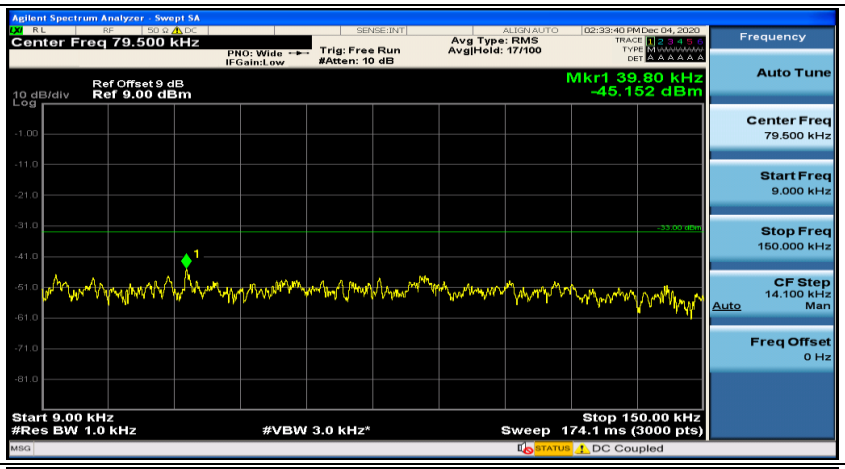
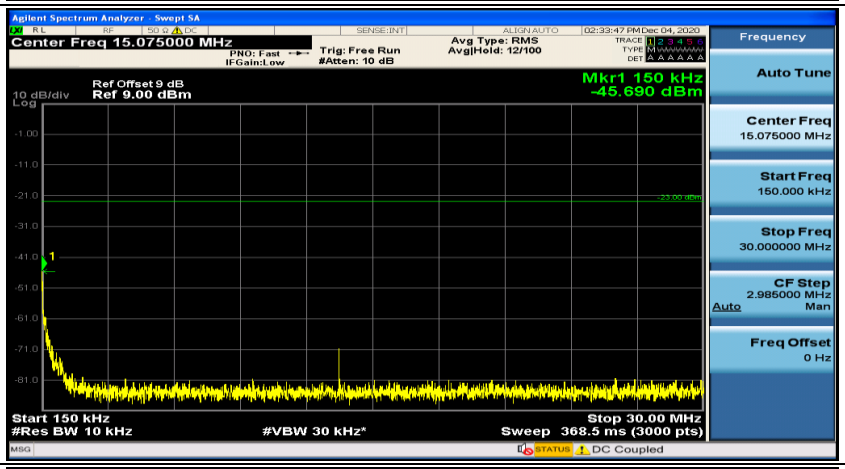
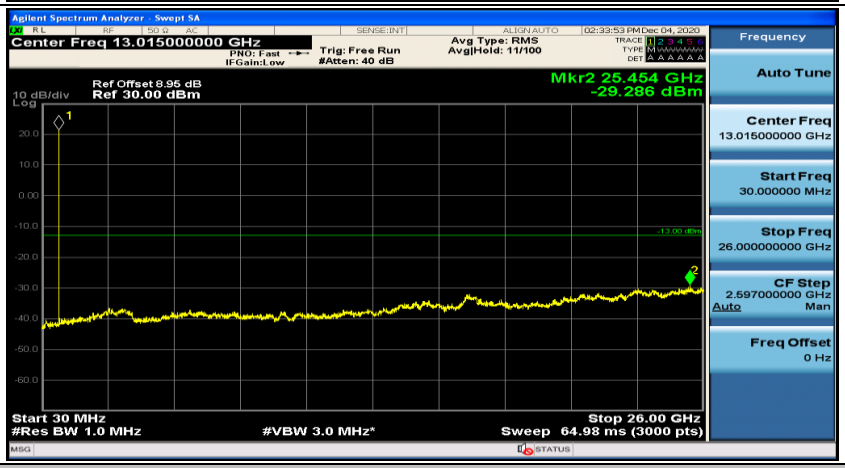
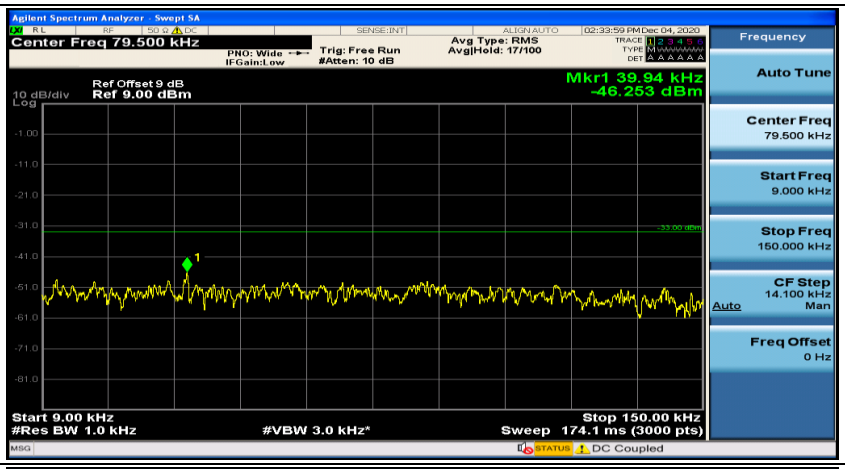
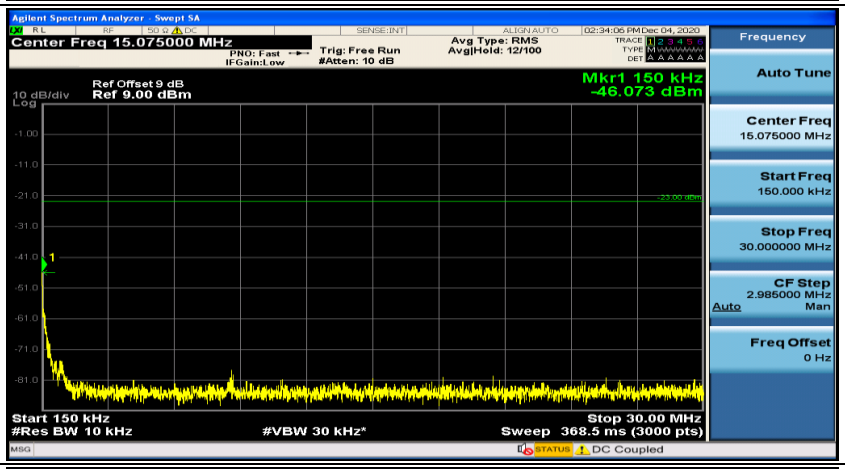






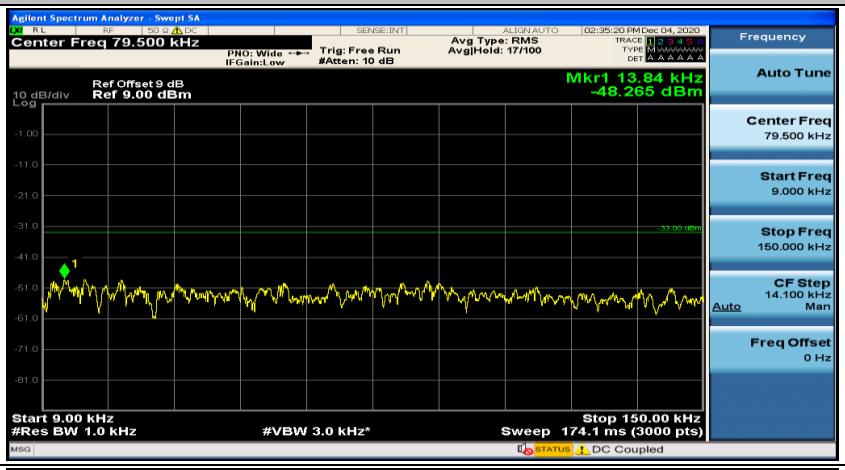
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

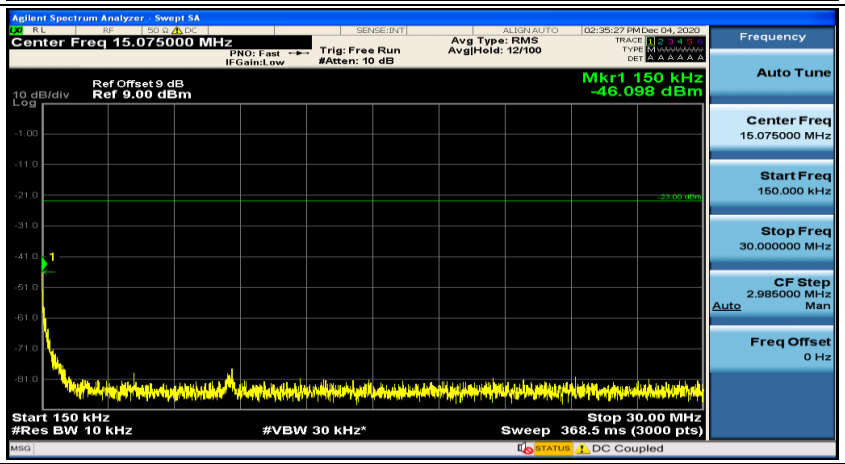

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:33:59 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 39.94 kHz
-46.253 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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
02:34:06 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-46.073 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

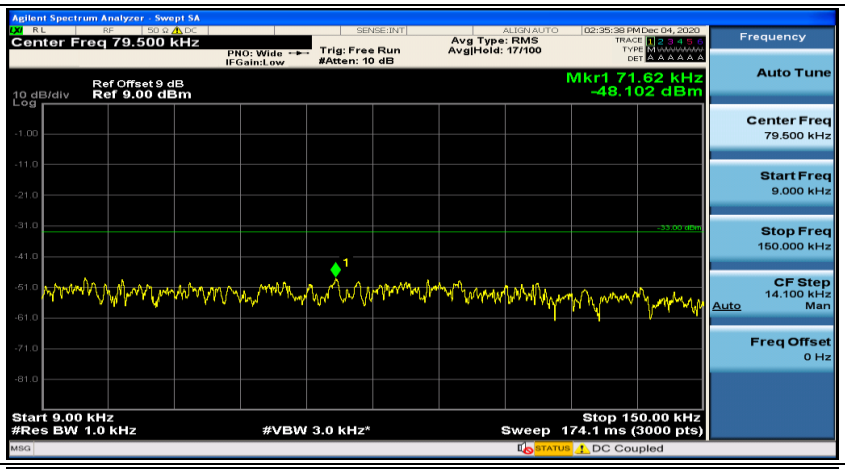
Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:34:12 PM Dec 04, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.420 GHz
-29.779 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

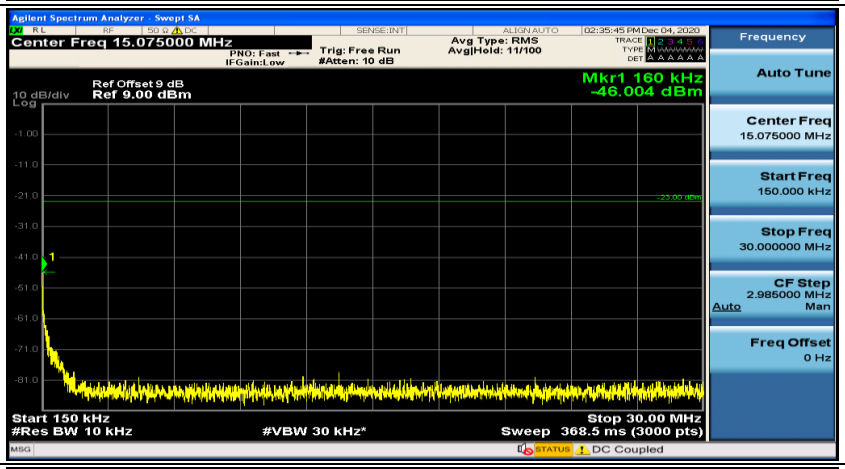
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

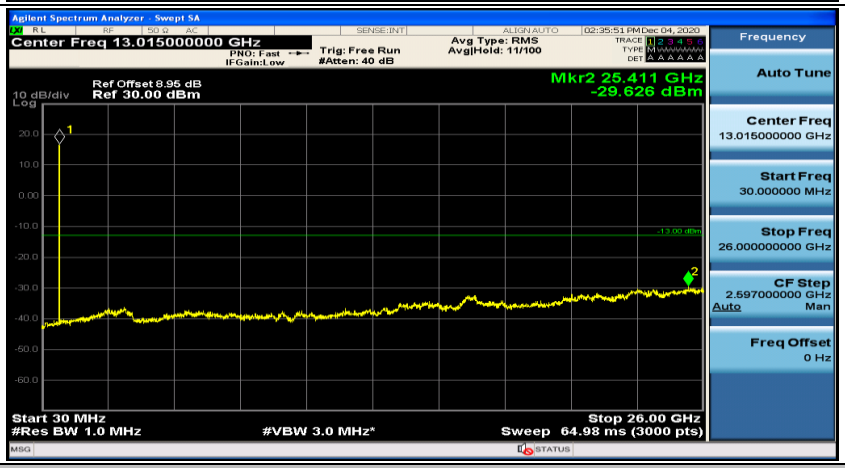




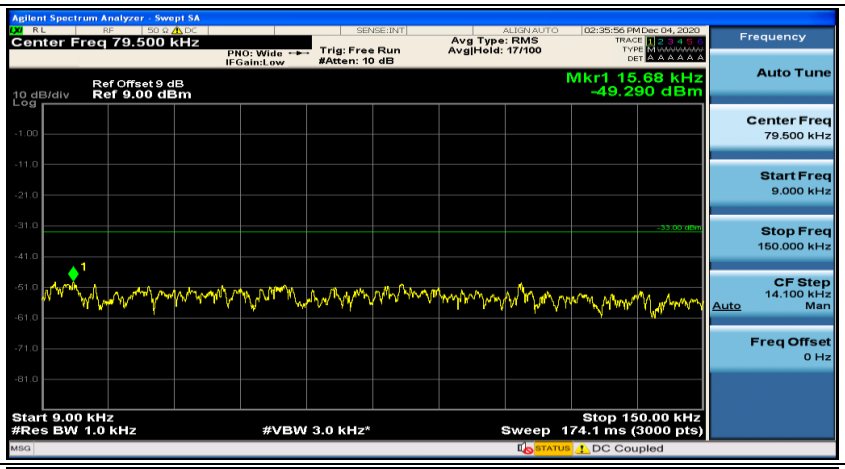
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

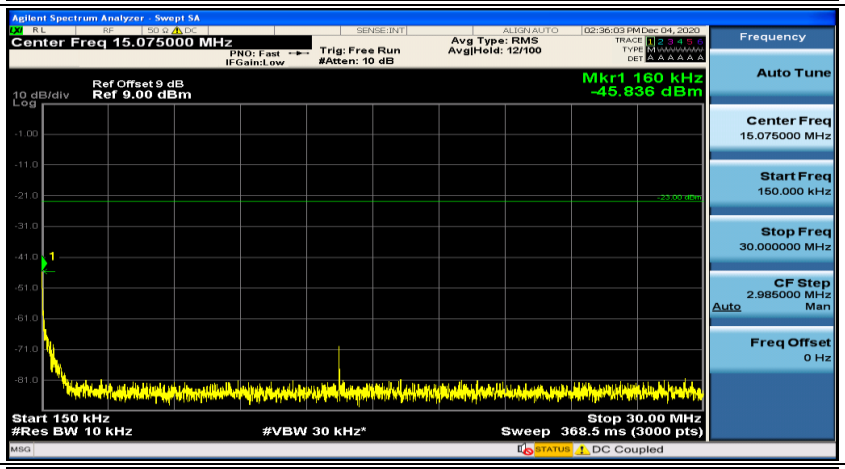






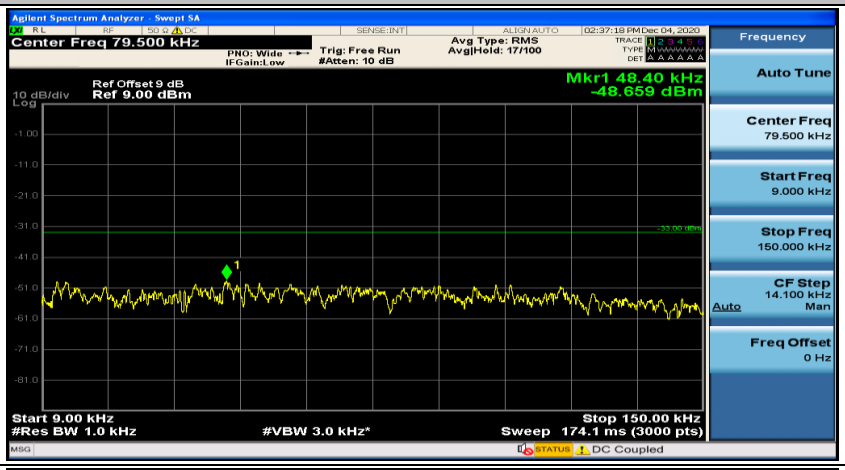
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

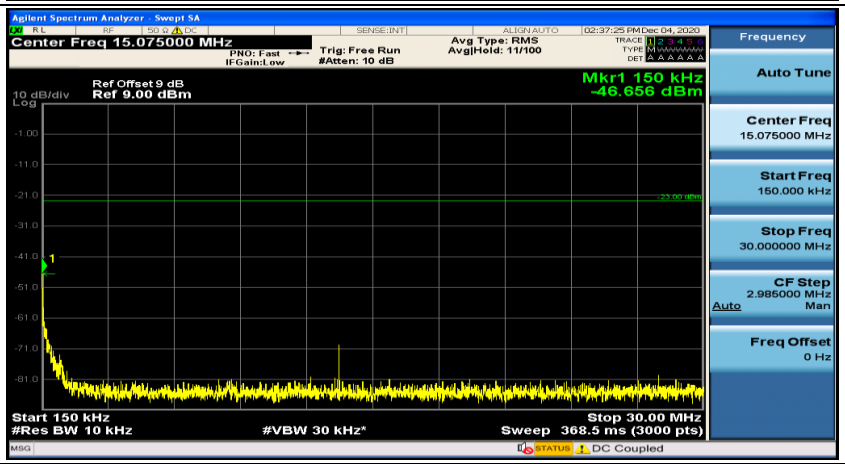

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:35:56 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 15.68 kHz
-49.290 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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
02:36:03 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 160 kHz
-45.836 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

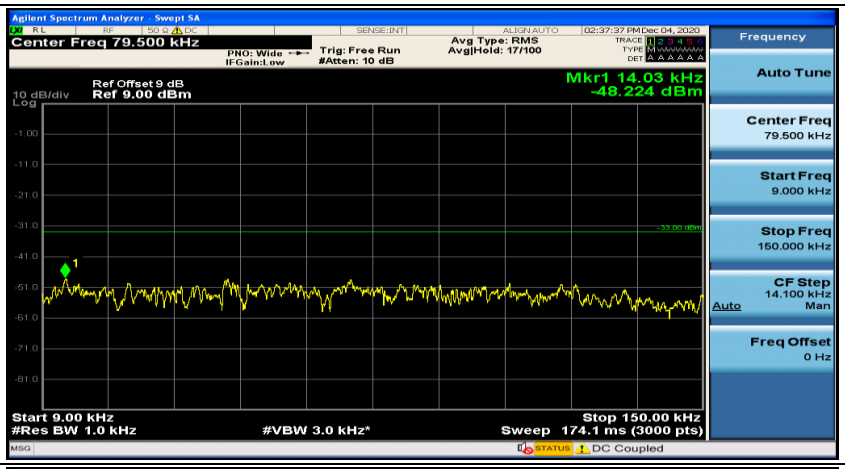
Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:36:10 PM Dec 04, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.896 GHz
-29.503 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
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

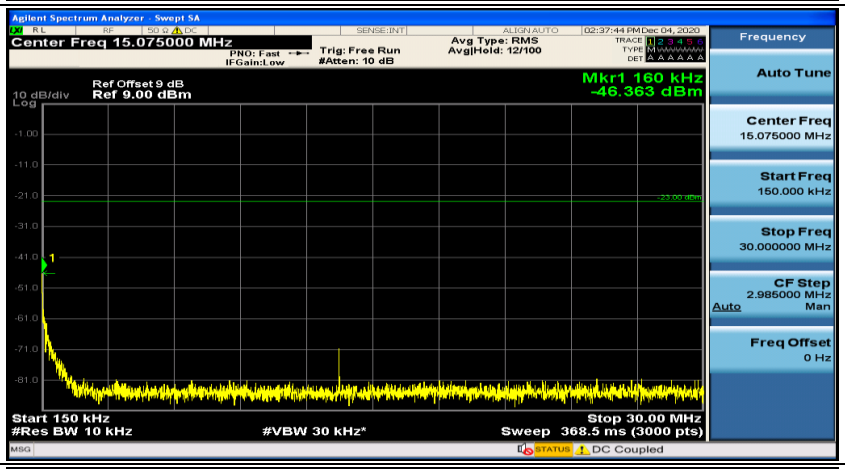
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

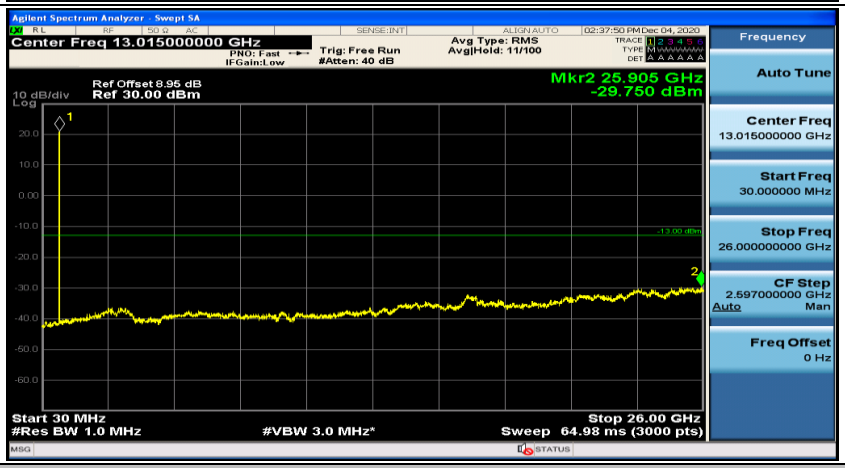




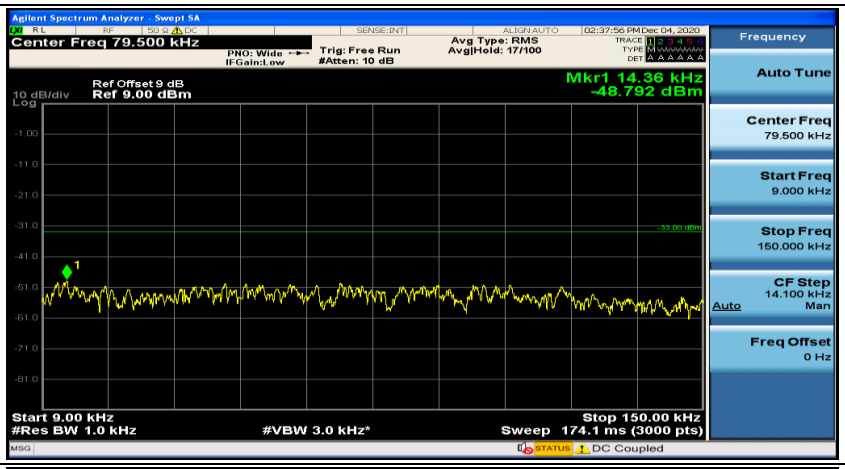
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

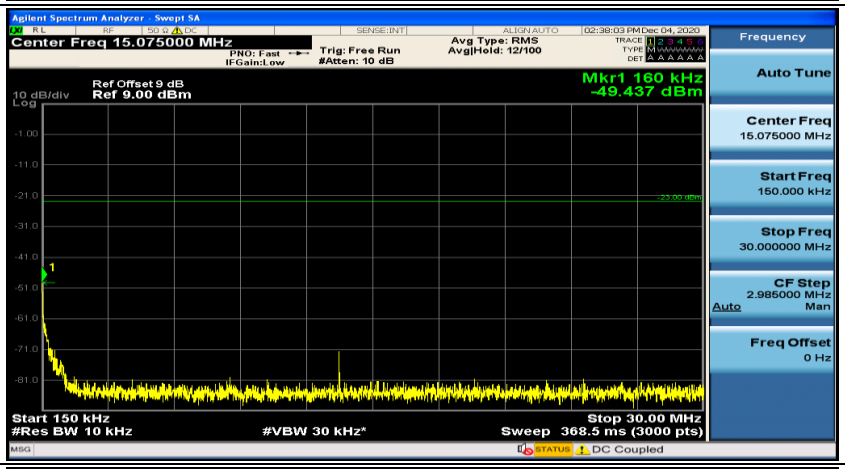






(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24

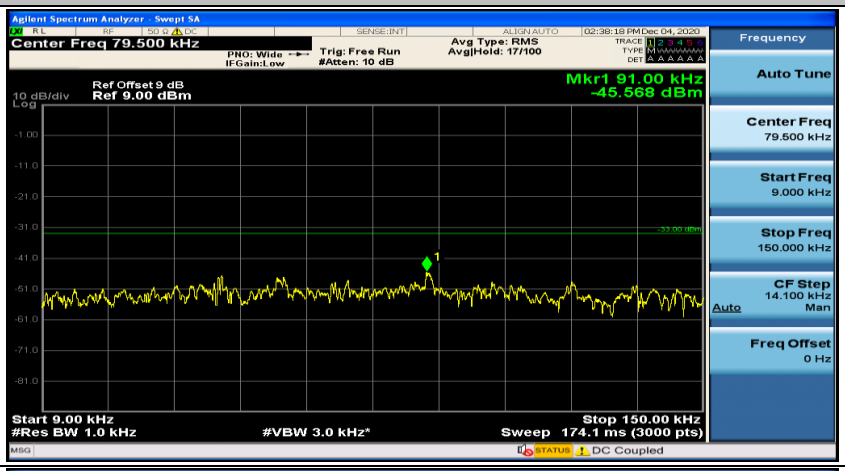

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:37:56 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 14.36 kHz
-48.792 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

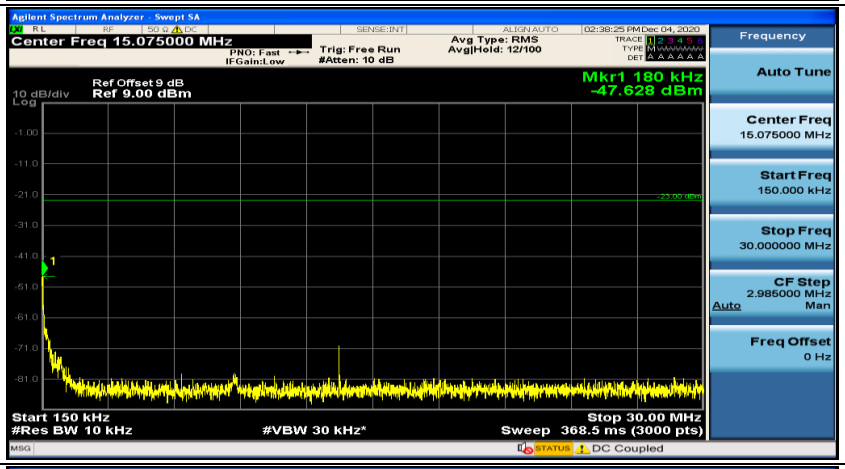

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:38:03 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 160 kHz
-49.437 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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

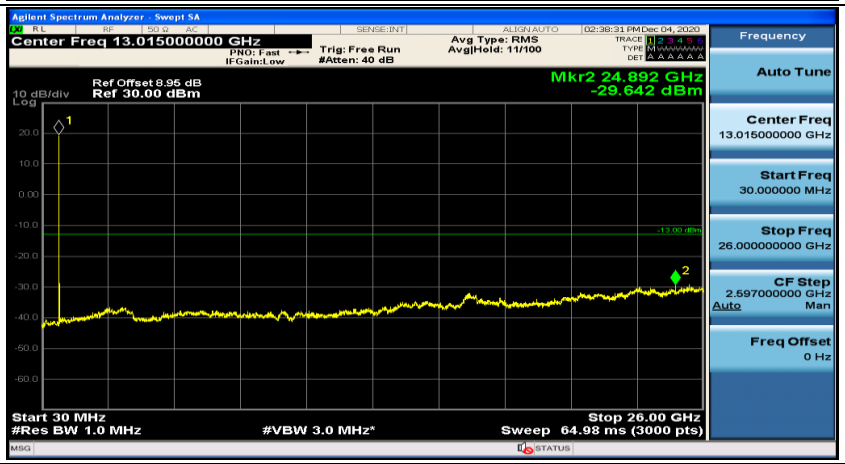
Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
02:38:09 PM Dec 04, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.489 GHz
-29.428 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

Channel Bandwidth: 10 MHz

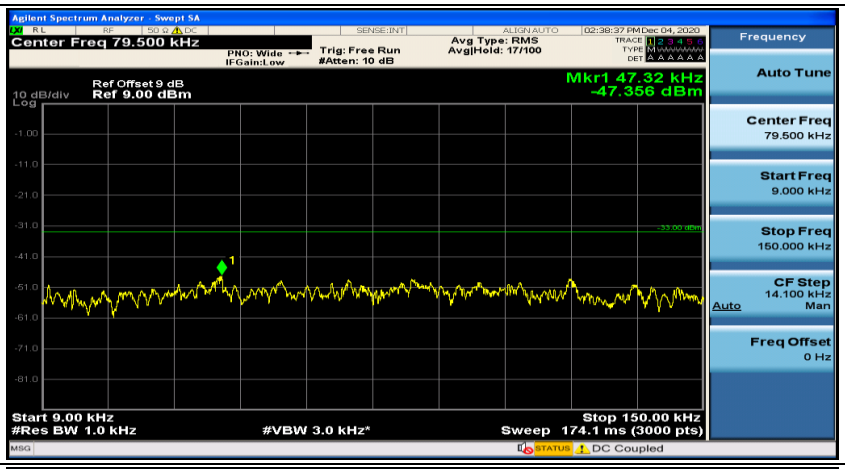
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0

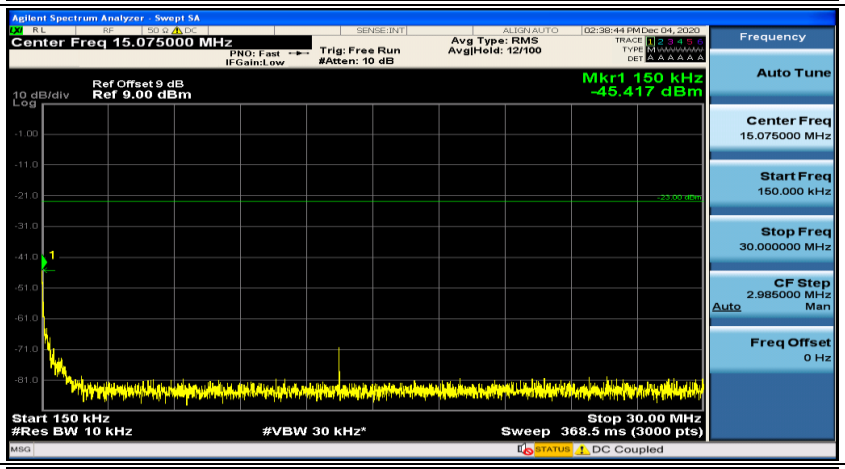


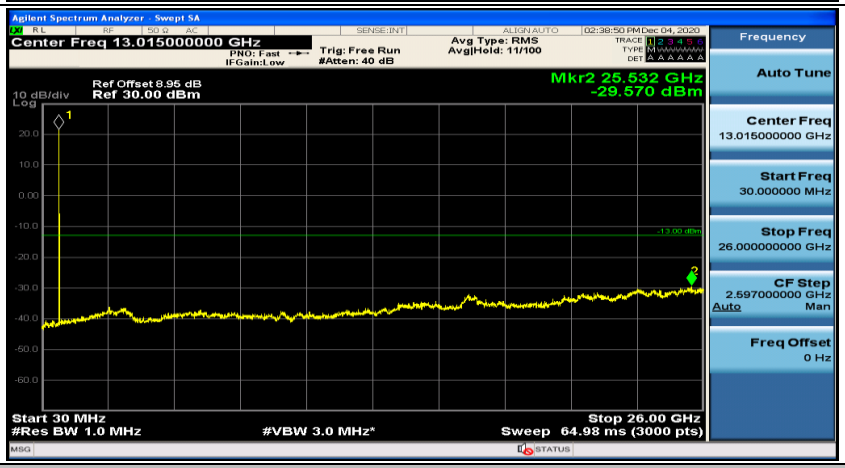




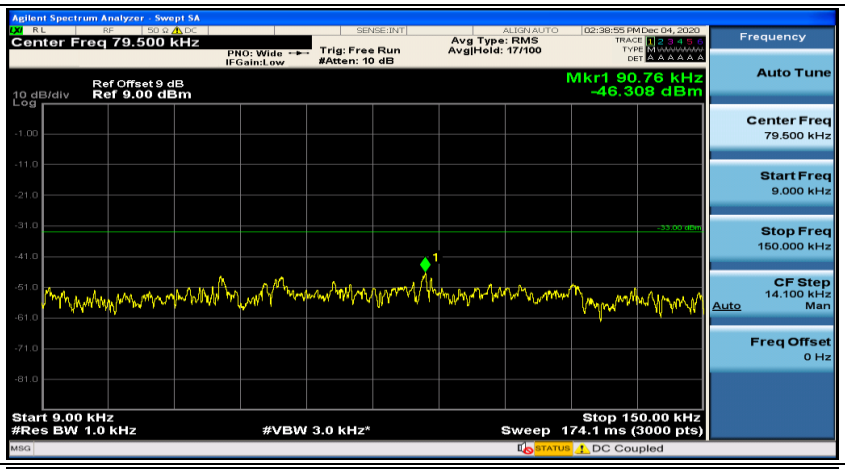
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#24

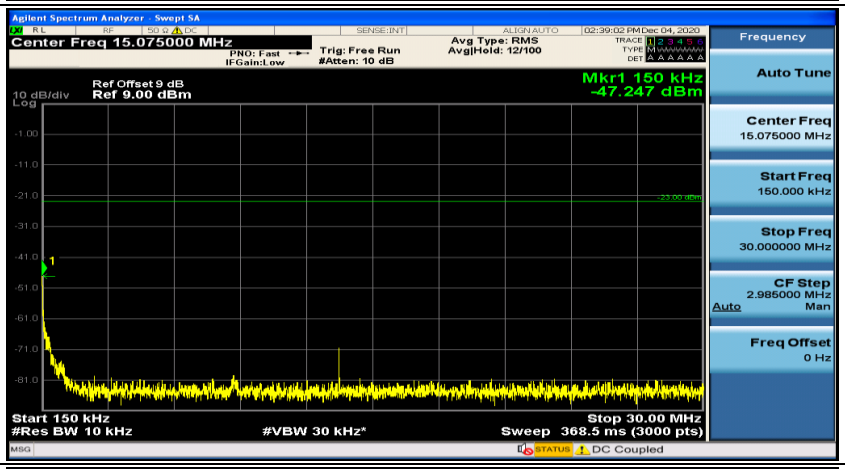




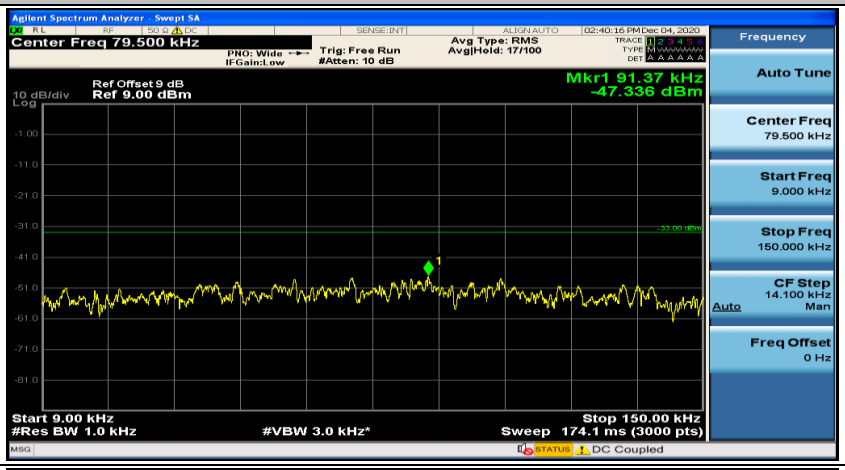
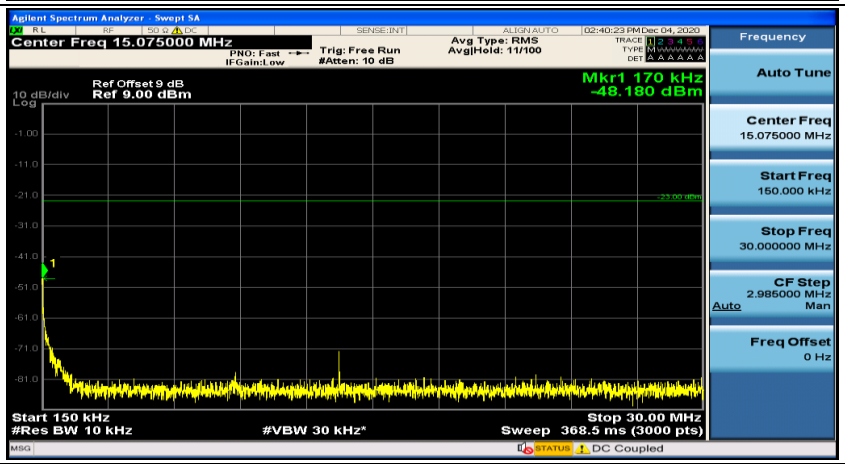


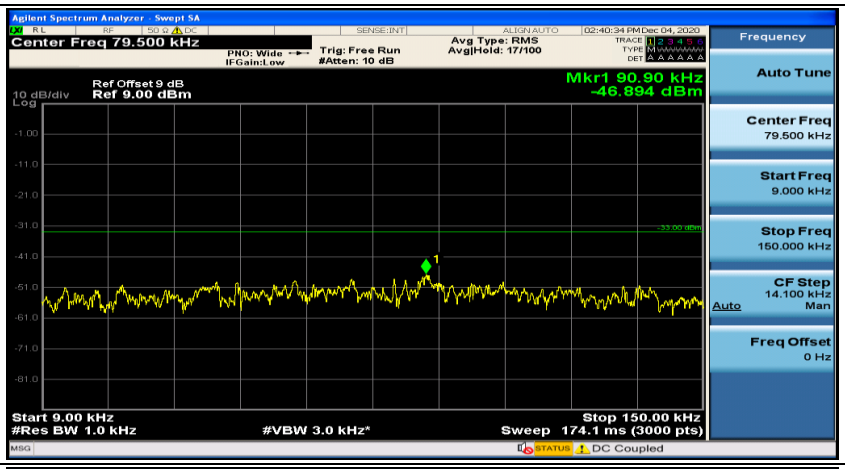
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#49

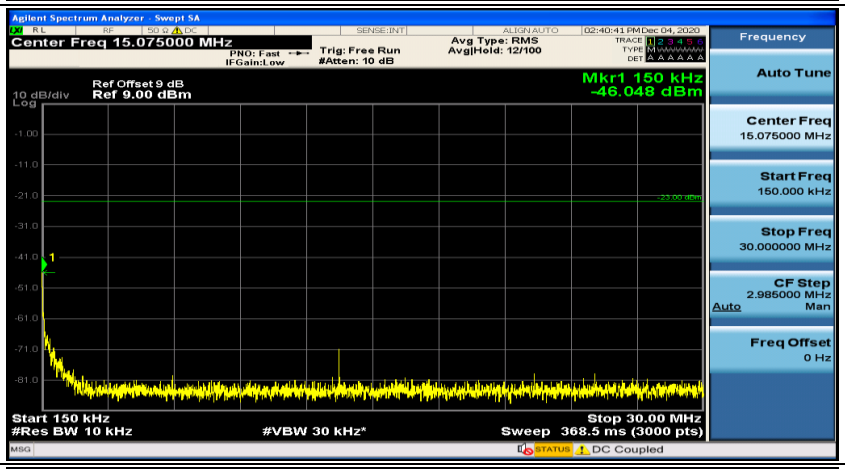

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:38:55 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 90.76 kHz
-46.308 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz
Auto Man
Freq Offset 0 Hz

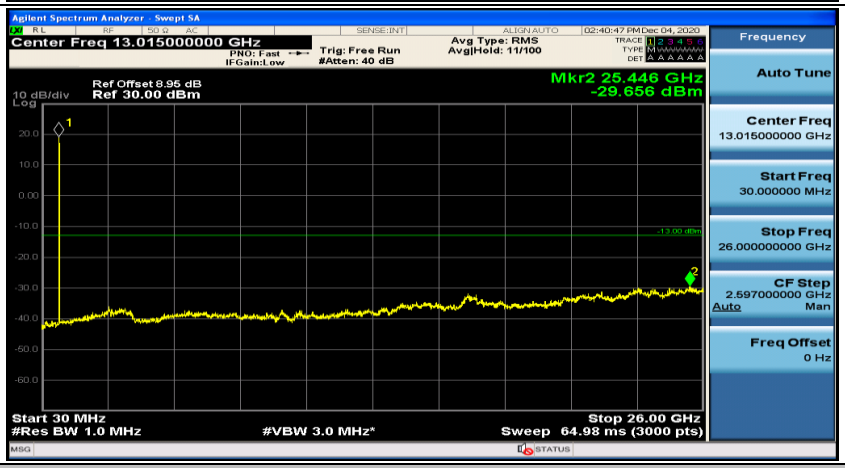

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:39:02 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-47.247 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:39:08 PM Dec 04, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.922 GHz
-29.498 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

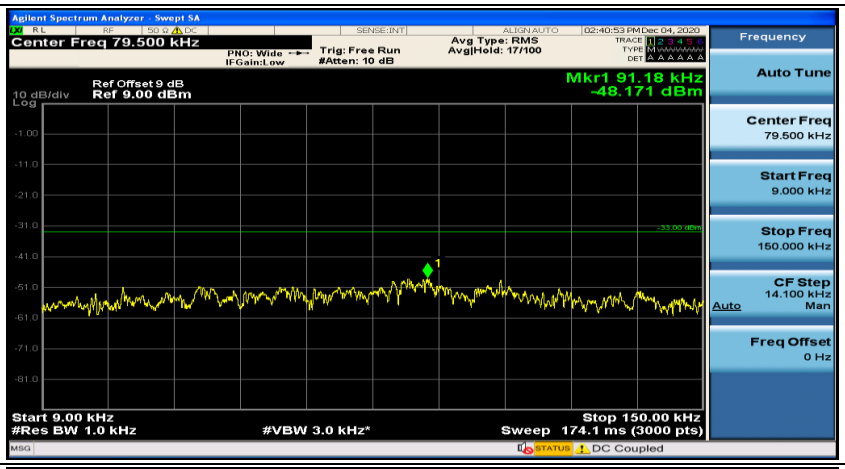
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

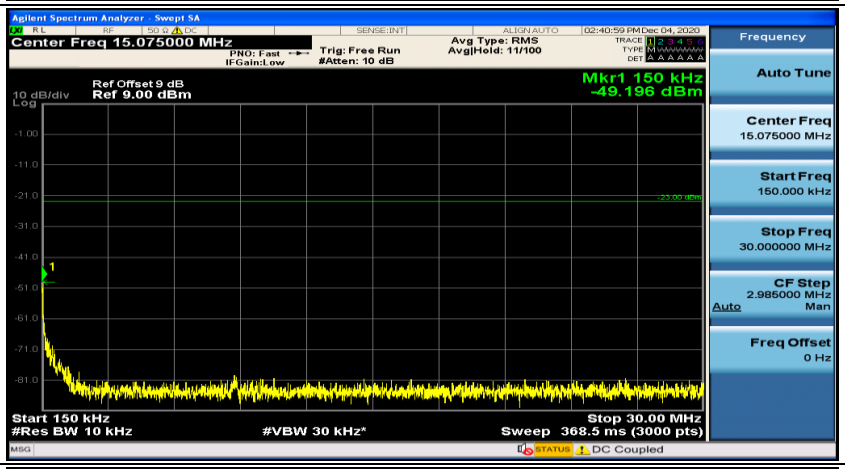




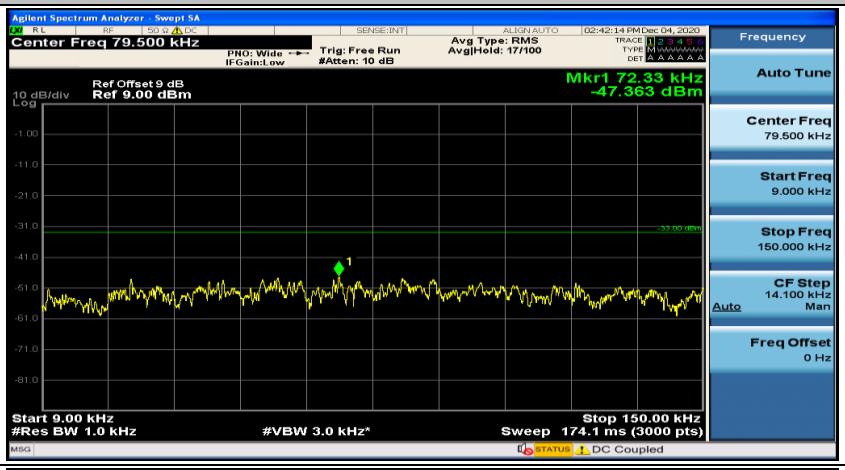
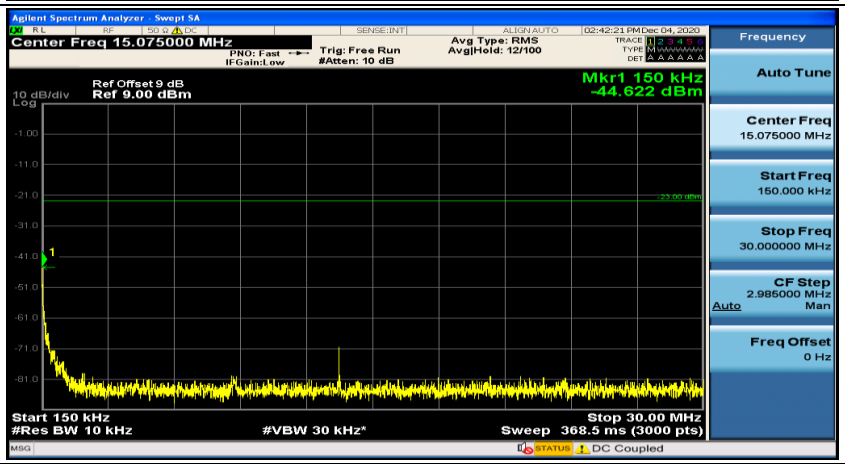


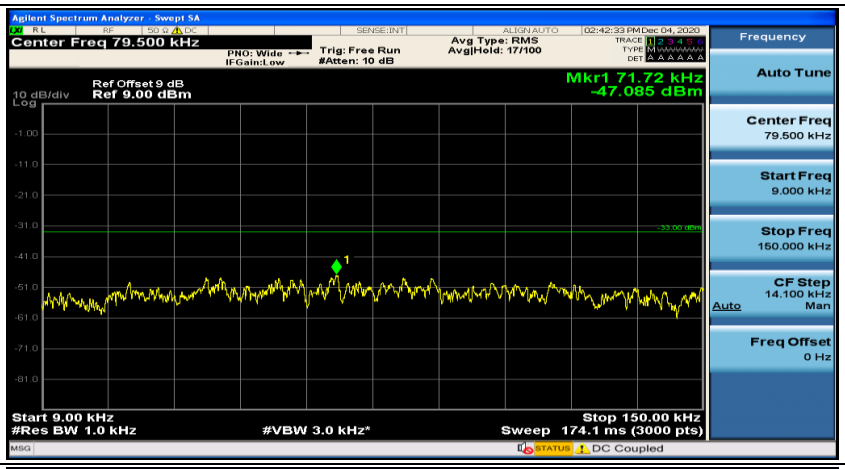
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

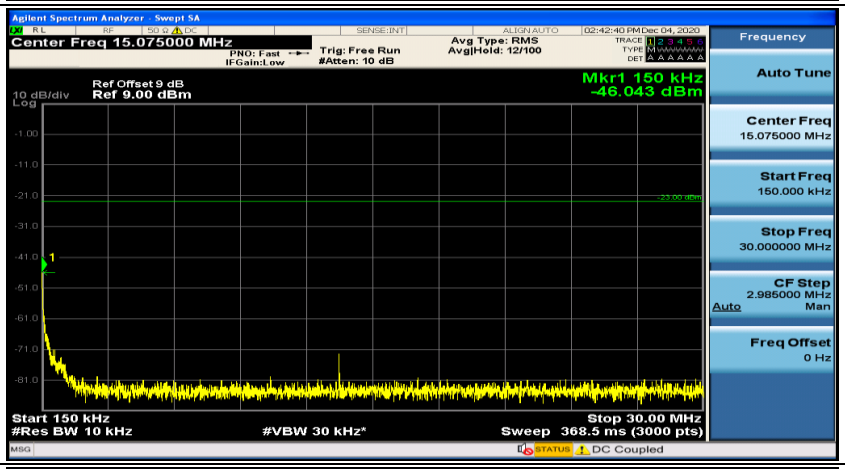

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:40:53 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 91.18 kHz
-48.171 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

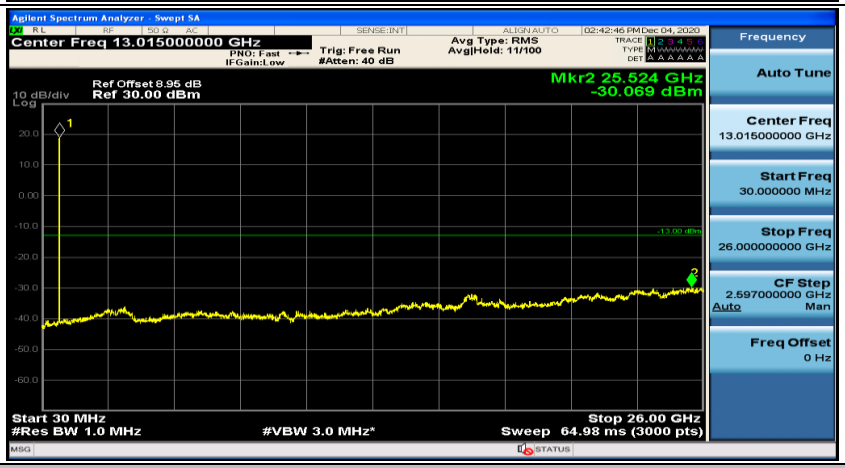

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
02:40:59 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 150 kHz
-49.196 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:41:06 PM Dec 04, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr2 25.524 GHz
-29.793 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

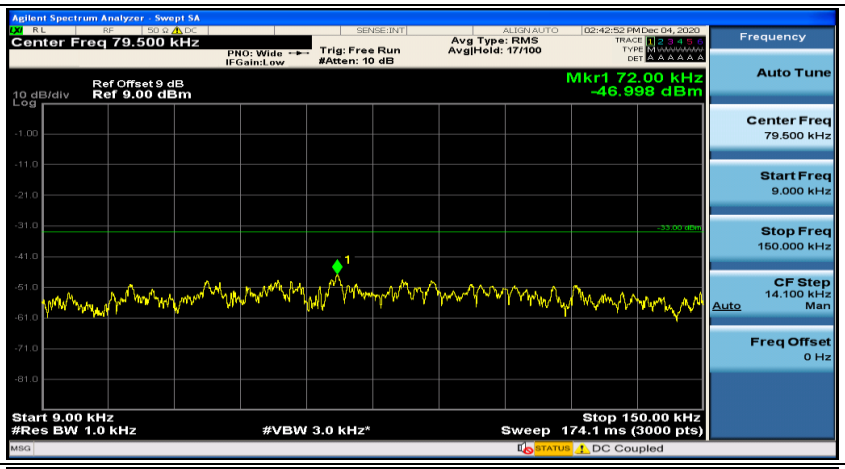
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

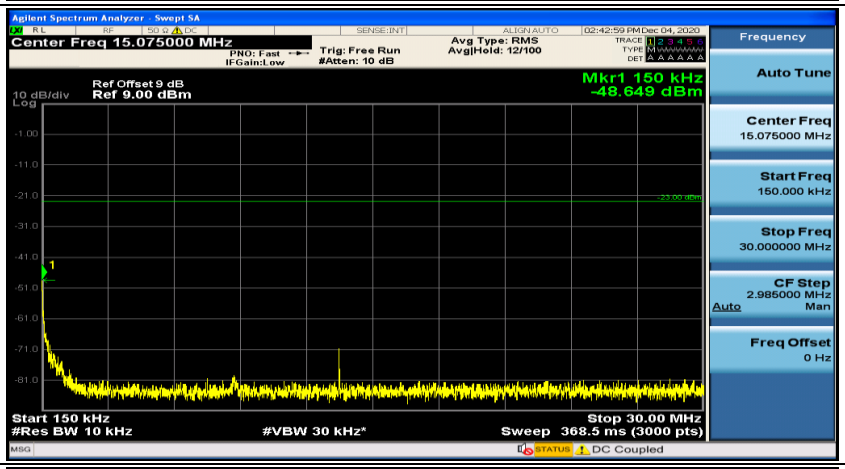




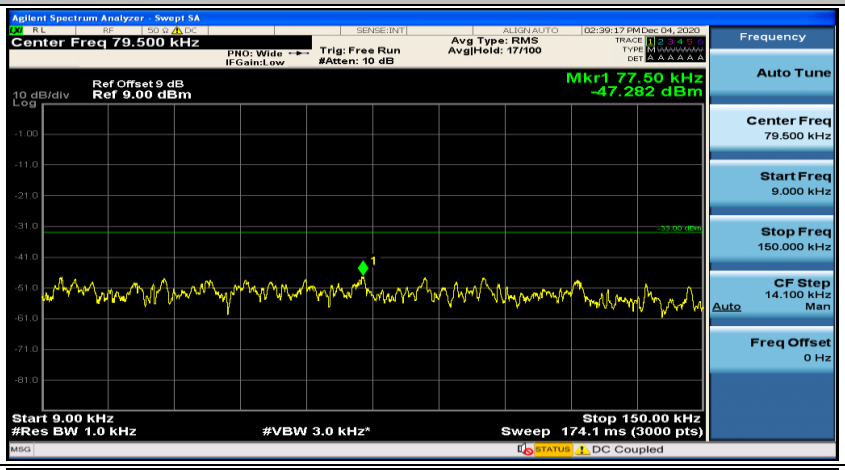
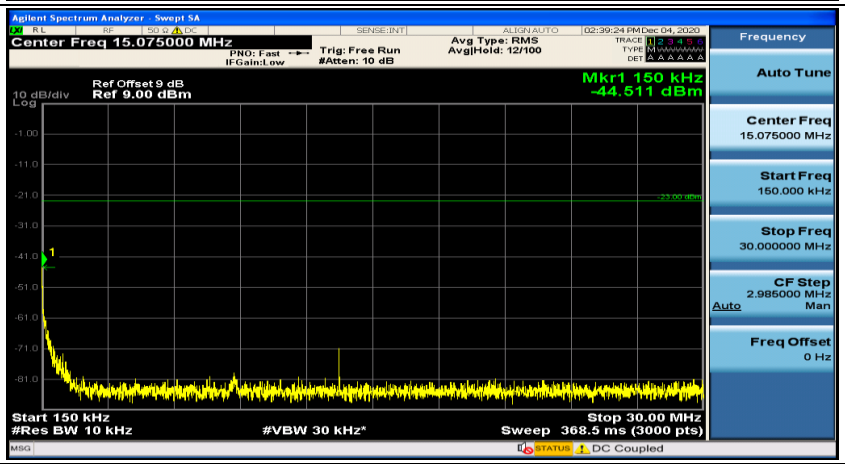


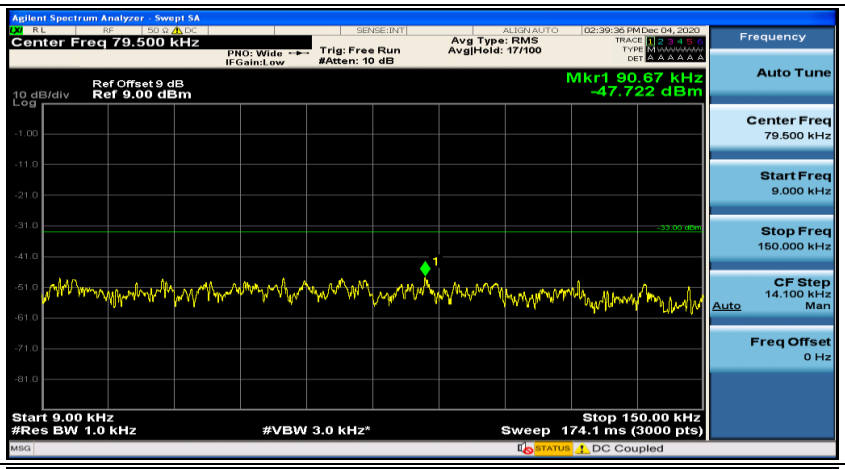
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#49

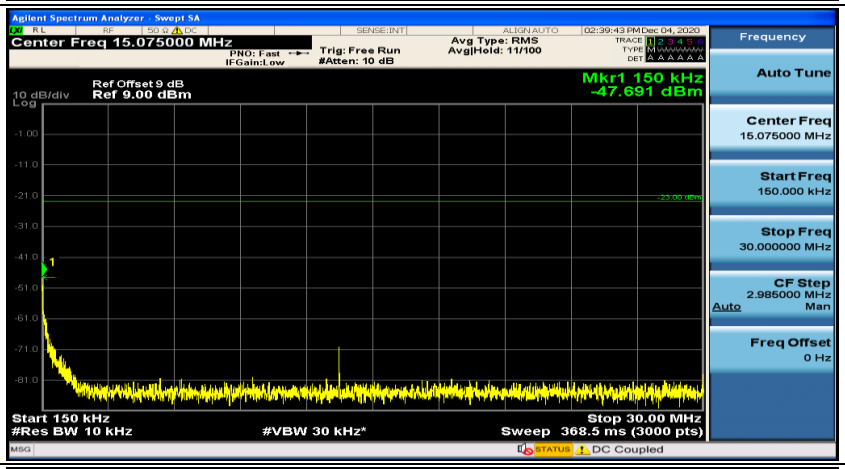

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:42:52 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 72.00 kHz
-46.998 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

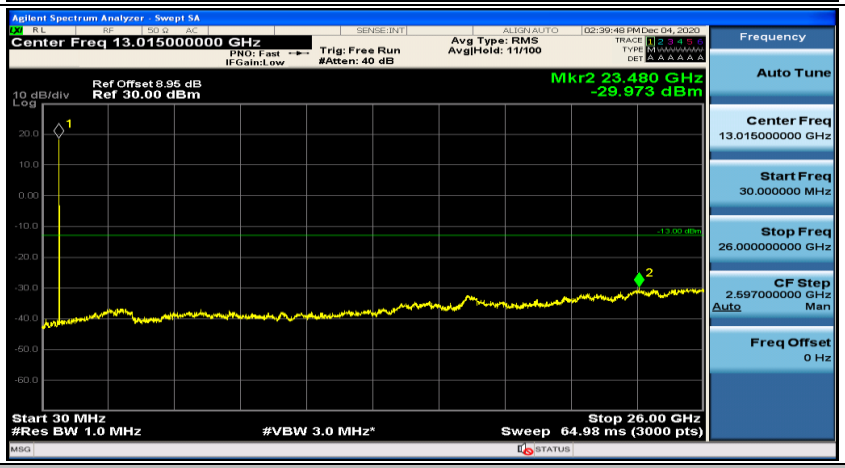

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:42:59 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-48.649 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:43:04 PM Dec 04, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.870 GHz
-30.024 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

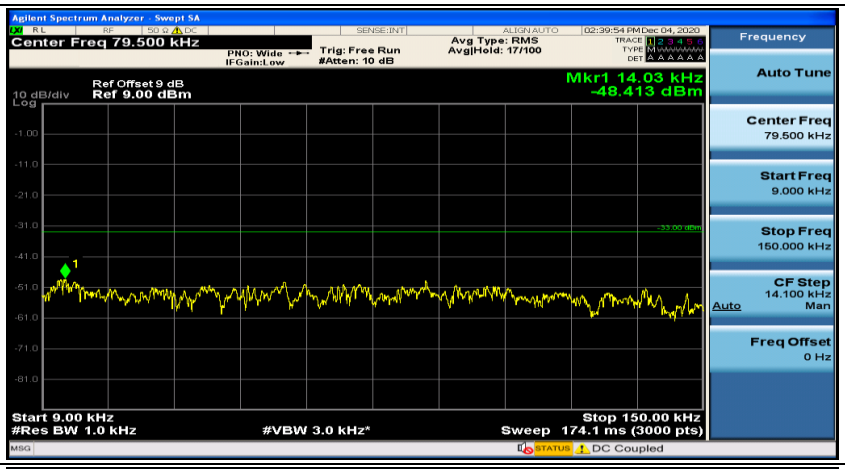
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

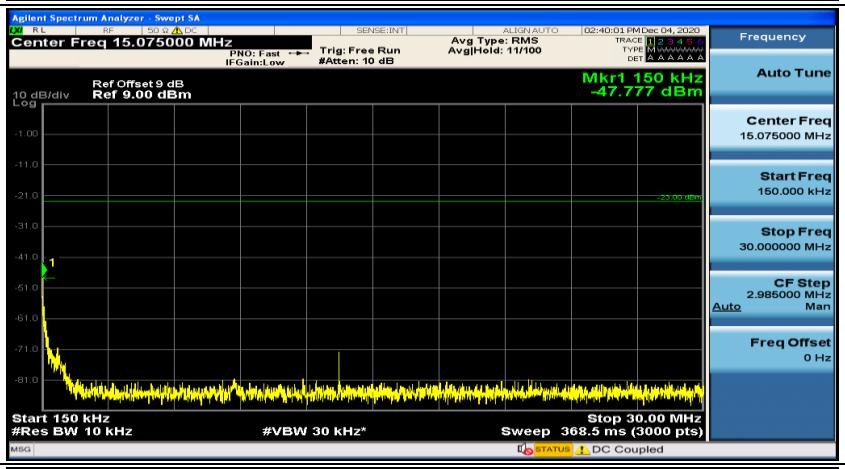




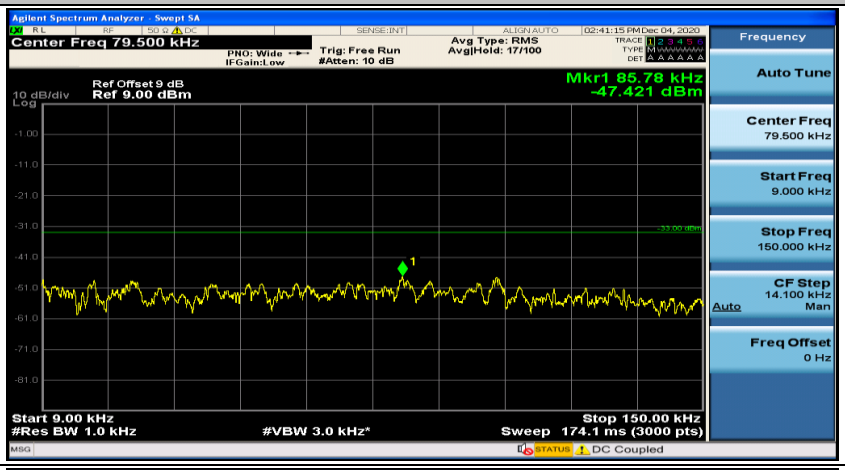
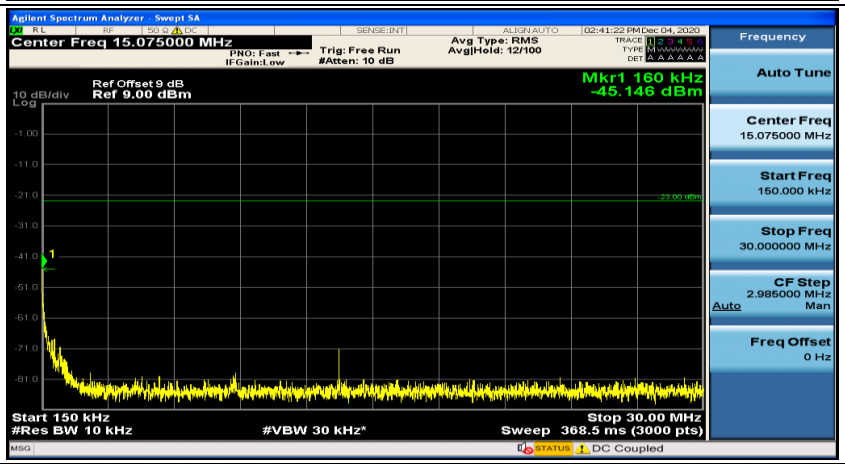


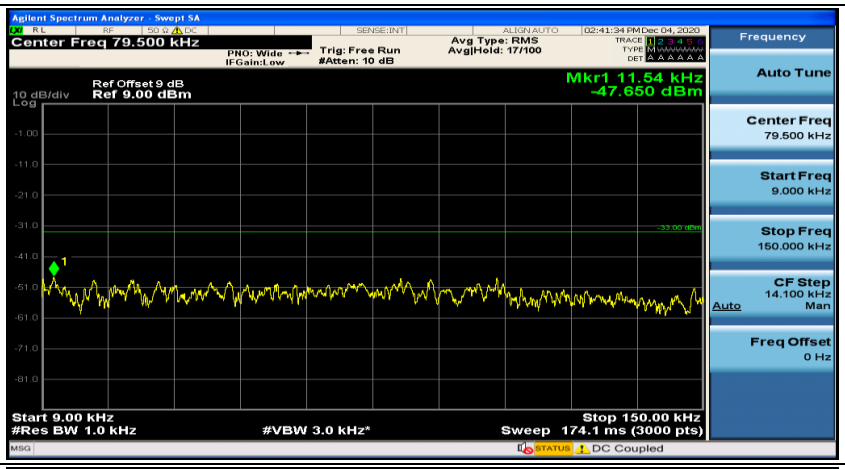
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49

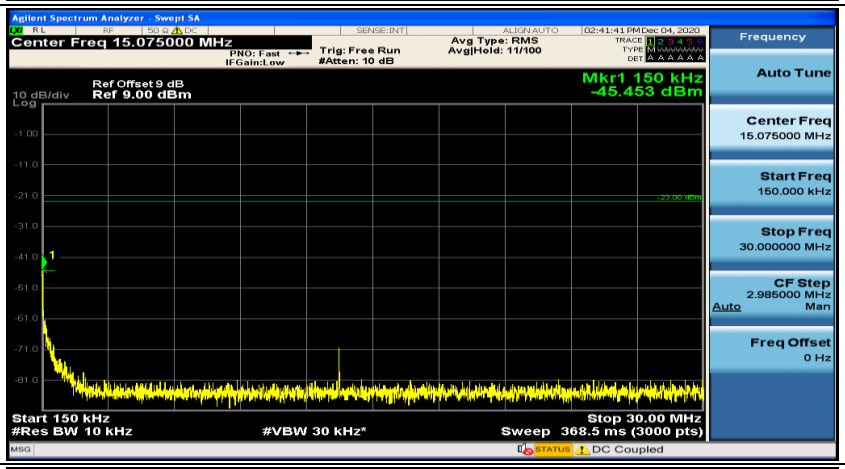

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:39:54 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 14.03 kHz
-48.413 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 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

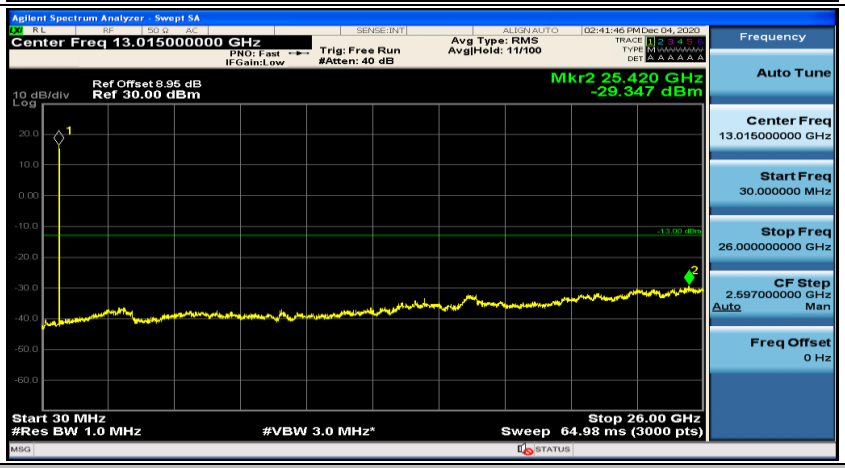

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
02:40:01 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-47.777 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:40:07 PM Dec 04, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.359 GHz
-29.642 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

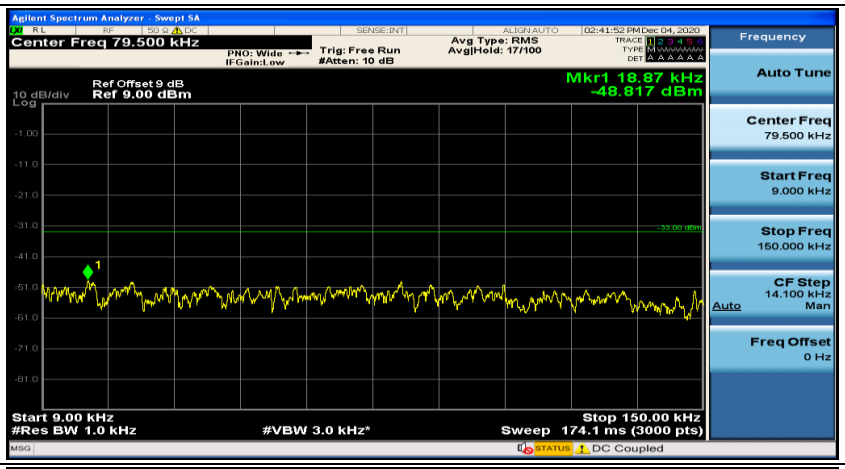
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

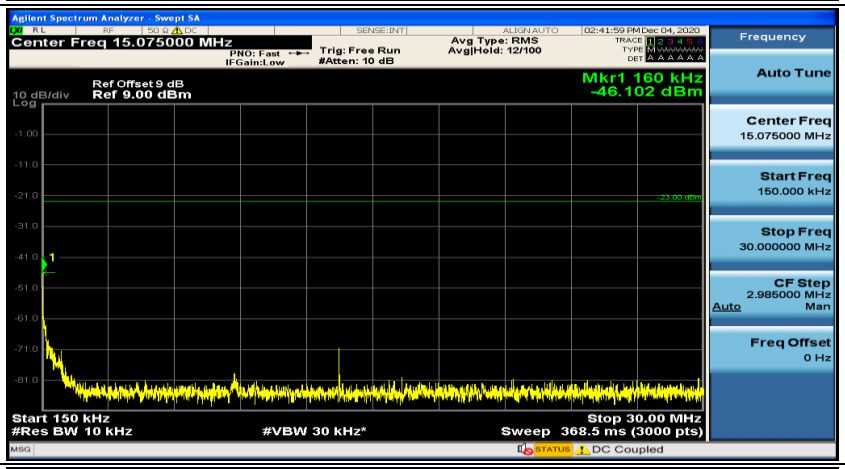




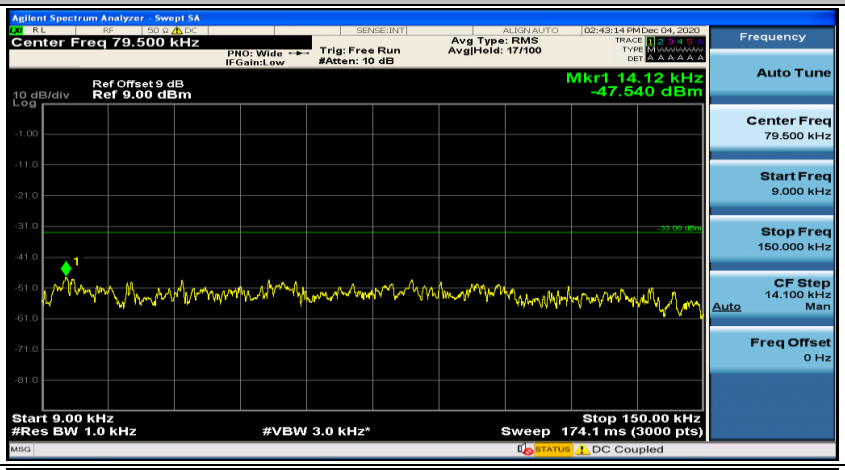
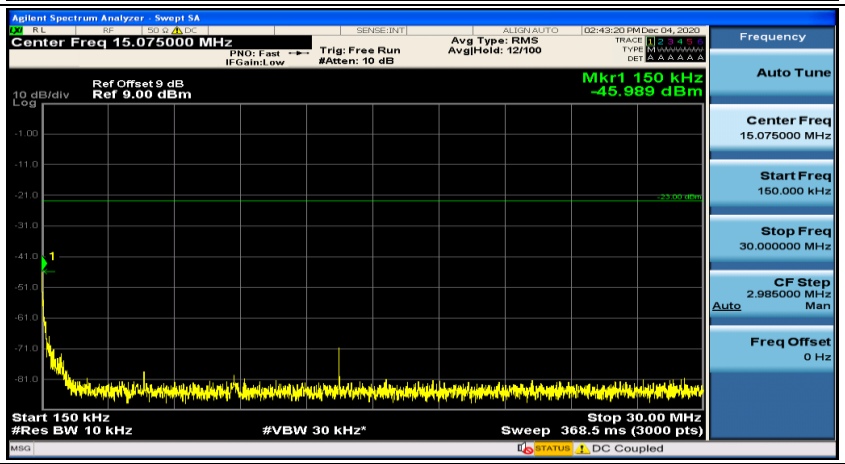


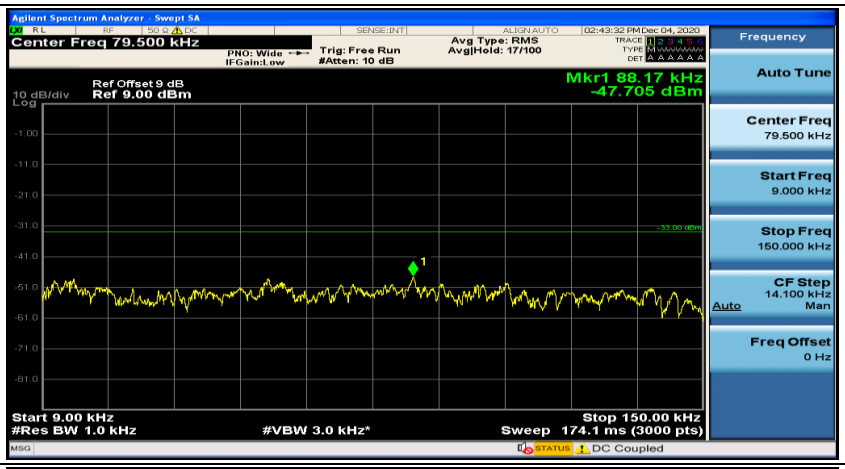
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

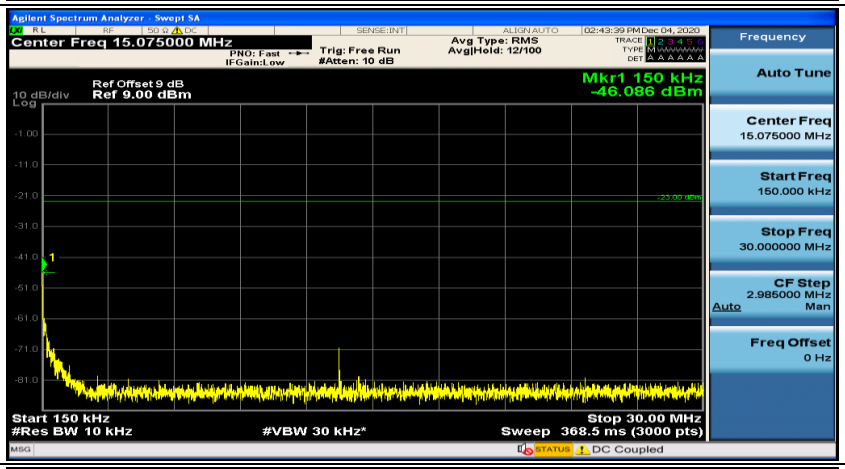

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
02:41:52 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 18.87 kHz
-48.817 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 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

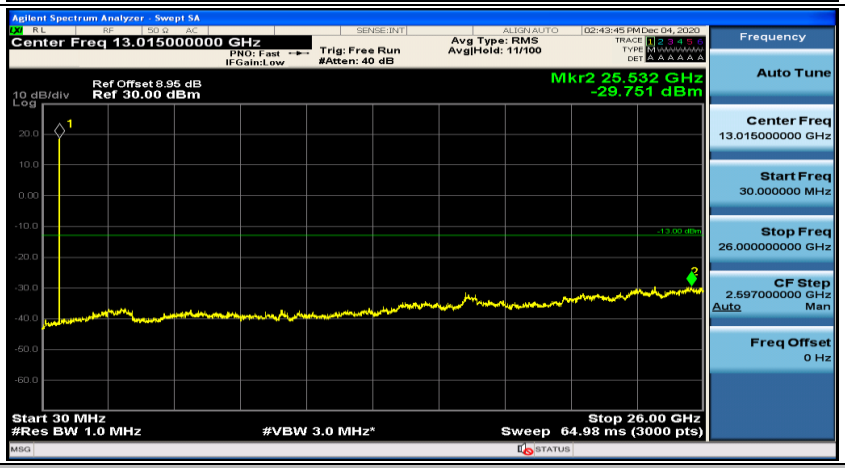

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
02:41:59 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 160 kHz
-46.102 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 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
02:42:05 PM Dec 04, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr2 25.931 GHz
-29.766 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

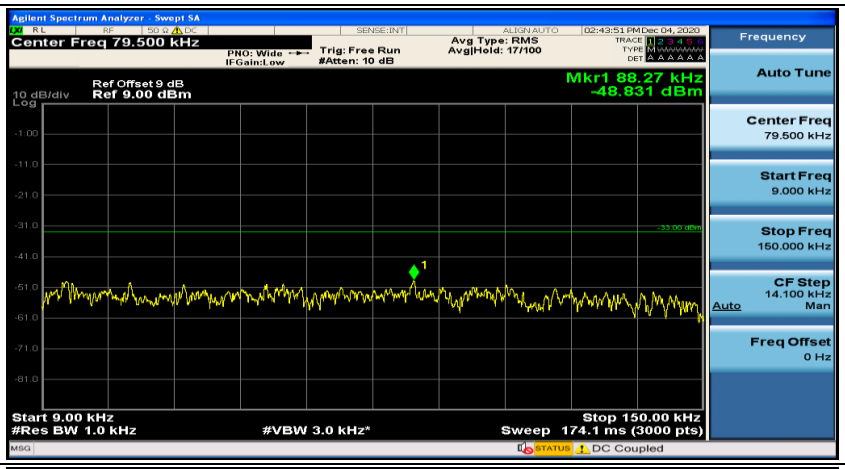
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24

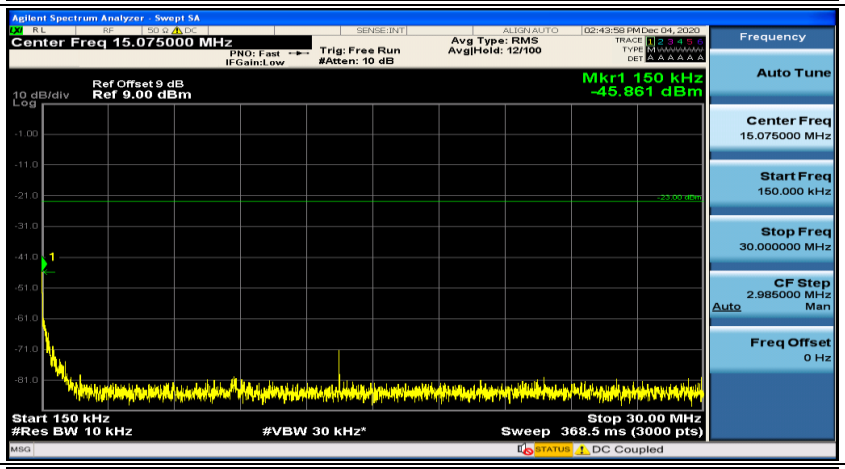






Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49


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
02:43:51 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 88.27 kHz
-48.831 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
02:43:58 PM Dec 04, 2020
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-45.861 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
02:44:04 PM Dec 04, 2020
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.913 GHz
-29.737 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.47	-0.002081	± 2.5	PASS
		VN	TN	-0.26	-0.000368	± 2.5	PASS
		VH	TN	2.19	0.003100	± 2.5	PASS
	MCH	VL	TN	3.08	0.004338	± 2.5	PASS
		VN	TN	2.51	0.003535	± 2.5	PASS
		VH	TN	-1.1	-0.001549	± 2.5	PASS
	HCH	VL	TN	4.74	0.006643	± 2.5	PASS
		VN	TN	3.15	0.004415	± 2.5	PASS
		VH	TN	4.87	0.006826	± 2.5	PASS
16QAM	LCH	VL	TN	-1.23	-0.001741	± 2.5	PASS
		VN	TN	0.57	0.000807	± 2.5	PASS
		VH	TN	-1.01	-0.001430	± 2.5	PASS
	MCH	VL	TN	3.15	0.004437	± 2.5	PASS
		VN	TN	2.53	0.003563	± 2.5	PASS
		VH	TN	2.41	0.003394	± 2.5	PASS
	HCH	VL	TN	0.9	0.001261	± 2.5	PASS
		VN	TN	0.31	0.000434	± 2.5	PASS
		VH	TN	-1.7	-0.002383	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.67	0.006610	± 2.5	PASS
		VN	-20	-1.52	-0.002151	± 2.5	PASS
		VN	-10	-0.31	-0.000439	± 2.5	PASS
		VN	0	2.67	0.003779	± 2.5	PASS
		VN	10	-1.33	-0.001883	± 2.5	PASS
		VN	20	4.32	0.006115	± 2.5	PASS
		VN	30	3.29	0.004657	± 2.5	PASS
		VN	40	1.68	0.002378	± 2.5	PASS
		VN	50	0.57	0.000807	± 2.5	PASS

	MCH	VN	-30	-0.43	-0.000606	± 2.5	PASS
		VN	-20	1.05	0.001479	± 2.5	PASS
		VN	-10	1.88	0.002648	± 2.5	PASS
		VN	0	2.85	0.004014	± 2.5	PASS
		VN	10	-1.7	-0.002394	± 2.5	PASS
		VN	20	-1.99	-0.002803	± 2.5	PASS
		VN	30	-1.78	-0.002507	± 2.5	PASS
		VN	40	-0.83	-0.001169	± 2.5	PASS
		VN	50	3.73	0.005254	± 2.5	PASS
	HCH	VN	-30	-0.52	-0.000729	± 2.5	PASS
		VN	-20	2.71	0.003798	± 2.5	PASS
		VN	-10	-1.97	-0.002761	± 2.5	PASS
		VN	0	-1.68	-0.002355	± 2.5	PASS
		VN	10	0.33	0.000463	± 2.5	PASS
		VN	20	0.33	0.000463	± 2.5	PASS
		VN	30	3.61	0.005060	± 2.5	PASS
		VN	40	4.22	0.005915	± 2.5	PASS
		VN	50	-1.49	-0.002088	± 2.5	PASS
16QAM	LCH	VN	-30	2.06	0.002916	± 2.5	PASS
		VN	-20	2.82	0.003992	± 2.5	PASS
		VN	-10	0.22	0.000311	± 2.5	PASS
		VN	0	4.56	0.006454	± 2.5	PASS
		VN	10	1.8	0.002548	± 2.5	PASS
		VN	20	1.47	0.002081	± 2.5	PASS
		VN	30	3.21	0.004544	± 2.5	PASS
		VN	40	2.71	0.003836	± 2.5	PASS
		VN	50	0.62	0.000878	± 2.5	PASS
	MCH	VN	-30	1.38	0.001934	± 2.5	PASS
		VN	-20	4.84	0.006783	± 2.5	PASS
		VN	-10	1.06	0.001486	± 2.5	PASS
		VN	0	-1.04	-0.001458	± 2.5	PASS
		VN	10	0.05	0.000070	± 2.5	PASS
		VN	20	-0.61	-0.000855	± 2.5	PASS
		VN	30	1.1	0.001542	± 2.5	PASS
		VN	40	2.27	0.003181	± 2.5	PASS
		VN	50	1.9	0.002663	± 2.5	PASS
	HCH	VN	-30	3.6	0.005046	± 2.5	PASS
		VN	-20	4.52	0.006335	± 2.5	PASS
		VN	-10	0.99	0.001388	± 2.5	PASS
		VN	0	0.92	0.001289	± 2.5	PASS
		VN	10	1.06	0.001486	± 2.5	PASS

		VN	20	-1.3	-0.001822	± 2.5	PASS
		VN	30	4.65	0.006517	± 2.5	PASS
		VN	40	4.95	0.006938	± 2.5	PASS
		VN	50	-1.91	-0.002677	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.58	-0.002228	± 2.5	PASS
		VN	TN	-1.61	-0.002271	± 2.5	PASS
		VH	TN	4.12	0.005811	± 2.5	PASS
	MCH	VL	TN	2.96	0.004169	± 2.5	PASS
		VN	TN	1.85	0.002606	± 2.5	PASS
		VH	TN	4.97	0.007000	± 2.5	PASS
	HCH	VL	TN	3.29	0.004627	± 2.5	PASS
		VN	TN	0.75	0.001055	± 2.5	PASS
		VH	TN	1.77	0.002489	± 2.5	PASS
16QAM	LCH	VL	TN	-0.59	-0.000832	± 2.5	PASS
		VN	TN	3.45	0.004866	± 2.5	PASS
		VH	TN	3.51	0.004951	± 2.5	PASS
	MCH	VL	TN	2.76	0.003887	± 2.5	PASS
		VN	TN	-1.26	-0.001775	± 2.5	PASS
		VH	TN	0.04	0.000056	± 2.5	PASS
	HCH	VL	TN	2.83	0.003980	± 2.5	PASS
		VN	TN	0.66	0.000928	± 2.5	PASS
		VH	TN	2.77	0.003896	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1	0.001410	± 2.5	PASS
		VN	-20	2.99	0.004217	± 2.5	PASS
		VN	-10	3.18	0.004485	± 2.5	PASS
		VN	0	-0.14	-0.000197	± 2.5	PASS
		VN	10	0.22	0.000310	± 2.5	PASS
		VN	20	1.27	0.001791	± 2.5	PASS
		VN	30	3.77	0.005317	± 2.5	PASS
		VN	40	3.55	0.005007	± 2.5	PASS
		VN	50	-0.54	-0.000762	± 2.5	PASS
	MCH	VN	-30	2.81	0.003958	± 2.5	PASS

		VN	-20	-1.32	-0.001859	± 2.5	PASS
		VN	-10	1.94	0.002732	± 2.5	PASS
		VN	0	-0.18	-0.000254	± 2.5	PASS
		VN	10	4.19	0.005901	± 2.5	PASS
		VN	20	3.2	0.004507	± 2.5	PASS
		VN	30	1.31	0.001845	± 2.5	PASS
		VN	40	-0.69	-0.000972	± 2.5	PASS
		VN	50	-0.2	-0.000282	± 2.5	PASS
	HCH	VN	-30	-1.04	-0.001463	± 2.5	PASS
		VN	-20	1.85	0.002602	± 2.5	PASS
		VN	-10	2.97	0.004177	± 2.5	PASS
		VN	0	-0.22	-0.000309	± 2.5	PASS
		VN	10	3.78	0.005316	± 2.5	PASS
		VN	20	1.82	0.002560	± 2.5	PASS
		VN	30	2.84	0.003994	± 2.5	PASS
		VN	40	2.41	0.003390	± 2.5	PASS
		VN	50	0.93	0.001308	± 2.5	PASS
16QAM	LCH	VN	-30	2.33	0.003282	± 2.5	PASS
		VN	-20	4.8	0.006761	± 2.5	PASS
		VN	-10	3.54	0.004986	± 2.5	PASS
		VN	0	-1.63	-0.002296	± 2.5	PASS
		VN	10	1.06	0.001493	± 2.5	PASS
		VN	20	-1.22	-0.001718	± 2.5	PASS
		VN	30	2.76	0.003887	± 2.5	PASS
		VN	40	0.77	0.001085	± 2.5	PASS
		VN	50	4.76	0.006704	± 2.5	PASS
	MCH	VN	-30	1.51	0.002124	± 2.5	PASS
		VN	-20	1.28	0.001800	± 2.5	PASS
		VN	-10	3.6	0.005063	± 2.5	PASS
		VN	0	2.66	0.003741	± 2.5	PASS
		VN	10	-0.06	-0.000084	± 2.5	PASS
		VN	20	1.71	0.002405	± 2.5	PASS
		VN	30	3.3	0.004641	± 2.5	PASS
		VN	40	-0.36	-0.000506	± 2.5	PASS
		VN	50	4.86	0.006835	± 2.5	PASS
	HCH	VN	-30	-0.75	-0.001055	± 2.5	PASS
		VN	-20	2.48	0.003488	± 2.5	PASS
		VN	-10	4.83	0.006793	± 2.5	PASS
		VN	0	2.8	0.003938	± 2.5	PASS
		VN	10	-1.37	-0.001927	± 2.5	PASS
		VN	20	1.92	0.002700	± 2.5	PASS

		VN	30	4.08	0.005738	± 2.5	PASS
		VN	40	4.32	0.006076	± 2.5	PASS
		VN	50	1.29	0.001814	± 2.5	PASS