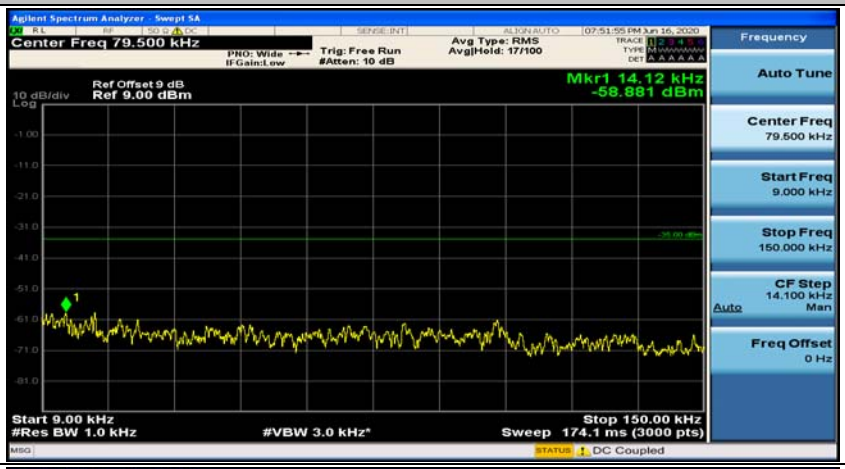
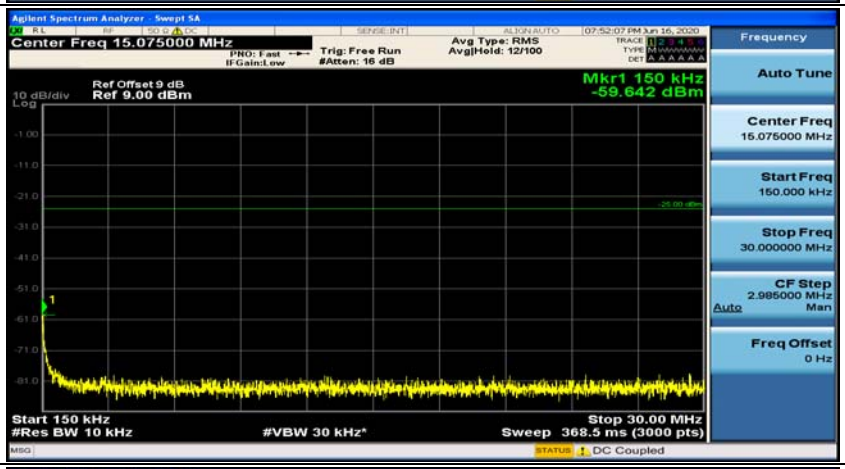
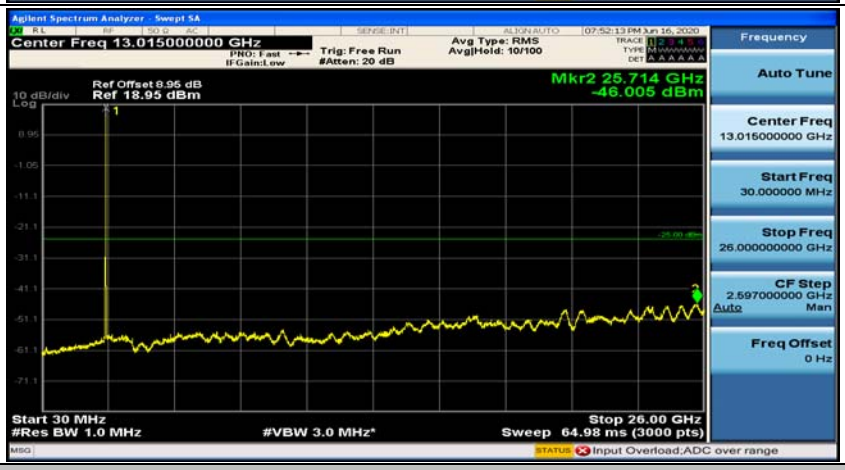
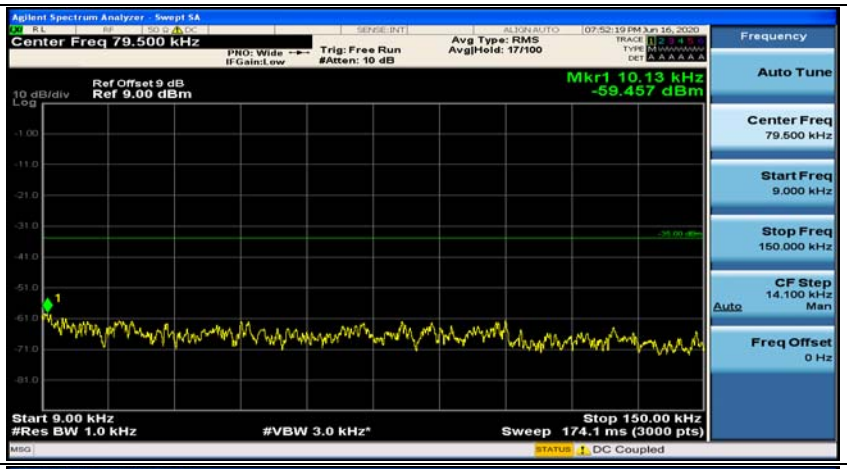
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

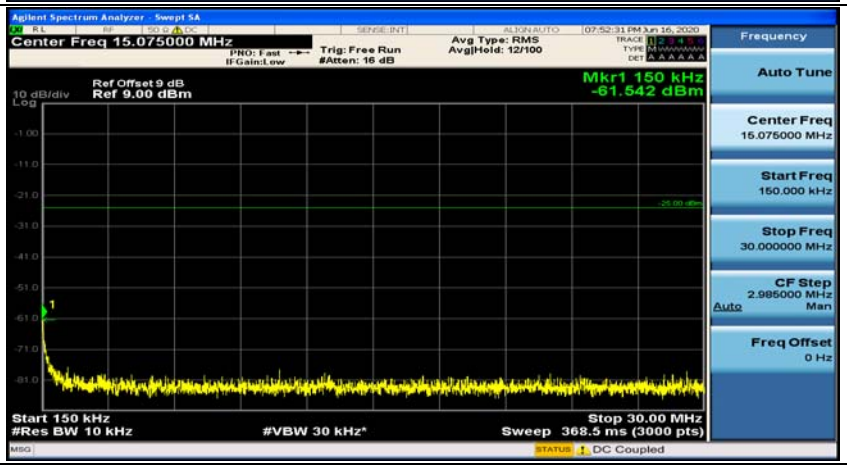


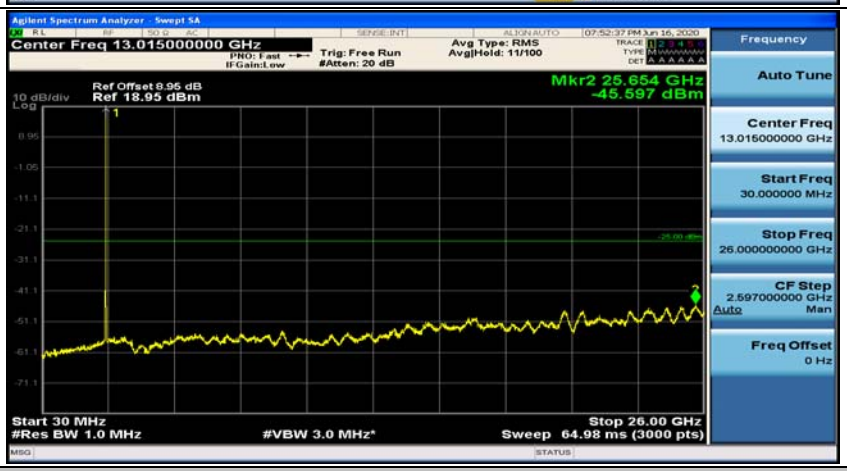




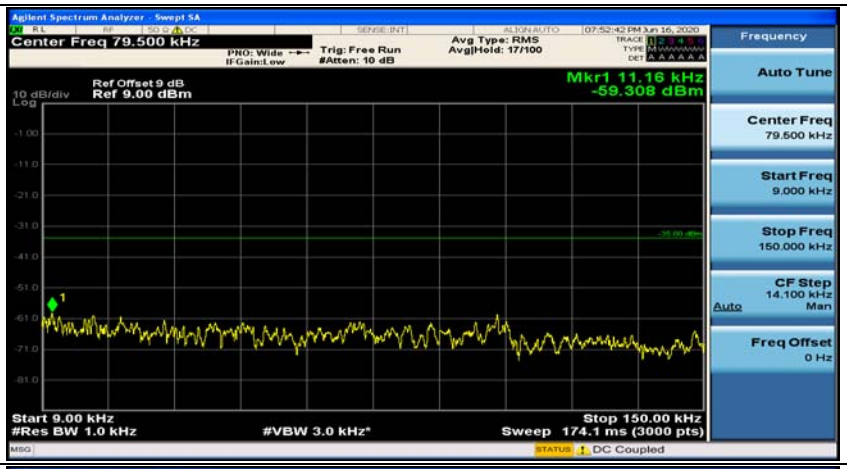
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

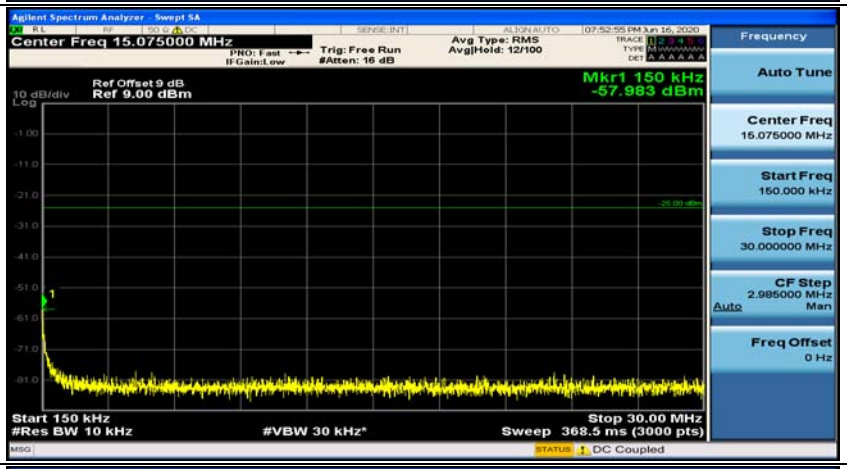


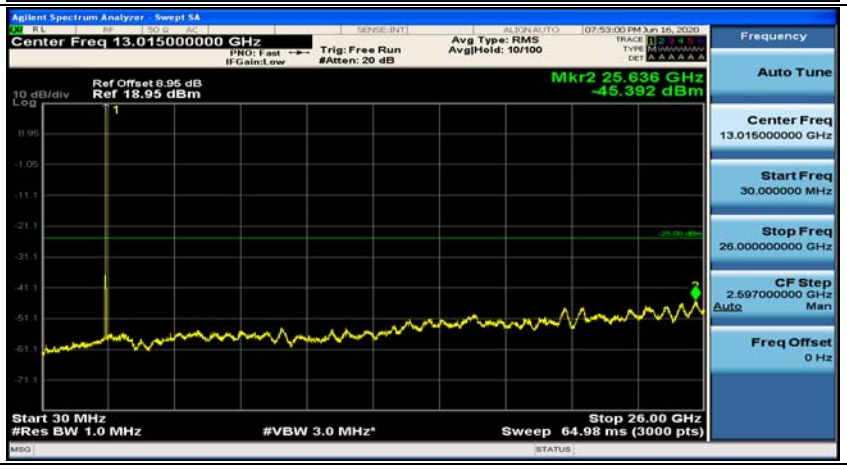




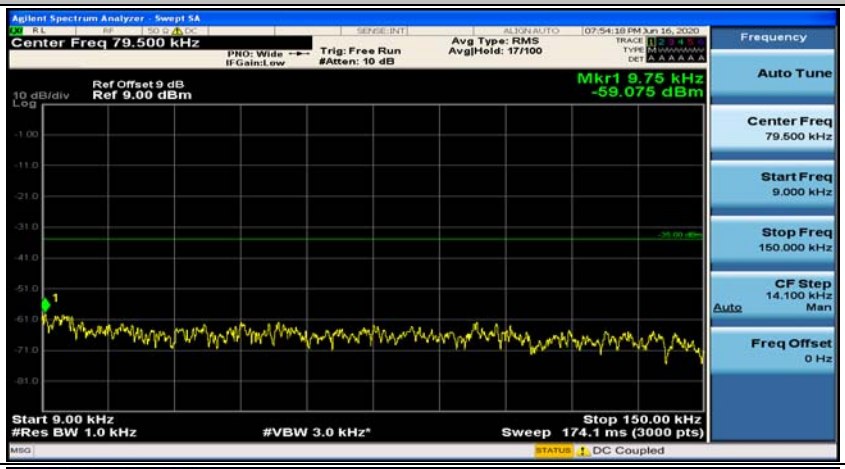
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

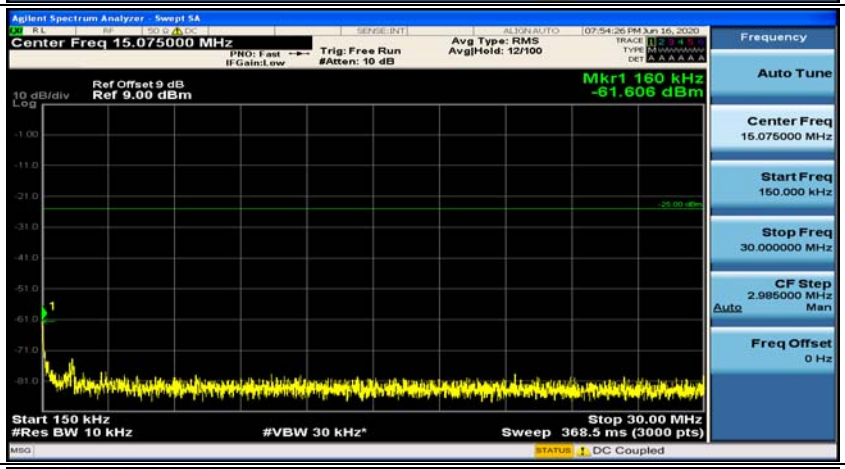

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
07:52:42 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 11.16 kHz
-59.308 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

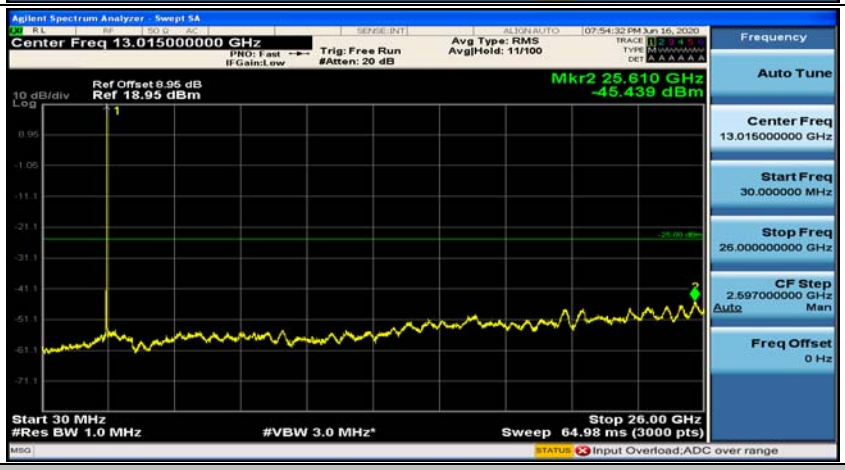

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
07:52:55 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-57.983 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
07:53:00 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.636 GHz
-45.392 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

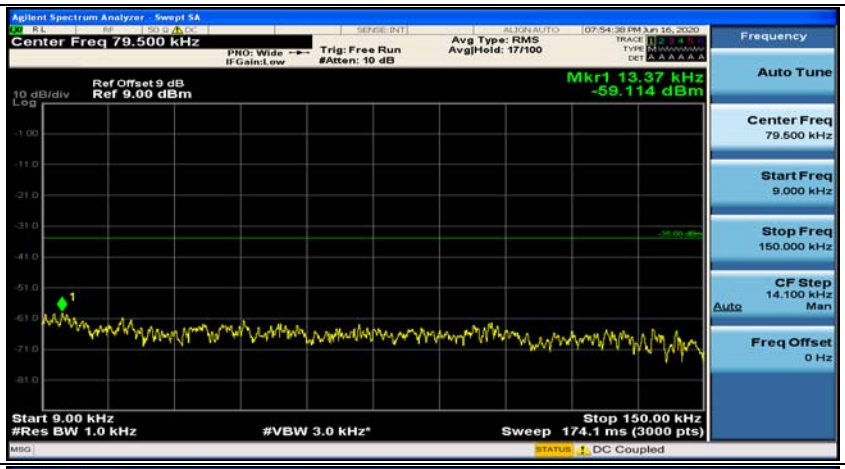
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0

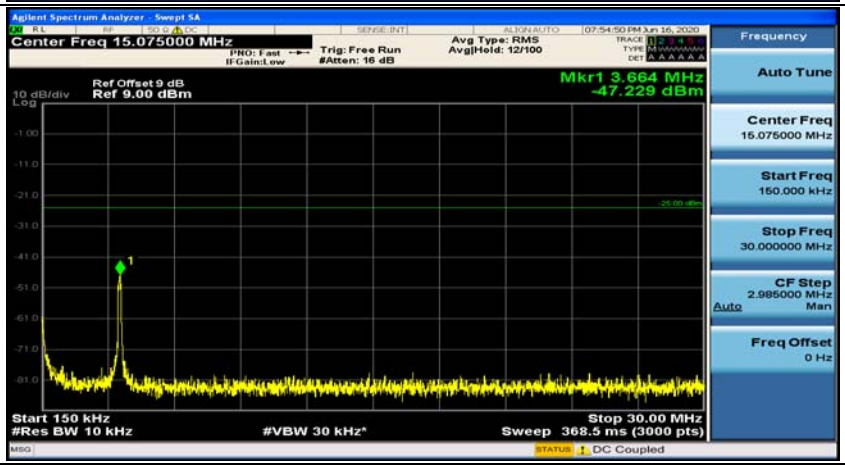


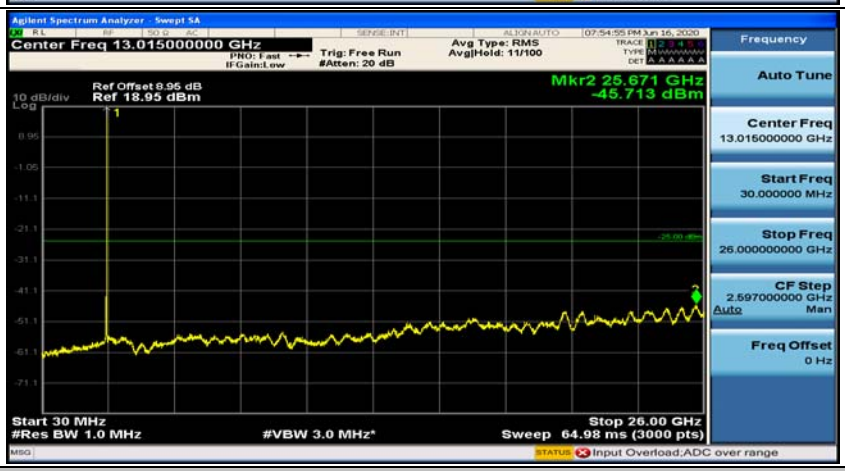




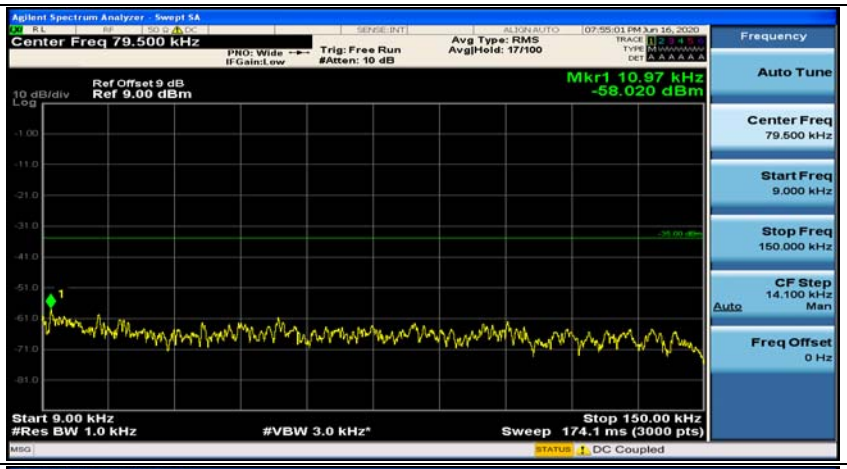
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24

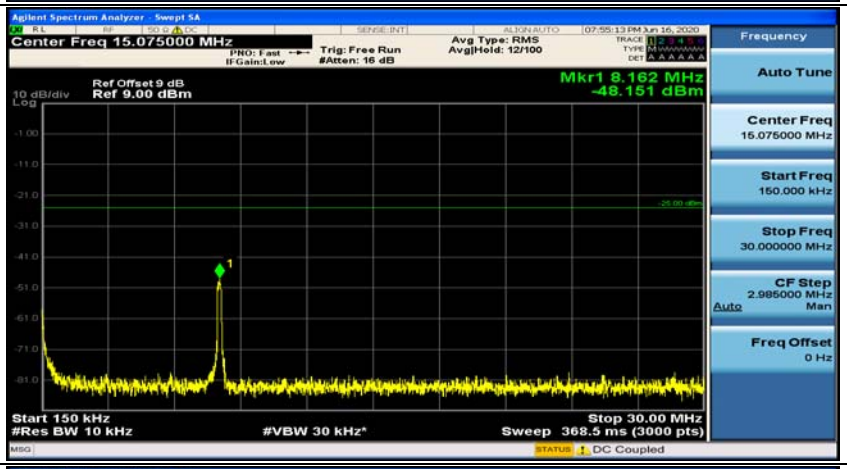


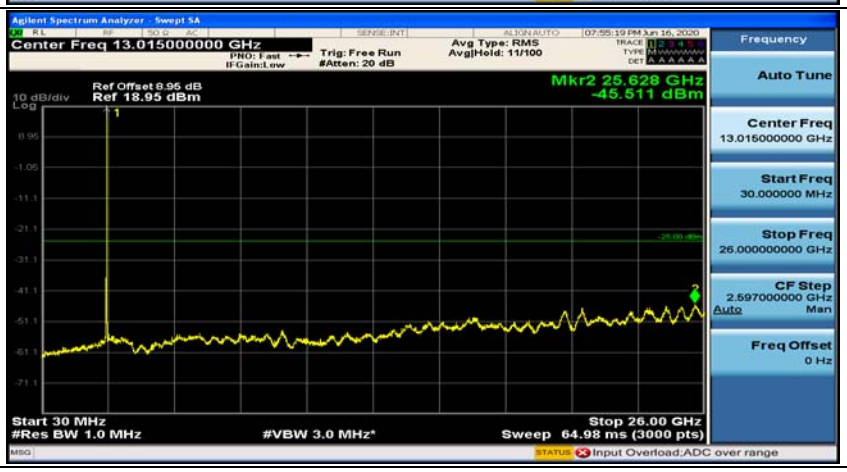




Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49

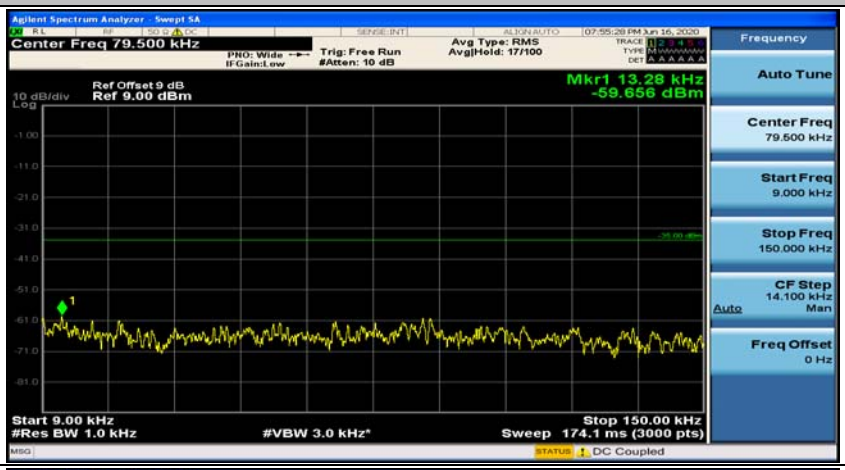

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
07:55:01 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 10.97 kHz
-58.020 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

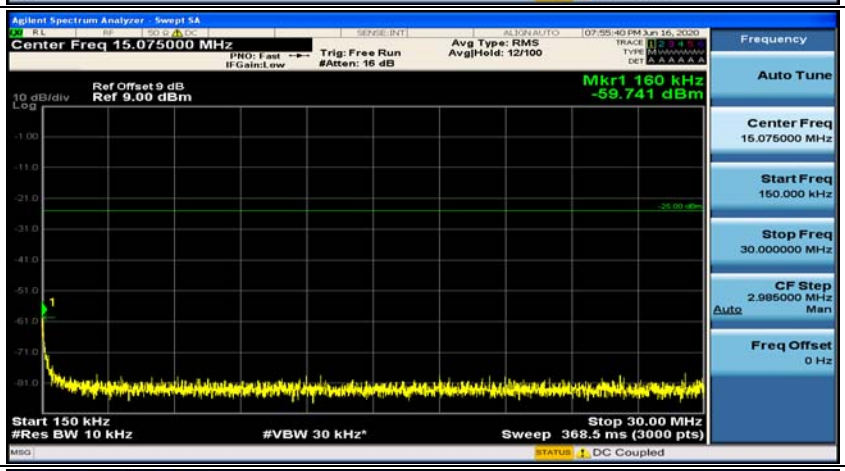

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
07:55:13 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 8.162 MHz
-48.151 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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

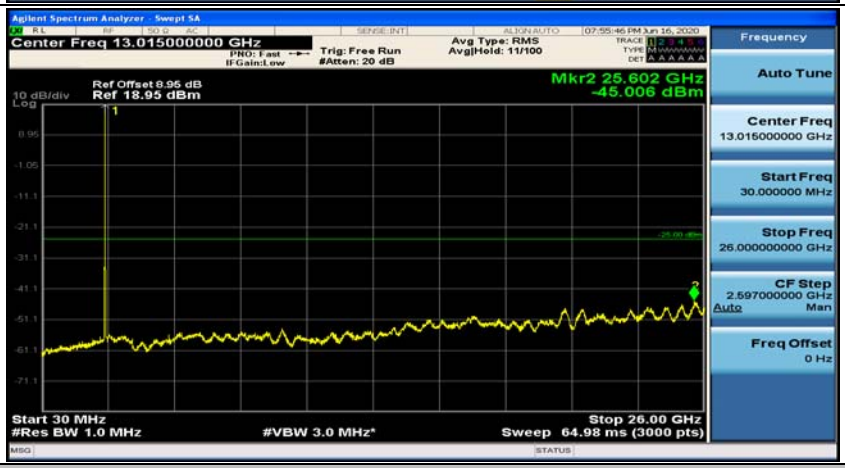

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 11/100
07:55:19 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.628 GHz
-45.511 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

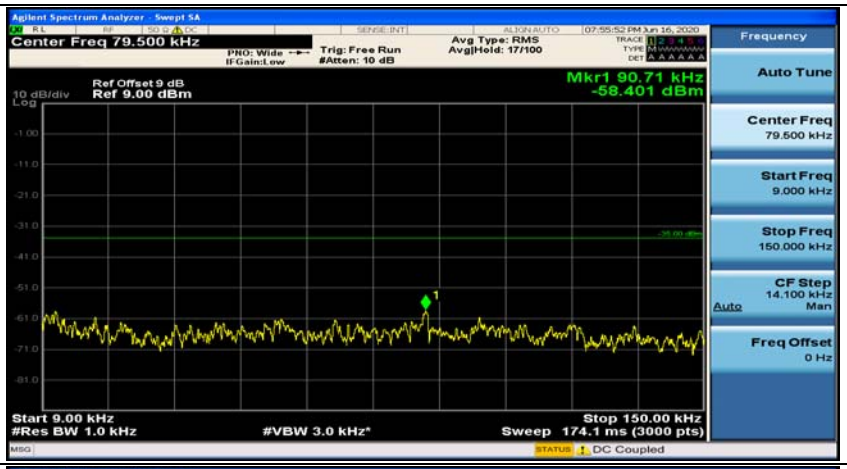
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#0

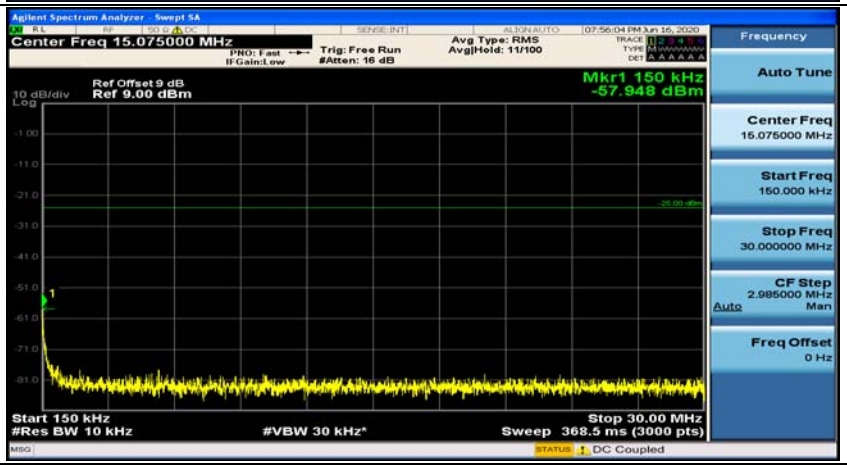


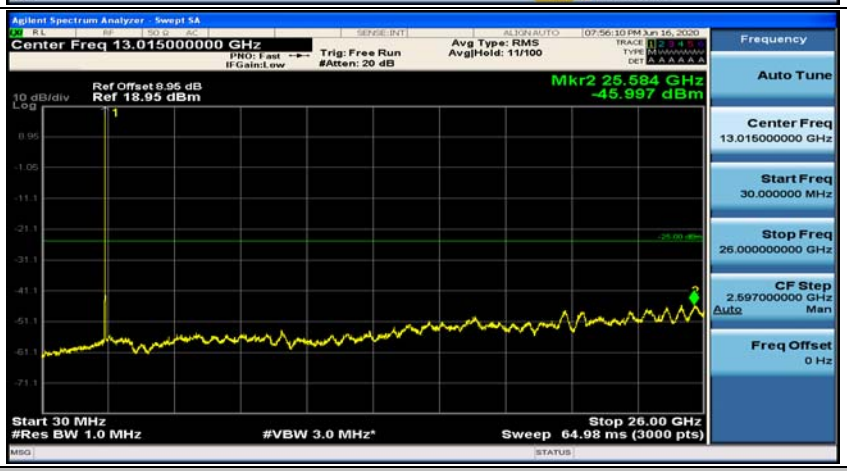




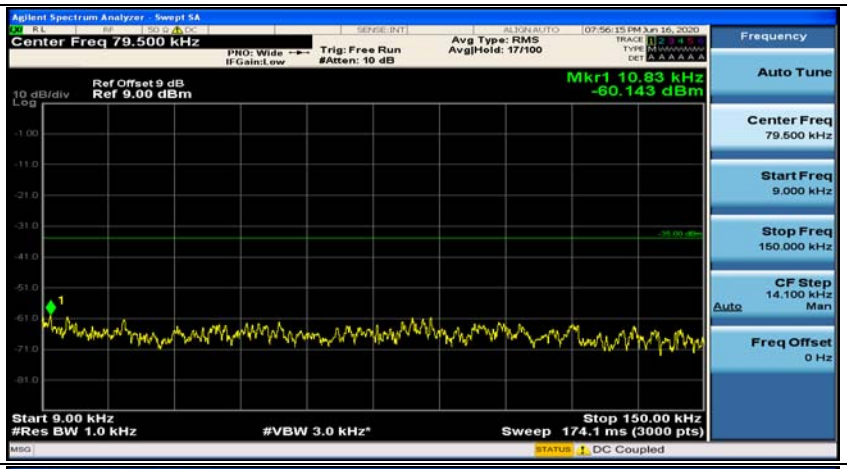
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#37

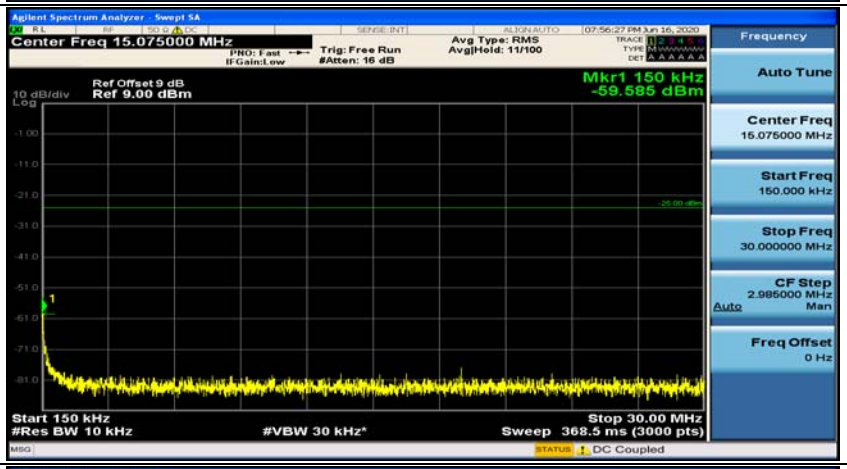


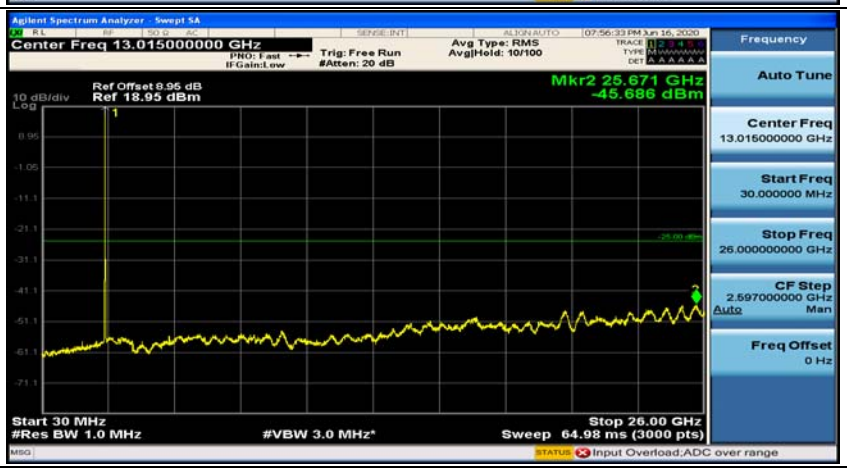




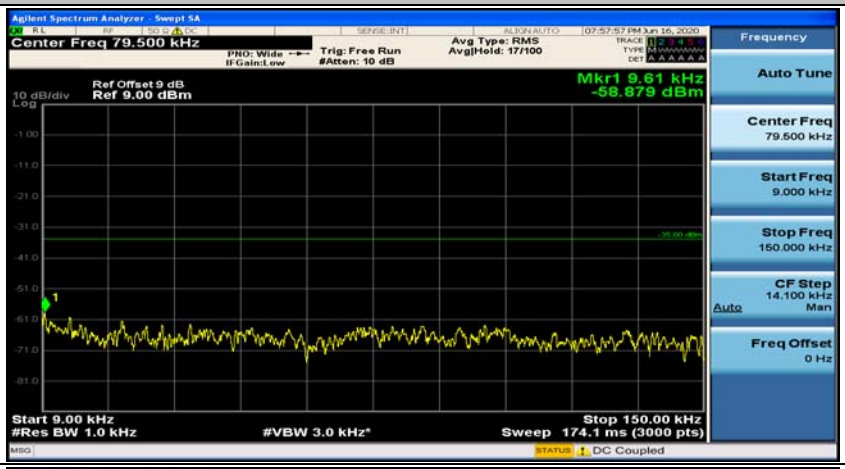
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#74

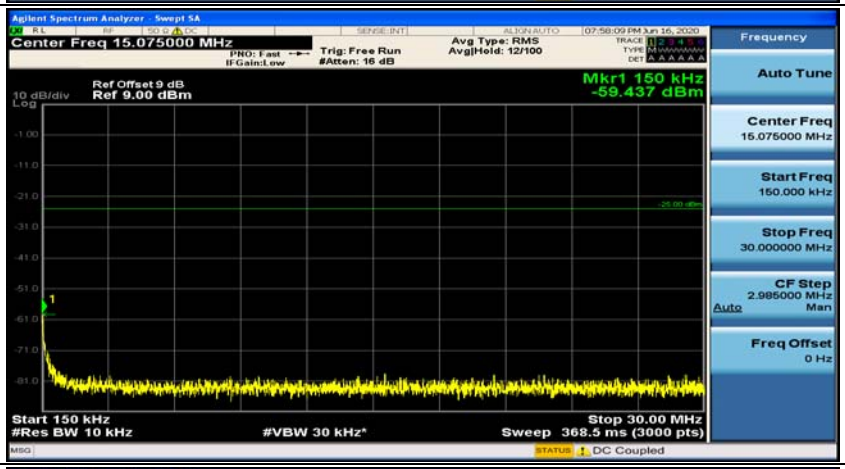

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
07:56:15 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 10.83 kHz
-60.143 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

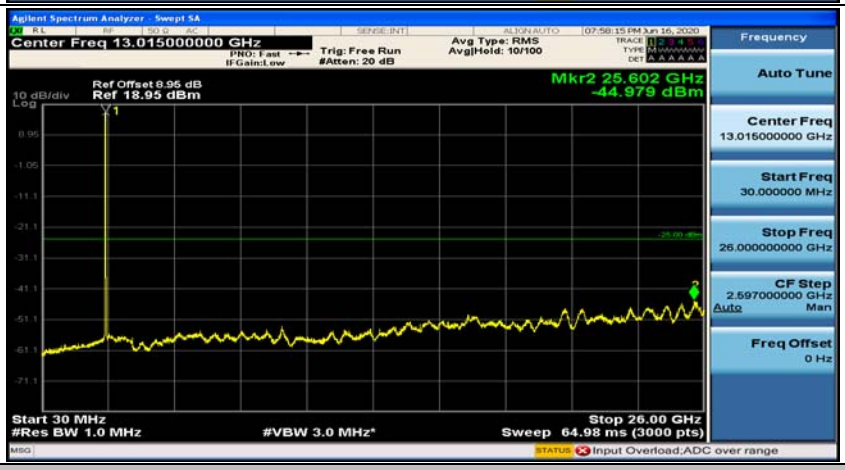

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
07:56:27 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-59.585 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
07:56:33 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.671 GHz
-45.686 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

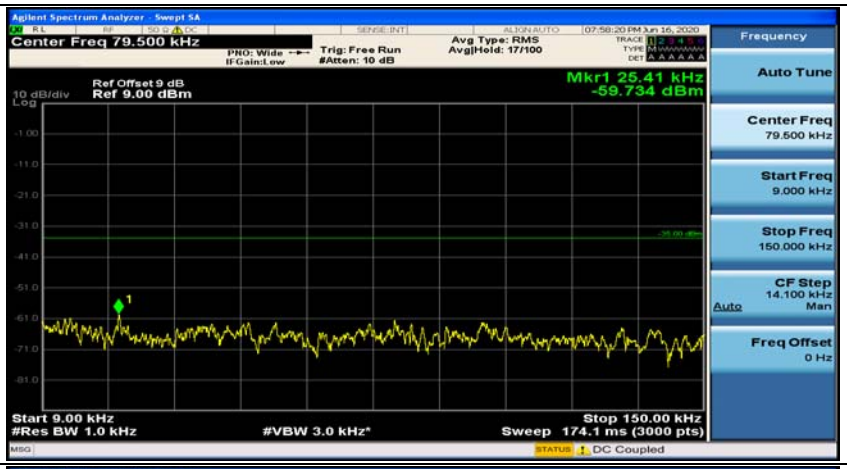
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0

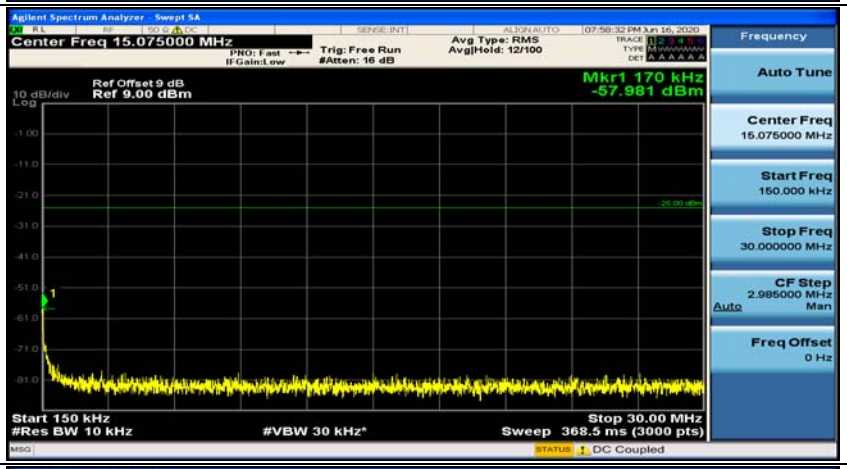


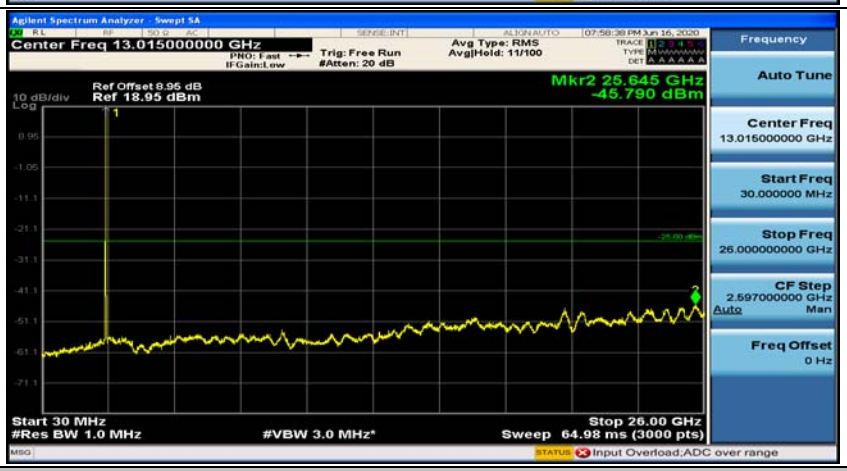




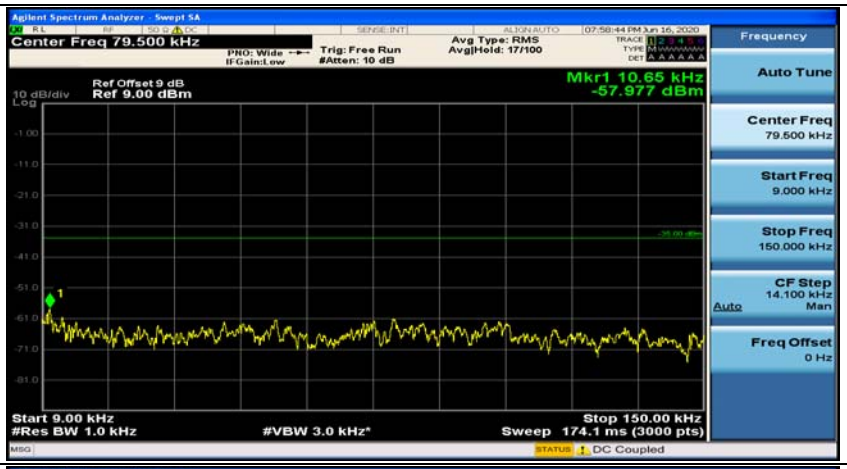
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#37

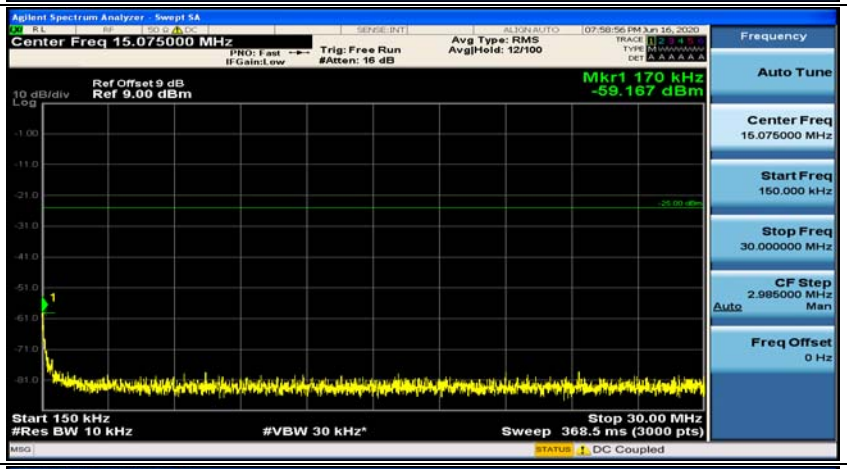


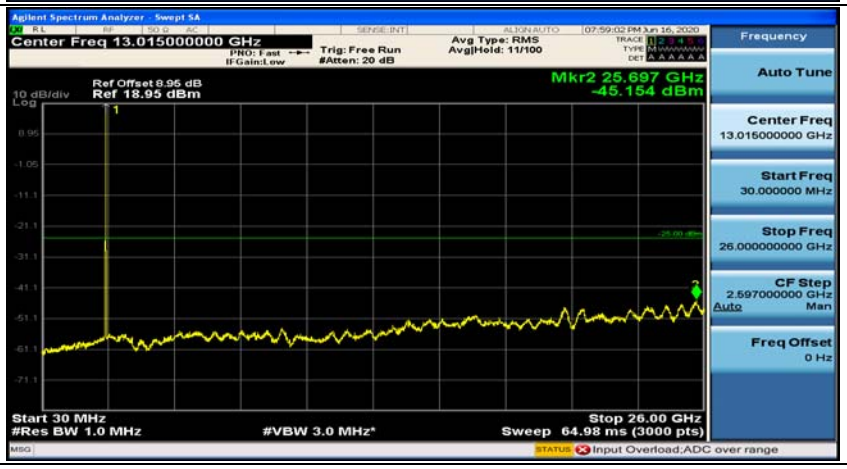




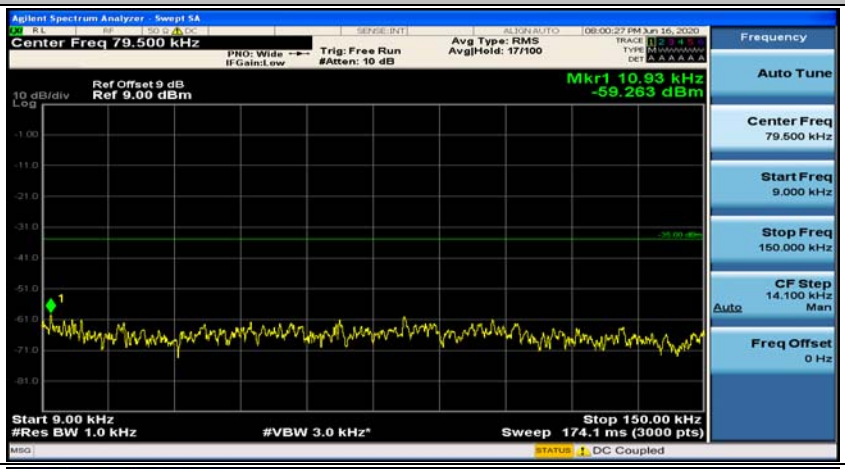
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#74

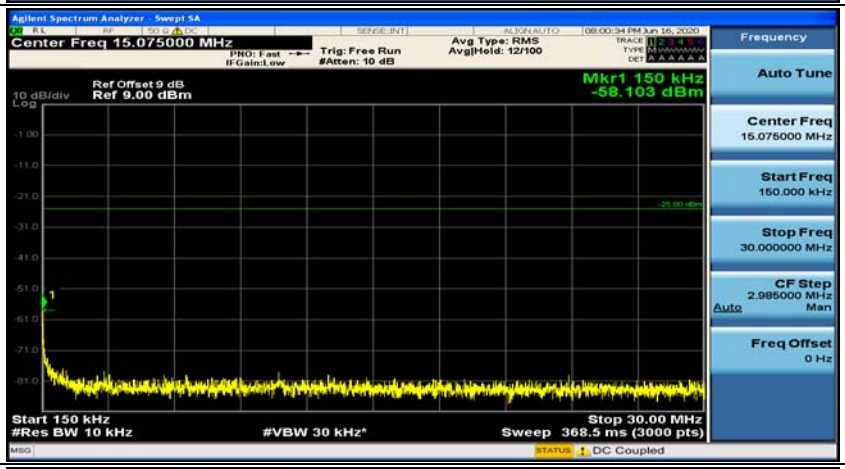

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
07:58:44 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 10.65 kHz
-57.977 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

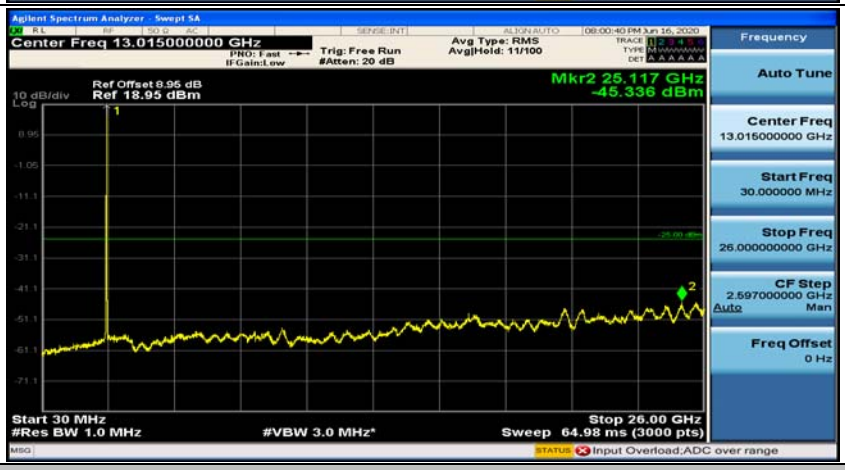

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
07:58:56 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 170 kHz
-59.167 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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: 11/100
07:59:02 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.697 GHz
-45.154 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

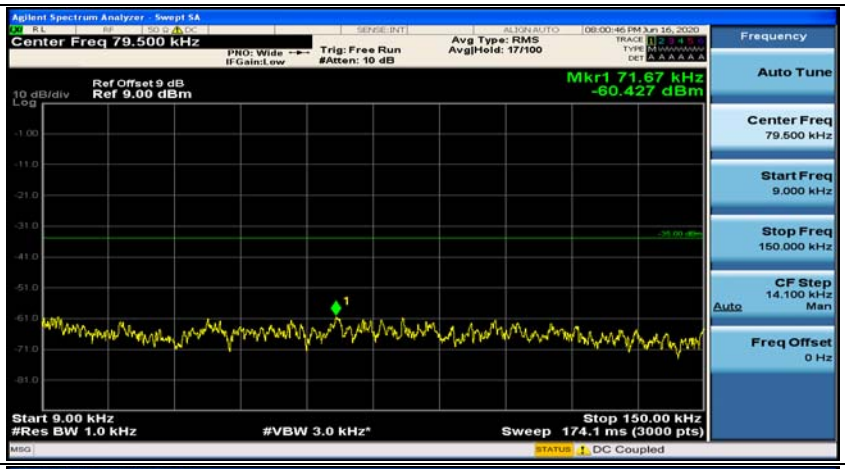
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0

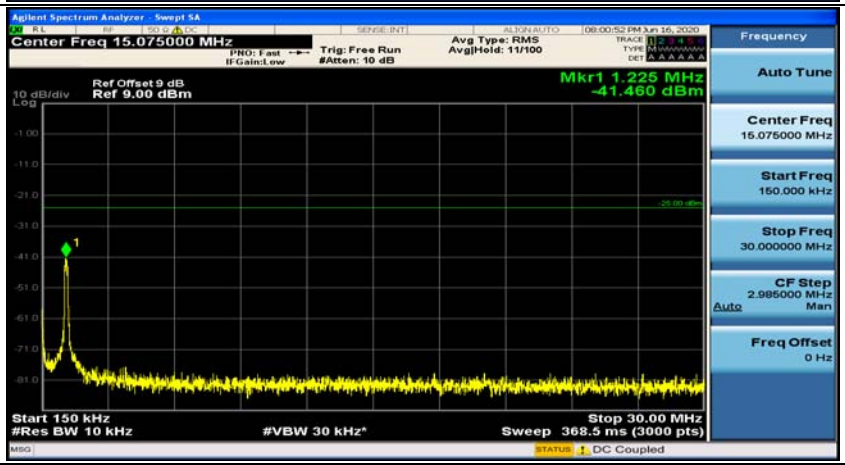


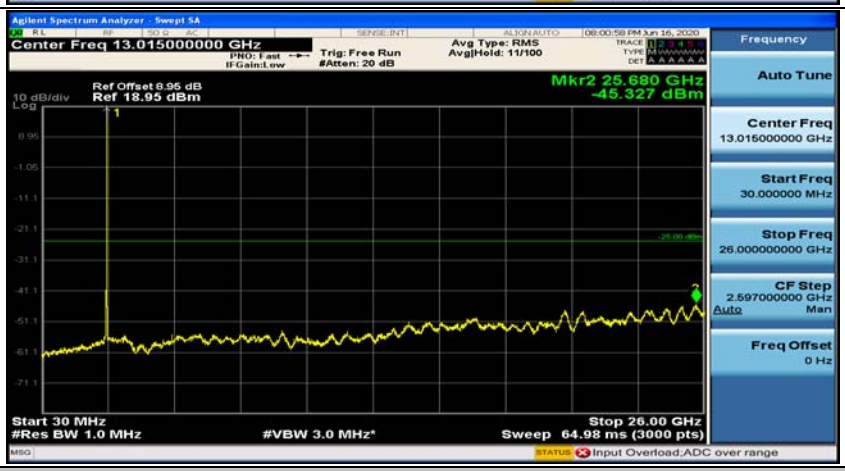




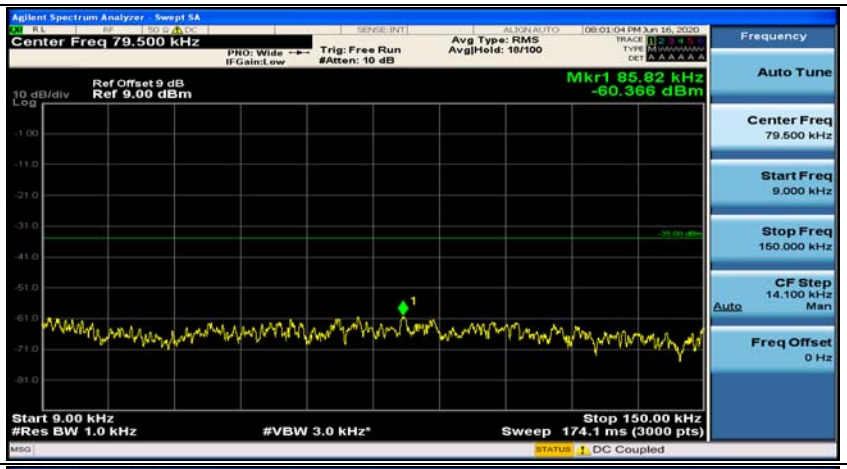
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37

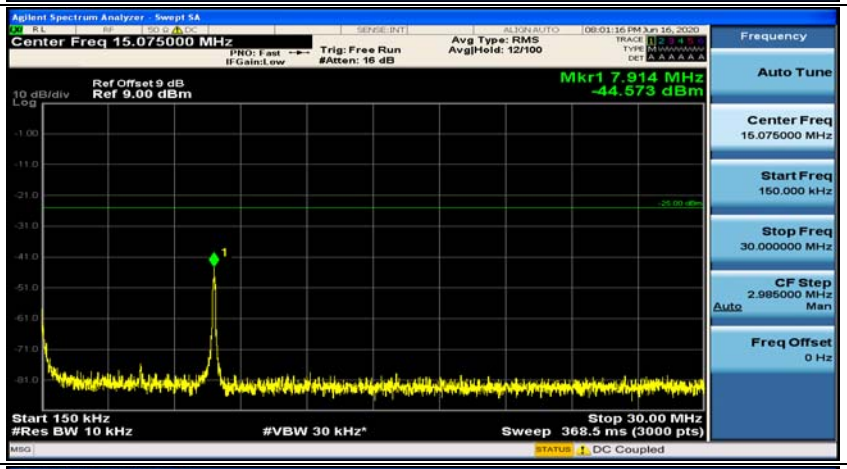


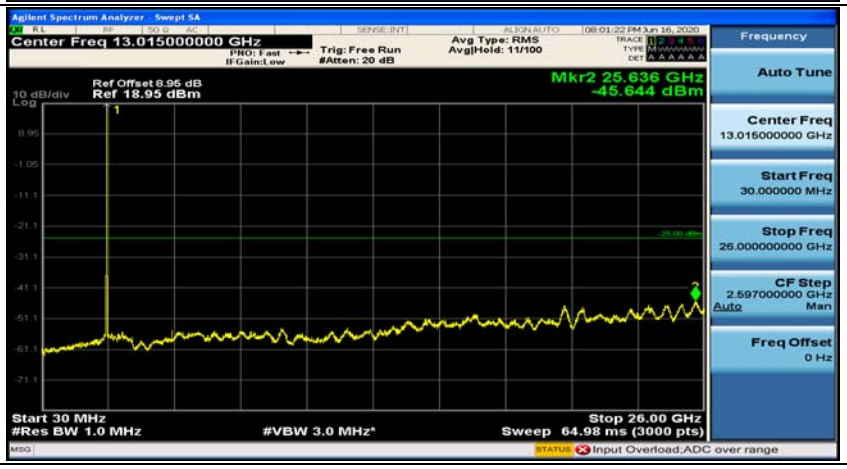




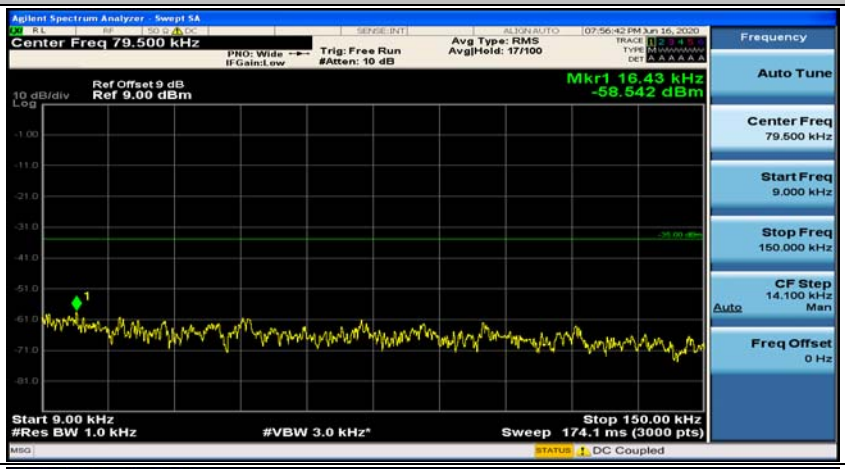
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#74

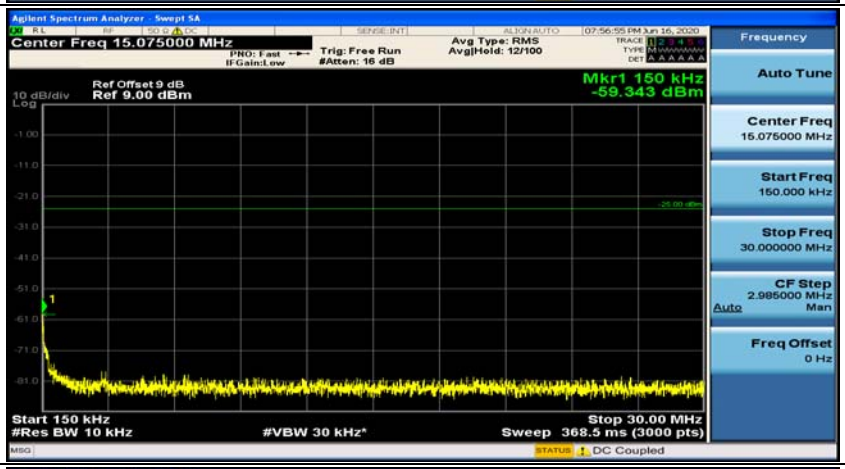

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 18/100
08:01:04 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 85.82 kHz
-60.366 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

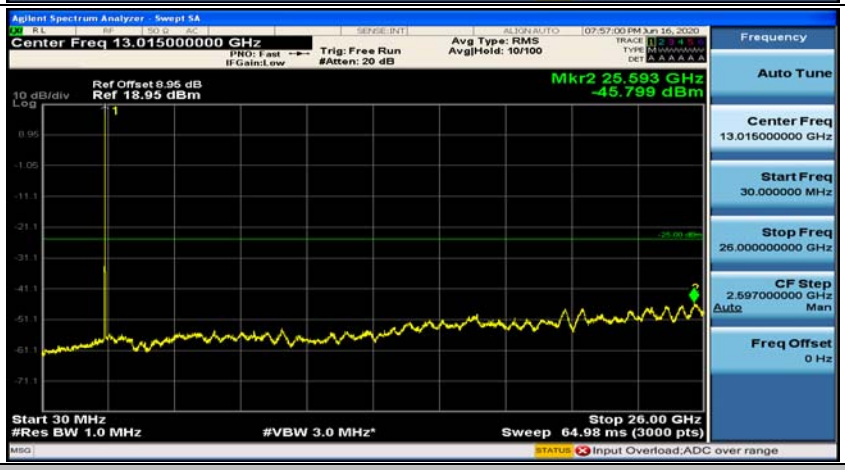

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
08:01:16 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 7.914 MHz
-44.573 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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: 11/100
08:01:22 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.636 GHz
-45.644 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

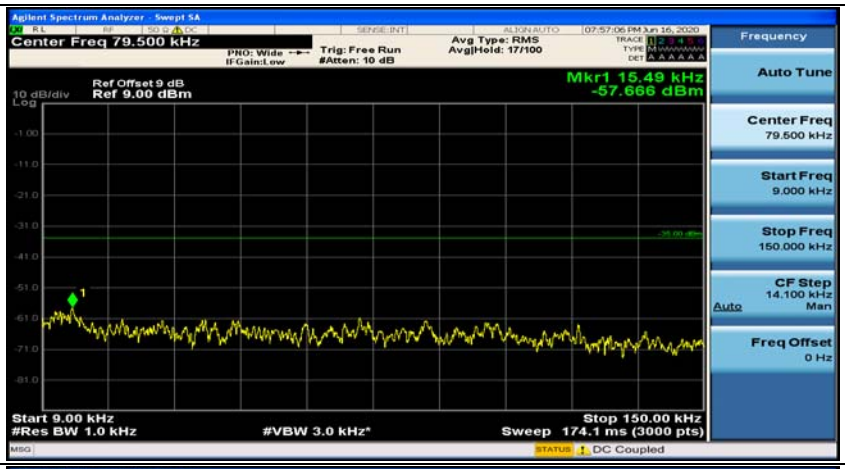
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0

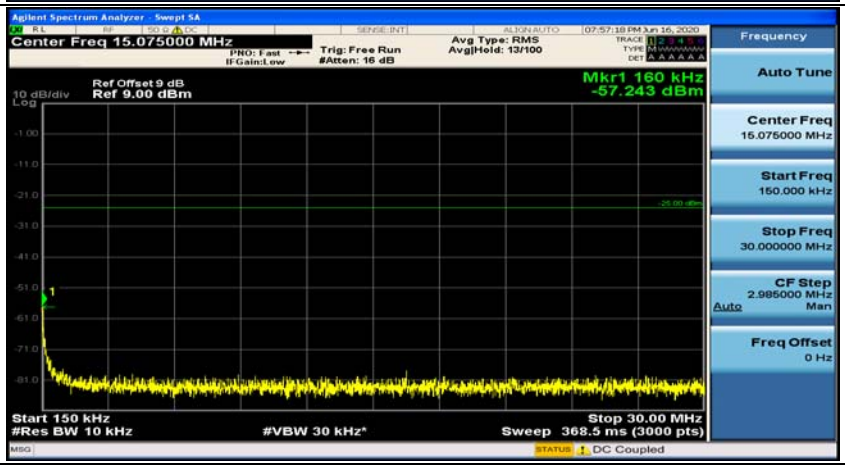


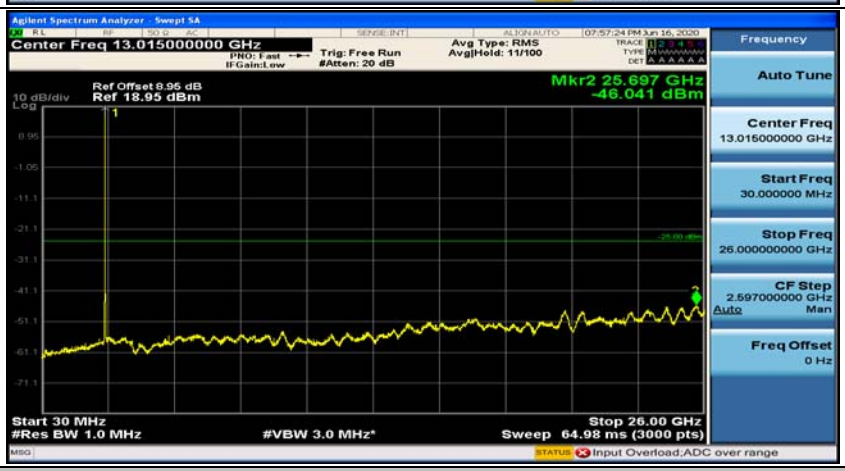




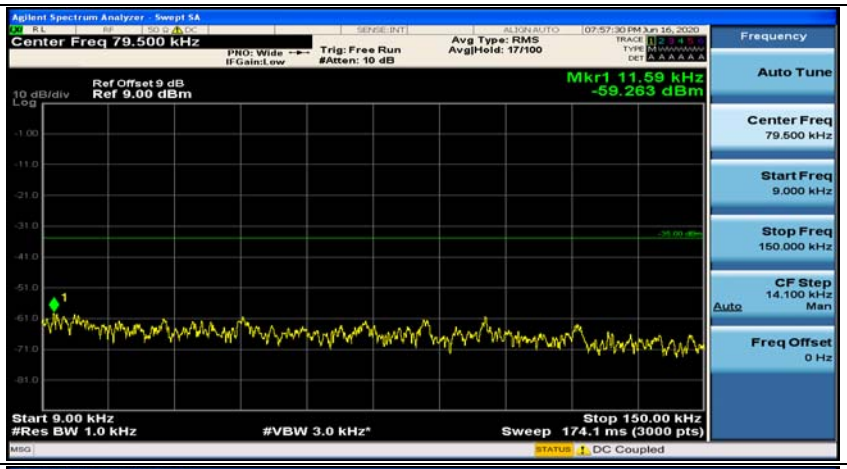
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#37

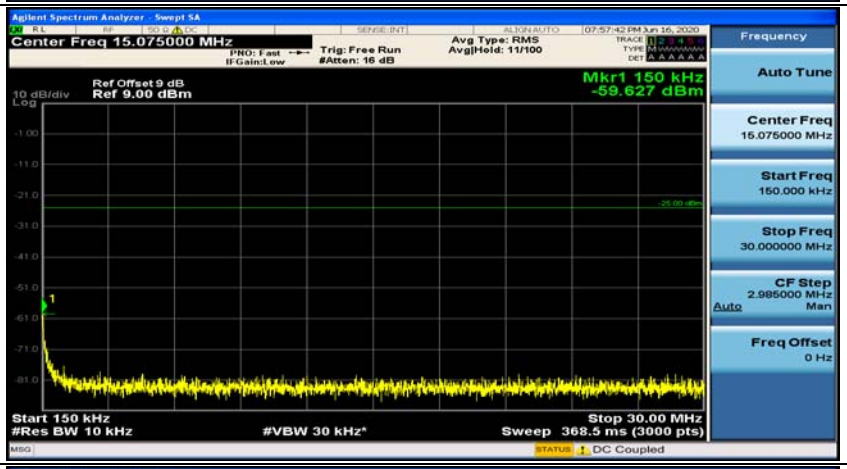


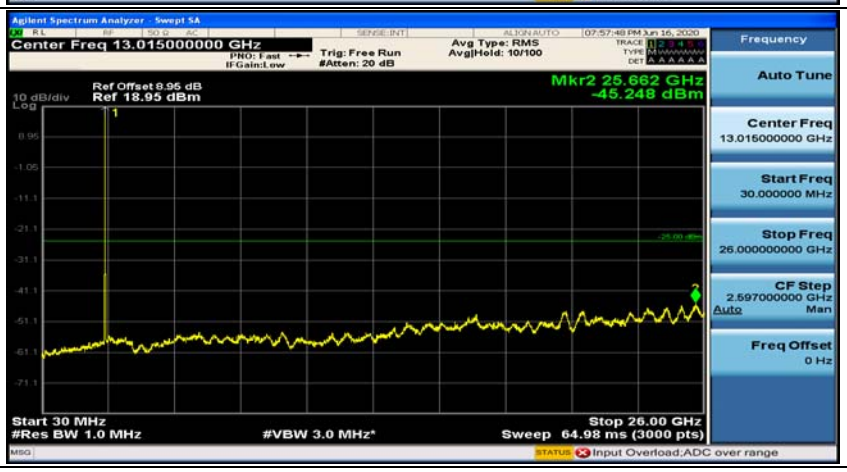




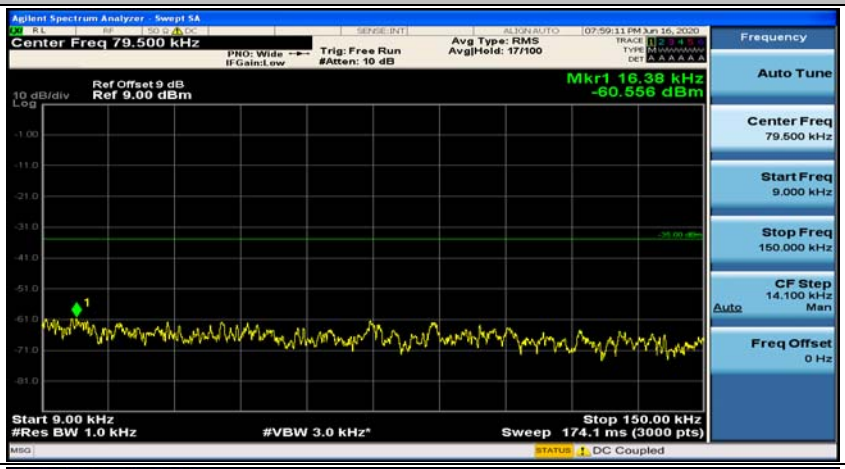
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#74

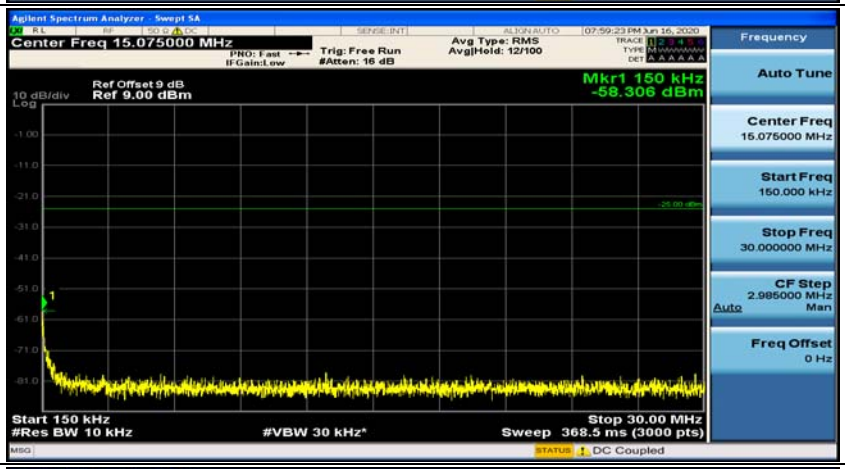

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
07:57:30 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 11.59 kHz
-59.263 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

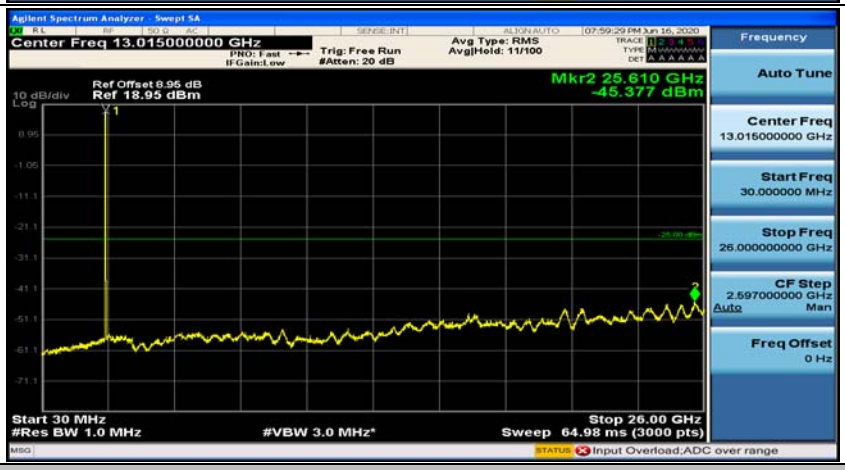

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
07:57:42 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-59.627 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
07:57:48 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.662 GHz
-45.248 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

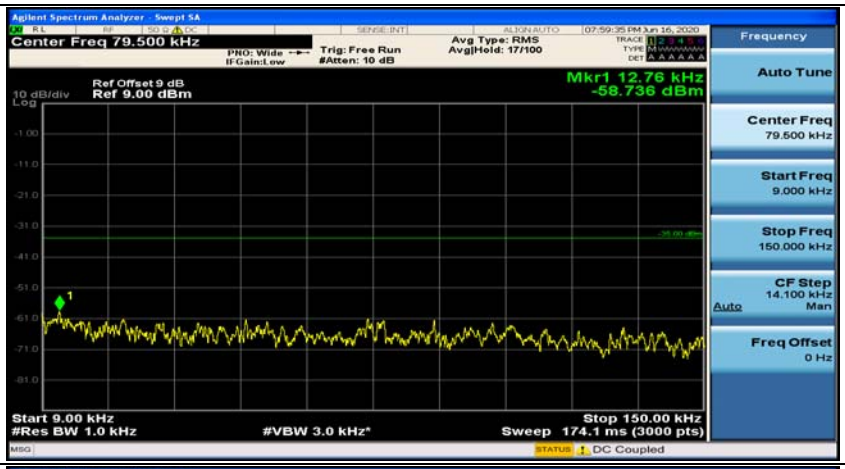
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

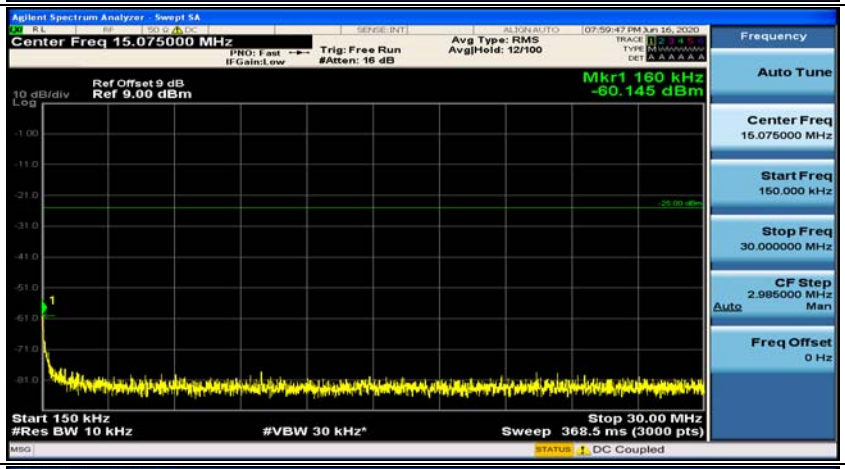


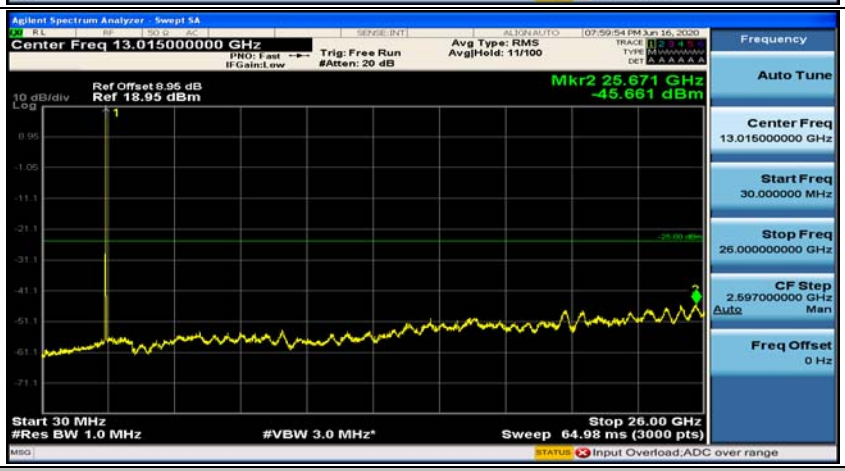




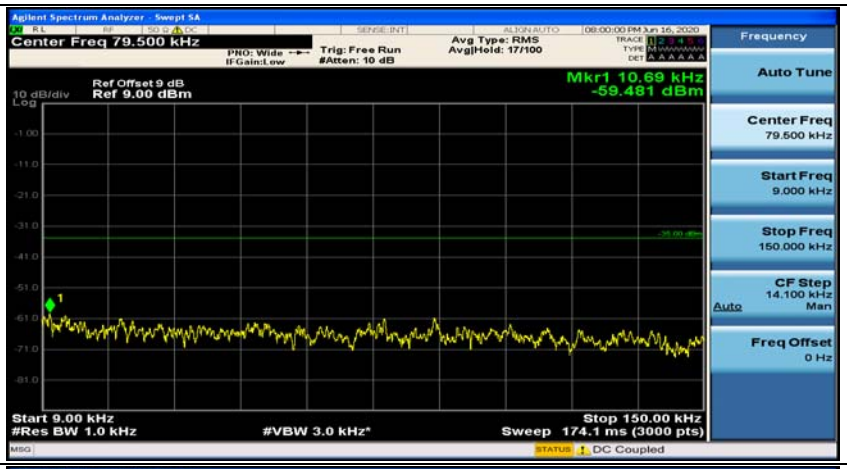
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37

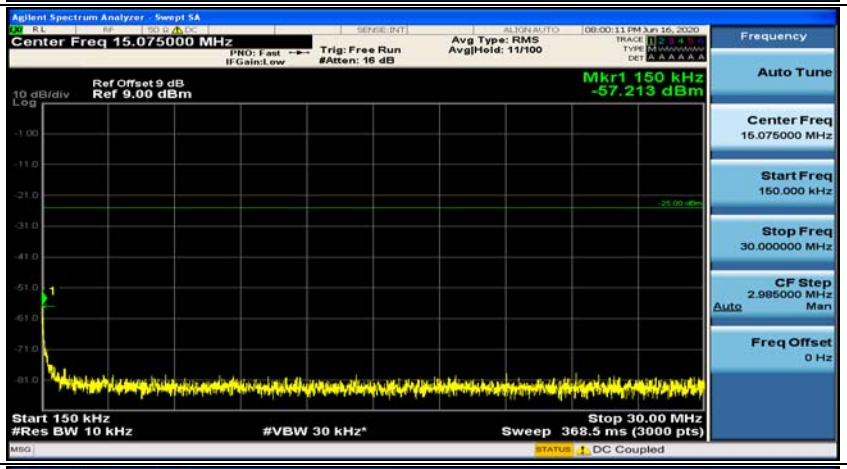


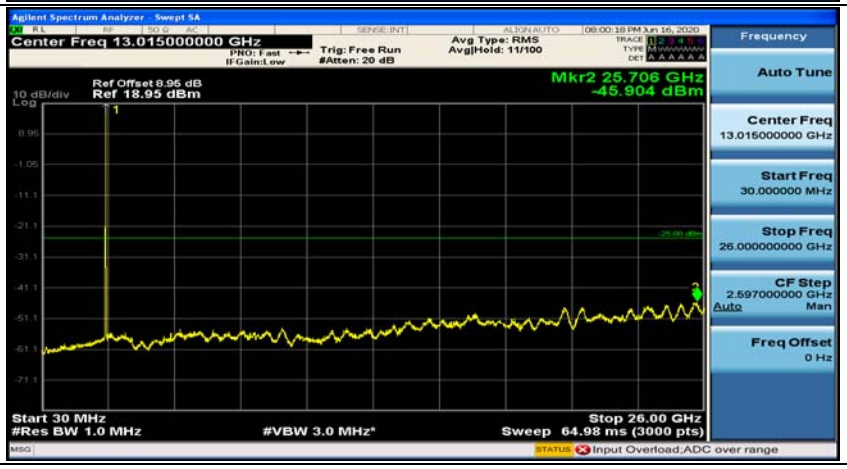




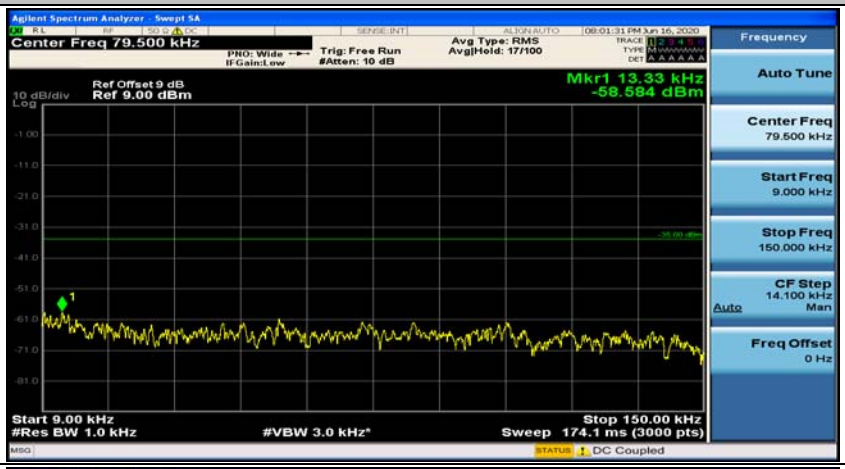
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#74

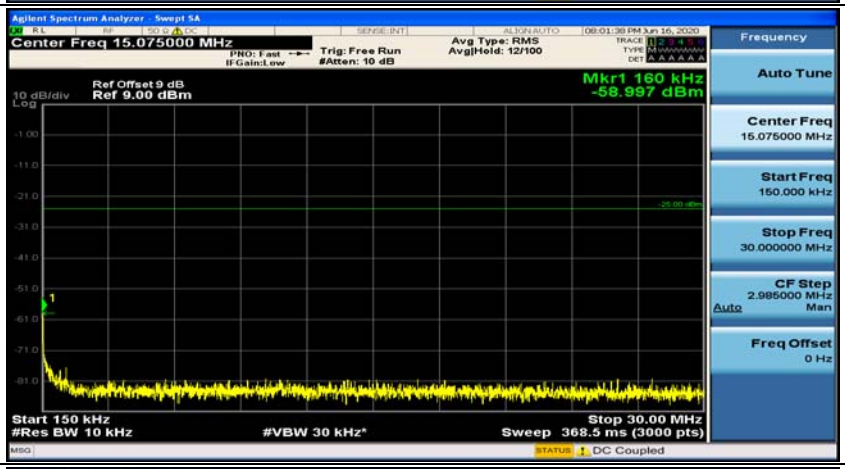

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
08:00:00 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div Ref 9.00 dBm
Log
Mkr1 10.69 kHz
-59.481 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

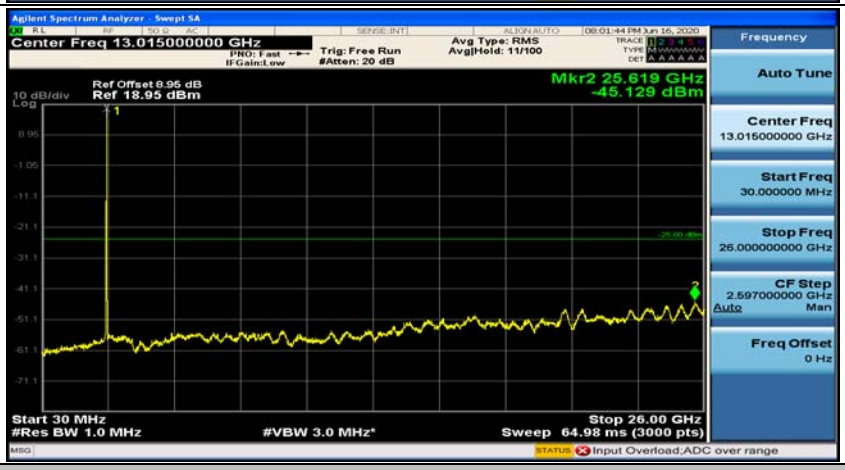

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
08:00:11 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div Ref 9.00 dBm
Log
Mkr1 150 kHz
-57.213 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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: 11/100
08:00:19 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div Ref 18.95 dBm
Log
Mkr2 25.706 GHz
-45.904 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

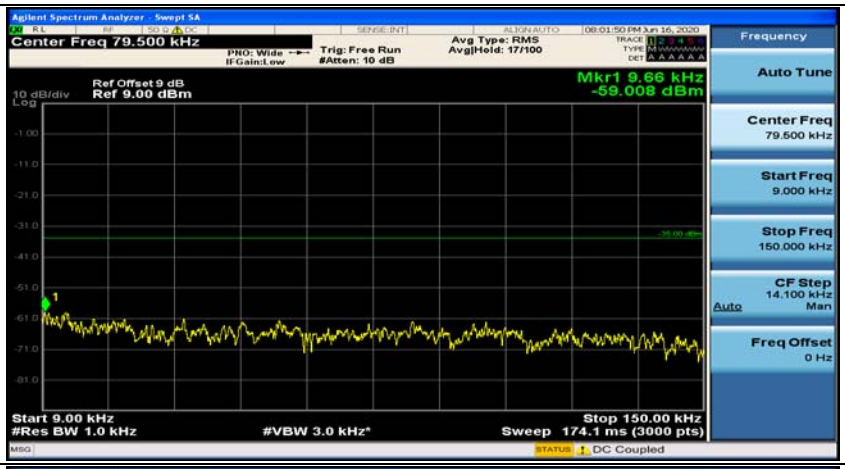
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0

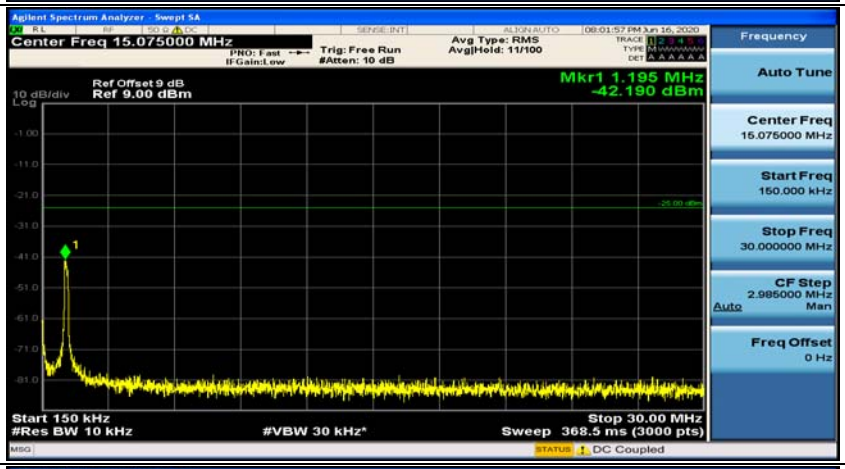


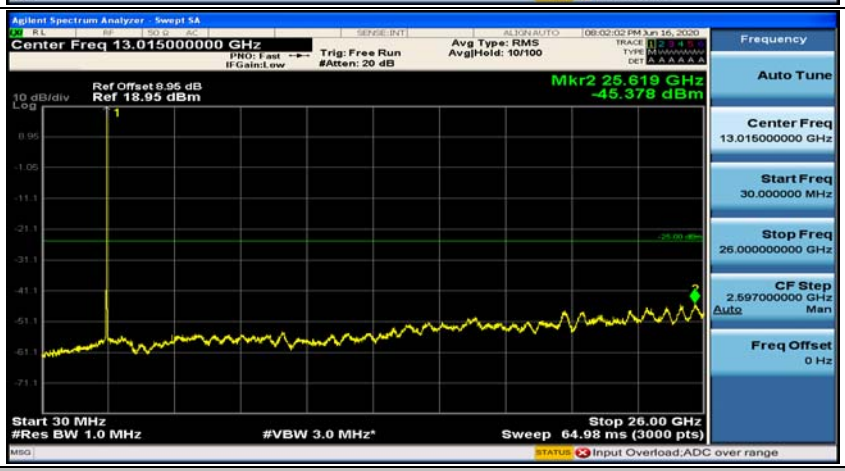




(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#37

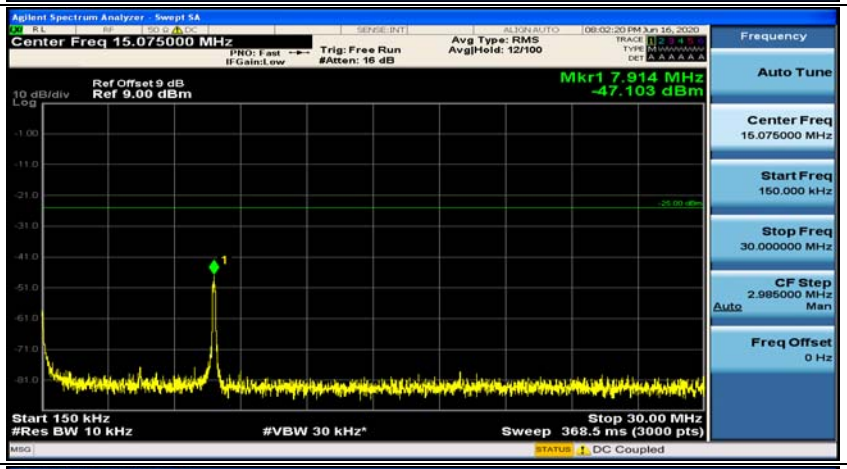


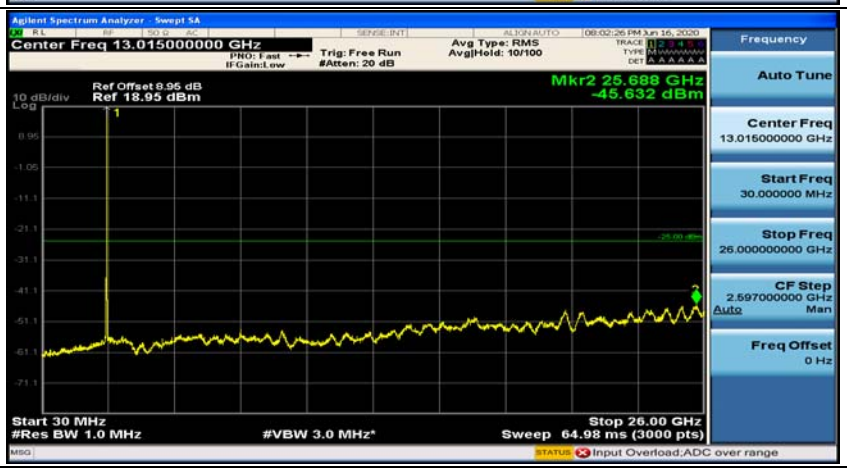




(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#74

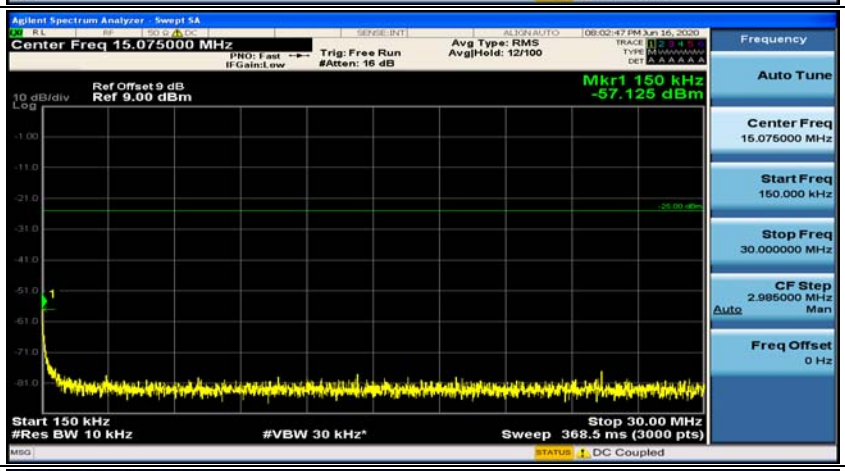
Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
08:02:08 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 10.50 kHz
-59.649 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

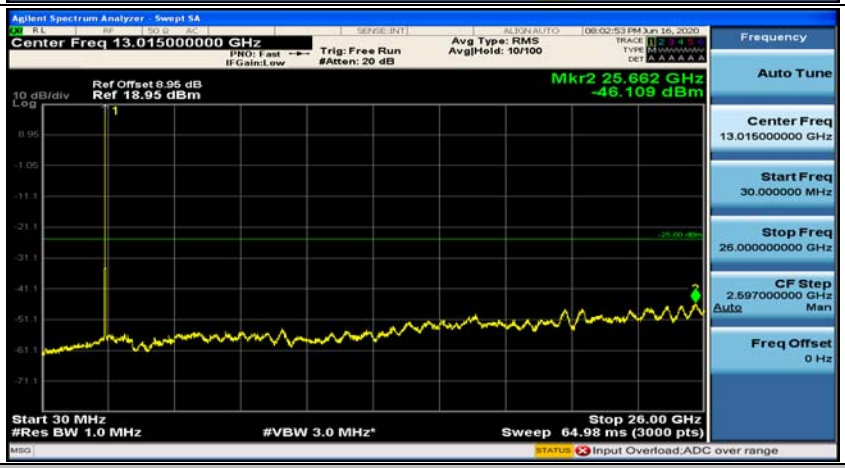

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
08:02:20 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 7.914 MHz
-47.103 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
08:02:26 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.688 GHz
-45.632 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

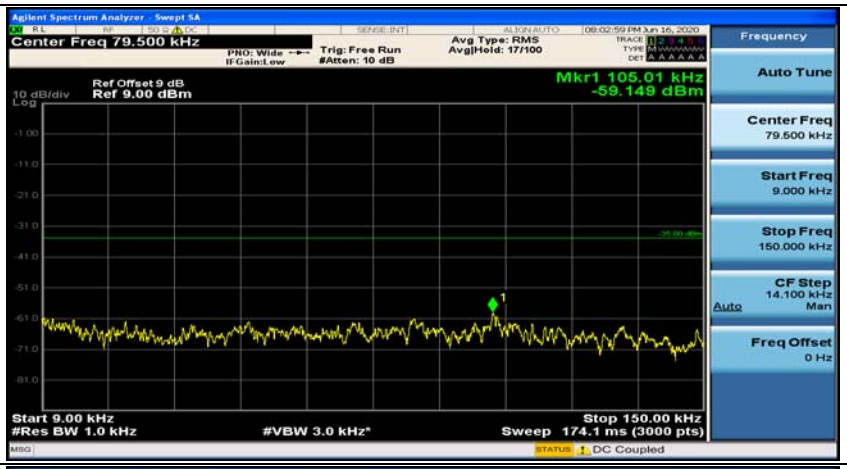
Channel Bandwidth: 20 MHz

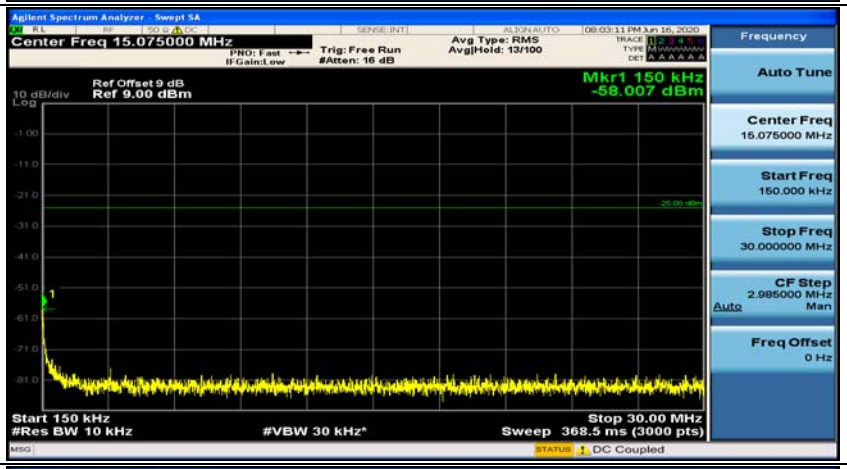
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#0

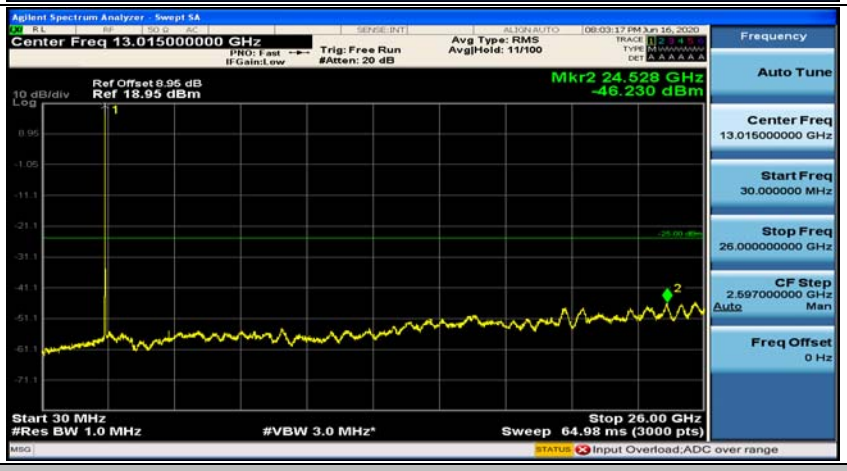




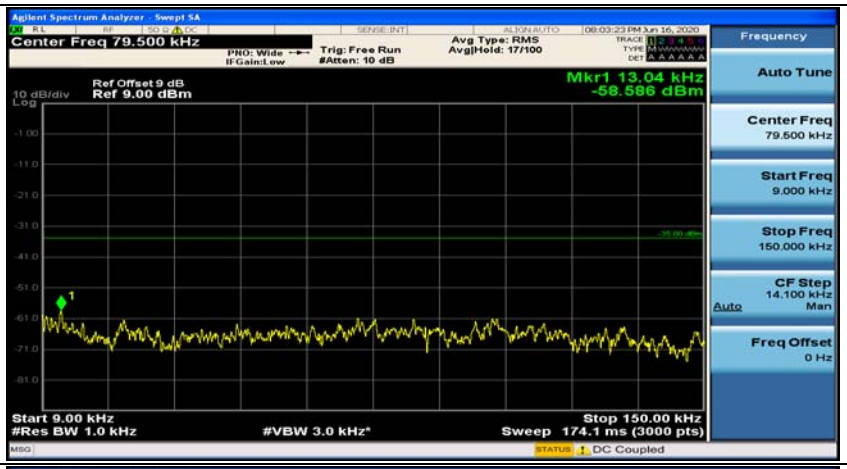
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#49

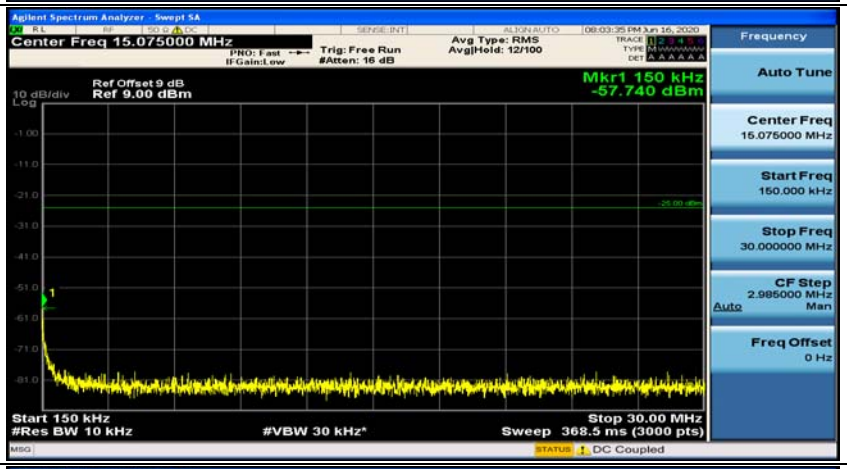


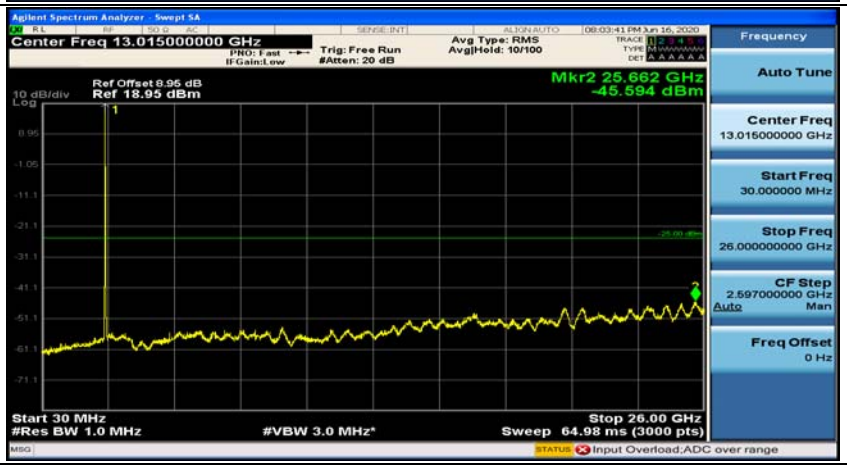




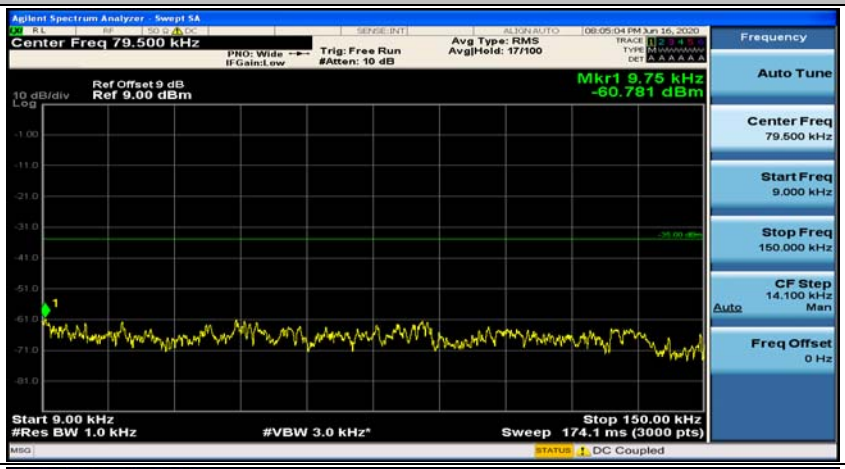
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#99

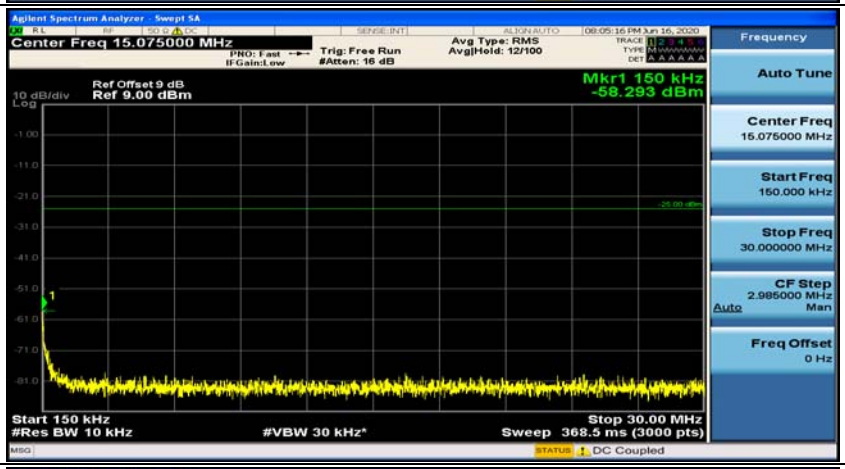

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
08:03:23 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 13.04 kHz
-58.586 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

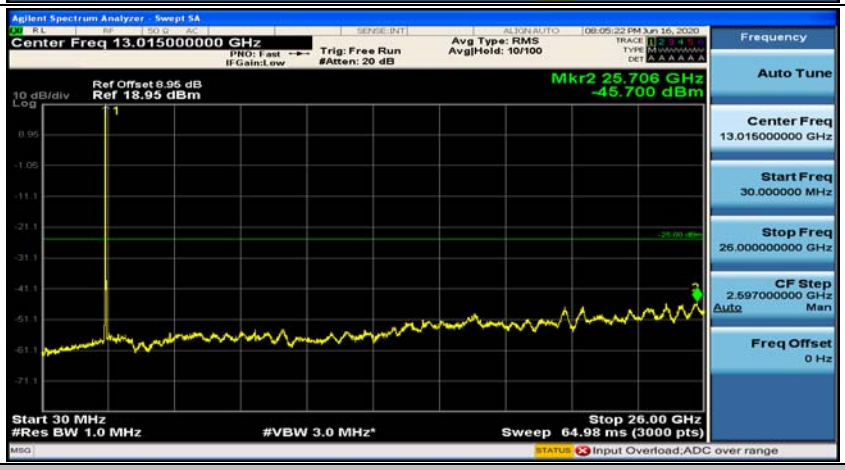

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
08:03:35 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-57.740 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
08:03:41 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.662 GHz
-45.594 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

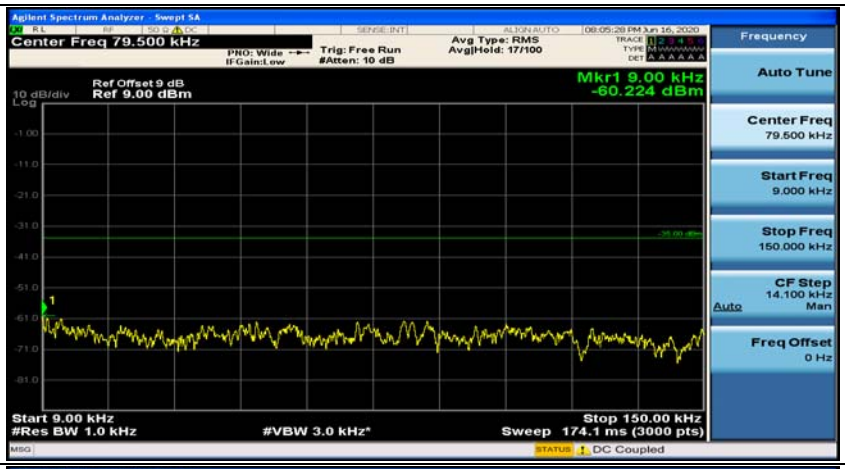
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

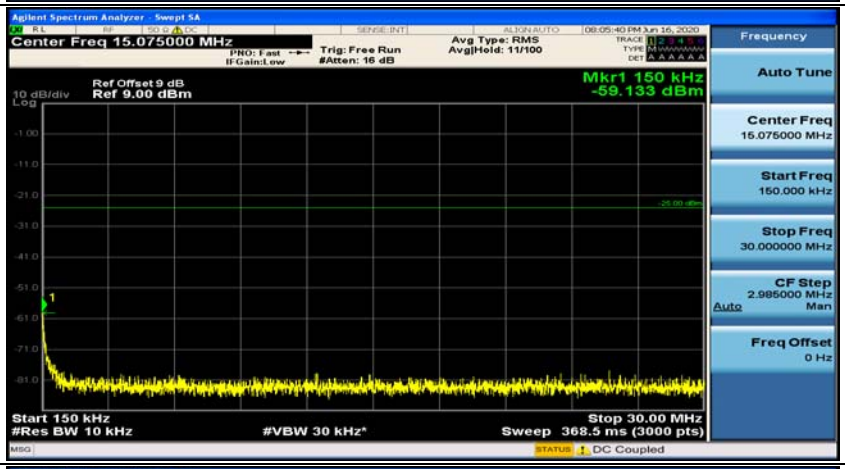


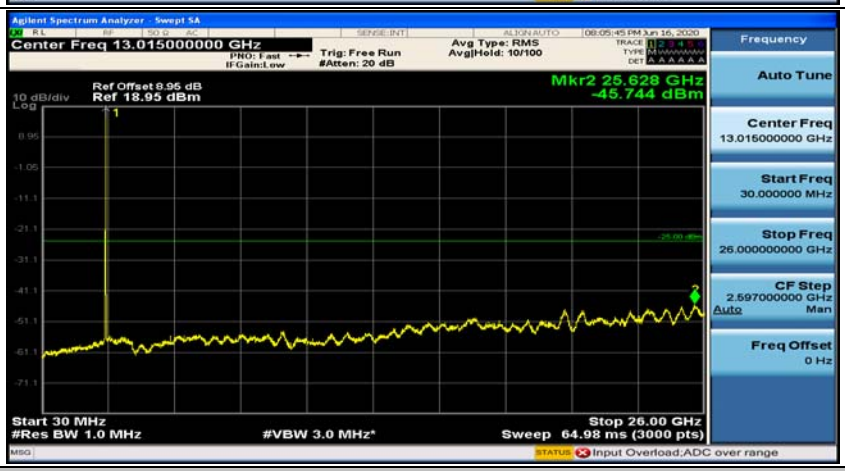




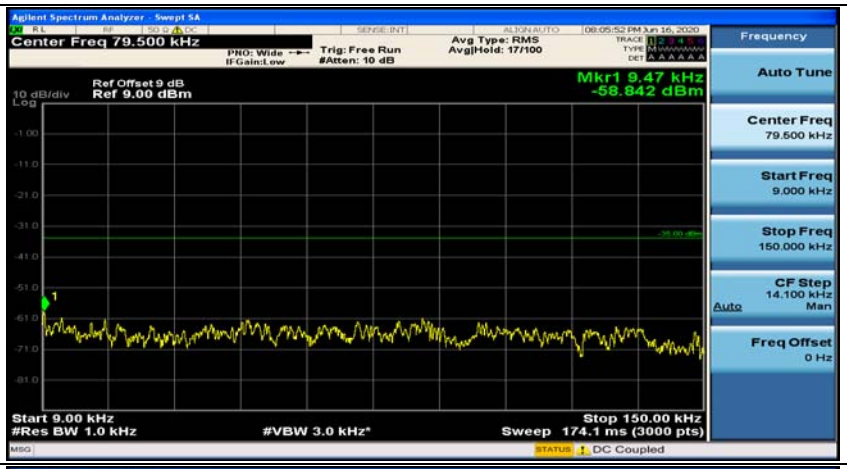
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49

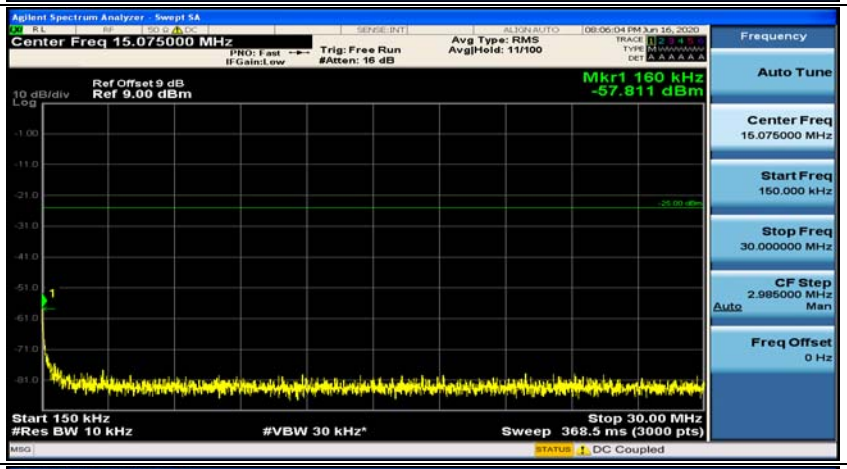


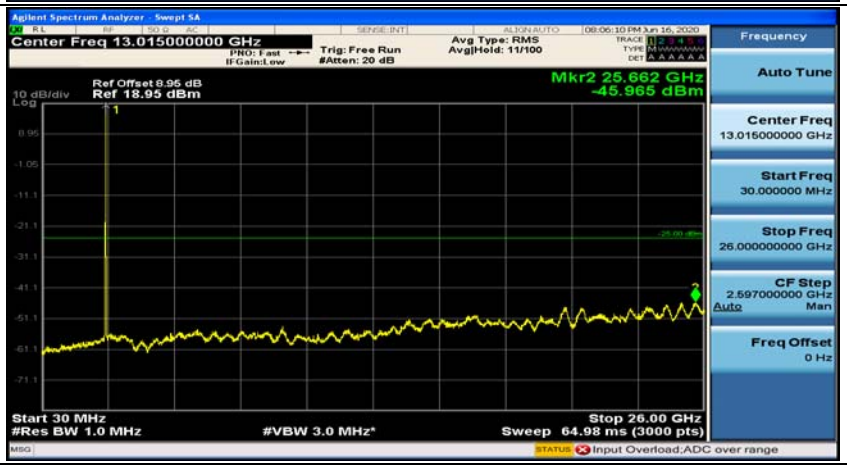




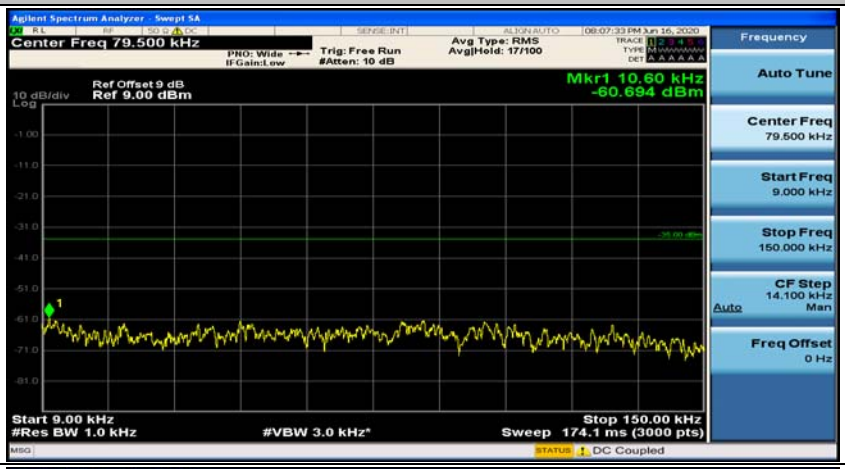
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#99

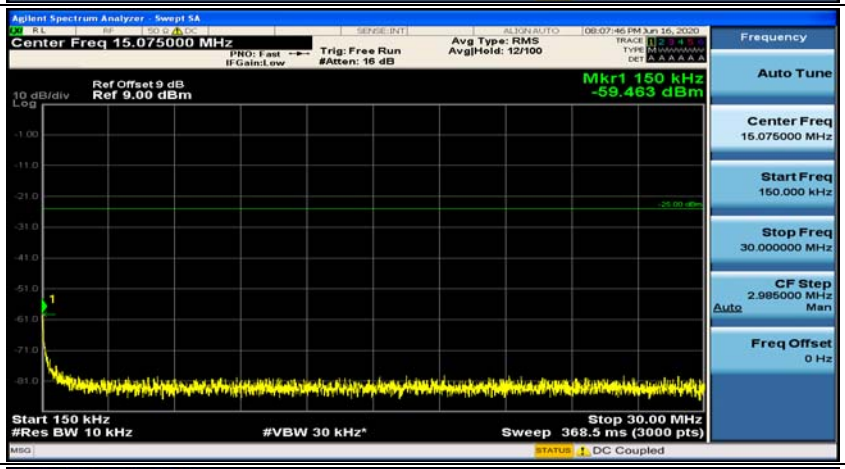

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
08:05:52 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 9.47 kHz
-58.842 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

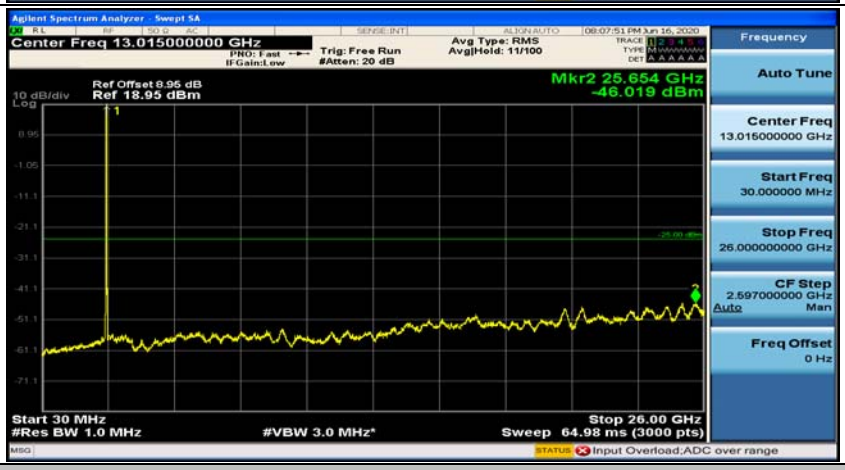

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
08:06:04 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 160 kHz
-57.811 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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: 11/100
08:06:10 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.662 GHz
-45.965 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

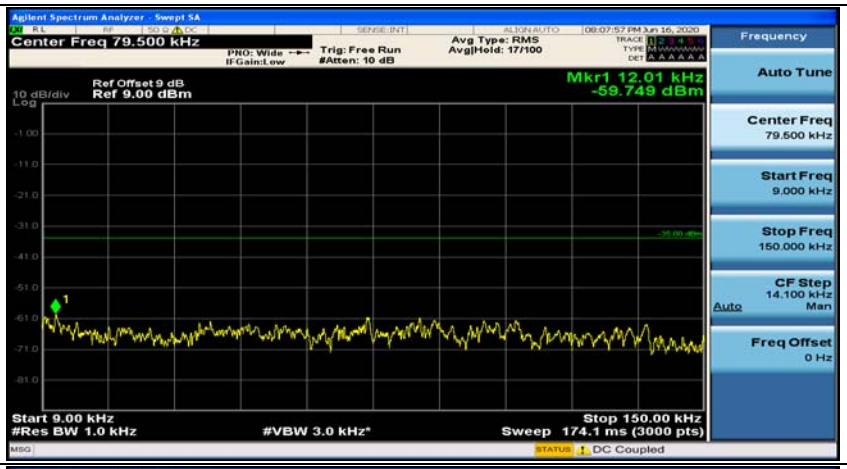
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0

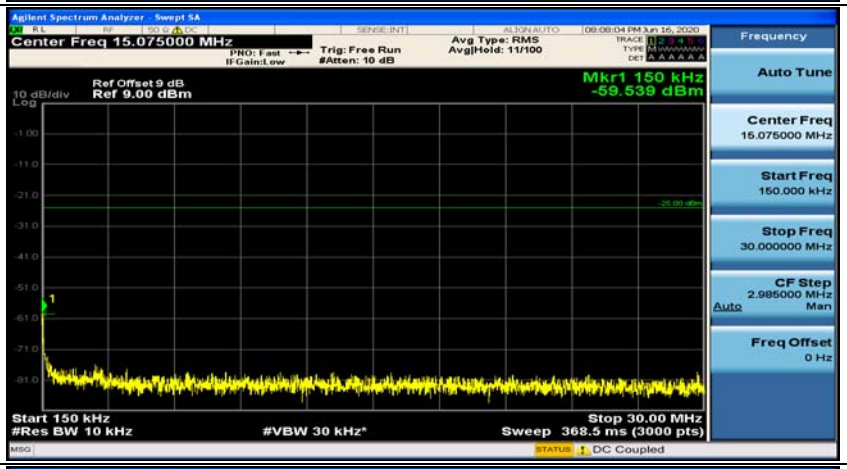


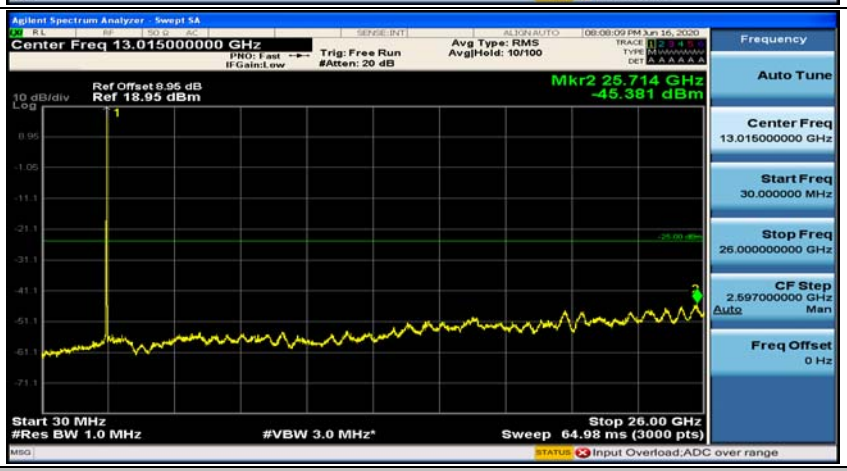




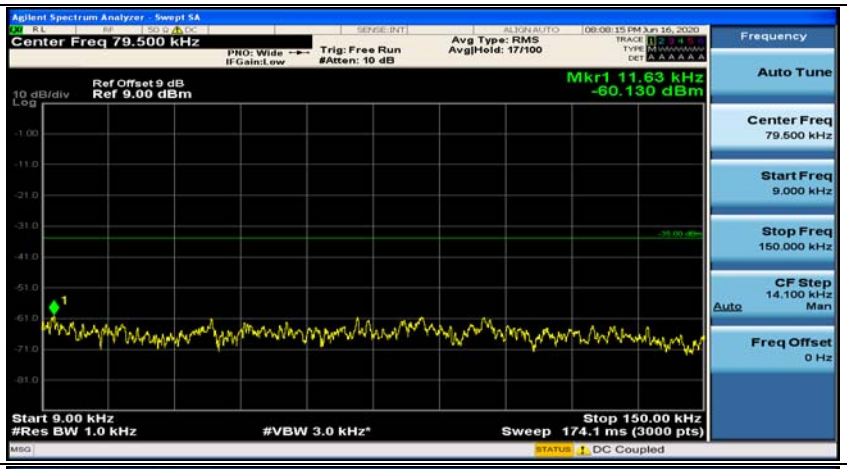
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#49

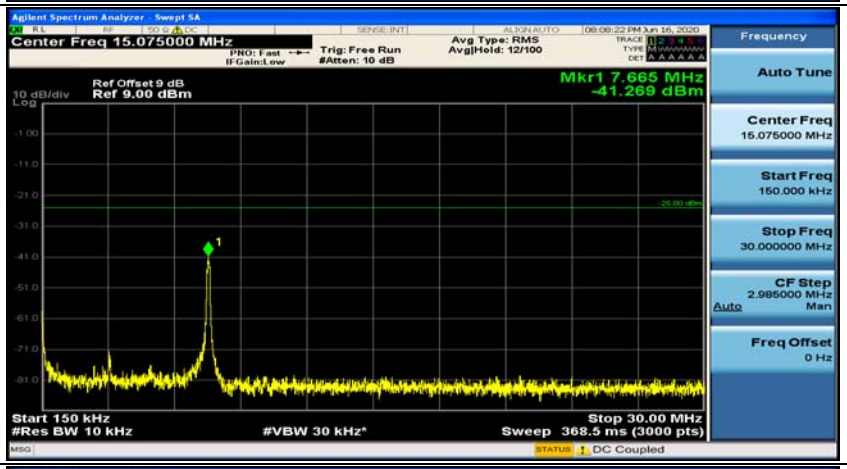


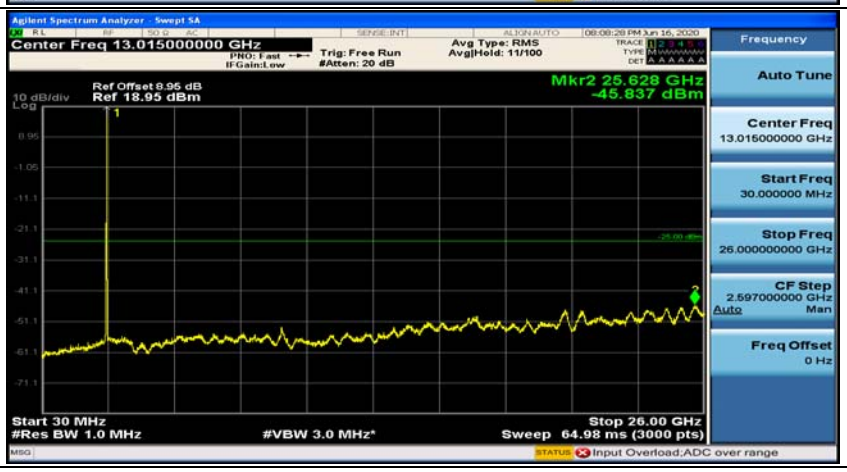




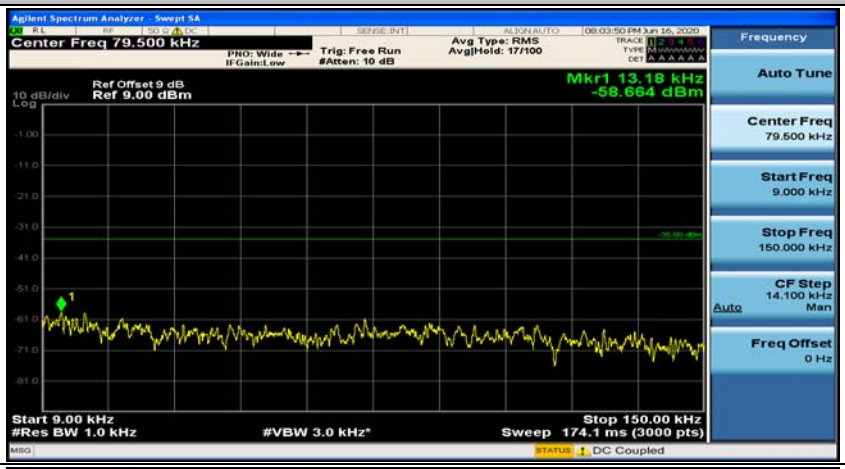
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#99

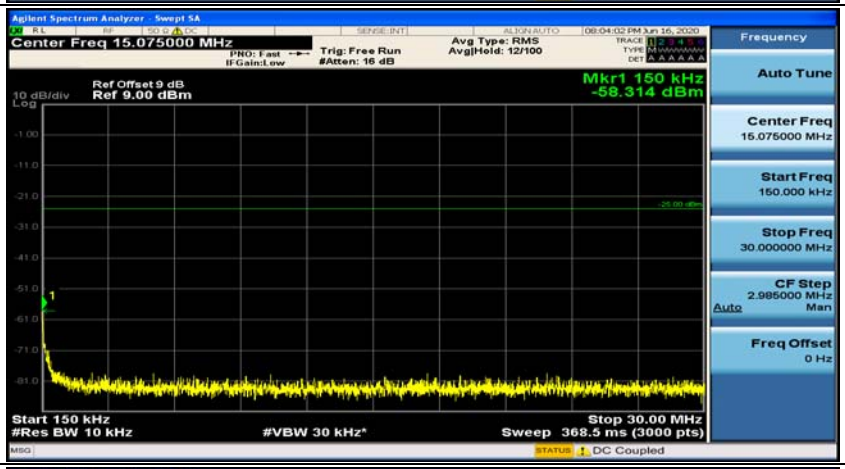

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
08:08:15 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 11.63 kHz
-60.130 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

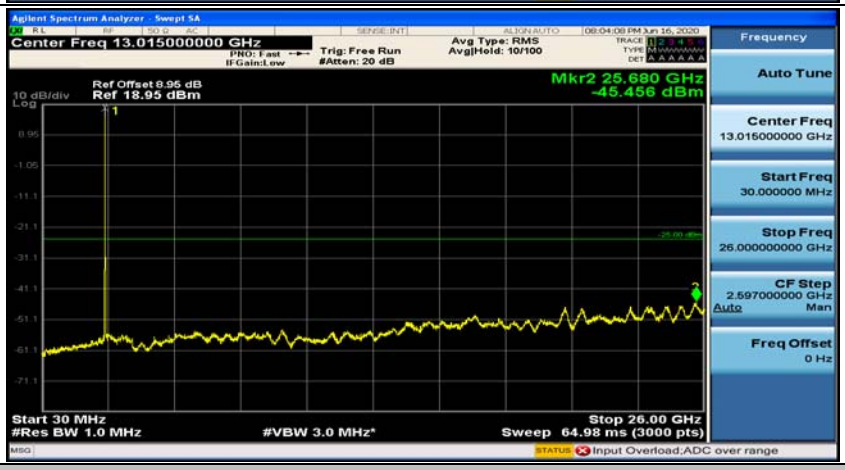

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
08:08:22 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 7.665 MHz
-41.269 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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: 11/100
08:08:28 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.628 GHz
-45.837 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

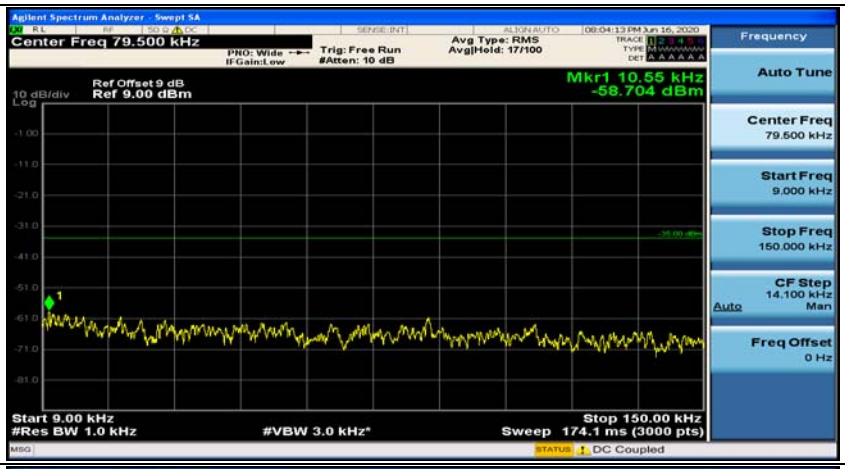
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0

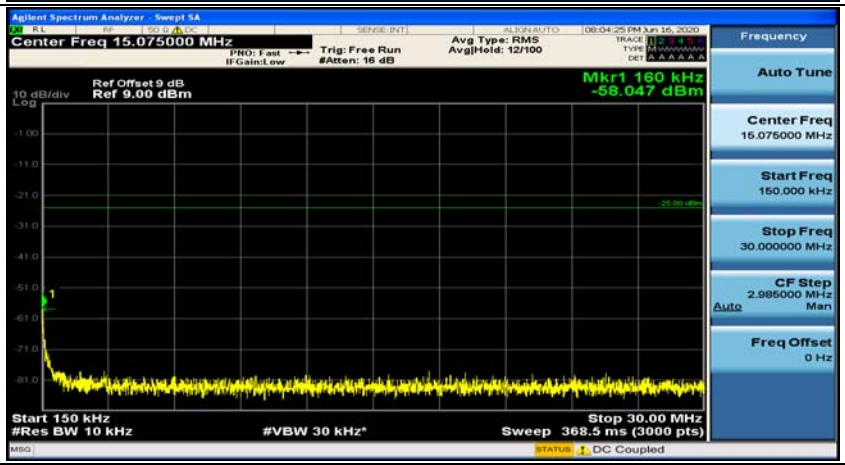


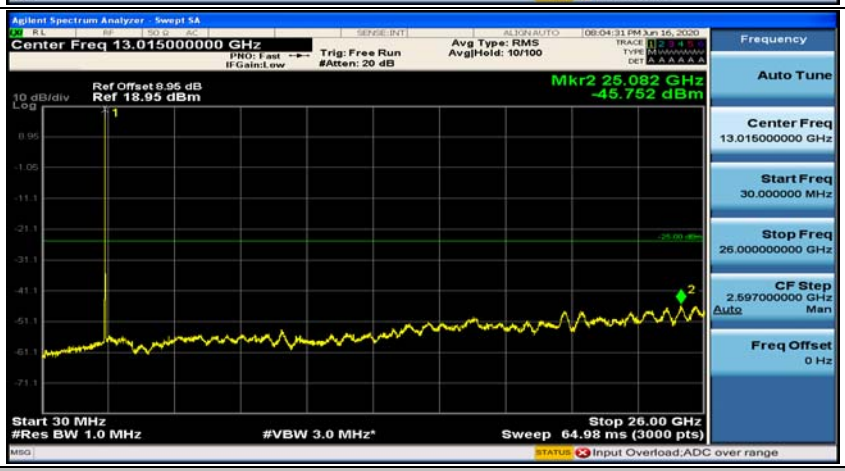




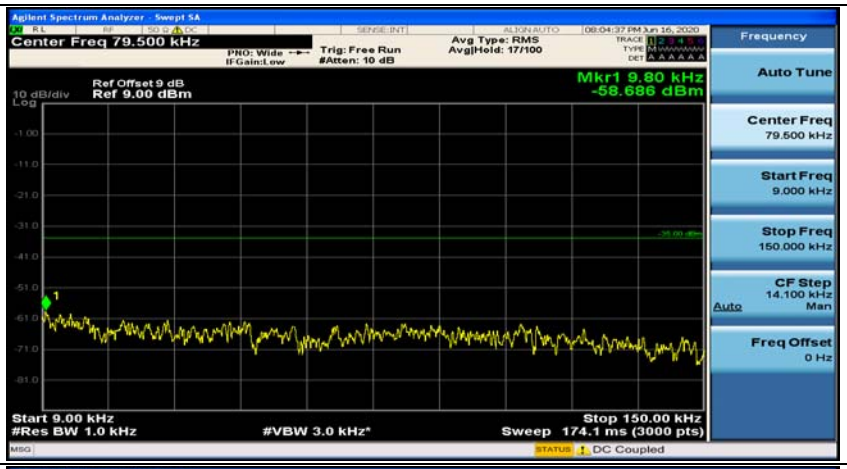
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49

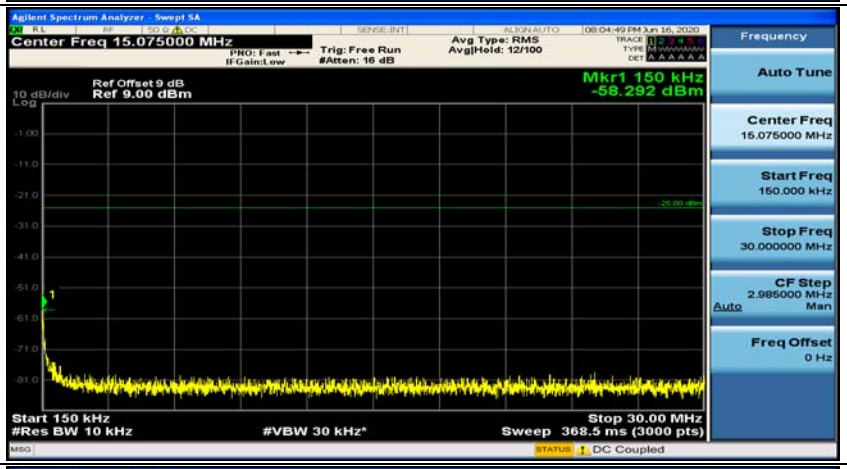


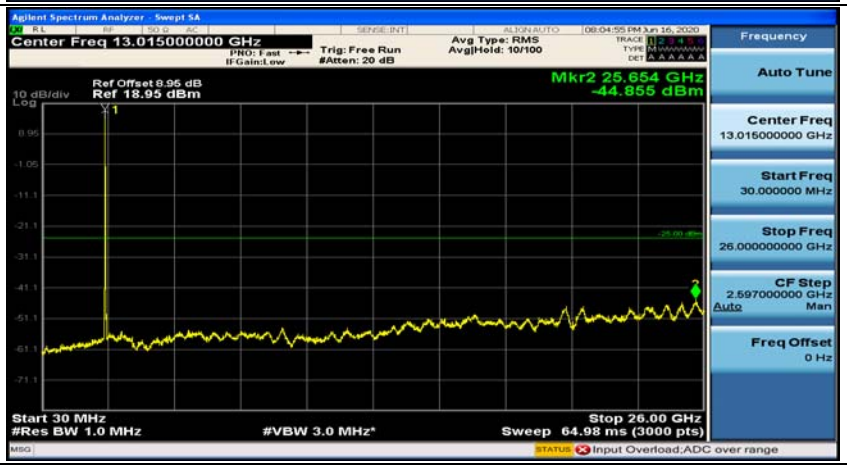




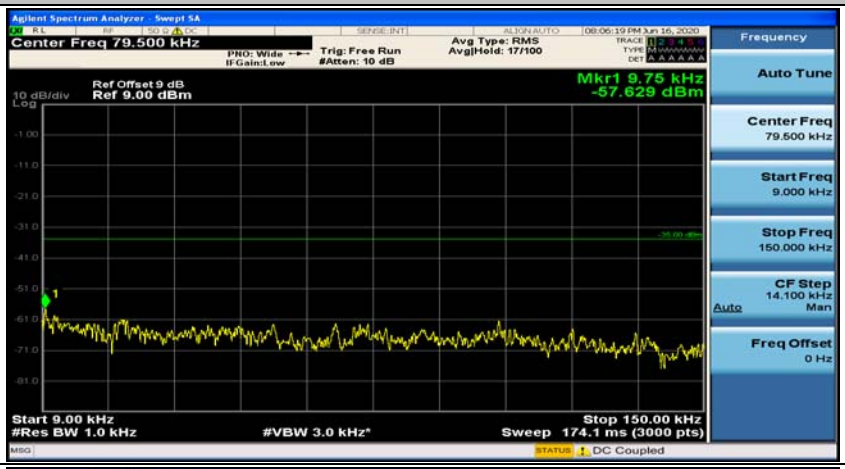
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#99

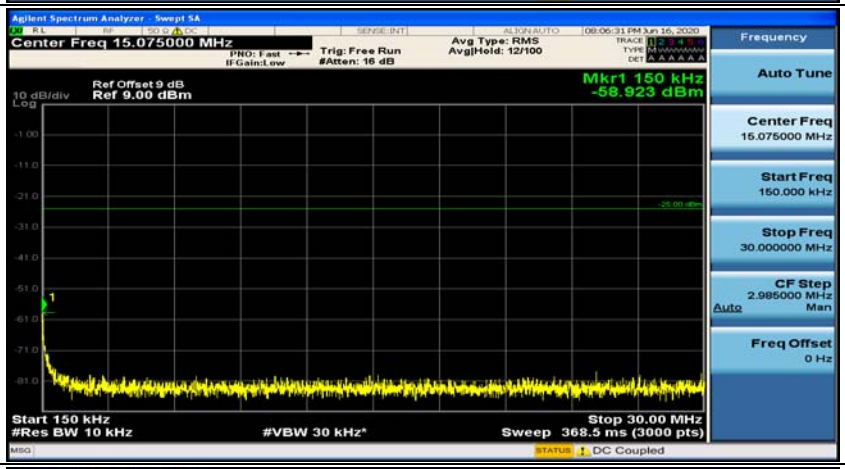

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
08:04:37 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 9.80 kHz
-58.686 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

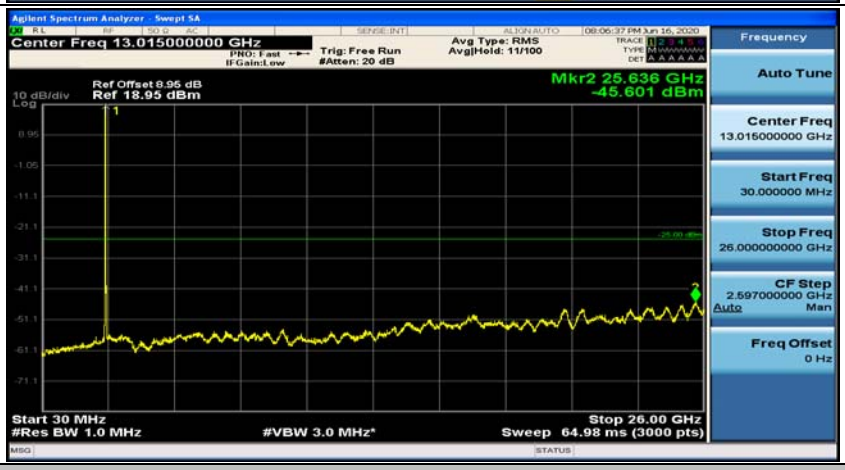

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
08:04:49 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-58.292 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
08:04:55 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.654 GHz
-44.855 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

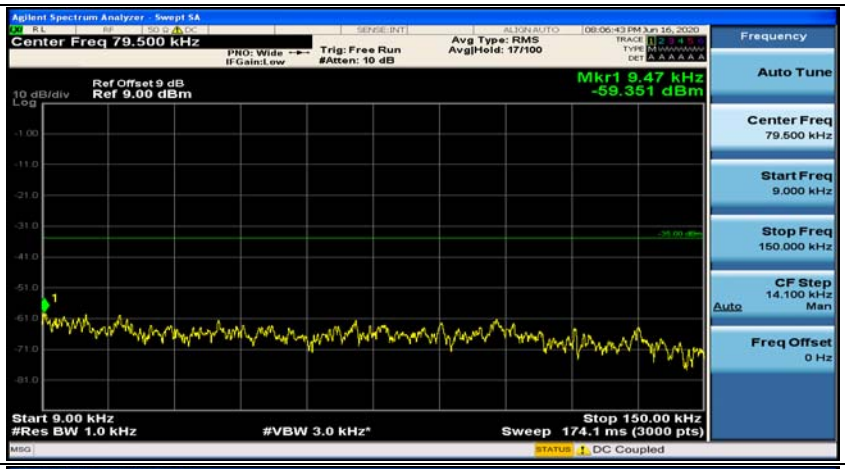
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0

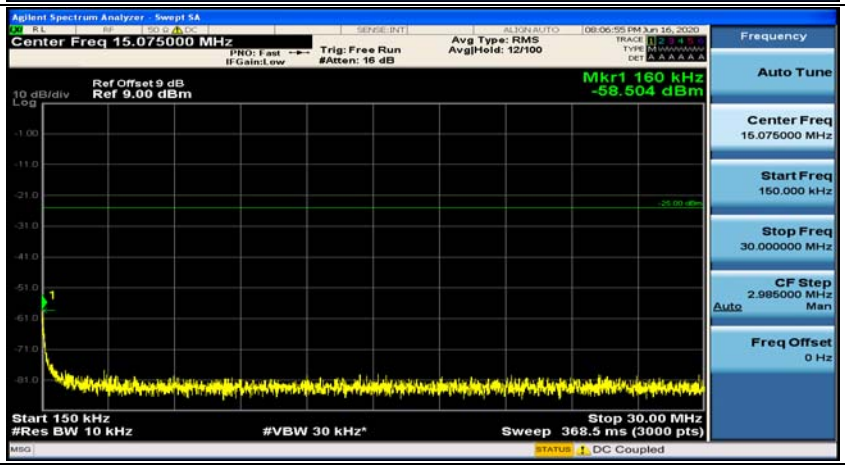


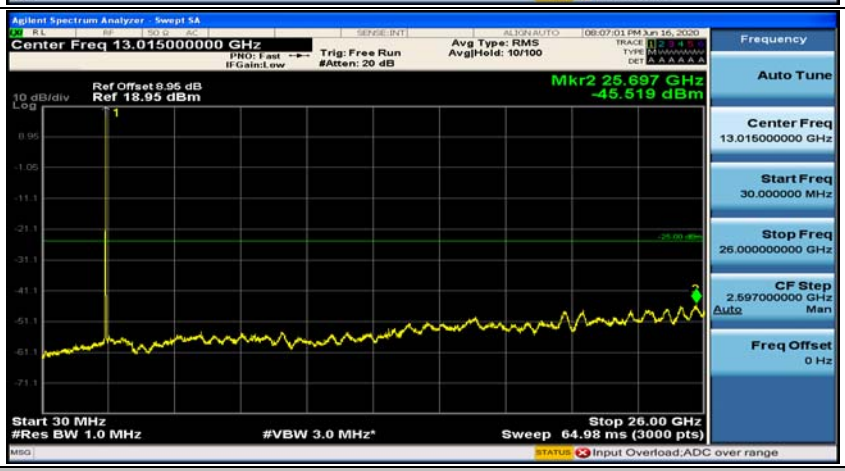




(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49

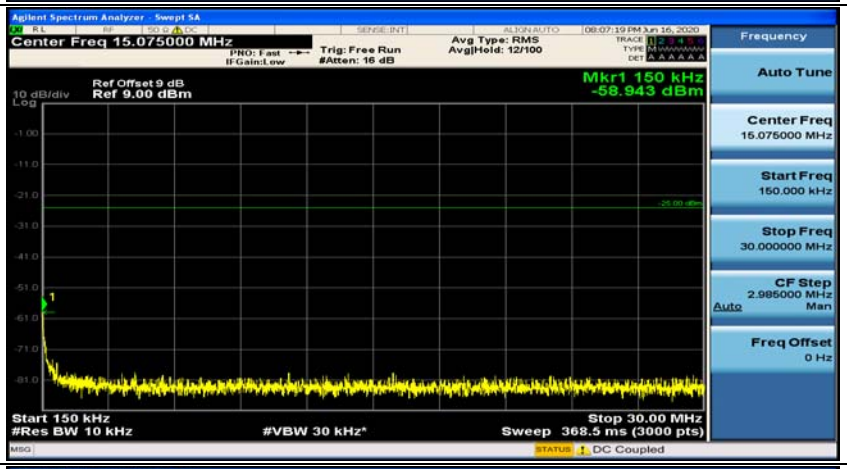


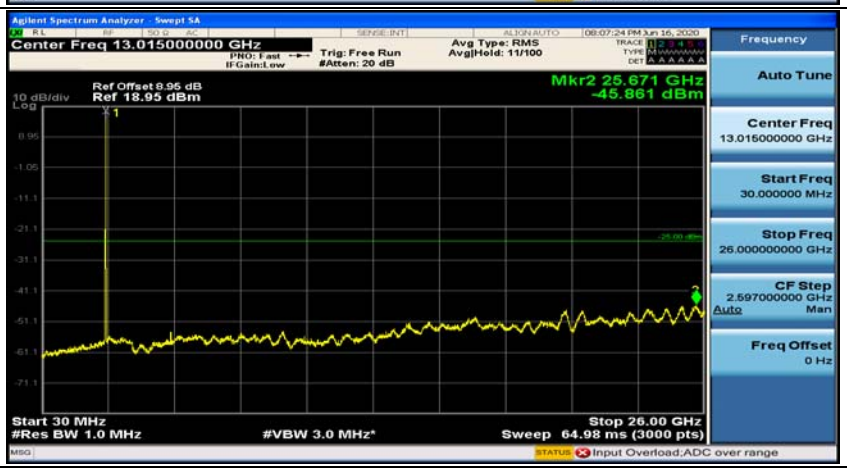




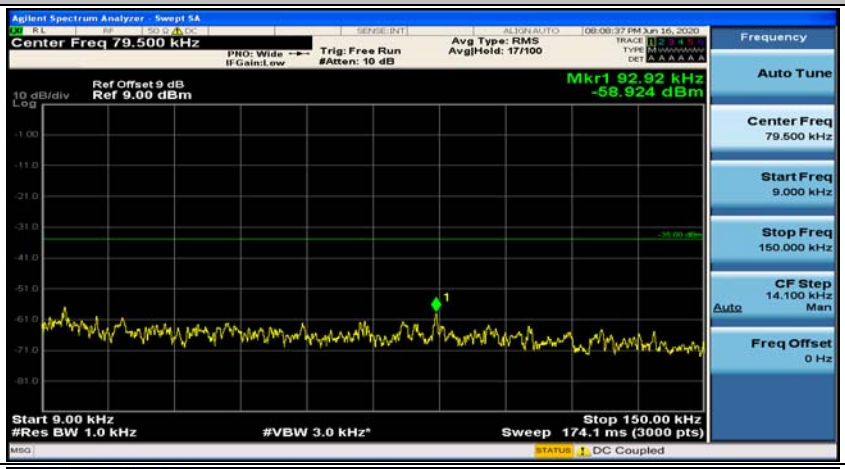
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#99

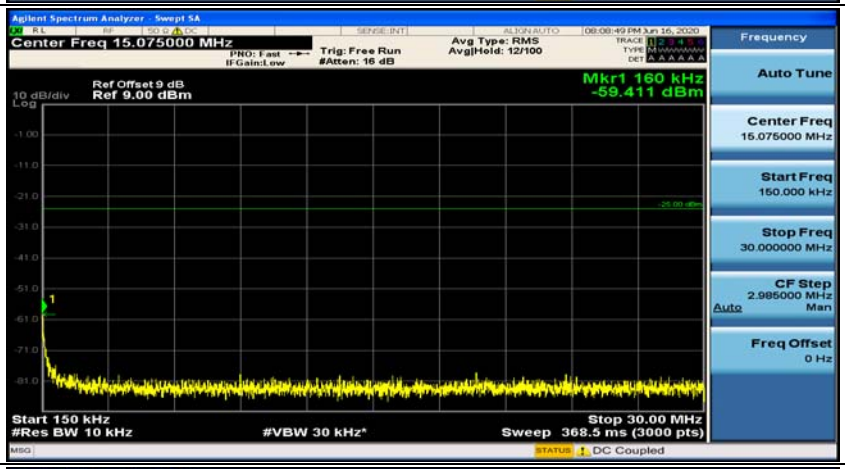
Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
08:07:06 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 9.00 kHz
-58.754 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

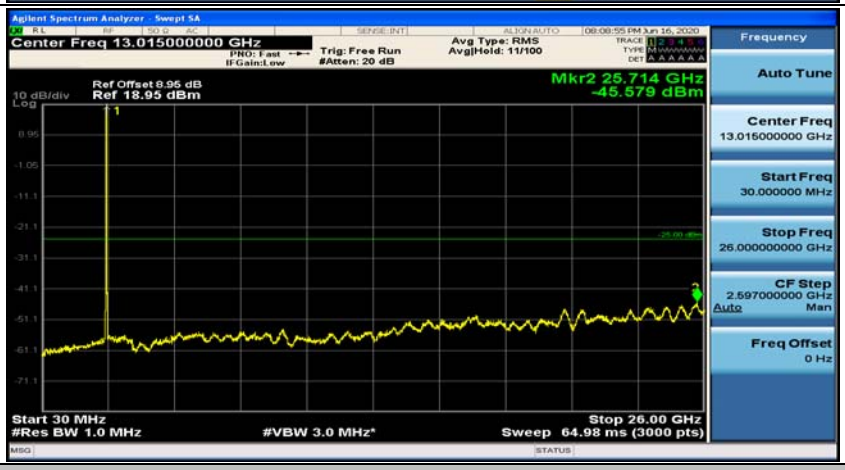

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
08:07:19 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-58.943 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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: 11/100
08:07:24 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.671 GHz
-45.861 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Input Overload;ADC over range
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

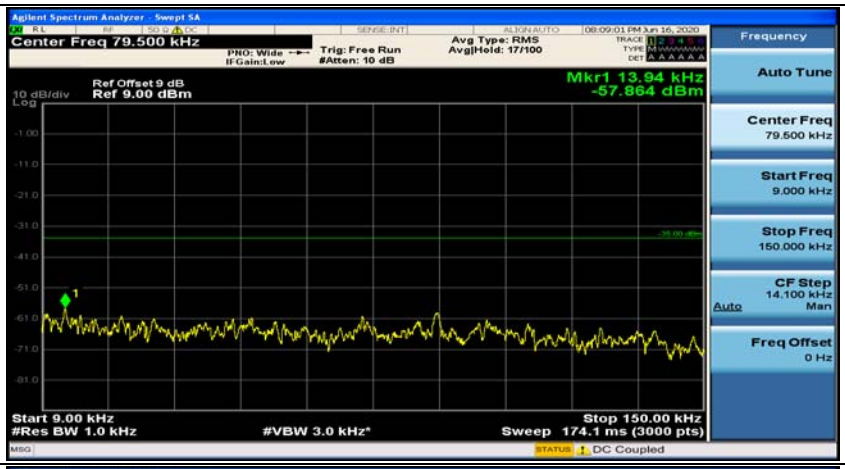
(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0

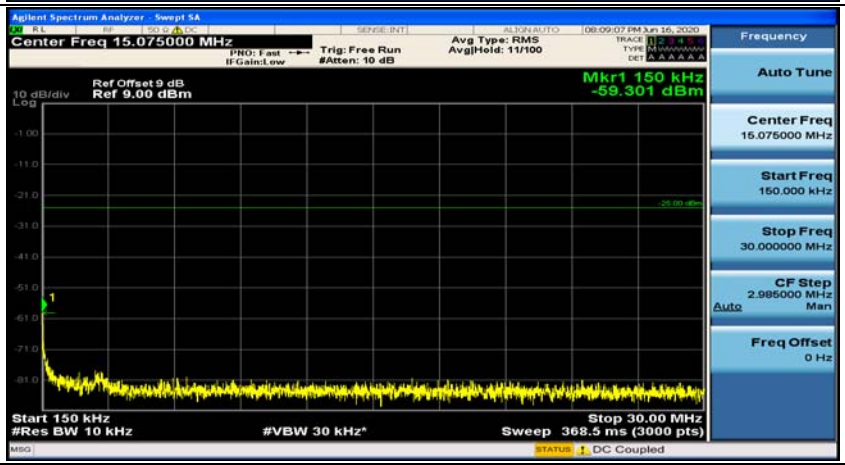


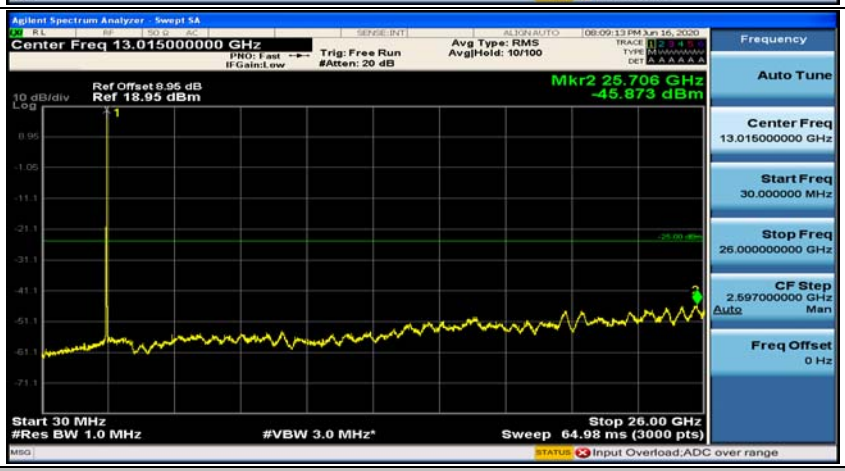




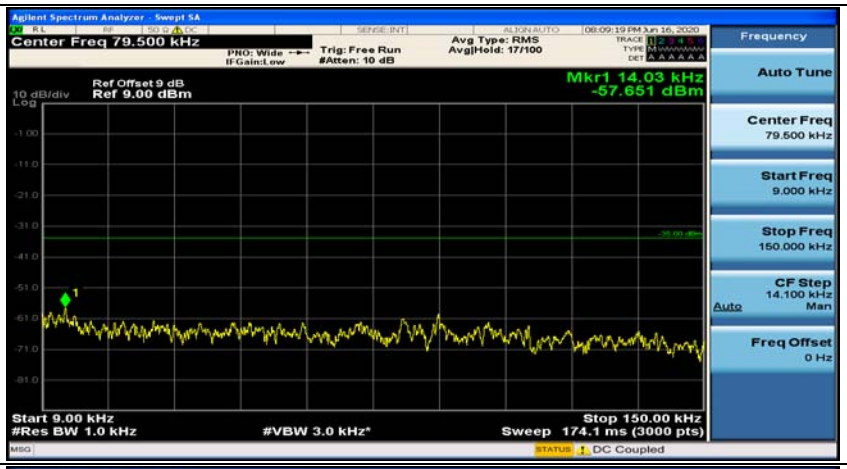
(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#49

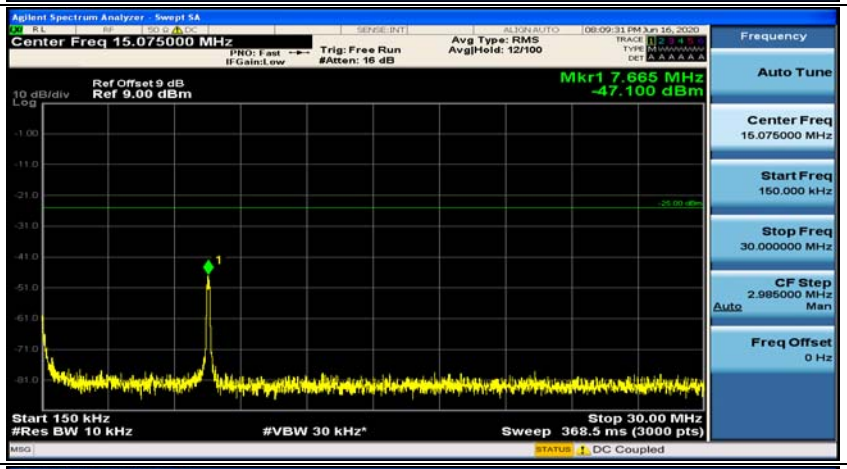


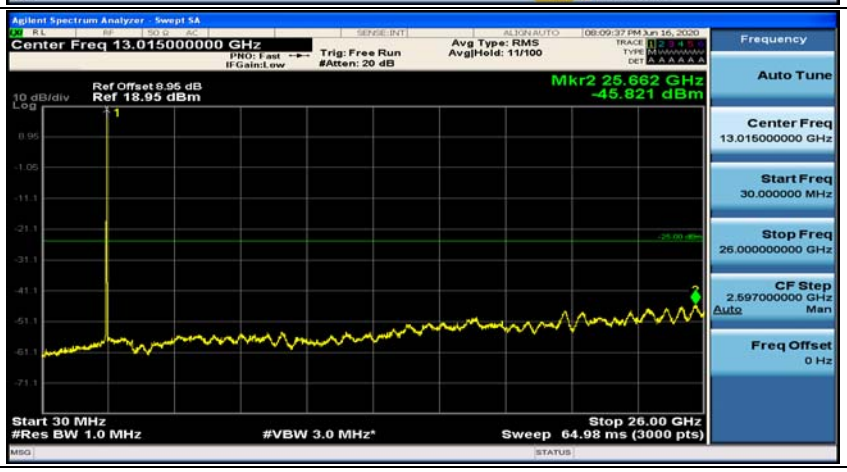




(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#99


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
08:09:19 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 14.03 kHz
-57.651 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
08:09:31 PM Jun 16, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 7.665 MHz
-47.100 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: 11/100
08:09:37 PM Jun 16, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 18.95 dBm
Mkr2 25.662 GHz
-45.821 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

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	1.88	0.000751	± 2.5	PASS
		VN	TN	-0.43	-0.000172	± 2.5	PASS
		VH	TN	3.4	0.001359	± 2.5	PASS
	MCH	VL	TN	2.6	0.001026	± 2.5	PASS
		VN	TN	1.46	0.000576	± 2.5	PASS
		VH	TN	1	0.000394	± 2.5	PASS
	HCH	VL	TN	4.45	0.001733	± 2.5	PASS
		VN	TN	4.93	0.001920	± 2.5	PASS
		VH	TN	1.89	0.000736	± 2.5	PASS
16QAM	LCH	VL	TN	-1.2	-0.000480	± 2.5	PASS
		VN	TN	3.39	0.001355	± 2.5	PASS
		VH	TN	4.38	0.001750	± 2.5	PASS
	MCH	VL	TN	-0.58	-0.000229	± 2.5	PASS
		VN	TN	4.74	0.001870	± 2.5	PASS
		VH	TN	1.54	0.000607	± 2.5	PASS
	HCH	VL	TN	1.14	0.000444	± 2.5	PASS
		VN	TN	2.6	0.001013	± 2.5	PASS
		VH	TN	3.12	0.001215	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.27	-0.000108	± 2.5	PASS
		VN	-20	4.03	0.001610	± 2.5	PASS
		VN	-10	2.35	0.000939	± 2.5	PASS
		VN	0	1.98	0.000791	± 2.5	PASS
		VN	10	-1.32	-0.000527	± 2.5	PASS
		VN	20	0.35	0.000140	± 2.5	PASS
		VN	30	-0.51	-0.000204	± 2.5	PASS
		VN	40	3.85	0.001538	± 2.5	PASS
		VN	50	1.31	0.000523	± 2.5	PASS

	MCH	VN	-30	-0.68	-0.000268	± 2.5	PASS
		VN	-20	-0.12	-0.000047	± 2.5	PASS
		VN	-10	2.26	0.000892	± 2.5	PASS
		VN	0	4.36	0.001720	± 2.5	PASS
		VN	10	-1.27	-0.000501	± 2.5	PASS
		VN	20	2.74	0.001081	± 2.5	PASS
		VN	30	4.24	0.001673	± 2.5	PASS
		VN	40	0.64	0.000252	± 2.5	PASS
		VN	50	0.43	0.000170	± 2.5	PASS
	HCH	VN	-30	0.36	0.000140	± 2.5	PASS
		VN	-20	2.46	0.000958	± 2.5	PASS
		VN	-10	-0.42	-0.000164	± 2.5	PASS
		VN	0	4.4	0.001714	± 2.5	PASS
		VN	10	1.07	0.000417	± 2.5	PASS
		VN	20	3.68	0.001433	± 2.5	PASS
		VN	30	-1.27	-0.000495	± 2.5	PASS
		VN	40	2.04	0.000795	± 2.5	PASS
		VN	50	1.38	0.000537	± 2.5	PASS
16QAM	LCH	VN	-30	-1.28	-0.000511	± 2.5	PASS
		VN	-20	2.8	0.001119	± 2.5	PASS
		VN	-10	-0.77	-0.000308	± 2.5	PASS
		VN	0	3.69	0.001475	± 2.5	PASS
		VN	10	0.35	0.000140	± 2.5	PASS
		VN	20	1.13	0.000452	± 2.5	PASS
		VN	30	-0.78	-0.000312	± 2.5	PASS
		VN	40	3.88	0.001550	± 2.5	PASS
		VN	50	2.77	0.001107	± 2.5	PASS
	MCH	VN	-30	2.46	0.000970	± 2.5	PASS
		VN	-20	4.72	0.001862	± 2.5	PASS
		VN	-10	-0.86	-0.000339	± 2.5	PASS
		VN	0	2.84	0.001120	± 2.5	PASS
		VN	10	-0.62	-0.000245	± 2.5	PASS
		VN	20	0.45	0.000178	± 2.5	PASS
		VN	30	3.14	0.001239	± 2.5	PASS
		VN	40	3.64	0.001436	± 2.5	PASS
		VN	50	1.06	0.000418	± 2.5	PASS
	HCH	VN	-30	4.85	0.001889	± 2.5	PASS
		VN	-20	4.7	0.001831	± 2.5	PASS
		VN	-10	-1.86	-0.000724	± 2.5	PASS
		VN	0	0.19	0.000074	± 2.5	PASS
		VN	10	0.79	0.000308	± 2.5	PASS

		VN	20	2.96	0.001153	± 2.5	PASS
		VN	30	2.79	0.001087	± 2.5	PASS
		VN	40	2.53	0.000985	± 2.5	PASS
		VN	50	2.32	0.000904	± 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	1.05	0.000419	± 2.5	PASS
		VN	TN	4.46	0.001780	± 2.5	PASS
		VH	TN	4.57	0.001824	± 2.5	PASS
	MCH	VL	TN	-0.19	-0.000075	± 2.5	PASS
		VN	TN	-0.51	-0.000201	± 2.5	PASS
		VH	TN	-0.53	-0.000209	± 2.5	PASS
	HCH	VL	TN	3.27	0.001275	± 2.5	PASS
		VN	TN	3.77	0.001470	± 2.5	PASS
		VH	TN	0.9	0.000351	± 2.5	PASS
16QAM	LCH	VL	TN	4.07	0.001625	± 2.5	PASS
		VN	TN	2.81	0.001122	± 2.5	PASS
		VH	TN	4.85	0.001936	± 2.5	PASS
	MCH	VL	TN	2.33	0.000919	± 2.5	PASS
		VN	TN	-0.21	-0.000083	± 2.5	PASS
		VH	TN	-1.04	-0.000410	± 2.5	PASS
	HCH	VL	TN	4.67	0.001821	± 2.5	PASS
		VN	TN	-0.85	-0.000331	± 2.5	PASS
		VH	TN	4.74	0.001848	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.64	0.000255	± 2.5	PASS
		VN	-20	2.33	0.000930	± 2.5	PASS
		VN	-10	3.76	0.001501	± 2.5	PASS
		VN	0	0.44	0.000176	± 2.5	PASS
		VN	10	3.73	0.001489	± 2.5	PASS
		VN	20	-0.09	-0.000036	± 2.5	PASS
		VN	30	1.41	0.000563	± 2.5	PASS
		VN	40	3.55	0.001417	± 2.5	PASS
		VN	50	4.75	0.001896	± 2.5	PASS

	MCH	VN	-30	2.83	0.001116	± 2.5	PASS
		VN	-20	3.99	0.001574	± 2.5	PASS
		VN	-10	-0.71	-0.000280	± 2.5	PASS
		VN	0	1.31	0.000517	± 2.5	PASS
		VN	10	-0.56	-0.000221	± 2.5	PASS
		VN	20	1.64	0.000647	± 2.5	PASS
		VN	30	-1.19	-0.000469	± 2.5	PASS
		VN	40	1.71	0.000675	± 2.5	PASS
		VN	50	1.24	0.000489	± 2.5	PASS
	HCH	VN	-30	-1.49	-0.000581	± 2.5	PASS
		VN	-20	2.06	0.000803	± 2.5	PASS
		VN	-10	1.06	0.000413	± 2.5	PASS
		VN	0	4.75	0.001852	± 2.5	PASS
		VN	10	0.14	0.000055	± 2.5	PASS
		VN	20	0.88	0.000343	± 2.5	PASS
		VN	30	2.43	0.000947	± 2.5	PASS
		VN	40	2.45	0.000955	± 2.5	PASS
		VN	50	-1.92	-0.000749	± 2.5	PASS
16QAM	LCH	VN	-30	4.38	0.001749	± 2.5	PASS
		VN	-20	3.7	0.001477	± 2.5	PASS
		VN	-10	-1.39	-0.000555	± 2.5	PASS
		VN	0	-1.51	-0.000603	± 2.5	PASS
		VN	10	-1.89	-0.000754	± 2.5	PASS
		VN	20	4.16	0.001661	± 2.5	PASS
		VN	30	1.29	0.000515	± 2.5	PASS
		VN	40	2.2	0.000878	± 2.5	PASS
		VN	50	4.17	0.001665	± 2.5	PASS
	MCH	VN	-30	0.38	0.000150	± 2.5	PASS
		VN	-20	-1.86	-0.000734	± 2.5	PASS
		VN	-10	2.33	0.000919	± 2.5	PASS
		VN	0	4.55	0.001795	± 2.5	PASS
		VN	10	2.37	0.000935	± 2.5	PASS
		VN	20	2.56	0.001010	± 2.5	PASS
		VN	30	-1.39	-0.000548	± 2.5	PASS
		VN	40	1.89	0.000746	± 2.5	PASS
		VN	50	2.15	0.000848	± 2.5	PASS
	HCH	VN	-30	-1.33	-0.000519	± 2.5	PASS
		VN	-20	4.5	0.001754	± 2.5	PASS
		VN	-10	0.16	0.000062	± 2.5	PASS
		VN	0	1.17	0.000456	± 2.5	PASS
		VN	10	1.19	0.000464	± 2.5	PASS

		VN	20	0.88	0.000343	± 2.5	PASS
		VN	30	4.65	0.001813	± 2.5	PASS
		VN	40	2.79	0.001088	± 2.5	PASS
		VN	50	4.79	0.001867	± 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	-1.05	-0.000419	± 2.5	PASS
		VN	TN	1.75	0.000698	± 2.5	PASS
		VH	TN	1.25	0.000499	± 2.5	PASS
	MCH	VL	TN	1.36	0.000536	± 2.5	PASS
		VN	TN	0.81	0.000320	± 2.5	PASS
		VH	TN	4.18	0.001649	± 2.5	PASS
	HCH	VL	TN	2.68	0.001046	± 2.5	PASS
		VN	TN	2.71	0.001058	± 2.5	PASS
		VH	TN	3.94	0.001538	± 2.5	PASS
16QAM	LCH	VL	TN	1.18	0.000471	± 2.5	PASS
		VN	TN	0.81	0.000323	± 2.5	PASS
		VH	TN	-0.79	-0.000315	± 2.5	PASS
	MCH	VL	TN	1.08	0.000426	± 2.5	PASS
		VN	TN	-0.11	-0.000043	± 2.5	PASS
		VH	TN	-1.96	-0.000773	± 2.5	PASS
	HCH	VL	TN	4.91	0.001916	± 2.5	PASS
		VN	TN	-0.18	-0.000070	± 2.5	PASS
		VH	TN	1.75	0.000683	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.93	0.000371	± 2.5	PASS
		VN	-20	3.47	0.001384	± 2.5	PASS
		VN	-10	2.08	0.000830	± 2.5	PASS
		VN	0	-0.06	-0.000024	± 2.5	PASS
		VN	10	3.76	0.001500	± 2.5	PASS
		VN	20	3.59	0.001432	± 2.5	PASS
		VN	30	0.88	0.000351	± 2.5	PASS
		VN	40	1.55	0.000618	± 2.5	PASS
		VN	50	1.93	0.000770	± 2.5	PASS

	MCH	VN	-30	4.83	0.001905	± 2.5	PASS
		VN	-20	0.09	0.000036	± 2.5	PASS
		VN	-10	-1.88	-0.000742	± 2.5	PASS
		VN	0	0.83	0.000327	± 2.5	PASS
		VN	10	3.6	0.001420	± 2.5	PASS
		VN	20	1.96	0.000773	± 2.5	PASS
		VN	30	4.3	0.001696	± 2.5	PASS
		VN	40	-0.54	-0.000213	± 2.5	PASS
		VN	50	4.28	0.001688	± 2.5	PASS
	HCH	VN	-30	1.99	0.000777	± 2.5	PASS
		VN	-20	-0.4	-0.000156	± 2.5	PASS
		VN	-10	4.53	0.001768	± 2.5	PASS
		VN	0	0.29	0.000113	± 2.5	PASS
		VN	10	-1.09	-0.000425	± 2.5	PASS
		VN	20	0.86	0.000336	± 2.5	PASS
		VN	30	4.22	0.001647	± 2.5	PASS
		VN	40	0.68	0.000265	± 2.5	PASS
		VN	50	-1.07	-0.000418	± 2.5	PASS
16QAM	LCH	VN	-30	0.78	0.000311	± 2.5	PASS
		VN	-20	-1.48	-0.000590	± 2.5	PASS
		VN	-10	1	0.000399	± 2.5	PASS
		VN	0	1.81	0.000722	± 2.5	PASS
		VN	10	3.11	0.001240	± 2.5	PASS
		VN	20	3.99	0.001591	± 2.5	PASS
		VN	30	-0.65	-0.000259	± 2.5	PASS
		VN	40	-1.71	-0.000682	± 2.5	PASS
		VN	50	2.43	0.000969	± 2.5	PASS
	MCH	VN	-30	4.41	0.001740	± 2.5	PASS
		VN	-20	4.07	0.001606	± 2.5	PASS
		VN	-10	1.92	0.000757	± 2.5	PASS
		VN	0	2.36	0.000931	± 2.5	PASS
		VN	10	1.12	0.000442	± 2.5	PASS
		VN	20	4.24	0.001673	± 2.5	PASS
		VN	30	2.98	0.001176	± 2.5	PASS
		VN	40	4.46	0.001759	± 2.5	PASS
		VN	50	4.79	0.001890	± 2.5	PASS
	HCH	VN	-30	0.8	0.000312	± 2.5	PASS
		VN	-20	3.54	0.001381	± 2.5	PASS
		VN	-10	3.06	0.001194	± 2.5	PASS
		VN	0	-1.41	-0.000550	± 2.5	PASS
		VN	10	3.09	0.001206	± 2.5	PASS

		VN	20	4.2	0.001639	± 2.5	PASS
		VN	30	1.41	0.000550	± 2.5	PASS
		VN	40	0.59	0.000230	± 2.5	PASS
		VN	50	0.76	0.000297	± 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	-0.25	-0.000100	± 2.5	PASS
		VN	TN	1.7	0.000677	± 2.5	PASS
		VH	TN	-0.08	-0.000032	± 2.5	PASS
	MCH	VL	TN	3.37	0.001329	± 2.5	PASS
		VN	TN	1.55	0.000611	± 2.5	PASS
		VH	TN	3.57	0.001408	± 2.5	PASS
	HCH	VL	TN	-1.68	-0.000656	± 2.5	PASS
		VN	TN	3.4	0.001328	± 2.5	PASS
		VH	TN	2.11	0.000824	± 2.5	PASS
16QAM	LCH	VL	TN	-1.07	-0.000426	± 2.5	PASS
		VN	TN	-0.15	-0.000060	± 2.5	PASS
		VH	TN	0.32	0.000127	± 2.5	PASS
	MCH	VL	TN	-1.4	-0.000552	± 2.5	PASS
		VN	TN	2.35	0.000927	± 2.5	PASS
		VH	TN	1.39	0.000548	± 2.5	PASS
	HCH	VL	TN	2.68	0.001047	± 2.5	PASS
		VN	TN	4.38	0.001711	± 2.5	PASS
		VH	TN	2.05	0.000801	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.82	0.001522	± 2.5	PASS
		VN	-20	2.64	0.001052	± 2.5	PASS
		VN	-10	3.3	0.001315	± 2.5	PASS
		VN	0	3.08	0.001227	± 2.5	PASS
		VN	10	0.75	0.000299	± 2.5	PASS
		VN	20	2.93	0.001167	± 2.5	PASS
		VN	30	1.68	0.000669	± 2.5	PASS
		VN	40	1.82	0.000725	± 2.5	PASS
		VN	50	4.12	0.001641	± 2.5	PASS

	MCH	VN	-30	1.77	0.000698	± 2.5	PASS
		VN	-20	3.56	0.001404	± 2.5	PASS
		VN	-10	3.41	0.001345	± 2.5	PASS
		VN	0	-1.29	-0.000509	± 2.5	PASS
		VN	10	-0.15	-0.000059	± 2.5	PASS
		VN	20	3.34	0.001318	± 2.5	PASS
		VN	30	3.77	0.001487	± 2.5	PASS
		VN	40	1.21	0.000477	± 2.5	PASS
		VN	50	-1.82	-0.000718	± 2.5	PASS
	HCH	VN	-30	3.68	0.001438	± 2.5	PASS
		VN	-20	2.93	0.001145	± 2.5	PASS
		VN	-10	2.87	0.001121	± 2.5	PASS
		VN	0	1.3	0.000508	± 2.5	PASS
		VN	10	3.43	0.001340	± 2.5	PASS
		VN	20	-1.11	-0.000434	± 2.5	PASS
		VN	30	-1.54	-0.000602	± 2.5	PASS
		VN	40	4.61	0.001801	± 2.5	PASS
		VN	50	1.92	0.000750	± 2.5	PASS
16QAM	LCH	VN	-30	4.47	0.001781	± 2.5	PASS
		VN	-20	-0.02	-0.000008	± 2.5	PASS
		VN	-10	0.42	0.000167	± 2.5	PASS
		VN	0	2.88	0.001147	± 2.5	PASS
		VN	10	1.36	0.000542	± 2.5	PASS
		VN	20	1	0.000398	± 2.5	PASS
		VN	30	-1.81	-0.000721	± 2.5	PASS
		VN	40	-1.49	-0.000594	± 2.5	PASS
		VN	50	3.73	0.001486	± 2.5	PASS
	MCH	VN	-30	-1.04	-0.000410	± 2.5	PASS
		VN	-20	1.09	0.000430	± 2.5	PASS
		VN	-10	2.25	0.000888	± 2.5	PASS
		VN	0	3.5	0.001381	± 2.5	PASS
		VN	10	0.31	0.000122	± 2.5	PASS
		VN	20	0.82	0.000323	± 2.5	PASS
		VN	30	4.69	0.001850	± 2.5	PASS
		VN	40	3.85	0.001519	± 2.5	PASS
		VN	50	2.55	0.001006	± 2.5	PASS
	HCH	VN	-30	-1.7	-0.000664	± 2.5	PASS
		VN	-20	-1.6	-0.000625	± 2.5	PASS
		VN	-10	-1.28	-0.000500	± 2.5	PASS
		VN	0	1.67	0.000652	± 2.5	PASS
		VN	10	4.49	0.001754	± 2.5	PASS

		VN	20	2.59	0.001012	± 2.5	PASS
		VN	30	3.09	0.001207	± 2.5	PASS
		VN	40	3.27	0.001277	± 2.5	PASS
		VN	50	2.71	0.001059	± 2.5	PASS