



Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:03:56 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 10/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.910 060 GHz  
-32.280 dBm

10 dB/div  
Log

Center 1.910000 GHz  
#Res BW 51 kHz #VBW 150 kHz\* Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:04:12 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 10/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.910 000 GHz  
-26.995 dBm

10 dB/div  
Log

Center 1.910000 GHz  
#Res BW 51 kHz  
#VBW 150 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.910000000 GHz

Start Freq  
1.909000000 GHz

Stop Freq  
1.911000000 GHz

CF Step  
200.000 kHz  
Auto Man

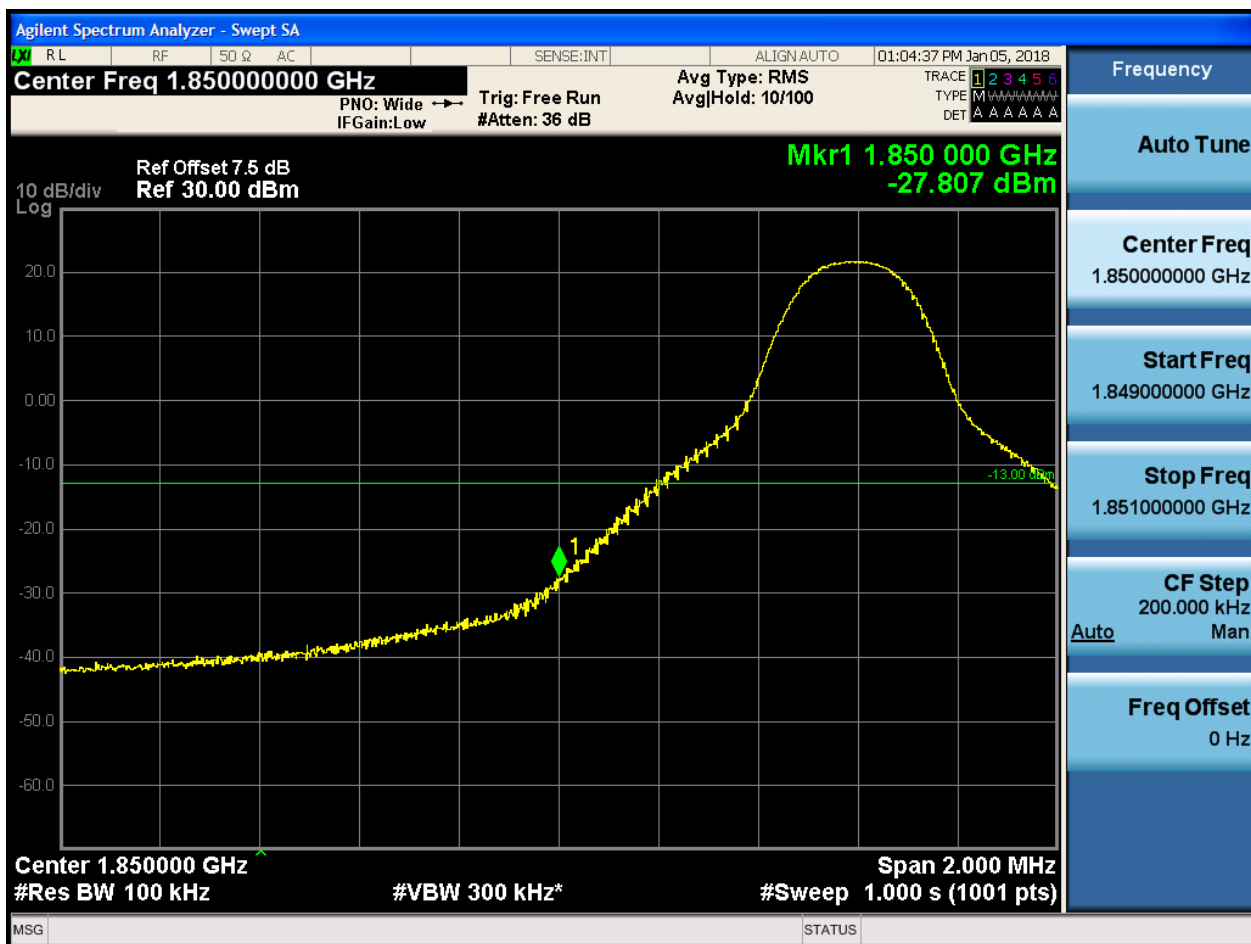
Freq Offset  
0 Hz



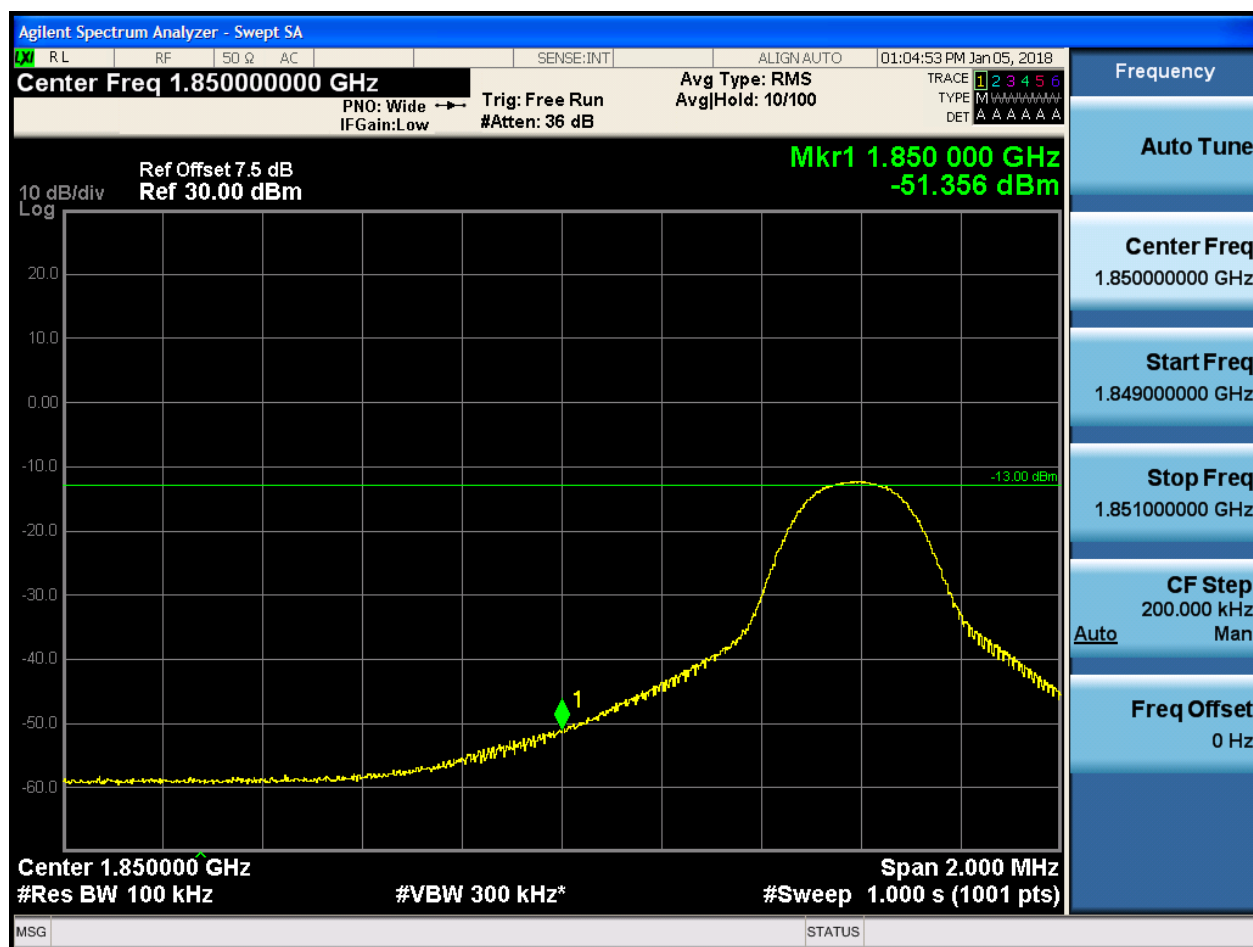
## 5.1.1.1.4 Test Bandwidth = 10

## 5.1.1.1.4.1 Test Channel = LCH

## 5.1.1.1.4.1.1 Test RB = RB1#0

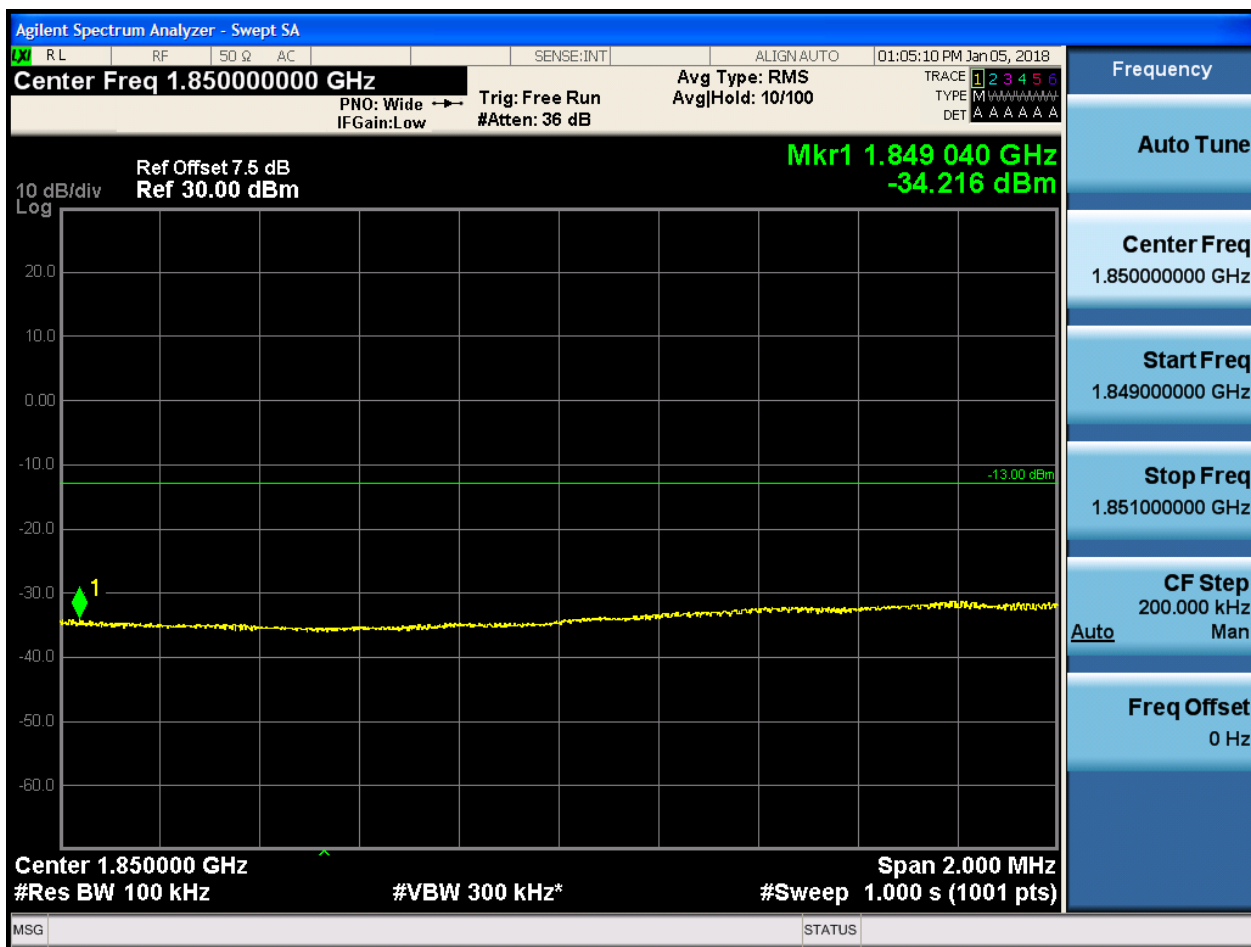


#### 5.1.1.1.4.1.2 Test RB = RB1#49





## 5.1.1.1.4.1.3 Test RB = RB25#13





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:05:27 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 10/100  
#Atten: 36 dB

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 1.850 000 GHz  
-31.397 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 100 kHz  
#VBW 300 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.850000000 GHz

Start Freq  
1.849000000 GHz

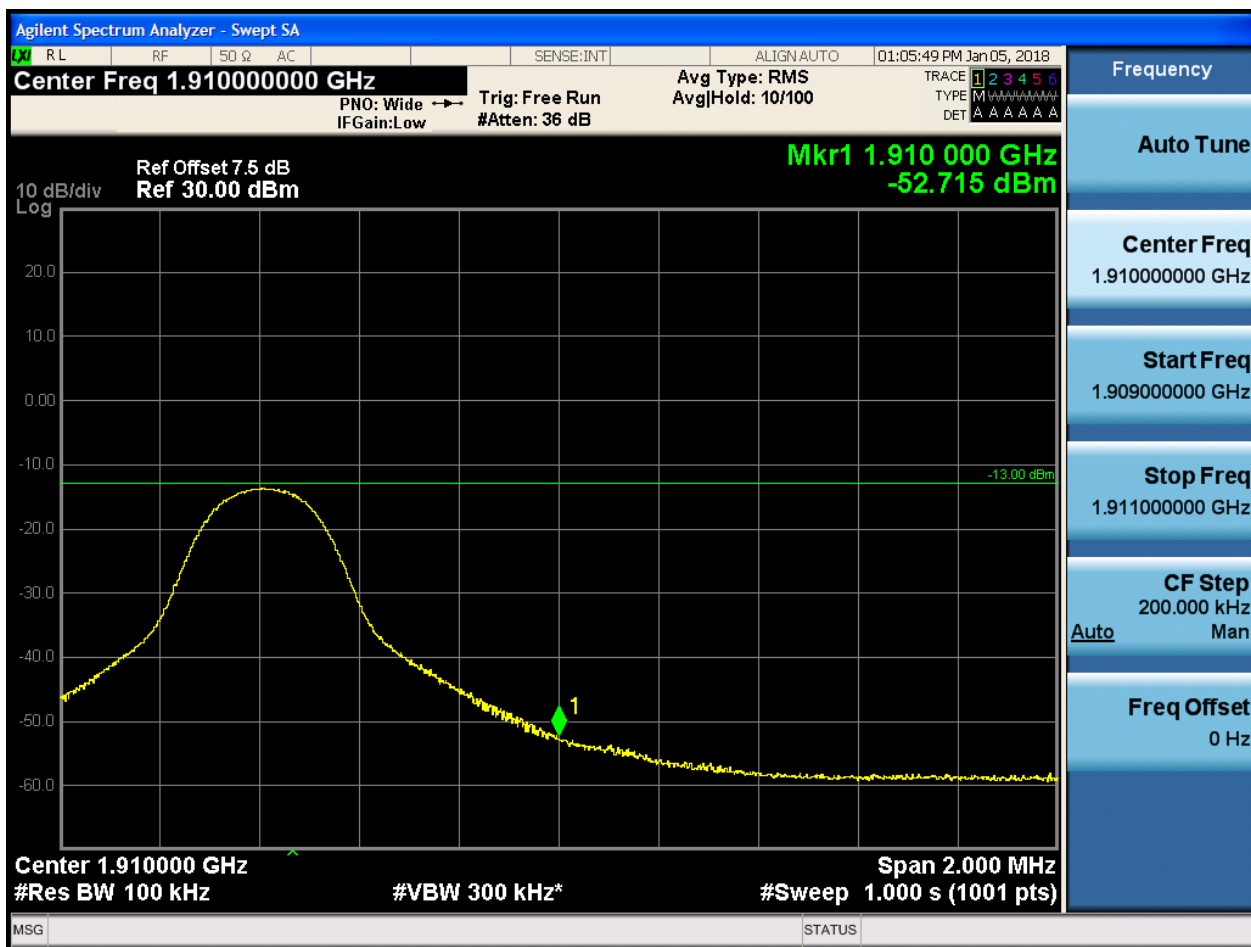
Stop Freq  
1.851000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz

#### 5.1.1.1.4.2 Test Channel = HCH

#### 5.1.1.1.4.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:06:05 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide → Trig: Free Run AvgHold: 10/100  
IFGain:Low #Atten: 36 dB

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 1.910 000 GHz  
-27.998 dBm

10 dB/div  
Log

Center 1.910000 GHz  
#Res BW 100 kHz  
#VBW 300 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.910000000 GHz

Start Freq  
1.909000000 GHz

Stop Freq  
1.911000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:06:22 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 10/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.910 000 GHz  
-32.438 dBm

10 dB/div  
Log

Center 1.910000 GHz  
#Res BW 100 kHz  
#VBW 300 kHz  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

#### 5.1.1.1.4.2.4 Test RB = RB50#0





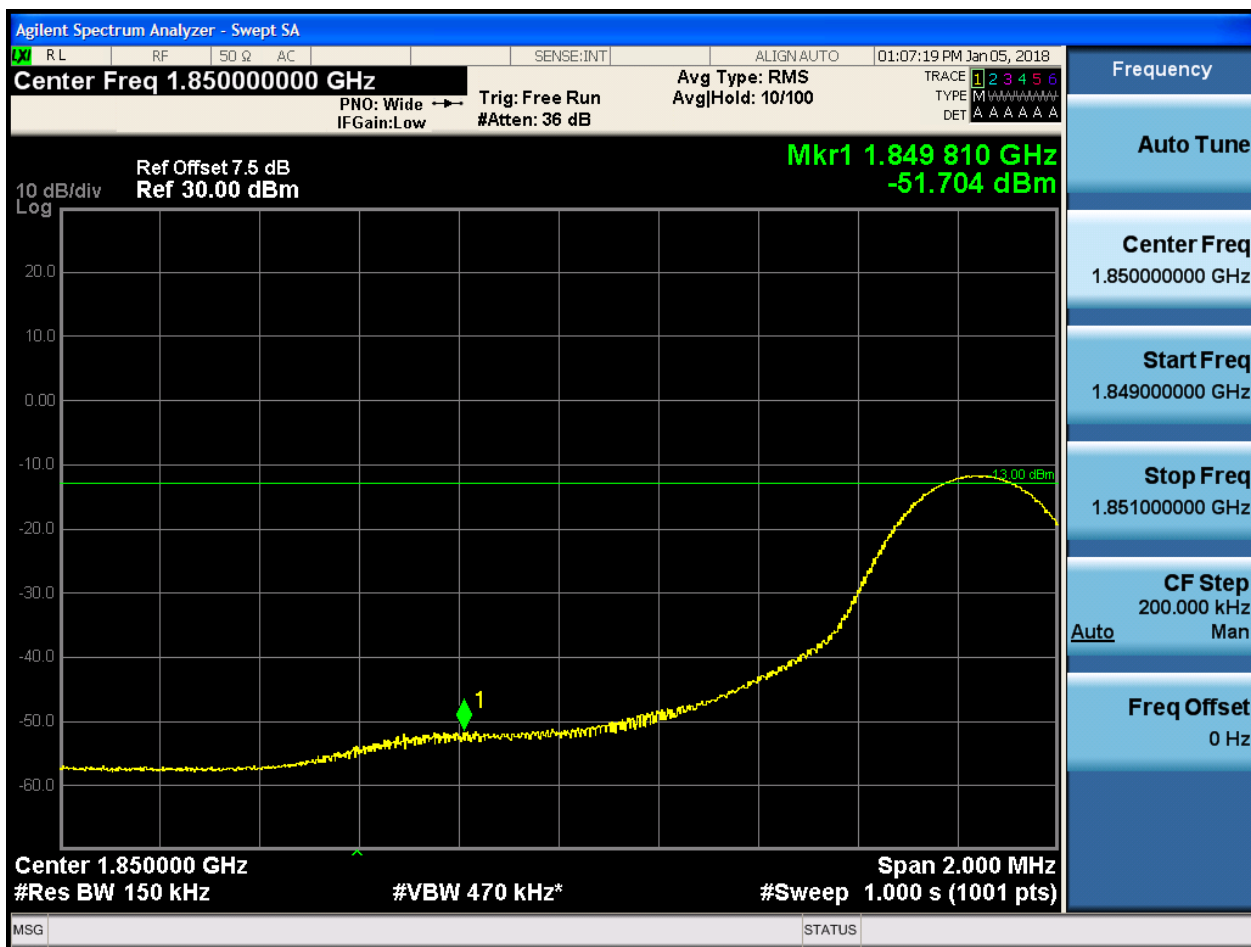
## 5.1.1.1.5 Test Bandwidth = 15

## 5.1.1.1.5.1 Test Channel = LCH

## 5.1.1.1.5.1.1 Test RB = RB1#0



#### 5.1.1.1.5.1.2 Test RB = RB1#74





## 5.1.1.1.5.1.3 Test RB = RB38#19





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:07:52 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 10/100  
#Atten: 36 dB

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 1.850 000 GHz  
-33.363 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 150 kHz  
#VBW 470 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.850000000 GHz

Start Freq  
1.849000000 GHz

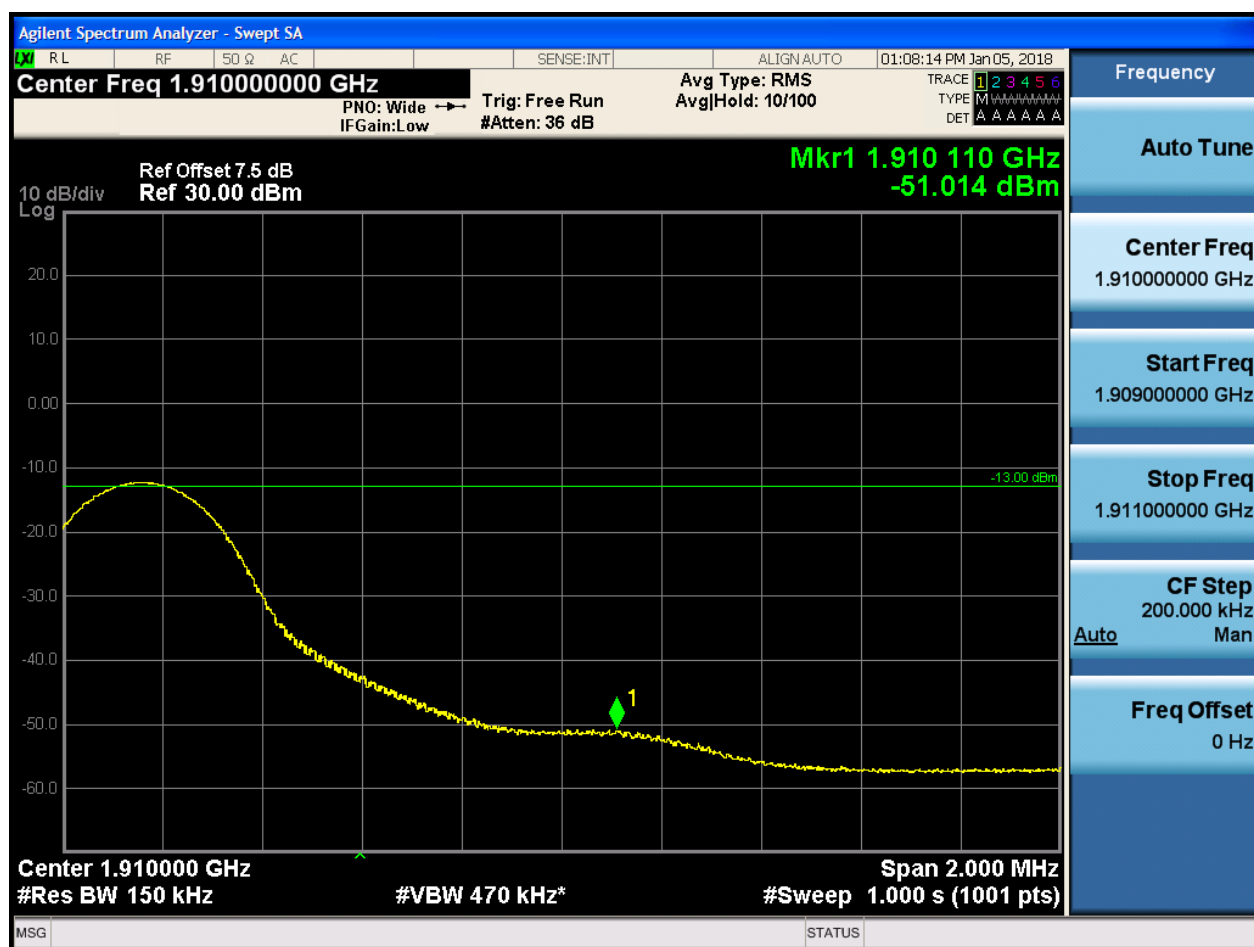
Stop Freq  
1.851000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz

#### 5.1.1.1.5.2 Test Channel = HCH

#### 5.1.1.1.5.2.1 Test RB = RB1#0



#### 5.1.1.1.5.2.2 Test RB = RB1#74







## 5.1.1.1.5.2.3 Test RB = RB38#19





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN: AUTO 01:09:04 PM Jan 05, 2018

Center Freq 1.91000000 GHz Avg Type: RMS  
PNO: Wide Trig: Free Run Avg|Hold: 10/100  
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 7.5 dB Mkr1 1.910 000 GHz  
Ref 30.00 dBm -32.618 dBm

10 dB/div Log

Center 1.91000 GHz Span 2.000 MHz  
#Res BW 150 kHz #VBW 470 kHz\* #Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.91000000 GHz

Start Freq  
1.90900000 GHz

Stop Freq  
1.91100000 GHz

CF Step  
200.000 kHz  
Auto Man

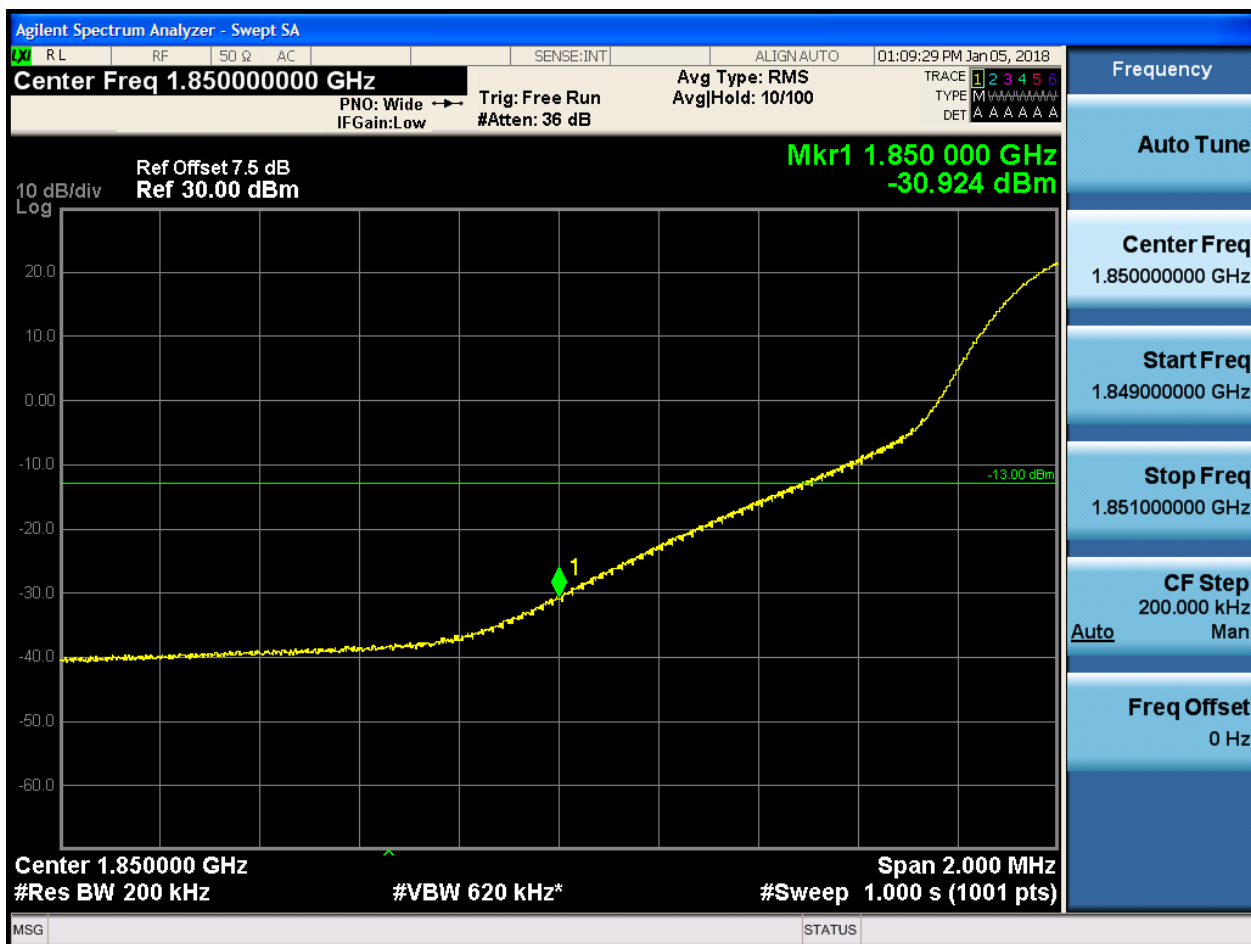
Freq Offset  
0 Hz



## 5.1.1.1.6 Test Bandwidth = 20

## 5.1.1.1.6.1 Test Channel = LCH

## 5.1.1.1.6.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:09:45 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide Trig: Free Run AvgHold: 8/100  
IFGain: Low #Atten: 36 dB

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 1.849 930 GHz  
-54.736 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 200 kHz  
#VBW 620 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG Alignment Completed STATUS

Frequency

Auto Tune

Center Freq  
1.850000000 GHz

Start Freq  
1.849000000 GHz

Stop Freq  
1.851000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN: AUTO 01:10:02 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 10/100  
#Atten: 36 dB

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 1.850 000 GHz  
-36.088 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 200 kHz  
#VBW 620 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.850000000 GHz

Start Freq  
1.849000000 GHz

Stop Freq  
1.851000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:10:18 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 10/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.850 000 GHz  
-34.330 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 200 kHz  
#VBW 620 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency  
Auto Tune  
Center Freq  
1.850000000 GHz  
Start Freq  
1.849000000 GHz  
Stop Freq  
1.851000000 GHz  
CF Step  
200.000 kHz  
Auto Man  
Freq Offset  
0 Hz



## 5.1.1.1.6.2 Test Channel = HCH

## 5.1.1.1.6.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:10:58 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide → Trig: Free Run AvgHold: 10/100  
IFGain:Low #Atten: 36 dB

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 1.910 000 GHz  
-30.922 dBm

10 dB/div  
Log

20.0  
10.0  
0.00  
-10.0  
-20.0  
-30.0  
-40.0  
-50.0  
-60.0

-13.00 dBm

1

Center 1.910000 GHz  
#Res BW 200 kHz

#VBW 620 kHz\*

Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency  
Auto Tune  
Center Freq  
1.910000000 GHz  
Start Freq  
1.909000000 GHz  
Stop Freq  
1.911000000 GHz  
CF Step  
200.000 kHz  
Auto Man  
Freq Offset  
0 Hz





## 5.1.1.1.6.2.3 Test RB = RB50#25





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:11:31 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 10/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.910 000 GHz  
-34.526 dBm

10 dB/div  
Log

20.0  
10.0  
0.00  
-10.0  
-20.0  
-30.0  
-40.0  
-50.0  
-60.0

-13.00 dBm

1

Center 1.910000 GHz  
#Res BW 200 kHz

Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

#VBW 620 kHz\*

Frequency

Auto Tune

Center Freq  
1.910000000 GHz

Start Freq  
1.909000000 GHz

Stop Freq  
1.911000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz

MSG STATUS

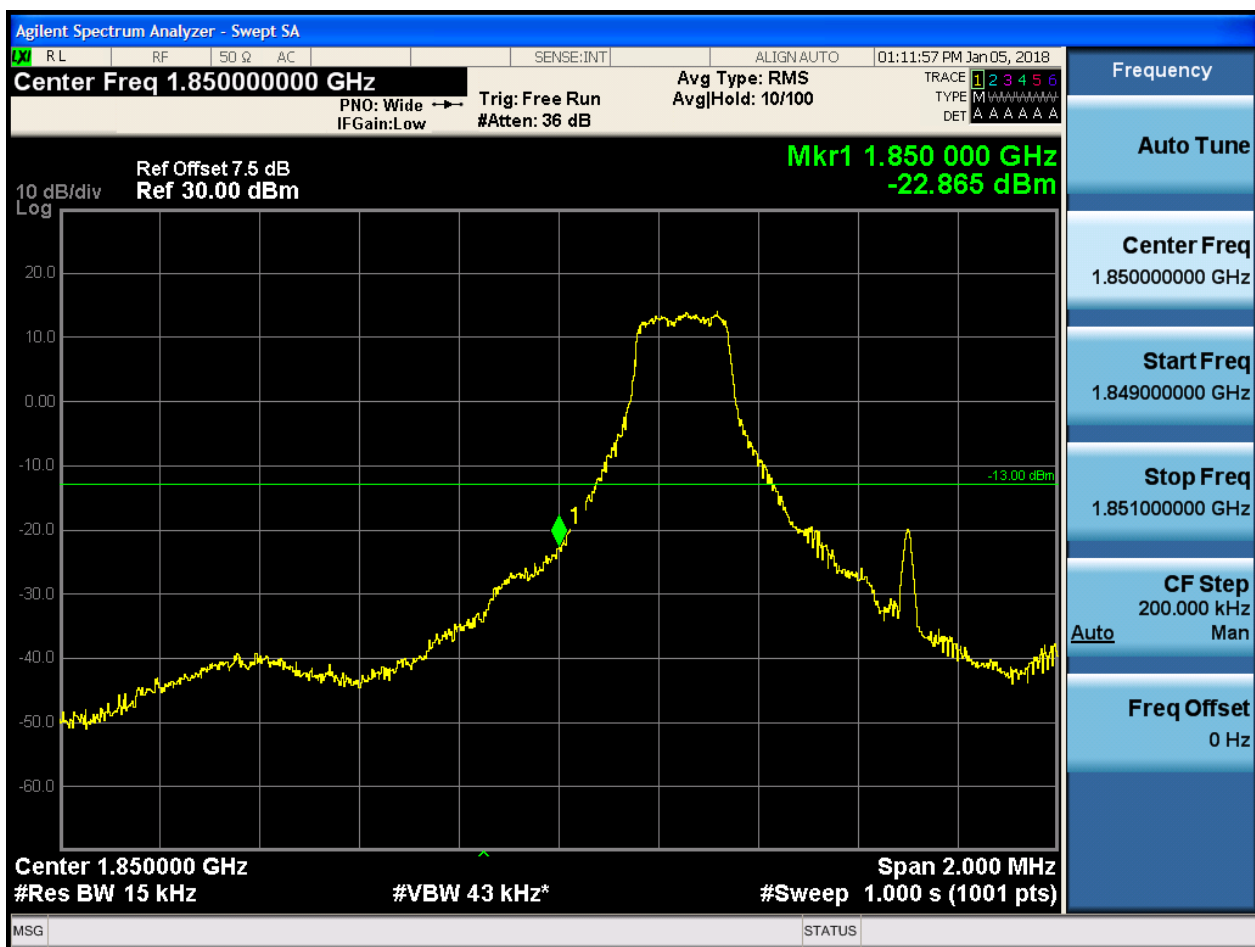


## 5.1.1.2 Test Mode = LTE/TM2

## 5.1.1.2.1 Test Bandwidth = 1.4

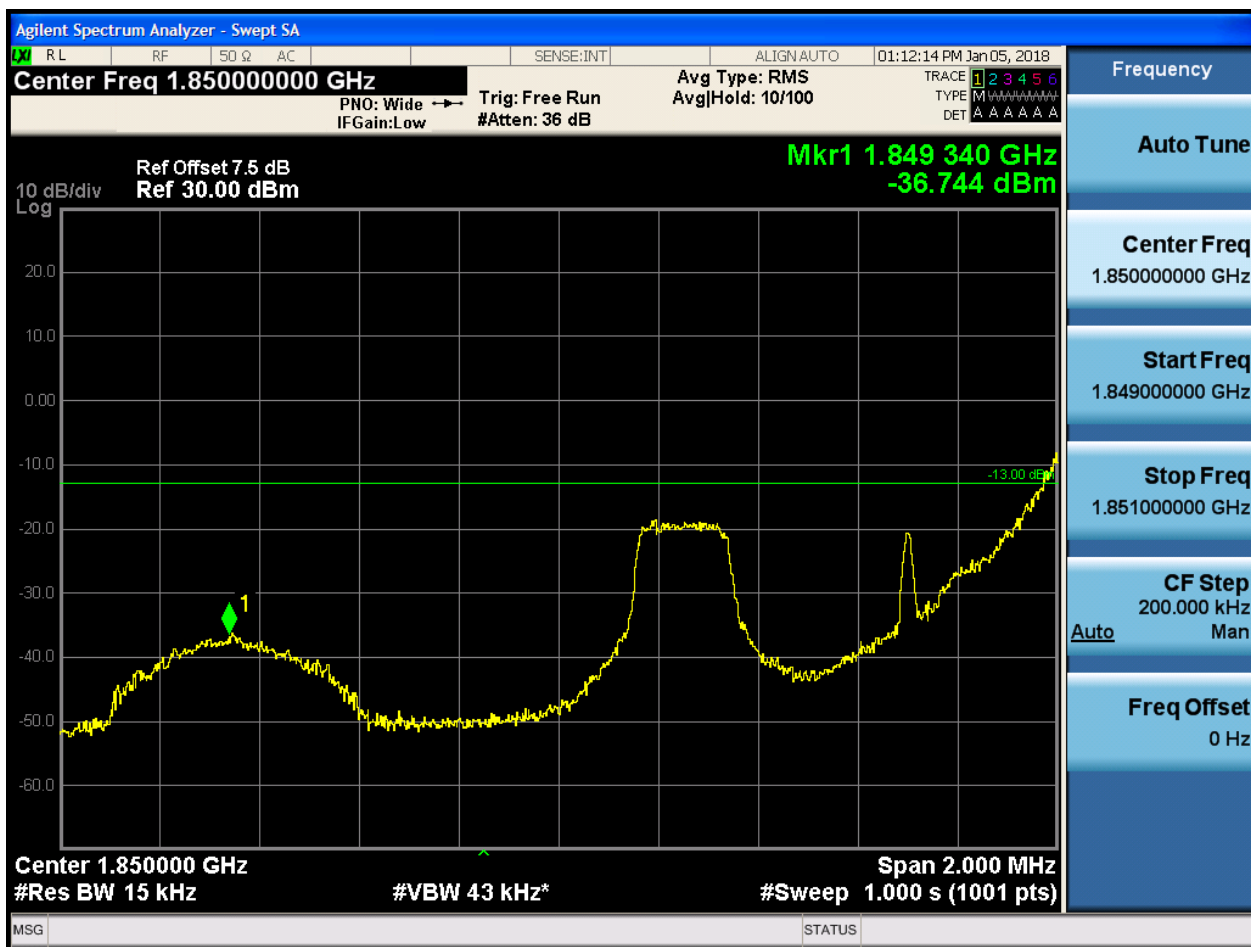
## 5.1.1.2.1.1 Test Channel = LCH

## 5.1.1.2.1.1.1 Test RB = RB1#0





## 5.1.1.2.1.2 Test RB = RB1#5





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:12:31 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 10/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.850 000 GHz  
-31.223 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 15 kHz  
#VBW 43 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.850000000 GHz

Start Freq  
1.849000000 GHz

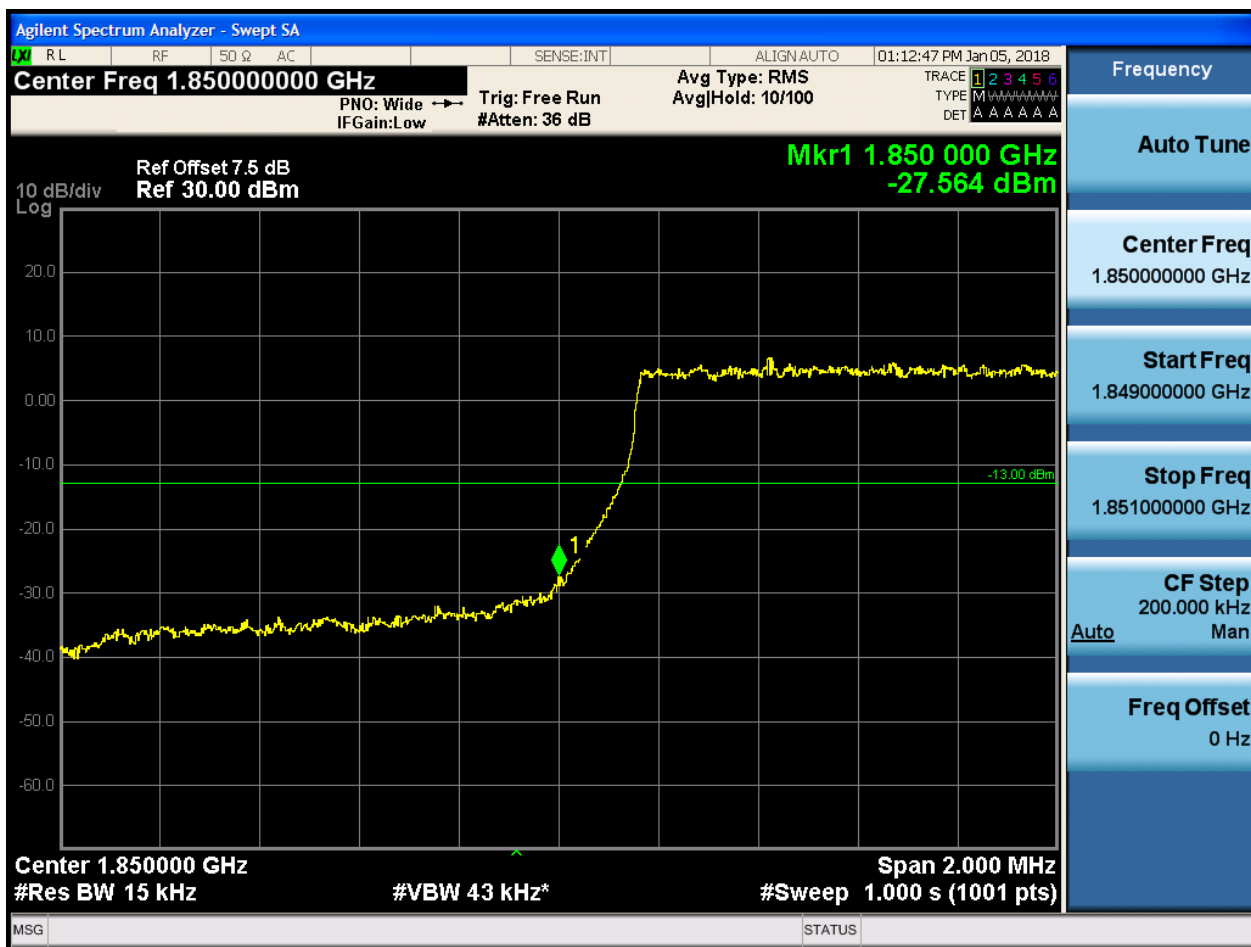
Stop Freq  
1.851000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz

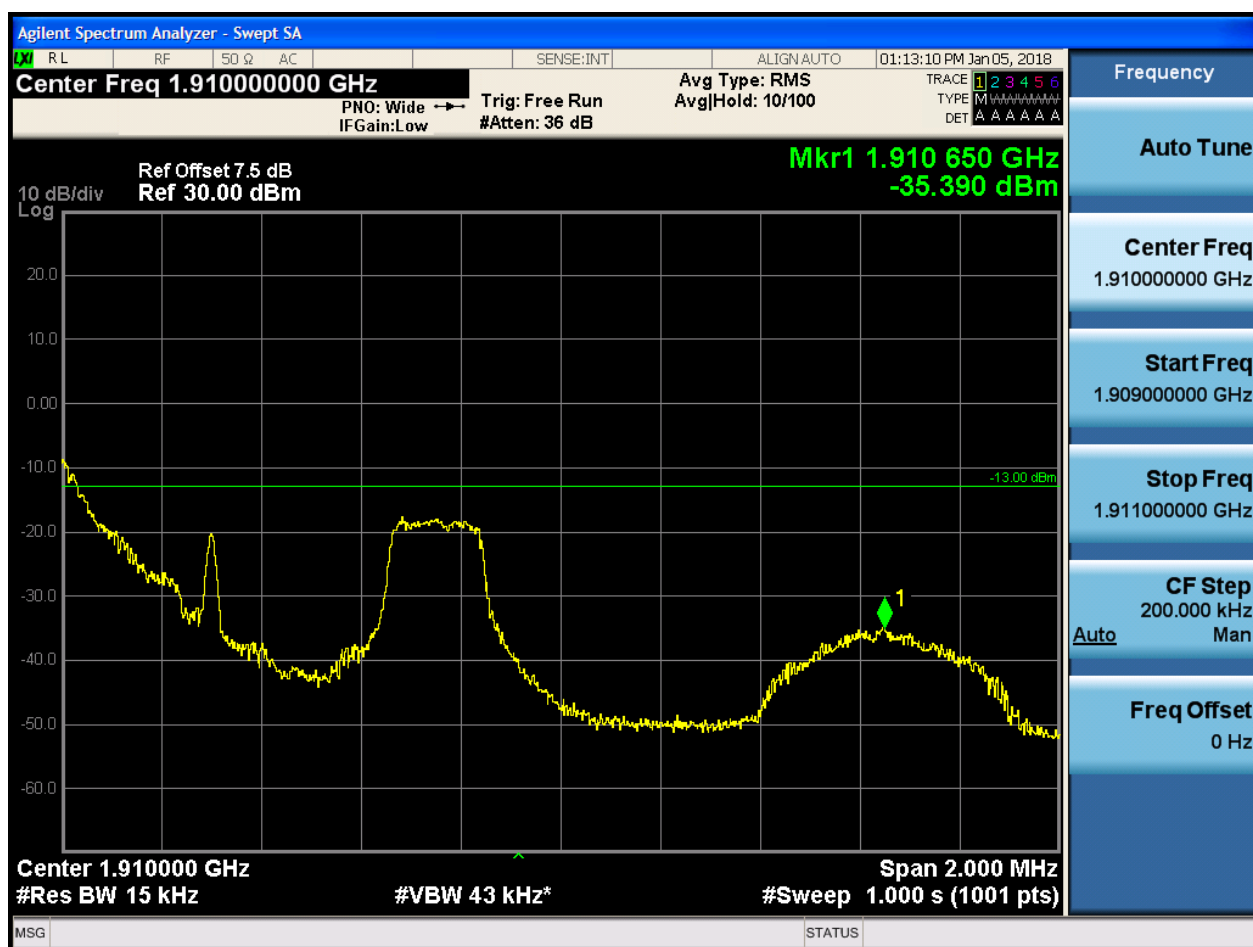


## 5.1.1.2.1.1.4 Test RB = RB6#0



#### 5.1.1.2.1.2 Test Channel = HCH

#### 5.1.1.2.1.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:13:26 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 10/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.910 010 GHz  
-23.722 dBm

10 dB/div  
Log

Center 1.910000 GHz  
#Res BW 15 kHz  
#VBW 43 kHz  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.910000000 GHz

Start Freq  
1.909000000 GHz

Stop Freq  
1.911000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:13:43 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide Trig: Free Run  
IFGain:Low #Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.910 010 GHz  
-24.334 dBm

10 dB/div  
Log

Center Freq 1.910000000 GHz  
Start Freq 1.909000000 GHz  
Stop Freq 1.911000000 GHz  
CF Step 200.000 kHz  
Auto Man  
Freq Offset 0 Hz

Center 1.910000 GHz  
#Res BW 15 kHz  
#VBW 43 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

#### 5.1.1.2.1.2.4 Test RB = RB6#0

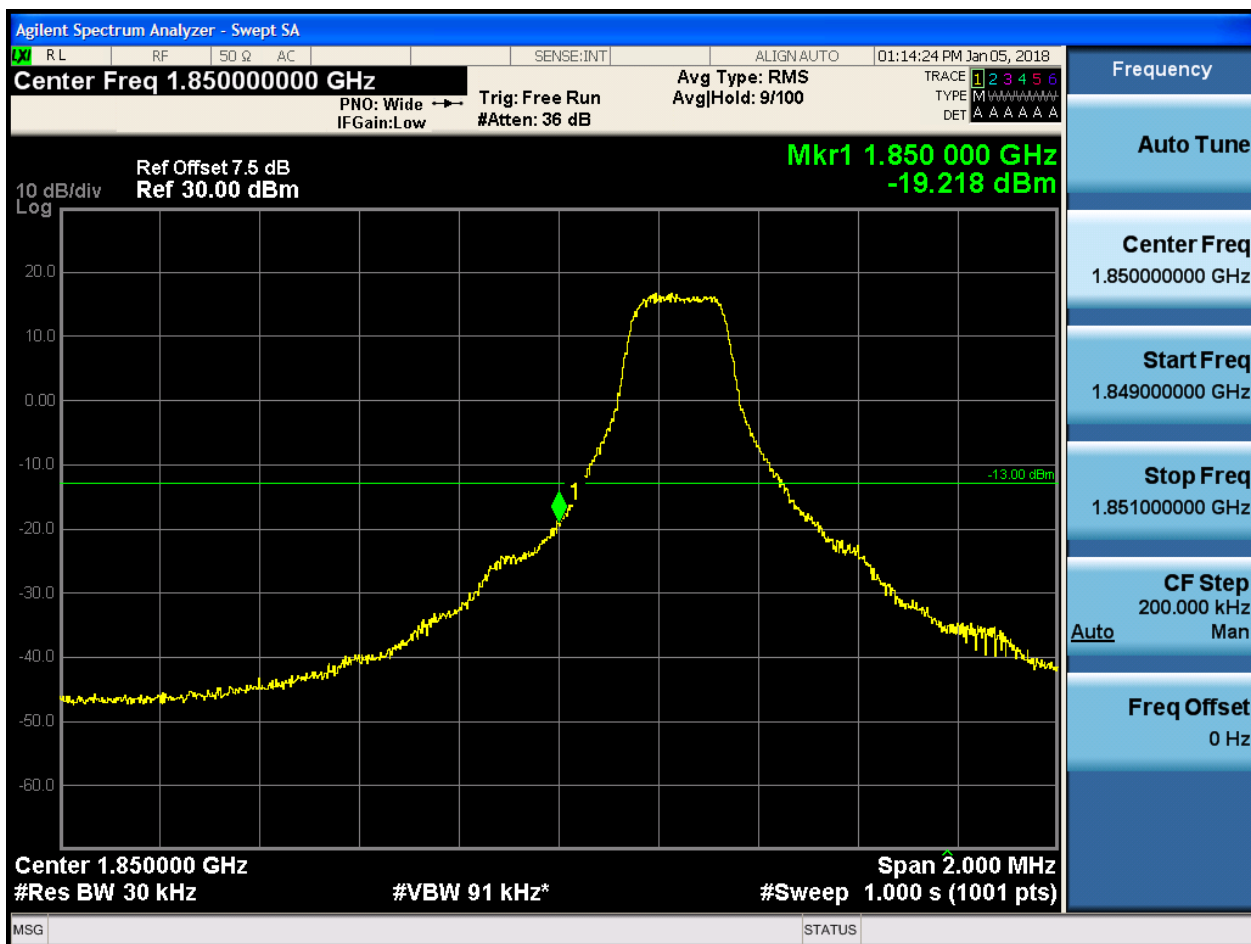




## 5.1.1.2.2 Test Bandwidth = 3

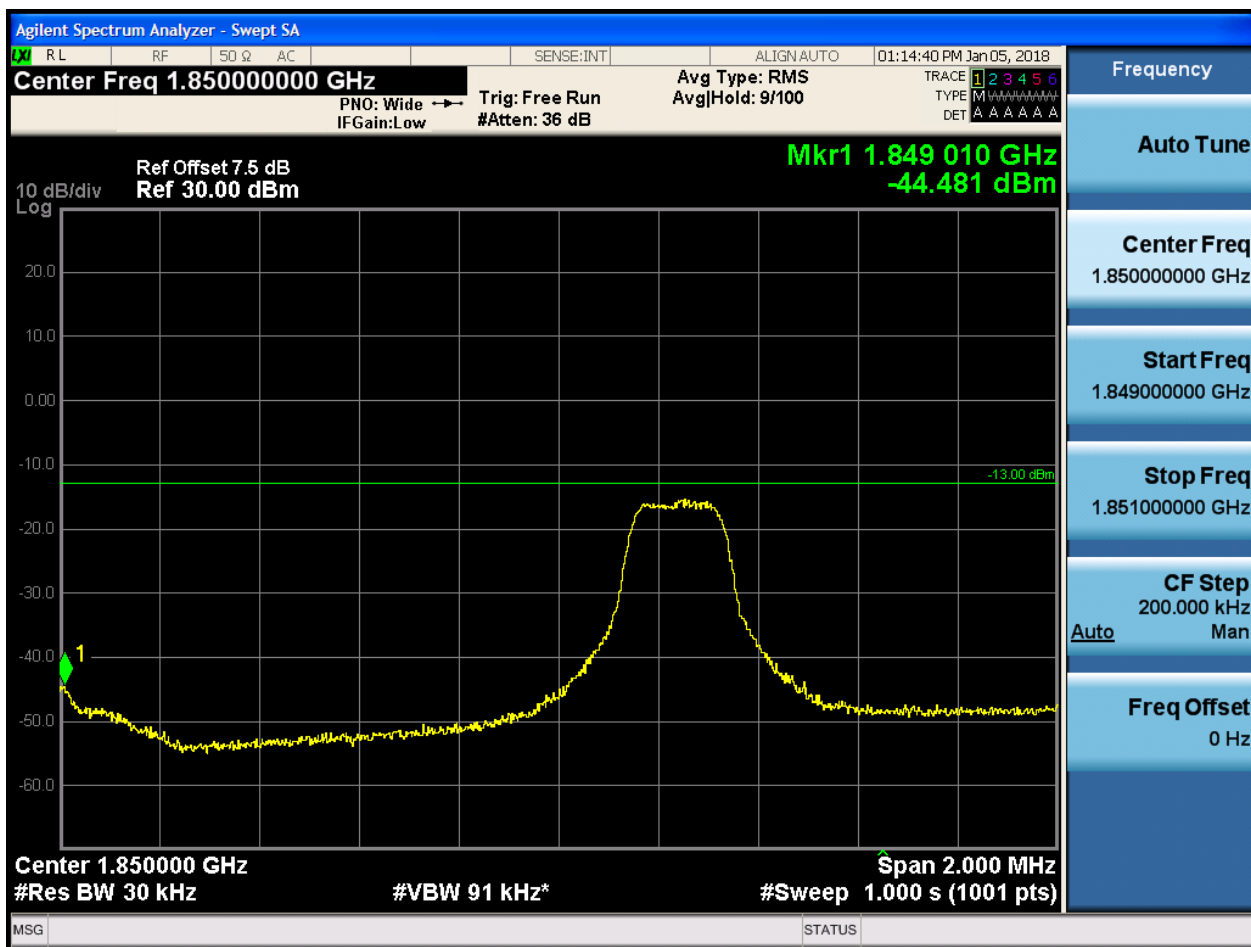
## 5.1.1.2.2.1 Test Channel = LCH

## 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

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:14:56 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.850 000 GHz  
-33.309 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 30 kHz  
#VBW 91 kHz

Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.850000000 GHz

Start Freq  
1.849000000 GHz

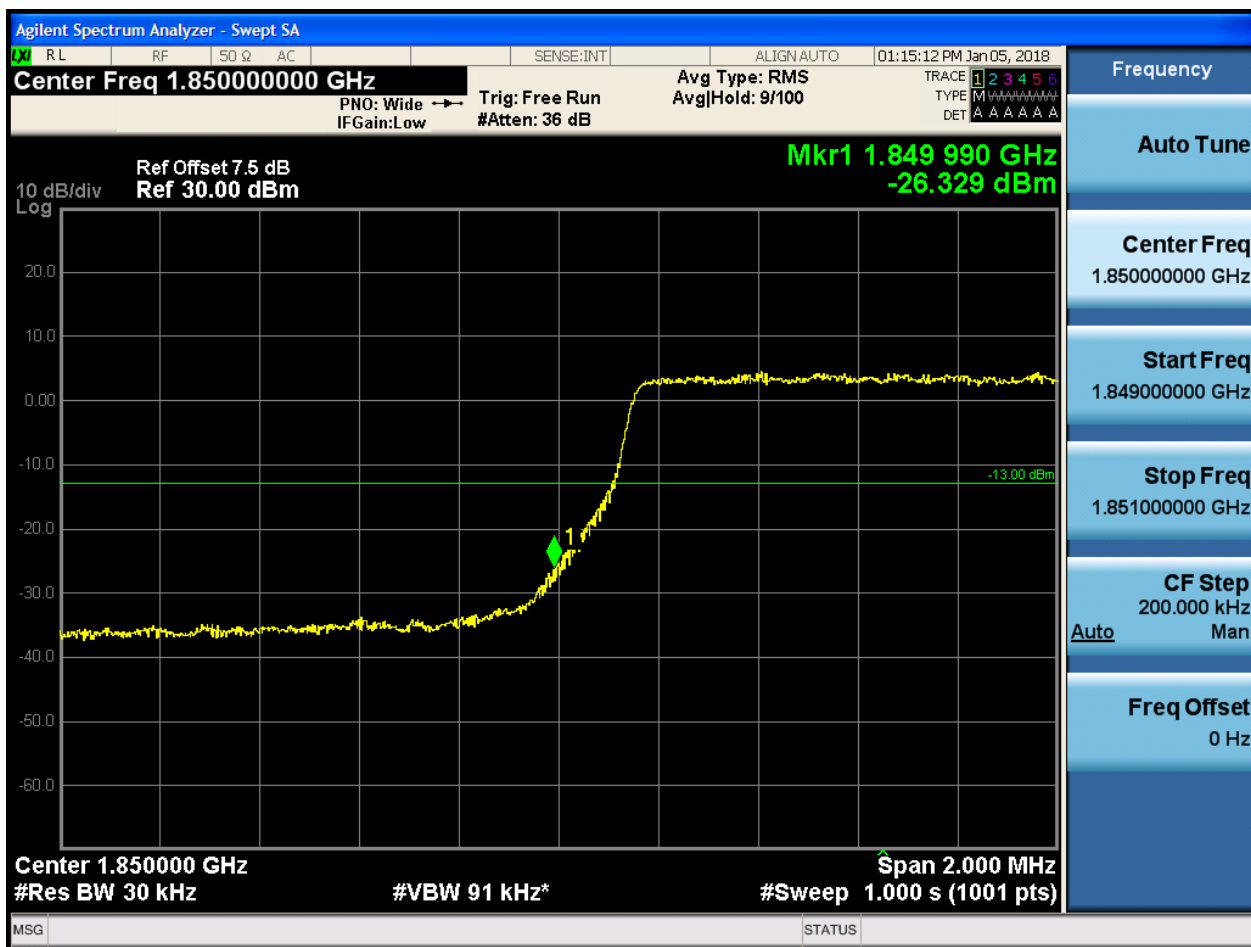
Stop Freq  
1.851000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz



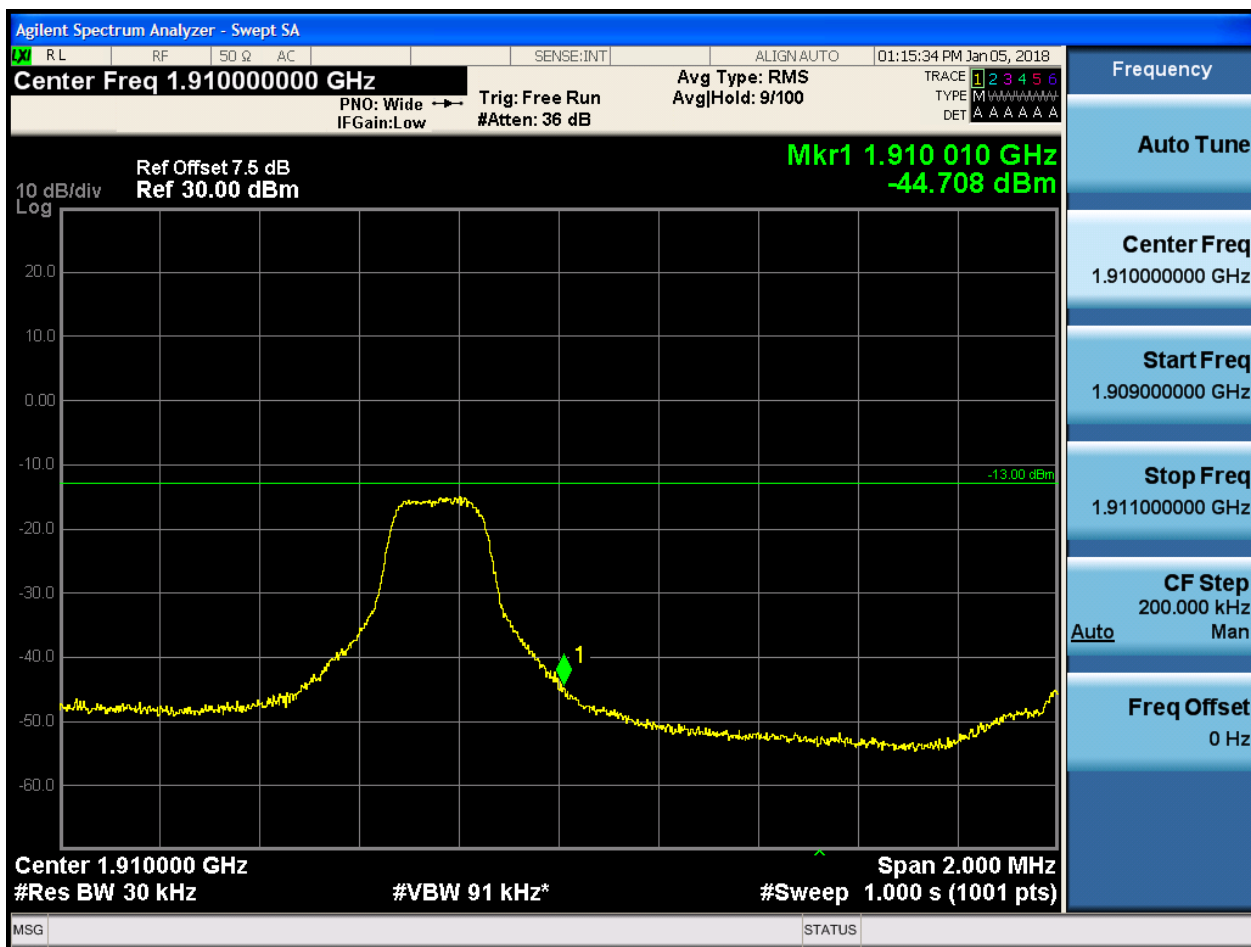
## 5.1.1.2.2.1.4 Test RB = RB15#0





## 5.1.1.2.2.2 Test Channel = HCH

## 5.1.1.2.2.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:15:50 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.910 000 GHz  
-18.888 dBm

10 dB/div  
Log

Center 1.910000 GHz  
#Res BW 30 kHz  
#VBW 91 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.910000000 GHz

Start Freq  
1.909000000 GHz

Stop Freq  
1.911000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz



#### 5.1.1.2.2.2.3 Test RB = RB8#4





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:16:22 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.910 000 GHz  
-27.688 dBm

10 dB/div  
Log

20.0  
10.0  
0.00  
-10.0  
-20.0  
-30.0  
-40.0  
-50.0  
-60.0

-13.00 dBm

1

Center 1.910000 GHz  
#Res BW 30 kHz  
#VBW 91 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

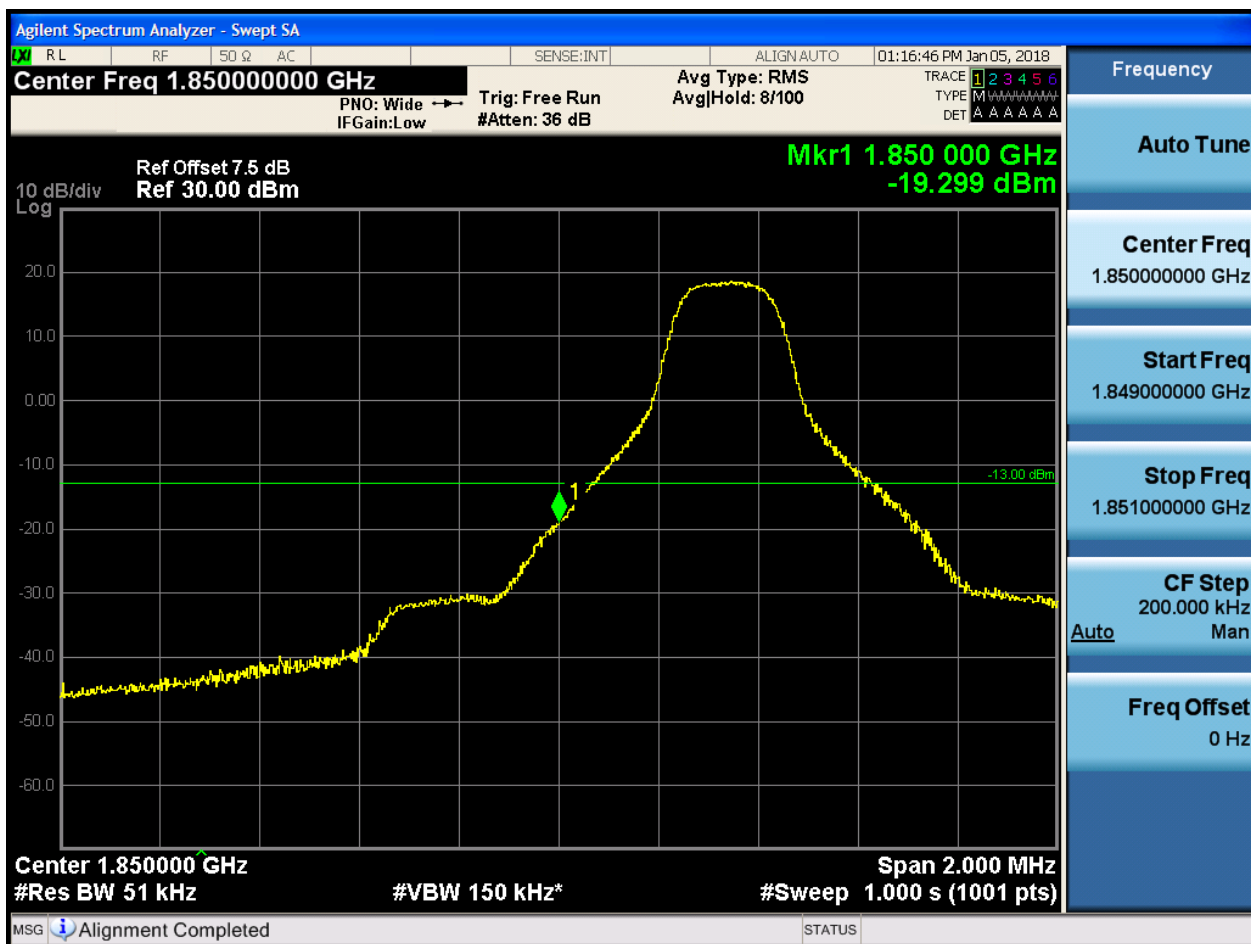
Frequency  
Auto Tune  
Center Freq  
1.910000000 GHz  
Start Freq  
1.909000000 GHz  
Stop Freq  
1.911000000 GHz  
CF Step  
200.000 kHz  
Auto Man  
Freq Offset  
0 Hz



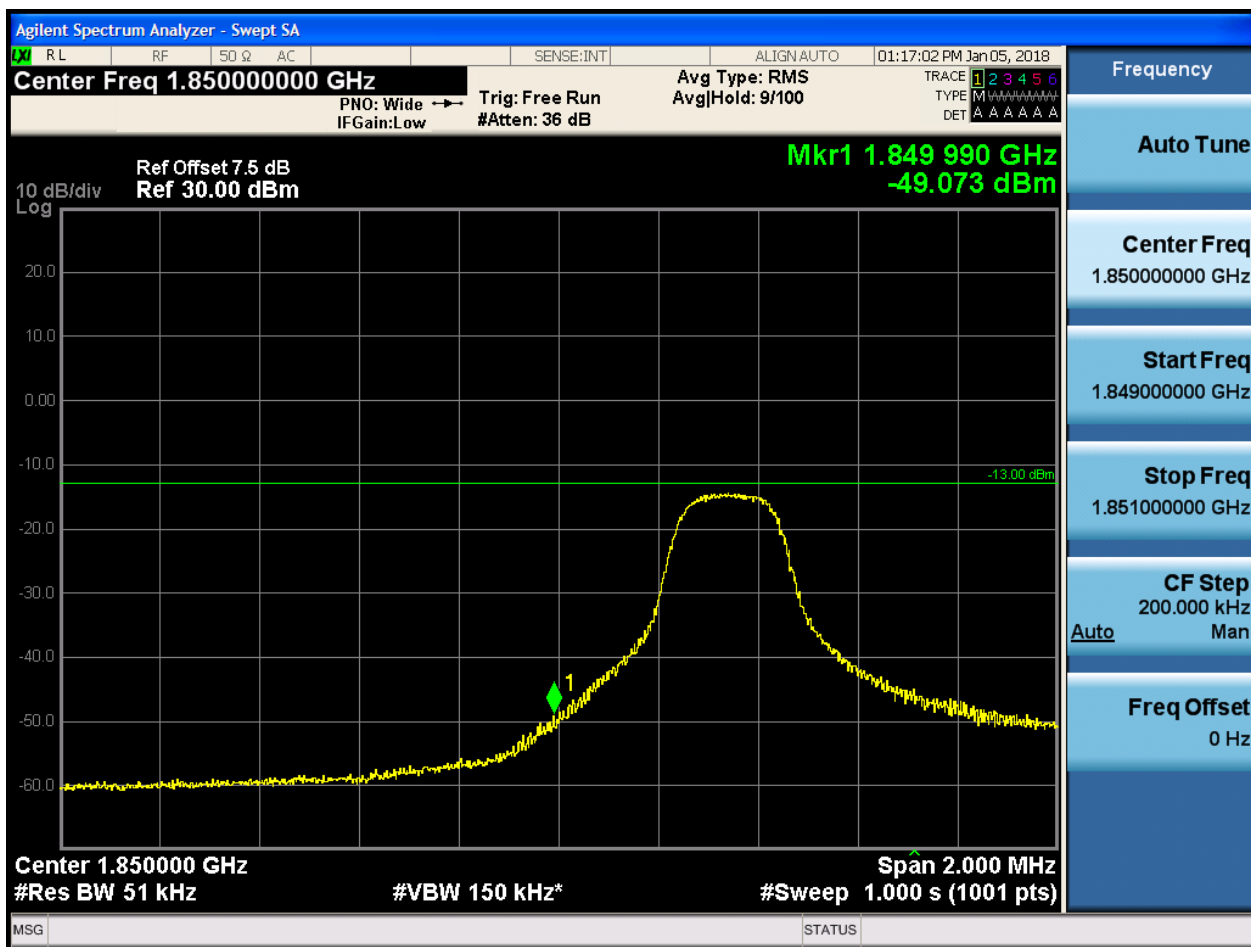
## 5.1.1.2.3 Test Bandwidth = 5

## 5.1.1.2.3.1 Test Channel = LCH

## 5.1.1.2.3.1.1 Test RB = RB1#0



#### 5.1.1.2.3.1.2 Test RB = RB1#24



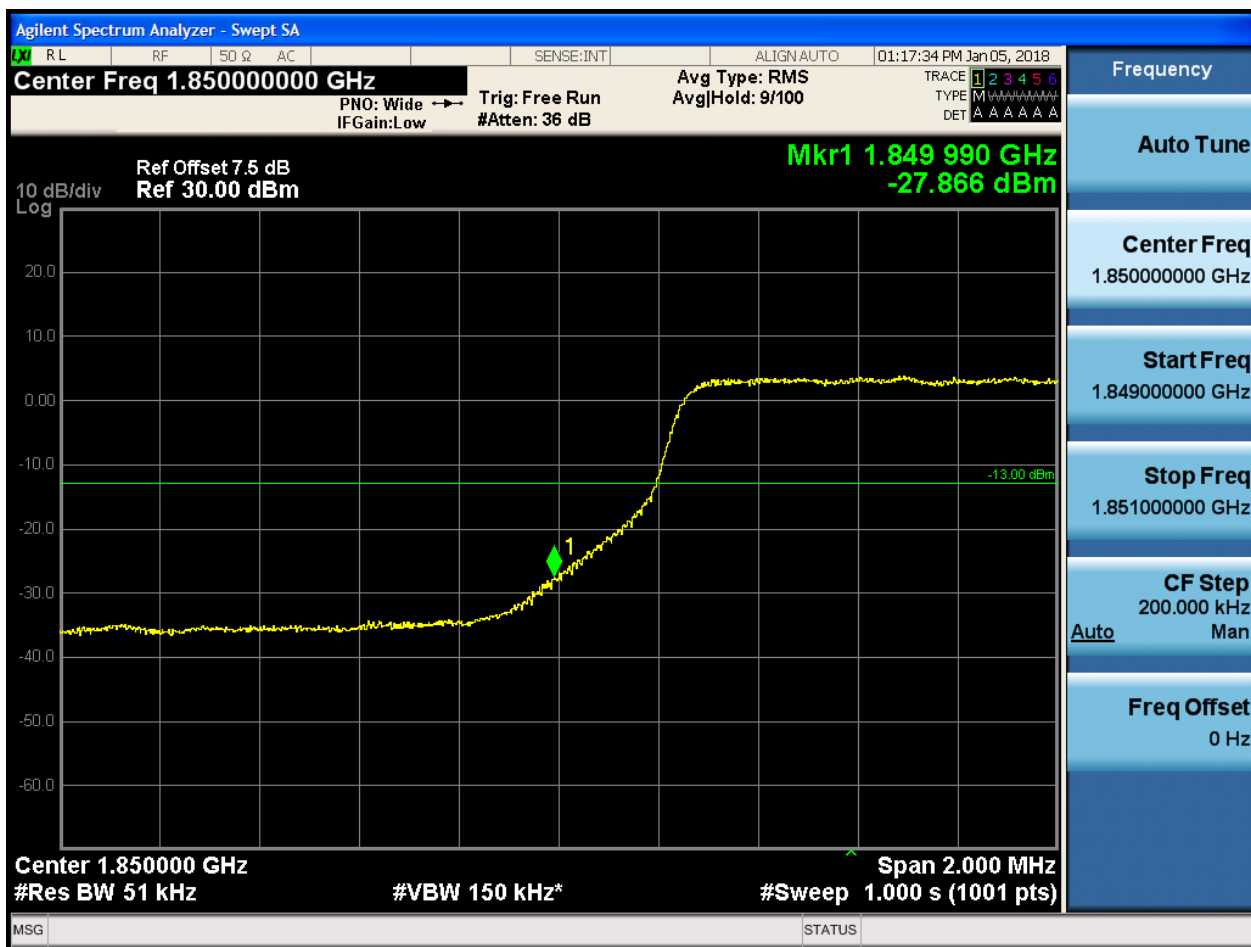


## 5.1.1.2.3.1.3 Test RB = RB12#6





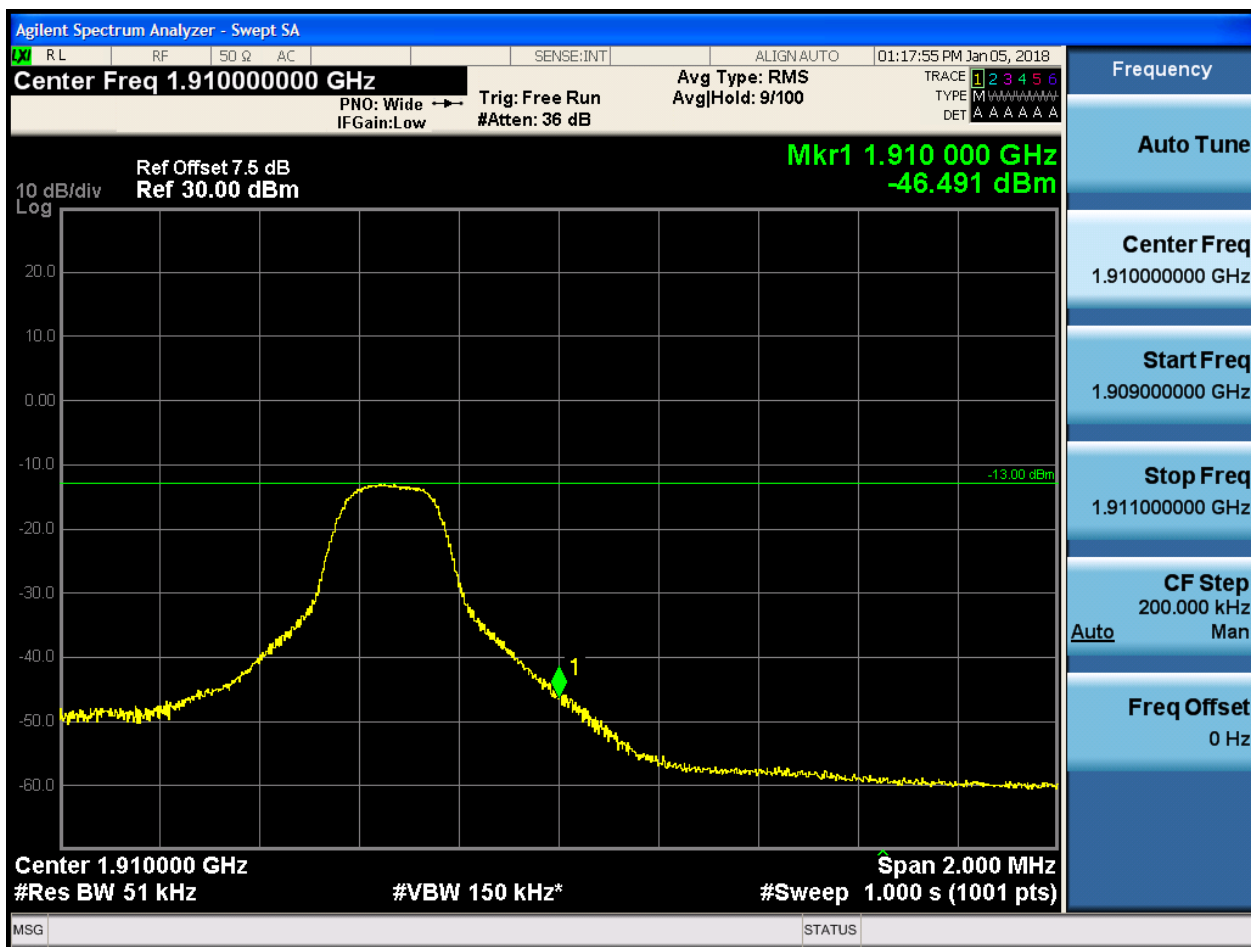
## 5.1.1.2.3.1.4 Test RB = RB25#0





## 5.1.1.2.3.2 Test Channel = HCH

## 5.1.1.2.3.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:18:11 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.910 000 GHz  
-18.615 dBm

10 dB/div  
Log

Center 1.910000 GHz  
#Res BW 51 kHz #VBW 150 kHz\* Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

| Frequency                          |
|------------------------------------|
| Auto Tune                          |
| Center Freq<br>1.910000000 GHz     |
| Start Freq<br>1.909000000 GHz      |
| Stop Freq<br>1.911000000 GHz       |
| CF Step<br>200.000 kHz<br>Auto Man |
| Freq Offset<br>0 Hz                |





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:18:27 PM Jan 05, 2018

Center Freq 1.91000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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 1.910 000 GHz  
-33.529 dBm

10 dB/div  
Log

Center 1.910000 GHz  
#Res BW 51 kHz  
#VBW 150 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency  
Auto Tune  
Center Freq  
1.91000000 GHz  
Start Freq  
1.909000000 GHz  
Stop Freq  
1.911000000 GHz  
CF Step  
200.000 kHz  
Auto  
Man  
Freq Offset  
0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 1.910000000 GHz

Ref Offset 7.5 dB  
Ref 30.00 dBm

10 dB/div  
Log

Mkr1 1.910 000 GHz  
-27.706 dBm

Center Freq 1.910000000 GHz

Start Freq 1.909000000 GHz

Stop Freq 1.911000000 GHz

CF Step 200.000 kHz  
Auto

Freq Offset 0 Hz

Center 1.910000 GHz  
#Res BW 51 kHz

#VBW 150 kHz\*

Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

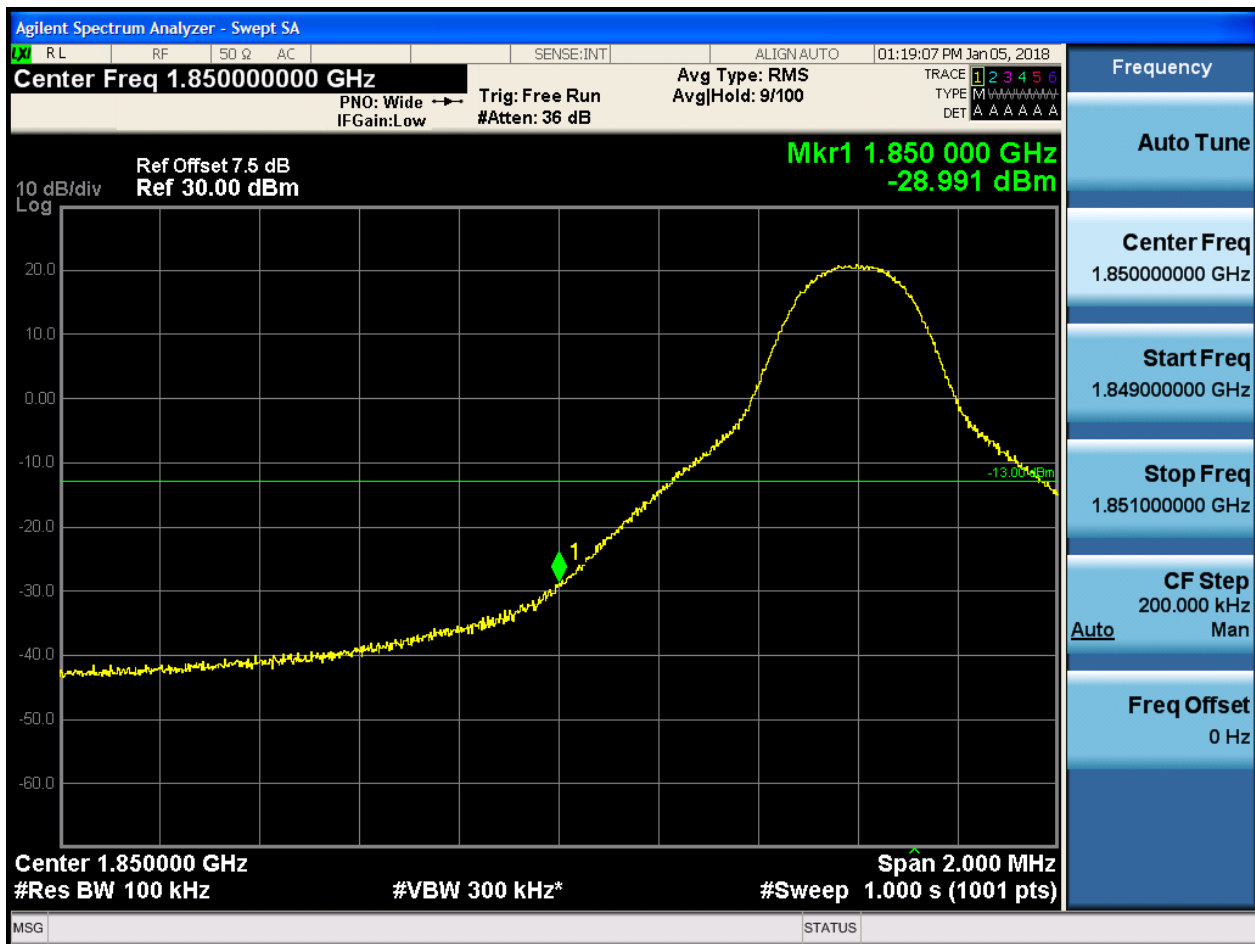
MSG STATUS



## 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





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:19:23 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

Mkr1 1.850 000 GHz  
-50.268 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 100 kHz  
#VBW 300 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency  
Auto Tune  
Center Freq  
1.850000000 GHz  
Start Freq  
1.849000000 GHz  
Stop Freq  
1.851000000 GHz  
CF Step  
200.000 kHz  
Auto Man  
Freq Offset  
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:19:40 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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

Ref Offset 7.5 dB  
Ref 30.00 dBm

10 dB/div  
Log

Mkr1 1.850 000 GHz  
-33.884 dBm

-13.00 dBm

Center 1.850000 GHz  
#Res BW 100 kHz  
#VBW 300 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.850000000 GHz

Start Freq  
1.849000000 GHz

Stop Freq  
1.851000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz



Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:19:56 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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 1.850 000 GHz  
-31.987 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 100 kHz  
#VBW 300 kHz  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.850000000 GHz

Start Freq  
1.849000000 GHz

Stop Freq  
1.851000000 GHz

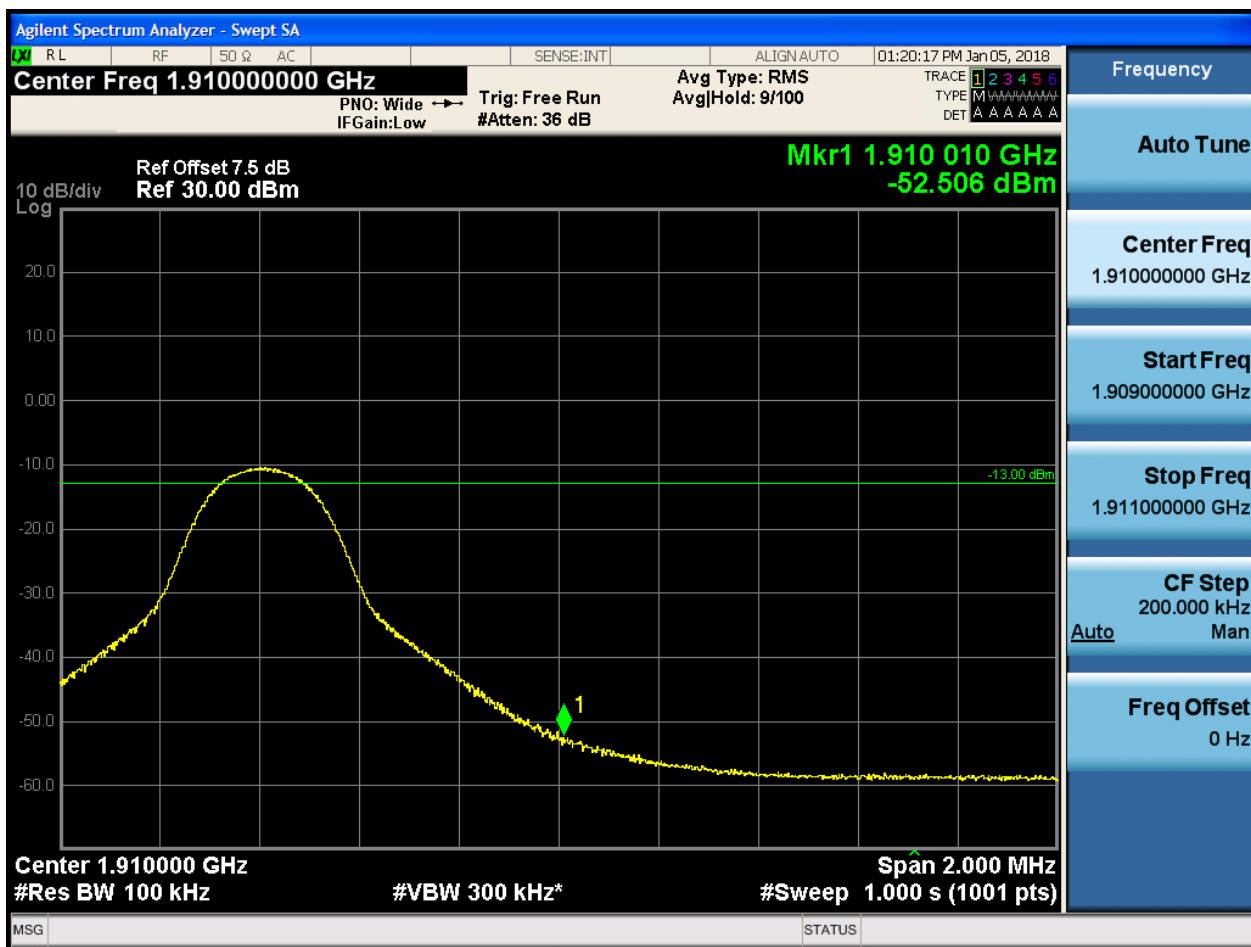
CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz



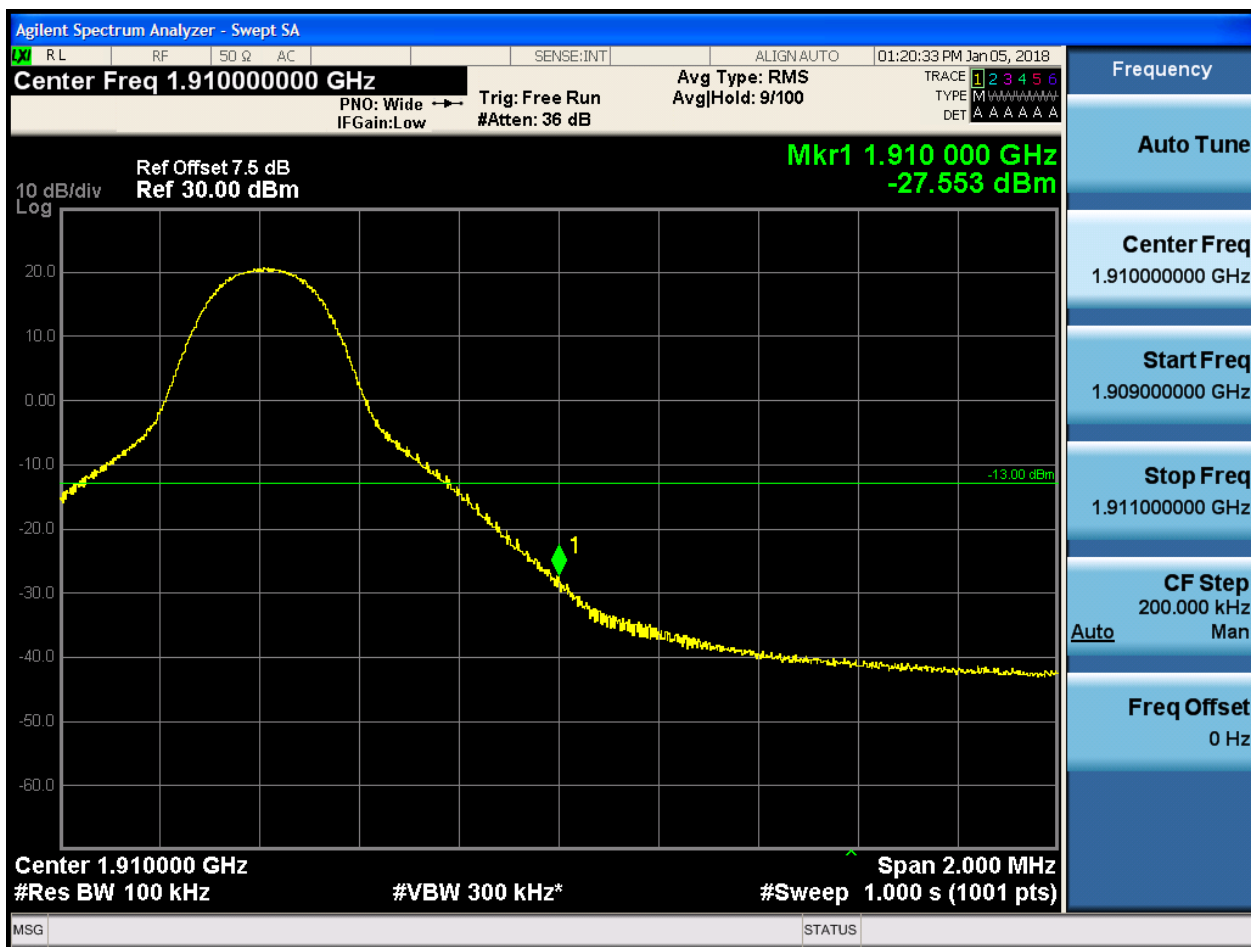
## 5.1.1.2.4.2 Test Channel = HCH

## 5.1.1.2.4.2.1 Test RB = RB1#0





## 5.1.1.2.4.2.2 Test RB = RB1#49







## 5.1.1.2.4.2.3 Test RB = RB25#13





## 5.1.1.2.4.2.4 Test RB = RB50#0

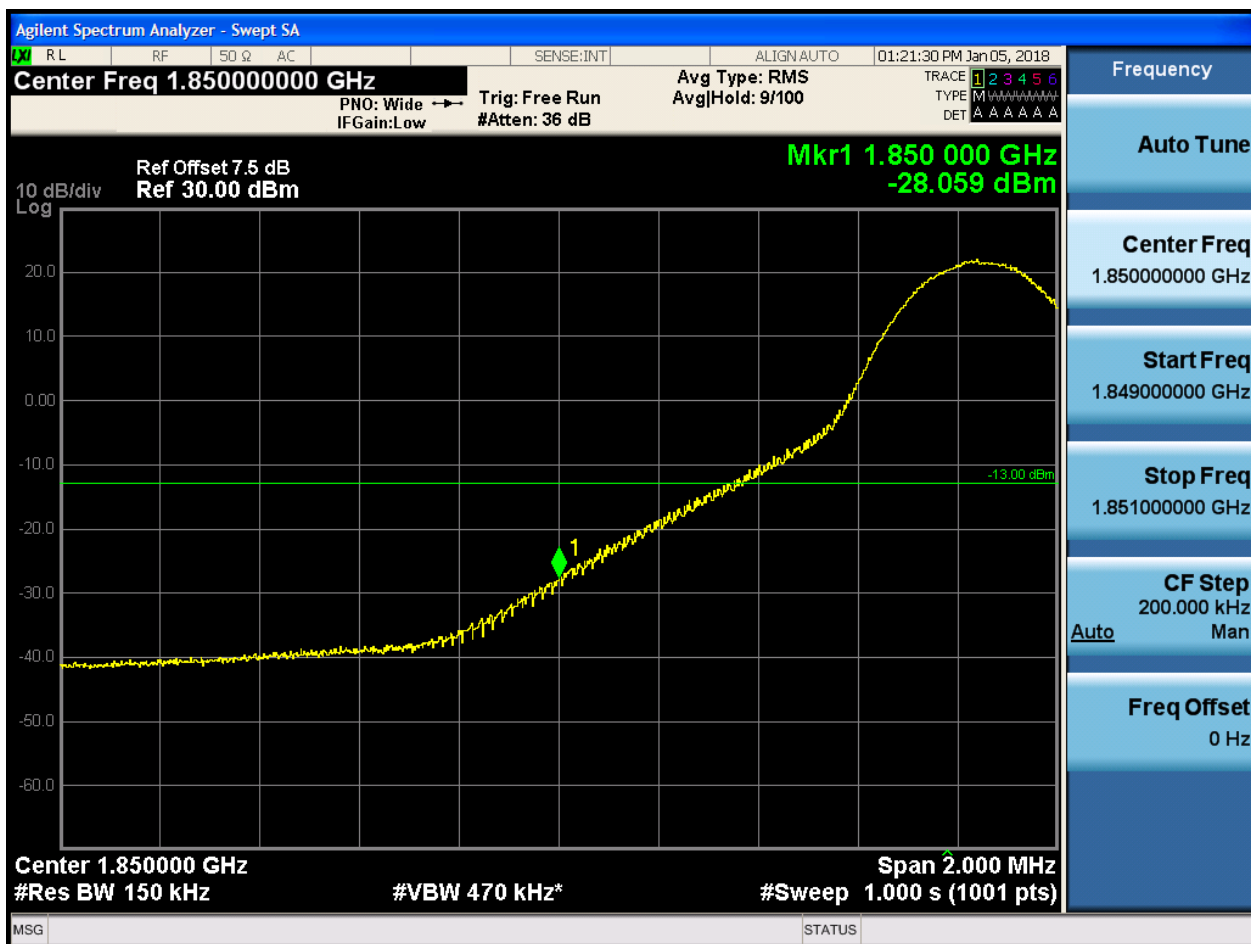




## 5.1.1.2.5 Test Bandwidth = 15

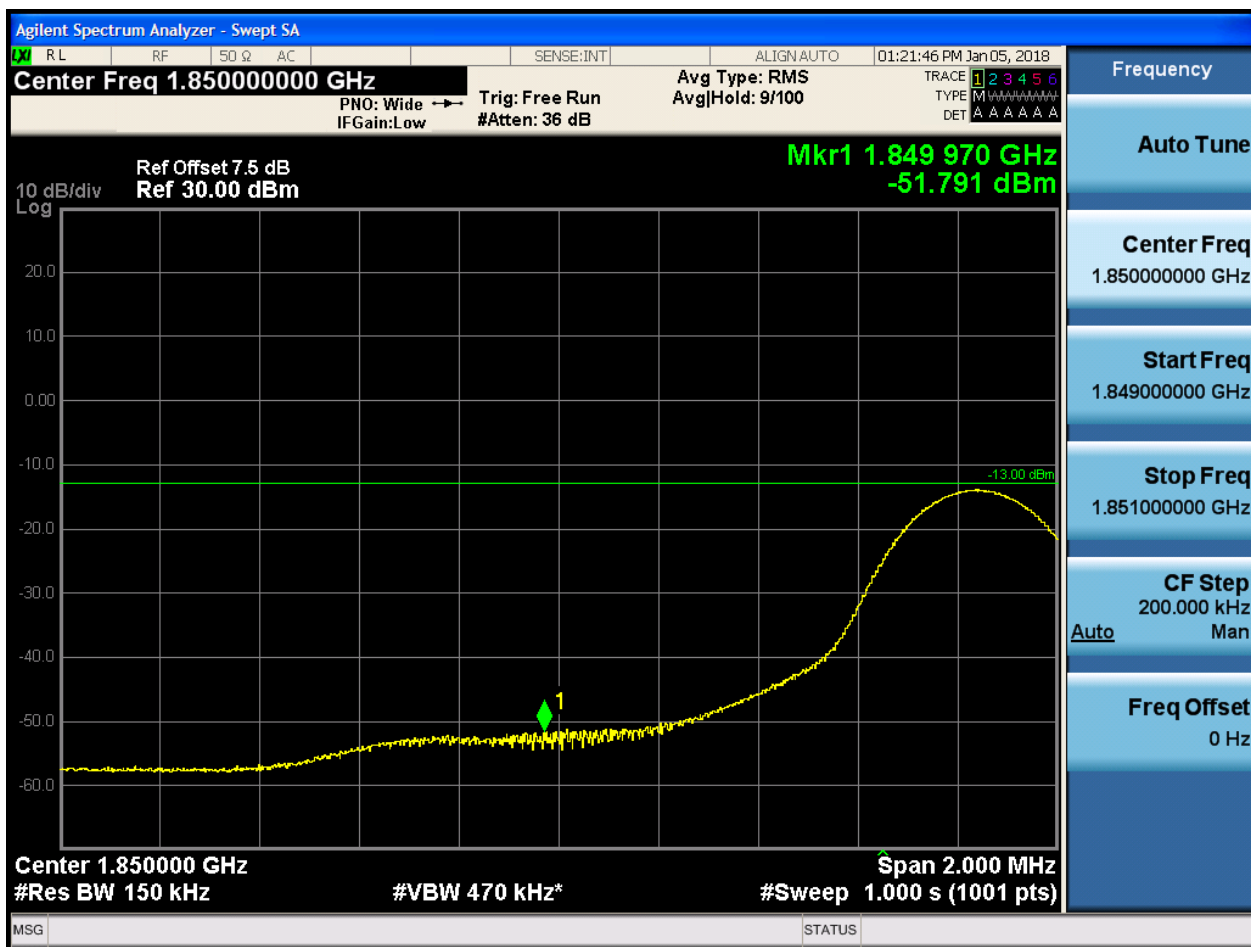
## 5.1.1.2.5.1 Test Channel = LCH

## 5.1.1.2.5.1.1 Test RB = RB1#0





## 5.1.1.2.5.1.2 Test RB = RB1#74





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:22:02 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide Trig: Free Run  
IFGain:Low #Atten: 36 dB

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 1.849 960 GHz  
-34.488 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 150 kHz  
#VBW 470 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:22:18 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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 1.849 990 GHz  
-33.986 dBm

10 dB/div  
Log

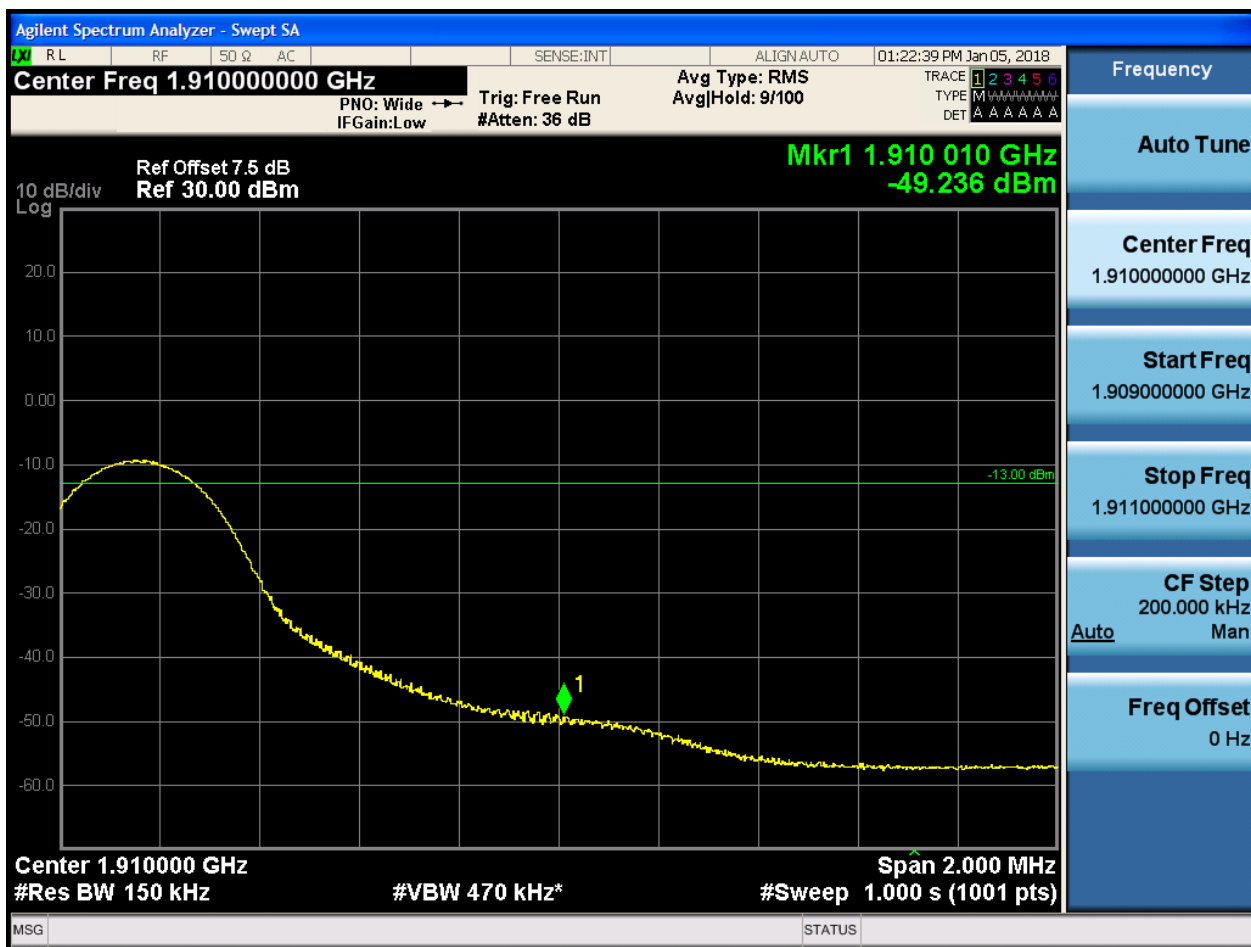
Center 1.850000 GHz  
#Res BW 150 kHz  
#VBW 470 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS



## 5.1.1.2.5.2 Test Channel = HCH

## 5.1.1.2.5.2.1 Test RB = RB1#0





## 5.1.1.2.5.2.2 Test RB = RB1#74







Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:23:11 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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 1.910 140 GHz  
-34.472 dBm

10 dB/div  
Log

-13.00 dBm

Center 1.910000 GHz  
#Res BW 150 kHz  
#VBW 470 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq  
1.910000000 GHz

Start Freq  
1.909000000 GHz

Stop Freq  
1.911000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz

MSG STATUS

#### 5.1.1.2.5.2.4 Test RB = RB75#0





## 5.1.1.2.6 Test Bandwidth = 20

## 5.1.1.2.6.1 Test Channel = LCH

## 5.1.1.2.6.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:24:08 PM Jan 05, 2018

Center Freq 1.850000000 GHz Avg Type: RMS  
PNO: Wide Trig: Free Run  
IFGain:Low #Atten: 36 dB

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 1.849 890 GHz  
-54.912 dBm

10 dB/div  
Log

Center 1.850000 GHz  
#Res BW 200 kHz  
#VBW 620 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.850000000 GHz

Start Freq  
1.849000000 GHz

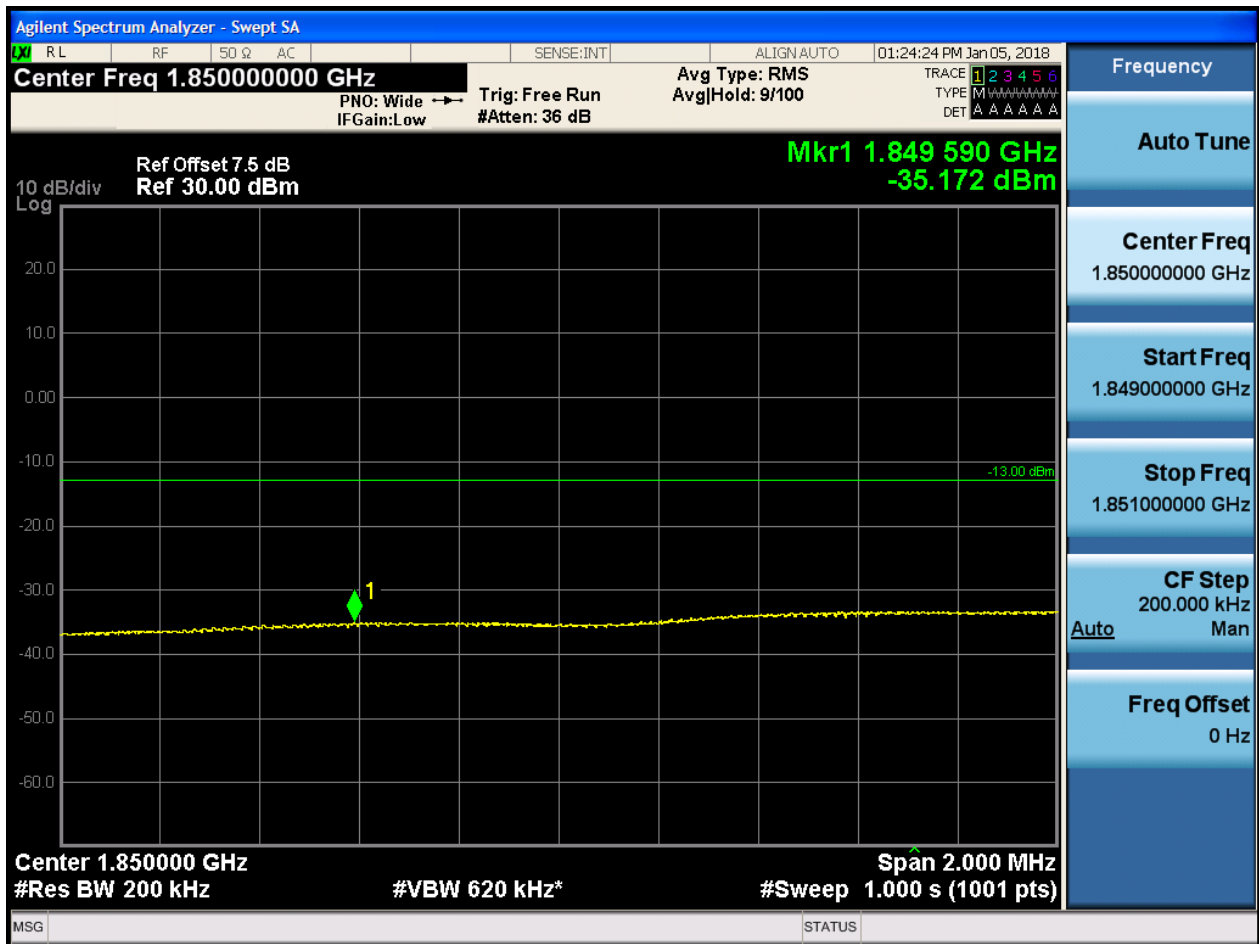
Stop Freq  
1.851000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz

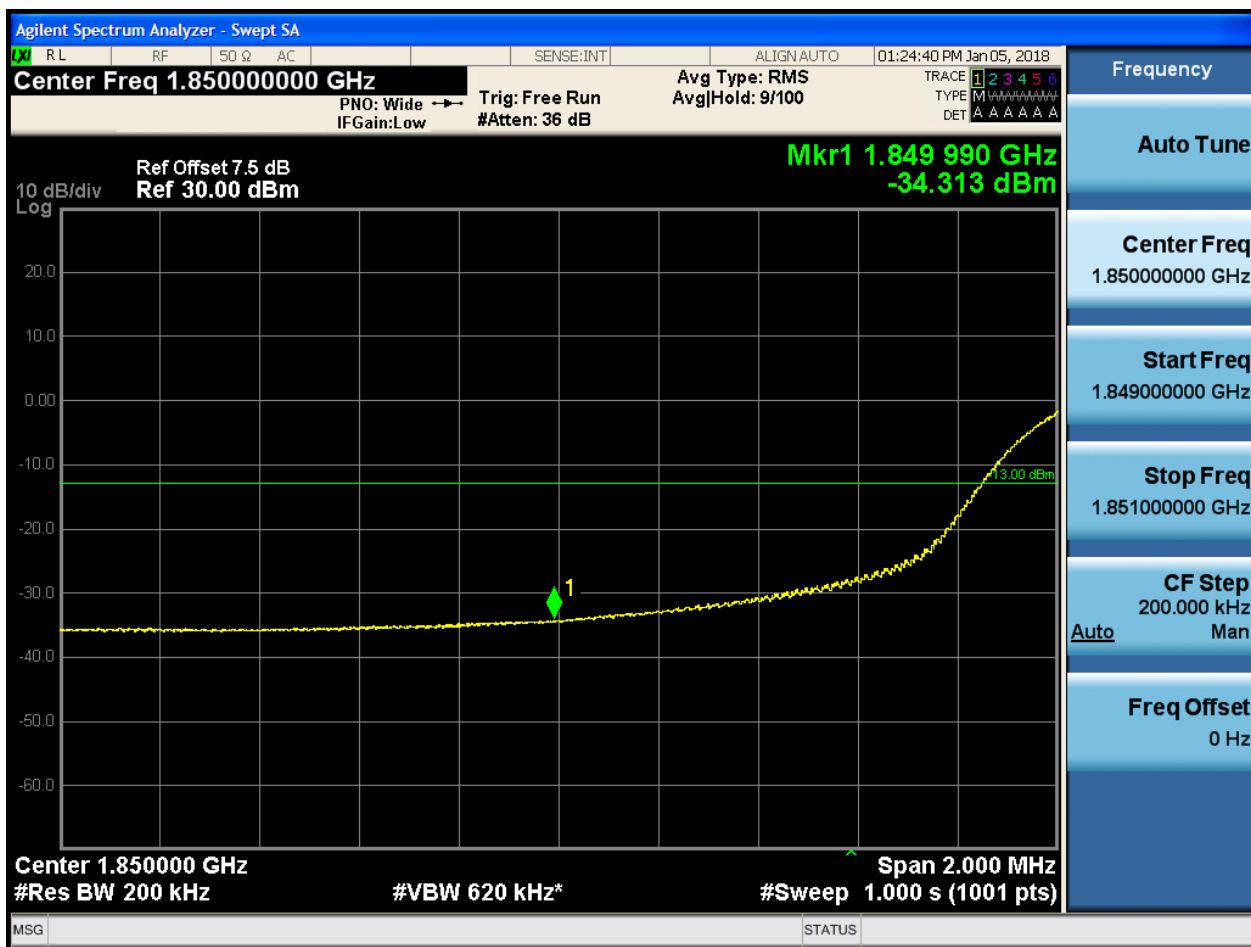


## 5.1.1.2.6.1.3 Test RB = RB50#25





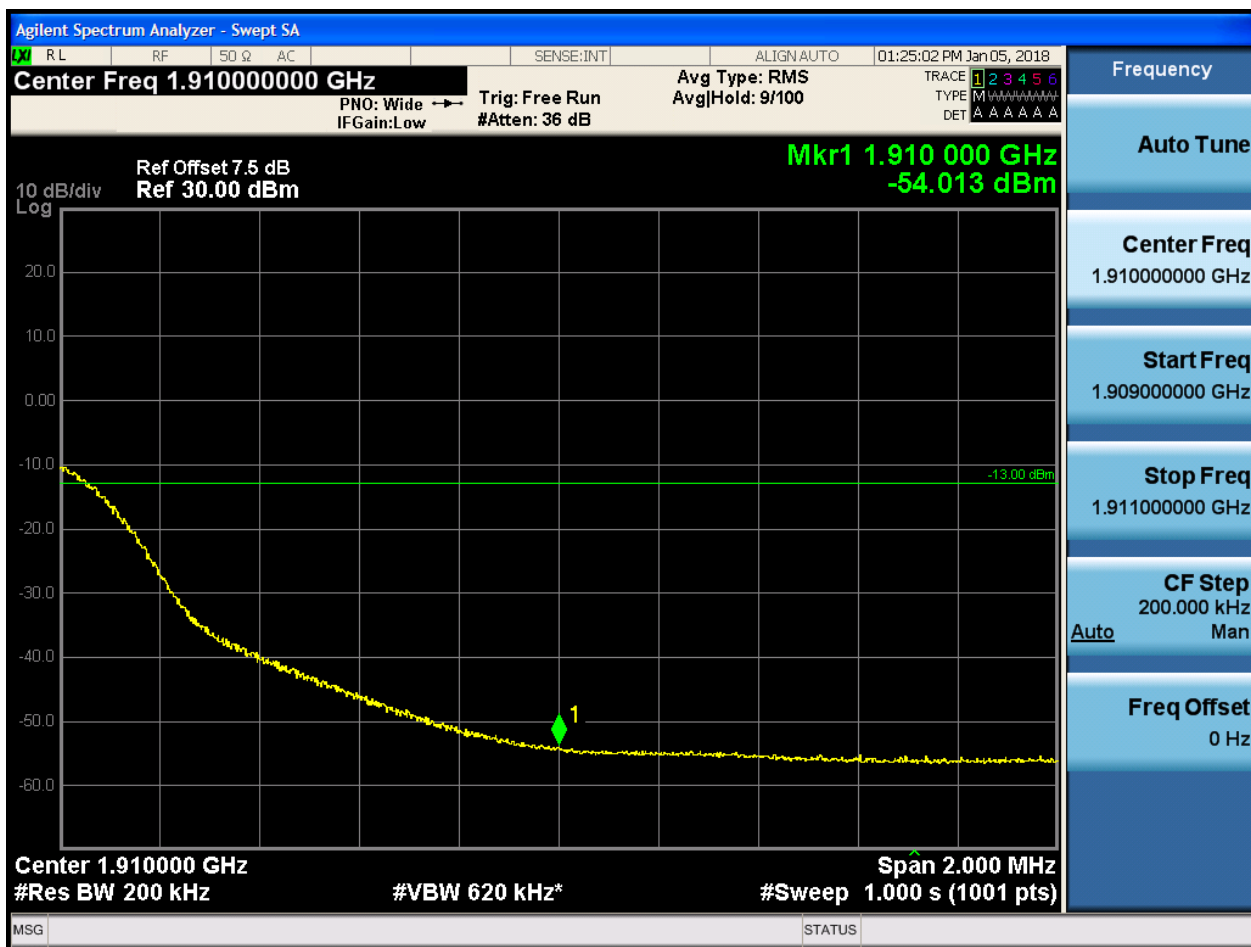
## 5.1.1.2.6.1.4 Test RB = RB100#0





## 5.1.1.2.6.2 Test Channel = HCH

## 5.1.1.2.6.2.1 Test RB = RB1#0





## 5.1.1.2.6.2.2 Test RB = RB1#99







Agilent Spectrum Analyzer - Swept SA

RL RF 50  $\Omega$  AC SENSE:INT ALIGN AUTO 01:25:34 PM Jan 05, 2018

Center Freq 1.910000000 GHz Avg Type: RMS  
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 9/100  
#Atten: 36 dB

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 1.910 000 GHz  
-34.215 dBm

10 dB/div  
Log

-13.00 dBm

Center 1.910000 GHz  
#Res BW 200 kHz  
#VBW 620 kHz\*  
Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

MSG STATUS

Frequency

Auto Tune

Center Freq  
1.910000000 GHz

Start Freq  
1.909000000 GHz

Stop Freq  
1.911000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz



Agilent Spectrum Analyzer - Swept SA

Center Freq 1.910000000 GHz

Ref Offset 7.5 dB  
Ref 30.00 dBm

10 dB/div  
Log

Mkr1 1.910 030 GHz  
-33.610 dBm

Center 1.910000 GHz  
#Res BW 200 kHz  
#VBW 620 kHz\*

Span 2.000 MHz  
#Sweep 1.000 s (1001 pts)

Frequency

Auto Tune

Center Freq  
1.910000000 GHz

Start Freq  
1.909000000 GHz

Stop Freq  
1.911000000 GHz

CF Step  
200.000 kHz  
Auto Man

Freq Offset  
0 Hz

MSG STATUS

## 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

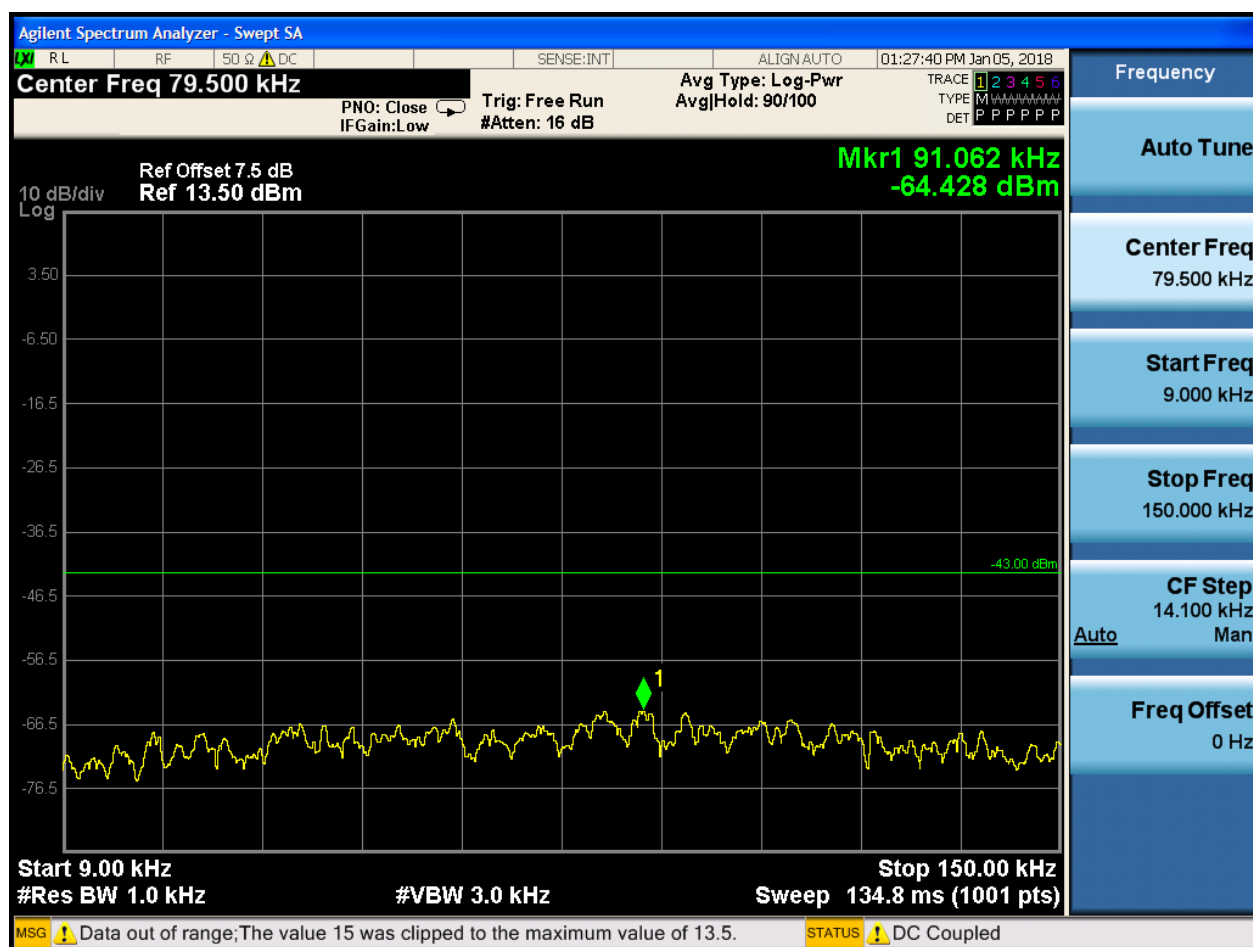
### 6.1.1 Test Band = BAND2

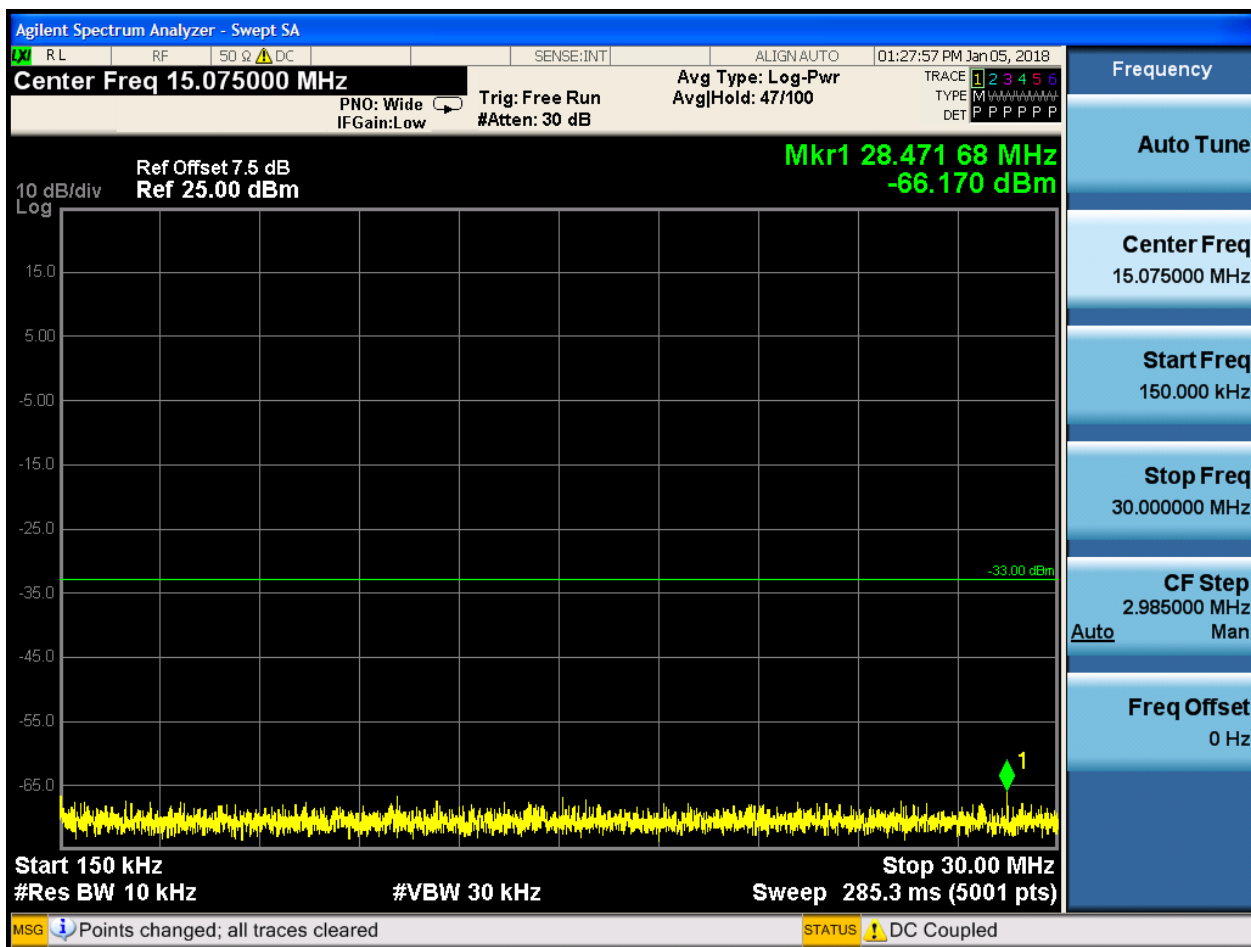
#### 6.1.1.1 Test Mode = LTE/TM1

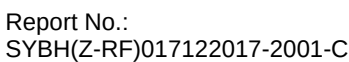
#### 6.1.1.1.1 Test Bandwidth = 1.4

#### 6.1.1.1.1.1 Test Channel = LCH

#### 6.1.1.1.1.1.1 Test RB = RB1#0

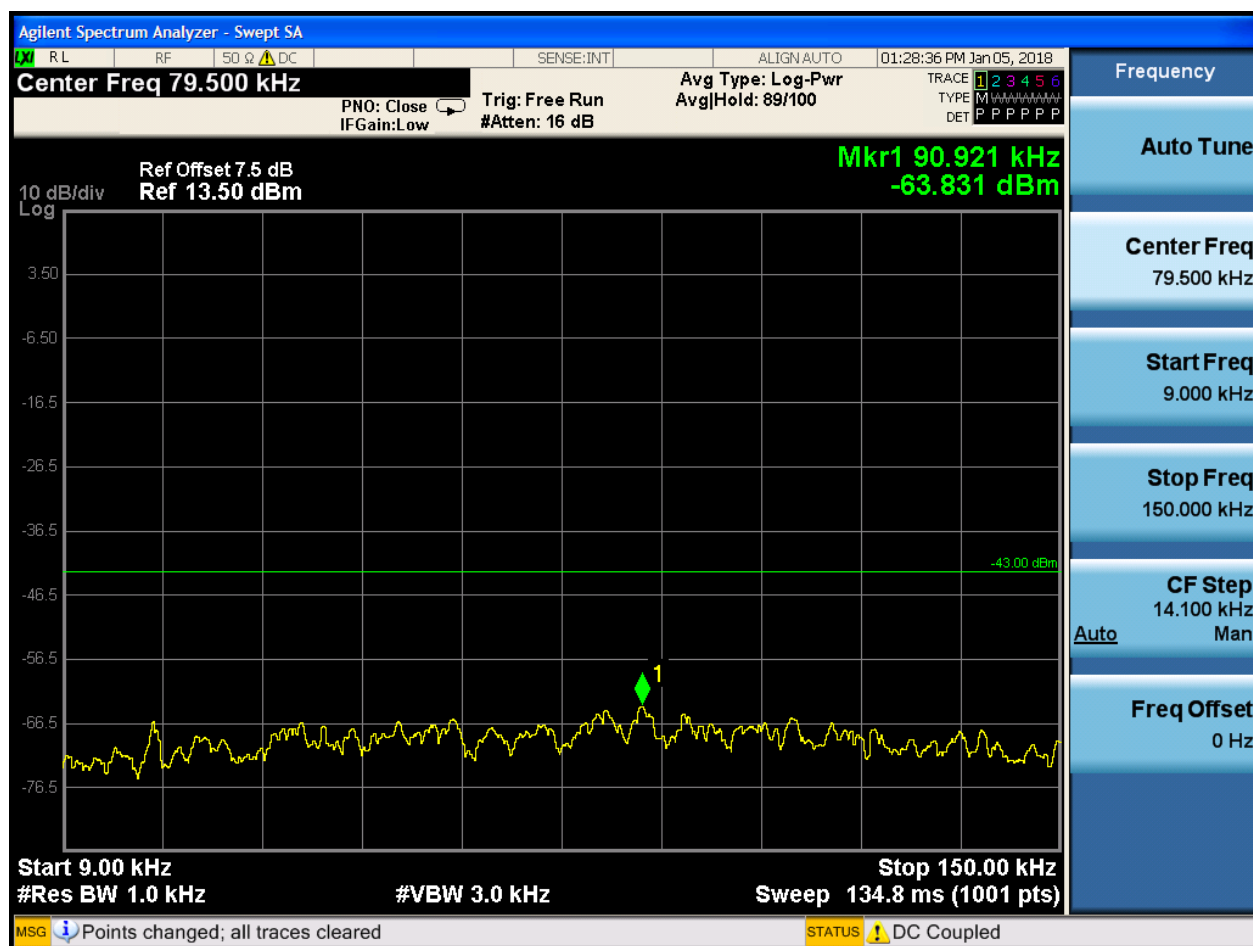


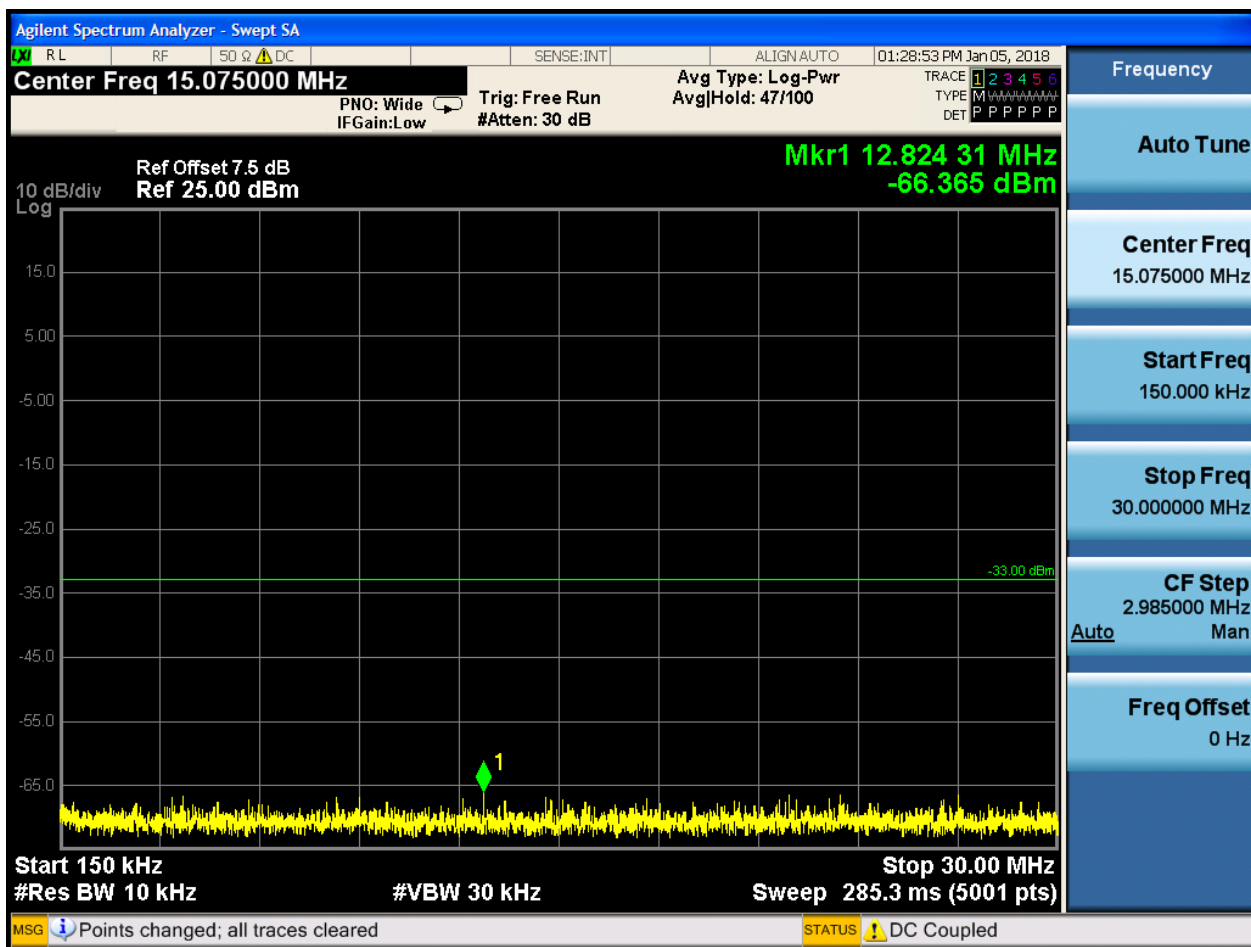


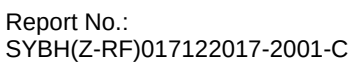


#### 6.1.1.1.1.2 Test Channel = MCH

#### 6.1.1.1.1.2.1 Test RB = RB1#0



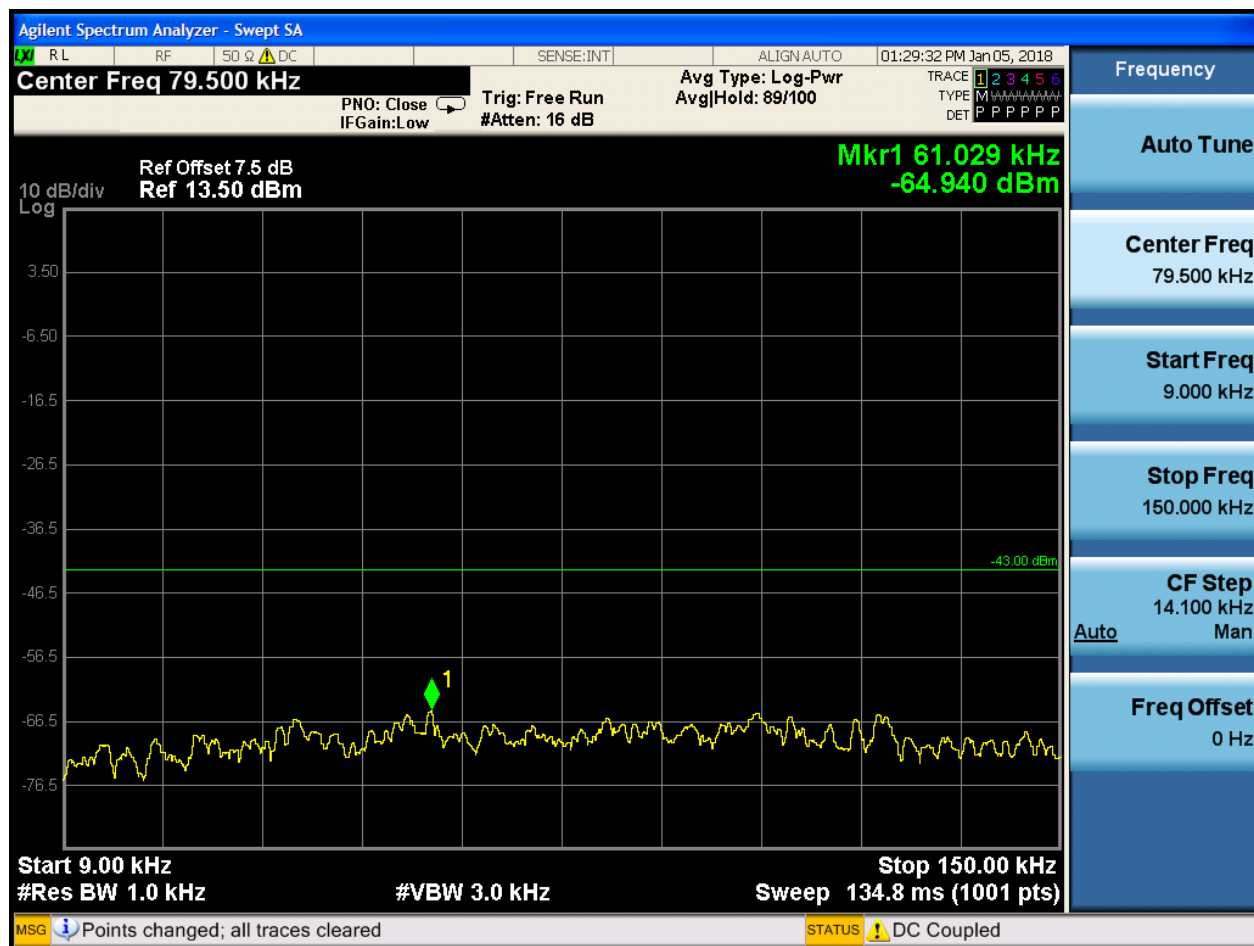


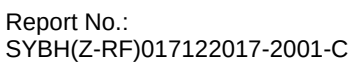


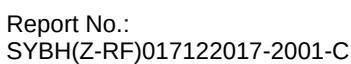


#### 6.1.1.1.1.3 Test Channel = HCH

#### 6.1.1.1.1.3.1 Test RB = RB1#0





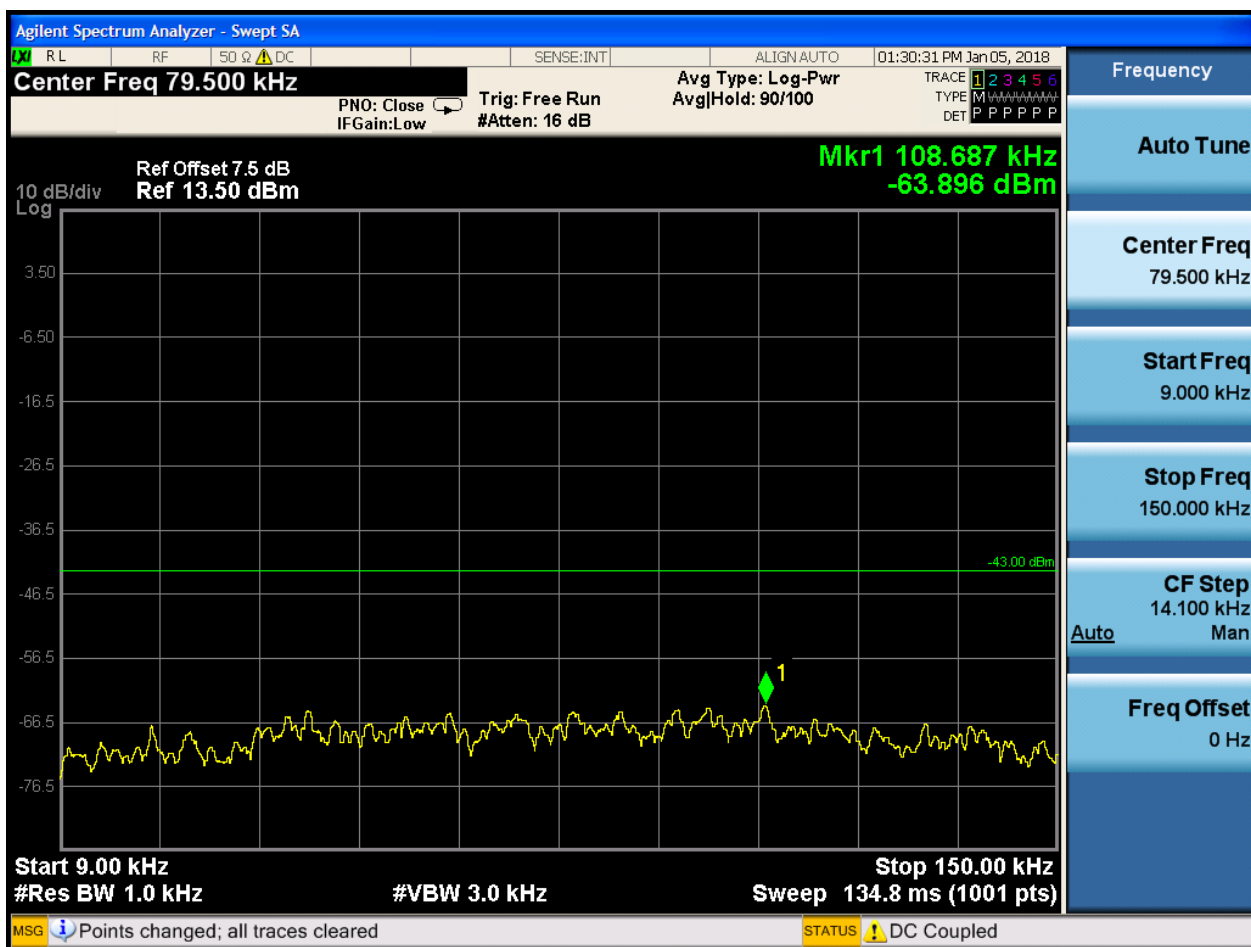


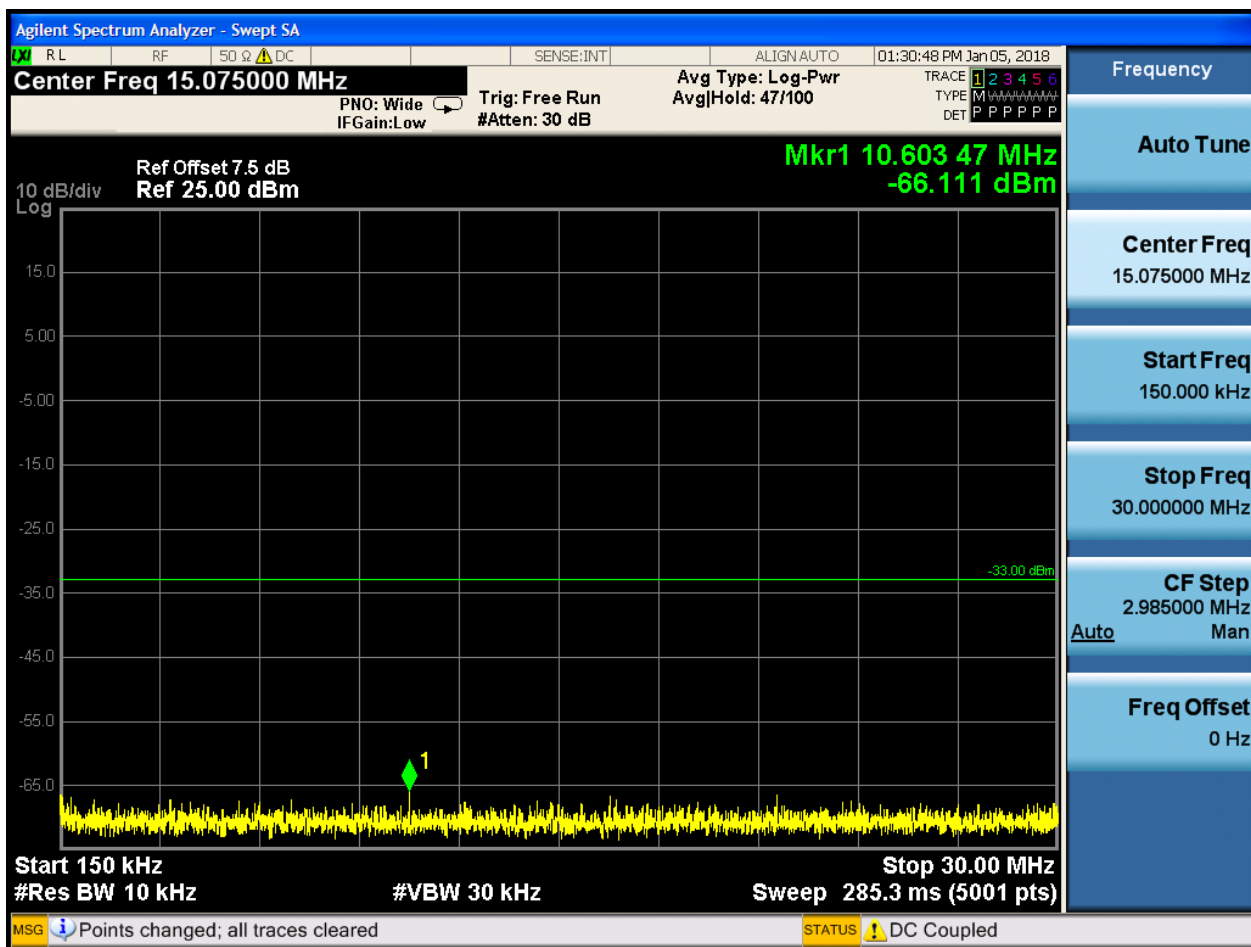


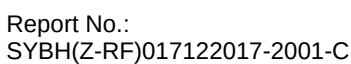
## 6.1.1.1.2 Test Bandwidth = 3

## 6.1.1.1.2.1 Test Channel = LCH

## 6.1.1.1.2.1.1 Test RB = RB1#0

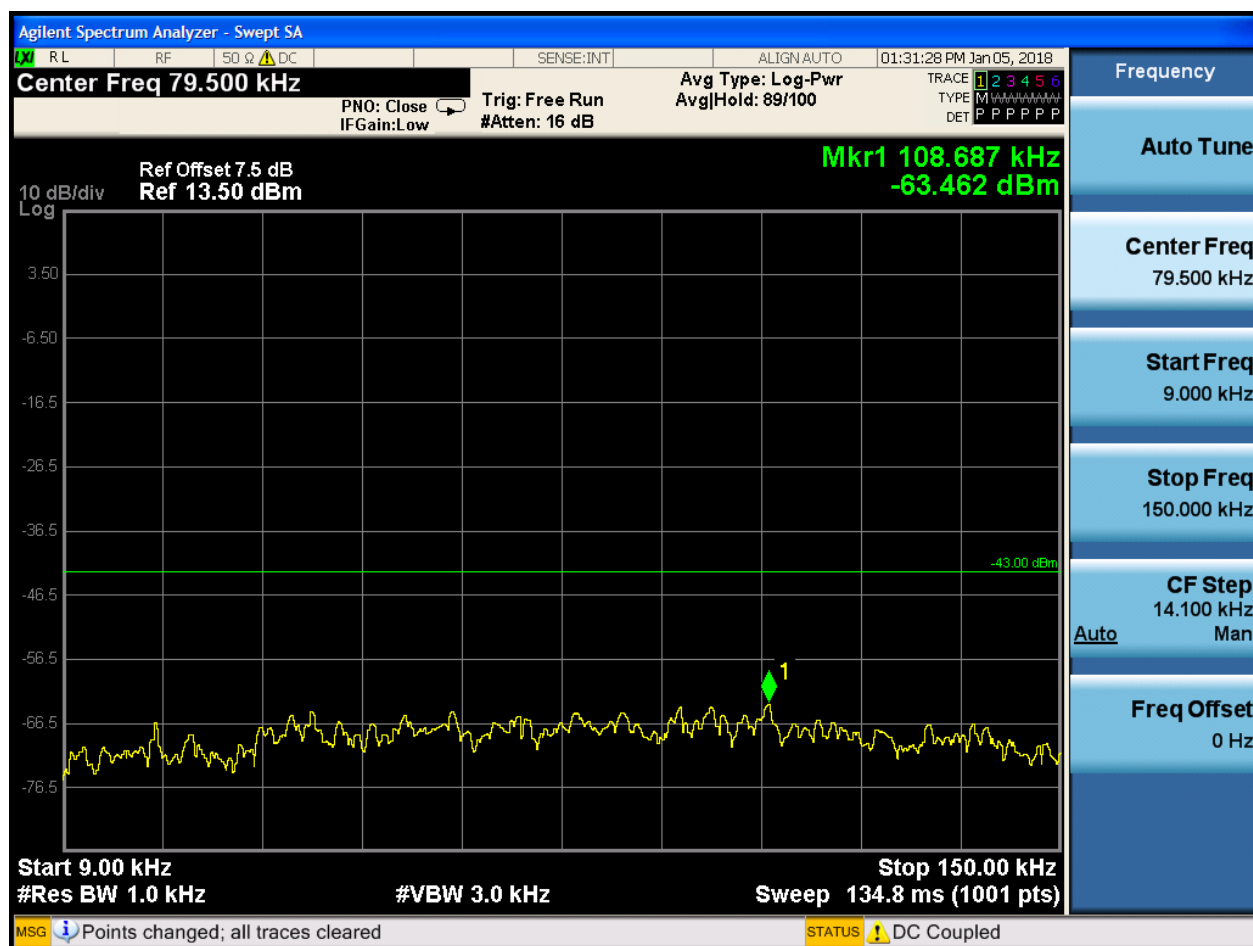


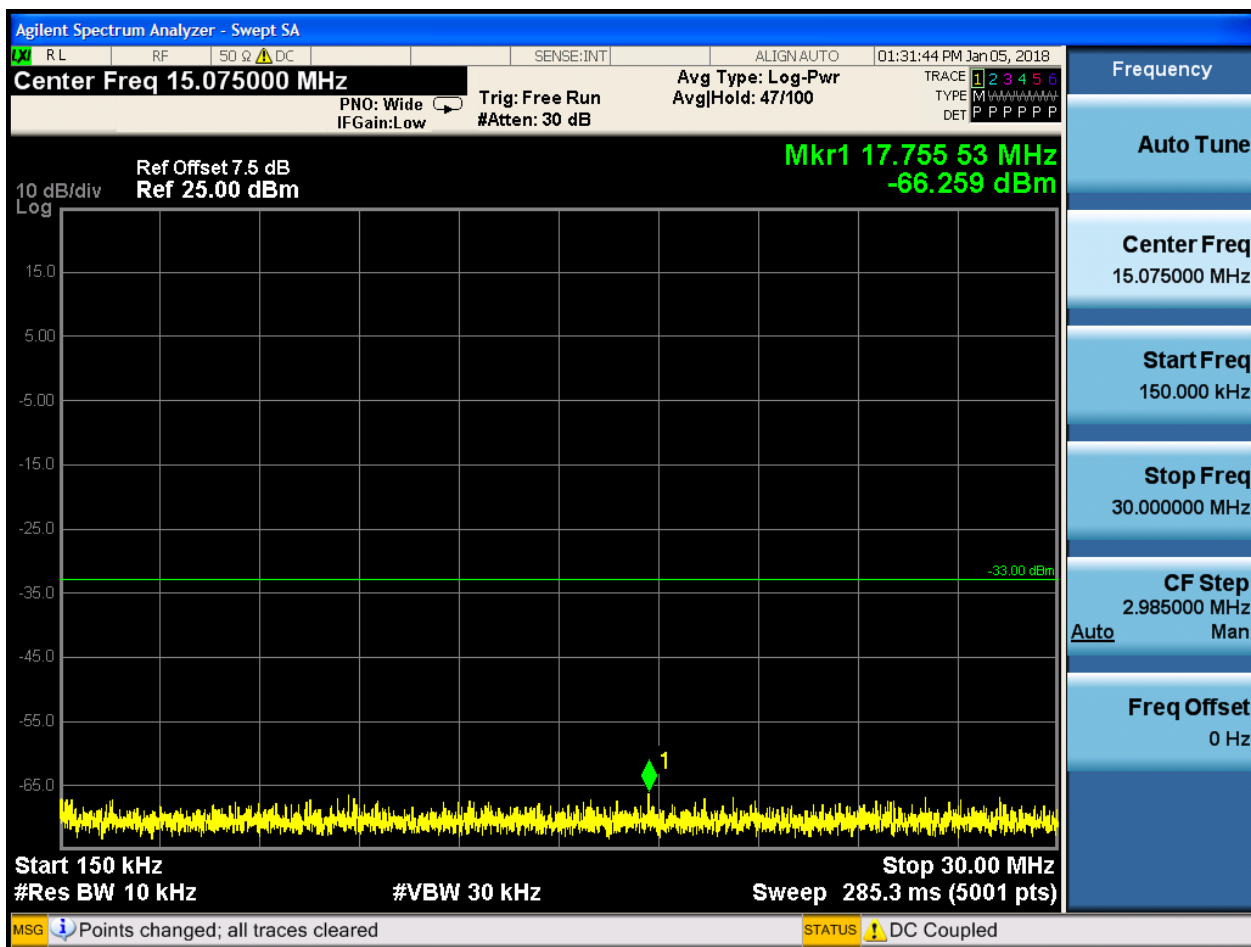




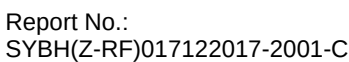
#### 6.1.1.1.2.2 Test Channel = MCH

#### 6.1.1.1.2.2.1 Test RB = RB1#0



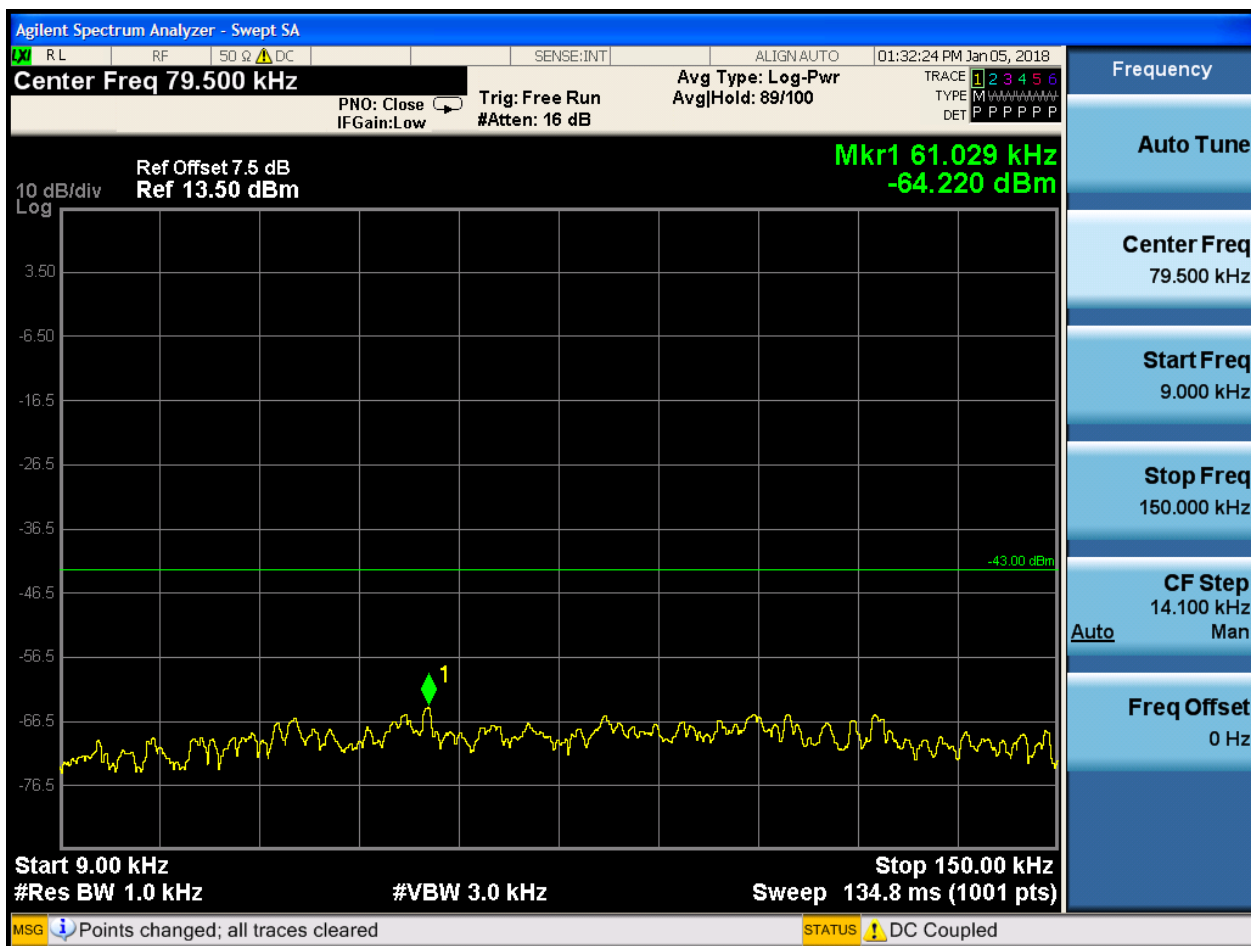


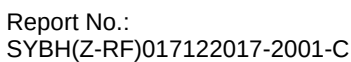


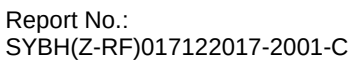


#### 6.1.1.1.2.3 Test Channel = HCH

#### 6.1.1.1.2.3.1 Test RB = RB1#0

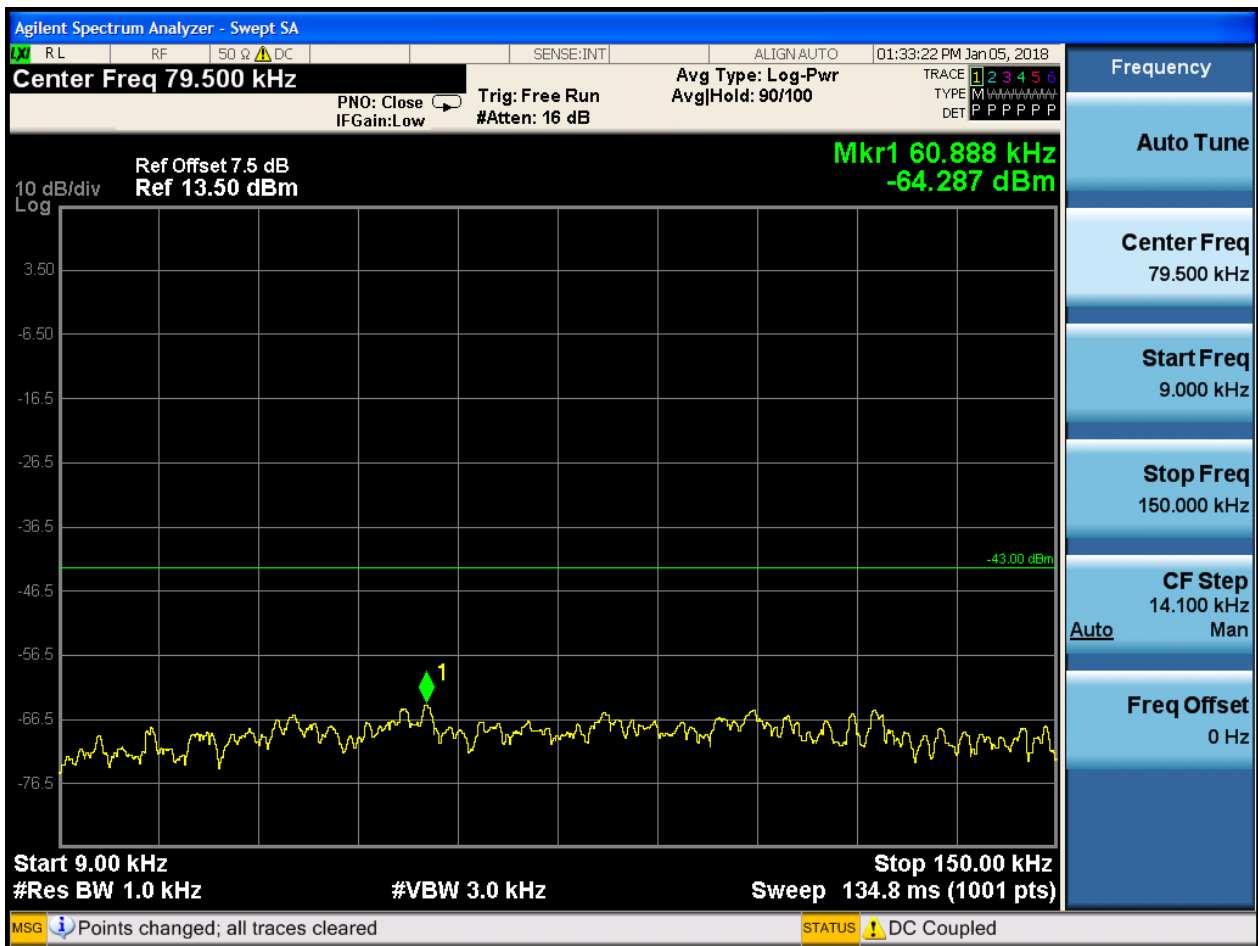


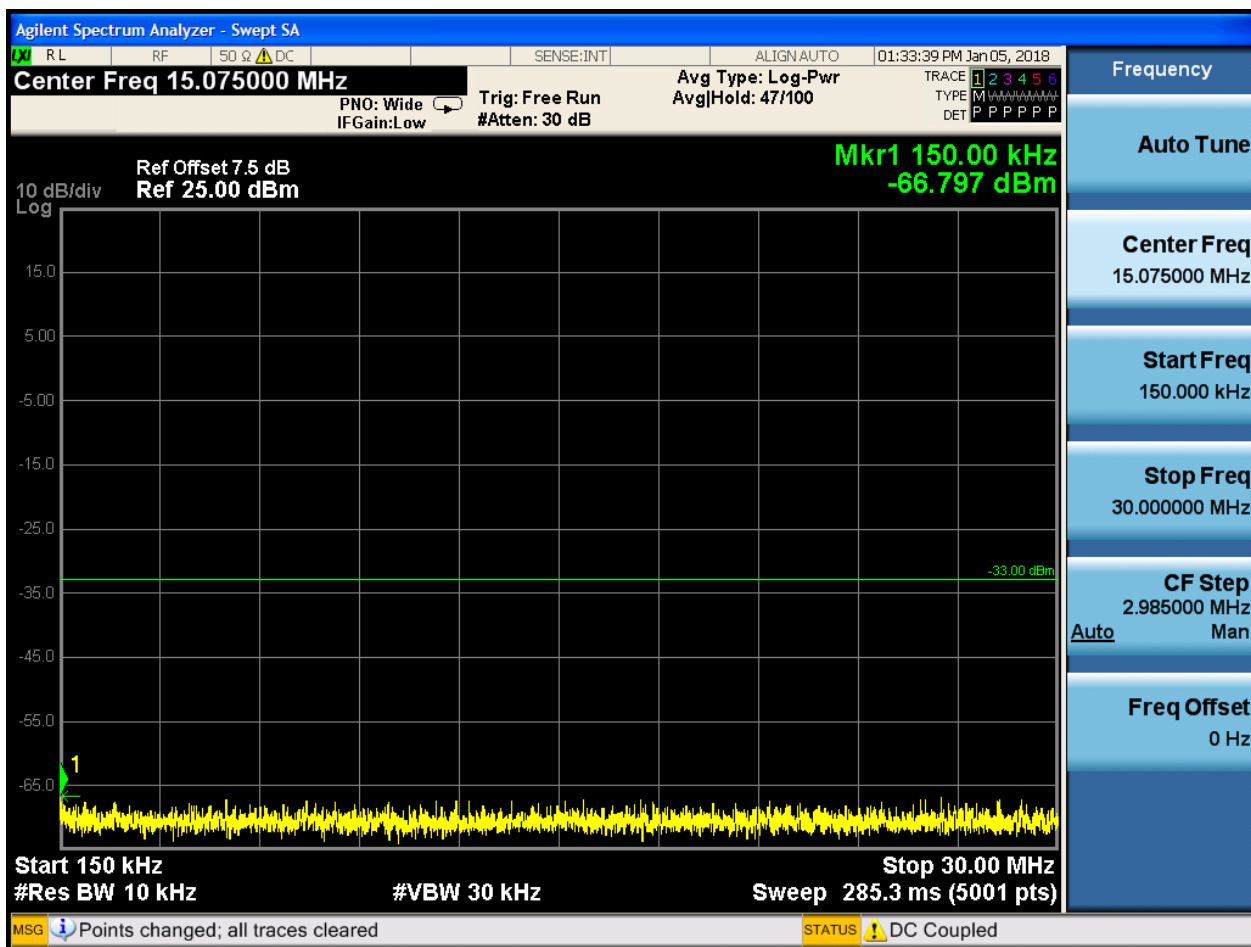


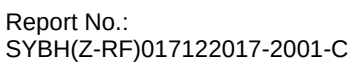




#### 6.1.1.1.3.1.1 Test RB = RB1#0









#### 6.1.1.1.3.2.1 Test RB = RB1#0

