



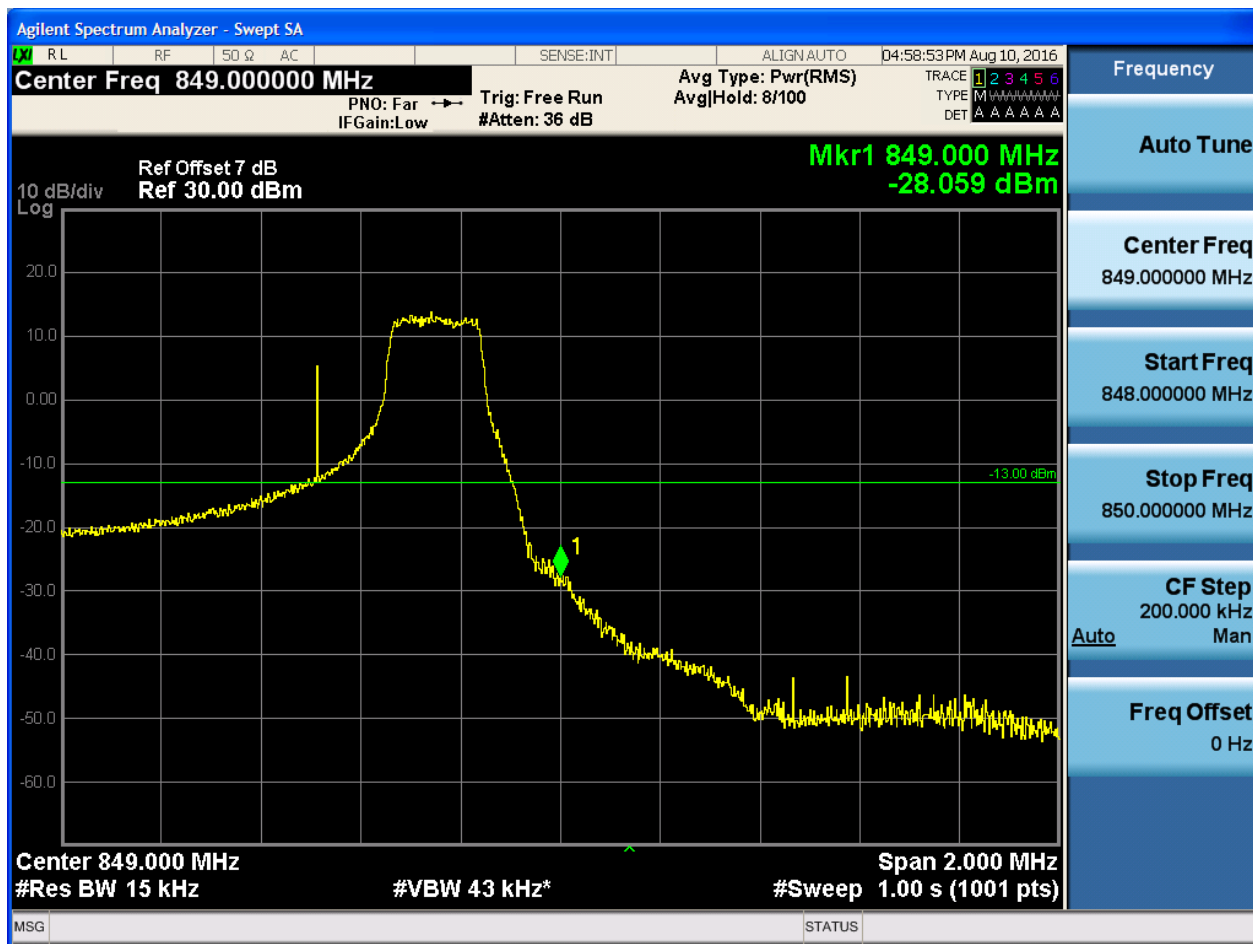
5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0





5.1.1.2.1.2.2 Test RB = RB1#5





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
-33.626 dBm

Center 849.000 MHz
#Res BW 15 kHz
#VBW 43 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

Alignment Completed

STATUS

The image shows a screenshot of an Agilent Spectrum Analyzer in swept mode. The main display is a log-scale plot of power spectral density (PSD) versus frequency. The y-axis is labeled '10 dB/div Log' and ranges from -60.0 to 20.0 dBm. The x-axis represents frequency, with a center frequency of 849.000 MHz and a span of 2.000 MHz. A yellow trace shows a signal that is relatively flat around -10 dBm from 848 MHz to 849 MHz, then drops sharply to about -35 dBm at 849 MHz, and continues to decrease with some noise towards 850 MHz. A green horizontal line is drawn at -13.00 dBm. A yellow marker labeled '1' is placed on the trace at approximately 849.000 MHz, indicating a power level of -33.626 dBm. The top of the screen displays various settings: Center Freq 849.000000 MHz, Ref Offset 7 dB, Ref 30.00 dBm, Mkr1 849.000 MHz, -33.626 dBm, Center 849.000 MHz, #Res BW 15 kHz, #VBW 43 kHz*, Span 2.000 MHz, #Sweep 1.00 s (1001 pts). The right side of the screen shows a control panel with buttons for Auto Tune, Center Freq, Start Freq, Stop Freq, CF Step, and Freq Offset. The bottom of the screen shows a status bar with 'Alignment Completed' and 'STATUS'.

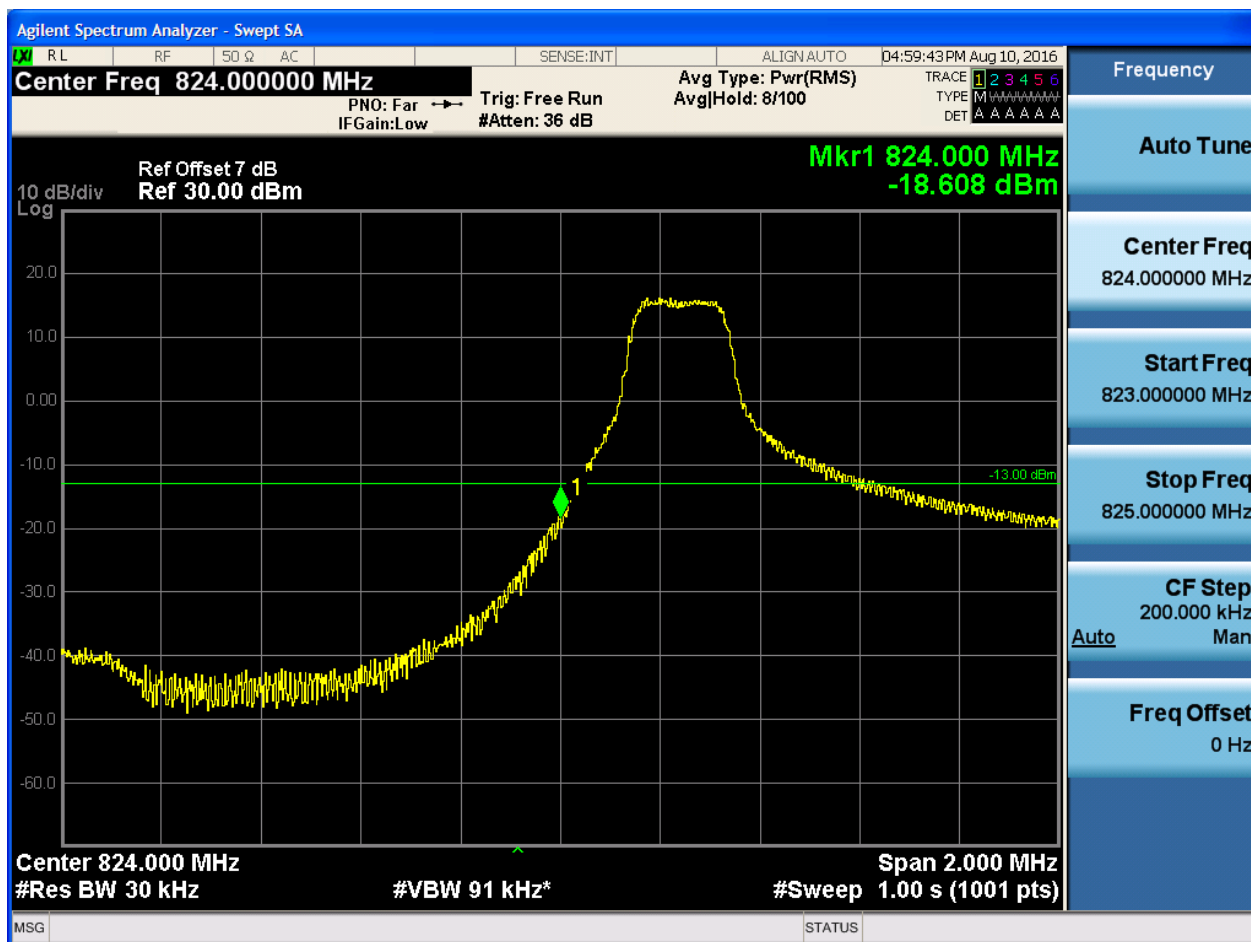


5.1.1.2.1.2.4 Test RB = RB6#0



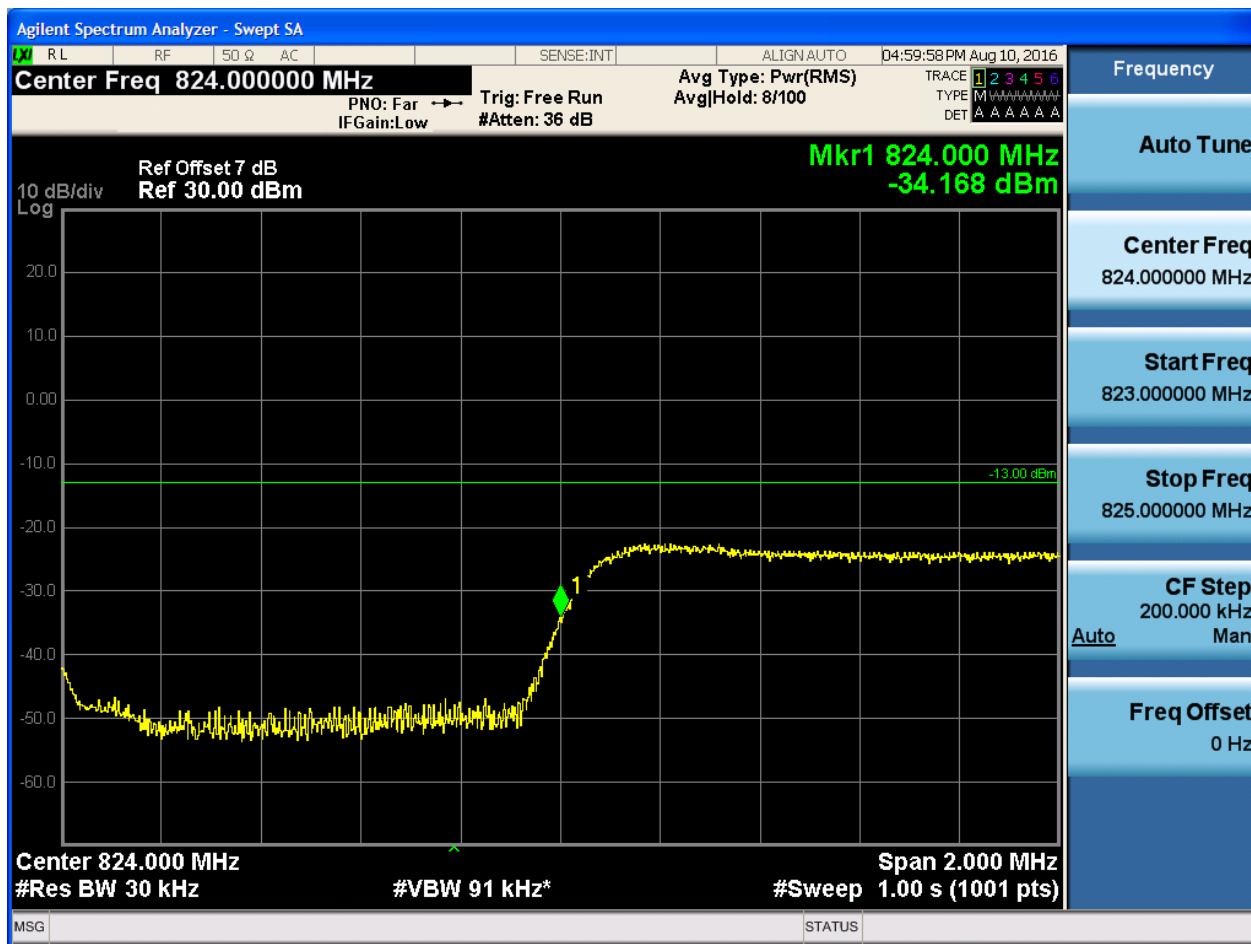


5.1.1.2.2.1.1 Test RB = RB1#0



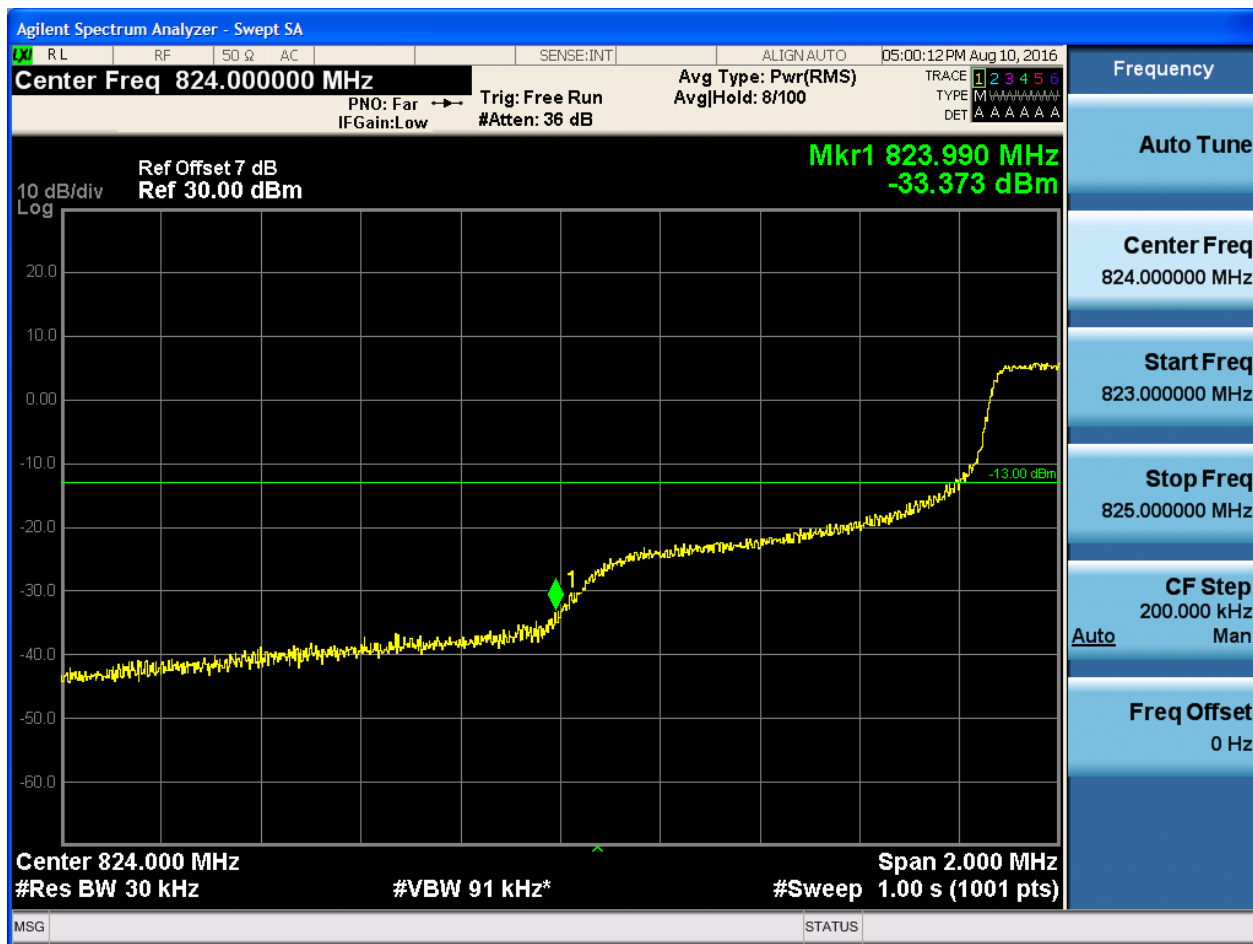


5.1.1.2.2.1.2 Test RB = RB1#14



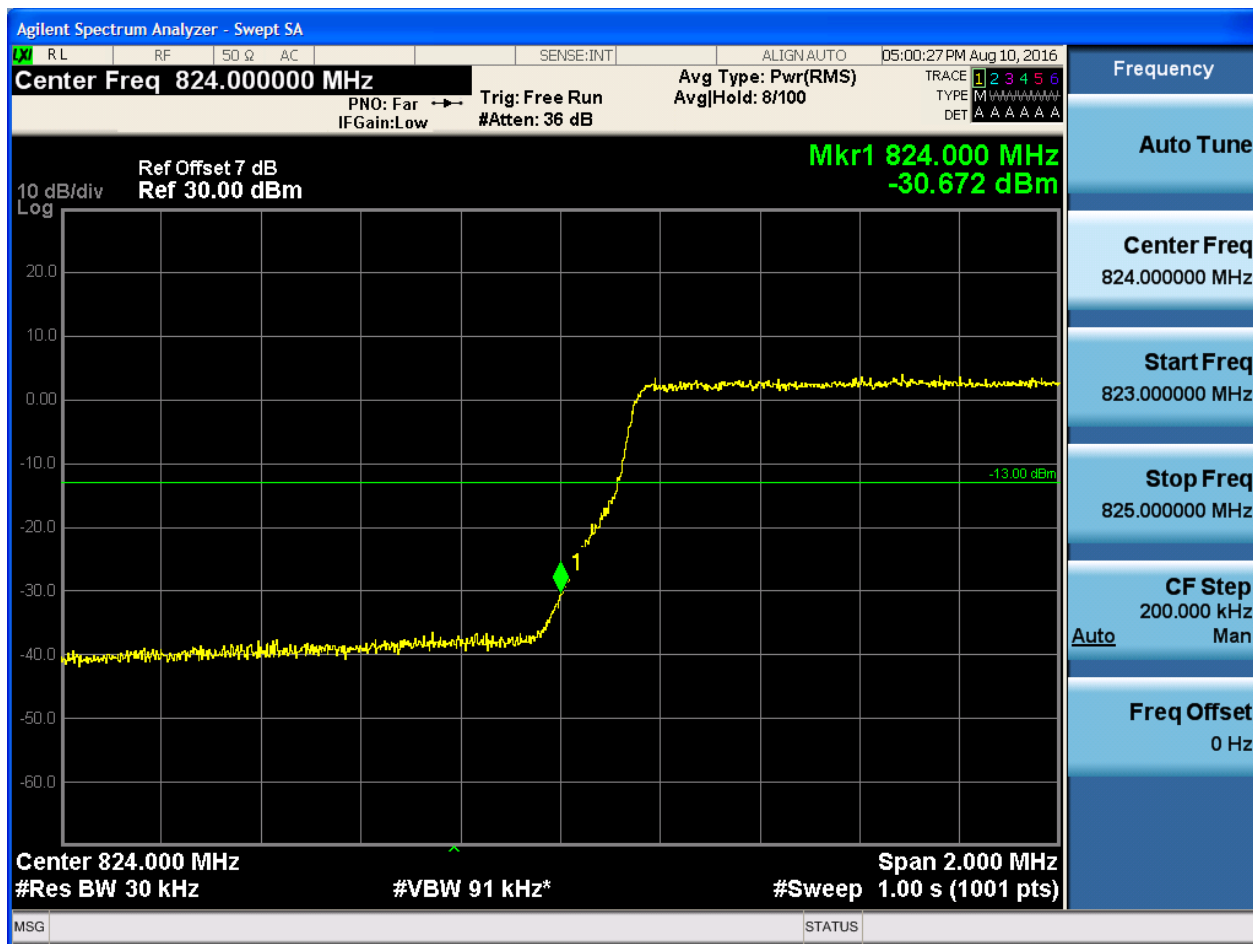


5.1.1.2.2.1.3 Test RB = RB8#4





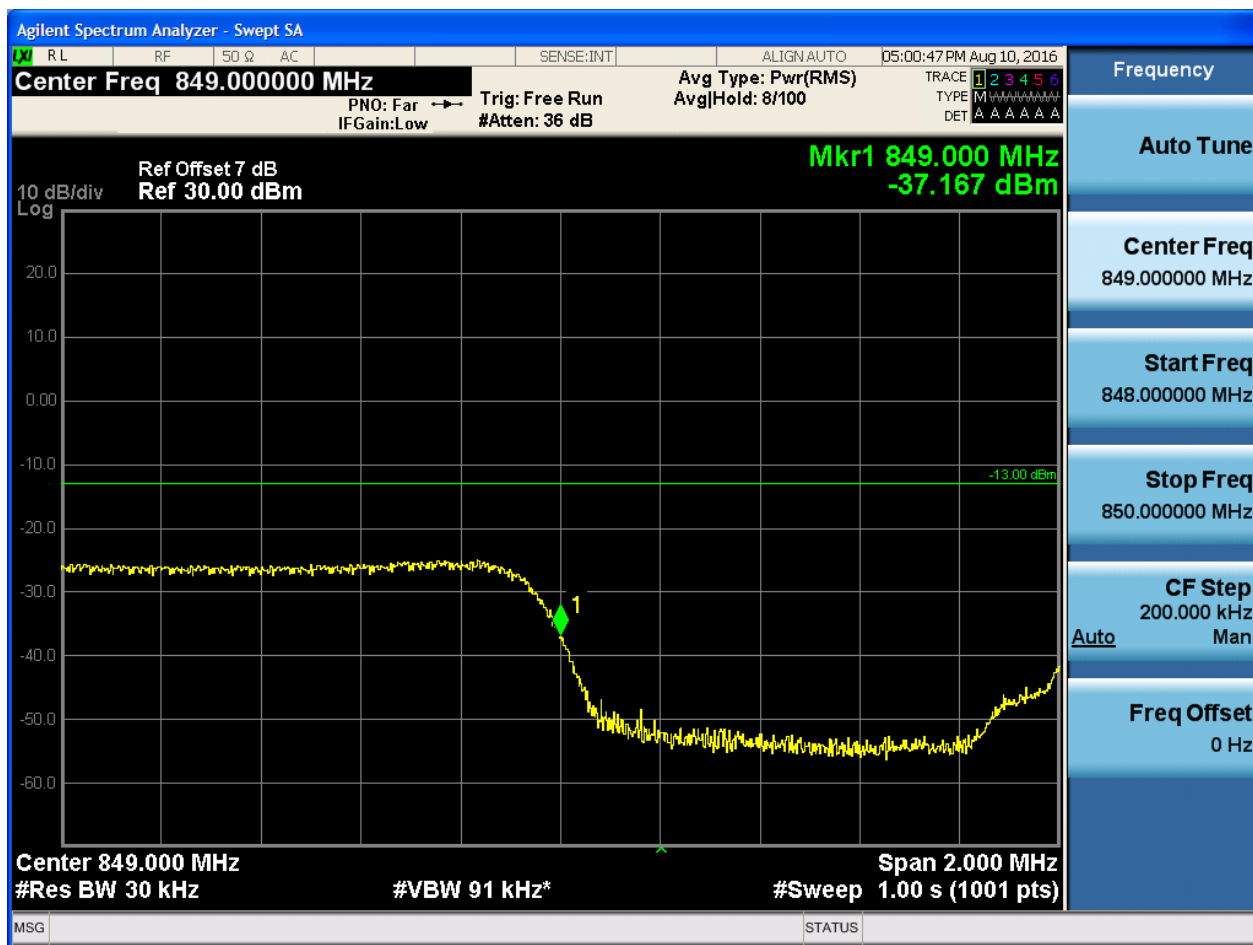
5.1.1.2.2.1.4 Test RB = RB15#0





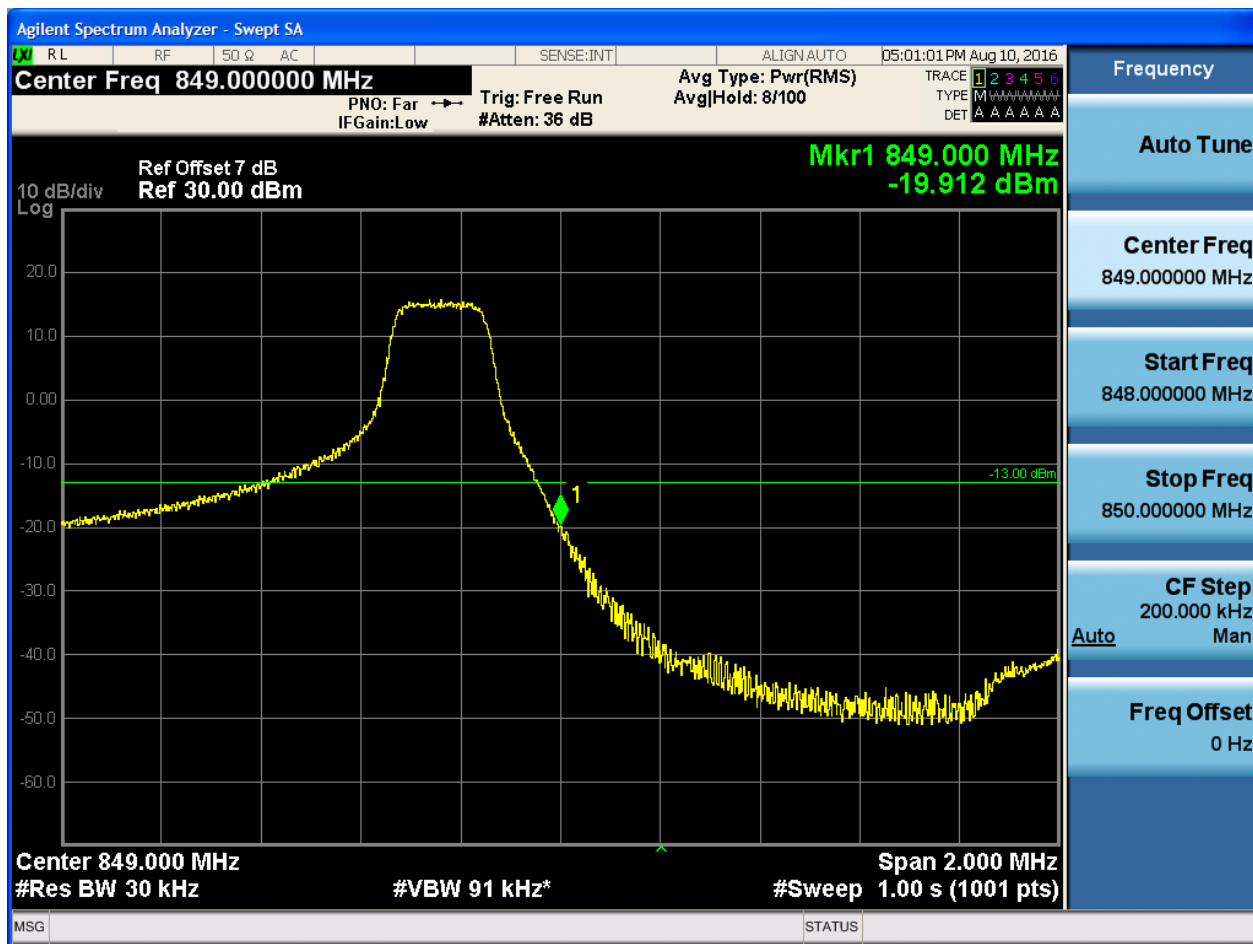
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0





5.1.1.2.2.2 Test RB = RB1#14





5.1.1.2.2.3 Test RB = RB8#4



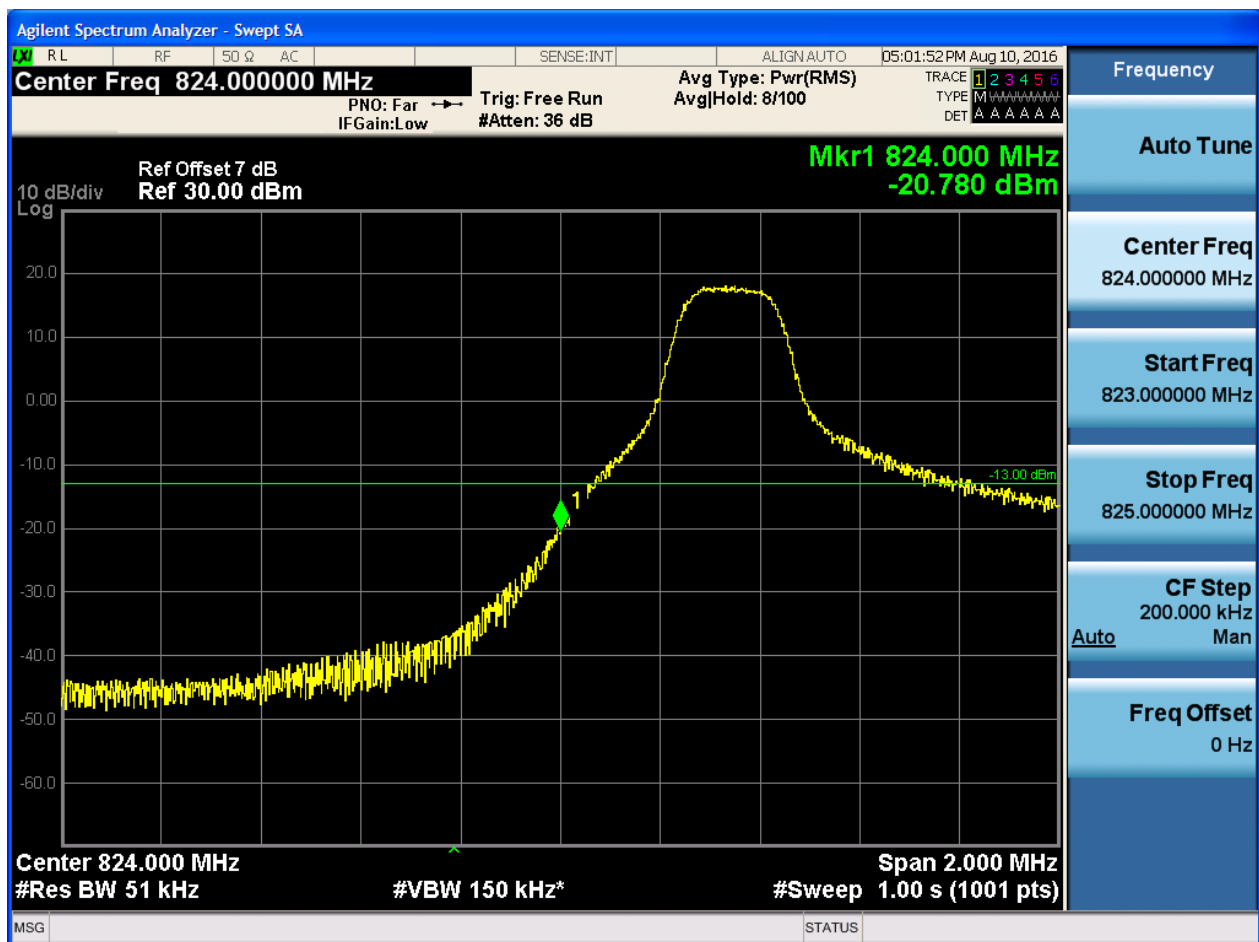


5.1.1.2.2.4 Test RB = RB15#0



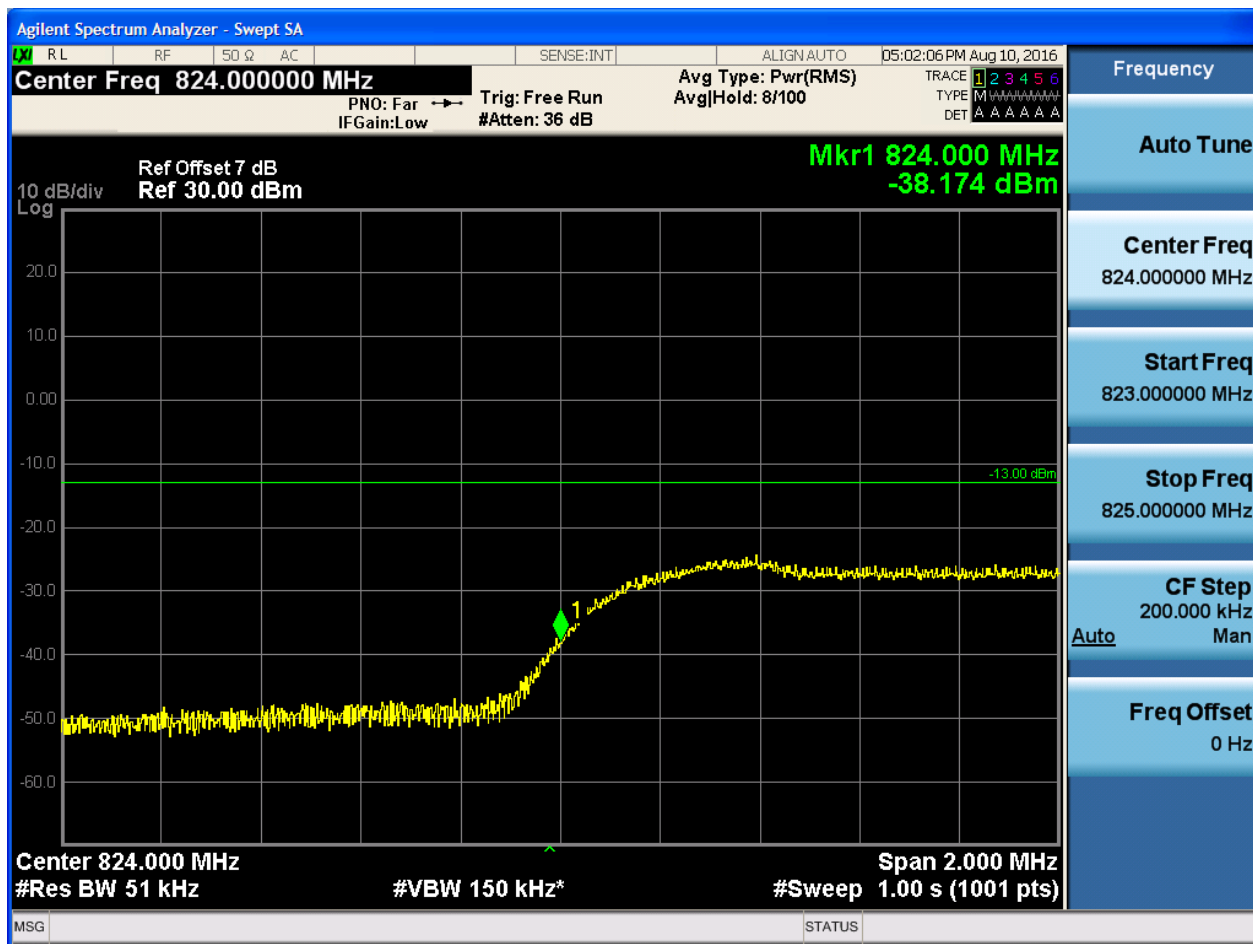


5.1.1.2.3.1.1 Test RB = RB1#0





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 05:02:21 PM Aug 10, 2016

Center Freq 824.000000 MHz Avg Type: Pwr(RMS) Avg|Hold: 8/100

PN0: Far Trig: Free Run PNO: Far IFGain:Low #Atten: 36 dB

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

Ref Offset 7 dB Ref 30.00 dBm

Mkr1 823.990 MHz -35.640 dBm

10 dB/div Log

-13.00 dBm

Center 824.000 MHz #Res BW 51 kHz #VBW 150 kHz* Span 2.000 MHz #Sweep 1.00 s (1001 pts)

MSG STATUS

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



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: 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

Mkr1 824.000 MHz
-31.779 dBm

-13.00 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

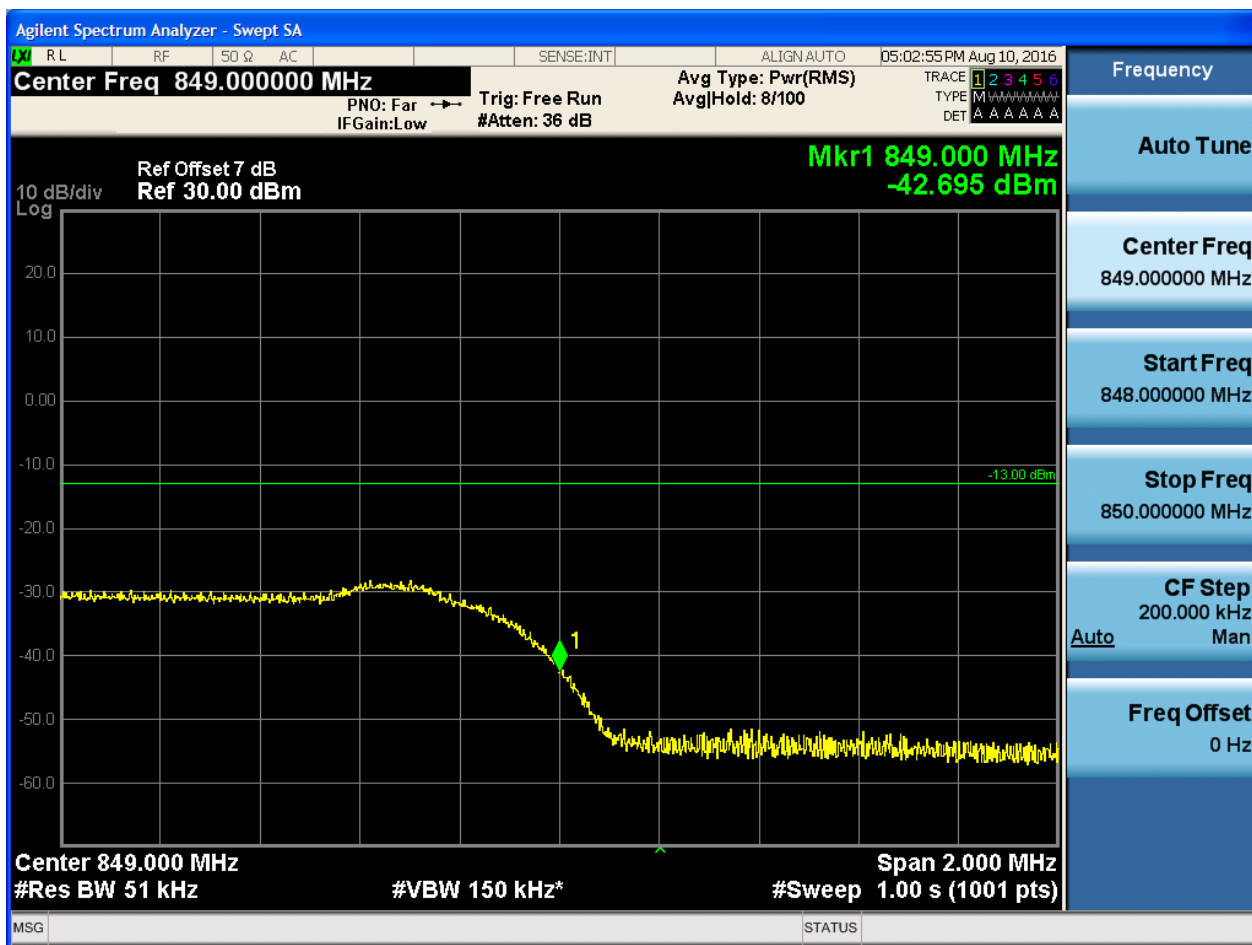
Freq Offset
0 Hz

MSG STATUS



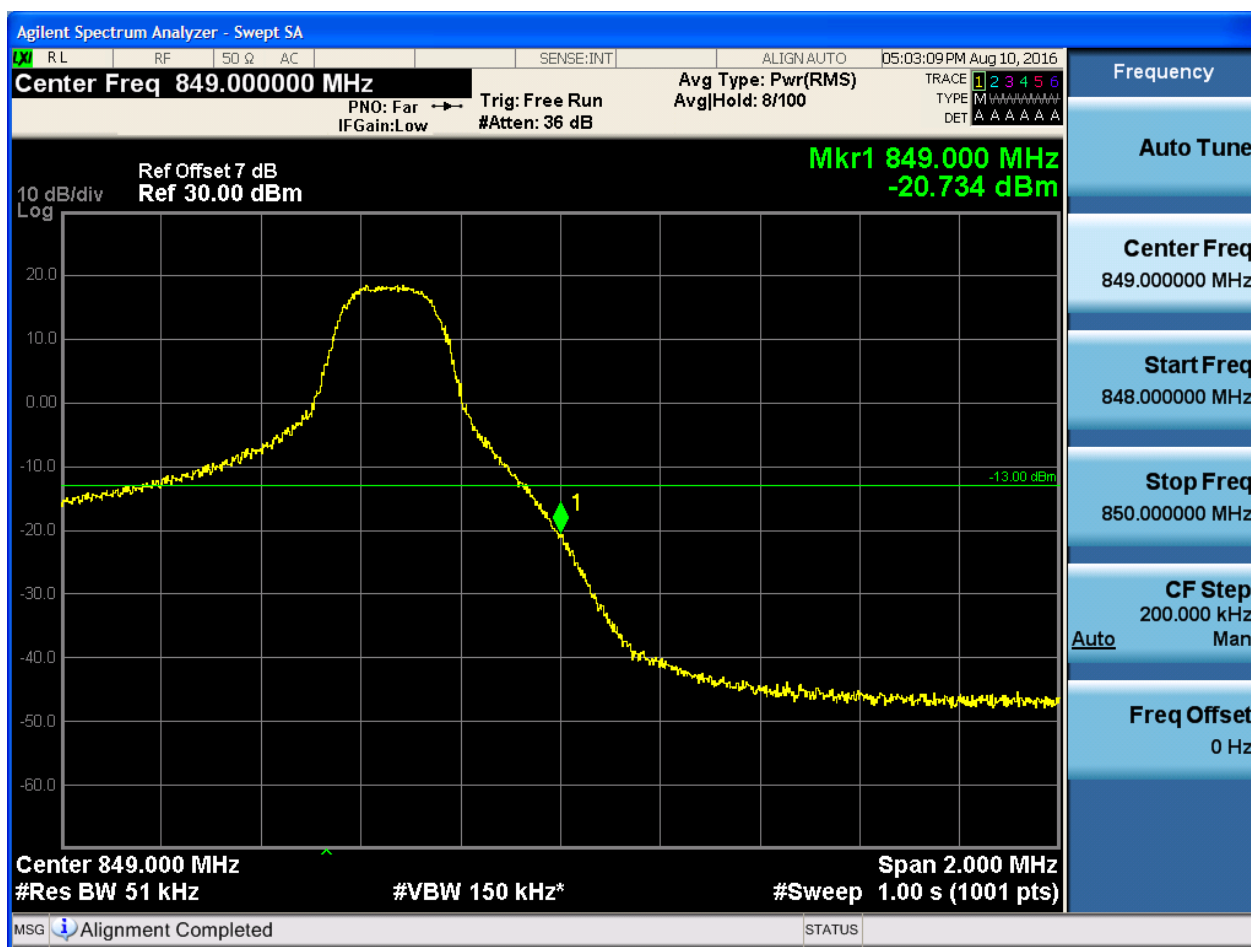
5.1.1.2.3.2 Test Channel = HCH

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 849.000000 MHz

Ref Offset 7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-36.666 dBm

Center 849.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

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

Center 849.000 MHz
#Res BW 51 kHz
#VBW 150 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

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



5.1.1.2.3.2.4 Test RB = RB25#0

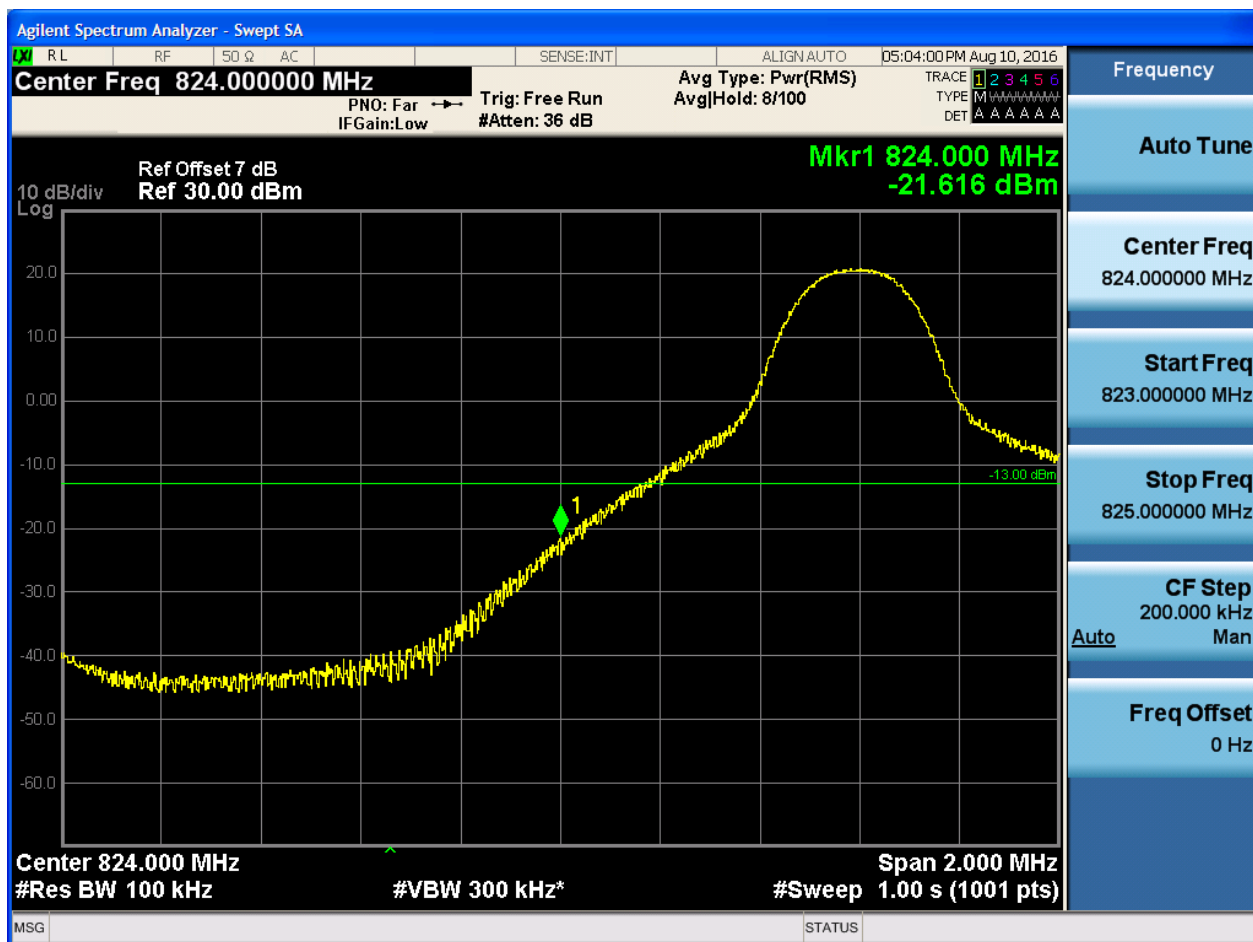




5.1.1.2.4 Test Bandwidth = 10

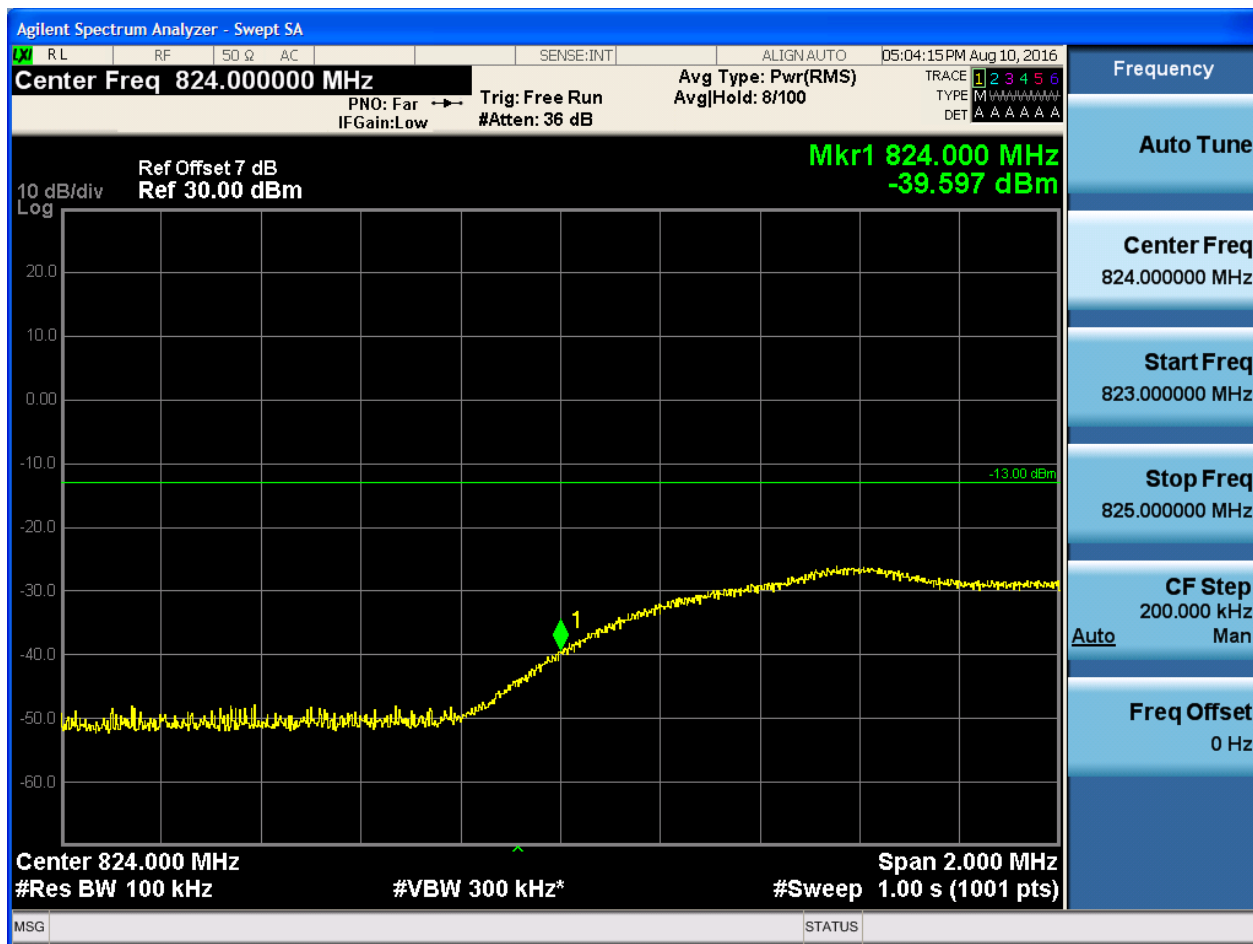
5.1.1.2.4.1 Test Channel = LCH

5.1.1.2.4.1.1 Test RB = RB1#0





5.1.1.2.4.1.2 Test RB = RB1#49





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
-35.935 dBm

Center 824.000 MHz
#Res BW 100 kHz
#VBW 300 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

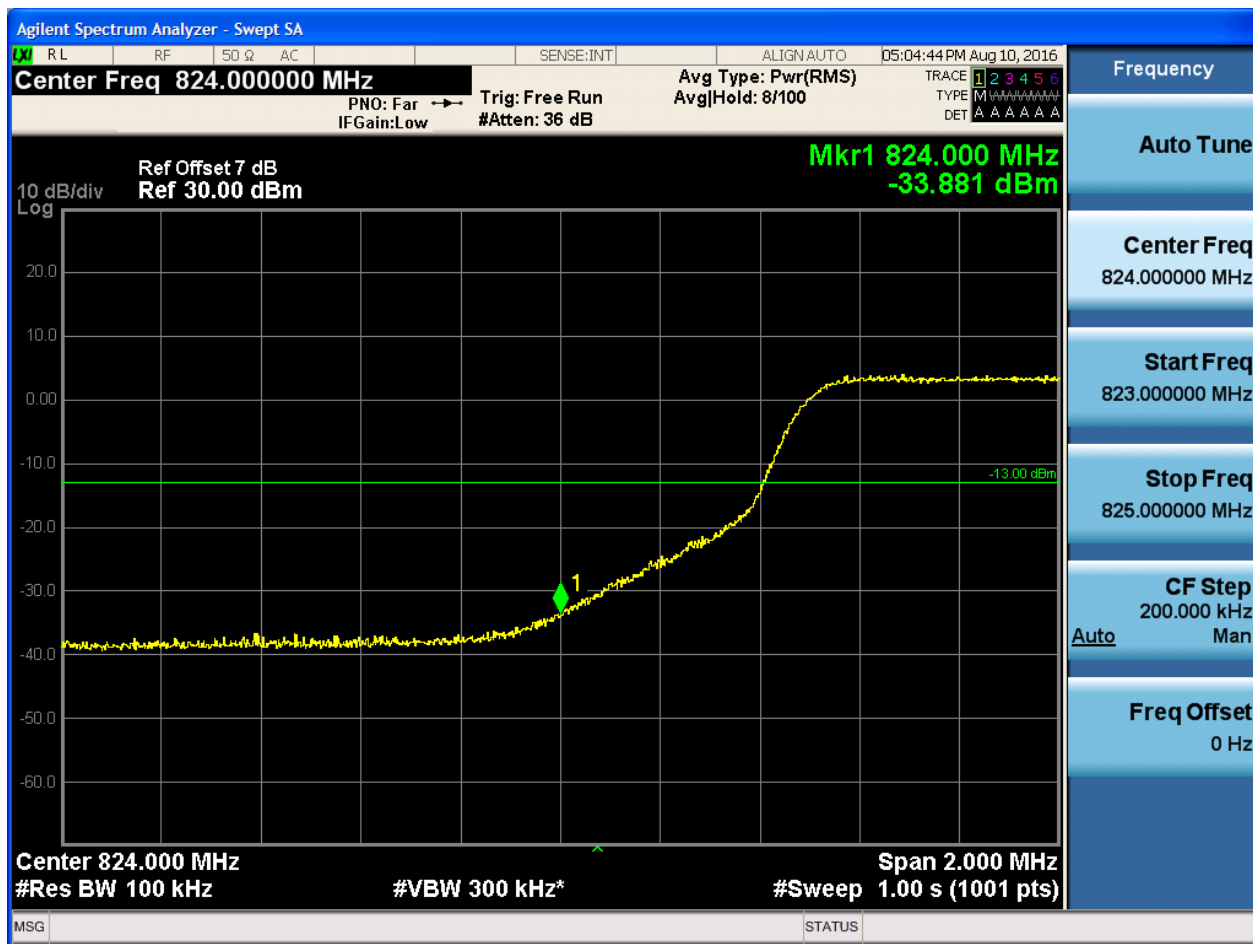
CF Step
200.000 kHz
Man

Freq Offset
0 Hz

MSG STATUS



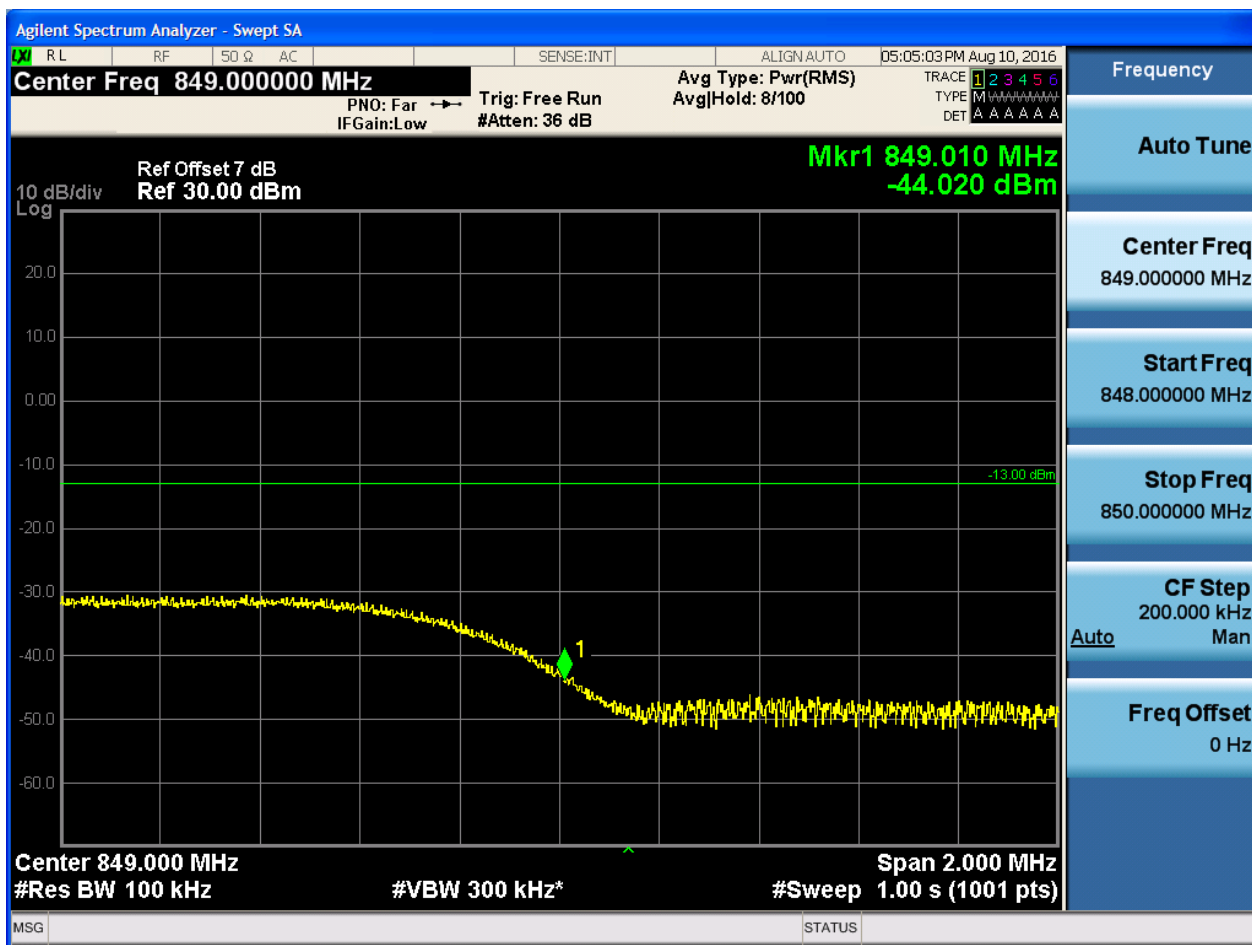
5.1.1.2.4.1.4 Test RB = RB50#0





5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 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 849.010 MHz
-23.470 dBm

Center 849.000 MHz
#Res BW 100 kHz

#VBW 300 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

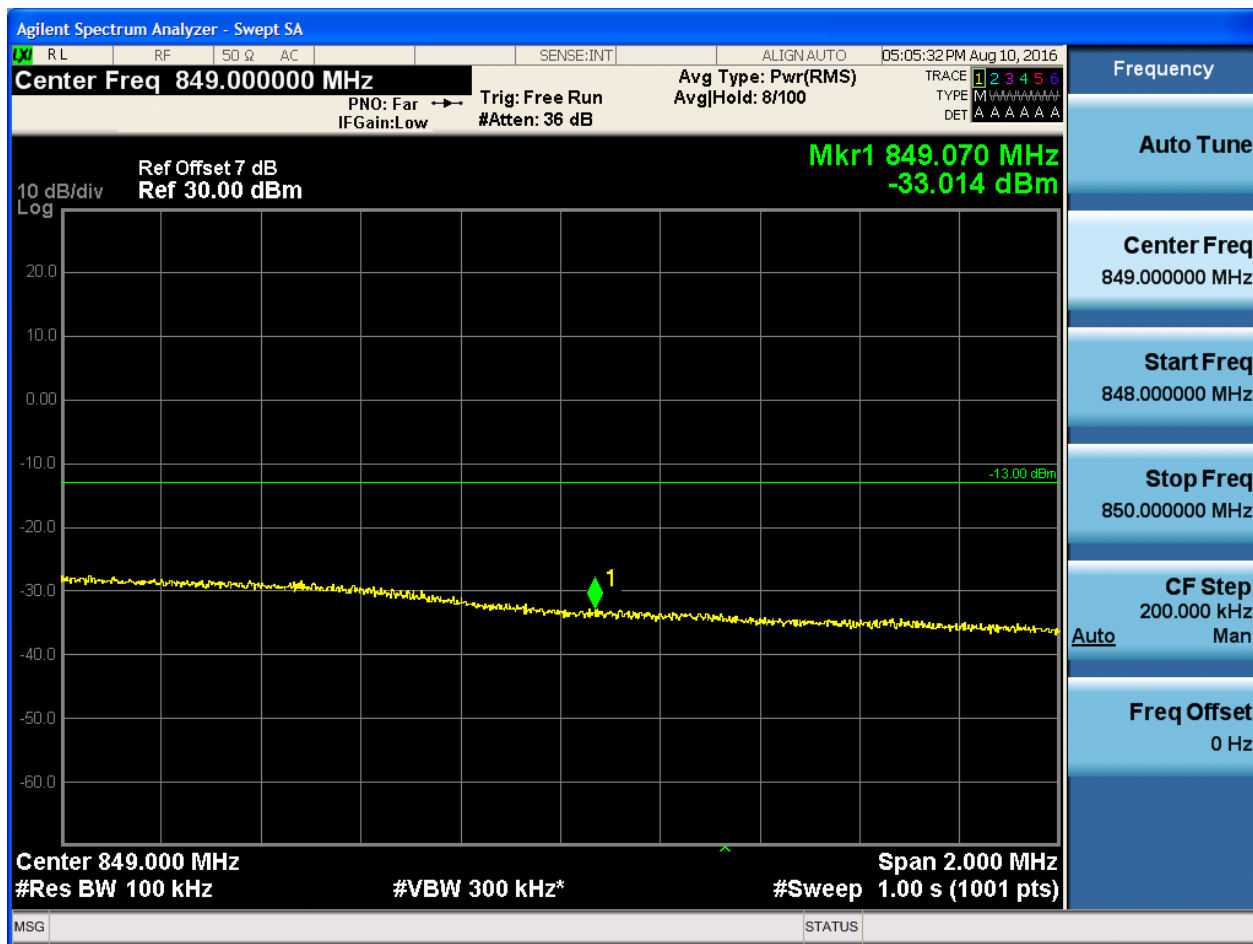
CF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz



5.1.1.2.4.2.3 Test RB = RB25#13





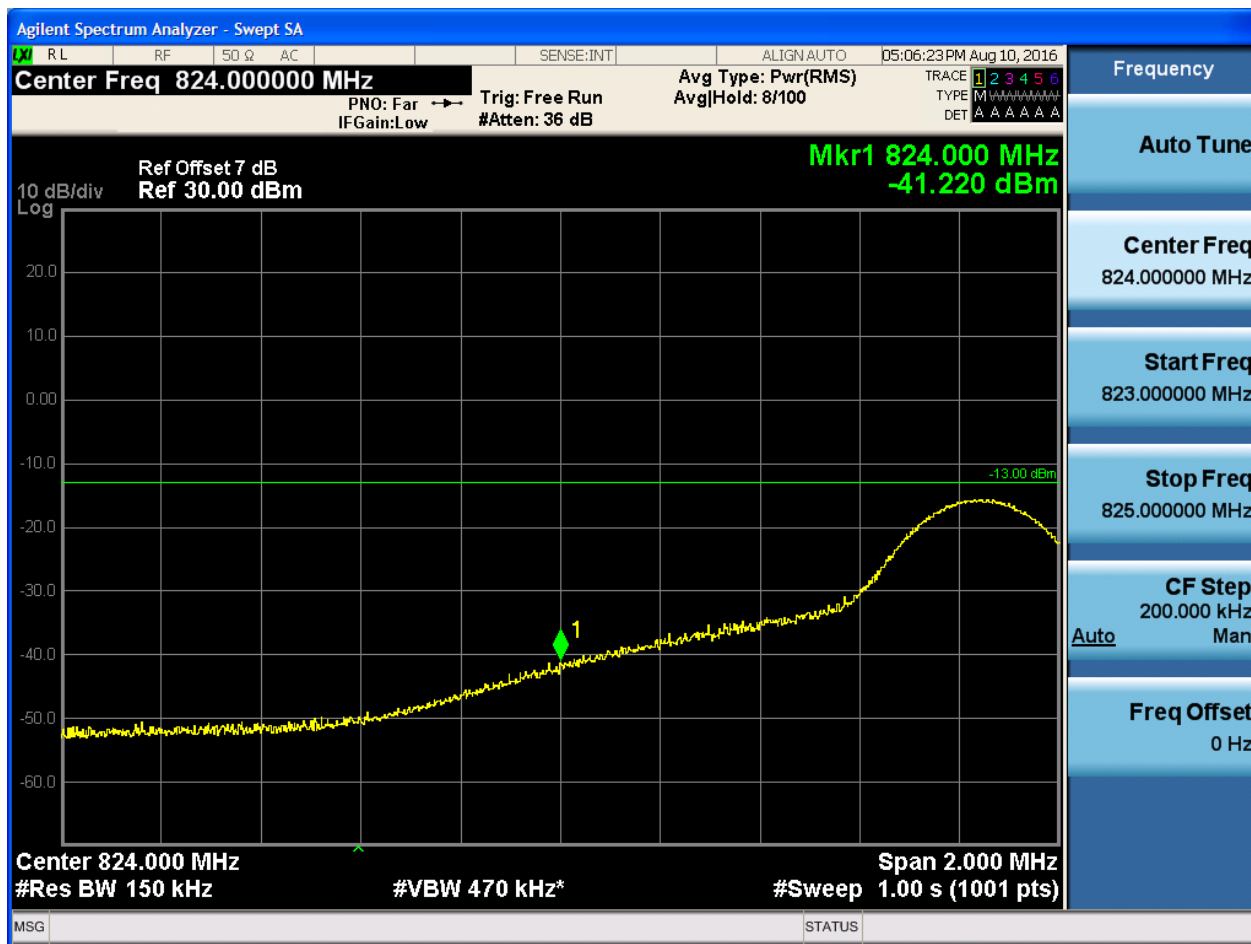
5.1.1.2.4.2.4 Test RB = RB50#0







5.1.1.2.5.1.2 Test RB = RB1#74





Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 823.970 MHz
-36.738 dBm

Center 824.000 MHz
#Res BW 150 kHz

#VBW 470 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

Freq Offset
0 Hz

Frequency

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



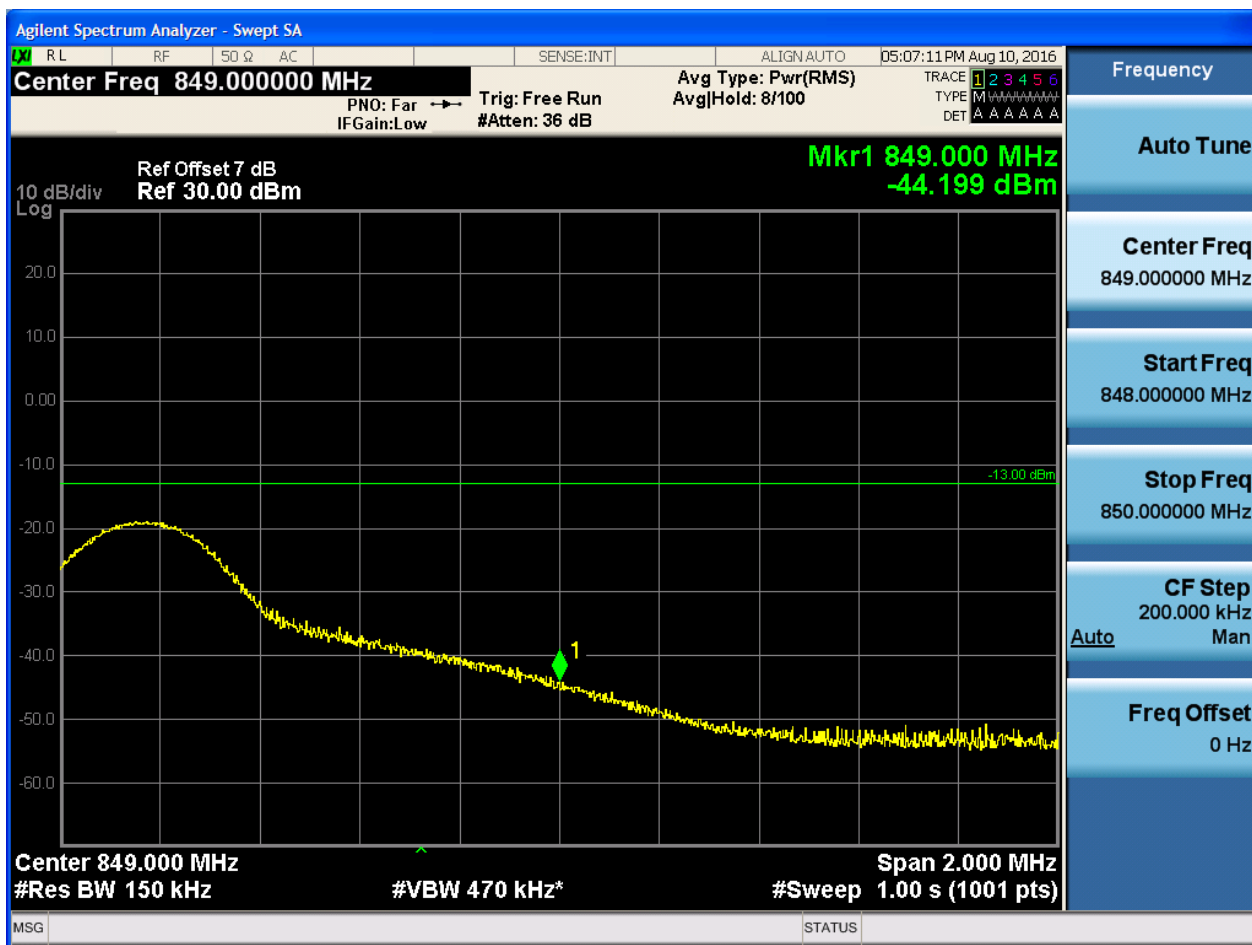
5.1.1.2.5.1.4 Test RB = RB75#0





5.1.1.2.5.2 Test Channel = HCH

5.1.1.2.5.2.1 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
-23.878 dBm

Center 849.000 MHz
#Res BW 150 kHz
#VBW 470 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

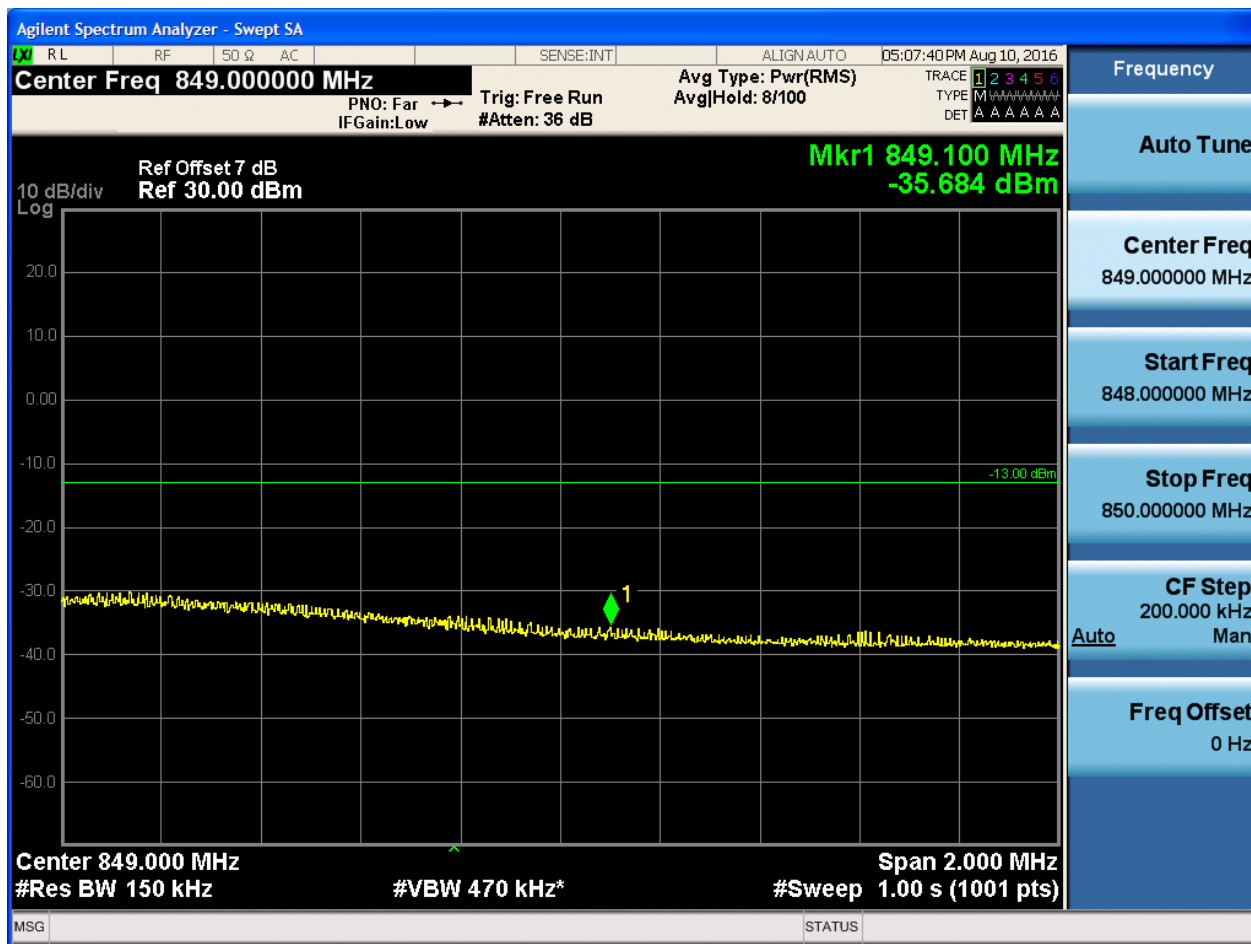
Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz



5.1.1.2.5.2.3 Test RB = RB38#19





Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.020 MHz
-33.749 dBm

Center 849.000 MHz
#Res BW 150 kHz

#VBW 470 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

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

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

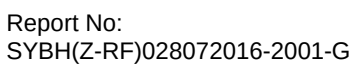
6.1.1 Test Band = BAND26

6.1.1.1 Test Mode = LTE/TM1

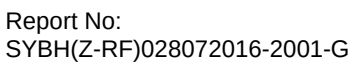
6.1.1.1.1 Test Bandwidth = 1.4

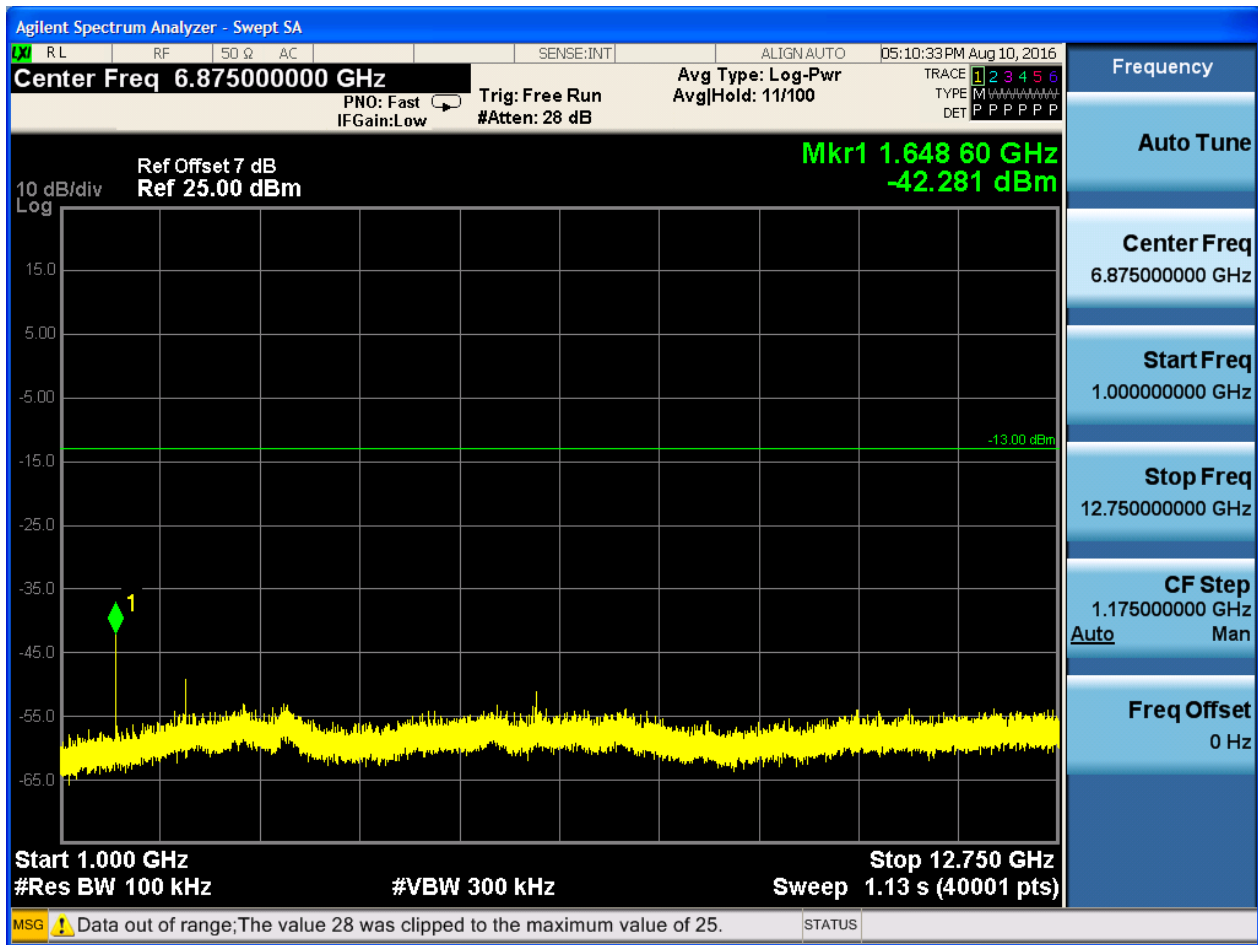
6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0





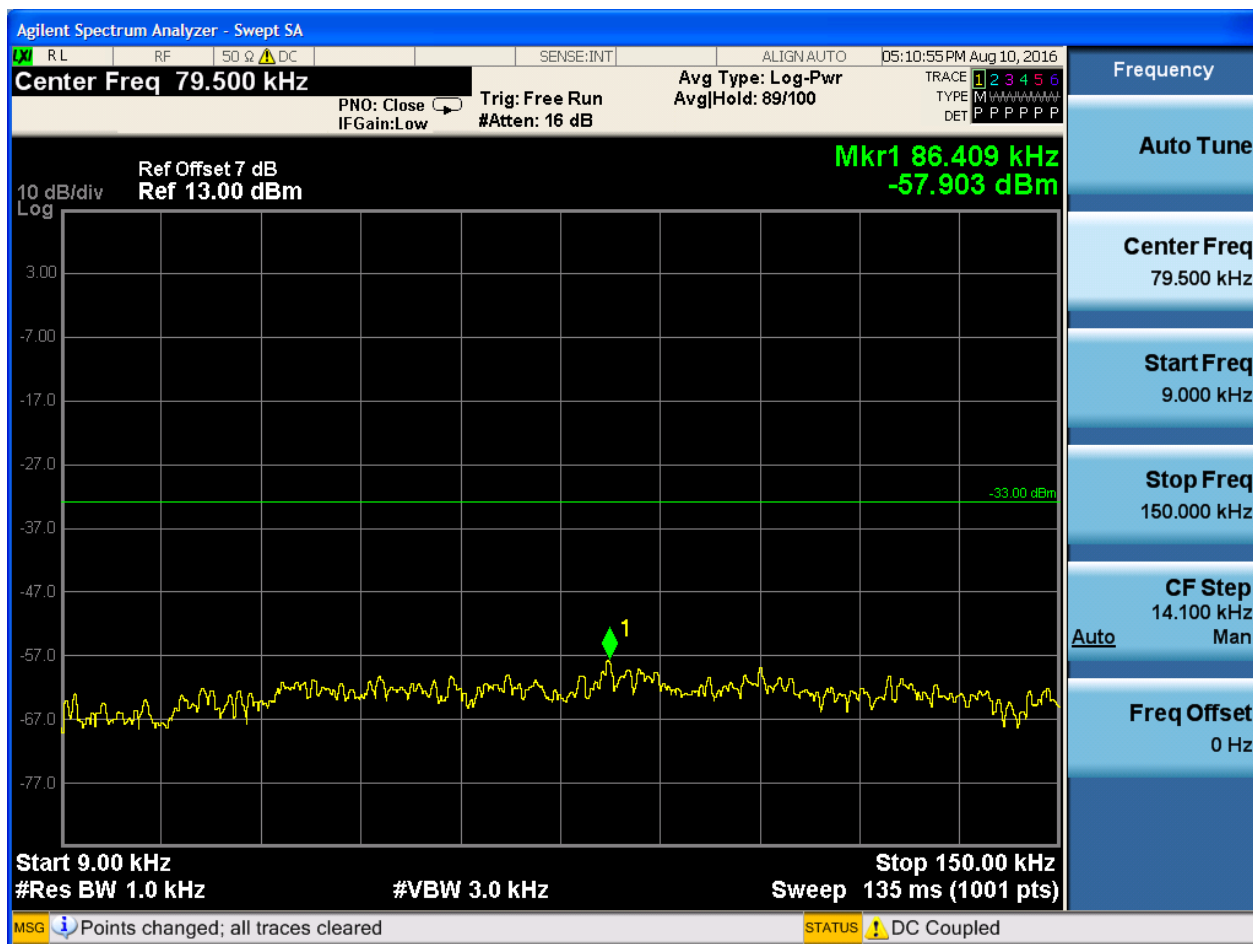


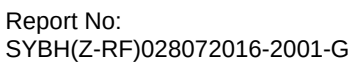


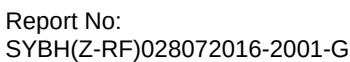


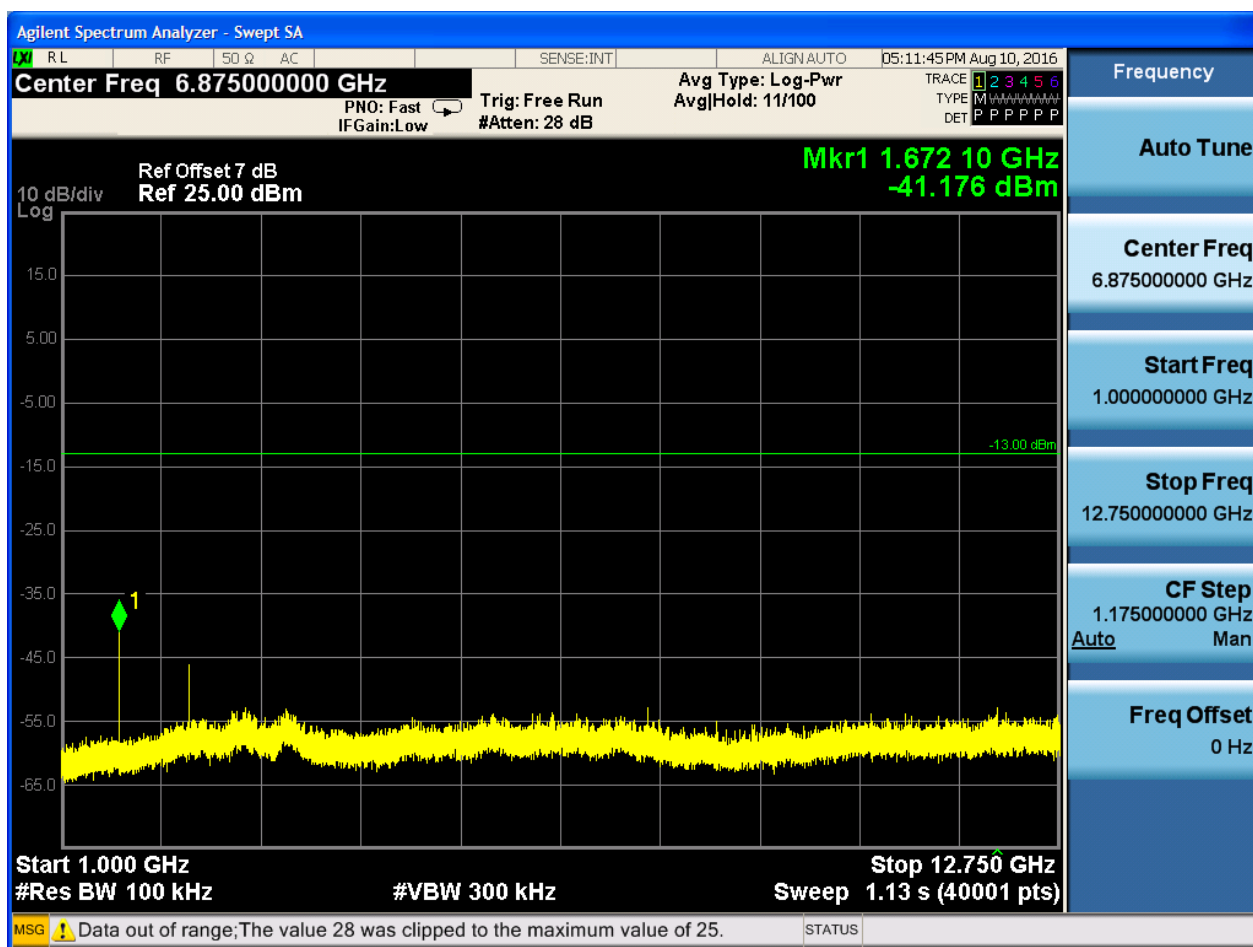
6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0

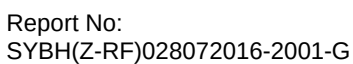


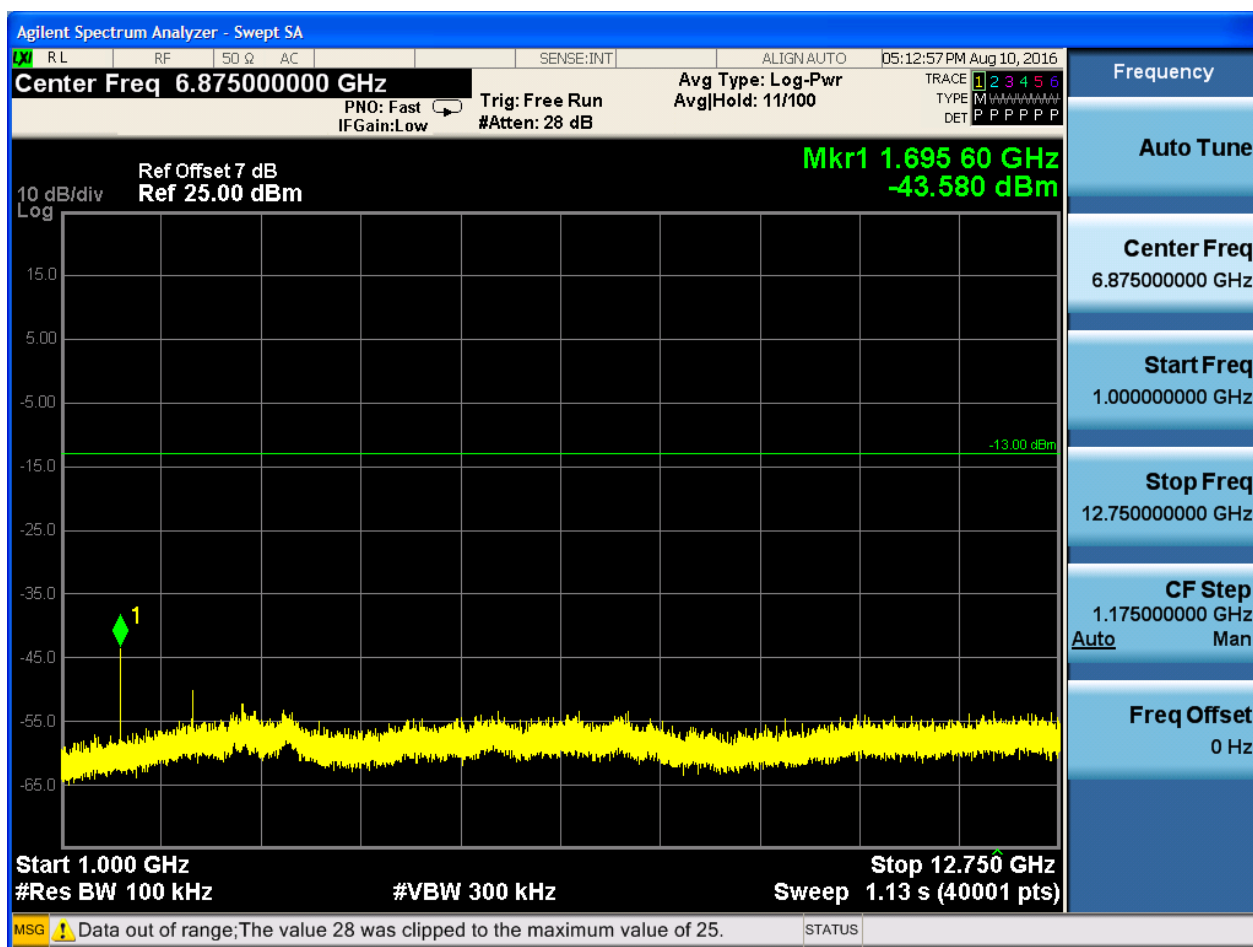










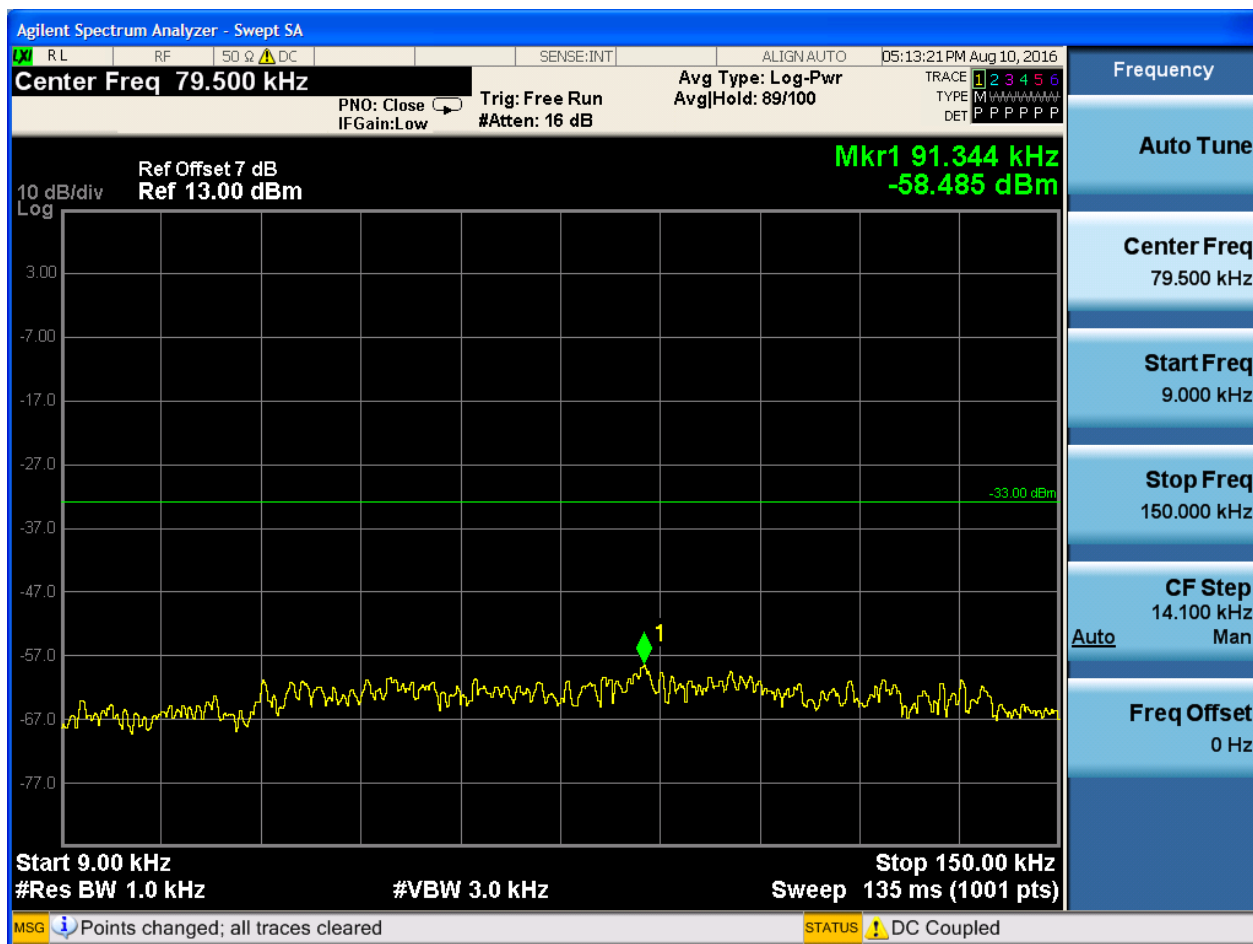


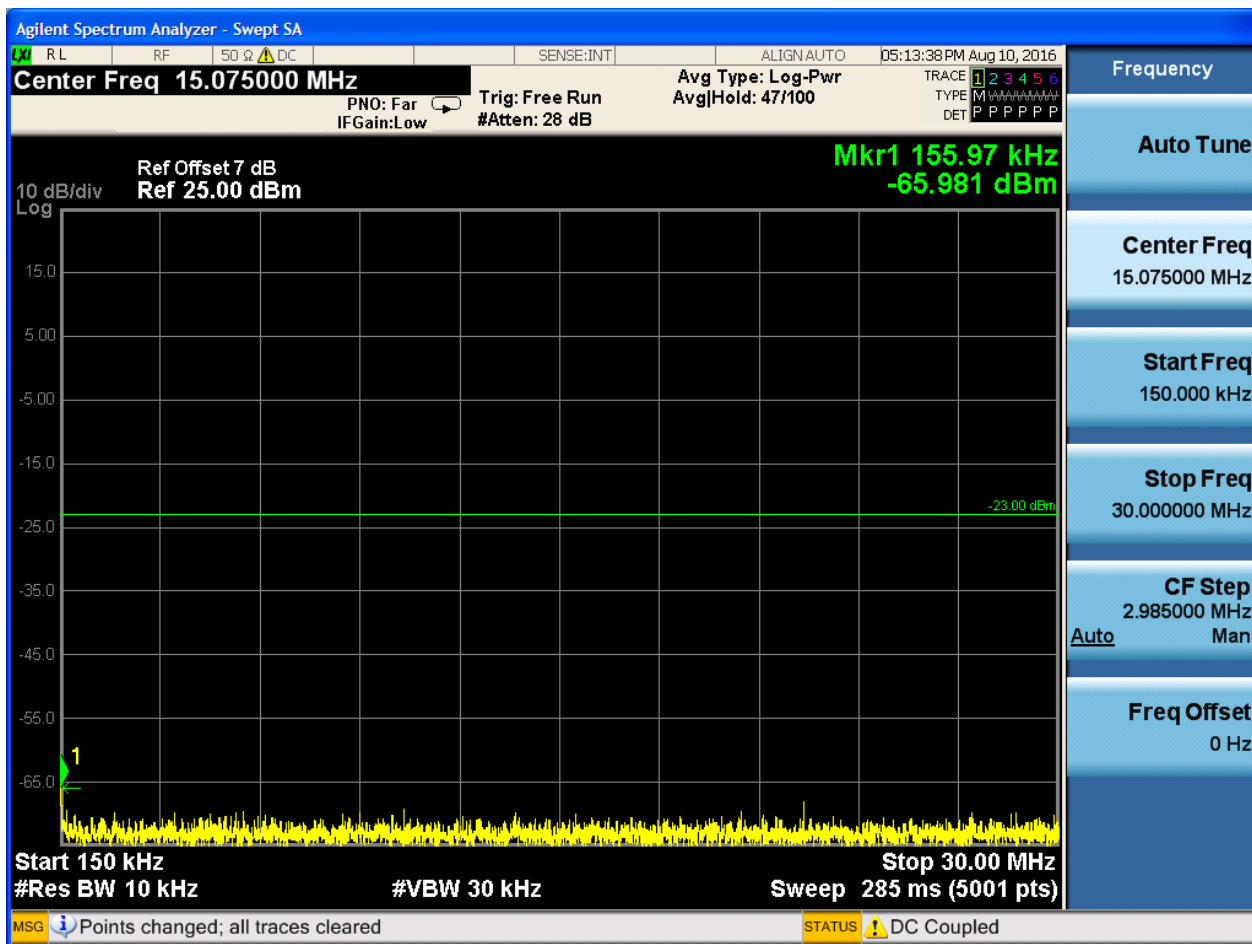


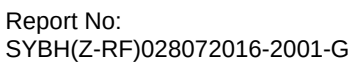
6.1.1.1.2 Test Bandwidth = 3

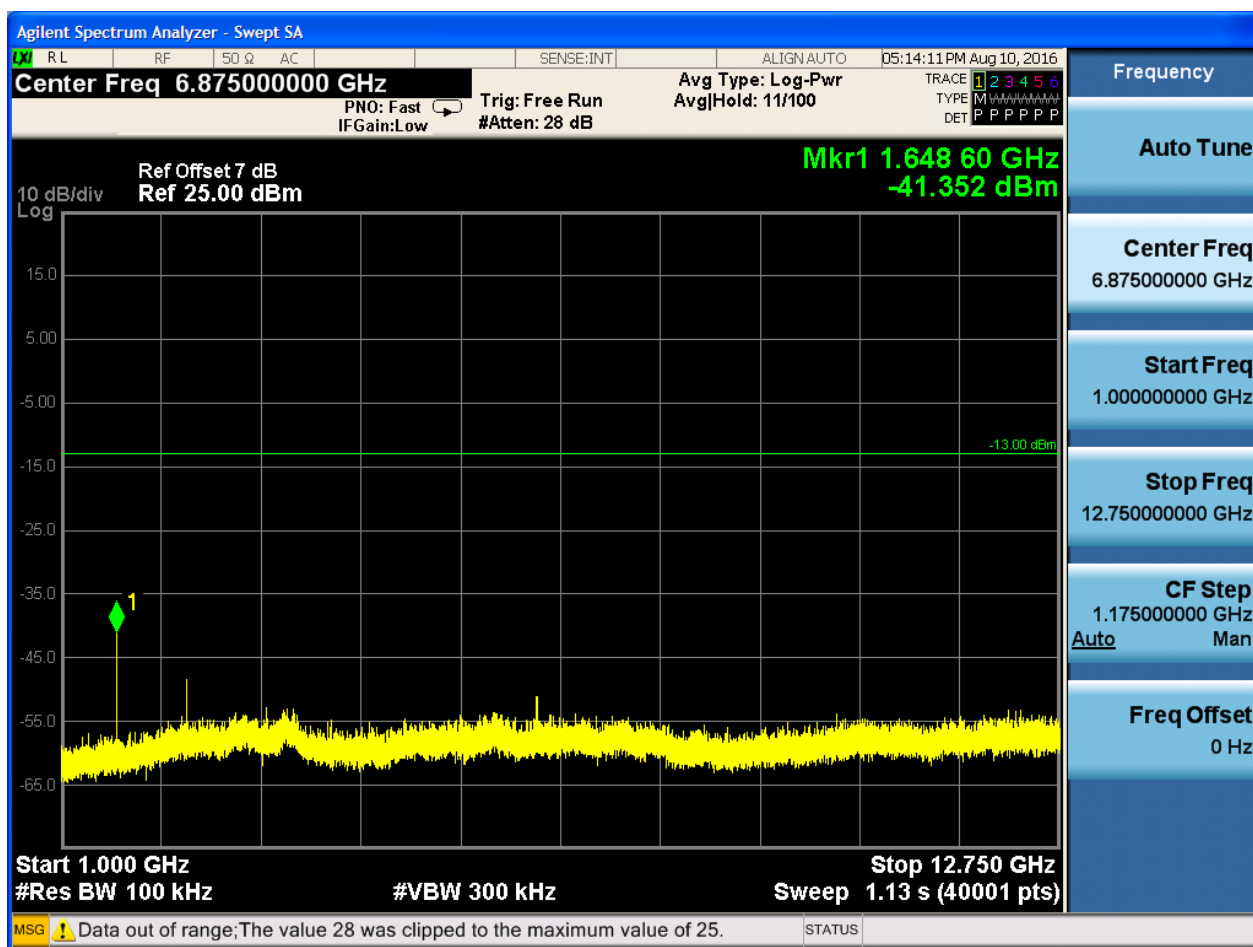
6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0





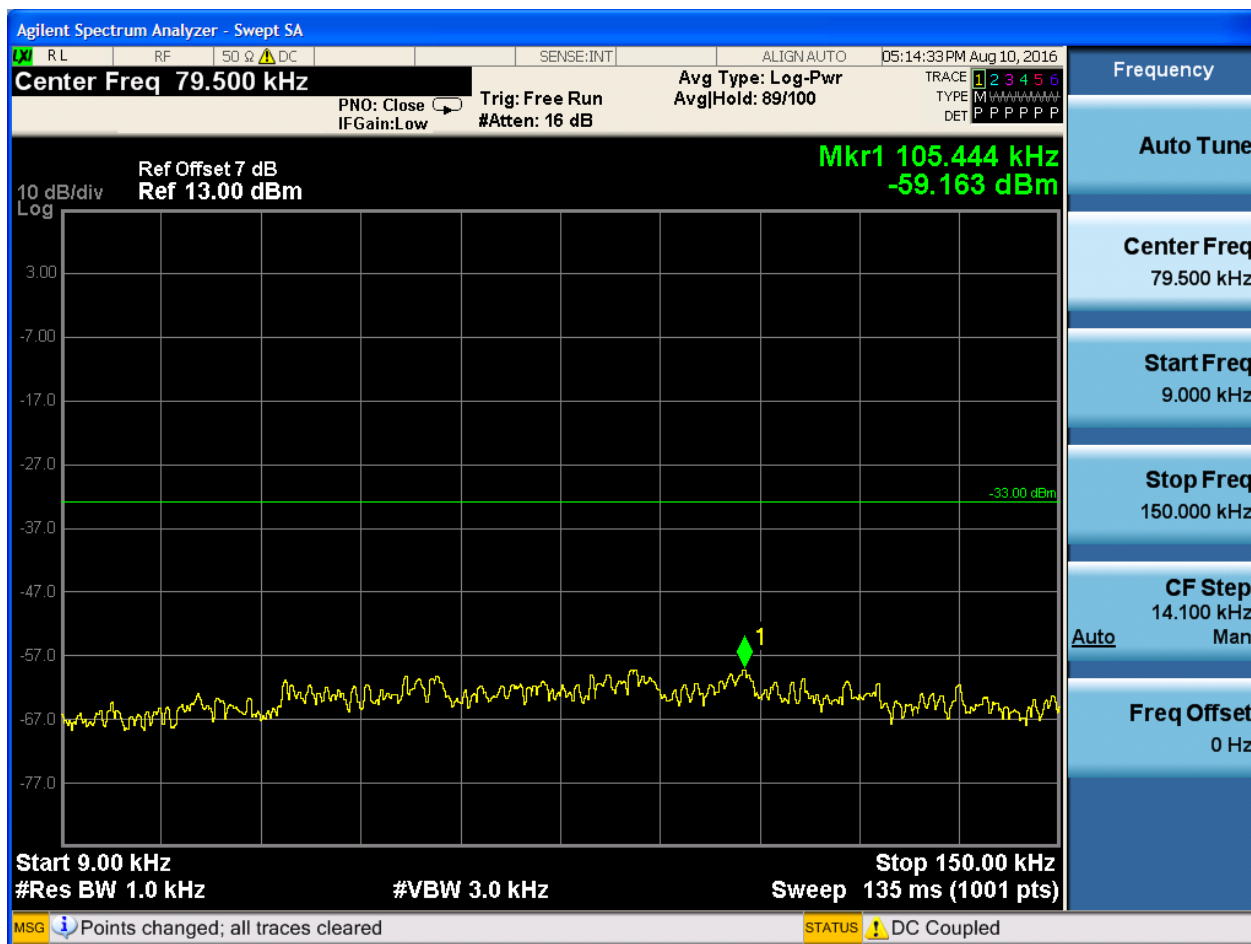


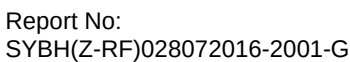


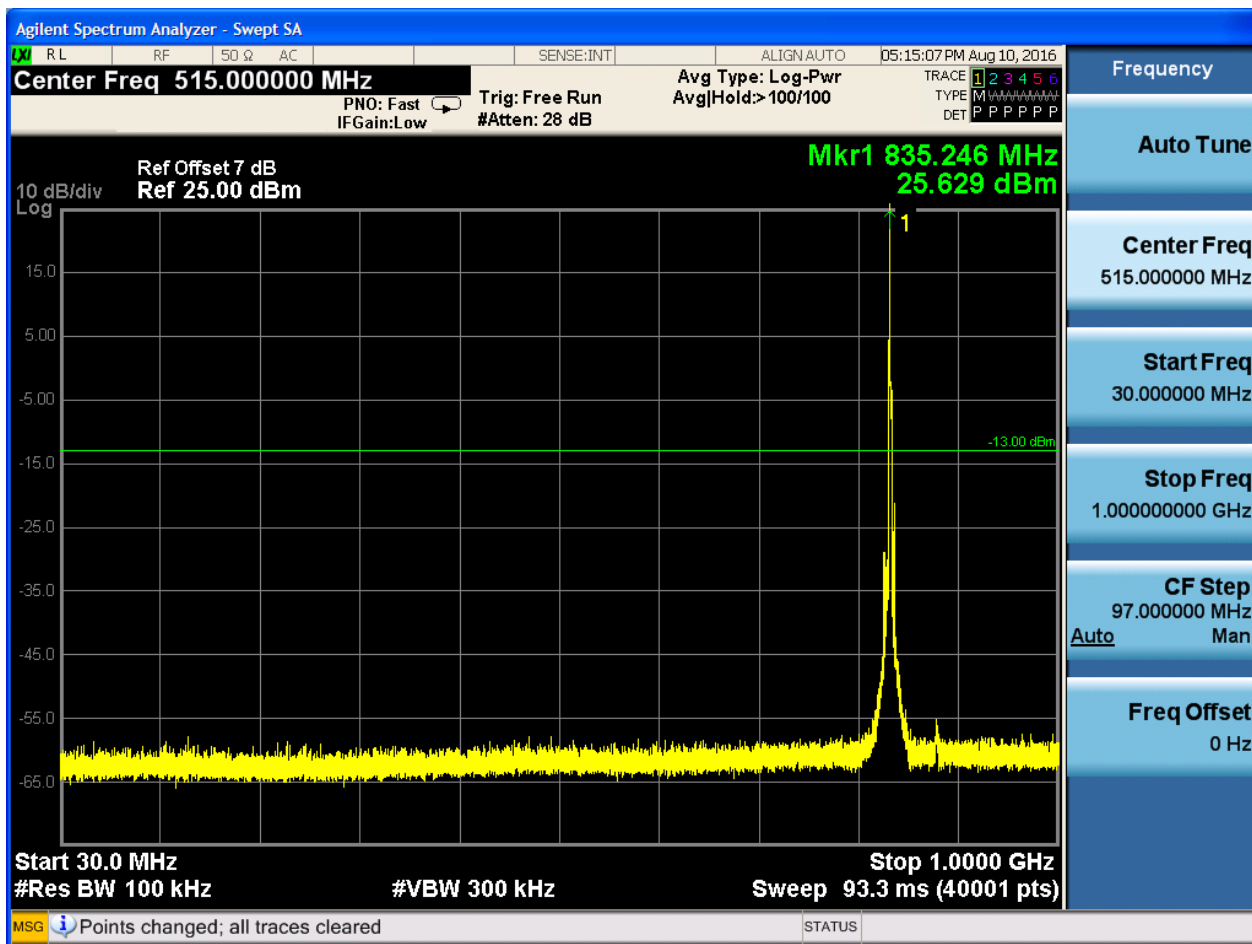


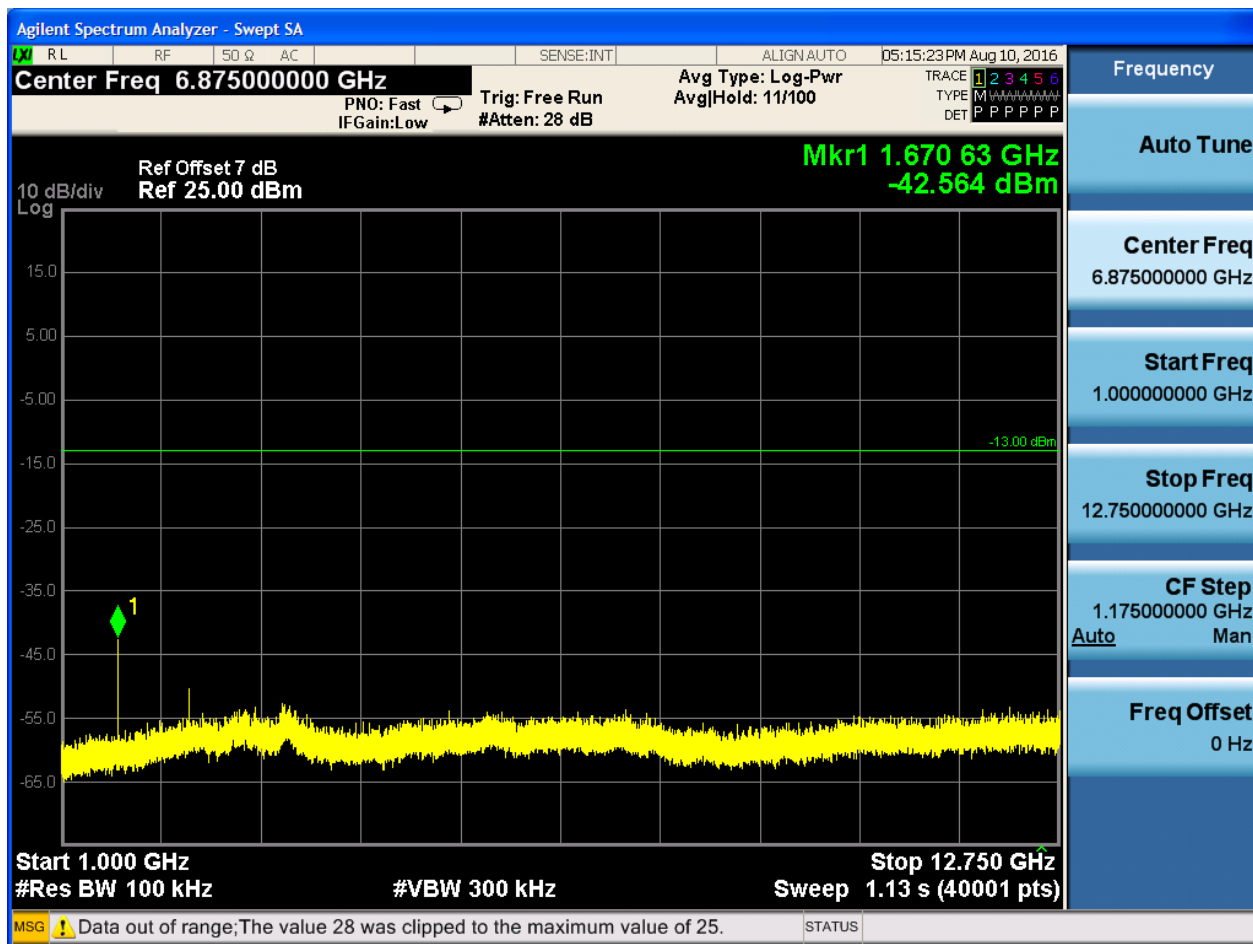
6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0





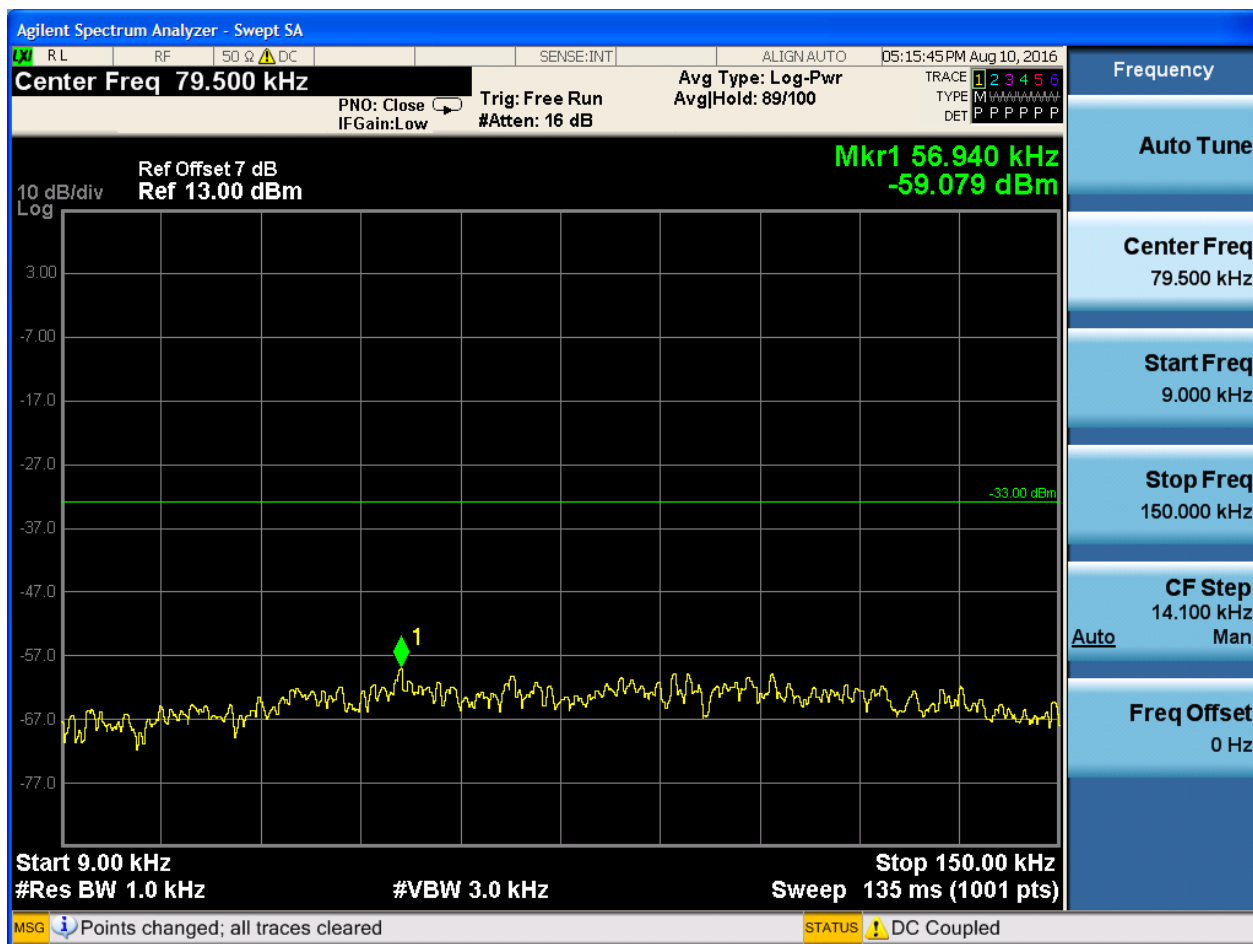




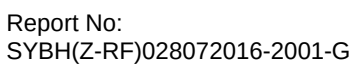


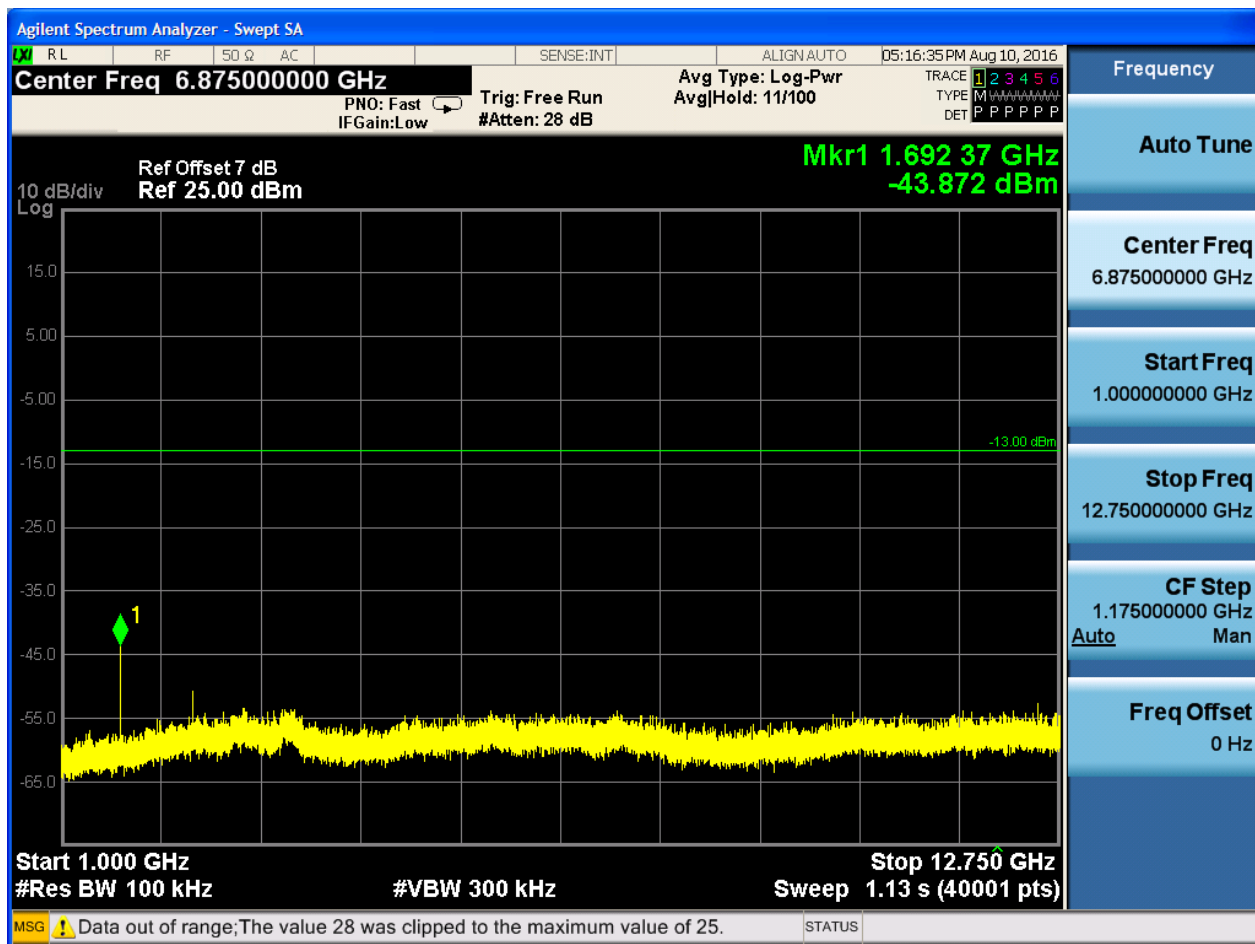
6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0







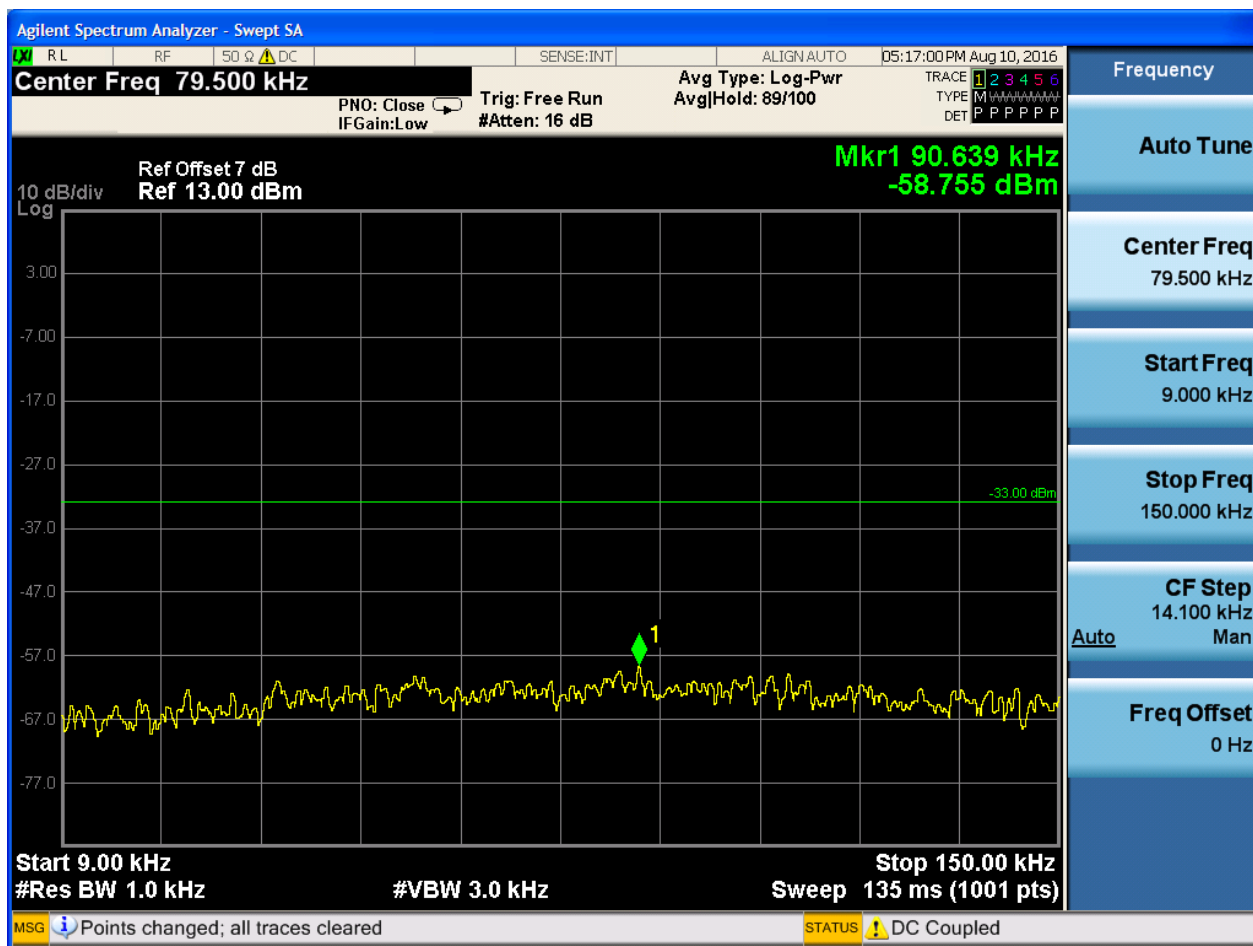




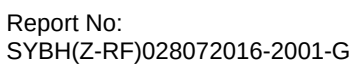
6.1.1.1.3 Test Bandwidth = 5

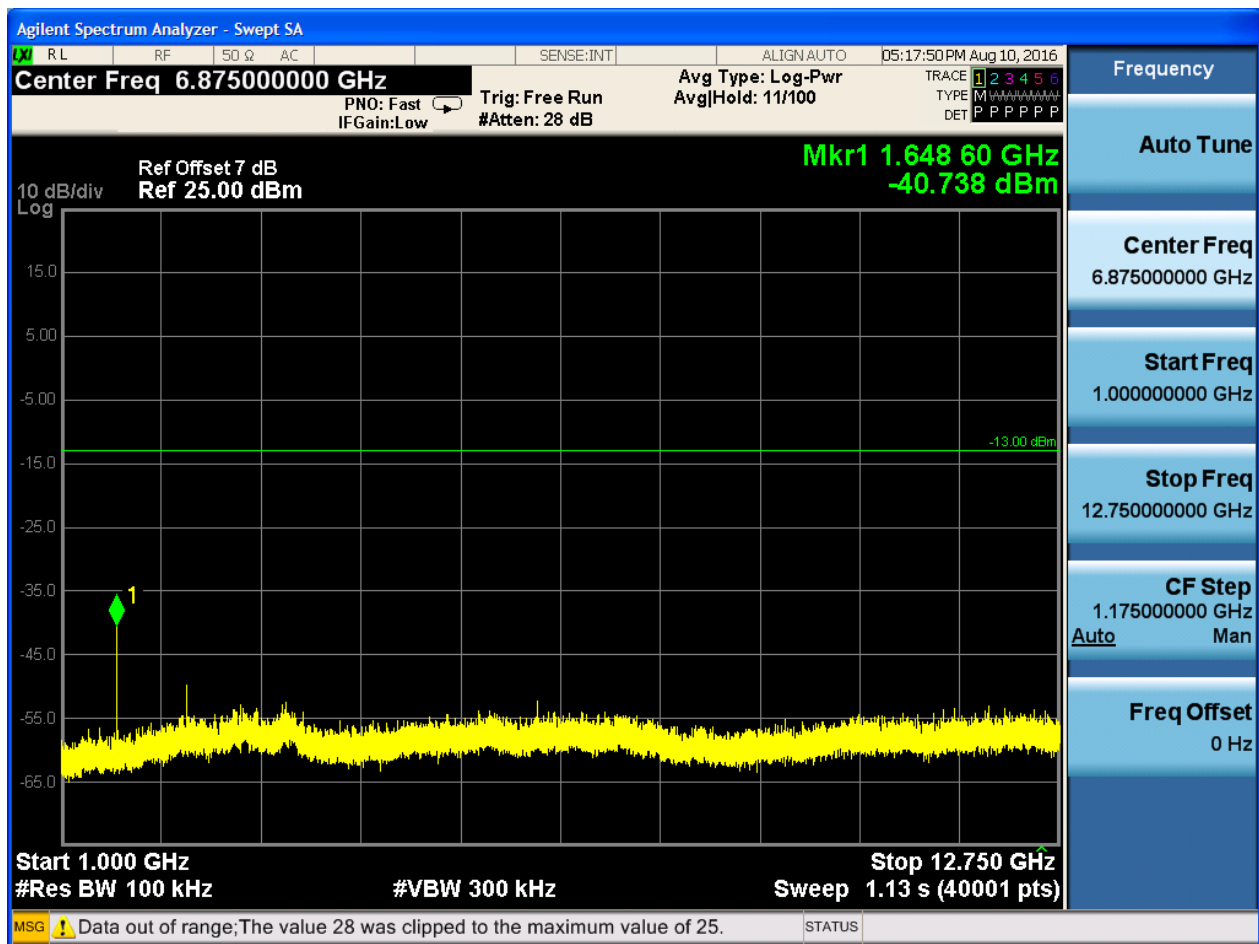
6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0





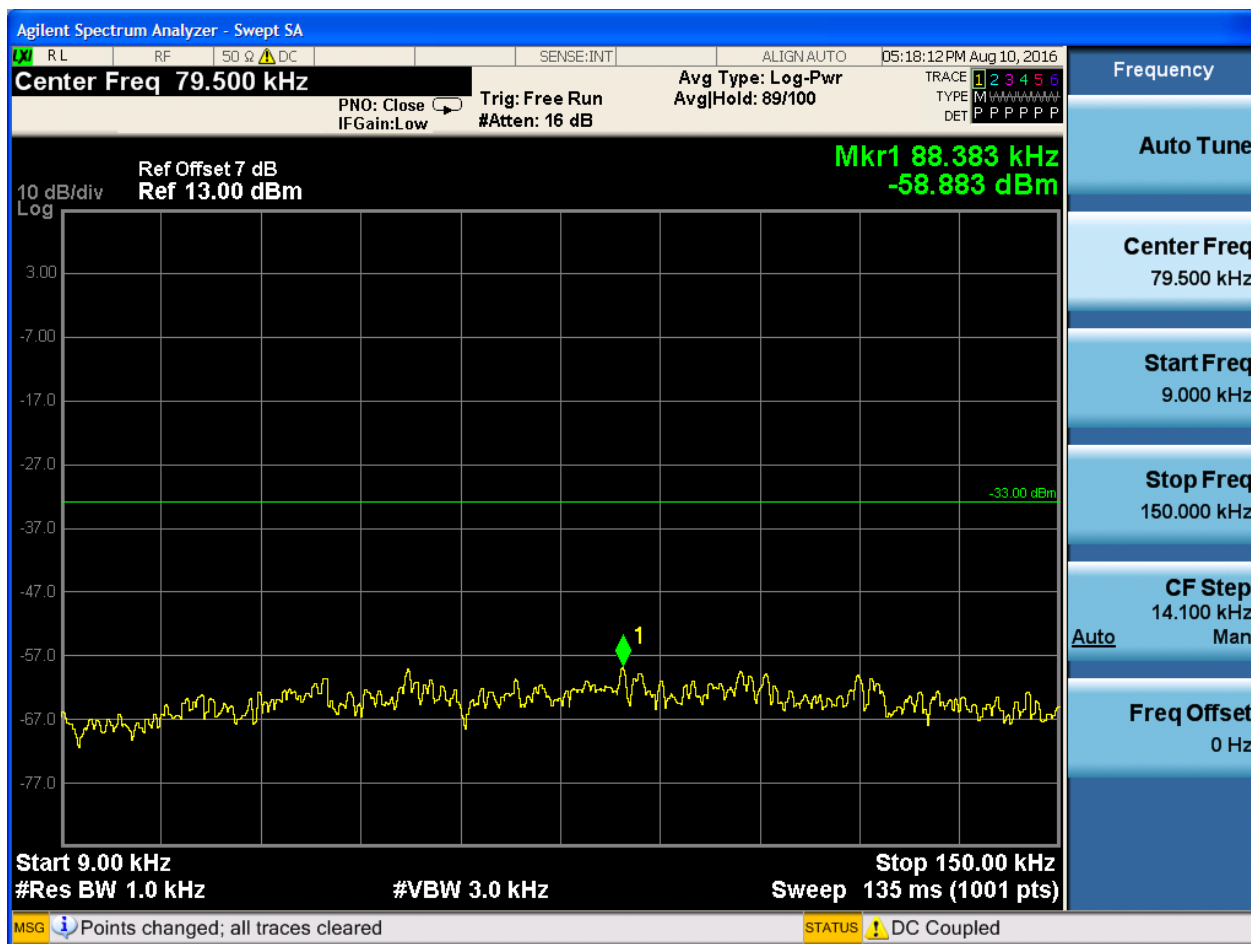




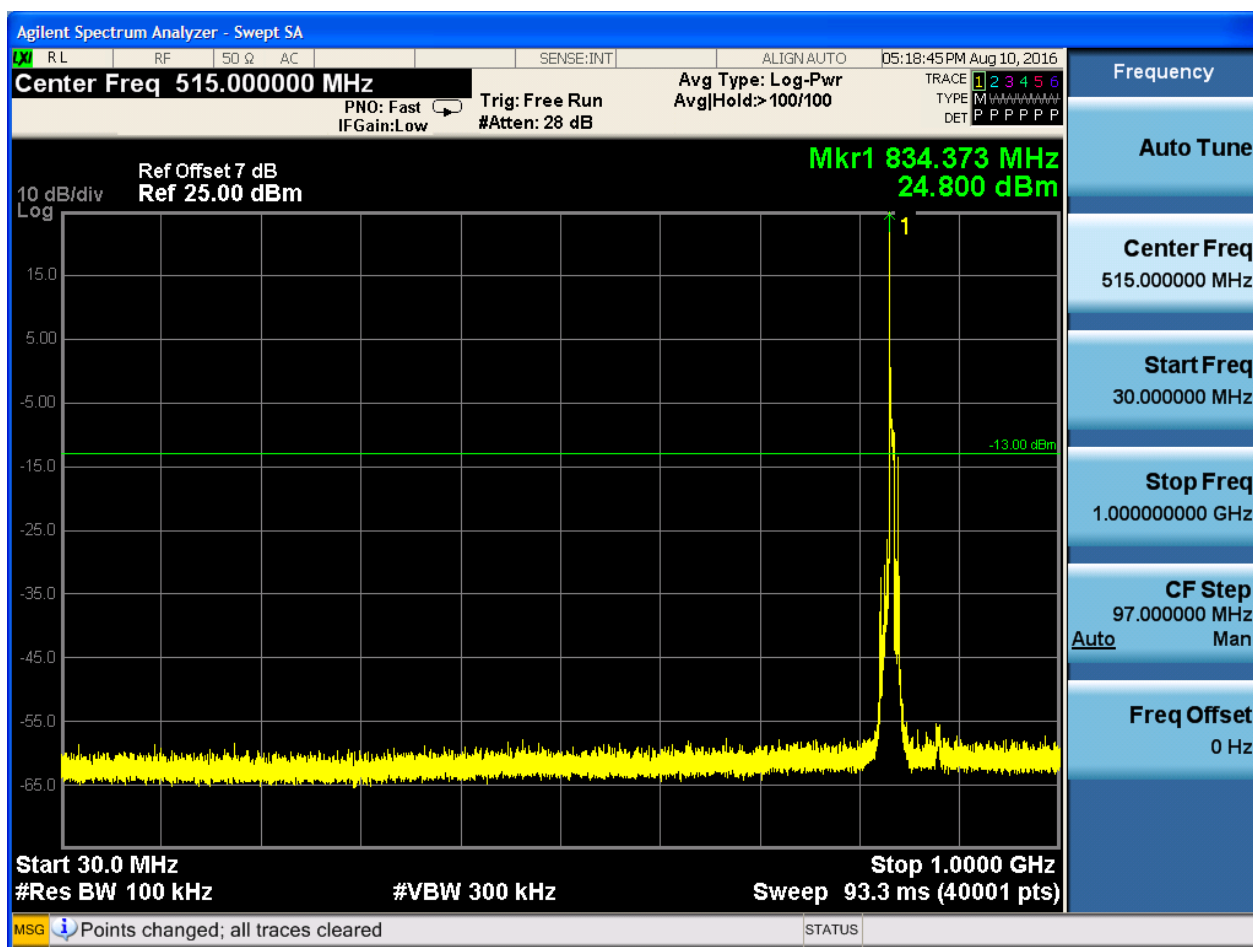


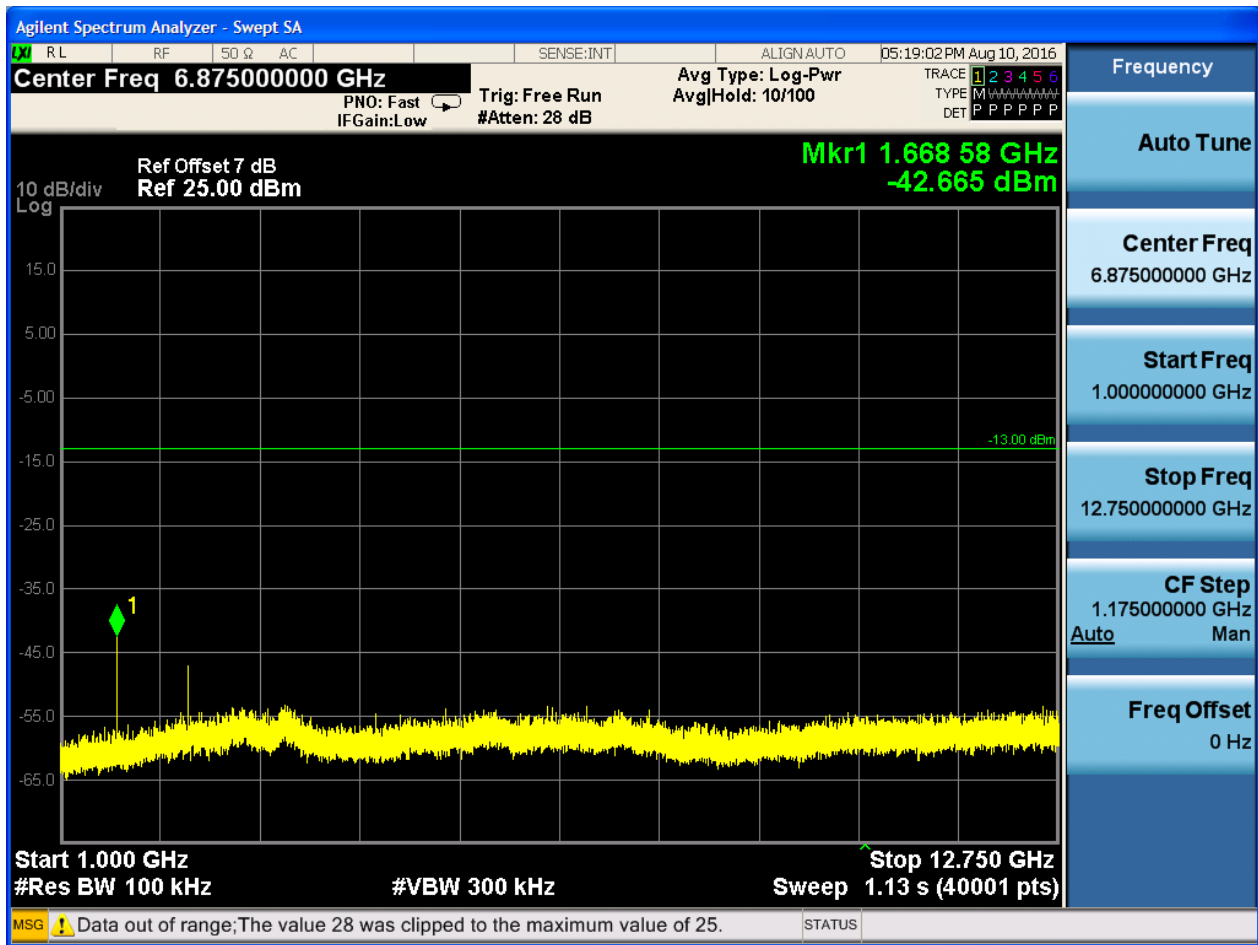
6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0





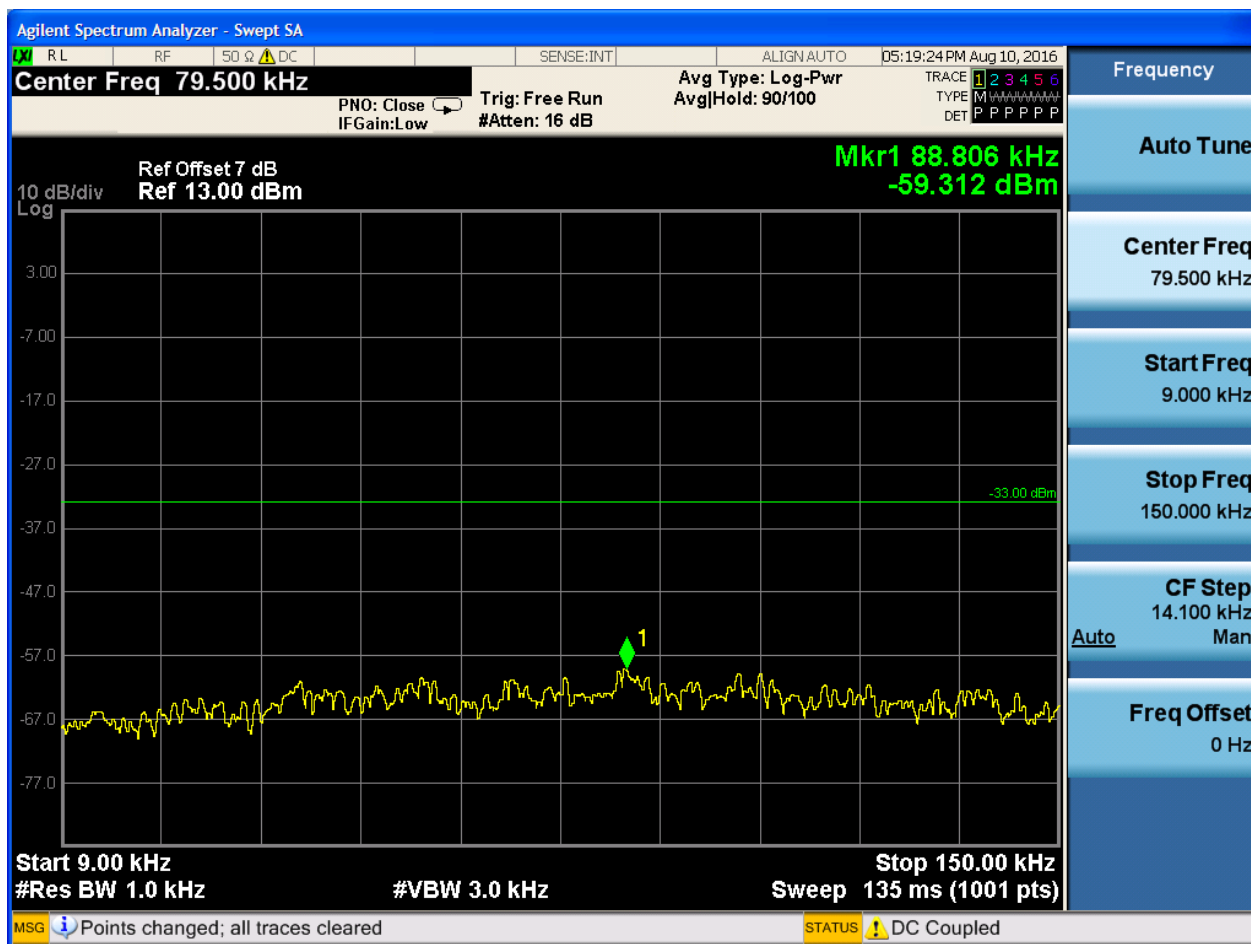


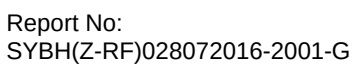


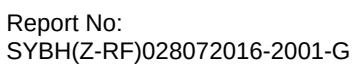


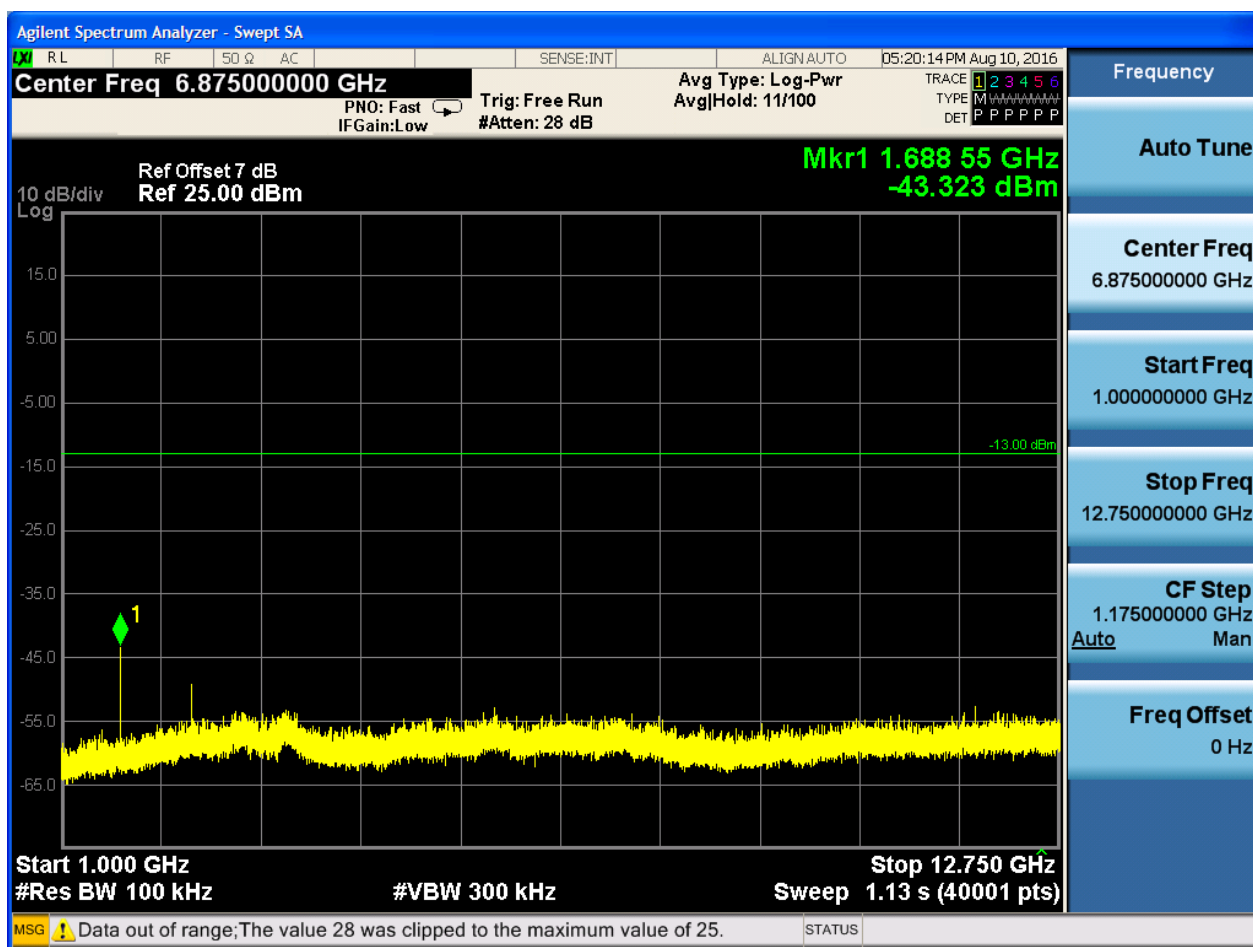
6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0







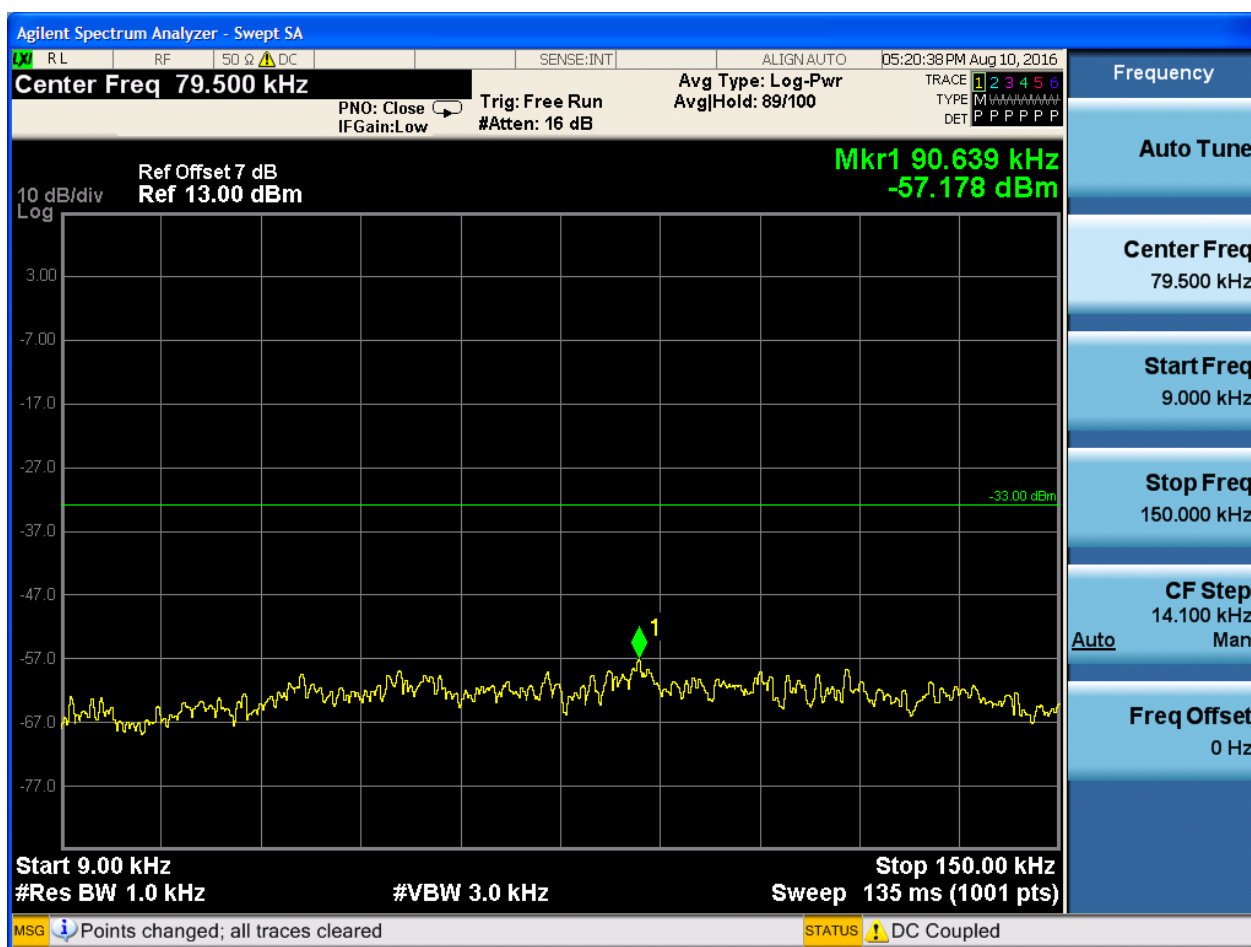




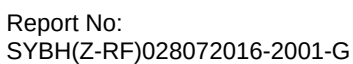
6.1.1.1.4 Test Bandwidth = 10

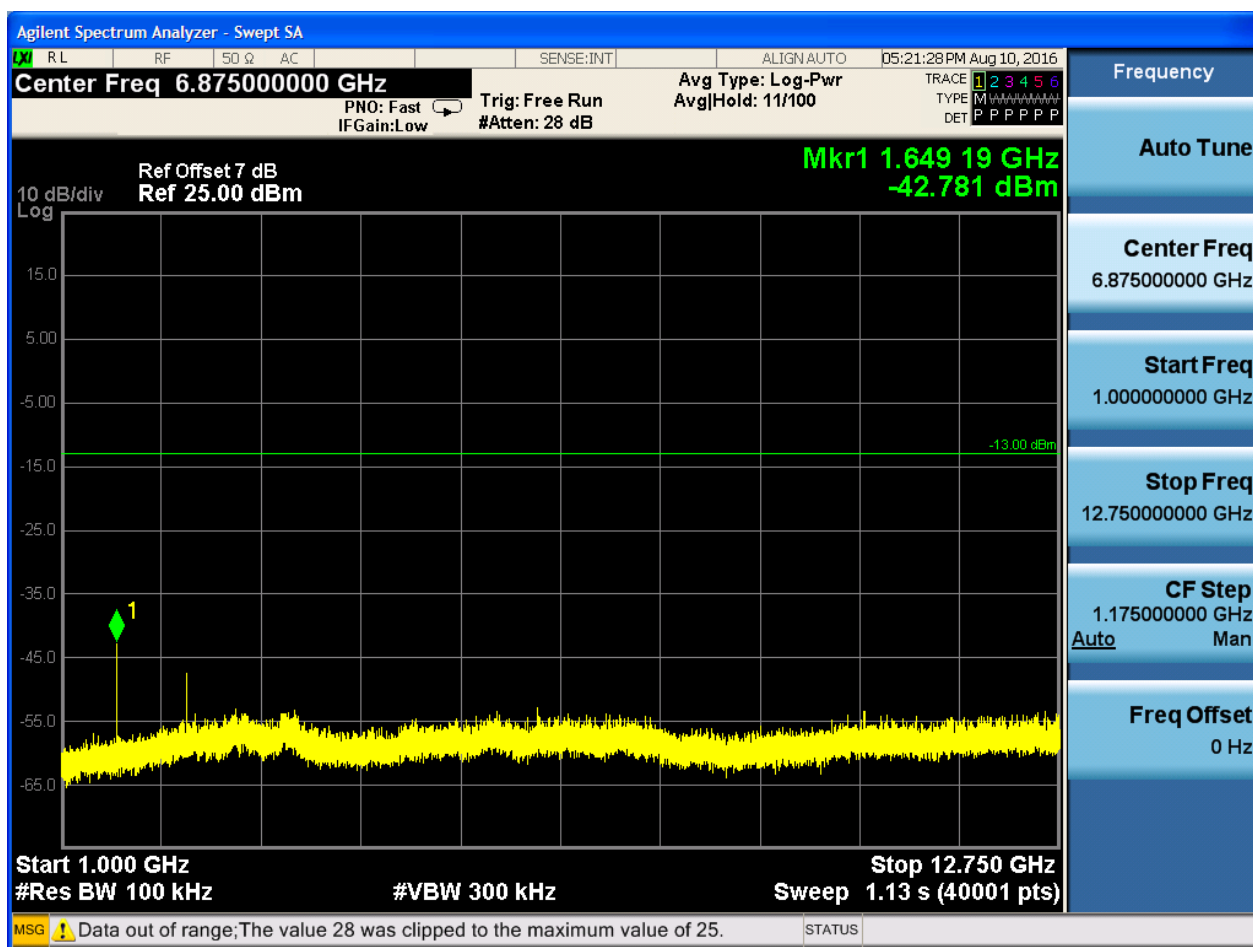
6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0





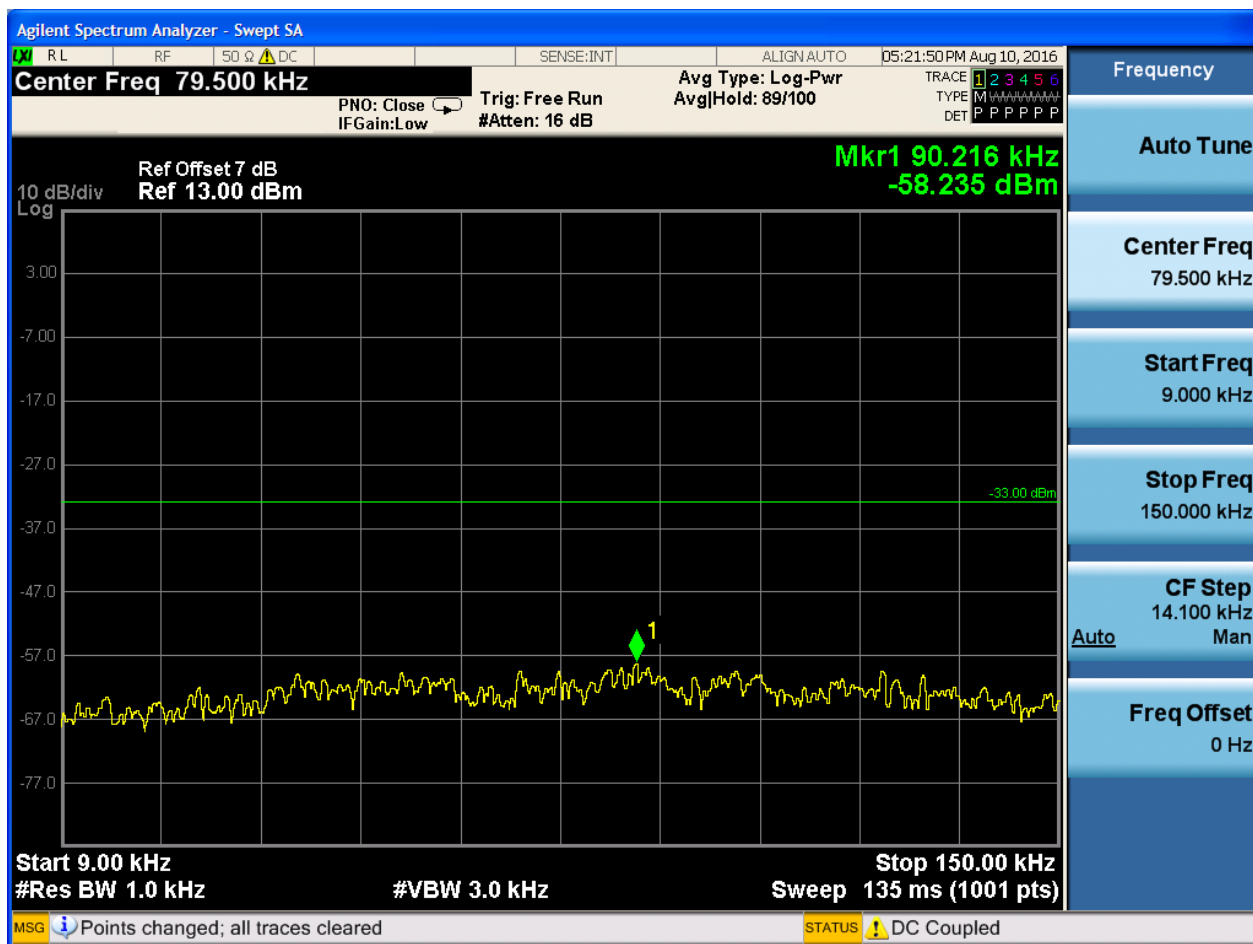


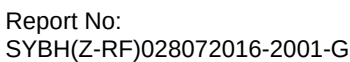


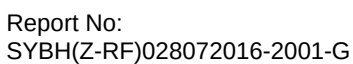


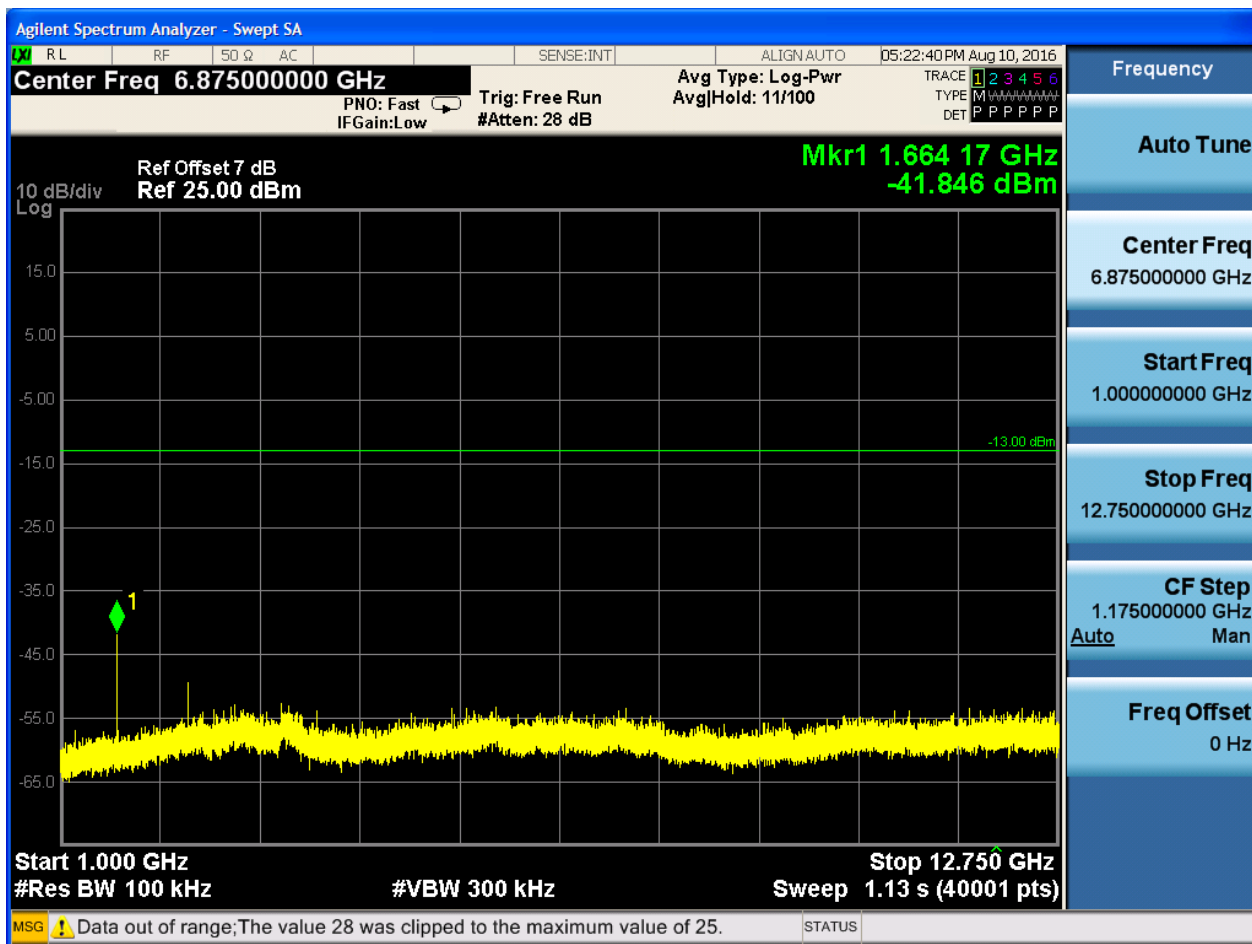
6.1.1.1.4.2 Test Channel = MCH

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

