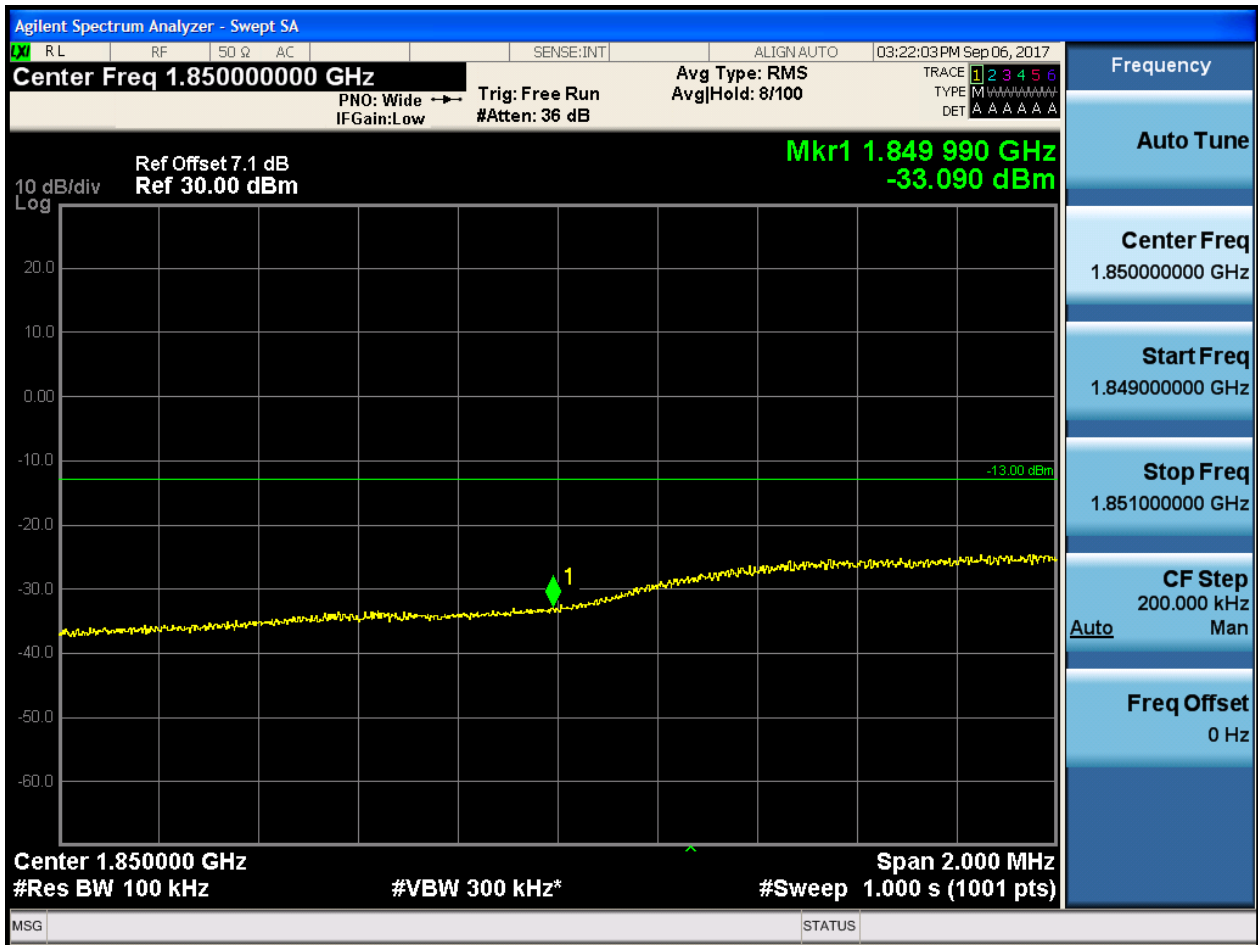
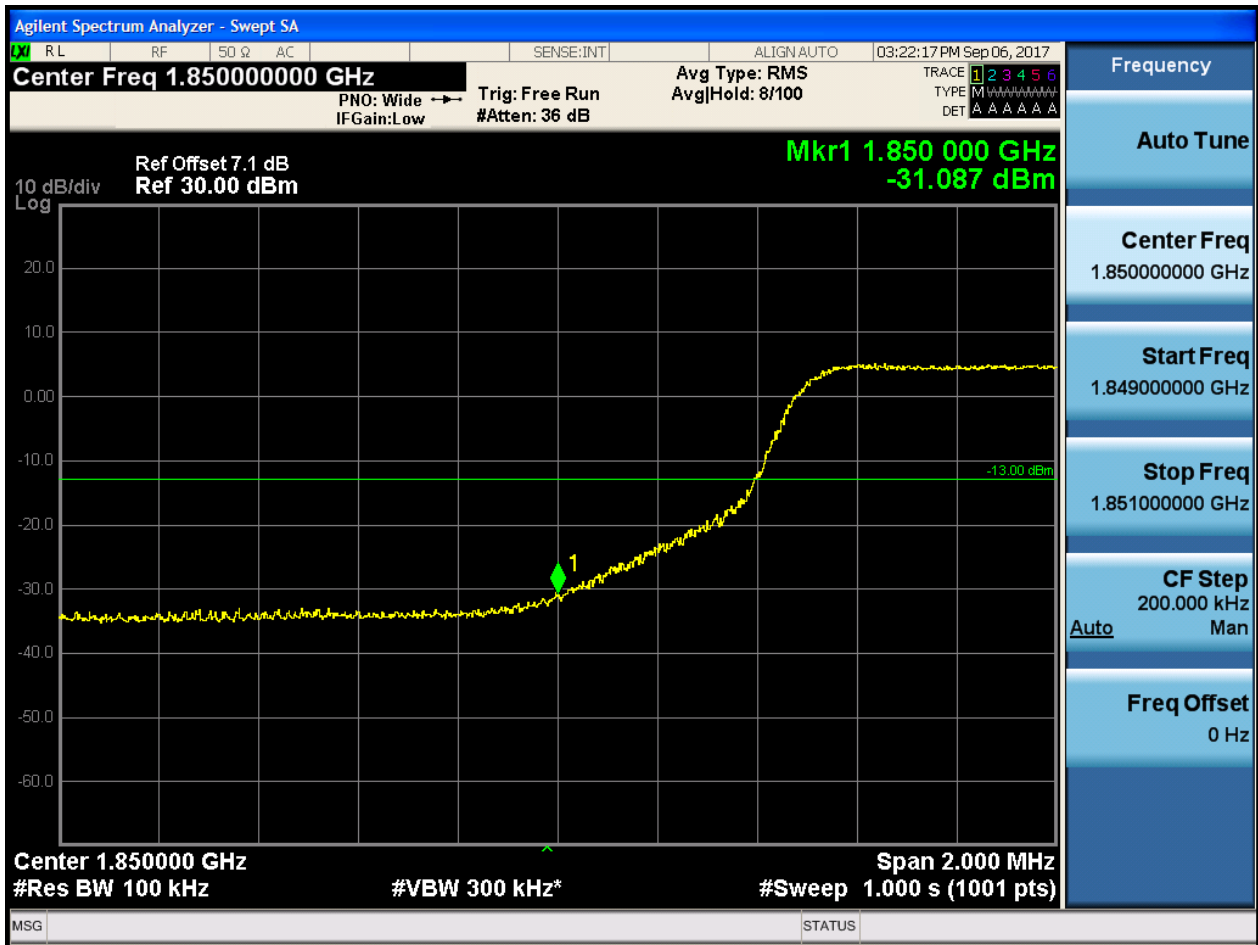


5.1.1.1.4.1.3 Test RB = RB25#13



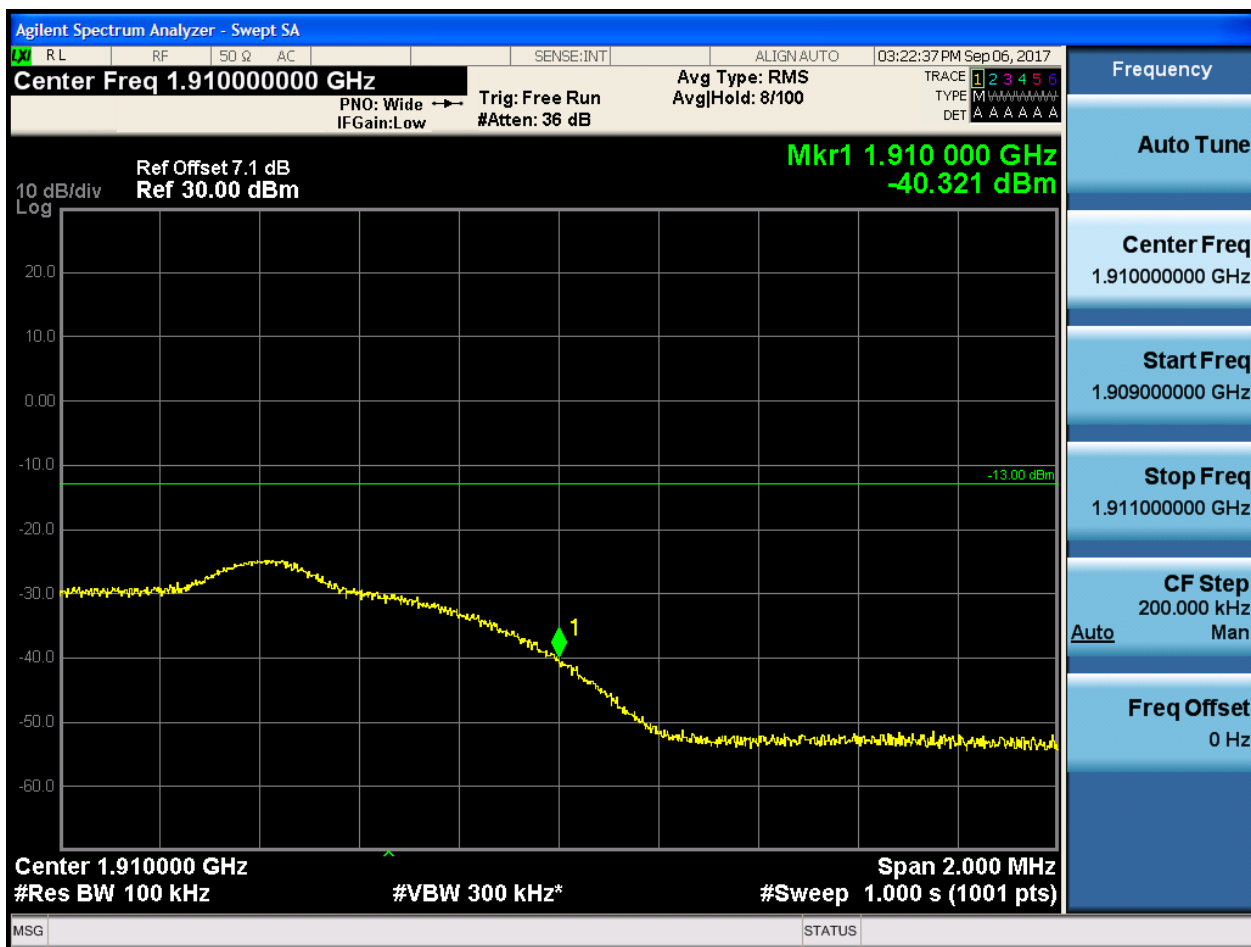
5.1.1.1.4.1.4 Test RB = RB50#0





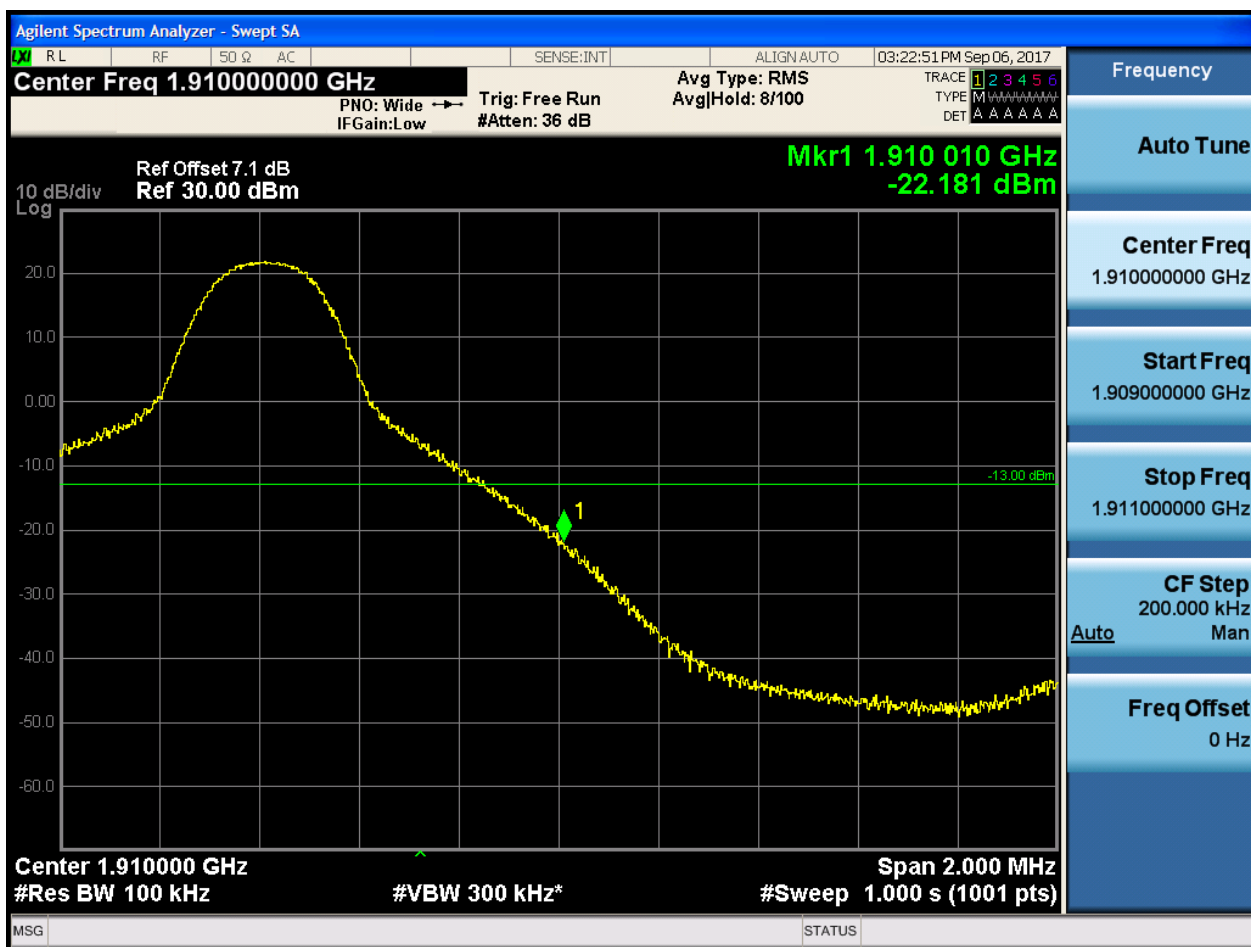
5.1.1.1.4.2 Test Channel = HCH

5.1.1.1.4.2.1 Test RB = RB1#0





5.1.1.1.4.2.2 Test RB = RB1#49





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:23:05 PM Sep 06, 2017

Center Freq 1.91000000 GHz Avg Type: RMS
 PNO: Wide Trg: 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 7.1 dB
 Ref 30.00 dBm

Mkr1 1.910 050 GHz
 -30.274 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
 1.91000000 GHz

Start Freq
 1.909000000 GHz

Stop Freq
 1.911000000 GHz

CF Step
 200.000 kHz
 Auto Man

Freq Offset
 0 Hz



5.1.1.1.4.2.4 Test RB = RB50#0

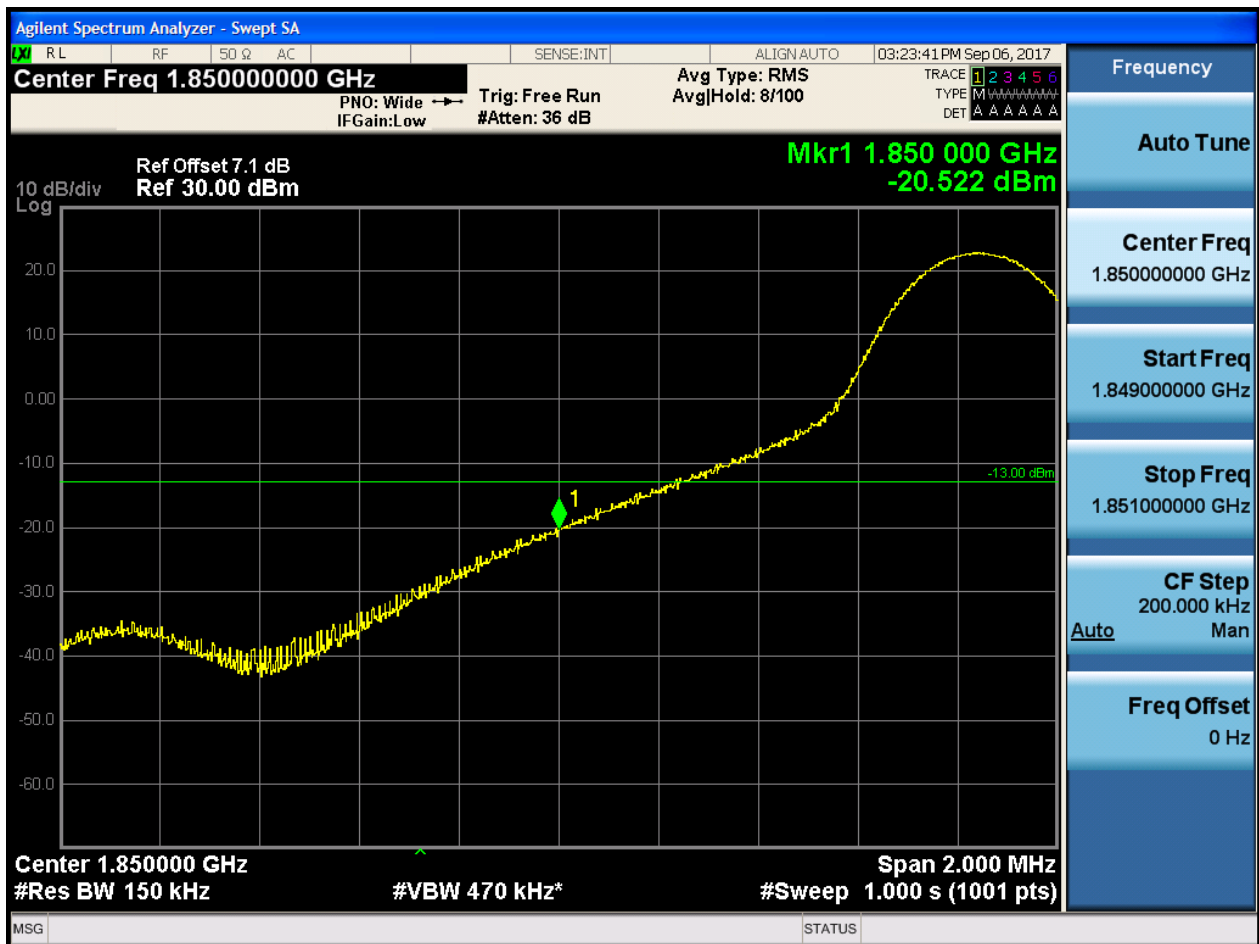




5.1.1.1.5 Test Bandwidth = 15

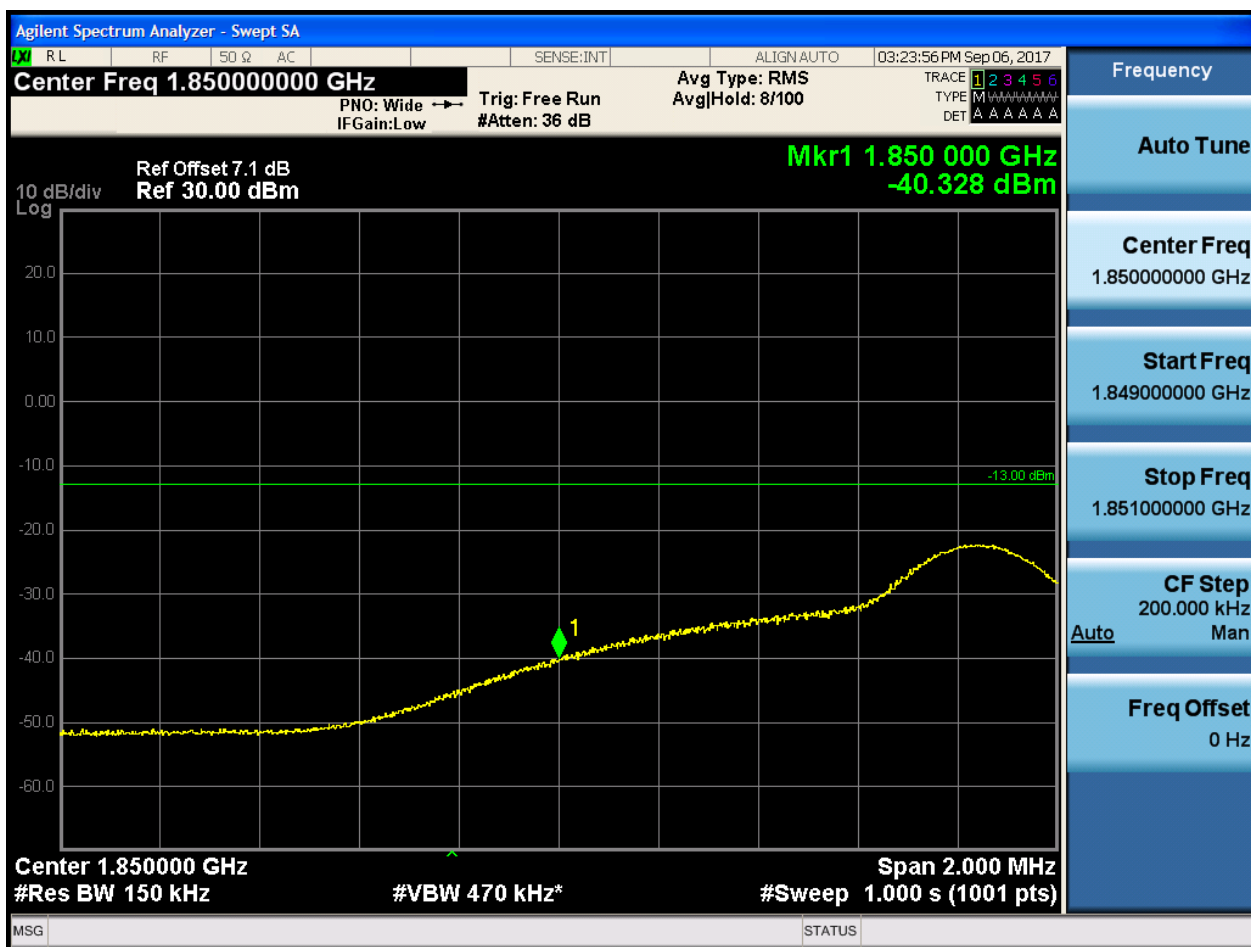
5.1.1.1.5.1 Test Channel = LCH

5.1.1.1.5.1.1 Test RB = RB1#0



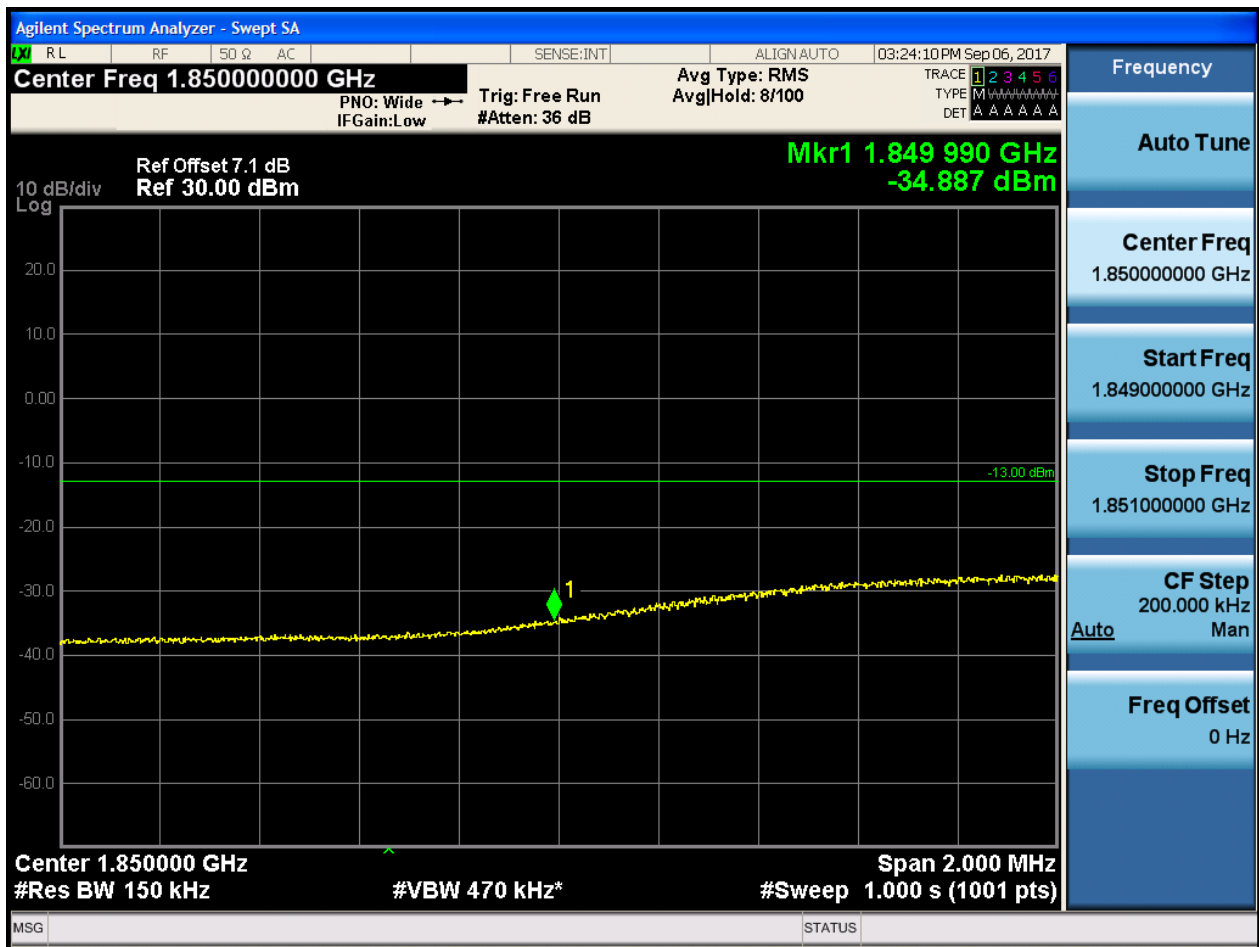


5.1.1.1.5.1.2 Test RB = RB1#74





5.1.1.1.5.1.3 Test RB = RB38#19





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:24:24 PM Sep 06, 2017

Center Freq 1.850000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run
#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 7.1 dB
Ref 30.00 dBm

Mkr1 1.850 000 GHz
-30.144 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





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:24:58 PM Sep 06, 2017

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 010 GHz
-20.478 dBm

10 dB/div
Log

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

Frequency

Auto Tune

Center Freq
1.910000000 GHz

Start Freq
1.909000000 GHz

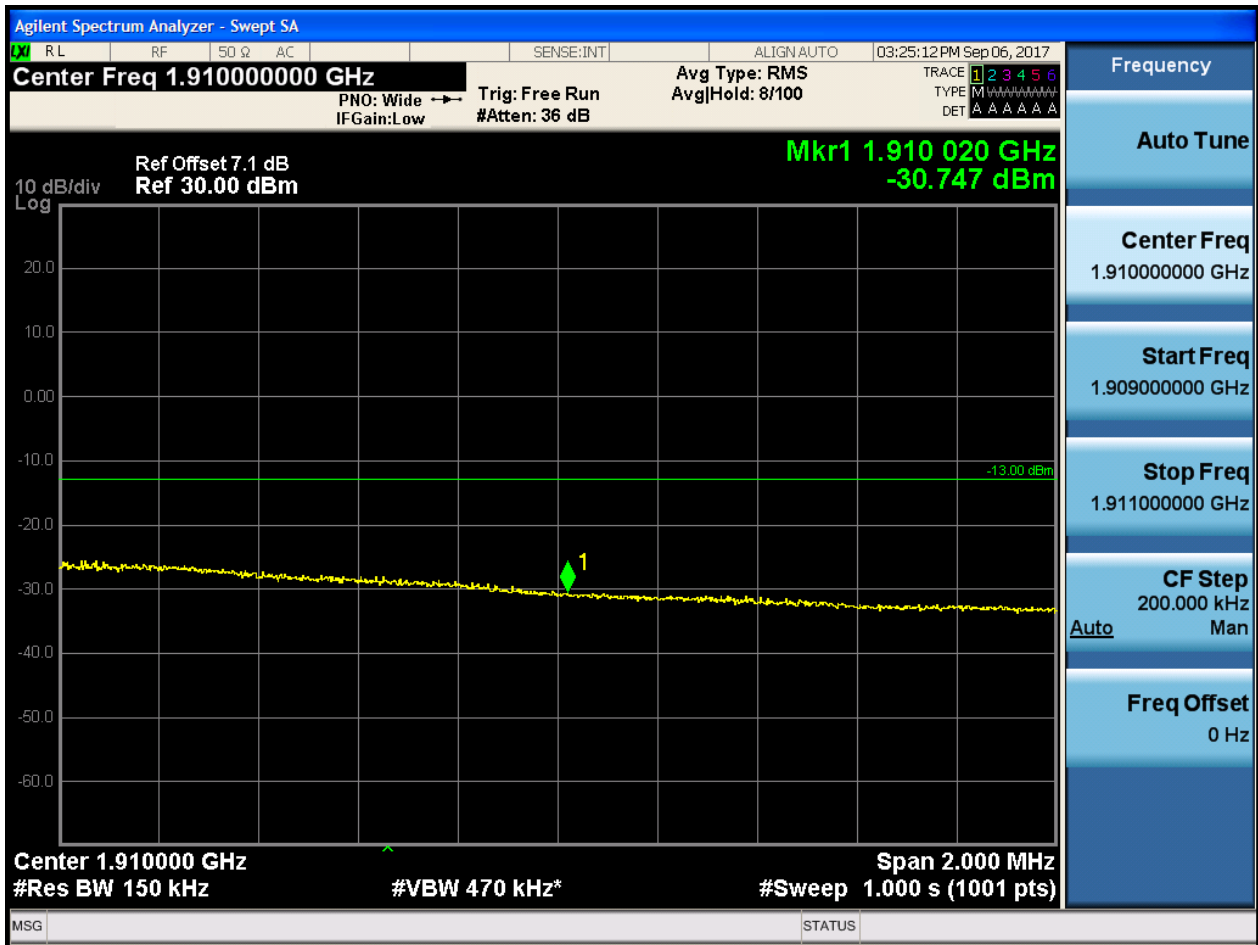
Stop Freq
1.911000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

MSG STATUS

5.1.1.1.5.2.3 Test RB = RB38#19





5.1.1.1.5.2.4 Test RB = RB75#0

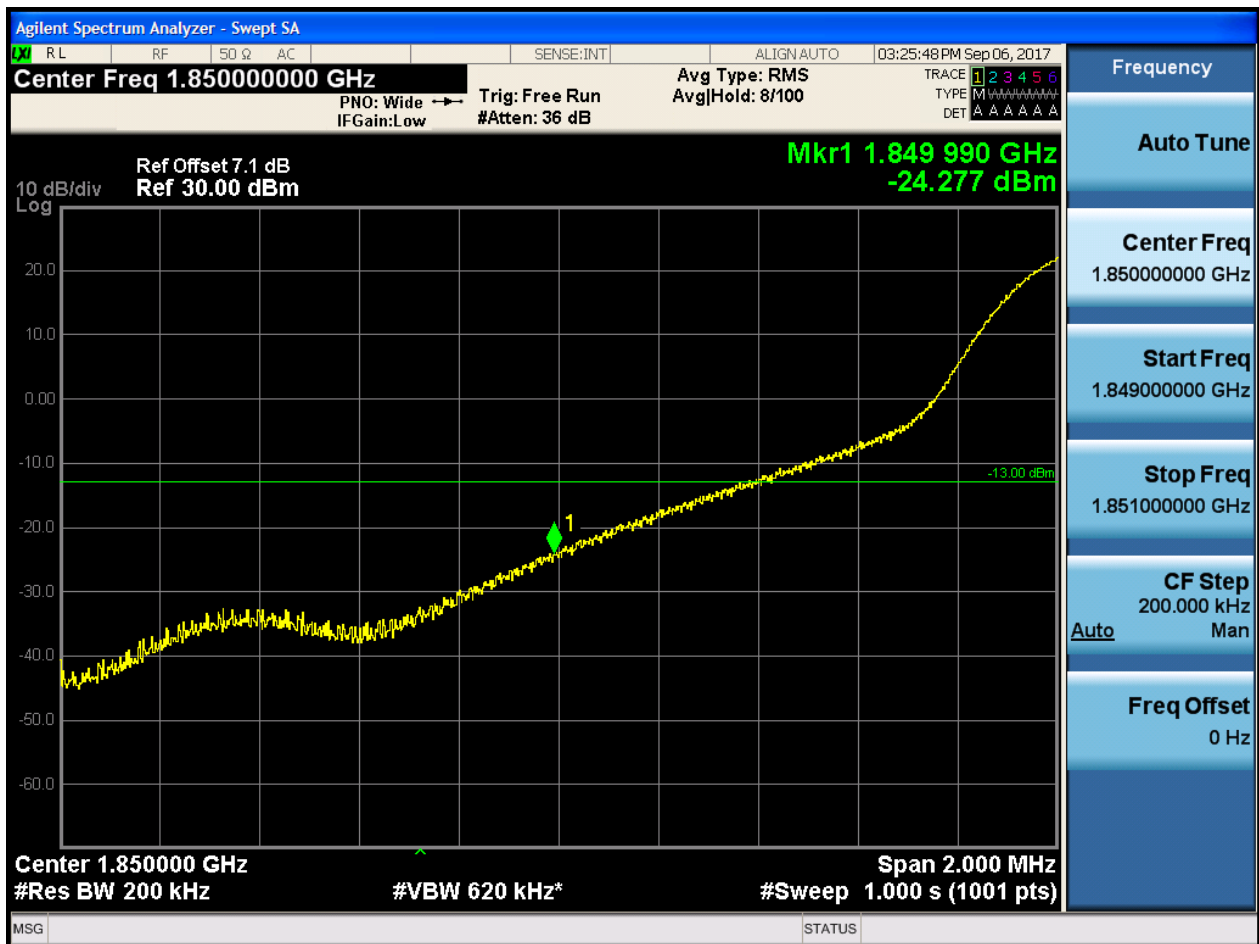




5.1.1.1.6 Test Bandwidth = 20

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

Center Freq 1.850000000 GHz

Ref Offset 7.1 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 1.850 000 GHz
-40.205 dBm

Center 1.850000 GHz
#Res BW 200 kHz
#VBW 620 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

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

The image shows a screenshot of an Agilent Spectrum Analyzer in a swept SA mode. The main display area shows a frequency spectrum with a yellow trace. A green horizontal line is drawn across the plot at -13.00 dBm. A yellow marker labeled '1' is placed on the trace at approximately 1.850 GHz and -40.2 dBm. The plot has a grid with frequency on the x-axis and power in dBm on the y-axis. The y-axis scale is 10 dB/div in Log mode. The x-axis shows a span of 2.000 MHz centered at 1.850000 GHz. The resolution bandwidth (Res BW) is 200 kHz, and the video bandwidth (VBW) is 620 kHz. The sweep time is 1.000 s, resulting in 1001 points. The reference level is set to 30.00 dBm with a 7.1 dB offset. The marker '1' indicates a signal level of -40.205 dBm at the center frequency. The right side of the screen features a control panel with various settings for frequency, auto-tune, center frequency, start/stop frequencies, CF step, and frequency offset.



Agilent Spectrum Analyzer - Swept SA

Center Freq 1.850000000 GHz

Ref Offset 7.1 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 1.850 000 GHz
-36.852 dBm

Center 1.850000 GHz
#Res BW 200 kHz
#VBW 620 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

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

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

Center Freq 1.850000000 GHz

Ref Offset 7.1 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 1.849 950 GHz
-33.631 dBm

Center 1.850000 GHz
#Res BW 200 kHz
#VBW 620 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Auto Tune

Center Freq
1.850000000 GHz

Start Freq
1.849000000 GHz

Stop Freq
1.851000000 GHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

Center 1.850000 GHz
#Res BW 200 kHz
#VBW 620 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

MSG STATUS



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 Ω AC SENSE:INT ALIGN AUTO 03:27:05 PM Sep 06, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 000 GHz
-23.687 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



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:27:19 PM Sep 06, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 280 GHz
-30.667 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

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:27:33 PM Sep 06, 2017

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

Ref Offset 7.1 dB
 Ref 30.00 dBm

Mkr1 1.910 010 GHz
 -31.288 dBm

10 dB/div
 Log

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

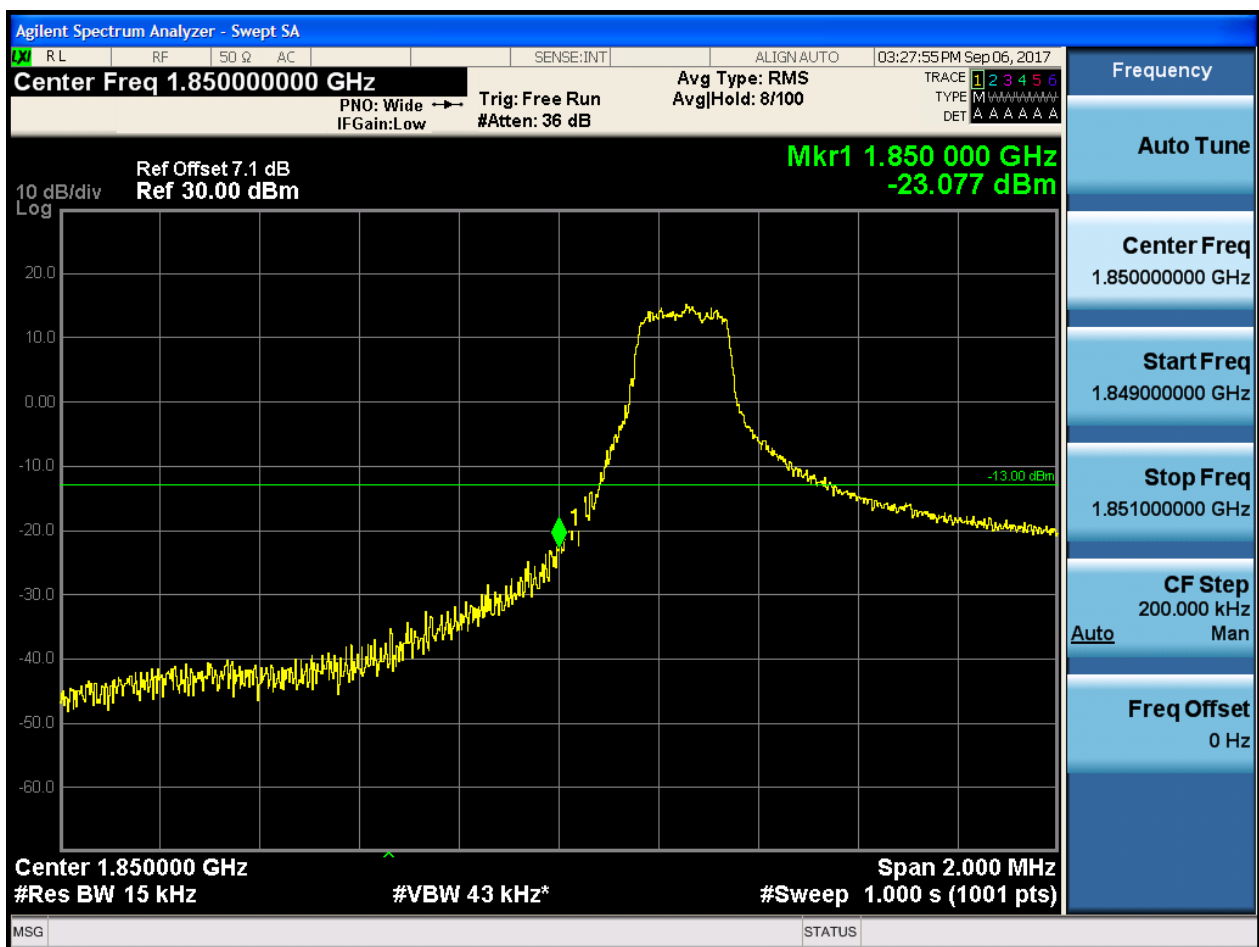
MSG STATUS

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





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:28:09 PM Sep 06, 2017

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.849 320 GHz
-34.640 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)

Frequency

Auto Tune

Center Freq
1.850000000 GHz

Start Freq
1.849000000 GHz

Stop Freq
1.851000000 GHz

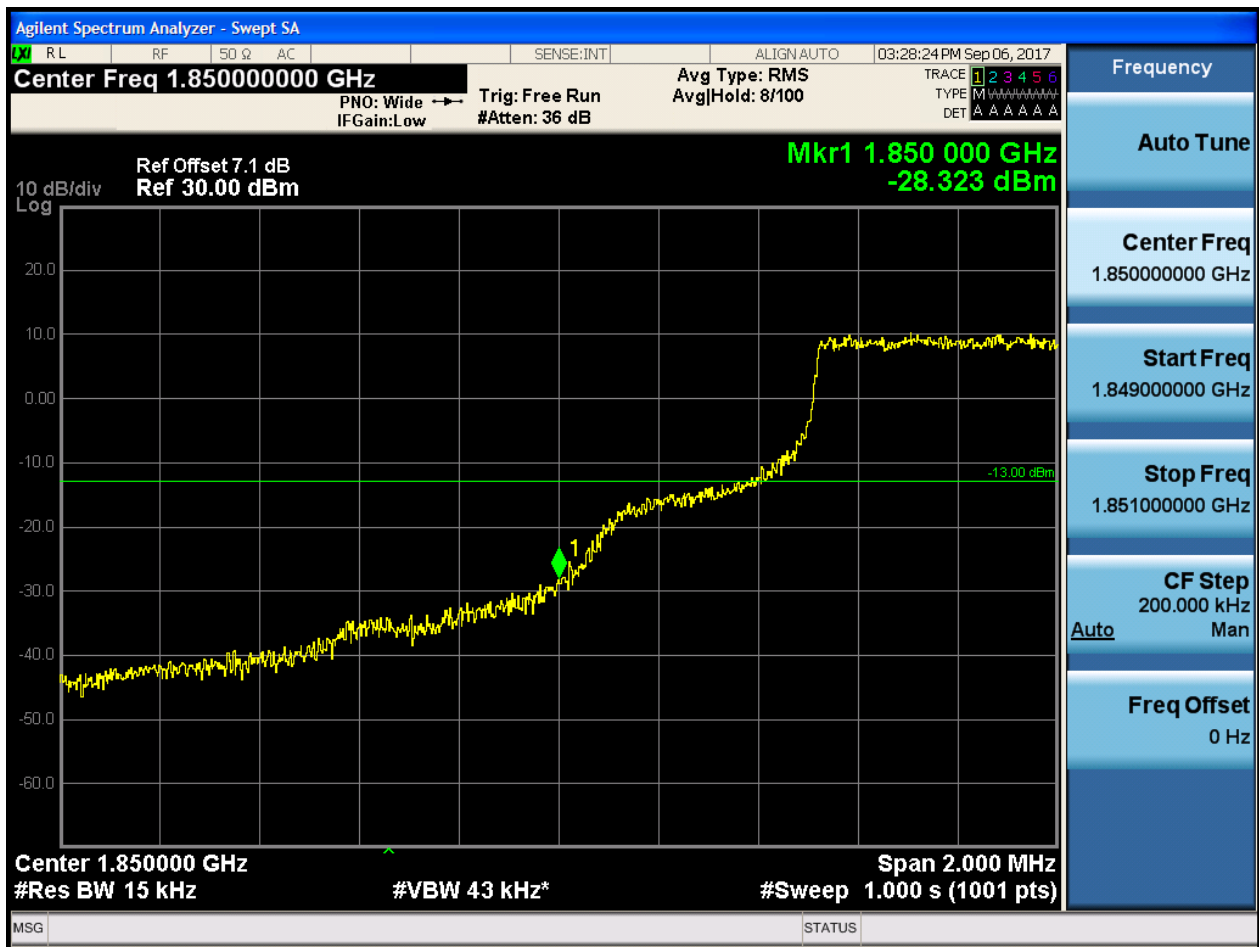
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

MSG STATUS



5.1.1.2.1.1.3 Test RB = RB3#2





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:28:38 PM Sep 06, 2017

Center Freq 1.850000000 GHz Avg Type: RMS
PNO: Wide Trg: 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 7.1 dB
Ref 30.00 dBm

Mkr1 1.850 000 GHz
-25.638 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

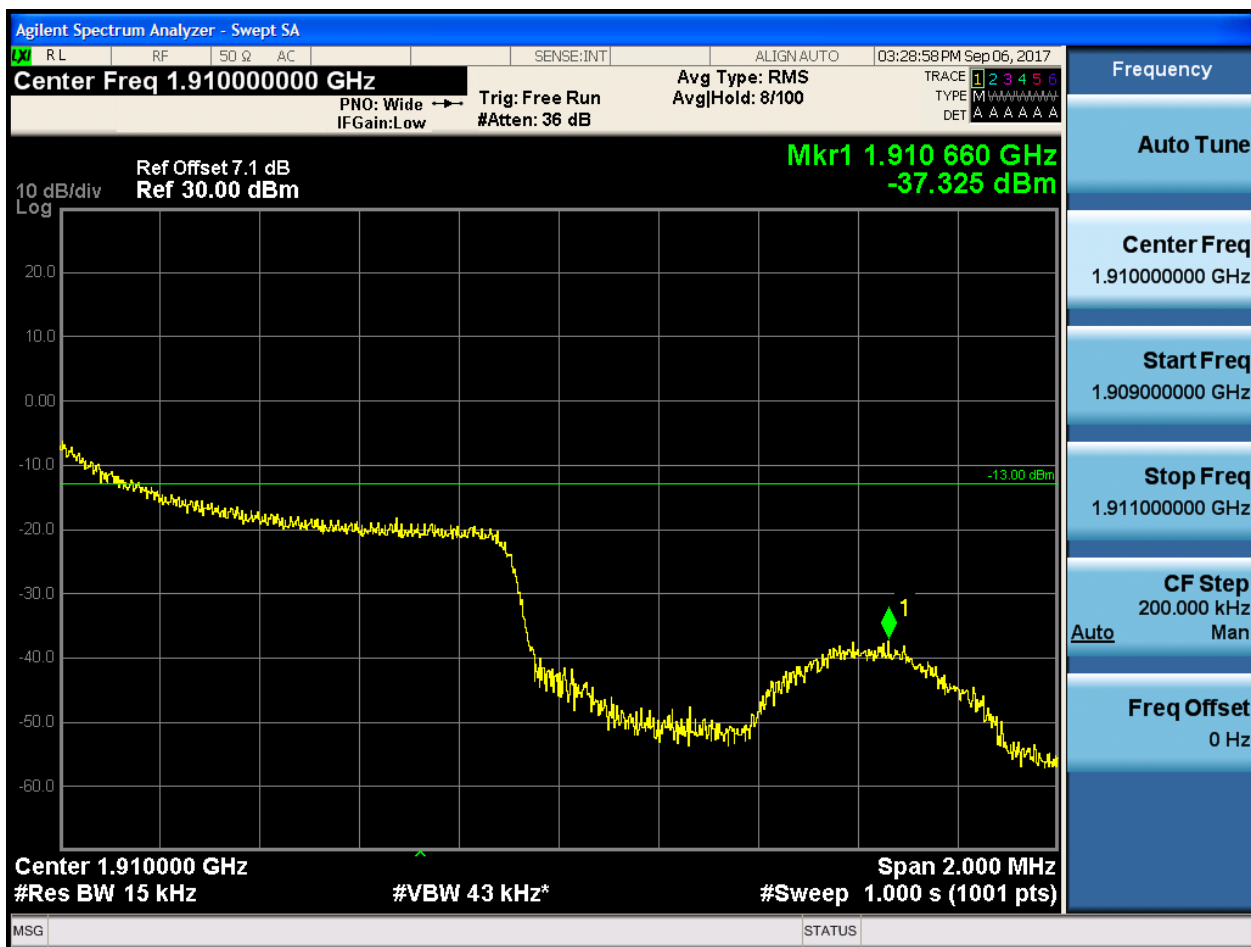
Stop Freq
1.851000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

5.1.1.2.1.2 Test Channel = HCH

5.1.1.2.1.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:29:12 PM Sep 06, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide Trg: Free Run
IFGain:Low #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 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 000 GHz
-23.798 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 Ω AC SENSE:INT ALIGN AUTO 03:29:26 PM Sep 06, 2017

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

Ref Offset 7.1 dB
 Ref 30.00 dBm

Mkr1 1.910 030 GHz
 -25.699 dBm

10 dB/div
 Log

Center 1.910000 GHz Span 2.000 MHz
 #Res BW 15 kHz #VBW 43 kHz* #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



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:29:41 PM Sep 06, 2017

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

Ref Offset 7.1 dB
 Ref 30.00 dBm

Mkr1 1.910 280 GHz
 -30.454 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)

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

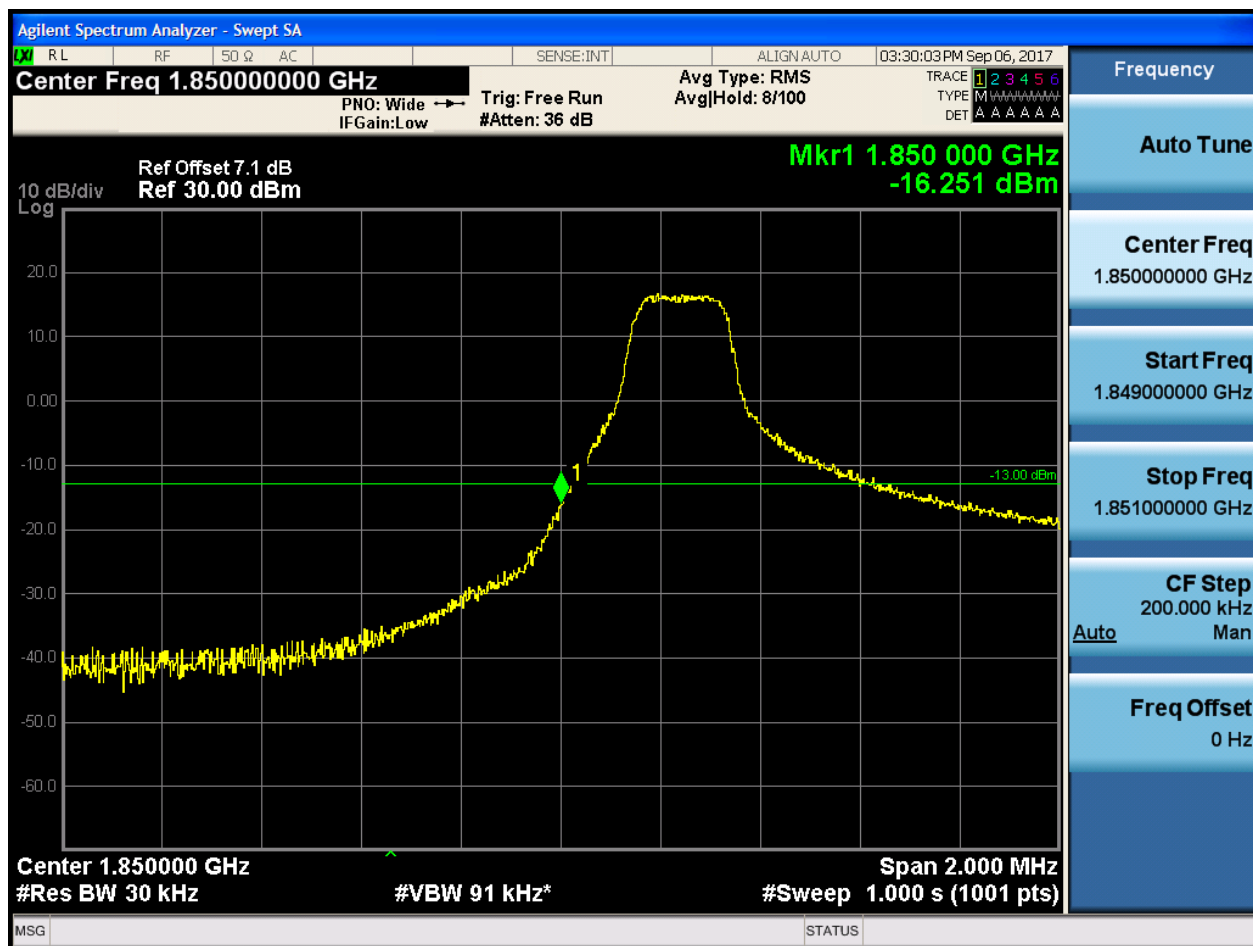
Freq Offset
 0 Hz

MSG STATUS

5.1.1.2.2 Test Bandwidth = 3

5.1.1.2.2.1 Test Channel = LCH

5.1.1.2.2.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:30:17 PM Sep 06, 2017

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.850 000 GHz
-32.840 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

Center 1.850000 GHz
#Res BW 30 kHz

#VBW 91 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

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

MSG STATUS



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:30:31 PM Sep 06, 2017

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

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.850 000 GHz
-29.380 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



Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:30:45 PM Sep 06, 2017

Center Freq 1.850000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 1.850 000 GHz
-27.124 dBm

10 dB/div
Log

-13.00 dBm

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

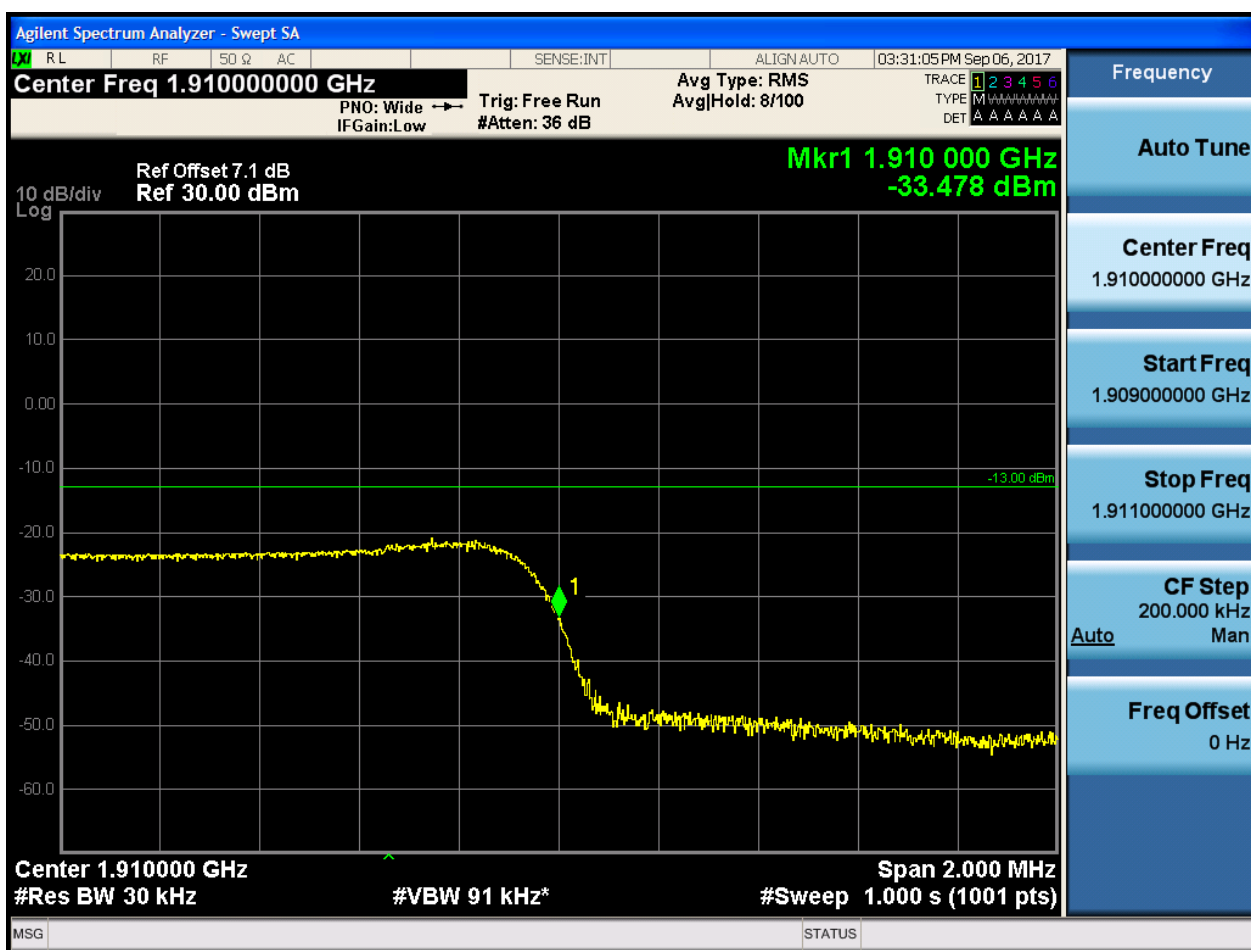
Stop Freq
1.851000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

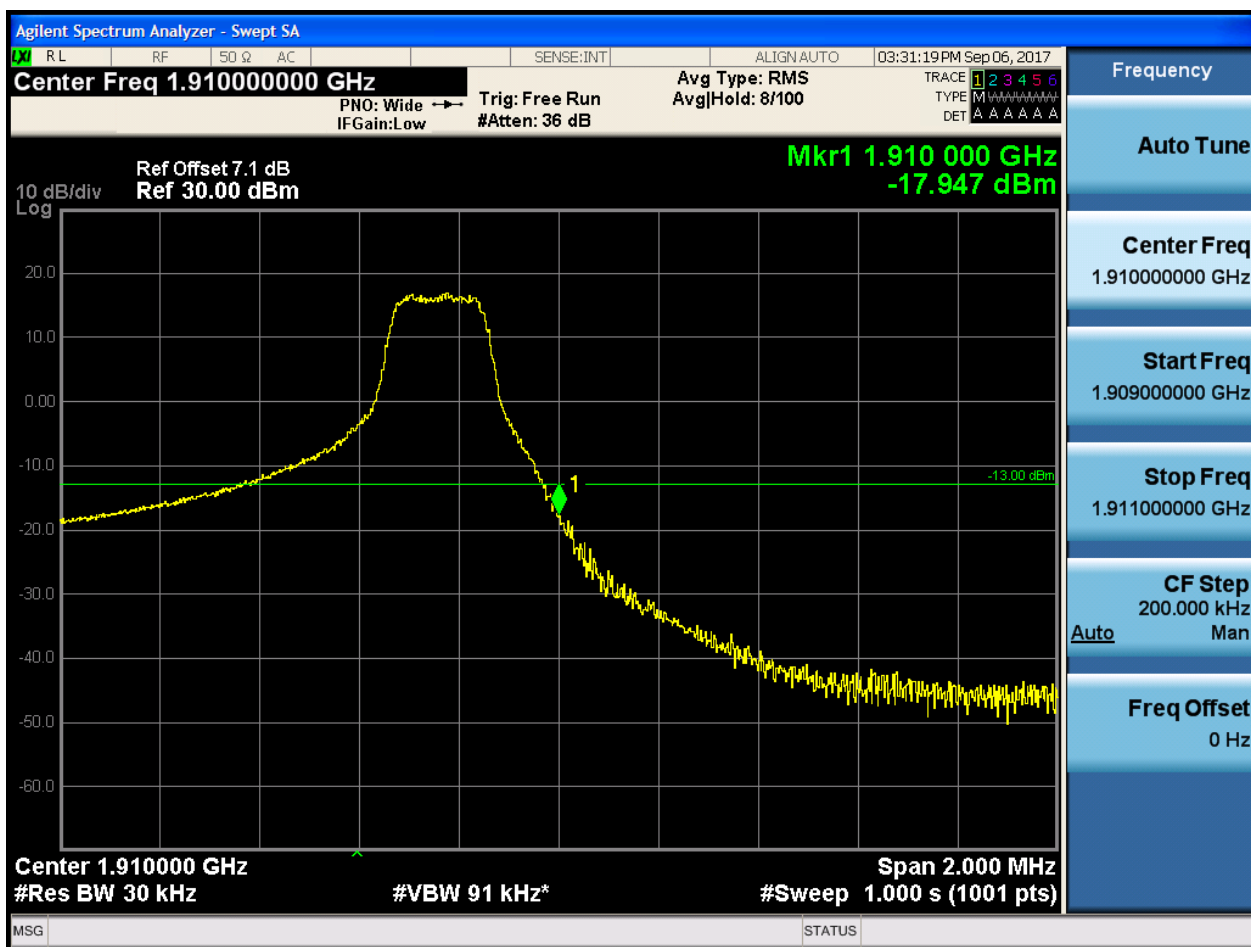
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0





5.1.1.2.2.2 Test RB = RB1#14





5.1.1.2.2.3 Test RB = RB8#4





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:31:48 PM Sep 06, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide Trg: 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 W W
DET A A A A A A

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 000 GHz
-28.811 dBm

10 dB/div
Log

-13.00 dBm

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

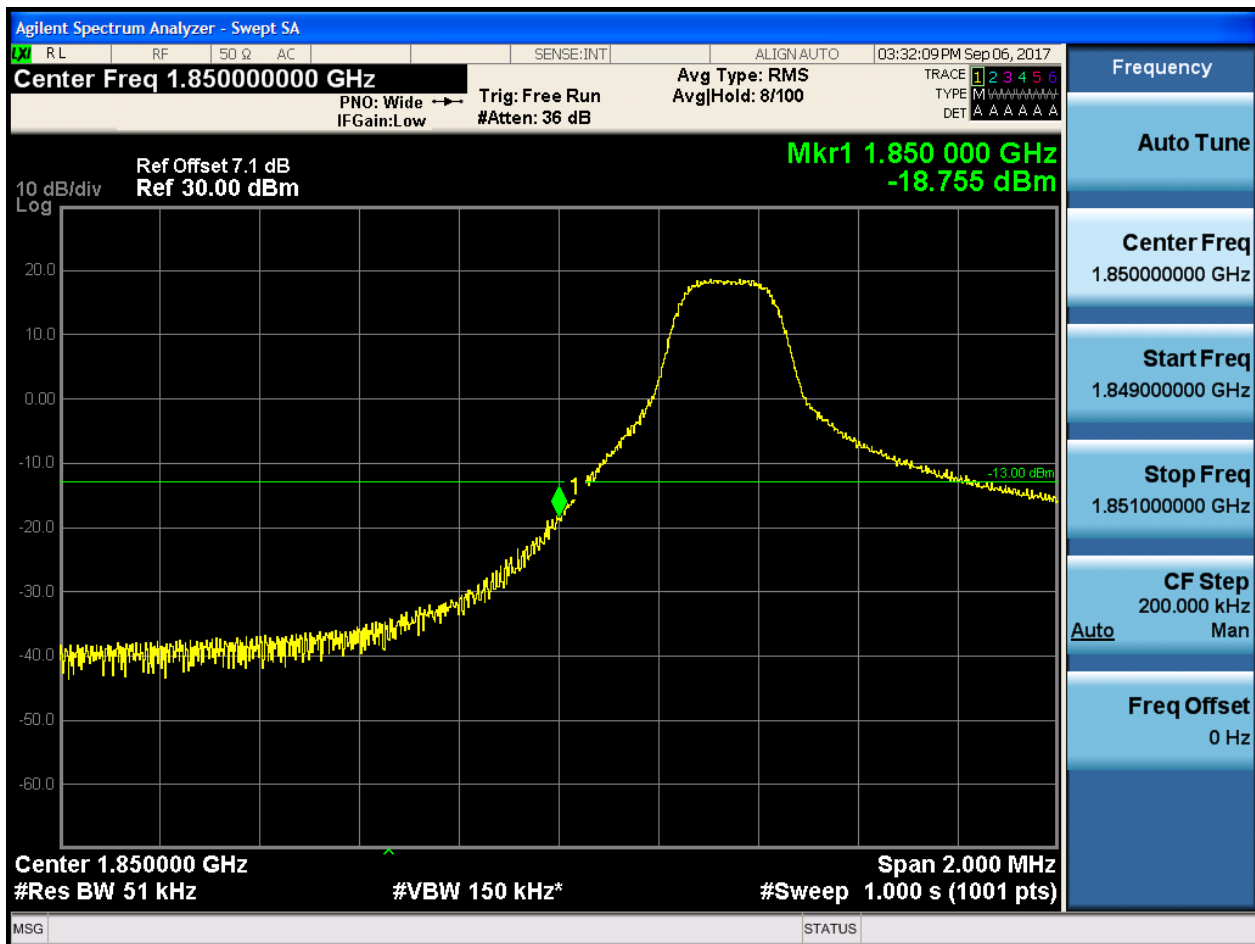
MSG STATUS

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

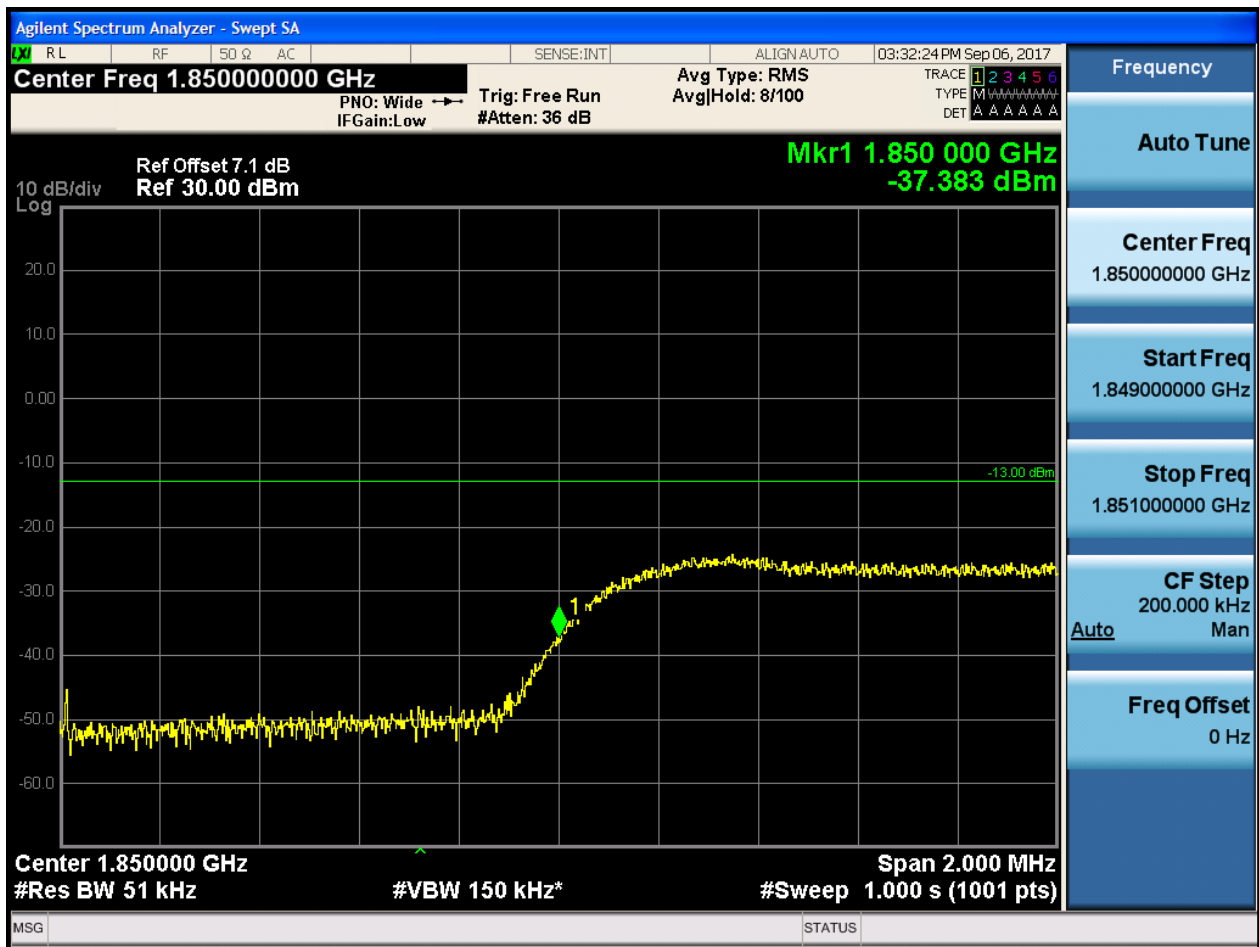
5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0



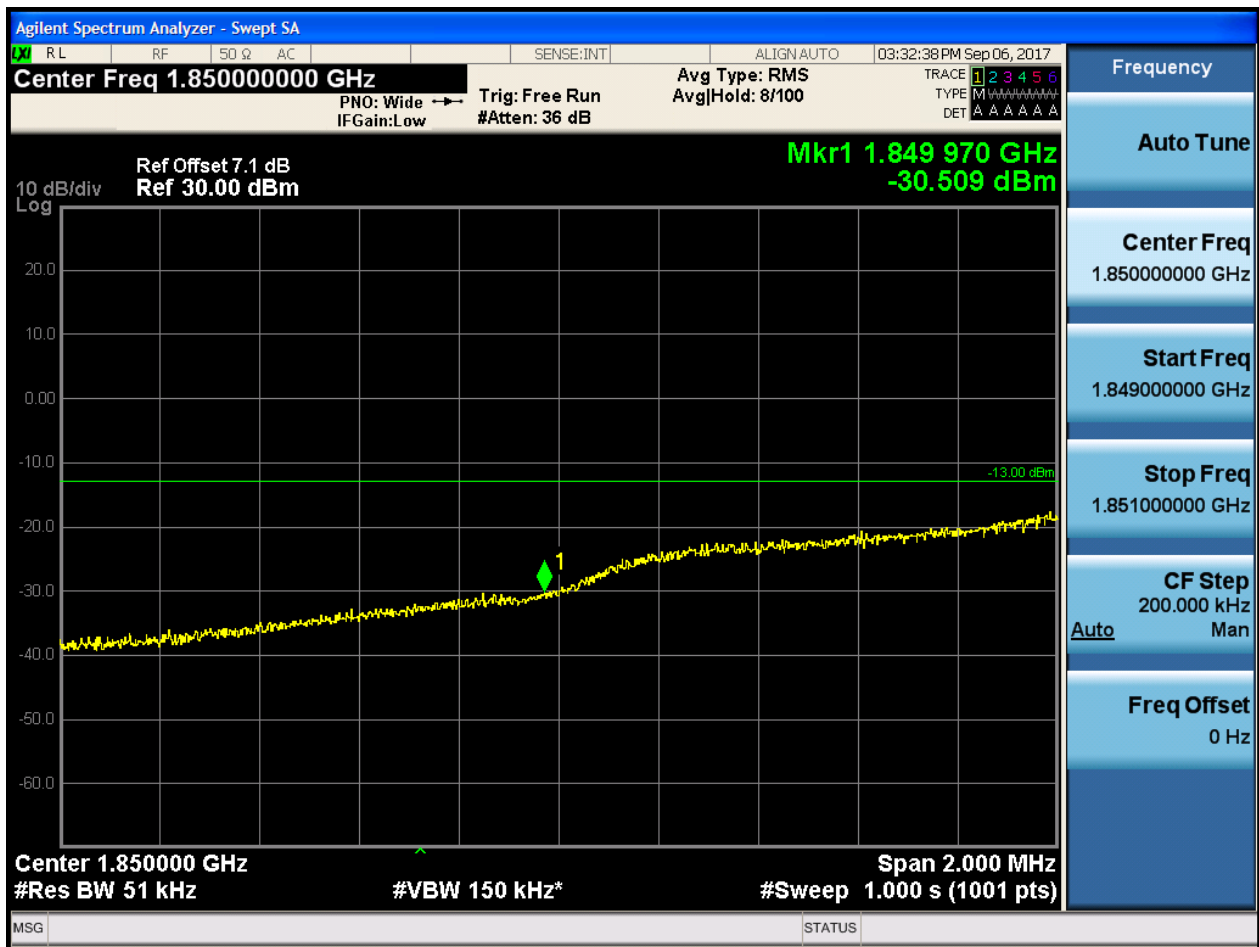


5.1.1.2.3.1.2 Test RB = RB1#24





5.1.1.2.3.1.3 Test RB = RB12#6





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:32:52 PM Sep 06, 2017

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

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.849 990 GHz
-28.120 dBm

10 dB/div
Log

Center 1.850000 GHz
#Res BW 51 kHz
#VBW 150 kHz*
Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

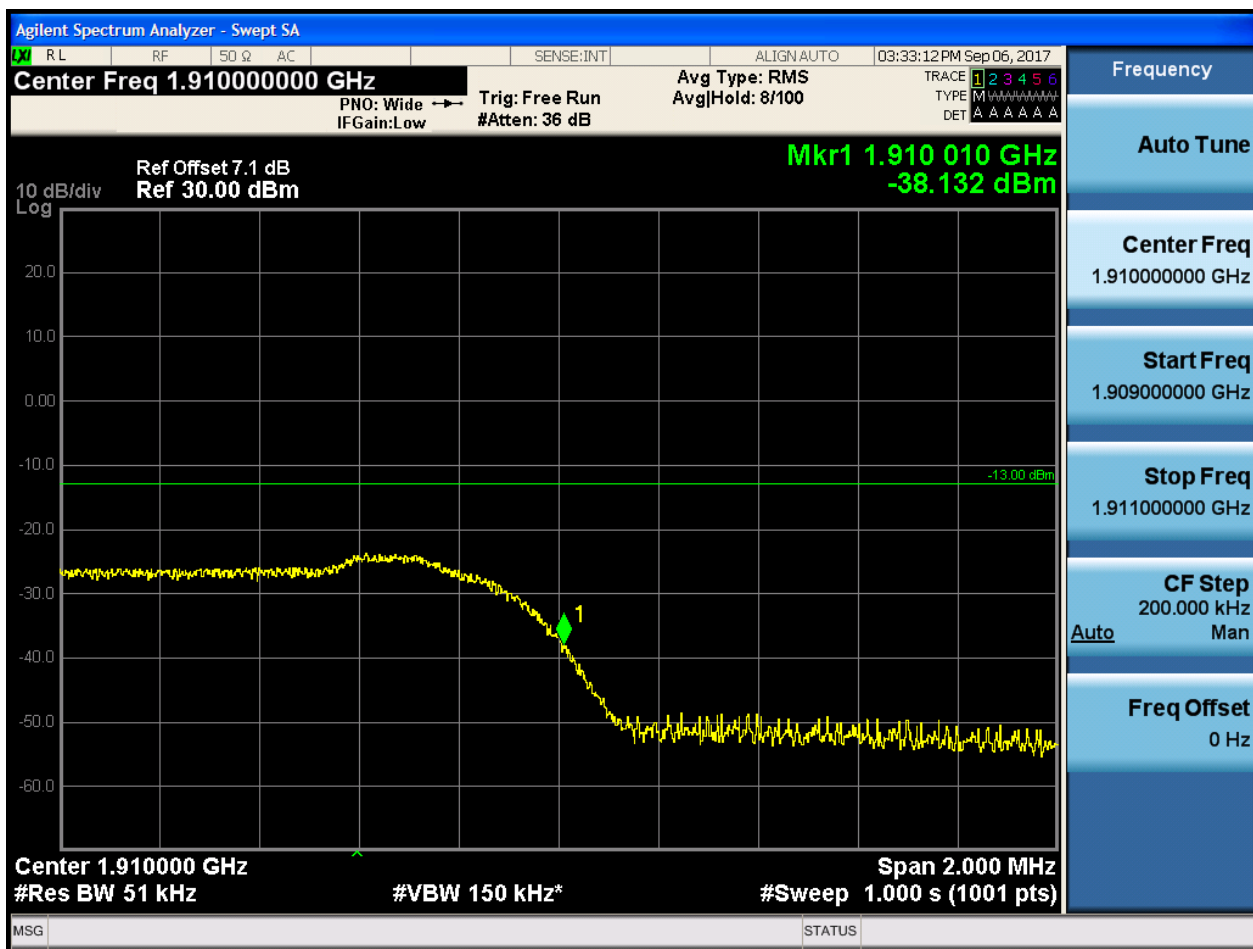
MSG STATUS

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



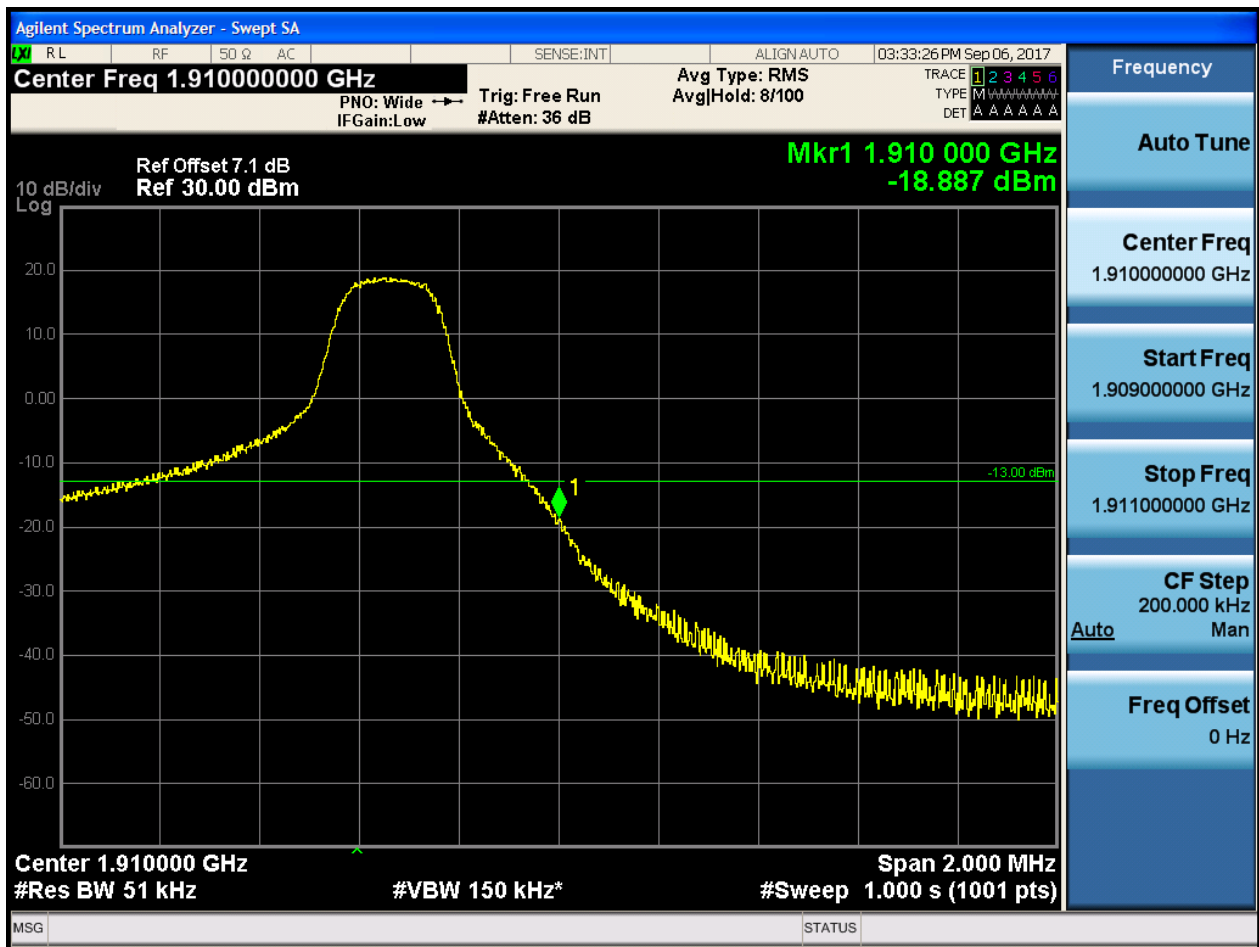
5.1.1.2.3.2 Test Channel = HCH

5.1.1.2.3.2.1 Test RB = RB1#0





5.1.1.2.3.2.2 Test RB = RB1#24





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:33:40 PM Sep 06, 2017

Center Freq 1.91000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#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 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 000 GHz
-35.003 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

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:33:55 PM Sep 06, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Atten: 36 dB

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 000 GHz
-30.485 dBm

10 dB/div
Log

-13.00 dBm

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

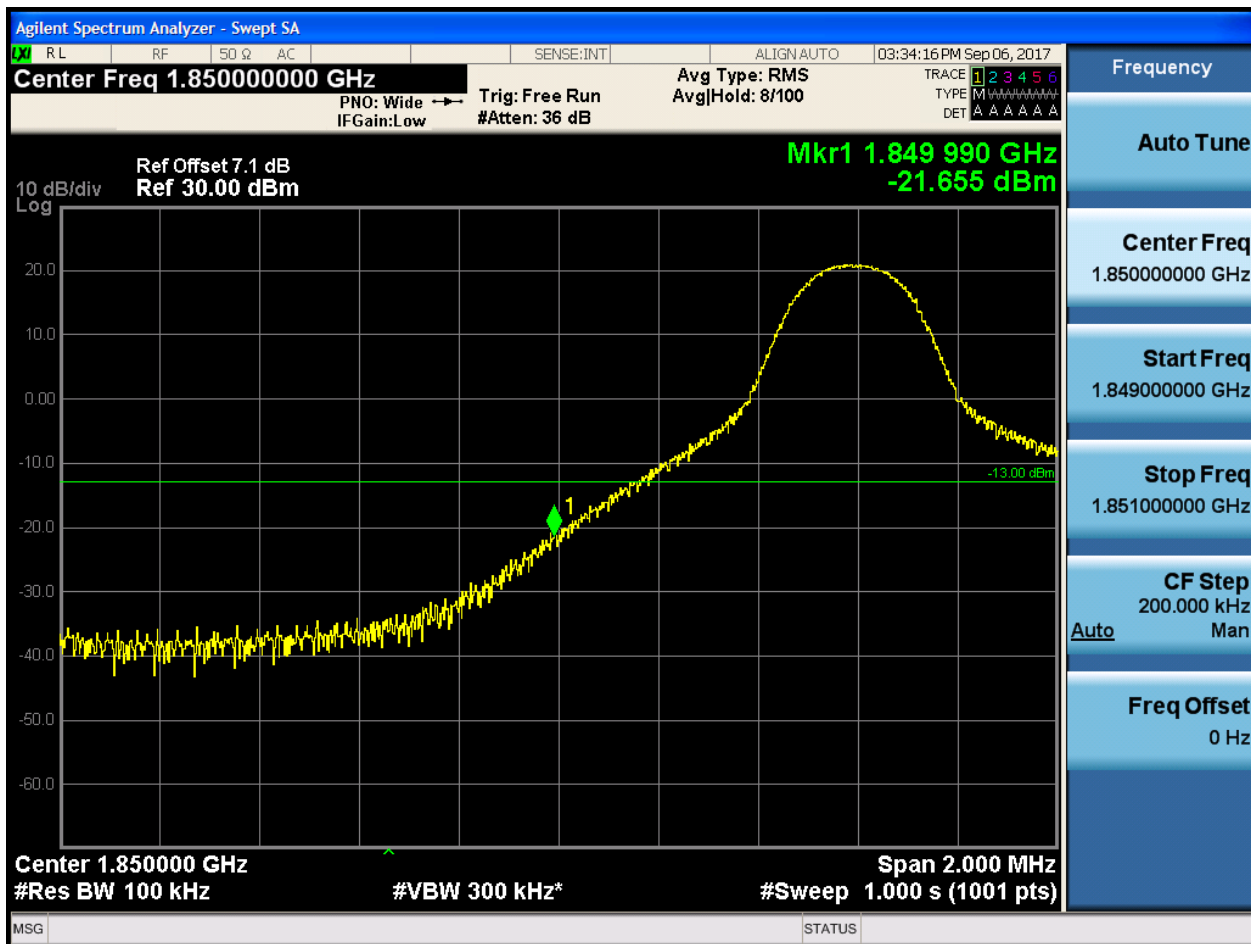
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

5.1.1.2.4 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 Ω AC SENSE:INT ALIGN: AUTO 03:34:31 PM Sep 06, 2017

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

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.850 000 GHz
-38.852 dBm

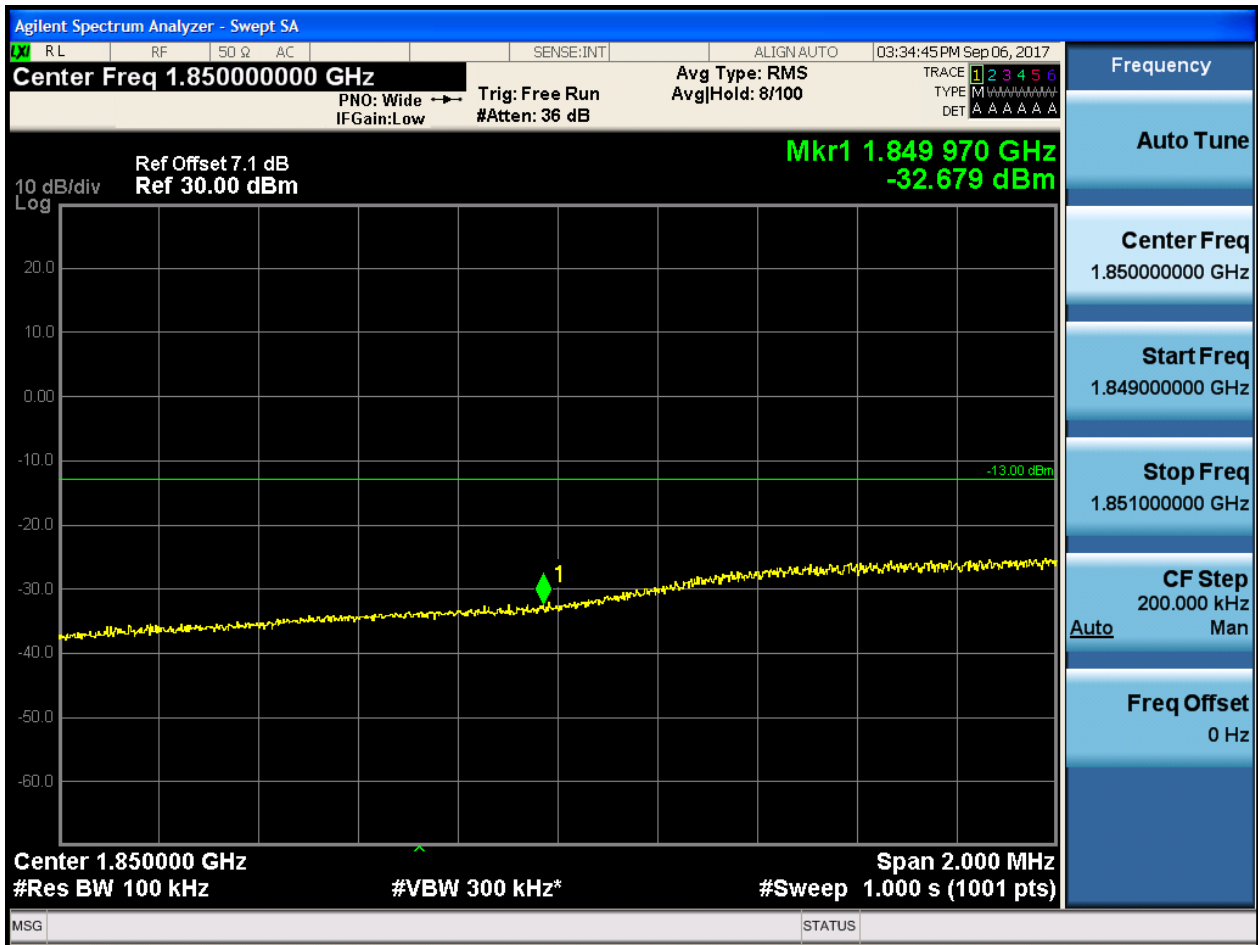
10 dB/div
Log

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

5.1.1.2.4.1.3 Test RB = RB25#13



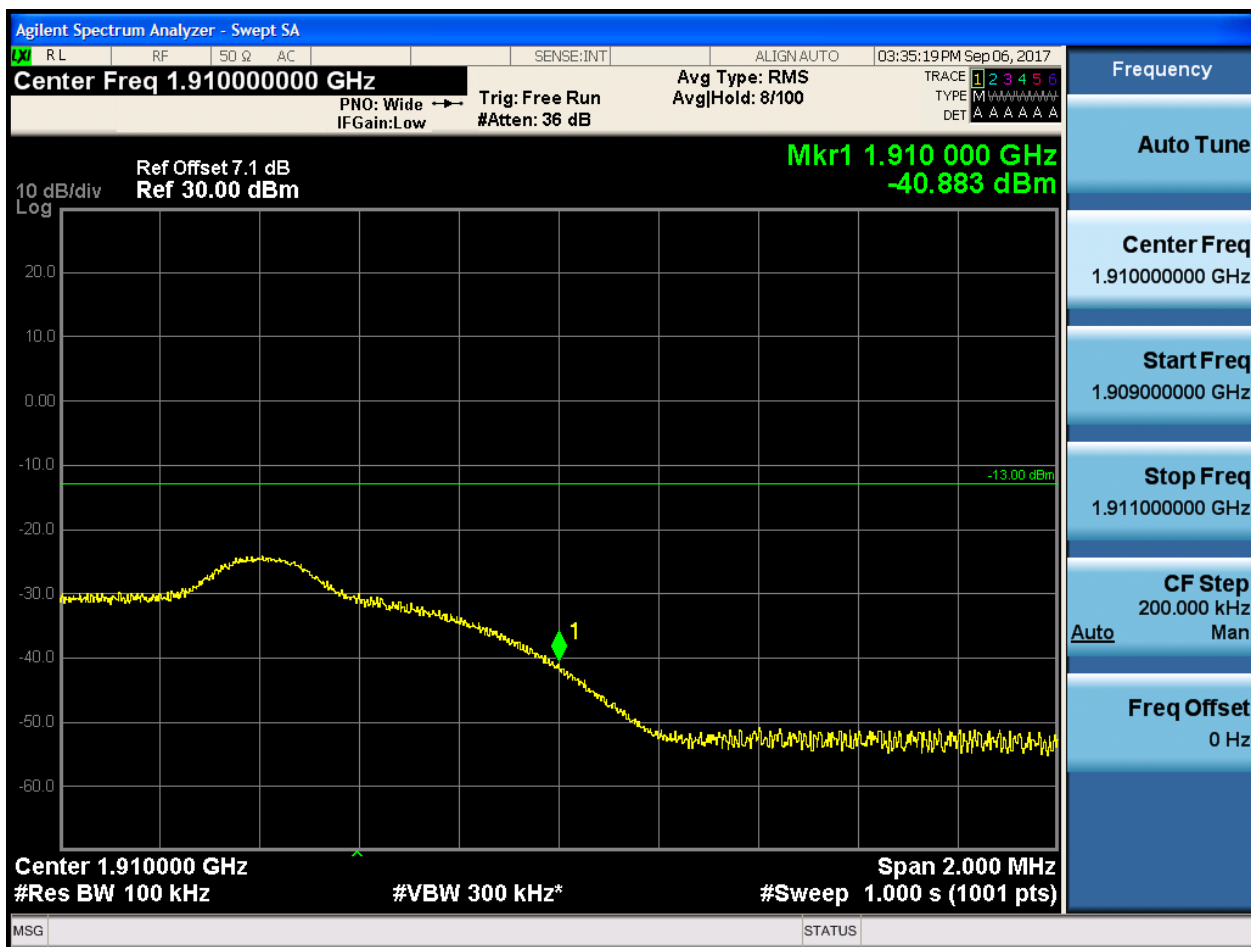
5.1.1.2.4.1.4 Test RB = RB50#0





5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:35:33 PM Sep 06, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide Trg: 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 W W
DET A A A A A A

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 000 GHz
-22.193 dBm

10 dB/div
Log

Center 1.910000 GHz Span 2.000 MHz
#Res BW 100 kHz #VBW 300 kHz* #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 Ω AC SENSE:INT ALIGN AUTO 03:35:48 PM Sep 06, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
#Att: 36 dB

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 020 GHz
-35.477 dBm

10 dB/div
Log

The spectrum analyzer display shows a swept spectrum from 1.909 GHz to 1.911 GHz. The vertical axis represents power in dBm, ranging from -60 to 20. A yellow trace shows the signal level, which is relatively flat around -35 dBm. A green horizontal line is drawn at -13.00 dBm. A green marker labeled '1' is placed on the trace at 1.910020 GHz. The background is a dark gray grid.

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

5.1.1.2.4.2.4 Test RB = RB50#0

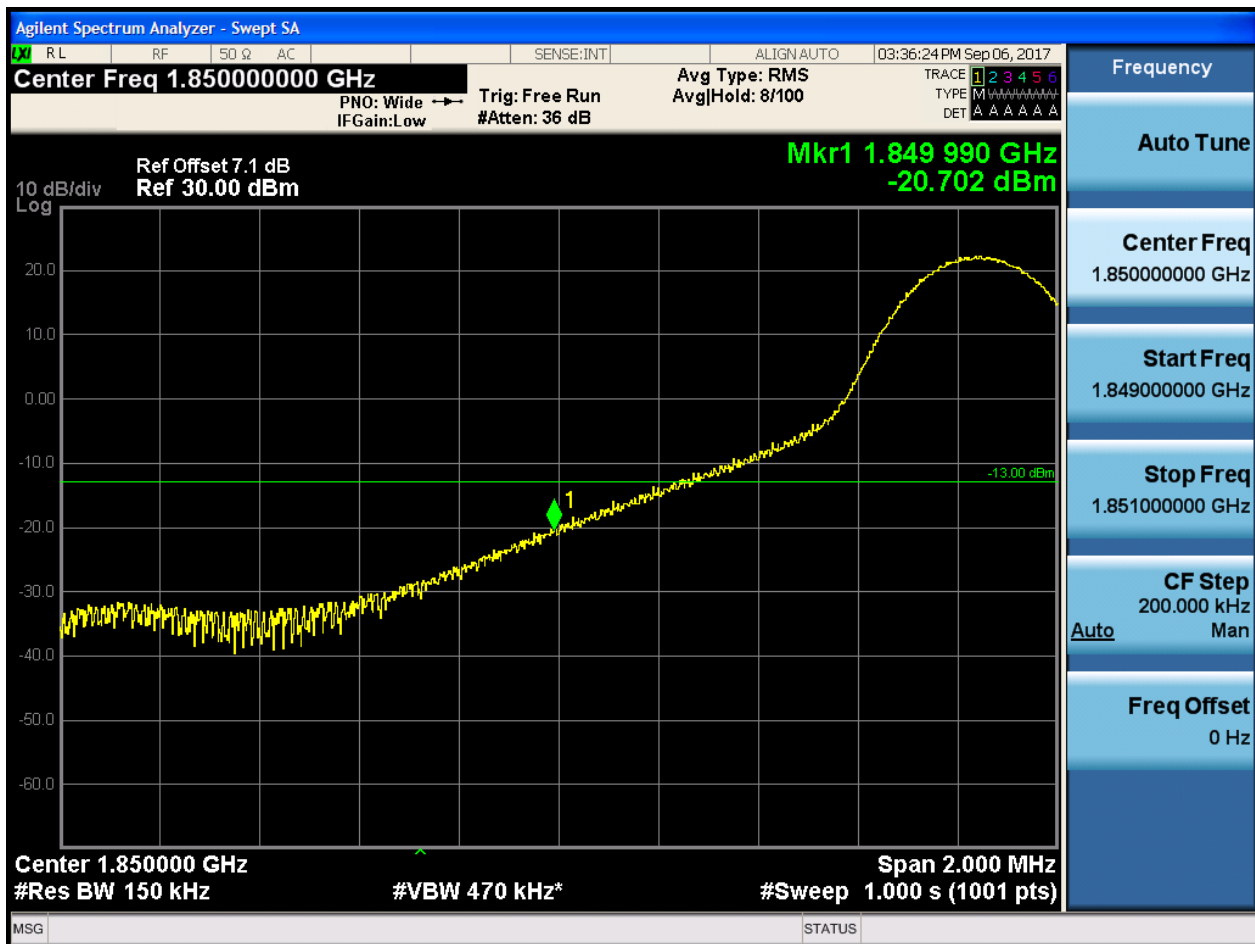




5.1.1.2.5 Test Bandwidth = 15

5.1.1.2.5.1 Test Channel = LCH

5.1.1.2.5.1.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:36:38 PM Sep 06, 2017

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.850 000 GHz
-40.337 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



Agilent Spectrum Analyzer - Swept SA

Center Freq 1.850000000 GHz

PNO: Wide → Trig: Free Run

IFGain:Low #Atten: 36 dB

Avg Type: RMS

AvgHold: 8/100

03:36:52 PM Sep 06, 2017

TRACE 1 2 3 4 5 6

TYPE M

DET A A A A A A

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

10 dB/div

Log

Ref Offset 7.1 dB

Ref 30.00 dBm

Mkr1 1.849 990 GHz

-34.319 dBm

-13.10 dBm

1

Center 1.850000 GHz

#Res BW 150 kHz

#VBW 470 kHz*

Span 2.000 MHz

#Sweep 1.000 s (1001 pts)

MSG STATUS



5.1.1.2.5.1.4 Test RB = RB75#0





5.1.1.2.5.2 Test Channel = HCH

5.1.1.2.5.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:37:40 PM Sep 06, 2017

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 020 GHz
-21.274 dBm

10 dB/div
Log

Center 1.910000 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
1.910000000 GHz

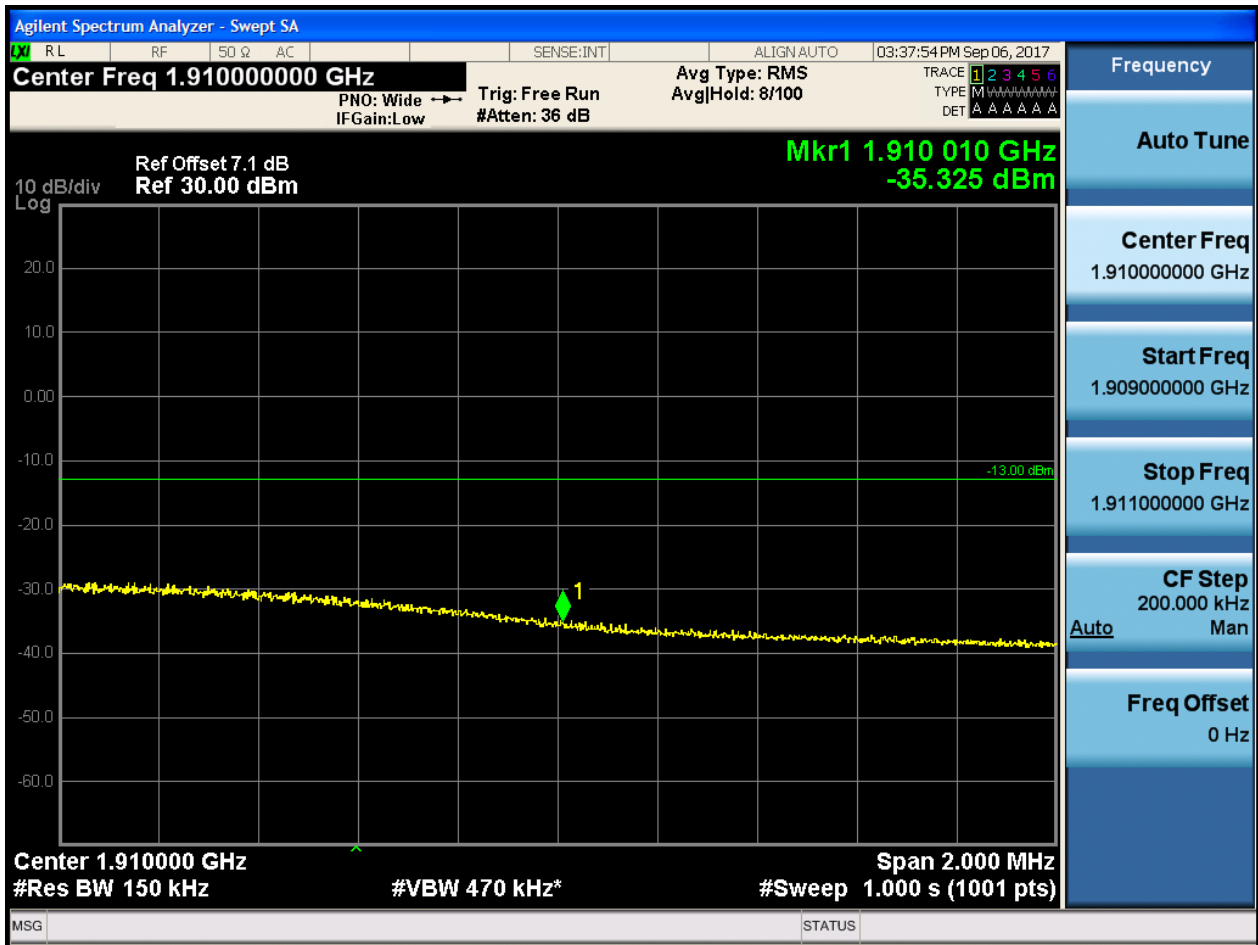
Start Freq
1.909000000 GHz

Stop Freq
1.911000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

5.1.1.2.5.2.3 Test RB = RB38#19





Agilent Spectrum Analyzer - Swept SA

Center Freq 1.910000000 GHz

Ref Offset 7.1 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 1.910 000 GHz
-31.266 dBm

Center 1.910000 GHz
#Res BW 150 kHz
#VBW 470 kHz*

Span 2.000 MHz
#Sweep 1.000 s (1001 pts)

Auto Tune

Center Freq
1.910000000 GHz

Start Freq
1.909000000 GHz

Stop Freq
1.911000000 GHz

CF Step
200.000 kHz
Auto

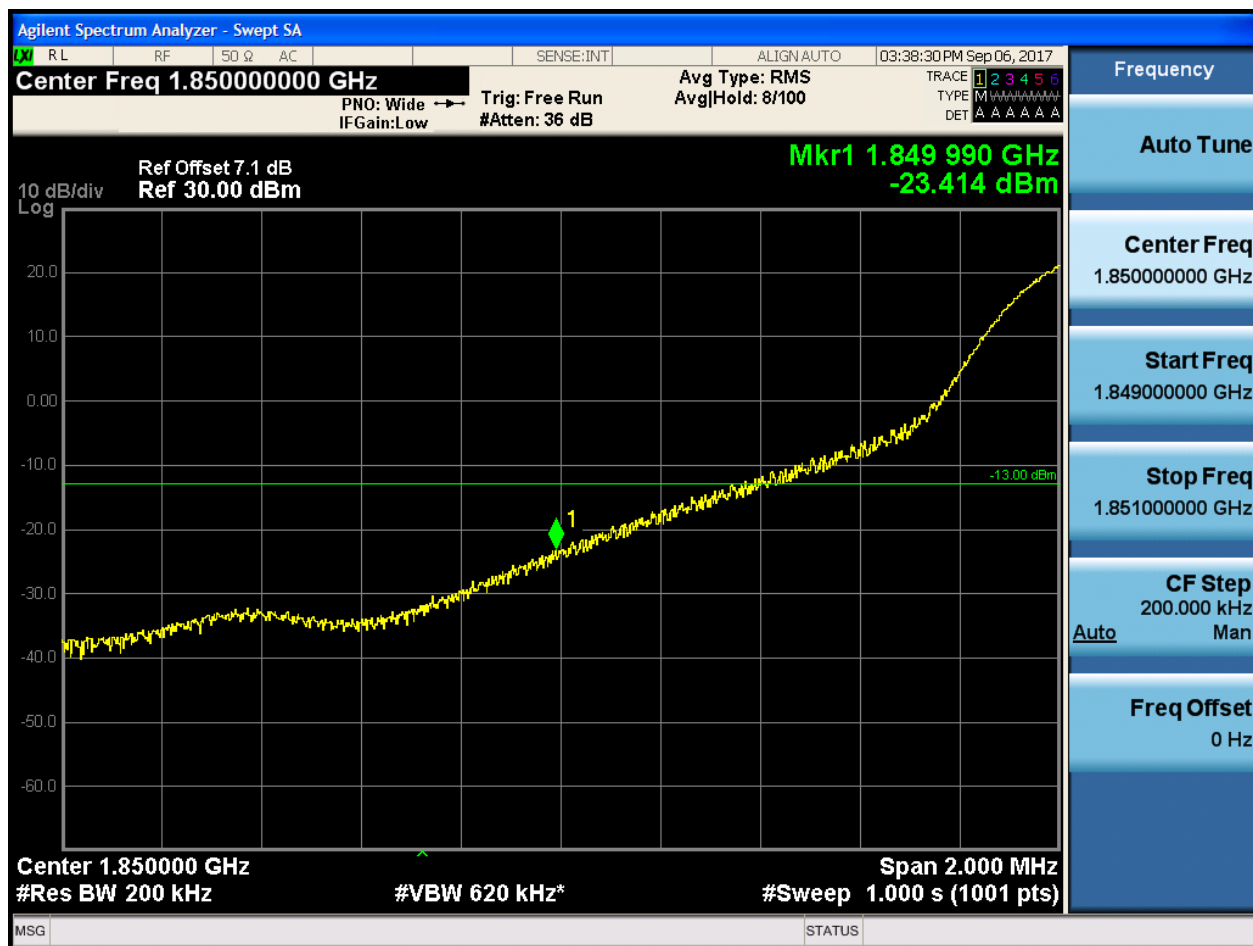
Freq Offset
0 Hz



5.1.1.2.6 Test Bandwidth = 20

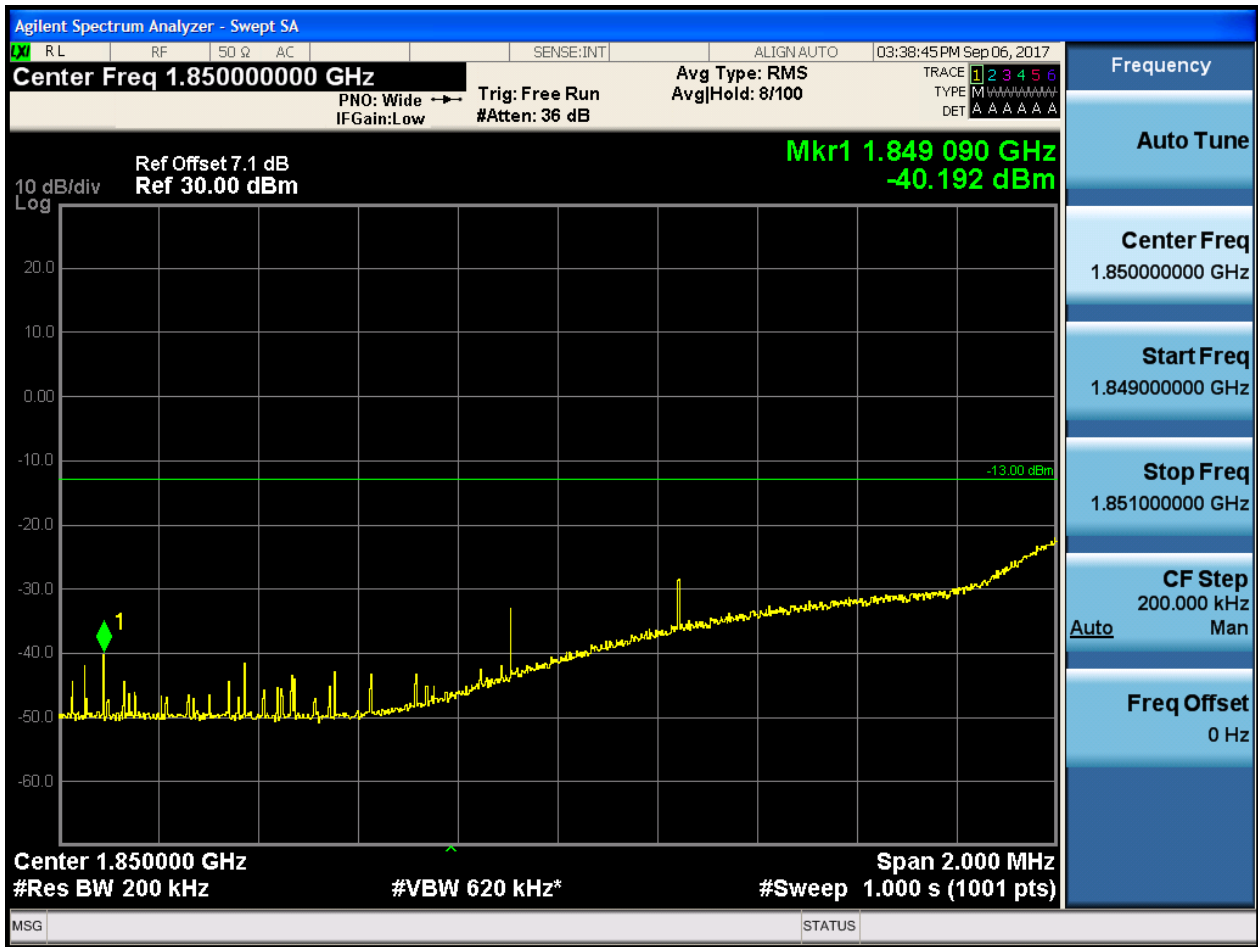
5.1.1.2.6.1 Test Channel = LCH

5.1.1.2.6.1.1 Test RB = RB1#0



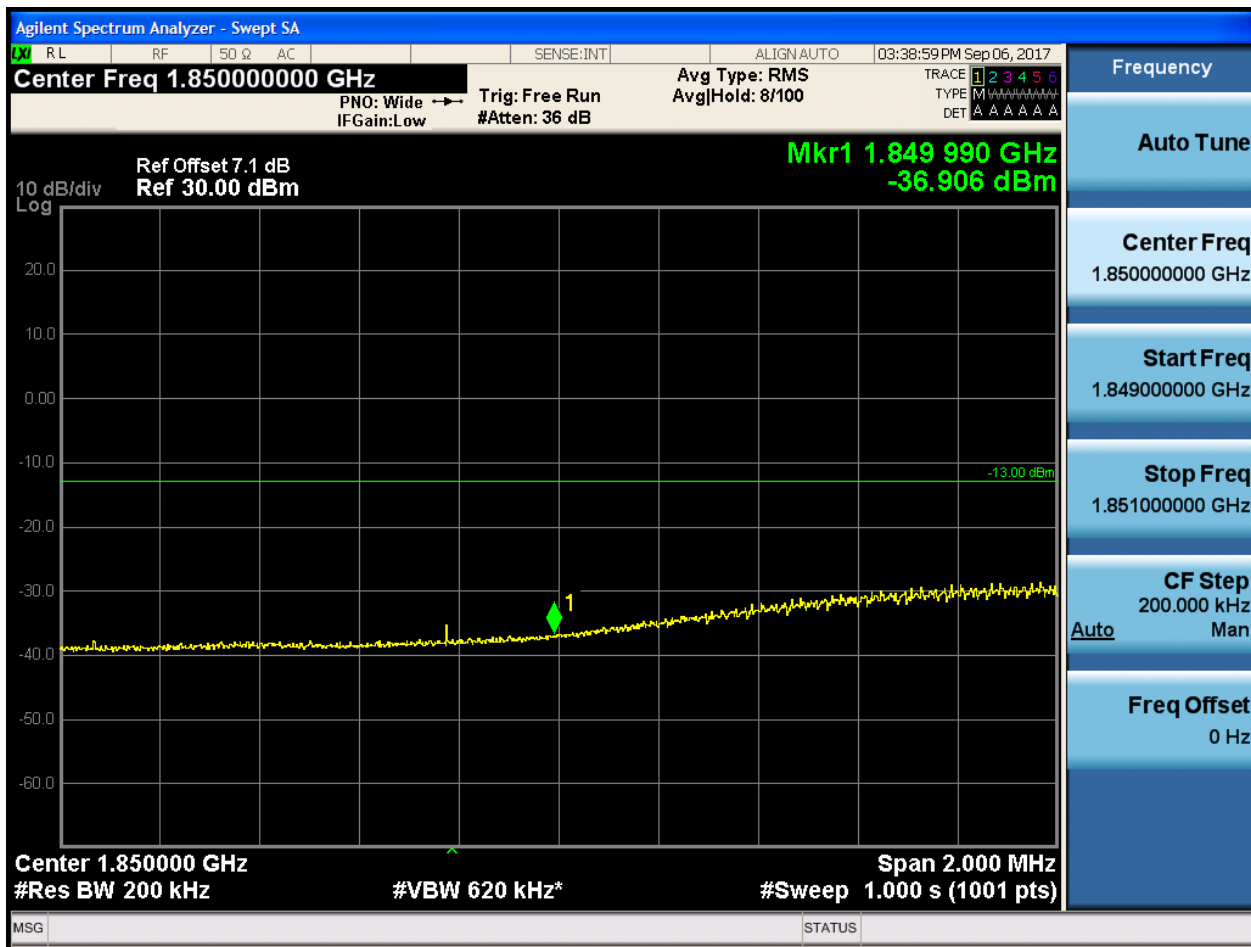


5.1.1.2.6.1.2 Test RB = RB1#99

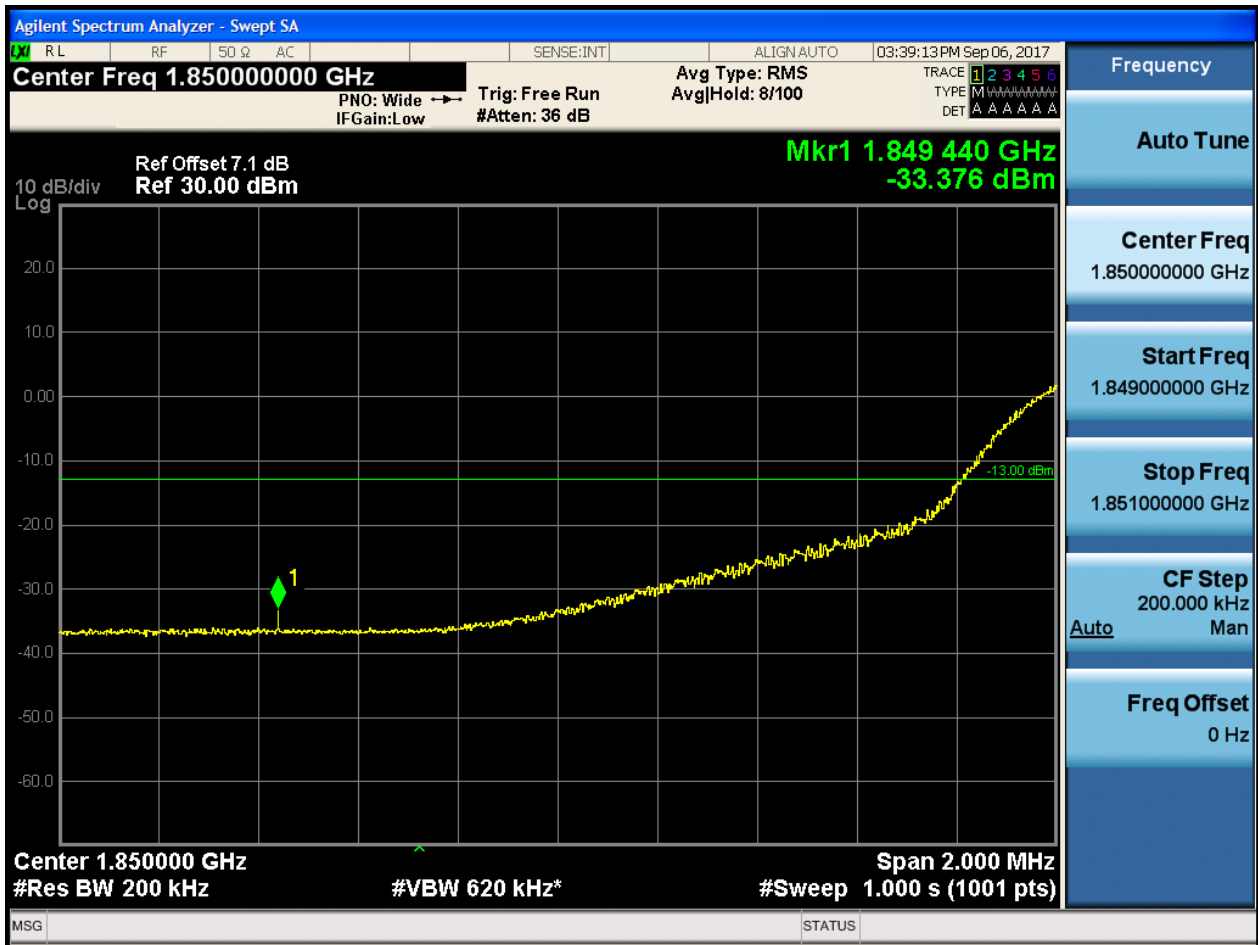




5.1.1.2.6.1.3 Test RB = RB50#25



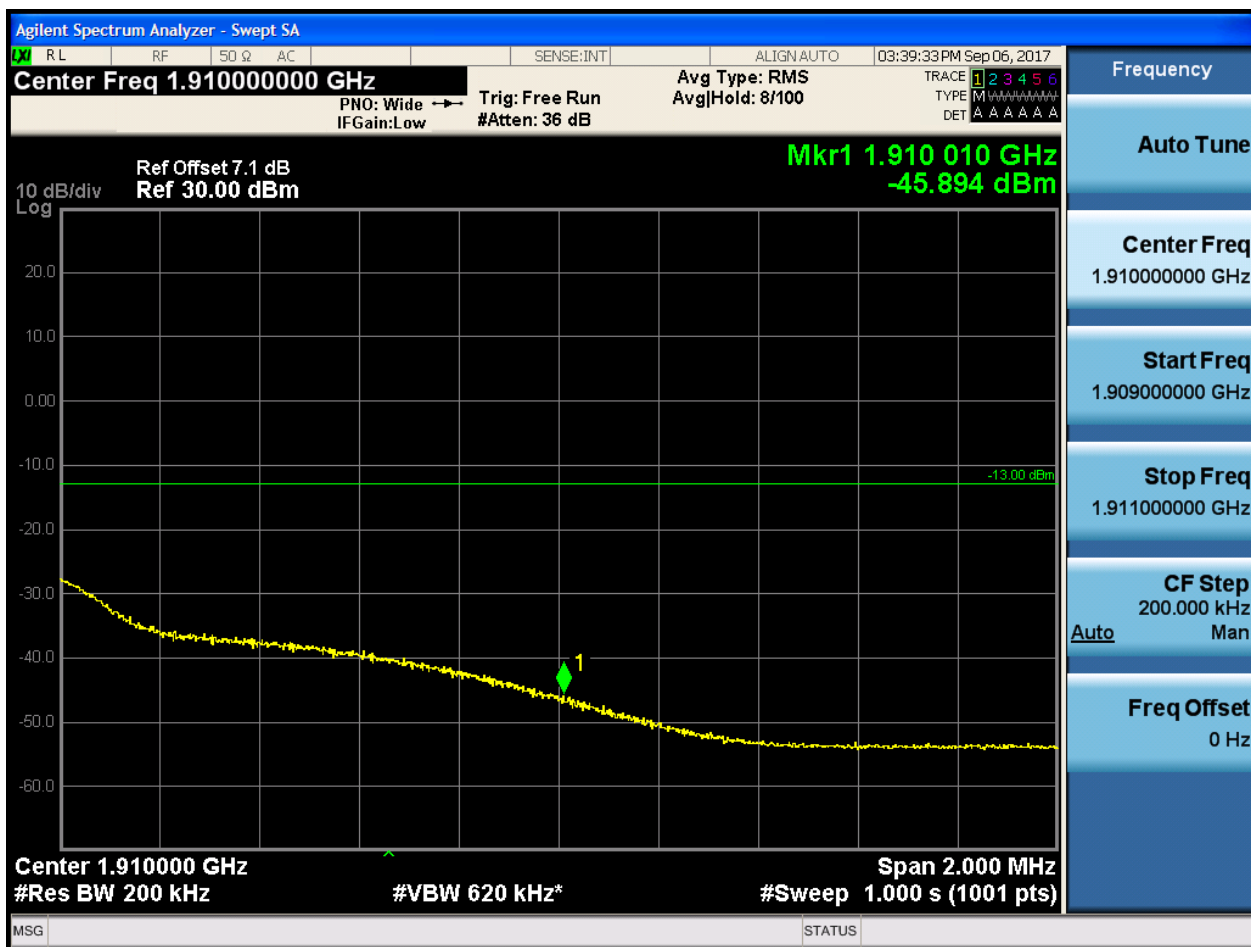
5.1.1.2.6.1.4 Test RB = RB100#0





5.1.1.2.6.2 Test Channel = HCH

5.1.1.2.6.2.1 Test RB = RB1#0





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:39:47 PM Sep 06, 2017

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

Ref Offset 7.1 dB
Ref 30.00 dBm

Mkr1 1.910 000 GHz
-24.504 dBm

10 dB/div
Log

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
1.91000000 GHz

Start Freq
1.909000000 GHz

Stop Freq
1.911000000 GHz

CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz



5.1.1.2.6.2.3 Test RB = RB50#25





Agilent Spectrum Analyzer - Swept SA

RL RF 50 Ω AC SENSE:INT ALIGN AUTO 03:40:16 PM Sep 06, 2017

Center Freq 1.910000000 GHz Avg Type: RMS
 PNO: Wide IFGain:Low Trig: Free Run AvgHold: 8/100
 #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 A

Ref Offset 7.1 dB
 Ref 30.00 dBm

Mkr1 1.910 020 GHz
 -32.702 dBm

10 dB/div
 Log

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

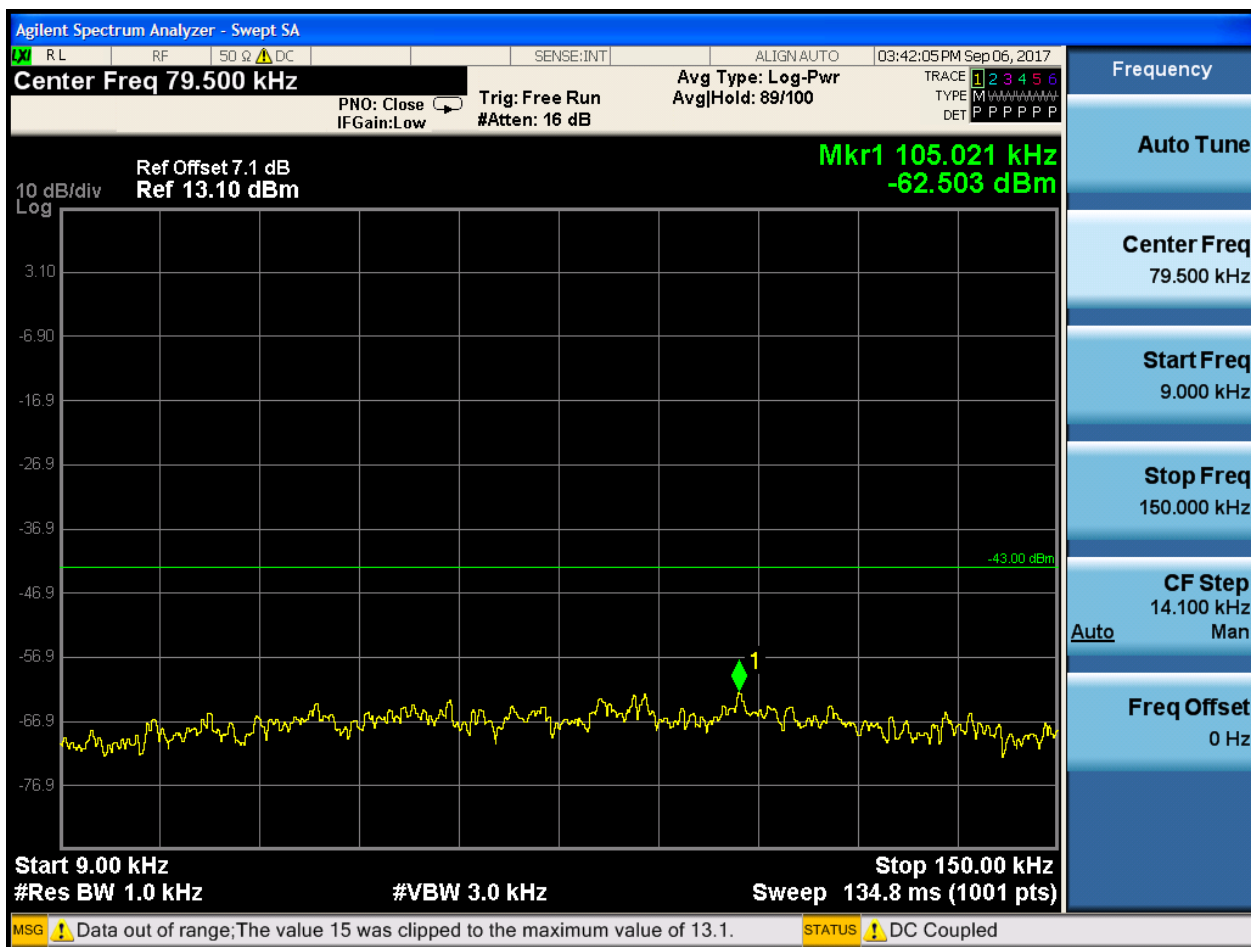
6.1.1 Test Band = BAND2

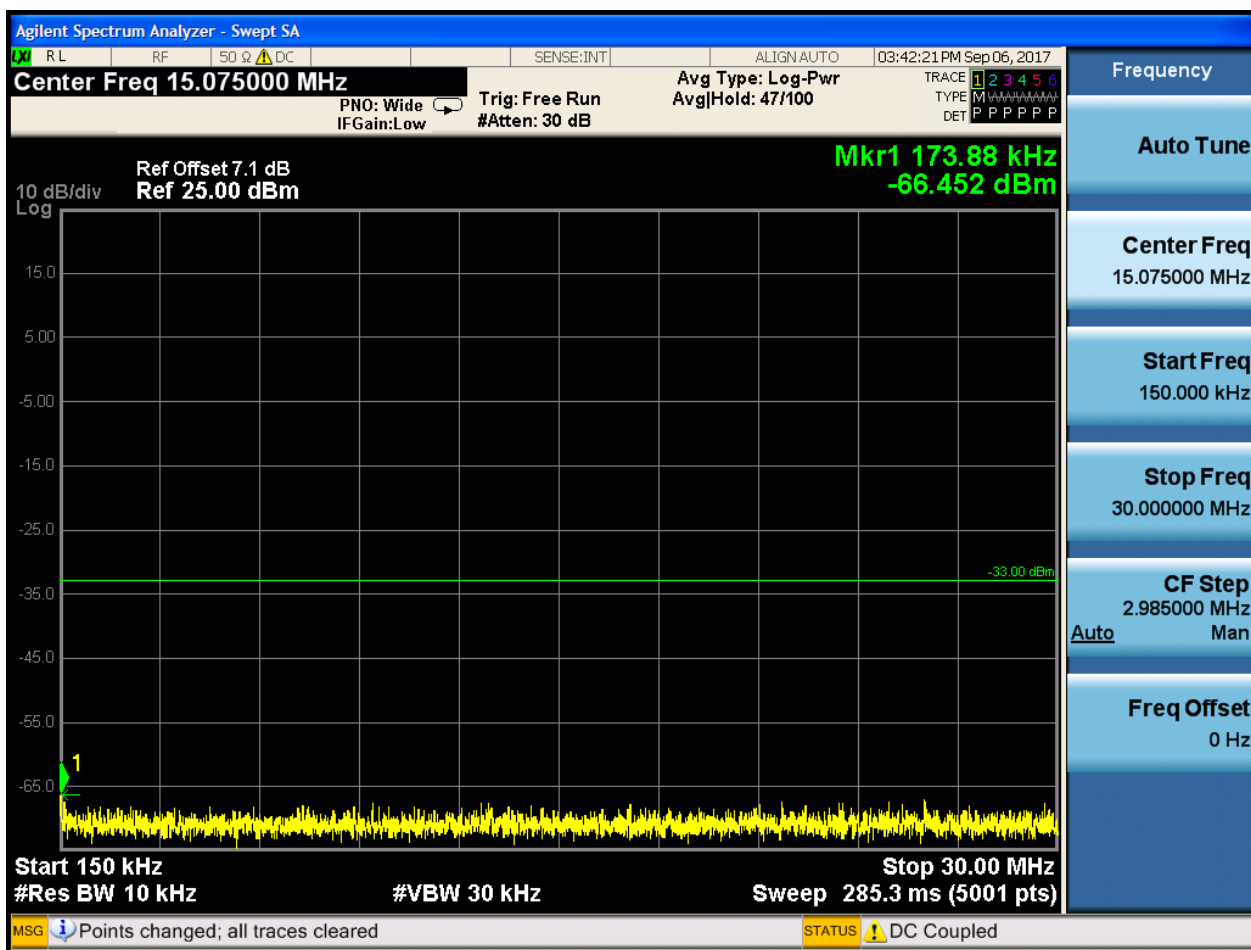
6.1.1.1 Test Mode = LTE/TM1

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

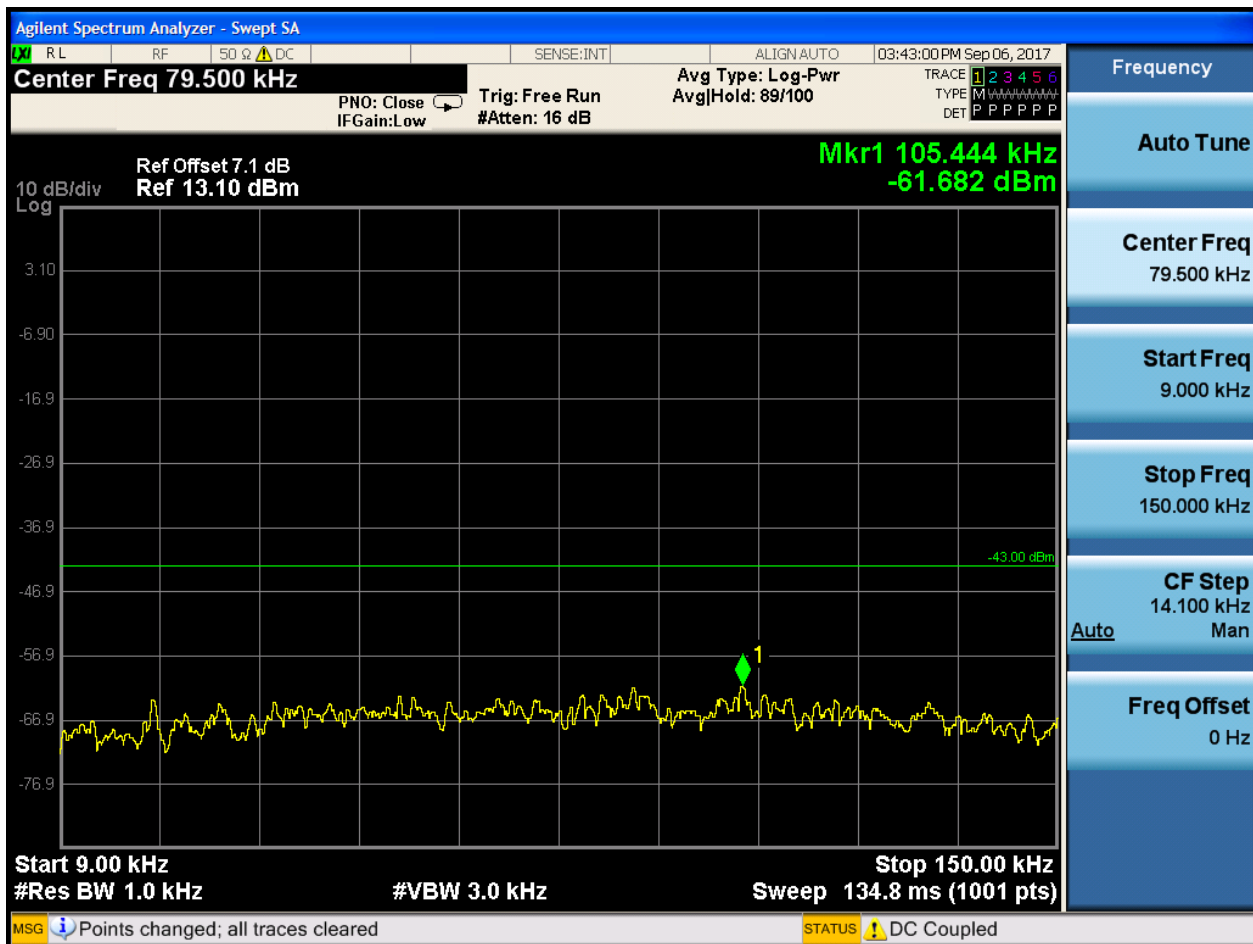


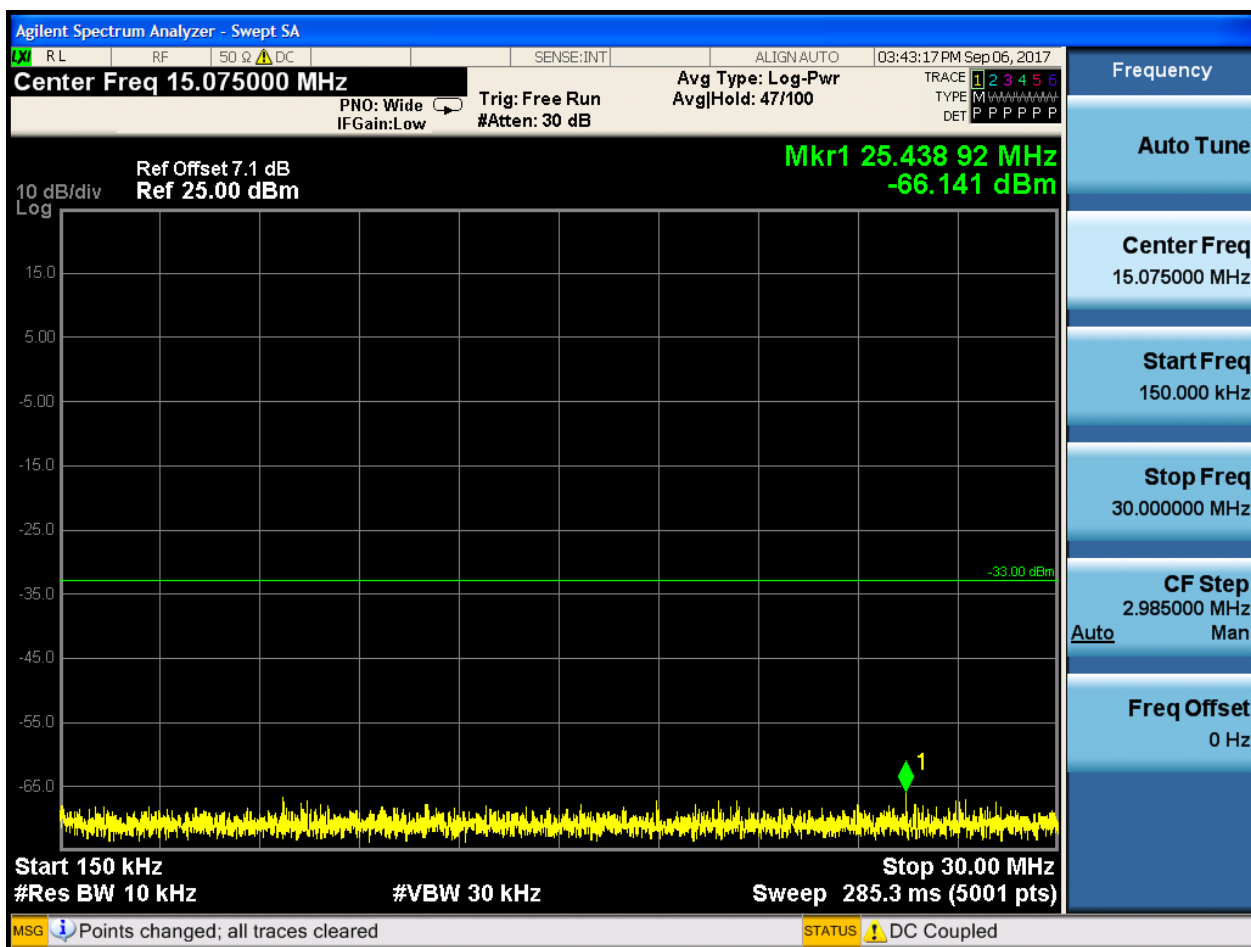


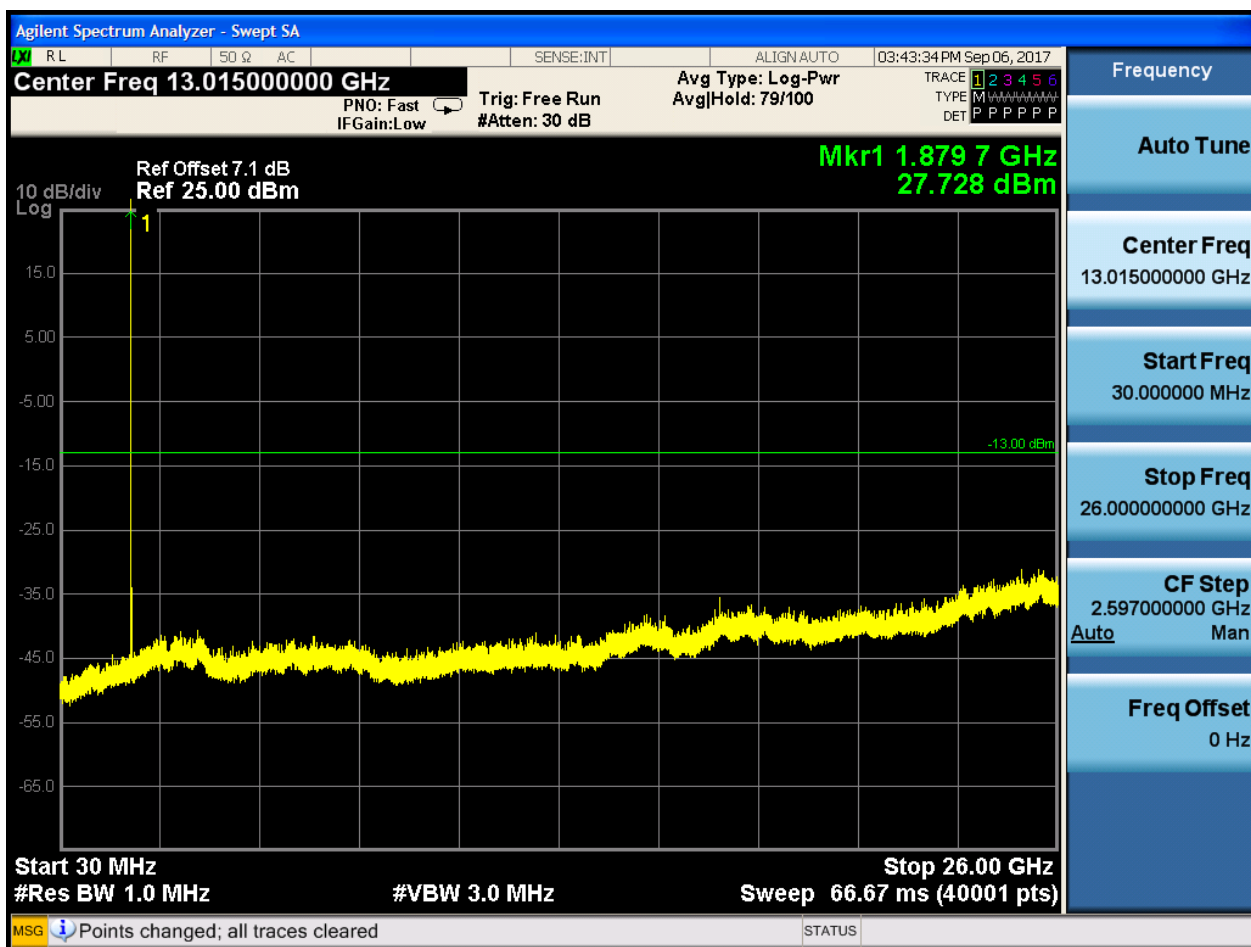


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0

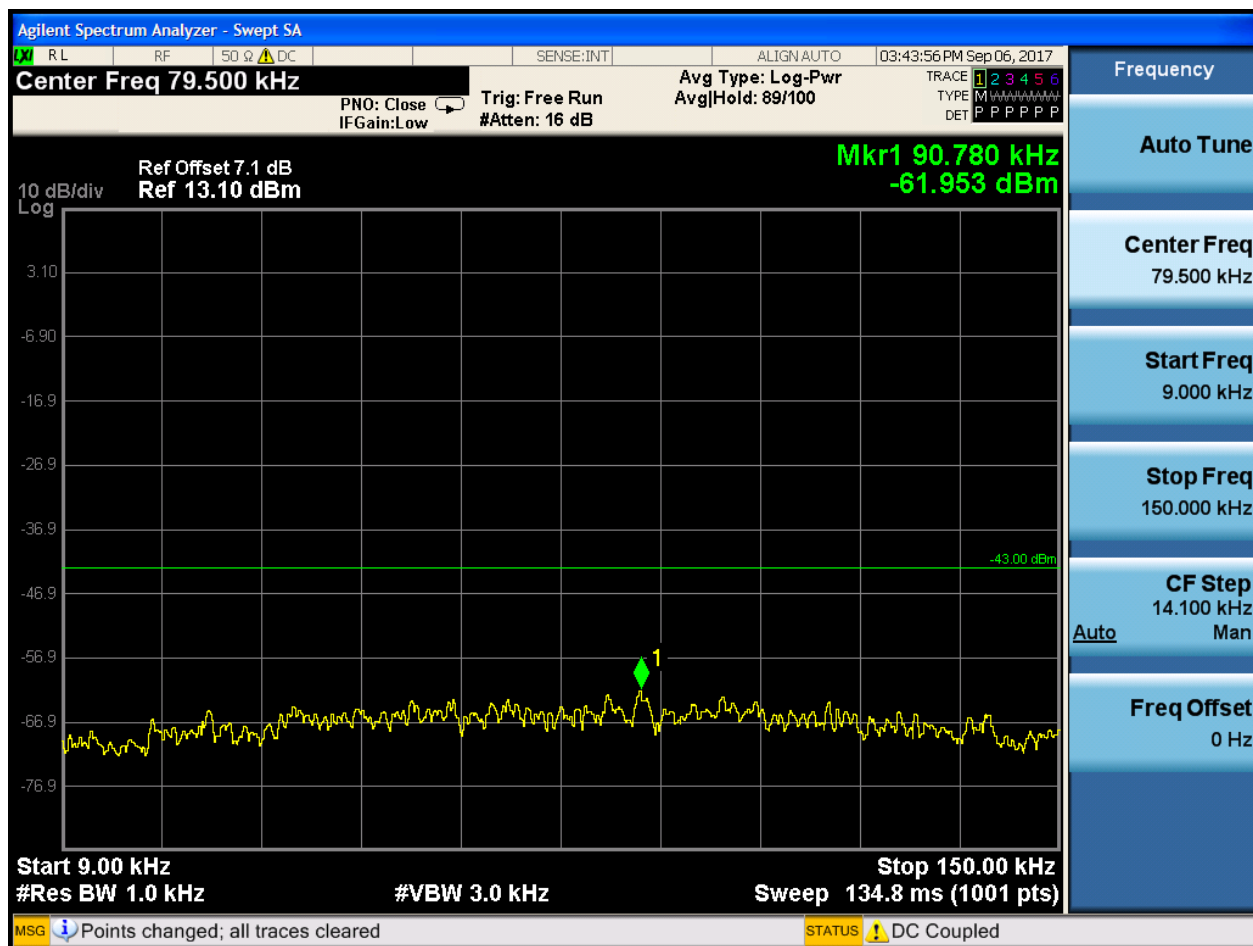


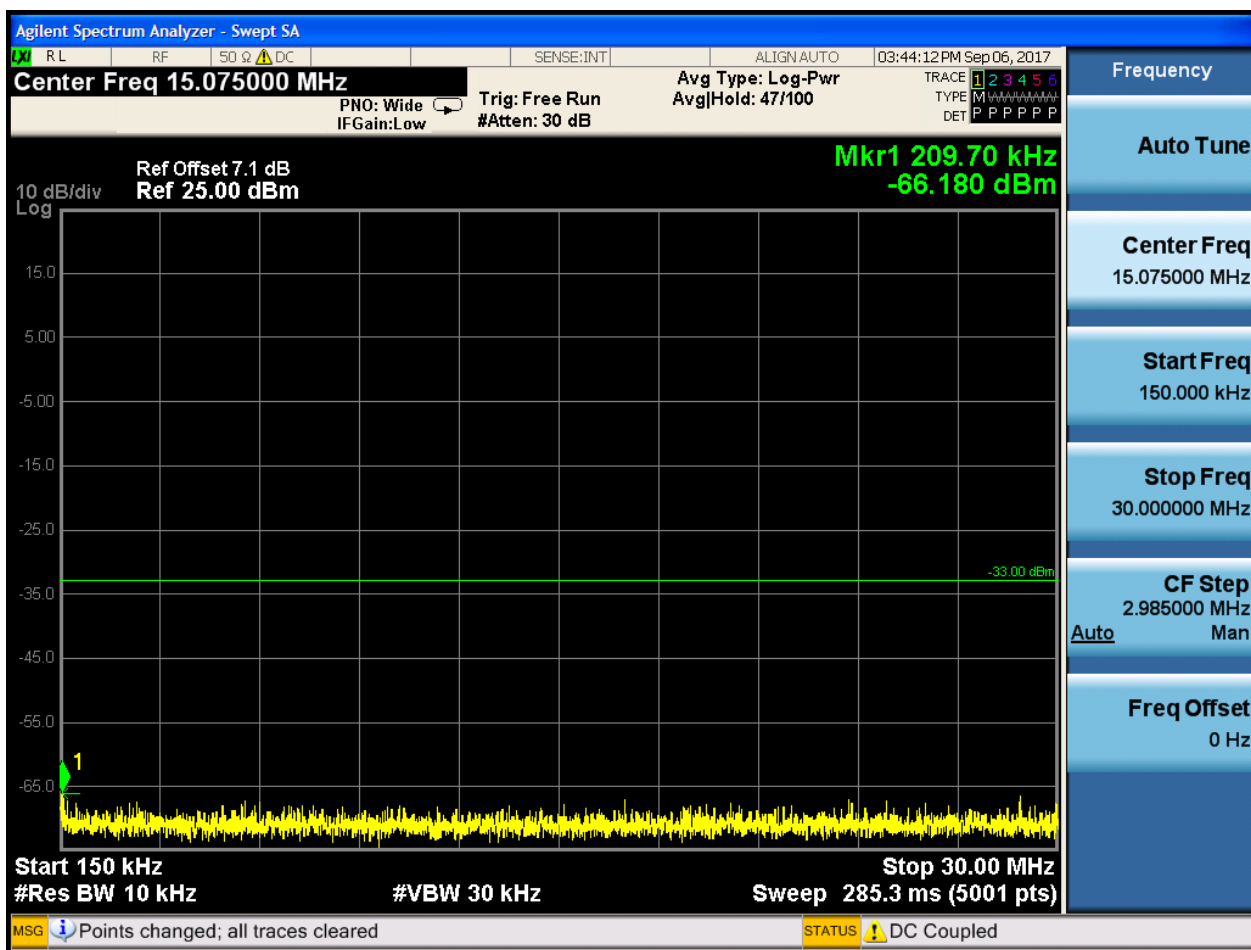


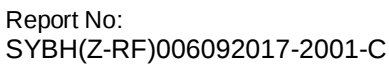


6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0



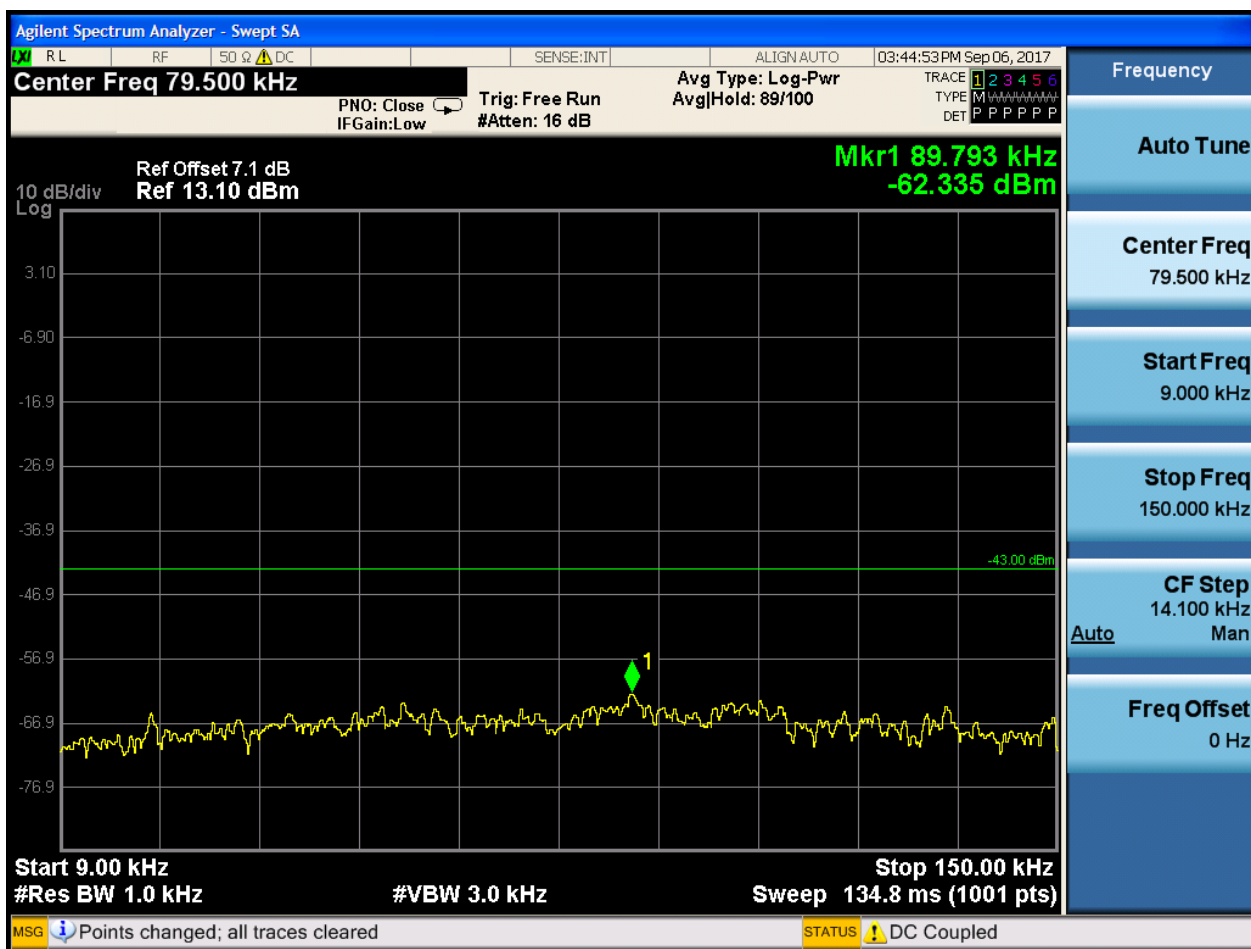




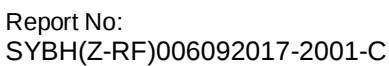
6.1.1.1.2 Test Bandwidth = 3

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0



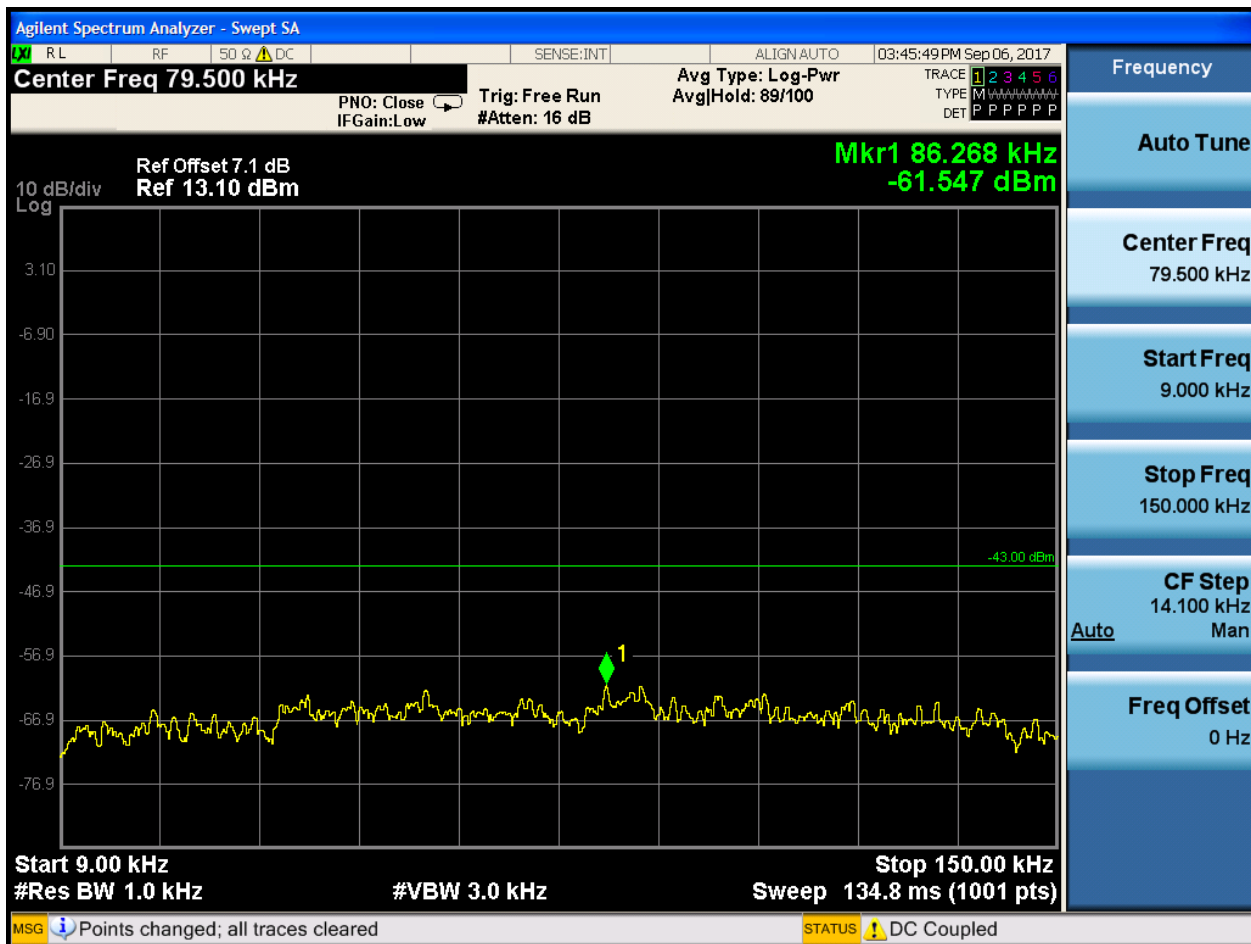


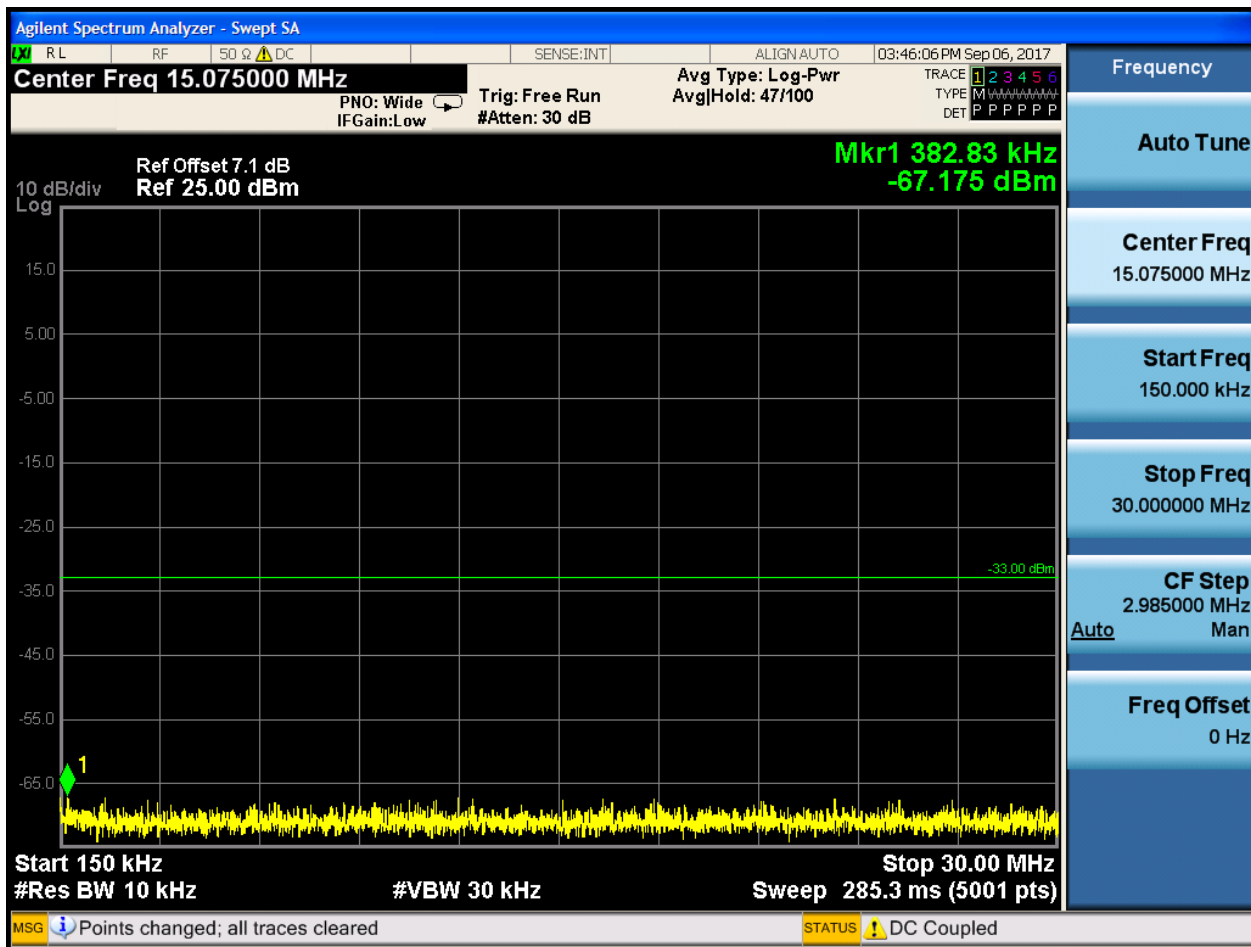


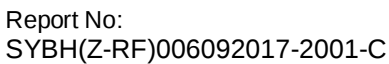


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



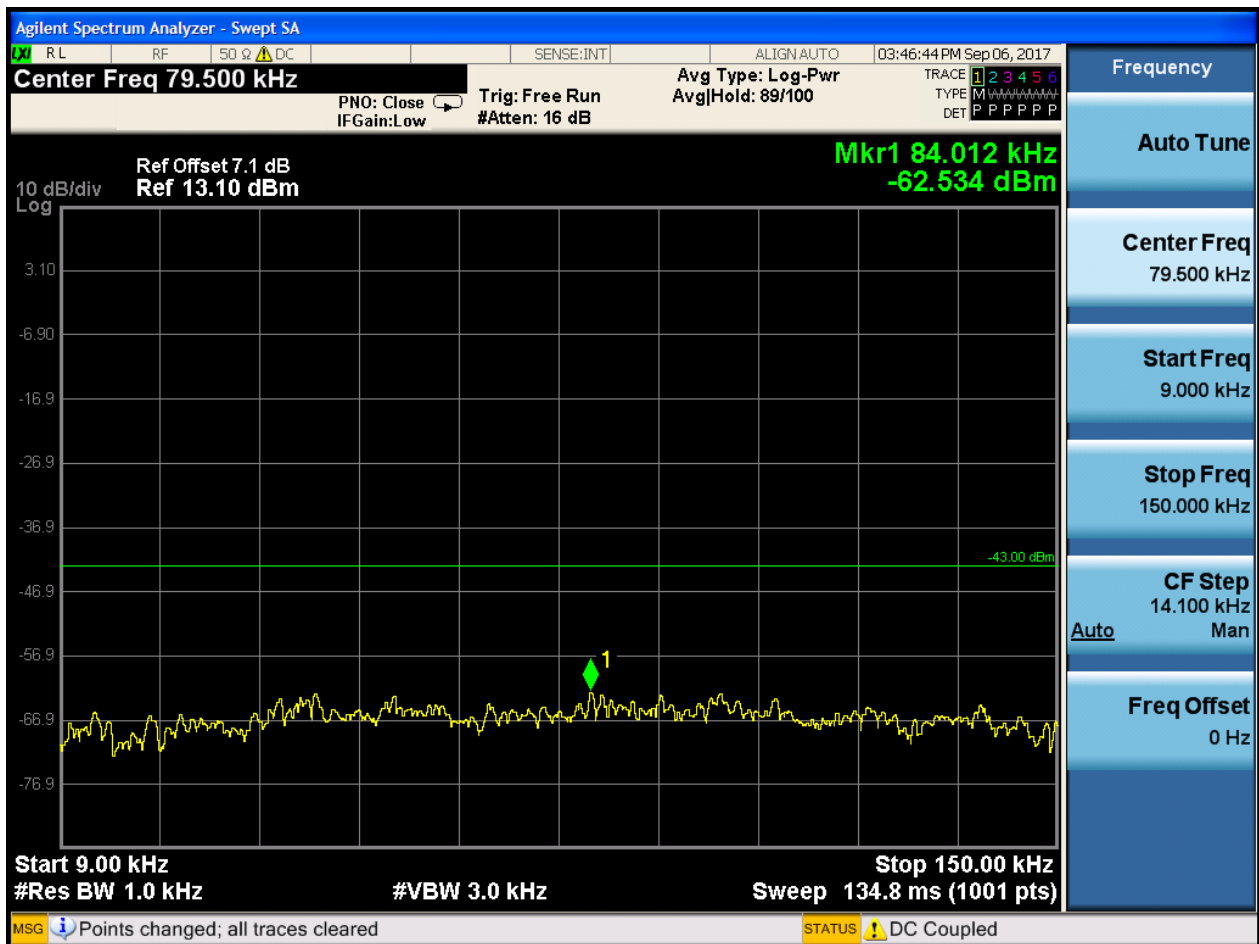


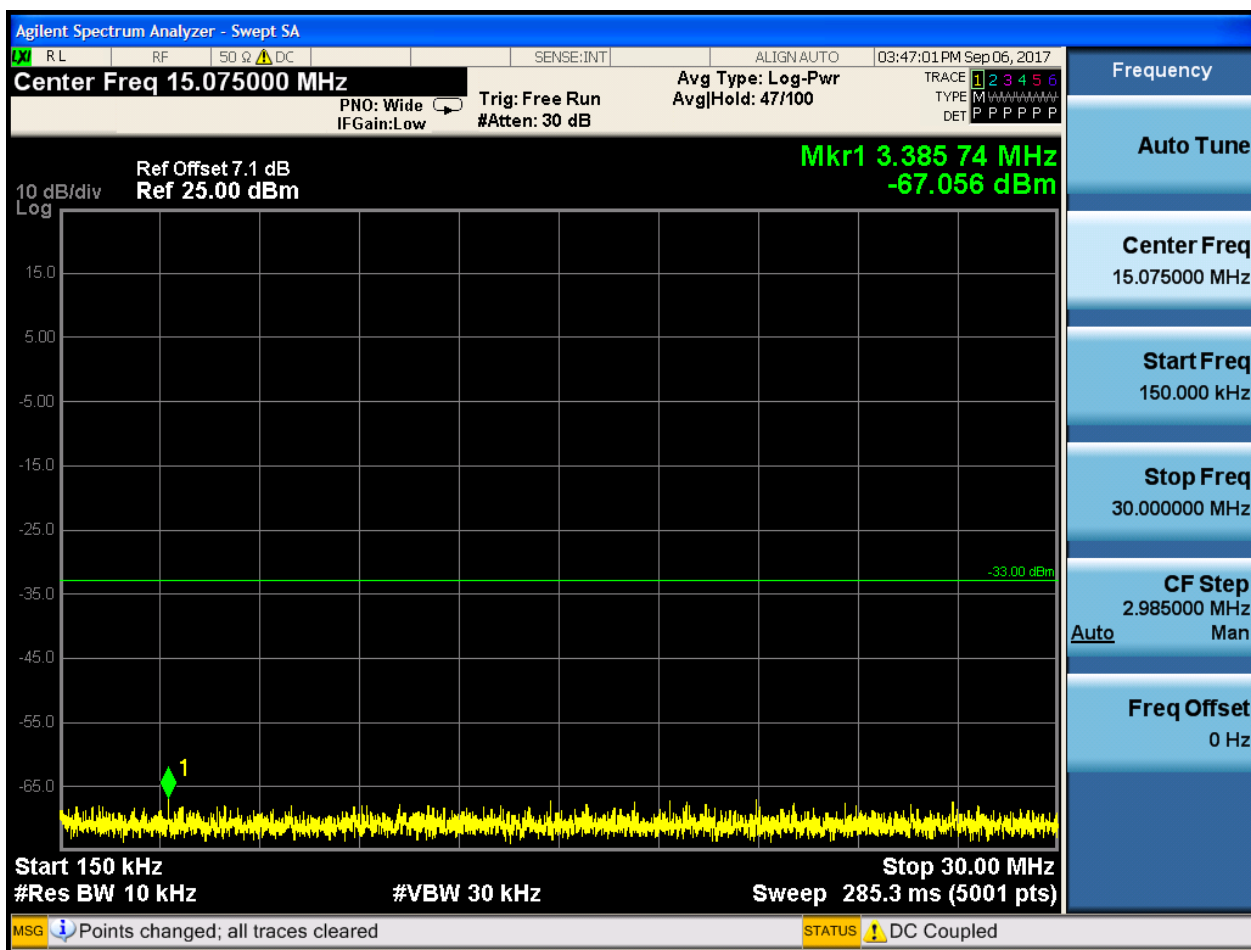


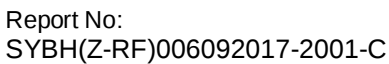


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0





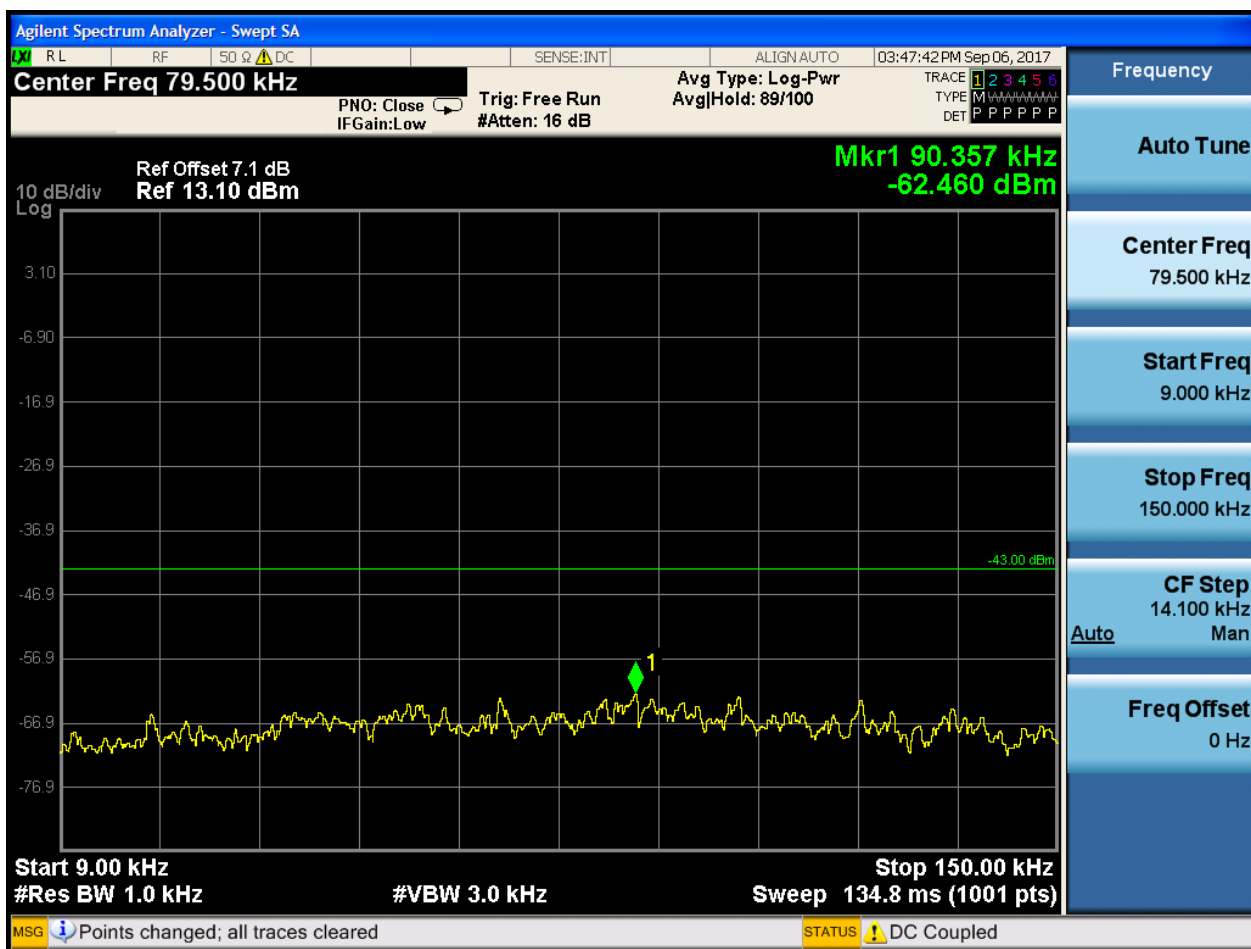


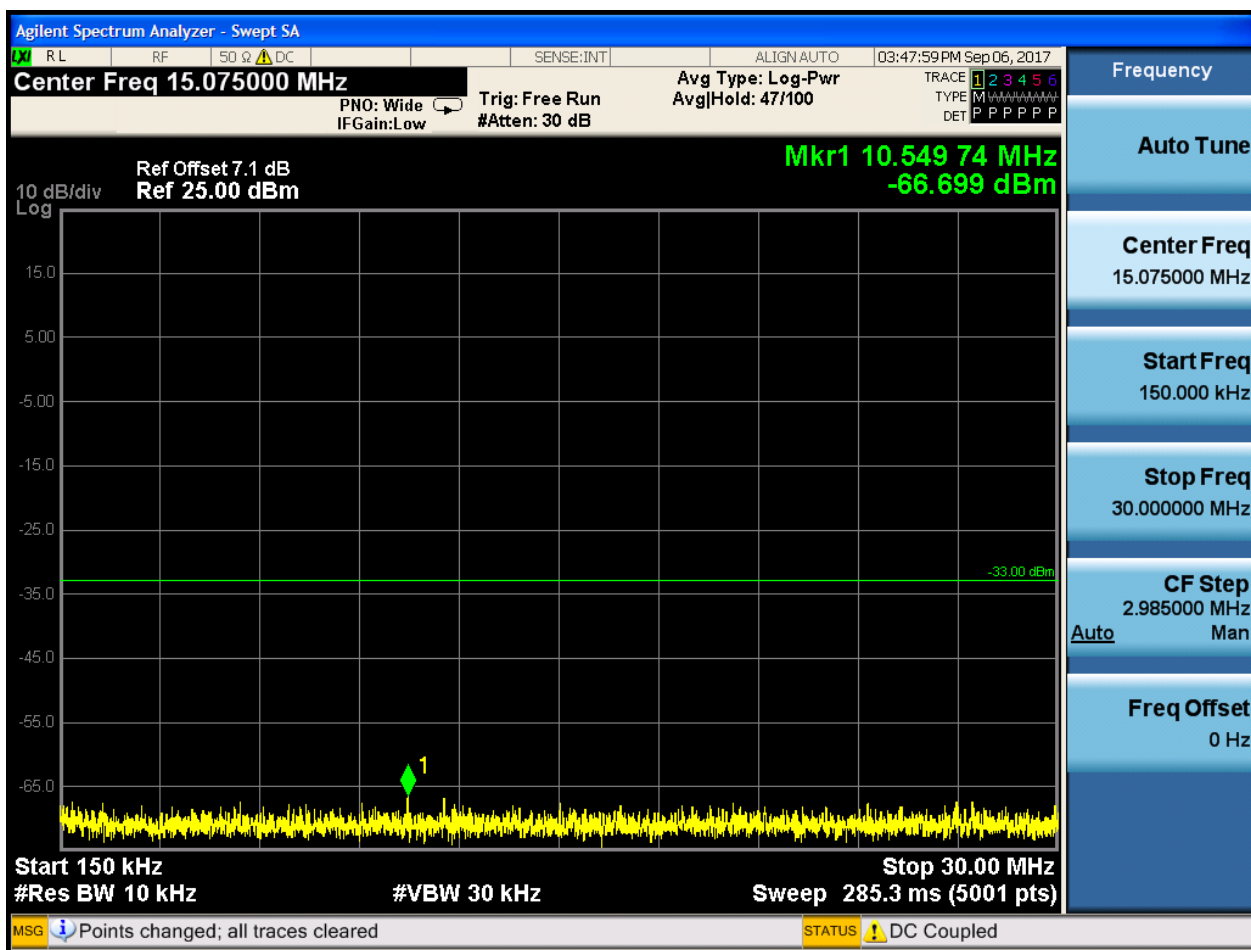


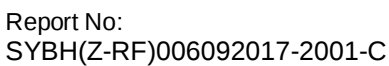
6.1.1.1.3 Test Bandwidth = 5

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0



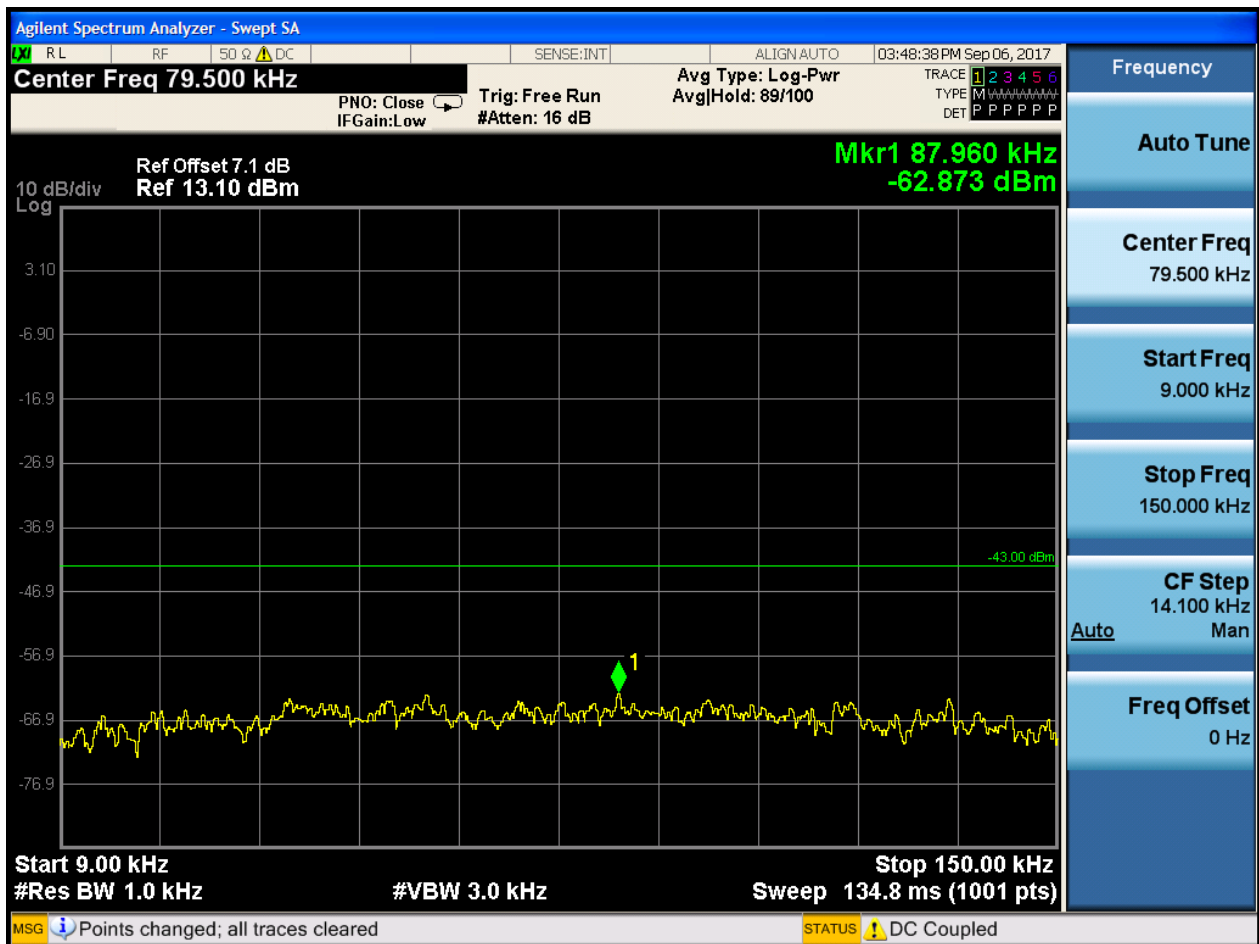


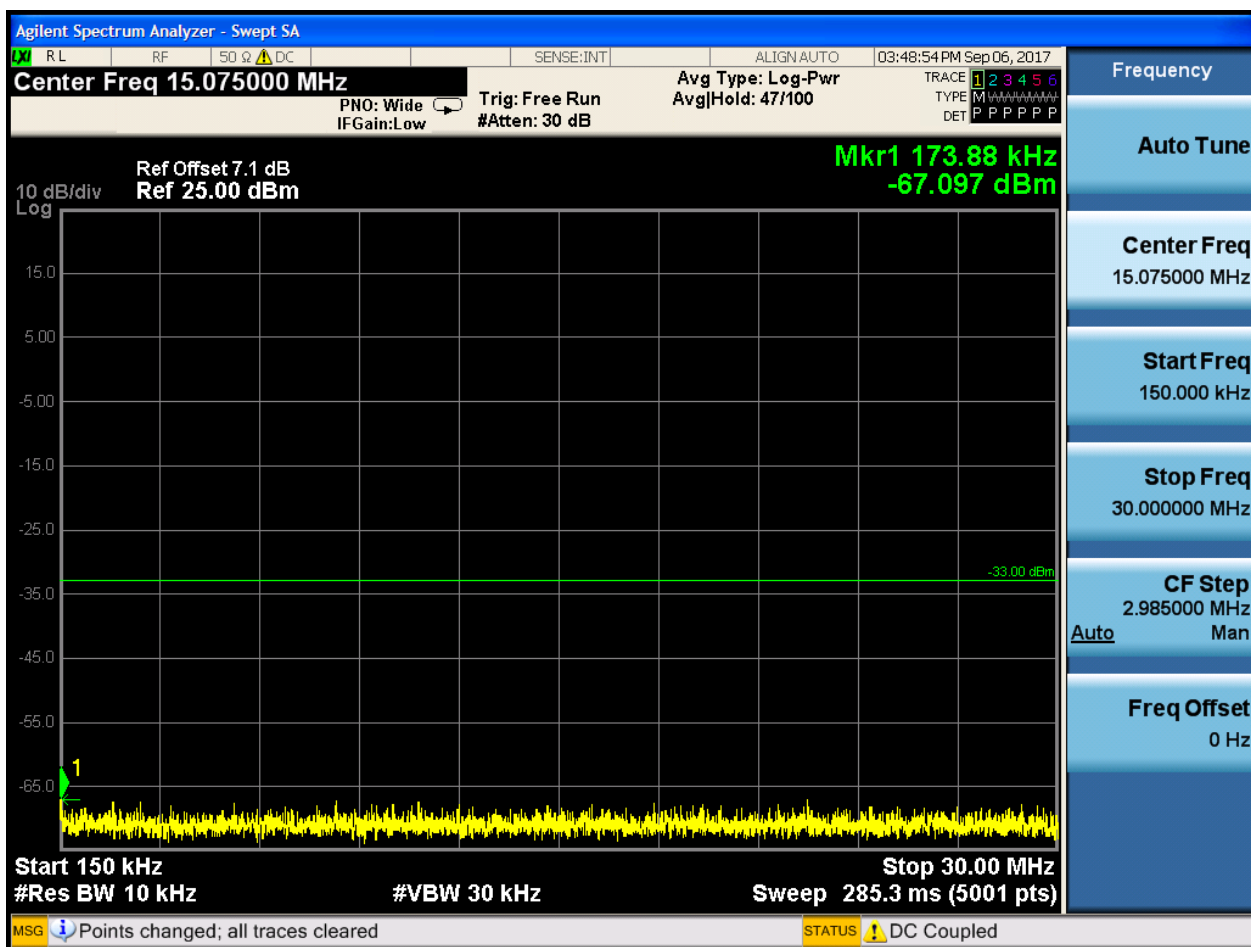


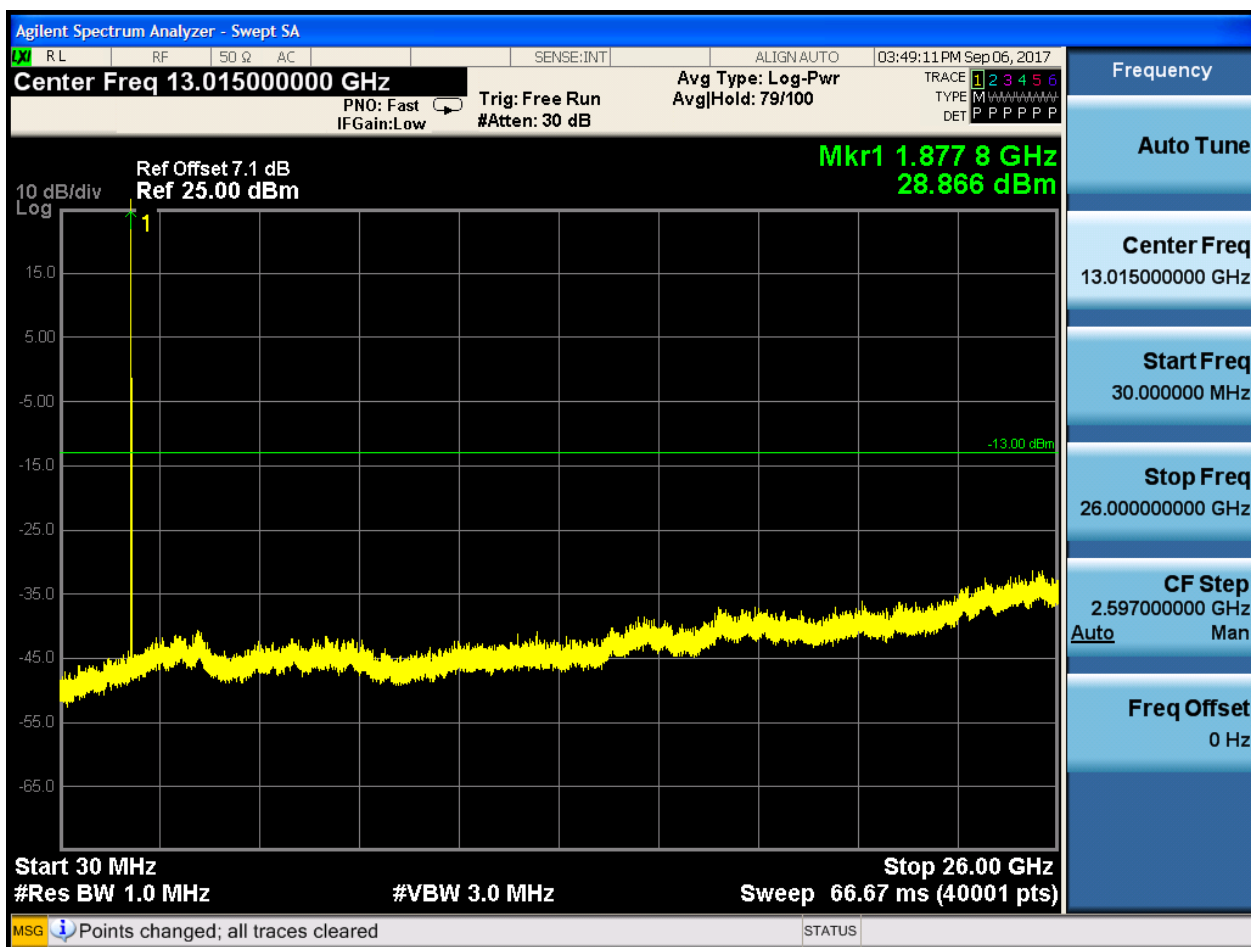


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0

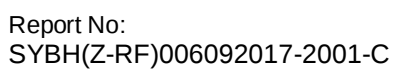


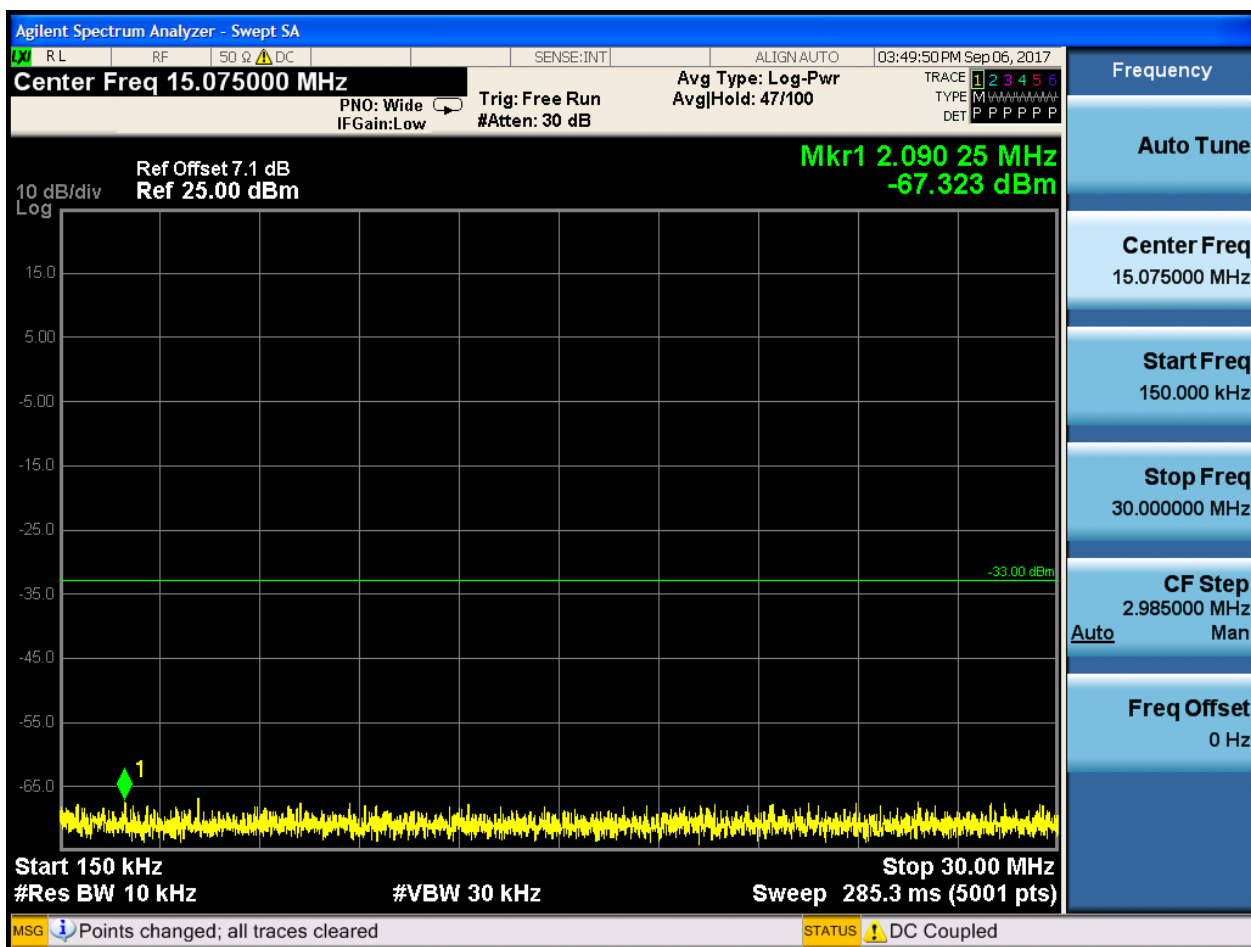


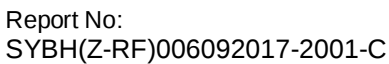




6.1.1.1.3.3.1 Test RB = RB1#0







6.1.1.1.4 Test Bandwidth = 10

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0

