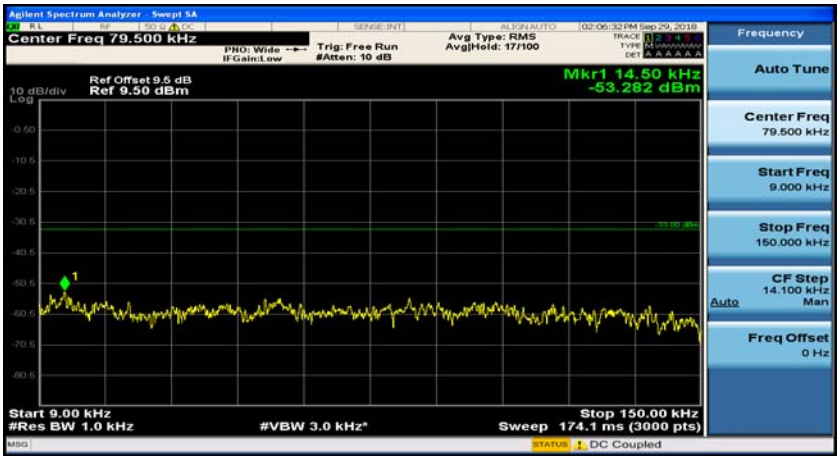
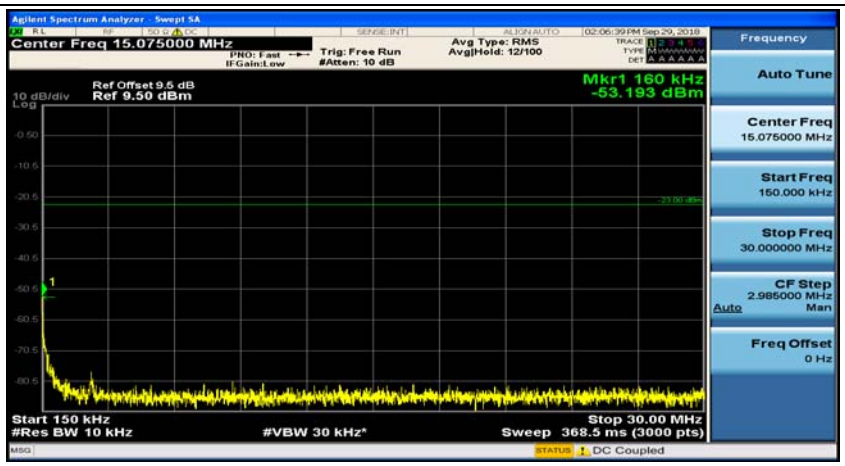
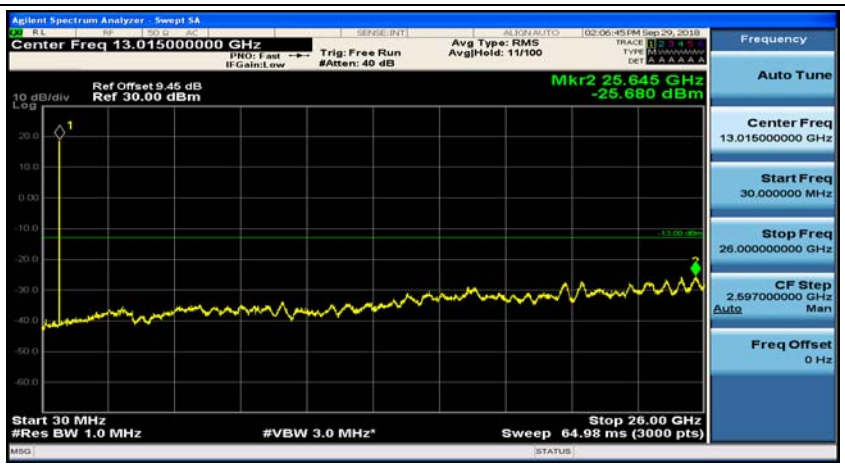
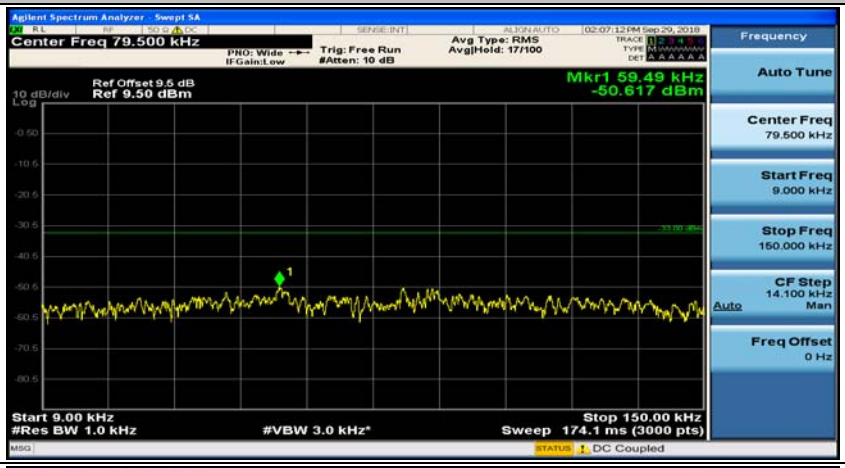
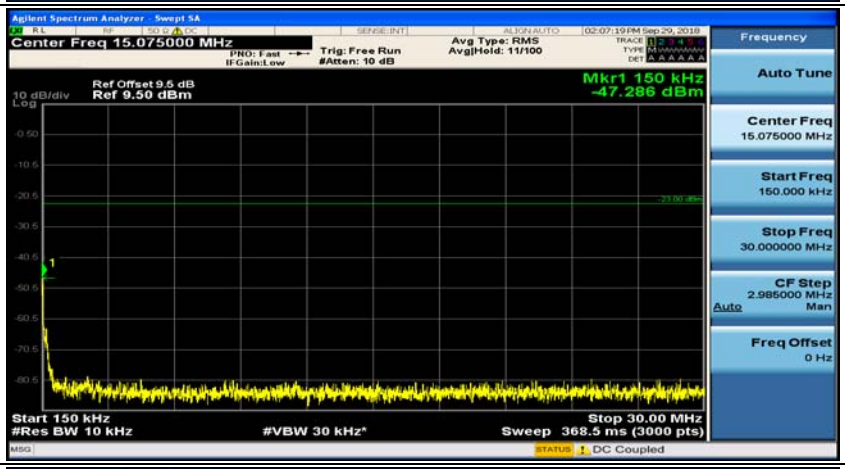
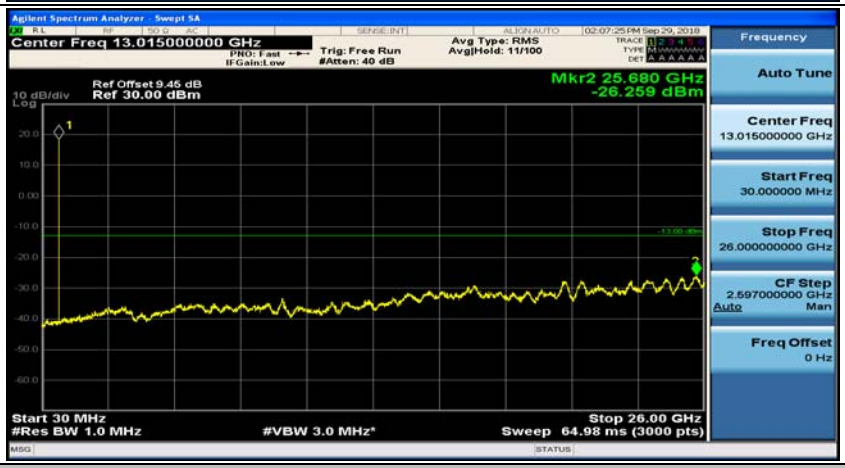
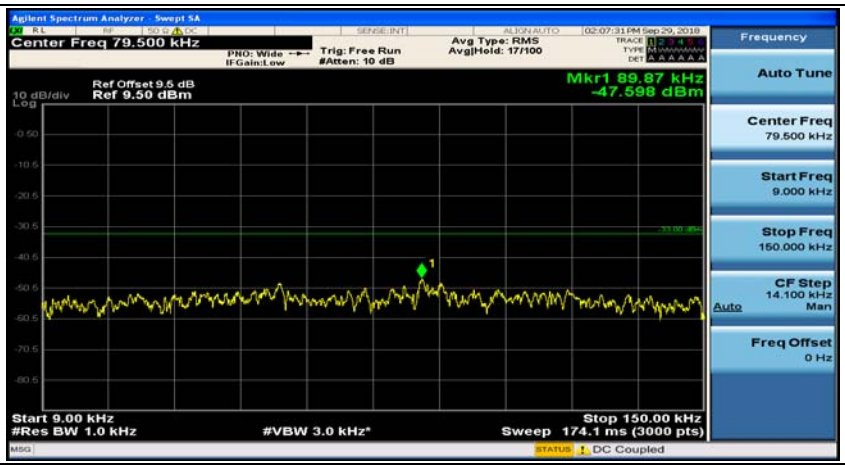

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:06:32 PM Sep 29, 2018
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Mkr1 14.50 kHz
-53.282 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

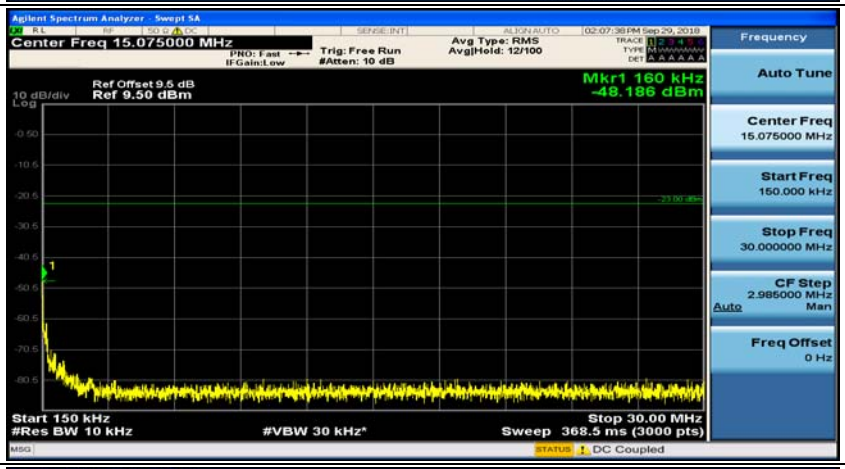

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:06:39 PM Sep 29, 2018
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Mkr1 160 kHz
-53.193 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:06:45 PM Sep 29, 2018
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.645 GHz
-25.680 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

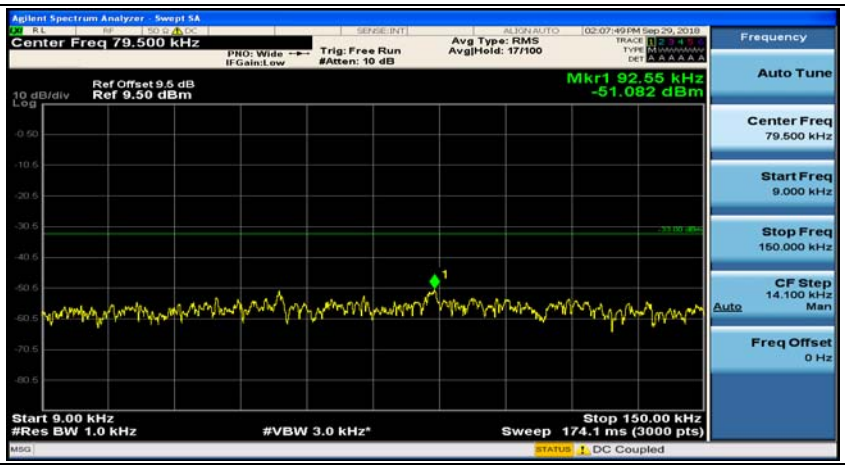
Channel Bandwidth: 5 MHz

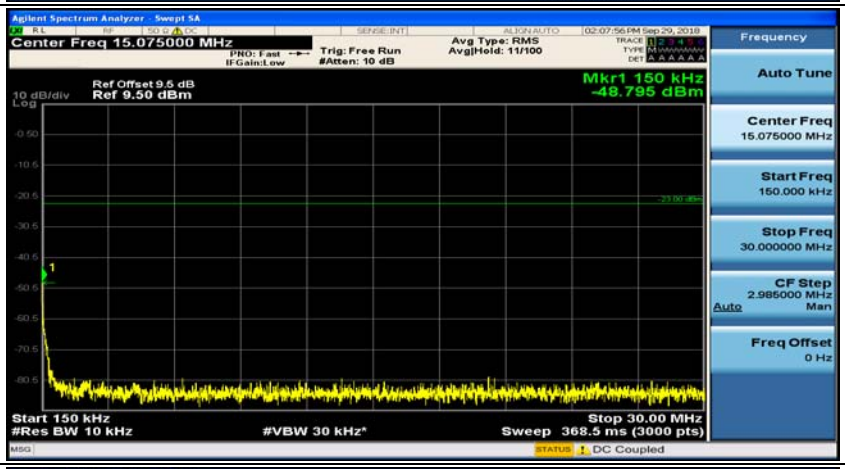
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

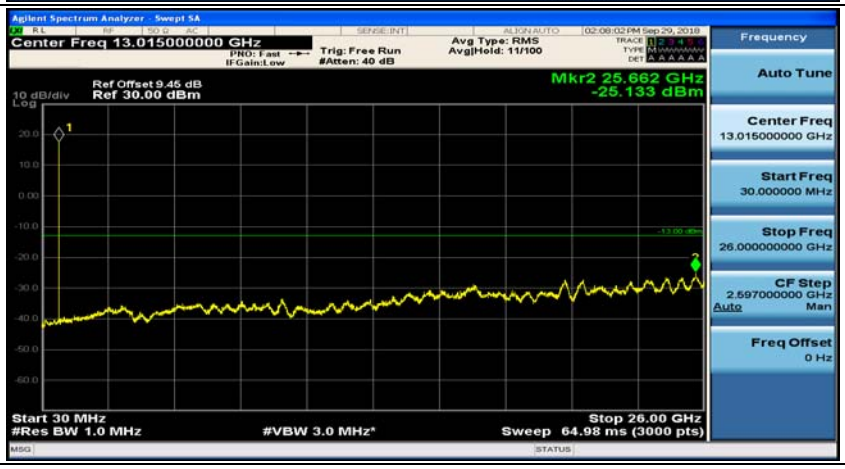


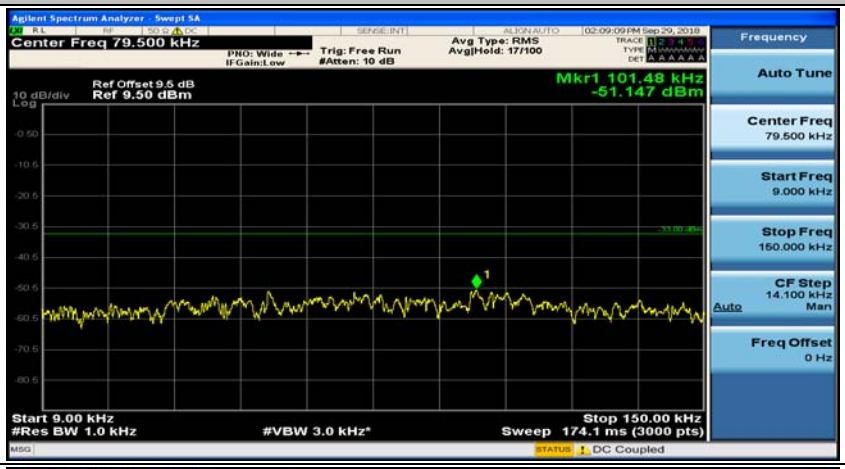
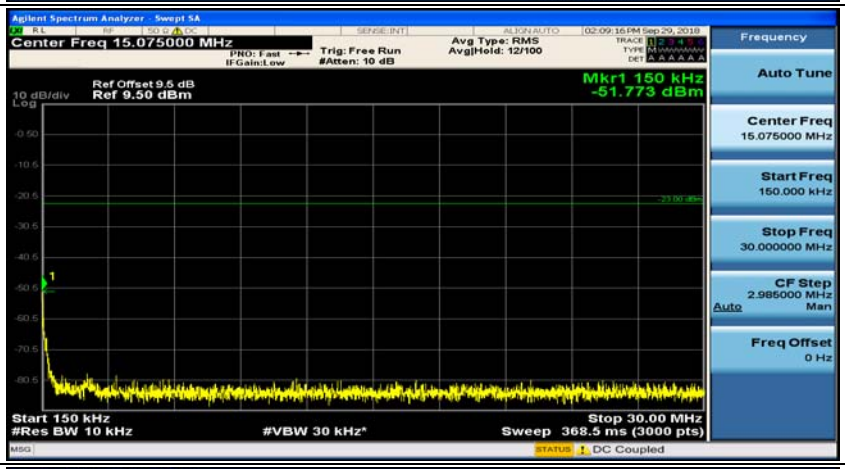
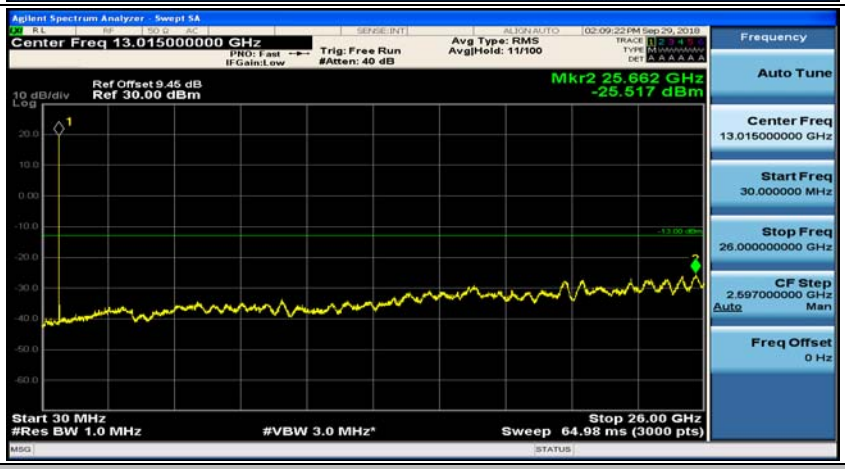


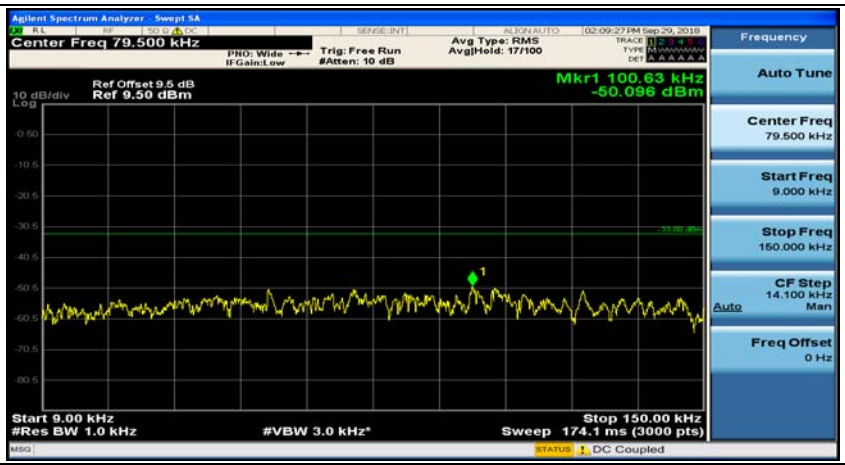
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

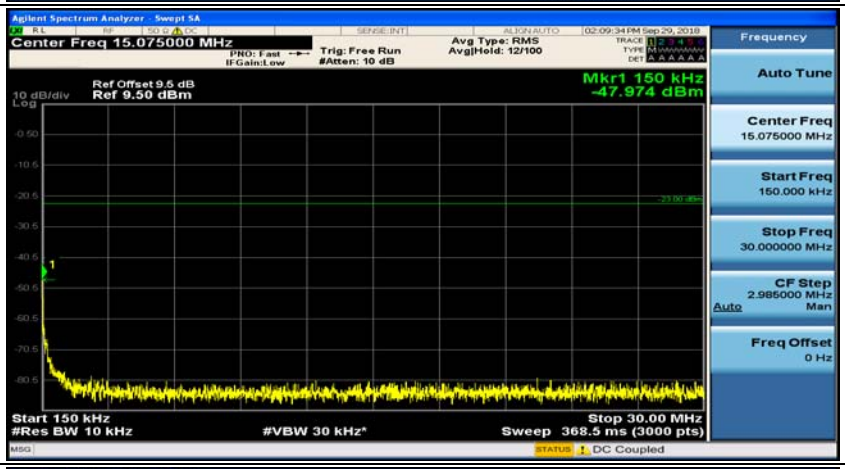

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:07:49 PM Sep 29, 2018
Frequency
Auto Tune
Mkr1 92.55 kHz
-51.082 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

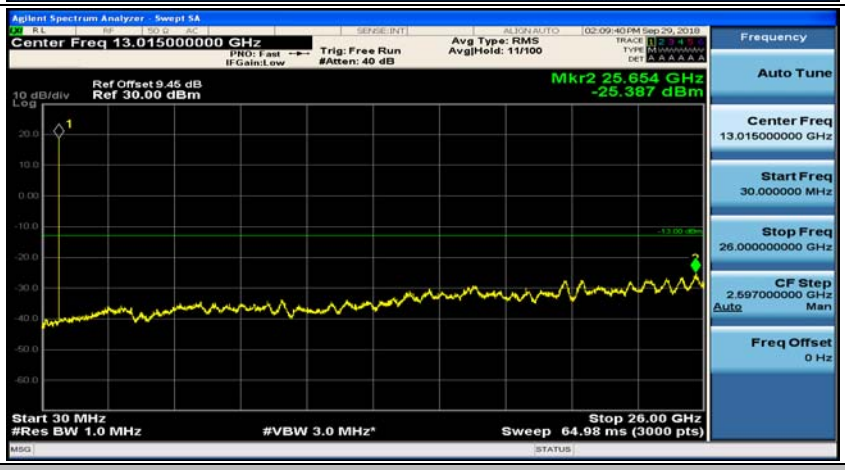

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
02:07:56 PM Sep 29, 2018
Frequency
Auto Tune
Mkr1 150 kHz
-48.795 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:08:02 PM Sep 29, 2018
Frequency
Auto Tune
Mkr2 25.662 GHz
-25.133 dBm
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

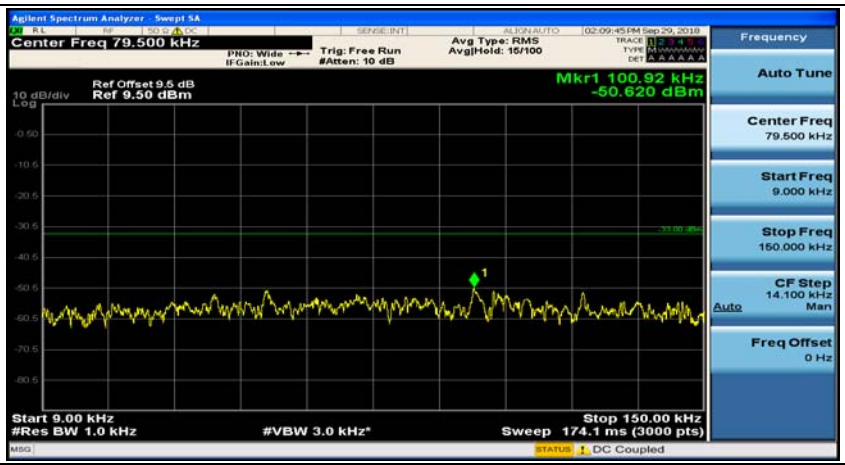
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

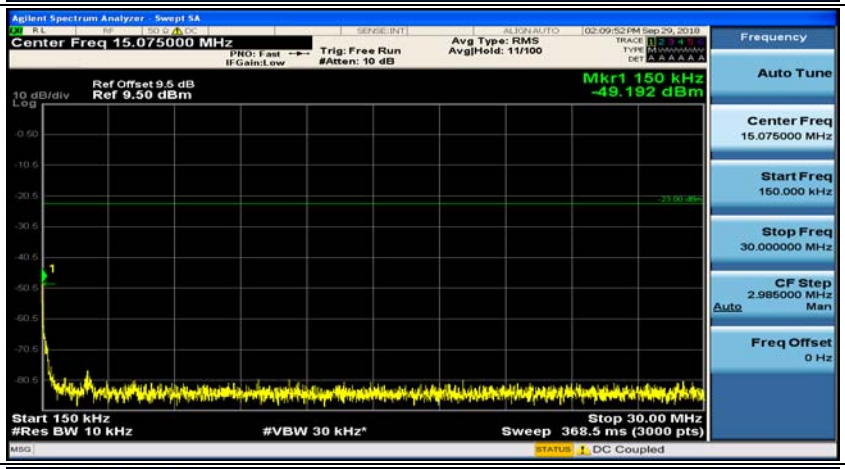


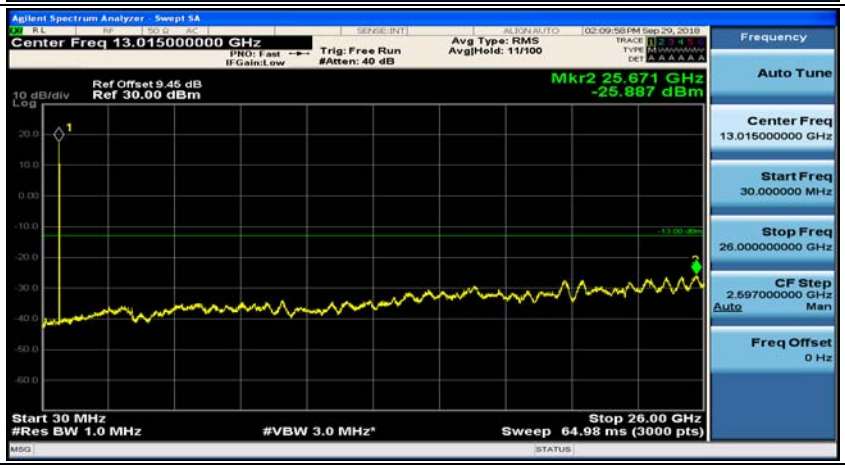


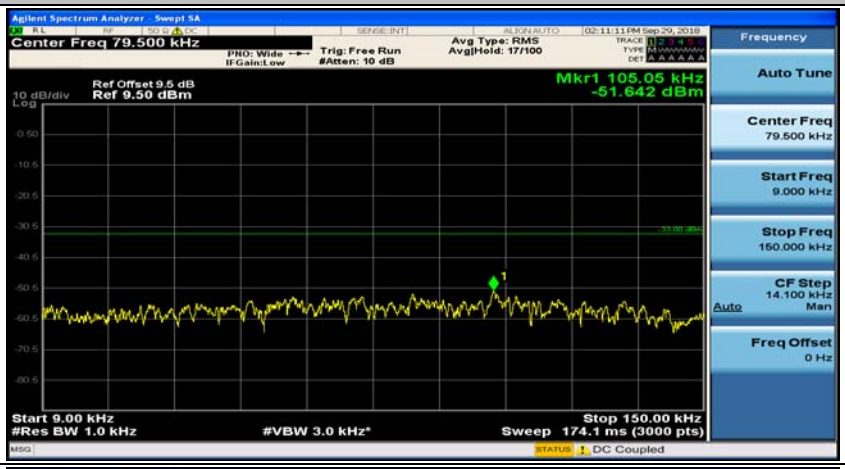
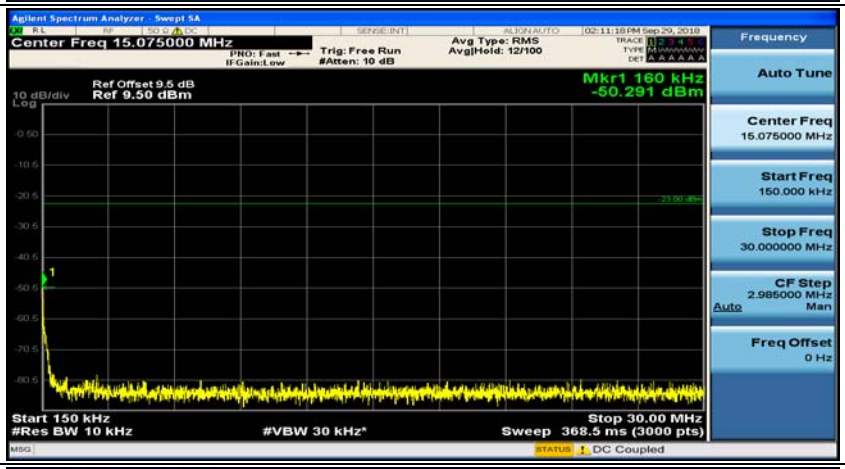
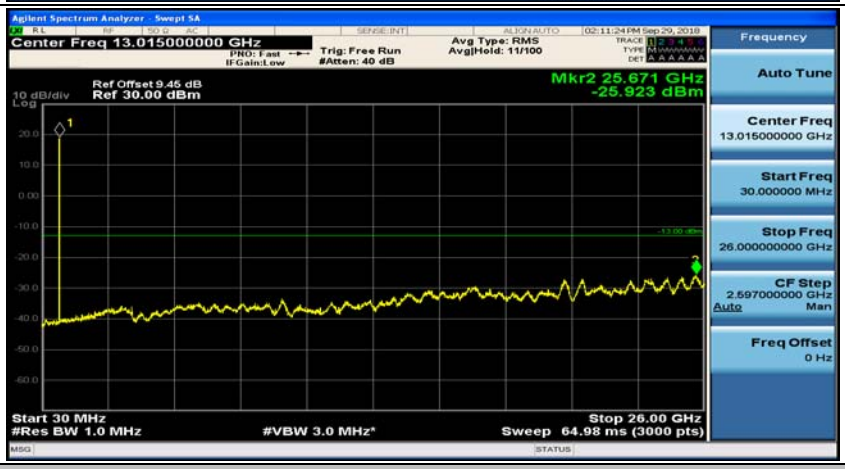


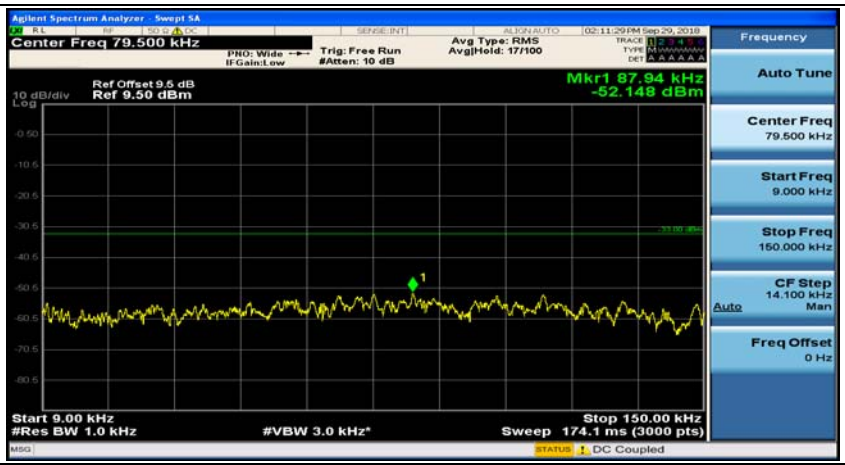
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

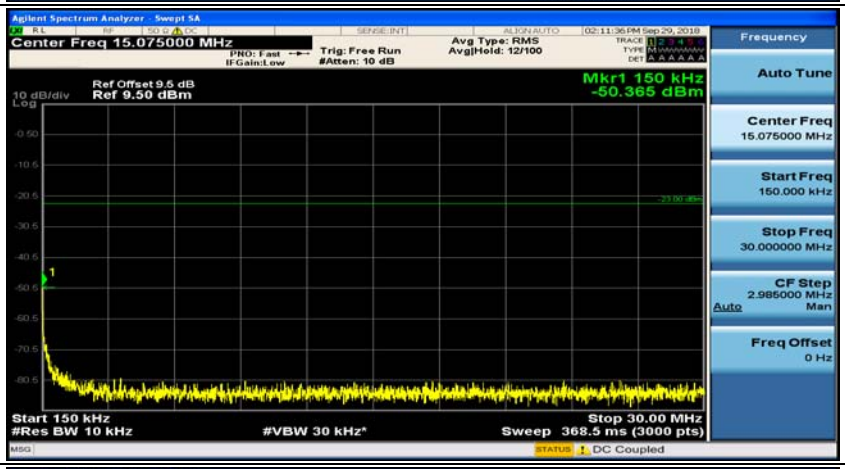

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 16/100
02:09:45 PM Sep 29, 2018
Ref Offset 9.5 dB
10 dB/div
Ref 9.50 dBm
Mkr1 100.92 kHz
-50.620 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

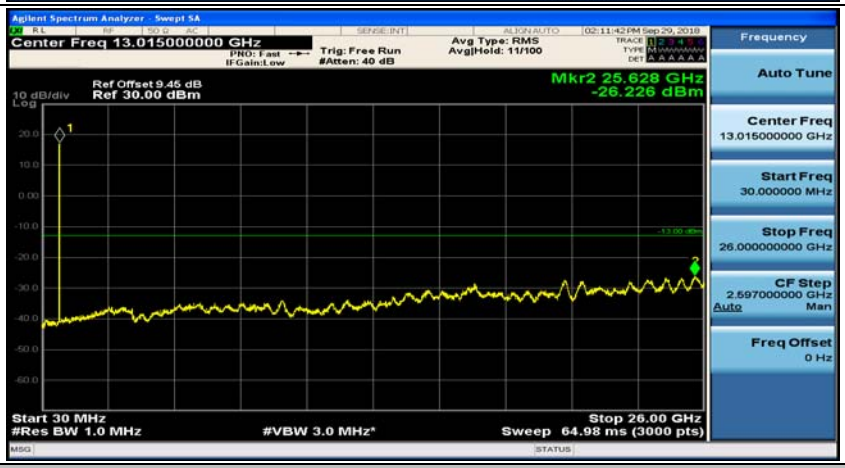

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
02:09:52 PM Sep 29, 2018
Ref Offset 9.5 dB
10 dB/div
Ref 9.50 dBm
Mkr1 150 kHz
-49.192 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:09:58 PM Sep 29, 2018
Ref Offset 9.45 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.671 GHz
-25.887 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

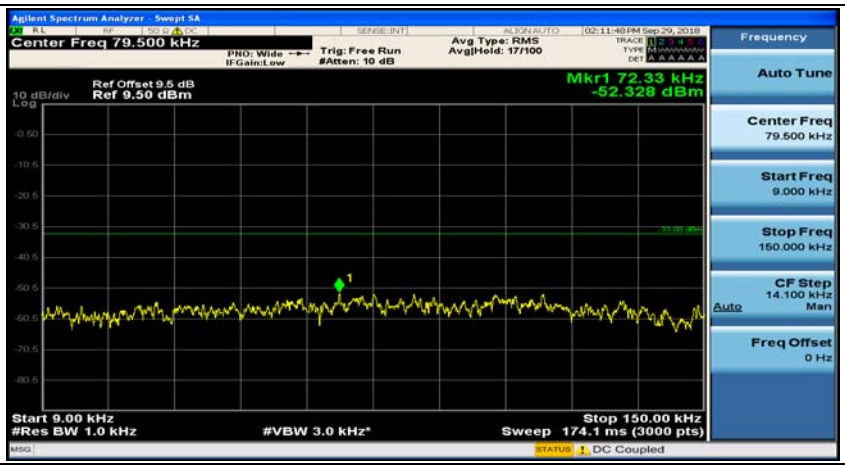
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

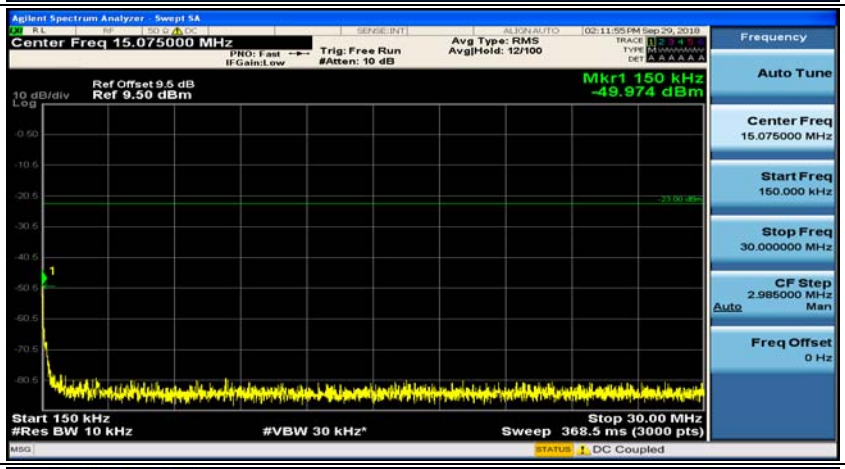


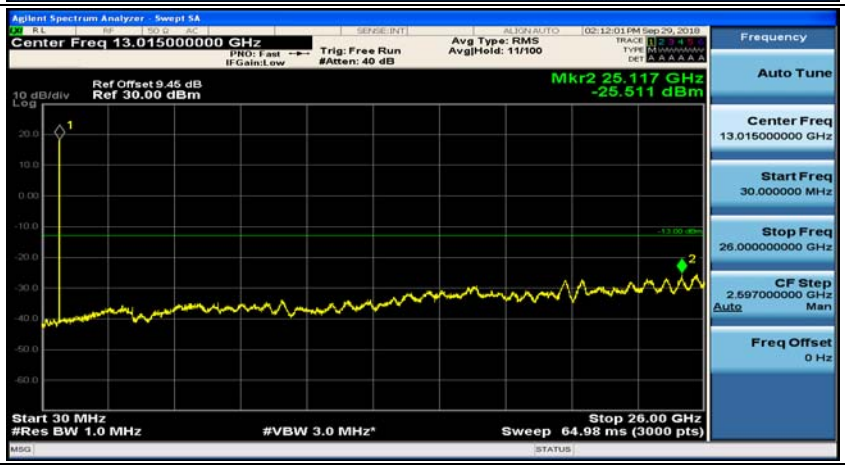


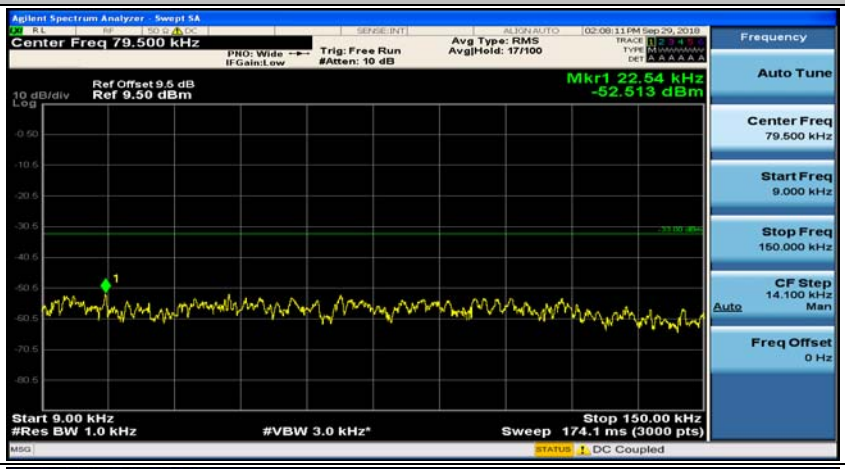
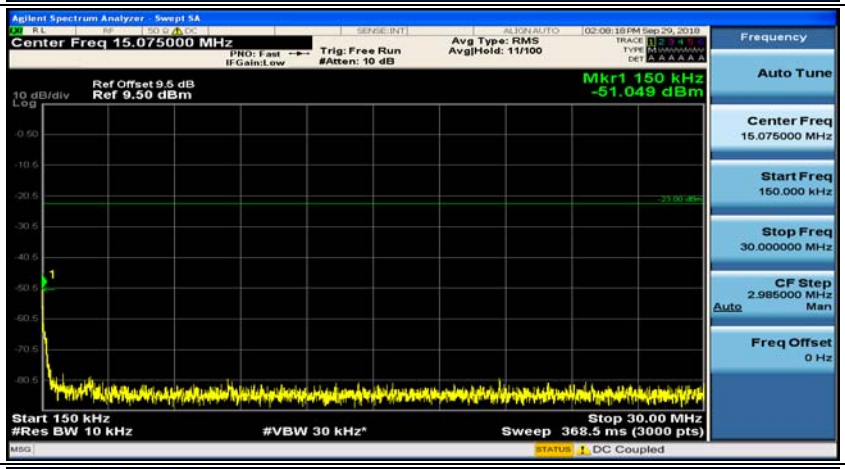
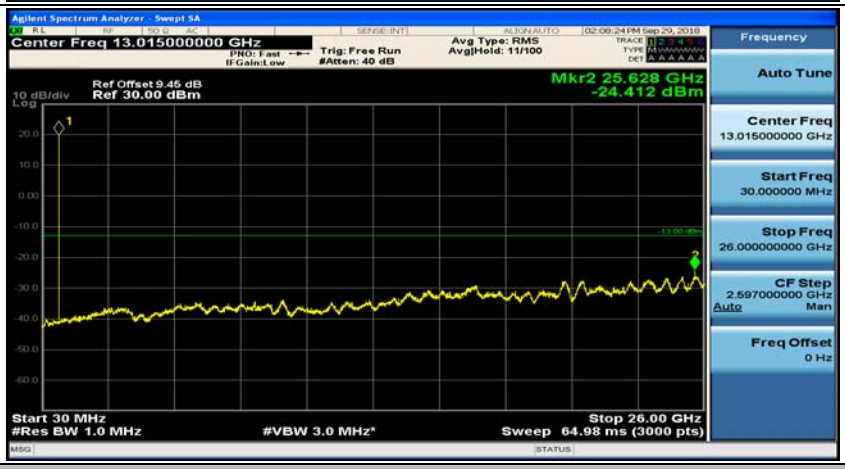


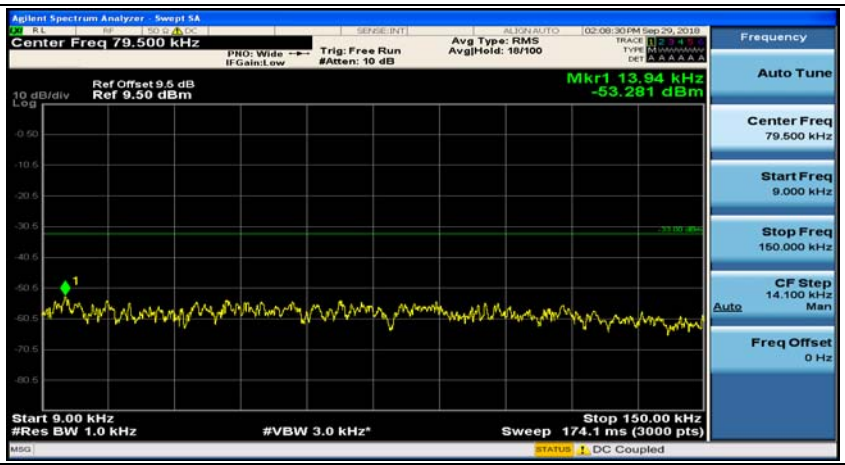
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

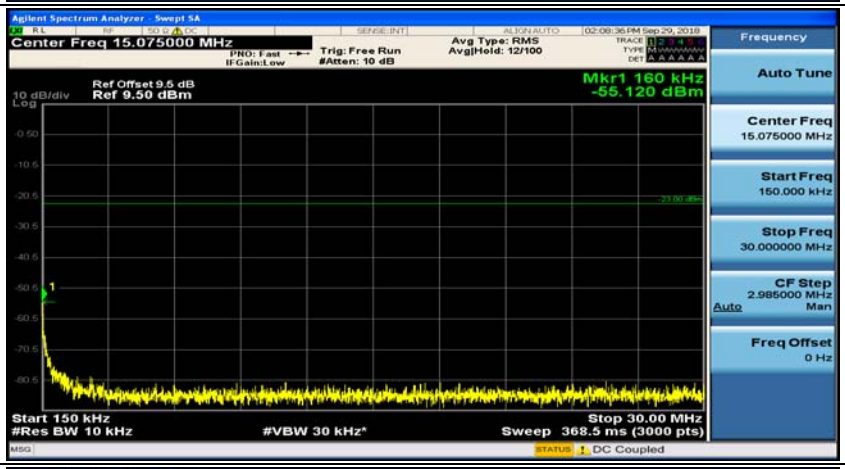

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:11:48 PM Sep 29, 2018
Frequency
Auto Tune
Mkr1 72.33 kHz
-52.328 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

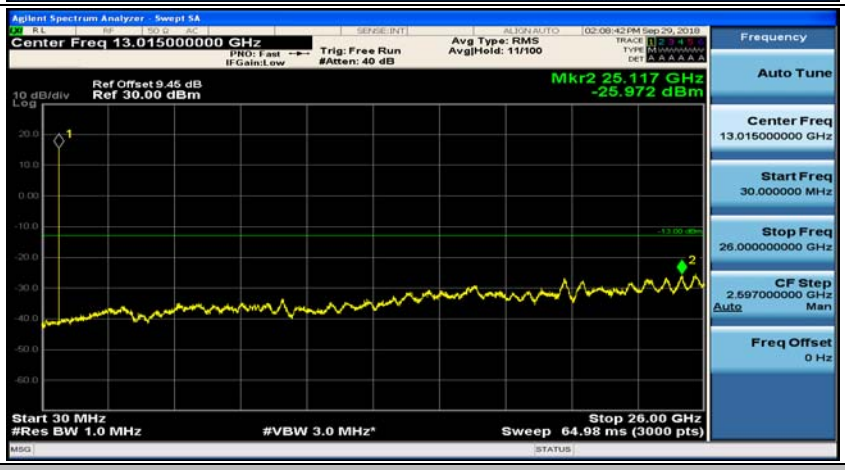

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:11:55 PM Sep 29, 2018
Frequency
Auto Tune
Mkr1 150 kHz
-49.974 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:12:01 PM Sep 29, 2018
Frequency
Auto Tune
Mkr2 25.117 GHz
-25.511 dBm
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

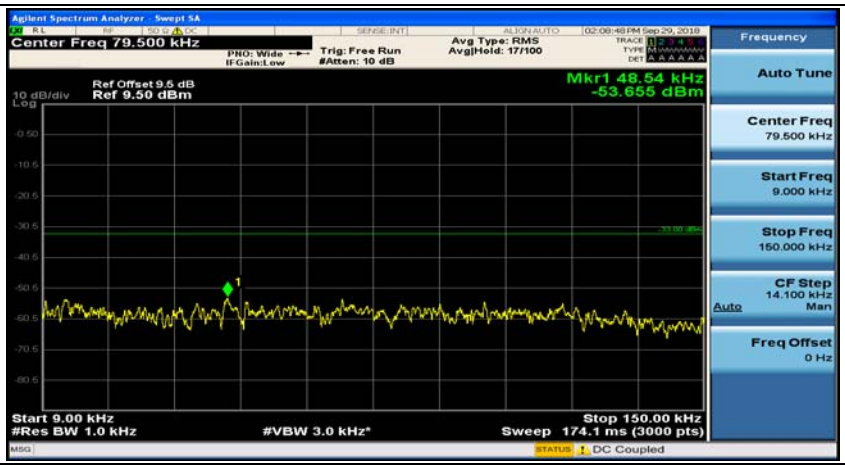
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

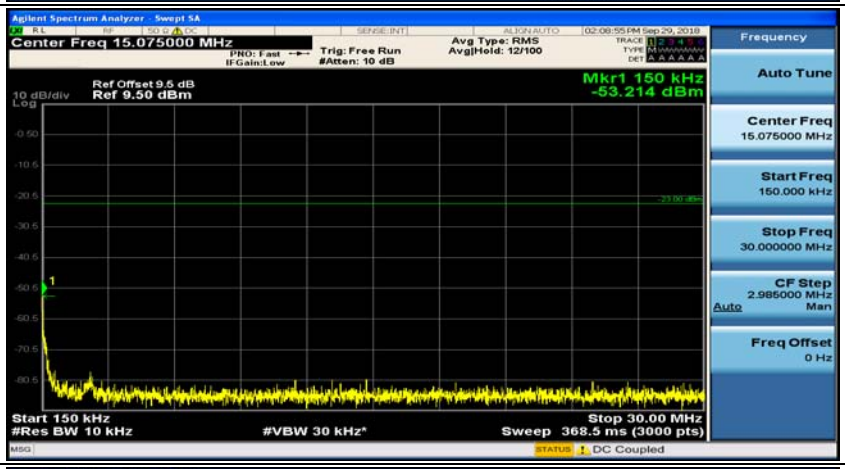


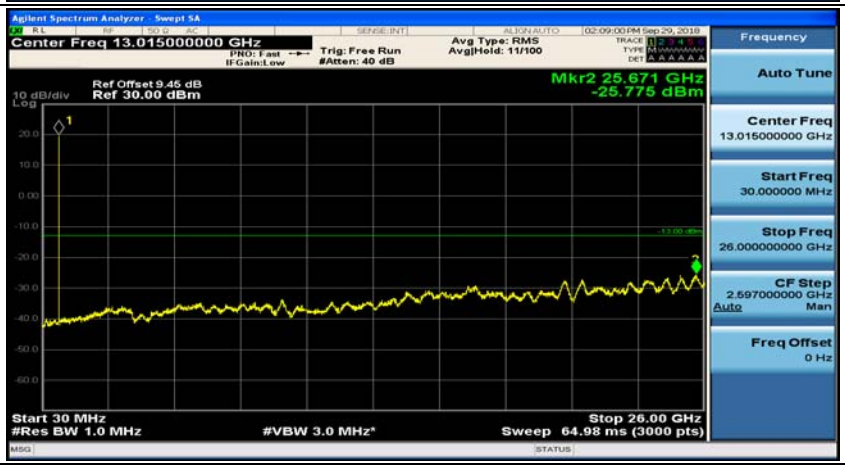


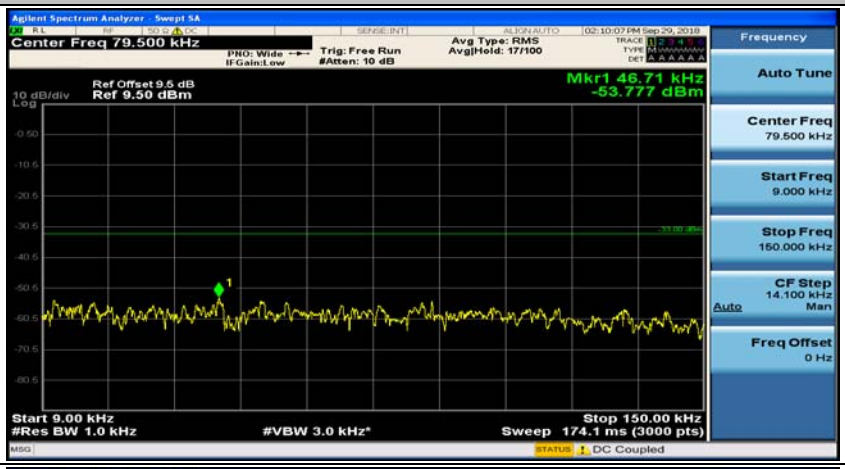
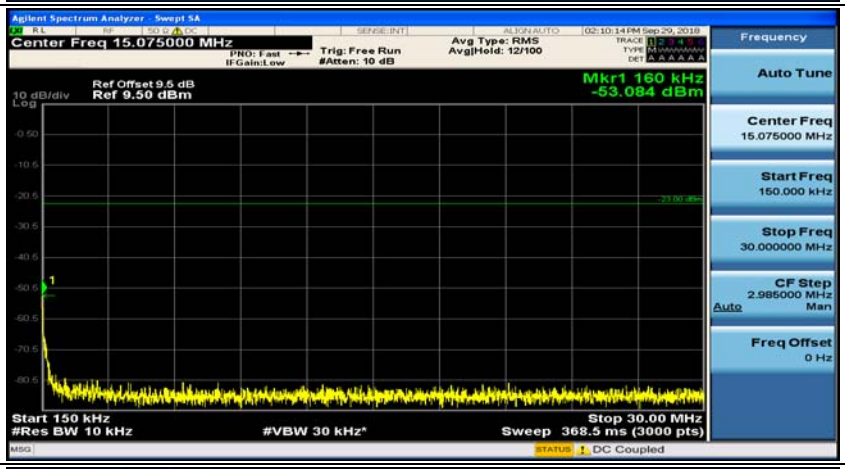
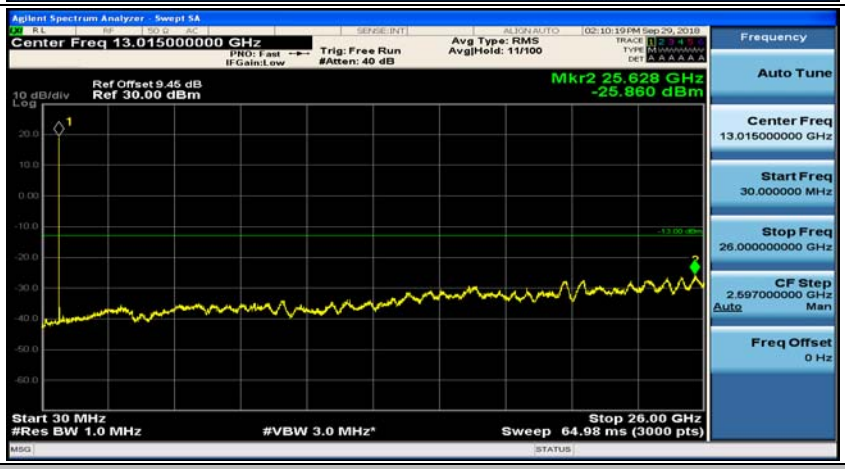


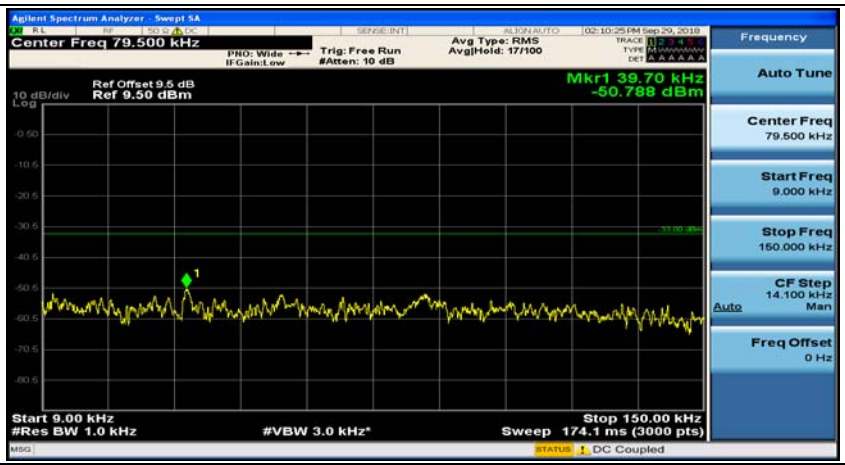
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

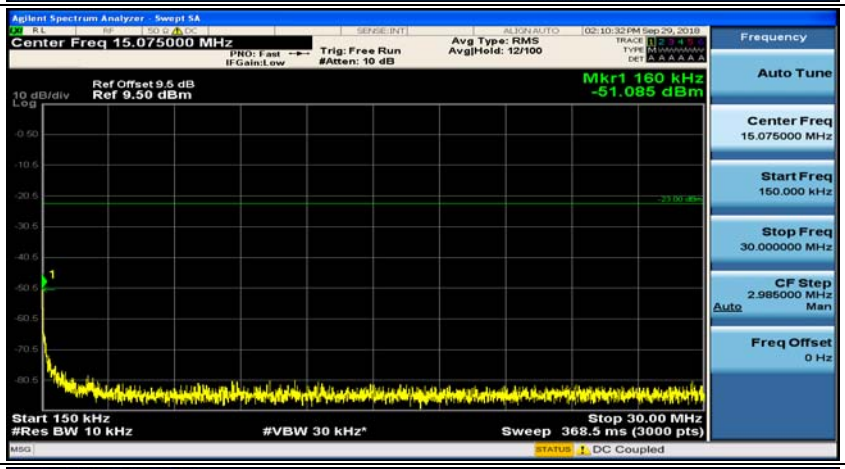

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:08:46 PM Sep 29, 2018
Frequency
Mkr1 48.54 kHz
-53.655 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

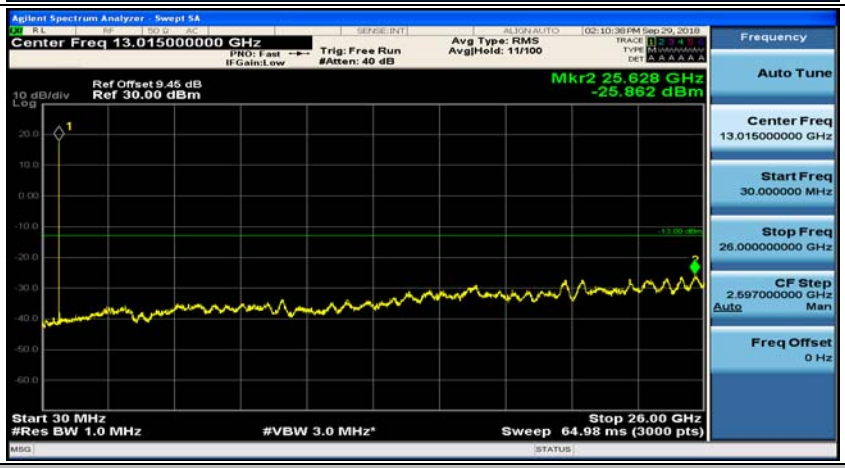

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:08:55 PM Sep 29, 2018
Frequency
Mkr1 150 kHz
-53.214 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:09:00 PM Sep 29, 2018
Frequency
Mkr2 25.671 GHz
-25.775 dBm
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

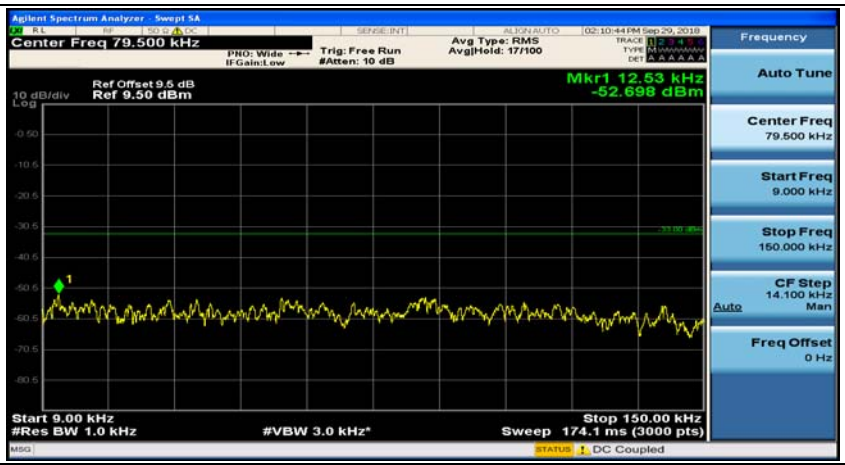
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

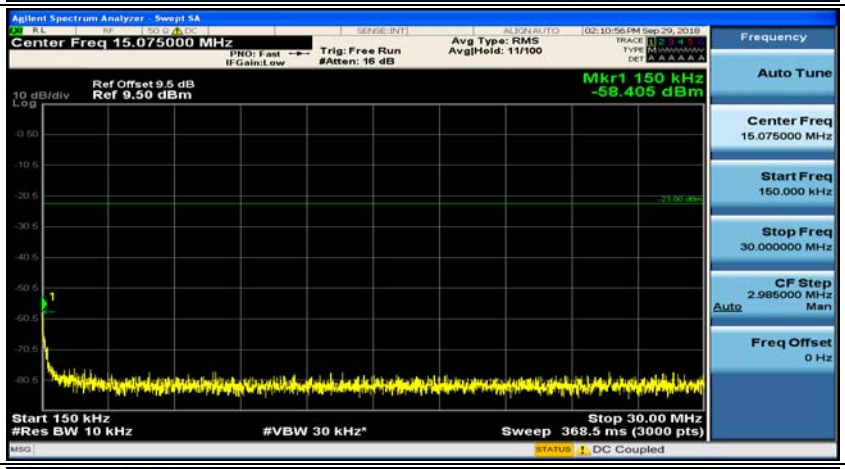


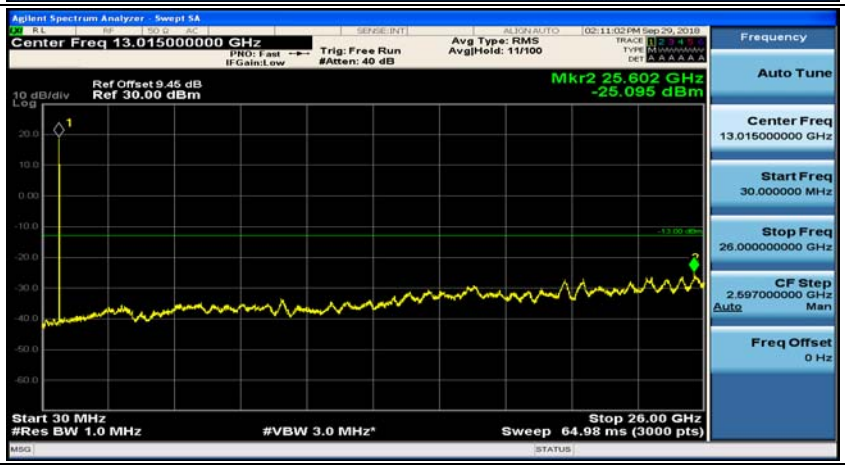


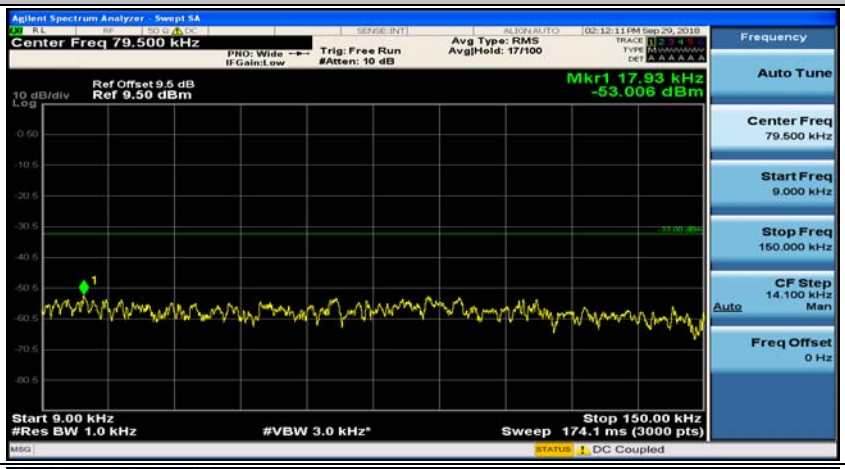
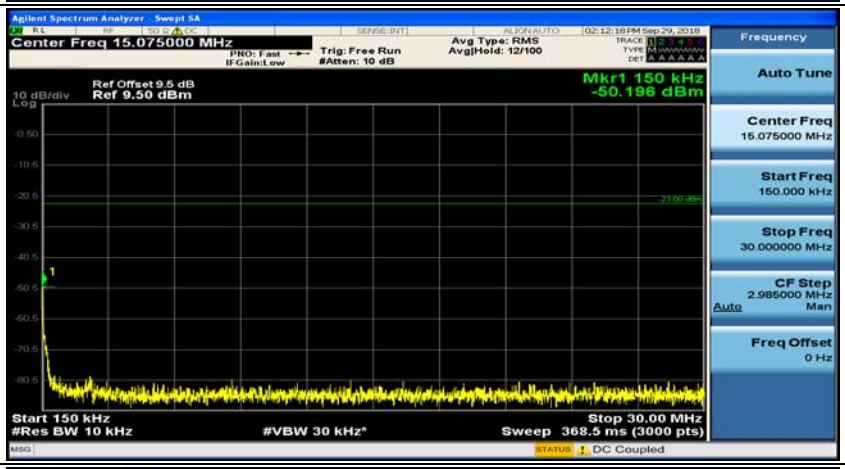
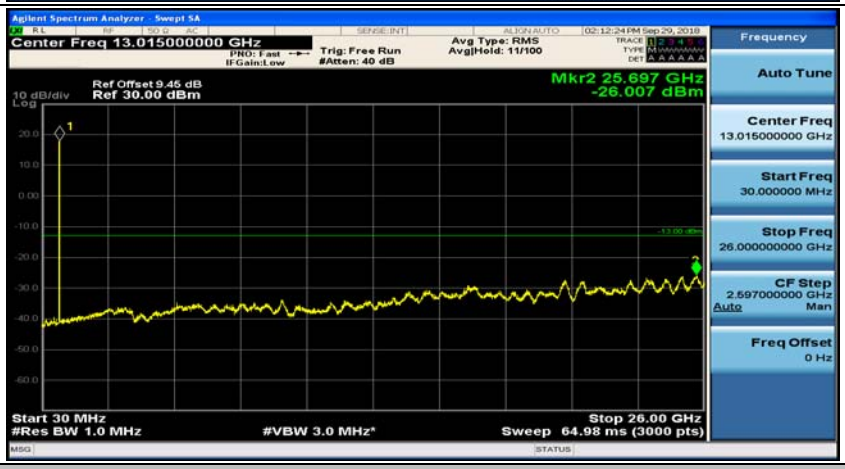


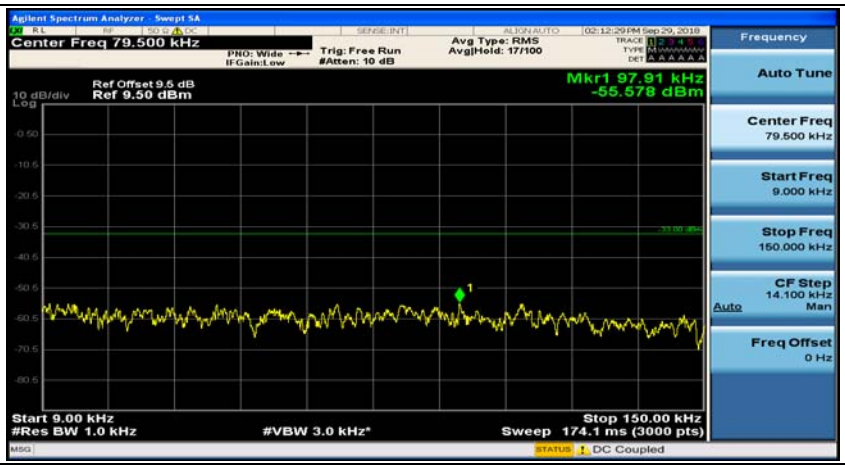
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

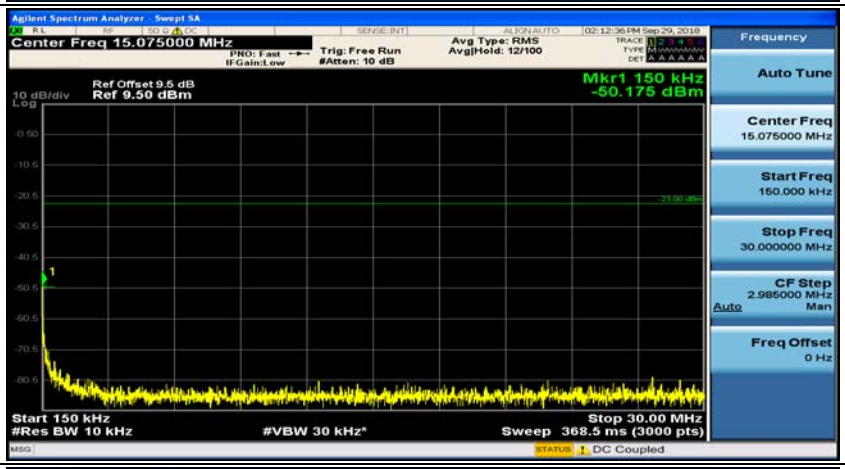

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:10:44 PM Sep 29, 2018
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Mkr1 12.53 kHz
-52.698 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

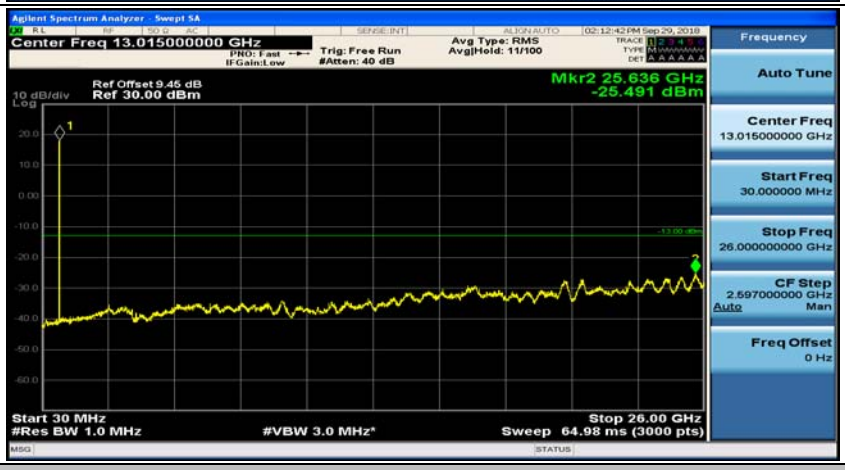

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
02:10:56 PM Sep 29, 2018
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Mkr1 150 kHz
-58.405 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:11:02 PM Sep 29, 2018
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.602 GHz
-25.095 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

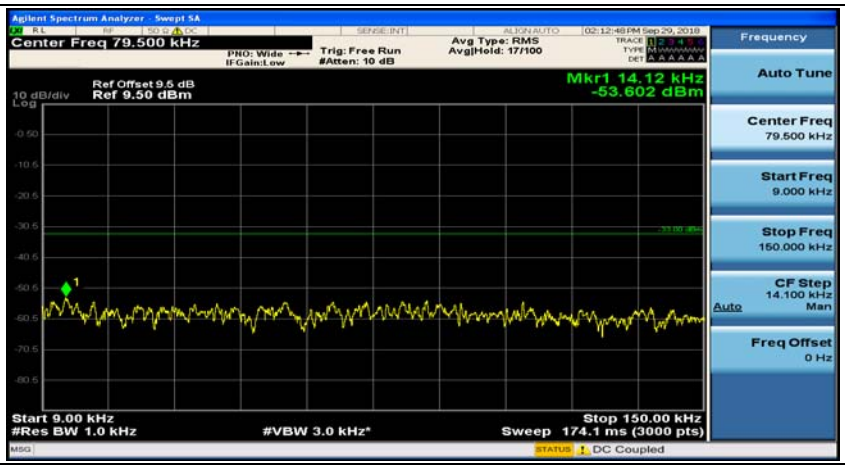
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

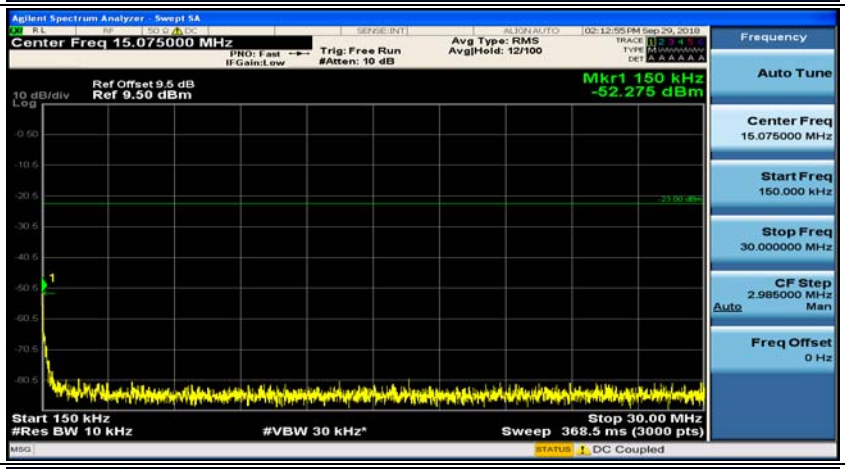


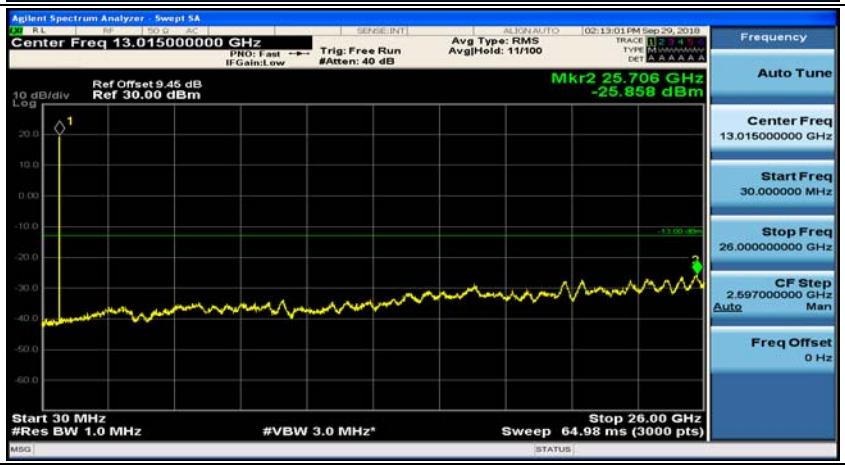




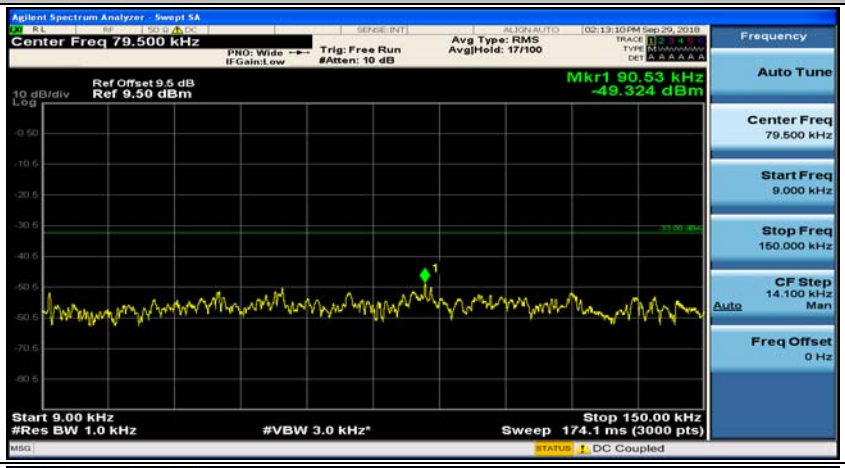
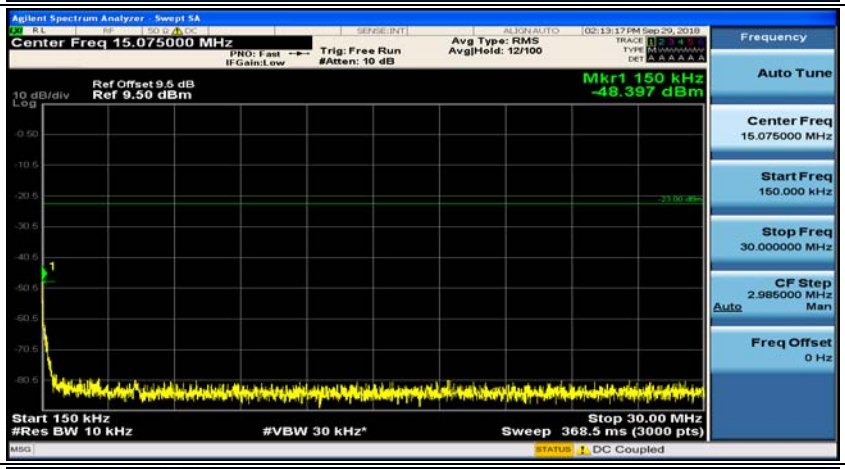
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24


Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:12:46 PM Sep 29, 2018
Frequency
Auto Tune
Mkr1 14.12 kHz
-53.602 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

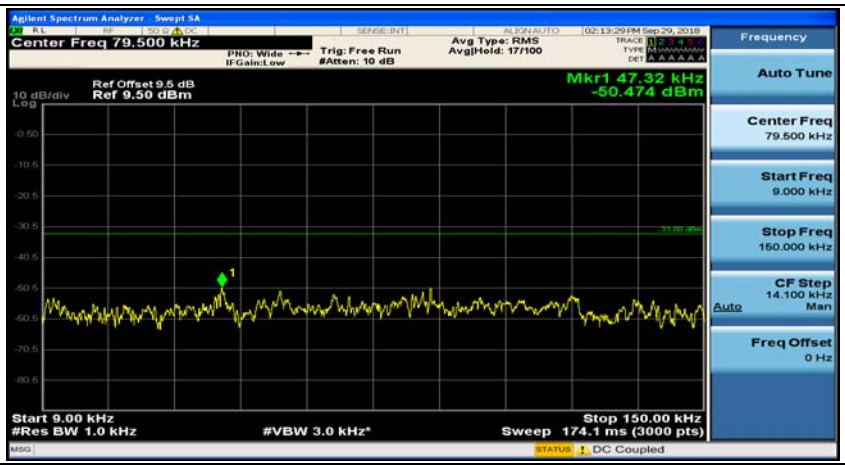

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:12:55 PM Sep 29, 2018
Frequency
Auto Tune
Mkr1 150 kHz
-52.275 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

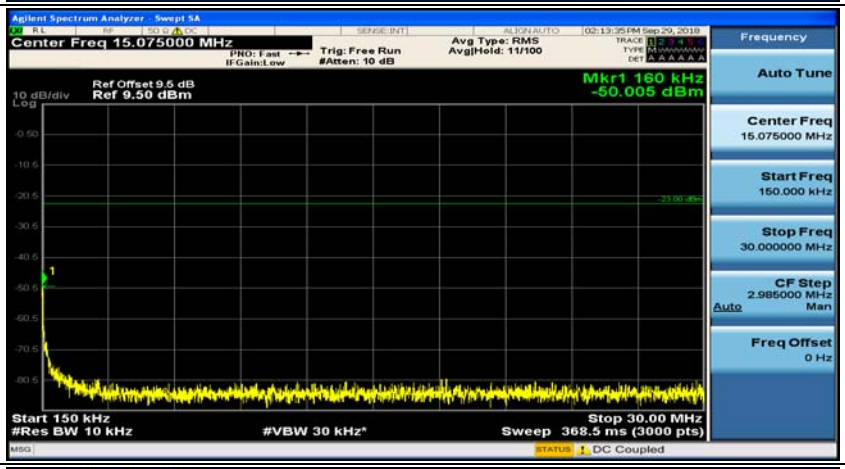

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:13:01 PM Sep 29, 2018
Frequency
Auto Tune
Mkr2 25.706 GHz
-25.858 dBm
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

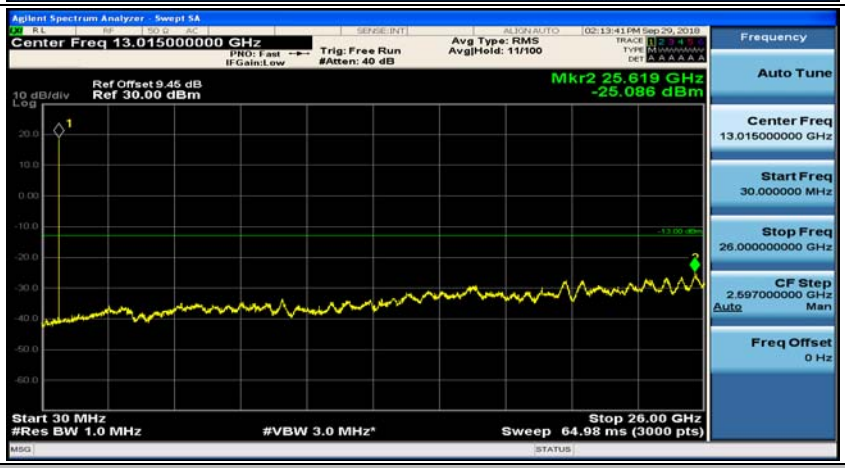
Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0



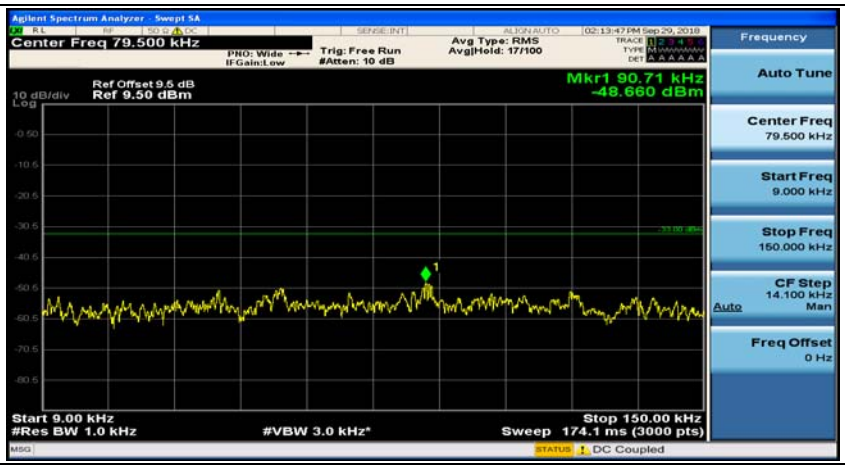
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#24

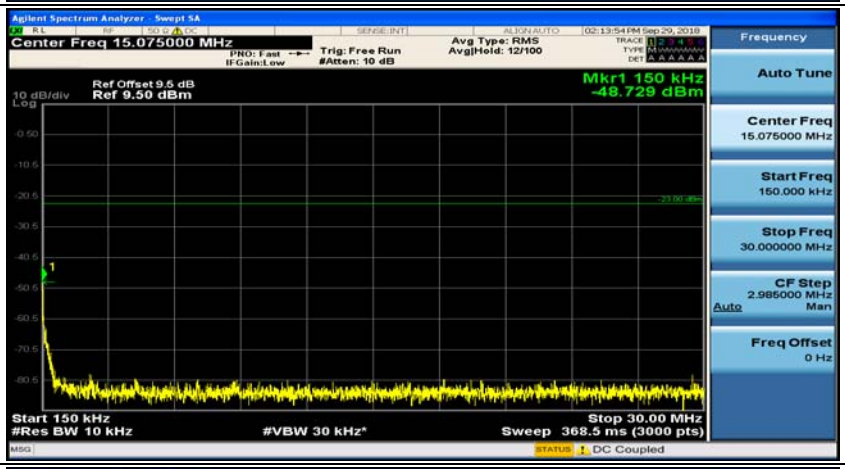


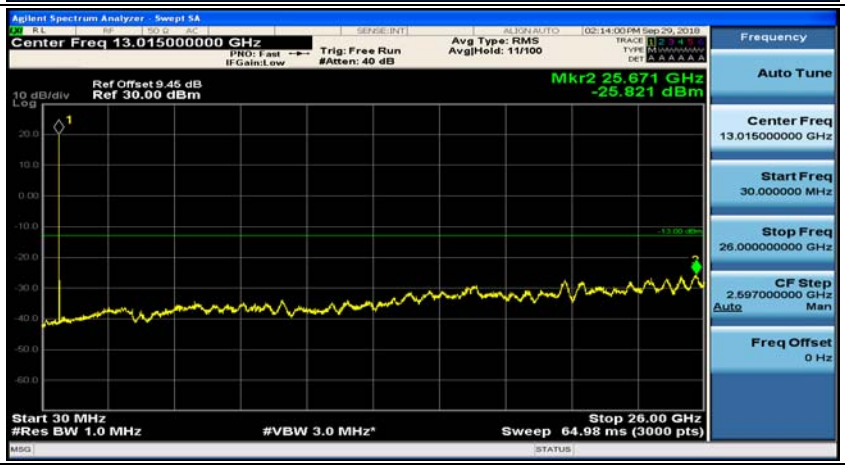


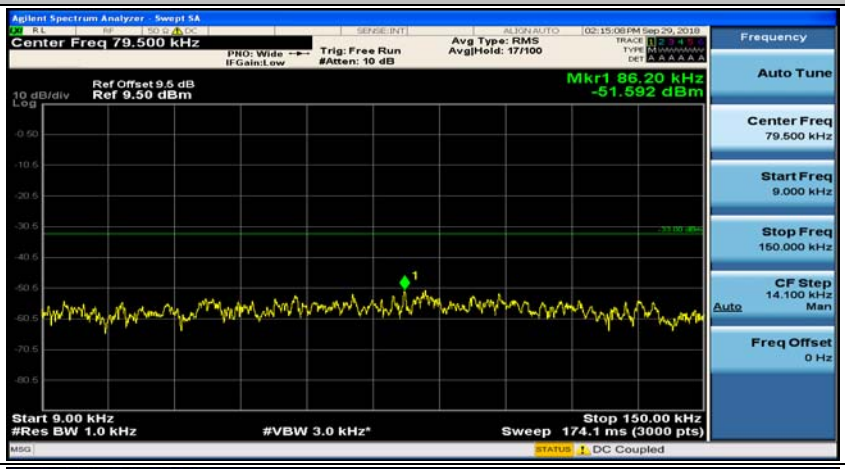
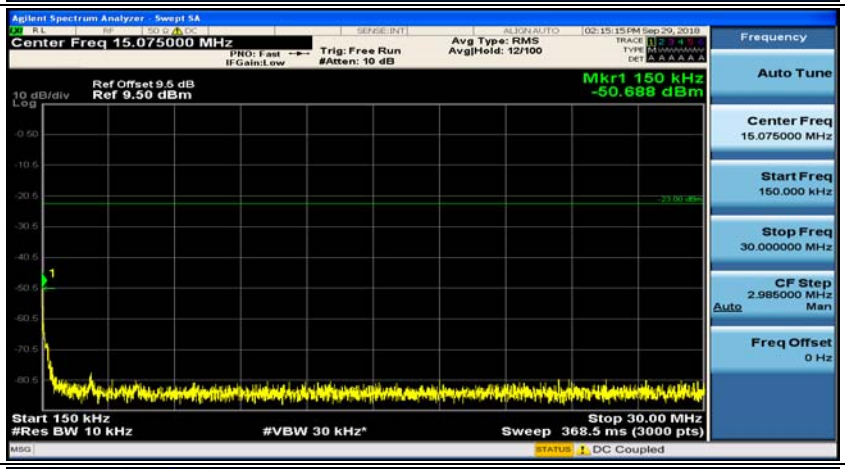
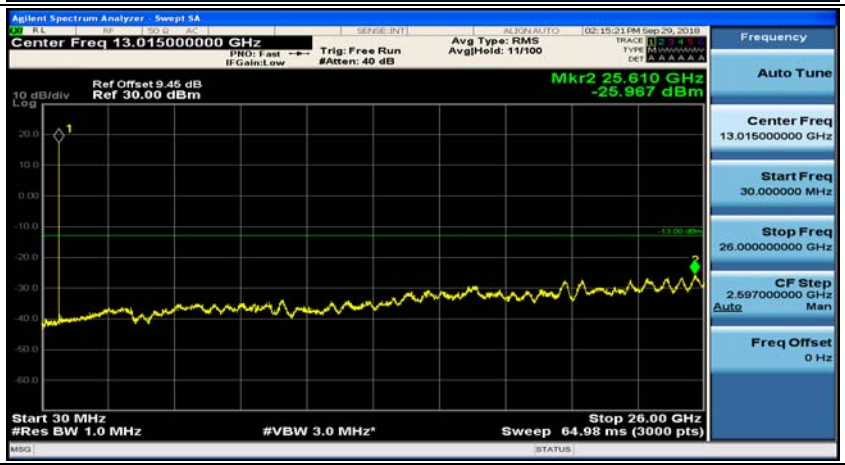


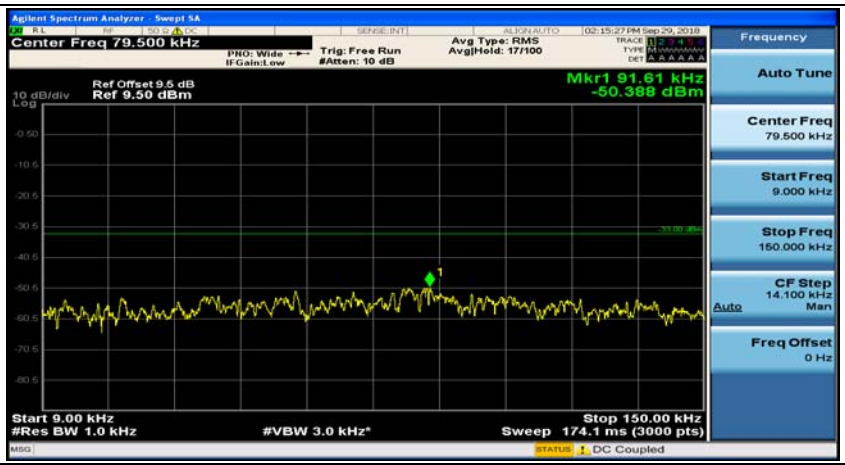
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#49

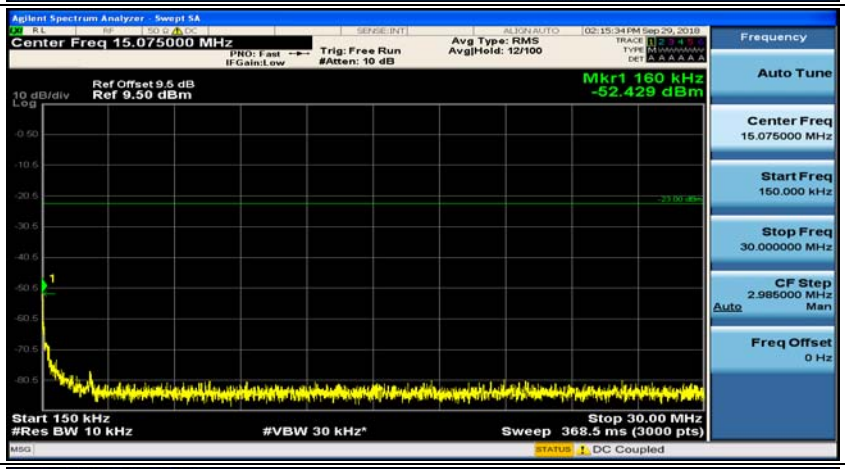

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:13:47 PM Sep 29, 2018
Ref Offset 9.5 dB
10 dB/div
Ref 9.50 dBm
Mkr1 90.71 kHz
-48.660 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

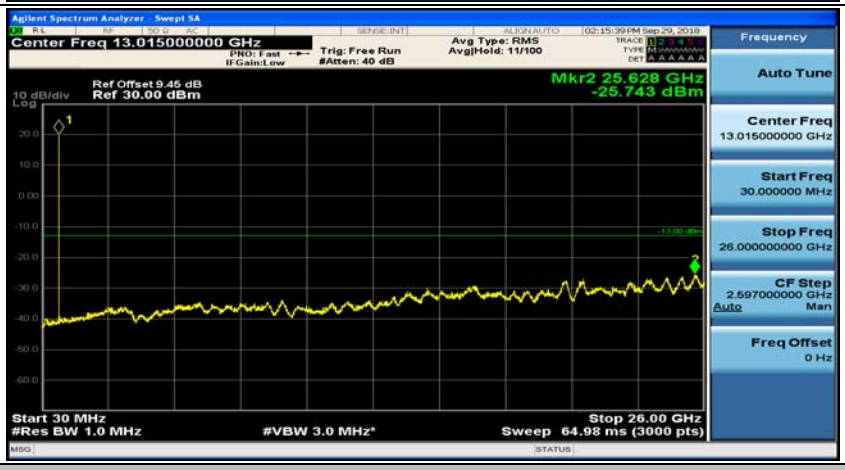

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:13:54 PM Sep 29, 2018
Ref Offset 9.5 dB
10 dB/div
Ref 9.50 dBm
Mkr1 150 kHz
-48.729 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:14:00 PM Sep 29, 2018
Ref Offset 9.45 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.671 GHz
-25.821 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

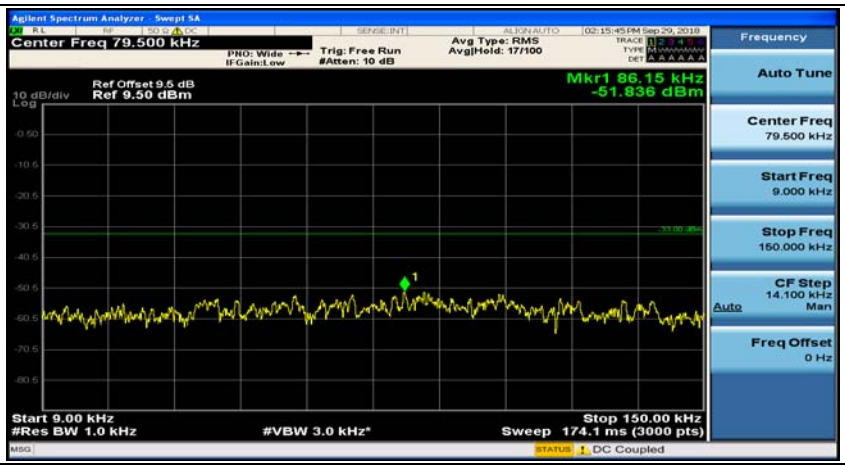
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

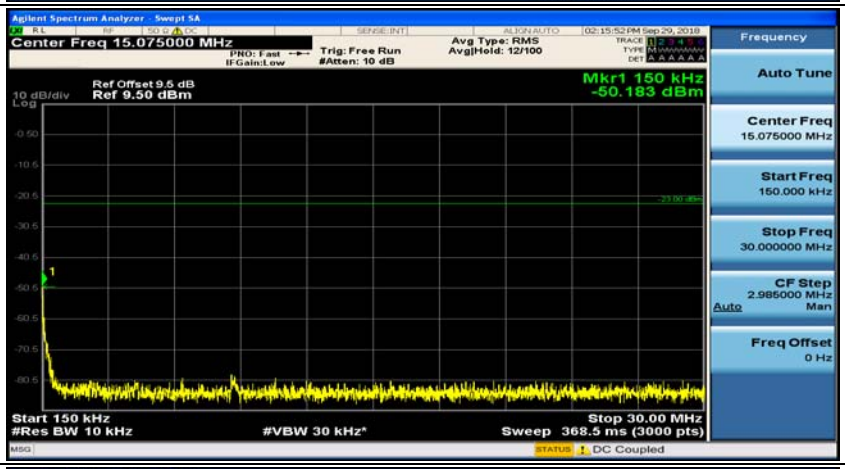


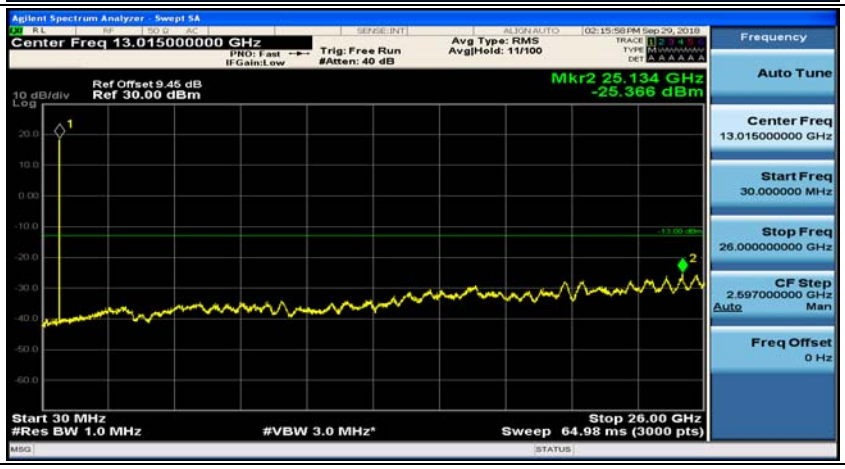


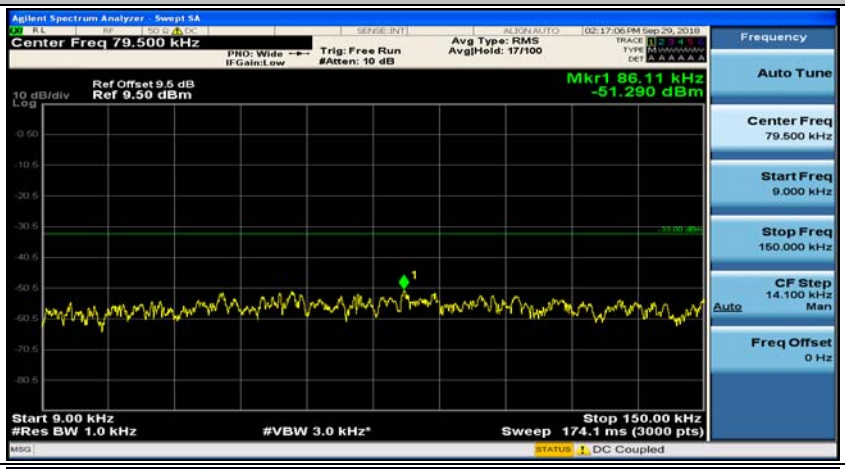
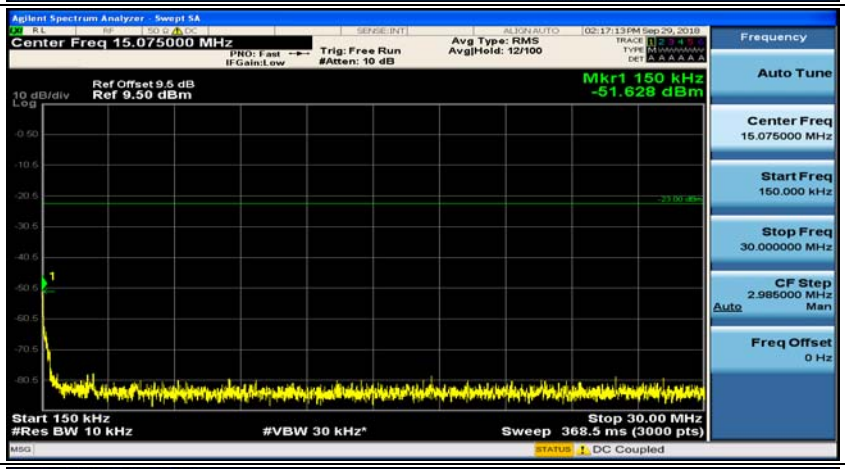
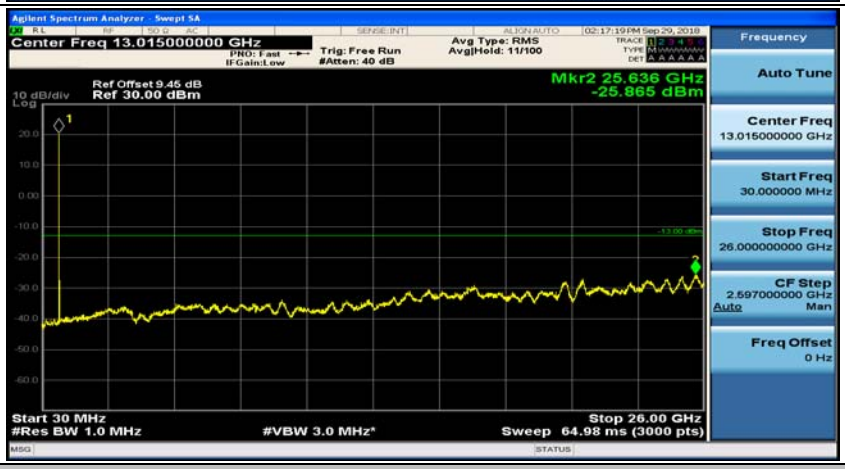


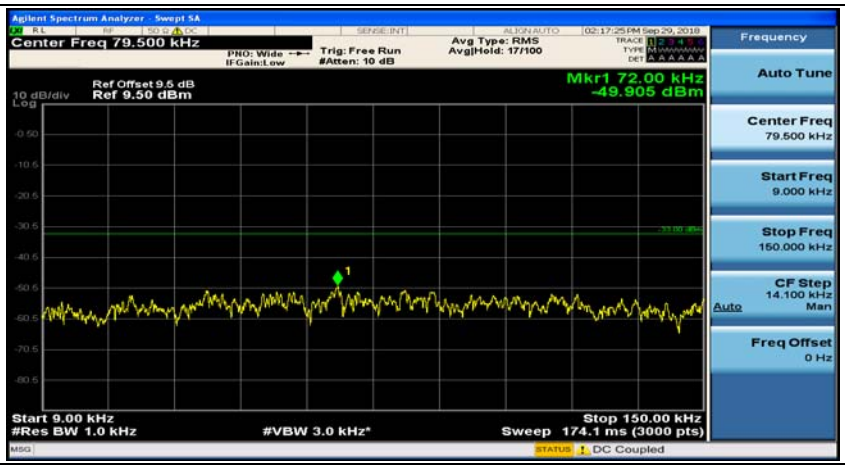
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

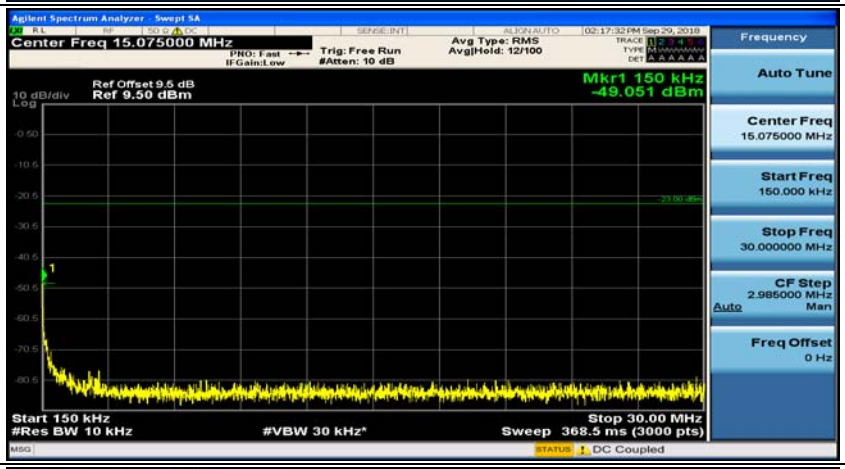

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:15:45 PM Sep 29, 2018
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Mkr1 86.15 kHz
-51.836 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

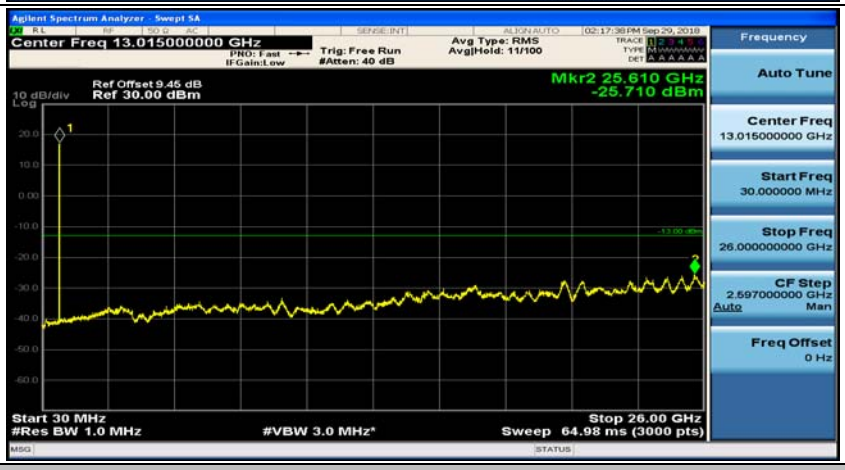

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:15:52 PM Sep 29, 2018
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Mkr1 150 kHz
-50.183 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:15:58 PM Sep 29, 2018
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.134 GHz
-25.366 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

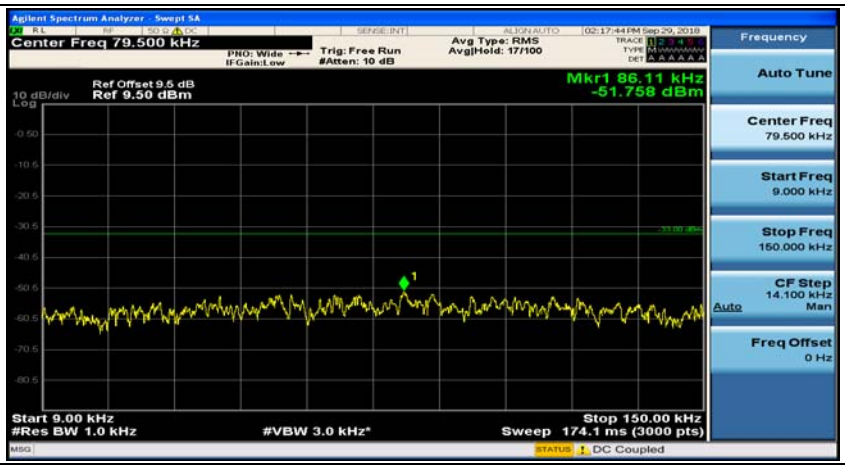
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

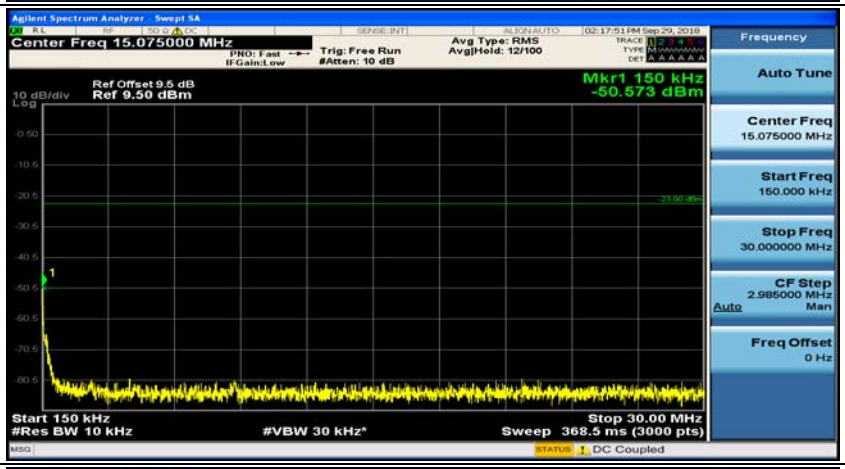


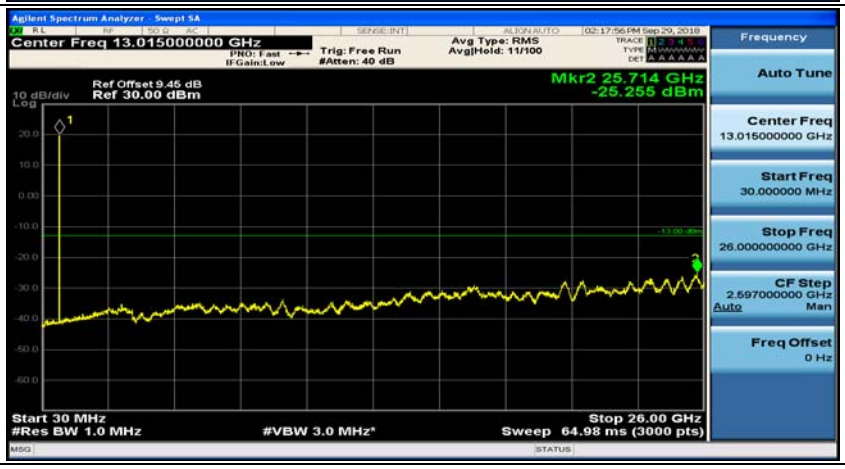


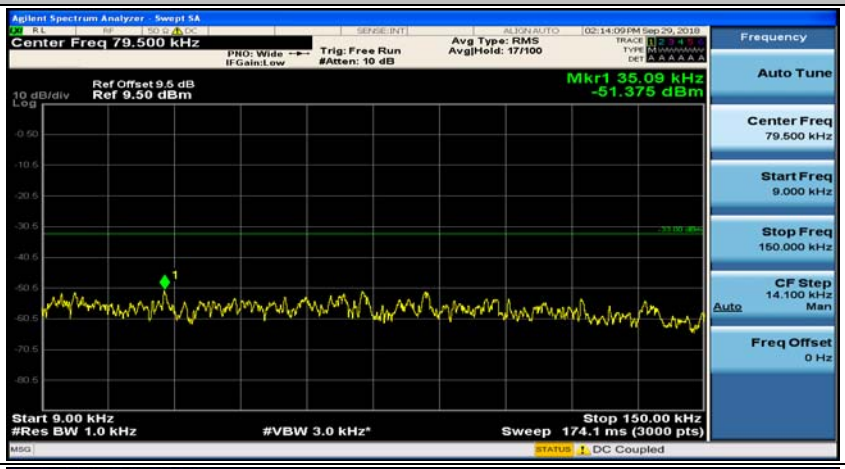
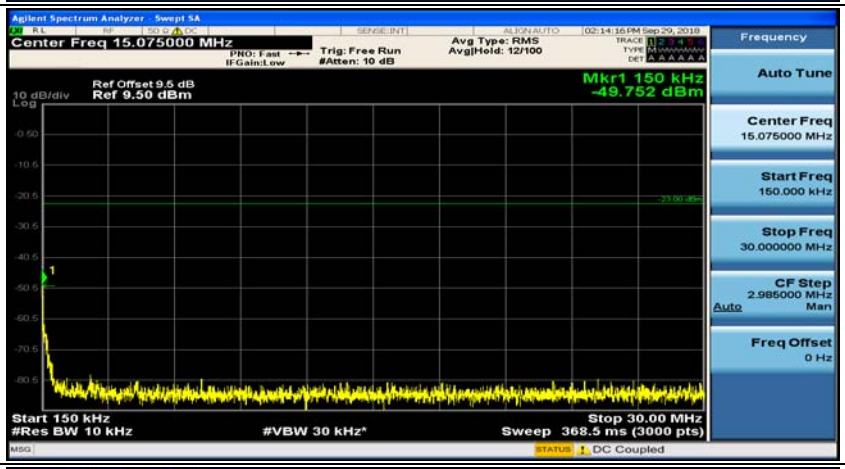
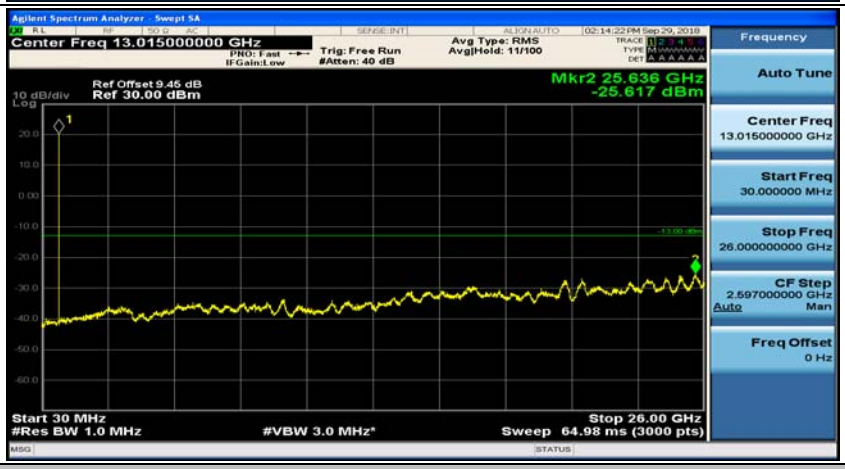


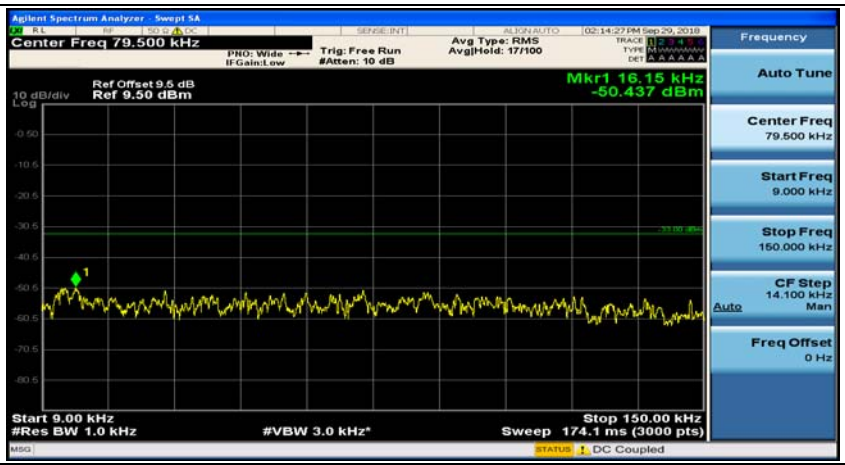
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#49

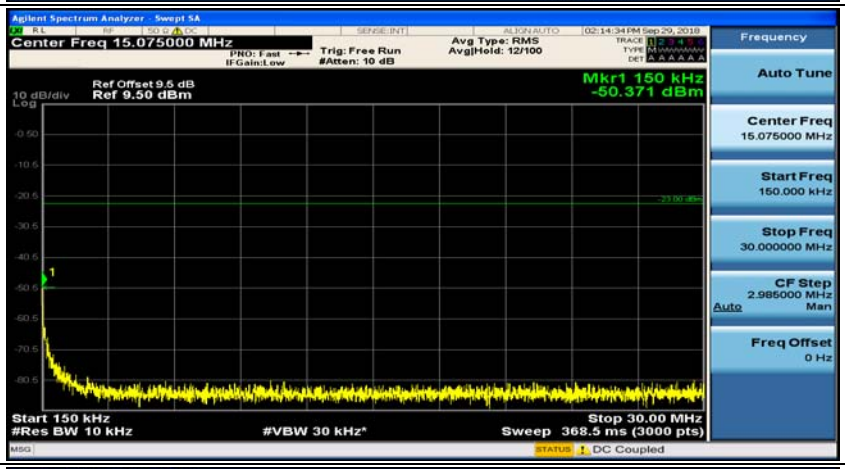

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:17:44 PM Sep 29, 2018
Frequency
Mkr1 86.11 kHz
-51.758 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:17:51 PM Sep 29, 2018
Frequency
Mkr1 150 kHz
-50.573 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

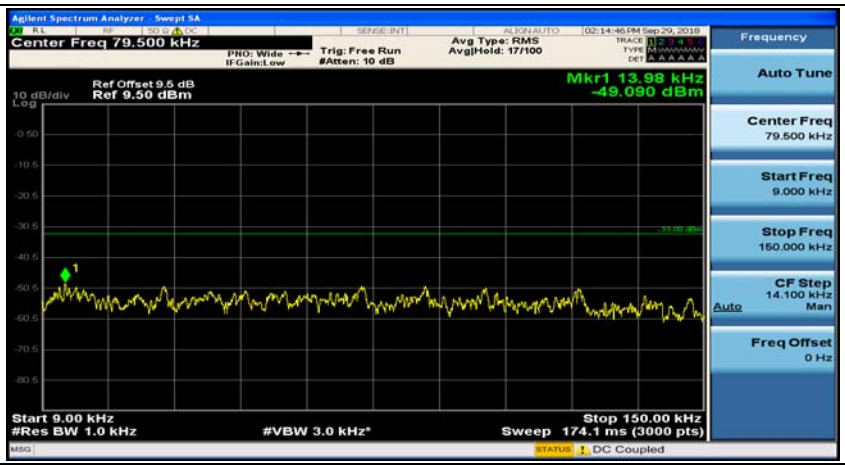

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:17:56 PM Sep 29, 2018
Frequency
Mkr2 25.714 GHz
-25.255 dBm
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

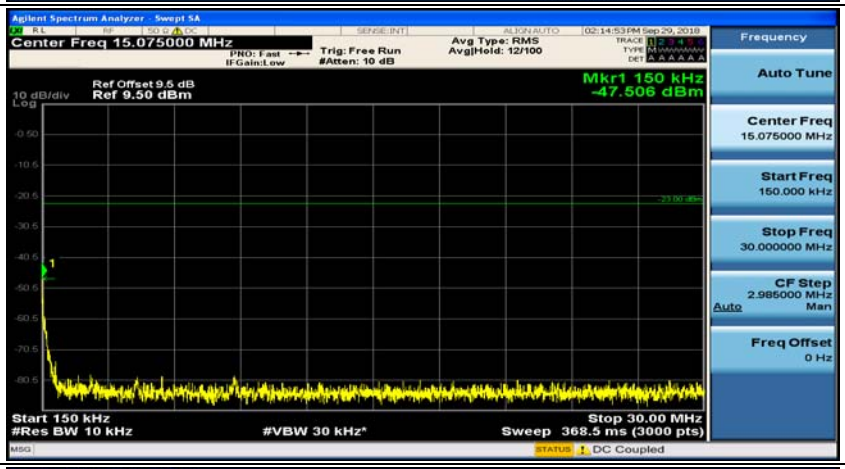
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24



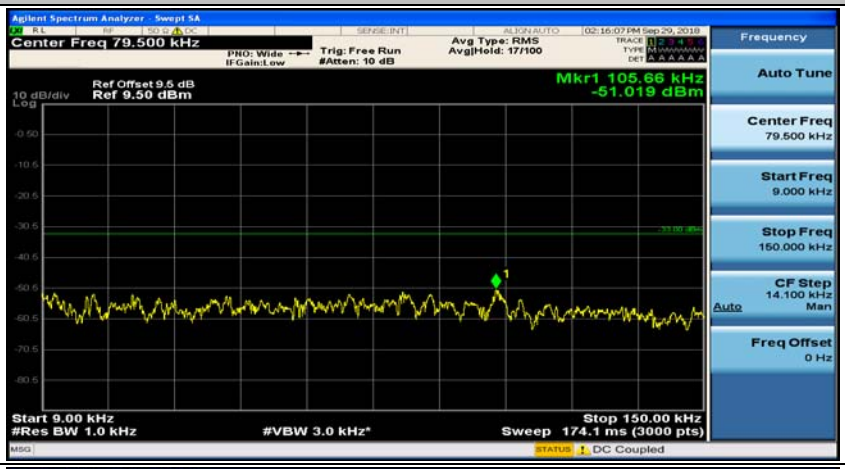
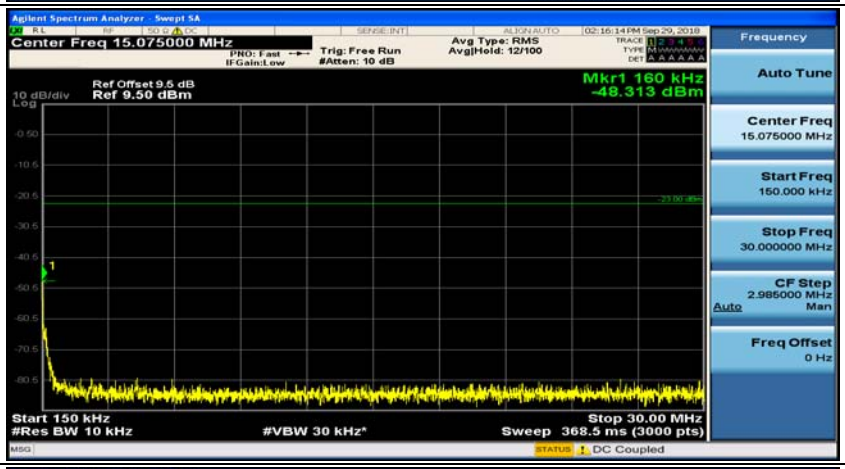
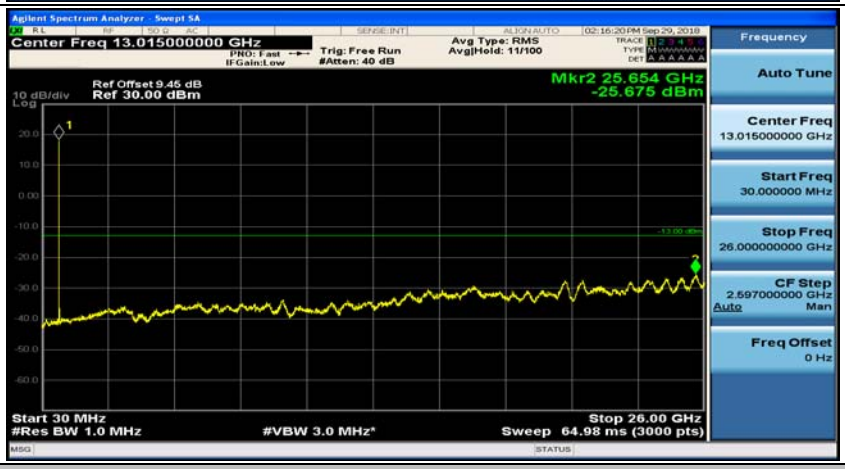


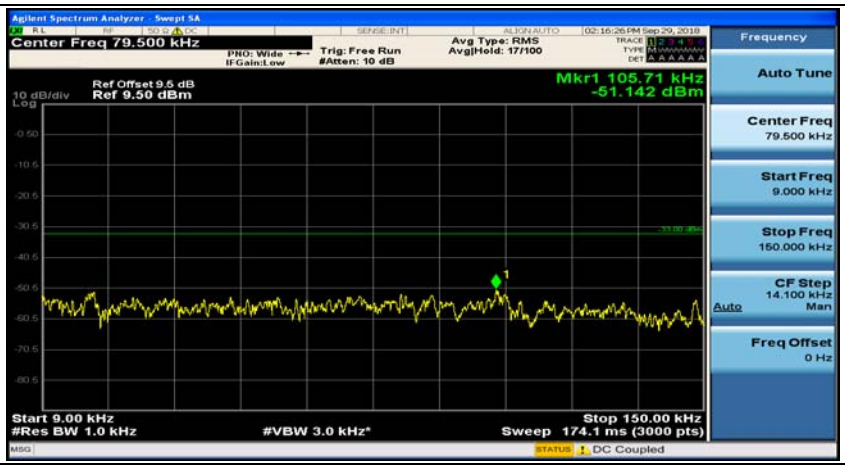
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49

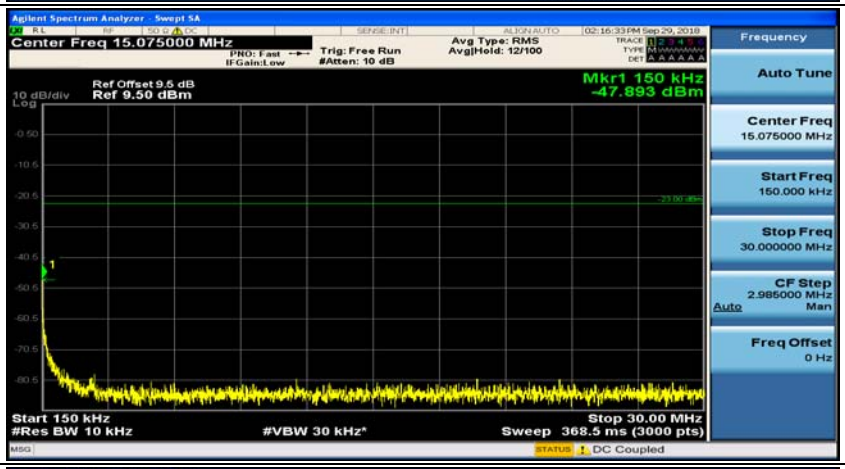

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:14:46 PM Sep 29, 2018
Frequency
Mkr1 13.98 kHz
-49.090 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

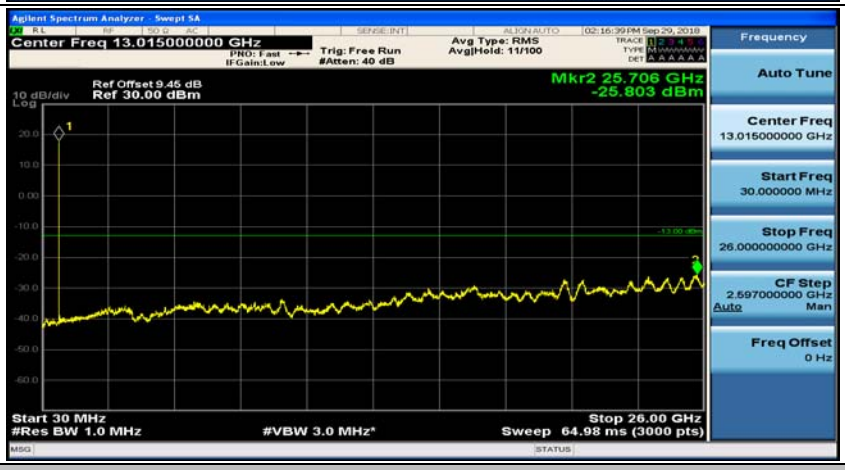

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:14:53 PM Sep 29, 2018
Frequency
Mkr1 150 kHz
-47.506 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:14:59 PM Sep 29, 2018
Frequency
Mkr2 25.628 GHz
-25.626 dBm
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

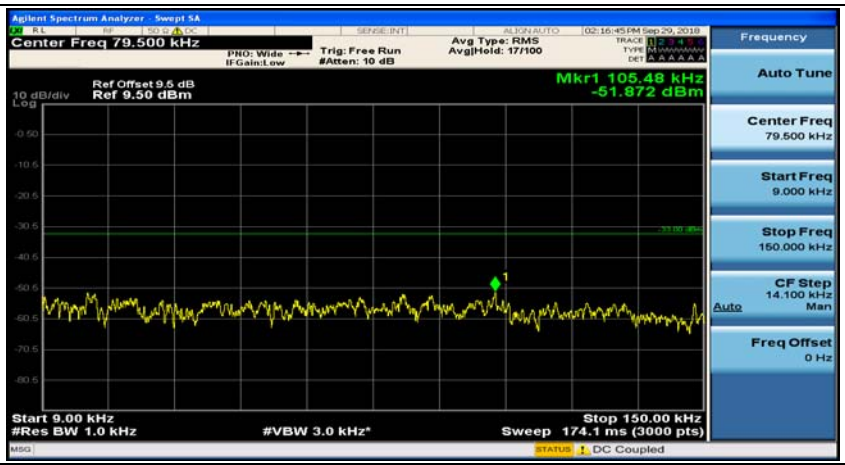
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

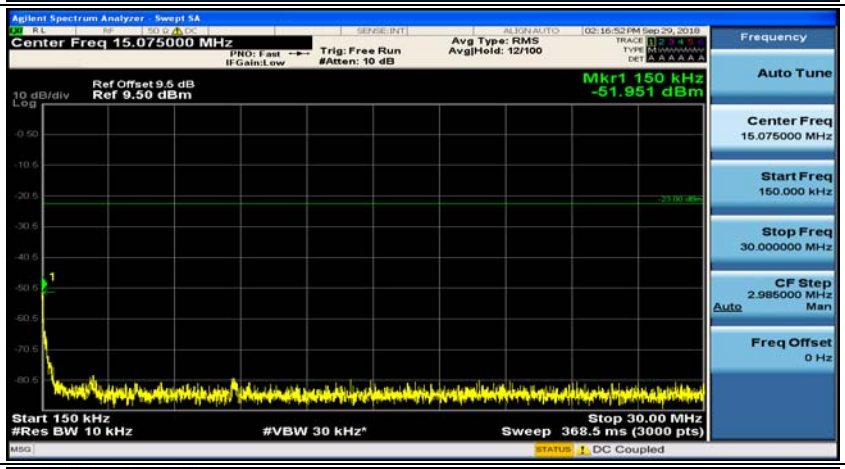


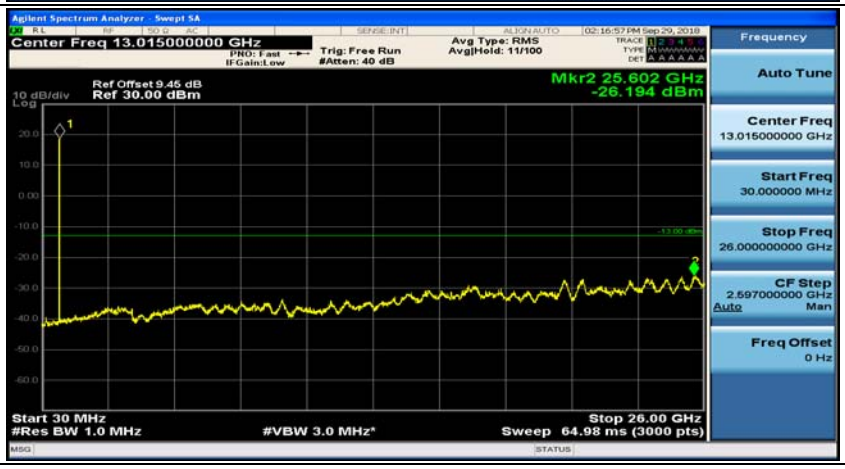


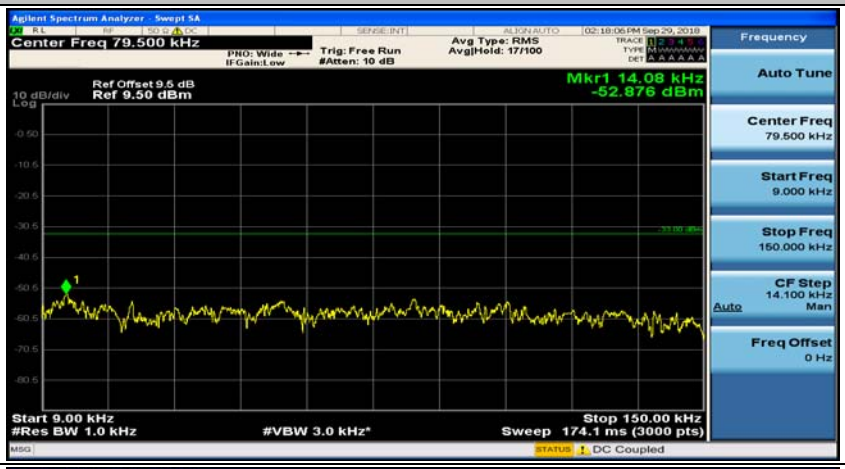
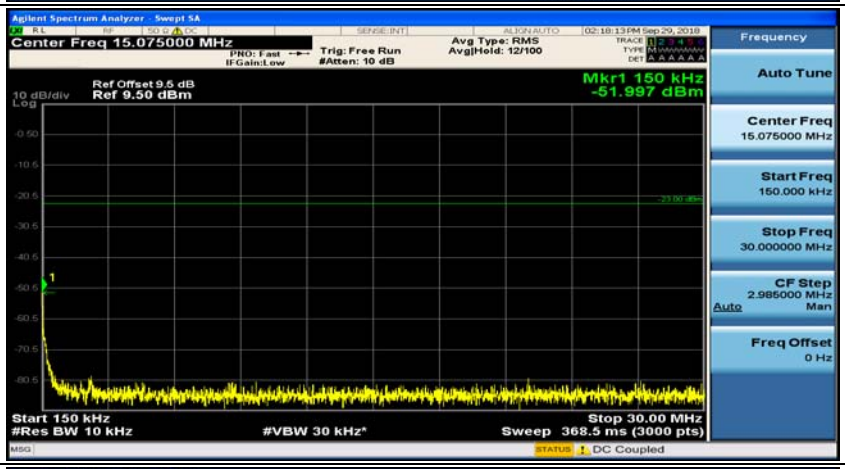
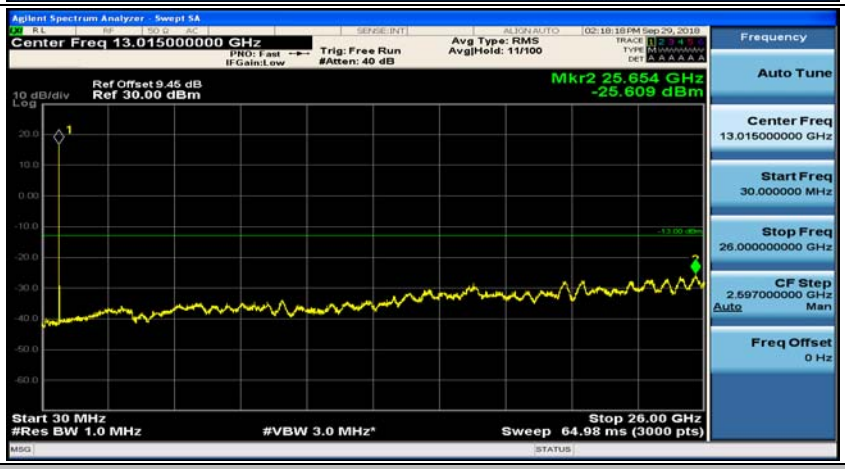


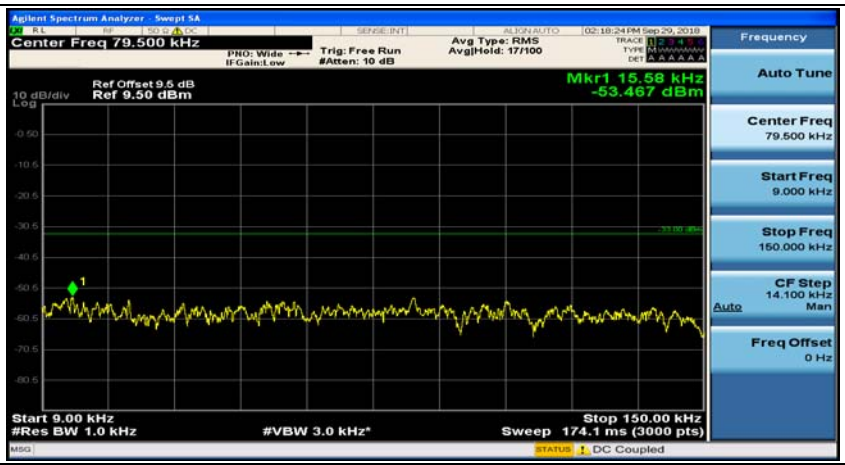
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

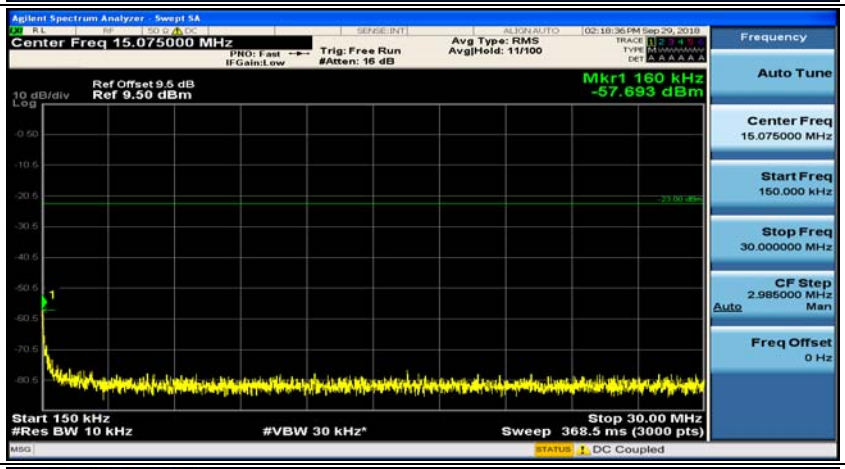

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:16:45 PM Sep 29, 2018
Frequency
Auto Tune
Mkr1 105.48 kHz
-51.872 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

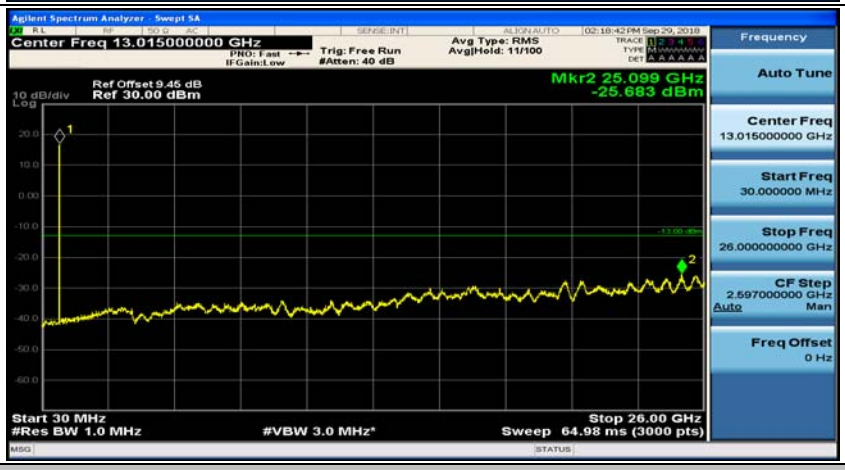

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:16:52 PM Sep 29, 2018
Frequency
Auto Tune
Mkr1 150 kHz
-51.951 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:16:57 PM Sep 29, 2018
Frequency
Auto Tune
Mkr2 25.602 GHz
-26.194 dBm
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

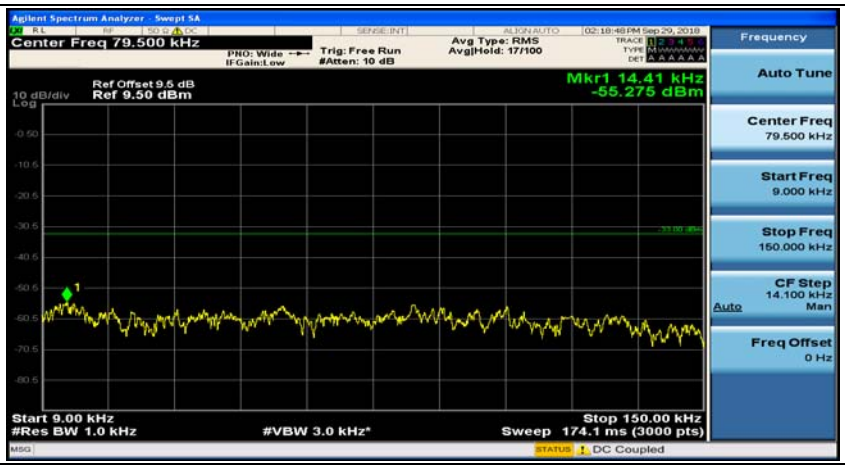
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24

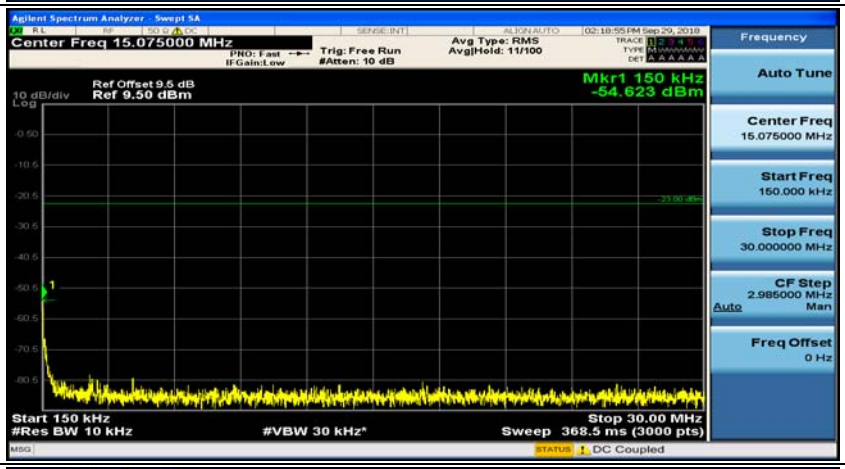


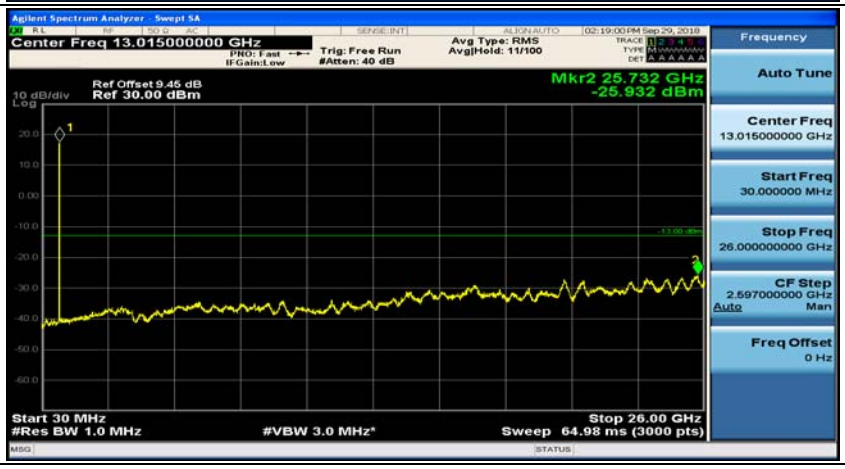




Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49


Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:18:48 PM Sep 29, 2018
Mkr1 14.41 kHz
-55.275 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
02:18:55 PM Sep 29, 2018
Mkr1 150 kHz
-54.623 dBm
Ref Offset 9.5 dB
10 dB/div
Log
Ref 9.50 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:19:00 PM Sep 29, 2018
Mkr2 25.732 GHz
-25.932 dBm
Ref Offset 9.45 dB
10 dB/div
Log
Ref 30.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	4.6	0.006574	± 2.5	PASS
		VN	TN	0.68	0.000972	± 2.5	PASS
		VH	TN	4.12	0.005888	± 2.5	PASS
	MCH	VL	TN	0.98	0.001385	± 2.5	PASS
		VN	TN	1.63	0.002304	± 2.5	PASS
		VH	TN	-1.11	-0.001569	± 2.5	PASS
	HCH	VL	TN	3.94	0.005508	± 2.5	PASS
		VN	TN	1.79	0.002502	± 2.5	PASS
		VH	TN	-0.3	-0.000419	± 2.5	PASS
16QAM	LCH	VL	TN	4.04	0.005774	± 2.5	PASS
		VN	TN	1.03	0.001472	± 2.5	PASS
		VH	TN	1.26	0.001801	± 2.5	PASS
	MCH	VL	TN	4.29	0.006064	± 2.5	PASS
		VN	TN	0.26	0.000367	± 2.5	PASS
		VH	TN	4.88	0.006898	± 2.5	PASS
	HCH	VL	TN	3.39	0.004739	± 2.5	PASS
		VN	TN	-1.06	-0.001482	± 2.5	PASS
		VH	TN	-0.26	-0.000363	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.04	-0.000057	± 2.5	PASS
		VN	-20	-1.61	-0.002301	± 2.5	PASS
		VN	-10	-0.78	-0.001115	± 2.5	PASS
		VN	0	4.36	0.006231	± 2.5	PASS
		VN	10	1.28	0.001829	± 2.5	PASS
		VN	20	3.68	0.005259	± 2.5	PASS
		VN	30	0.46	0.000657	± 2.5	PASS
		VN	40	3.3	0.004716	± 2.5	PASS
		VN	50	1.57	0.002244	± 2.5	PASS
	MCH	VN	-30	2.19	0.003095	± 2.5	PASS
		VN	-20	1.01	0.001428	± 2.5	PASS

		VN	-10	2.71	0.003830	± 2.5	PASS
		VN	0	1.63	0.002304	± 2.5	PASS
		VN	10	1.92	0.002714	± 2.5	PASS
		VN	20	0.4	0.000565	± 2.5	PASS
		VN	30	4.89	0.006912	± 2.5	PASS
		VN	40	1.1	0.001555	± 2.5	PASS
		VN	50	1.63	0.002304	± 2.5	PASS
	HCH	VN	-30	-1.2	-0.001678	± 2.5	PASS
		VN	-20	0.94	0.001314	± 2.5	PASS
		VN	-10	3.06	0.004278	± 2.5	PASS
		VN	0	2.17	0.003034	± 2.5	PASS
		VN	10	-0.86	-0.001202	± 2.5	PASS
		VN	20	3.28	0.004585	± 2.5	PASS
		VN	30	-0.37	-0.000517	± 2.5	PASS
		VN	40	0.31	0.000433	± 2.5	PASS
		VN	50	-0.05	-0.000070	± 2.5	PASS
16QAM	LCH	VN	-30	0.48	0.000686	± 2.5	PASS
		VN	-20	2.22	0.003173	± 2.5	PASS
		VN	-10	1.29	0.001844	± 2.5	PASS
		VN	0	3.04	0.004345	± 2.5	PASS
		VN	10	0.59	0.000843	± 2.5	PASS
		VN	20	-1.14	-0.001629	± 2.5	PASS
		VN	30	-0.59	-0.000843	± 2.5	PASS
		VN	40	4.42	0.006317	± 2.5	PASS
		VN	50	3.26	0.004659	± 2.5	PASS
	MCH	VN	-30	3.15	0.004452	± 2.5	PASS
		VN	-20	4.29	0.006064	± 2.5	PASS
		VN	-10	3.47	0.004905	± 2.5	PASS
		VN	0	2.17	0.003067	± 2.5	PASS
		VN	10	3.26	0.004608	± 2.5	PASS
		VN	20	1.1	0.001555	± 2.5	PASS
		VN	30	3.78	0.005343	± 2.5	PASS
		VN	40	0.43	0.000608	± 2.5	PASS
		VN	50	0.39	0.000551	± 2.5	PASS
	HCH	VN	-30	-1.65	-0.002307	± 2.5	PASS
		VN	-20	0.71	0.000993	± 2.5	PASS
		VN	-10	-1.64	-0.002293	± 2.5	PASS
		VN	0	1.48	0.002069	± 2.5	PASS
		VN	10	-0.48	-0.000671	± 2.5	PASS
		VN	20	2.4	0.003355	± 2.5	PASS
		VN	30	-1.74	-0.002433	± 2.5	PASS

		VN	40	-0.34	-0.000475	± 2.5	PASS
		VN	50	3.7	0.005173	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	3.15	0.004497	± 2.5	PASS
		VN	TN	3.83	0.005468	± 2.5	PASS
		VH	TN	2.31	0.003298	± 2.5	PASS
	MCH	VL	TN	0.63	0.000890	± 2.5	PASS
		VN	TN	-1.74	-0.002459	± 2.5	PASS
		VH	TN	4.92	0.006954	± 2.5	PASS
	HCH	VL	TN	-1.44	-0.002015	± 2.5	PASS
		VN	TN	3.34	0.004675	± 2.5	PASS
		VH	TN	3.94	0.005514	± 2.5	PASS
16QAM	LCH	VL	TN	-1.21	-0.001727	± 2.5	PASS
		VN	TN	1.84	0.002627	± 2.5	PASS
		VH	TN	0.27	0.000385	± 2.5	PASS
	MCH	VL	TN	1.53	0.002163	± 2.5	PASS
		VN	TN	4.95	0.006996	± 2.5	PASS
		VH	TN	2.92	0.004127	± 2.5	PASS
	HCH	VL	TN	0.86	0.001204	± 2.5	PASS
		VN	TN	1.5	0.002099	± 2.5	PASS
		VH	TN	4.87	0.006816	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.48	-0.002113	± 2.5	PASS
		VN	-20	-1.47	-0.002099	± 2.5	PASS
		VN	-10	1.21	0.001727	± 2.5	PASS
		VN	0	4.02	0.005739	± 2.5	PASS
		VN	10	-0.47	-0.000671	± 2.5	PASS
		VN	20	2.23	0.003183	± 2.5	PASS
		VN	30	0.83	0.001185	± 2.5	PASS
		VN	40	0.64	0.000914	± 2.5	PASS
		VN	50	2.88	0.004111	± 2.5	PASS
	MCH	VN	-30	-0.8	-0.001131	± 2.5	PASS
		VN	-20	2.47	0.003491	± 2.5	PASS
		VN	-10	4.23	0.005979	± 2.5	PASS

		VN	0	2.72	0.003845	± 2.5	PASS
		VN	10	1.78	0.002516	± 2.5	PASS
		VN	20	1.67	0.002360	± 2.5	PASS
		VN	30	2.29	0.003237	± 2.5	PASS
		VN	40	4.81	0.006799	± 2.5	PASS
		VN	50	0.04	0.000057	± 2.5	PASS
	HCH	VN	-30	3.31	0.004633	± 2.5	PASS
		VN	-20	4.14	0.005794	± 2.5	PASS
		VN	-10	-0.7	-0.000980	± 2.5	PASS
		VN	0	-1.56	-0.002183	± 2.5	PASS
		VN	10	0.86	0.001204	± 2.5	PASS
		VN	20	3.29	0.004605	± 2.5	PASS
		VN	30	-1.64	-0.002295	± 2.5	PASS
		VN	40	-1.81	-0.002533	± 2.5	PASS
		VN	50	3.9	0.005458	± 2.5	PASS
16QAM	LCH	VN	-30	2.05	0.002926	± 2.5	PASS
		VN	-20	2.14	0.003055	± 2.5	PASS
		VN	-10	0.78	0.001113	± 2.5	PASS
		VN	0	1.15	0.001642	± 2.5	PASS
		VN	10	3.11	0.004440	± 2.5	PASS
		VN	20	3.33	0.004754	± 2.5	PASS
		VN	30	4.23	0.006039	± 2.5	PASS
		VN	40	-0.59	-0.000842	± 2.5	PASS
		VN	50	0.71	0.001014	± 2.5	PASS
	MCH	VN	-30	1.76	0.002488	± 2.5	PASS
		VN	-20	1.98	0.002799	± 2.5	PASS
		VN	-10	1.81	0.002558	± 2.5	PASS
		VN	0	0.28	0.000396	± 2.5	PASS
		VN	10	2.35	0.003322	± 2.5	PASS
		VN	20	2.61	0.003689	± 2.5	PASS
		VN	30	-1.2	-0.001696	± 2.5	PASS
		VN	40	3.88	0.005484	± 2.5	PASS
		VN	50	4.93	0.006968	± 2.5	PASS
	HCH	VN	-30	3.92	0.005486	± 2.5	PASS
		VN	-20	1.47	0.002057	± 2.5	PASS
		VN	-10	-0.63	-0.000882	± 2.5	PASS
		VN	0	3.37	0.004717	± 2.5	PASS
		VN	10	2	0.002799	± 2.5	PASS
		VN	20	3.09	0.004325	± 2.5	PASS
		VN	30	2.31	0.003233	± 2.5	PASS
		VN	40	-1.46	-0.002043	± 2.5	PASS

		VN	50	3.08	0.004311	± 2.5	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.71	-0.002438	± 2.5	PASS
		VN	TN	-1.05	-0.001497	± 2.5	PASS
		VH	TN	0.41	0.000584	± 2.5	PASS
	MCH	VL	TN	-1.46	-0.002064	± 2.5	PASS
		VN	TN	-1.67	-0.002360	± 2.5	PASS
		VH	TN	1.09	0.001541	± 2.5	PASS
	HCH	VL	TN	3.74	0.005242	± 2.5	PASS
		VN	TN	-0.22	-0.000308	± 2.5	PASS
		VH	TN	0.73	0.001023	± 2.5	PASS
16QAM	LCH	VL	TN	4.81	0.006857	± 2.5	PASS
		VN	TN	1.25	0.001782	± 2.5	PASS
		VH	TN	3.97	0.005659	± 2.5	PASS
	MCH	VL	TN	-1.77	-0.002502	± 2.5	PASS
		VN	TN	3.36	0.004749	± 2.5	PASS
		VH	TN	0.23	0.000325	± 2.5	PASS
	HCH	VL	TN	-0.49	-0.000687	± 2.5	PASS
		VN	TN	1.23	0.001724	± 2.5	PASS
		VH	TN	3.48	0.004877	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.96	-0.001368	± 2.5	PASS
		VN	-20	-1.47	-0.002096	± 2.5	PASS
		VN	-10	3.89	0.005545	± 2.5	PASS
		VN	0	4.39	0.006258	± 2.5	PASS
		VN	10	-0.47	-0.000670	± 2.5	PASS
		VN	20	-1.59	-0.002267	± 2.5	PASS
		VN	30	2.21	0.003150	± 2.5	PASS
		VN	40	-0.09	-0.000128	± 2.5	PASS
		VN	50	3.32	0.004733	± 2.5	PASS
	MCH	VN	-30	2.37	0.003350	± 2.5	PASS
		VN	-20	4.26	0.006021	± 2.5	PASS
		VN	-10	0.97	0.001371	± 2.5	PASS
		VN	0	1.82	0.002572	± 2.5	PASS

		VN	10	0.74	0.001046	± 2.5	PASS
		VN	20	-1.59	-0.002247	± 2.5	PASS
		VN	30	4.49	0.006346	± 2.5	PASS
		VN	40	-0.44	-0.000622	± 2.5	PASS
		VN	50	3.47	0.004905	± 2.5	PASS
	HCH	VN	-30	-1.75	-0.002453	± 2.5	PASS
		VN	-20	4.82	0.006755	± 2.5	PASS
		VN	-10	2.73	0.003826	± 2.5	PASS
		VN	0	1.05	0.001472	± 2.5	PASS
		VN	10	2.83	0.003966	± 2.5	PASS
		VN	20	-1.12	-0.001570	± 2.5	PASS
		VN	30	0.91	0.001275	± 2.5	PASS
		VN	40	-1.23	-0.001724	± 2.5	PASS
		VN	50	2.84	0.003980	± 2.5	PASS
16QAM	LCH	VN	-30	3.01	0.004291	± 2.5	PASS
		VN	-20	-0.65	-0.000927	± 2.5	PASS
		VN	-10	4.47	0.006372	± 2.5	PASS
		VN	0	-0.45	-0.000641	± 2.5	PASS
		VN	10	1.81	0.002580	± 2.5	PASS
		VN	20	0.85	0.001212	± 2.5	PASS
		VN	30	-1.01	-0.001440	± 2.5	PASS
		VN	40	2.56	0.003649	± 2.5	PASS
		VN	50	4.54	0.006472	± 2.5	PASS
	MCH	VN	-30	4.96	0.007011	± 2.5	PASS
		VN	-20	3.77	0.005329	± 2.5	PASS
		VN	-10	1.17	0.001654	± 2.5	PASS
		VN	0	-0.15	-0.000212	± 2.5	PASS
		VN	10	4.91	0.006940	± 2.5	PASS
		VN	20	2.37	0.003350	± 2.5	PASS
		VN	30	2.68	0.003788	± 2.5	PASS
		VN	40	4.69	0.006629	± 2.5	PASS
		VN	50	-1.35	-0.001908	± 2.5	PASS
	HCH	VN	-30	2.43	0.003406	± 2.5	PASS
		VN	-20	3.38	0.004737	± 2.5	PASS
		VN	-10	0.24	0.000336	± 2.5	PASS
		VN	0	2.38	0.003336	± 2.5	PASS
		VN	10	1.32	0.001850	± 2.5	PASS
		VN	20	-1.07	-0.001500	± 2.5	PASS
		VN	30	4.02	0.005634	± 2.5	PASS
		VN	40	-0.83	-0.001163	± 2.5	PASS
		VN	50	0.72	0.001009	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.52	-0.000739	± 2.5	PASS
		VN	TN	0.63	0.000895	± 2.5	PASS
		VH	TN	4.1	0.005824	± 2.5	PASS
	MCH	VL	TN	3.73	0.005272	± 2.5	PASS
		VN	TN	-1.48	-0.002092	± 2.5	PASS
		VH	TN	1.2	0.001696	± 2.5	PASS
	HCH	VL	TN	1.52	0.002138	± 2.5	PASS
		VN	TN	3.88	0.005457	± 2.5	PASS
		VH	TN	-1.35	-0.001899	± 2.5	PASS
16QAM	LCH	VL	TN	4.22	0.005994	± 2.5	PASS
		VN	TN	-1.02	-0.001449	± 2.5	PASS
		VH	TN	2.35	0.003338	± 2.5	PASS
	MCH	VL	TN	3.78	0.005343	± 2.5	PASS
		VN	TN	4.07	0.005753	± 2.5	PASS
		VH	TN	3.4	0.004806	± 2.5	PASS
	HCH	VL	TN	1.97	0.002771	± 2.5	PASS
		VN	TN	1.44	0.002025	± 2.5	PASS
		VH	TN	-1.55	-0.002180	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	4.95	0.007031	± 2.5	PASS
		VN	-20	3.54	0.005028	± 2.5	PASS
		VN	-10	0.1	0.000142	± 2.5	PASS
		VN	0	3.77	0.005355	± 2.5	PASS
		VN	10	-0.95	-0.001349	± 2.5	PASS
		VN	20	0.55	0.000781	± 2.5	PASS
		VN	30	3.19	0.004531	± 2.5	PASS
		VN	40	-0.06	-0.000085	± 2.5	PASS
		VN	50	2.13	0.003026	± 2.5	PASS
	MCH	VN	-30	1.69	0.002389	± 2.5	PASS
		VN	-20	3.32	0.004693	± 2.5	PASS
		VN	-10	3.09	0.004367	± 2.5	PASS
		VN	0	-0.18	-0.000254	± 2.5	PASS
		VN	10	-0.31	-0.000438	± 2.5	PASS
		VN	20	1.35	0.001908	± 2.5	PASS

		VN	30	-1.43	-0.002021	± 2.5	PASS
		VN	40	4.48	0.006332	± 2.5	PASS
		VN	50	2.45	0.003463	± 2.5	PASS
	HCH	VN	-30	1.56	0.002194	± 2.5	PASS
		VN	-20	4.12	0.005795	± 2.5	PASS
		VN	-10	-1.95	-0.002743	± 2.5	PASS
		VN	0	4.57	0.006428	± 2.5	PASS
		VN	10	3.01	0.004233	± 2.5	PASS
		VN	20	0.19	0.000267	± 2.5	PASS
		VN	30	3.37	0.004740	± 2.5	PASS
		VN	40	3.07	0.004318	± 2.5	PASS
		VN	50	0.28	0.000394	± 2.5	PASS
QPSK	LCH	VN	-30	-1.67	-0.002372	± 2.5	PASS
		VN	-20	2.34	0.003324	± 2.5	PASS
		VN	-10	0.87	0.001236	± 2.5	PASS
		VN	0	-0.42	-0.000597	± 2.5	PASS
		VN	10	1.91	0.002713	± 2.5	PASS
		VN	20	-0.13	-0.000185	± 2.5	PASS
		VN	30	1.4	0.001989	± 2.5	PASS
		VN	40	-0.22	-0.000313	± 2.5	PASS
		VN	50	4.31	0.006122	± 2.5	PASS
	MCH	VN	-30	2.08	0.002940	± 2.5	PASS
		VN	-20	-1.95	-0.002756	± 2.5	PASS
		VN	-10	-1.59	-0.002247	± 2.5	PASS
		VN	0	3.22	0.004551	± 2.5	PASS
		VN	10	-1.88	-0.002657	± 2.5	PASS
		VN	20	2.68	0.003788	± 2.5	PASS
		VN	30	1.96	0.002770	± 2.5	PASS
		VN	40	-0.8	-0.001131	± 2.5	PASS
		VN	50	4.52	0.006389	± 2.5	PASS
	HCH	VN	-30	1.49	0.002096	± 2.5	PASS
		VN	-20	0.55	0.000774	± 2.5	PASS
		VN	-10	3.07	0.004318	± 2.5	PASS
		VN	0	-1.6	-0.002250	± 2.5	PASS
		VN	10	1.68	0.002363	± 2.5	PASS
		VN	20	-0.9	-0.001266	± 2.5	PASS
		VN	30	1.5	0.002110	± 2.5	PASS
		VN	40	2.96	0.004163	± 2.5	PASS
		VN	50	3.97	0.005584	± 2.5	PASS