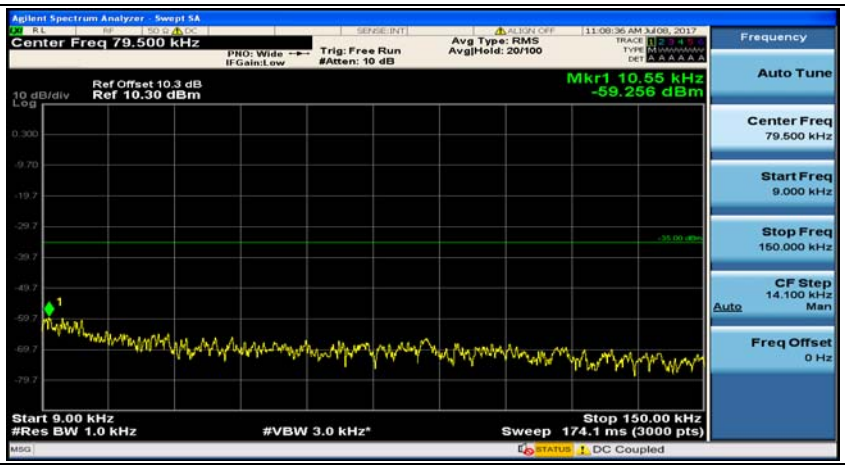
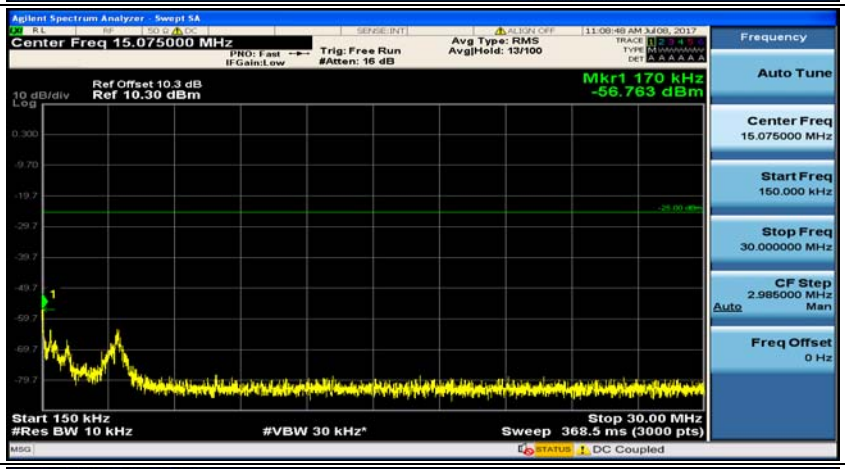
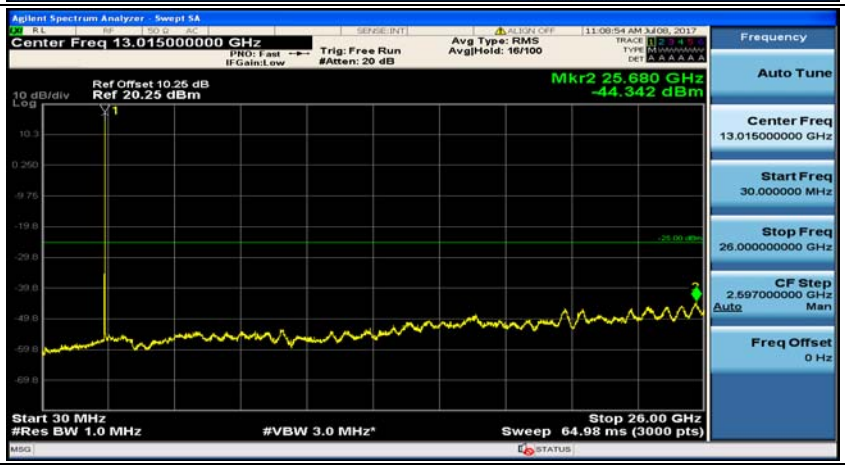
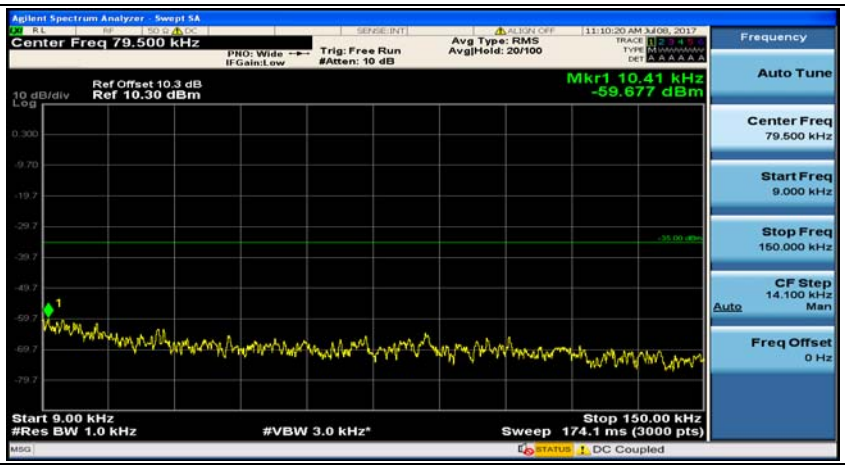
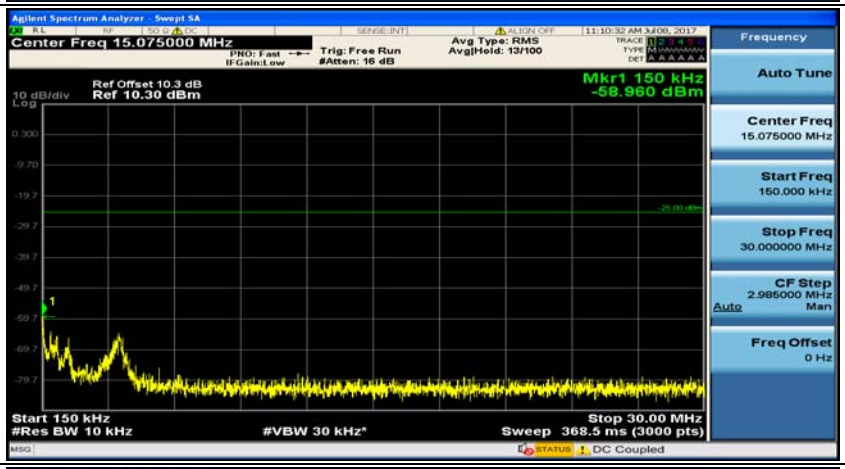


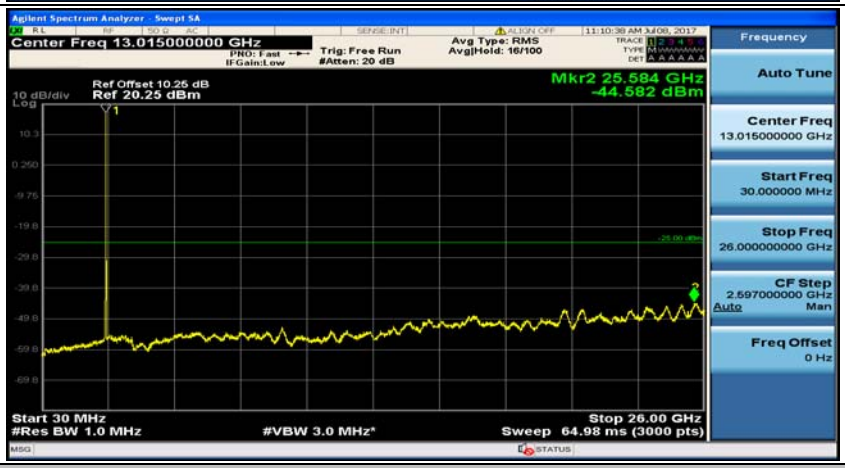




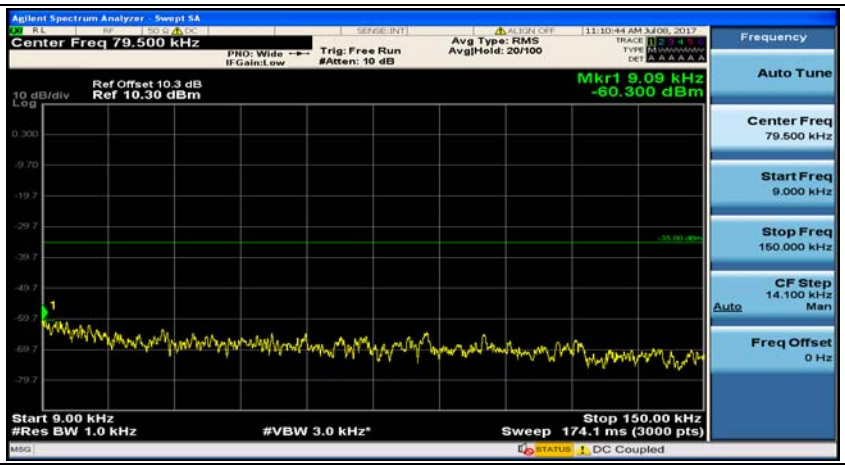
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

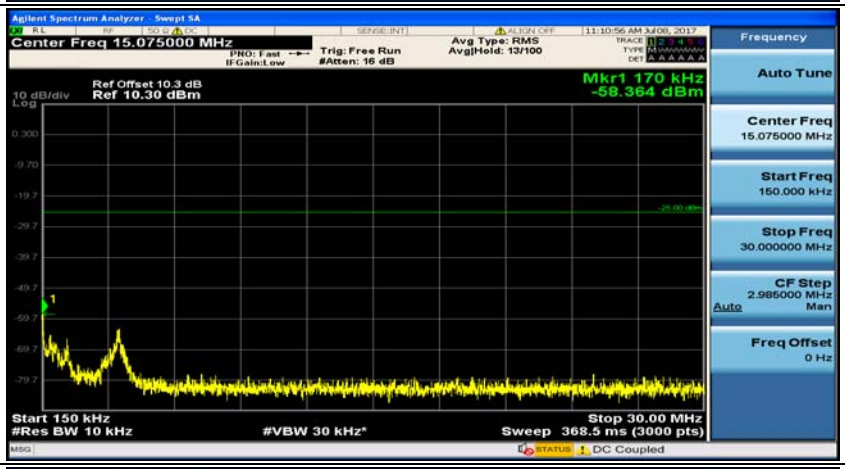


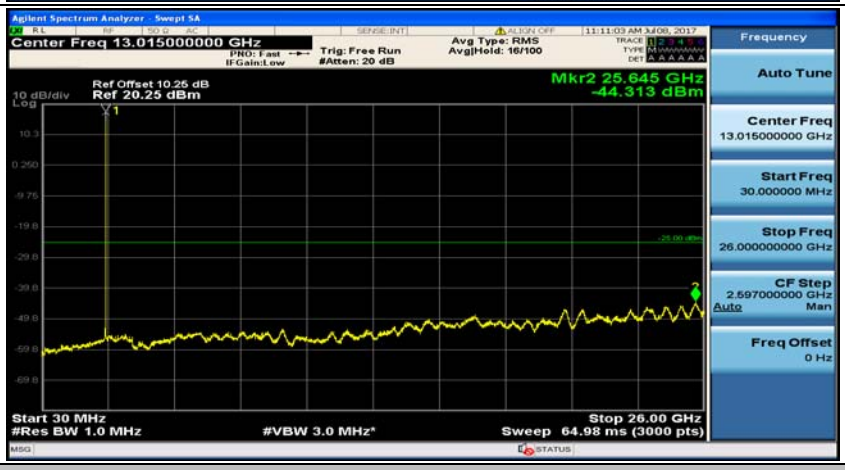




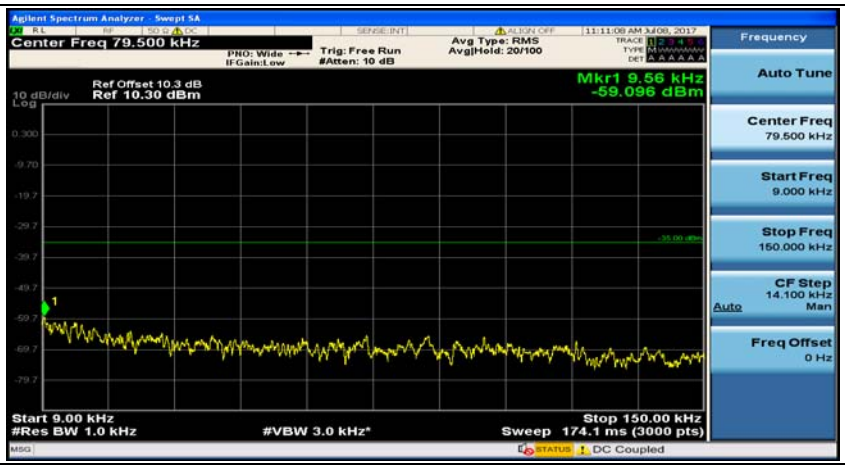
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

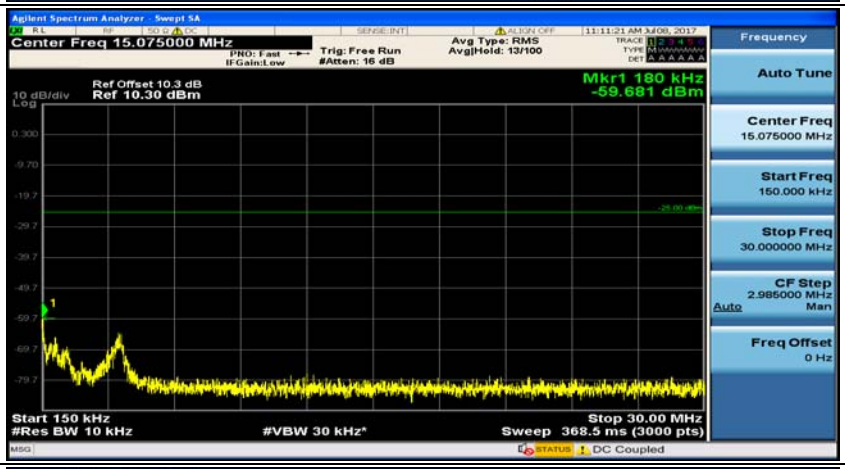


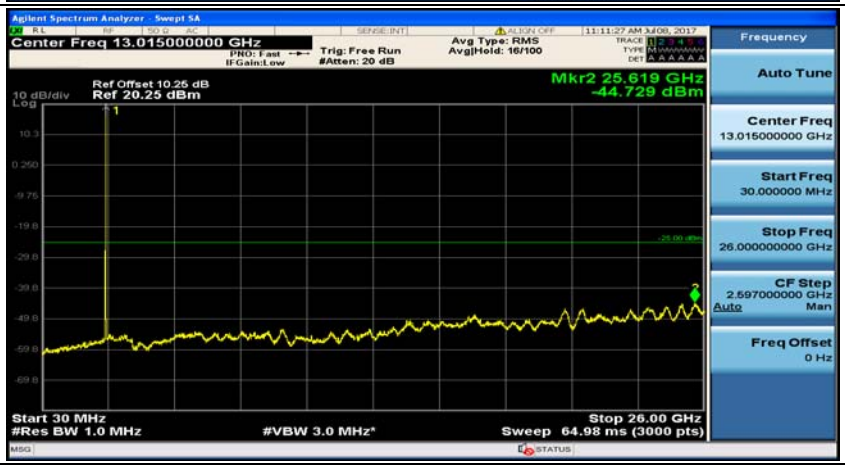




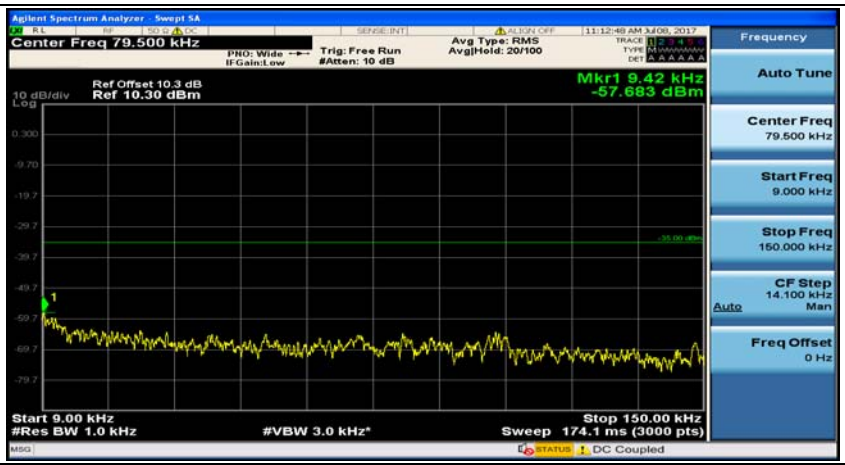
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

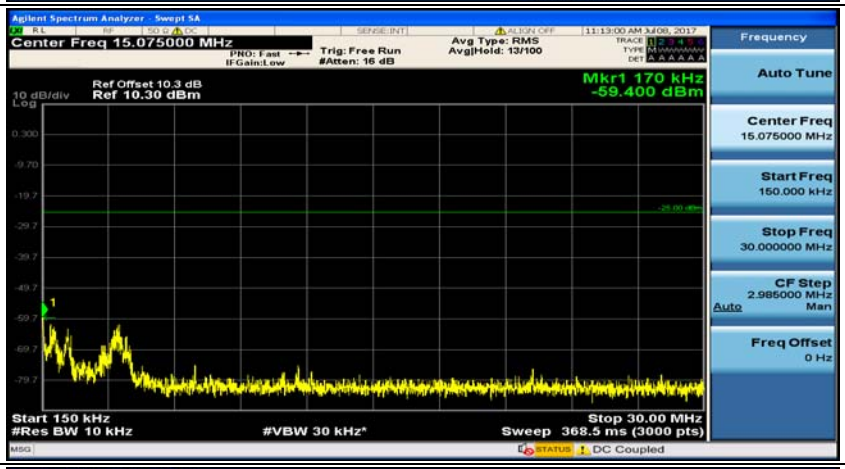


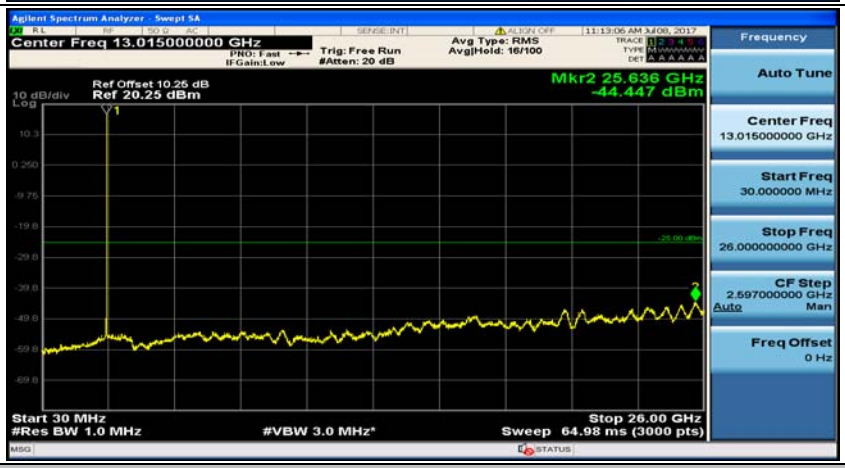




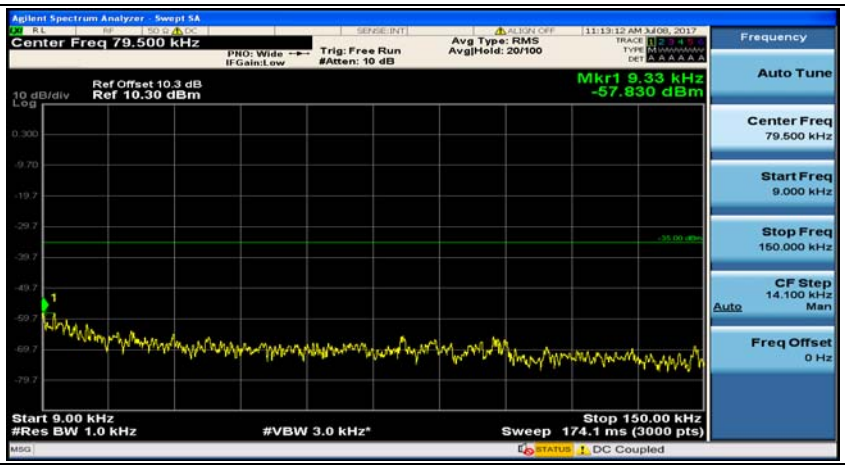
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0

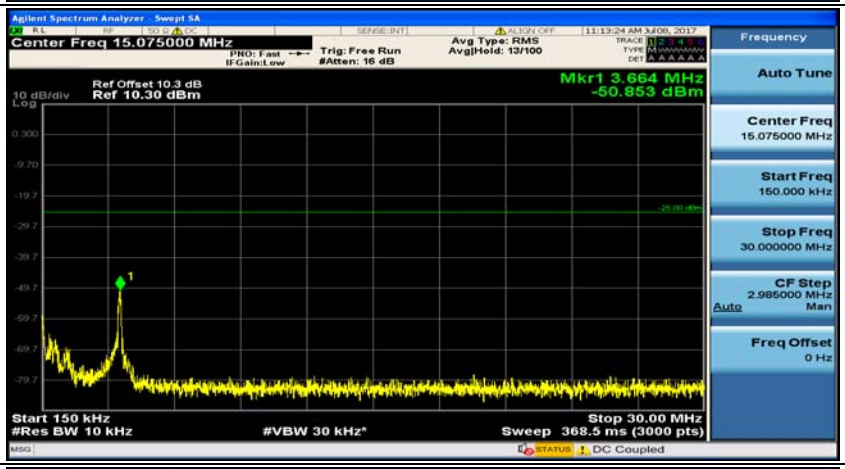


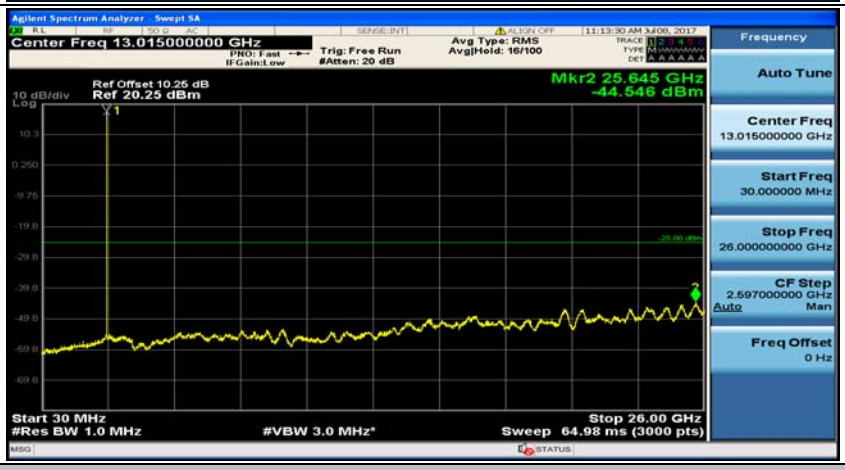




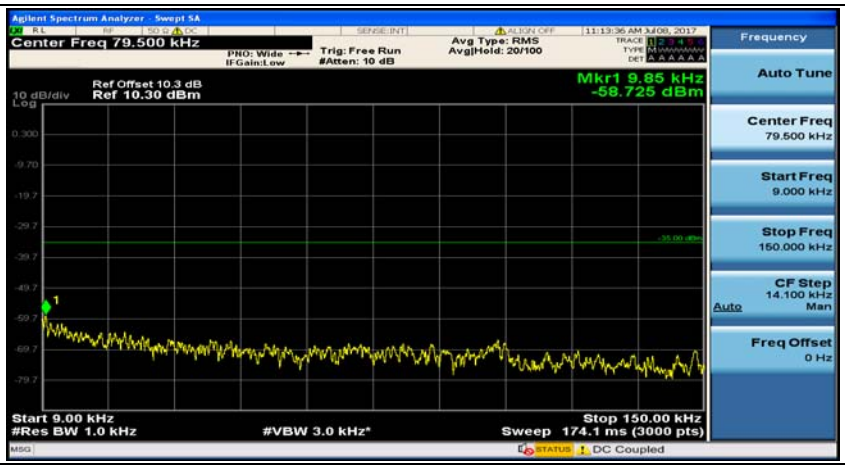
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24

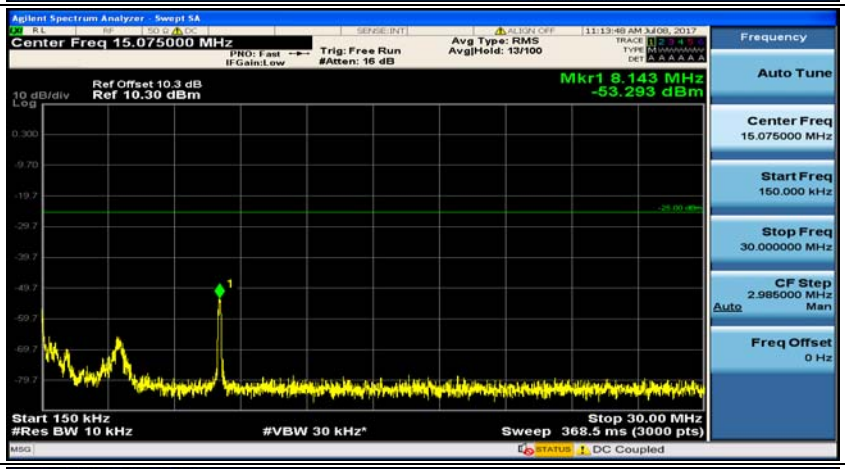


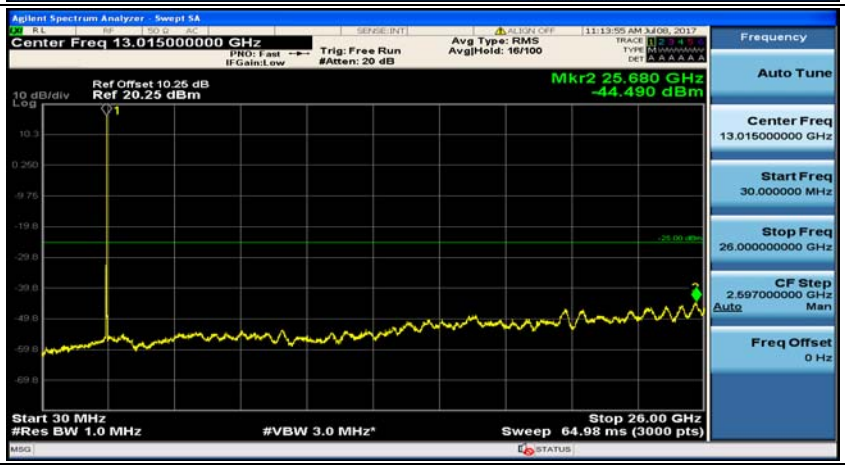




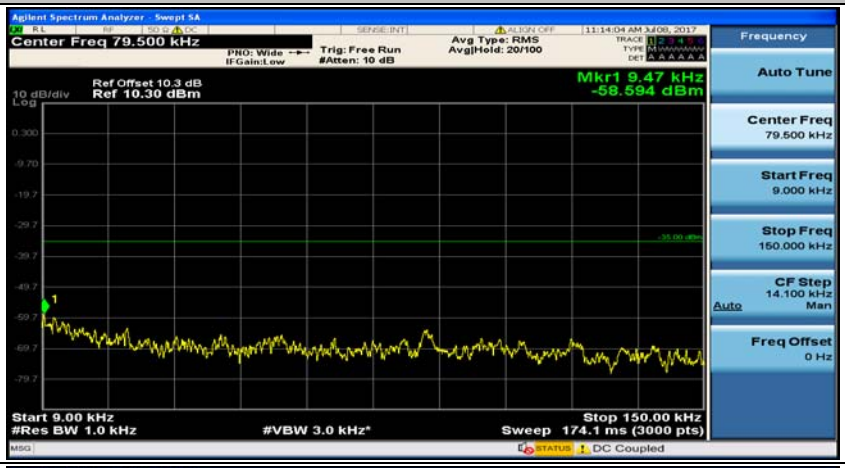
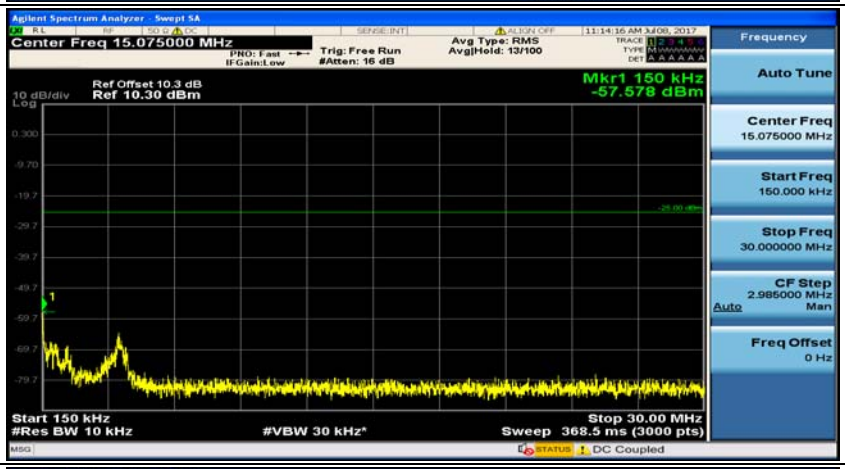
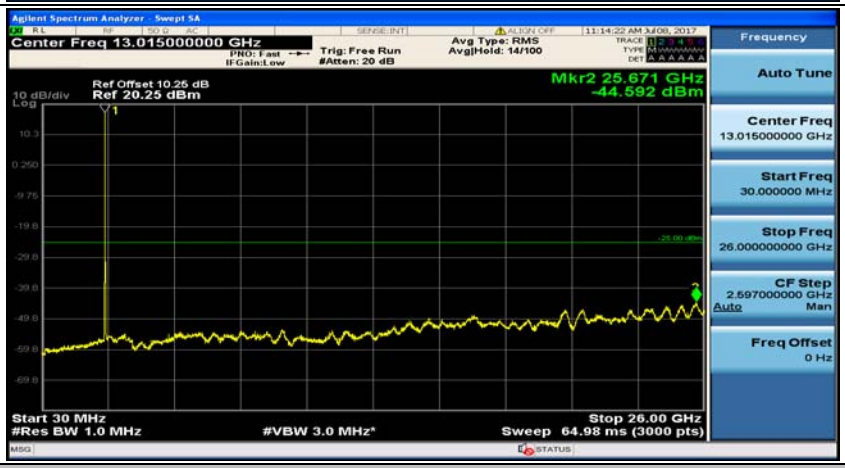
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49

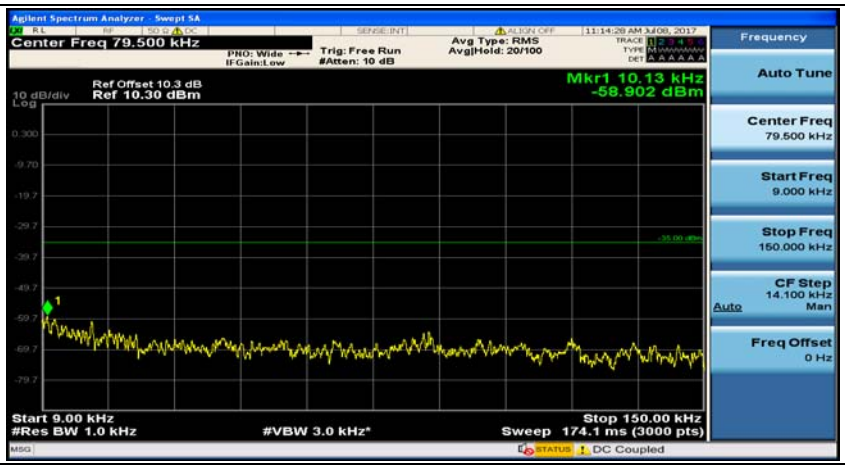

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 20/100
11:13:36 AM Jul 08, 2017
Frequency
Mkr1 9.85 kHz
-58.725 dBm
Ref Offset 10.3 dB
10 dB/div
Log
Ref 10.30 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled

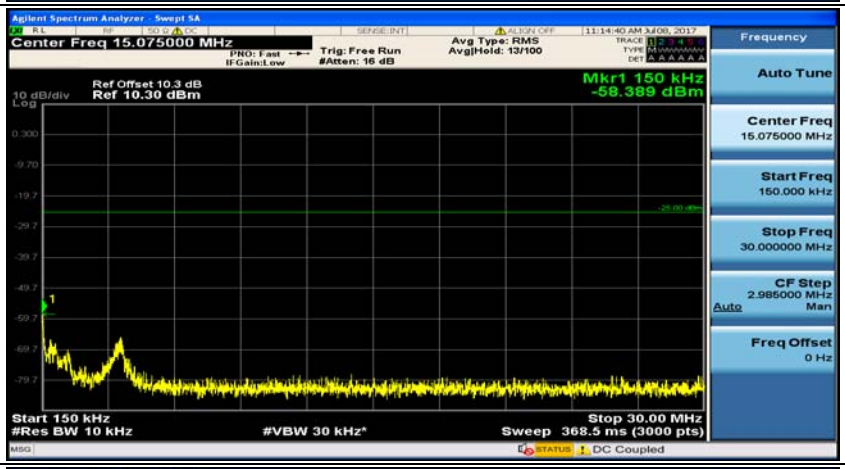

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 13/100
11:13:48 AM Jul 08, 2017
Frequency
Mkr1 8.143 MHz
-53.293 dBm
Ref Offset 10.3 dB
10 dB/div
Log
Ref 10.30 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled

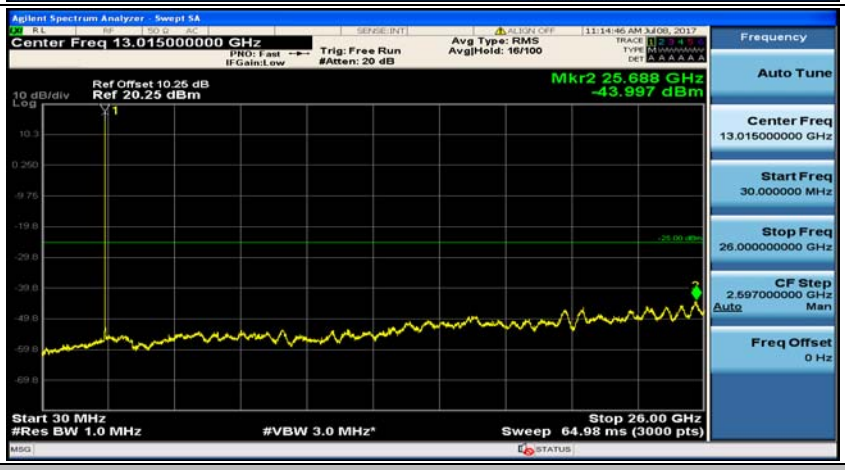

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 16/100
11:13:55 AM Jul 08, 2017
Frequency
Mkr2 25.680 GHz
-44.490 dBm
Ref Offset 10.25 dB
10 dB/div
Log
Ref 20.25 dBm
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

Channel Bandwidth: 15 MHz

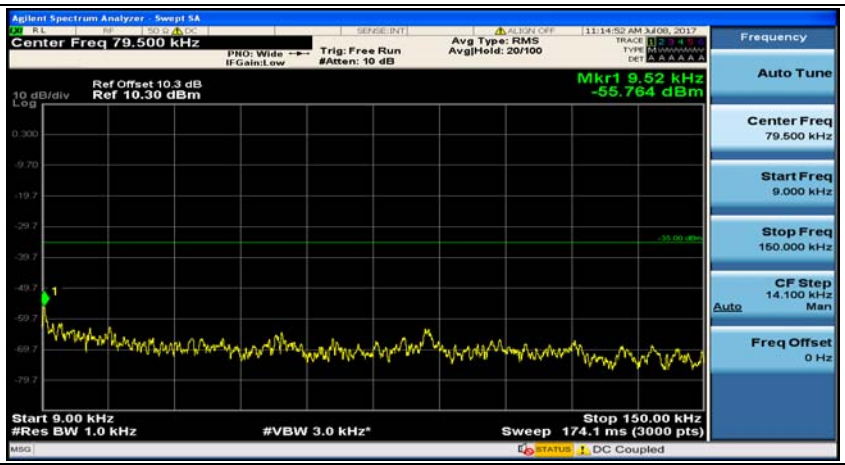
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#37

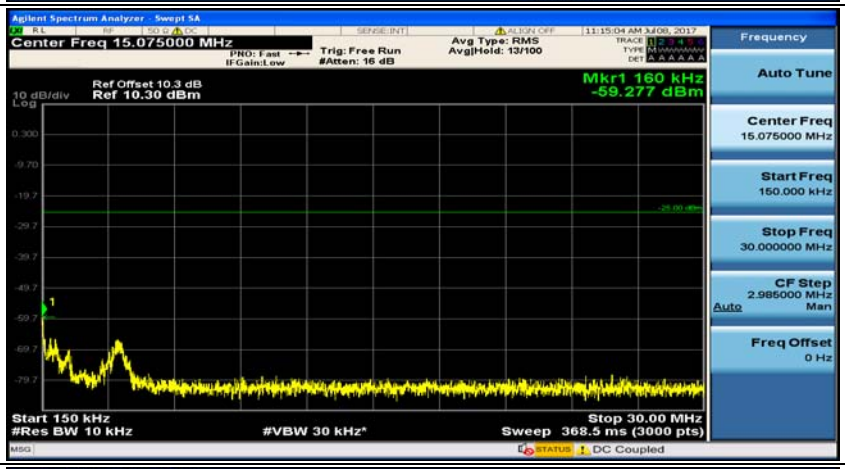


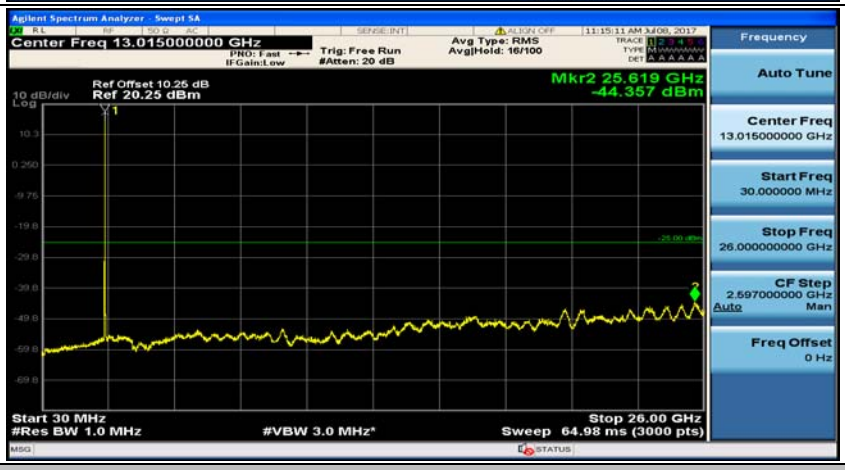




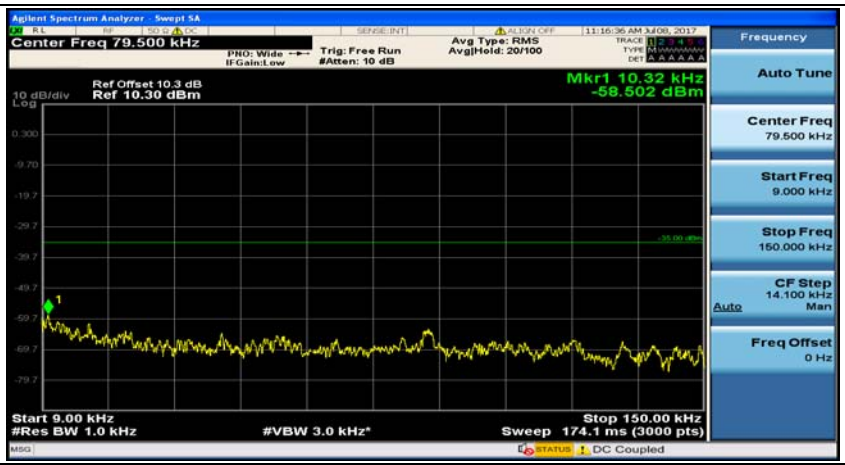
(Channel Bandwidth:15 MHz)_LCH_QPSK_1RB#74

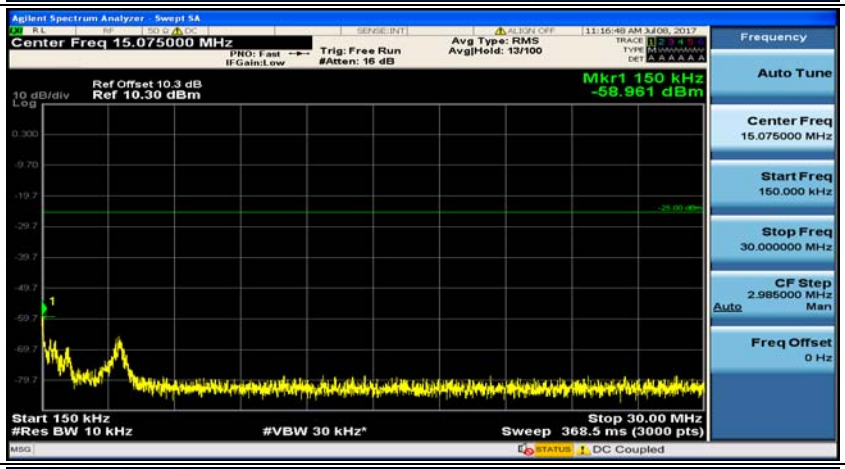


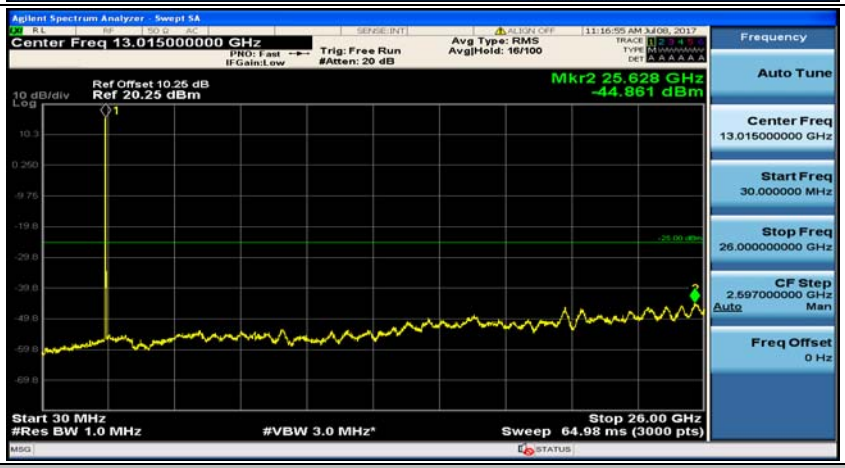




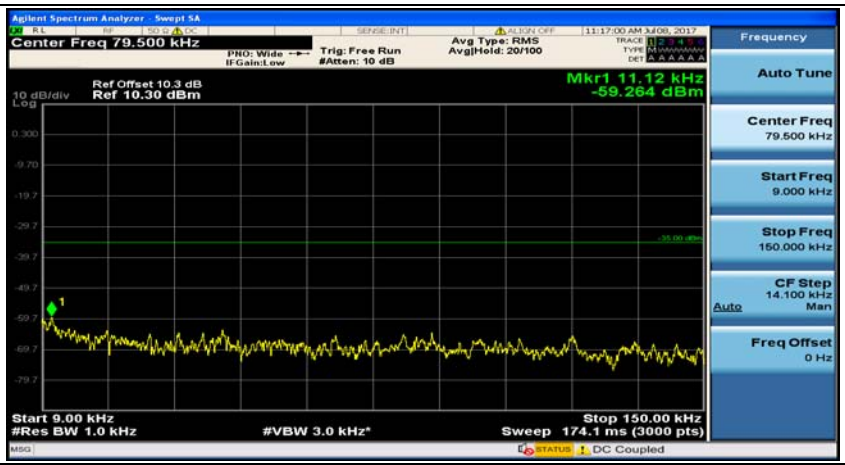
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0

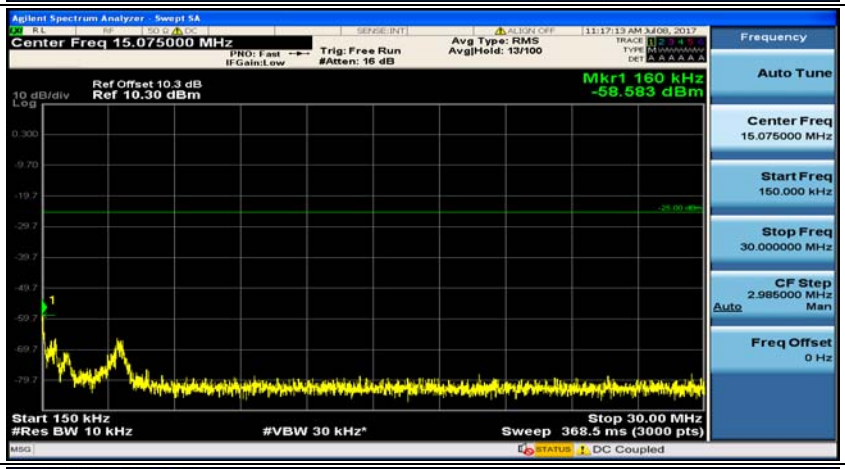


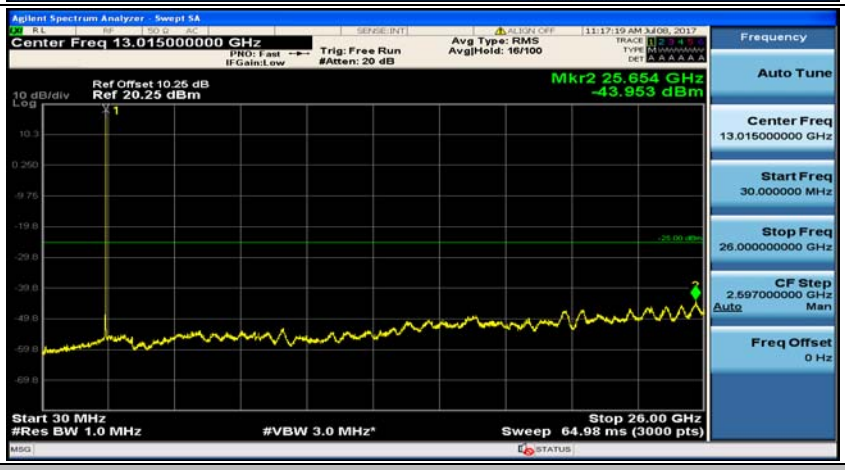




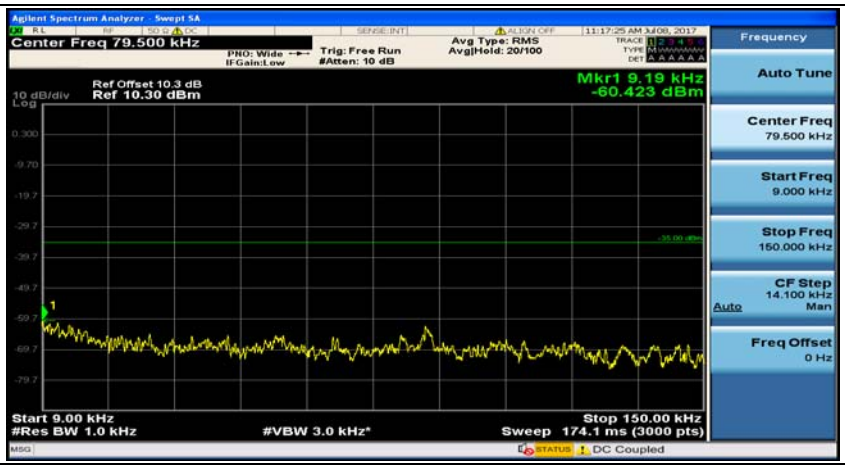
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#37

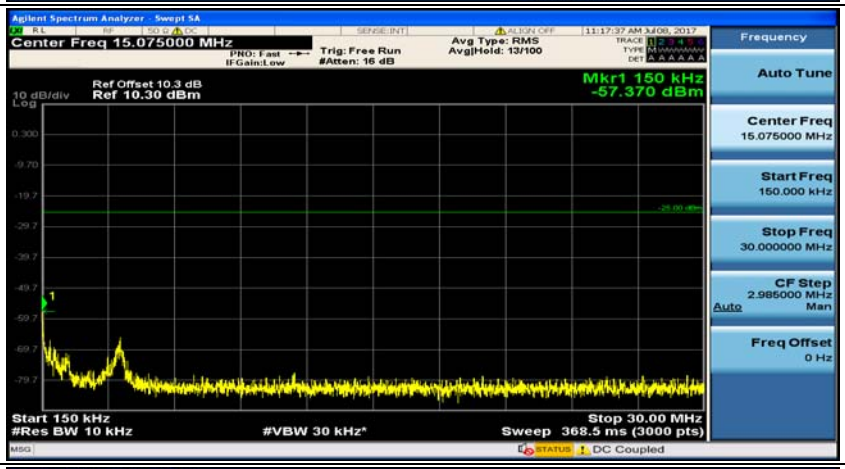


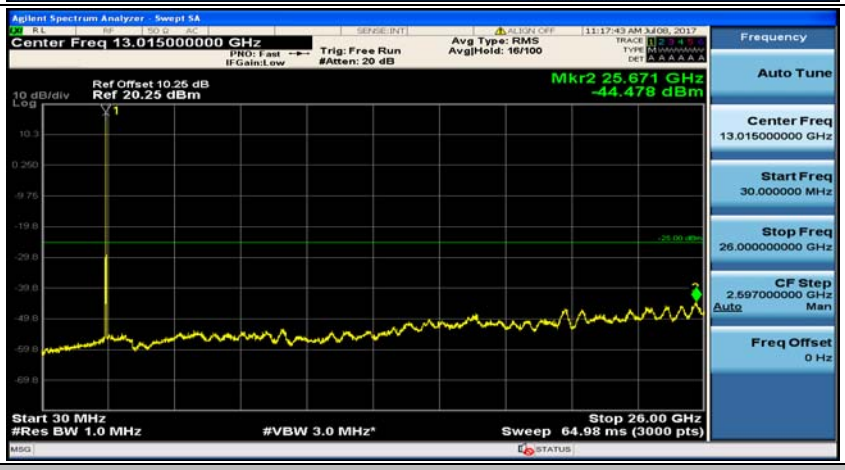




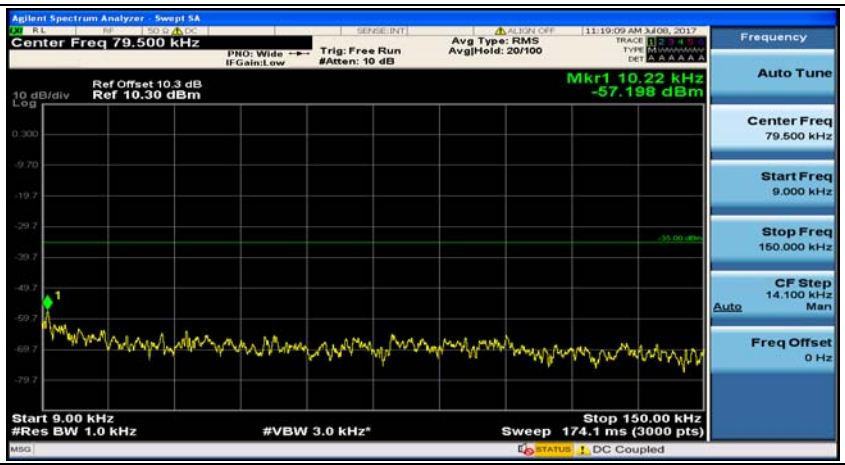
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#74

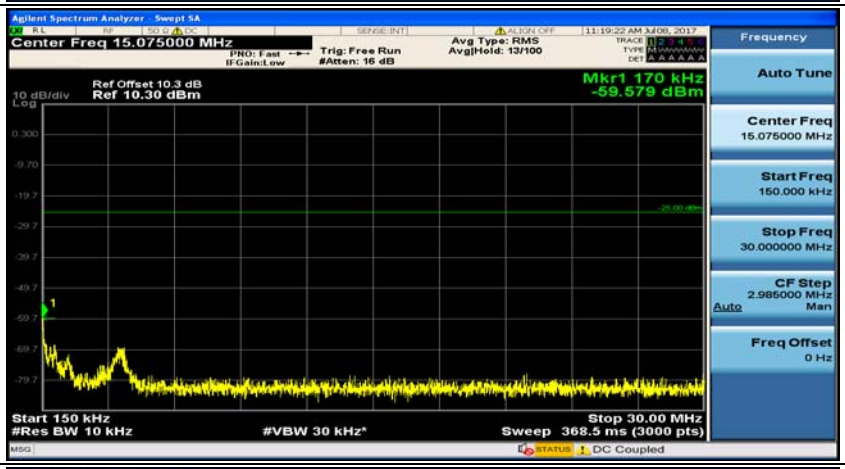


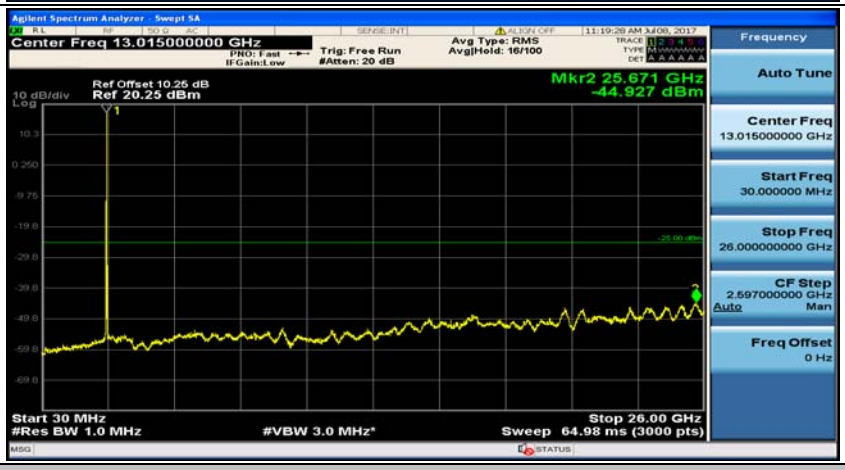




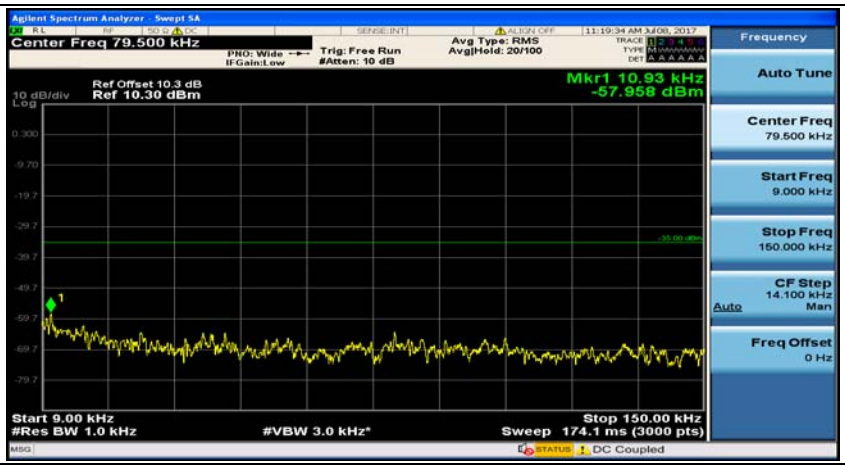
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0

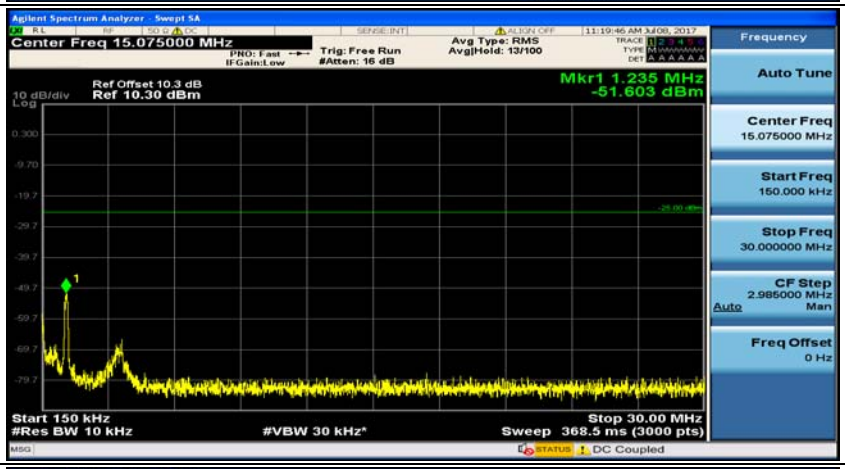


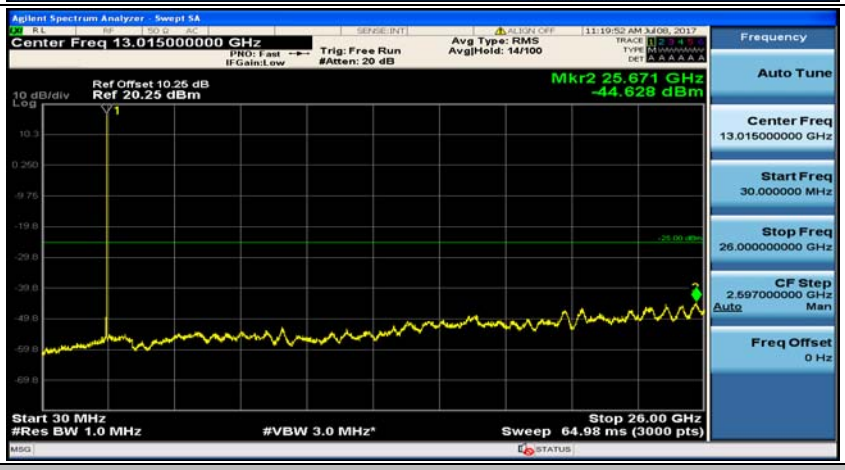




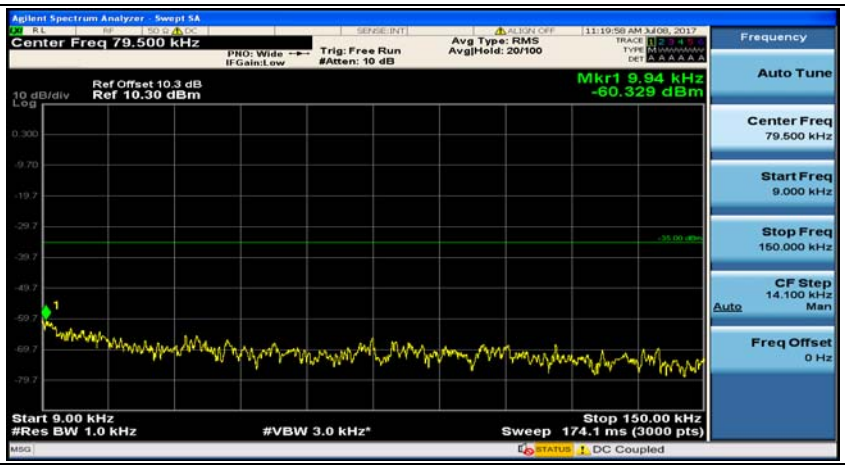
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37

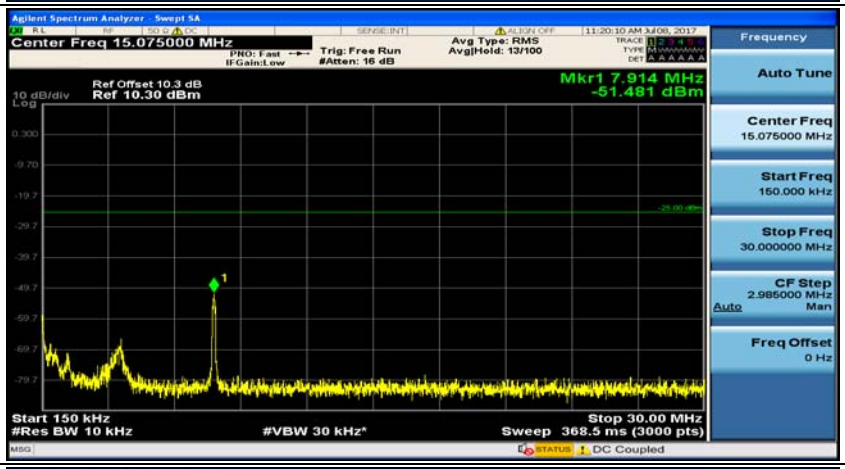


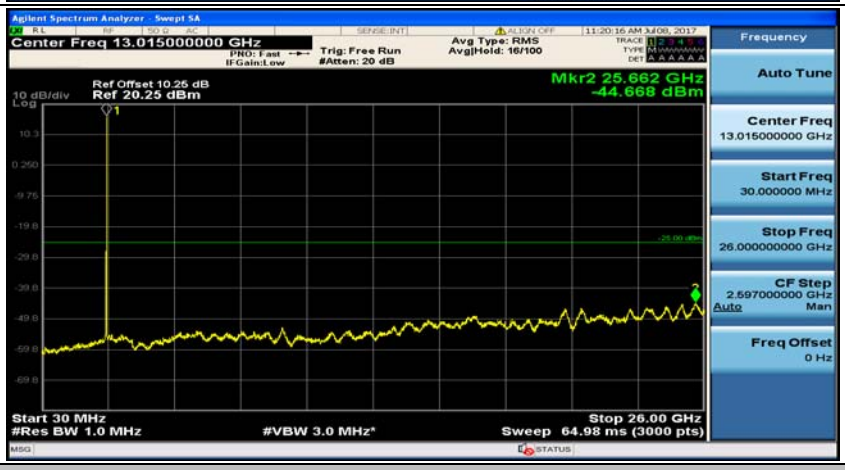




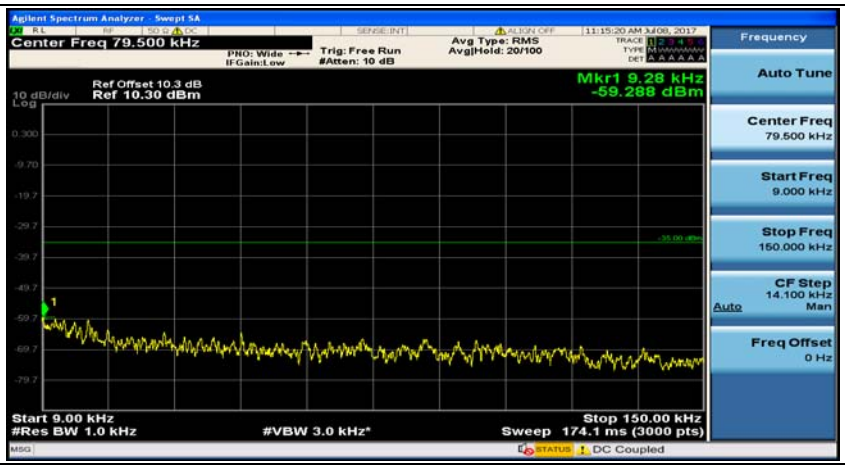
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#74

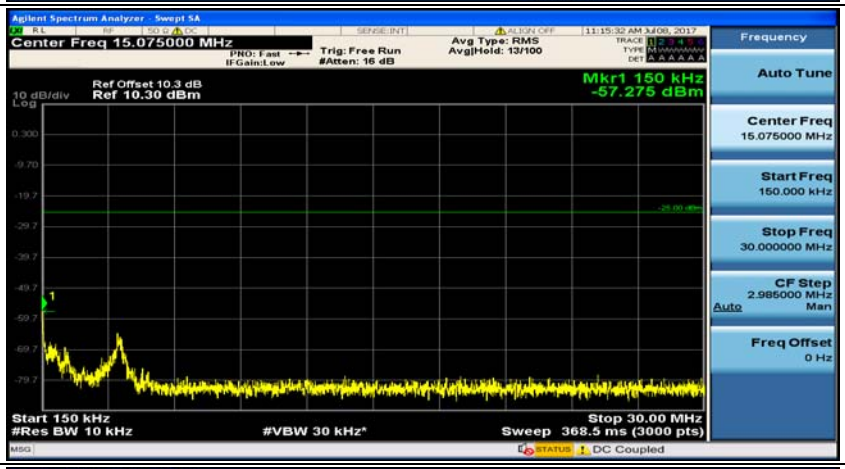


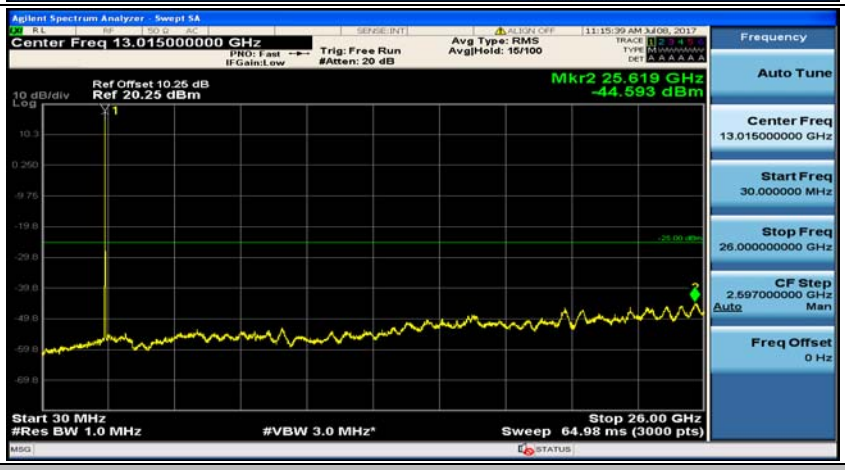




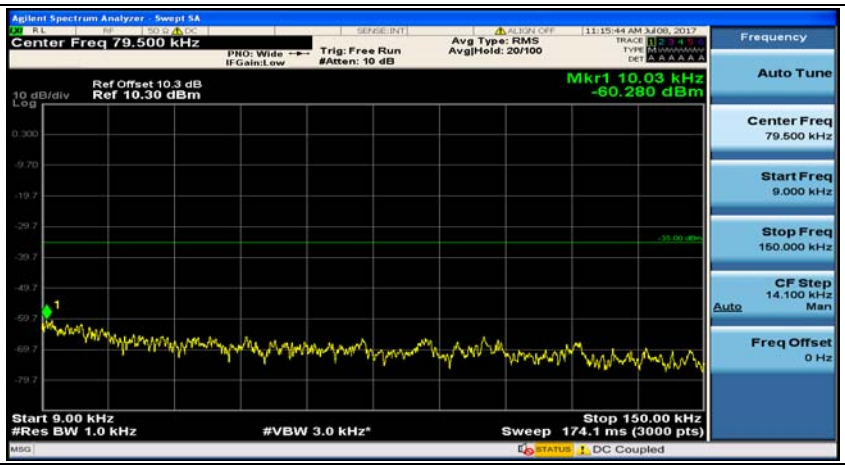
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0

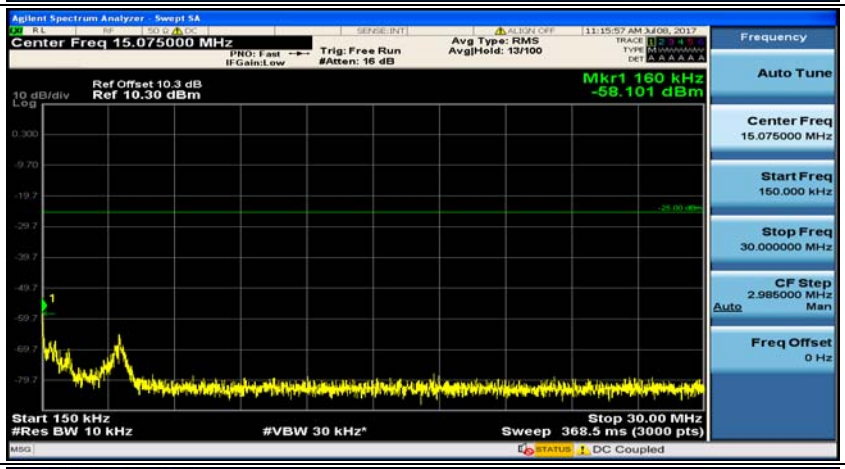


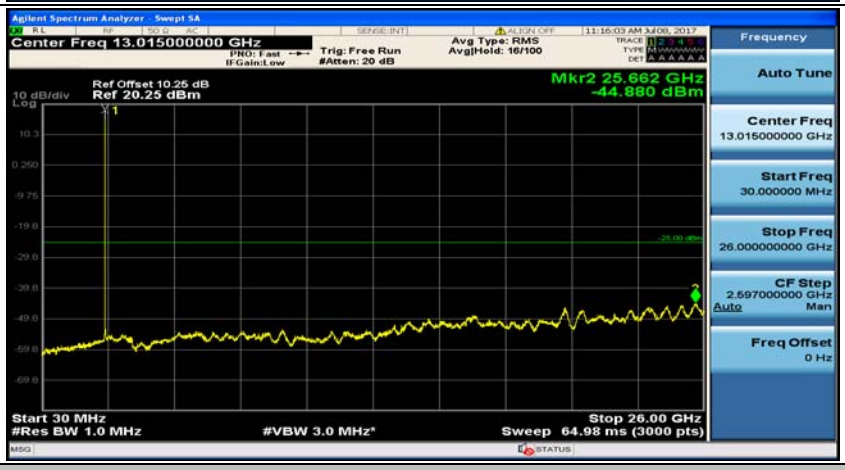




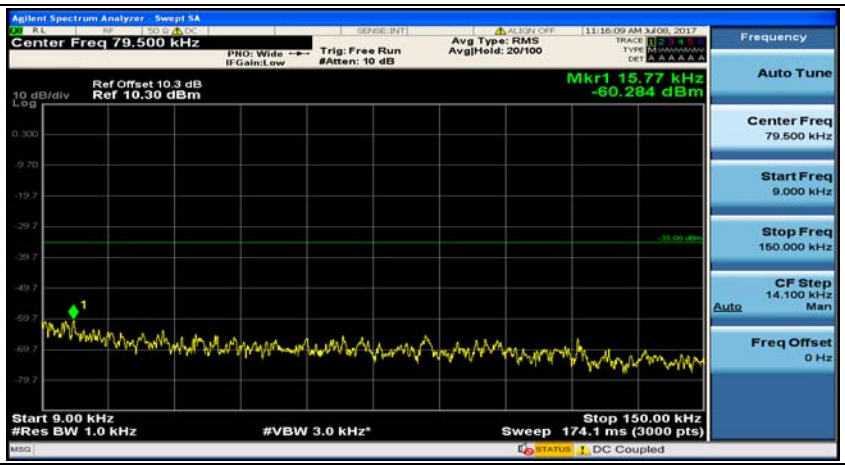
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#37

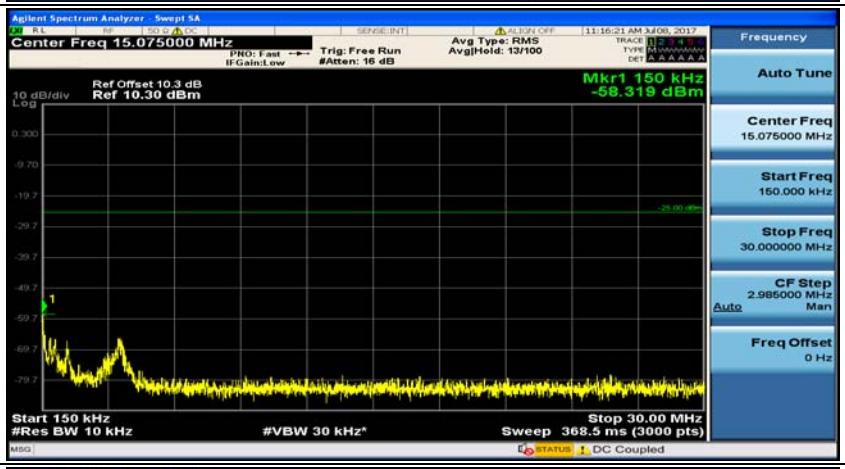


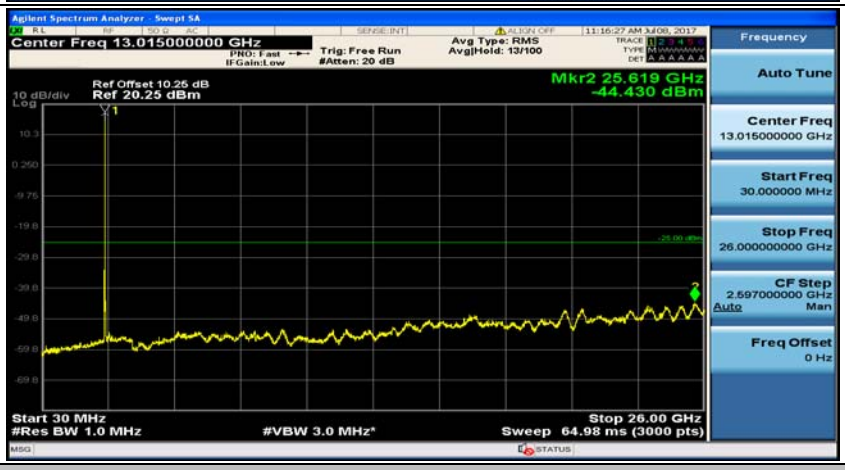




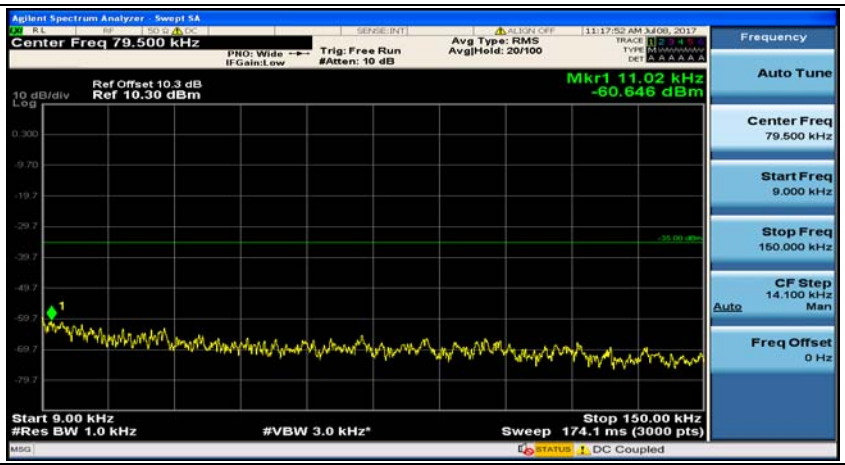
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#74

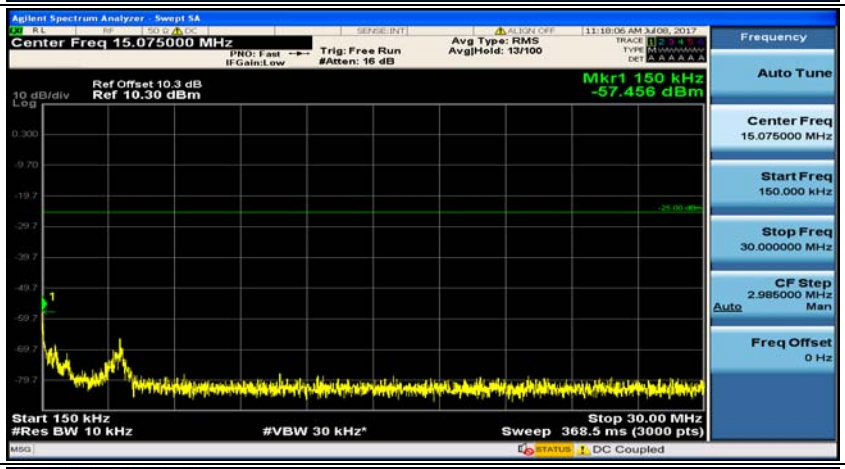


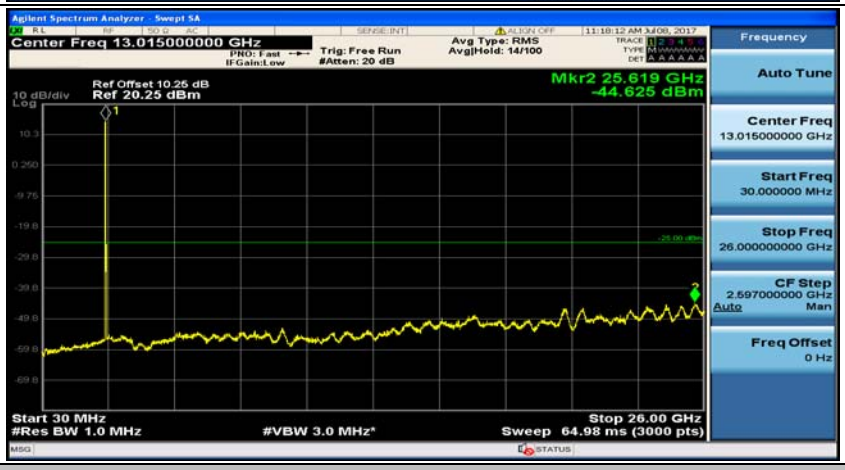




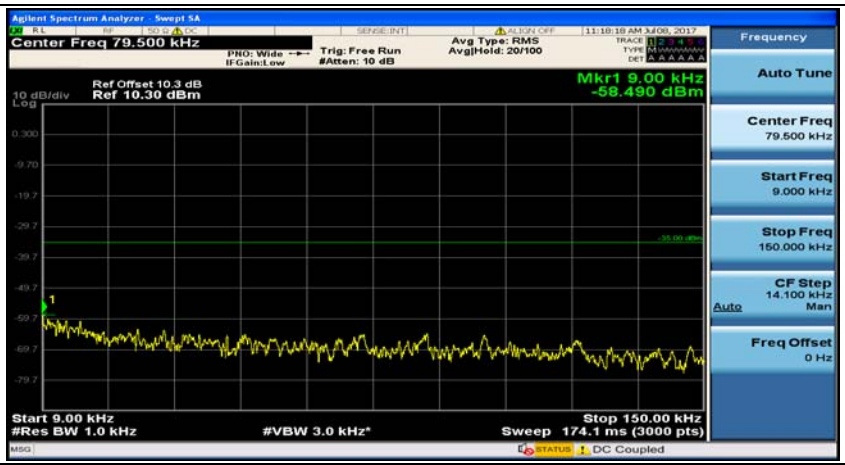
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

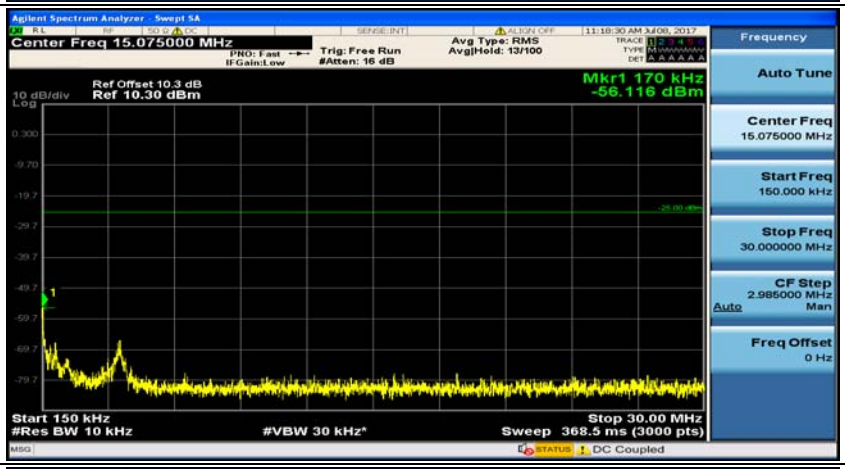


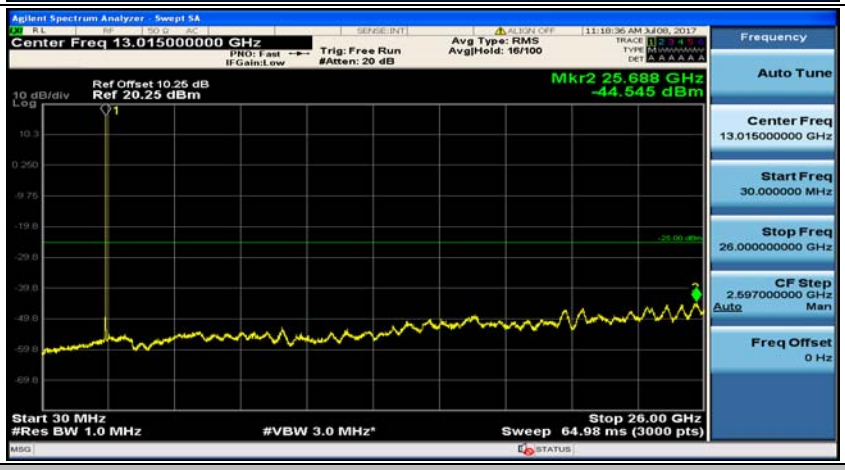




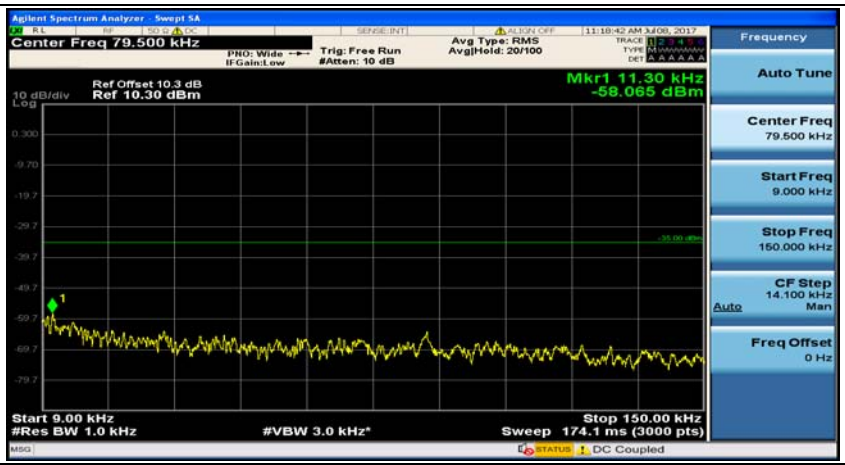
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37

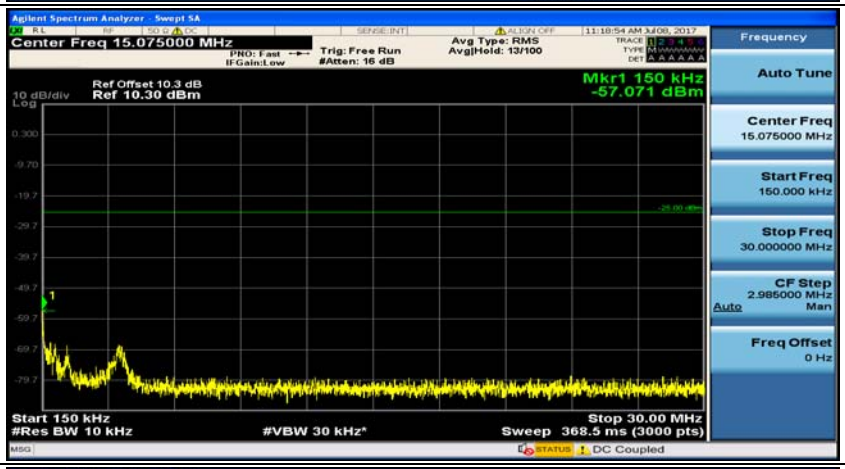


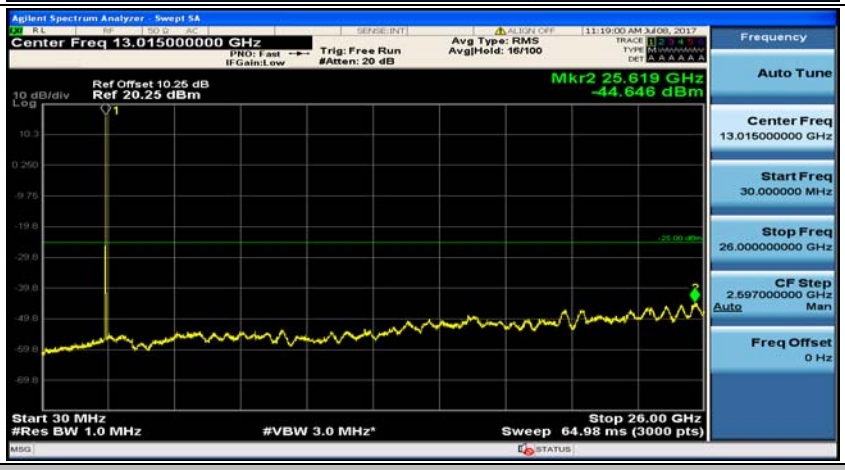




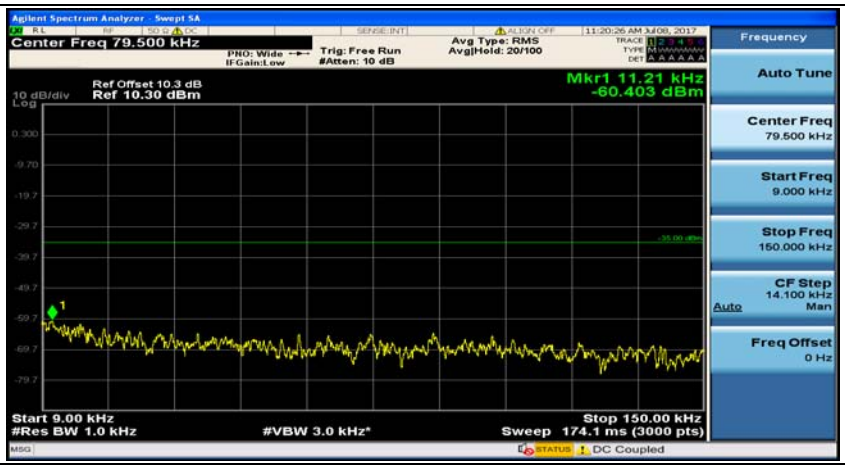
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#74

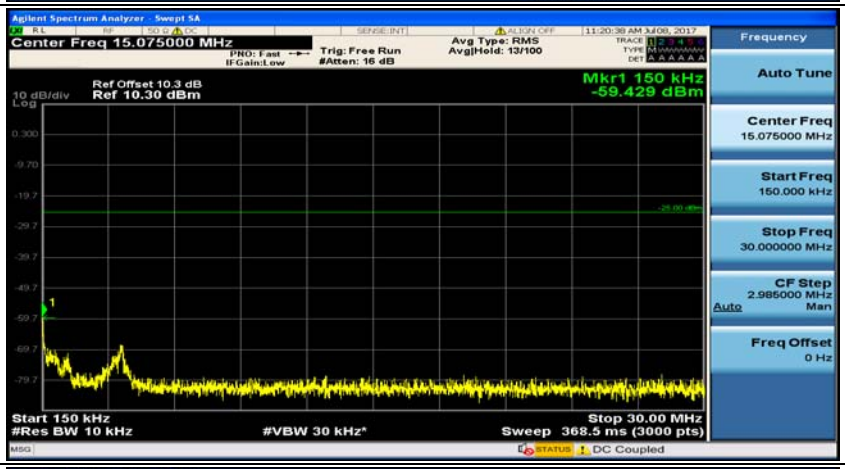


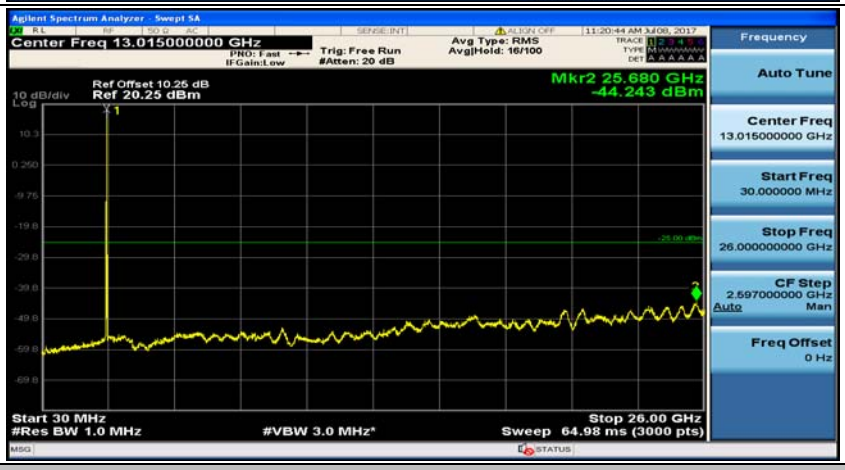




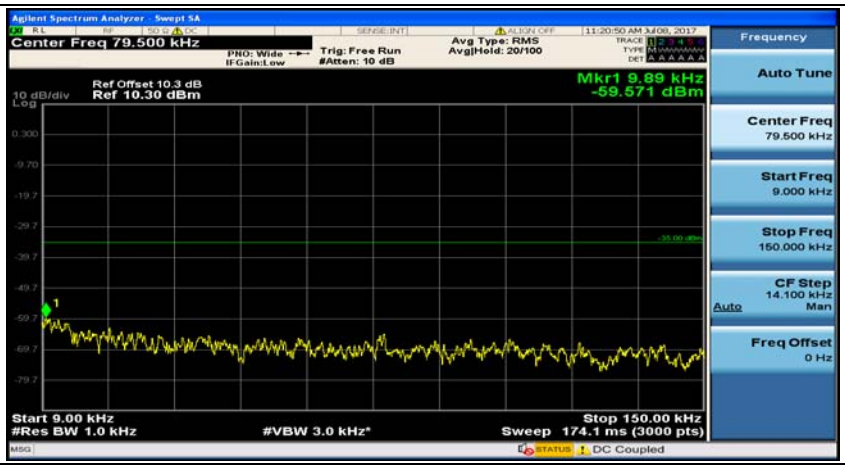
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0

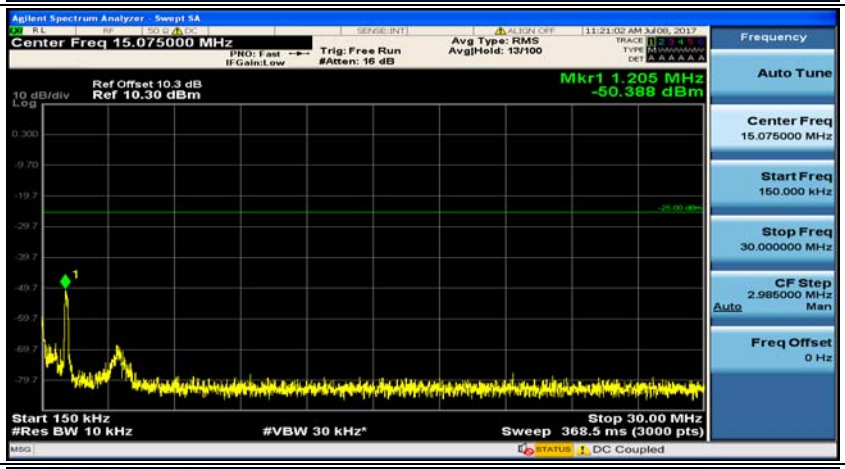


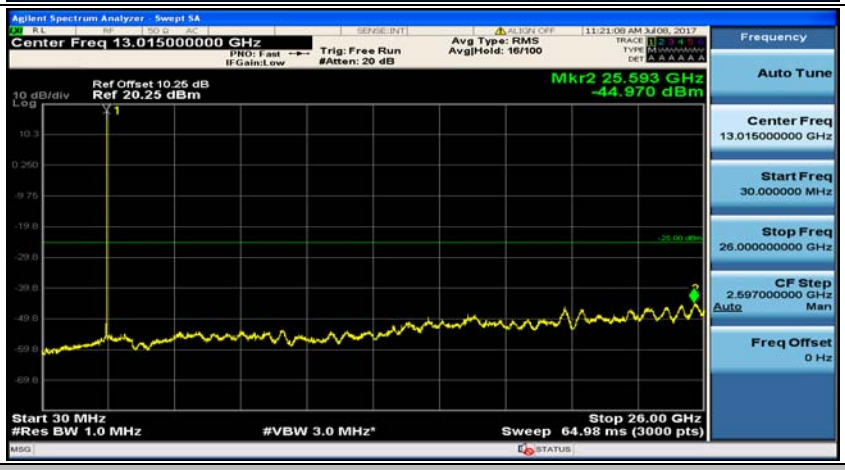




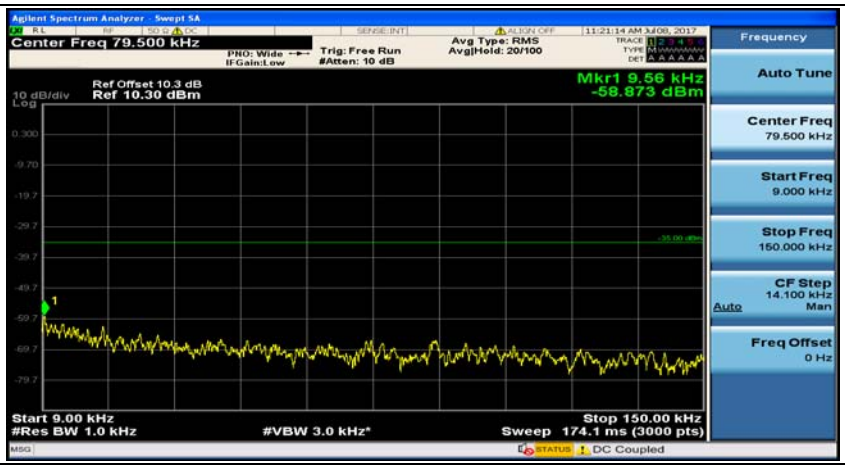
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#37

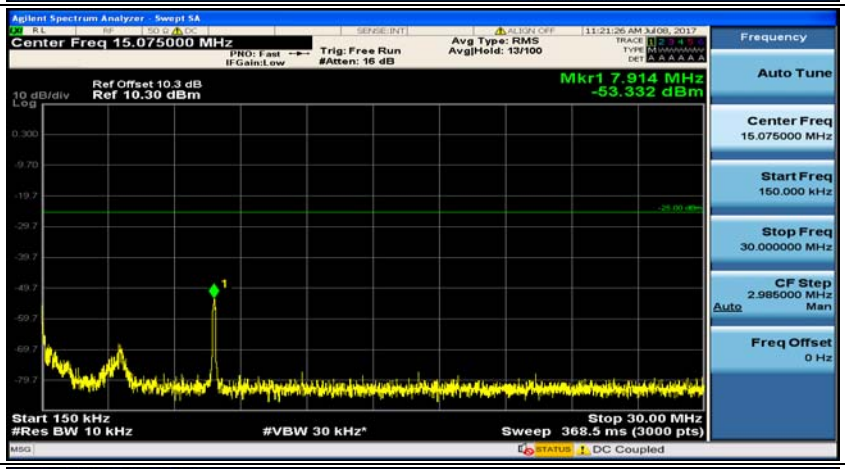


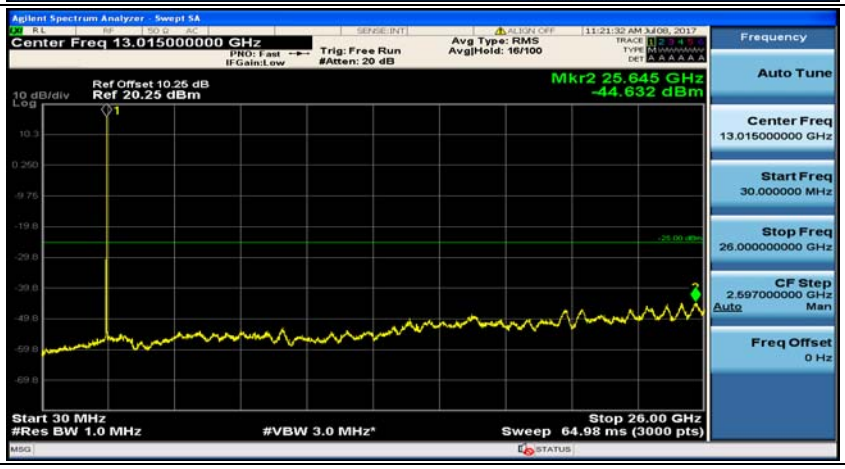




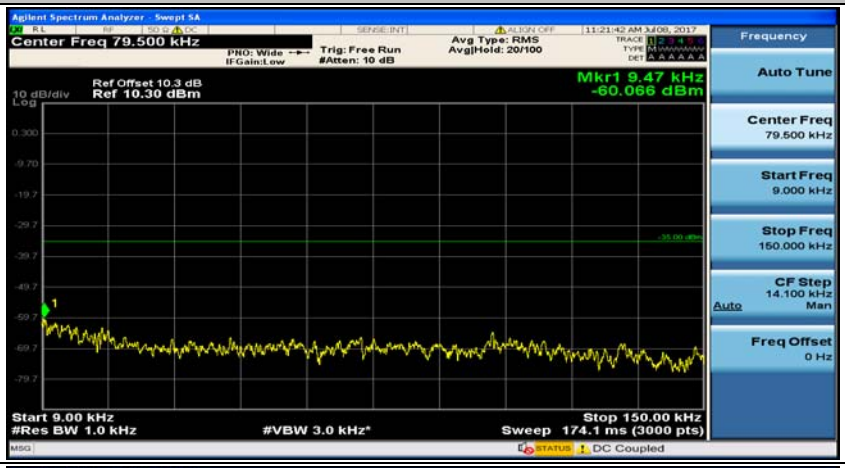
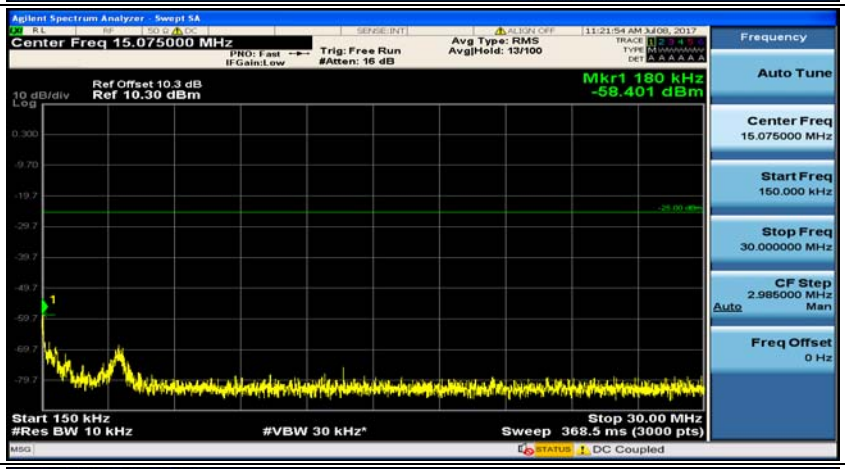
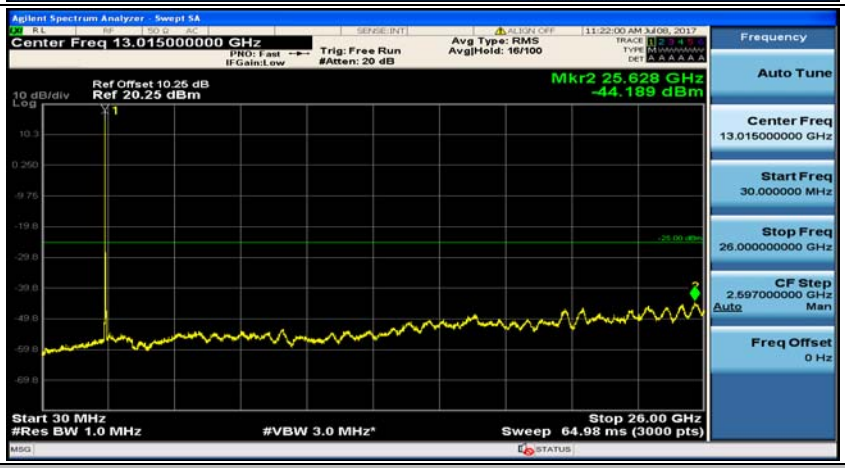
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#74

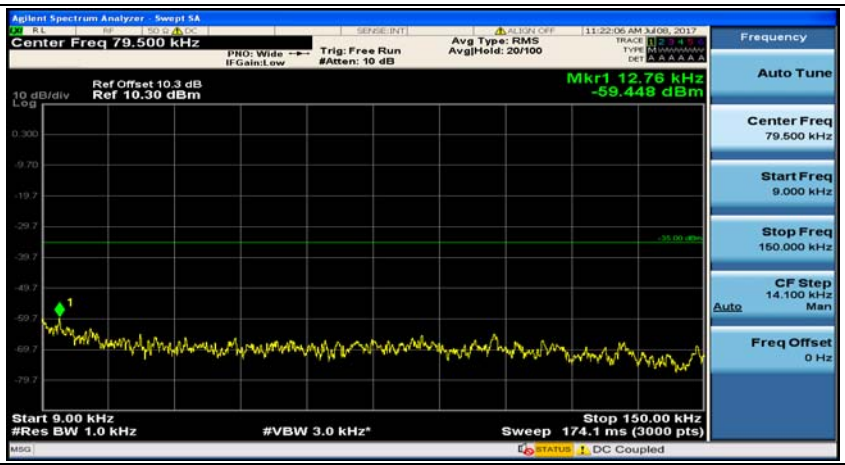

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 20/100
11:21:14 AM Jul 08, 2017
Frequency
Auto Tune
Mkr1 9.56 kHz
-58.873 dBm
Ref Offset 10.3 dB
10 dB/div
Ref 10.30 dBm
Log
Center Freq
79.500 kHz
Start Freq
9.000 kHz
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

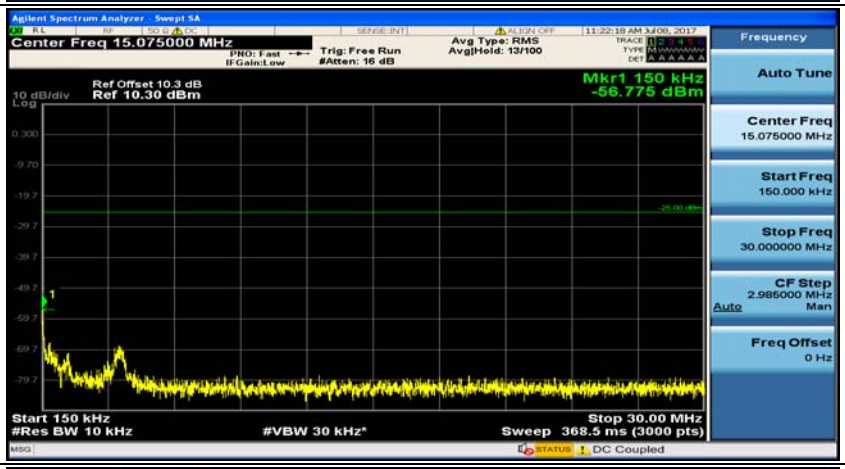

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 13/100
11:21:26 AM Jul 08, 2017
Frequency
Auto Tune
Mkr1 7.914 MHz
-53.332 dBm
Ref Offset 10.3 dB
10 dB/div
Ref 10.30 dBm
Log
Center Freq
15.075000 MHz
Start Freq
150.000 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

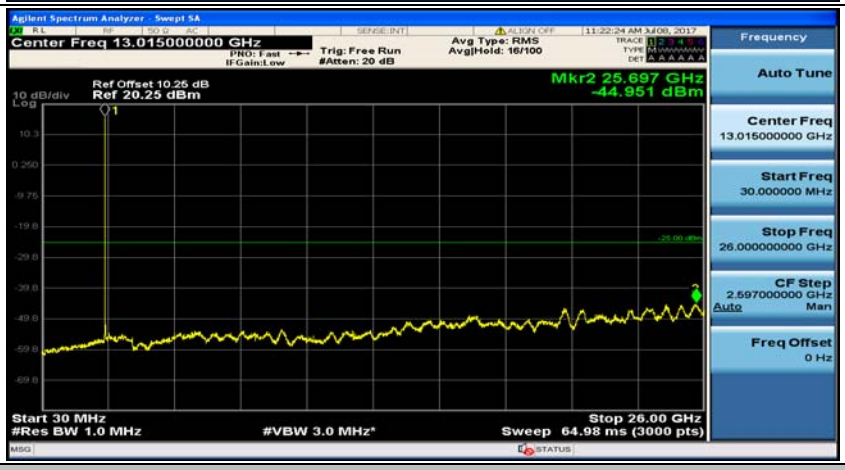

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 16/100
11:21:32 AM Jul 08, 2017
Frequency
Auto Tune
Mkr2 25.645 GHz
-44.632 dBm
Ref Offset 10.25 dB
10 dB/div
Ref 20.25 dBm
Log
Center Freq
13.015000000 GHz
Start 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: 20 MHz

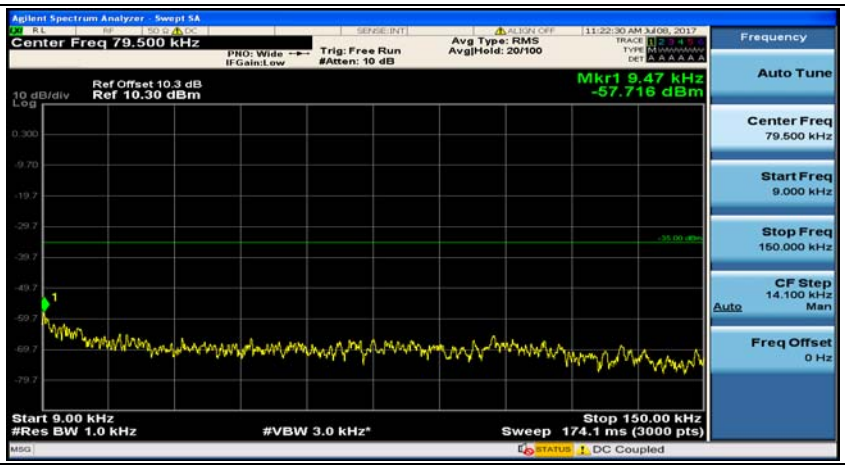
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#49

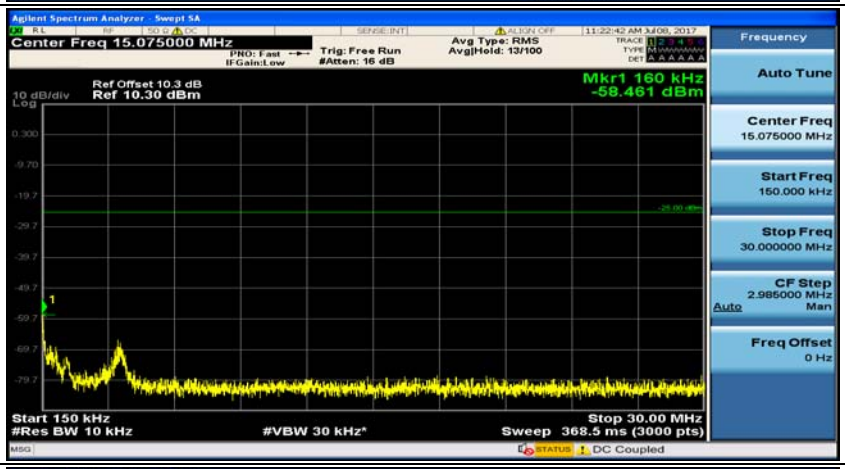


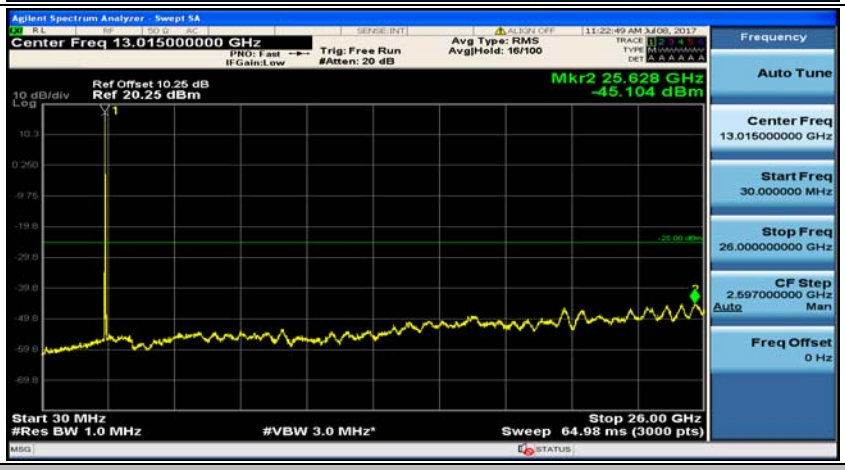




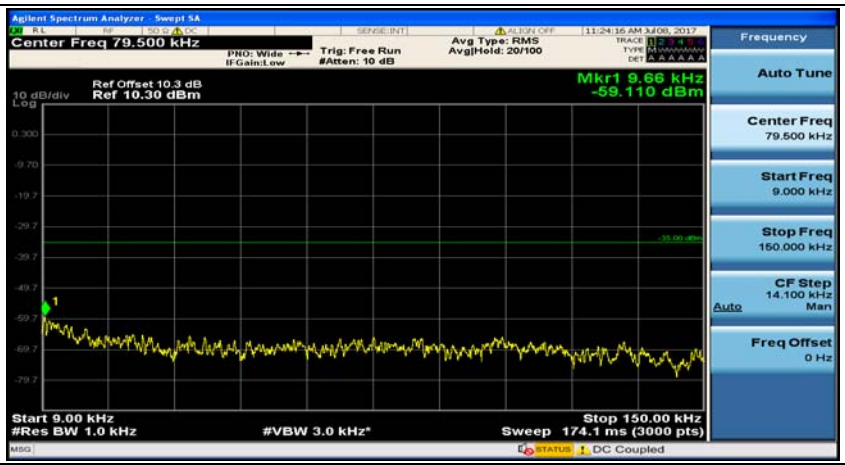
(Channel Bandwidth:20 MHz)_LCH_QPSK_1RB#99

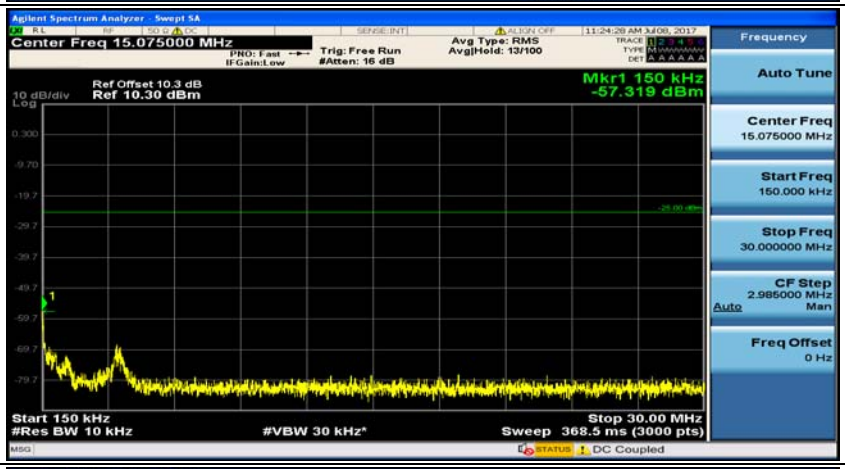


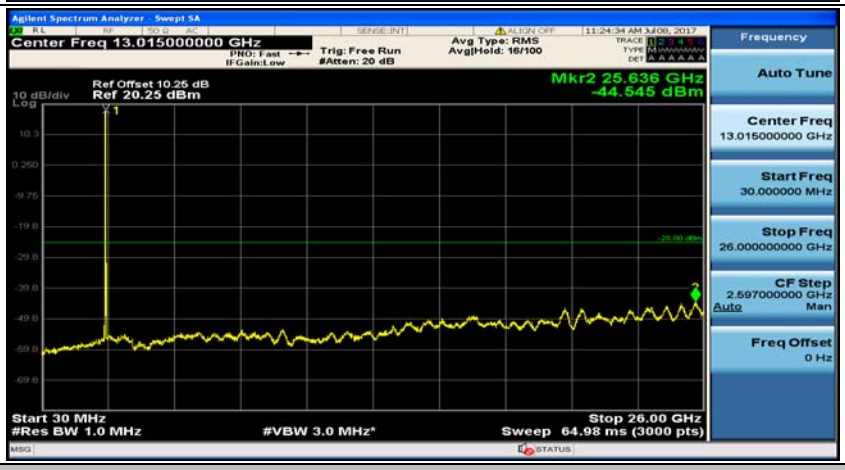




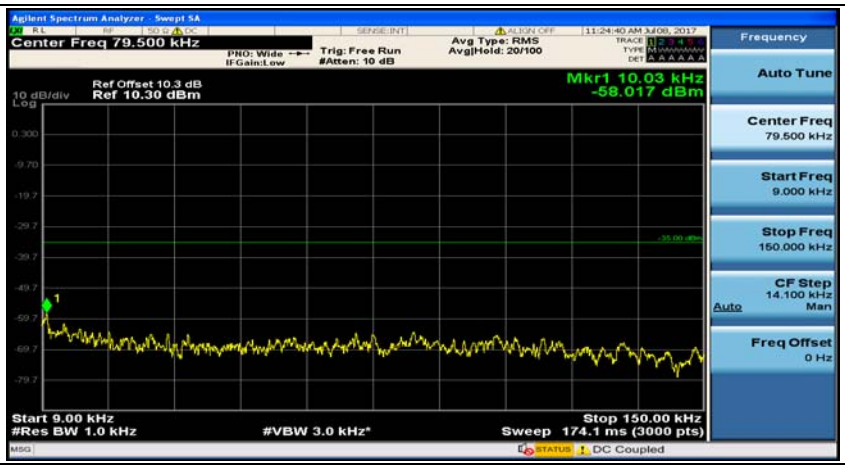
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

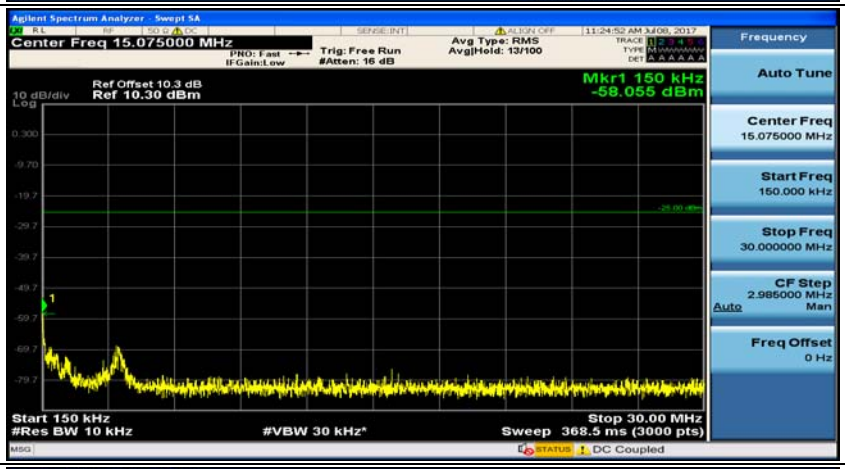


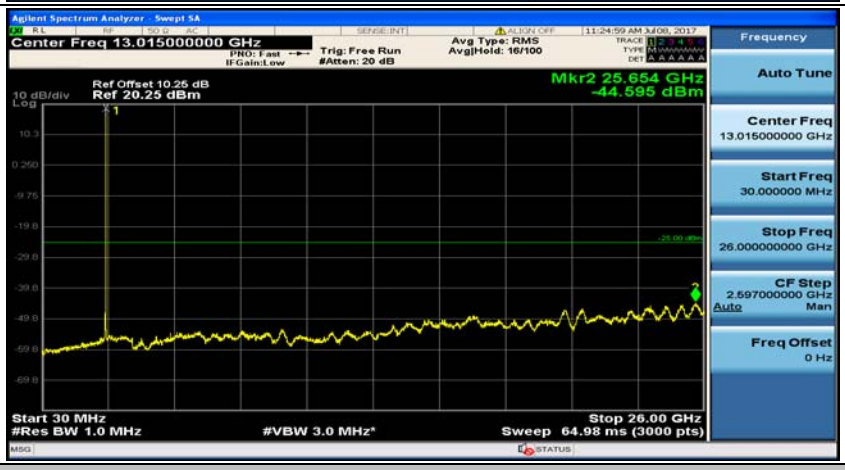




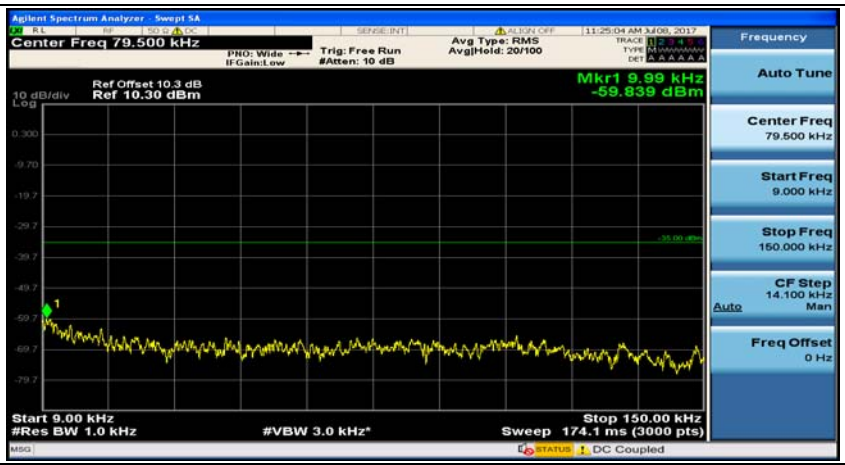
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49

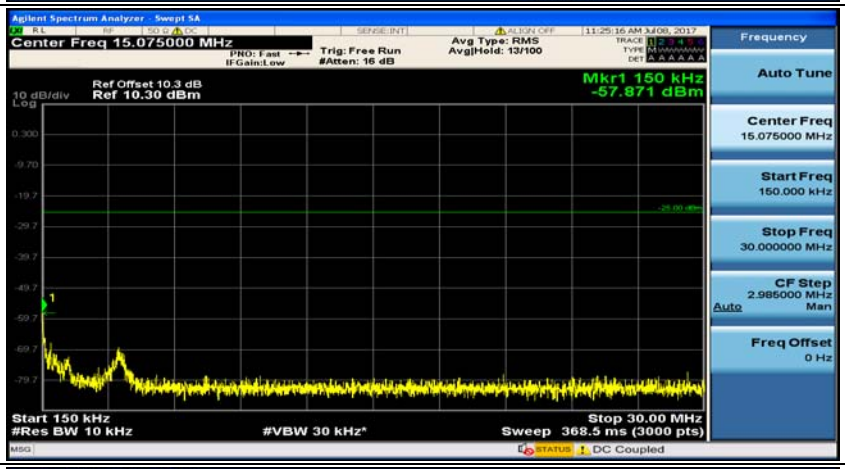


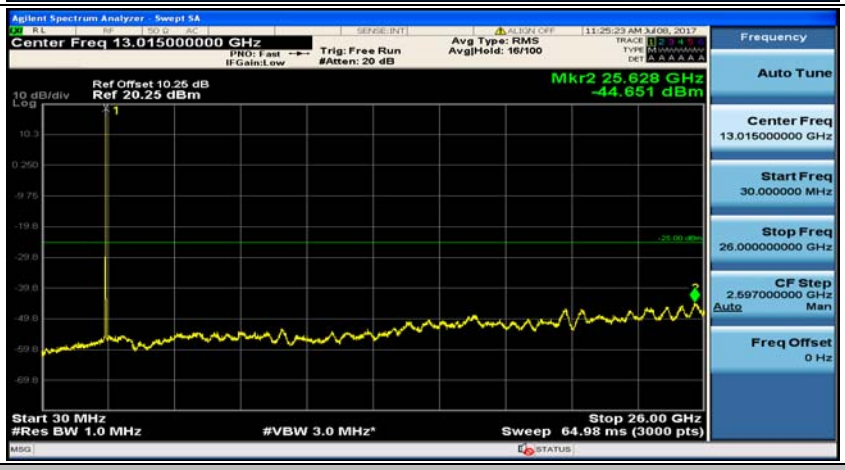




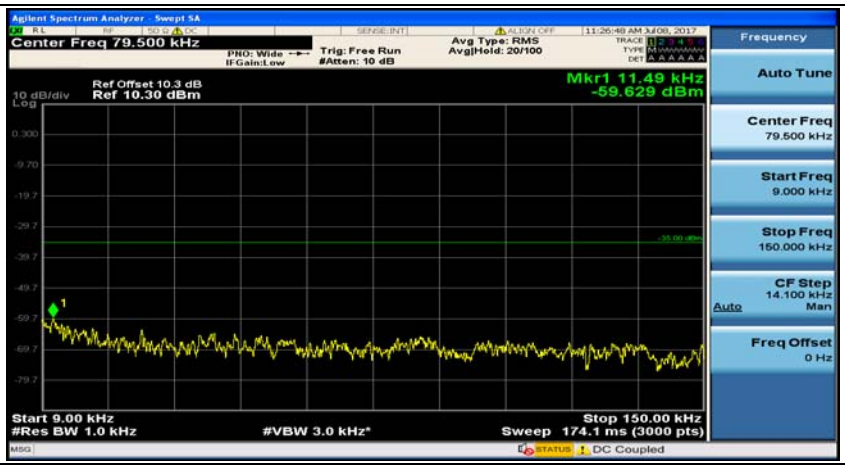
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#99

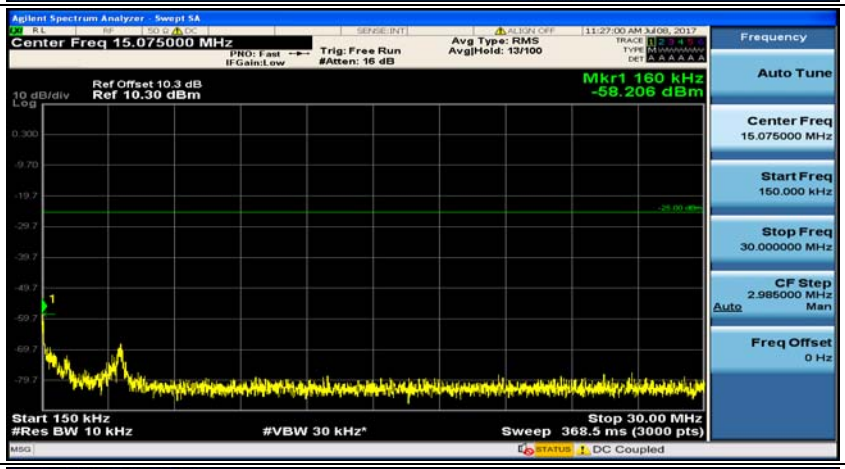


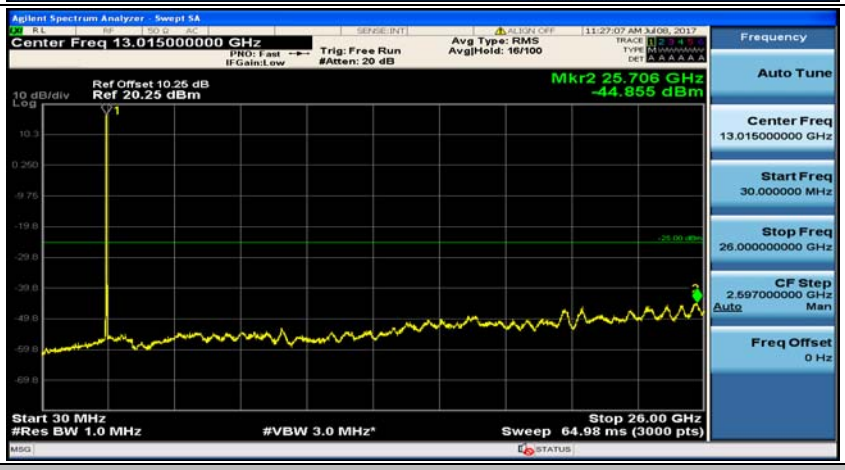




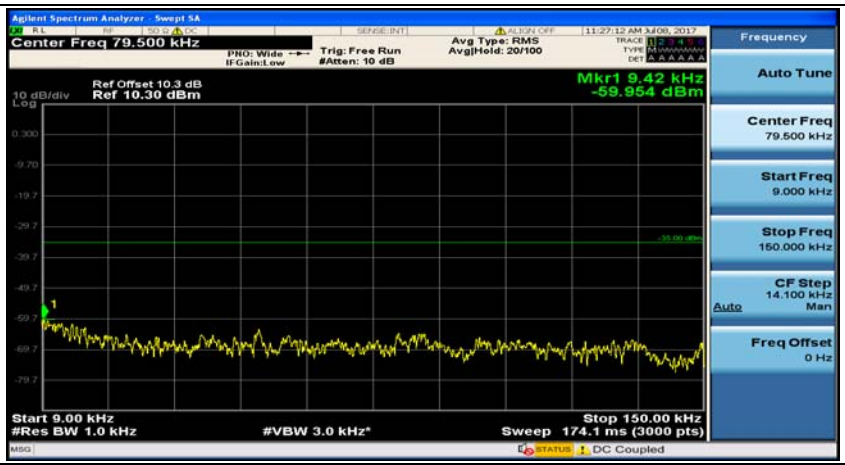
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0

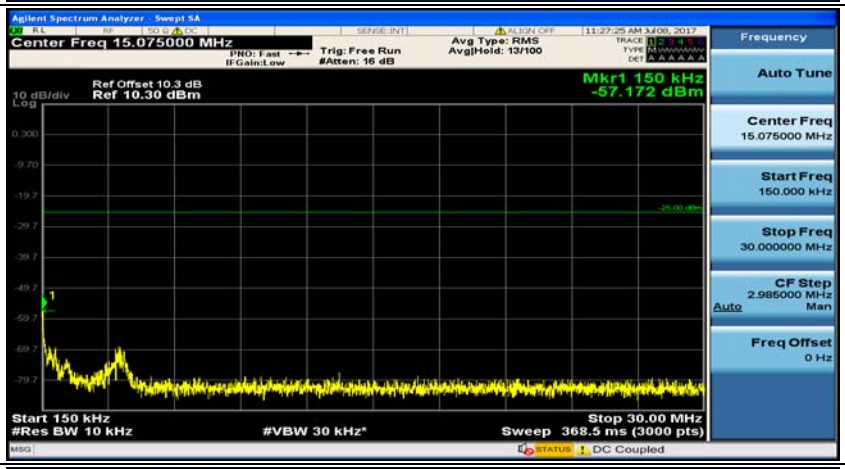


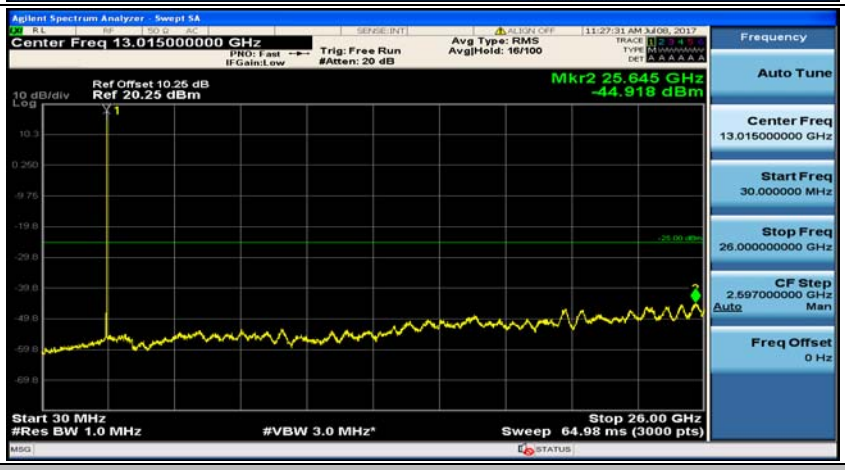




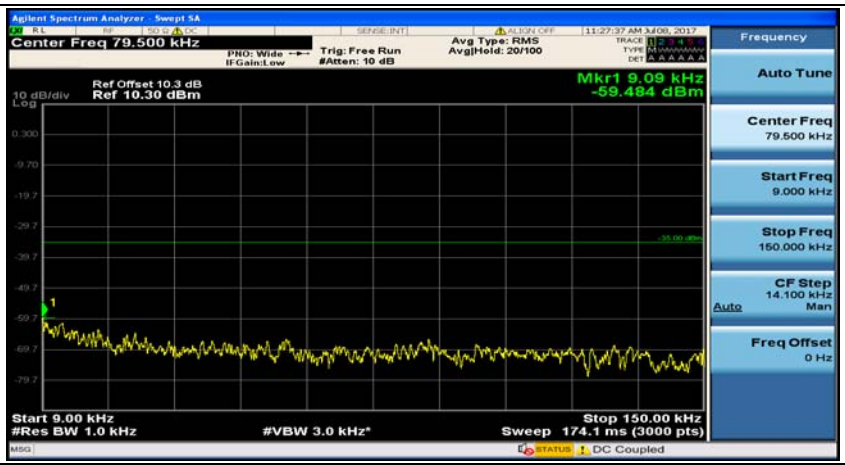
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#49

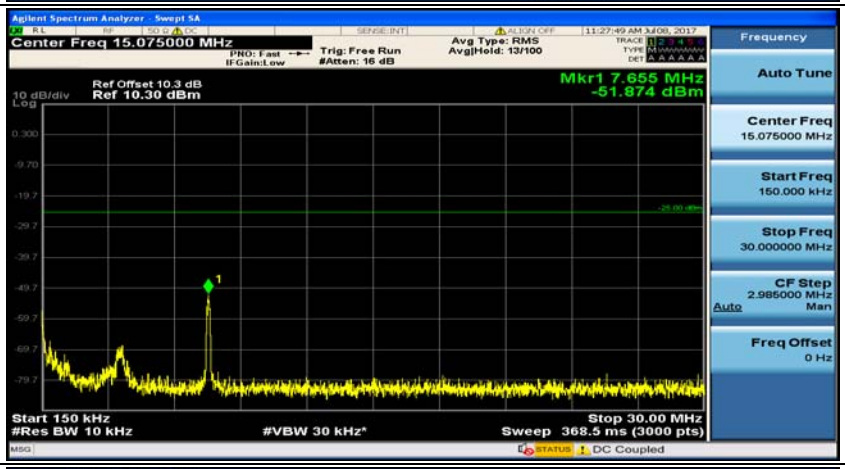


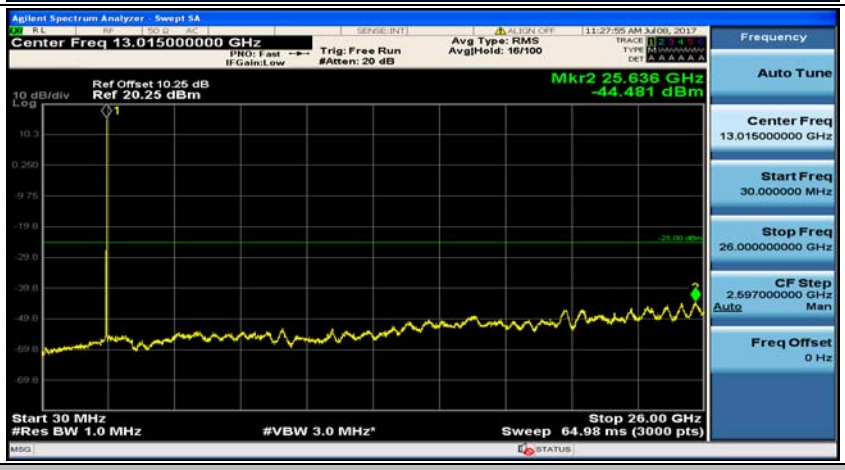




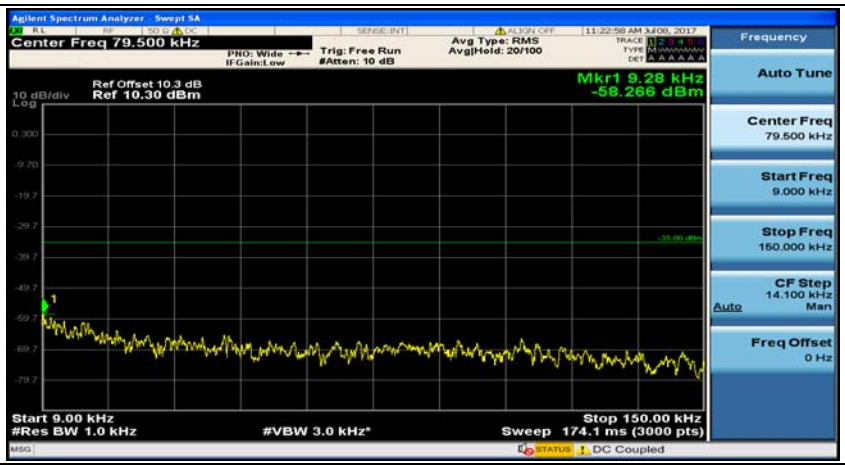
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#99

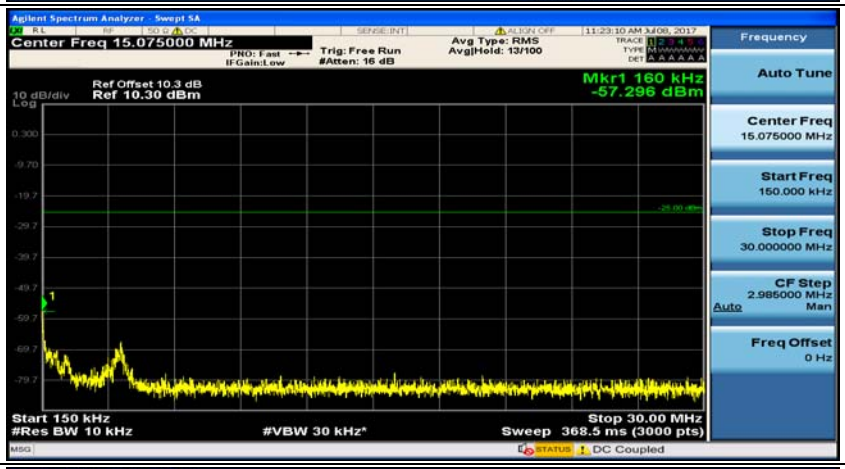


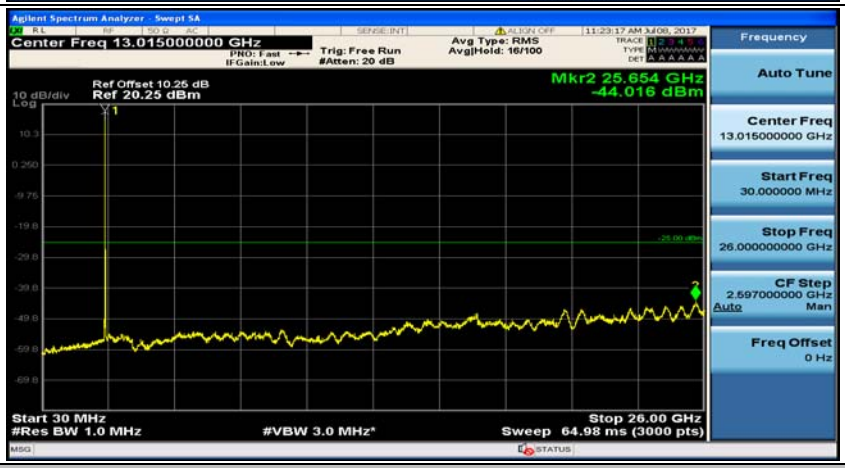




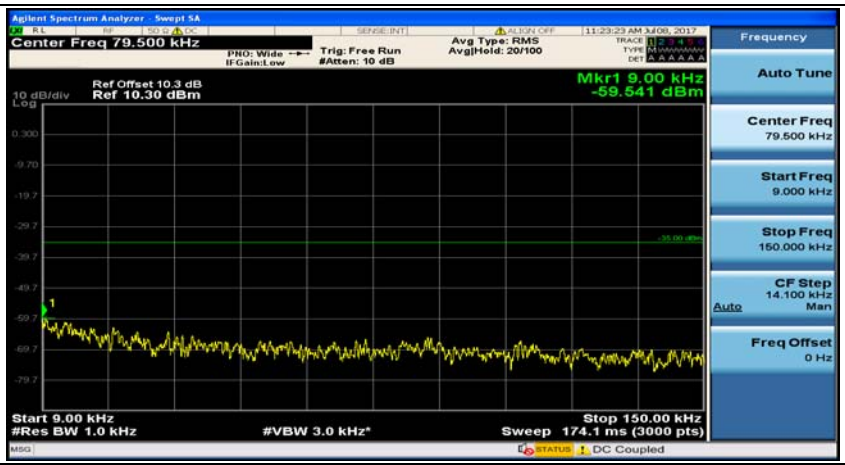
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0

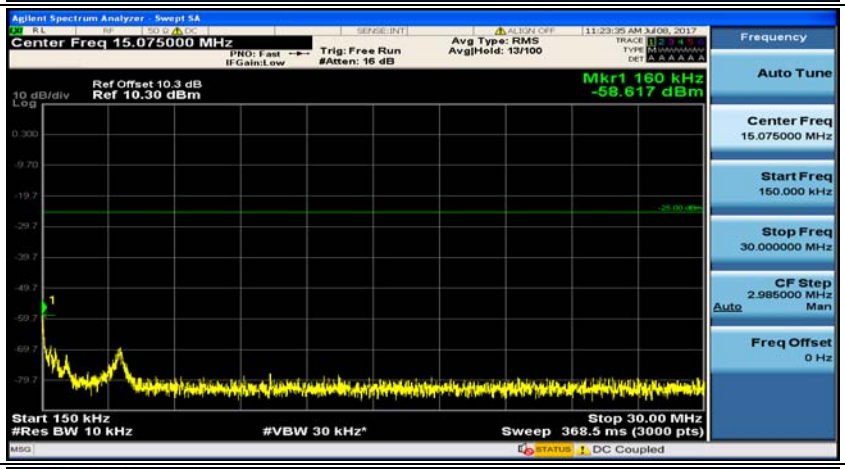


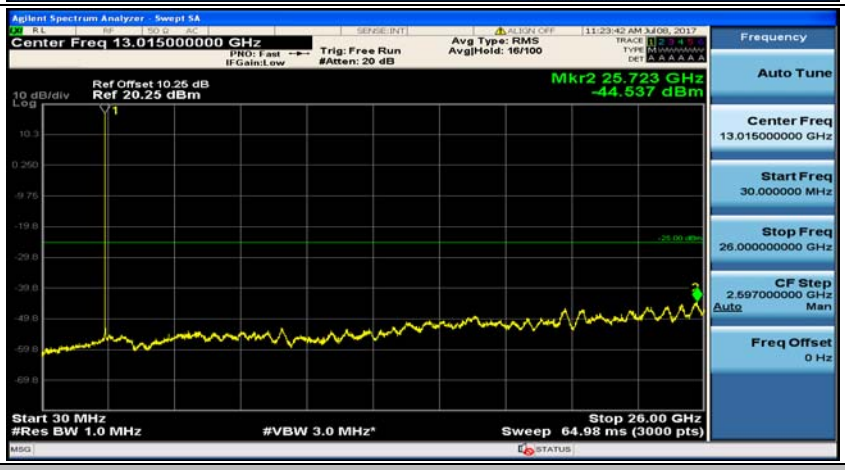




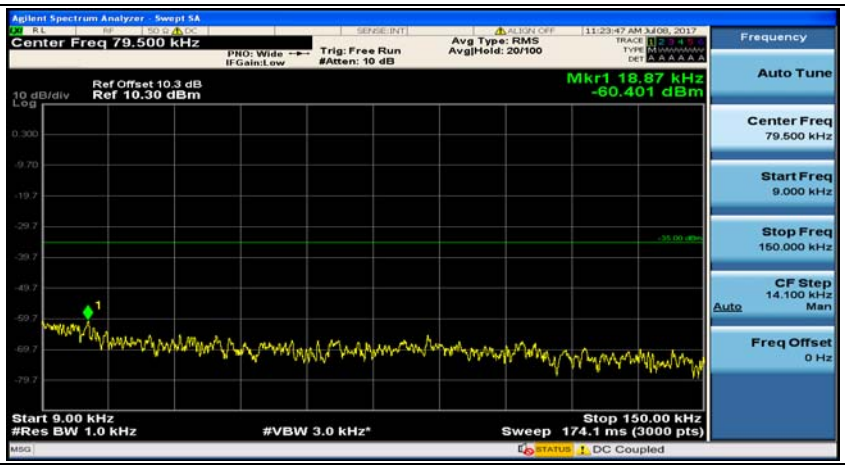
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49

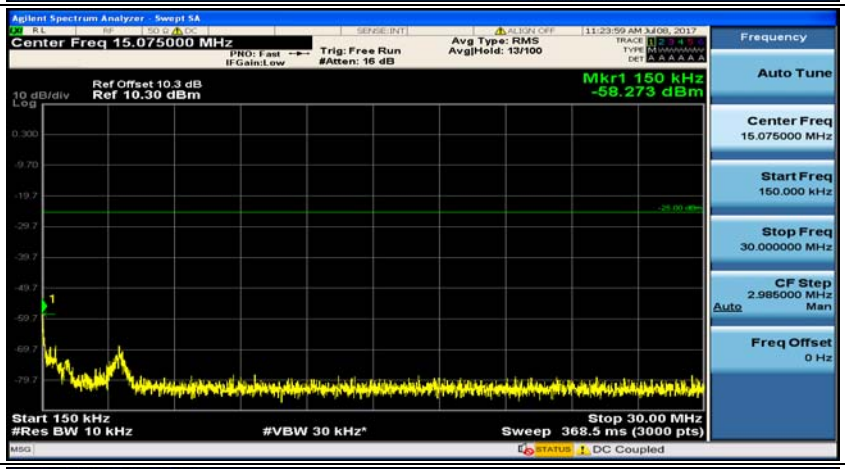


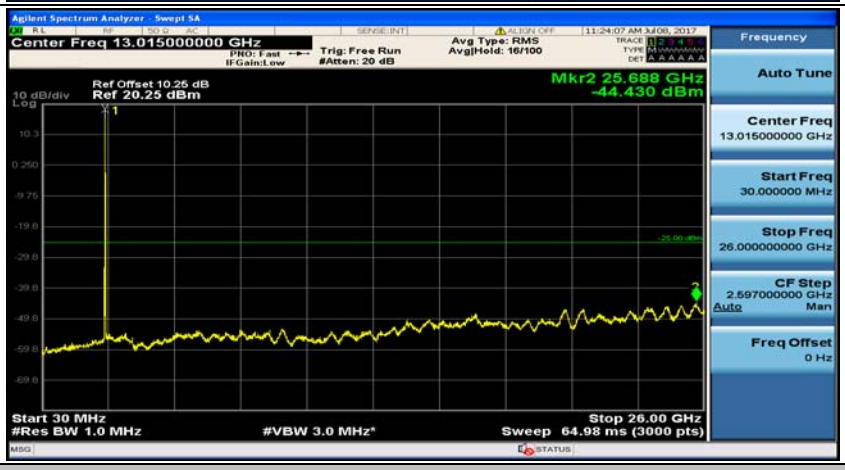




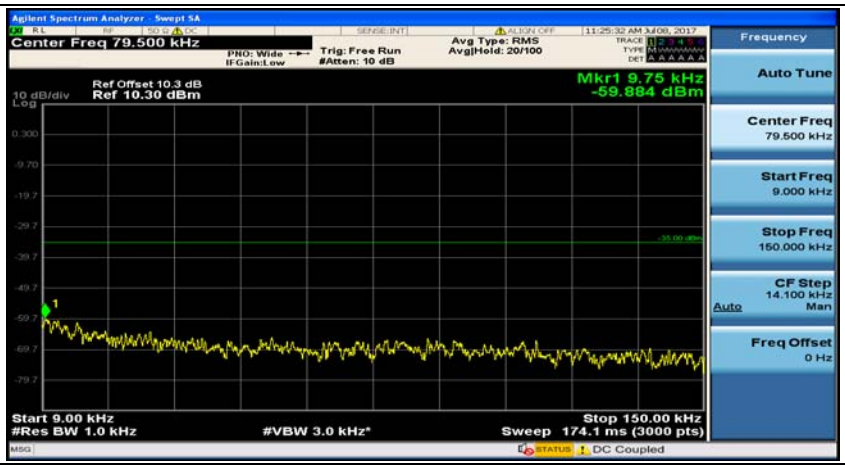
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#99

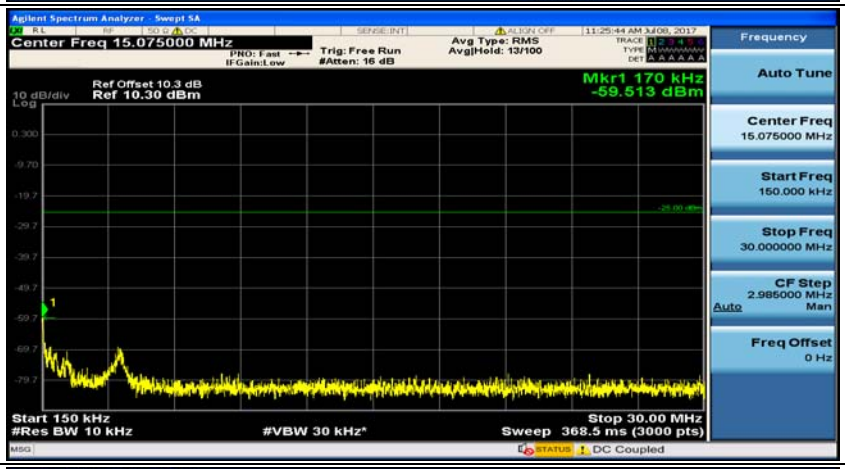


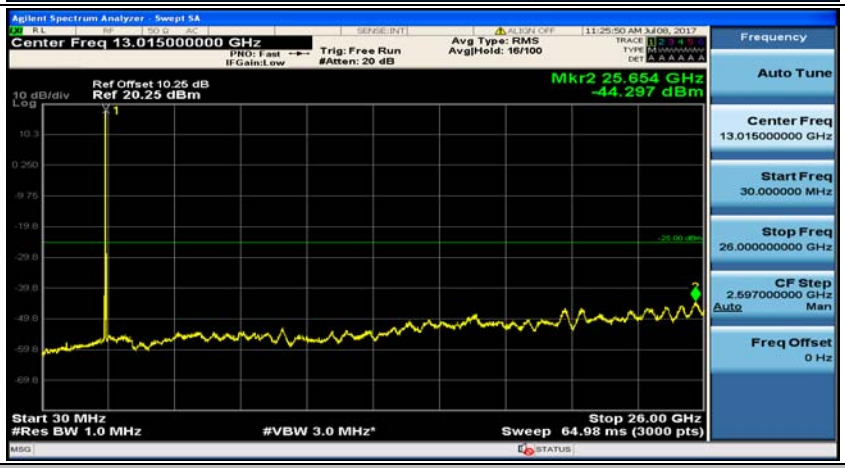




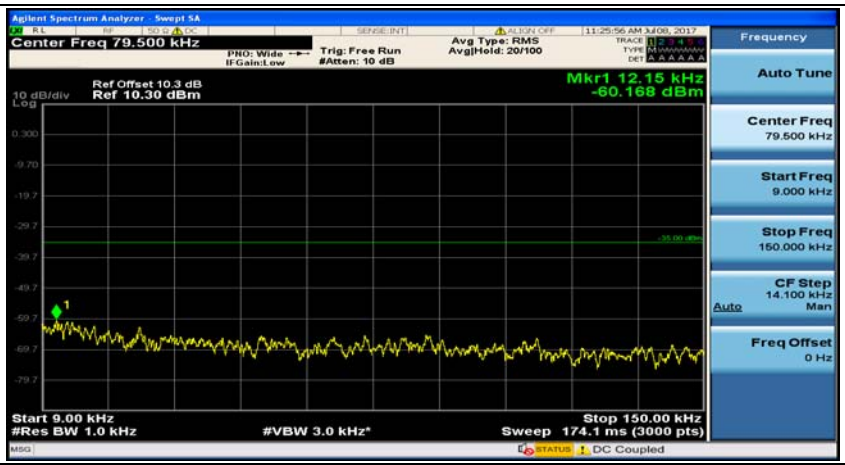
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0

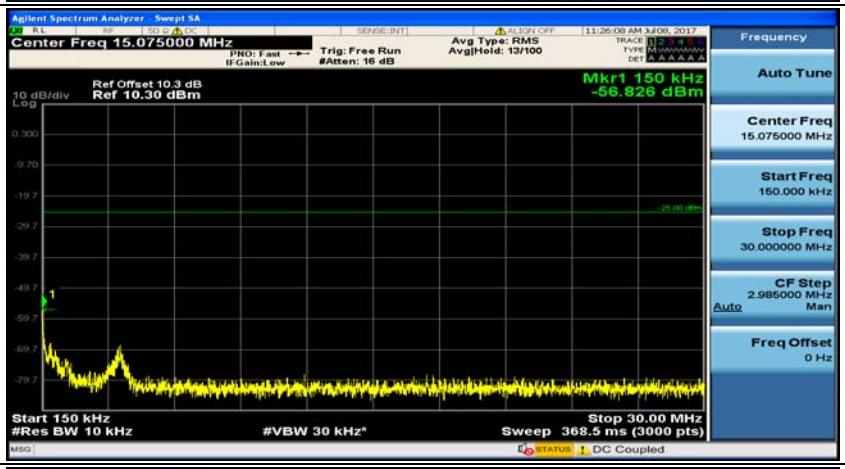


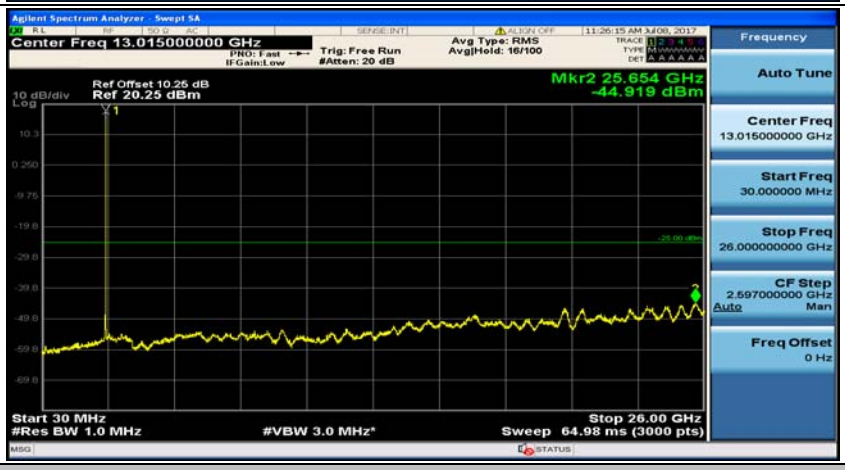




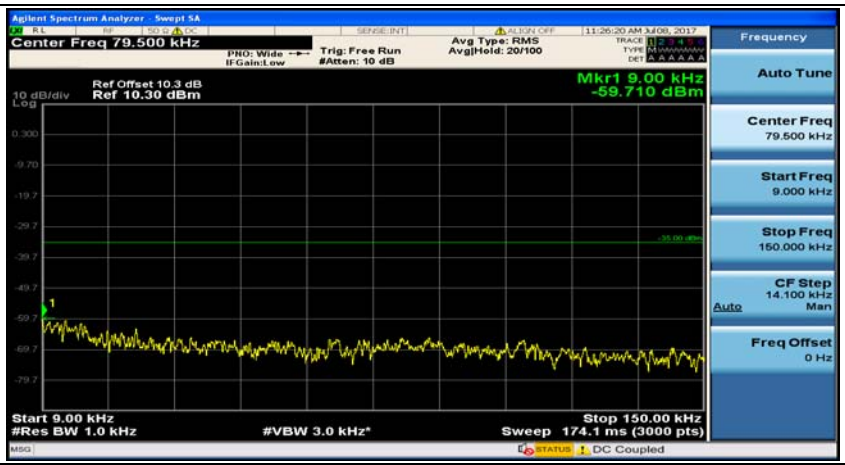
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49

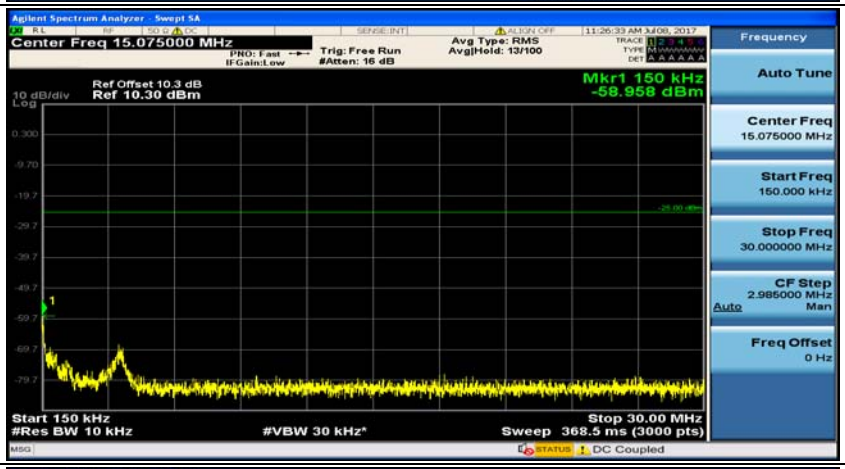


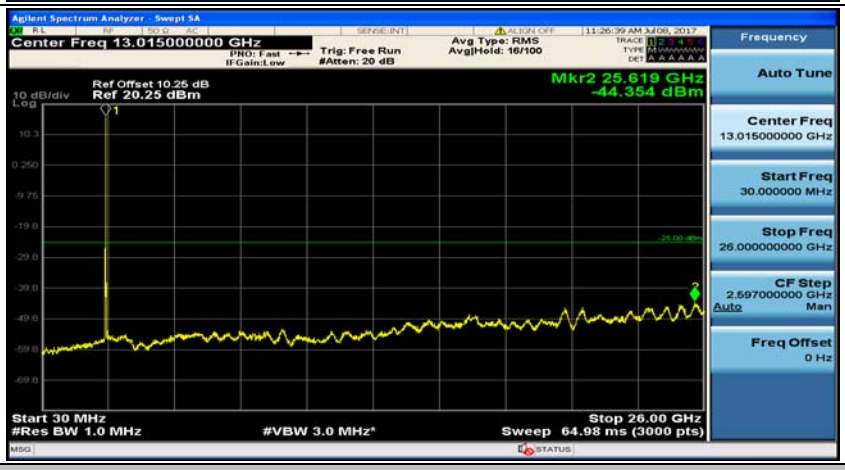




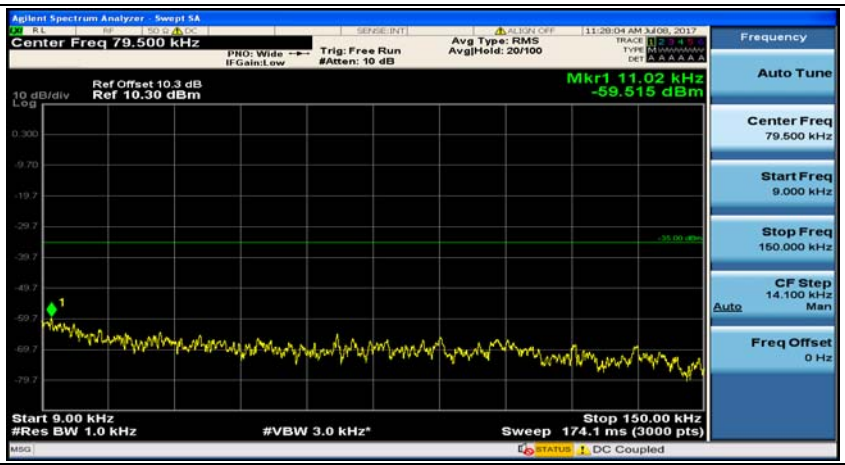
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#99

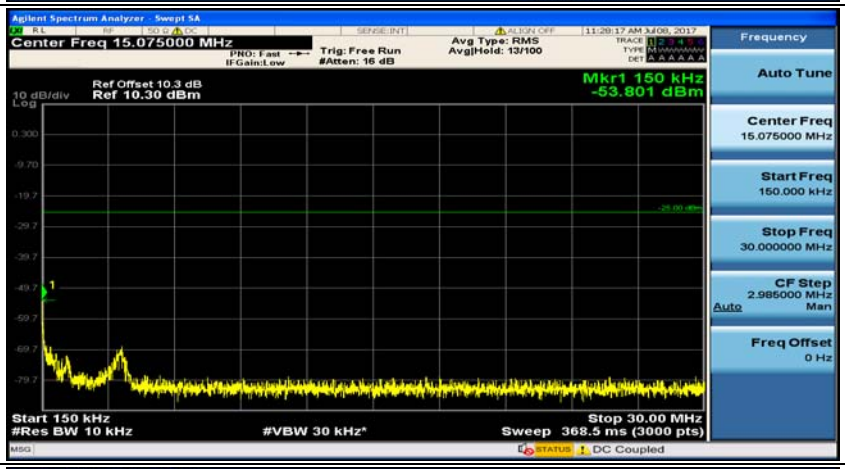


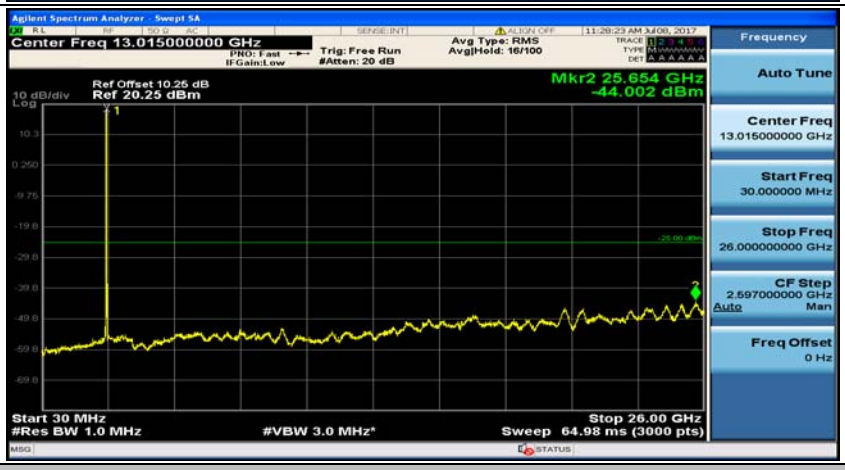




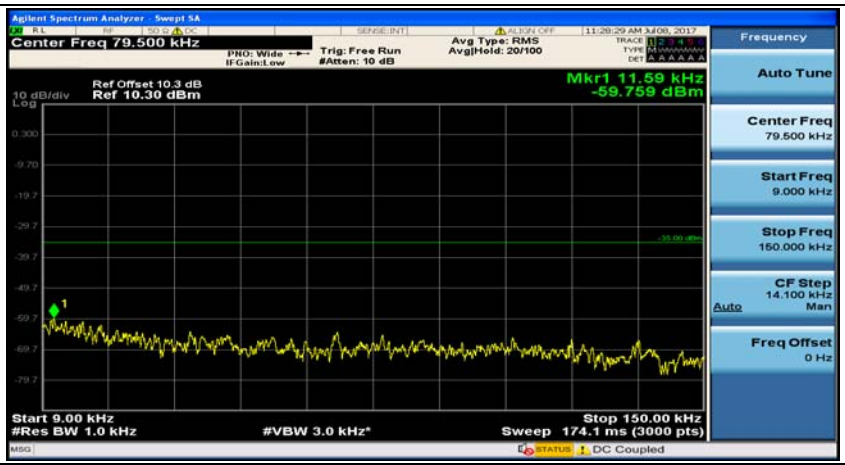
(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0

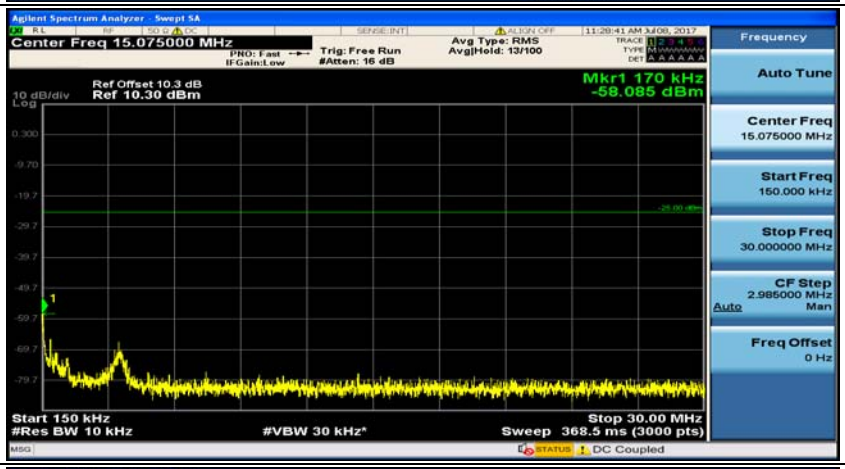


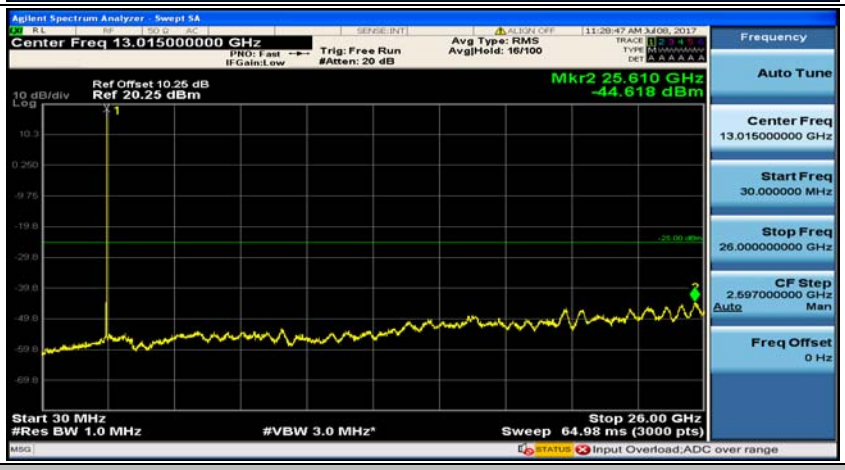




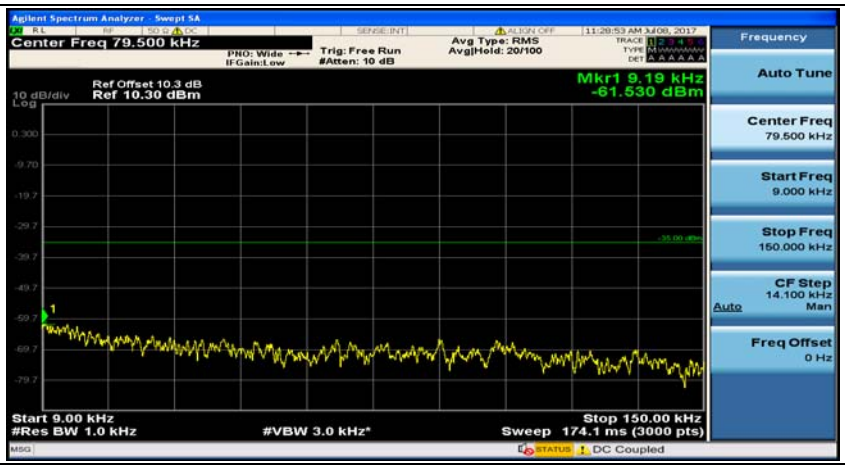
(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#49

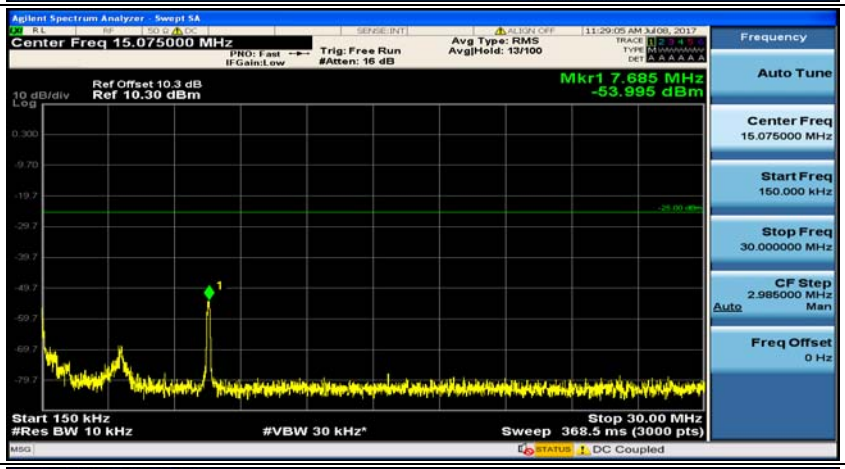


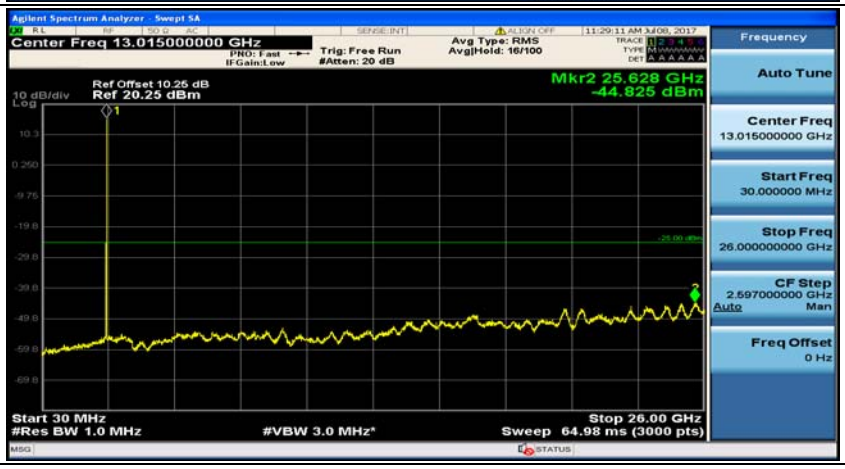




(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#99


Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 20/100
11:29:53 AM Jul 08, 2017
Frequency
Ref Offset 10.3 dB
10 dB/div
Log
Ref 10.30 dBm
Mkr1 9.19 kHz
-61.530 dBm
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 16 dB
Avg Type: RMS
Avg|Hold: 13/100
11:29:05 AM Jul 08, 2017
Frequency
Ref Offset 10.3 dB
10 dB/div
Log
Ref 10.30 dBm
Mkr1 7.685 MHz
-53.995 dBm
Auto Tune
Center Freq
15.075000 MHz
Start Freq
150.000 kHz
Stop Freq
30.000000 MHz
CF Step
2.985000 MHz
Auto
Man
Freq Offset
0 Hz
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: RMS
Avg|Hold: 16/100
11:29:11 AM Jul 08, 2017
Frequency
Ref Offset 10.25 dB
10 dB/div
Log
Ref 20.25 dBm
Mkr2 25.628 GHz
-44.825 dBm
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

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	4.16	0.001662	± 2.5	PASS
		VN	TN	-0.1	-0.000040	± 2.5	PASS
		VH	TN	2.44	0.000975	± 2.5	PASS
	MCH	VL	TN	-0.21	-0.000083	± 2.5	PASS
		VN	TN	-1.58	-0.000623	± 2.5	PASS
		VH	TN	2.95	0.001164	± 2.5	PASS
	HCH	VL	TN	-0.92	-0.000358	± 2.5	PASS
		VN	TN	0.82	0.000319	± 2.5	PASS
		VH	TN	2.86	0.001114	± 2.5	PASS
16QAM	LCH	VL	TN	1.25	0.000500	± 2.5	PASS
		VN	TN	-0.48	-0.000192	± 2.5	PASS
		VH	TN	3.94	0.001574	± 2.5	PASS
	MCH	VL	TN	0.08	0.000032	± 2.5	PASS
		VN	TN	4.23	0.001669	± 2.5	PASS
		VH	TN	3.56	0.001404	± 2.5	PASS
	HCH	VL	TN	0.75	0.000292	± 2.5	PASS
		VN	TN	1.04	0.000405	± 2.5	PASS
		VH	TN	4.51	0.001757	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.31	0.000923	± 2.5	PASS
		VN	-20	4.09	0.001634	± 2.5	PASS
		VN	-10	1.83	0.000731	± 2.5	PASS
		VN	0	4.36	0.001742	± 2.5	PASS
		VN	10	-1.9	-0.000759	± 2.5	PASS
		VN	20	3.08	0.001231	± 2.5	PASS
		VN	30	2.99	0.001195	± 2.5	PASS
		VN	40	-1.75	-0.000699	± 2.5	PASS
		VN	50	2.77	0.001107	± 2.5	PASS
	MCH	VN	-30	2.2	0.000868	± 2.5	PASS
		VN	-20	3.89	0.001535	± 2.5	PASS

		VN	-10	2.09	0.000824	± 2.5	PASS
		VN	0	1.31	0.000517	± 2.5	PASS
		VN	10	1.24	0.000489	± 2.5	PASS
		VN	20	1.02	0.000402	± 2.5	PASS
		VN	30	-0.43	-0.000170	± 2.5	PASS
		VN	40	1.52	0.000600	± 2.5	PASS
		VN	50	-0.92	-0.000363	± 2.5	PASS
	HCH	VN	-30	4.89	0.001905	± 2.5	PASS
		VN	-20	2.97	0.001157	± 2.5	PASS
		VN	-10	1.02	0.000397	± 2.5	PASS
		VN	0	-0.68	-0.000265	± 2.5	PASS
		VN	10	-0.56	-0.000218	± 2.5	PASS
		VN	20	4.27	0.001663	± 2.5	PASS
		VN	30	2.11	0.000822	± 2.5	PASS
		VN	40	3.54	0.001379	± 2.5	PASS
		VN	50	0.8	0.000312	± 2.5	PASS
16QAM	LCH	VN	-30	-1.73	-0.000691	± 2.5	PASS
		VN	-20	2.02	0.000807	± 2.5	PASS
		VN	-10	3.53	0.001411	± 2.5	PASS
		VN	0	1.18	0.000472	± 2.5	PASS
		VN	10	3.94	0.001574	± 2.5	PASS
		VN	20	3.37	0.001347	± 2.5	PASS
		VN	30	4.21	0.001682	± 2.5	PASS
		VN	40	0.75	0.000300	± 2.5	PASS
		VN	50	4.78	0.001910	± 2.5	PASS
	MCH	VN	-30	-1.52	-0.000600	± 2.5	PASS
		VN	-20	-0.25	-0.000099	± 2.5	PASS
		VN	-10	-0.97	-0.000383	± 2.5	PASS
		VN	0	3.58	0.001412	± 2.5	PASS
		VN	10	-0.84	-0.000331	± 2.5	PASS
		VN	20	2.87	0.001132	± 2.5	PASS
		VN	30	3.02	0.001191	± 2.5	PASS
		VN	40	-1.05	-0.000414	± 2.5	PASS
		VN	50	-0.65	-0.000256	± 2.5	PASS
	HCH	VN	-30	-0.5	-0.000195	± 2.5	PASS
		VN	-20	2.02	0.000787	± 2.5	PASS
		VN	-10	1.11	0.000432	± 2.5	PASS
		VN	0	1.38	0.000537	± 2.5	PASS
		VN	10	-1.29	-0.000502	± 2.5	PASS
		VN	20	1.79	0.000697	± 2.5	PASS
		VN	30	-0.66	-0.000257	± 2.5	PASS

		VN	40	3.12	0.001215	± 2.5	PASS
		VN	50	-1.8	-0.000701	± 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	4.2	0.001677	± 2.5	PASS
		VN	TN	0.37	0.000148	± 2.5	PASS
		VH	TN	0.41	0.000164	± 2.5	PASS
	MCH	VL	TN	0.43	0.000170	± 2.5	PASS
		VN	TN	0.41	0.000162	± 2.5	PASS
		VH	TN	2.13	0.000840	± 2.5	PASS
	HCH	VL	TN	4.96	0.001934	± 2.5	PASS
		VN	TN	2.99	0.001166	± 2.5	PASS
		VH	TN	2.26	0.000881	± 2.5	PASS
16QAM	LCH	VL	TN	4.36	0.001741	± 2.5	PASS
		VN	TN	4.53	0.001808	± 2.5	PASS
		VH	TN	3.63	0.001449	± 2.5	PASS
	MCH	VL	TN	3.98	0.001570	± 2.5	PASS
		VN	TN	-1.11	-0.000438	± 2.5	PASS
		VH	TN	1.5	0.000592	± 2.5	PASS
	HCH	VL	TN	4.25	0.001657	± 2.5	PASS
		VN	TN	0.04	0.000016	± 2.5	PASS
		VH	TN	-0.66	-0.000257	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.53	0.001010	± 2.5	PASS
		VN	-20	2.52	0.001006	± 2.5	PASS
		VN	-10	0.64	0.000255	± 2.5	PASS
		VN	0	4.86	0.001940	± 2.5	PASS
		VN	10	2.32	0.000926	± 2.5	PASS
		VN	20	1.07	0.000427	± 2.5	PASS
		VN	30	0.19	0.000076	± 2.5	PASS
		VN	40	4.41	0.001760	± 2.5	PASS
		VN	50	1.17	0.000467	± 2.5	PASS
	MCH	VN	-30	0.04	0.000016	± 2.5	PASS
		VN	-20	0.64	0.000252	± 2.5	PASS
		VN	-10	-1.02	-0.000402	± 2.5	PASS

		VN	0	-1.21	-0.000477	± 2.5	PASS
		VN	10	0.34	0.000134	± 2.5	PASS
		VN	20	4.9	0.001933	± 2.5	PASS
		VN	30	1.24	0.000489	± 2.5	PASS
		VN	40	0.38	0.000150	± 2.5	PASS
		VN	50	4.96	0.001957	± 2.5	PASS
	HCH	VN	-30	-0.84	-0.000327	± 2.5	PASS
		VN	-20	2.55	0.000994	± 2.5	PASS
		VN	-10	-1.82	-0.000710	± 2.5	PASS
		VN	0	3.62	0.001411	± 2.5	PASS
		VN	10	0.44	0.000172	± 2.5	PASS
		VN	20	1.02	0.000398	± 2.5	PASS
		VN	30	4.38	0.001708	± 2.5	PASS
		VN	40	3.3	0.001287	± 2.5	PASS
		VN	50	4.08	0.001591	± 2.5	PASS
16QAM	LCH	VN	-30	0.63	0.000251	± 2.5	PASS
		VN	-20	4.28	0.001709	± 2.5	PASS
		VN	-10	0.07	0.000028	± 2.5	PASS
		VN	0	2.07	0.000826	± 2.5	PASS
		VN	10	1.24	0.000495	± 2.5	PASS
		VN	20	-1.3	-0.000519	± 2.5	PASS
		VN	30	2.77	0.001106	± 2.5	PASS
		VN	40	-0.24	-0.000096	± 2.5	PASS
		VN	50	1.85	0.000739	± 2.5	PASS
	MCH	VN	-30	-0.91	-0.000359	± 2.5	PASS
		VN	-20	2.19	0.000864	± 2.5	PASS
		VN	-10	4.55	0.001795	± 2.5	PASS
		VN	0	3.28	0.001294	± 2.5	PASS
		VN	10	1.83	0.000722	± 2.5	PASS
		VN	20	2.68	0.001057	± 2.5	PASS
		VN	30	4.28	0.001688	± 2.5	PASS
		VN	40	4.2	0.001657	± 2.5	PASS
		VN	50	2.18	0.000860	± 2.5	PASS
	HCH	VN	-30	0.02	0.000008	± 2.5	PASS
		VN	-20	-0.76	-0.000296	± 2.5	PASS
		VN	-10	0.92	0.000359	± 2.5	PASS
		VN	0	3.19	0.001244	± 2.5	PASS
		VN	10	1.9	0.000741	± 2.5	PASS
		VN	20	3.74	0.001458	± 2.5	PASS
		VN	30	2	0.000780	± 2.5	PASS
		VN	40	0.8	0.000312	± 2.5	PASS

		VN	50	-0.57	-0.000222	± 2.5	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.83	-0.000730	± 2.5	PASS
		VN	TN	0.47	0.000187	± 2.5	PASS
		VH	TN	-0.37	-0.000148	± 2.5	PASS
	MCH	VL	TN	-0.69	-0.000272	± 2.5	PASS
		VN	TN	1.85	0.000730	± 2.5	PASS
		VH	TN	2.23	0.000880	± 2.5	PASS
	HCH	VL	TN	0.62	0.000242	± 2.5	PASS
		VN	TN	3.07	0.001198	± 2.5	PASS
		VH	TN	1.3	0.000507	± 2.5	PASS
16QAM	LCH	VL	TN	2.76	0.001101	± 2.5	PASS
		VN	TN	-0.54	-0.000215	± 2.5	PASS
		VH	TN	4.44	0.001771	± 2.5	PASS
	MCH	VL	TN	0	0.000000	± 2.5	PASS
		VN	TN	1.39	0.000548	± 2.5	PASS
		VH	TN	2.97	0.001172	± 2.5	PASS
	HCH	VL	TN	-0.5	-0.000195	± 2.5	PASS
		VN	TN	3.79	0.001479	± 2.5	PASS
		VH	TN	1.92	0.000749	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.91	0.001559	± 2.5	PASS
		VN	-20	0.88	0.000351	± 2.5	PASS
		VN	-10	-0.27	-0.000108	± 2.5	PASS
		VN	0	-0.86	-0.000343	± 2.5	PASS
		VN	10	-1.87	-0.000746	± 2.5	PASS
		VN	20	2.83	0.001129	± 2.5	PASS
		VN	30	4.96	0.001978	± 2.5	PASS
		VN	40	1.48	0.000590	± 2.5	PASS
		VN	50	-0.47	-0.000187	± 2.5	PASS
	MCH	VN	-30	3.17	0.001250	± 2.5	PASS
		VN	-20	0.26	0.000103	± 2.5	PASS
		VN	-10	1.23	0.000485	± 2.5	PASS
		VN	0	0.15	0.000059	± 2.5	PASS

		VN	10	-1.14	-0.000450	± 2.5	PASS
		VN	20	5	0.001972	± 2.5	PASS
		VN	30	1.19	0.000469	± 2.5	PASS
		VN	40	0.54	0.000213	± 2.5	PASS
		VN	50	-1.02	-0.000402	± 2.5	PASS
	HCH	VN	-30	3.32	0.001296	± 2.5	PASS
		VN	-20	1.56	0.000609	± 2.5	PASS
		VN	-10	3.09	0.001206	± 2.5	PASS
		VN	0	1.39	0.000542	± 2.5	PASS
		VN	10	2.95	0.001151	± 2.5	PASS
		VN	20	4.7	0.001834	± 2.5	PASS
		VN	30	1.41	0.000550	± 2.5	PASS
		VN	40	0.38	0.000148	± 2.5	PASS
		VN	50	-1.8	-0.000702	± 2.5	PASS
16QAM	LCH	VN	-30	-1.06	-0.000423	± 2.5	PASS
		VN	-20	-1.39	-0.000554	± 2.5	PASS
		VN	-10	3.34	0.001332	± 2.5	PASS
		VN	0	2.5	0.000997	± 2.5	PASS
		VN	10	2.51	0.001001	± 2.5	PASS
		VN	20	3.42	0.001364	± 2.5	PASS
		VN	30	3.4	0.001356	± 2.5	PASS
		VN	40	1	0.000399	± 2.5	PASS
		VN	50	3.41	0.001360	± 2.5	PASS
	MCH	VN	-30	-1.59	-0.000627	± 2.5	PASS
		VN	-20	1.69	0.000667	± 2.5	PASS
		VN	-10	4.6	0.001815	± 2.5	PASS
		VN	0	0.63	0.000249	± 2.5	PASS
		VN	10	4.03	0.001590	± 2.5	PASS
		VN	20	1.35	0.000533	± 2.5	PASS
		VN	30	4.74	0.001870	± 2.5	PASS
		VN	40	-1.2	-0.000473	± 2.5	PASS
		VN	50	3.52	0.001389	± 2.5	PASS
	HCH	VN	-30	-0.41	-0.000160	± 2.5	PASS
		VN	-20	0.46	0.000180	± 2.5	PASS
		VN	-10	-0.89	-0.000347	± 2.5	PASS
		VN	0	1.33	0.000519	± 2.5	PASS
		VN	10	4.74	0.001850	± 2.5	PASS
		VN	20	0.69	0.000269	± 2.5	PASS
		VN	30	4.04	0.001577	± 2.5	PASS
		VN	40	-0.33	-0.000129	± 2.5	PASS
		VN	50	-1.41	-0.000550	± 2.5	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.65	-0.000657	± 2.5	PASS
		VN	TN	2	0.000797	± 2.5	PASS
		VH	TN	0.86	0.000343	± 2.5	PASS
	MCH	VL	TN	-0.3	-0.000118	± 2.5	PASS
		VN	TN	-1.82	-0.000718	± 2.5	PASS
		VH	TN	-0.99	-0.000391	± 2.5	PASS
	HCH	VL	TN	1.49	0.000582	± 2.5	PASS
		VN	TN	2.51	0.000980	± 2.5	PASS
		VH	TN	2.83	0.001105	± 2.5	PASS
16QAM	LCH	VL	TN	0.13	0.000052	± 2.5	PASS
		VN	TN	3.79	0.001510	± 2.5	PASS
		VH	TN	-1.85	-0.000737	± 2.5	PASS
	MCH	VL	TN	1.3	0.000513	± 2.5	PASS
		VN	TN	2.2	0.000868	± 2.5	PASS
		VH	TN	4.35	0.001716	± 2.5	PASS
	HCH	VL	TN	1.4	0.000547	± 2.5	PASS
		VN	TN	0.01	0.000004	± 2.5	PASS
		VH	TN	-1.4	-0.000547	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.95	-0.000777	± 2.5	PASS
		VN	-20	1.37	0.000546	± 2.5	PASS
		VN	-10	0.92	0.000367	± 2.5	PASS
		VN	0	4.86	0.001936	± 2.5	PASS
		VN	10	-1.85	-0.000737	± 2.5	PASS
		VN	20	0.83	0.000331	± 2.5	PASS
		VN	30	3.65	0.001454	± 2.5	PASS
		VN	40	2.91	0.001159	± 2.5	PASS
		VN	50	3.86	0.001538	± 2.5	PASS
	MCH	VN	-30	4.93	0.001945	± 2.5	PASS
		VN	-20	2.38	0.000939	± 2.5	PASS
		VN	-10	0.39	0.000154	± 2.5	PASS
		VN	0	-0.11	-0.000043	± 2.5	PASS
		VN	10	1.77	0.000698	± 2.5	PASS
		VN	20	0.28	0.000110	± 2.5	PASS
		VN	30	3.41	0.001345	± 2.5	PASS

		VN	40	2.96	0.001168	± 2.5	PASS
		VN	50	2.8	0.001105	± 2.5	PASS
	HCH	VN	-30	4.77	0.001863	± 2.5	PASS
		VN	-20	2.57	0.001004	± 2.5	PASS
		VN	-10	4.03	0.001574	± 2.5	PASS
		VN	0	4.85	0.001895	± 2.5	PASS
		VN	10	1.53	0.000598	± 2.5	PASS
		VN	20	-1.5	-0.000586	± 2.5	PASS
		VN	30	3.88	0.001516	± 2.5	PASS
		VN	40	0.77	0.000301	± 2.5	PASS
		VN	50	0.25	0.000098	± 2.5	PASS
16QAM	LCH	VN	-30	4.1	0.001633	± 2.5	PASS
		VN	-20	-0.74	-0.000295	± 2.5	PASS
		VN	-10	2.48	0.000988	± 2.5	PASS
		VN	0	-1.61	-0.000641	± 2.5	PASS
		VN	10	3	0.001195	± 2.5	PASS
		VN	20	0.35	0.000139	± 2.5	PASS
		VN	30	-1.37	-0.000546	± 2.5	PASS
		VN	40	-2	-0.000797	± 2.5	PASS
		VN	50	2.2	0.000876	± 2.5	PASS
	MCH	VN	-30	2.96	0.001168	± 2.5	PASS
		VN	-20	3.73	0.001471	± 2.5	PASS
		VN	-10	1.55	0.000611	± 2.5	PASS
		VN	0	2.75	0.001085	± 2.5	PASS
		VN	10	-0.97	-0.000383	± 2.5	PASS
		VN	20	3.29	0.001298	± 2.5	PASS
		VN	30	1.21	0.000477	± 2.5	PASS
		VN	40	0.81	0.000320	± 2.5	PASS
		VN	50	4.73	0.001866	± 2.5	PASS
	HCH	VN	-30	0.35	0.000137	± 2.5	PASS
		VN	-20	-1.8	-0.000703	± 2.5	PASS
		VN	-10	4.83	0.001887	± 2.5	PASS
		VN	0	3.35	0.001309	± 2.5	PASS
		VN	10	4.03	0.001574	± 2.5	PASS
		VN	20	0.04	0.000016	± 2.5	PASS
		VN	30	0.82	0.000320	± 2.5	PASS
		VN	40	4.62	0.001805	± 2.5	PASS
		VN	50	1.87	0.000730	± 2.5	PASS