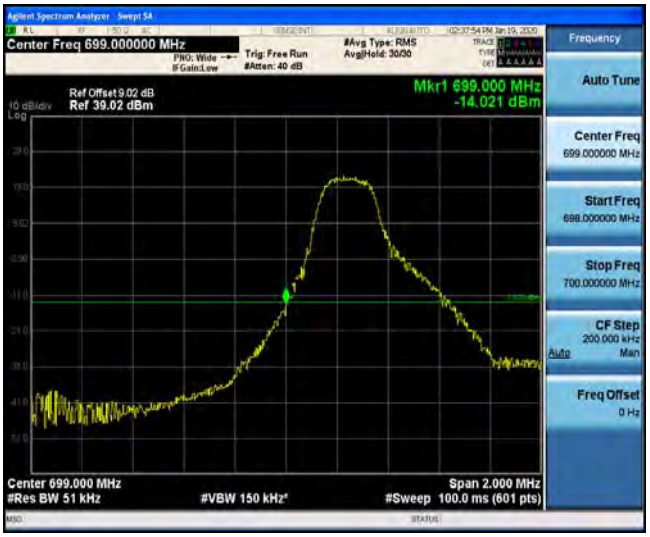
Band12_3MHz_16QAM_23025_1RB#0



Band12_3MHz_16QAM_23025_15RB#0

Band12_3MHz_16QAM_23165_1RB#0

Band12_3MHz_16QAM_23165_15RB#0

Band12_5MHz_QPSK_23035_1RB#0

Band12_5MHz_QPSK_23035_25RB#0

Band12_5MHz_QPSK_23155_1RB#0

Band12_5MHz_QPSK_23155_25RB#0

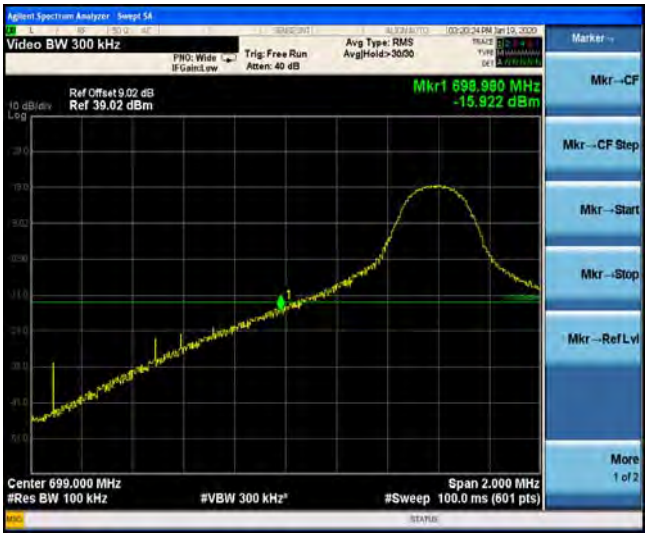
Band12_5MHz_16QAM_23035_1RB#0

Band12_5MHz_16QAM_23035_25RB#0

Band12_5MHz_16QAM_23155_1RB#0

Band12_5MHz_16QAM_23155_25RB#0

Band12_10MHz_QPSK_23060_1RB#0



Band12_10MHz_QPSK_23060_50RB#0

Band12_10MHz_QPSK_23130_1RB#0

Band12_10MHz_QPSK_23130_50RB#0

Band12_10MHz_16QAM_23060_1RB#0

Band12_10MHz_16QAM_23060_50RB#0

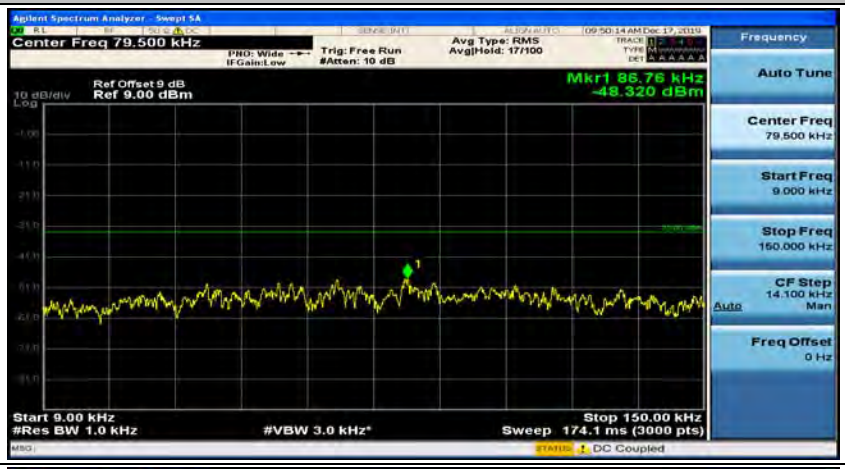
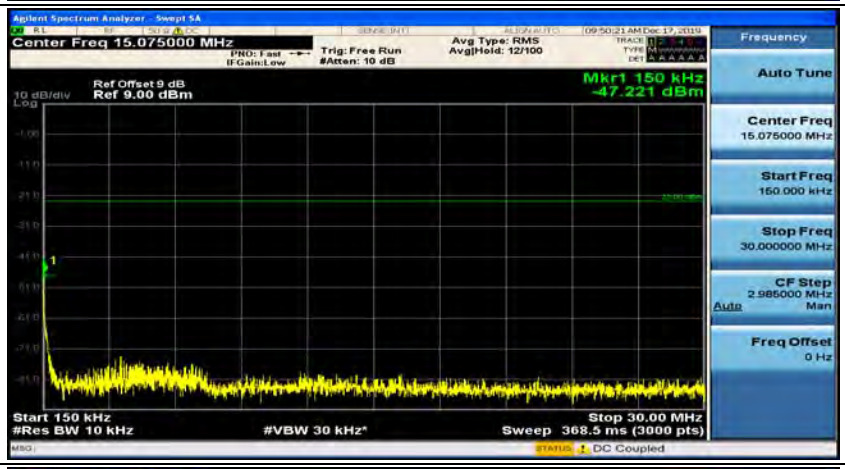
Band12_10MHz_16QAM_23130_1RB#0

Band12_10MHz_16QAM_23130_50RB#0

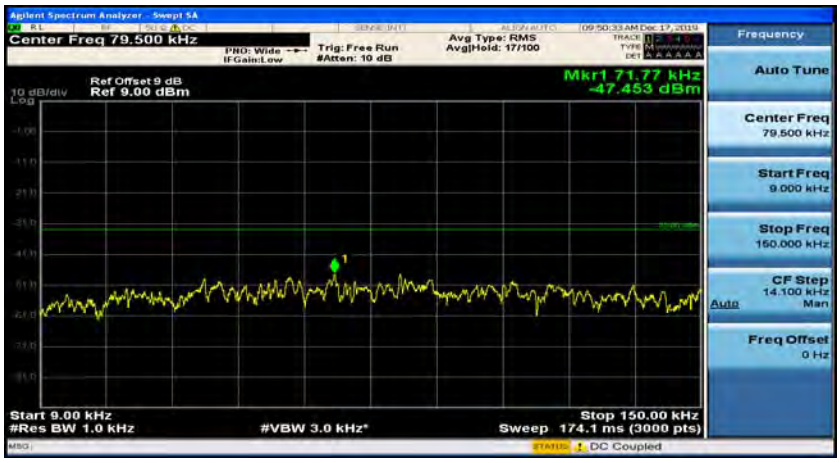
Appendix E: Conducted Spurious Emission

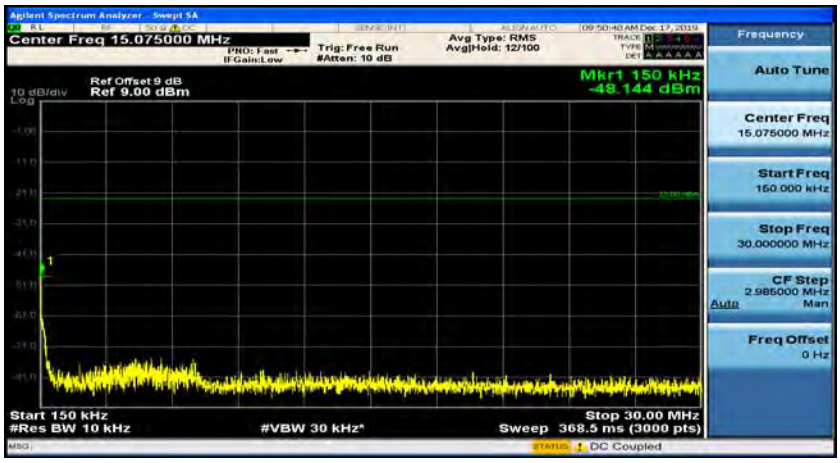
Test Graphs

Channel Bandwidth: 1.4 MHz

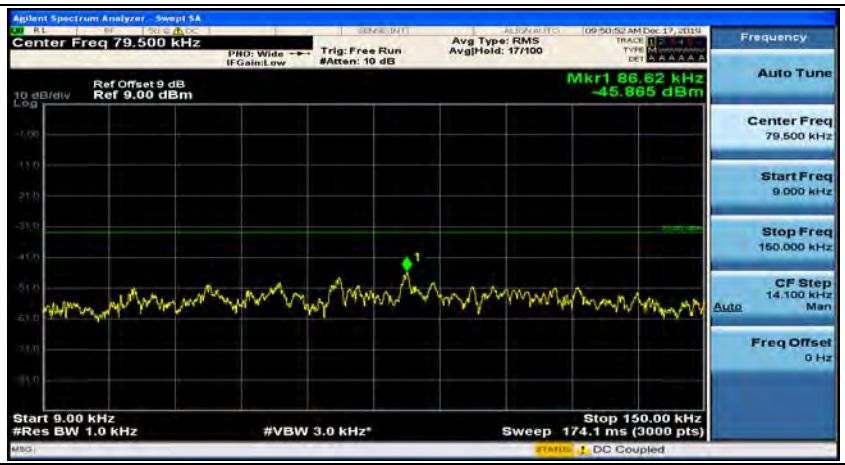
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0



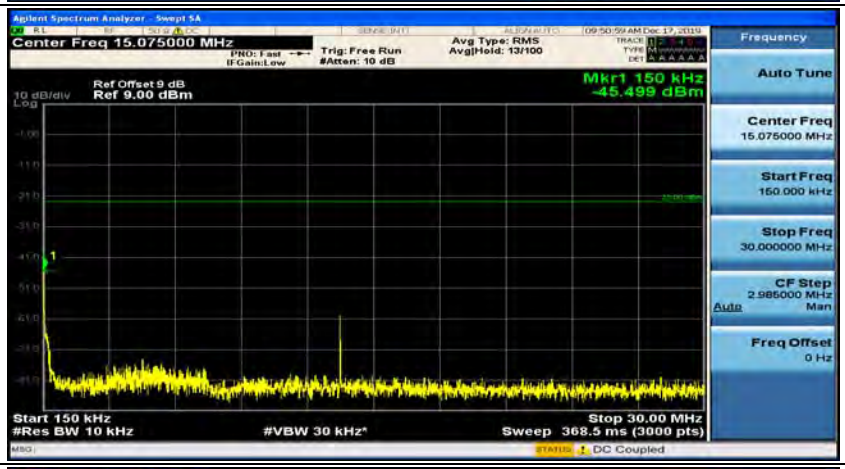
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3



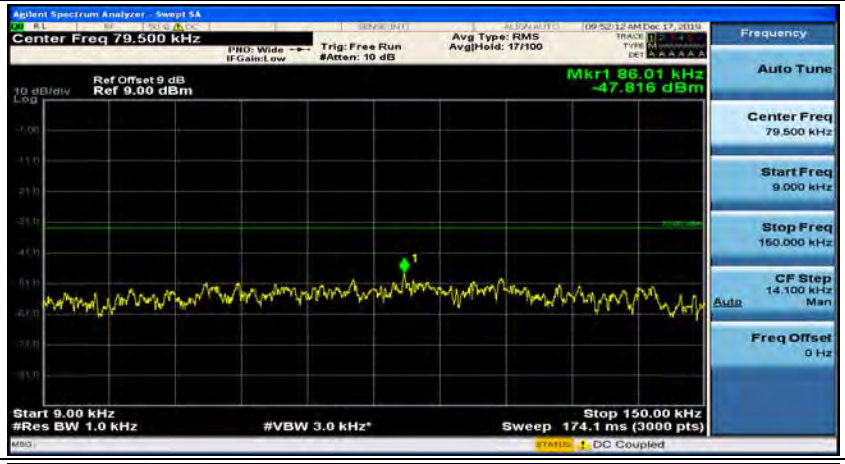
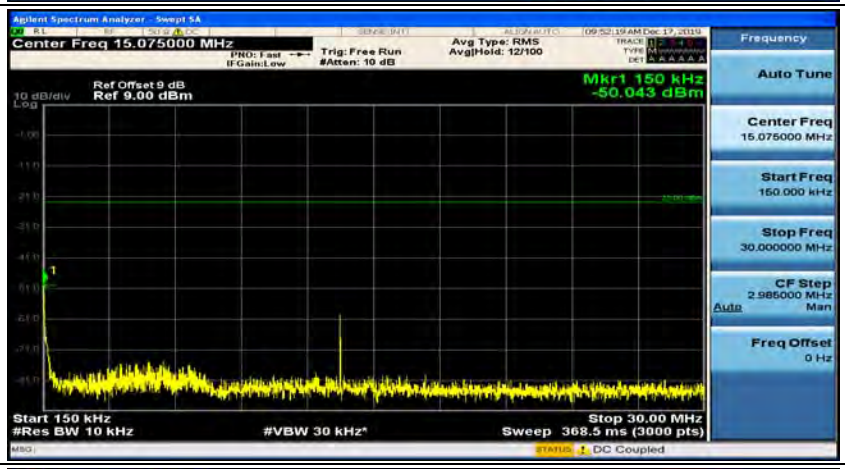


(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5

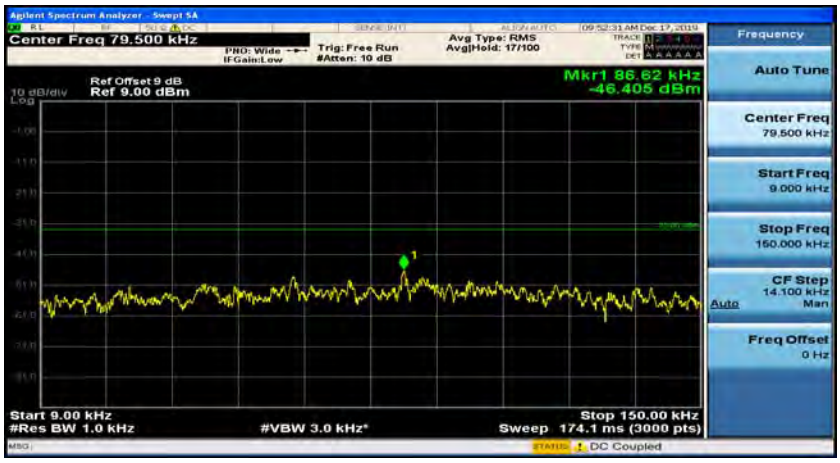

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
09:50:52 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 86.62 kHz
-45.865 dBm
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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

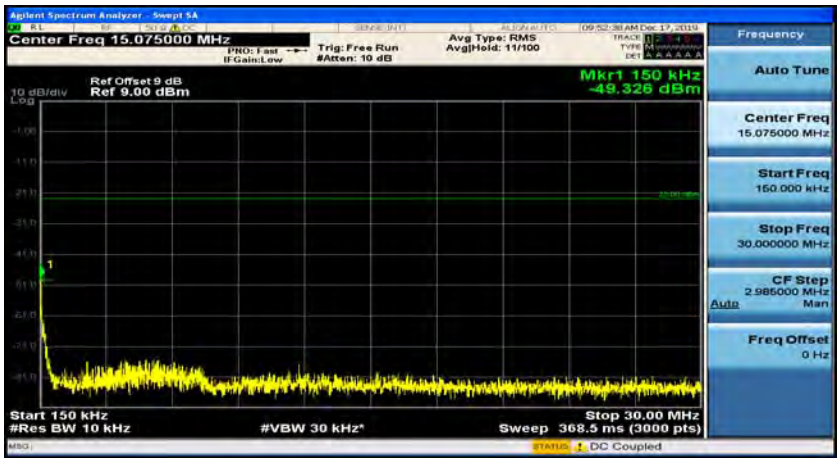

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 13/100
09:50:59 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 150 kHz
-45.499 dBm
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Center Freq
15.075000 MHz
Start Freq
150.000 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
09:51:05 AM Dec 17, 2019
Frequency
Auto Tune
Mkr2 25.732 GHz
-25.955 dBm
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Log
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)

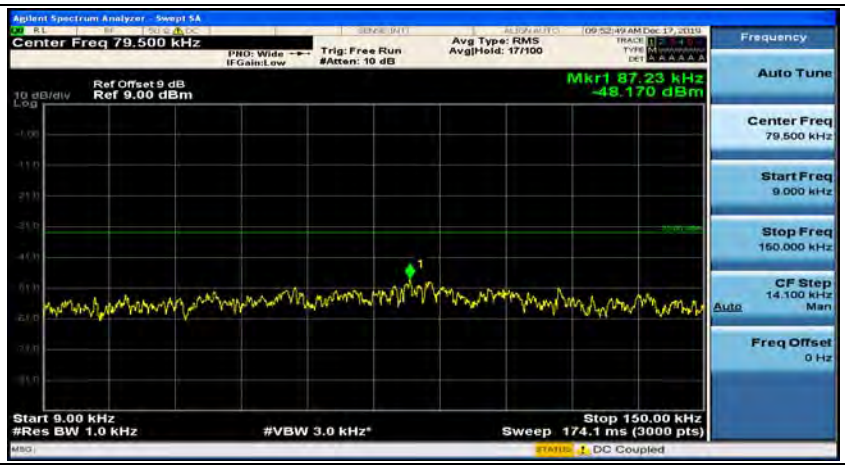
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0



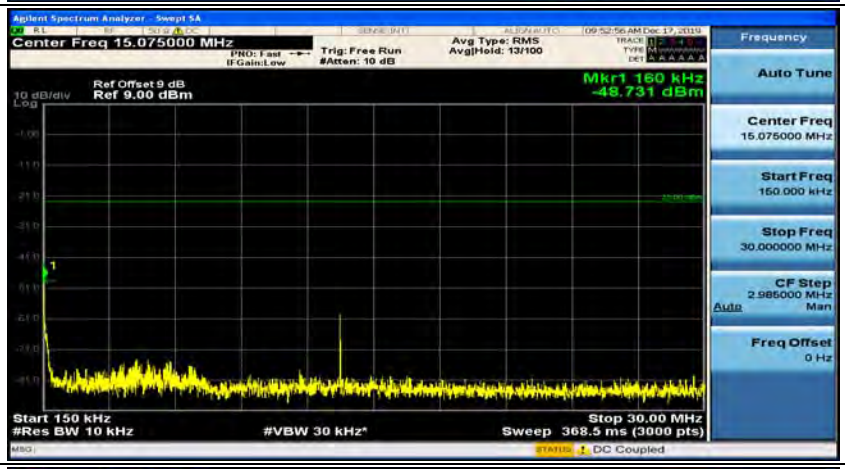
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3



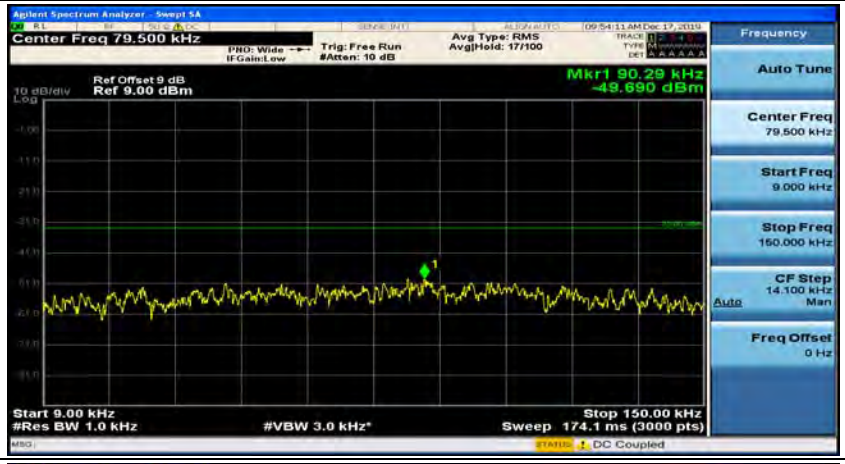
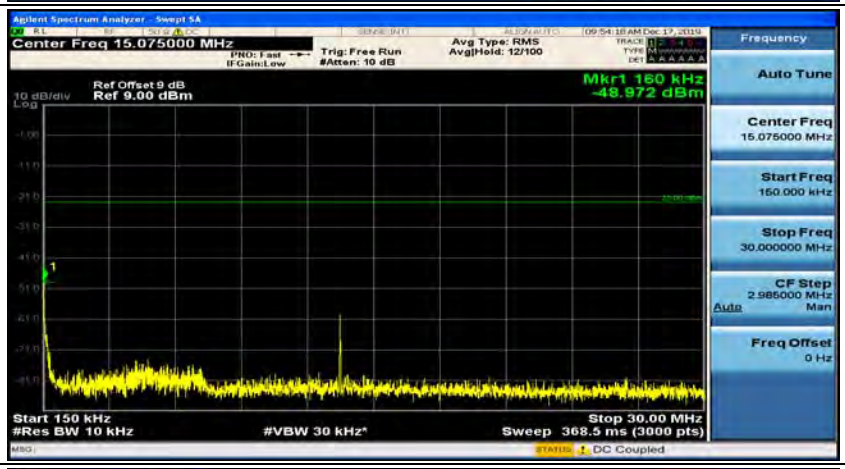


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5

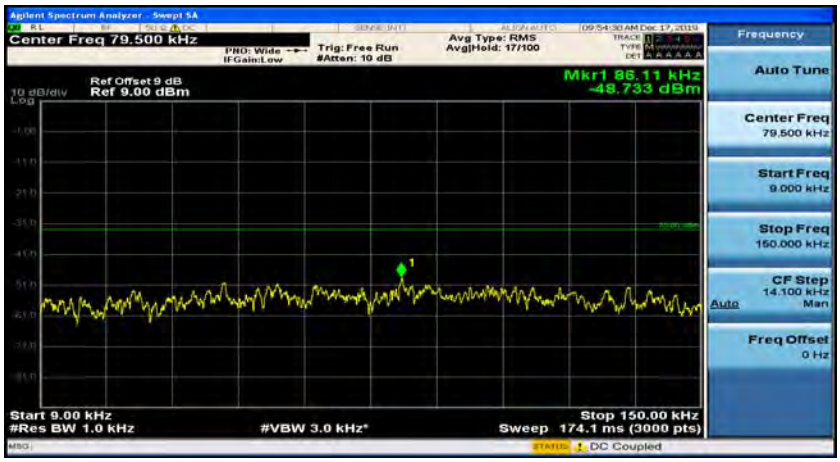

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
09:52:49 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 87.23 kHz
-48.170 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

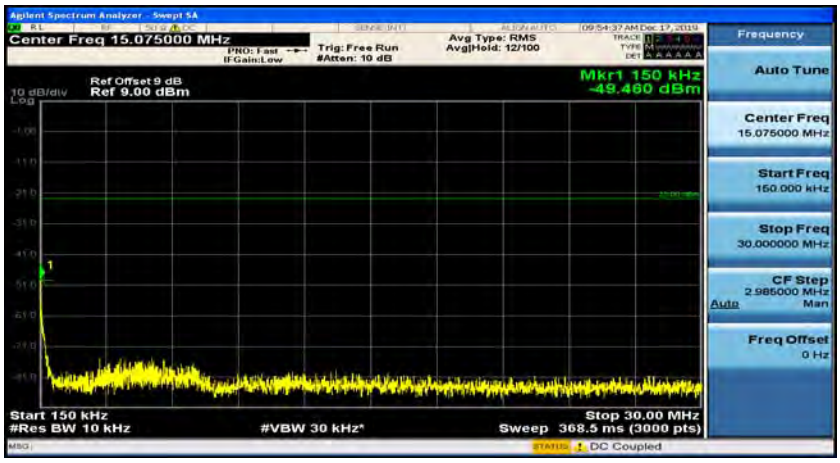

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 13/100
09:52:56 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 160 kHz
-48.731 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
09:53:02 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.602 GHz
-26.491 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

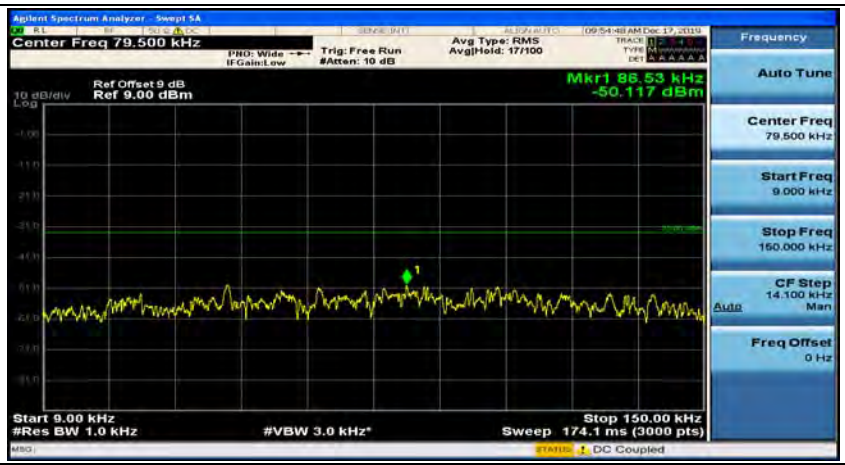
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0



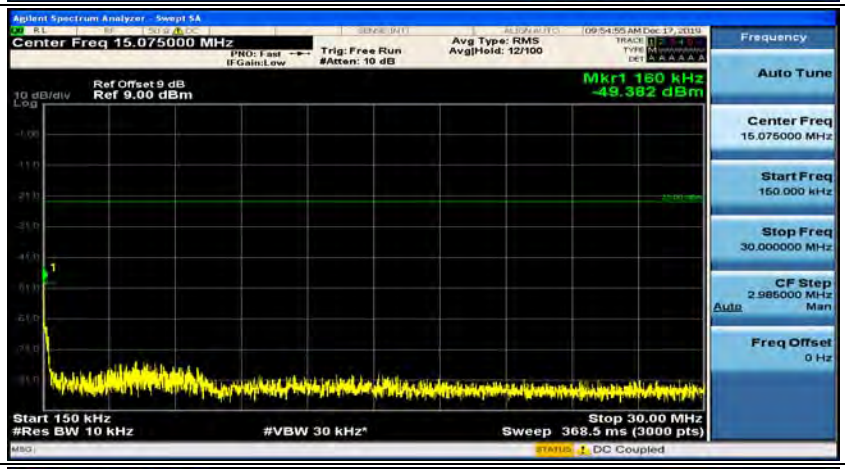
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3



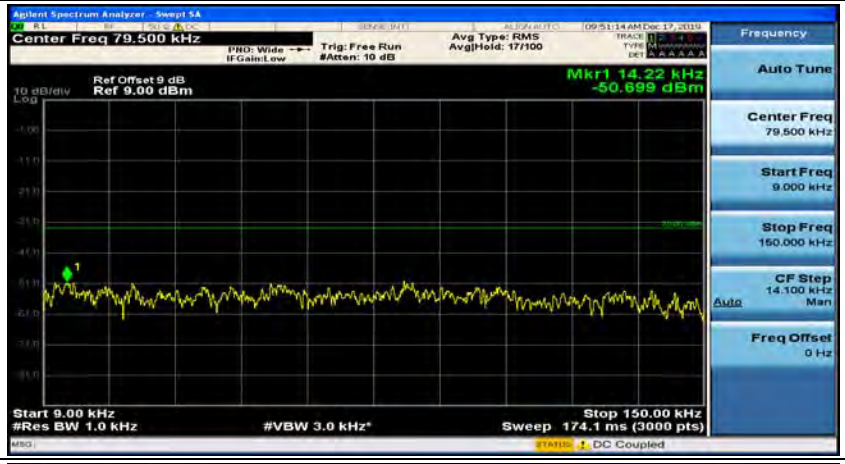
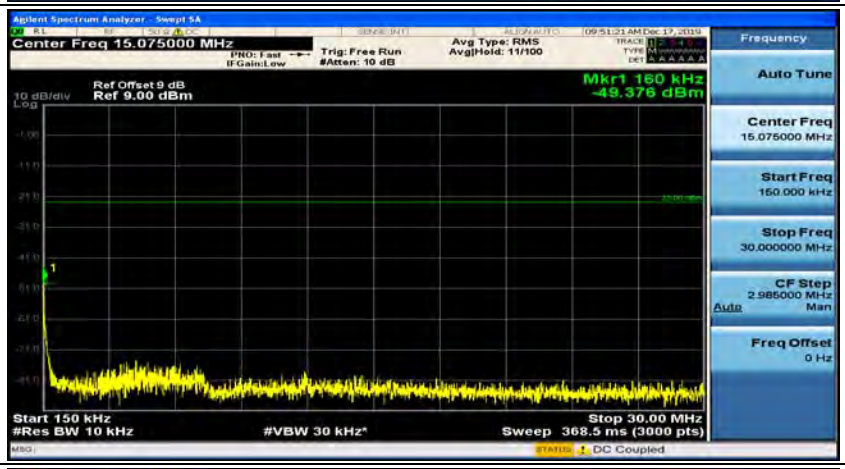


(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5

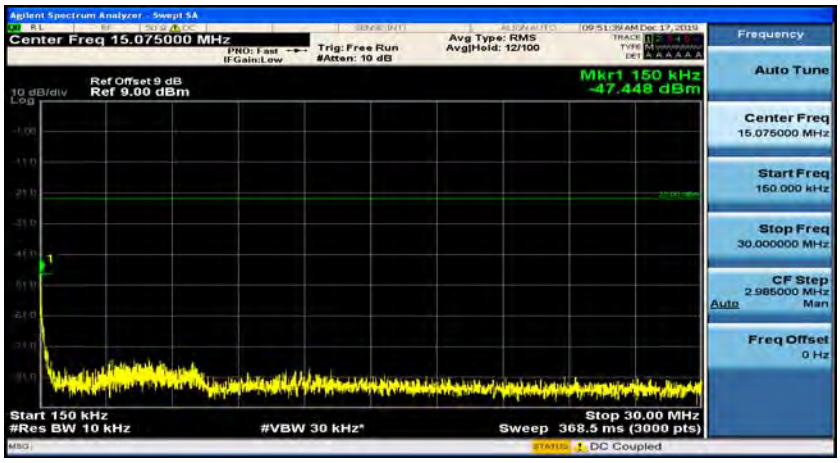

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 86.53 kHz
-50.117 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 160 kHz
-49.382 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz

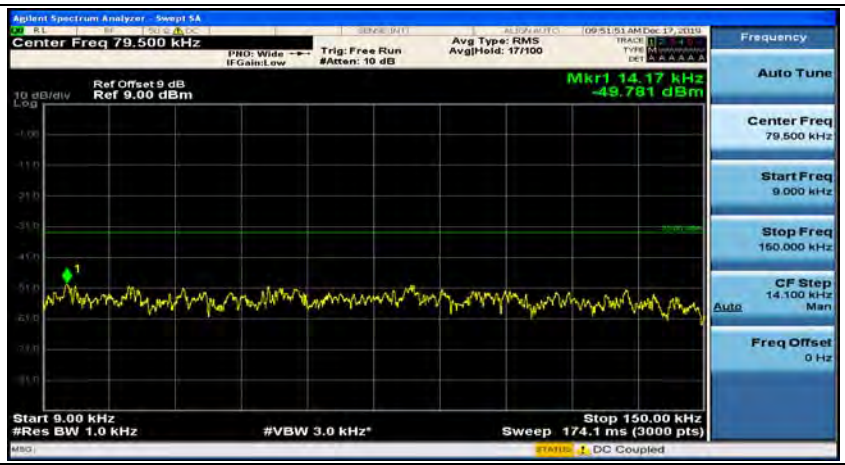

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.619 GHz
-26.266 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
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

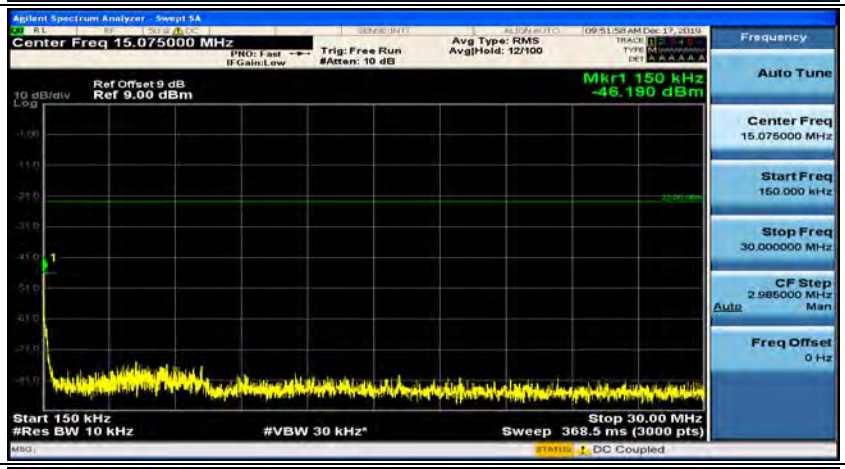
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3

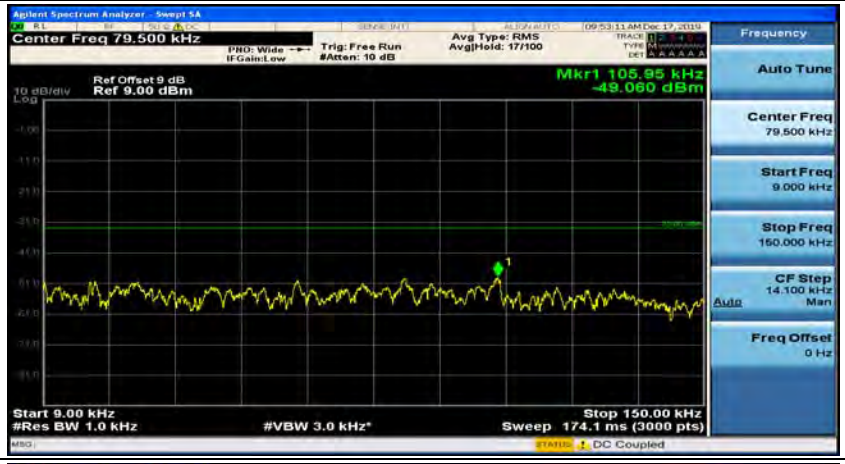
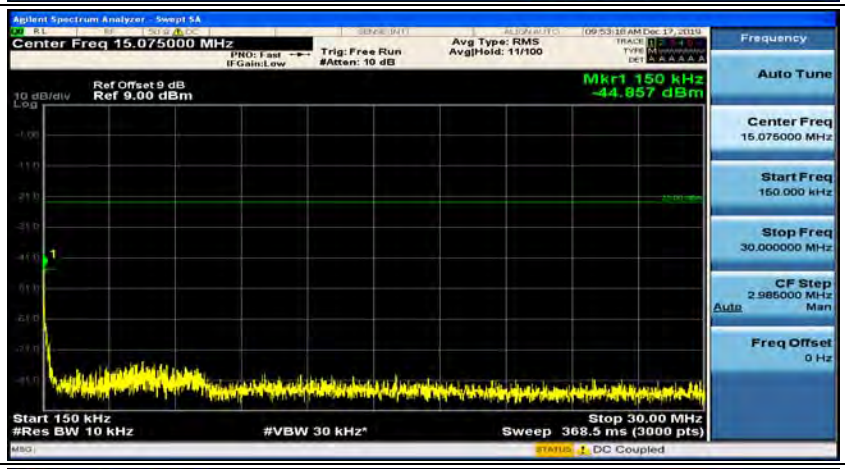


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5

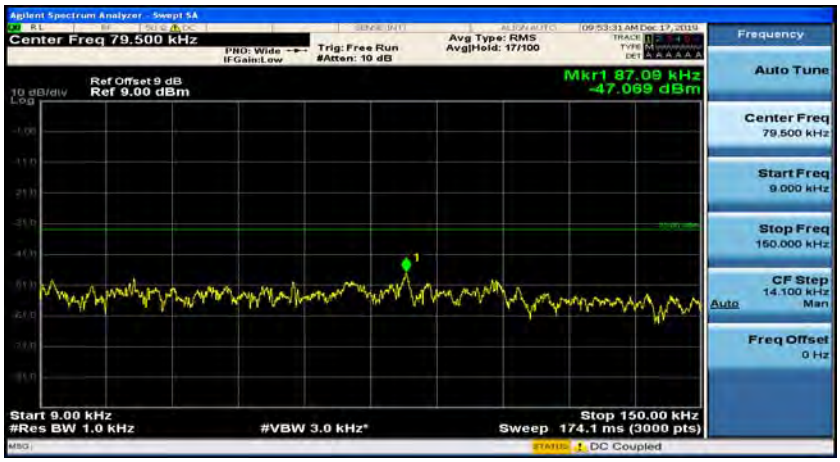

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
09:51:51 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 14.17 kHz
-49.781 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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

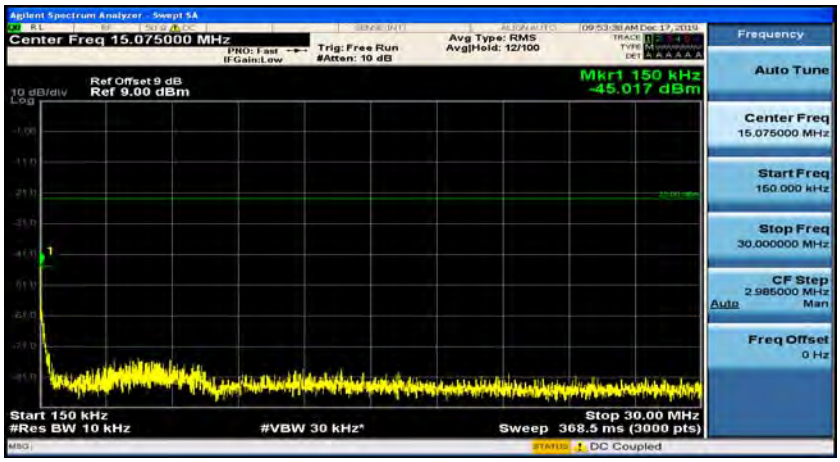

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
09:51:58 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 150 kHz
-46.190 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 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
09:52:03 AM Dec 17, 2019
Frequency
Auto Tune
Mkr2 25.688 GHz
-26.195 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)

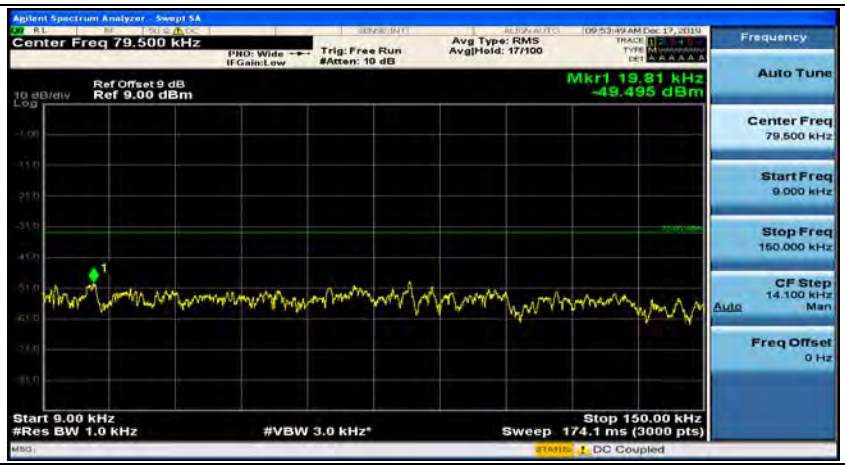
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0



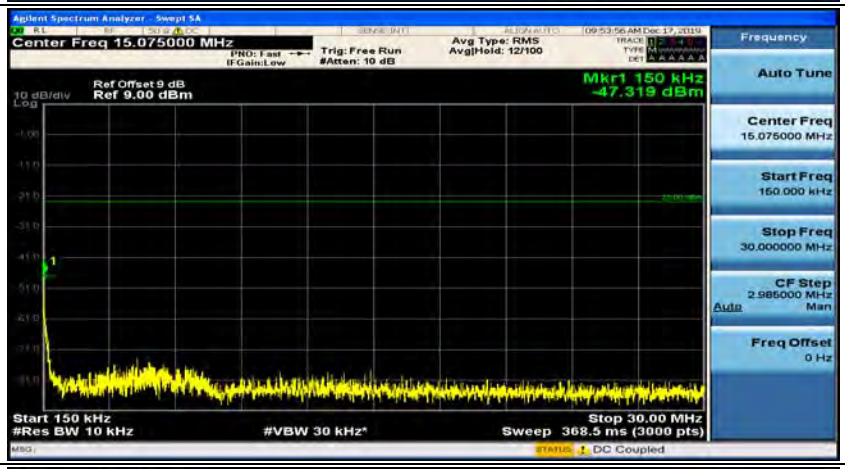
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3



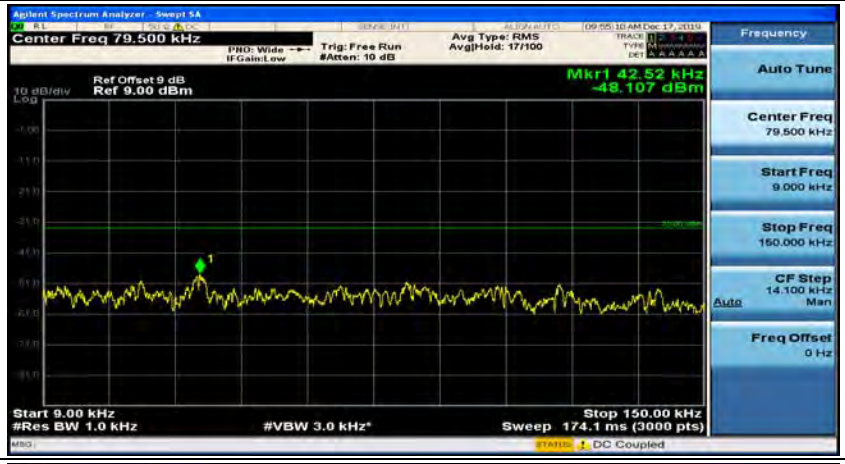
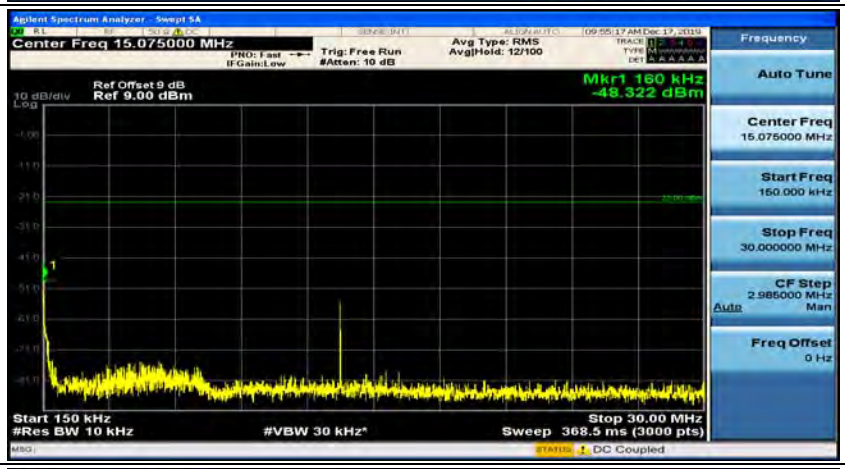


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5

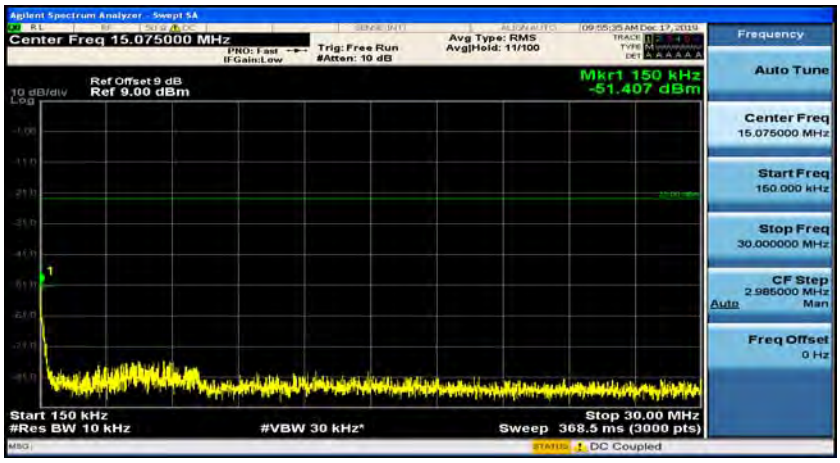

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
09:53:49 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 19.81 kHz
-49.495 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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
09:53:56 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-47.319 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
09:54:02 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.697 GHz
-26.166 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

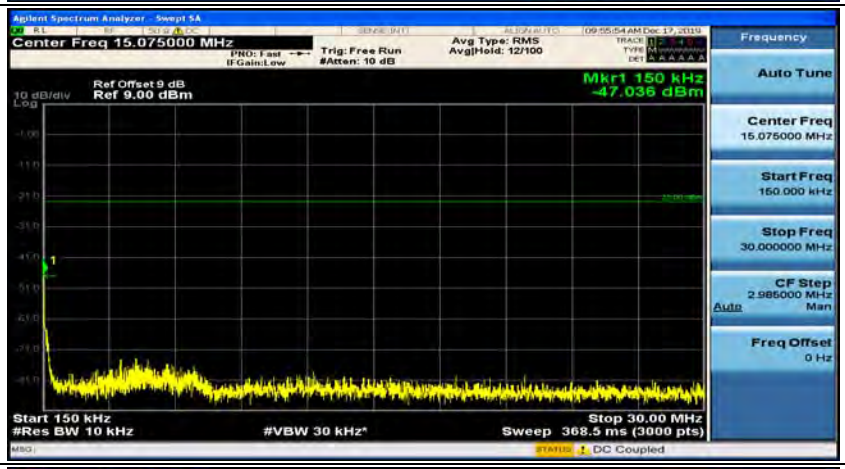
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3



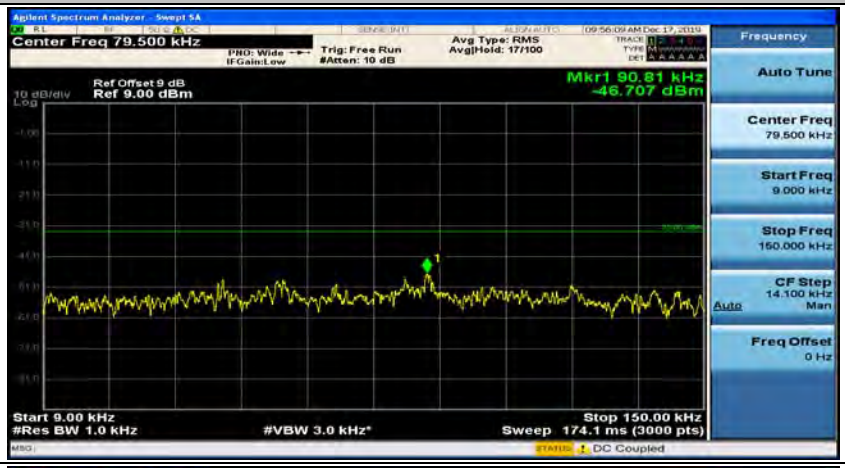
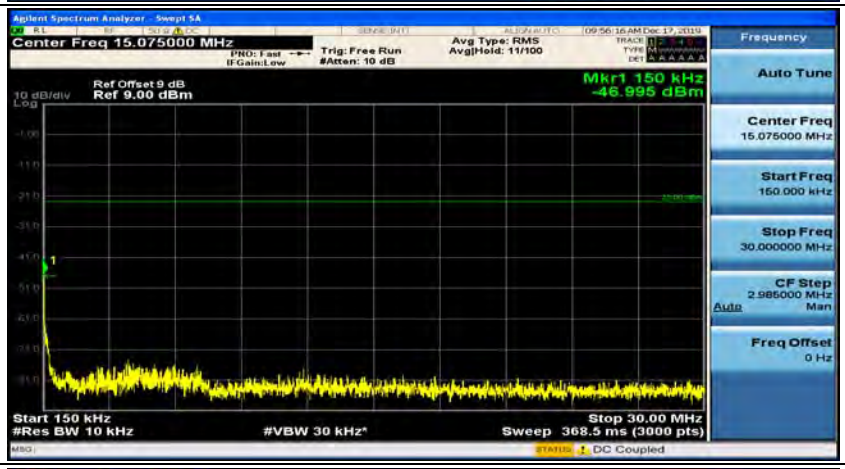
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5


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
09:55:47 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 13.56 kHz
-49.648 dBm
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
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

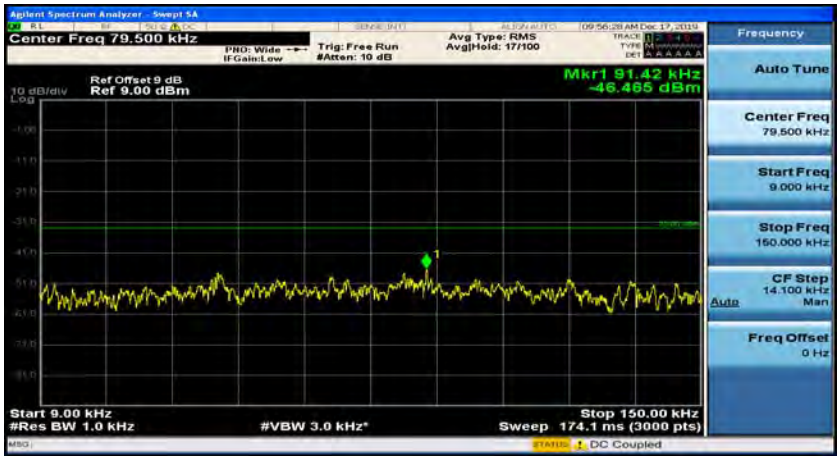

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
09:55:54 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 150 kHz
-47.036 dBm
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Center Freq
15.075000 MHz
Start Freq
150.000 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

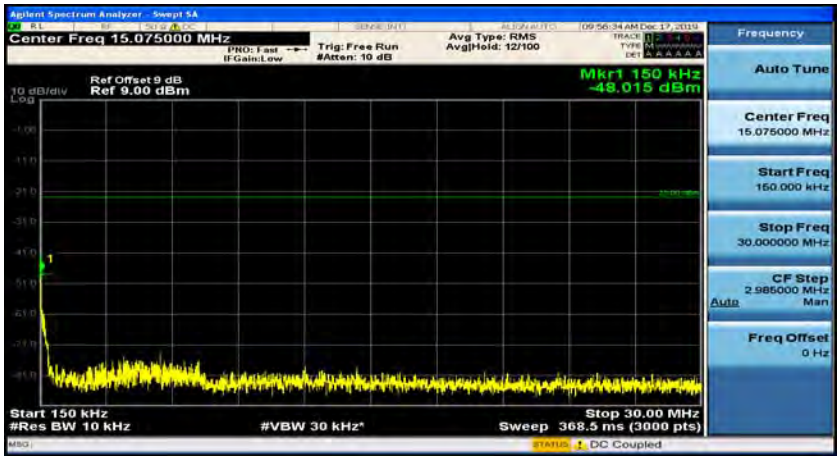

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
09:56:00 AM Dec 17, 2019
Frequency
Auto Tune
Mkr2 25.654 GHz
-26.414 dBm
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
13.015000000 GHz
Start 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: 3 MHz

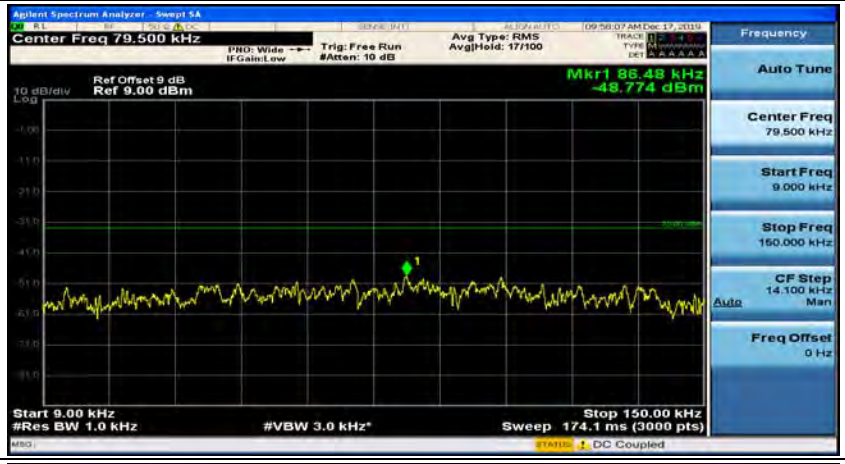
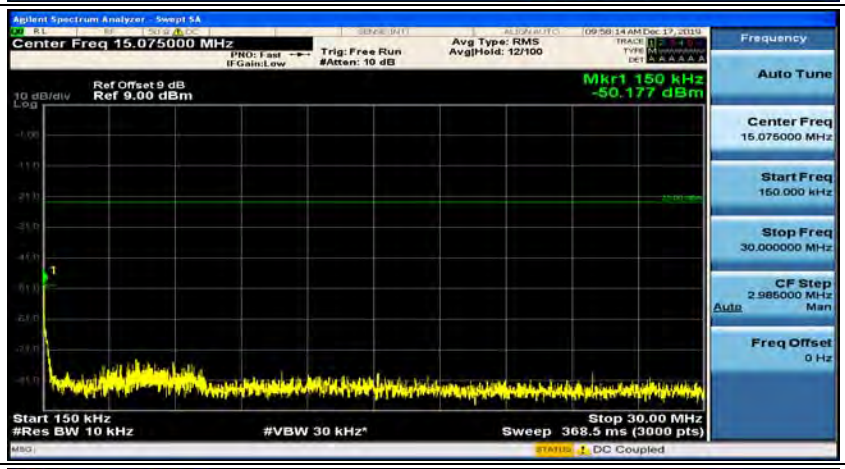
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7

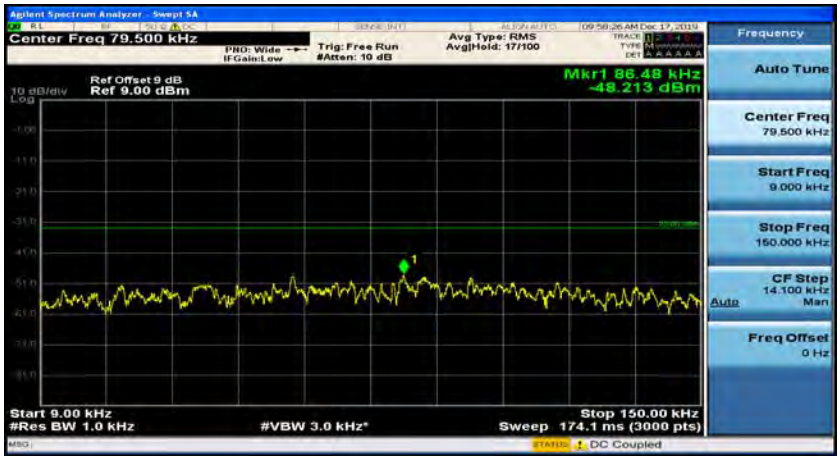

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
09:56:28 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 91.42 kHz
-46.485 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

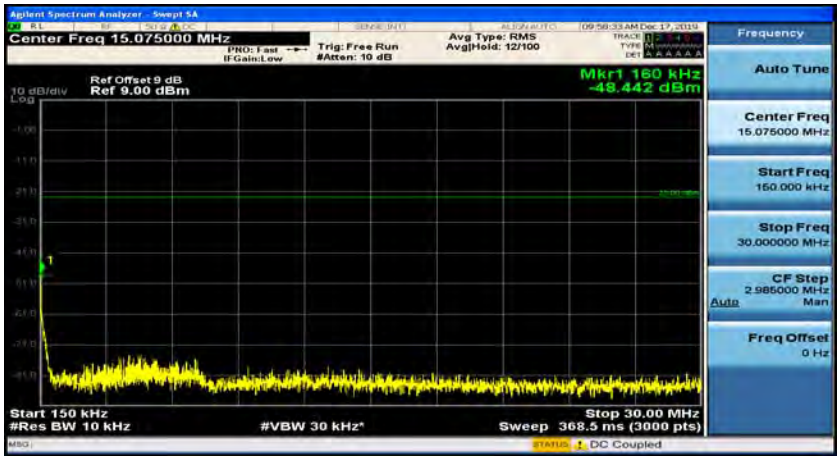

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
09:56:34 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-48.015 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
09:56:40 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.636 GHz
-25.612 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

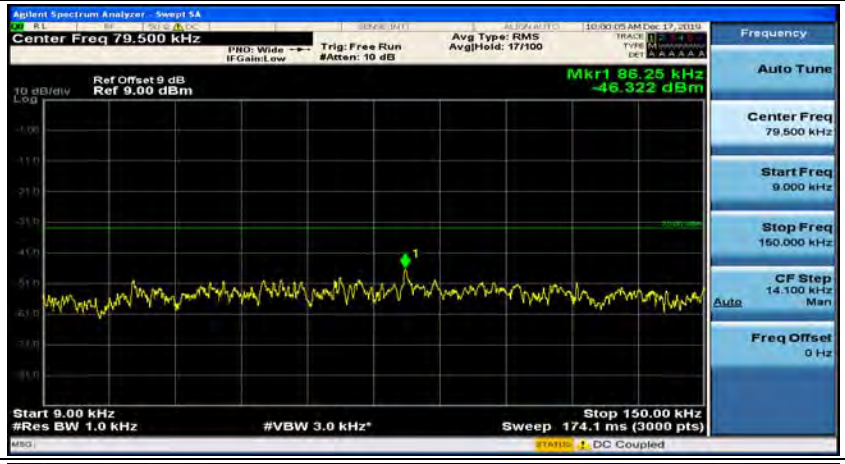
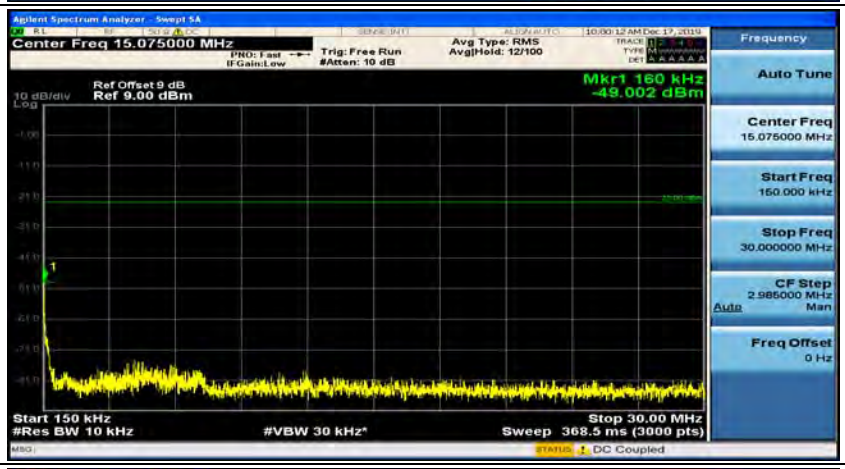
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7

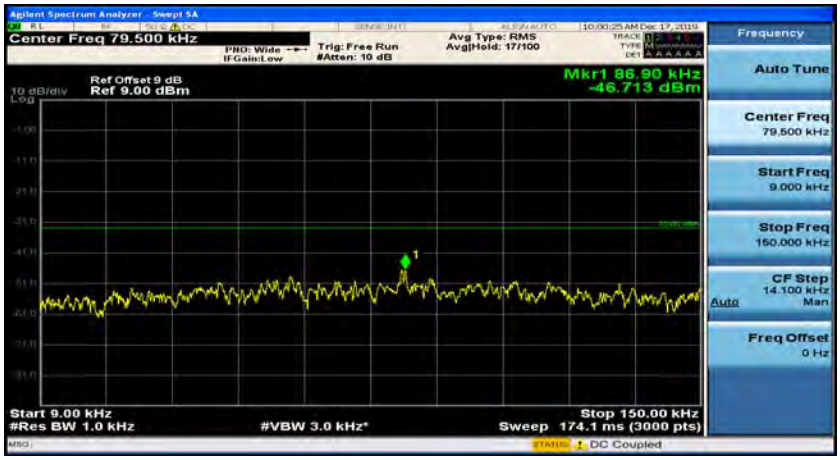

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
09:56:26 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 86.48 kHz
-48.213 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

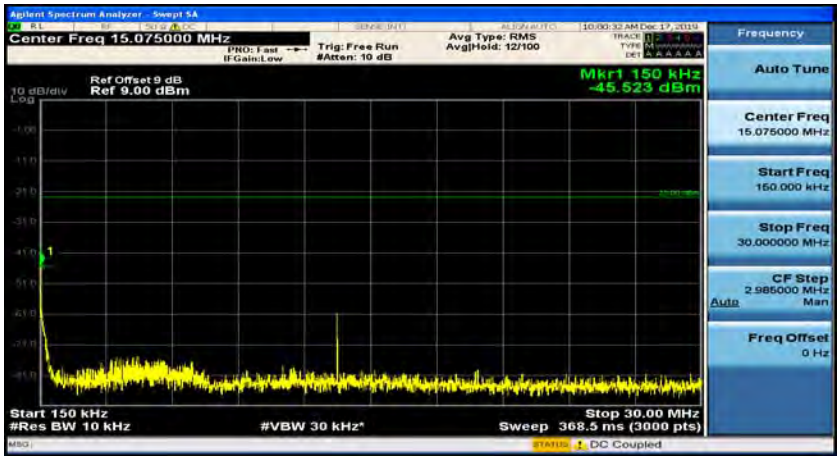

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
09:56:33 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 160 kHz
-48.442 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
09:56:38 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.619 GHz
-26.058 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

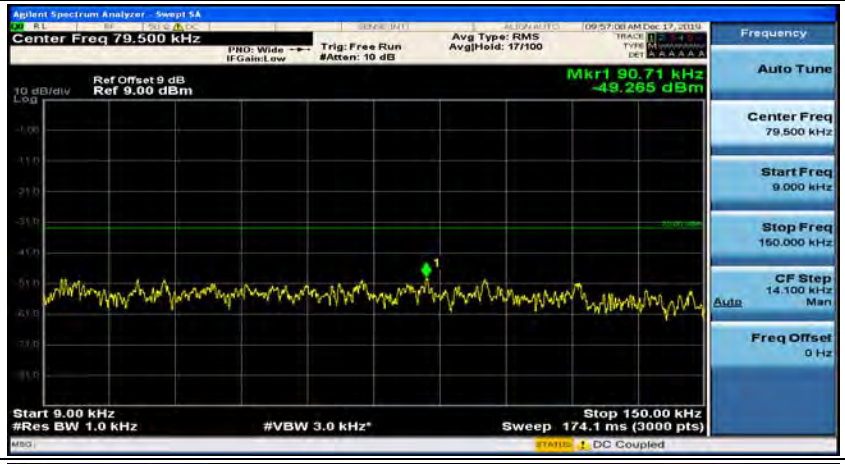
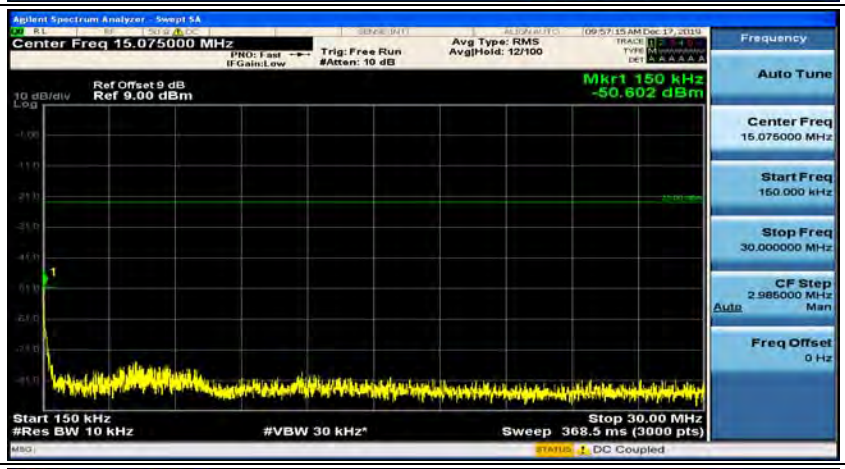
(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#7

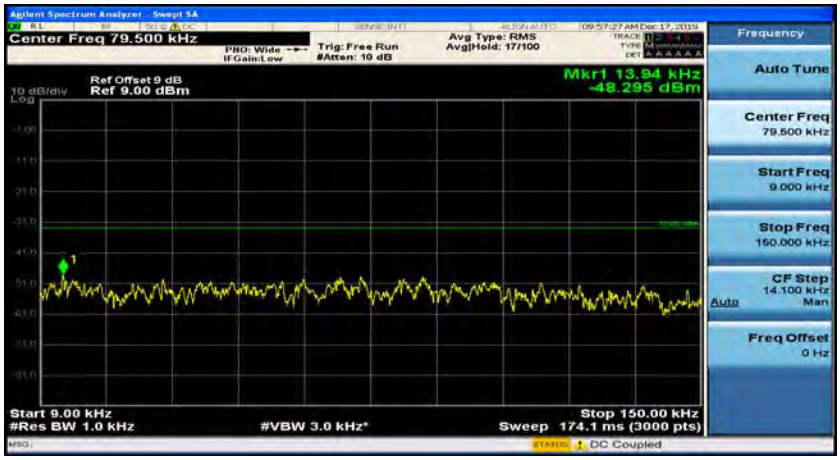

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:00:25 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 86.90 kHz
-46.713 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

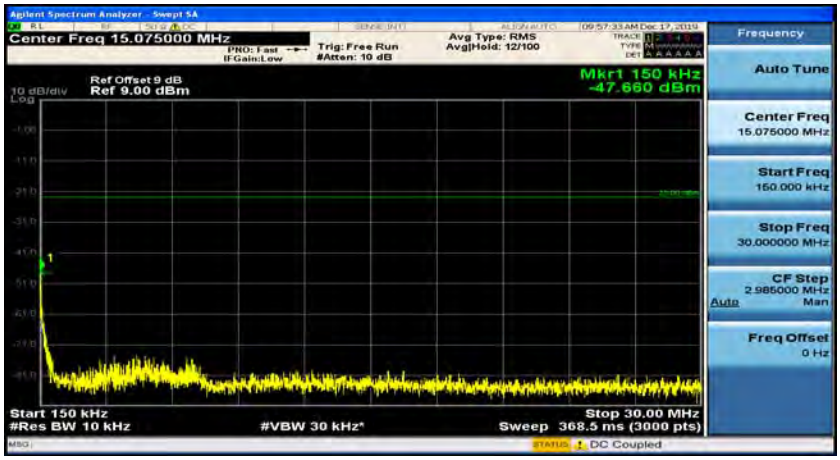

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
10:00:32 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-45.523 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
10:00:37 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.125 GHz
-26.373 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

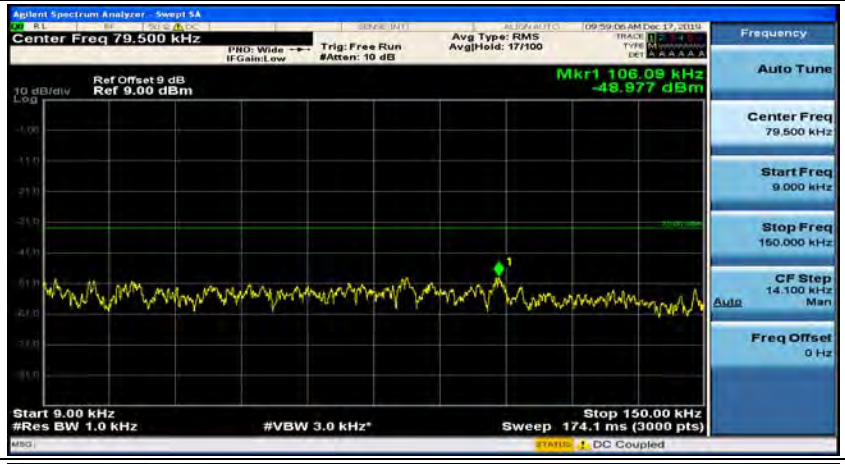
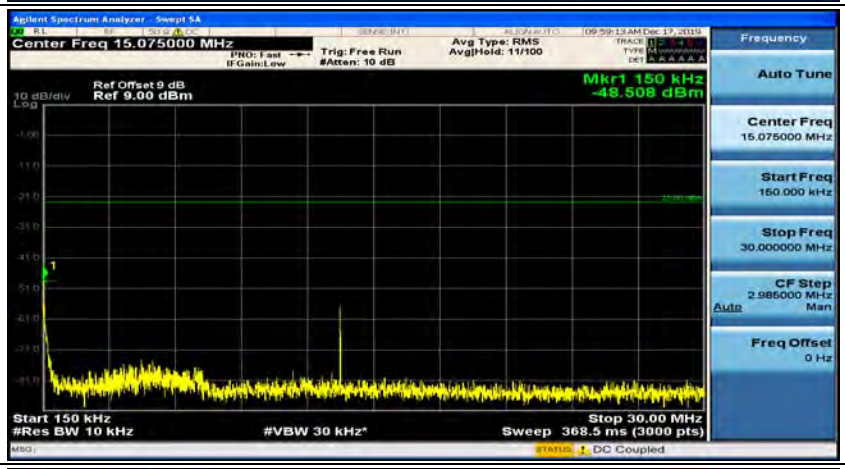
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#7

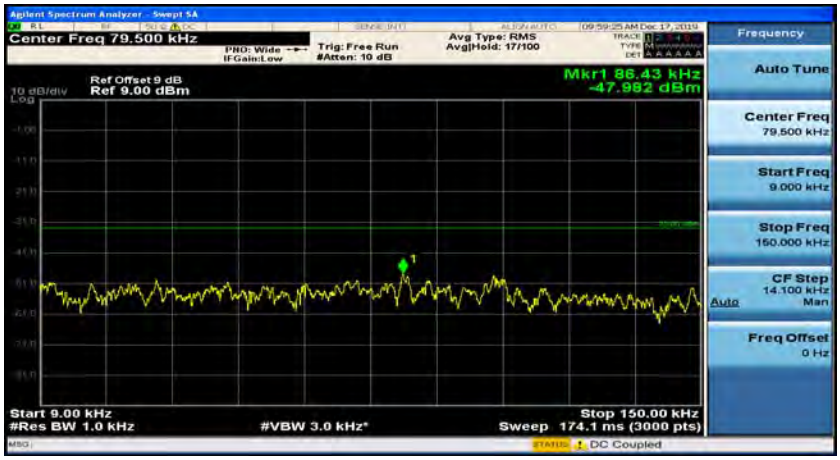

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
09:57:27 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 13.94 kHz
-48.295 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

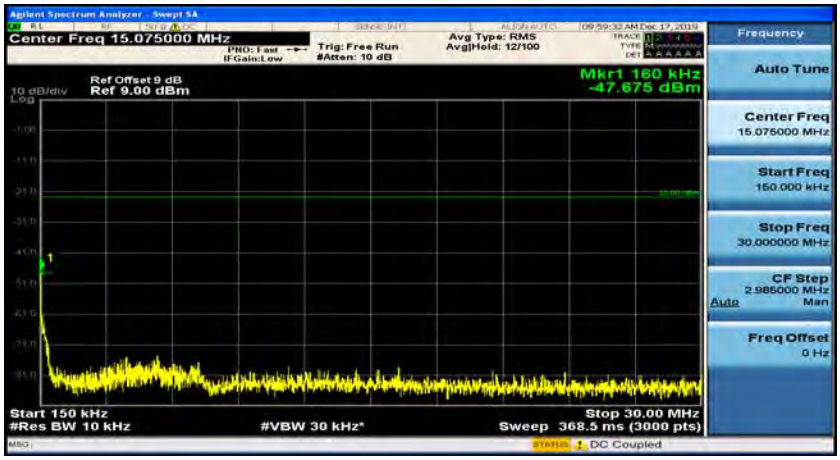

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
09:57:33 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-47.660 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
09:57:39 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.645 GHz
-25.934 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

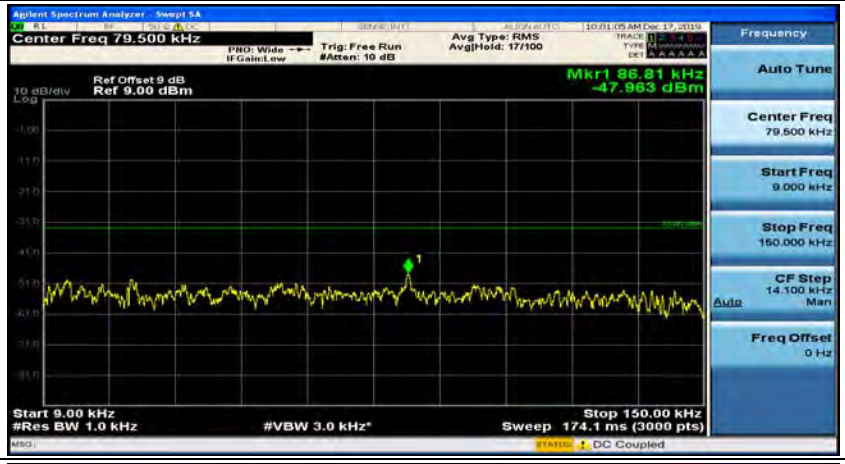
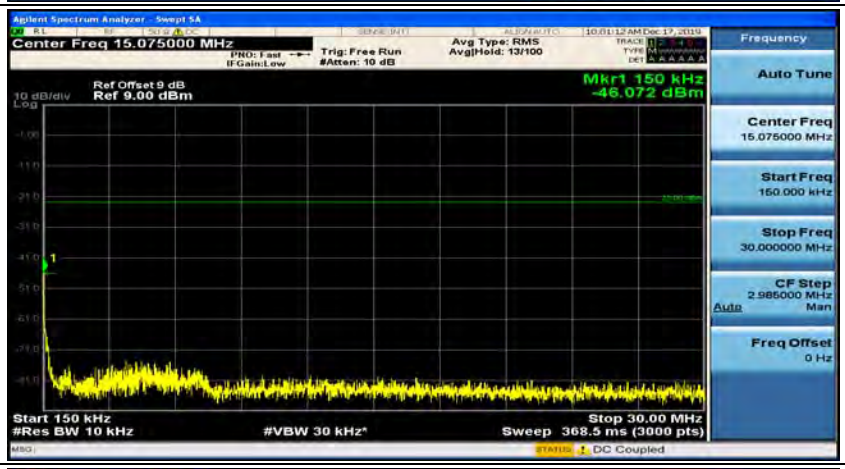
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7

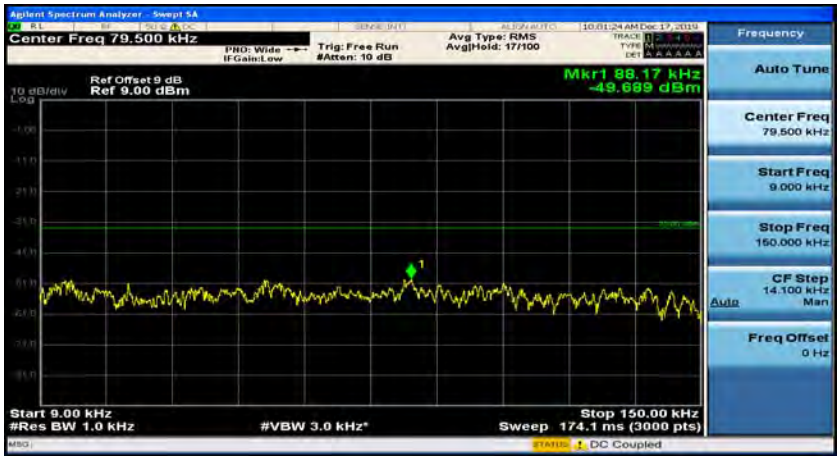

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
09:59:25 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 86.43 kHz
-47.982 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

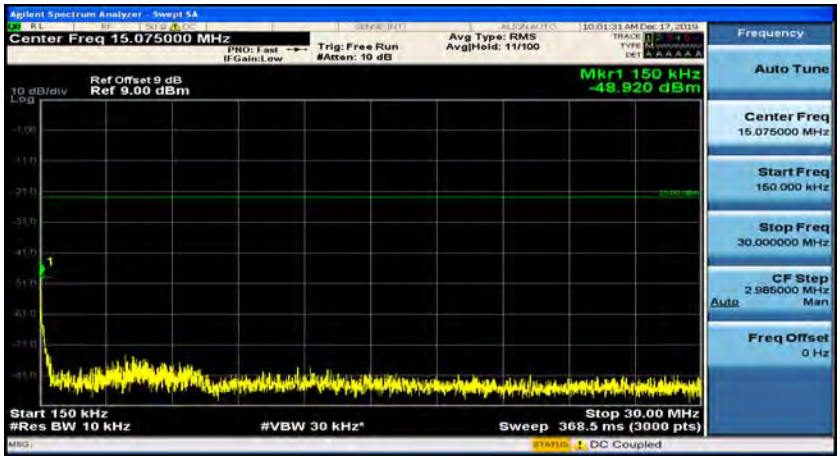

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
09:59:32 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 160 kHz
-47.675 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
09:59:37 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.636 GHz
-26.497 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



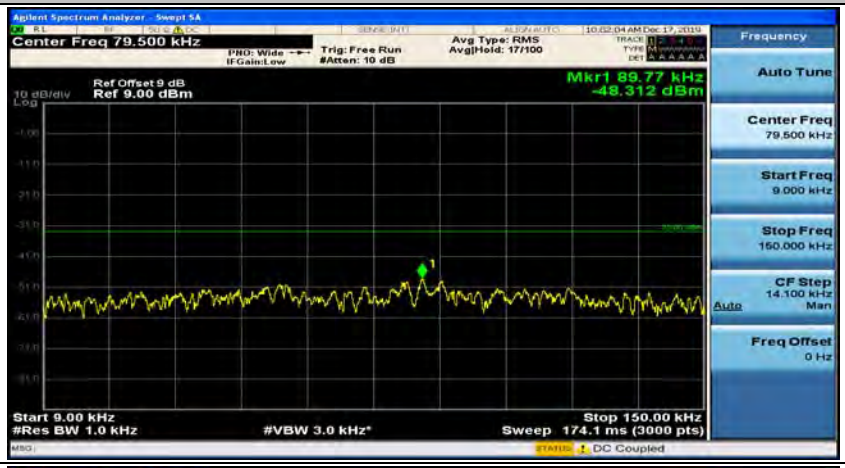
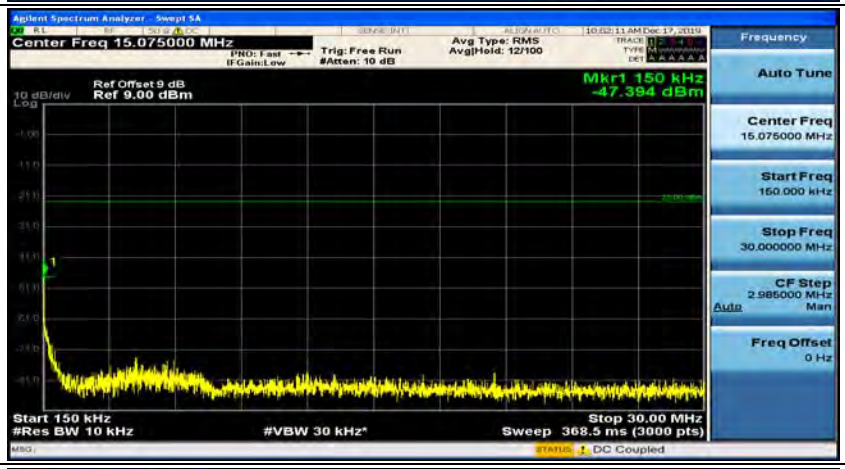
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7


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
10:01:24 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 88.17 kHz
-49.689 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

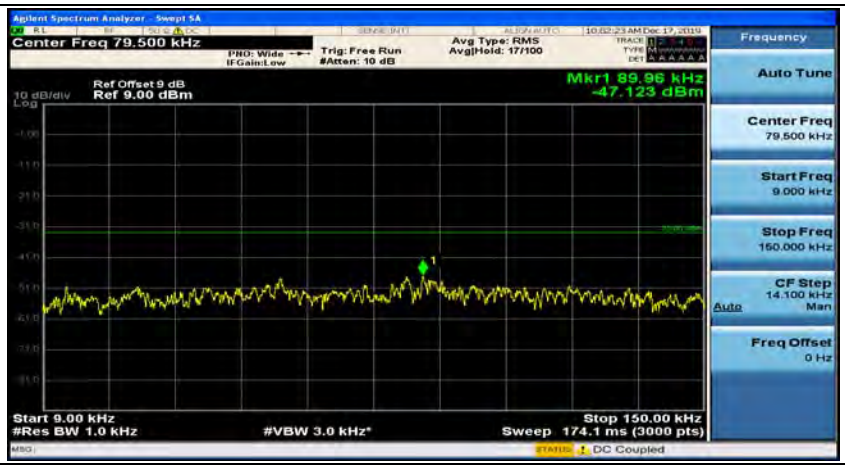

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
10:01:31 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-48.920 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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

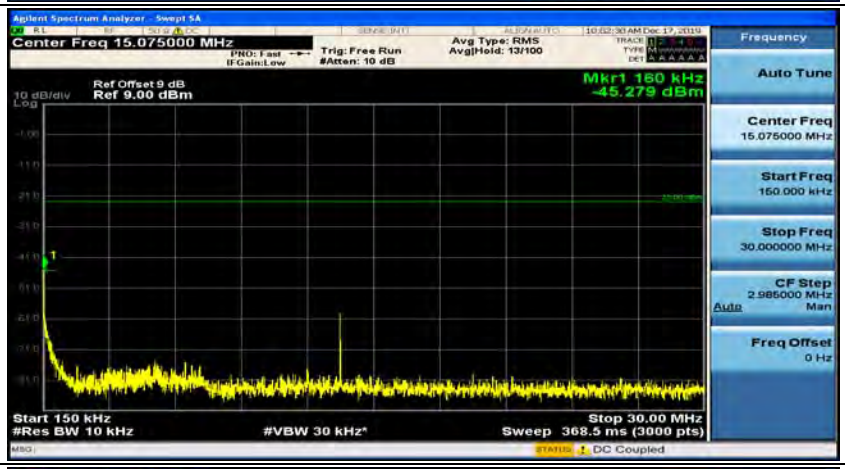

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
10:01:37 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.680 GHz
-26.157 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
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

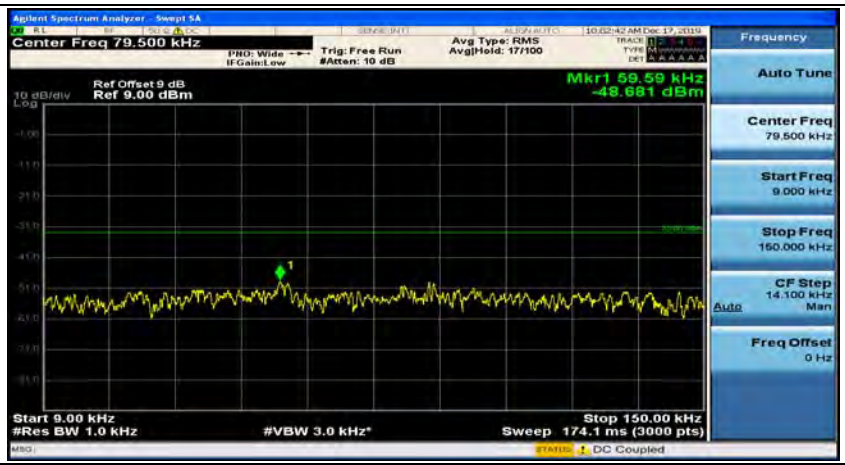
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



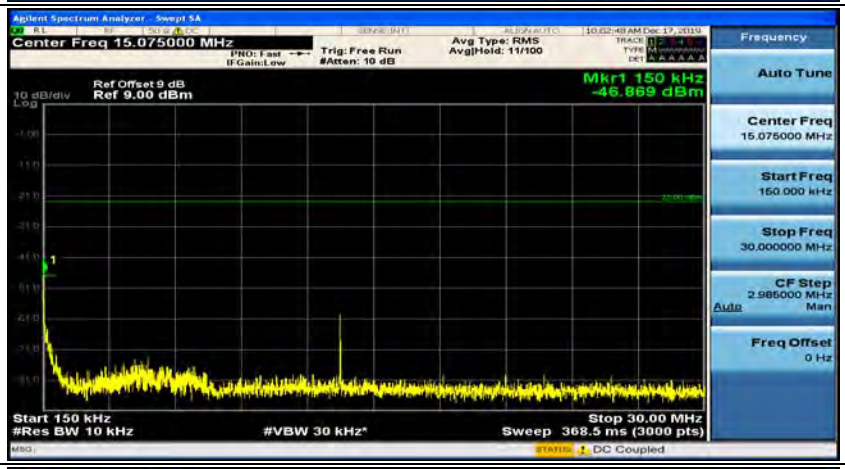
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12



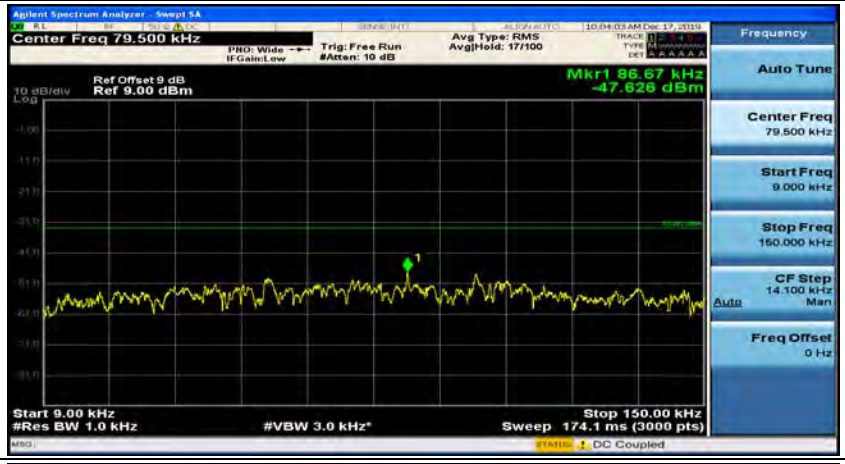
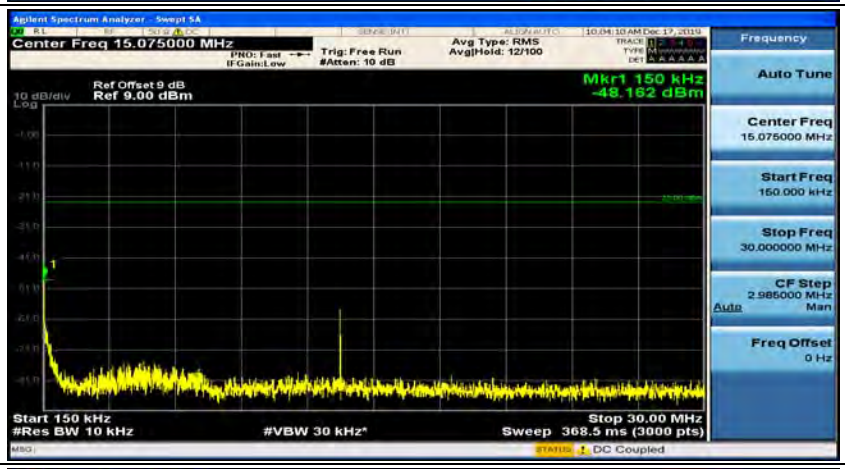


(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

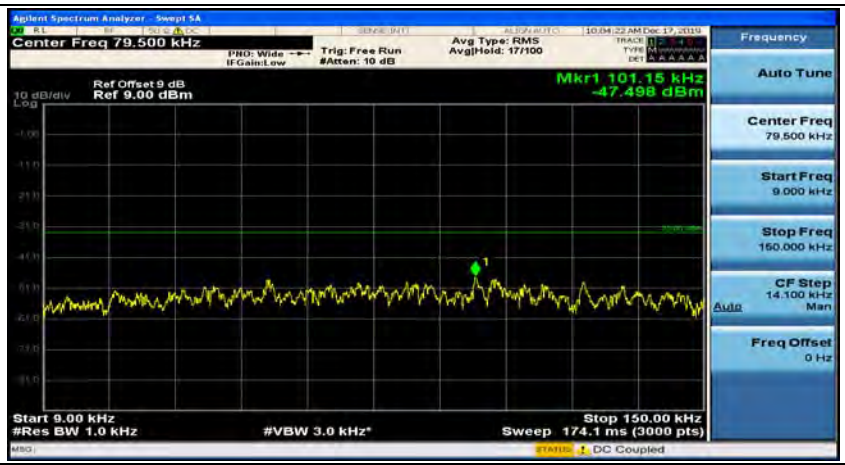

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:02:42 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 59.59 kHz
-48.681 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

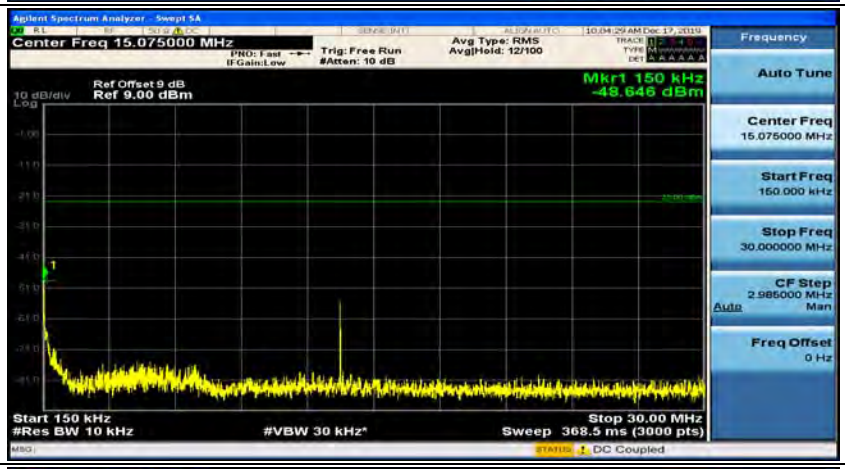

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
10:02:48 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-46.869 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
10:02:54 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.584 GHz
-26.332 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0



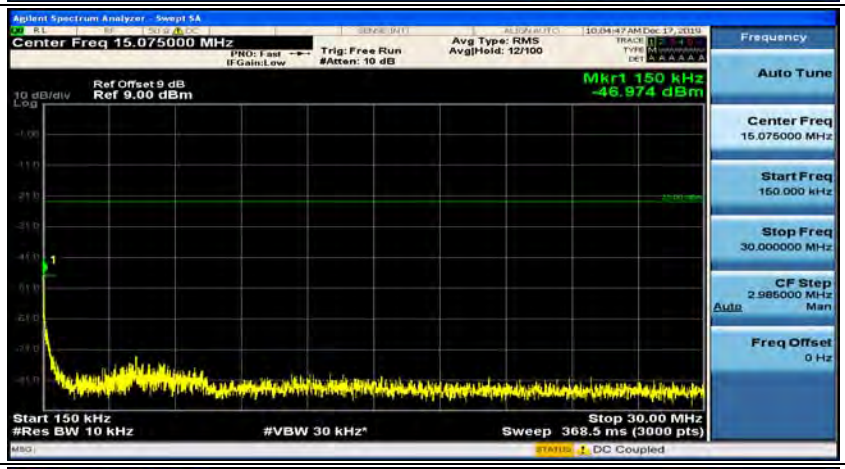
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12



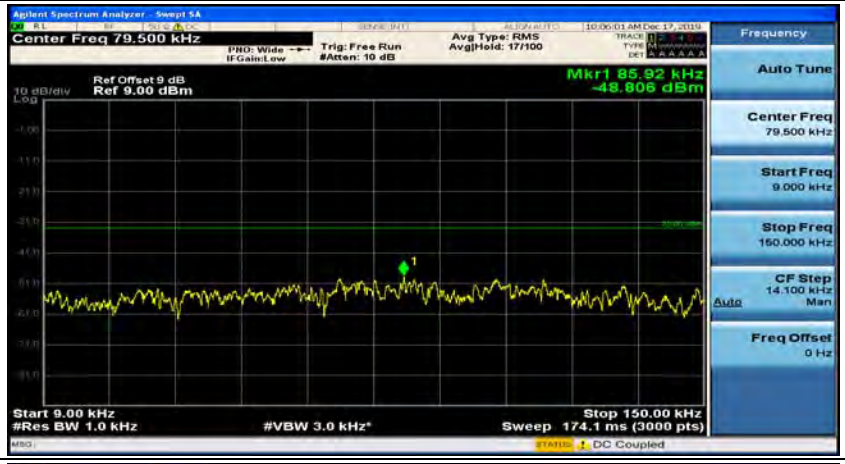
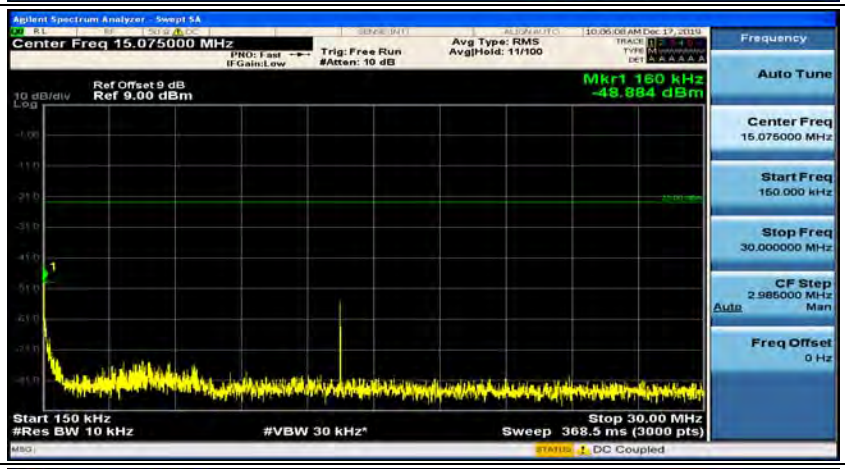


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

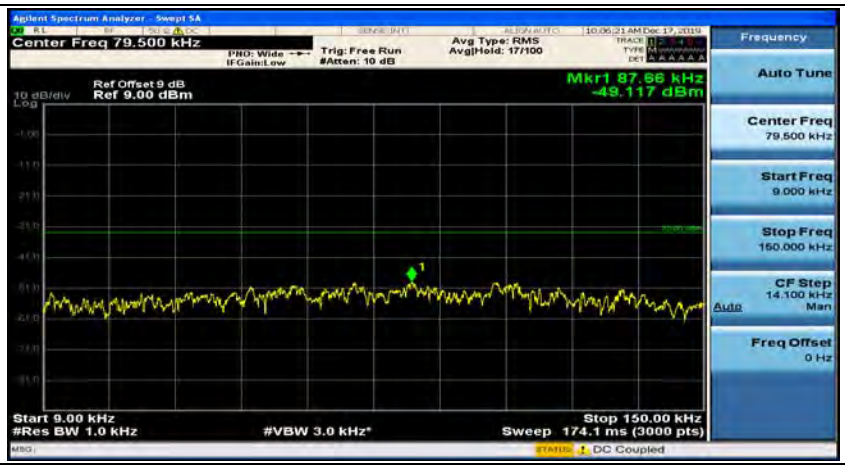

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:04:40 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 100.92 kHz
-47.488 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

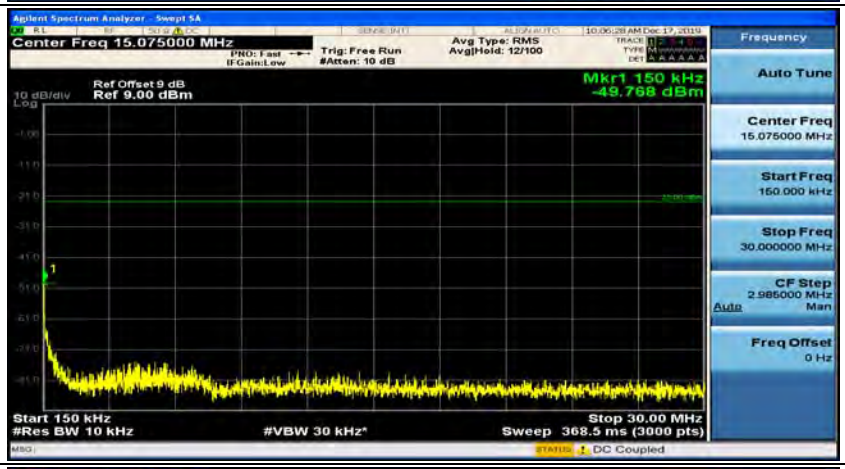

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
10:04:47 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-46.974 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
10:04:53 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.619 GHz
-26.129 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

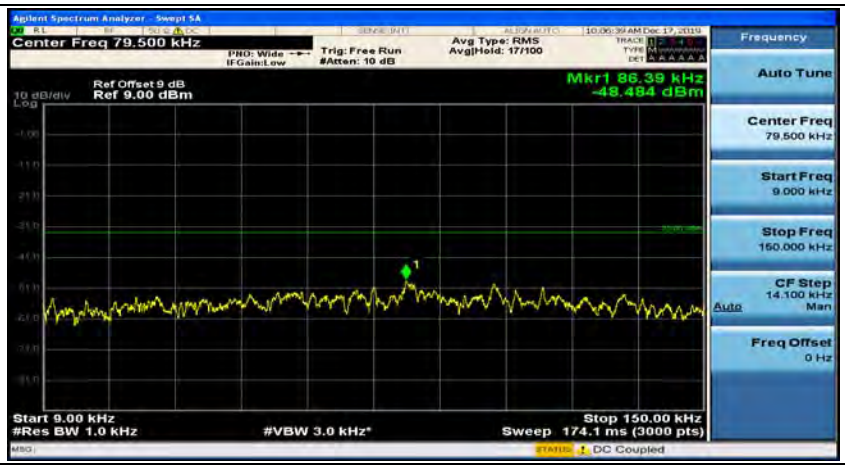
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



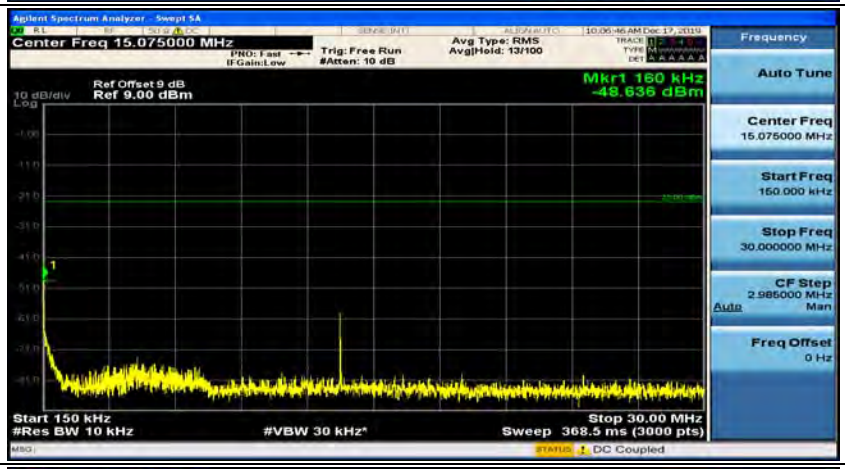
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12



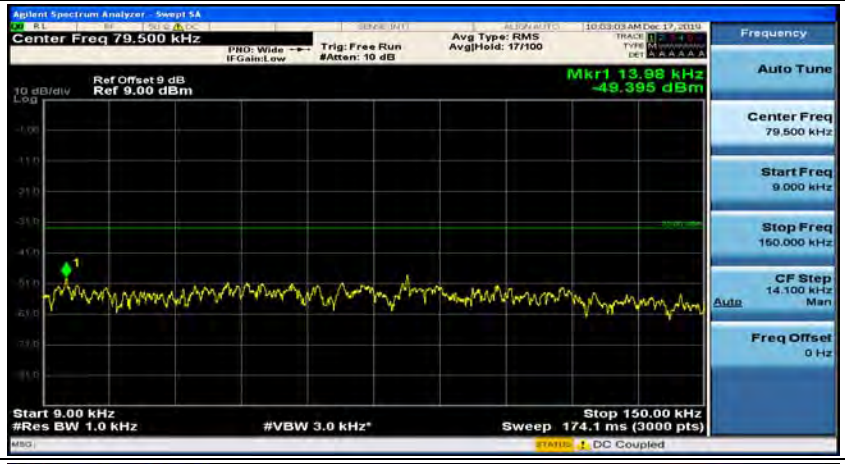
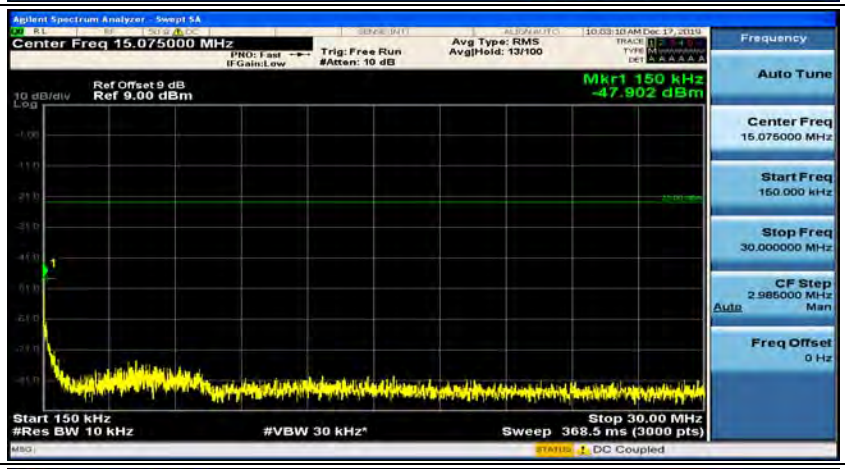


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

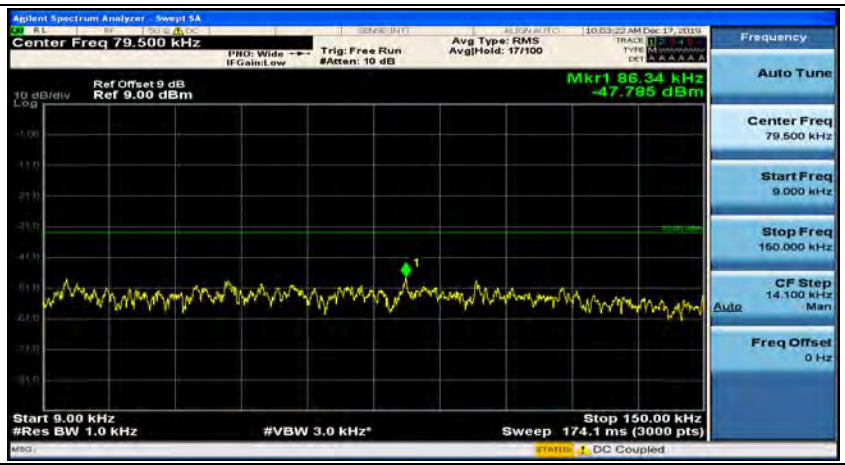

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:06:39 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 86.39 kHz
-48.484 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop 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

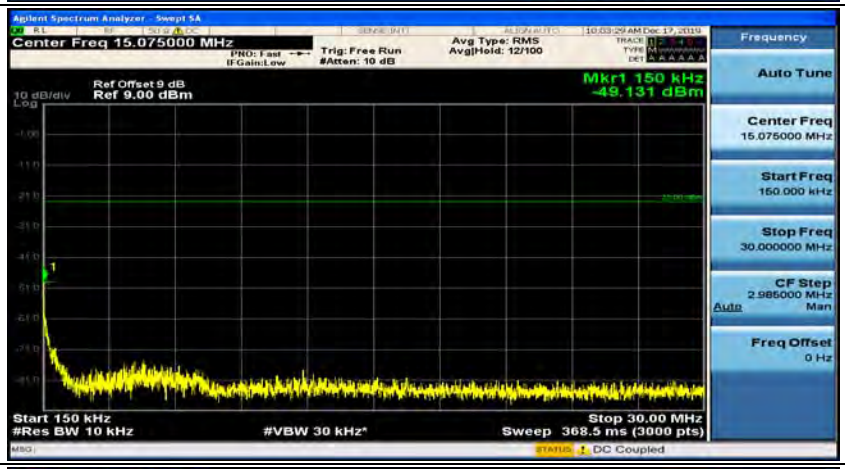

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 13/100
10:06:46 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 160 kHz
-48.636 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 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
10:06:52 AM Dec 17, 2019
Frequency
Auto Tune
Mkr2 25.662 GHz
-25.864 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)

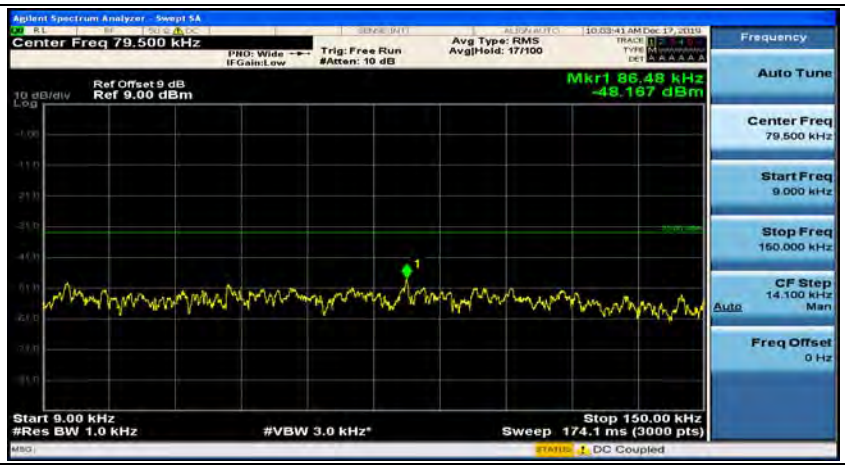
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



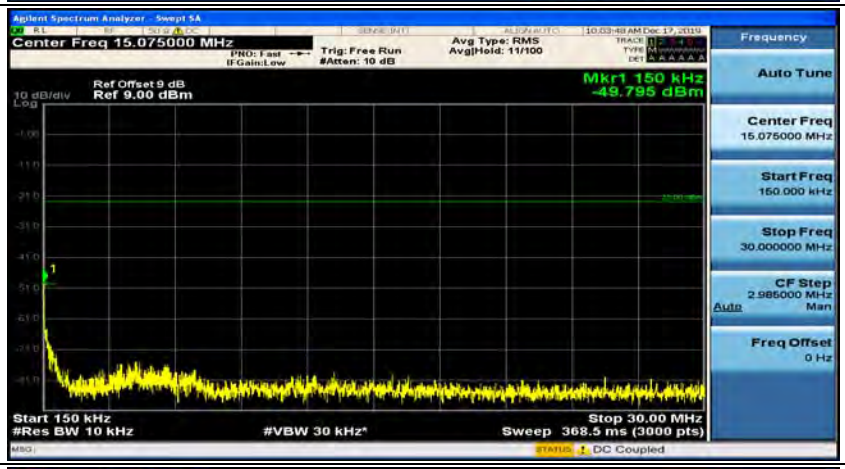
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12





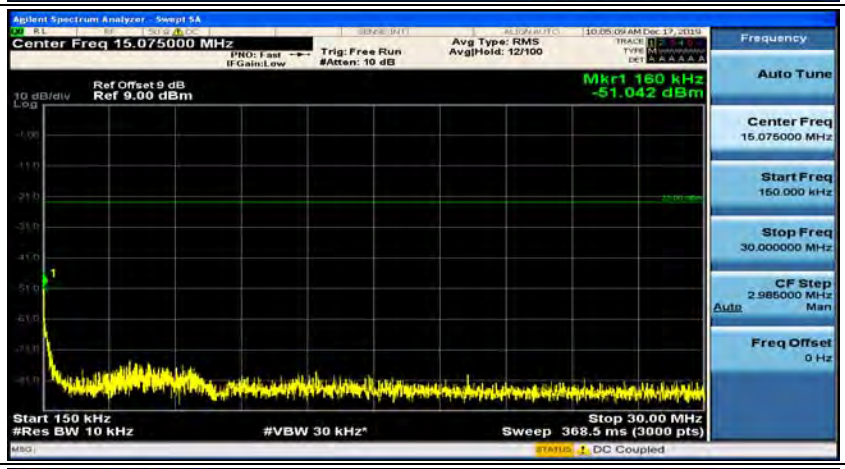
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24


Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:03:41 AM Dec 17, 2019
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 86.48 kHz
-48.167 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

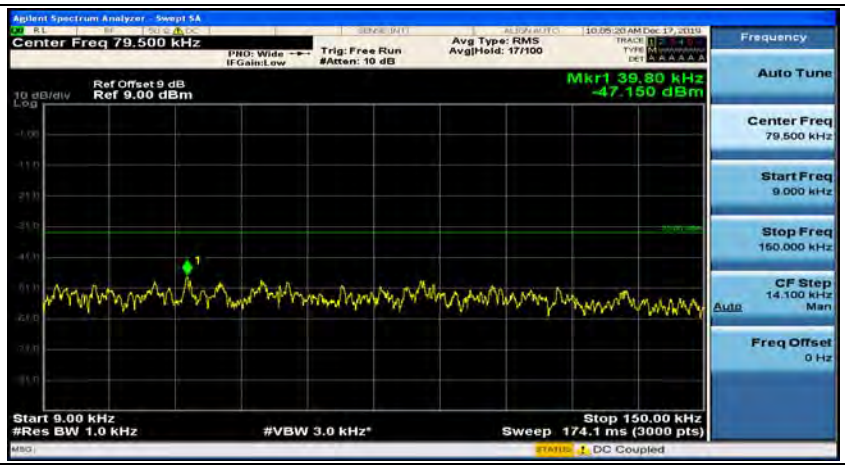

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
10:03:48 AM Dec 17, 2019
Frequency
Auto Tune
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-49.795 dBm
Center Freq
15.075000 MHz
Start Freq
150.000 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

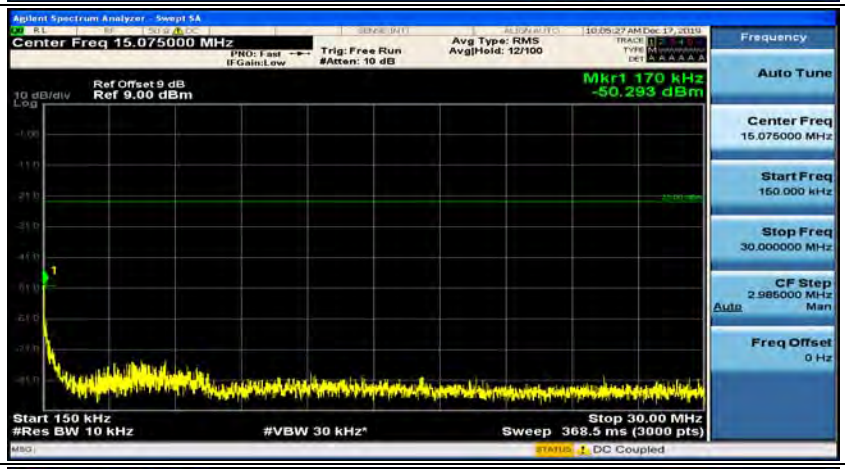

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
10:03:54 AM Dec 17, 2019
Frequency
Auto Tune
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.680 GHz
-26.501 dBm
Center Freq
13.015000000 GHz
Start 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_16QAM_1RB#0

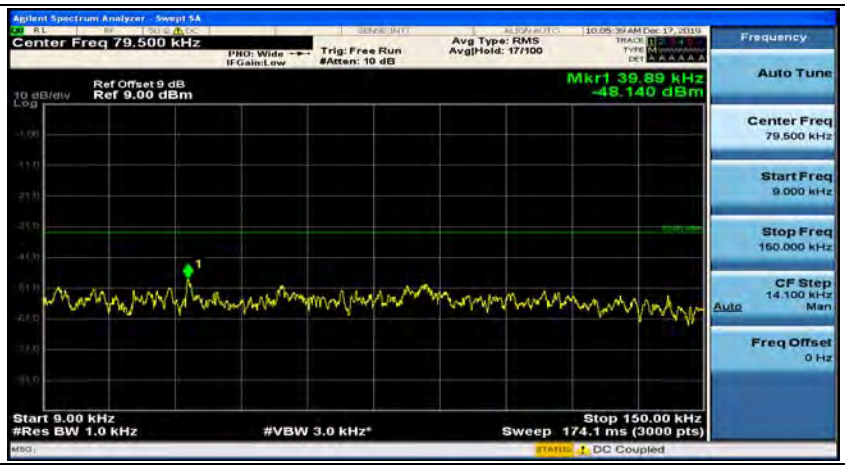


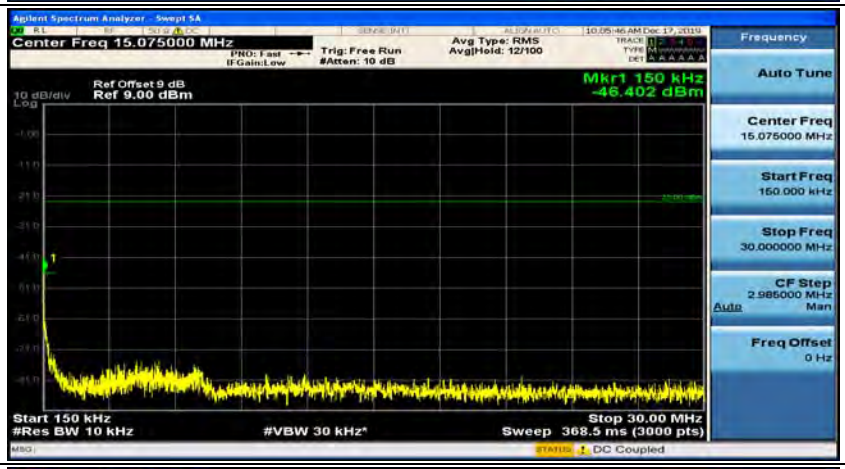
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12



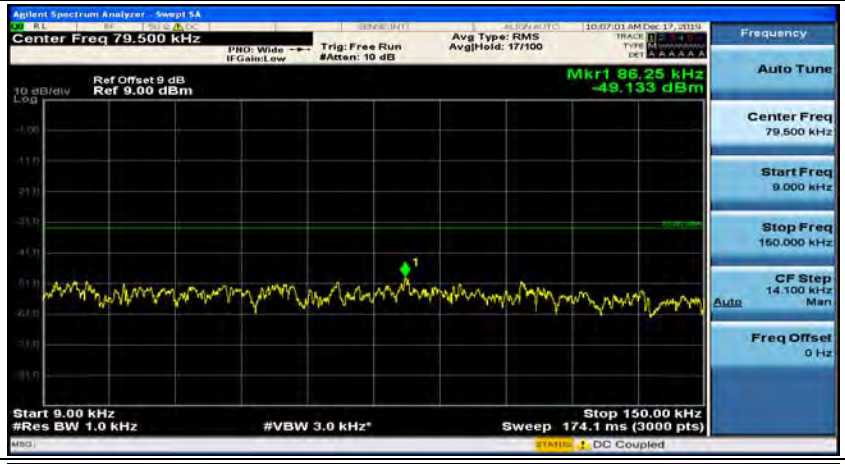
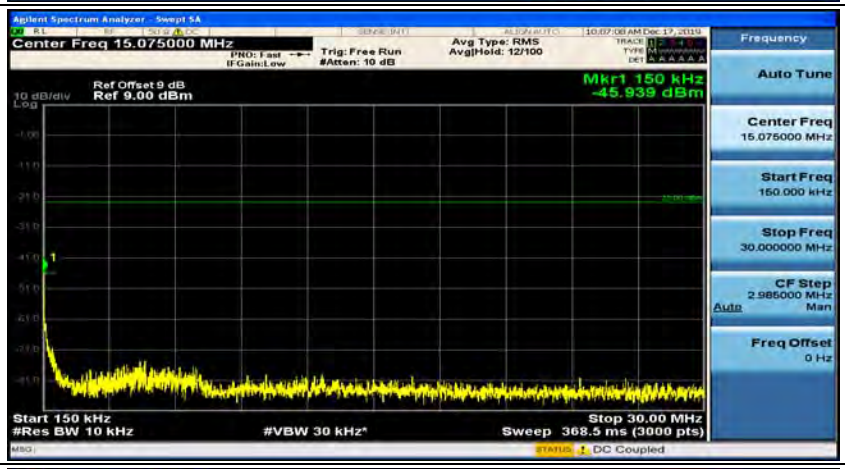


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

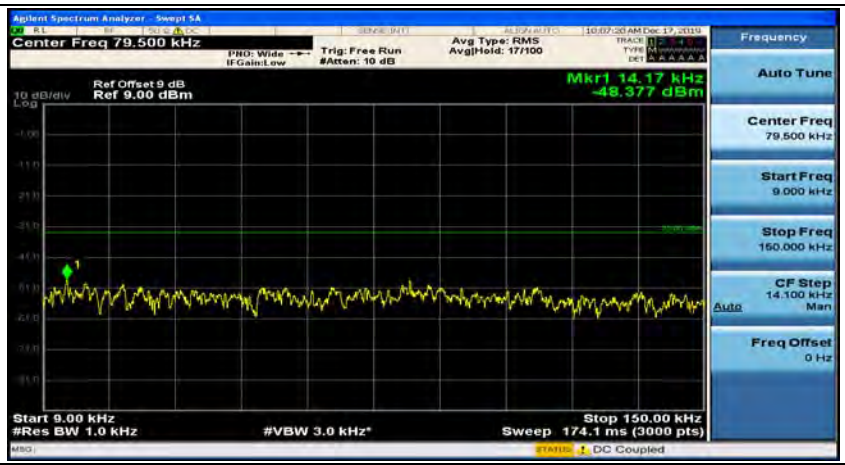

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:05:39 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 39.89 kHz
-48.140 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

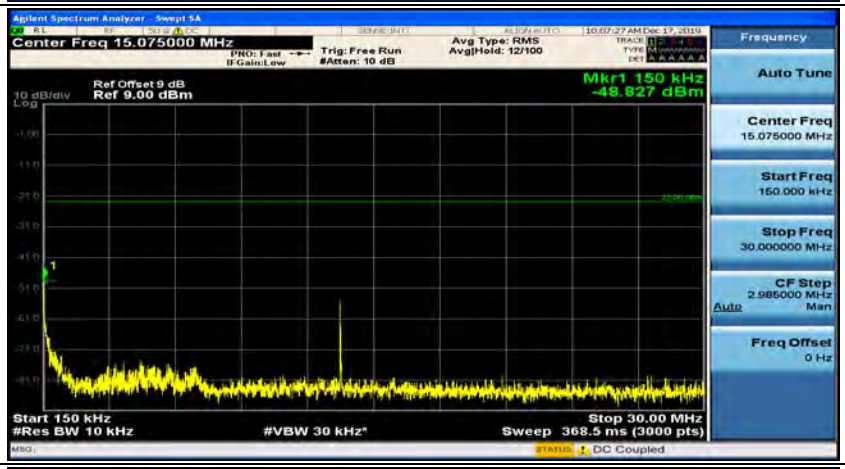

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
10:05:46 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-46.402 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
10:05:52 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.654 GHz
-26.066 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

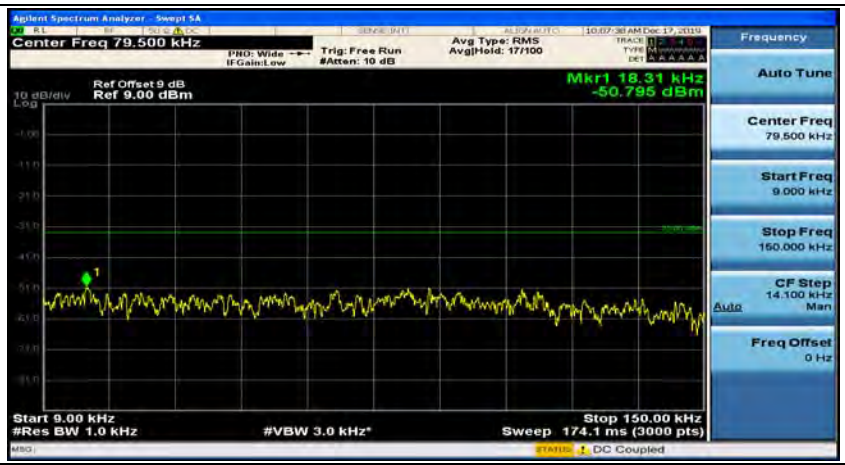
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



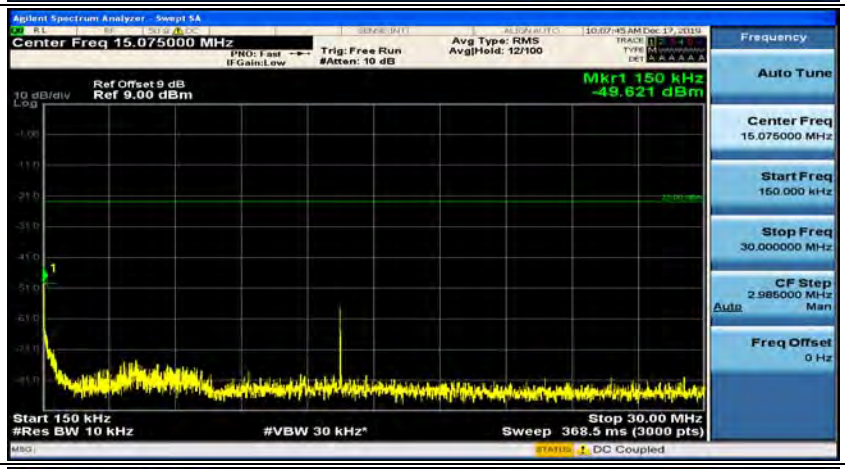
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12





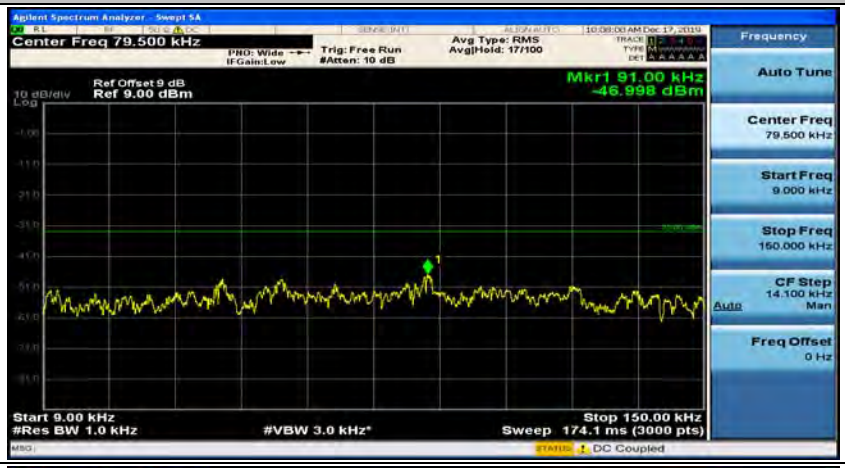
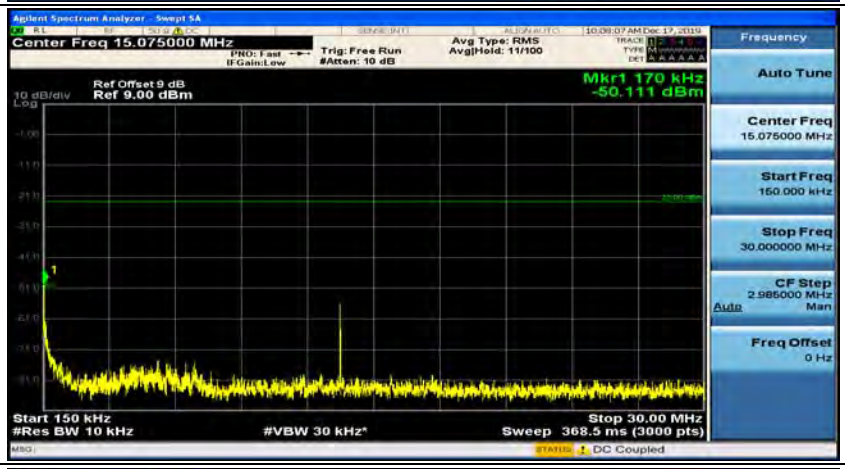
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24


Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:07:38 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 18.31 kHz
-50.795 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

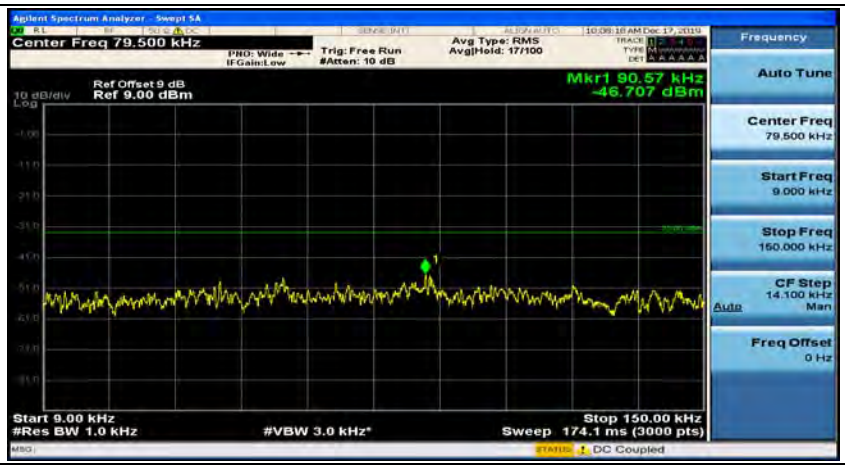

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
10:07:45 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 150 kHz
-49.621 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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

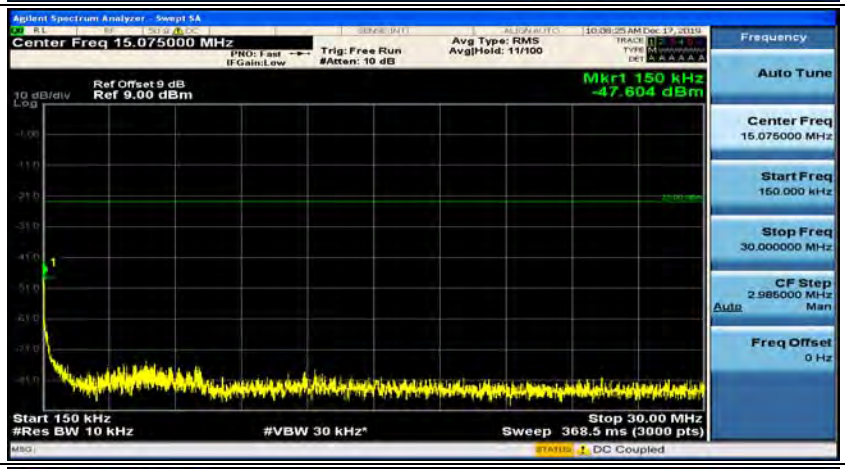

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
10:07:51 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr2 25.117 GHz
-26.510 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 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

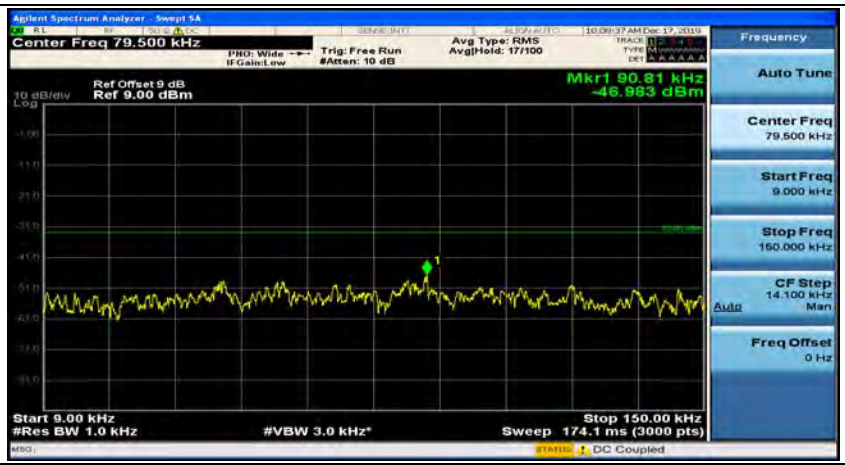
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0



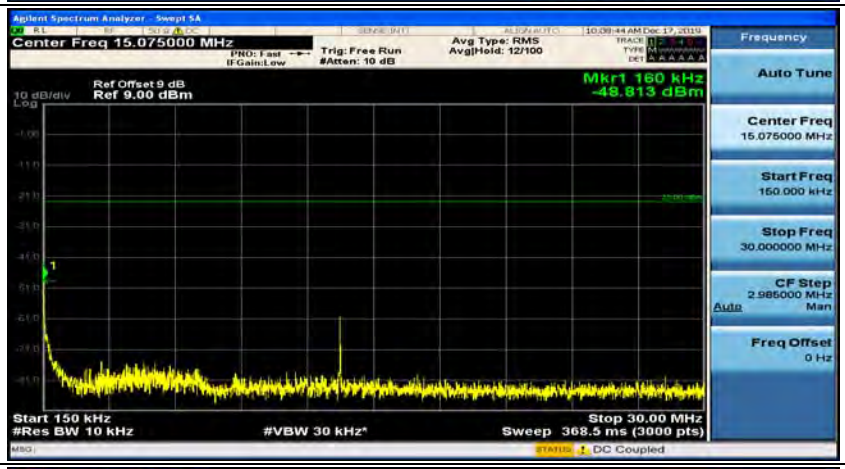
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#24



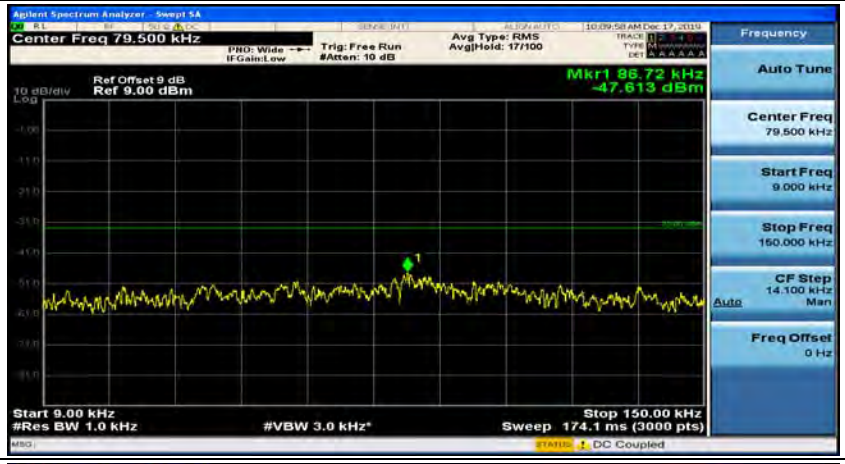
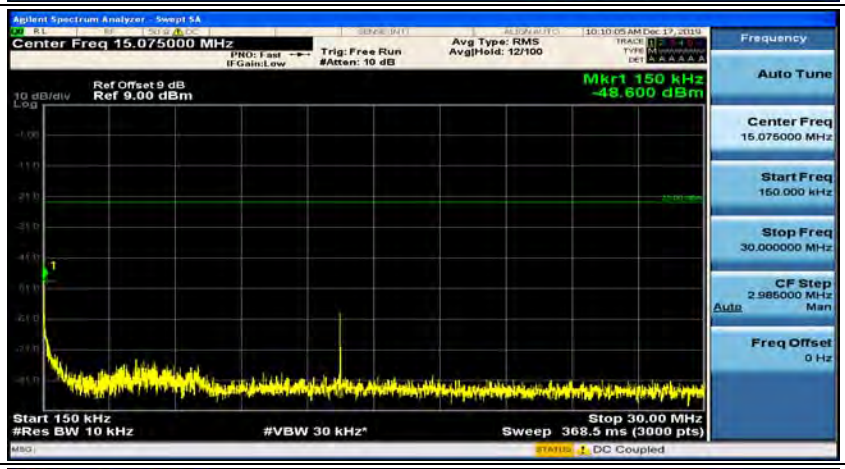


Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#49

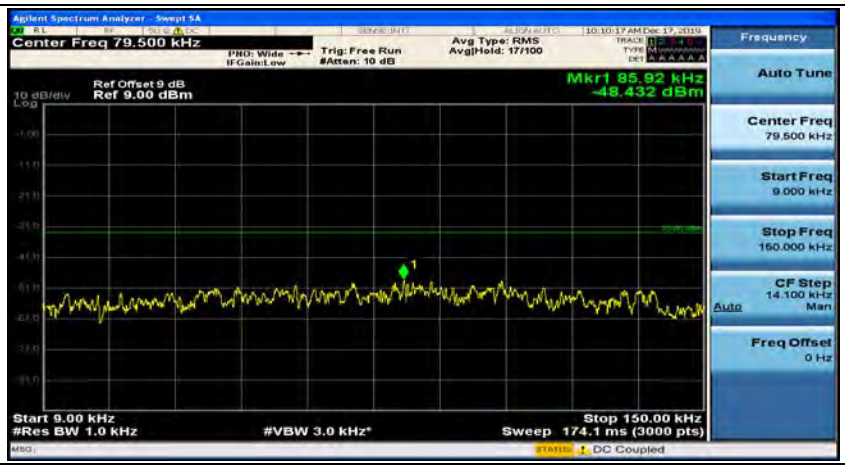

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 90.81 kHz
-46.983 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

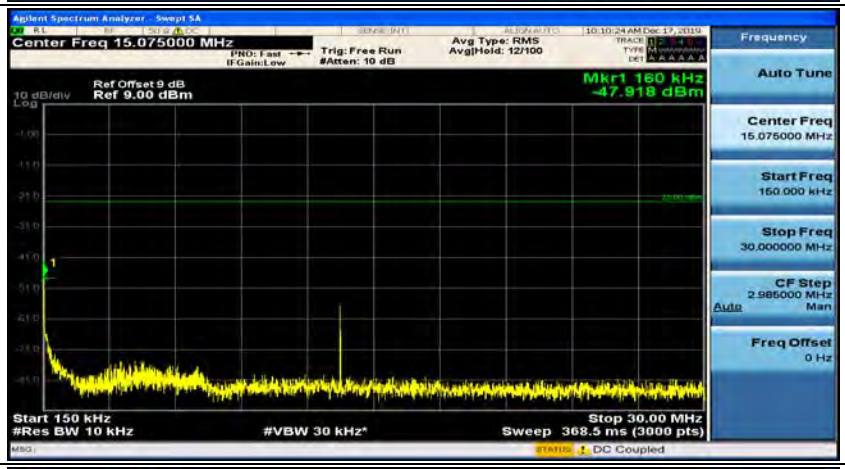

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 160 kHz
-48.813 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.688 GHz
-26.207 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

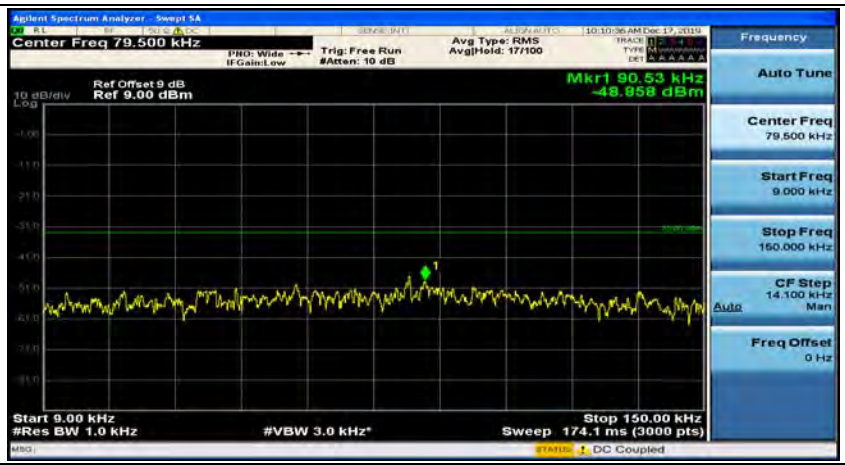
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



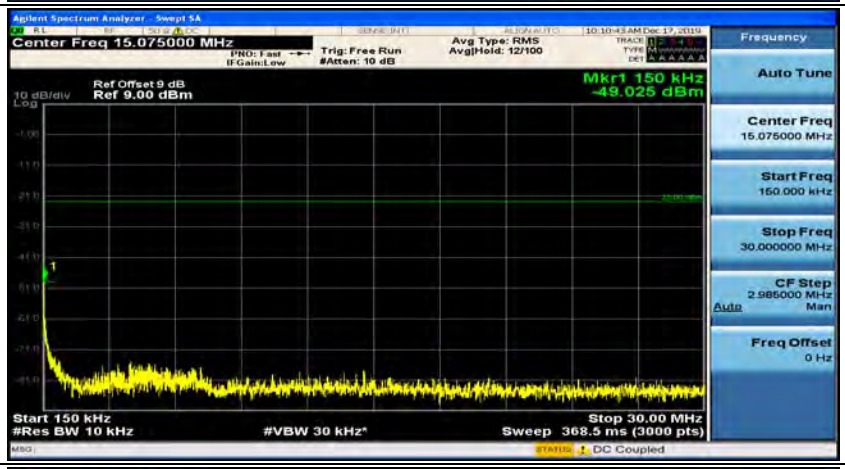
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24



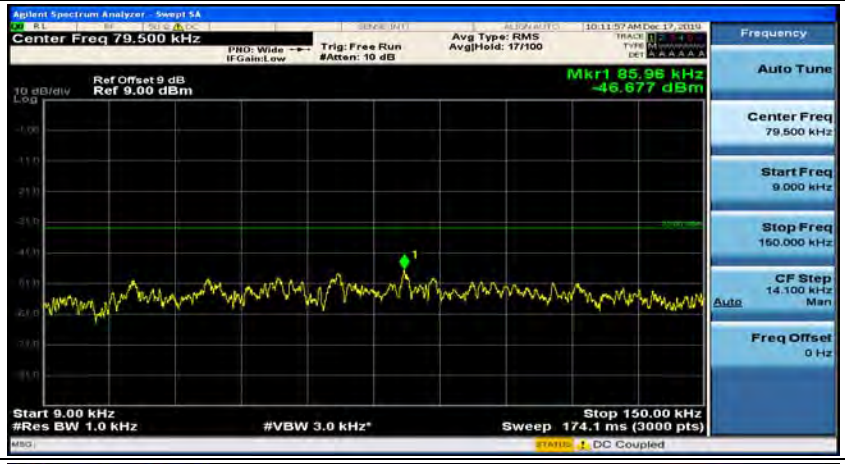
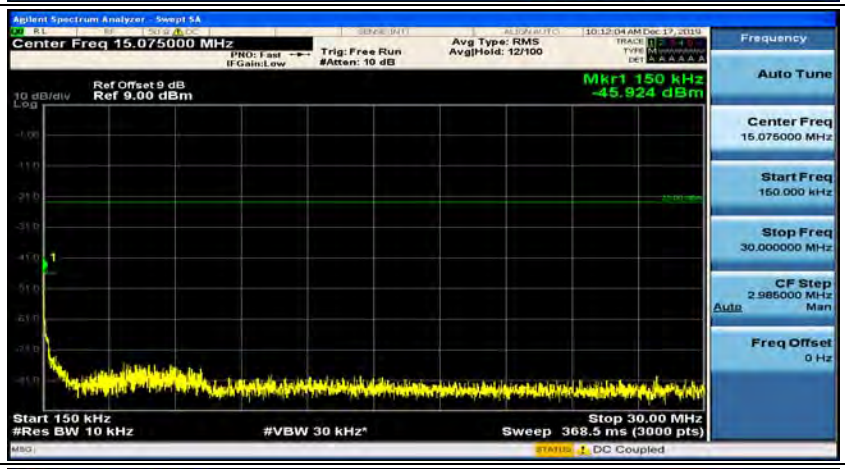


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

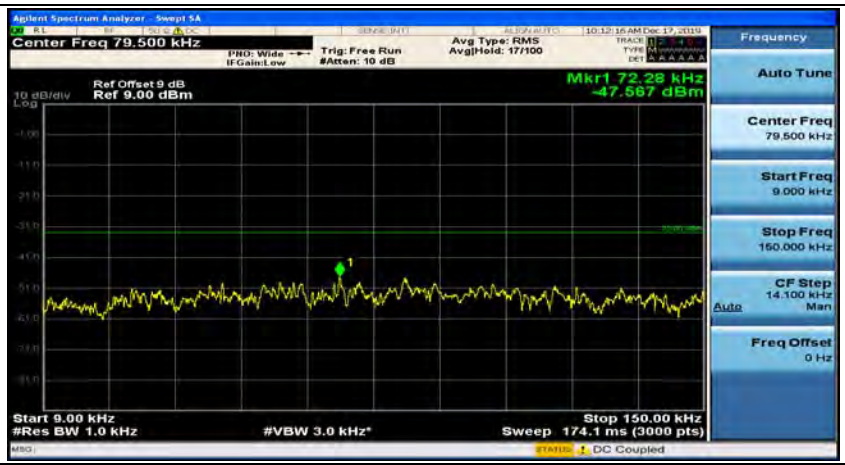

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:10:36 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 90.53 kHz
-48.858 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

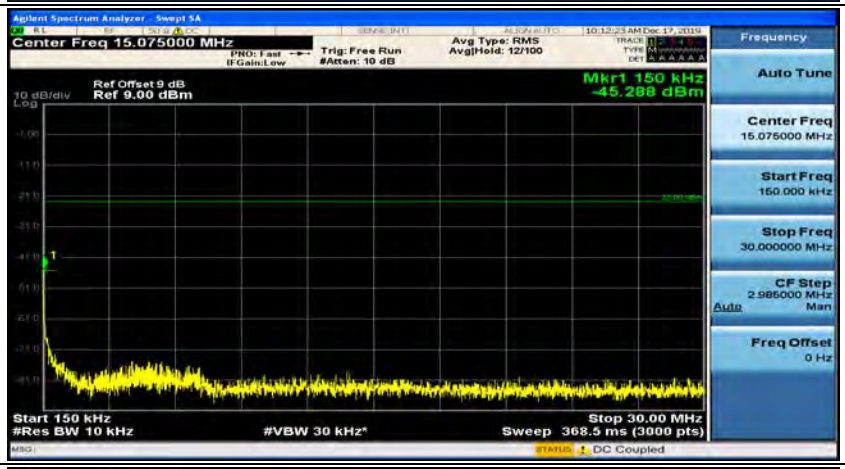

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
10:10:43 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-49.025 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
10:10:49 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.654 GHz
-26.362 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

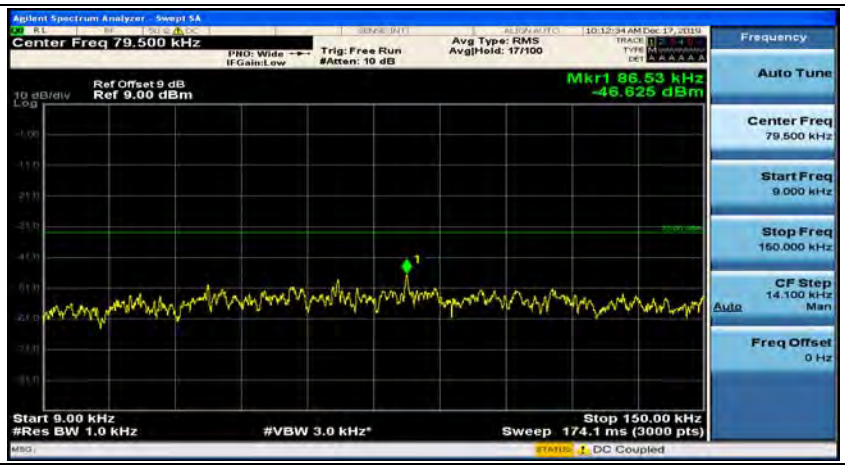
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



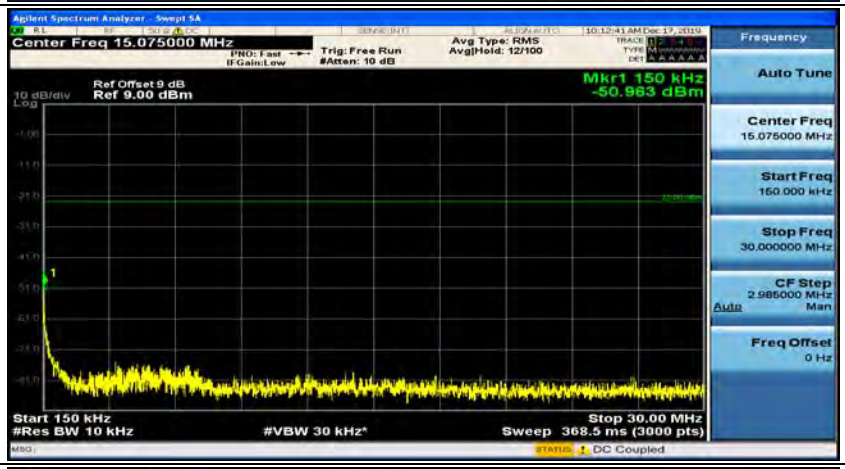
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24



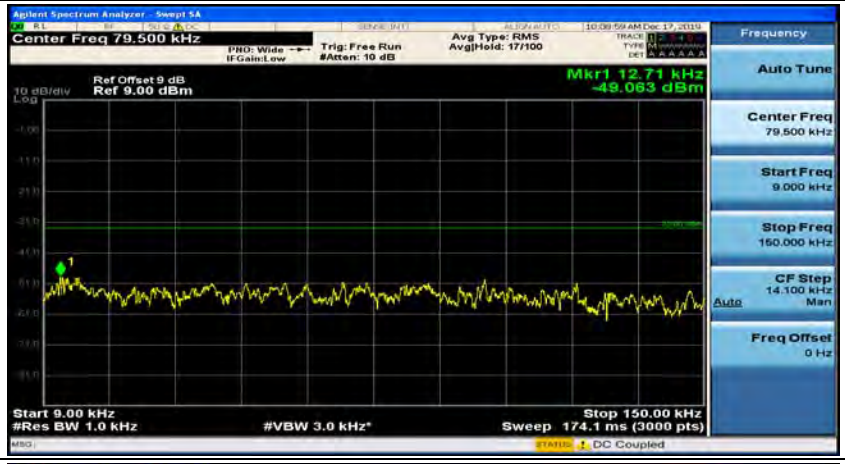
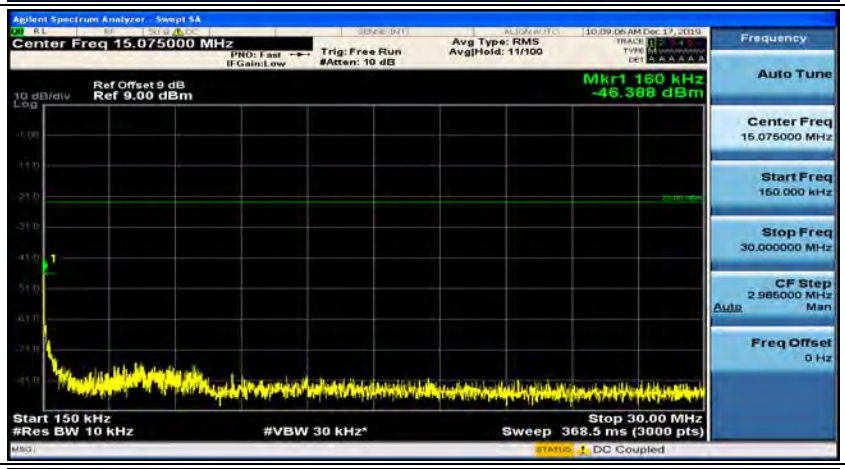


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#49

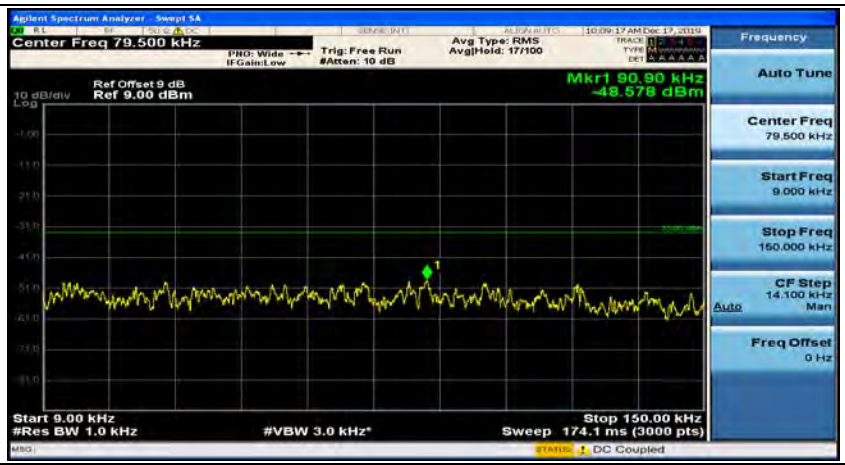

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:12:34 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 86.53 kHz
-46.625 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

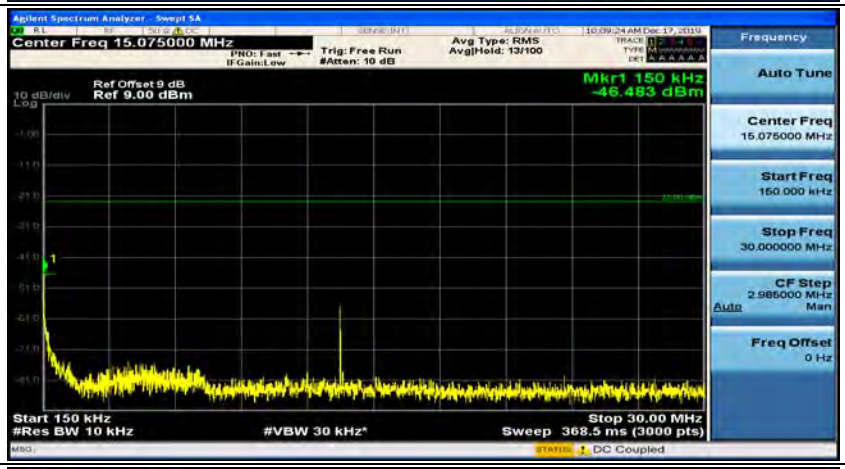

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
10:12:41 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 150 kHz
-50.963 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
10:12:47 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr2 25.576 GHz
-26.350 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

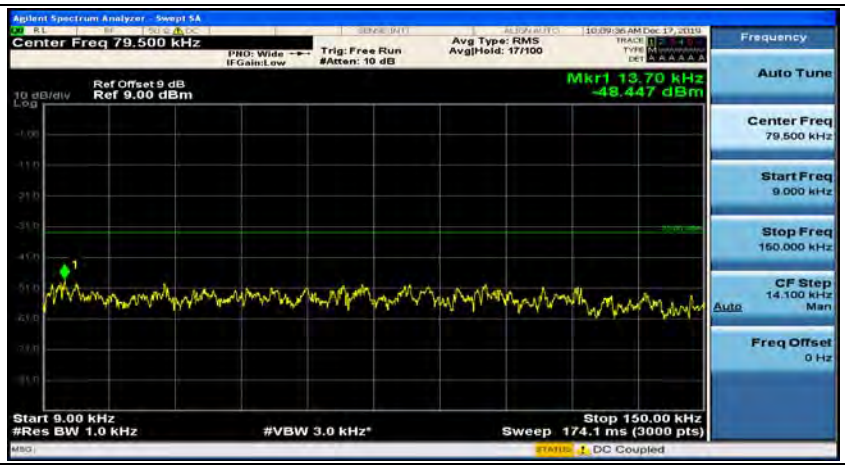
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



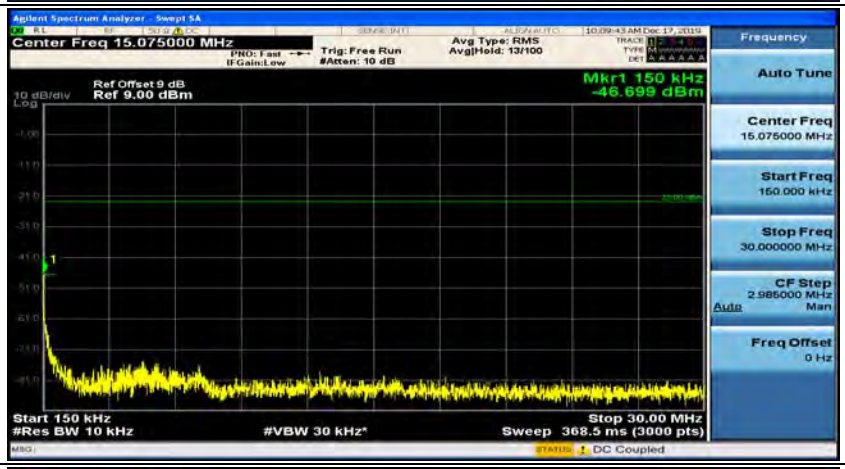
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24



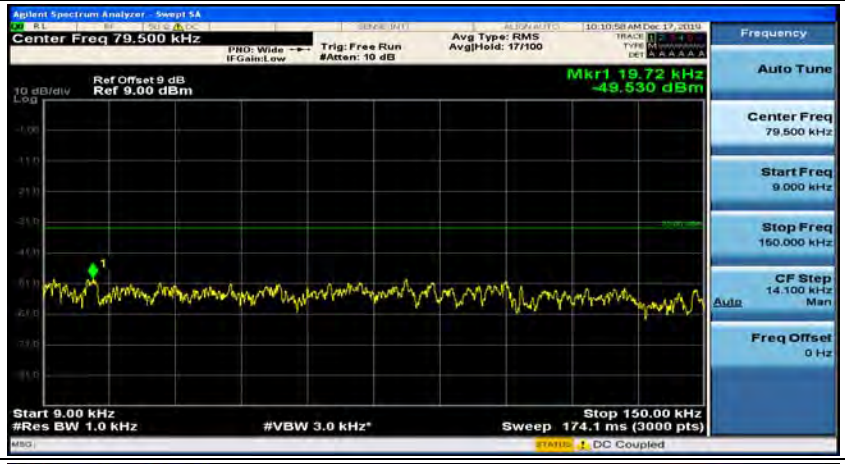
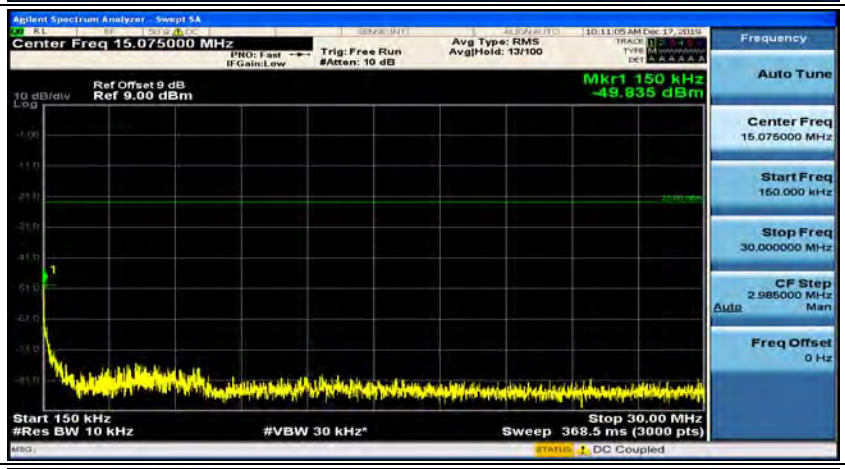


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49

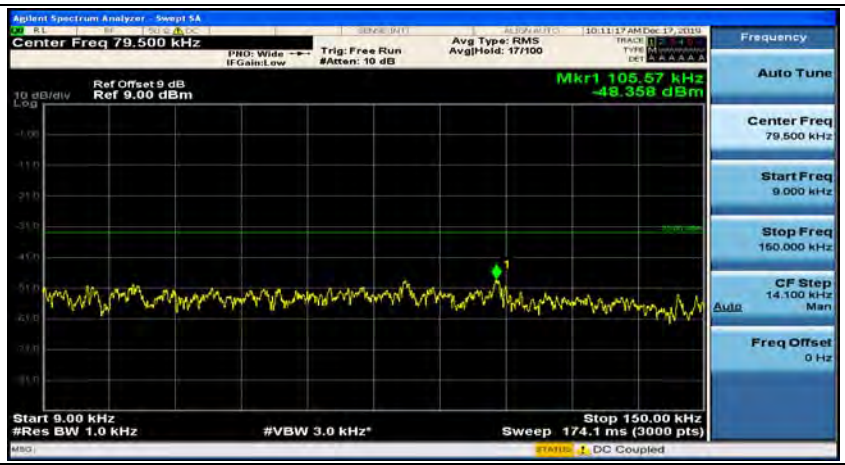

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:09:36 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 13.70 kHz
-48.447 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

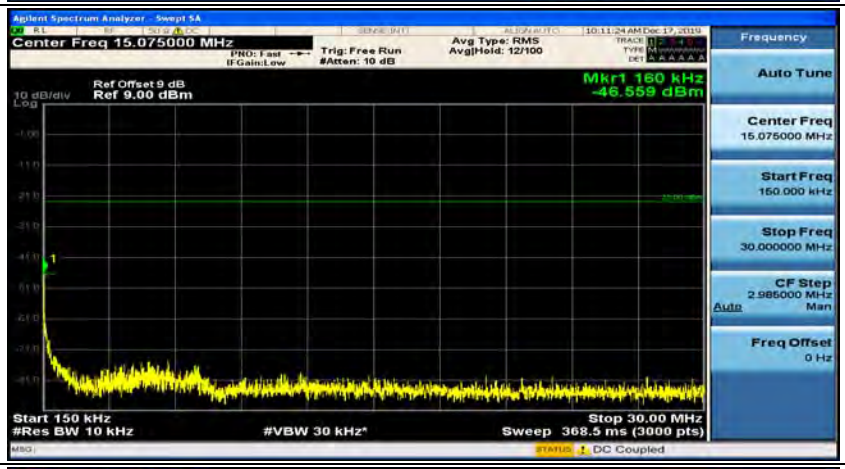

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 13/100
10:09:43 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-46.699 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
10:09:49 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.628 GHz
-26.305 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

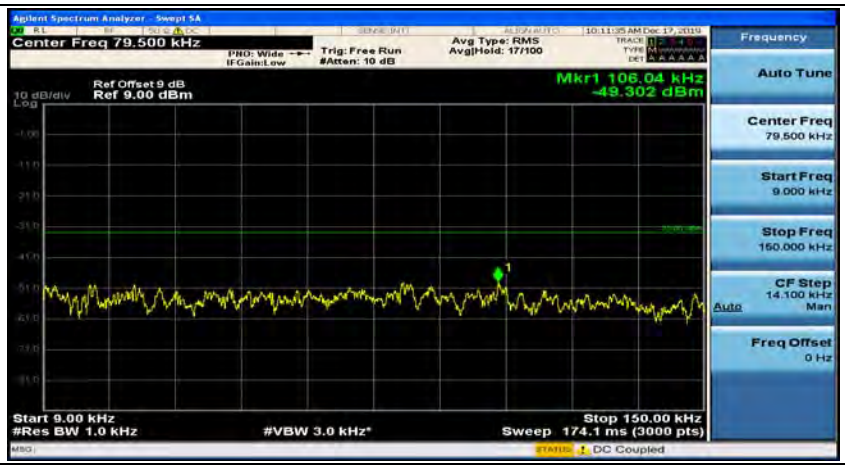
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



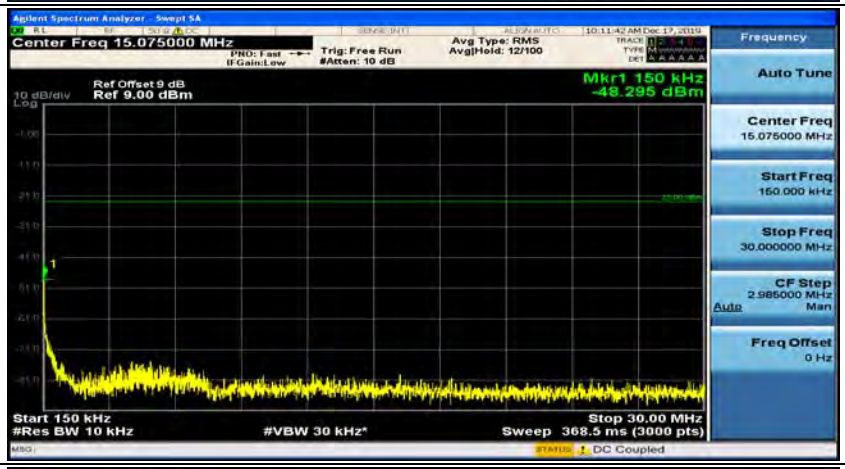
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24



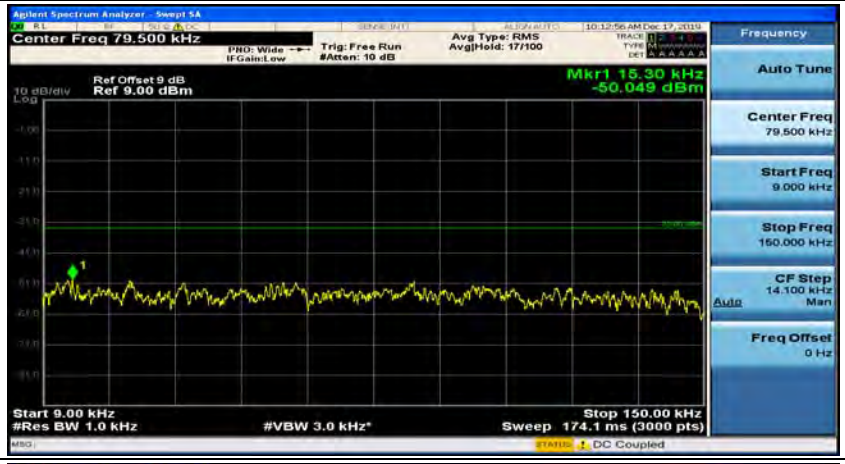
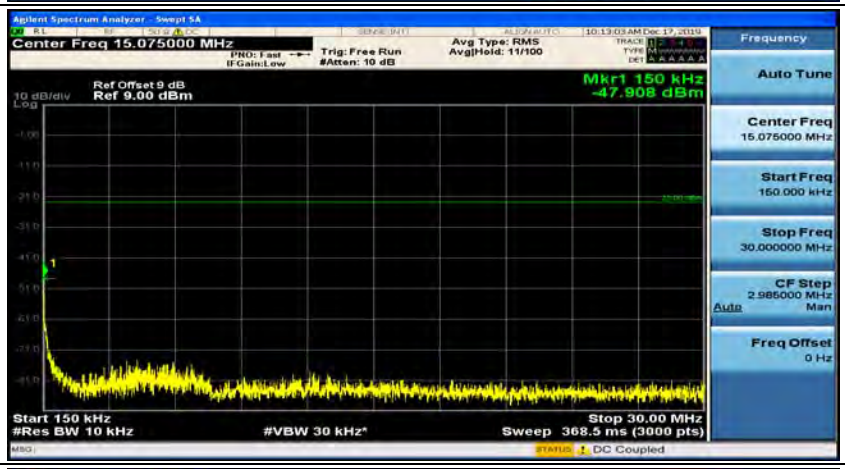


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

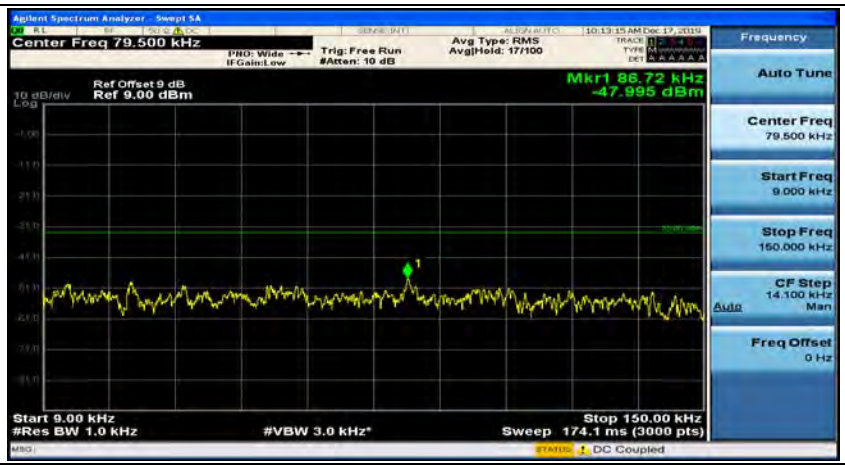

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:11:35 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 106.04 kHz
-49.302 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

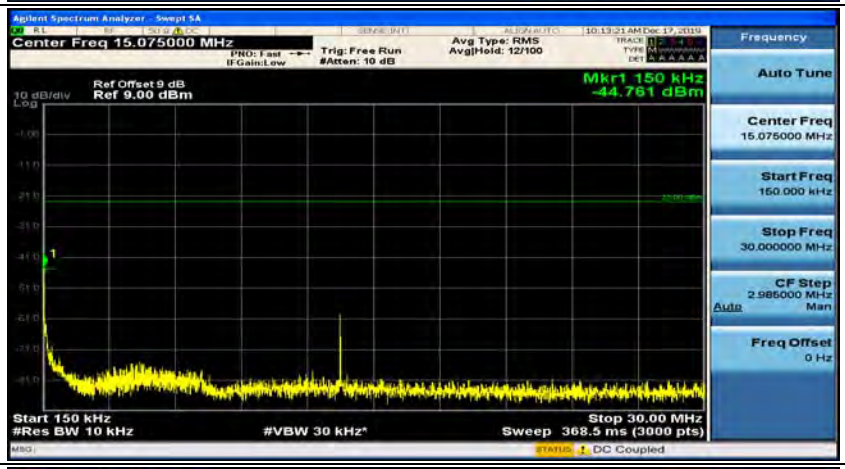

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
10:11:42 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-48.295 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
10:11:48 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.697 GHz
-25.950 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

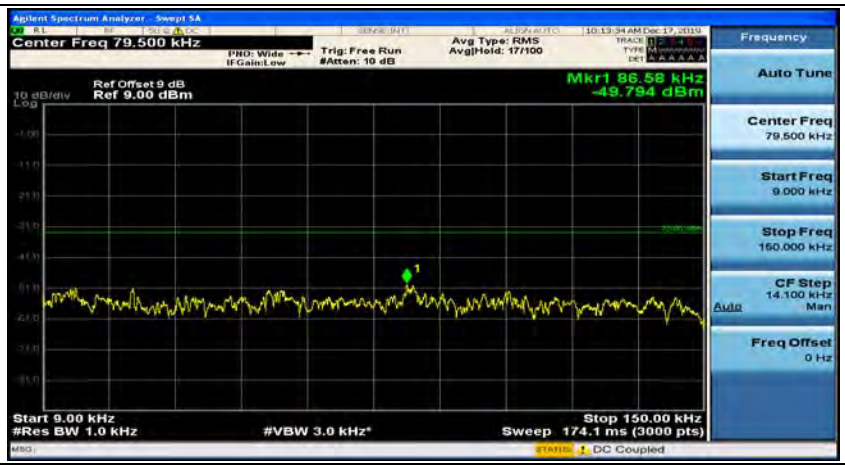
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



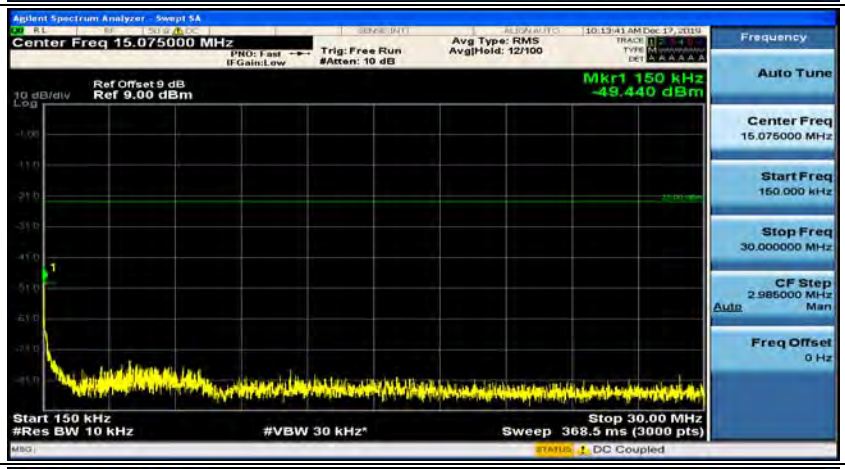
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24





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
10:13:34 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 86.58 kHz
-49.794 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
10:13:41 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 150 kHz
-49.440 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
10:13:47 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr2 25.645 GHz
-26.431 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.06	-0.001515	± 2.5	PASS
		VN	TN	1	0.001429	± 2.5	PASS
		VH	TN	2.16	0.003087	± 2.5	PASS
	MCH	VL	TN	3.65	0.005159	± 2.5	PASS
		VN	TN	-0.79	-0.001117	± 2.5	PASS
		VH	TN	1.11	0.001569	± 2.5	PASS
	HCH	VL	TN	4.45	0.006221	± 2.5	PASS
		VN	TN	-0.25	-0.000350	± 2.5	PASS
		VH	TN	-0.01	-0.000014	± 2.5	PASS
16QAM	LCH	VL	TN	0	0.000000	± 2.5	PASS
		VN	TN	3.14	0.004488	± 2.5	PASS
		VH	TN	2.03	0.002901	± 2.5	PASS
	MCH	VL	TN	-1.17	-0.001654	± 2.5	PASS
		VN	TN	0.6	0.000848	± 2.5	PASS
		VH	TN	1.56	0.002205	± 2.5	PASS
	HCH	VL	TN	0.84	0.001174	± 2.5	PASS
		VN	TN	3.25	0.004544	± 2.5	PASS
		VH	TN	4.47	0.006249	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.81	0.001158	± 2.5	PASS
		VN	-20	-1.53	-0.002187	± 2.5	PASS
		VN	-10	1.96	0.002801	± 2.5	PASS
		VN	0	3.01	0.004302	± 2.5	PASS
		VN	10	-0.45	-0.000643	± 2.5	PASS
		VN	20	-1.8	-0.002573	± 2.5	PASS
		VN	30	-1.33	-0.001901	± 2.5	PASS
		VN	40	-1.54	-0.002201	± 2.5	PASS
		VN	50	0.49	0.000700	± 2.5	PASS
	MCH	VN	-30	0.12	0.000170	± 2.5	PASS
		VN	-20	2.53	0.003576	± 2.5	PASS

		VN	-10	2.04	0.002883	± 2.5	PASS
		VN	0	3.76	0.005314	± 2.5	PASS
		VN	10	2.05	0.002898	± 2.5	PASS
		VN	20	-1.18	-0.001668	± 2.5	PASS
		VN	30	3.26	0.004608	± 2.5	PASS
		VN	40	4.27	0.006035	± 2.5	PASS
		VN	50	3.61	0.005102	± 2.5	PASS
	HCH	VN	-30	3.96	0.005536	± 2.5	PASS
		VN	-20	2.15	0.003006	± 2.5	PASS
		VN	-10	3.18	0.004446	± 2.5	PASS
		VN	0	1.49	0.002083	± 2.5	PASS
		VN	10	2.39	0.003341	± 2.5	PASS
		VN	20	-1.78	-0.002488	± 2.5	PASS
		VN	30	-1.61	-0.002251	± 2.5	PASS
		VN	40	1.8	0.002516	± 2.5	PASS
		VN	50	3.97	0.005550	± 2.5	PASS
16QAM	LCH	VN	-30	-0.39	-0.000557	± 2.5	PASS
		VN	-20	-0.6	-0.000858	± 2.5	PASS
		VN	-10	4.64	0.006631	± 2.5	PASS
		VN	0	-1.67	-0.002387	± 2.5	PASS
		VN	10	0.18	0.000257	± 2.5	PASS
		VN	20	-1.38	-0.001972	± 2.5	PASS
		VN	30	1.54	0.002201	± 2.5	PASS
		VN	40	1.89	0.002701	± 2.5	PASS
		VN	50	0.65	0.000929	± 2.5	PASS
	MCH	VN	-30	2.36	0.003336	± 2.5	PASS
		VN	-20	3.49	0.004933	± 2.5	PASS
		VN	-10	-0.87	-0.001230	± 2.5	PASS
		VN	0	2.03	0.002869	± 2.5	PASS
		VN	10	0.73	0.001032	± 2.5	PASS
		VN	20	3.2	0.004523	± 2.5	PASS
		VN	30	-0.01	-0.000014	± 2.5	PASS
		VN	40	-1.73	-0.002445	± 2.5	PASS
		VN	50	-1.73	-0.002445	± 2.5	PASS
	HCH	VN	-30	4.7	0.006571	± 2.5	PASS
		VN	-20	-1.61	-0.002251	± 2.5	PASS
		VN	-10	1.72	0.002405	± 2.5	PASS
		VN	0	2.71	0.003789	± 2.5	PASS
		VN	10	-0.13	-0.000182	± 2.5	PASS
		VN	20	3.62	0.005061	± 2.5	PASS
		VN	30	0.36	0.000503	± 2.5	PASS

		VN	40	0.32	0.000447	± 2.5	PASS
		VN	50	-1.11	-0.001552	± 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	1.85	0.002641	± 2.5	PASS
		VN	TN	-0.98	-0.001399	± 2.5	PASS
		VH	TN	3.98	0.005682	± 2.5	PASS
	MCH	VL	TN	3.38	0.004777	± 2.5	PASS
		VN	TN	-0.4	-0.000565	± 2.5	PASS
		VH	TN	-1.08	-0.001527	± 2.5	PASS
	HCH	VL	TN	2.57	0.003597	± 2.5	PASS
		VN	TN	4.75	0.006648	± 2.5	PASS
		VH	TN	0.15	0.000210	± 2.5	PASS
16QAM	LCH	VL	TN	3.39	0.004839	± 2.5	PASS
		VN	TN	1.74	0.002484	± 2.5	PASS
		VH	TN	-1.58	-0.002256	± 2.5	PASS
	MCH	VL	TN	2.53	0.003576	± 2.5	PASS
		VN	TN	-1.64	-0.002318	± 2.5	PASS
		VH	TN	-1.51	-0.002134	± 2.5	PASS
	HCH	VL	TN	0.42	0.000588	± 2.5	PASS
		VN	TN	3.14	0.004395	± 2.5	PASS
		VH	TN	2.73	0.003821	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.95	-0.002784	± 2.5	PASS
		VN	-20	-0.05	-0.000071	± 2.5	PASS
		VN	-10	1.63	0.002327	± 2.5	PASS
		VN	0	1.19	0.001699	± 2.5	PASS
		VN	10	3.71	0.005296	± 2.5	PASS
		VN	20	4.43	0.006324	± 2.5	PASS
		VN	30	-1.74	-0.002484	± 2.5	PASS
		VN	40	-0.7	-0.000999	± 2.5	PASS
		VN	50	0.39	0.000557	± 2.5	PASS
	MCH	VN	-30	4.52	0.006389	± 2.5	PASS
		VN	-20	4.32	0.006106	± 2.5	PASS
		VN	-10	3.37	0.004763	± 2.5	PASS

		VN	0	4.19	0.005922	± 2.5	PASS
		VN	10	1.12	0.001583	± 2.5	PASS
		VN	20	2.69	0.003802	± 2.5	PASS
		VN	30	1.12	0.001583	± 2.5	PASS
		VN	40	3.98	0.005625	± 2.5	PASS
		VN	50	4.94	0.006982	± 2.5	PASS
	HCH	VN	-30	4.43	0.006200	± 2.5	PASS
		VN	-20	2.78	0.003891	± 2.5	PASS
		VN	-10	-0.34	-0.000476	± 2.5	PASS
		VN	0	1.55	0.002169	± 2.5	PASS
		VN	10	3	0.004199	± 2.5	PASS
		VN	20	3.03	0.004241	± 2.5	PASS
		VN	30	2.58	0.003611	± 2.5	PASS
		VN	40	-1.37	-0.001917	± 2.5	PASS
		VN	50	3.2	0.004479	± 2.5	PASS
16QAM	LCH	VN	-30	-0.02	-0.000029	± 2.5	PASS
		VN	-20	-1.24	-0.001770	± 2.5	PASS
		VN	-10	-0.91	-0.001299	± 2.5	PASS
		VN	0	1.53	0.002184	± 2.5	PASS
		VN	10	4.37	0.006238	± 2.5	PASS
		VN	20	-1.07	-0.001527	± 2.5	PASS
		VN	30	3.92	0.005596	± 2.5	PASS
		VN	40	0.59	0.000842	± 2.5	PASS
		VN	50	-0.96	-0.001370	± 2.5	PASS
	MCH	VN	-30	2.04	0.002883	± 2.5	PASS
		VN	-20	2.67	0.003774	± 2.5	PASS
		VN	-10	2.65	0.003746	± 2.5	PASS
		VN	0	3.86	0.005456	± 2.5	PASS
		VN	10	1.99	0.002813	± 2.5	PASS
		VN	20	2.32	0.003279	± 2.5	PASS
		VN	30	-1.39	-0.001965	± 2.5	PASS
		VN	40	1.4	0.001979	± 2.5	PASS
		VN	50	4.43	0.006261	± 2.5	PASS
	HCH	VN	-30	3.14	0.004395	± 2.5	PASS
		VN	-20	3.01	0.004213	± 2.5	PASS
		VN	-10	-1.51	-0.002113	± 2.5	PASS
		VN	0	2.18	0.003051	± 2.5	PASS
		VN	10	-1.46	-0.002043	± 2.5	PASS
		VN	20	3.92	0.005486	± 2.5	PASS
		VN	30	0.82	0.001148	± 2.5	PASS
		VN	40	0.17	0.000238	± 2.5	PASS

		VN	50	-1.43	-0.002001	± 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	-0.63	-0.000898	± 2.5	PASS
		VN	TN	2.07	0.002951	± 2.5	PASS
		VH	TN	4.54	0.006472	± 2.5	PASS
	MCH	VL	TN	3	0.004240	± 2.5	PASS
		VN	TN	4.97	0.007025	± 2.5	PASS
		VH	TN	4.52	0.006389	± 2.5	PASS
	HCH	VL	TN	-0.65	-0.000911	± 2.5	PASS
		VN	TN	3.72	0.005214	± 2.5	PASS
		VH	TN	2.61	0.003658	± 2.5	PASS
16QAM	LCH	VL	TN	-1.68	-0.002395	± 2.5	PASS
		VN	TN	2.17	0.003093	± 2.5	PASS
		VH	TN	1.14	0.001625	± 2.5	PASS
	MCH	VL	TN	3.55	0.005018	± 2.5	PASS
		VN	TN	1.07	0.001512	± 2.5	PASS
		VH	TN	2.49	0.003519	± 2.5	PASS
	HCH	VL	TN	2.32	0.003252	± 2.5	PASS
		VN	TN	-0.33	-0.000463	± 2.5	PASS
		VH	TN	0.79	0.001107	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.97	0.002808	± 2.5	PASS
		VN	-20	-1.75	-0.002495	± 2.5	PASS
		VN	-10	4.15	0.005916	± 2.5	PASS
		VN	0	2.8	0.003991	± 2.5	PASS
		VN	10	-0.58	-0.000827	± 2.5	PASS
		VN	20	2.97	0.004234	± 2.5	PASS
		VN	30	3.95	0.005631	± 2.5	PASS
		VN	40	3.51	0.005004	± 2.5	PASS
		VN	50	4.32	0.006158	± 2.5	PASS
	MCH	VN	-30	2.03	0.002869	± 2.5	PASS
		VN	-20	-0.45	-0.000636	± 2.5	PASS
		VN	-10	1.41	0.001993	± 2.5	PASS
		VN	0	4.12	0.005823	± 2.5	PASS

		VN	10	3.14	0.004438	± 2.5	PASS
		VN	20	0.88	0.001244	± 2.5	PASS
		VN	30	-1.38	-0.001951	± 2.5	PASS
		VN	40	2.19	0.003095	± 2.5	PASS
		VN	50	3.09	0.004367	± 2.5	PASS
	HCH	VN	-30	-1.21	-0.001696	± 2.5	PASS
		VN	-20	-1.24	-0.001738	± 2.5	PASS
		VN	-10	-0.67	-0.000939	± 2.5	PASS
		VN	0	-0.57	-0.000799	± 2.5	PASS
		VN	10	-0.16	-0.000224	± 2.5	PASS
		VN	20	1.05	0.001472	± 2.5	PASS
		VN	30	0.14	0.000196	± 2.5	PASS
		VN	40	2.36	0.003308	± 2.5	PASS
		VN	50	0.46	0.000645	± 2.5	PASS
16QAM	LCH	VN	-30	2.59	0.003692	± 2.5	PASS
		VN	-20	3.95	0.005631	± 2.5	PASS
		VN	-10	-0.43	-0.000613	± 2.5	PASS
		VN	0	0.41	0.000584	± 2.5	PASS
		VN	10	2.6	0.003706	± 2.5	PASS
		VN	20	-0.63	-0.000898	± 2.5	PASS
		VN	30	-1.48	-0.002110	± 2.5	PASS
		VN	40	4.97	0.007085	± 2.5	PASS
		VN	50	2.19	0.003122	± 2.5	PASS
	MCH	VN	-30	-1.63	-0.002304	± 2.5	PASS
		VN	-20	1.4	0.001979	± 2.5	PASS
		VN	-10	2.01	0.002841	± 2.5	PASS
		VN	0	4.64	0.006558	± 2.5	PASS
		VN	10	-1.21	-0.001710	± 2.5	PASS
		VN	20	2.34	0.003307	± 2.5	PASS
		VN	30	3.83	0.005413	± 2.5	PASS
		VN	40	-1.68	-0.002375	± 2.5	PASS
		VN	50	4.59	0.006488	± 2.5	PASS
	HCH	VN	-30	3.74	0.005242	± 2.5	PASS
		VN	-20	2.4	0.003364	± 2.5	PASS
		VN	-10	1.97	0.002761	± 2.5	PASS
		VN	0	-1.72	-0.002411	± 2.5	PASS
		VN	10	3.52	0.004933	± 2.5	PASS
		VN	20	4.54	0.006363	± 2.5	PASS
		VN	30	1.99	0.002789	± 2.5	PASS
		VN	40	0.18	0.000252	± 2.5	PASS
		VN	50	2.96	0.004149	± 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	4.72	0.006705	± 2.5	PASS
		VN	TN	-0.45	-0.000639	± 2.5	PASS
		VH	TN	-0.57	-0.000810	± 2.5	PASS
	MCH	VL	TN	-0.49	-0.000693	± 2.5	PASS
		VN	TN	0.58	0.000820	± 2.5	PASS
		VH	TN	2.3	0.003251	± 2.5	PASS
	HCH	VL	TN	3.23	0.004543	± 2.5	PASS
		VN	TN	3.68	0.005176	± 2.5	PASS
		VH	TN	-1.75	-0.002461	± 2.5	PASS
16QAM	LCH	VL	TN	1.27	0.001804	± 2.5	PASS
		VN	TN	0.83	0.001179	± 2.5	PASS
		VH	TN	0.92	0.001307	± 2.5	PASS
	MCH	VL	TN	4.25	0.006007	± 2.5	PASS
		VN	TN	-0.15	-0.000212	± 2.5	PASS
		VH	TN	3.1	0.004382	± 2.5	PASS
	HCH	VL	TN	4.88	0.006864	± 2.5	PASS
		VN	TN	4.44	0.006245	± 2.5	PASS
		VH	TN	2.27	0.003193	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.01	-0.000014	± 2.5	PASS
		VN	-20	0.02	0.000028	± 2.5	PASS
		VN	-10	0.32	0.000455	± 2.5	PASS
		VN	0	4.88	0.006932	± 2.5	PASS
		VN	10	0.97	0.001378	± 2.5	PASS
		VN	20	3.71	0.005270	± 2.5	PASS
		VN	30	2.77	0.003935	± 2.5	PASS
		VN	40	3.71	0.005270	± 2.5	PASS
		VN	50	2.99	0.004247	± 2.5	PASS
	MCH	VN	-30	4.38	0.006191	± 2.5	PASS
		VN	-20	-0.6	-0.000848	± 2.5	PASS
		VN	-10	-1.21	-0.001710	± 2.5	PASS
		VN	0	0.09	0.000127	± 2.5	PASS
		VN	10	4.09	0.005781	± 2.5	PASS

		VN	20	1.59	0.002247	± 2.5	PASS
		VN	30	-0.04	-0.000057	± 2.5	PASS
		VN	40	0.83	0.001173	± 2.5	PASS
		VN	50	1.8	0.002544	± 2.5	PASS
	HCH	VN	-30	4.01	0.005640	± 2.5	PASS
		VN	-20	0.71	0.000999	± 2.5	PASS
		VN	-10	2.8	0.003938	± 2.5	PASS
		VN	0	-1.3	-0.001828	± 2.5	PASS
		VN	10	2.98	0.004191	± 2.5	PASS
		VN	20	4.96	0.006976	± 2.5	PASS
		VN	30	0.27	0.000380	± 2.5	PASS
		VN	40	0.94	0.001322	± 2.5	PASS
		VN	50	2.94	0.004135	± 2.5	PASS
QPSK	LCH	VN	-30	2.03	0.002884	± 2.5	PASS
		VN	-20	1.4	0.001989	± 2.5	PASS
		VN	-10	1.24	0.001761	± 2.5	PASS
		VN	0	-0.48	-0.000682	± 2.5	PASS
		VN	10	2.1	0.002983	± 2.5	PASS
		VN	20	-1.36	-0.001932	± 2.5	PASS
		VN	30	2.49	0.003537	± 2.5	PASS
		VN	40	-1.95	-0.002770	± 2.5	PASS
		VN	50	4.03	0.005724	± 2.5	PASS
	MCH	VN	-30	3.44	0.004862	± 2.5	PASS
		VN	-20	-0.93	-0.001314	± 2.5	PASS
		VN	-10	0.83	0.001173	± 2.5	PASS
		VN	0	1.09	0.001541	± 2.5	PASS
		VN	10	-1.05	-0.001484	± 2.5	PASS
		VN	20	2.74	0.003873	± 2.5	PASS
		VN	30	2.52	0.003562	± 2.5	PASS
		VN	40	4.46	0.006304	± 2.5	PASS
		VN	50	-1.57	-0.002219	± 2.5	PASS
	HCH	VN	-30	2.85	0.004008	± 2.5	PASS
		VN	-20	4.76	0.006695	± 2.5	PASS
		VN	-10	1.99	0.002799	± 2.5	PASS
		VN	0	1.54	0.002166	± 2.5	PASS
		VN	10	2.27	0.003193	± 2.5	PASS
		VN	20	0.45	0.000633	± 2.5	PASS
		VN	30	0.62	0.000872	± 2.5	PASS
		VN	40	4.09	0.005752	± 2.5	PASS
		VN	50	1.72	0.002419	± 2.5	PASS