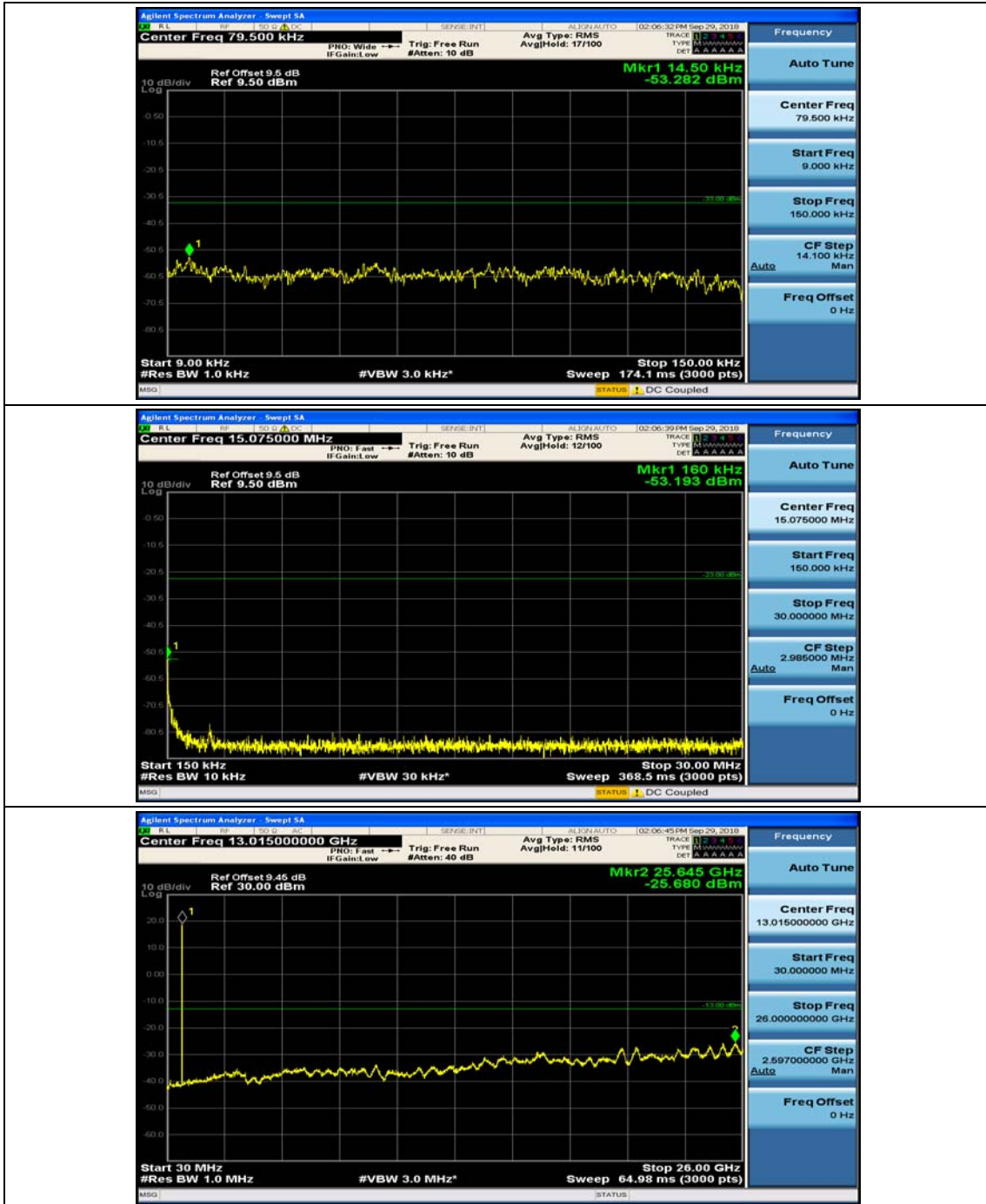
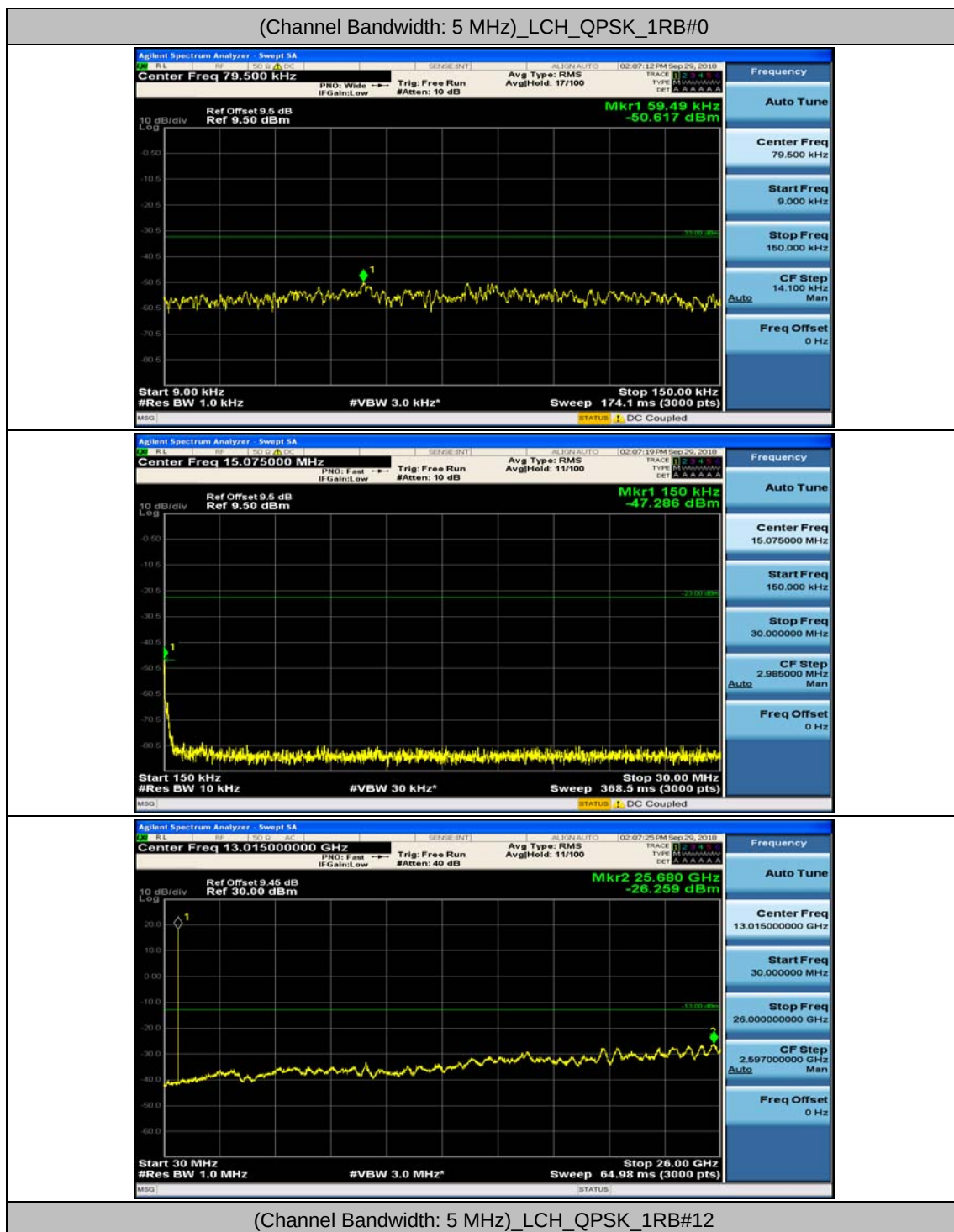
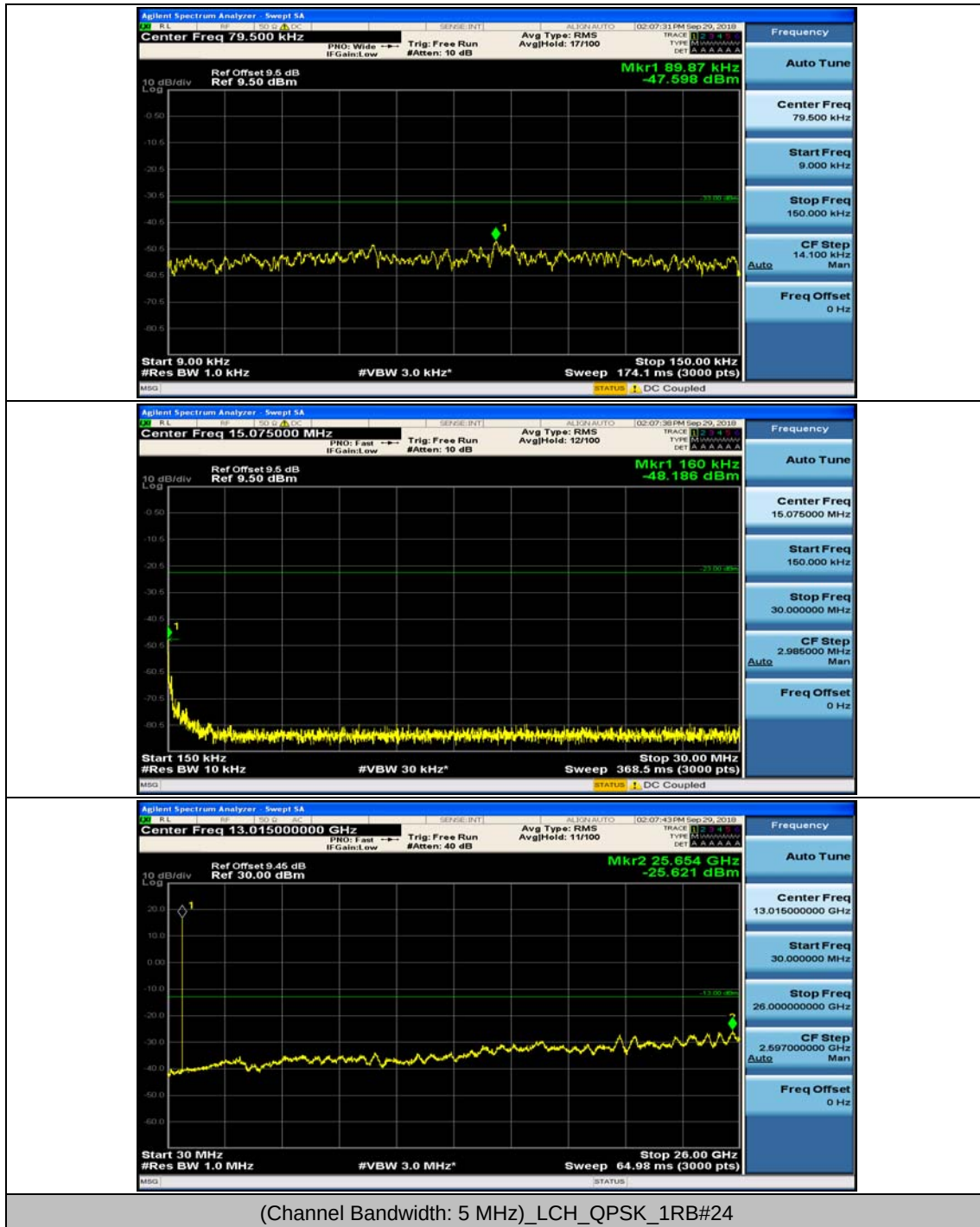
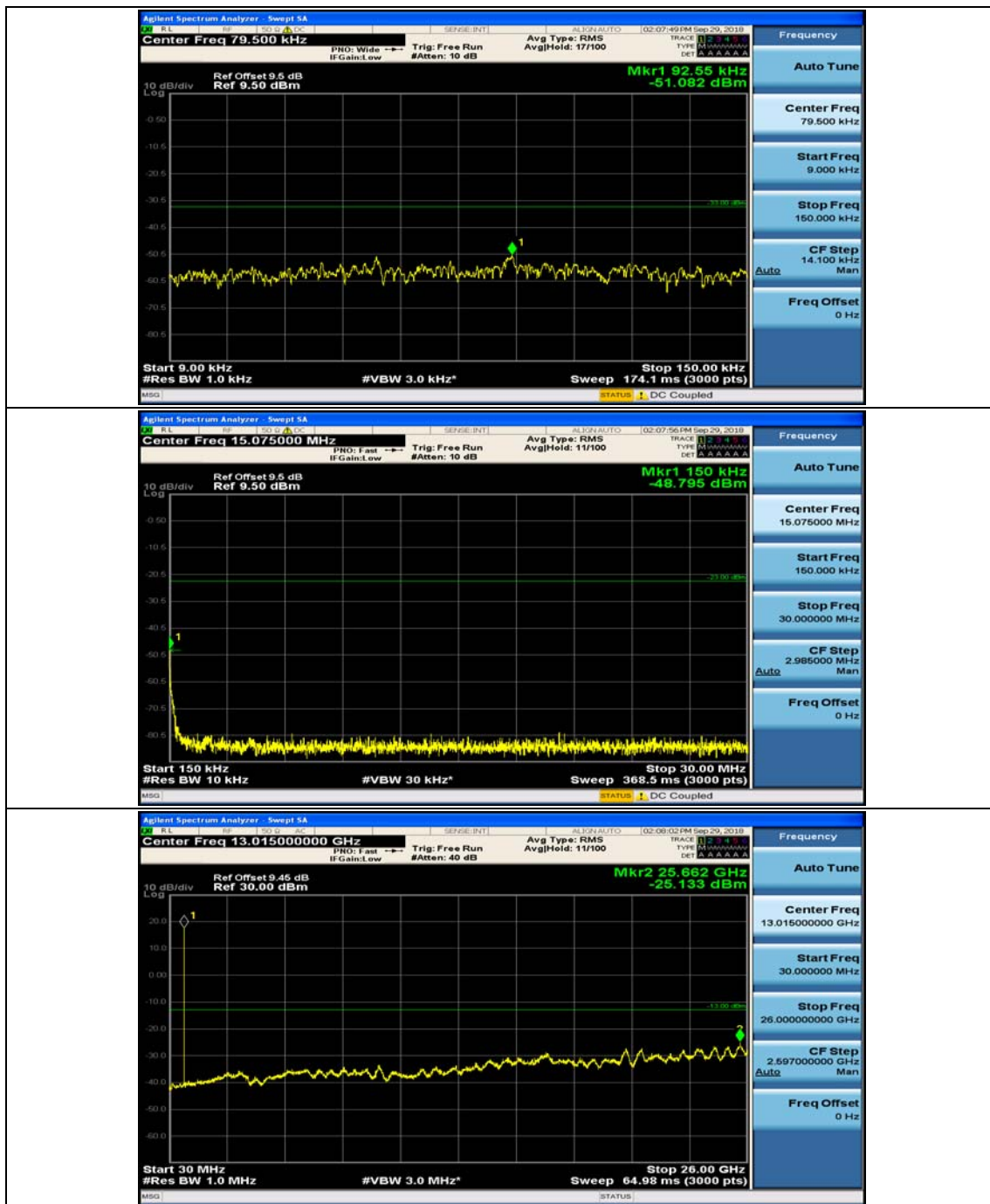




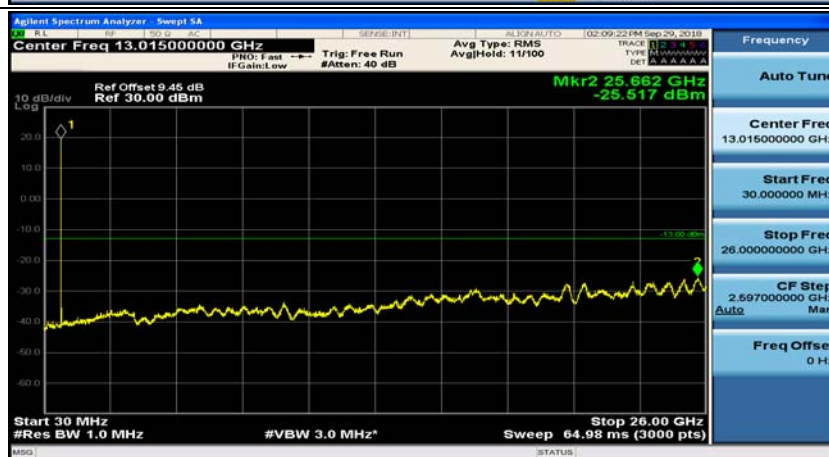
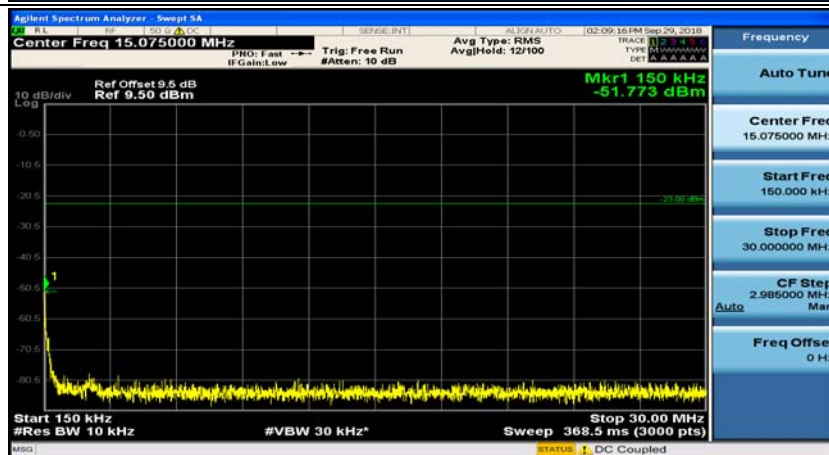
Channel Bandwidth: 5 MHz



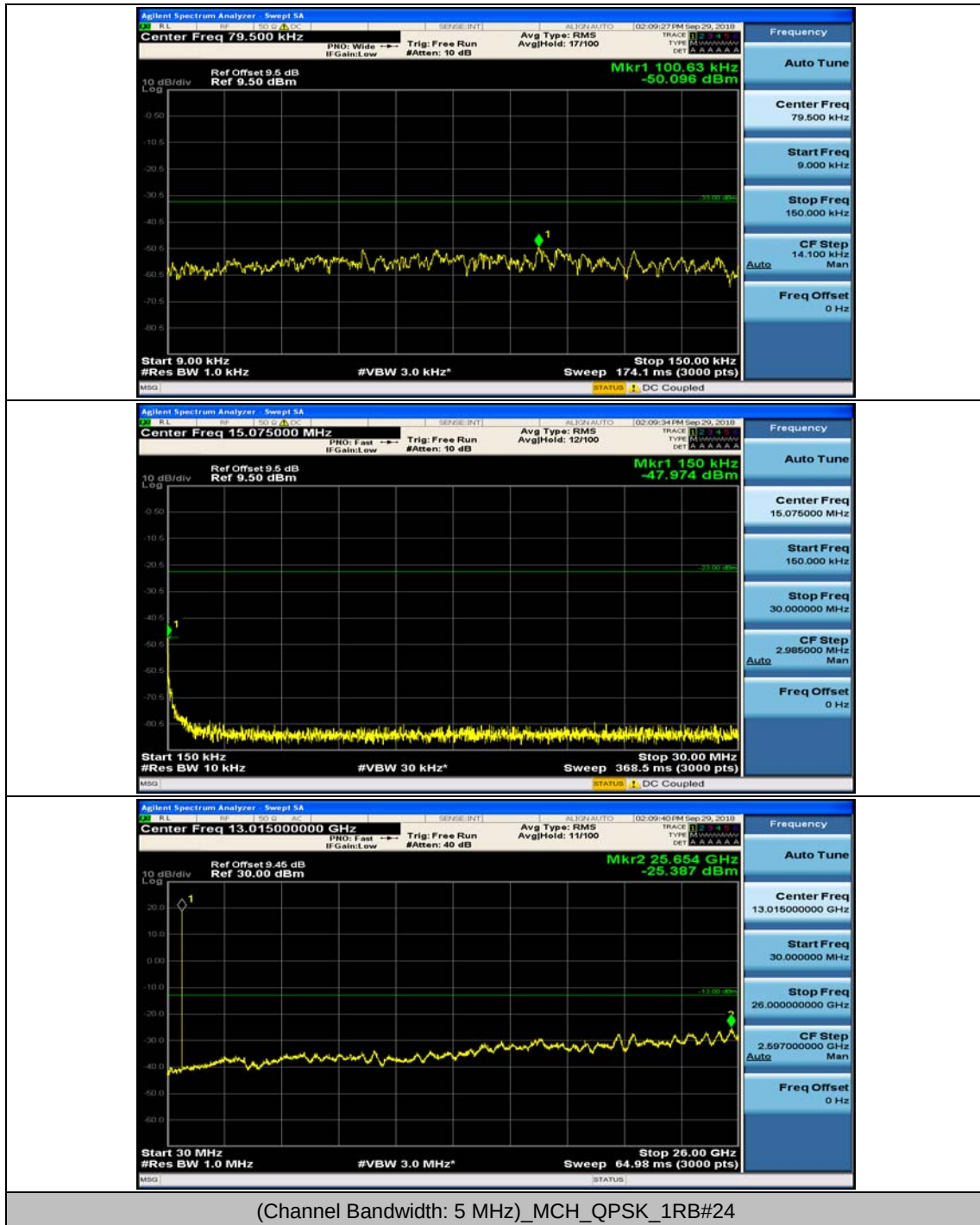


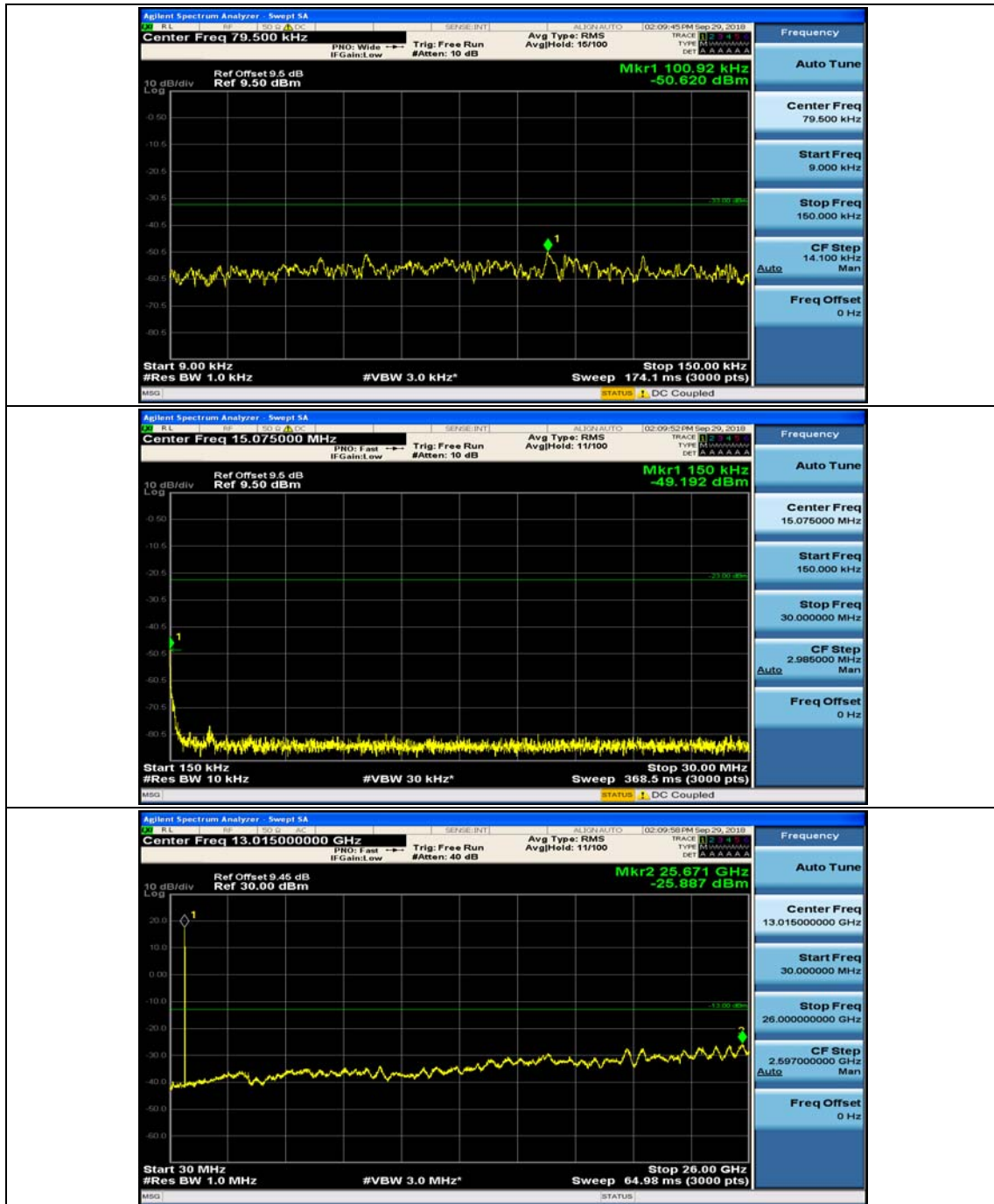


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

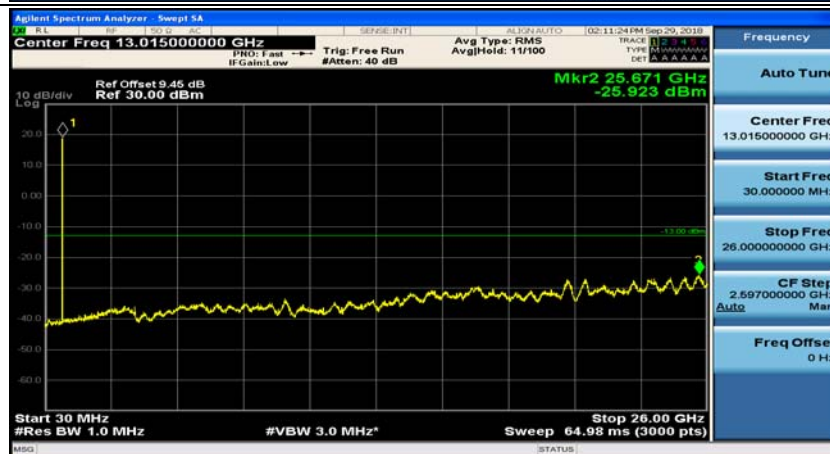
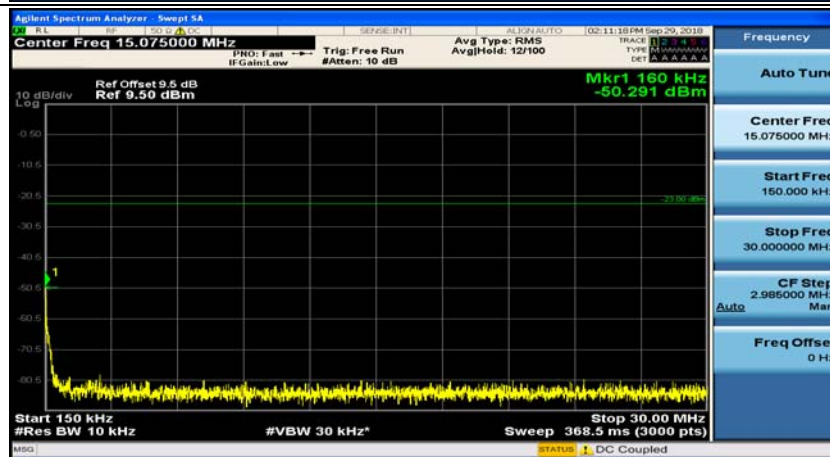


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

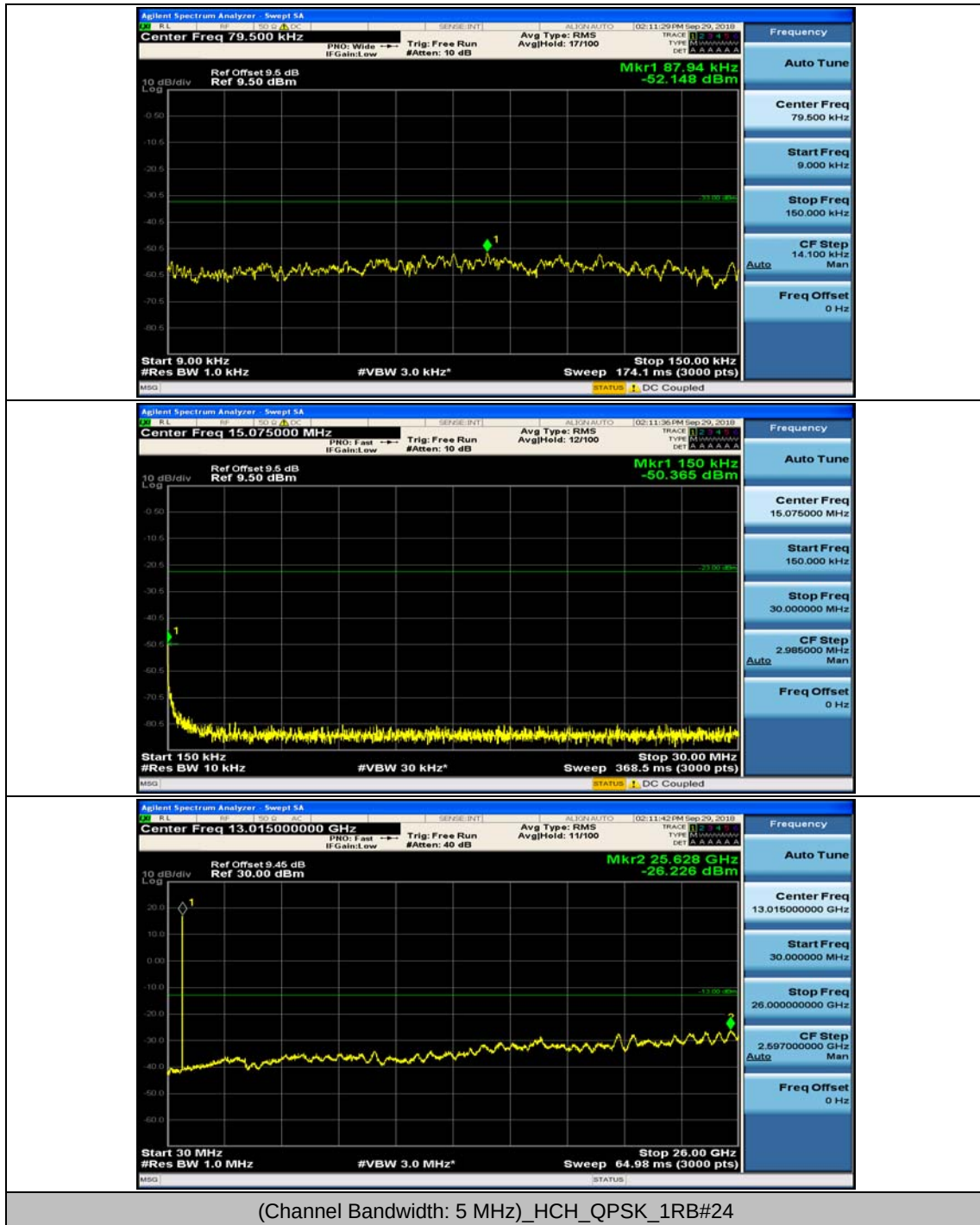


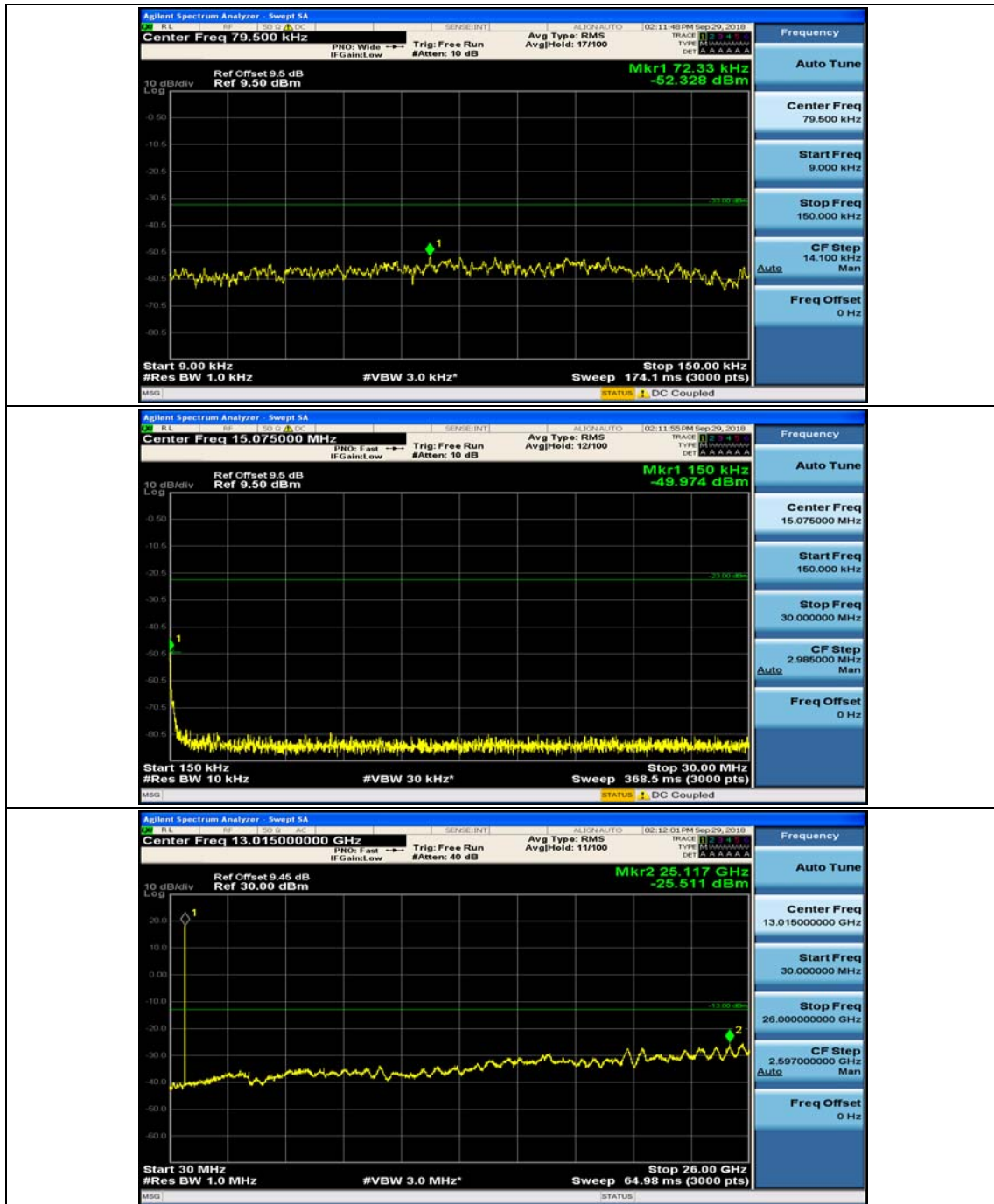


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

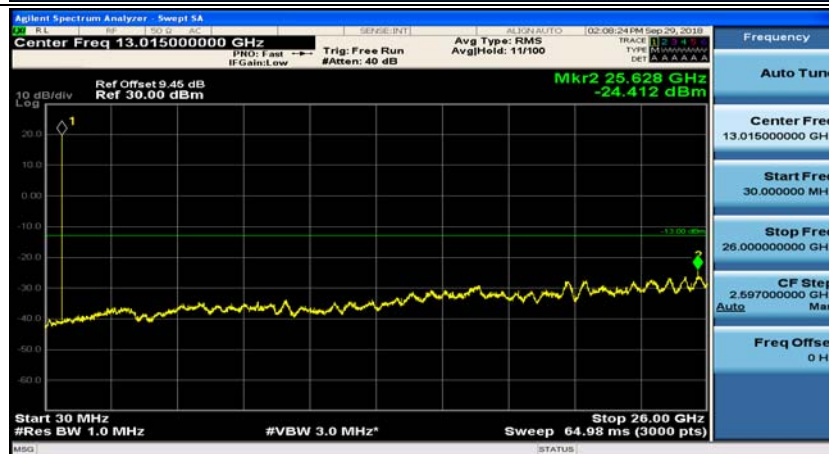
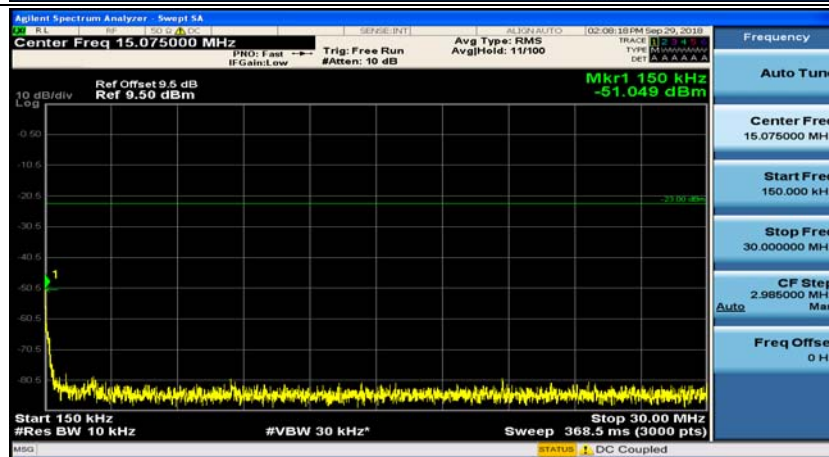


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

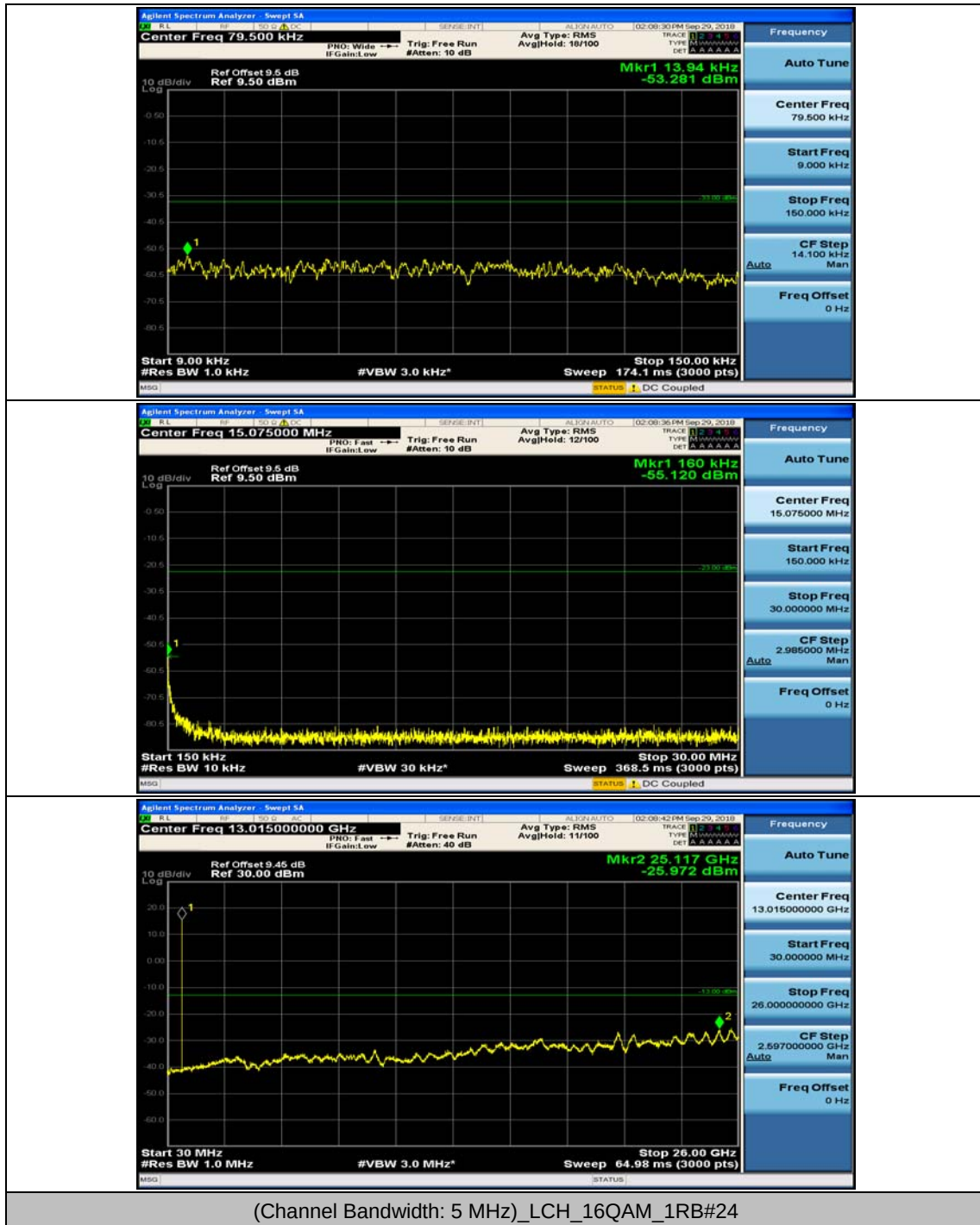


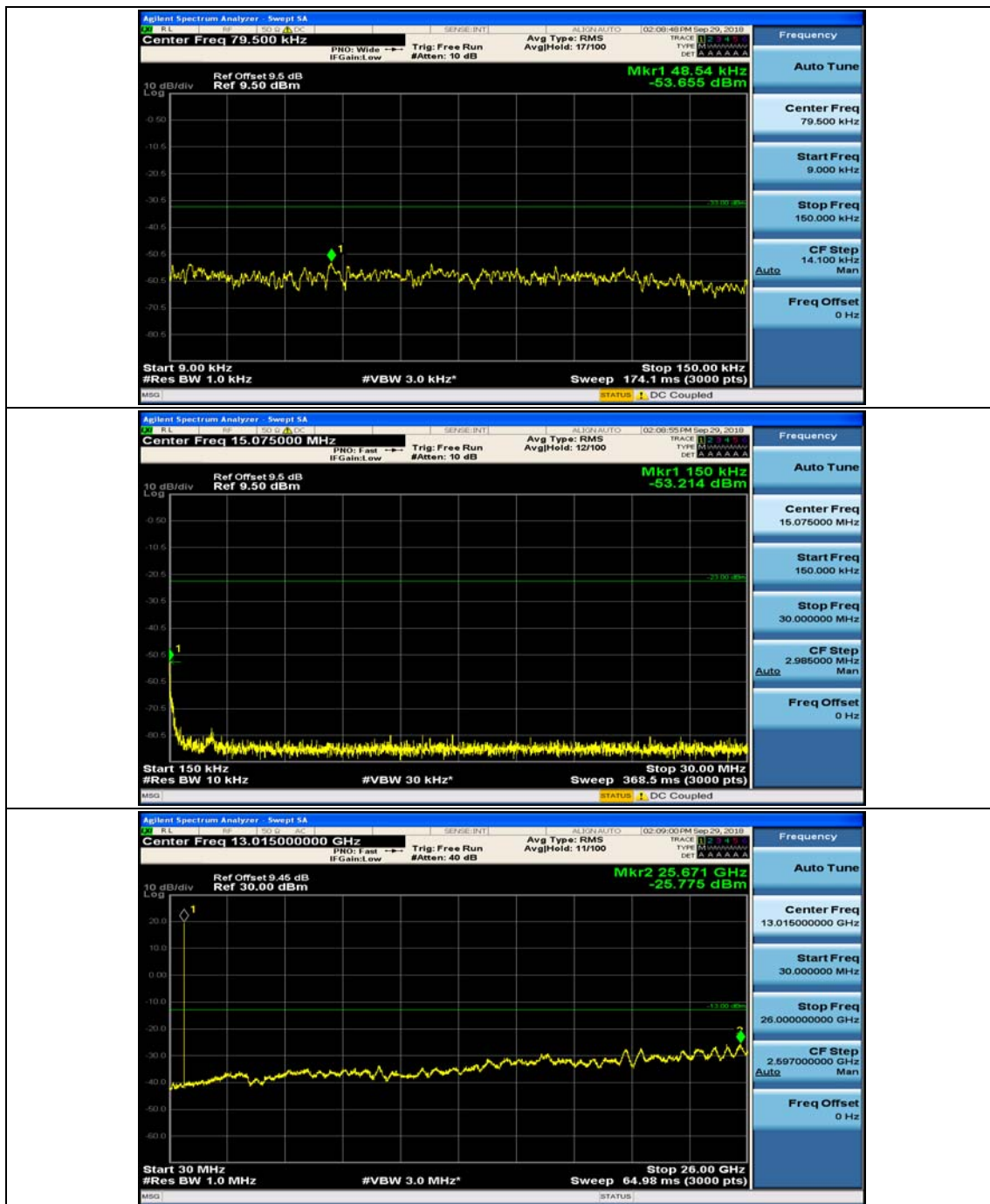


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

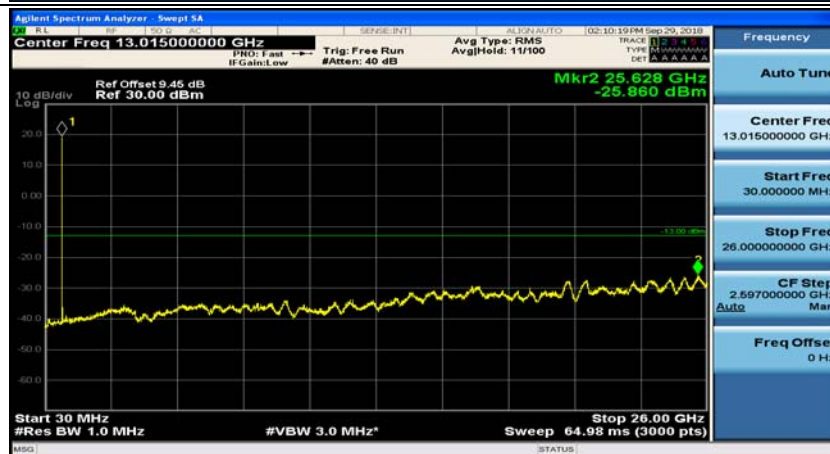
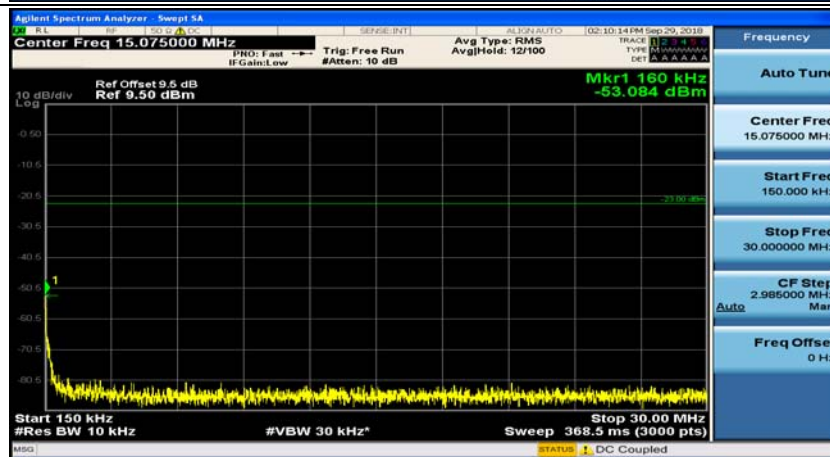


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

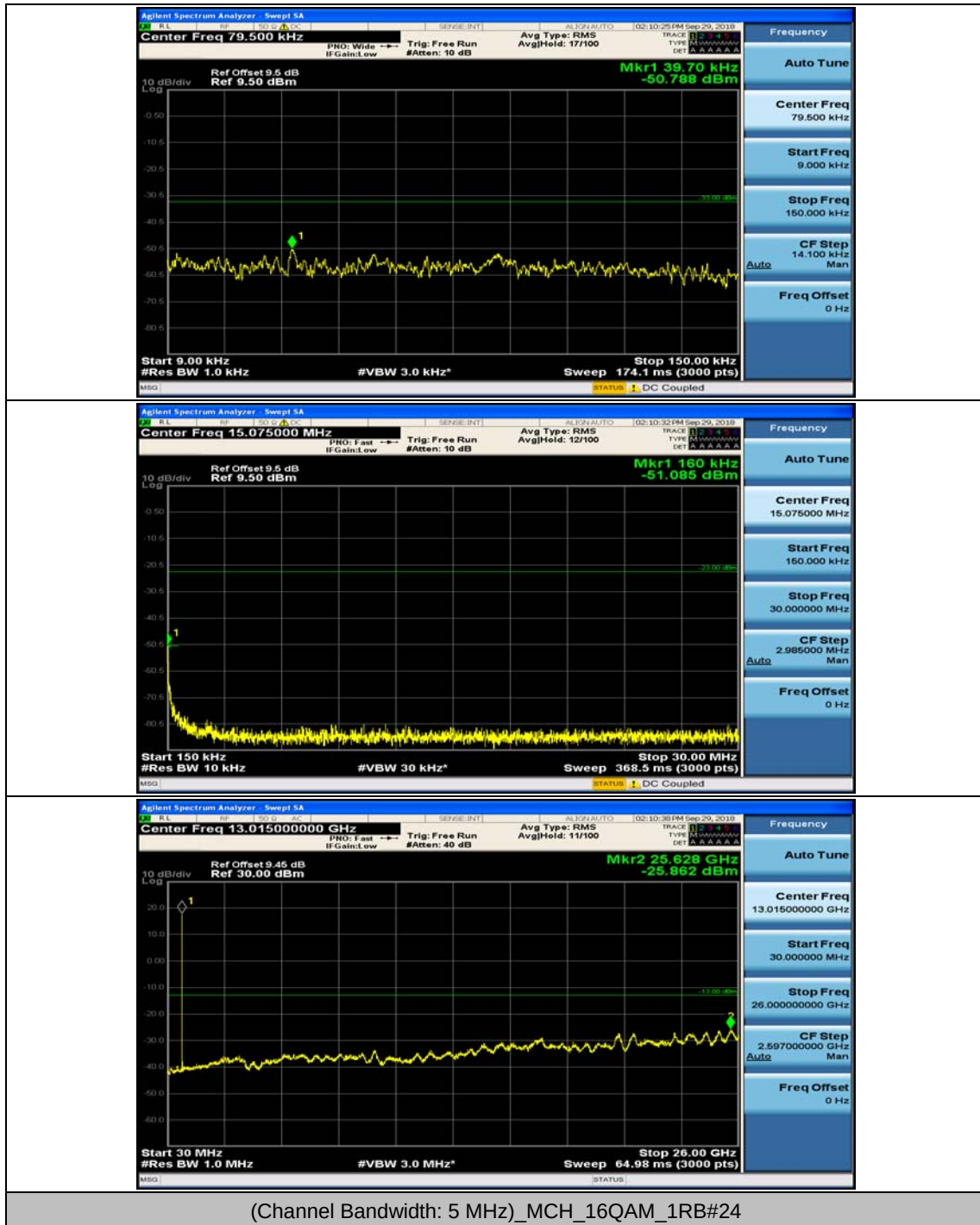


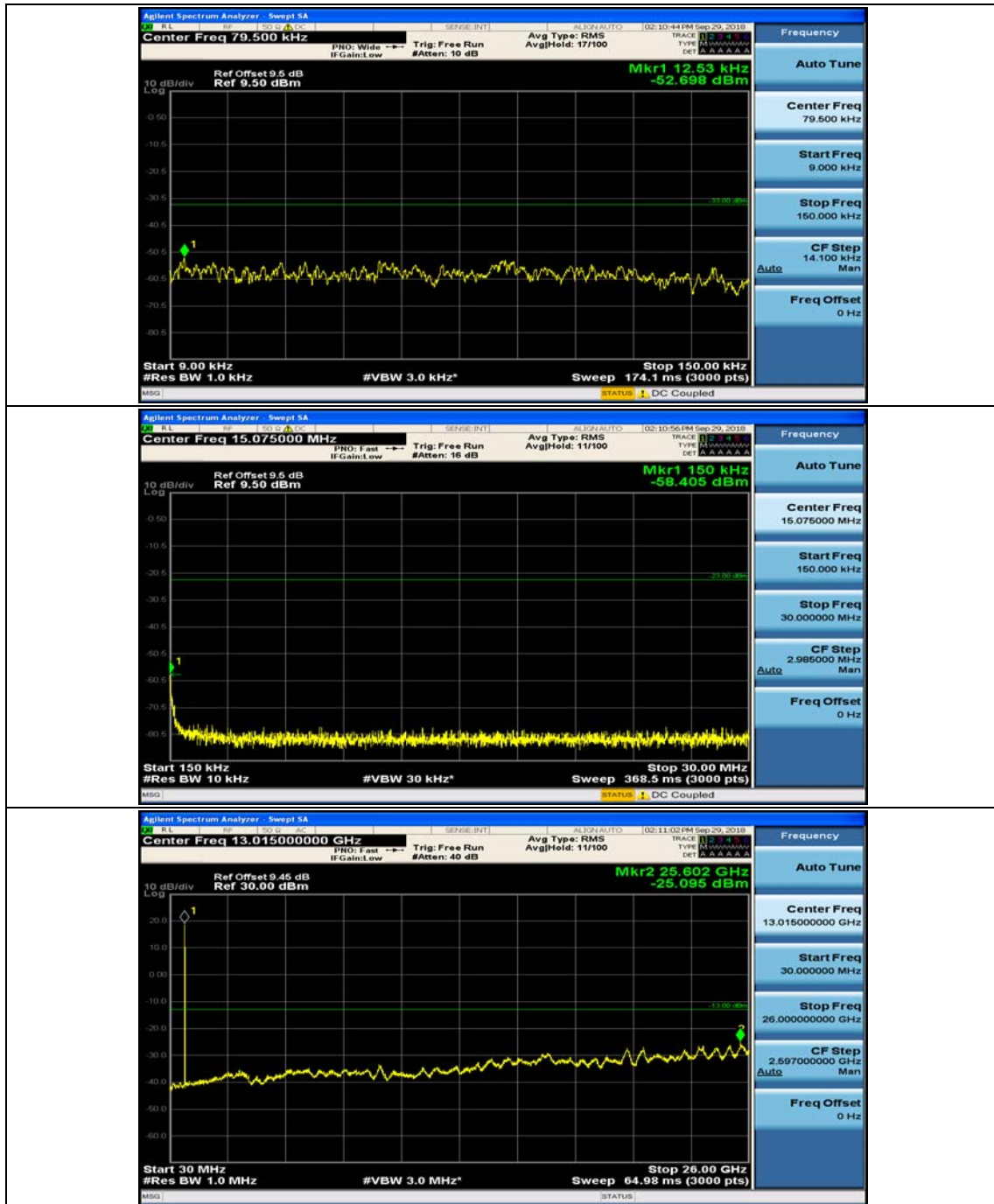


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

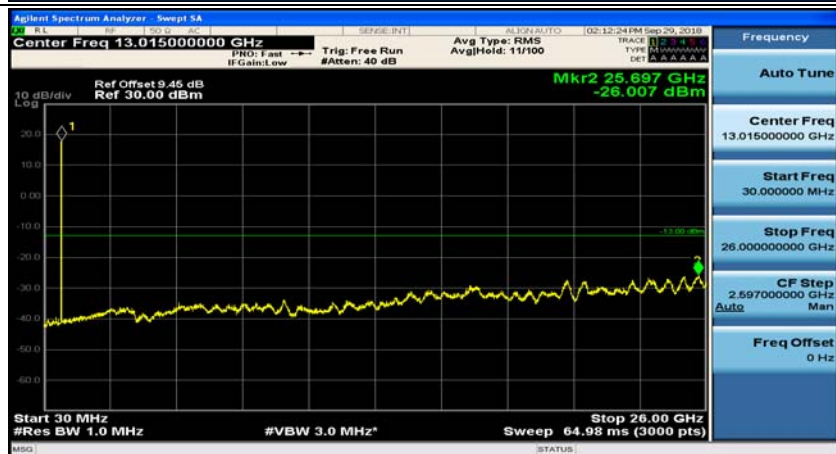
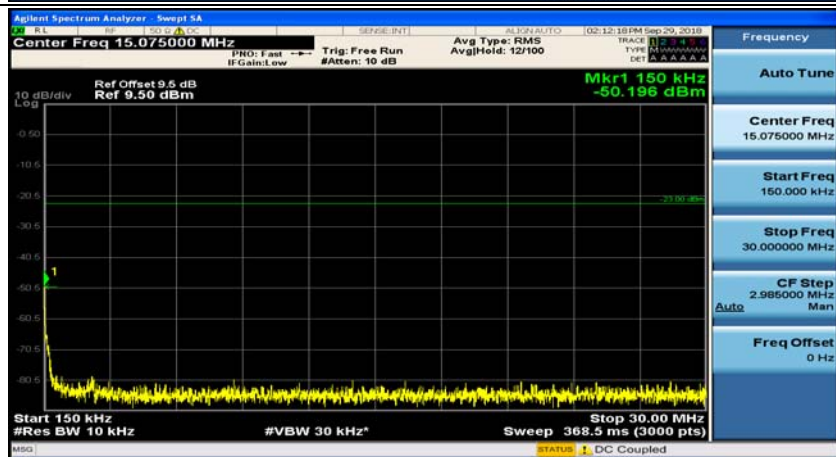


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

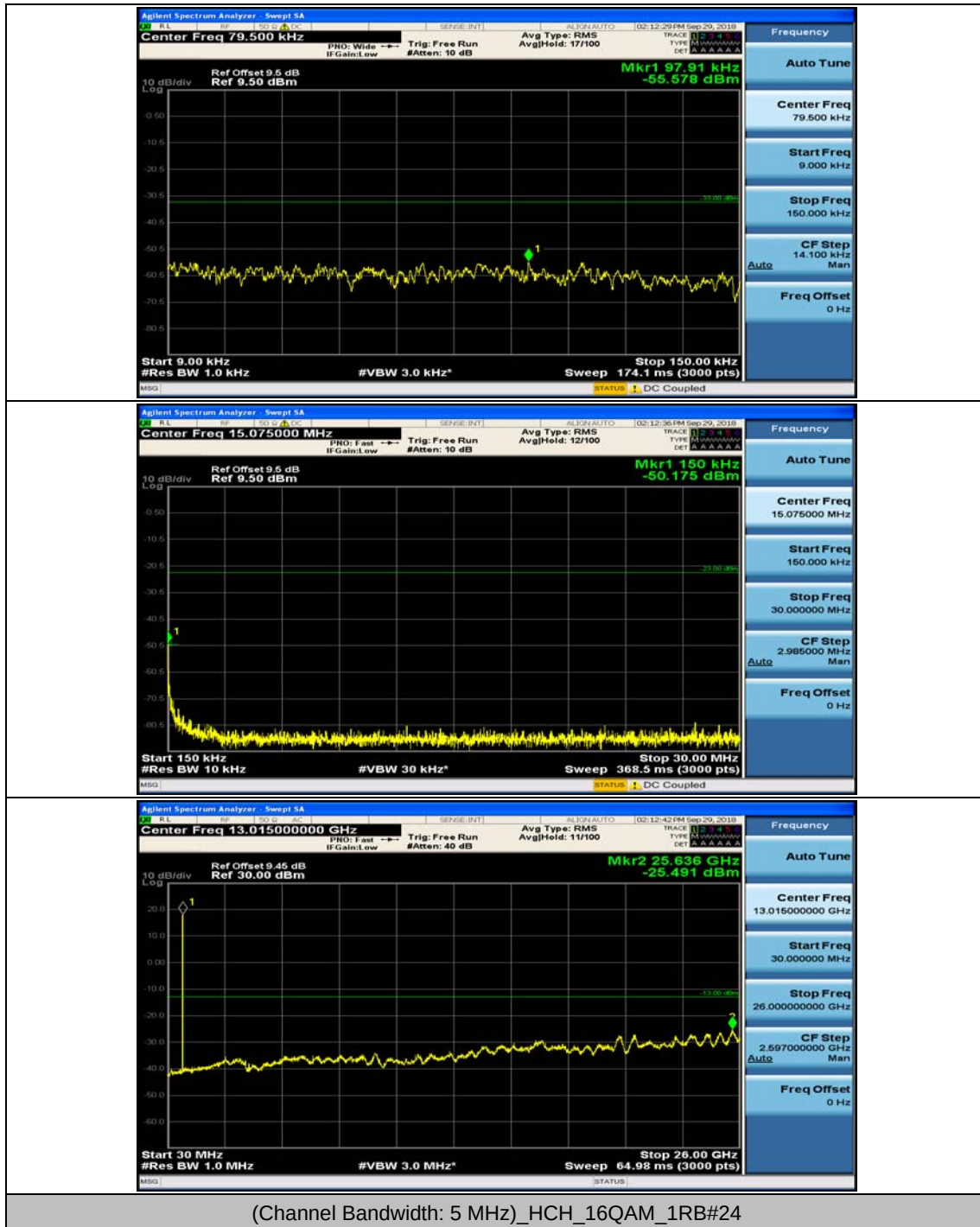


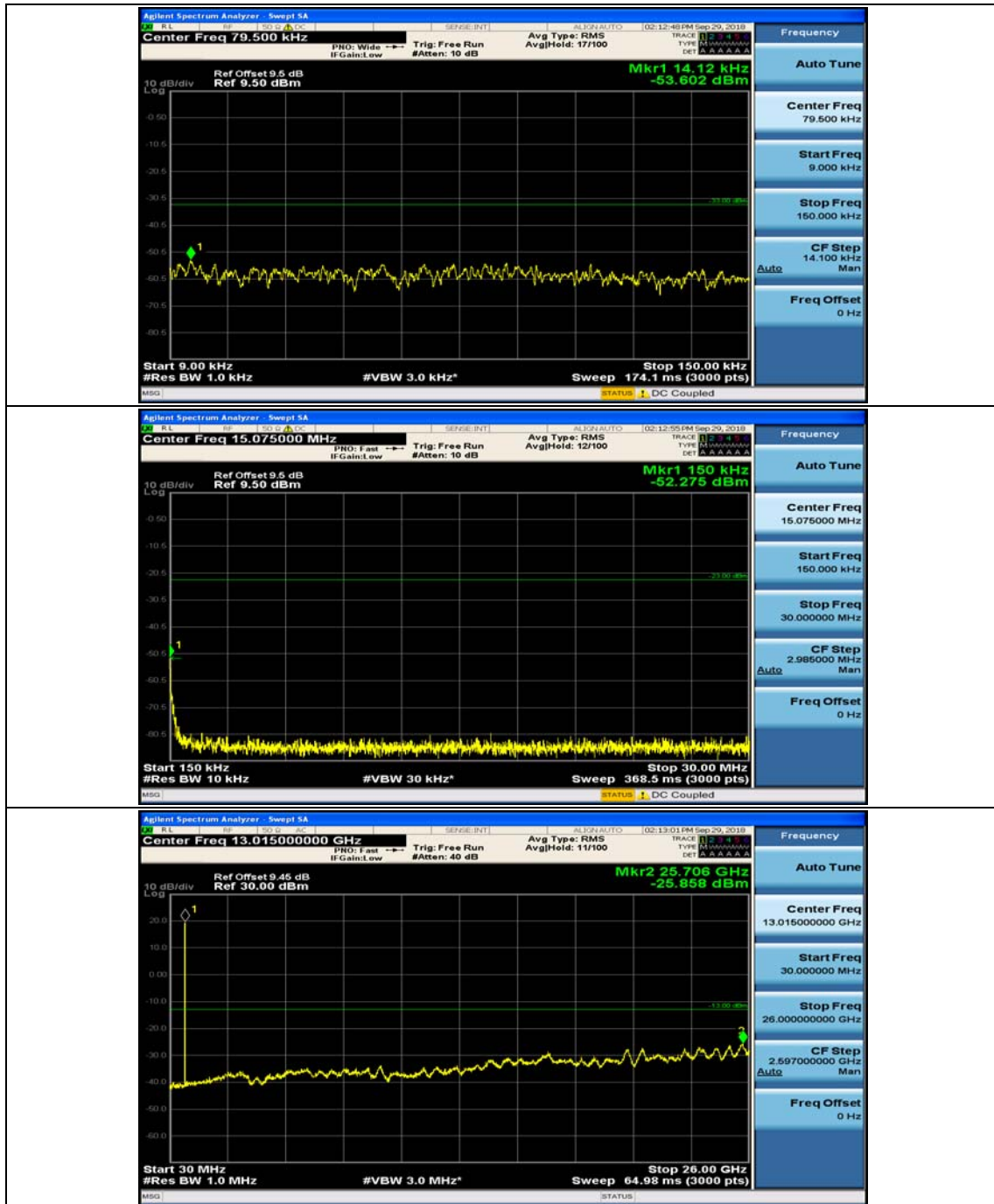


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

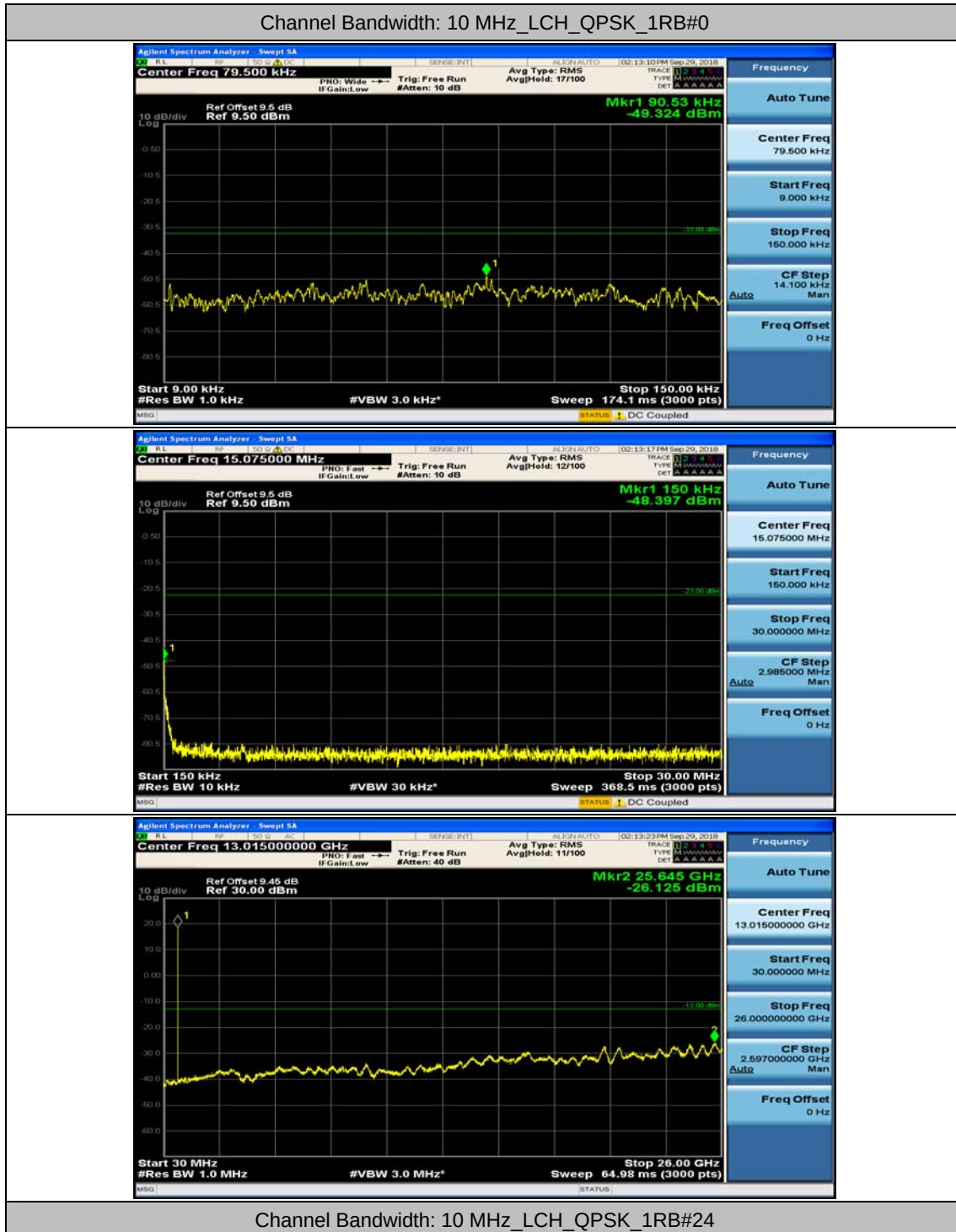


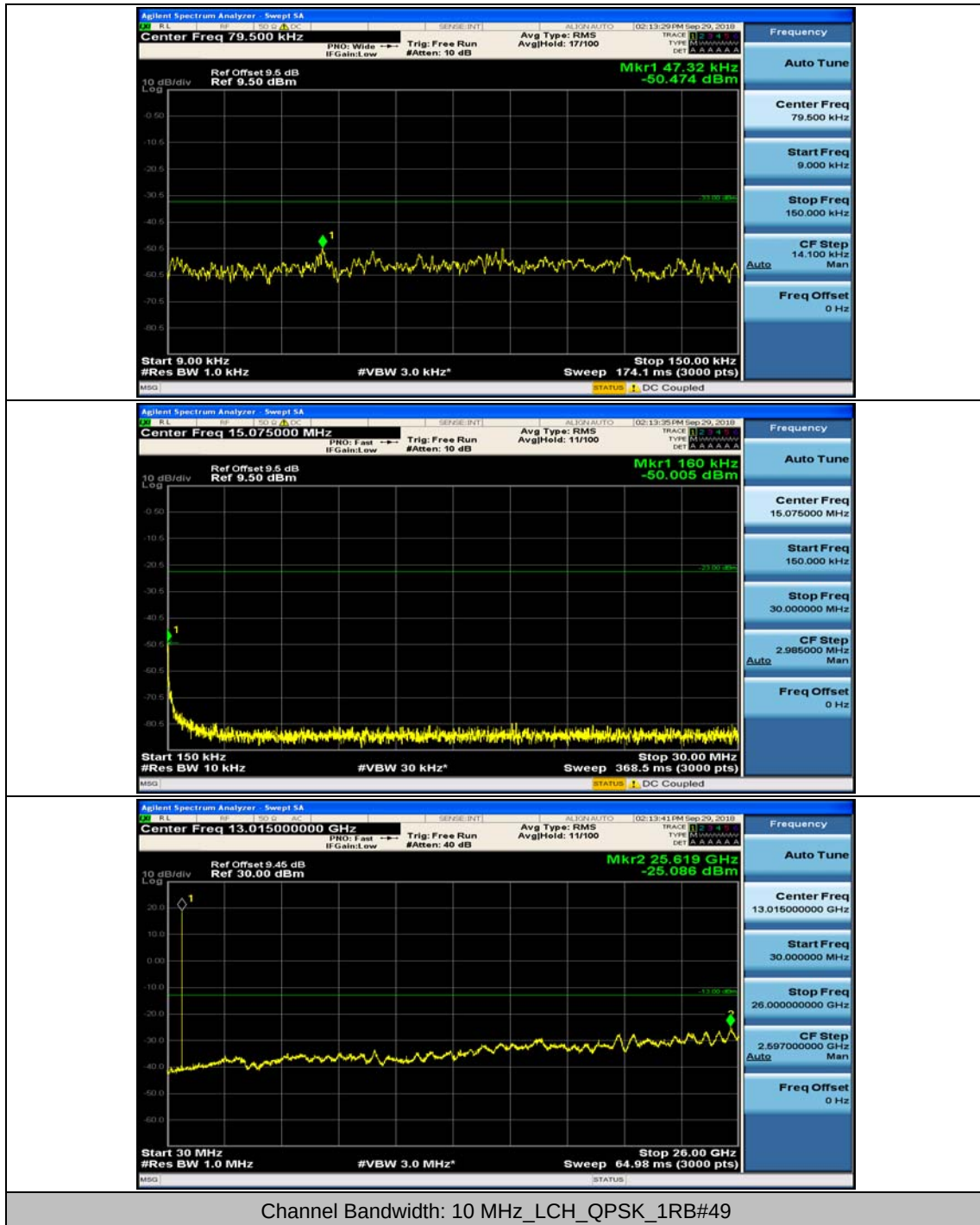
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

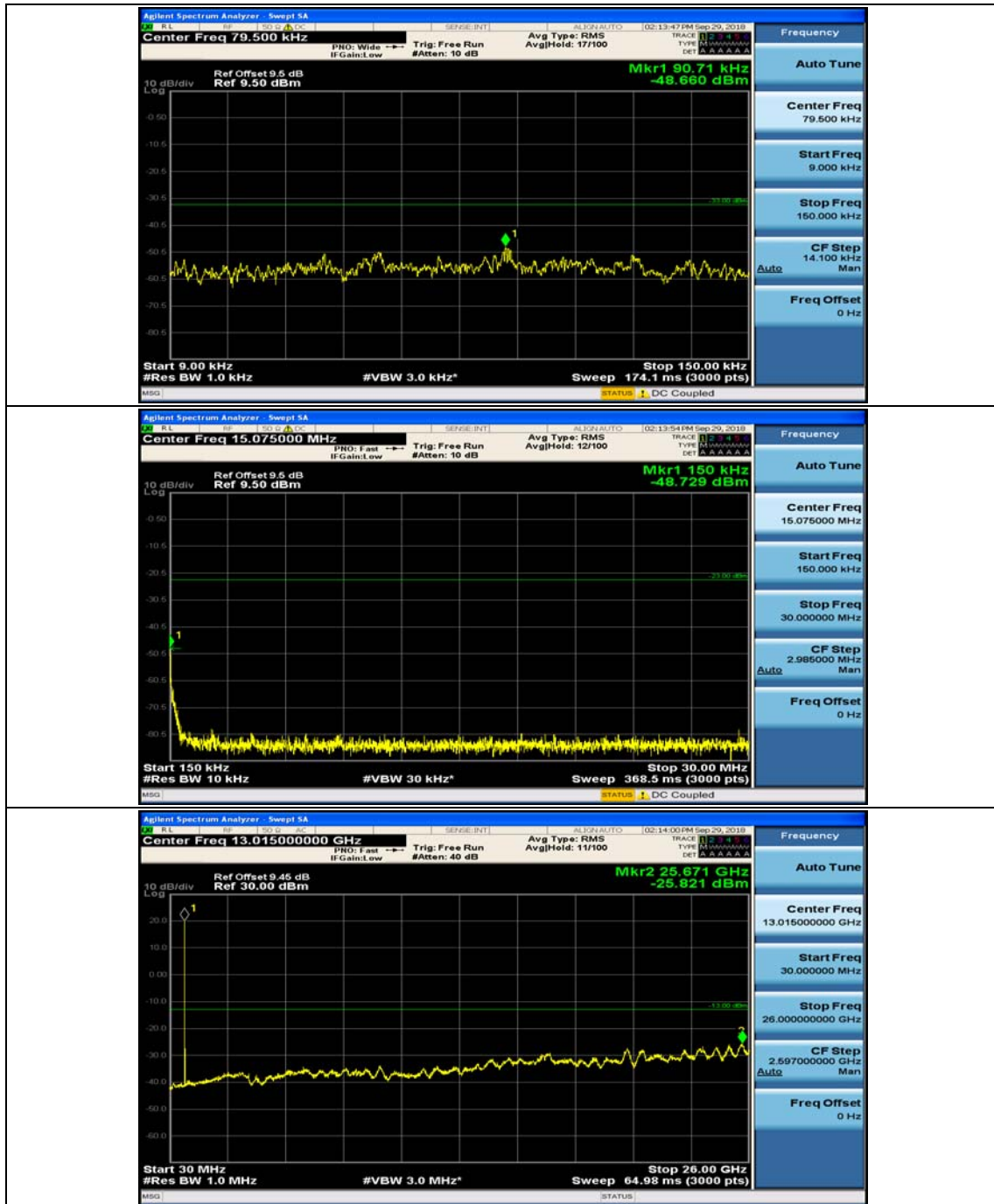




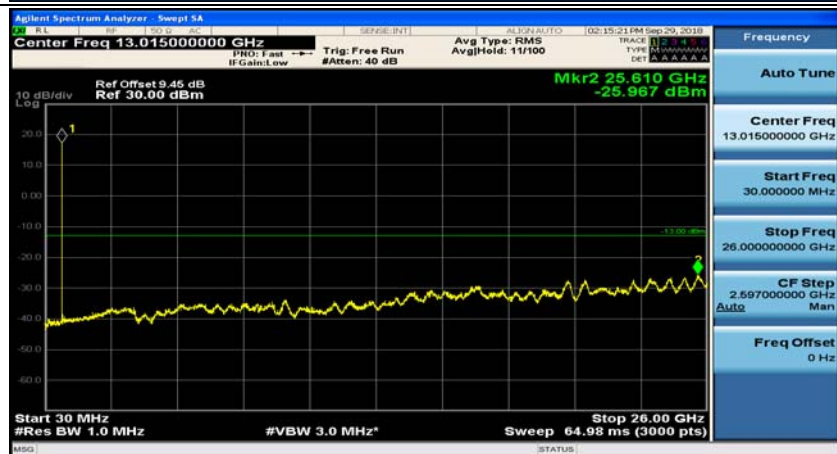
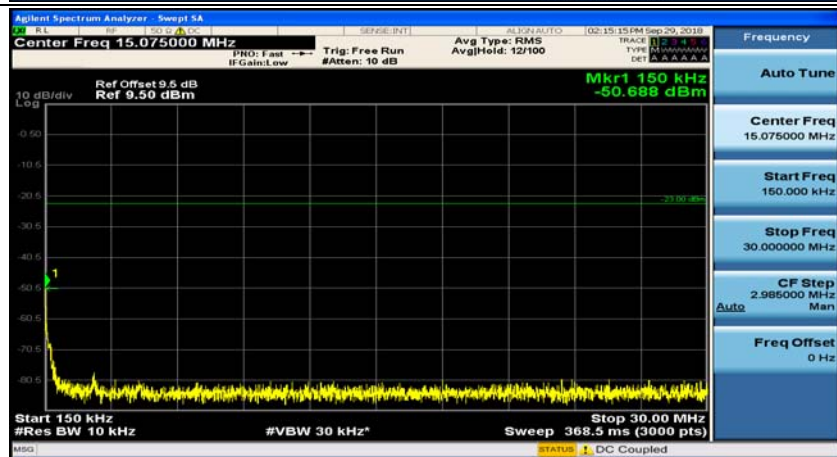
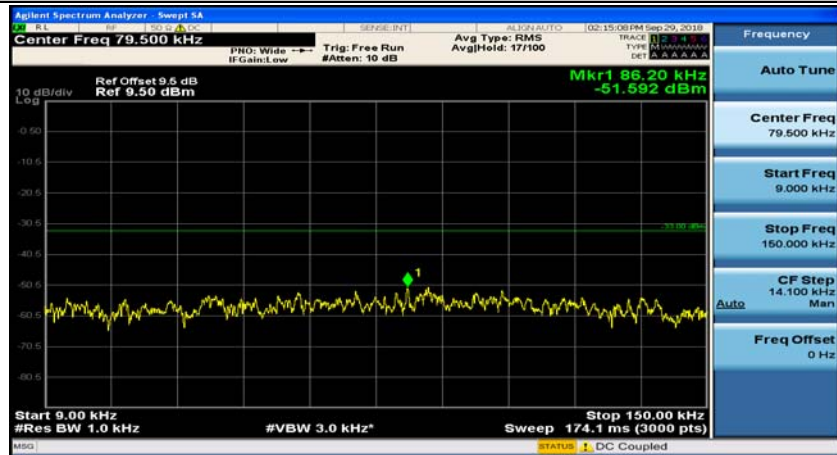
Channel Bandwidth: 10 MHz



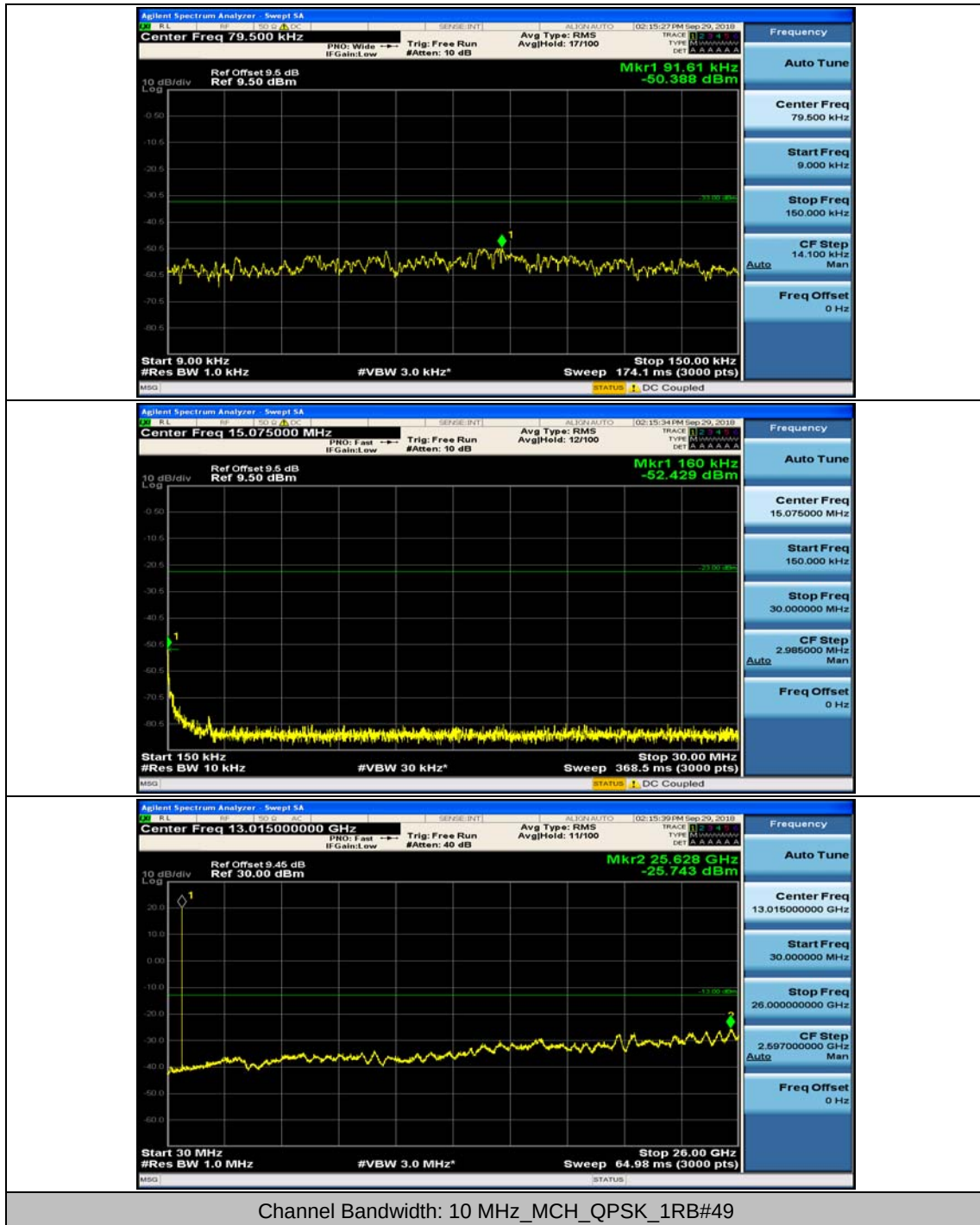


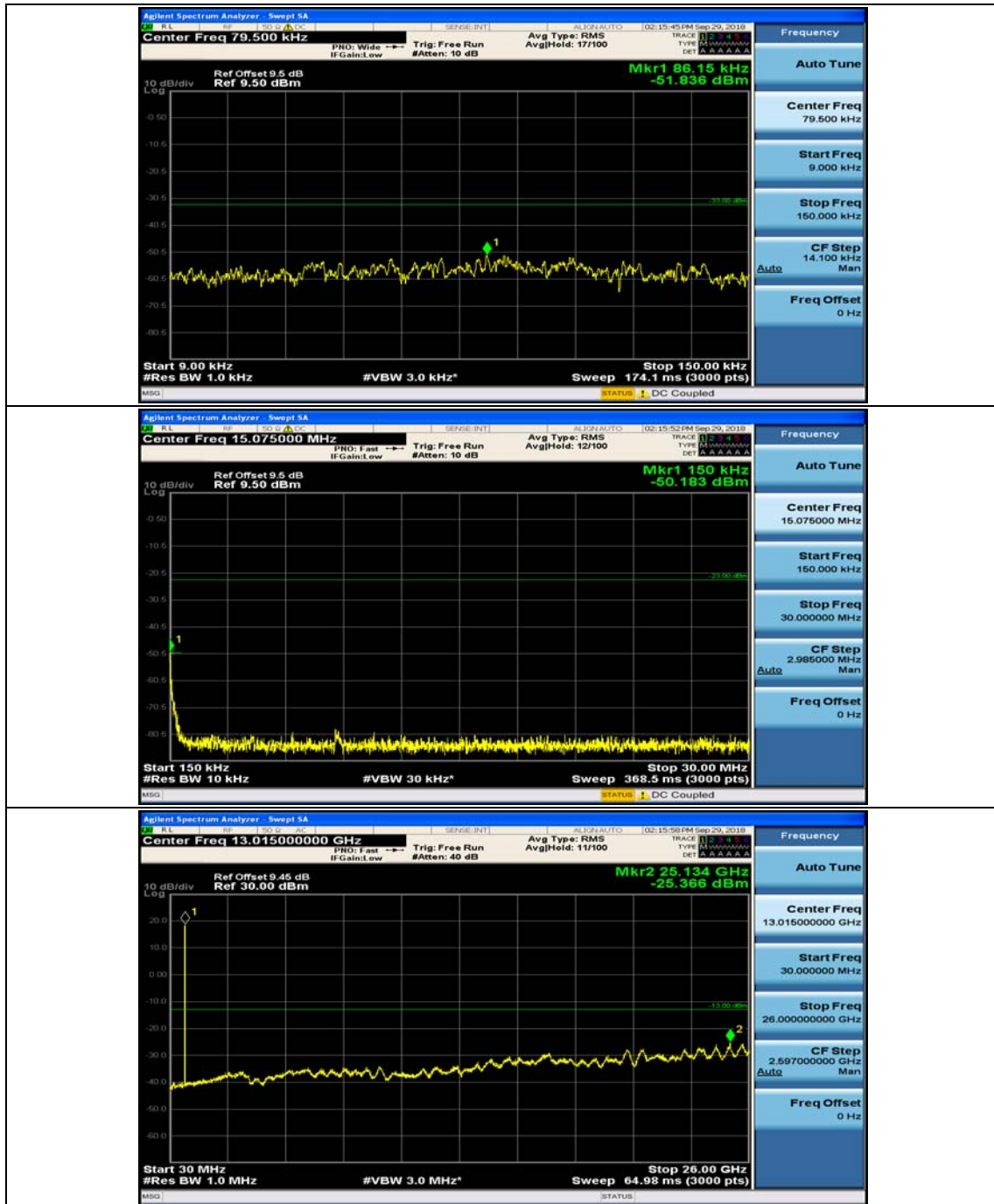


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

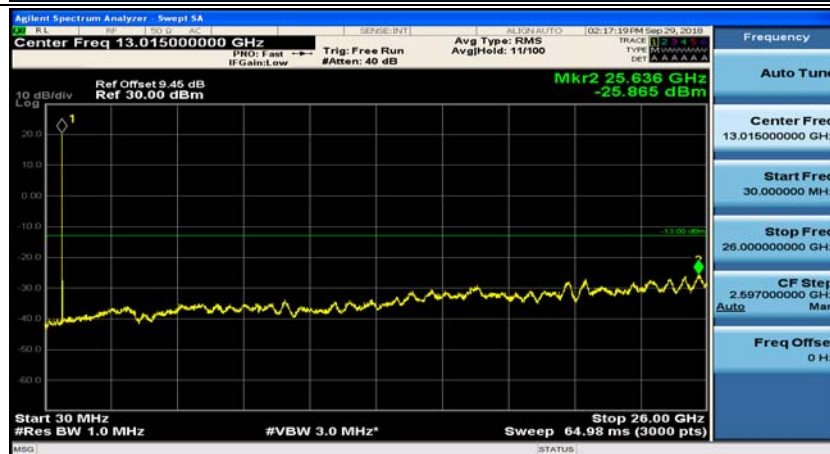
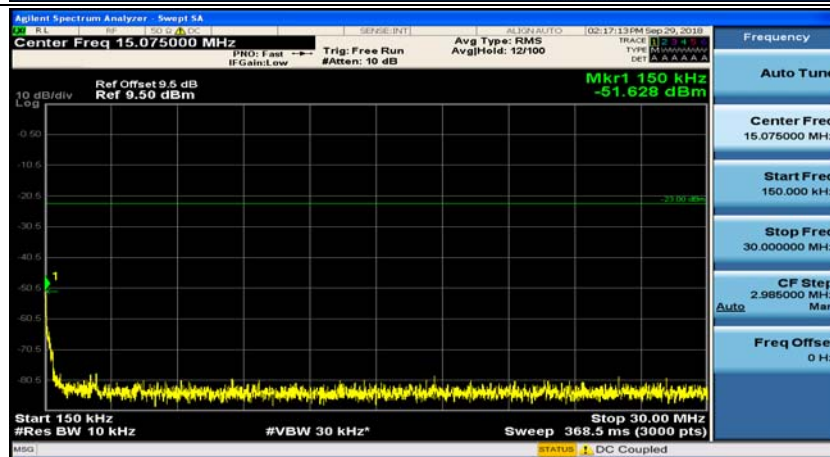
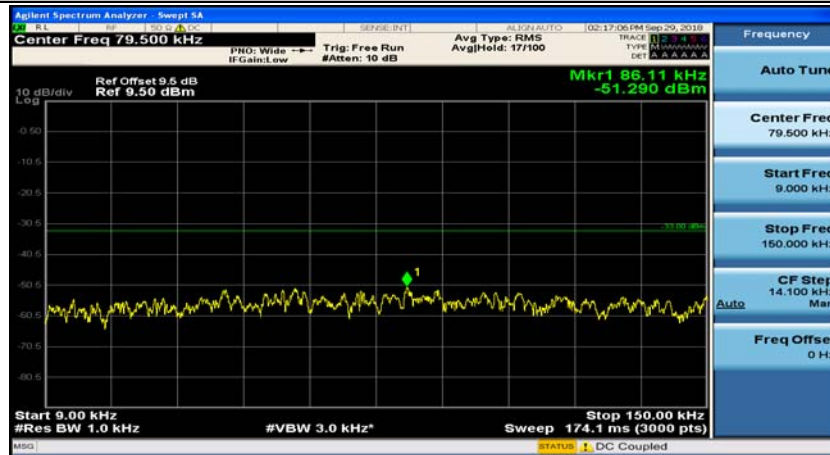


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

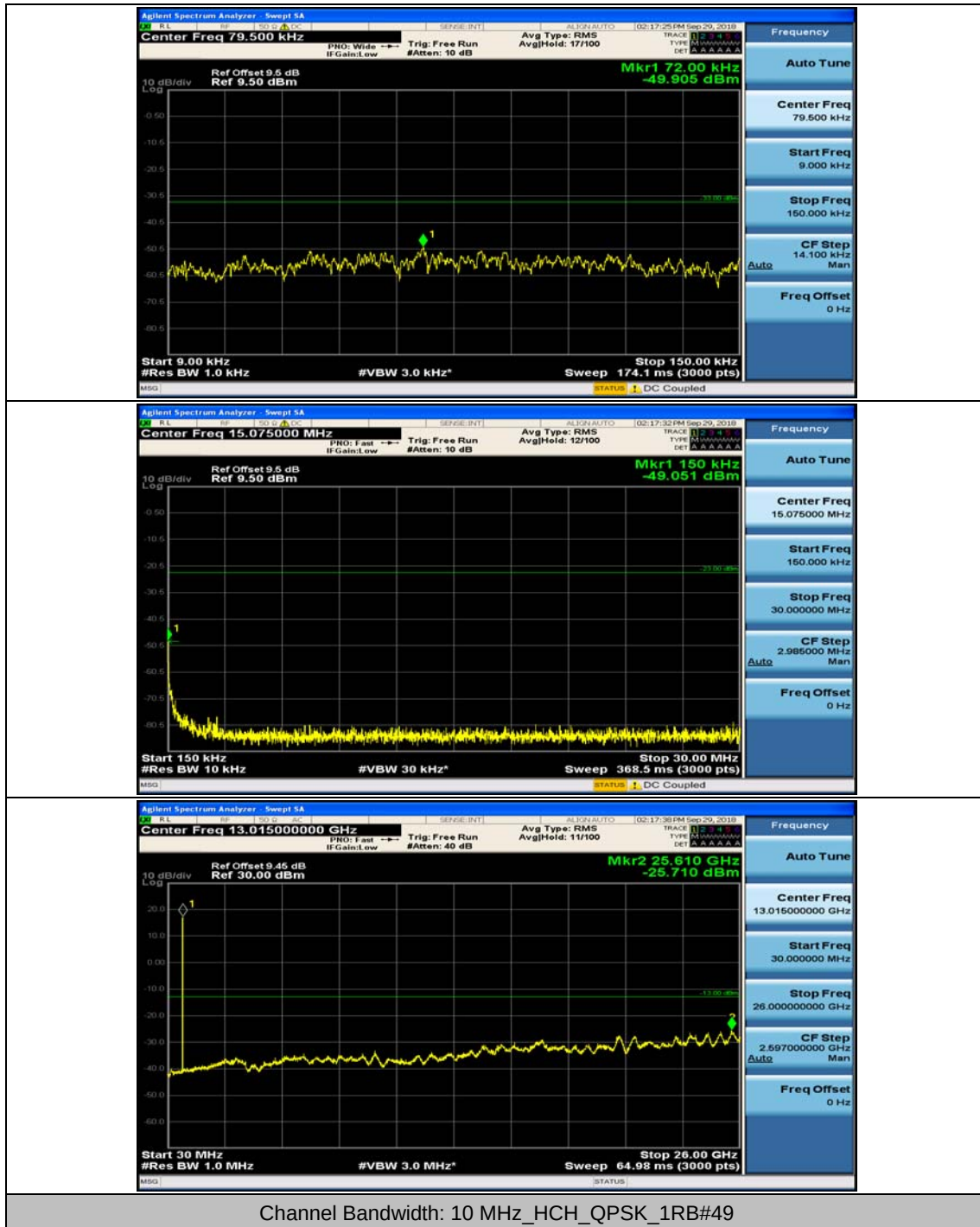


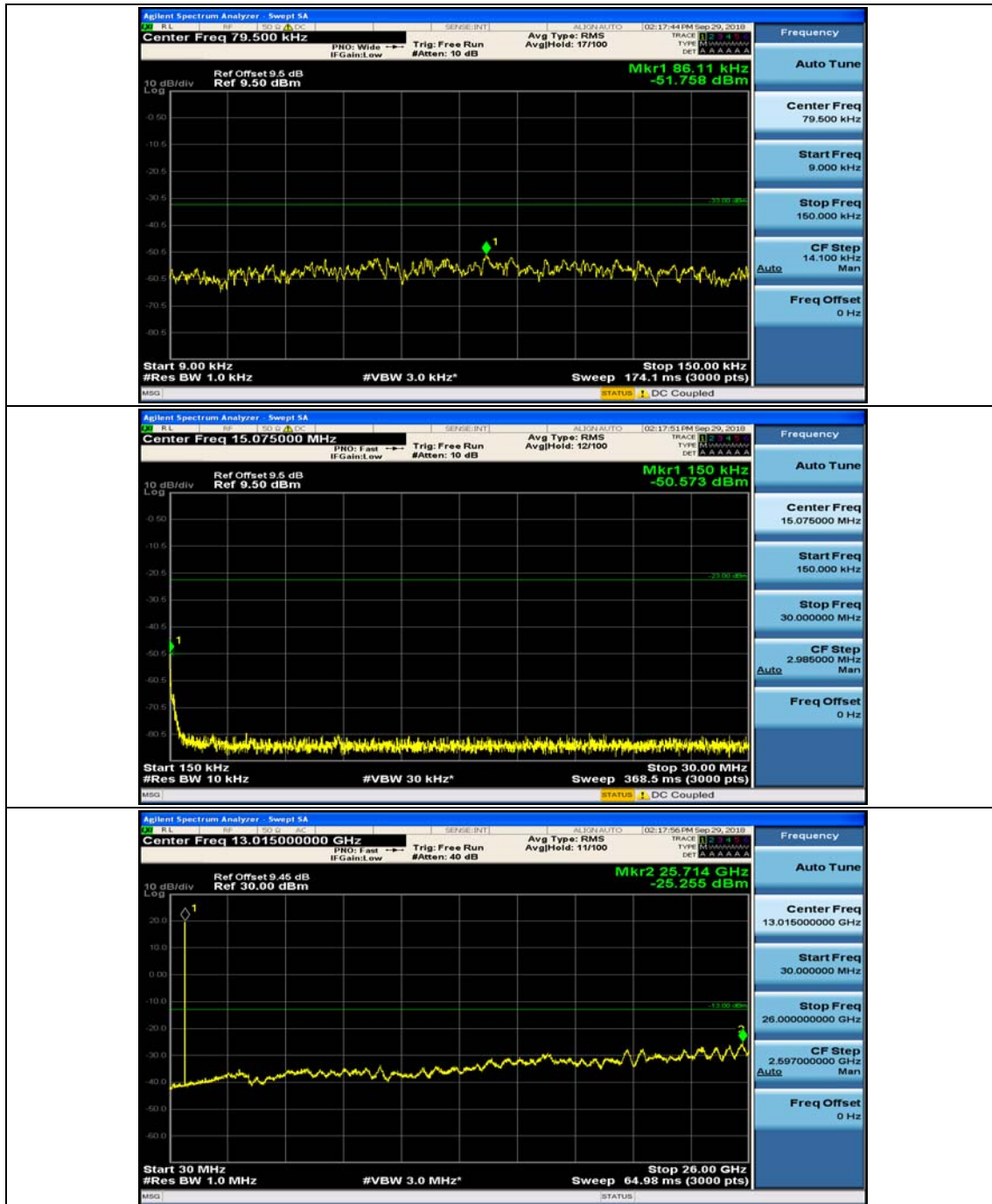


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0

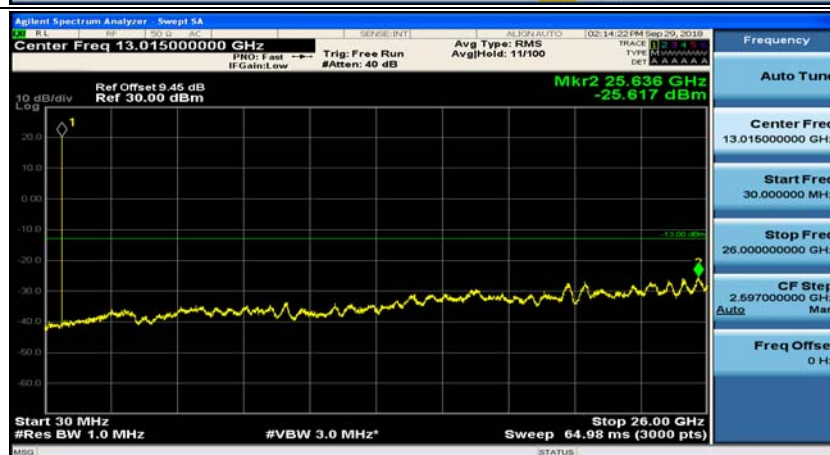
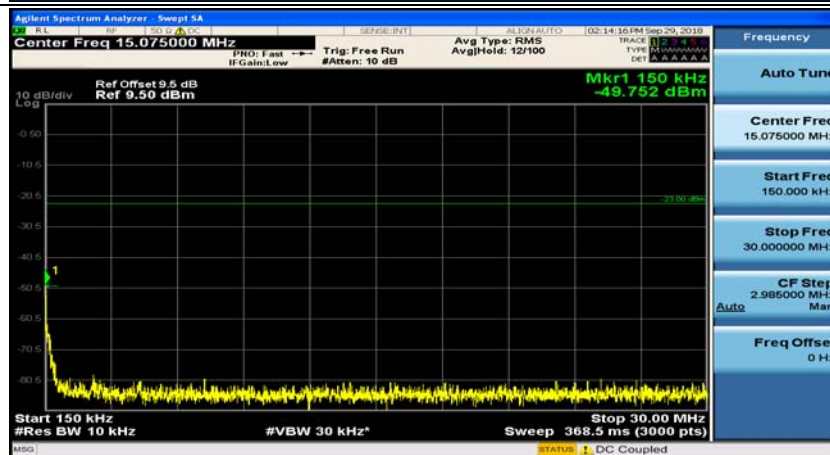
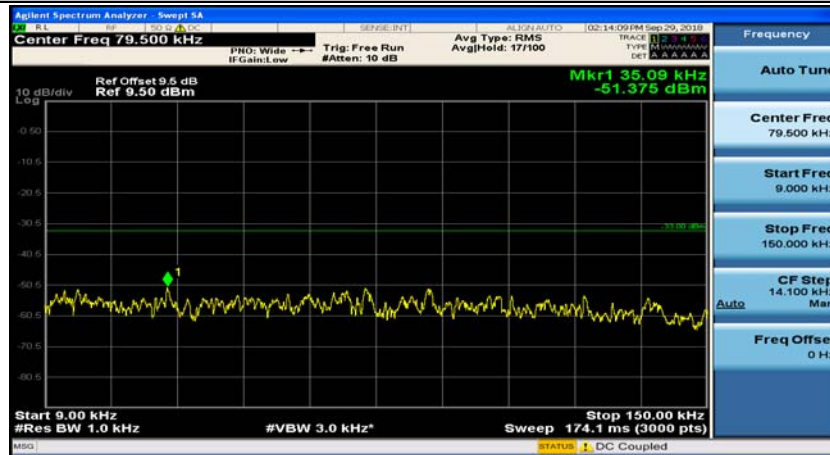


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

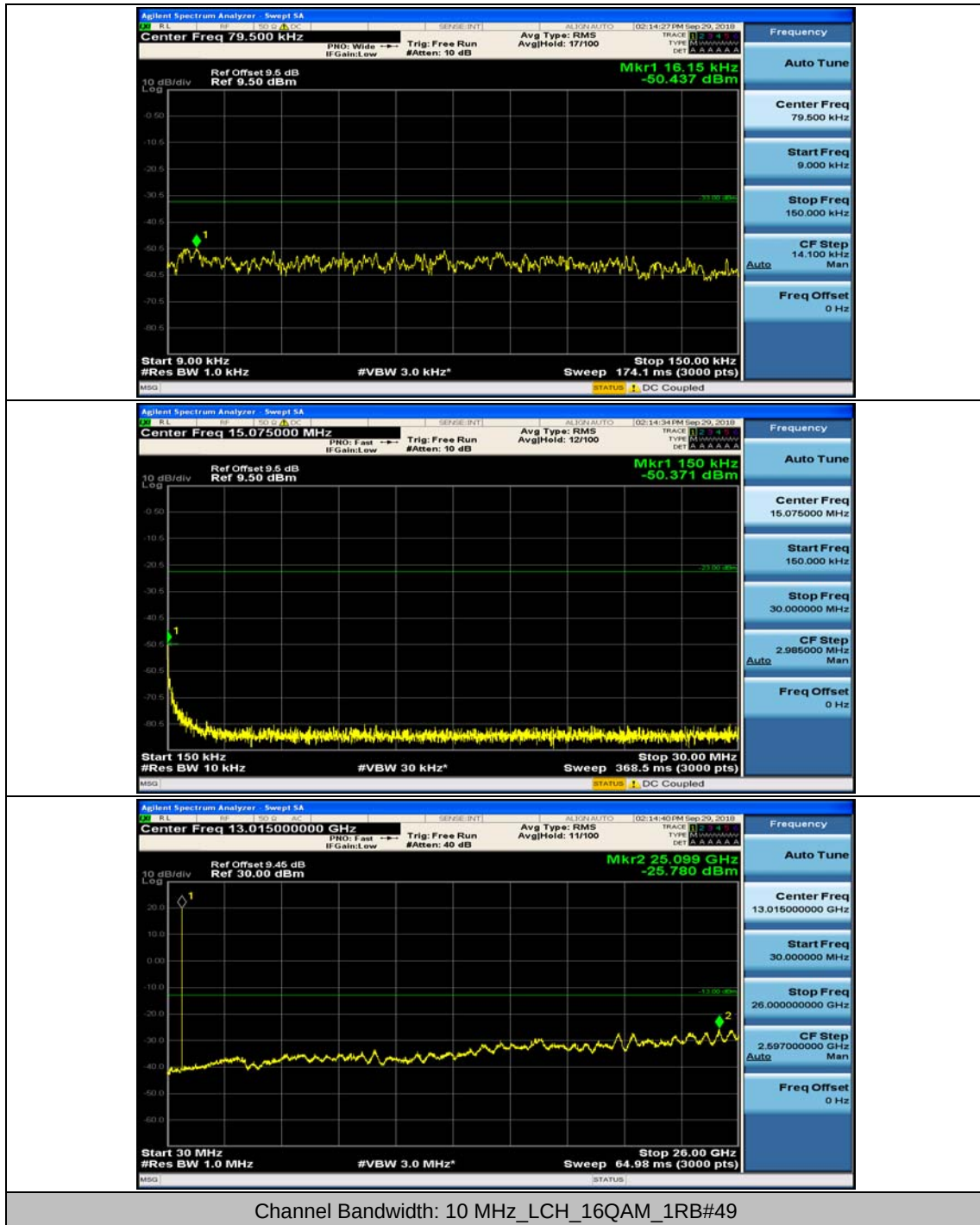


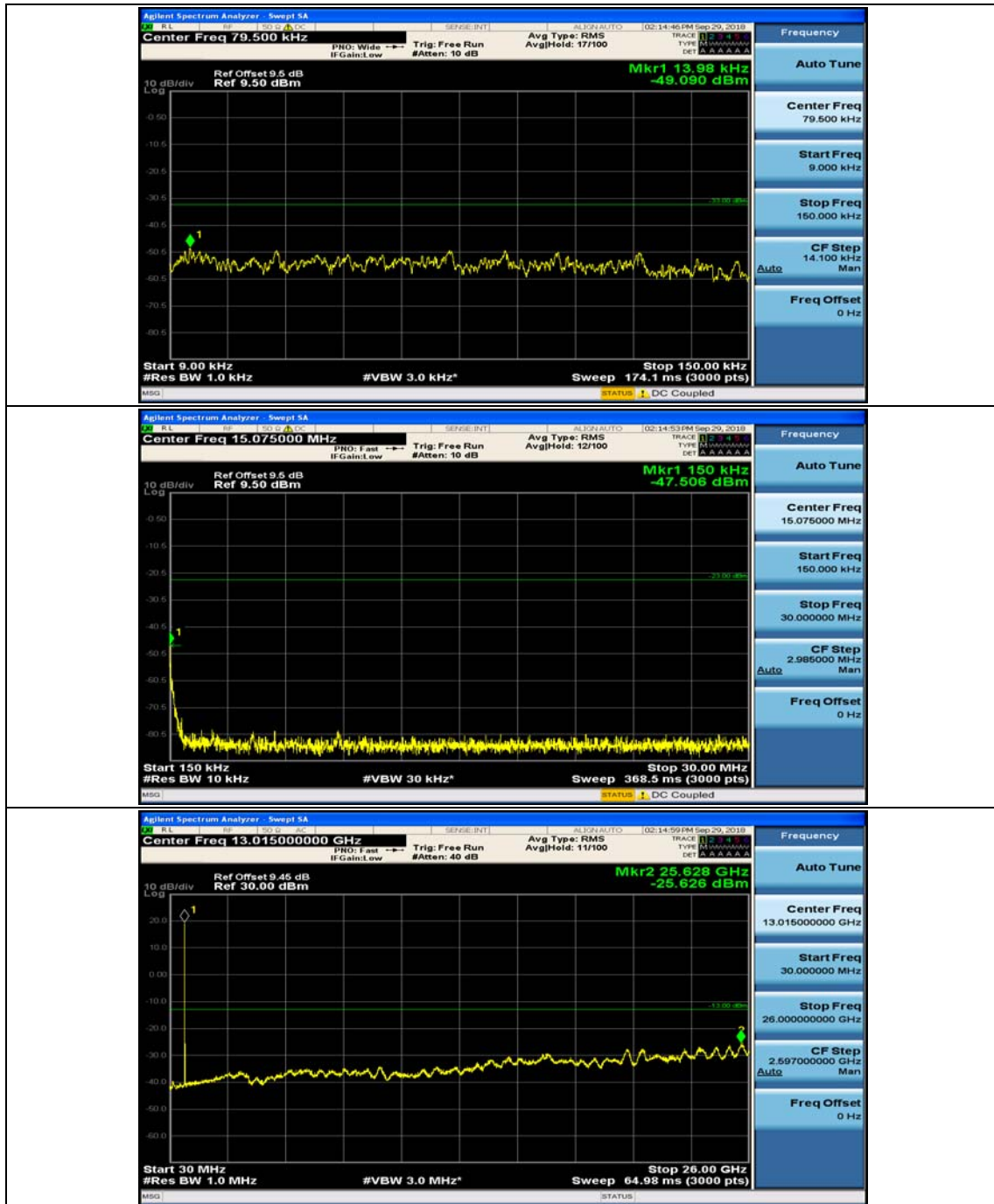


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0

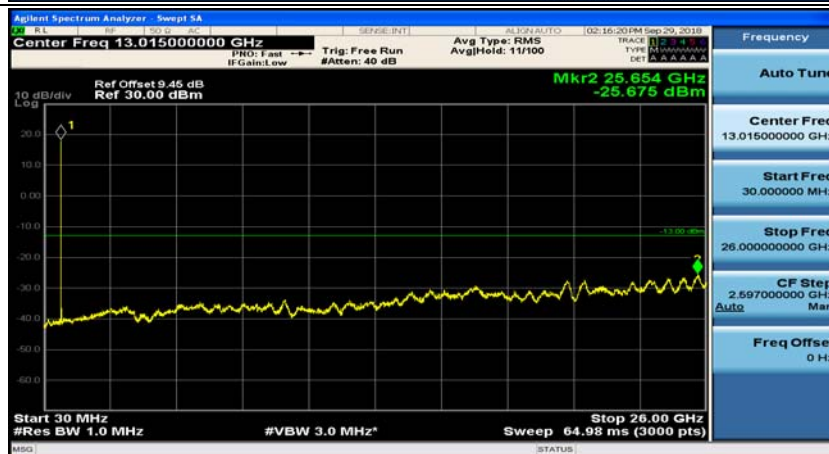
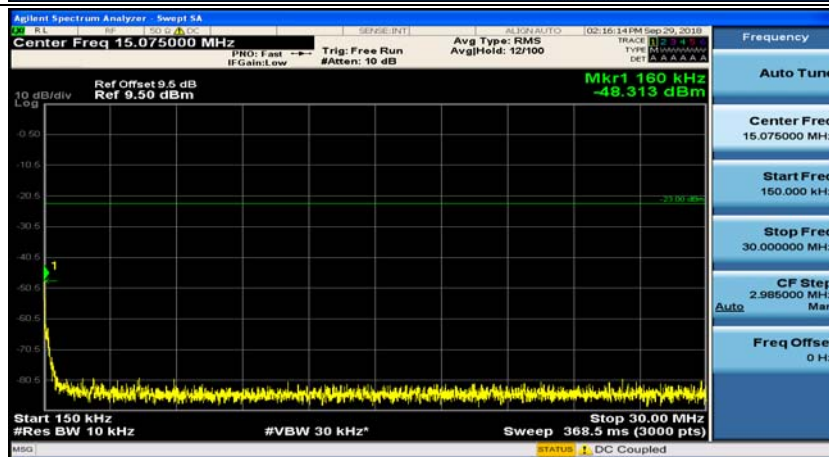


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

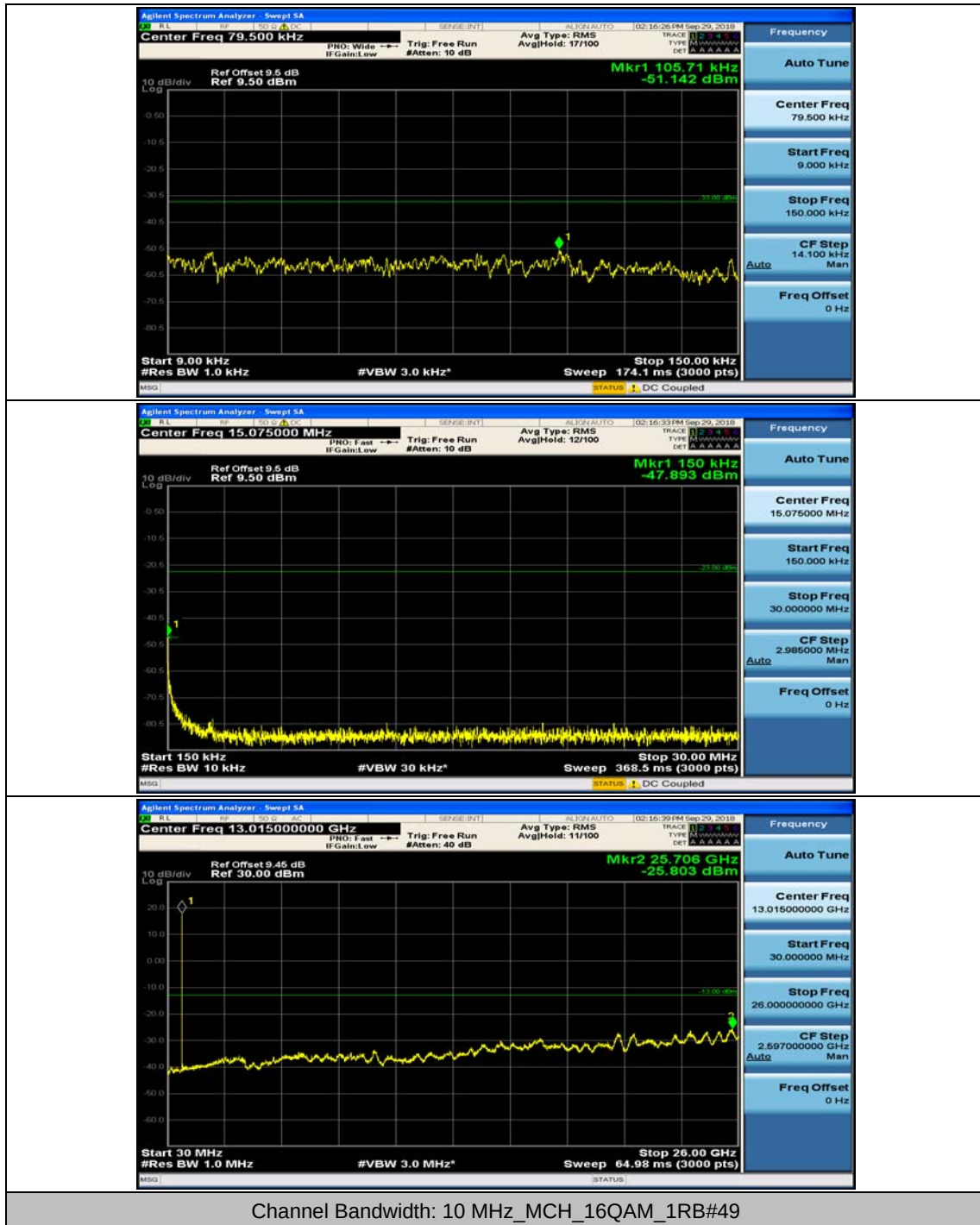


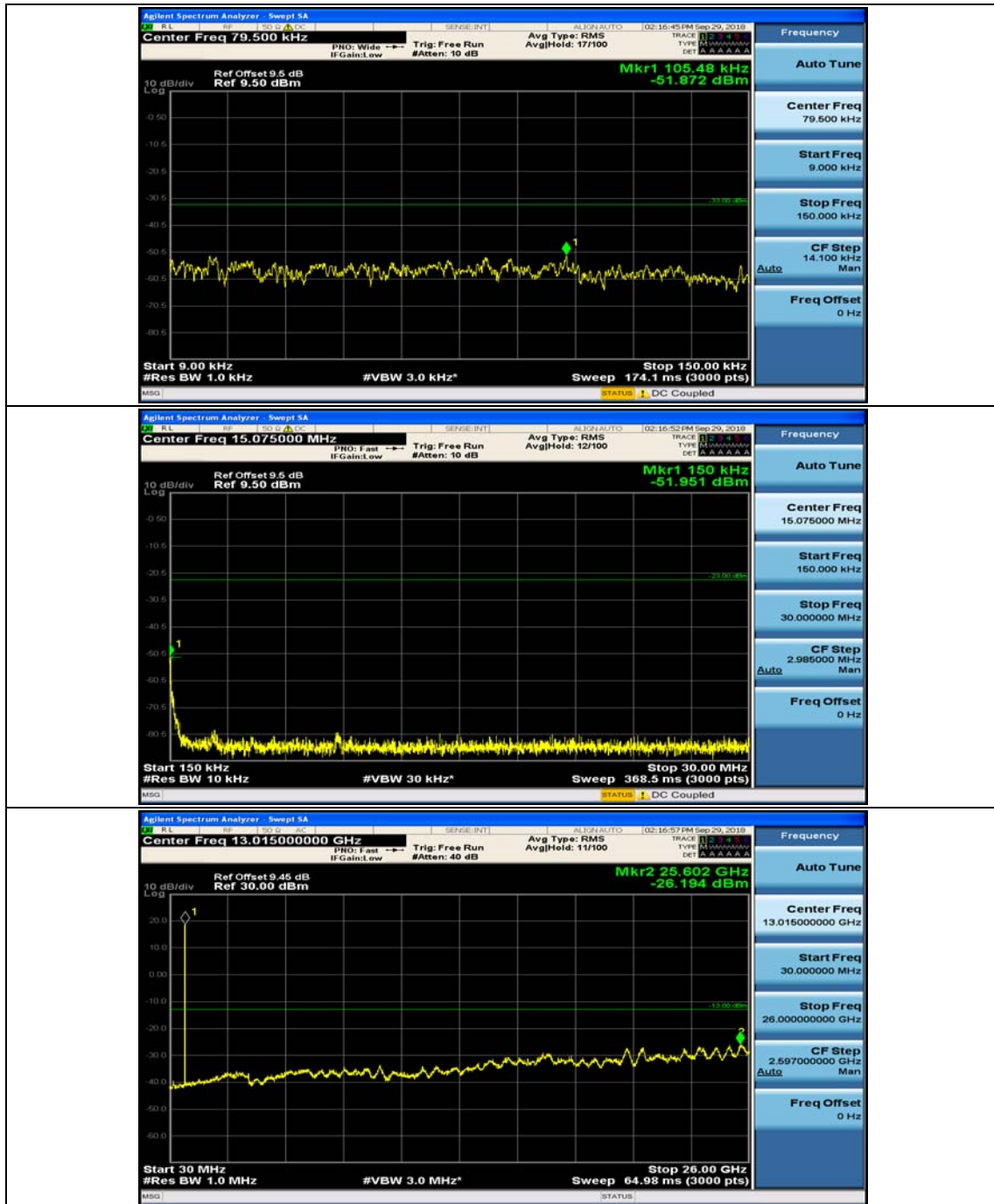


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

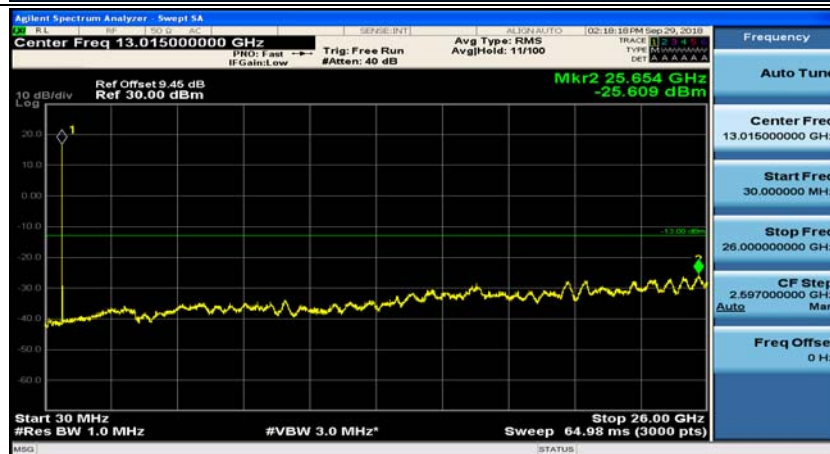
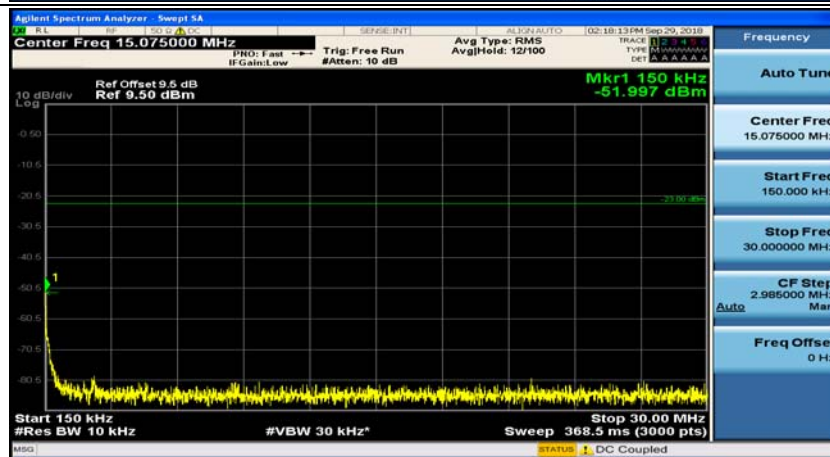


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

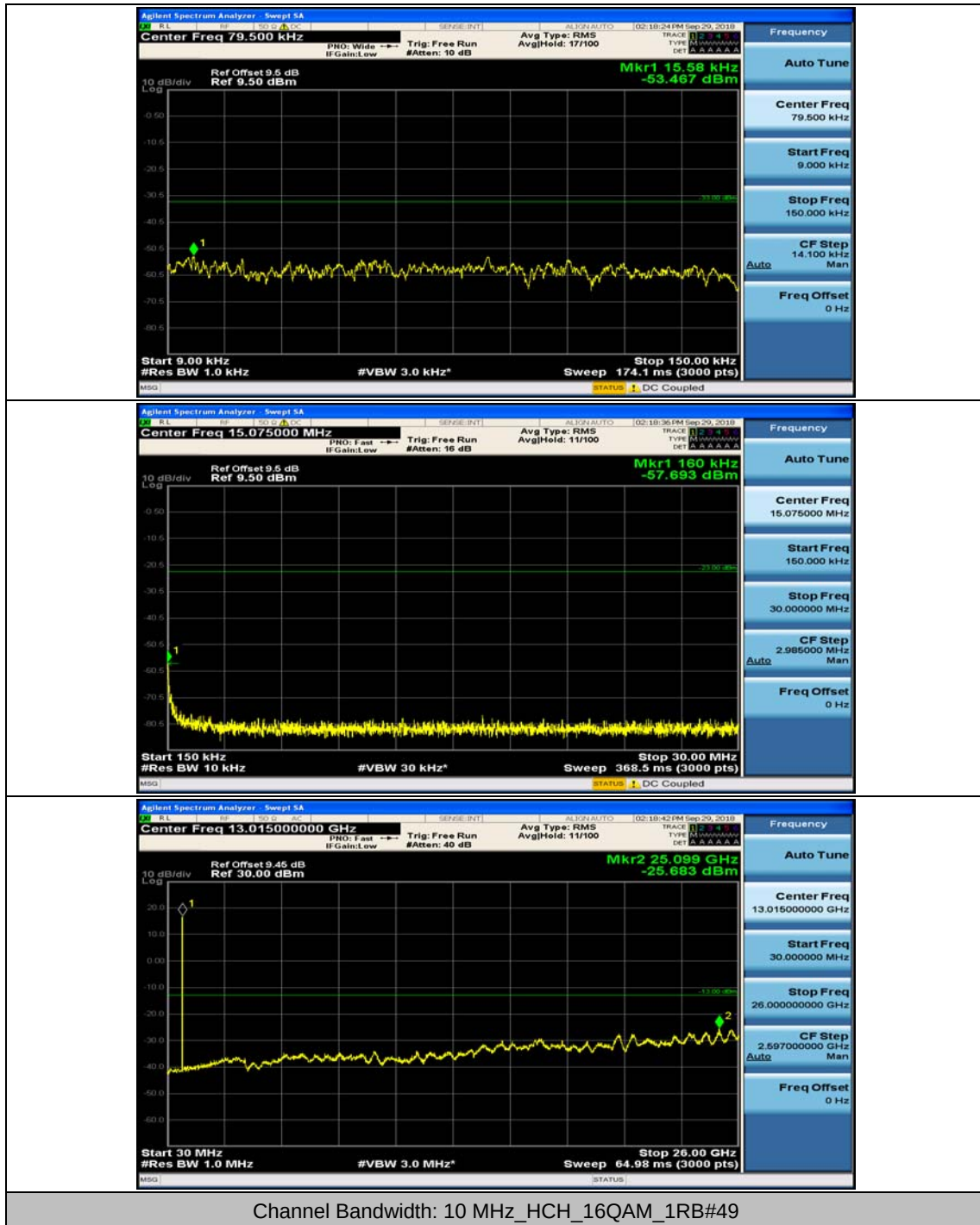


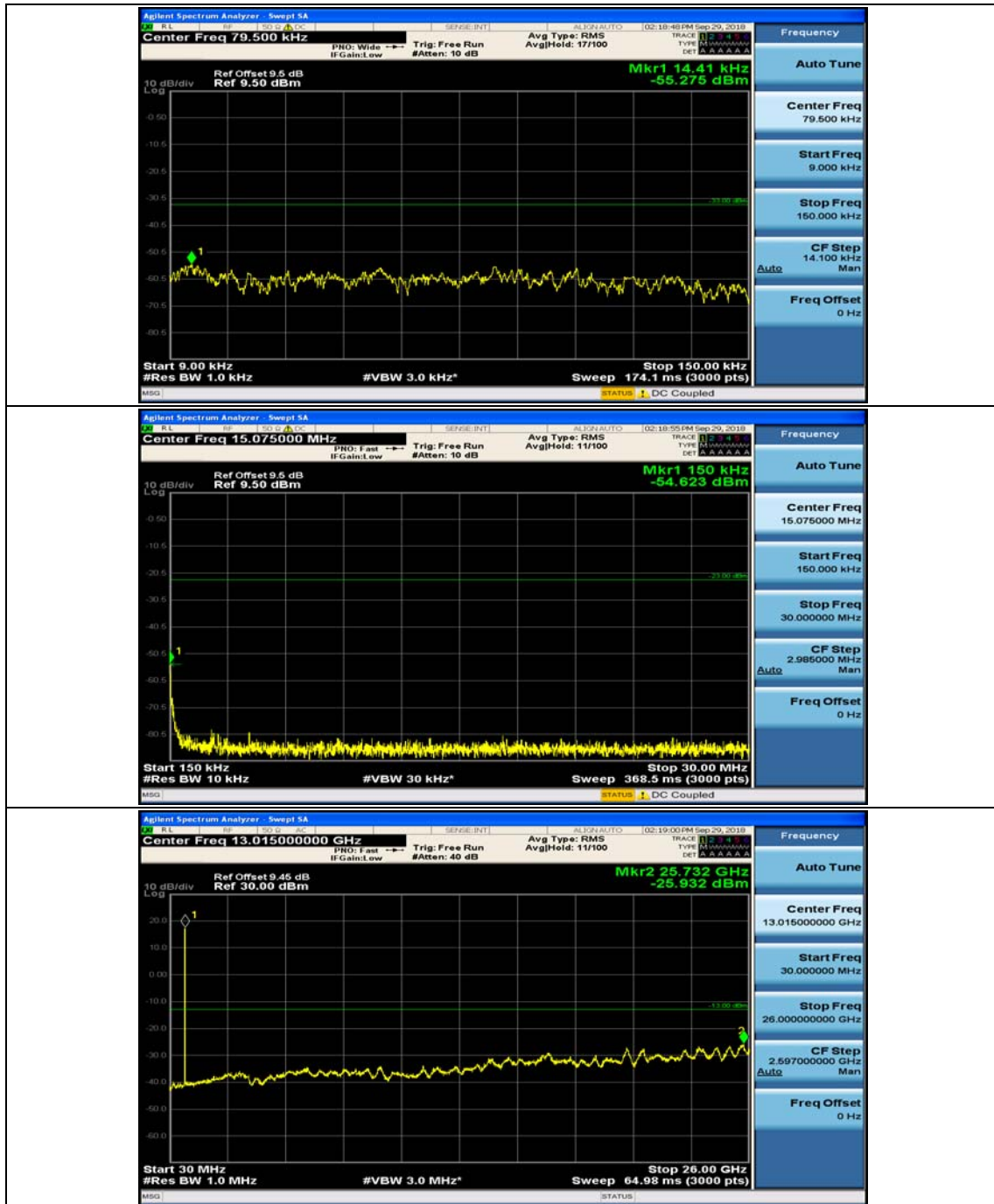


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



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	4.6	0.006574	± 2.5	PASS
		VN	TN	0.68	0.000972	± 2.5	PASS
		VH	TN	4.12	0.005888	± 2.5	PASS
	MCH	VL	TN	0.98	0.001385	± 2.5	PASS
		VN	TN	1.63	0.002304	± 2.5	PASS
		VH	TN	-1.11	-0.001569	± 2.5	PASS
	HCH	VL	TN	3.94	0.005508	± 2.5	PASS
		VN	TN	1.79	0.002502	± 2.5	PASS
		VH	TN	-0.3	-0.000419	± 2.5	PASS
16QAM	LCH	VL	TN	4.04	0.005774	± 2.5	PASS
		VN	TN	1.03	0.001472	± 2.5	PASS
		VH	TN	1.26	0.001801	± 2.5	PASS
	MCH	VL	TN	4.29	0.006064	± 2.5	PASS
		VN	TN	0.26	0.000367	± 2.5	PASS
		VH	TN	4.88	0.006898	± 2.5	PASS
	HCH	VL	TN	3.39	0.004739	± 2.5	PASS
		VN	TN	-1.06	-0.001482	± 2.5	PASS
		VH	TN	-0.26	-0.000363	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.04	-0.000057	± 2.5	PASS
		VN	-20	-1.61	-0.002301	± 2.5	PASS
		VN	-10	-0.78	-0.001115	± 2.5	PASS
		VN	0	4.36	0.006231	± 2.5	PASS
		VN	10	1.28	0.001829	± 2.5	PASS
		VN	20	3.68	0.005259	± 2.5	PASS
		VN	30	0.46	0.000657	± 2.5	PASS
		VN	40	3.3	0.004716	± 2.5	PASS
		VN	50	1.57	0.002244	± 2.5	PASS
	MCH	VN	-30	2.19	0.003095	± 2.5	PASS
		VN	-20	1.01	0.001428	± 2.5	PASS

		VN	-10	2.71	0.003830	± 2.5	PASS
		VN	0	1.63	0.002304	± 2.5	PASS
		VN	10	1.92	0.002714	± 2.5	PASS
		VN	20	0.4	0.000565	± 2.5	PASS
		VN	30	4.89	0.006912	± 2.5	PASS
		VN	40	1.1	0.001555	± 2.5	PASS
		VN	50	1.63	0.002304	± 2.5	PASS
	HCH	VN	-30	-1.2	-0.001678	± 2.5	PASS
		VN	-20	0.94	0.001314	± 2.5	PASS
		VN	-10	3.06	0.004278	± 2.5	PASS
		VN	0	2.17	0.003034	± 2.5	PASS
		VN	10	-0.86	-0.001202	± 2.5	PASS
		VN	20	3.28	0.004585	± 2.5	PASS
		VN	30	-0.37	-0.000517	± 2.5	PASS
		VN	40	0.31	0.000433	± 2.5	PASS
		VN	50	-0.05	-0.000070	± 2.5	PASS
16QAM	LCH	VN	-30	0.48	0.000686	± 2.5	PASS
		VN	-20	2.22	0.003173	± 2.5	PASS
		VN	-10	1.29	0.001844	± 2.5	PASS
		VN	0	3.04	0.004345	± 2.5	PASS
		VN	10	0.59	0.000843	± 2.5	PASS
		VN	20	-1.14	-0.001629	± 2.5	PASS
		VN	30	-0.59	-0.000843	± 2.5	PASS
		VN	40	4.42	0.006317	± 2.5	PASS
		VN	50	3.26	0.004659	± 2.5	PASS
	MCH	VN	-30	3.15	0.004452	± 2.5	PASS
		VN	-20	4.29	0.006064	± 2.5	PASS
		VN	-10	3.47	0.004905	± 2.5	PASS
		VN	0	2.17	0.003067	± 2.5	PASS
		VN	10	3.26	0.004608	± 2.5	PASS
		VN	20	1.1	0.001555	± 2.5	PASS
		VN	30	3.78	0.005343	± 2.5	PASS
		VN	40	0.43	0.000608	± 2.5	PASS
		VN	50	0.39	0.000551	± 2.5	PASS
	HCH	VN	-30	-1.65	-0.002307	± 2.5	PASS
		VN	-20	0.71	0.000993	± 2.5	PASS
		VN	-10	-1.64	-0.002293	± 2.5	PASS
		VN	0	1.48	0.002069	± 2.5	PASS
		VN	10	-0.48	-0.000671	± 2.5	PASS
		VN	20	2.4	0.003355	± 2.5	PASS
		VN	30	-1.74	-0.002433	± 2.5	PASS

		VN	40	-0.34	-0.000475	± 2.5	PASS
		VN	50	3.7	0.005173	± 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	3.15	0.004497	± 2.5	PASS
		VN	TN	3.83	0.005468	± 2.5	PASS
		VH	TN	2.31	0.003298	± 2.5	PASS
	MCH	VL	TN	0.63	0.000890	± 2.5	PASS
		VN	TN	-1.74	-0.002459	± 2.5	PASS
		VH	TN	4.92	0.006954	± 2.5	PASS
	HCH	VL	TN	-1.44	-0.002015	± 2.5	PASS
		VN	TN	3.34	0.004675	± 2.5	PASS
		VH	TN	3.94	0.005514	± 2.5	PASS
16QAM	LCH	VL	TN	-1.21	-0.001727	± 2.5	PASS
		VN	TN	1.84	0.002627	± 2.5	PASS
		VH	TN	0.27	0.000385	± 2.5	PASS
	MCH	VL	TN	1.53	0.002163	± 2.5	PASS
		VN	TN	4.95	0.006996	± 2.5	PASS
		VH	TN	2.92	0.004127	± 2.5	PASS
	HCH	VL	TN	0.86	0.001204	± 2.5	PASS
		VN	TN	1.5	0.002099	± 2.5	PASS
		VH	TN	4.87	0.006816	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.48	-0.002113	± 2.5	PASS
		VN	-20	-1.47	-0.002099	± 2.5	PASS
		VN	-10	1.21	0.001727	± 2.5	PASS
		VN	0	4.02	0.005739	± 2.5	PASS
		VN	10	-0.47	-0.000671	± 2.5	PASS
		VN	20	2.23	0.003183	± 2.5	PASS
		VN	30	0.83	0.001185	± 2.5	PASS
		VN	40	0.64	0.000914	± 2.5	PASS
		VN	50	2.88	0.004111	± 2.5	PASS
	MCH	VN	-30	-0.8	-0.001131	± 2.5	PASS
		VN	-20	2.47	0.003491	± 2.5	PASS
		VN	-10	4.23	0.005979	± 2.5	PASS

		VN	0	2.72	0.003845	± 2.5	PASS
		VN	10	1.78	0.002516	± 2.5	PASS
		VN	20	1.67	0.002360	± 2.5	PASS
		VN	30	2.29	0.003237	± 2.5	PASS
		VN	40	4.81	0.006799	± 2.5	PASS
		VN	50	0.04	0.000057	± 2.5	PASS
	HCH	VN	-30	3.31	0.004633	± 2.5	PASS
		VN	-20	4.14	0.005794	± 2.5	PASS
		VN	-10	-0.7	-0.000980	± 2.5	PASS
		VN	0	-1.56	-0.002183	± 2.5	PASS
		VN	10	0.86	0.001204	± 2.5	PASS
		VN	20	3.29	0.004605	± 2.5	PASS
		VN	30	-1.64	-0.002295	± 2.5	PASS
		VN	40	-1.81	-0.002533	± 2.5	PASS
		VN	50	3.9	0.005458	± 2.5	PASS
16QAM	LCH	VN	-30	2.05	0.002926	± 2.5	PASS
		VN	-20	2.14	0.003055	± 2.5	PASS
		VN	-10	0.78	0.001113	± 2.5	PASS
		VN	0	1.15	0.001642	± 2.5	PASS
		VN	10	3.11	0.004440	± 2.5	PASS
		VN	20	3.33	0.004754	± 2.5	PASS
		VN	30	4.23	0.006039	± 2.5	PASS
		VN	40	-0.59	-0.000842	± 2.5	PASS
		VN	50	0.71	0.001014	± 2.5	PASS
	MCH	VN	-30	1.76	0.002488	± 2.5	PASS
		VN	-20	1.98	0.002799	± 2.5	PASS
		VN	-10	1.81	0.002558	± 2.5	PASS
		VN	0	0.28	0.000396	± 2.5	PASS
		VN	10	2.35	0.003322	± 2.5	PASS
		VN	20	2.61	0.003689	± 2.5	PASS
		VN	30	-1.2	-0.001696	± 2.5	PASS
		VN	40	3.88	0.005484	± 2.5	PASS
		VN	50	4.93	0.006968	± 2.5	PASS
	HCH	VN	-30	3.92	0.005486	± 2.5	PASS
		VN	-20	1.47	0.002057	± 2.5	PASS
		VN	-10	-0.63	-0.000882	± 2.5	PASS
		VN	0	3.37	0.004717	± 2.5	PASS
		VN	10	2	0.002799	± 2.5	PASS
		VN	20	3.09	0.004325	± 2.5	PASS
		VN	30	2.31	0.003233	± 2.5	PASS
		VN	40	-1.46	-0.002043	± 2.5	PASS

		VN	50	3.08	0.004311	± 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	-1.71	-0.002438	± 2.5	PASS
		VN	TN	-1.05	-0.001497	± 2.5	PASS
		VH	TN	0.41	0.000584	± 2.5	PASS
	MCH	VL	TN	-1.46	-0.002064	± 2.5	PASS
		VN	TN	-1.67	-0.002360	± 2.5	PASS
		VH	TN	1.09	0.001541	± 2.5	PASS
	HCH	VL	TN	3.74	0.005242	± 2.5	PASS
		VN	TN	-0.22	-0.000308	± 2.5	PASS
		VH	TN	0.73	0.001023	± 2.5	PASS
16QAM	LCH	VL	TN	4.81	0.006857	± 2.5	PASS
		VN	TN	1.25	0.001782	± 2.5	PASS
		VH	TN	3.97	0.005659	± 2.5	PASS
	MCH	VL	TN	-1.77	-0.002502	± 2.5	PASS
		VN	TN	3.36	0.004749	± 2.5	PASS
		VH	TN	0.23	0.000325	± 2.5	PASS
	HCH	VL	TN	-0.49	-0.000687	± 2.5	PASS
		VN	TN	1.23	0.001724	± 2.5	PASS
		VH	TN	3.48	0.004877	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.96	-0.001368	± 2.5	PASS
		VN	-20	-1.47	-0.002096	± 2.5	PASS
		VN	-10	3.89	0.005545	± 2.5	PASS
		VN	0	4.39	0.006258	± 2.5	PASS
		VN	10	-0.47	-0.000670	± 2.5	PASS
		VN	20	-1.59	-0.002267	± 2.5	PASS
		VN	30	2.21	0.003150	± 2.5	PASS
		VN	40	-0.09	-0.000128	± 2.5	PASS
		VN	50	3.32	0.004733	± 2.5	PASS
	MCH	VN	-30	2.37	0.003350	± 2.5	PASS
		VN	-20	4.26	0.006021	± 2.5	PASS
		VN	-10	0.97	0.001371	± 2.5	PASS
		VN	0	1.82	0.002572	± 2.5	PASS

		VN	10	0.74	0.001046	± 2.5	PASS
		VN	20	-1.59	-0.002247	± 2.5	PASS
		VN	30	4.49	0.006346	± 2.5	PASS
		VN	40	-0.44	-0.000622	± 2.5	PASS
		VN	50	3.47	0.004905	± 2.5	PASS
	HCH	VN	-30	-1.75	-0.002453	± 2.5	PASS
		VN	-20	4.82	0.006755	± 2.5	PASS
		VN	-10	2.73	0.003826	± 2.5	PASS
		VN	0	1.05	0.001472	± 2.5	PASS
		VN	10	2.83	0.003966	± 2.5	PASS
		VN	20	-1.12	-0.001570	± 2.5	PASS
		VN	30	0.91	0.001275	± 2.5	PASS
		VN	40	-1.23	-0.001724	± 2.5	PASS
		VN	50	2.84	0.003980	± 2.5	PASS
		VN	-30	3.01	0.004291	± 2.5	PASS
16QAM	LCH	VN	-20	-0.65	-0.000927	± 2.5	PASS
		VN	-10	4.47	0.006372	± 2.5	PASS
		VN	0	-0.45	-0.000641	± 2.5	PASS
		VN	10	1.81	0.002580	± 2.5	PASS
		VN	20	0.85	0.001212	± 2.5	PASS
		VN	30	-1.01	-0.001440	± 2.5	PASS
		VN	40	2.56	0.003649	± 2.5	PASS
		VN	50	4.54	0.006472	± 2.5	PASS
	MCH	VN	-30	4.96	0.007011	± 2.5	PASS
		VN	-20	3.77	0.005329	± 2.5	PASS
		VN	-10	1.17	0.001654	± 2.5	PASS
		VN	0	-0.15	-0.000212	± 2.5	PASS
		VN	10	4.91	0.006940	± 2.5	PASS
		VN	20	2.37	0.003350	± 2.5	PASS
		VN	30	2.68	0.003788	± 2.5	PASS
		VN	40	4.69	0.006629	± 2.5	PASS
		VN	50	-1.35	-0.001908	± 2.5	PASS
	HCH	VN	-30	2.43	0.003406	± 2.5	PASS
		VN	-20	3.38	0.004737	± 2.5	PASS
		VN	-10	0.24	0.000336	± 2.5	PASS
		VN	0	2.38	0.003336	± 2.5	PASS
		VN	10	1.32	0.001850	± 2.5	PASS
		VN	20	-1.07	-0.001500	± 2.5	PASS
		VN	30	4.02	0.005634	± 2.5	PASS
		VN	40	-0.83	-0.001163	± 2.5	PASS
		VN	50	0.72	0.001009	± 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	-0.52	-0.000739	± 2.5	PASS
		VN	TN	0.63	0.000895	± 2.5	PASS
		VH	TN	4.1	0.005824	± 2.5	PASS
	MCH	VL	TN	3.73	0.005272	± 2.5	PASS
		VN	TN	-1.48	-0.002092	± 2.5	PASS
		VH	TN	1.2	0.001696	± 2.5	PASS
	HCH	VL	TN	1.52	0.002138	± 2.5	PASS
		VN	TN	3.88	0.005457	± 2.5	PASS
		VH	TN	-1.35	-0.001899	± 2.5	PASS
16QAM	LCH	VL	TN	4.22	0.005994	± 2.5	PASS
		VN	TN	-1.02	-0.001449	± 2.5	PASS
		VH	TN	2.35	0.003338	± 2.5	PASS
	MCH	VL	TN	3.78	0.005343	± 2.5	PASS
		VN	TN	4.07	0.005753	± 2.5	PASS
		VH	TN	3.4	0.004806	± 2.5	PASS
	HCH	VL	TN	1.97	0.002771	± 2.5	PASS
		VN	TN	1.44	0.002025	± 2.5	PASS
		VH	TN	-1.55	-0.002180	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	4.95	0.007031	± 2.5	PASS
		VN	-20	3.54	0.005028	± 2.5	PASS
		VN	-10	0.1	0.000142	± 2.5	PASS
		VN	0	3.77	0.005355	± 2.5	PASS
		VN	10	-0.95	-0.001349	± 2.5	PASS
		VN	20	0.55	0.000781	± 2.5	PASS
		VN	30	3.19	0.004531	± 2.5	PASS
		VN	40	-0.06	-0.000085	± 2.5	PASS
		VN	50	2.13	0.003026	± 2.5	PASS
	MCH	VN	-30	1.69	0.002389	± 2.5	PASS
		VN	-20	3.32	0.004693	± 2.5	PASS
		VN	-10	3.09	0.004367	± 2.5	PASS
		VN	0	-0.18	-0.000254	± 2.5	PASS
		VN	10	-0.31	-0.000438	± 2.5	PASS
		VN	20	1.35	0.001908	± 2.5	PASS

		VN	30	-1.43	-0.002021	± 2.5	PASS
		VN	40	4.48	0.006332	± 2.5	PASS
		VN	50	2.45	0.003463	± 2.5	PASS
	HCH	VN	-30	1.56	0.002194	± 2.5	PASS
		VN	-20	4.12	0.005795	± 2.5	PASS
		VN	-10	-1.95	-0.002743	± 2.5	PASS
		VN	0	4.57	0.006428	± 2.5	PASS
		VN	10	3.01	0.004233	± 2.5	PASS
		VN	20	0.19	0.000267	± 2.5	PASS
		VN	30	3.37	0.004740	± 2.5	PASS
		VN	40	3.07	0.004318	± 2.5	PASS
		VN	50	0.28	0.000394	± 2.5	PASS
QPSK	LCH	VN	-30	-1.67	-0.002372	± 2.5	PASS
		VN	-20	2.34	0.003324	± 2.5	PASS
		VN	-10	0.87	0.001236	± 2.5	PASS
		VN	0	-0.42	-0.000597	± 2.5	PASS
		VN	10	1.91	0.002713	± 2.5	PASS
		VN	20	-0.13	-0.000185	± 2.5	PASS
		VN	30	1.4	0.001989	± 2.5	PASS
		VN	40	-0.22	-0.000313	± 2.5	PASS
		VN	50	4.31	0.006122	± 2.5	PASS
	MCH	VN	-30	2.08	0.002940	± 2.5	PASS
		VN	-20	-1.95	-0.002756	± 2.5	PASS
		VN	-10	-1.59	-0.002247	± 2.5	PASS
		VN	0	3.22	0.004551	± 2.5	PASS
		VN	10	-1.88	-0.002657	± 2.5	PASS
		VN	20	2.68	0.003788	± 2.5	PASS
		VN	30	1.96	0.002770	± 2.5	PASS
		VN	40	-0.8	-0.001131	± 2.5	PASS
		VN	50	4.52	0.006389	± 2.5	PASS
	HCH	VN	-30	1.49	0.002096	± 2.5	PASS
		VN	-20	0.55	0.000774	± 2.5	PASS
		VN	-10	3.07	0.004318	± 2.5	PASS
		VN	0	-1.6	-0.002250	± 2.5	PASS
		VN	10	1.68	0.002363	± 2.5	PASS
		VN	20	-0.9	-0.001266	± 2.5	PASS
		VN	30	1.5	0.002110	± 2.5	PASS
		VN	40	2.96	0.004163	± 2.5	PASS
		VN	50	3.97	0.005584	± 2.5	PASS