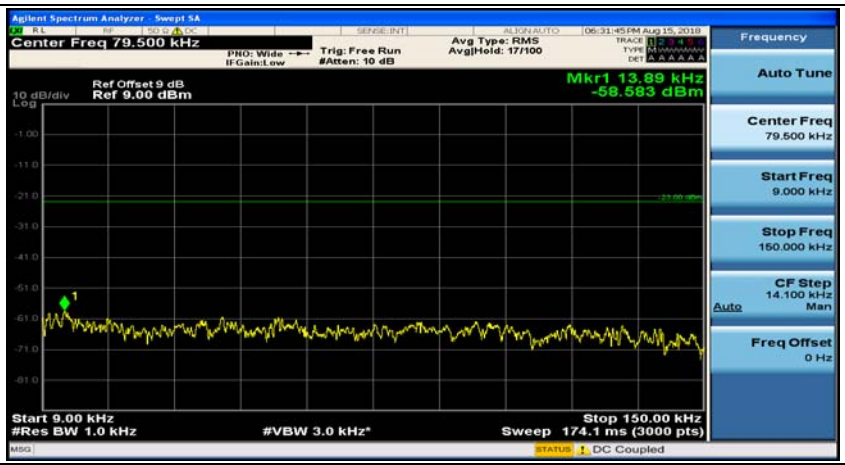
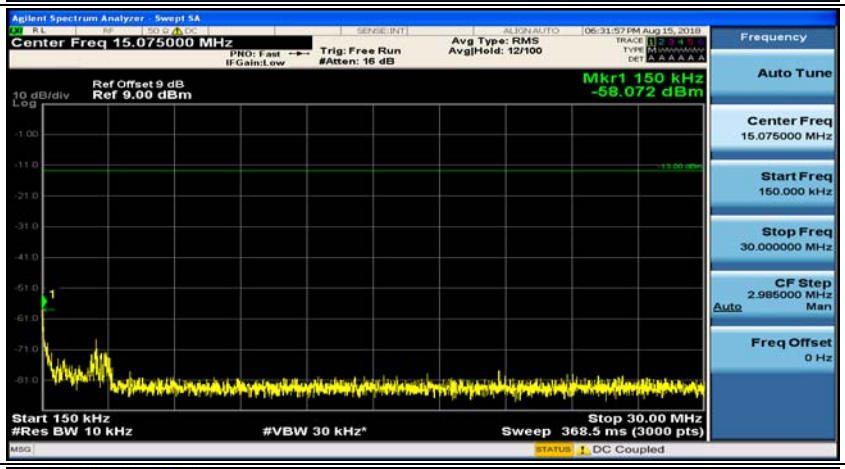
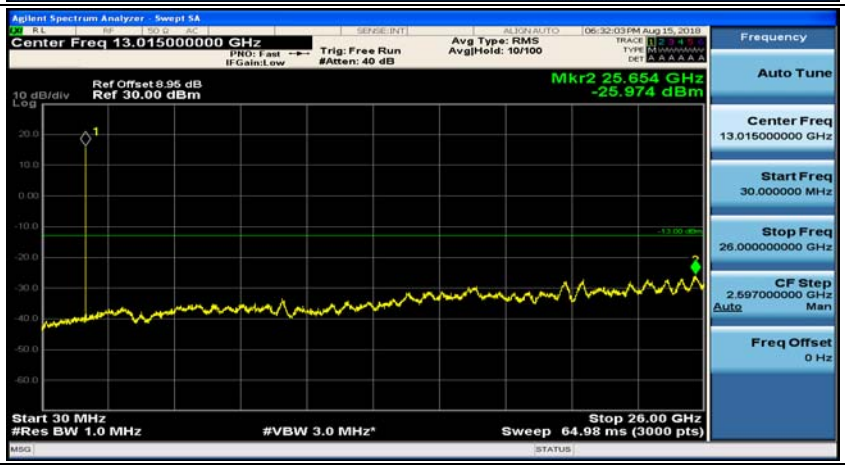
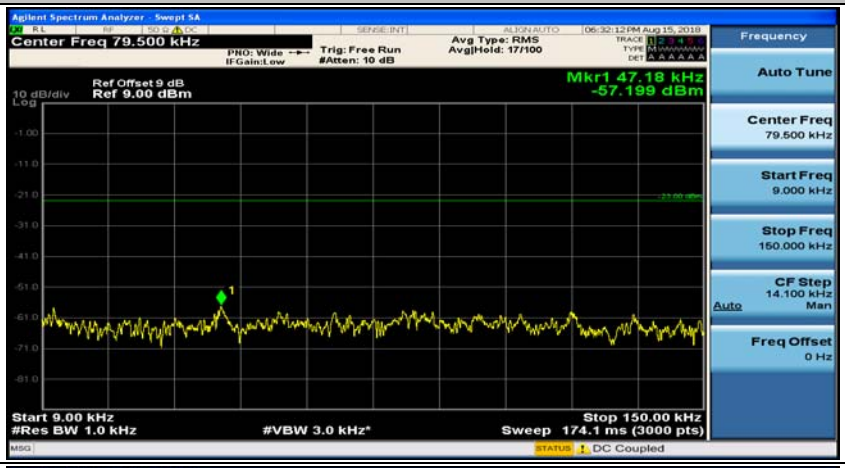

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:31:45 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 13.89 kHz
-58.583 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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

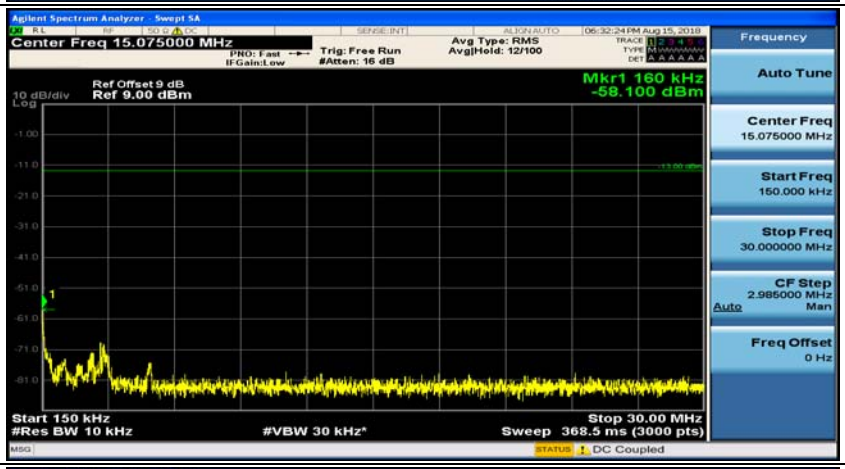

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
06:31:57 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-58.072 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 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

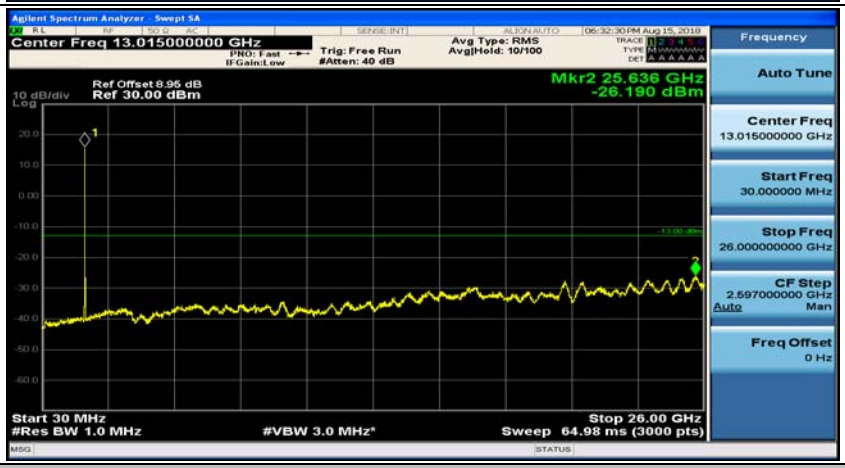

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 10/100
06:32:03 PM Aug 15, 2018
Frequency
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.654 GHz
-25.974 dBm
Auto Tune
Center Freq
13.015000000 GHz
Start 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: 15 MHz

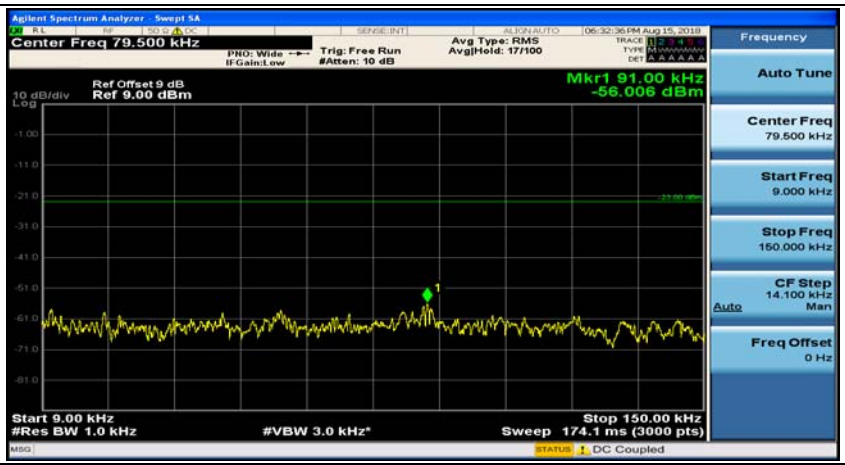
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#0

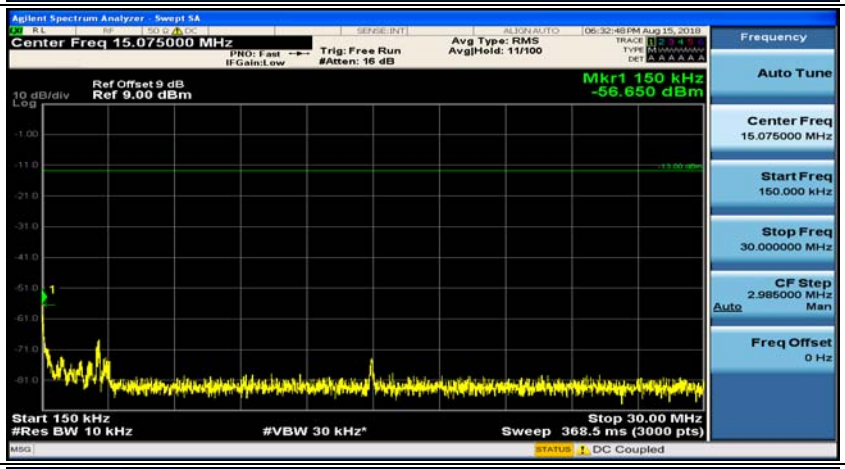


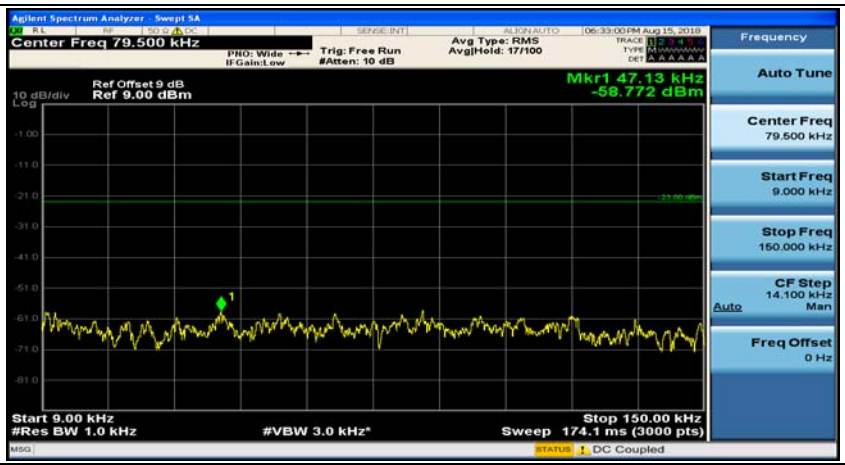

(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#37

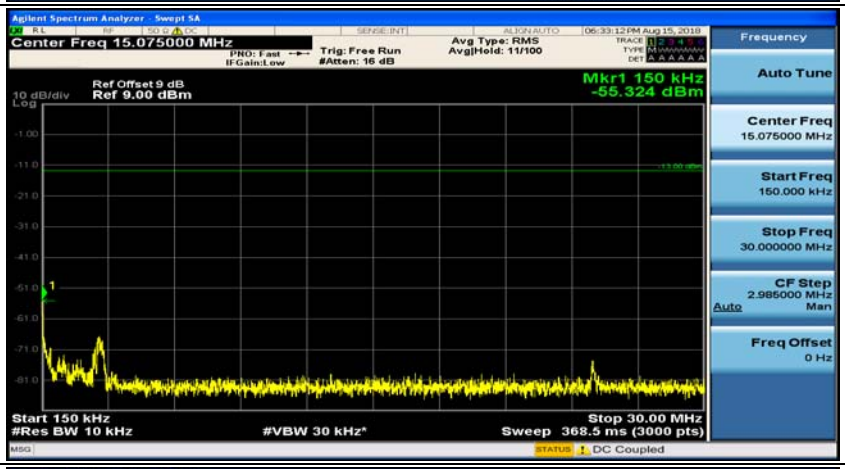


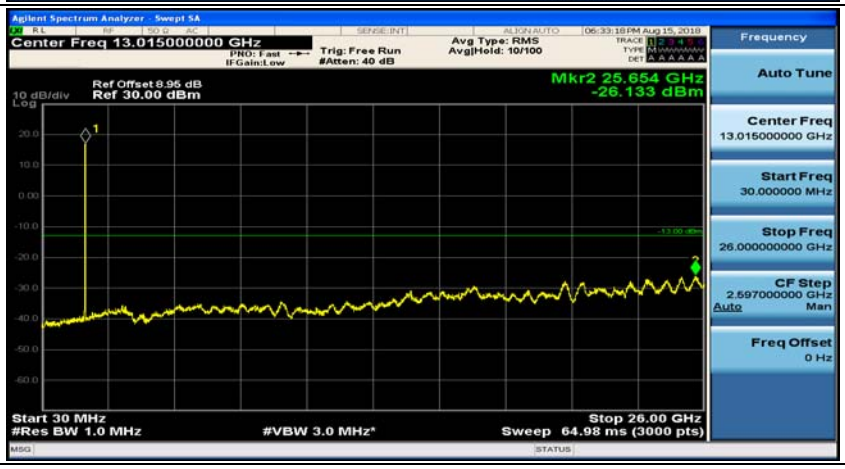



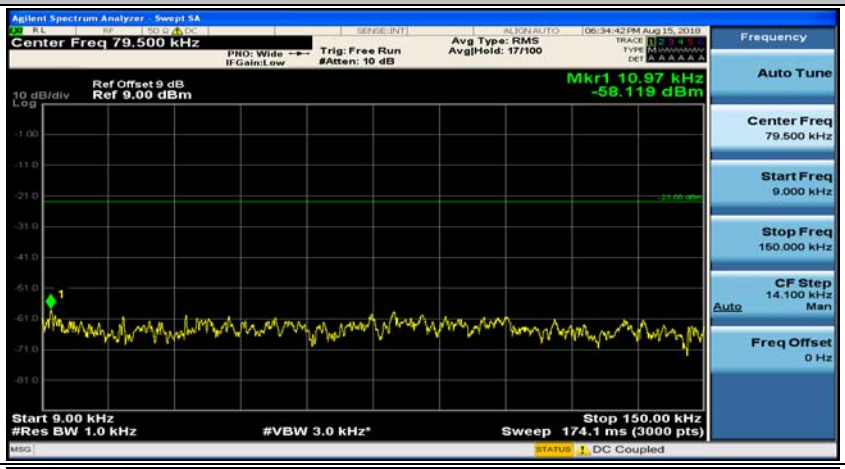
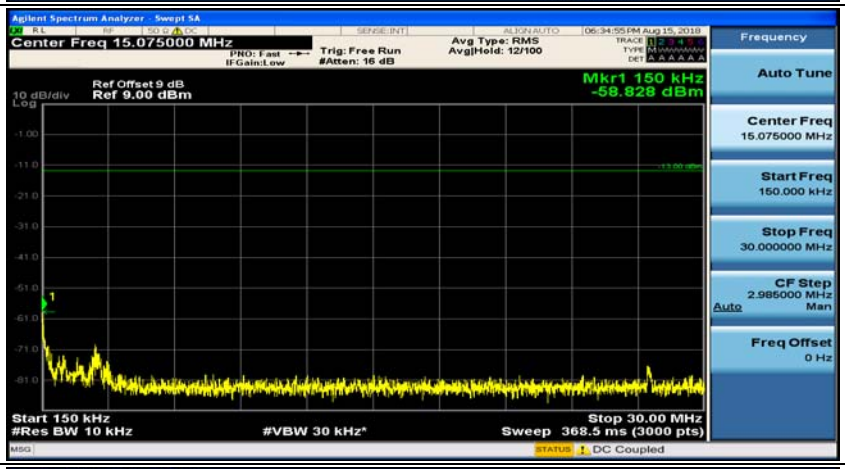
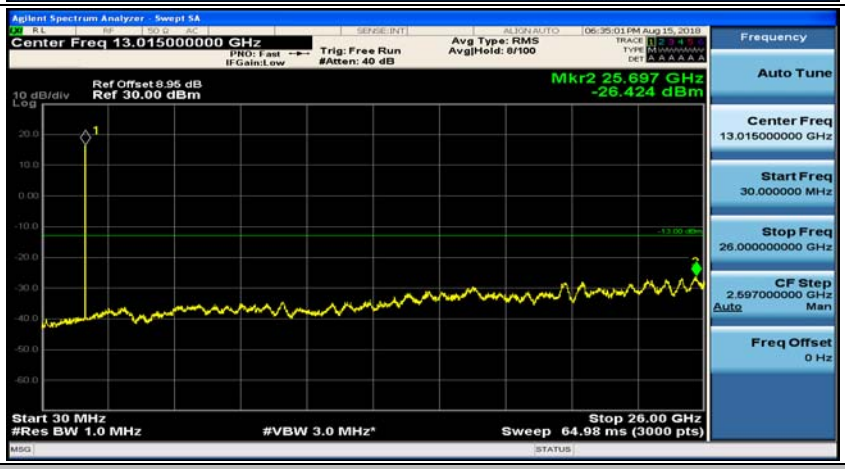


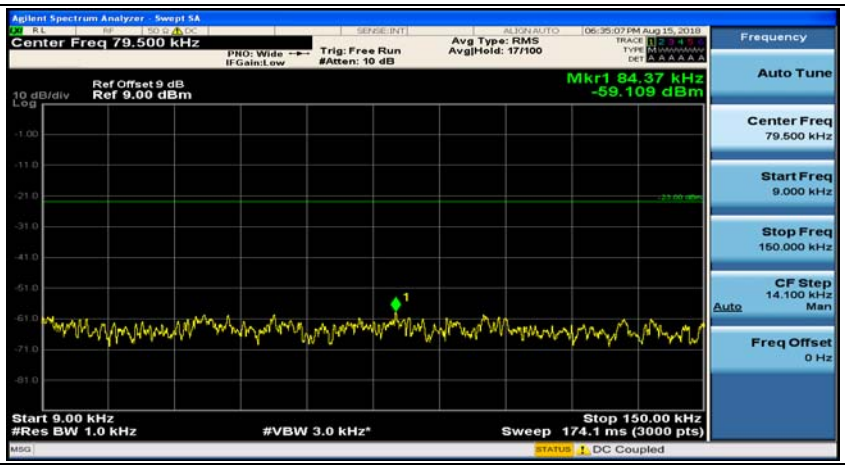
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#74

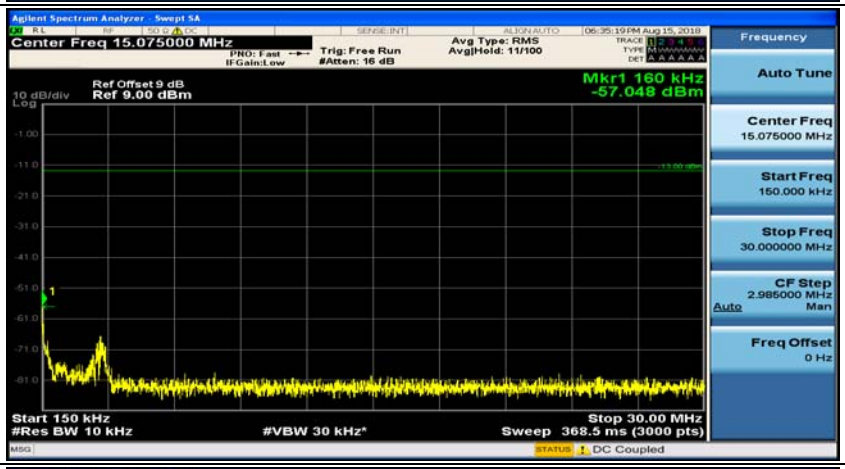

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:33:00 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 47.13 kHz
-58.772 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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: 11/100
06:33:12 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-55.324 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: 10/100
06:33:18 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.654 GHz
-26.133 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)

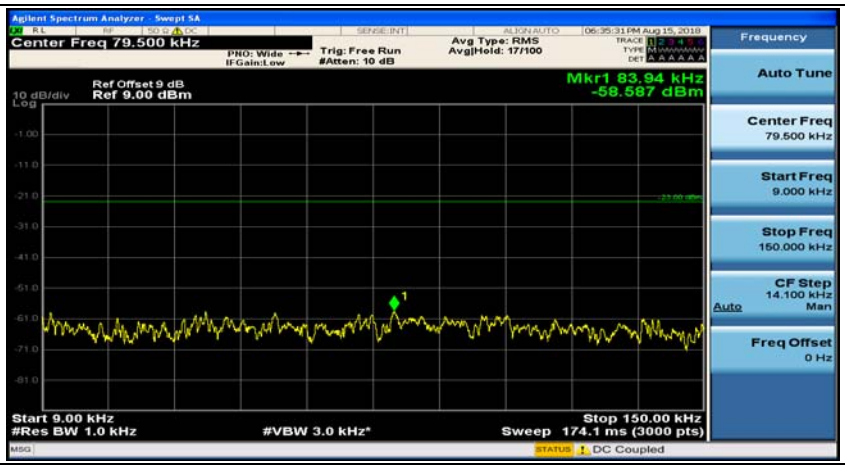
| (Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#37 |

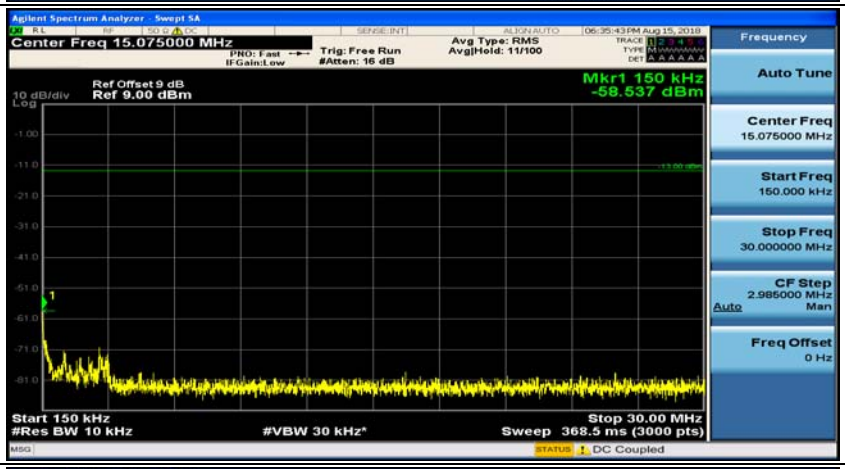


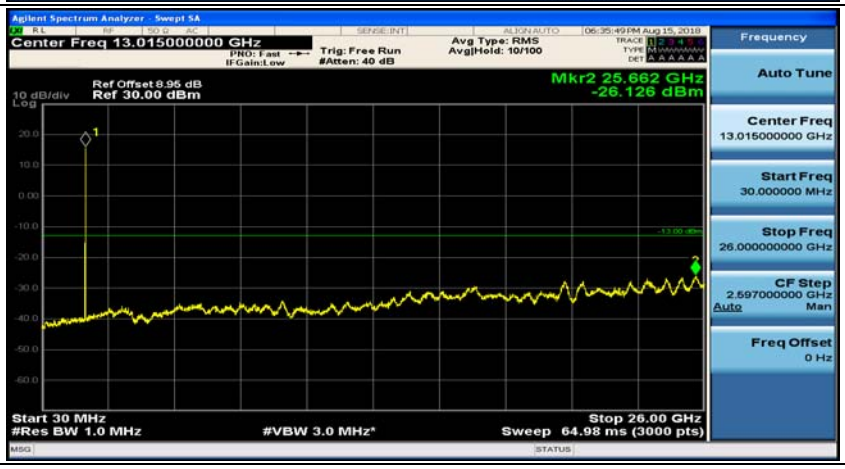



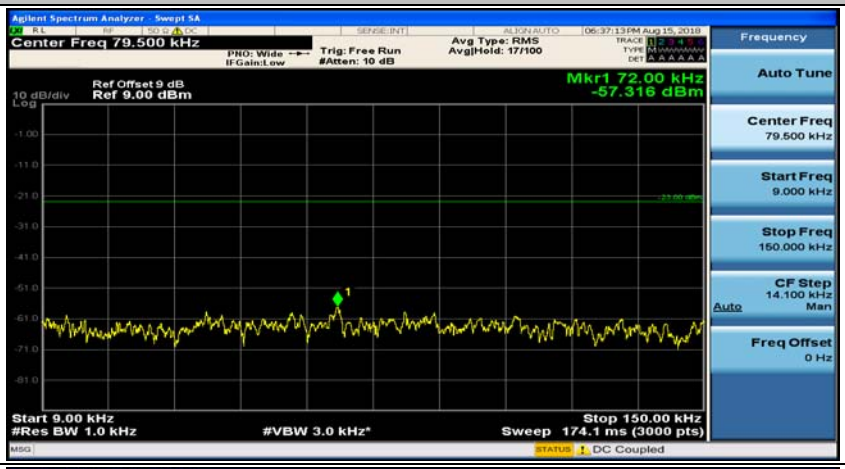
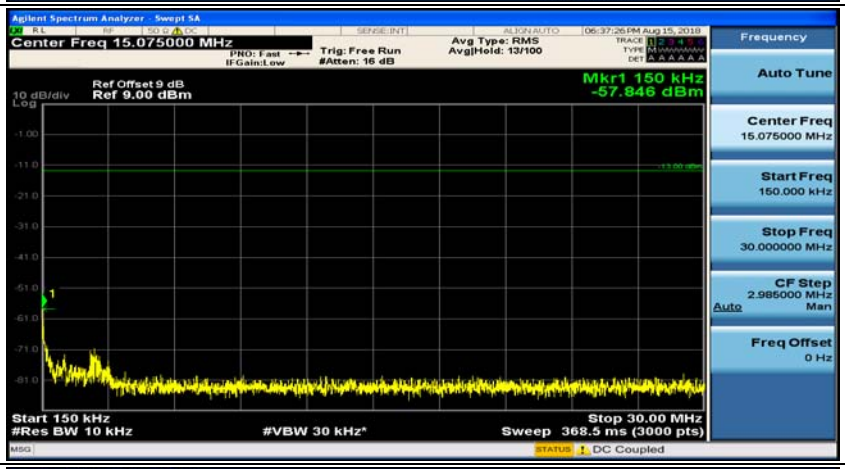
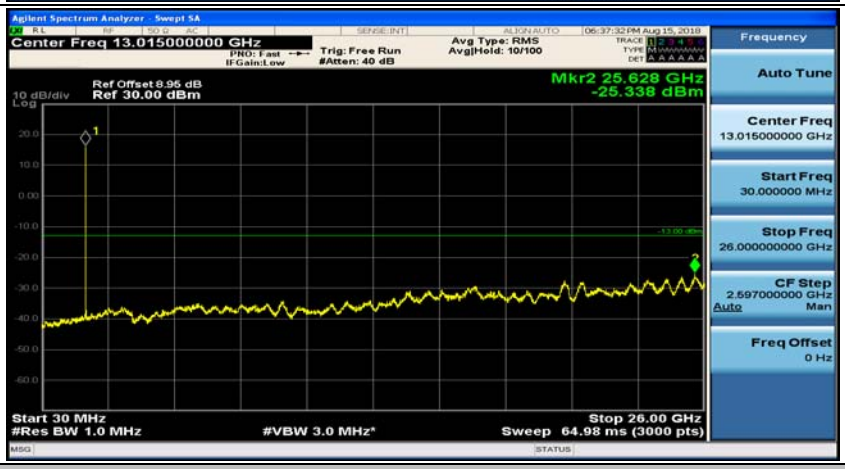


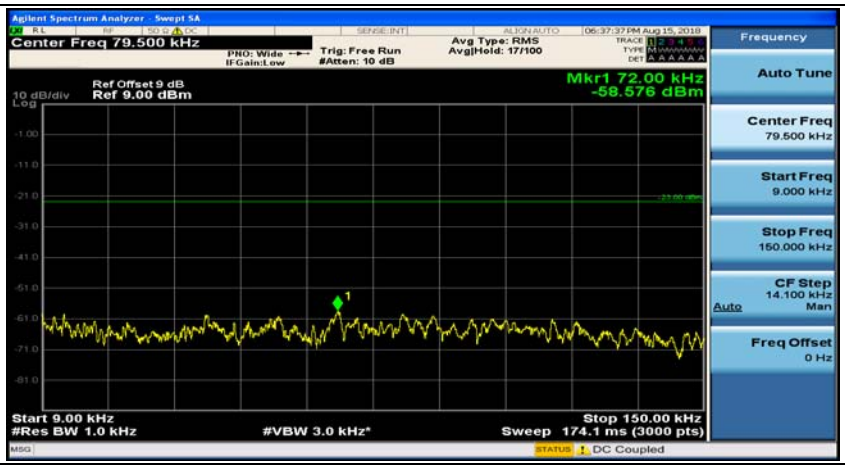
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#74

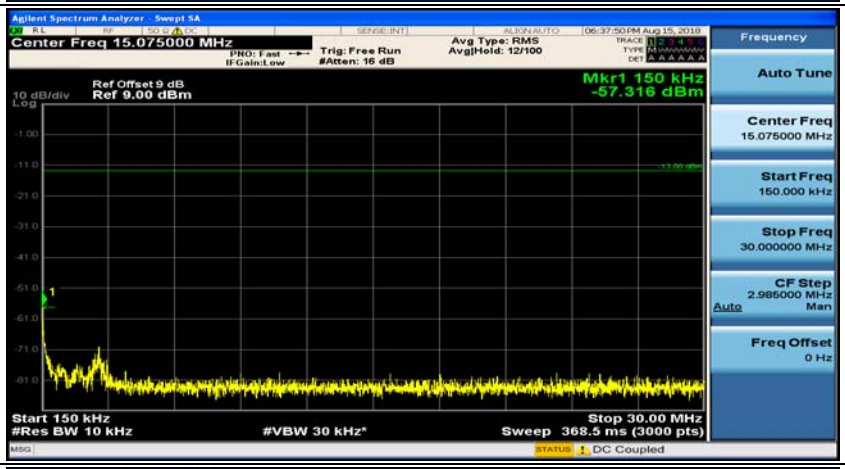

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:35:31 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 83.94 kHz
-58.587 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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: 11/100
06:35:43 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-58.537 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: 10/100
06:35:49 PM Aug 15, 2018
Frequency
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.662 GHz
-26.126 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)

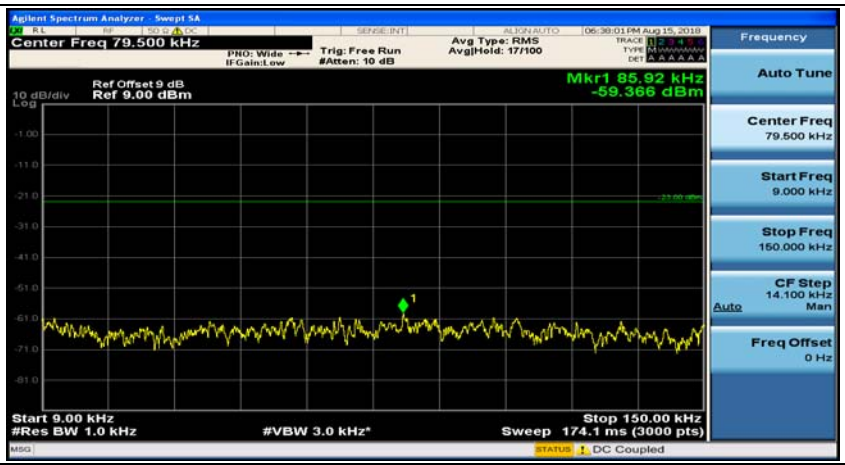
| (Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37 |

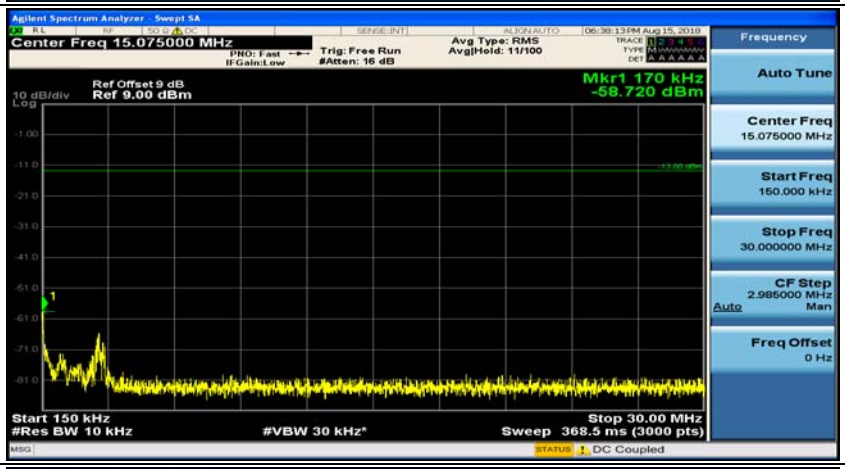


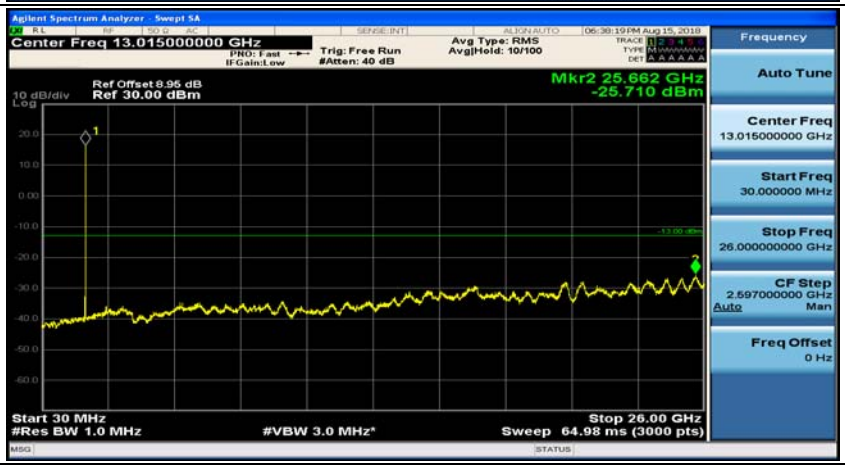



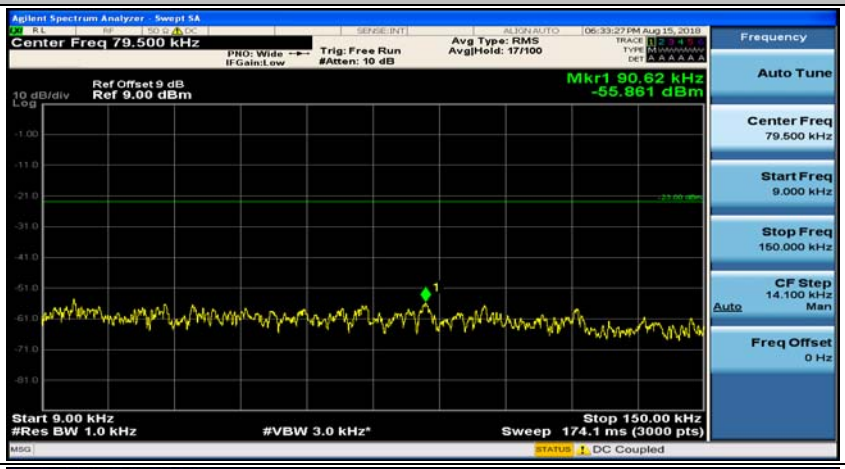
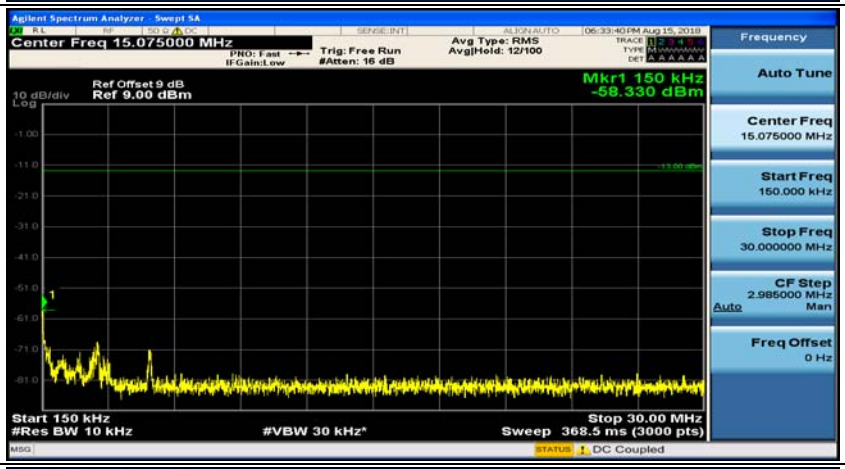
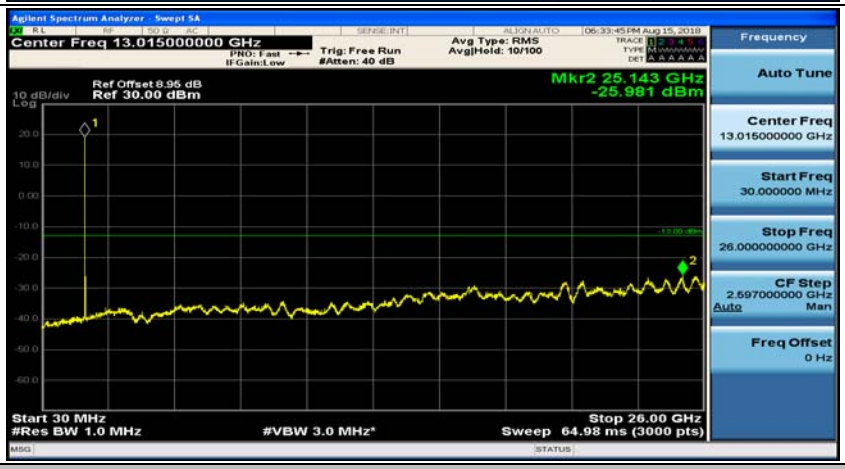


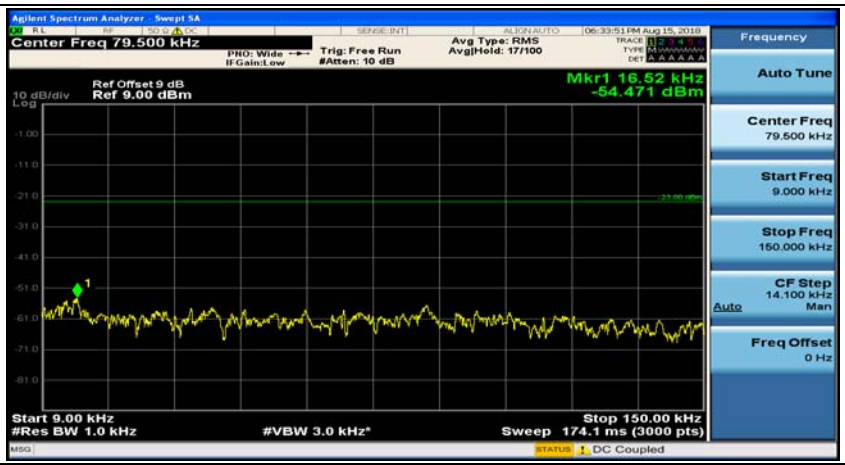
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#74

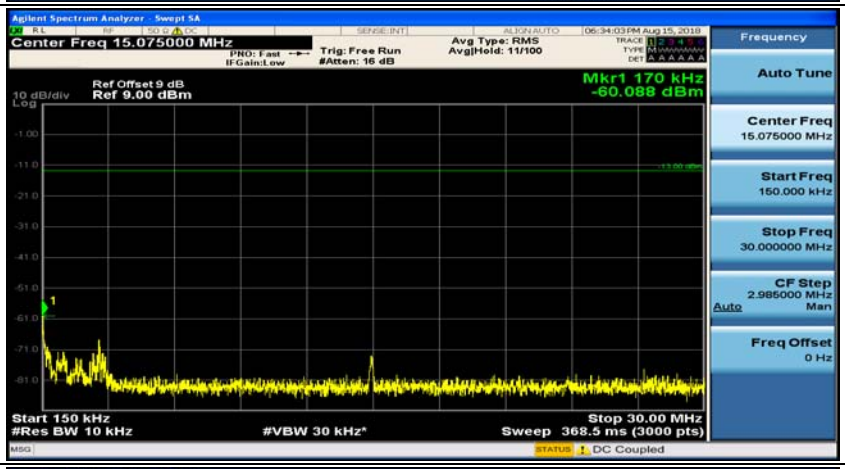

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:38:01 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 85.92 kHz
-59.366 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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: 11/100
06:38:13 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 170 kHz
-58.720 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: 10/100
06:38:19 PM Aug 15, 2018
Frequency
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.662 GHz
-25.710 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)

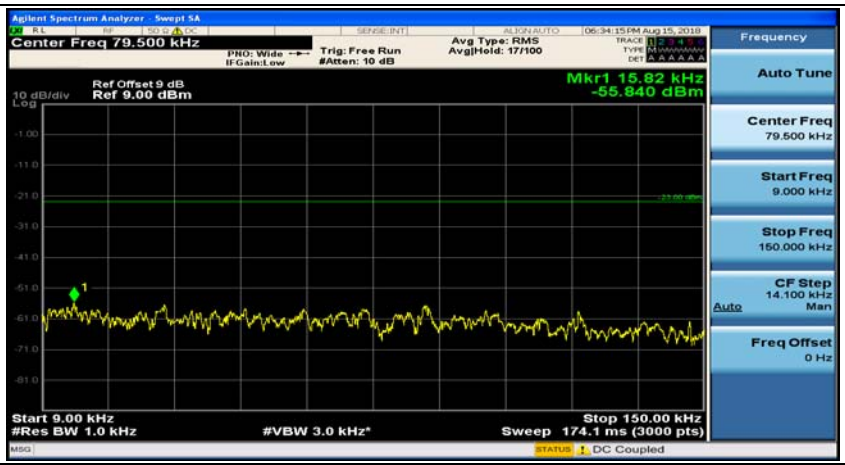
| (Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#37 |

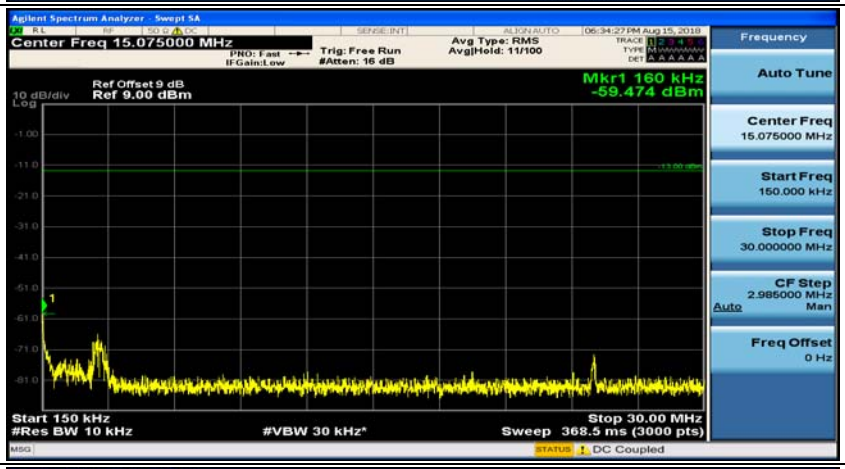


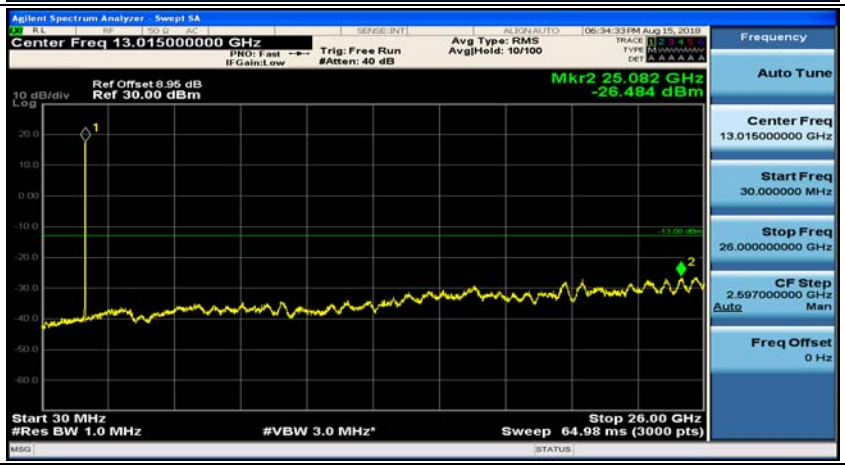



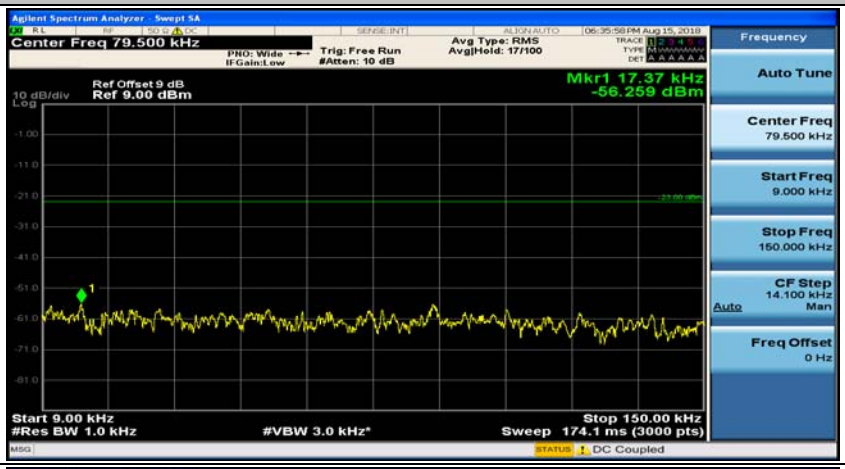
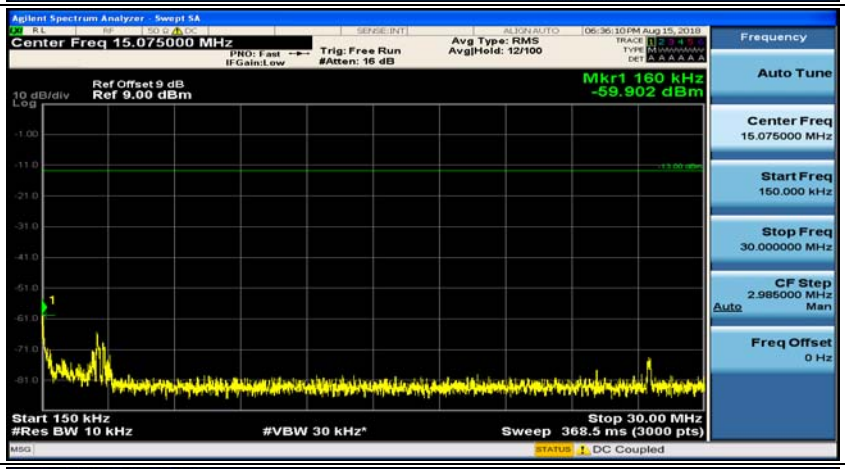
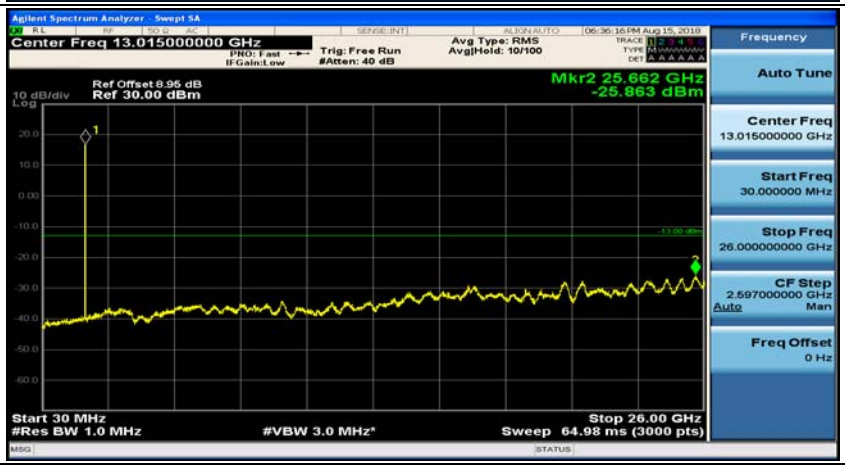


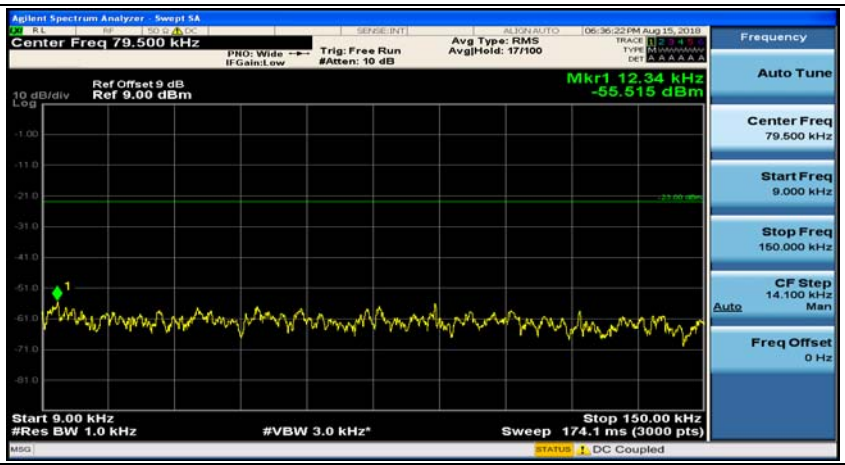
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#74

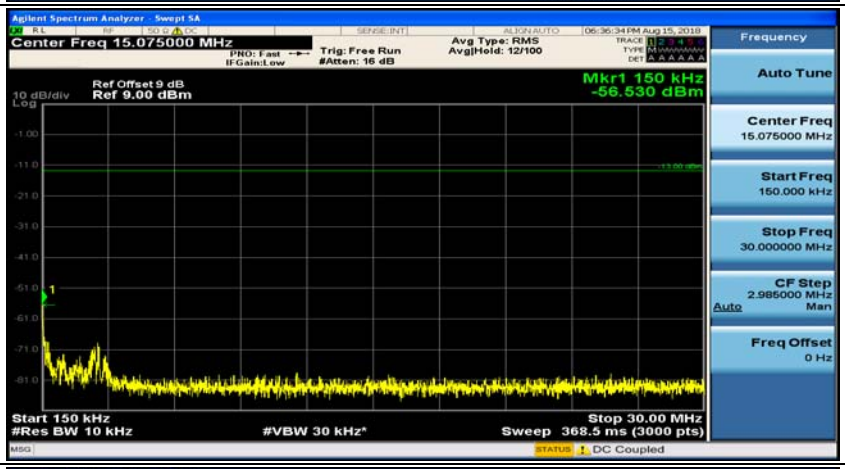

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:34:15 PM Aug 15, 2018
Frequency
Mkr1 15.82 kHz
-55.840 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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: 11/100
06:34:27 PM Aug 15, 2018
Frequency
Mkr1 160 kHz
-59.474 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: 10/100
06:34:33 PM Aug 15, 2018
Frequency
Mkr2 25.082 GHz
-26.484 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)

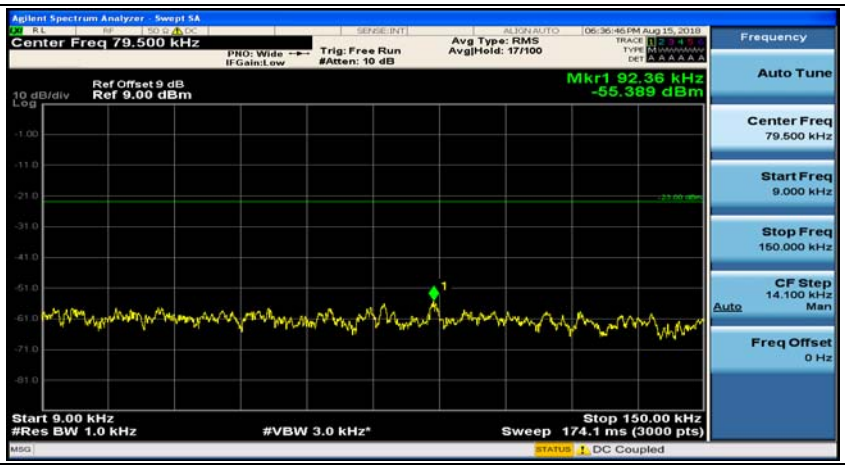
| (Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37 |

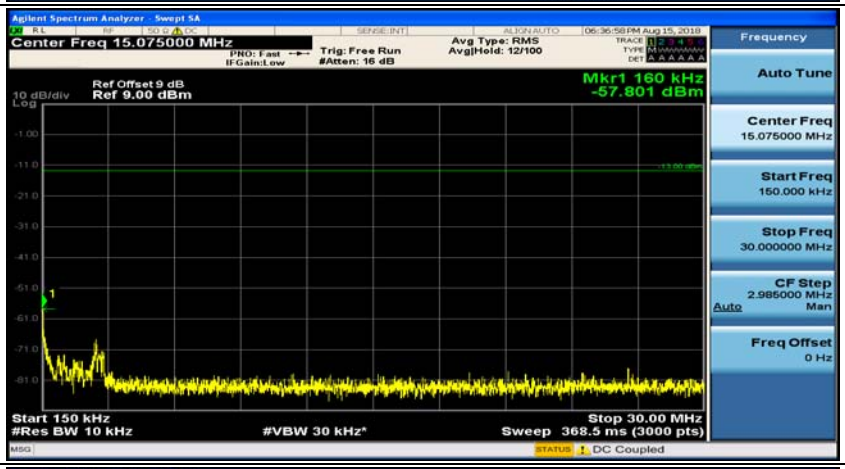


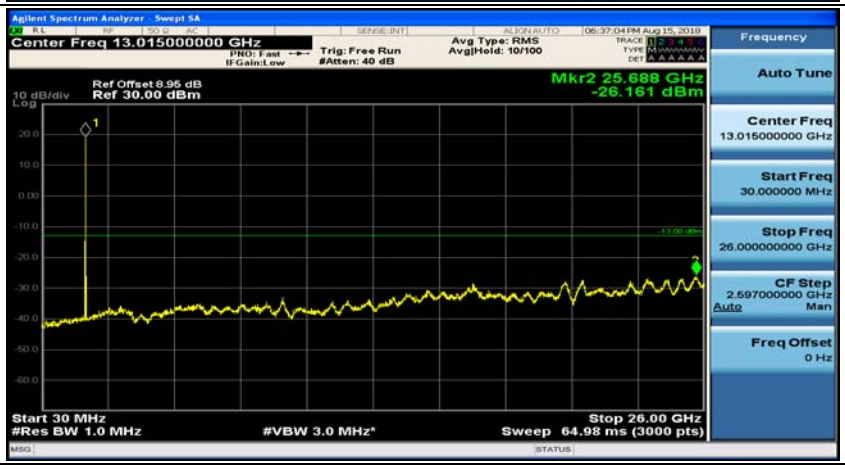



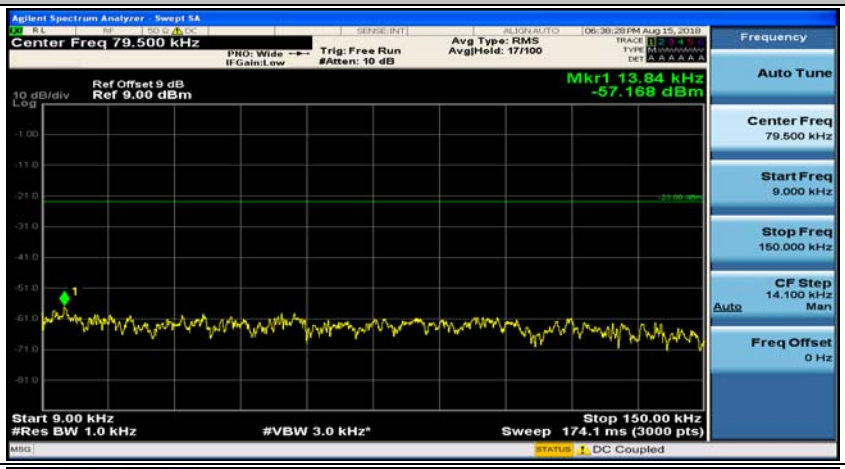
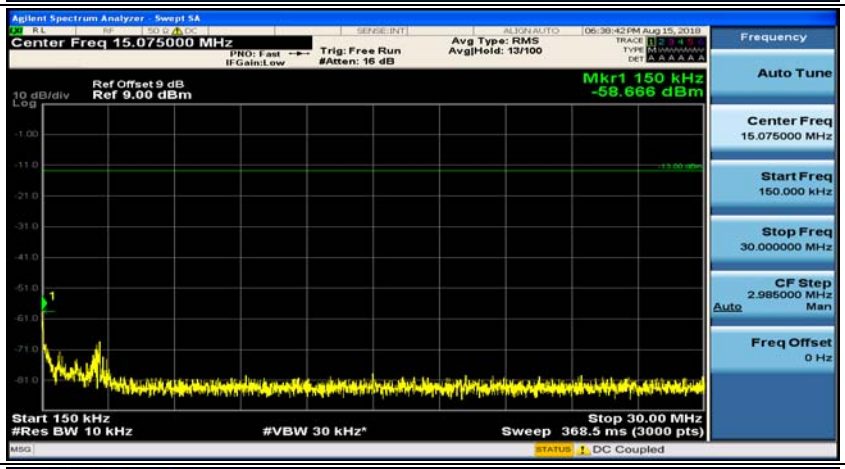
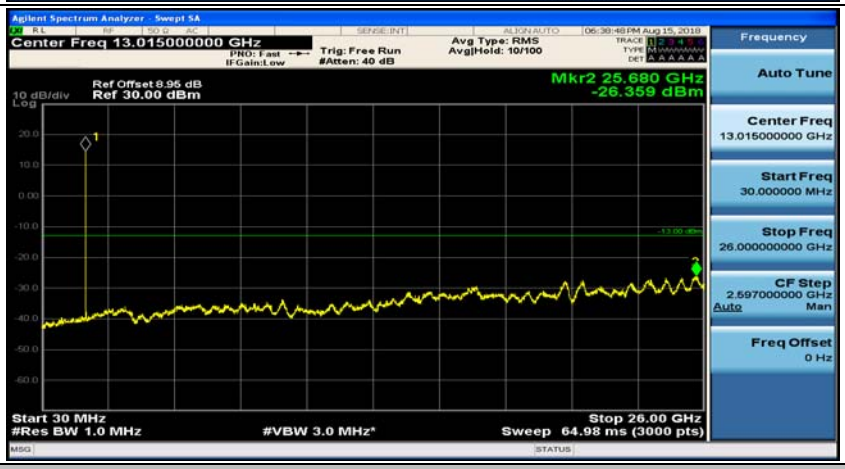


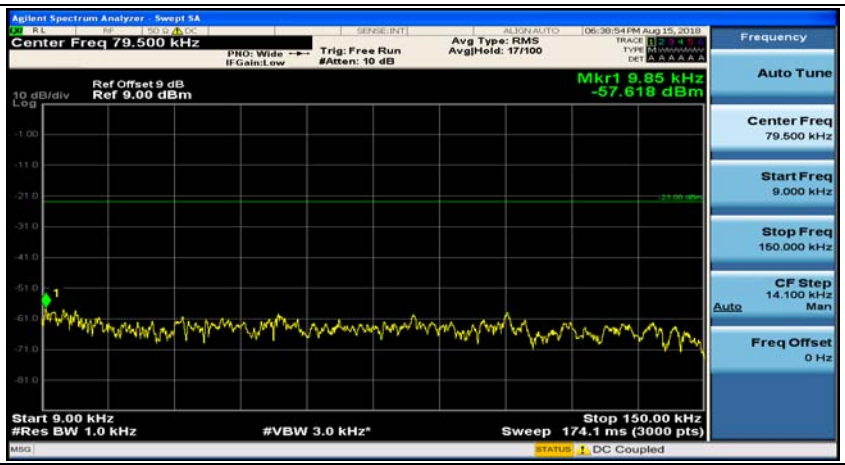
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#74

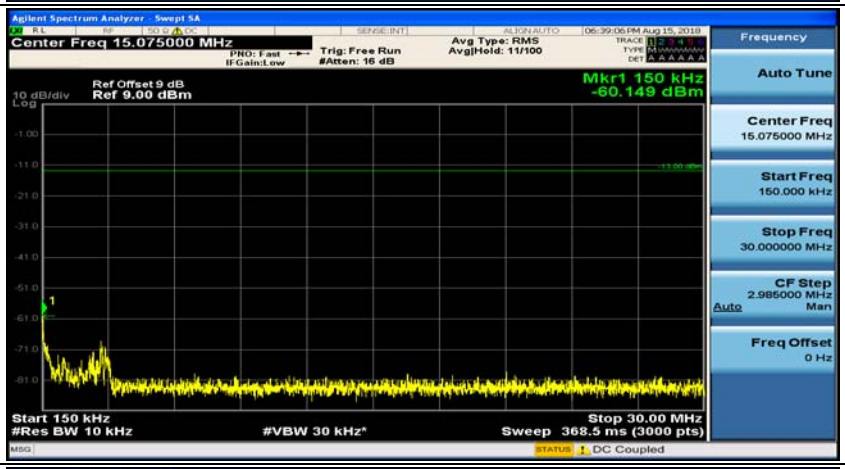

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:36:46 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 92.36 kHz
-55.389 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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

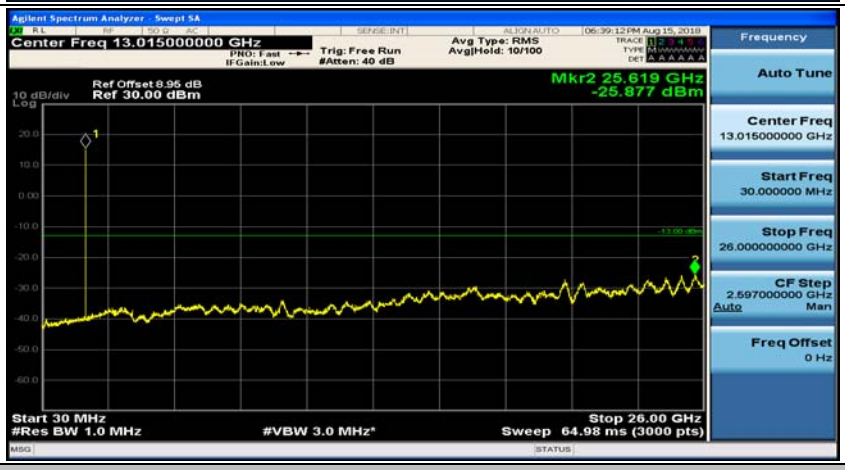

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
06:36:58 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 160 kHz
-57.801 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 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: 10/100
06:37:04 PM Aug 15, 2018
Frequency
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.688 GHz
-26.161 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)

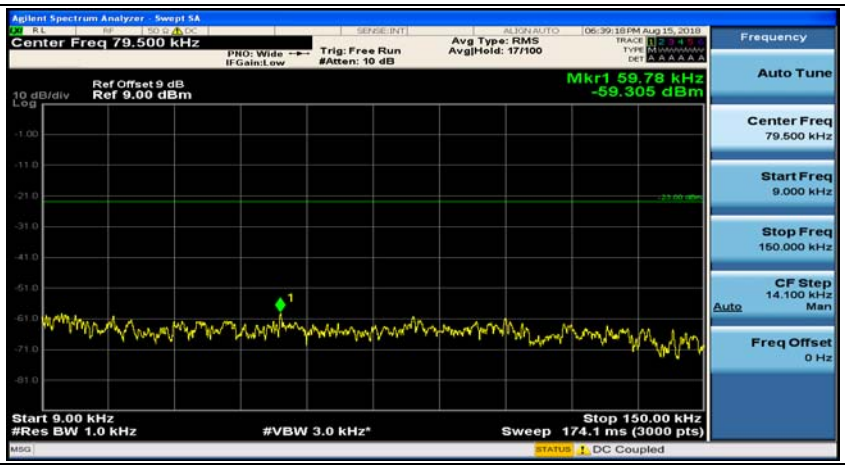
| (Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#37 |

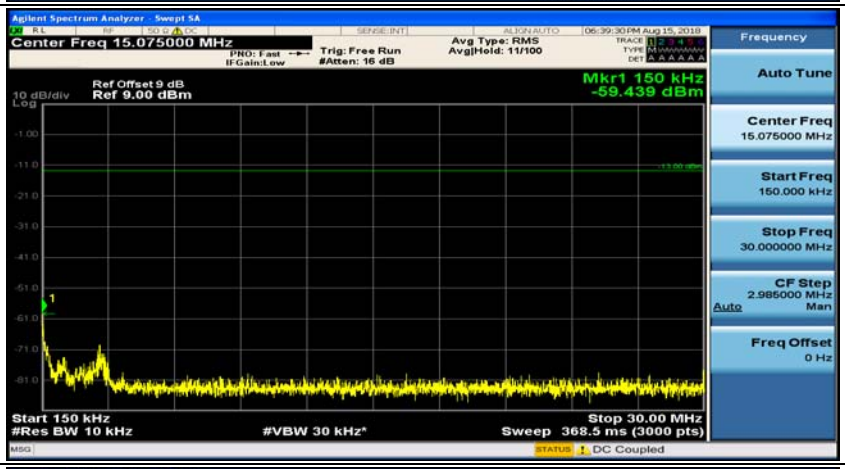


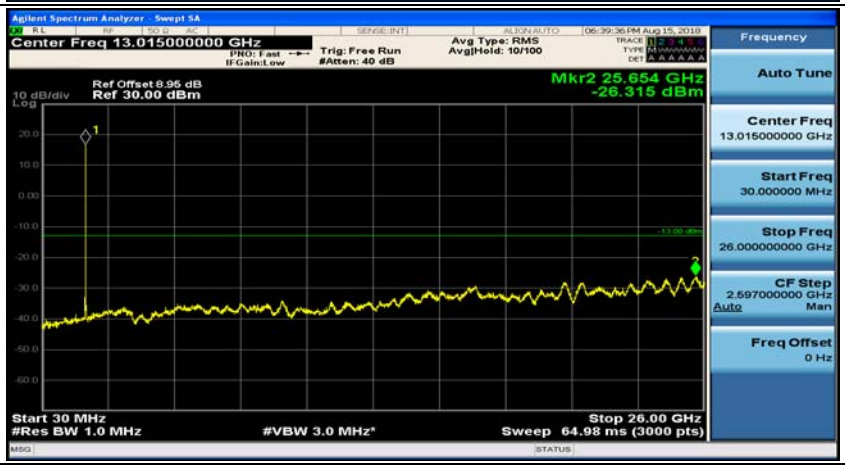




(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#74

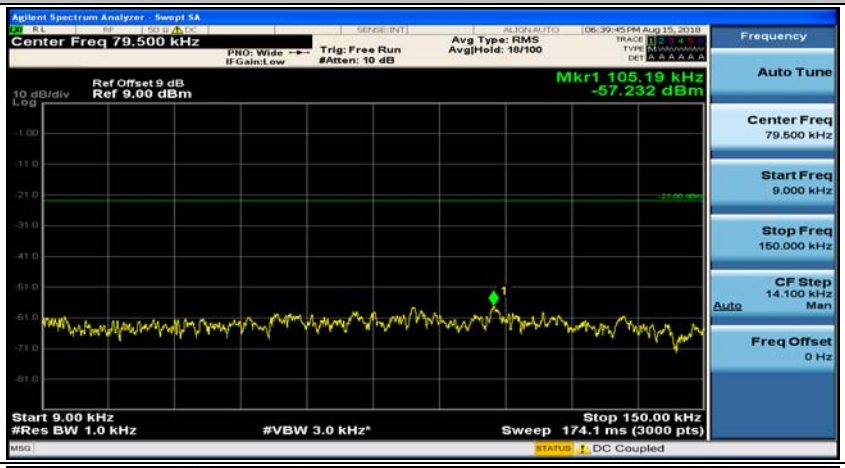

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:39:18 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 59.78 kHz
-59.305 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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

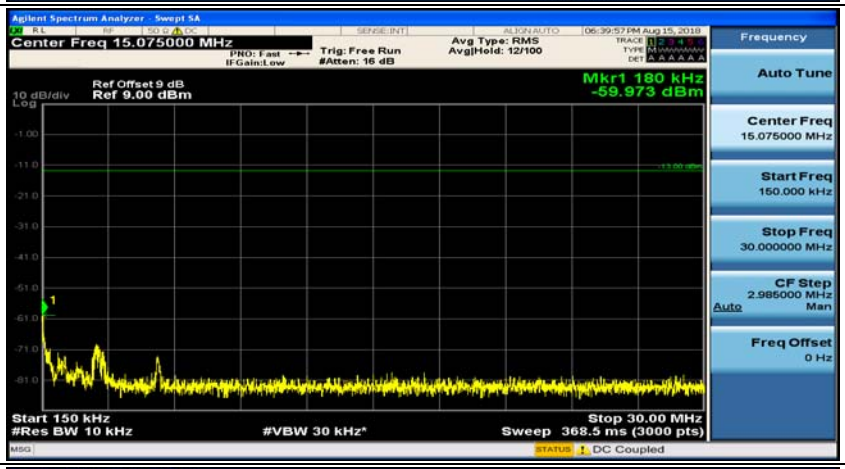

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
06:39:30 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-59.439 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 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

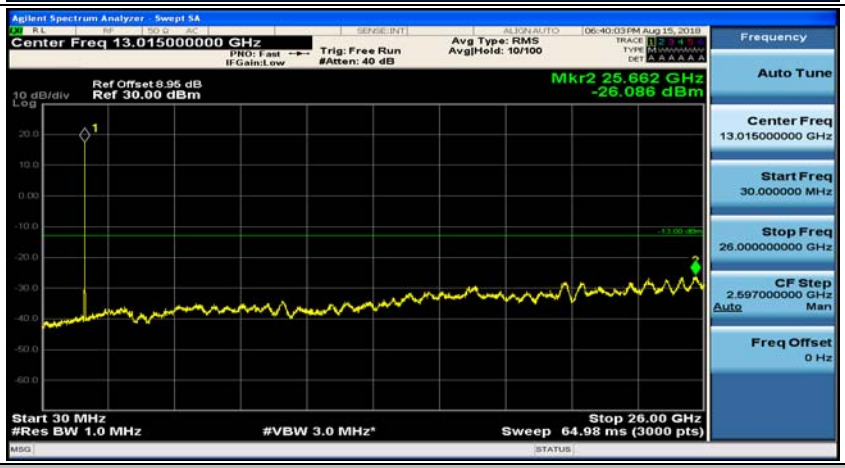

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 10/100
06:39:36 PM Aug 15, 2018
Frequency
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.654 GHz
-26.315 dBm
Auto Tune
Center Freq
13.015000000 GHz
Start 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: 20 MHz

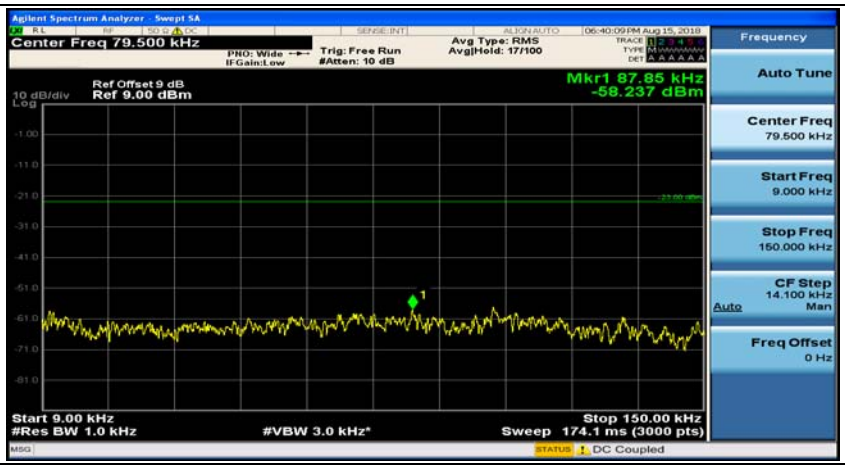
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#0

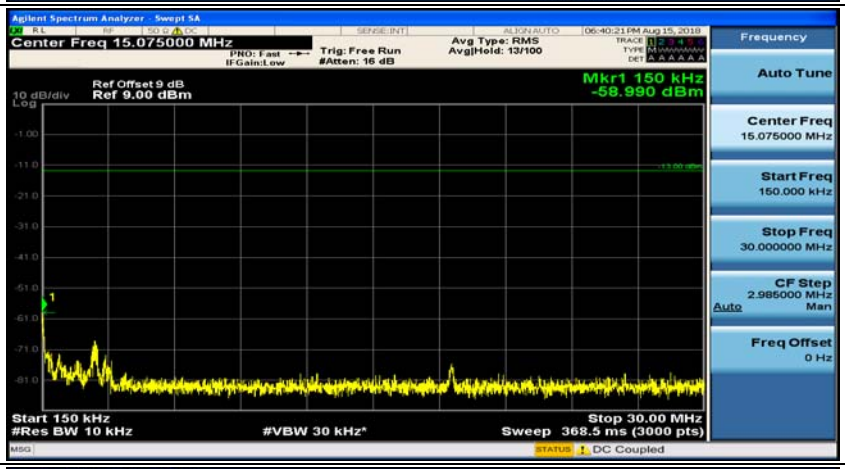


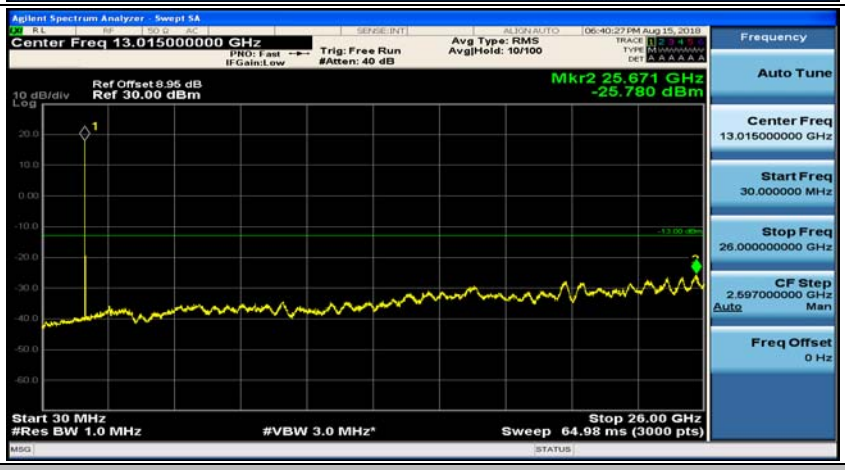



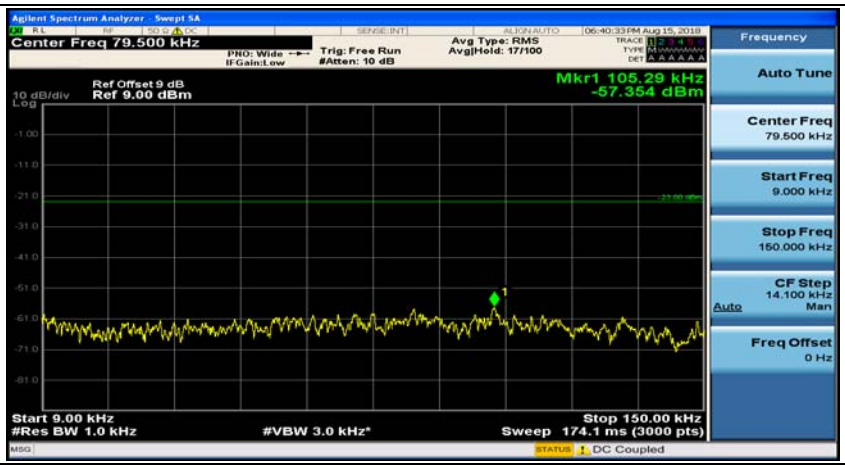

(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#49

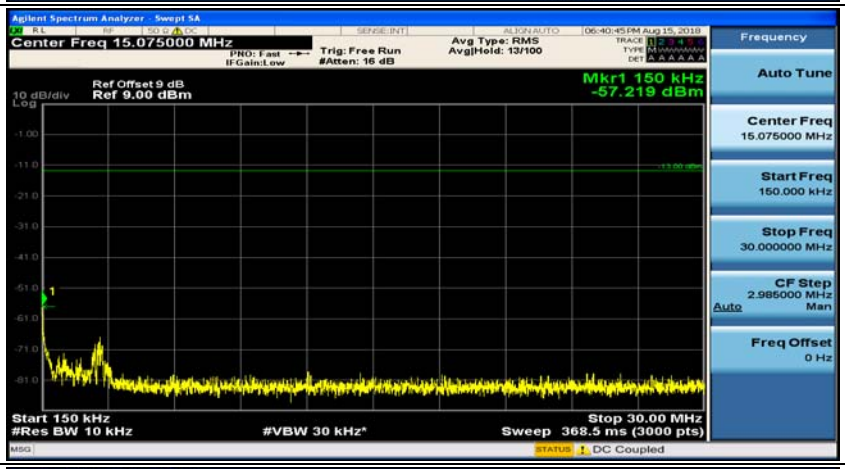


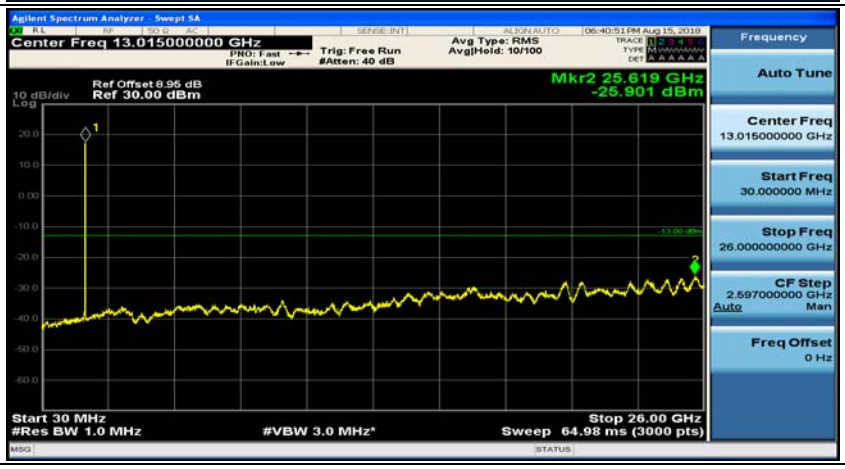



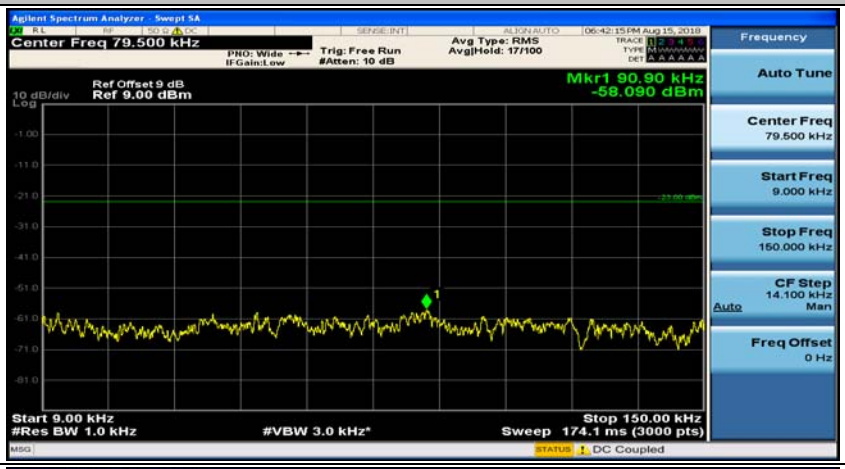
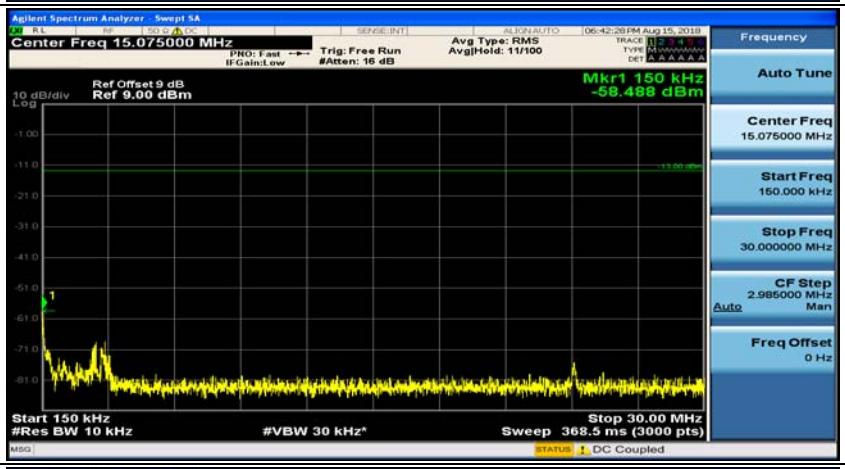
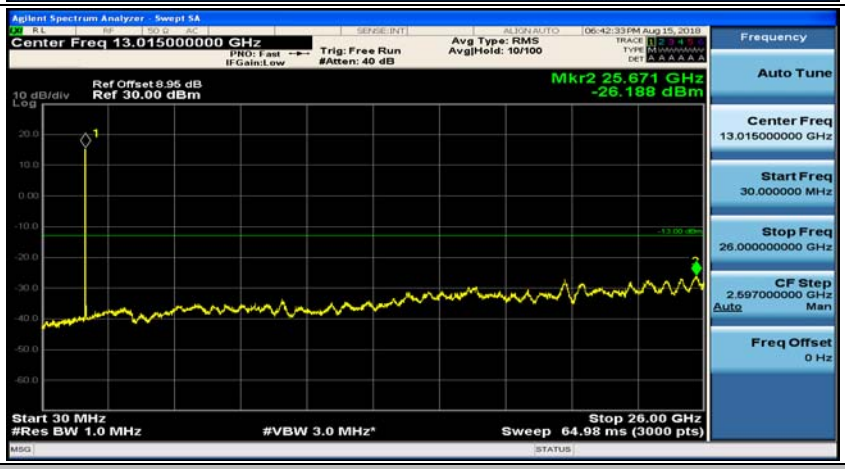



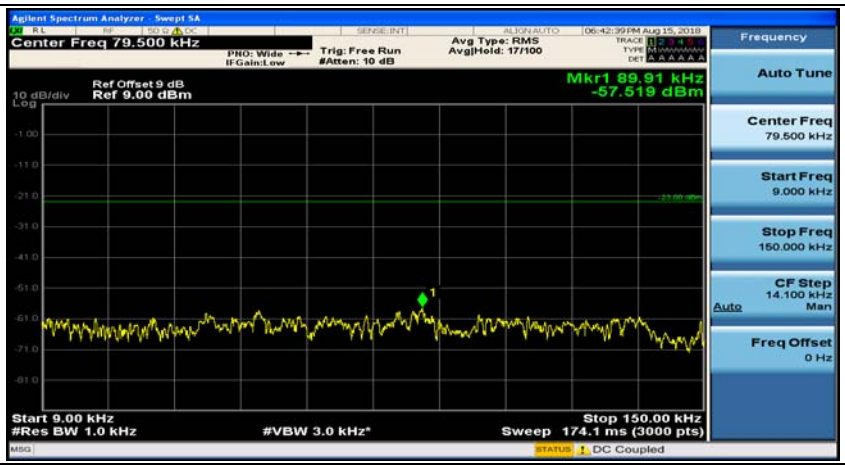

(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#99

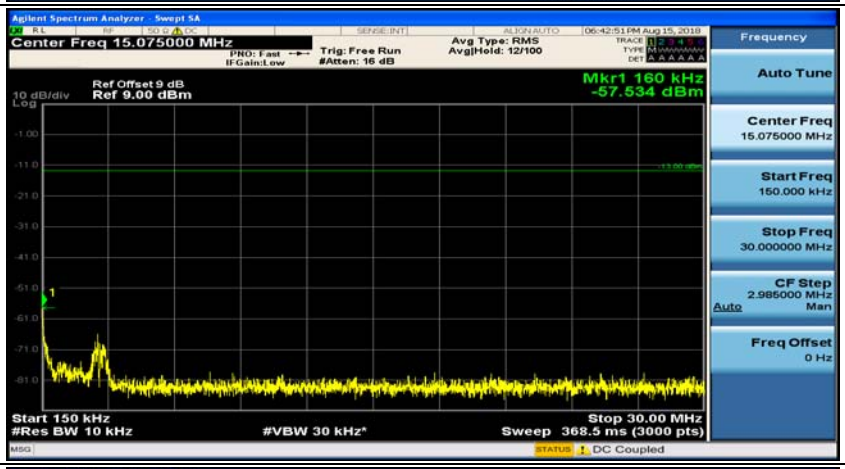

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:40:33 PM Aug 15, 2018
Frequency
Auto Tune
Mkr1 105.29 kHz
-57.354 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
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

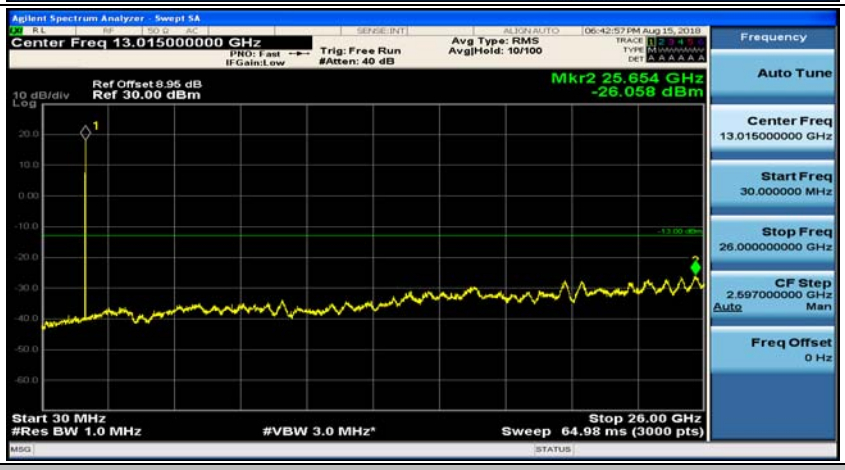

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 13/100
06:40:45 PM Aug 15, 2018
Frequency
Auto Tune
Mkr1 150 kHz
-57.219 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 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: 10/100
06:40:51 PM Aug 15, 2018
Frequency
Auto Tune
Mkr2 25.619 GHz
-25.901 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)

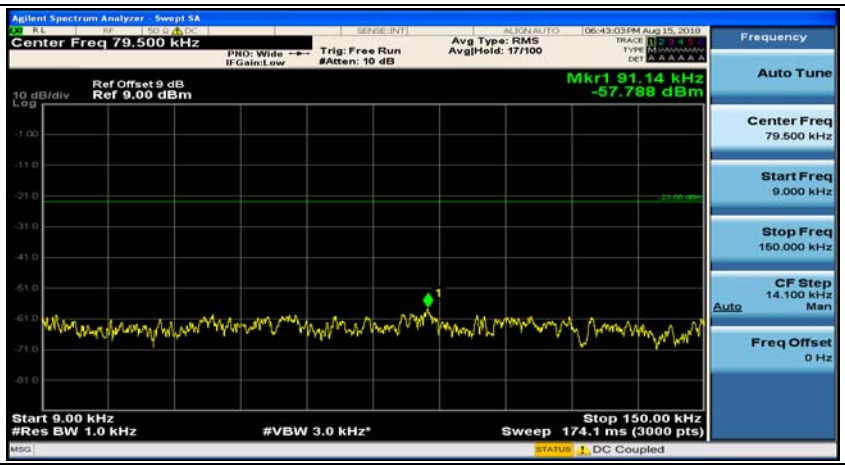
| (Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49 |

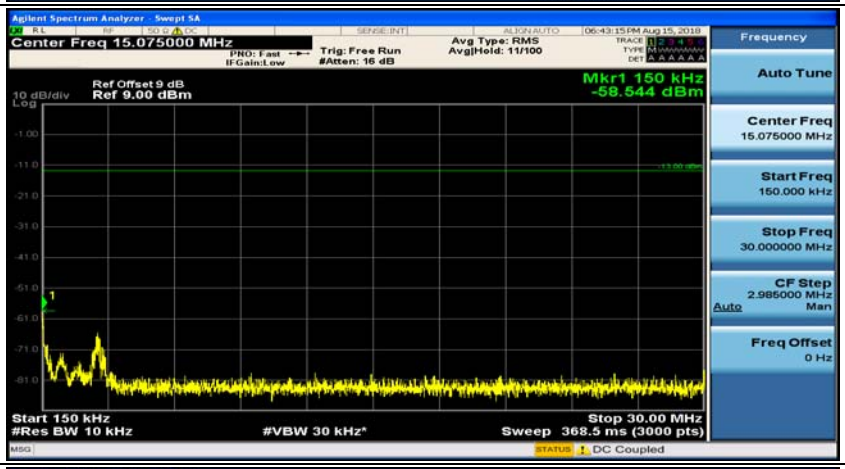


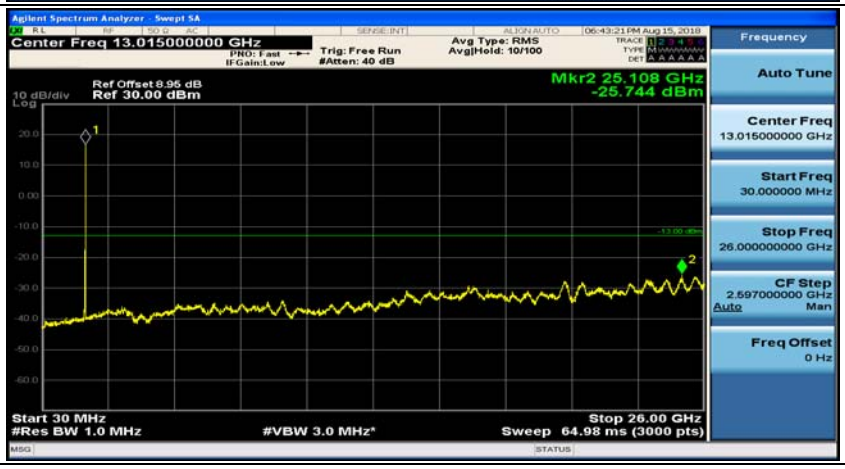



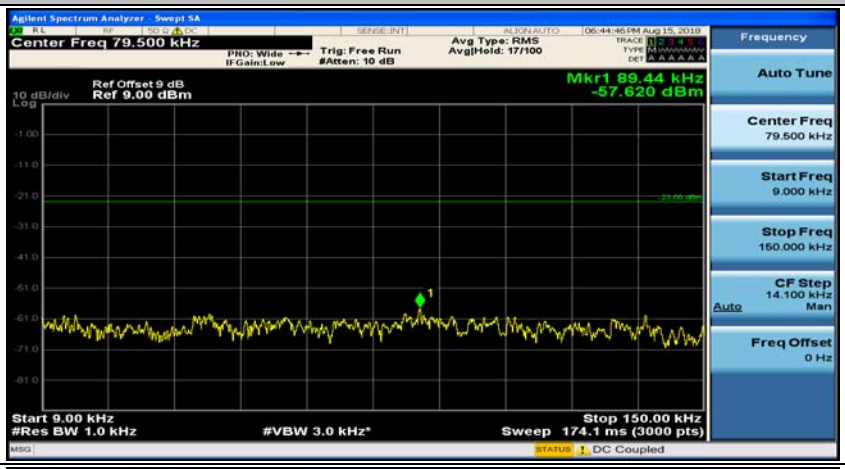
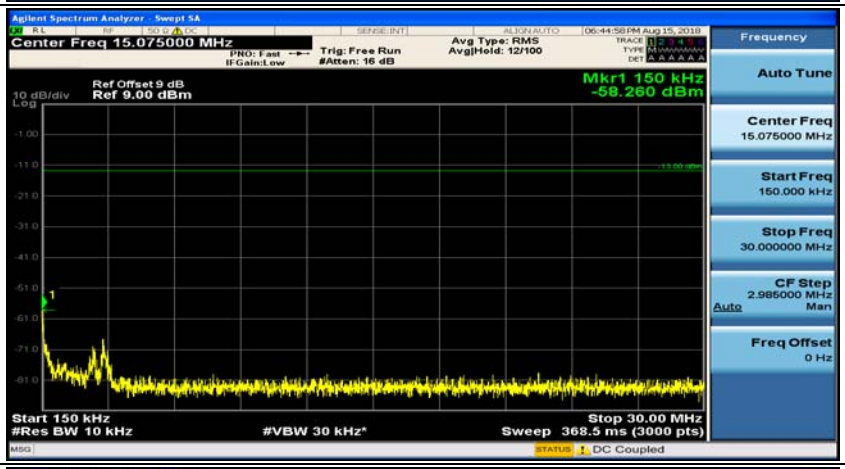
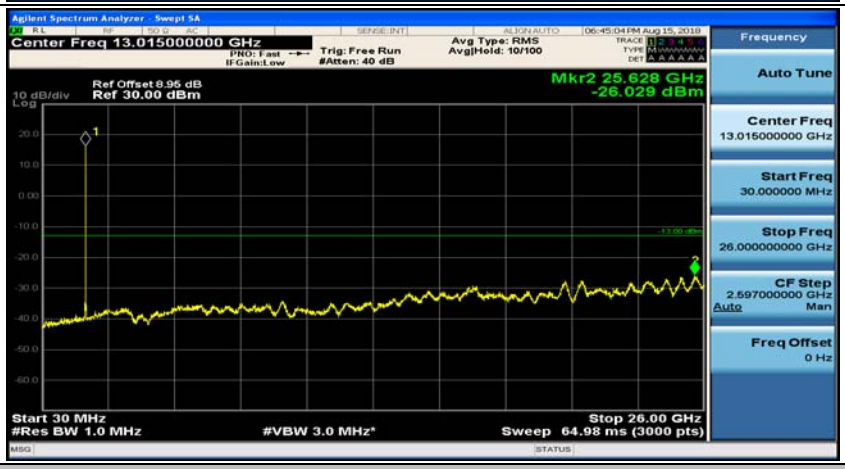



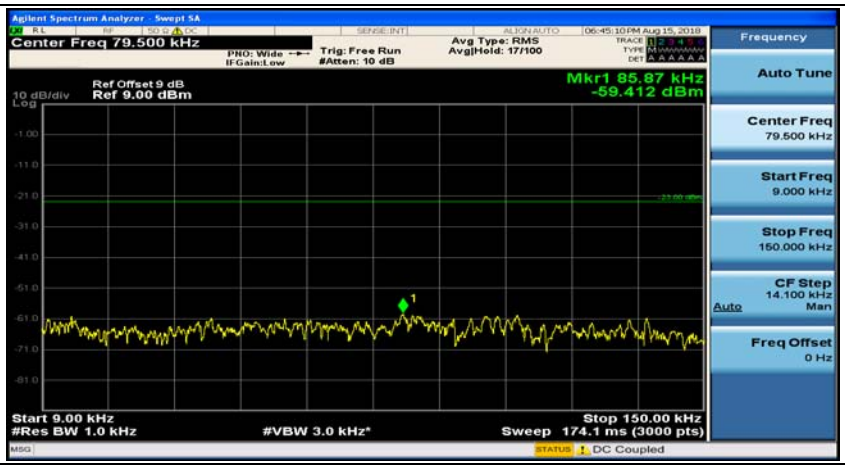

(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#99

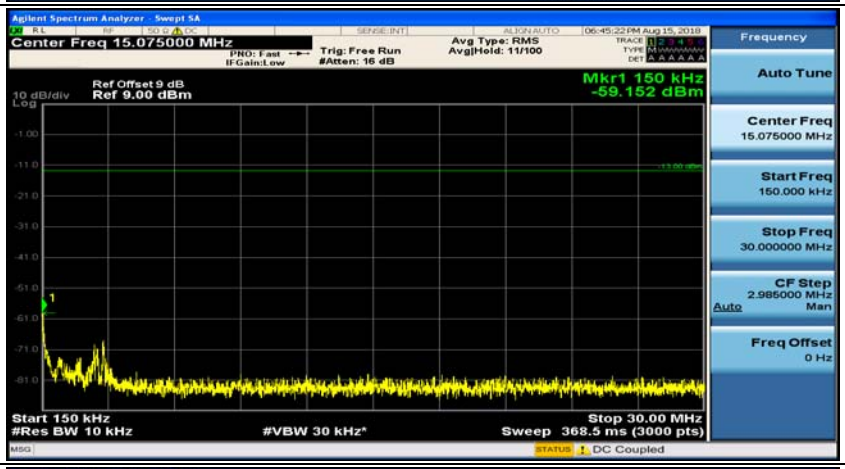

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:43:03 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 91.14 kHz
-57.788 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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

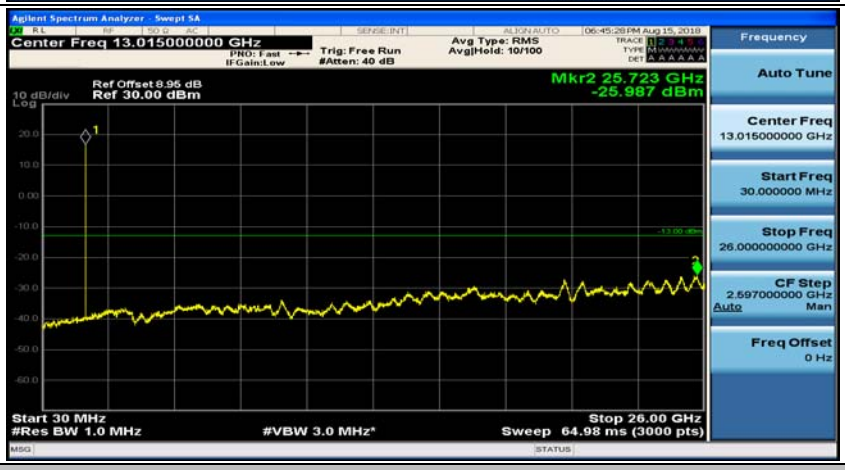

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 11/100
06:43:15 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-58.544 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 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: 10/100
06:43:21 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.108 GHz
-25.744 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)

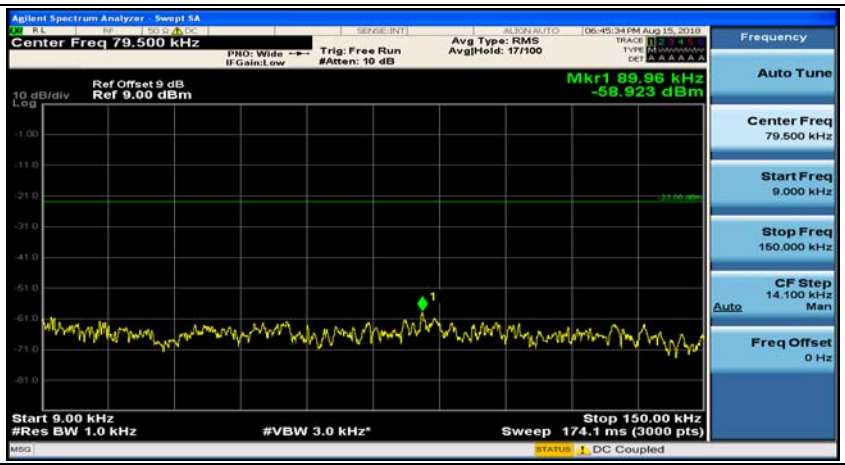
| (Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#49 |

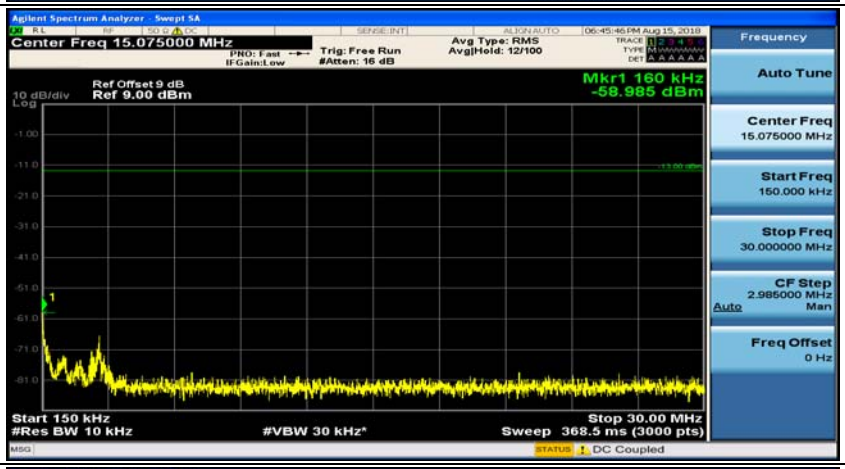


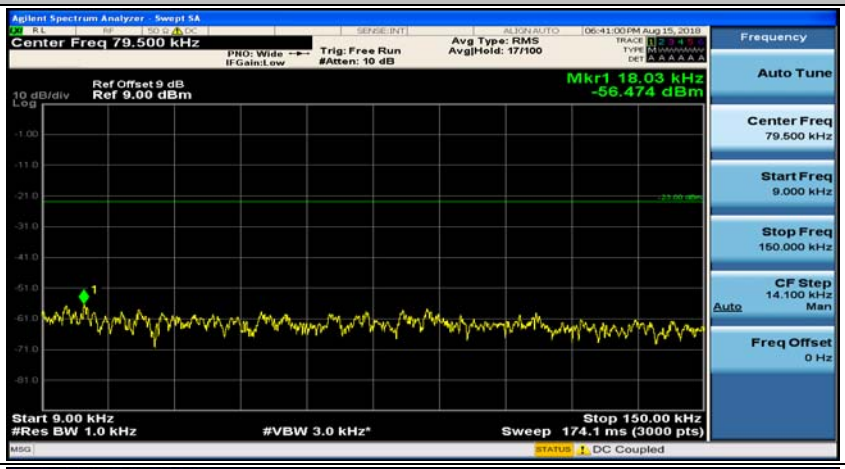
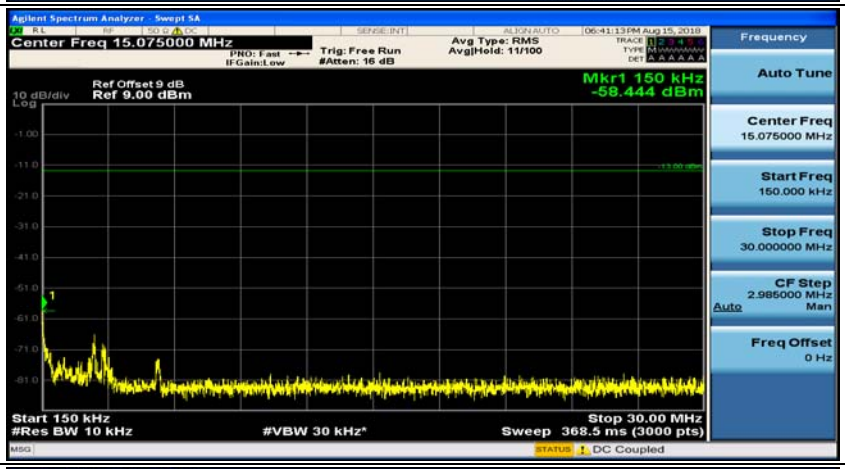
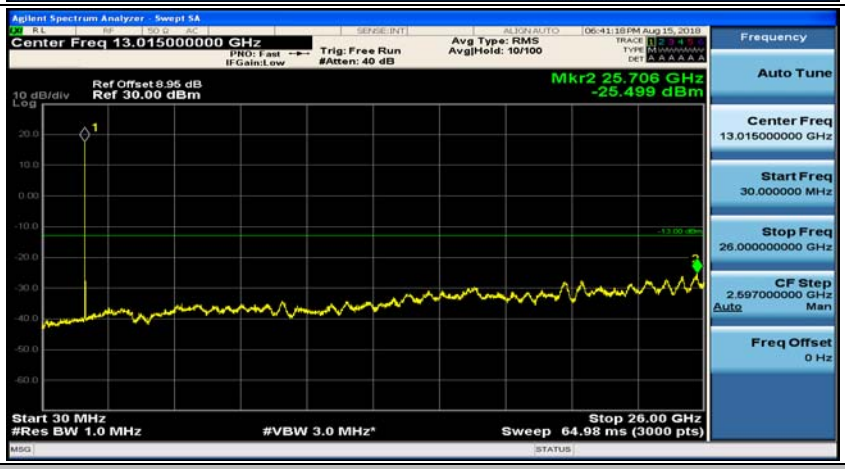



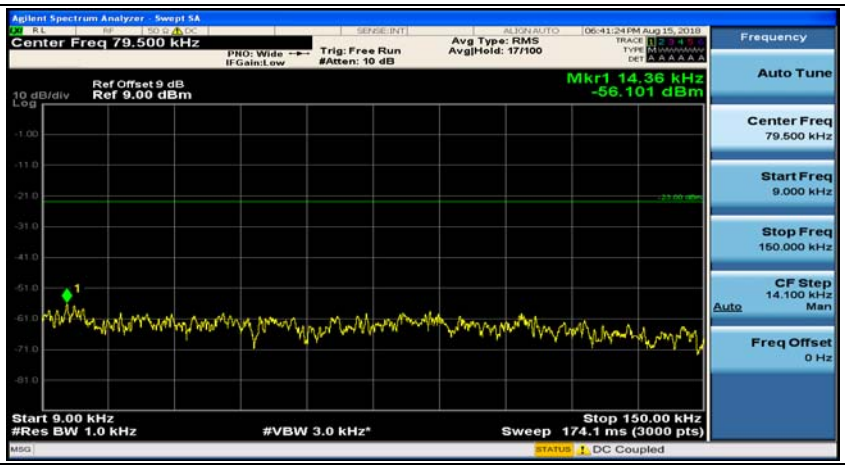

(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#99

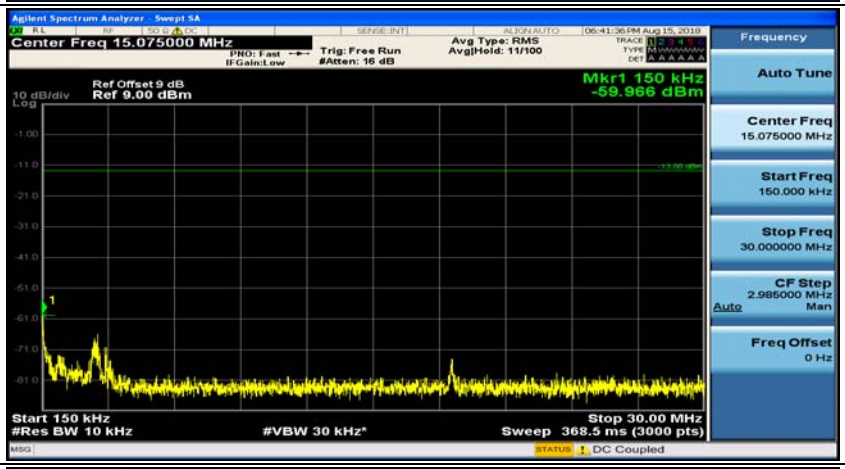

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:45:34 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 89.96 kHz
-58.923 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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

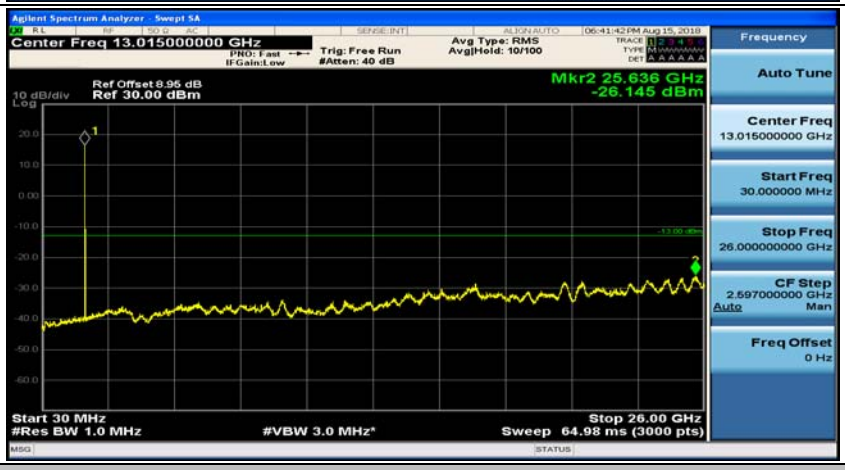

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
06:45:46 PM Aug 15, 2018
Frequency
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 160 kHz
-58.985 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 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: 10/100
06:45:52 PM Aug 15, 2018
Frequency
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.636 GHz
-26.662 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)

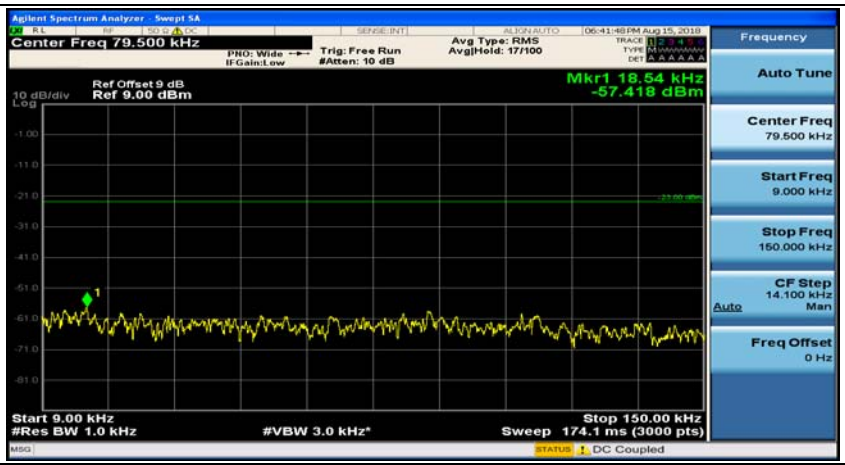
| (Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49 |

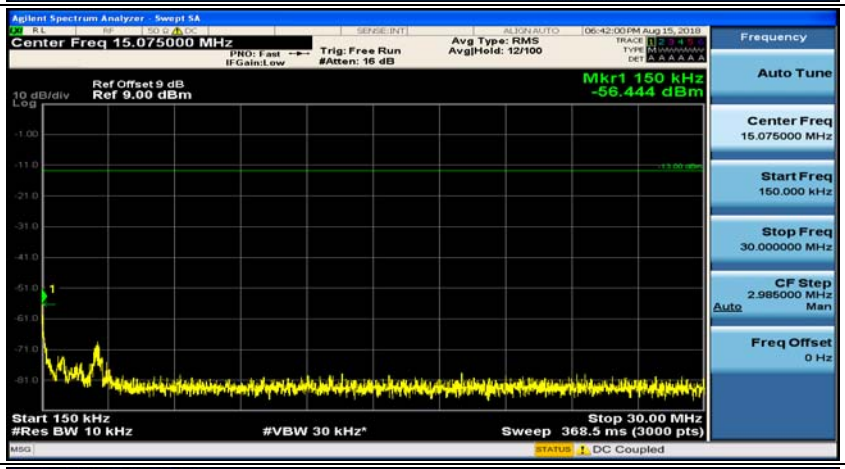


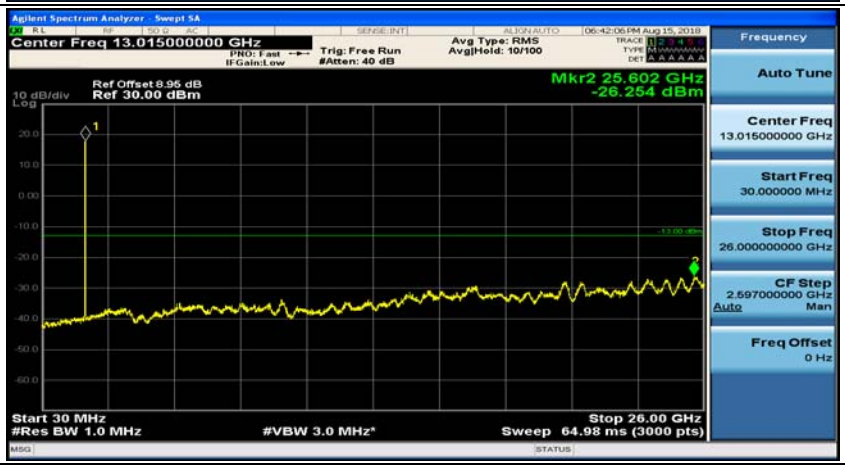



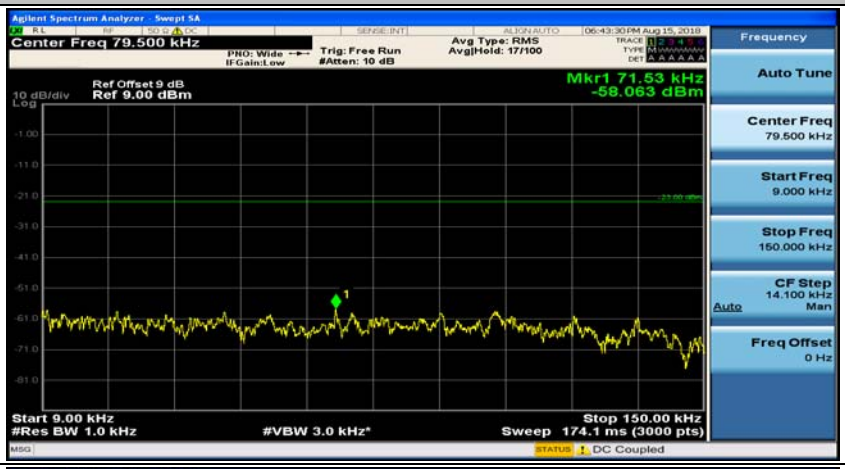
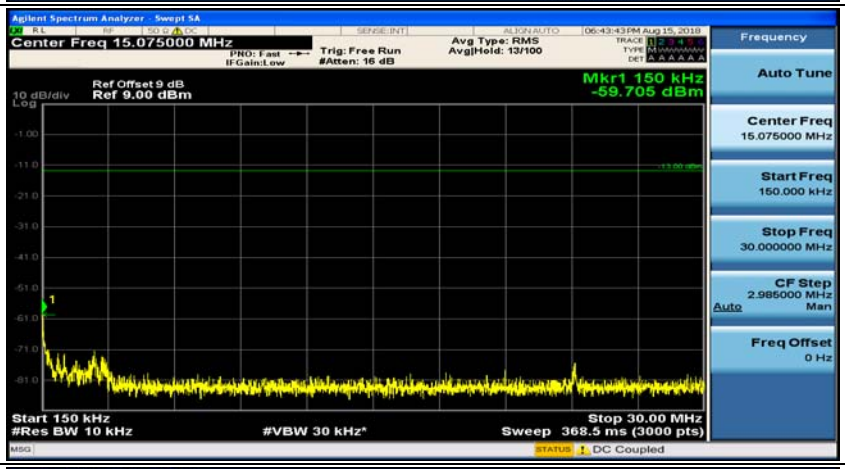
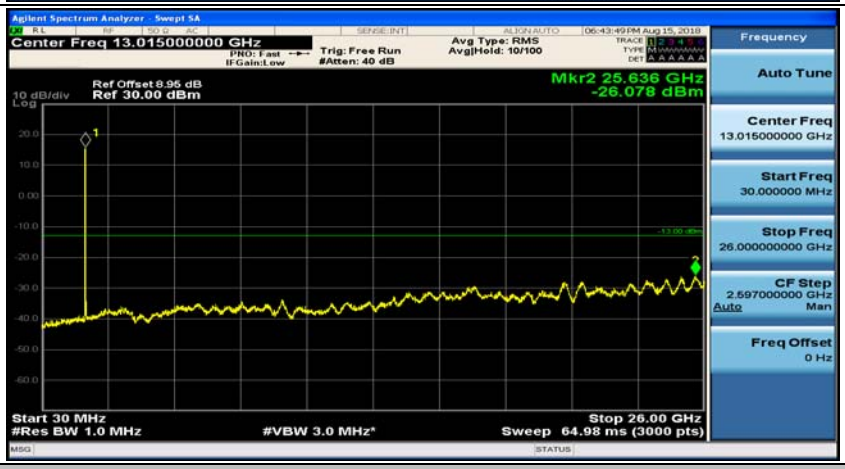



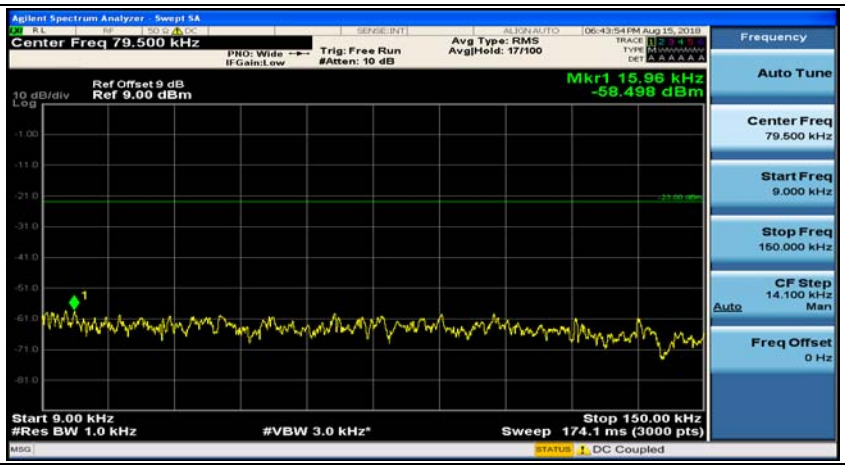

(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#99

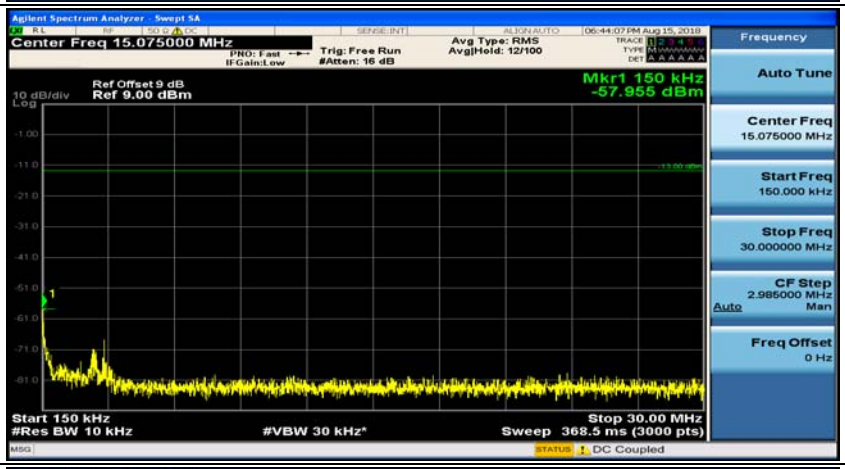

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:41:48 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 18.54 kHz
-57.418 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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

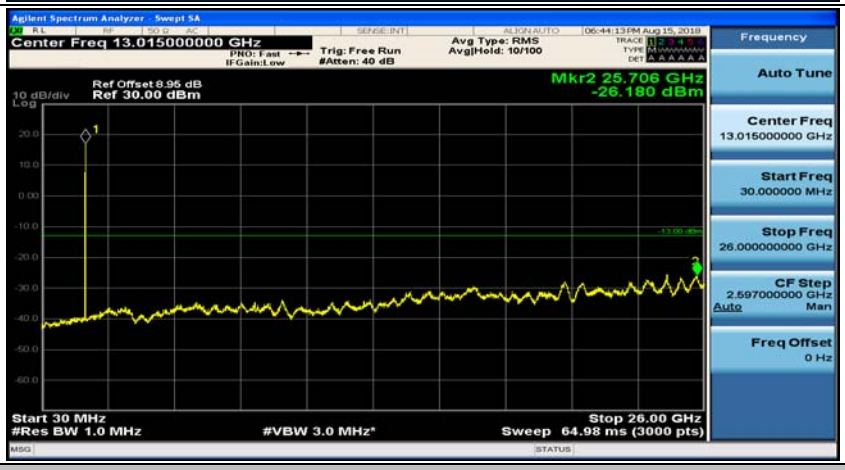

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 12/100
06:42:00 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-56.444 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 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: 10/100
06:42:06 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.602 GHz
-26.254 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)

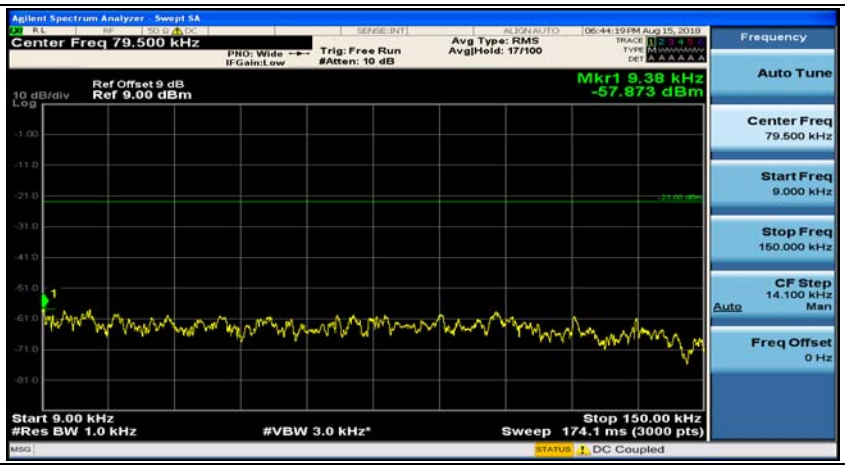
| (Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49 |

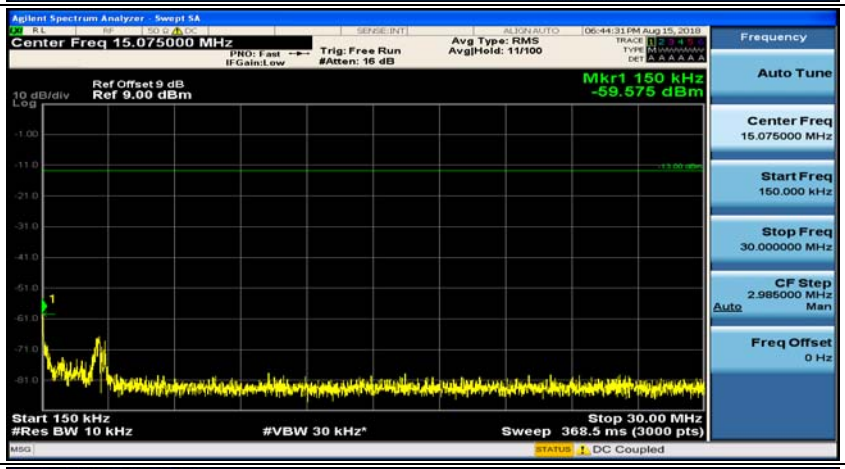


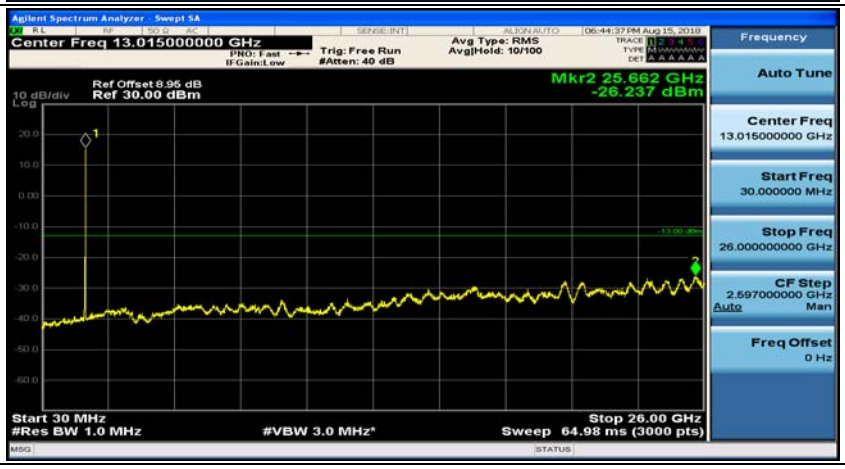



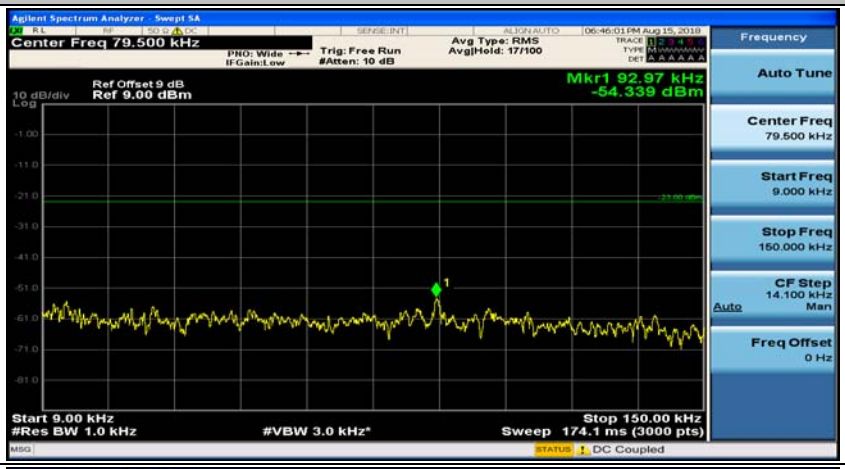
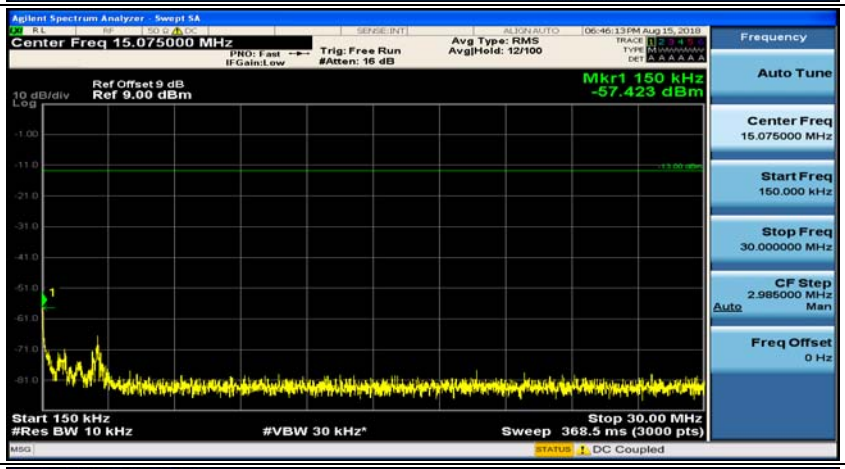
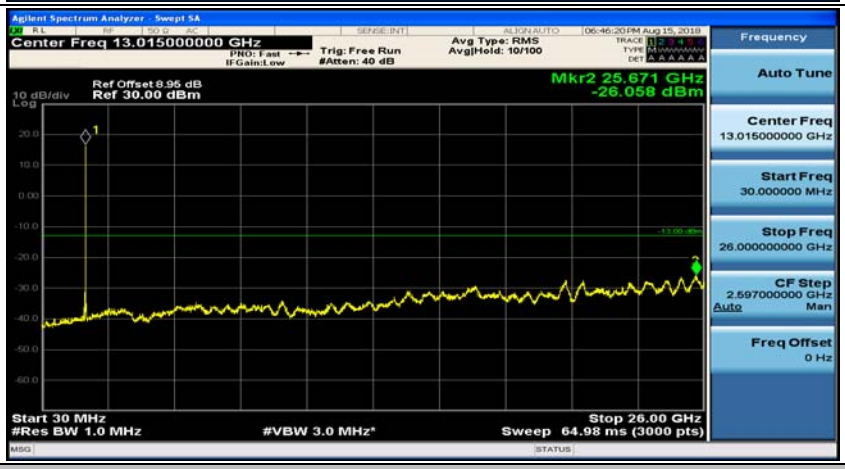



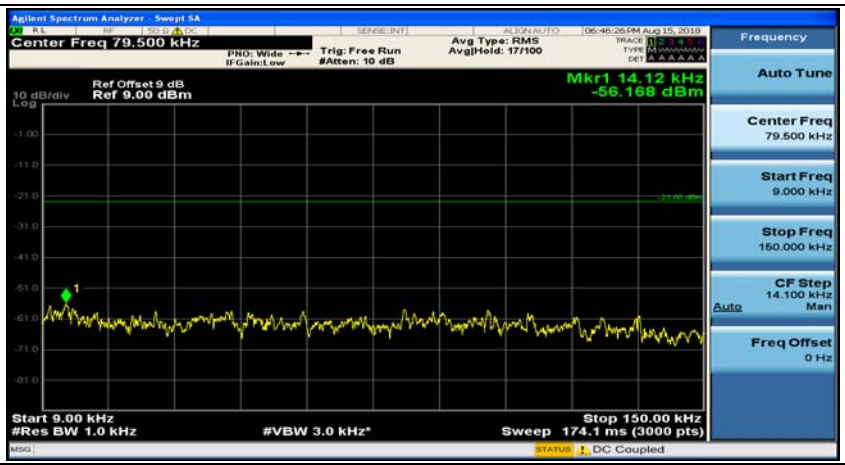

(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#99

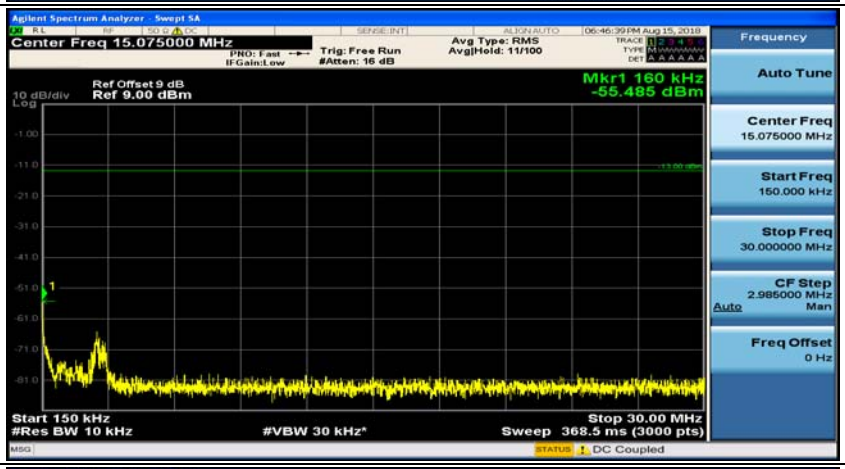

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
06:44:19 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 9.38 kHz
-57.873 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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: 11/100
06:44:31 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-59.575 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: 10/100
06:44:37 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.662 GHz
-26.237 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)

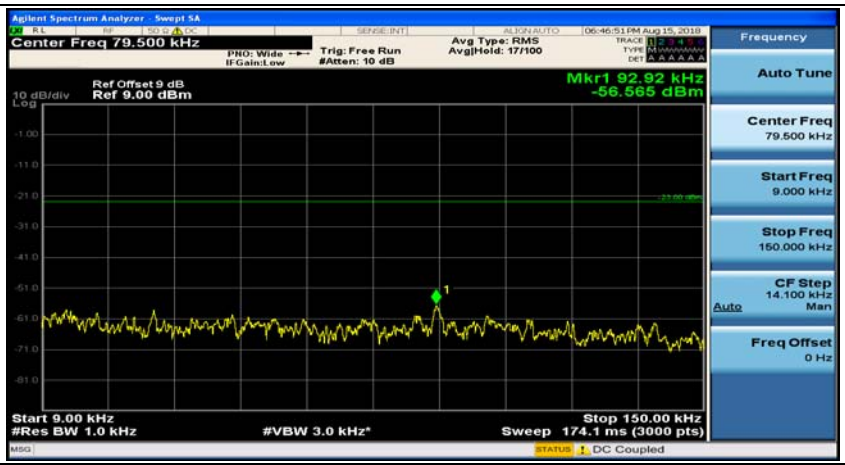
| (Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#49 |

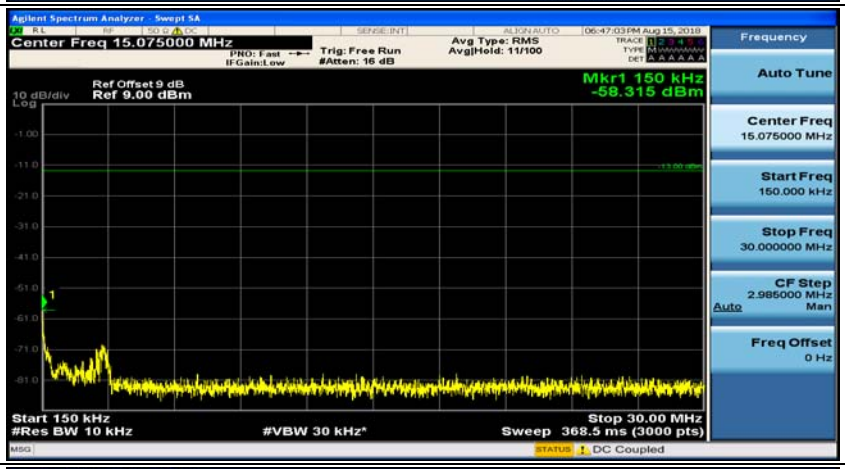


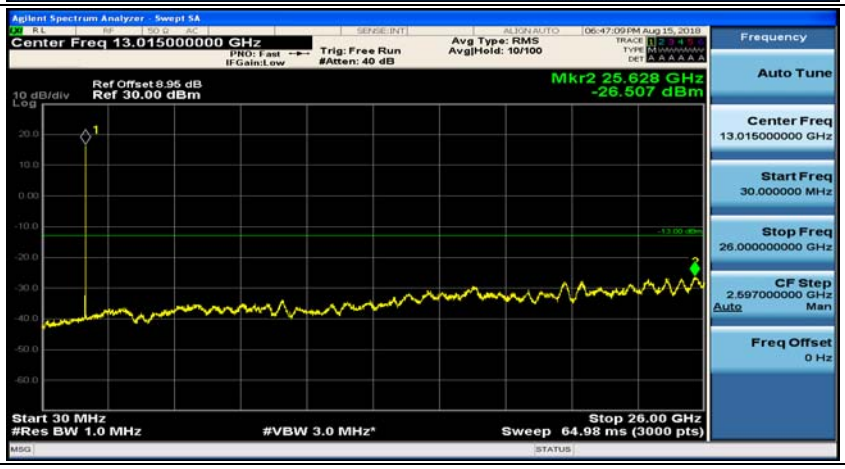





(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#99


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
06:46:51 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 92.92 kHz
-56.565 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: 11/100
06:47:03 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-58.315 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: 10/100
06:47:09 PM Aug 15, 2018
Frequency
Auto Tune
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.628 GHz
-26.507 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)

# 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 | -0.5 | -0.000292 | ± 2.5 | PASS |
| | | VN | TN | -0.95 | -0.000555 | ± 2.5 | PASS |
| | | VH | TN | 4.07 | 0.002379 | ± 2.5 | PASS |
| | MCH | VL | TN | 0.76 | 0.000439 | ± 2.5 | PASS |
| | | VN | TN | 3.59 | 0.002072 | ± 2.5 | PASS |
| | | VH | TN | 3.33 | 0.001922 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.88 | 0.000502 | ± 2.5 | PASS |
| | | VN | TN | 0.05 | 0.000029 | ± 2.5 | PASS |
| | | VH | TN | 3.37 | 0.001921 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | -0.26 | -0.000152 | ± 2.5 | PASS |
| | | VN | TN | -0.15 | -0.000088 | ± 2.5 | PASS |
| | | VH | TN | 3.35 | 0.001958 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.3 | -0.000750 | ± 2.5 | PASS |
| | | VN | TN | 0.96 | 0.000554 | ± 2.5 | PASS |
| | | VH | TN | 1.19 | 0.000687 | ± 2.5 | PASS |
| | HCH | VL | TN | -0.09 | -0.000051 | ± 2.5 | PASS |
| | | VN | TN | -1.82 | -0.001037 | ± 2.5 | PASS |
| | | VH | TN | 0.26 | 0.000148 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 4.96 | 0.002899 | ± 2.5 | PASS |
| | | VN | -20 | -0.75 | -0.000438 | ± 2.5 | PASS |
| | | VN | -10 | -0.22 | -0.000129 | ± 2.5 | PASS |
| | | VN | 0 | 1.05 | 0.000614 | ± 2.5 | PASS |
| | | VN | 10 | 4.74 | 0.002771 | ± 2.5 | PASS |
| | | VN | 20 | 3.33 | 0.001947 | ± 2.5 | PASS |
| | | VN | 30 | 0.72 | 0.000421 | ± 2.5 | PASS |
| | | VN | 40 | 4.31 | 0.002519 | ± 2.5 | PASS |
| | | VN | 50 | 4.61 | 0.002695 | ± 2.5 | PASS |
| | MCH | VN | -30 | 0.95 | 0.000548 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | -20 | 4.47 | 0.002580 | ± 2.5 | PASS |
| | | VN | -10 | 2.88 | 0.001662 | ± 2.5 | PASS |
| | | VN | 0 | 3.6 | 0.002078 | ± 2.5 | PASS |
| | | VN | 10 | 1.79 | 0.001033 | ± 2.5 | PASS |
| | | VN | 20 | 0.44 | 0.000254 | ± 2.5 | PASS |
| | | VN | 30 | 2.6 | 0.001501 | ± 2.5 | PASS |
| | | VN | 40 | 0.88 | 0.000508 | ± 2.5 | PASS |
| | | VN | 50 | -1.18 | -0.000681 | ± 2.5 | PASS |
| | HCH | VN | -30 | 2.55 | 0.001454 | ± 2.5 | PASS |
| | | VN | -20 | 1.49 | 0.000849 | ± 2.5 | PASS |
| | | VN | -10 | -1.61 | -0.000918 | ± 2.5 | PASS |
| | | VN | 0 | -0.83 | -0.000473 | ± 2.5 | PASS |
| | | VN | 10 | 0.86 | 0.000490 | ± 2.5 | PASS |
| | | VN | 20 | 4.75 | 0.002708 | ± 2.5 | PASS |
| | | VN | 30 | -0.92 | -0.000524 | ± 2.5 | PASS |
| | | VN | 40 | 3.63 | 0.002069 | ± 2.5 | PASS |
| | | VN | 50 | 1.53 | 0.000872 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 1.86 | 0.001087 | ± 2.5 | PASS |
| | | VN | -20 | -0.64 | -0.000374 | ± 2.5 | PASS |
| | | VN | -10 | 2.02 | 0.001181 | ± 2.5 | PASS |
| | | VN | 0 | -0.57 | -0.000333 | ± 2.5 | PASS |
| | | VN | 10 | 3.47 | 0.002028 | ± 2.5 | PASS |
| | | VN | 20 | 2.07 | 0.001210 | ± 2.5 | PASS |
| | | VN | 30 | 3.17 | 0.001853 | ± 2.5 | PASS |
| | | VN | 40 | 1.86 | 0.001087 | ± 2.5 | PASS |
| | | VN | 50 | -0.15 | -0.000088 | ± 2.5 | PASS |
| | MCH | VN | -30 | 2.16 | 0.001231 | ± 2.5 | PASS |
| | | VN | -20 | 2.18 | 0.001243 | ± 2.5 | PASS |
| | | VN | -10 | 0.52 | 0.000296 | ± 2.5 | PASS |
| | | VN | 0 | -0.44 | -0.000251 | ± 2.5 | PASS |
| | | VN | 10 | 3.03 | 0.001727 | ± 2.5 | PASS |
| | | VN | 20 | -0.23 | -0.000131 | ± 2.5 | PASS |
| | | VN | 30 | 2.73 | 0.001556 | ± 2.5 | PASS |
| | | VN | 40 | 0.93 | 0.000530 | ± 2.5 | PASS |
| | | VN | 50 | 2.82 | 0.001607 | ± 2.5 | PASS |
| | HCH | VN | -30 | -0.62 | -0.000353 | ± 2.5 | PASS |
| | | VN | -20 | 4 | 0.002280 | ± 2.5 | PASS |
| | | VN | -10 | 1.25 | 0.000713 | ± 2.5 | PASS |
| | | VN | 0 | 0.17 | 0.000097 | ± 2.5 | PASS |
| | | VN | 10 | 1.53 | 0.000872 | ± 2.5 | PASS |
| | | VN | 20 | 3.53 | 0.002012 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 30 | 4.12 | 0.002349 | ± 2.5 | PASS |
| | | VN | 40 | -1.89 | -0.001077 | ± 2.5 | PASS |
| | | VN | 50 | -1.18 | -0.000673 | ± 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 | 1.77 | 0.001034 | ± 2.5 | PASS |
| | | VN | TN | 4.98 | 0.002910 | ± 2.5 | PASS |
| | | VH | TN | 2.56 | 0.001496 | ± 2.5 | PASS |
| | MCH | VL | TN | 4.24 | 0.002447 | ± 2.5 | PASS |
| | | VN | TN | -1.74 | -0.001004 | ± 2.5 | PASS |
| | | VH | TN | 3.66 | 0.002113 | ± 2.5 | PASS |
| | HCH | VL | TN | -1.09 | -0.000622 | ± 2.5 | PASS |
| | | VN | TN | -0.49 | -0.000279 | ± 2.5 | PASS |
| | | VH | TN | 1.8 | 0.001027 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 4.17 | 0.002436 | ± 2.5 | PASS |
| | | VN | TN | 3.12 | 0.001823 | ± 2.5 | PASS |
| | | VH | TN | -1.2 | -0.000701 | ± 2.5 | PASS |
| | MCH | VL | TN | 4.84 | 0.002794 | ± 2.5 | PASS |
| | | VN | TN | 1.47 | 0.000848 | ± 2.5 | PASS |
| | | VH | TN | 4.98 | 0.002874 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.05 | 0.001739 | ± 2.5 | PASS |
| | | VN | TN | 1.82 | 0.001038 | ± 2.5 | PASS |
| | | VH | TN | 4.27 | 0.002435 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | -0.6 | -0.000351 | ± 2.5 | PASS |
| | | VN | -20 | -1.55 | -0.000906 | ± 2.5 | PASS |
| | | VN | -10 | -0.95 | -0.000555 | ± 2.5 | PASS |
| | | VN | 0 | 2.38 | 0.001391 | ± 2.5 | PASS |
| | | VN | 10 | -1.4 | -0.000818 | ± 2.5 | PASS |
| | | VN | 20 | 1.39 | 0.000812 | ± 2.5 | PASS |
| | | VN | 30 | -0.18 | -0.000105 | ± 2.5 | PASS |
| | | VN | 40 | 4.22 | 0.002466 | ± 2.5 | PASS |
| | | VN | 50 | 1.12 | 0.000654 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.92 | 0.002840 | ± 2.5 | PASS |
| | | VN | -20 | 3.67 | 0.002118 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | -10 | 3.21 | 0.001853 | ± 2.5 | PASS |
| | | VN | 0 | 3.86 | 0.002228 | ± 2.5 | PASS |
| | | VN | 10 | 1.16 | 0.000670 | ± 2.5 | PASS |
| | | VN | 20 | 1.44 | 0.000831 | ± 2.5 | PASS |
| | | VN | 30 | 2.59 | 0.001495 | ± 2.5 | PASS |
| | | VN | 40 | -1.06 | -0.000612 | ± 2.5 | PASS |
| | | VN | 50 | 4.32 | 0.002494 | ± 2.5 | PASS |
| | HCH | VN | -30 | 3.98 | 0.002270 | ± 2.5 | PASS |
| | | VN | -20 | 0.98 | 0.000559 | ± 2.5 | PASS |
| | | VN | -10 | 2.25 | 0.001283 | ± 2.5 | PASS |
| | | VN | 0 | 1.28 | 0.000730 | ± 2.5 | PASS |
| | | VN | 10 | -0.13 | -0.000074 | ± 2.5 | PASS |
| | | VN | 20 | -0.09 | -0.000051 | ± 2.5 | PASS |
| | | VN | 30 | -0.66 | -0.000376 | ± 2.5 | PASS |
| | | VN | 40 | 2.61 | 0.001488 | ± 2.5 | PASS |
| | | VN | 50 | 4.92 | 0.002806 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 2.21 | 0.001276 | ± 2.5 | PASS |
| | | VN | -20 | -1.75 | -0.001010 | ± 2.5 | PASS |
| | | VN | -10 | -0.04 | -0.000023 | ± 2.5 | PASS |
| | | VN | 0 | 3.4 | 0.001962 | ± 2.5 | PASS |
| | | VN | 10 | 1.05 | 0.000606 | ± 2.5 | PASS |
| | | VN | 20 | -1.54 | -0.000889 | ± 2.5 | PASS |
| | | VN | 30 | -0.66 | -0.000381 | ± 2.5 | PASS |
| | | VN | 40 | 4.09 | 0.002361 | ± 2.5 | PASS |
| | | VN | 50 | 2.02 | 0.001166 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.87 | 0.002777 | ± 2.5 | PASS |
| | | VN | -20 | 4.36 | 0.002486 | ± 2.5 | PASS |
| | | VN | -10 | 1.78 | 0.001015 | ± 2.5 | PASS |
| | | VN | 0 | -1.9 | -0.001084 | ± 2.5 | PASS |
| | | VN | 10 | -1.7 | -0.000969 | ± 2.5 | PASS |
| | | VN | 20 | 3.91 | 0.002230 | ± 2.5 | PASS |
| | | VN | 30 | 1.29 | 0.000736 | ± 2.5 | PASS |
| | | VN | 40 | 1.19 | 0.000679 | ± 2.5 | PASS |
| | | VN | 50 | 1.17 | 0.000667 | ± 2.5 | PASS |
| | HCH | VN | -30 | -1.61 | -0.000918 | ± 2.5 | PASS |
| | | VN | -20 | 2.48 | 0.001414 | ± 2.5 | PASS |
| | | VN | -10 | -0.13 | -0.000074 | ± 2.5 | PASS |
| | | VN | 0 | -0.2 | -0.000114 | ± 2.5 | PASS |
| | | VN | 10 | -0.86 | -0.000490 | ± 2.5 | PASS |
| | | VN | 20 | 3.39 | 0.001933 | ± 2.5 | PASS |
| | | VN | 30 | 3.53 | 0.002013 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 40 | 3.43 | 0.001956 | ± 2.5 | PASS |
| | | VN | 50 | -0.07 | -0.000040 | ± 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 | -0.66 | -0.000385 | ± 2.5 | PASS |
| | | VN | TN | -0.83 | -0.000485 | ± 2.5 | PASS |
| | | VH | TN | 2.89 | 0.001688 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.22 | 0.001281 | ± 2.5 | PASS |
| | | VN | TN | 2.63 | 0.001518 | ± 2.5 | PASS |
| | | VH | TN | -0.31 | -0.000179 | ± 2.5 | PASS |
| | HCH | VL | TN | 2.72 | 0.001552 | ± 2.5 | PASS |
| | | VN | TN | -0.27 | -0.000154 | ± 2.5 | PASS |
| | | VH | TN | 4.09 | 0.002334 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 0.29 | 0.000169 | ± 2.5 | PASS |
| | | VN | TN | 3.39 | 0.001980 | ± 2.5 | PASS |
| | | VH | TN | 4.22 | 0.002464 | ± 2.5 | PASS |
| | MCH | VL | TN | 3.4 | 0.001962 | ± 2.5 | PASS |
| | | VN | TN | -0.99 | -0.000571 | ± 2.5 | PASS |
| | | VH | TN | 1.63 | 0.000941 | ± 2.5 | PASS |
| | HCH | VL | TN | -1.93 | -0.001101 | ± 2.5 | PASS |
| | | VN | TN | -0.33 | -0.000188 | ± 2.5 | PASS |
| | | VH | TN | -1.34 | -0.000765 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 0.18 | 0.000105 | ± 2.5 | PASS |
| | | VN | -20 | 2.09 | 0.001220 | ± 2.5 | PASS |
| | | VN | -10 | 0.5 | 0.000292 | ± 2.5 | PASS |
| | | VN | 0 | -0.87 | -0.000508 | ± 2.5 | PASS |
| | | VN | 10 | 1.14 | 0.000666 | ± 2.5 | PASS |
| | | VN | 20 | 0.46 | 0.000269 | ± 2.5 | PASS |
| | | VN | 30 | 3.31 | 0.001933 | ± 2.5 | PASS |
| | | VN | 40 | 2.39 | 0.001396 | ± 2.5 | PASS |
| | | VN | 50 | 0.62 | 0.000362 | ± 2.5 | PASS |
| | MCH | VN | -30 | 0.53 | 0.000306 | ± 2.5 | PASS |
| | | VN | -20 | -0.95 | -0.000548 | ± 2.5 | PASS |
| | | VN | -10 | 0.08 | 0.000046 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 0 | -0.31 | -0.000179 | ± 2.5 | PASS |
| | | VN | 10 | -1.65 | -0.000952 | ± 2.5 | PASS |
| | | VN | 20 | 4.82 | 0.002782 | ± 2.5 | PASS |
| | | VN | 30 | 4.21 | 0.002430 | ± 2.5 | PASS |
| | | VN | 40 | 2.55 | 0.001472 | ± 2.5 | PASS |
| | | VN | 50 | -0.53 | -0.000306 | ± 2.5 | PASS |
| | HCH | VN | -30 | 4.48 | 0.002556 | ± 2.5 | PASS |
| | | VN | -20 | -0.16 | -0.000084 | ± 2.5 | PASS |
| | | VN | -10 | -0.82 | -0.000430 | ± 2.5 | PASS |
| | | VN | 0 | -1.44 | -0.000755 | ± 2.5 | PASS |
| | | VN | 10 | 0.9 | 0.000472 | ± 2.5 | PASS |
| | | VN | 20 | 3.81 | 0.001997 | ± 2.5 | PASS |
| | | VN | 30 | 4.79 | 0.002511 | ± 2.5 | PASS |
| | | VN | 40 | 4.62 | 0.002422 | ± 2.5 | PASS |
| | | VN | 50 | -1.09 | -0.000571 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 1.1 | 0.000635 | ± 2.5 | PASS |
| | | VN | -20 | 2.65 | 0.001530 | ± 2.5 | PASS |
| | | VN | -10 | 4.48 | 0.002586 | ± 2.5 | PASS |
| | | VN | 0 | -0.08 | -0.000046 | ± 2.5 | PASS |
| | | VN | 10 | 3.45 | 0.001991 | ± 2.5 | PASS |
| | | VN | 20 | 0.82 | 0.000473 | ± 2.5 | PASS |
| | | VN | 30 | 2.61 | 0.001506 | ± 2.5 | PASS |
| | | VN | 40 | -1.92 | -0.001108 | ± 2.5 | PASS |
| | | VN | 50 | 4.09 | 0.002361 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.95 | 0.002825 | ± 2.5 | PASS |
| | | VN | -20 | 0.68 | 0.000388 | ± 2.5 | PASS |
| | | VN | -10 | -0.38 | -0.000217 | ± 2.5 | PASS |
| | | VN | 0 | -0.15 | -0.000086 | ± 2.5 | PASS |
| | | VN | 10 | -0.14 | -0.000080 | ± 2.5 | PASS |
| | | VN | 20 | 0.39 | 0.000223 | ± 2.5 | PASS |
| | | VN | 30 | -0.5 | -0.000285 | ± 2.5 | PASS |
| | | VN | 40 | -1.03 | -0.000588 | ± 2.5 | PASS |
| | | VN | 50 | -1.59 | -0.000907 | ± 2.5 | PASS |
| | HCH | VN | -30 | 1.81 | 0.000949 | ± 2.5 | PASS |
| | | VN | -20 | 3.46 | 0.001814 | ± 2.5 | PASS |
| | | VN | -10 | -1.27 | -0.000666 | ± 2.5 | PASS |
| | | VN | 0 | 4.74 | 0.002485 | ± 2.5 | PASS |
| | | VN | 10 | -1.96 | -0.001028 | ± 2.5 | PASS |
| | | VN | 20 | 4.15 | 0.002176 | ± 2.5 | PASS |
| | | VN | 30 | 3.8 | 0.001992 | ± 2.5 | PASS |
| | | VN | 40 | 1.79 | 0.000938 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 50 | 4.61 | 0.002417 | ± 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 | 0.08 | 0.000047 | ± 2.5 | PASS |
| | | VN | TN | 3.56 | 0.002076 | ± 2.5 | PASS |
| | | VH | TN | 4.82 | 0.002810 | ± 2.5 | PASS |
| | MCH | VL | TN | 4.27 | 0.002465 | ± 2.5 | PASS |
| | | VN | TN | 2.75 | 0.001587 | ± 2.5 | PASS |
| | | VH | TN | 1.13 | 0.000652 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.15 | 0.001800 | ± 2.5 | PASS |
| | | VN | TN | 4.85 | 0.002771 | ± 2.5 | PASS |
| | | VH | TN | 2.88 | 0.001646 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 0.54 | 0.000315 | ± 2.5 | PASS |
| | | VN | TN | 2.32 | 0.001353 | ± 2.5 | PASS |
| | | VH | TN | -0.75 | -0.000437 | ± 2.5 | PASS |
| | MCH | VL | TN | 4.45 | 0.002569 | ± 2.5 | PASS |
| | | VN | TN | -0.28 | -0.000162 | ± 2.5 | PASS |
| | | VH | TN | 1.45 | 0.000837 | ± 2.5 | PASS |
| | HCH | VL | TN | -0.82 | -0.000469 | ± 2.5 | PASS |
| | | VN | TN | -1.08 | -0.000617 | ± 2.5 | PASS |
| | | VH | TN | 1.85 | 0.001057 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 16QAM | LCH | VN | -30 | 0.72 | 0.000420 | ± 2.5 | PASS |
| | | VN | -20 | 1.1 | 0.000641 | ± 2.5 | PASS |
| | | VN | -10 | -0.44 | -0.000257 | ± 2.5 | PASS |
| | | VN | 0 | 3.11 | 0.001813 | ± 2.5 | PASS |
| | | VN | 10 | -0.63 | -0.000367 | ± 2.5 | PASS |
| | | VN | 20 | 3.34 | 0.001948 | ± 2.5 | PASS |
| | | VN | 30 | 1.32 | 0.000770 | ± 2.5 | PASS |
| | | VN | 40 | 1.71 | 0.000997 | ± 2.5 | PASS |
| | | VN | 50 | 2.98 | 0.001738 | ± 2.5 | PASS |
| | MCH | VN | -30 | 2.93 | 0.001691 | ± 2.5 | PASS |
| | | VN | -20 | 3.89 | 0.002245 | ± 2.5 | PASS |
| | | VN | -10 | 1.73 | 0.000999 | ± 2.5 | PASS |
| | | VN | 0 | 3.13 | 0.001807 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 10 | 2.39 | 0.001380 | ± 2.5 | PASS |
| | | VN | 20 | 0.06 | 0.000035 | ± 2.5 | PASS |
| | | VN | 30 | 1.53 | 0.000883 | ± 2.5 | PASS |
| | | VN | 40 | 3.69 | 0.002130 | ± 2.5 | PASS |
| | | VN | 50 | 3.19 | 0.001841 | ± 2.5 | PASS |
| | HCH | VN | -30 | -1.71 | -0.000977 | ± 2.5 | PASS |
| | | VN | -20 | 2.15 | 0.001229 | ± 2.5 | PASS |
| | | VN | -10 | 1.44 | 0.000823 | ± 2.5 | PASS |
| | | VN | 0 | -0.83 | -0.000474 | ± 2.5 | PASS |
| | | VN | 10 | 3.18 | 0.001817 | ± 2.5 | PASS |
| | | VN | 20 | 0.63 | 0.000360 | ± 2.5 | PASS |
| | | VN | 30 | 3.07 | 0.001754 | ± 2.5 | PASS |
| | | VN | 40 | 3.97 | 0.002269 | ± 2.5 | PASS |
| | | VN | 50 | 2.09 | 0.001194 | ± 2.5 | PASS |
| QPSK | LCH | VN | -30 | -1.8 | -0.001039 | ± 2.5 | PASS |
| | | VN | -20 | 0.65 | 0.000375 | ± 2.5 | PASS |
| | | VN | -10 | -1.63 | -0.000941 | ± 2.5 | PASS |
| | | VN | 0 | 3.1 | 0.001789 | ± 2.5 | PASS |
| | | VN | 10 | 2.16 | 0.001247 | ± 2.5 | PASS |
| | | VN | 20 | -0.32 | -0.000185 | ± 2.5 | PASS |
| | | VN | 30 | 2.77 | 0.001599 | ± 2.5 | PASS |
| | | VN | 40 | -1.19 | -0.000687 | ± 2.5 | PASS |
| | | VN | 50 | 3.09 | 0.001784 | ± 2.5 | PASS |
| | MCH | VN | -30 | 1.96 | 0.001120 | ± 2.5 | PASS |
| | | VN | -20 | -1.79 | -0.001023 | ± 2.5 | PASS |
| | | VN | -10 | 2.89 | 0.001651 | ± 2.5 | PASS |
| | | VN | 0 | 0.33 | 0.000189 | ± 2.5 | PASS |
| | | VN | 10 | 2.34 | 0.001337 | ± 2.5 | PASS |
| | | VN | 20 | 2.84 | 0.001623 | ± 2.5 | PASS |
| | | VN | 30 | 1.27 | 0.000726 | ± 2.5 | PASS |
| | | VN | 40 | 0.3 | 0.000171 | ± 2.5 | PASS |
| | | VN | 50 | 1.54 | 0.000880 | ± 2.5 | PASS |
| | HCH | VN | -30 | 1.23 | 0.000703 | ± 2.5 | PASS |
| | | VN | -20 | 1.44 | 0.000823 | ± 2.5 | PASS |
| | | VN | -10 | 3.45 | 0.001971 | ± 2.5 | PASS |
| | | VN | 0 | 0.01 | 0.000006 | ± 2.5 | PASS |
| | | VN | 10 | 1.55 | 0.000886 | ± 2.5 | PASS |
| | | VN | 20 | 4.66 | 0.002663 | ± 2.5 | PASS |
| | | VN | 30 | 4.84 | 0.002766 | ± 2.5 | PASS |
| | | VN | 40 | 3.93 | 0.002246 | ± 2.5 | PASS |
| | | VN | 50 | 3.67 | 0.002097 | ± 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 | 4.16 | 0.002422 | ± 2.5 | PASS |
| | | VN | TN | -0.7 | -0.000408 | ± 2.5 | PASS |
| | | VH | TN | 1.66 | 0.000967 | ± 2.5 | PASS |
| | MCH | VL | TN | 3.35 | 0.001934 | ± 2.5 | PASS |
| | | VN | TN | 3.1 | 0.001789 | ± 2.5 | PASS |
| | | VH | TN | 2.99 | 0.001726 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.17 | 0.000097 | ± 2.5 | PASS |
| | | VN | TN | -1.35 | -0.000773 | ± 2.5 | PASS |
| | | VH | TN | 0.56 | 0.000320 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 0.21 | 0.000122 | ± 2.5 | PASS |
| | | VN | TN | 0.28 | 0.000163 | ± 2.5 | PASS |
| | | VH | TN | -1.09 | -0.000635 | ± 2.5 | PASS |
| | MCH | VL | TN | 3.95 | 0.002280 | ± 2.5 | PASS |
| | | VN | TN | -0.66 | -0.000381 | ± 2.5 | PASS |
| | | VH | TN | 4.06 | 0.002343 | ± 2.5 | PASS |
| | HCH | VL | TN | 2.95 | 0.001688 | ± 2.5 | PASS |
| | | VN | TN | 3.07 | 0.001757 | ± 2.5 | PASS |
| | | VH | TN | 3.46 | 0.001980 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 3.69 | 0.002148 | ± 2.5 | PASS |
| | | VN | -20 | 0.54 | 0.000314 | ± 2.5 | PASS |
| | | VN | -10 | 3.63 | 0.002114 | ± 2.5 | PASS |
| | | VN | 0 | 4.02 | 0.002341 | ± 2.5 | PASS |
| | | VN | 10 | -1.49 | -0.000868 | ± 2.5 | PASS |
| | | VN | 20 | 4.79 | 0.002789 | ± 2.5 | PASS |
| | | VN | 30 | 1.91 | 0.001112 | ± 2.5 | PASS |
| | | VN | 40 | 2.43 | 0.001415 | ± 2.5 | PASS |
| | | VN | 50 | -0.68 | -0.000396 | ± 2.5 | PASS |
| | MCH | VN | -30 | -1.94 | -0.001120 | ± 2.5 | PASS |
| | | VN | -20 | -0.54 | -0.000312 | ± 2.5 | PASS |
| | | VN | -10 | 1.77 | 0.001022 | ± 2.5 | PASS |
| | | VN | 0 | 4.61 | 0.002661 | ± 2.5 | PASS |
| | | VN | 10 | -0.33 | -0.000190 | ± 2.5 | PASS |
| | | VN | 20 | -0.37 | -0.000214 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 30 | -1.24 | -0.000716 | ± 2.5 | PASS |
| | | VN | 40 | 4.6 | 0.002655 | ± 2.5 | PASS |
| | | VN | 50 | -0.83 | -0.000479 | ± 2.5 | PASS |
| | HCH | VN | -30 | 3.11 | 0.001780 | ± 2.5 | PASS |
| | | VN | -20 | 4.78 | 0.002735 | ± 2.5 | PASS |
| | | VN | -10 | 3.69 | 0.002112 | ± 2.5 | PASS |
| | | VN | 0 | -0.57 | -0.000326 | ± 2.5 | PASS |
| | | VN | 10 | -1.83 | -0.001047 | ± 2.5 | PASS |
| | | VN | 20 | 3.75 | 0.002146 | ± 2.5 | PASS |
| | | VN | 30 | -1.24 | -0.000710 | ± 2.5 | PASS |
| | | VN | 40 | 3.92 | 0.002243 | ± 2.5 | PASS |
| | | VN | 50 | 3.95 | 0.002260 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | -1.2 | -0.000693 | ± 2.5 | PASS |
| | | VN | -20 | -0.53 | -0.000306 | ± 2.5 | PASS |
| | | VN | -10 | 4.7 | 0.002713 | ± 2.5 | PASS |
| | | VN | 0 | 4.51 | 0.002603 | ± 2.5 | PASS |
| | | VN | 10 | 1.92 | 0.001108 | ± 2.5 | PASS |
| | | VN | 20 | 0.62 | 0.000358 | ± 2.5 | PASS |
| | | VN | 30 | 4.39 | 0.002534 | ± 2.5 | PASS |
| | | VN | 40 | 3.96 | 0.002286 | ± 2.5 | PASS |
| | | VN | 50 | 3.5 | 0.002020 | ± 2.5 | PASS |
| | MCH | VN | -30 | 2.97 | 0.001700 | ± 2.5 | PASS |
| | | VN | -20 | 4.29 | 0.002455 | ± 2.5 | PASS |
| | | VN | -10 | -1.54 | -0.000881 | ± 2.5 | PASS |
| | | VN | 0 | -0.32 | -0.000183 | ± 2.5 | PASS |
| | | VN | 10 | -1.96 | -0.001122 | ± 2.5 | PASS |
| | | VN | 20 | 2.92 | 0.001671 | ± 2.5 | PASS |
| | | VN | 30 | -0.39 | -0.000223 | ± 2.5 | PASS |
| | | VN | 40 | -1.49 | -0.000853 | ± 2.5 | PASS |
| | | VN | 50 | 0.17 | 0.000097 | ± 2.5 | PASS |
| | HCH | VN | -30 | 4.53 | 0.002592 | ± 2.5 | PASS |
| | | VN | -20 | -1.08 | -0.000618 | ± 2.5 | PASS |
| | | VN | -10 | 1.73 | 0.000990 | ± 2.5 | PASS |
| | | VN | 0 | 3.32 | 0.001900 | ± 2.5 | PASS |
| | | VN | 10 | -0.59 | -0.000338 | ± 2.5 | PASS |
| | | VN | 20 | -1.28 | -0.000732 | ± 2.5 | PASS |
| | | VN | 30 | 3.04 | 0.001740 | ± 2.5 | PASS |
| | | VN | 40 | -0.12 | -0.000069 | ± 2.5 | PASS |
| | | VN | 50 | -0.12 | -0.000069 | ± 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 | 3.67 | 0.002134 | ± 2.5 | PASS |
| | | VN | TN | 2.86 | 0.001663 | ± 2.5 | PASS |
| | | VH | TN | 4.48 | 0.002605 | ± 2.5 | PASS |
| | MCH | VL | TN | 0.34 | 0.000196 | ± 2.5 | PASS |
| | | VN | TN | -1.03 | -0.000595 | ± 2.5 | PASS |
| | | VH | TN | 3.76 | 0.002170 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.46 | 0.001983 | ± 2.5 | PASS |
| | | VN | TN | -0.78 | -0.000447 | ± 2.5 | PASS |
| | | VH | TN | -1.21 | -0.000693 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 1.08 | 0.000628 | ± 2.5 | PASS |
| | | VN | TN | 1.53 | 0.000890 | ± 2.5 | PASS |
| | | VH | TN | 4.04 | 0.002349 | ± 2.5 | PASS |
| | MCH | VL | TN | 0.56 | 0.000323 | ± 2.5 | PASS |
| | | VN | TN | 1.59 | 0.000918 | ± 2.5 | PASS |
| | | VH | TN | 0.89 | 0.000514 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.84 | 0.000481 | ± 2.5 | PASS |
| | | VN | TN | -1.87 | -0.001072 | ± 2.5 | PASS |
| | | VH | TN | 4.37 | 0.002504 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 1.21 | 0.000703 | ± 2.5 | PASS |
| | | VN | -20 | -1.57 | -0.000913 | ± 2.5 | PASS |
| | | VN | -10 | 3 | 0.001744 | ± 2.5 | PASS |
| | | VN | 0 | 2.06 | 0.001198 | ± 2.5 | PASS |
| | | VN | 10 | 4.57 | 0.002657 | ± 2.5 | PASS |
| | | VN | 20 | 1.29 | 0.000750 | ± 2.5 | PASS |
| | | VN | 30 | 2.88 | 0.001674 | ± 2.5 | PASS |
| | | VN | 40 | -0.76 | -0.000442 | ± 2.5 | PASS |
| | | VN | 50 | 4.84 | 0.002814 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.49 | 0.002592 | ± 2.5 | PASS |
| | | VN | -20 | 1.76 | 0.001016 | ± 2.5 | PASS |
| | | VN | -10 | 3 | 0.001732 | ± 2.5 | PASS |
| | | VN | 0 | 2.94 | 0.001697 | ± 2.5 | PASS |
| | | VN | 10 | 0.42 | 0.000242 | ± 2.5 | PASS |
| | | VN | 20 | 1.91 | 0.001102 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 30 | 4.37 | 0.002522 | ± 2.5 | PASS |
| | | VN | 40 | 1.31 | 0.000756 | ± 2.5 | PASS |
| | | VN | 50 | 0.45 | 0.000260 | ± 2.5 | PASS |
| | HCH | VN | -30 | 2.62 | 0.001501 | ± 2.5 | PASS |
| | | VN | -20 | 0.34 | 0.000195 | ± 2.5 | PASS |
| | | VN | -10 | 1.84 | 0.001054 | ± 2.5 | PASS |
| | | VN | 0 | 4.99 | 0.002860 | ± 2.5 | PASS |
| | | VN | 10 | 3.68 | 0.002109 | ± 2.5 | PASS |
| | | VN | 20 | 1.3 | 0.000745 | ± 2.5 | PASS |
| | | VN | 30 | 4.41 | 0.002527 | ± 2.5 | PASS |
| | | VN | 40 | -0.16 | -0.000092 | ± 2.5 | PASS |
| | | VN | 50 | 0.88 | 0.000504 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | -0.91 | -0.000525 | ± 2.5 | PASS |
| | | VN | -20 | 3.05 | 0.001760 | ± 2.5 | PASS |
| | | VN | -10 | 4.25 | 0.002453 | ± 2.5 | PASS |
| | | VN | 0 | -1.71 | -0.000987 | ± 2.5 | PASS |
| | | VN | 10 | 1.46 | 0.000843 | ± 2.5 | PASS |
| | | VN | 20 | 2.43 | 0.001403 | ± 2.5 | PASS |
| | | VN | 30 | 1.75 | 0.001010 | ± 2.5 | PASS |
| | | VN | 40 | 1.03 | 0.000595 | ± 2.5 | PASS |
| | | VN | 50 | 2.25 | 0.001299 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.83 | 0.002768 | ± 2.5 | PASS |
| | | VN | -20 | 0.77 | 0.000441 | ± 2.5 | PASS |
| | | VN | -10 | 2.89 | 0.001656 | ± 2.5 | PASS |
| | | VN | 0 | 1.88 | 0.001077 | ± 2.5 | PASS |
| | | VN | 10 | -1.45 | -0.000831 | ± 2.5 | PASS |
| | | VN | 20 | -0.69 | -0.000395 | ± 2.5 | PASS |
| | | VN | 30 | 2.35 | 0.001347 | ± 2.5 | PASS |
| | | VN | 40 | 3.34 | 0.001914 | ± 2.5 | PASS |
| | | VN | 50 | 1.87 | 0.001072 | ± 2.5 | PASS |
| | HCH | VN | -30 | 2.66 | 0.001524 | ± 2.5 | PASS |
| | | VN | -20 | -0.94 | -0.000539 | ± 2.5 | PASS |
| | | VN | -10 | 0.2 | 0.000115 | ± 2.5 | PASS |
| | | VN | 0 | 3.81 | 0.002183 | ± 2.5 | PASS |
| | | VN | 10 | 4.88 | 0.002797 | ± 2.5 | PASS |
| | | VN | 20 | 3.75 | 0.002149 | ± 2.5 | PASS |
| | | VN | 30 | 4.46 | 0.002556 | ± 2.5 | PASS |
| | | VN | 40 | 4.66 | 0.002670 | ± 2.5 | PASS |
| | | VN | 50 | 2.25 | 0.001289 | ± 2.5 | PASS |