

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

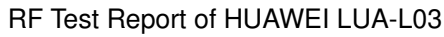
CF Step
200.000 kHz
Auto

Freq Offset
0 Hz



5.1.1.2.1.2.4 Test RB = RB6#0

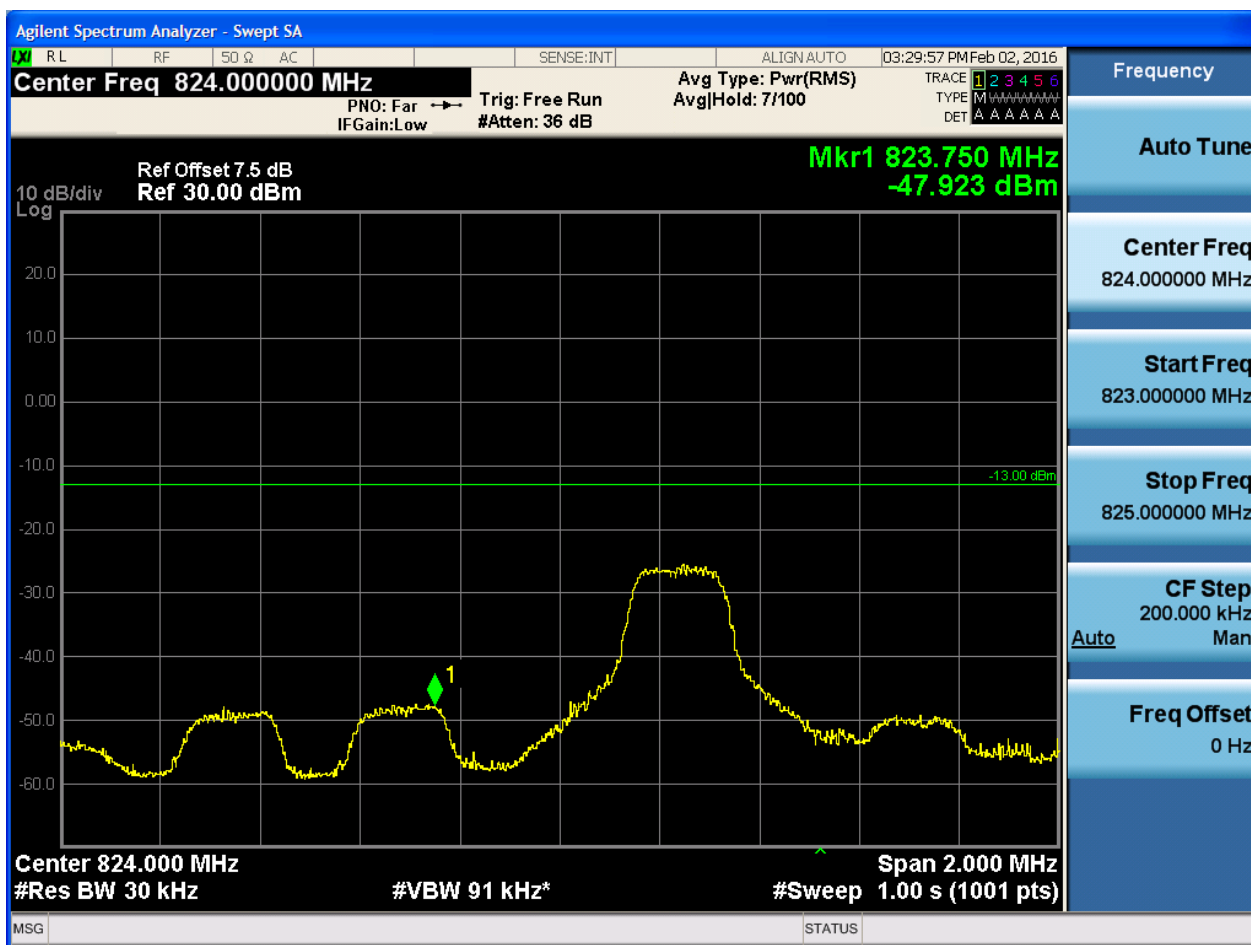


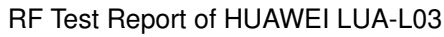


5.1.1.2.2.1.1 Test RB = RB1#0



5.1.1.2.2.1.2 Test RB = RB1#14





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

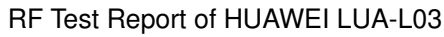
Start Freq
823.000000 MHz

Stop Freq
825.000000 MHz

CF Step
200.000 kHz
Man

Auto

Freq Offset
0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 824.000000 MHz

Ref Offset 7.5 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 824.000 MHz
-28.396 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

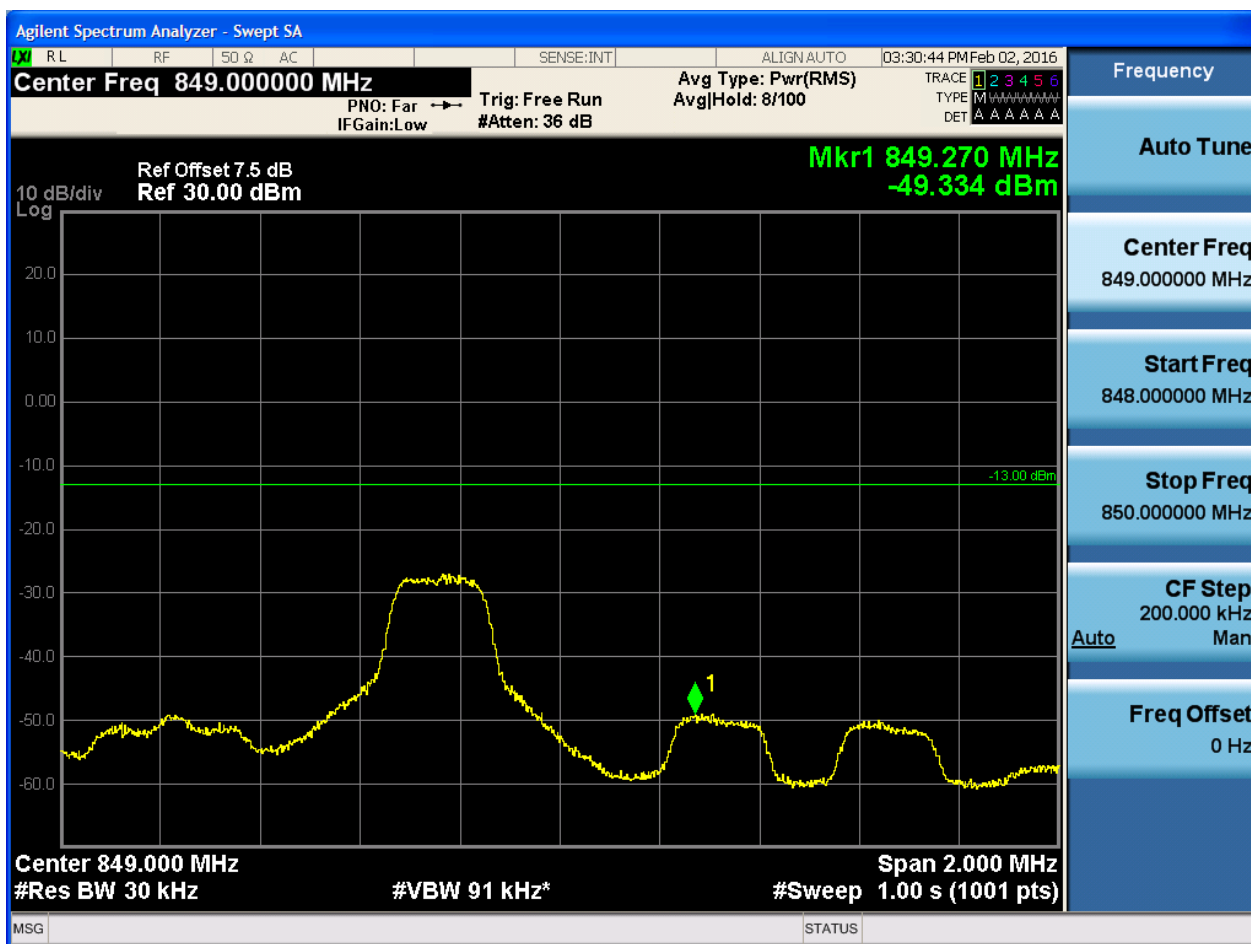
Auto

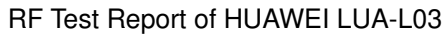
Freq Offset
0 Hz



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

RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 03:30:58 PM Feb 02, 2016

Center Freq 849.000000 MHz Avg Type: Pwr(RMS) Trace 1 2 3 4 5 6
PNO: Far Trig: Free Run TYPE M W W W W W W W
IFGain: Low #Atten: 36 dB DET A A A A A A

Ref Offset 7.5 dB Mkr1 849.000 MHz
Ref 30.00 dBm -16.250 dBm

10 dB/div Log

Center 849.000 MHz Span 2.000 MHz
#Res BW 30 kHz #VBW 91 kHz* #Sweep 1.00 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq
849.000000 MHz

Start Freq
848.000000 MHz

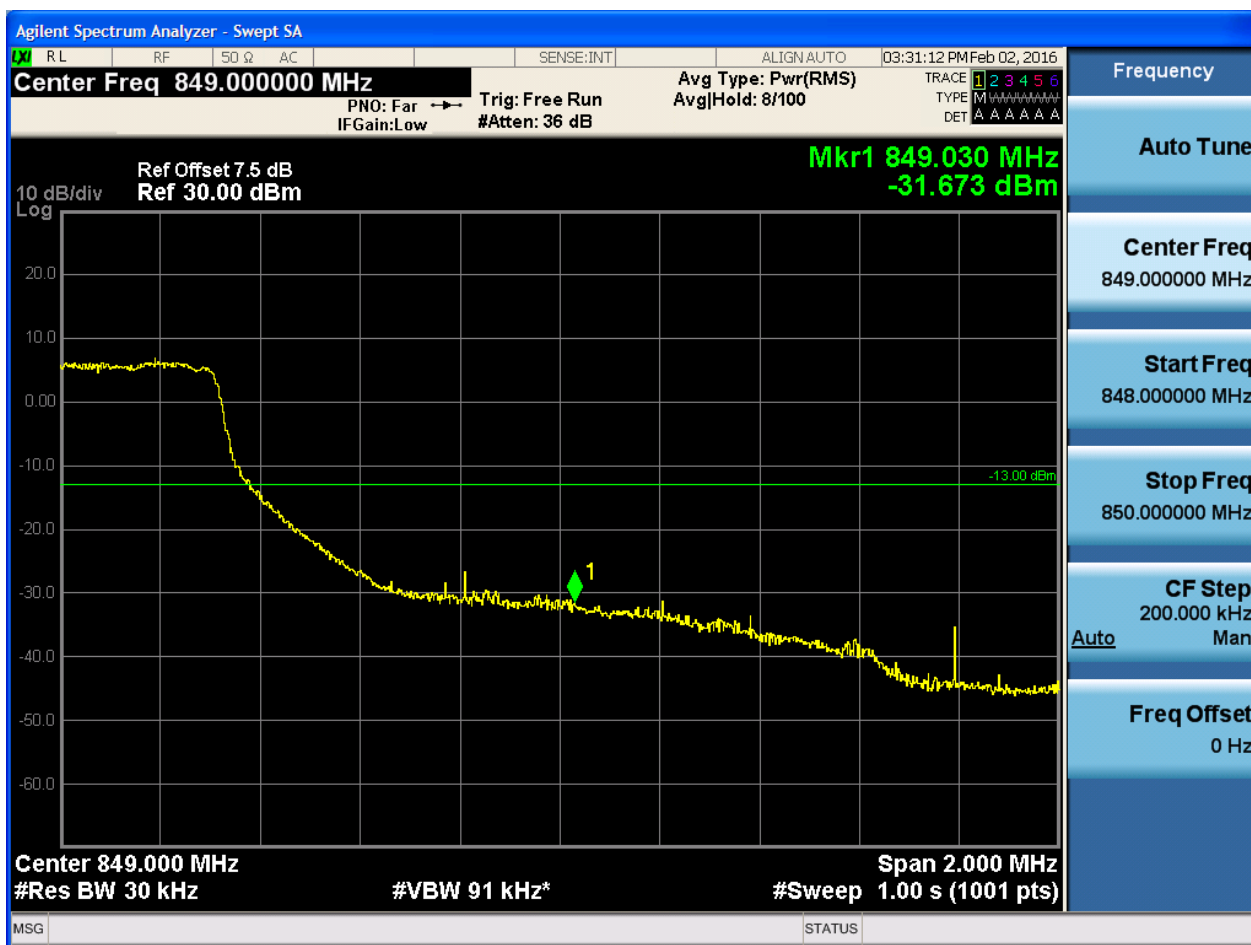
Stop Freq
850.000000 MHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

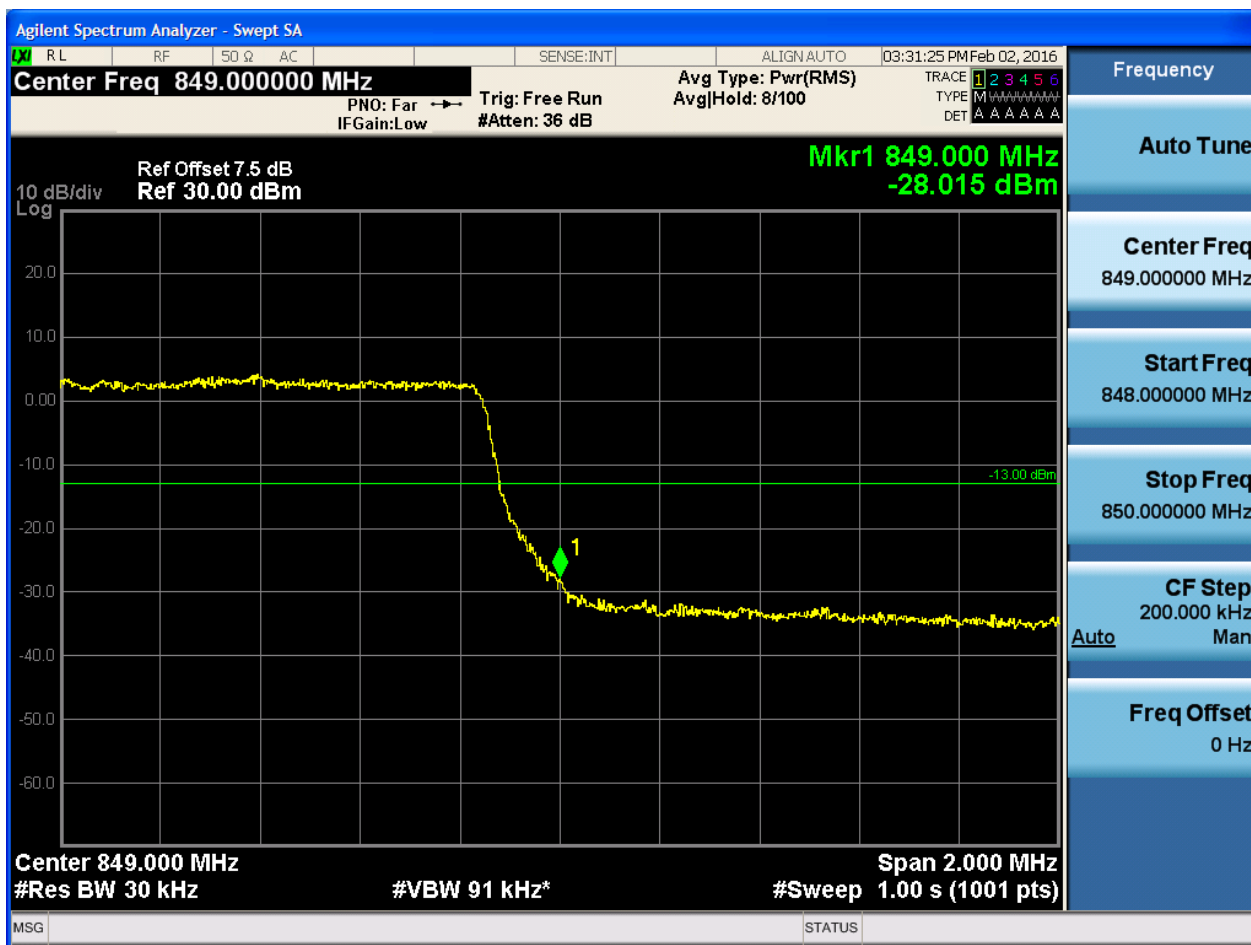


5.1.1.2.2.3 Test RB = RB8#4





5.1.1.2.2.4 Test RB = RB15#0

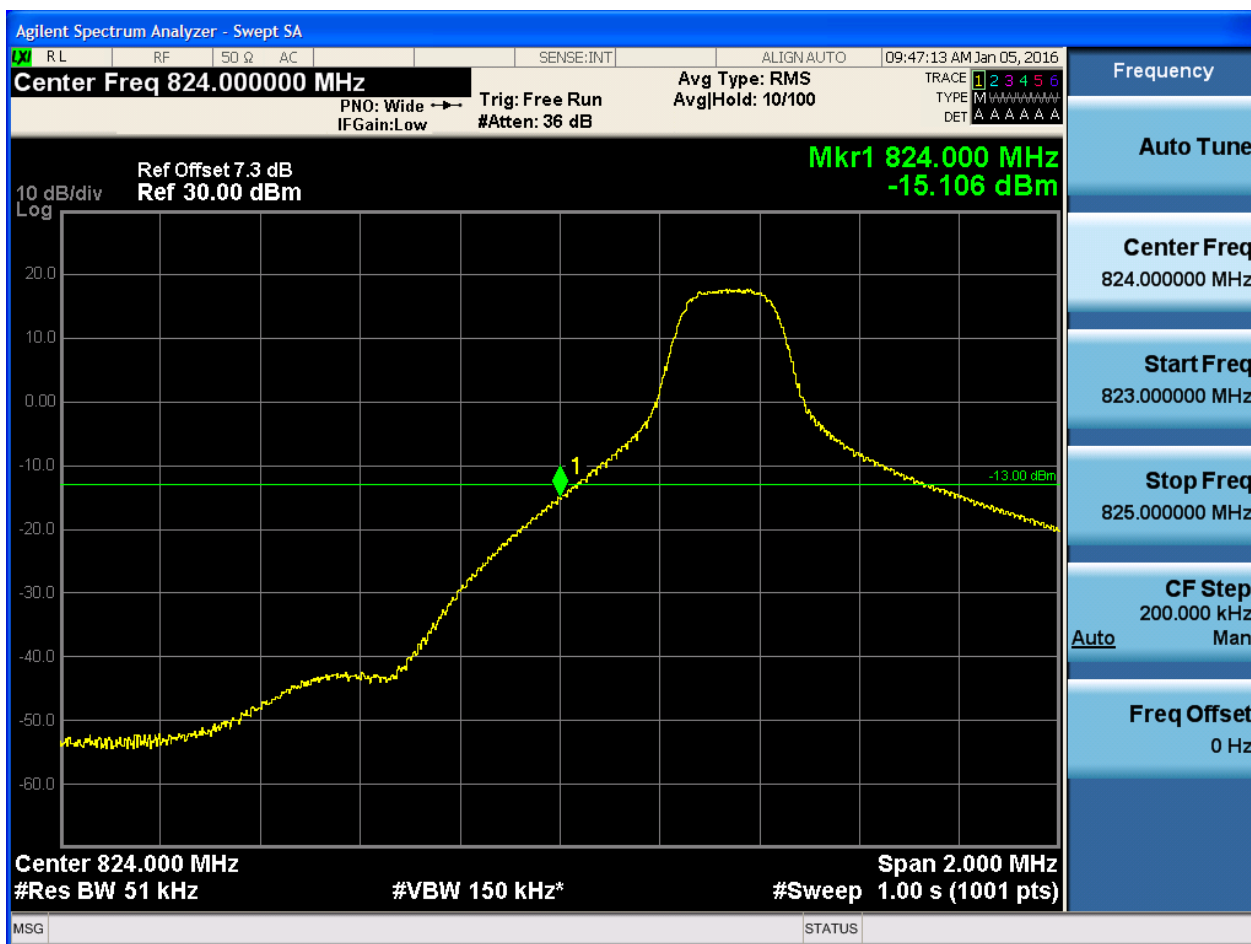




5.1.3.2.1 Test Bandwidth = 5

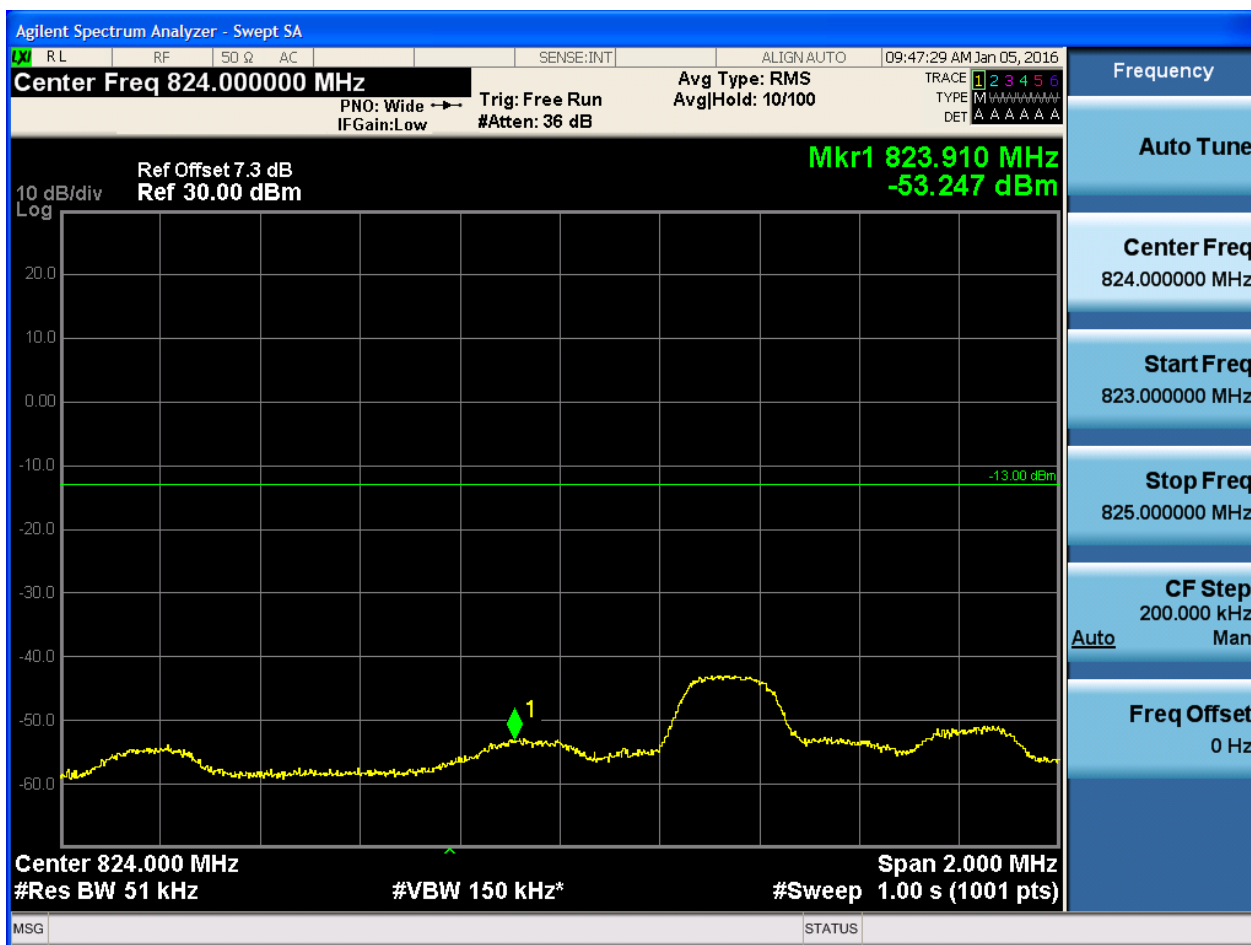
5.1.3.2.1.1 Test Channel = LCH

5.1.3.2.1.1.1 Test RB = RB1#0



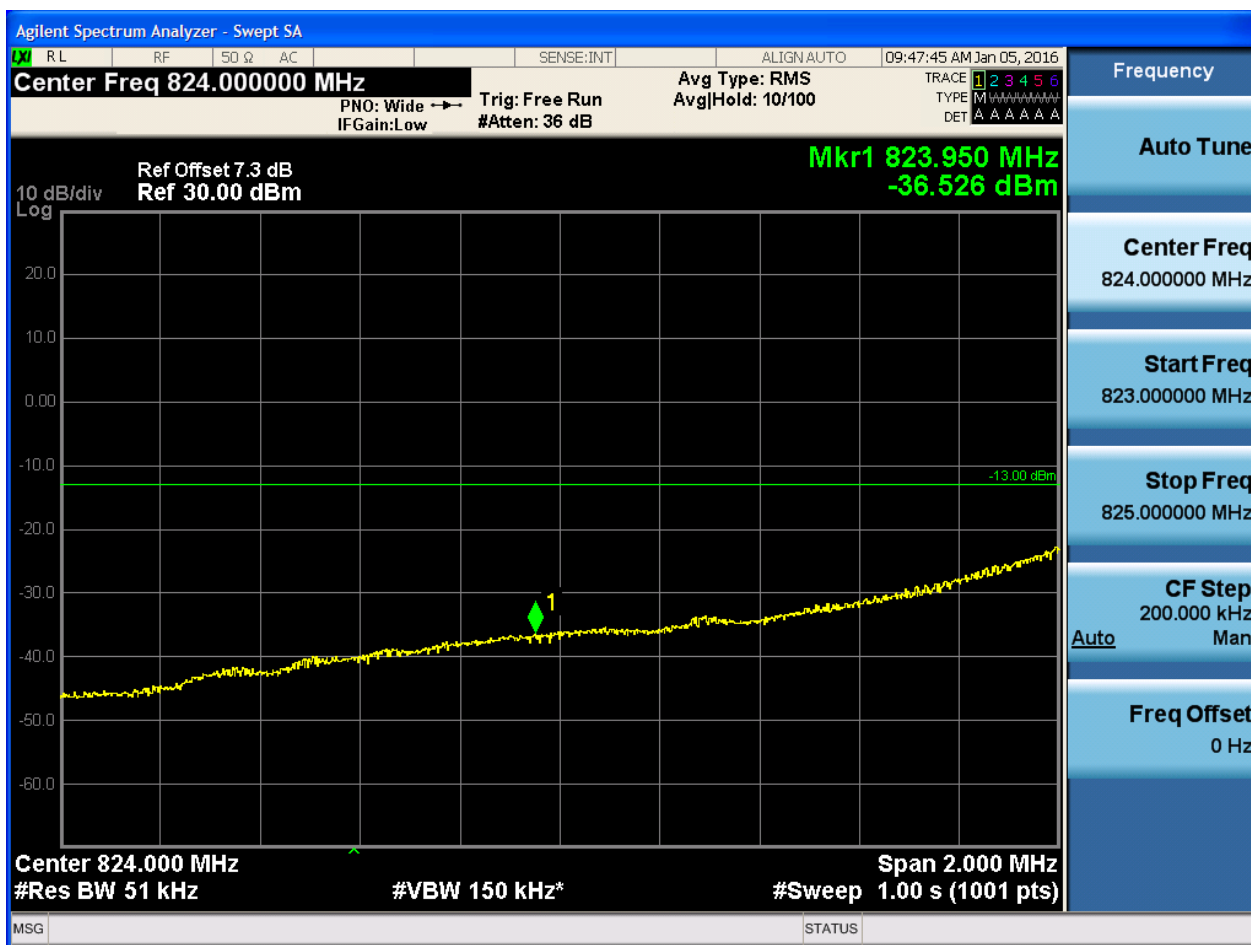


5.1.3.2.1.1.2 Test RB = RB1#24





5.1.3.2.1.1.3 Test RB = RB12#6





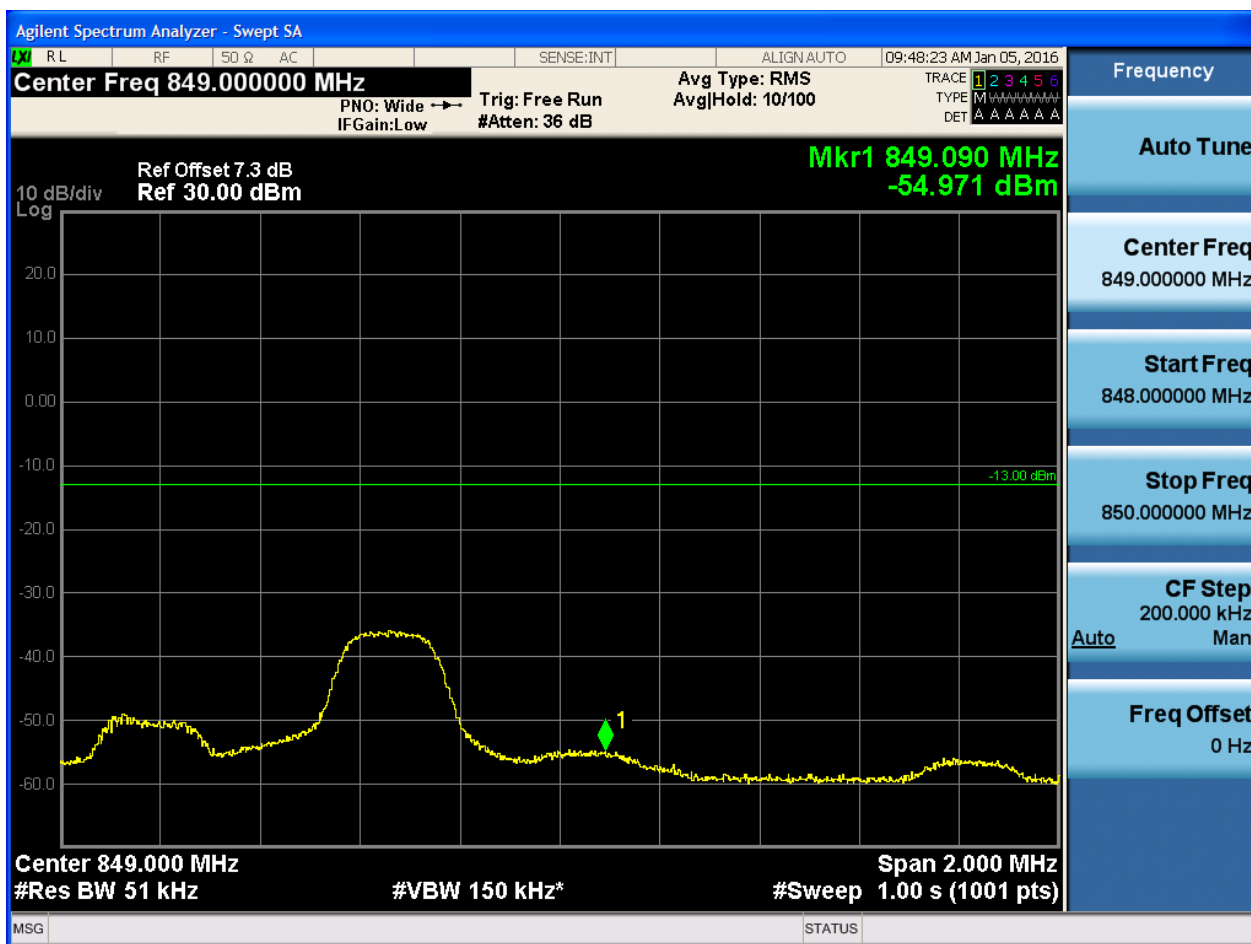
5.1.3.2.1.1.4 Test RB = RB25#0





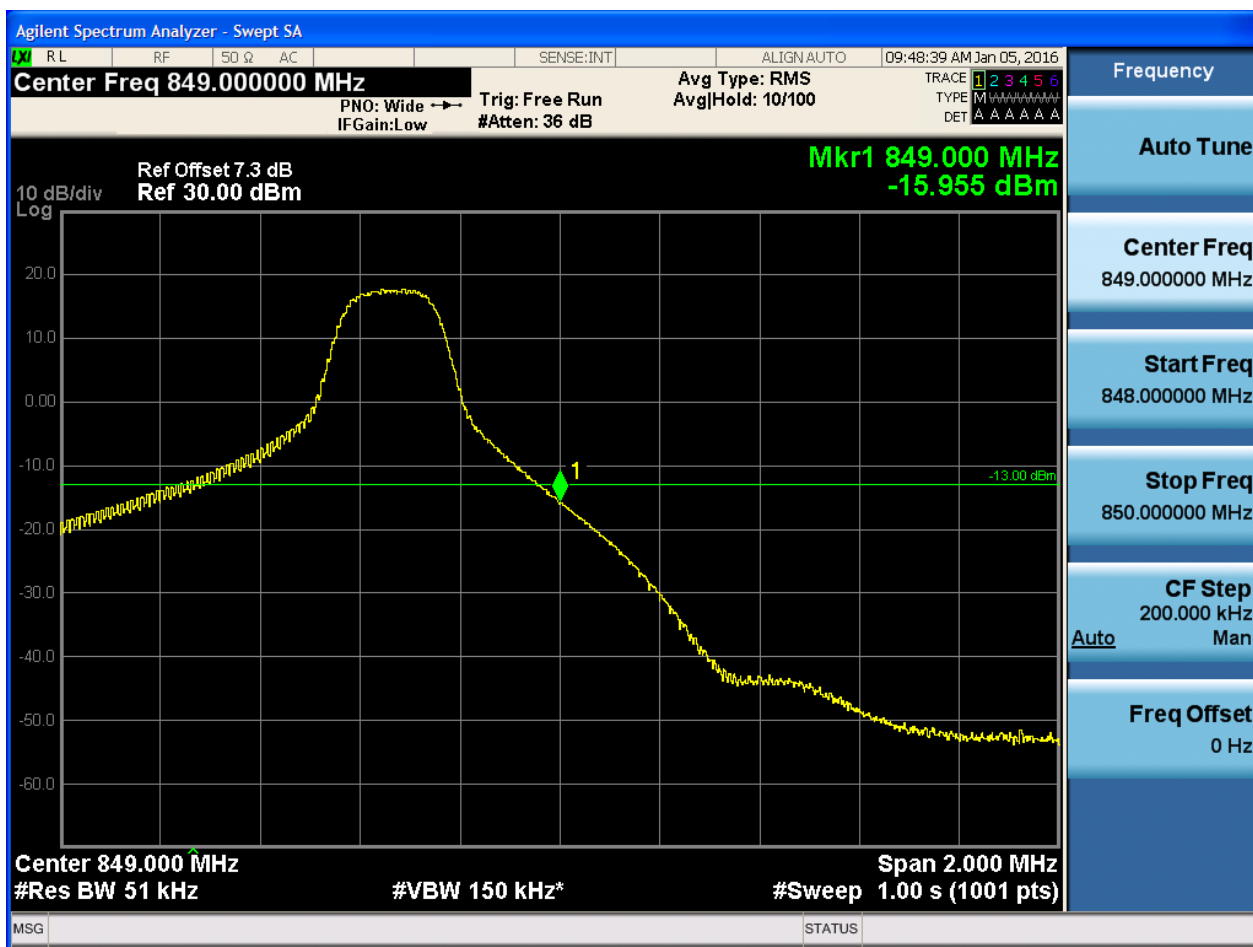
5.1.3.2.1.2 Test Channel = HCH

5.1.3.2.1.2.1 Test RB = RB1#0





5.1.3.2.1.2.2 Test RB = RB1#24





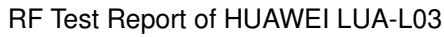
5.1.3.2.1.2.3 Test RB = RB12#6





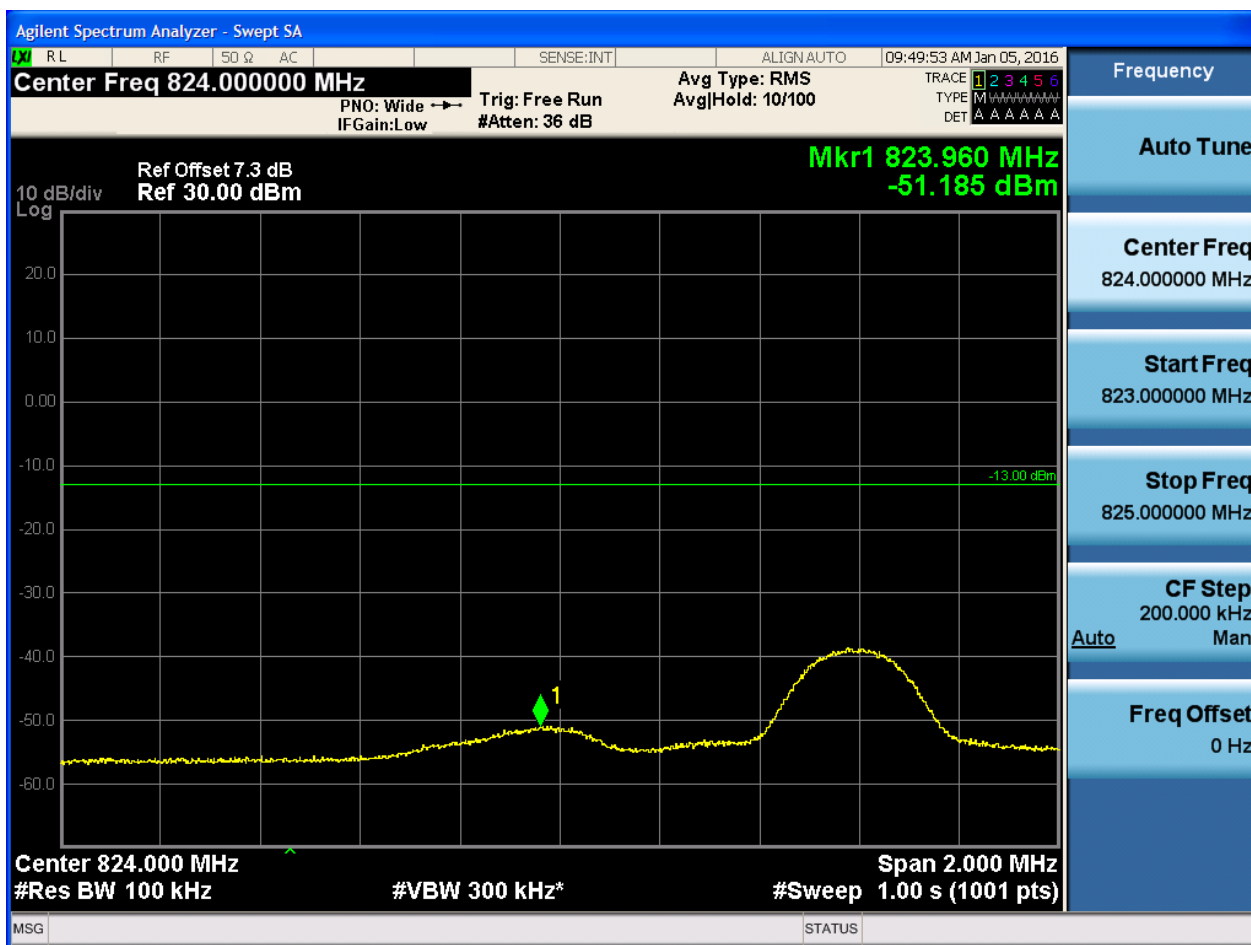
5.1.3.2.1.2.4 Test RB = RB25#0





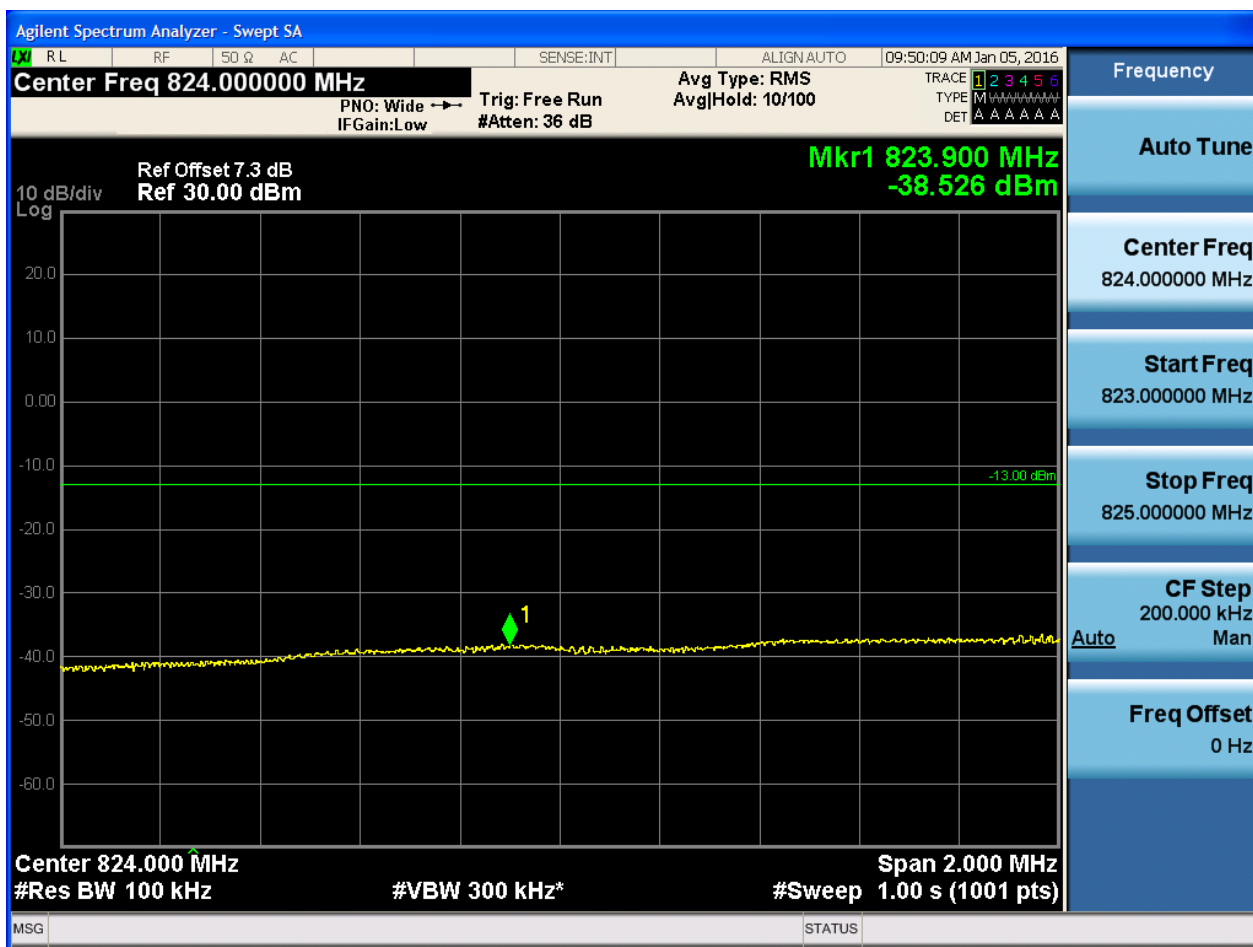


5.1.3.2.2.1.2 Test RB = RB1#49





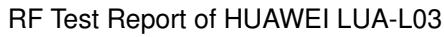
5.1.3.2.2.1.3 Test RB = RB25#13



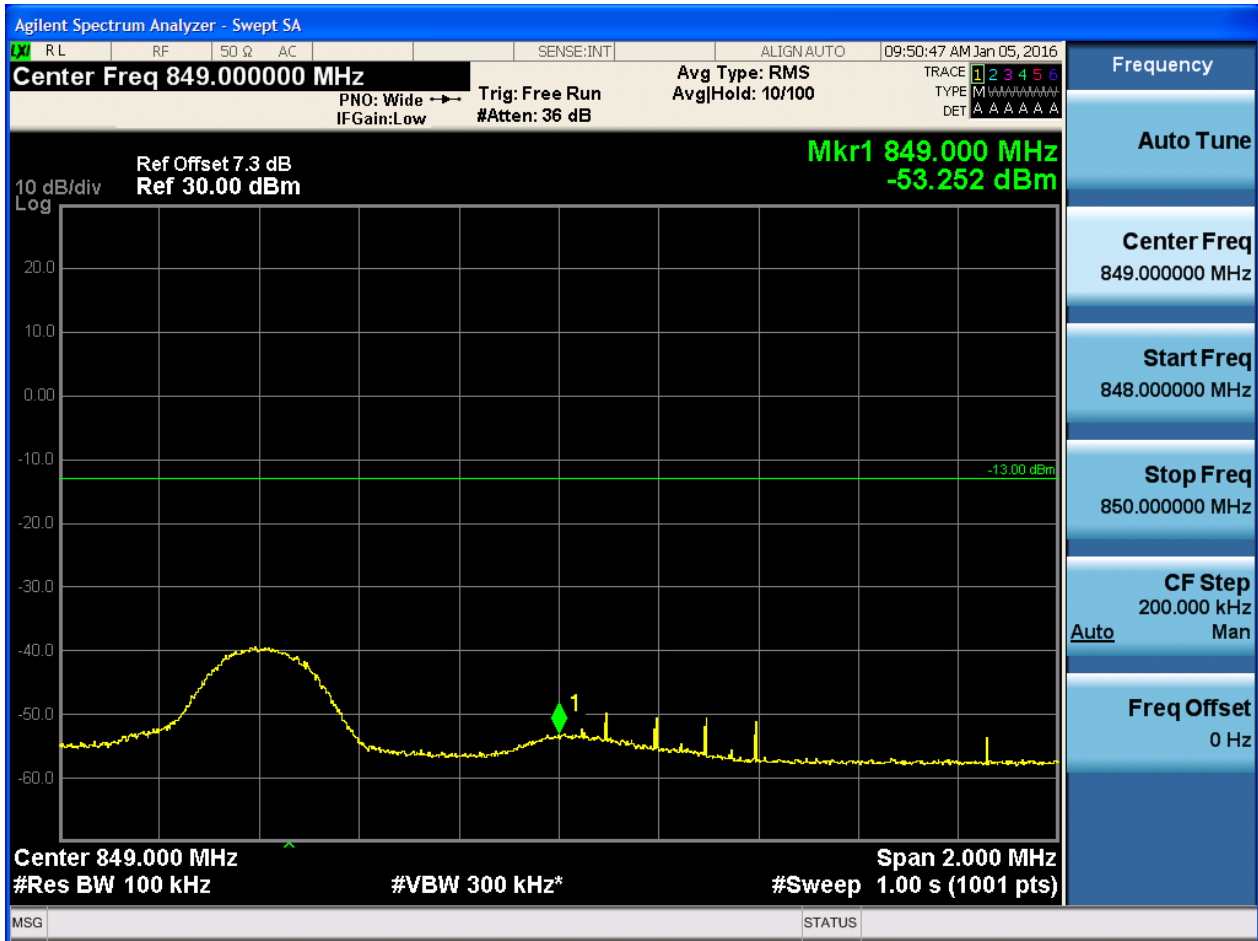


5.1.3.2.2.1.4 Test RB = RB50#0



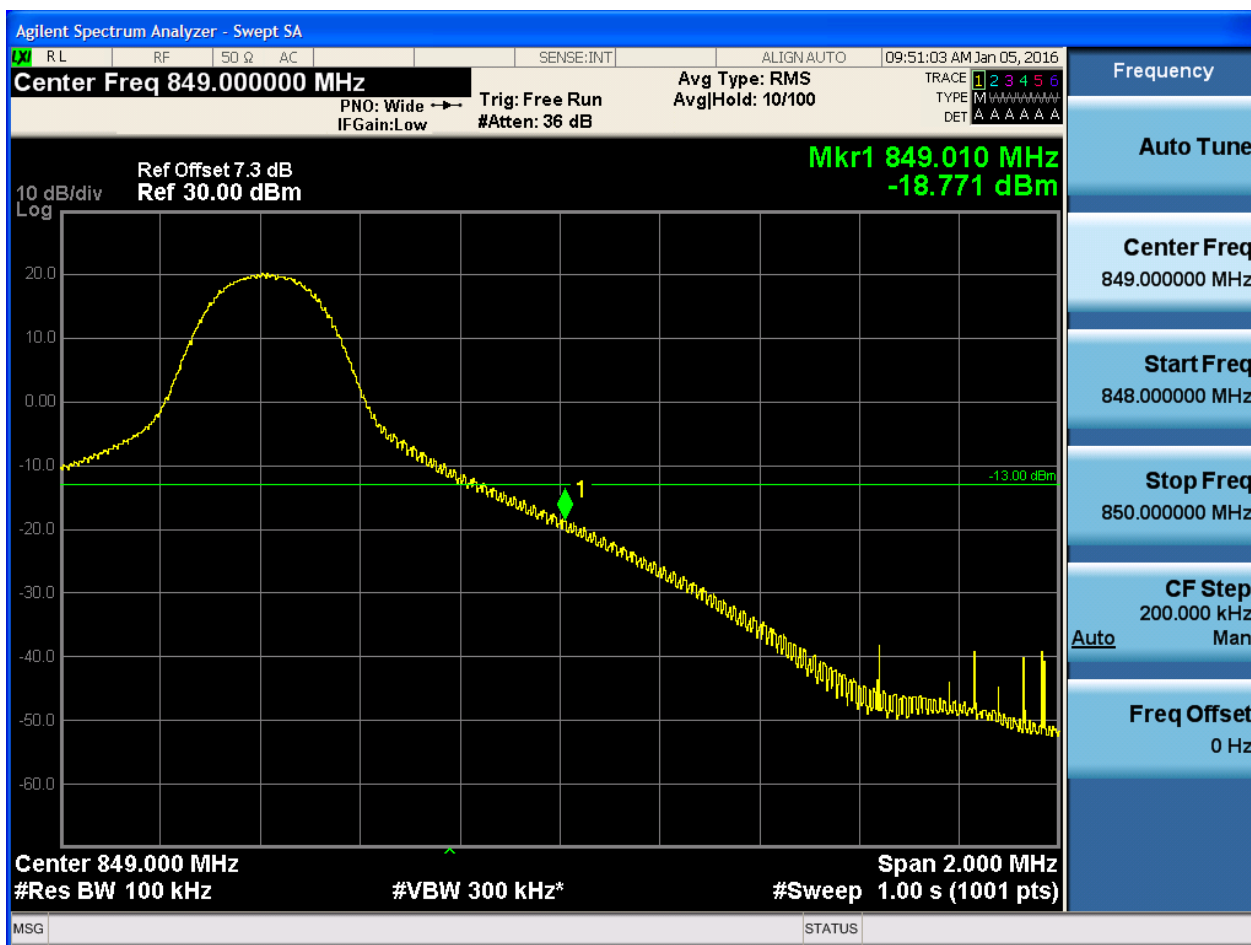


5.1.3.2.2.2.1 Test RB = RB1#0





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





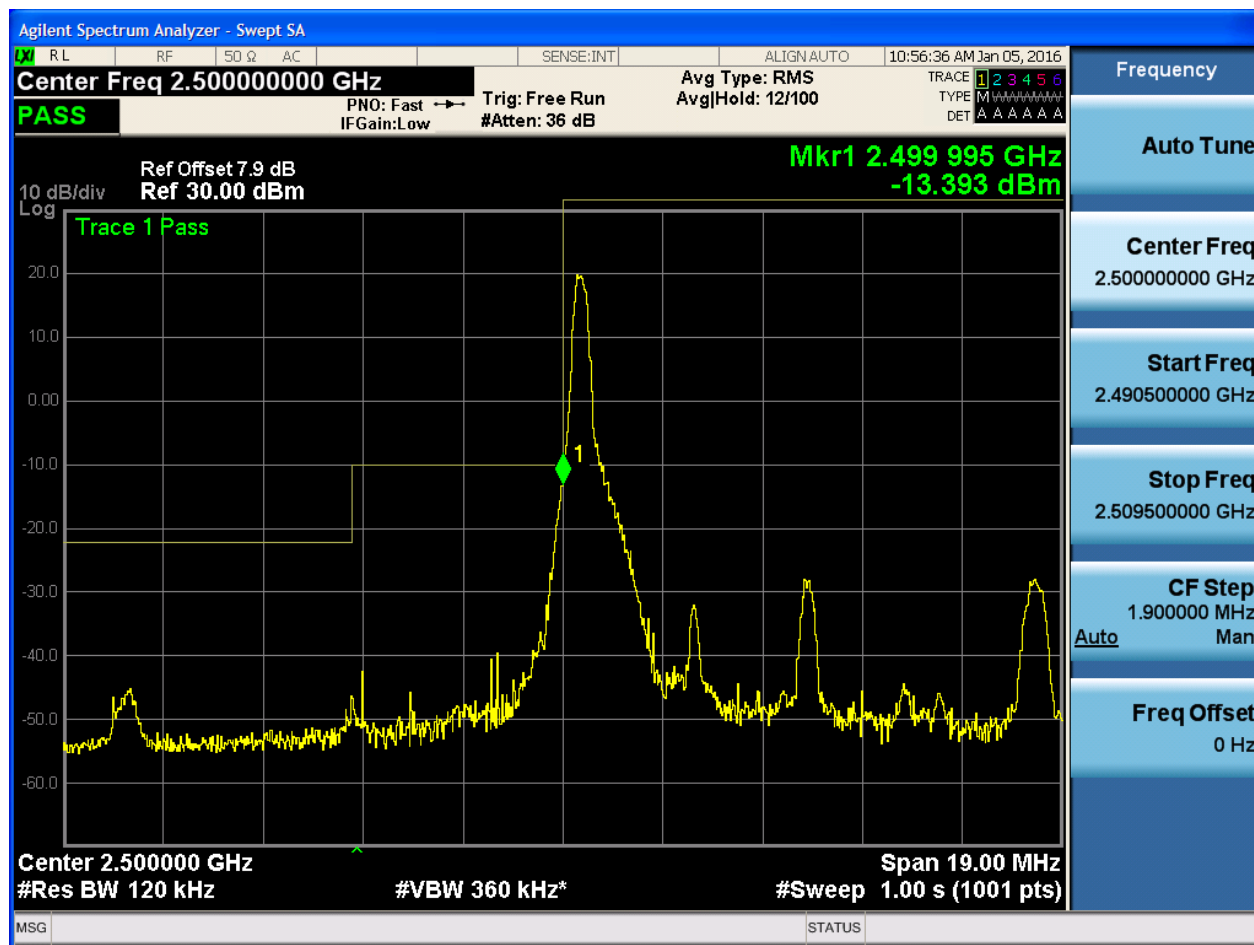
5.1.4 Test Band = BAND7

5.1.4.1 Test Mode = LTE/TM1

5.1.4.1.1 Test Bandwidth = 5

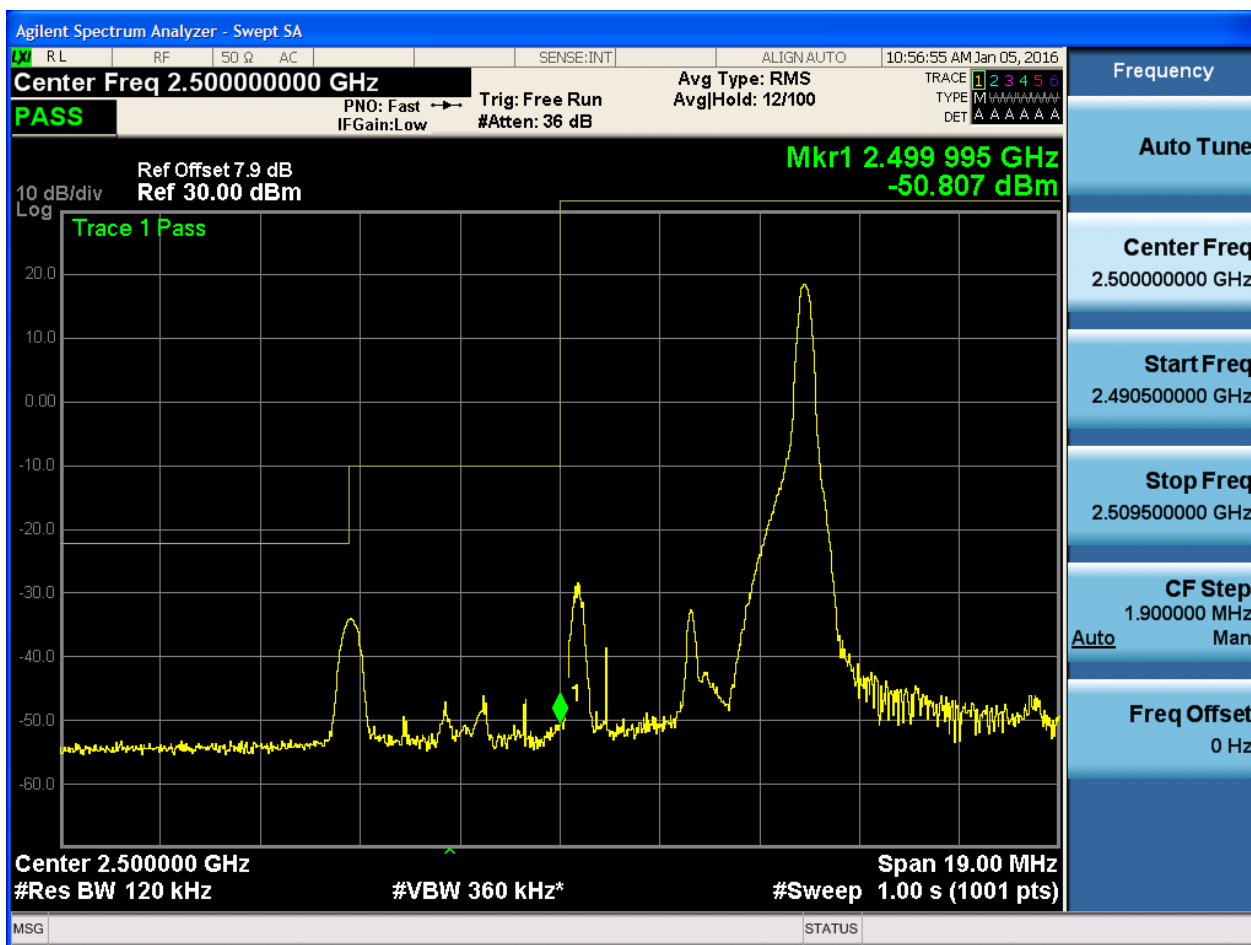
5.1.4.1.1.1 Test Channel = LCH

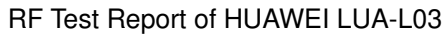
5.1.4.1.1.1.1 Test RB = RB1#0





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

10 dB/div
Log

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

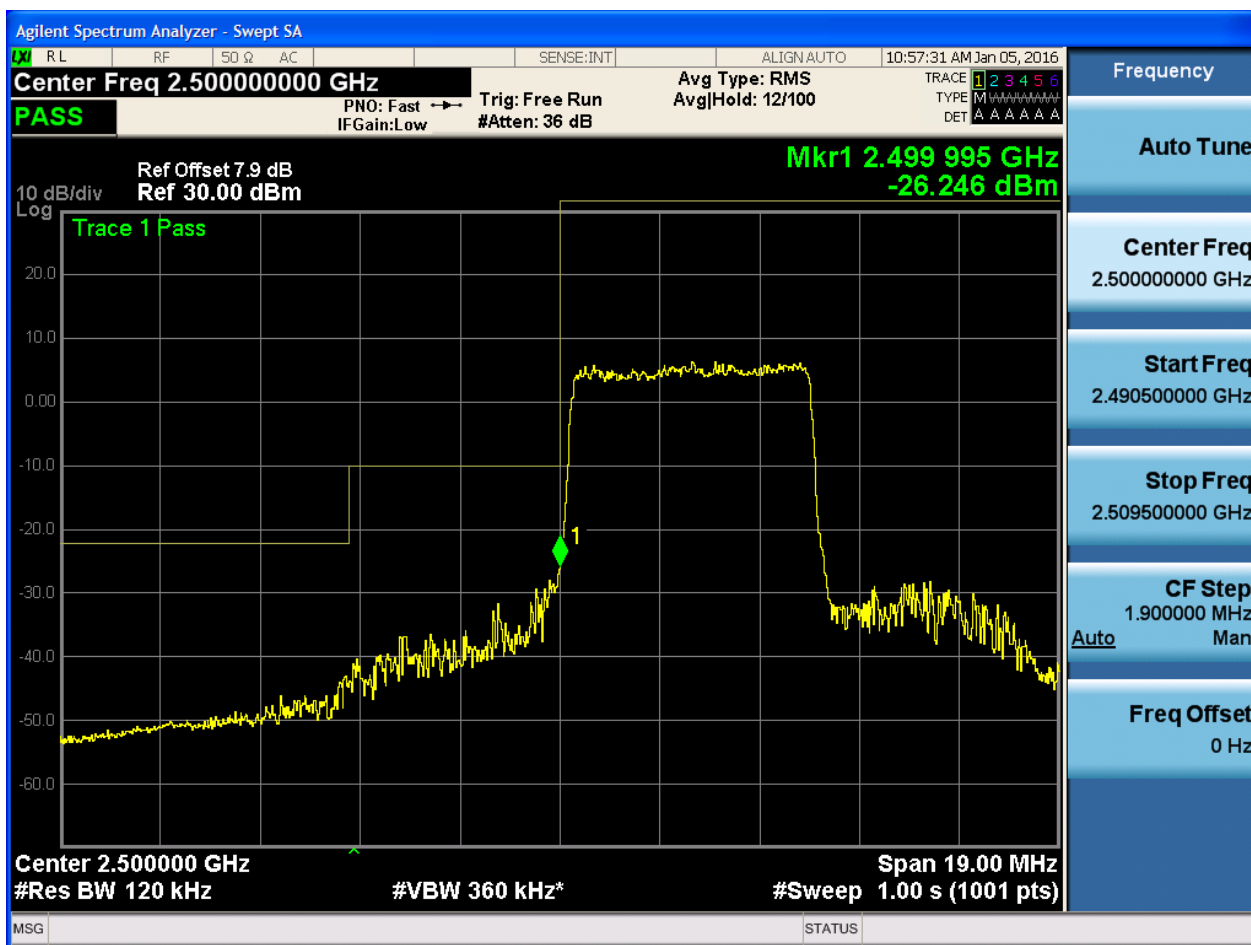
CF Step
1.900000 MHz
Man

Freq Offset
0 Hz

MSG STATUS

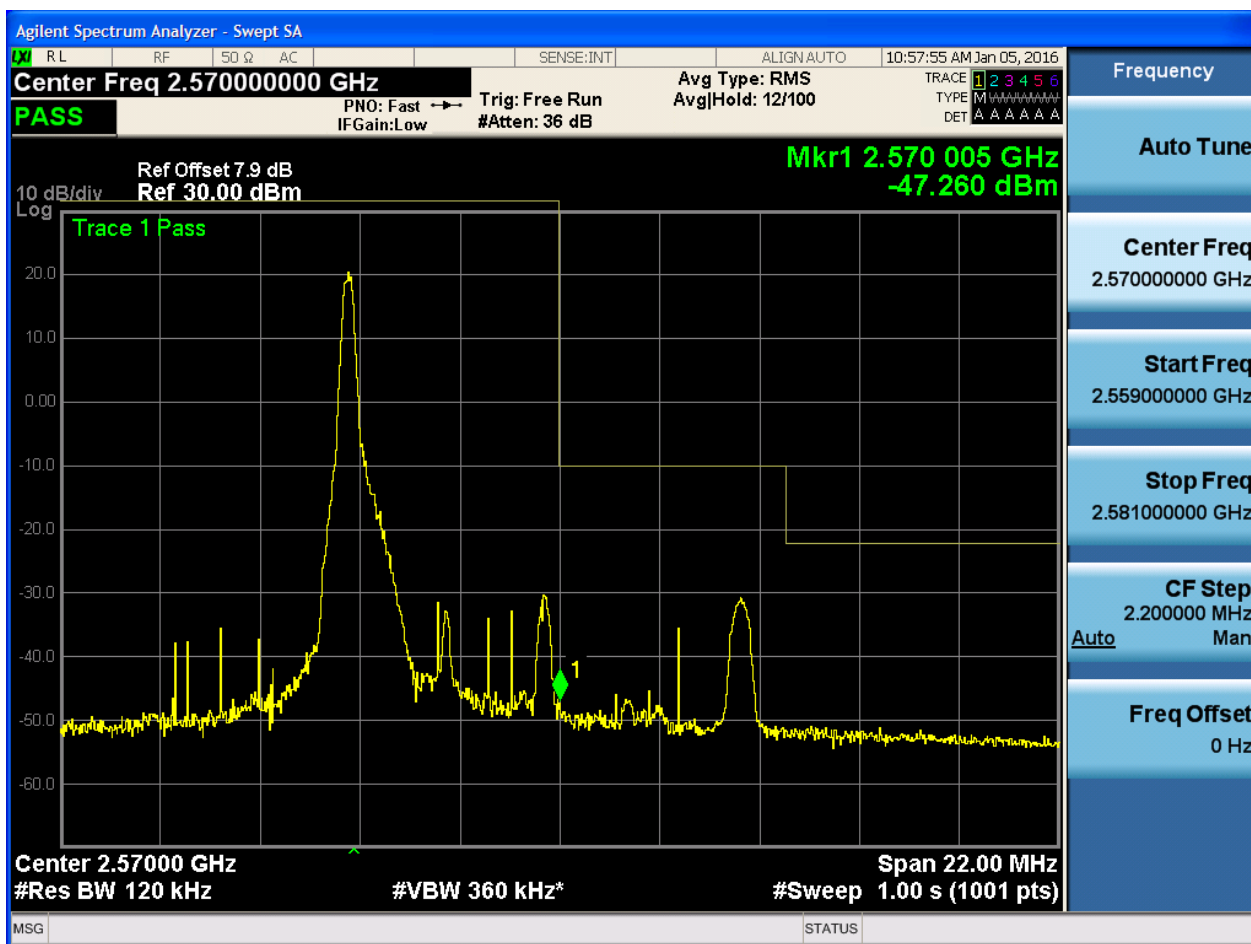


5.1.4.1.1.4 Test RB = RB25#0



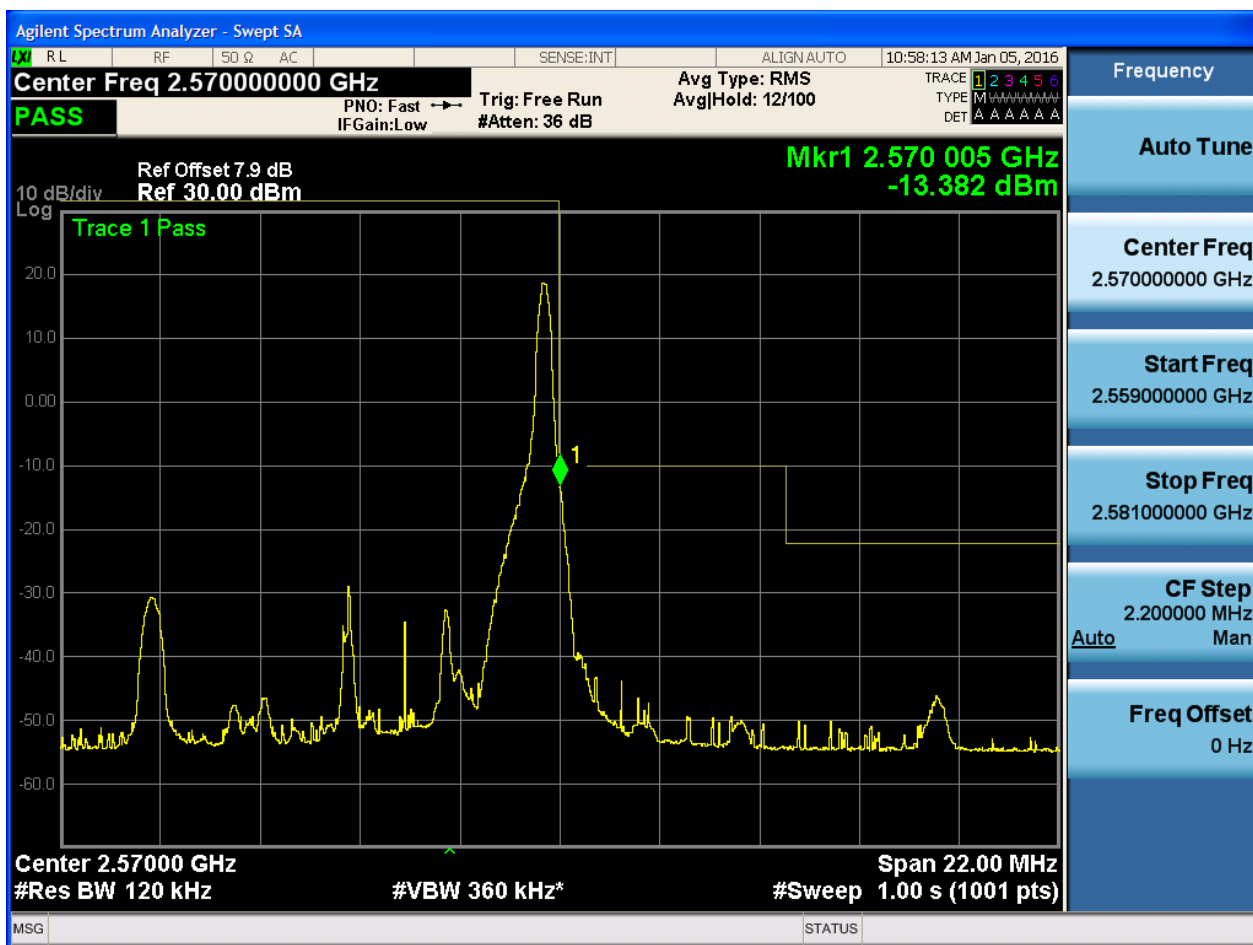
5.1.4.1.1.2 Test Channel = HCH

5.1.4.1.1.2.1 Test RB = RB1#0



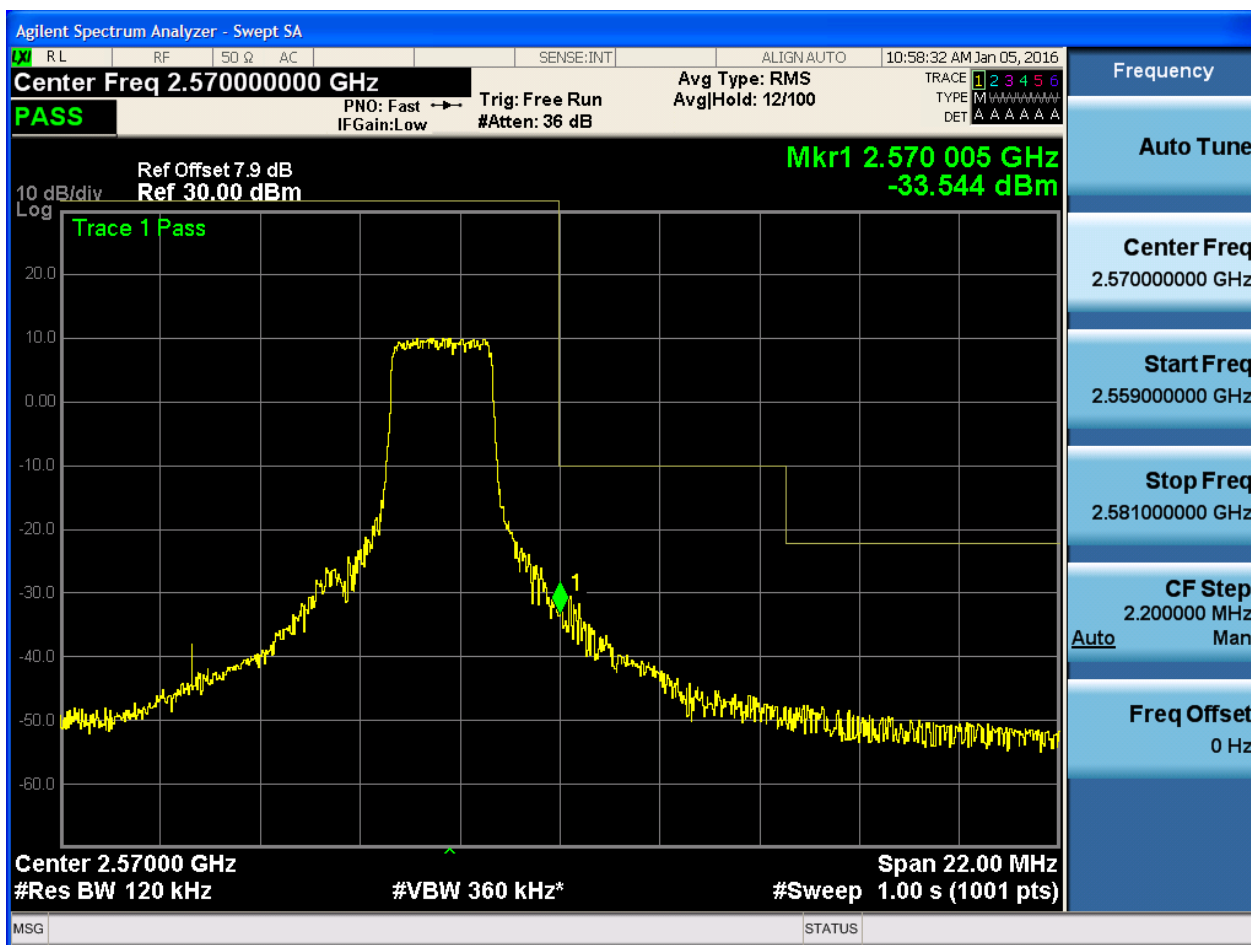


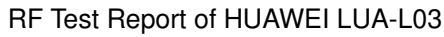
5.1.4.1.1.2.2 Test RB = RB1#24





5.1.4.1.1.2.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

Center Freq 2.57000000 GHz

Avg Type: RMS
Avg|Hold: 12/100

10:58:50 AM Jan 05, 2016

PASS

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

Ref Offset 7.9 dB
Ref 30.00 dBm

Mkr1 2.570 005 GHz
-23.088 dBm

Trace 1 Pass

Center 2.57000 GHz
#Res BW 120 kHz

#VBW 360 kHz*

Span 22.00 MHz
#Sweep 1.00 s (1001 pts)

Frequency

Auto Tune

Center Freq
2.57000000 GHz

Start Freq
2.559000000 GHz

Stop Freq
2.581000000 GHz

CF Step
2.200000 MHz
Man

Freq Offset
0 Hz

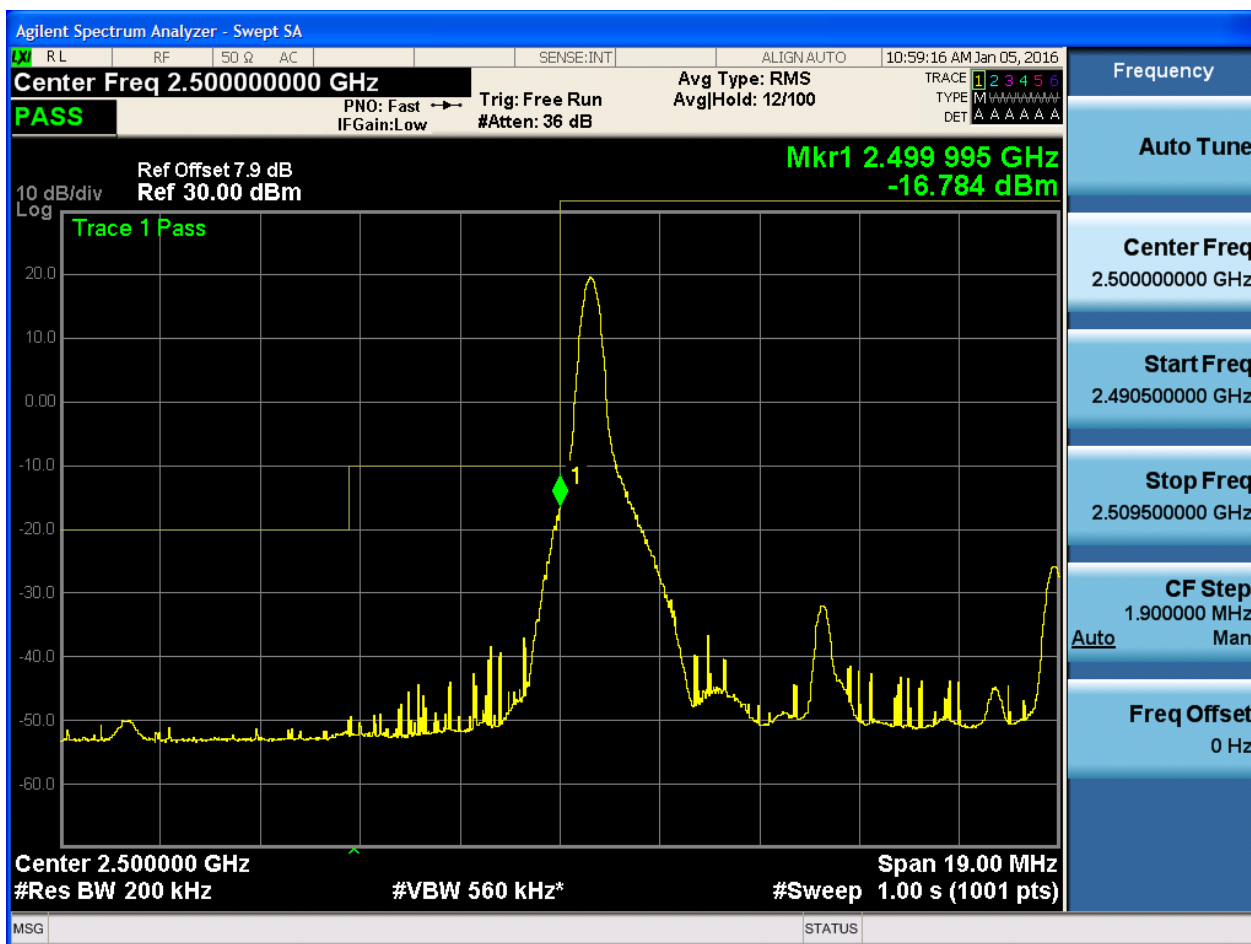
MSG	STATUS



5.1.4.1.2 Test Bandwidth = 10

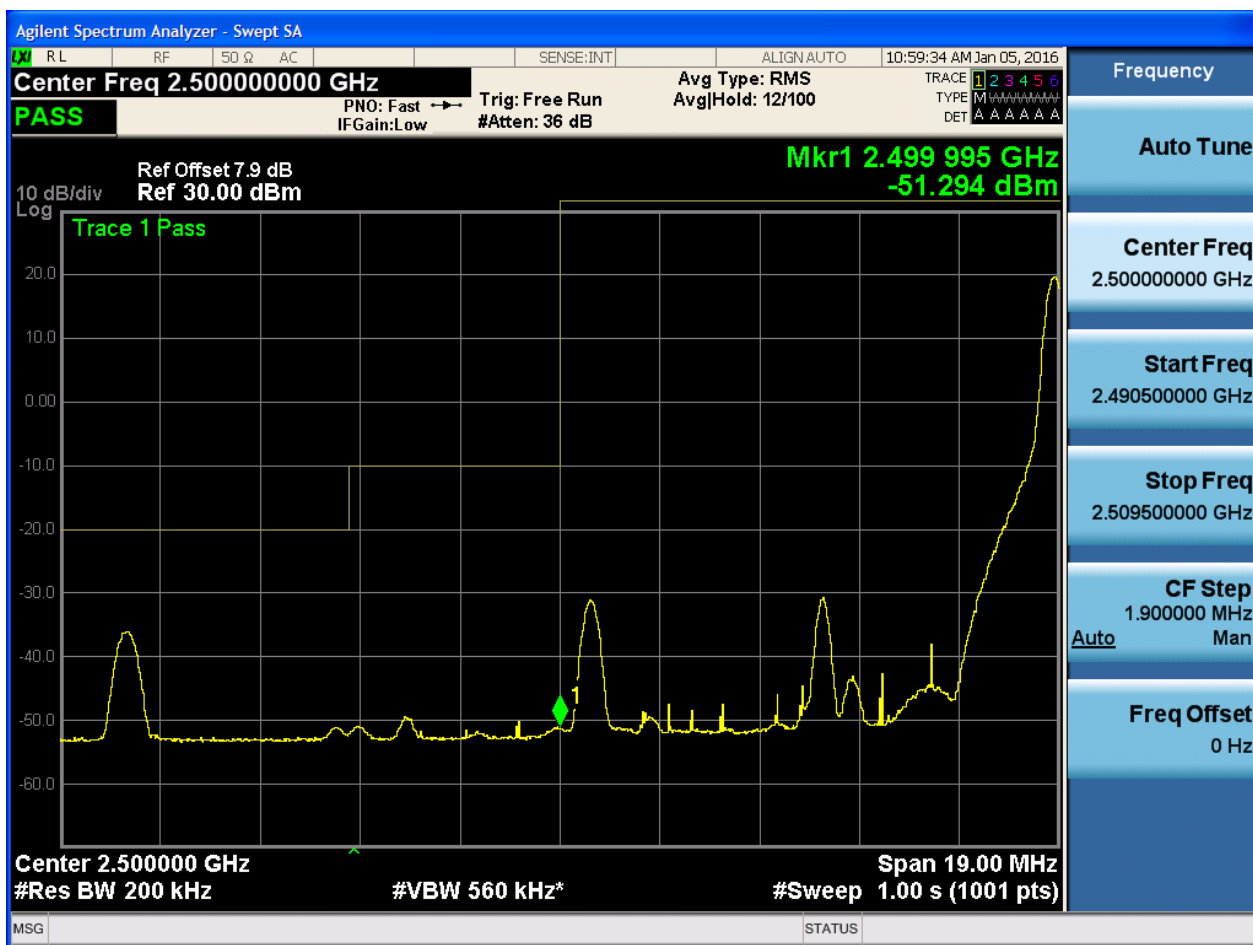
5.1.4.1.2.1 Test Channel = LCH

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



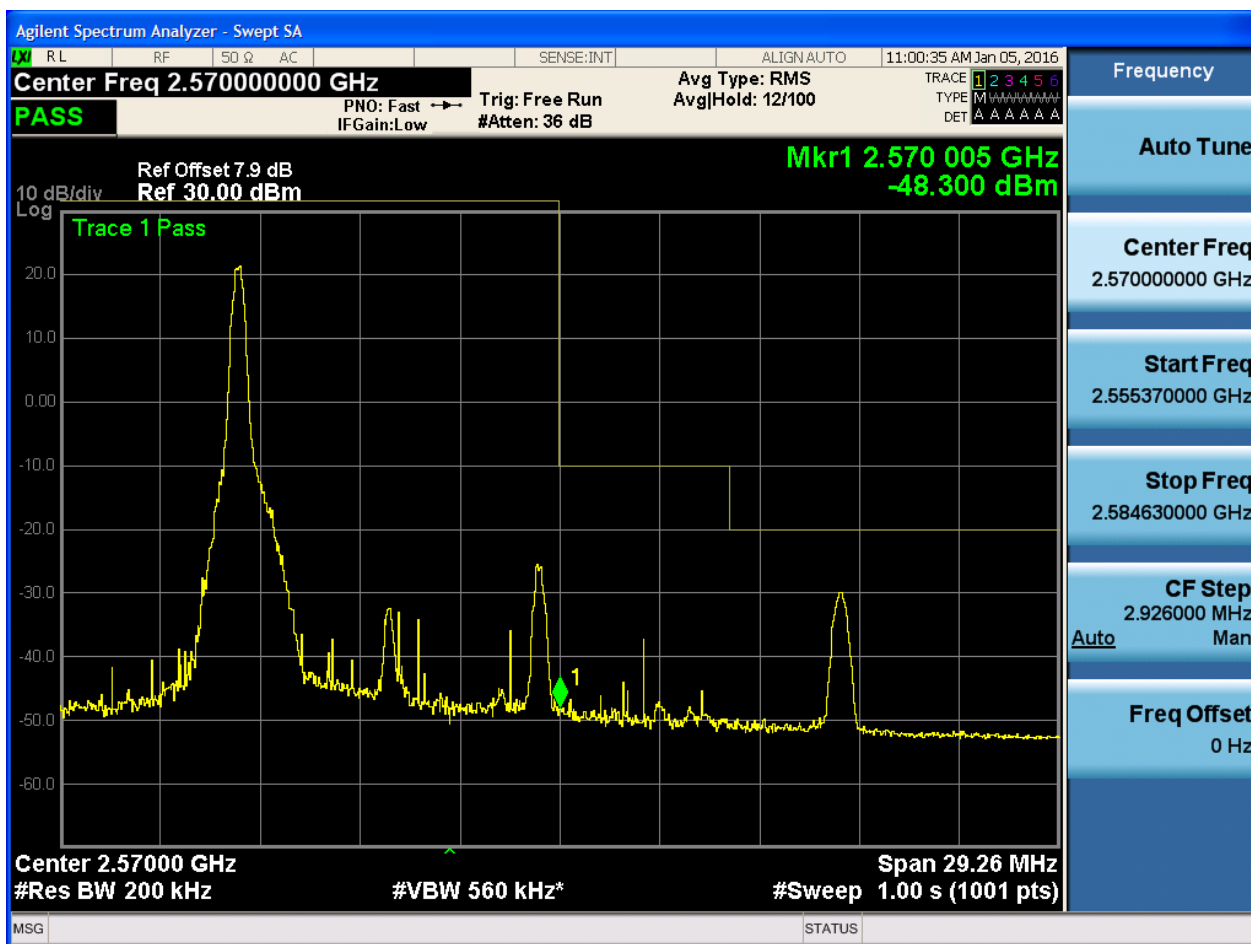


5.1.4.1.2.1.4 Test RB = RB50#0



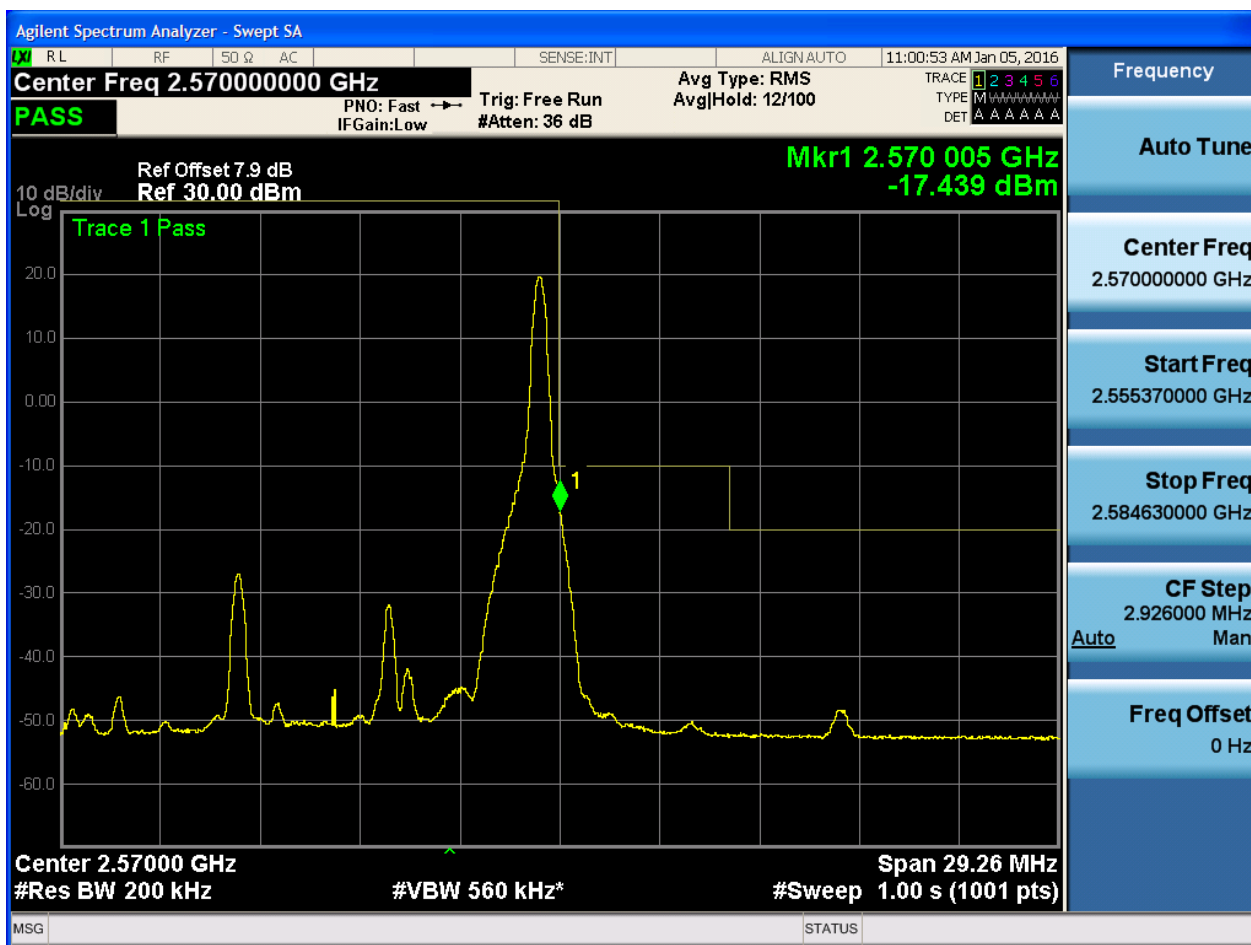
5.1.4.1.2.2 Test Channel = HCH

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

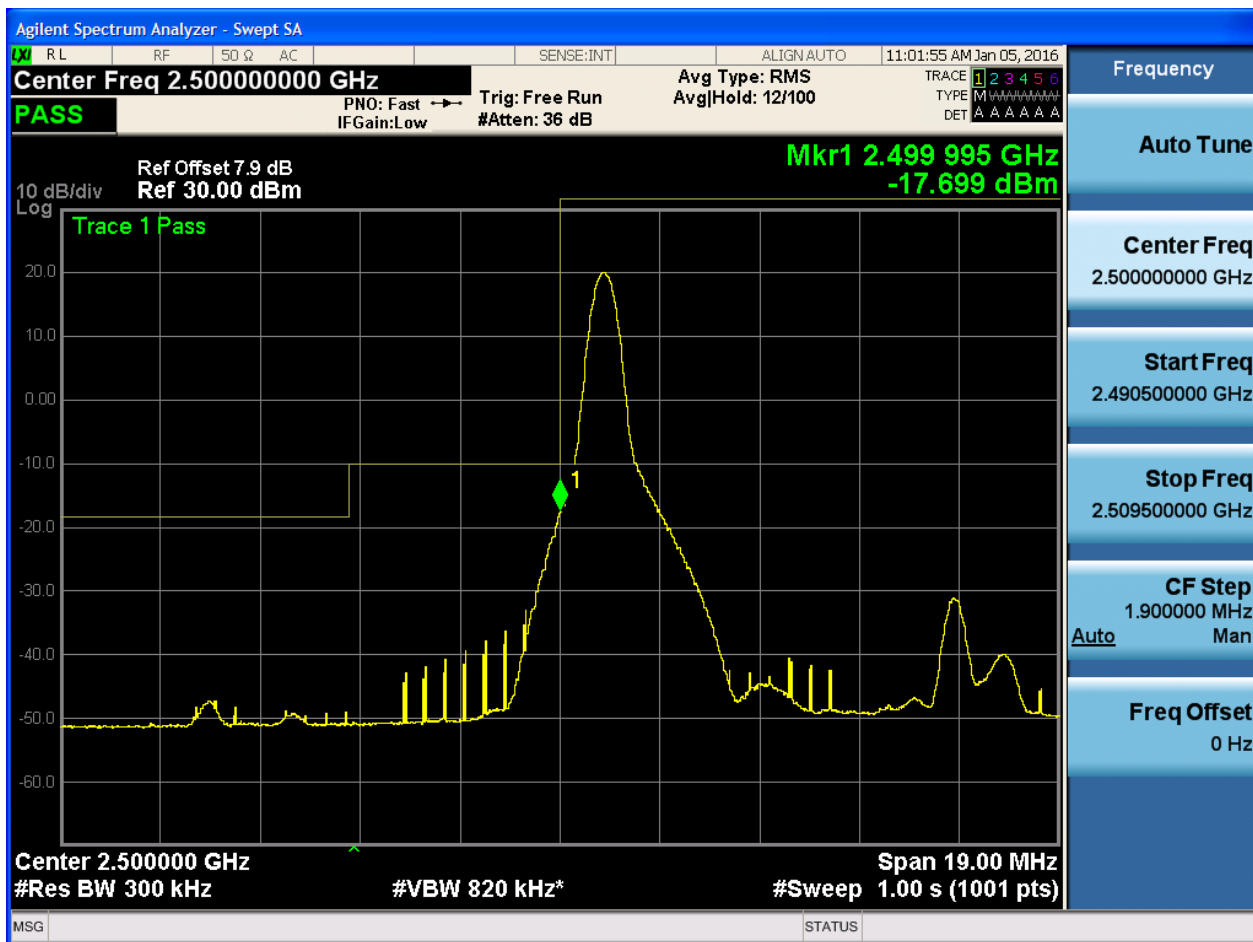




5.1.4.1.3 Test Bandwidth = 15

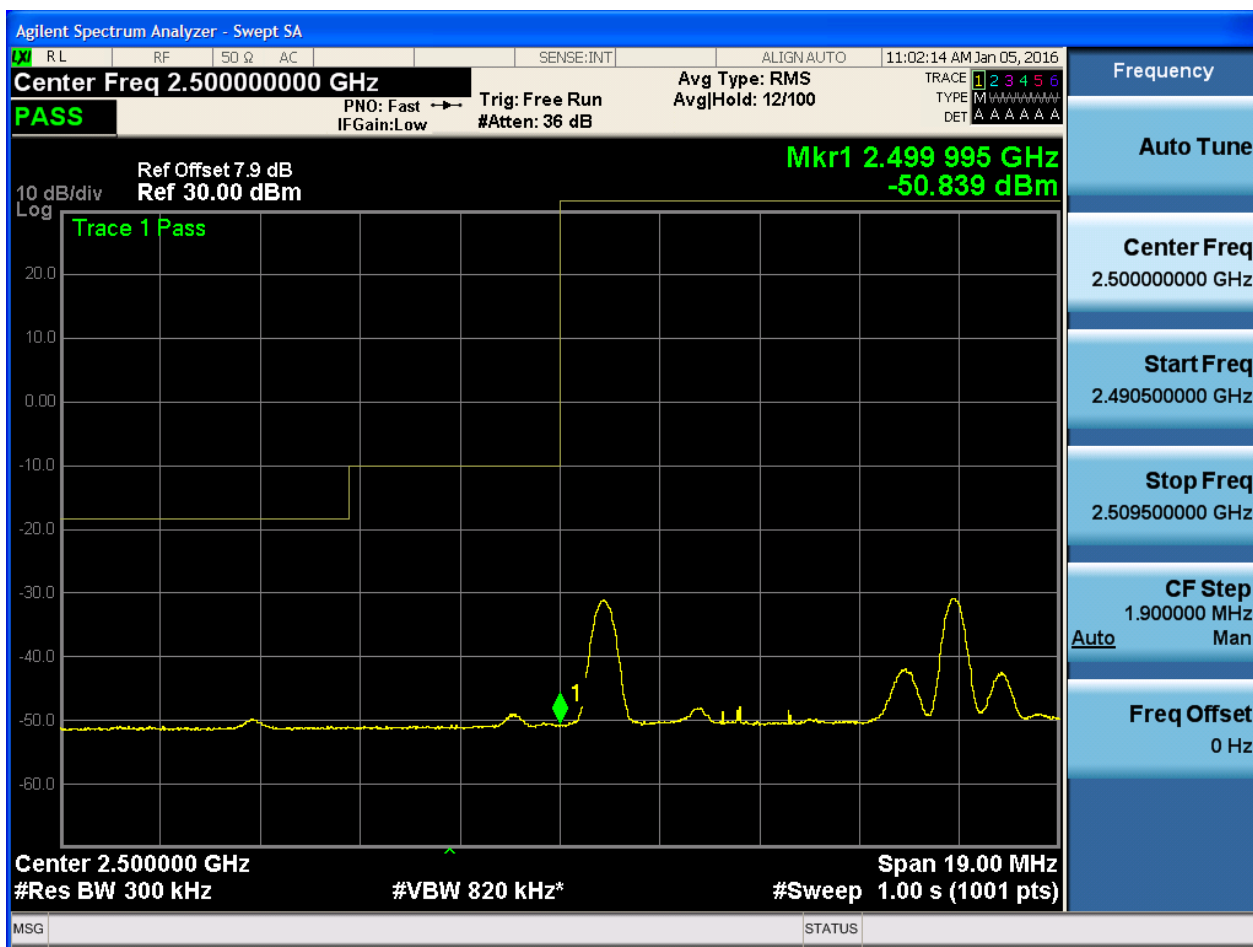
5.1.4.1.3.1 Test Channel = LCH

5.1.4.1.3.1.1 Test RB = RB1#0





5.1.4.1.3.1.2 Test RB = RB1#74





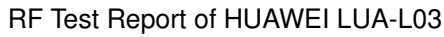
5.1.4.1.3.1.3 Test RB = RB36#18





5.1.4.1.3.1.4 Test RB = RB75#0

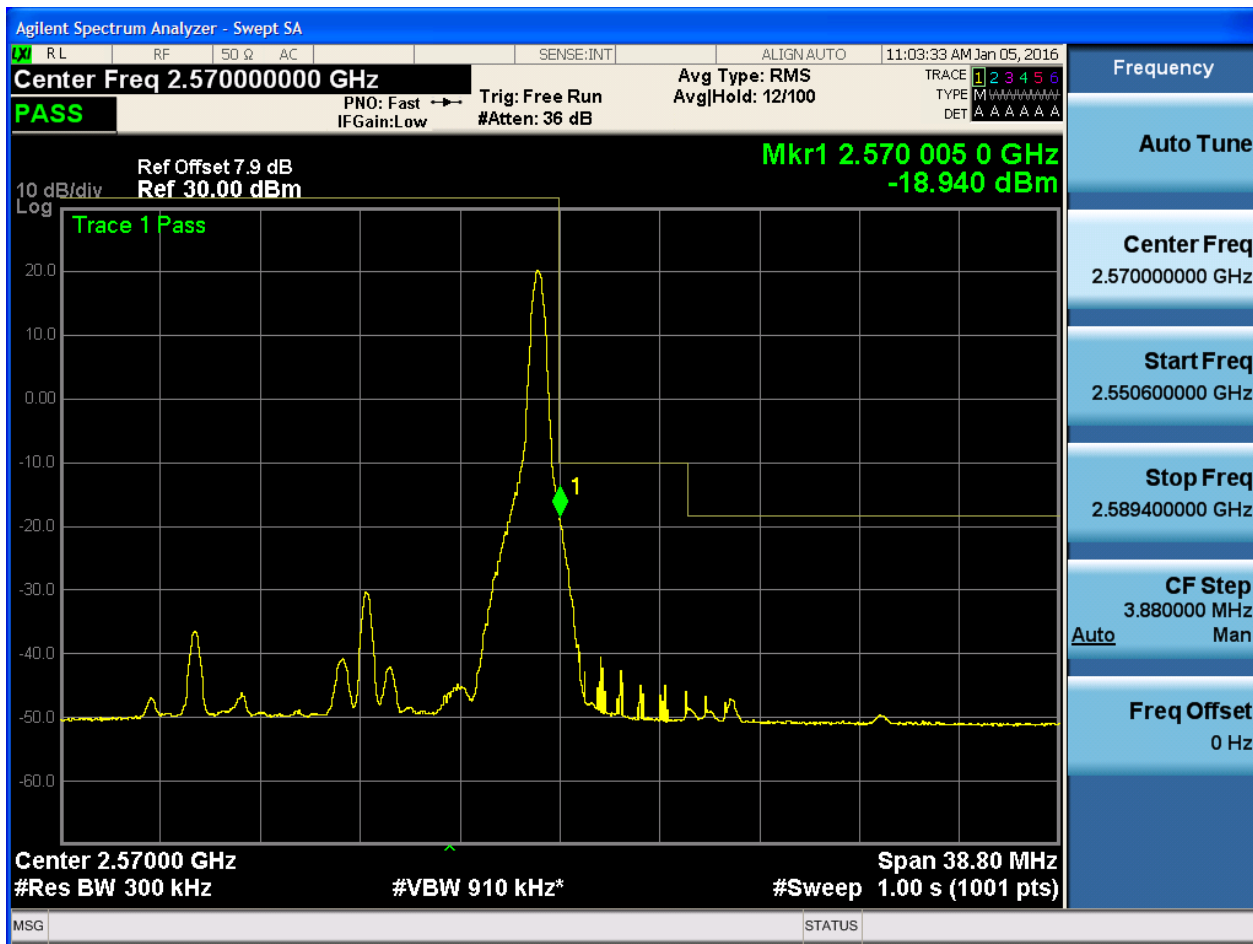




5.1.4.1.3.2.1 Test RB = RB1#0



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

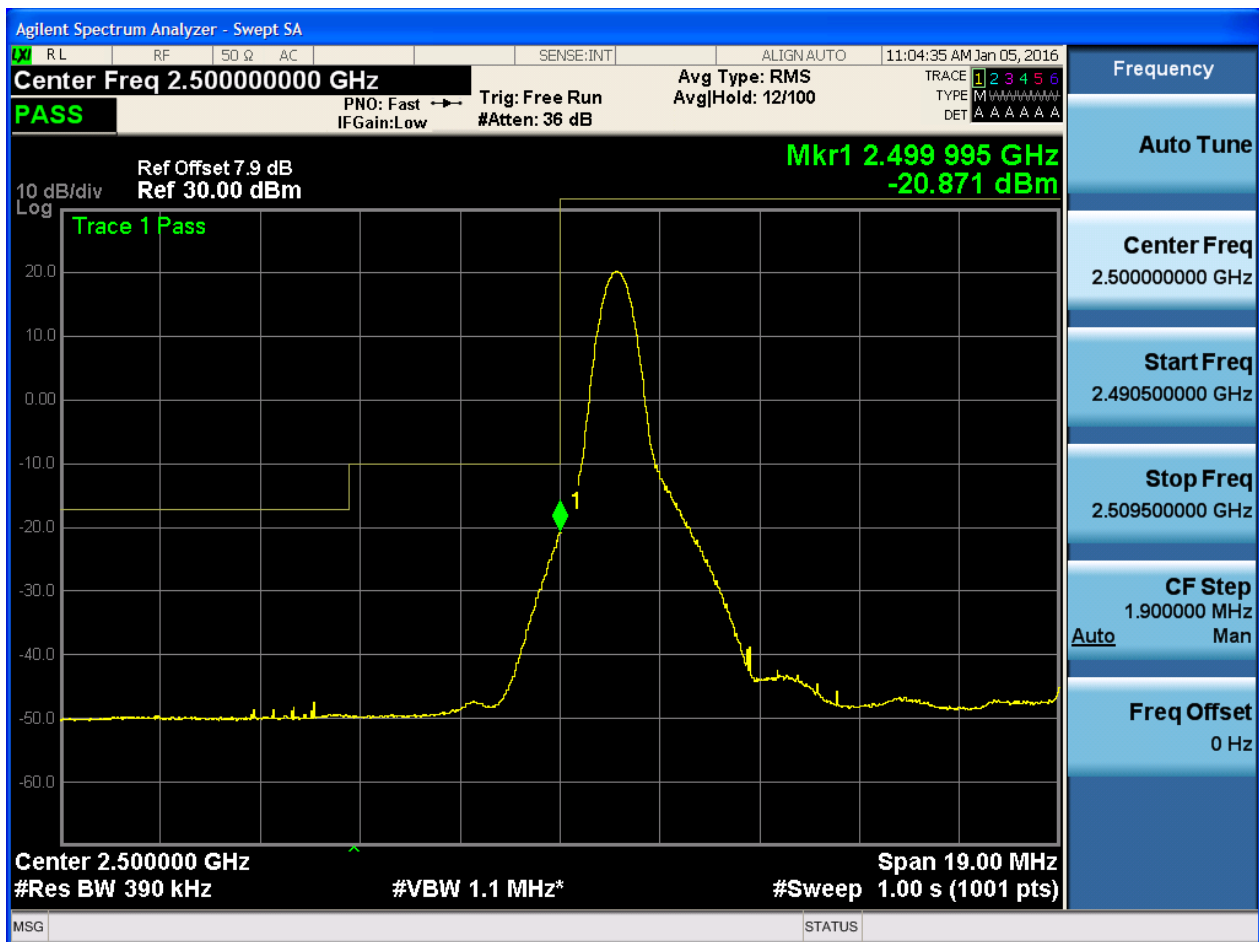




5.1.4.1.4 Test Bandwidth = 20

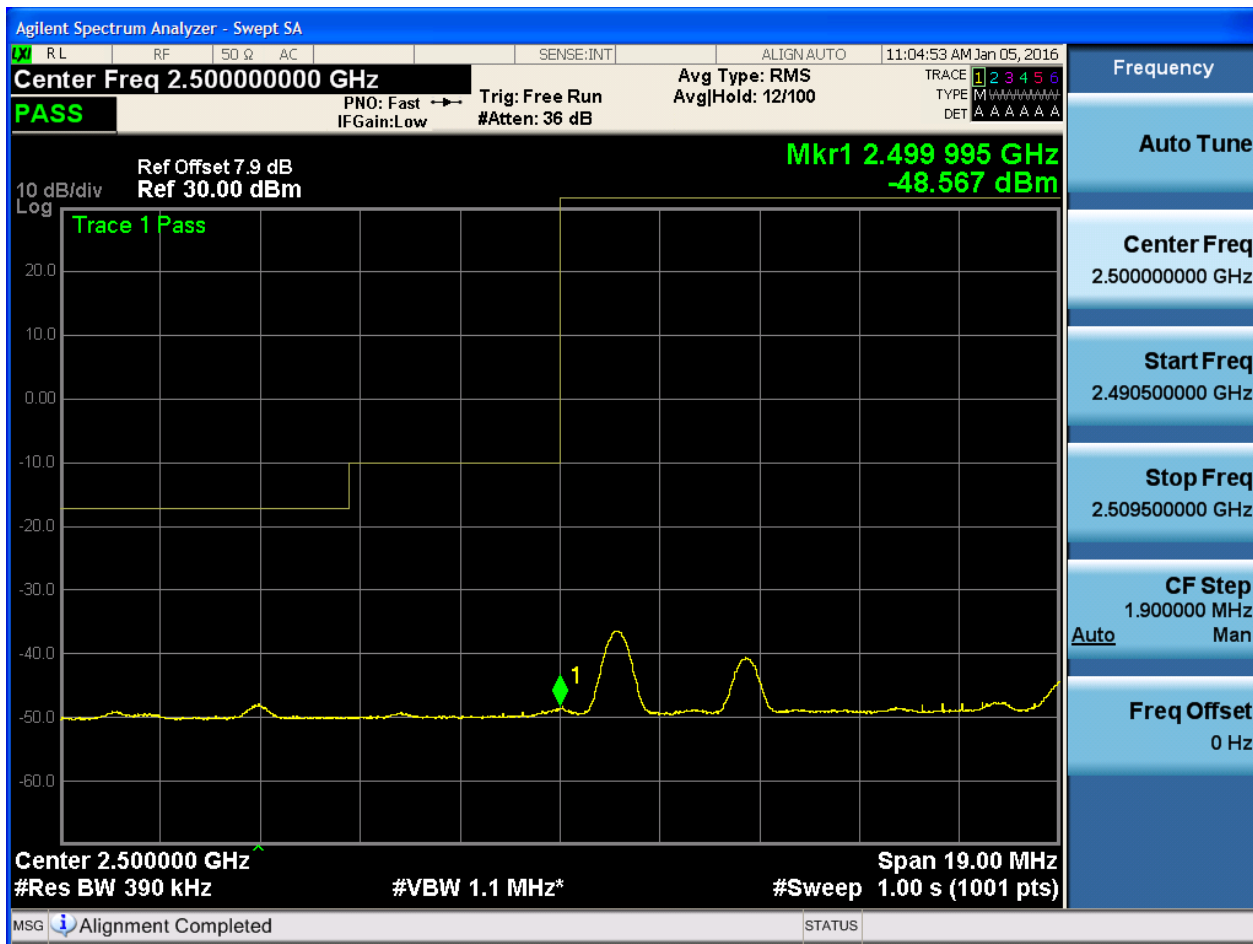
5.1.4.1.4.1 Test Channel = LCH

5.1.4.1.4.1.1 Test RB = RB1#0



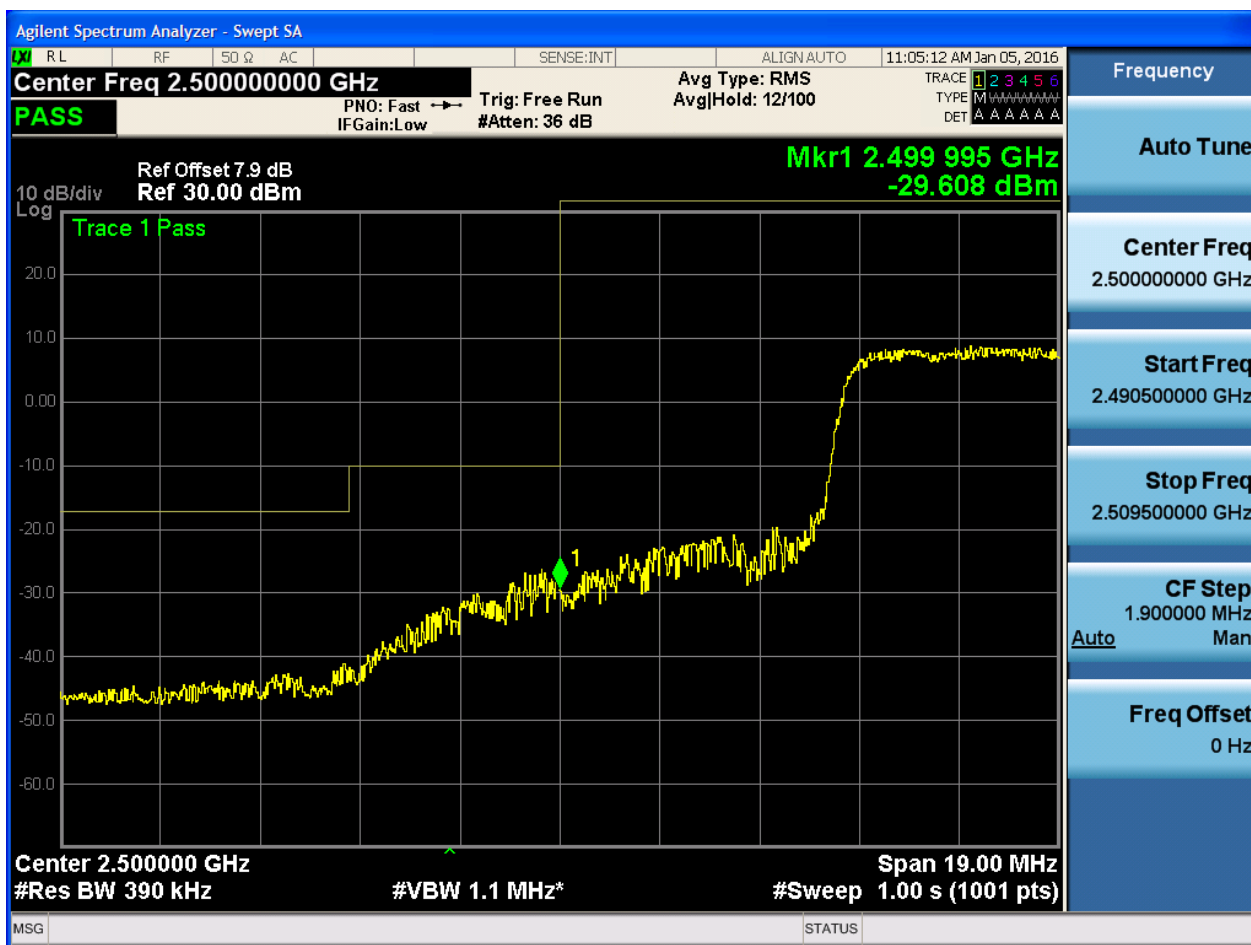


5.1.4.1.4.1.2 Test RB = RB1#99



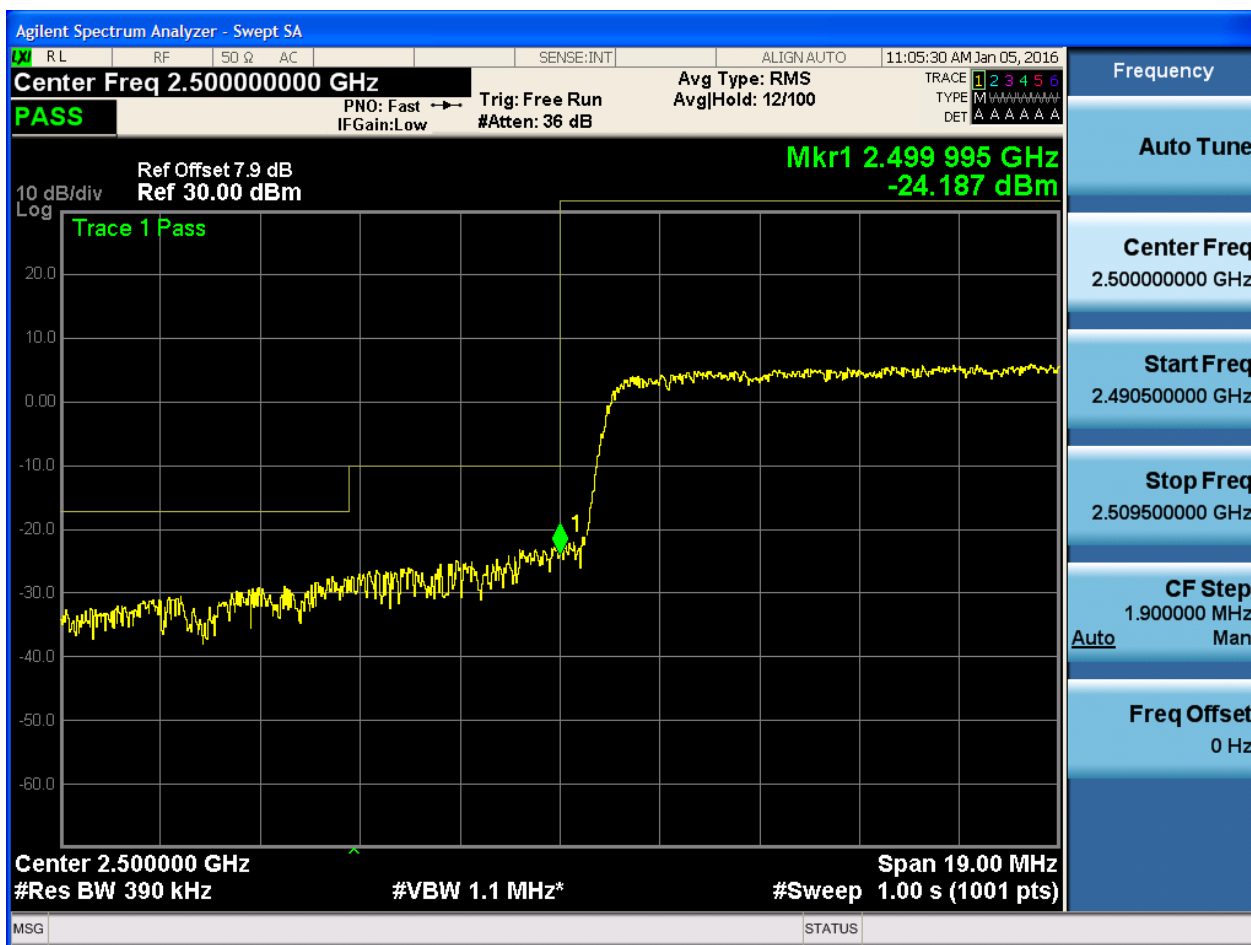


5.1.4.1.4.1.3 Test RB = RB50#25





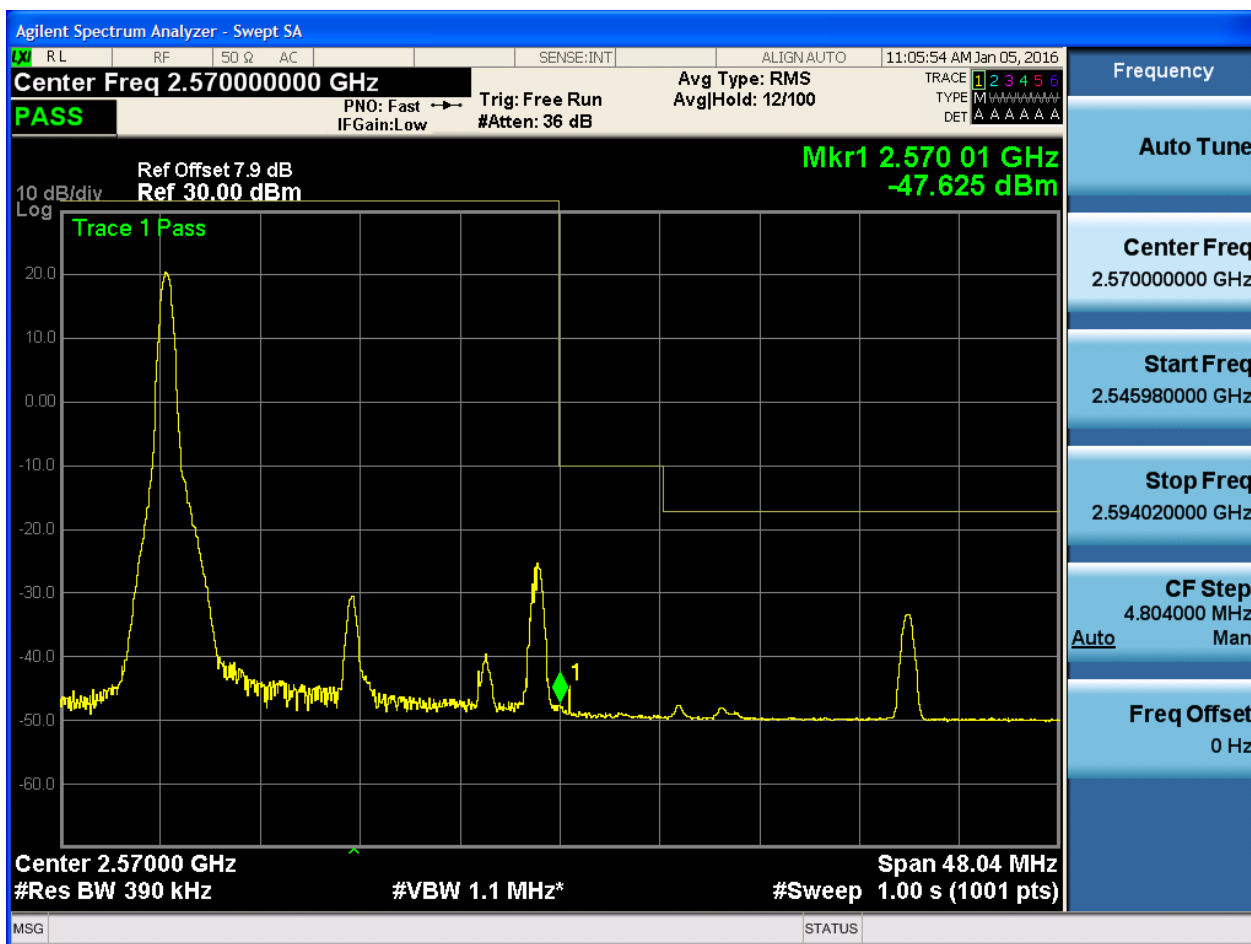
5.1.4.1.4.1.4 Test RB = RB100#0





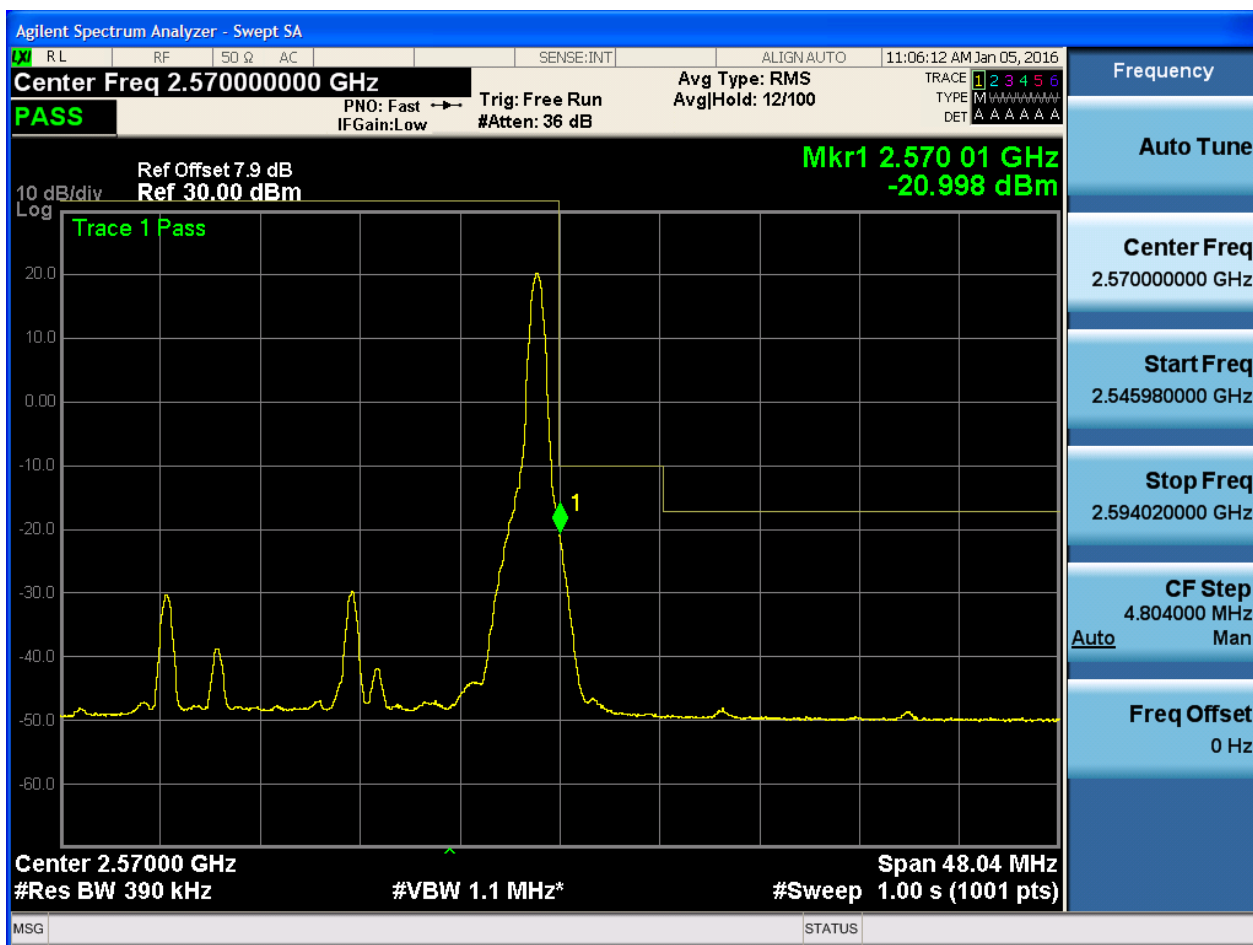
5.1.4.1.4.2 Test Channel = HCH

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



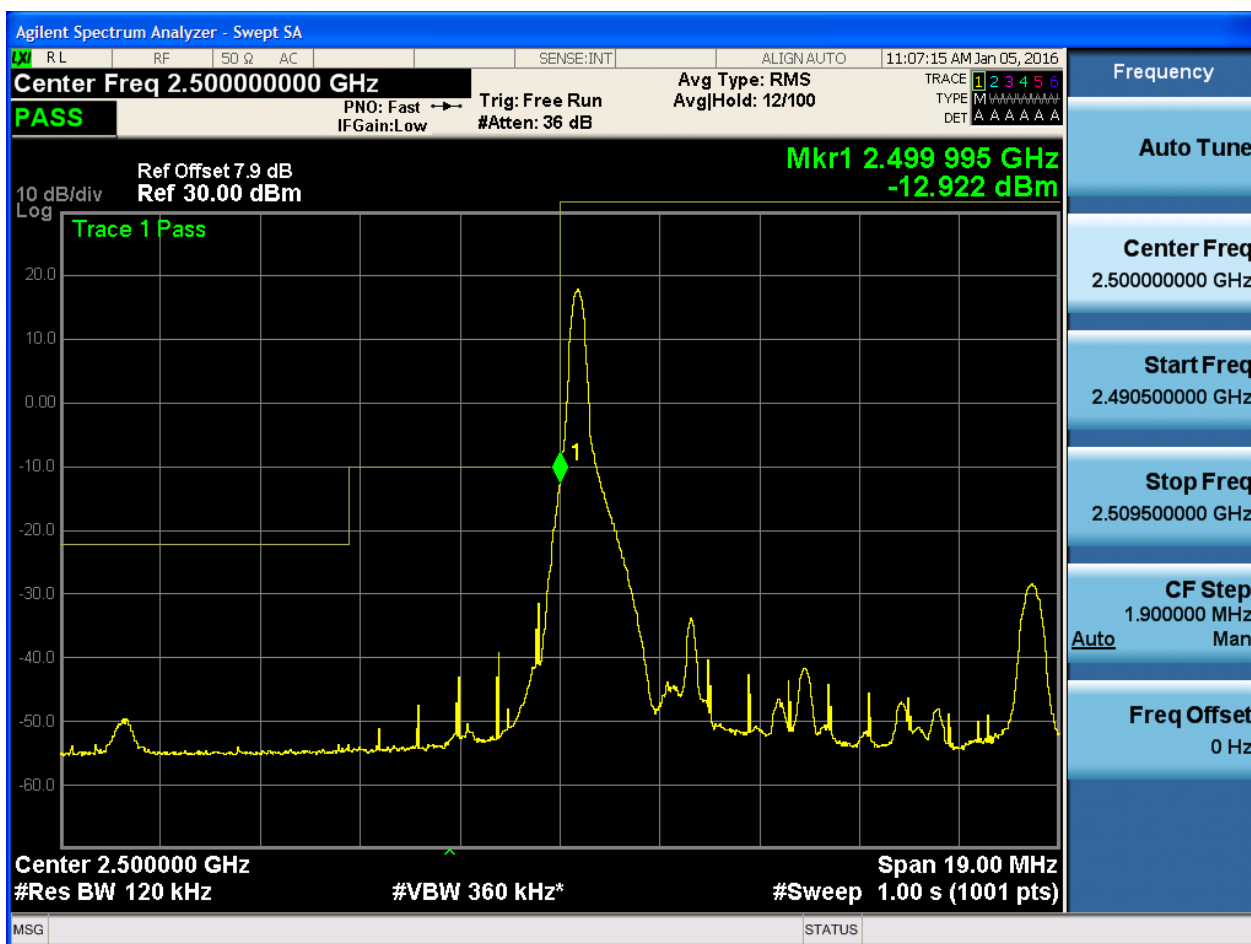


5.1.4.2 Test Mode = LTE/TM2

5.1.4.2.1 Test Bandwidth = 5

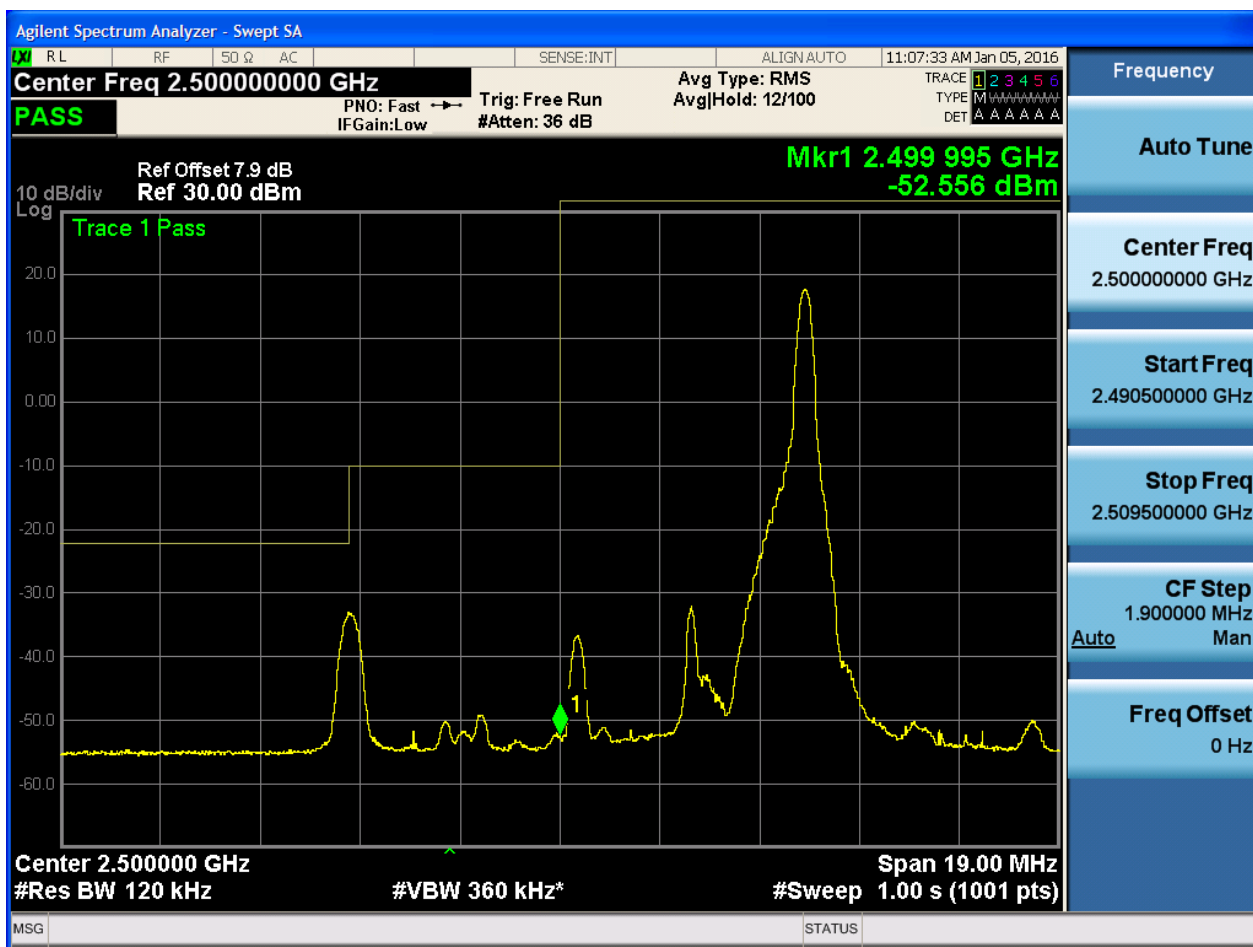
5.1.4.2.1.1 Test Channel = LCH

5.1.4.2.1.1.1 Test RB = RB1#0



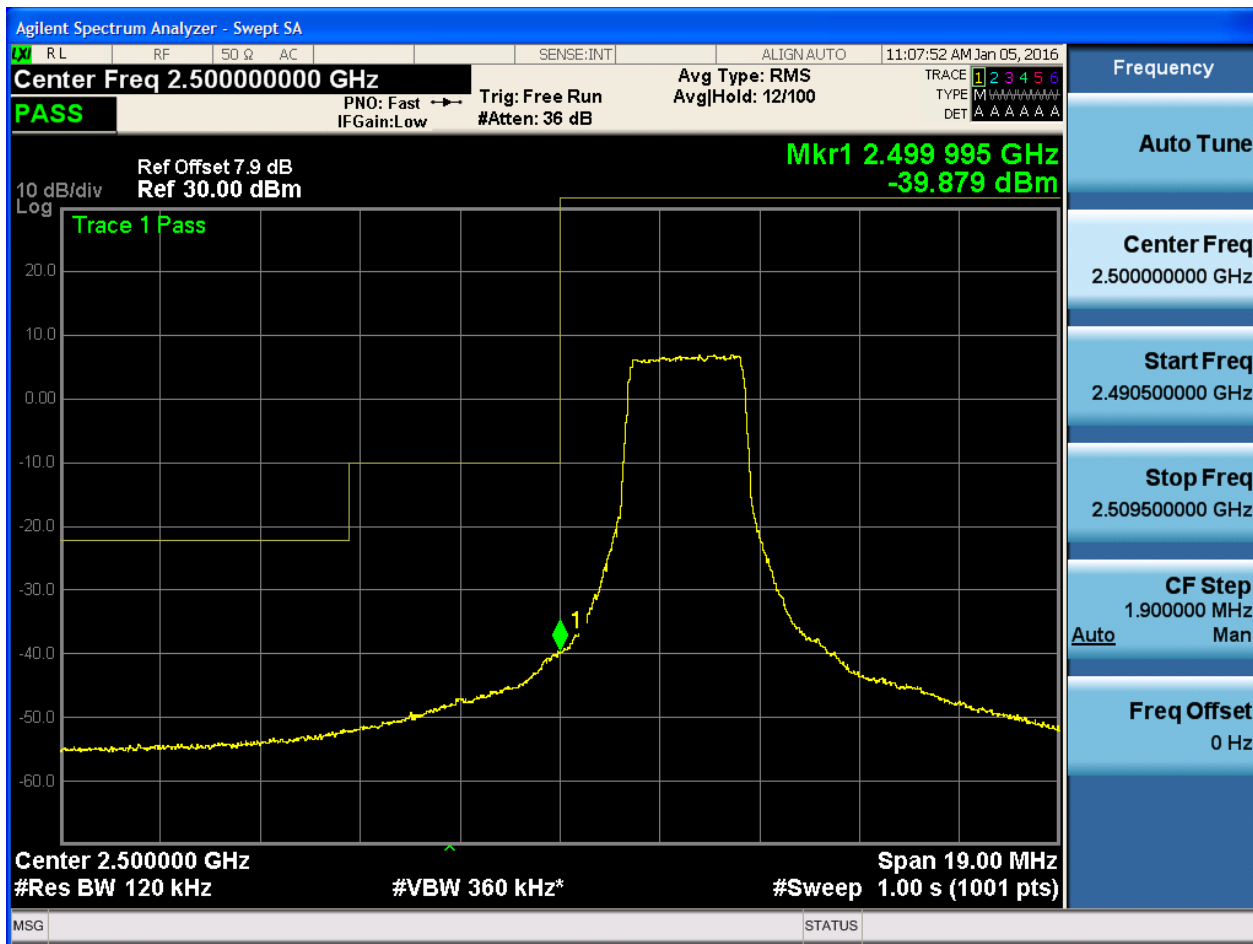


5.1.4.2.1.1.2 Test RB = RB1#24



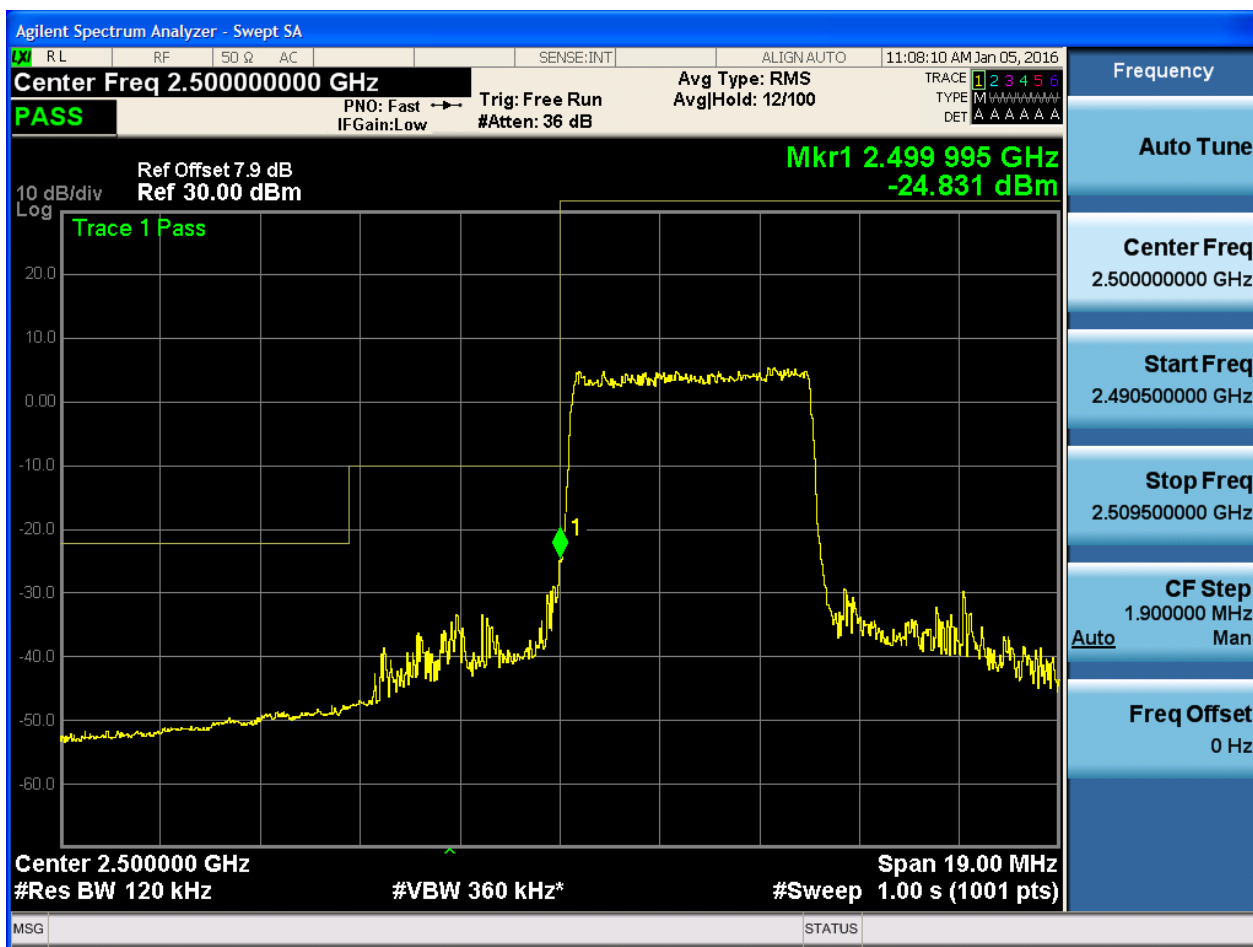


5.1.4.2.1.1.3 Test RB = RB12#6



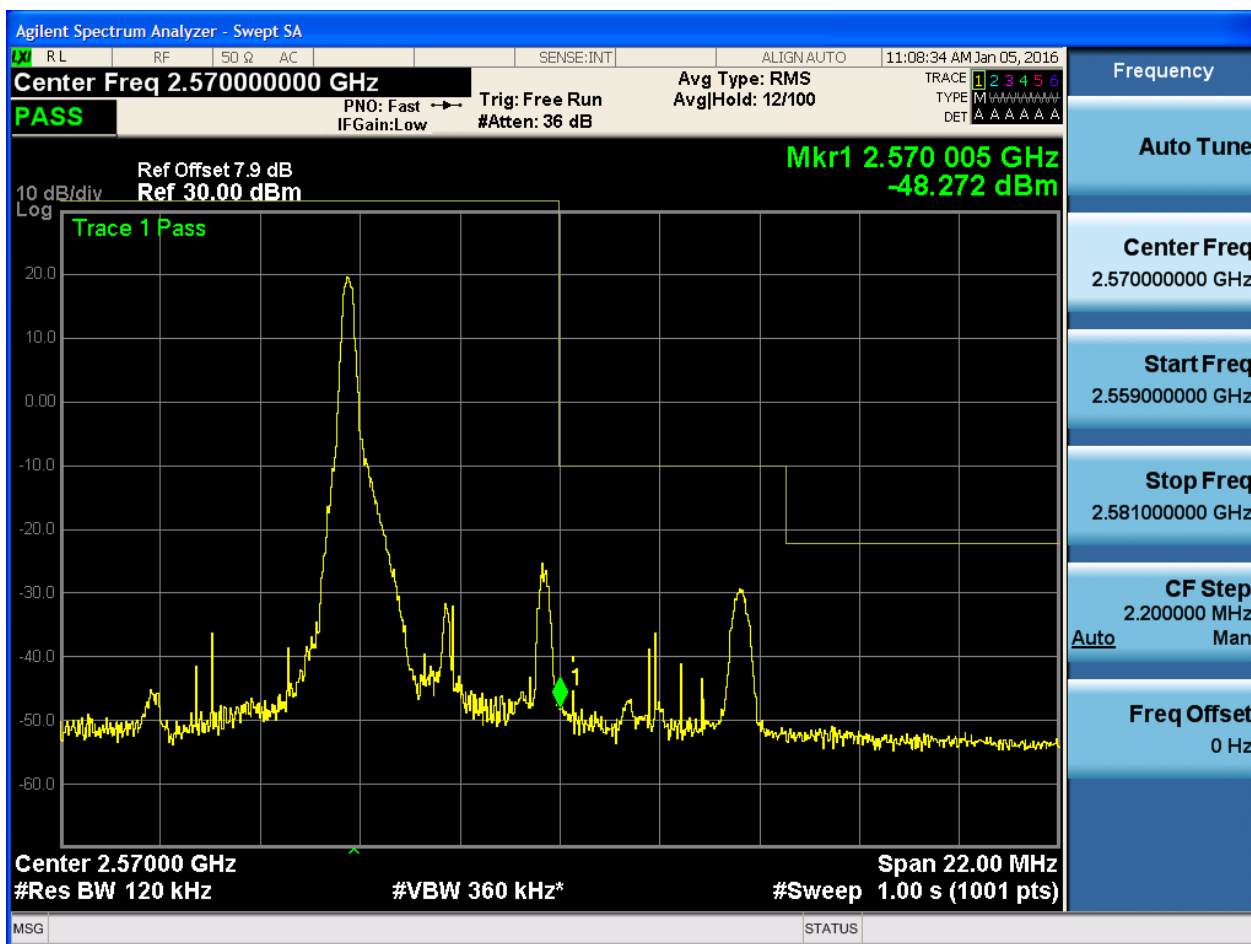


5.1.4.2.1.1.4 Test RB = RB25#0



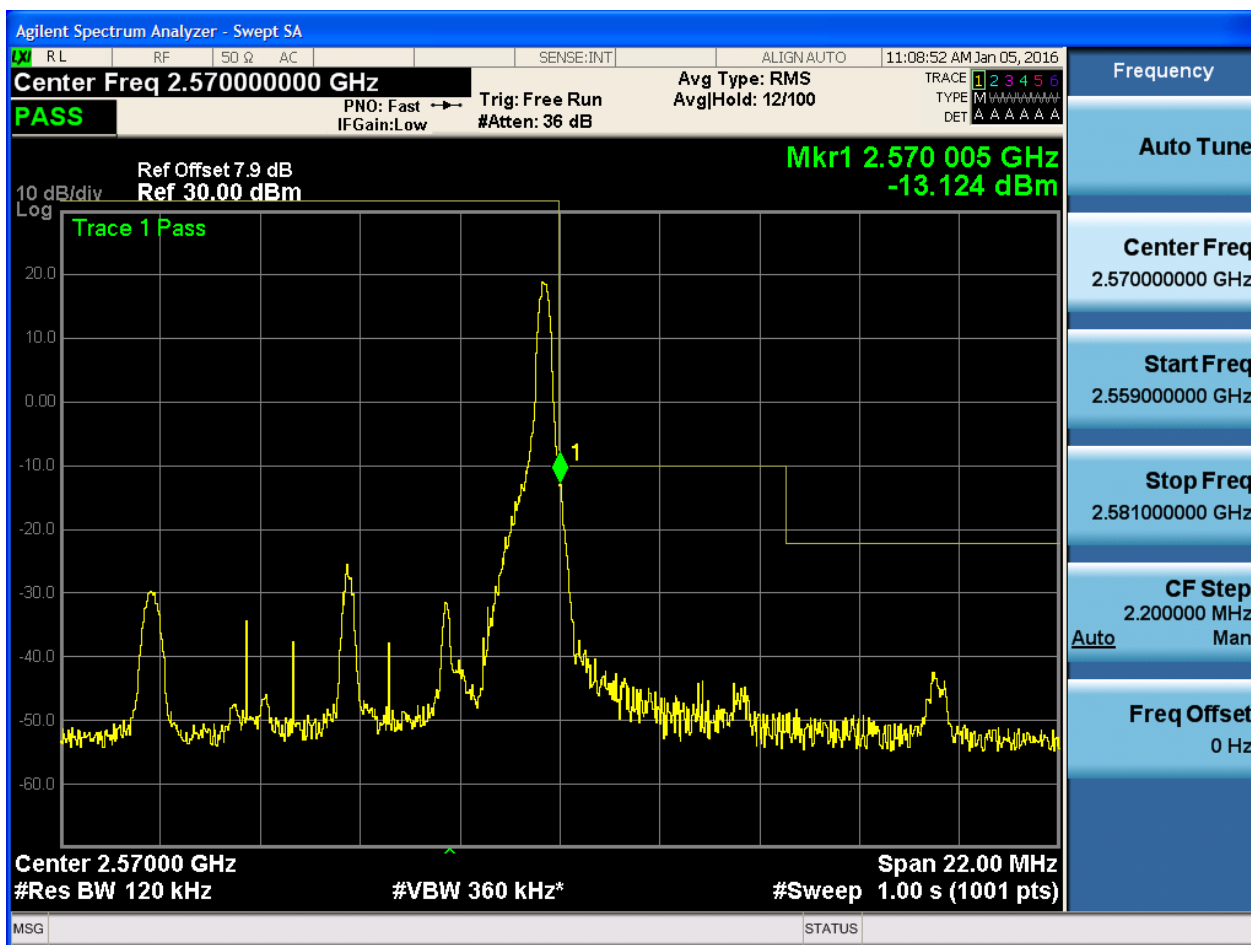
5.1.4.2.1.2 Test Channel = HCH

5.1.4.2.1.2.1 Test RB = RB1#0



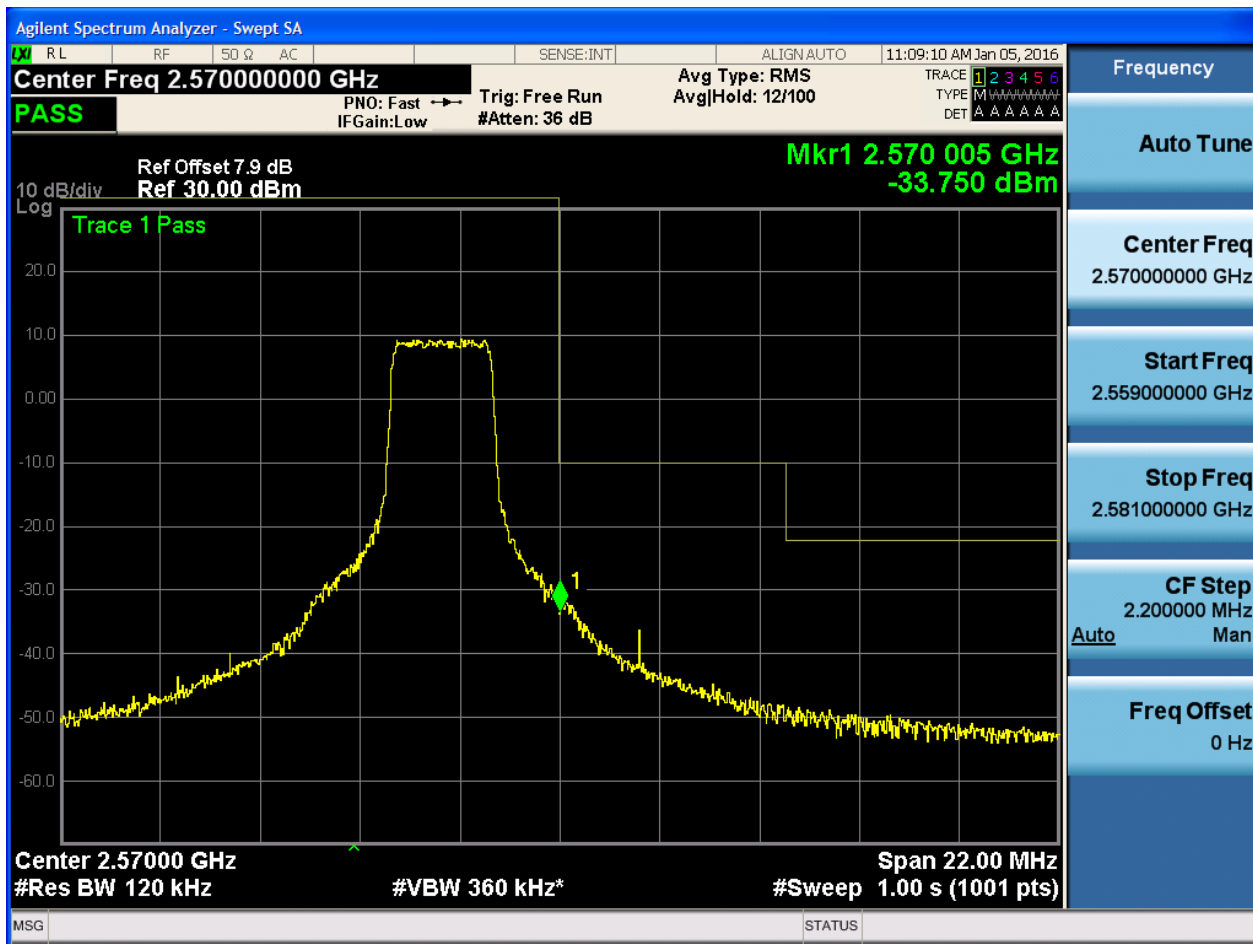


5.1.4.2.1.2.2 Test RB = RB1#24



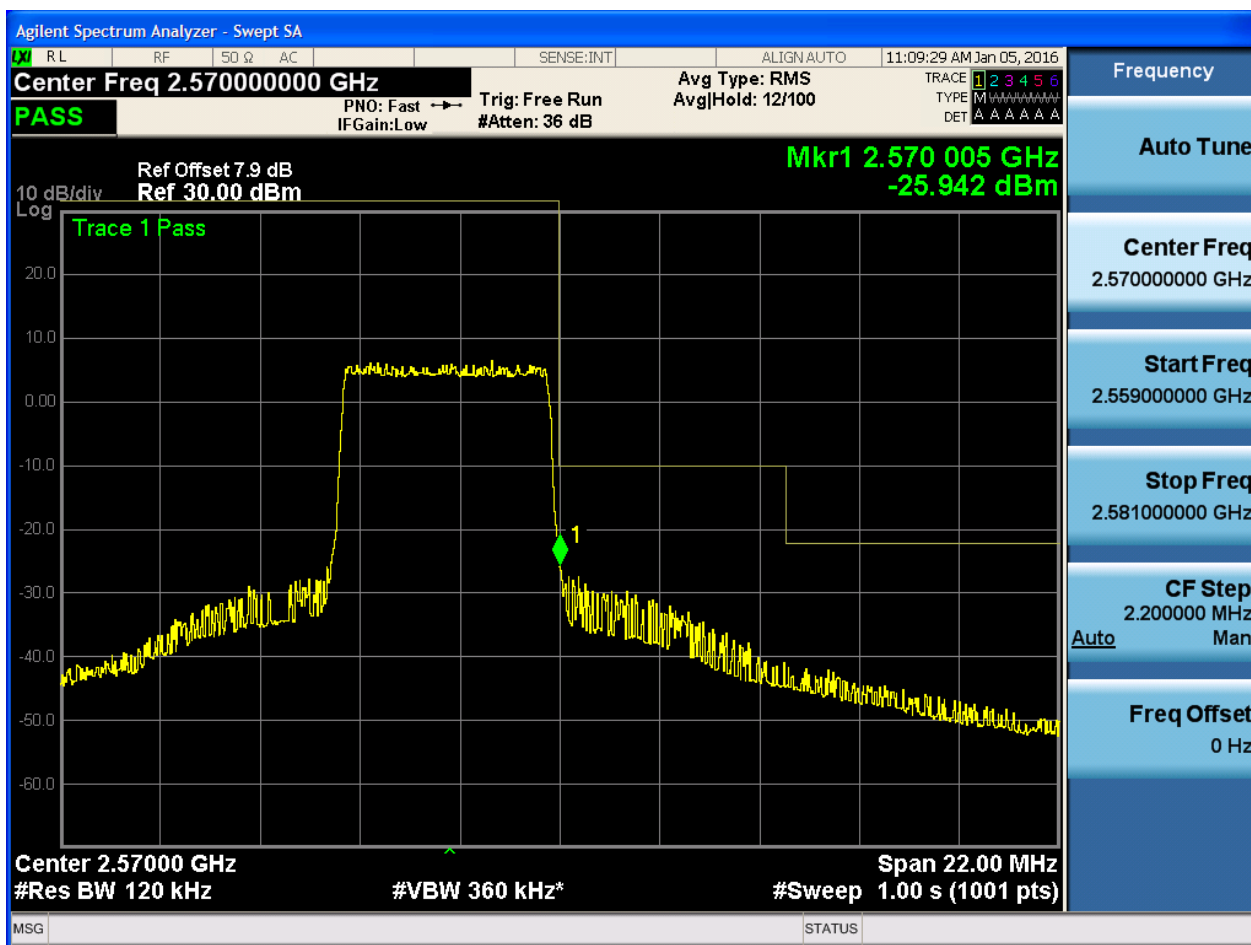


5.1.4.2.1.2.3 Test RB = RB12#6





5.1.4.2.1.2.4 Test RB = RB25#0

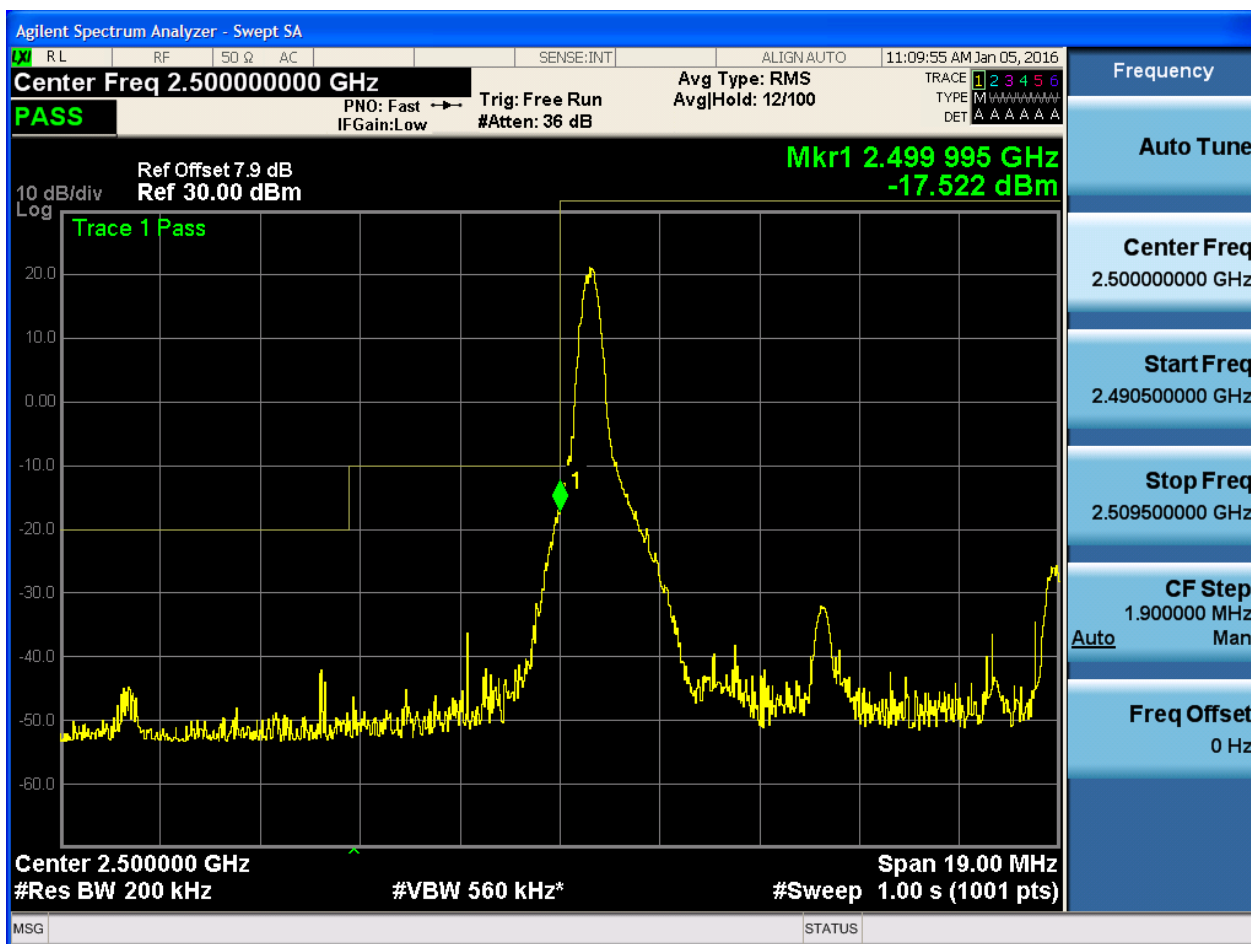




5.1.4.2.2 Test Bandwidth = 10

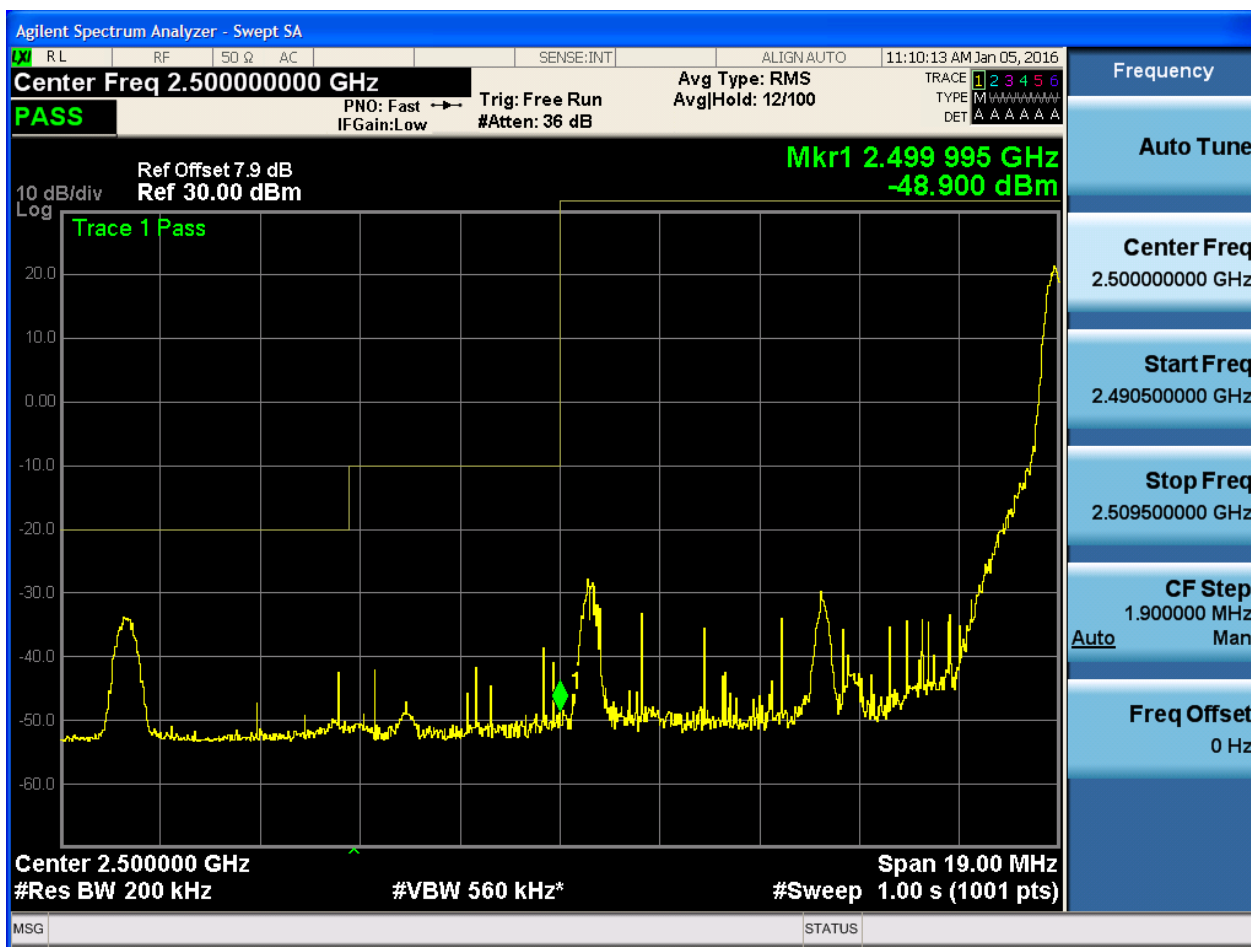
5.1.4.2.2.1 Test Channel = LCH

5.1.4.2.2.1.1 Test RB = RB1#0





5.1.4.2.2.1.2 Test RB = RB1#49



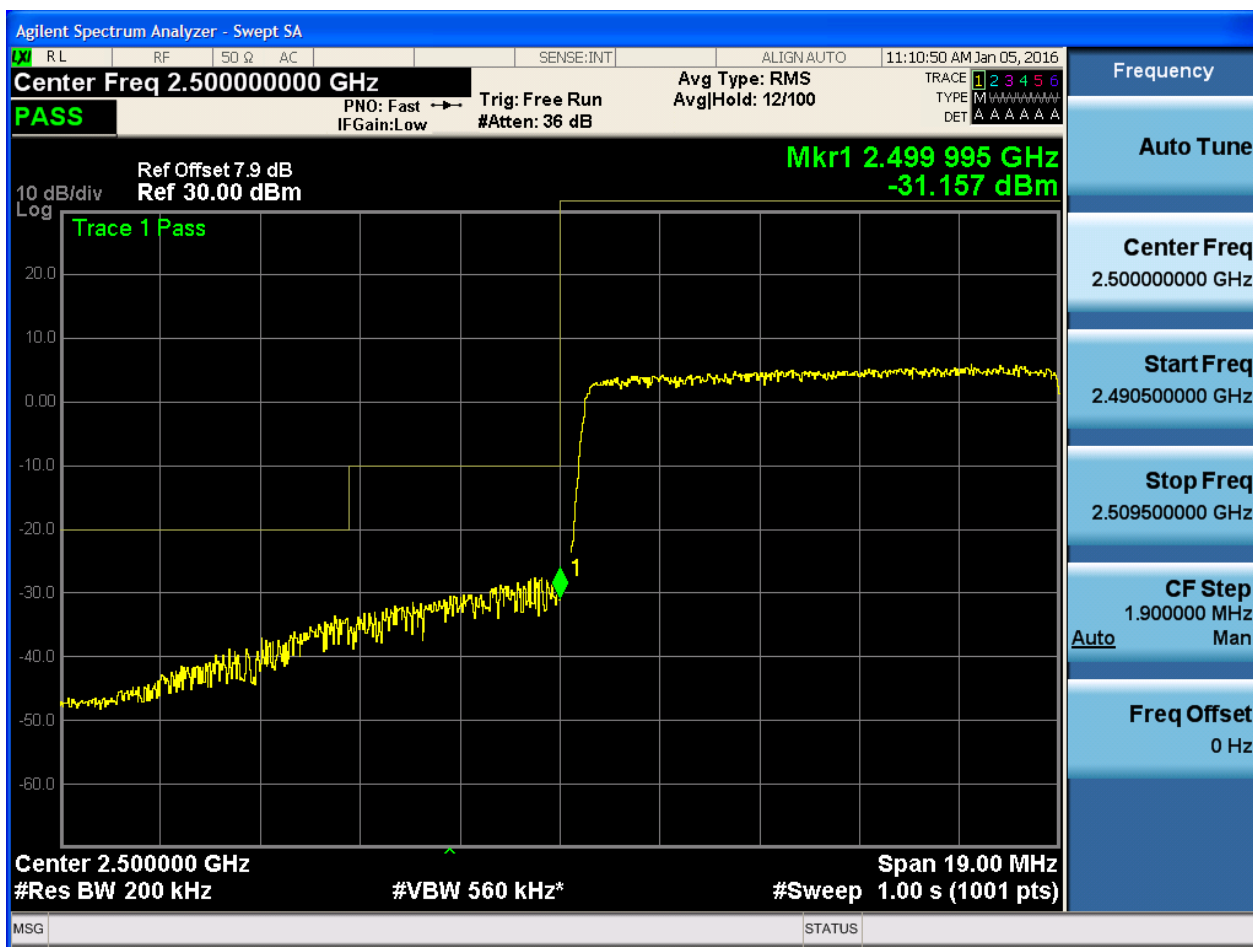


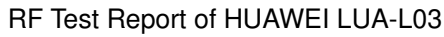
5.1.4.2.2.1.3 Test RB = RB25#13



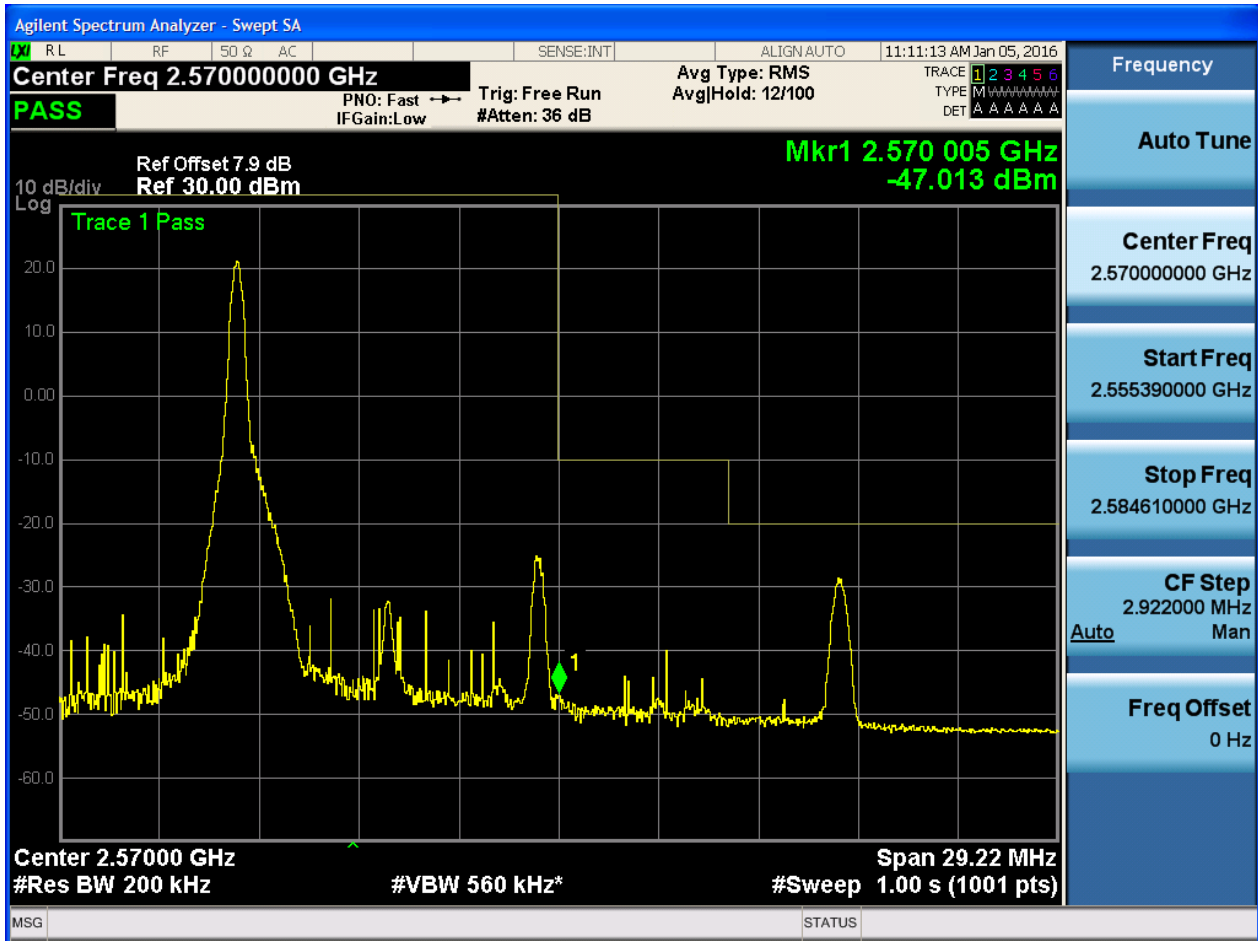


5.1.4.2.2.1.4 Test RB = RB50#0



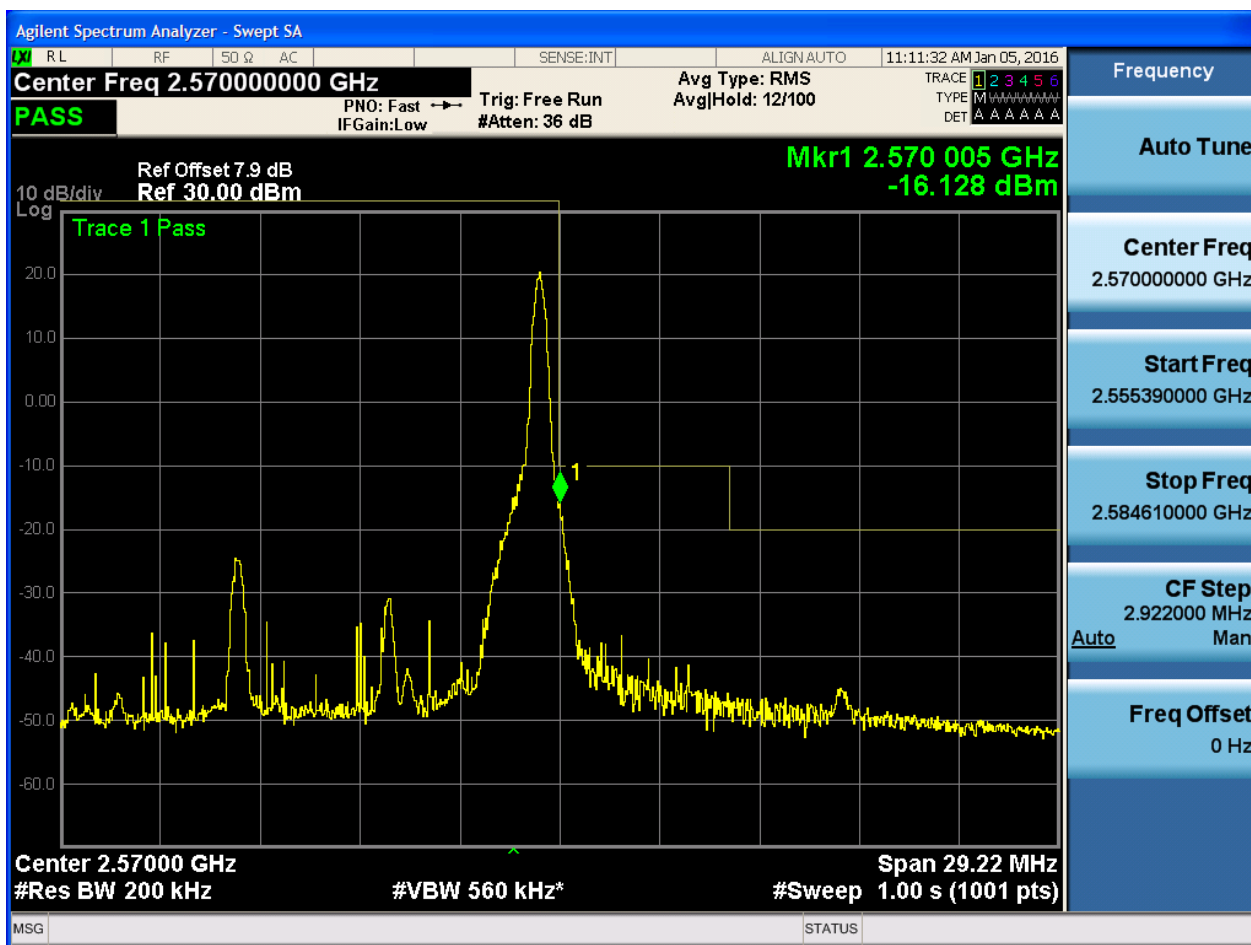


5.1.4.2.2.2.1 Test RB = RB1#0



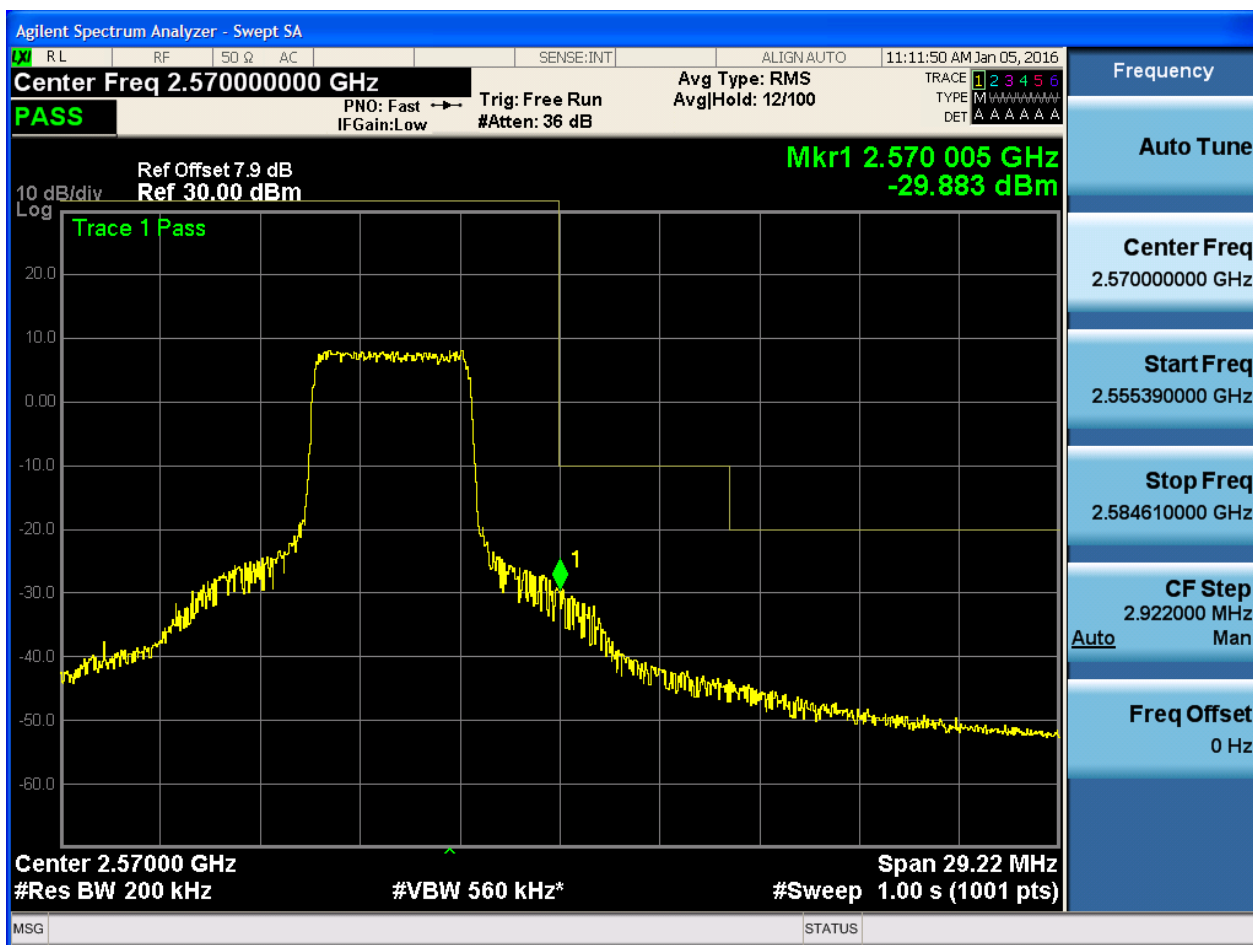


5.1.4.2.2.2 Test RB = RB1#49





5.1.4.2.2.3 Test RB = RB25#13





5.1.4.2.2.4 Test RB = RB50#0

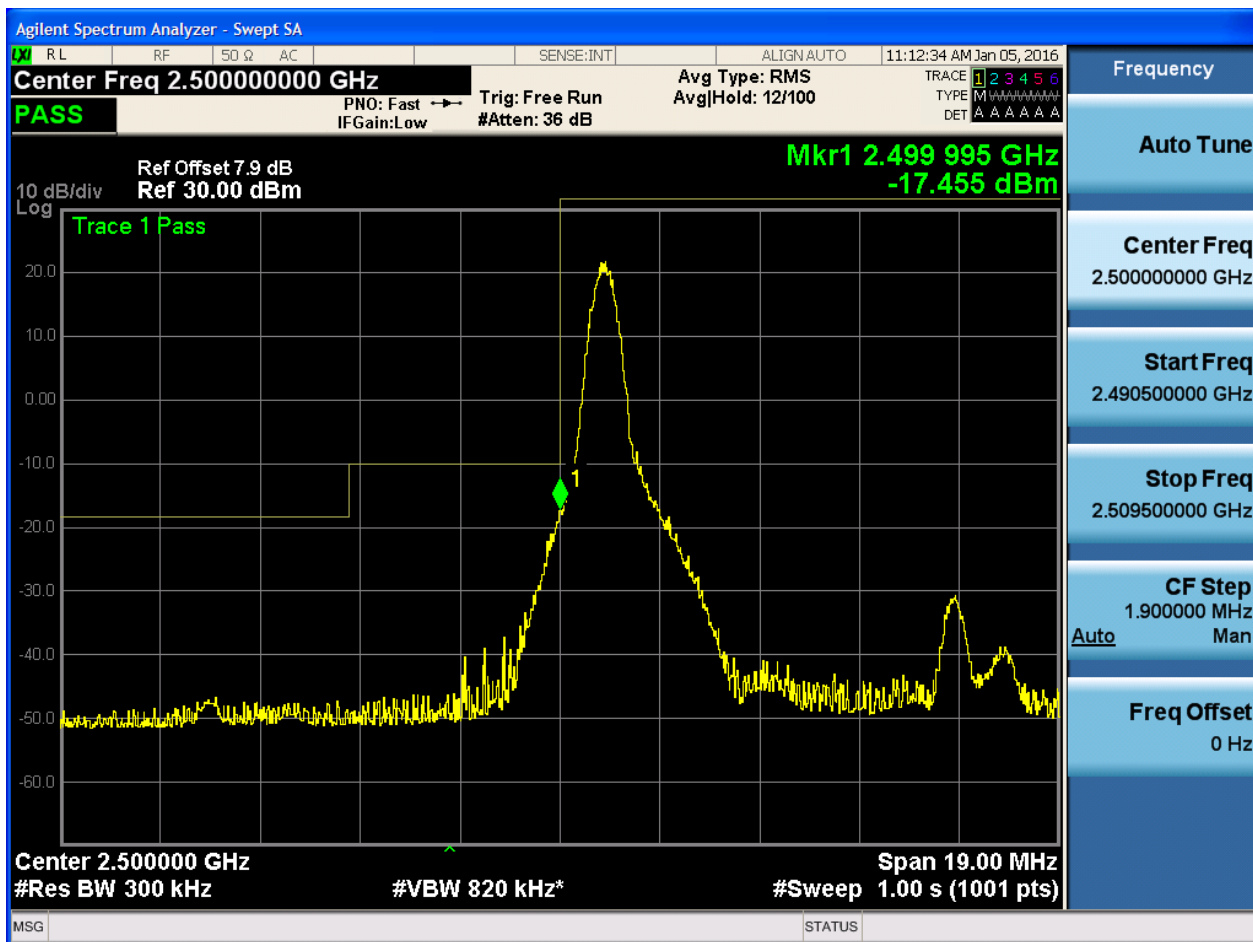




5.1.4.2.3 Test Bandwidth = 15

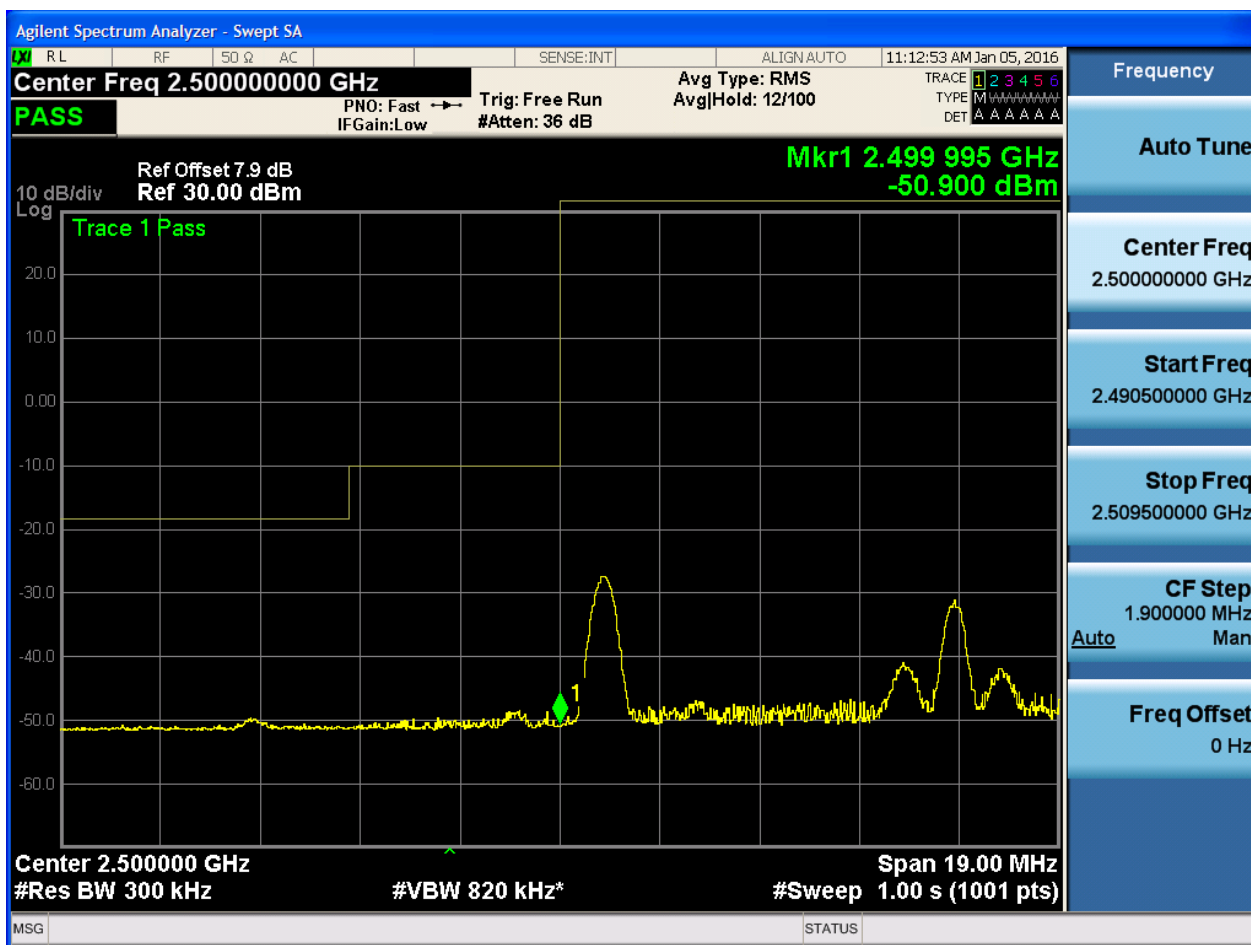
5.1.4.2.3.1 Test Channel = LCH

5.1.4.2.3.1.1 Test RB = RB1#0



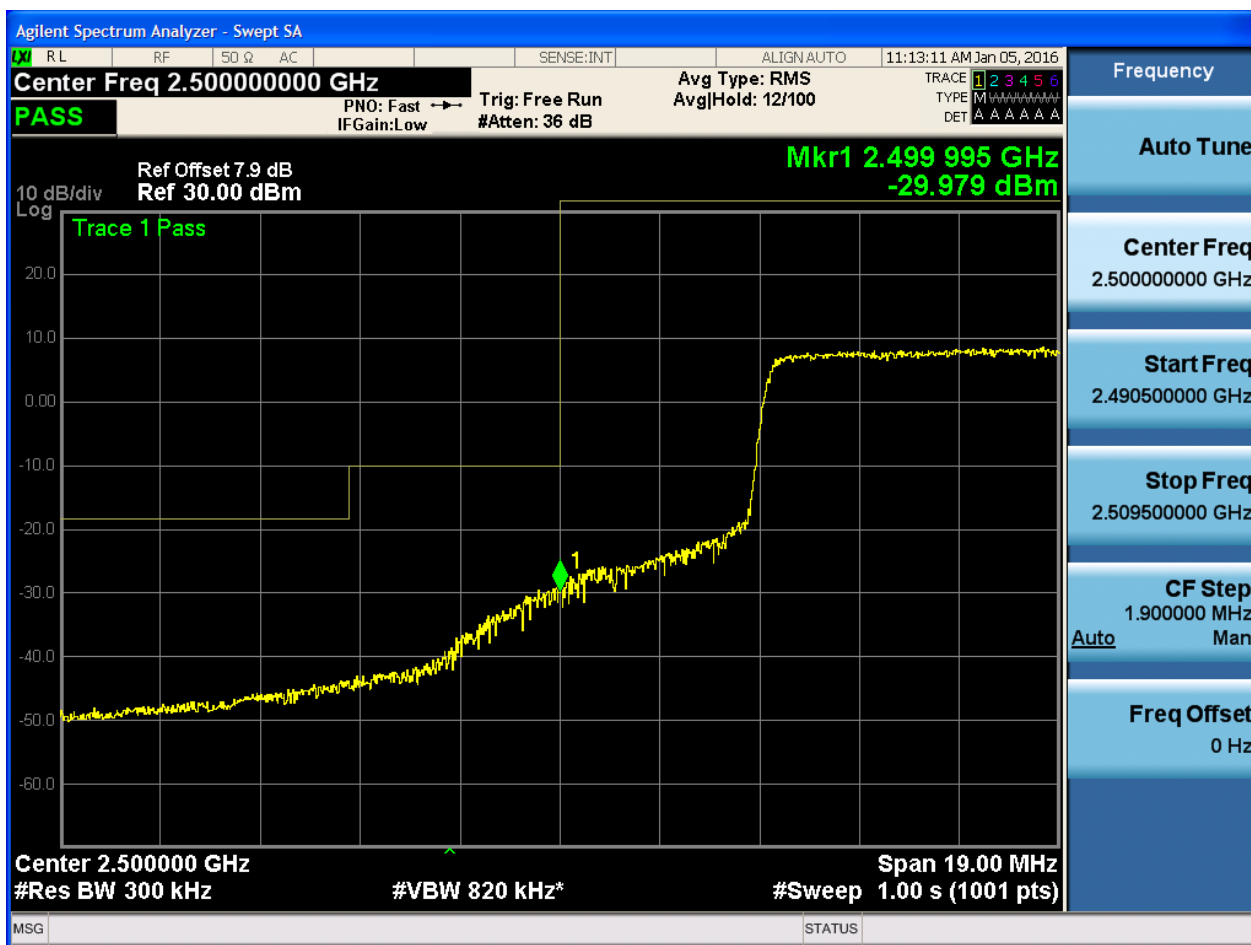


5.1.4.2.3.1.2 Test RB = RB1#74



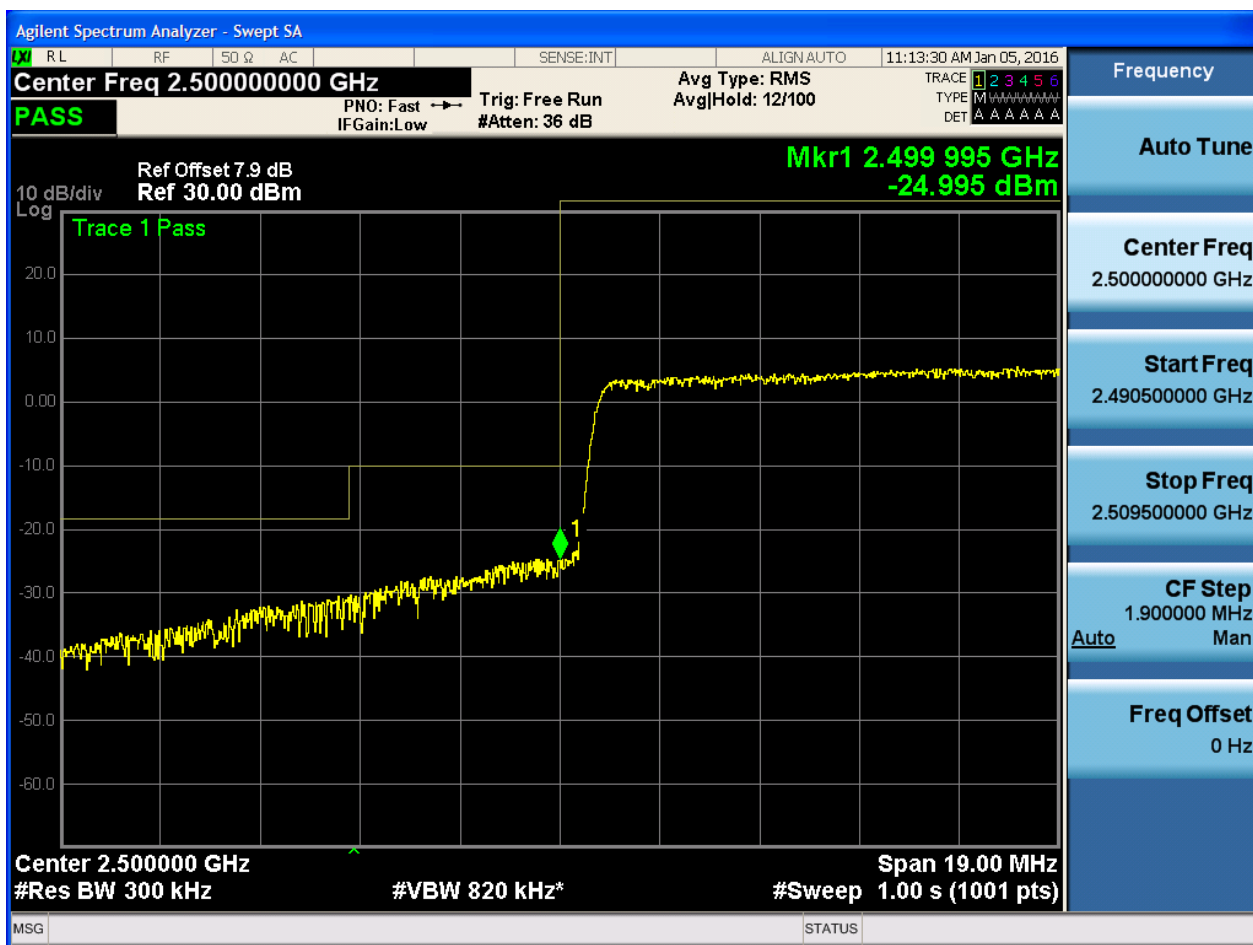


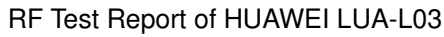
5.1.4.2.3.1.3 Test RB = RB36#18



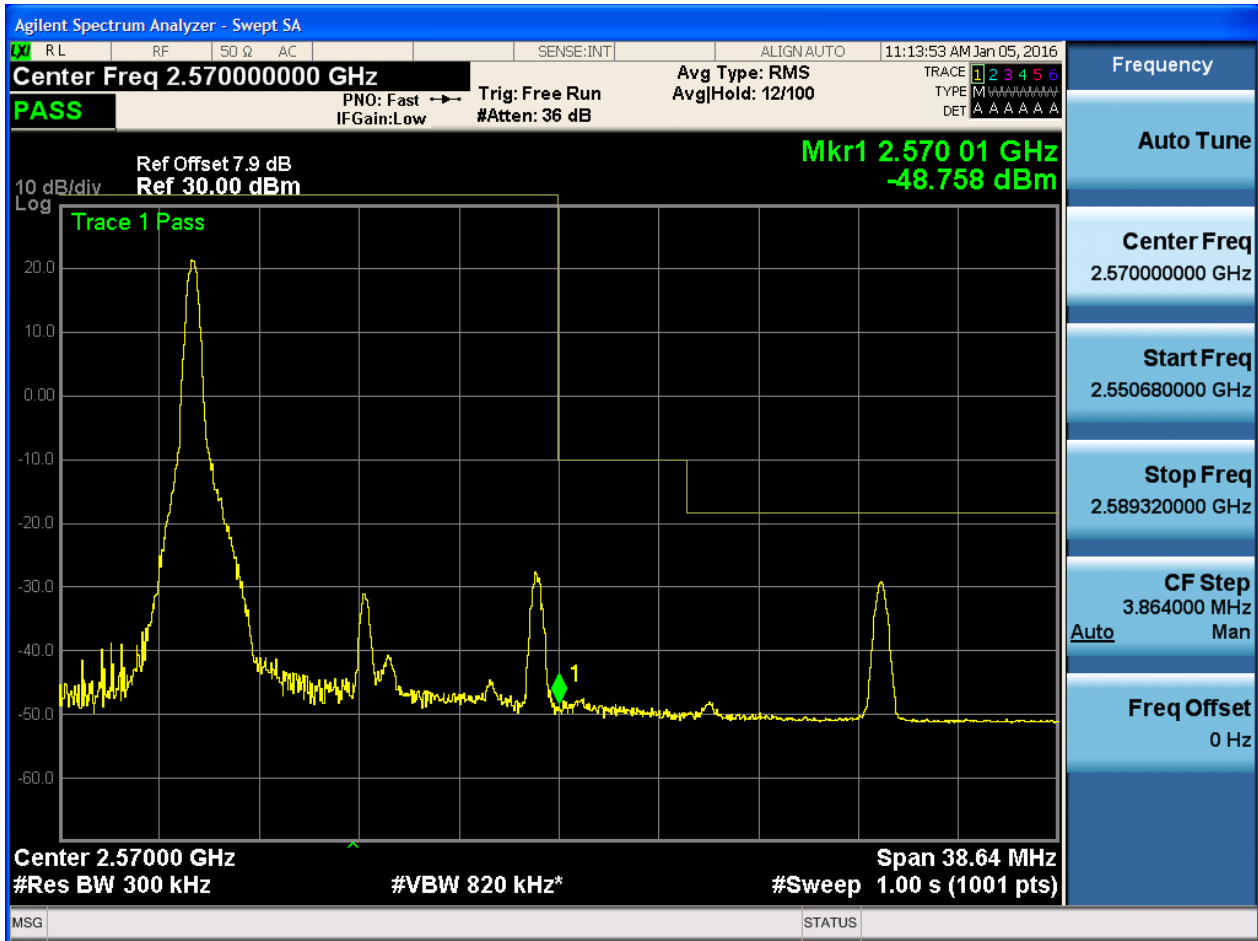


5.1.4.2.3.1.4 Test RB = RB75#0



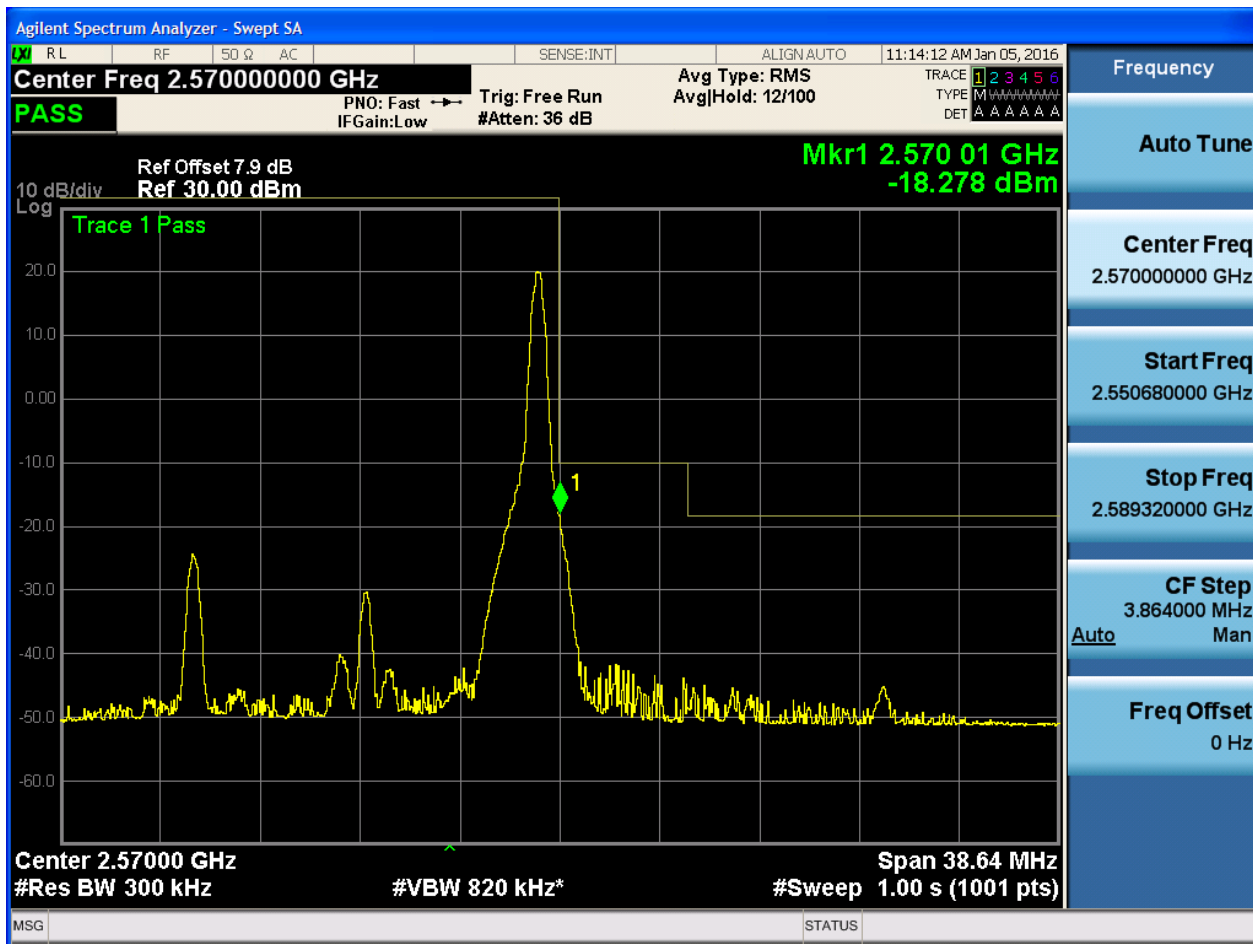


5.1.4.2.3.2.1 Test RB = RB1#0





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

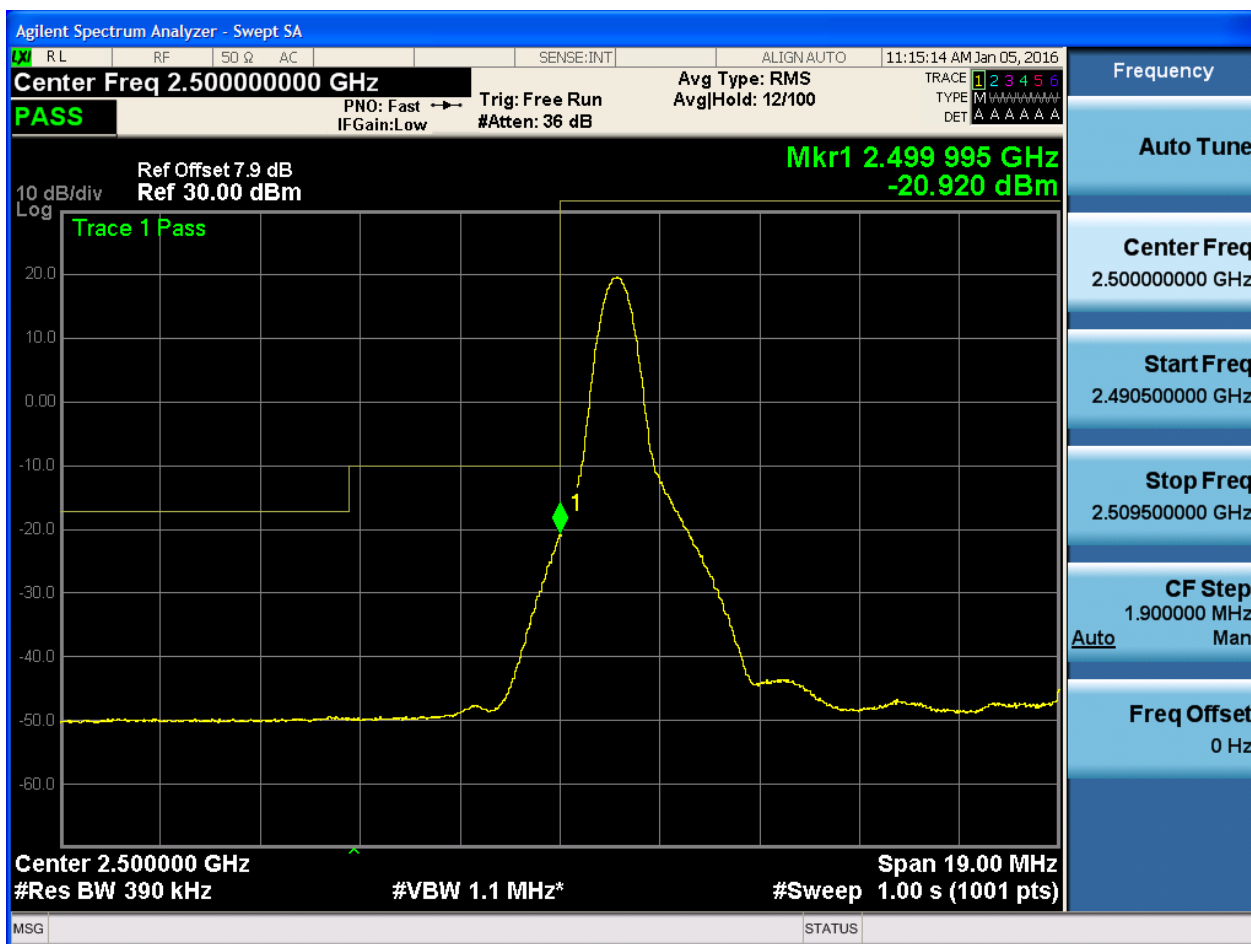




5.1.4.2.4 Test Bandwidth = 20

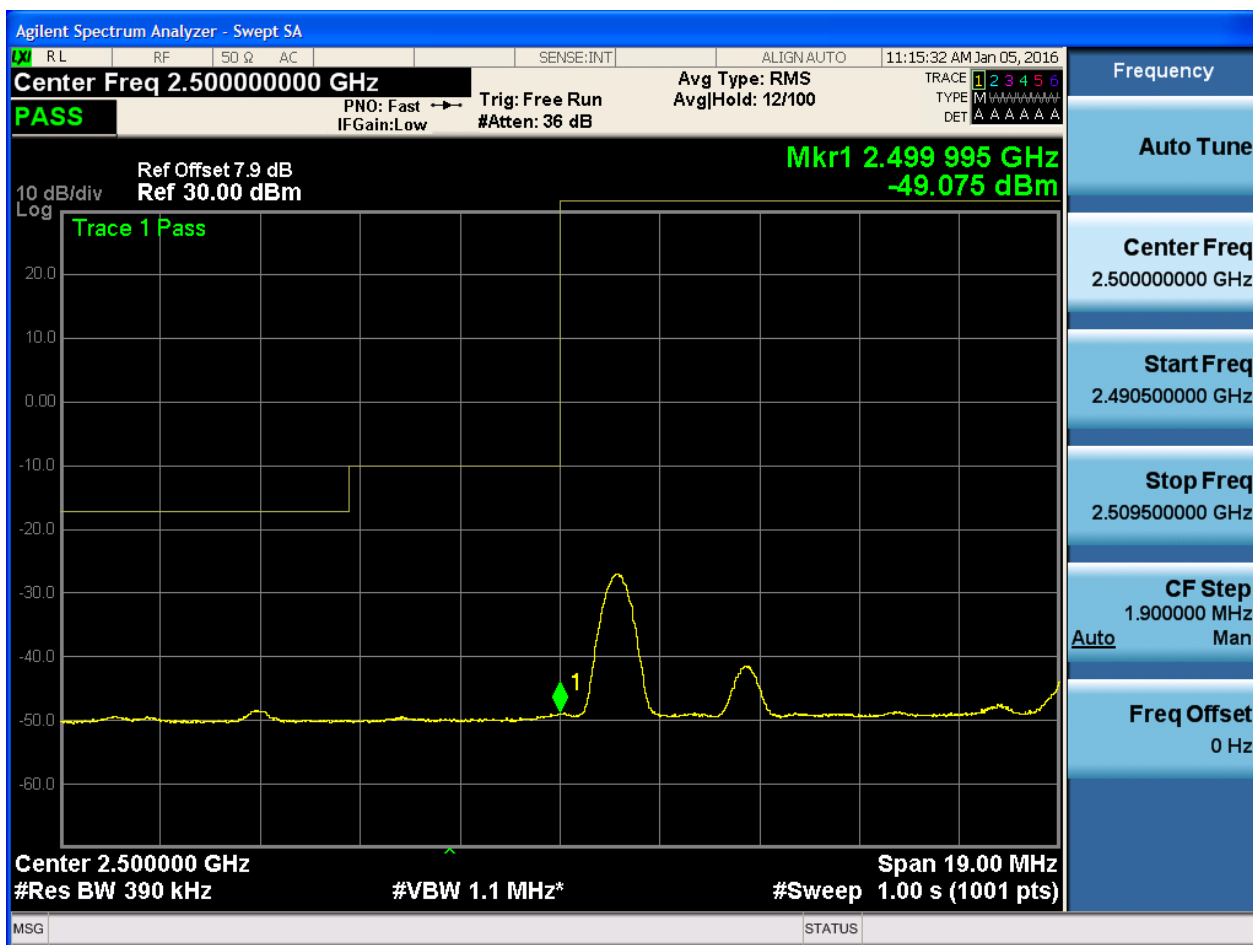
5.1.4.2.4.1 Test Channel = LCH

5.1.4.2.4.1.1 Test RB = RB1#0





5.1.4.2.4.1.2 Test RB = RB1#99



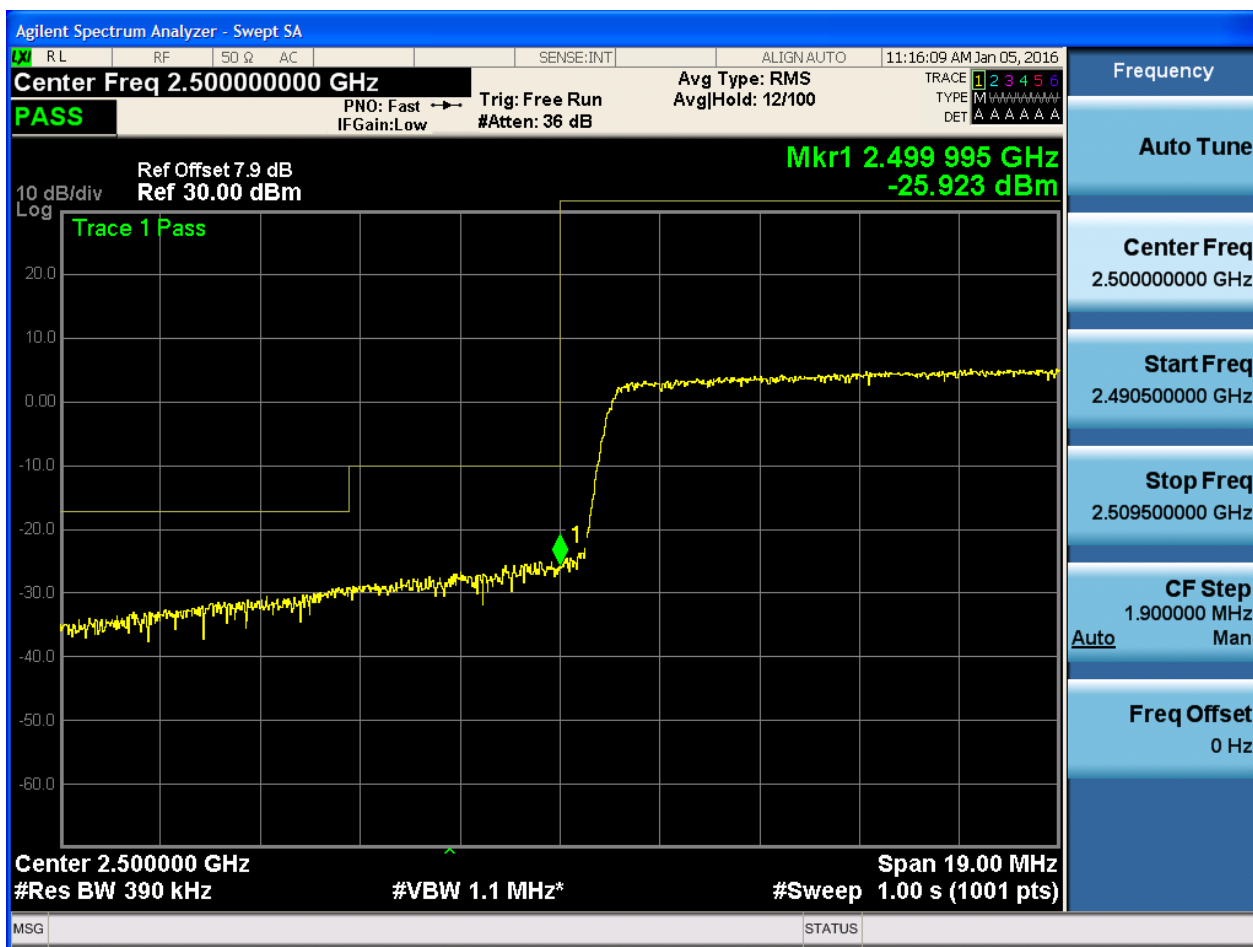


5.1.4.2.4.1.3 Test RB = RB50#25



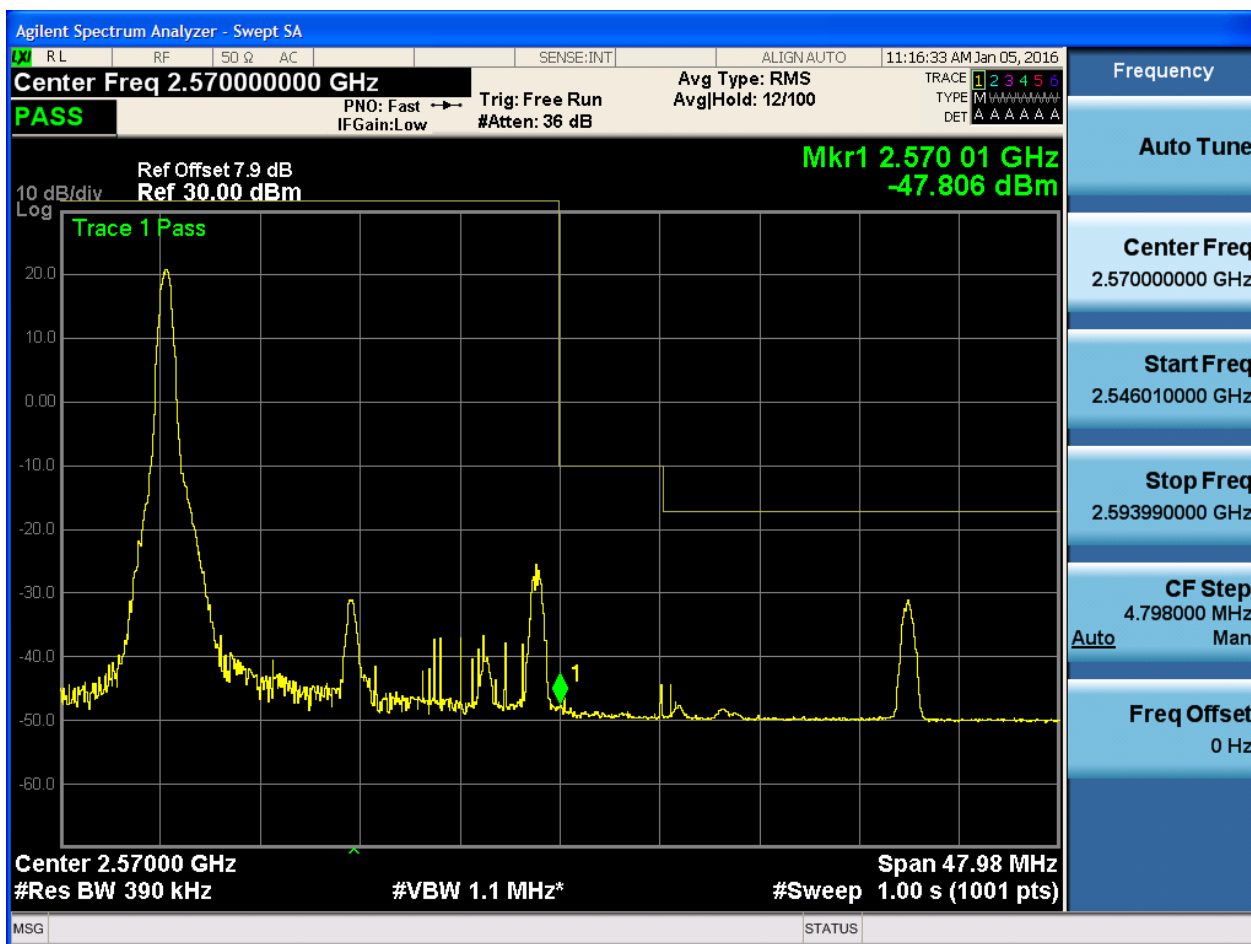


5.1.4.2.4.1.4 Test RB = RB100#0



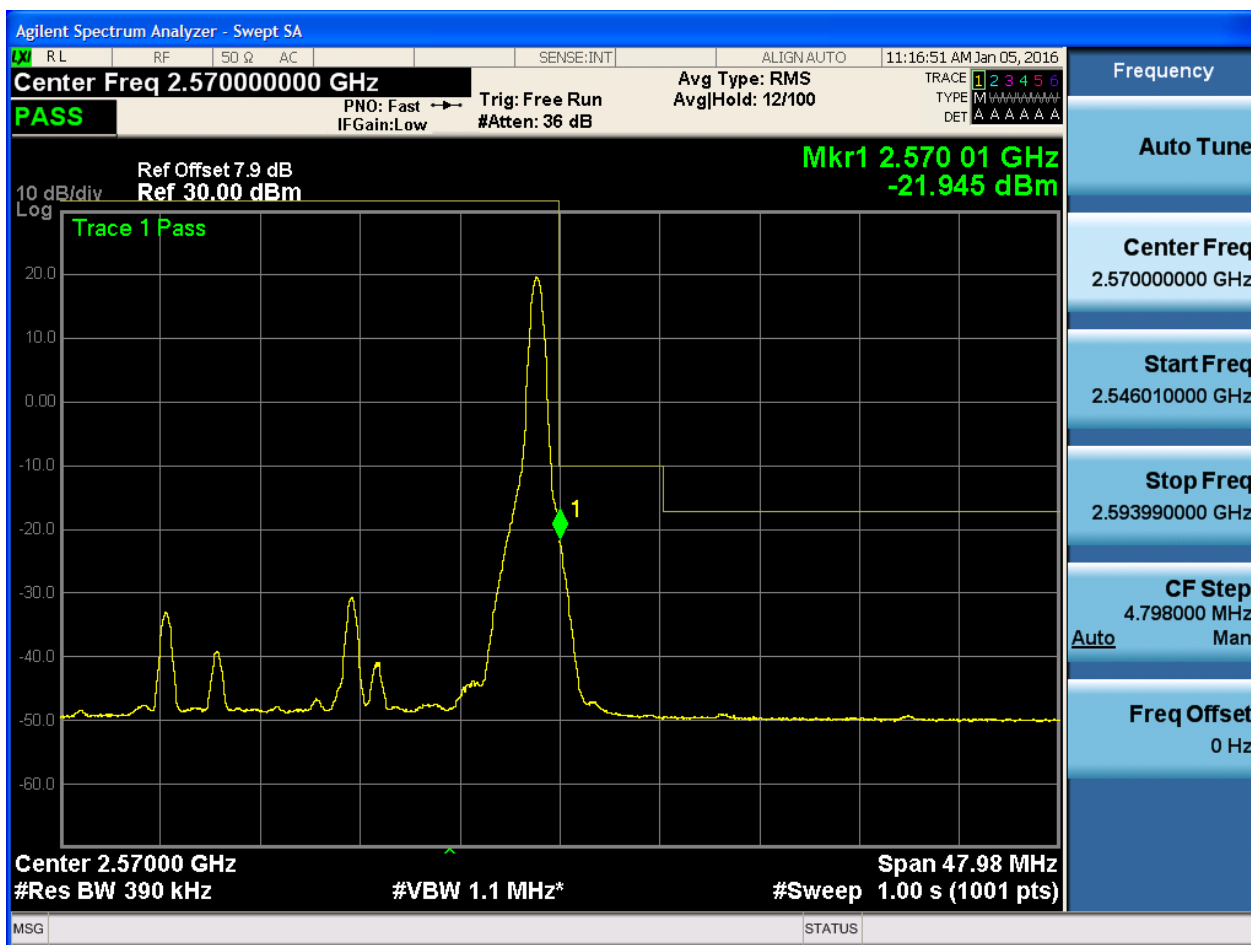
5.1.4.2.4.2 Test Channel = HCH

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

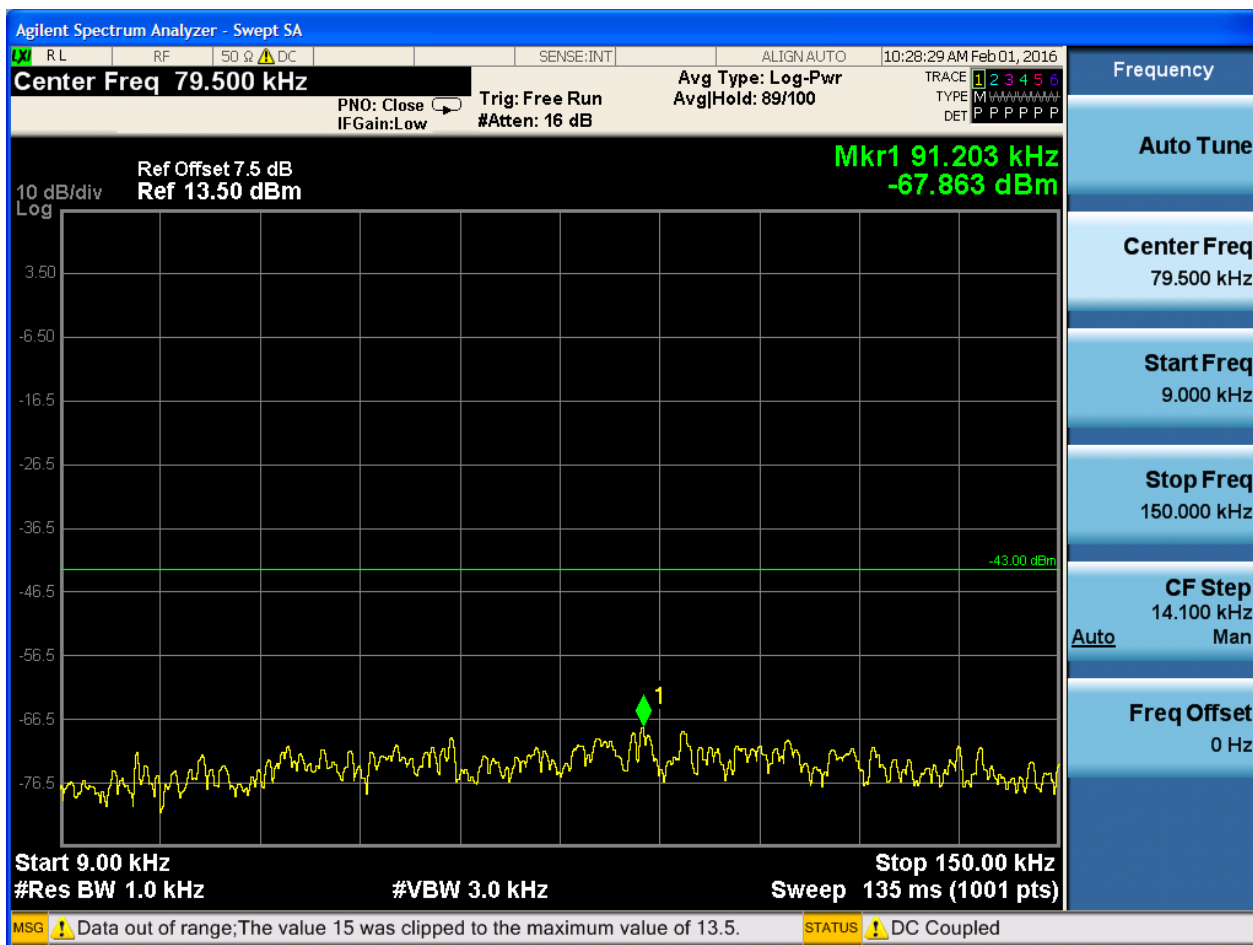
6.1.1 Test Band = BAND2

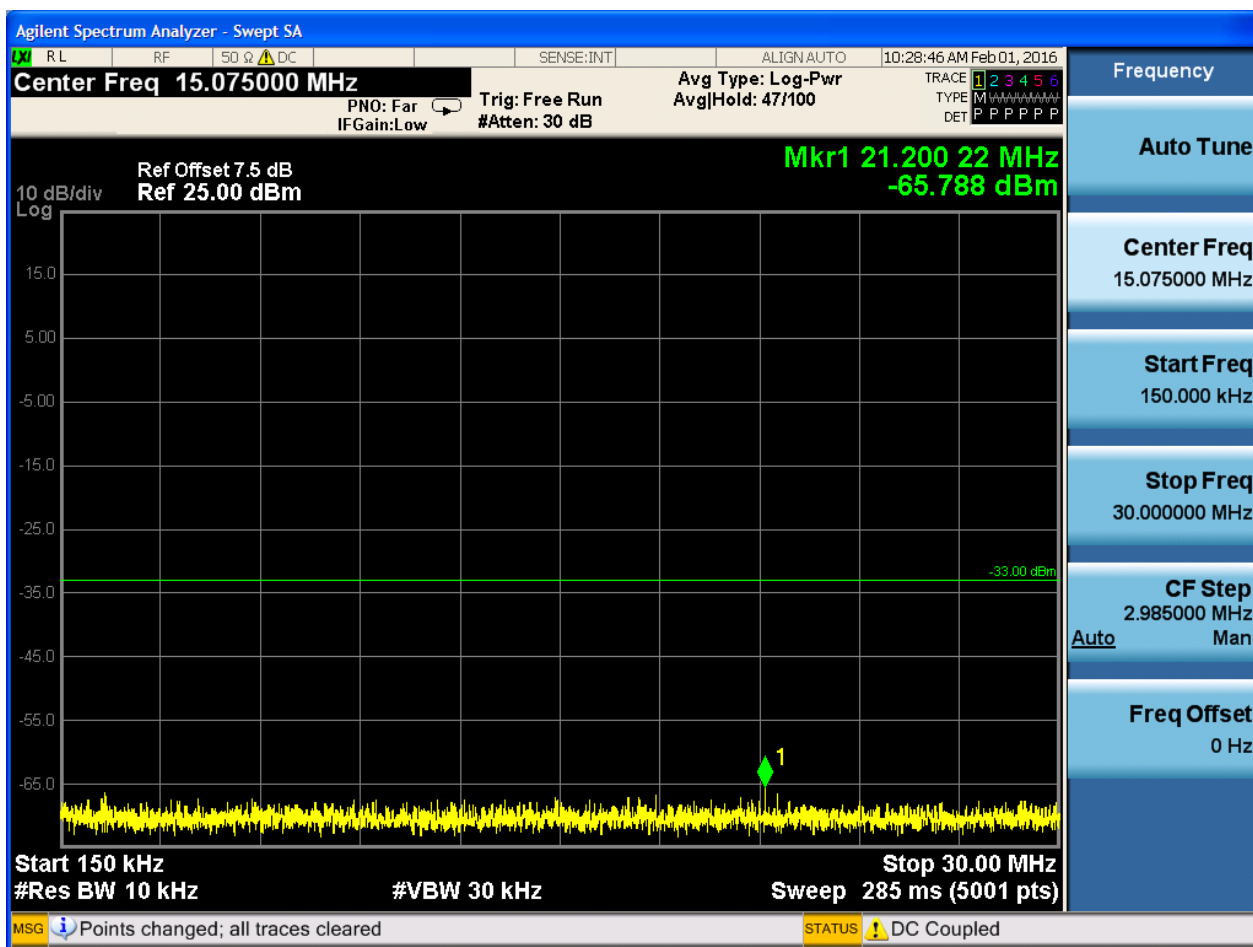
6.1.1.1 Test Mode = LTE/TM1

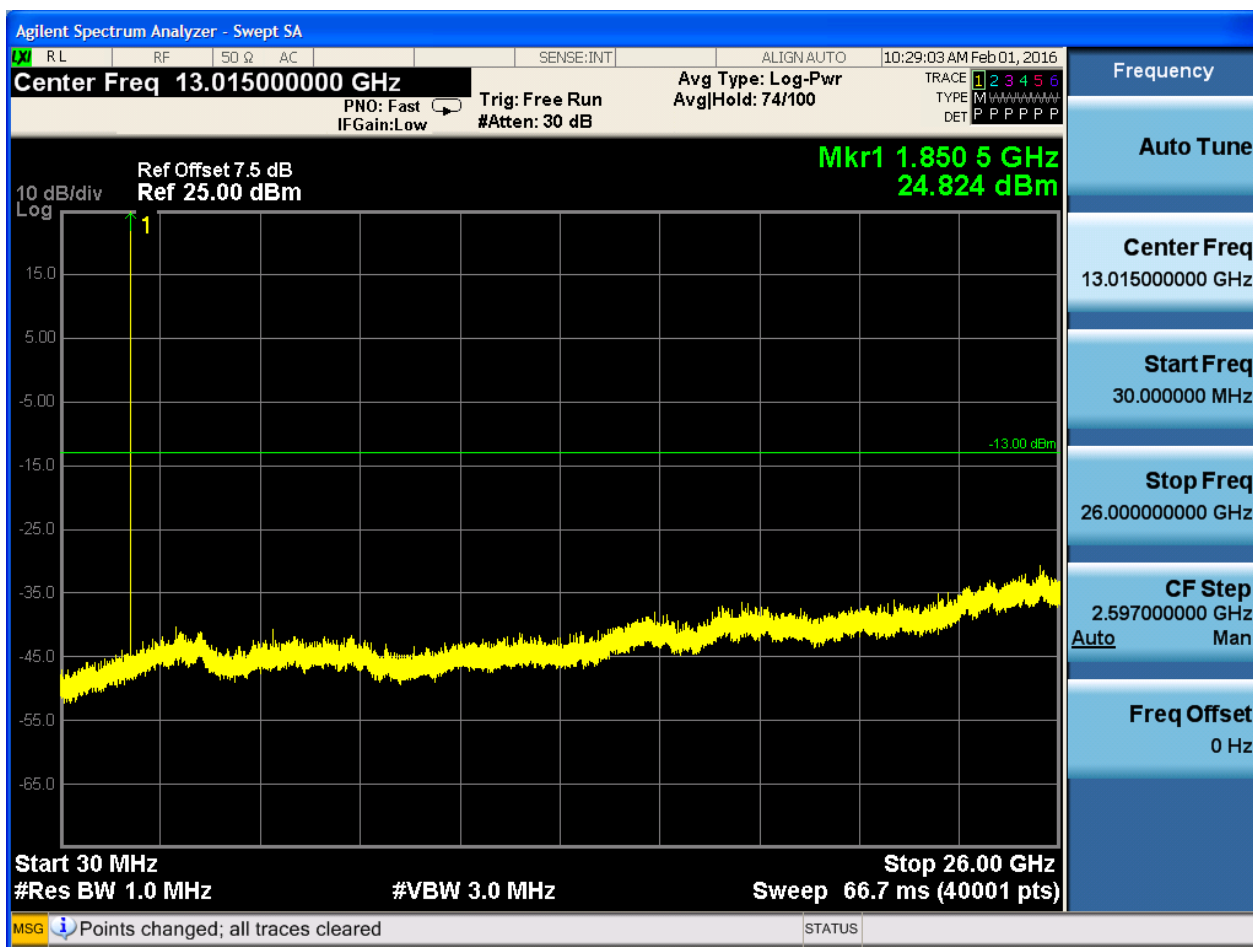
6.1.1.1.1 Test Bandwidth = 1.4

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



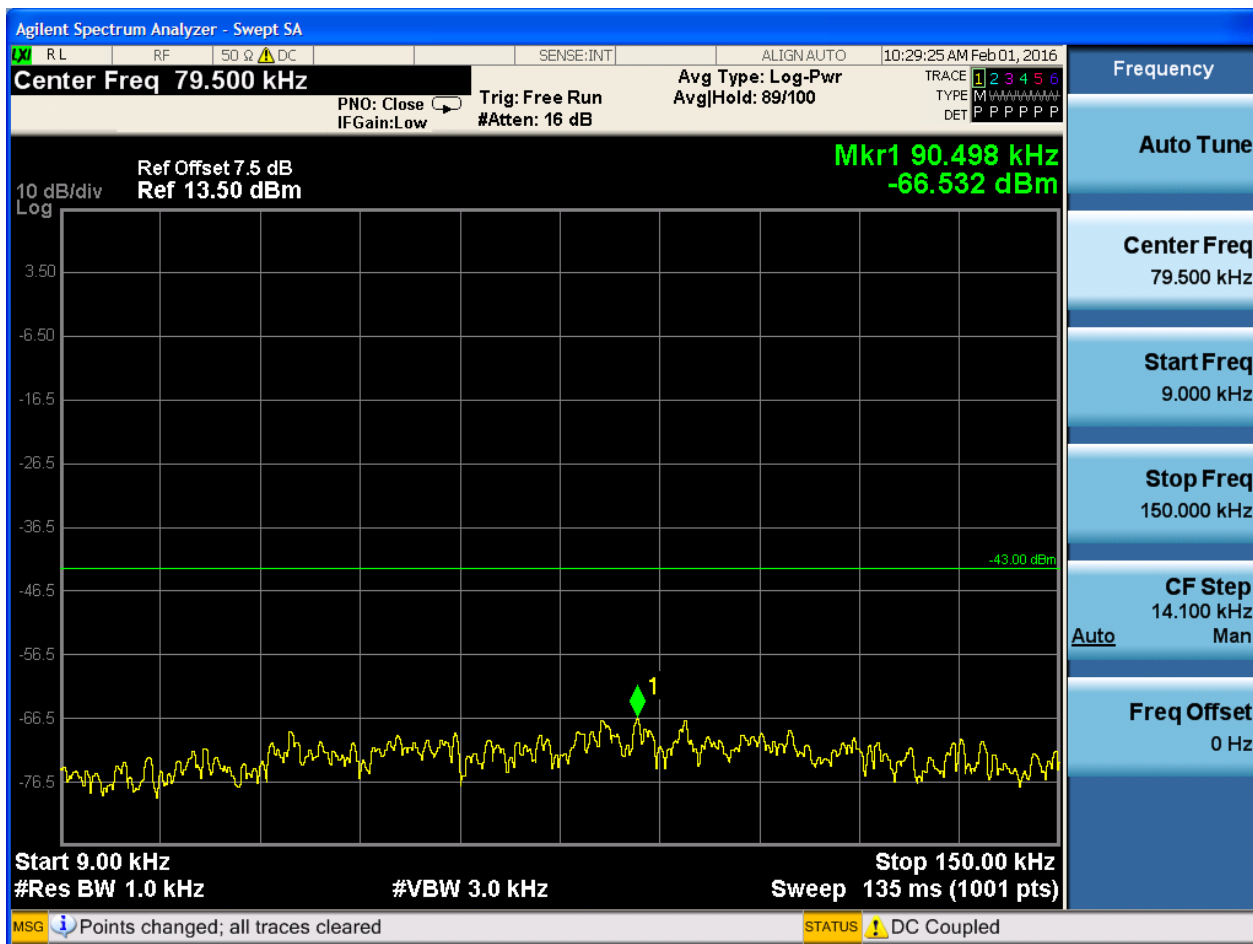


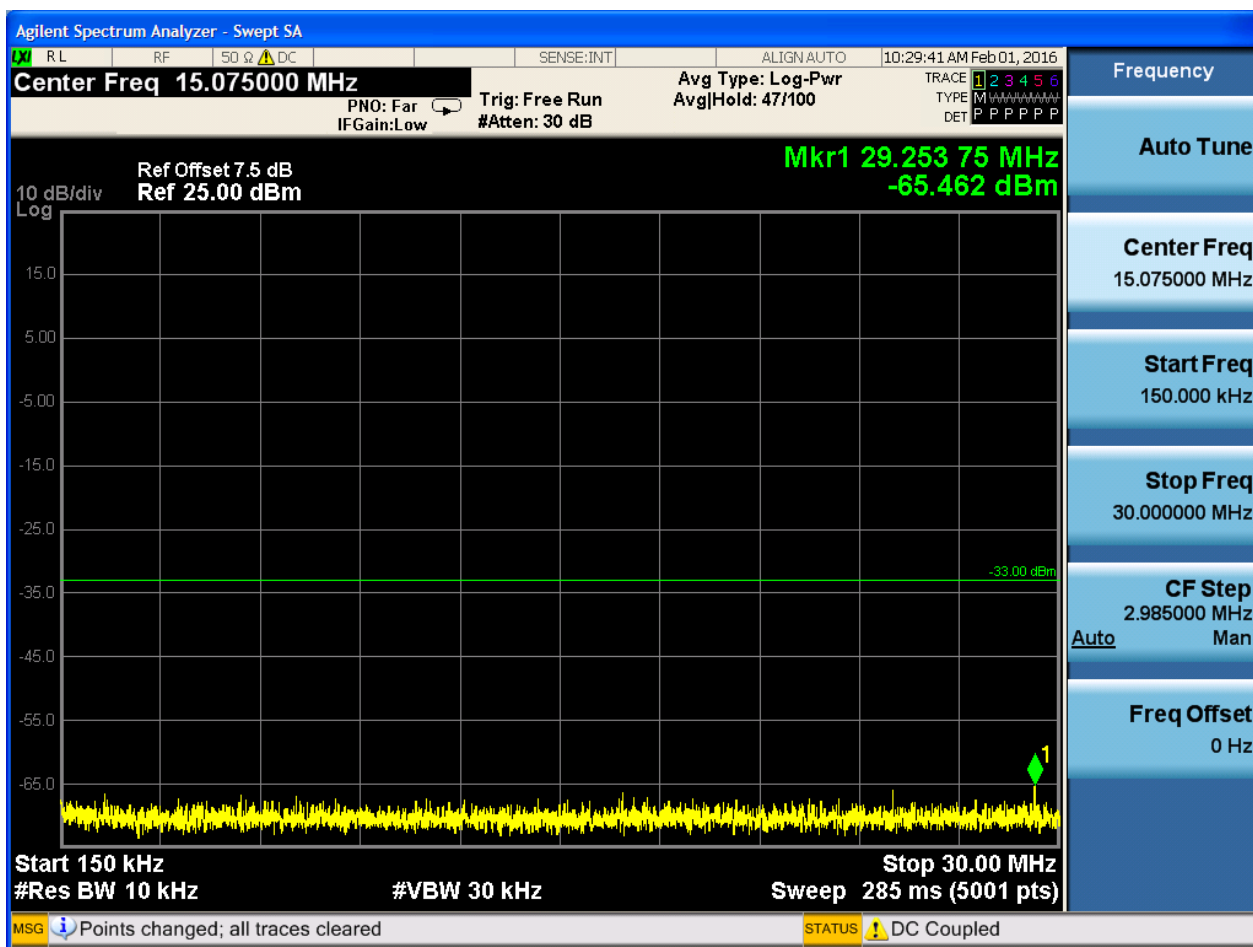


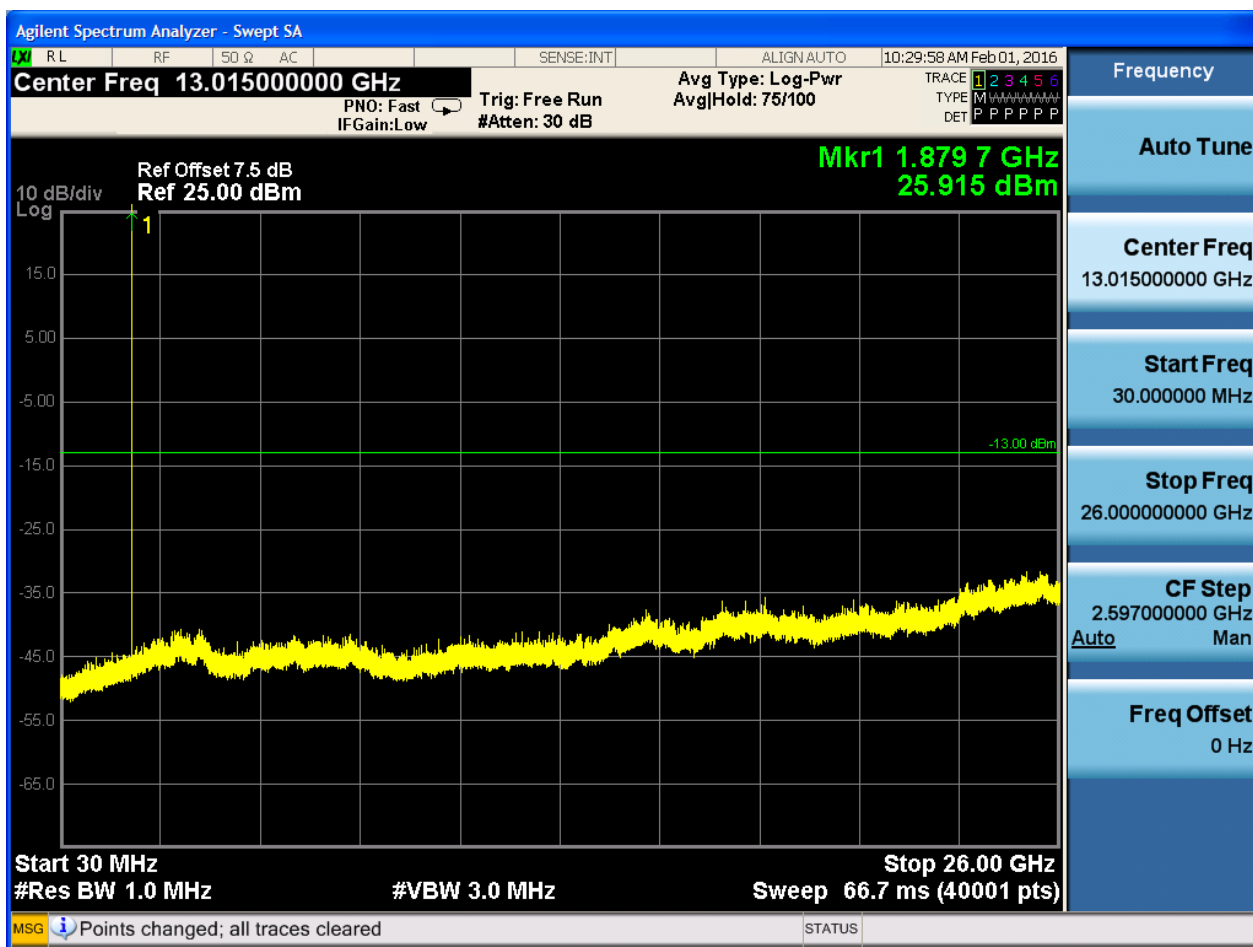


6.1.1.1.2 Test Channel = MCH

6.1.1.1.2.1 Test RB = RB1#0



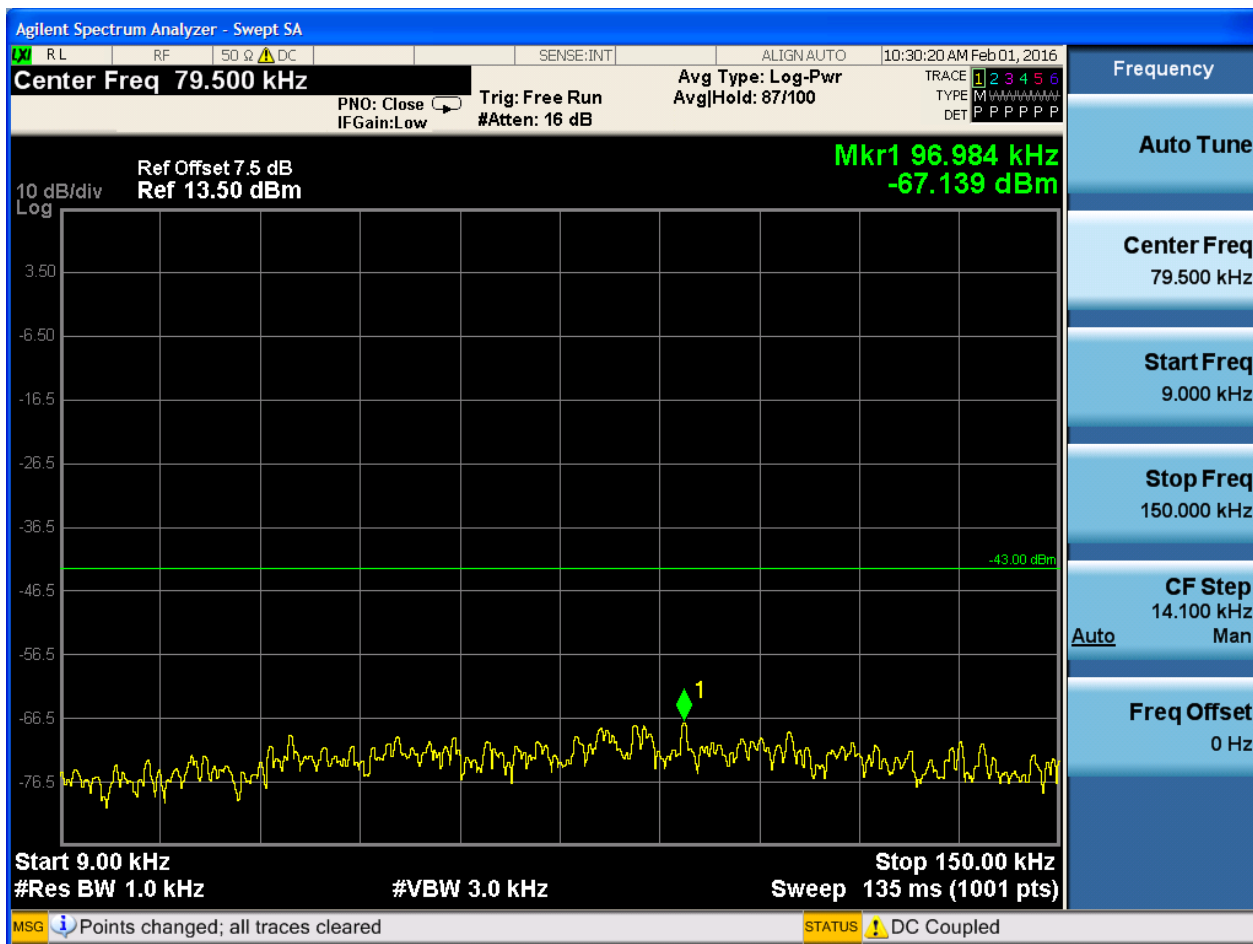


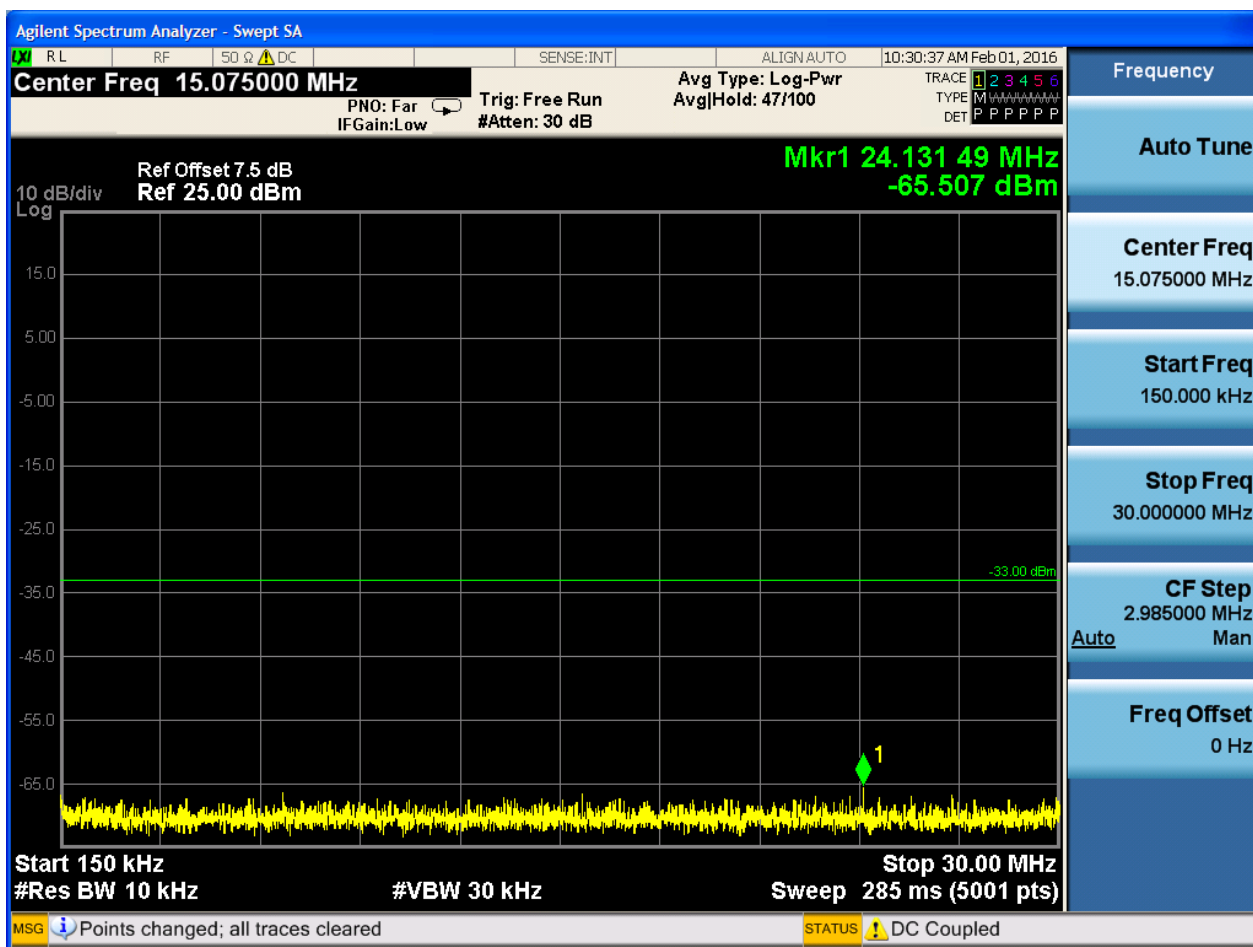


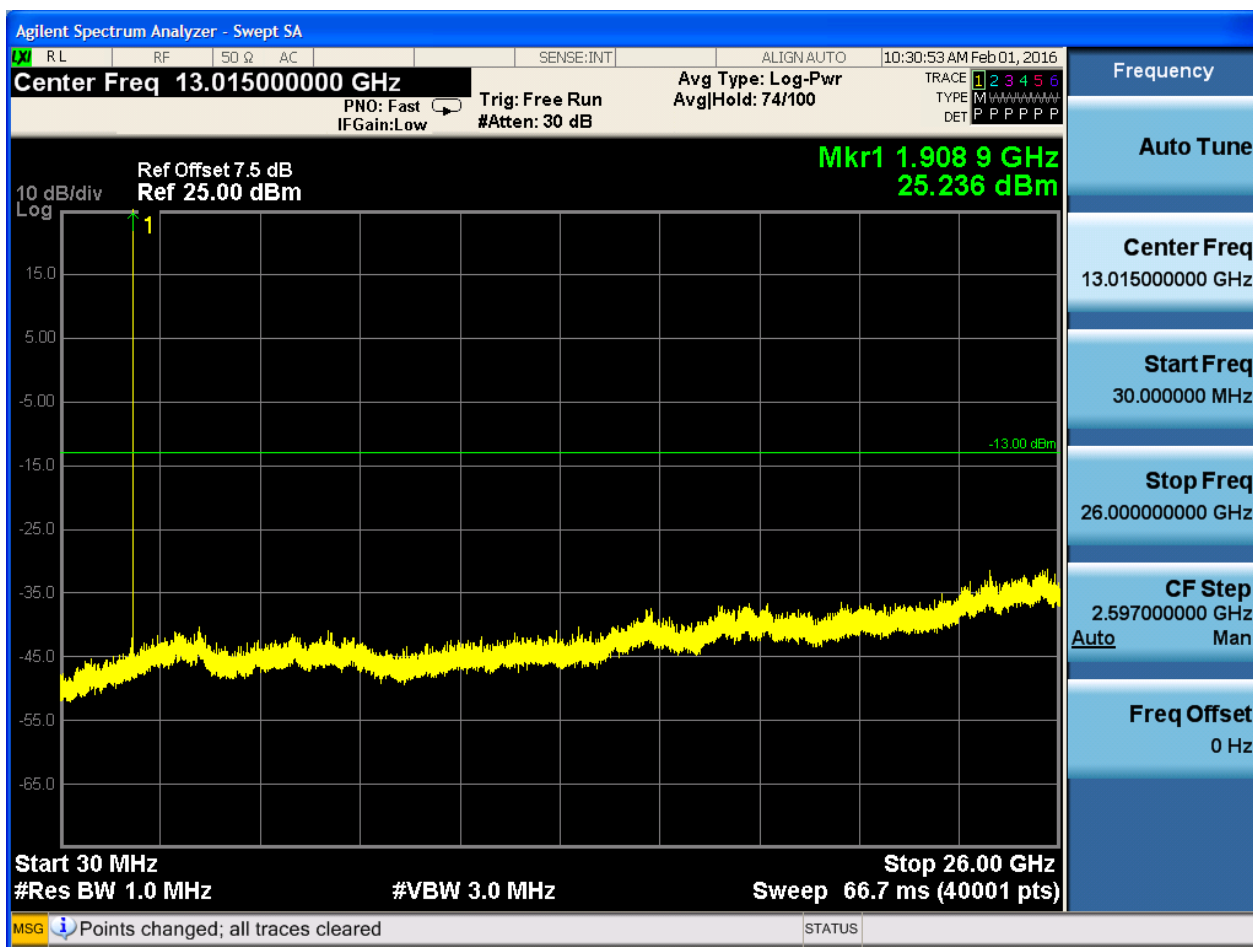


6.1.1.1.1.3 Test Channel = HCH

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

