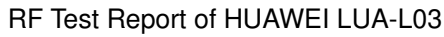




5.1.1.2.1.2.3 Test RB = RB3#2





Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7.5 dB
Ref 30.00 dBm

10 dB/div
Log

Trig: Free Run
#Atten: 36 dB

Avg Type: Pwr(RMS)
AvgHold: 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 849.030 MHz
-31.867 dBm

-13.00 dBm

1

Center 849.000 MHz
#Res BW 15 kHz

#VBW 43 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

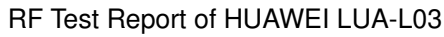
Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Man

Auto

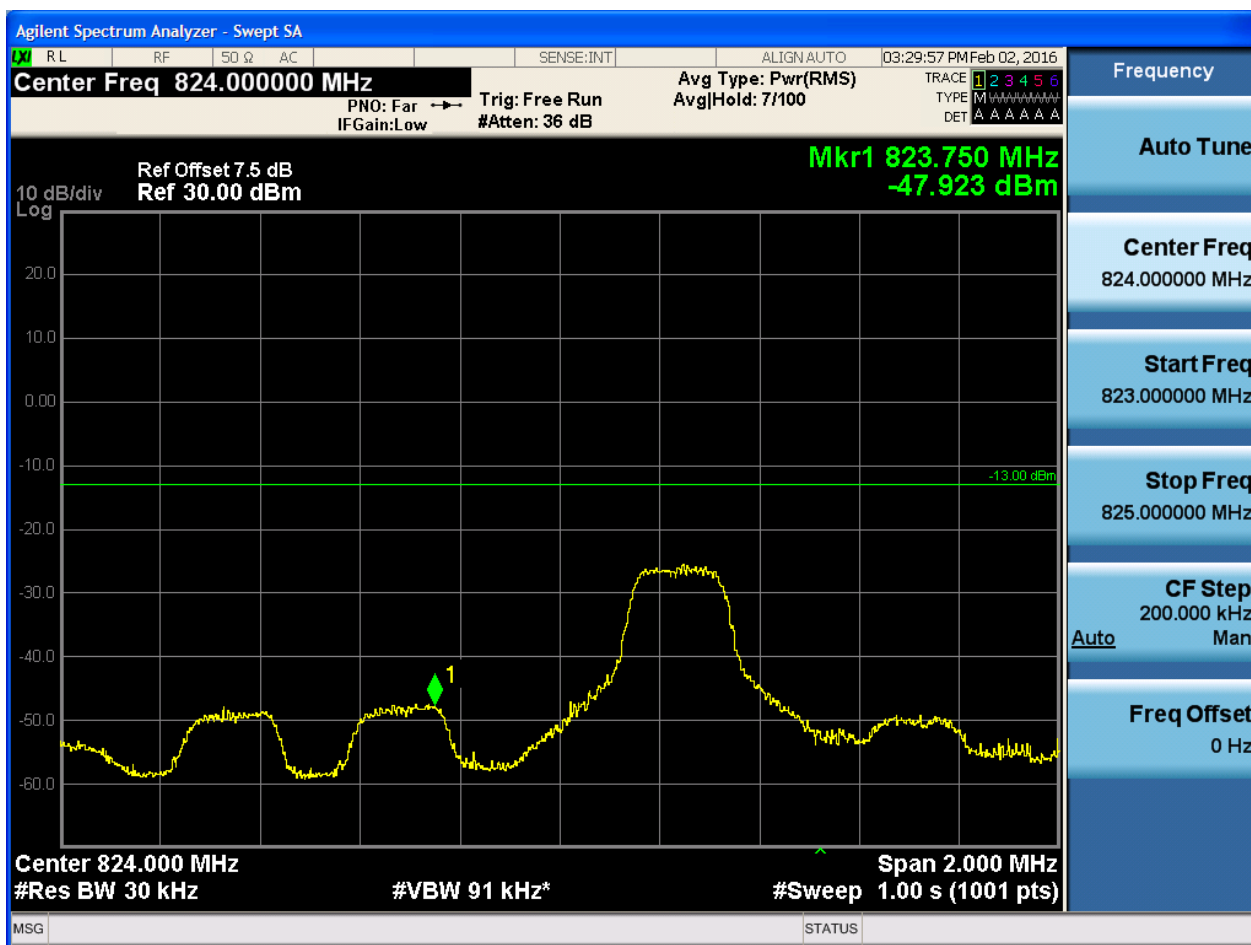
Freq Offset
0 Hz

MSG STATUS



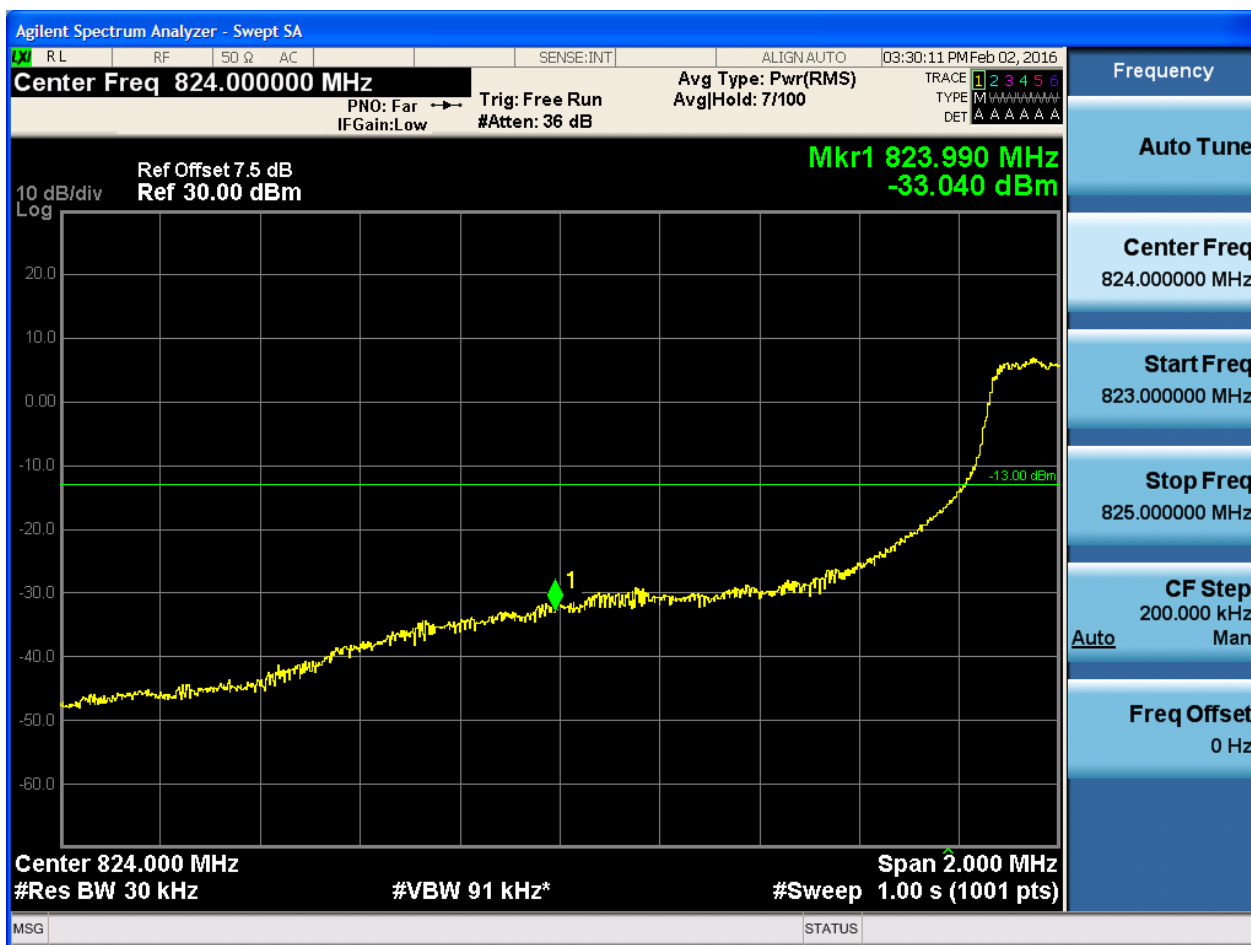


5.1.1.2.2.1.2 Test RB = RB1#14



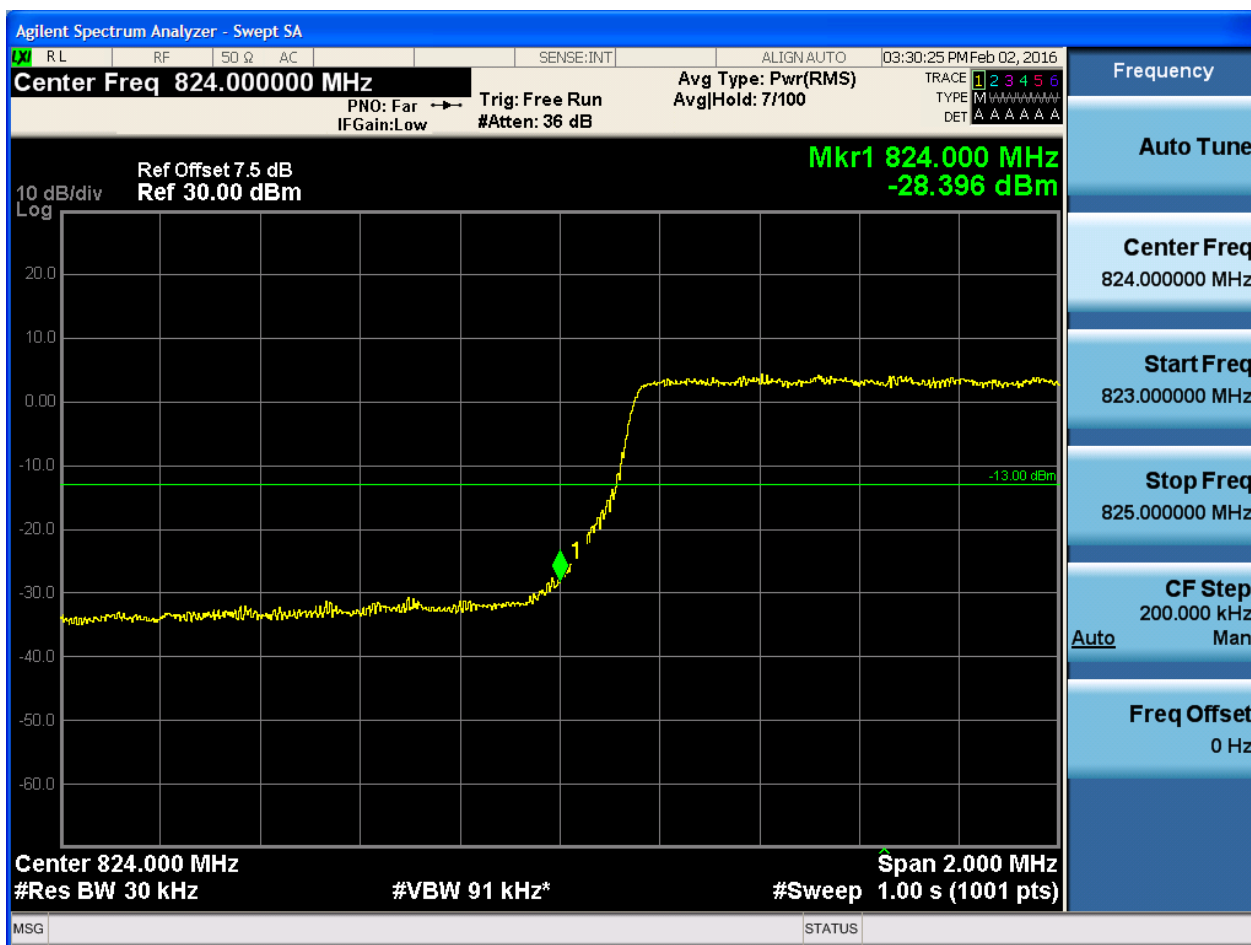


5.1.1.2.2.1.3 Test RB = RB8#4



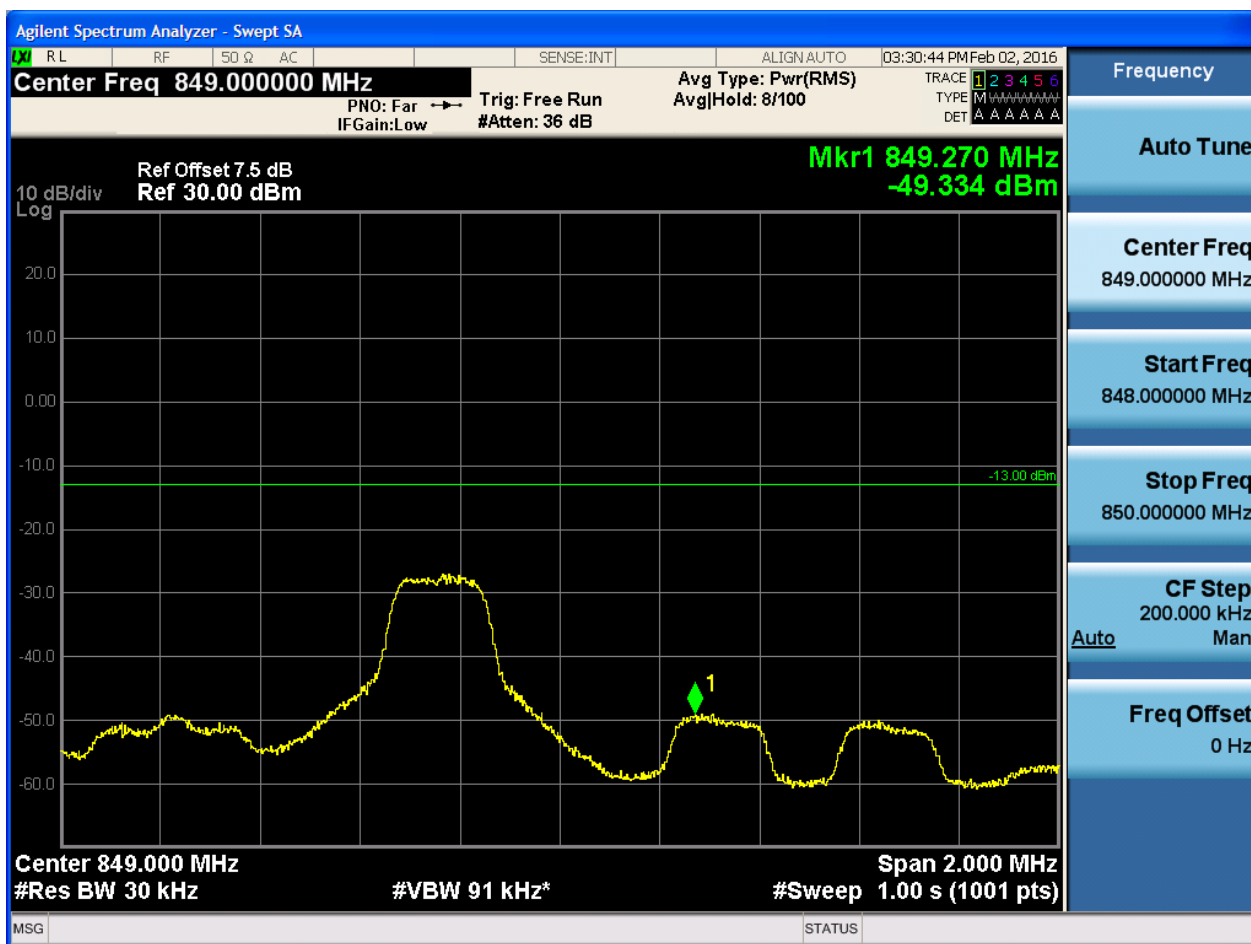


5.1.1.2.2.1.4 Test RB = RB15#0



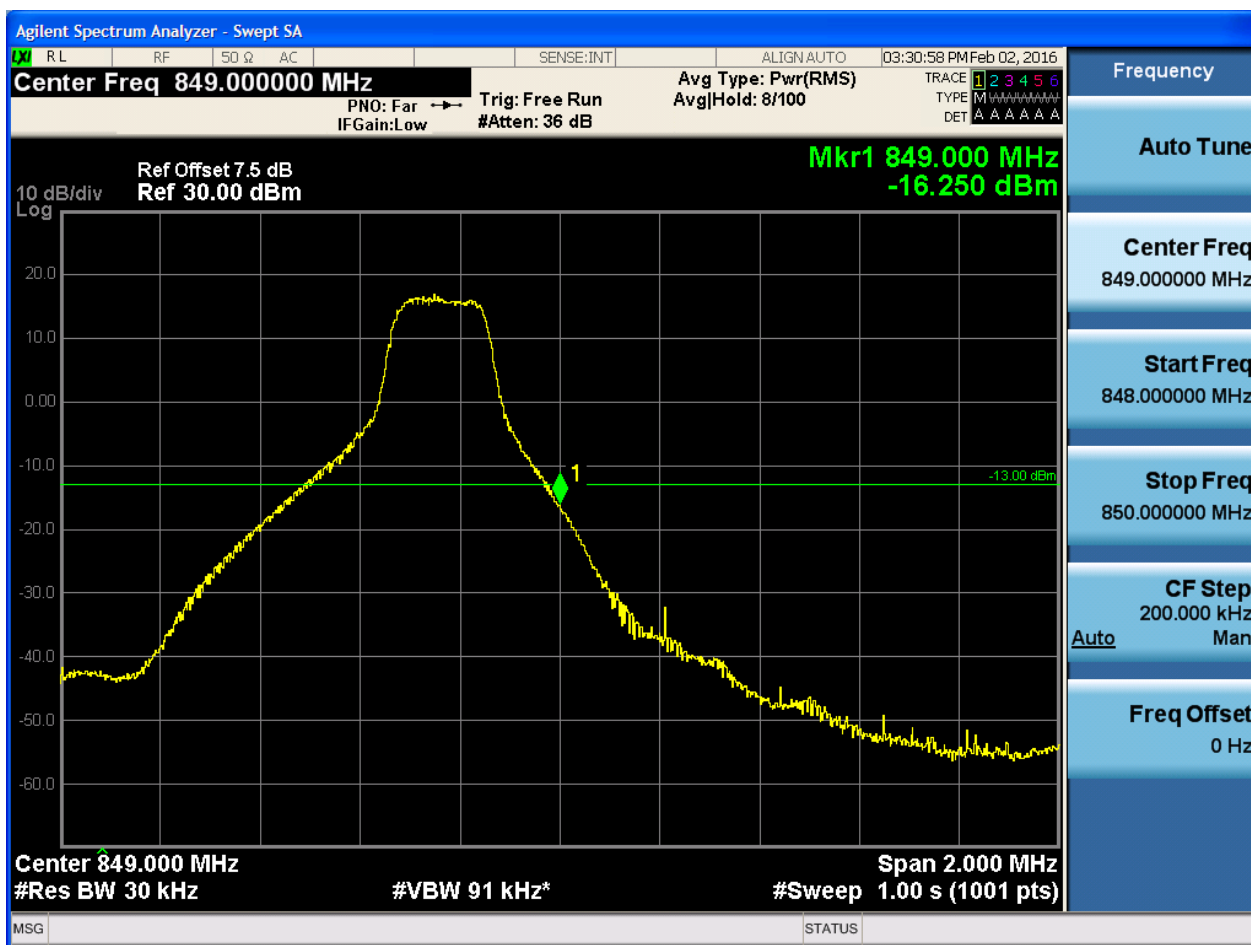
5.1.1.2.2.2 Test Channel = HCH

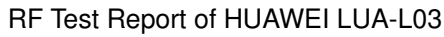
5.1.1.2.2.2.1 Test RB = RB1#0





5.1.1.2.2.2 Test RB = RB1#14





Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7.5 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.030 MHz
-31.673 dBm

Center 849.000 MHz
#Res BW 30 kHz

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

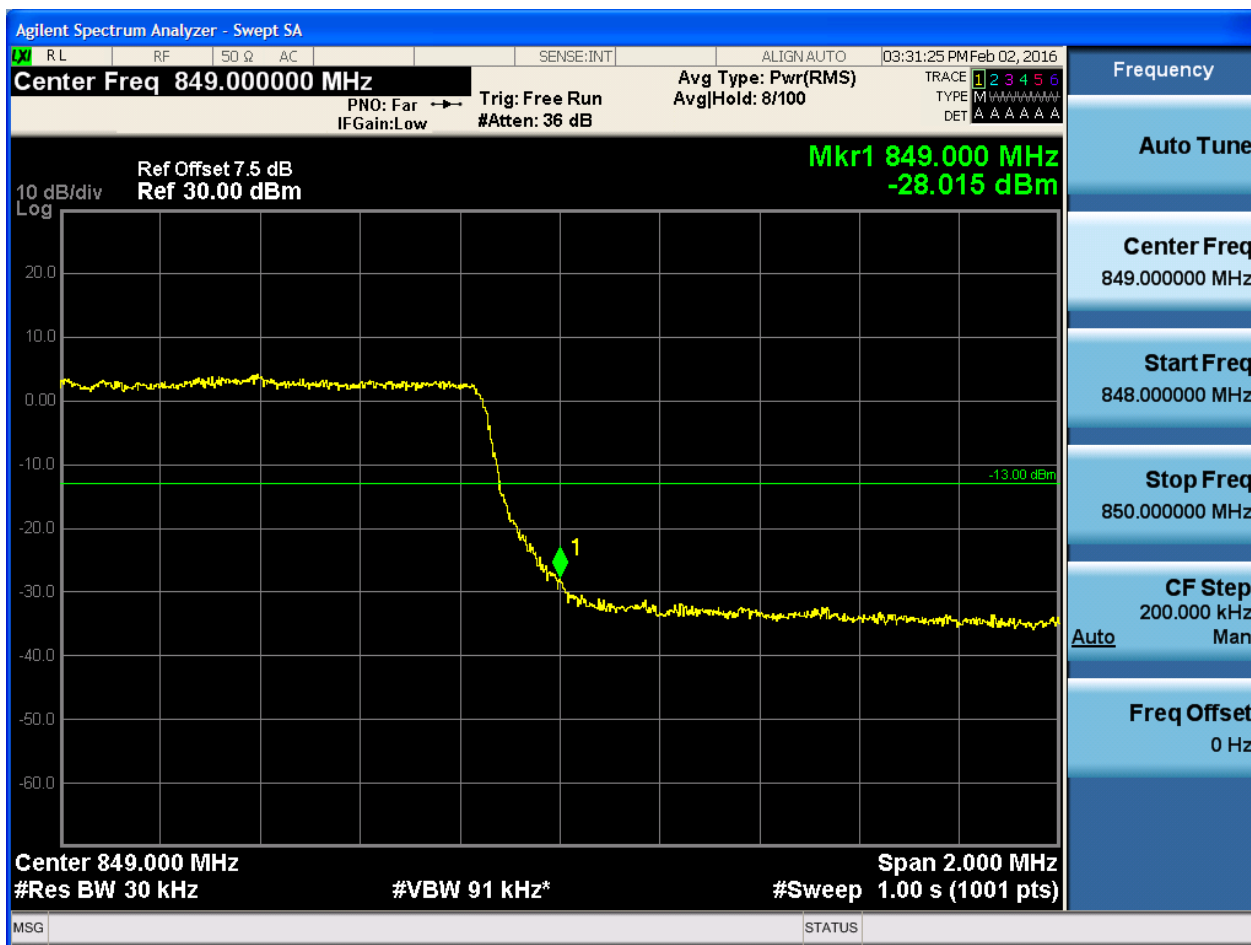
Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

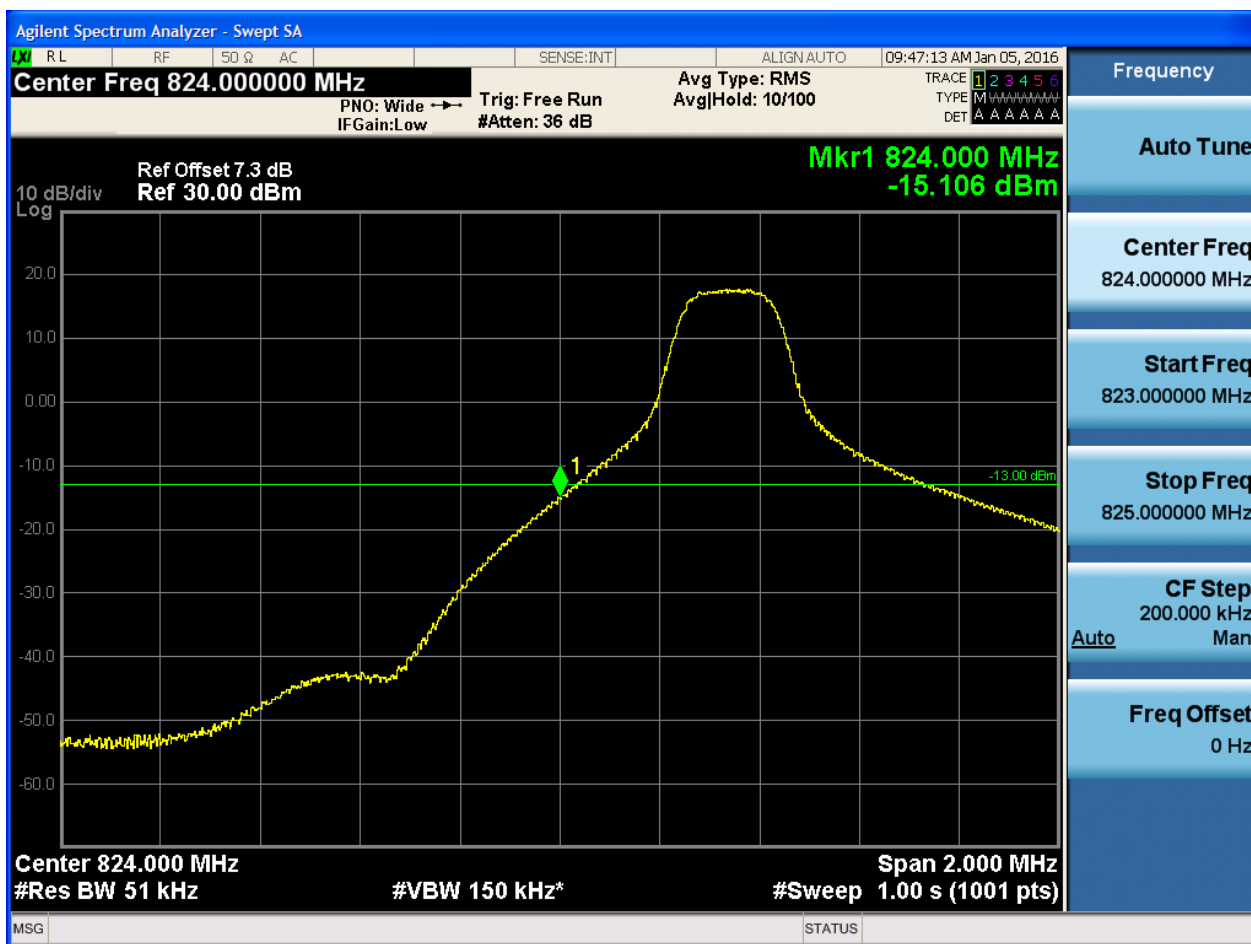
5.1.1.2.2.4 Test RB =
RB15#0



5.1.3.2.1 Test Bandwidth = 5

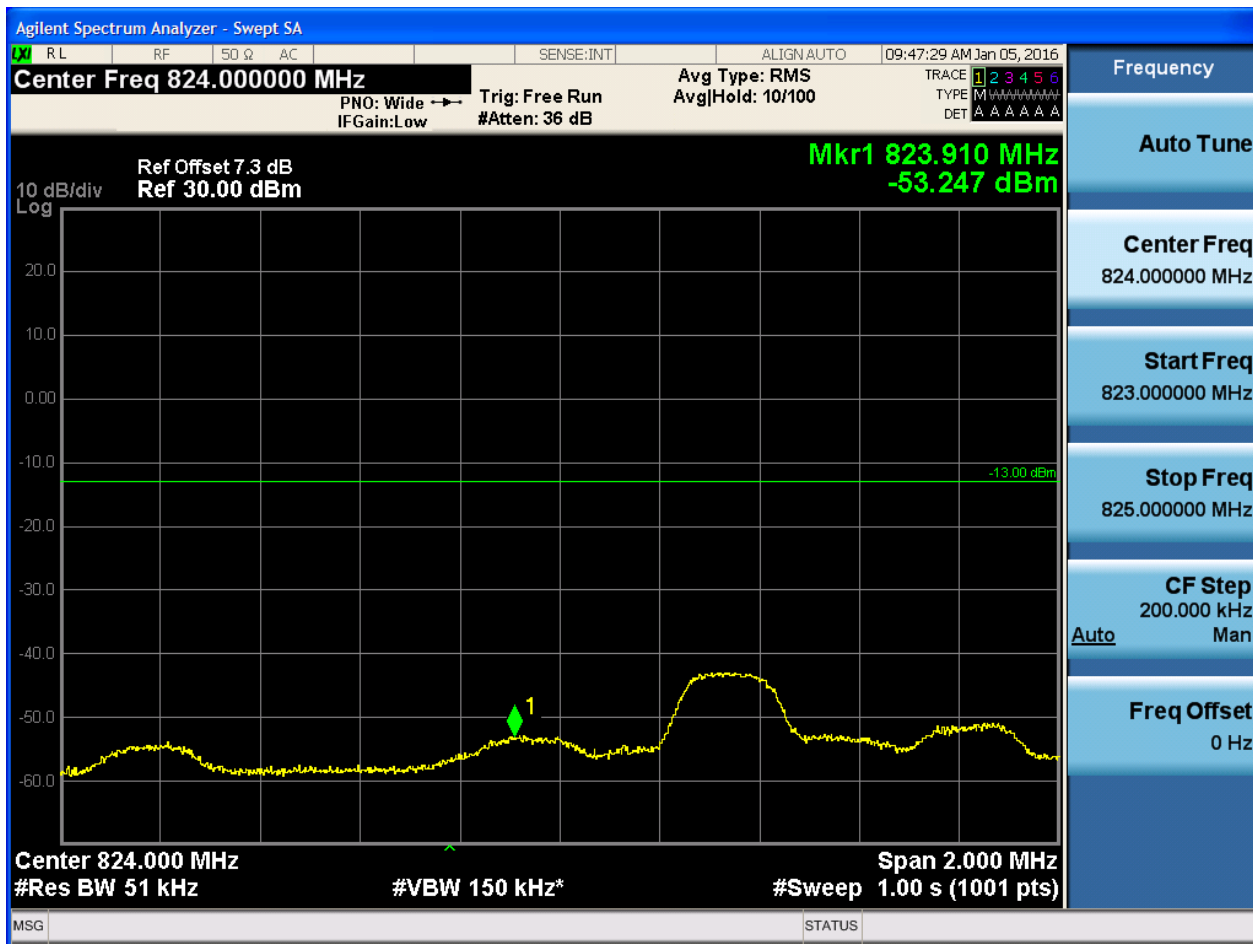
5.1.3.2.1.1 Test Channel = LCH

5.1.3.2.1.1.1 Test RB = RB1#0



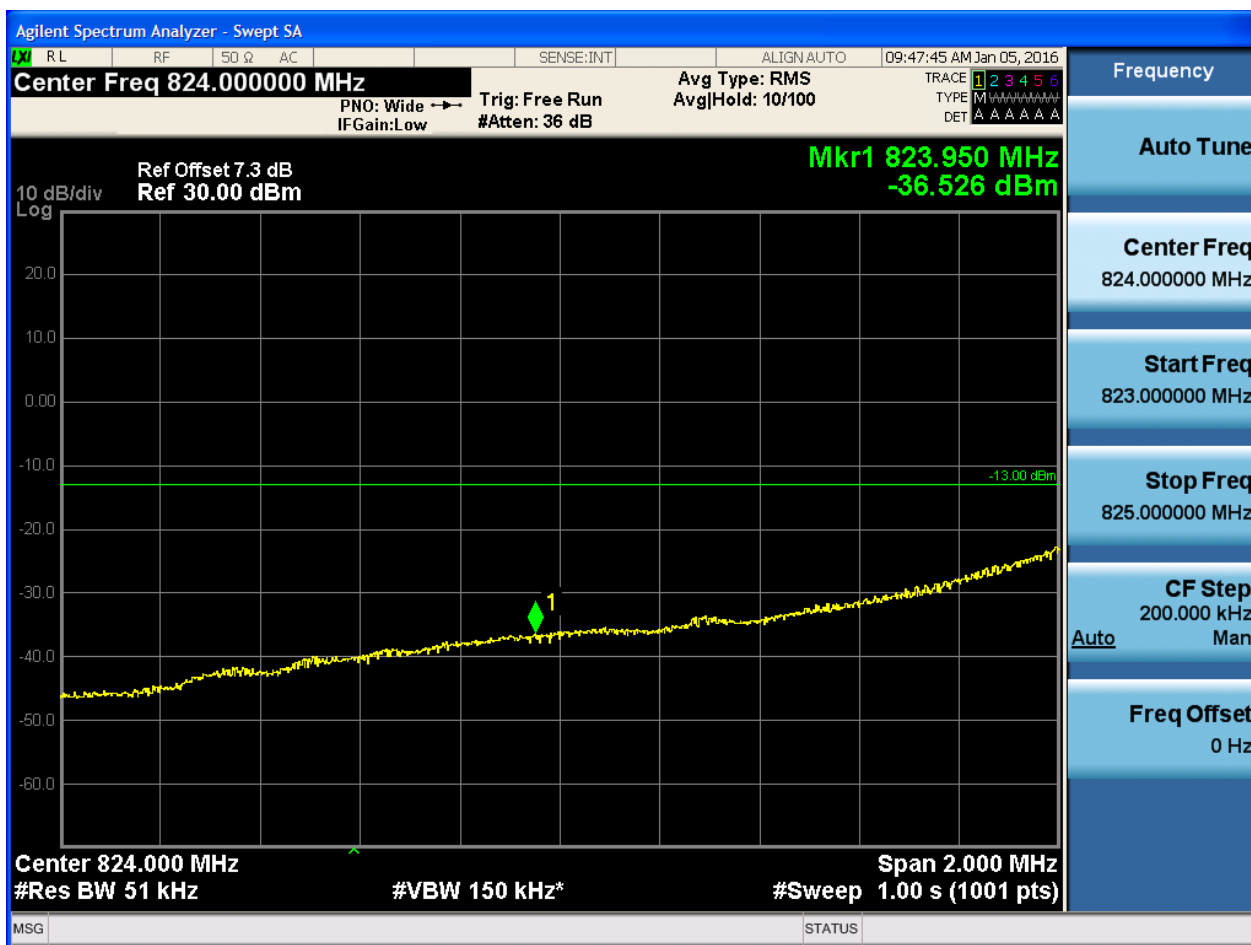


5.1.3.2.1.1.2 Test RB = RB1#24





5.1.3.2.1.1.3 Test RB = RB12#6





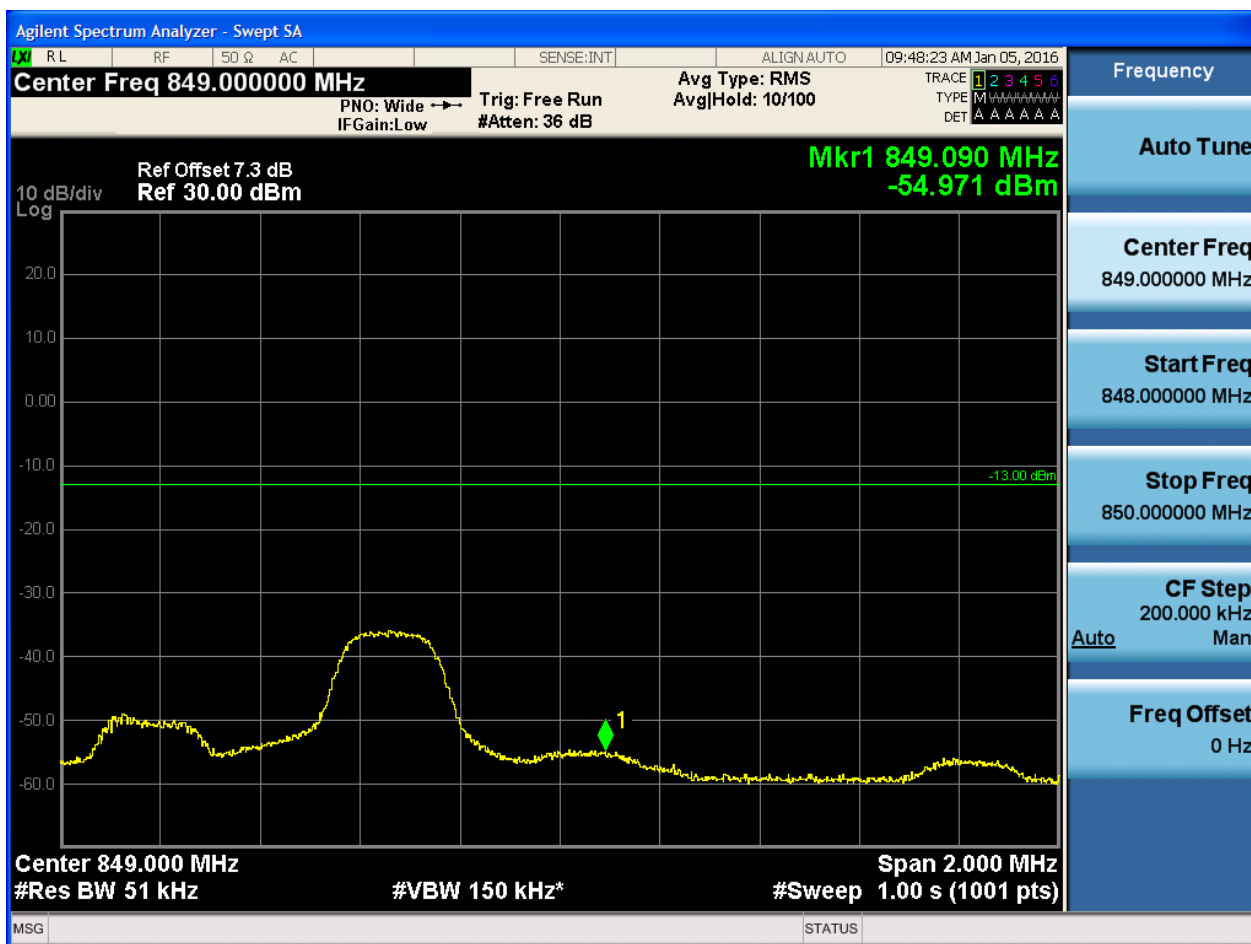
5.1.3.2.1.1.4 Test RB = RB25#0





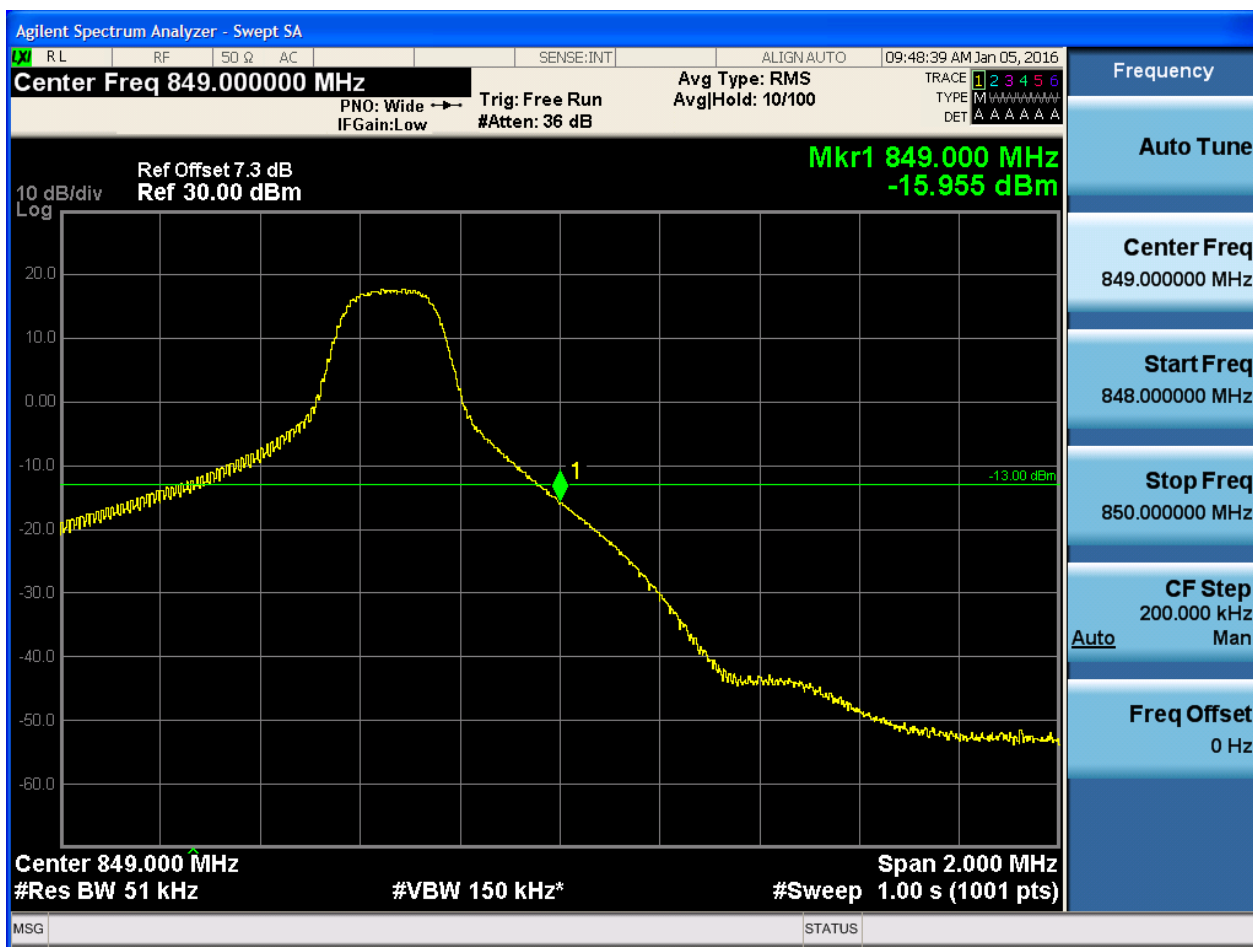
5.1.3.2.1.2 Test Channel = HCH

5.1.3.2.1.2.1 Test RB = RB1#0





5.1.3.2.1.2.2 Test RB = RB1#24





5.1.3.2.1.2.3 Test RB = RB12#6





5.1.3.2.1.2.4 Test RB = RB25#0

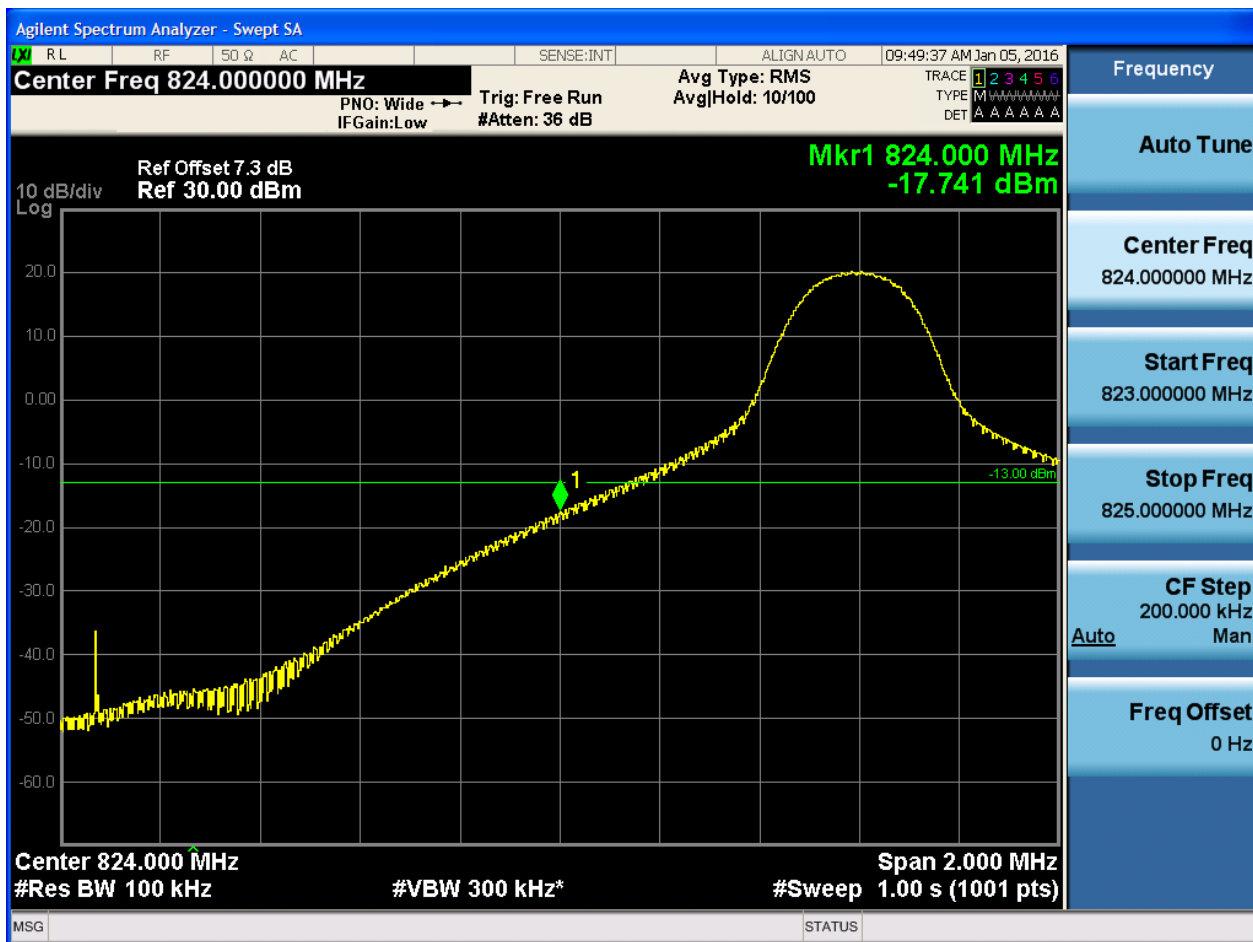




5.1.3.2.2 Test Bandwidth = 10

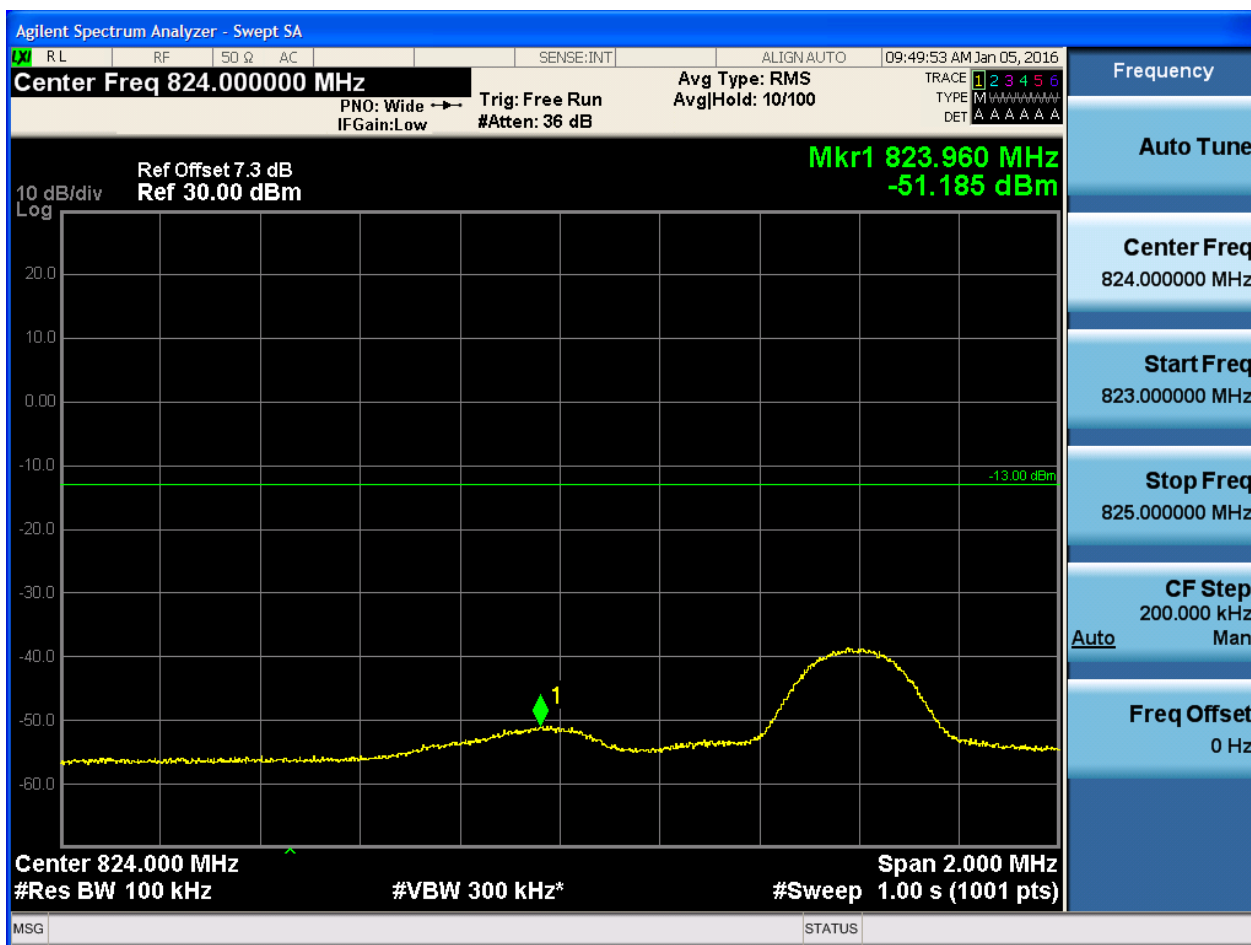
5.1.3.2.2.1 Test Channel = LCH

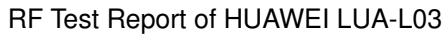
5.1.3.2.2.1.1 Test RB = RB1#0





5.1.3.2.2.1.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 7.3 dB
Ref 30.00 dBm

10 dB/div
Log

Center 824.000 MHz
#Res BW 100 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

Auto

Freq Offset
0 Hz

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

Center Freq 824.000000 MHz

Ref Offset 7.3 dB
Ref 30.00 dBm

10 dB/div
Log

Center 824.000 MHz
#Res BW 100 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

Auto

Freq Offset
0 Hz

MSG

STATUS

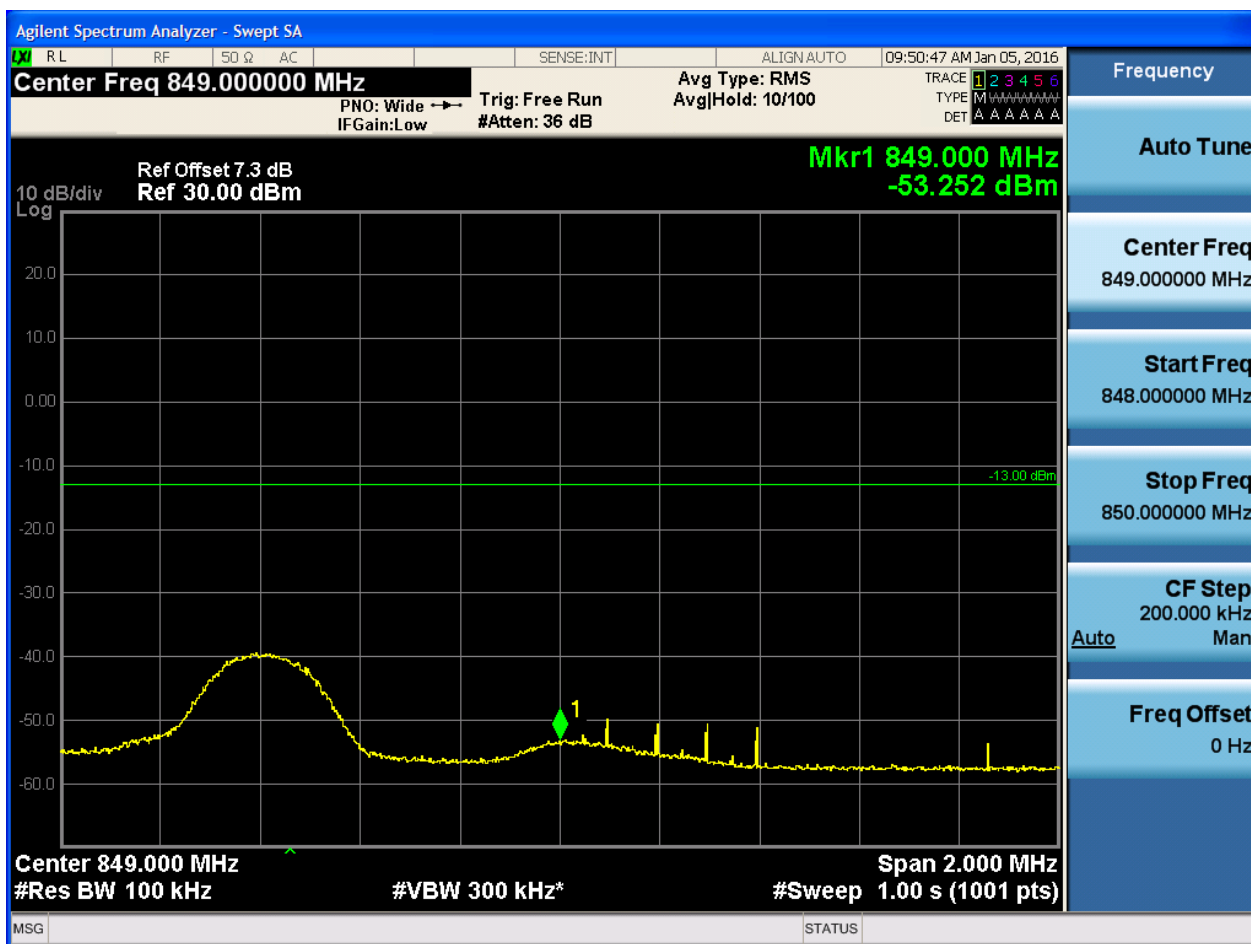


5.1.3.2.2.1.4 Test RB = RB50#0



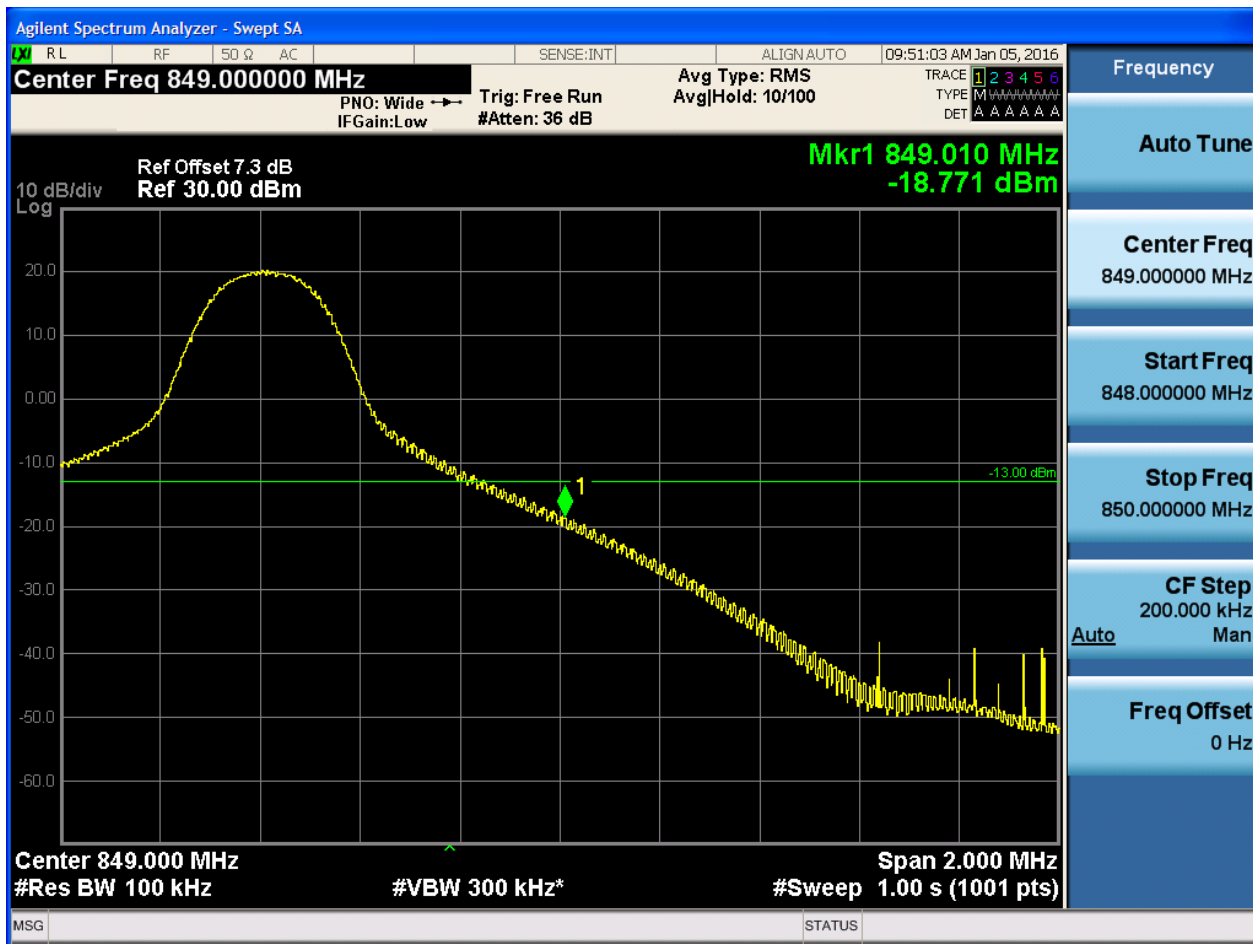
5.1.3.2.2.2 Test Channel = HCH

5.1.3.2.2.2.1 Test RB = RB1#0





5.1.3.2.2.2 Test RB = RB1#49





5.1.3.2.2.3 Test RB = RB25#13





5.1.3.2.2.4 Test RB = RB50#0





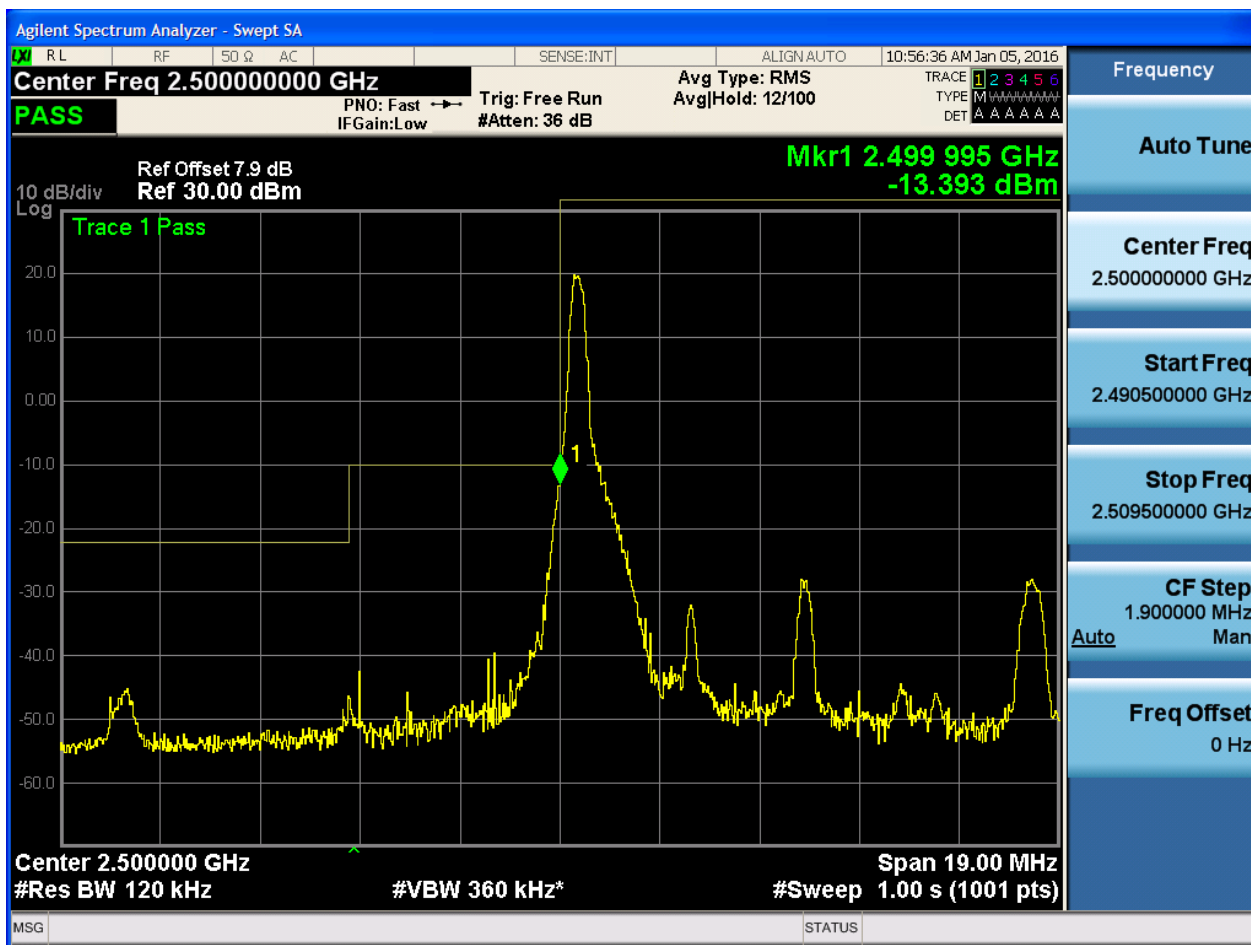
5.1.4 Test Band = BAND7

5.1.4.1 Test Mode = LTE/TM1

5.1.4.1.1 Test Bandwidth = 5

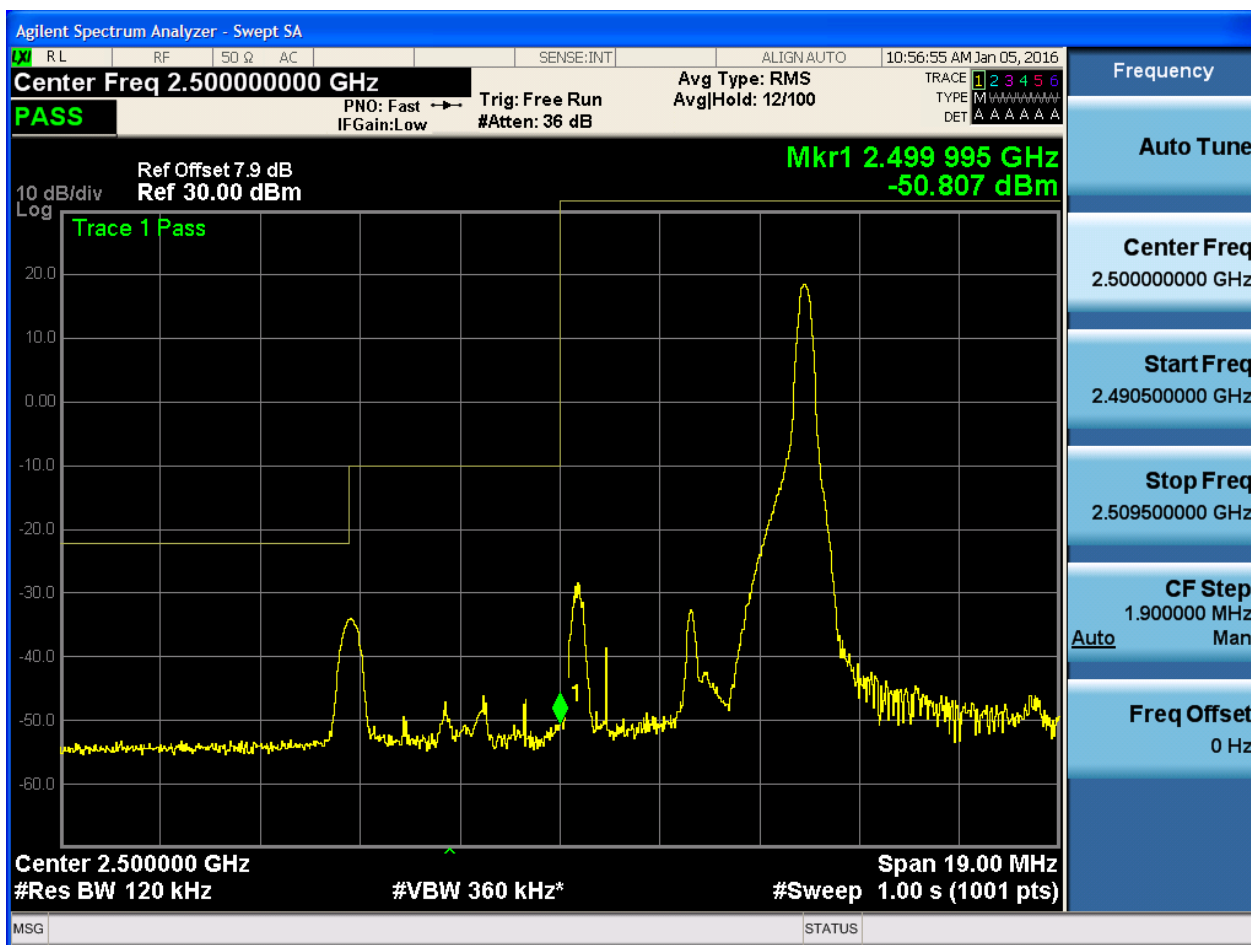
5.1.4.1.1.1 Test Channel = LCH

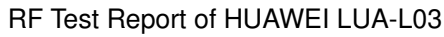
5.1.4.1.1.1.1 Test RB = RB1#0





5.1.4.1.1.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.50000000 GHz

Ref Offset 7.9 dB
Ref 30.00 dBm

Trace 1 Pass

Mkr1 2.499 995 GHz
-36.477 dBm

Center 2.500000 GHz
#Res BW 120 kHz
#VBW 360 kHz*
Span 19.00 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

Center Freq
2.50000000 GHz

Start Freq
2.490500000 GHz

Stop Freq
2.509500000 GHz

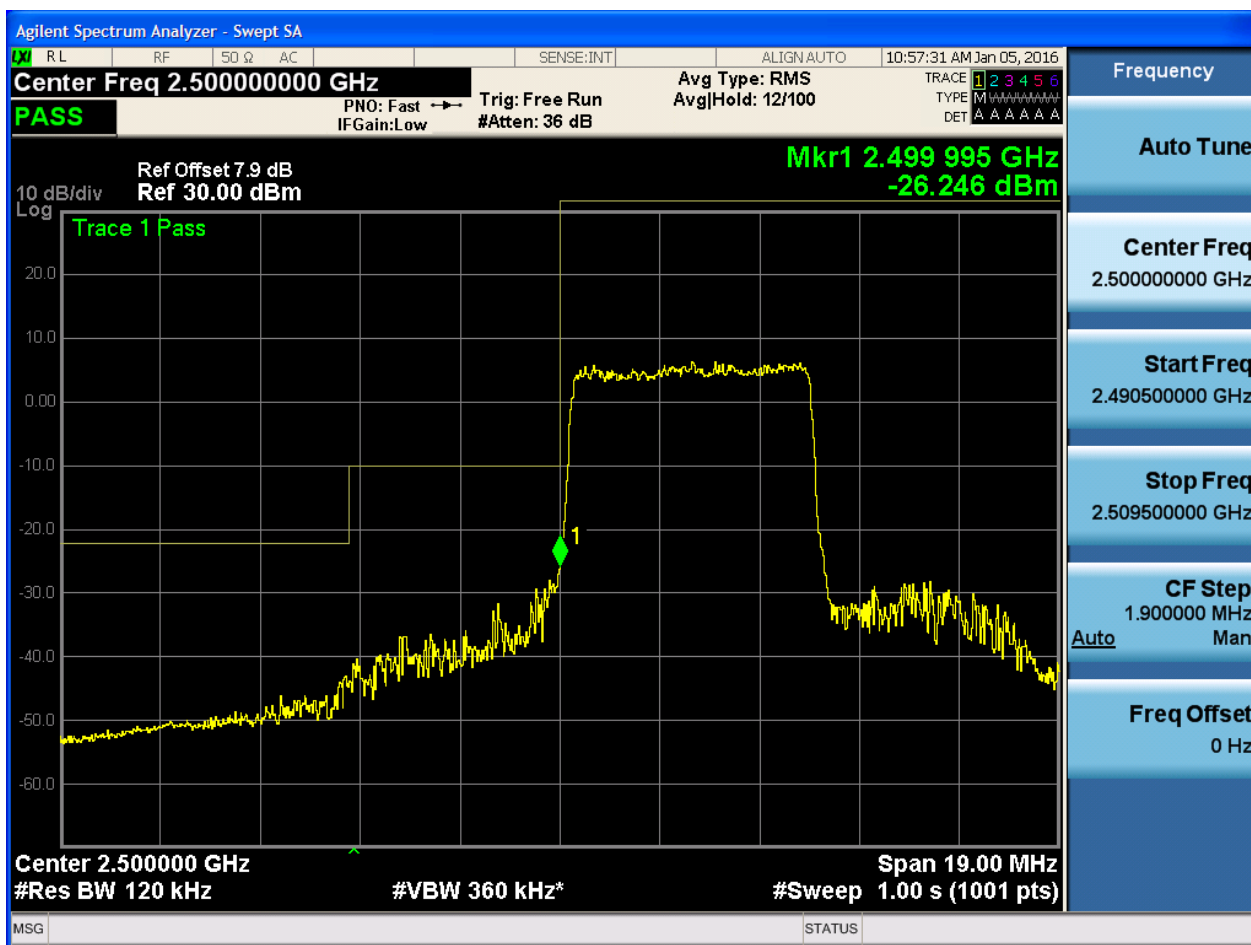
CF Step
1.900000 MHz
Man

Freq Offset
0 Hz

The image shows a screenshot of an Agilent Spectrum Analyzer. The main display is a plot of power spectral density (PSD) in dBm versus frequency in GHz. The plot shows a noisy baseline with a prominent peak at 2.499995 GHz, which is marked with a green diamond and labeled 'Mkr1'. The peak power is -36.477 dBm. The plot is titled 'Trace 1 Pass'. The center frequency is 2.50000000 GHz, and the span is 19.00 MHz. The resolution bandwidth (RBW) is 120 kHz, and the video bandwidth (VBW) is 360 kHz. The sweep time is 1.00 s. The plot is displayed on a grid with a vertical scale from -60.0 to 20.0 dBm and a horizontal scale from 2.4905 to 2.5095 GHz. The plot is titled 'Trace 1 Pass'. The plot is displayed on a grid with a vertical scale from -60.0 to 20.0 dBm and a horizontal scale from 2.4905 to 2.5095 GHz.



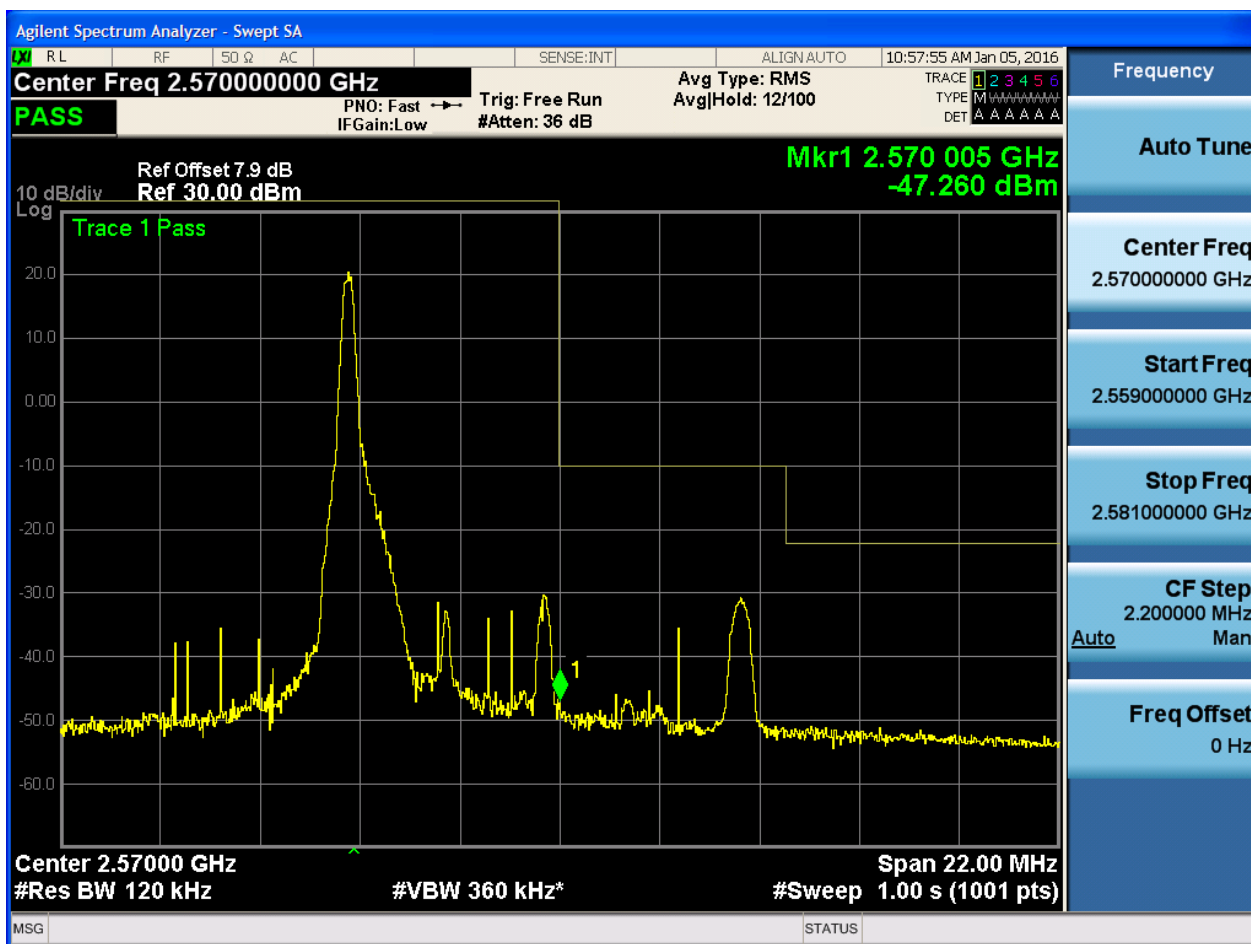
5.1.4.1.1.4 Test RB = RB25#0





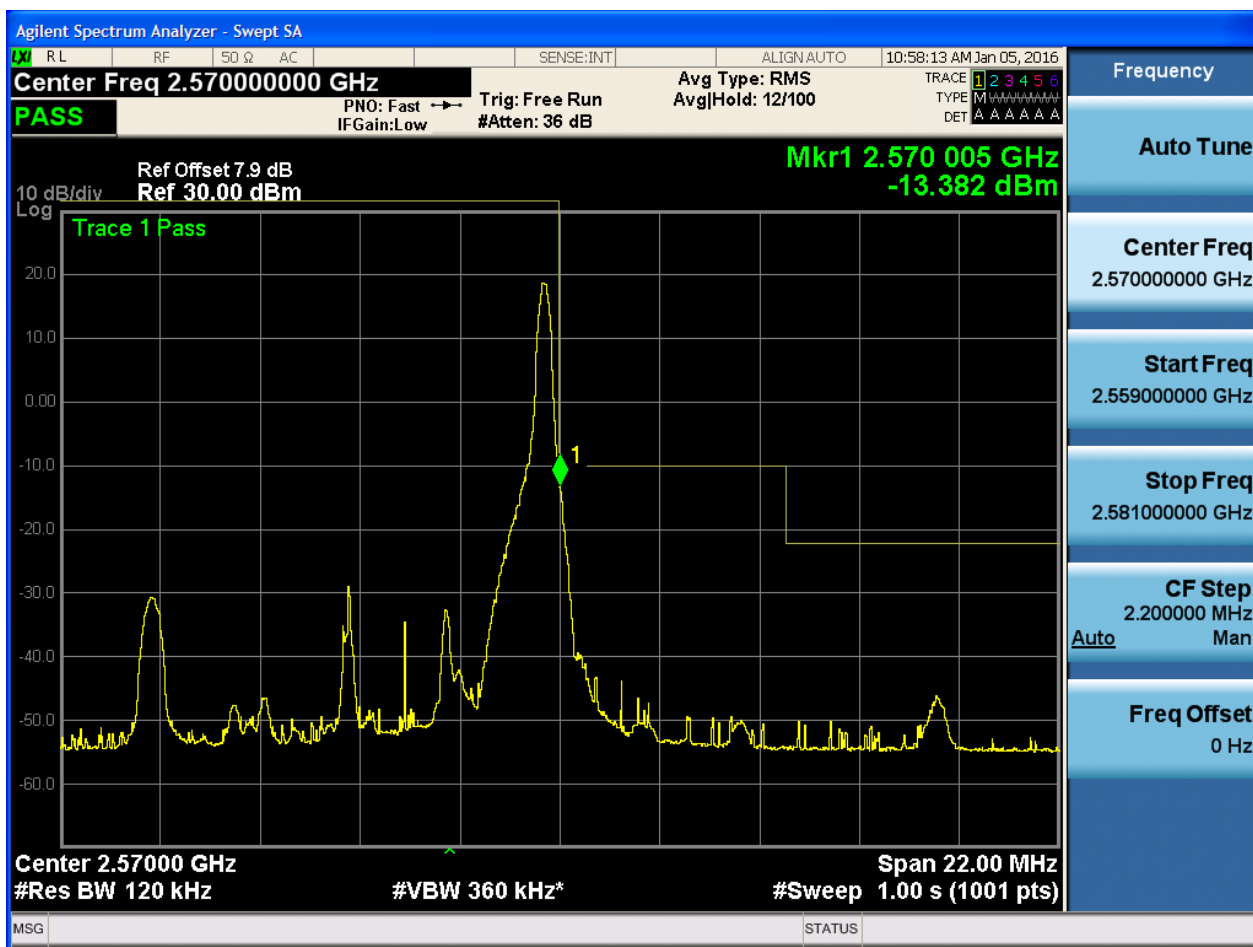
5.1.4.1.1.2 Test Channel = HCH

5.1.4.1.1.2.1 Test RB = RB1#0



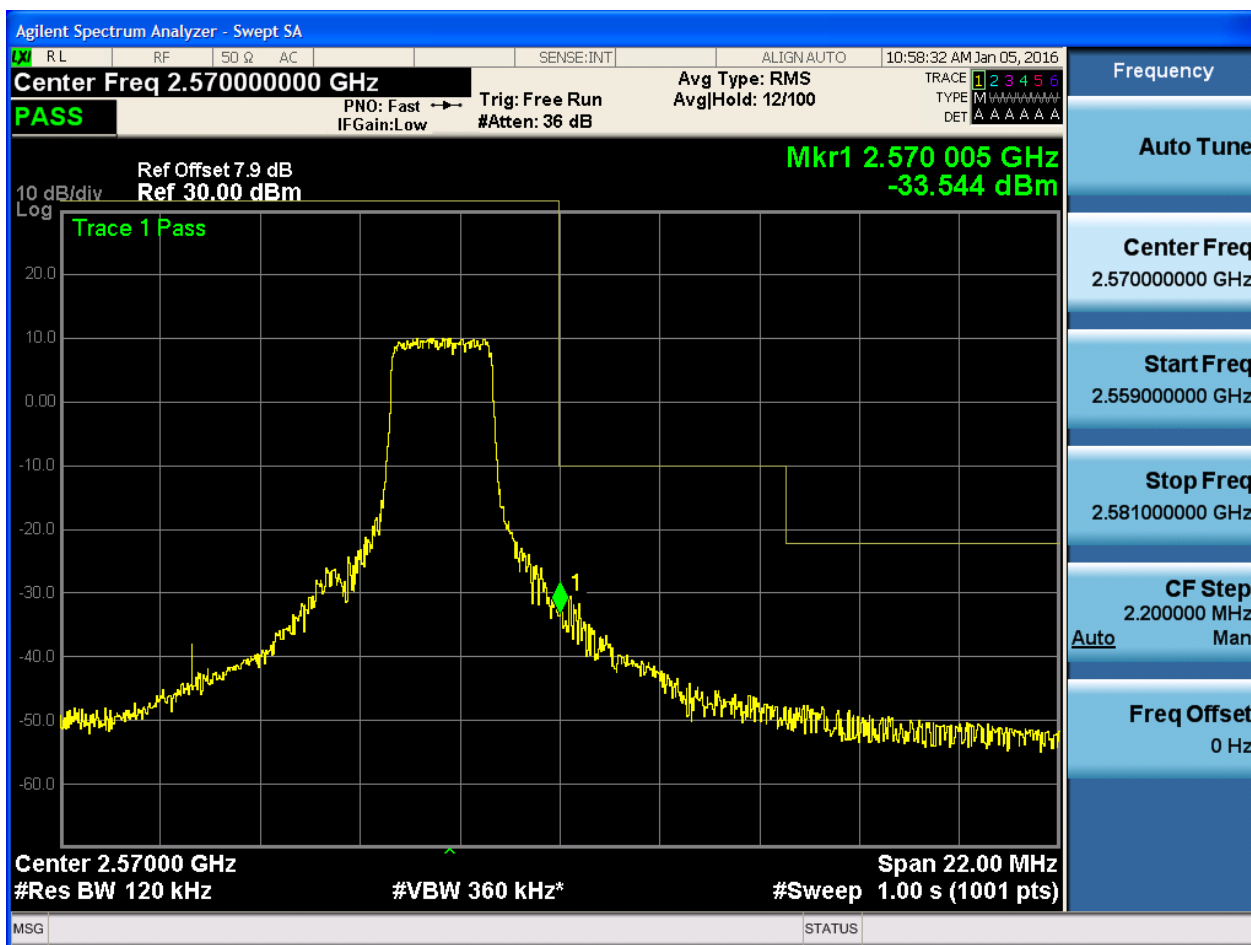


5.1.4.1.1.2.2 Test RB = RB1#24



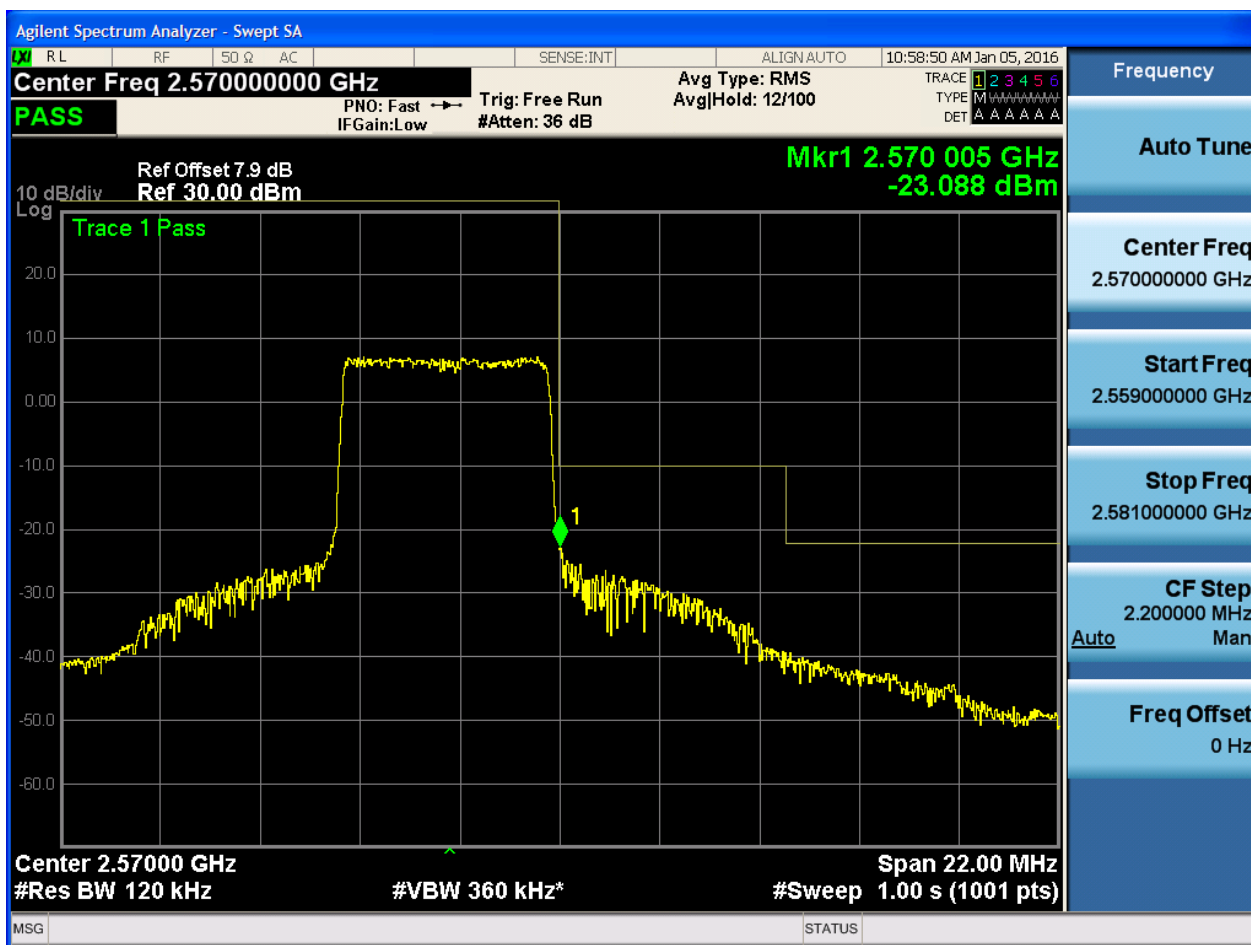


5.1.4.1.1.2.3 Test RB = RB12#6





5.1.4.1.1.2.4 Test RB = RB25#0

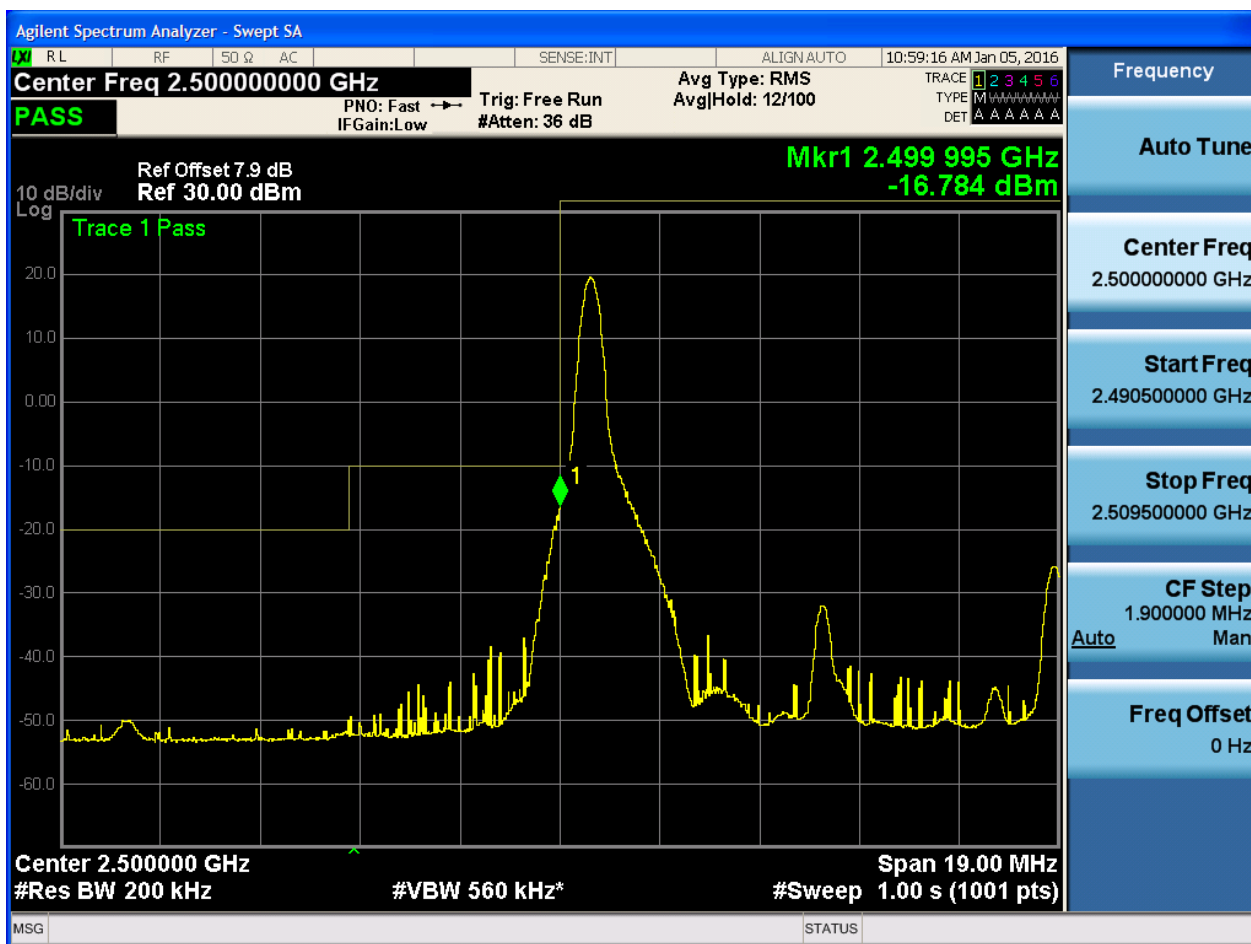




5.1.4.1.2 Test Bandwidth = 10

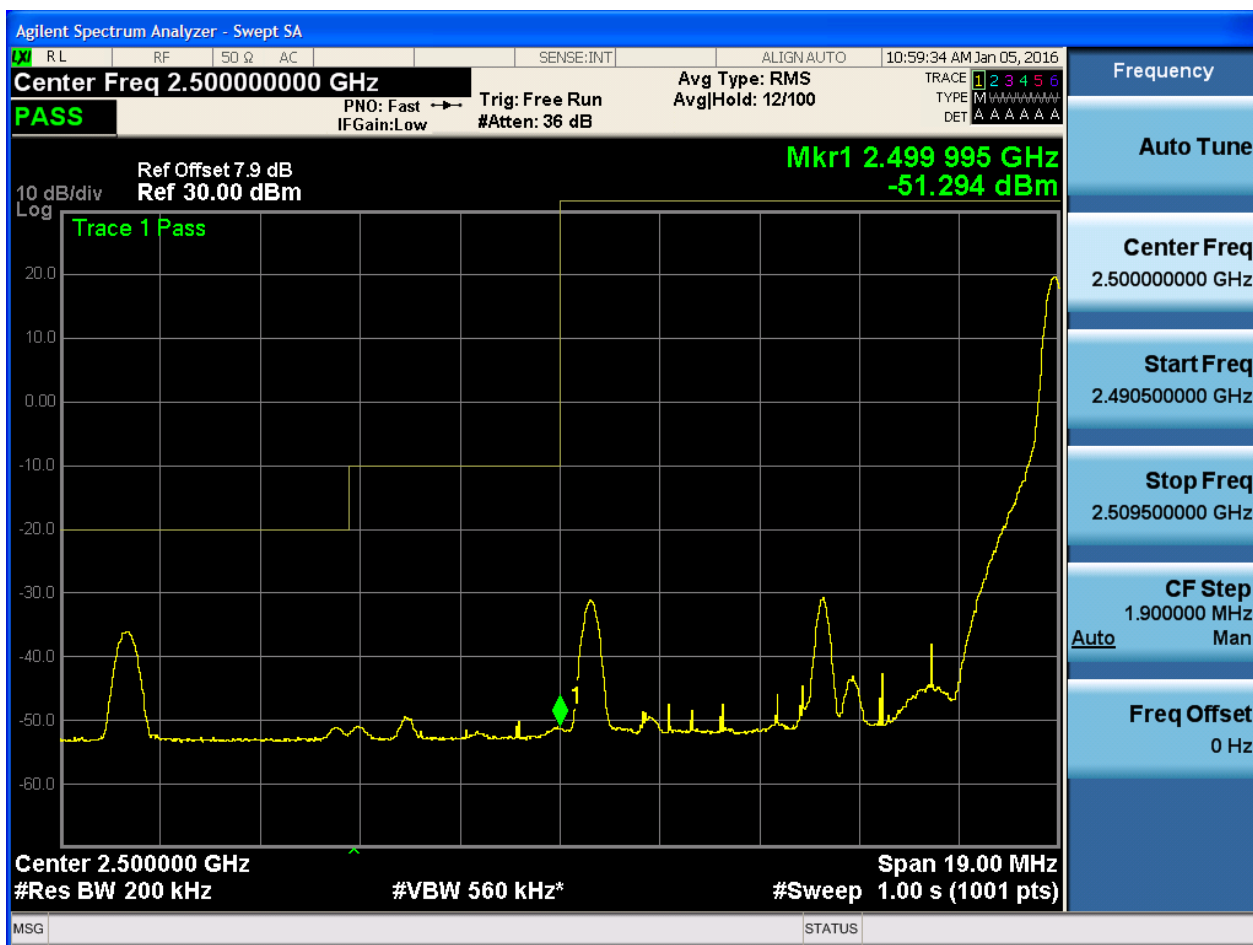
5.1.4.1.2.1 Test Channel = LCH

5.1.4.1.2.1.1 Test RB = RB1#0



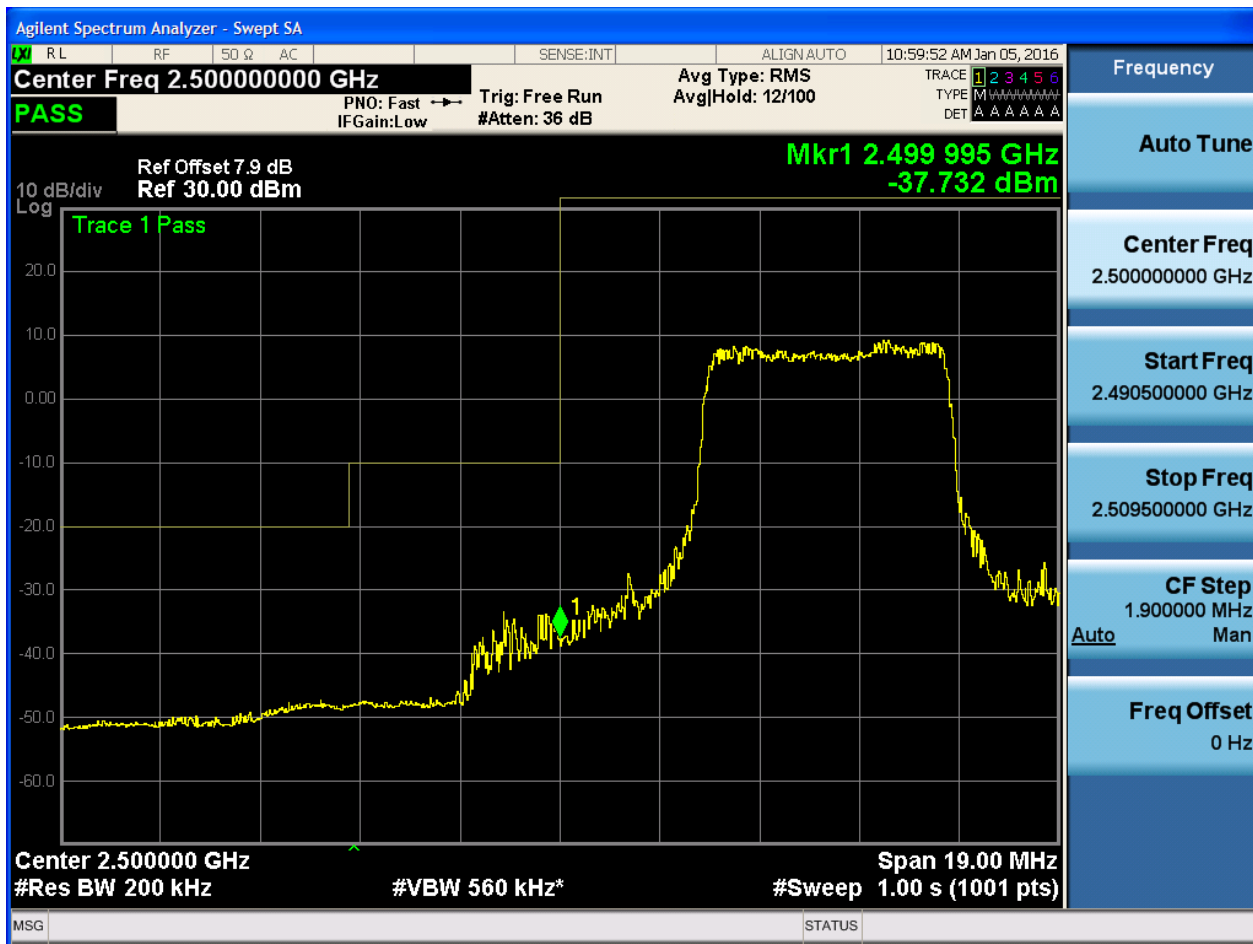


5.1.4.1.2.1.2 Test RB = RB1#49





5.1.4.1.2.1.3 Test RB = RB25#13





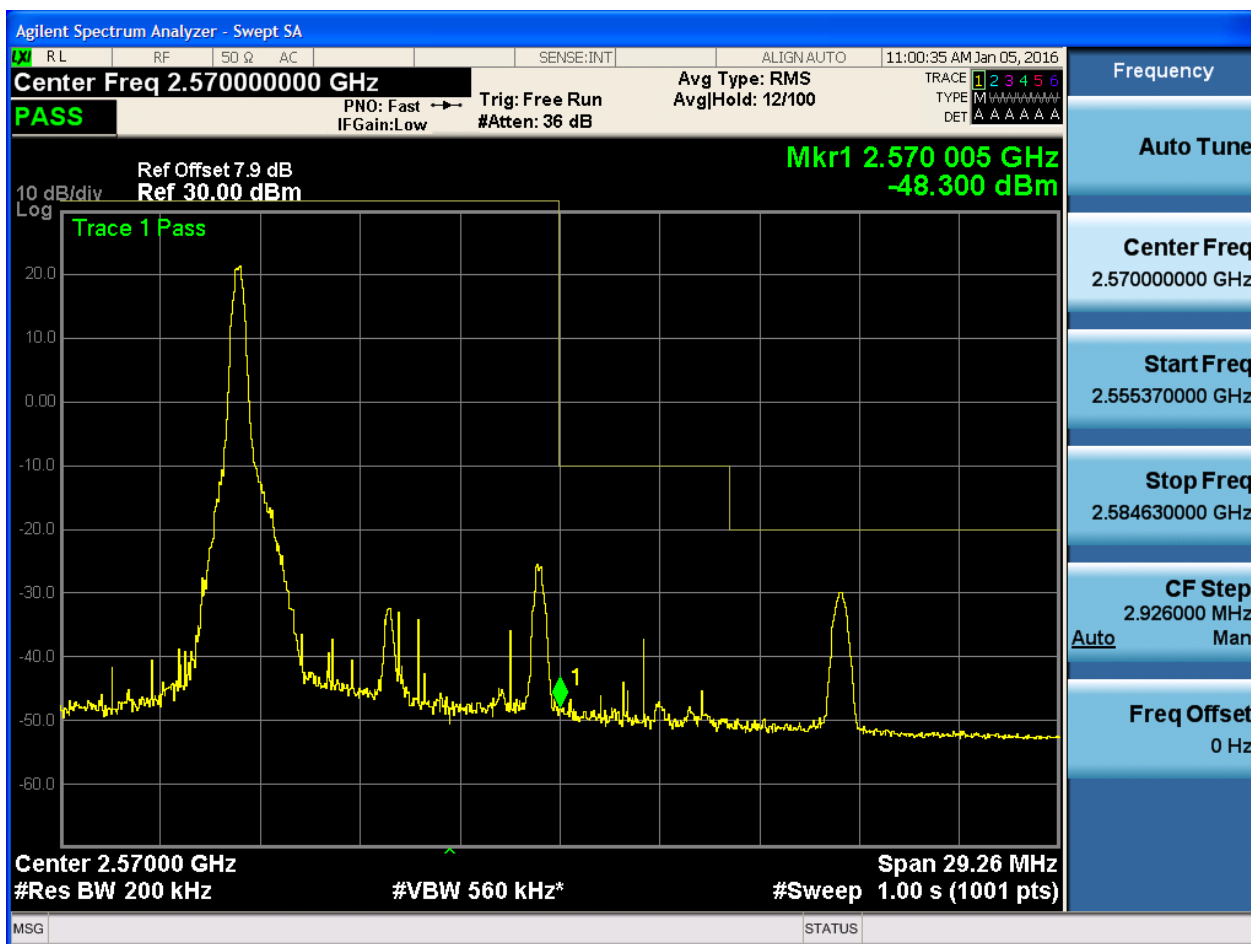
5.1.4.1.2.1.4 Test RB = RB50#0





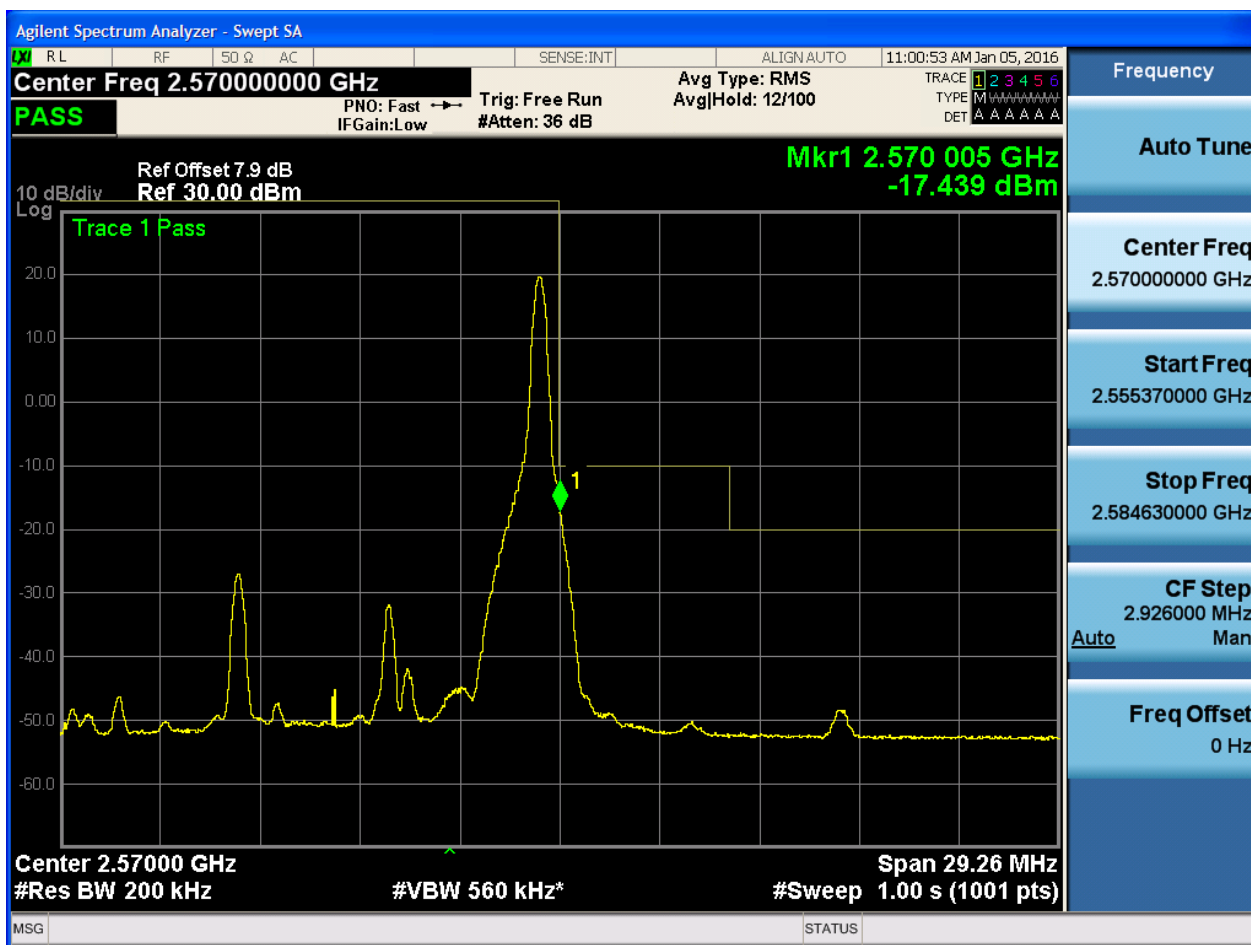
5.1.4.1.2.2 Test Channel = HCH

5.1.4.1.2.2.1 Test RB = RB1#0





5.1.4.1.2.2.2 Test RB = RB1#49



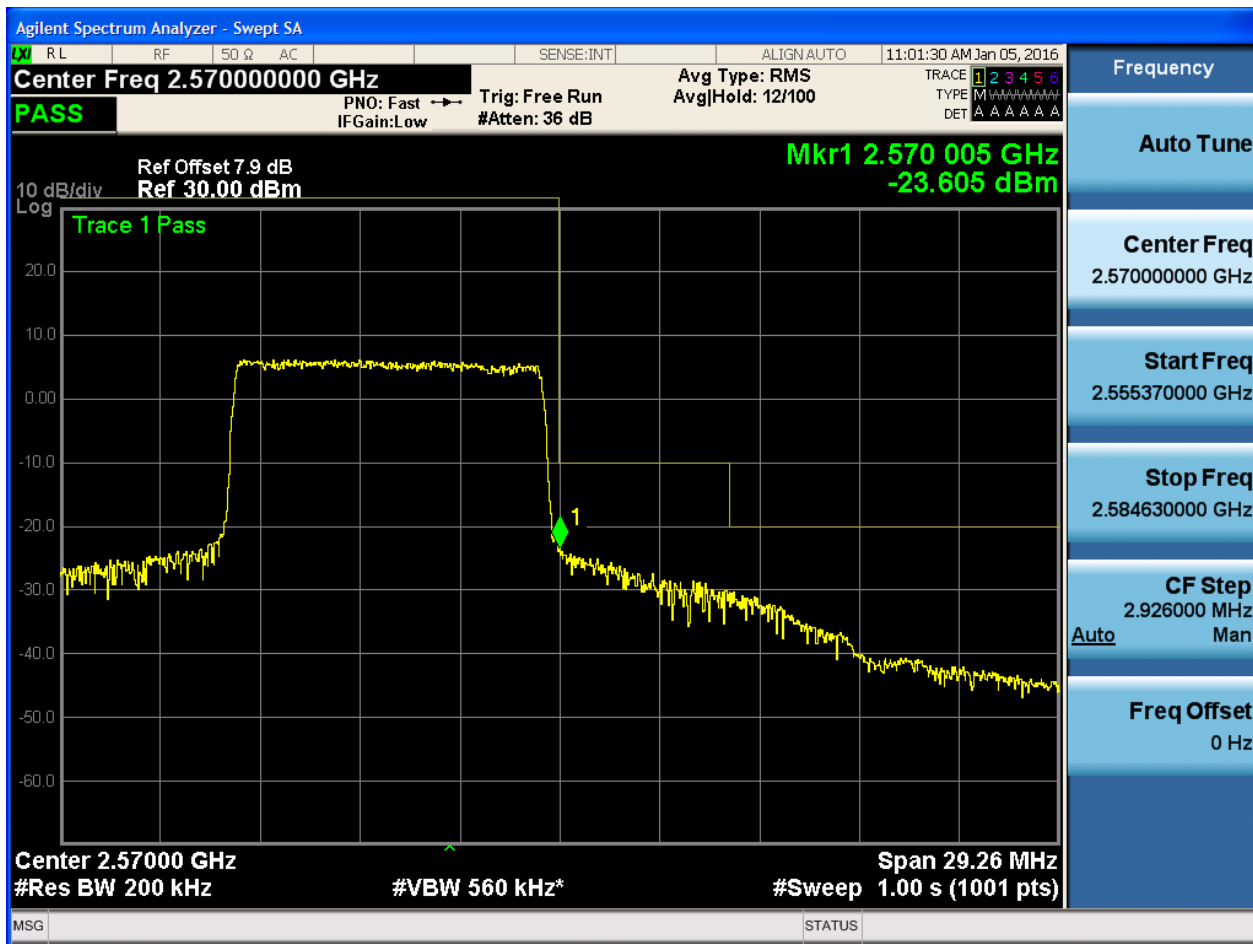


5.1.4.1.2.2.3 Test RB = RB25#13





5.1.4.1.2.2.4 Test RB = RB50#0

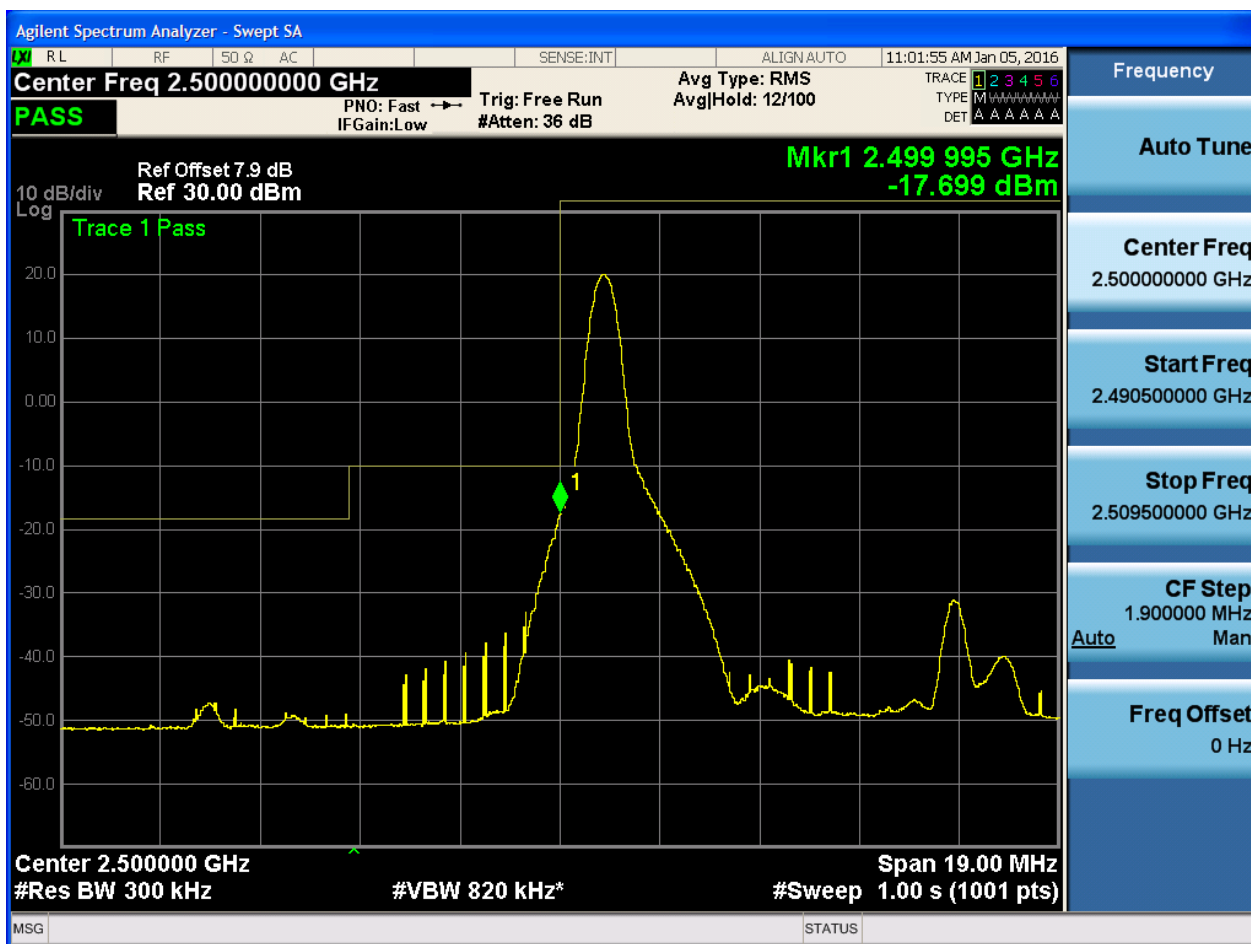




5.1.4.1.3 Test Bandwidth = 15

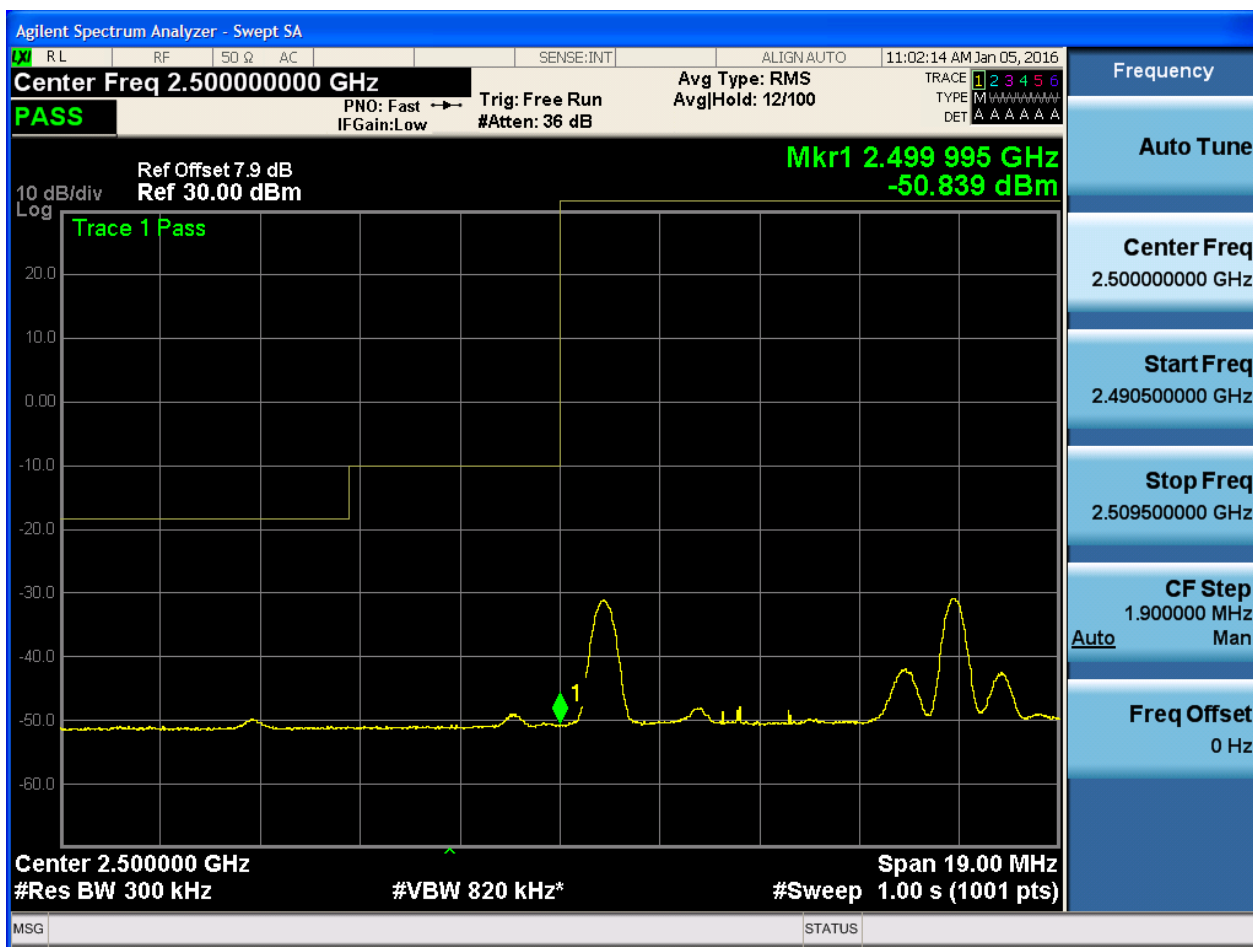
5.1.4.1.3.1 Test Channel = LCH

5.1.4.1.3.1.1 Test RB = RB1#0





5.1.4.1.3.1.2 Test RB = RB1#74





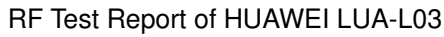
5.1.4.1.3.1.3 Test RB = RB36#18





5.1.4.1.3.1.4 Test RB = RB75#0

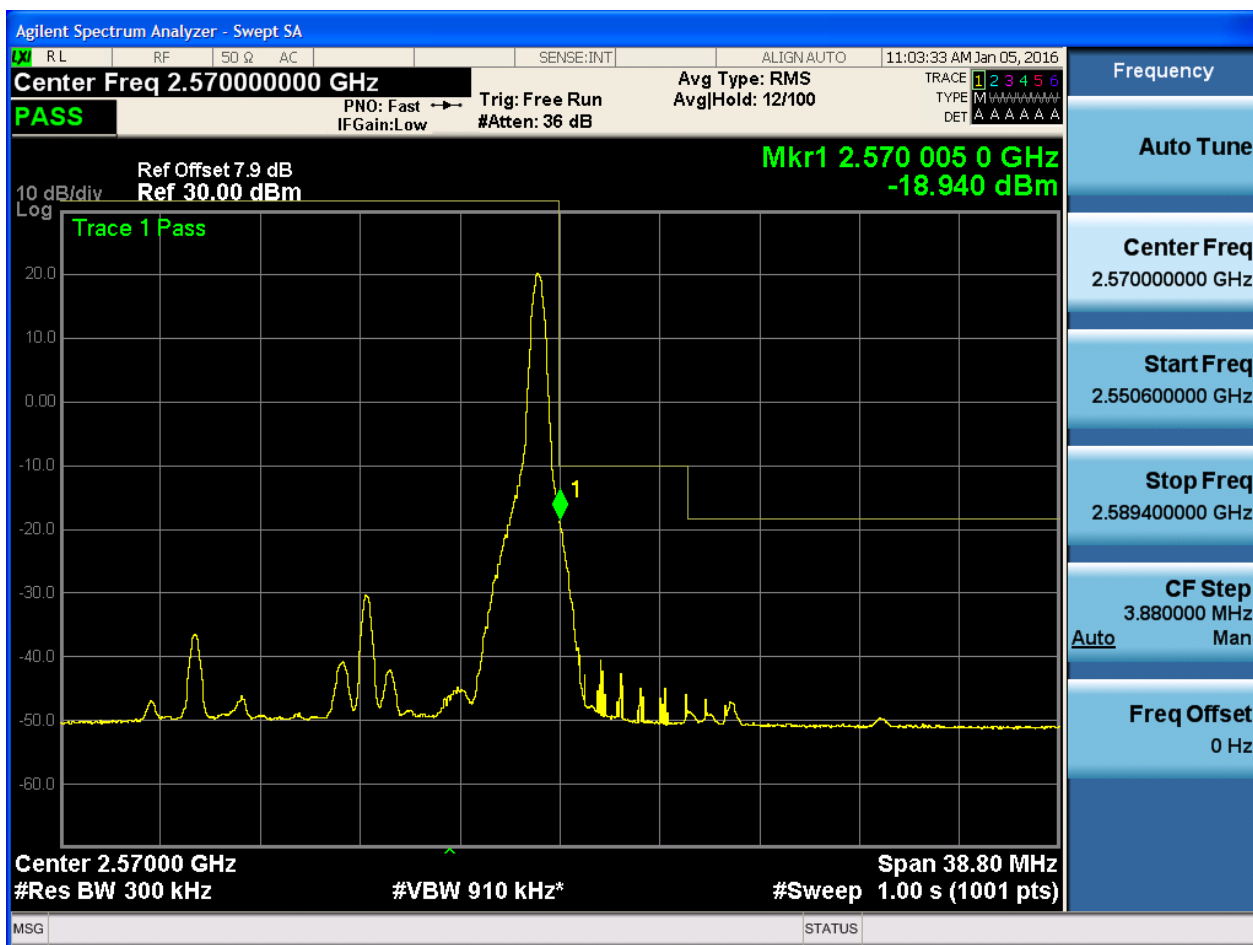




5.1.4.1.3.2.1 Test RB = RB1#0



5.1.4.1.3.2.2 Test RB = RB1#74





5.1.4.1.3.2.3 Test RB = RB36#18





5.1.4.1.3.2.4 Test RB = RB75#0

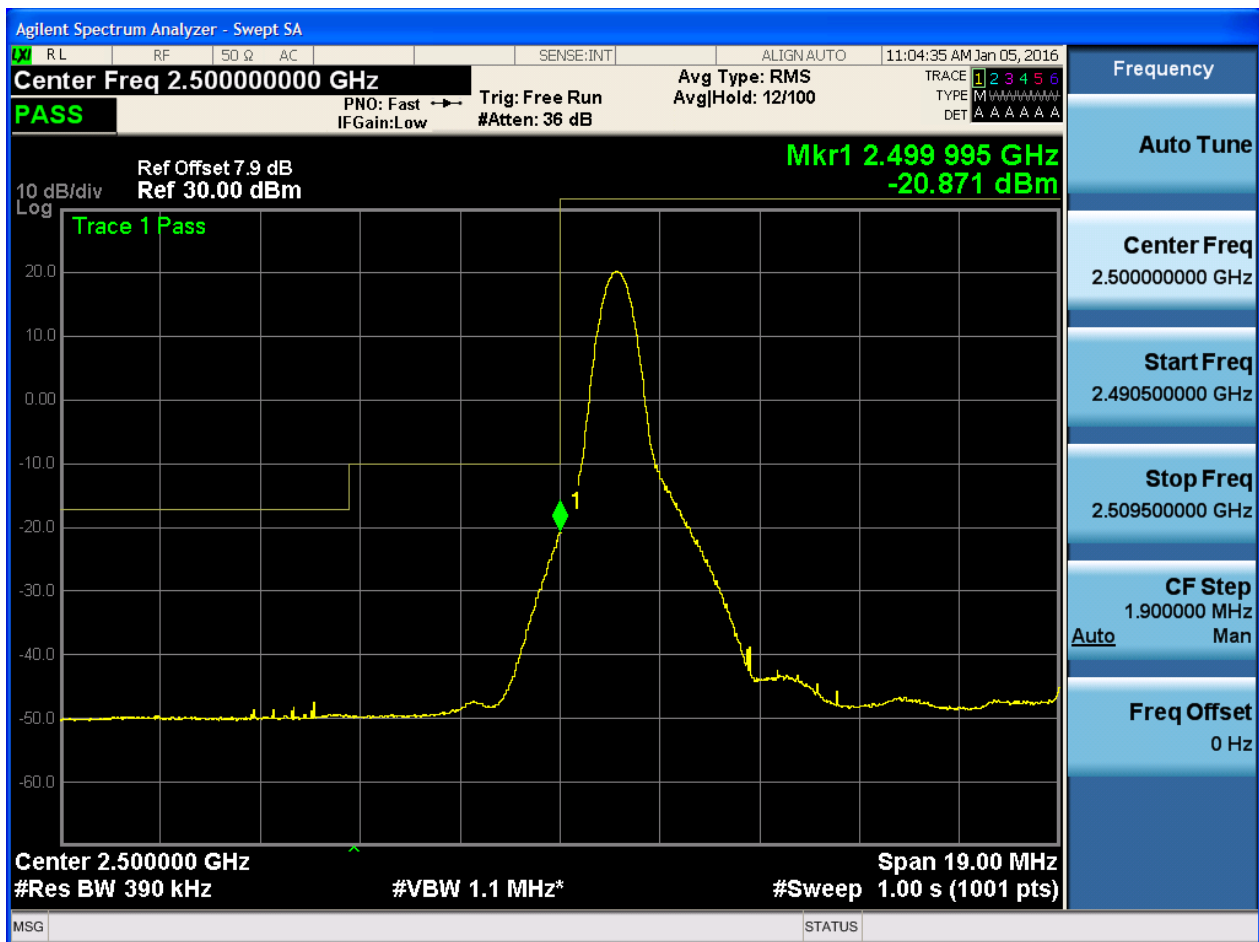




5.1.4.1.4 Test Bandwidth = 20

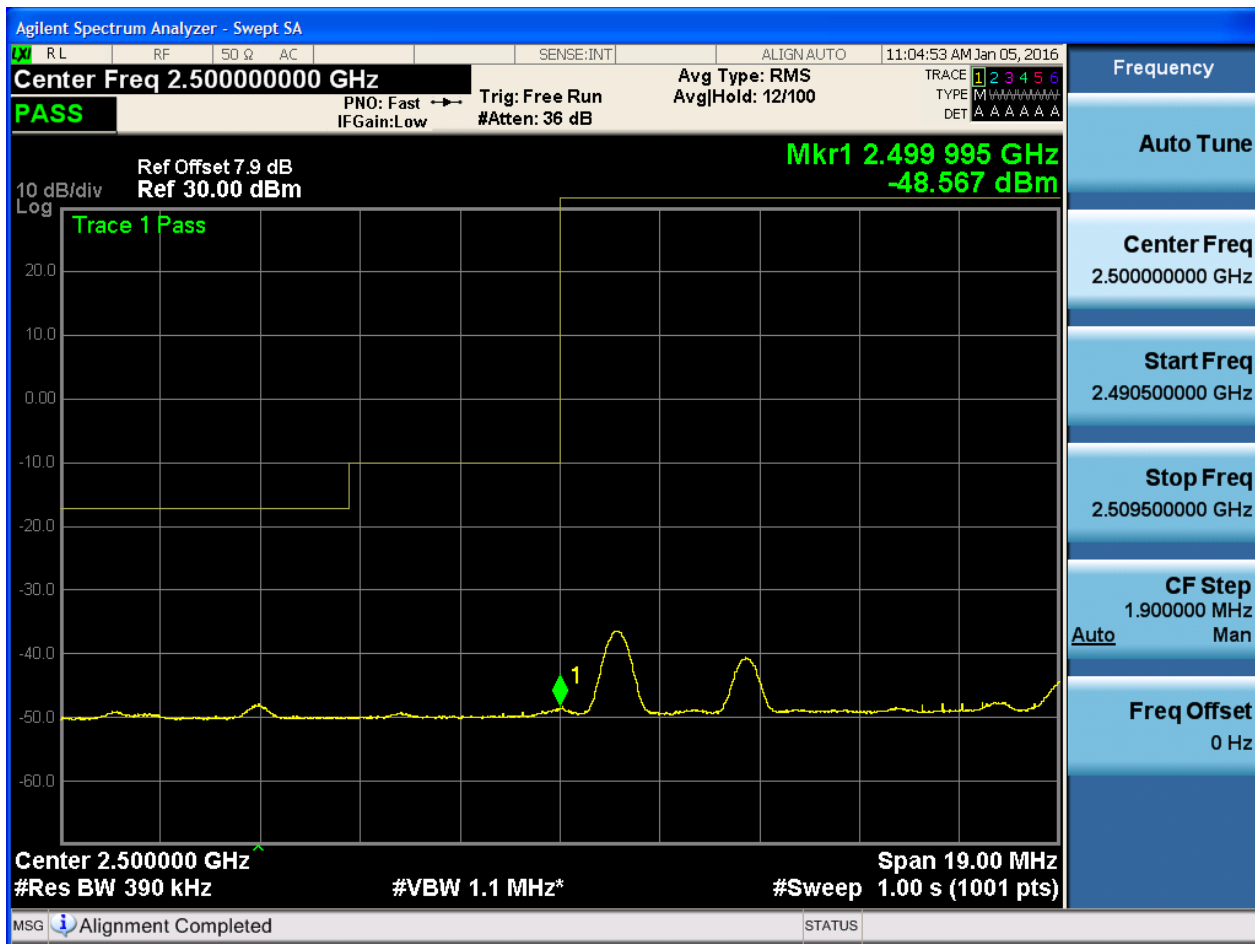
5.1.4.1.4.1 Test Channel = LCH

5.1.4.1.4.1.1 Test RB = RB1#0



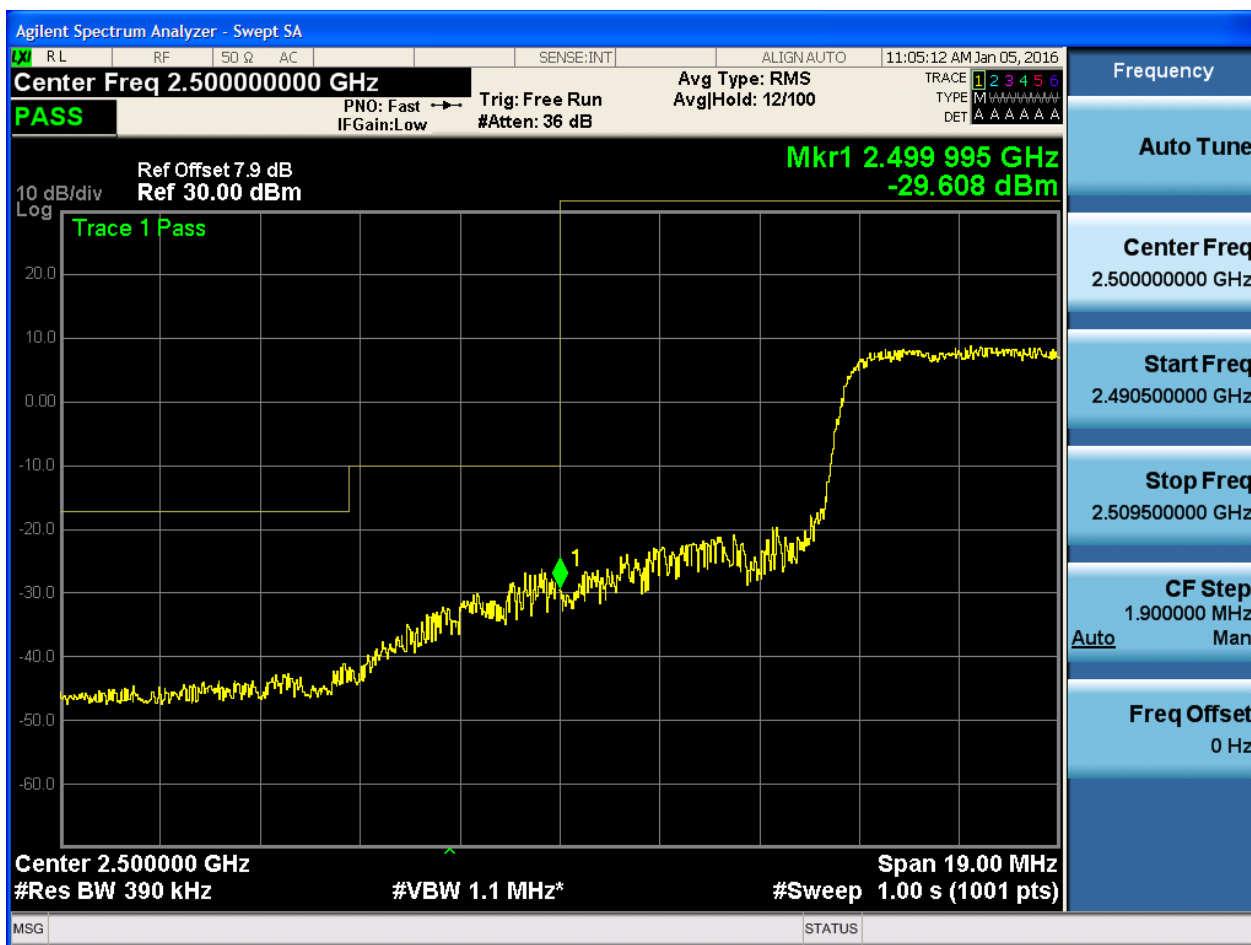


5.1.4.1.4.1.2 Test RB = RB1#99



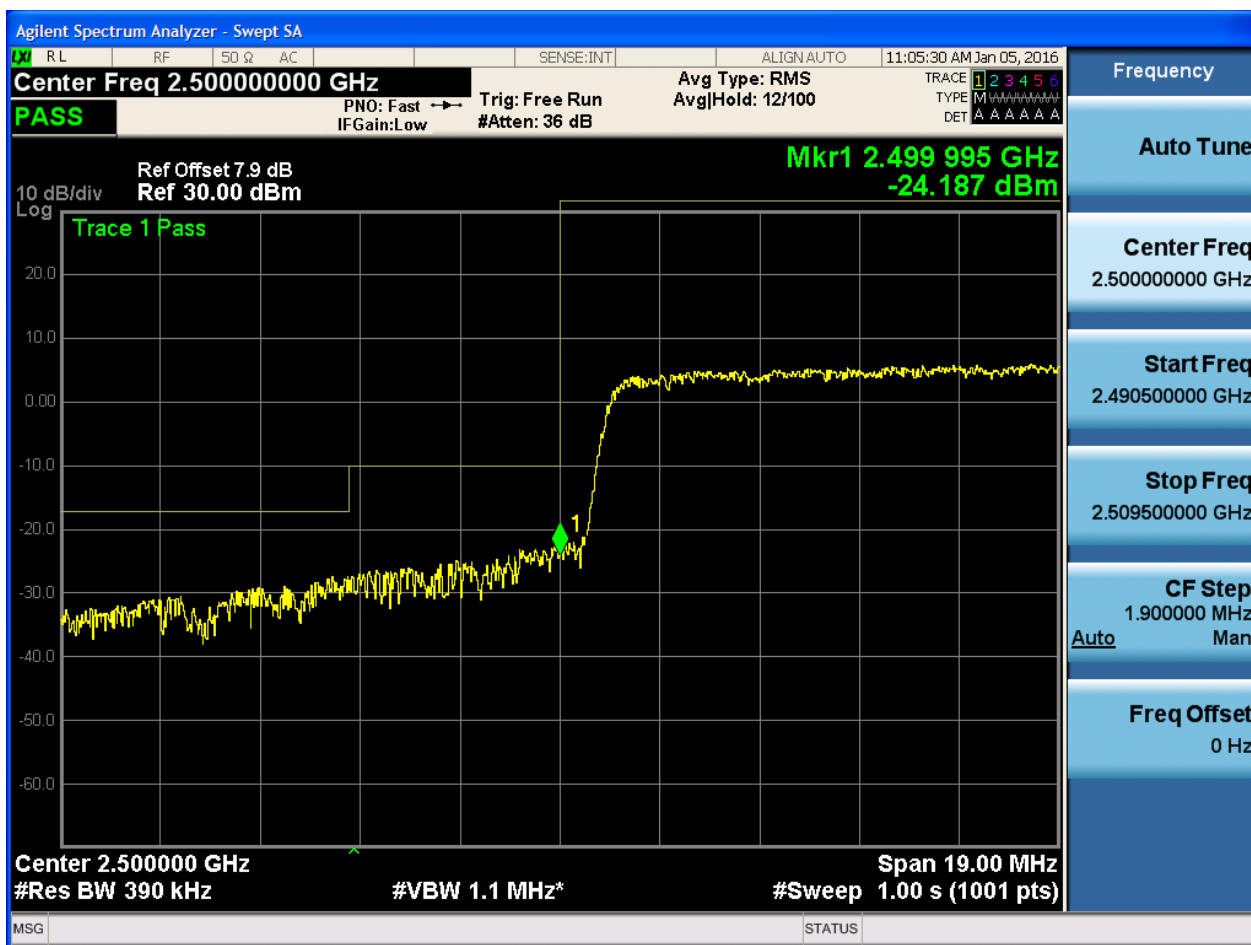


5.1.4.1.4.1.3 Test RB = RB50#25





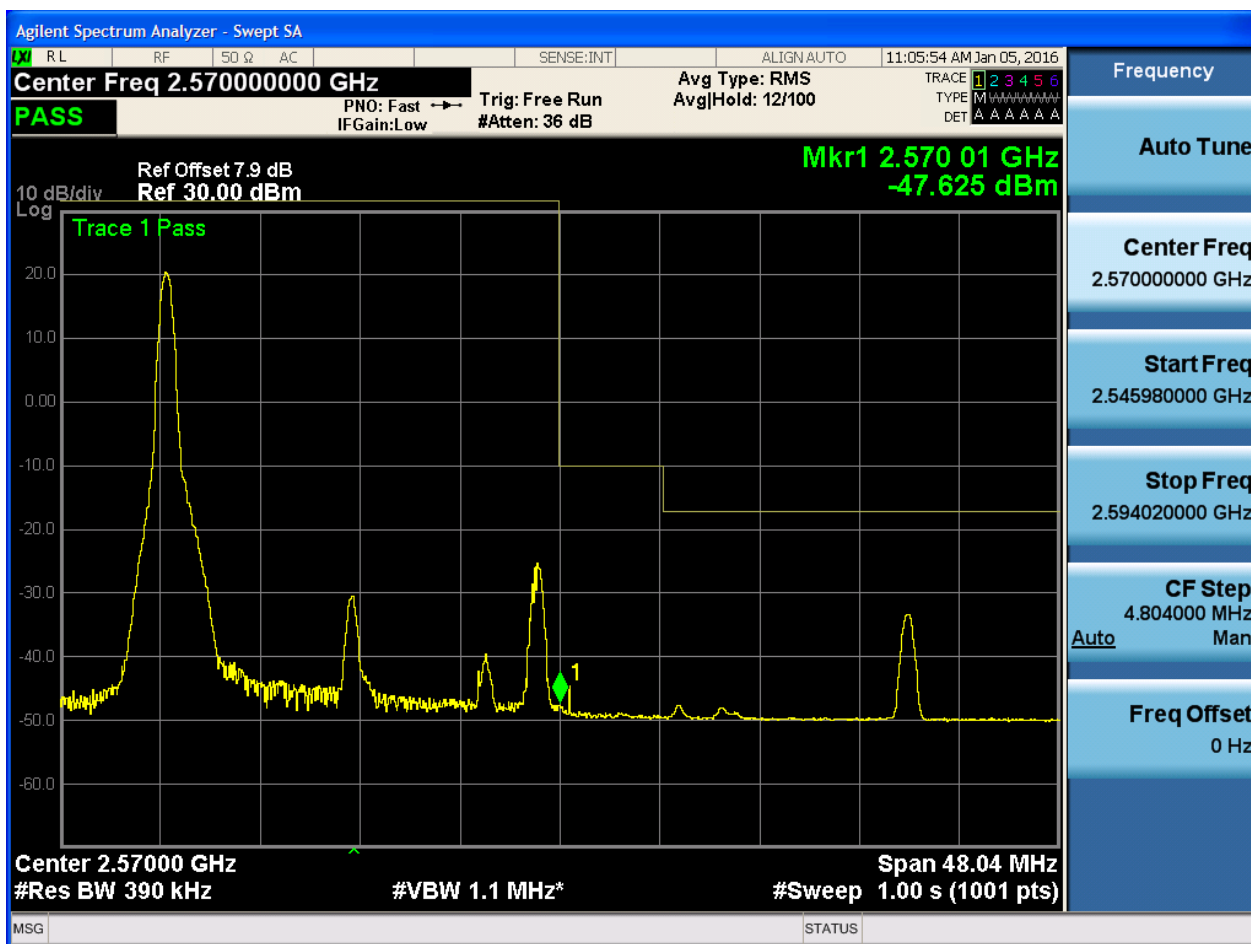
5.1.4.1.4.1.4 Test RB = RB100#0





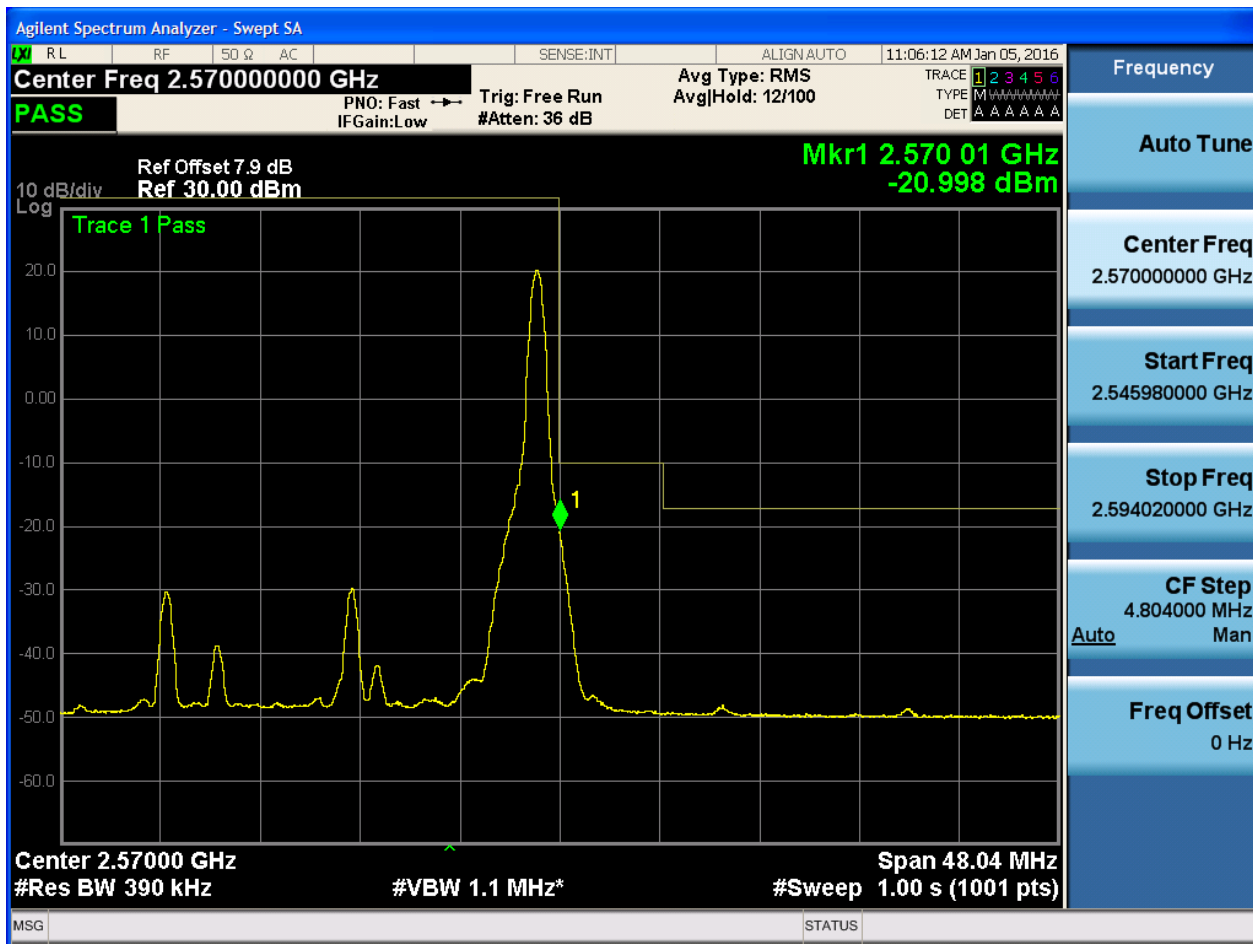
5.1.4.1.4.2 Test Channel = HCH

5.1.4.1.4.2.1 Test RB = RB1#0





5.1.4.1.4.2.2 Test RB = RB1#99





5.1.4.1.4.2.3 Test RB = RB50#25





5.1.4.1.4.2.4 Test RB = RB100#0



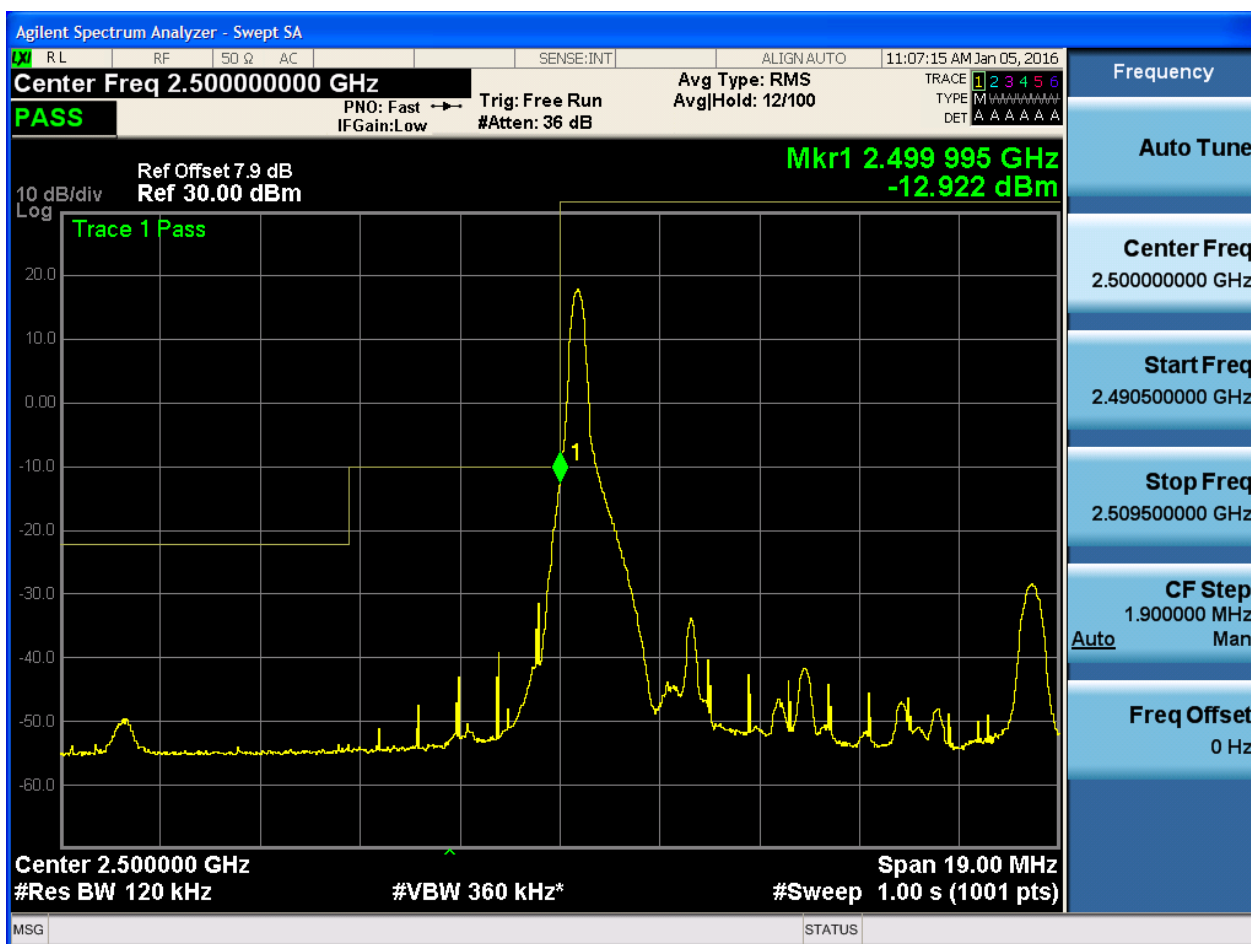


5.1.4.2 Test Mode = LTE/TM2

5.1.4.2.1 Test Bandwidth = 5

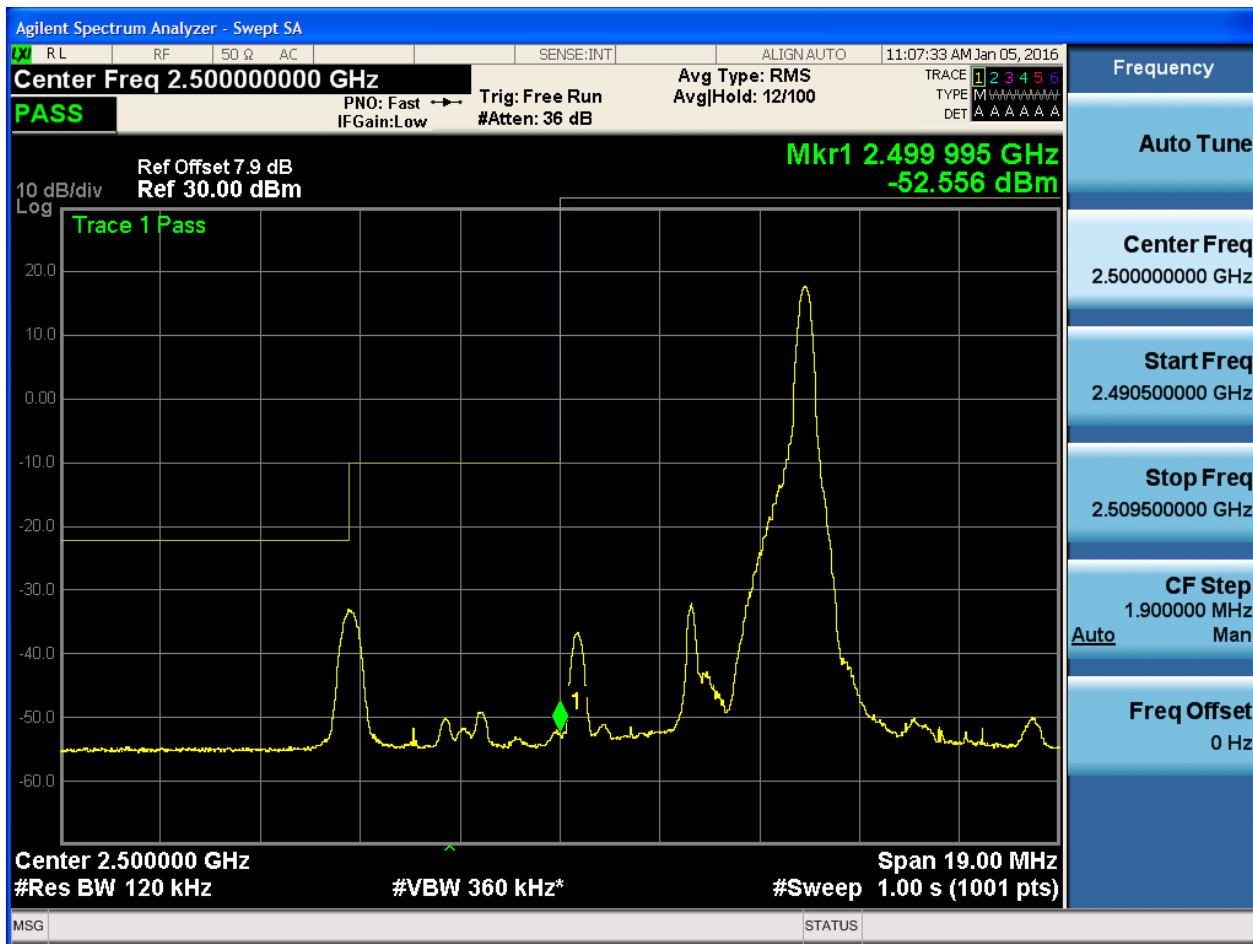
5.1.4.2.1.1 Test Channel = LCH

5.1.4.2.1.1.1 Test RB = RB1#0



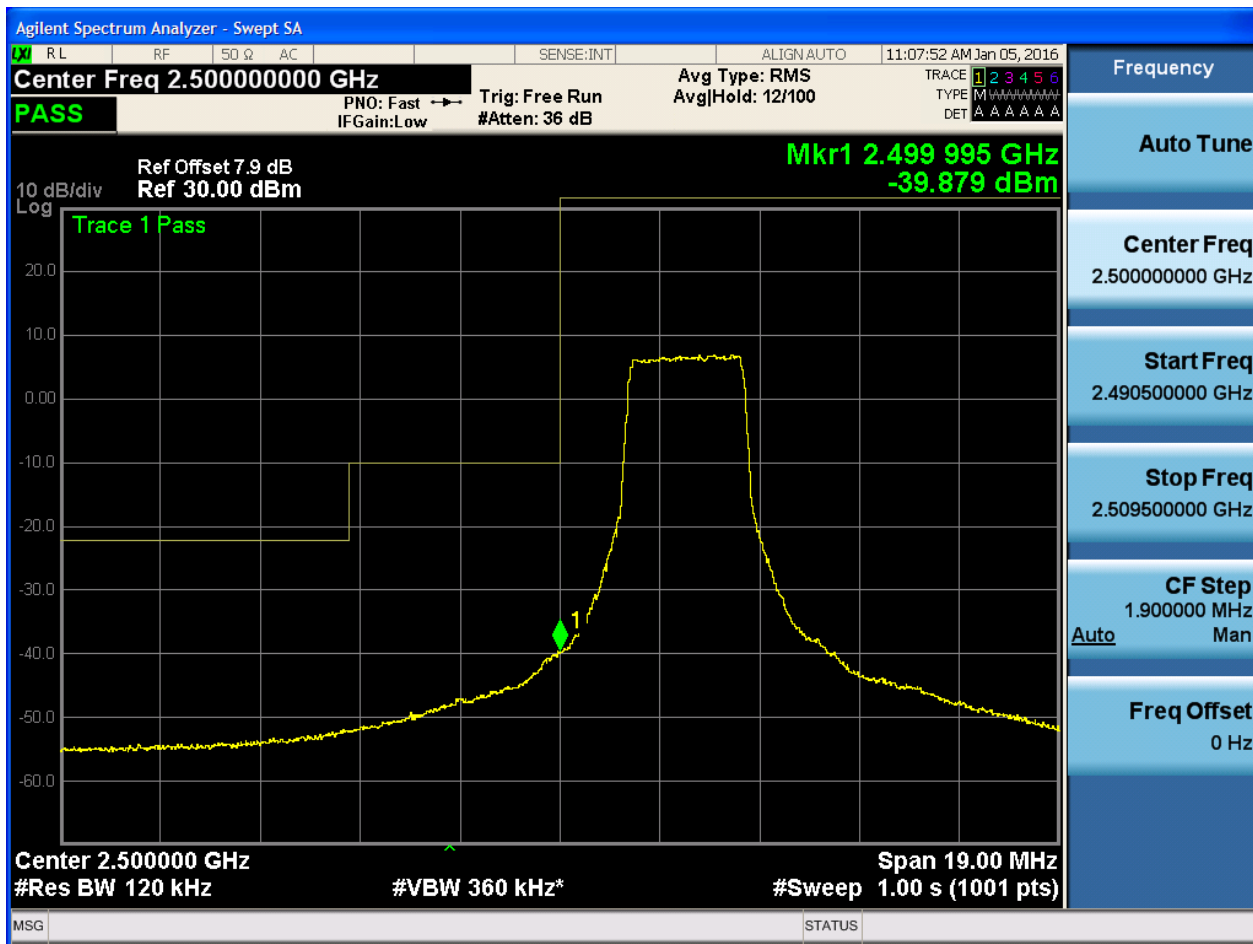


5.1.4.2.1.1.2 Test RB = RB1#24



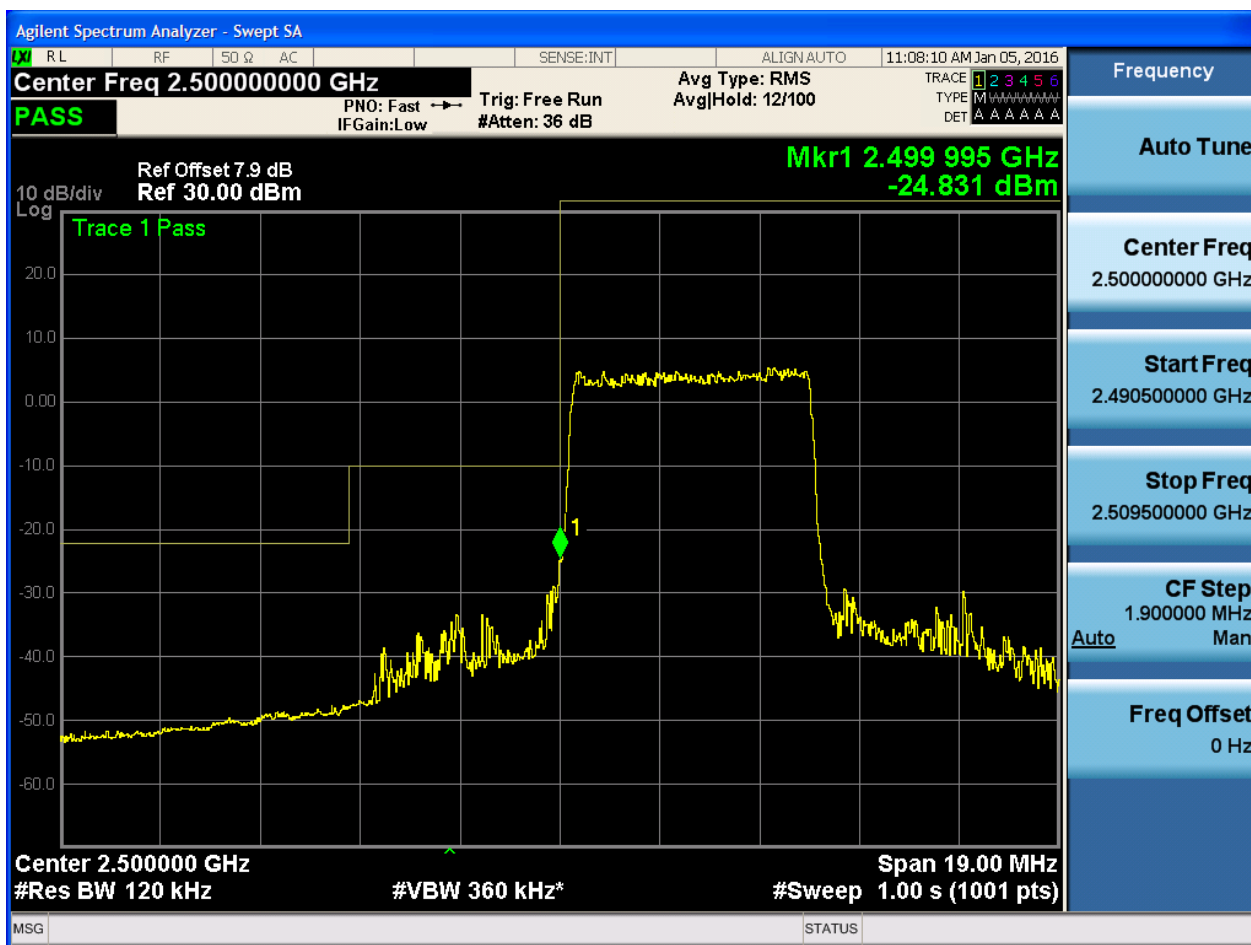


5.1.4.2.1.1.3 Test RB = RB12#6



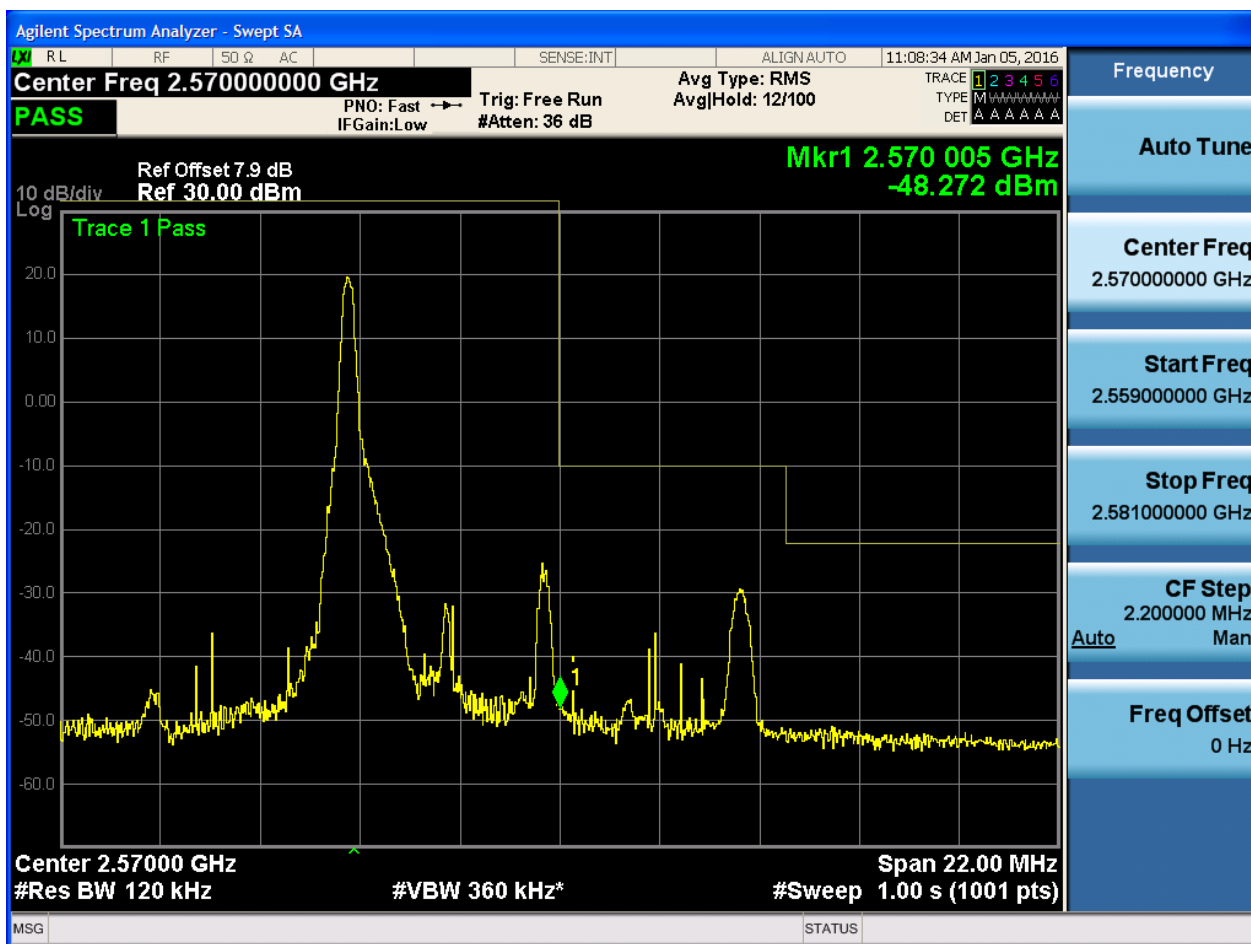


5.1.4.2.1.1.4 Test RB = RB25#0



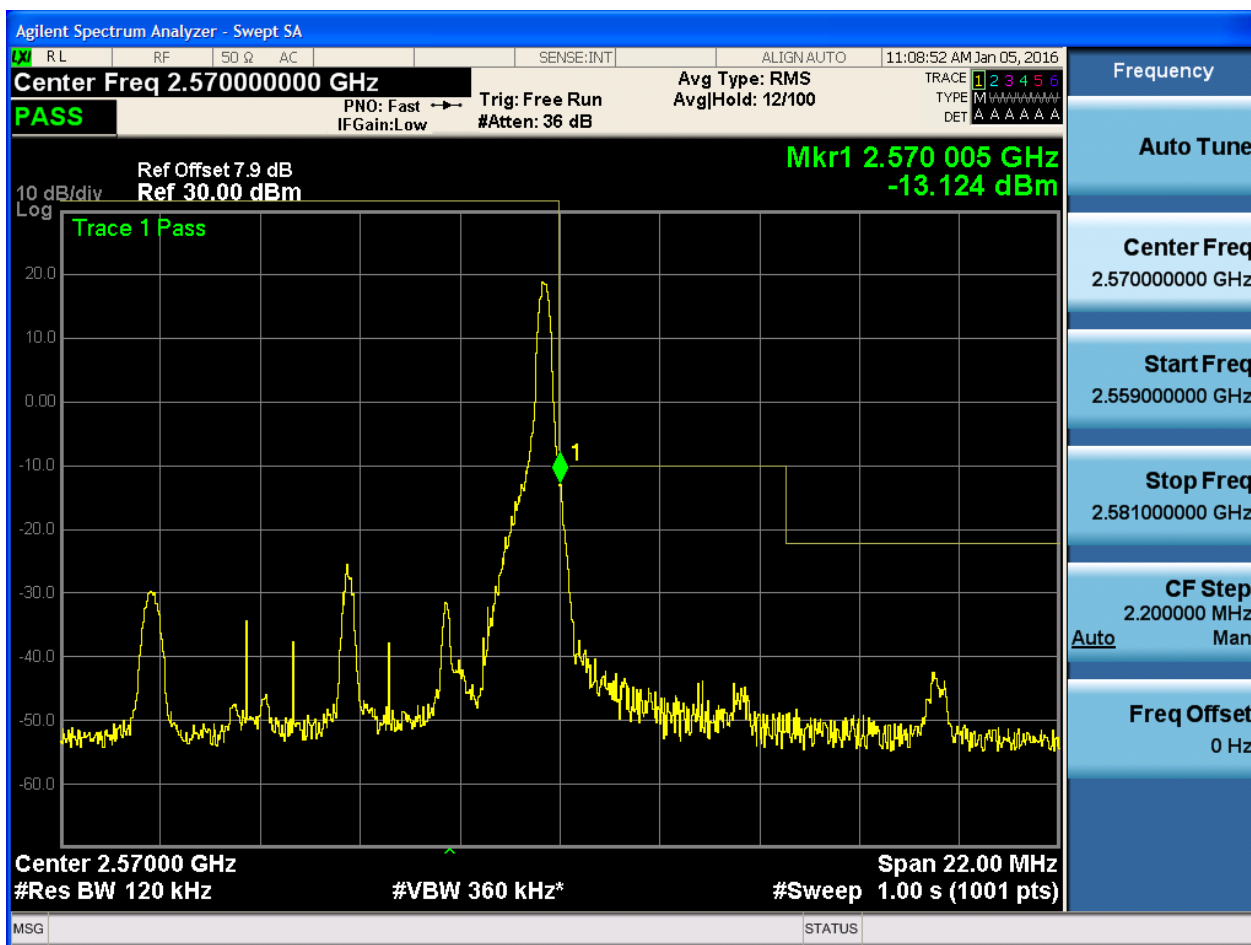
5.1.4.2.1.2 Test Channel = HCH

5.1.4.2.1.2.1 Test RB = RB1#0



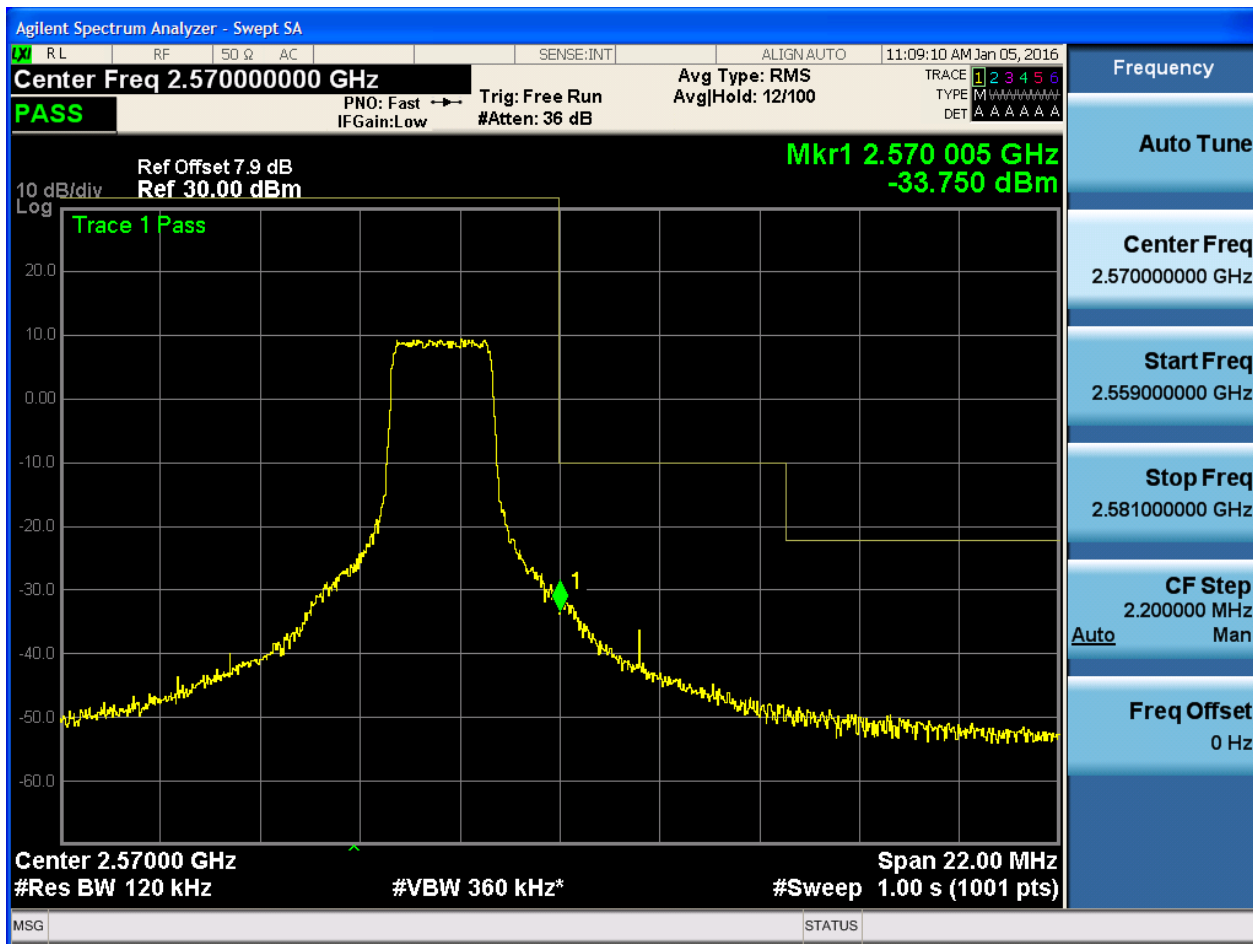


5.1.4.2.1.2.2 Test RB = RB1#24



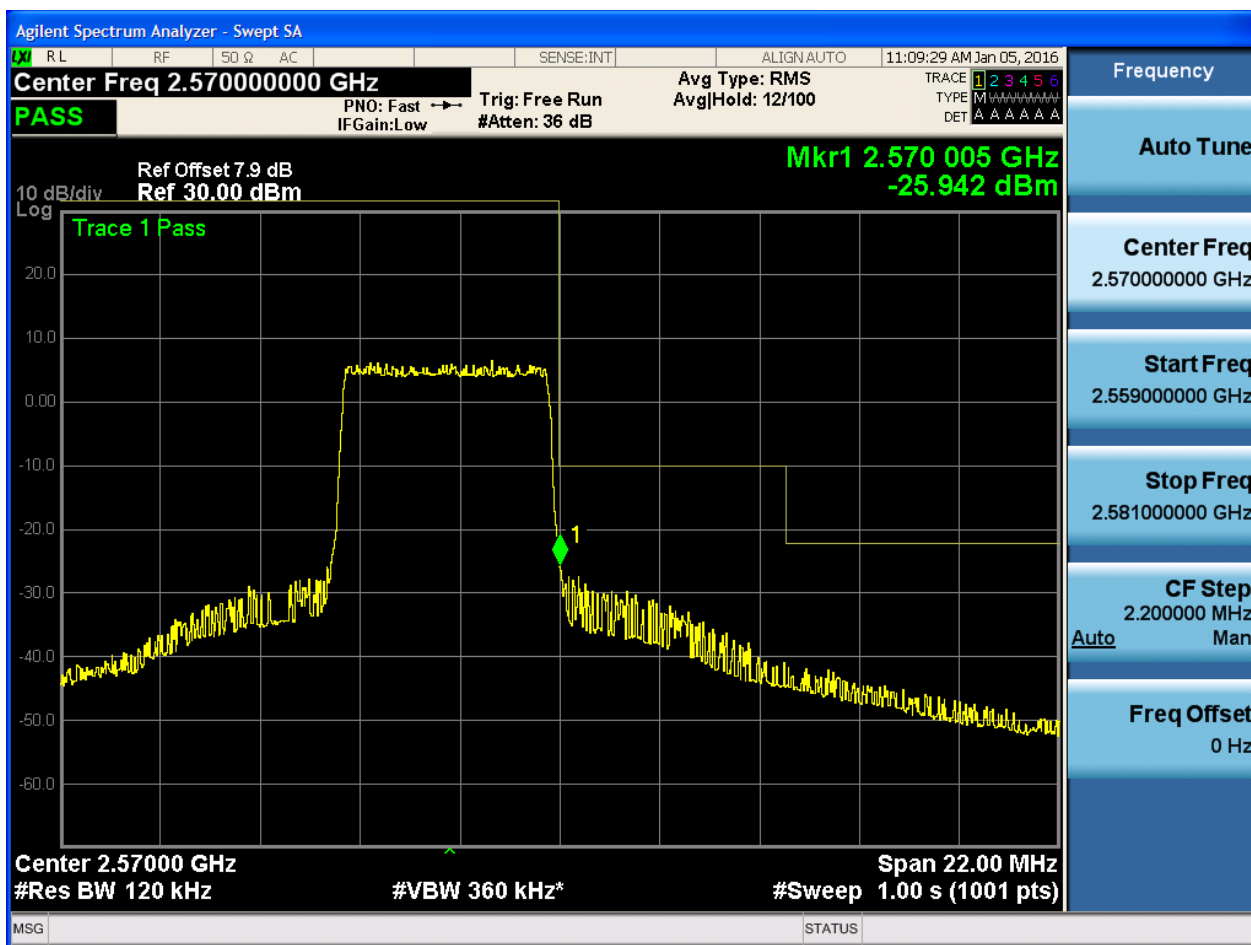


5.1.4.2.1.2.3 Test RB = RB12#6





5.1.4.2.1.2.4 Test RB = RB25#0

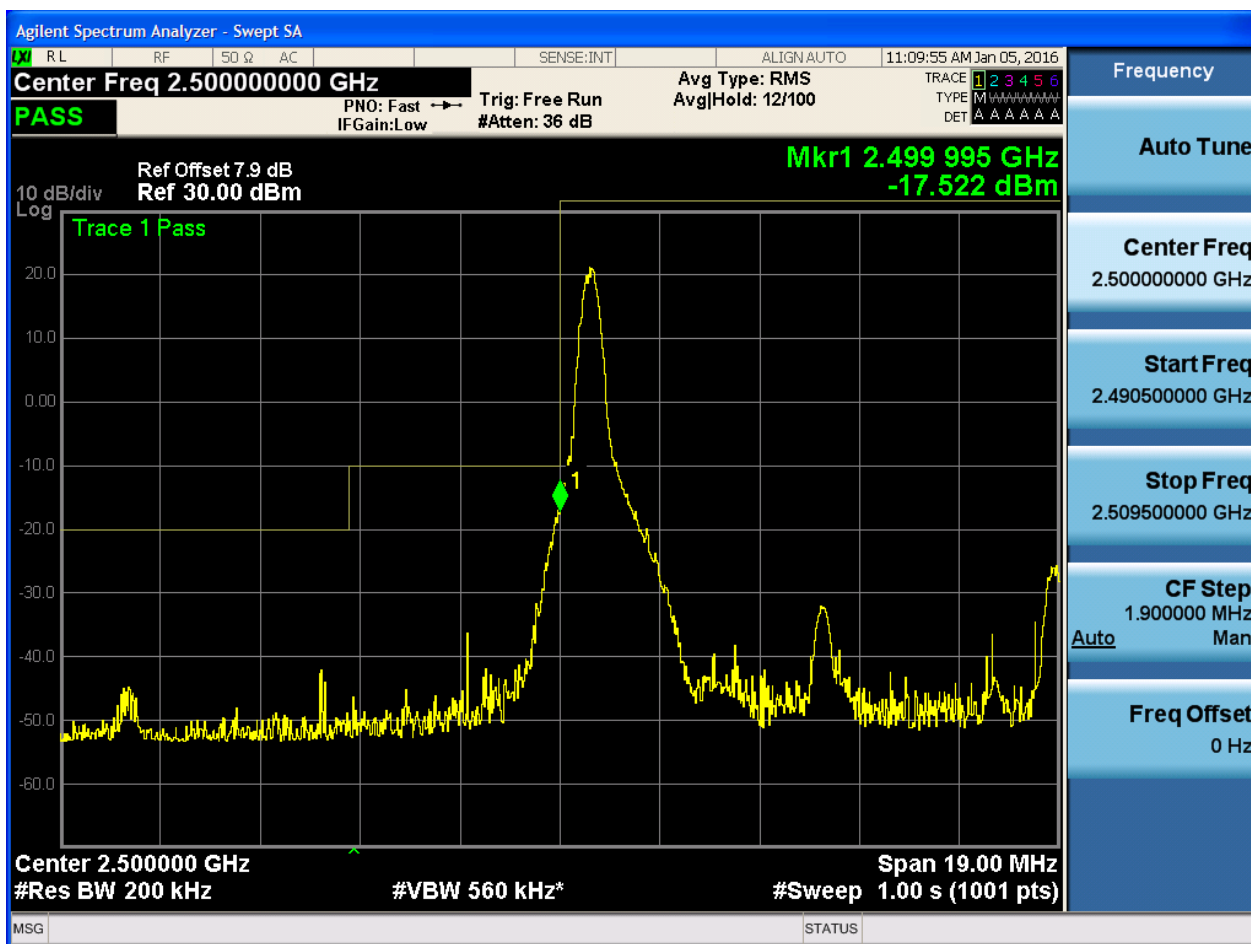




5.1.4.2.2 Test Bandwidth = 10

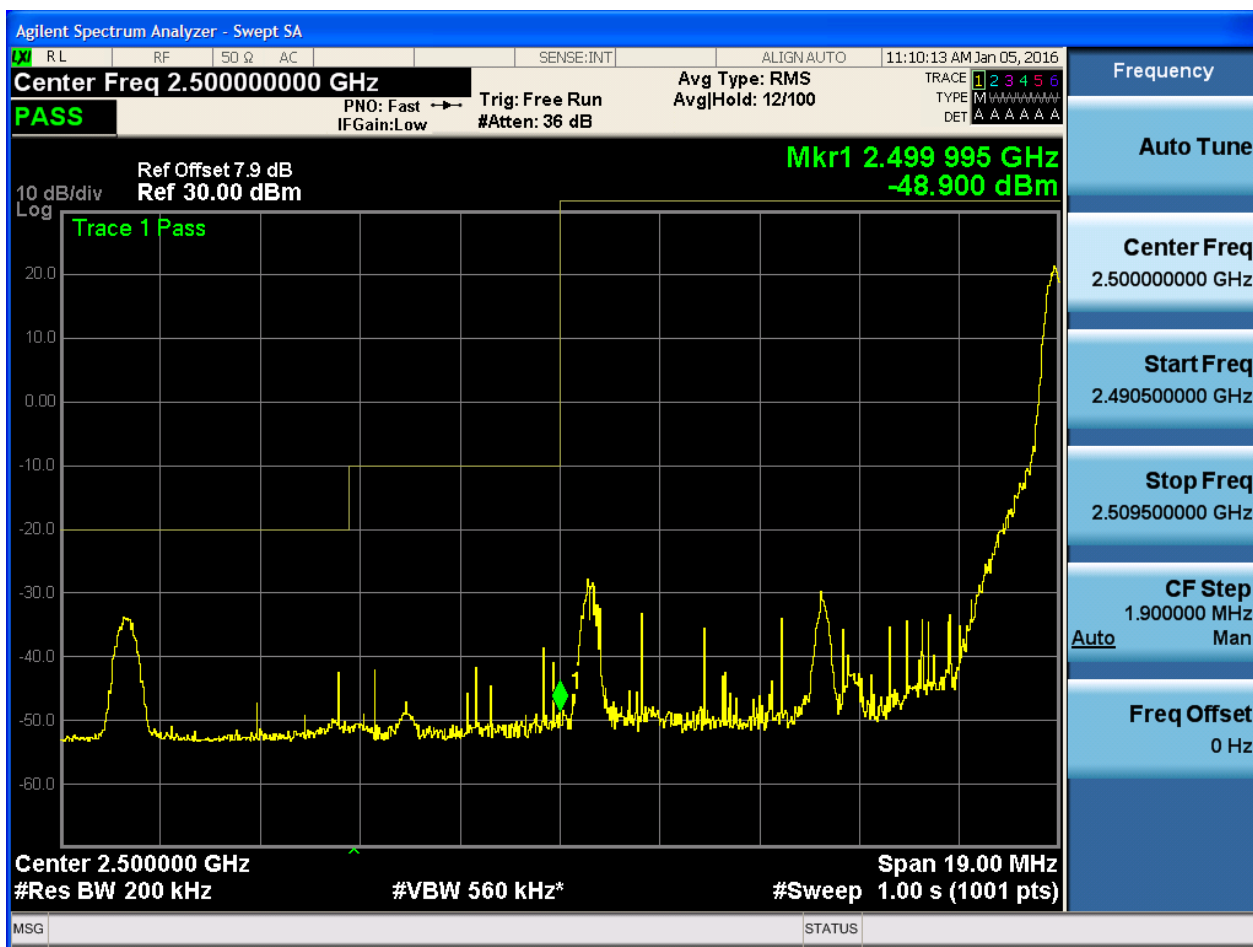
5.1.4.2.2.1 Test Channel = LCH

5.1.4.2.2.1.1 Test RB = RB1#0





5.1.4.2.2.1.2 Test RB = RB1#49



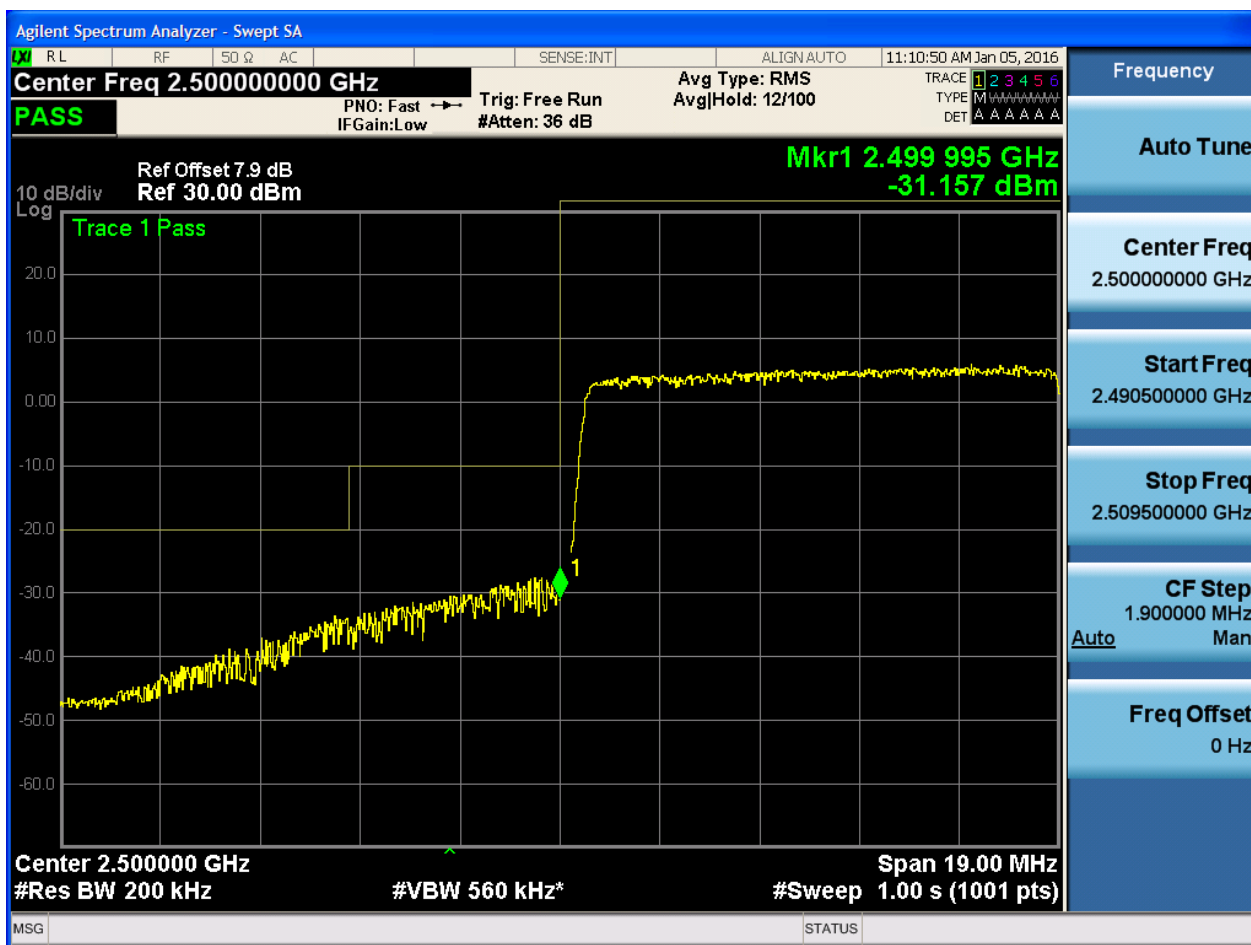


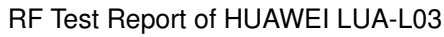
5.1.4.2.2.1.3 Test RB = RB25#13





5.1.4.2.2.1.4 Test RB = RB50#0

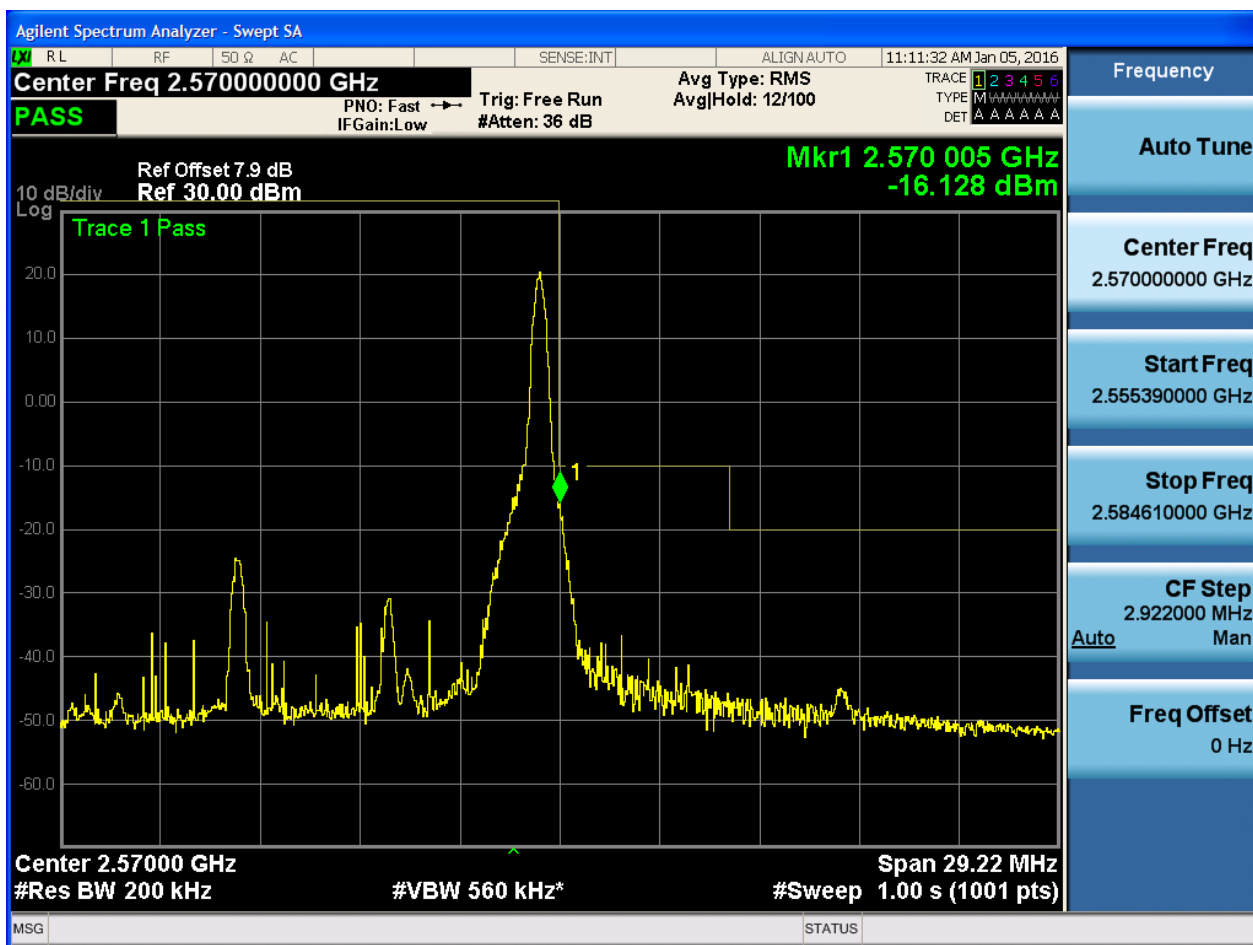




5.1.4.2.2.2.1 Test RB = RB1#0

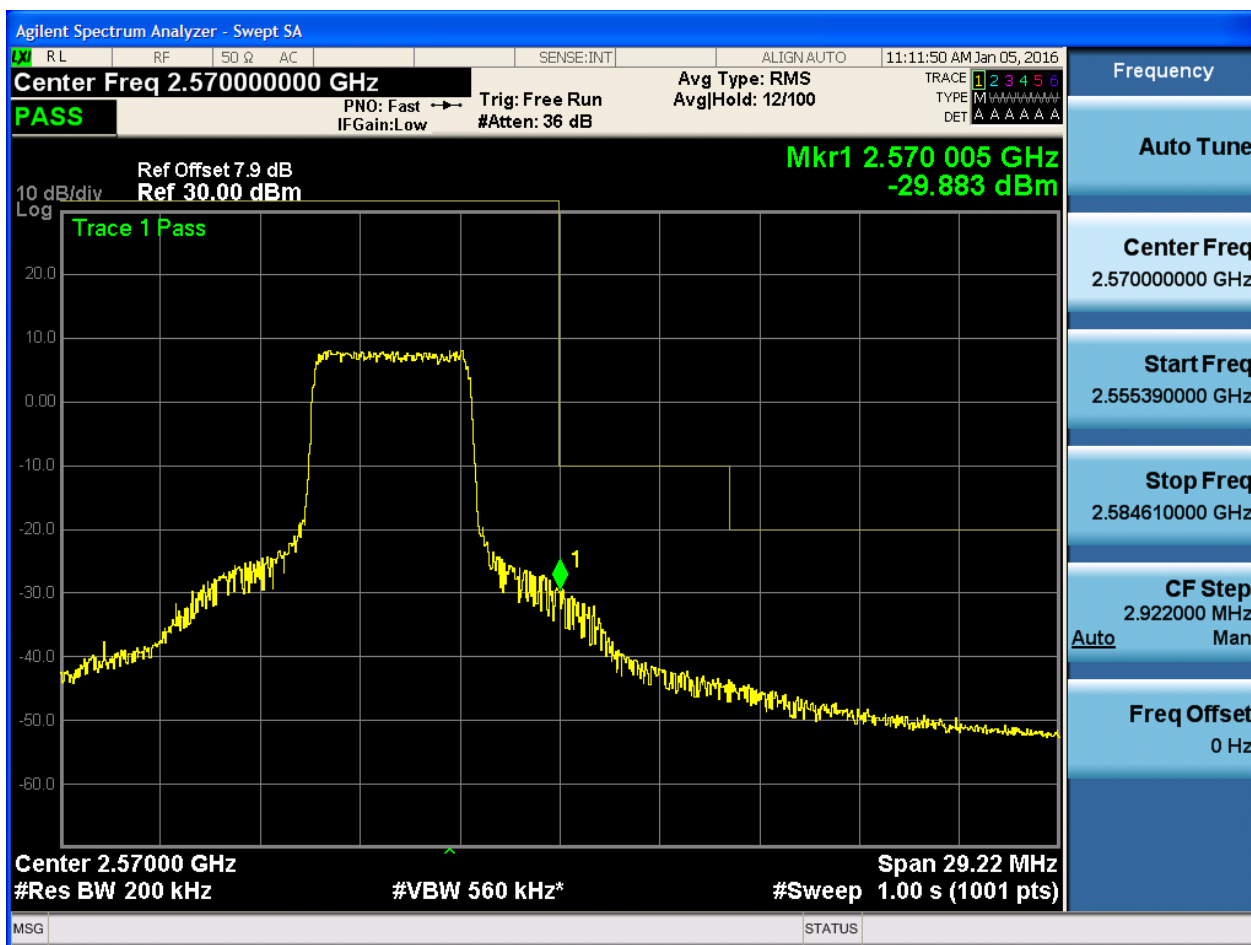


5.1.4.2.2.2 Test RB = RB1#49





5.1.4.2.2.3 Test RB = RB25#13





5.1.4.2.2.4 Test RB = RB50#0

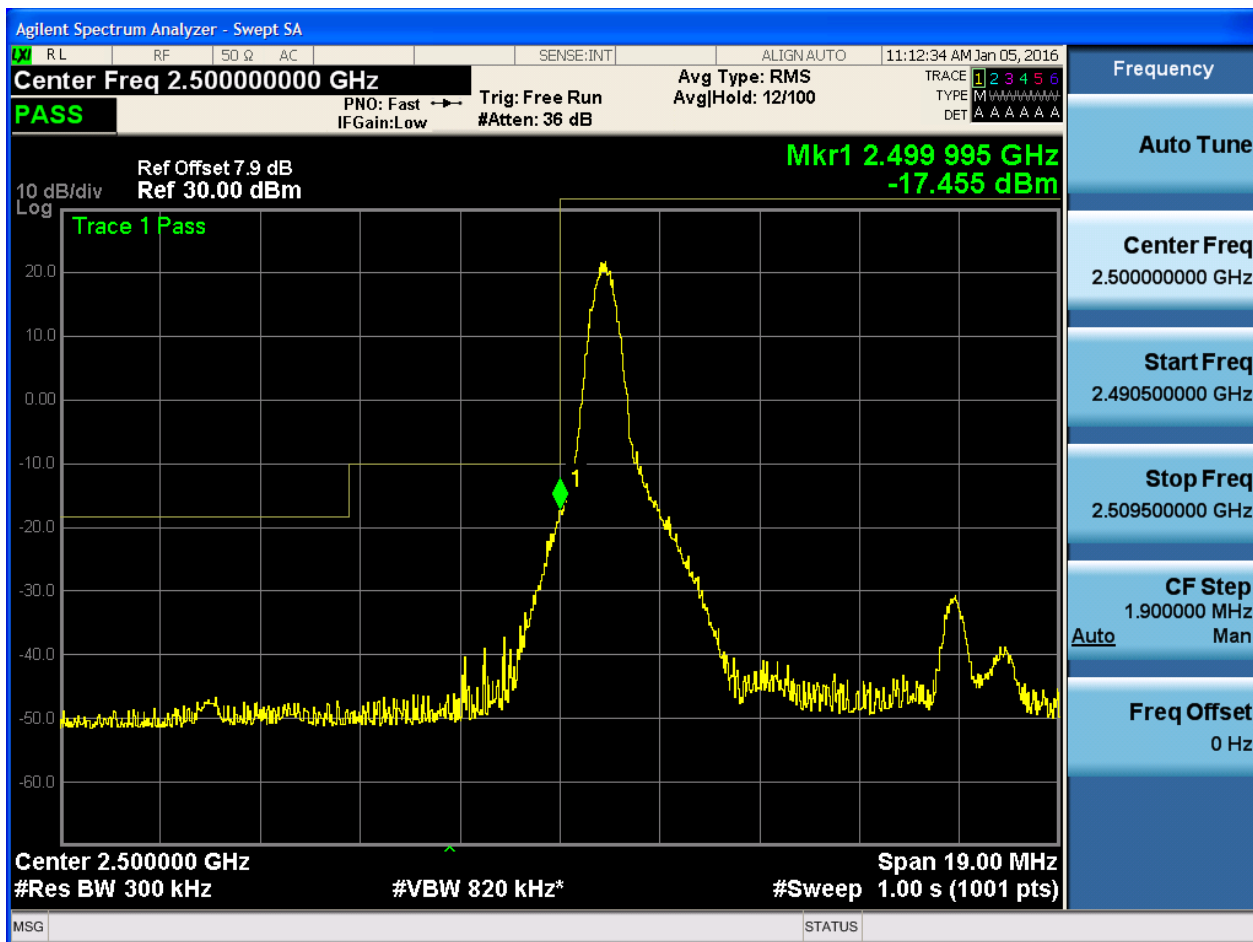




5.1.4.2.3 Test Bandwidth = 15

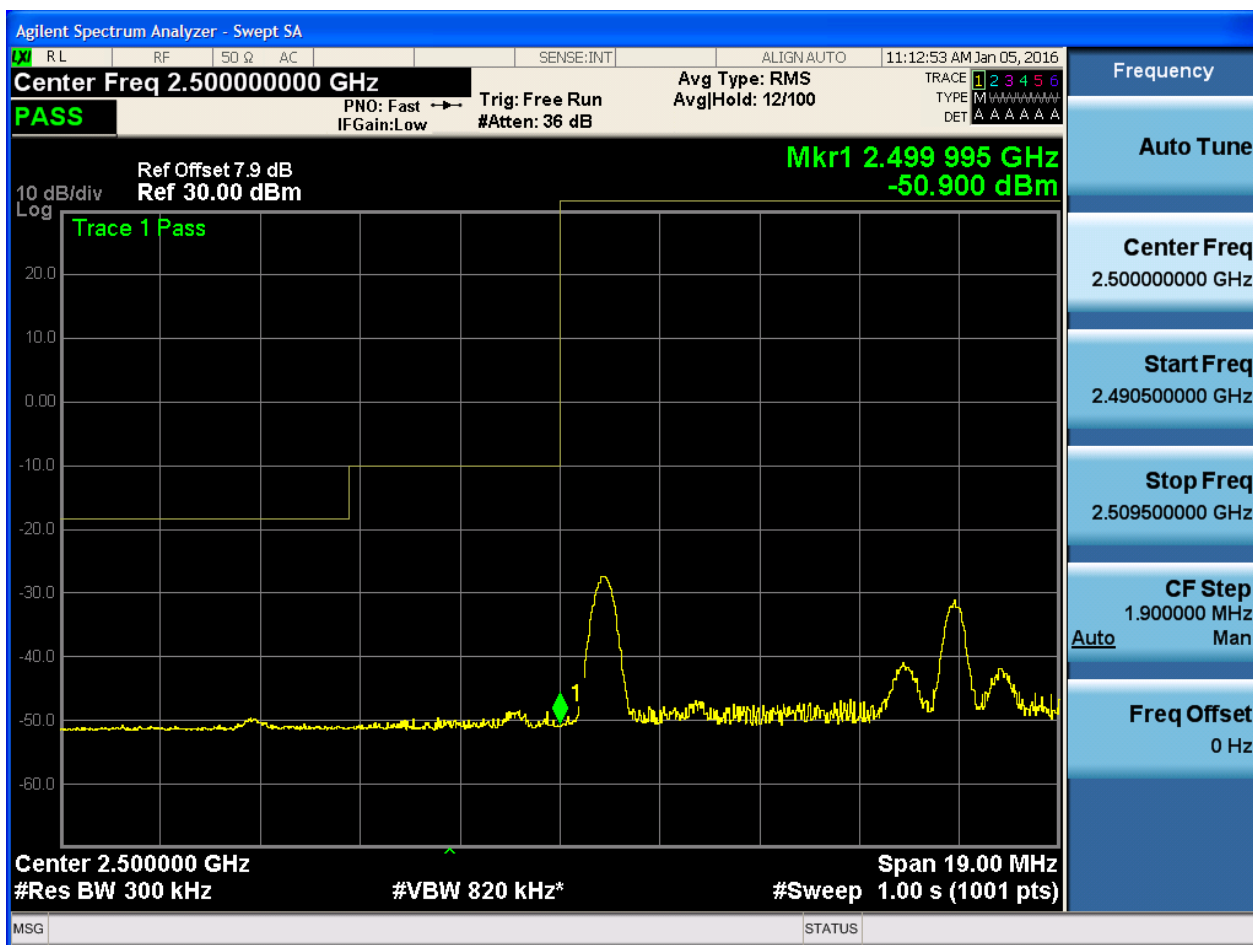
5.1.4.2.3.1 Test Channel = LCH

5.1.4.2.3.1.1 Test RB = RB1#0



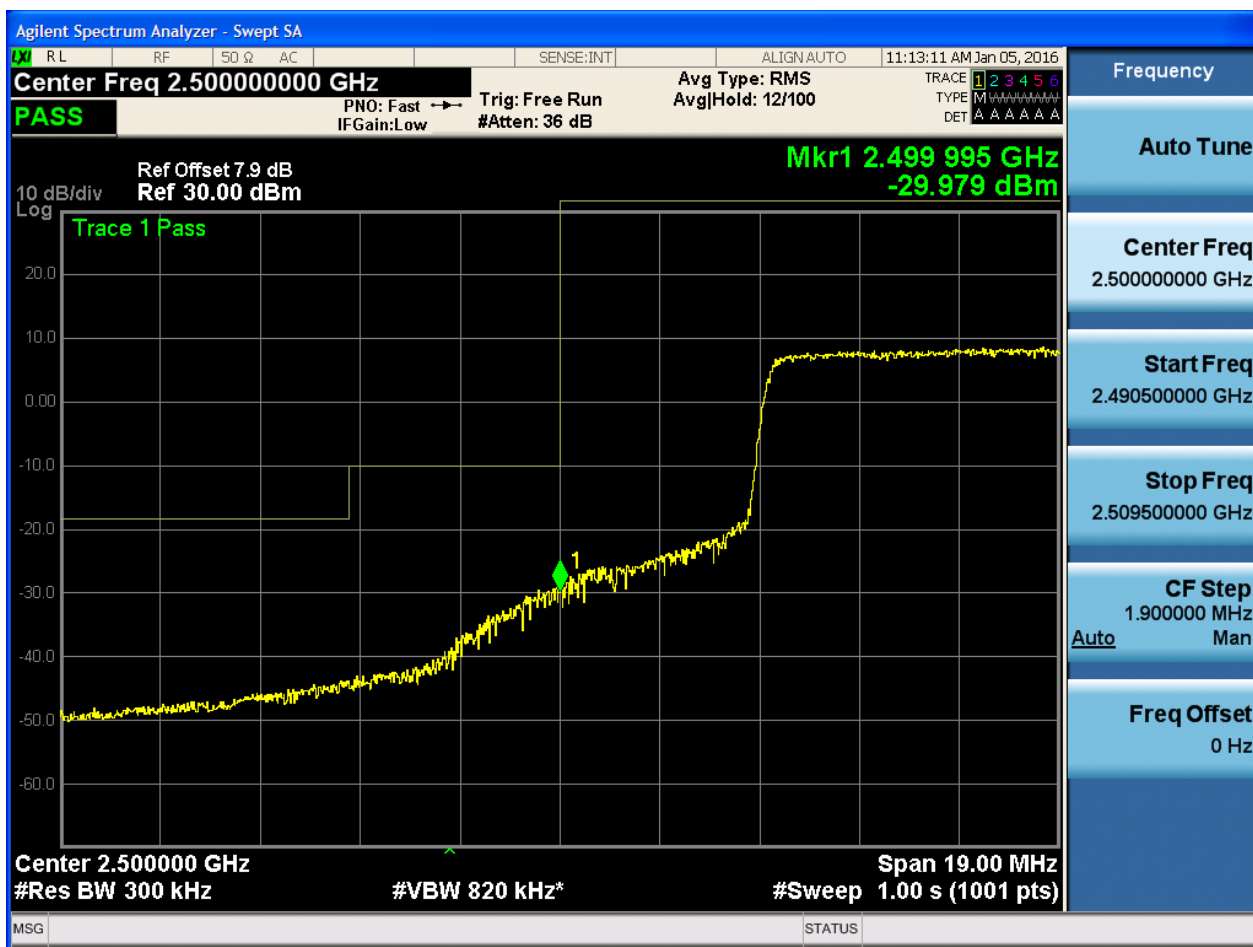


5.1.4.2.3.1.2 Test RB = RB1#74



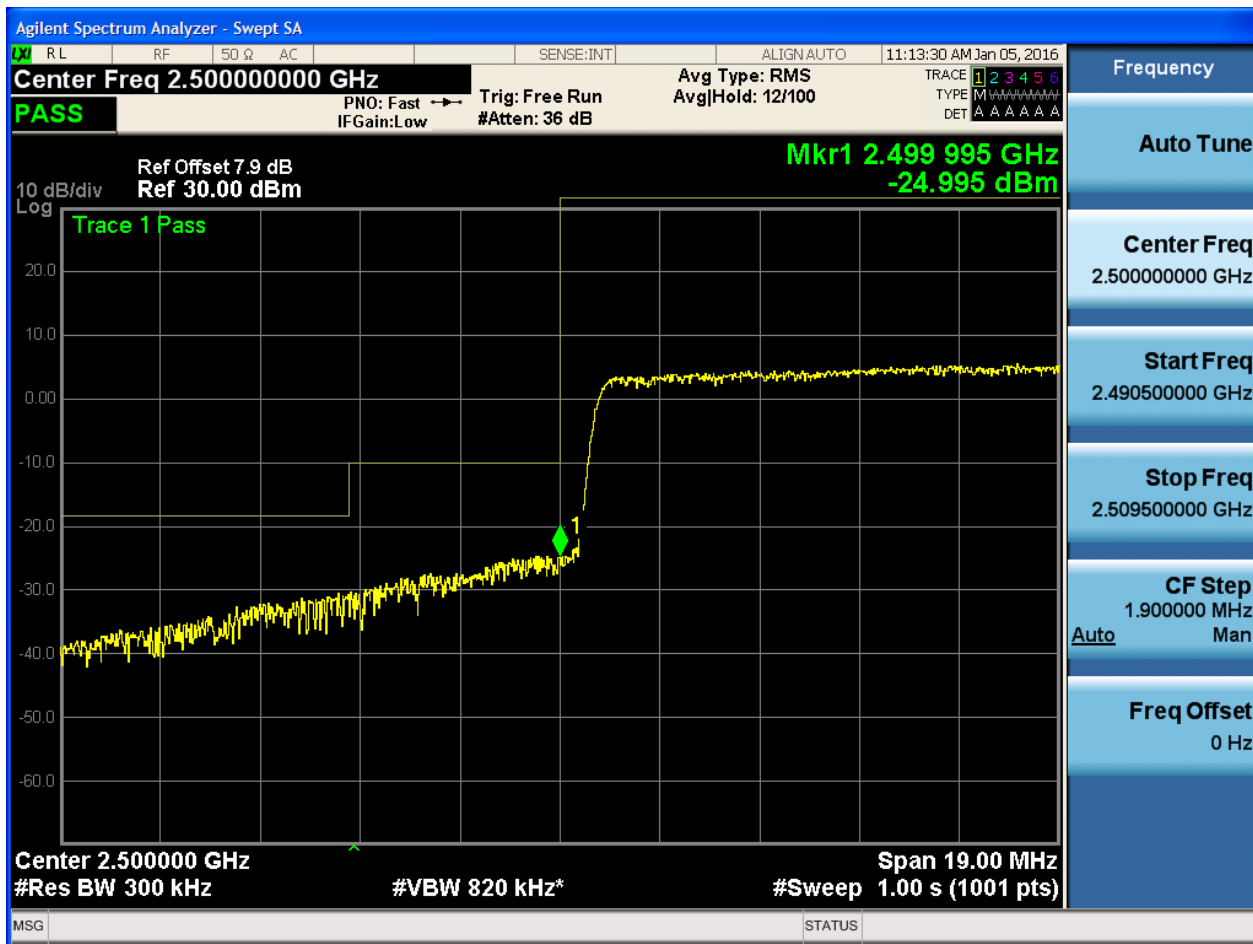


5.1.4.2.3.1.3 Test RB = RB36#18





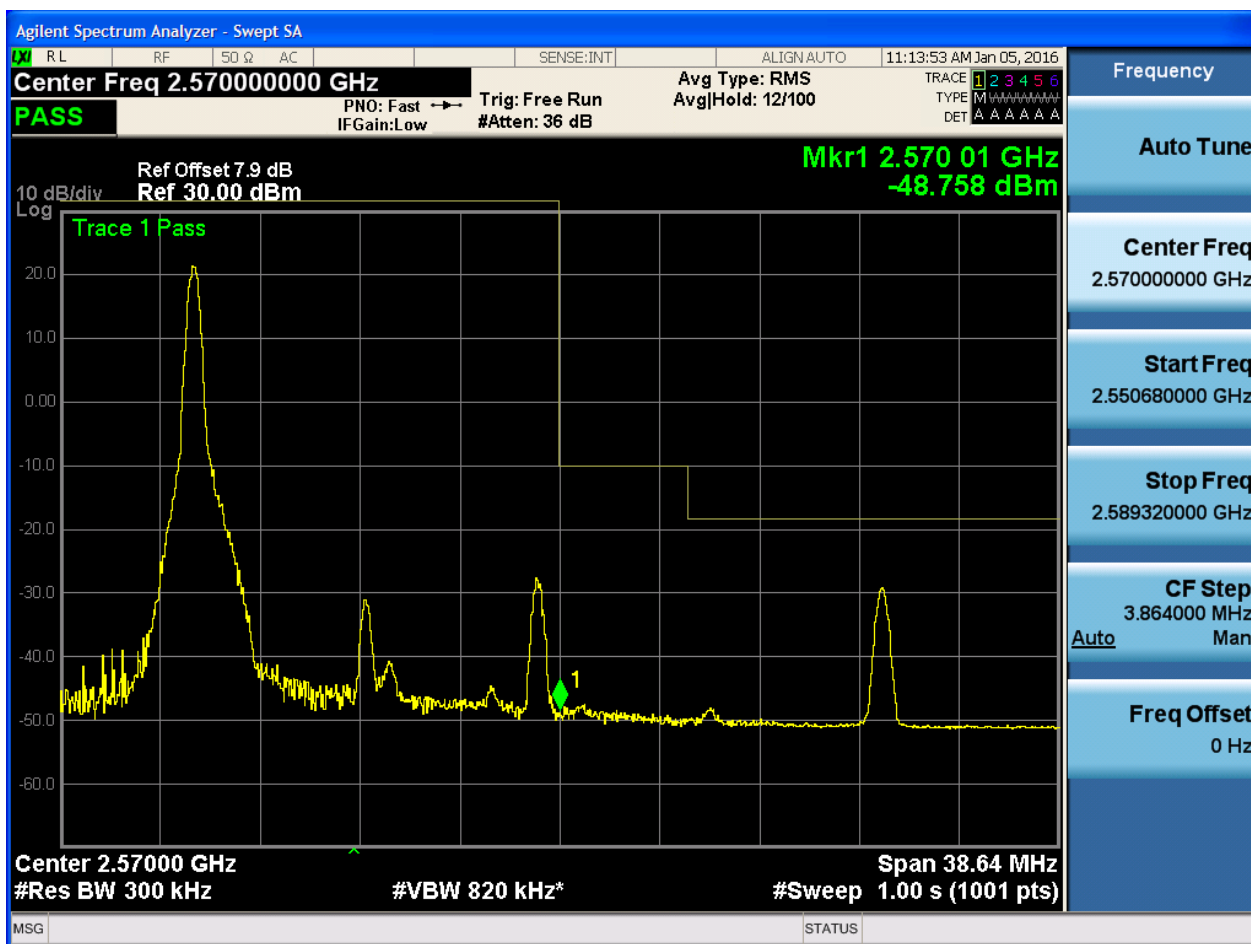
5.1.4.2.3.1.4 Test RB = RB75#0





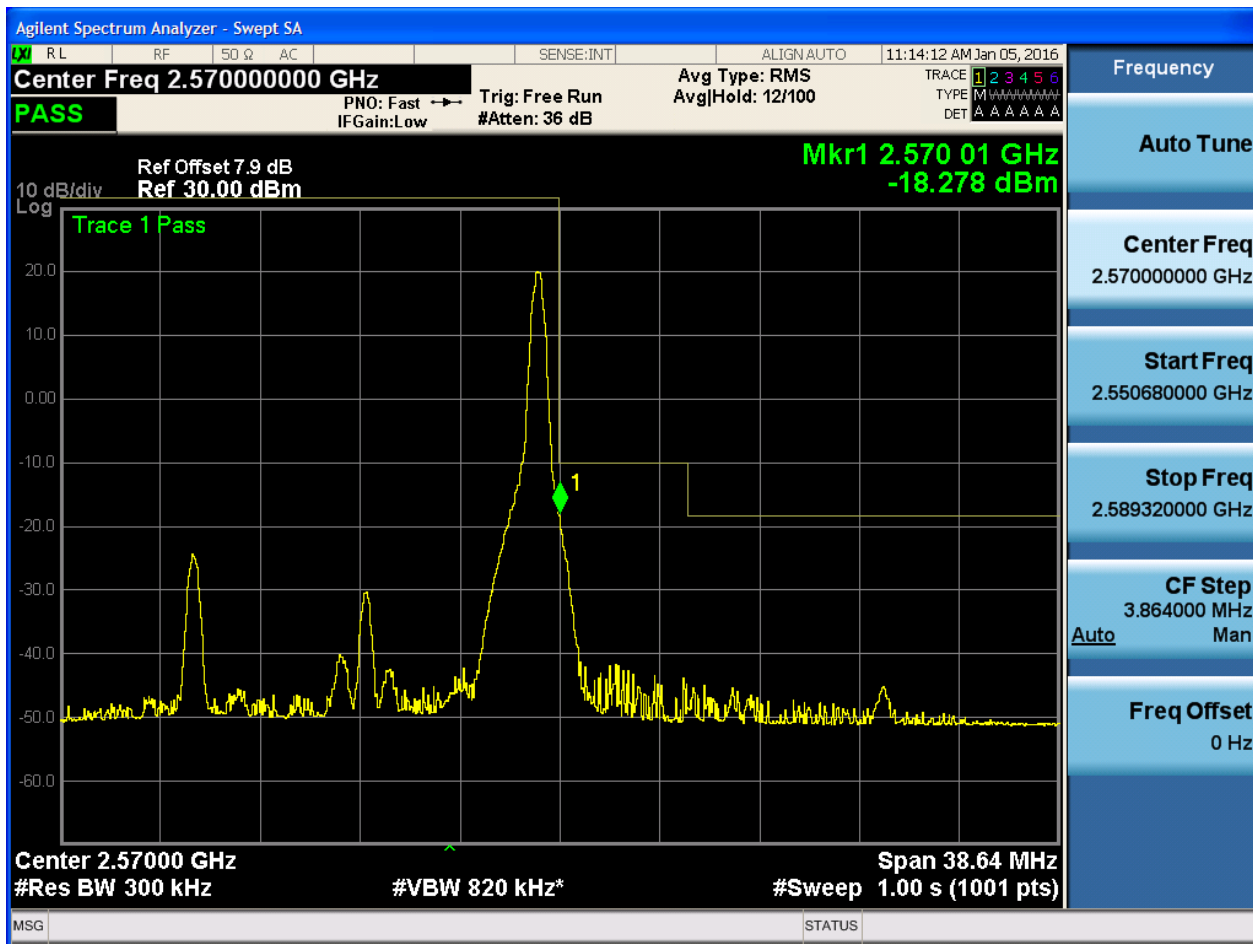
5.1.4.2.3.2 Test Channel = HCH

5.1.4.2.3.2.1 Test RB = RB1#0





5.1.4.2.3.2.2 Test RB = RB1#74





5.1.4.2.3.2.3 Test RB = RB36#18





5.1.4.2.3.2.4 Test RB = RB75#0

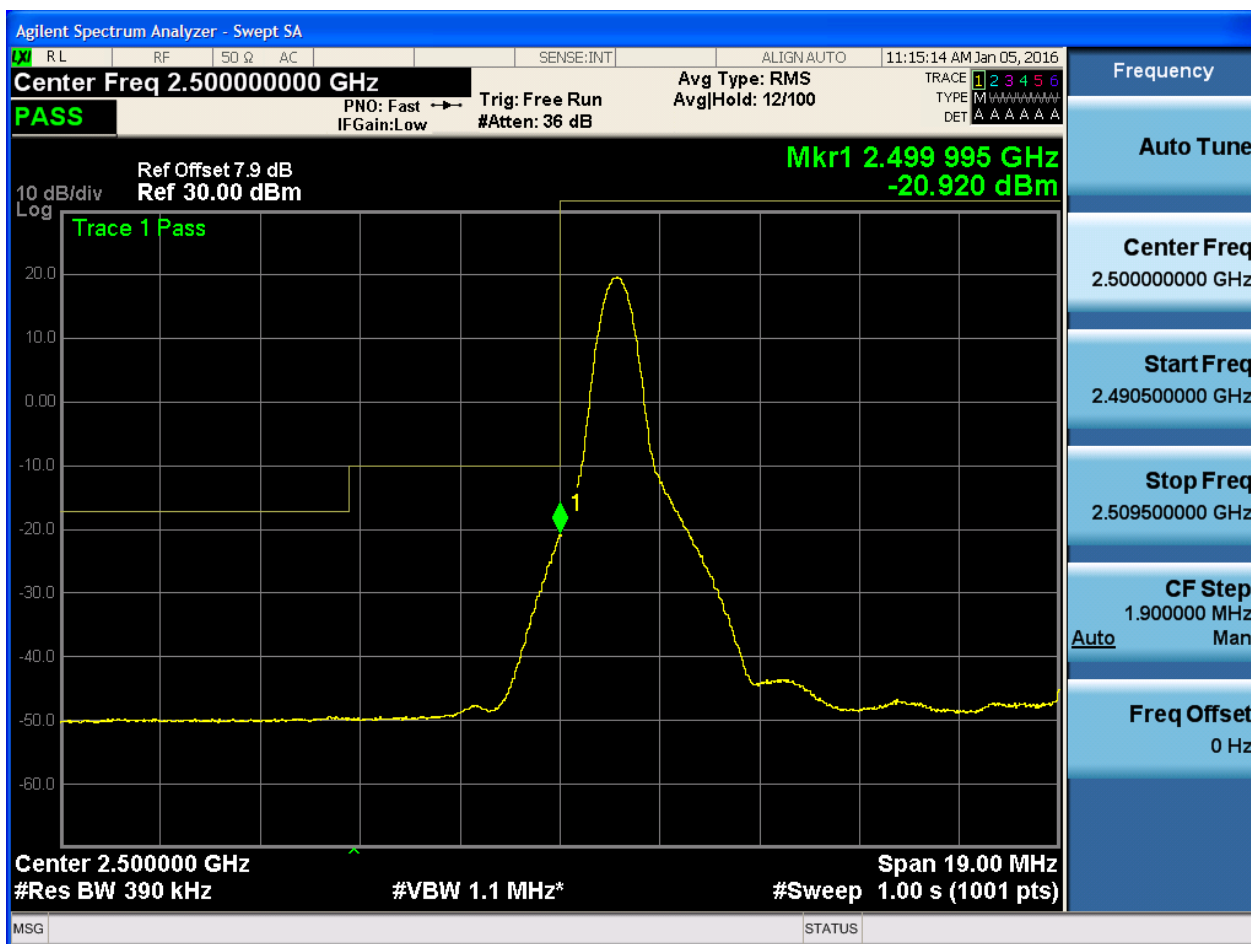




5.1.4.2.4 Test Bandwidth = 20

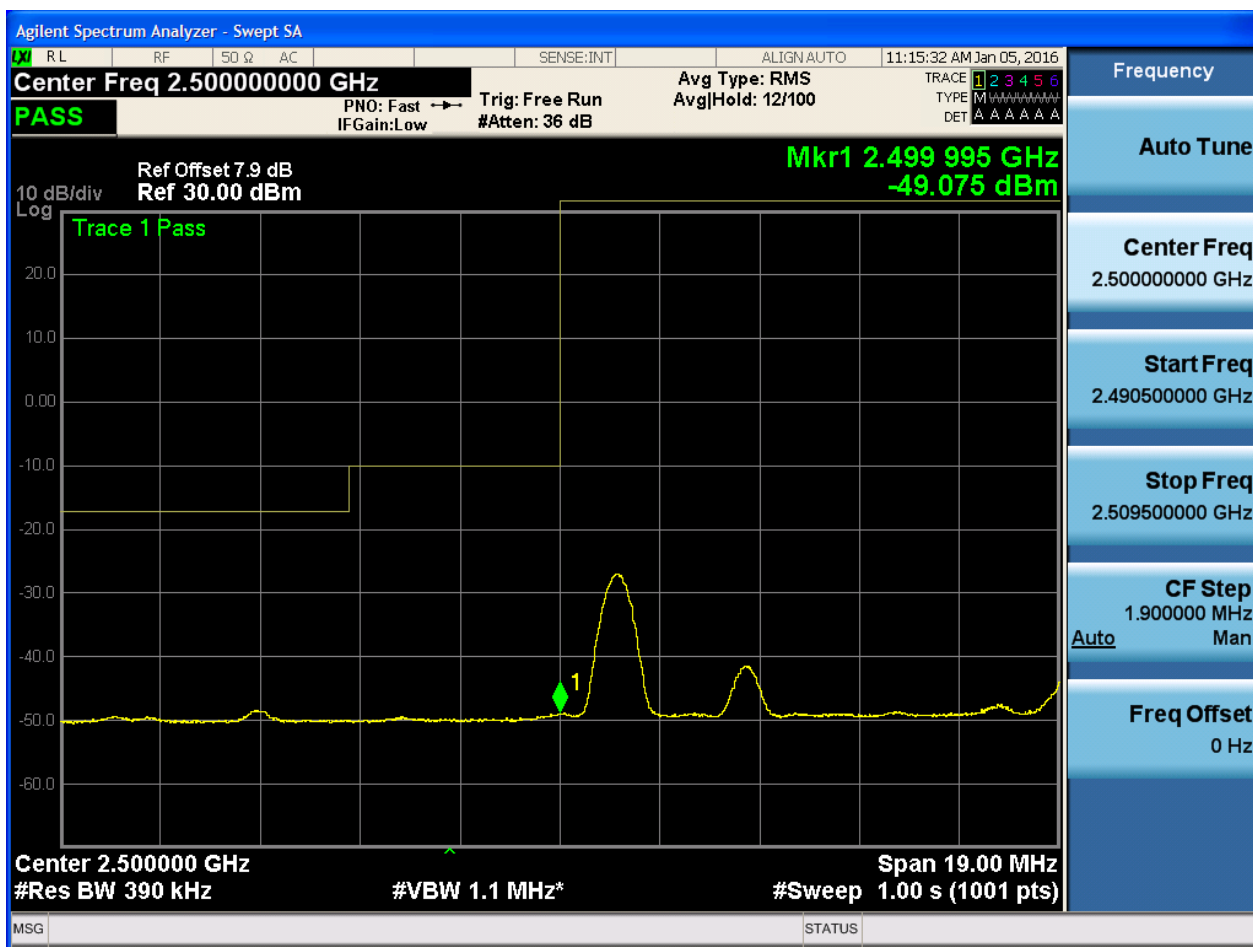
5.1.4.2.4.1 Test Channel = LCH

5.1.4.2.4.1.1 Test RB = RB1#0





5.1.4.2.4.1.2 Test RB = RB1#99



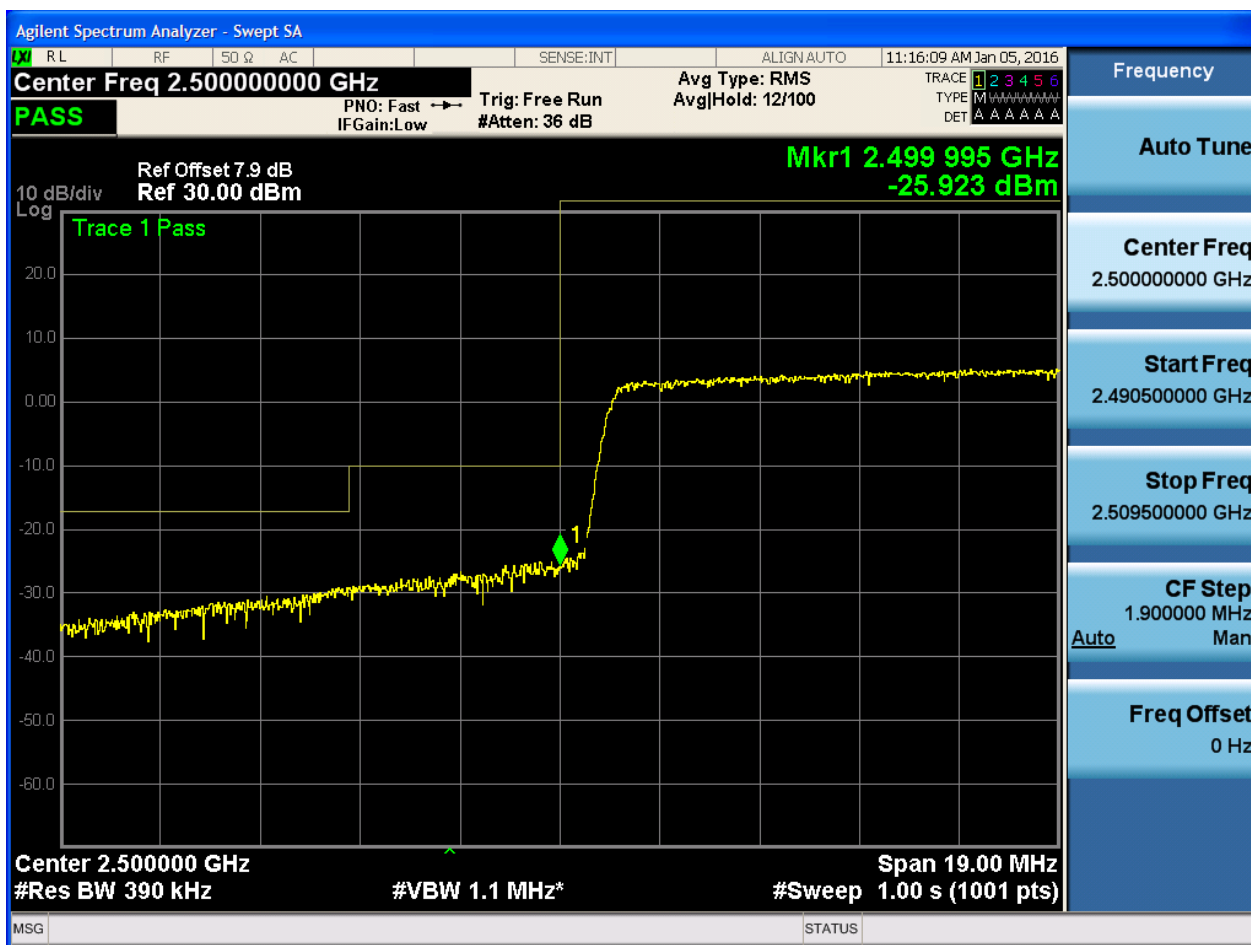


5.1.4.2.4.1.3 Test RB = RB50#25



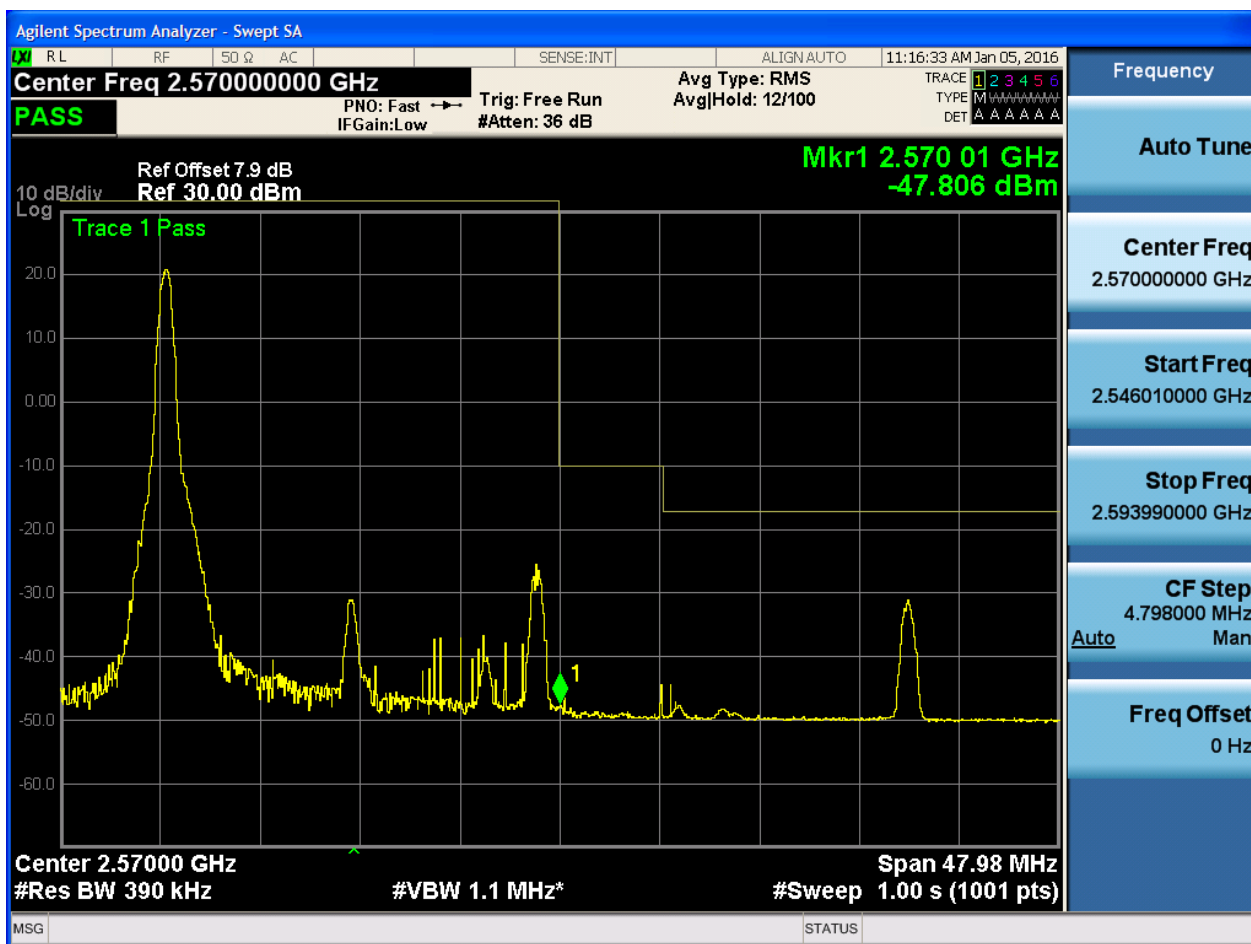


5.1.4.2.4.1.4 Test RB = RB100#0



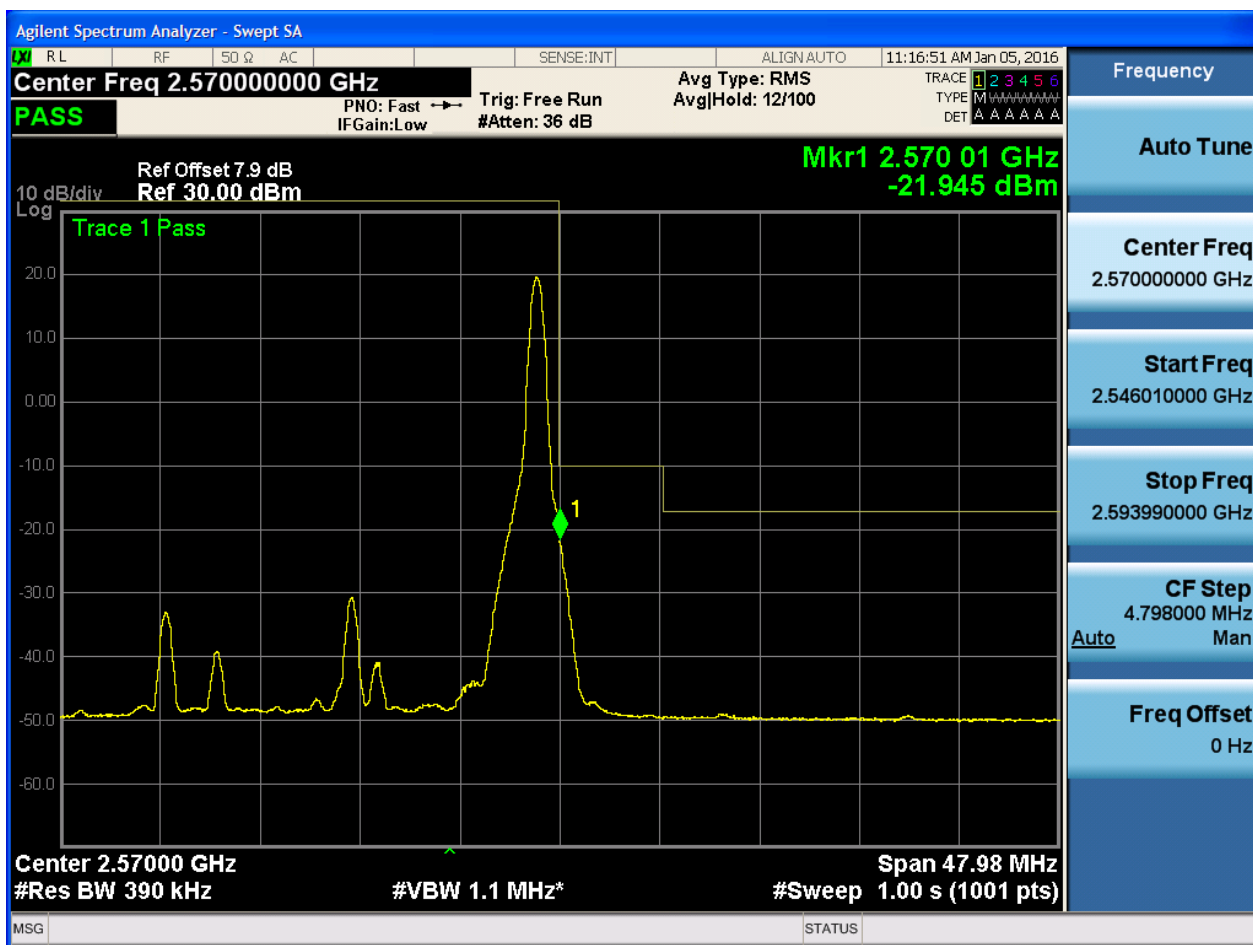
5.1.4.2.4.2 Test Channel = HCH

5.1.4.2.4.2.1 Test RB = RB1#0





5.1.4.2.4.2.2 Test RB = RB1#99





5.1.4.2.4.2.3 Test RB = RB50#25





5.1.4.2.4.2.4 Test RB = RB100#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

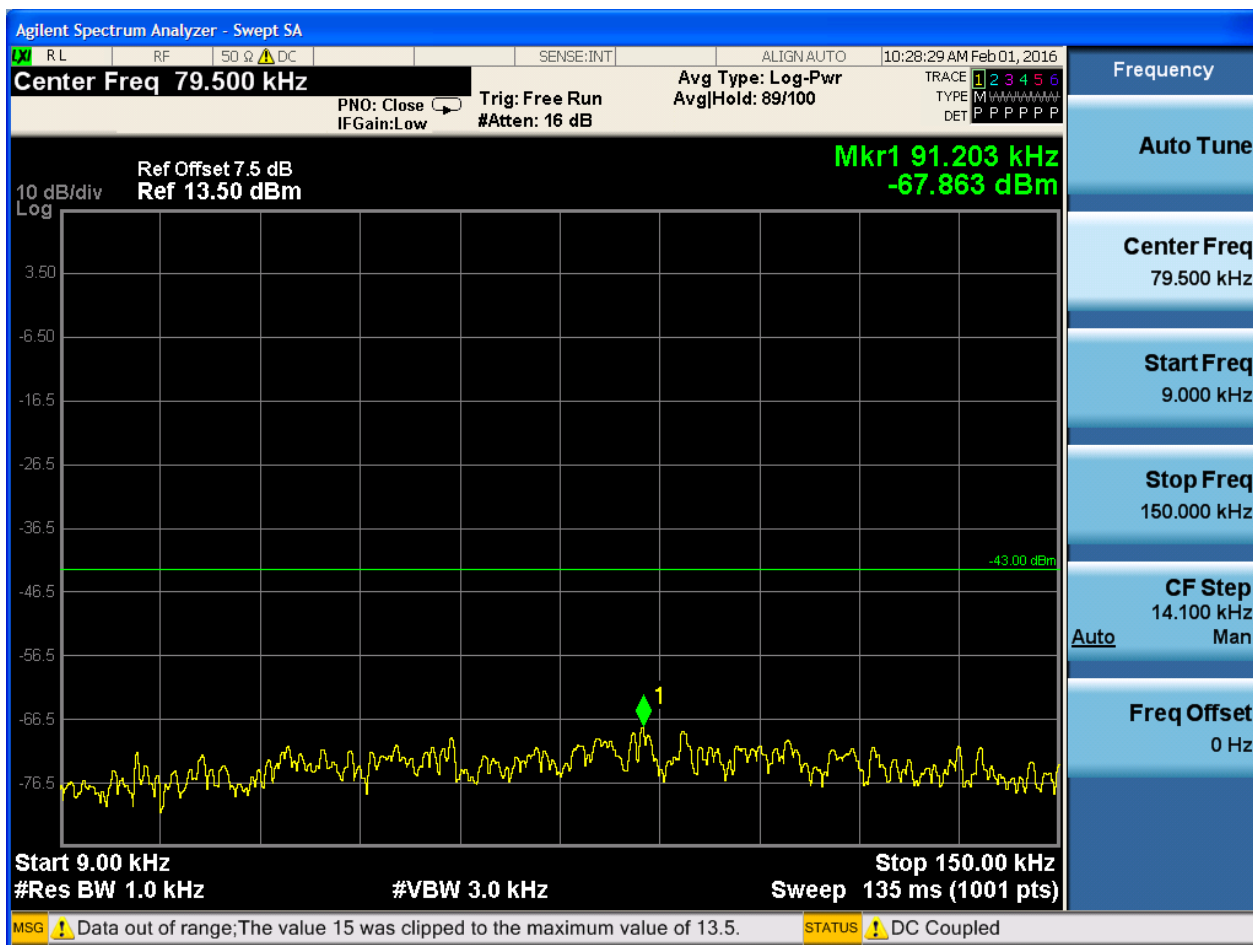
6.1.1 Test Band = BAND2

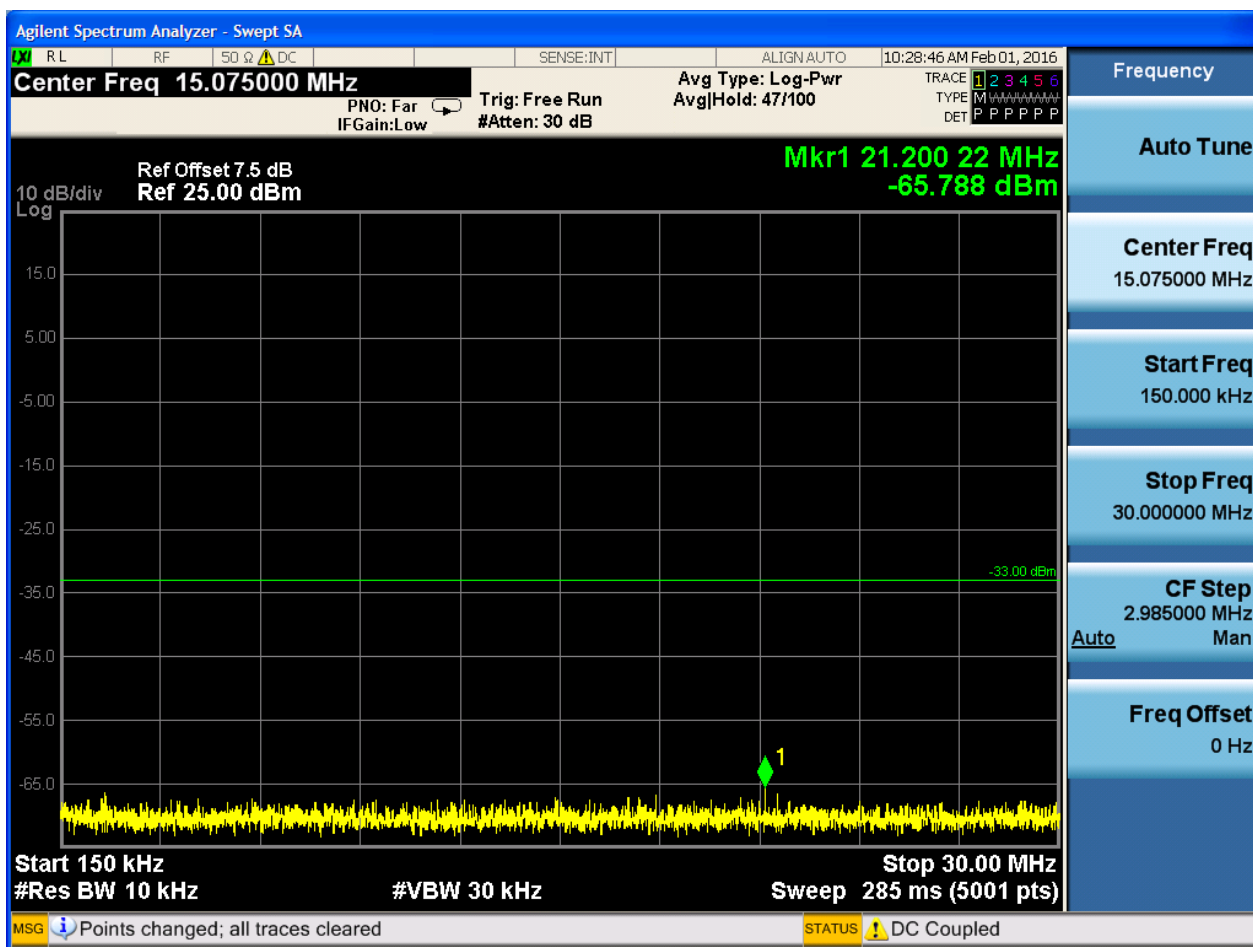
6.1.1.1 Test Mode = LTE/TM1

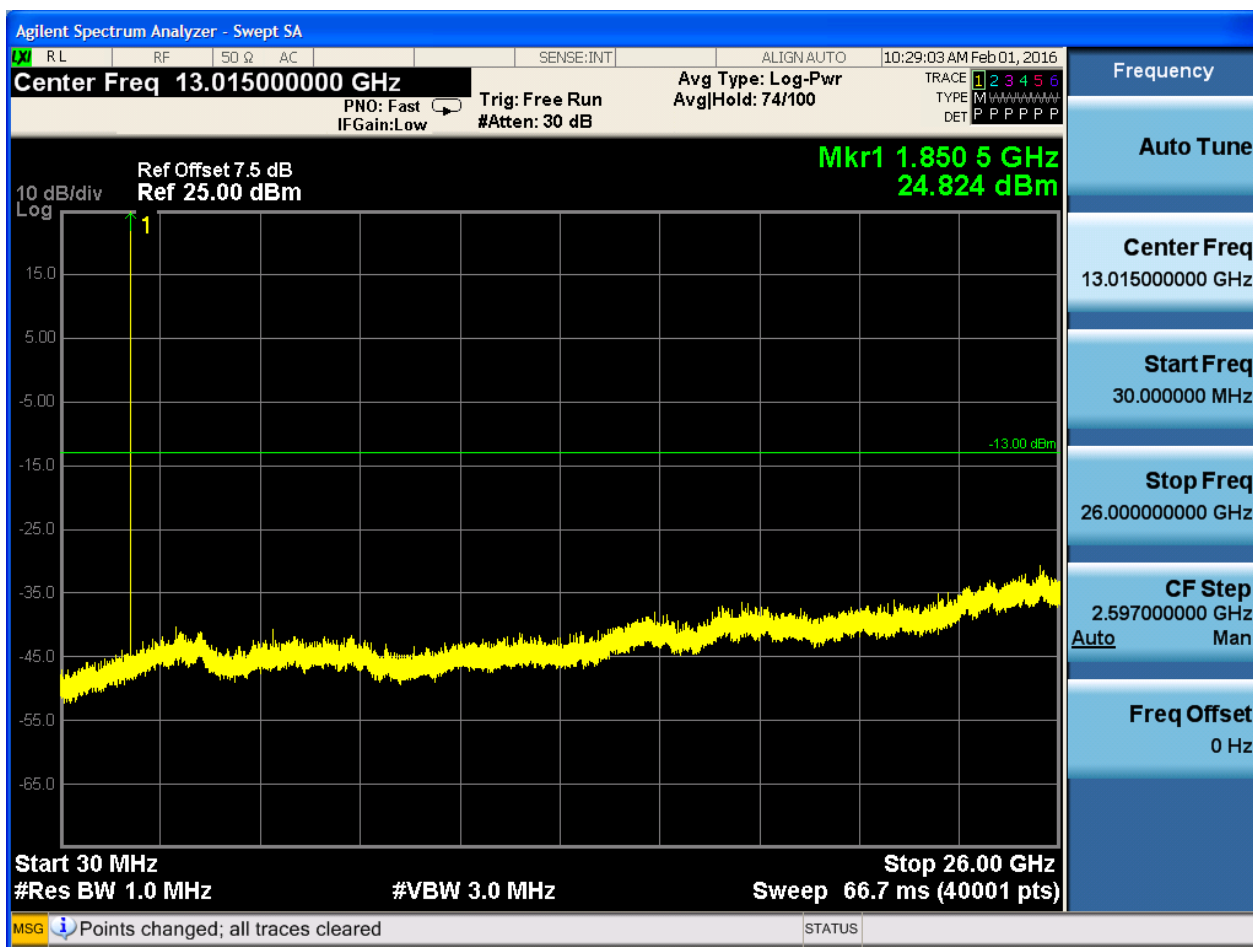
6.1.1.1.1 Test Bandwidth = 1.4

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



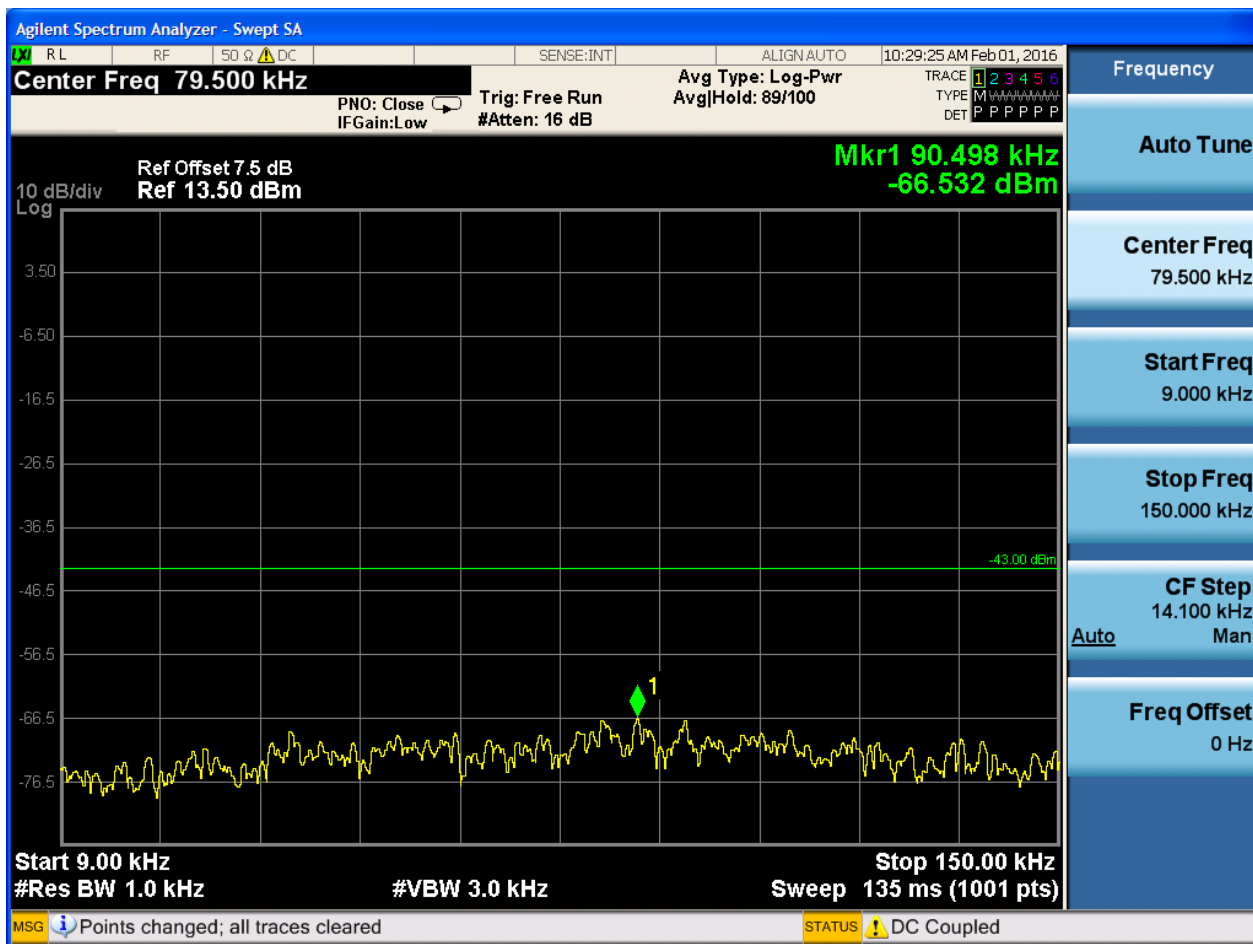


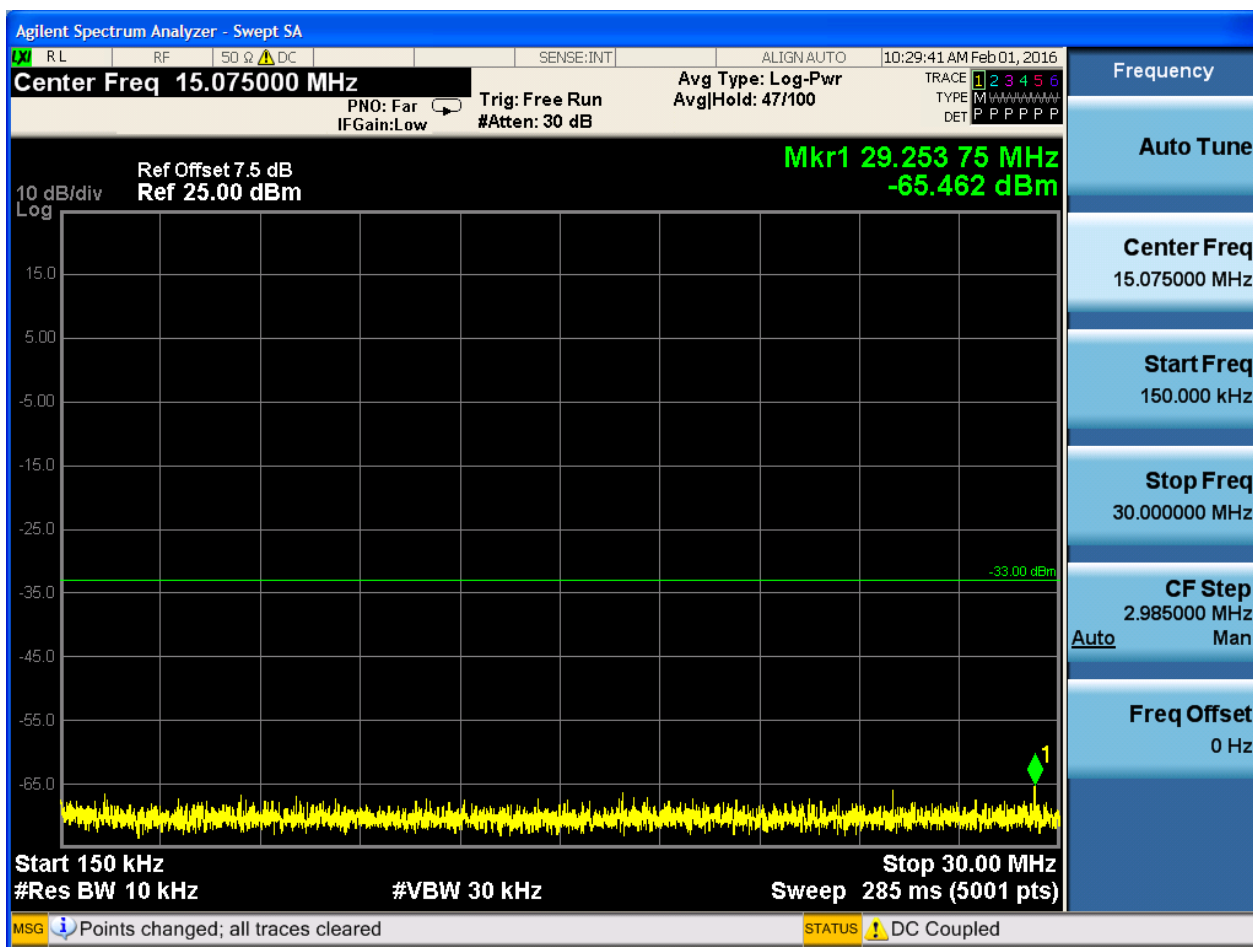


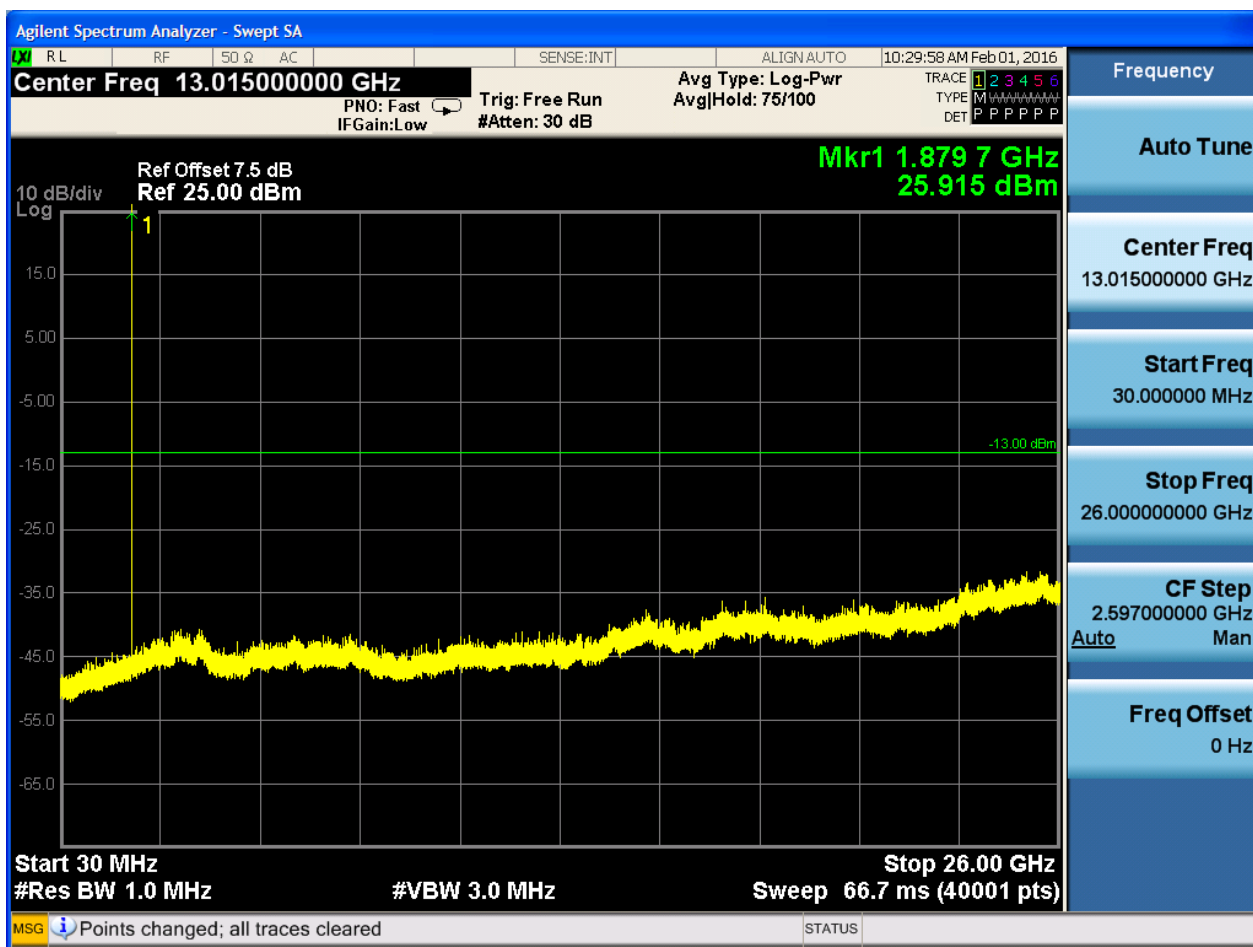


6.1.1.1.2 Test Channel = MCH

6.1.1.1.2.1 Test RB = RB1#0



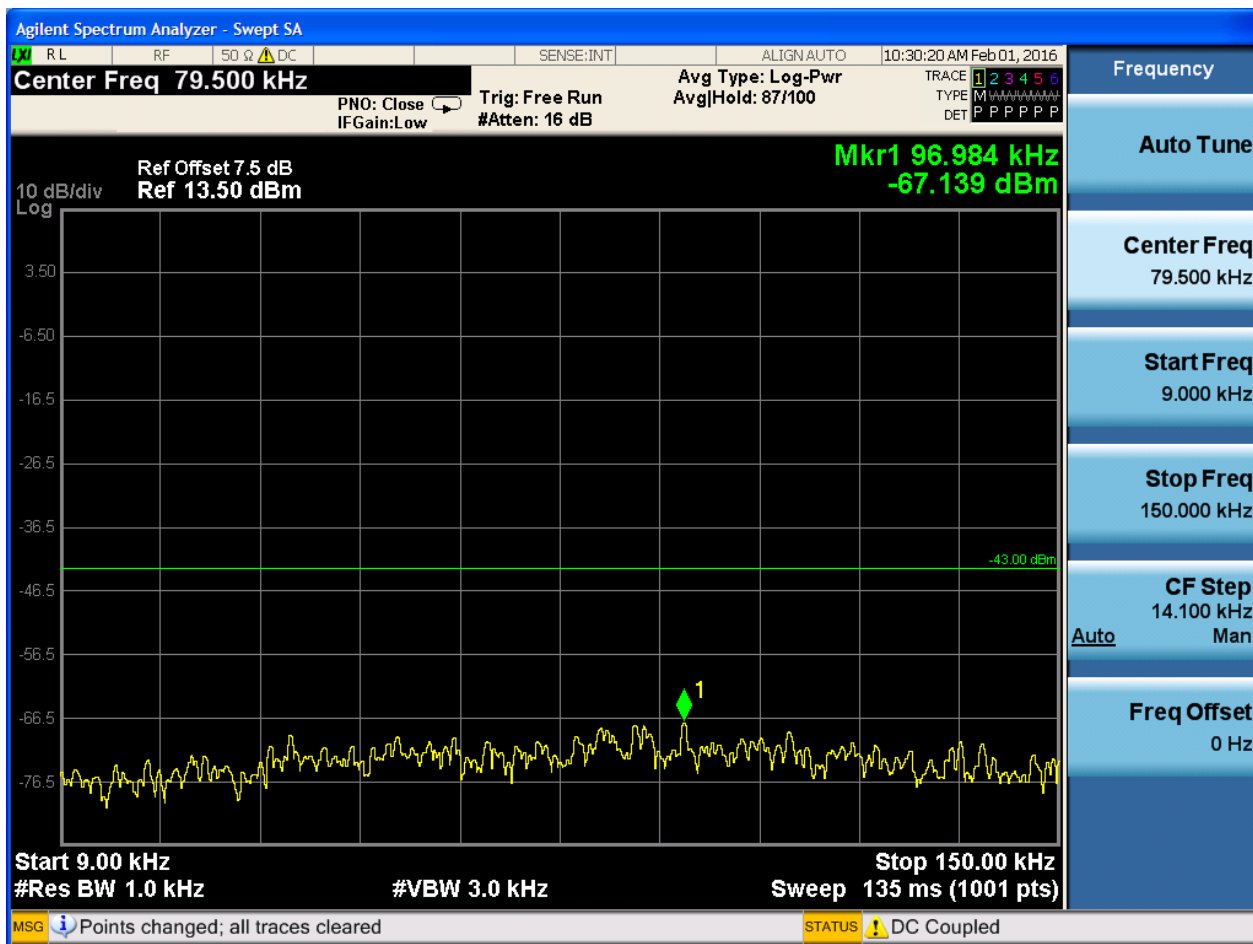


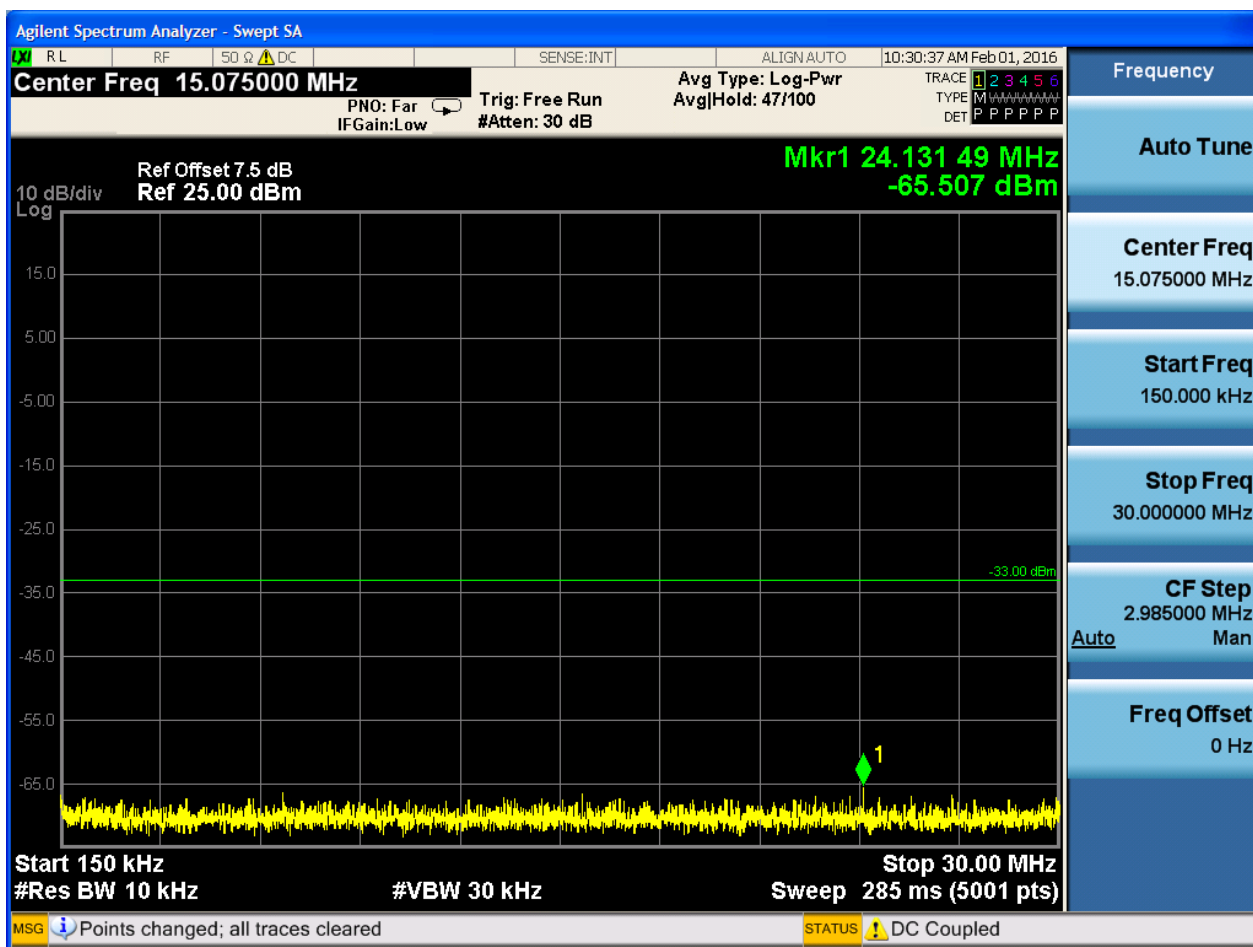


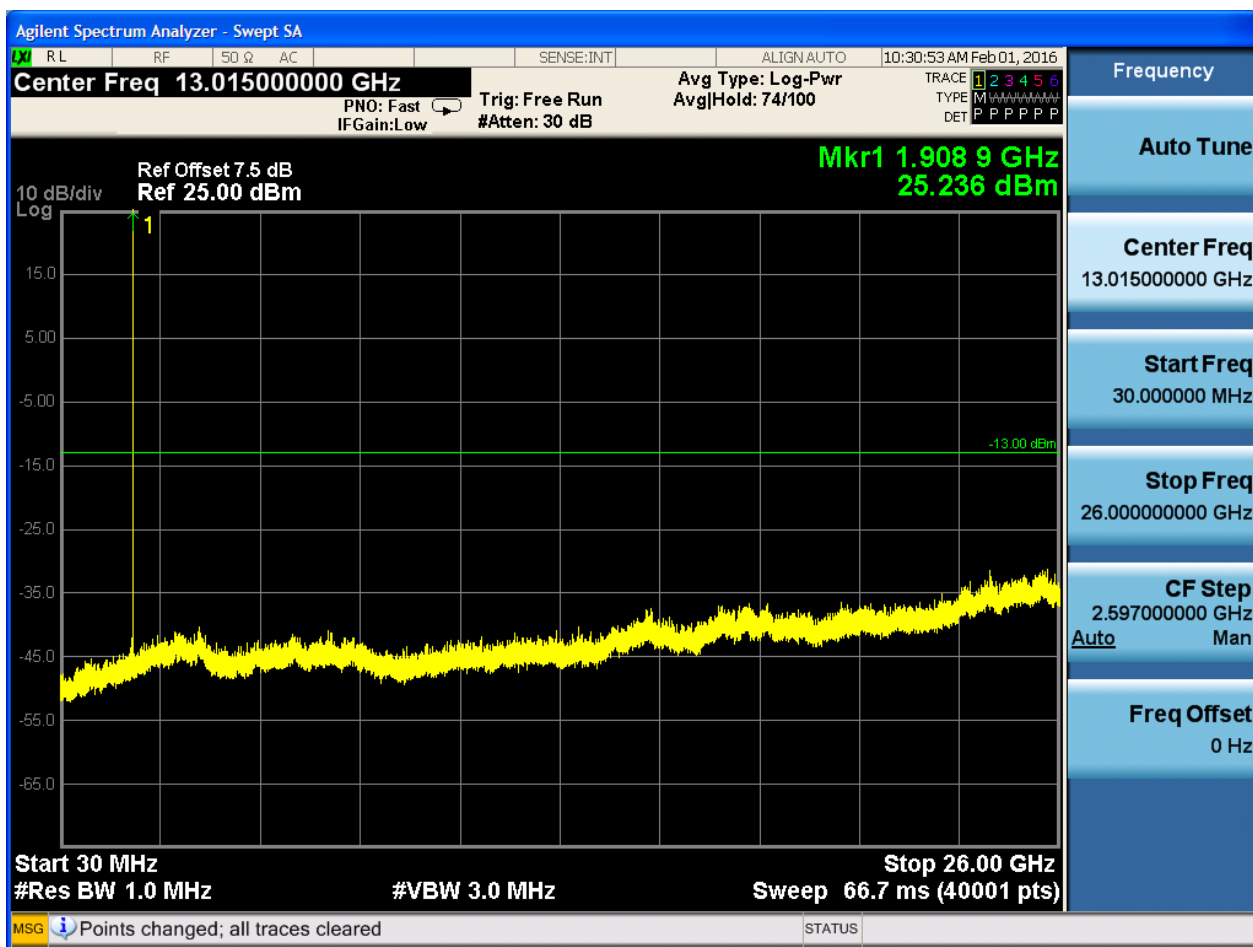


6.1.1.1.1.3 Test Channel = HCH

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

