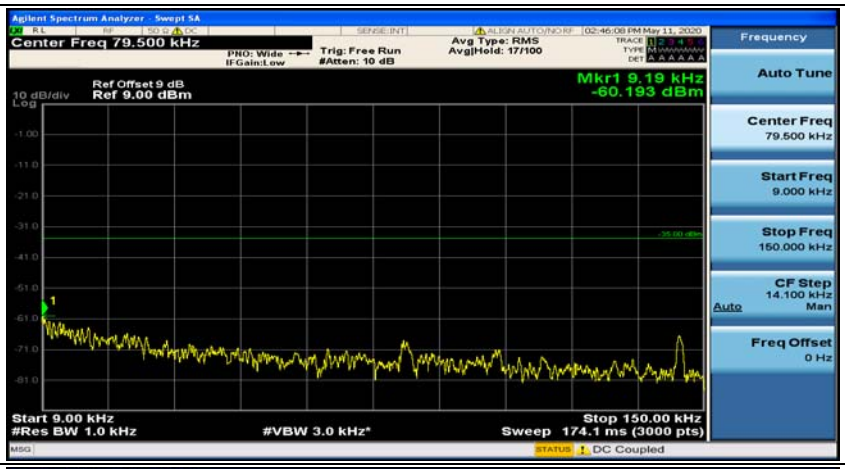
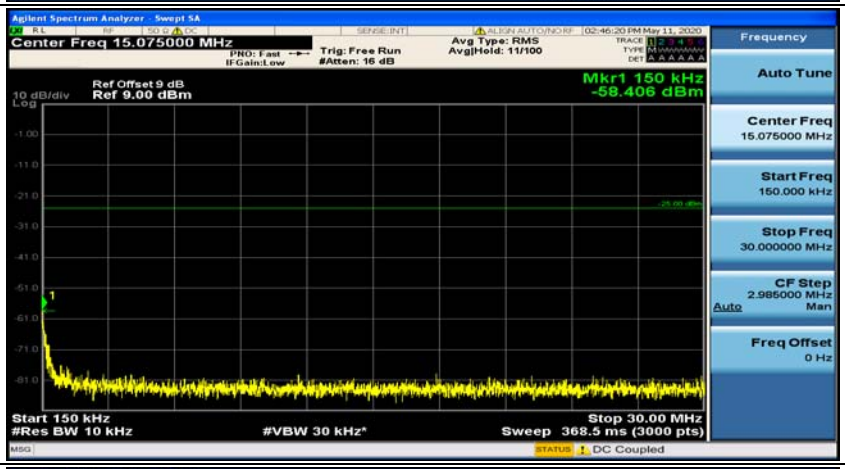
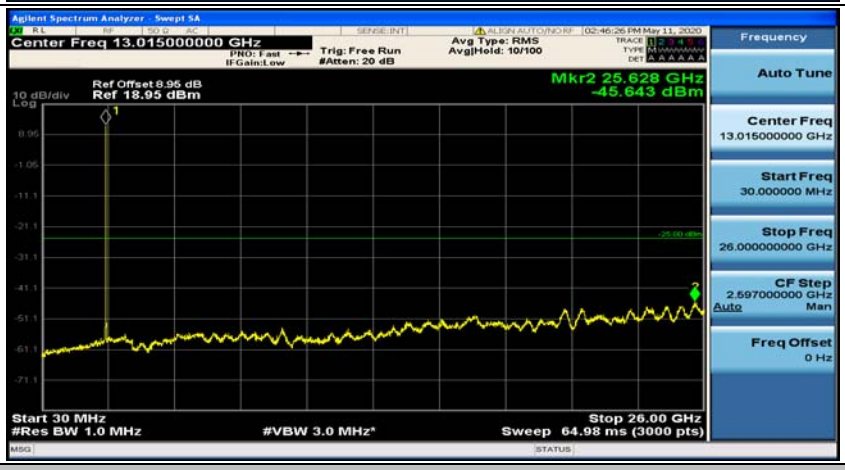
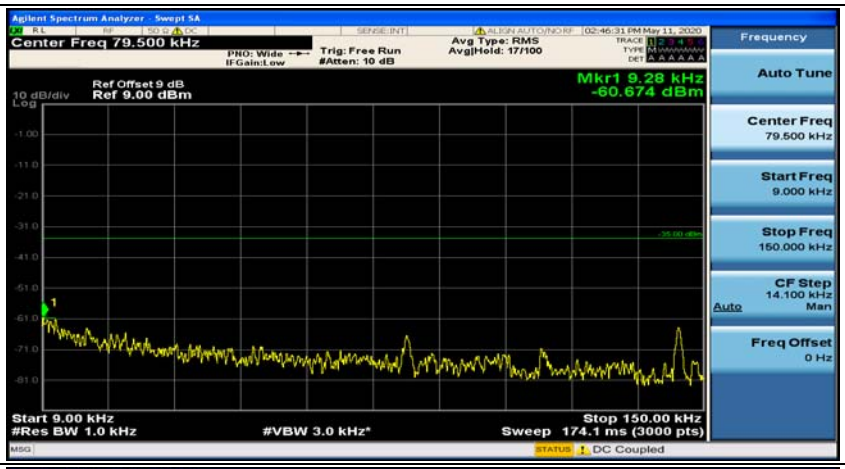
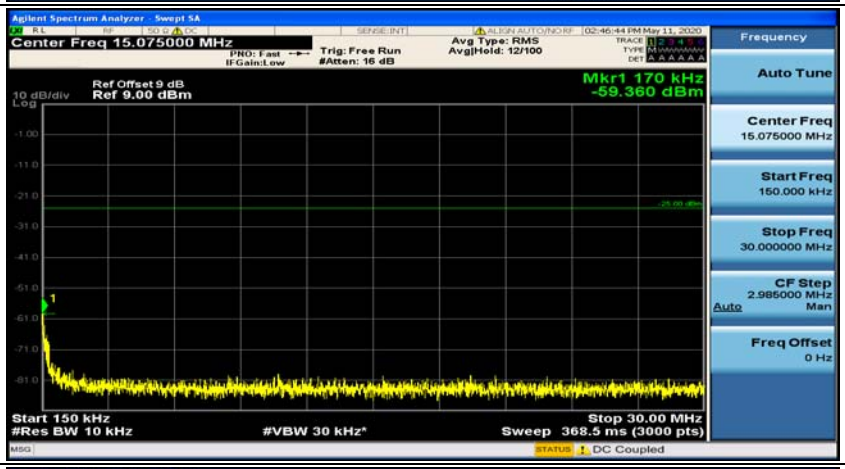


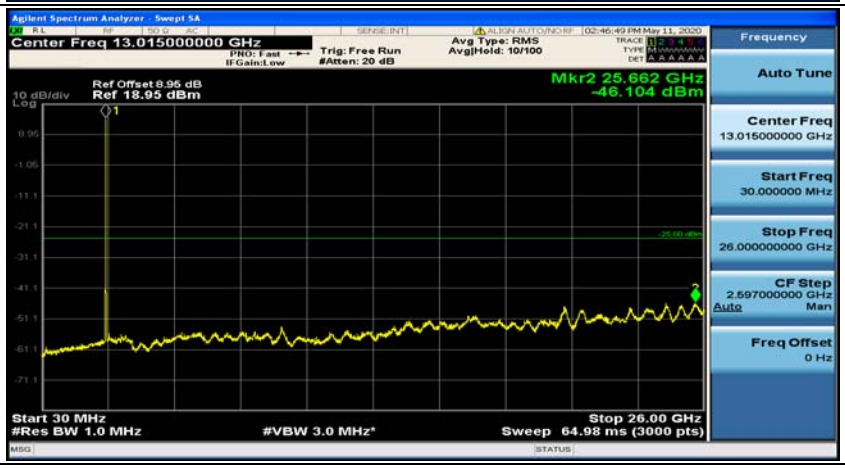


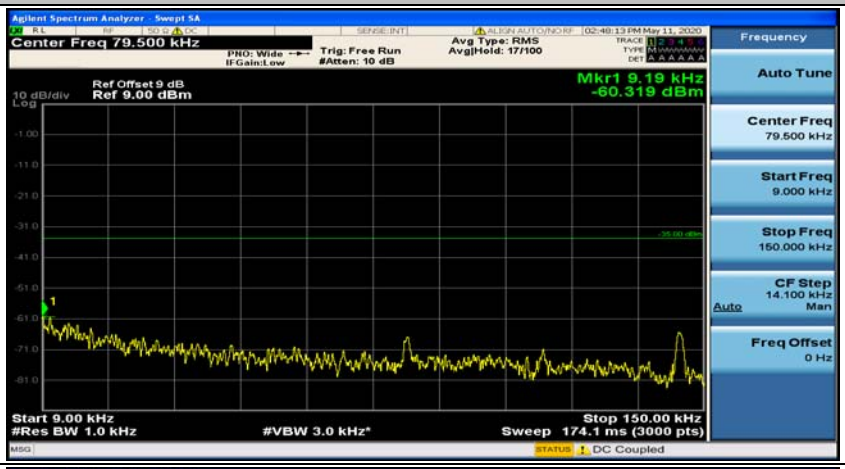
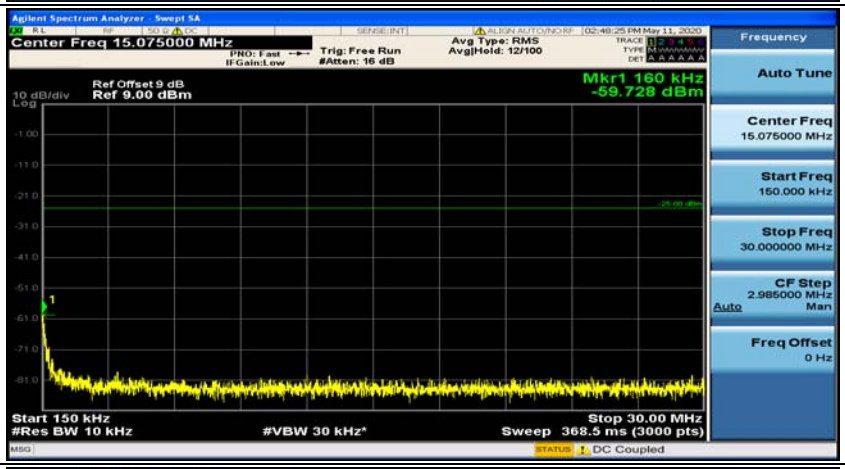
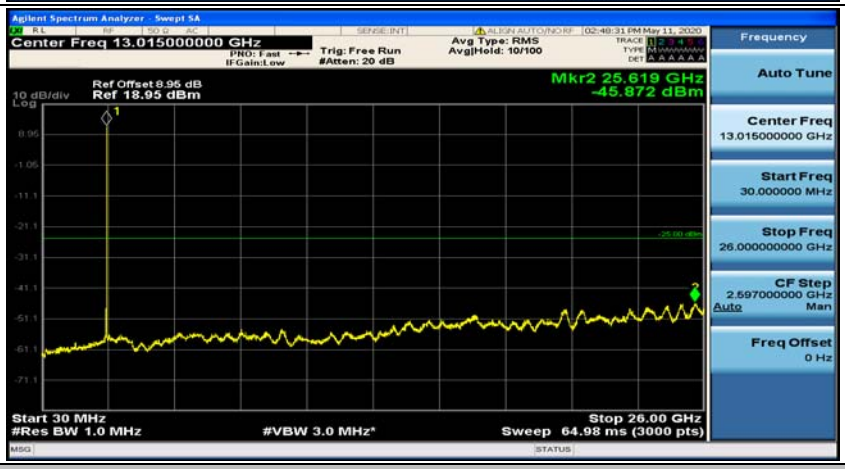


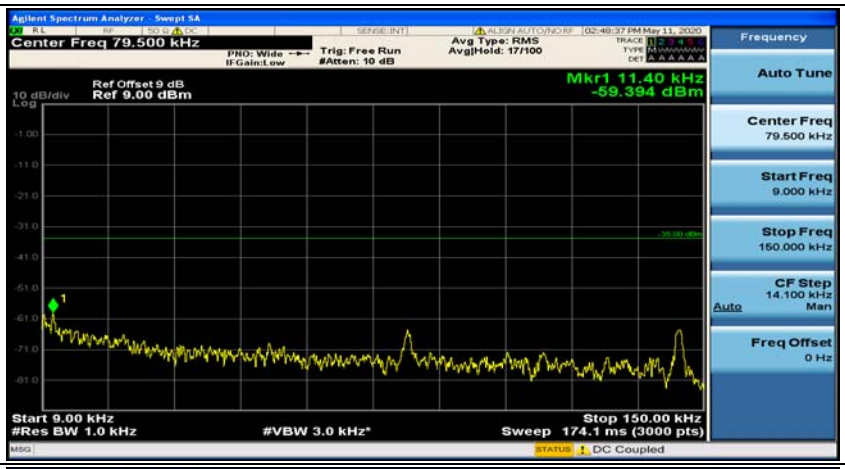
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

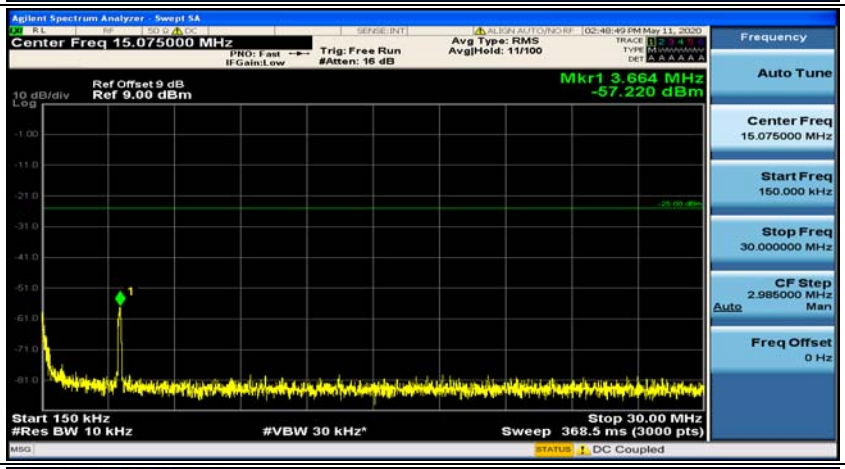

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:46:31 PM May 11, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 9.28 kHz
-60.674 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

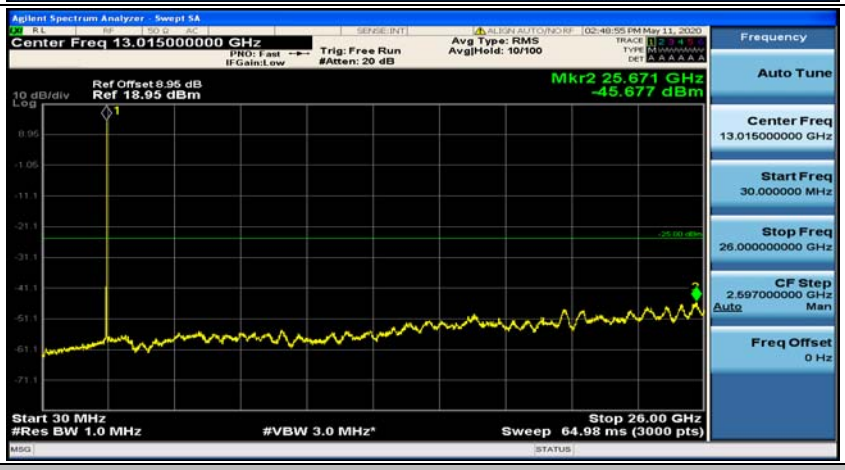

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
02:46:44 PM May 11, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 170 kHz
-59.360 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
02:46:49 PM May 11, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.662 GHz
-46.104 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

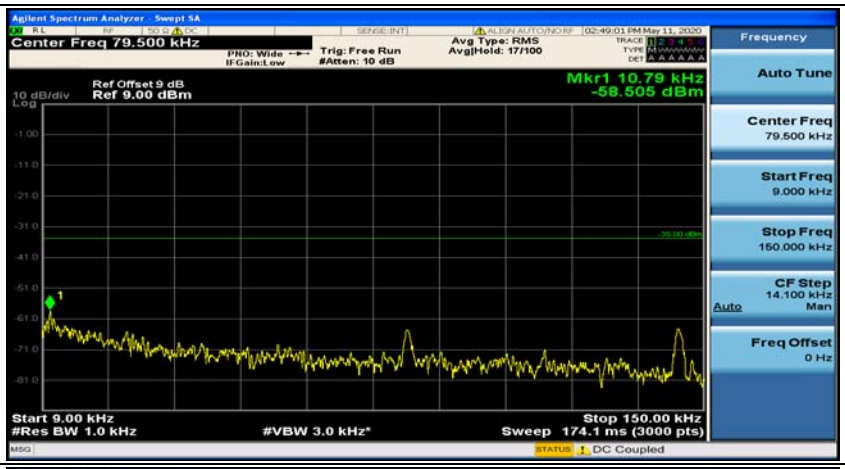
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24

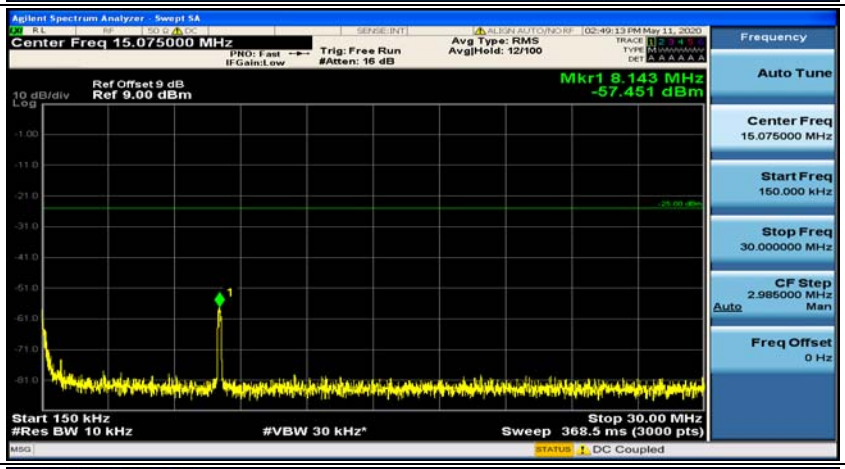


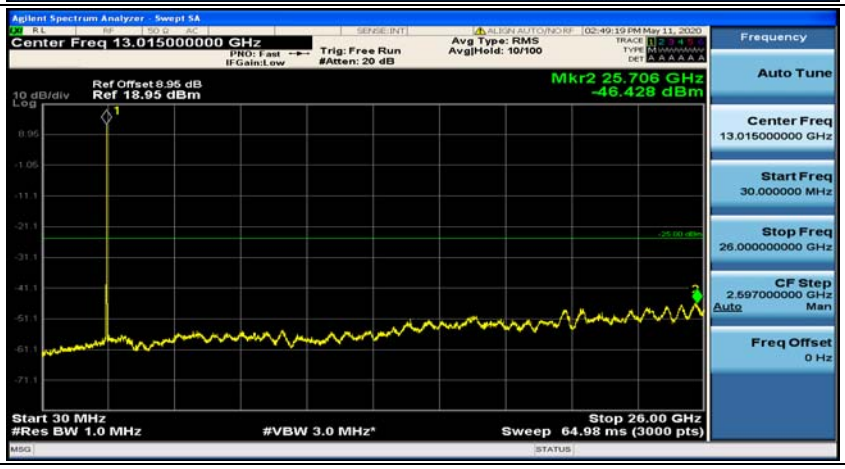




Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49

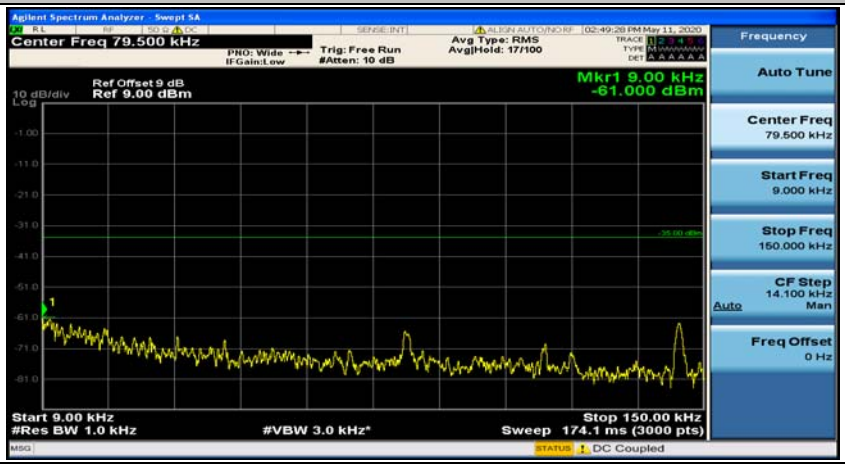

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 10.79 kHz
-58.505 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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

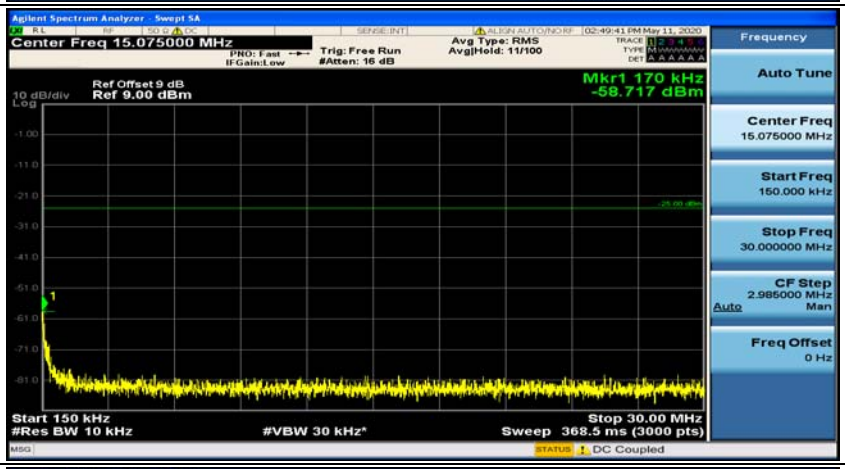

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 8.143 MHz
-57.451 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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

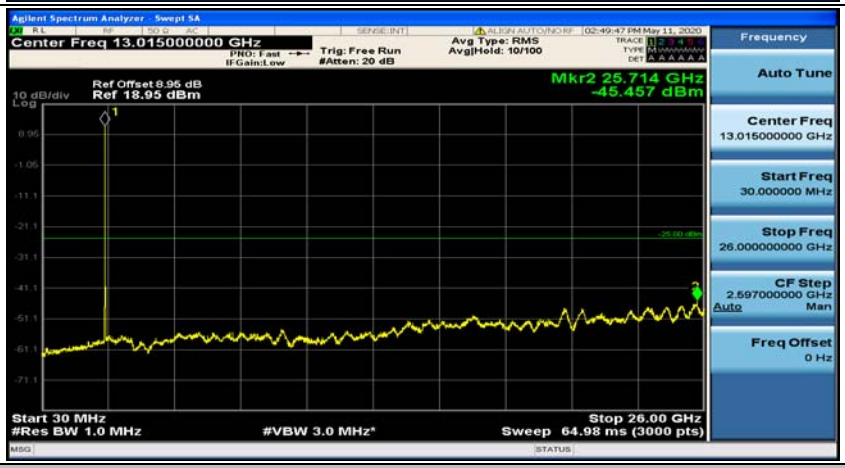

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.706 GHz
-46.428 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
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: 15 MHz

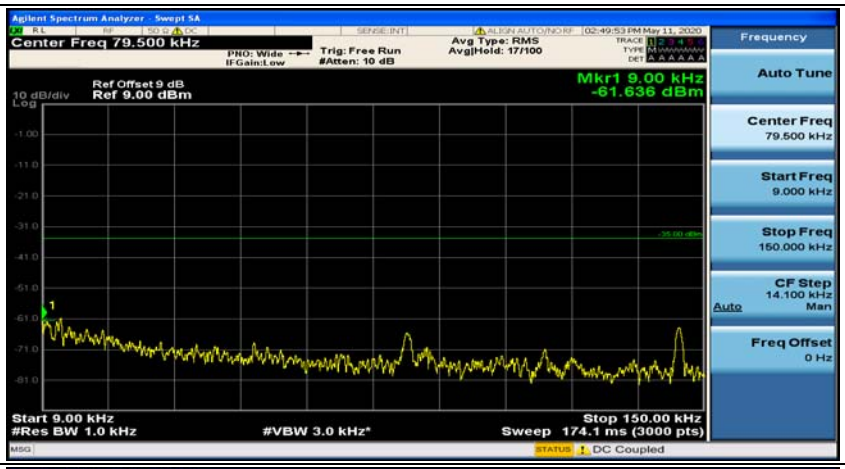
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#0

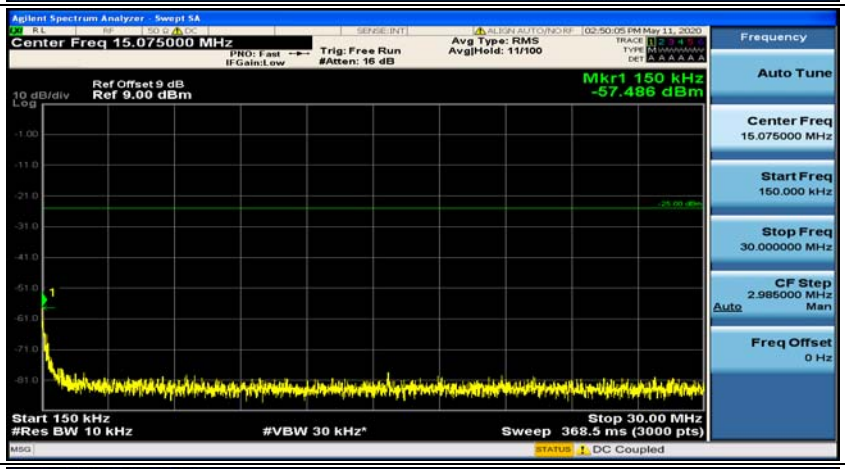


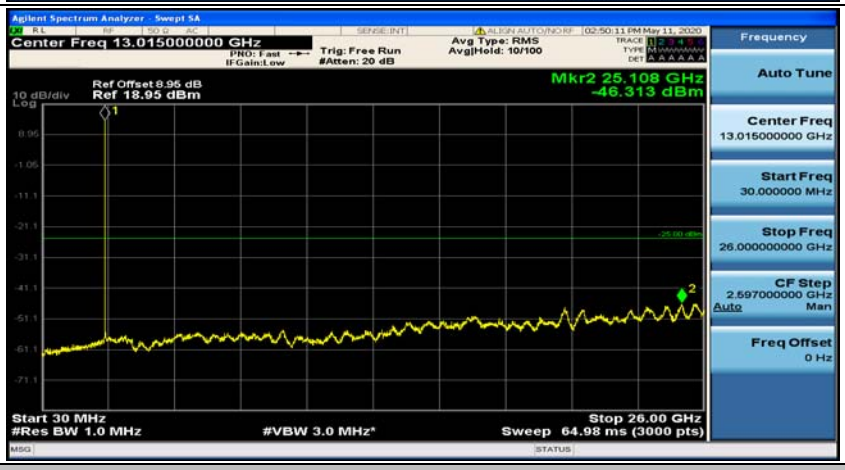




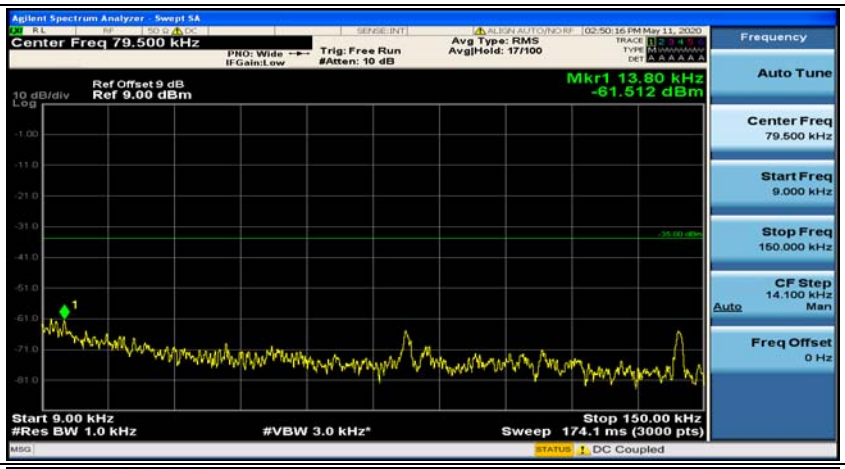
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#37

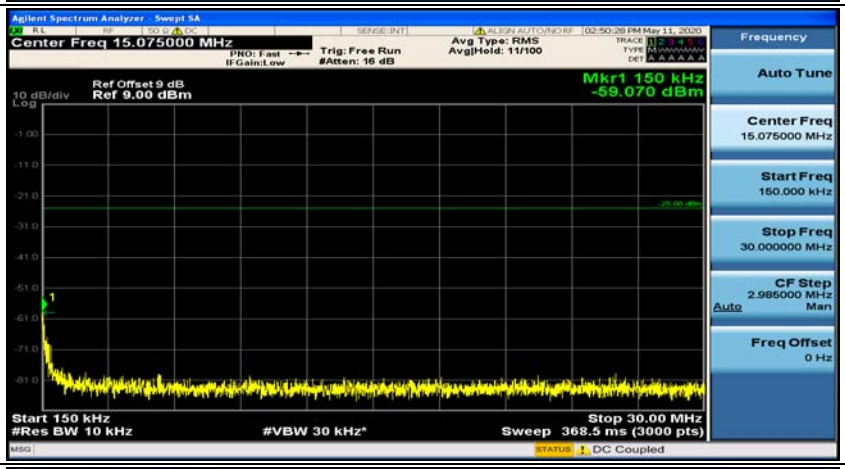


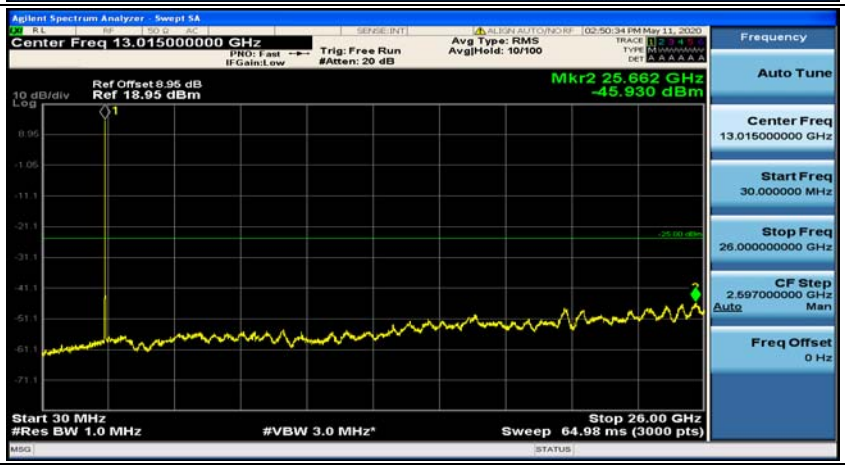




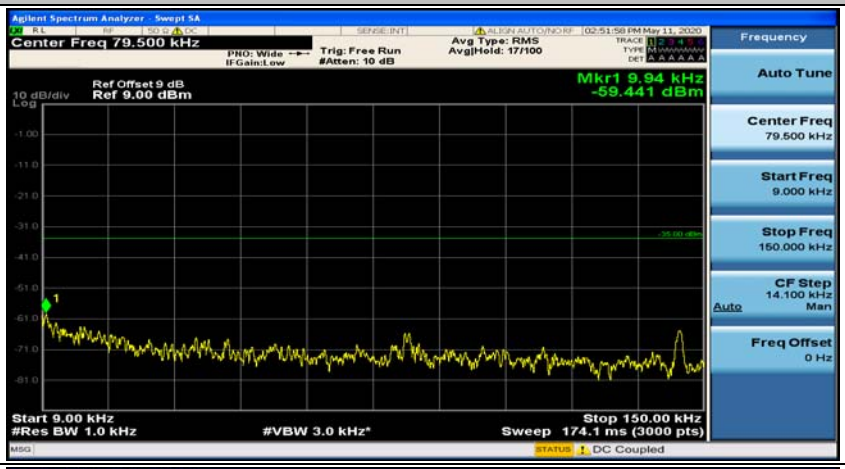
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#74

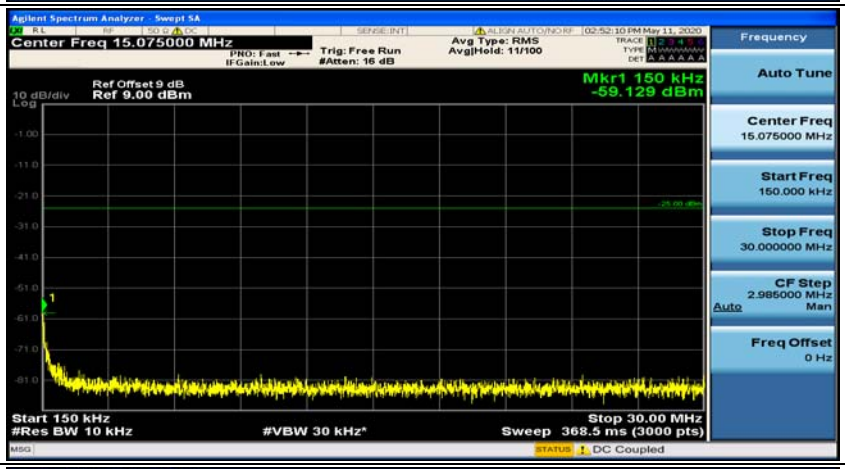

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 13.80 kHz
-61.512 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-59.070 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

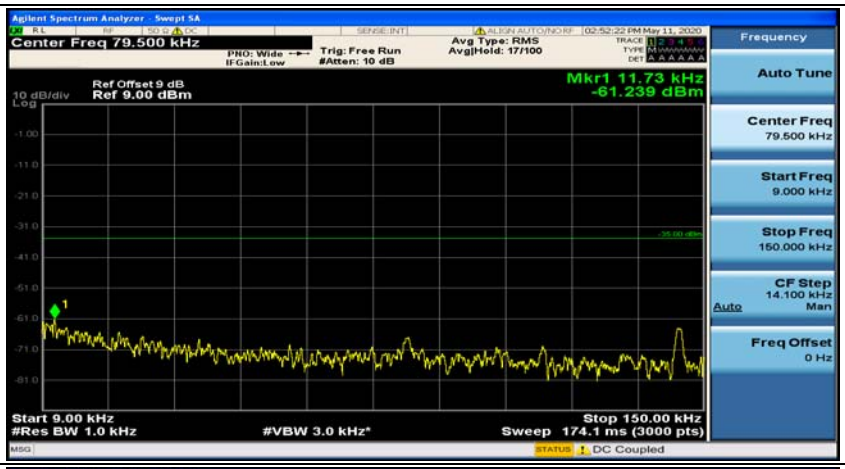

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.662 GHz
-45.930 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
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

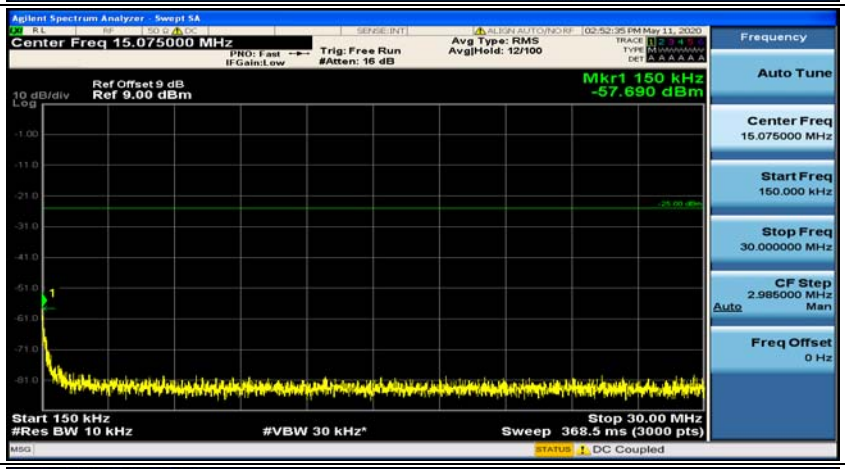
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0



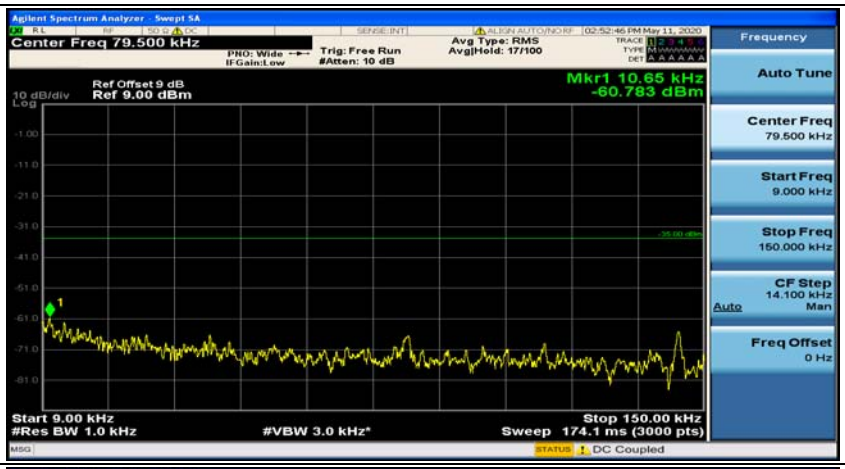


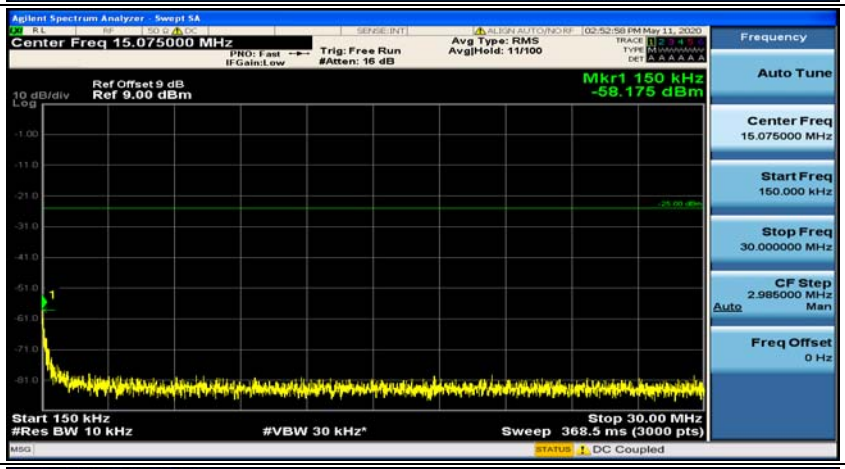
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#37





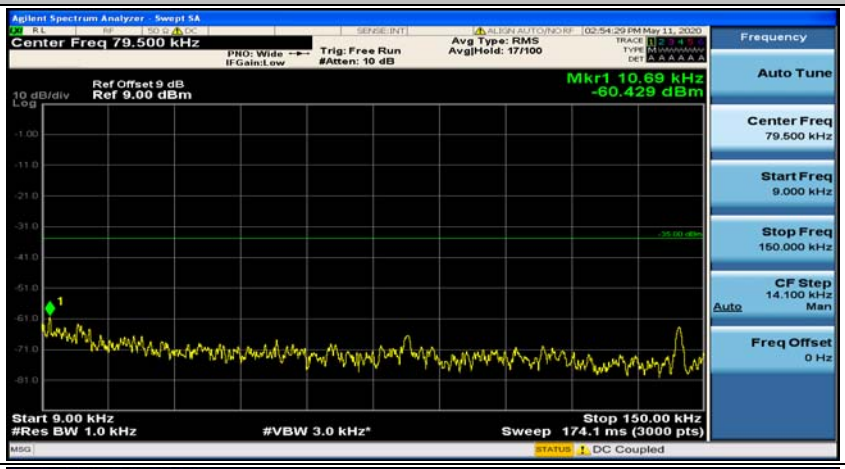
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#74

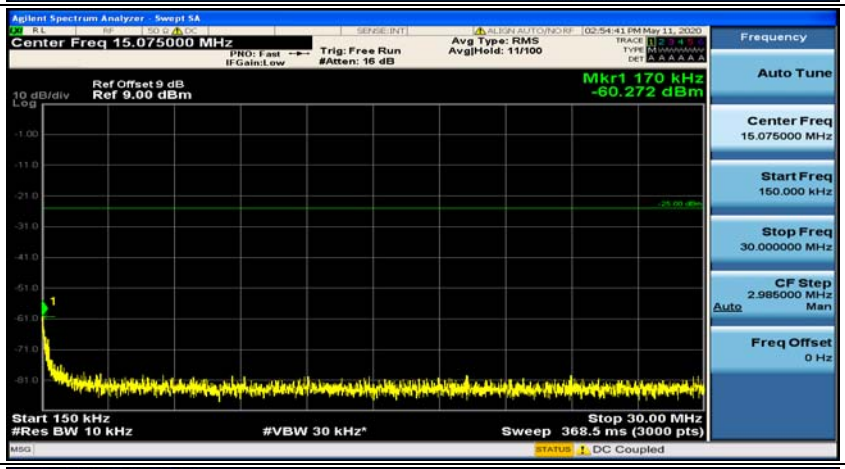

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 10.65 kHz
-60.783 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-58.175 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

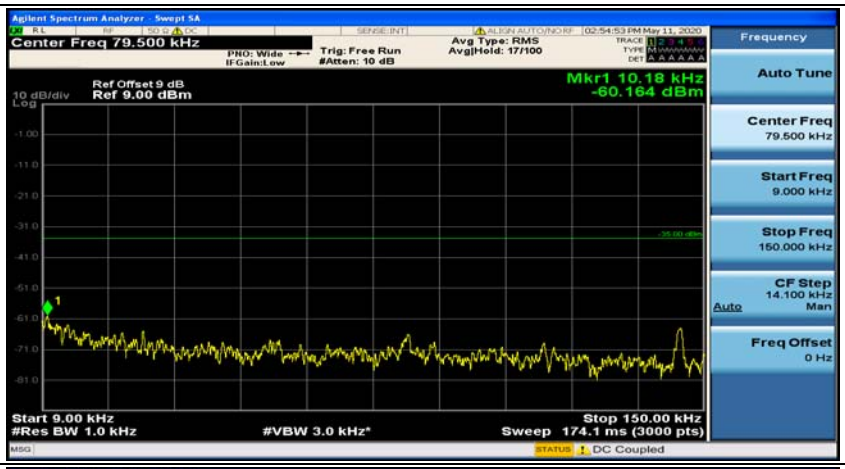
Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.636 GHz
-45.930 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
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

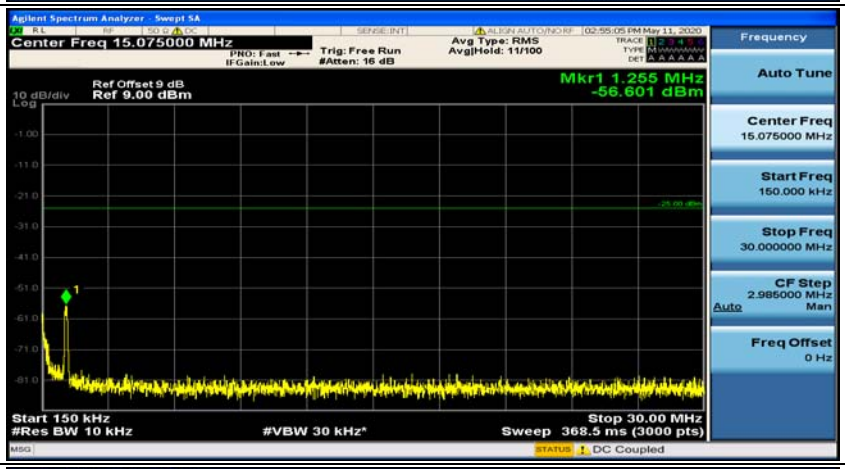
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0

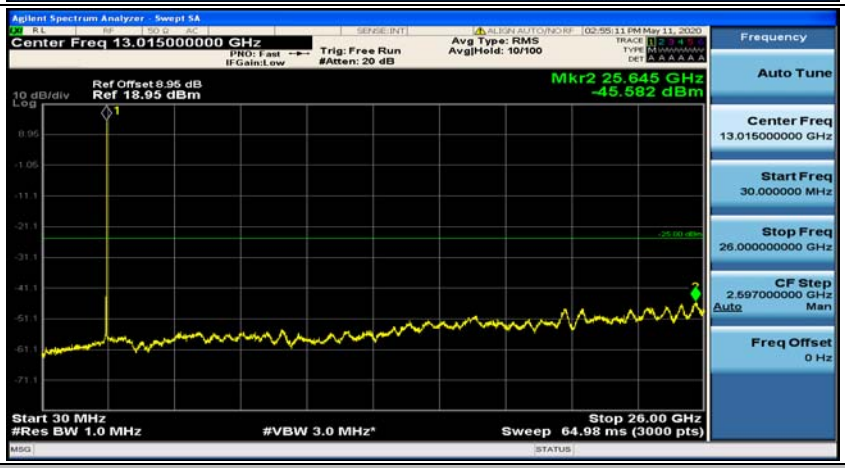




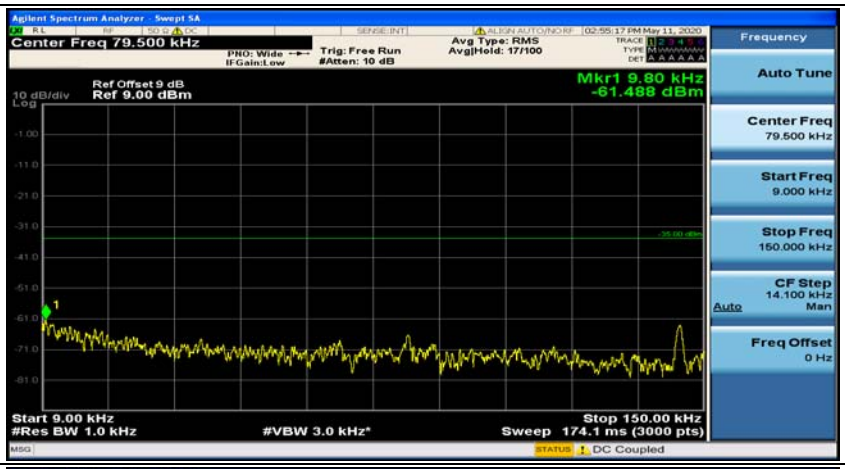
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37

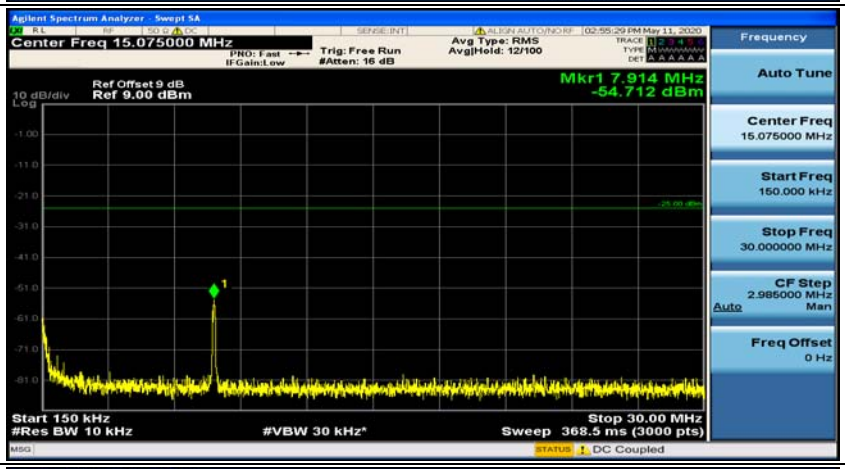


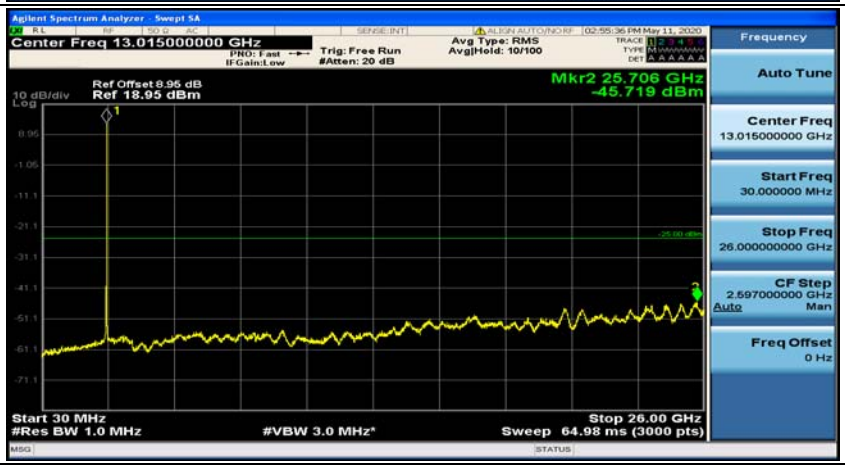


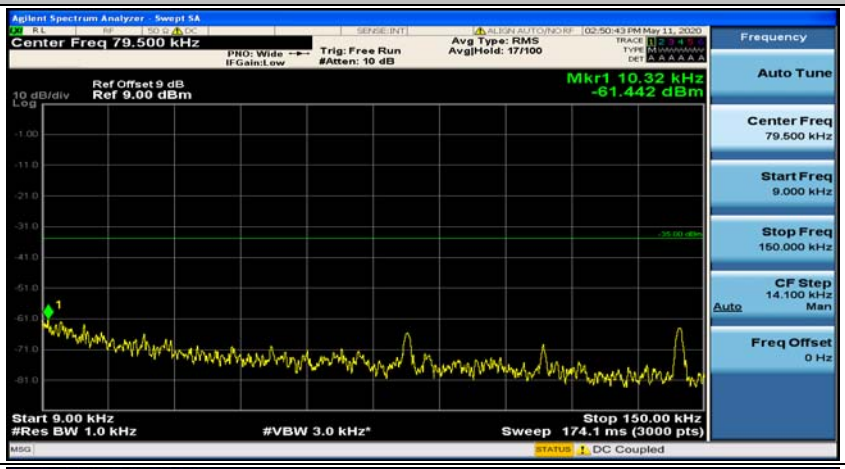
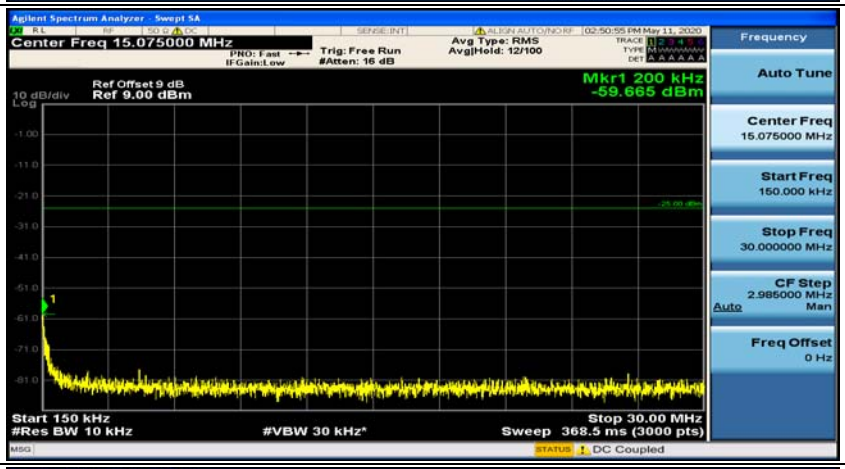
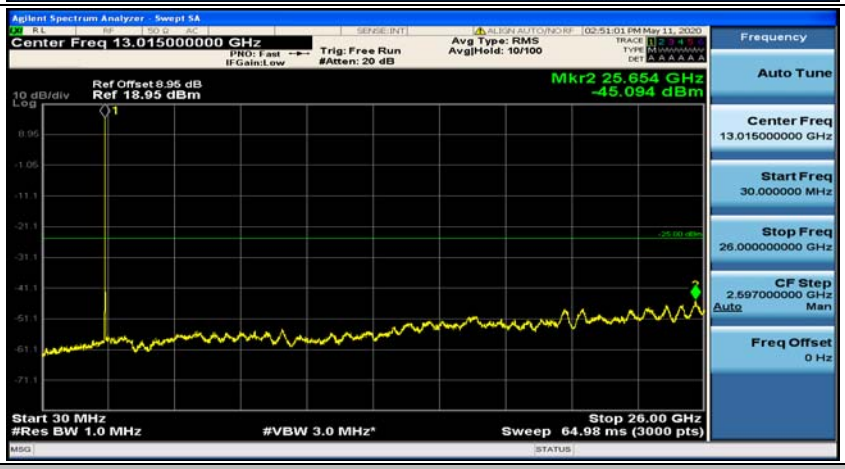


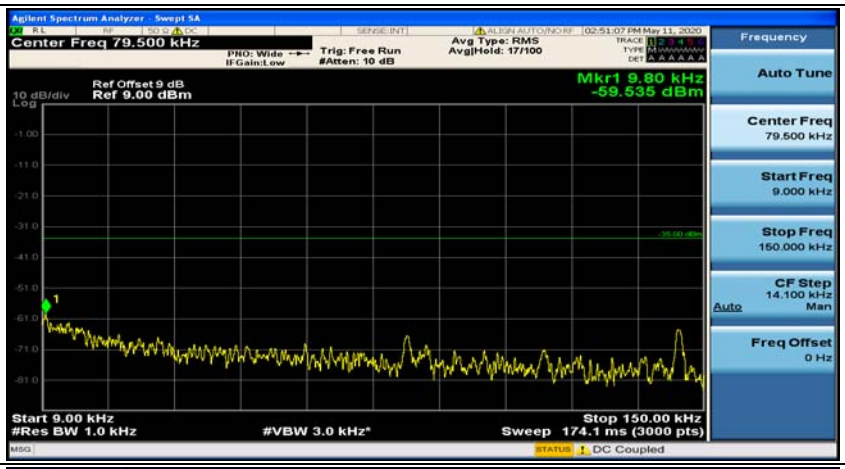
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#74

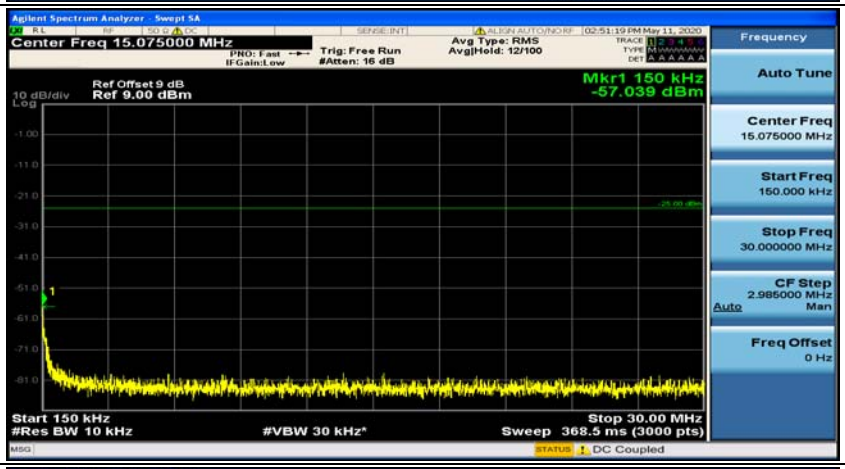

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 9.80 kHz
-61.488 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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: 12/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 7.914 MHz
-54.712 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

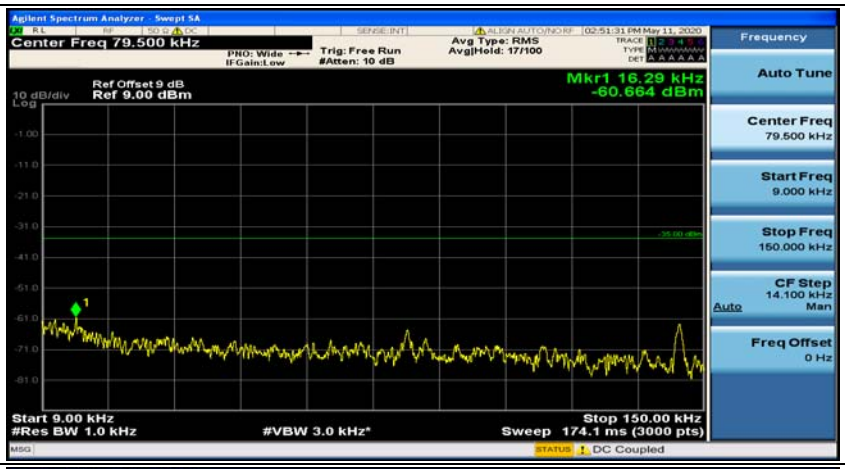

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.706 GHz
-45.719 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
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

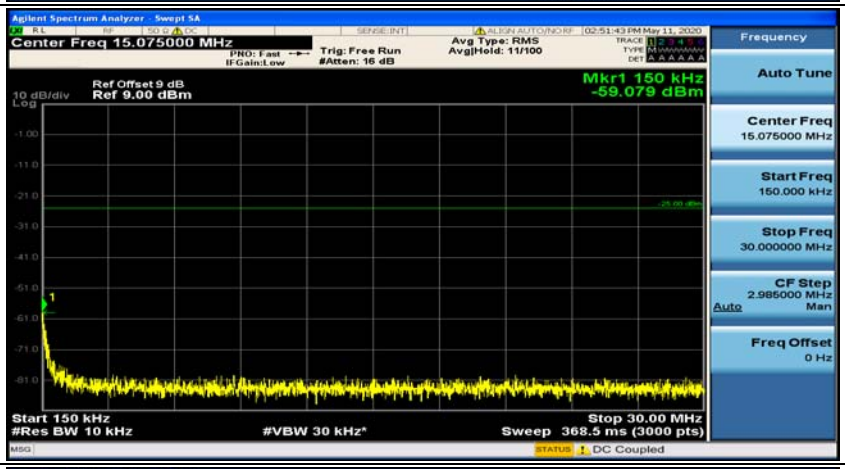
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#37





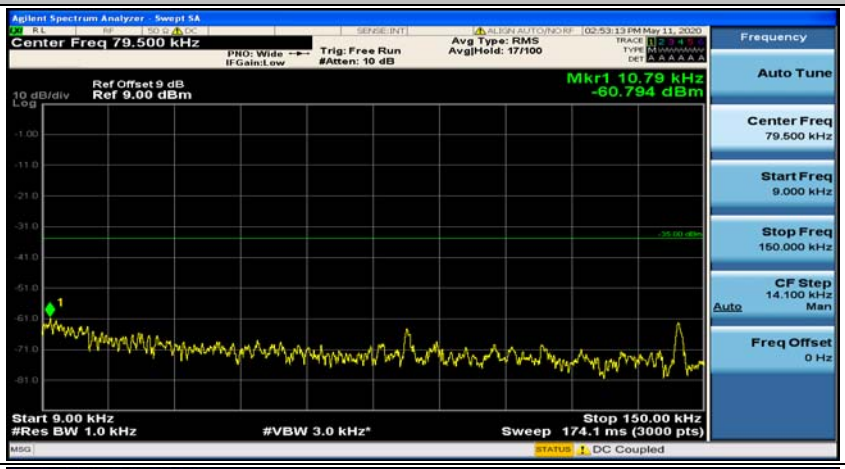
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#74

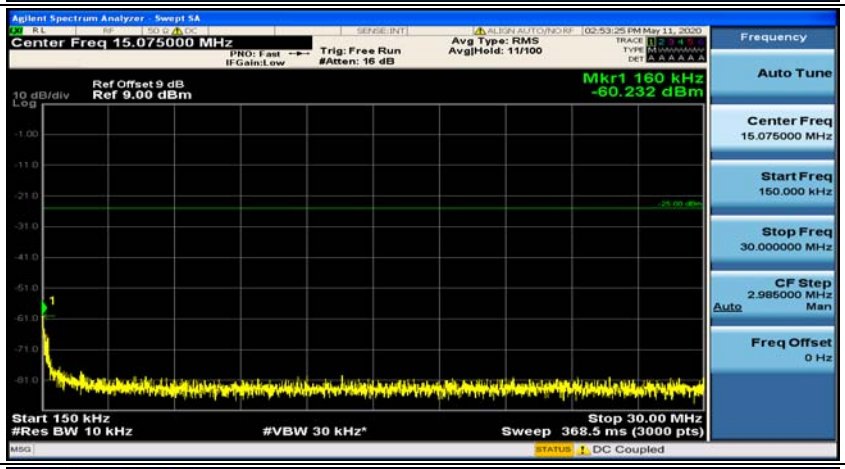

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:51:31 PM May 11, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 16.29 kHz
-60.664 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

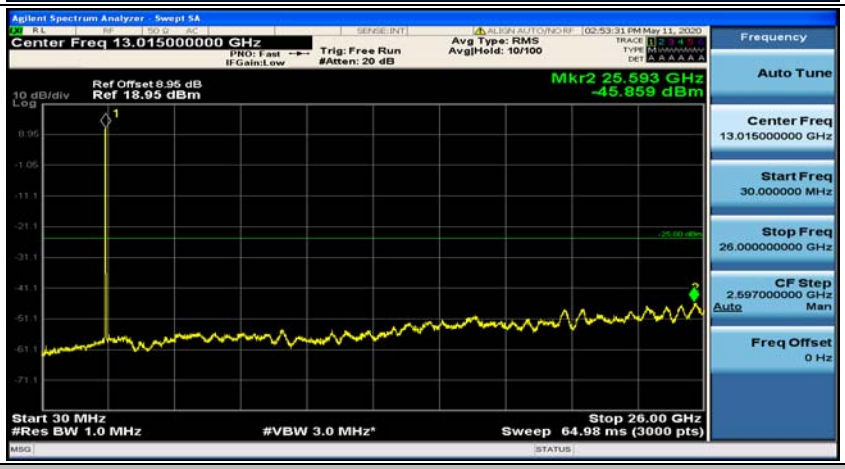

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
02:51:43 PM May 11, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-59.079 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
02:51:49 PM May 11, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.636 GHz
-46.072 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

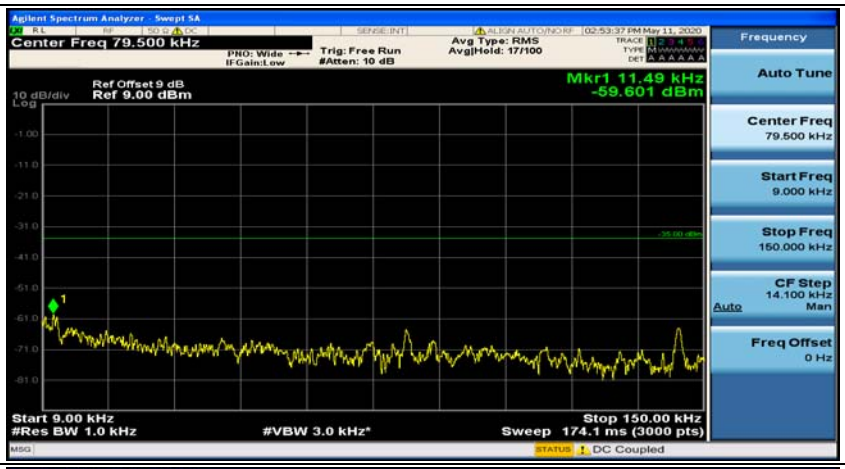
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

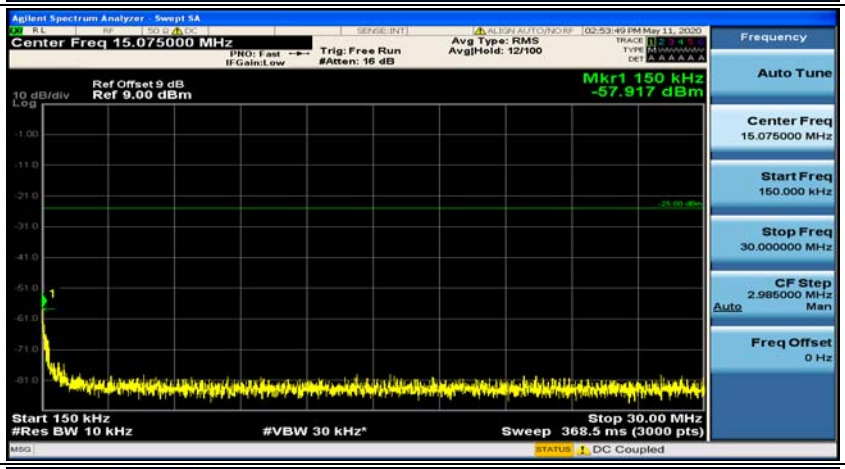




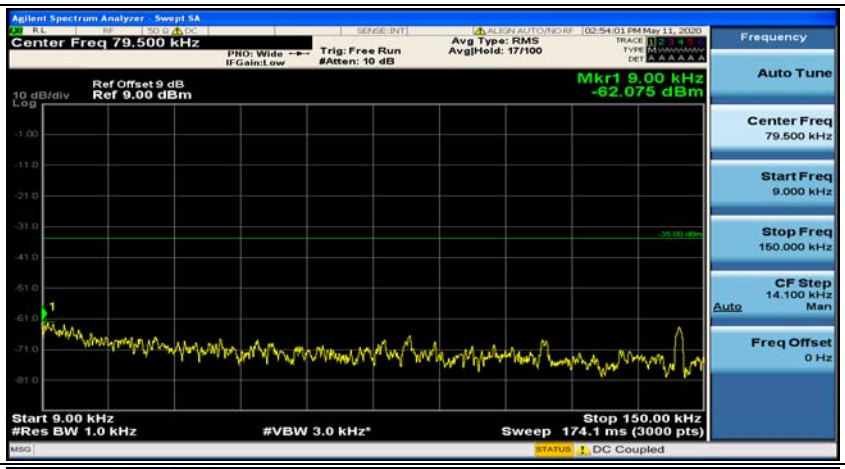


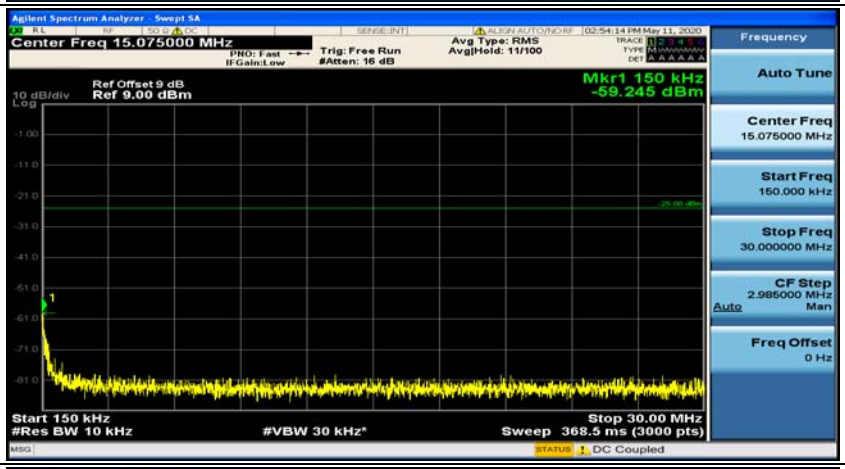
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37

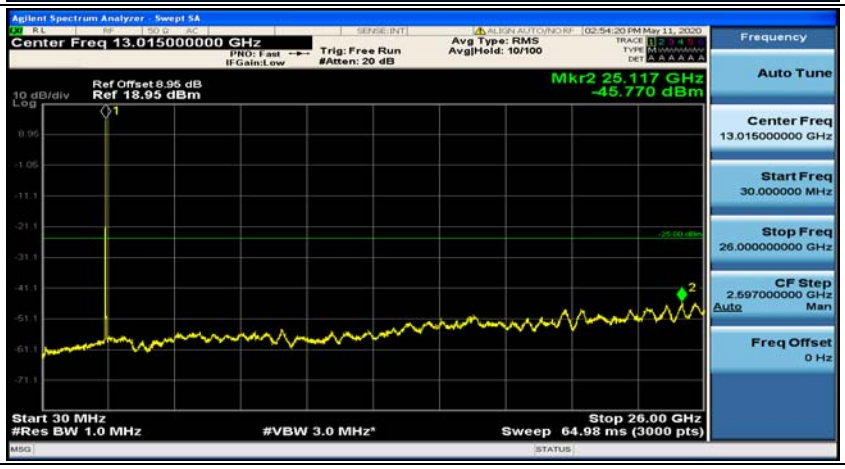




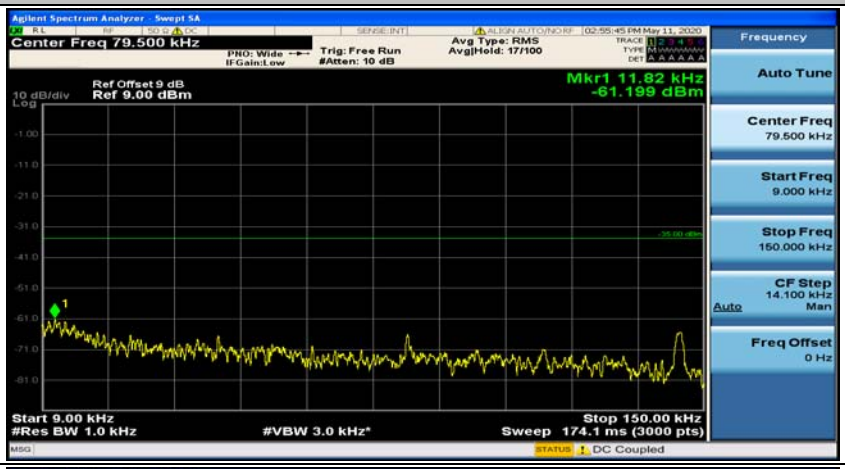
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#74

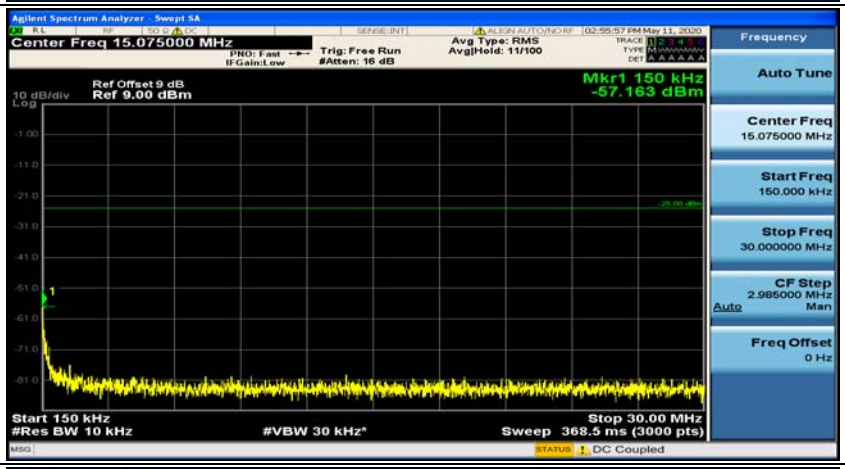

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:54:01 PM May 11, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 9.00 kHz
-62.075 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

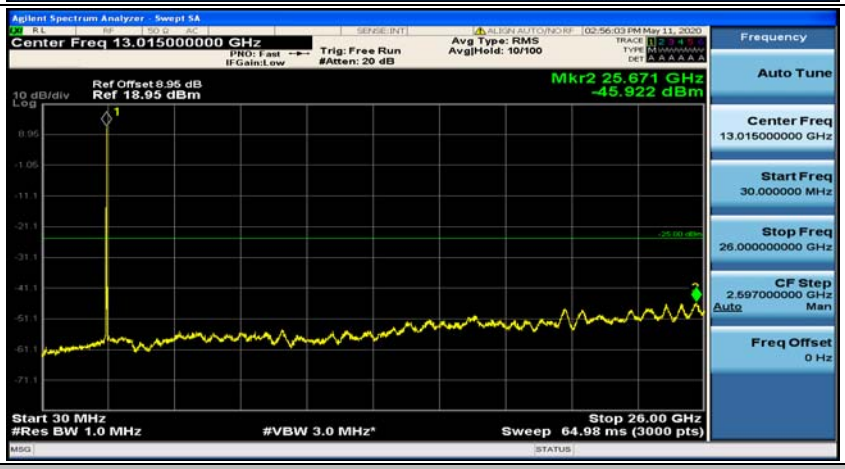

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
02:54:14 PM May 11, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-59.245 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
02:54:20 PM May 11, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.117 GHz
-45.770 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

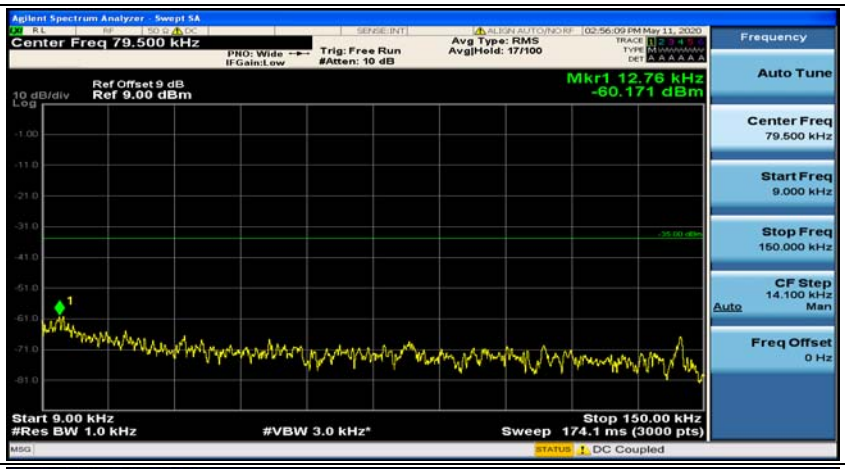
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0

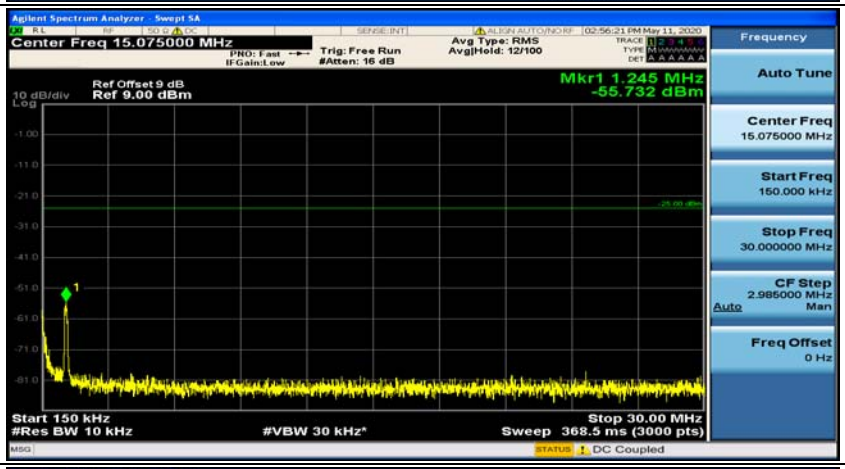


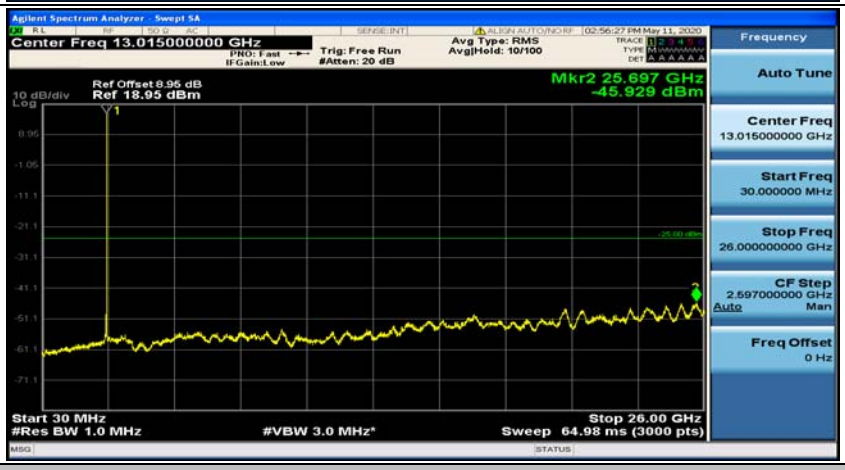




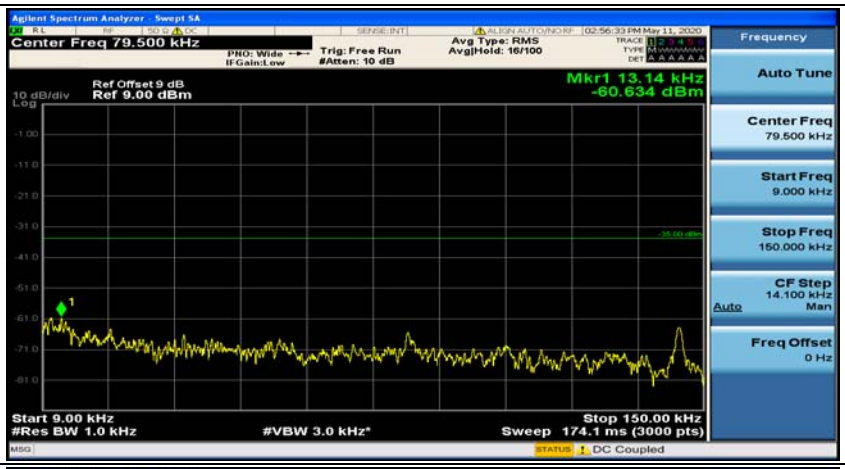
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#37

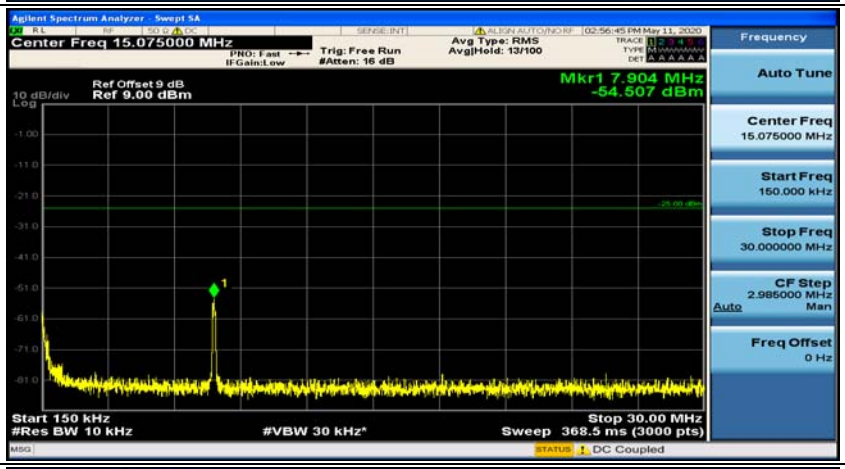


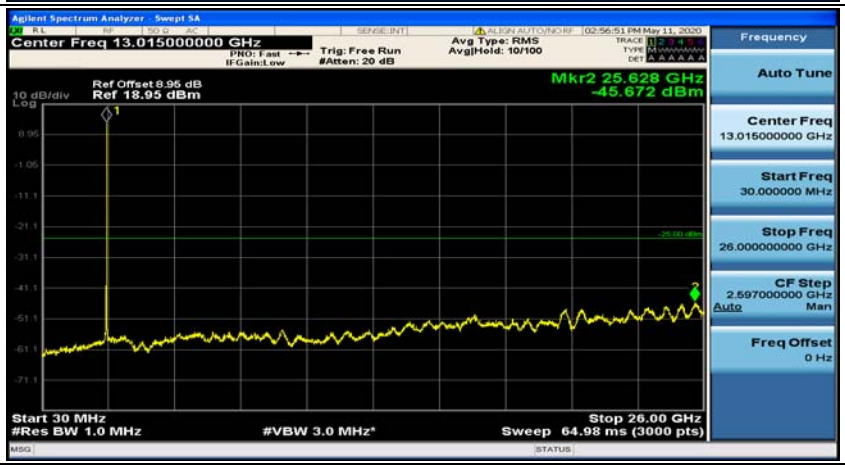




(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#74

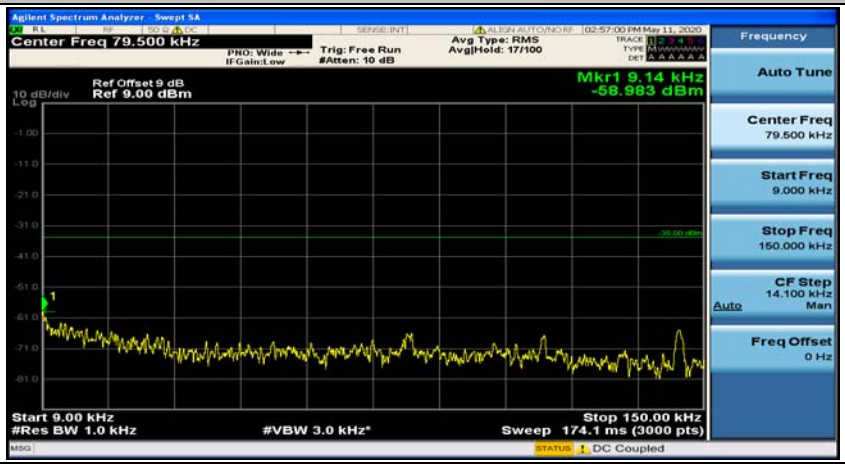

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 16/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 13.14 kHz
-60.634 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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

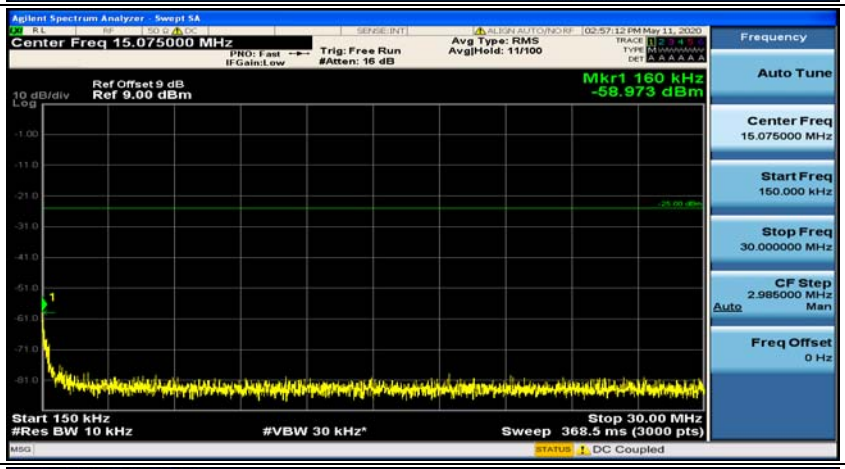

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 13/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 7.904 MHz
-54.507 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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

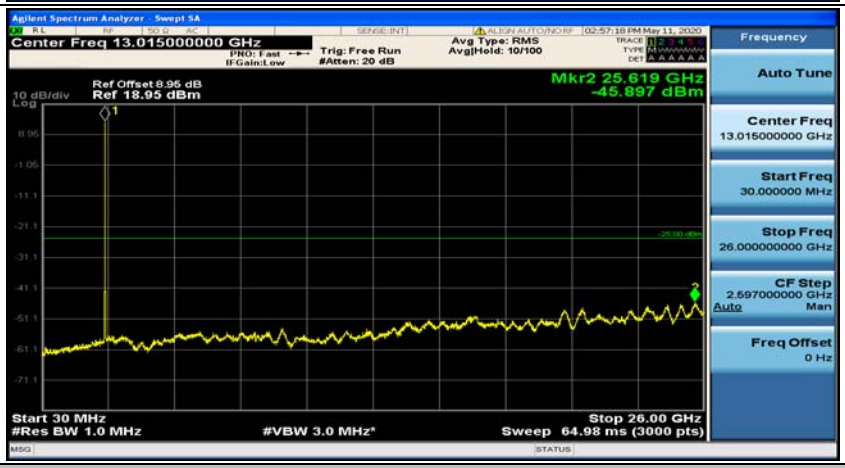

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.628 GHz
-45.672 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
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: 20 MHz

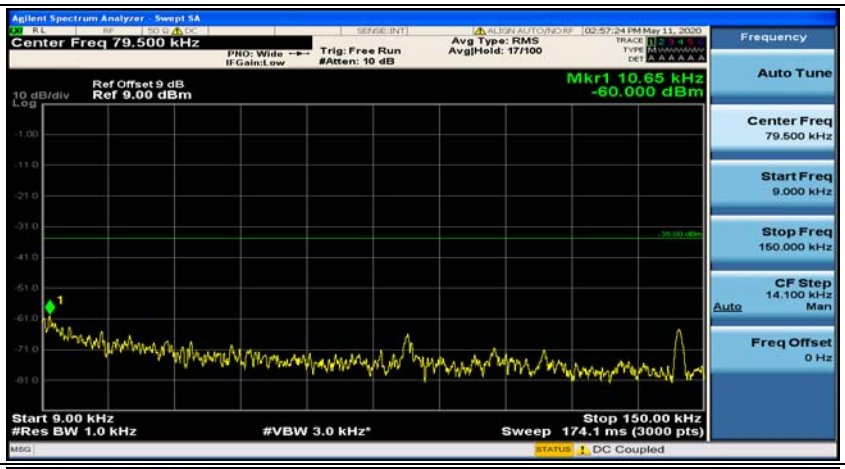
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#0

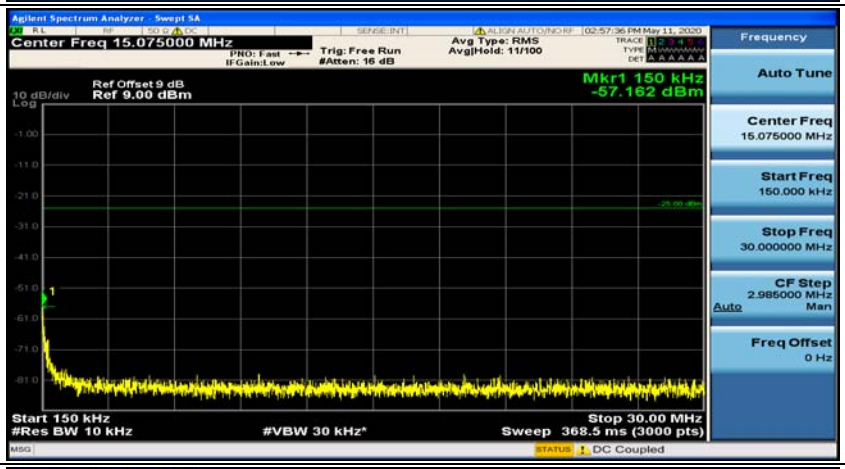




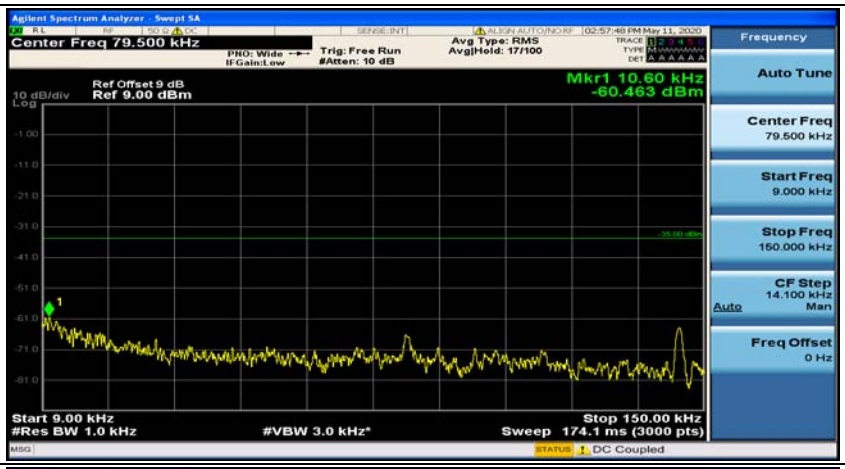


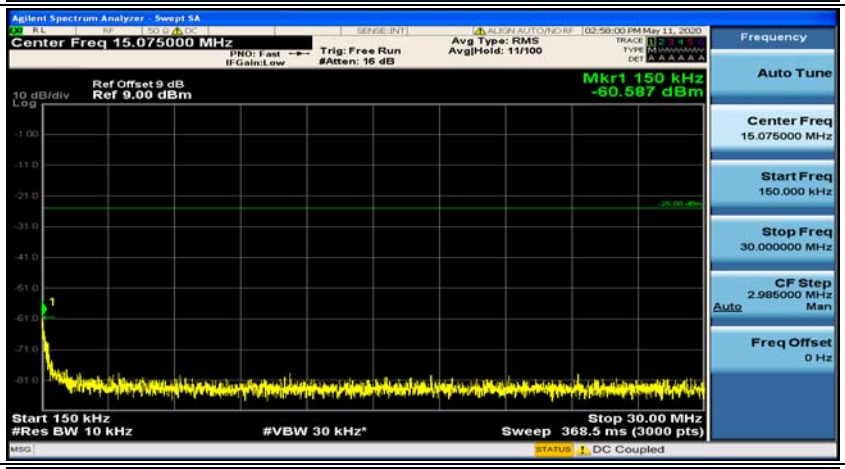
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#49

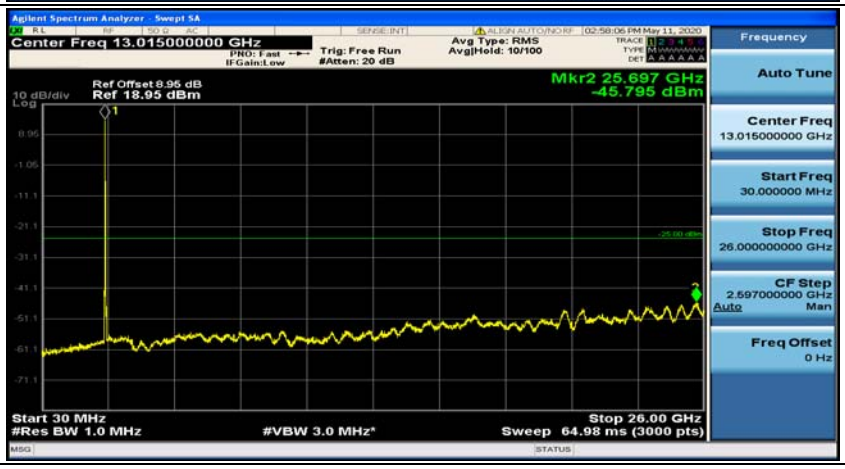




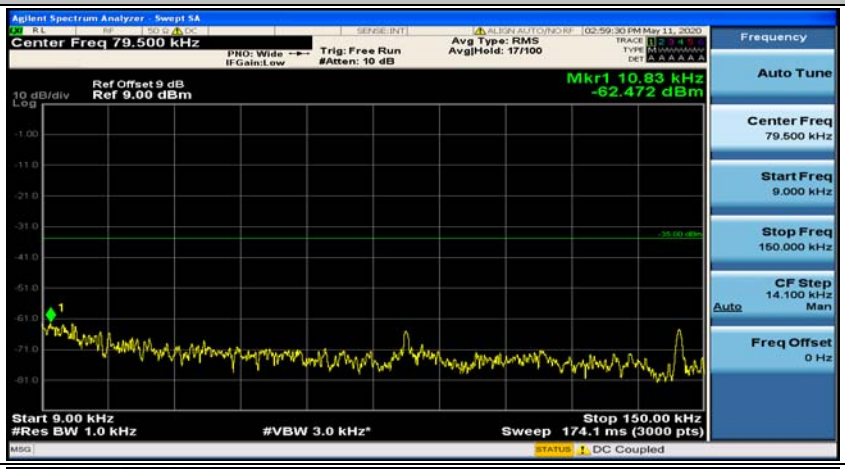
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#99

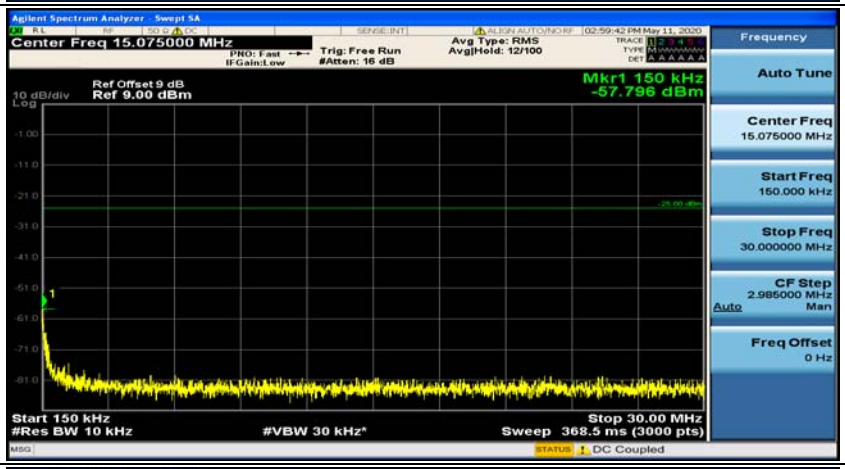

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 10.60 kHz
-60.463 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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

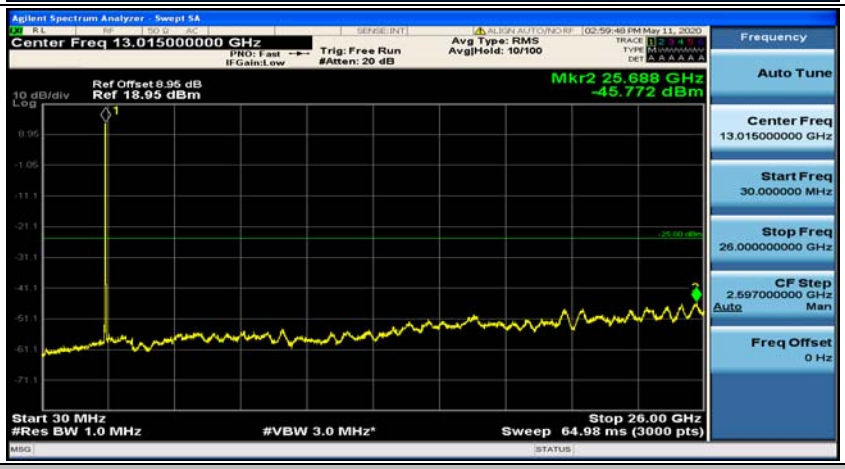

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-60.587 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.697 GHz
-45.795 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

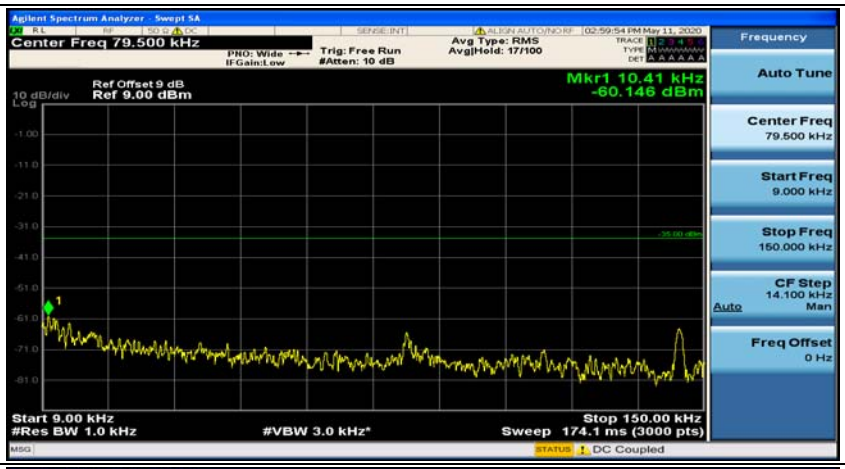
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

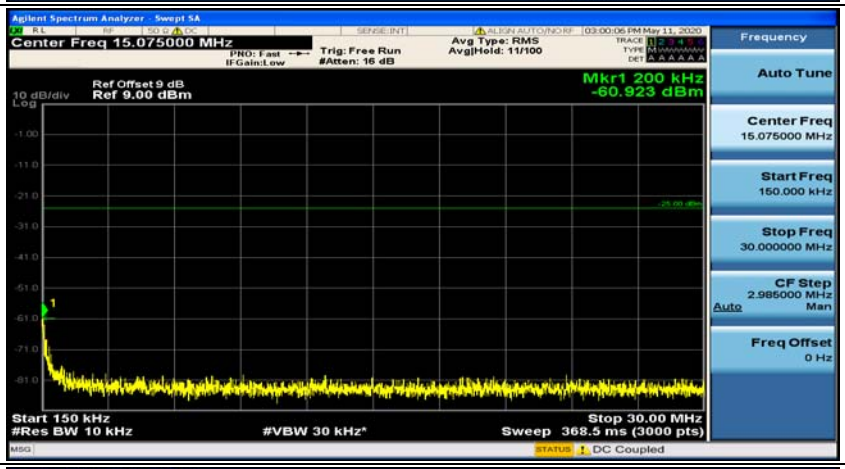




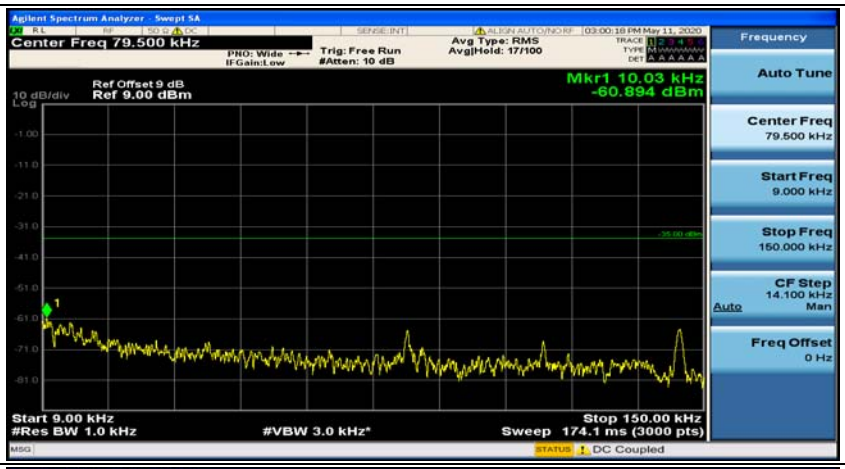


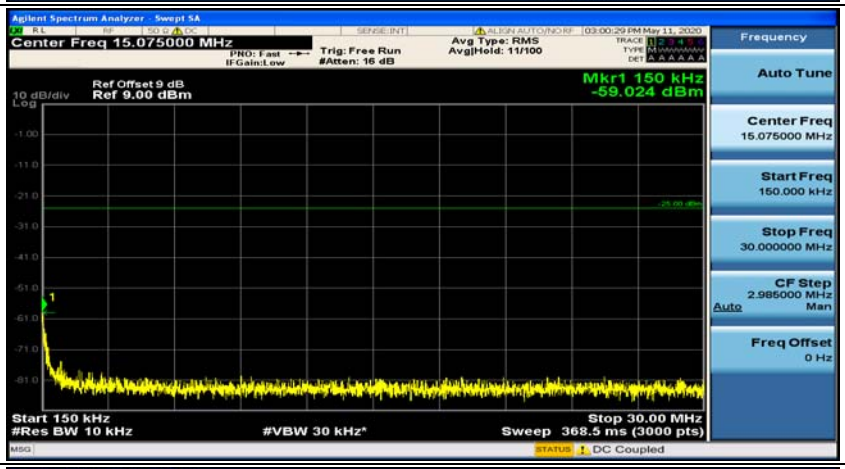
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49

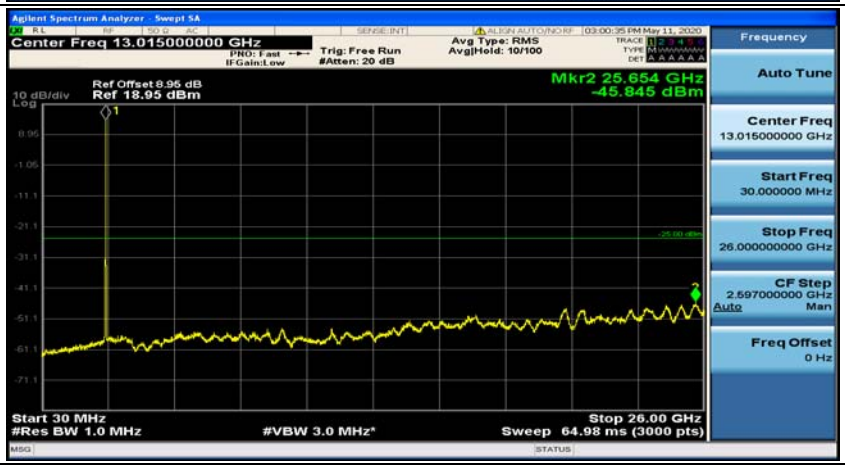




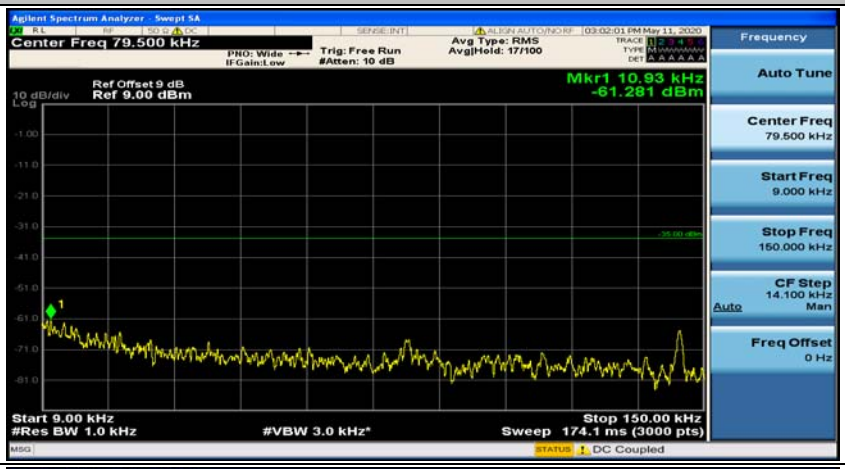
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#99

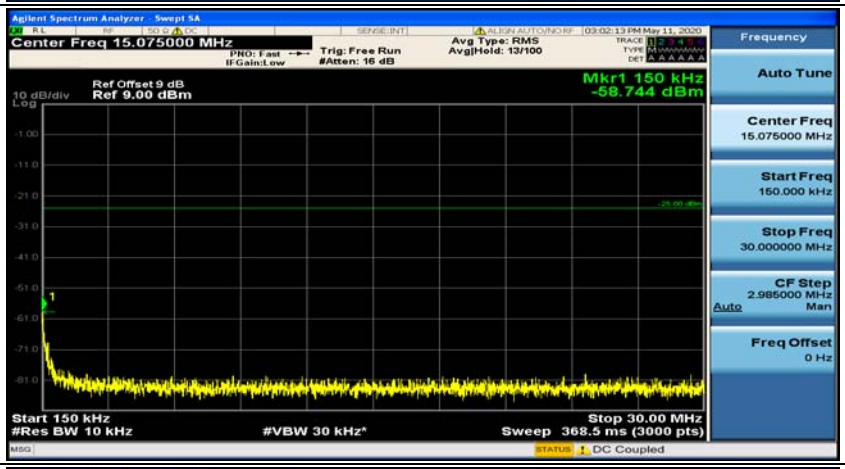

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 10.03 kHz
-60.894 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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

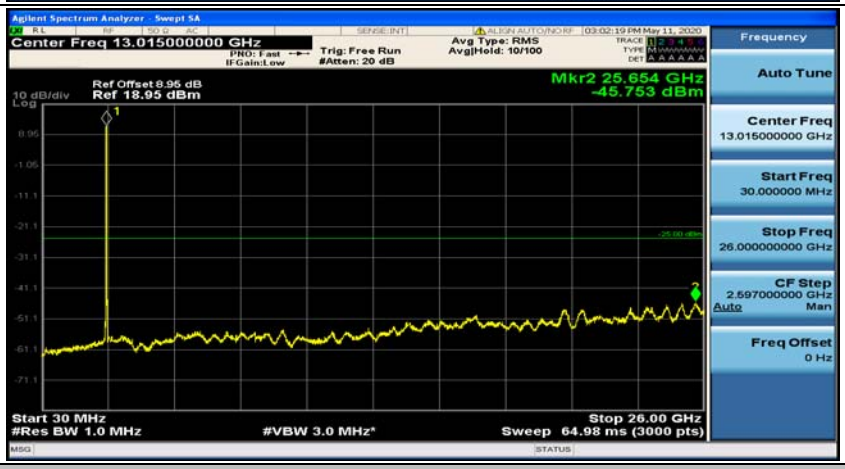

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-59.024 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.654 GHz
-45.845 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

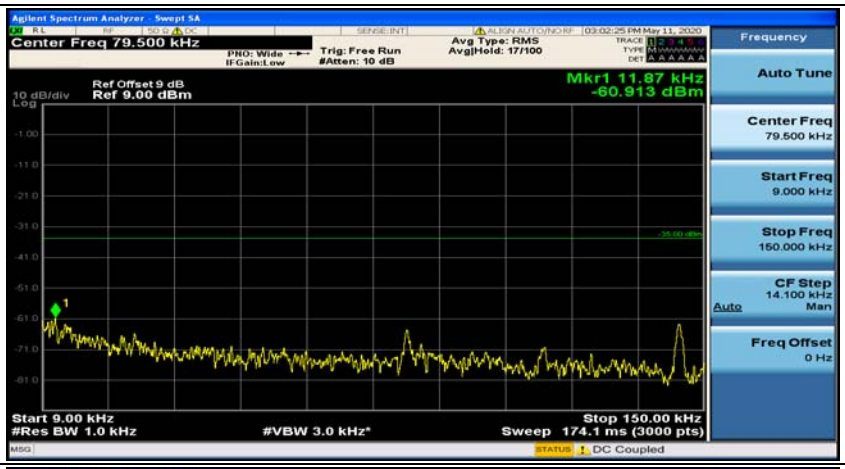
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0

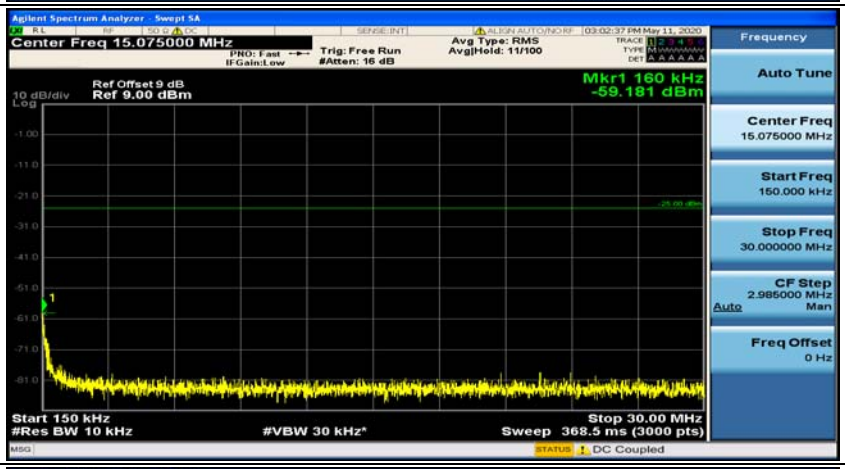


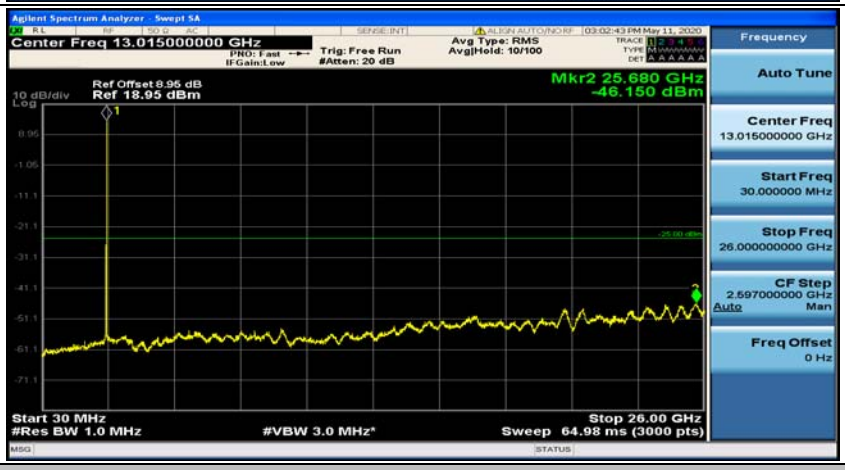




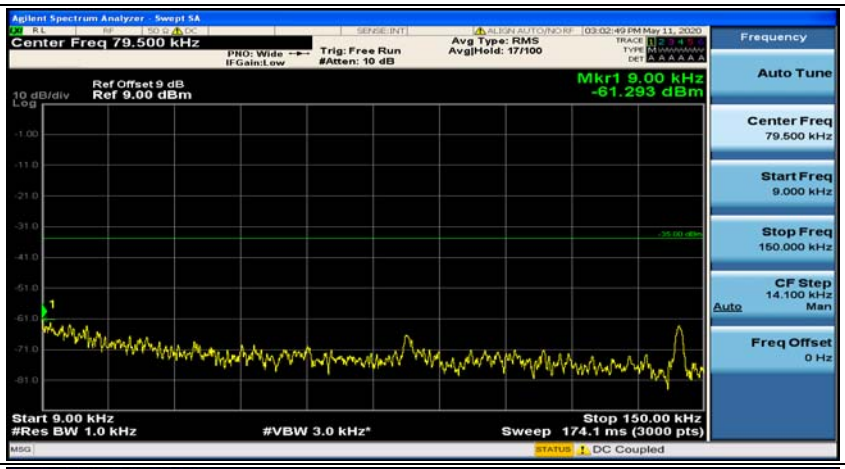
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#49

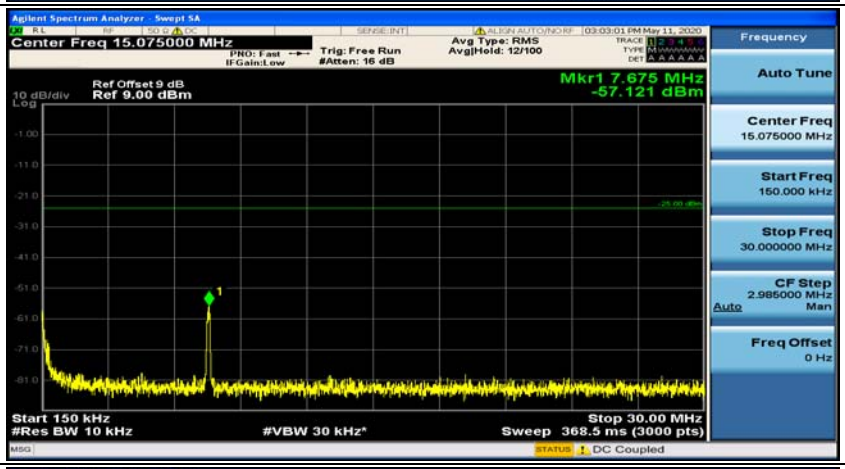


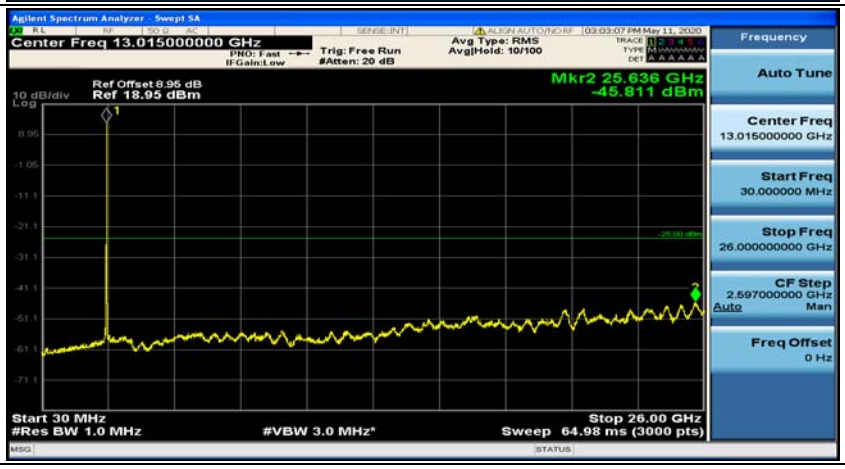




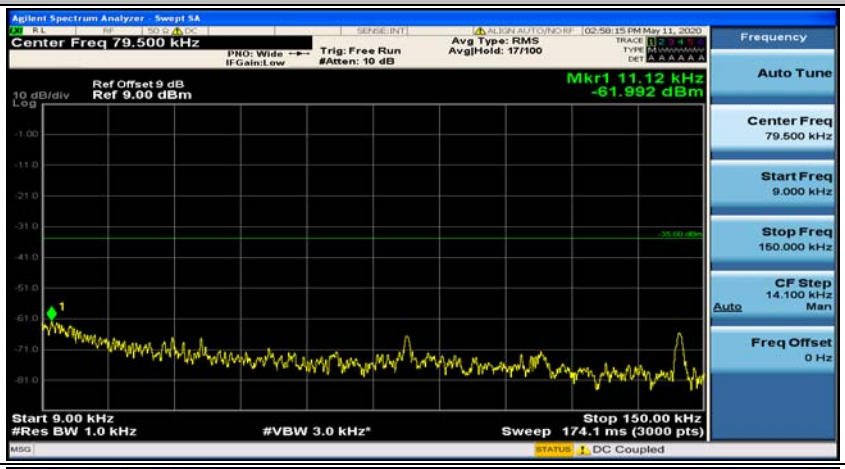
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#99

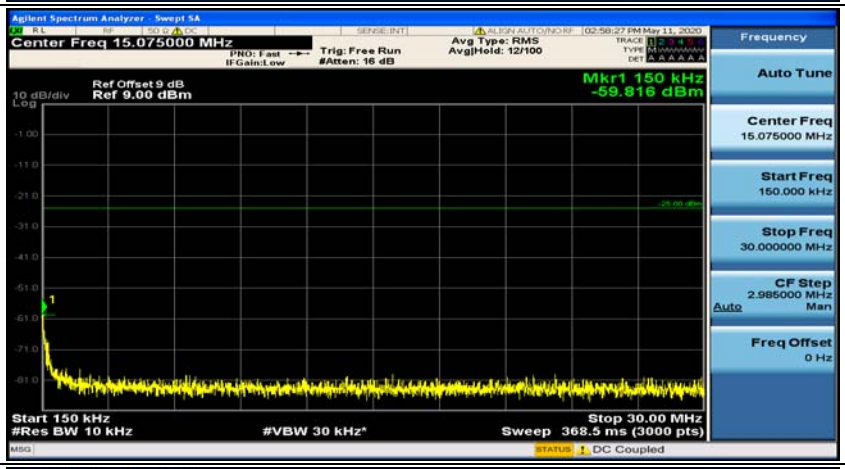

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 9.00 kHz
-61.293 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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

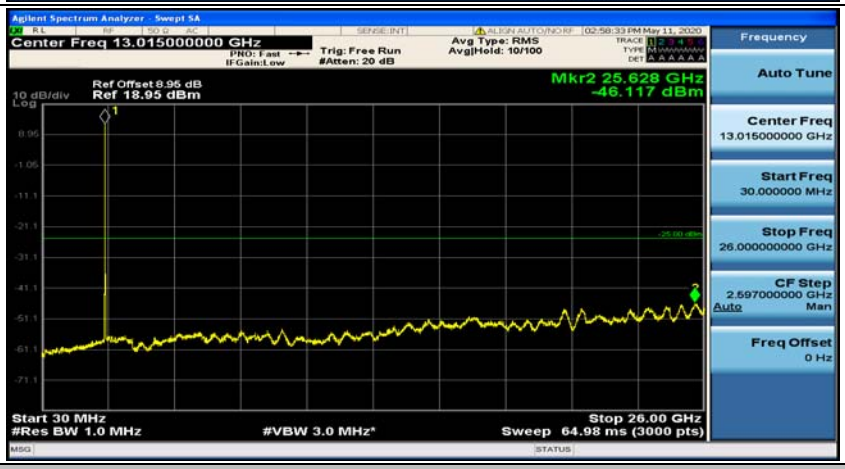

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 7.675 MHz
-57.121 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.636 GHz
-45.811 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

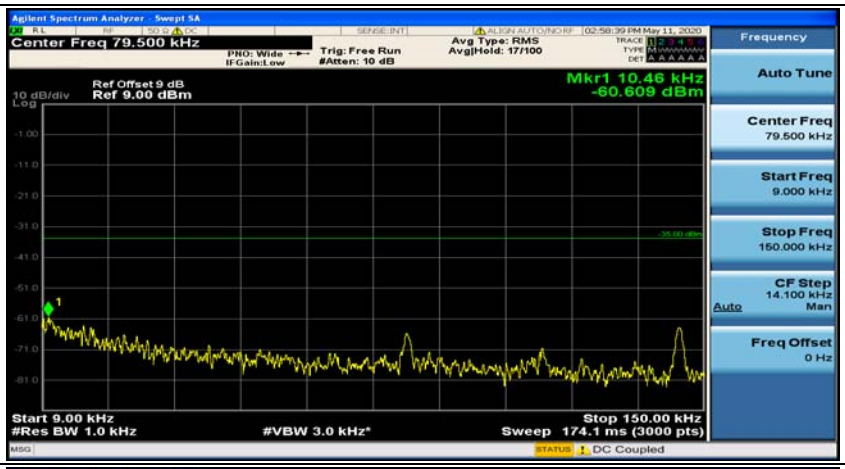
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0

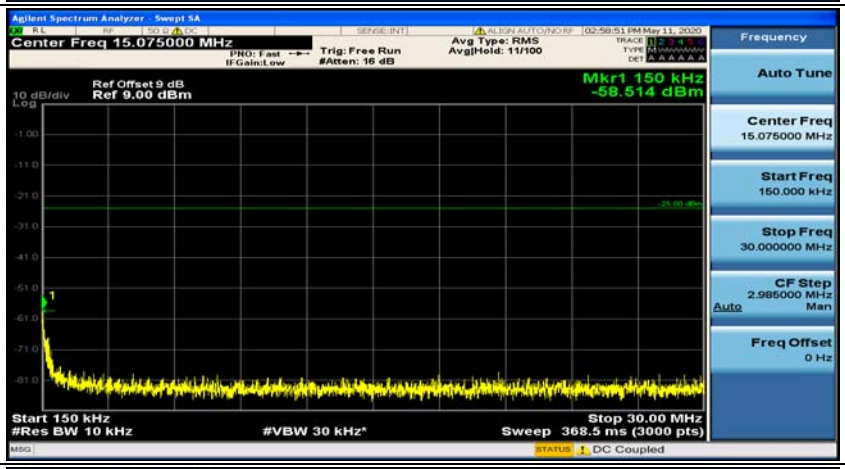




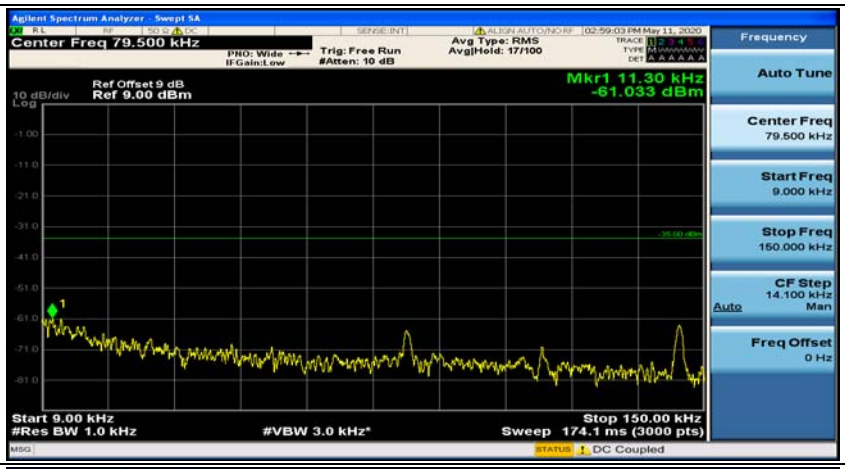


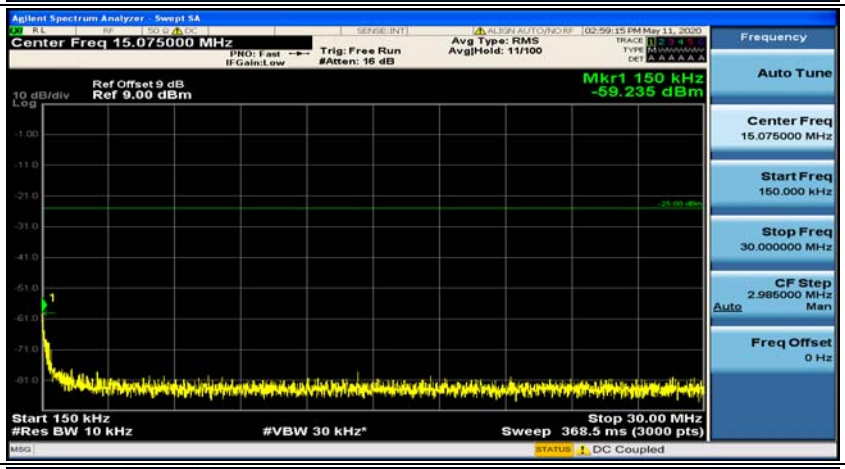
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49

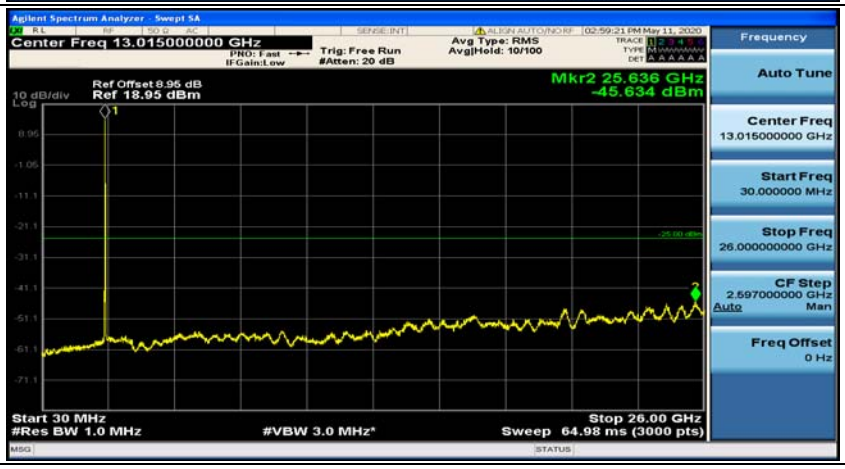




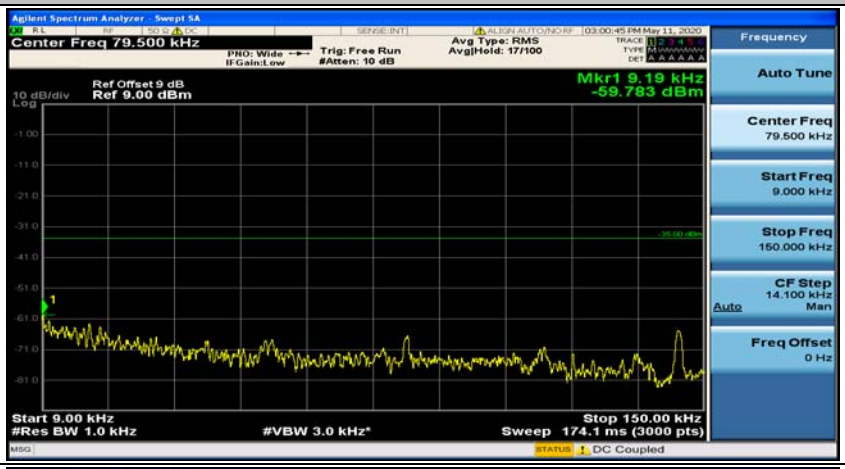
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#99

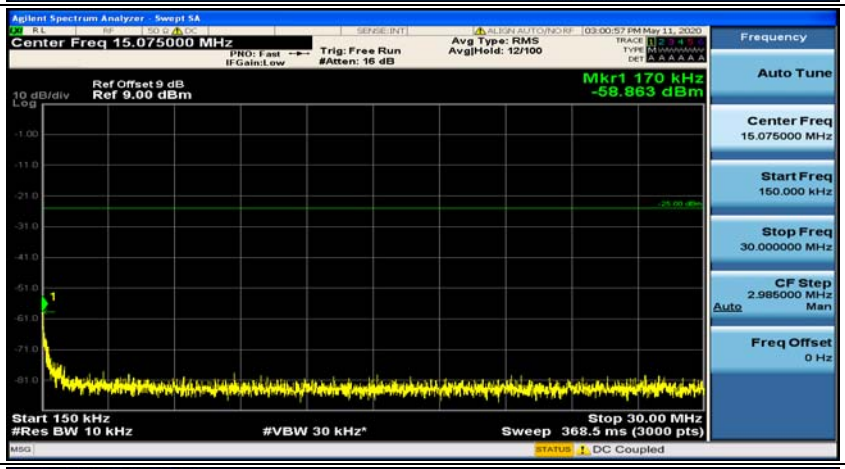

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 11.30 kHz
-61.033 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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

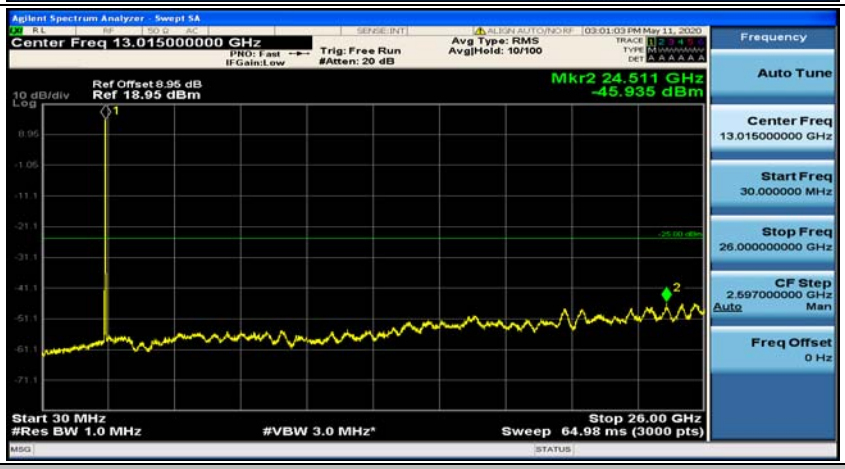

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-59.235 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.636 GHz
-45.634 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

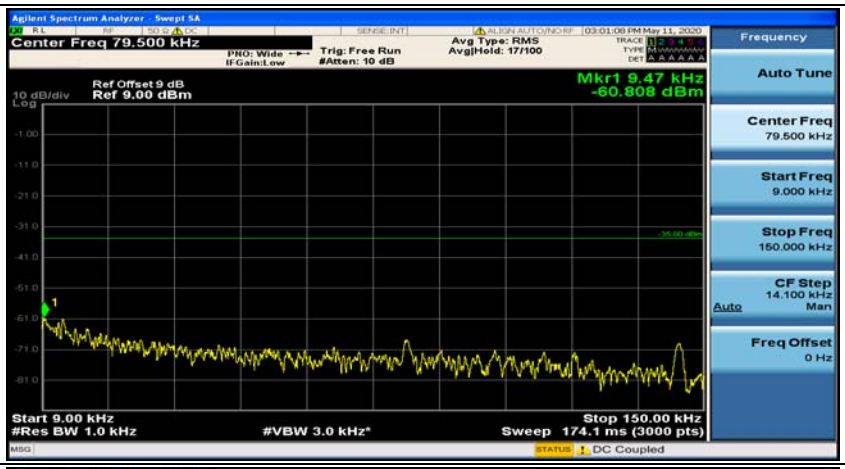
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0

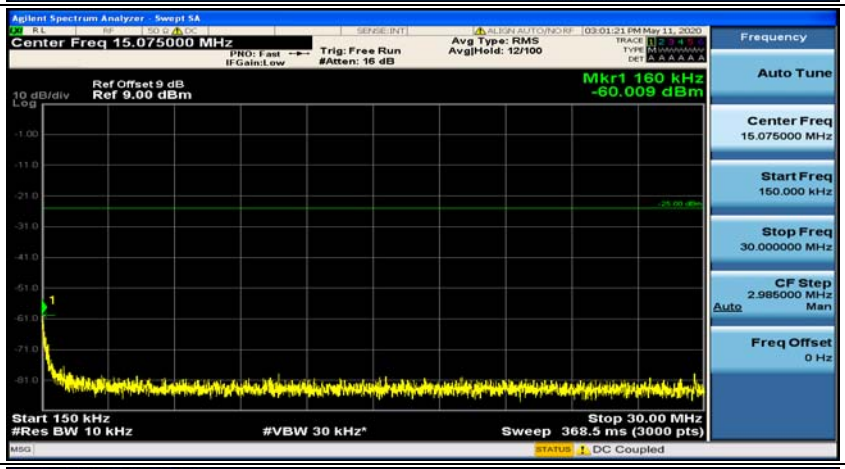


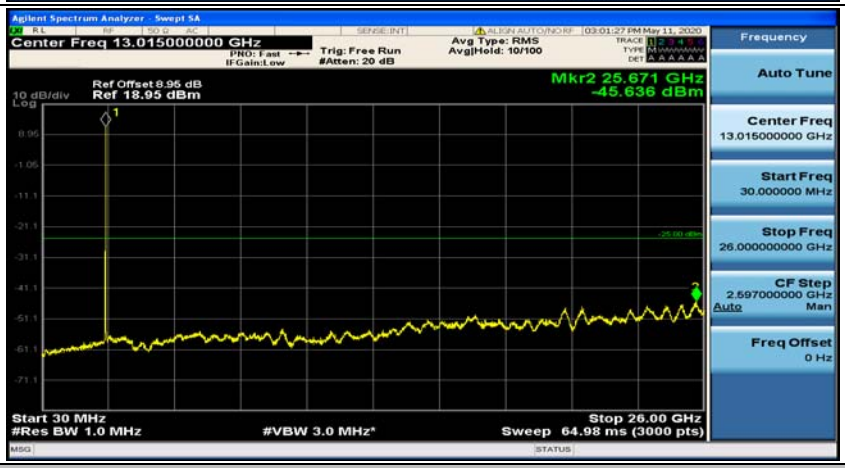




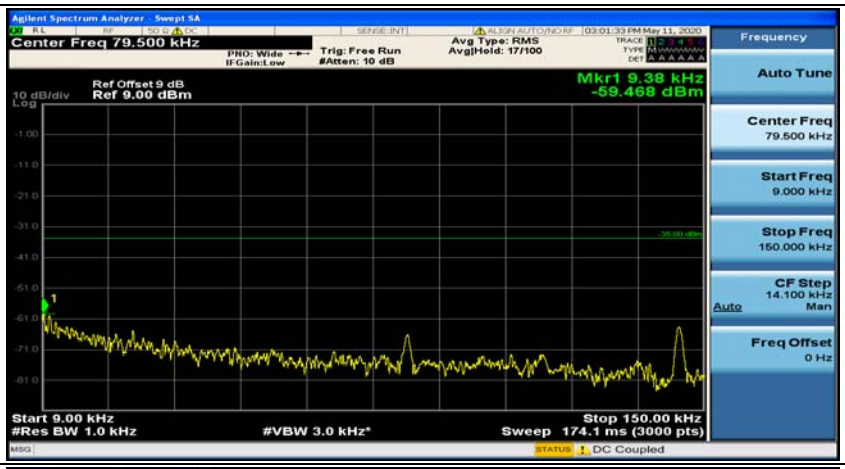
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49

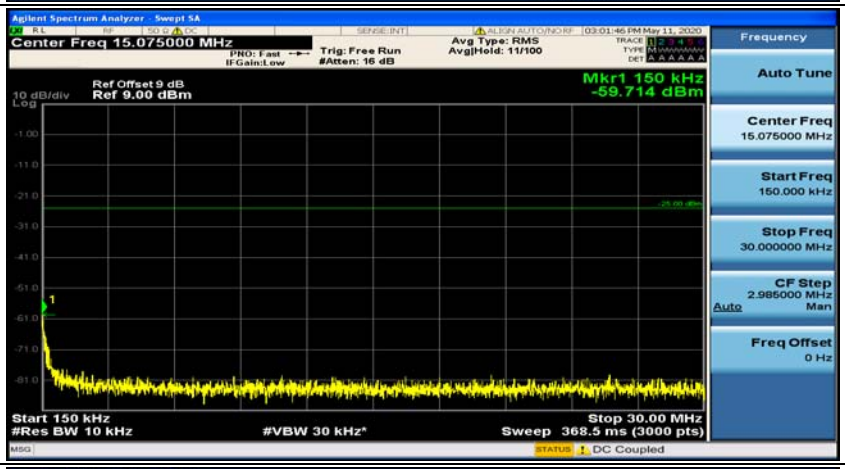






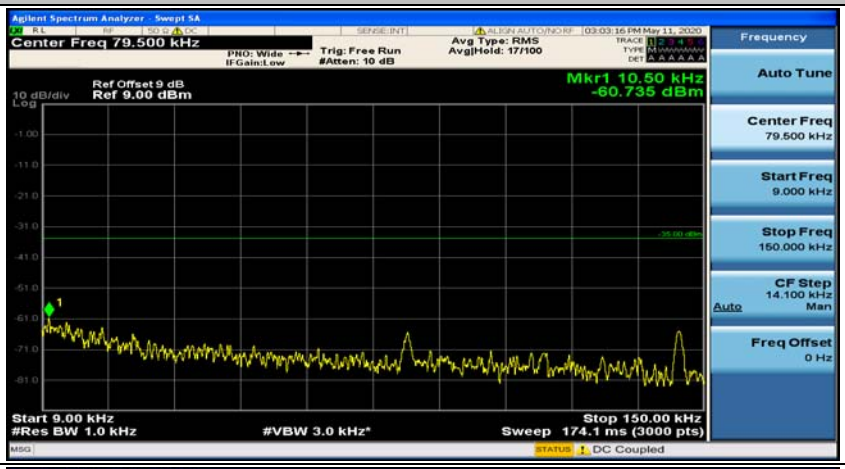
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#99

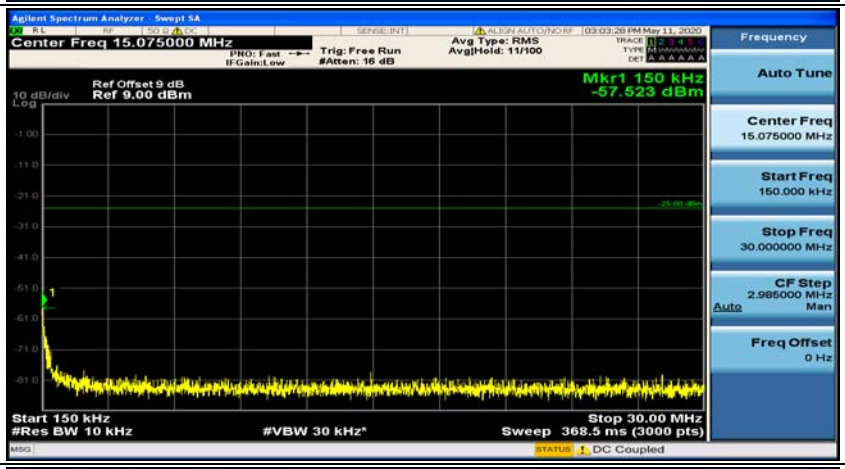

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 9.38 kHz
-59.468 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
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

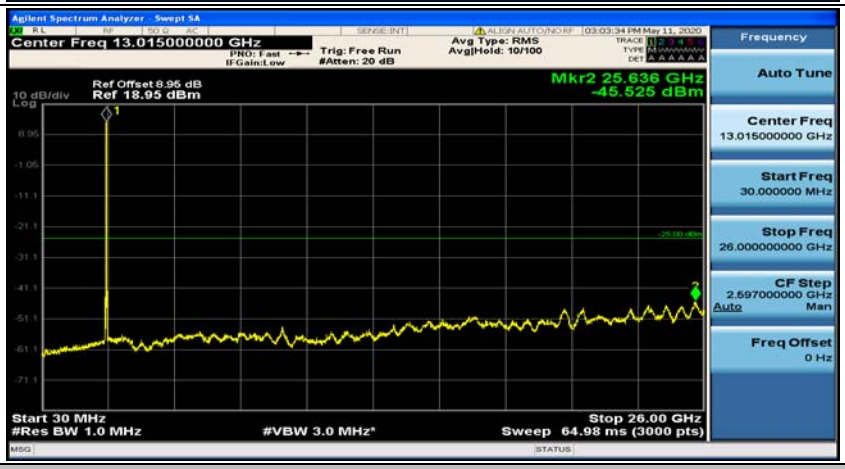

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-59.714 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.619 GHz
-45.712 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

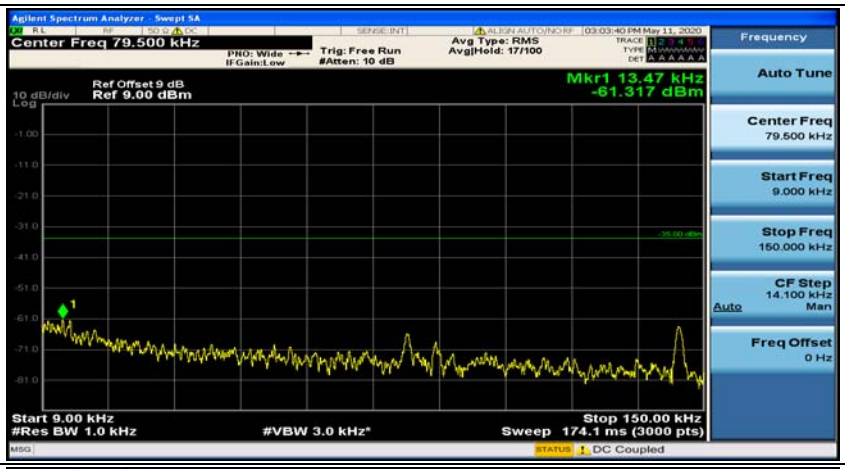
(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0

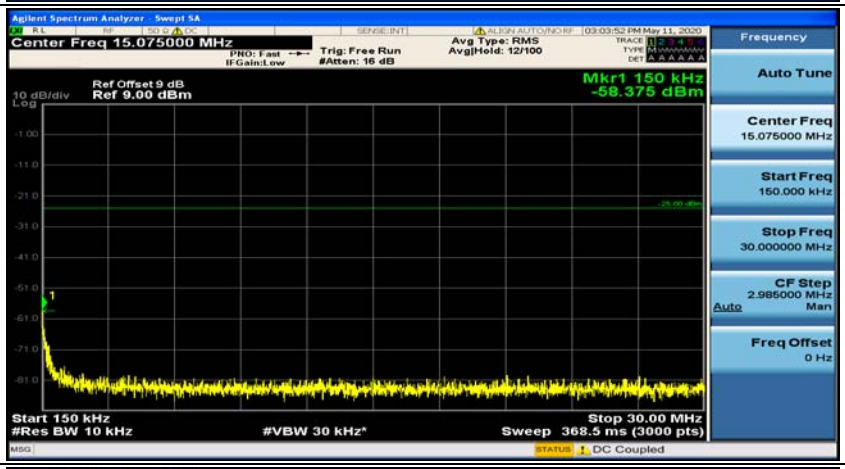


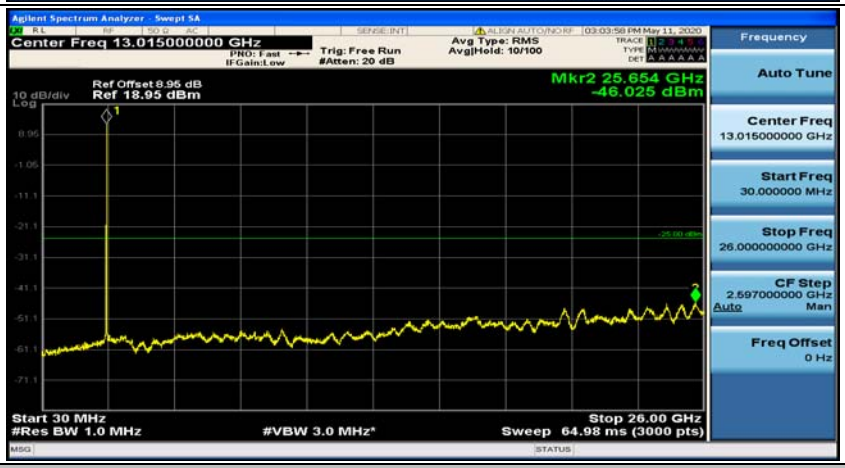




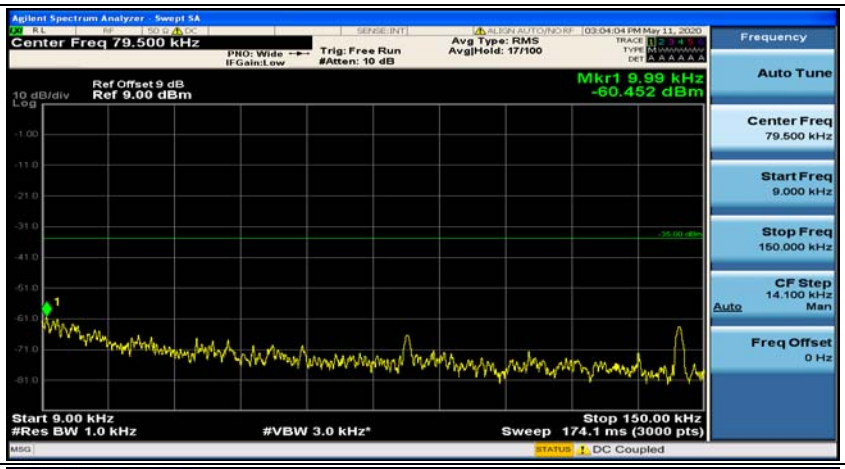
(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#49

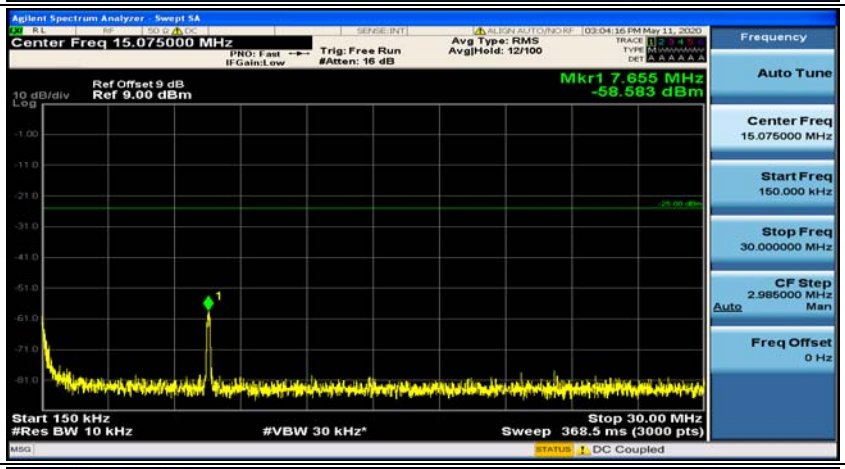


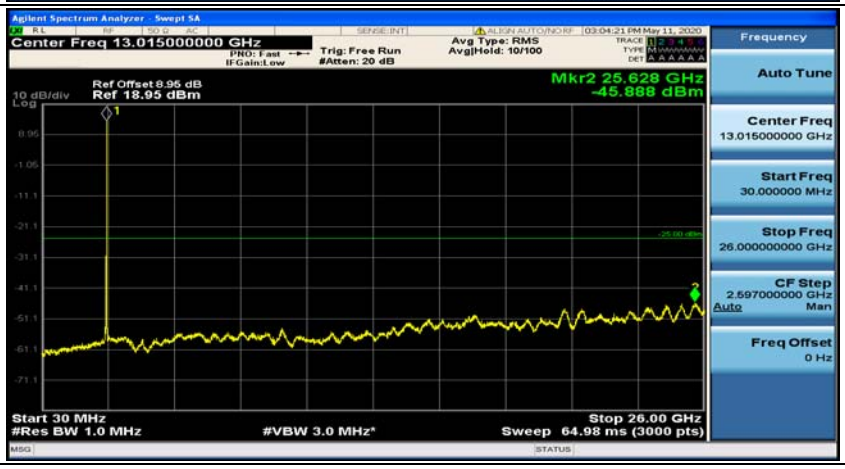




(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#99


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 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 9.99 kHz
-60.452 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: 12/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 7.655 MHz
-58.583 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: 20 dB
Avg Type: RMS
Avg|Hold: 10/100
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.628 GHz
-45.888 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: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	4.82	0.001926	± 2.5	PASS
		VN	TN	3	0.001199	± 2.5	PASS
		VH	TN	0.26	0.000104	± 2.5	PASS
	MCH	VL	TN	4.99	0.001968	± 2.5	PASS
		VN	TN	3.73	0.001471	± 2.5	PASS
		VH	TN	-1.04	-0.000410	± 2.5	PASS
	HCH	VL	TN	2.7	0.001052	± 2.5	PASS
		VN	TN	3.77	0.001468	± 2.5	PASS
		VH	TN	3.43	0.001336	± 2.5	PASS
16QAM	LCH	VL	TN	4.72	0.001886	± 2.5	PASS
		VN	TN	-1.23	-0.000492	± 2.5	PASS
		VH	TN	-1.73	-0.000691	± 2.5	PASS
	MCH	VL	TN	1.17	0.000462	± 2.5	PASS
		VN	TN	3.24	0.001278	± 2.5	PASS
		VH	TN	-1.25	-0.000493	± 2.5	PASS
	HCH	VL	TN	1.86	0.000724	± 2.5	PASS
		VN	TN	3.96	0.001542	± 2.5	PASS
		VH	TN	3.06	0.001192	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.56	-0.000623	± 2.5	PASS
		VN	-20	0.08	0.000032	± 2.5	PASS
		VN	-10	4.69	0.001874	± 2.5	PASS
		VN	0	2.3	0.000919	± 2.5	PASS
		VN	10	-0.86	-0.000344	± 2.5	PASS
		VN	20	0.28	0.000112	± 2.5	PASS
		VN	30	3.97	0.001586	± 2.5	PASS
		VN	40	1.5	0.000599	± 2.5	PASS
		VN	50	-0.66	-0.000264	± 2.5	PASS
	MCH	VN	-30	3.51	0.001385	± 2.5	PASS

		VN	-20	3.77	0.001487	± 2.5	PASS
		VN	-10	2.57	0.001014	± 2.5	PASS
		VN	0	-1.58	-0.000623	± 2.5	PASS
		VN	10	2.72	0.001073	± 2.5	PASS
		VN	20	3.48	0.001373	± 2.5	PASS
		VN	30	3.02	0.001191	± 2.5	PASS
		VN	40	-1.2	-0.000473	± 2.5	PASS
		VN	50	0.4	0.000158	± 2.5	PASS
	HCH	VN	-30	1.49	0.000580	± 2.5	PASS
		VN	-20	-1.09	-0.000425	± 2.5	PASS
		VN	-10	0.11	0.000043	± 2.5	PASS
		VN	0	-0.48	-0.000187	± 2.5	PASS
		VN	10	3.79	0.001476	± 2.5	PASS
		VN	20	3.19	0.001242	± 2.5	PASS
		VN	30	1.44	0.000561	± 2.5	PASS
		VN	40	3	0.001168	± 2.5	PASS
		VN	50	-1.12	-0.000436	± 2.5	PASS
16QAM	LCH	VN	-30	4.18	0.001670	± 2.5	PASS
		VN	-20	4.28	0.001710	± 2.5	PASS
		VN	-10	1.89	0.000755	± 2.5	PASS
		VN	0	-1.81	-0.000723	± 2.5	PASS
		VN	10	0.51	0.000204	± 2.5	PASS
		VN	20	-1.74	-0.000695	± 2.5	PASS
		VN	30	3.32	0.001327	± 2.5	PASS
		VN	40	4.18	0.001670	± 2.5	PASS
		VN	50	1.03	0.000412	± 2.5	PASS
	MCH	VN	-30	-1.71	-0.000675	± 2.5	PASS
		VN	-20	1.22	0.000481	± 2.5	PASS
		VN	-10	3.38	0.001333	± 2.5	PASS
		VN	0	2.88	0.001136	± 2.5	PASS
		VN	10	1.84	0.000726	± 2.5	PASS
		VN	20	2.05	0.000809	± 2.5	PASS
		VN	30	-1.27	-0.000501	± 2.5	PASS
		VN	40	3.04	0.001199	± 2.5	PASS
		VN	50	4.64	0.001830	± 2.5	PASS
	HCH	VN	-30	-1.18	-0.000460	± 2.5	PASS
		VN	-20	2.47	0.000962	± 2.5	PASS
		VN	-10	0.55	0.000214	± 2.5	PASS
		VN	0	-0.79	-0.000308	± 2.5	PASS
		VN	10	1.45	0.000565	± 2.5	PASS
		VN	20	3.47	0.001352	± 2.5	PASS

		VN	30	-1.37	-0.000534	± 2.5	PASS
		VN	40	2.1	0.000818	± 2.5	PASS
		VN	50	2.48	0.000966	± 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	3.69	0.001473	± 2.5	PASS
		VN	TN	3.63	0.001449	± 2.5	PASS
		VH	TN	1.5	0.000599	± 2.5	PASS
	MCH	VL	TN	0.97	0.000383	± 2.5	PASS
		VN	TN	4.27	0.001684	± 2.5	PASS
		VH	TN	-1.56	-0.000615	± 2.5	PASS
	HCH	VL	TN	2.27	0.000885	± 2.5	PASS
		VN	TN	4.44	0.001731	± 2.5	PASS
		VH	TN	-1.21	-0.000472	± 2.5	PASS
16QAM	LCH	VL	TN	4.74	0.001892	± 2.5	PASS
		VN	TN	3.93	0.001569	± 2.5	PASS
		VH	TN	-1.33	-0.000531	± 2.5	PASS
	MCH	VL	TN	0.47	0.000185	± 2.5	PASS
		VN	TN	-0.48	-0.000189	± 2.5	PASS
		VH	TN	-1.58	-0.000623	± 2.5	PASS
	HCH	VL	TN	4.42	0.001723	± 2.5	PASS
		VN	TN	-1.67	-0.000651	± 2.5	PASS
		VH	TN	2.83	0.001103	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.94	0.000375	± 2.5	PASS
		VN	-20	-0.97	-0.000387	± 2.5	PASS
		VN	-10	0.51	0.000204	± 2.5	PASS
		VN	0	1.45	0.000579	± 2.5	PASS
		VN	10	0.29	0.000116	± 2.5	PASS
		VN	20	-0.5	-0.000200	± 2.5	PASS
		VN	30	-0.05	-0.000020	± 2.5	PASS
		VN	40	4.43	0.001768	± 2.5	PASS
		VN	50	-1	-0.000399	± 2.5	PASS
	MCH	VN	-30	2.41	0.000951	± 2.5	PASS
		VN	-20	0.92	0.000363	± 2.5	PASS

		VN	-10	3.14	0.001239	± 2.5	PASS
		VN	0	0.27	0.000107	± 2.5	PASS
		VN	10	0.19	0.000075	± 2.5	PASS
		VN	20	1.22	0.000481	± 2.5	PASS
		VN	30	1.98	0.000781	± 2.5	PASS
		VN	40	0.64	0.000252	± 2.5	PASS
		VN	50	4.39	0.001732	± 2.5	PASS
	HCH	VN	-30	3.89	0.001517	± 2.5	PASS
		VN	-20	-0.73	-0.000285	± 2.5	PASS
		VN	-10	2.06	0.000803	± 2.5	PASS
		VN	0	1.13	0.000441	± 2.5	PASS
		VN	10	4.09	0.001595	± 2.5	PASS
		VN	20	1.65	0.000643	± 2.5	PASS
		VN	30	-1.15	-0.000448	± 2.5	PASS
		VN	40	-0.06	-0.000023	± 2.5	PASS
		VN	50	-1.02	-0.000398	± 2.5	PASS
16QAM	LCH	VN	-30	2.91	0.001162	± 2.5	PASS
		VN	-20	-0.33	-0.000132	± 2.5	PASS
		VN	-10	4.57	0.001824	± 2.5	PASS
		VN	0	-1.5	-0.000599	± 2.5	PASS
		VN	10	4.2	0.001677	± 2.5	PASS
		VN	20	0.63	0.000251	± 2.5	PASS
		VN	30	3.12	0.001246	± 2.5	PASS
		VN	40	-1.27	-0.000507	± 2.5	PASS
		VN	50	0.07	0.000028	± 2.5	PASS
	MCH	VN	-30	-0.62	-0.000245	± 2.5	PASS
		VN	-20	0.41	0.000162	± 2.5	PASS
		VN	-10	3.07	0.001211	± 2.5	PASS
		VN	0	-1.99	-0.000785	± 2.5	PASS
		VN	10	4.84	0.001909	± 2.5	PASS
		VN	20	2.04	0.000805	± 2.5	PASS
		VN	30	0.65	0.000256	± 2.5	PASS
		VN	40	-1.7	-0.000671	± 2.5	PASS
		VN	50	4.67	0.001842	± 2.5	PASS
	HCH	VN	-30	0.56	0.000218	± 2.5	PASS
		VN	-20	3.7	0.001442	± 2.5	PASS
		VN	-10	1.42	0.000554	± 2.5	PASS
		VN	0	-1.07	-0.000417	± 2.5	PASS
		VN	10	-1.72	-0.000671	± 2.5	PASS
		VN	20	-0.69	-0.000269	± 2.5	PASS
		VN	30	1.12	0.000437	± 2.5	PASS

		VN	40	4.81	0.001875	± 2.5	PASS
		VN	50	3.48	0.001357	± 2.5	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	3.86	0.001539	± 2.5	PASS
		VN	TN	-0.2	-0.000080	± 2.5	PASS
		VH	TN	0.33	0.000132	± 2.5	PASS
	MCH	VL	TN	-0.22	-0.000087	± 2.5	PASS
		VN	TN	0.66	0.000260	± 2.5	PASS
		VH	TN	-1.49	-0.000588	± 2.5	PASS
	HCH	VL	TN	1.16	0.000453	± 2.5	PASS
		VN	TN	4.5	0.001756	± 2.5	PASS
		VH	TN	-1.2	-0.000468	± 2.5	PASS
16QAM	LCH	VL	TN	-1.27	-0.000506	± 2.5	PASS
		VN	TN	-1.37	-0.000546	± 2.5	PASS
		VH	TN	2.52	0.001005	± 2.5	PASS
	MCH	VL	TN	0.52	0.000205	± 2.5	PASS
		VN	TN	4.34	0.001712	± 2.5	PASS
		VH	TN	4.73	0.001866	± 2.5	PASS
	HCH	VL	TN	0.92	0.000359	± 2.5	PASS
		VN	TN	3.88	0.001514	± 2.5	PASS
		VH	TN	3.95	0.001541	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.96	0.000383	± 2.5	PASS
		VN	-20	3.94	0.001571	± 2.5	PASS
		VN	-10	-0.64	-0.000255	± 2.5	PASS
		VN	0	-1.99	-0.000794	± 2.5	PASS
		VN	10	3.99	0.001591	± 2.5	PASS
		VN	20	-1.37	-0.000546	± 2.5	PASS
		VN	30	0.86	0.000343	± 2.5	PASS
		VN	40	1.32	0.000526	± 2.5	PASS
		VN	50	-1.04	-0.000415	± 2.5	PASS
	MCH	VN	-30	4.26	0.001680	± 2.5	PASS
		VN	-20	4.04	0.001594	± 2.5	PASS
		VN	-10	1.77	0.000698	± 2.5	PASS

		VN	0	-1.42	-0.000560	± 2.5	PASS
		VN	10	2.59	0.001022	± 2.5	PASS
		VN	20	4.45	0.001755	± 2.5	PASS
		VN	30	-0.98	-0.000387	± 2.5	PASS
		VN	40	1.64	0.000647	± 2.5	PASS
		VN	50	-0.01	-0.000004	± 2.5	PASS
	HCH	VN	-30	0.78	0.000304	± 2.5	PASS
		VN	-20	-1.46	-0.000570	± 2.5	PASS
		VN	-10	0.49	0.000191	± 2.5	PASS
		VN	0	1.17	0.000457	± 2.5	PASS
		VN	10	2.14	0.000835	± 2.5	PASS
		VN	20	-1.94	-0.000757	± 2.5	PASS
		VN	30	0.89	0.000347	± 2.5	PASS
		VN	40	2.21	0.000862	± 2.5	PASS
		VN	50	-0.62	-0.000242	± 2.5	PASS
16QAM	LCH	VN	-30	0.61	0.000243	± 2.5	PASS
		VN	-20	1.98	0.000790	± 2.5	PASS
		VN	-10	-0.02	-0.000008	± 2.5	PASS
		VN	0	2.76	0.001101	± 2.5	PASS
		VN	10	2.33	0.000929	± 2.5	PASS
		VN	20	1.78	0.000710	± 2.5	PASS
		VN	30	3	0.001196	± 2.5	PASS
		VN	40	3.57	0.001424	± 2.5	PASS
		VN	50	0.95	0.000379	± 2.5	PASS
	MCH	VN	-30	-1.28	-0.000505	± 2.5	PASS
		VN	-20	-1.71	-0.000675	± 2.5	PASS
		VN	-10	0.08	0.000032	± 2.5	PASS
		VN	0	0.4	0.000158	± 2.5	PASS
		VN	10	1.47	0.000580	± 2.5	PASS
		VN	20	2.65	0.001045	± 2.5	PASS
		VN	30	1.57	0.000619	± 2.5	PASS
		VN	40	1.3	0.000513	± 2.5	PASS
		VN	50	-1.48	-0.000584	± 2.5	PASS
	HCH	VN	-30	3.64	0.001420	± 2.5	PASS
		VN	-20	0.6	0.000234	± 2.5	PASS
		VN	-10	-0.9	-0.000351	± 2.5	PASS
		VN	0	-0.67	-0.000261	± 2.5	PASS
		VN	10	3.27	0.001276	± 2.5	PASS
		VN	20	0.93	0.000363	± 2.5	PASS
		VN	30	0.04	0.000016	± 2.5	PASS
		VN	40	-1.33	-0.000519	± 2.5	PASS

		VN	50	1.73	0.000675	± 2.5	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.65	0.000259	± 2.5	PASS
		VN	TN	-0.13	-0.000052	± 2.5	PASS
		VH	TN	4.65	0.001853	± 2.5	PASS
	MCH	VL	TN	3.49	0.001377	± 2.5	PASS
		VN	TN	-0.99	-0.000391	± 2.5	PASS
		VH	TN	3.88	0.001531	± 2.5	PASS
	HCH	VL	TN	-1.75	-0.000684	± 2.5	PASS
		VN	TN	2.33	0.000910	± 2.5	PASS
		VH	TN	1.93	0.000754	± 2.5	PASS
16QAM	LCH	VL	TN	-1.8	-0.000717	± 2.5	PASS
		VN	TN	1.32	0.000526	± 2.5	PASS
		VH	TN	4.57	0.001821	± 2.5	PASS
	MCH	VL	TN	3.47	0.001369	± 2.5	PASS
		VN	TN	1.86	0.000734	± 2.5	PASS
		VH	TN	1.4	0.000552	± 2.5	PASS
	HCH	VL	TN	4.05	0.001582	± 2.5	PASS
		VN	TN	1.44	0.000563	± 2.5	PASS
		VH	TN	-0.17	-0.000066	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.94	-0.000375	± 2.5	PASS
		VN	-20	2.38	0.000948	± 2.5	PASS
		VN	-10	-0.02	-0.000008	± 2.5	PASS
		VN	0	4.69	0.001869	± 2.5	PASS
		VN	10	4.98	0.001984	± 2.5	PASS
		VN	20	3.53	0.001406	± 2.5	PASS
		VN	30	-0.35	-0.000139	± 2.5	PASS
		VN	40	-1.53	-0.000610	± 2.5	PASS
		VN	50	2.36	0.000940	± 2.5	PASS
	MCH	VN	-30	-0.24	-0.000095	± 2.5	PASS
		VN	-20	4.92	0.001941	± 2.5	PASS
		VN	-10	2.66	0.001049	± 2.5	PASS
		VN	0	-0.18	-0.000071	± 2.5	PASS

		VN	10	1.49	0.000588	± 2.5	PASS
		VN	20	-0.26	-0.000103	± 2.5	PASS
		VN	30	3.96	0.001562	± 2.5	PASS
		VN	40	1.46	0.000576	± 2.5	PASS
		VN	50	-0.09	-0.000036	± 2.5	PASS
	HCH	VN	-30	0.69	0.000270	± 2.5	PASS
		VN	-20	3.56	0.001391	± 2.5	PASS
		VN	-10	1.63	0.000637	± 2.5	PASS
		VN	0	0.09	0.000035	± 2.5	PASS
		VN	10	2.47	0.000965	± 2.5	PASS
		VN	20	4.59	0.001793	± 2.5	PASS
		VN	30	3.54	0.001383	± 2.5	PASS
		VN	40	1.9	0.000742	± 2.5	PASS
		VN	50	4.77	0.001863	± 2.5	PASS
16QAM	LCH	VN	-30	4.94	0.001968	± 2.5	PASS
		VN	-20	-1.11	-0.000442	± 2.5	PASS
		VN	-10	1.79	0.000713	± 2.5	PASS
		VN	0	0.14	0.000056	± 2.5	PASS
		VN	10	-0.69	-0.000275	± 2.5	PASS
		VN	20	-1.76	-0.000701	± 2.5	PASS
		VN	30	-0.62	-0.000247	± 2.5	PASS
		VN	40	1.18	0.000470	± 2.5	PASS
		VN	50	-0.8	-0.000319	± 2.5	PASS
	MCH	VN	-30	-0.01	-0.000004	± 2.5	PASS
		VN	-20	-1.87	-0.000738	± 2.5	PASS
		VN	-10	3	0.001183	± 2.5	PASS
		VN	0	0.97	0.000383	± 2.5	PASS
		VN	10	0.23	0.000091	± 2.5	PASS
		VN	20	4.92	0.001941	± 2.5	PASS
		VN	30	-0.85	-0.000335	± 2.5	PASS
		VN	40	-1.62	-0.000639	± 2.5	PASS
		VN	50	-1.06	-0.000418	± 2.5	PASS
	HCH	VN	-30	4.12	0.001609	± 2.5	PASS
		VN	-20	1.2	0.000469	± 2.5	PASS
		VN	-10	-1.26	-0.000492	± 2.5	PASS
		VN	0	2.01	0.000785	± 2.5	PASS
		VN	10	-1.37	-0.000535	± 2.5	PASS
		VN	20	4.99	0.001949	± 2.5	PASS
		VN	30	4.4	0.001719	± 2.5	PASS
		VN	40	2.65	0.001035	± 2.5	PASS
		VN	50	-0.18	-0.000070	± 2.5	PASS