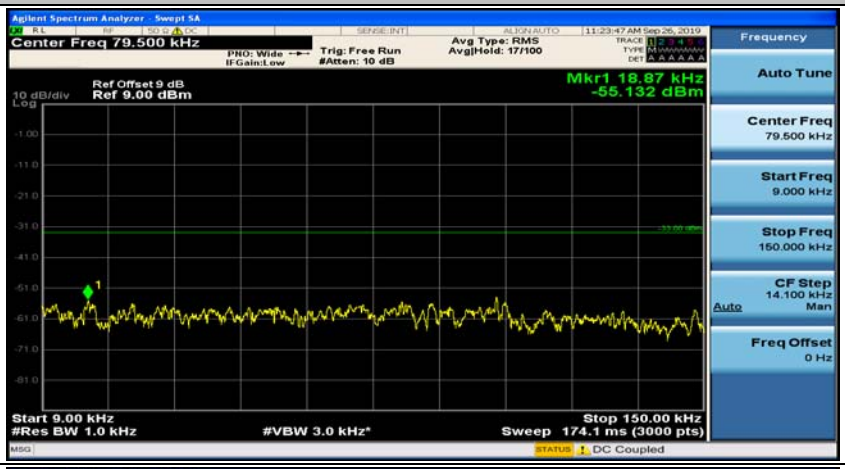
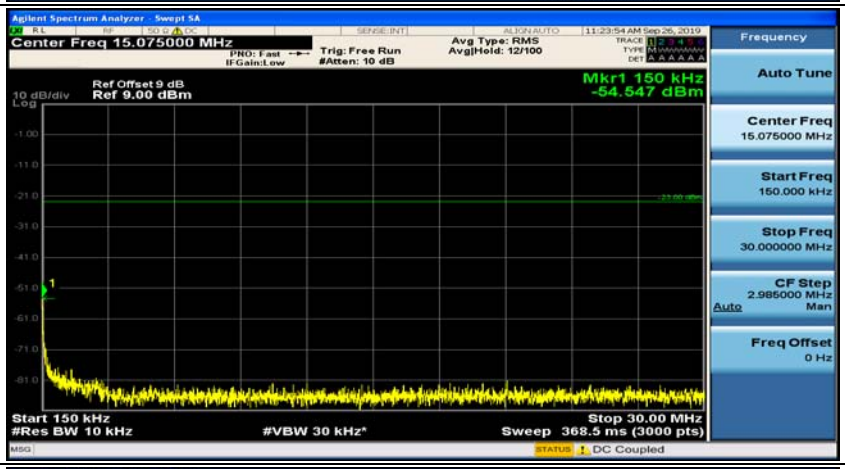
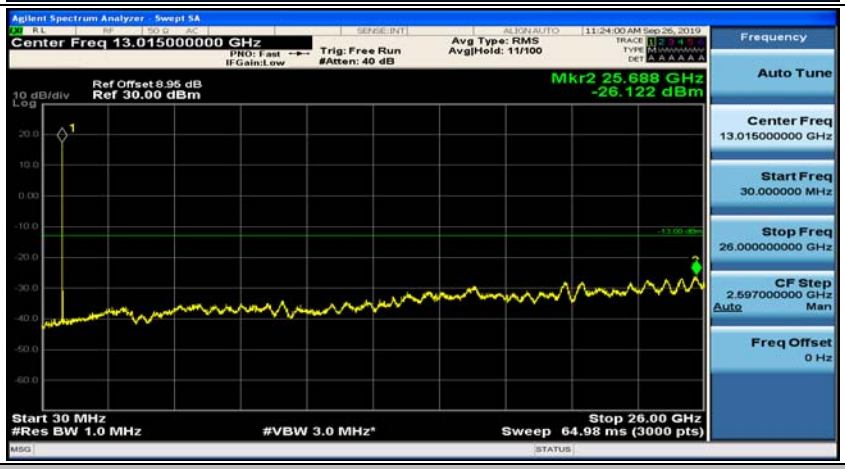
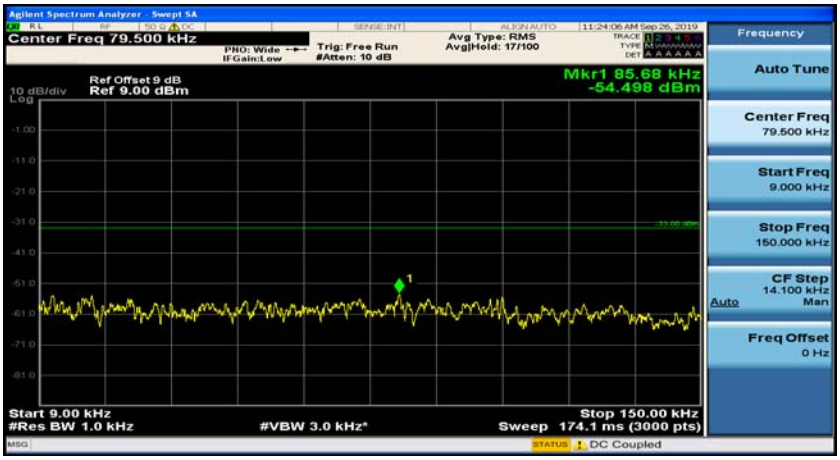
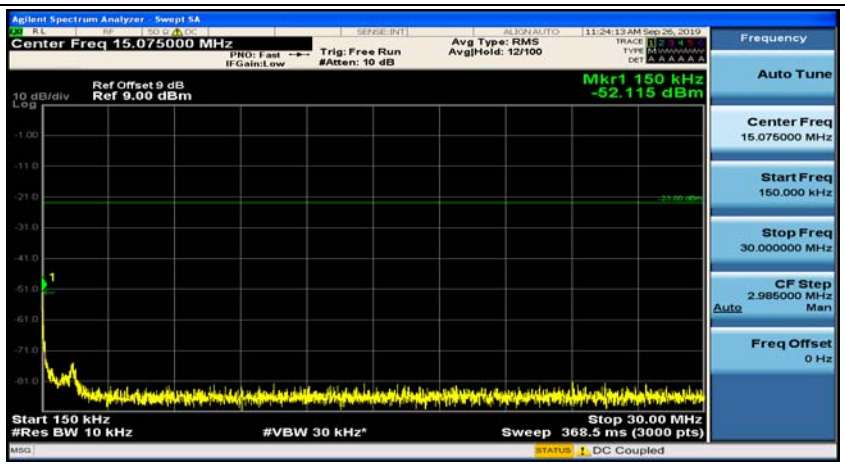
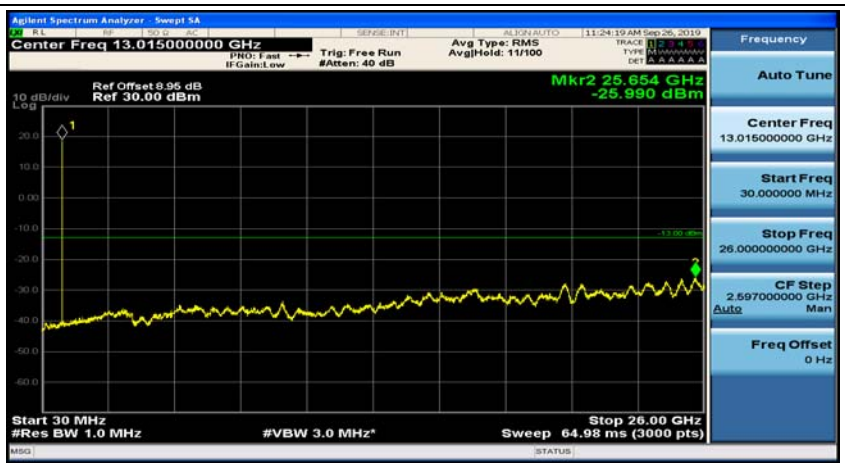
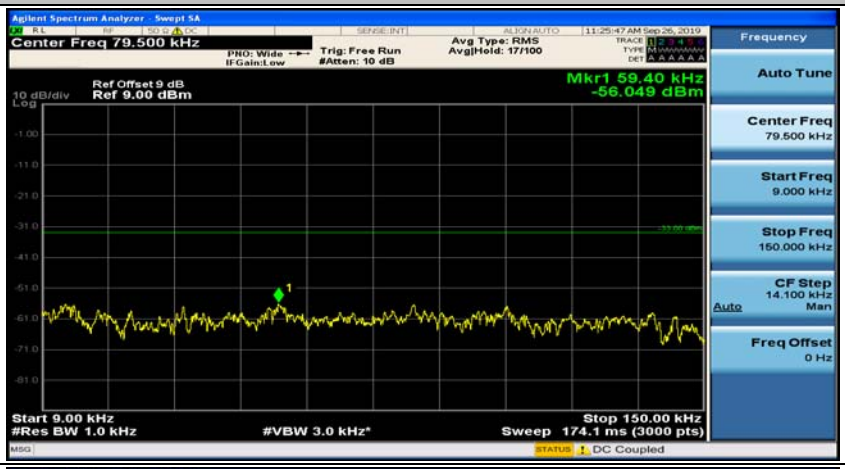
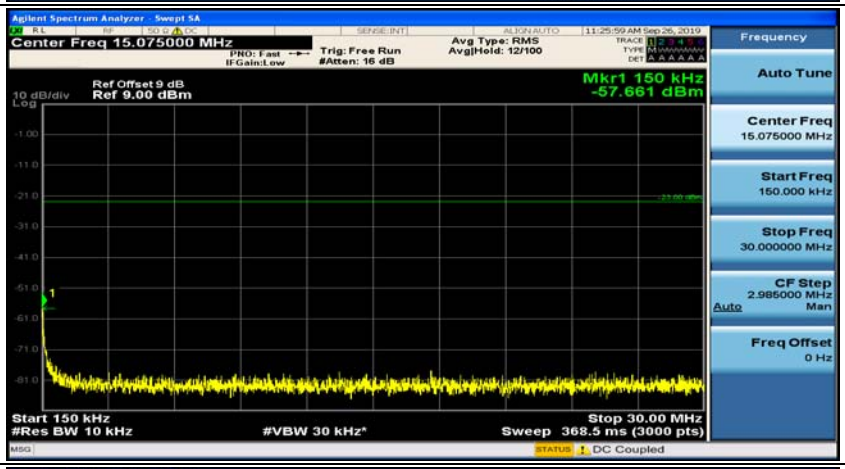
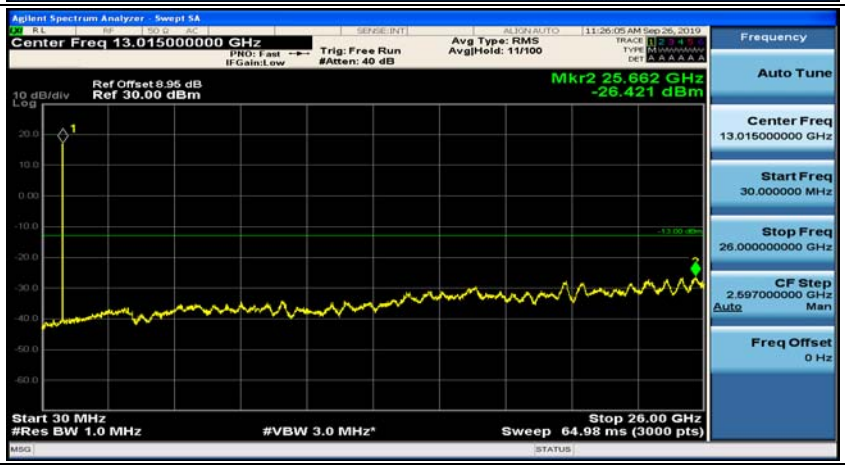
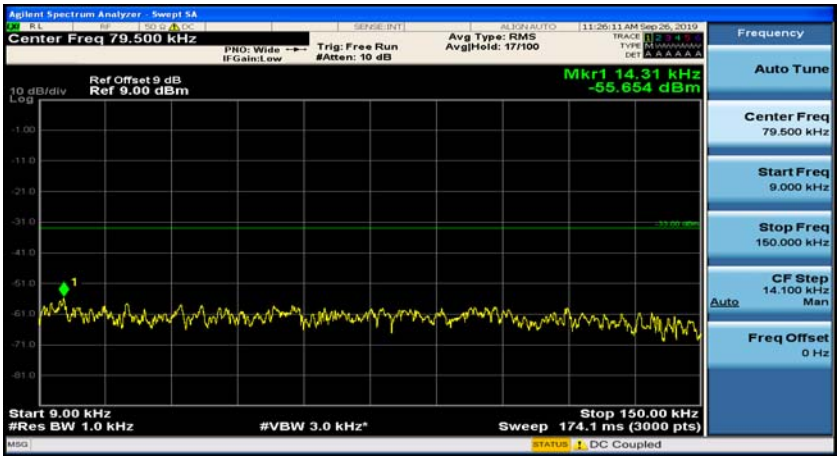
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7

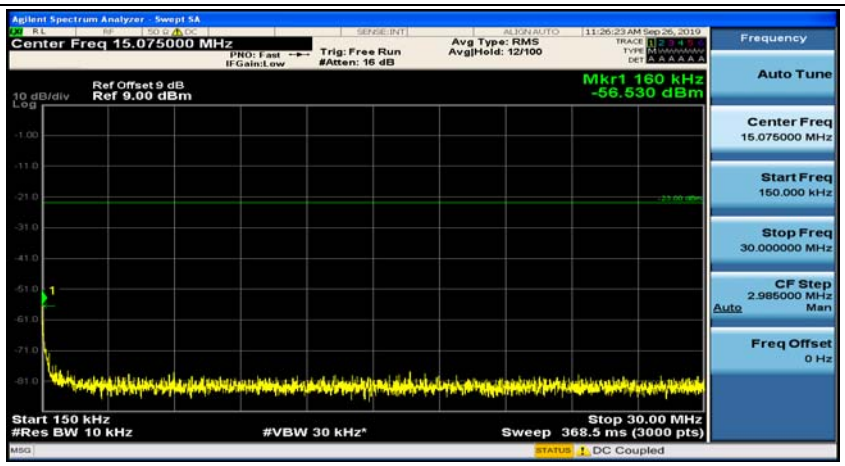

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:24:06 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 85.68 kHz
-54.498 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

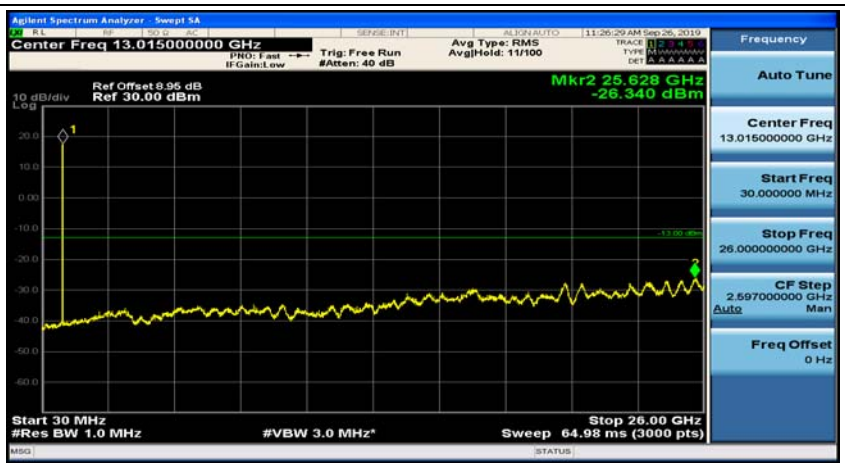

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
11:24:13 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-52.115 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:24:19 AM Sep 26, 2019
Ref Offset 8.96 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.654 GHz
-25.990 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

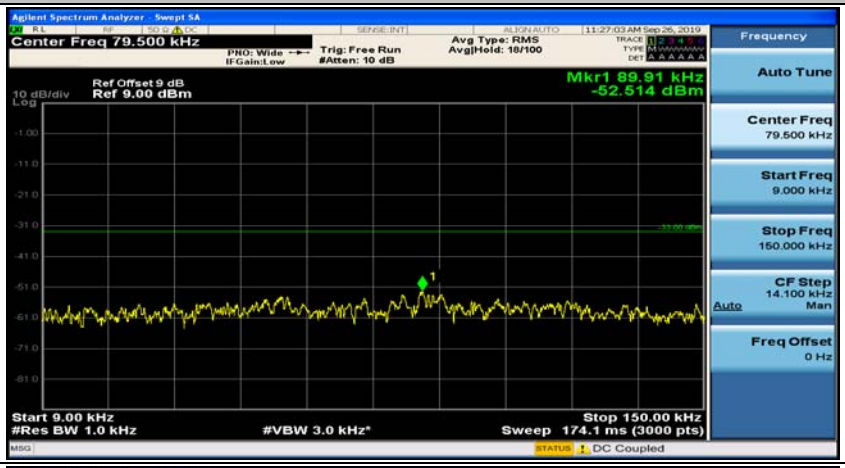
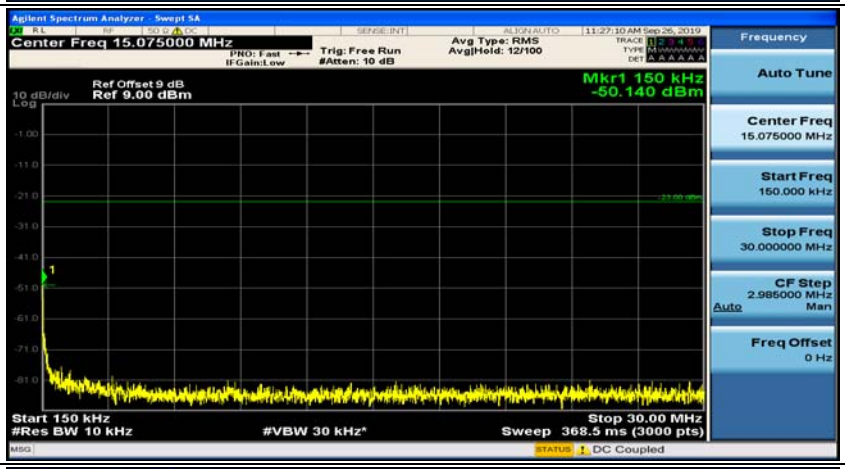
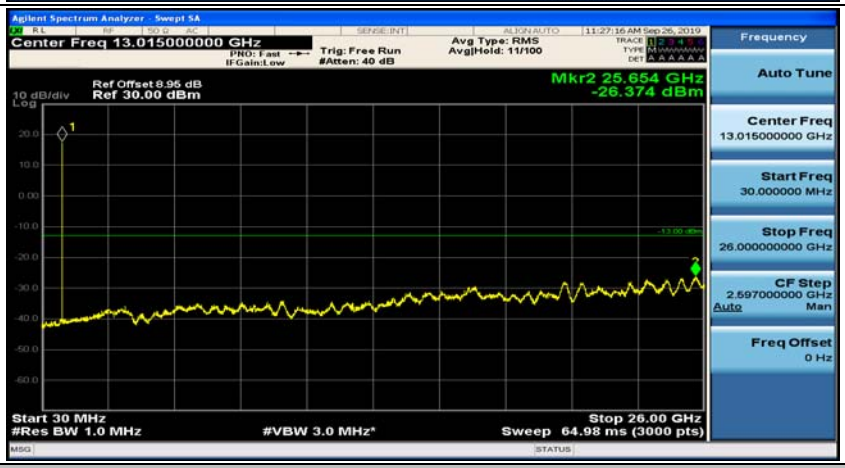
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7

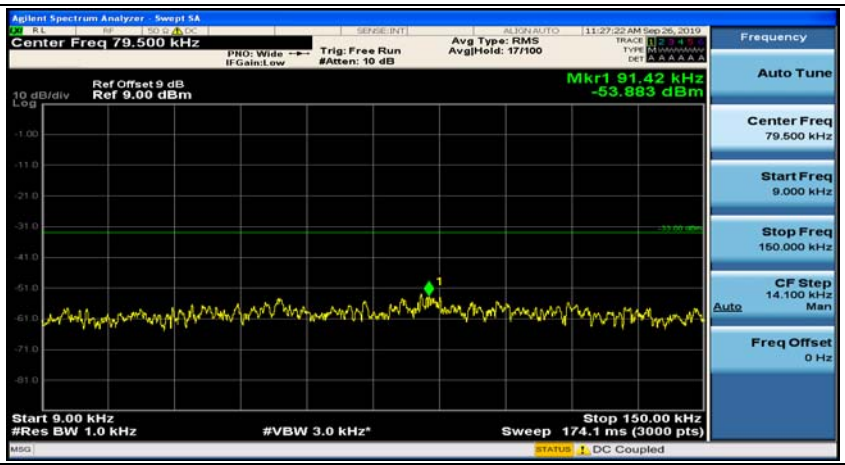

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:26:11 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 14.31 kHz
-55.654 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

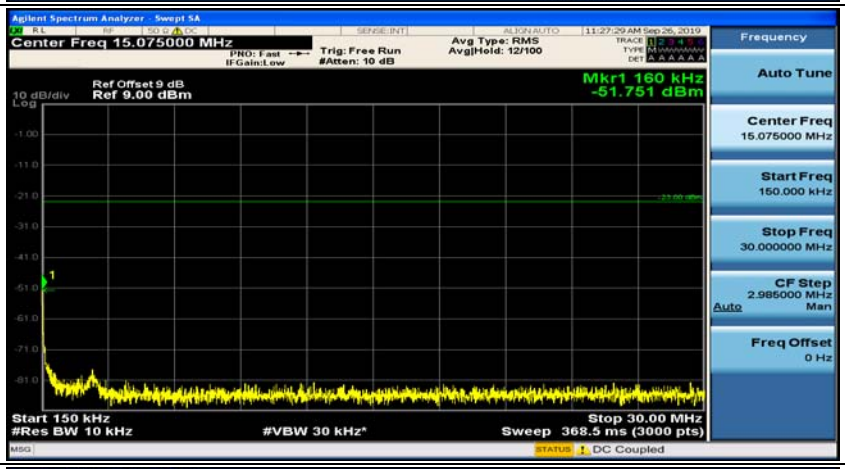

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
11:26:23 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 160 kHz
-56.530 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz

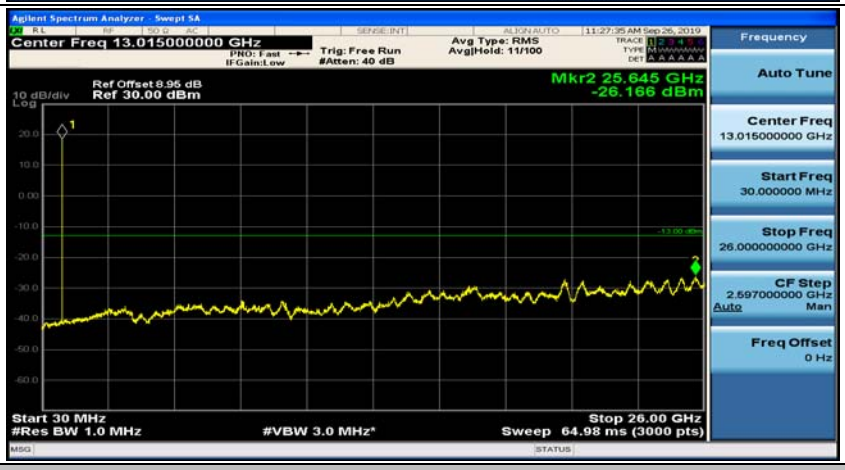

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:26:29 AM Sep 26, 2019
Ref Offset 8.96 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.628 GHz
-26.340 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

Channel Bandwidth: 5 MHz

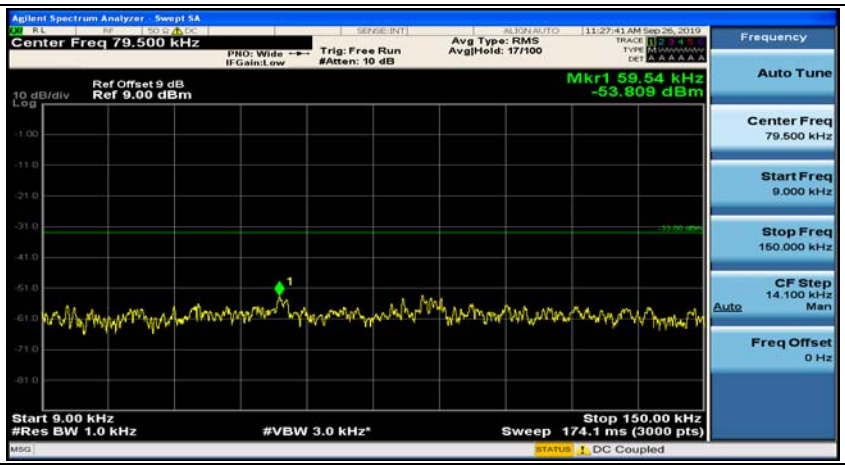
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

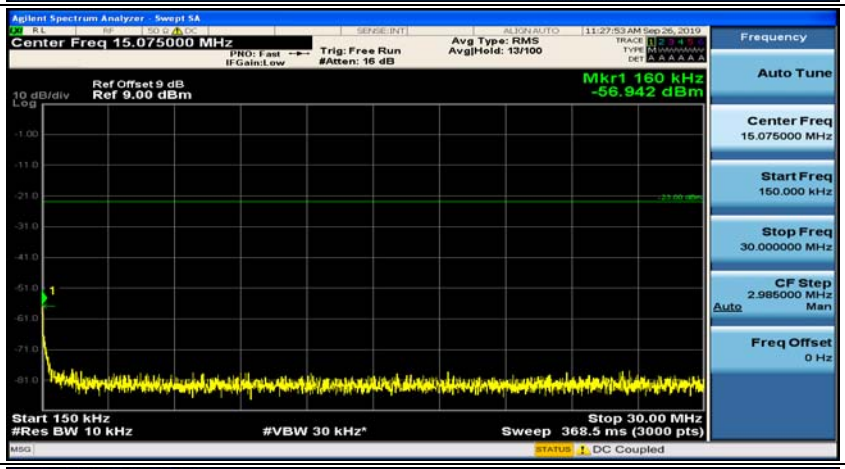


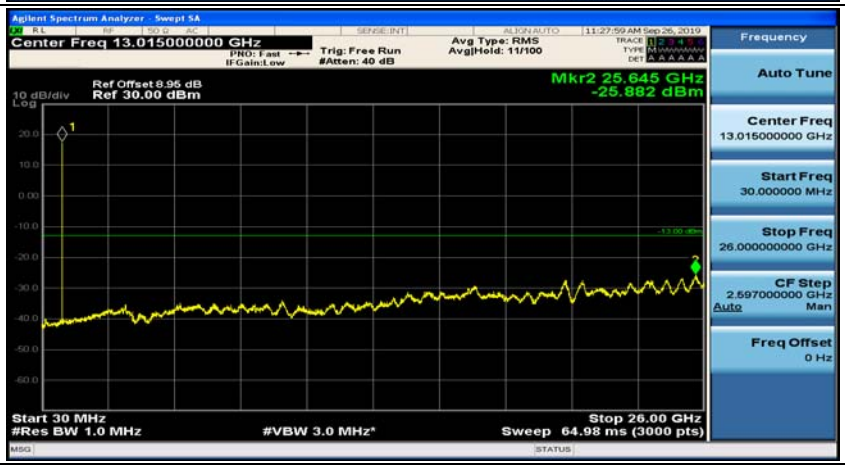


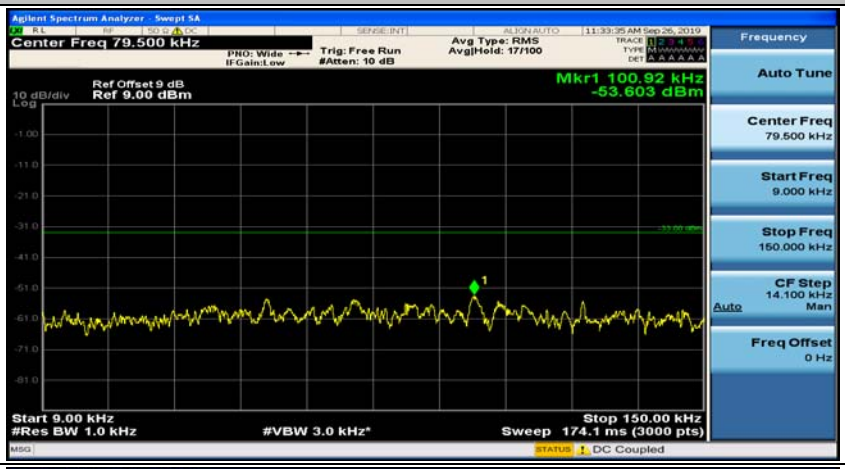
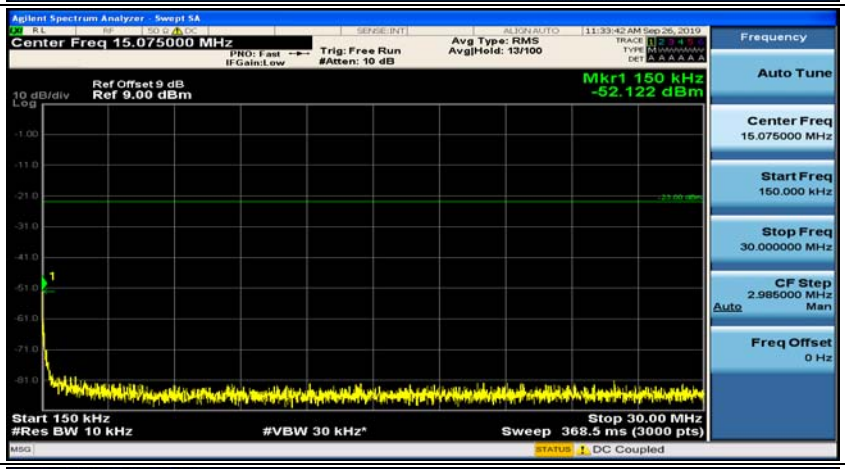
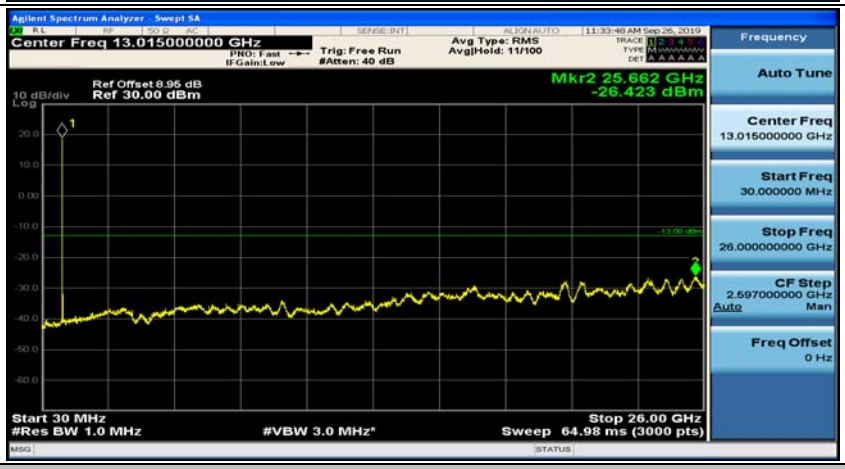


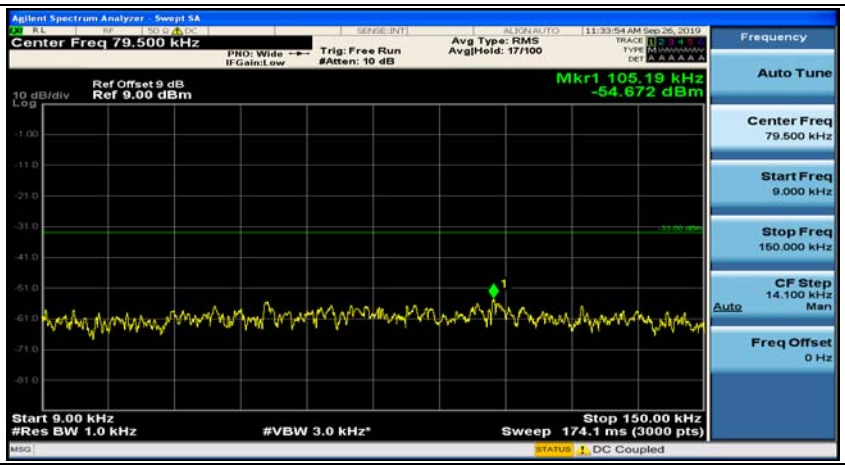
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

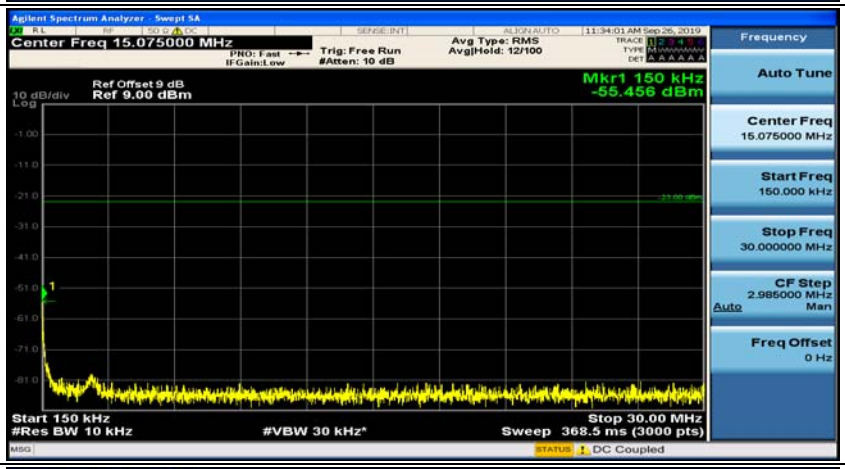

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:27:41 AM Sep 26, 2019
Frequency
Auto Tune
Mkr1 59.54 kHz
-53.809 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

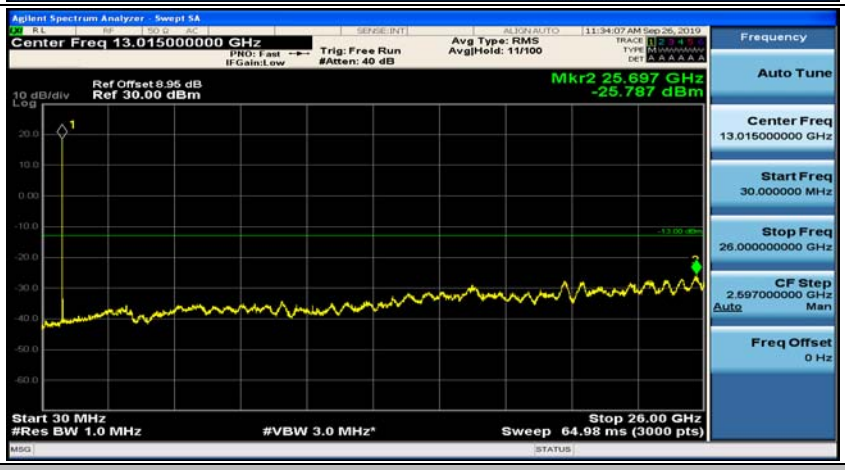

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 13/100
11:27:53 AM Sep 26, 2019
Frequency
Auto Tune
Mkr1 160 kHz
-56.942 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:27:59 AM Sep 26, 2019
Frequency
Auto Tune
Mkr2 25.645 GHz
-25.882 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

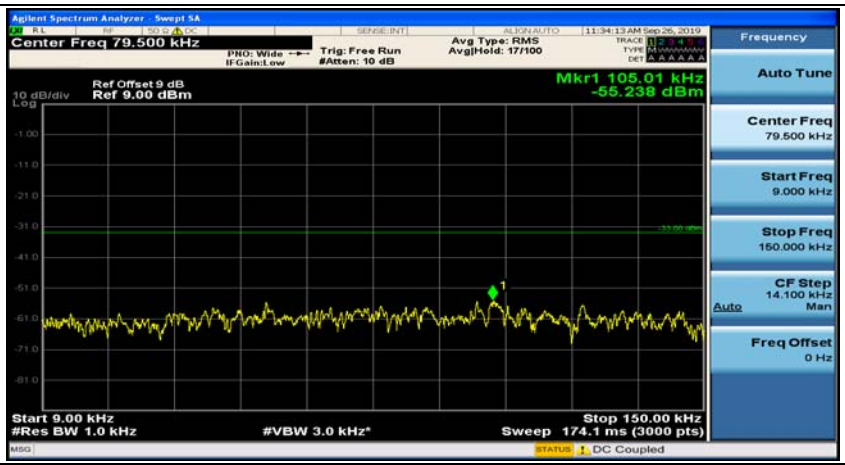
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

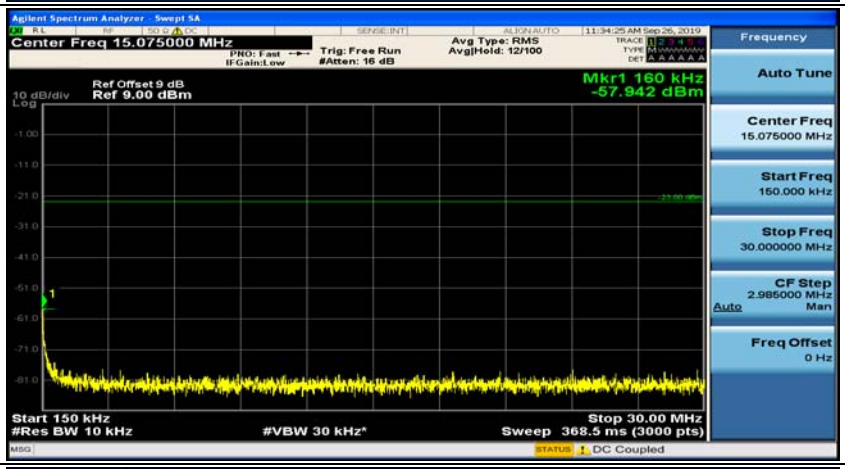


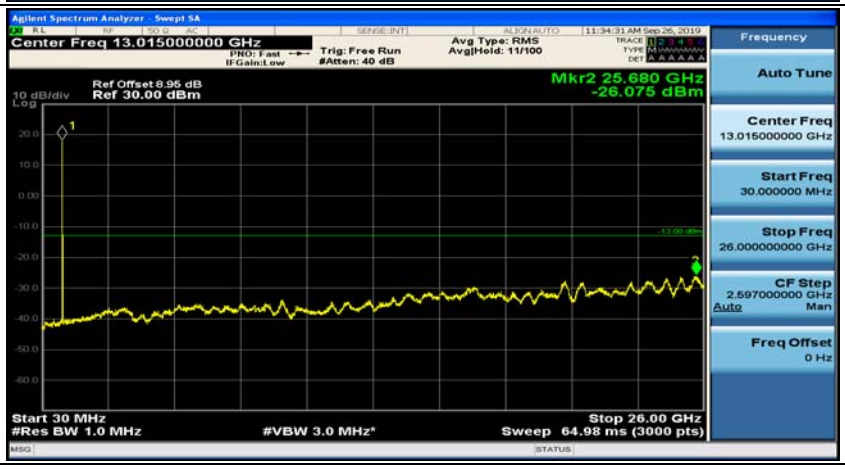


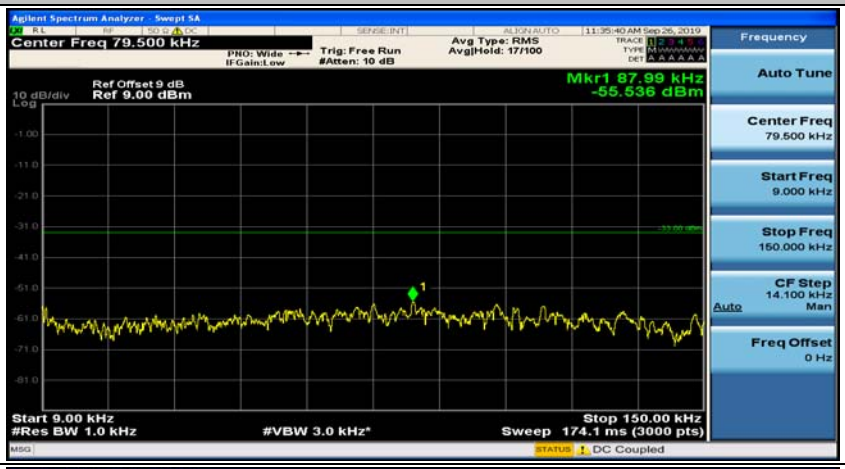
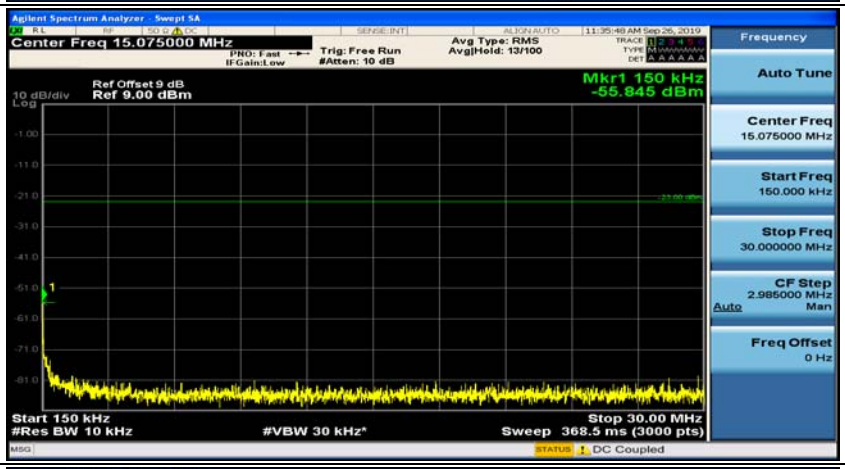
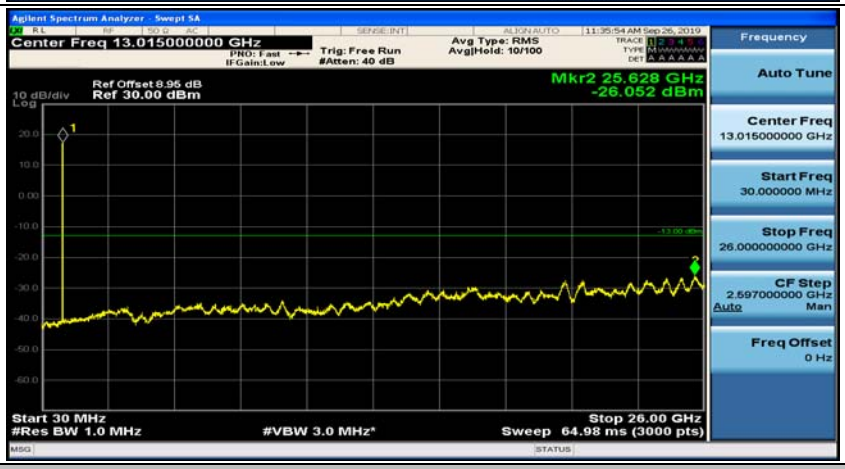


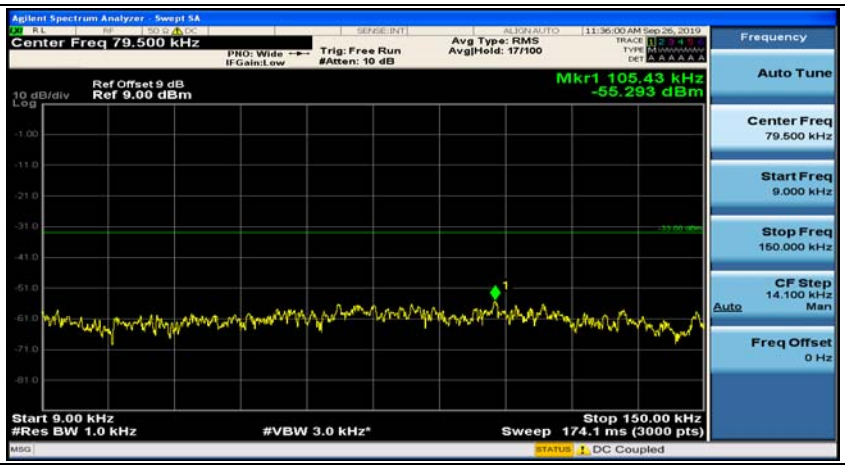
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

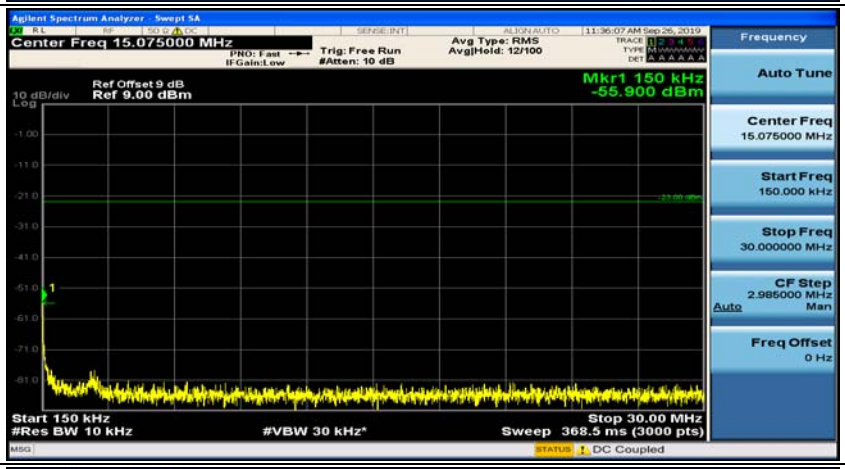

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:34:13 AM Sep 26, 2019
Frequency
Mkr1 105.01 kHz
-55.238 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

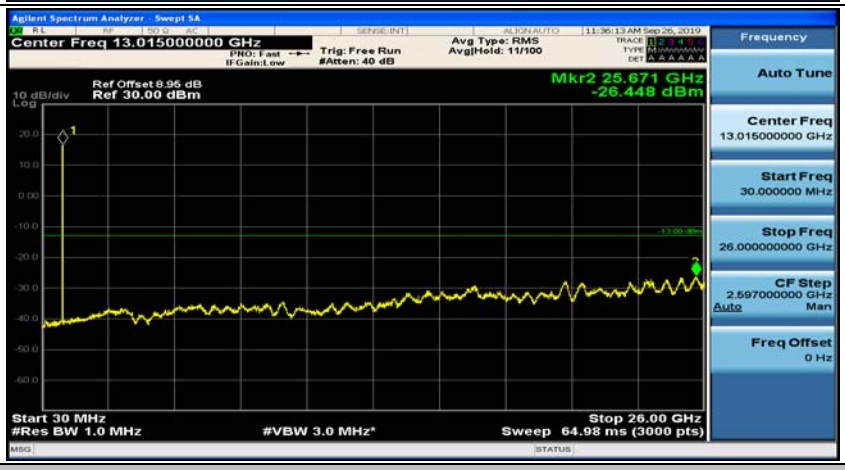

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
11:34:25 AM Sep 26, 2019
Frequency
Mkr1 160 kHz
-57.942 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:34:31 AM Sep 26, 2019
Frequency
Mkr2 25.680 GHz
-26.075 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

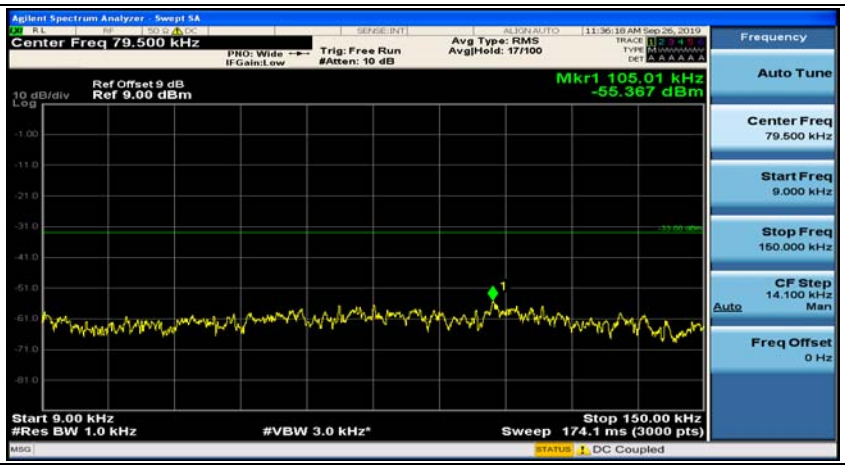
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

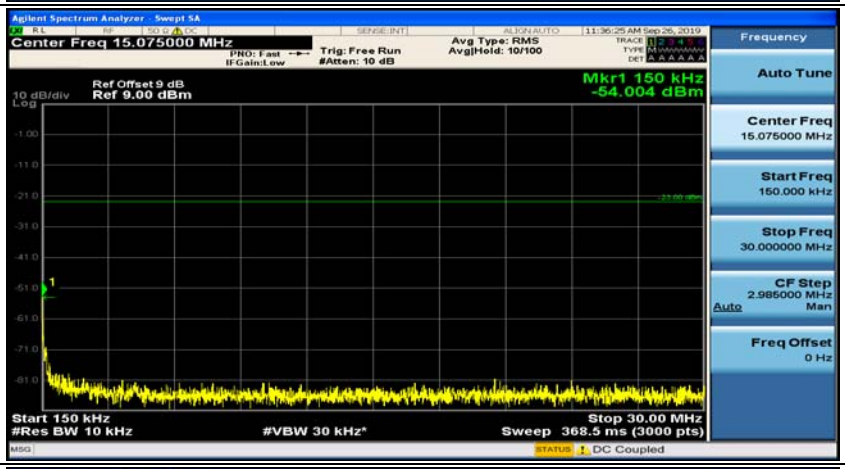


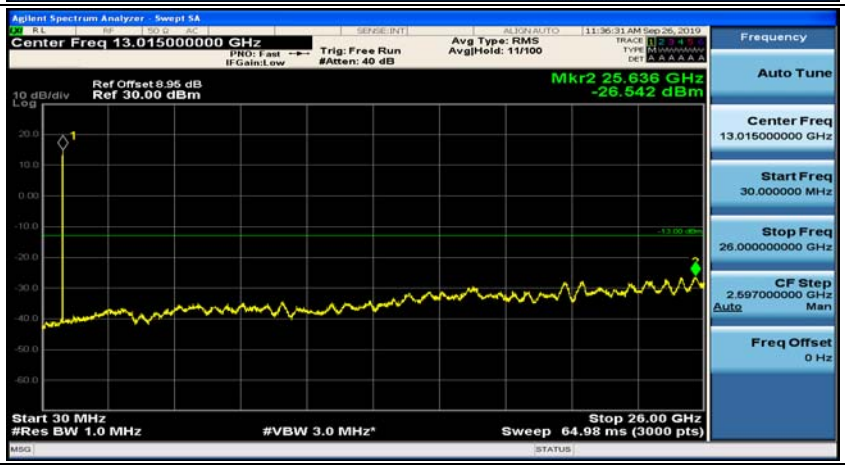


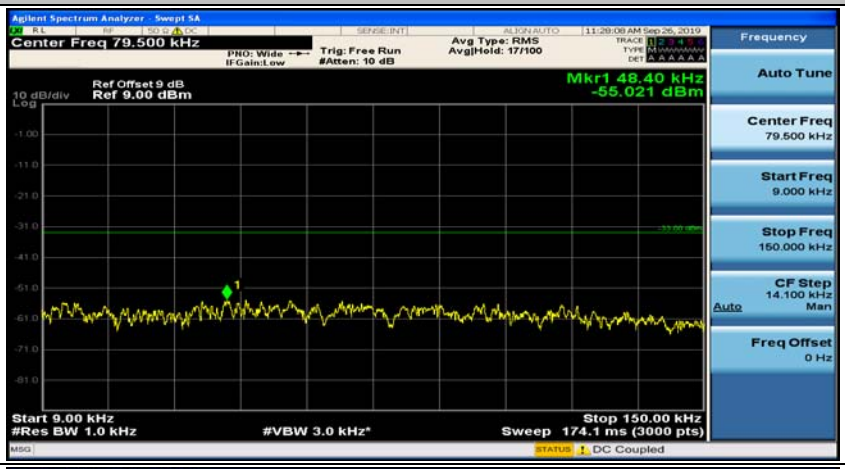
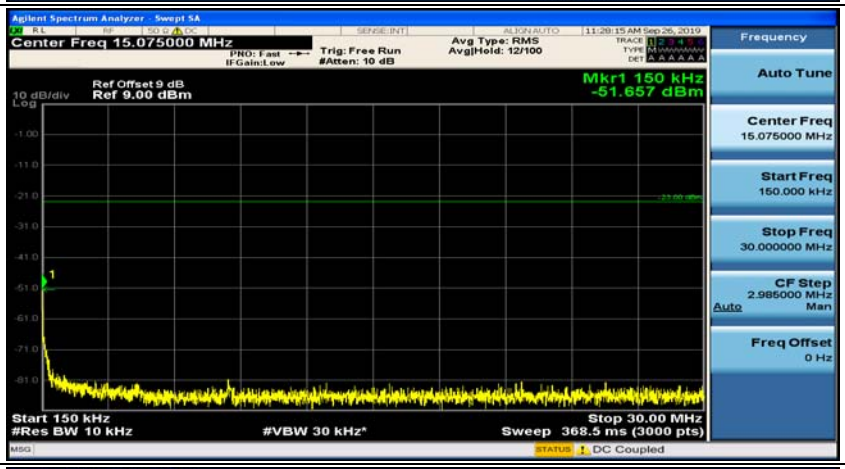
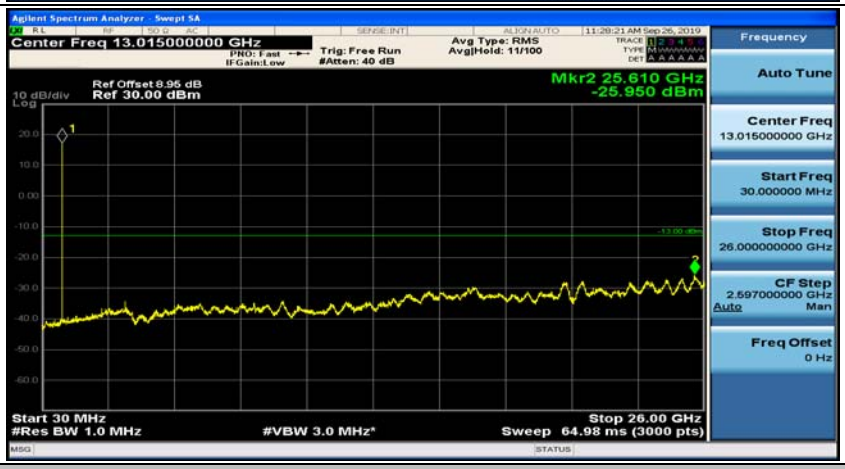


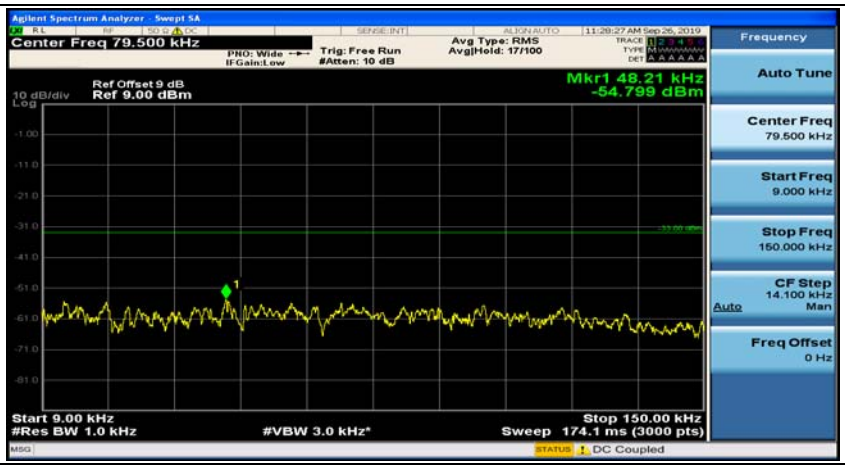
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

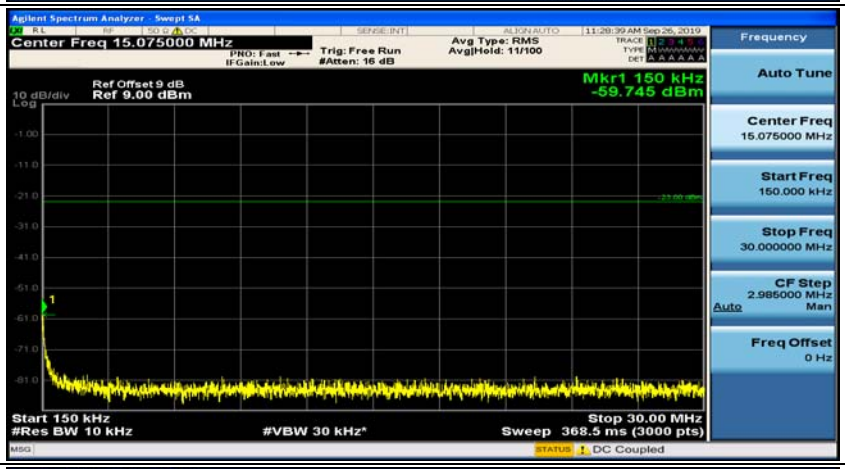

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:36:16 AM Sep 26, 2019
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 105.01 kHz
-55.367 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 10/100
11:36:25 AM Sep 26, 2019
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-54.004 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

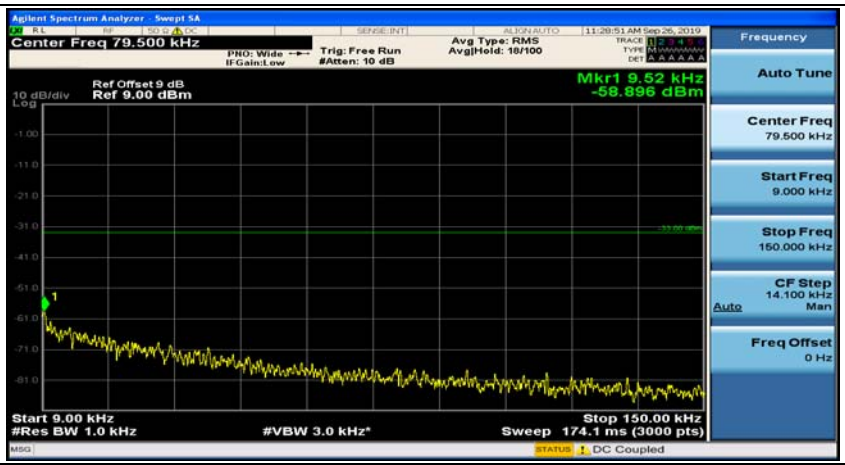

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:36:31 AM Sep 26, 2019
Frequency
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.636 GHz
-26.542 dBm
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

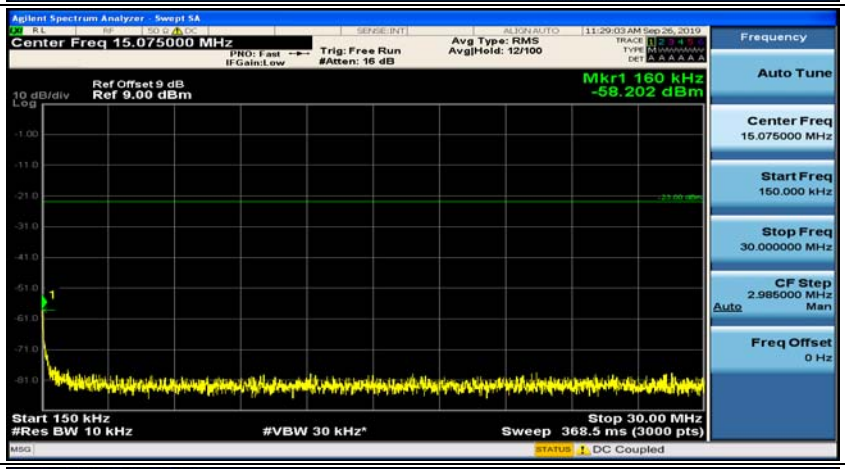
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

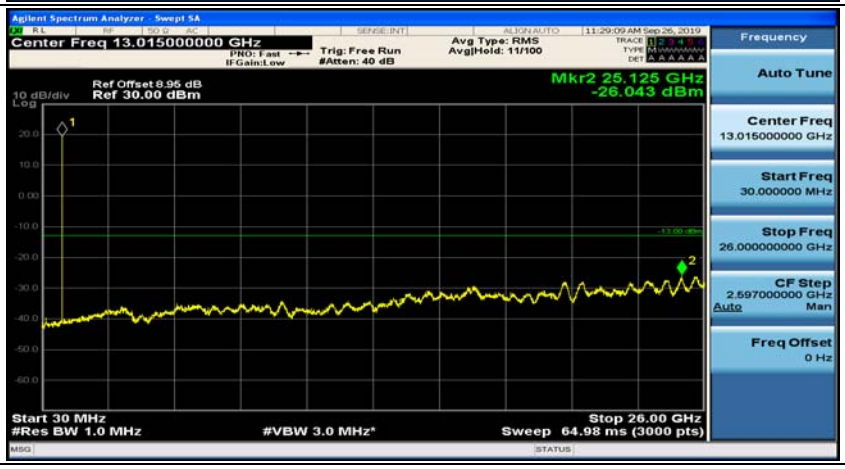


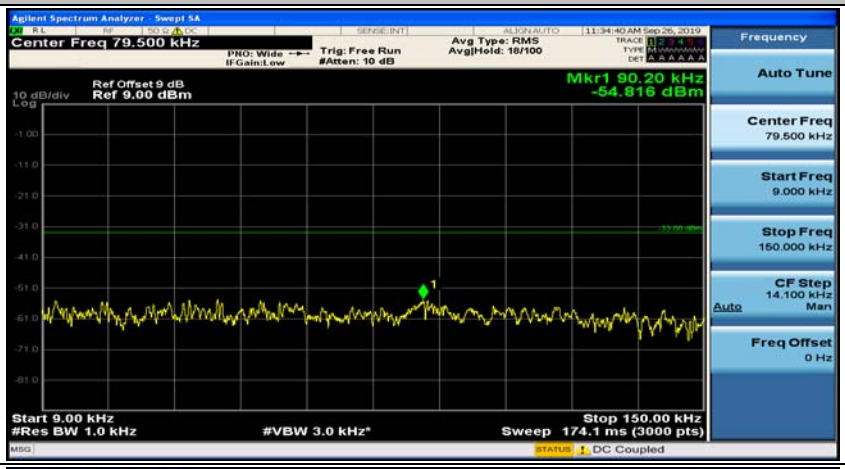
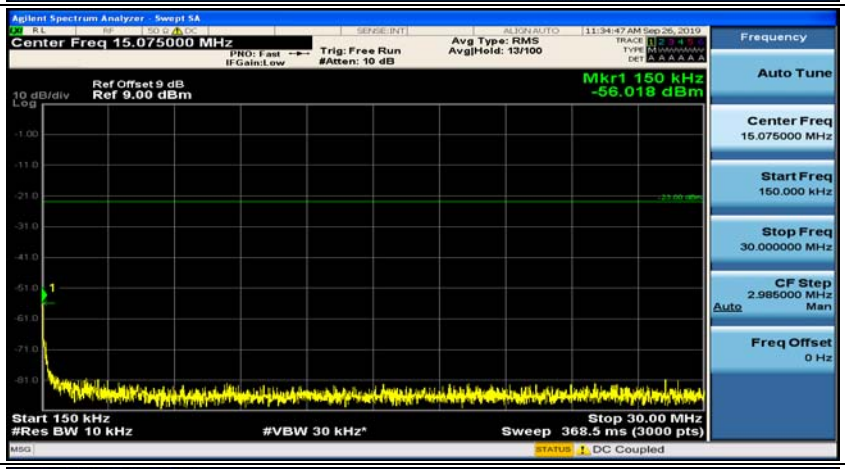
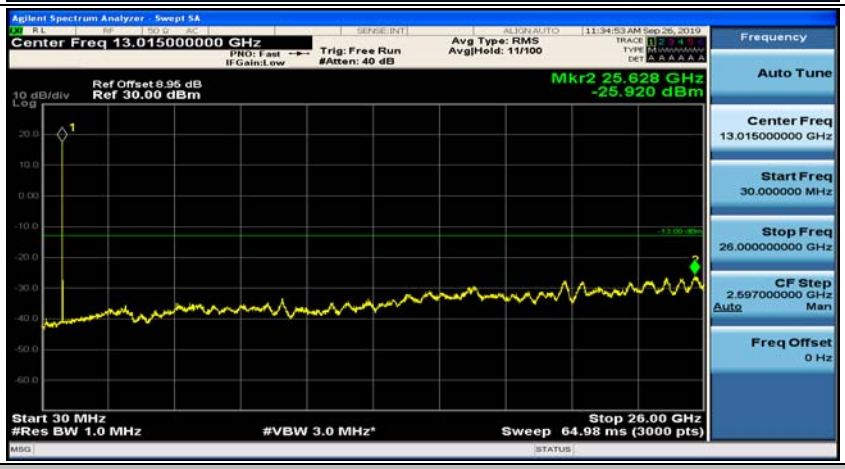


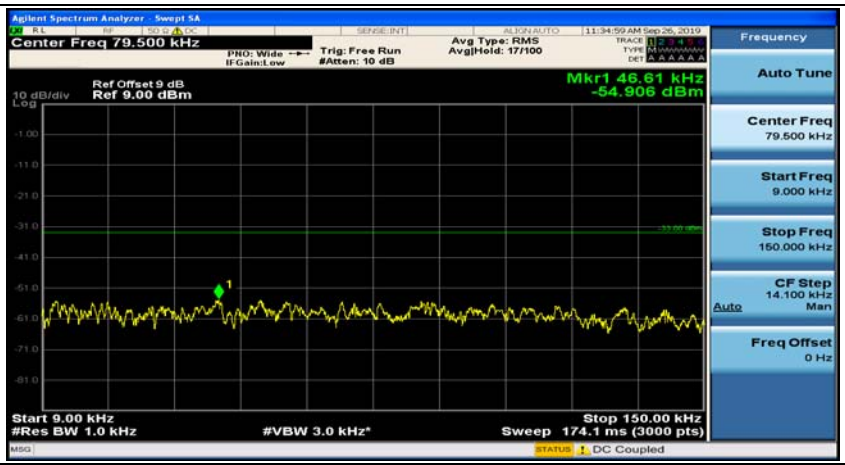
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

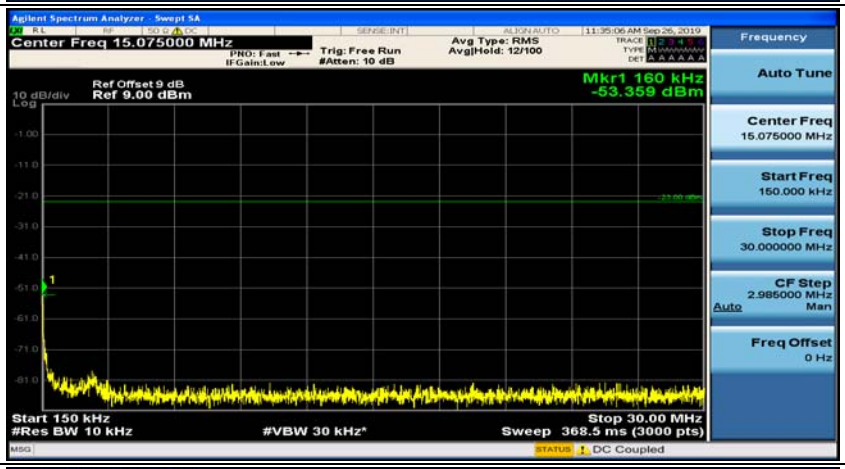

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 18/100
11:28:51 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 9.52 kHz
-58.896 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

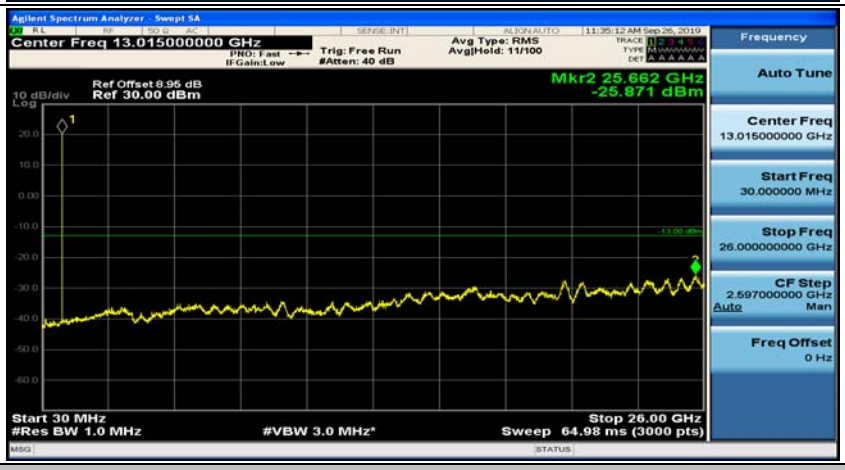

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
11:29:03 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 160 kHz
-58.202 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:29:09 AM Sep 26, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.125 GHz
-26.043 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

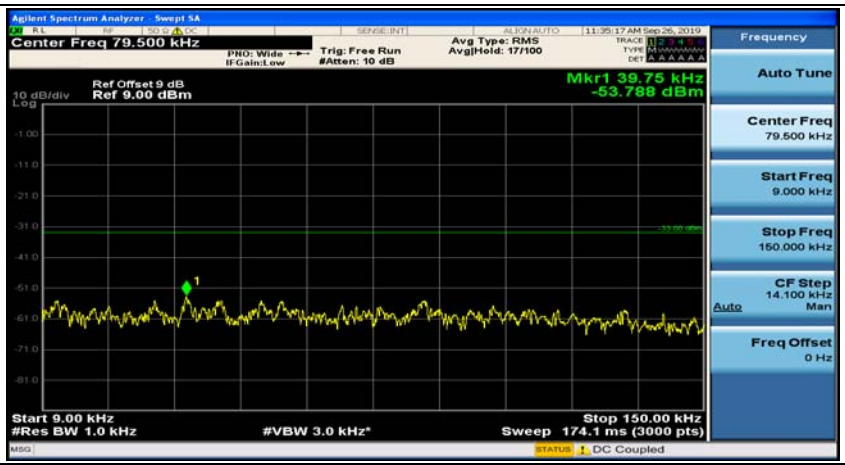
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

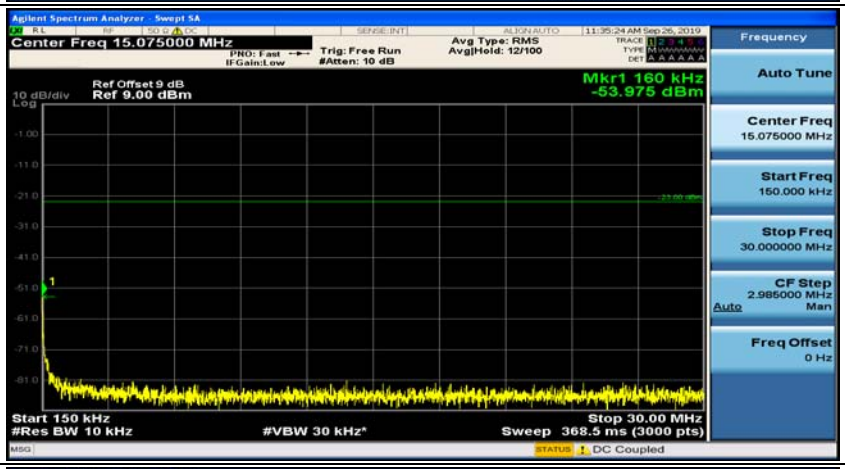


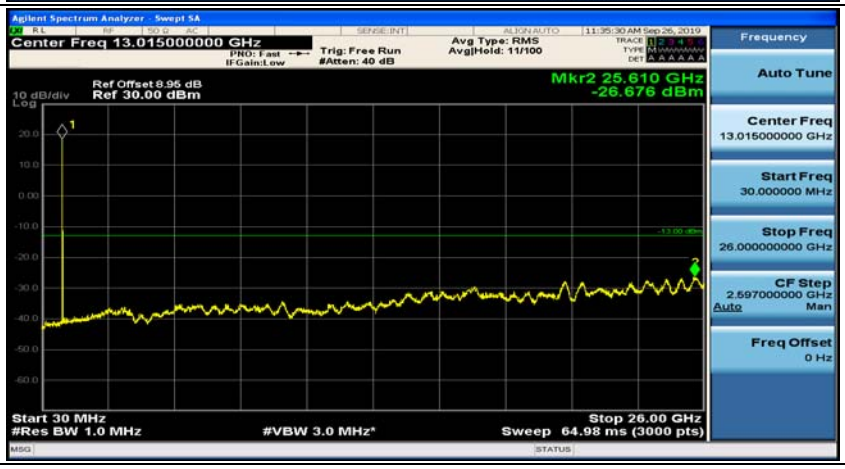


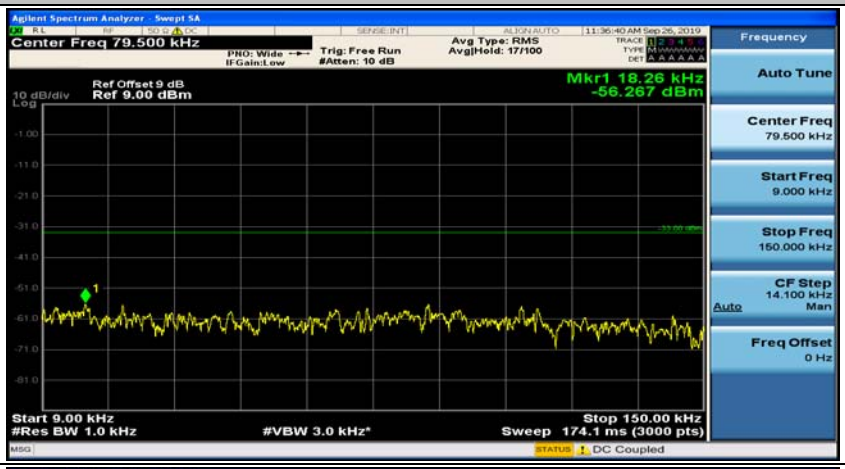
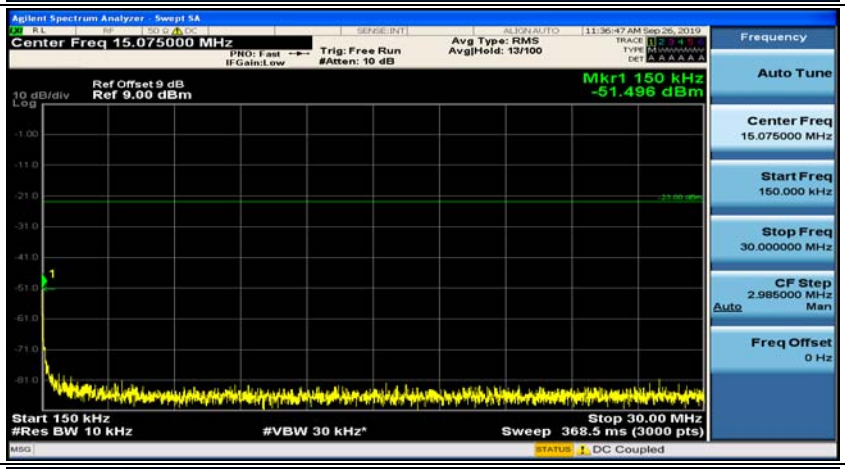
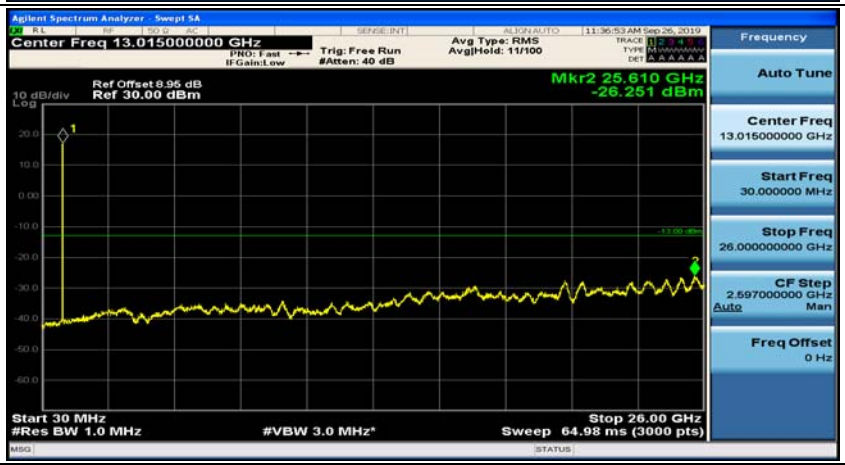


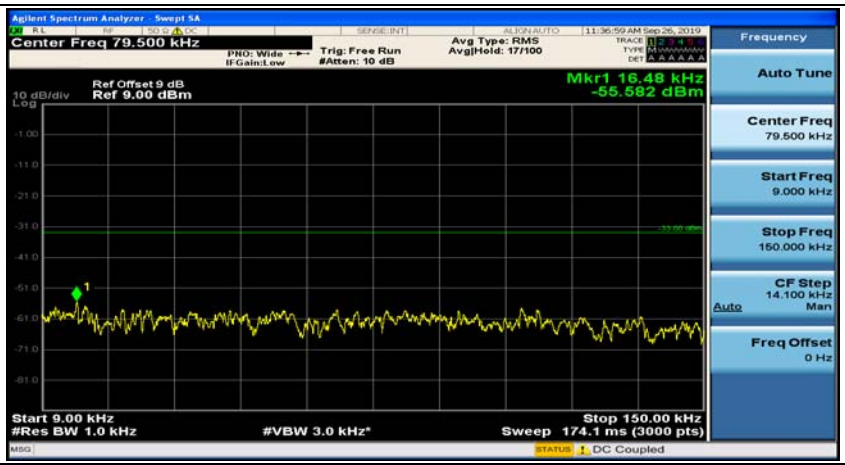
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

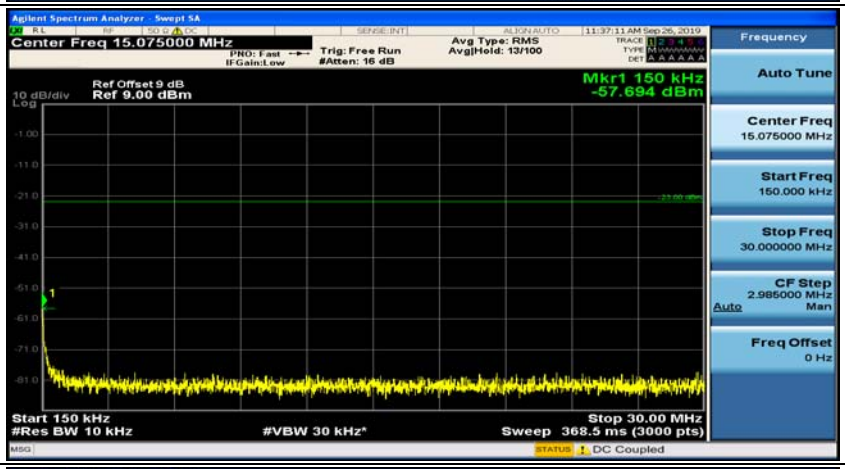

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:35:17 AM Sep 26, 2019
Frequency
Auto Tune
Mkr1 39.75 kHz
-53.788 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

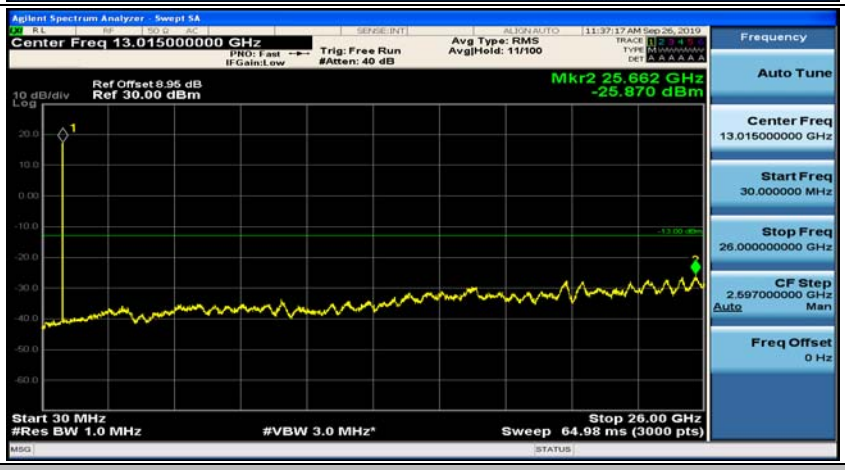

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
11:35:24 AM Sep 26, 2019
Frequency
Auto Tune
Mkr1 160 kHz
-53.975 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:35:30 AM Sep 26, 2019
Frequency
Auto Tune
Mkr2 25.610 GHz
-26.676 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

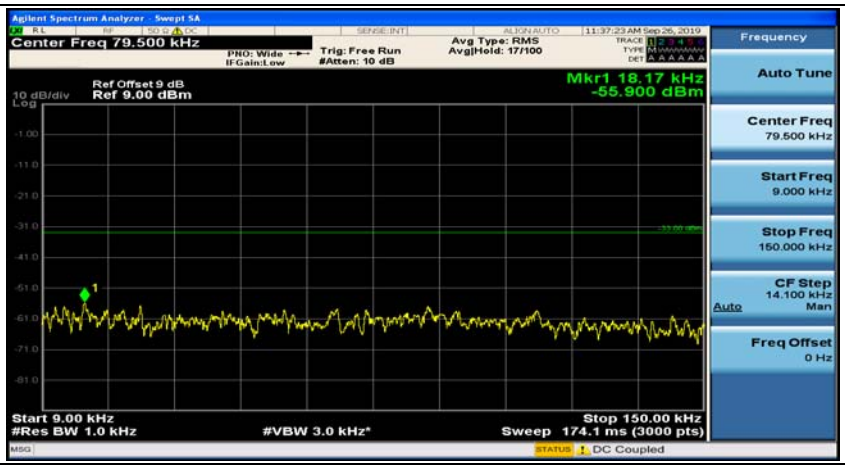
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

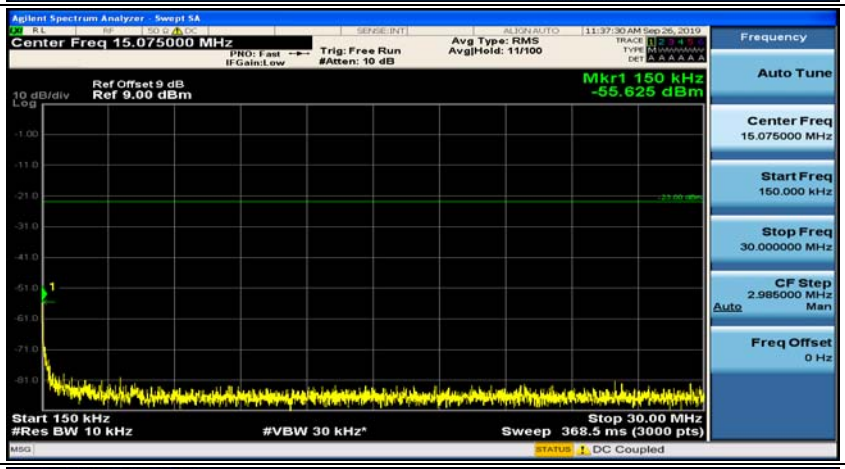


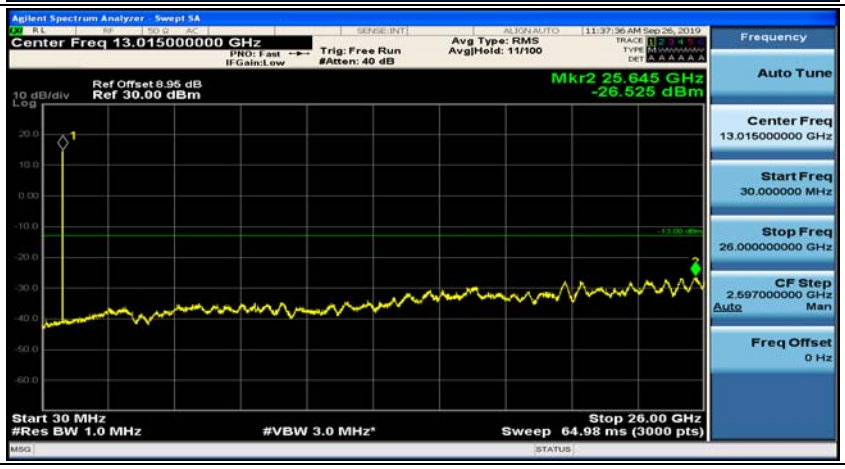




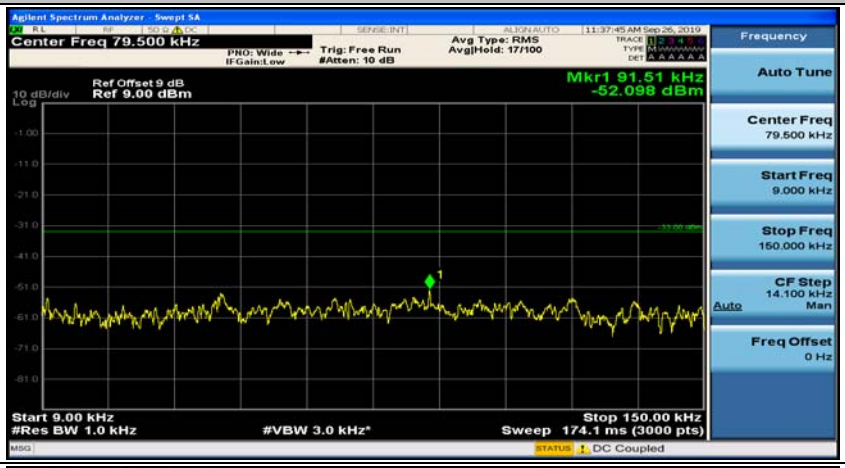
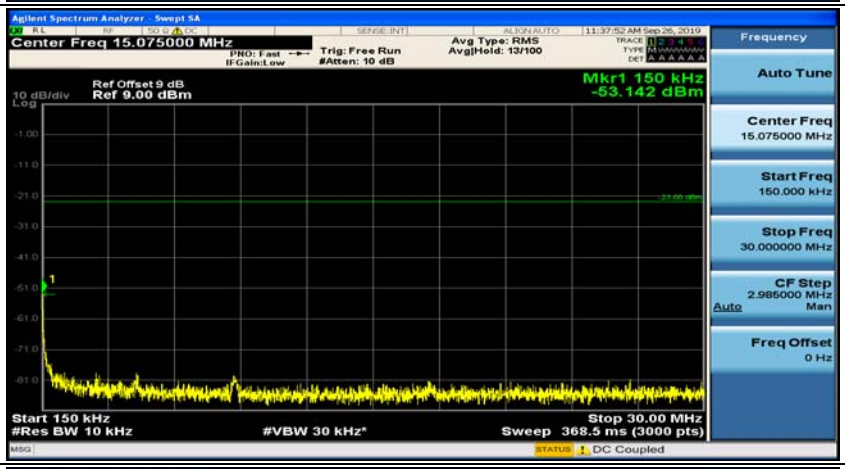
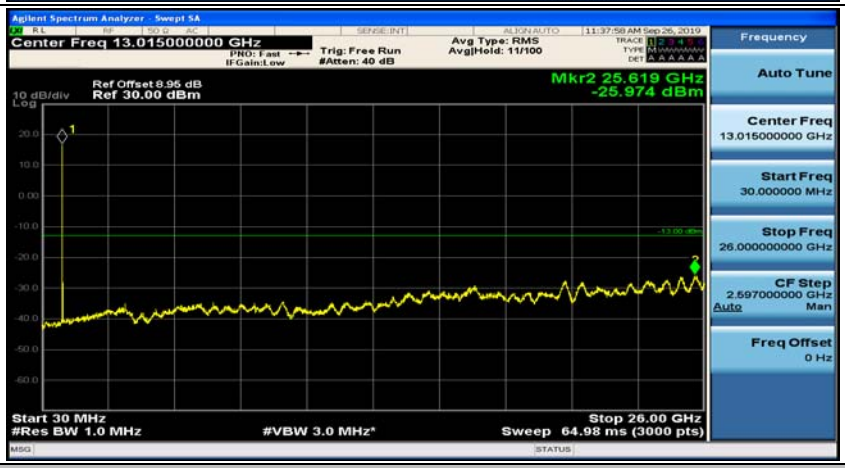
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24

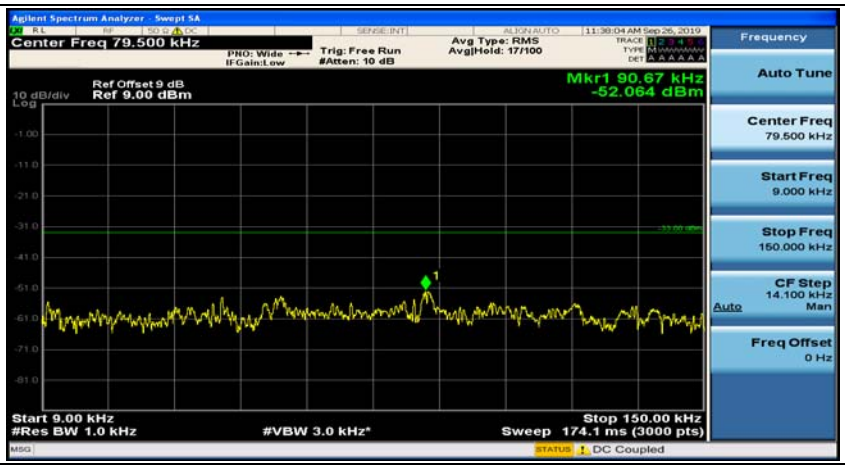

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:37:23 AM Sep 26, 2019
Mkr1 18.17 kHz
-55.900 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

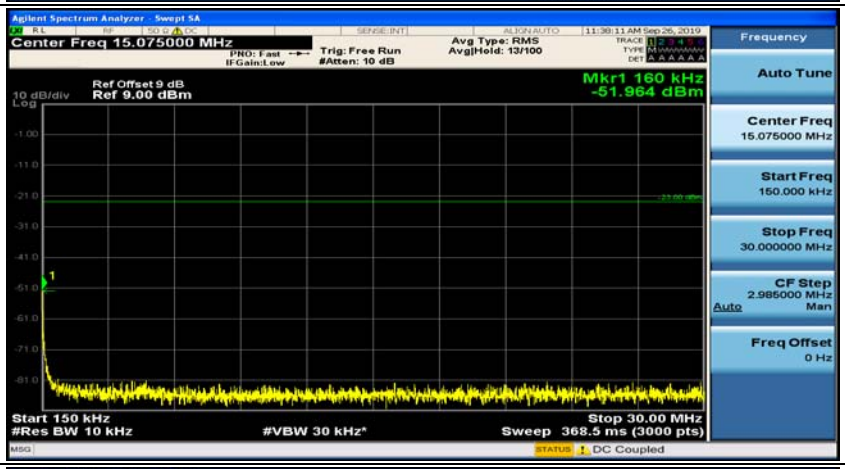

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
11:37:30 AM Sep 26, 2019
Mkr1 150 kHz
-55.625 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz

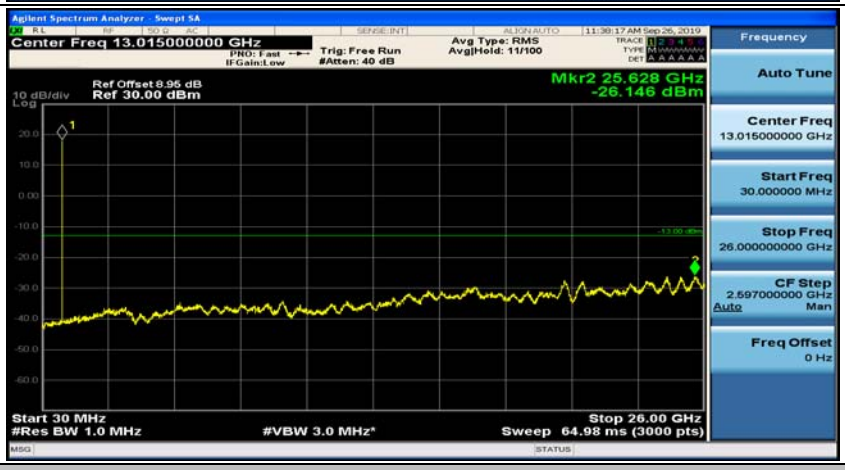

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:37:36 AM Sep 26, 2019
Mkr2 25.645 GHz
-26.525 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

Channel Bandwidth: 10 MHz

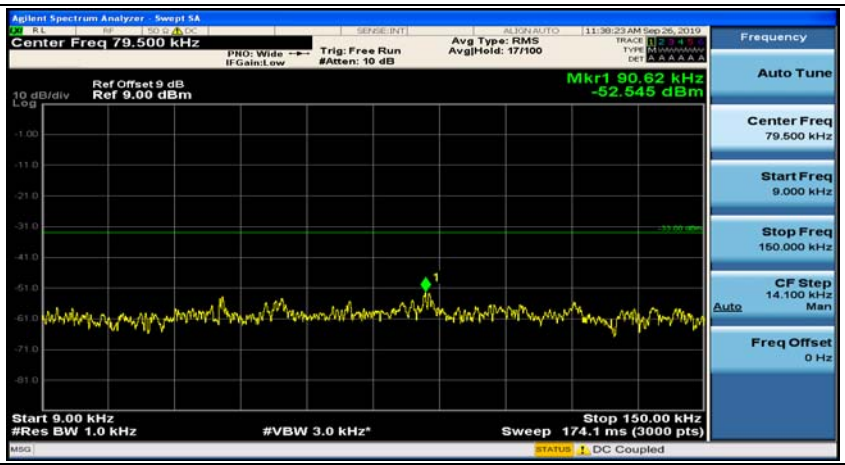
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#24

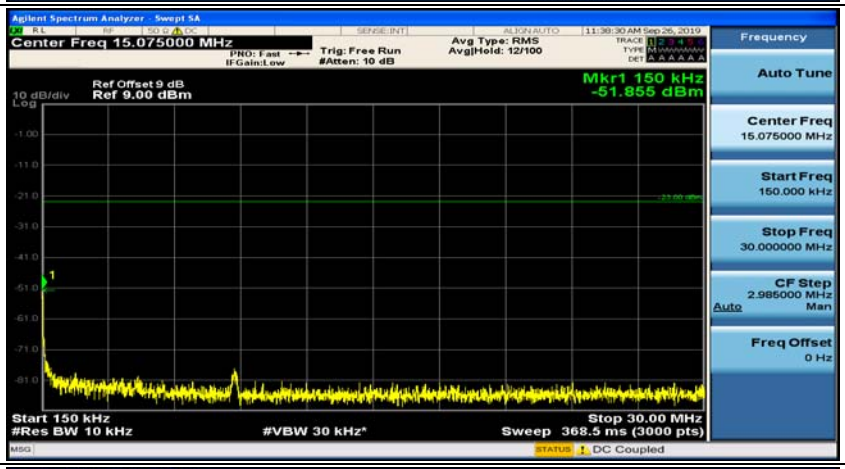


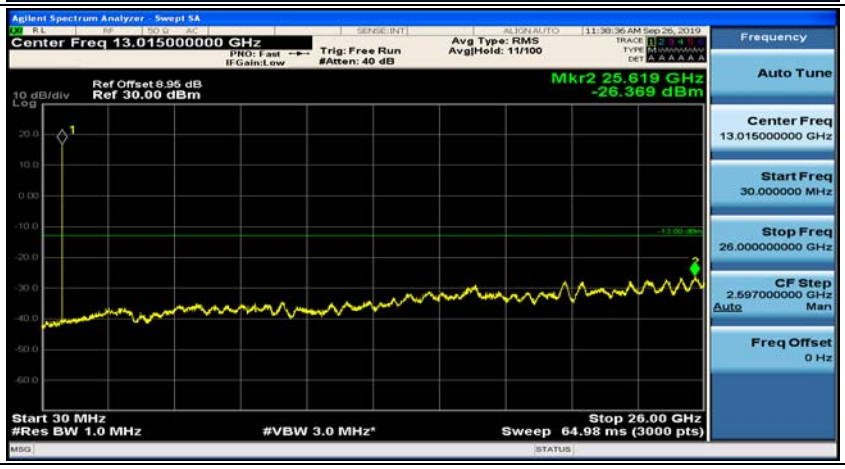


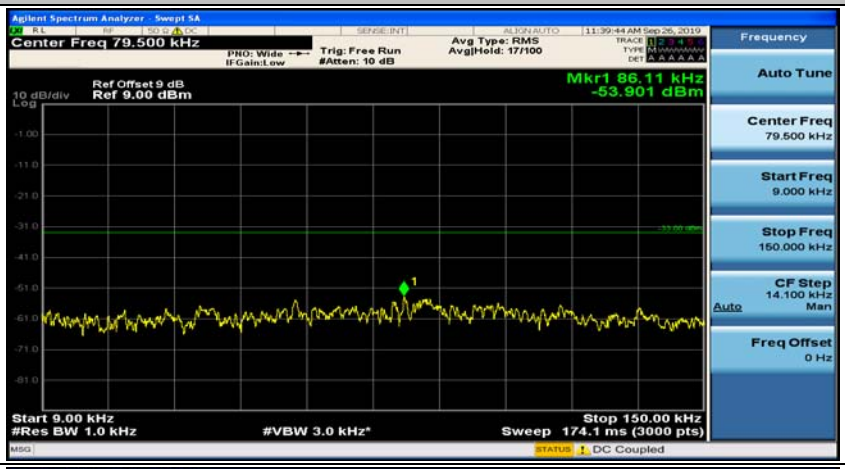
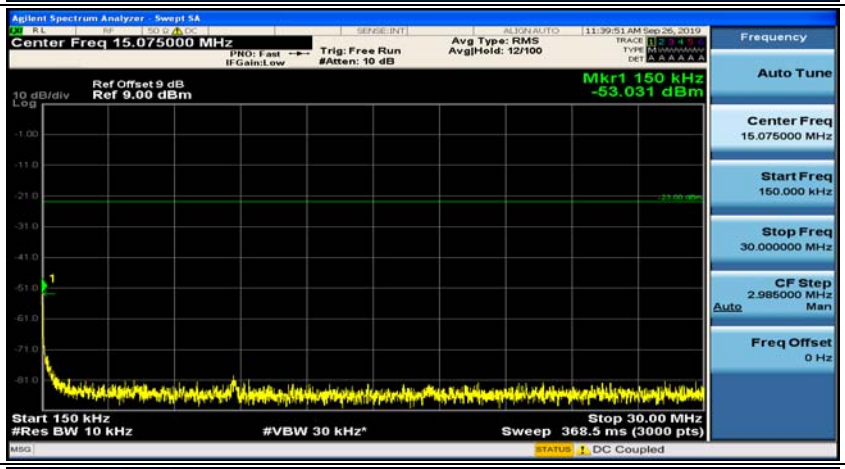
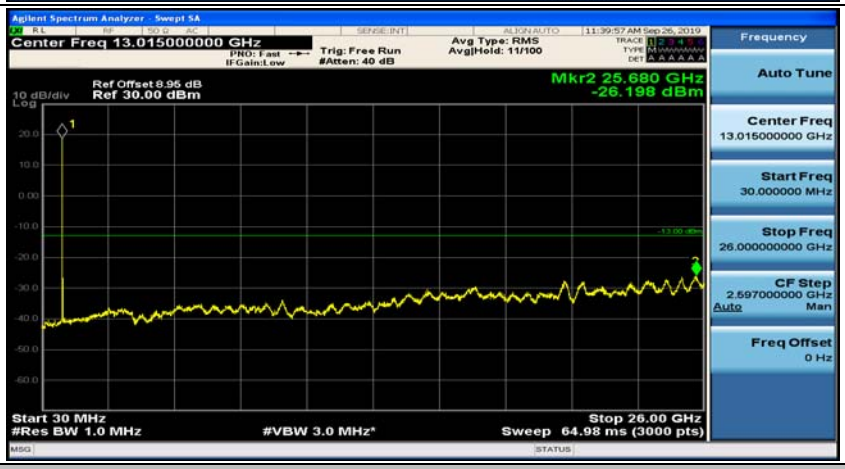


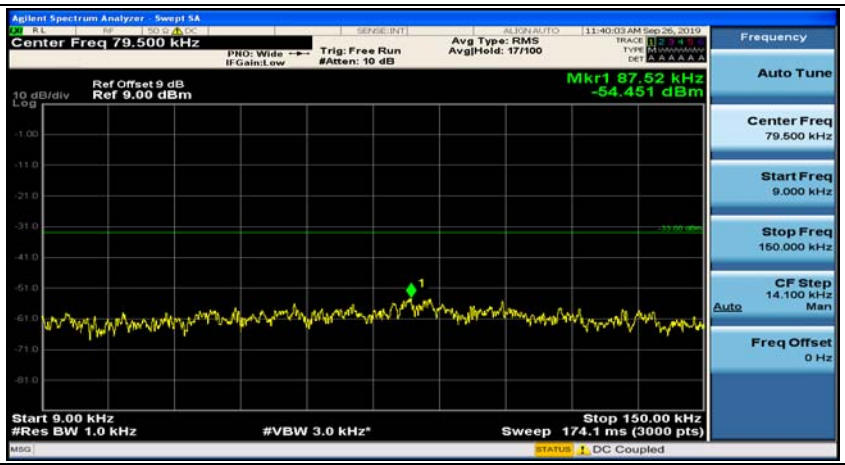
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#49

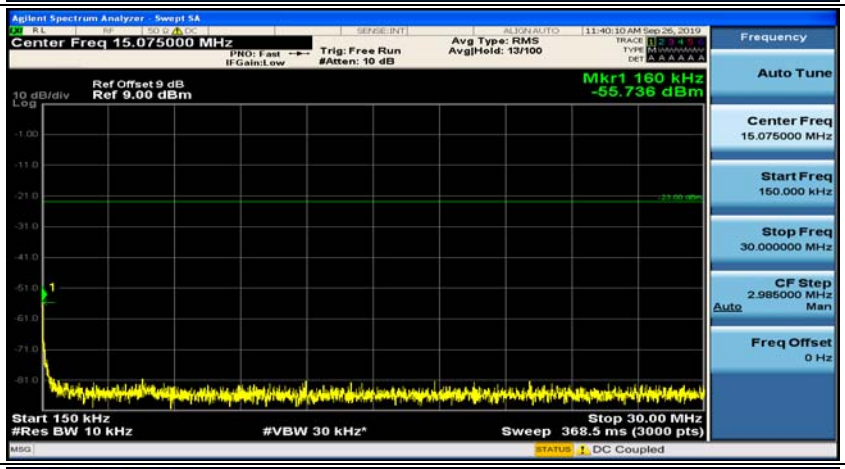

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:39:23 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 90.62 kHz
-52.545 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

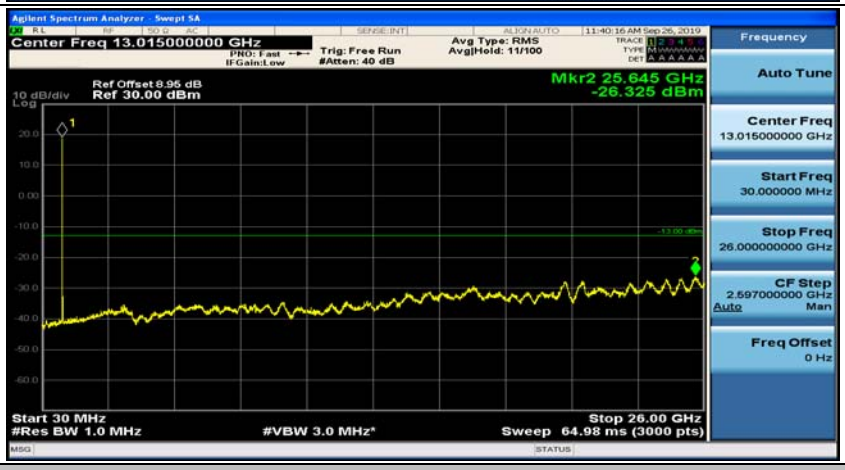

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
11:39:30 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-51.855 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:39:36 AM Sep 26, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.619 GHz
-26.369 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

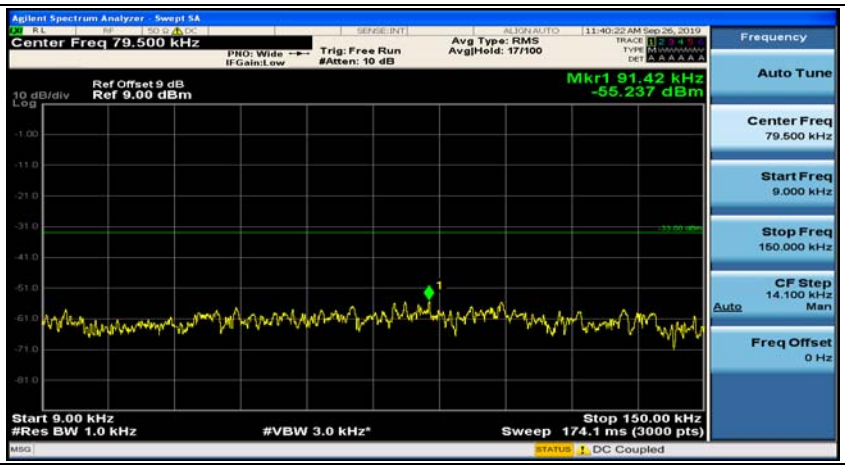
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

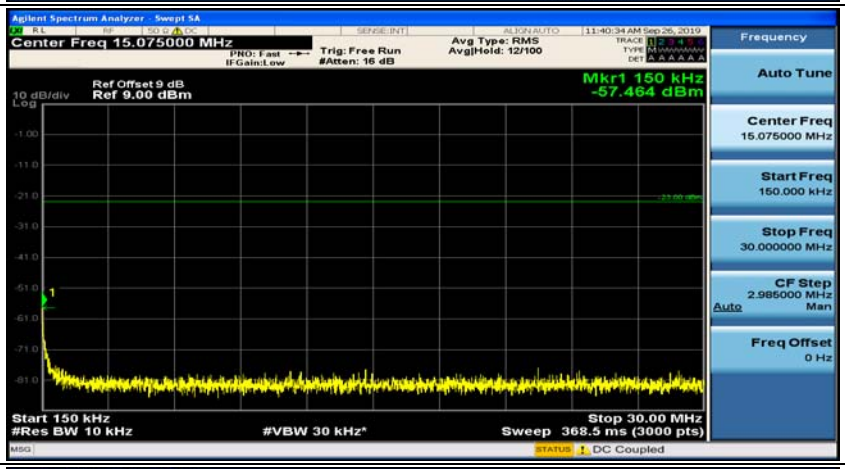


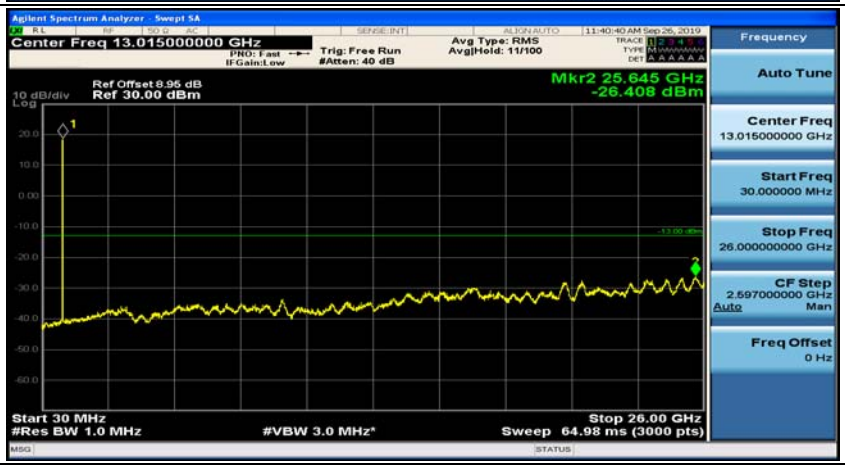


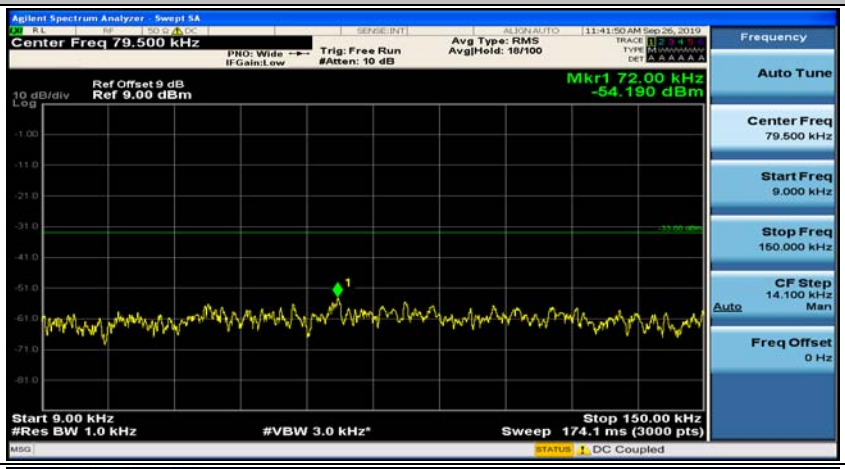
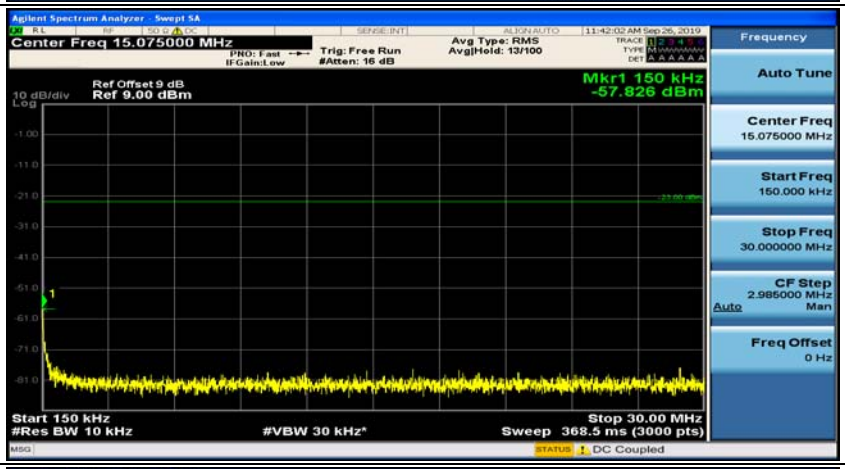
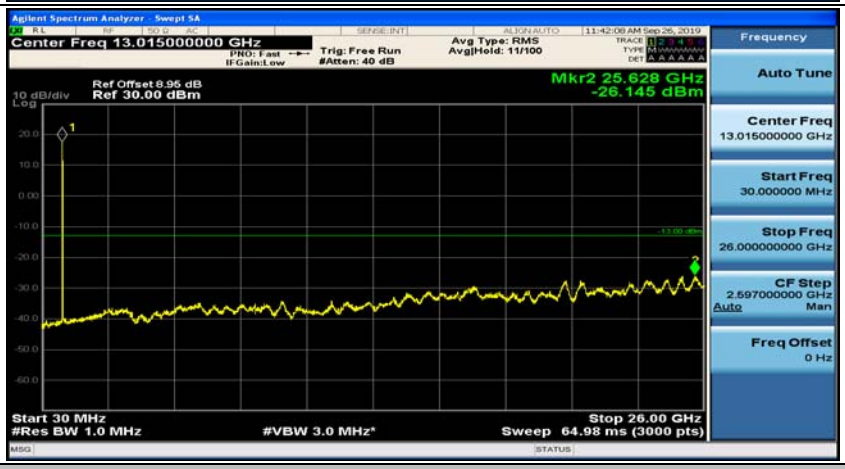


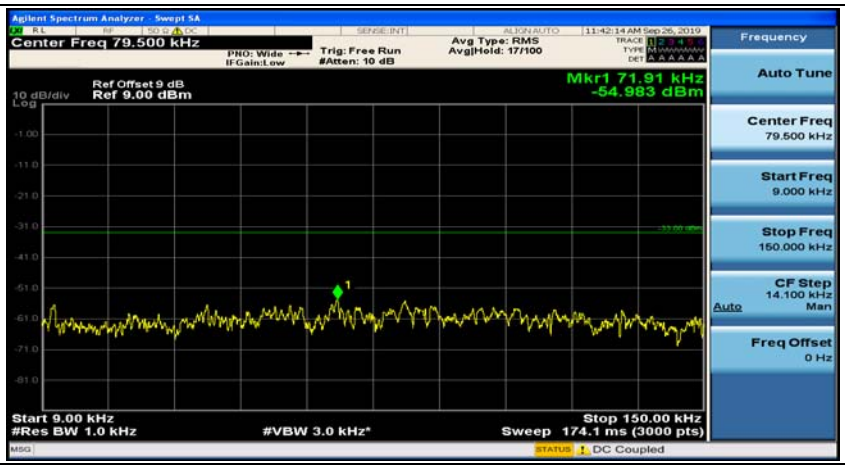
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

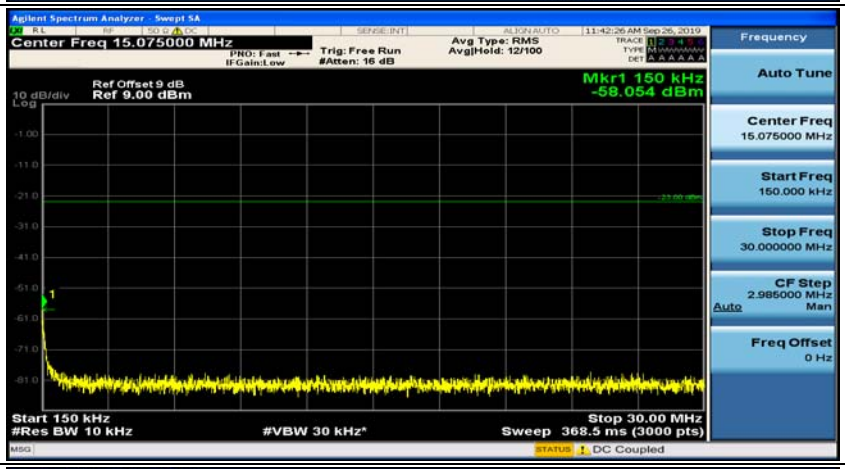

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:40:22 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 91.42 kHz
-55.237 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

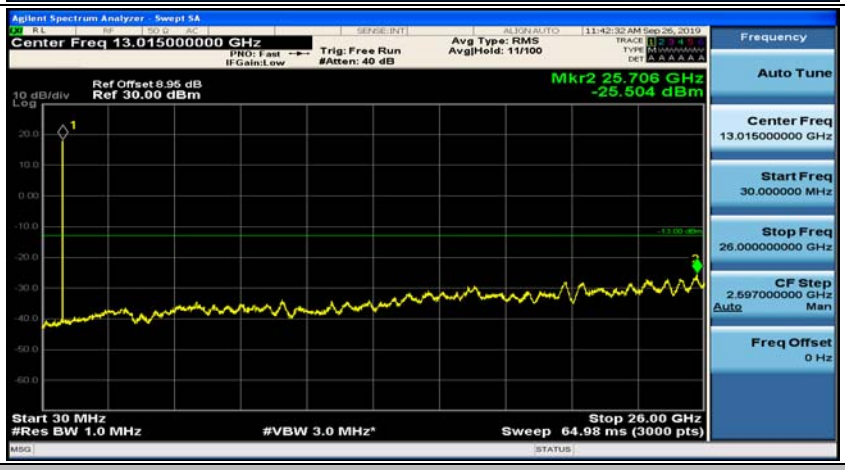

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
11:40:34 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-57.464 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:40:40 AM Sep 26, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.645 GHz
-26.408 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

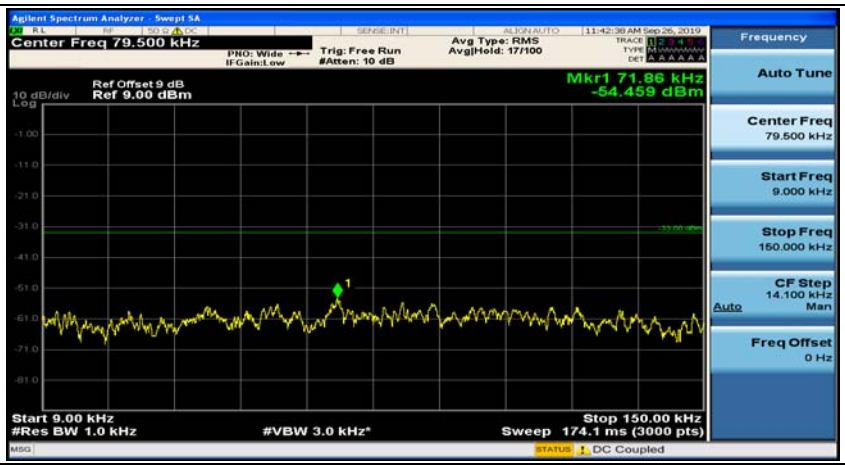
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

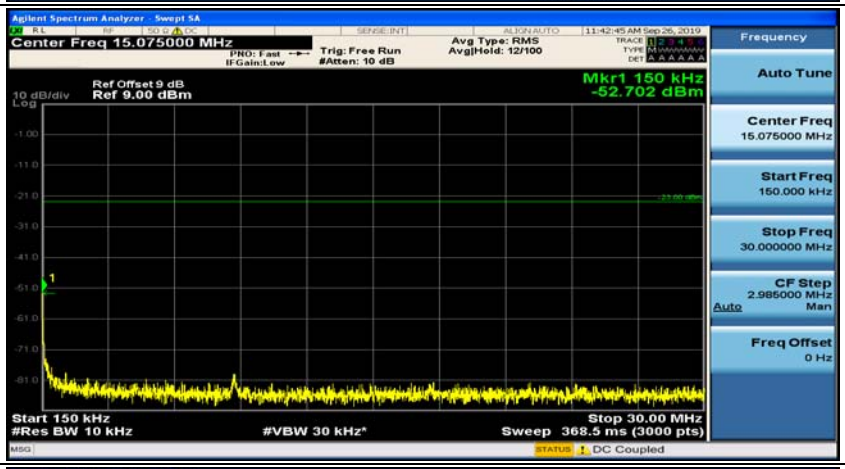


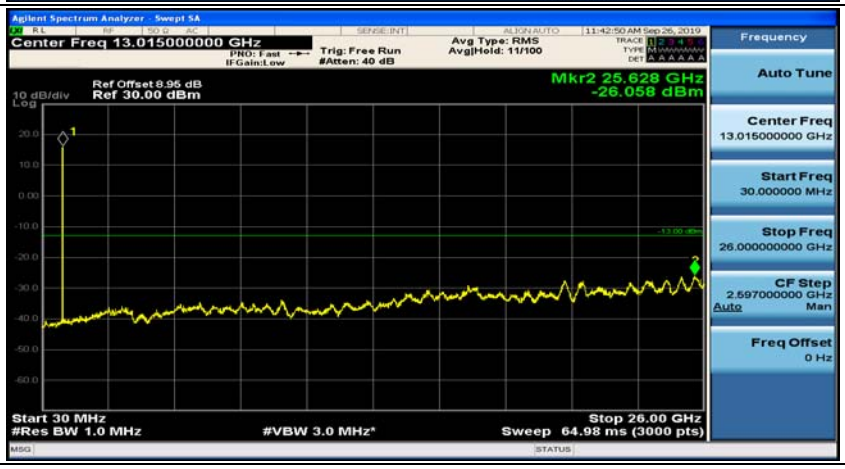


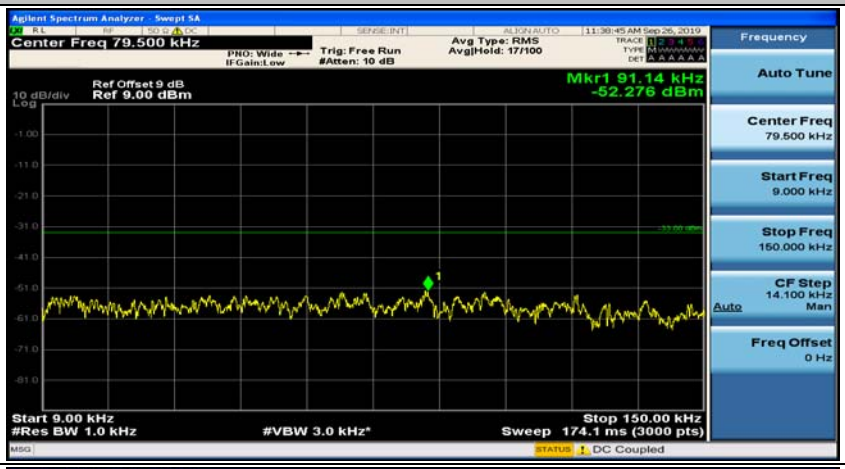
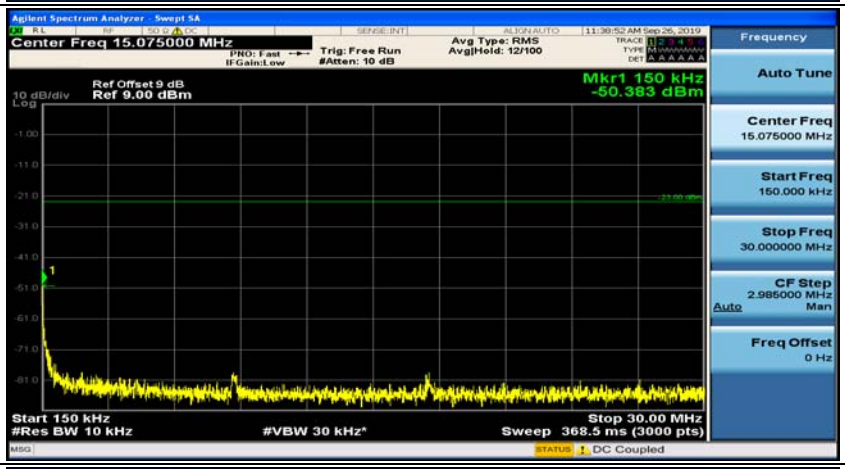
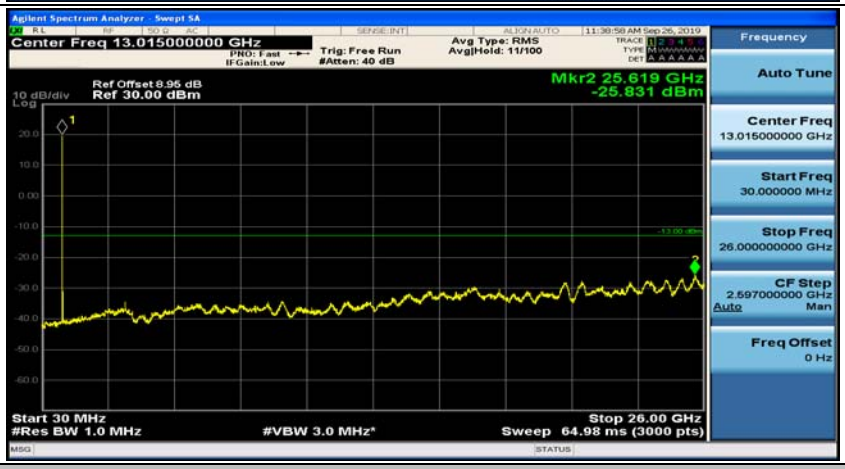


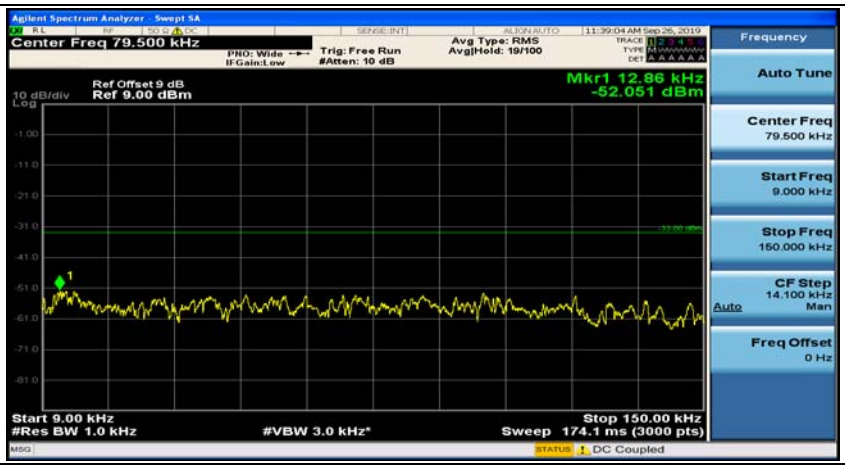
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#49

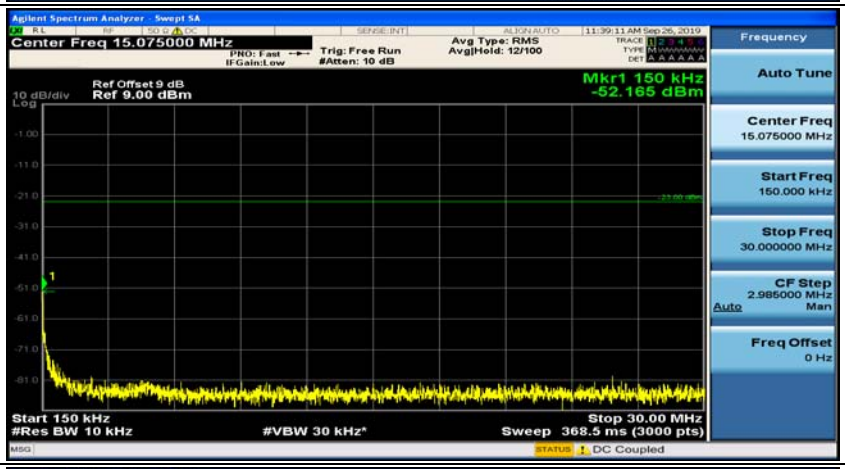

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:42:38 AM Sep 26, 2019
Mkr1 71.86 kHz
-54.459 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

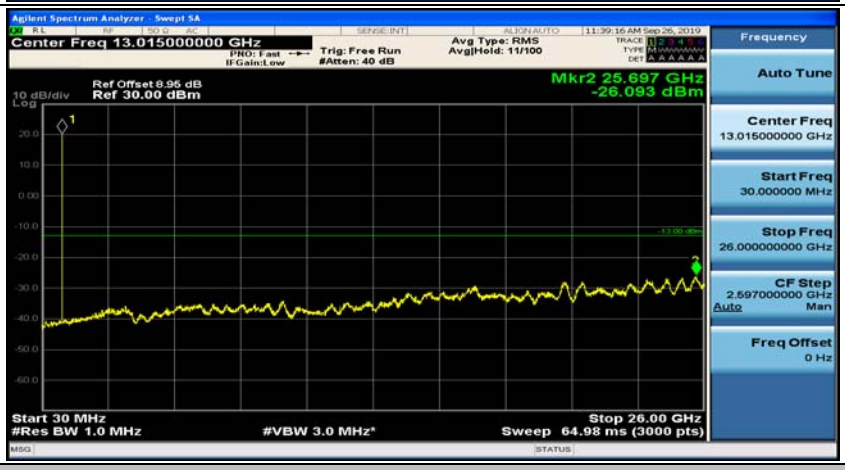

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
11:42:45 AM Sep 26, 2019
Mkr1 150 kHz
-52.702 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:42:50 AM Sep 26, 2019
Mkr2 25.628 GHz
-26.058 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

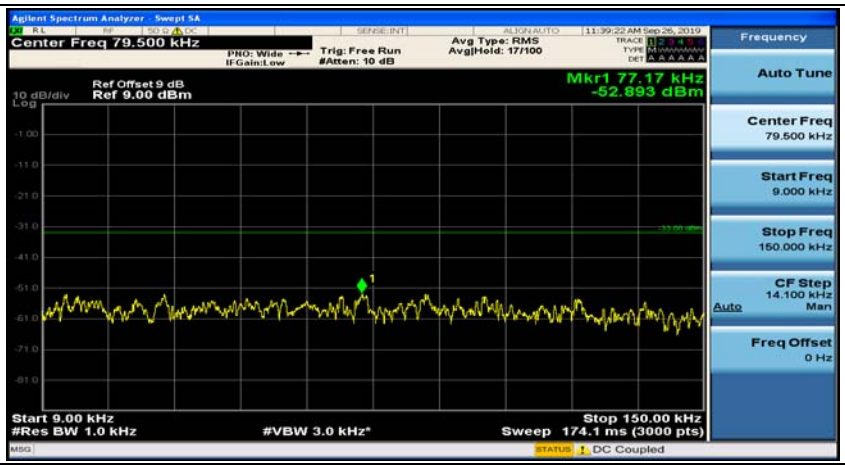
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

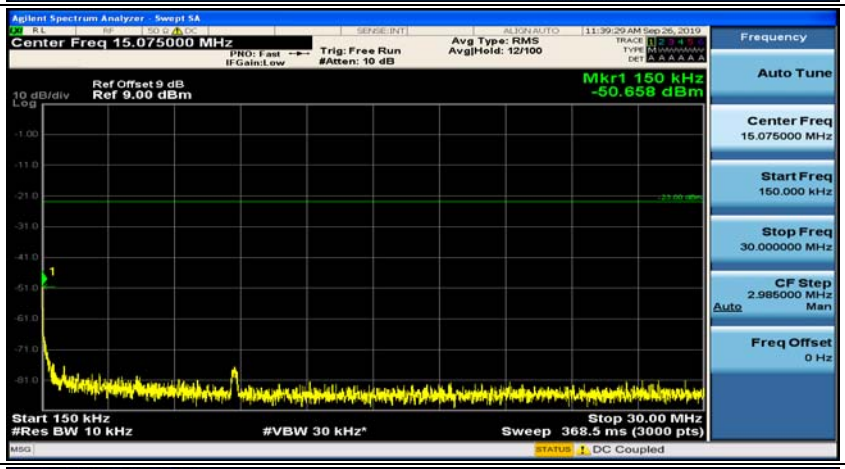


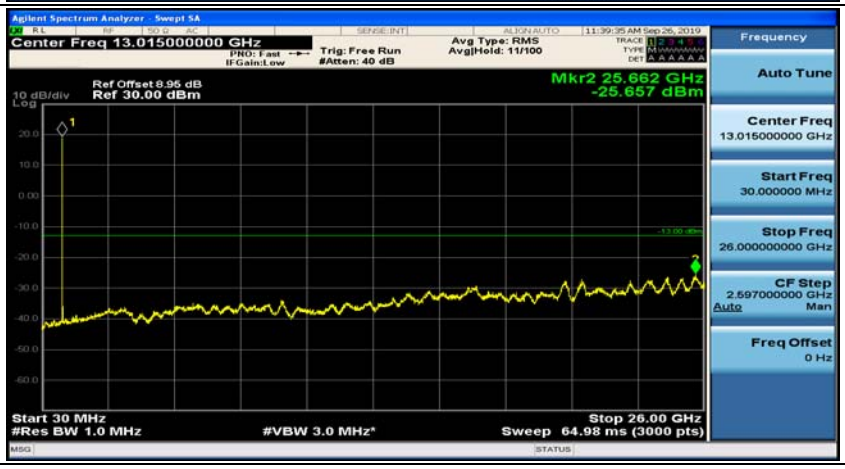


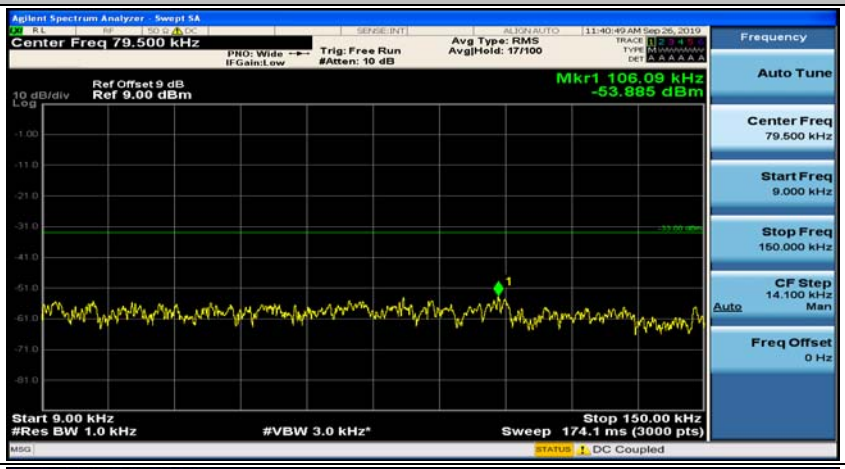
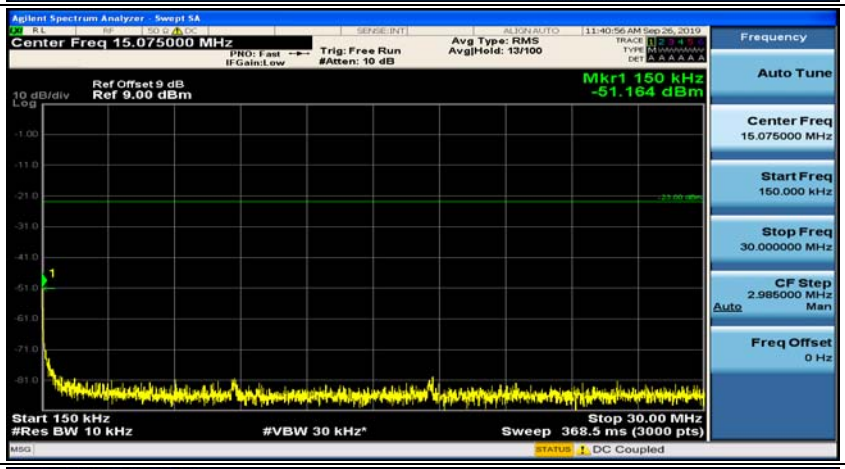
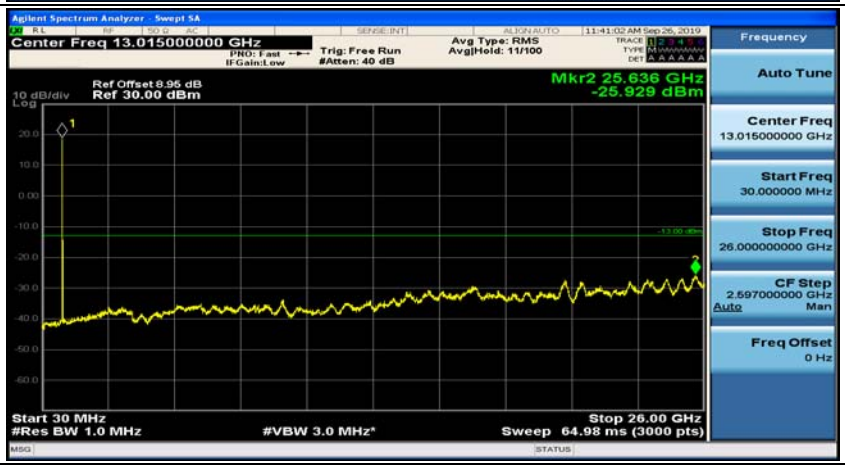


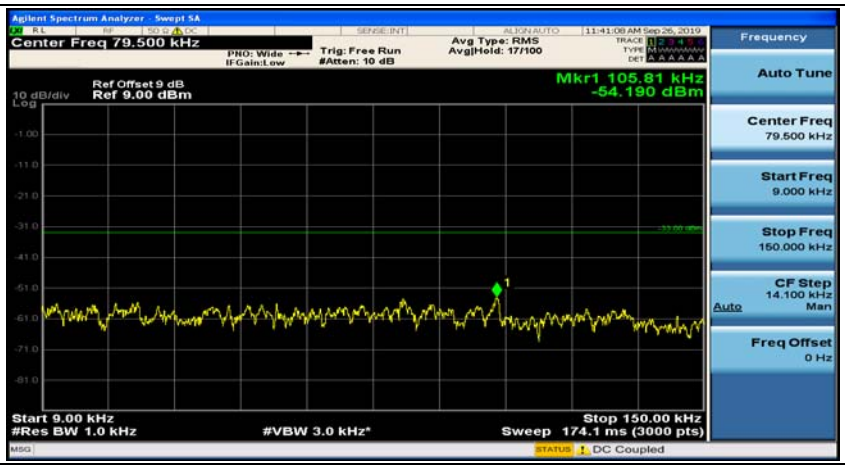
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49

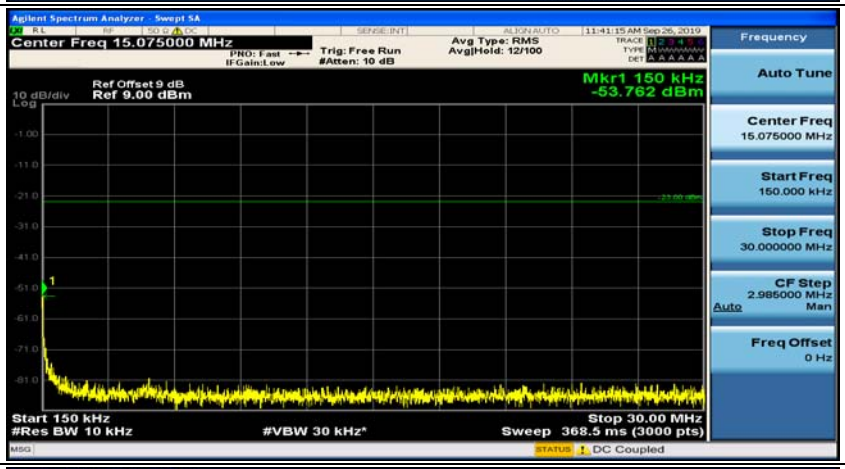

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:39:22 AM Sep 26, 2019
Frequency
Auto Tune
Mkr1 77.17 kHz
-52.893 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

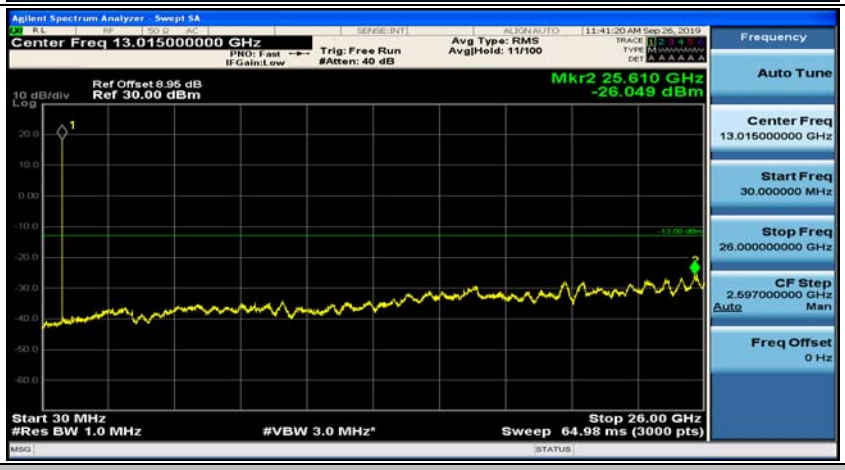

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
11:39:29 AM Sep 26, 2019
Frequency
Auto Tune
Mkr1 150 kHz
-50.658 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:39:35 AM Sep 26, 2019
Frequency
Auto Tune
Mkr2 25.662 GHz
-25.657 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

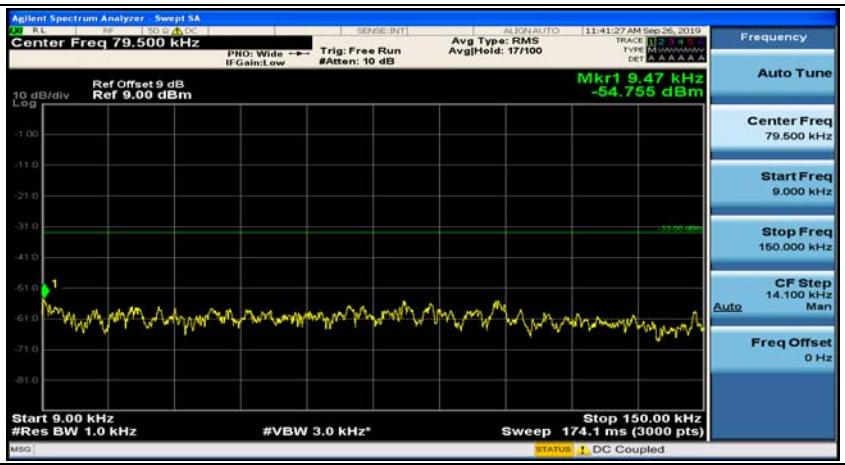
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

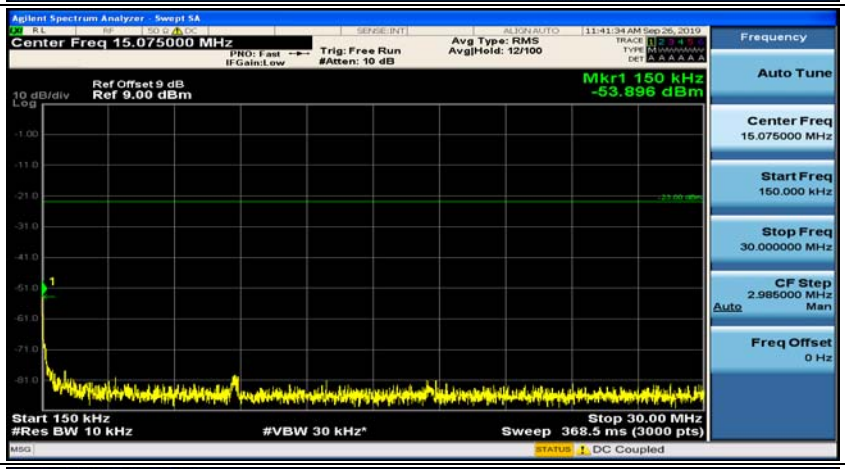


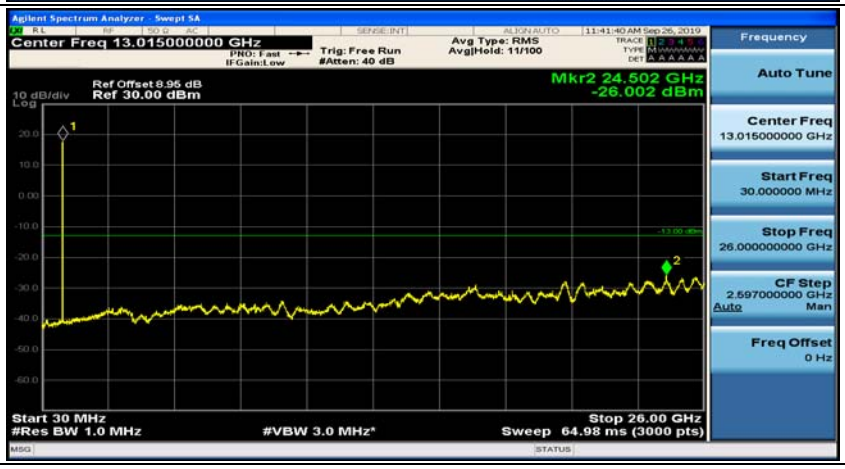


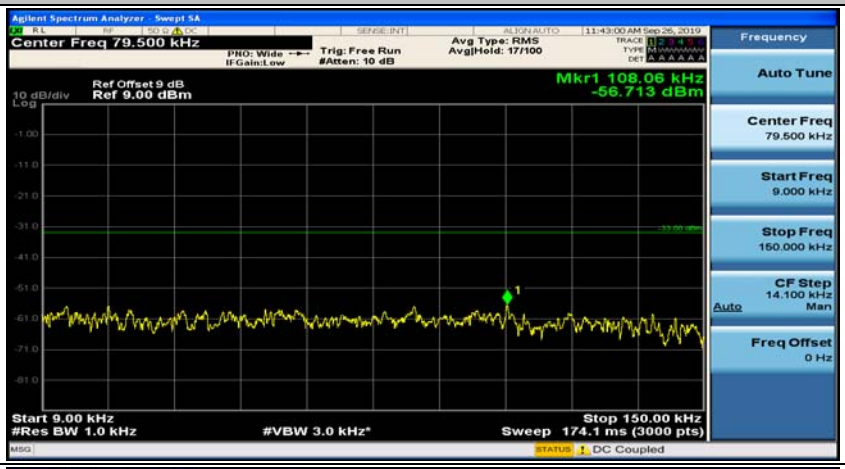
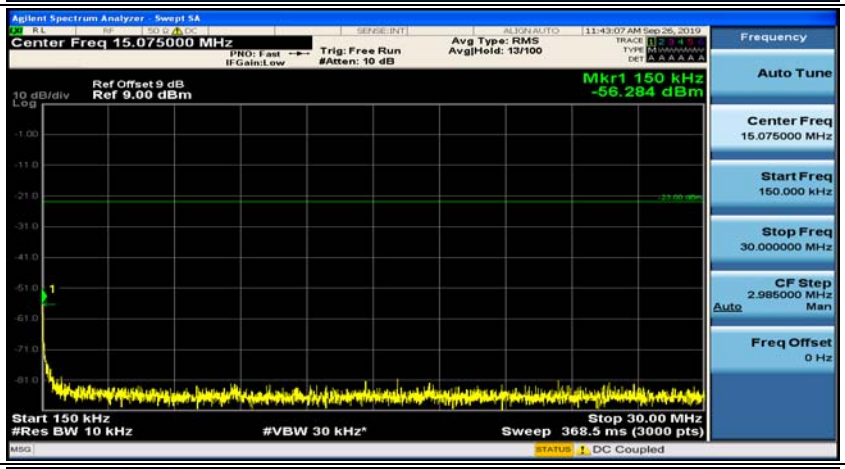
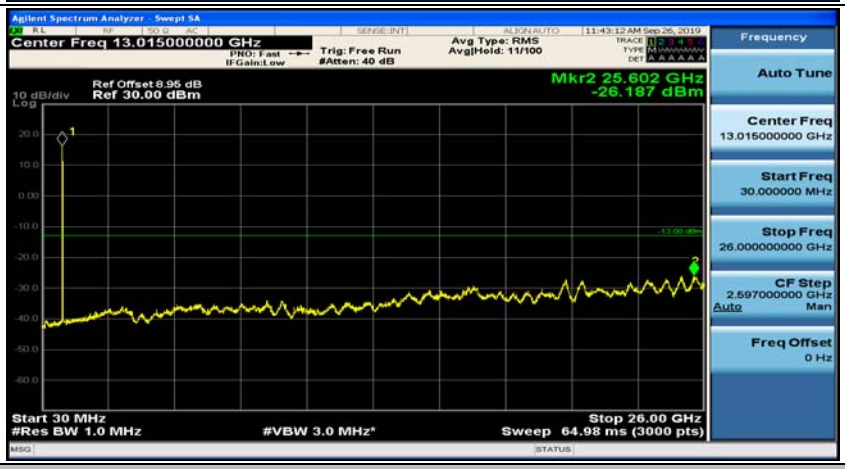


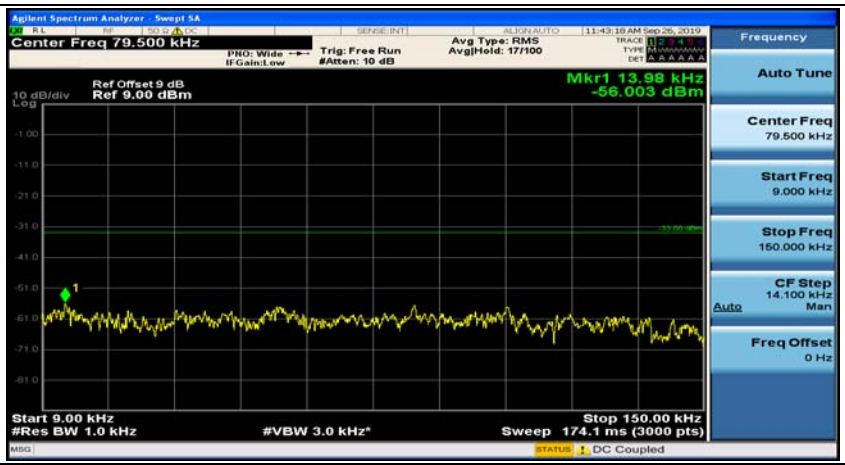
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

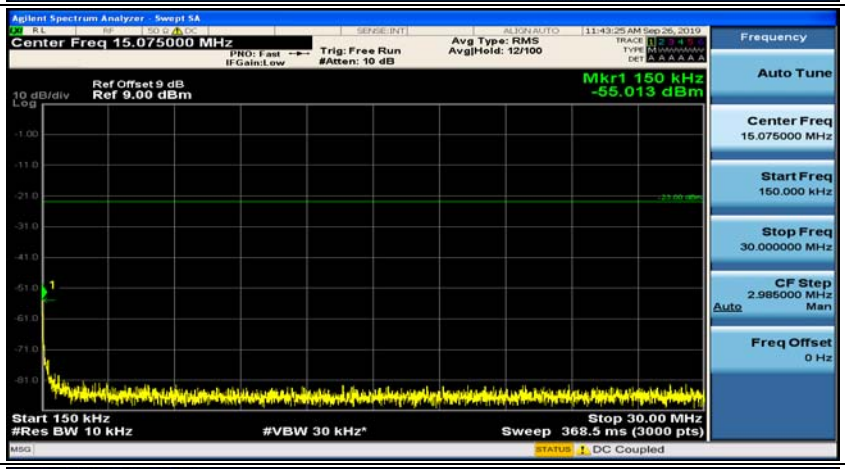

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:41:27 AM Sep 26, 2019
Mkr1 9.47 kHz
-54.755 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

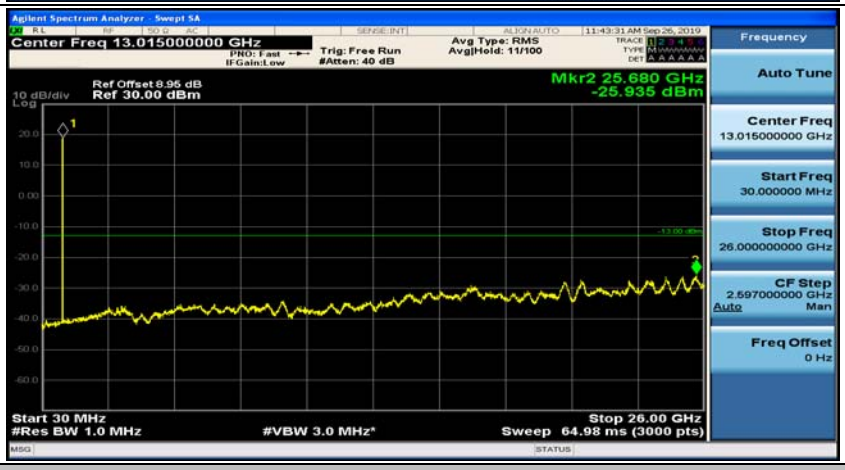

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
11:41:34 AM Sep 26, 2019
Mkr1 150 kHz
-53.896 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:41:40 AM Sep 26, 2019
Mkr2 24.502 GHz
-26.002 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

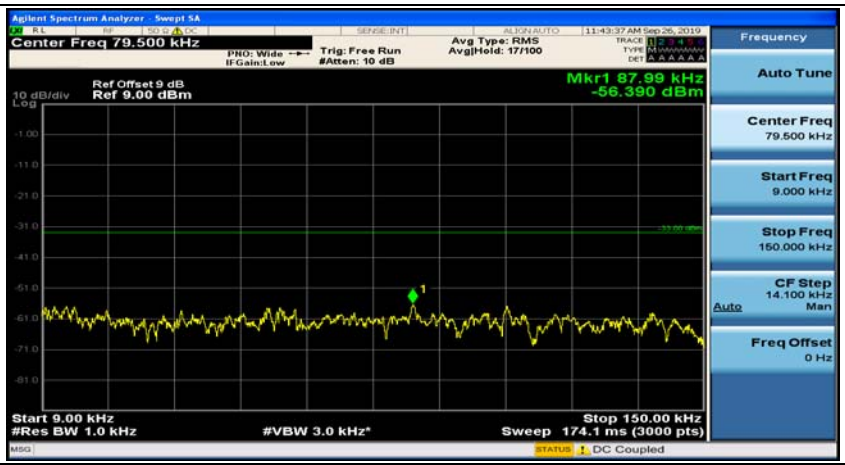
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24

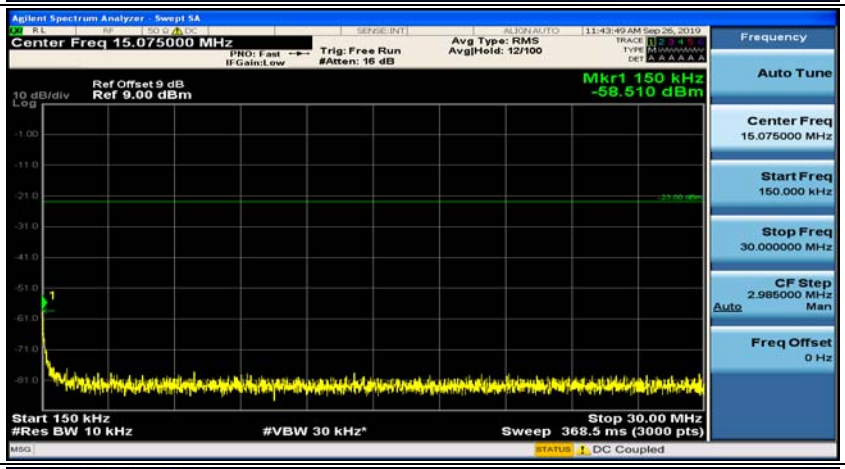


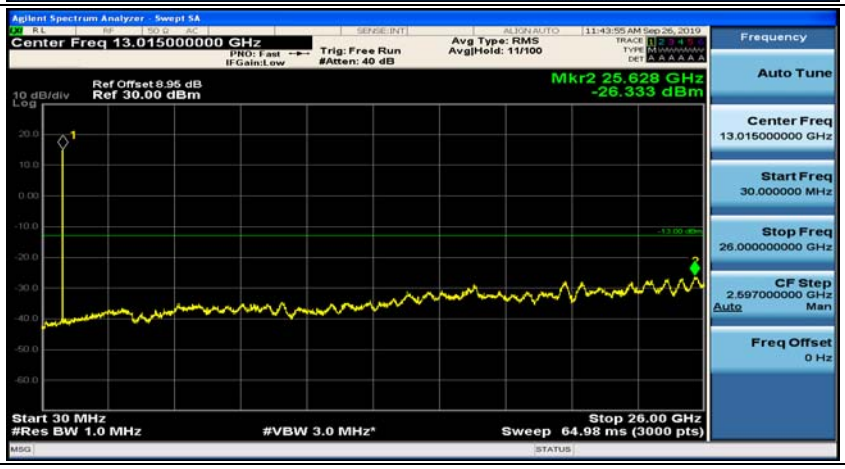




Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49


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
11:43:37 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 87.99 kHz
-56.390 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
11:43:49 AM Sep 26, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-58.510 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:43:55 AM Sep 26, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.628 GHz
-26.333 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.82	-0.000994	± 2.5	PASS
		VN	TN	4.89	0.005929	± 2.5	PASS
		VH	TN	1.8	0.002183	± 2.5	PASS
	MCH	VL	TN	-0.86	-0.001028	± 2.5	PASS
		VN	TN	2.45	0.002929	± 2.5	PASS
		VH	TN	3.08	0.003682	± 2.5	PASS
	HCH	VL	TN	-0.87	-0.001026	± 2.5	PASS
		VN	TN	0.13	0.000153	± 2.5	PASS
		VH	TN	-0.61	-0.000719	± 2.5	PASS
16QAM	LCH	VL	TN	1.35	0.001637	± 2.5	PASS
		VN	TN	3.49	0.004232	± 2.5	PASS
		VH	TN	-0.44	-0.000534	± 2.5	PASS
	MCH	VL	TN	3.06	0.003658	± 2.5	PASS
		VN	TN	2.01	0.002403	± 2.5	PASS
		VH	TN	0.8	0.000956	± 2.5	PASS
	HCH	VL	TN	-0.18	-0.000212	± 2.5	PASS
		VN	TN	-0.33	-0.000389	± 2.5	PASS
		VH	TN	3.55	0.004185	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.95	0.003577	± 2.5	PASS
		VN	-20	-1.57	-0.001904	± 2.5	PASS
		VN	-10	0.43	0.000521	± 2.5	PASS
		VN	0	2.29	0.002777	± 2.5	PASS
		VN	10	0.18	0.000218	± 2.5	PASS
		VN	20	4.02	0.004874	± 2.5	PASS
		VN	30	4.36	0.005287	± 2.5	PASS
		VN	40	-0.11	-0.000133	± 2.5	PASS
		VN	50	-0.53	-0.000643	± 2.5	PASS
	MCH	VN	-30	0.57	0.000681	± 2.5	PASS

		VN	-20	3.62	0.004328	± 2.5	PASS
		VN	-10	0.04	0.000048	± 2.5	PASS
		VN	0	3.21	0.003837	± 2.5	PASS
		VN	10	2.04	0.002439	± 2.5	PASS
		VN	20	-0.74	-0.000885	± 2.5	PASS
		VN	30	0.26	0.000311	± 2.5	PASS
		VN	40	4.89	0.005846	± 2.5	PASS
		VN	50	-1.69	-0.002020	± 2.5	PASS
	HCH	VN	-30	-1.49	-0.001756	± 2.5	PASS
		VN	-20	-0.89	-0.001049	± 2.5	PASS
		VN	-10	1.09	0.001285	± 2.5	PASS
		VN	0	-0.5	-0.000589	± 2.5	PASS
		VN	10	-1.43	-0.001686	± 2.5	PASS
		VN	20	2.17	0.002558	± 2.5	PASS
		VN	30	3.56	0.004197	± 2.5	PASS
		VN	40	2.39	0.002817	± 2.5	PASS
		VN	50	2.36	0.002782	± 2.5	PASS
16QAM	LCH	VN	-30	0.3	0.000364	± 2.5	PASS
		VN	-20	3.7	0.004486	± 2.5	PASS
		VN	-10	-0.82	-0.000994	± 2.5	PASS
		VN	0	1.35	0.001637	± 2.5	PASS
		VN	10	-0.32	-0.000388	± 2.5	PASS
		VN	20	3.12	0.003783	± 2.5	PASS
		VN	30	0.11	0.000133	± 2.5	PASS
		VN	40	0.82	0.000994	± 2.5	PASS
		VN	50	1.45	0.001758	± 2.5	PASS
	MCH	VN	-30	-1.47	-0.001733	± 2.5	PASS
		VN	-20	0.95	0.001120	± 2.5	PASS
		VN	-10	2.47	0.002912	± 2.5	PASS
		VN	0	2.9	0.003419	± 2.5	PASS
		VN	10	2.23	0.002629	± 2.5	PASS
		VN	20	0.65	0.000766	± 2.5	PASS
		VN	30	3.89	0.004586	± 2.5	PASS
		VN	40	-0.02	-0.000024	± 2.5	PASS
		VN	50	-0.05	-0.000059	± 2.5	PASS
	HCH	VN	-30	2.77	0.003265	± 2.5	PASS
		VN	-20	-1.95	-0.002299	± 2.5	PASS
		VN	-10	3.26	0.003843	± 2.5	PASS
		VN	0	-0.13	-0.000153	± 2.5	PASS
		VN	10	0.59	0.000696	± 2.5	PASS
		VN	20	1.36	0.001603	± 2.5	PASS

		VN	30	1.97	0.002322	± 2.5	PASS
		VN	40	3.62	0.004267	± 2.5	PASS
		VN	50	4.46	0.005258	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	3.9	0.004724	± 2.5	PASS
		VN	TN	4.42	0.005354	± 2.5	PASS
		VH	TN	1.99	0.002411	± 2.5	PASS
	MCH	VL	TN	2.08	0.002487	± 2.5	PASS
		VN	TN	-1.83	-0.002188	± 2.5	PASS
		VH	TN	3.97	0.004746	± 2.5	PASS
	HCH	VL	TN	-1.75	-0.002065	± 2.5	PASS
		VN	TN	2.77	0.003268	± 2.5	PASS
		VH	TN	0.98	0.001156	± 2.5	PASS
16QAM	LCH	VL	TN	2.43	0.002944	± 2.5	PASS
		VN	TN	3.93	0.004761	± 2.5	PASS
		VH	TN	0.11	0.000133	± 2.5	PASS
	MCH	VL	TN	4.54	0.005427	± 2.5	PASS
		VN	TN	-0.8	-0.000956	± 2.5	PASS
		VH	TN	4.9	0.005858	± 2.5	PASS
	HCH	VL	TN	0.1	0.000118	± 2.5	PASS
		VN	TN	0.07	0.000083	± 2.5	PASS
		VH	TN	4.8	0.005664	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.96	0.002374	± 2.5	PASS
		VN	-20	0.11	0.000133	± 2.5	PASS
		VN	-10	-0.05	-0.000061	± 2.5	PASS
		VN	0	2.76	0.003343	± 2.5	PASS
		VN	10	-0.82	-0.000993	± 2.5	PASS
		VN	20	1.49	0.001805	± 2.5	PASS
		VN	30	1.73	0.002096	± 2.5	PASS
		VN	40	-0.17	-0.000206	± 2.5	PASS
		VN	50	3.28	0.003973	± 2.5	PASS
	MCH	VN	-30	1.03	0.001231	± 2.5	PASS
		VN	-20	4.61	0.005511	± 2.5	PASS

		VN	-10	4.61	0.005511	± 2.5	PASS
		VN	0	1.4	0.001674	± 2.5	PASS
		VN	10	-0.92	-0.001100	± 2.5	PASS
		VN	20	-0.67	-0.000801	± 2.5	PASS
		VN	30	-1.14	-0.001363	± 2.5	PASS
		VN	40	4.8	0.005738	± 2.5	PASS
		VN	50	1.22	0.001458	± 2.5	PASS
	HCH	VN	-30	2.83	0.003339	± 2.5	PASS
		VN	-20	0.68	0.000802	± 2.5	PASS
		VN	-10	0.19	0.000224	± 2.5	PASS
		VN	0	0.9	0.001062	± 2.5	PASS
		VN	10	-1.27	-0.001499	± 2.5	PASS
		VN	20	-1.49	-0.001758	± 2.5	PASS
		VN	30	1.53	0.001805	± 2.5	PASS
		VN	40	2.49	0.002938	± 2.5	PASS
		VN	50	3.85	0.004543	± 2.5	PASS
QPSK	LCH	VN	-30	-0.03	-0.000036	± 2.5	PASS
		VN	-20	-1.39	-0.001662	± 2.5	PASS
		VN	-10	4.94	0.005906	± 2.5	PASS
		VN	0	3.53	0.004220	± 2.5	PASS
		VN	10	-1.35	-0.001614	± 2.5	PASS
		VN	20	1.45	0.001733	± 2.5	PASS
		VN	30	-1.26	-0.001506	± 2.5	PASS
		VN	40	-1.87	-0.002236	± 2.5	PASS
		VN	50	4.49	0.005368	± 2.5	PASS
	MCH	VN	-30	-0.72	-0.000850	± 2.5	PASS
		VN	-20	-0.18	-0.000212	± 2.5	PASS
		VN	-10	2.41	0.002844	± 2.5	PASS
		VN	0	-0.2	-0.000236	± 2.5	PASS
		VN	10	4.91	0.005794	± 2.5	PASS
		VN	20	2.56	0.003021	± 2.5	PASS
		VN	30	2.29	0.002702	± 2.5	PASS
		VN	40	1.6	0.001888	± 2.5	PASS
		VN	50	-1.18	-0.001392	± 2.5	PASS
	HCH	VN	-30	3.45	0.004071	± 2.5	PASS
		VN	-20	4.86	0.005735	± 2.5	PASS
		VN	-10	0.82	0.000968	± 2.5	PASS
		VN	0	-1.63	-0.001923	± 2.5	PASS
		VN	10	2.24	0.002643	± 2.5	PASS
		VN	20	-1.31	-0.001546	± 2.5	PASS
		VN	30	-0.51	-0.000602	± 2.5	PASS

		VN	40	-0.34	-0.000401	± 2.5	PASS
		VN	50	0.48	0.000566	± 2.5	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	4.01	0.004852	± 2.5	PASS
		VN	TN	1.28	0.001549	± 2.5	PASS
		VH	TN	-1.87	-0.002263	± 2.5	PASS
	MCH	VL	TN	-0.38	-0.000454	± 2.5	PASS
		VN	TN	0.81	0.000968	± 2.5	PASS
		VH	TN	-1.88	-0.002247	± 2.5	PASS
	HCH	VL	TN	2.54	0.003001	± 2.5	PASS
		VN	TN	1.87	0.002209	± 2.5	PASS
		VH	TN	0.26	0.000307	± 2.5	PASS
16QAM	LCH	VL	TN	-0.32	-0.000387	± 2.5	PASS
		VN	TN	-0.79	-0.000956	± 2.5	PASS
		VH	TN	-0.46	-0.000557	± 2.5	PASS
	MCH	VL	TN	0.41	0.000490	± 2.5	PASS
		VN	TN	-1.43	-0.001710	± 2.5	PASS
		VH	TN	-0.43	-0.000514	± 2.5	PASS
	HCH	VL	TN	4.5	0.005316	± 2.5	PASS
		VN	TN	-0.59	-0.000697	± 2.5	PASS
		VH	TN	-1.32	-0.001559	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.35	0.000423	± 2.5	PASS
		VN	-20	4.04	0.004888	± 2.5	PASS
		VN	-10	4.84	0.005856	± 2.5	PASS
		VN	0	-1	-0.001210	± 2.5	PASS
		VN	10	1.69	0.002045	± 2.5	PASS
		VN	20	0.49	0.000593	± 2.5	PASS
		VN	30	3.13	0.003787	± 2.5	PASS
		VN	40	4.18	0.005057	± 2.5	PASS
		VN	50	1.18	0.001428	± 2.5	PASS
	MCH	VN	-30	0.32	0.000383	± 2.5	PASS
		VN	-20	-0.91	-0.001088	± 2.5	PASS
		VN	-10	0.18	0.000215	± 2.5	PASS

		VN	0	3.74	0.004471	± 2.5	PASS
		VN	10	4.53	0.005415	± 2.5	PASS
		VN	20	4.04	0.004830	± 2.5	PASS
		VN	30	0.02	0.000024	± 2.5	PASS
		VN	40	3.5	0.004184	± 2.5	PASS
		VN	50	3.99	0.004770	± 2.5	PASS
	HCH	VN	-30	0.45	0.000532	± 2.5	PASS
		VN	-20	-1.24	-0.001465	± 2.5	PASS
		VN	-10	-0.7	-0.000827	± 2.5	PASS
		VN	0	4.86	0.005741	± 2.5	PASS
		VN	10	1.46	0.001725	± 2.5	PASS
		VN	20	-0.76	-0.000898	± 2.5	PASS
		VN	30	-0.94	-0.001110	± 2.5	PASS
		VN	40	1.26	0.001488	± 2.5	PASS
		VN	50	1.57	0.001855	± 2.5	PASS
16QAM	LCH	VN	-30	3.32	0.003969	± 2.5	PASS
		VN	-20	2.73	0.003264	± 2.5	PASS
		VN	-10	-0.22	-0.000263	± 2.5	PASS
		VN	0	3.99	0.004770	± 2.5	PASS
		VN	10	0.44	0.000526	± 2.5	PASS
		VN	20	1.83	0.002188	± 2.5	PASS
		VN	30	-1.26	-0.001506	± 2.5	PASS
		VN	40	4.44	0.005308	± 2.5	PASS
		VN	50	-1.69	-0.002020	± 2.5	PASS
	MCH	VN	-30	0.8	0.000945	± 2.5	PASS
		VN	-20	-1.42	-0.001677	± 2.5	PASS
		VN	-10	2.89	0.003414	± 2.5	PASS
		VN	0	2.51	0.002965	± 2.5	PASS
		VN	10	0.43	0.000508	± 2.5	PASS
		VN	20	0.28	0.000331	± 2.5	PASS
		VN	30	0.84	0.000992	± 2.5	PASS
		VN	40	-1.12	-0.001323	± 2.5	PASS
		VN	50	3.13	0.003698	± 2.5	PASS
	HCH	VN	-30	2.45	0.002894	± 2.5	PASS
		VN	-20	3.07	0.003627	± 2.5	PASS
		VN	-10	0.26	0.000307	± 2.5	PASS
		VN	0	-1.77	-0.002091	± 2.5	PASS
		VN	10	0.9	0.001063	± 2.5	PASS
		VN	20	3.33	0.003934	± 2.5	PASS
		VN	30	3.71	0.004383	± 2.5	PASS
		VN	40	1.33	0.001571	± 2.5	PASS

		VN	50	1.69	0.001996	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.67	-0.000808	± 2.5	PASS
		VN	TN	-1.3	-0.001568	± 2.5	PASS
		VH	TN	2.34	0.002823	± 2.5	PASS
	MCH	VL	TN	-1.94	-0.002319	± 2.5	PASS
		VN	TN	3.15	0.003766	± 2.5	PASS
		VH	TN	0.04	0.000048	± 2.5	PASS
	HCH	VL	TN	4.93	0.005841	± 2.5	PASS
		VN	TN	-0.4	-0.000474	± 2.5	PASS
		VH	TN	2.05	0.002429	± 2.5	PASS
16QAM	LCH	VL	TN	1.63	0.001966	± 2.5	PASS
		VN	TN	2.88	0.003474	± 2.5	PASS
		VH	TN	-0.68	-0.000820	± 2.5	PASS
	MCH	VL	TN	0.66	0.000789	± 2.5	PASS
		VN	TN	2.31	0.002762	± 2.5	PASS
		VH	TN	0.71	0.000849	± 2.5	PASS
	HCH	VL	TN	2.56	0.003033	± 2.5	PASS
		VN	TN	-1.35	-0.001600	± 2.5	PASS
		VH	TN	3.6	0.004265	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	-0.78	-0.000941	± 2.5	PASS
		VN	-20	0.95	0.001146	± 2.5	PASS
		VN	-10	2.7	0.003257	± 2.5	PASS
		VN	0	2.29	0.002762	± 2.5	PASS
		VN	10	0.37	0.000446	± 2.5	PASS
		VN	20	3.2	0.003860	± 2.5	PASS
		VN	30	3	0.003619	± 2.5	PASS
		VN	40	4.73	0.005706	± 2.5	PASS
		VN	50	1.34	0.001616	± 2.5	PASS
	MCH	VN	-30	-1.55	-0.001853	± 2.5	PASS
		VN	-20	2.67	0.003192	± 2.5	PASS
		VN	-10	-1.45	-0.001733	± 2.5	PASS
		VN	0	-1.93	-0.002307	± 2.5	PASS

		VN	10	4.76	0.005690	± 2.5	PASS
		VN	20	0.56	0.000669	± 2.5	PASS
		VN	30	4.19	0.005009	± 2.5	PASS
		VN	40	2.56	0.003060	± 2.5	PASS
		VN	50	4.6	0.005499	± 2.5	PASS
	HCH	VN	-30	0.53	0.000628	± 2.5	PASS
		VN	-20	2.92	0.003460	± 2.5	PASS
		VN	-10	3.92	0.004645	± 2.5	PASS
		VN	0	1.07	0.001268	± 2.5	PASS
		VN	10	1.36	0.001611	± 2.5	PASS
		VN	20	1.78	0.002109	± 2.5	PASS
		VN	30	-1.16	-0.001374	± 2.5	PASS
		VN	40	-1.4	-0.001659	± 2.5	PASS
		VN	50	3.94	0.004668	± 2.5	PASS
QPSK	LCH	VN	-30	2.69	0.003216	± 2.5	PASS
		VN	-20	4.16	0.004973	± 2.5	PASS
		VN	-10	-1.24	-0.001482	± 2.5	PASS
		VN	0	3.18	0.003802	± 2.5	PASS
		VN	10	3.12	0.003730	± 2.5	PASS
		VN	20	3.99	0.004770	± 2.5	PASS
		VN	30	-1.16	-0.001387	± 2.5	PASS
		VN	40	2	0.002391	± 2.5	PASS
		VN	50	2.04	0.002439	± 2.5	PASS
	MCH	VN	-30	3.72	0.004408	± 2.5	PASS
		VN	-20	0.73	0.000865	± 2.5	PASS
		VN	-10	0.07	0.000083	± 2.5	PASS
		VN	0	4.91	0.005818	± 2.5	PASS
		VN	10	-1.45	-0.001718	± 2.5	PASS
		VN	20	2.18	0.002583	± 2.5	PASS
		VN	30	4.72	0.005592	± 2.5	PASS
		VN	40	2.71	0.003211	± 2.5	PASS
		VN	50	2.26	0.002678	± 2.5	PASS
	HCH	VN	-30	0.85	0.001007	± 2.5	PASS
		VN	-20	-1.01	-0.001197	± 2.5	PASS
		VN	-10	-0.15	-0.000178	± 2.5	PASS
		VN	0	4.49	0.005320	± 2.5	PASS
		VN	10	1.24	0.001469	± 2.5	PASS
		VN	20	0.48	0.000569	± 2.5	PASS
		VN	30	-1.68	-0.001991	± 2.5	PASS
		VN	40	3.38	0.004005	± 2.5	PASS
		VN	50	5	0.005924	± 2.5	PASS