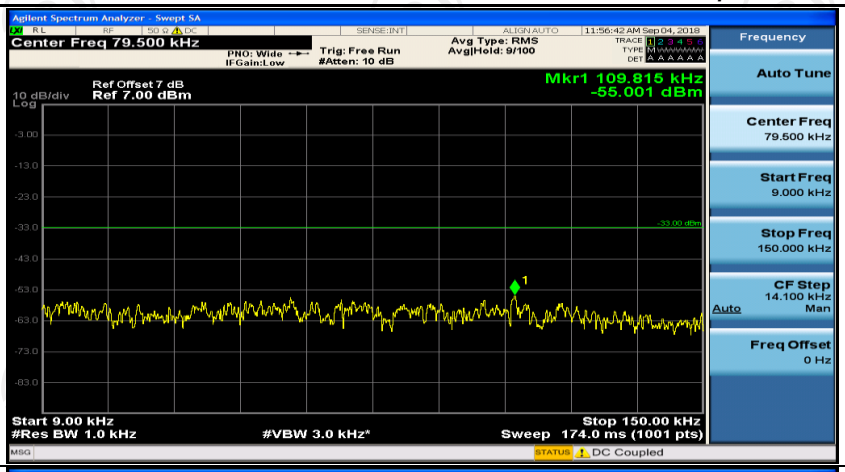
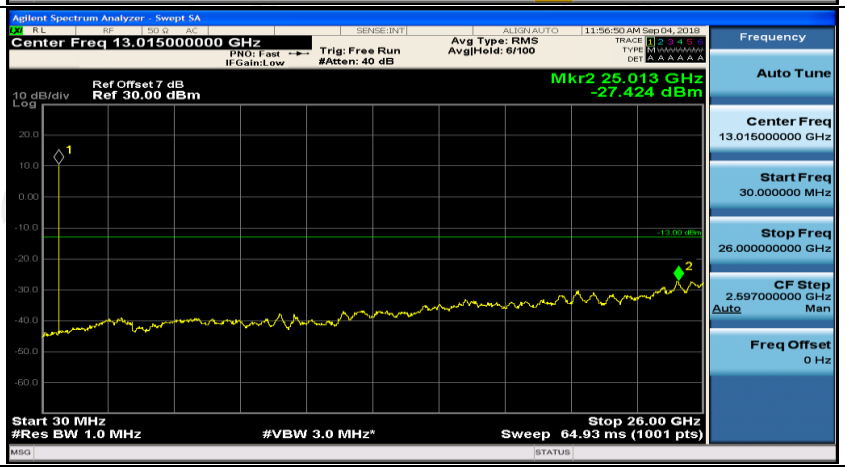
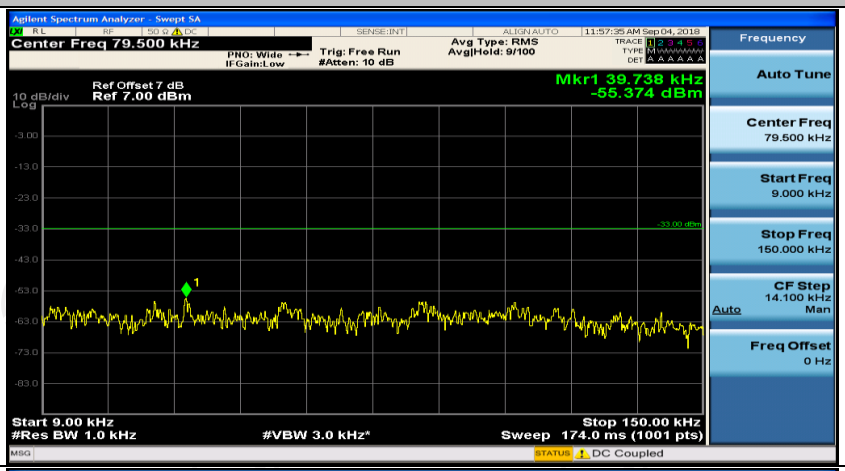
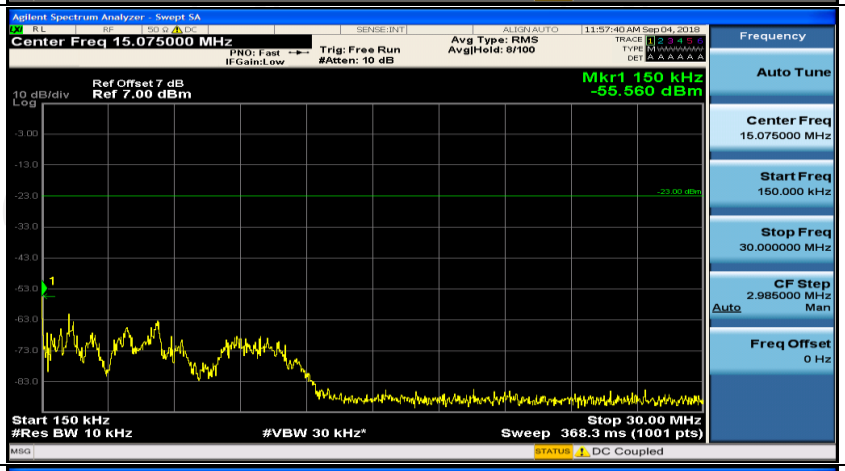
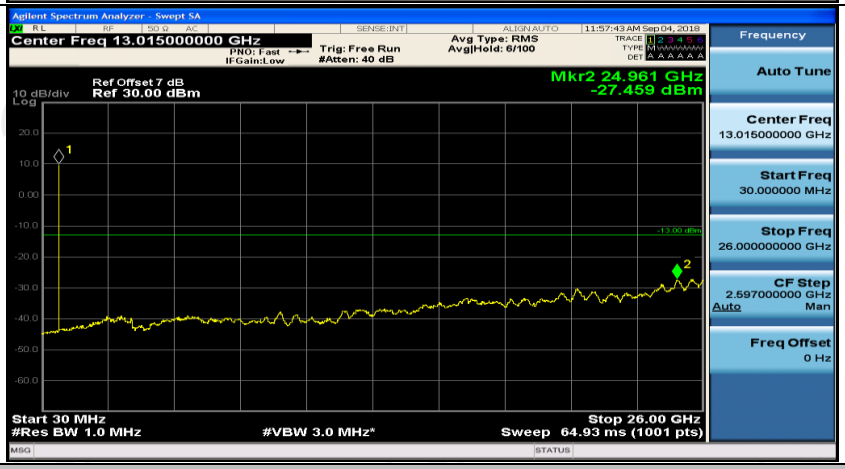
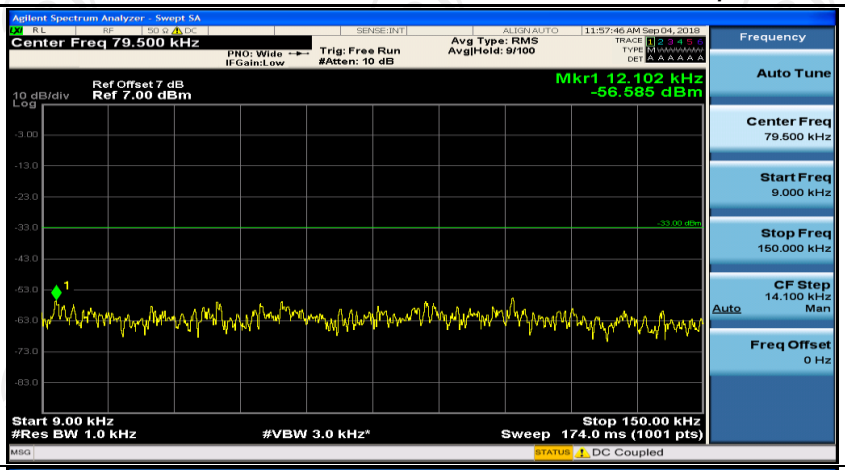
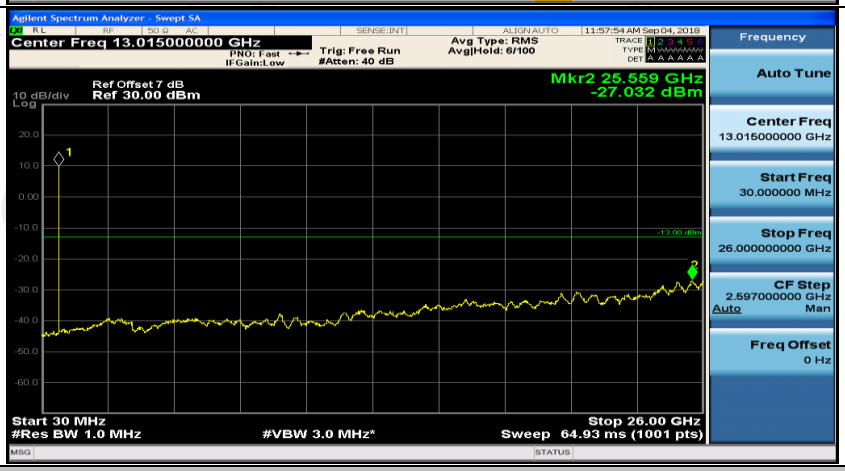

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 9/100
11:56:42 AM Sep 04, 2018
Mkr1 109.815 kHz
-55.001 dBm
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
-33.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.0 ms (1001 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: 8/100
11:56:47 AM Sep 04, 2018
Mkr1 150 kHz
-54.746 dBm
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
-23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.3 ms (1001 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

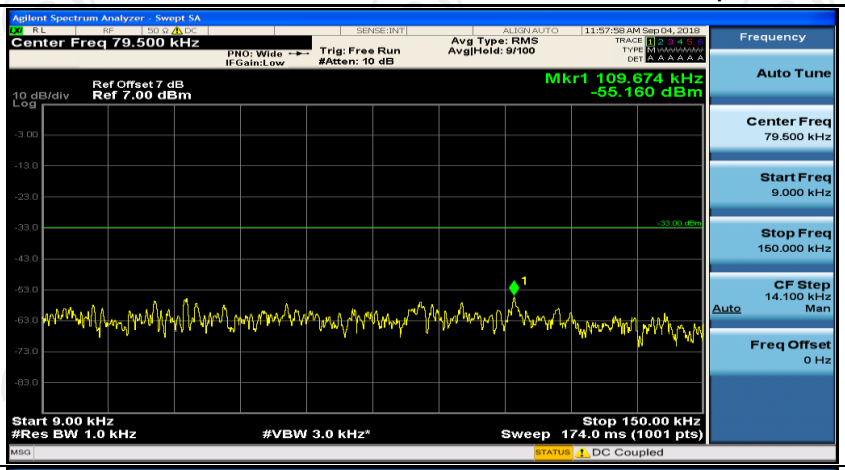

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 6/100
11:56:50 AM Sep 04, 2018
Mkr2 25.013 GHz
-27.424 dBm
Ref Offset 7 dB
10 dB/div
Log
Ref 30.00 dBm
-13.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.93 ms (1001 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

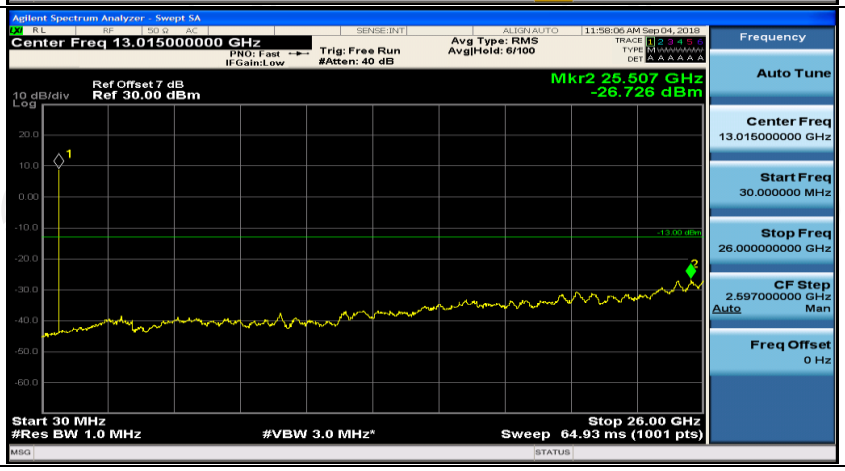


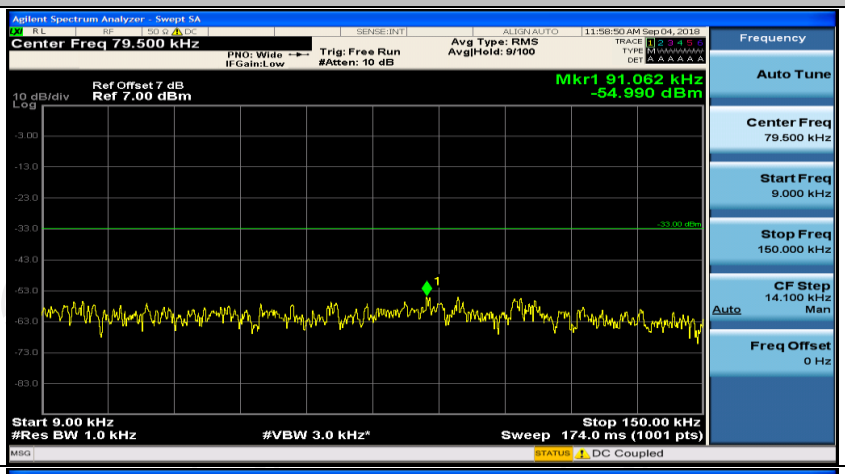


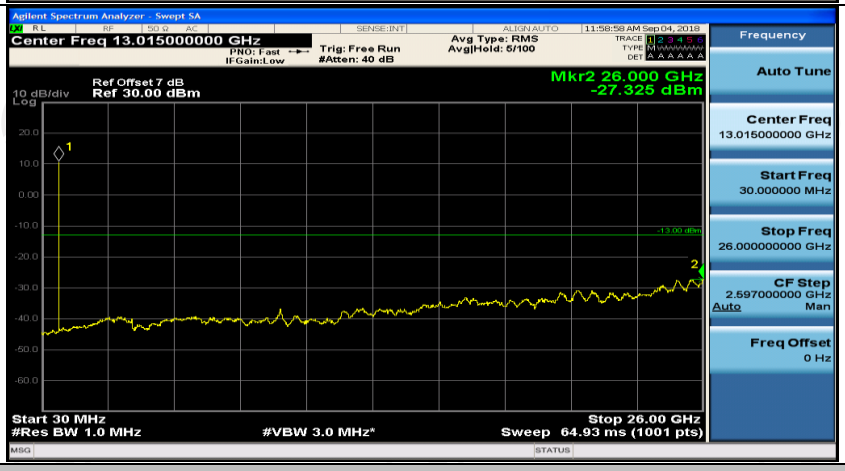
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

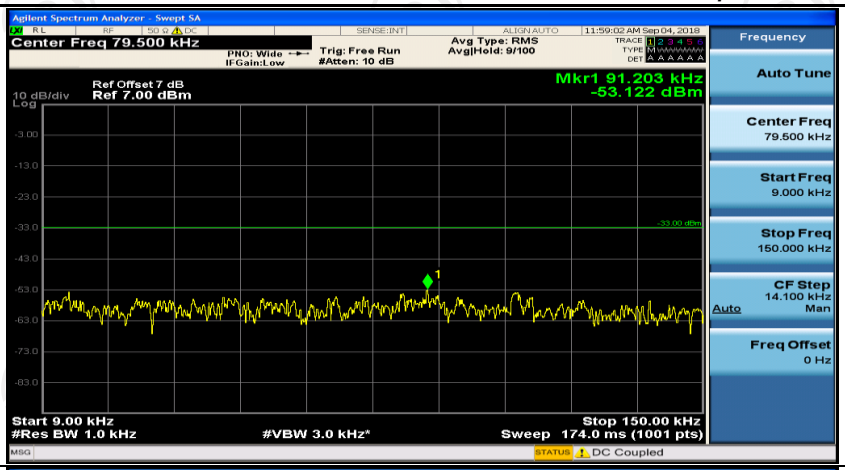

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 9/100
11:57:58 AM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 109.674 kHz
-55.160 dBm
-33.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.0 ms (1001 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

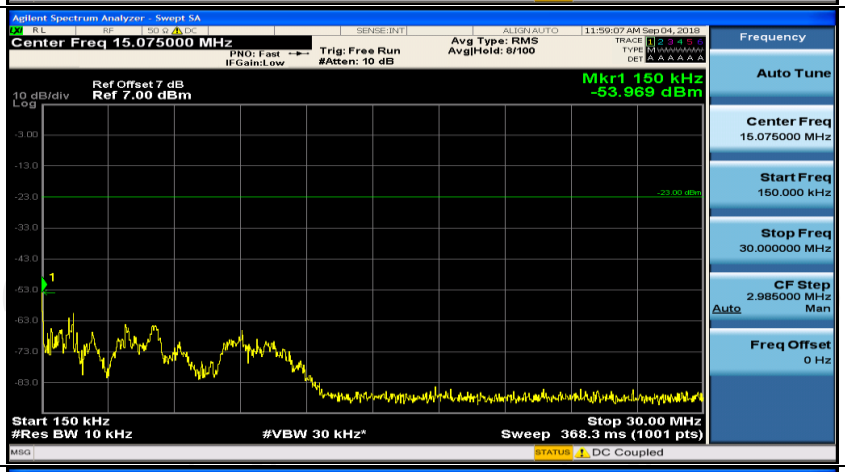

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 8/100
11:58:03 AM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 150 kHz
-58.113 dBm
-23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.3 ms (1001 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

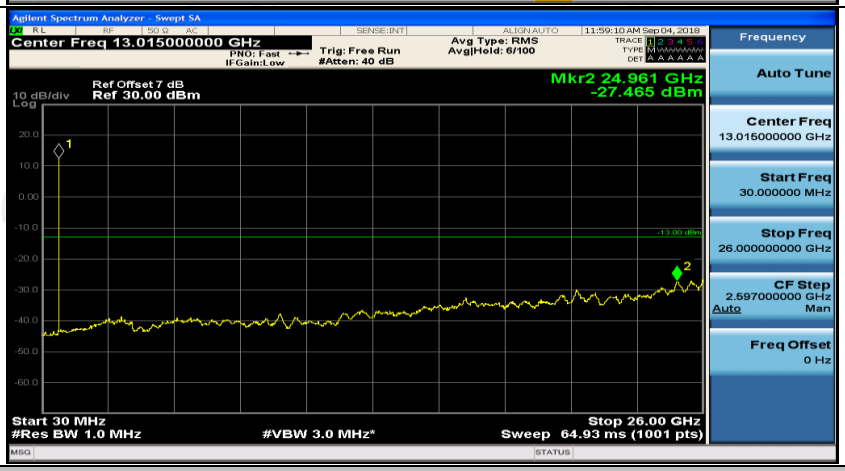

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 6/100
11:58:06 AM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.507 GHz
-26.726 dBm
-13.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.93 ms (1001 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


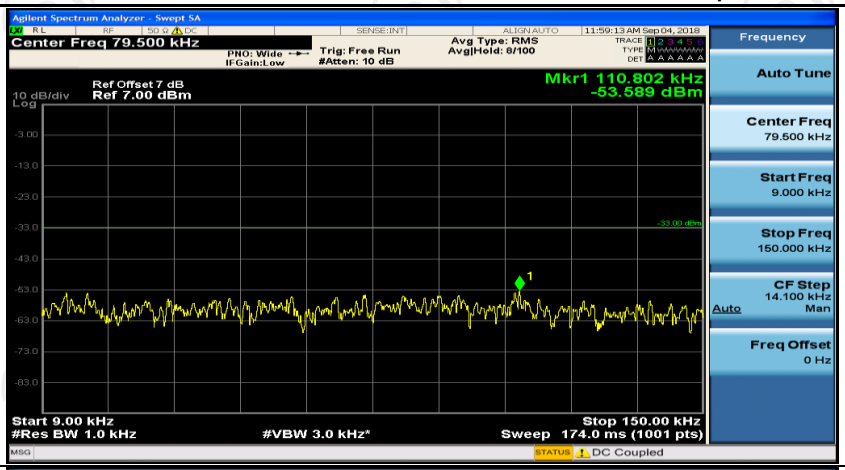

(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

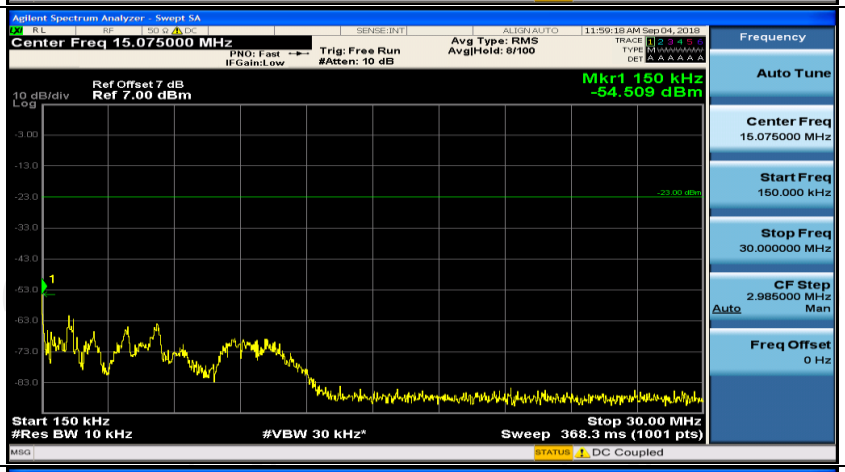


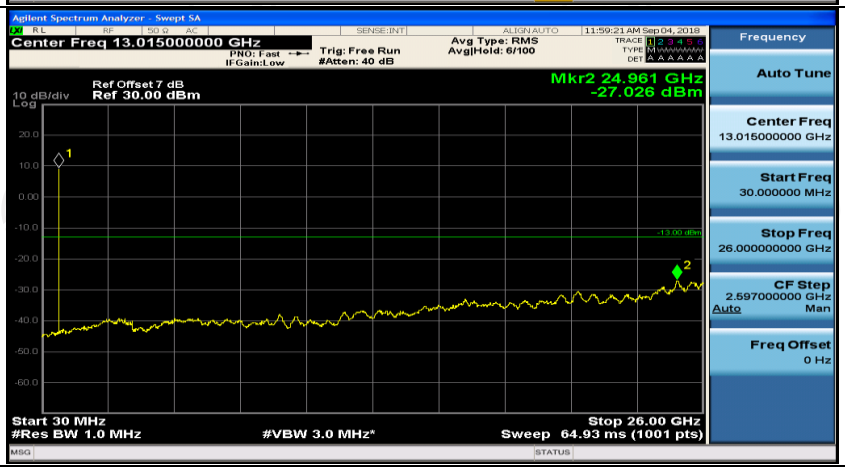




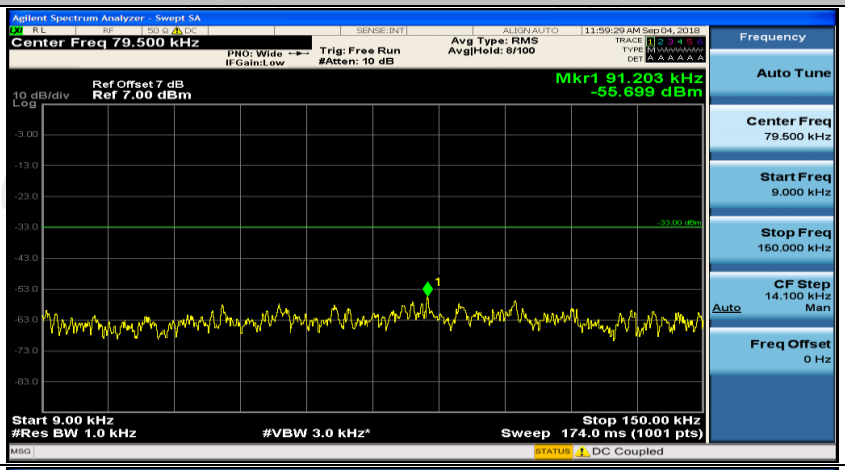
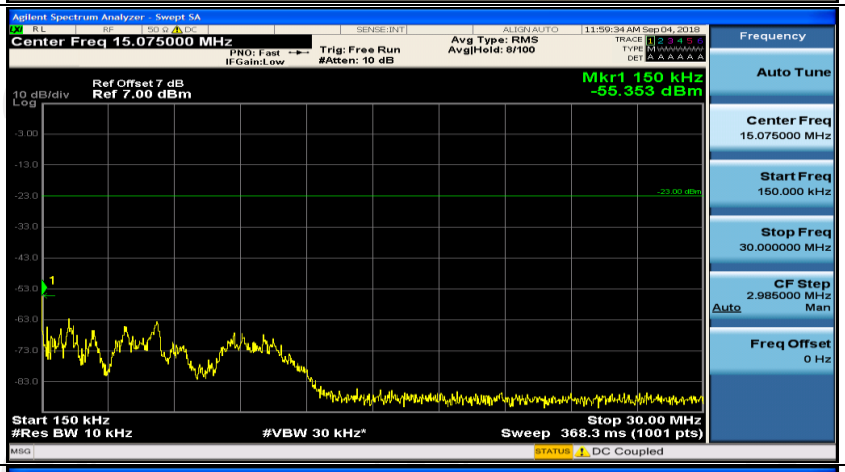
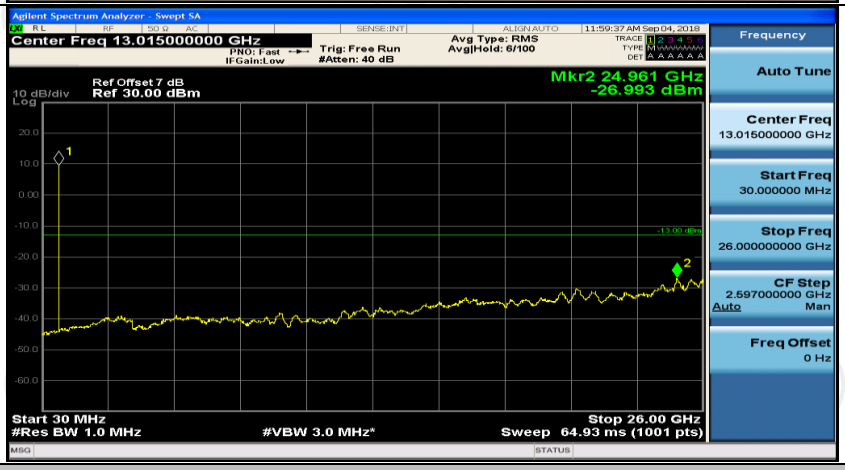
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24

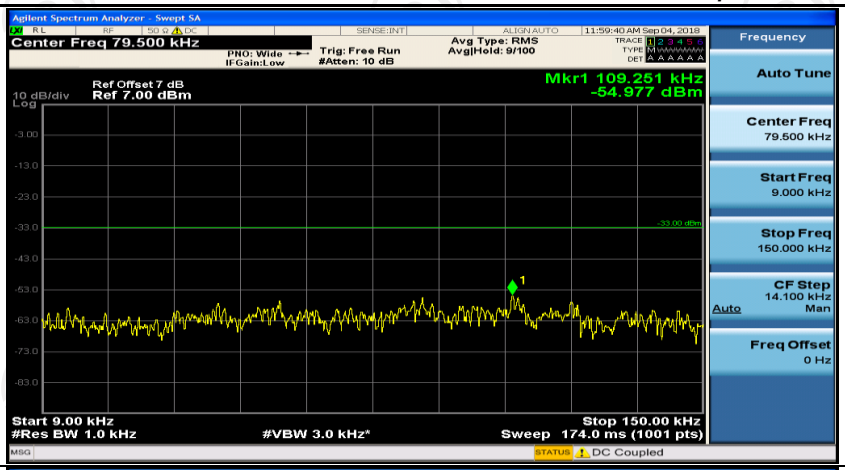

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 8/100
11:59:13 AM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 110.802 kHz
-53.589 dBm
-33.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.0 ms (1001 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

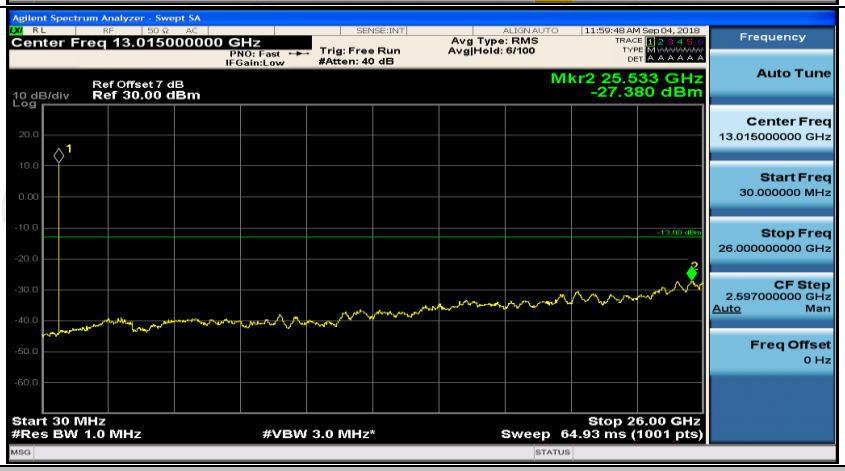

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 8/100
11:59:18 AM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 150 kHz
-54.509 dBm
-23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.3 ms (1001 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: 6/100
11:59:21 AM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 24.961 GHz
-27.026 dBm
-13.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.93 ms (1001 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

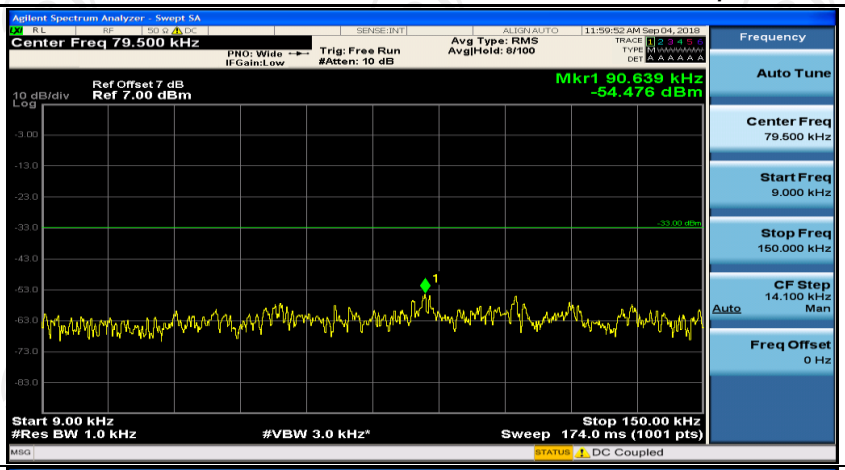
Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#24

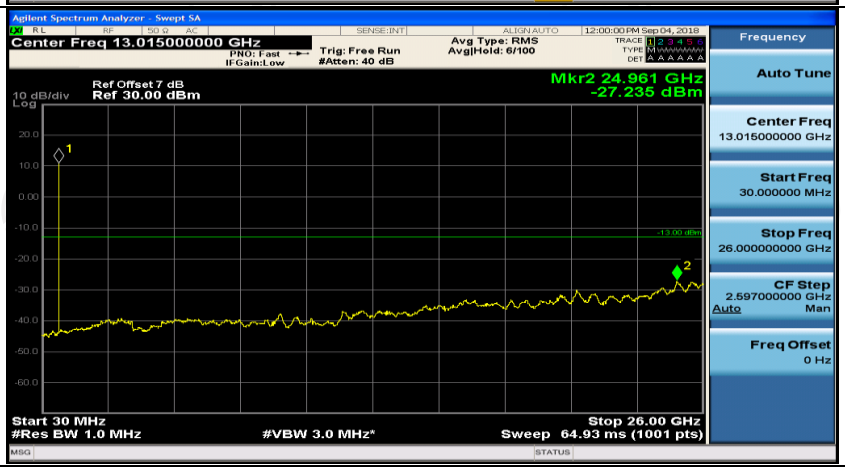


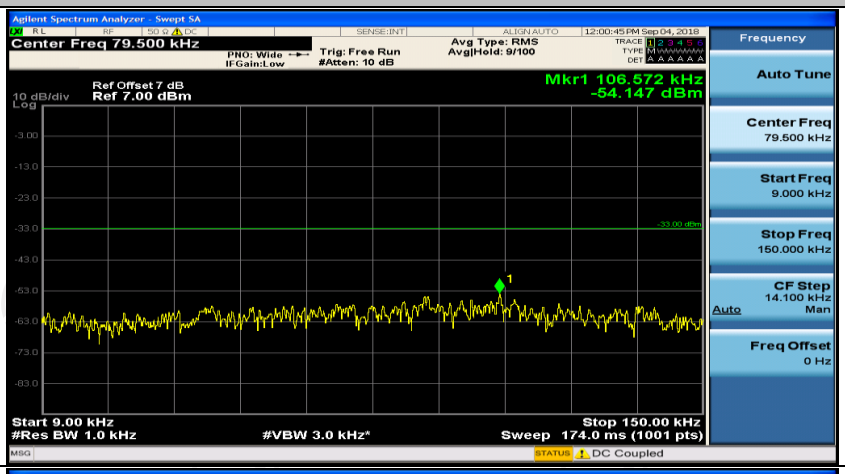


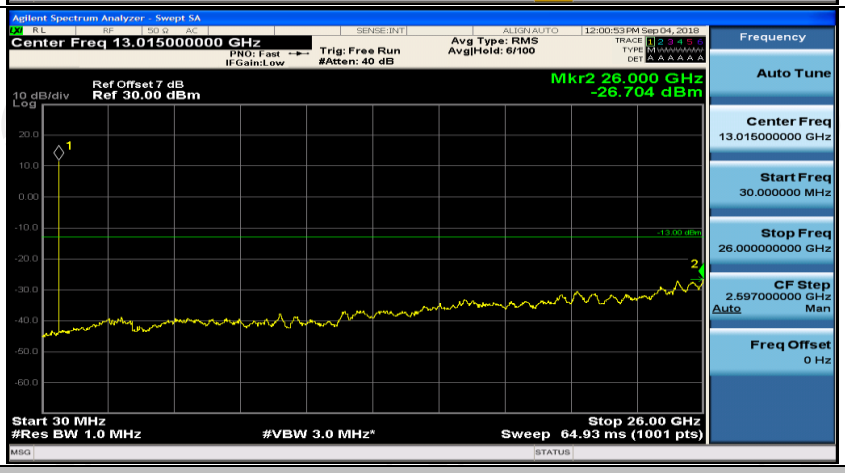
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#49

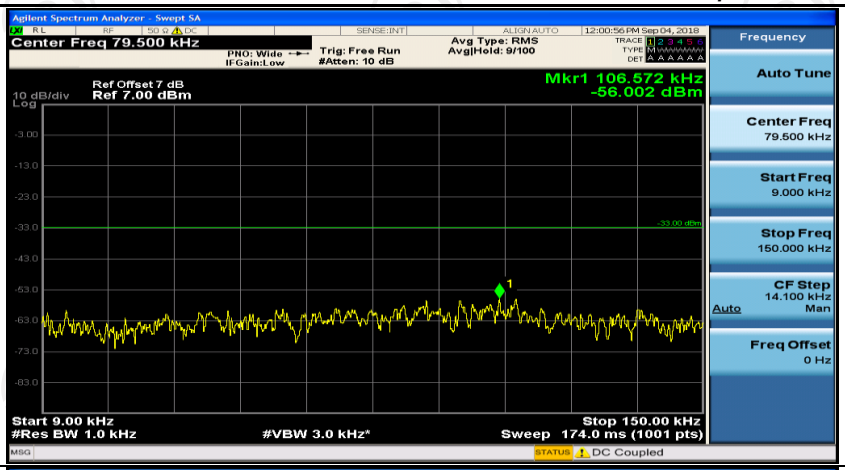

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 8/100
11:59:52 AM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 90.639 kHz
-54.476 dBm
-33.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.0 ms (1001 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

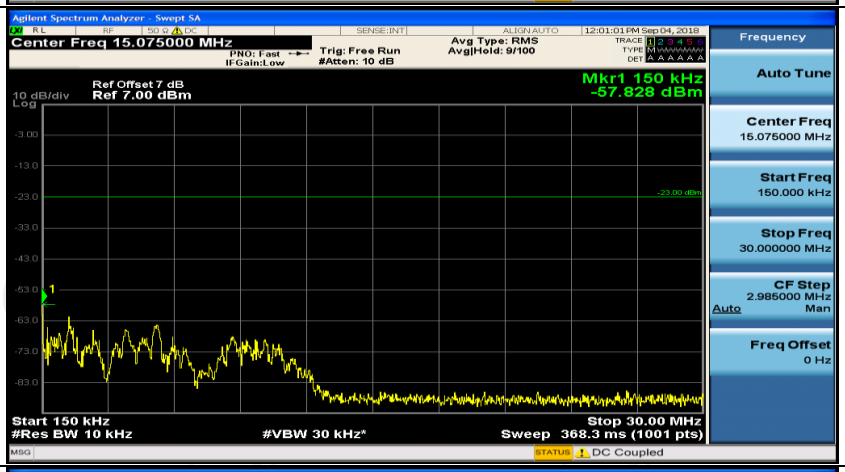

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 8/100
11:59:57 AM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 150 kHz
-56.014 dBm
-23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.3 ms (1001 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

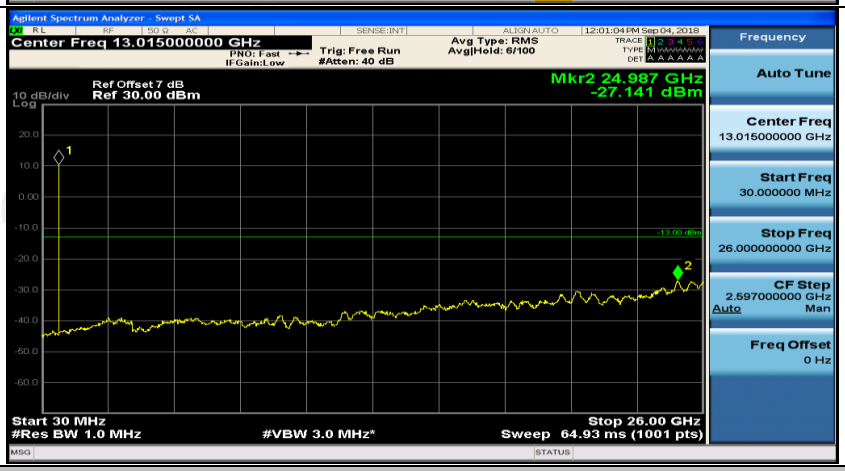

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 6/100
12:00:00 PM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 24.961 GHz
-27.235 dBm
-13.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.93 ms (1001 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


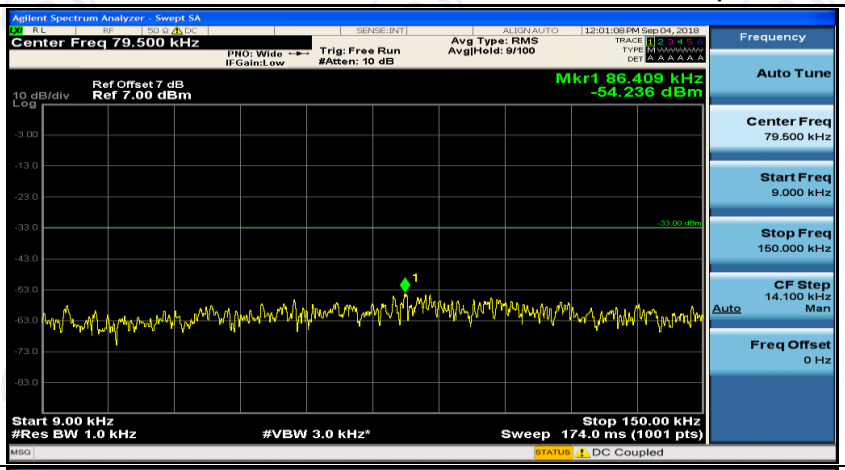

Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

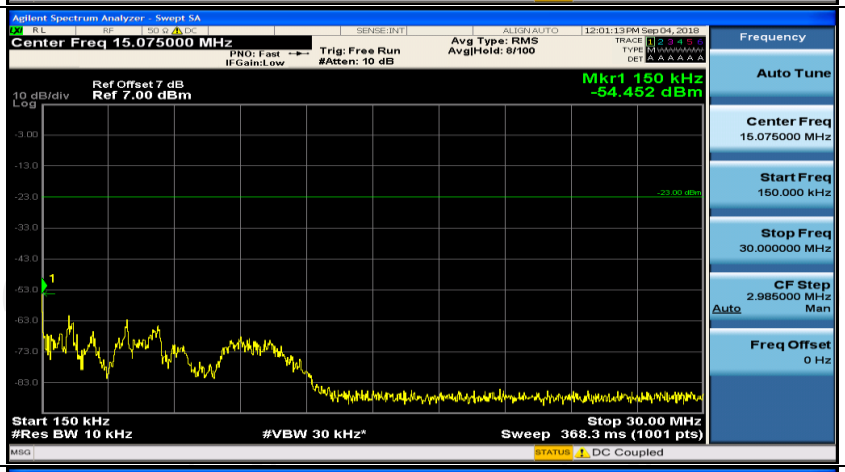


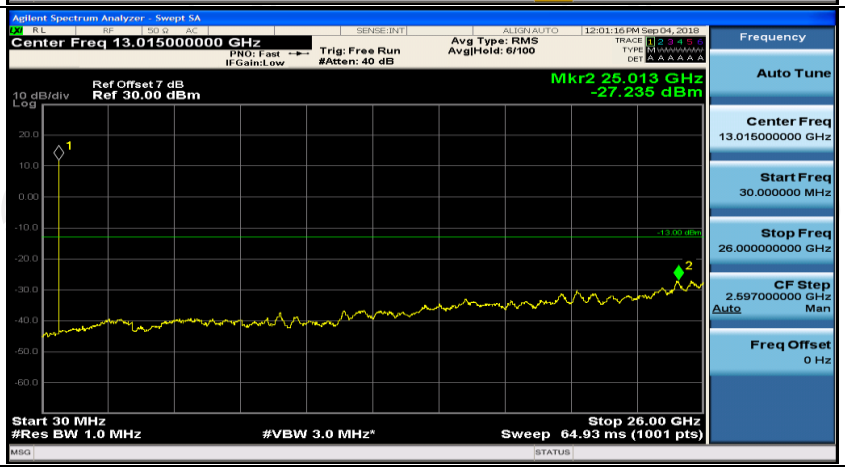


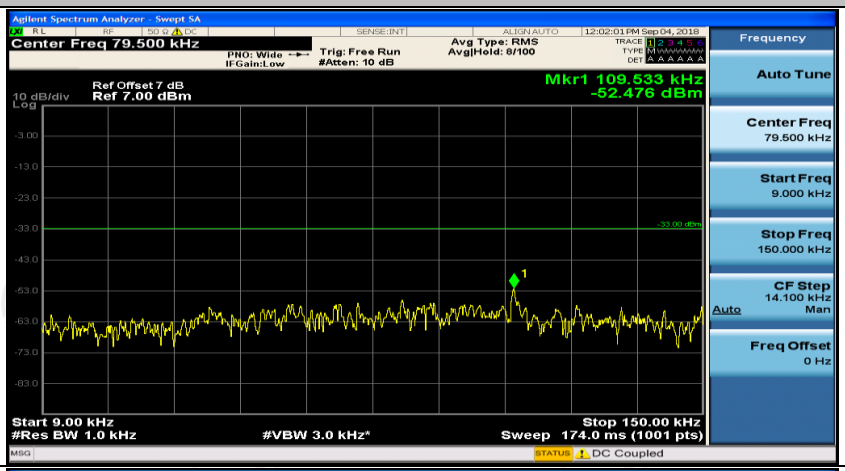
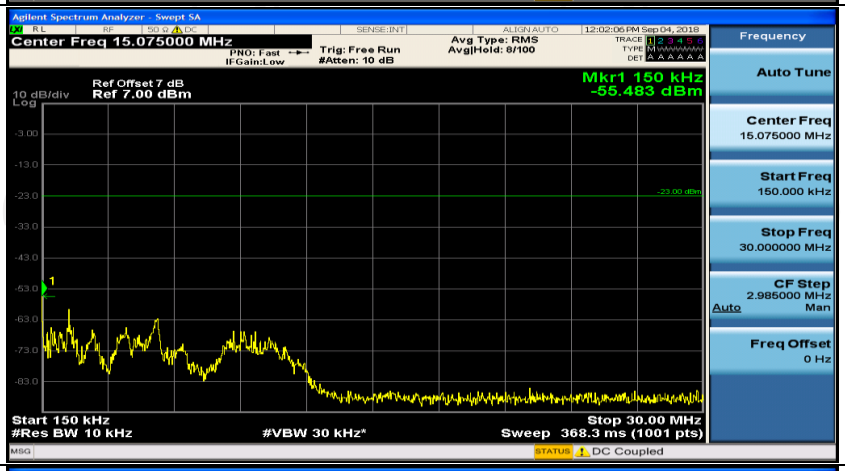
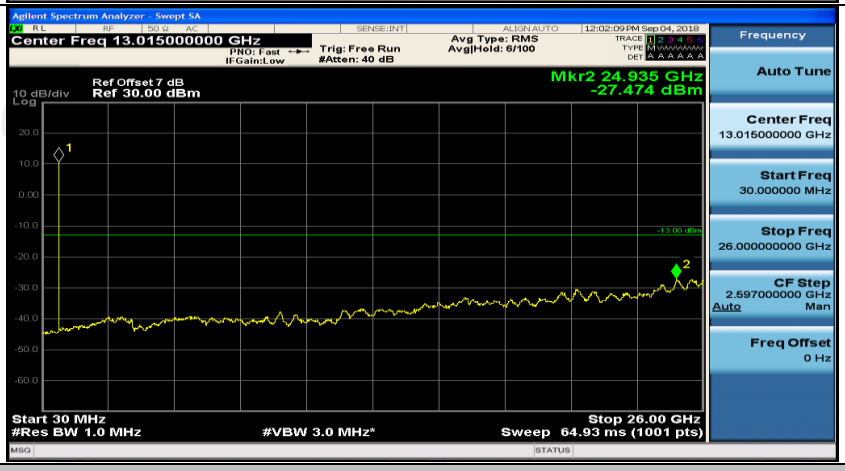


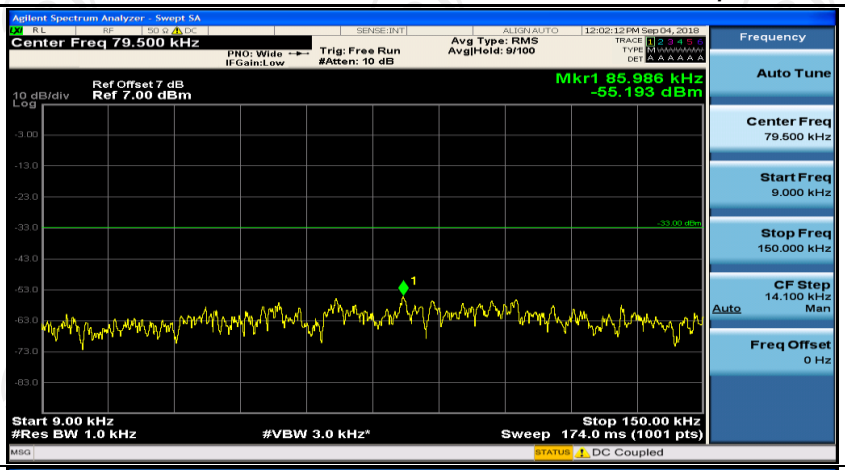
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

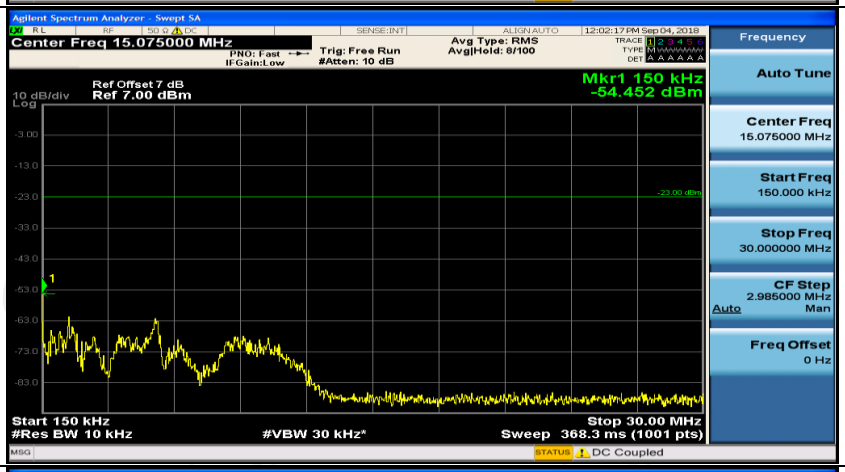

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 9/100
12:01:08 PM Sep 04, 2018
Frequency
Auto Tune
Mkr1 86.409 kHz
-54.236 dBm
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
-33.00 dBm
Center Freq
79.500 kHz
Start Freq
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 174.0 ms (1001 pts)
DC Coupled

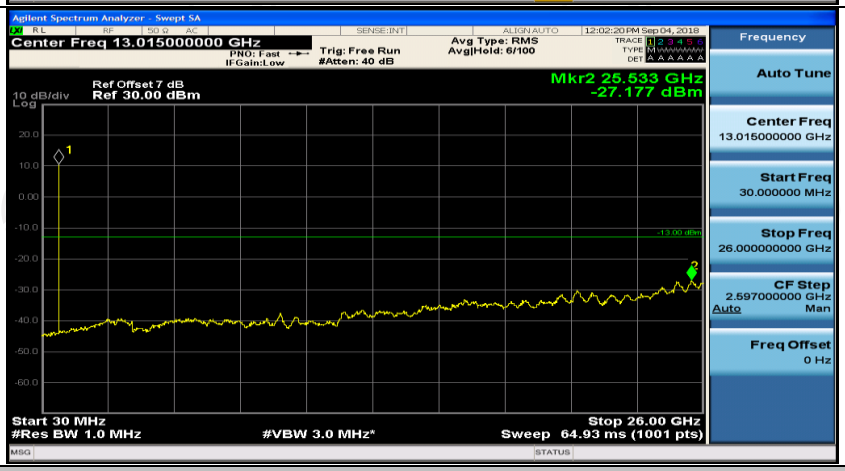

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 8/100
12:01:13 PM Sep 04, 2018
Frequency
Auto Tune
Mkr1 150 kHz
-54.452 dBm
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
-23.00 dBm
Center Freq
15.075000 MHz
Start Freq
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 368.3 ms (1001 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: 6/100
12:01:16 PM Sep 04, 2018
Frequency
Auto Tune
Mkr2 25.013 GHz
-27.235 dBm
Ref Offset 7 dB
10 dB/div
Log
Ref 30.00 dBm
-13.00 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 64.93 ms (1001 pts)

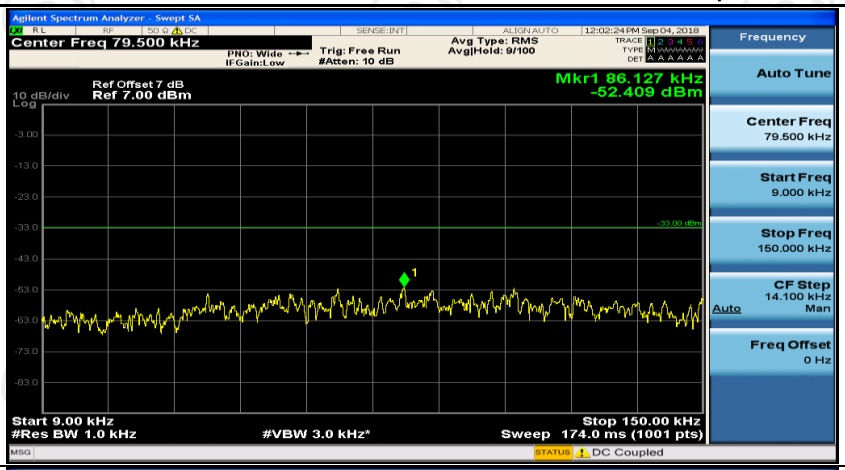
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

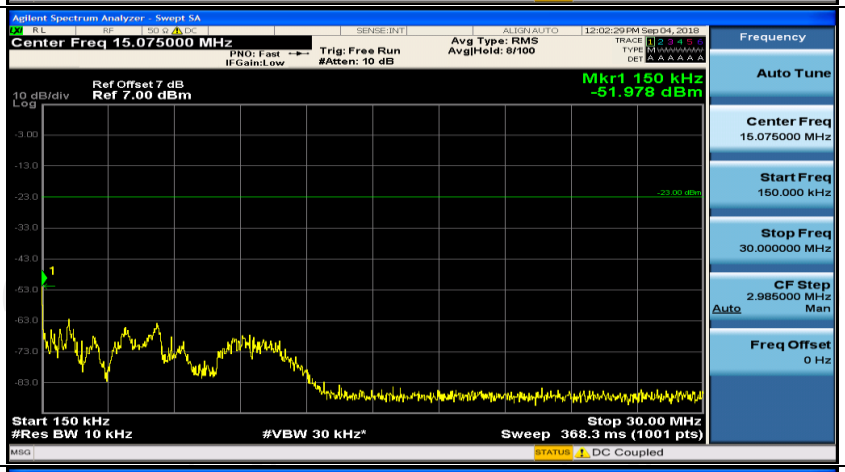


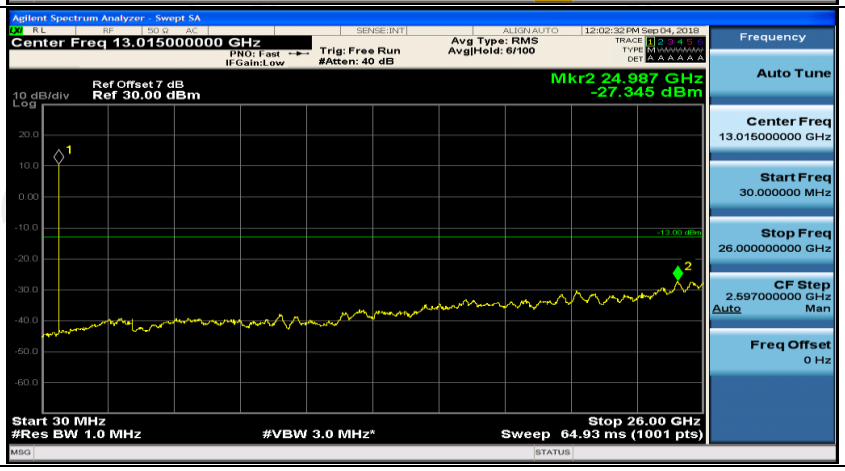


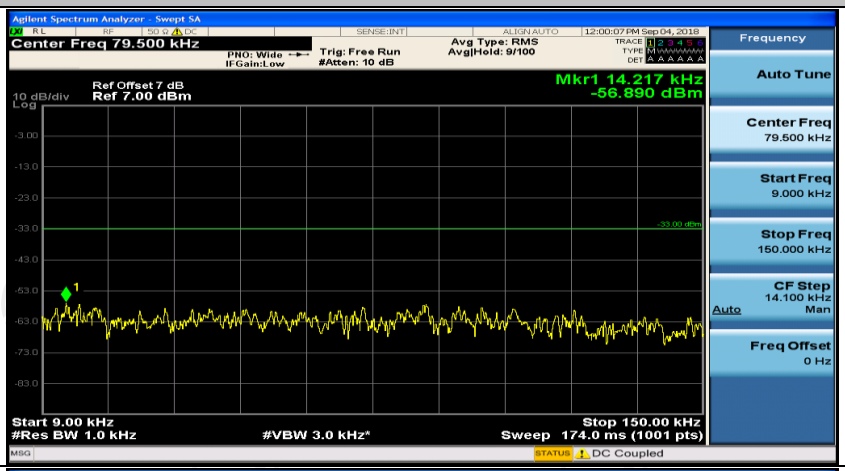


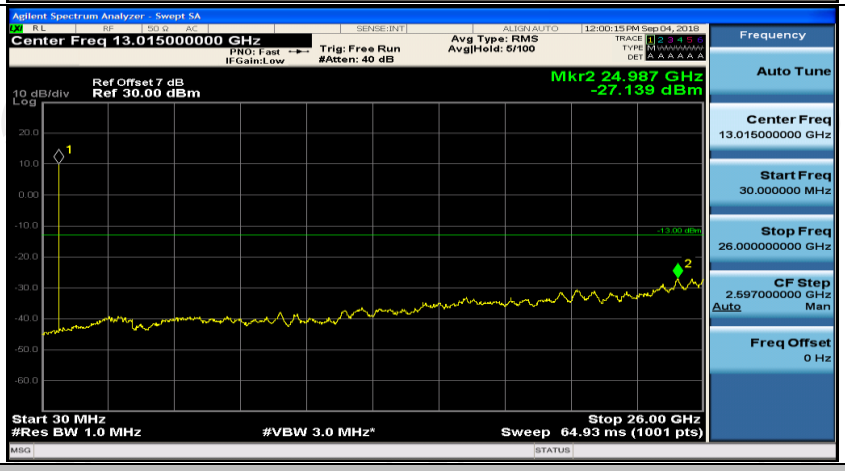
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#49

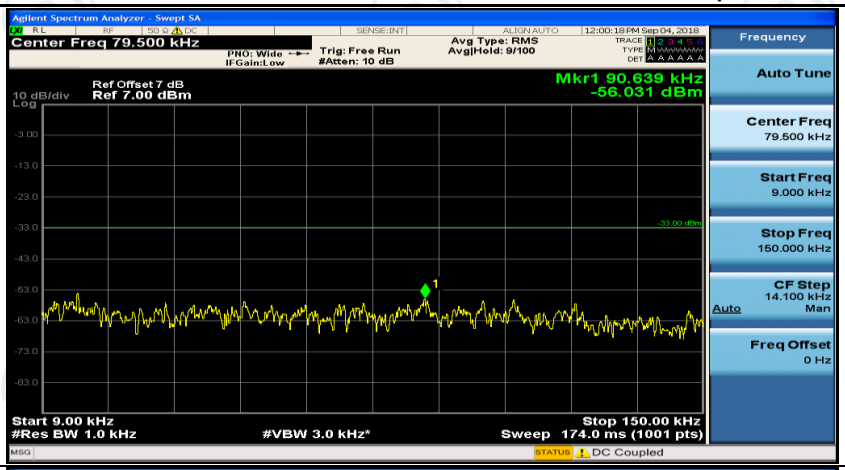

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 9/100
12:02:24 PM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 86.127 kHz
-52.409 dBm
-33.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.0 ms (1001 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

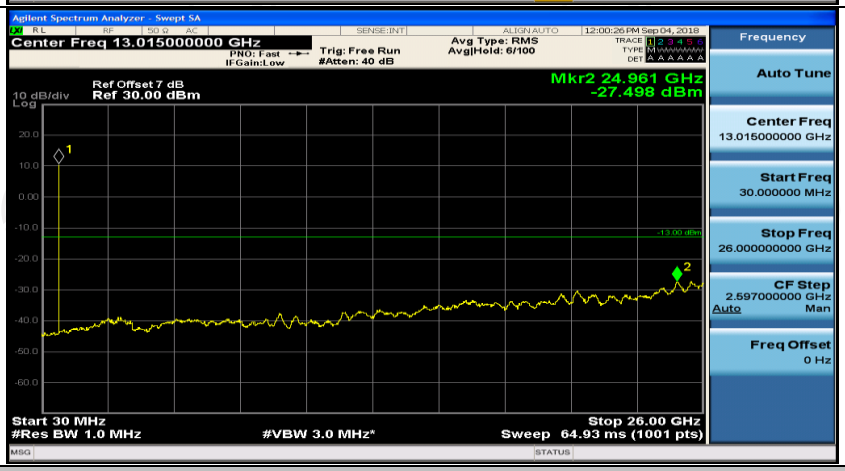

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 8/100
12:02:29 PM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 150 kHz
-51.978 dBm
-23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.3 ms (1001 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: 6/100
12:02:32 PM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 24.987 GHz
-27.345 dBm
-13.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.93 ms (1001 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

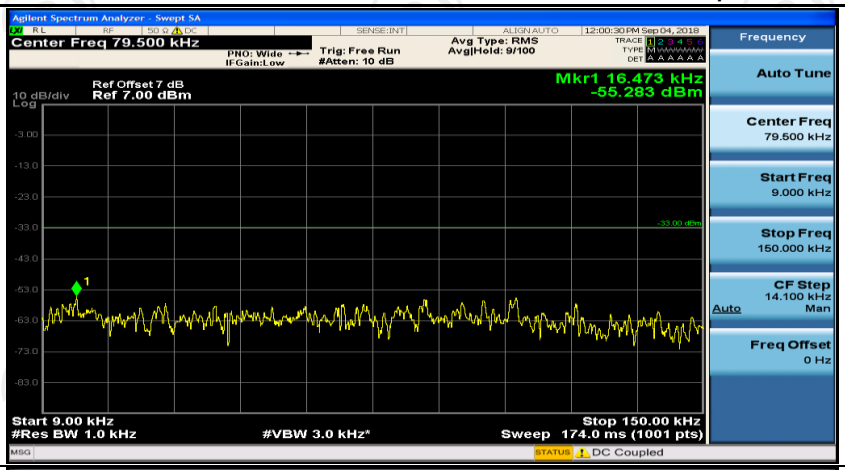
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

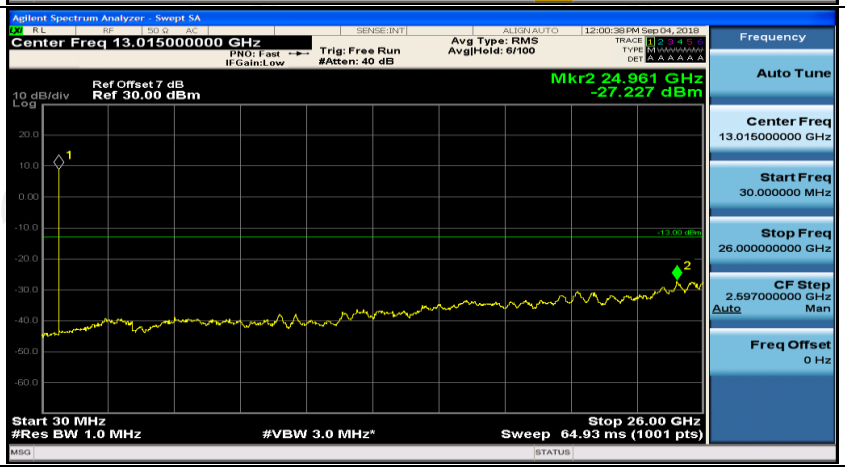


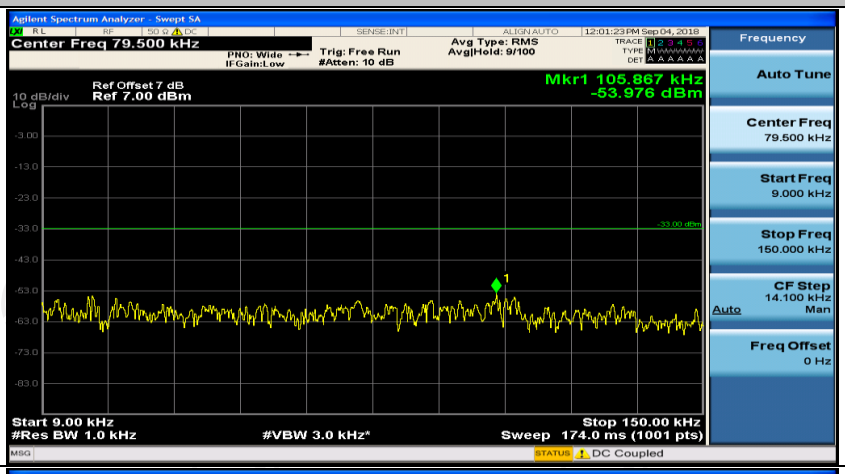


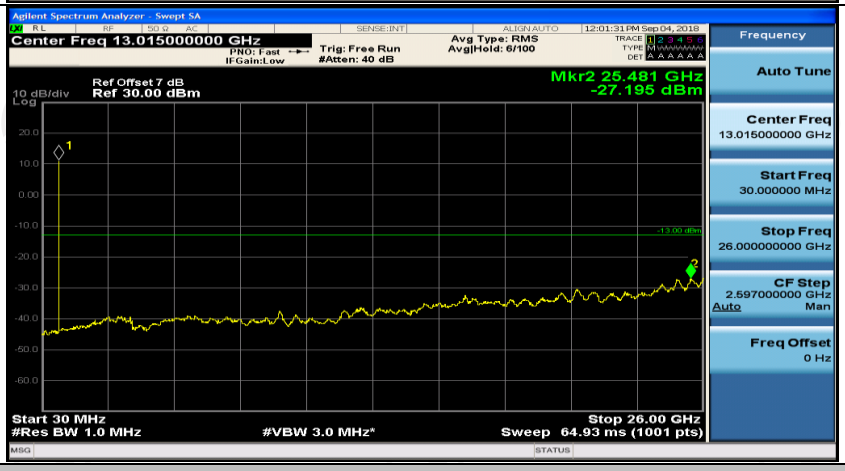
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49

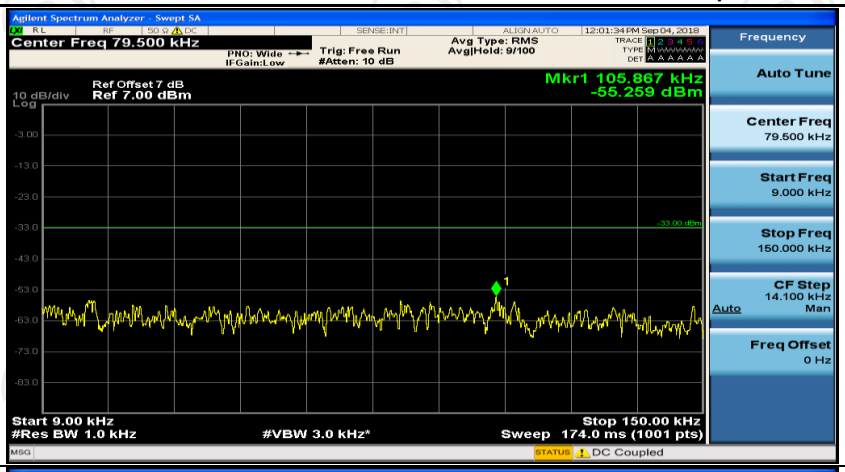

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 9/100
12:00:30 PM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 16.473 kHz
-55.283 dBm
-33.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.0 ms (1001 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

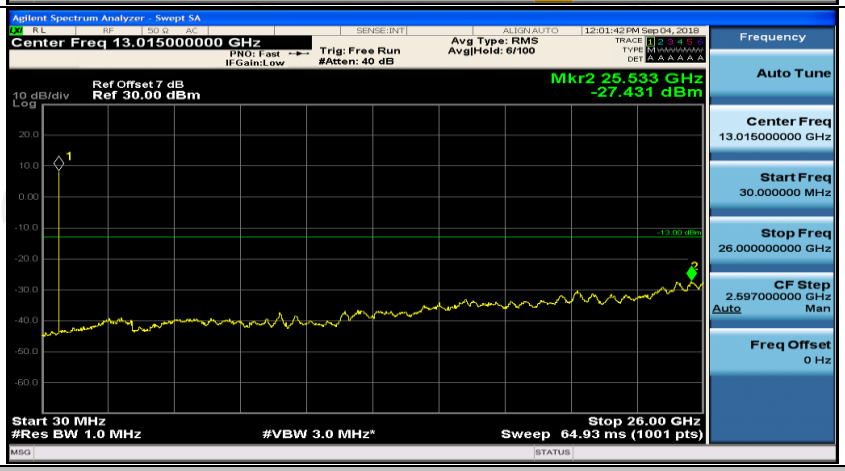

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 8/100
12:00:35 PM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 150 kHz
-56.843 dBm
-23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.3 ms (1001 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: 6/100
12:00:38 PM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 24.961 GHz
-27.227 dBm
-13.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.93 ms (1001 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

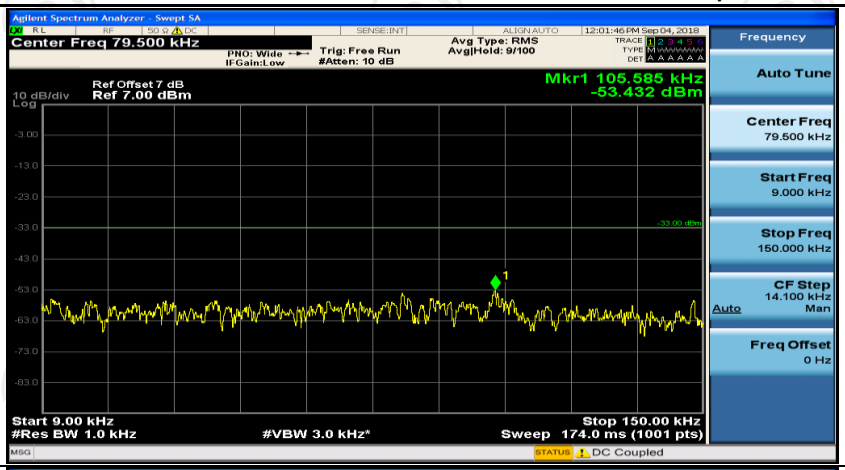
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0


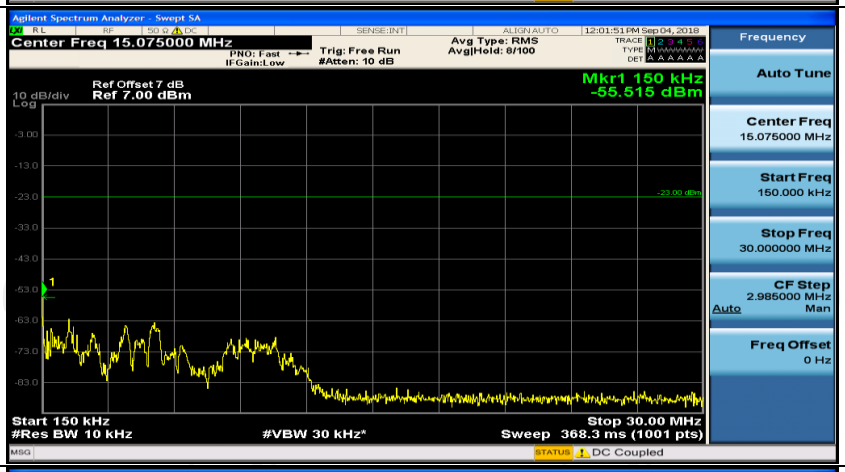

Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

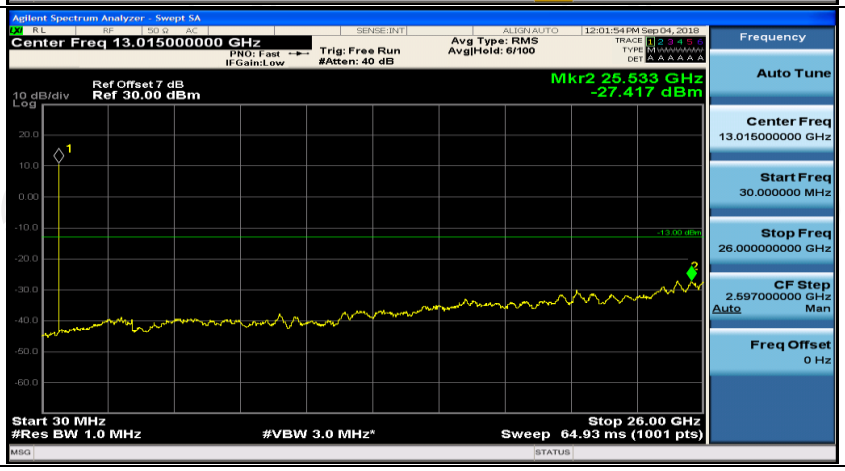


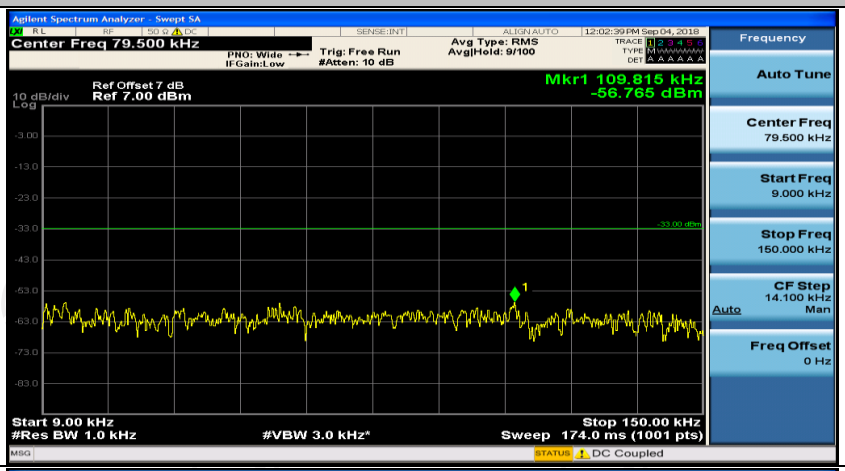


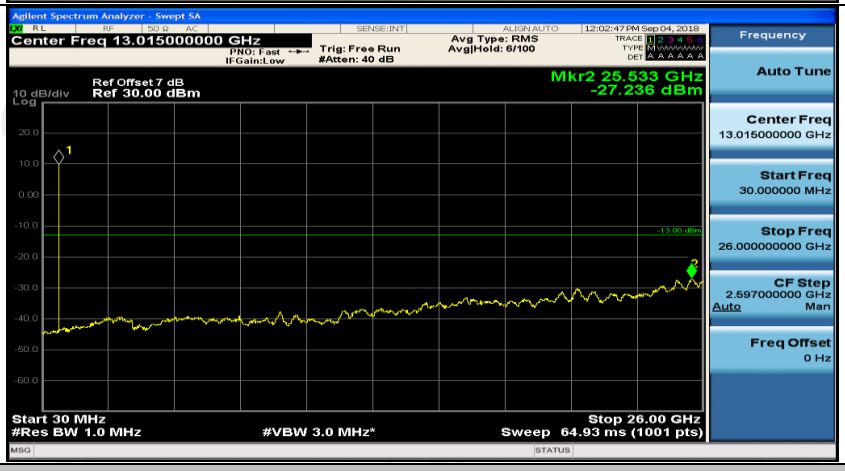
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

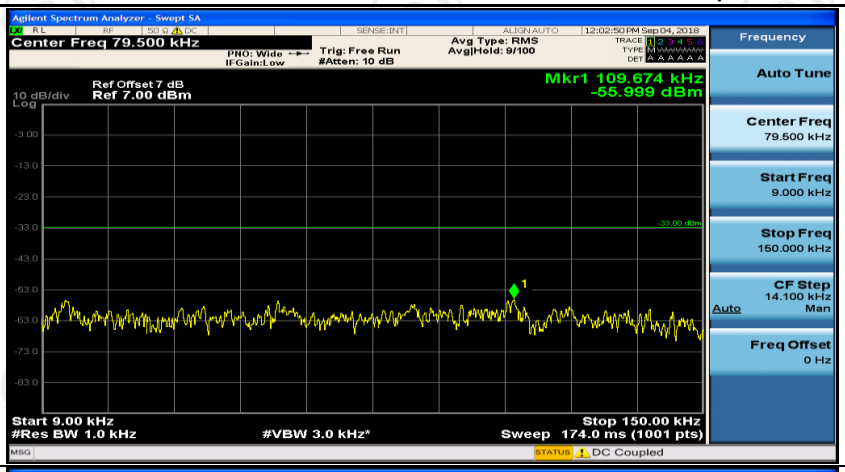

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 9/100
12:01:46 PM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 105.585 kHz
-53.432 dBm
-33.00 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.0 ms (1001 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

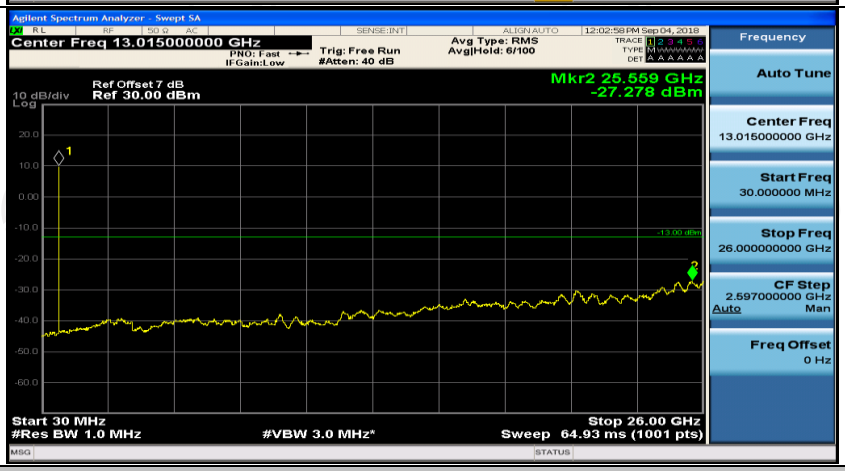

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 8/100
12:01:51 PM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
Mkr1 150 kHz
-55.515 dBm
-23.00 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.3 ms (1001 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: 6/100
12:01:54 PM Sep 04, 2018
Ref Offset 7 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.533 GHz
-27.417 dBm
-13.00 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.93 ms (1001 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

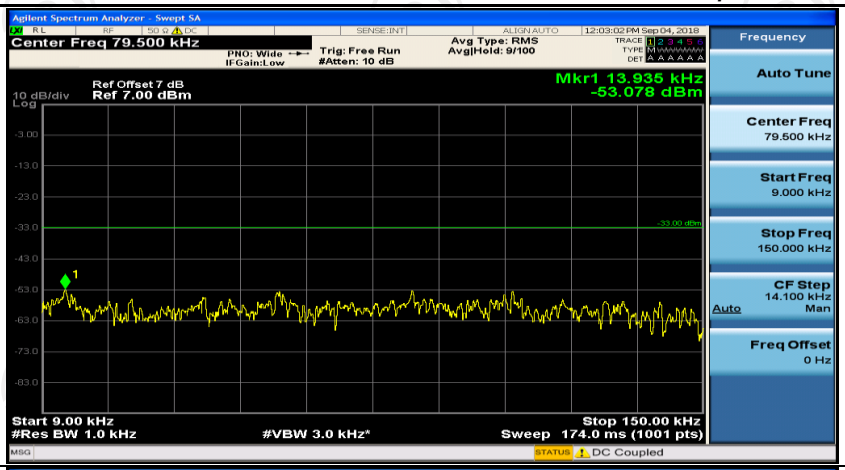
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0


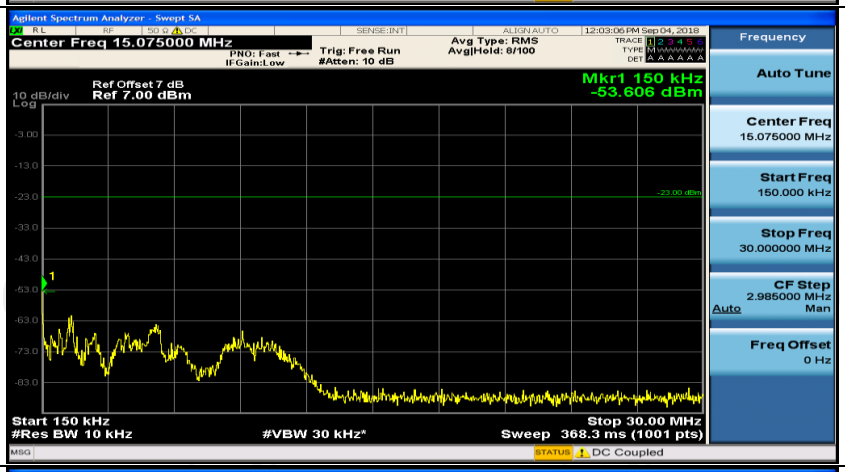

Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24

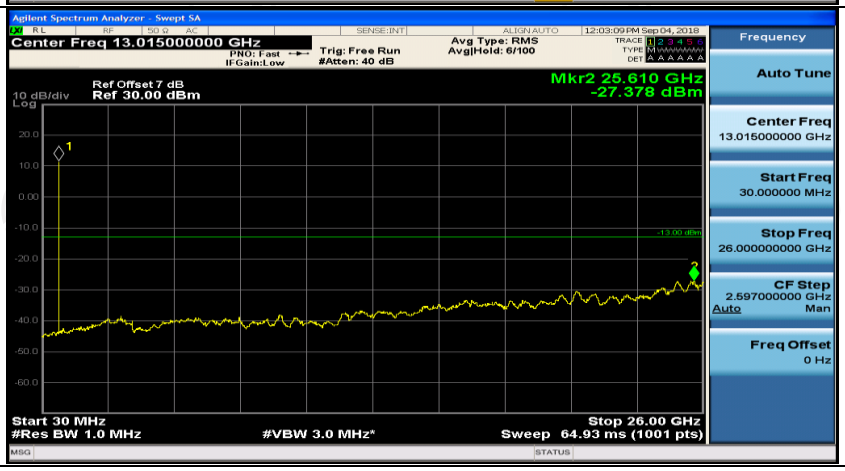




Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49


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: 9/100
12:03:02 PM Sep 04, 2018
Frequency
Auto Tune
Mkr1 13.935 kHz
-53.078 dBm
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
-33.00 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 174.0 ms (1001 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: 8/100
12:03:06 PM Sep 04, 2018
Frequency
Auto Tune
Mkr1 150 kHz
-53.606 dBm
Ref Offset 7 dB
10 dB/div
Log
Ref 7.00 dBm
-23.00 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 368.3 ms (1001 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: 6/100
12:03:09 PM Sep 04, 2018
Frequency
Auto Tune
Mkr2 25.610 GHz
-27.378 dBm
Ref Offset 7 dB
10 dB/div
Log
Ref 30.00 dBm
-13.00 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 64.93 ms (1001 pts)

Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Voltage						
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	10.5	25	-0.000252	± 2.5	PASS
		24	25	-0.000225	± 2.5	PASS
		32	25	-0.000217	± 2.5	PASS
	MCH	10.5	25	-0.000451	± 2.5	PASS
		24	25	0.000040	± 2.5	PASS
		32	25	-0.000360	± 2.5	PASS
	HCH	10.5	25	-0.000710	± 2.5	PASS
		24	25	0.000400	± 2.5	PASS
		32	25	-0.000735	± 2.5	PASS
16QAM	LCH	10.5	25	-0.001780	± 2.5	PASS
		24	25	-0.001922	± 2.5	PASS
		32	25	-0.001627	± 2.5	PASS
	MCH	10.5	25	-0.000620	± 2.5	PASS
		24	25	-0.000364	± 2.5	PASS
		32	25	-0.000853	± 2.5	PASS
	HCH	10.5	25	-0.000650	± 2.5	PASS
		24	25	-0.000840	± 2.5	PASS
		32	25	-0.000284	± 2.5	PASS
Temperature						
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	24	-30	-0.002165	± 2.5	PASS
		24	-20	-0.002558	± 2.5	PASS
		24	-10	-0.001533	± 2.5	PASS
		24	0	-0.000859	± 2.5	PASS
		24	10	-0.000961	± 2.5	PASS
		24	20	-0.000716	± 2.5	PASS
		24	30	-0.002165	± 2.5	PASS
		24	40	0.001240	± 2.5	PASS
		24	50	-0.000890	± 2.5	PASS
	MCH	24	-30	-0.000607	± 2.5	PASS
		24	-20	-0.000708	± 2.5	PASS
		24	-10	0.000485	± 2.5	PASS
		24	0	-0.004140	± 2.5	PASS
		24	10	-0.003310	± 2.5	PASS
		24	20	-0.001120	± 2.5	PASS
		24	30	-0.001680	± 2.5	PASS

		24	40	-0.001120	± 2.5	PASS
		24	50	-0.000320	± 2.5	PASS
	HCH	24	-30	-0.004140	± 2.5	PASS
		24	-20	-0.001041	± 2.5	PASS
		24	-10	0.000041	± 2.5	PASS
		24	0	-0.000450	± 2.5	PASS
		24	10	-0.001411	± 2.5	PASS
		24	20	-0.000736	± 2.5	PASS
		24	30	-0.001830	± 2.5	PASS
		24	40	-0.001154	± 2.5	PASS
		24	50	0.000586	± 2.5	PASS
16QAM	LCH	24	-30	-0.000667	± 2.5	PASS
		24	-20	-0.001051	± 2.5	PASS
		24	-10	-0.001638	± 2.5	PASS
		24	0	-0.001830	± 2.5	PASS
		24	10	-0.002310	± 2.5	PASS
		24	20	-0.000420	± 2.5	PASS
		24	30	-0.000960	± 2.5	PASS
		24	40	-0.000640	± 2.5	PASS
		24	50	-0.001940	± 2.5	PASS
	MCH	24	-30	-0.002165	± 2.5	PASS
		24	-20	-0.002558	± 2.5	PASS
		24	-10	-0.001533	± 2.5	PASS
		24	0	-0.000859	± 2.5	PASS
		24	10	-0.000961	± 2.5	PASS
		24	20	-0.000716	± 2.5	PASS
		24	30	-0.002165	± 2.5	PASS
		24	40	0.001240	± 2.5	PASS
		24	50	-0.000890	± 2.5	PASS
	HCH	24	-30	-0.000607	± 2.5	PASS
		24	-20	-0.000708	± 2.5	PASS
		24	-10	0.000485	± 2.5	PASS
		24	0	-0.004140	± 2.5	PASS
		24	10	-0.003310	± 2.5	PASS
		24	20	-0.001120	± 2.5	PASS
		24	30	-0.001680	± 2.5	PASS
		24	40	-0.001120	± 2.5	PASS
		24	50	-0.000320	± 2.5	PASS

Note: All bandwidth and modulation are tested, only the worst result is reported.

Appendix G :Field Strength of Spurious Radiation Measurement

Test Result

Bandwidth:	1.4M		Test channel:	Lowest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1399.4	Vertical	-32.72	-13.00	PASS
2099.1	V	-43.68		
-	V	-		
1399.4	Horizontal	-31.14		
2099.1	H	-44.36		
-	H	-		
Bandwidth:	1.4M		Test channel:	Middle
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1415	Vertical	-32.34	-13.00	PASS
2122.5	V	-44.60		
-	V	-		
1415	Horizontal	-33.12		
2122.5	H	-44.79		
-	H	-		
Bandwidth:	1.4M		Test channel:	Highest
Modulation:	QPSK		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1430.6	Vertical	-32.57	-13.00	PASS
2145.9	V	-41.63		
-	V	-		
1430.6	Horizontal	-32.18		
2145.9	H	-45.74		
-	H	-		

Bandwidth:	1.4M		Test channel:	Lowest
Modulation:	16QAM		Temperature :	23~24°C
RB #:	1RB #0		Relative Humidity:	46~48%
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1399.4	Vertical	-31.45	-13.00	PASS
2099.1	V	-42.68		
-	V	-		
1399.4	Horizontal	-32.47		
2099.1	H	-46.45		
-	H	-		
Bandwidth:	**1.4M**		**Test channel:**	**Middle**
Modulation:	**16QAM**		**Temperature :**	**23~24°C**
RB #:	**1RB #0**		**Relative Humidity:**	**46~48%**
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1415	Vertical	-31.60	-13.00	PASS
2122.5	V	-42.58		
-	V	-		
1415	Horizontal	-32.65		
2122.5	H	-43.87		
-	H	-		
Bandwidth:	**1.4M**		**Test channel:**	**Highest**
Modulation:	**16QAM**		**Temperature :**	**23~24°C**
RB #:	**1RB #0**		**Relative Humidity:**	**46~48%**
Note:	Spurious emissions within 30-1000MHz were found more than 20dB below limit line.			
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1430.6	Vertical	-31.54	-13.00	PASS
2145.9	V	-42.22		
-	V	-		
1430.6	Horizontal	-32.56		
2145.9	H	-45.45		
-	H	-		

Note: All bandwidth and modulation are tested, only the worst result is reported.