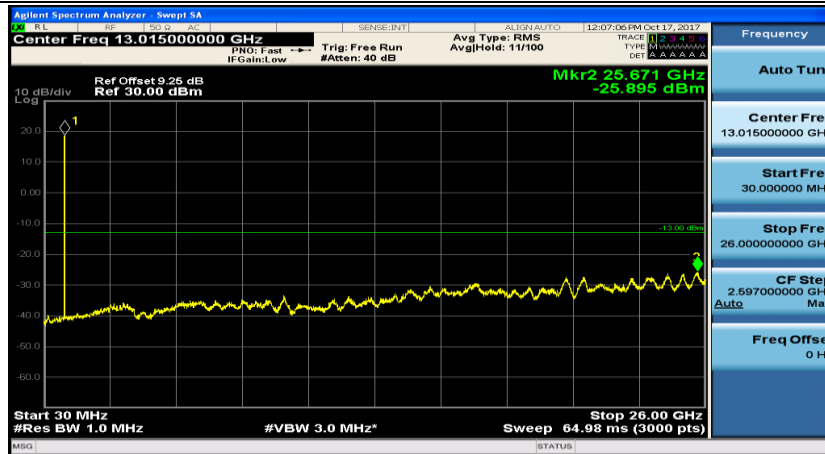
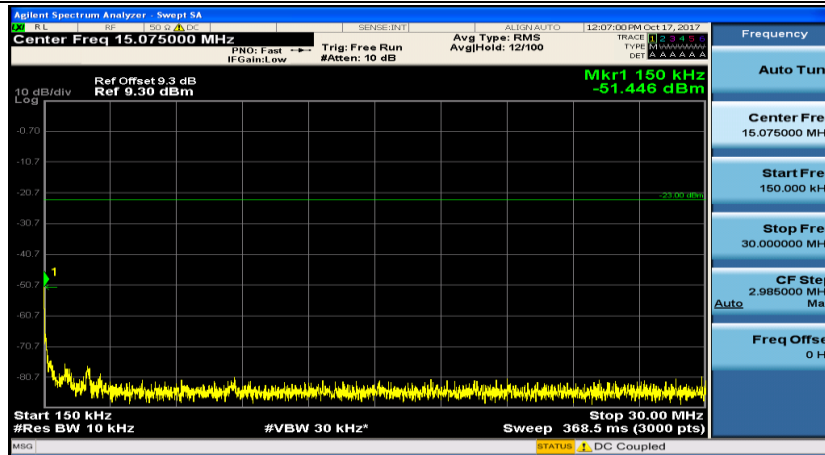
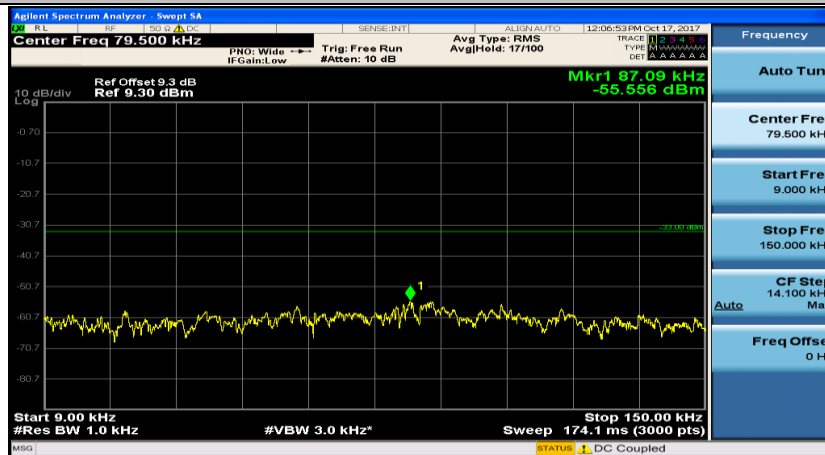
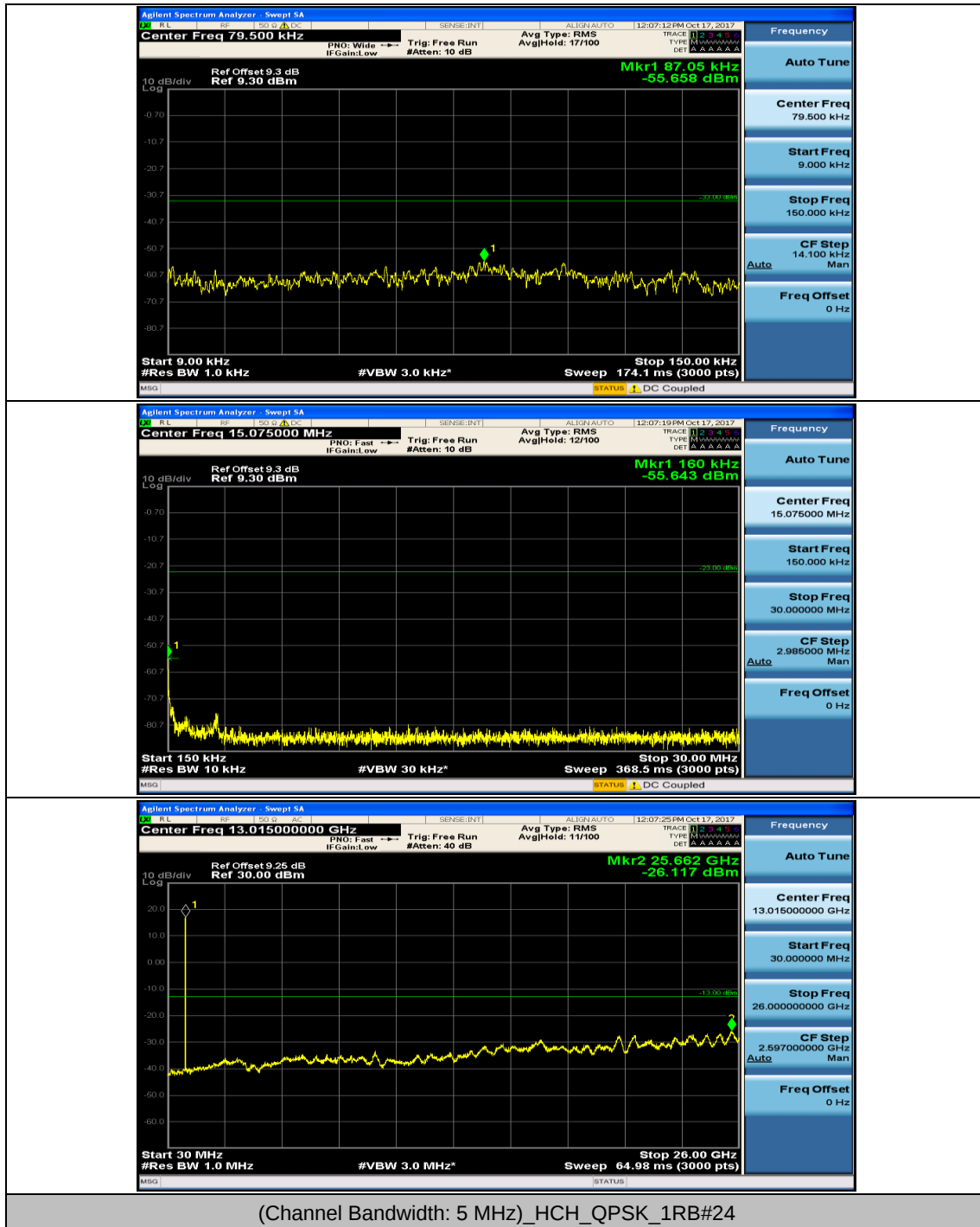
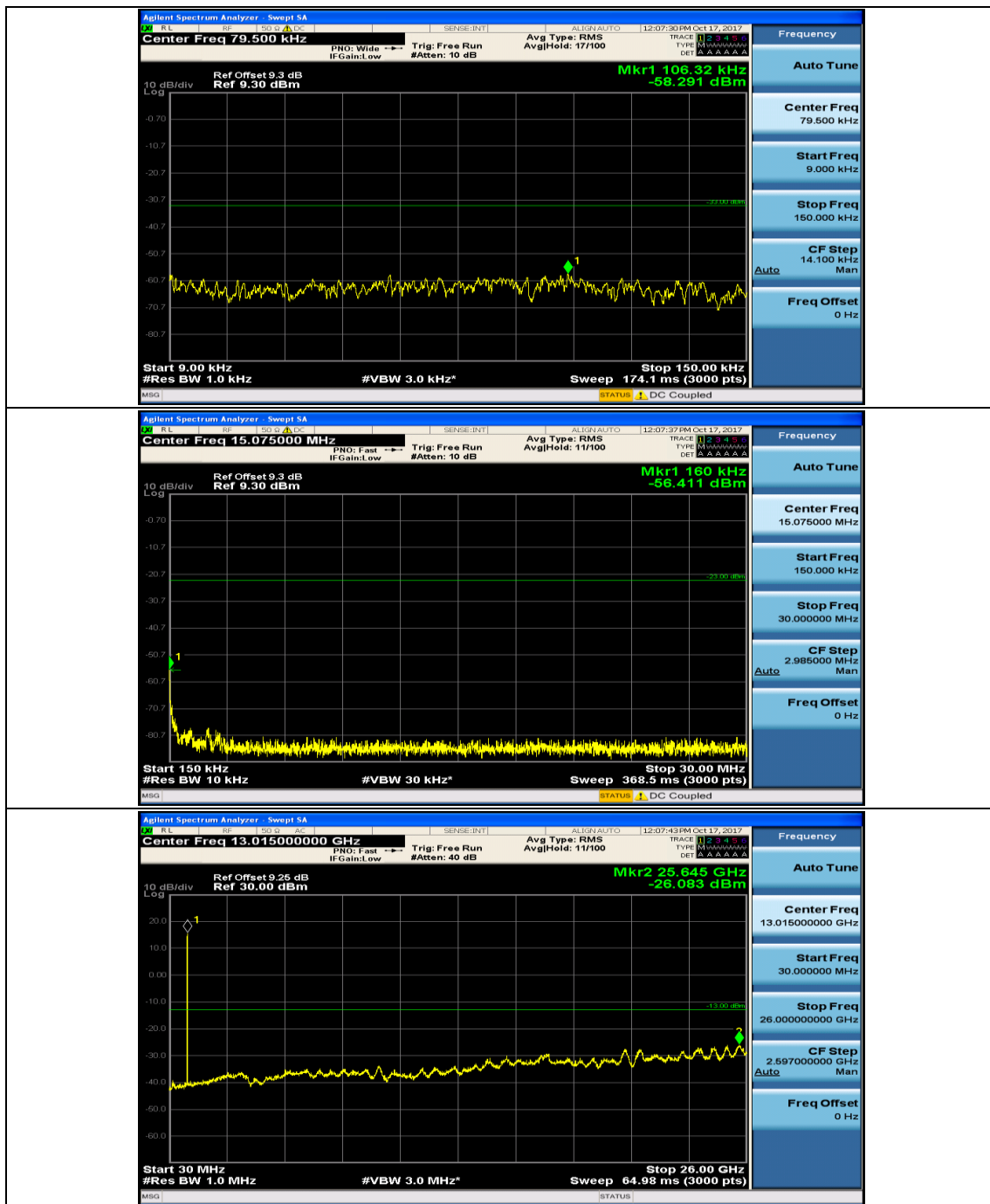


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

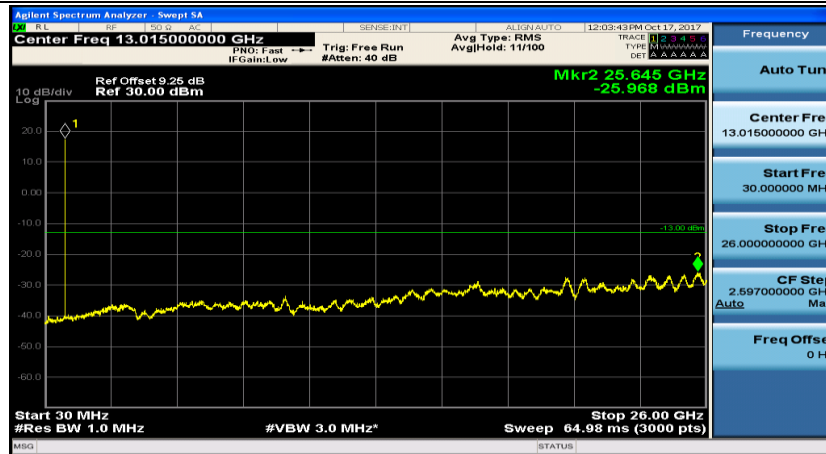
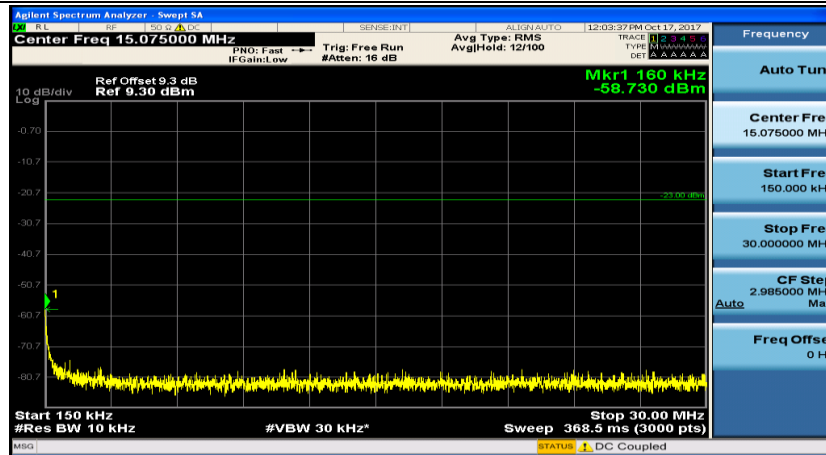
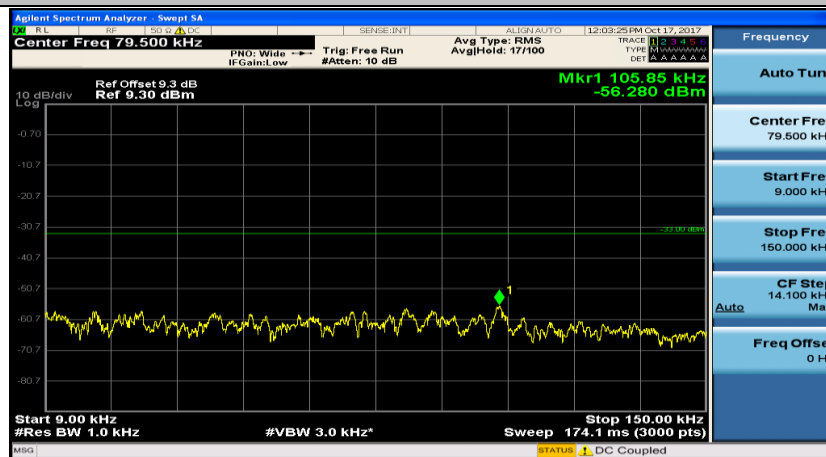


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

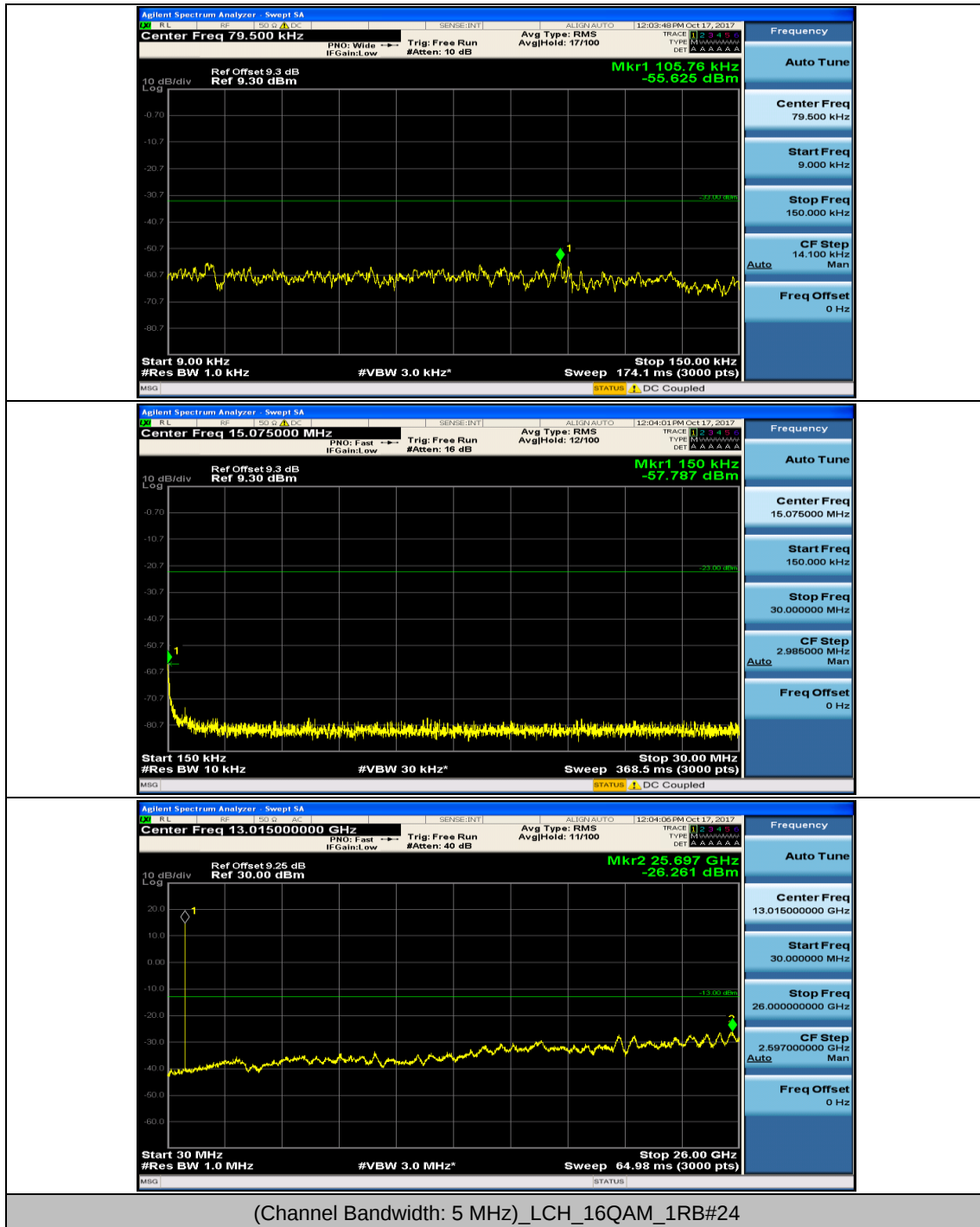


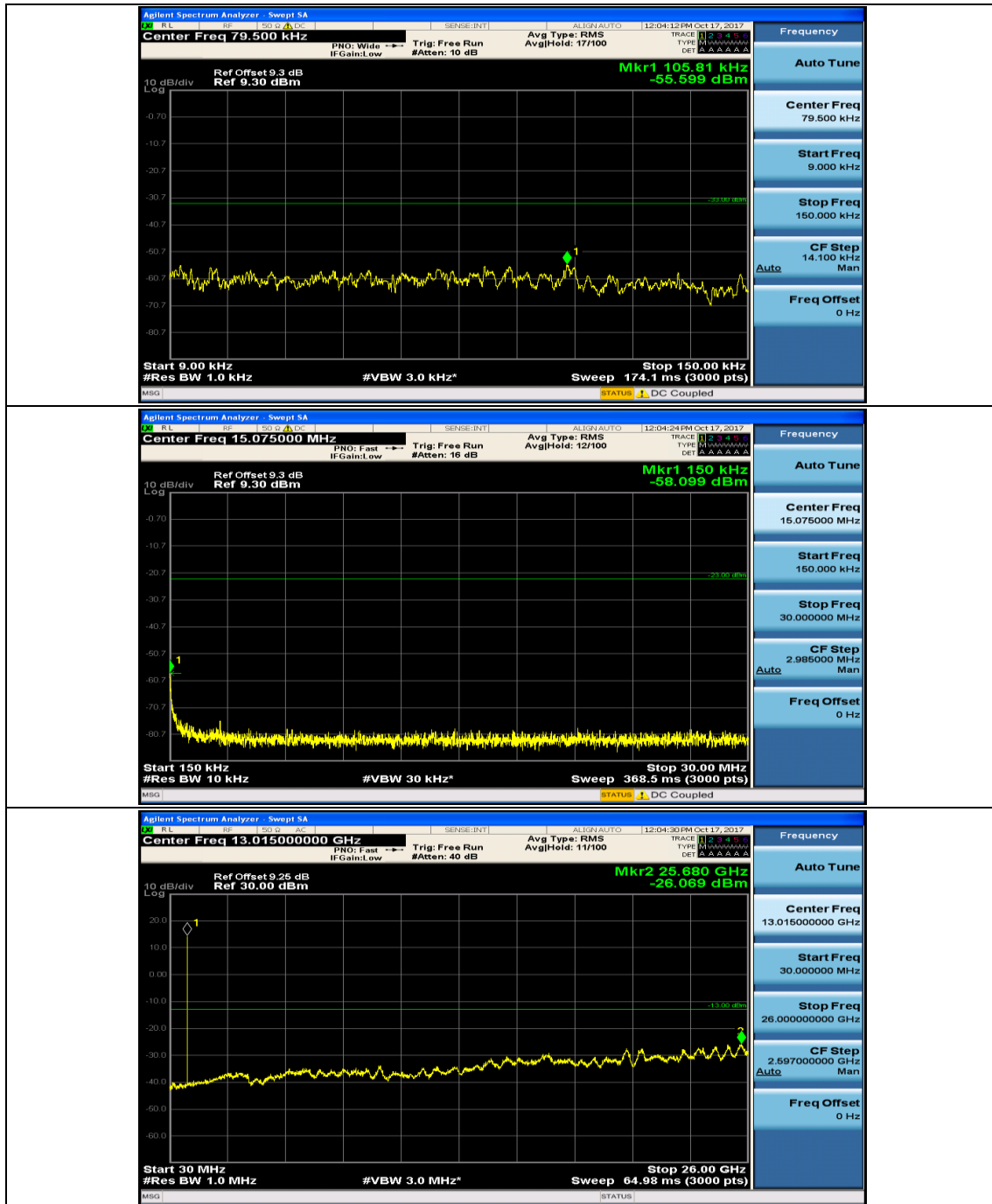


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

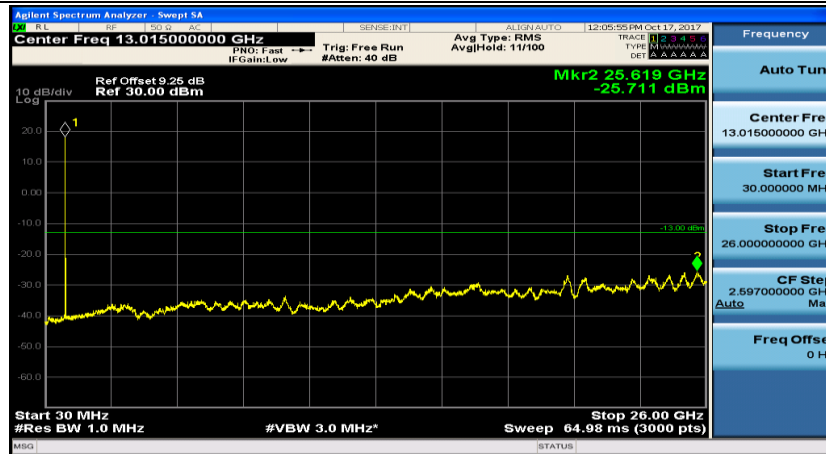
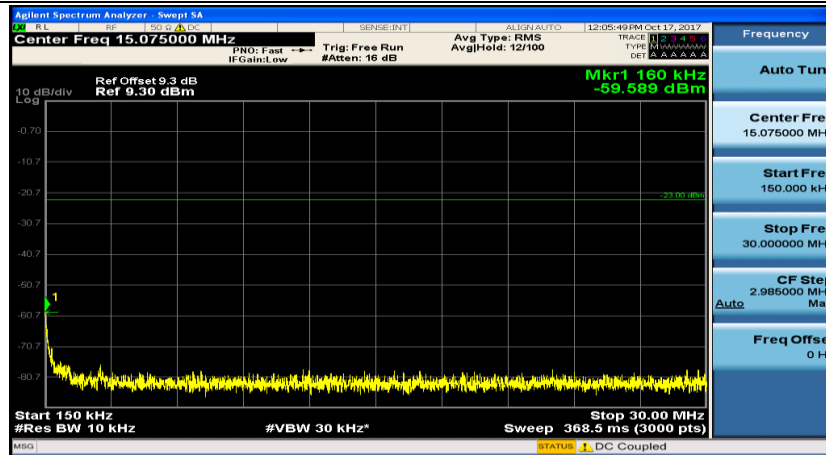
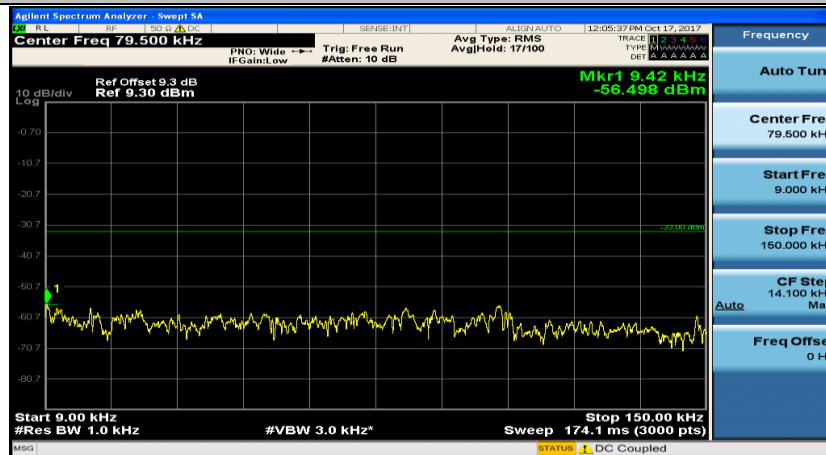


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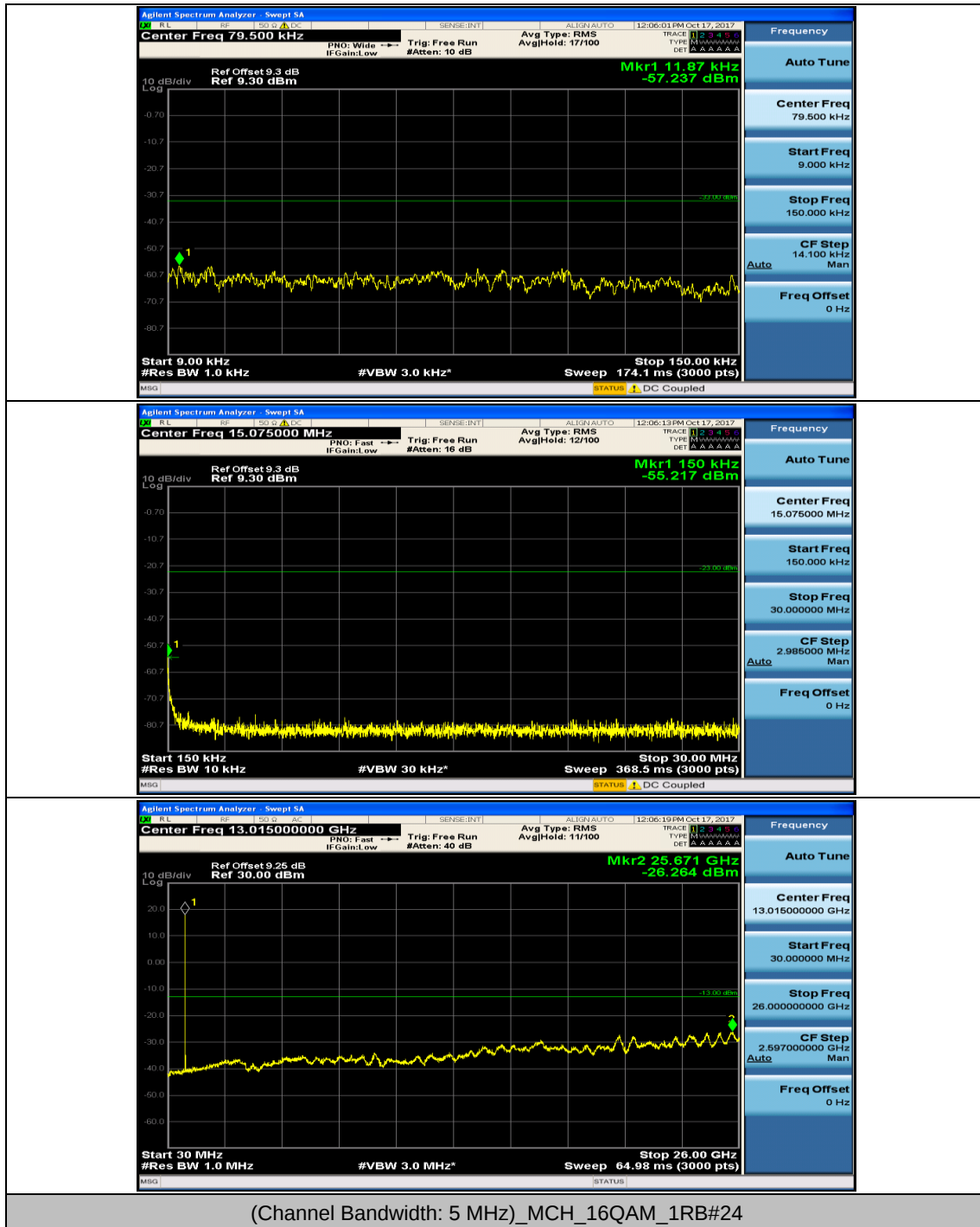


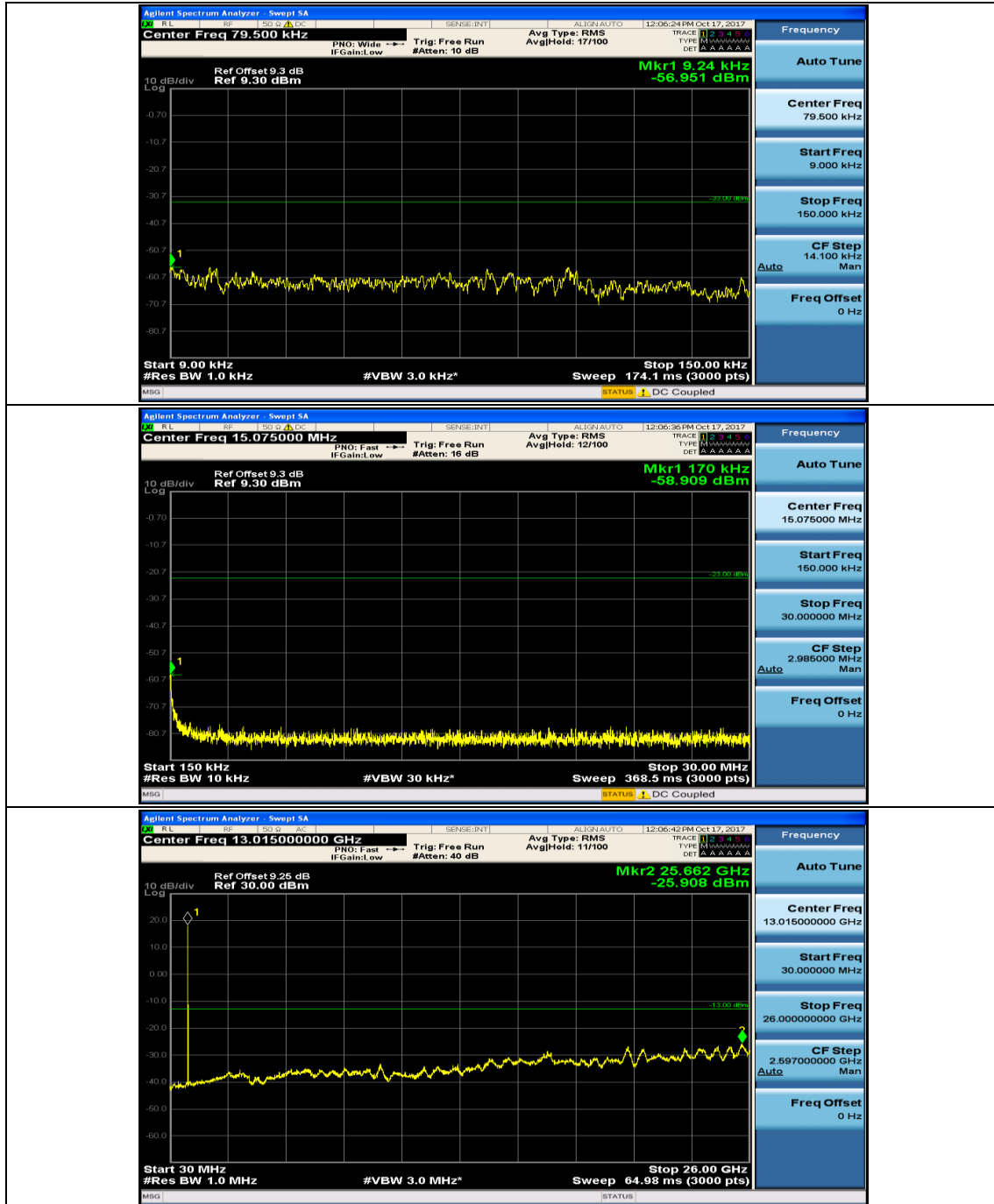


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

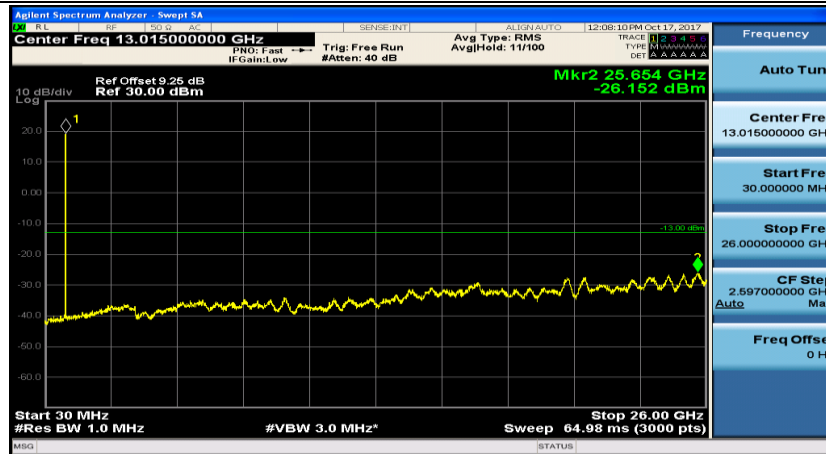
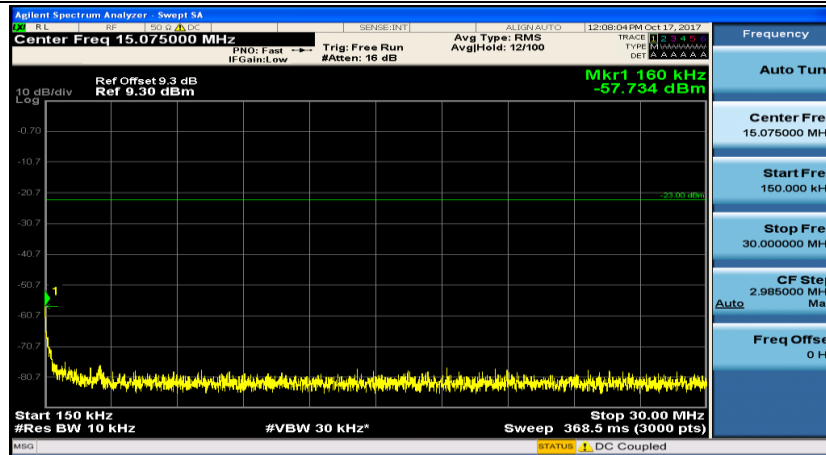
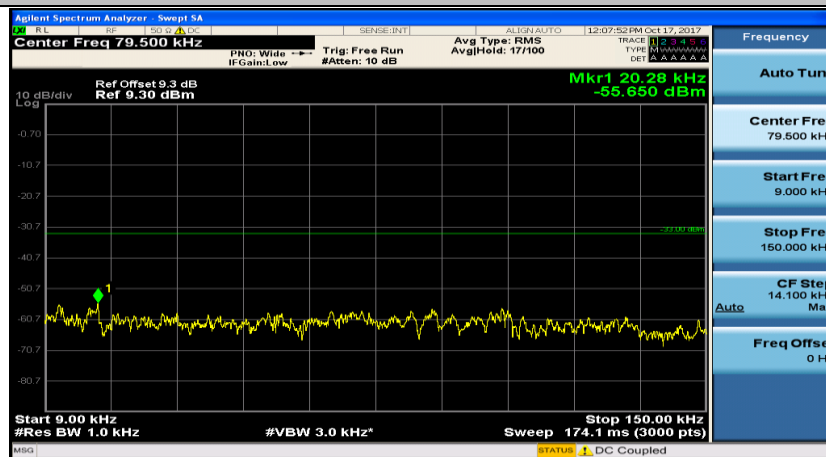


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

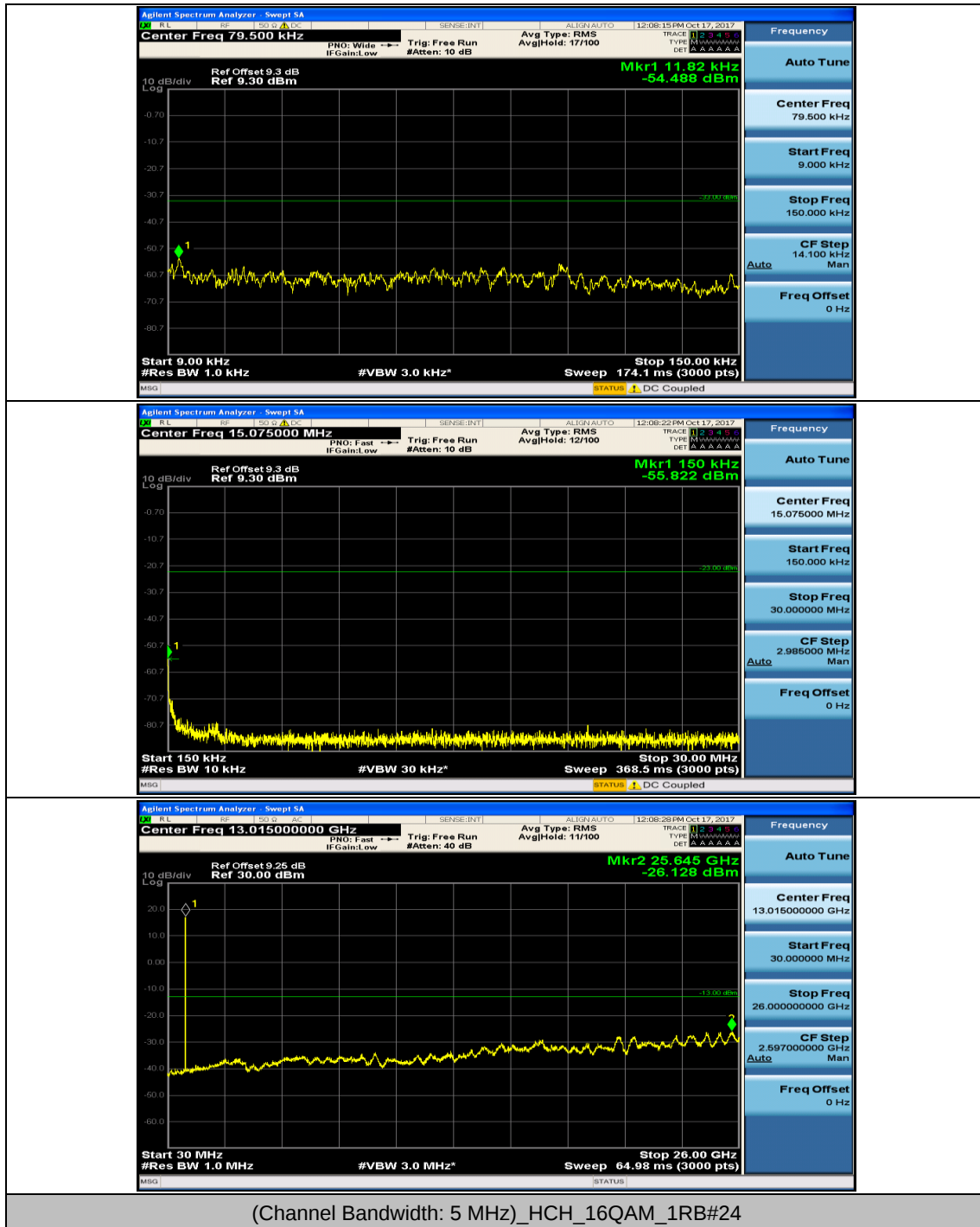


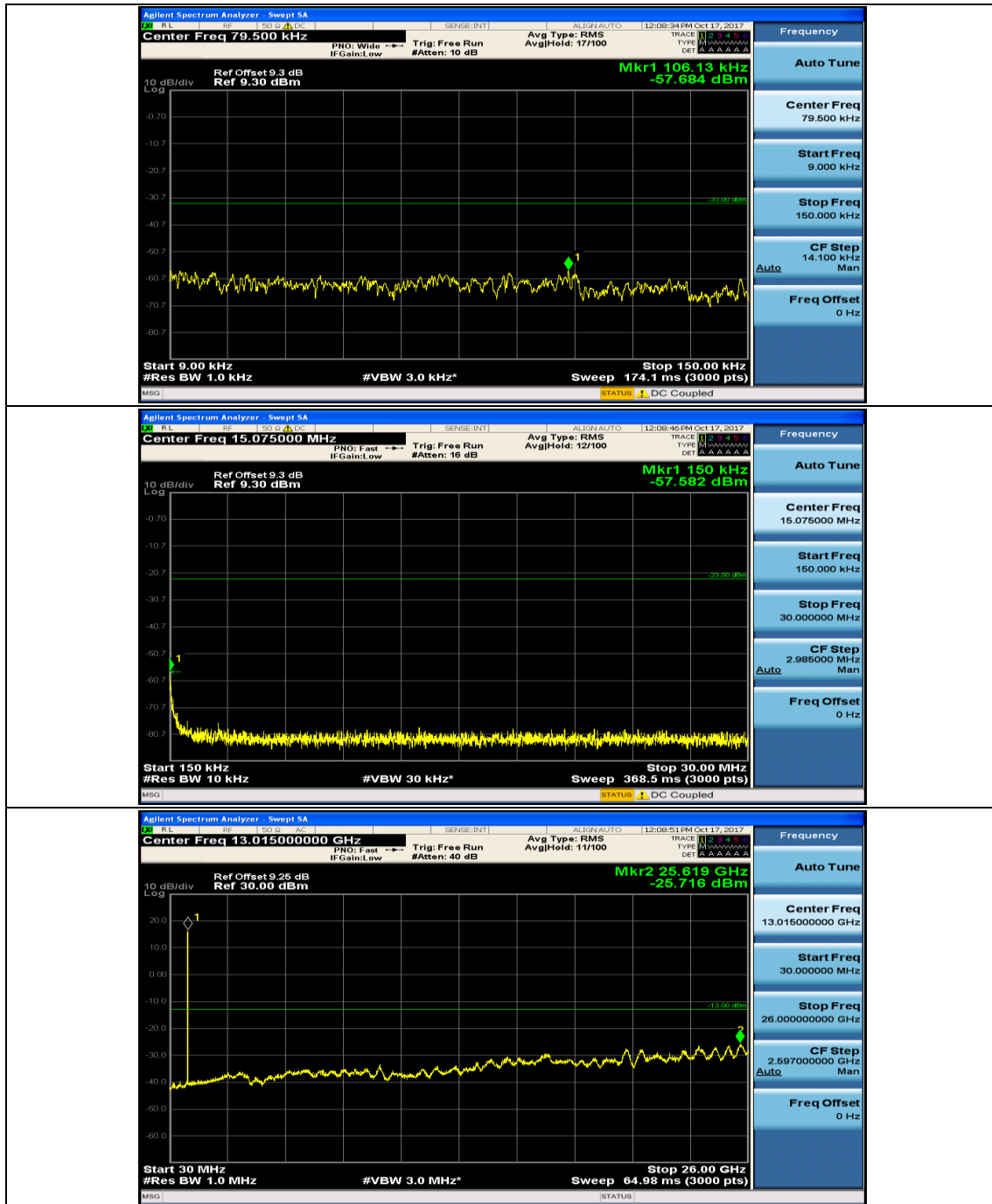


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

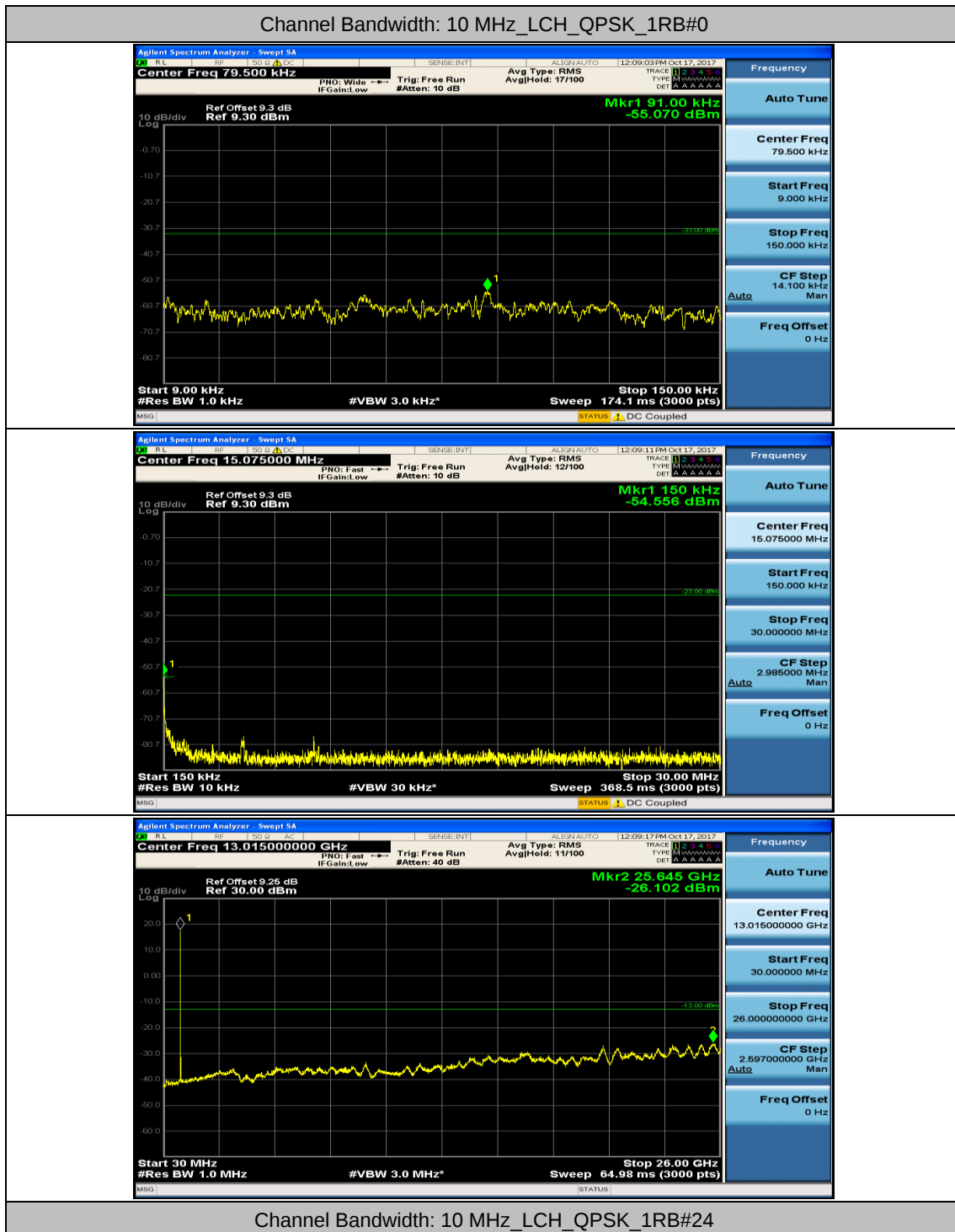


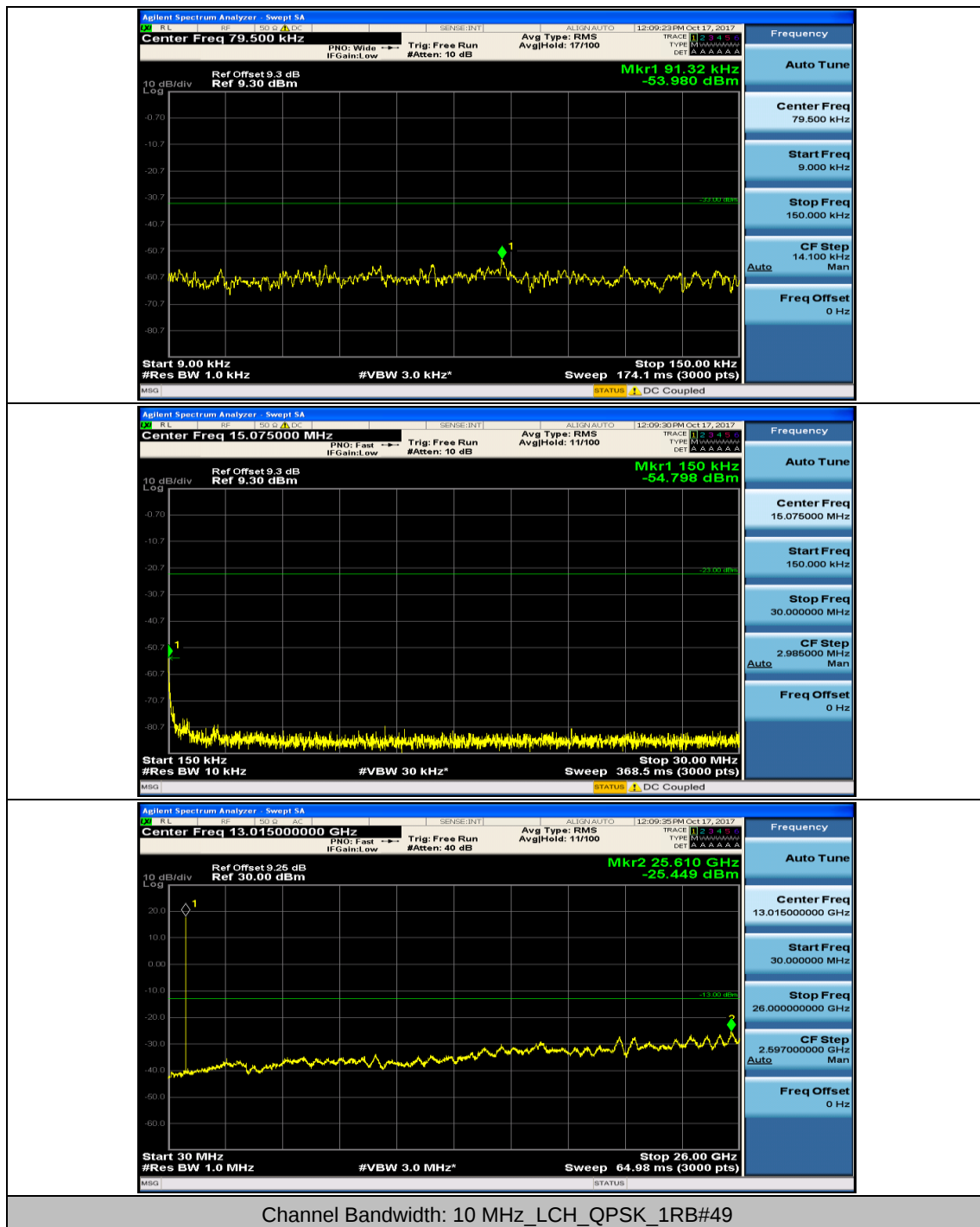
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

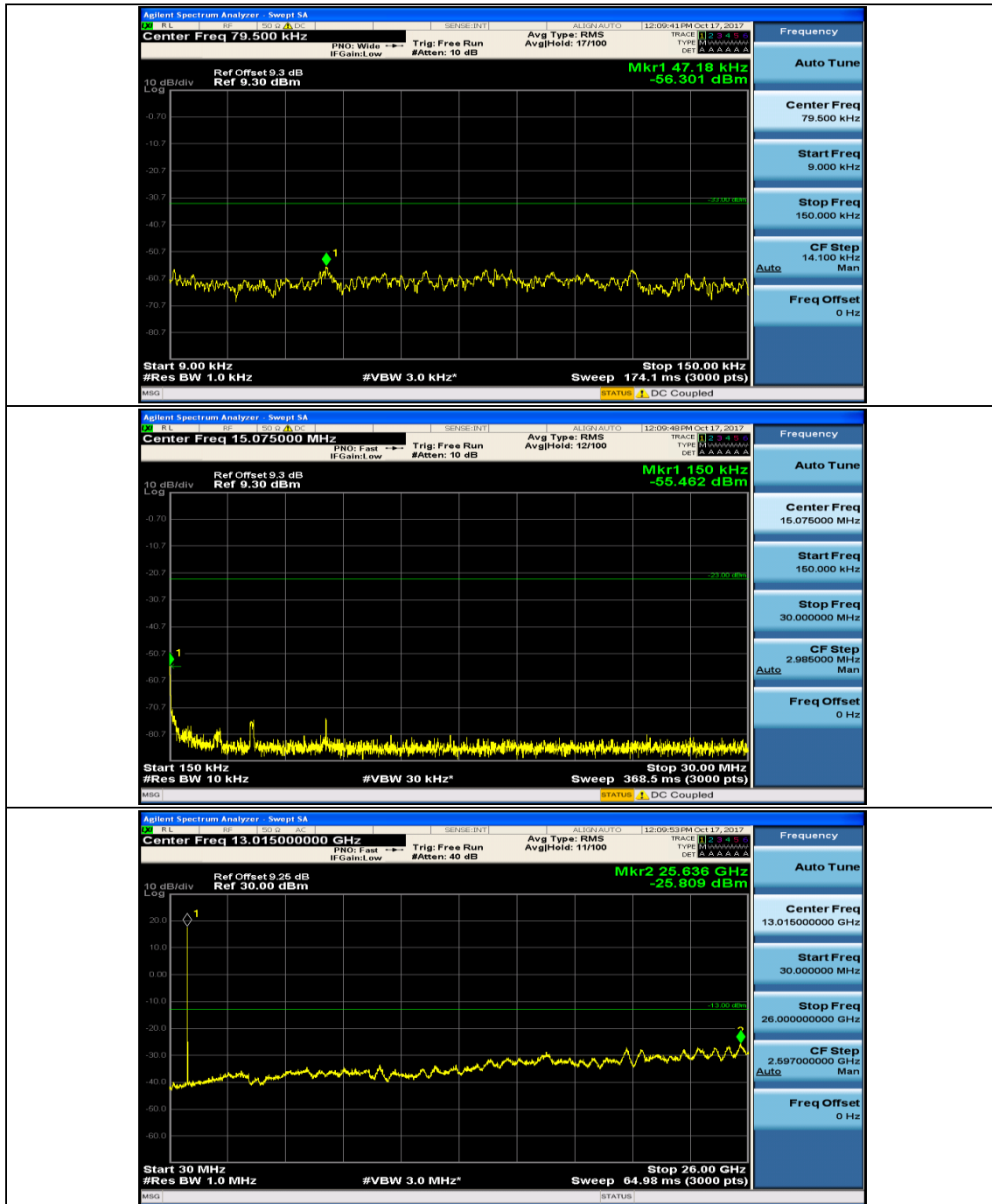




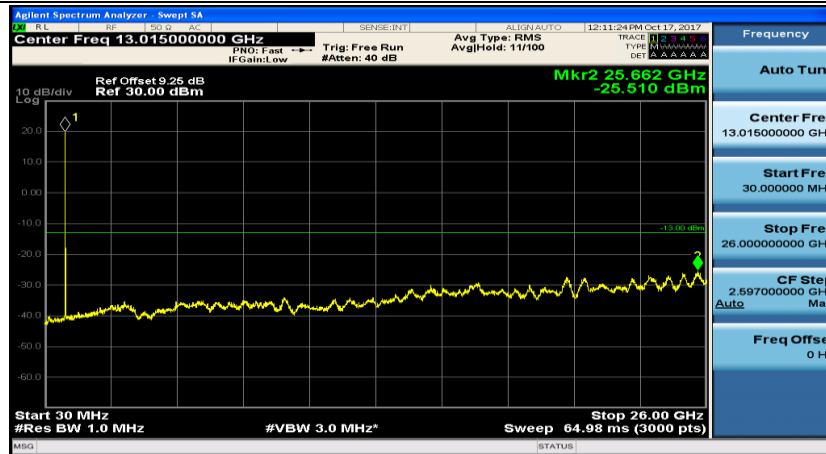
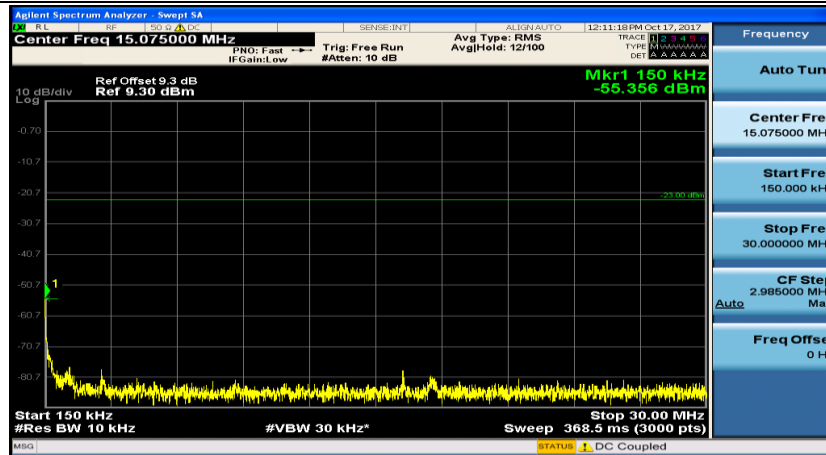
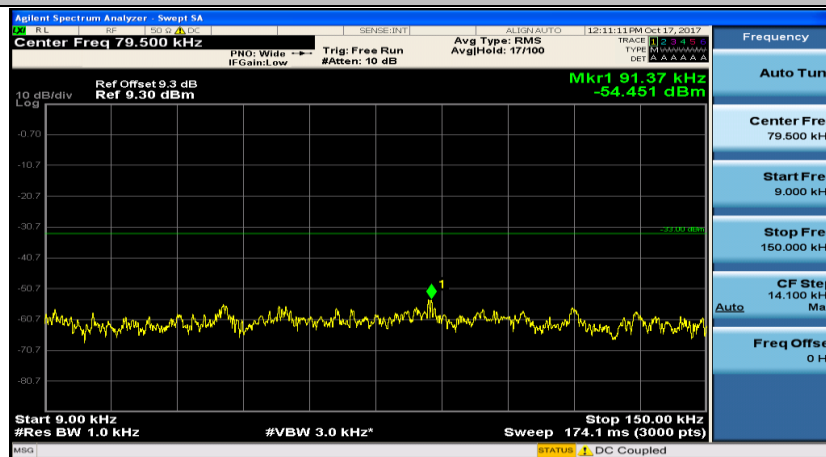
Channel Bandwidth: 10 MHz



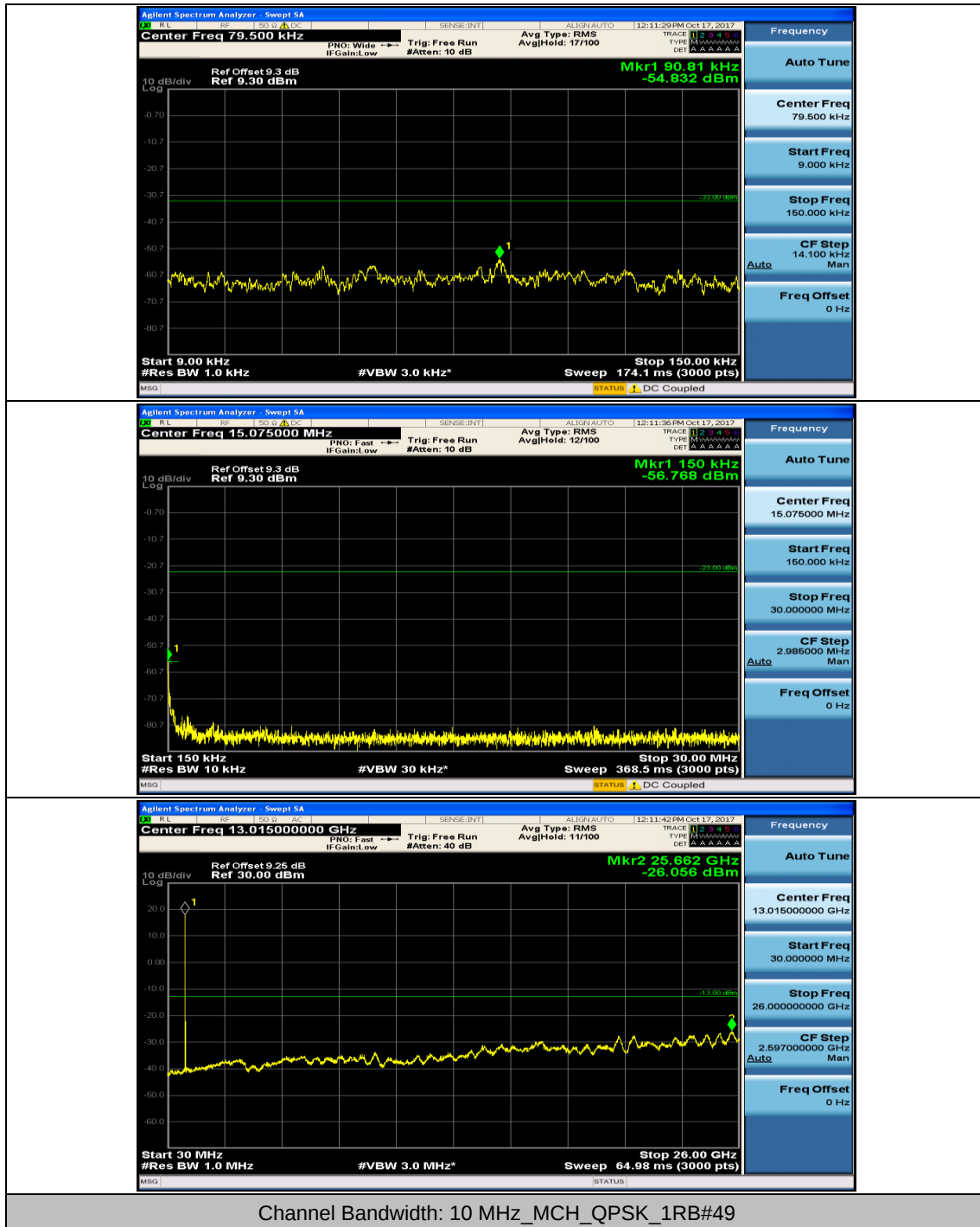


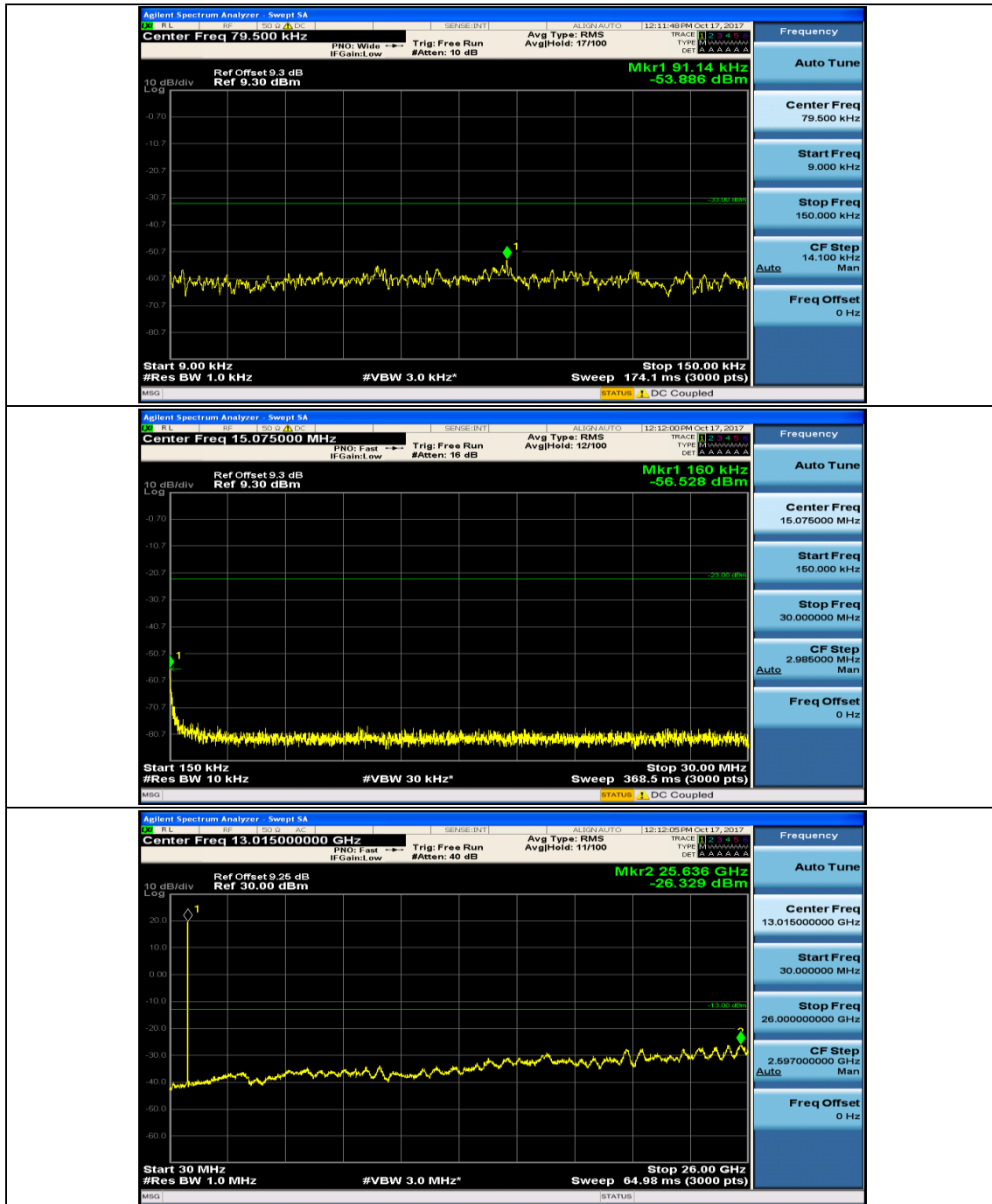


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

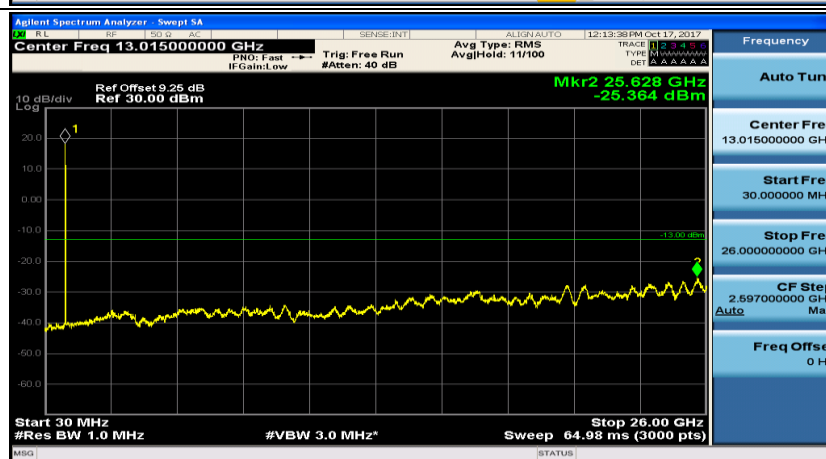
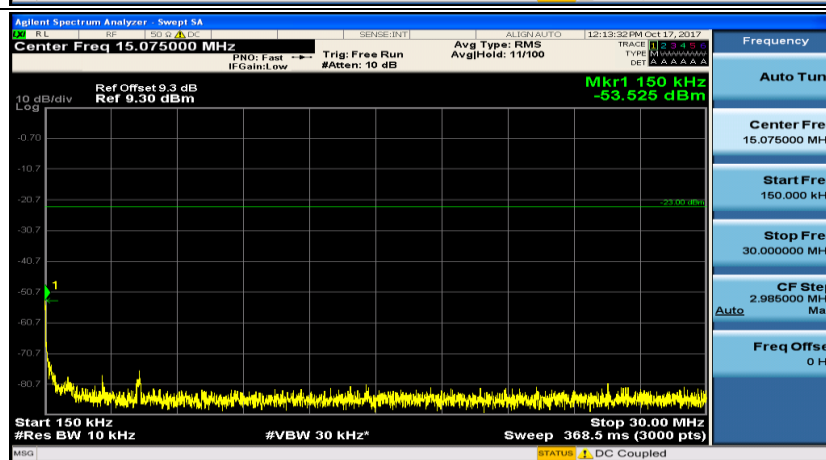
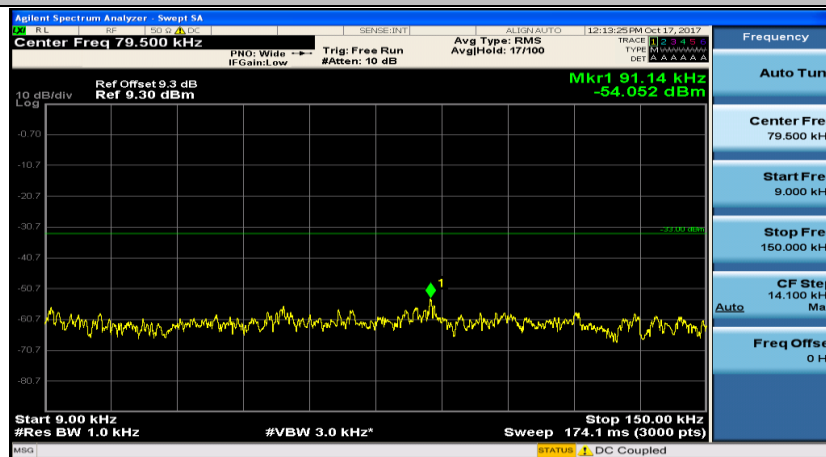


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

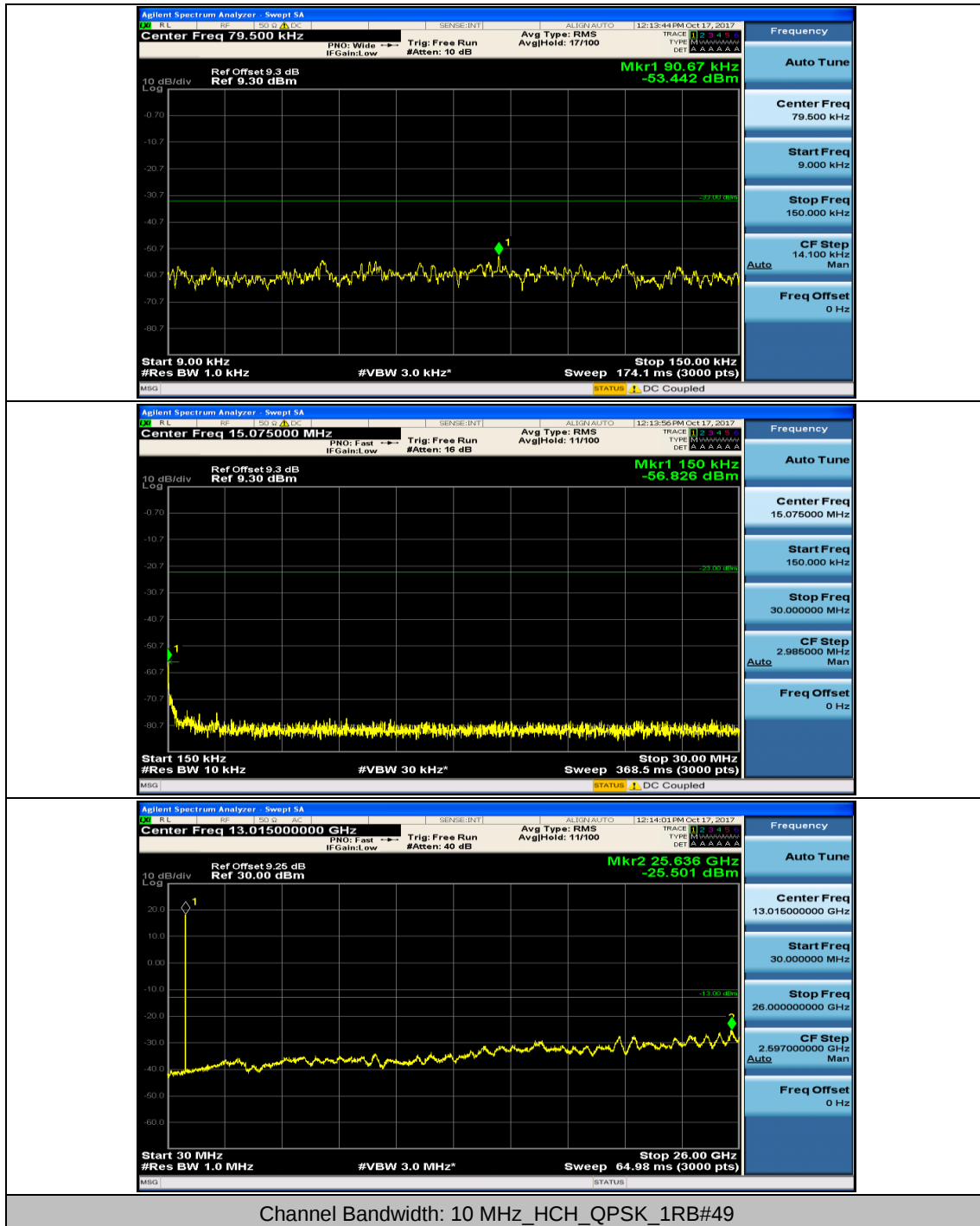


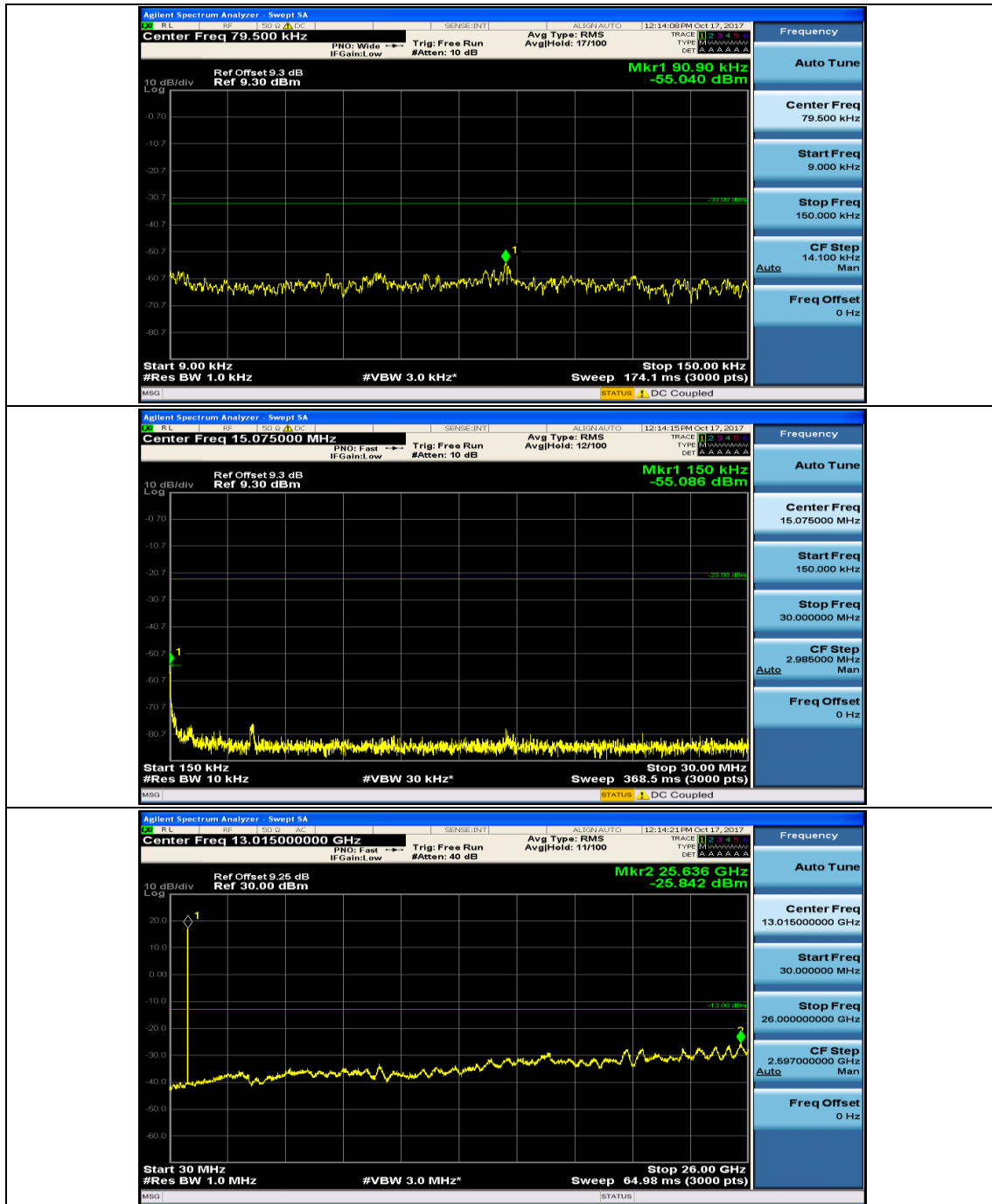


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0

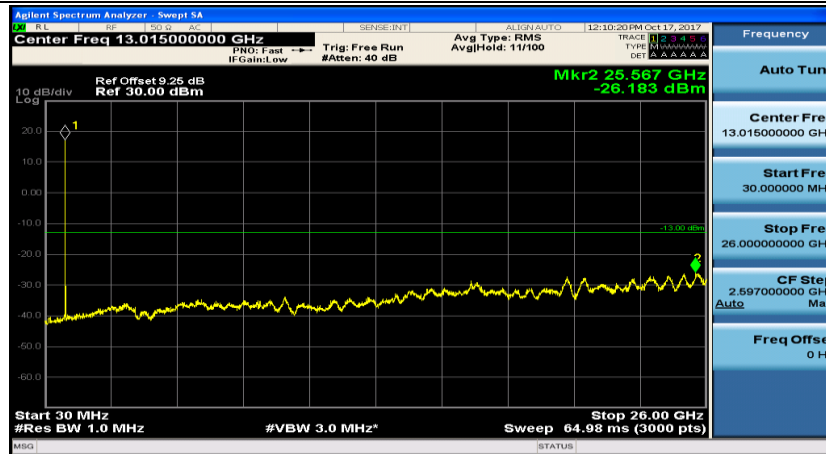
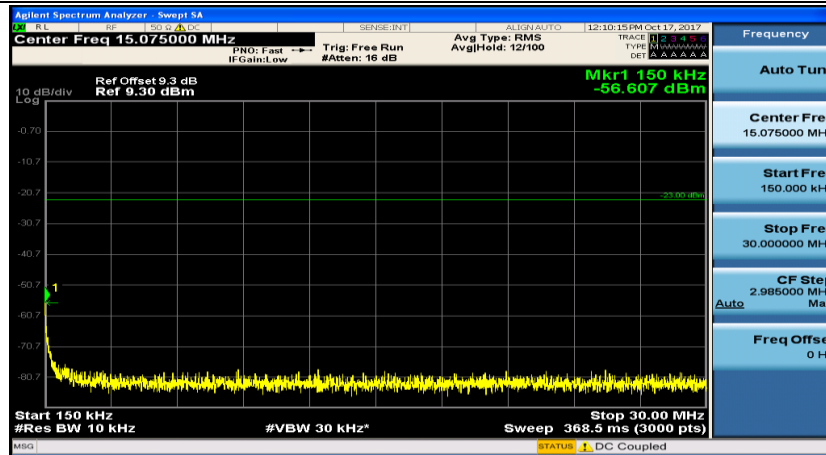
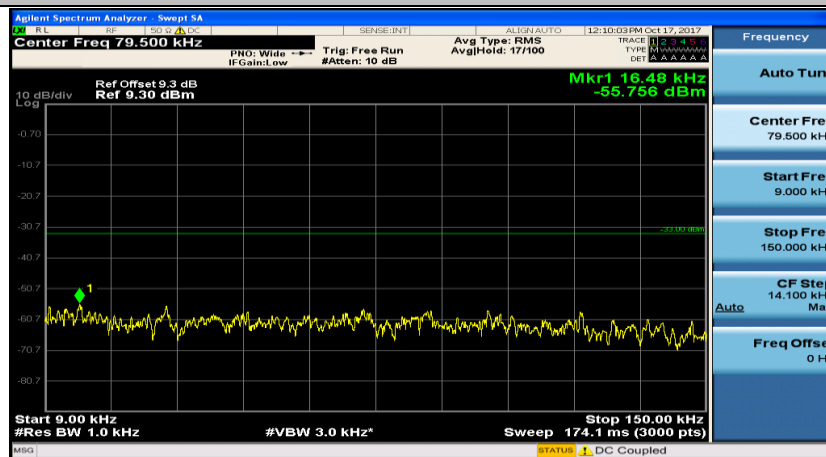


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

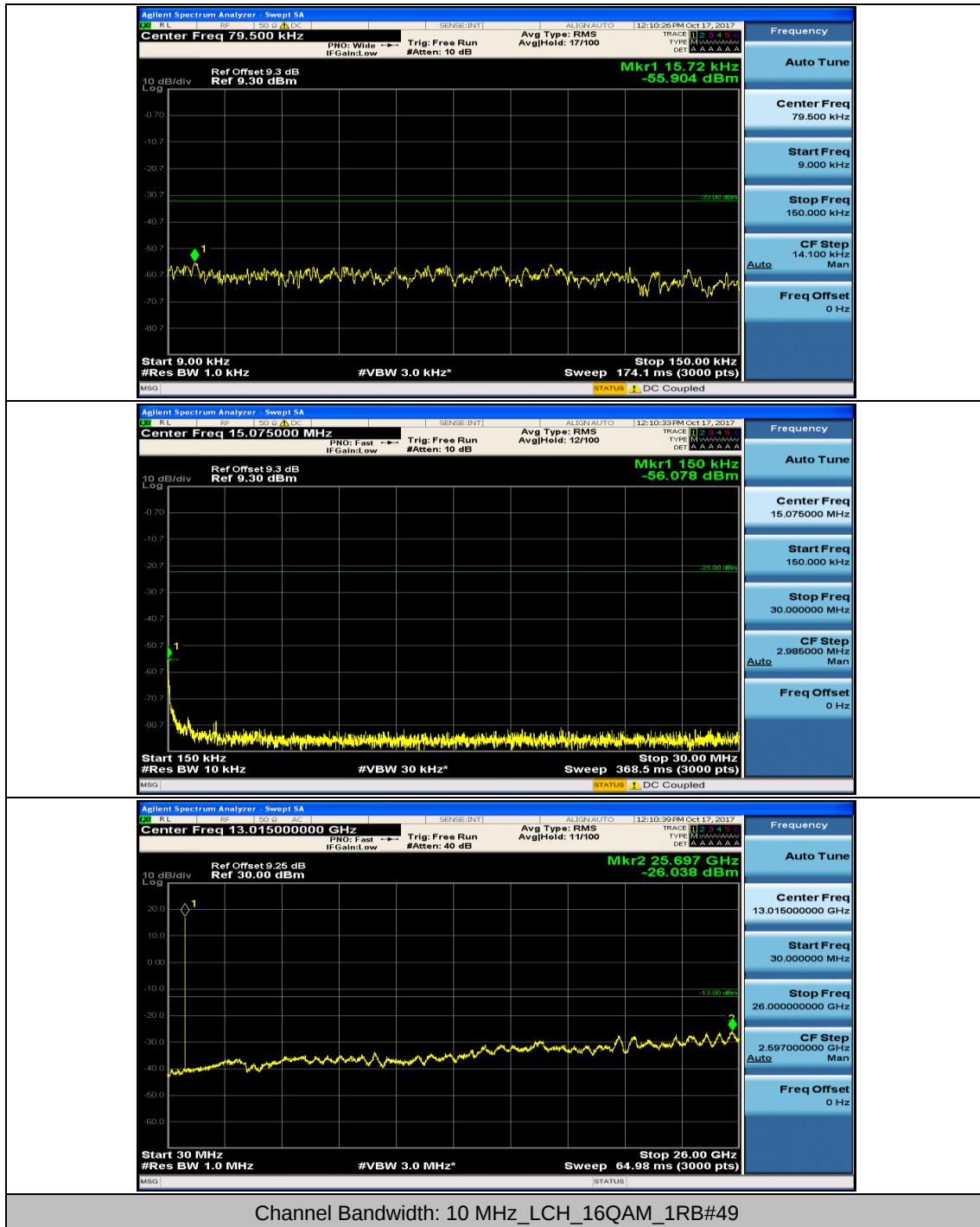


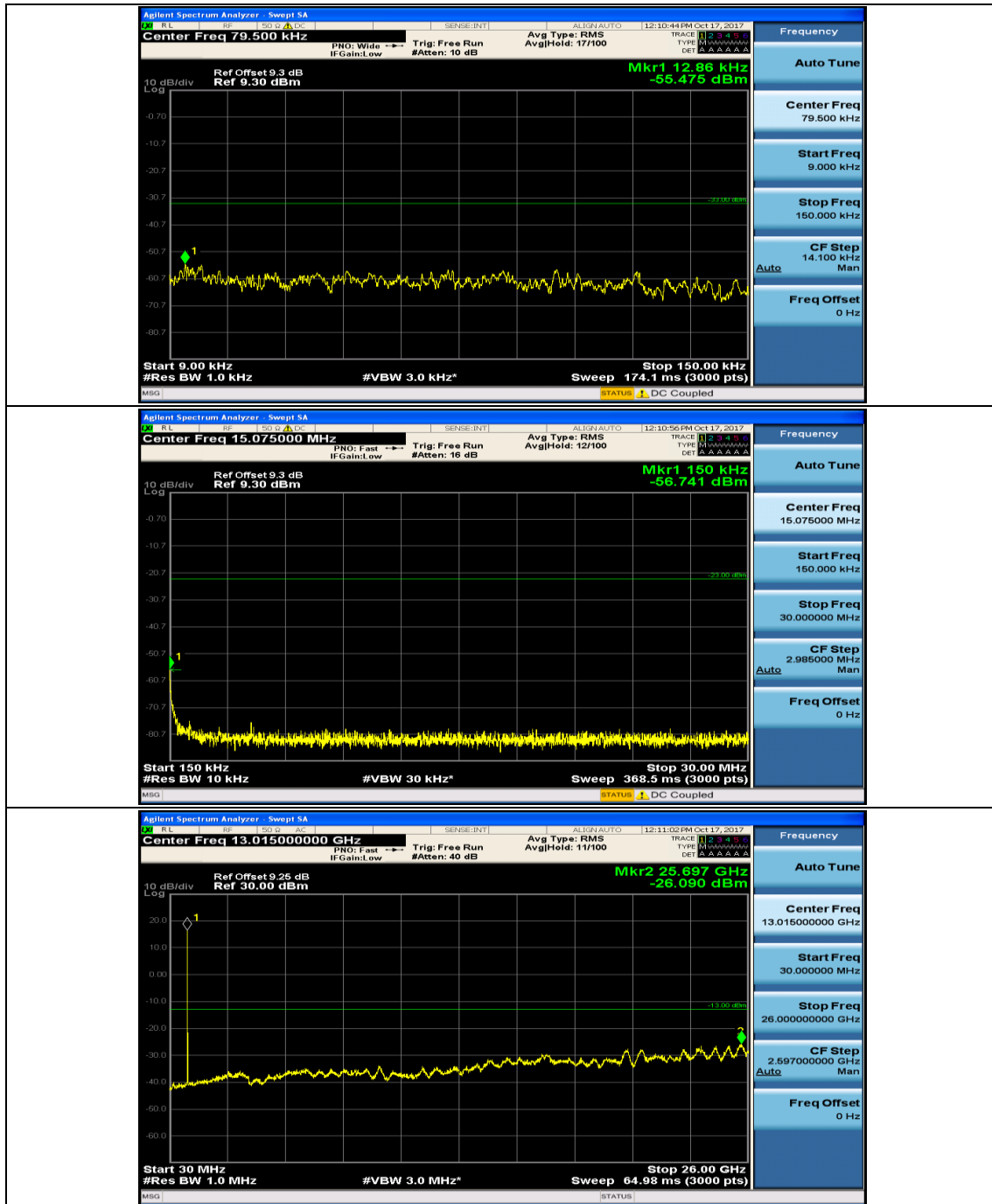


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0

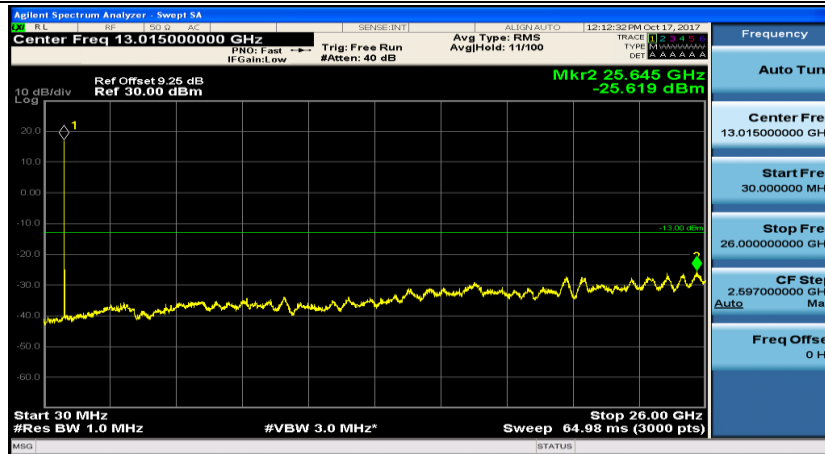
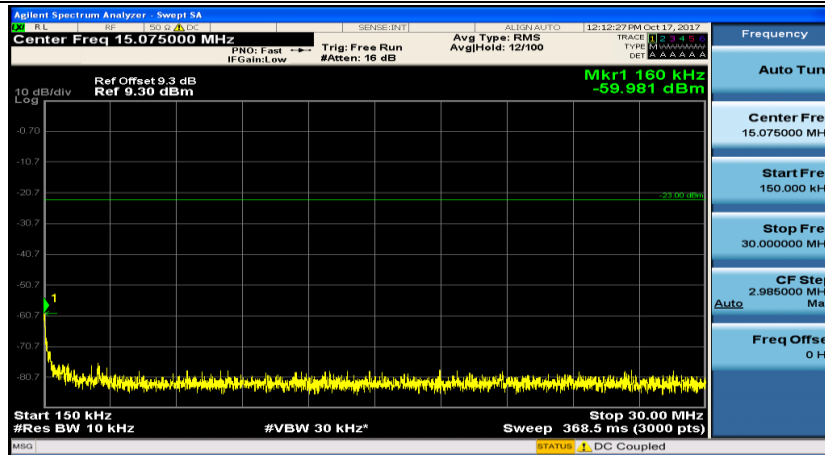
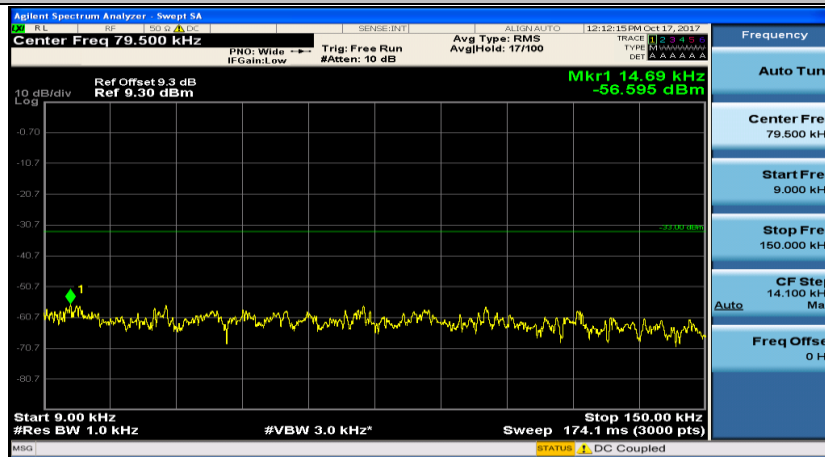


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

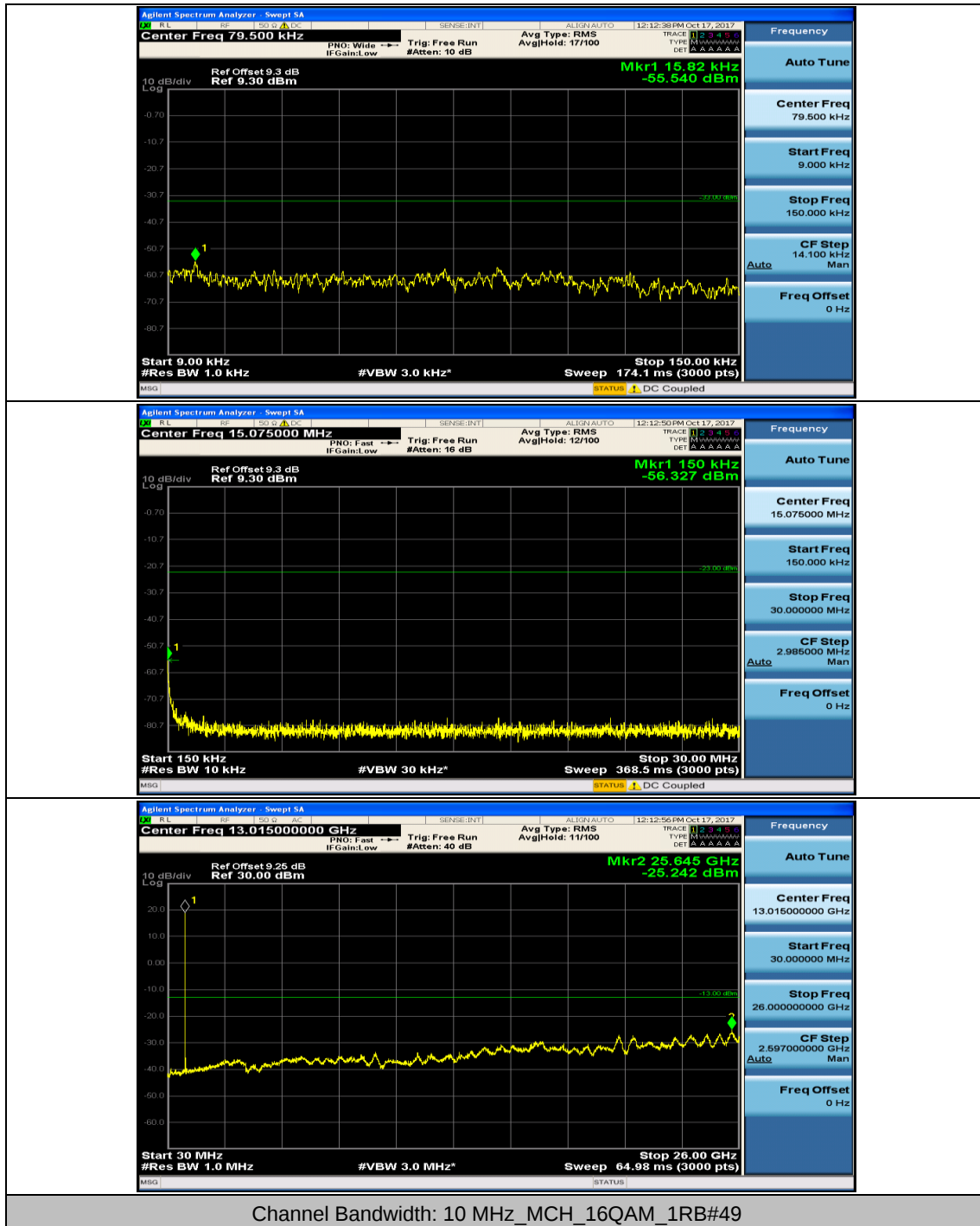


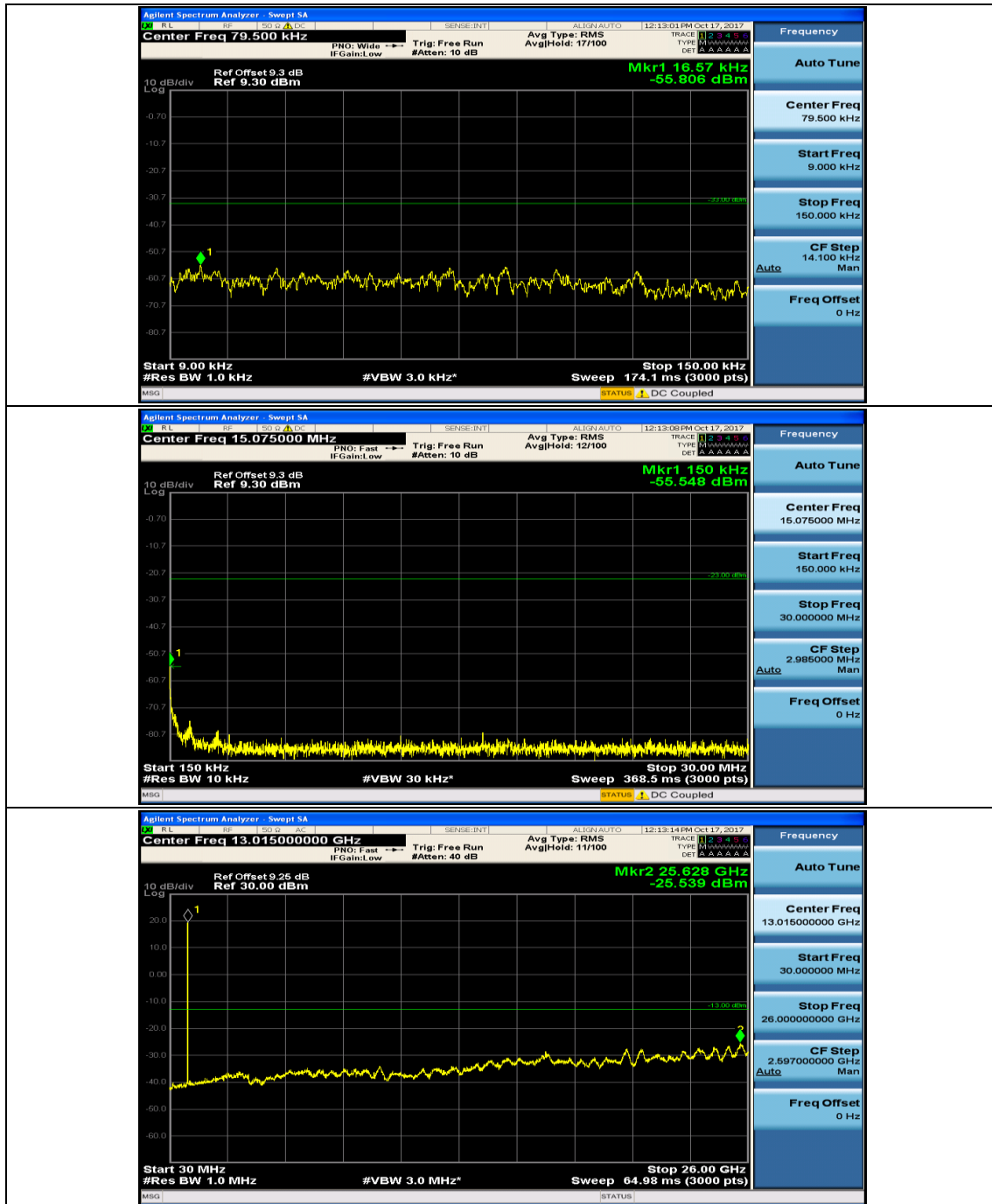


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

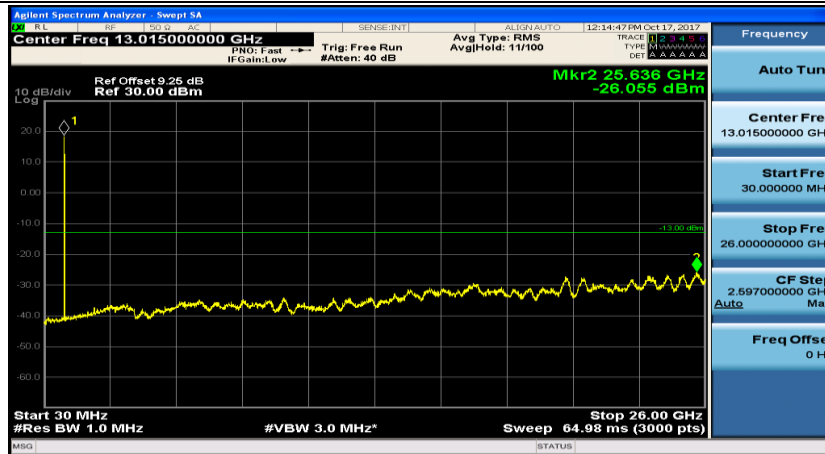
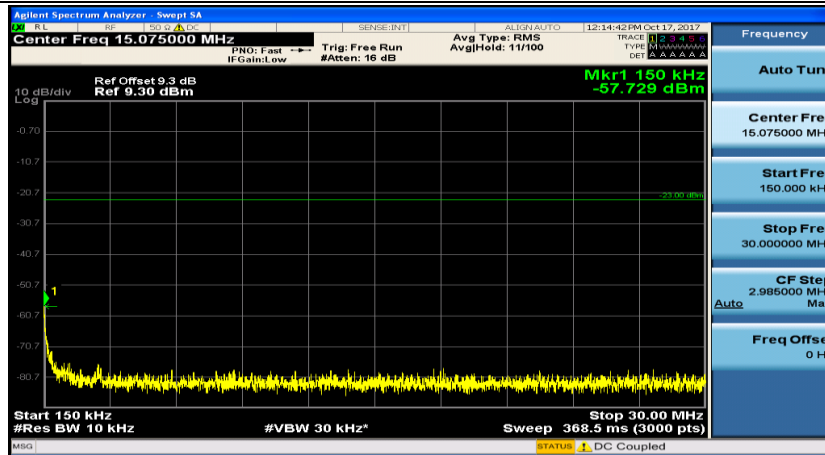
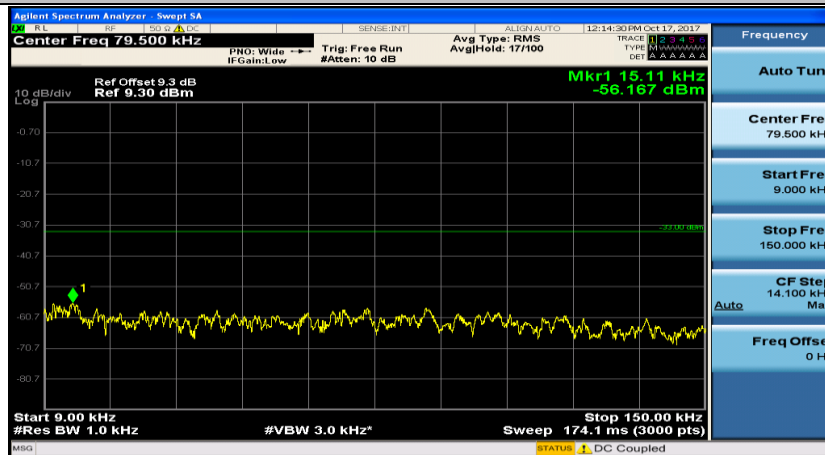


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

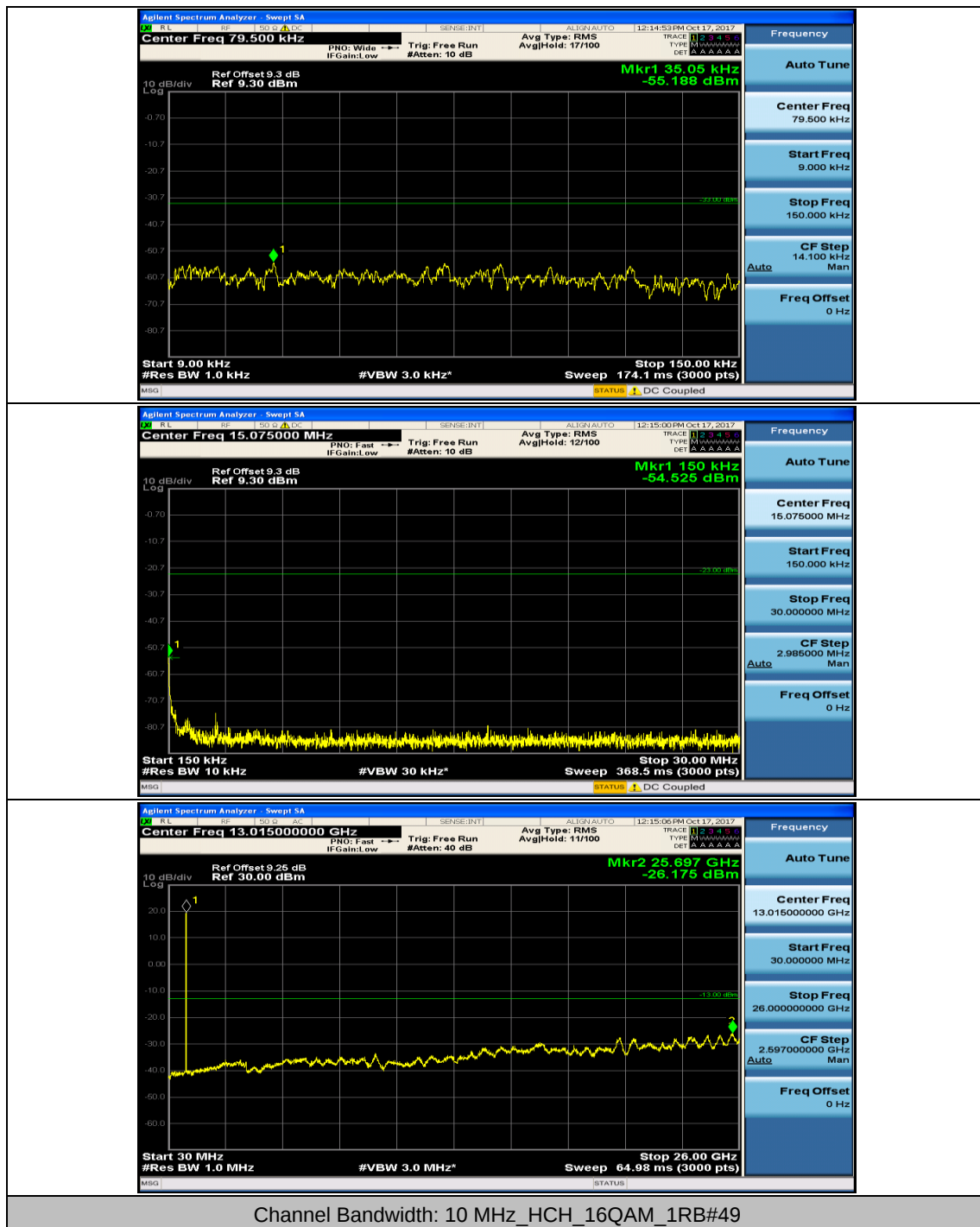


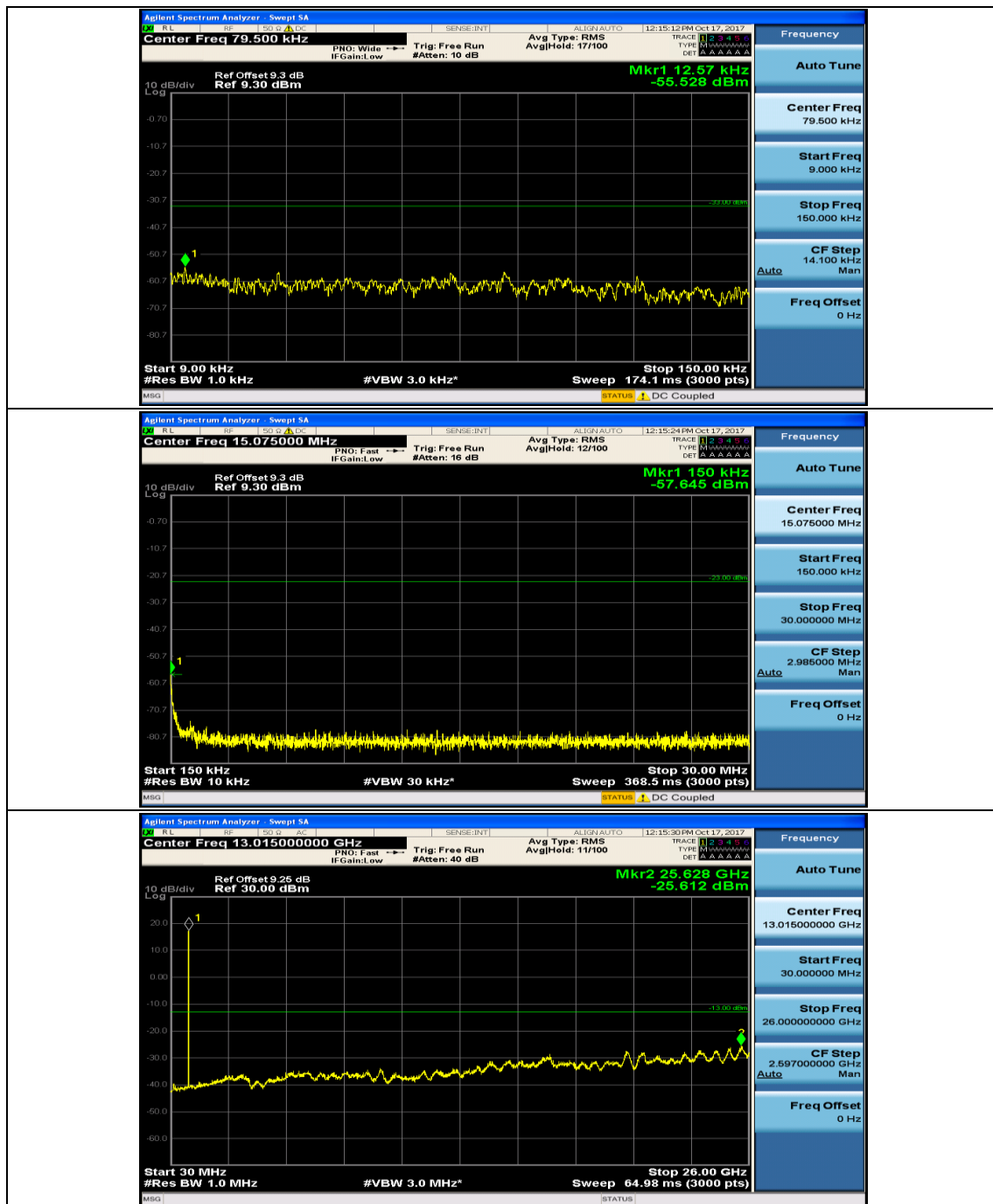


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24





Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	1.1	0.001334	± 2.5	PASS
		VN	TN	2.04	0.002474	± 2.5	PASS
		VH	TN	-0.43	-0.000521	± 2.5	PASS
	MCH	VL	TN	3.1	0.003706	± 2.5	PASS
		VN	TN	2.96	0.003539	± 2.5	PASS
		VH	TN	2.86	0.003419	± 2.5	PASS
	HCH	VL	TN	-0.58	-0.000684	± 2.5	PASS
		VN	TN	2.67	0.003147	± 2.5	PASS
		VH	TN	1.09	0.001285	± 2.5	PASS
16QAM	LCH	VL	TN	-1.39	-0.001685	± 2.5	PASS
		VN	TN	4.49	0.005444	± 2.5	PASS
		VH	TN	4.73	0.005735	± 2.5	PASS
	MCH	VL	TN	4.37	0.005224	± 2.5	PASS
		VN	TN	3.36	0.004017	± 2.5	PASS
		VH	TN	-1.16	-0.001387	± 2.5	PASS
	HCH	VL	TN	3.09	0.003643	± 2.5	PASS
		VN	TN	-1.53	-0.001804	± 2.5	PASS
		VH	TN	-0.6	-0.000707	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.36	0.001649	± 2.5	PASS
		VN	-20	-1.17	-0.001419	± 2.5	PASS
		VN	-10	3.5	0.004244	± 2.5	PASS
		VN	0	0.54	0.000655	± 2.5	PASS
		VN	10	3.34	0.004050	± 2.5	PASS
		VN	20	3.35	0.004062	± 2.5	PASS
		VN	30	1.98	0.002401	± 2.5	PASS
		VN	40	0.05	0.000061	± 2.5	PASS
		VN	50	-0.47	-0.000570	± 2.5	PASS
	MCH	VN	-30	-1.95	-0.002331	± 2.5	PASS
		VN	-20	2.79	0.003335	± 2.5	PASS

		VN	-10	0.29	0.000347	± 2.5	PASS
		VN	0	3.58	0.004280	± 2.5	PASS
		VN	10	4.99	0.005965	± 2.5	PASS
		VN	20	1.67	0.001996	± 2.5	PASS
		VN	30	3.38	0.004041	± 2.5	PASS
		VN	40	1.92	0.002295	± 2.5	PASS
		VN	50	1.3	0.001554	± 2.5	PASS
	HCH	VN	-30	4.58	0.005399	± 2.5	PASS
		VN	-20	3.54	0.004173	± 2.5	PASS
		VN	-10	4.14	0.004880	± 2.5	PASS
		VN	0	0.03	0.000035	± 2.5	PASS
		VN	10	3.32	0.003914	± 2.5	PASS
		VN	20	1.67	0.001969	± 2.5	PASS
		VN	30	2.88	0.003395	± 2.5	PASS
		VN	40	1.6	0.001886	± 2.5	PASS
		VN	50	0.72	0.000849	± 2.5	PASS
16QAM	LCH	VN	-30	4.9	0.005942	± 2.5	PASS
		VN	-20	4.92	0.005966	± 2.5	PASS
		VN	-10	3.33	0.004038	± 2.5	PASS
		VN	0	-1.26	-0.001528	± 2.5	PASS
		VN	10	-1.01	-0.001225	± 2.5	PASS
		VN	20	0.73	0.000885	± 2.5	PASS
		VN	30	2.42	0.002934	± 2.5	PASS
		VN	40	-0.37	-0.000449	± 2.5	PASS
		VN	50	-1.97	-0.002389	± 2.5	PASS
	MCH	VN	-30	0.54	0.000637	± 2.5	PASS
		VN	-20	-0.82	-0.000967	± 2.5	PASS
		VN	-10	1.23	0.001450	± 2.5	PASS
		VN	0	1.7	0.002004	± 2.5	PASS
		VN	10	-0.04	-0.000047	± 2.5	PASS
		VN	20	-0.33	-0.000389	± 2.5	PASS
		VN	30	-0.1	-0.000118	± 2.5	PASS
		VN	40	0.56	0.000660	± 2.5	PASS
		VN	50	1.93	0.002275	± 2.5	PASS
	HCH	VN	-30	2.68	0.003159	± 2.5	PASS
		VN	-20	-1.61	-0.001898	± 2.5	PASS
		VN	-10	-0.84	-0.000990	± 2.5	PASS
		VN	0	4.14	0.004880	± 2.5	PASS
		VN	10	3.82	0.004503	± 2.5	PASS
		VN	20	2.48	0.002923	± 2.5	PASS
		VN	30	4.82	0.005682	± 2.5	PASS

		VN	40	3.79	0.004468	± 2.5	PASS
		VN	50	4.07	0.004798	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	1.35	0.001637	± 2.5	PASS
		VN	TN	1.77	0.002146	± 2.5	PASS
		VH	TN	1.49	0.001807	± 2.5	PASS
	MCH	VL	TN	3.54	0.004232	± 2.5	PASS
		VN	TN	0.29	0.000347	± 2.5	PASS
		VH	TN	3.36	0.004017	± 2.5	PASS
	HCH	VL	TN	1.19	0.001403	± 2.5	PASS
		VN	TN	1.2	0.001415	± 2.5	PASS
		VH	TN	-0.93	-0.001096	± 2.5	PASS
16QAM	LCH	VL	TN	1	0.001213	± 2.5	PASS
		VN	TN	3.94	0.004777	± 2.5	PASS
		VH	TN	4.49	0.005444	± 2.5	PASS
	MCH	VL	TN	3.17	0.003790	± 2.5	PASS
		VN	TN	-0.1	-0.000120	± 2.5	PASS
		VH	TN	3.44	0.004112	± 2.5	PASS
	HCH	VL	TN	-1.68	-0.001980	± 2.5	PASS
		VN	TN	0.32	0.000377	± 2.5	PASS
		VH	TN	-0.93	-0.001096	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.63	0.001976	± 2.5	PASS
		VN	-20	4.76	0.005772	± 2.5	PASS
		VN	-10	4.25	0.005153	± 2.5	PASS
		VN	0	3.6	0.004365	± 2.5	PASS
		VN	10	0.21	0.000255	± 2.5	PASS
		VN	20	-1.3	-0.001576	± 2.5	PASS
		VN	30	-1.31	-0.001588	± 2.5	PASS
		VN	40	4.86	0.005893	± 2.5	PASS
		VN	50	-0.63	-0.000764	± 2.5	PASS
	MCH	VN	-30	2.11	0.002522	± 2.5	PASS
		VN	-20	1.1	0.001315	± 2.5	PASS
		VN	-10	0.33	0.000395	± 2.5	PASS

		VN	0	-1.53	-0.001829	± 2.5	PASS
		VN	10	0.74	0.000885	± 2.5	PASS
		VN	20	-0.44	-0.000526	± 2.5	PASS
		VN	30	1.61	0.001925	± 2.5	PASS
		VN	40	1.83	0.002188	± 2.5	PASS
		VN	50	1.85	0.002212	± 2.5	PASS
	HCH	VN	-30	4.6	0.005423	± 2.5	PASS
		VN	-20	3.06	0.003607	± 2.5	PASS
		VN	-10	0.84	0.000990	± 2.5	PASS
		VN	0	2.89	0.003407	± 2.5	PASS
		VN	10	-1.58	-0.001863	± 2.5	PASS
		VN	20	2.95	0.003478	± 2.5	PASS
		VN	30	-1.48	-0.001745	± 2.5	PASS
		VN	40	0.62	0.000731	± 2.5	PASS
		VN	50	-0.78	-0.000919	± 2.5	PASS
QPSK	LCH	VN	-30	4.54	0.005505	± 2.5	PASS
		VN	-20	-1.55	-0.001879	± 2.5	PASS
		VN	-10	4.04	0.004899	± 2.5	PASS
		VN	0	3.34	0.004050	± 2.5	PASS
		VN	10	-1.08	-0.001310	± 2.5	PASS
		VN	20	0.46	0.000558	± 2.5	PASS
		VN	30	-0.14	-0.000170	± 2.5	PASS
		VN	40	0.62	0.000752	± 2.5	PASS
		VN	50	-0.74	-0.000897	± 2.5	PASS
	MCH	VN	-30	-0.41	-0.000483	± 2.5	PASS
		VN	-20	-0.32	-0.000377	± 2.5	PASS
		VN	-10	3.67	0.004326	± 2.5	PASS
		VN	0	3.54	0.004173	± 2.5	PASS
		VN	10	2.65	0.003124	± 2.5	PASS
		VN	20	-0.59	-0.000696	± 2.5	PASS
		VN	30	-1.69	-0.001992	± 2.5	PASS
		VN	40	2.58	0.003041	± 2.5	PASS
		VN	50	-0.21	-0.000248	± 2.5	PASS
	HCH	VN	-30	2.23	0.002629	± 2.5	PASS
		VN	-20	3.93	0.004633	± 2.5	PASS
		VN	-10	-0.16	-0.000189	± 2.5	PASS
		VN	0	4.53	0.005340	± 2.5	PASS
		VN	10	-0.23	-0.000271	± 2.5	PASS
		VN	20	2.84	0.003348	± 2.5	PASS
		VN	30	0.3	0.000354	± 2.5	PASS
		VN	40	-1.37	-0.001615	± 2.5	PASS

		VN	50	1.51	0.001780	± 2.5	PASS
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Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.42	-0.001722	± 2.5	PASS
		VN	TN	2.97	0.003601	± 2.5	PASS
		VH	TN	2.34	0.002837	± 2.5	PASS
	MCH	VL	TN	4.48	0.005356	± 2.5	PASS
		VN	TN	3.55	0.004244	± 2.5	PASS
		VH	TN	-1.55	-0.001853	± 2.5	PASS
	HCH	VL	TN	-0.9	-0.001061	± 2.5	PASS
		VN	TN	3.18	0.003749	± 2.5	PASS
		VH	TN	1.32	0.001556	± 2.5	PASS
16QAM	LCH	VL	TN	-1.83	-0.002219	± 2.5	PASS
		VN	TN	-0.34	-0.000412	± 2.5	PASS
		VH	TN	4.48	0.005432	± 2.5	PASS
	MCH	VL	TN	2.53	0.003025	± 2.5	PASS
		VN	TN	1.13	0.001351	± 2.5	PASS
		VH	TN	1.1	0.001315	± 2.5	PASS
	HCH	VL	TN	4.88	0.005753	± 2.5	PASS
		VN	TN	-0.26	-0.000306	± 2.5	PASS
		VH	TN	-1.04	-0.001226	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.22	-0.001479	± 2.5	PASS
		VN	-20	0.19	0.000230	± 2.5	PASS
		VN	-10	-0.15	-0.000182	± 2.5	PASS
		VN	0	4.73	0.005735	± 2.5	PASS
		VN	10	2.39	0.002898	± 2.5	PASS
		VN	20	1.58	0.001916	± 2.5	PASS
		VN	30	-0.91	-0.001103	± 2.5	PASS
		VN	40	3.27	0.003965	± 2.5	PASS
		VN	50	2.64	0.003201	± 2.5	PASS
	MCH	VN	-30	-0.05	-0.000060	± 2.5	PASS
		VN	-20	-0.27	-0.000323	± 2.5	PASS
		VN	-10	3.09	0.003694	± 2.5	PASS
		VN	0	0.95	0.001136	± 2.5	PASS

		VN	10	1.71	0.002044	± 2.5	PASS
		VN	20	2.59	0.003096	± 2.5	PASS
		VN	30	4.15	0.004961	± 2.5	PASS
		VN	40	-0.86	-0.001028	± 2.5	PASS
		VN	50	4.51	0.005392	± 2.5	PASS
	HCH	VN	-30	-1.3	-0.001532	± 2.5	PASS
		VN	-20	1.57	0.001851	± 2.5	PASS
		VN	-10	1.56	0.001839	± 2.5	PASS
		VN	0	4.85	0.005717	± 2.5	PASS
		VN	10	-0.63	-0.000743	± 2.5	PASS
		VN	20	0.41	0.000483	± 2.5	PASS
		VN	30	-1.32	-0.001556	± 2.5	PASS
		VN	40	0.5	0.000589	± 2.5	PASS
		VN	50	4.95	0.005835	± 2.5	PASS
16QAM	LCH	VN	-30	2.67	0.003238	± 2.5	PASS
		VN	-20	0.58	0.000703	± 2.5	PASS
		VN	-10	3.66	0.004438	± 2.5	PASS
		VN	0	-0.97	-0.001176	± 2.5	PASS
		VN	10	2.59	0.003141	± 2.5	PASS
		VN	20	1.34	0.001625	± 2.5	PASS
		VN	30	1.4	0.001698	± 2.5	PASS
		VN	40	0.37	0.000449	± 2.5	PASS
		VN	50	4.5	0.005457	± 2.5	PASS
	MCH	VN	-30	3.54	0.004173	± 2.5	PASS
		VN	-20	4.42	0.005210	± 2.5	PASS
		VN	-10	-0.73	-0.000861	± 2.5	PASS
		VN	0	4.29	0.005057	± 2.5	PASS
		VN	10	0.89	0.001049	± 2.5	PASS
		VN	20	-0.93	-0.001096	± 2.5	PASS
		VN	30	-1.31	-0.001544	± 2.5	PASS
		VN	40	3.25	0.003831	± 2.5	PASS
		VN	50	-1.54	-0.001815	± 2.5	PASS
	HCH	VN	-30	3.58	0.004220	± 2.5	PASS
		VN	-20	4.47	0.005269	± 2.5	PASS
		VN	-10	2.82	0.003324	± 2.5	PASS
		VN	0	4.27	0.005034	± 2.5	PASS
		VN	10	1.58	0.001863	± 2.5	PASS
		VN	20	1.2	0.001415	± 2.5	PASS
		VN	30	4.58	0.005399	± 2.5	PASS
		VN	40	3.79	0.004468	± 2.5	PASS
		VN	50	0.05	0.000059	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.49	0.000594	± 2.5	PASS
		VN	TN	3.15	0.003820	± 2.5	PASS
		VH	TN	-0.64	-0.000776	± 2.5	PASS
	MCH	VL	TN	-1.83	-0.002188	± 2.5	PASS
		VN	TN	-0.93	-0.001112	± 2.5	PASS
		VH	TN	1.94	0.002319	± 2.5	PASS
	HCH	VL	TN	4.9	0.005776	± 2.5	PASS
		VN	TN	4.96	0.005847	± 2.5	PASS
		VH	TN	1.62	0.001910	± 2.5	PASS
16QAM	LCH	VL	TN	0.03	0.000036	± 2.5	PASS
		VN	TN	1.66	0.002013	± 2.5	PASS
		VH	TN	3.48	0.004220	± 2.5	PASS
	MCH	VL	TN	-0.51	-0.000610	± 2.5	PASS
		VN	TN	4.29	0.005129	± 2.5	PASS
		VH	TN	1.34	0.001602	± 2.5	PASS
	HCH	VL	TN	2.94	0.003466	± 2.5	PASS
		VN	TN	4.26	0.005022	± 2.5	PASS
		VH	TN	0.78	0.000919	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	1.31	0.001588	± 2.5	PASS
		VN	-20	0.49	0.000594	± 2.5	PASS
		VN	-10	-1.8	-0.002183	± 2.5	PASS
		VN	0	-1.33	-0.001613	± 2.5	PASS
		VN	10	3.89	0.004717	± 2.5	PASS
		VN	20	1.73	0.002098	± 2.5	PASS
		VN	30	-0.31	-0.000376	± 2.5	PASS
		VN	40	-0.98	-0.001188	± 2.5	PASS
		VN	50	4.9	0.005942	± 2.5	PASS
	MCH	VN	-30	3.4	0.004065	± 2.5	PASS
		VN	-20	-0.83	-0.000992	± 2.5	PASS
		VN	-10	0.51	0.000610	± 2.5	PASS
		VN	0	0.08	0.000096	± 2.5	PASS
		VN	10	3.78	0.004519	± 2.5	PASS
		VN	20	0.77	0.000921	± 2.5	PASS

		VN	30	3.51	0.004196	± 2.5	PASS
		VN	40	3.03	0.003622	± 2.5	PASS
		VN	50	1.61	0.001925	± 2.5	PASS
	HCH	VN	-30	-1.29	-0.001521	± 2.5	PASS
		VN	-20	-1.43	-0.001686	± 2.5	PASS
		VN	-10	3.77	0.004444	± 2.5	PASS
		VN	0	0.71	0.000837	± 2.5	PASS
		VN	10	-0.74	-0.000872	± 2.5	PASS
		VN	20	2.89	0.003407	± 2.5	PASS
		VN	30	3.28	0.003867	± 2.5	PASS
		VN	40	2.84	0.003348	± 2.5	PASS
		VN	50	-1.19	-0.001403	± 2.5	PASS
QPSK	LCH	VN	-30	4.36	0.005287	± 2.5	PASS
		VN	-20	1.51	0.001831	± 2.5	PASS
		VN	-10	3.69	0.004474	± 2.5	PASS
		VN	0	1.32	0.001601	± 2.5	PASS
		VN	10	0.49	0.000594	± 2.5	PASS
		VN	20	0.83	0.001006	± 2.5	PASS
		VN	30	1.75	0.002122	± 2.5	PASS
		VN	40	-0.07	-0.000085	± 2.5	PASS
		VN	50	4.8	0.005820	± 2.5	PASS
	MCH	VN	-30	3.84	0.004527	± 2.5	PASS
		VN	-20	2.32	0.002735	± 2.5	PASS
		VN	-10	1.55	0.001827	± 2.5	PASS
		VN	0	-1.77	-0.002087	± 2.5	PASS
		VN	10	-0.33	-0.000389	± 2.5	PASS
		VN	20	-1.95	-0.002299	± 2.5	PASS
		VN	30	3.49	0.004114	± 2.5	PASS
		VN	40	1.65	0.001945	± 2.5	PASS
		VN	50	2.66	0.003136	± 2.5	PASS
	HCH	VN	-30	3.69	0.004350	± 2.5	PASS
		VN	-20	3.72	0.004385	± 2.5	PASS
		VN	-10	4.09	0.004821	± 2.5	PASS
		VN	0	4.57	0.005387	± 2.5	PASS
		VN	10	-0.45	-0.000530	± 2.5	PASS
		VN	20	-1.78	-0.002098	± 2.5	PASS
		VN	30	-0.1	-0.000118	± 2.5	PASS
		VN	40	1.75	0.002063	± 2.5	PASS
		VN	50	-0.39	-0.000460	± 2.5	PASS