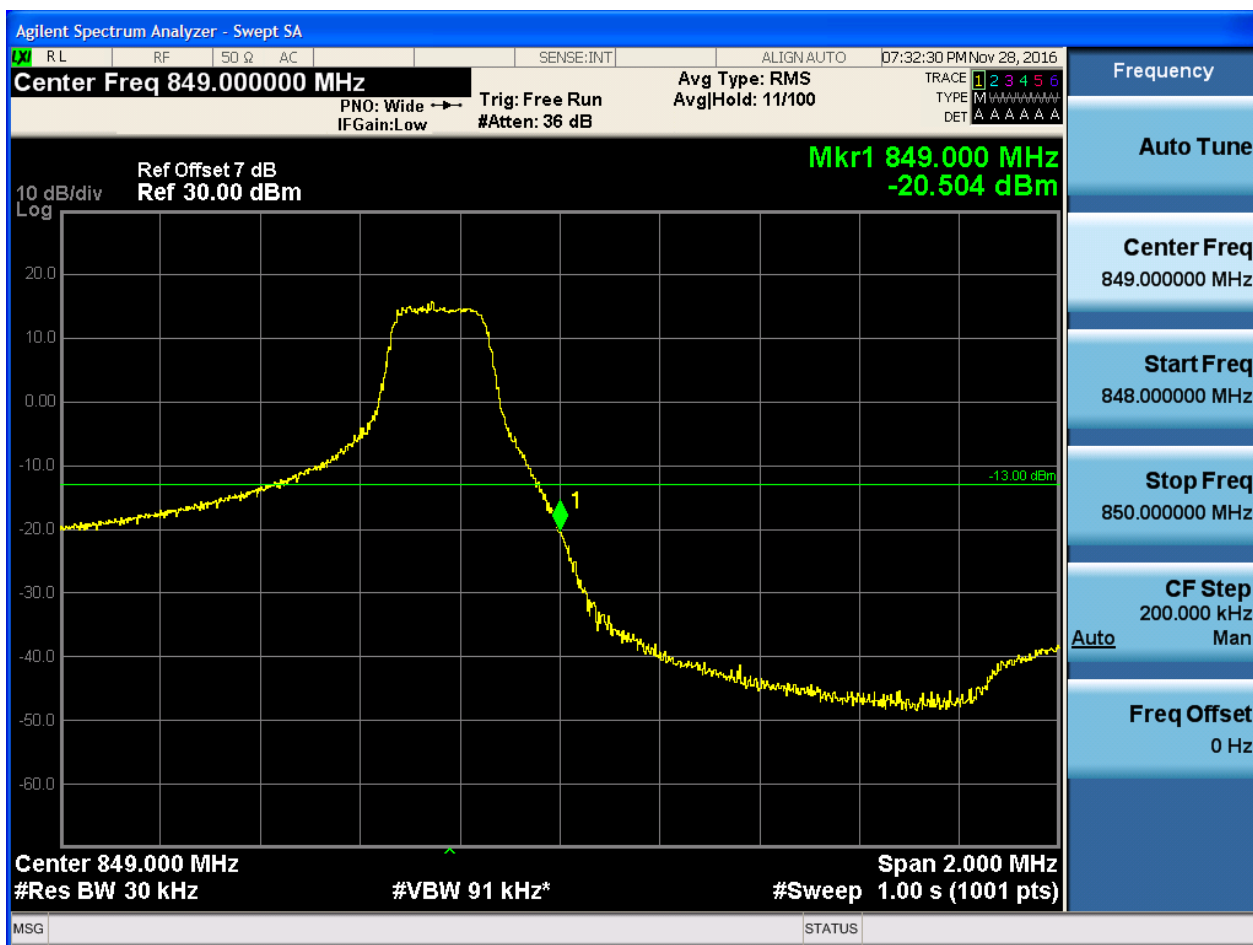
5.1.3.2.2.2 Test Channel = HCH

5.1.3.2.2.2.1 Test RB = RB1#0





5.1.3.2.2.2 Test RB = RB1#14



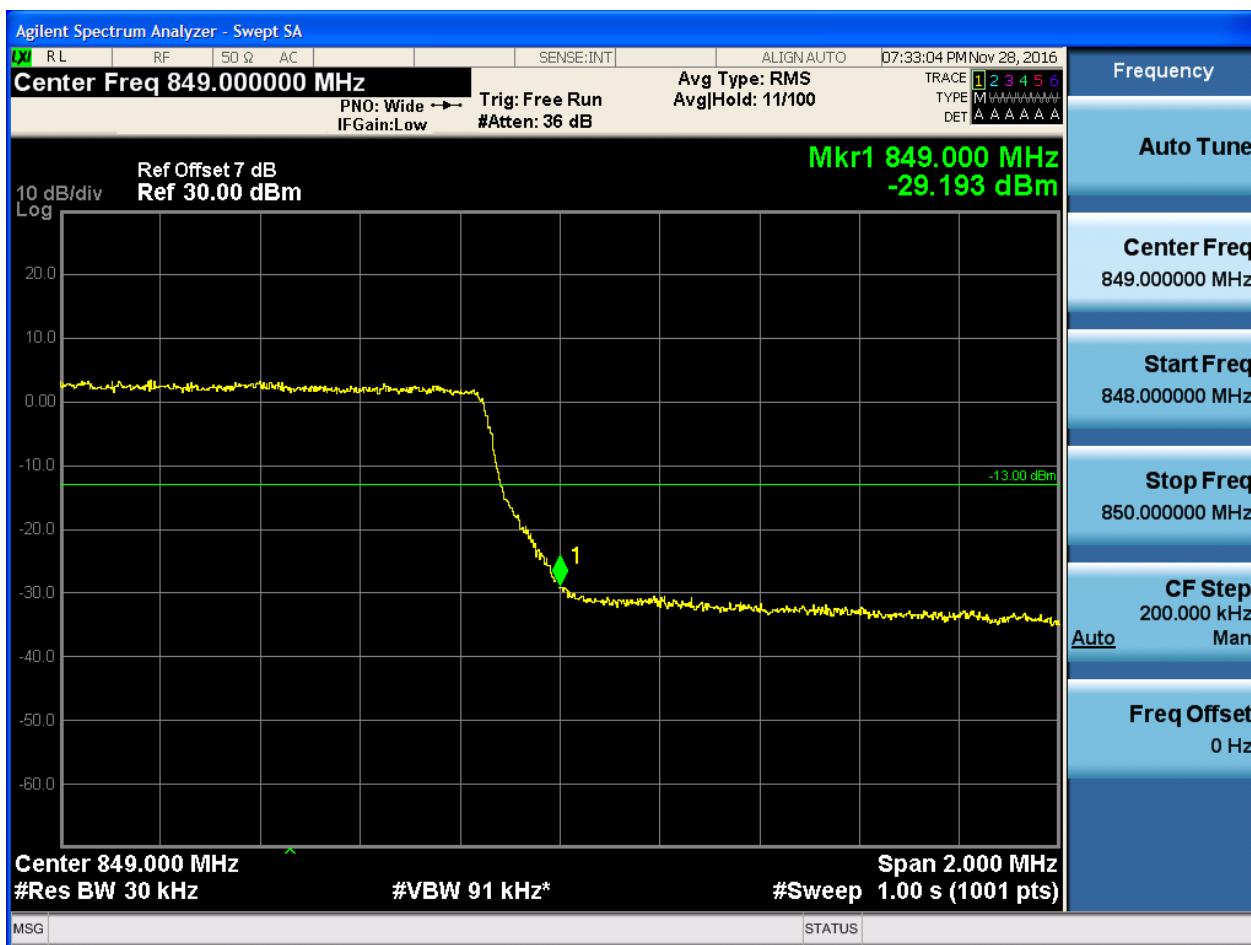


5.1.3.2.2.3 Test RB = RB8#4





5.1.3.2.2.4 Test RB = RB15#0

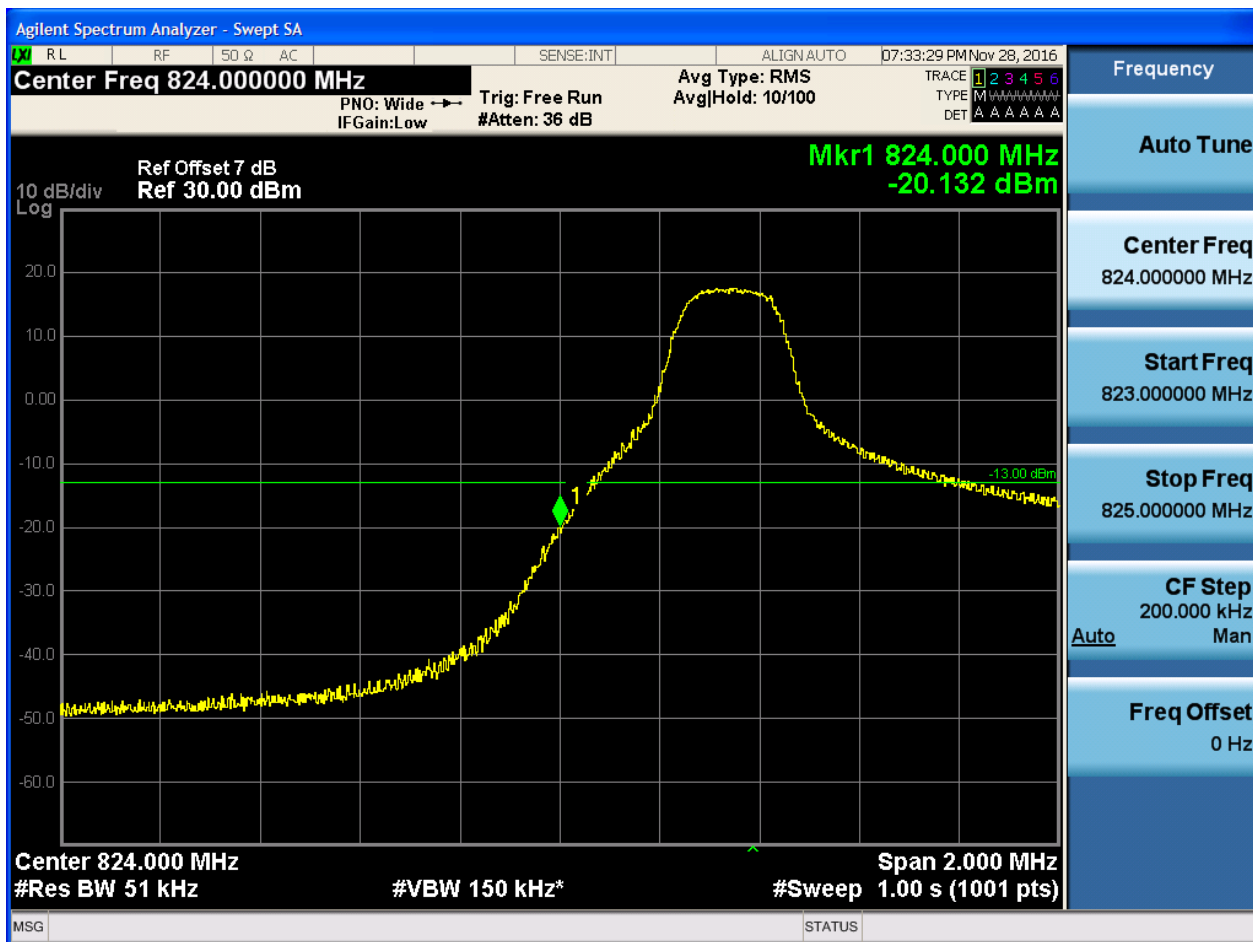




5.1.3.2.3 Test Bandwidth = 5

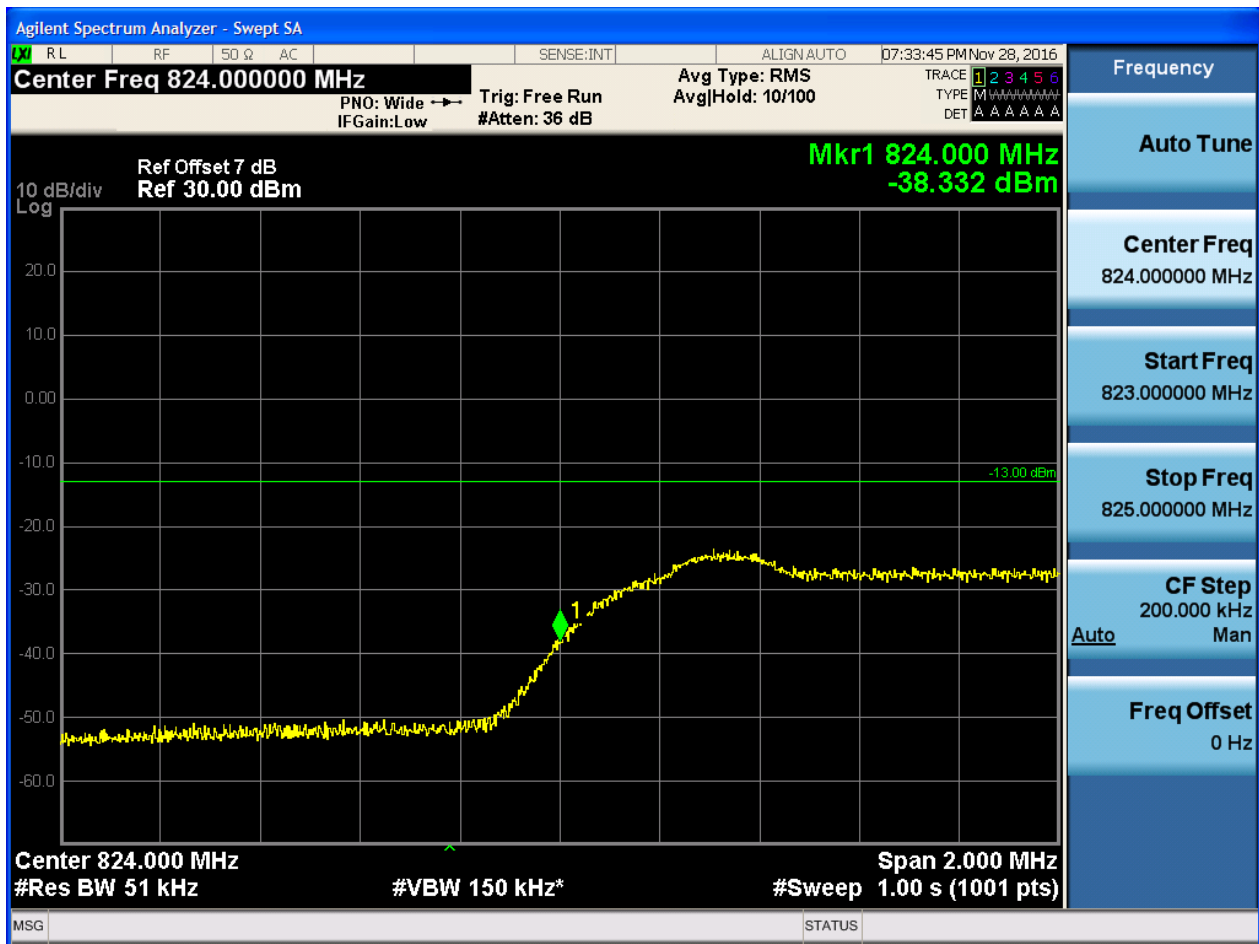
5.1.3.2.3.1 Test Channel = LCH

5.1.3.2.3.1.1 Test RB = RB1#0





5.1.3.2.3.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 823.990 MHz
-32.324 dBm

Center 824.000 MHz
#Res BW 51 kHz

#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
824.000000 MHz

Start Freq
823.000000 MHz

Stop Freq
825.000000 MHz

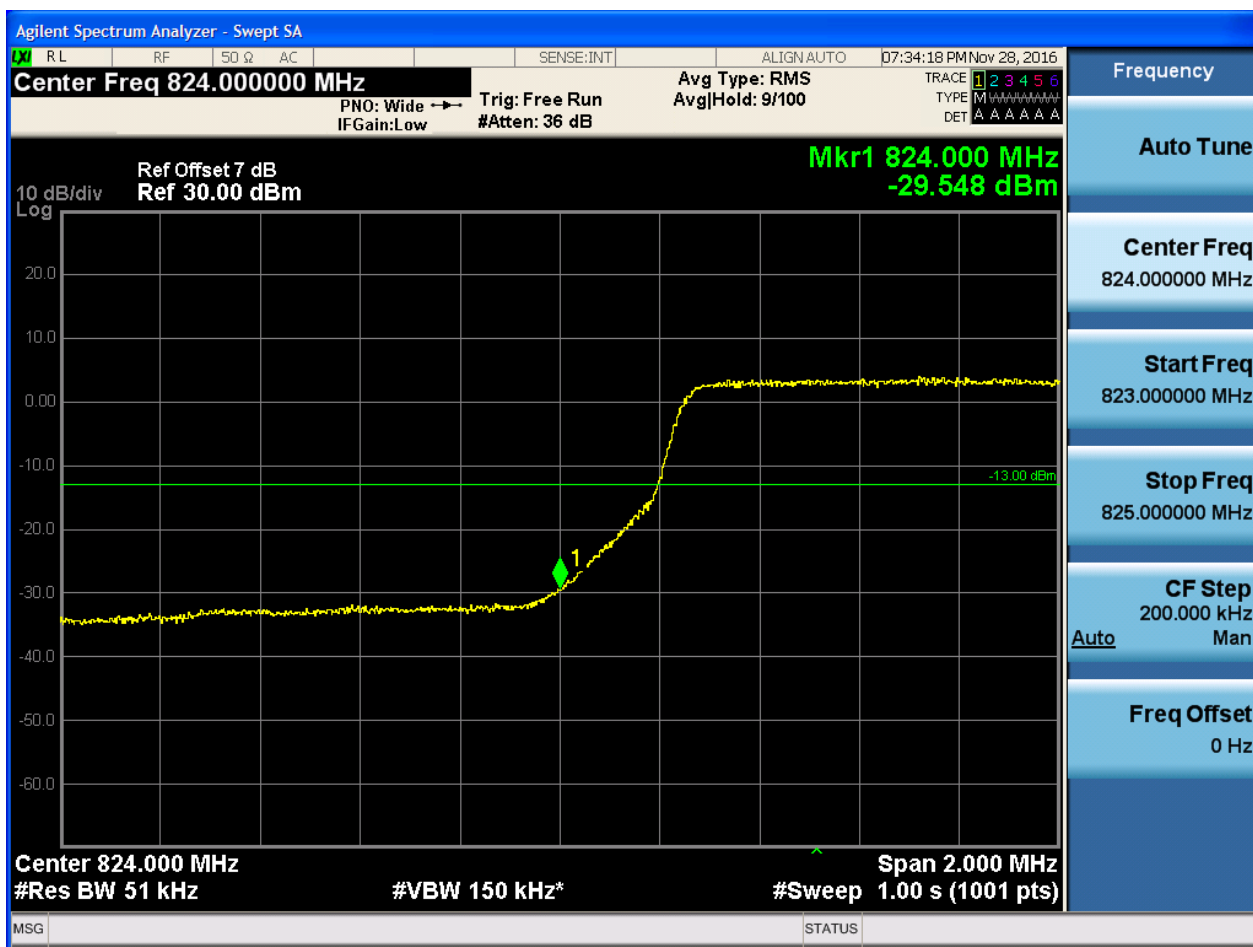
CF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz



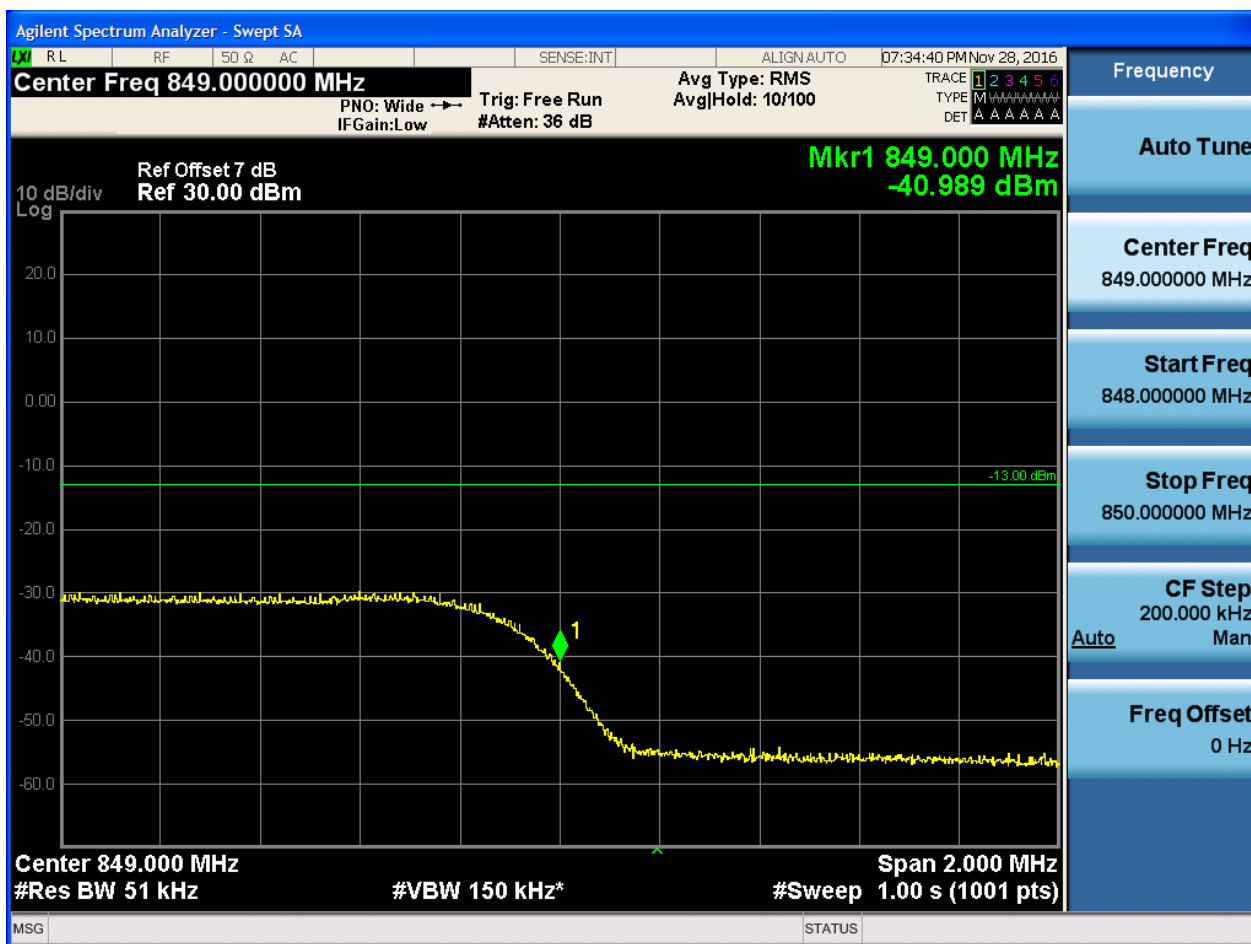
5.1.3.2.3.1.4 Test RB = RB25#0





5.1.3.2.3.2 Test Channel = HCH

5.1.3.2.3.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-21.008 dBm

Trig: Free Run
#Atten: 36 dB

PNO: Wide
IFGain: Low

Avg Type: RMS
Avg/Hold: 10/100

ALIGN AUTO

07:34:57 PM Nov 28, 2016

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

Auto Tune

Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz

Center 849.000 MHz
#Res BW 51 kHz

#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

MSG STATUS



5.1.3.2.3.2.3 Test RB = RB12#6





5.1.3.2.3.2.4 Test RB = RB25#0

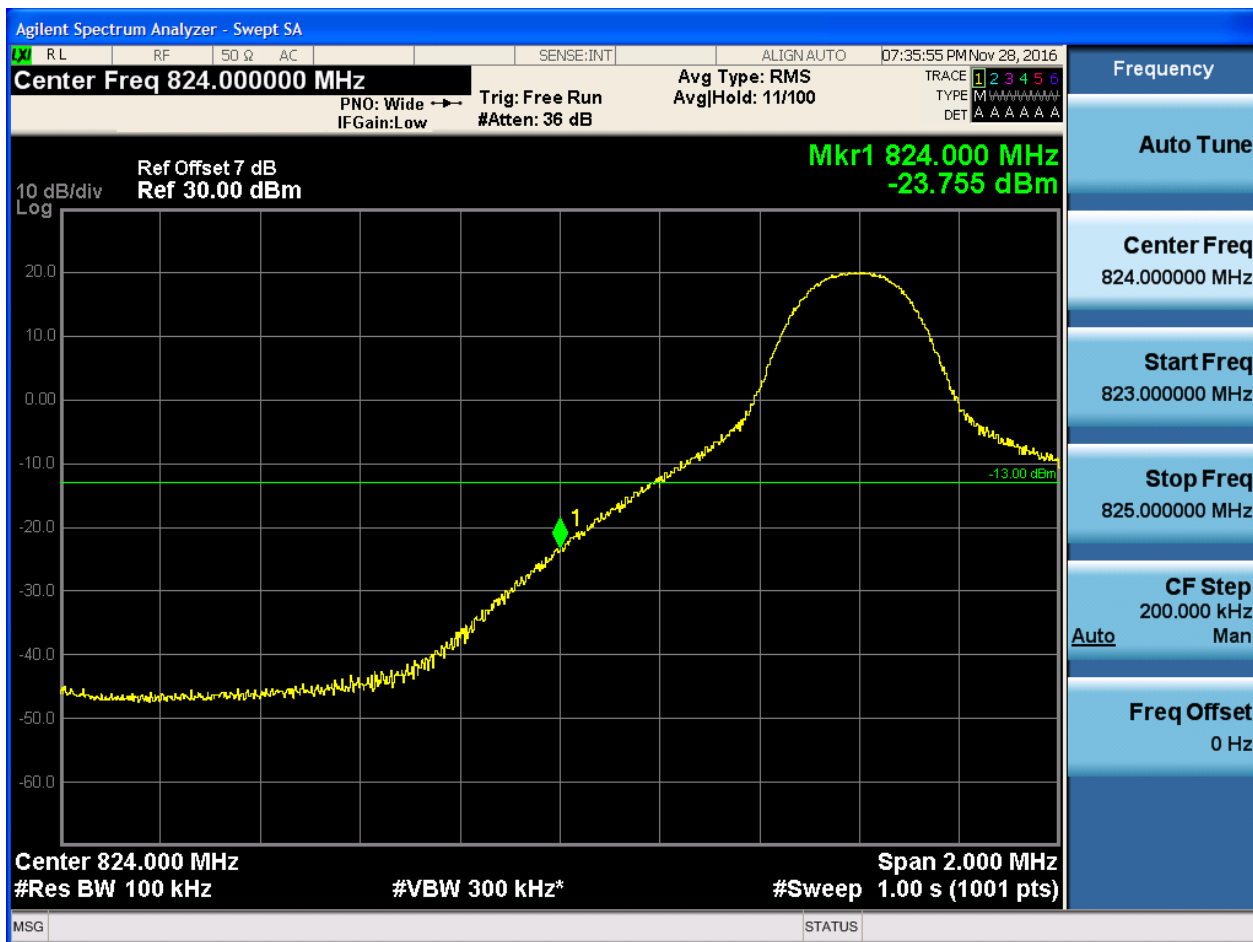




5.1.3.2.4 Test Bandwidth = 10

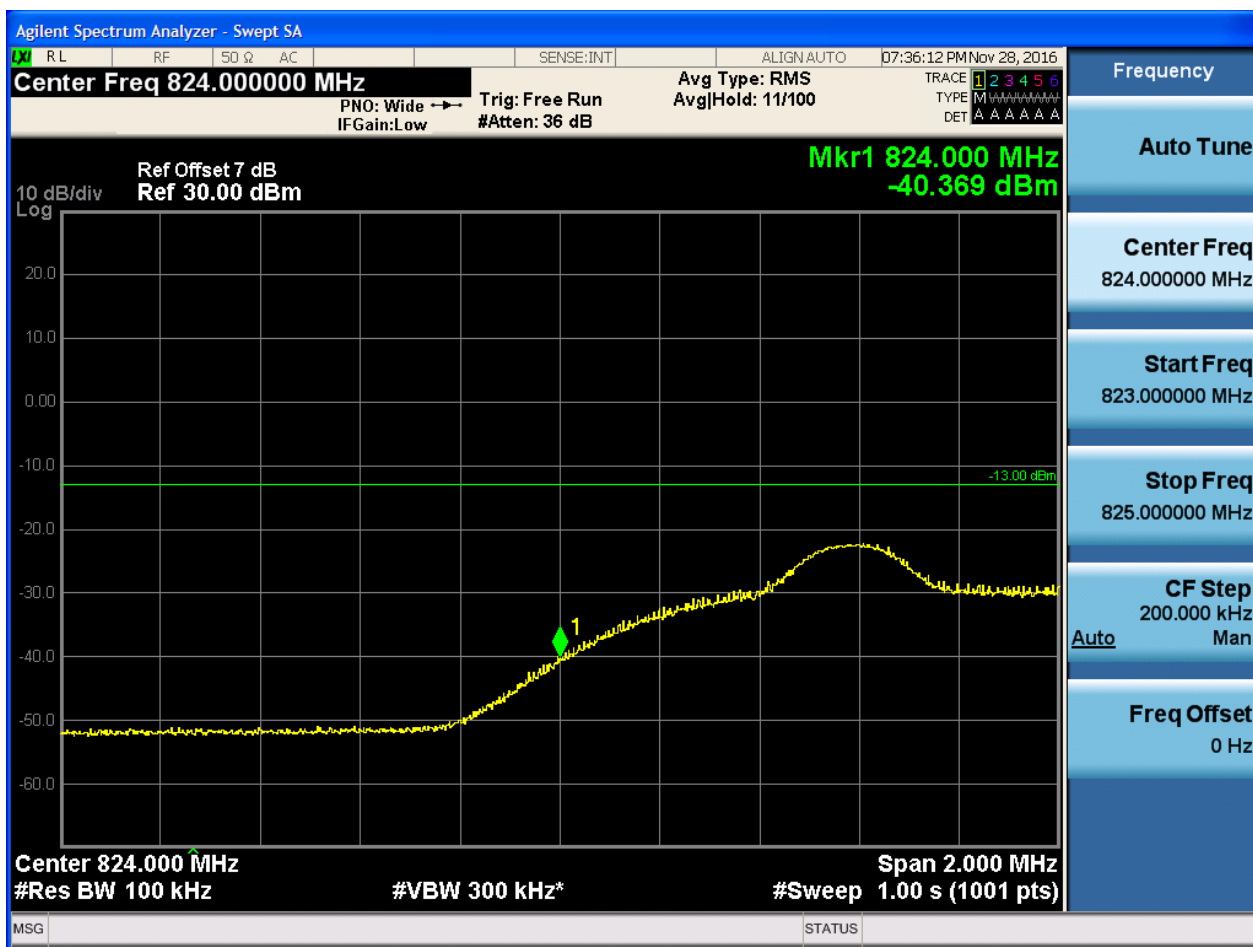
5.1.3.2.4.1 Test Channel = LCH

5.1.3.2.4.1.1 Test RB = RB1#0



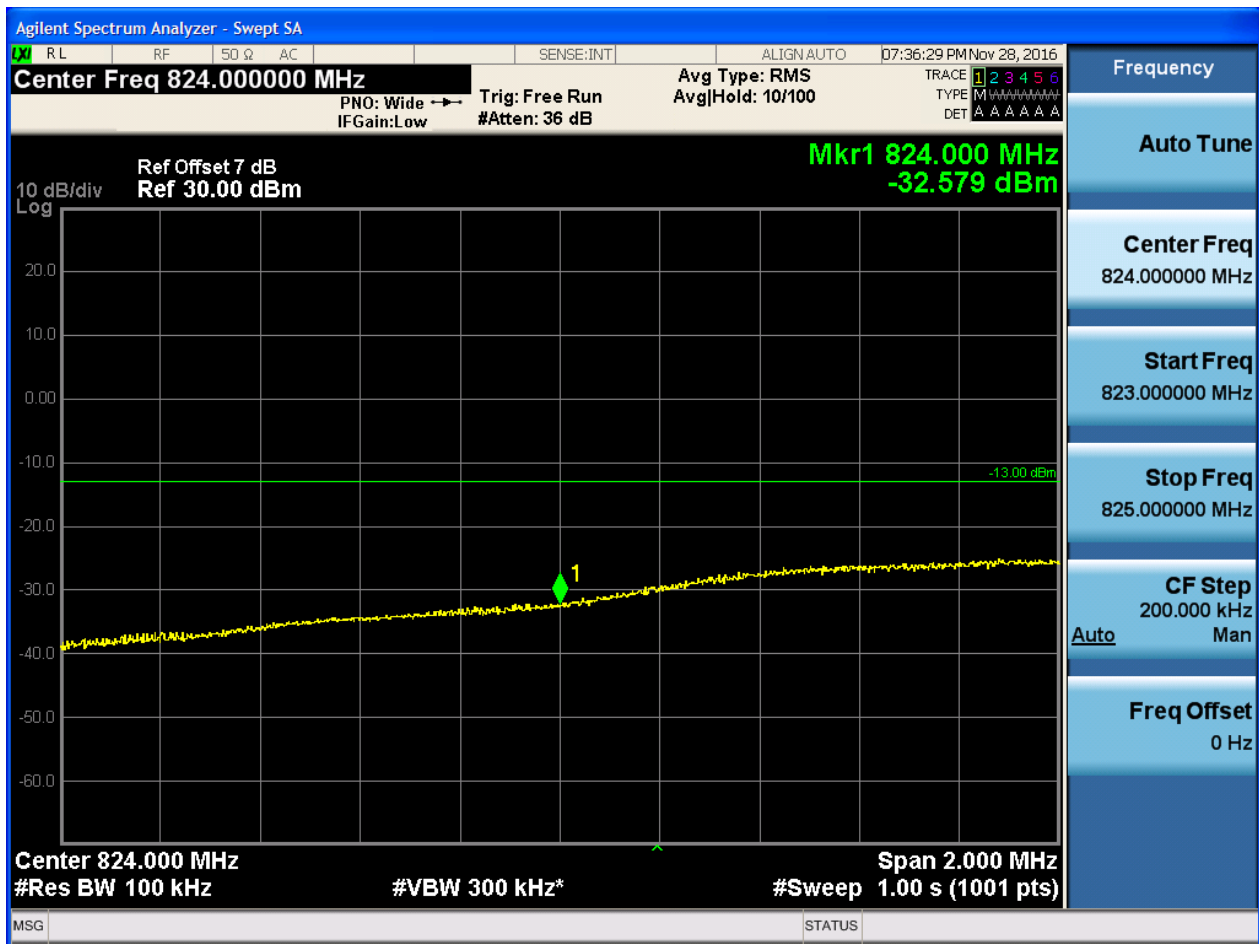


5.1.3.2.4.1.2 Test RB = RB1#49





5.1.3.2.4.1.3 Test RB = RB25#13





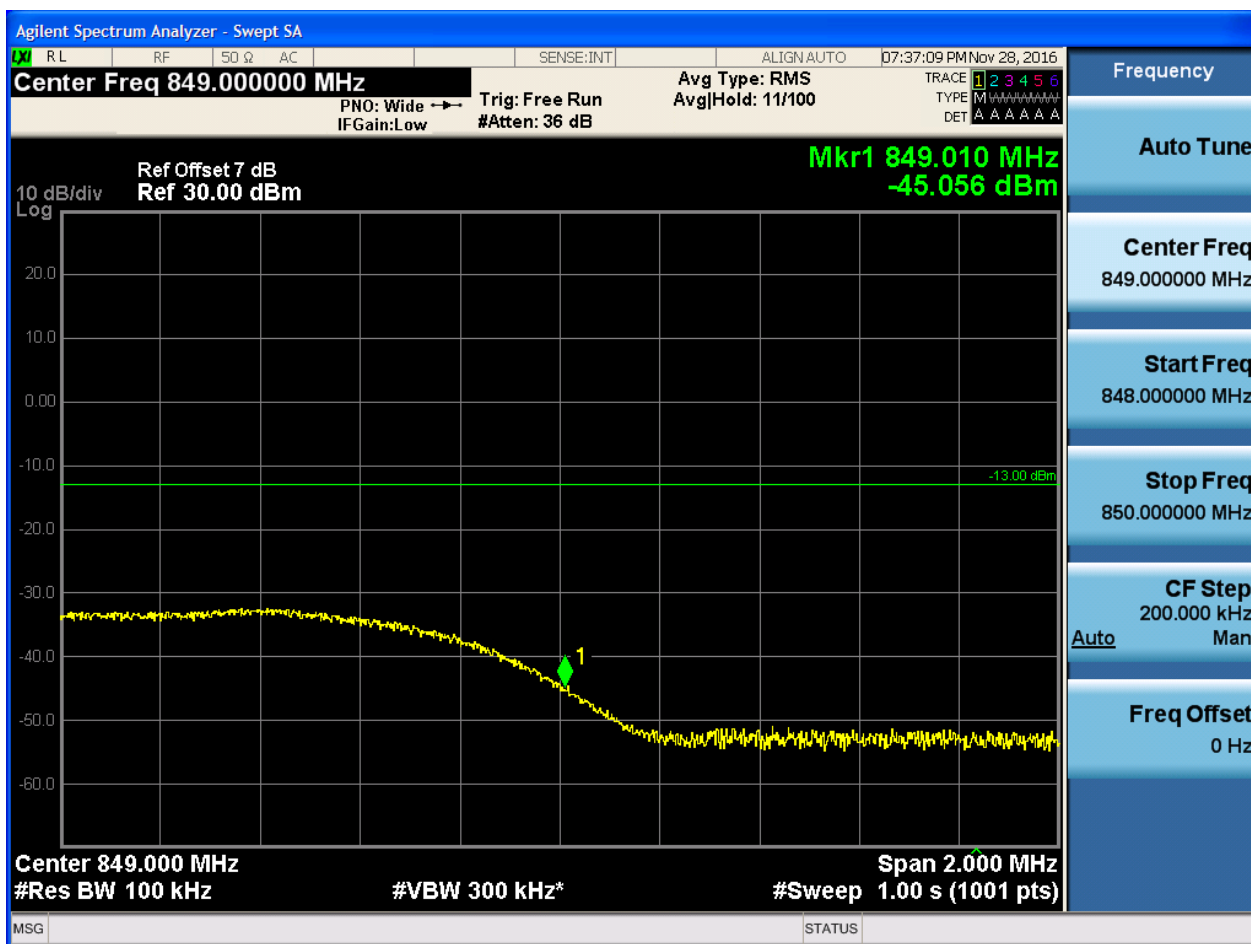
5.1.3.2.4.1.4 Test RB = RB50#0





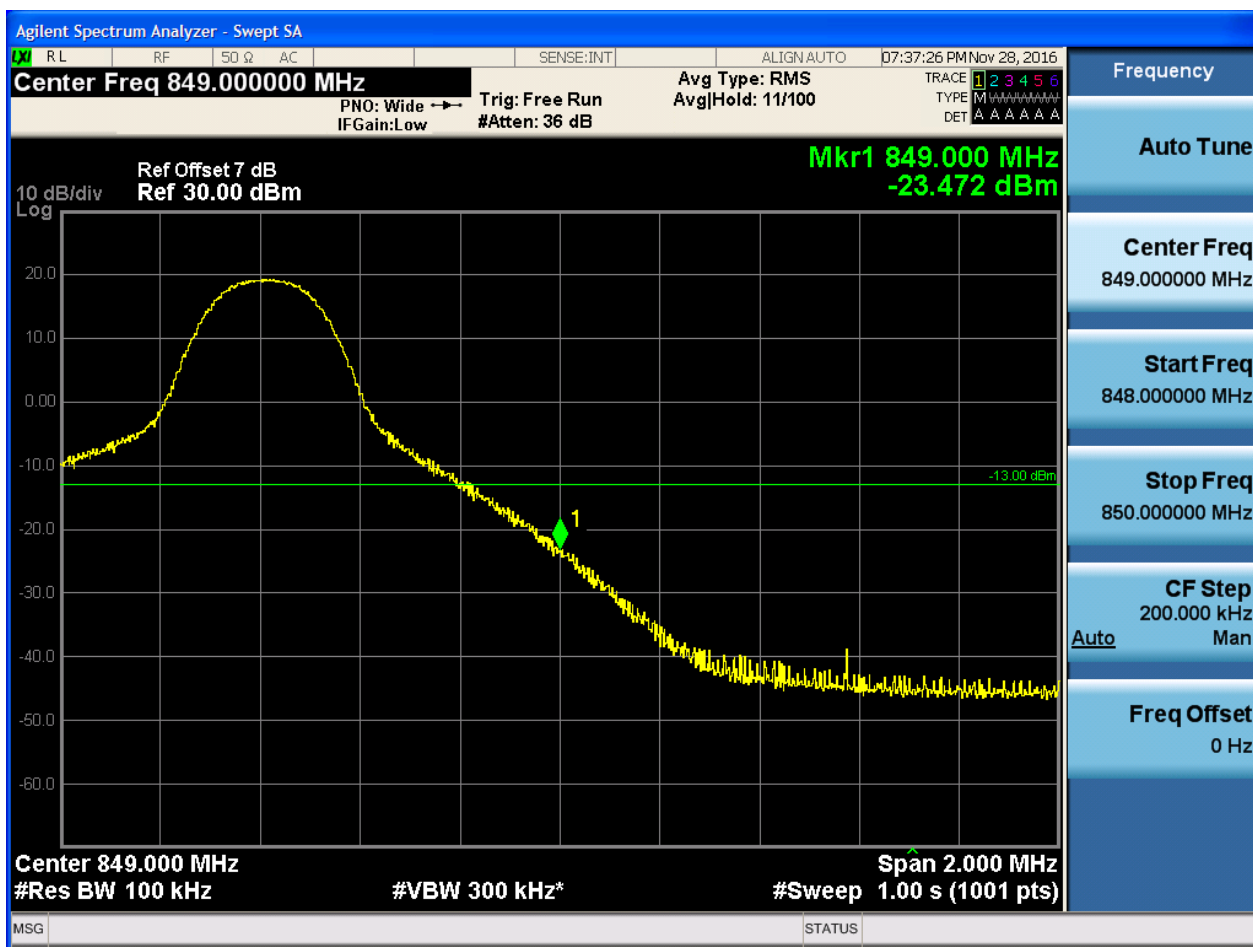
5.1.3.2.4.2 Test Channel = HCH

5.1.3.2.4.2.1 Test RB = RB1#0



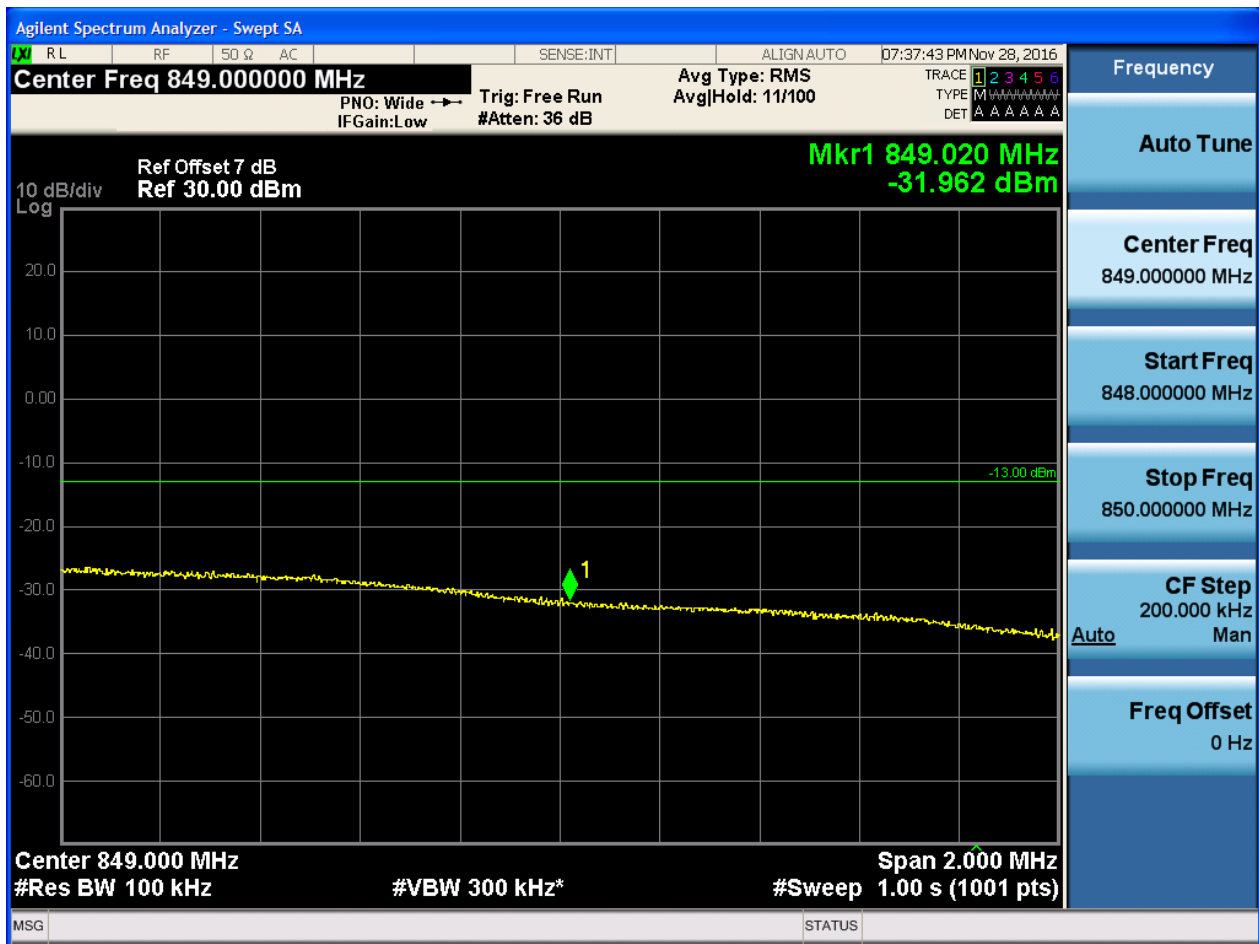


5.1.3.2.4.2.2 Test RB = RB1#49





5.1.3.2.4.2.3 Test RB = RB25#13





5.1.3.2.4.2.4 Test RB = RB50#0

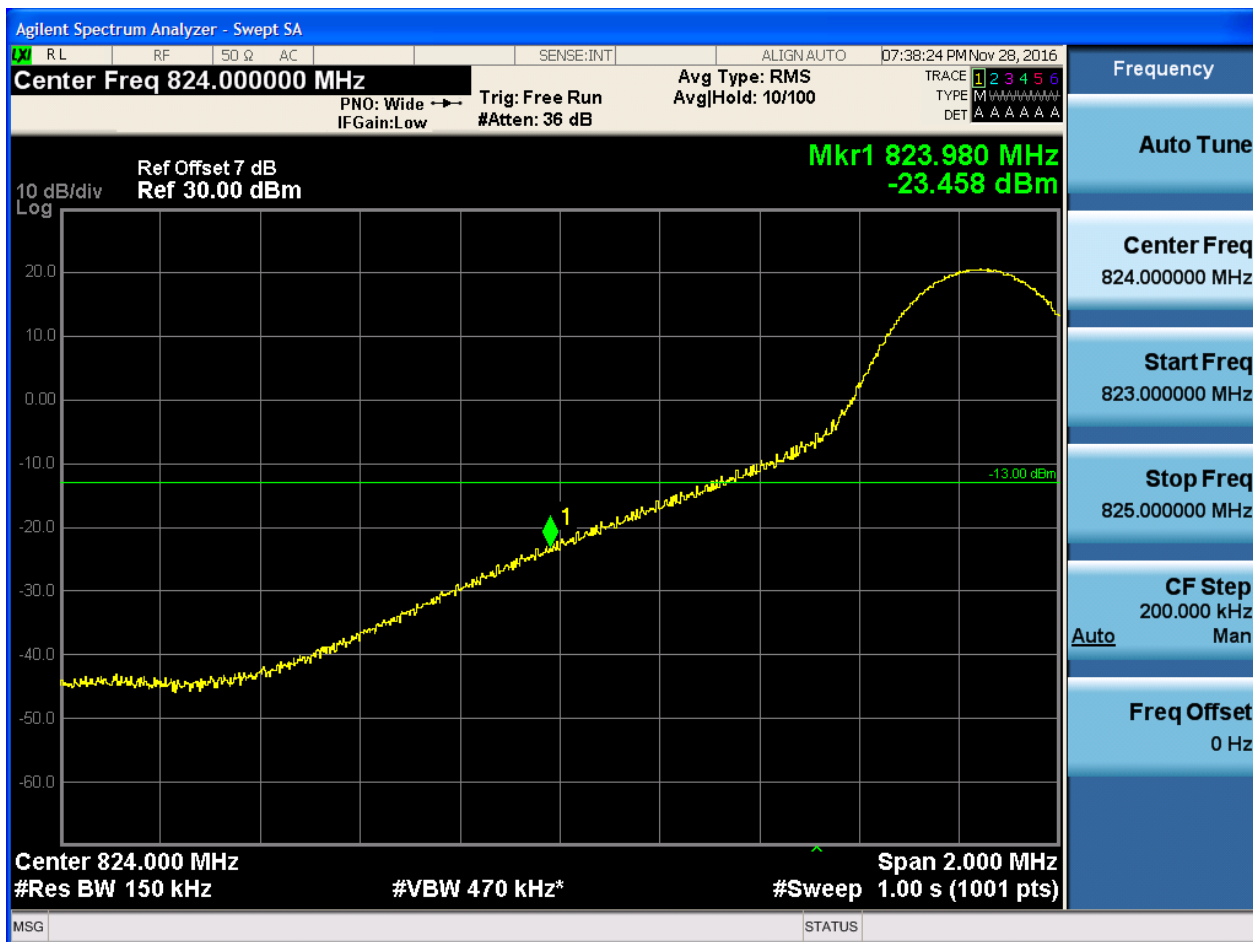




5.1.3.2.5 Test Bandwidth = 15

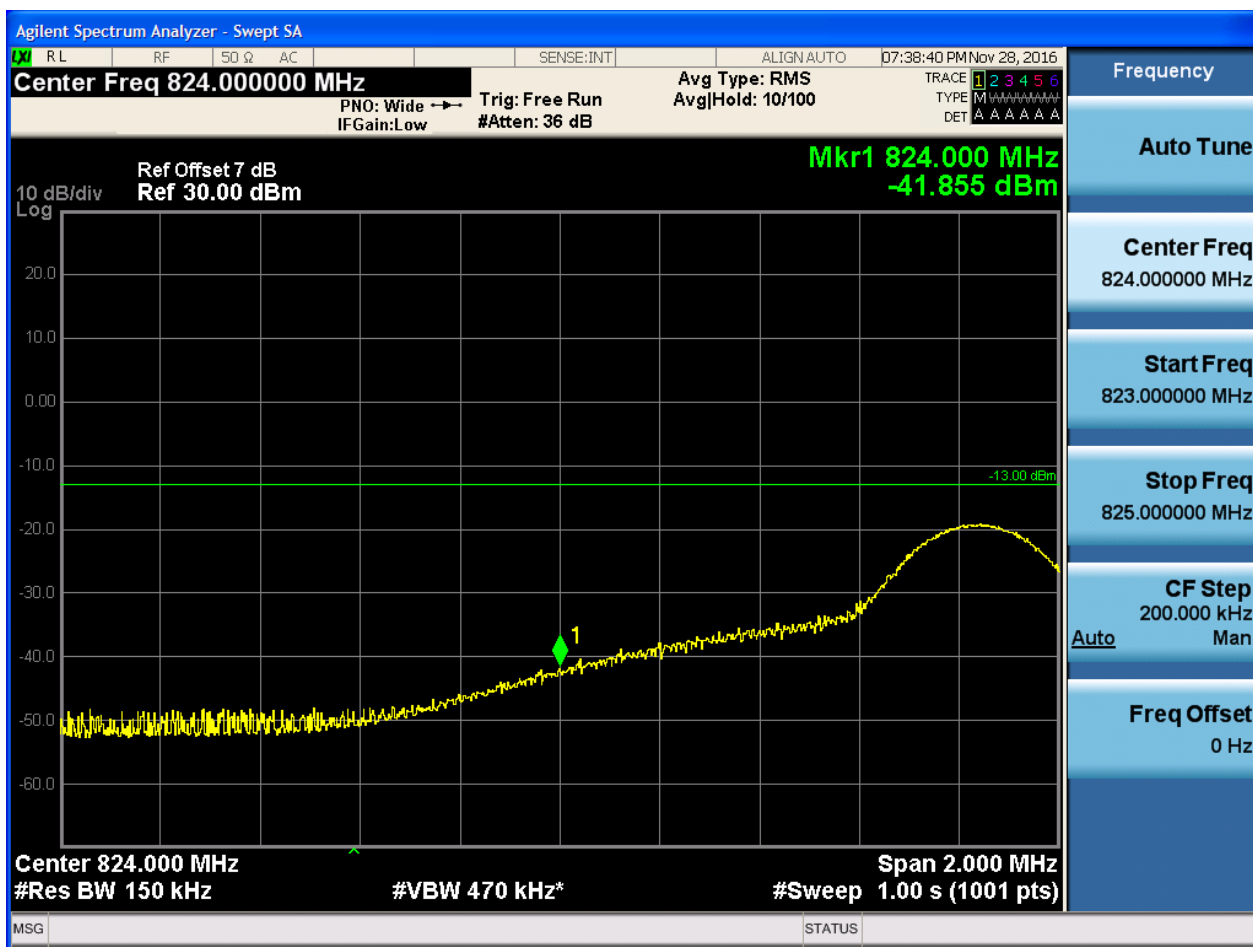
5.1.3.2.5.1 Test Channel = LCH

5.1.3.2.5.1.1 Test RB = RB1#0



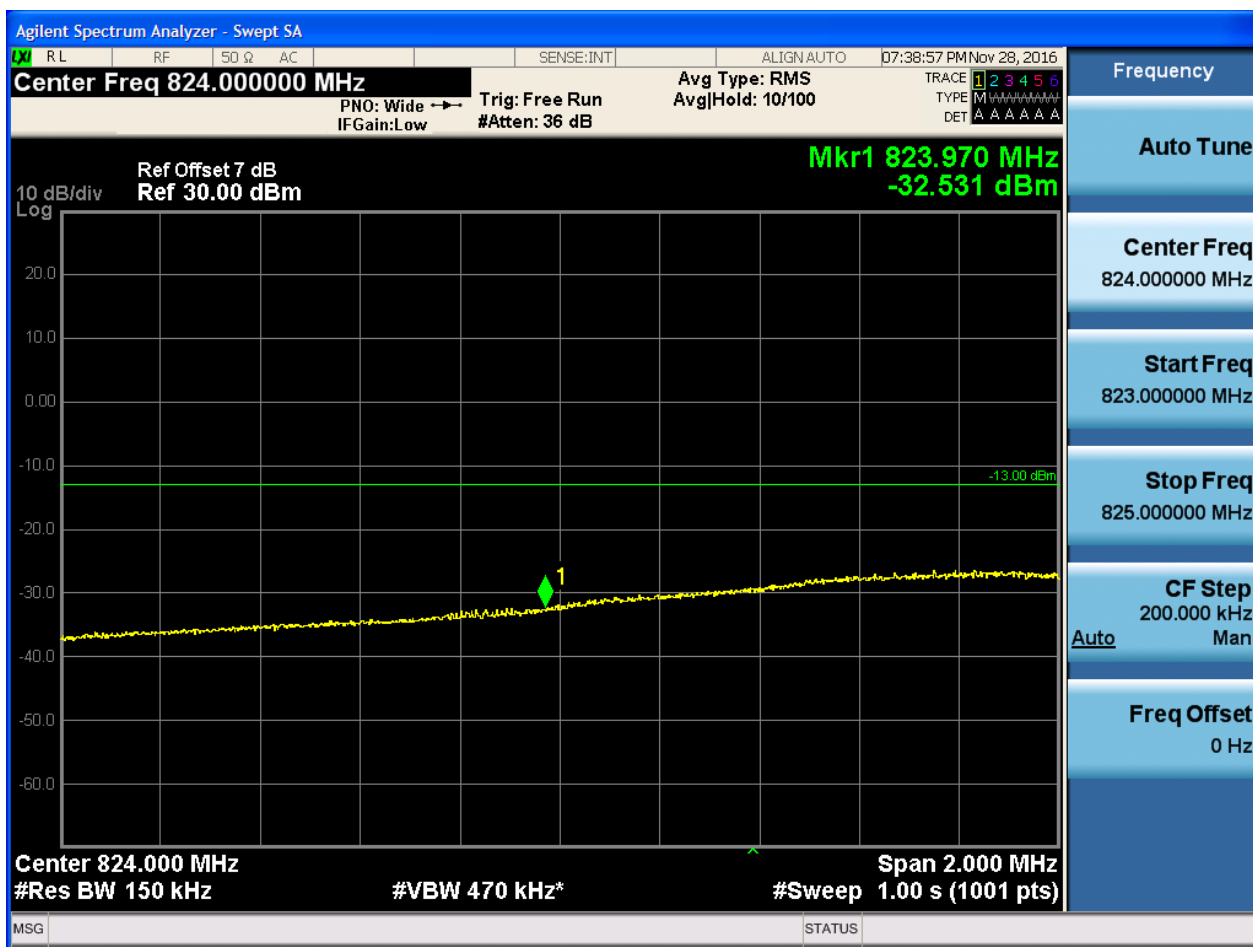


5.1.3.2.5.1.2 Test RB = RB1#74





5.1.3.2.5.1.3 Test RB = RB38#19





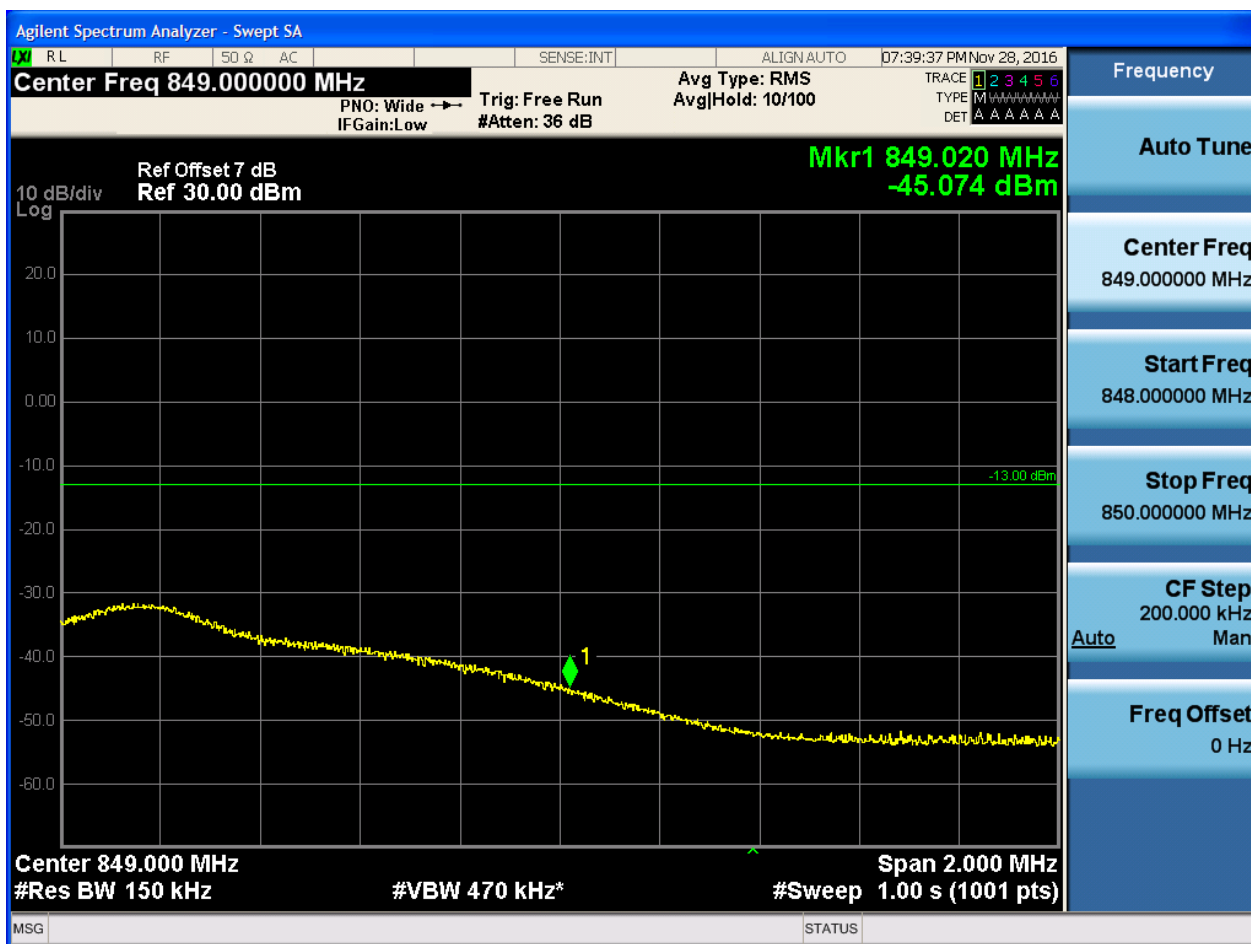
5.1.3.2.5.1.4 Test RB = RB75#0





5.1.3.2.5.2 Test Channel = HCH

5.1.3.2.5.2.1 Test RB = RB1#0





5.1.3.2.5.2.2 Test RB = RB1#74





5.1.3.2.5.2.3 Test RB = RB38#19





5.1.3.2.5.2.4 Test RB = RB75#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

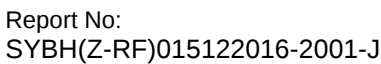
6.1.3 Test Band = BAND26

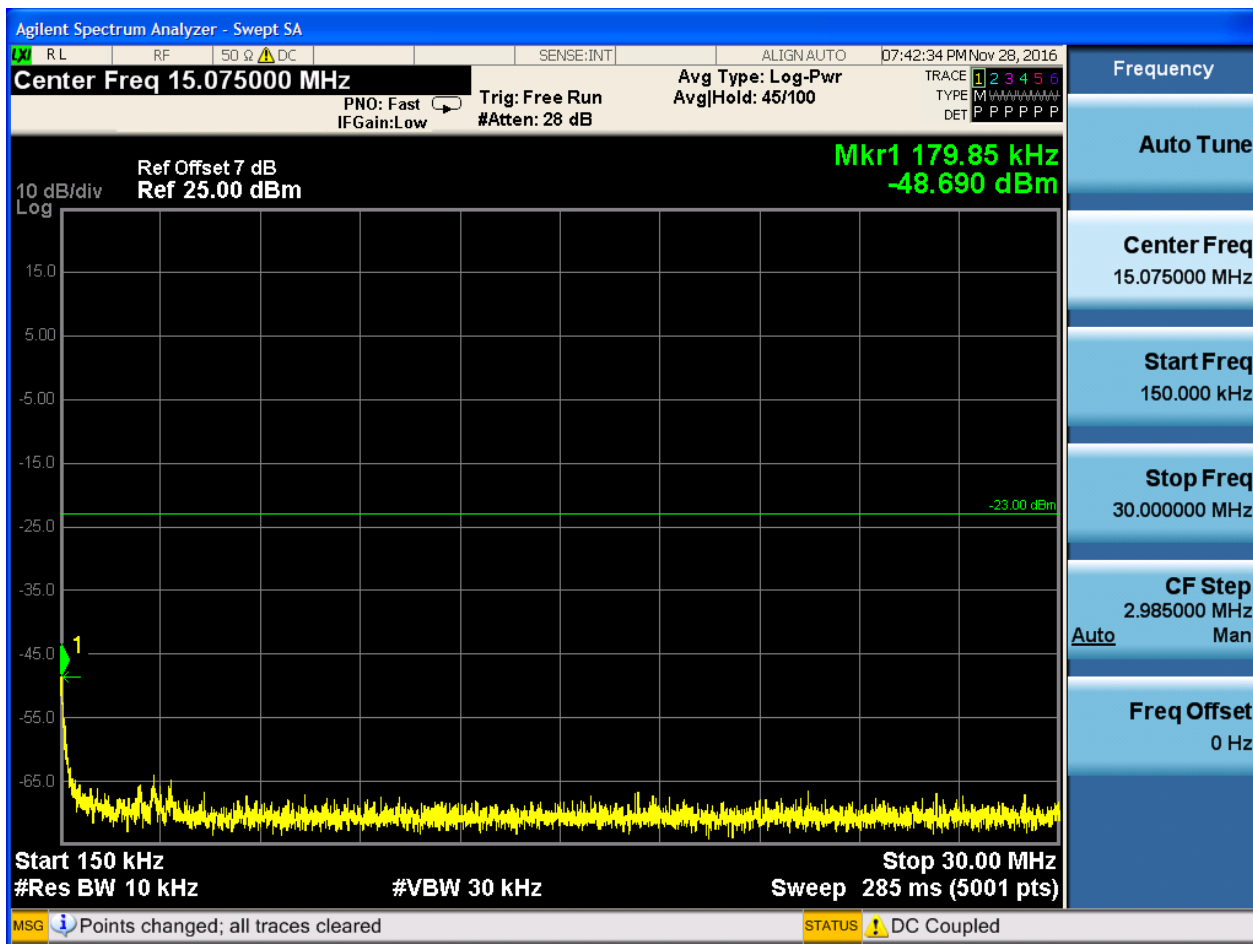
6.1.3.1 Test Mode = LTE/TM1

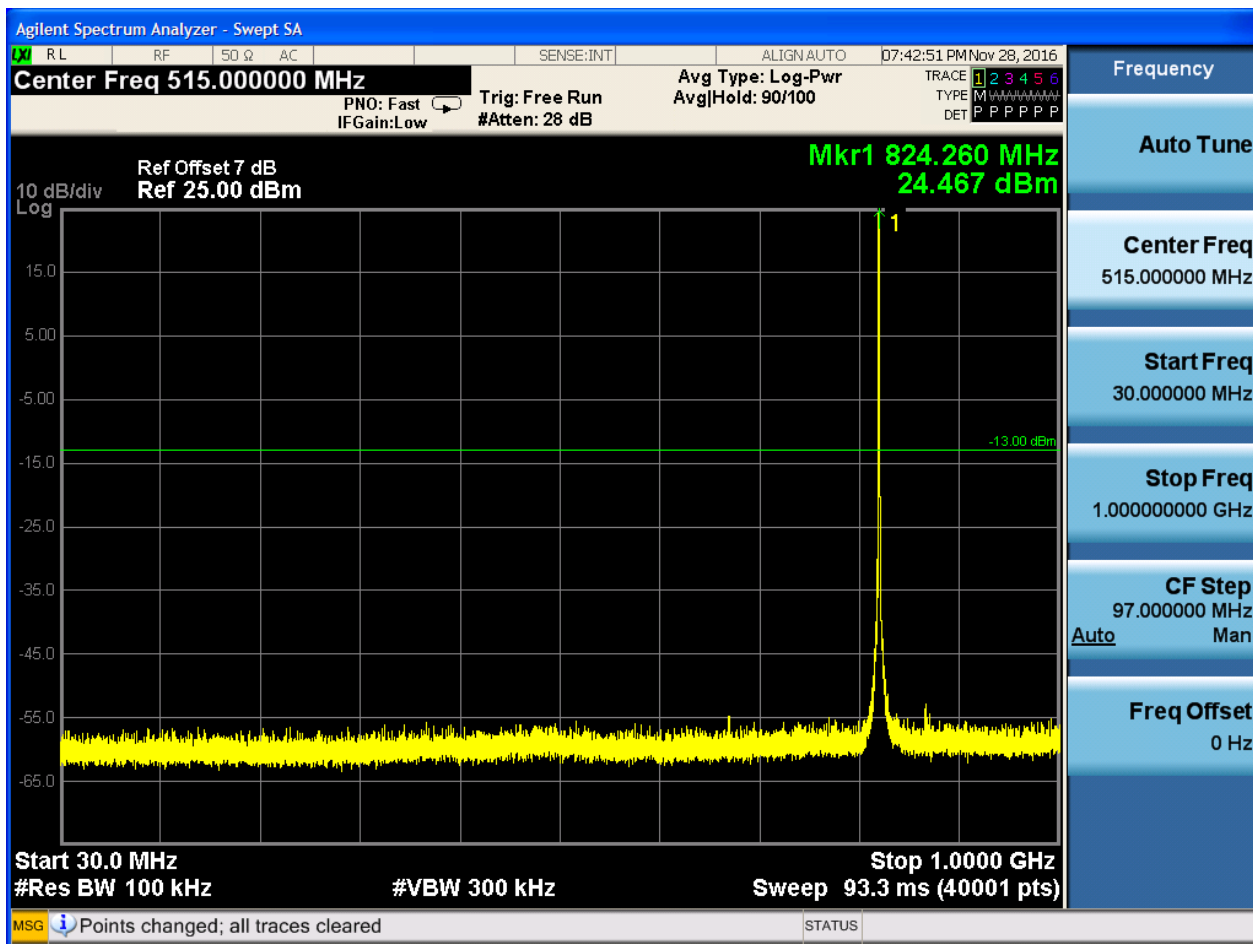
6.1.3.1.1 Test Bandwidth = 1.4

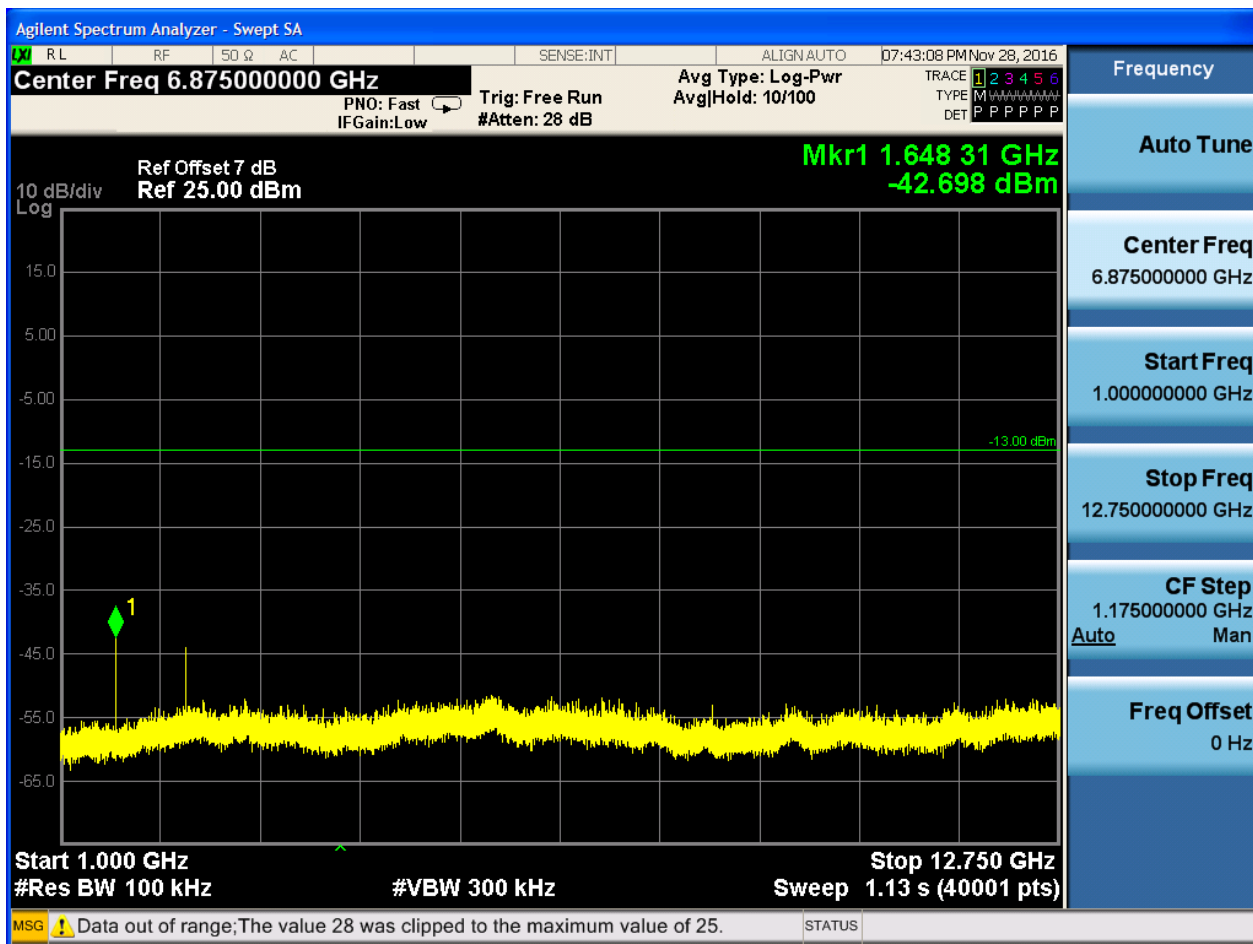
6.1.3.1.1.1 Test Channel = LCH

6.1.3.1.1.1.1 Test RB = RB1#0





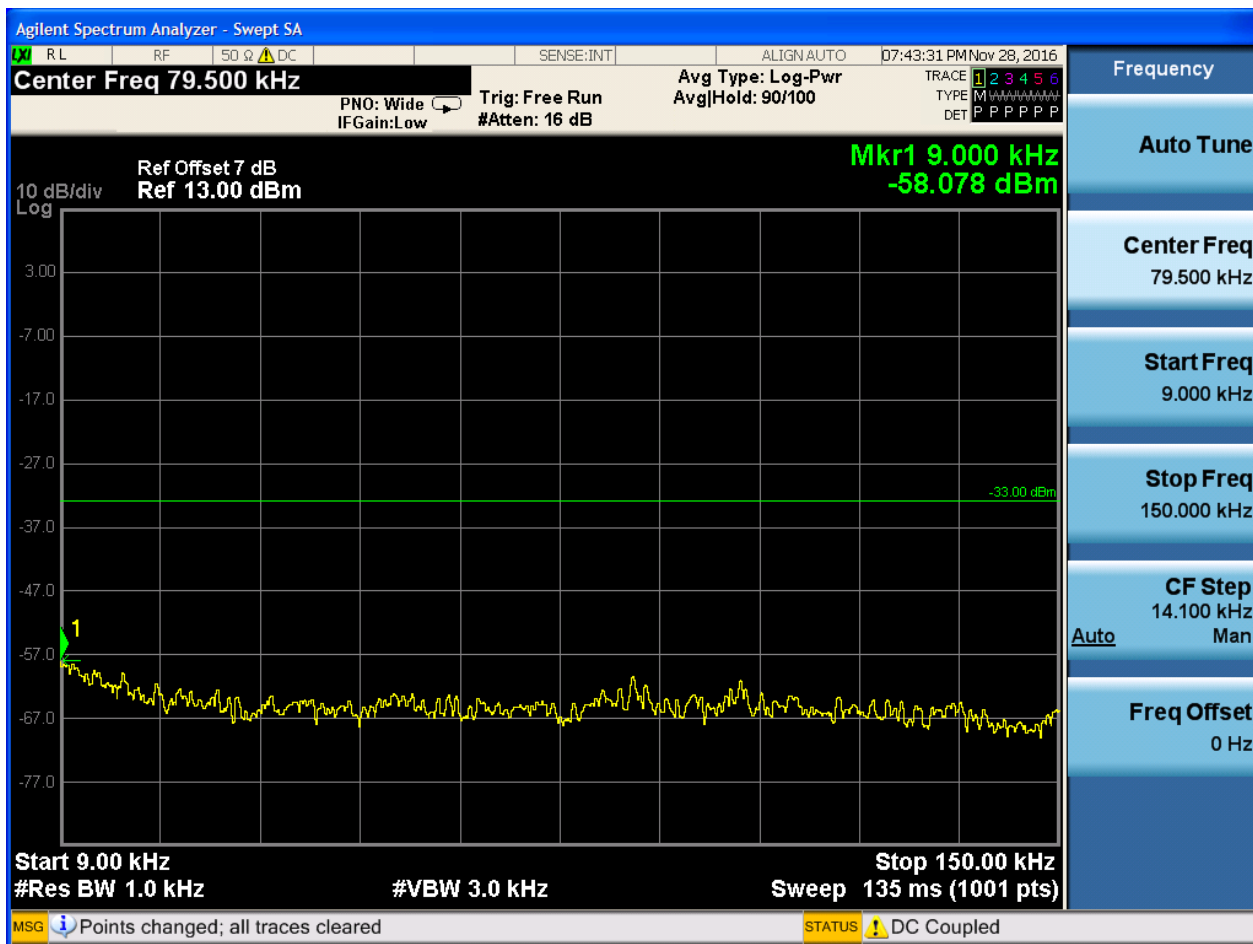


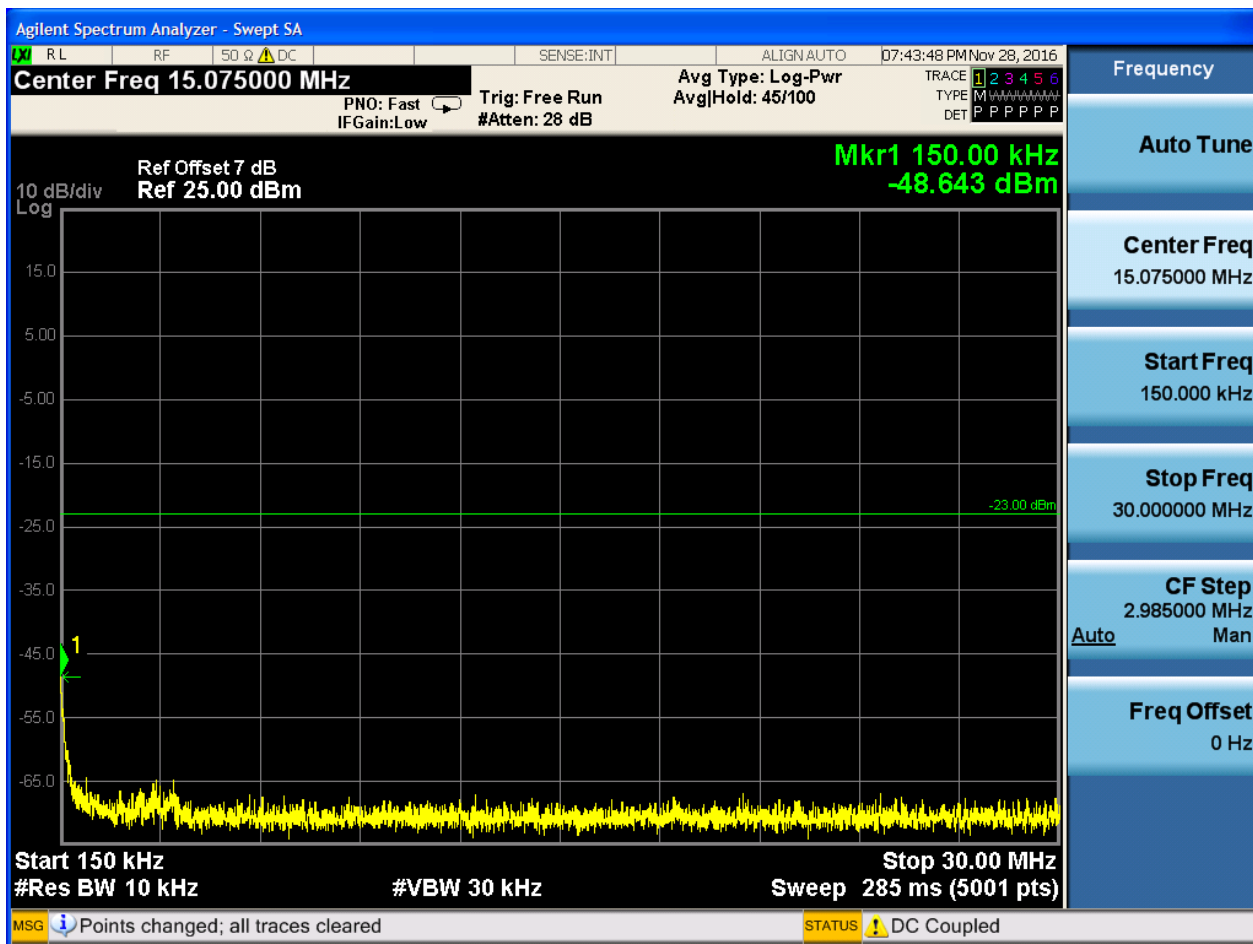


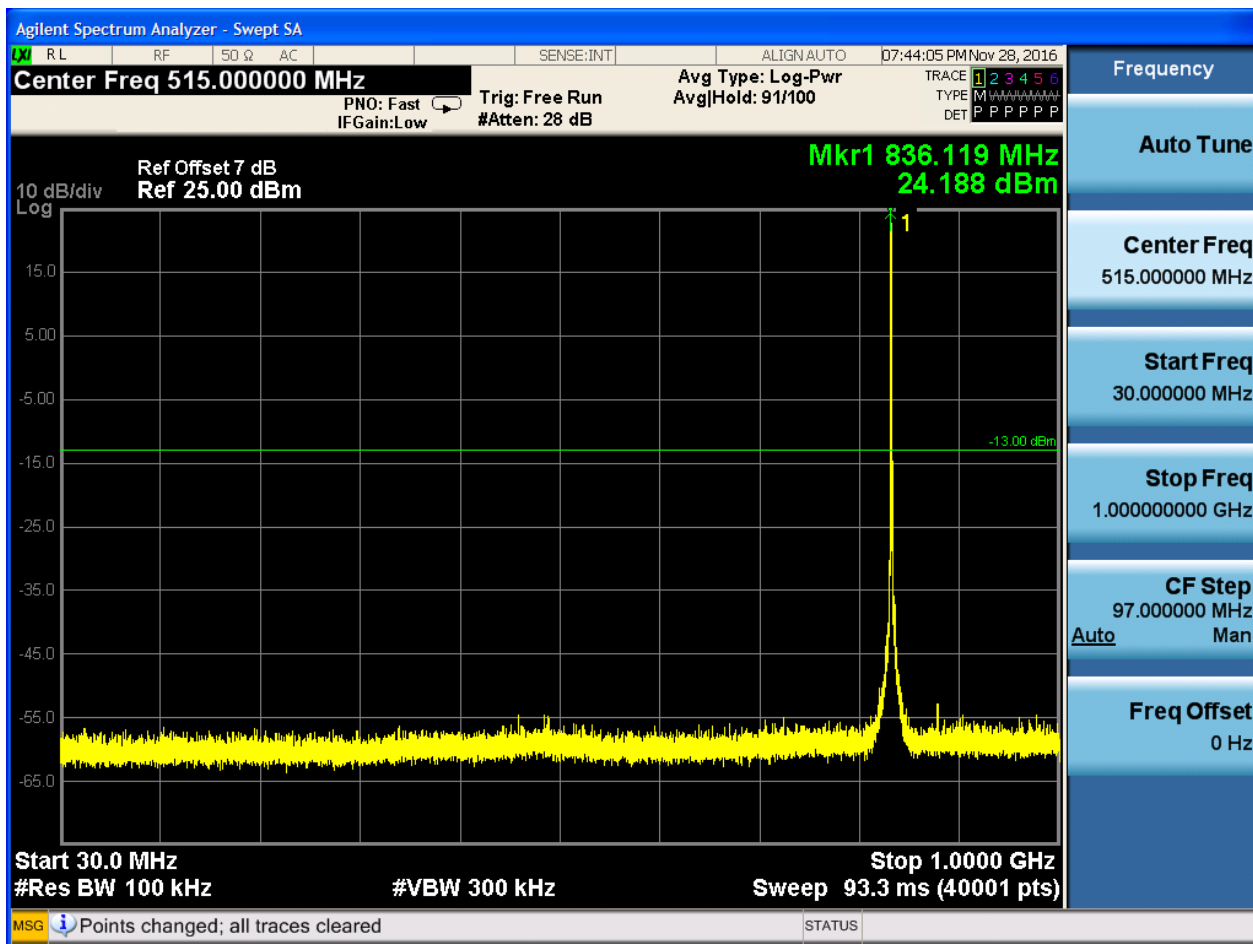


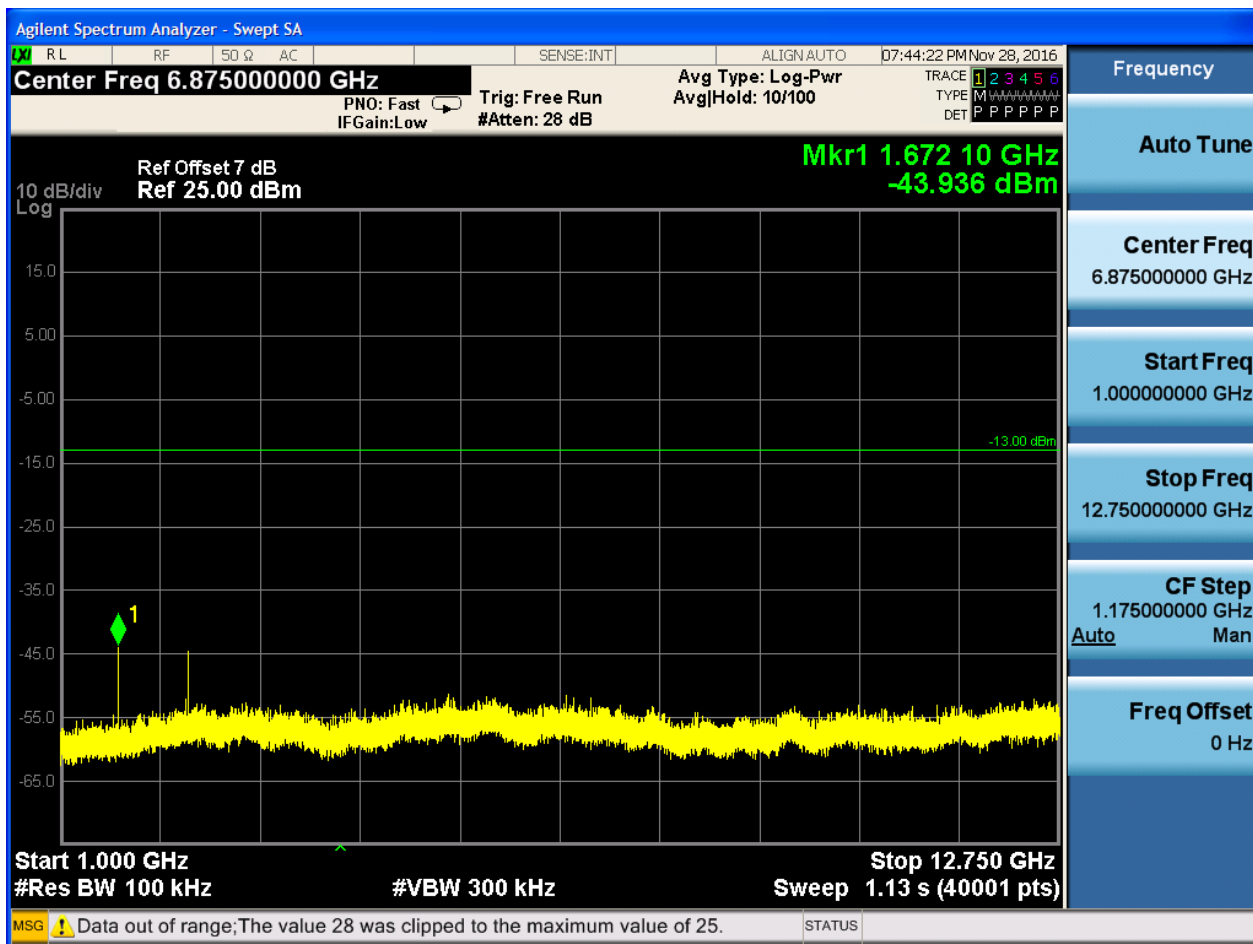
6.1.3.1.1.2 Test Channel = MCH

6.1.3.1.1.2.1 Test RB = RB1#0





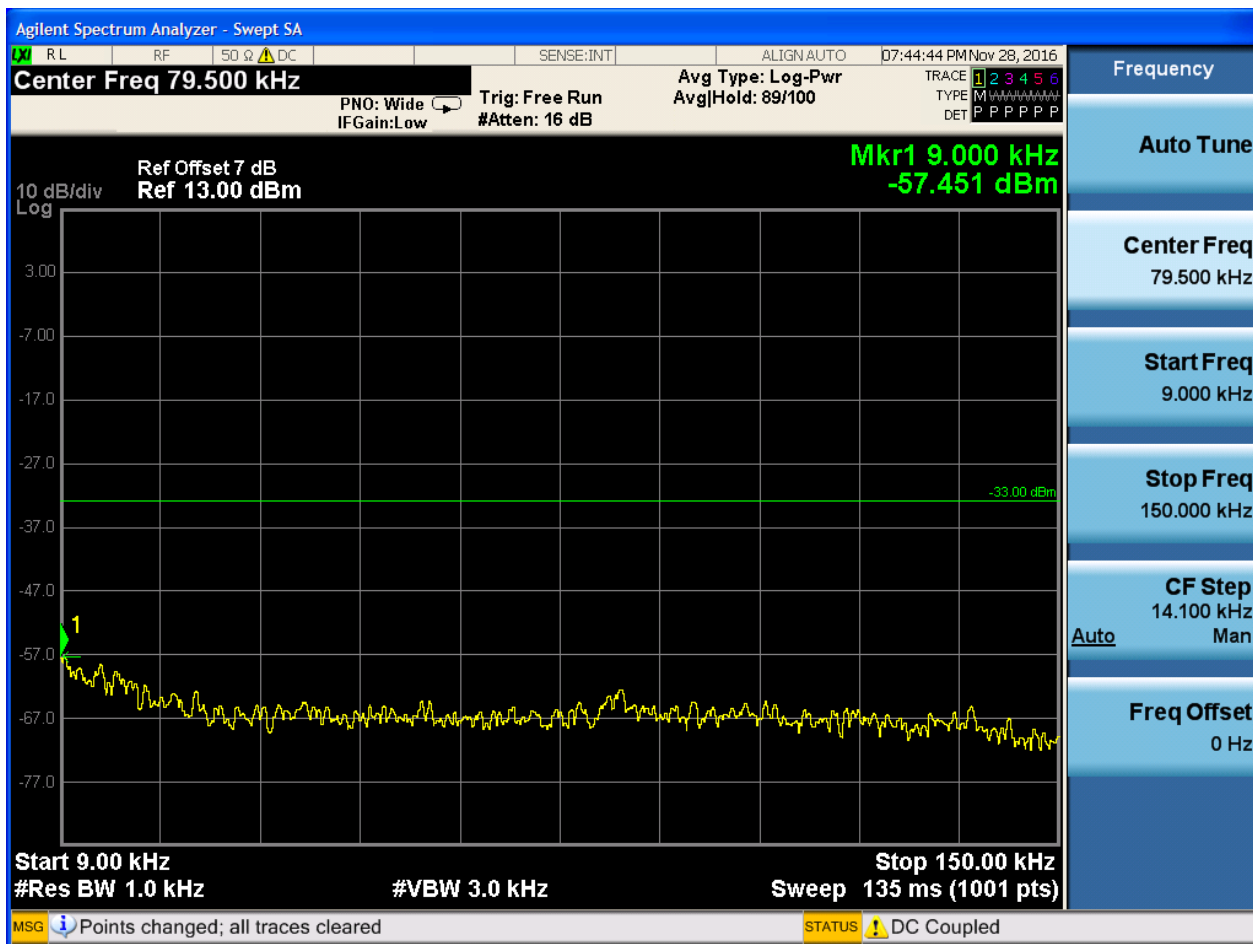


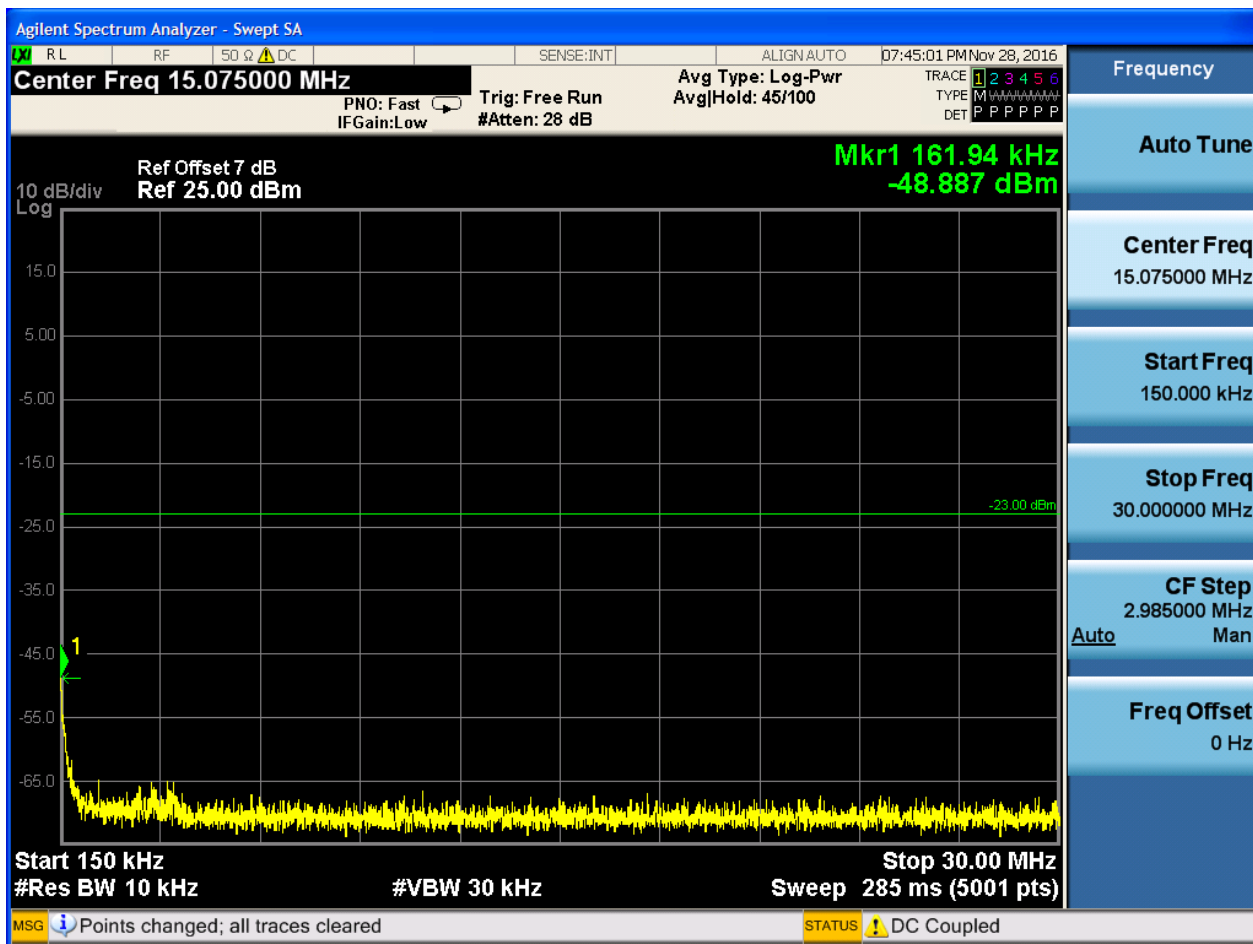


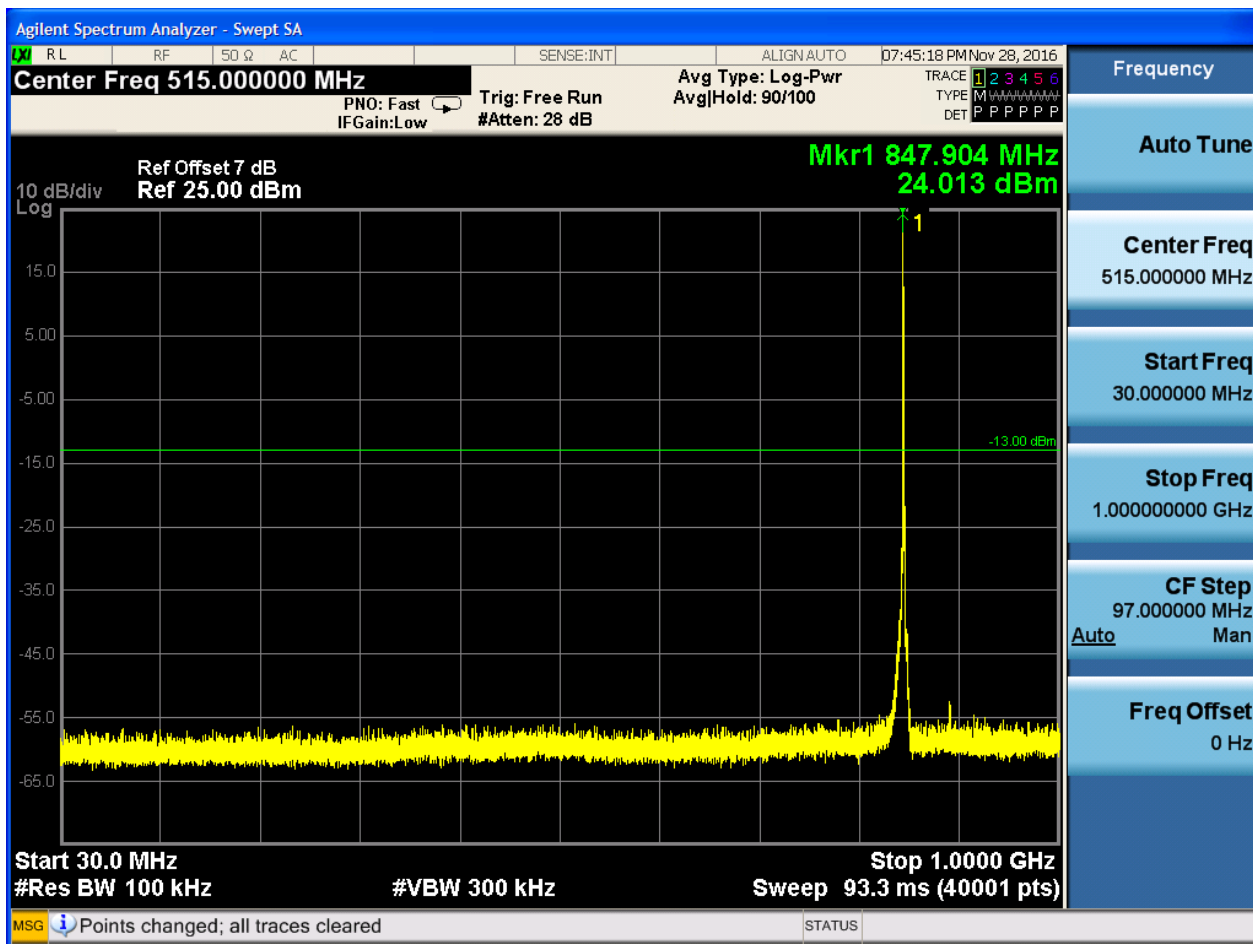


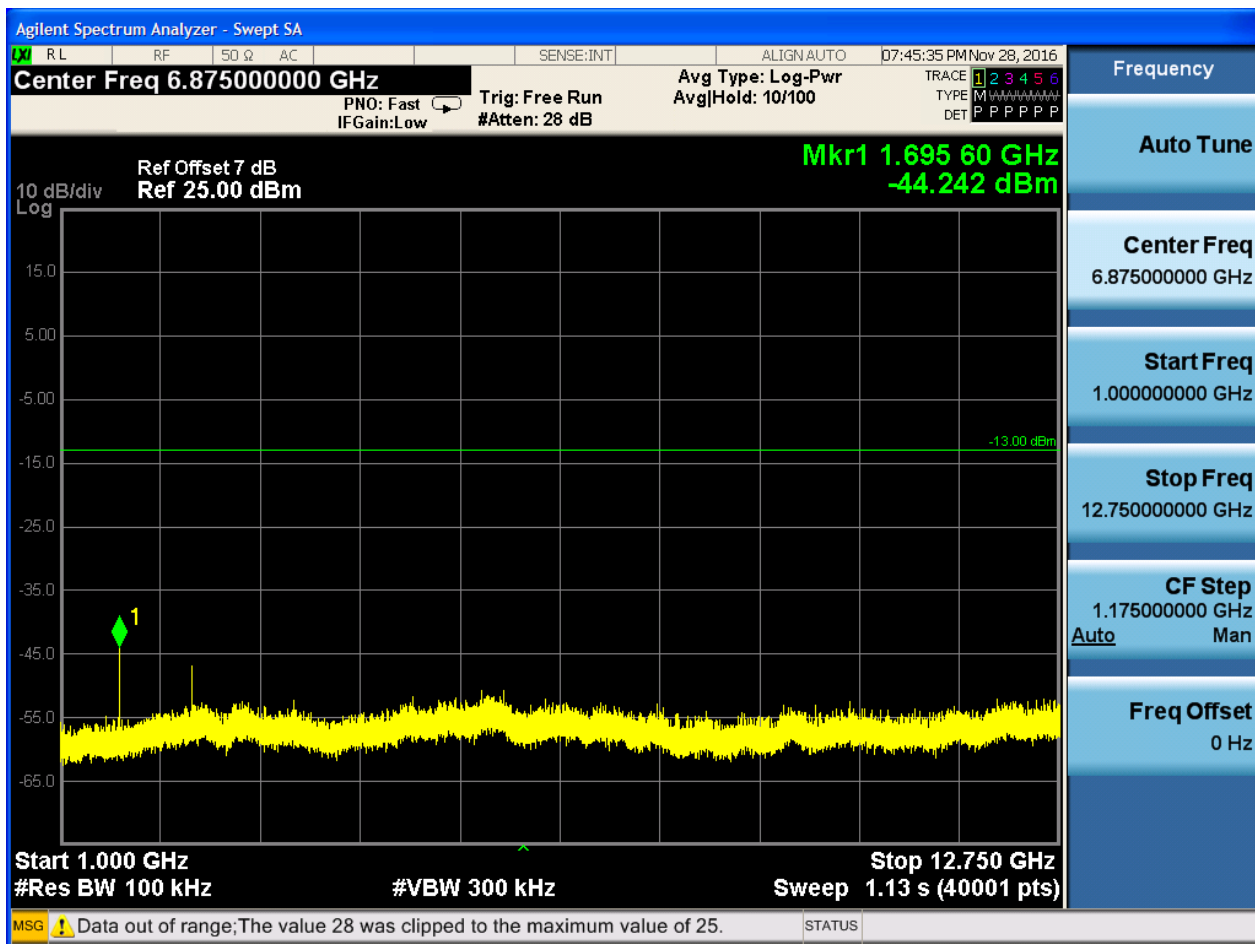
6.1.3.1.1.3 Test Channel = HCH

6.1.3.1.1.3.1 Test RB = RB1#0





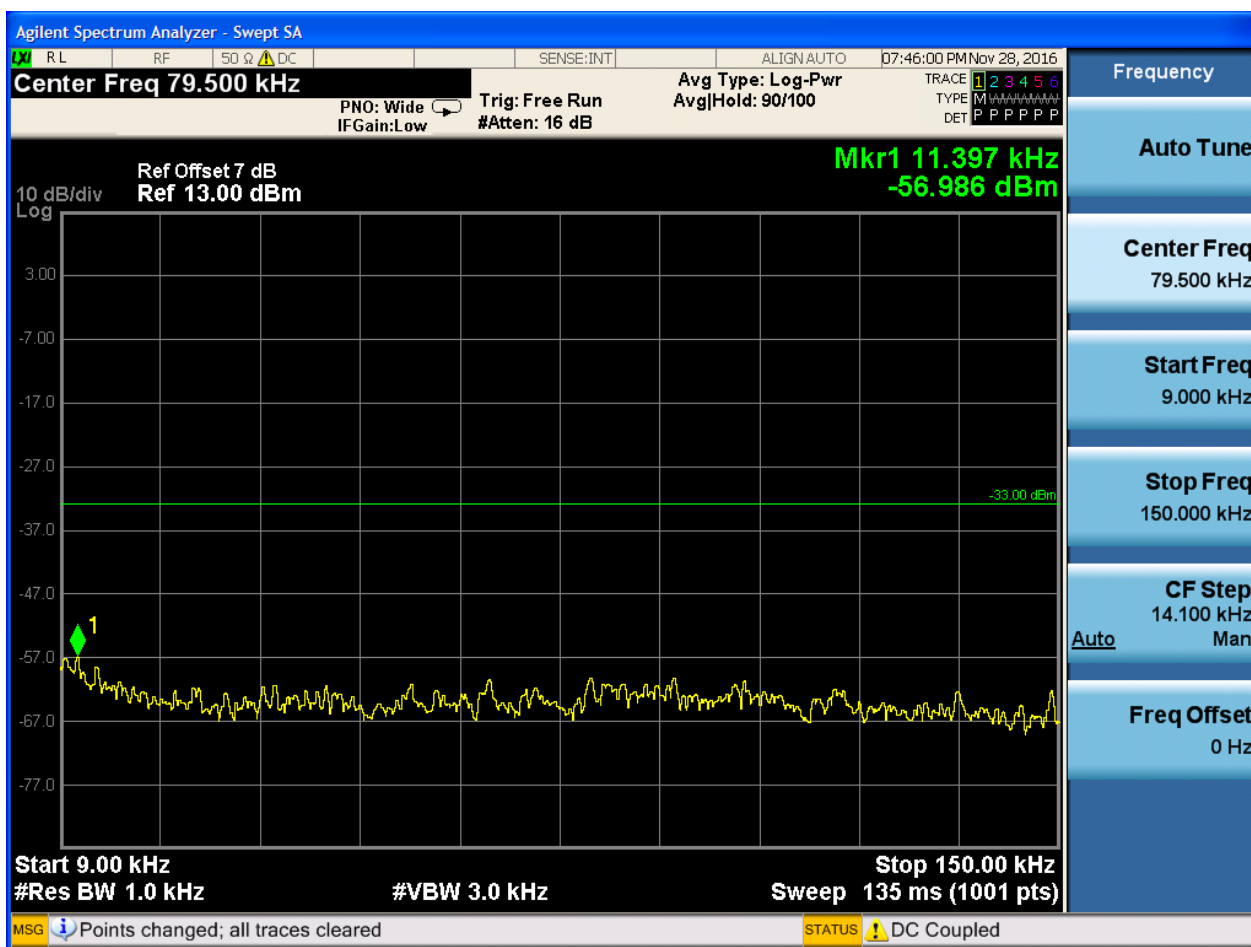




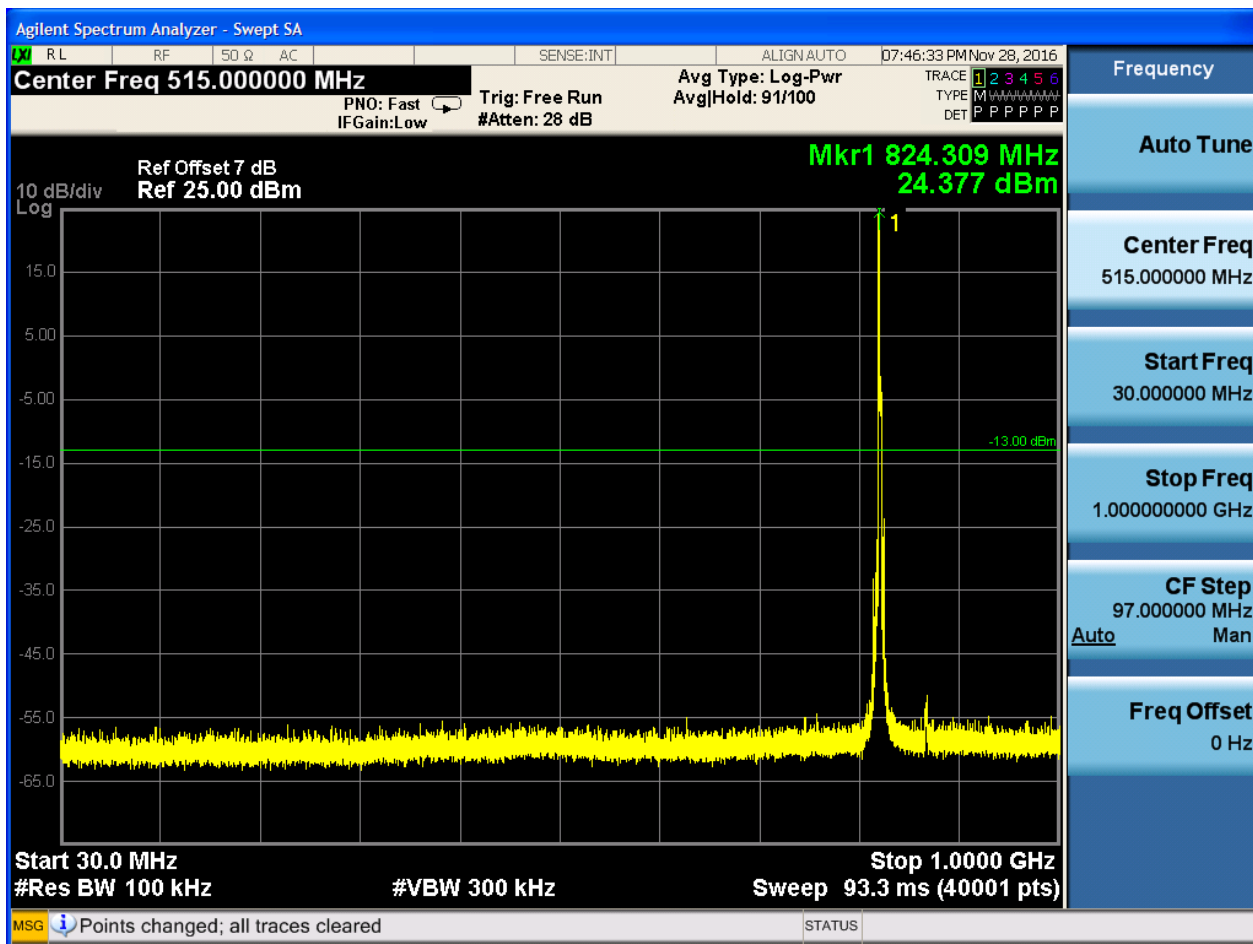
6.1.3.1.2 Test Bandwidth = 3

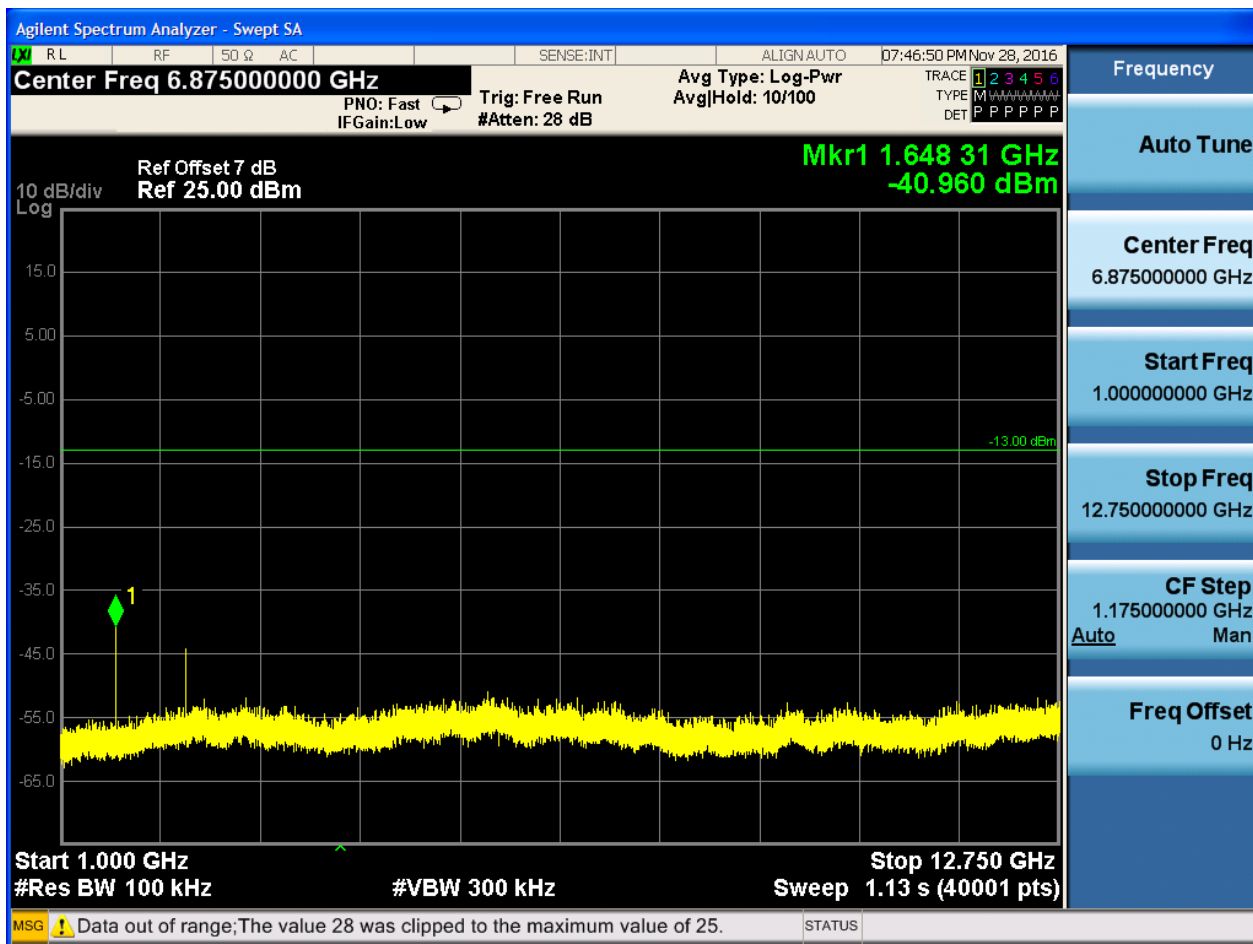
6.1.3.1.2.1 Test Channel = LCH

6.1.3.1.2.1.1 Test RB = RB1#0





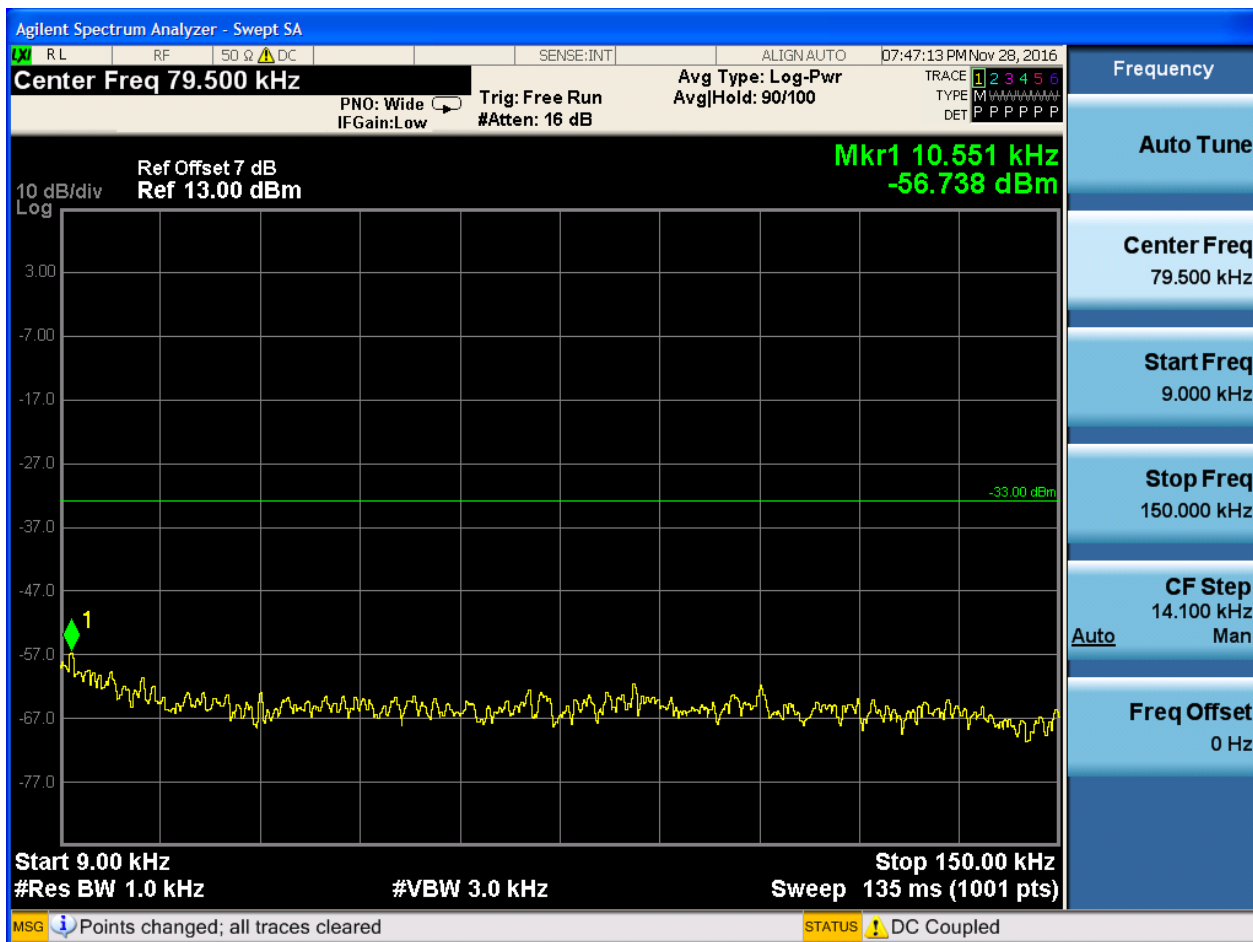




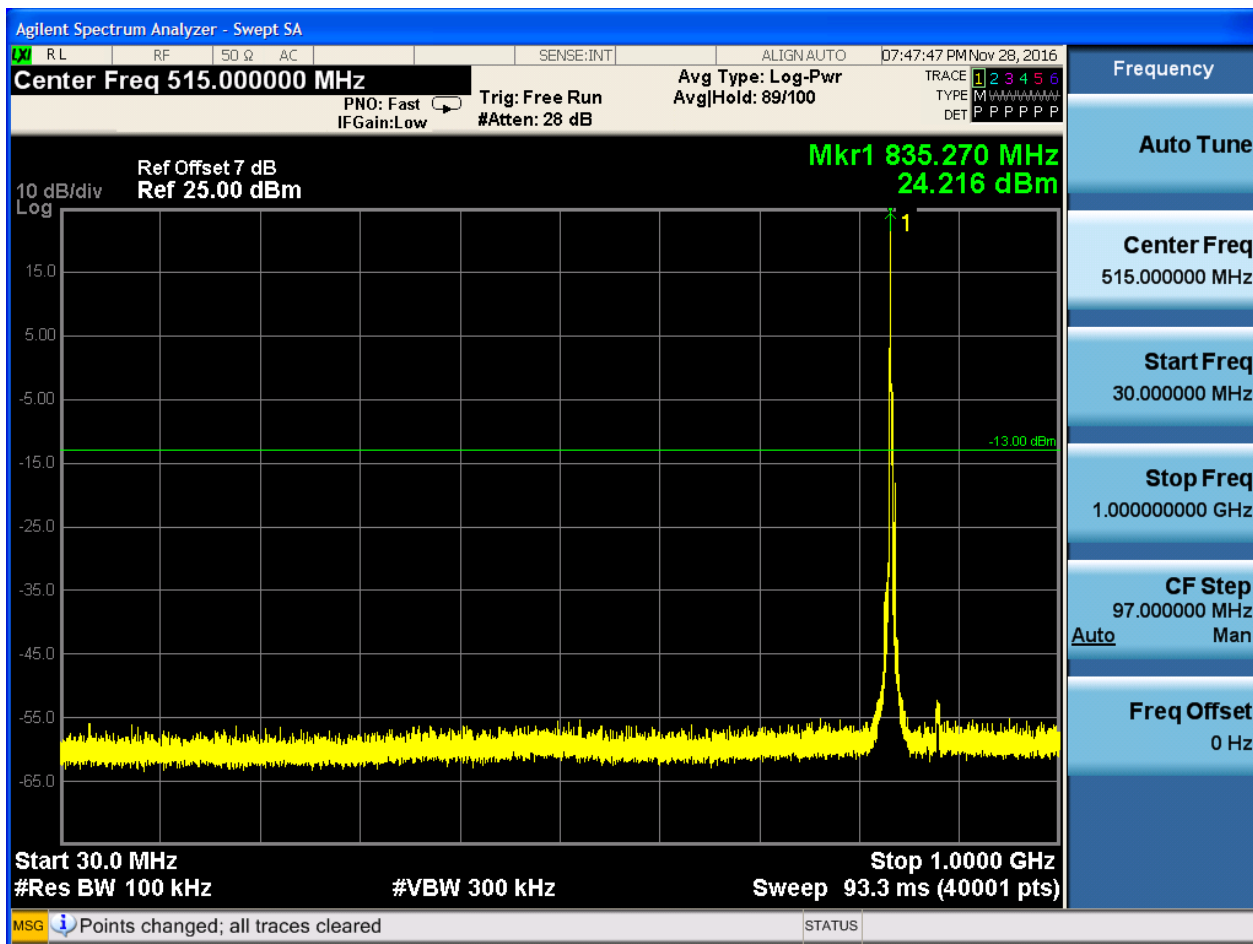


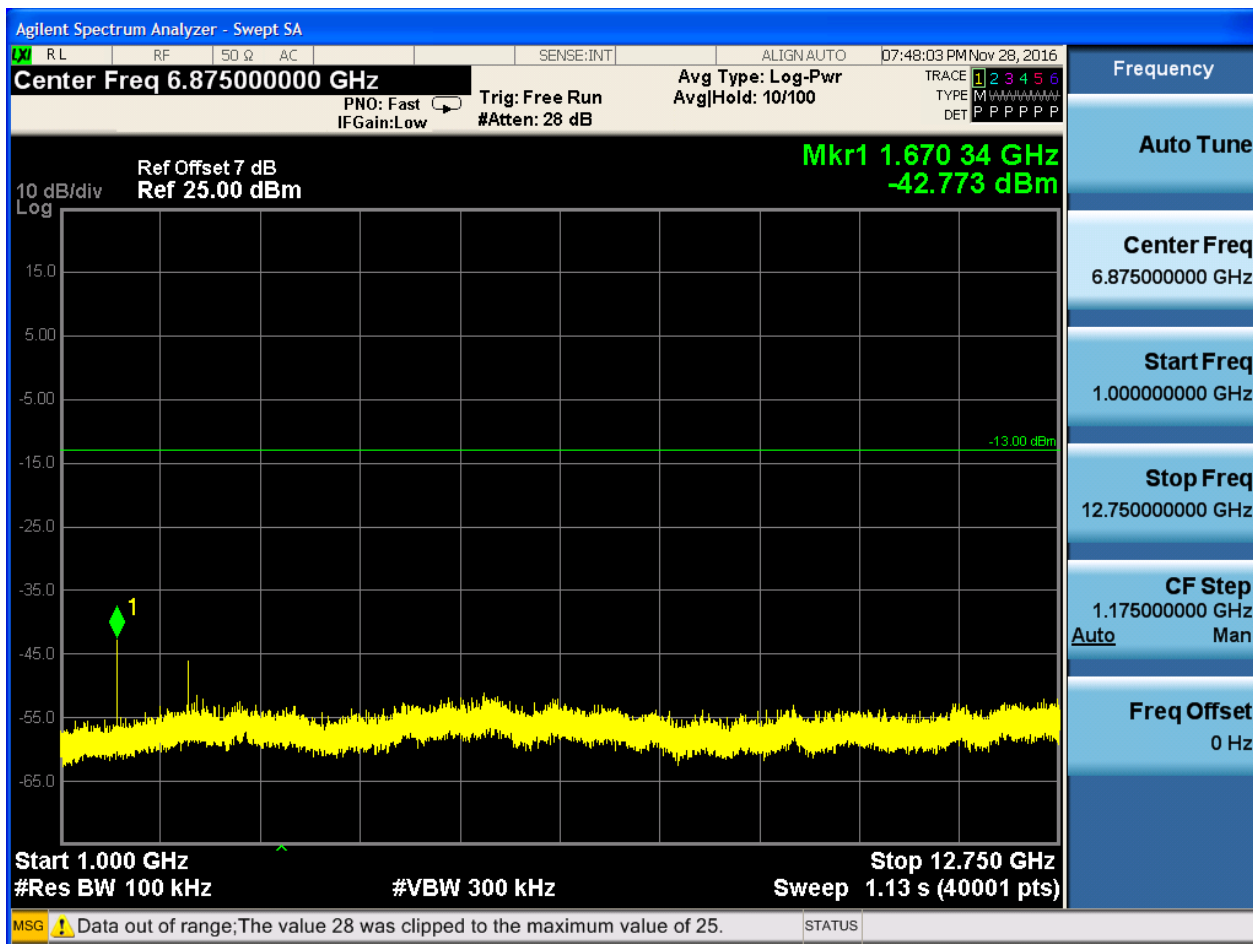
6.1.3.1.2.2 Test Channel = MCH

6.1.3.1.2.2.1 Test RB = RB1#0





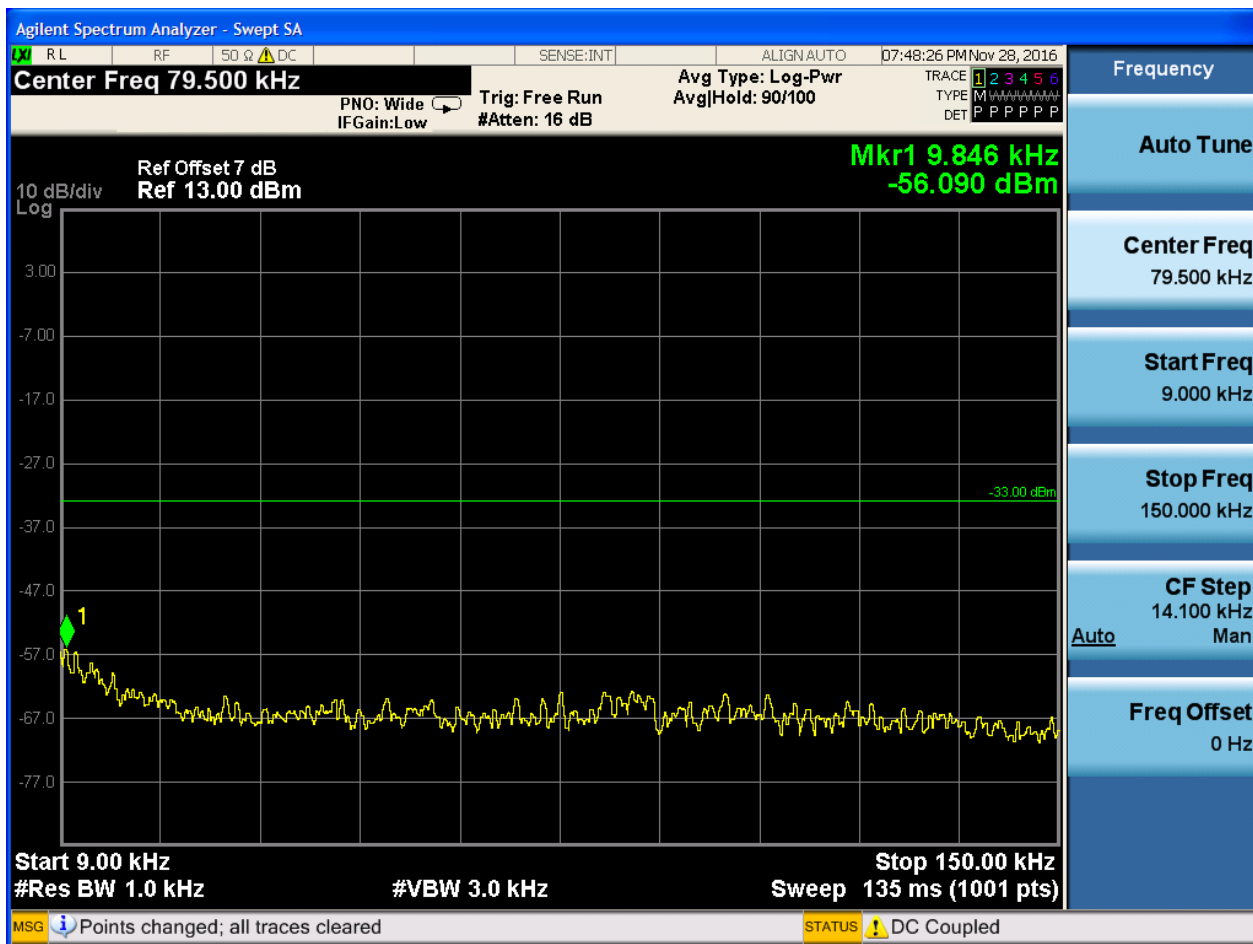


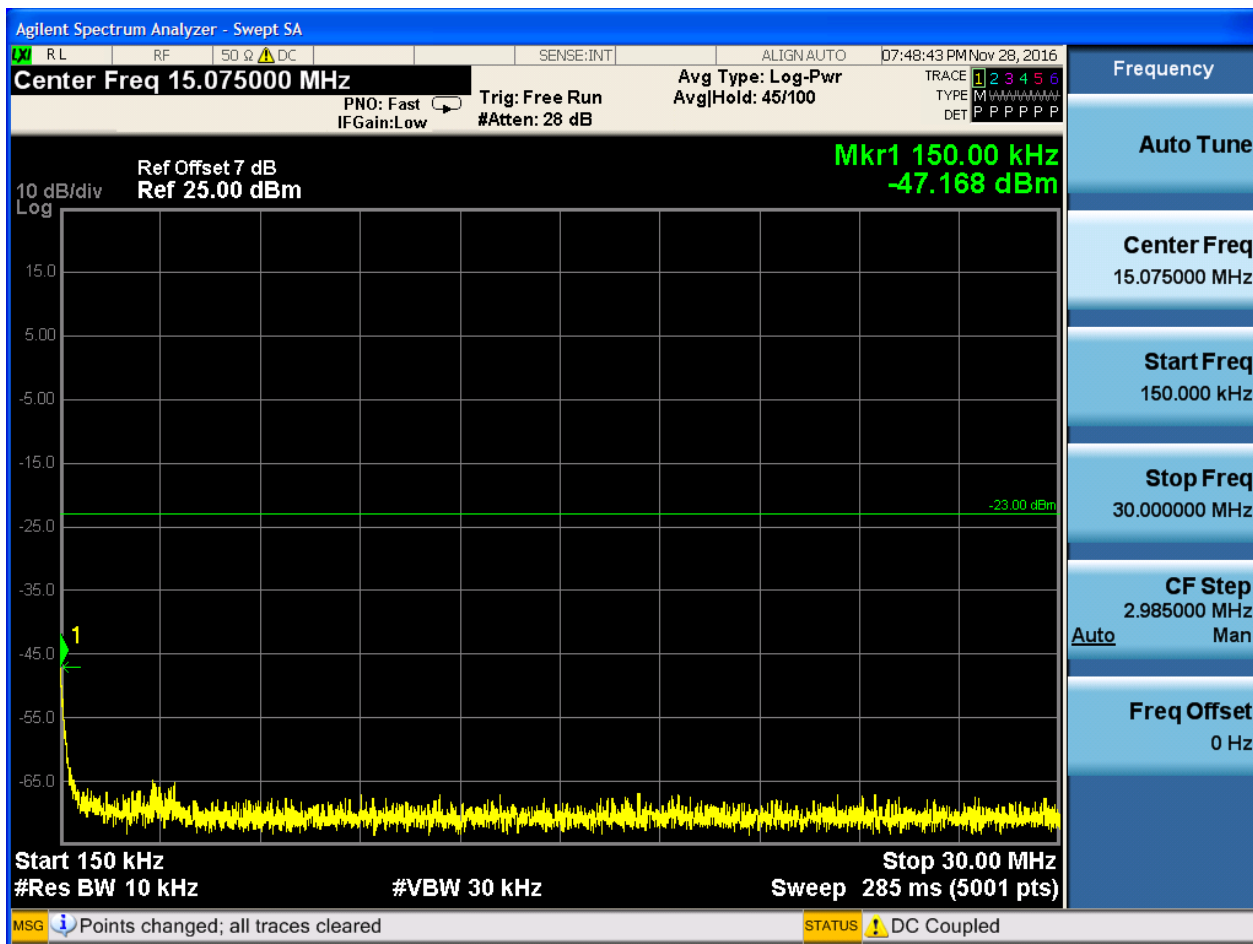


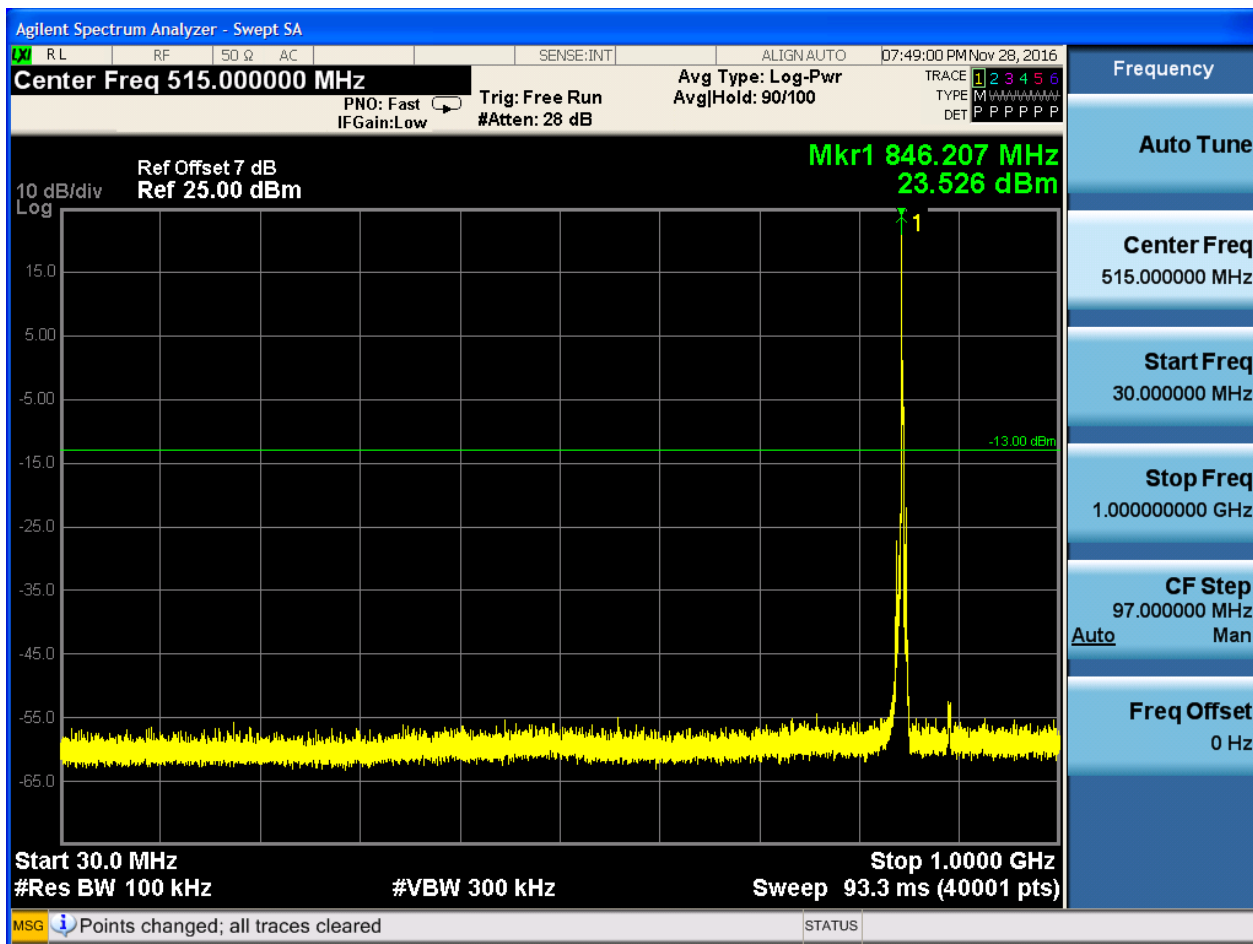


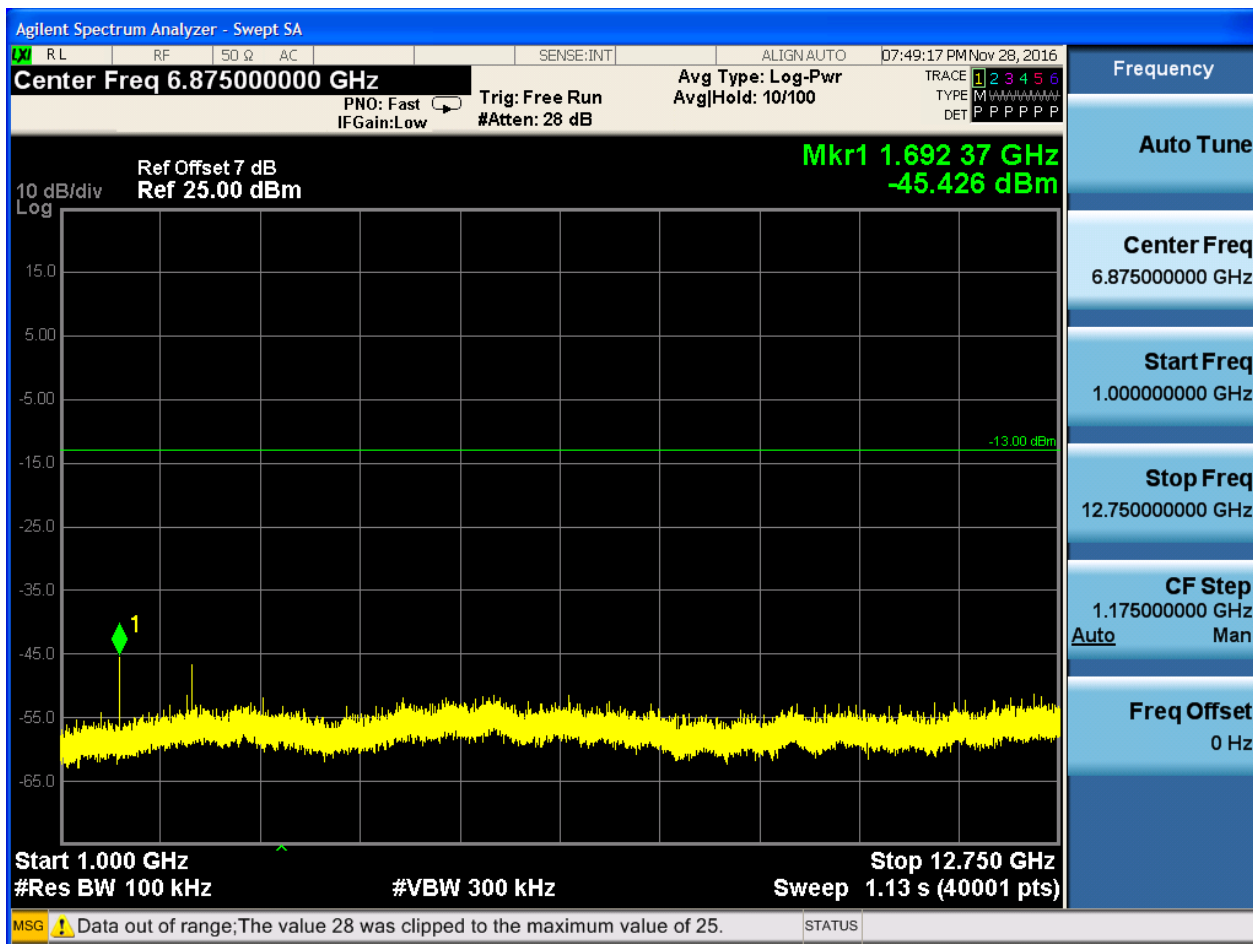
6.1.3.1.2.3 Test Channel = HCH

6.1.3.1.2.3.1 Test RB = RB1#0







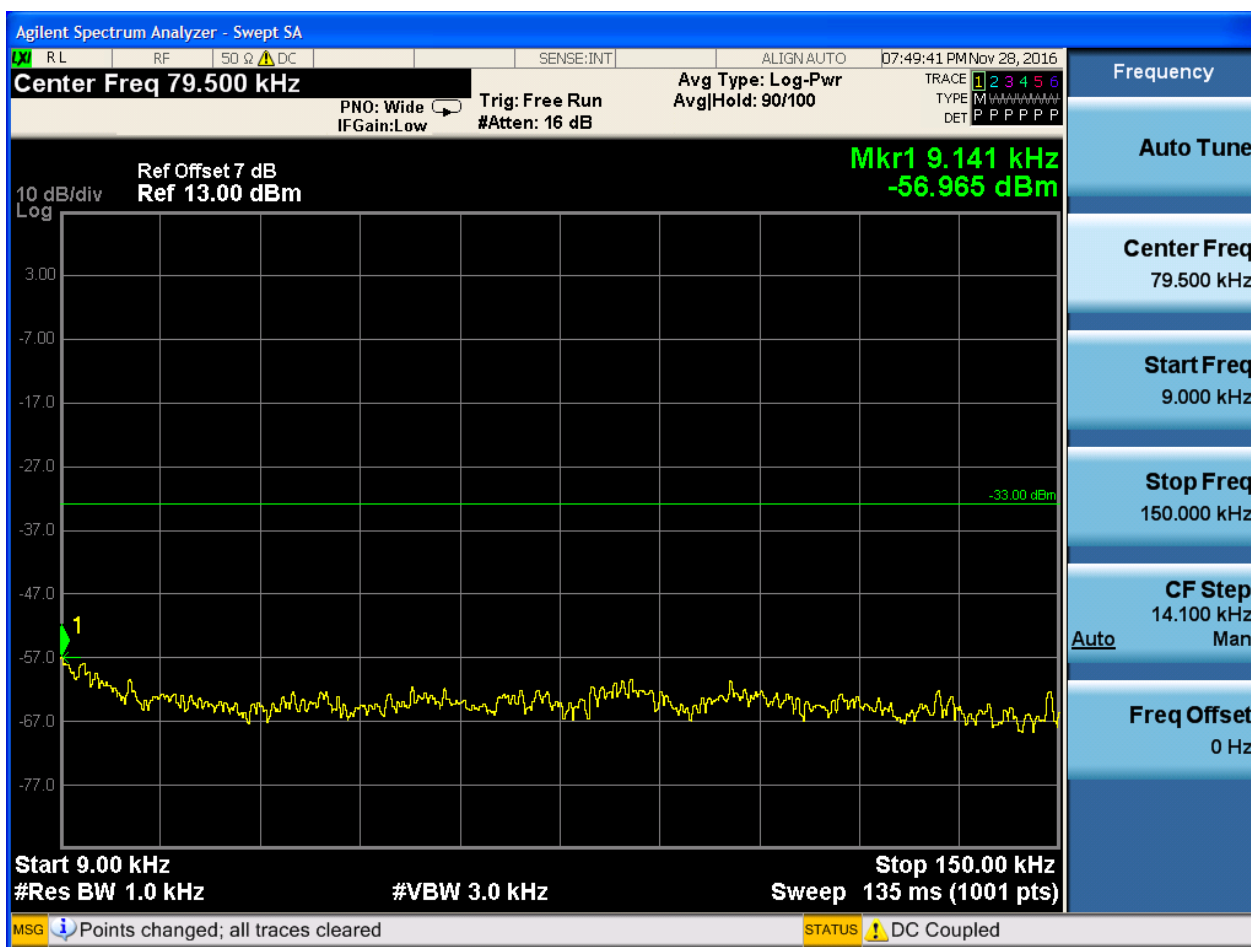




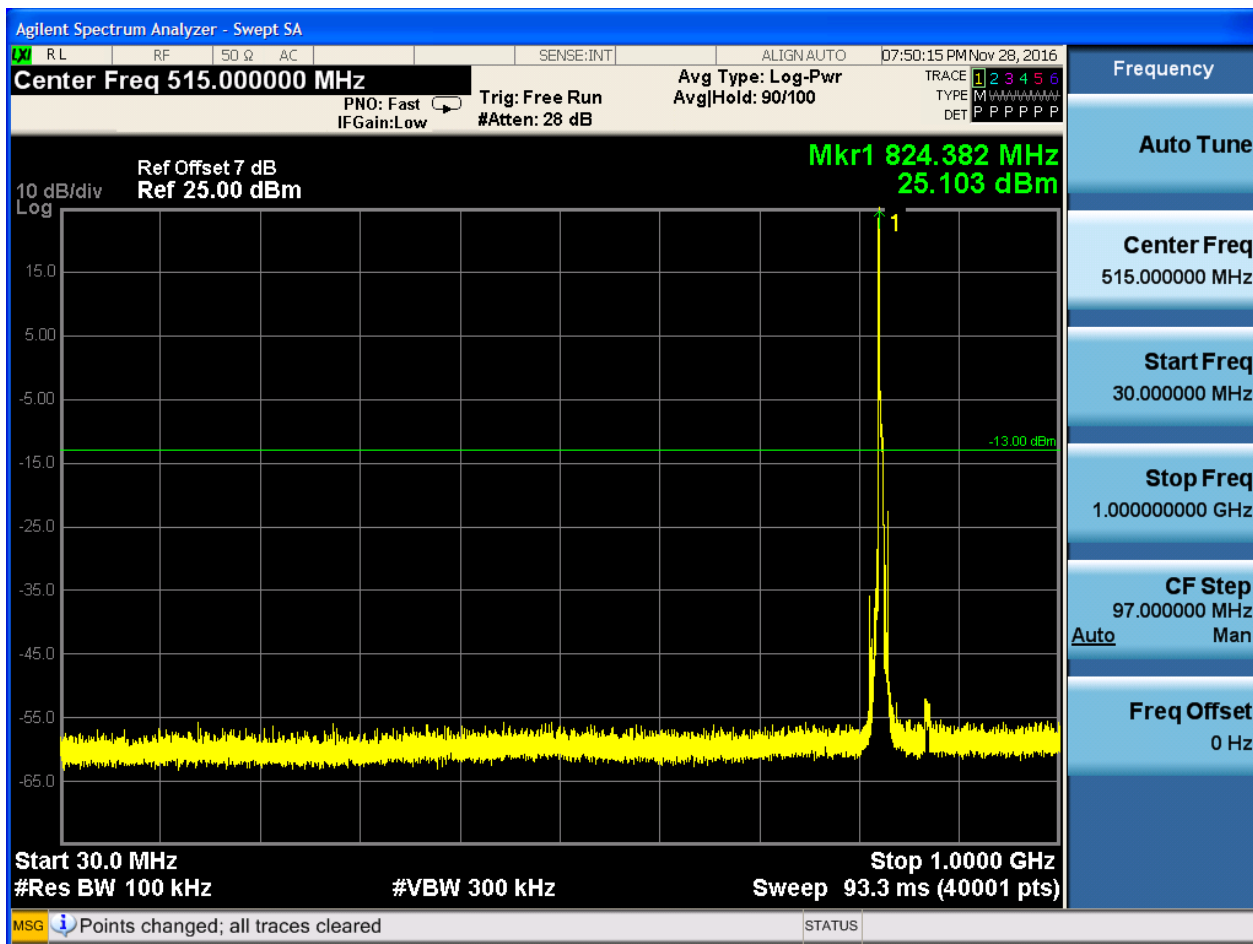
6.1.3.1.3 Test Bandwidth = 5

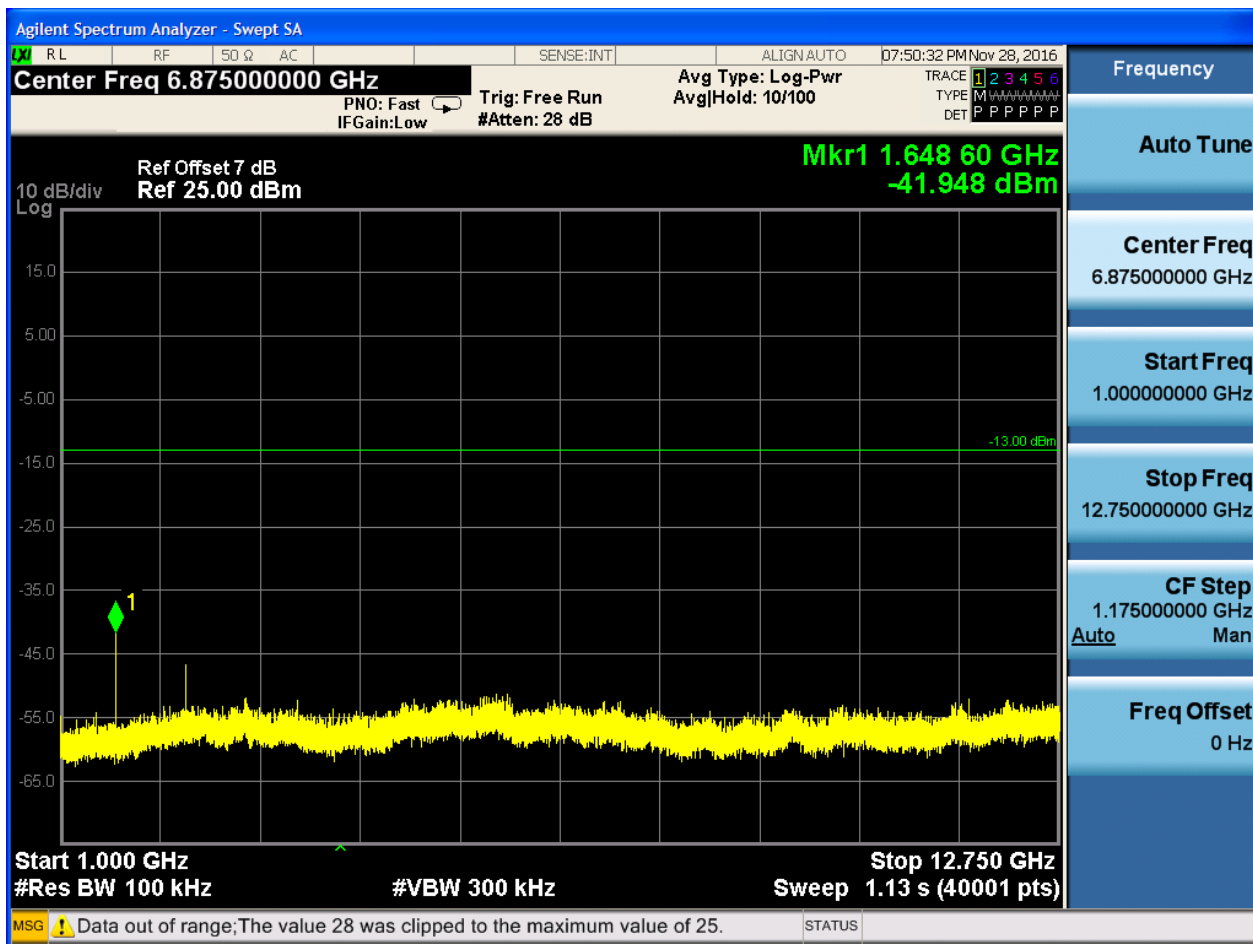
6.1.3.1.3.1 Test Channel = LCH

6.1.3.1.3.1.1 Test RB = RB1#0











6.1.3.1.3.2 Test Channel = MCH

6.1.3.1.3.2.1 Test RB = RB1#0

