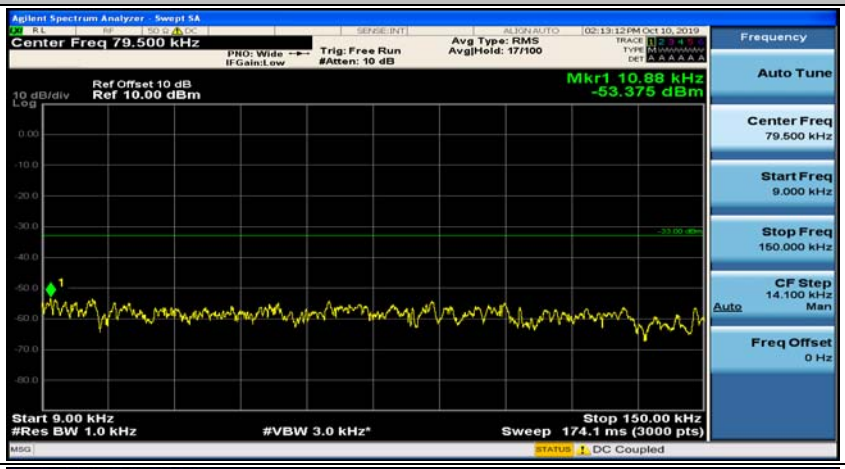
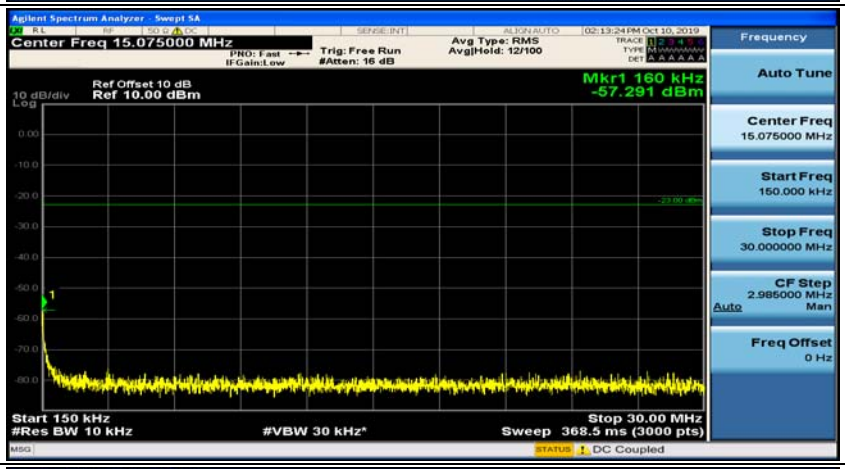
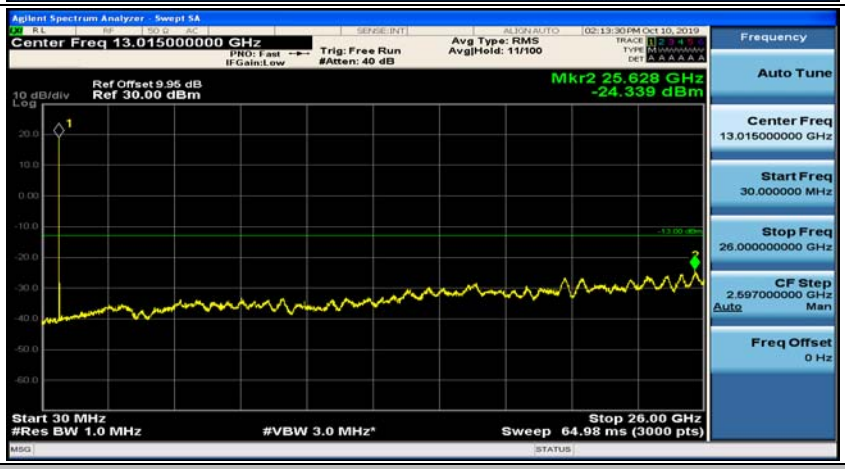
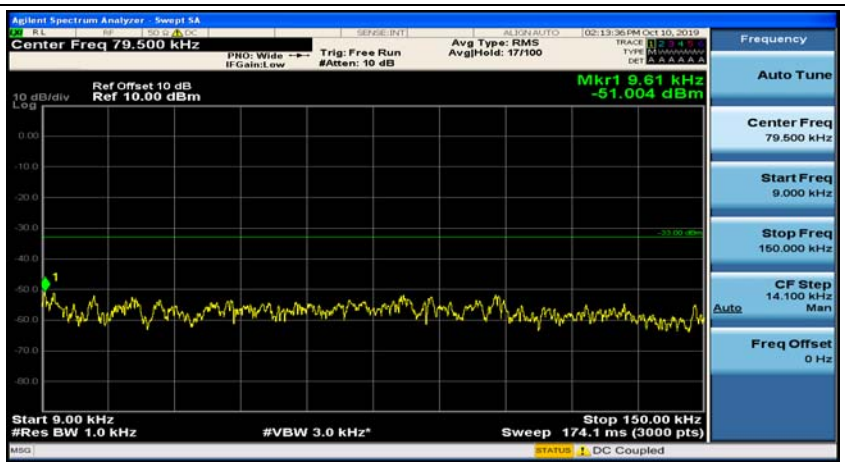
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0

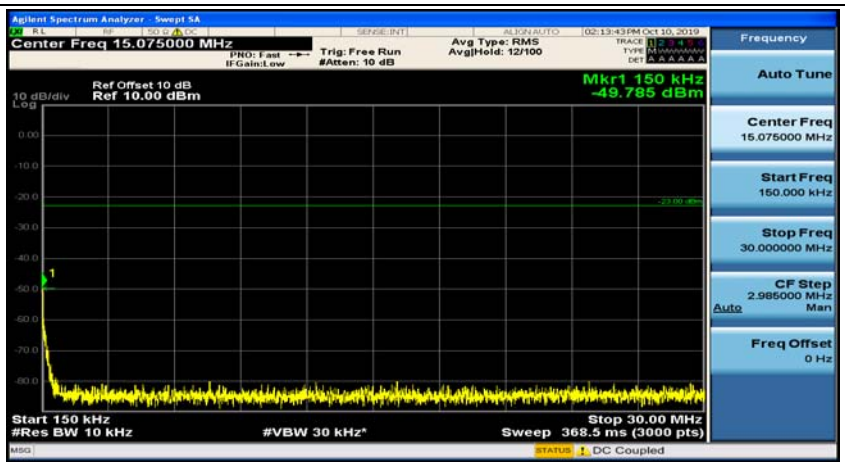


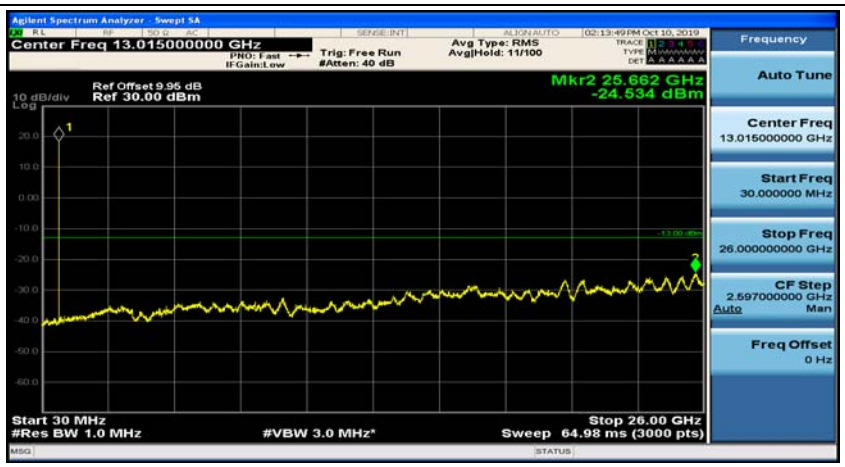




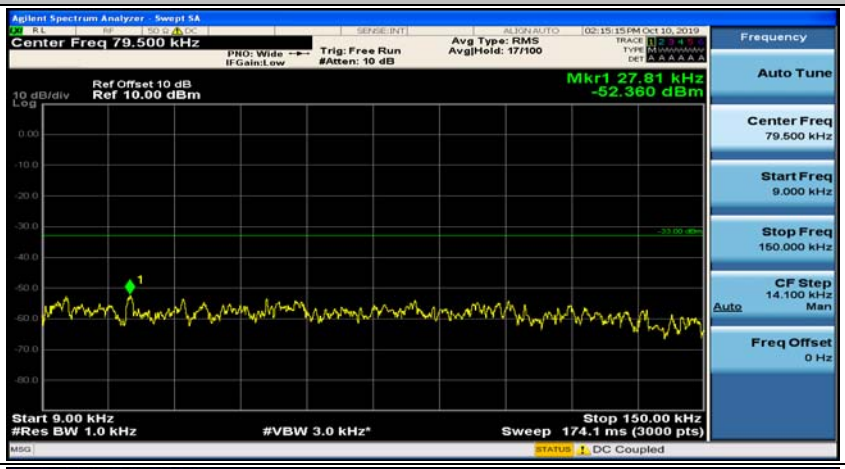
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7

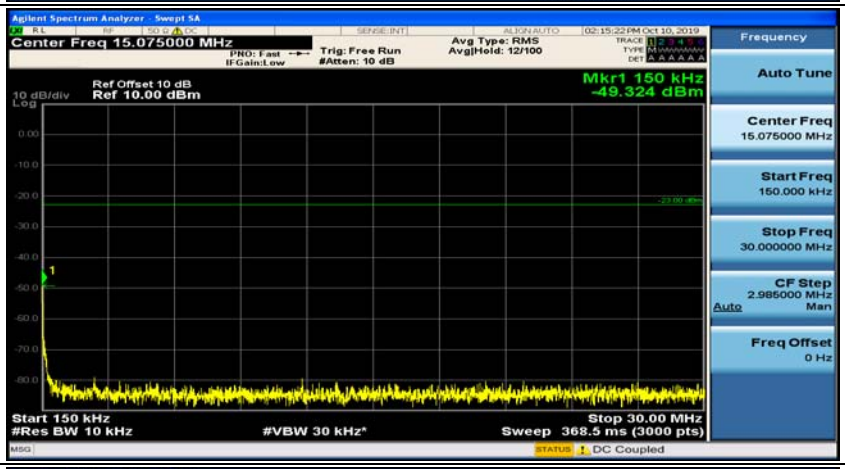

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:13:36 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 9.61 kHz
-51.004 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

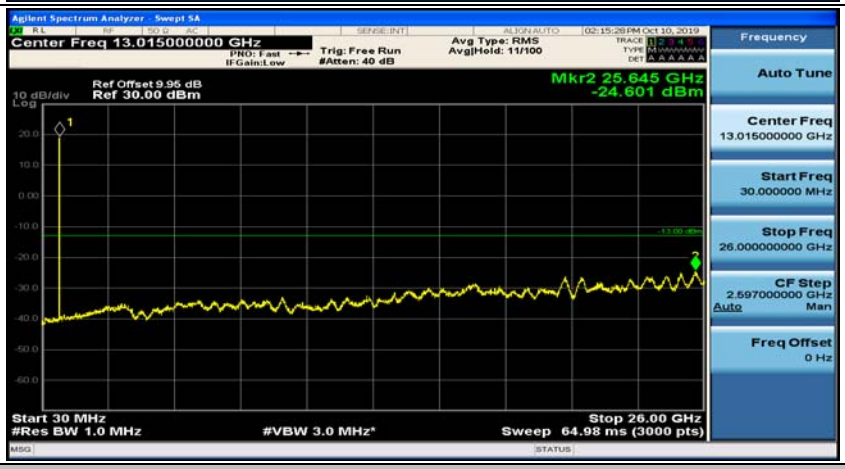

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:13:43 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 150 kHz
-49.785 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:13:49 PM Oct 10, 2019
Ref Offset 9.96 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.662 GHz
-24.534 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

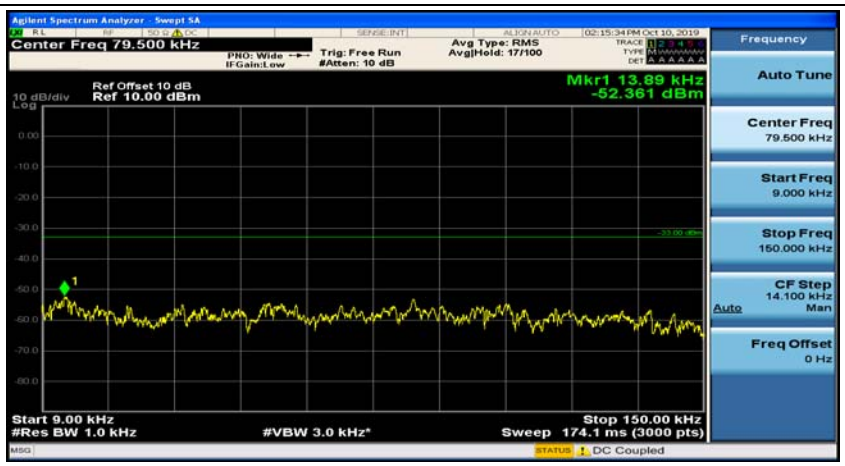
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

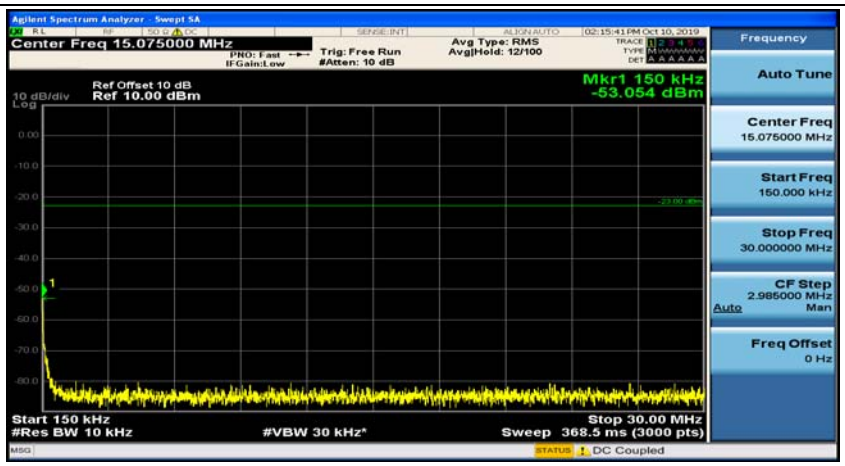


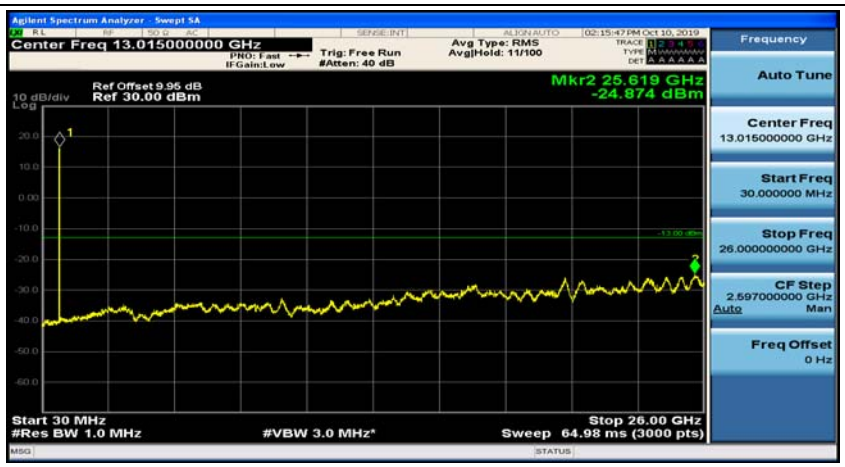




(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7

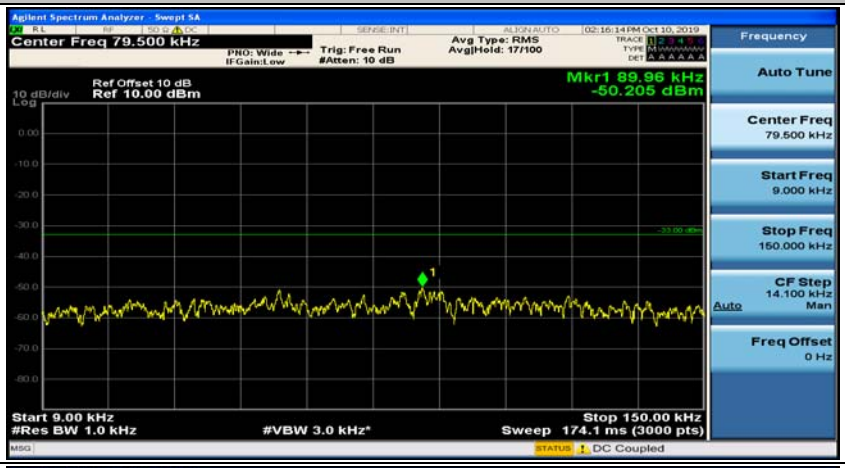

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:15:34 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 13.89 kHz
-52.361 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

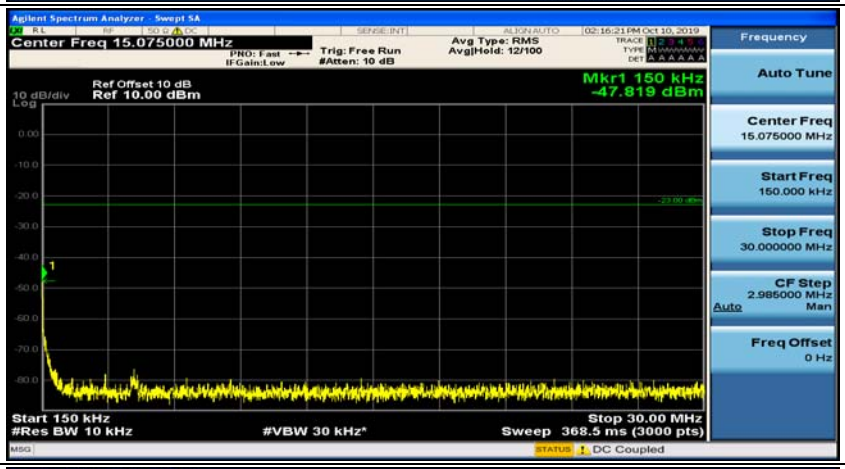

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:15:41 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 150 kHz
-53.054 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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

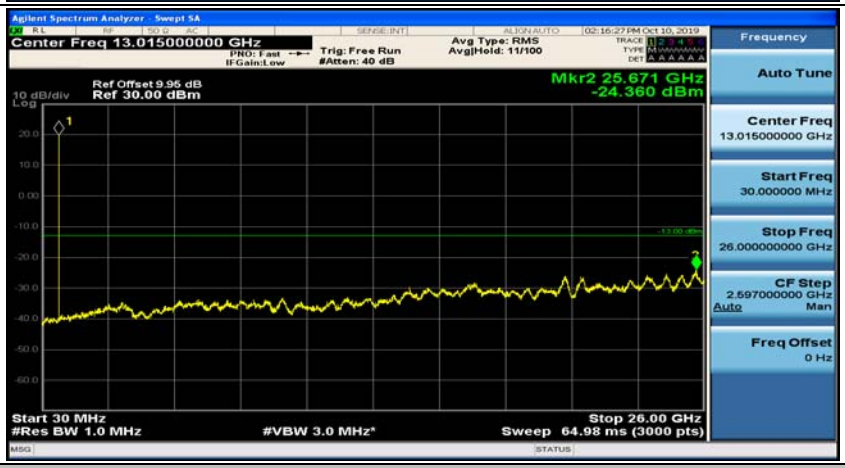

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:15:47 PM Oct 10, 2019
Ref Offset 9.96 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.619 GHz
-24.874 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
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

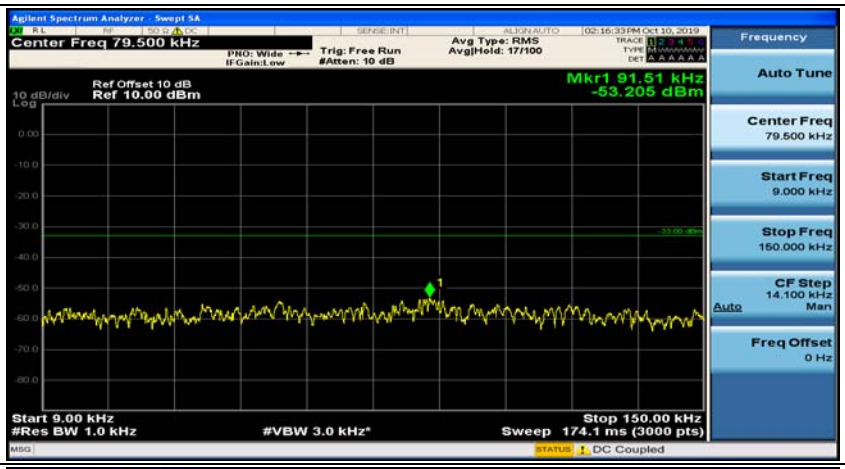
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0

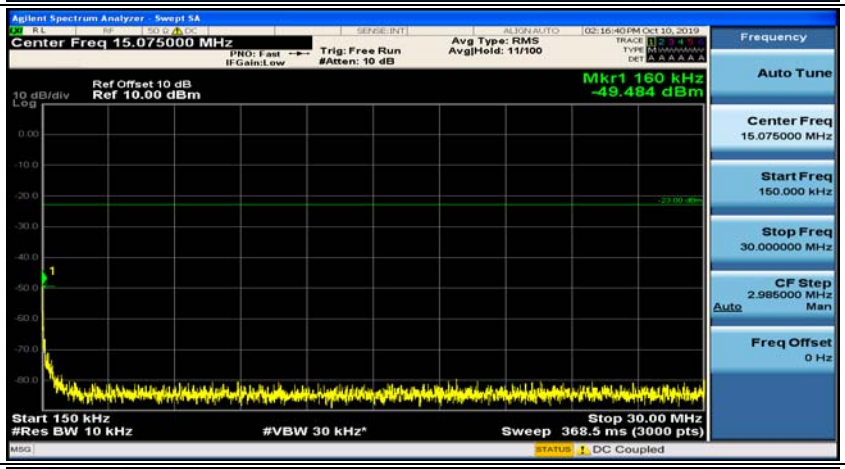


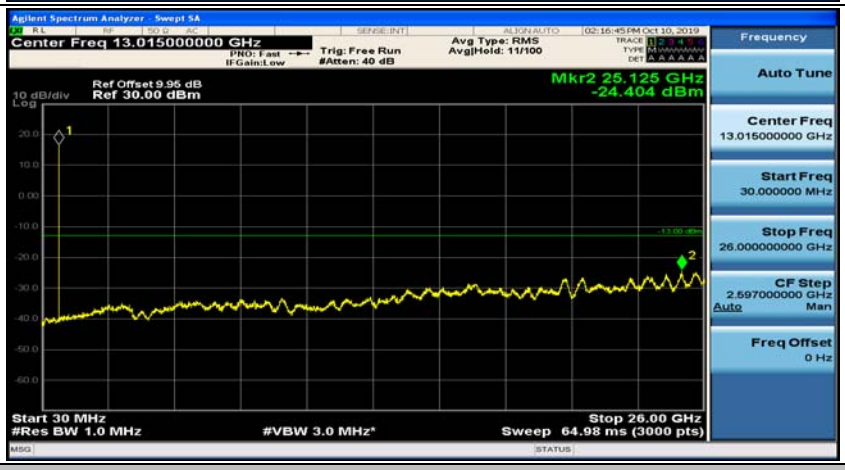




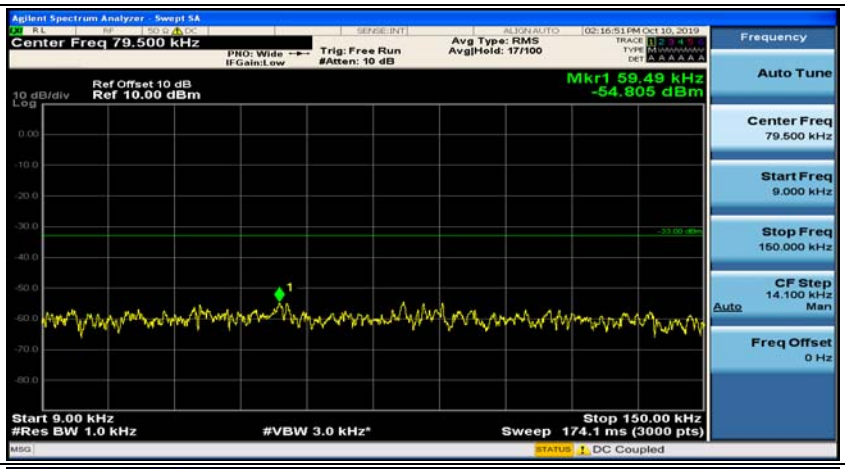
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

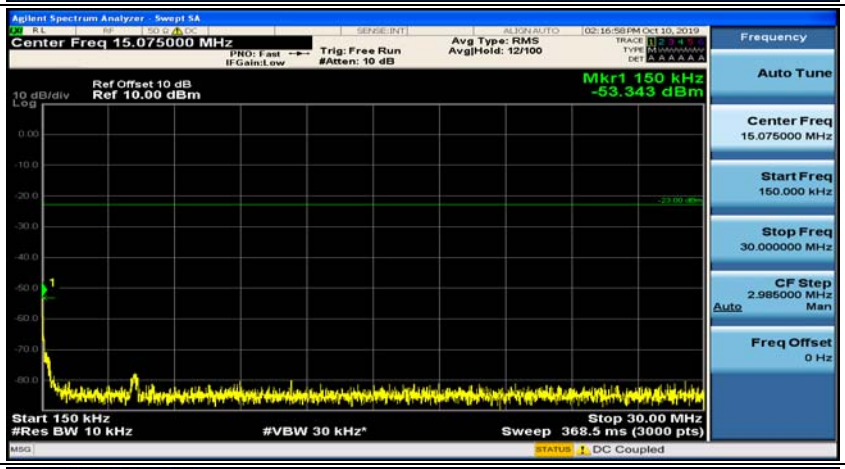


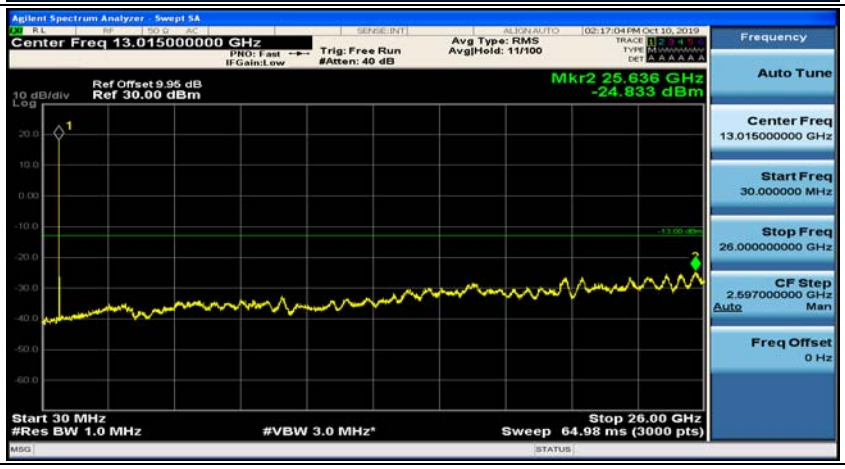




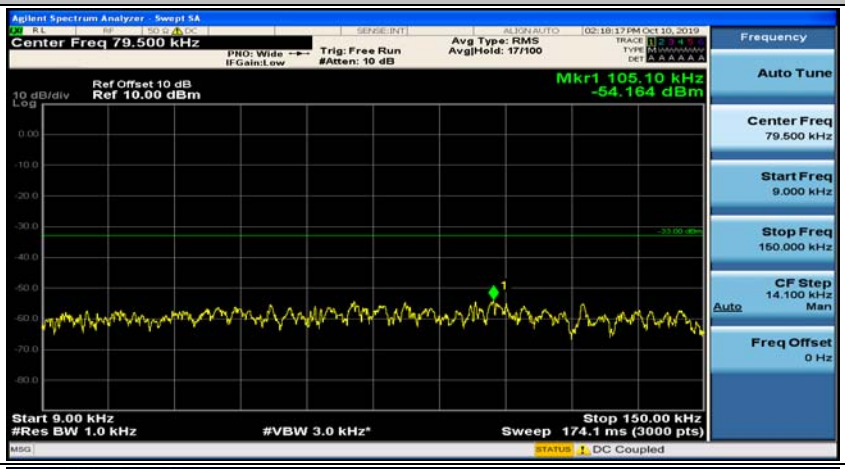
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

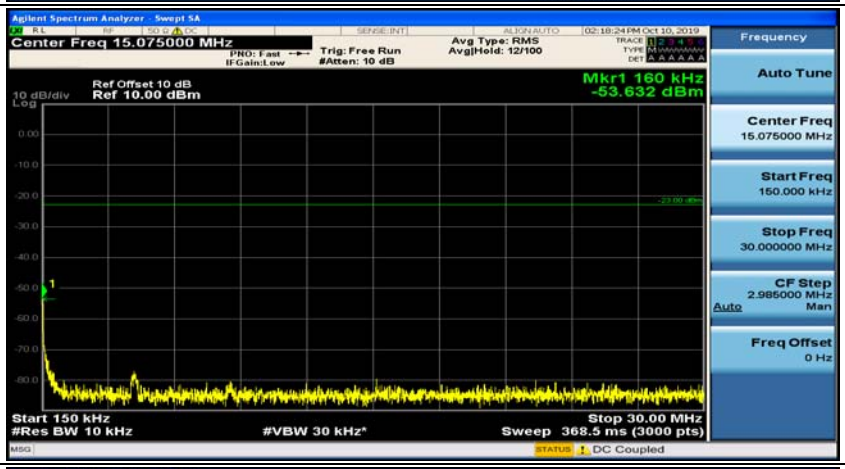

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:16:51 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 59.49 kHz
-54.805 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

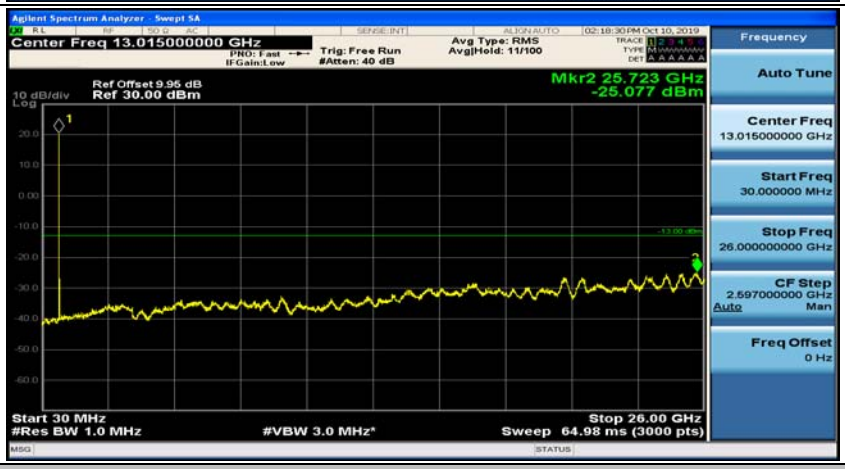

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:16:58 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 150 kHz
-53.343 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:17:04 PM Oct 10, 2019
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.636 GHz
-24.833 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

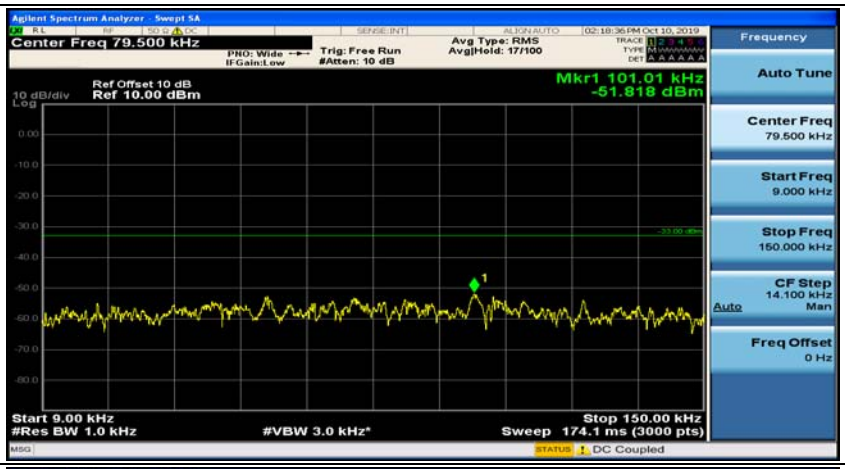
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

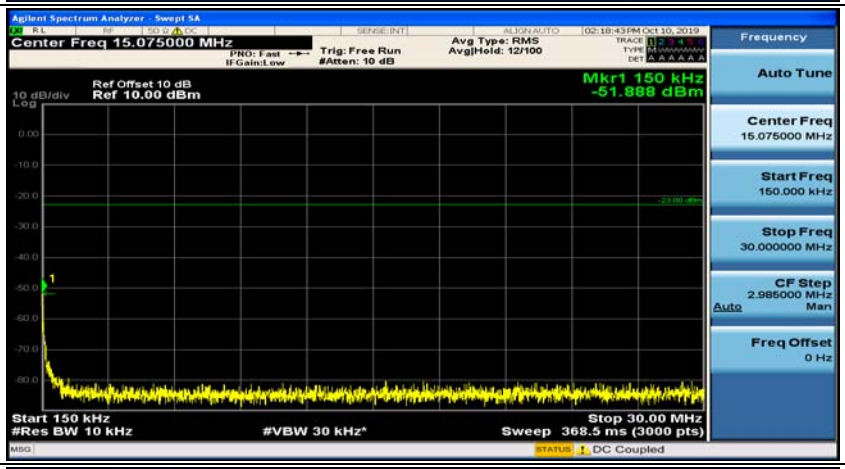


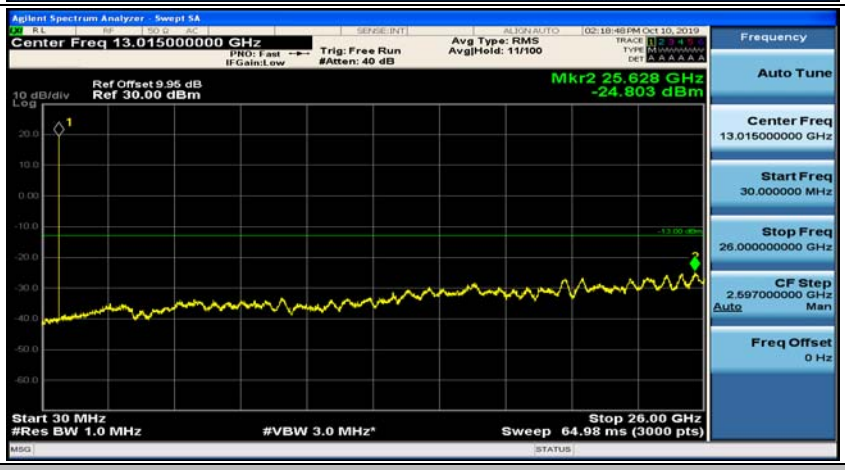




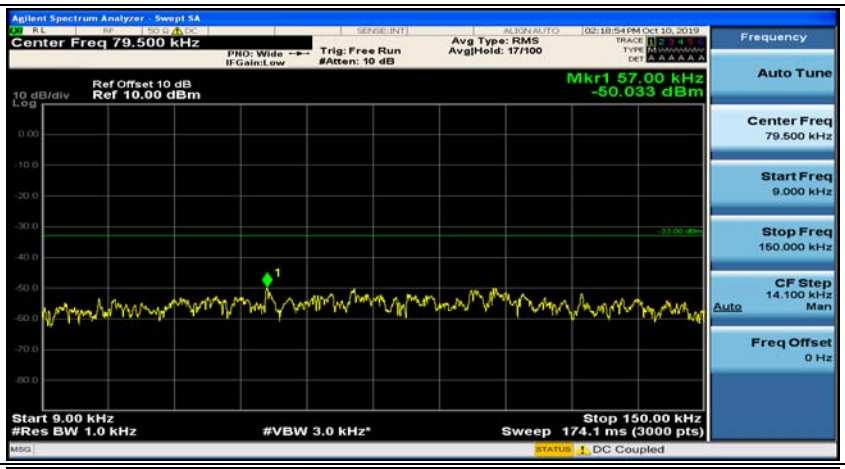
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

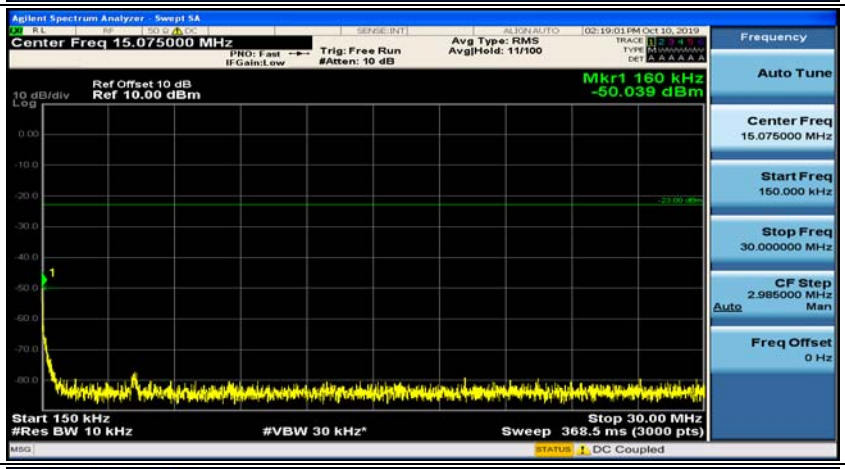


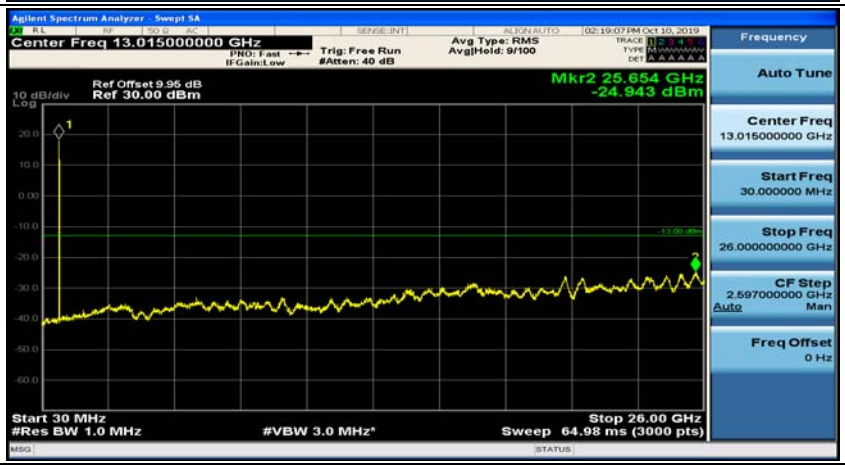




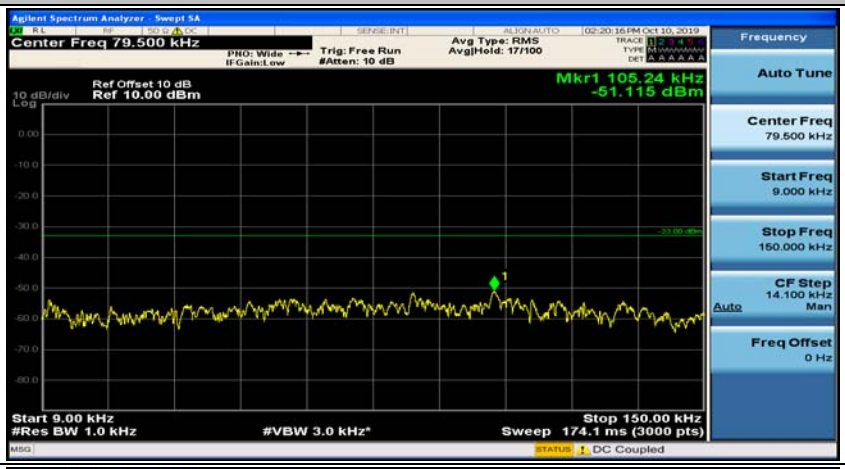
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

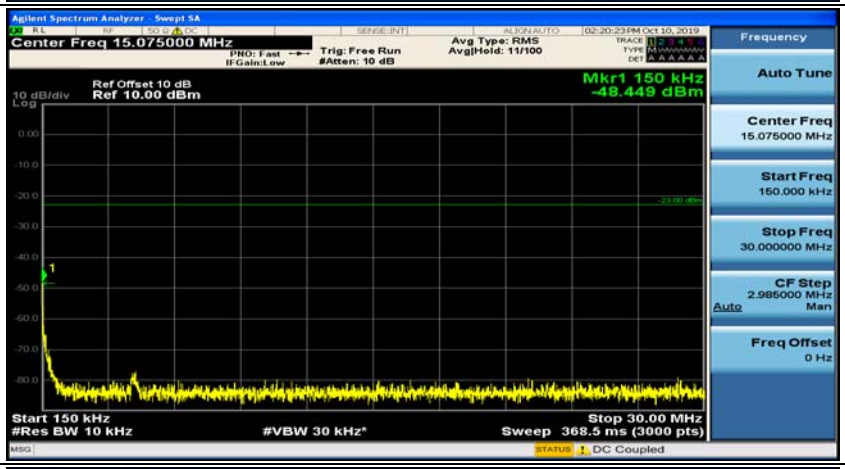

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:18:54 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 57.00 kHz
-50.033 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

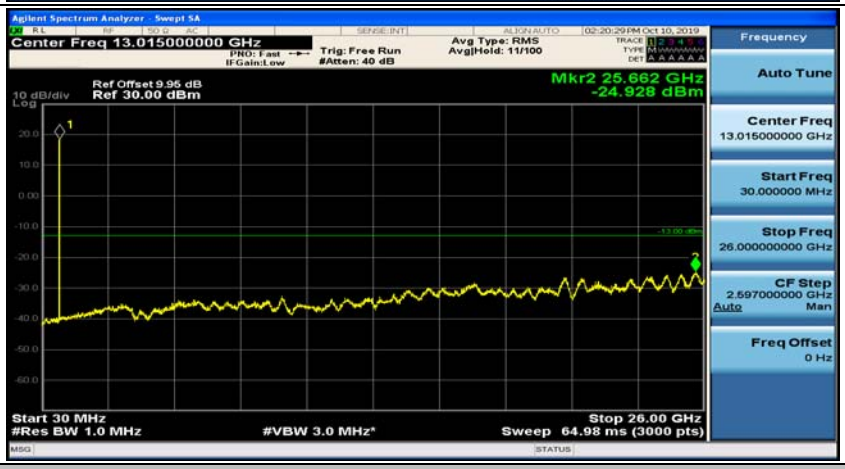

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
02:19:01 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 160 kHz
-50.039 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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: 9/100
02:19:07 PM Oct 10, 2019
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.654 GHz
-24.943 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

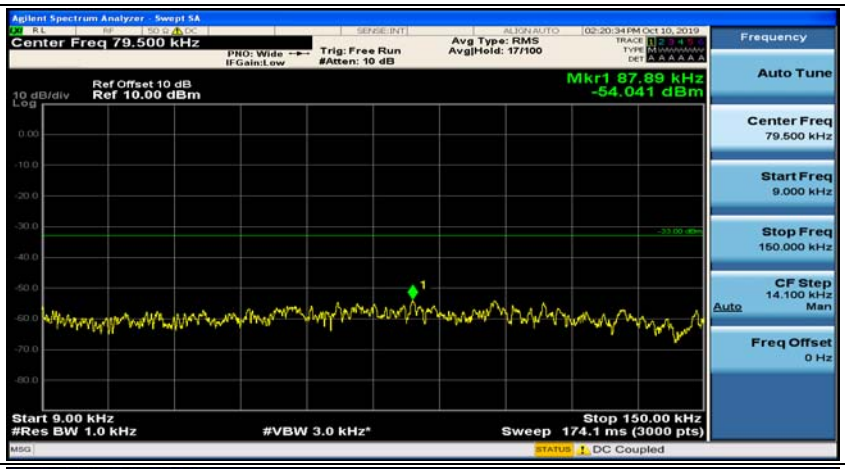
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

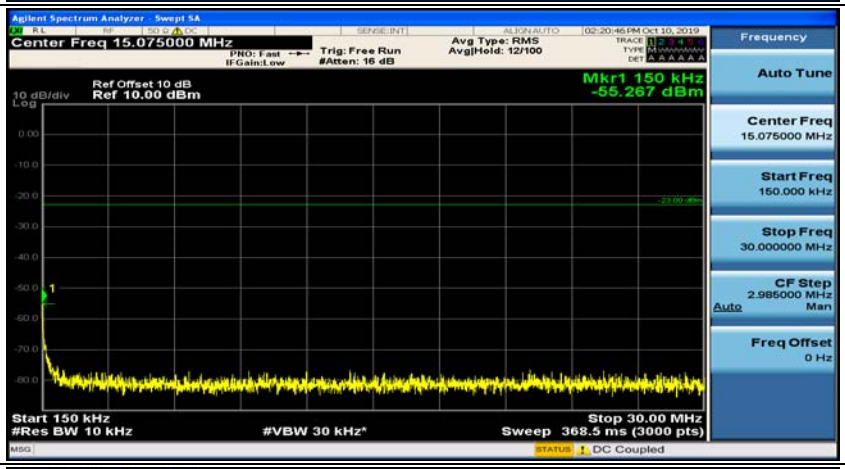


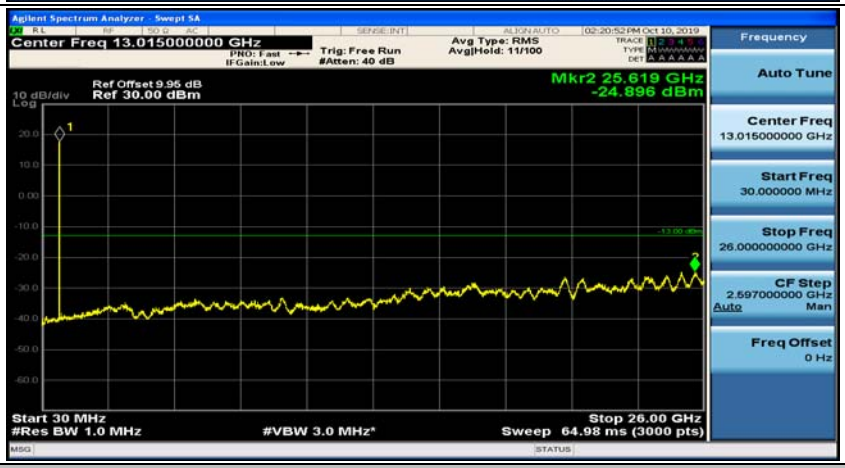




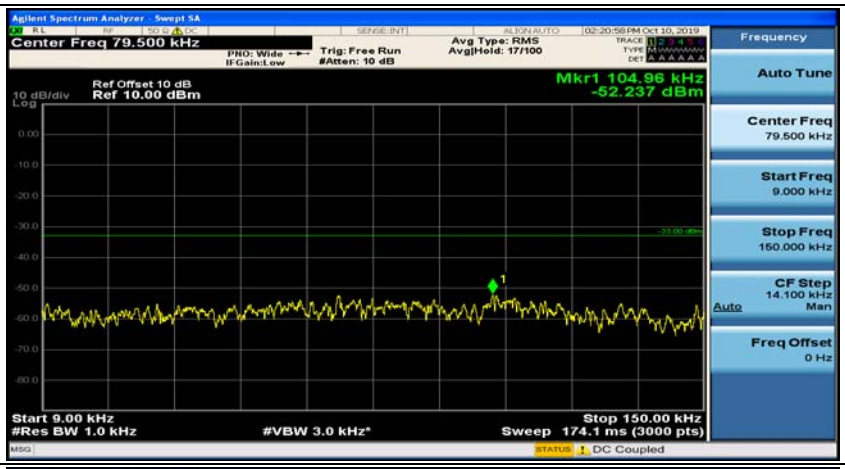
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

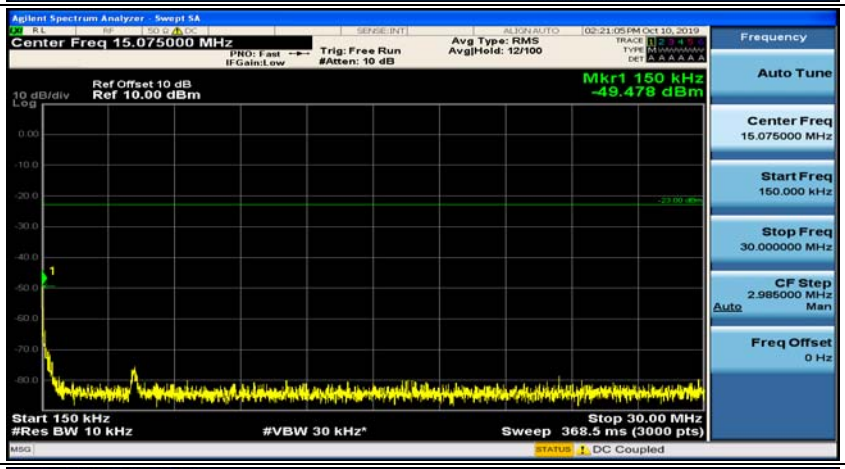


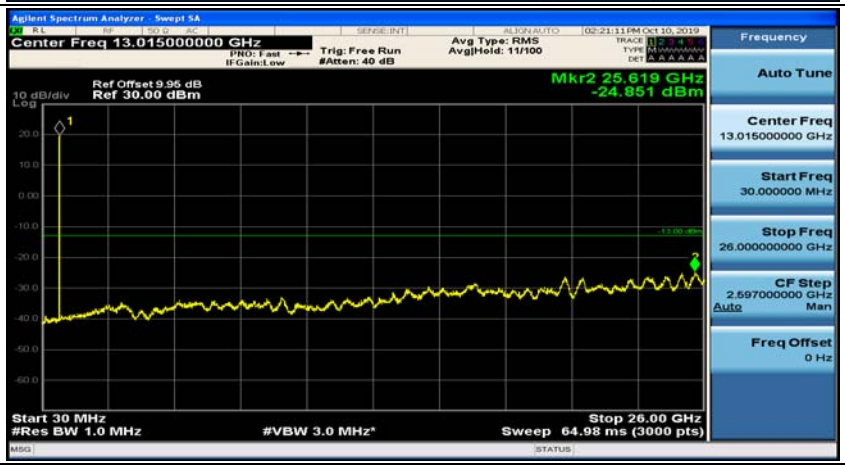




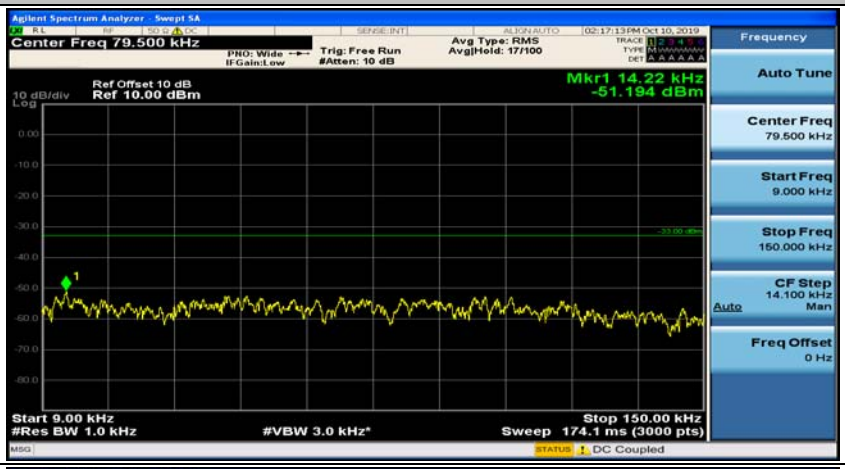
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

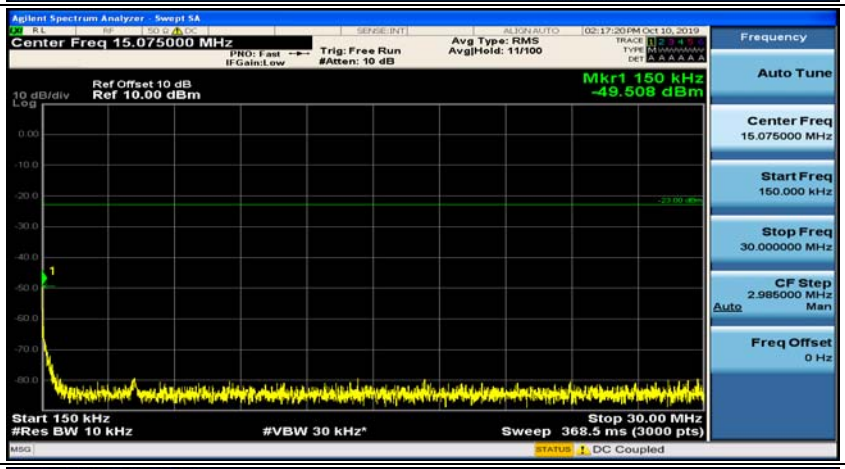

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:20:58 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 104.96 kHz
-52.237 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

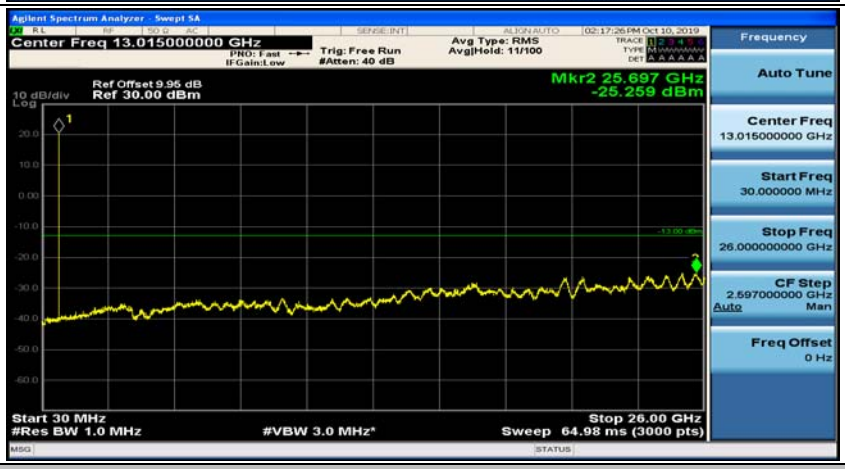

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:21:05 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 150 kHz
-49.478 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:21:11 PM Oct 10, 2019
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.619 GHz
-24.851 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

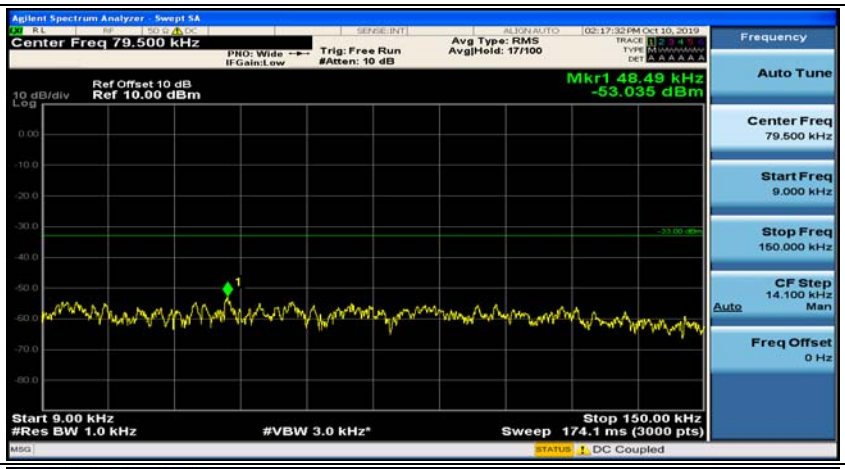
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

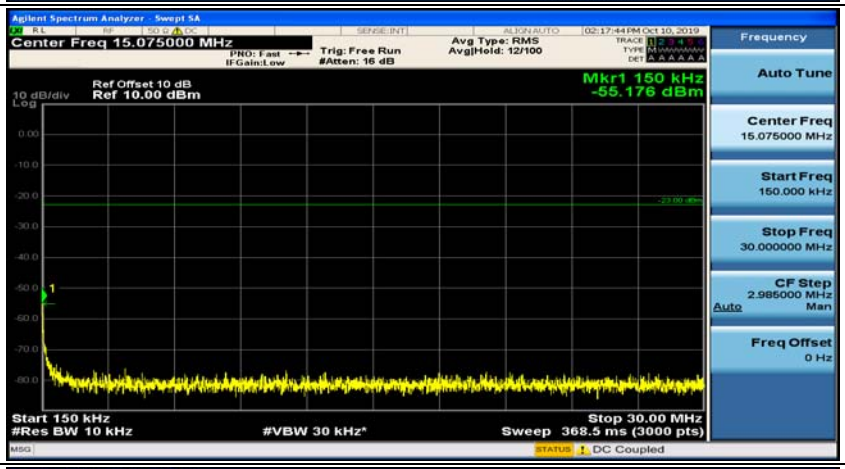


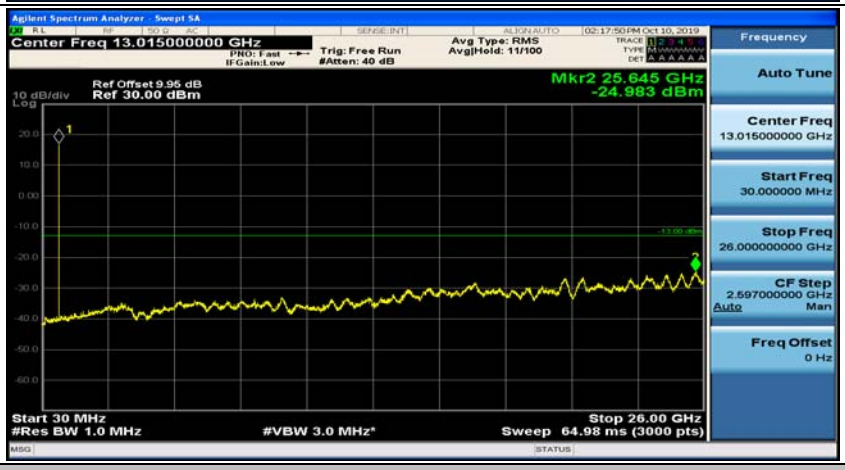




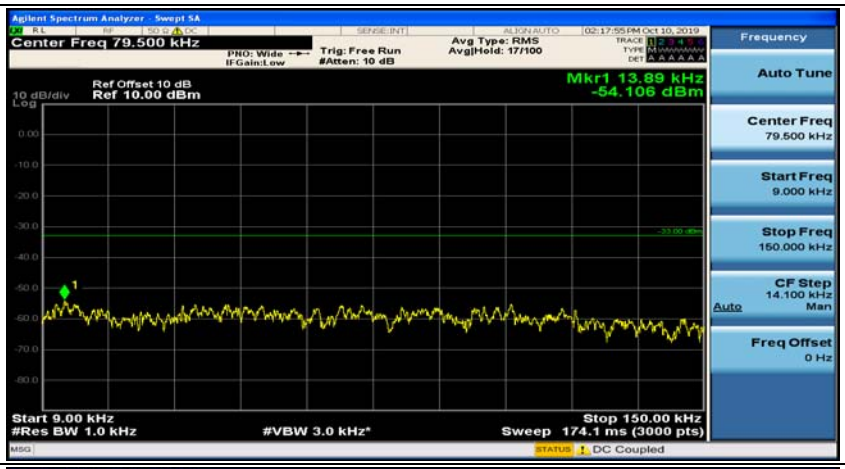
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

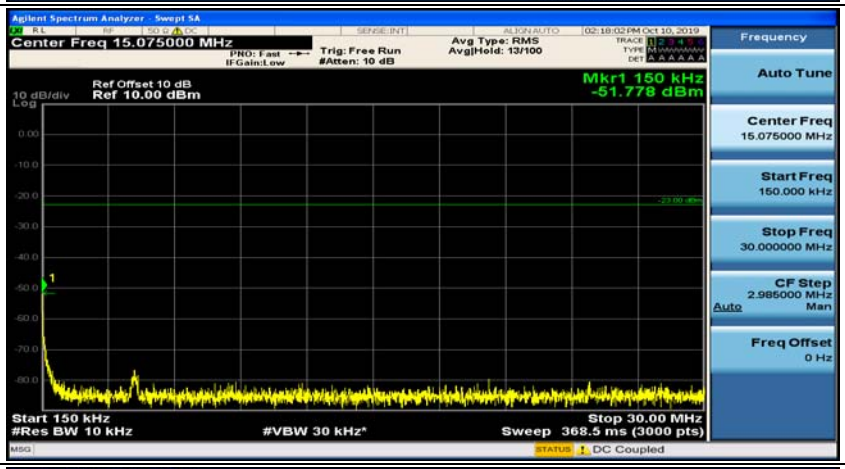


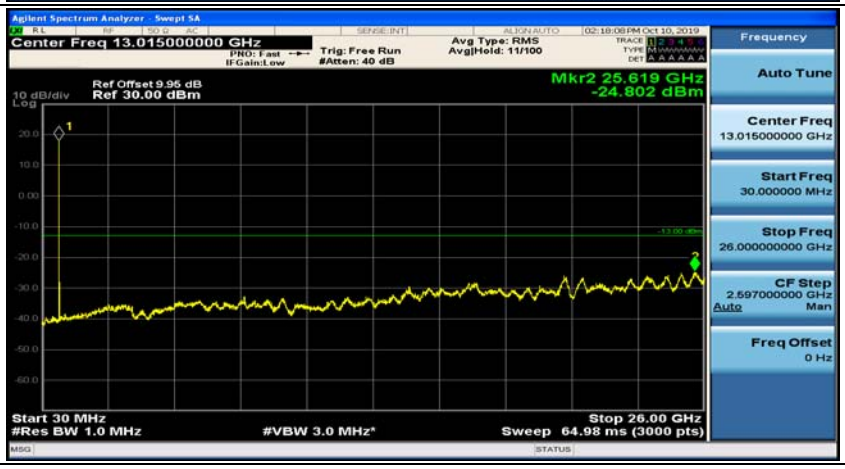




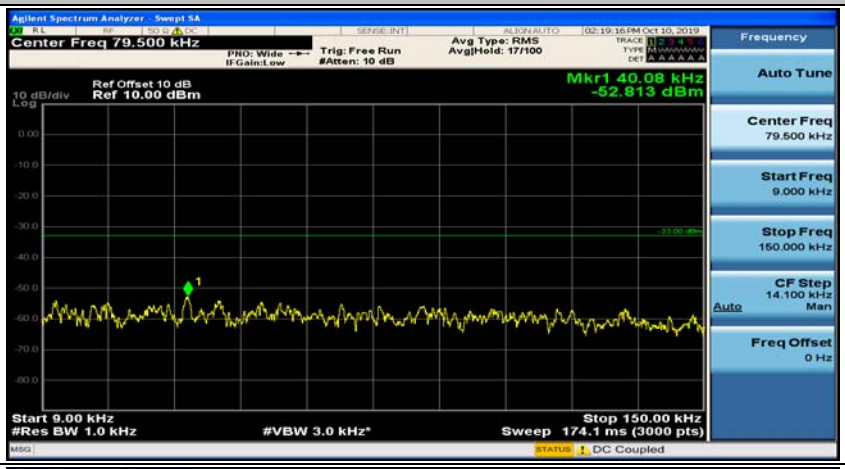
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

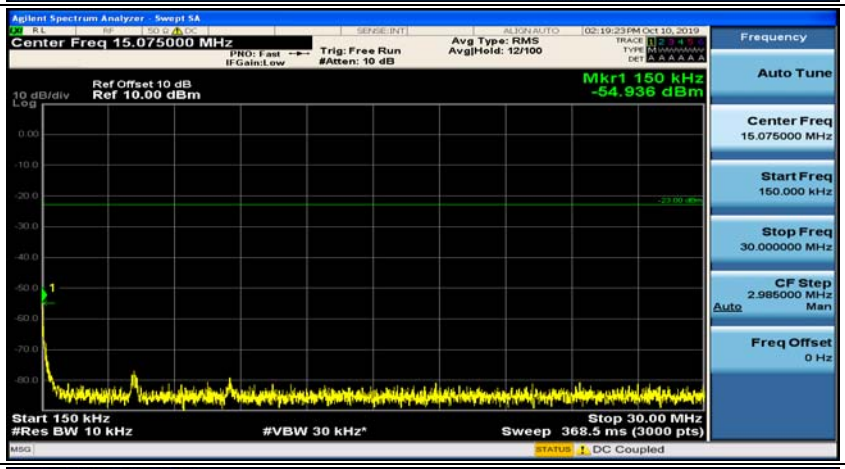

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:17:55 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 13.89 kHz
-54.106 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

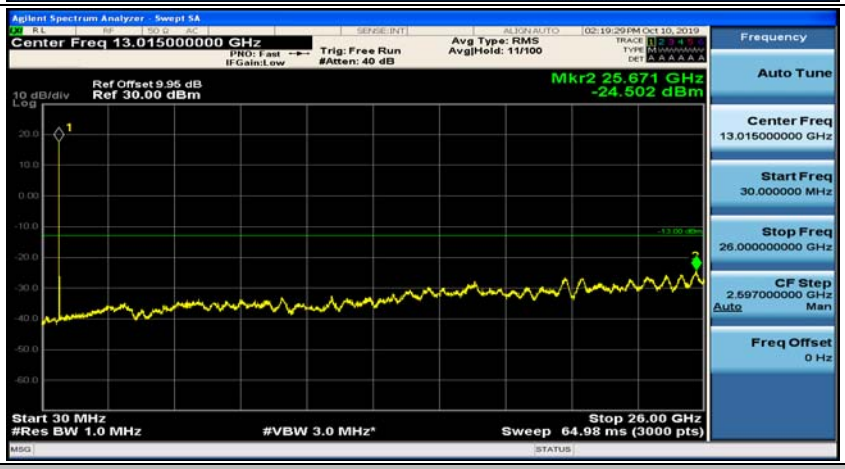

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 13/100
02:18:02 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 150 kHz
-51.778 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:18:08 PM Oct 10, 2019
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.619 GHz
-24.802 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

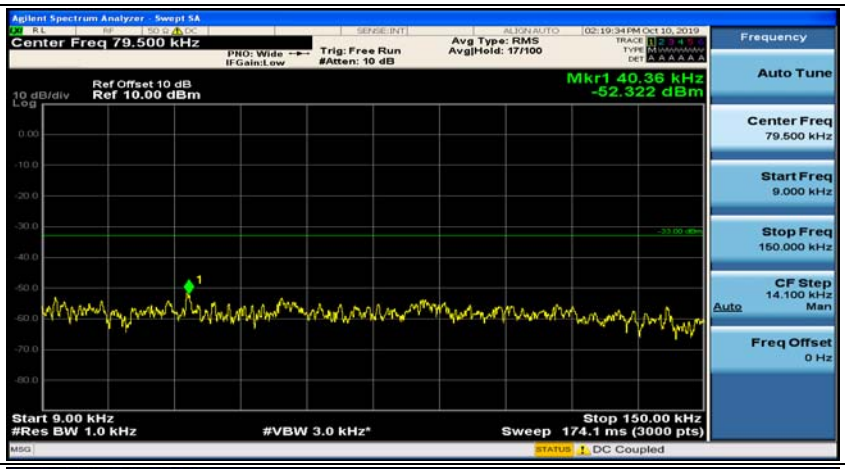
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

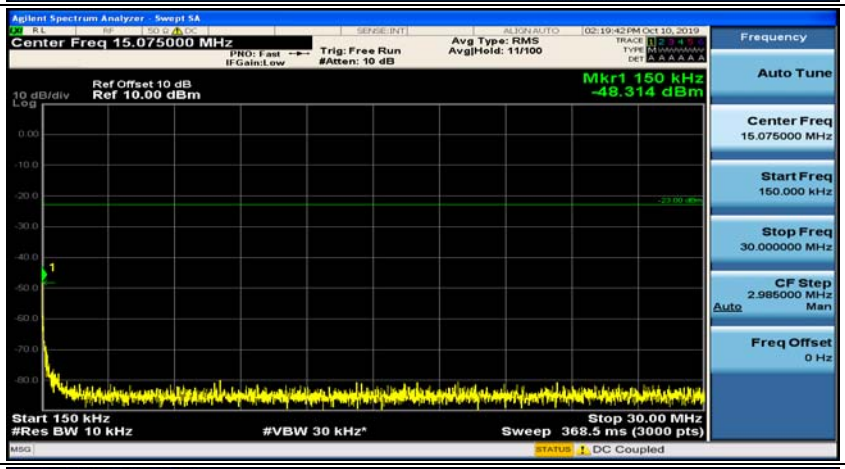




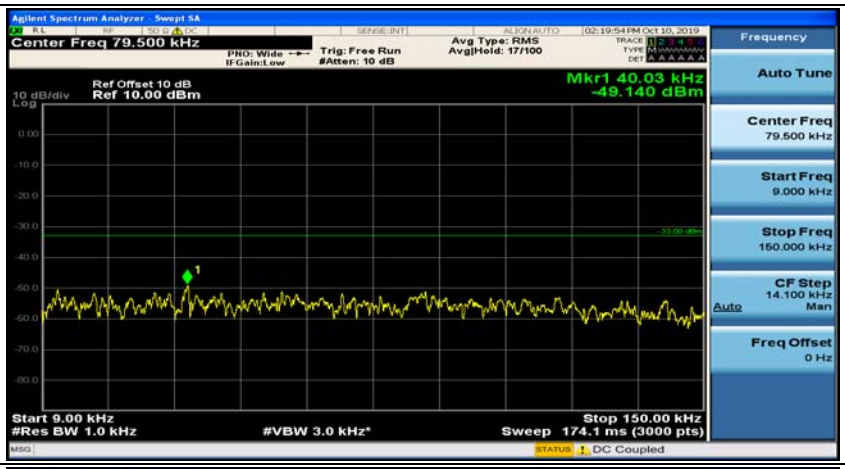


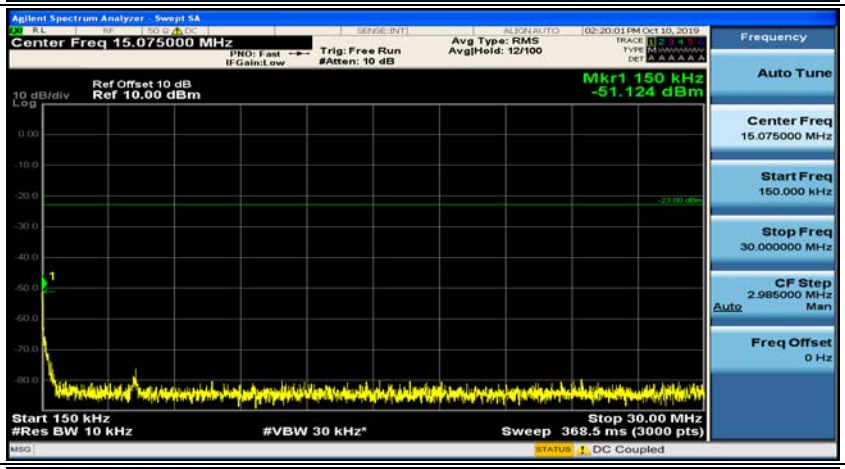
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

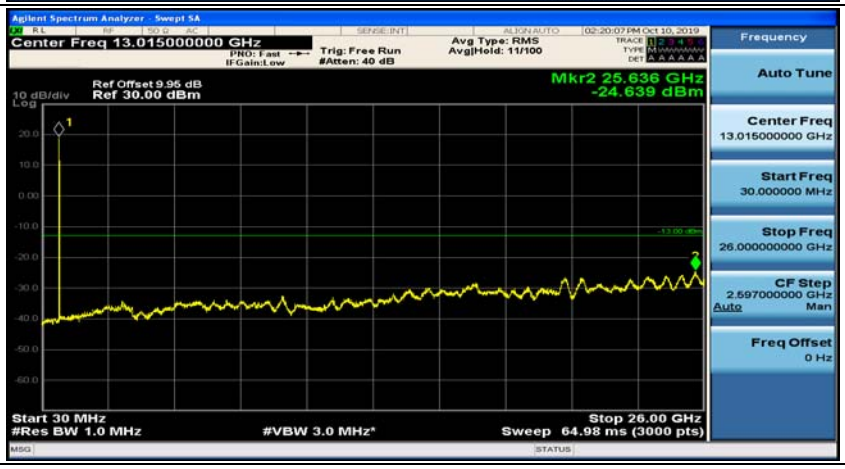




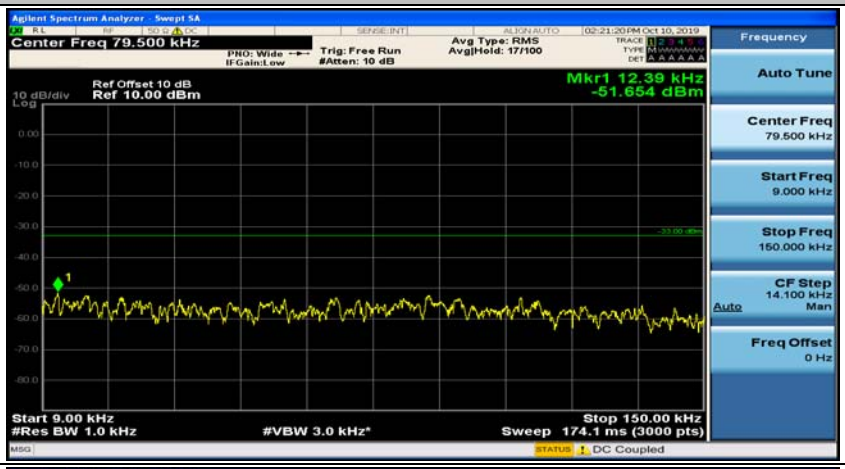
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

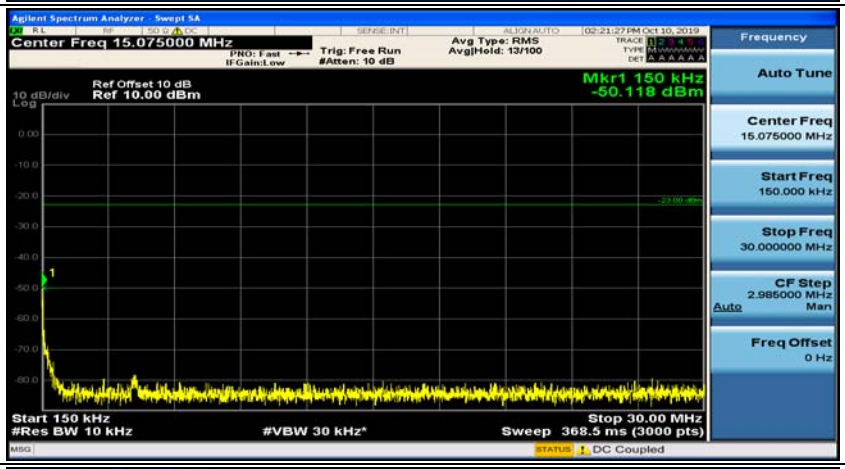

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:19:54 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 40.03 kHz
-49.140 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

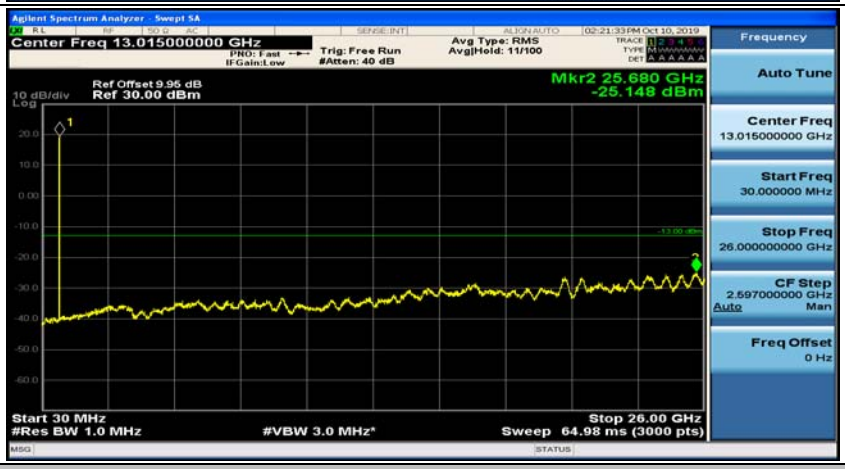

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:20:01 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 150 kHz
-51.124 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:20:07 PM Oct 10, 2019
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.636 GHz
-24.639 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

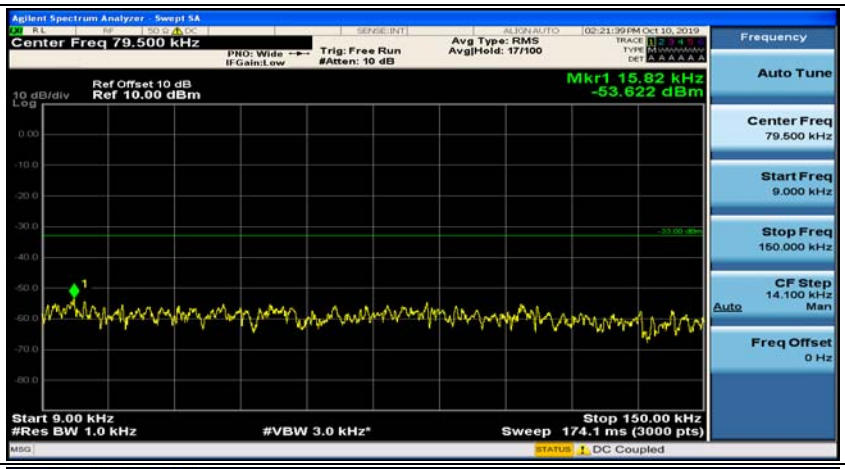
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

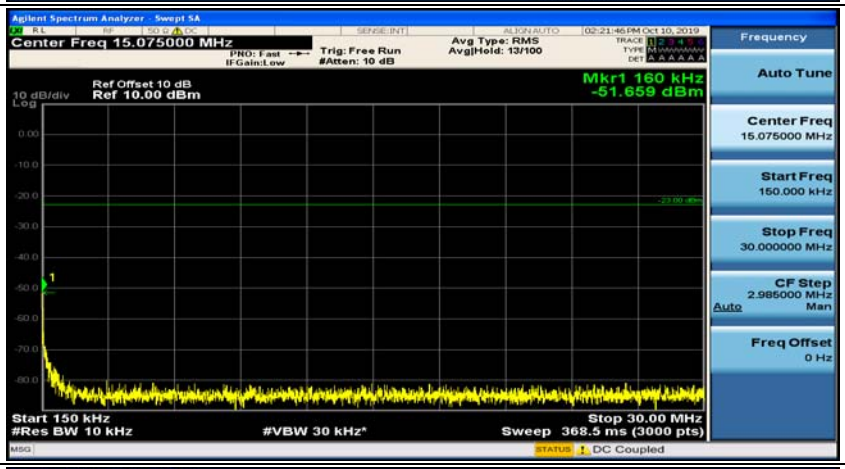




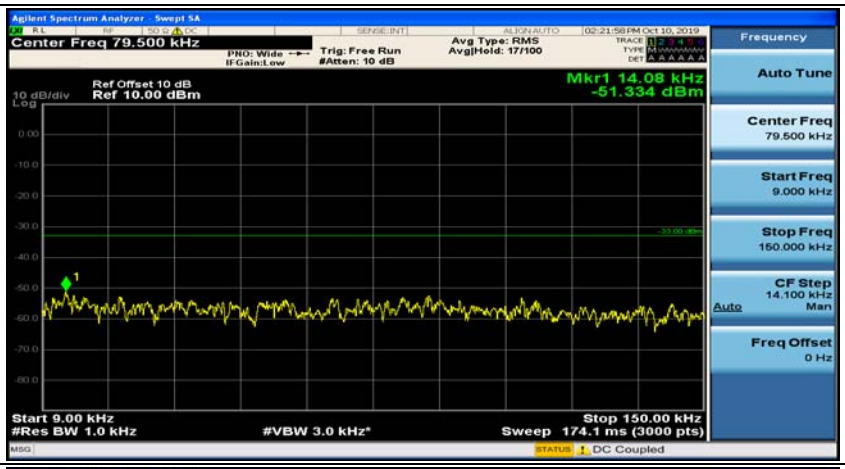


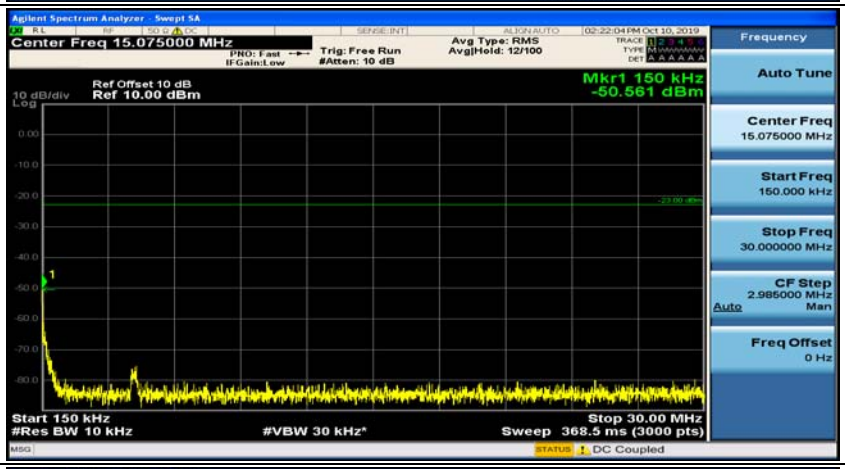
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

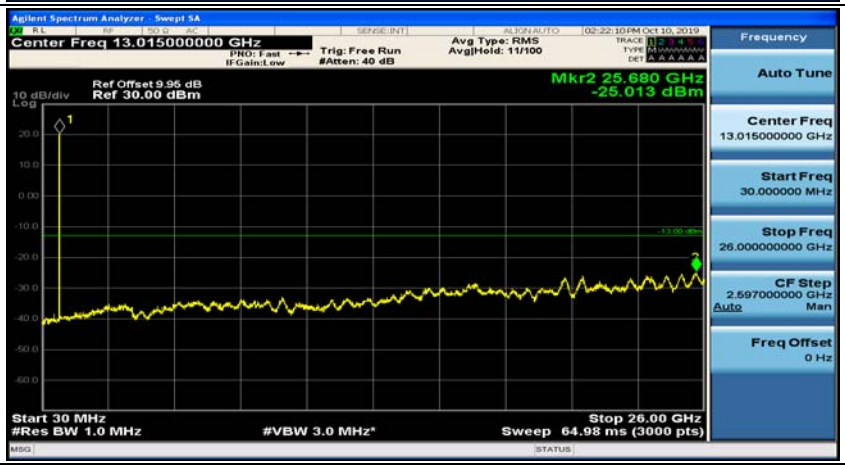




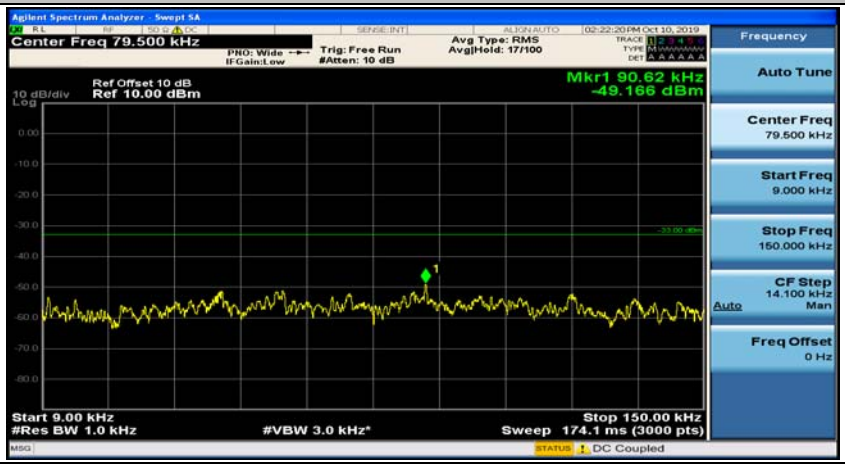
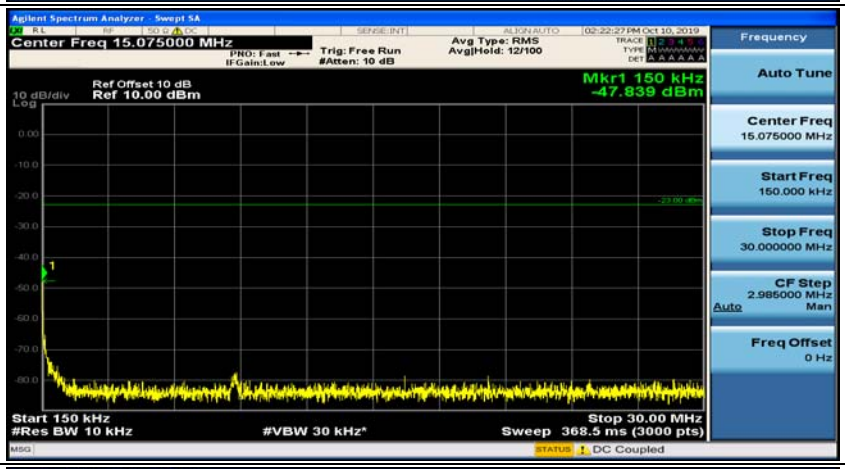
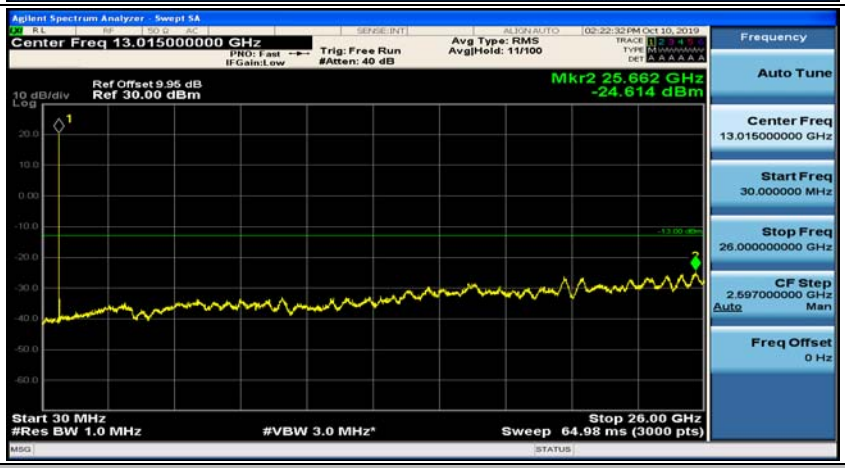
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24

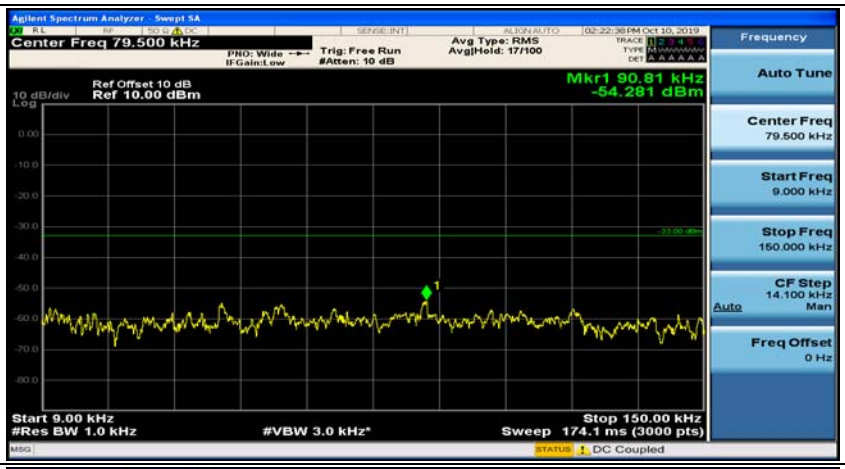

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:21:58 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 14.08 kHz
-51.334 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

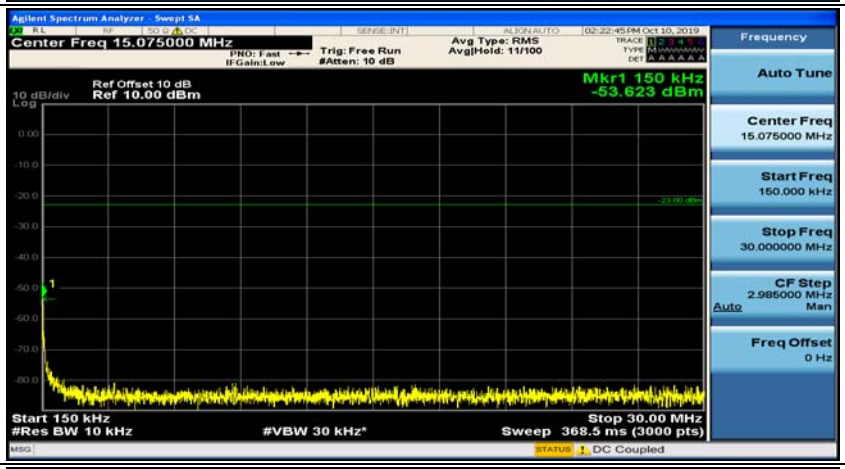

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:22:04 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 150 kHz
-50.561 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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

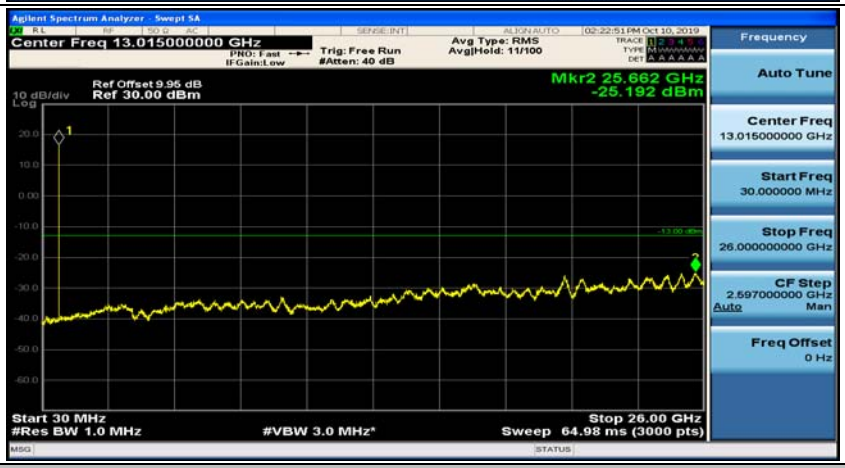

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:22:10 PM Oct 10, 2019
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.680 GHz
-25.013 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
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

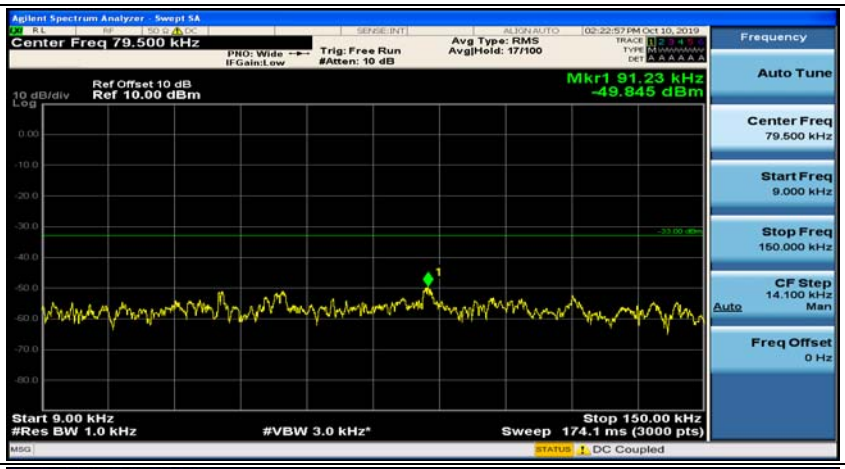
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#24

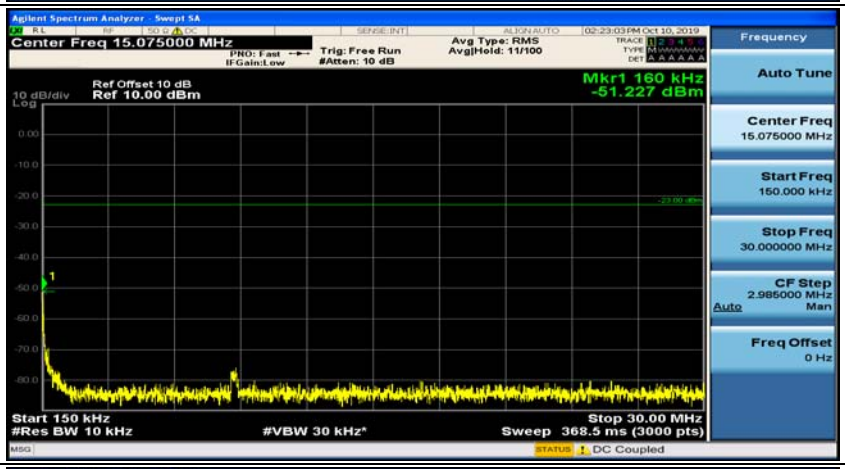


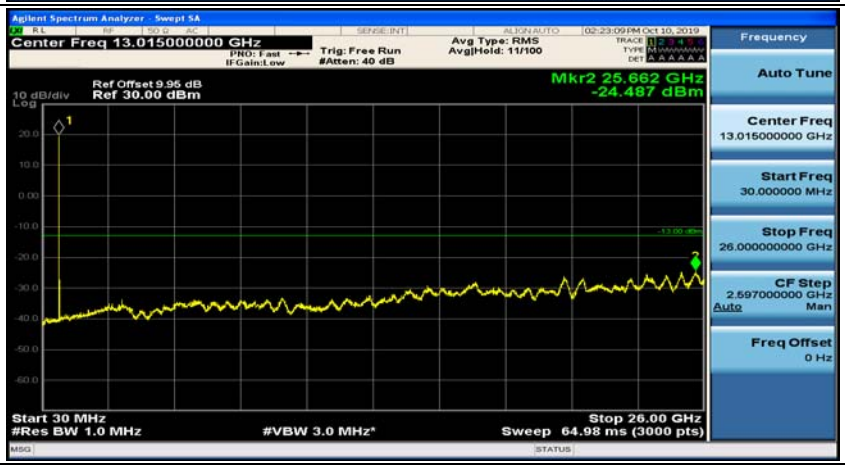


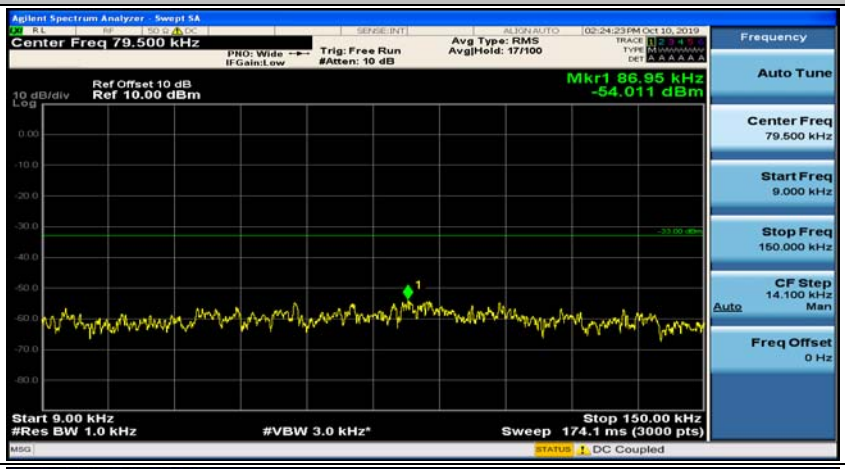
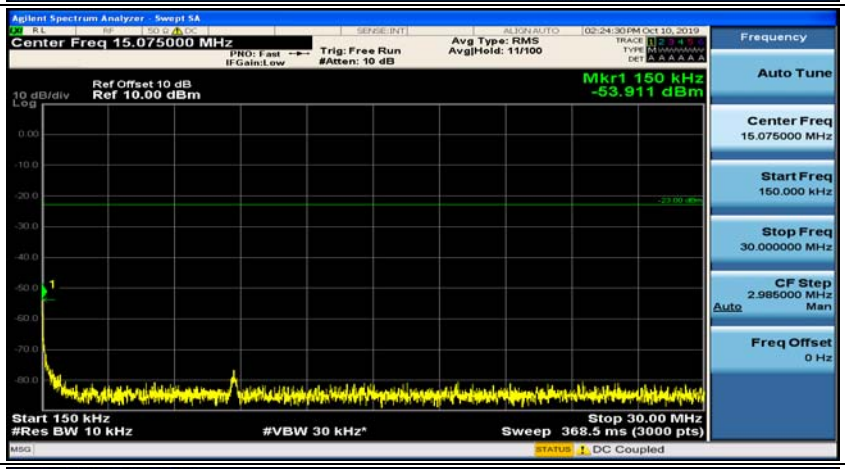
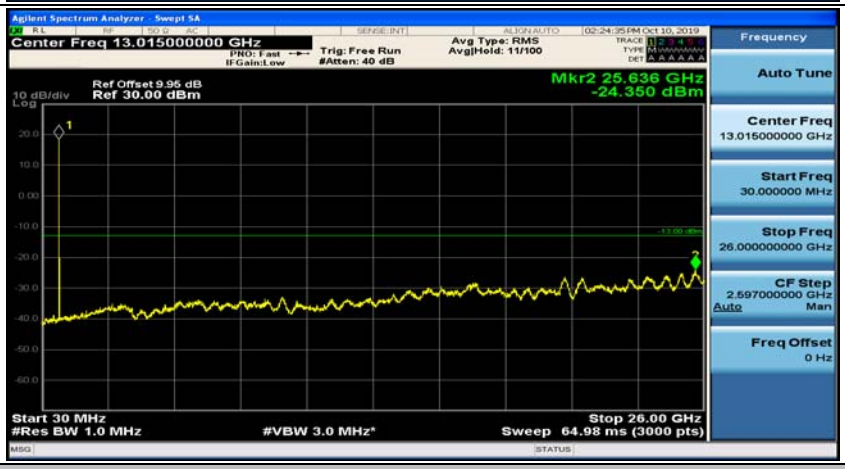


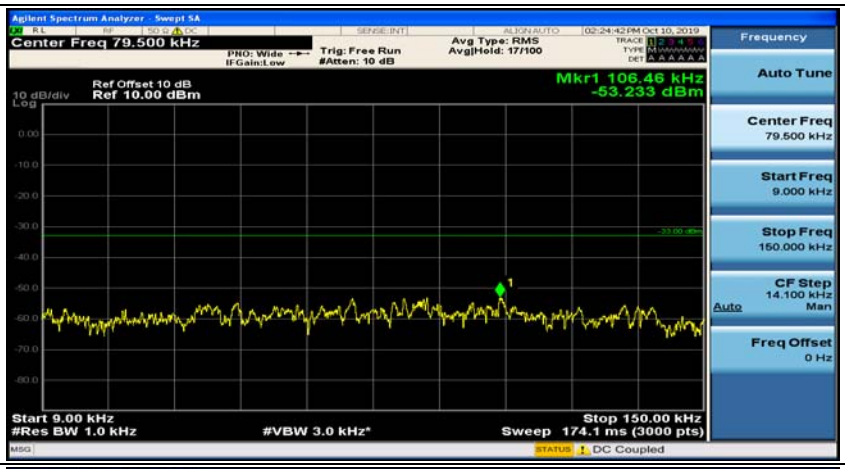
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#49

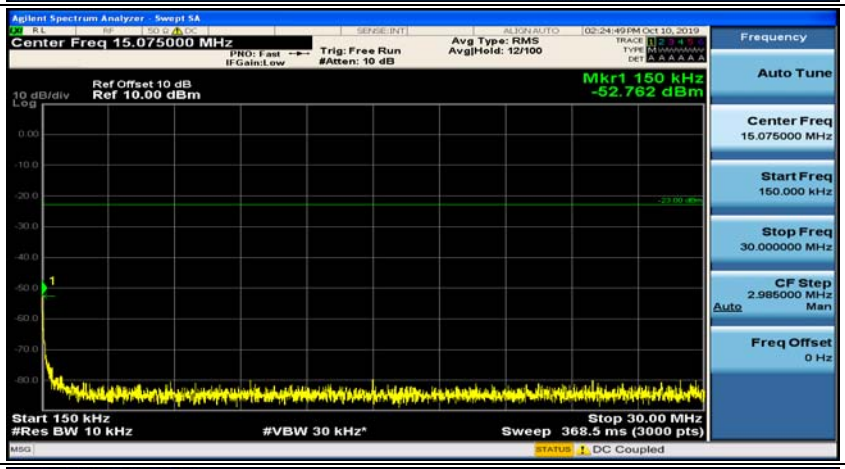

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:22:57 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 91.23 kHz
-49.845 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

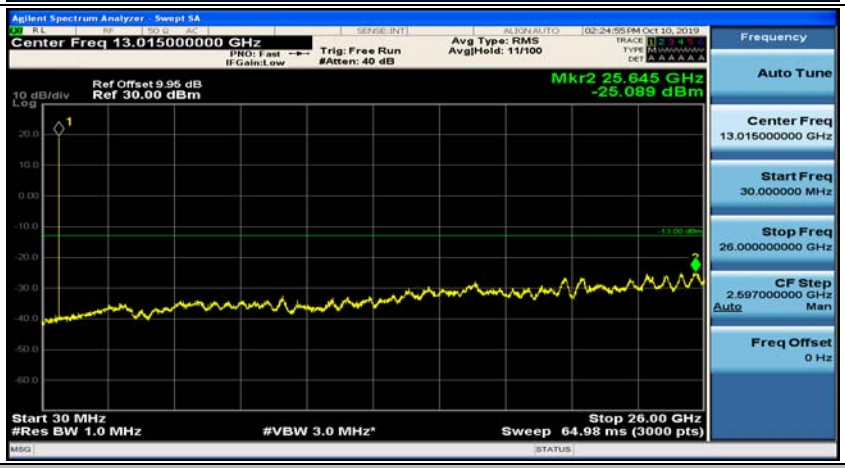

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
02:23:03 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 160 kHz
-51.227 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:23:09 PM Oct 10, 2019
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.662 GHz
-24.487 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

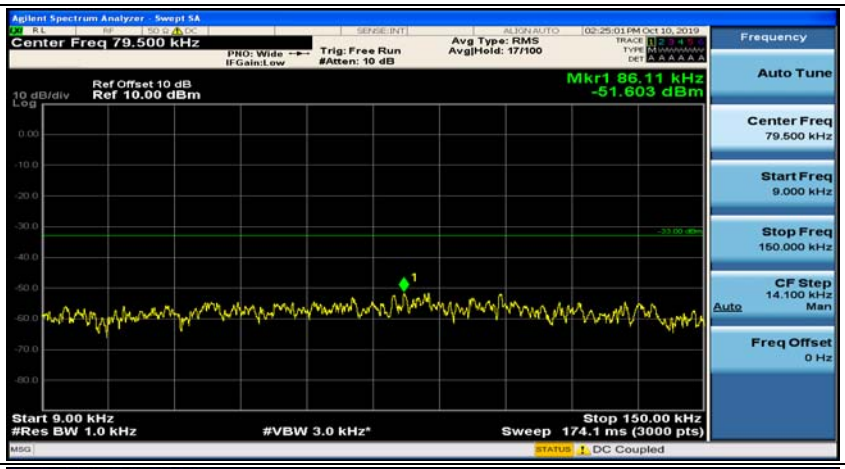
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

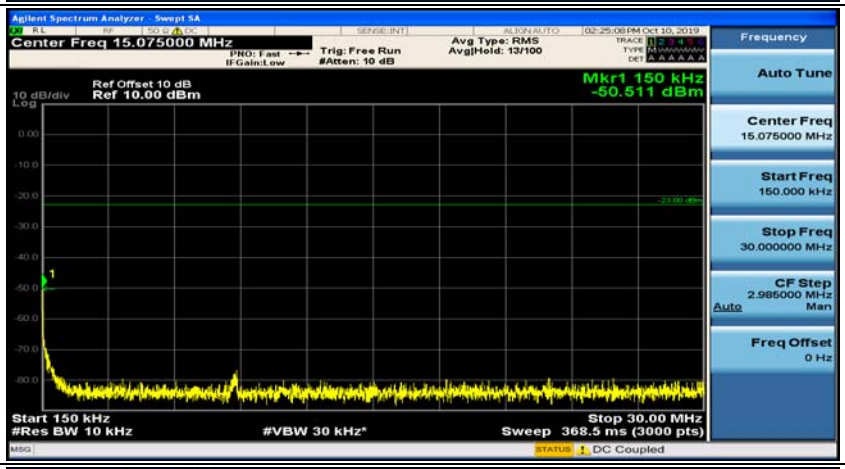


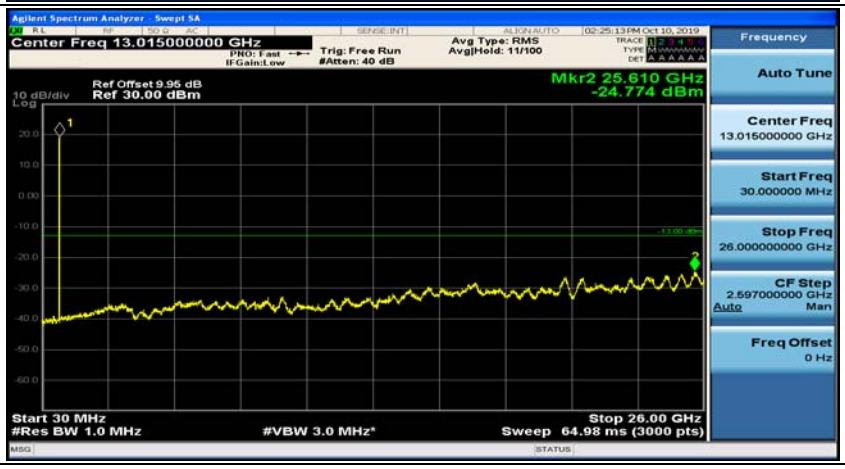


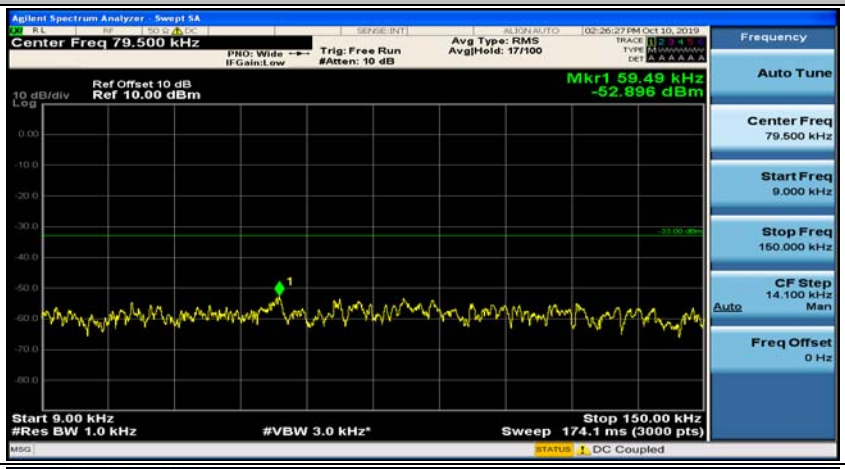
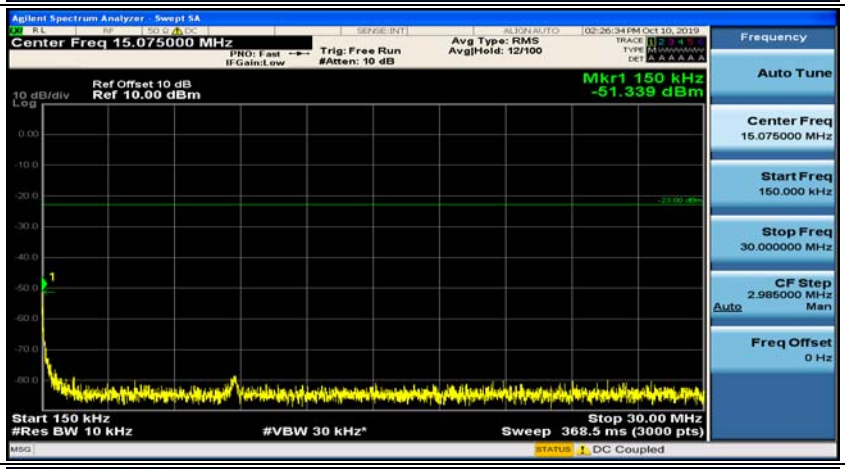
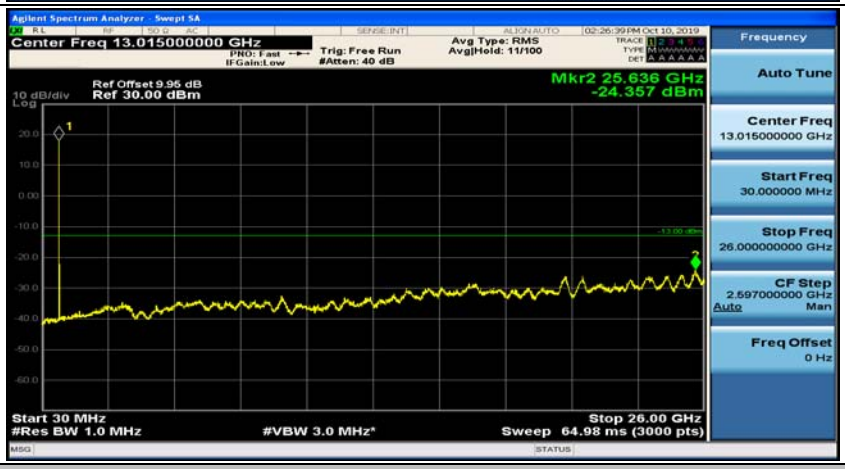


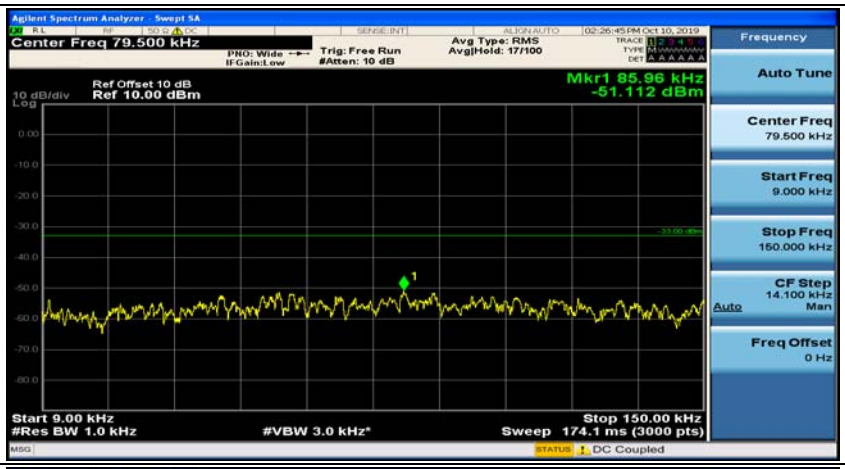
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

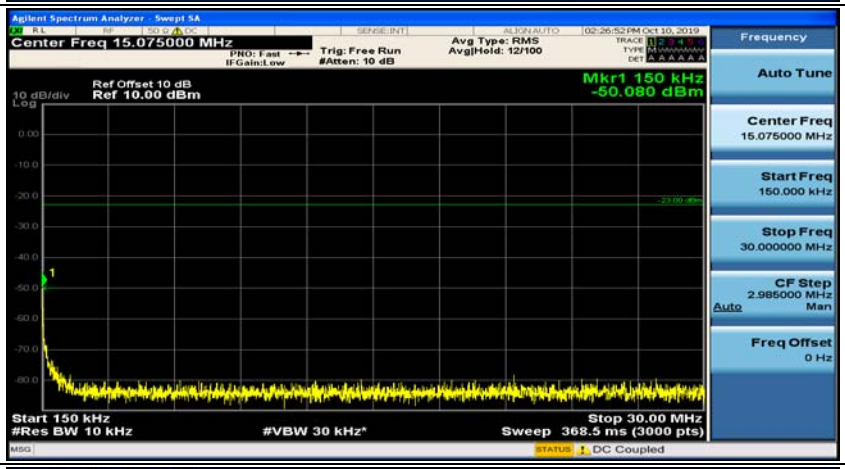

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:25:01 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 86.11 kHz
-51.603 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

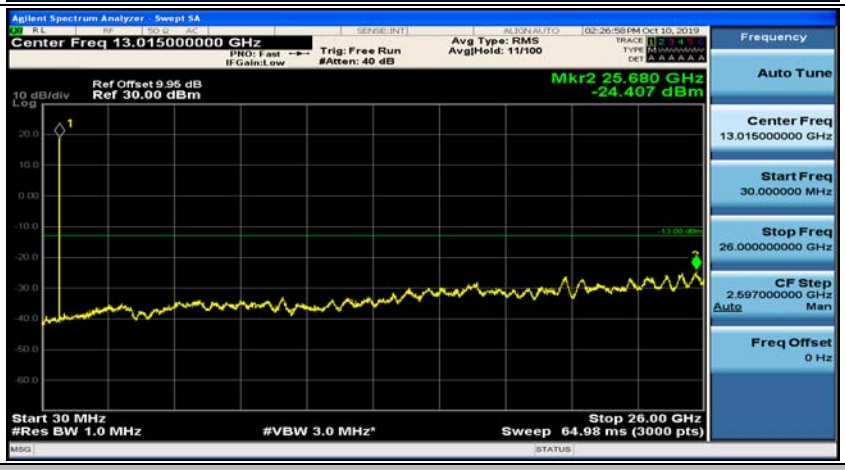

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 13/100
02:25:08 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 150 kHz
-50.511 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:25:13 PM Oct 10, 2019
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.610 GHz
-24.774 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

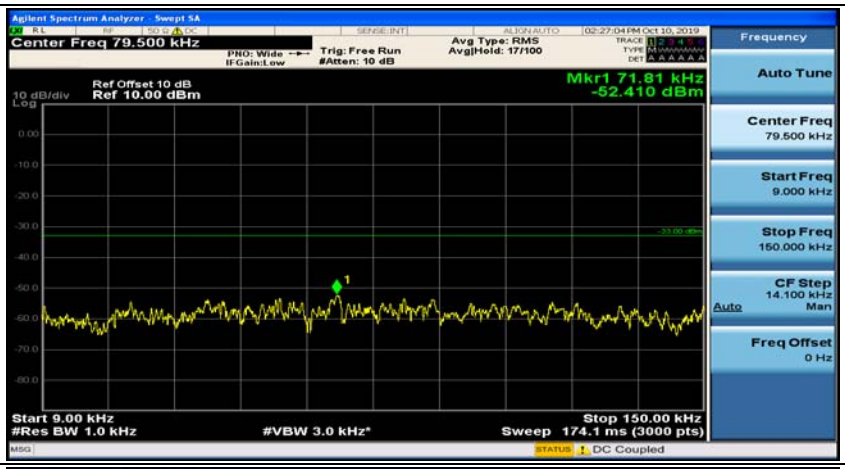
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

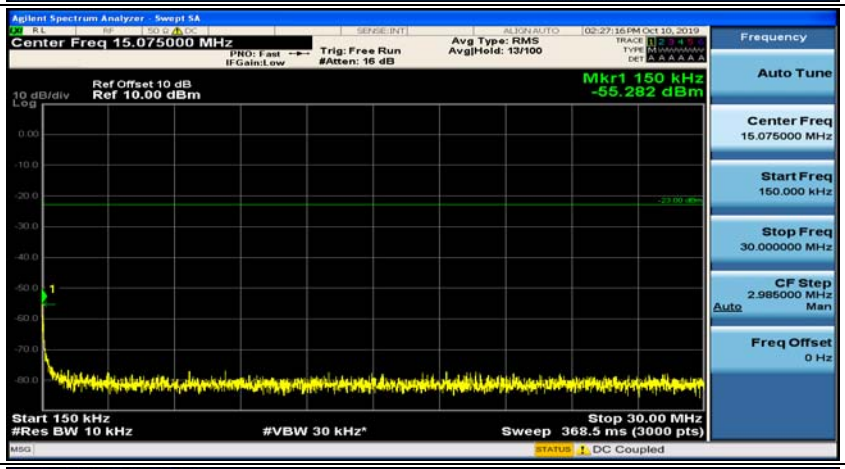


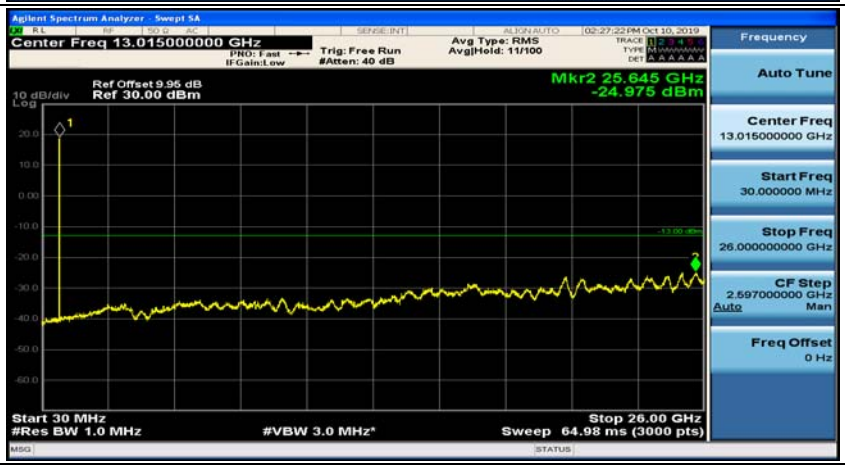


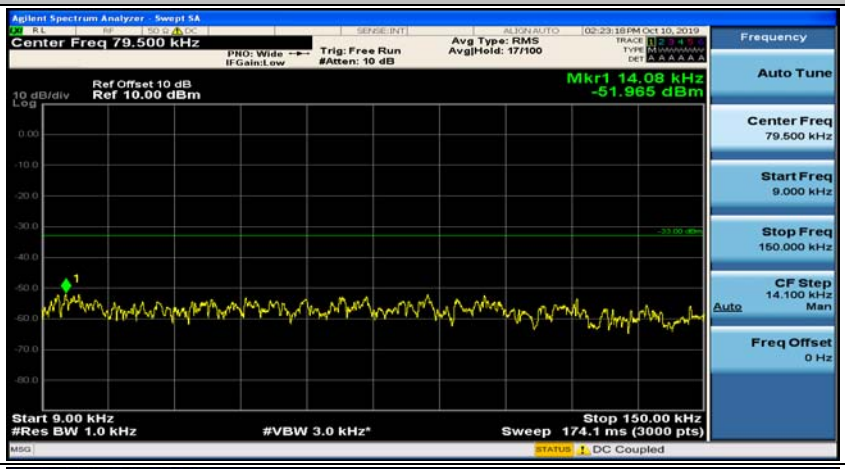
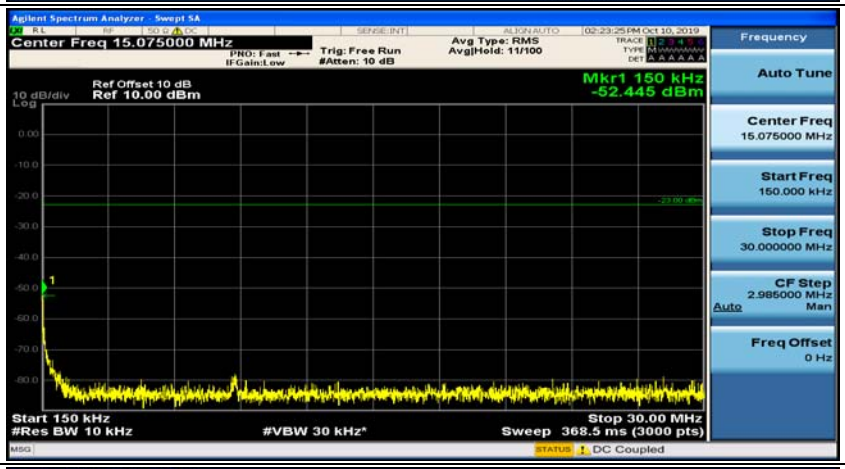
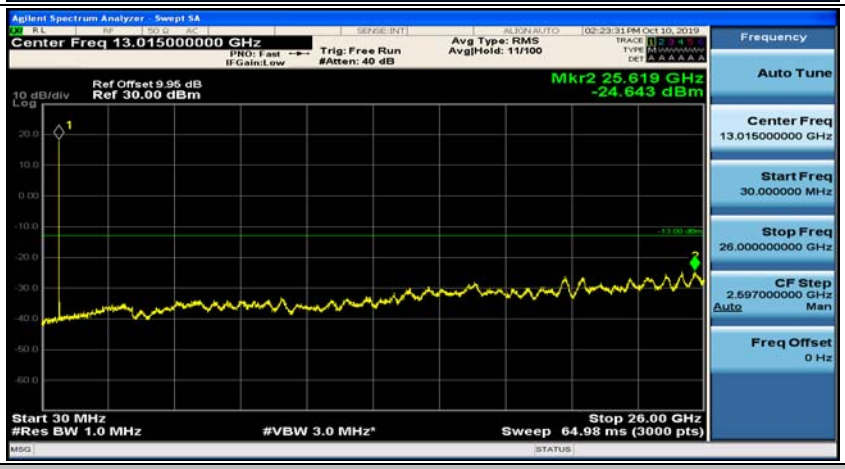


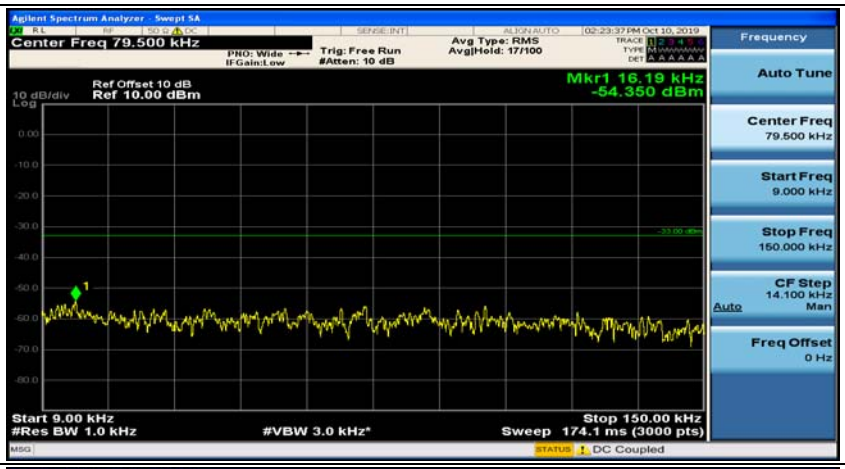
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#49

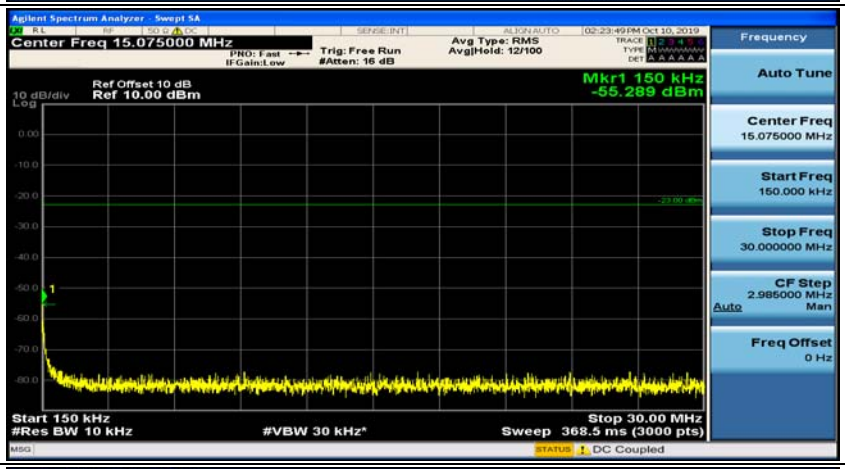

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:27:04 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 71.81 kHz
-52.410 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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: 13/100
02:27:16 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 150 kHz
-55.282 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

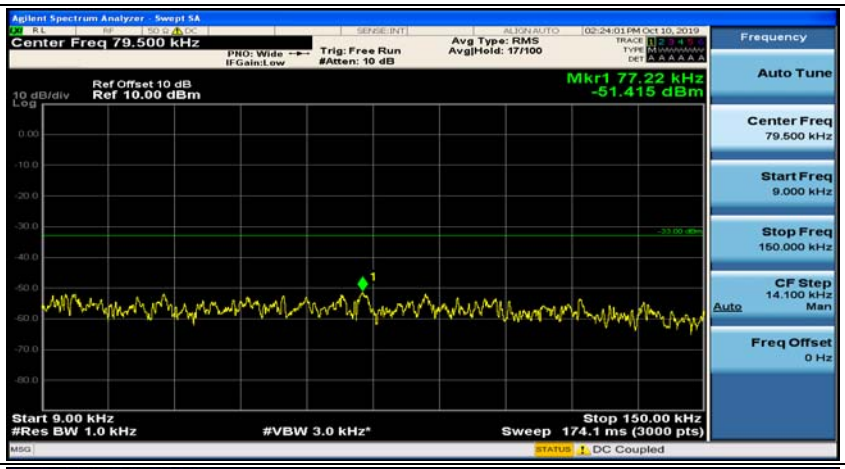

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:27:22 PM Oct 10, 2019
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.645 GHz
-24.975 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
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

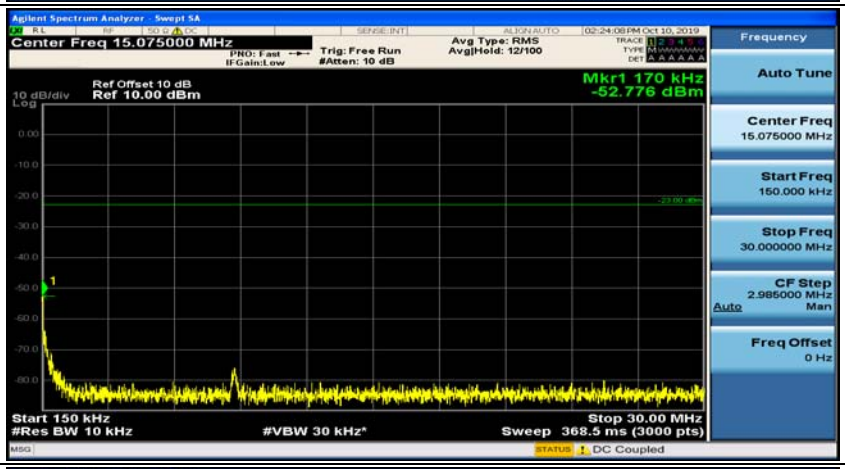
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

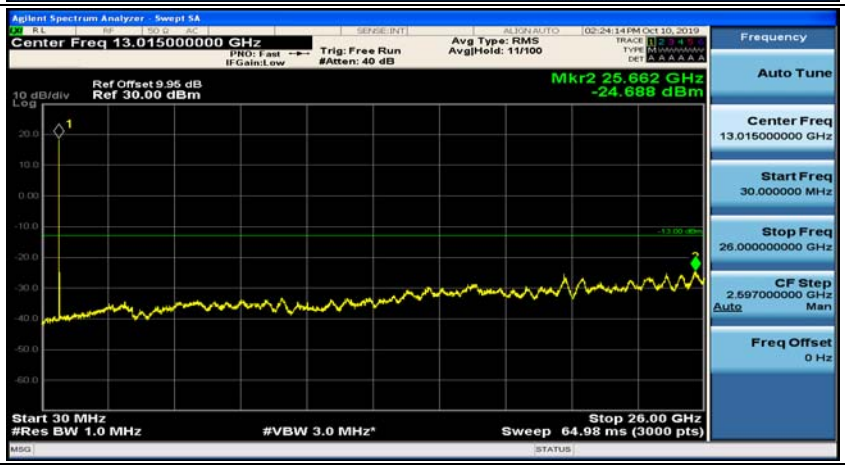


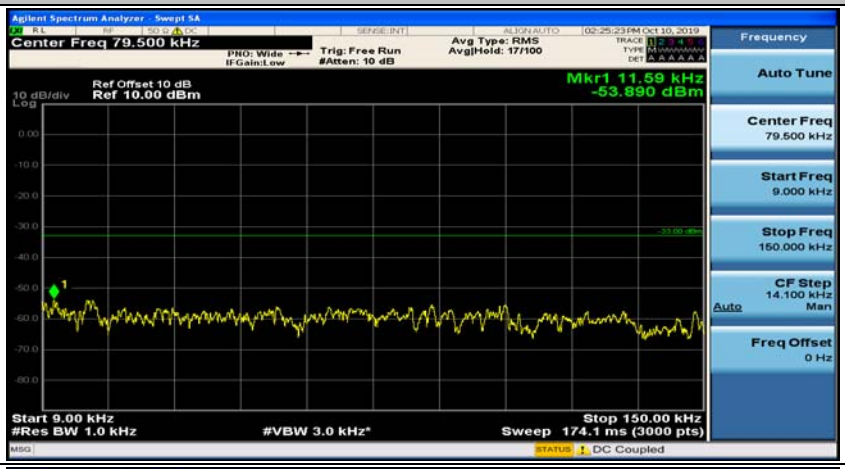
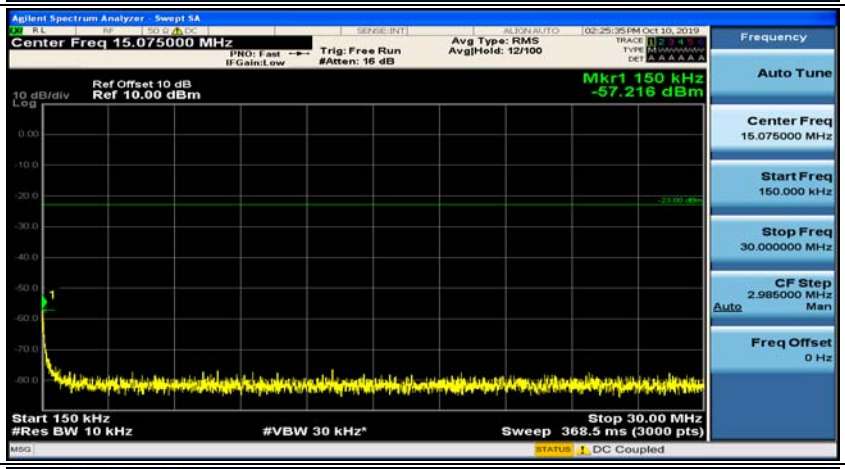
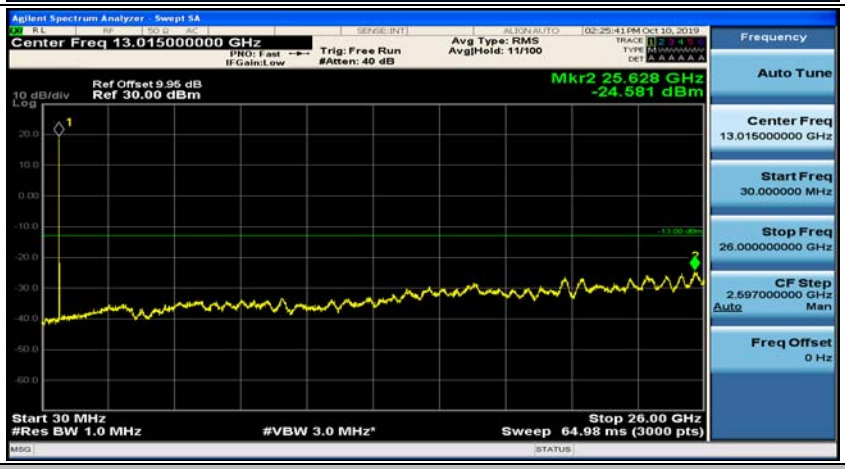


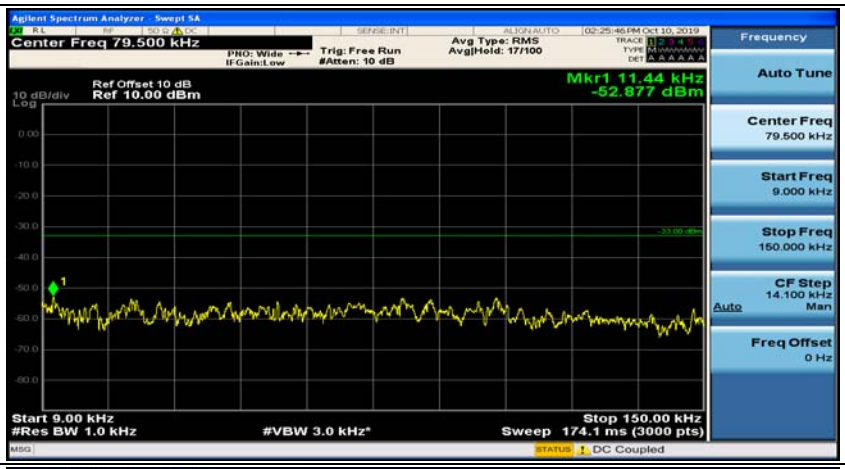
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49

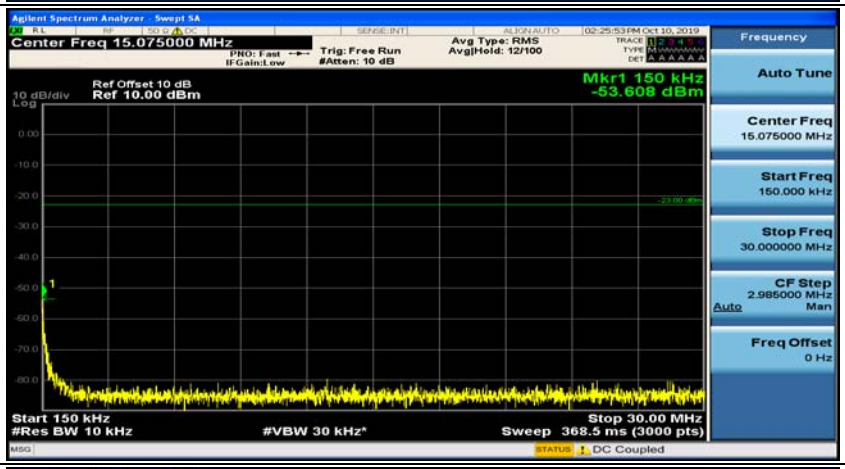

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 77.22 kHz
-51.415 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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

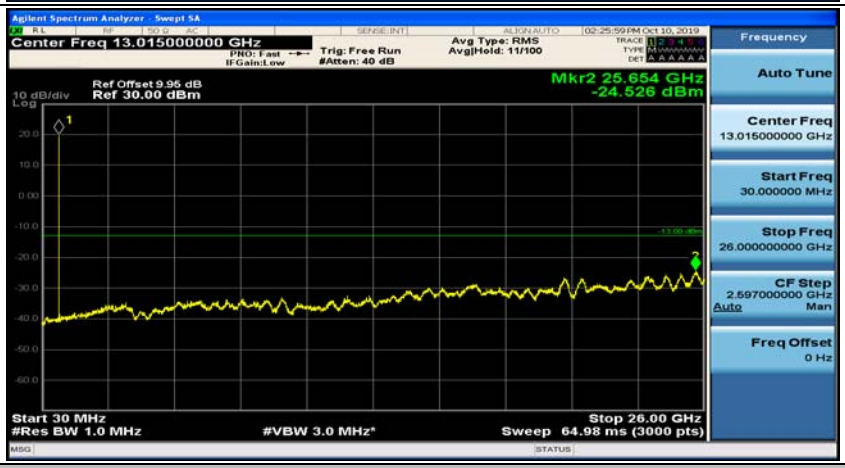

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 170 kHz
-52.776 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.662 GHz
-24.688 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

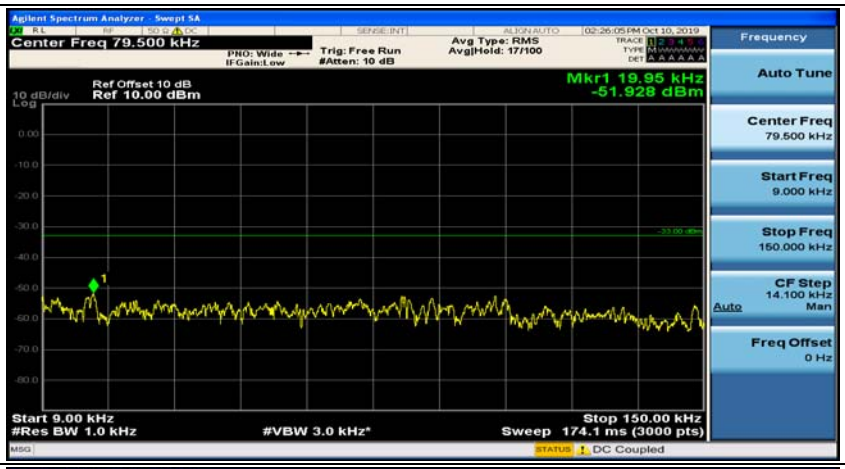
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

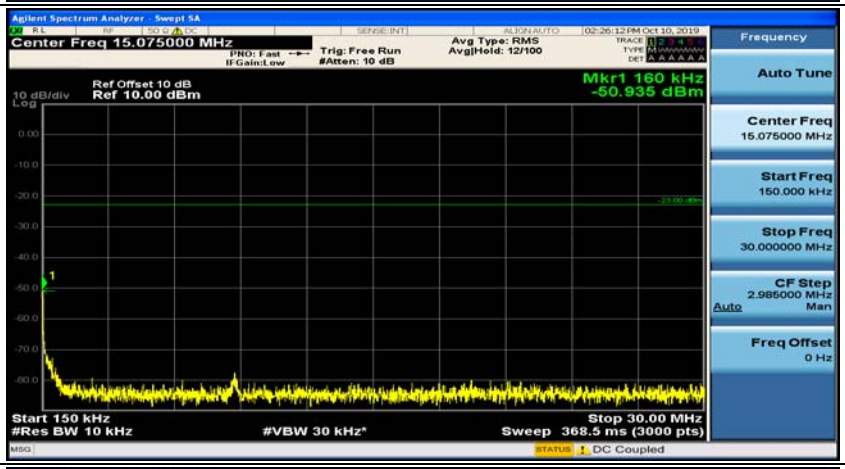


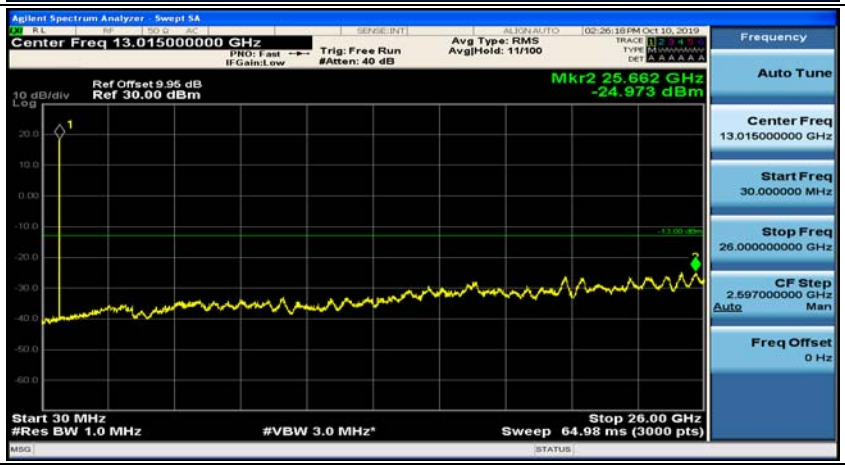


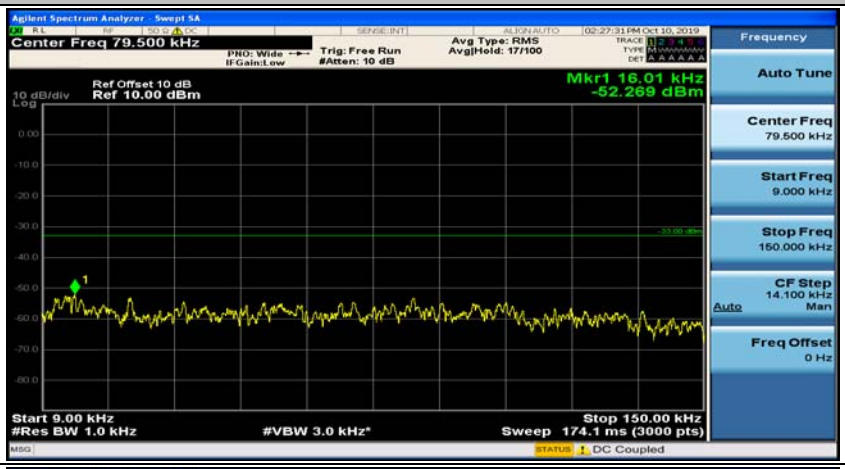
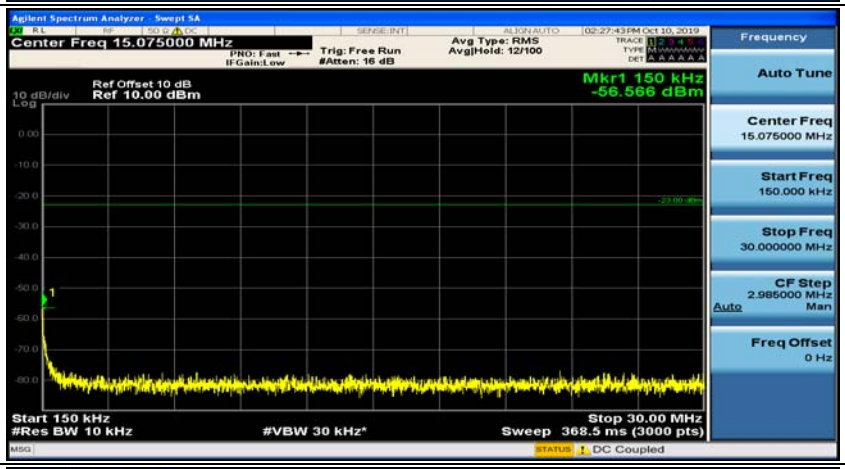
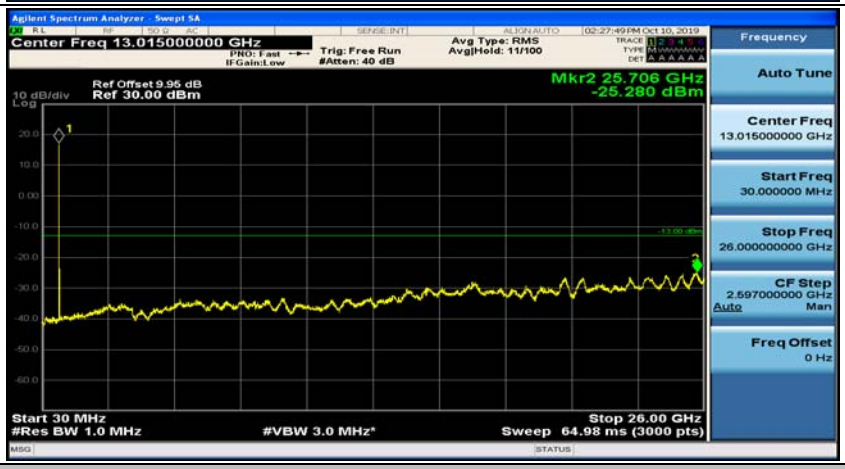


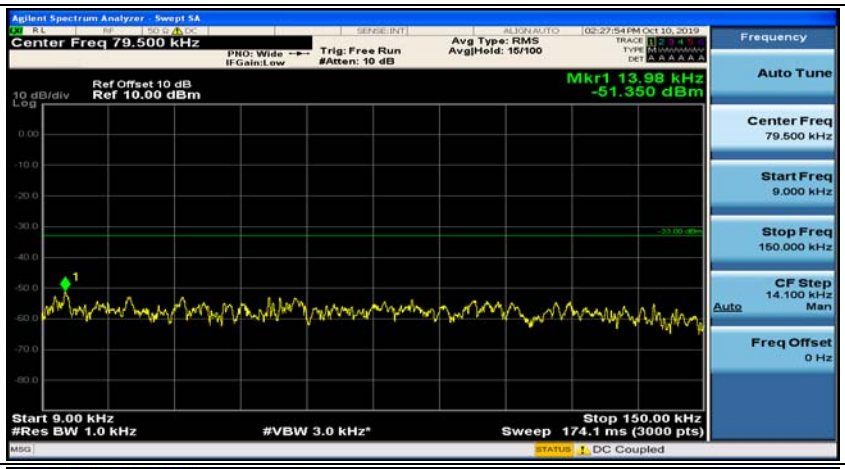
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

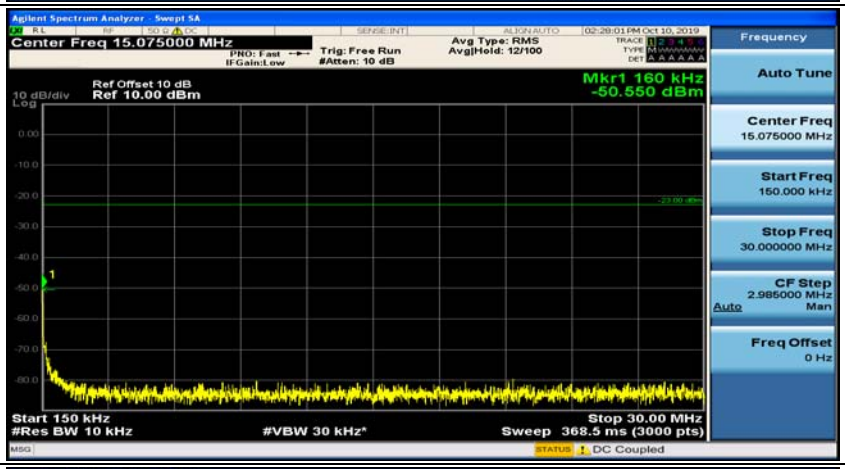

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 19.95 kHz
-51.928 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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

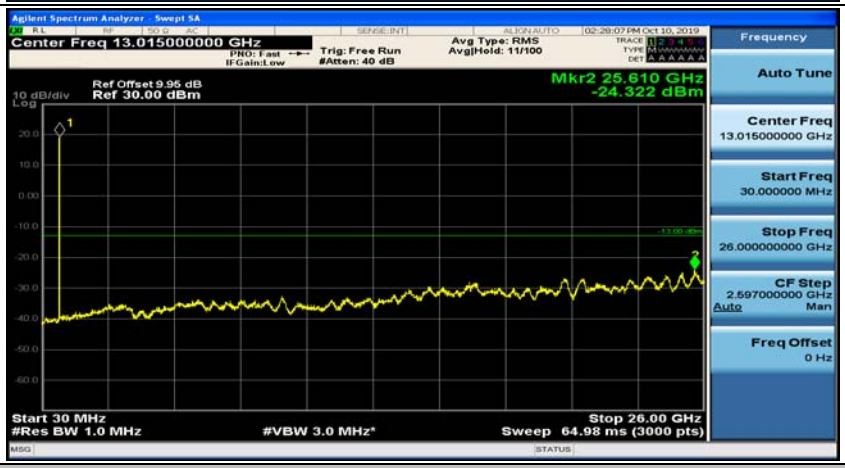

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 160 kHz
-50.935 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.662 GHz
-24.973 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

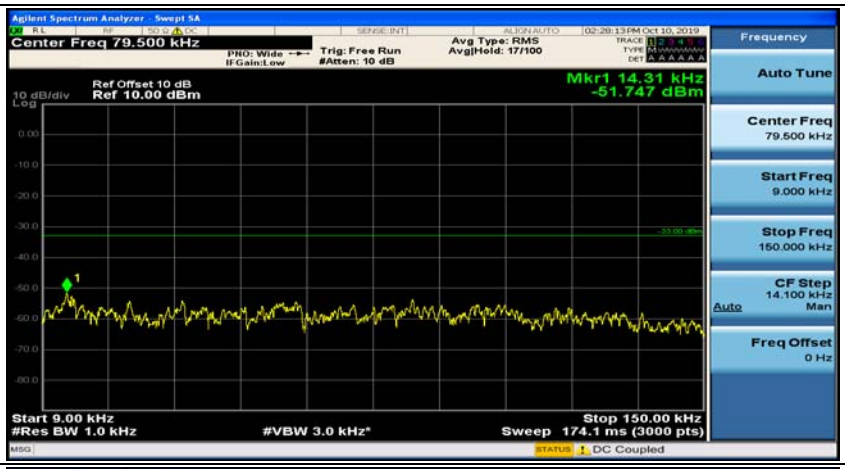
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24

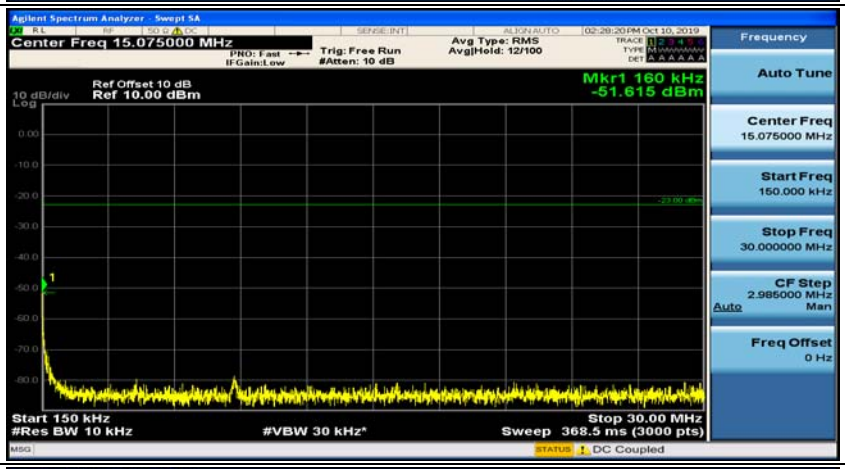


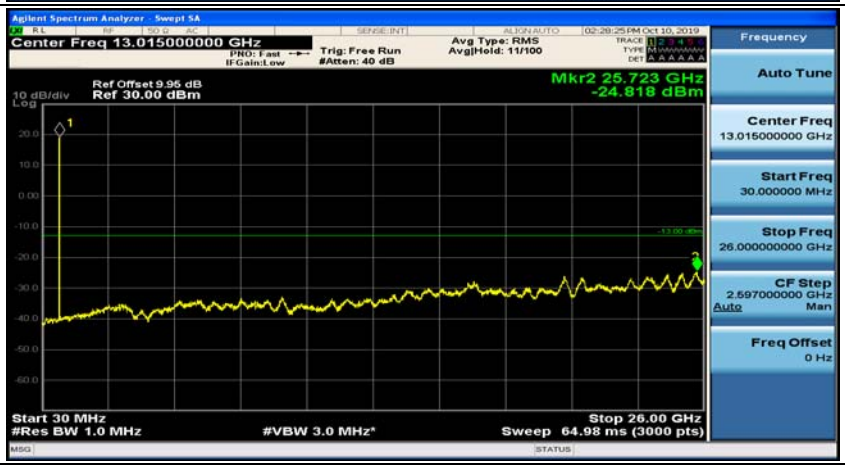




Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49


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
02:28:13 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 14.31 kHz
-51.747 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
02:28:20 PM Oct 10, 2019
Ref Offset 10 dB
10 dB/div
Ref 10.00 dBm
Mkr1 160 kHz
-51.615 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
02:28:25 PM Oct 10, 2019
Ref Offset 9.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.723 GHz
-24.818 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	1.91	0.002730	± 2.5	PASS
		VN	TN	1.65	0.002358	± 2.5	PASS
		VH	TN	3.15	0.004502	± 2.5	PASS
	MCH	VL	TN	2	0.002827	± 2.5	PASS
		VN	TN	3.36	0.004749	± 2.5	PASS
		VH	TN	-0.63	-0.000890	± 2.5	PASS
	HCH	VL	TN	0.21	0.000294	± 2.5	PASS
		VN	TN	1.95	0.002726	± 2.5	PASS
		VH	TN	-1.1	-0.001538	± 2.5	PASS
16QAM	LCH	VL	TN	1.08	0.001544	± 2.5	PASS
		VN	TN	1.9	0.002715	± 2.5	PASS
		VH	TN	2.46	0.003516	± 2.5	PASS
	MCH	VL	TN	3.05	0.004311	± 2.5	PASS
		VN	TN	4.59	0.006488	± 2.5	PASS
		VH	TN	-1.03	-0.001456	± 2.5	PASS
	HCH	VL	TN	-0.54	-0.000755	± 2.5	PASS
		VN	TN	3.31	0.004627	± 2.5	PASS
		VH	TN	2.15	0.003006	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.13	0.004473	± 2.5	PASS
		VN	-20	2.45	0.003502	± 2.5	PASS
		VN	-10	3.42	0.004888	± 2.5	PASS
		VN	0	-1.58	-0.002258	± 2.5	PASS
		VN	10	-1.44	-0.002058	± 2.5	PASS
		VN	20	0.98	0.001401	± 2.5	PASS
		VN	30	4.61	0.006589	± 2.5	PASS
		VN	40	1.49	0.002129	± 2.5	PASS
		VN	50	-0.12	-0.000172	± 2.5	PASS
	MCH	VN	-30	-0.21	-0.000297	± 2.5	PASS
		VN	-20	0.67	0.000947	± 2.5	PASS

		VN	-10	0.26	0.000367	± 2.5	PASS
		VN	0	4.51	0.006375	± 2.5	PASS
		VN	10	-0.95	-0.001343	± 2.5	PASS
		VN	20	-1.95	-0.002756	± 2.5	PASS
		VN	30	4.99	0.007053	± 2.5	PASS
		VN	40	-0.22	-0.000311	± 2.5	PASS
		VN	50	-0.96	-0.001357	± 2.5	PASS
	HCH	VN	-30	-1.99	-0.002782	± 2.5	PASS
		VN	-20	1.19	0.001664	± 2.5	PASS
		VN	-10	1.58	0.002209	± 2.5	PASS
		VN	0	2.03	0.002838	± 2.5	PASS
		VN	10	-0.09	-0.000126	± 2.5	PASS
		VN	20	1.6	0.002237	± 2.5	PASS
		VN	30	0.81	0.001132	± 2.5	PASS
		VN	40	1.22	0.001706	± 2.5	PASS
		VN	50	0.91	0.001272	± 2.5	PASS
16QAM	LCH	VN	-30	-0.31	-0.000443	± 2.5	PASS
		VN	-20	4.55	0.006503	± 2.5	PASS
		VN	-10	3.61	0.005159	± 2.5	PASS
		VN	0	2.45	0.003502	± 2.5	PASS
		VN	10	2.17	0.003101	± 2.5	PASS
		VN	20	-0.02	-0.000029	± 2.5	PASS
		VN	30	4.22	0.006031	± 2.5	PASS
		VN	40	0.31	0.000443	± 2.5	PASS
		VN	50	3.94	0.005631	± 2.5	PASS
	MCH	VN	-30	4.92	0.006954	± 2.5	PASS
		VN	-20	1.59	0.002247	± 2.5	PASS
		VN	-10	1.26	0.001781	± 2.5	PASS
		VN	0	-1.35	-0.001908	± 2.5	PASS
		VN	10	1.3	0.001837	± 2.5	PASS
		VN	20	0.11	0.000155	± 2.5	PASS
		VN	30	4.43	0.006261	± 2.5	PASS
		VN	40	1.73	0.002445	± 2.5	PASS
		VN	50	0.72	0.001018	± 2.5	PASS
	HCH	VN	-30	3.23	0.004516	± 2.5	PASS
		VN	-20	1.76	0.002461	± 2.5	PASS
		VN	-10	1.83	0.002558	± 2.5	PASS
		VN	0	3.33	0.004655	± 2.5	PASS
		VN	10	-1.49	-0.002083	± 2.5	PASS
		VN	20	3.72	0.005201	± 2.5	PASS
		VN	30	2.64	0.003691	± 2.5	PASS

		VN	40	1.44	0.002013	± 2.5	PASS
		VN	50	2.09	0.002922	± 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	2.08	0.002969	± 2.5	PASS
		VN	TN	4.97	0.007095	± 2.5	PASS
		VH	TN	4.52	0.006453	± 2.5	PASS
	MCH	VL	TN	0.83	0.001173	± 2.5	PASS
		VN	TN	-1.01	-0.001428	± 2.5	PASS
		VH	TN	3.15	0.004452	± 2.5	PASS
	HCH	VL	TN	-1.45	-0.002029	± 2.5	PASS
		VN	TN	1.06	0.001484	± 2.5	PASS
		VH	TN	3.57	0.004997	± 2.5	PASS
16QAM	LCH	VL	TN	0.99	0.001413	± 2.5	PASS
		VN	TN	0.59	0.000842	± 2.5	PASS
		VH	TN	3.21	0.004582	± 2.5	PASS
	MCH	VL	TN	3.22	0.004551	± 2.5	PASS
		VN	TN	2.8	0.003958	± 2.5	PASS
		VH	TN	-1.72	-0.002431	± 2.5	PASS
	HCH	VL	TN	0.68	0.000952	± 2.5	PASS
		VN	TN	4.31	0.006032	± 2.5	PASS
		VH	TN	1.96	0.002743	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.91	0.002727	± 2.5	PASS
		VN	-20	-1.11	-0.001585	± 2.5	PASS
		VN	-10	0.88	0.001256	± 2.5	PASS
		VN	0	-0.4	-0.000571	± 2.5	PASS
		VN	10	4.78	0.006824	± 2.5	PASS
		VN	20	4.36	0.006224	± 2.5	PASS
		VN	30	-0.27	-0.000385	± 2.5	PASS
		VN	40	3.75	0.005353	± 2.5	PASS
		VN	50	0.36	0.000514	± 2.5	PASS
	MCH	VN	-30	2.64	0.003731	± 2.5	PASS
		VN	-20	-1.44	-0.002035	± 2.5	PASS
		VN	-10	2.7	0.003816	± 2.5	PASS

		VN	0	2.34	0.003307	± 2.5	PASS
		VN	10	2.28	0.003223	± 2.5	PASS
		VN	20	1.79	0.002530	± 2.5	PASS
		VN	30	2.24	0.003166	± 2.5	PASS
		VN	40	2.36	0.003336	± 2.5	PASS
		VN	50	4.26	0.006021	± 2.5	PASS
	HCH	VN	-30	4.04	0.005654	± 2.5	PASS
		VN	-20	1.7	0.002379	± 2.5	PASS
		VN	-10	2.22	0.003107	± 2.5	PASS
		VN	0	-1.29	-0.001805	± 2.5	PASS
		VN	10	2.44	0.003415	± 2.5	PASS
		VN	20	2.17	0.003037	± 2.5	PASS
		VN	30	0.87	0.001218	± 2.5	PASS
		VN	40	4.19	0.005864	± 2.5	PASS
		VN	50	0.16	0.000224	± 2.5	PASS
16QAM	LCH	VN	-30	4.55	0.006495	± 2.5	PASS
		VN	-20	-1.53	-0.002184	± 2.5	PASS
		VN	-10	1.39	0.001984	± 2.5	PASS
		VN	0	1.08	0.001542	± 2.5	PASS
		VN	10	2.77	0.003954	± 2.5	PASS
		VN	20	2.03	0.002898	± 2.5	PASS
		VN	30	2.78	0.003969	± 2.5	PASS
		VN	40	1.94	0.002769	± 2.5	PASS
		VN	50	4.31	0.006153	± 2.5	PASS
	MCH	VN	-30	-0.53	-0.000749	± 2.5	PASS
		VN	-20	0	0.000000	± 2.5	PASS
		VN	-10	2.73	0.003859	± 2.5	PASS
		VN	0	3.11	0.004396	± 2.5	PASS
		VN	10	0.6	0.000848	± 2.5	PASS
		VN	20	0.8	0.001131	± 2.5	PASS
		VN	30	4.48	0.006332	± 2.5	PASS
		VN	40	4.03	0.005696	± 2.5	PASS
		VN	50	1.11	0.001569	± 2.5	PASS
	HCH	VN	-30	0.7	0.000980	± 2.5	PASS
		VN	-20	1.66	0.002323	± 2.5	PASS
		VN	-10	-1.35	-0.001889	± 2.5	PASS
		VN	0	3.86	0.005402	± 2.5	PASS
		VN	10	1.99	0.002785	± 2.5	PASS
		VN	20	4.24	0.005934	± 2.5	PASS
		VN	30	1.52	0.002127	± 2.5	PASS
		VN	40	-0.14	-0.000196	± 2.5	PASS

		VN	50	-1.37	-0.001917	± 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	3.71	0.005289	± 2.5	PASS
		VN	TN	-0.75	-0.001069	± 2.5	PASS
		VH	TN	-0.17	-0.000242	± 2.5	PASS
	MCH	VL	TN	-1.13	-0.001597	± 2.5	PASS
		VN	TN	-0.63	-0.000890	± 2.5	PASS
		VH	TN	3.46	0.004890	± 2.5	PASS
	HCH	VL	TN	0.83	0.001163	± 2.5	PASS
		VN	TN	0.27	0.000378	± 2.5	PASS
		VH	TN	1.73	0.002425	± 2.5	PASS
16QAM	LCH	VL	TN	1.11	0.001582	± 2.5	PASS
		VN	TN	1.79	0.002552	± 2.5	PASS
		VH	TN	4.8	0.006842	± 2.5	PASS
	MCH	VL	TN	0.28	0.000396	± 2.5	PASS
		VN	TN	-0.91	-0.001286	± 2.5	PASS
		VH	TN	0.43	0.000608	± 2.5	PASS
	HCH	VL	TN	0.87	0.001219	± 2.5	PASS
		VN	TN	1.01	0.001416	± 2.5	PASS
		VH	TN	4.65	0.006517	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.62	0.003735	± 2.5	PASS
		VN	-20	1.55	0.002210	± 2.5	PASS
		VN	-10	4.64	0.006614	± 2.5	PASS
		VN	0	4.83	0.006885	± 2.5	PASS
		VN	10	1.09	0.001554	± 2.5	PASS
		VN	20	1.55	0.002210	± 2.5	PASS
		VN	30	2.12	0.003022	± 2.5	PASS
		VN	40	-0.2	-0.000285	± 2.5	PASS
		VN	50	-1.92	-0.002737	± 2.5	PASS
	MCH	VN	-30	2.47	0.003491	± 2.5	PASS
		VN	-20	-0.31	-0.000438	± 2.5	PASS
		VN	-10	4.55	0.006431	± 2.5	PASS
		VN	0	-1.72	-0.002431	± 2.5	PASS

		VN	10	-1.08	-0.001527	± 2.5	PASS
		VN	20	3.33	0.004707	± 2.5	PASS
		VN	30	3.19	0.004509	± 2.5	PASS
		VN	40	3.49	0.004933	± 2.5	PASS
		VN	50	-1.68	-0.002375	± 2.5	PASS
	HCH	VN	-30	0.33	0.000463	± 2.5	PASS
		VN	-20	-0.18	-0.000252	± 2.5	PASS
		VN	-10	3.95	0.005536	± 2.5	PASS
		VN	0	4.35	0.006097	± 2.5	PASS
		VN	10	4.59	0.006433	± 2.5	PASS
		VN	20	-1.43	-0.002004	± 2.5	PASS
		VN	30	-1.41	-0.001976	± 2.5	PASS
		VN	40	-1.61	-0.002256	± 2.5	PASS
		VN	50	0.78	0.001093	± 2.5	PASS
16QAM	LCH	VN	-30	3.69	0.005260	± 2.5	PASS
		VN	-20	1.38	0.001967	± 2.5	PASS
		VN	-10	1.11	0.001582	± 2.5	PASS
		VN	0	-0.57	-0.000813	± 2.5	PASS
		VN	10	4.44	0.006329	± 2.5	PASS
		VN	20	-0.12	-0.000171	± 2.5	PASS
		VN	30	3.02	0.004305	± 2.5	PASS
		VN	40	4.1	0.005845	± 2.5	PASS
		VN	50	0.36	0.000513	± 2.5	PASS
	MCH	VN	-30	-0.31	-0.000438	± 2.5	PASS
		VN	-20	-0.53	-0.000749	± 2.5	PASS
		VN	-10	3.84	0.005428	± 2.5	PASS
		VN	0	3.74	0.005286	± 2.5	PASS
		VN	10	3.43	0.004848	± 2.5	PASS
		VN	20	-1.41	-0.001993	± 2.5	PASS
		VN	30	2.22	0.003138	± 2.5	PASS
		VN	40	0.01	0.000014	± 2.5	PASS
		VN	50	2.42	0.003420	± 2.5	PASS
	HCH	VN	-30	2.91	0.004078	± 2.5	PASS
		VN	-20	2.17	0.003041	± 2.5	PASS
		VN	-10	4.83	0.006769	± 2.5	PASS
		VN	0	-0.7	-0.000981	± 2.5	PASS
		VN	10	-0.51	-0.000715	± 2.5	PASS
		VN	20	4.91	0.006882	± 2.5	PASS
		VN	30	1.57	0.002200	± 2.5	PASS
		VN	40	2.44	0.003420	± 2.5	PASS
		VN	50	-1.51	-0.002116	± 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	2.14	0.003040	± 2.5	PASS
		VN	TN	-0.72	-0.001023	± 2.5	PASS
		VH	TN	3.73	0.005298	± 2.5	PASS
	MCH	VL	TN	-1.41	-0.001993	± 2.5	PASS
		VN	TN	2	0.002827	± 2.5	PASS
		VH	TN	2.33	0.003293	± 2.5	PASS
	HCH	VL	TN	4.58	0.006442	± 2.5	PASS
		VN	TN	2.55	0.003586	± 2.5	PASS
		VH	TN	4.4	0.006188	± 2.5	PASS
16QAM	LCH	VL	TN	-1.94	-0.002756	± 2.5	PASS
		VN	TN	-1.36	-0.001932	± 2.5	PASS
		VH	TN	-0.32	-0.000455	± 2.5	PASS
	MCH	VL	TN	2.12	0.002996	± 2.5	PASS
		VN	TN	-0.75	-0.001060	± 2.5	PASS
		VH	TN	-1.7	-0.002403	± 2.5	PASS
	HCH	VL	TN	1.75	0.002461	± 2.5	PASS
		VN	TN	0.71	0.000999	± 2.5	PASS
		VH	TN	3.29	0.004627	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.35	-0.000497	± 2.5	PASS
		VN	-20	4.64	0.006591	± 2.5	PASS
		VN	-10	3.01	0.004276	± 2.5	PASS
		VN	0	0.8	0.001136	± 2.5	PASS
		VN	10	-0.01	-0.000014	± 2.5	PASS
		VN	20	2.48	0.003523	± 2.5	PASS
		VN	30	0.61	0.000866	± 2.5	PASS
		VN	40	-0.91	-0.001293	± 2.5	PASS
		VN	50	4.24	0.006023	± 2.5	PASS
	MCH	VN	-30	-0.27	-0.000382	± 2.5	PASS
		VN	-20	3.68	0.005201	± 2.5	PASS
		VN	-10	-0.84	-0.001187	± 2.5	PASS
		VN	0	3.54	0.005004	± 2.5	PASS
		VN	10	3.02	0.004269	± 2.5	PASS
		VN	20	3.92	0.005541	± 2.5	PASS

		VN	30	3.09	0.004367	± 2.5	PASS
		VN	40	1.12	0.001583	± 2.5	PASS
		VN	50	1.21	0.001710	± 2.5	PASS
	HCH	VN	-30	0.82	0.001153	± 2.5	PASS
		VN	-20	-1.31	-0.001842	± 2.5	PASS
		VN	-10	-1.44	-0.002025	± 2.5	PASS
		VN	0	3.07	0.004318	± 2.5	PASS
		VN	10	-0.68	-0.000956	± 2.5	PASS
		VN	20	0.43	0.000605	± 2.5	PASS
		VN	30	-0.99	-0.001392	± 2.5	PASS
		VN	40	2.19	0.003080	± 2.5	PASS
		VN	50	2.55	0.003586	± 2.5	PASS
16QAM	LCH	VN	-30	2.78	0.003949	± 2.5	PASS
		VN	-20	2.63	0.003736	± 2.5	PASS
		VN	-10	4.45	0.006321	± 2.5	PASS
		VN	0	4.16	0.005909	± 2.5	PASS
		VN	10	1.57	0.002230	± 2.5	PASS
		VN	20	2.36	0.003352	± 2.5	PASS
		VN	30	0.19	0.000270	± 2.5	PASS
		VN	40	2.27	0.003224	± 2.5	PASS
		VN	50	3.35	0.004759	± 2.5	PASS
	MCH	VN	-30	2.86	0.004042	± 2.5	PASS
		VN	-20	-1.97	-0.002784	± 2.5	PASS
		VN	-10	2.38	0.003364	± 2.5	PASS
		VN	0	1.79	0.002530	± 2.5	PASS
		VN	10	4.07	0.005753	± 2.5	PASS
		VN	20	4.78	0.006756	± 2.5	PASS
		VN	30	-0.51	-0.000721	± 2.5	PASS
		VN	40	3.21	0.004537	± 2.5	PASS
		VN	50	-1.39	-0.001965	± 2.5	PASS
	HCH	VN	-30	-1.7	-0.002391	± 2.5	PASS
		VN	-20	0.09	0.000127	± 2.5	PASS
		VN	-10	4.76	0.006695	± 2.5	PASS
		VN	0	4.15	0.005837	± 2.5	PASS
		VN	10	-1.06	-0.001491	± 2.5	PASS
		VN	20	2.17	0.003052	± 2.5	PASS
		VN	30	-0.66	-0.000928	± 2.5	PASS
		VN	40	-1.53	-0.002152	± 2.5	PASS
		VN	50	2.22	0.003122	± 2.5	PASS