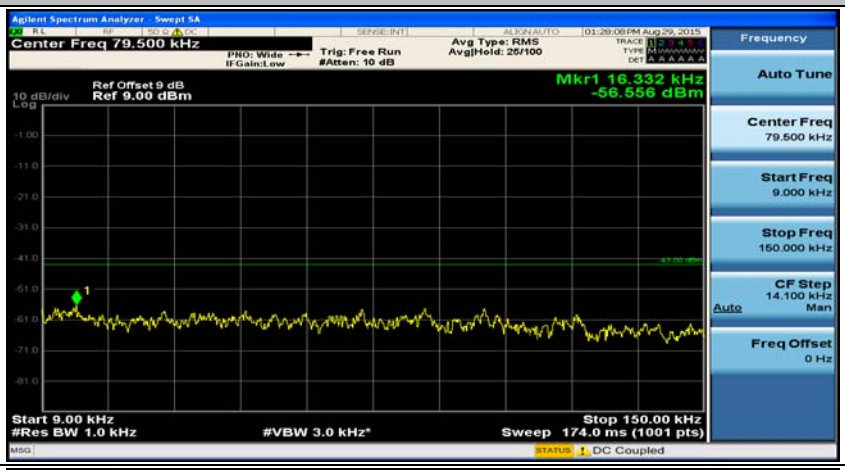
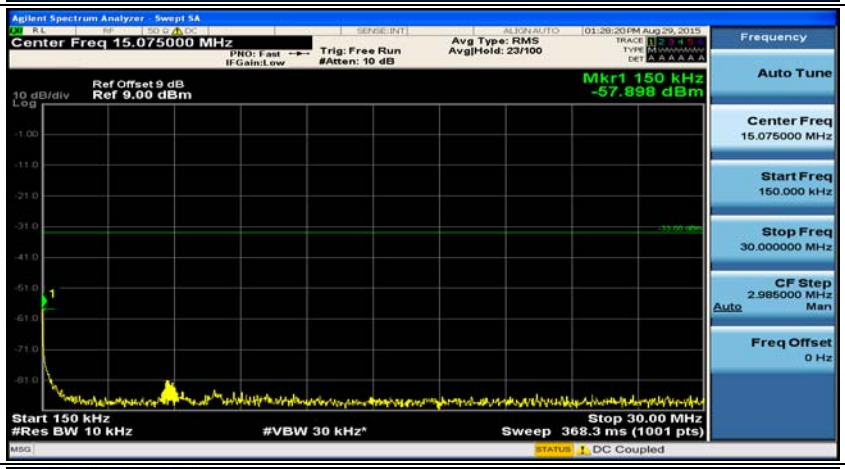
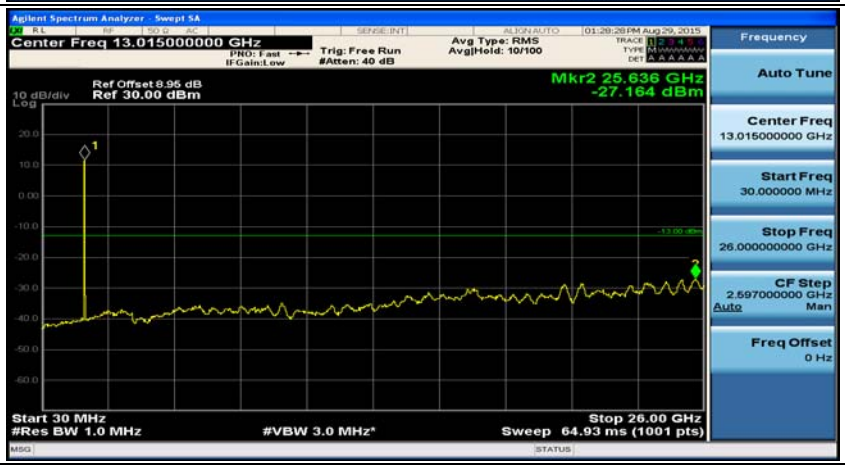
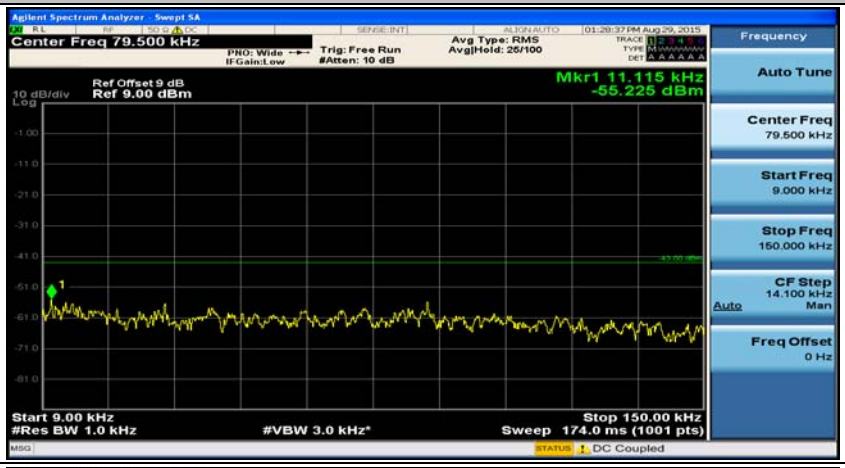
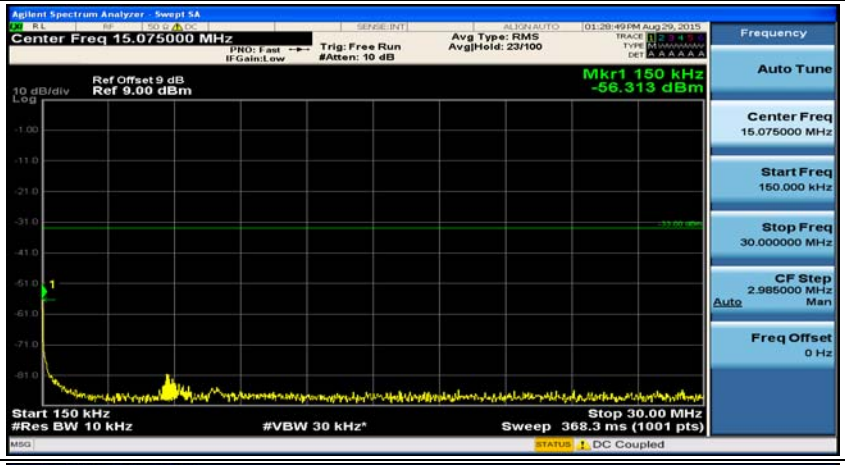
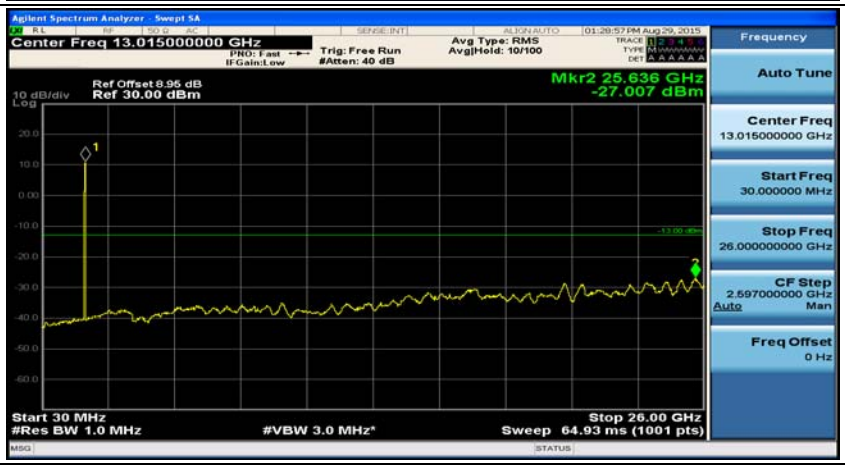
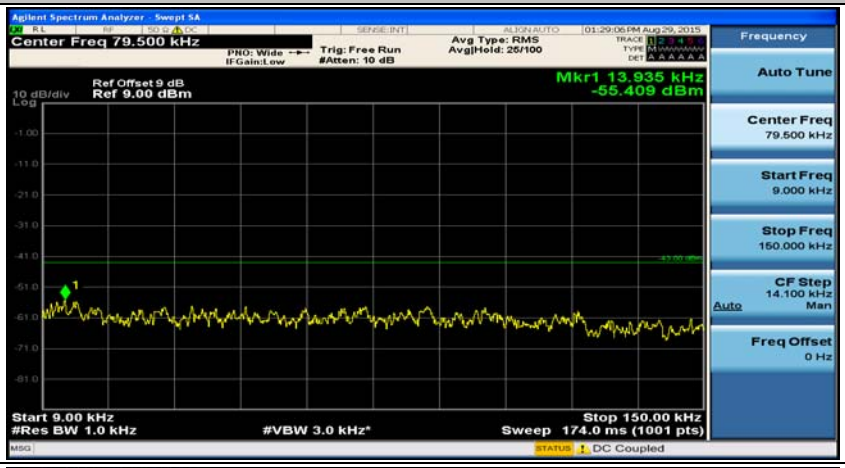
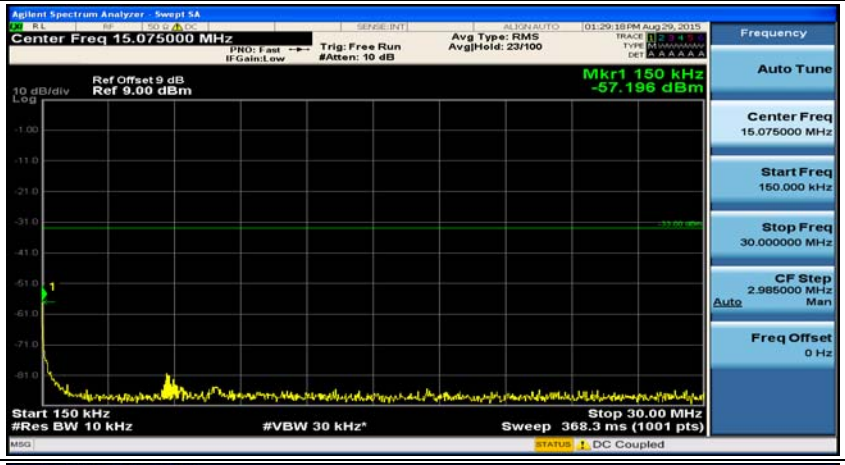
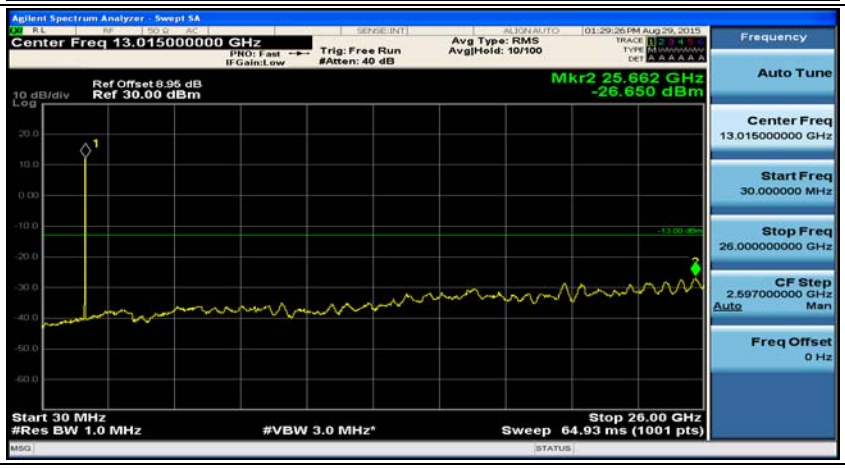
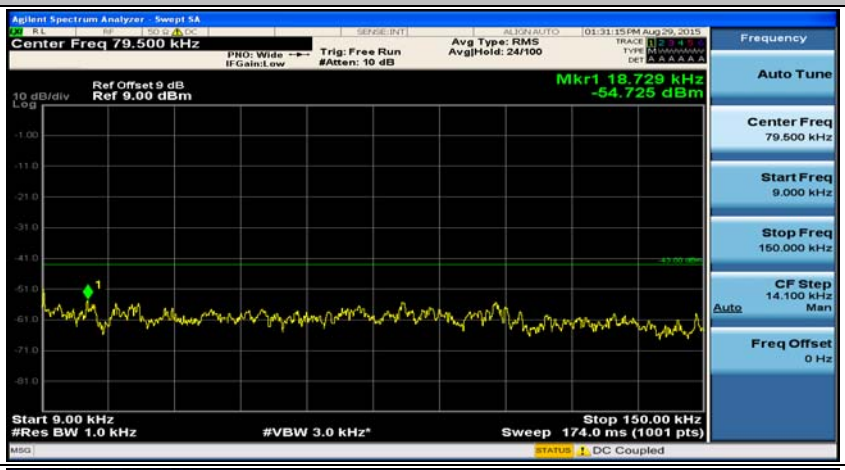
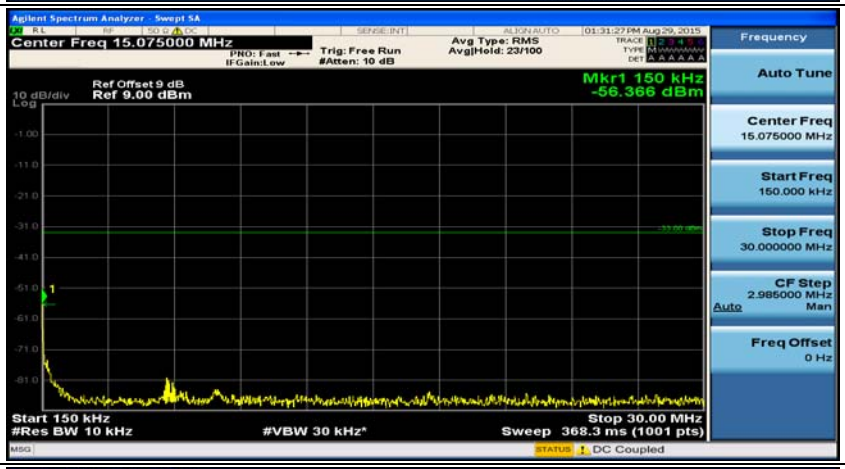
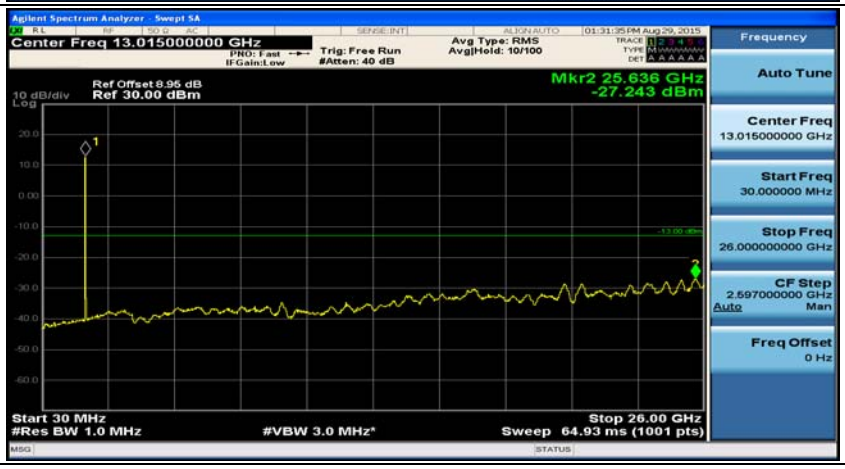
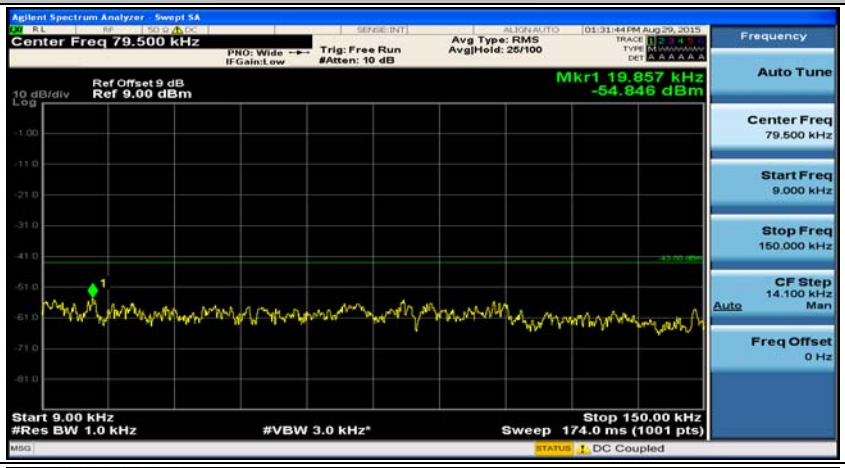
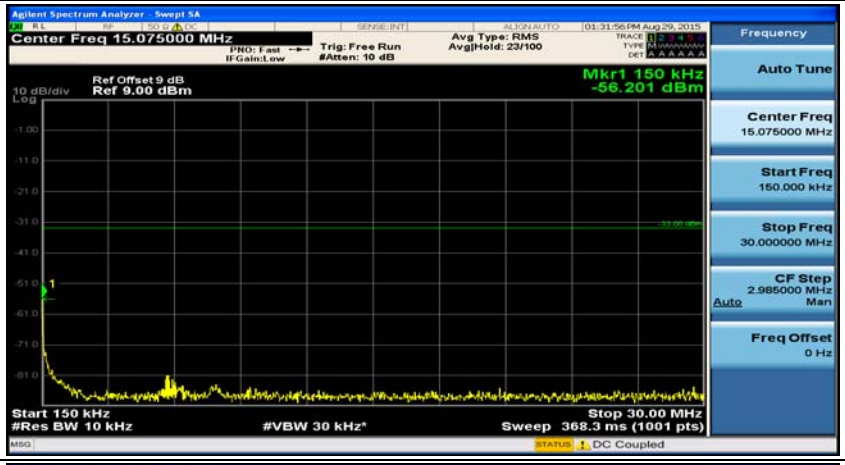
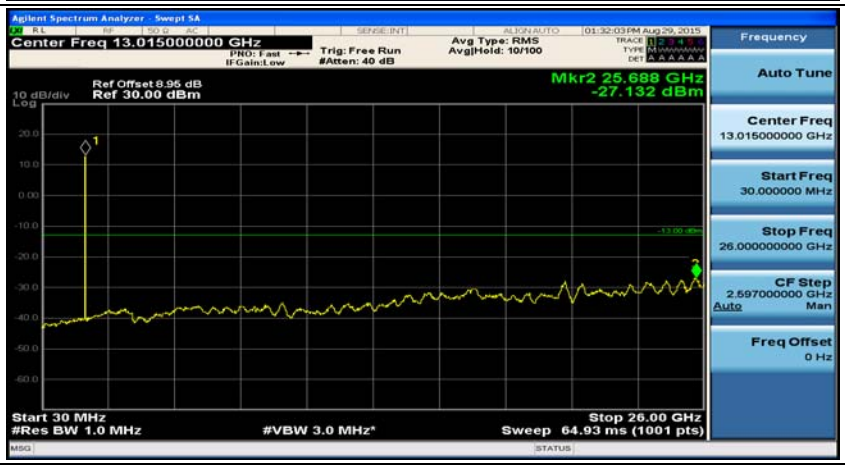
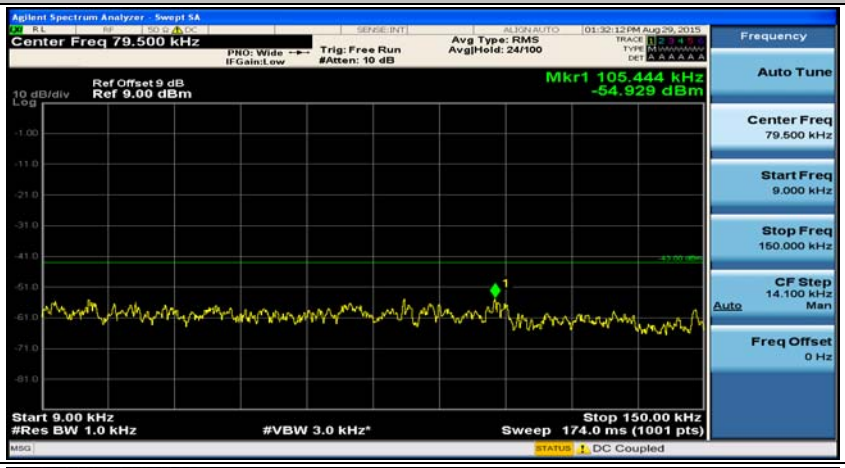
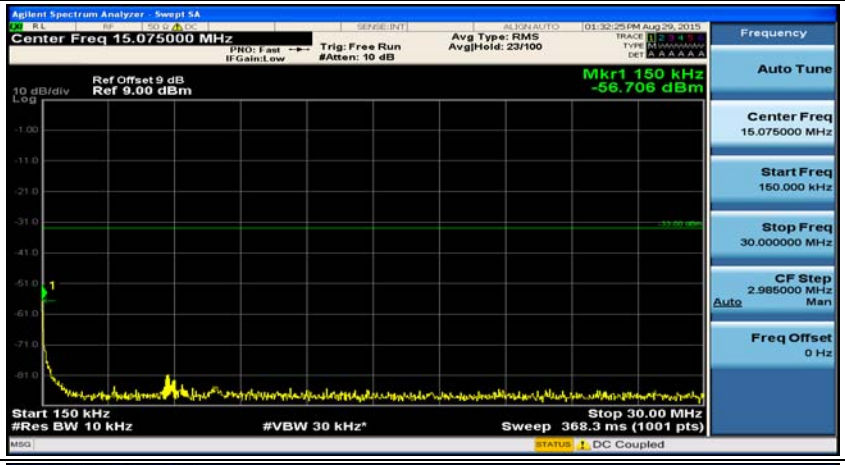
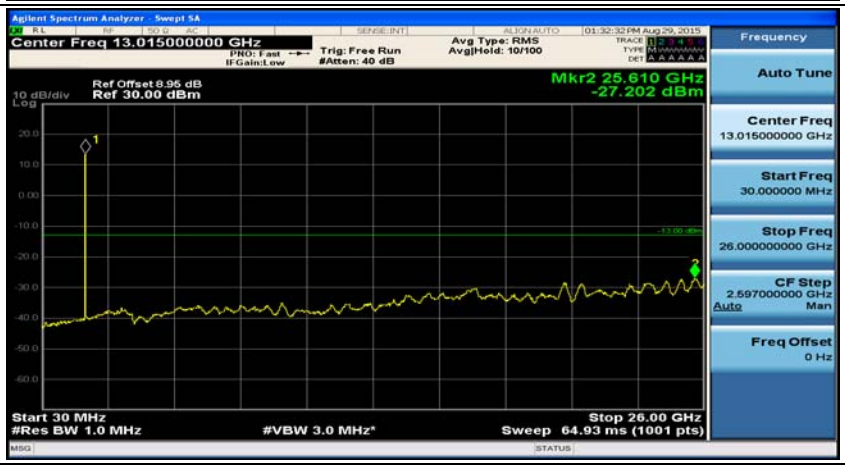
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0




Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24




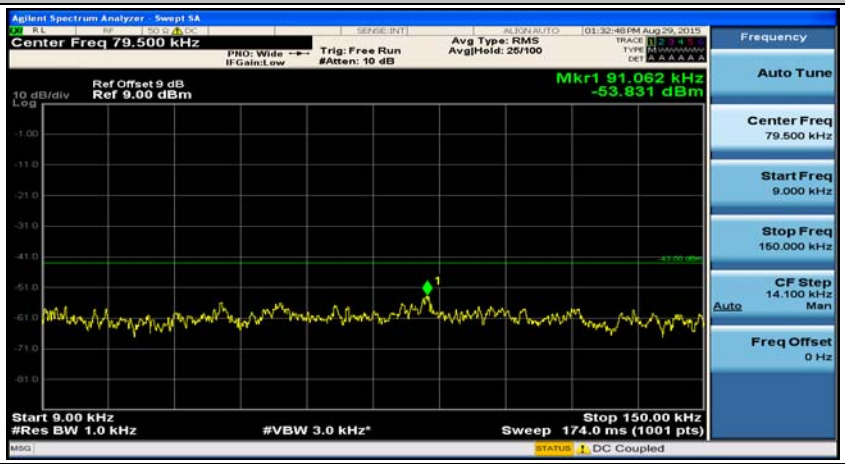
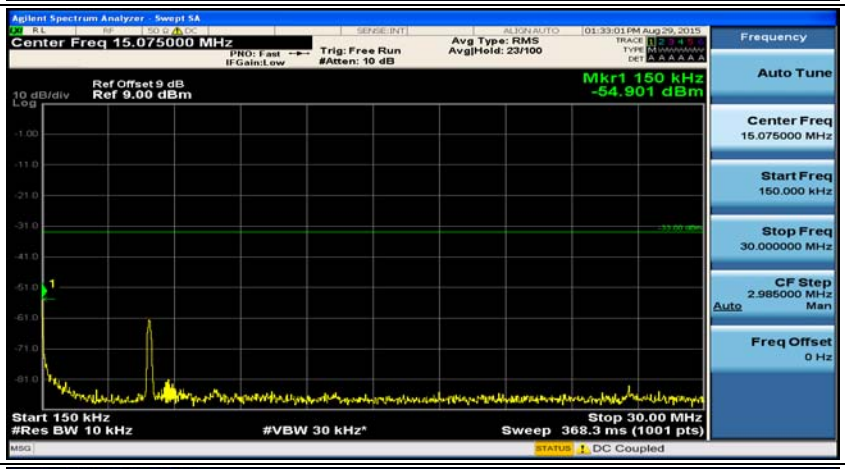
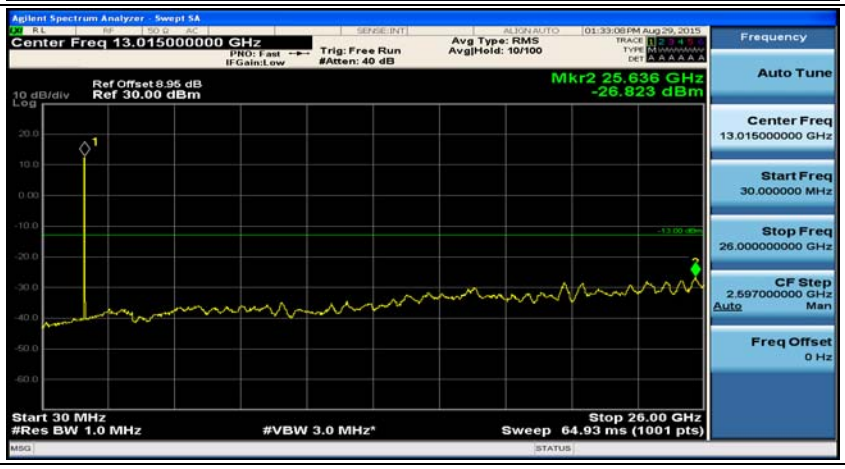
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49




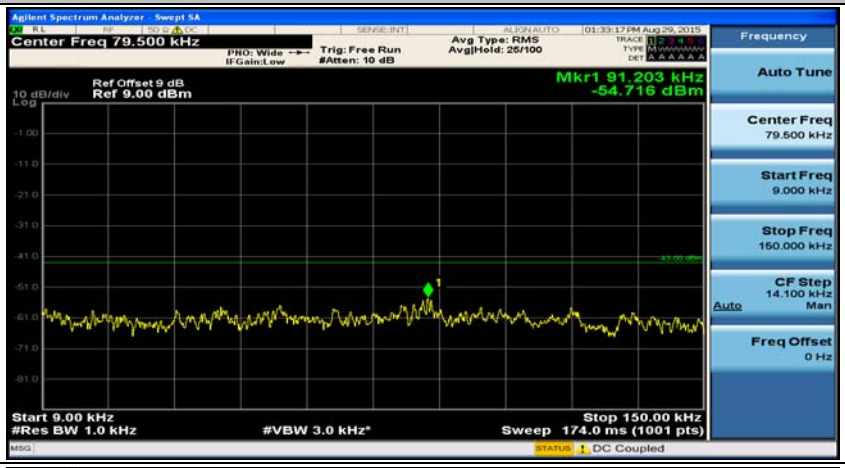
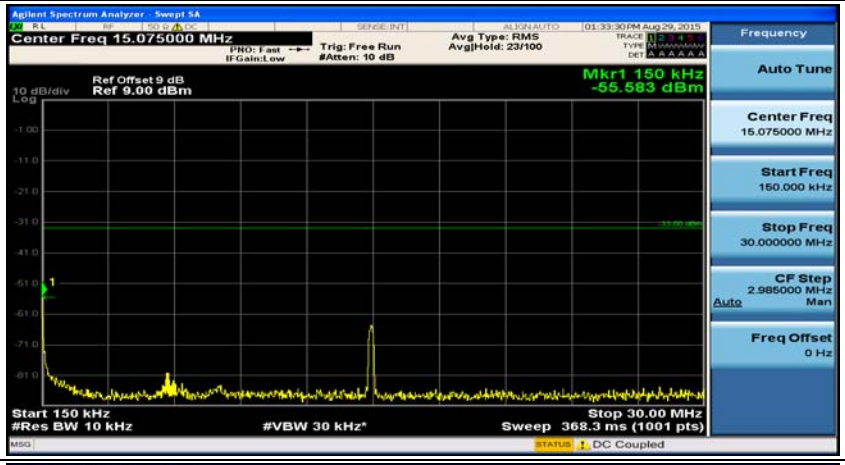
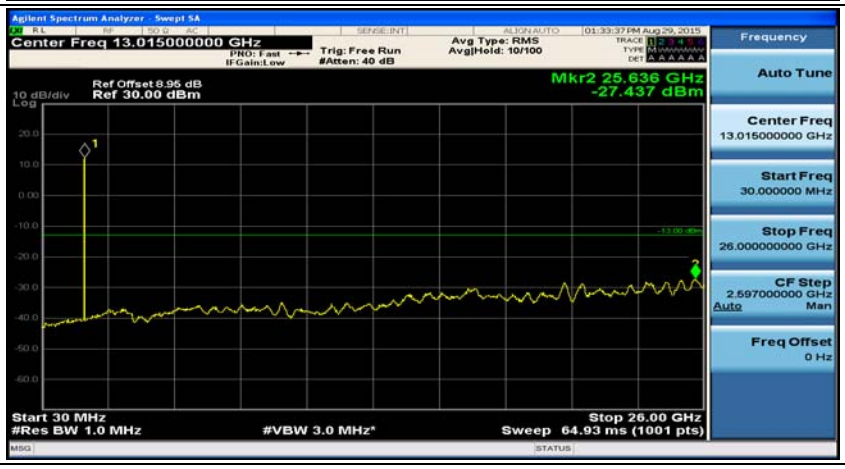
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0




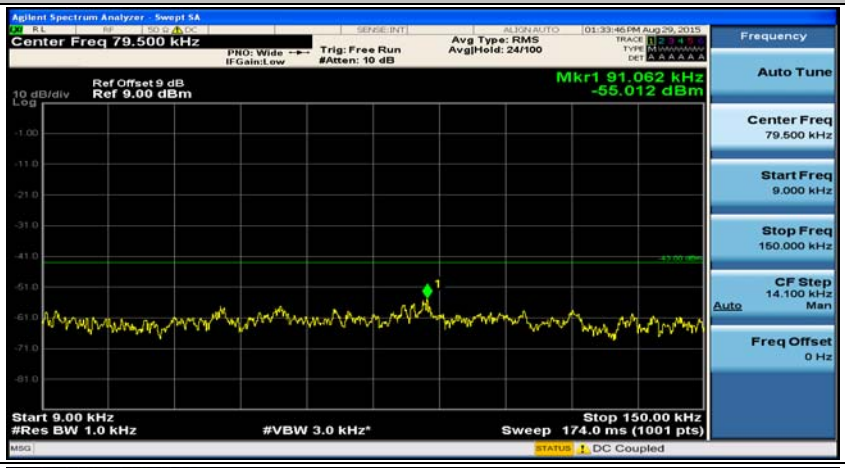
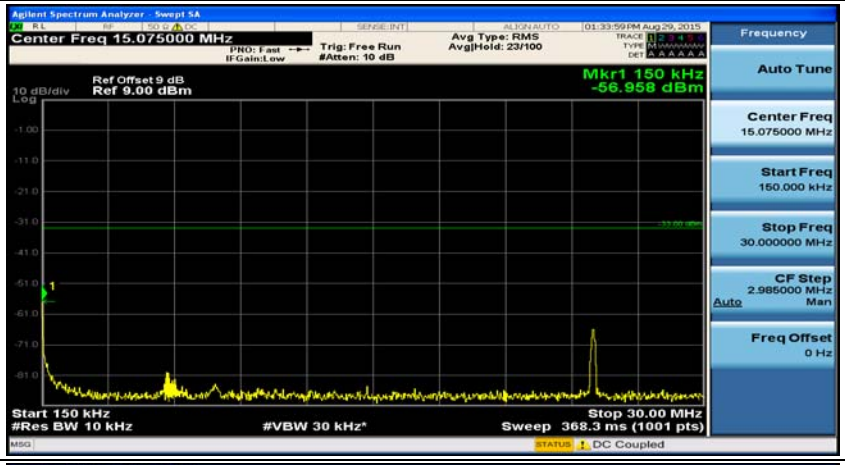
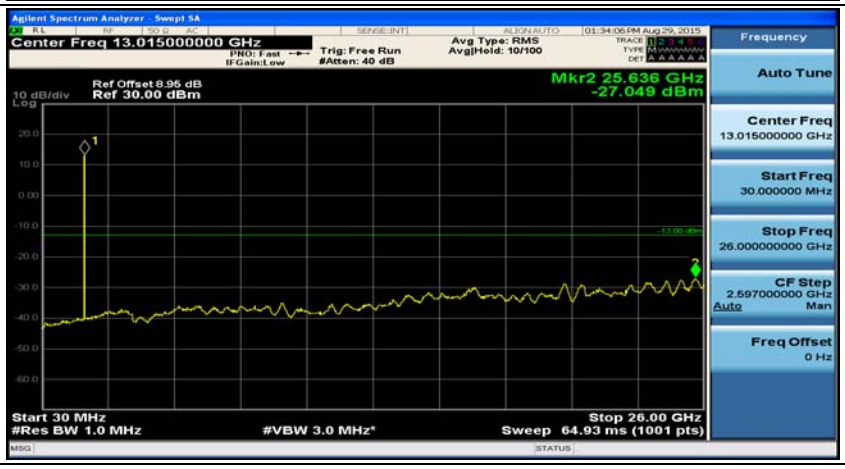
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24




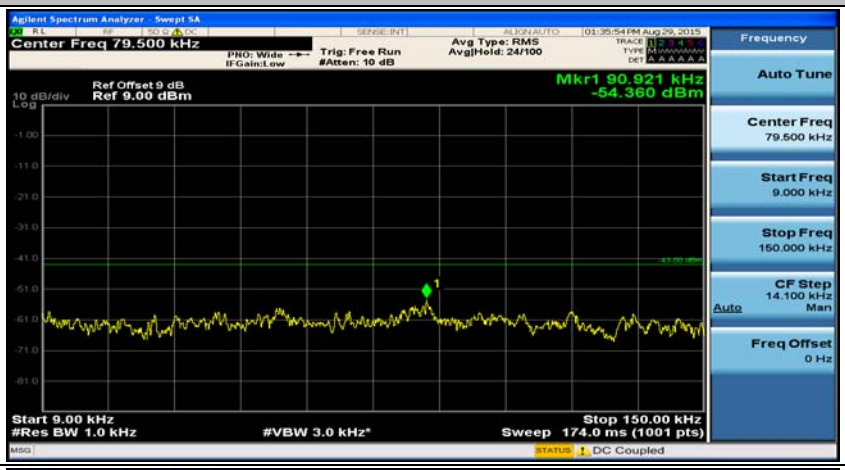
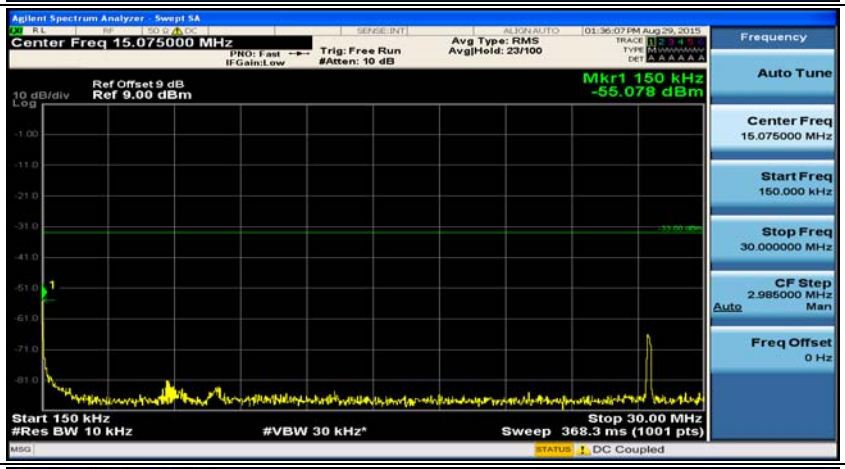
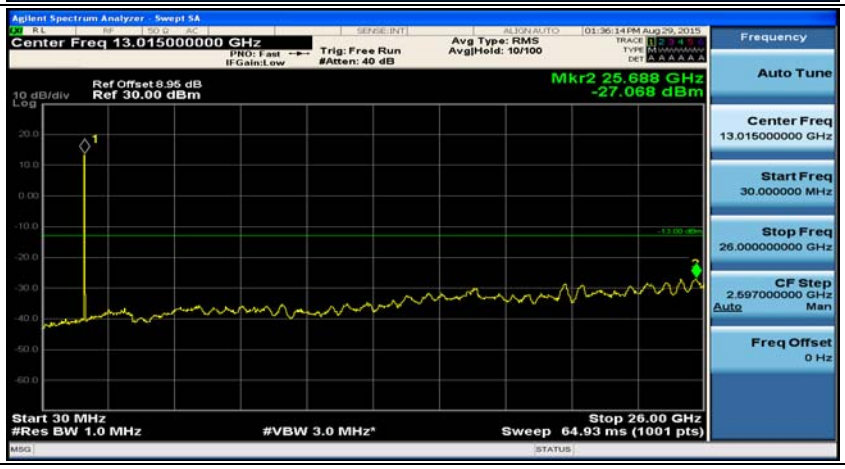
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49




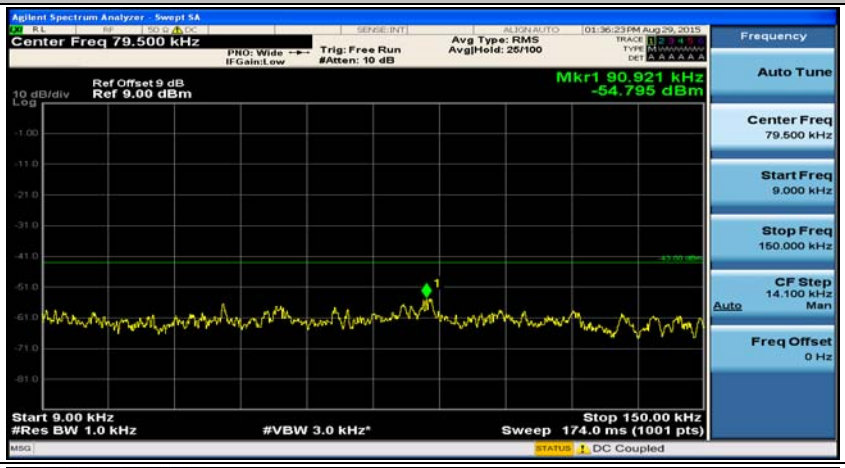
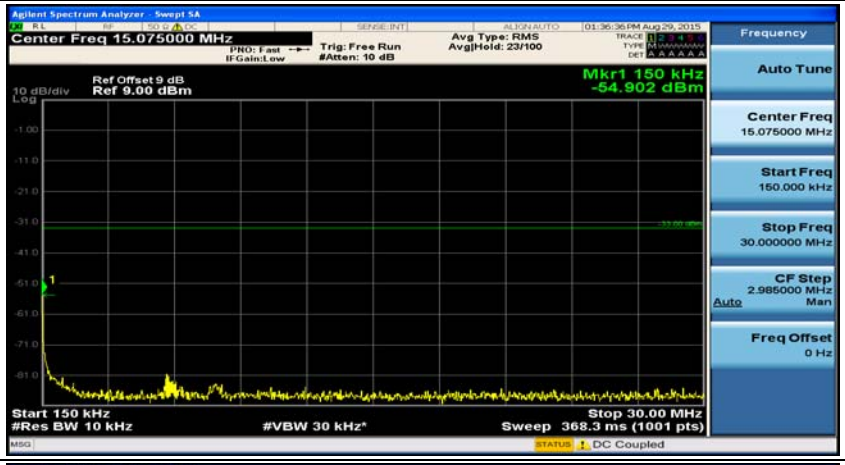
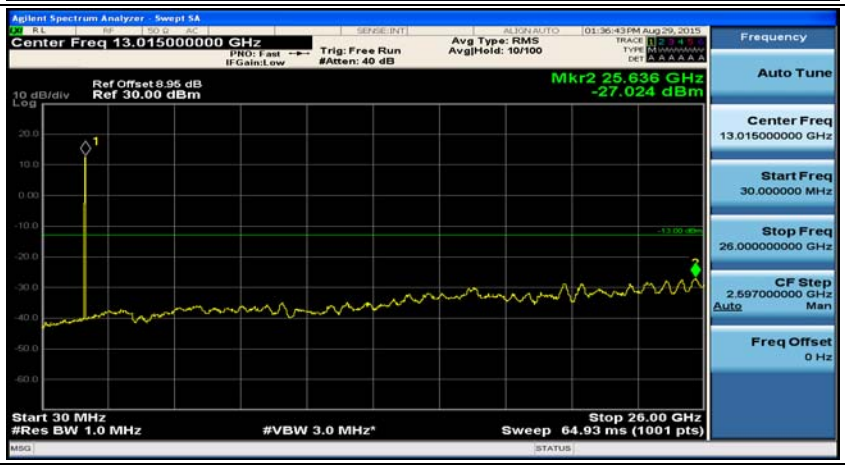
Channel Bandwidth: 15 MHz

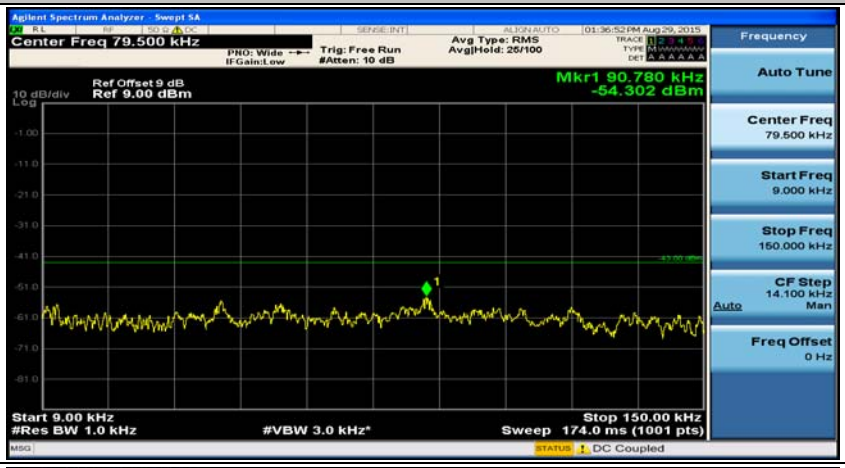
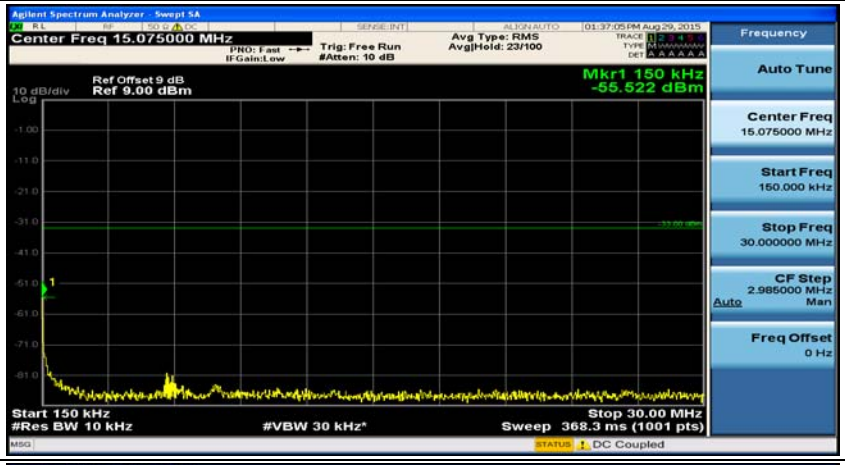
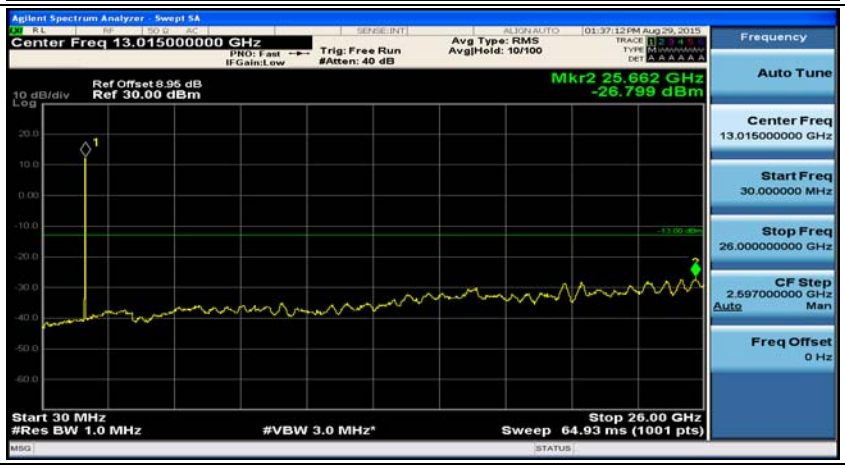
(Channel Bandwidth: 15 MHz)_LCH_QPSK_1RB#0




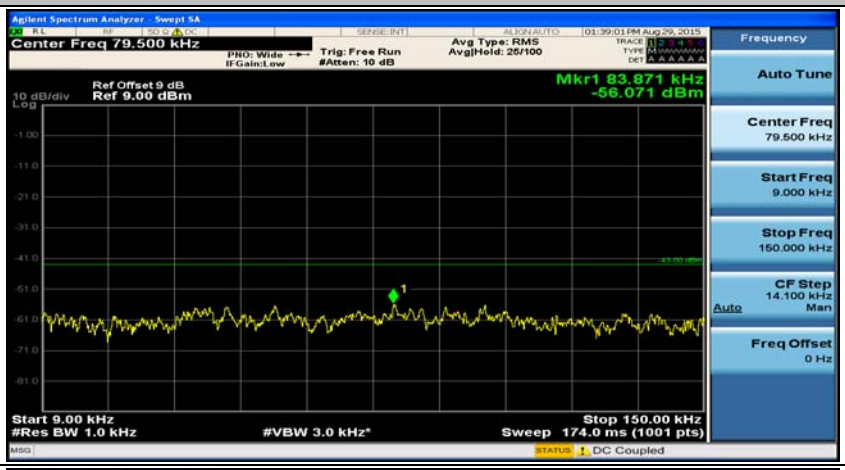
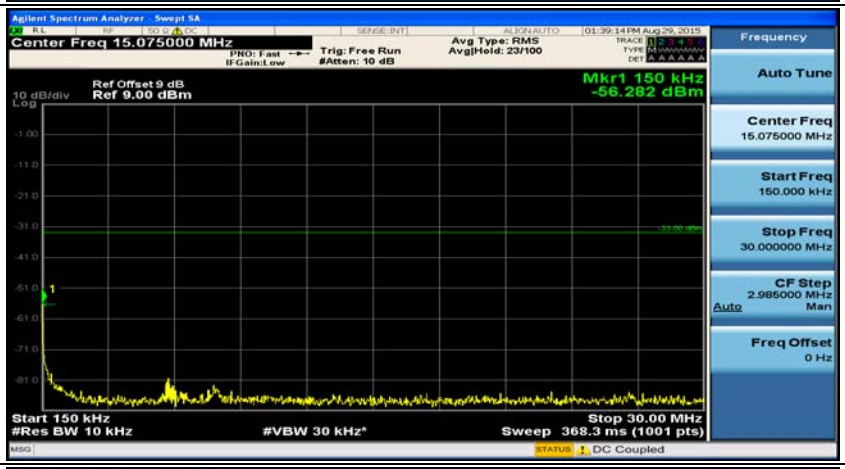
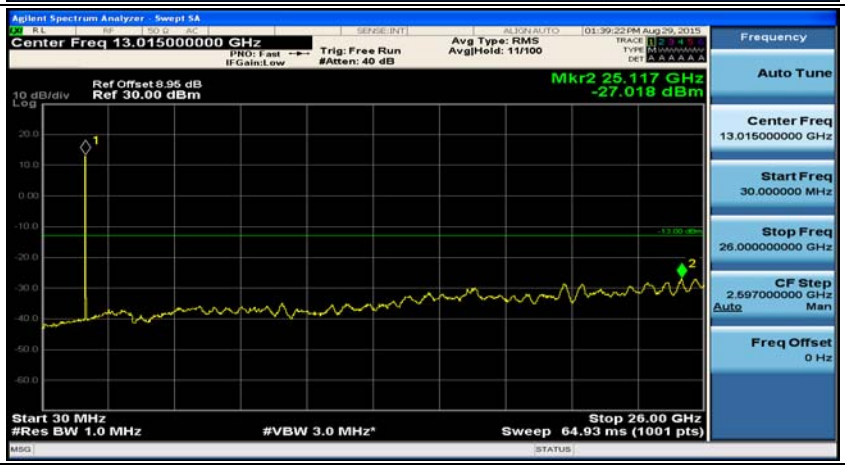
(Channel Bandwidth: 15 MHz)_LCH_QPSK_1RB#37




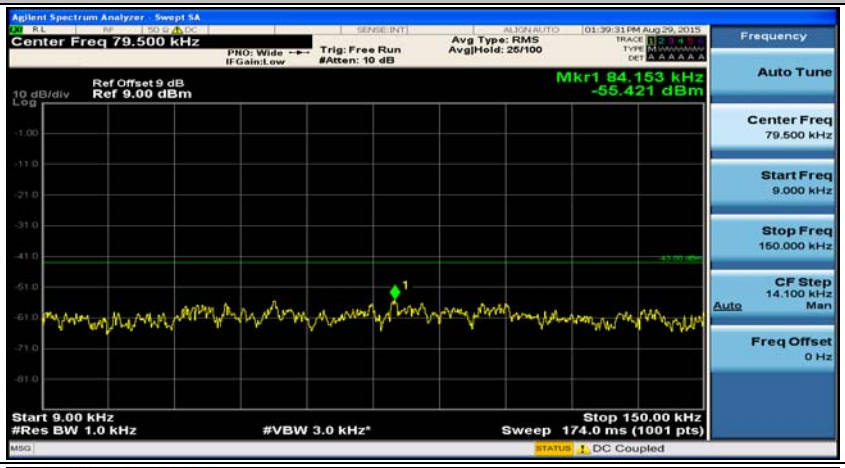
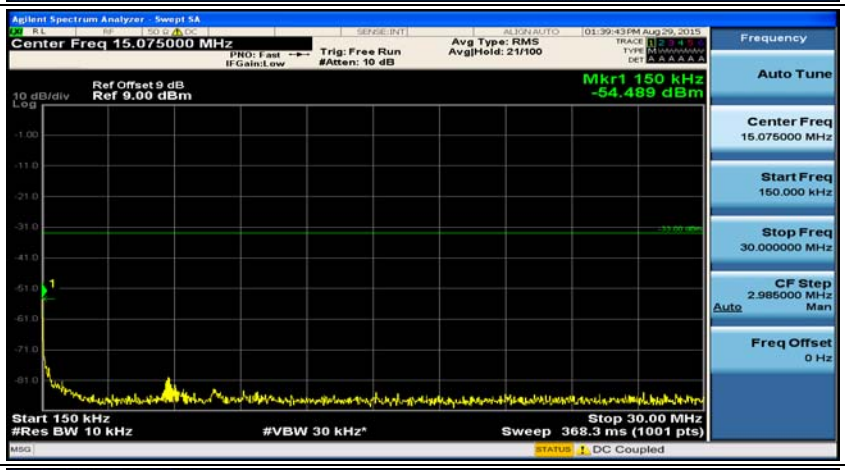
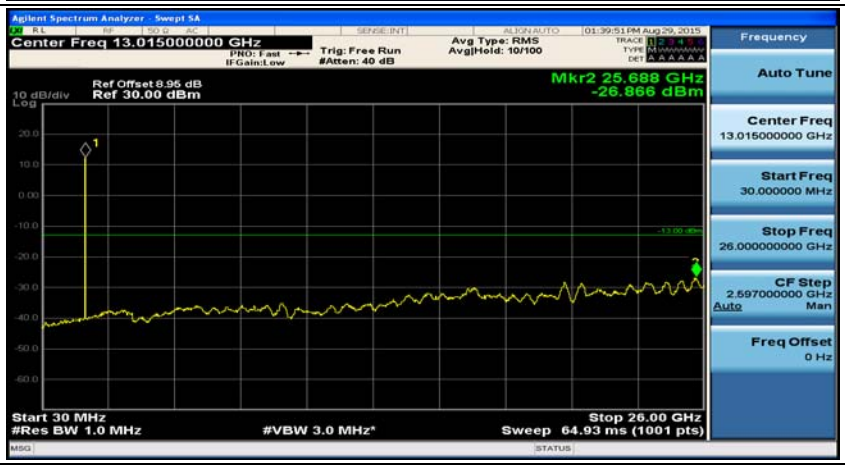
(Channel Bandwidth: 15 MHz)_LCH_QPSK_1RB#74




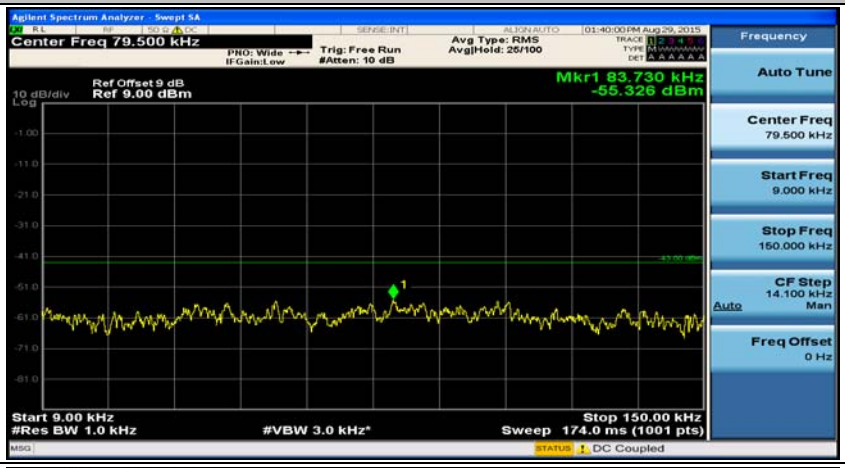
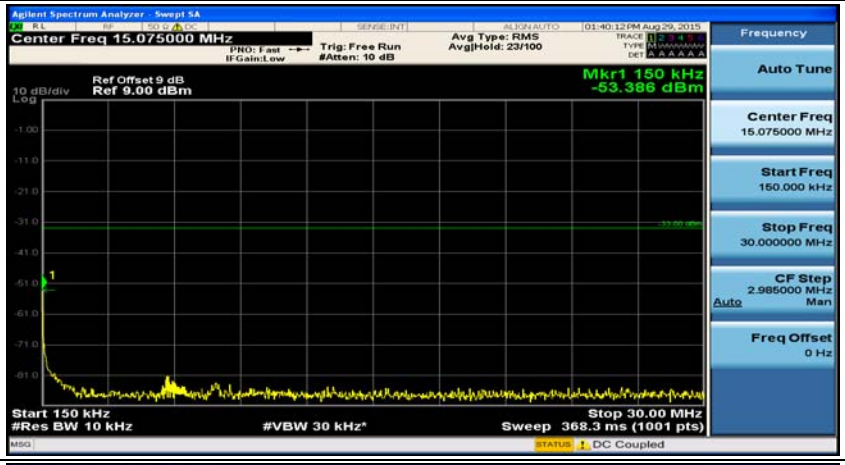
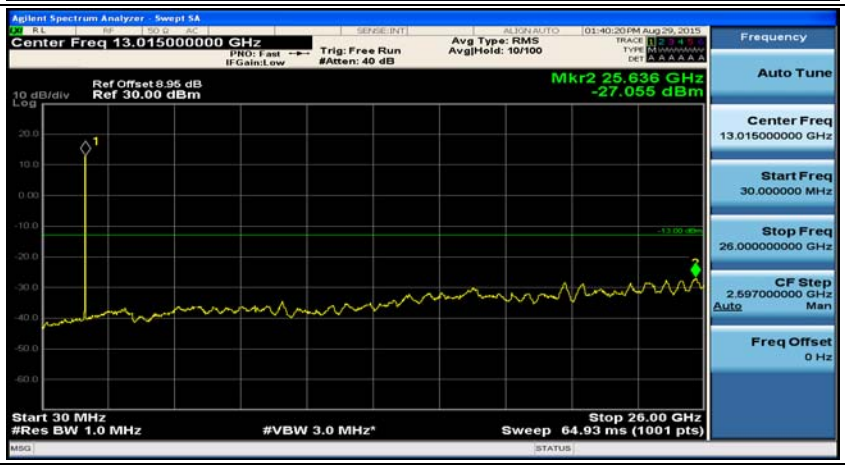
(Channel Bandwidth: 15 MHz)_MCH_QPSK_1RB#0




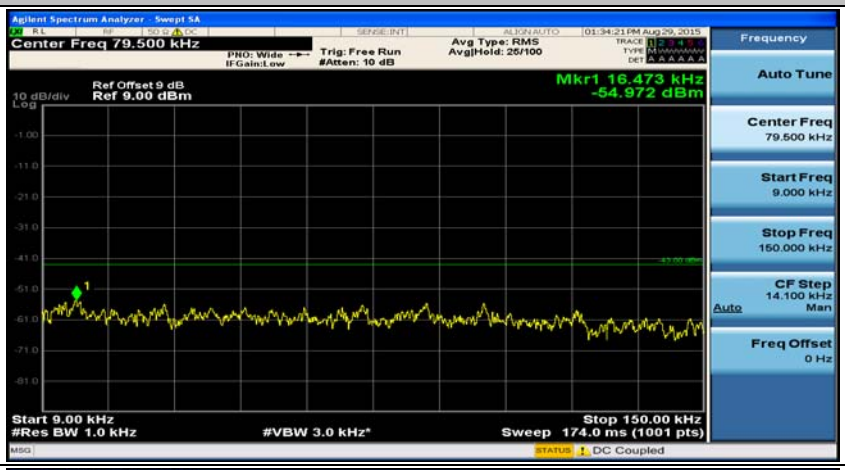
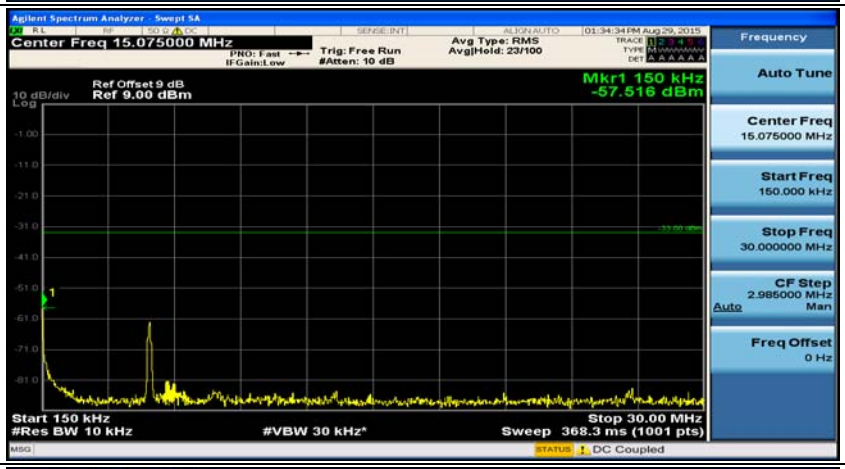
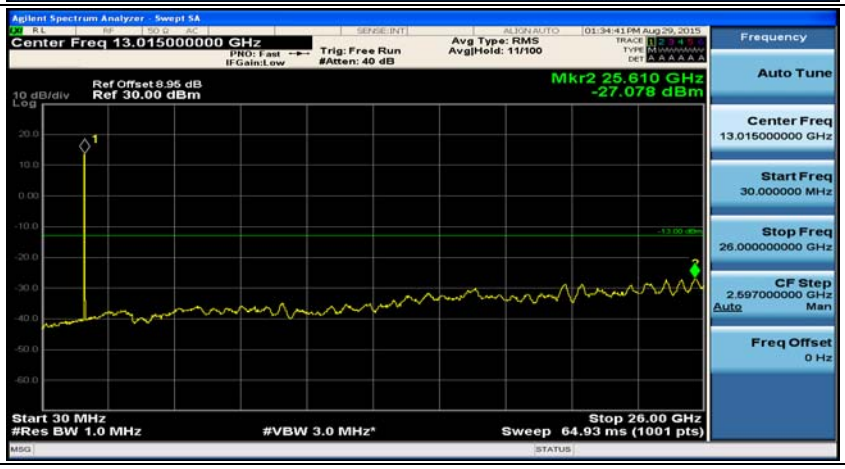
(Channel Bandwidth: 15 MHz)_MCH_QPSK_1RB#37




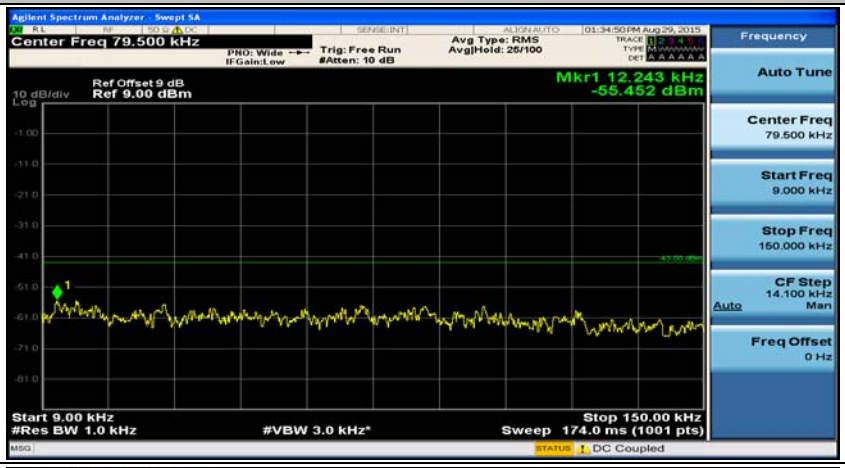
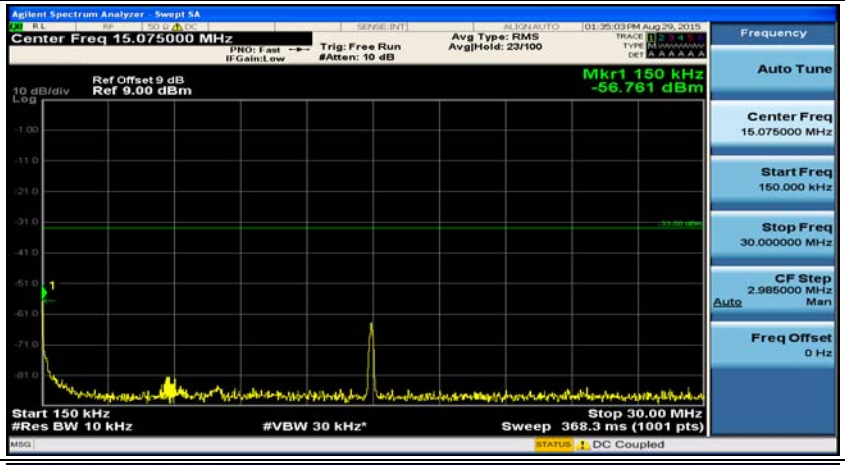
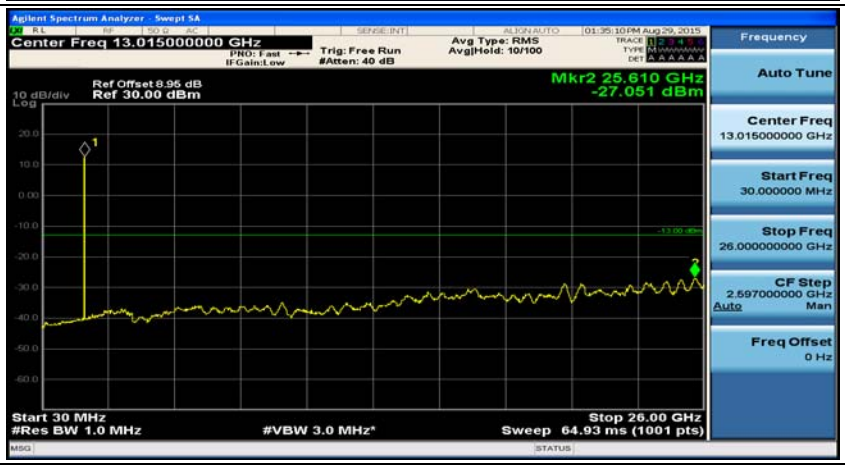
(Channel Bandwidth: 15 MHz)_MCH_QPSK_1RB#74




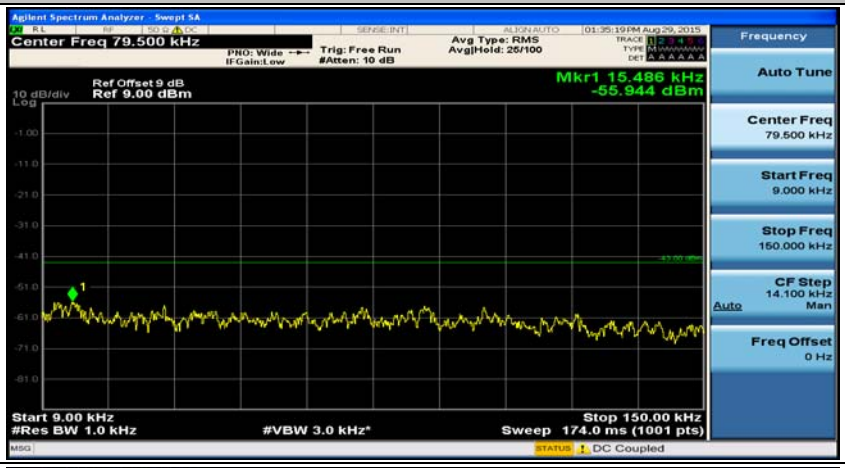
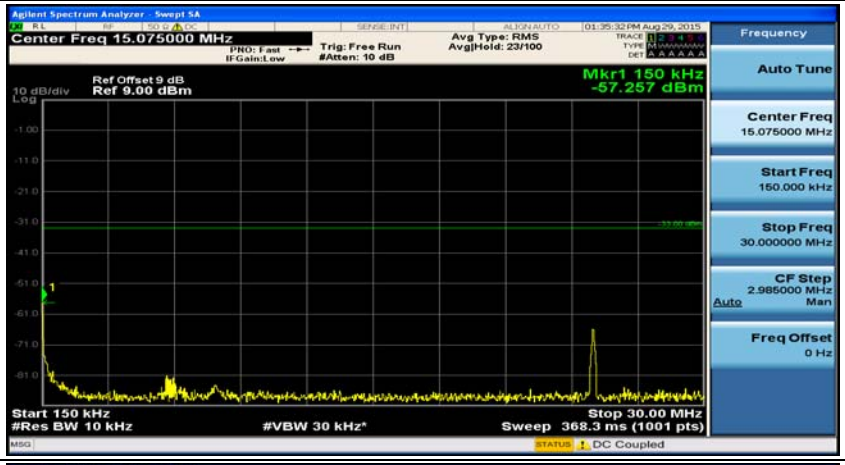
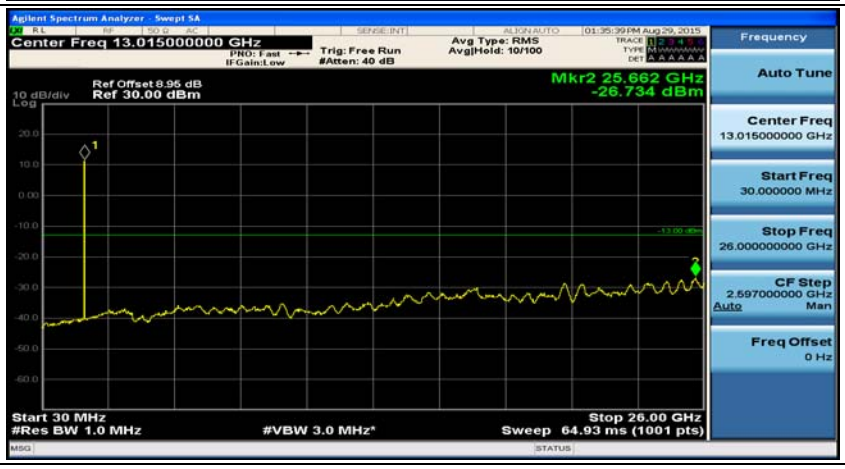
(Channel Bandwidth: 15 MHz)_HCH_QPSK_1RB#0




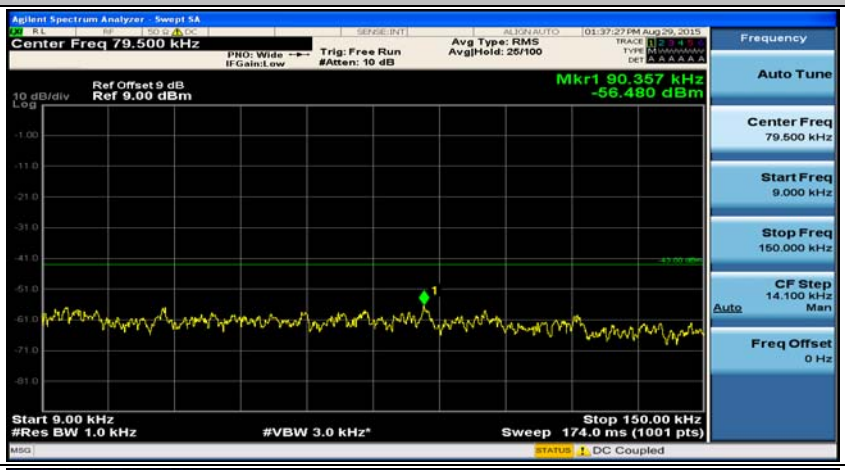
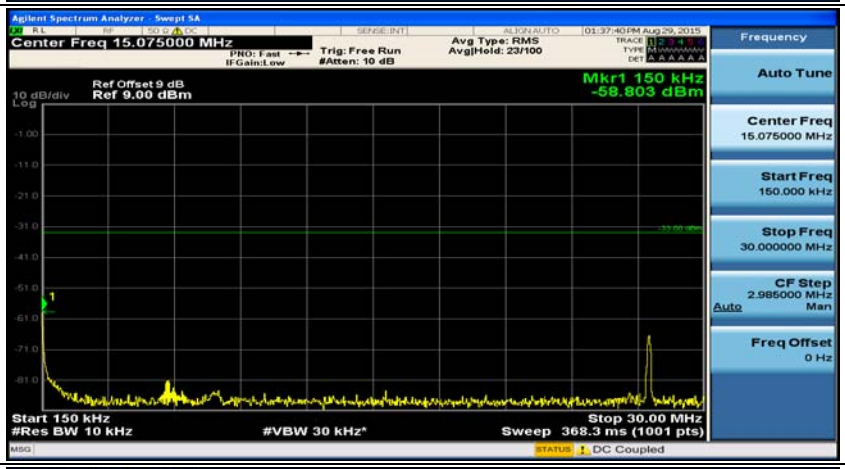
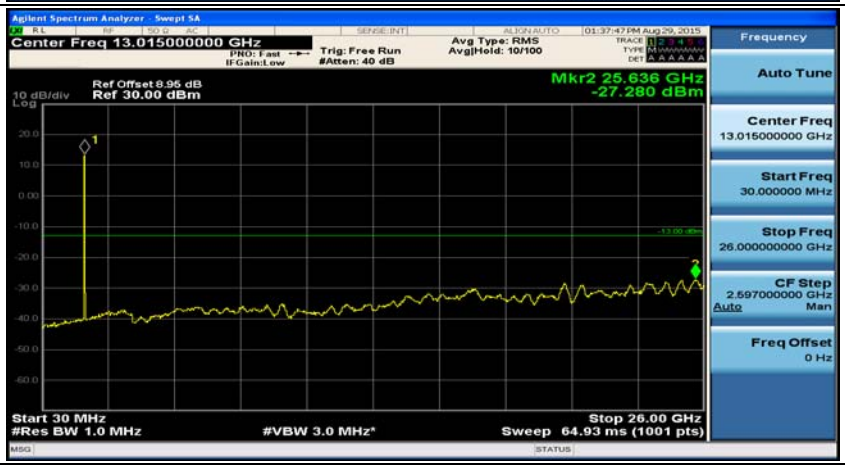
(Channel Bandwidth: 15 MHz)_HCH_QPSK_1RB#37




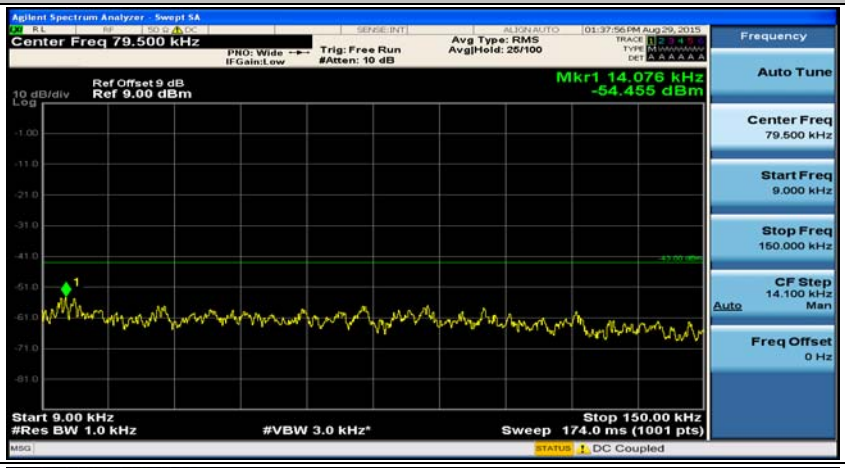
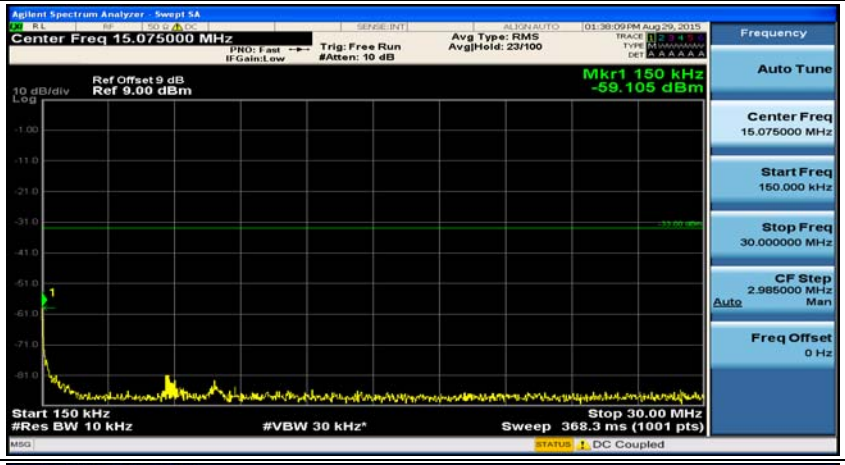
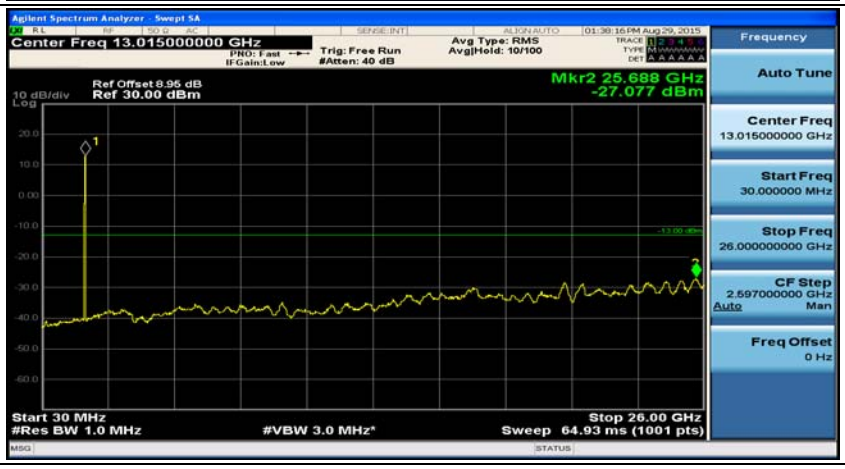
(Channel Bandwidth: 15 MHz)_HCH_QPSK_1RB#74




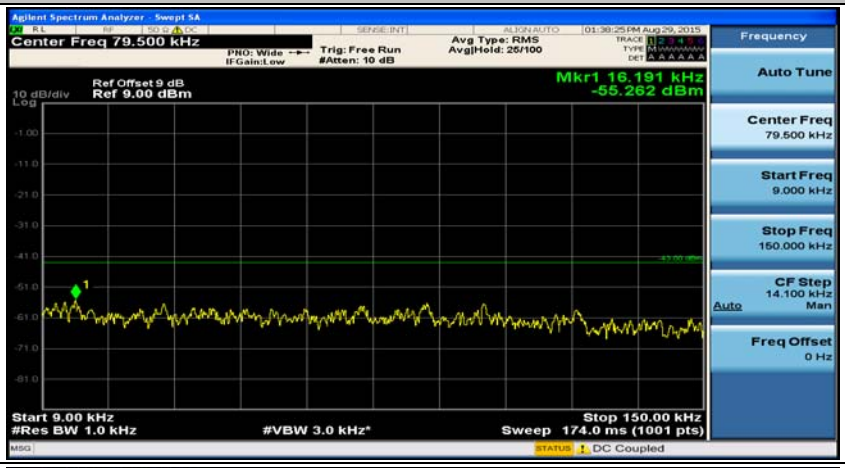
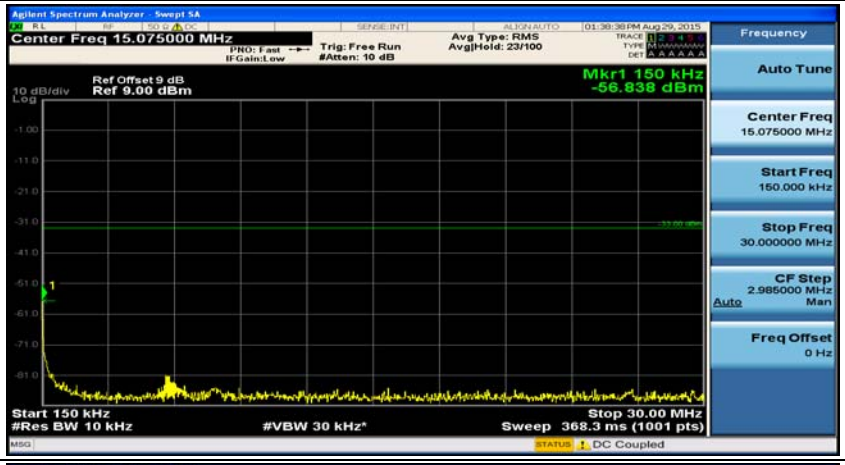
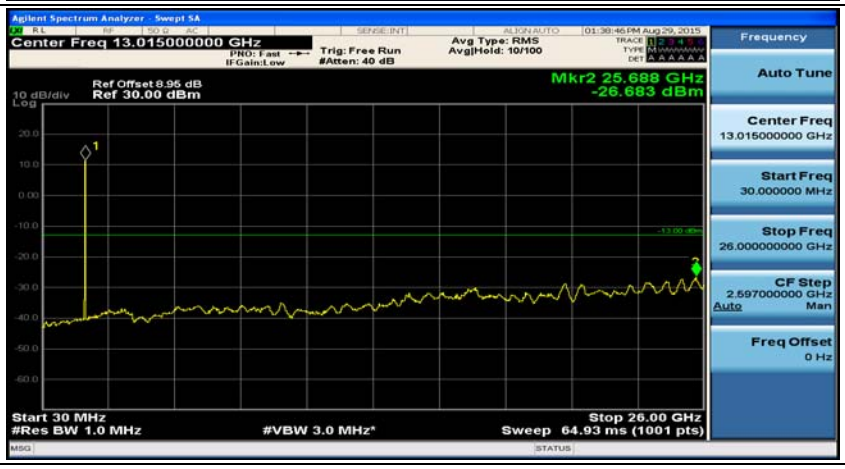
(Channel Bandwidth: 15 MHz)_LCH_16QAM_1RB#0




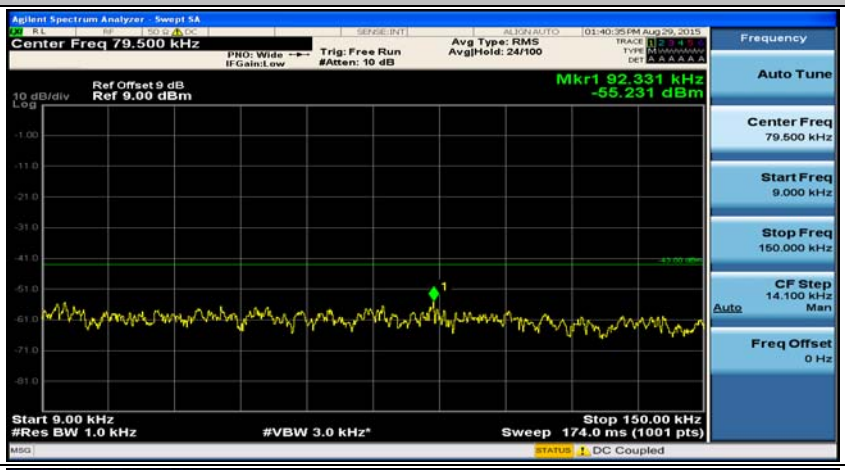
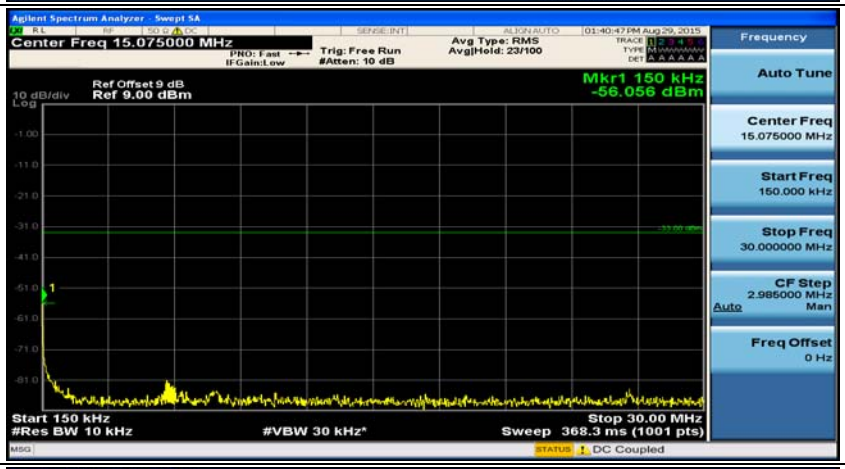
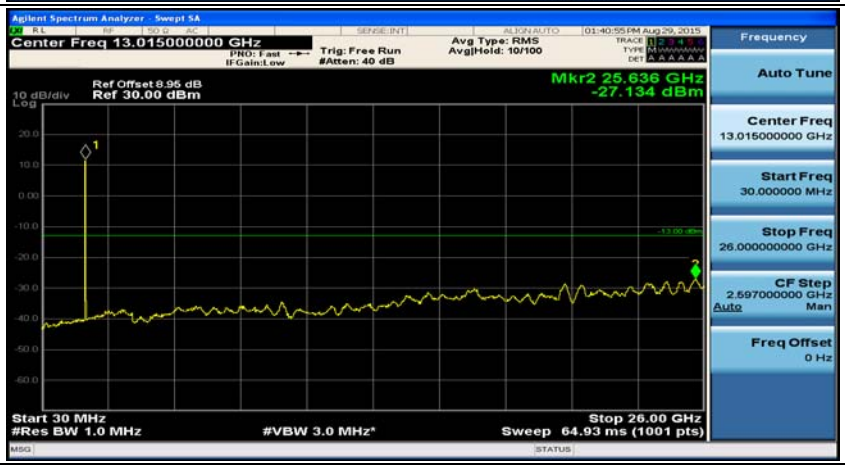
(Channel Bandwidth: 15 MHz)_LCH_16QAM_1RB#37




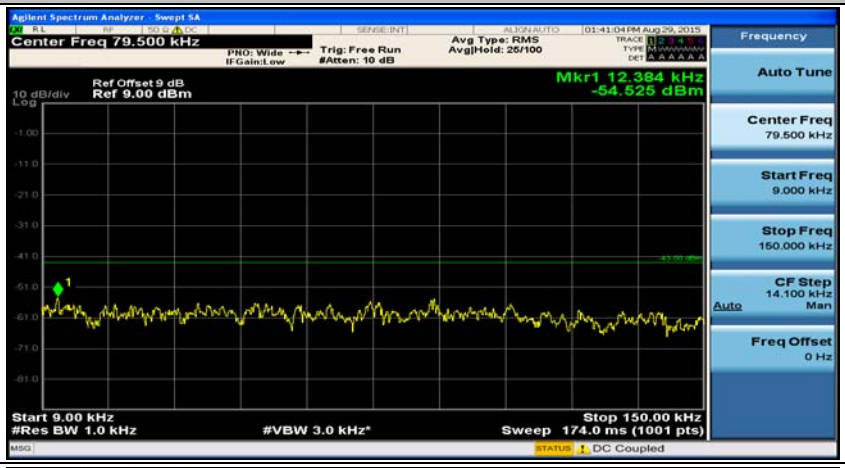
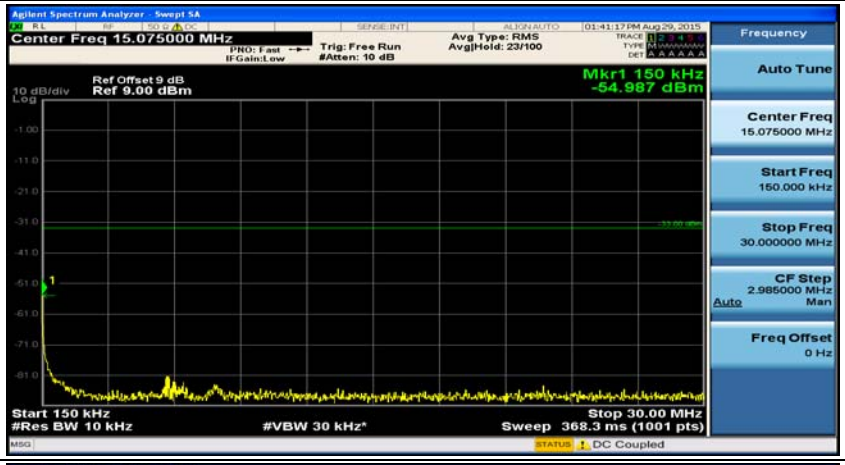
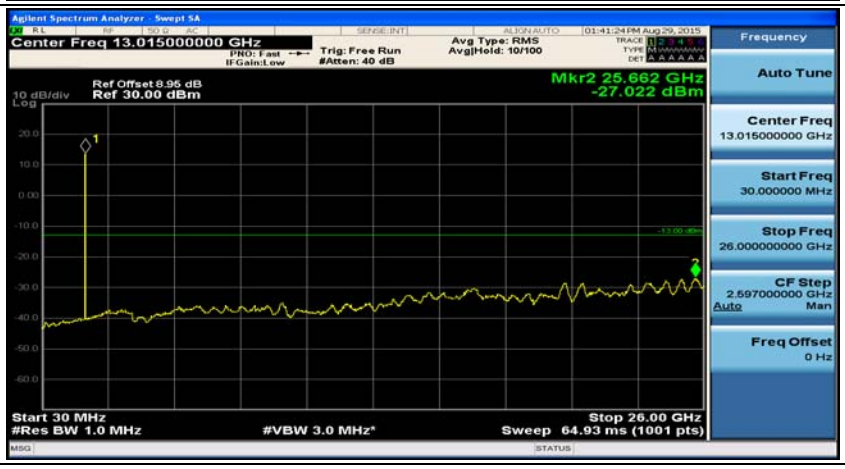
(Channel Bandwidth: 15 MHz)_LCH_16QAM_1RB#74




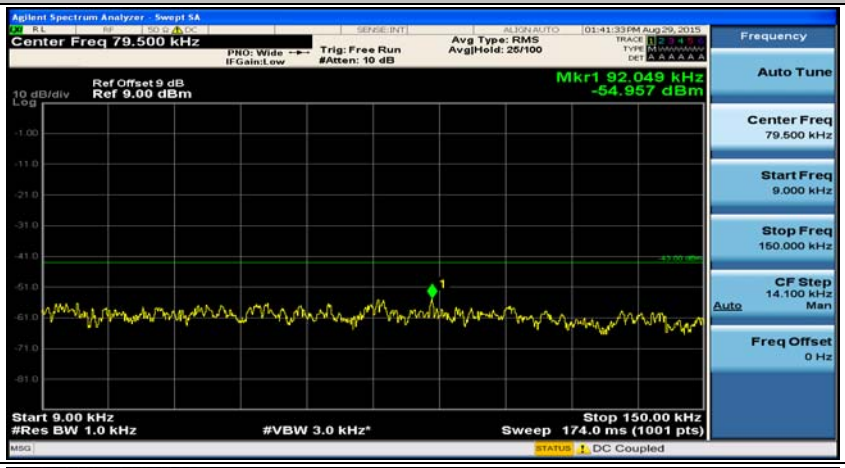
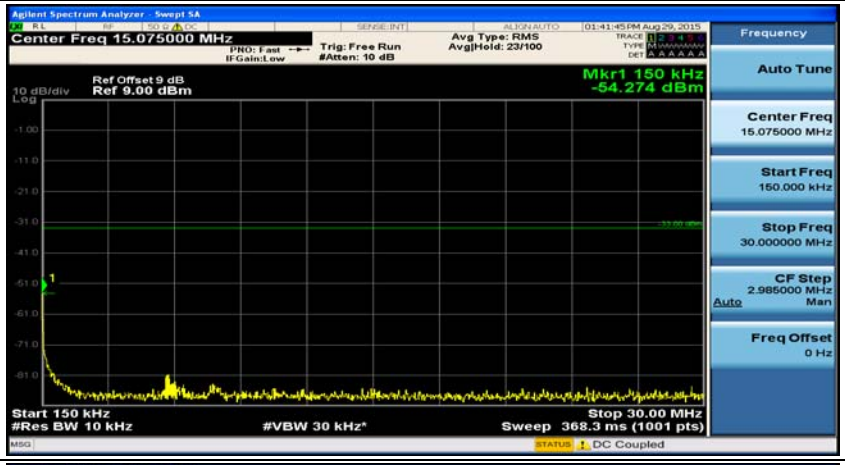
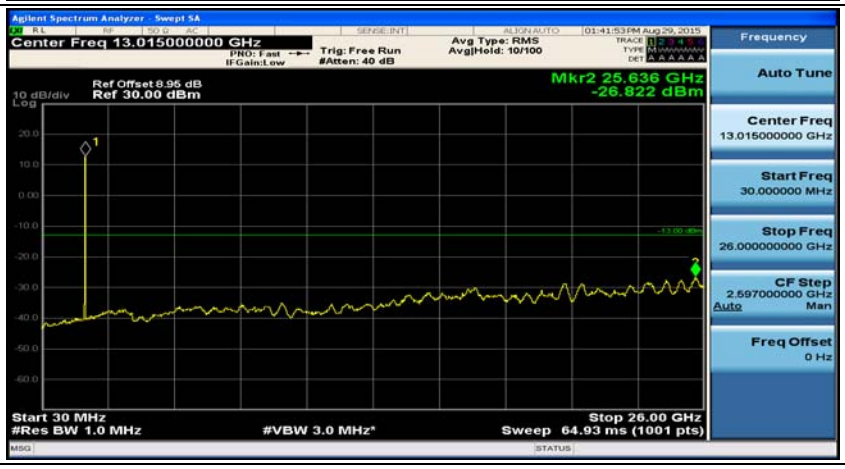
(Channel Bandwidth: 15 MHz)_MCH_16QAM_1RB#0




(Channel Bandwidth: 15 MHz)_MCH_16QAM_1RB#37




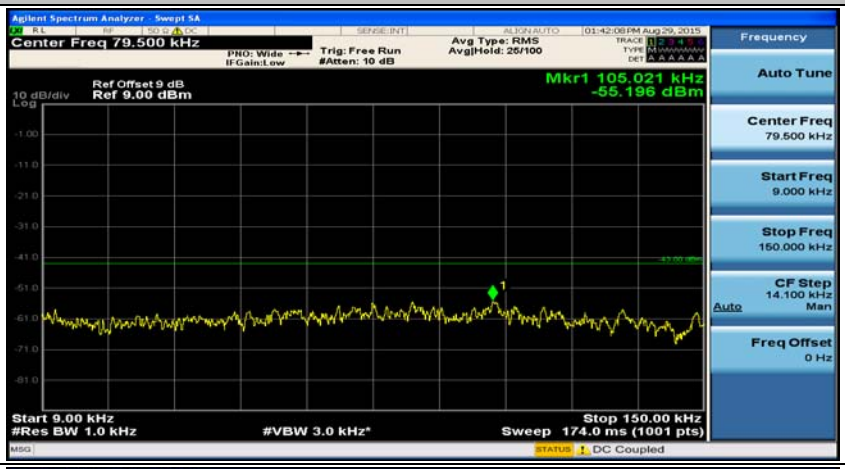
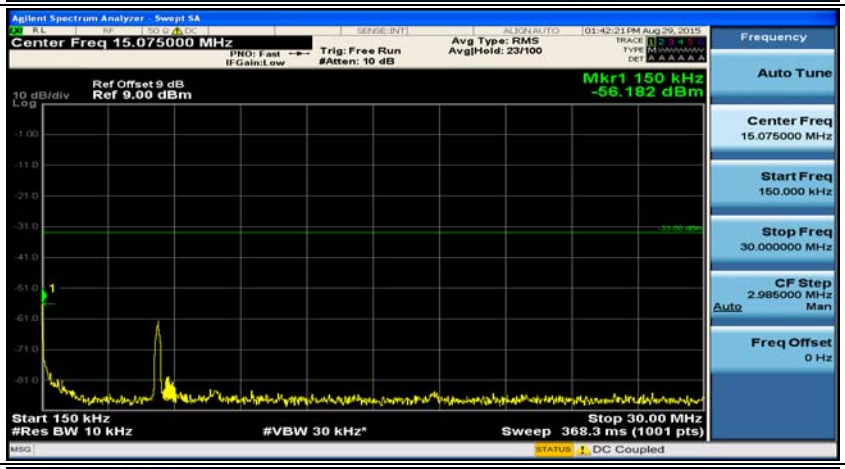
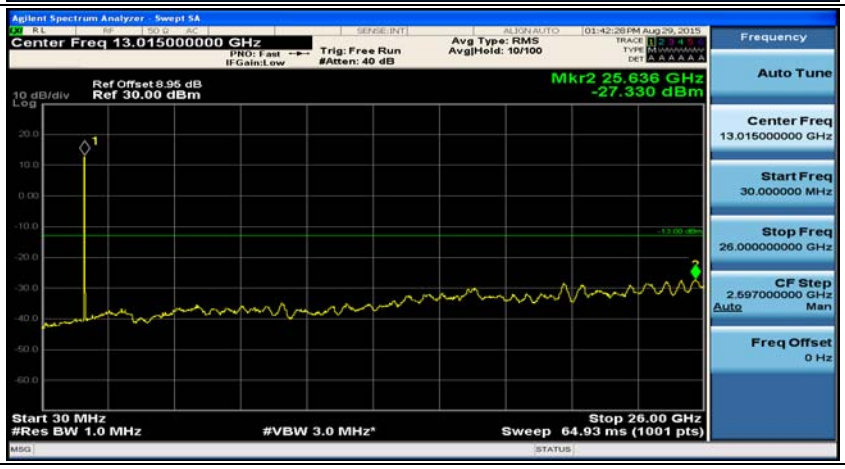
(Channel Bandwidth: 15 MHz)_MCH_16QAM_1RB#74




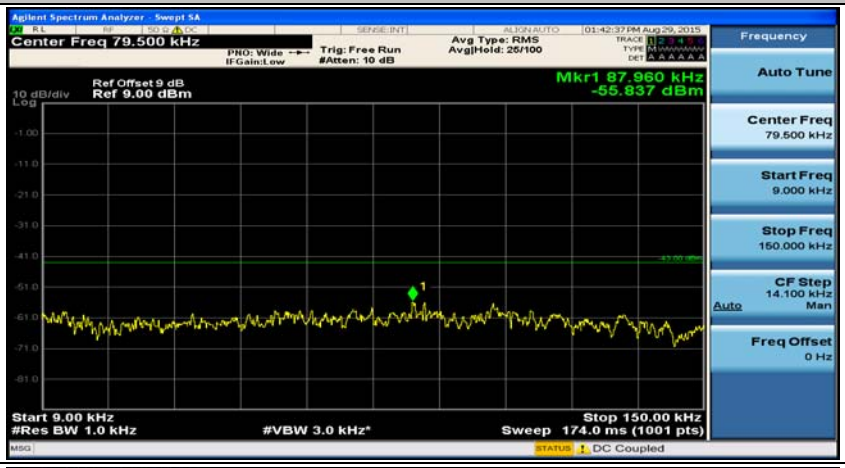
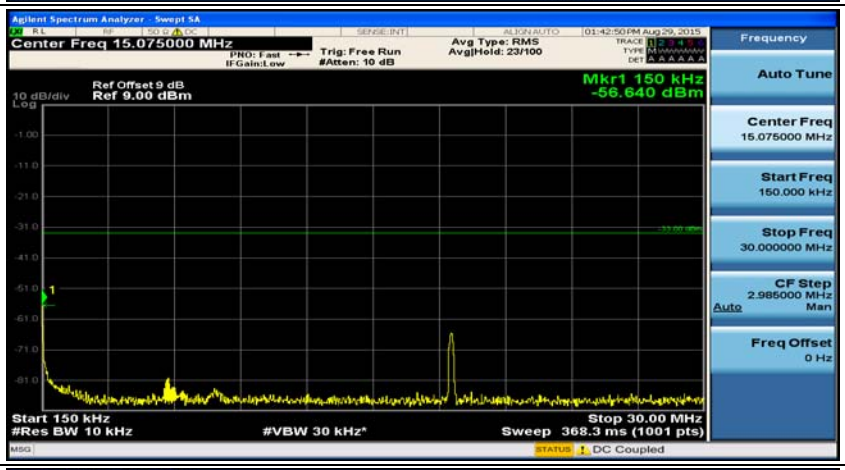
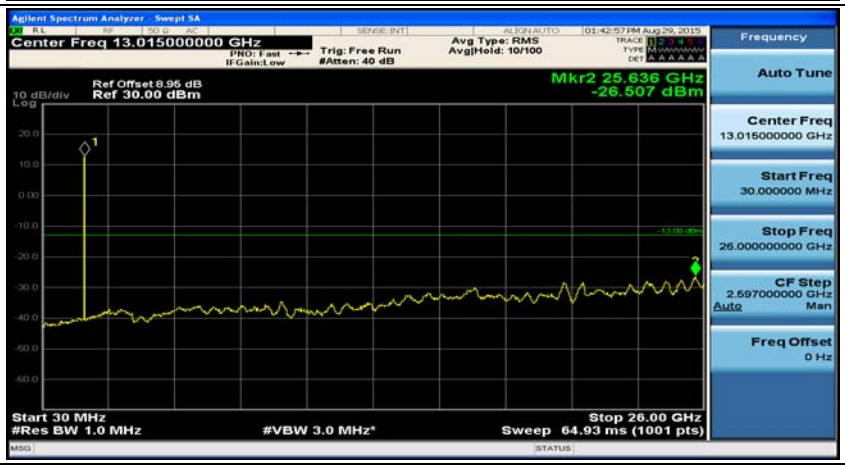
(Channel Bandwidth: 15 MHz)_HCH_16QAM_1RB#0




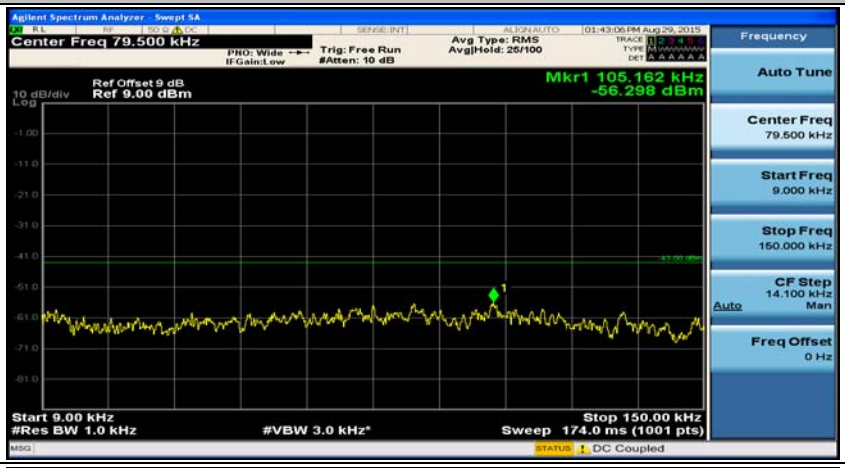
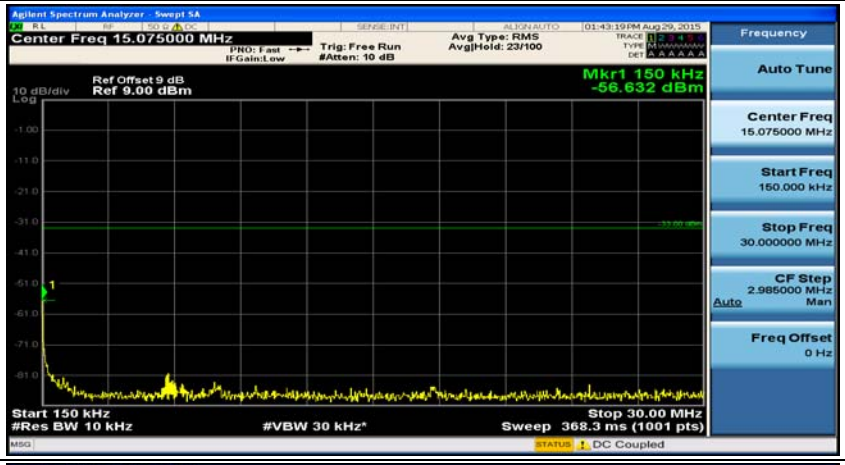
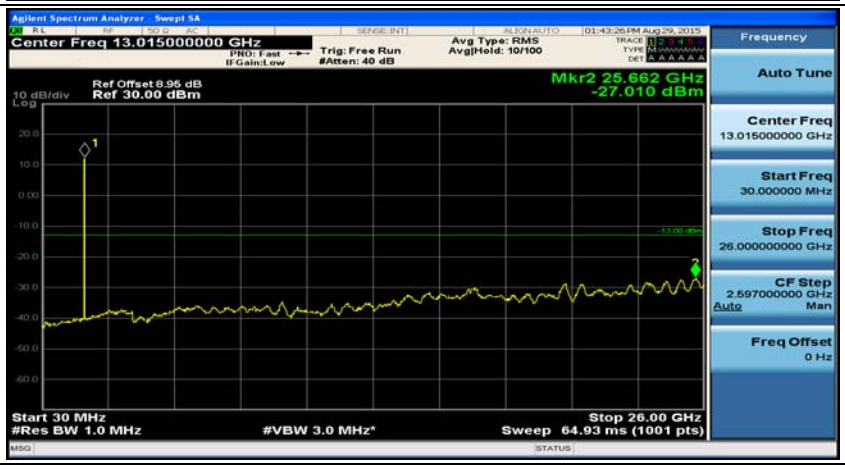
(Channel Bandwidth: 15 MHz)_HCH_16QAM_1RB#37




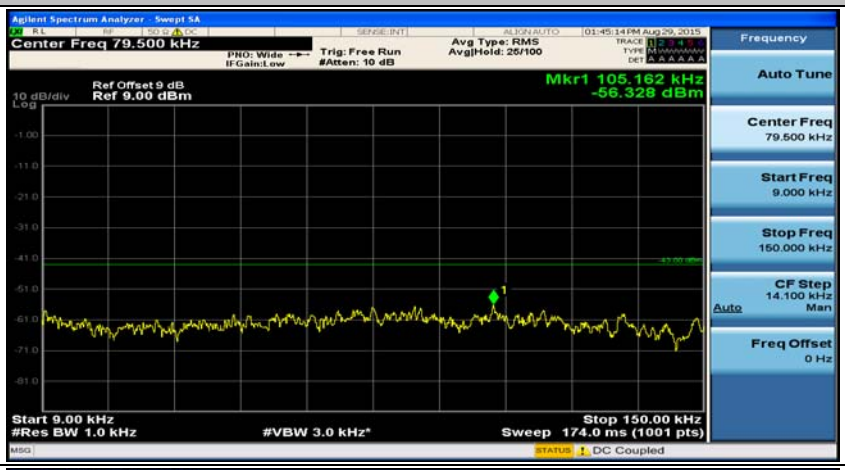
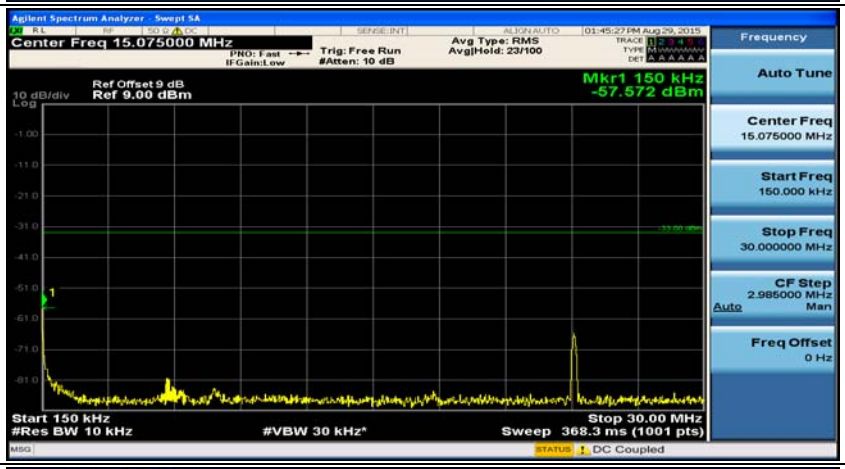
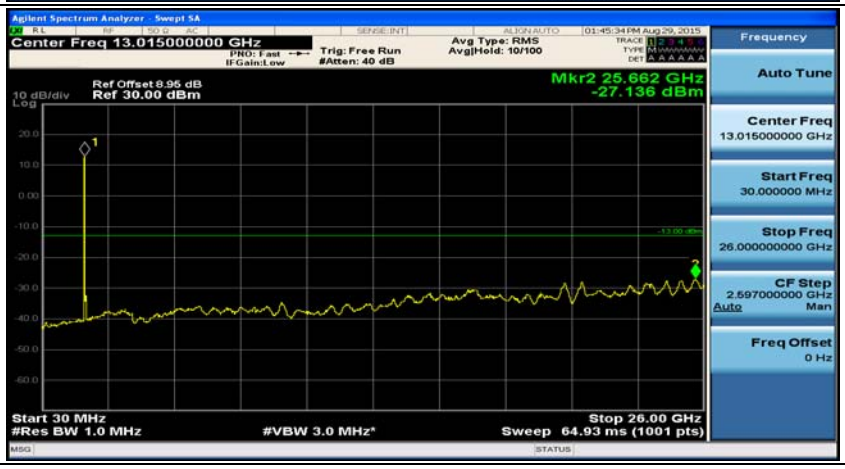
(Channel Bandwidth: 15 MHz)_HCH_16QAM_1RB#74




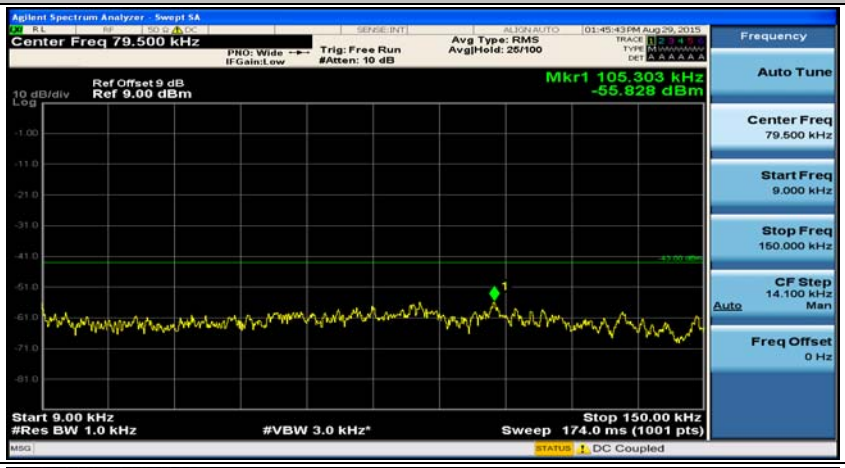
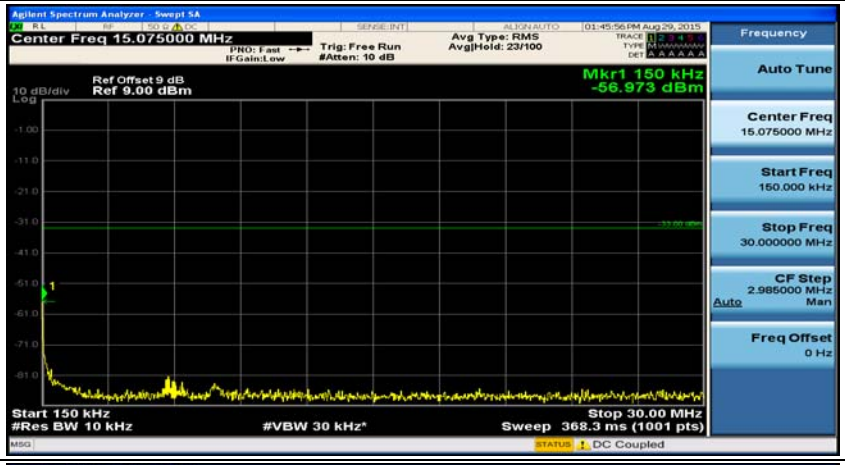
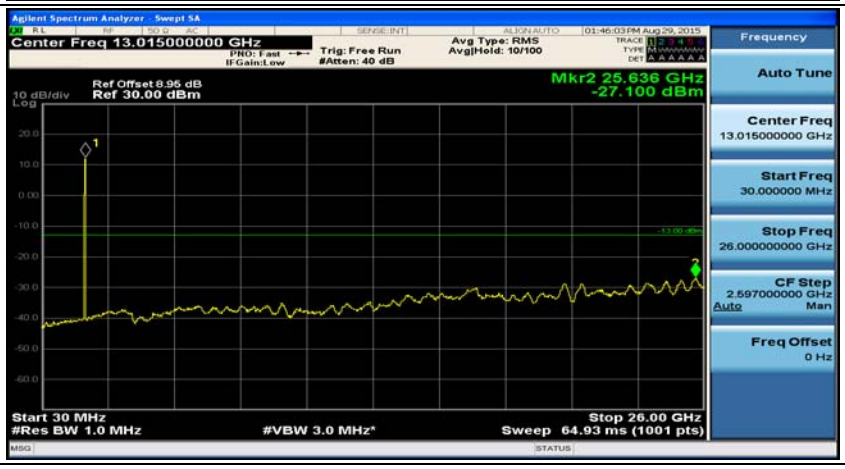
Channel Bandwidth: 20 MHz

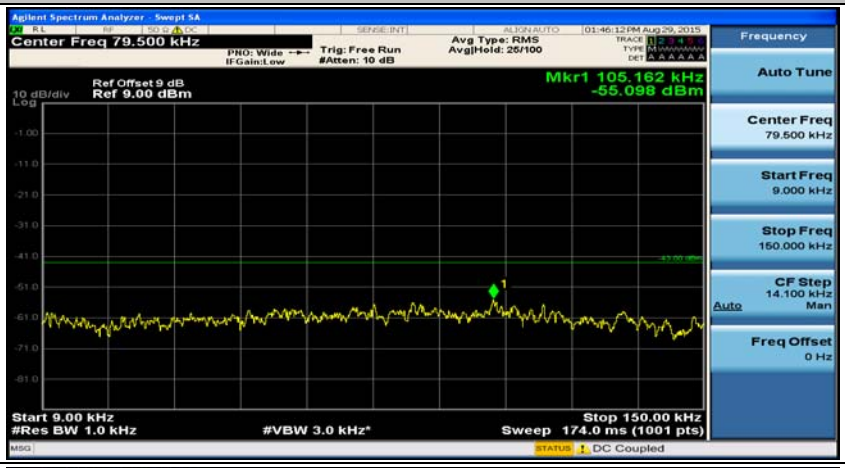
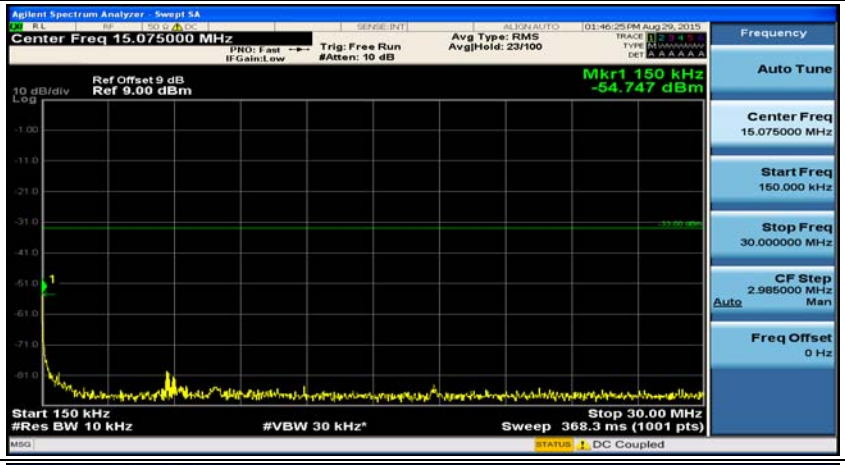
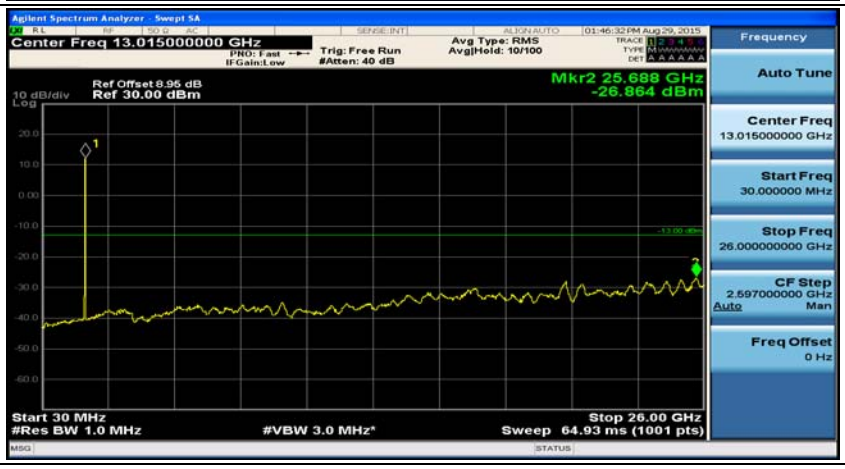
(Channel Bandwidth: 20 MHz)_LCH_QPSK_1RB#0




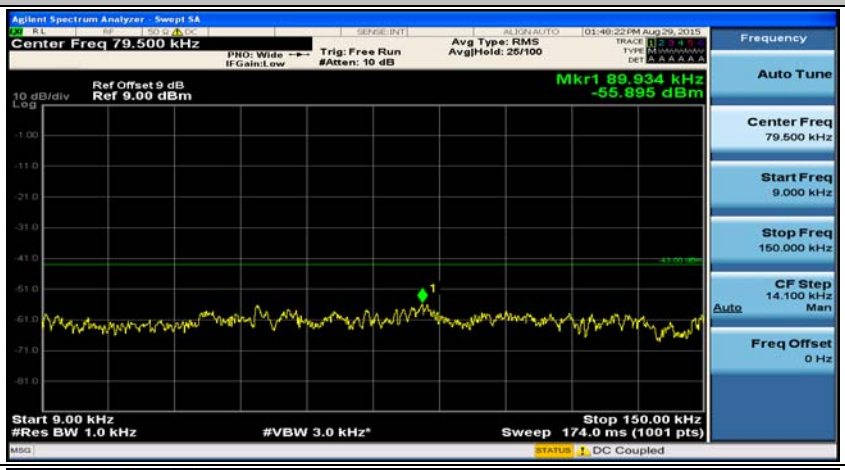
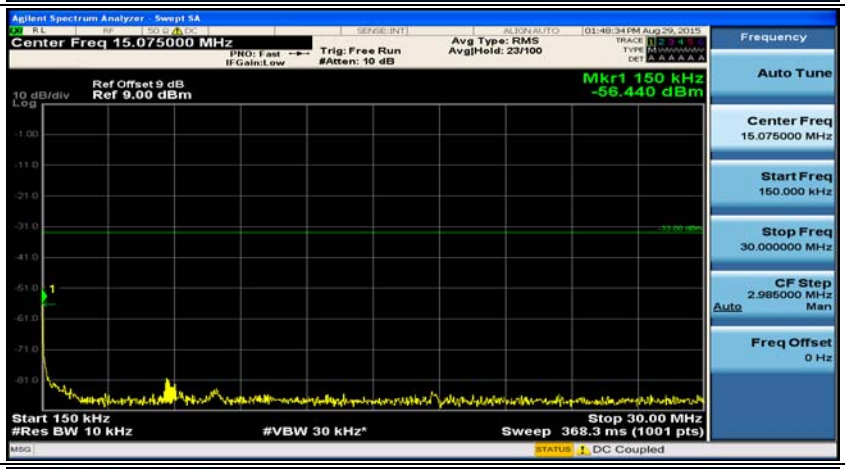
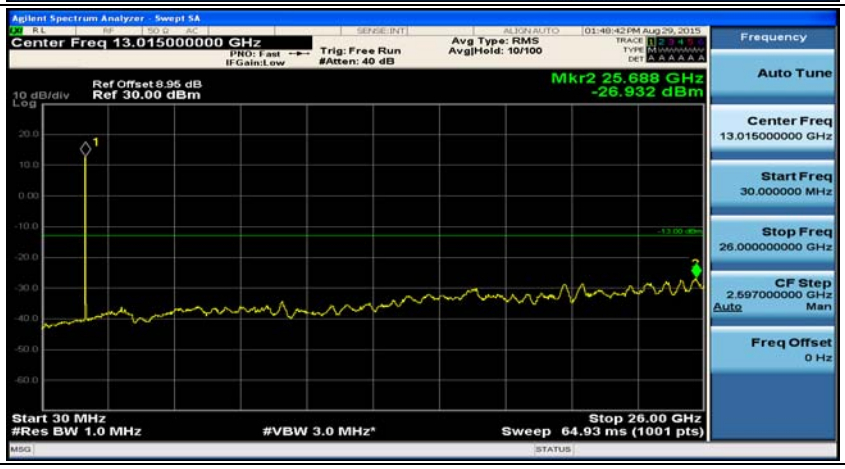
(Channel Bandwidth: 20 MHz)_LCH_QPSK_1RB#49




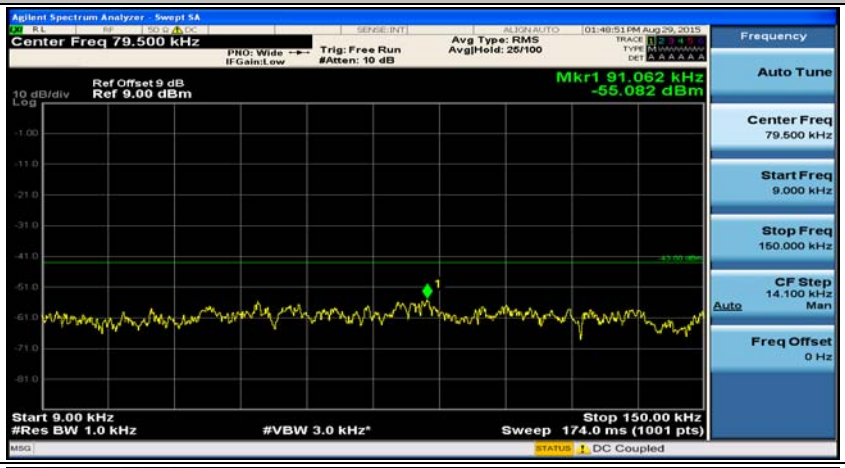
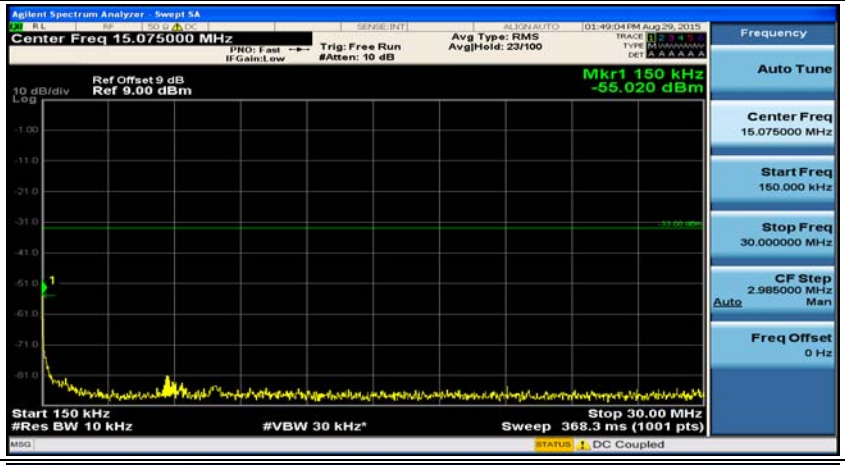
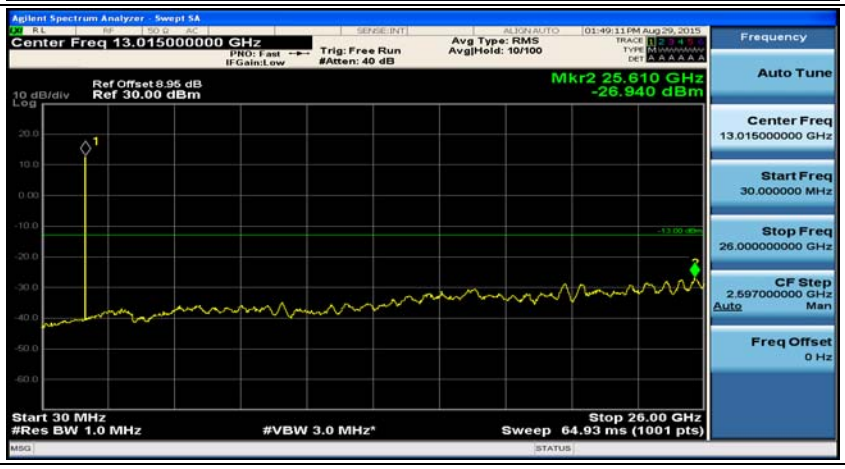
(Channel Bandwidth: 20 MHz)_LCH_QPSK_1RB#99




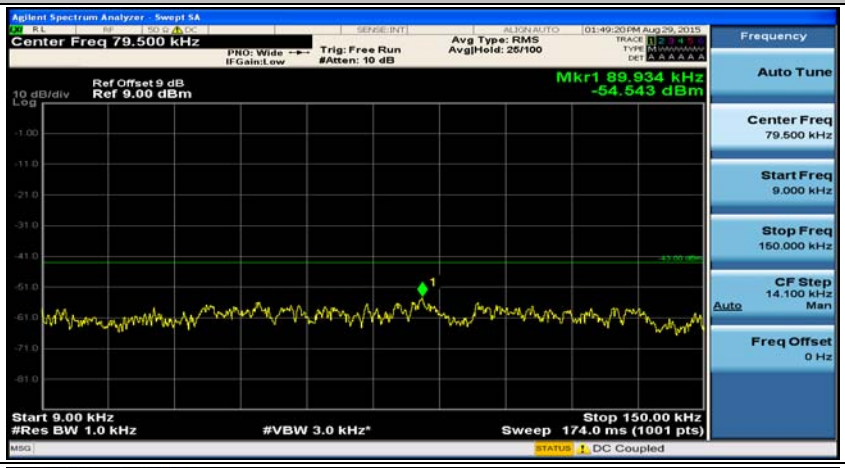
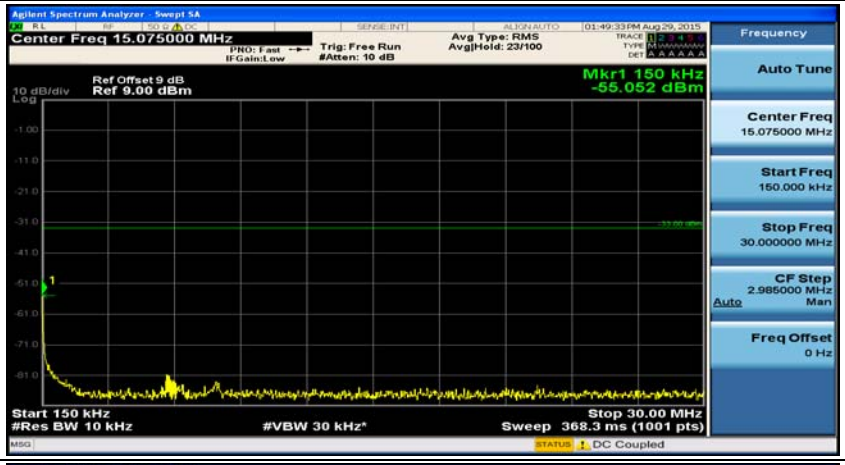
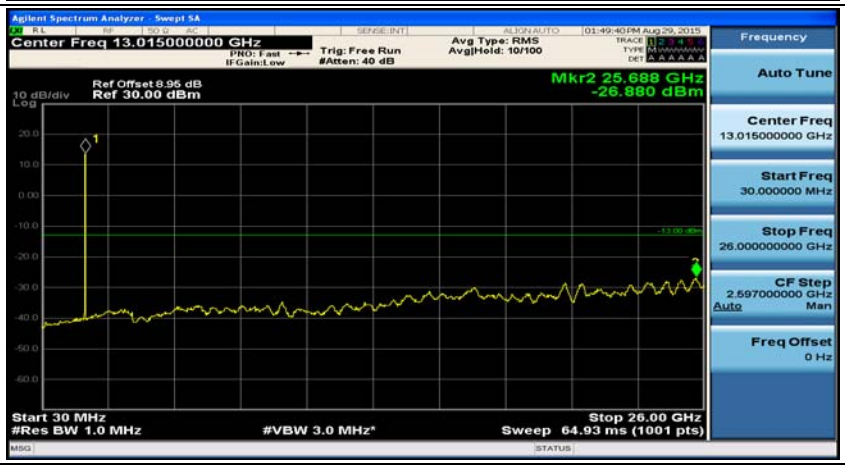
(Channel Bandwidth: 20 MHz)_MCH_QPSK_1RB#0




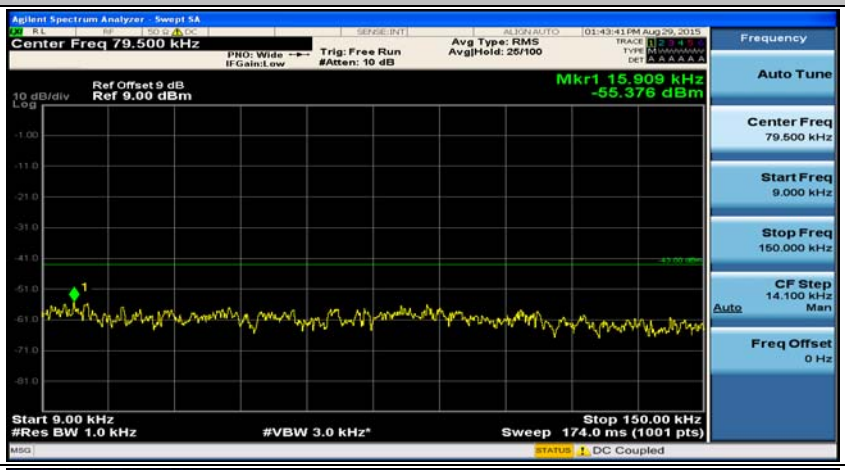
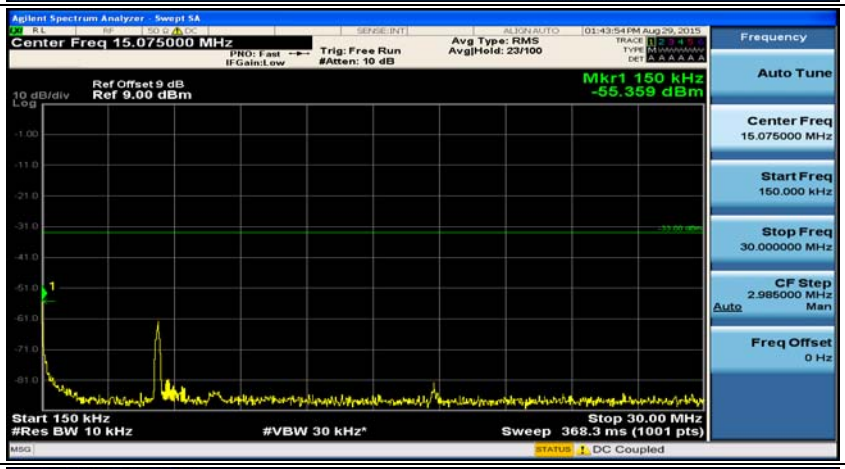
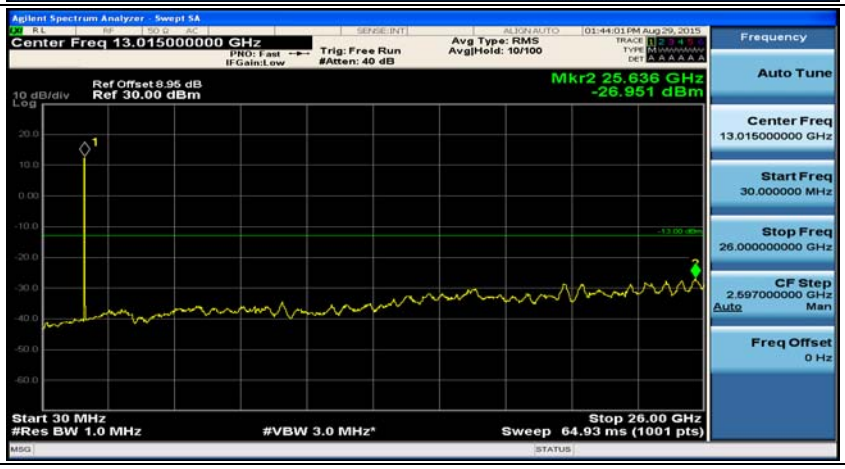
(Channel Bandwidth: 20 MHz)_MCH_QPSK_1RB#49




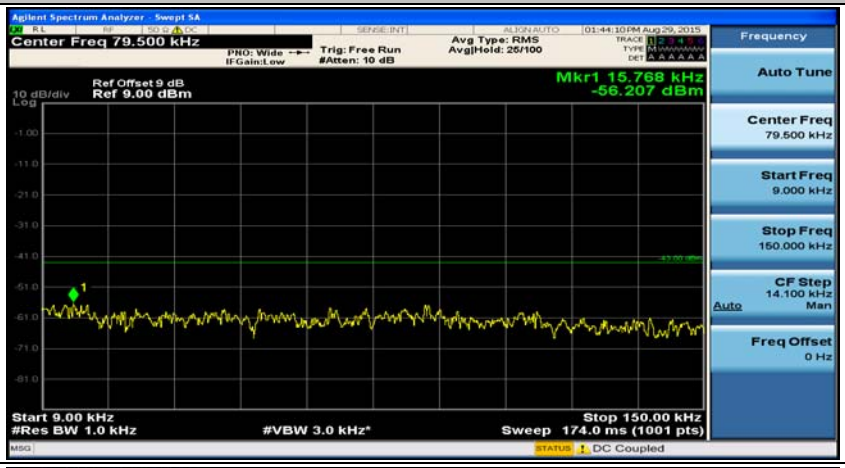
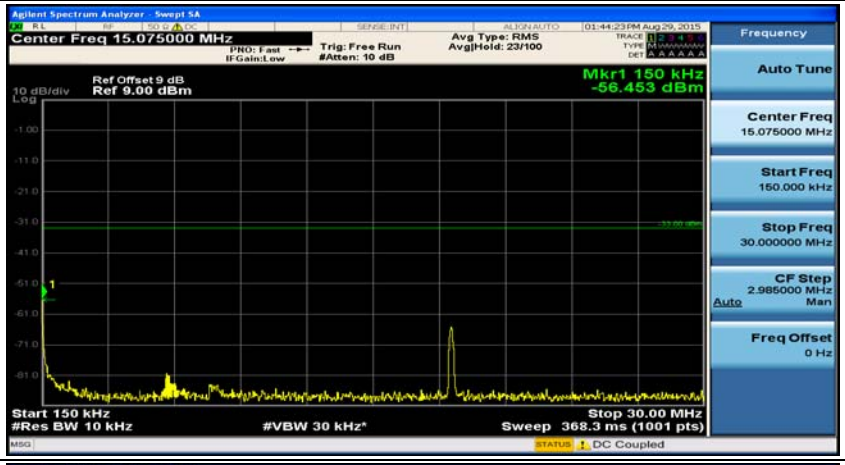
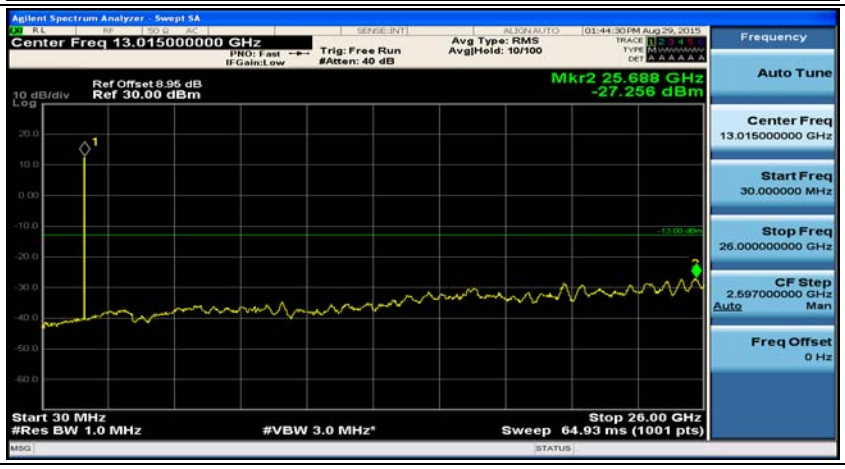
(Channel Bandwidth: 20 MHz)_MCH_QPSK_1RB#99




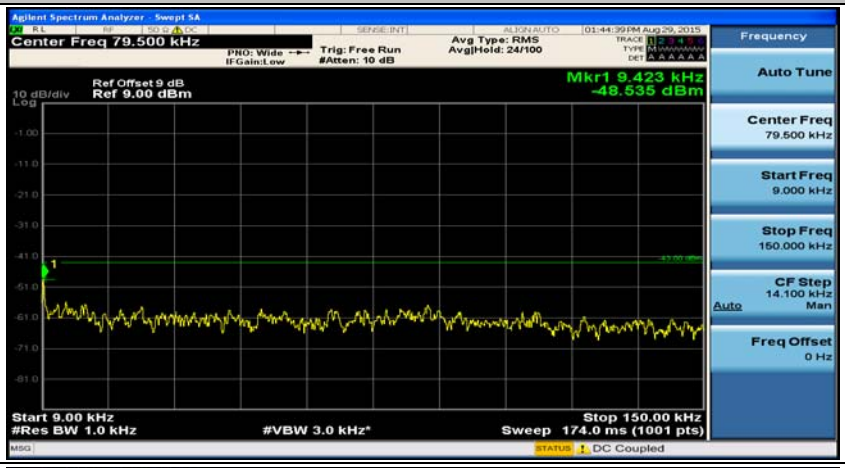
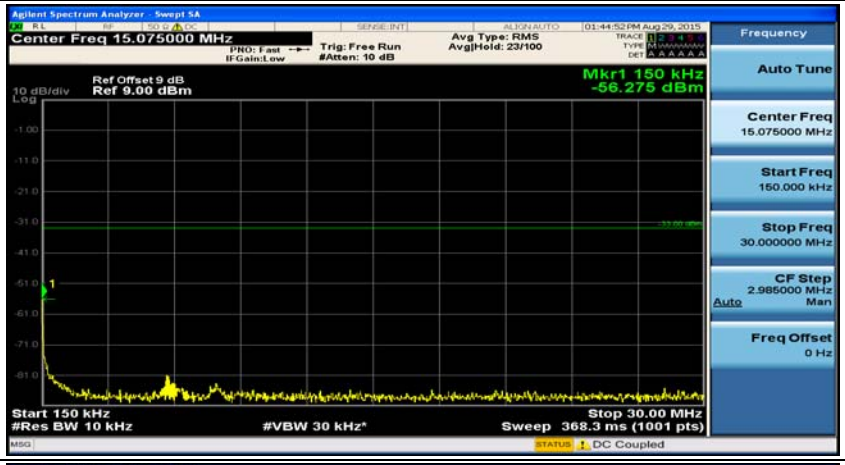
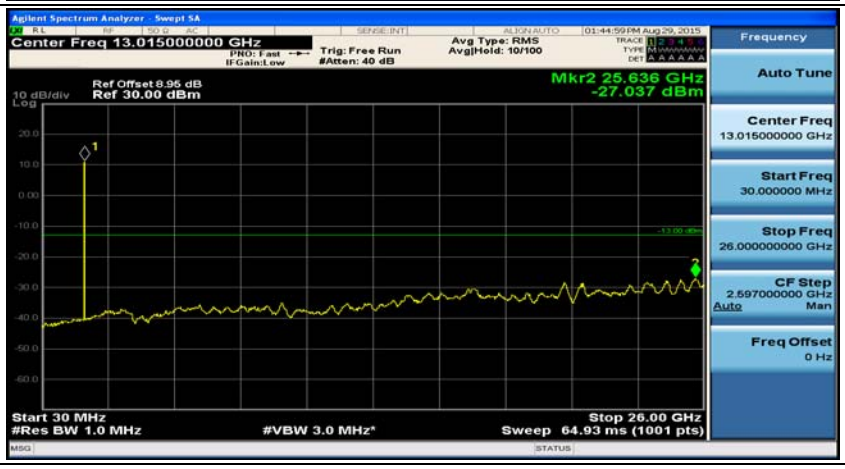
(Channel Bandwidth: 20 MHz)_HCH_QPSK_1RB#0




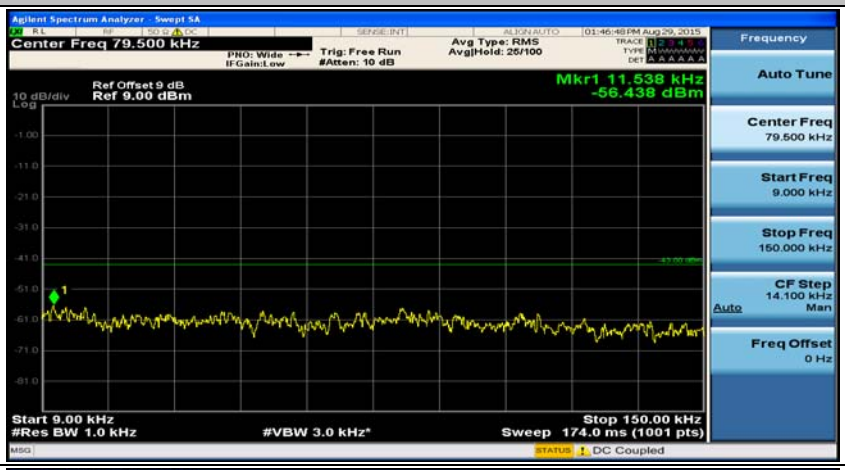
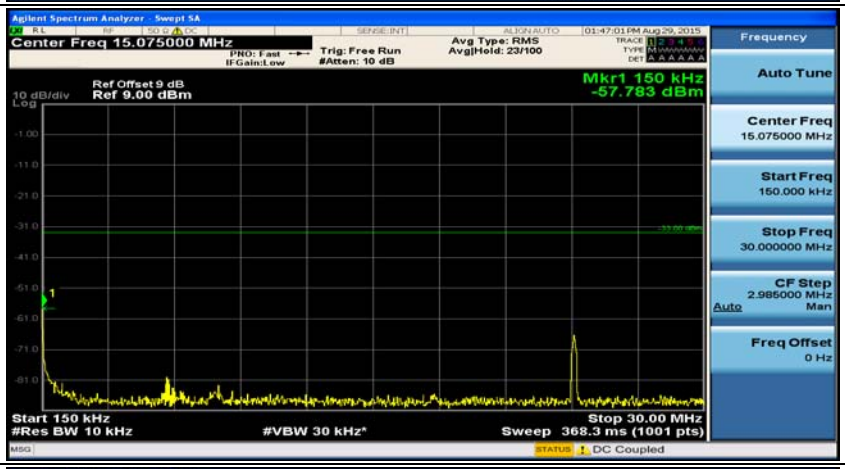
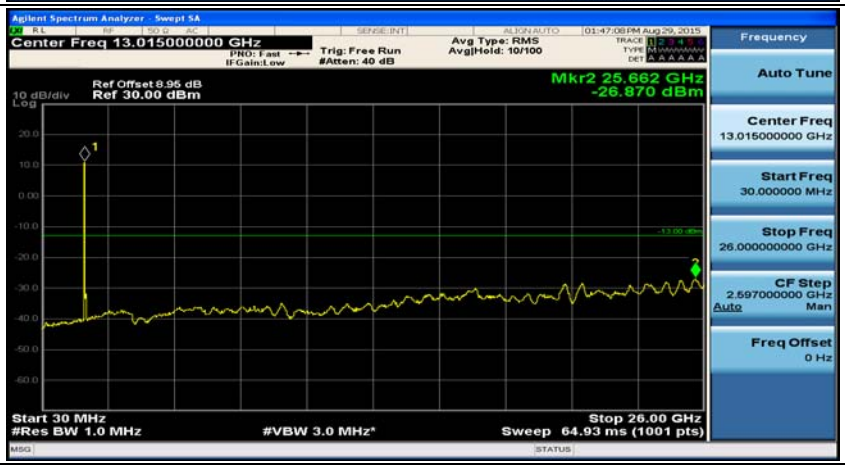
(Channel Bandwidth: 20 MHz)_HCH_QPSK_1RB#49




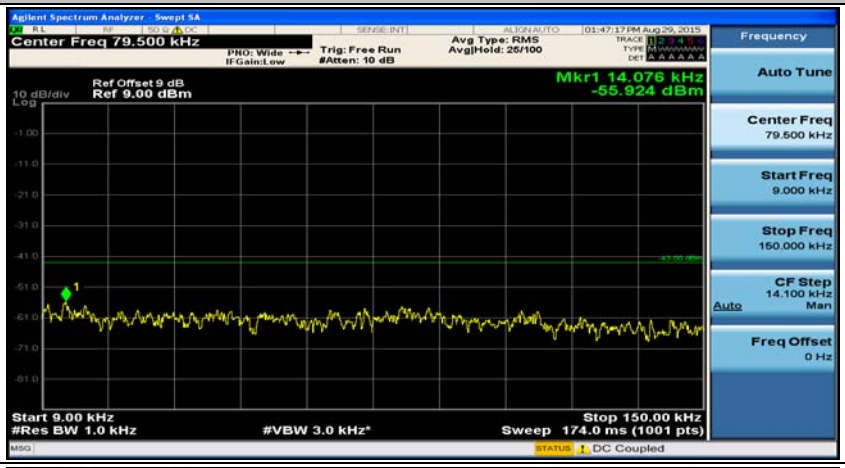
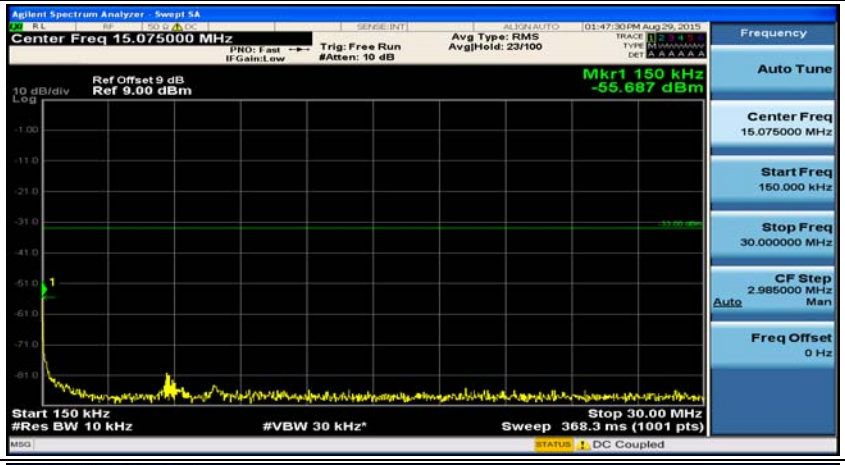
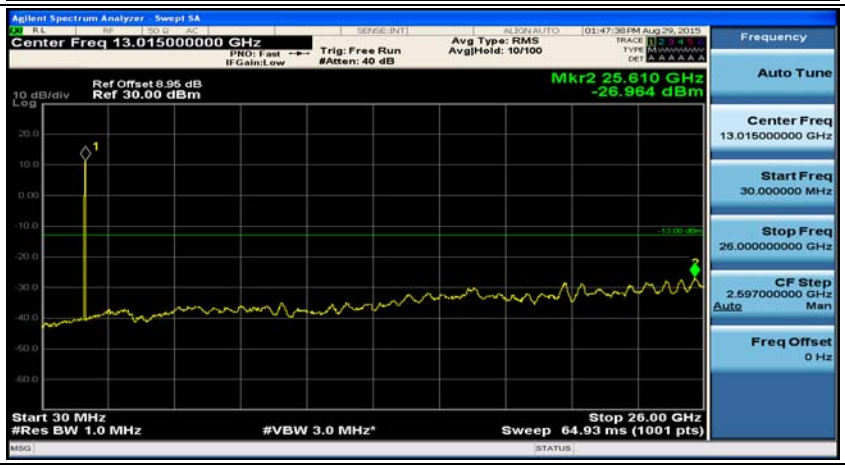
(Channel Bandwidth: 20 MHz)_HCH_QPSK_1RB#99




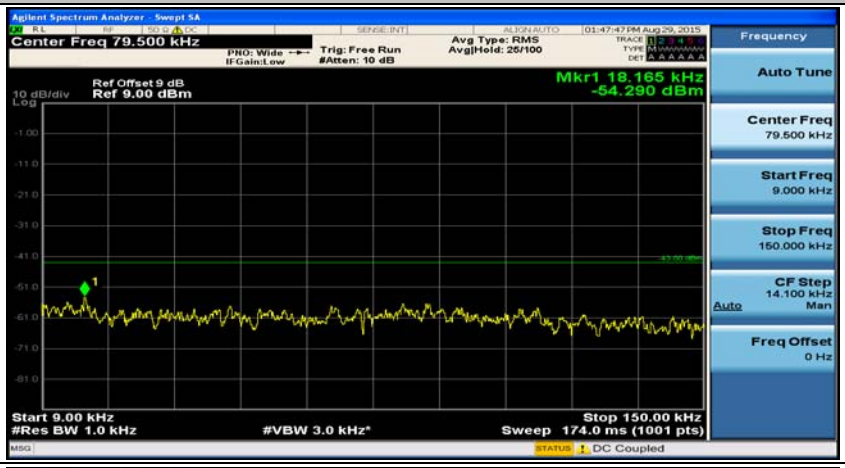
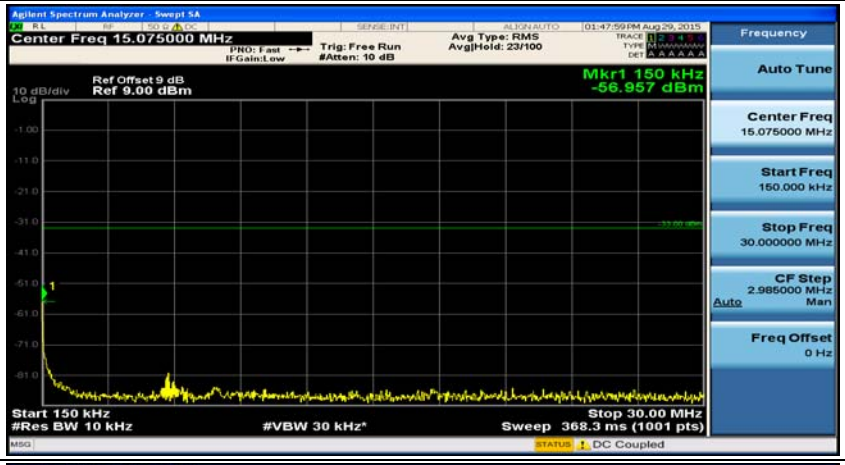
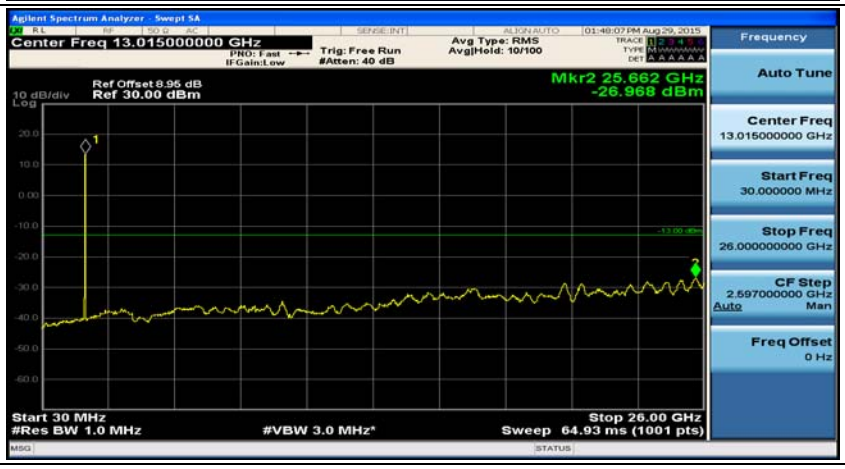
(Channel Bandwidth: 20 MHz)_LCH_16QAM_1RB#0




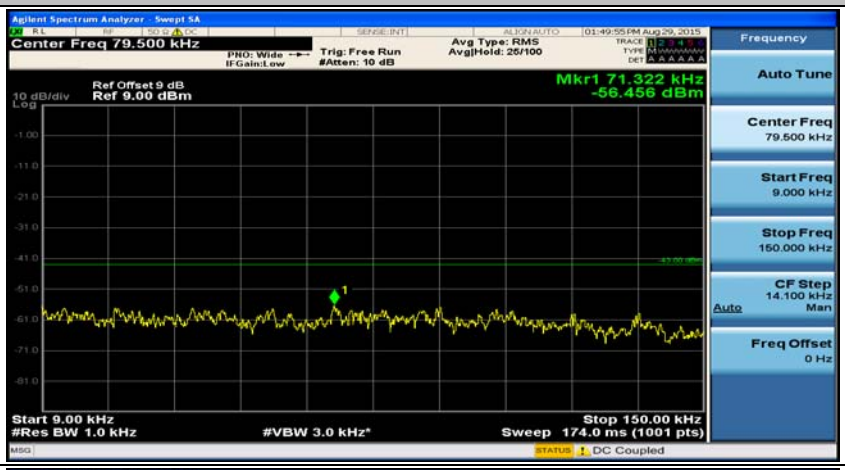
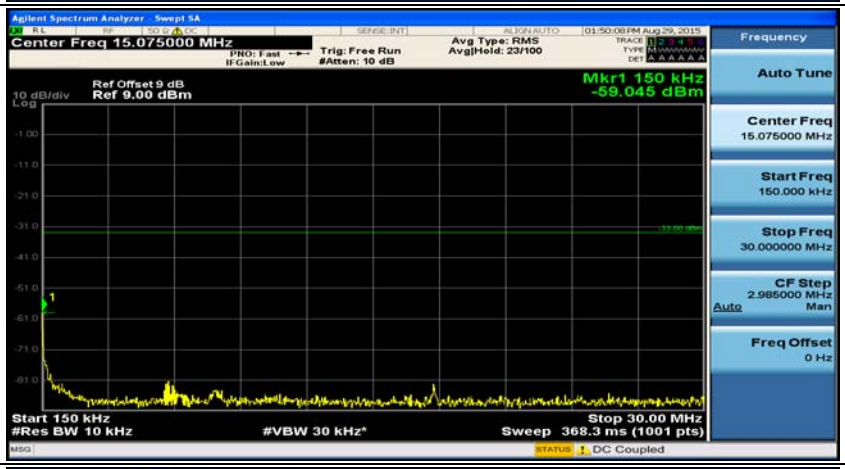
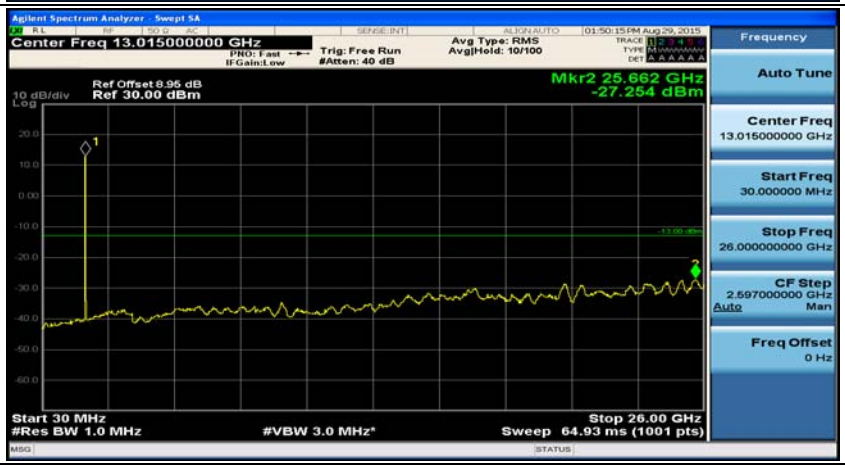
(Channel Bandwidth: 20 MHz)_LCH_16QAM_1RB#49




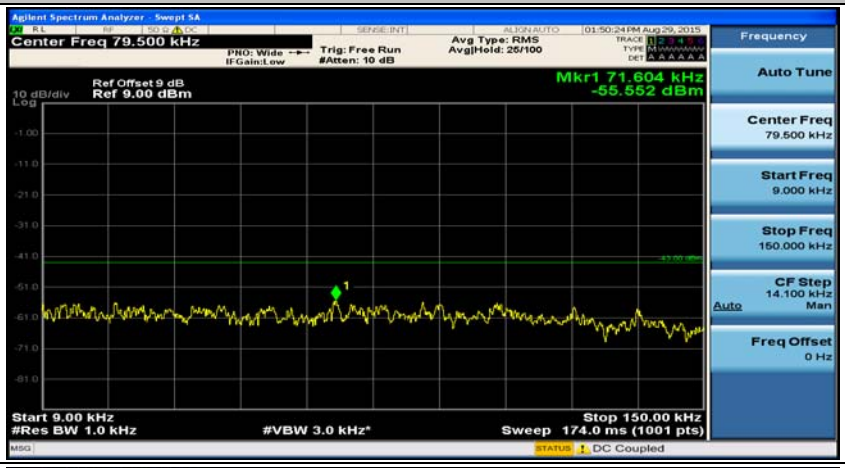
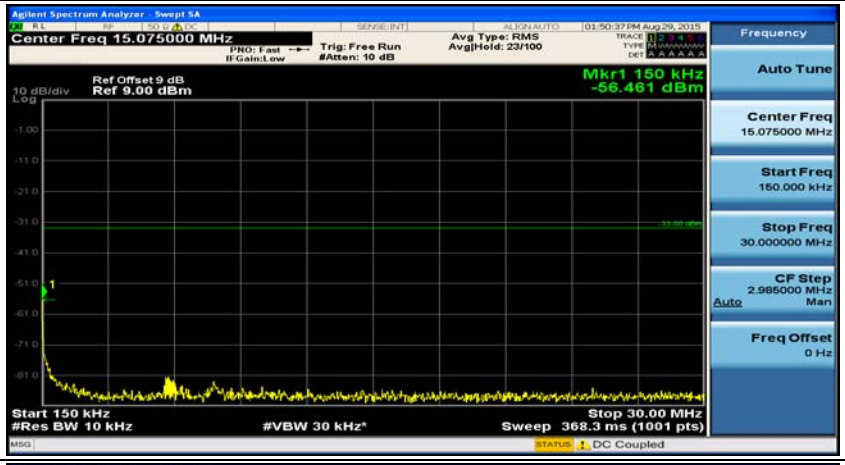
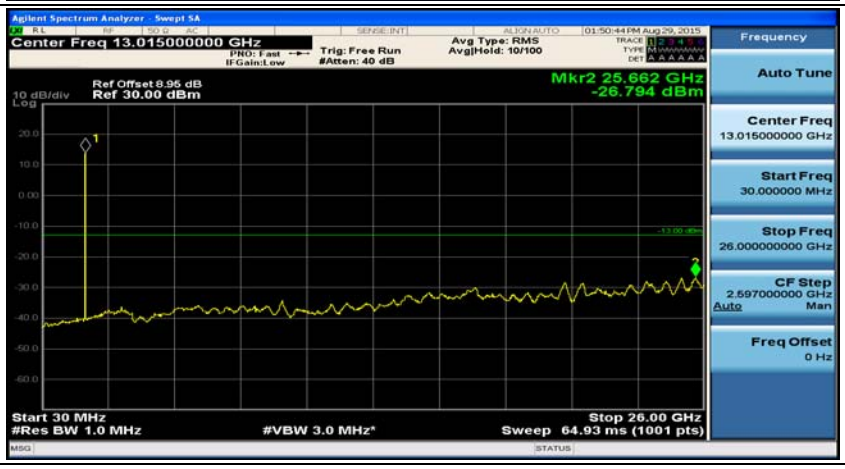
(Channel Bandwidth: 20 MHz)_LCH_16QAM_1RB#99




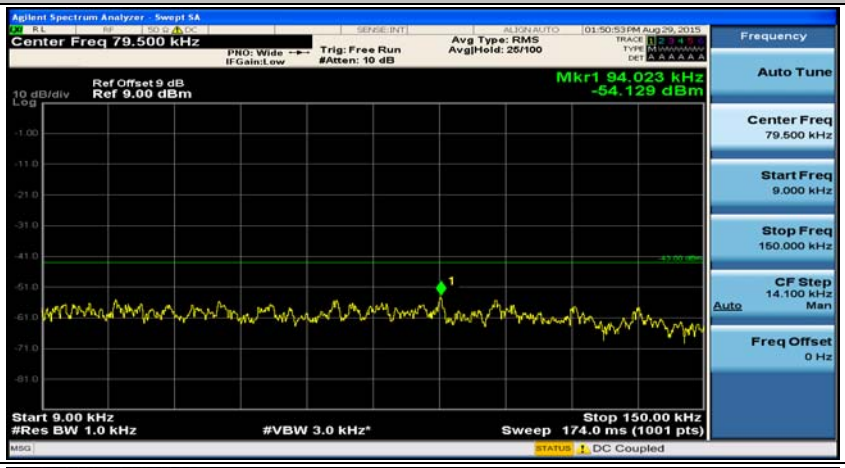
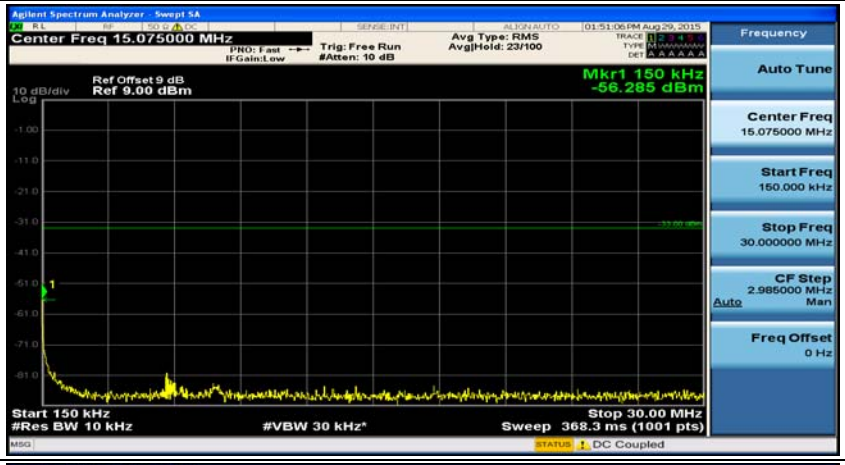
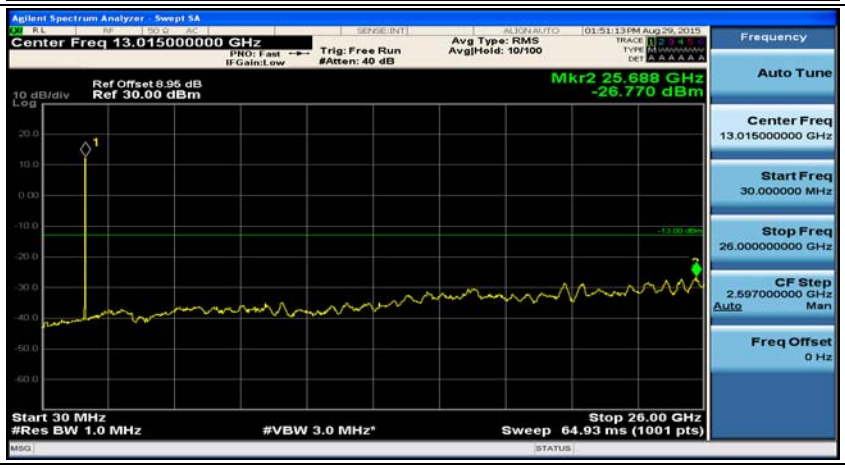
(Channel Bandwidth: 20 MHz)_MCH_16QAM_1RB#0




(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




Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.94	-0.000552	± 2.5	PASS
		VN	TN	1.47	0.000861	± 2.5	PASS
		VH	TN	0.27	0.000159	± 2.5	PASS
	MCH	VL	TN	1.99	0.001148	± 2.5	PASS
		VN	TN	1.07	0.000619	± 2.5	PASS
		VH	TN	-0.29	-0.000165	± 2.5	PASS
	HCH	VL	TN	3.58	0.002039	± 2.5	PASS
		VN	TN	-2.26	-0.001288	± 2.5	PASS
		VH	TN	3.93	0.002242	± 2.5	PASS
16QAM	LCH	VL	TN	-1.13	-0.000661	± 2.5	PASS
		VN	TN	2.09	0.001221	± 2.5	PASS
		VH	TN	-2.65	-0.001547	± 2.5	PASS
	MCH	VL	TN	-1.97	-0.001139	± 2.5	PASS
		VN	TN	1.09	0.000628	± 2.5	PASS
		VH	TN	-2.03	-0.001172	± 2.5	PASS
	HCH	VL	TN	-2.00	-0.001142	± 2.5	PASS
		VN	TN	0.26	0.000147	± 2.5	PASS
		VH	TN	-1.99	-0.001133	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.33	-0.000192	± 2.5	PASS
		VN	-20	-1.04	-0.000610	± 2.5	PASS
		VN	-10	-1.04	-0.000610	± 2.5	PASS
		VN	0	-0.06	-0.000033	± 2.5	PASS
		VN	10	-2.20	-0.001288	± 2.5	PASS
		VN	20	0.16	0.000092	± 2.5	PASS
		VN	30	-2.12	-0.001238	± 2.5	PASS
		VN	40	2.83	0.001656	± 2.5	PASS
		VN	50	2.76	0.001614	± 2.5	PASS
	MCH	VN	-30	-0.36	-0.000206	± 2.5	PASS
		VN	-20	-0.24	-0.000140	± 2.5	PASS
		VN	-10	-0.77	-0.000446	± 2.5	PASS
		VN	0	0.94	0.000545	± 2.5	PASS
		VN	10	-0.03	-0.000017	± 2.5	PASS
		VN	20	2.75	0.001585	± 2.5	PASS
		VN	30	0.77	0.000446	± 2.5	PASS

		VN	40	0.50	0.000289	± 2.5	PASS
		VN	50	-0.16	-0.000091	± 2.5	PASS
	HCH	VN	-30	-0.46	-0.000261	± 2.5	PASS
		VN	-20	1.22	0.000693	± 2.5	PASS
		VN	-10	2.02	0.001150	± 2.5	PASS
		VN	0	1.60	0.000913	± 2.5	PASS
		VN	10	-2.23	-0.001272	± 2.5	PASS
		VN	20	2.99	0.001704	± 2.5	PASS
		VN	30	3.63	0.002071	± 2.5	PASS
		VN	40	4.01	0.002283	± 2.5	PASS
		VN	50	5.01	0.002854	± 2.5	PASS
16QAM	LCH	VN	-30	-0.92	-0.000535	± 2.5	PASS
		VN	-20	-1.59	-0.000928	± 2.5	PASS
		VN	-10	2.23	0.001304	± 2.5	PASS
		VN	0	1.20	0.000702	± 2.5	PASS
		VN	10	0.41	0.000243	± 2.5	PASS
		VN	20	0.09	0.000050	± 2.5	PASS
		VN	30	-0.69	-0.000401	± 2.5	PASS
		VN	40	-0.41	-0.000243	± 2.5	PASS
		VN	50	-2.09	-0.001221	± 2.5	PASS
	MCH	VN	-30	-2.27	-0.001313	± 2.5	PASS
		VN	-20	-3.26	-0.001883	± 2.5	PASS
		VN	-10	1.69	0.000974	± 2.5	PASS
		VN	0	-0.60	-0.000347	± 2.5	PASS
		VN	10	0.37	0.000215	± 2.5	PASS
		VN	20	-1.04	-0.000603	± 2.5	PASS
		VN	30	-1.20	-0.000694	± 2.5	PASS
		VN	40	3.73	0.002155	± 2.5	PASS
		VN	50	1.99	0.001148	± 2.5	PASS
	HCH	VN	-30	-3.06	-0.001745	± 2.5	PASS
		VN	-20	0.31	0.000179	± 2.5	PASS
		VN	-10	-0.36	-0.000204	± 2.5	PASS
		VN	0	-0.36	-0.000204	± 2.5	PASS
		VN	10	0.31	0.000179	± 2.5	PASS
		VN	20	-1.04	-0.000595	± 2.5	PASS
		VN	30	3.58	0.002039	± 2.5	PASS
		VN	40	0.97	0.000554	± 2.5	PASS
		VN	50	0.86	0.000489	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	1.96	0.001145	± 2.5	PASS
		VN	TN	2.83	0.001655	± 2.5	PASS
		VH	TN	1.34	0.000786	± 2.5	PASS
	MCH	VL	TN	-0.37	-0.000215	± 2.5	PASS

		VN	TN	0.06	0.000033	± 2.5	PASS
		VH	TN	0.13	0.000074	± 2.5	PASS
	HCH	VL	TN	0.80	0.000457	± 2.5	PASS
		VN	TN	-0.19	-0.000106	± 2.5	PASS
		VH	TN	3.91	0.002227	± 2.5	PASS
16QAM	LCH	VL	TN	-1.93	-0.001128	± 2.5	PASS
		VN	TN	0.89	0.000518	± 2.5	PASS
		VH	TN	0.21	0.000125	± 2.5	PASS
	MCH	VL	TN	0.31	0.000182	± 2.5	PASS
		VN	TN	1.20	0.000694	± 2.5	PASS
		VH	TN	-1.10	-0.000636	± 2.5	PASS
	HCH	VL	TN	0.94	0.000538	± 2.5	PASS
		VN	TN	-1.50	-0.000857	± 2.5	PASS
		VH	TN	1.44	0.000824	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.82	0.001647	± 2.5	PASS
		VN	-20	-1.30	-0.000761	± 2.5	PASS
		VN	-10	1.34	0.000786	± 2.5	PASS
		VN	0	2.25	0.001312	± 2.5	PASS
		VN	10	2.46	0.001438	± 2.5	PASS
		VN	20	-1.59	-0.000928	± 2.5	PASS
		VN	30	-1.86	-0.001087	± 2.5	PASS
		VN	40	3.52	0.002056	± 2.5	PASS
		VN	50	-0.83	-0.000485	± 2.5	PASS
	MCH	VN	-30	-4.69	-0.002708	± 2.5	PASS
		VN	-20	-4.01	-0.002312	± 2.5	PASS
		VN	-10	0.47	0.000272	± 2.5	PASS
		VN	0	-0.04	-0.000025	± 2.5	PASS
		VN	10	-0.16	-0.000091	± 2.5	PASS
		VN	20	0.07	0.000041	± 2.5	PASS
		VN	30	3.06	0.001767	± 2.5	PASS
		VN	40	-1.07	-0.000619	± 2.5	PASS
		VN	50	1.39	0.000801	± 2.5	PASS
	HCH	VN	-30	-0.01	-0.000008	± 2.5	PASS
		VN	-20	1.47	0.000840	± 2.5	PASS
		VN	-10	-1.77	-0.001012	± 2.5	PASS
		VN	0	-1.34	-0.000767	± 2.5	PASS
		VN	10	-0.83	-0.000473	± 2.5	PASS
		VN	20	0.59	0.000334	± 2.5	PASS
		VN	30	1.87	0.001069	± 2.5	PASS
		VN	40	-1.36	-0.000775	± 2.5	PASS
		VN	50	2.07	0.001183	± 2.5	PASS
QPSK	LCH	VN	-30	0.00	0.000000	± 2.5	PASS
		VN	-20	-1.13	-0.000660	± 2.5	PASS
		VN	-10	-1.60	-0.000936	± 2.5	PASS
		VN	0	2.07	0.001212	± 2.5	PASS
		VN	10	-3.49	-0.002039	± 2.5	PASS
		VN	20	-0.37	-0.000217	± 2.5	PASS

		VN	30	1.30	0.000761	± 2.5	PASS
		VN	40	1.36	0.000794	± 2.5	PASS
		VN	50	0.17	0.000100	± 2.5	PASS
	MCH	VN	-30	-1.73	-0.000999	± 2.5	PASS
		VN	-20	-3.15	-0.001817	± 2.5	PASS
		VN	-10	-1.04	-0.000603	± 2.5	PASS
		VN	0	1.95	0.001123	± 2.5	PASS
		VN	10	1.59	0.000917	± 2.5	PASS
		VN	20	1.54	0.000892	± 2.5	PASS
		VN	30	0.44	0.000256	± 2.5	PASS
		VN	40	-0.83	-0.000479	± 2.5	PASS
		VN	50	-1.27	-0.000735	± 2.5	PASS
	HCH	VN	-30	0.06	0.000033	± 2.5	PASS
		VN	-20	-0.73	-0.000416	± 2.5	PASS
		VN	-10	-0.33	-0.000188	± 2.5	PASS
		VN	0	0.06	0.000033	± 2.5	PASS
		VN	10	-1.33	-0.000759	± 2.5	PASS
		VN	20	-1.14	-0.000653	± 2.5	PASS
		VN	30	0.70	0.000400	± 2.5	PASS
		VN	40	4.48	0.002553	± 2.5	PASS
		VN	50	-0.30	-0.000171	± 2.5	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.33	-0.000777	± 2.5	PASS
		VN	TN	2.46	0.001437	± 2.5	PASS
		VH	TN	-0.94	-0.000551	± 2.5	PASS
	MCH	VL	TN	3.56	0.002056	± 2.5	PASS
		VN	TN	-0.79	-0.000454	± 2.5	PASS
		VH	TN	-0.31	-0.000182	± 2.5	PASS
	HCH	VL	TN	0.29	0.000163	± 2.5	PASS
		VN	TN	4.09	0.002335	± 2.5	PASS
		VH	TN	0.97	0.000555	± 2.5	PASS
16QAM	LCH	VL	TN	0.50	0.000292	± 2.5	PASS
		VN	TN	-3.62	-0.002113	± 2.5	PASS
		VH	TN	-0.62	-0.000359	± 2.5	PASS
	MCH	VL	TN	-0.70	-0.000405	± 2.5	PASS
		VN	TN	-0.06	-0.000033	± 2.5	PASS
		VH	TN	3.60	0.002081	± 2.5	PASS
	HCH	VL	TN	3.16	0.001804	± 2.5	PASS
		VN	TN	0.30	0.000171	± 2.5	PASS
		VH	TN	0.66	0.000375	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict

QPSK	LCH	VN	-30	0.16	0.000092	± 2.5	PASS
		VN	-20	1.87	0.001094	± 2.5	PASS
		VN	-10	1.59	0.000927	± 2.5	PASS
		VN	0	-0.69	-0.000401	± 2.5	PASS
		VN	10	-1.77	-0.001036	± 2.5	PASS
		VN	20	-1.33	-0.000777	± 2.5	PASS
		VN	30	-0.04	-0.000025	± 2.5	PASS
		VN	40	-0.43	-0.000251	± 2.5	PASS
		VN	50	0.19	0.000109	± 2.5	PASS
	MCH	VN	-30	0.14	0.000083	± 2.5	PASS
		VN	-20	0.03	0.000017	± 2.5	PASS
		VN	-10	0.13	0.000074	± 2.5	PASS
		VN	0	-1.22	-0.000702	± 2.5	PASS
		VN	10	-1.04	-0.000603	± 2.5	PASS
		VN	20	-0.51	-0.000297	± 2.5	PASS
		VN	30	-1.16	-0.000669	± 2.5	PASS
		VN	40	0.50	0.000289	± 2.5	PASS
		VN	50	1.95	0.001123	± 2.5	PASS
	HCH	VN	-30	-0.74	-0.000424	± 2.5	PASS
		VN	-20	-0.19	-0.000106	± 2.5	PASS
		VN	-10	-0.87	-0.000498	± 2.5	PASS
		VN	0	1.19	0.000678	± 2.5	PASS
		VN	10	2.53	0.001445	± 2.5	PASS
		VN	20	-1.90	-0.001086	± 2.5	PASS
		VN	30	-1.75	-0.000996	± 2.5	PASS
		VN	40	-0.89	-0.000506	± 2.5	PASS
		VN	50	-0.66	-0.000375	± 2.5	PASS
16QAM	LCH	VN	-30	1.56	0.000911	± 2.5	PASS
		VN	-20	0.19	0.000109	± 2.5	PASS
		VN	-10	0.23	0.000134	± 2.5	PASS
		VN	0	-0.60	-0.000351	± 2.5	PASS
		VN	10	-0.10	-0.000058	± 2.5	PASS
		VN	20	-0.43	-0.000251	± 2.5	PASS
		VN	30	-3.03	-0.001771	± 2.5	PASS
		VN	40	0.96	0.000560	± 2.5	PASS
		VN	50	-0.29	-0.000167	± 2.5	PASS
	MCH	VN	-30	2.27	0.001313	± 2.5	PASS
		VN	-20	-0.99	-0.000570	± 2.5	PASS
		VN	-10	-1.20	-0.000694	± 2.5	PASS
		VN	0	-2.02	-0.001164	± 2.5	PASS
		VN	10	2.85	0.001643	± 2.5	PASS
		VN	20	0.74	0.000429	± 2.5	PASS
		VN	30	1.43	0.000826	± 2.5	PASS
		VN	40	-0.19	-0.000107	± 2.5	PASS
		VN	50	0.39	0.000223	± 2.5	PASS
	HCH	VN	-30	2.43	0.001388	± 2.5	PASS
		VN	-20	-1.83	-0.001045	± 2.5	PASS
		VN	-10	2.93	0.001673	± 2.5	PASS
		VN	0	-2.79	-0.001592	± 2.5	PASS
		VN	10	-0.11	-0.000065	± 2.5	PASS

		VN	20	1.73	0.000988	± 2.5	PASS
		VN	30	0.46	0.000261	± 2.5	PASS
		VN	40	0.59	0.000335	± 2.5	PASS
		VN	50	1.66	0.000947	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.37	0.000217	± 2.5	PASS
		VN	TN	-0.74	-0.000434	± 2.5	PASS
		VH	TN	1.16	0.000676	± 2.5	PASS
	MCH	VL	TN	0.07	0.000041	± 2.5	PASS
		VN	TN	1.32	0.000760	± 2.5	PASS
		VH	TN	1.07	0.000619	± 2.5	PASS
	HCH	VL	TN	-0.21	-0.000123	± 2.5	PASS
		VN	TN	1.17	0.000670	± 2.5	PASS
		VH	TN	-1.06	-0.000605	± 2.5	PASS
16QAM	LCH	VL	TN	0.20	0.000117	± 2.5	PASS
		VN	TN	0.39	0.000225	± 2.5	PASS
		VH	TN	0.53	0.000309	± 2.5	PASS
	MCH	VL	TN	1.27	0.000735	± 2.5	PASS
		VN	TN	0.43	0.000248	± 2.5	PASS
		VH	TN	0.59	0.000339	± 2.5	PASS
	HCH	VL	TN	-0.50	-0.000286	± 2.5	PASS
		VN	TN	-0.06	-0.000033	± 2.5	PASS
		VH	TN	-0.19	-0.000106	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	1.75	0.001018	± 2.5	PASS
		VN	-20	0.76	0.000442	± 2.5	PASS
		VN	-10	-0.04	-0.000025	± 2.5	PASS
		VN	0	-0.41	-0.000242	± 2.5	PASS
		VN	10	-0.04	-0.000025	± 2.5	PASS
		VN	20	0.37	0.000217	± 2.5	PASS
		VN	30	0.30	0.000175	± 2.5	PASS
		VN	40	-0.26	-0.000150	± 2.5	PASS
		VN	50	1.00	0.000584	± 2.5	PASS
	MCH	VN	-30	1.16	0.000669	± 2.5	PASS
		VN	-20	-0.50	-0.000289	± 2.5	PASS
		VN	-10	0.23	0.000132	± 2.5	PASS
		VN	0	0.10	0.000058	± 2.5	PASS
		VN	10	-0.66	-0.000380	± 2.5	PASS
		VN	20	-0.06	-0.000033	± 2.5	PASS
		VN	30	-0.11	-0.000066	± 2.5	PASS
		VN	40	0.29	0.000165	± 2.5	PASS

		VN	50	-0.46	-0.000264	± 2.5	PASS
	HCH	VN	-30	-0.16	-0.000090	± 2.5	PASS
		VN	-20	-0.21	-0.000123	± 2.5	PASS
		VN	-10	0.13	0.000074	± 2.5	PASS
		VN	0	0.11	0.000065	± 2.5	PASS
		VN	10	0.86	0.000490	± 2.5	PASS
		VN	20	0.54	0.000311	± 2.5	PASS
		VN	30	-0.31	-0.000180	± 2.5	PASS
		VN	40	0.36	0.000204	± 2.5	PASS
		VN	50	0.20	0.000114	± 2.5	PASS
QPSK	LCH	VN	-30	0.33	0.000192	± 2.5	PASS
		VN	-20	0.27	0.000158	± 2.5	PASS
		VN	-10	-0.21	-0.000125	± 2.5	PASS
		VN	0	-0.67	-0.000392	± 2.5	PASS
		VN	10	0.16	0.000092	± 2.5	PASS
		VN	20	0.64	0.000375	± 2.5	PASS
		VN	30	1.07	0.000626	± 2.5	PASS
		VN	40	1.32	0.000767	± 2.5	PASS
		VN	50	0.57	0.000334	± 2.5	PASS
	MCH	VN	-30	-0.51	-0.000297	± 2.5	PASS
		VN	-20	0.40	0.000231	± 2.5	PASS
		VN	-10	-0.54	-0.000314	± 2.5	PASS
		VN	0	0.20	0.000116	± 2.5	PASS
		VN	10	-0.50	-0.000289	± 2.5	PASS
		VN	20	0.94	0.000545	± 2.5	PASS
		VN	30	1.27	0.000735	± 2.5	PASS
		VN	40	0.03	0.000017	± 2.5	PASS
		VN	50	0.63	0.000363	± 2.5	PASS
	HCH	VN	-30	-0.23	-0.000131	± 2.5	PASS
		VN	-20	-0.39	-0.000221	± 2.5	PASS
		VN	-10	-1.00	-0.000572	± 2.5	PASS
		VN	0	1.00	0.000572	± 2.5	PASS
		VN	10	0.27	0.000155	± 2.5	PASS
		VN	20	0.40	0.000229	± 2.5	PASS
		VN	30	0.26	0.000147	± 2.5	PASS
		VN	40	0.51	0.000294	± 2.5	PASS
		VN	50	0.80	0.000458	± 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	1.53	0.000891	± 2.5	PASS
		VN	TN	-1.06	-0.000616	± 2.5	PASS
		VH	TN	0.73	0.000425	± 2.5	PASS
	MCH	VL	TN	-0.27	-0.000157	± 2.5	PASS
		VN	TN	0.07	0.000041	± 2.5	PASS

		VH	TN	-0.37	-0.000215	± 2.5	PASS
	HCH	VL	TN	0.37	0.000213	± 2.5	PASS
		VN	TN	1.65	0.000941	± 2.5	PASS
		VH	TN	-0.70	-0.000401	± 2.5	PASS
16QAM	LCH	VL	TN	-0.57	-0.000333	± 2.5	PASS
		VN	TN	0.06	0.000033	± 2.5	PASS
		VH	TN	0.39	0.000225	± 2.5	PASS
	MCH	VL	TN	0.34	0.000198	± 2.5	PASS
		VN	TN	0.23	0.000132	± 2.5	PASS
		VH	TN	-0.67	-0.000388	± 2.5	PASS
	HCH	VL	TN	0.23	0.000131	± 2.5	PASS
		VN	TN	-0.37	-0.000213	± 2.5	PASS
		VH	TN	0.26	0.000147	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.02	0.000591	± 2.5	PASS
		VN	-20	0.43	0.000250	± 2.5	PASS
		VN	-10	-0.87	-0.000508	± 2.5	PASS
		VN	0	0.36	0.000208	± 2.5	PASS
		VN	10	-0.31	-0.000183	± 2.5	PASS
		VN	20	0.06	0.000033	± 2.5	PASS
		VN	30	0.16	0.000092	± 2.5	PASS
		VN	40	-0.36	-0.000208	± 2.5	PASS
		VN	50	0.44	0.000258	± 2.5	PASS
	MCH	VN	-30	-0.16	-0.000091	± 2.5	PASS
		VN	-20	-0.57	-0.000330	± 2.5	PASS
		VN	-10	0.04	0.000025	± 2.5	PASS
		VN	0	-0.17	-0.000099	± 2.5	PASS
		VN	10	-0.27	-0.000157	± 2.5	PASS
		VN	20	0.43	0.000248	± 2.5	PASS
		VN	30	-0.43	-0.000248	± 2.5	PASS
		VN	40	-0.56	-0.000322	± 2.5	PASS
		VN	50	-0.67	-0.000388	± 2.5	PASS
	HCH	VN	-30	0.20	0.000115	± 2.5	PASS
		VN	-20	0.63	0.000360	± 2.5	PASS
		VN	-10	0.70	0.000401	± 2.5	PASS
		VN	0	-0.47	-0.000270	± 2.5	PASS
		VN	10	1.10	0.000630	± 2.5	PASS
		VN	20	-1.09	-0.000622	± 2.5	PASS
		VN	30	-0.51	-0.000295	± 2.5	PASS
		VN	40	-0.17	-0.000098	± 2.5	PASS
		VN	50	0.51	0.000295	± 2.5	PASS
QPSK	LCH	VN	-30	-0.07	-0.000042	± 2.5	PASS
		VN	-20	1.23	0.000716	± 2.5	PASS
		VN	-10	1.17	0.000683	± 2.5	PASS
		VN	0	0.76	0.000441	± 2.5	PASS
		VN	10	0.62	0.000358	± 2.5	PASS
		VN	20	-0.01	-0.000008	± 2.5	PASS
		VN	30	0.17	0.000100	± 2.5	PASS

		VN	40	0.74	0.000433	± 2.5	PASS
		VN	50	1.59	0.000925	± 2.5	PASS
	MCH	VN	-30	1.14	0.000661	± 2.5	PASS
		VN	-20	-0.33	-0.000190	± 2.5	PASS
		VN	-10	-0.72	-0.000413	± 2.5	PASS
		VN	0	0.59	0.000339	± 2.5	PASS
		VN	10	0.72	0.000413	± 2.5	PASS
		VN	20	0.93	0.000537	± 2.5	PASS
		VN	30	0.40	0.000231	± 2.5	PASS
		VN	40	-0.59	-0.000339	± 2.5	PASS
		VN	50	-0.49	-0.000281	± 2.5	PASS
	HCH	VN	-30	-0.44	-0.000254	± 2.5	PASS
		VN	-20	0.46	0.000262	± 2.5	PASS
		VN	-10	-0.10	-0.000057	± 2.5	PASS
		VN	0	-0.30	-0.000172	± 2.5	PASS
		VN	10	-0.04	-0.000025	± 2.5	PASS
		VN	20	-0.33	-0.000188	± 2.5	PASS
		VN	30	0.62	0.000352	± 2.5	PASS
		VN	40	0.43	0.000246	± 2.5	PASS
		VN	50	-0.39	-0.000221	± 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	0.49	0.000283	± 2.5	PASS
		VN	TN	1.42	0.000823	± 2.5	PASS
		VH	TN	-0.26	-0.000150	± 2.5	PASS
	MCH	VL	TN	-1.39	-0.000801	± 2.5	PASS
		VN	TN	1.30	0.000751	± 2.5	PASS
		VH	TN	-1.60	-0.000925	± 2.5	PASS
	HCH	VL	TN	0.70	0.000402	± 2.5	PASS
		VN	TN	0.66	0.000377	± 2.5	PASS
		VH	TN	0.29	0.000164	± 2.5	PASS
16QAM	LCH	VL	TN	-0.43	-0.000250	± 2.5	PASS
		VN	TN	0.37	0.000216	± 2.5	PASS
		VH	TN	0.77	0.000449	± 2.5	PASS
	MCH	VL	TN	-0.56	-0.000322	± 2.5	PASS
		VN	TN	0.34	0.000198	± 2.5	PASS
		VH	TN	0.56	0.000322	± 2.5	PASS
	HCH	VL	TN	0.23	0.000131	± 2.5	PASS
		VN	TN	0.67	0.000385	± 2.5	PASS
		VH	TN	0.62	0.000353	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.33	0.000191	± 2.5	PASS

		VN	-20	-0.62	-0.000358	± 2.5	PASS
		VN	-10	0.57	0.000333	± 2.5	PASS
		VN	0	0.77	0.000449	± 2.5	PASS
		VN	10	0.27	0.000158	± 2.5	PASS
		VN	20	0.59	0.000341	± 2.5	PASS
		VN	30	1.33	0.000773	± 2.5	PASS
		VN	40	0.00	0.000000	± 2.5	PASS
		VN	50	0.76	0.000441	± 2.5	PASS
	MCH	VN	-30	0.03	0.000017	± 2.5	PASS
		VN	-20	0.27	0.000157	± 2.5	PASS
		VN	-10	0.14	0.000083	± 2.5	PASS
		VN	0	-0.03	-0.000017	± 2.5	PASS
		VN	10	-1.39	-0.000801	± 2.5	PASS
		VN	20	0.53	0.000306	± 2.5	PASS
		VN	30	0.34	0.000198	± 2.5	PASS
		VN	40	0.36	0.000206	± 2.5	PASS
		VN	50	0.34	0.000198	± 2.5	PASS
	HCH	VN	-30	1.34	0.000771	± 2.5	PASS
		VN	-20	-0.26	-0.000148	± 2.5	PASS
		VN	-10	0.44	0.000254	± 2.5	PASS
		VN	0	1.23	0.000705	± 2.5	PASS
		VN	10	-0.79	-0.000451	± 2.5	PASS
		VN	20	0.41	0.000238	± 2.5	PASS
		VN	30	0.93	0.000533	± 2.5	PASS
		VN	40	-0.43	-0.000246	± 2.5	PASS
		VN	50	-0.43	-0.000246	± 2.5	PASS
QPSK	LCH	VN	-30	0.04	0.000025	± 2.5	PASS
		VN	-20	0.24	0.000141	± 2.5	PASS
		VN	-10	0.40	0.000233	± 2.5	PASS
		VN	0	0.60	0.000349	± 2.5	PASS
		VN	10	0.14	0.000083	± 2.5	PASS
		VN	20	0.43	0.000250	± 2.5	PASS
		VN	30	0.86	0.000499	± 2.5	PASS
		VN	40	0.47	0.000274	± 2.5	PASS
		VN	50	0.53	0.000308	± 2.5	PASS
	MCH	VN	-30	-0.27	-0.000157	± 2.5	PASS
		VN	-20	0.01	0.000008	± 2.5	PASS
		VN	-10	0.09	0.000050	± 2.5	PASS
		VN	0	0.36	0.000206	± 2.5	PASS
		VN	10	0.43	0.000248	± 2.5	PASS
		VN	20	-0.24	-0.000140	± 2.5	PASS
		VN	30	-0.36	-0.000206	± 2.5	PASS
		VN	40	0.20	0.000116	± 2.5	PASS
		VN	50	0.13	0.000074	± 2.5	PASS
	HCH	VN	-30	0.66	0.000377	± 2.5	PASS
		VN	-20	0.51	0.000295	± 2.5	PASS
		VN	-10	-0.54	-0.000312	± 2.5	PASS
		VN	0	-0.06	-0.000033	± 2.5	PASS
		VN	10	0.51	0.000295	± 2.5	PASS
		VN	20	-0.54	-0.000312	± 2.5	PASS

		VN	30	0.99	0.000566	± 2.5	PASS
		VN	40	0.90	0.000516	± 2.5	PASS
		VN	50	1.03	0.000590	± 2.5	PASS