

Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7.5 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-24.620 dBm

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
Auto

Freq Offset
0 Hz

Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7.5 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-24.620 dBm

Center 849.000 MHz
#Res BW 15 kHz
#VBW 43 kHz*

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

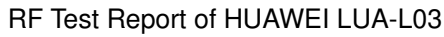
Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Auto

Freq Offset
0 Hz



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
-31.867 dBm

Center 849.000 MHz
#Res BW 15 kHz

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

Auto Tune

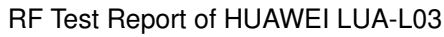
Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

Stop Freq
850.000000 MHz

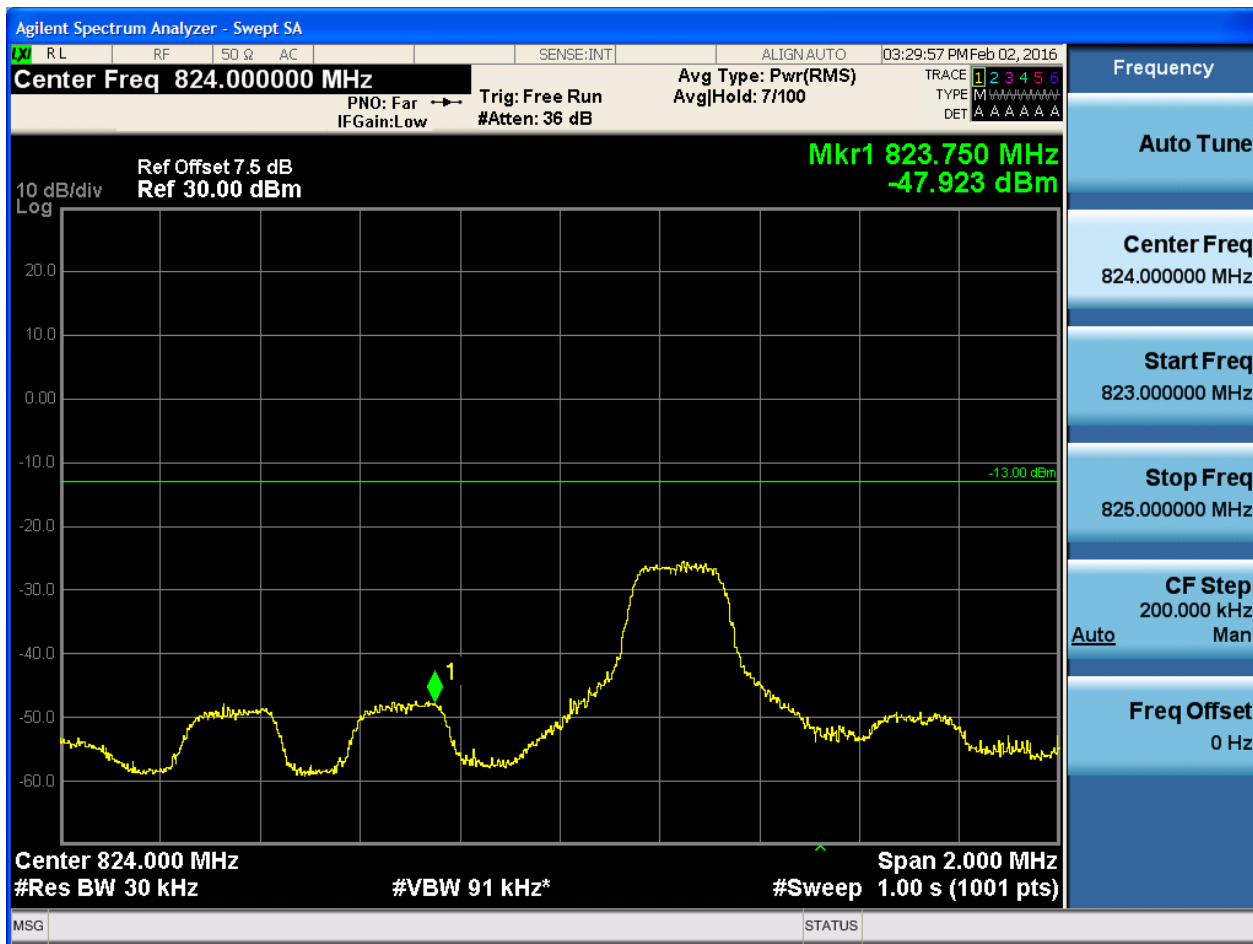
CF Step
200.000 kHz
Man

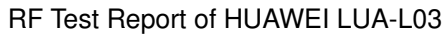
Freq Offset
0 Hz





5.1.1.2.2.1.2 Test RB = RB1#14





Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 7.5 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 823.990 MHz
-33.040 dBm

Center 824.000 MHz
#Res BW 30 kHz

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

#VBW 91 kHz*

Auto Tune

Center Freq
824.000000 MHz

Start Freq
823.000000 MHz

Stop Freq
825.000000 MHz

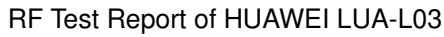
CF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz

MSG

STATUS



Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

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

Avg Type: Pwr(RMS)
AvgHold: 7/100

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

Ref Offset 7.5 dB
Ref 30.00 dBm

Mkr1 824.000 MHz
-28.396 dBm

10 dB/div Log

-13.00 dBm

Center 824.000 MHz
#Res BW 30 kHz

Span 2.000 MHz
#Sweep 1.00 s (1001 pts)

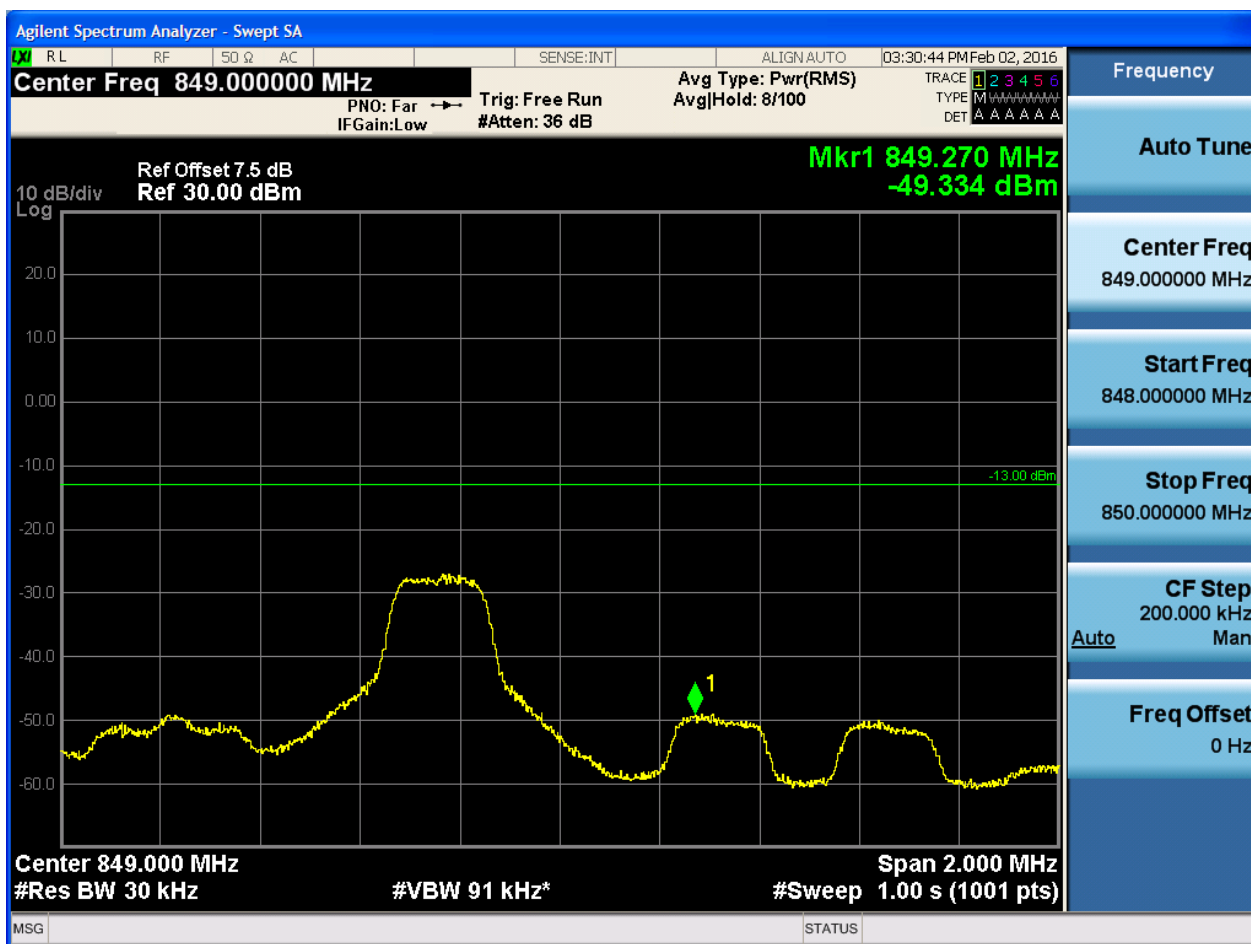
#VBW 91 kHz*

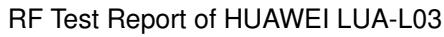
Frequency
Auto Tune
Center Freq 824.000000 MHz
Start Freq 823.000000 MHz
Stop Freq 825.000000 MHz
CF Step 200.000 kHz Man
Auto
Freq Offset 0 Hz

MSG STATUS

5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

Center Freq 849.000000 MHz

Ref Offset 7.5 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 849.000 MHz
-16.250 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

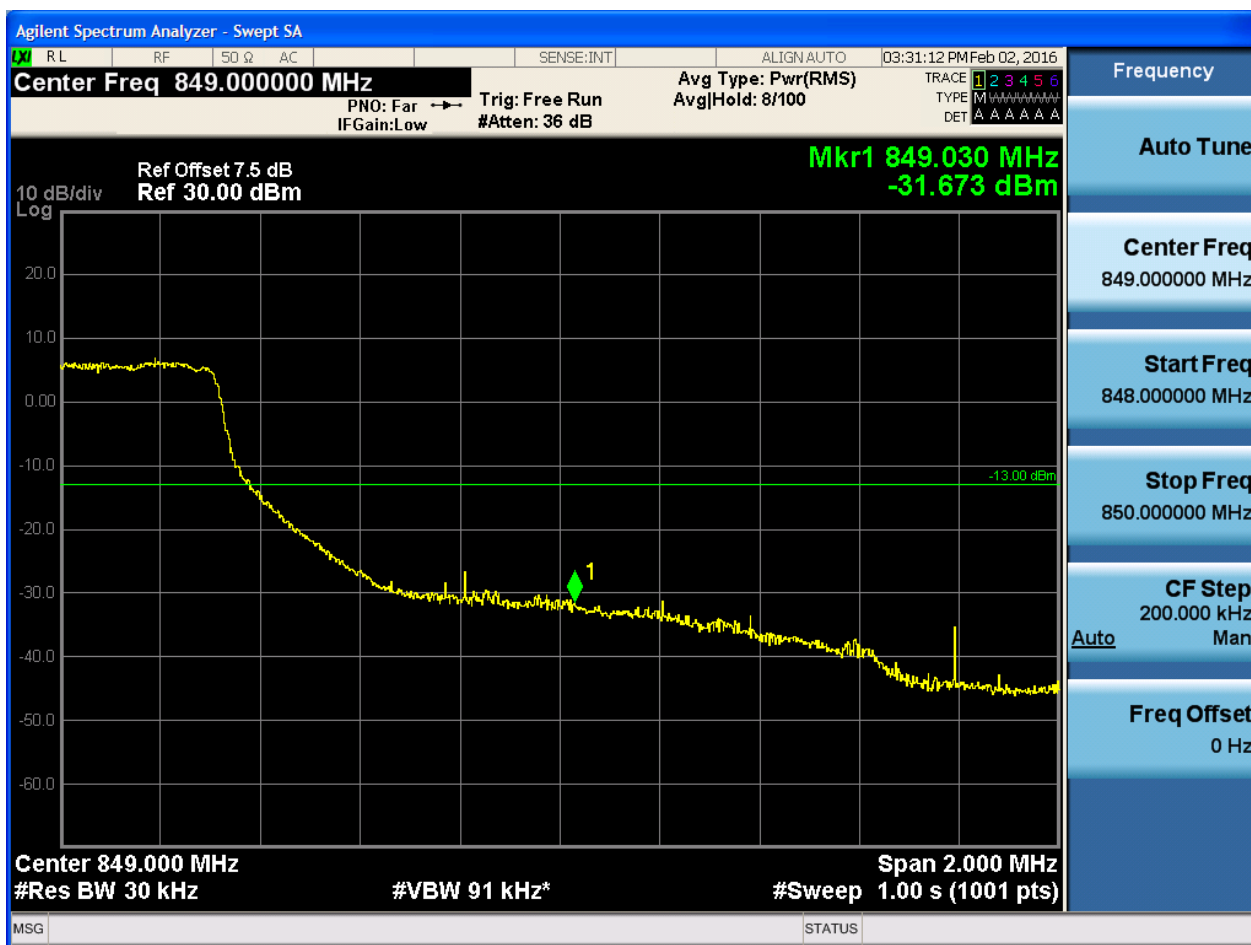
Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

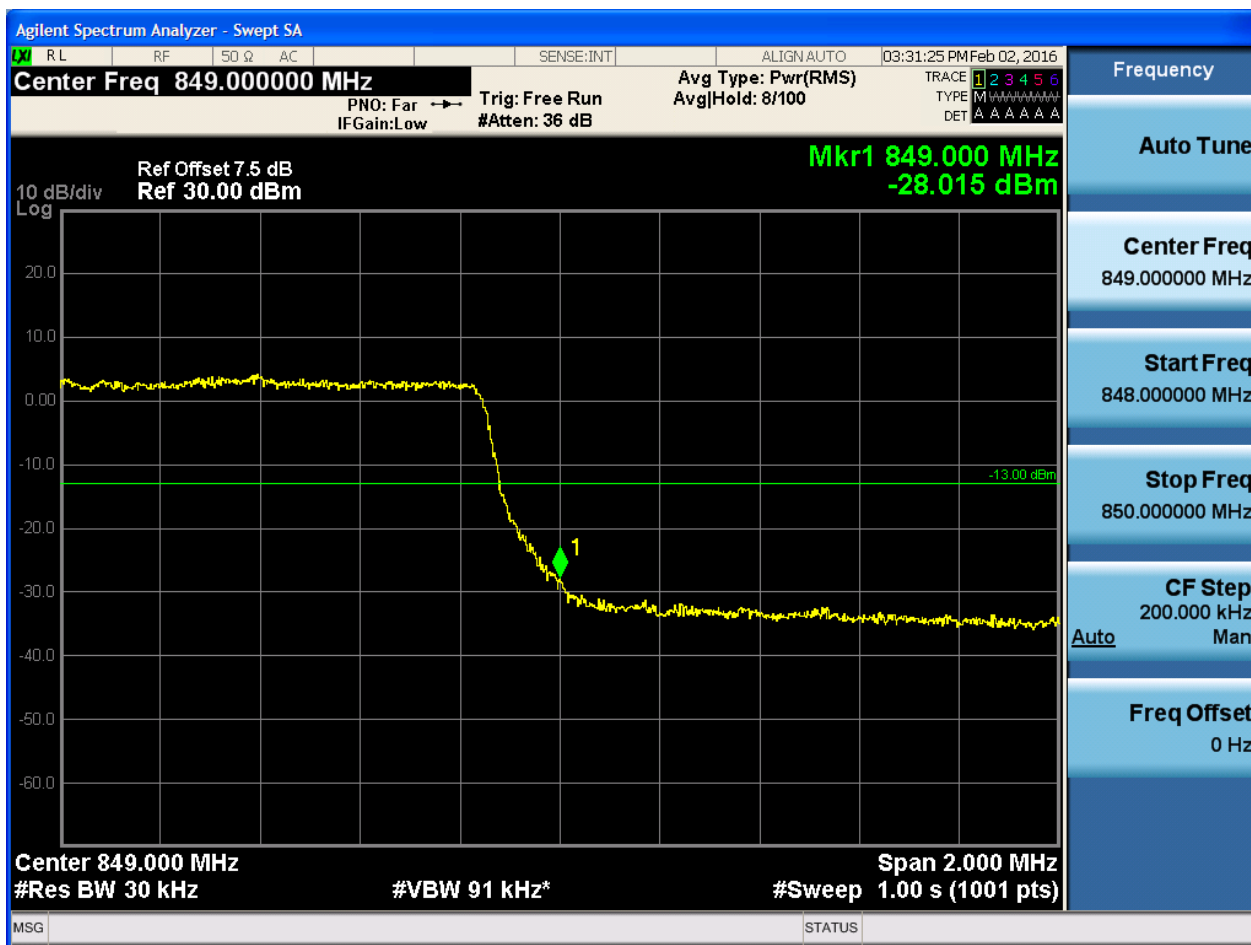


5.1.1.2.2.3 Test RB = RB8#4





5.1.1.2.2.4 Test RB = RB15#0

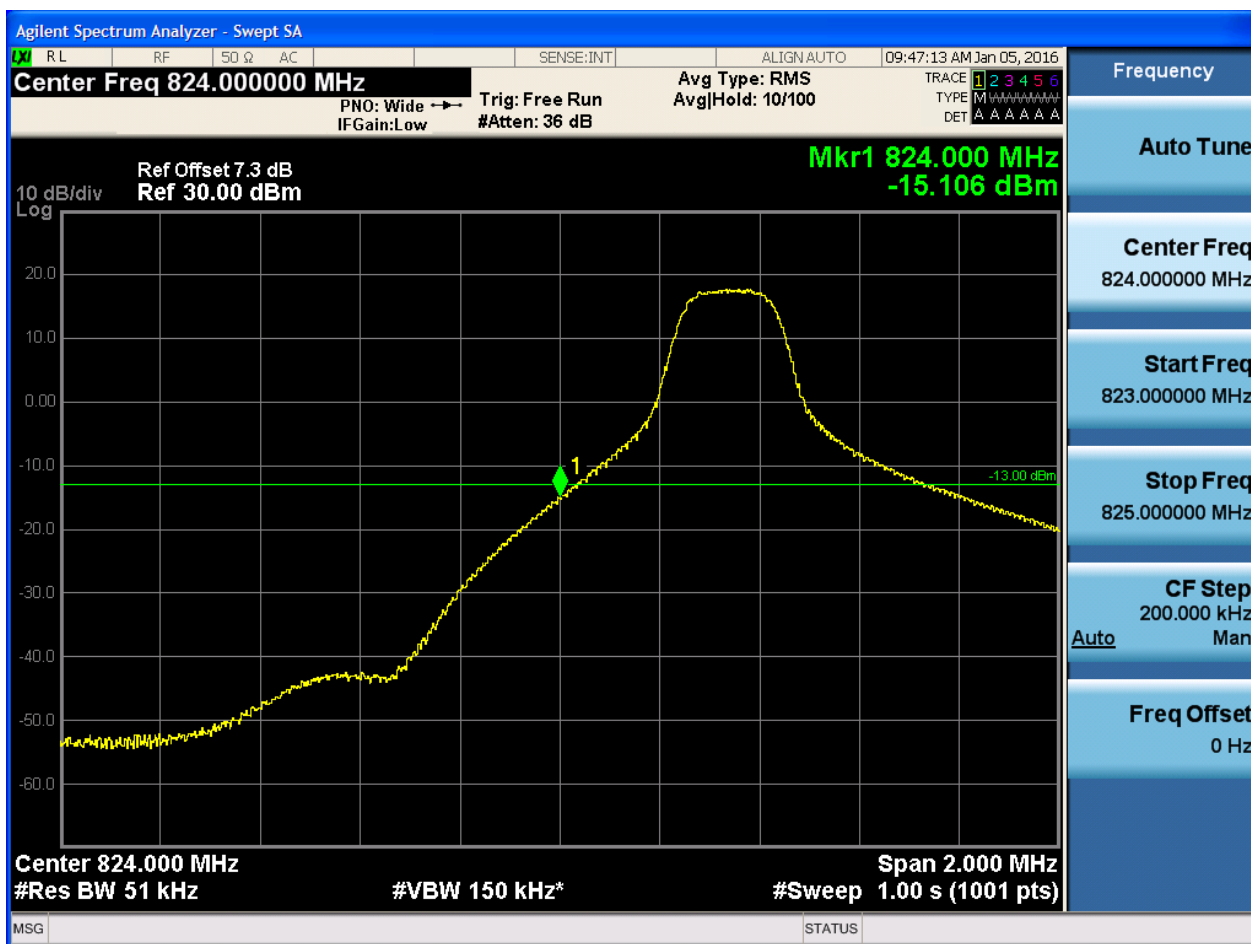




5.1.3.2.1 Test Bandwidth = 5

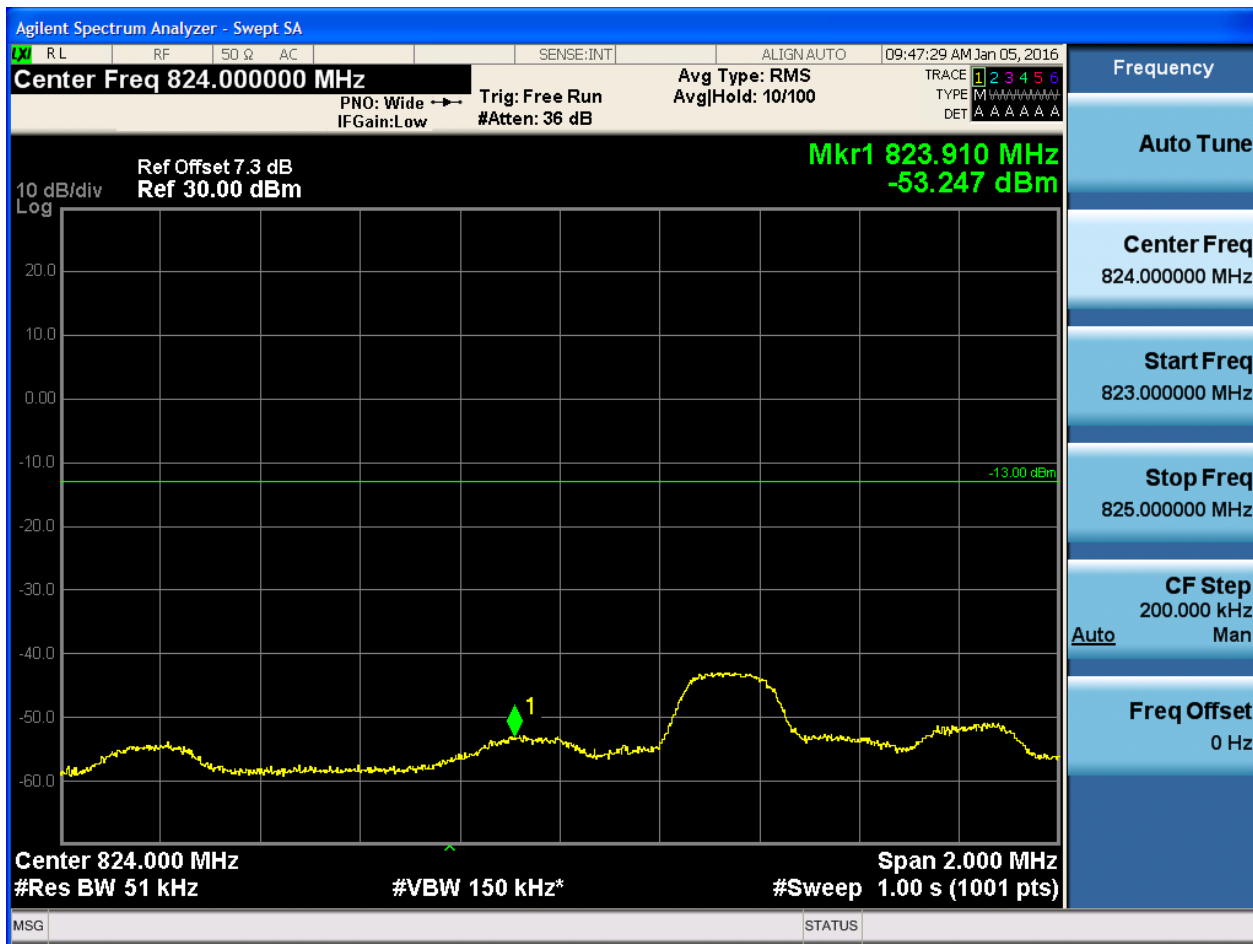
5.1.3.2.1.1 Test Channel = LCH

5.1.3.2.1.1.1 Test RB = RB1#0



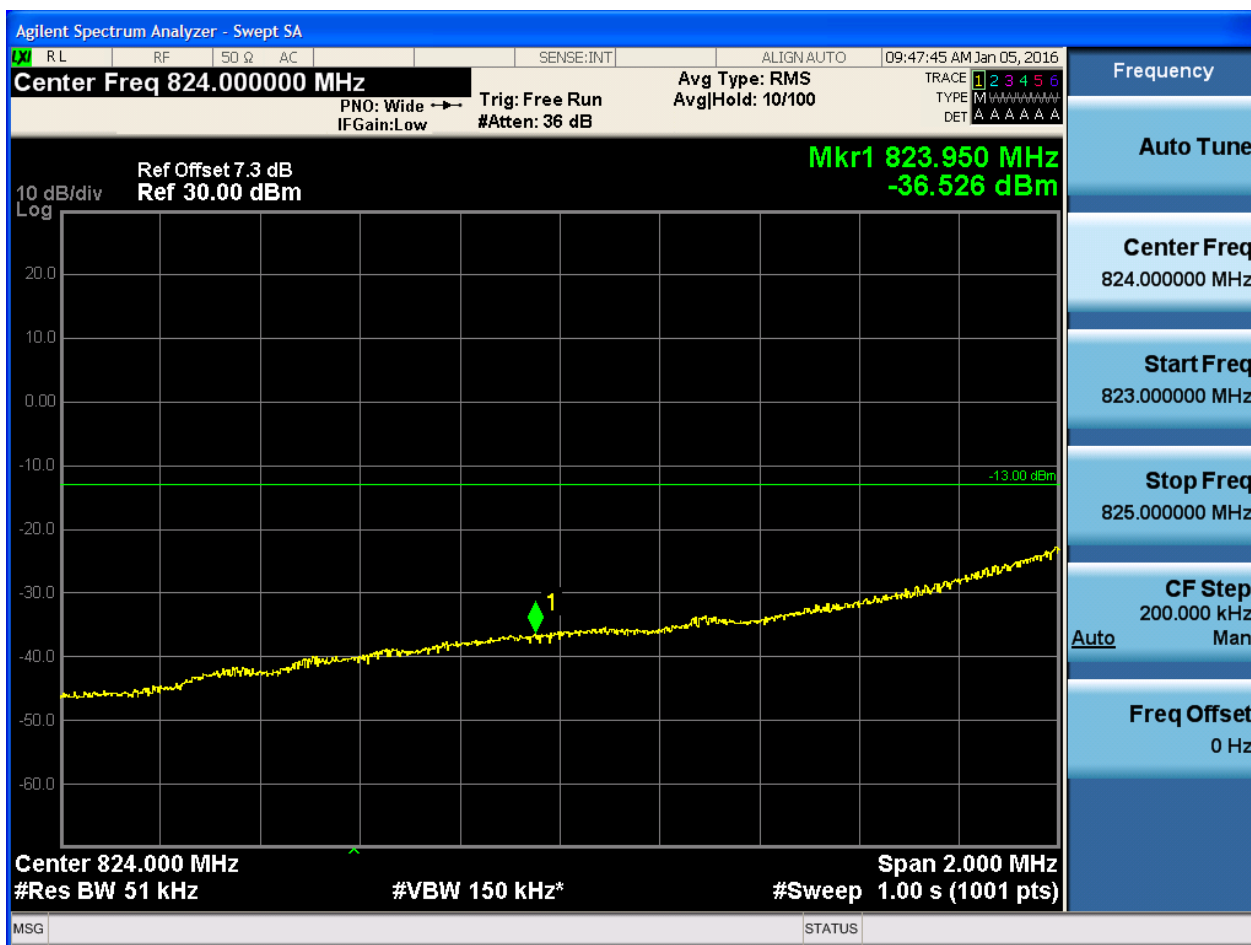


5.1.3.2.1.1.2 Test RB = RB1#24





5.1.3.2.1.1.3 Test RB = RB12#6





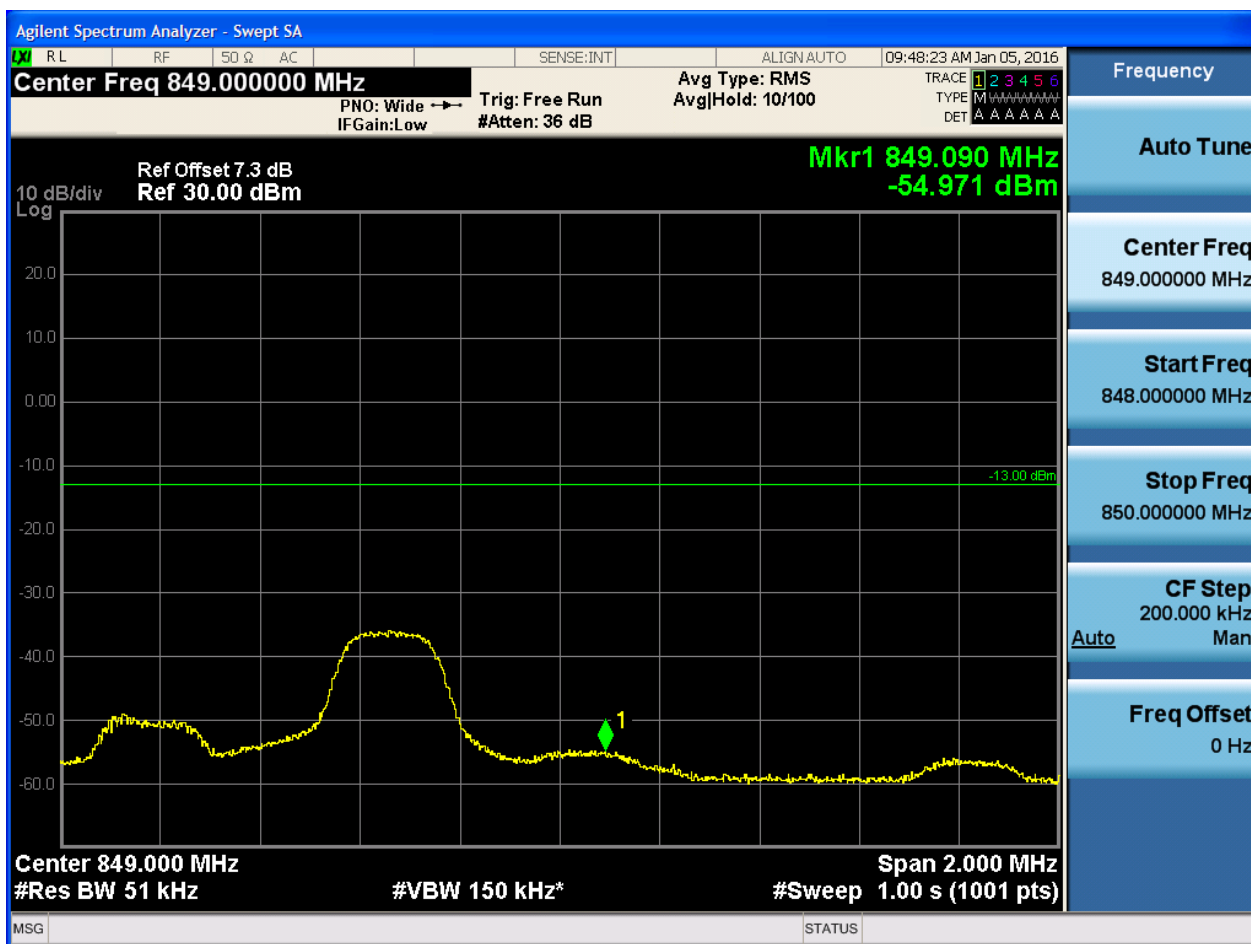
5.1.3.2.1.1.4 Test RB = RB25#0





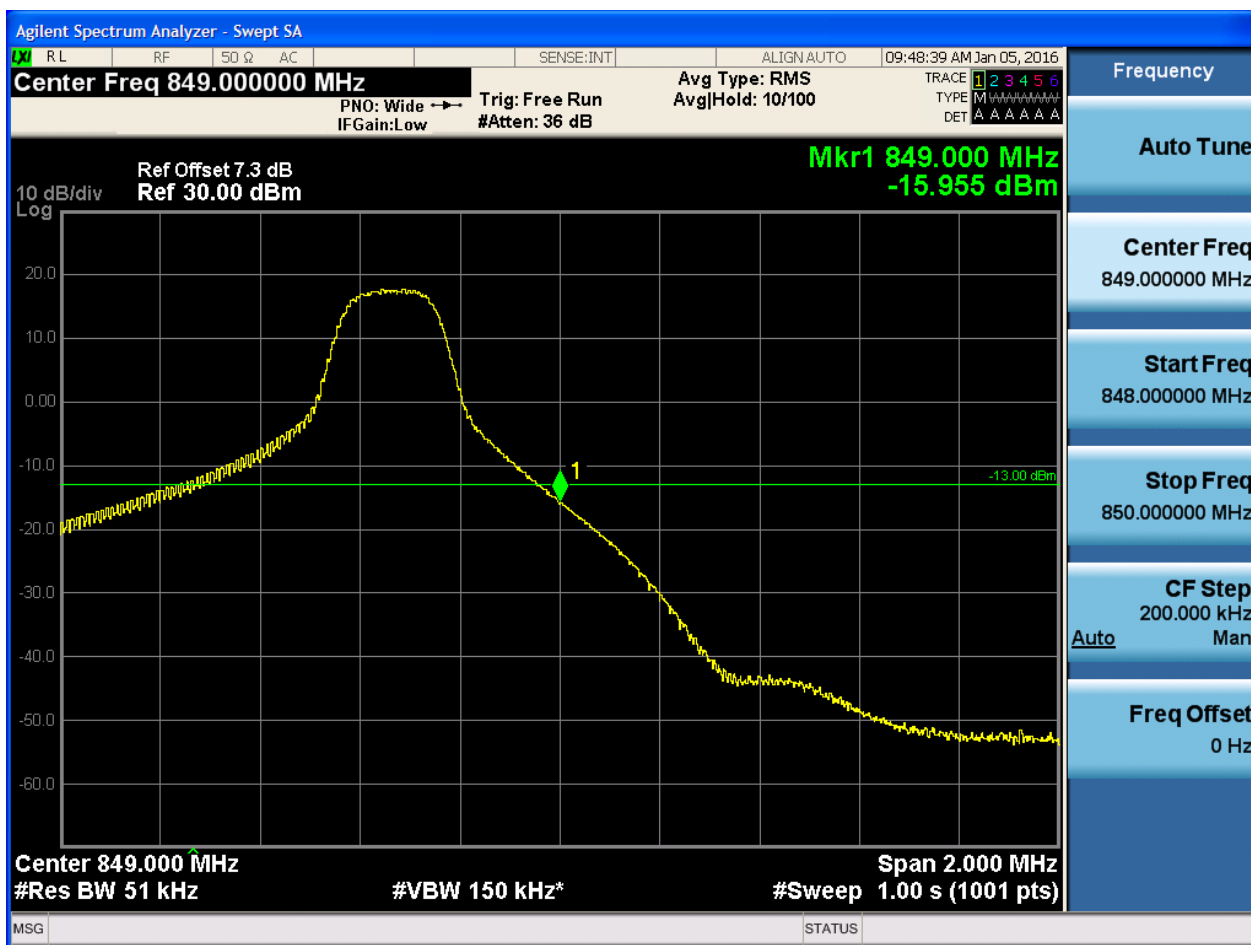
5.1.3.2.1.2 Test Channel = HCH

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

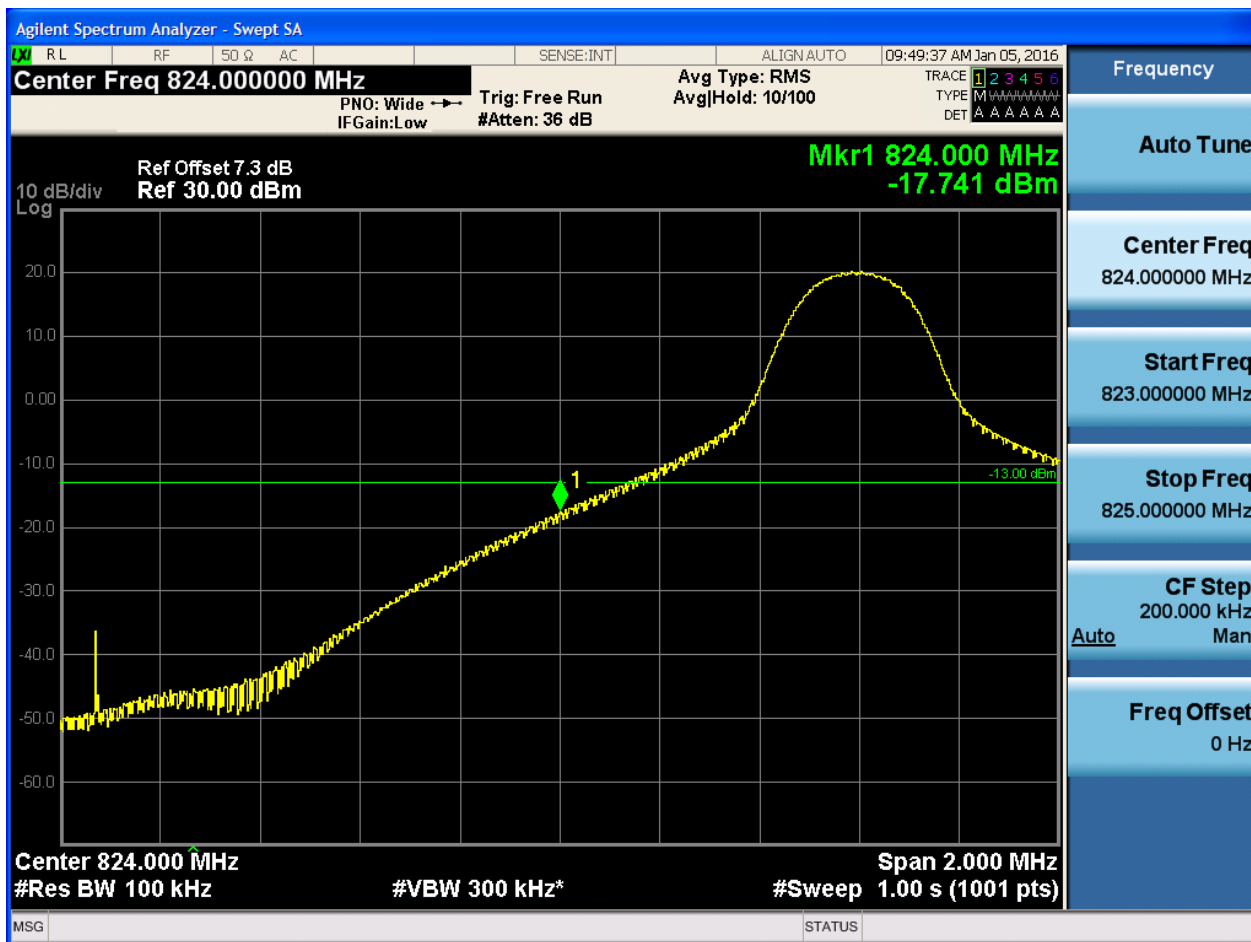




5.1.3.2.2 Test Bandwidth = 10

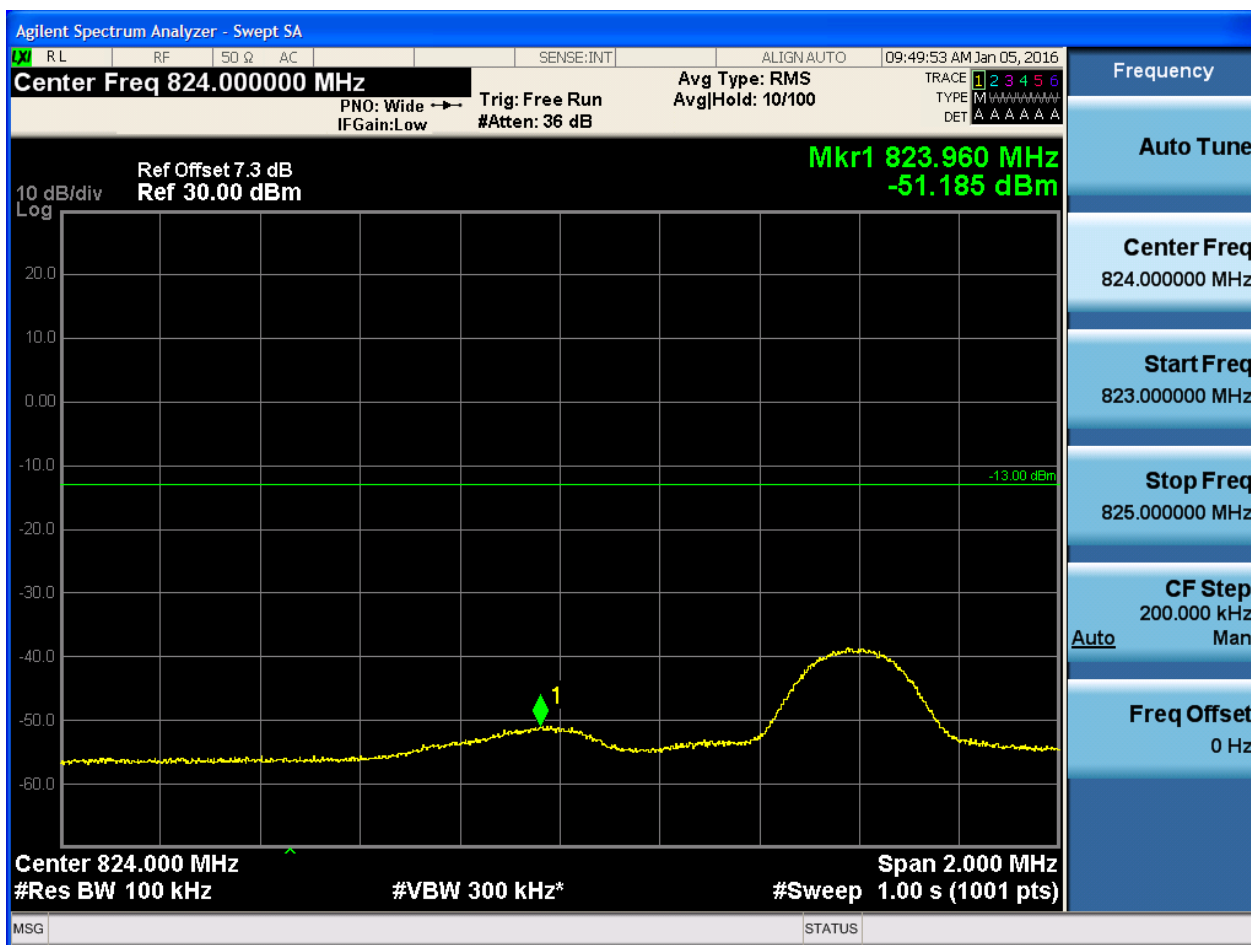
5.1.3.2.2.1 Test Channel = LCH

5.1.3.2.2.1.1 Test RB = RB1#0



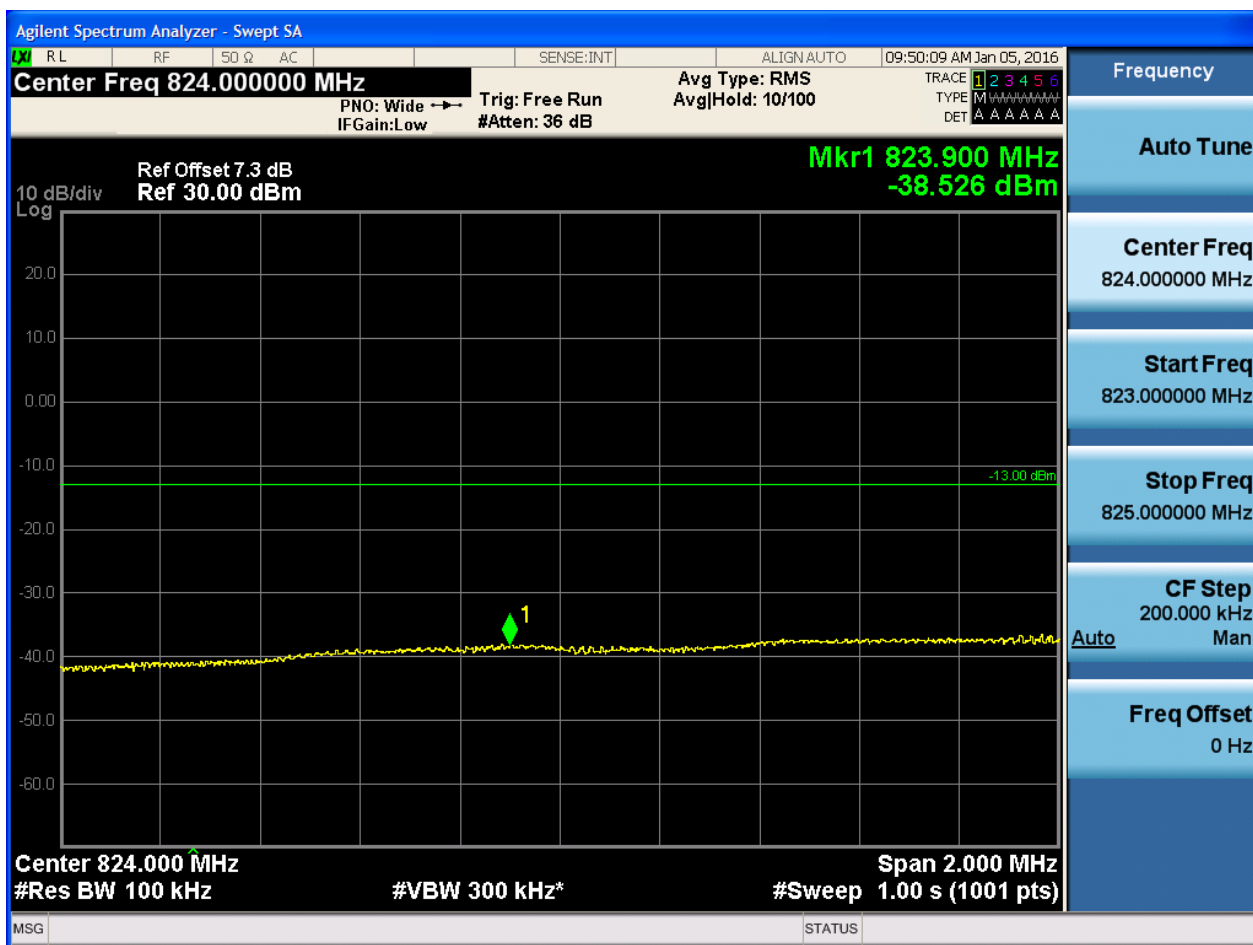


5.1.3.2.2.1.2 Test RB = RB1#49





5.1.3.2.2.1.3 Test RB = RB25#13



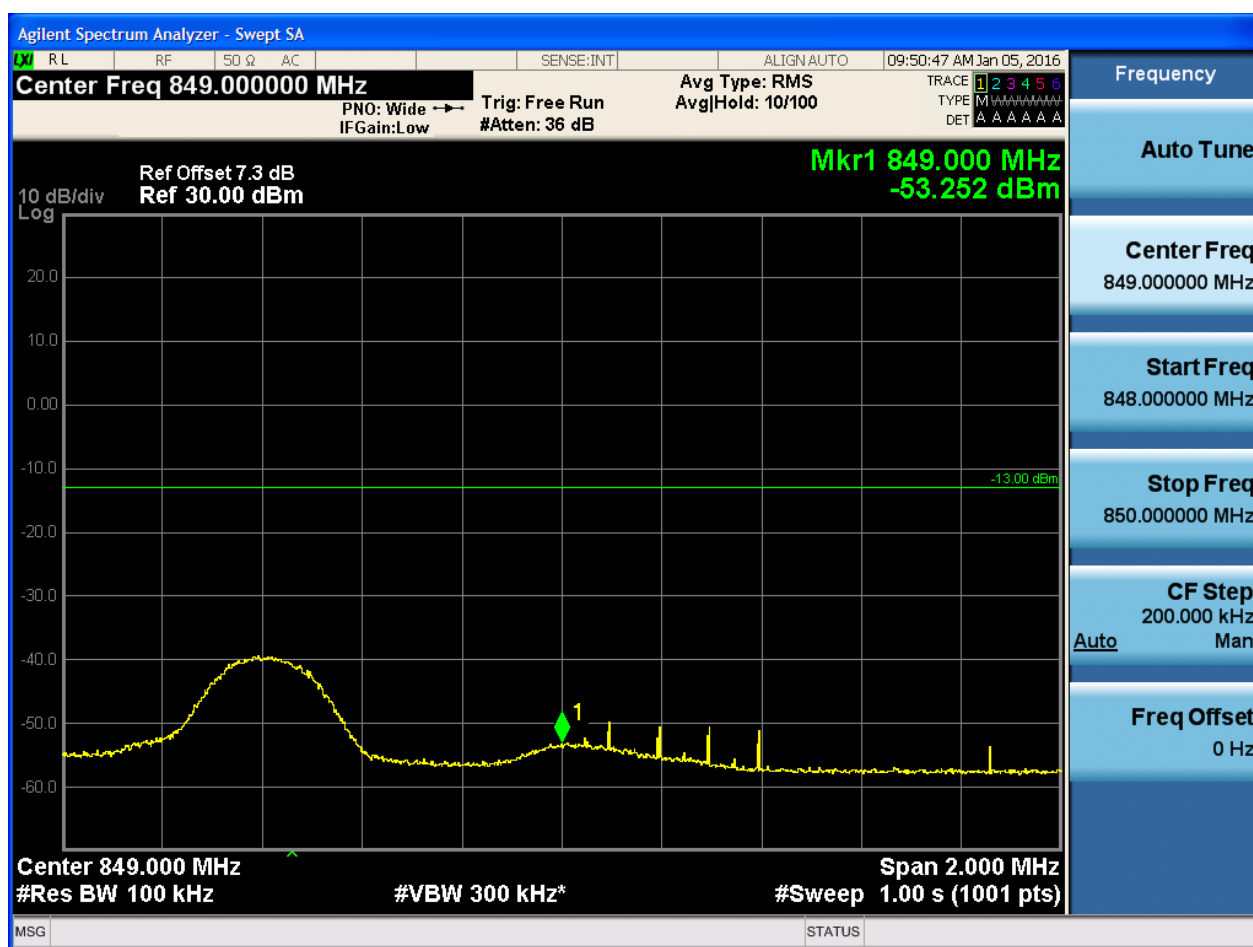


5.1.3.2.2.1.4 Test RB = RB50#0



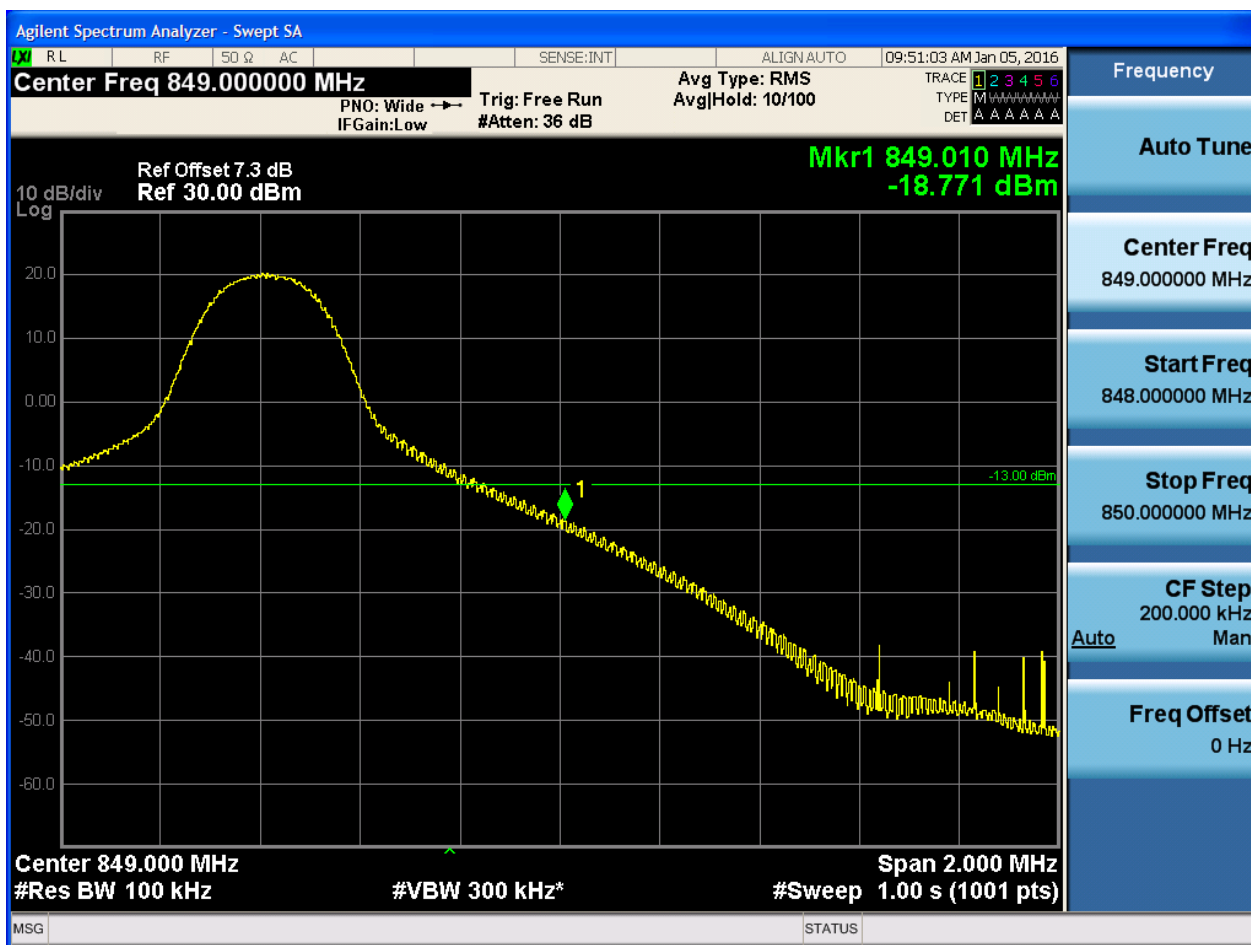
5.1.3.2.2.2 Test Channel = HCH

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





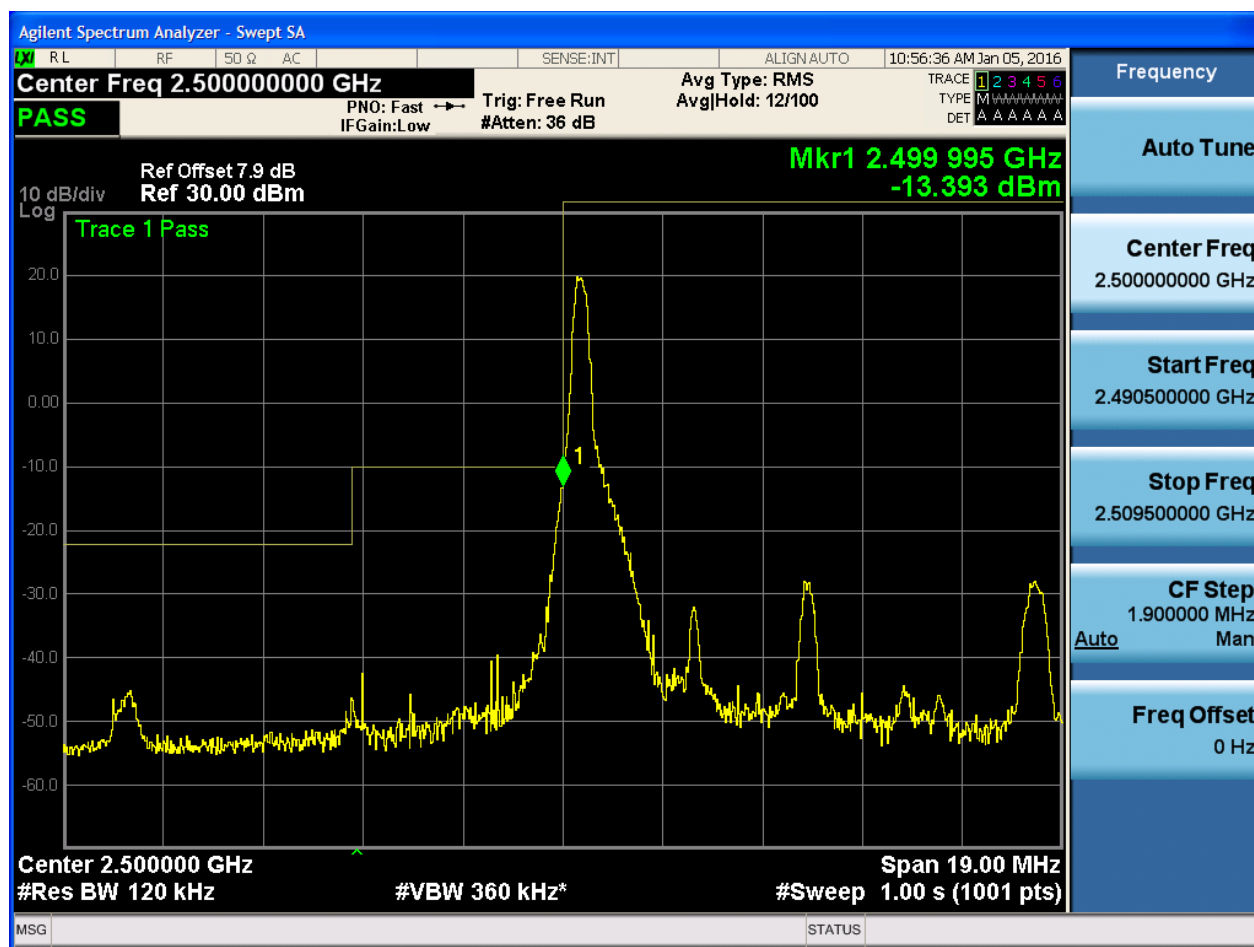
5.1.4 Test Band = BAND7

5.1.4.1 Test Mode = LTE/TM1

5.1.4.1.1 Test Bandwidth = 5

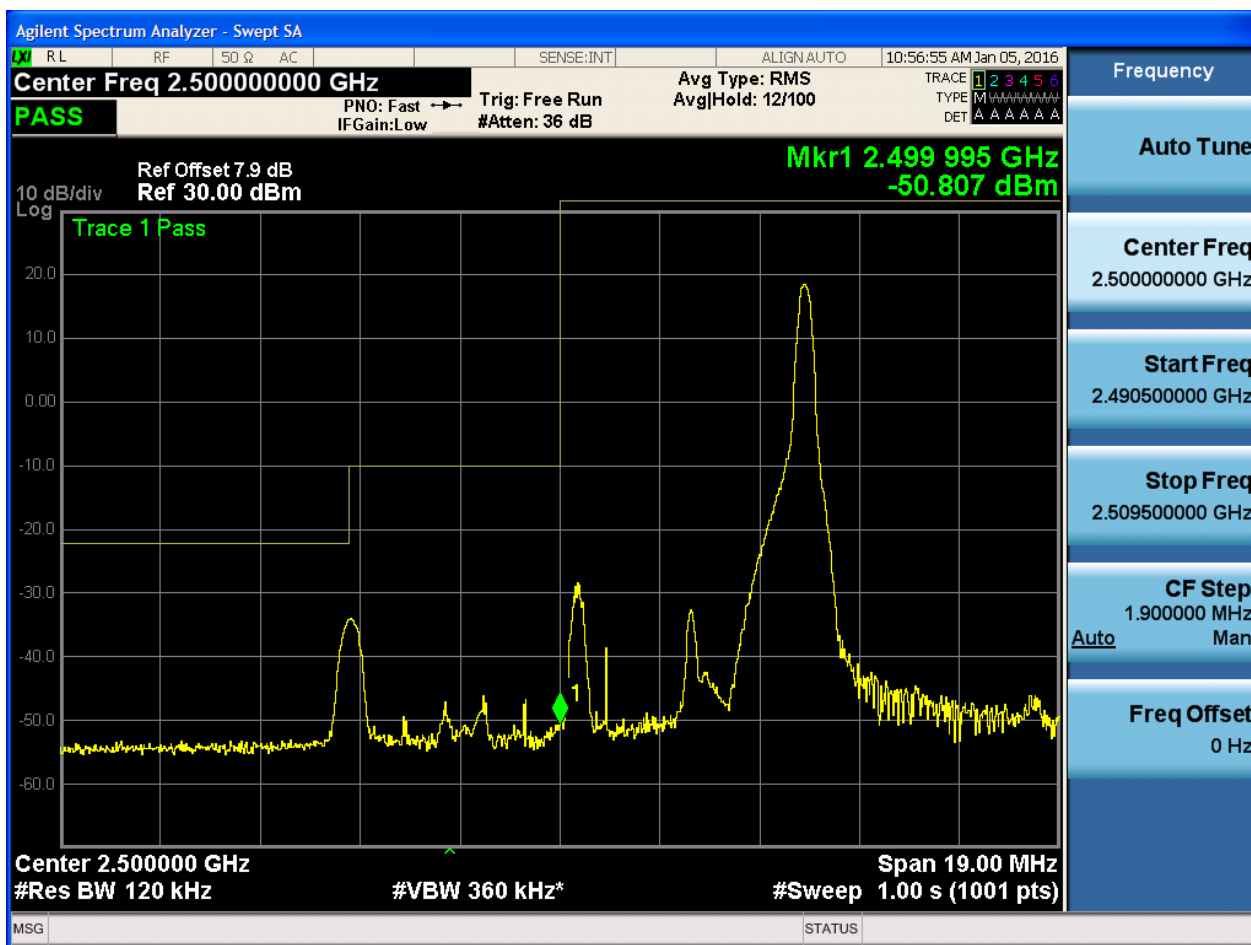
5.1.4.1.1.1 Test Channel = LCH

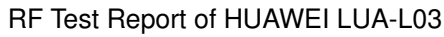
5.1.4.1.1.1.1 Test RB = RB1#0





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 2.50000 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

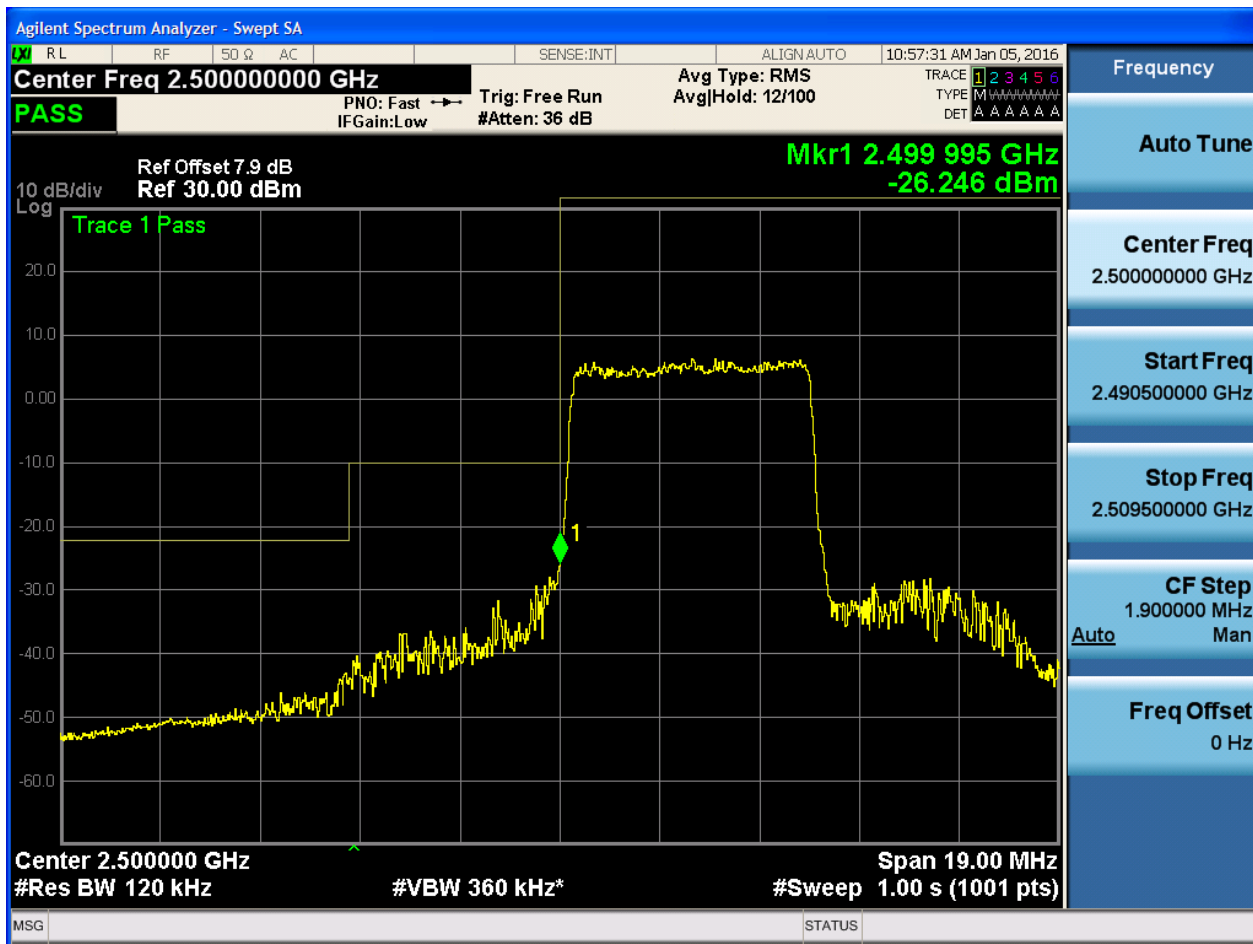
Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Man

Freq Offset
0 Hz



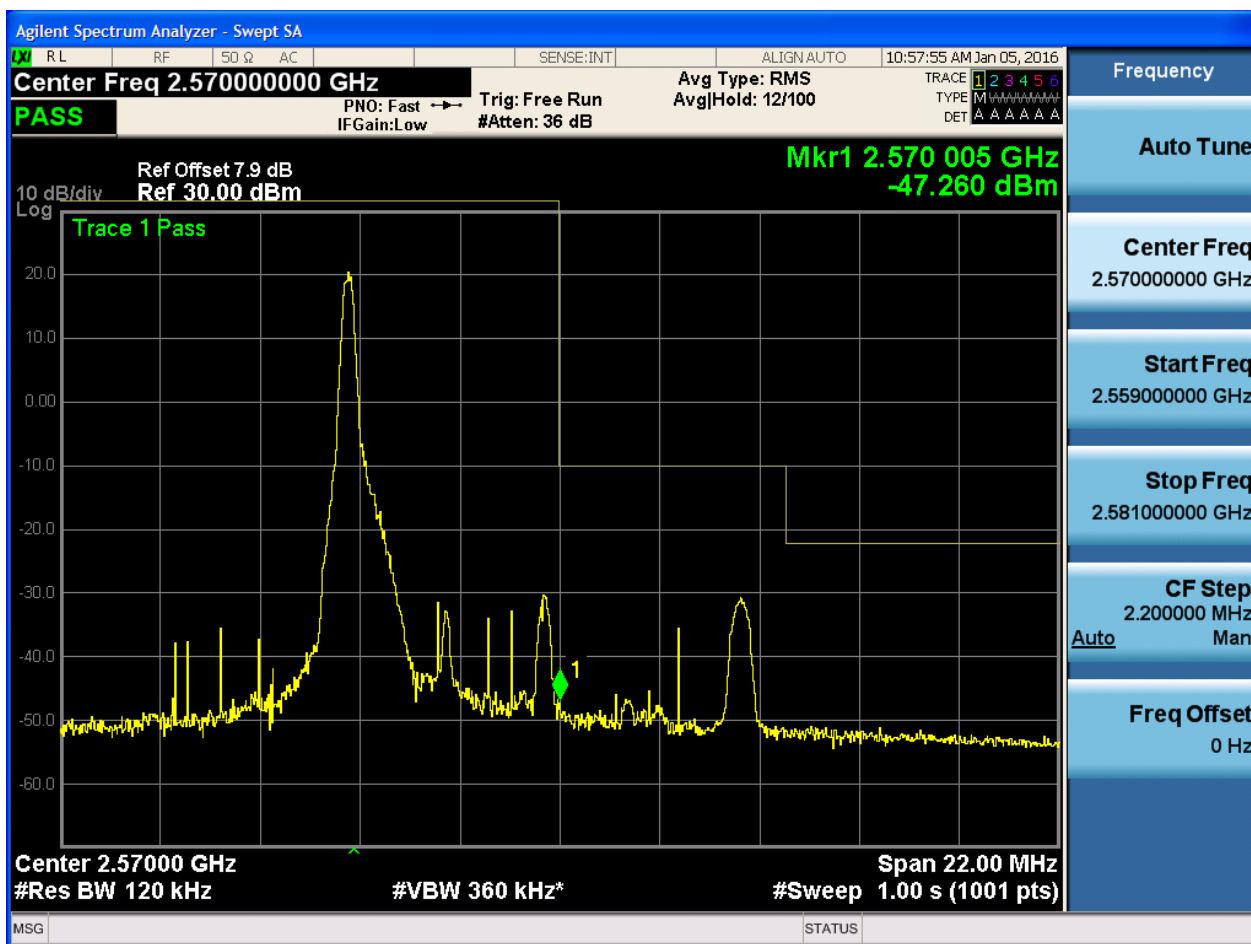
5.1.4.1.1.4 Test RB = RB25#0





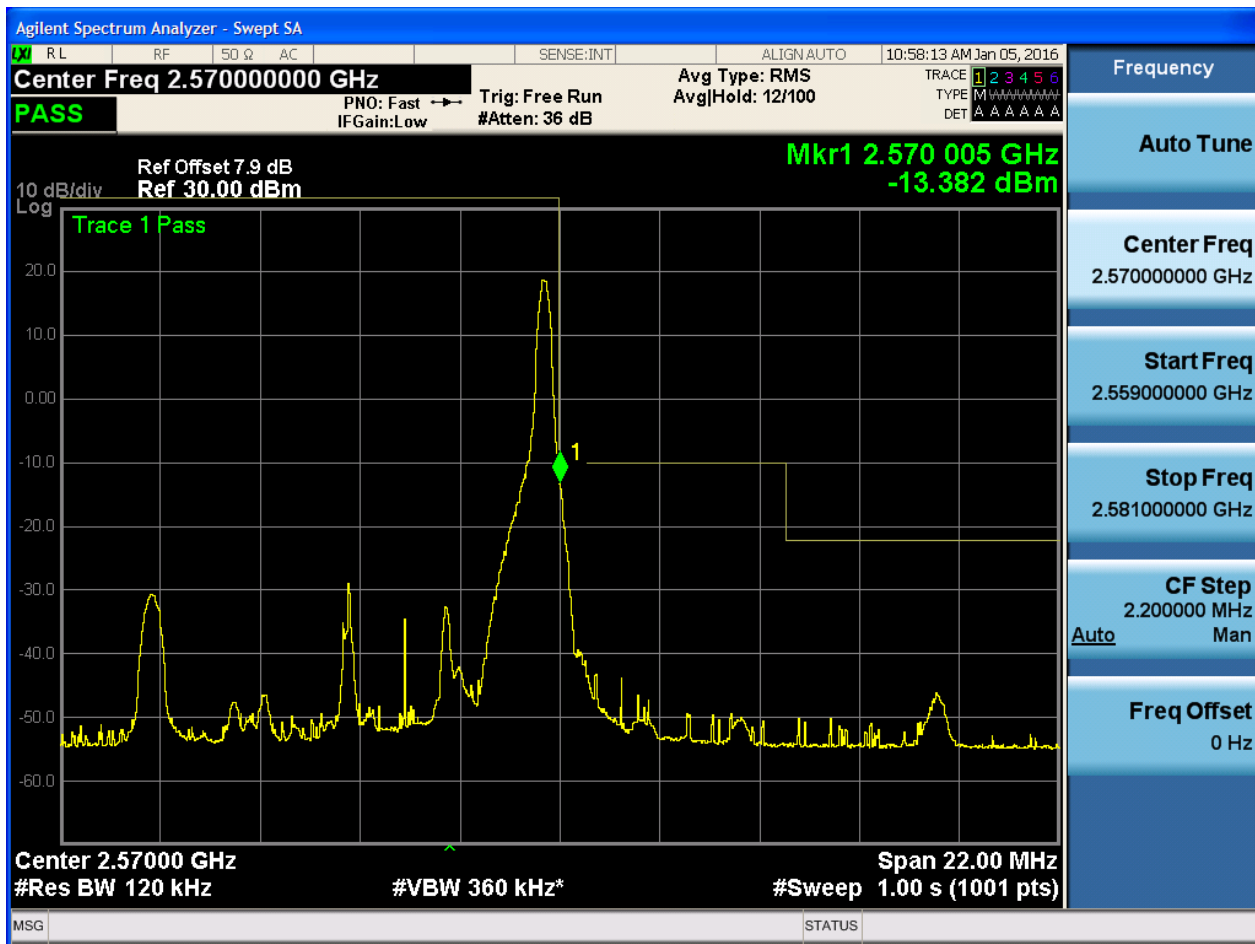
5.1.4.1.1.2 Test Channel = HCH

5.1.4.1.1.2.1 Test RB = RB1#0



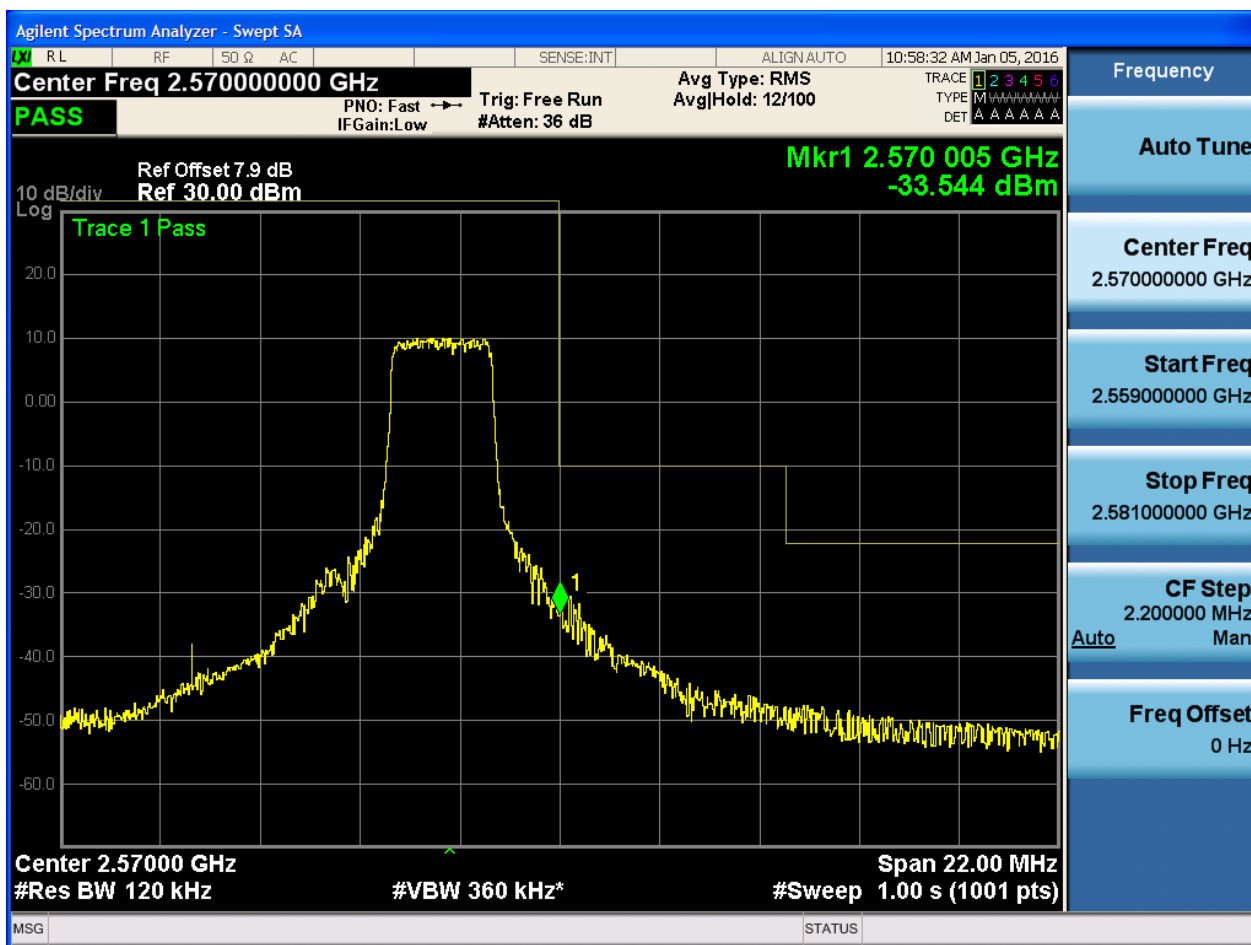


5.1.4.1.1.2.2 Test RB = RB1#24



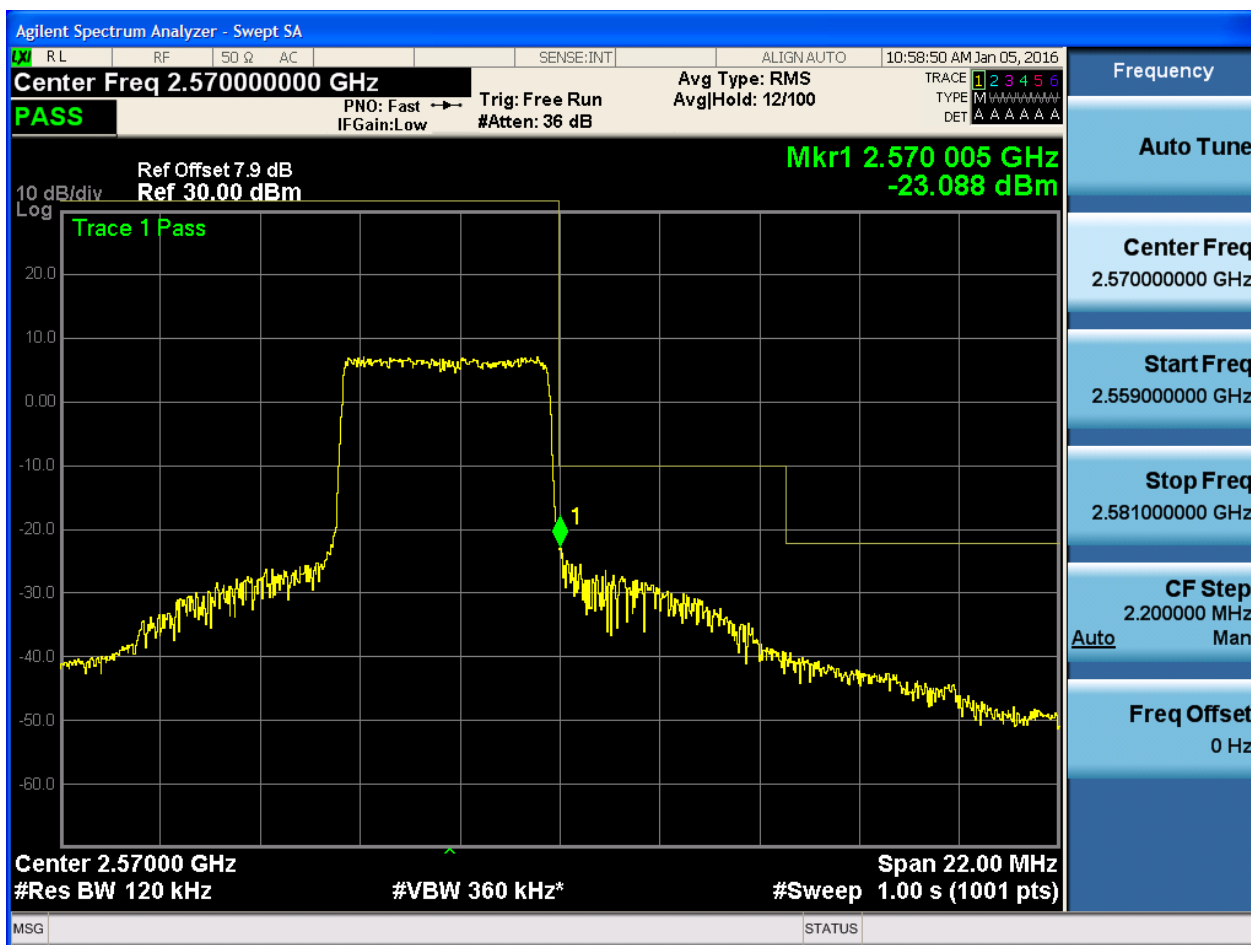


5.1.4.1.1.2.3 Test RB = RB12#6





5.1.4.1.1.2.4 Test RB = RB25#0

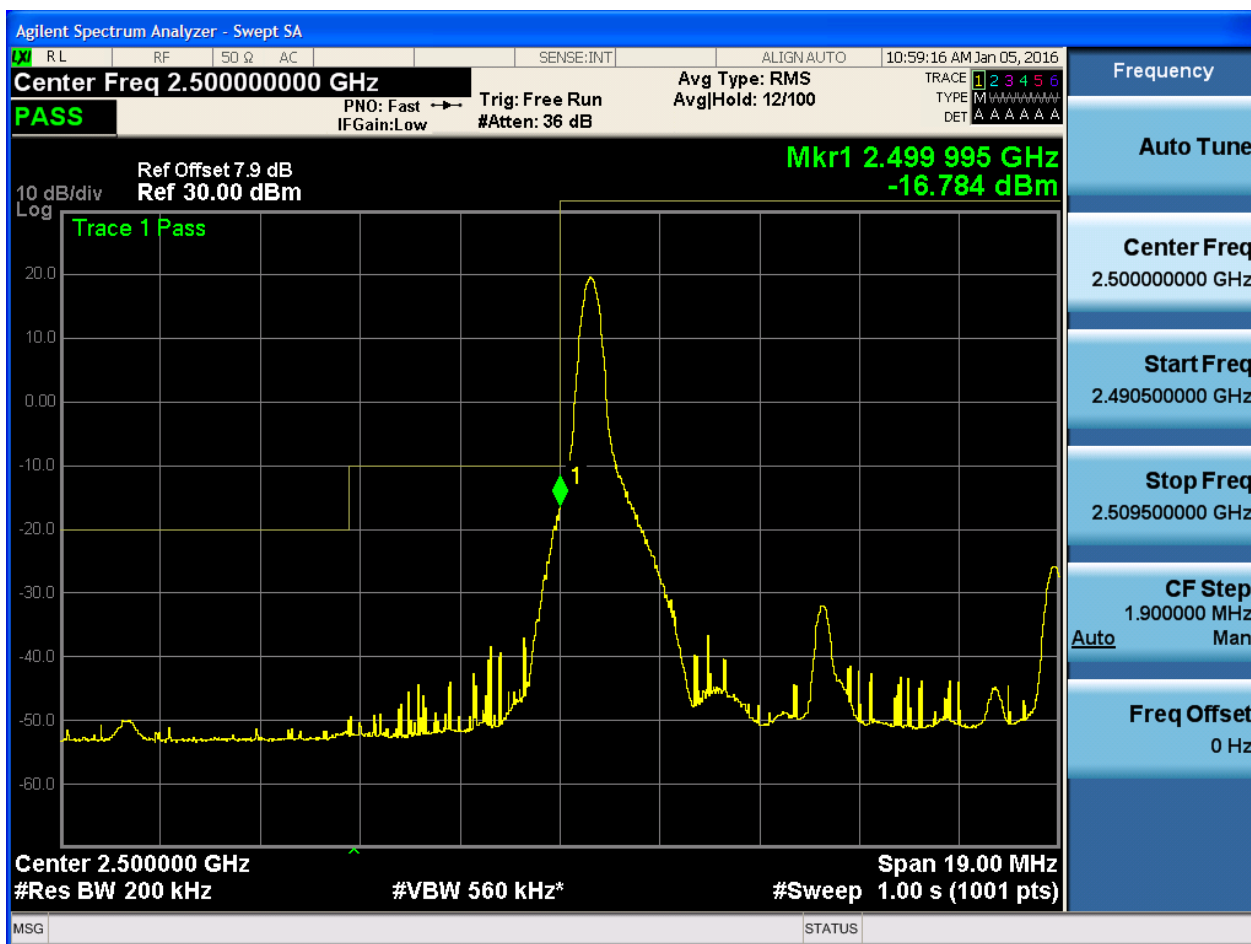




5.1.4.1.2 Test Bandwidth = 10

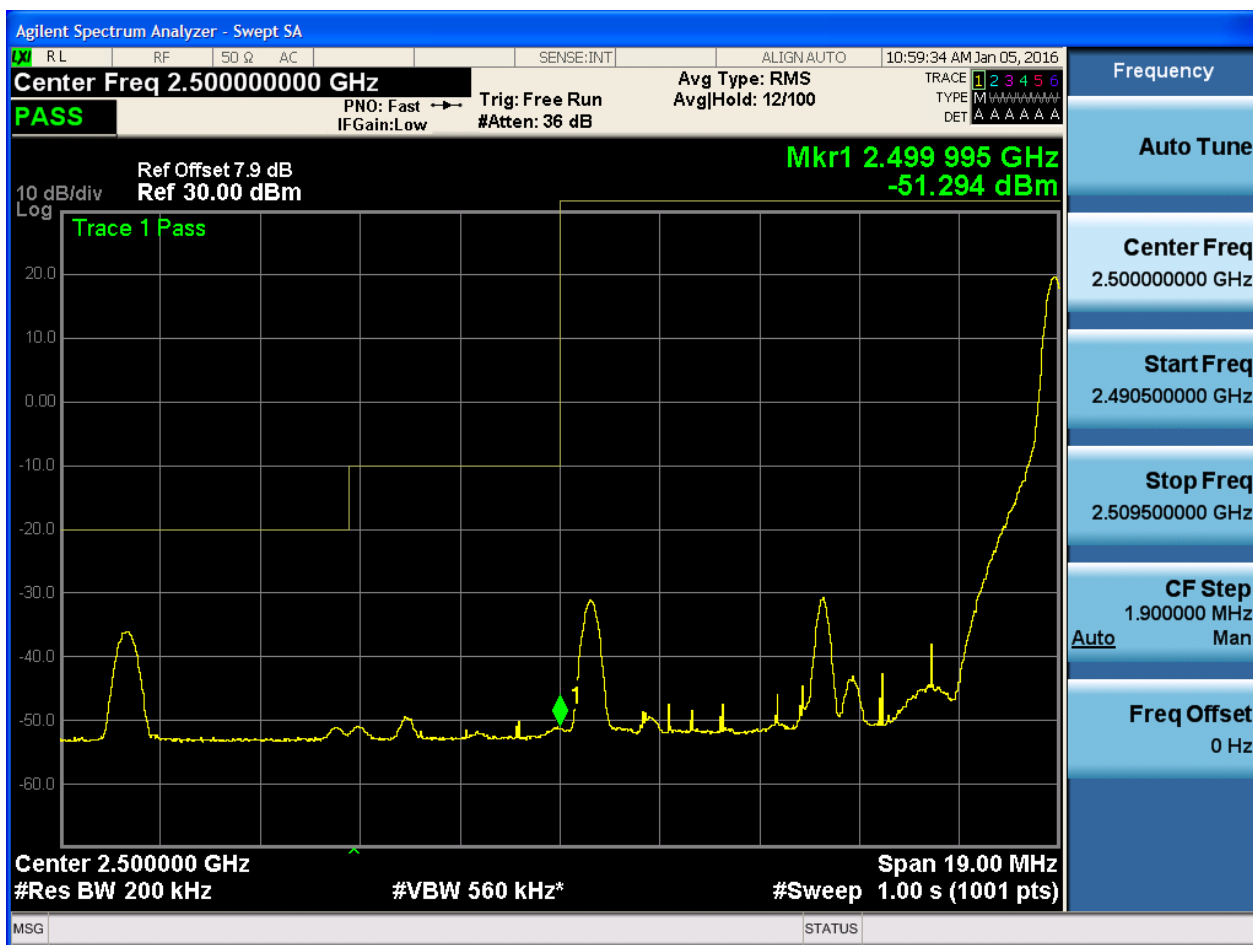
5.1.4.1.2.1 Test Channel = LCH

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



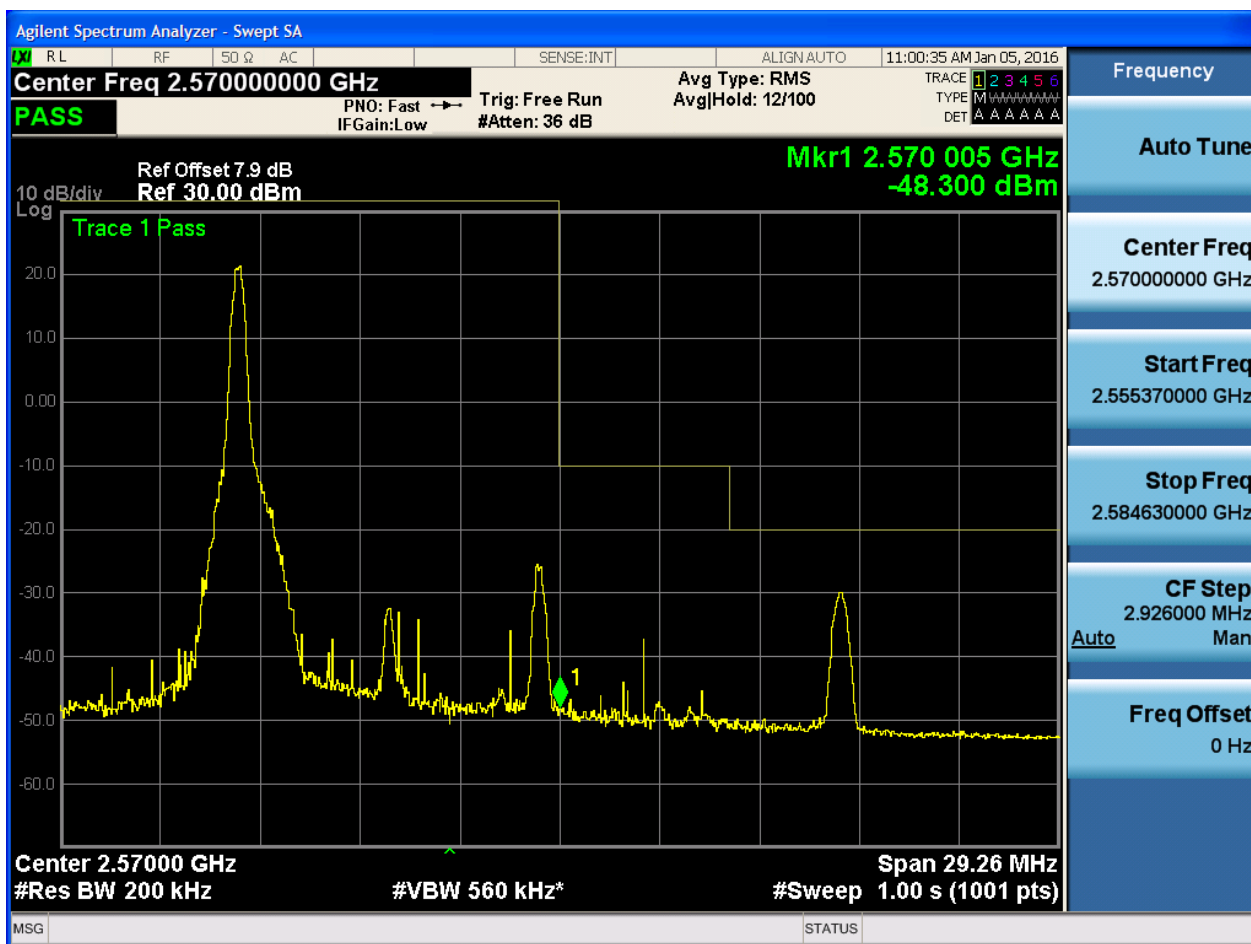


5.1.4.1.2.1.4 Test RB = RB50#0



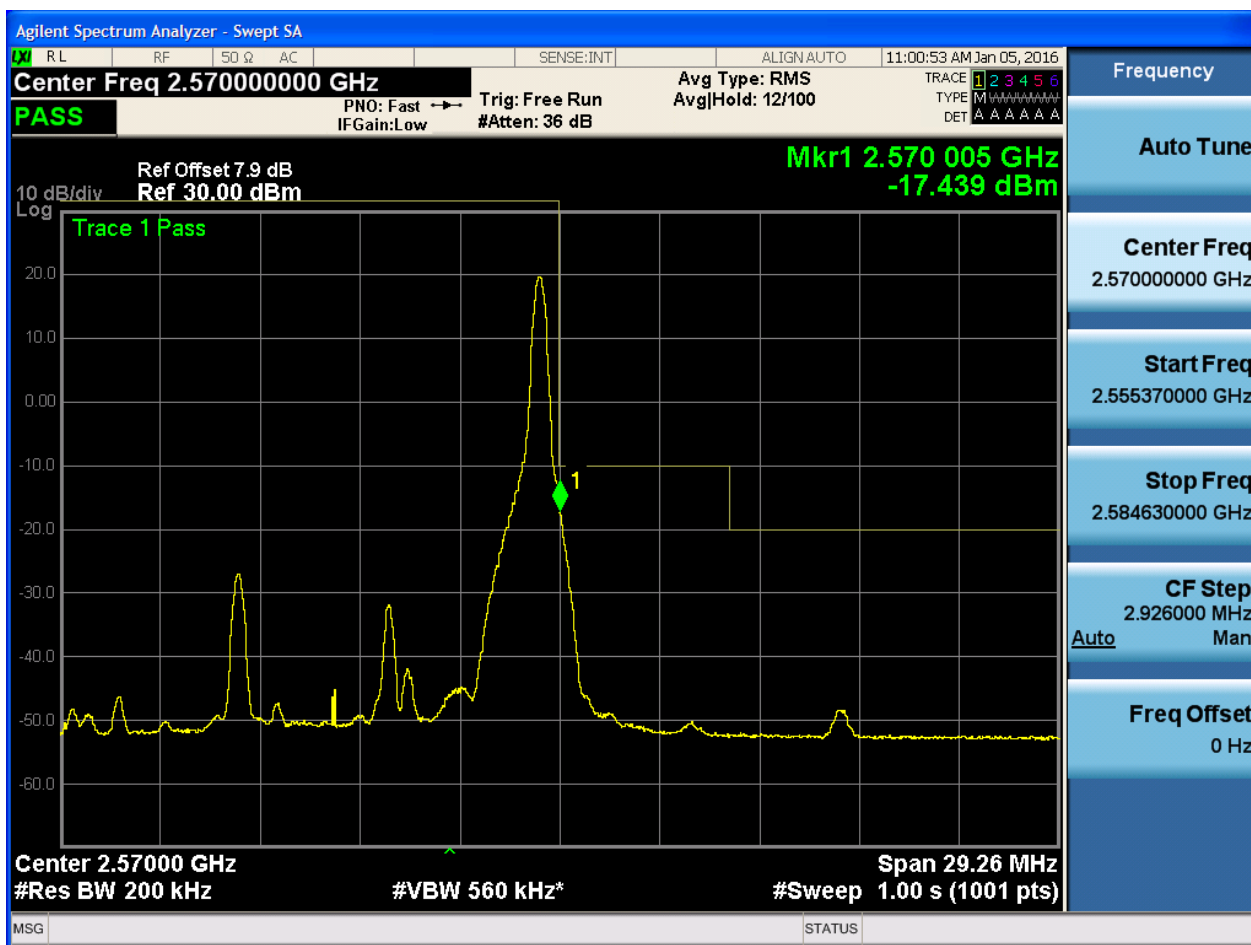
5.1.4.1.2.2 Test Channel = HCH

5.1.4.1.2.2.1 Test RB = RB1#0





5.1.4.1.2.2.2 Test RB = RB1#49



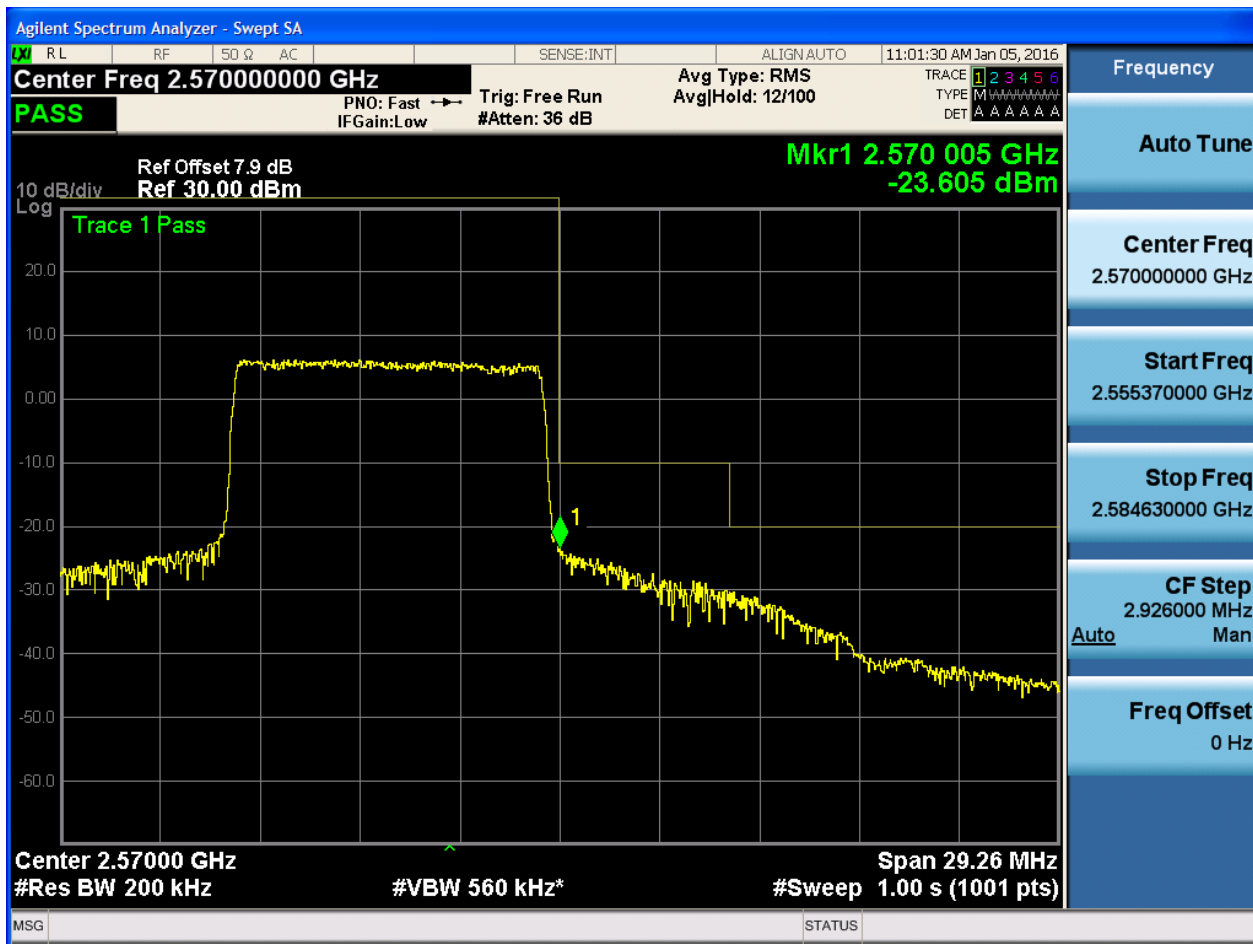


5.1.4.1.2.2.3 Test RB = RB25#13





5.1.4.1.2.2.4 Test RB = RB50#0

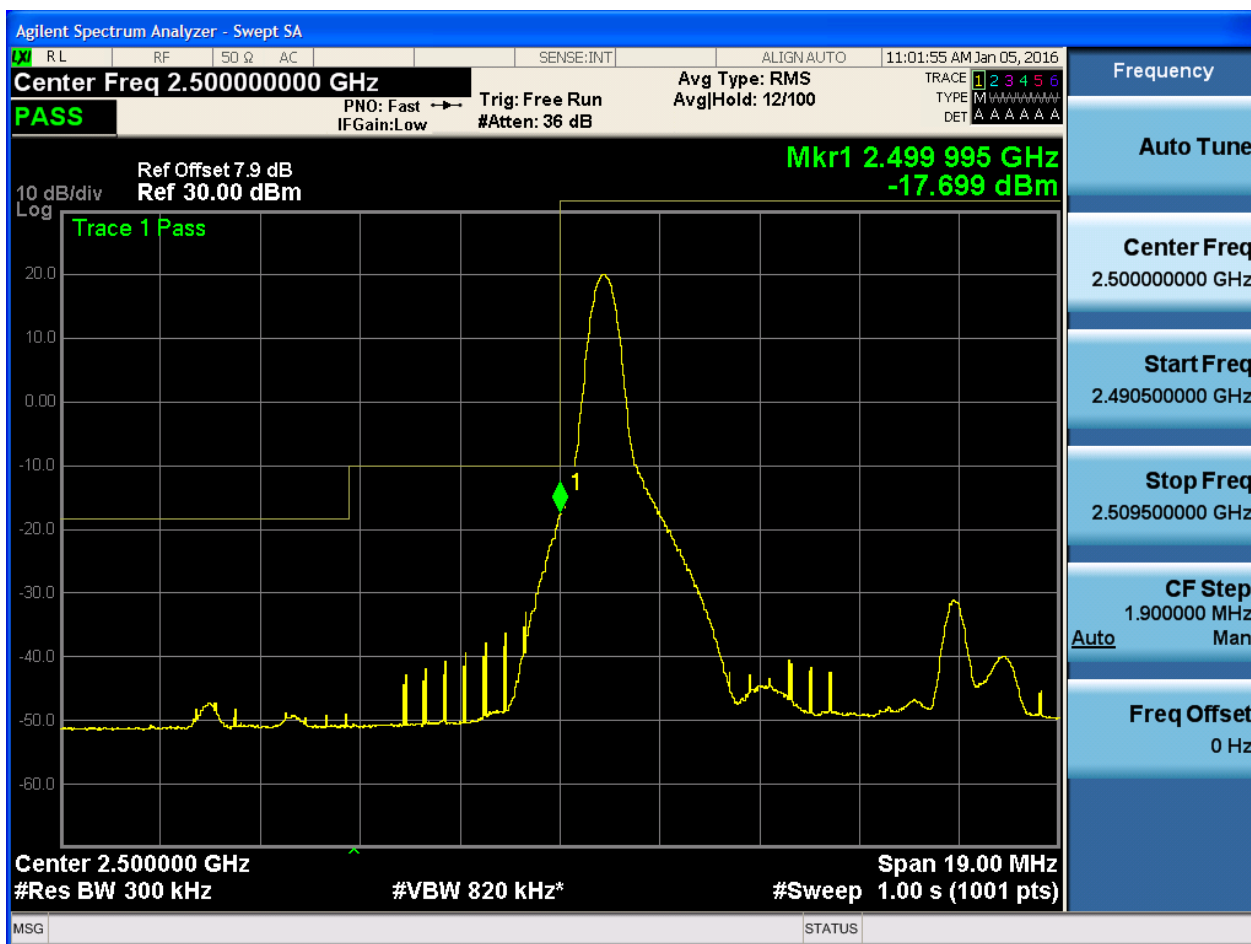




5.1.4.1.3 Test Bandwidth = 15

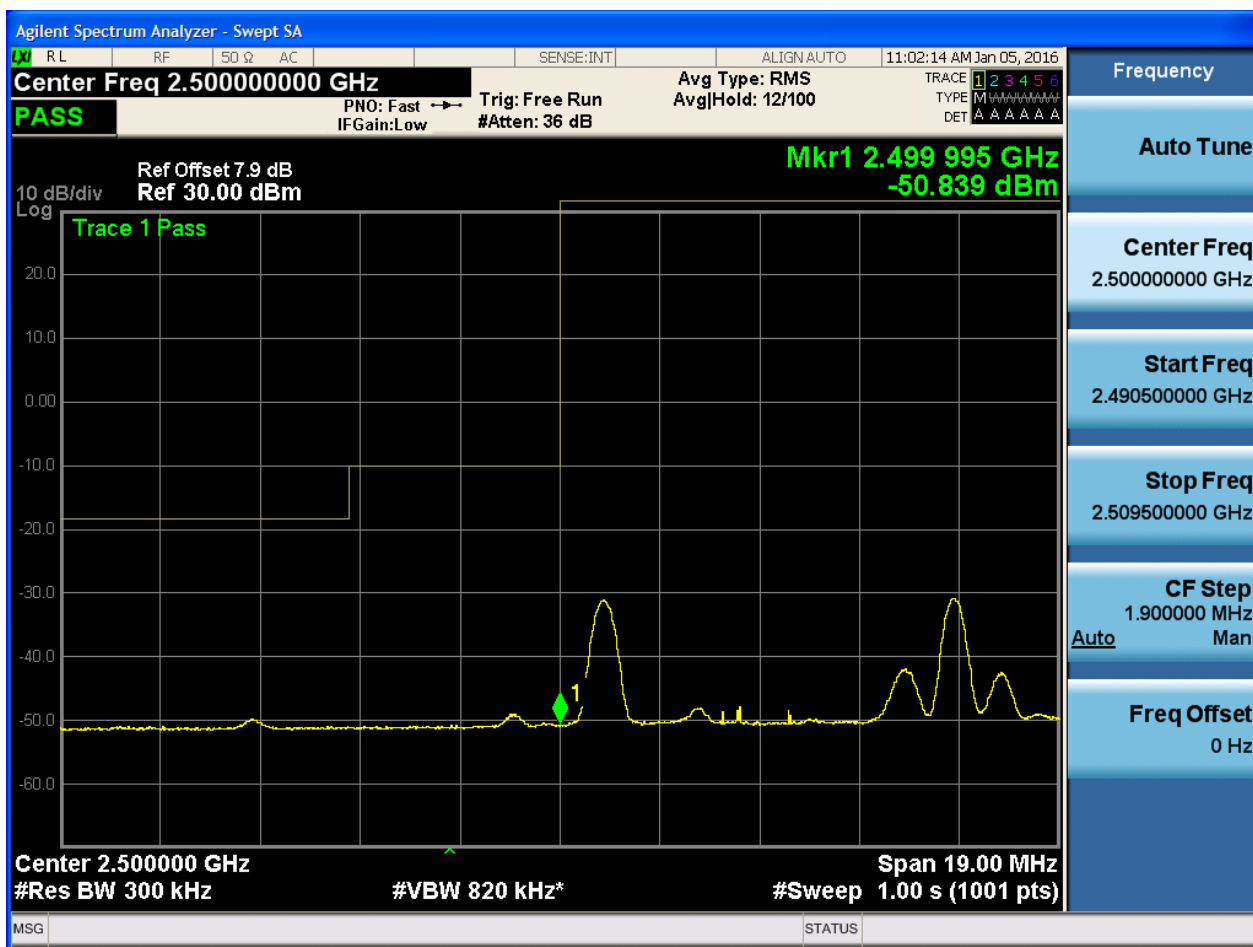
5.1.4.1.3.1 Test Channel = LCH

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



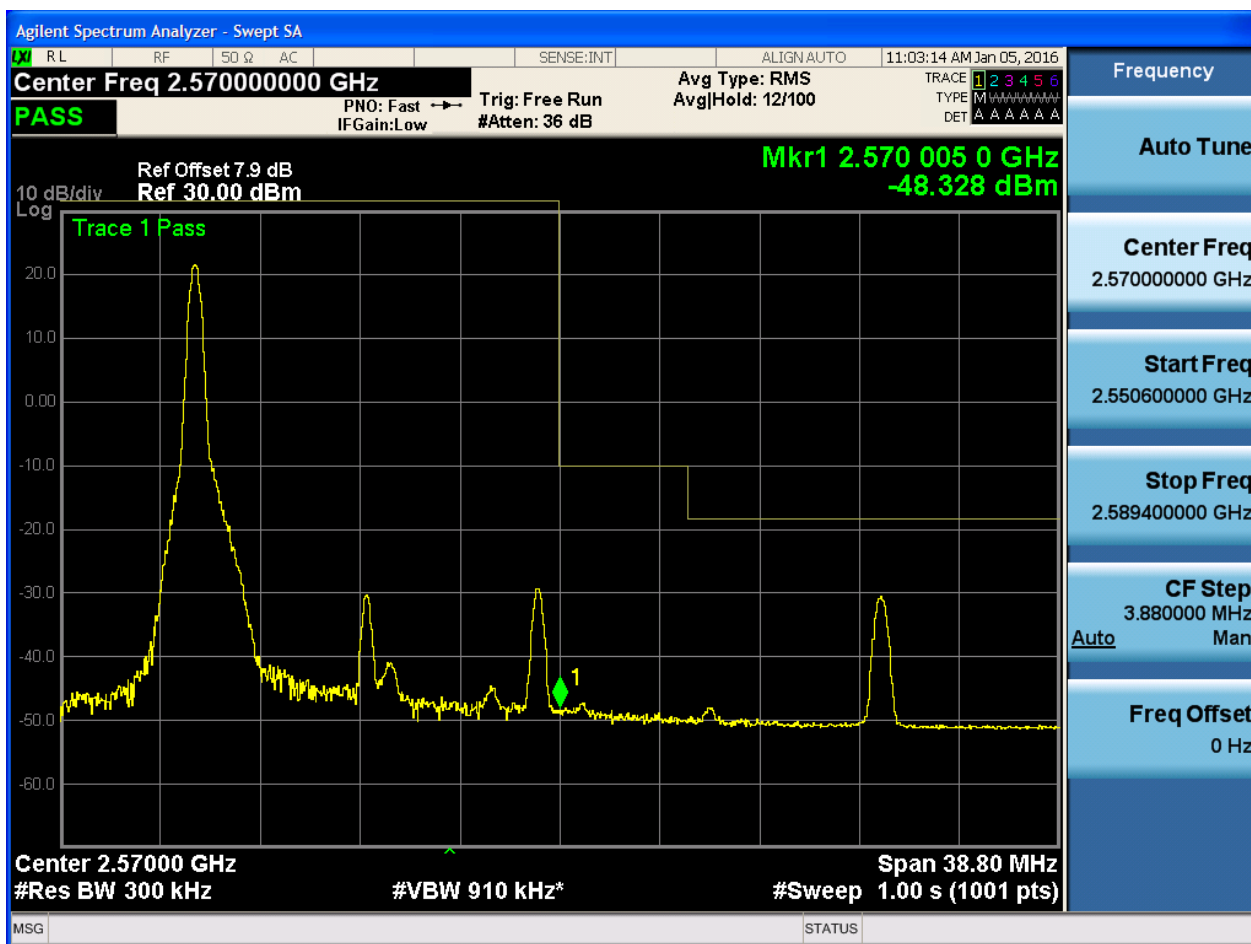


5.1.4.1.3.1.4 Test RB = RB75#0



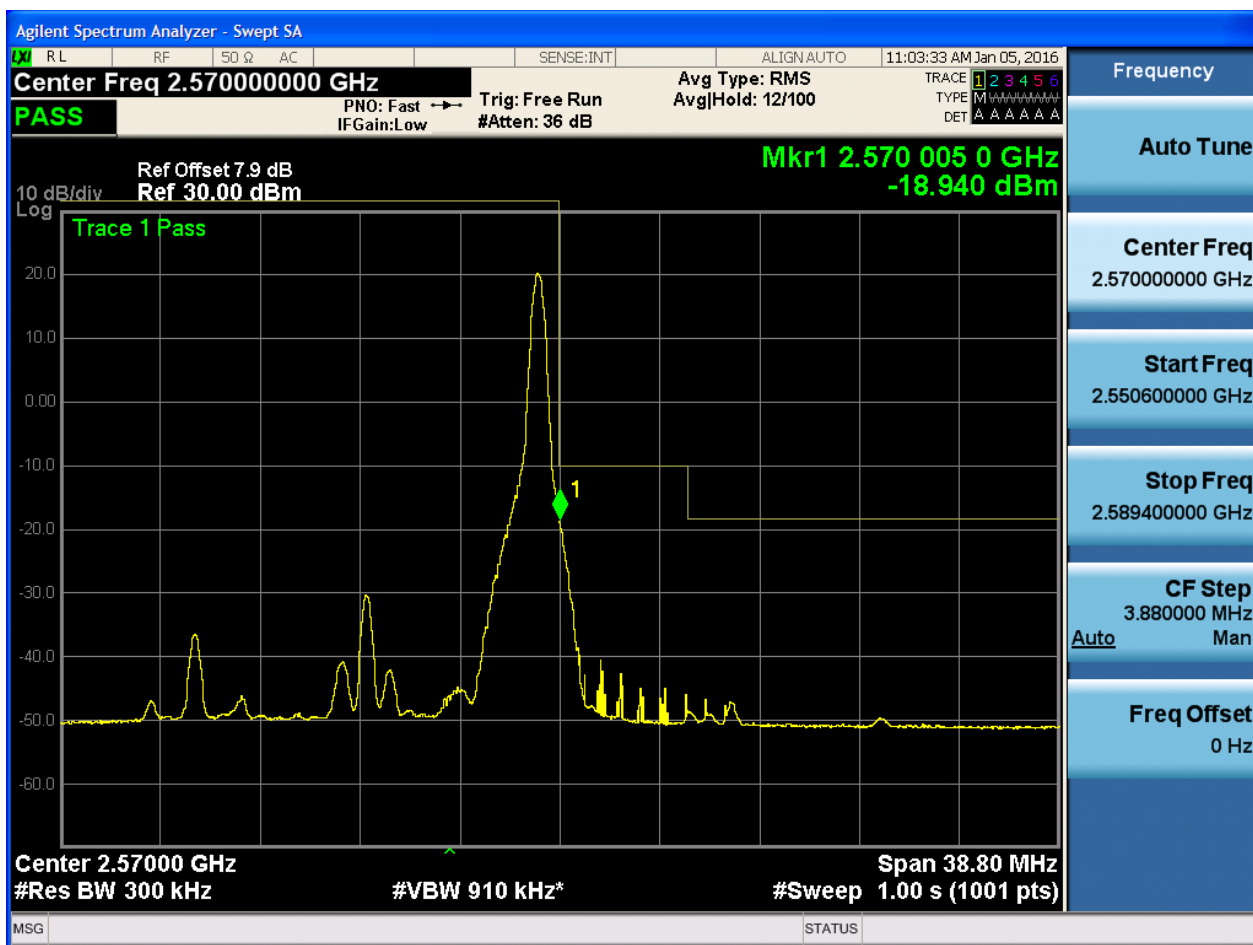
5.1.4.1.3.2 Test Channel = HCH

5.1.4.1.3.2.1 Test RB = RB1#0





5.1.4.1.3.2.2 Test RB = RB1#74





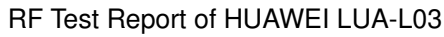
5.1.4.1.3.2.3 Test RB = RB36#18

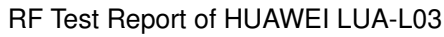




5.1.4.1.3.2.4 Test RB = RB75#0







Agilent Spectrum Analyzer - Swept SA

Center Freq 2.50000000 GHz

PASS

Ref Offset 7.9 dB
Ref 30.00 dBm

Mkr1 2.499 995 GHz
-48.567 dBm

Trace 1 Pass

Center 2.50000 GHz
#Res BW 390 kHz
#VBW 1.1 MHz*

Span 19.00 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
2.50000000 GHz

Start Freq
2.490500000 GHz

Stop Freq
2.509500000 GHz

CF Step
1.900000 MHz
Man

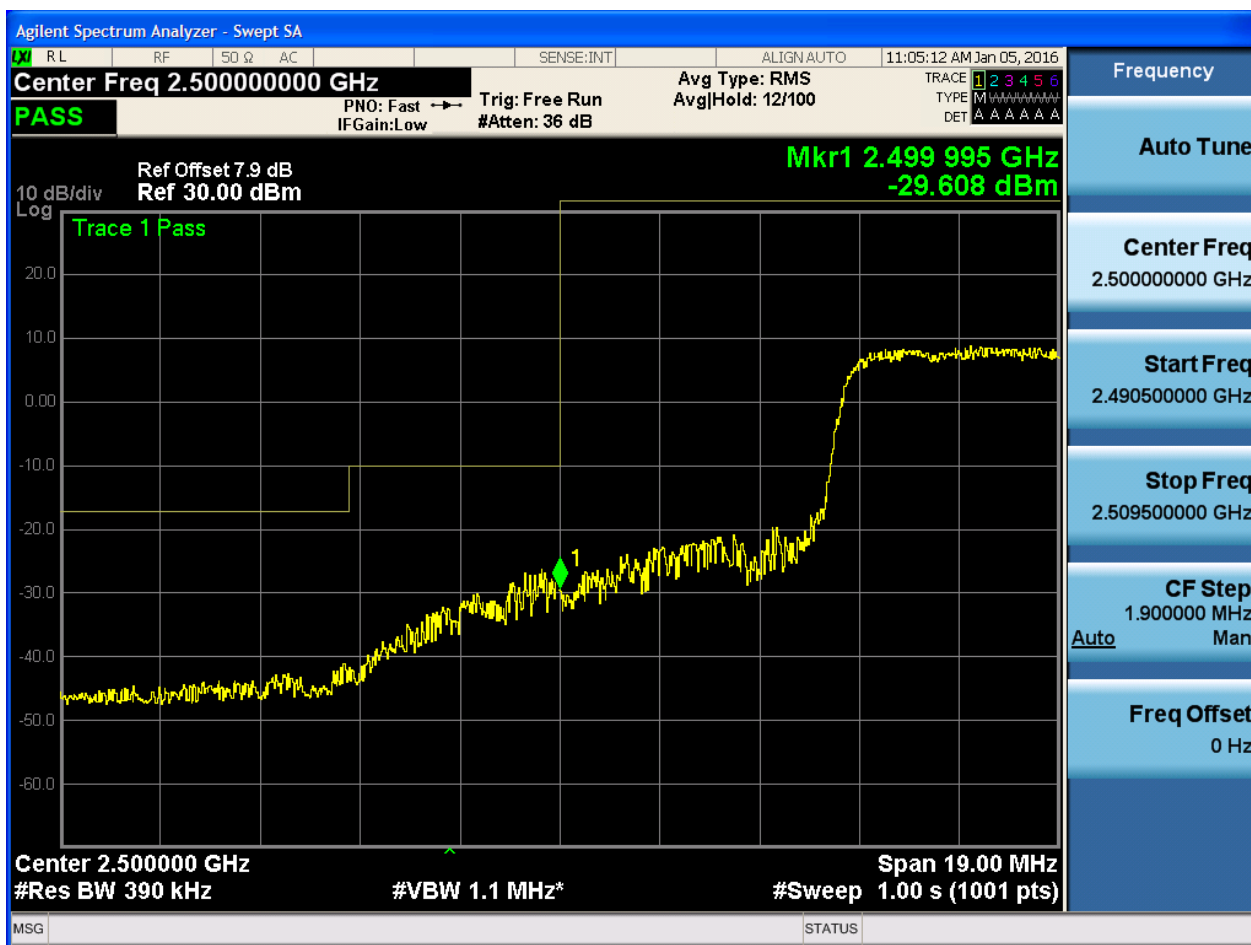
Freq Offset
0 Hz

MSG Alignment Completed

STATUS

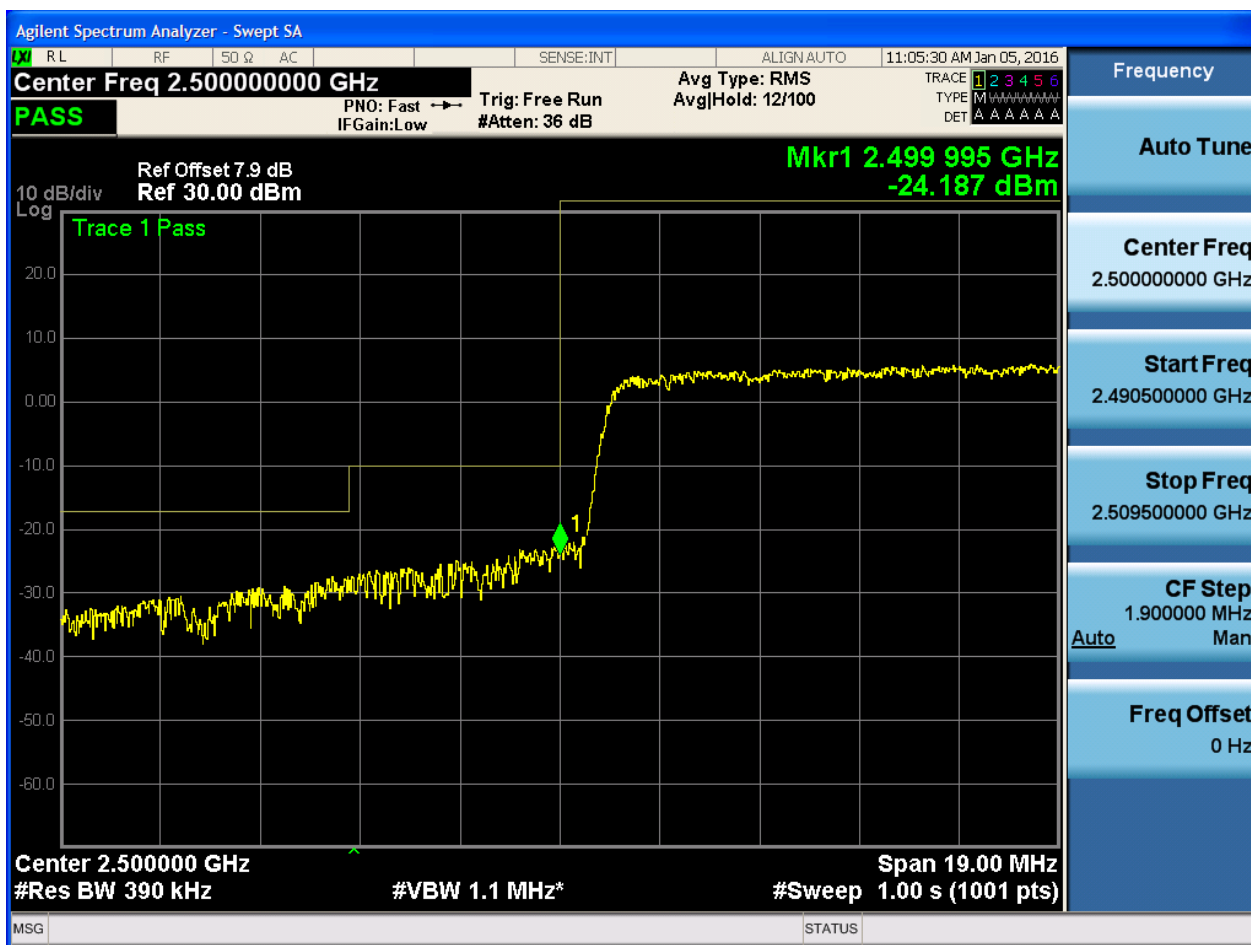


5.1.4.1.4.1.3 Test RB = RB50#25





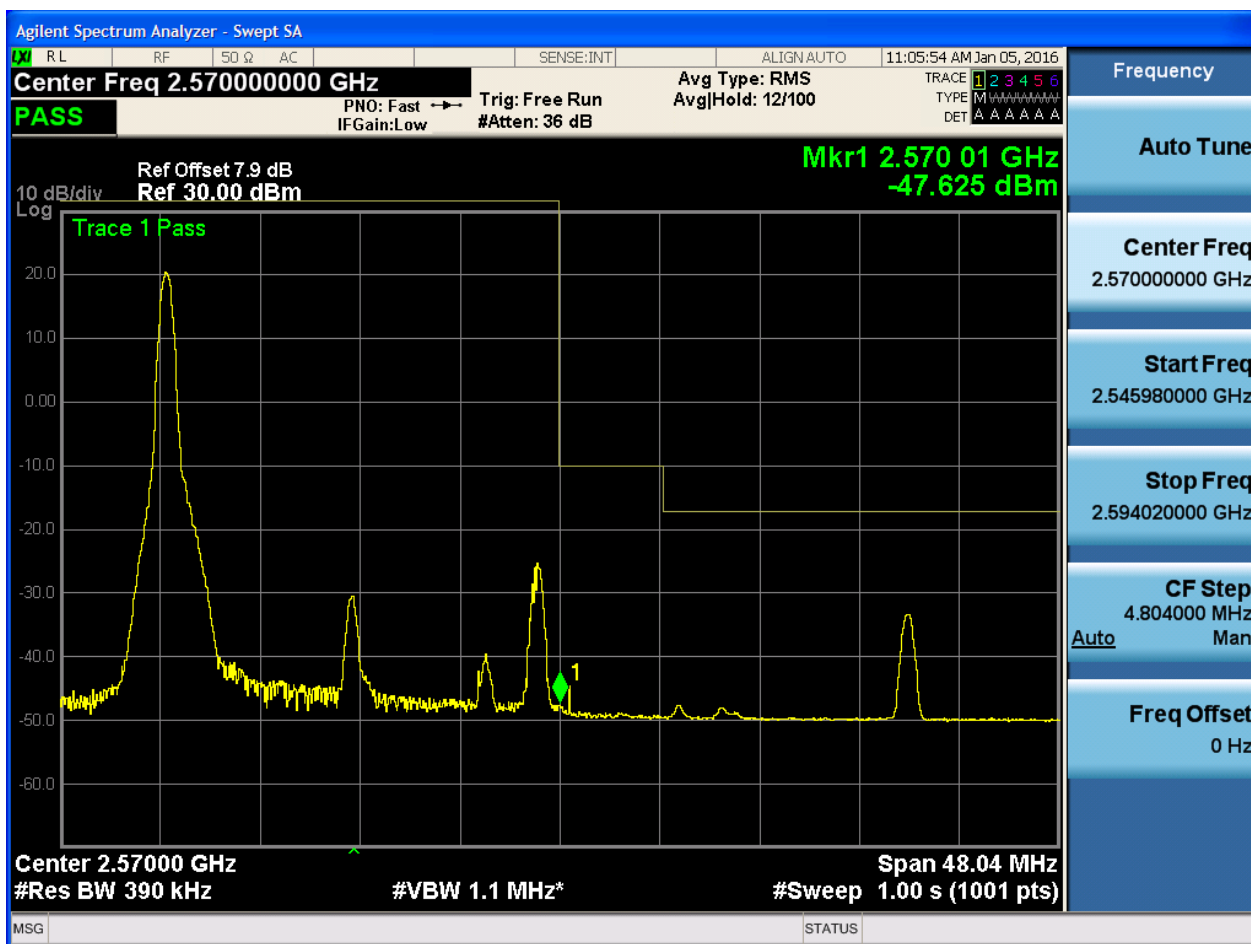
5.1.4.1.4.1.4 Test RB = RB100#0





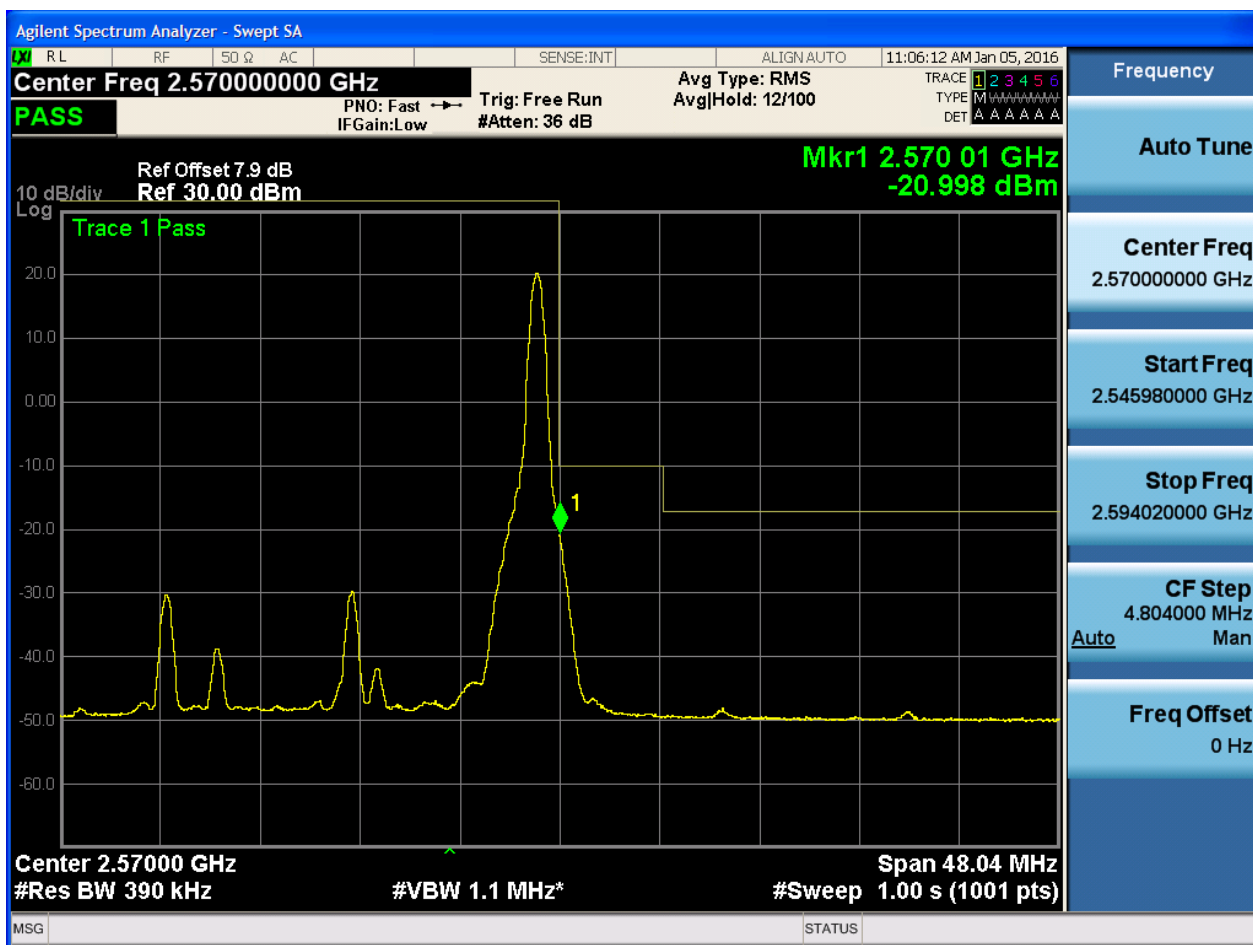
5.1.4.1.4.2 Test Channel = HCH

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



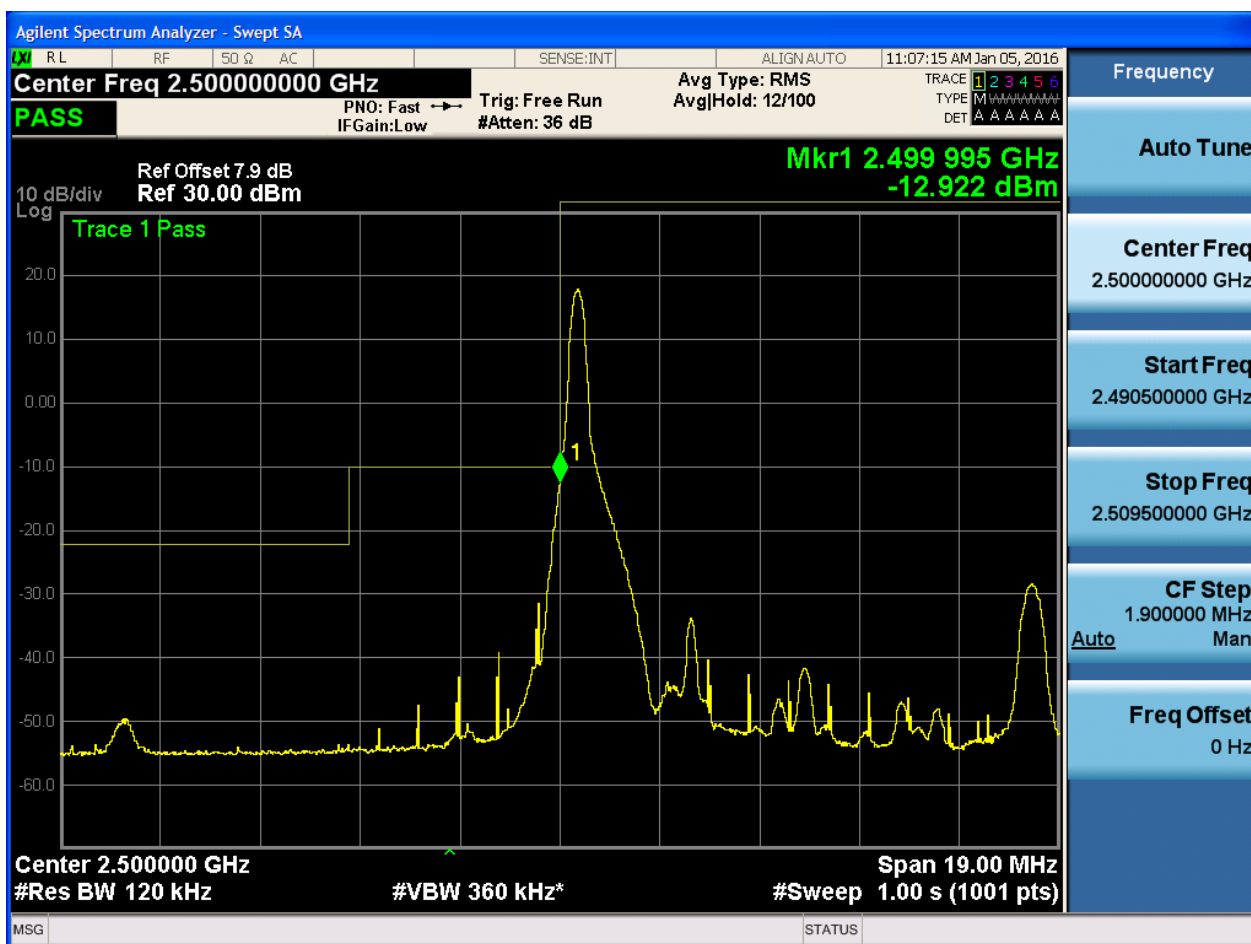


5.1.4.2 Test Mode = LTE/TM2

5.1.4.2.1 Test Bandwidth = 5

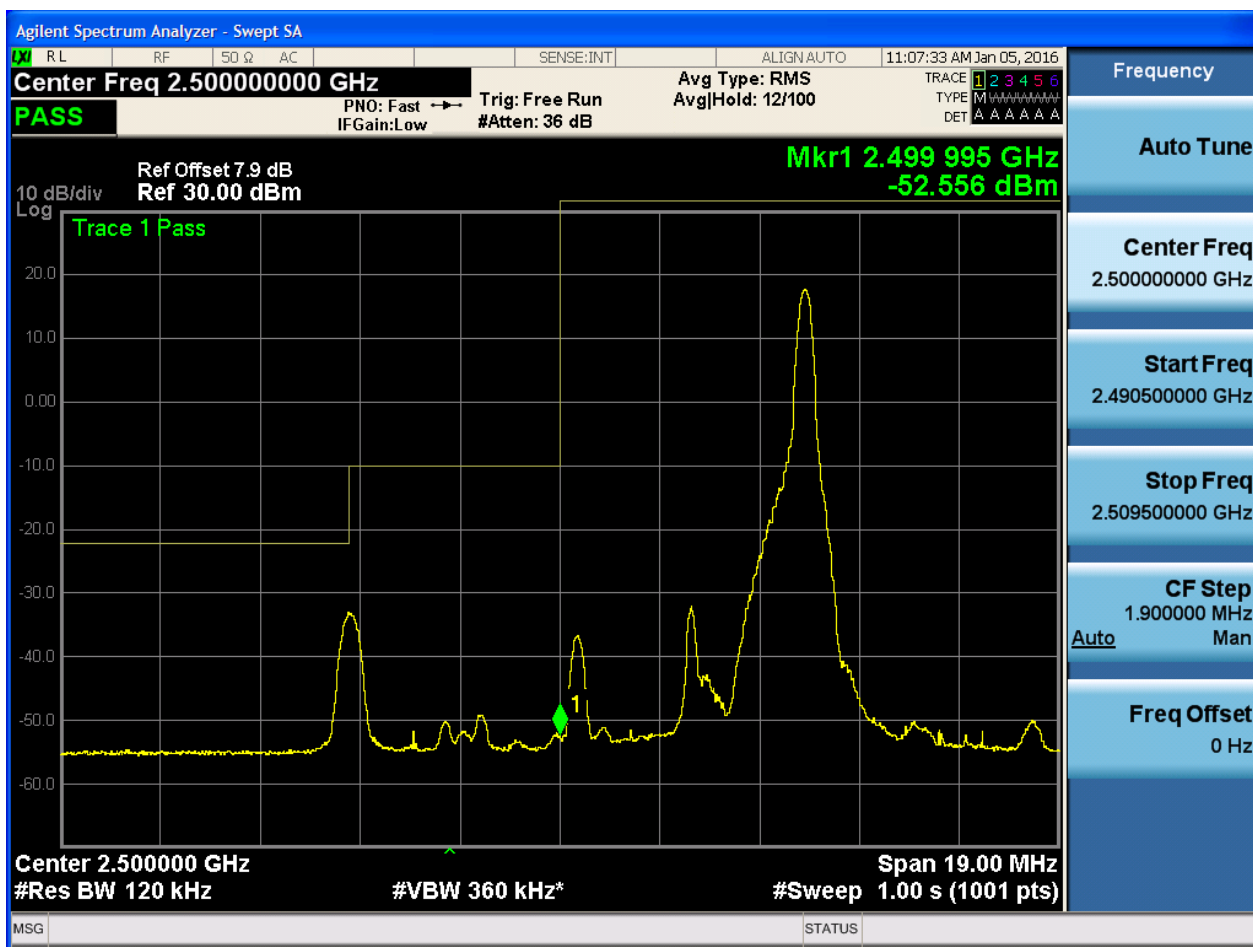
5.1.4.2.1.1 Test Channel = LCH

5.1.4.2.1.1.1 Test RB = RB1#0



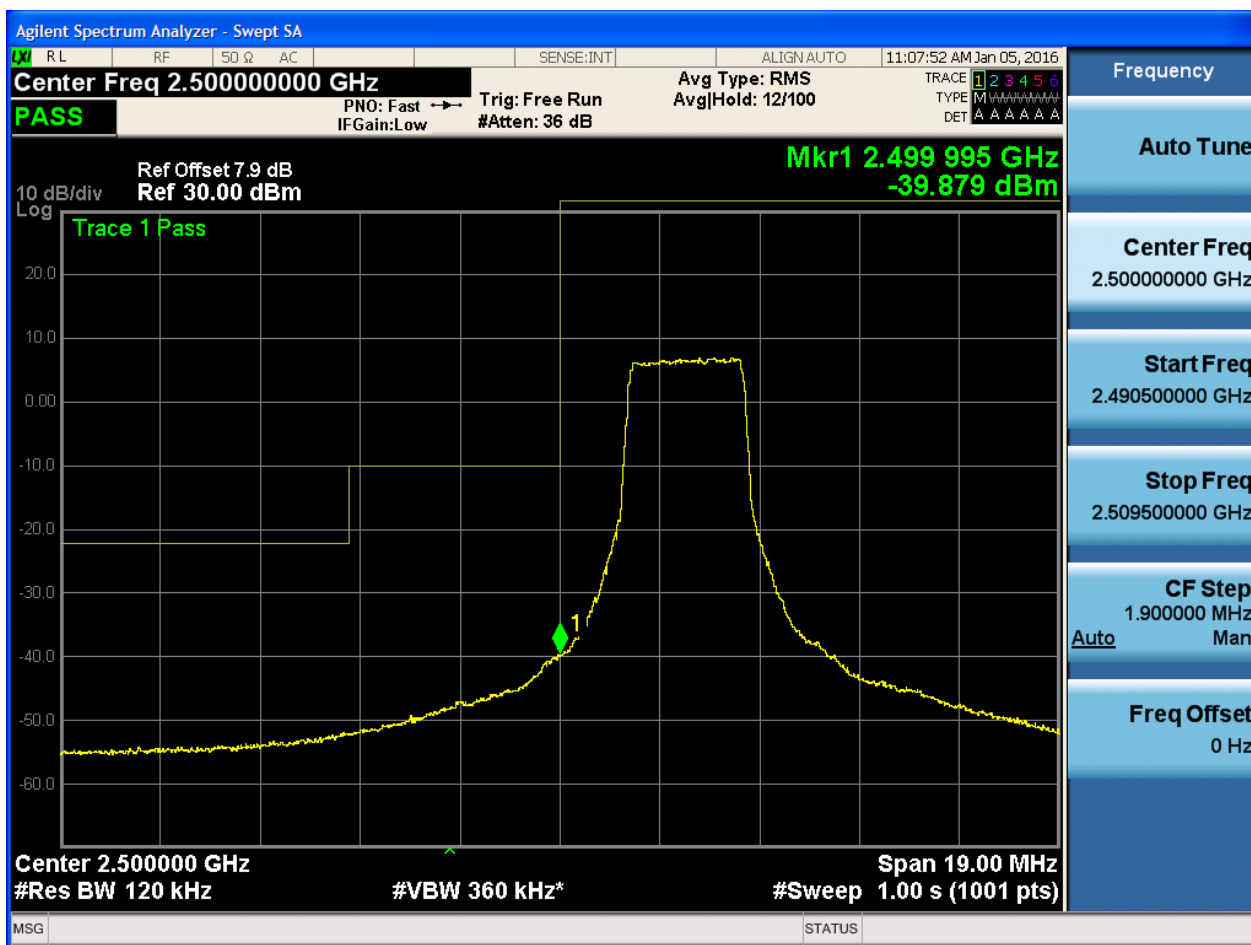


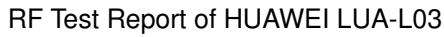
5.1.4.2.1.1.2 Test RB = RB1#24





5.1.4.2.1.1.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.50000000 GHz

Ref Offset 7.9 dB
Ref 30.00 dBm

Trace 1 Pass

Span 19.00 MHz
#Res BW 120 kHz
#VBW 360 kHz*
#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

11:08:10 AM Jan 05, 2016

Frequency

Auto Tune

Center Freq 2.50000000 GHz

Start Freq 2.490500000 GHz

Stop Freq 2.509500000 GHz

CF Step 1.900000 MHz
Man

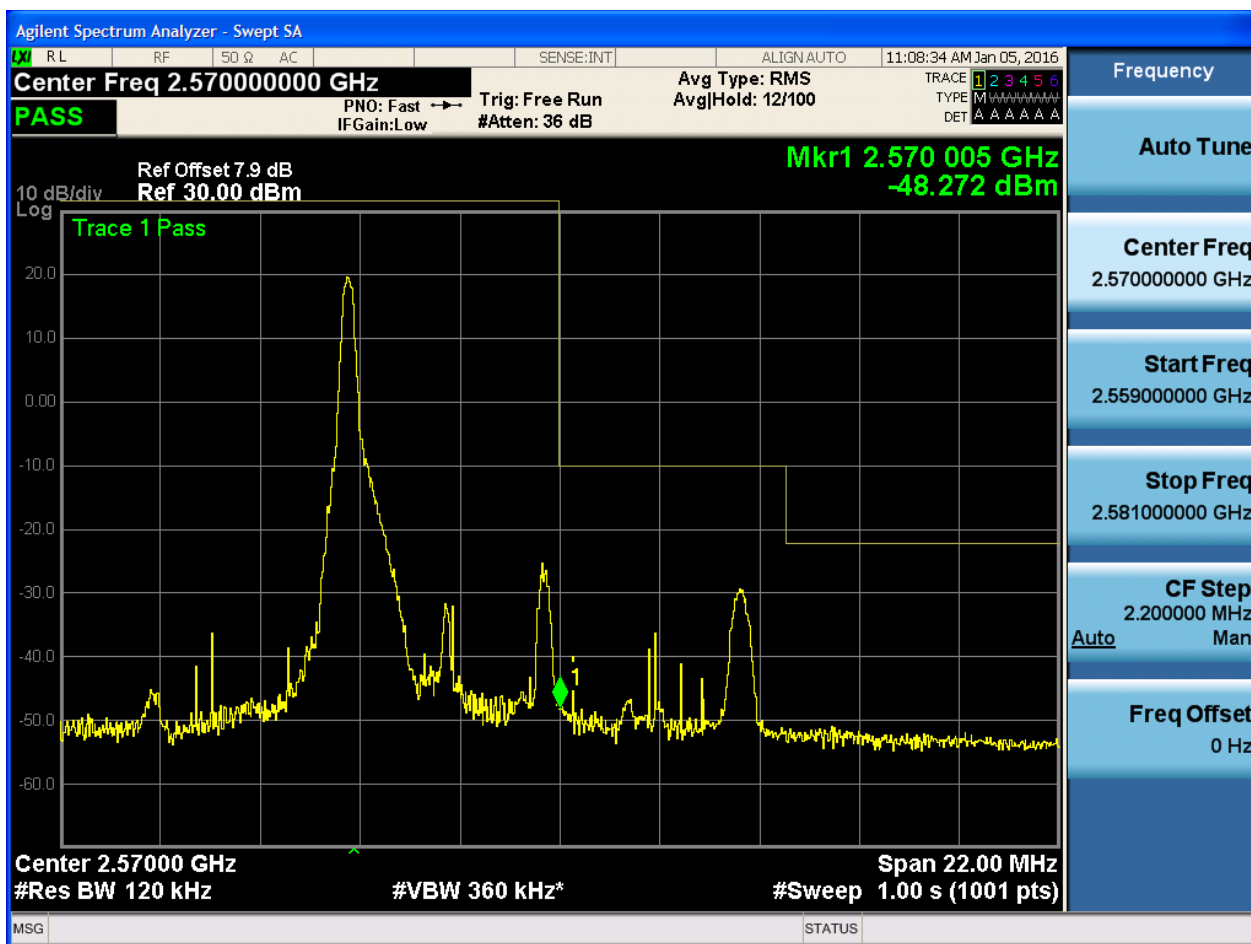
Freq Offset 0 Hz

MSG STATUS



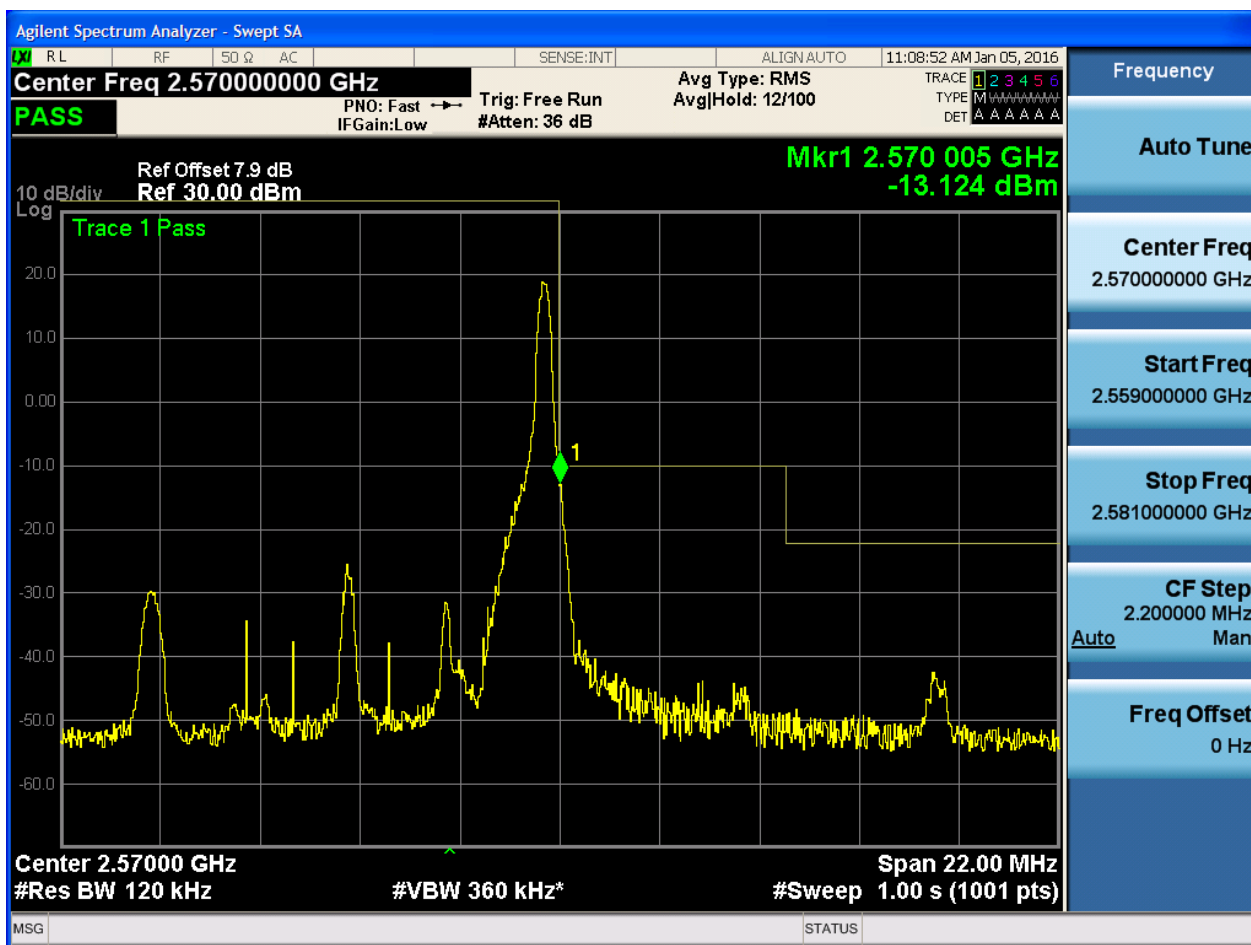
5.1.4.2.1.2 Test Channel = HCH

5.1.4.2.1.2.1 Test RB = RB1#0



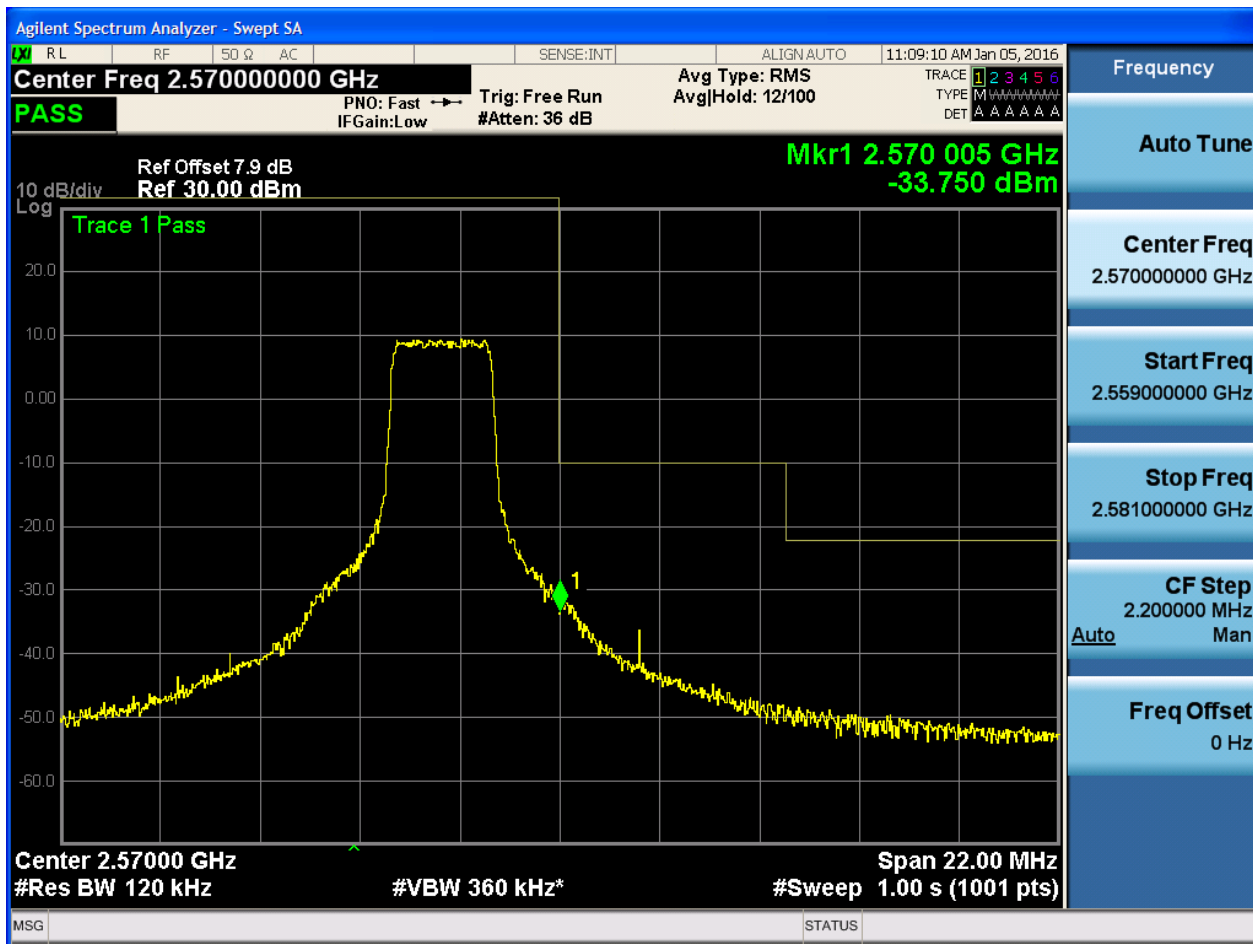


5.1.4.2.1.2.2 Test RB = RB1#24



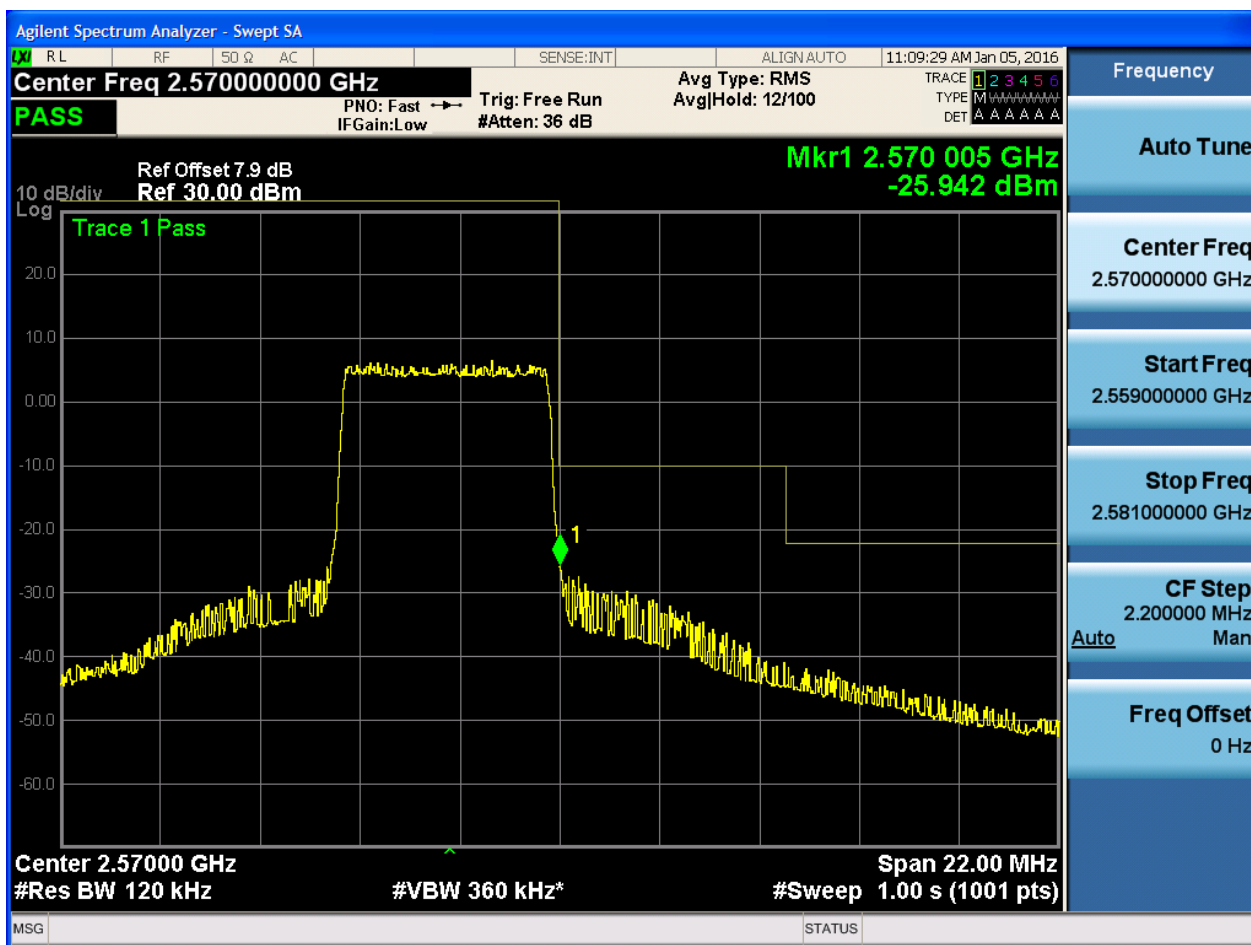


5.1.4.2.1.2.3 Test RB = RB12#6





5.1.4.2.1.2.4 Test RB = RB25#0

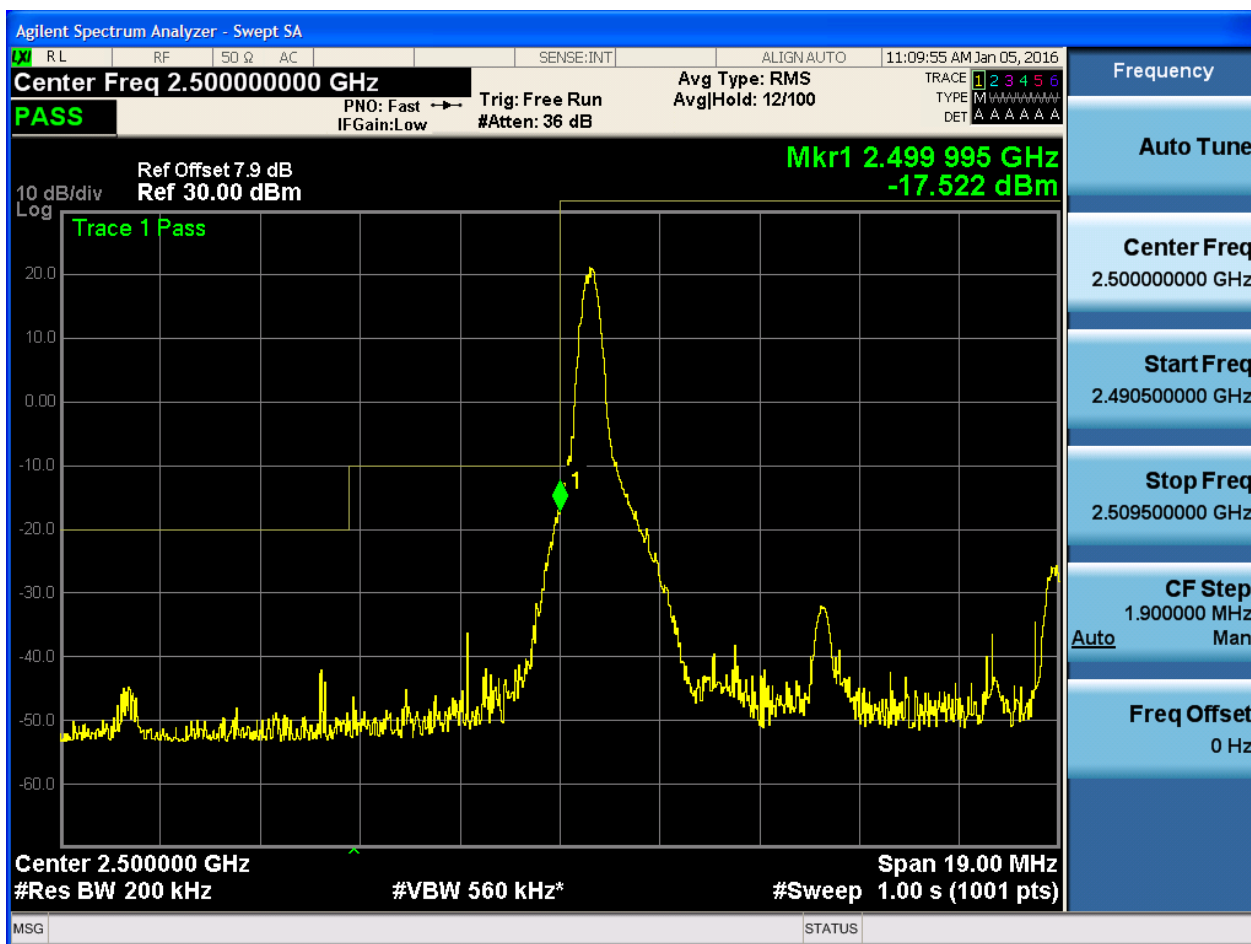




5.1.4.2.2 Test Bandwidth = 10

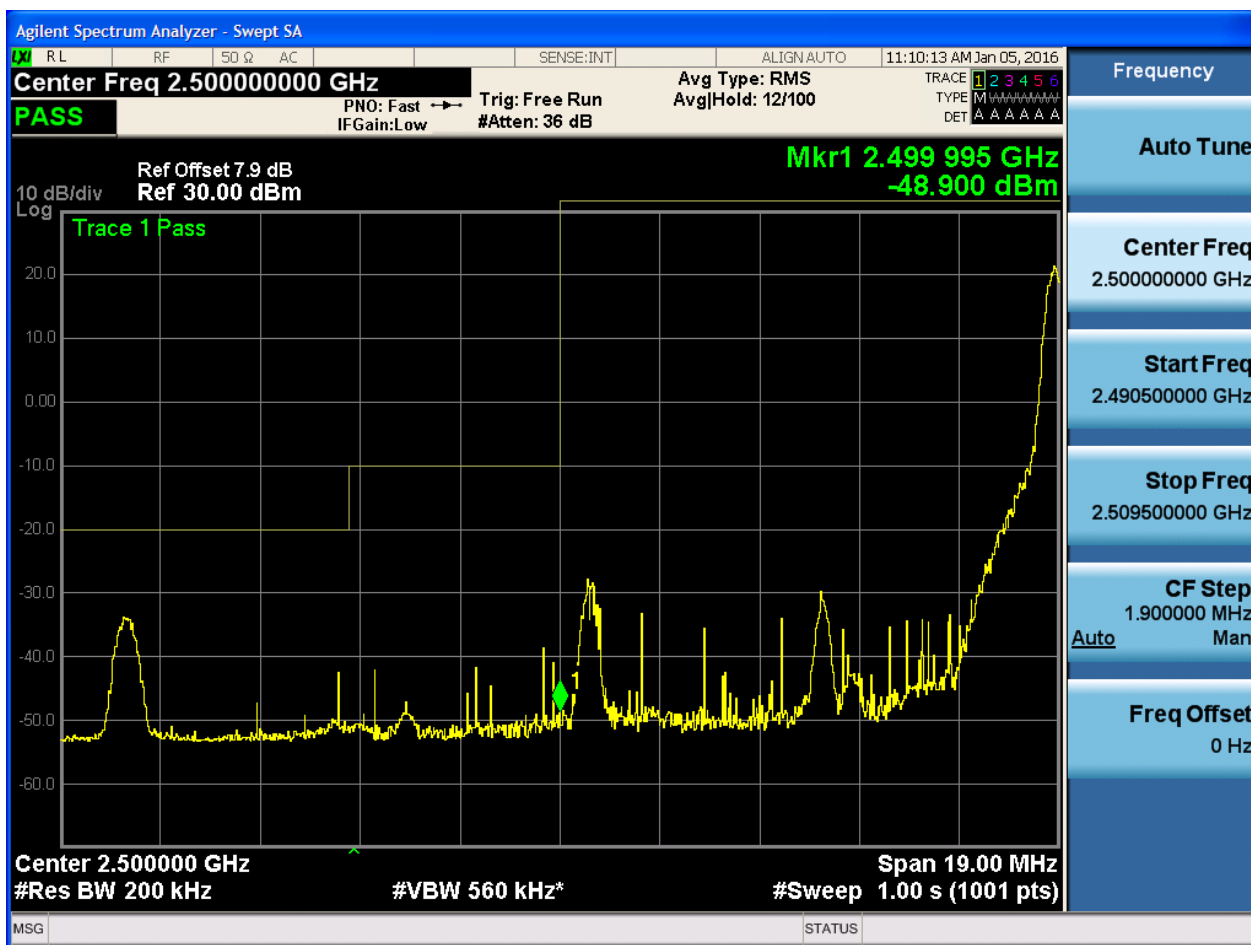
5.1.4.2.2.1 Test Channel = LCH

5.1.4.2.2.1.1 Test RB = RB1#0





5.1.4.2.2.1.2 Test RB = RB1#49



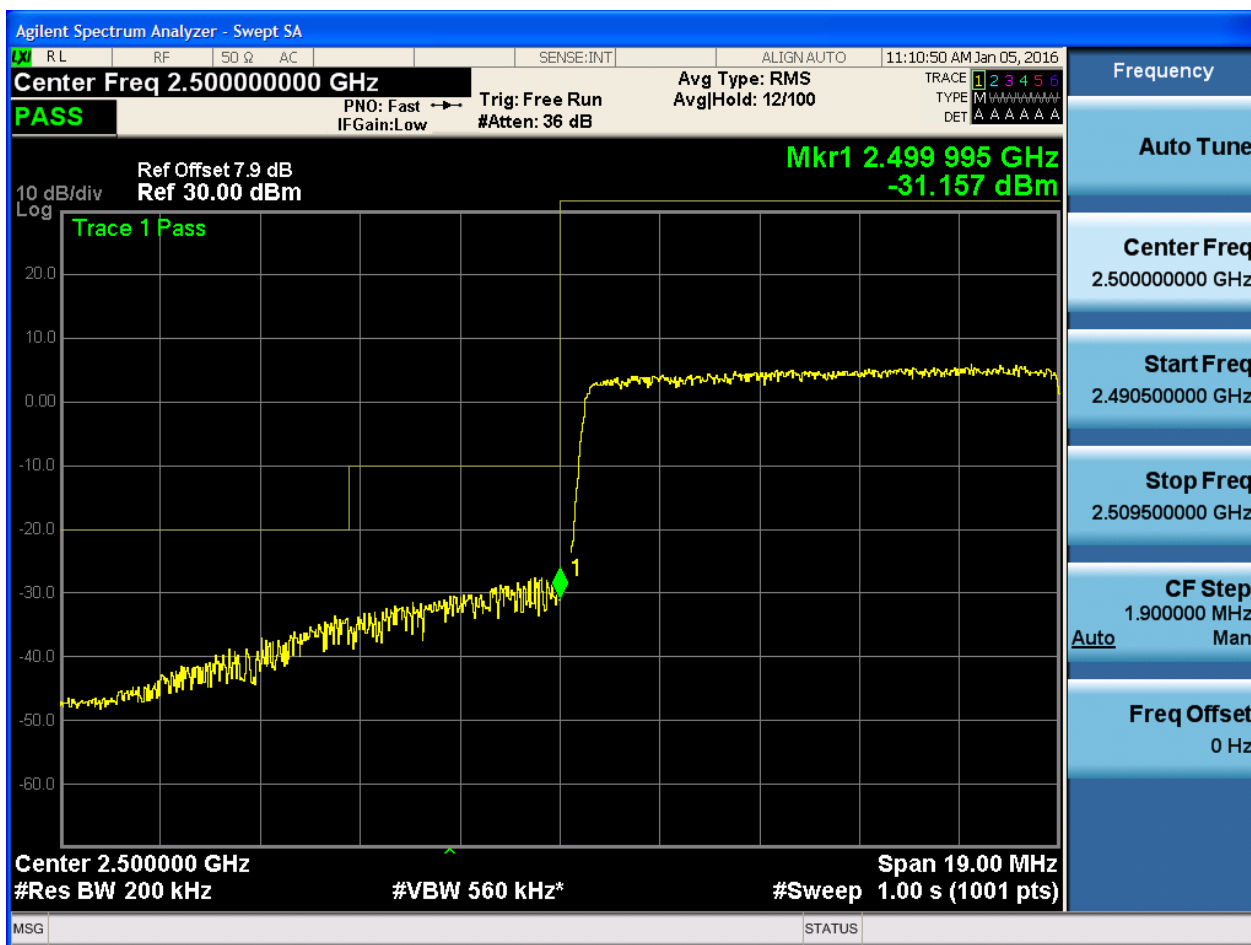


5.1.4.2.2.1.3 Test RB = RB25#13





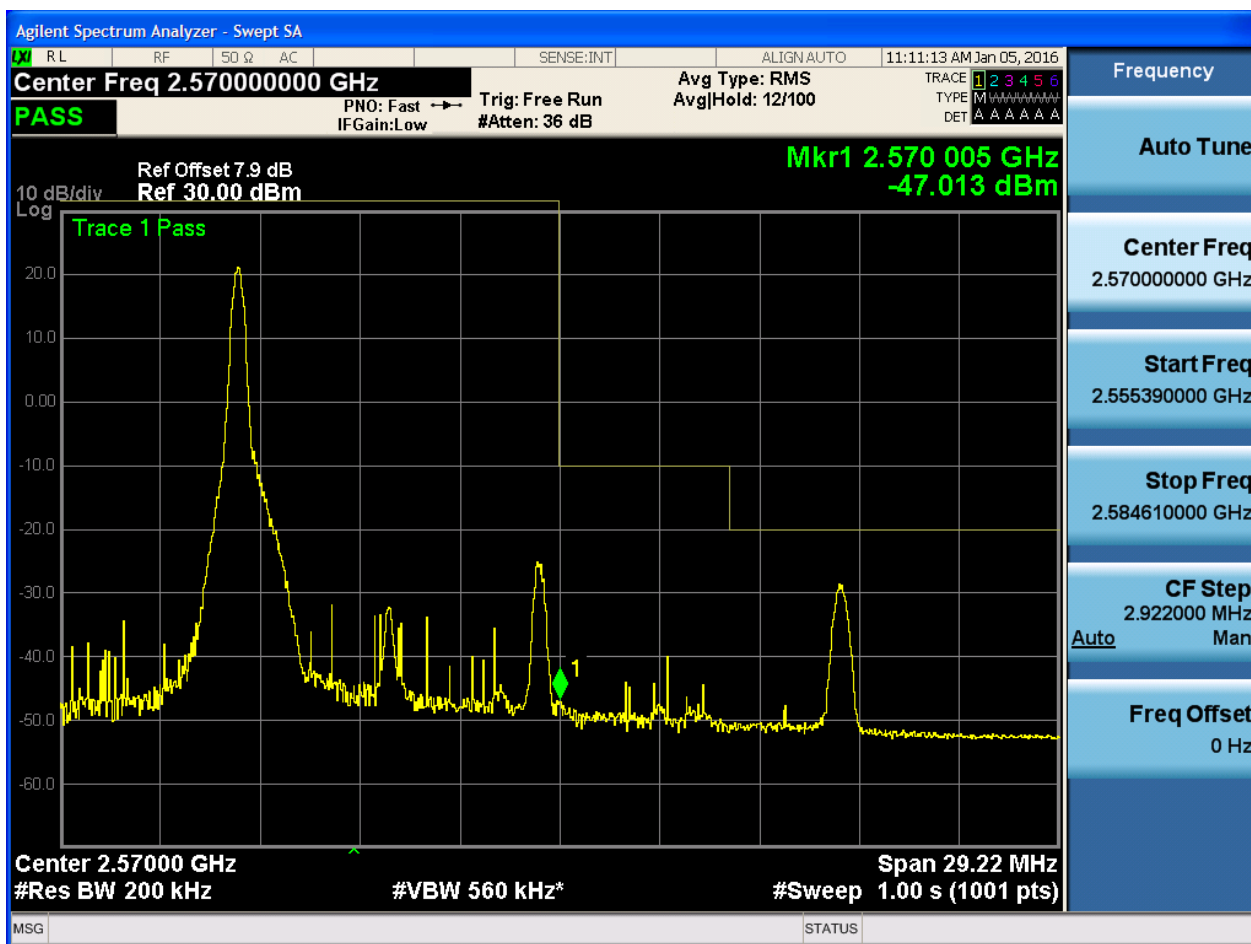
5.1.4.2.2.1.4 Test RB = RB50#0





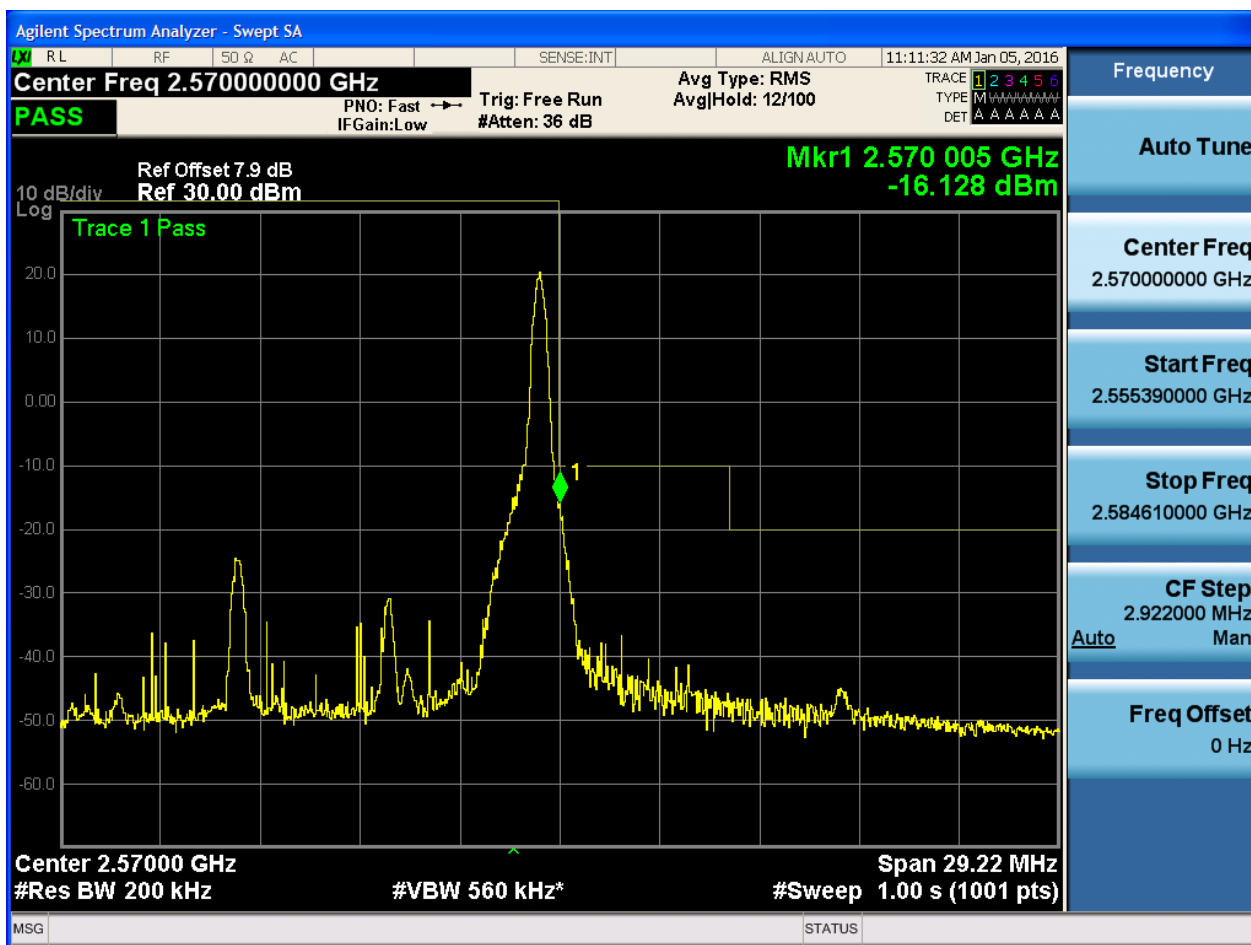
5.1.4.2.2.2 Test Channel = HCH

5.1.4.2.2.2.1 Test RB = RB1#0



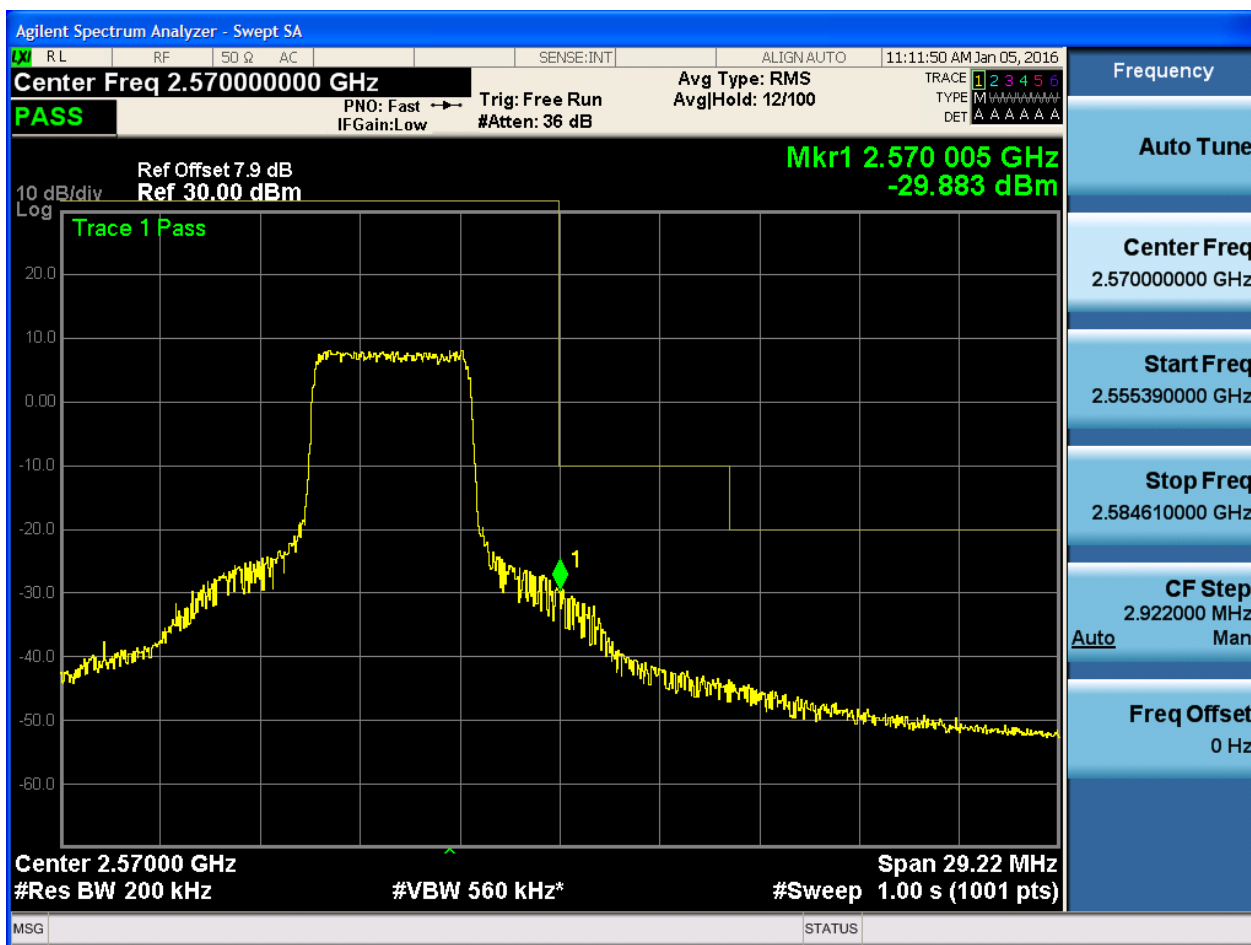


5.1.4.2.2.2 Test RB = RB1#49





5.1.4.2.2.3 Test RB = RB25#13





5.1.4.2.2.4 Test RB = RB50#0

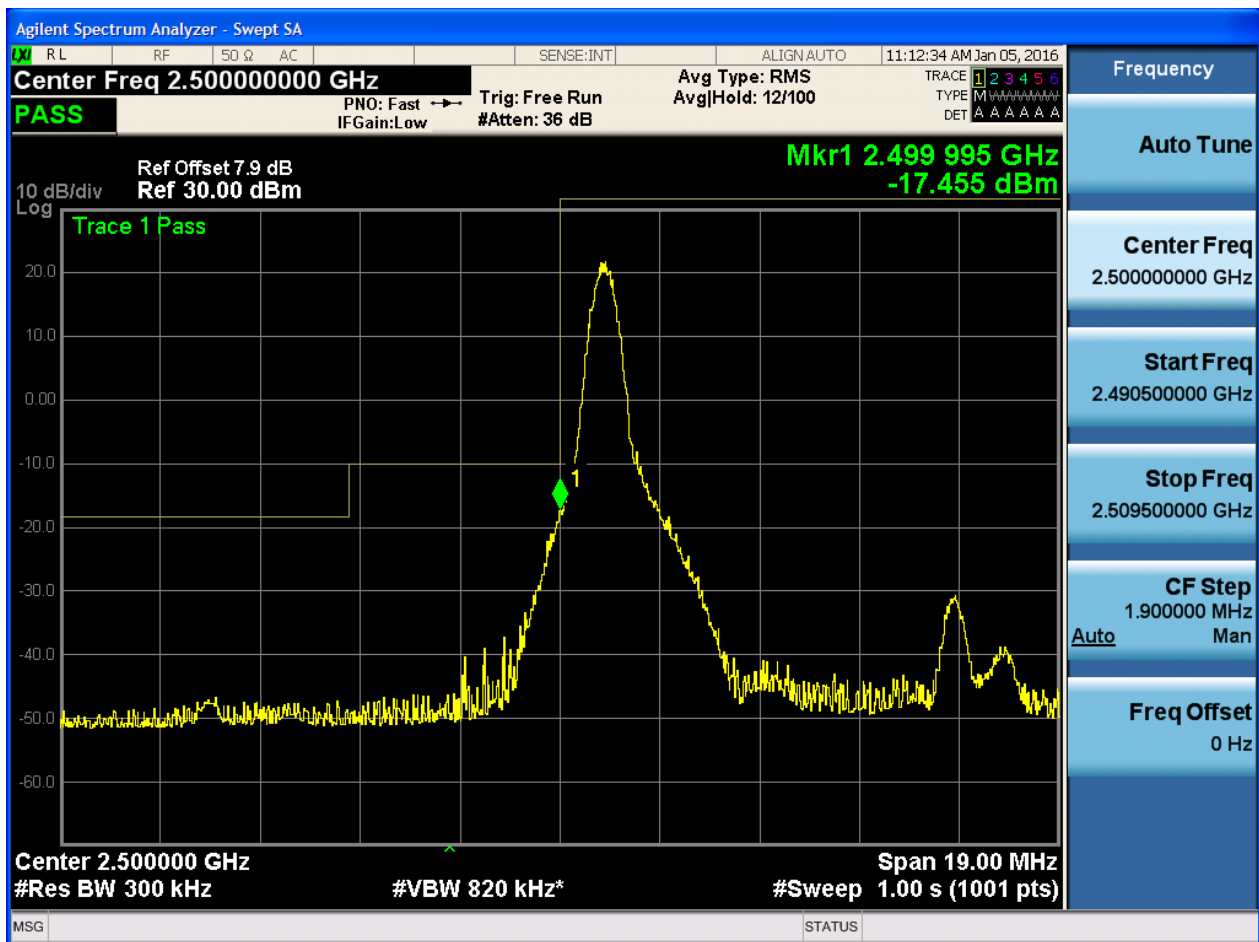




5.1.4.2.3 Test Bandwidth = 15

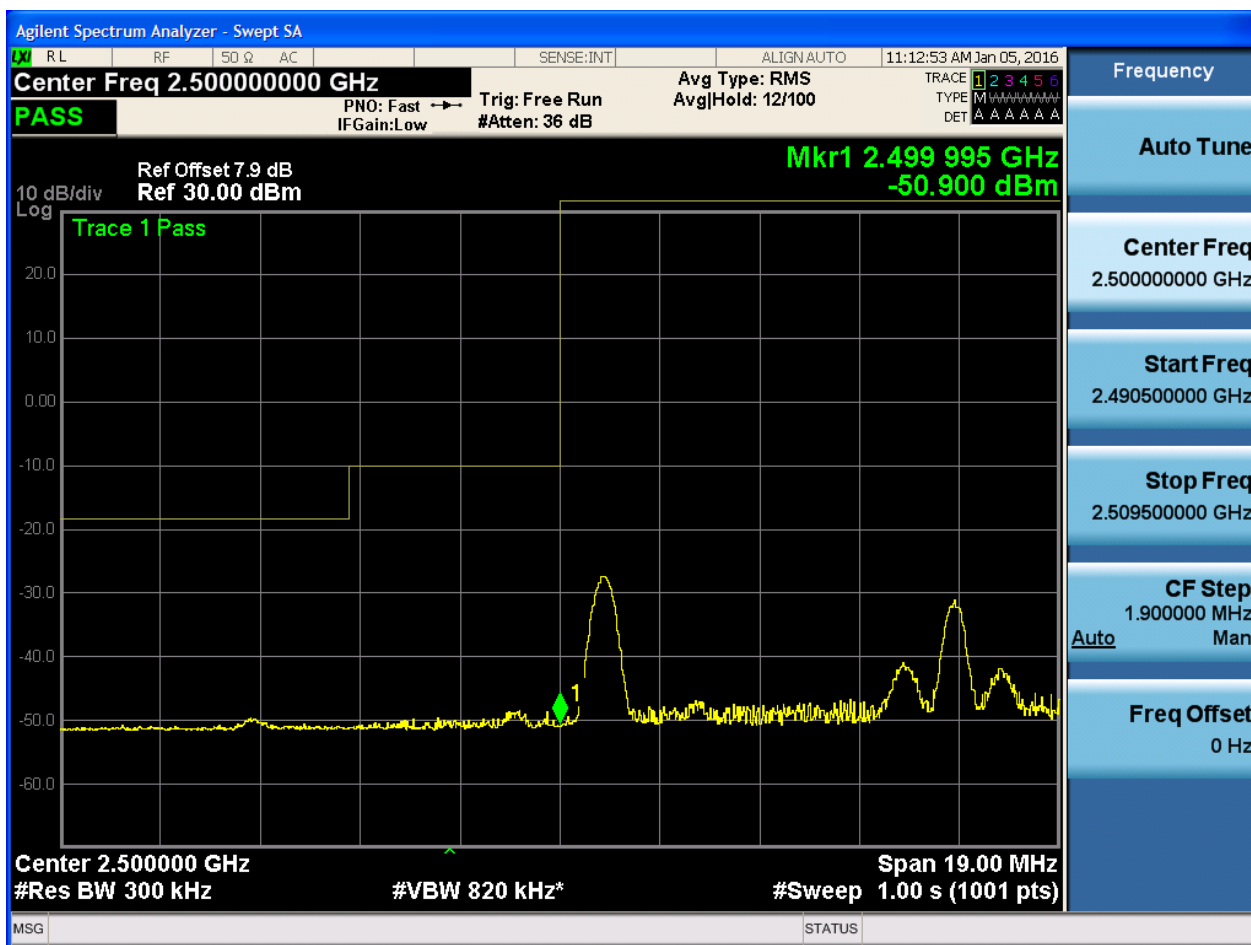
5.1.4.2.3.1 Test Channel = LCH

5.1.4.2.3.1.1 Test RB = RB1#0



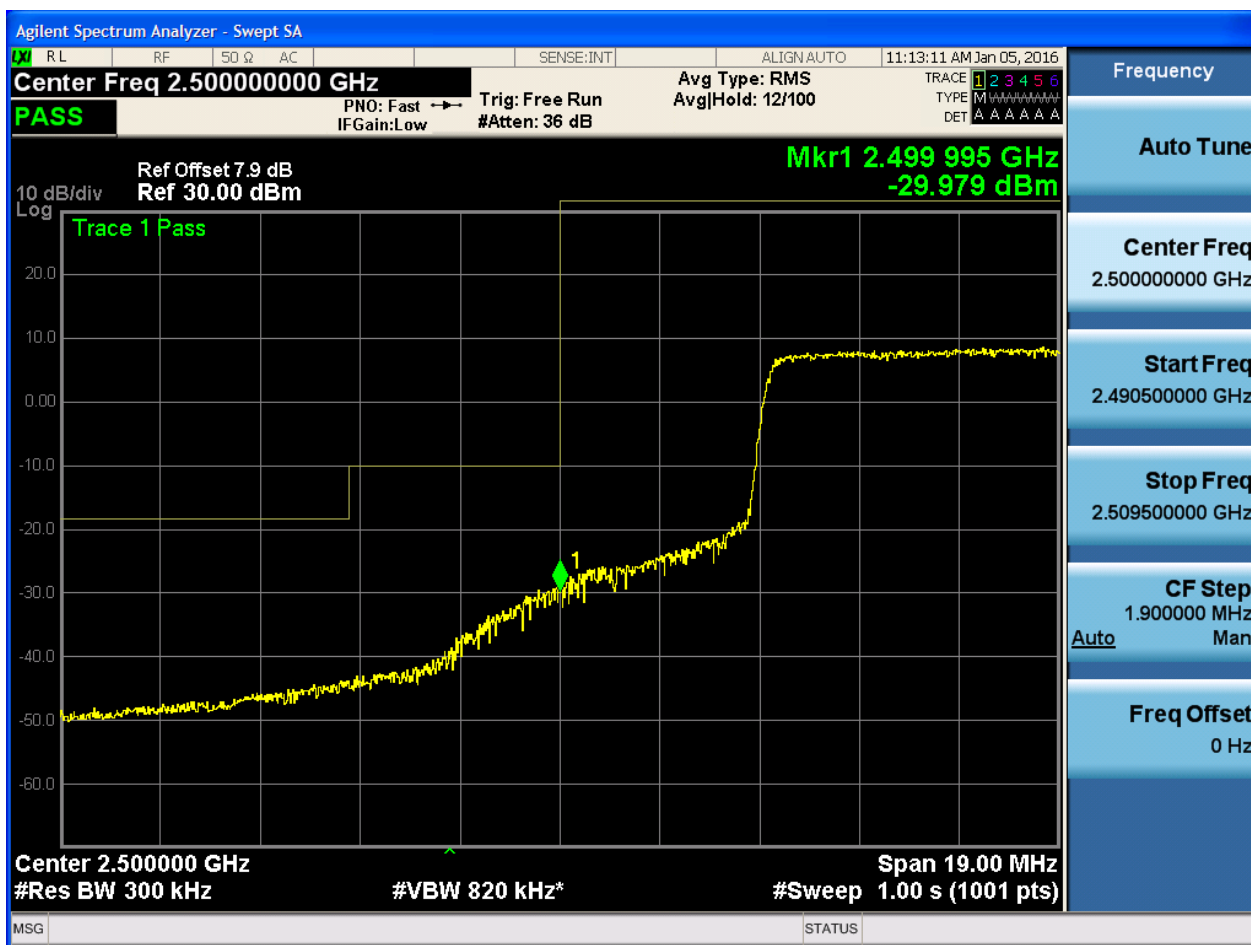


5.1.4.2.3.1.2 Test RB = RB1#74



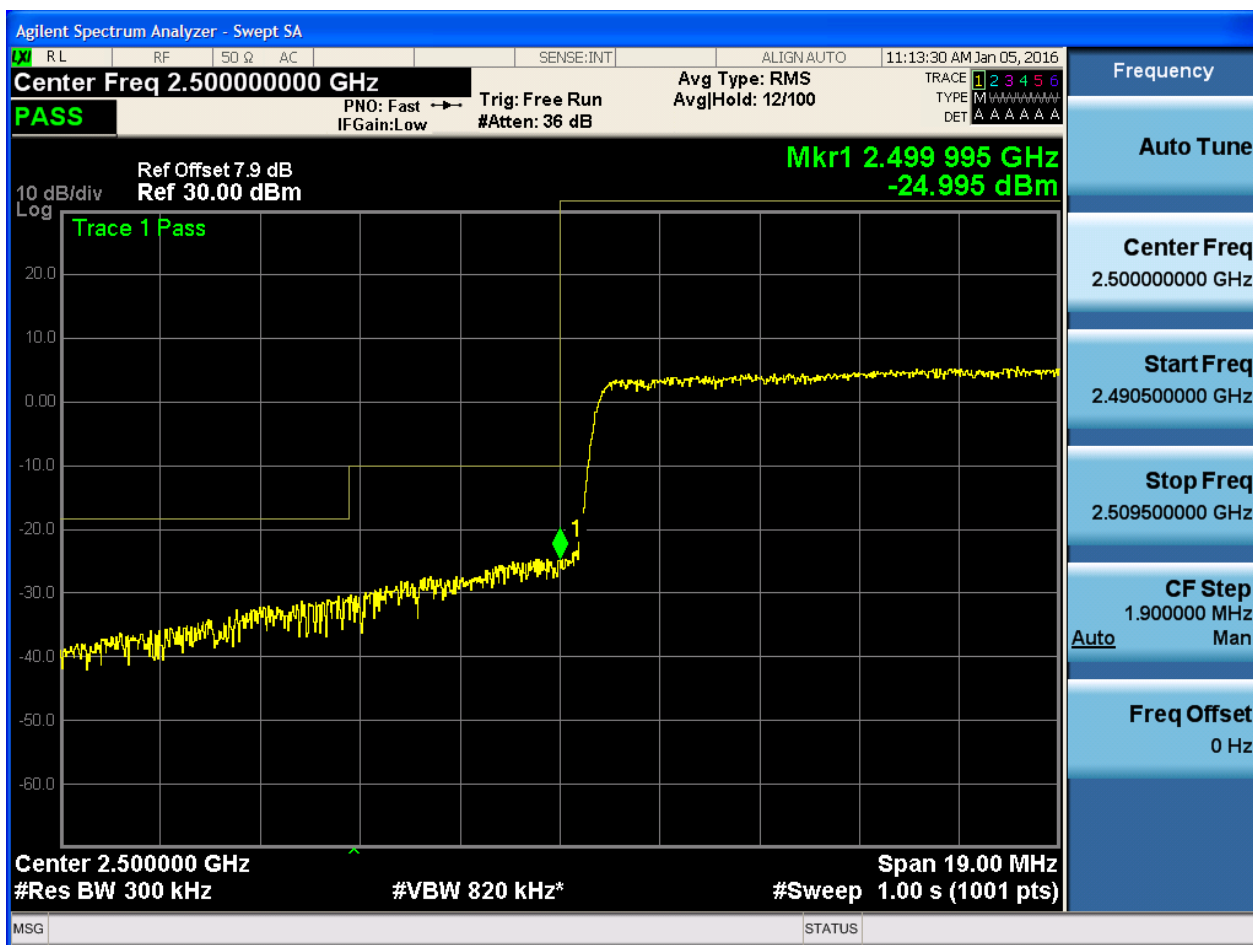


5.1.4.2.3.1.3 Test RB = RB36#18



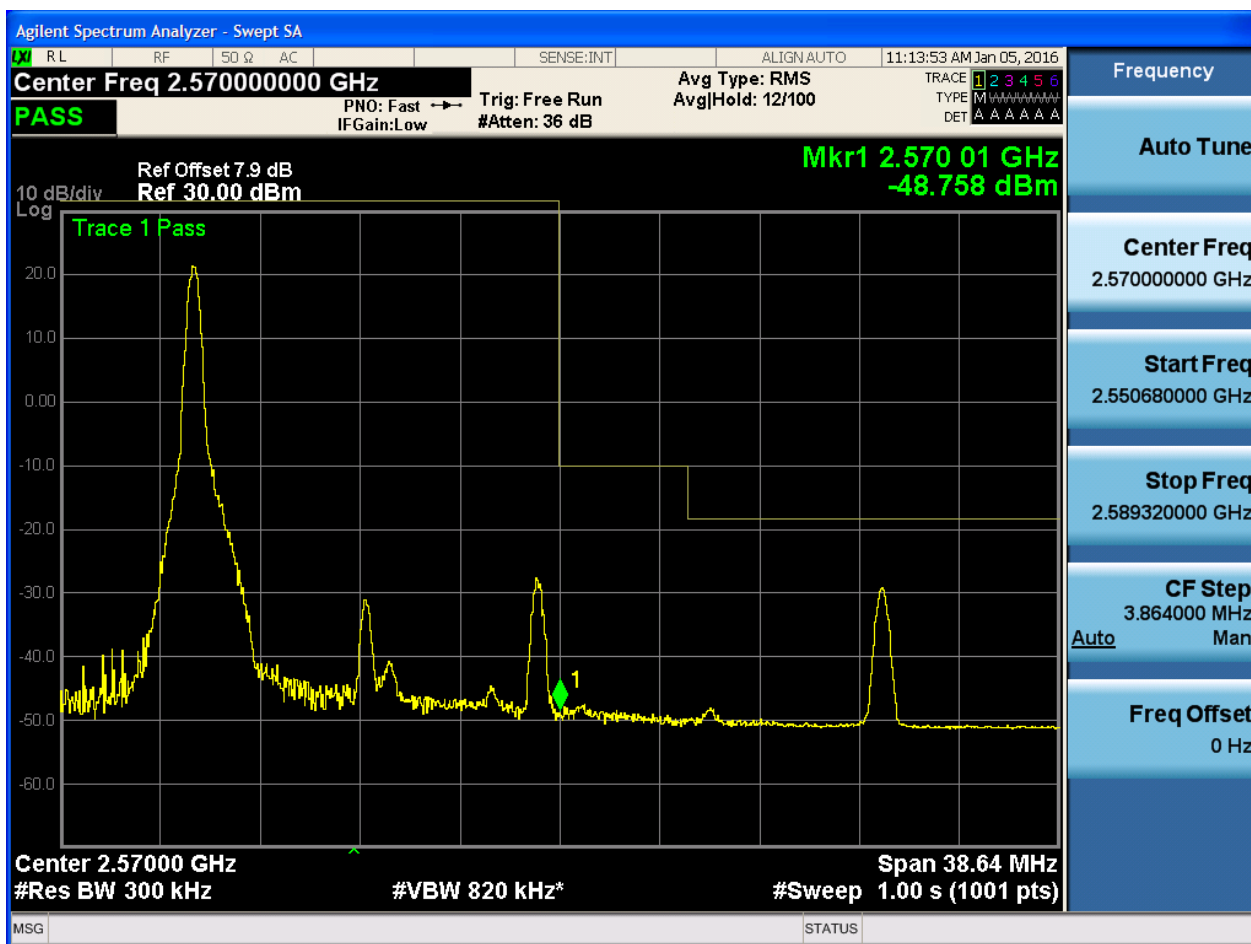


5.1.4.2.3.1.4 Test RB = RB75#0



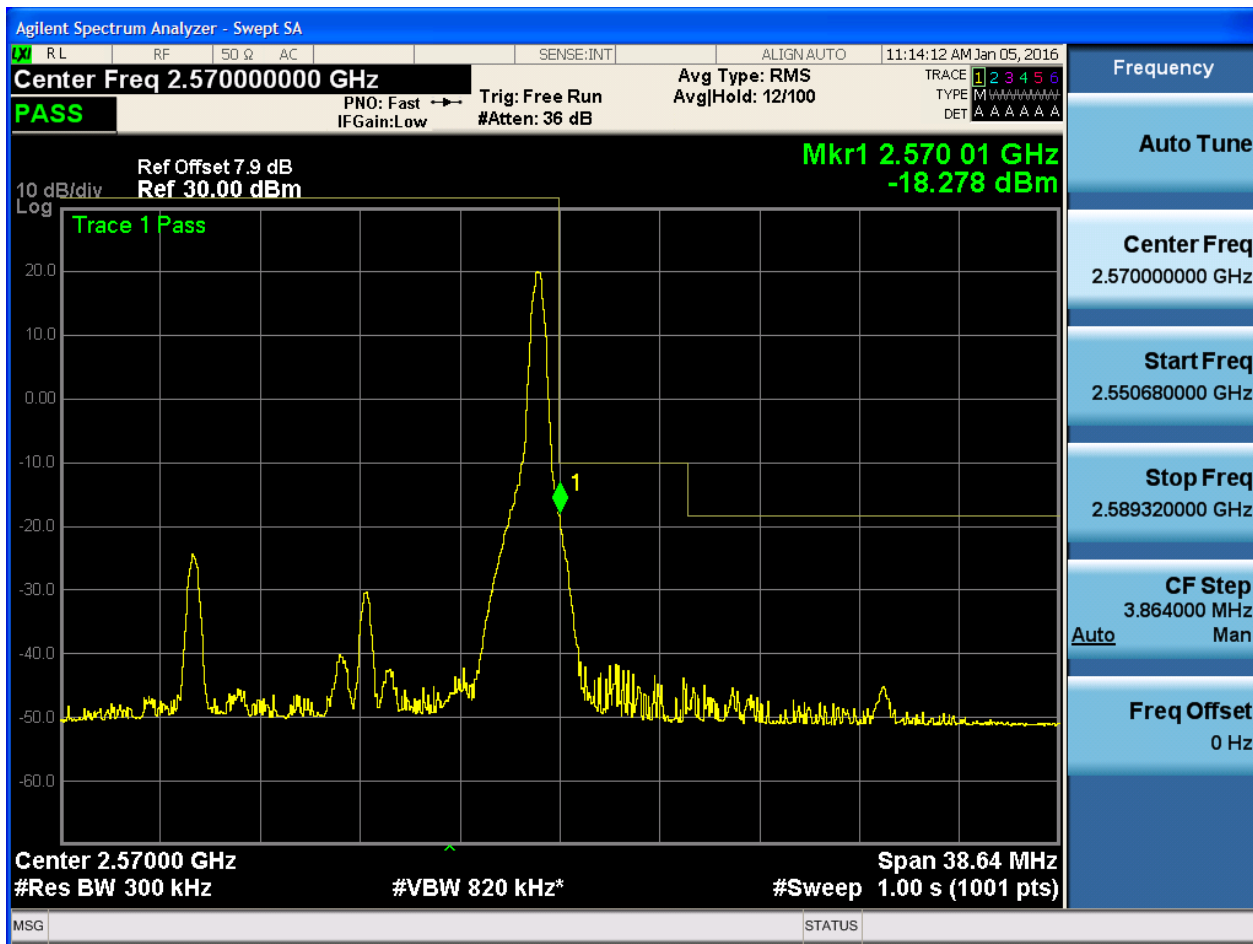
5.1.4.2.3.2 Test Channel = HCH

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

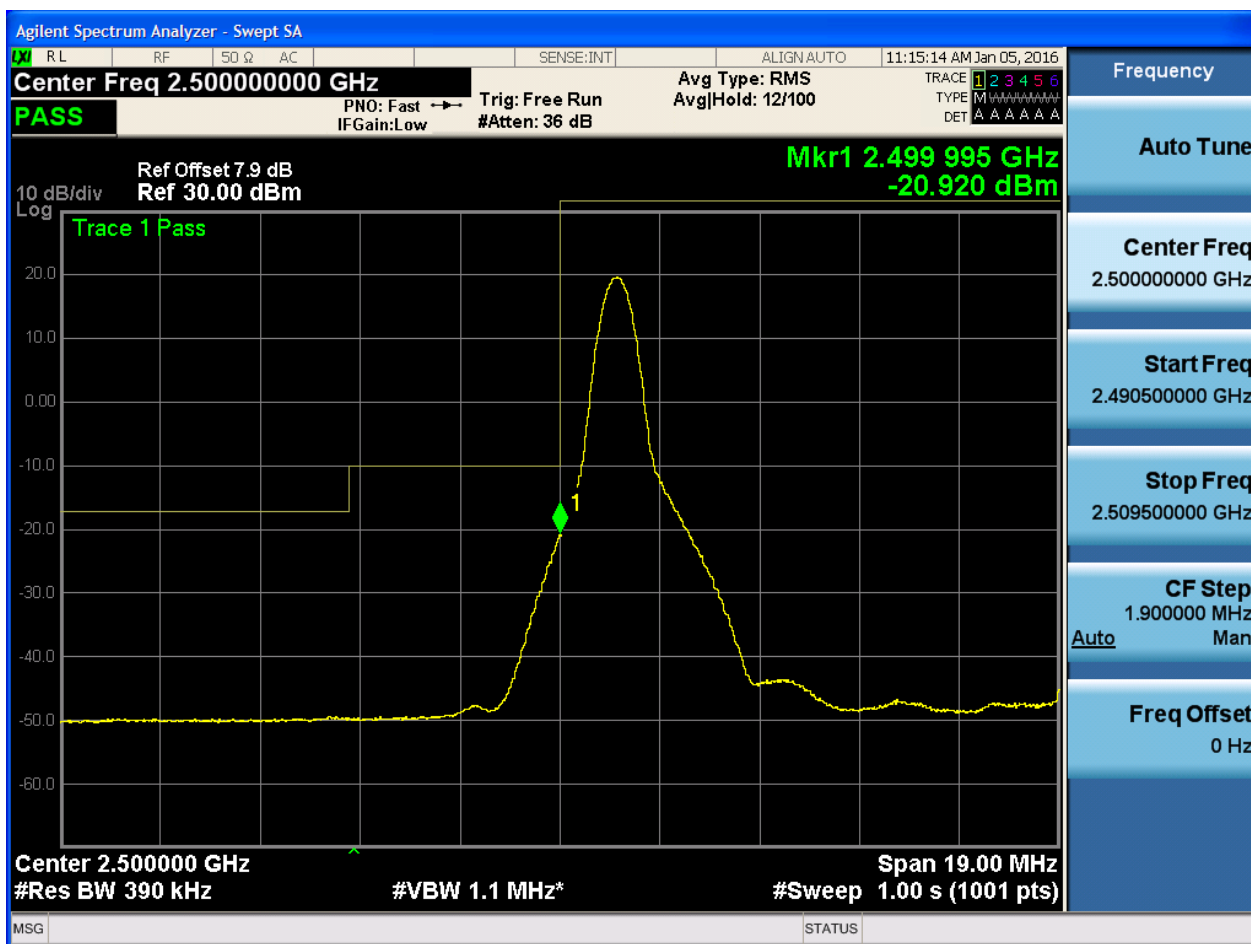




5.1.4.2.4 Test Bandwidth = 20

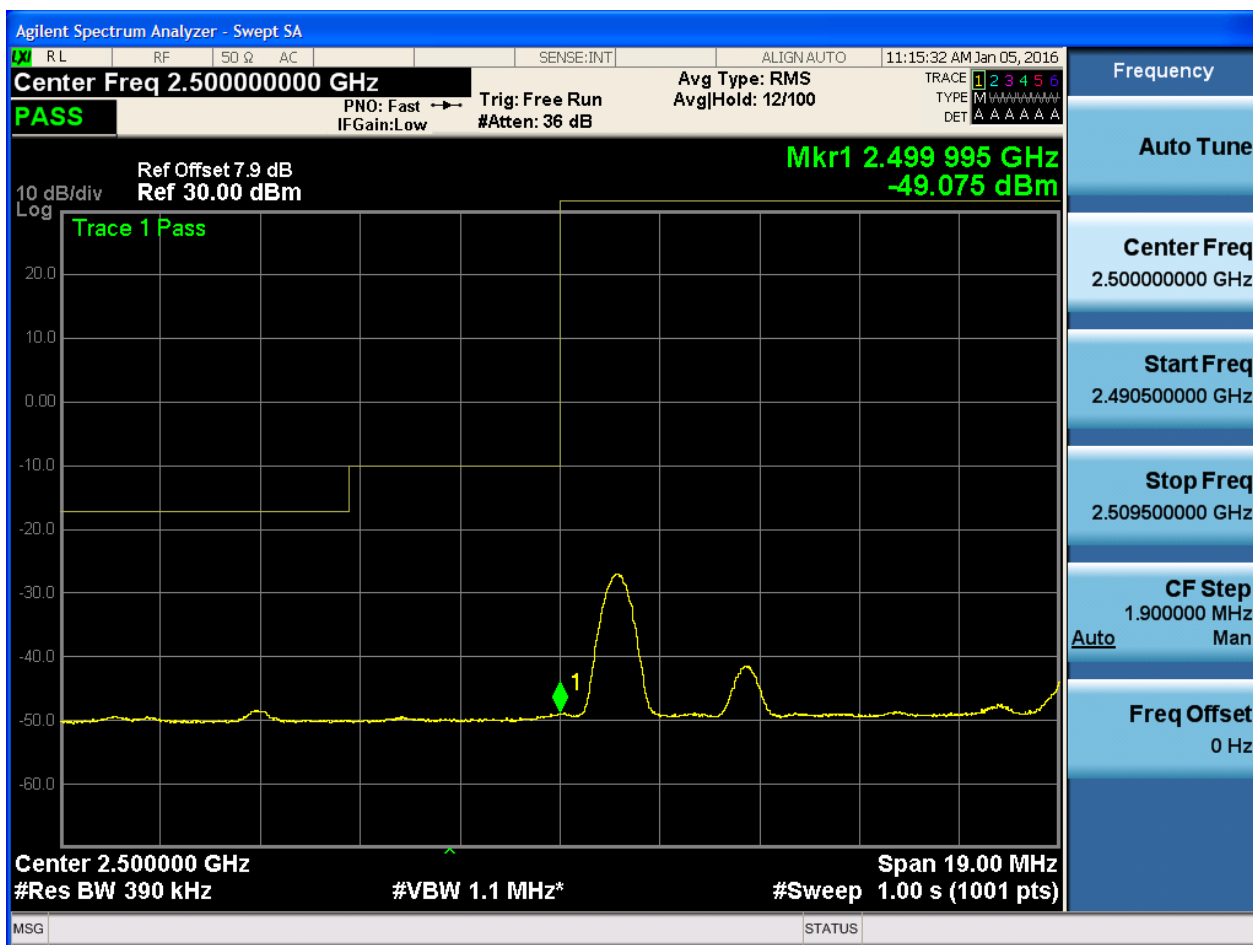
5.1.4.2.4.1 Test Channel = LCH

5.1.4.2.4.1.1 Test RB = RB1#0





5.1.4.2.4.1.2 Test RB = RB1#99



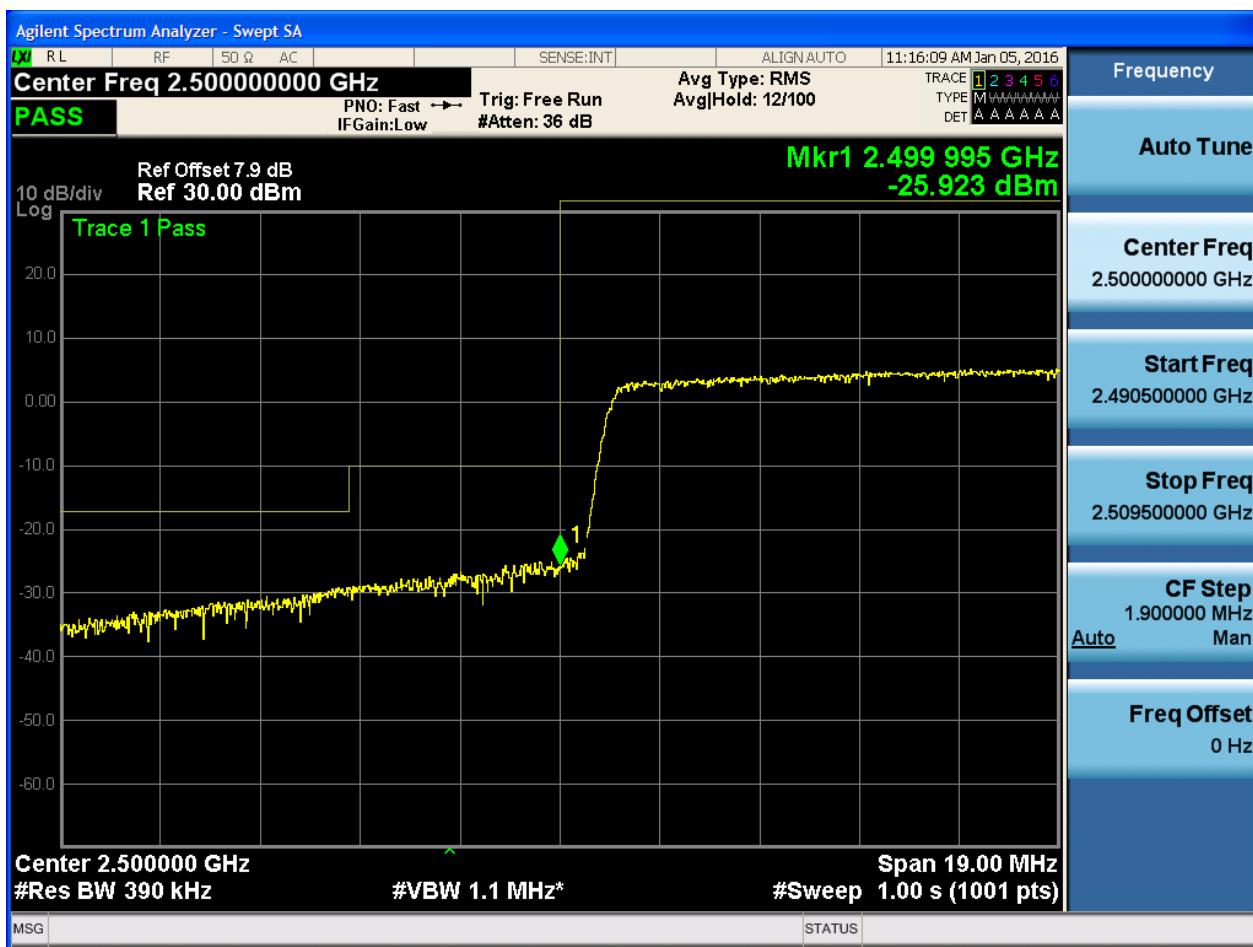


5.1.4.2.4.1.3 Test RB = RB50#25



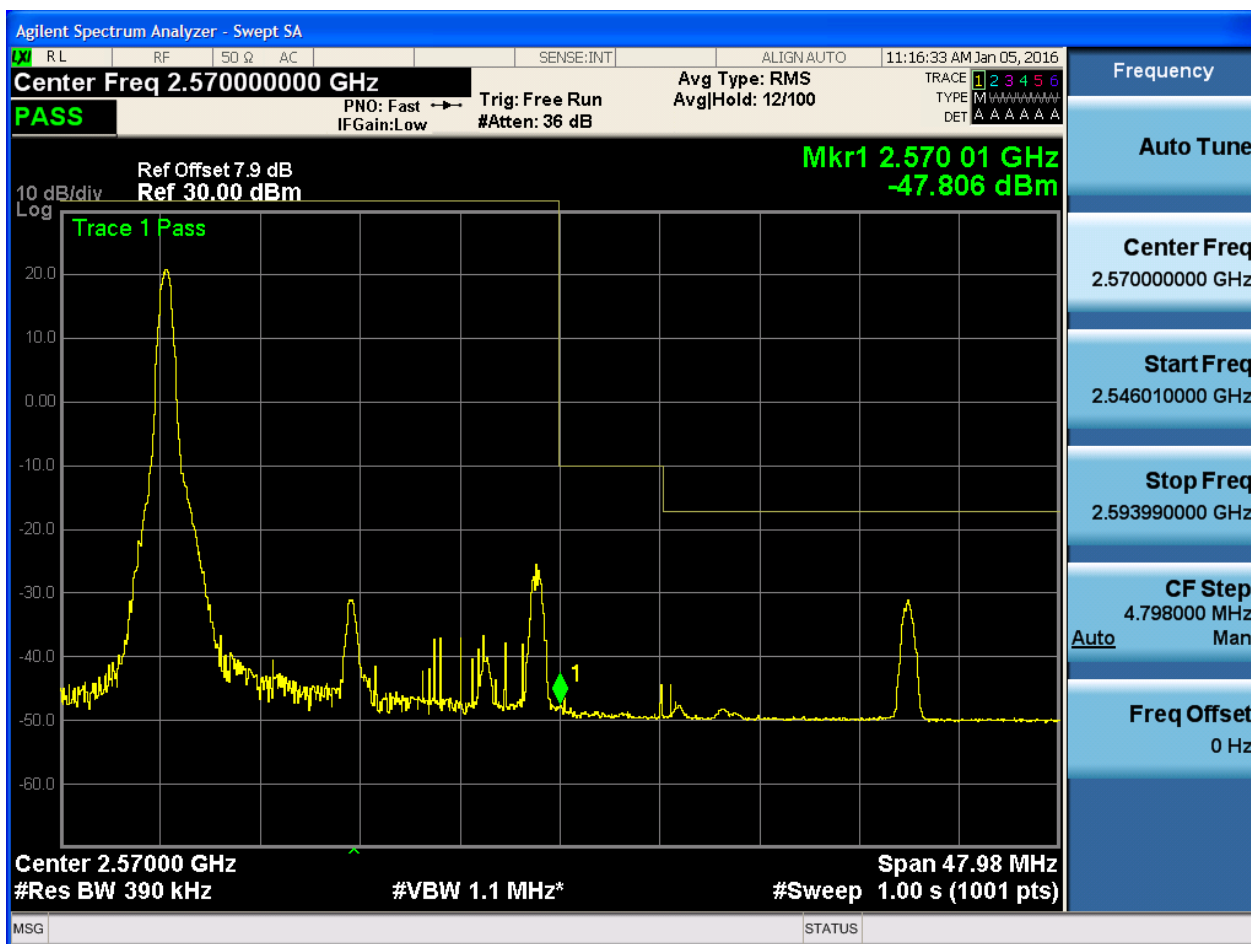


5.1.4.2.4.1.4 Test RB = RB100#0



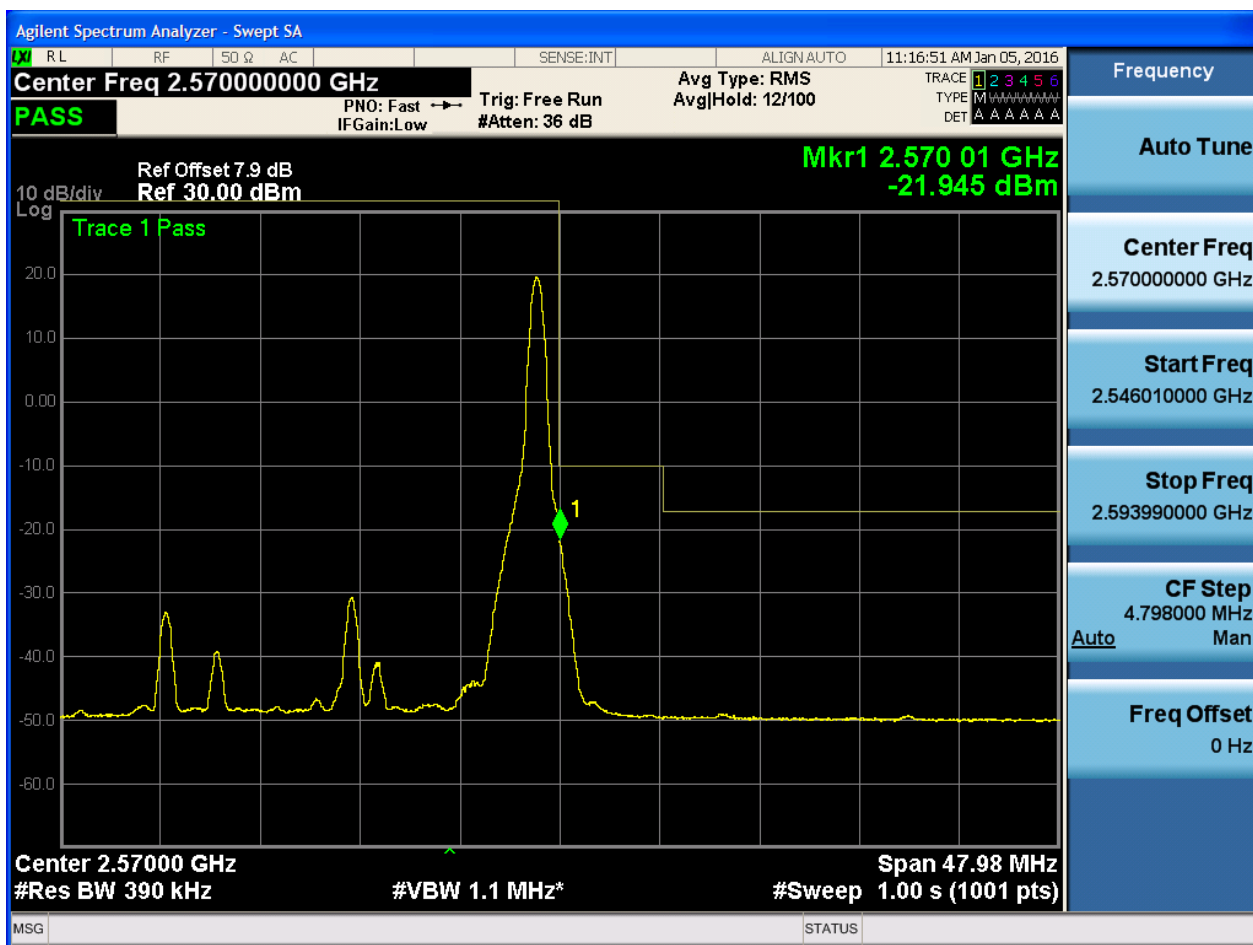
5.1.4.2.4.2 Test Channel = HCH

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

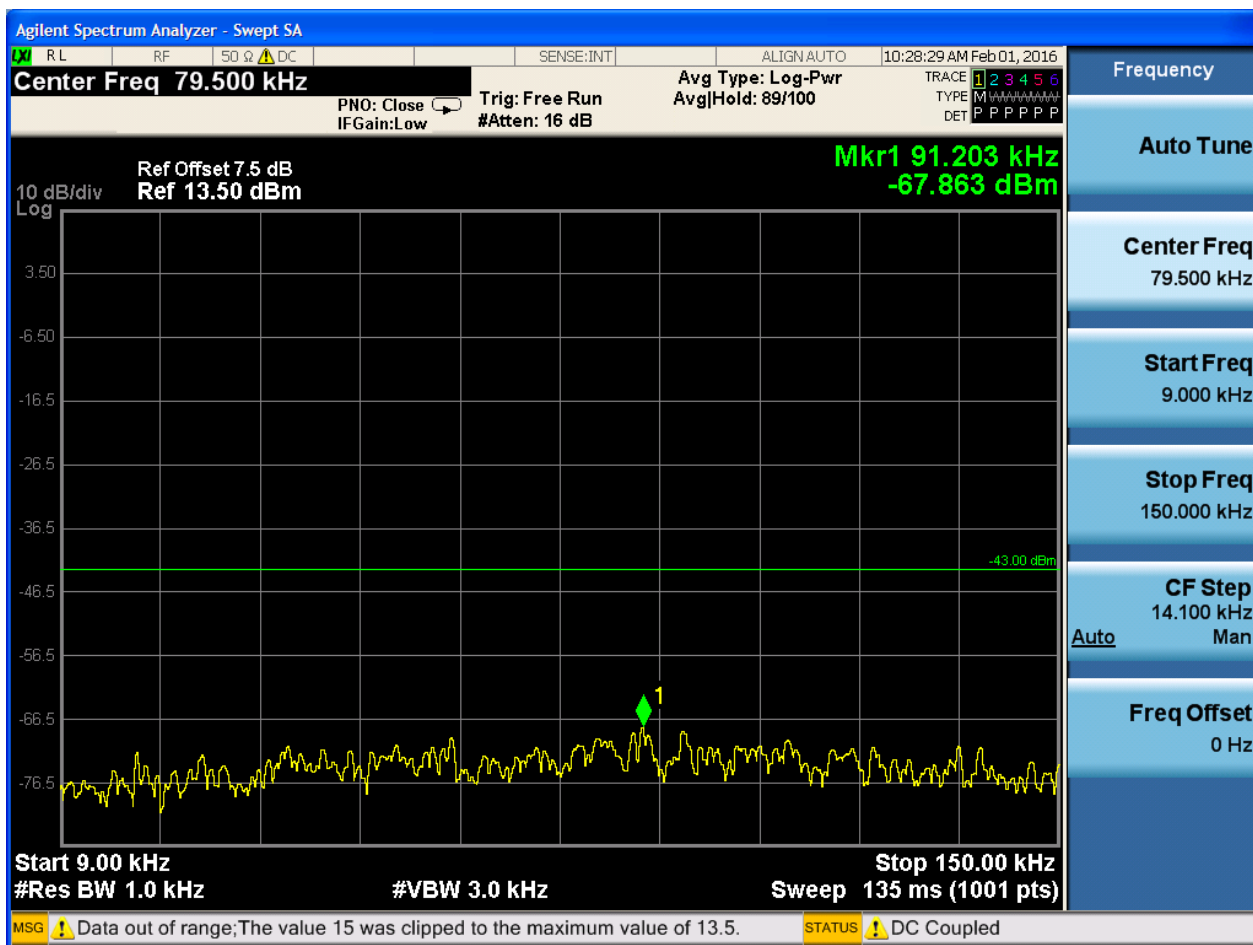
6.1.1 Test Band = BAND2

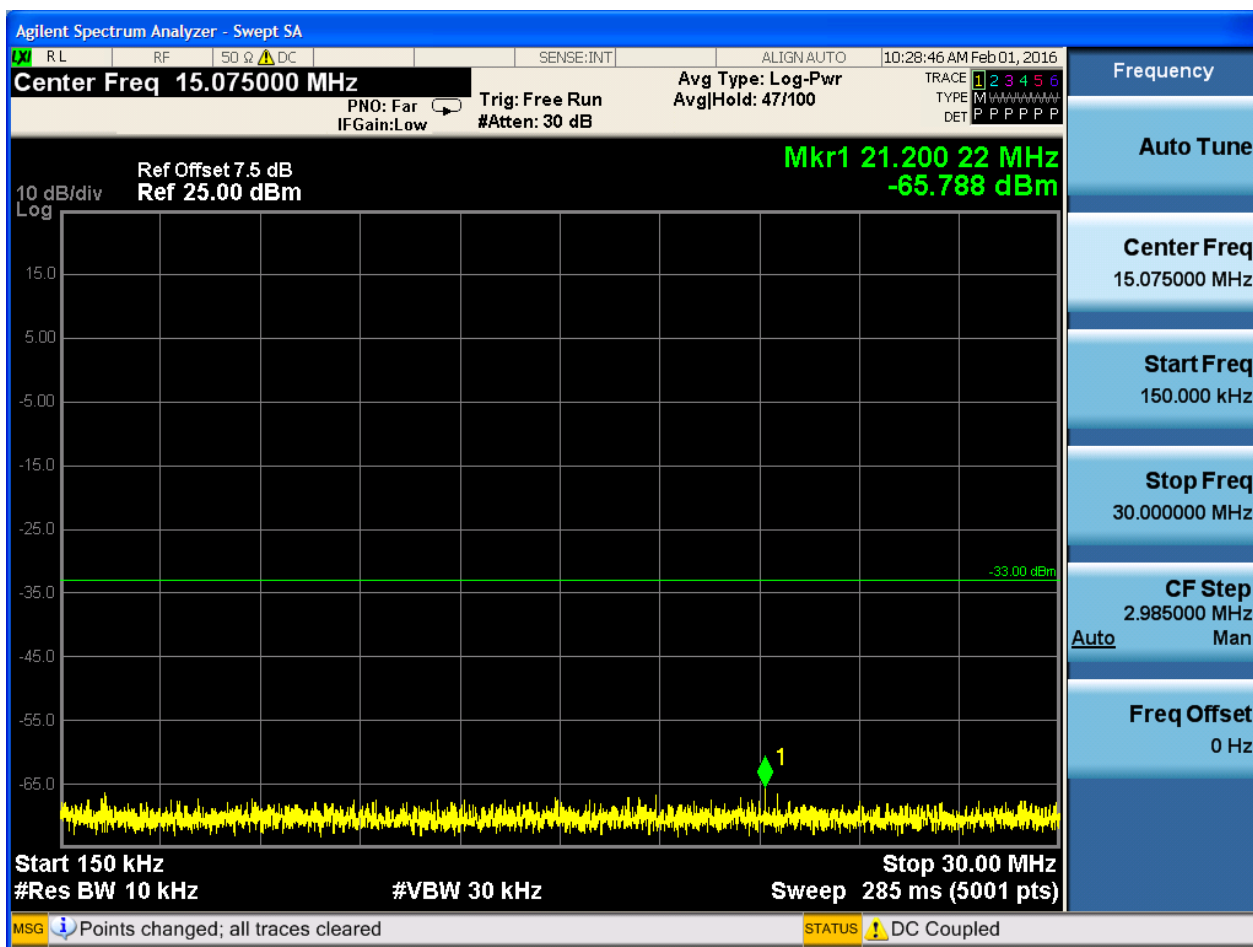
6.1.1.1 Test Mode = LTE/TM1

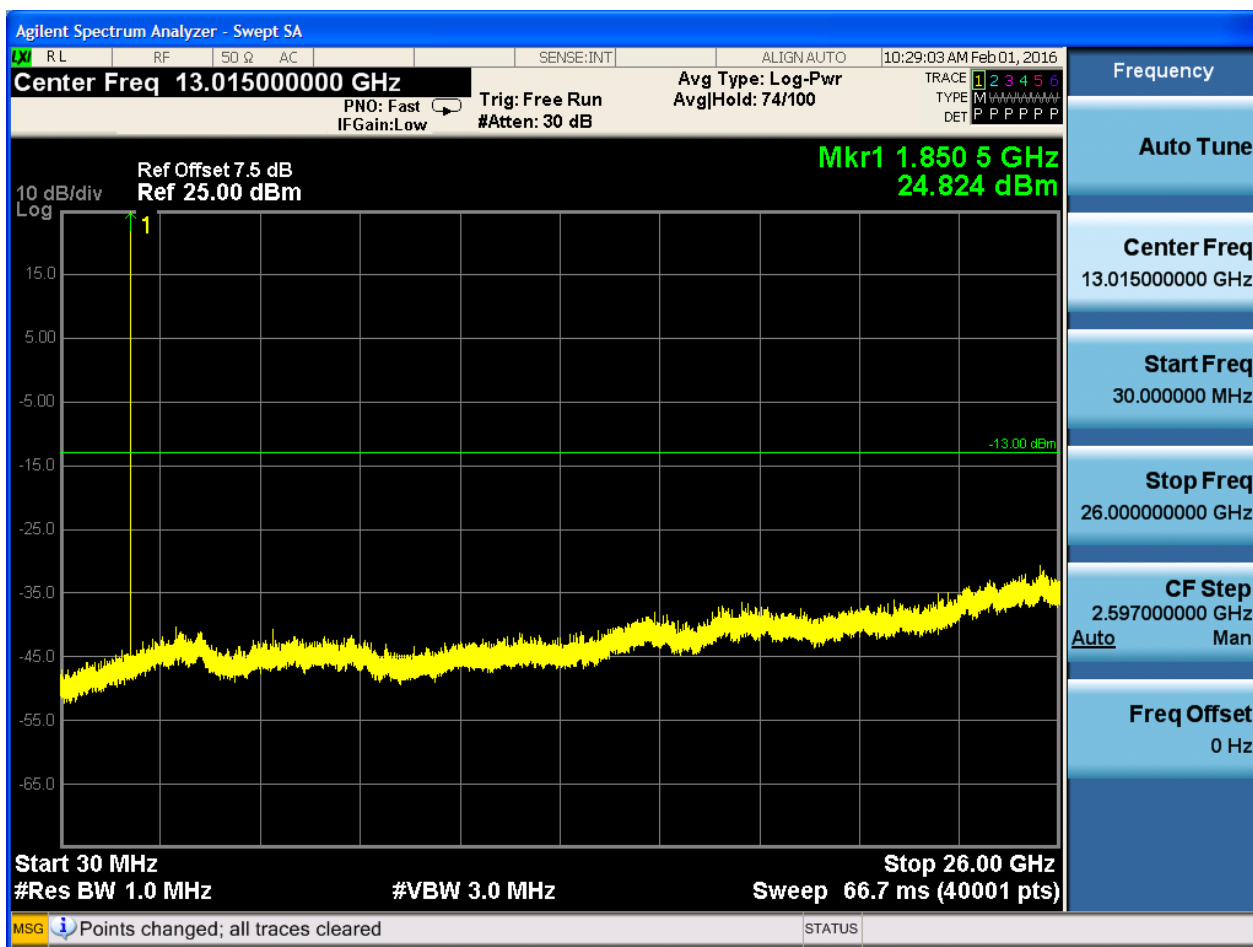
6.1.1.1.1 Test Bandwidth = 1.4

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



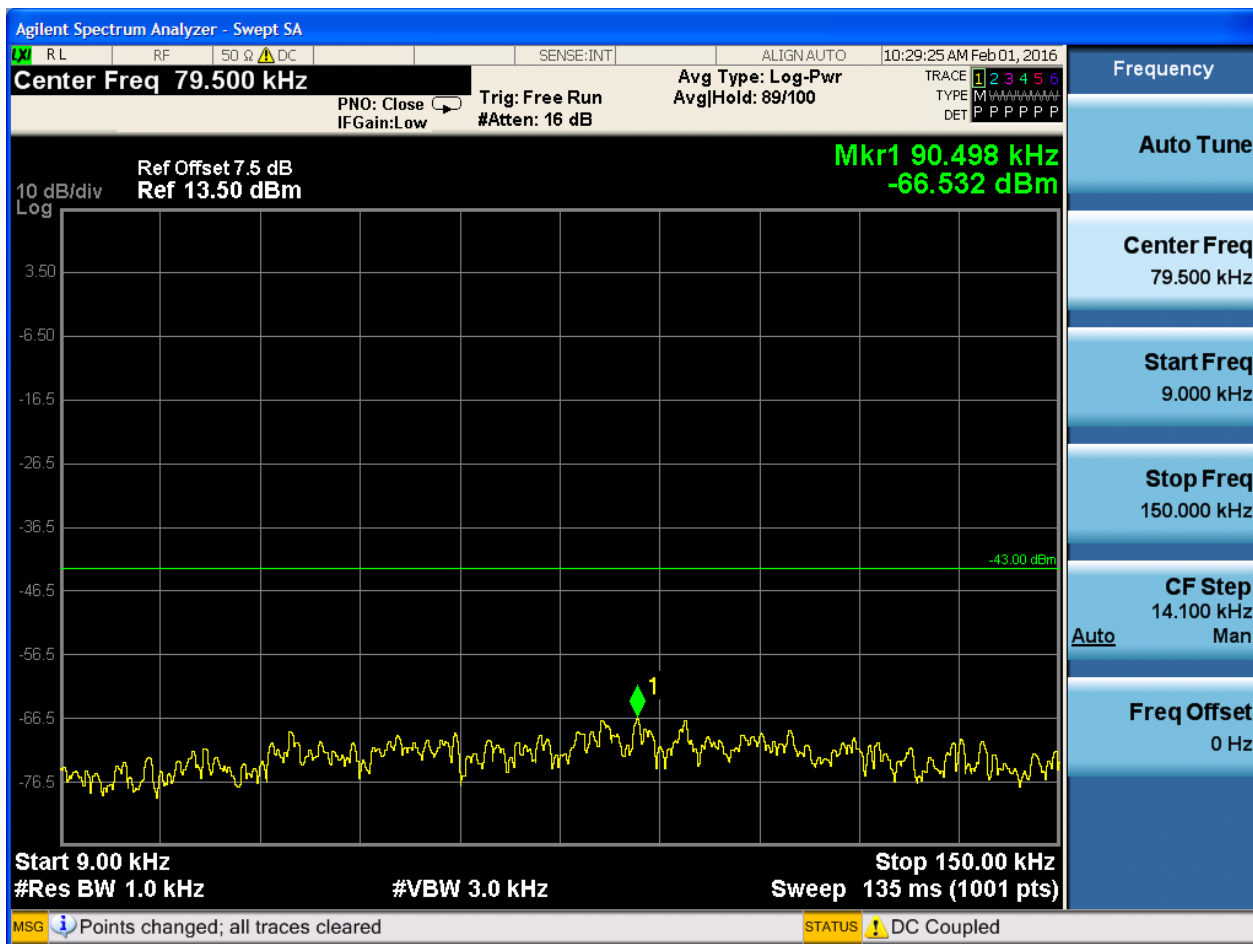


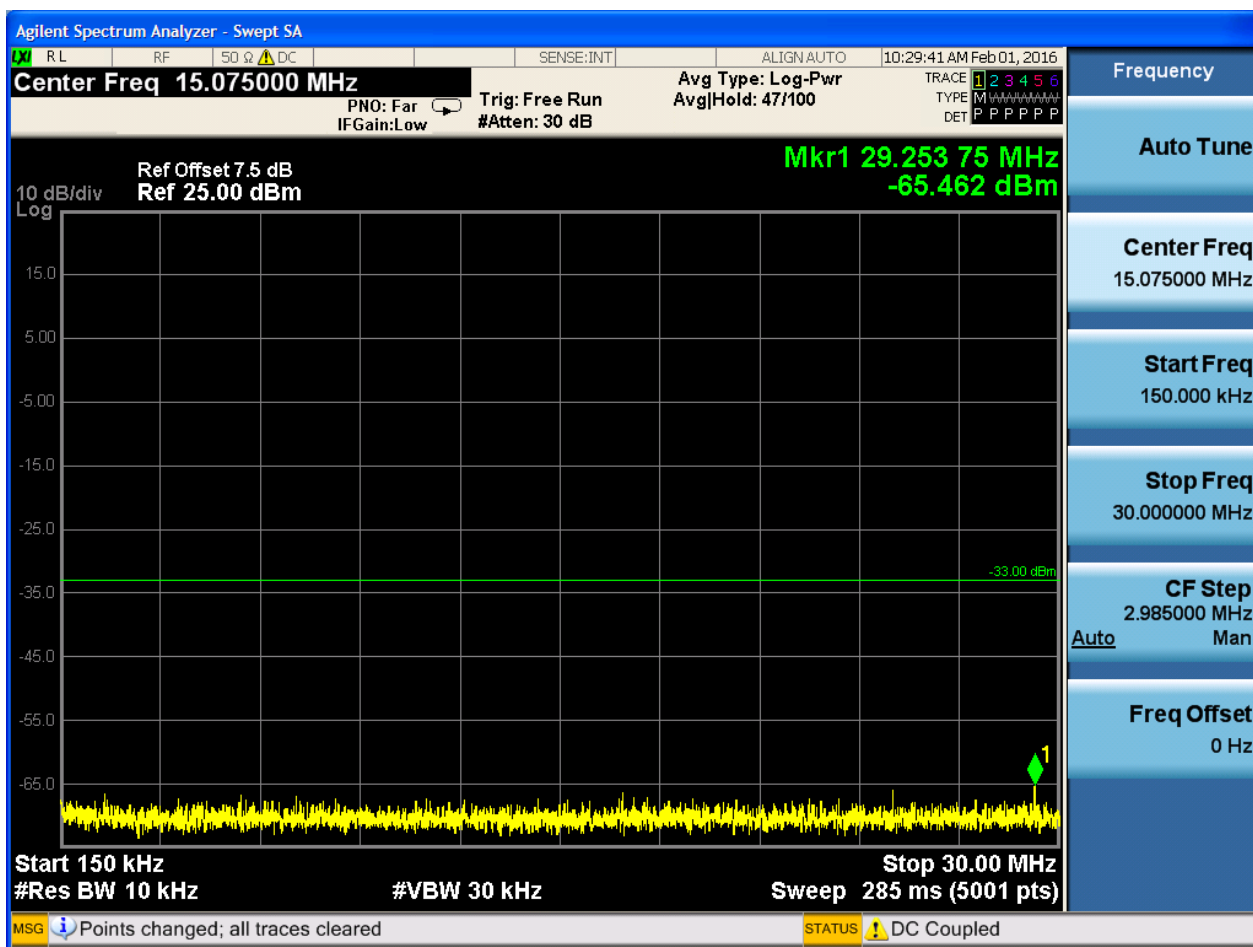


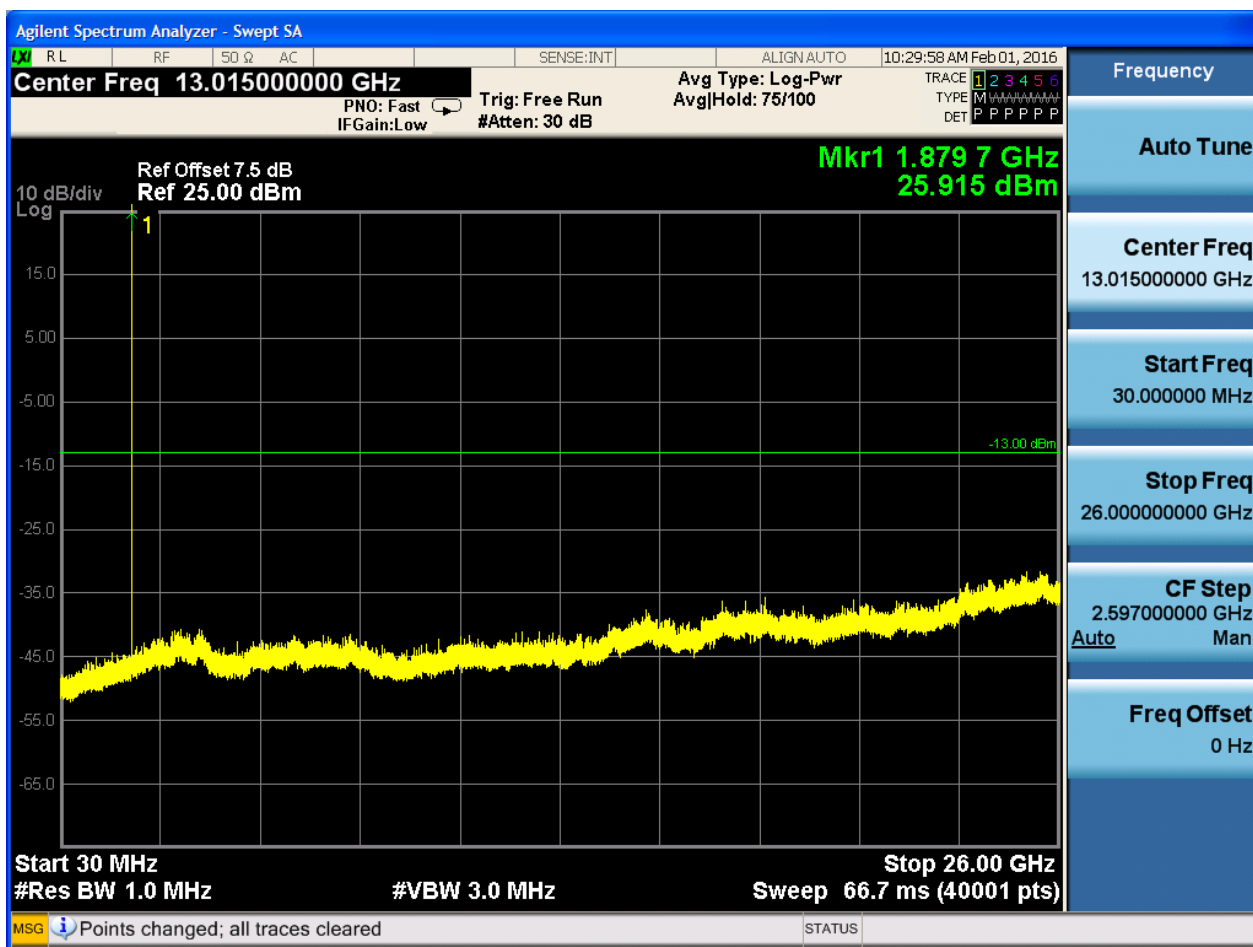


6.1.1.1.2 Test Channel = MCH

6.1.1.1.2.1 Test RB = RB1#0



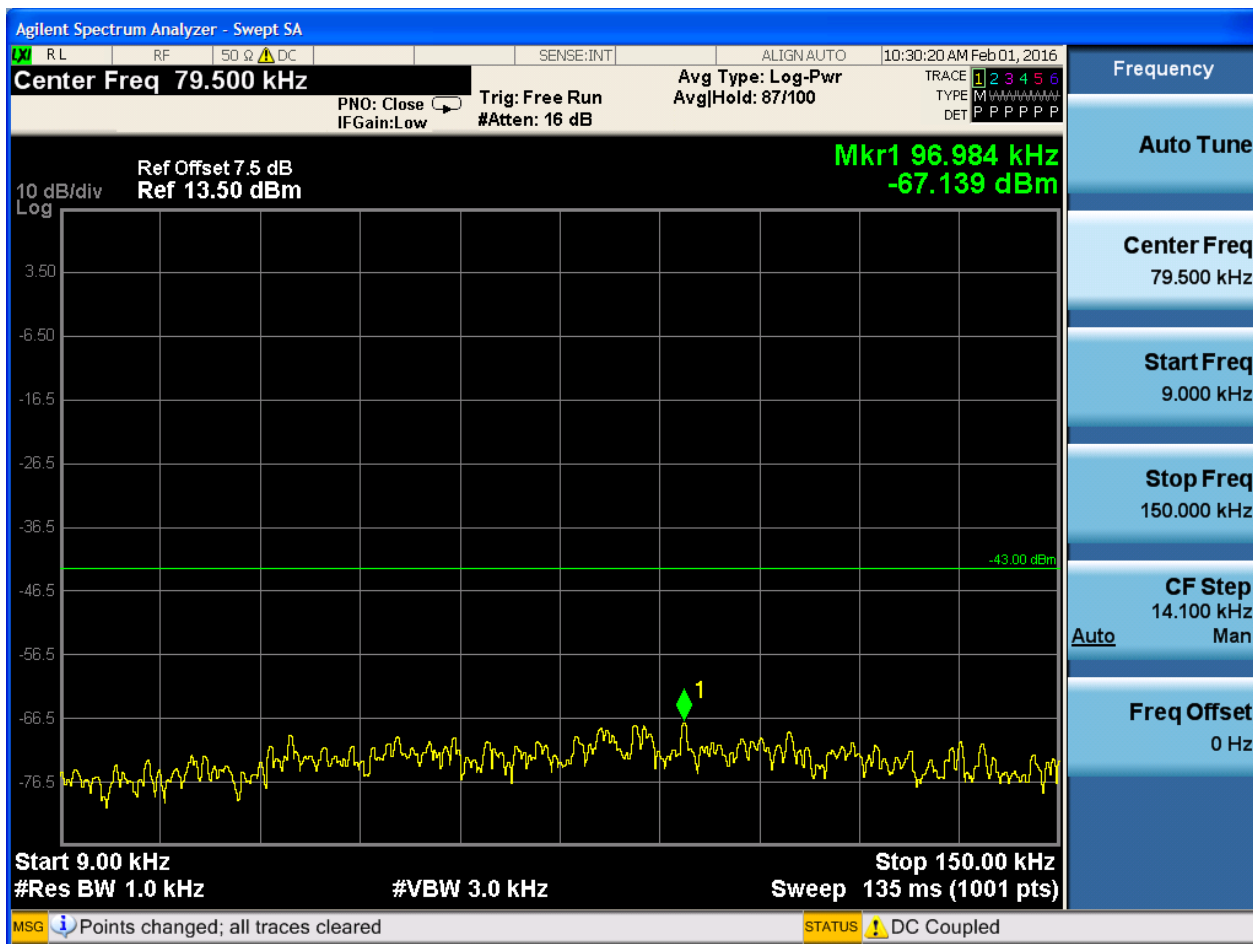


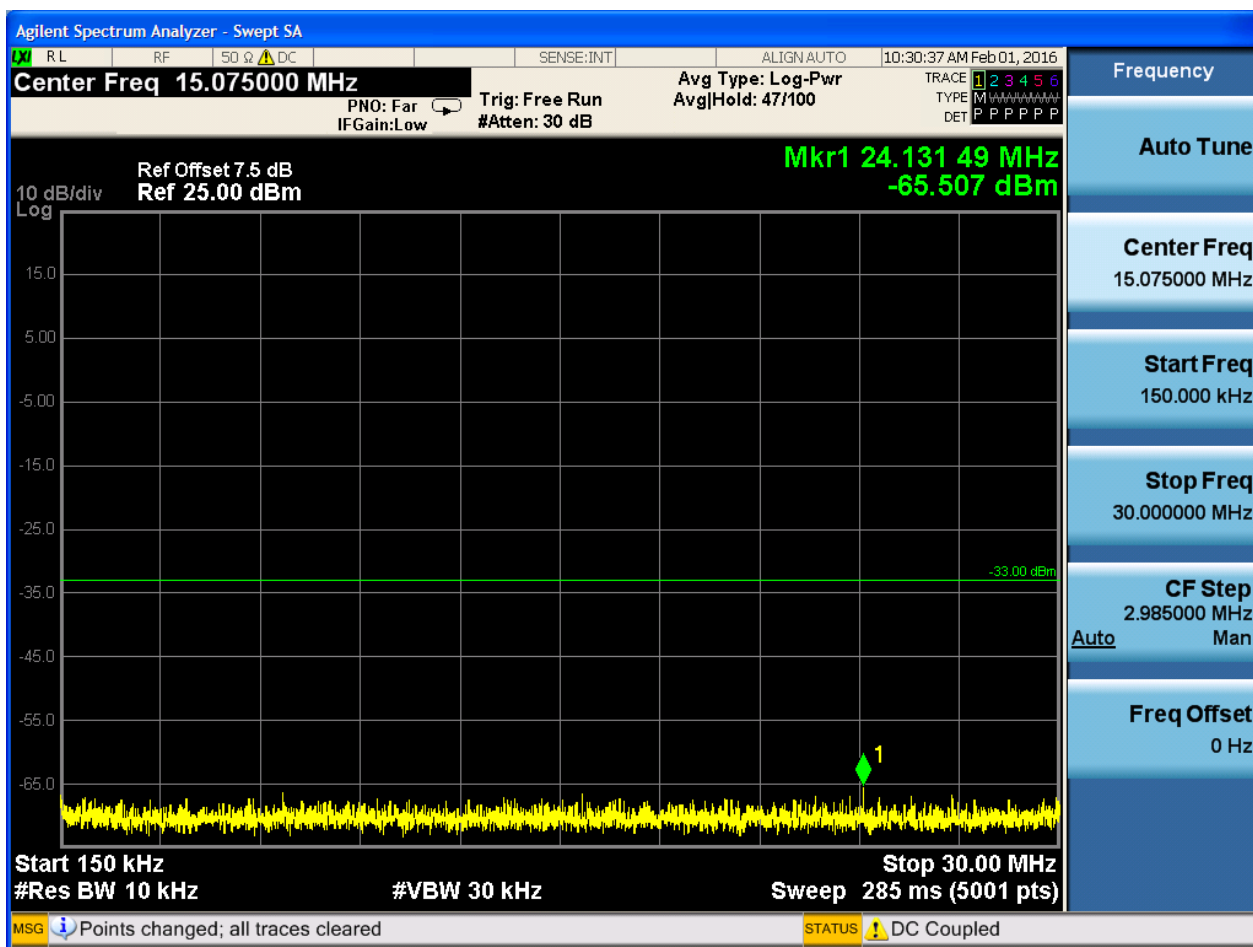


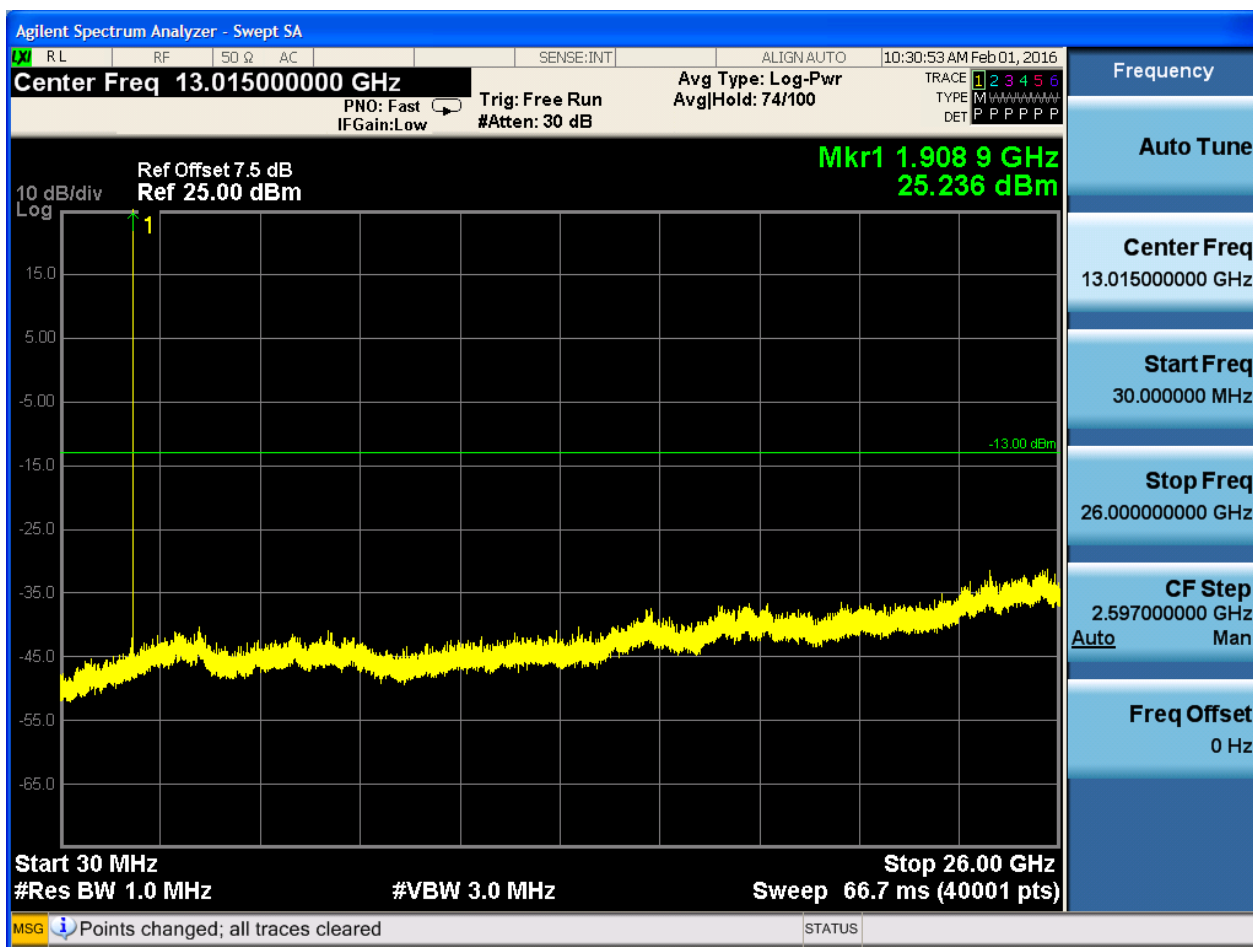


6.1.1.1.1.3 Test Channel = HCH

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

