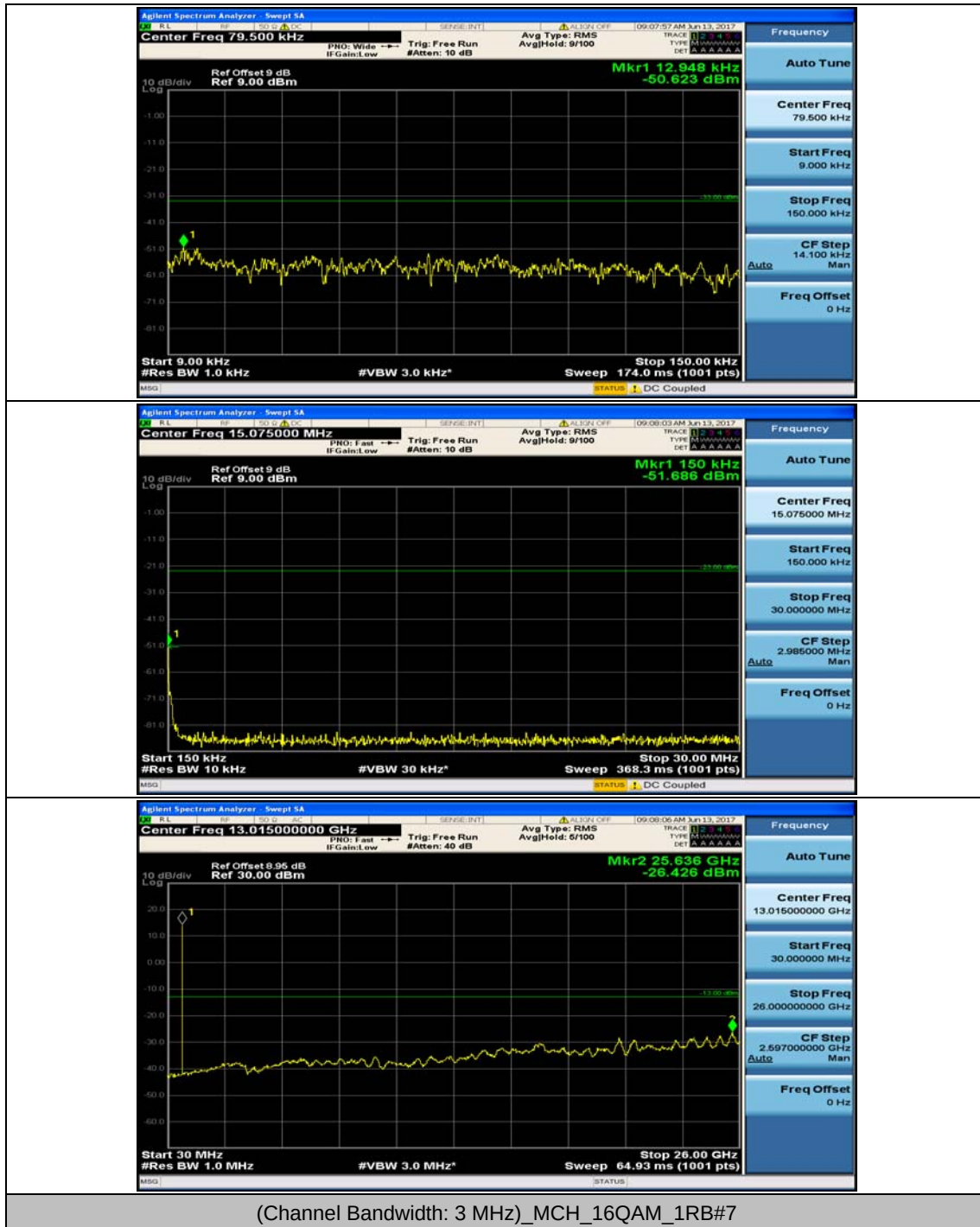
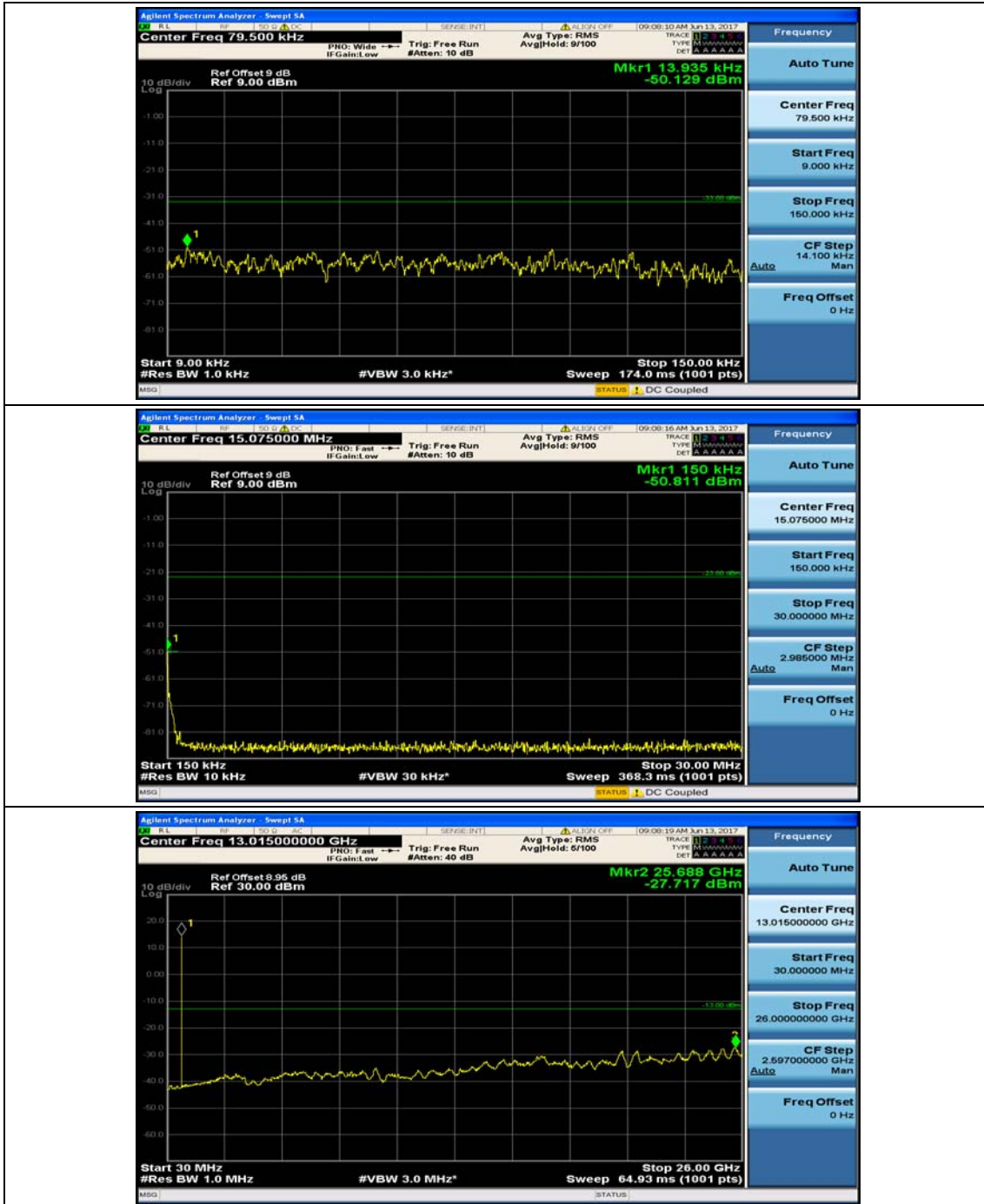
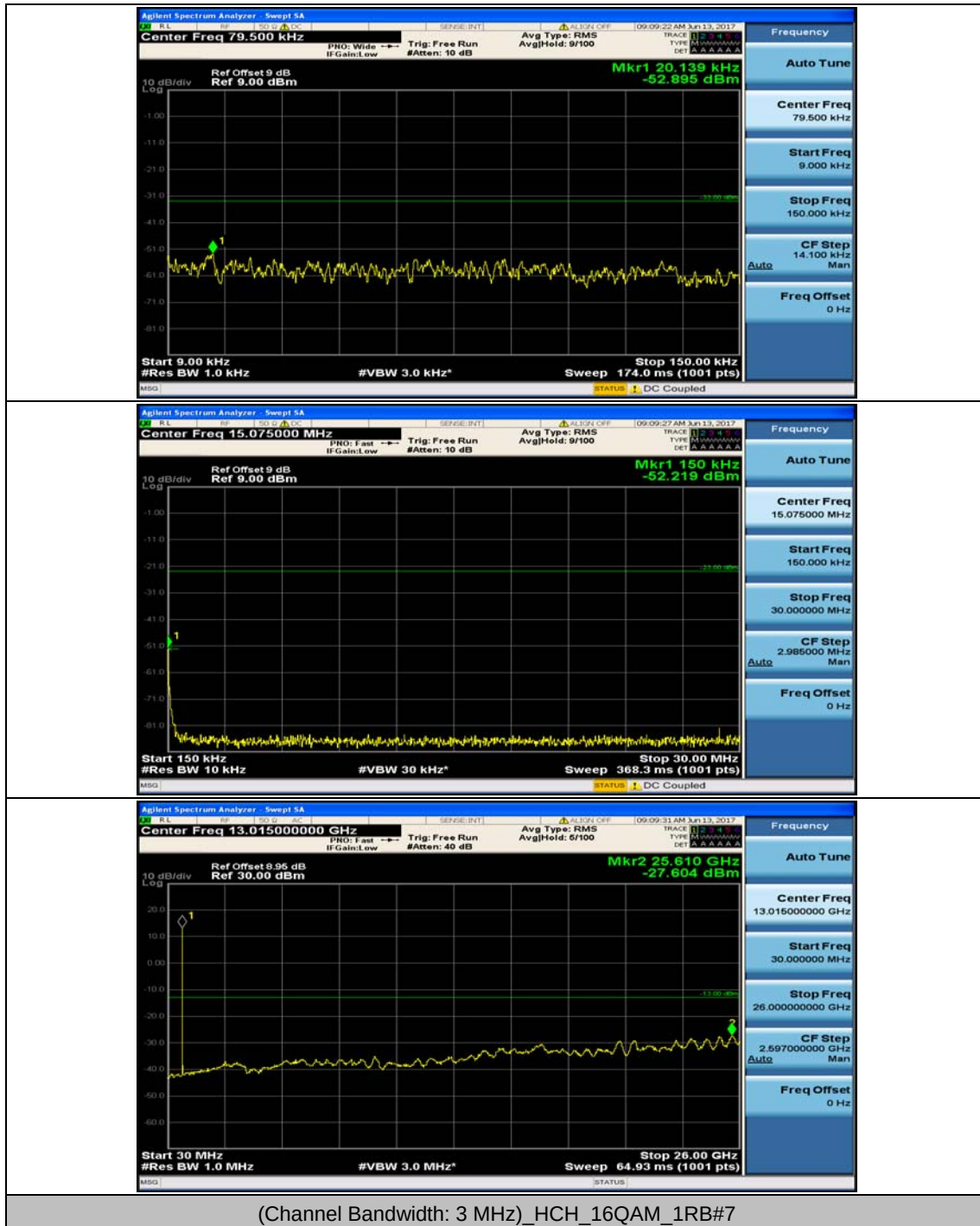
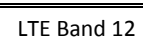




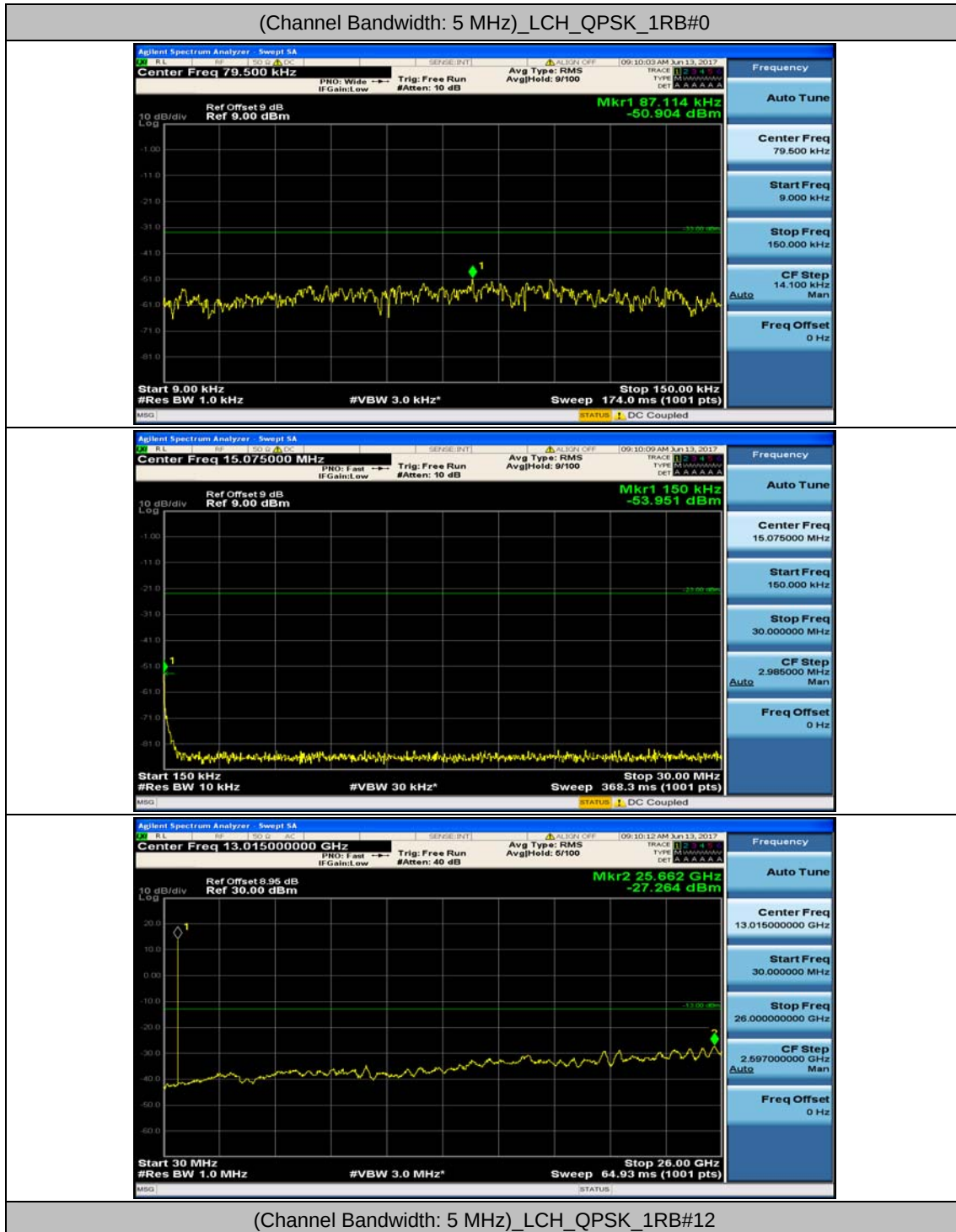


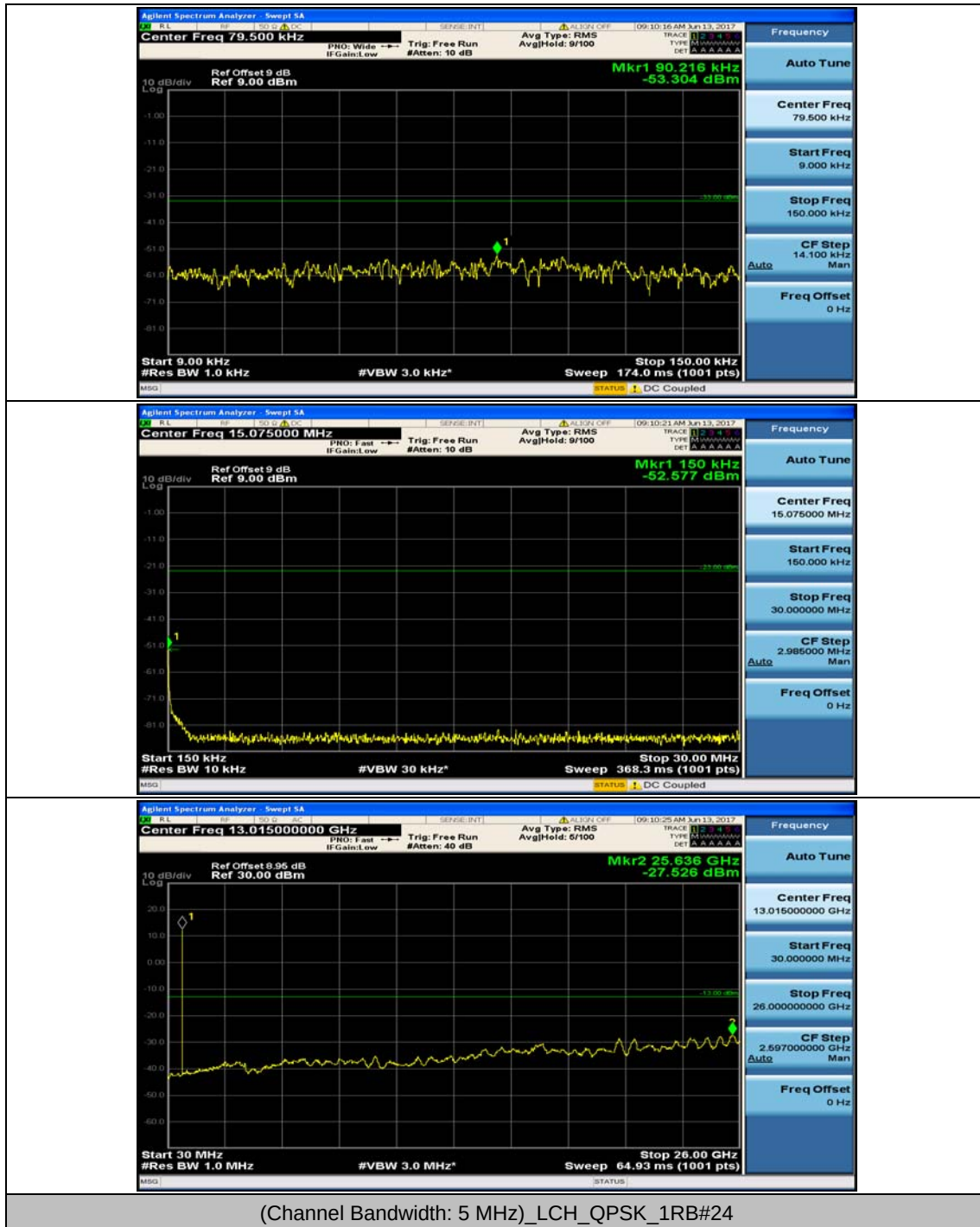
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

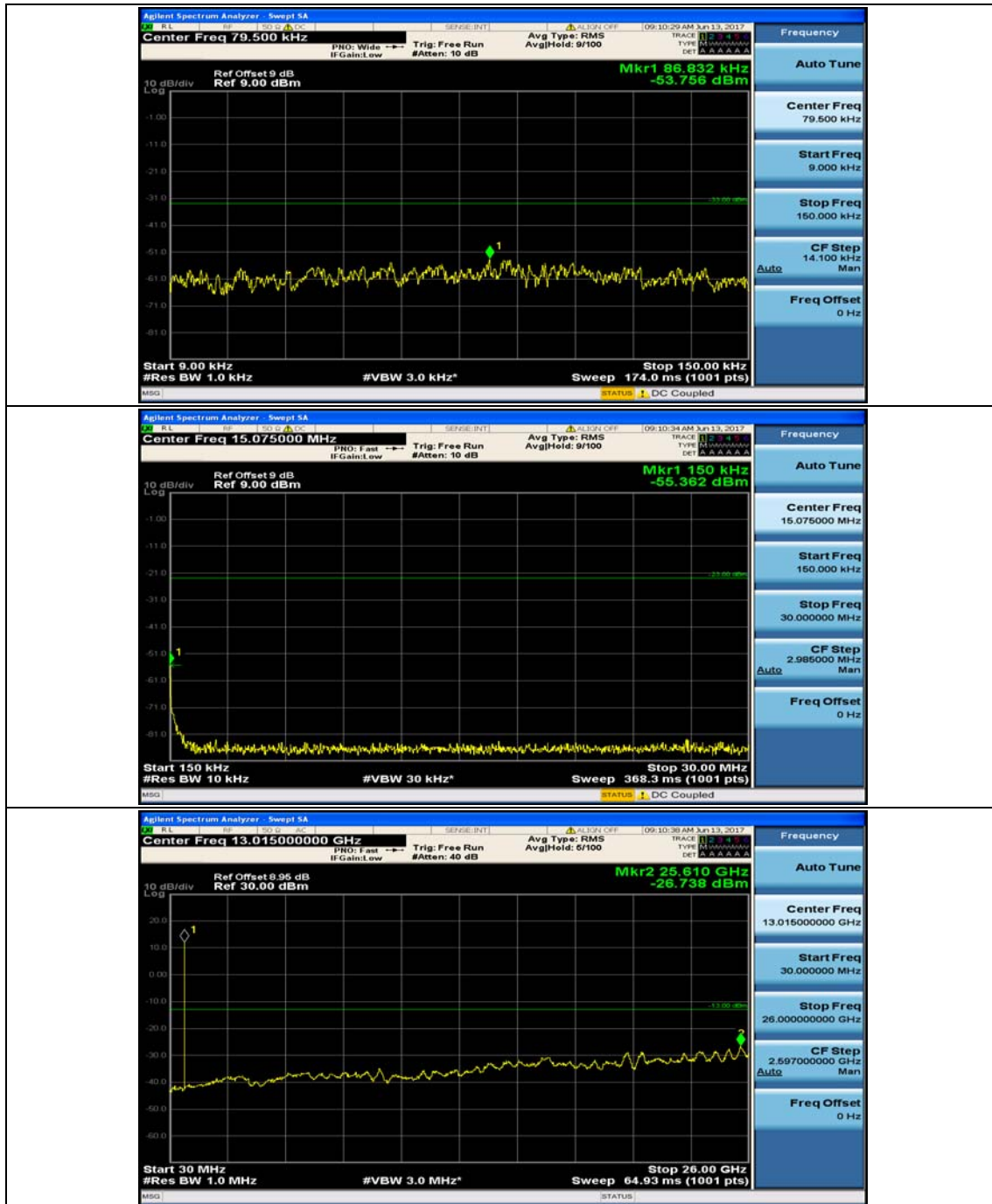




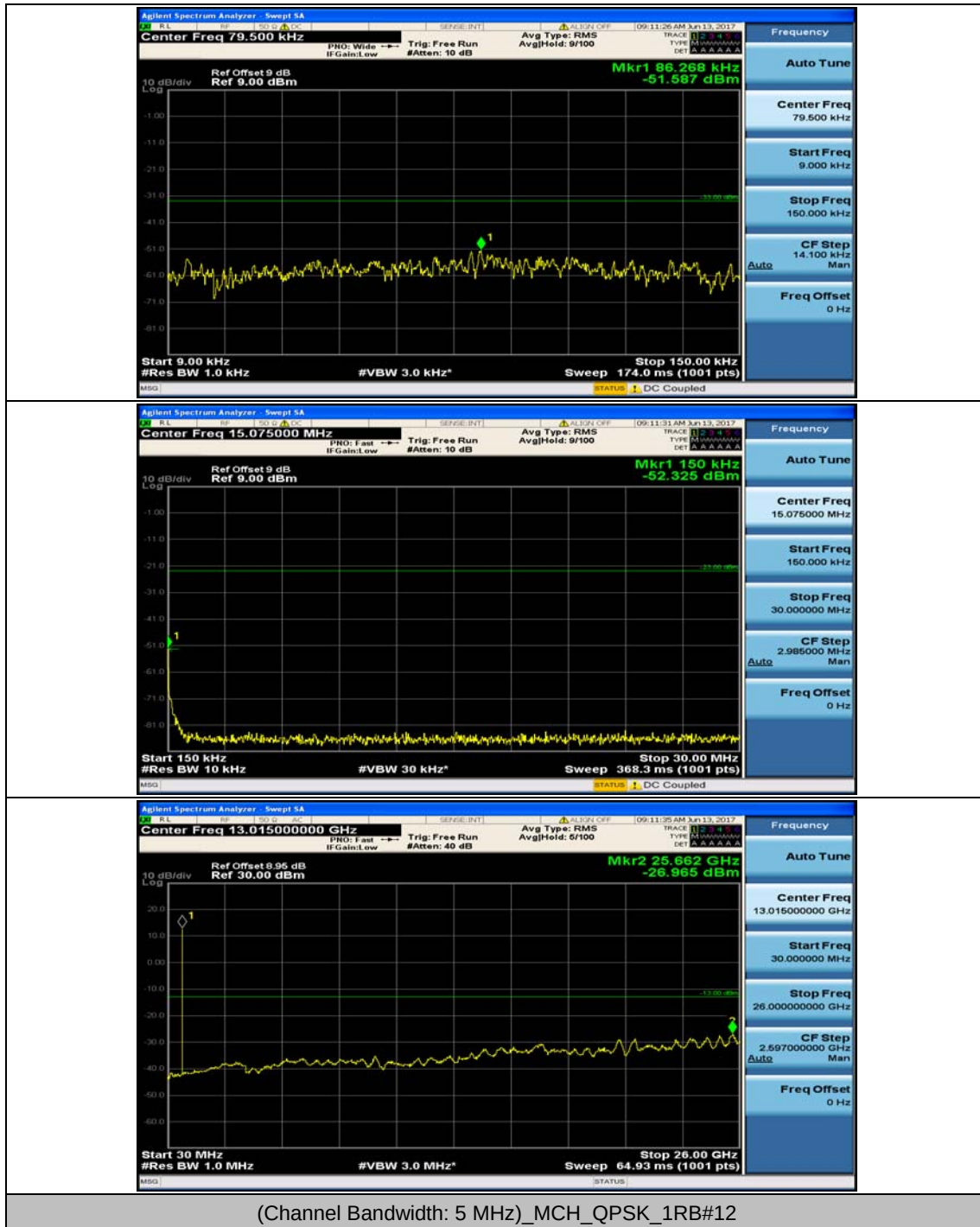
Channel Bandwidth: 5 MHz

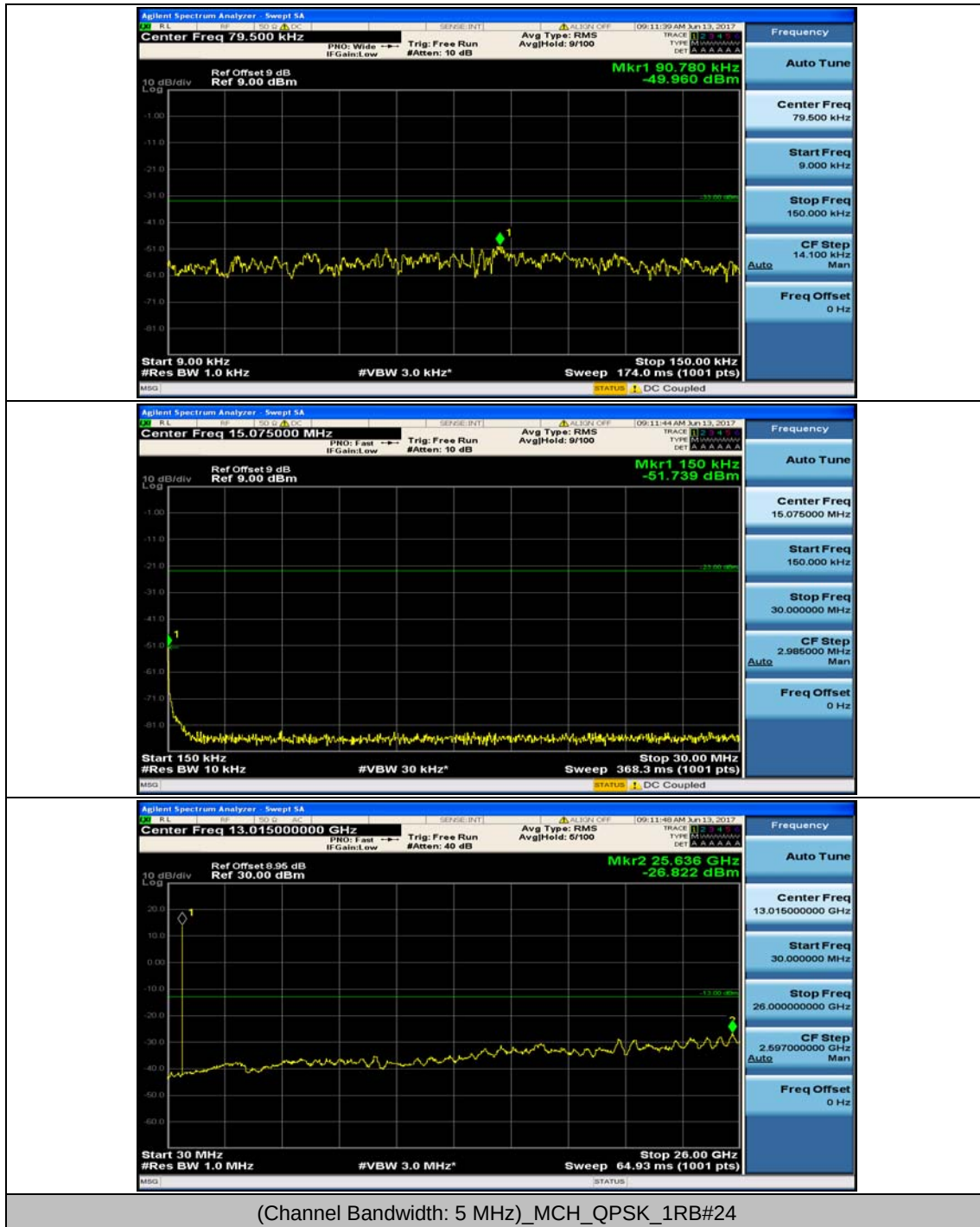


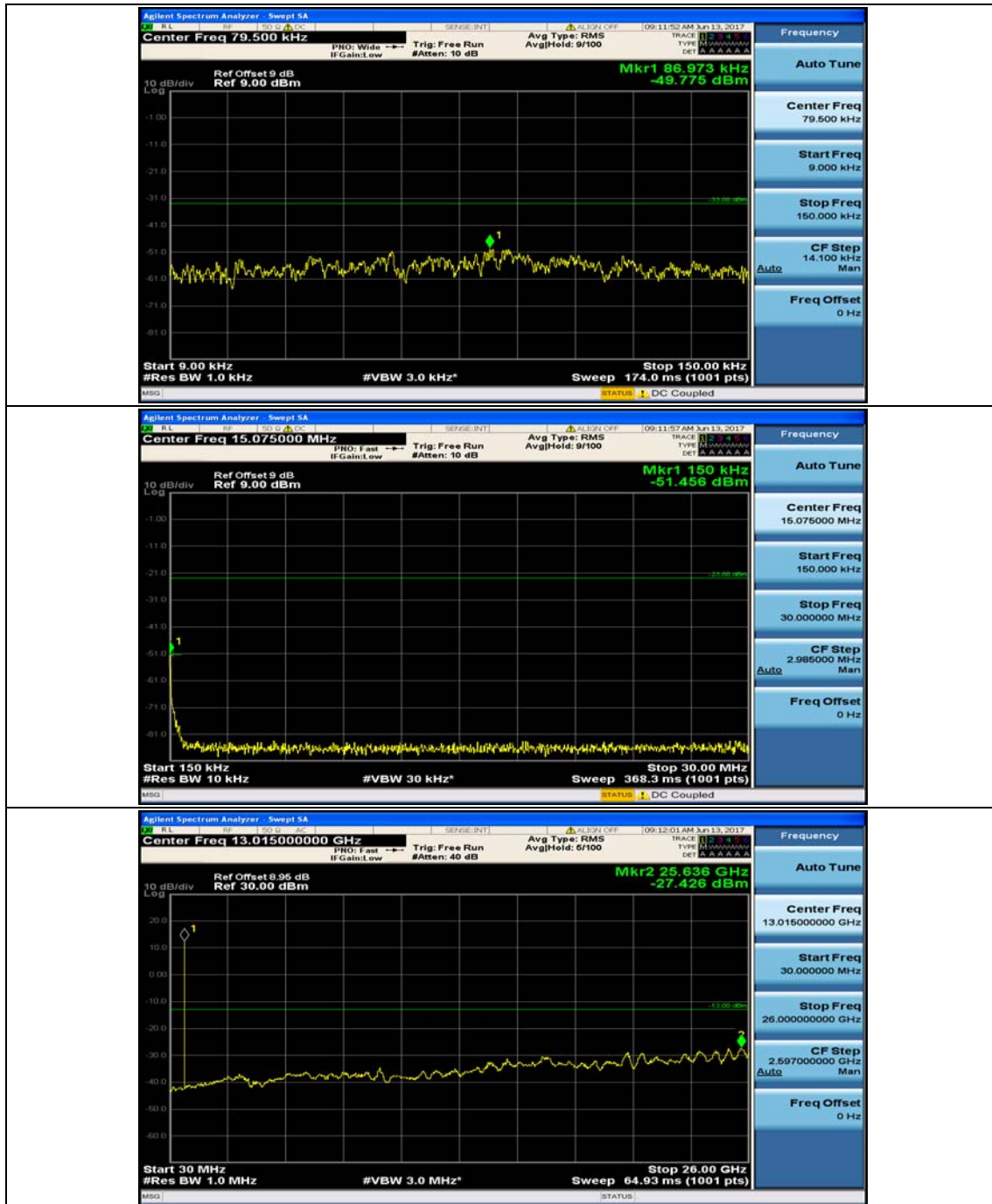




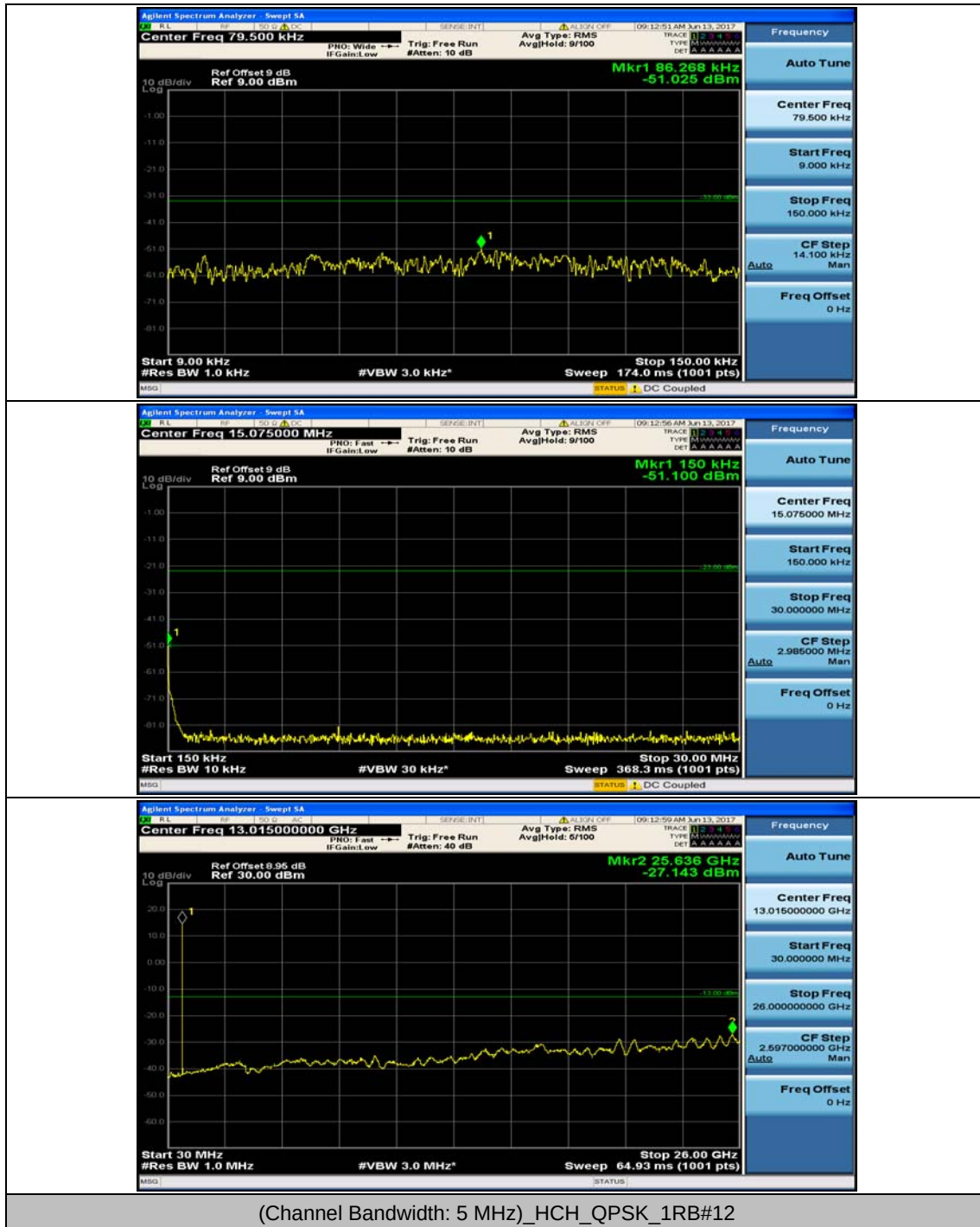
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

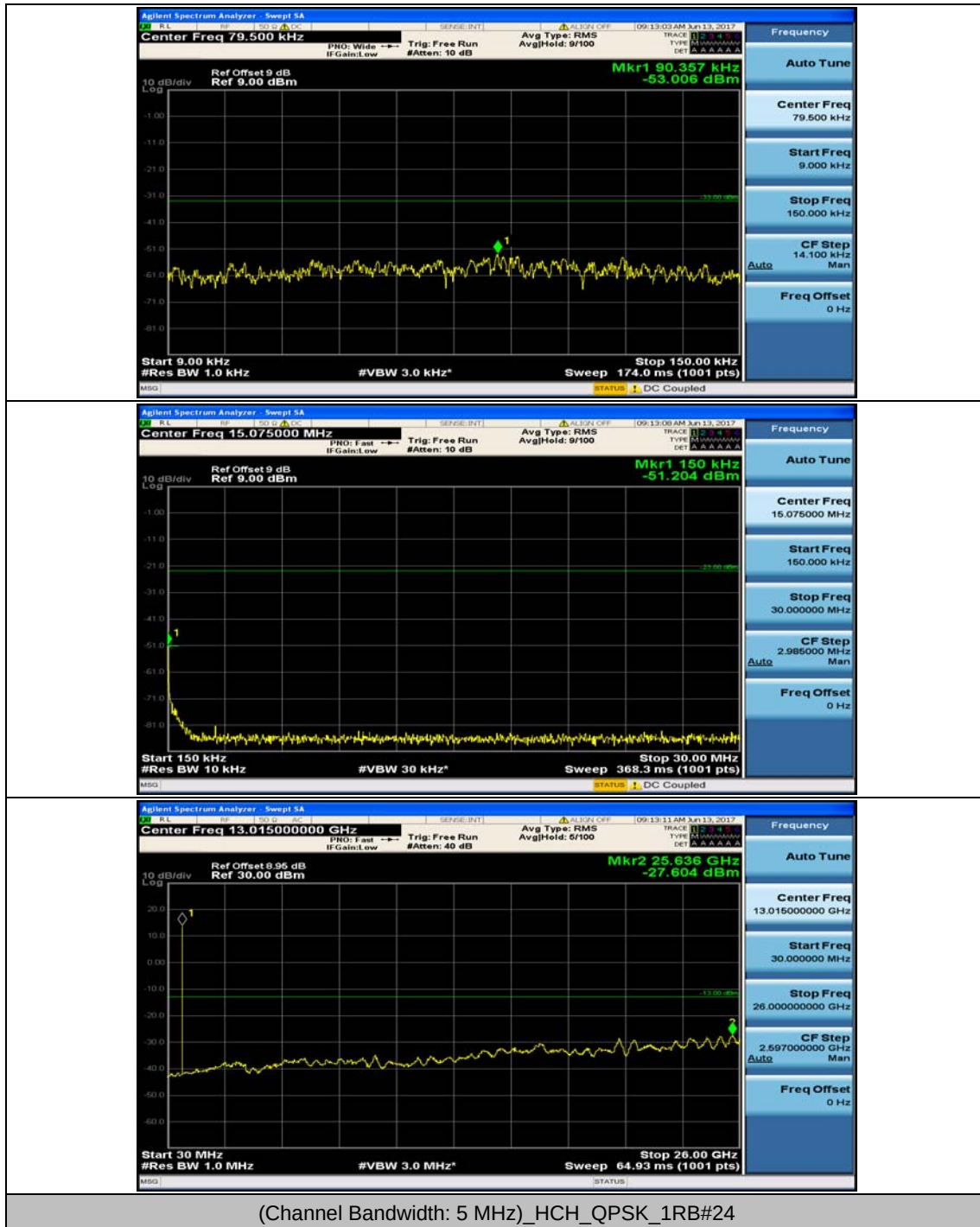


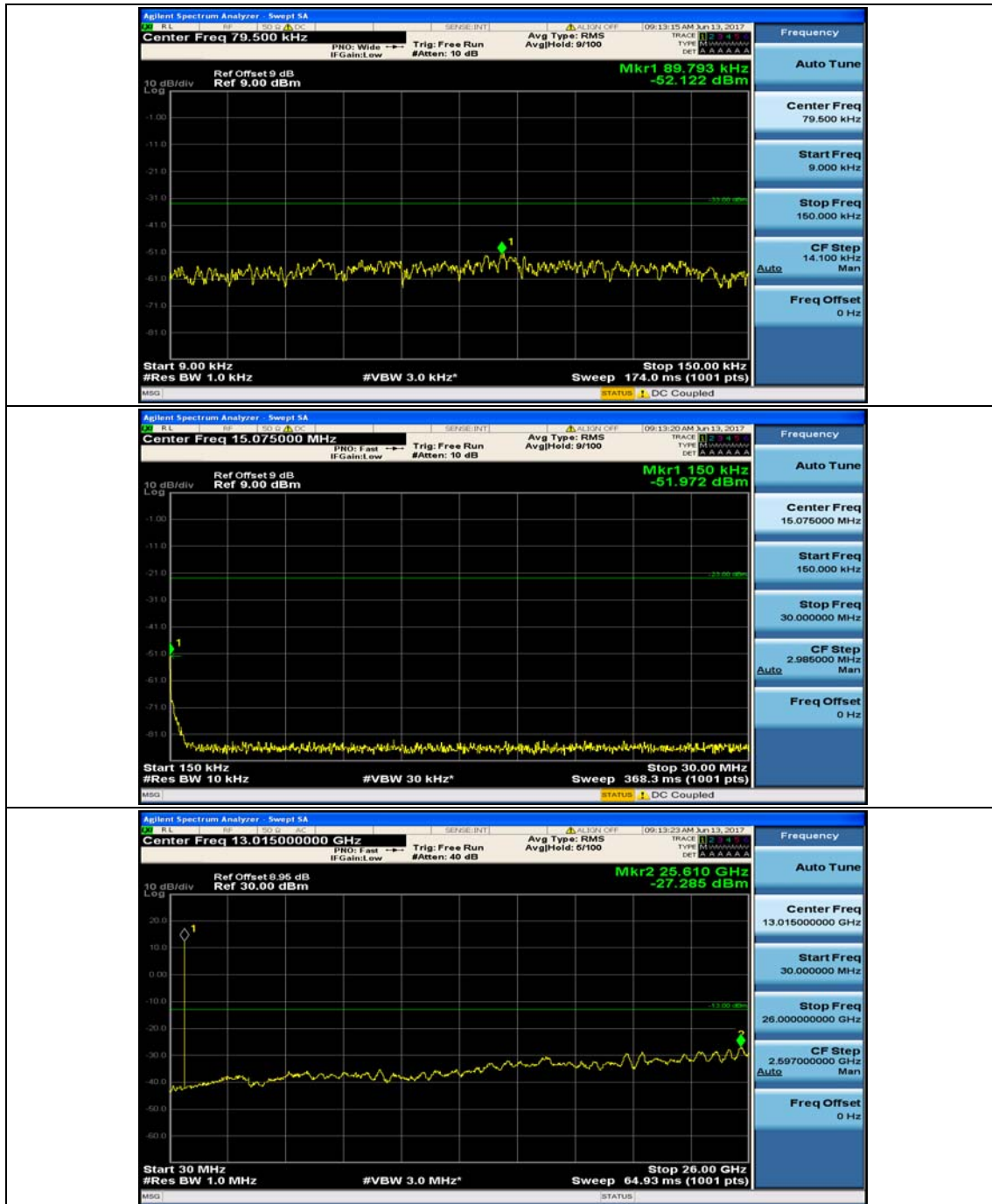




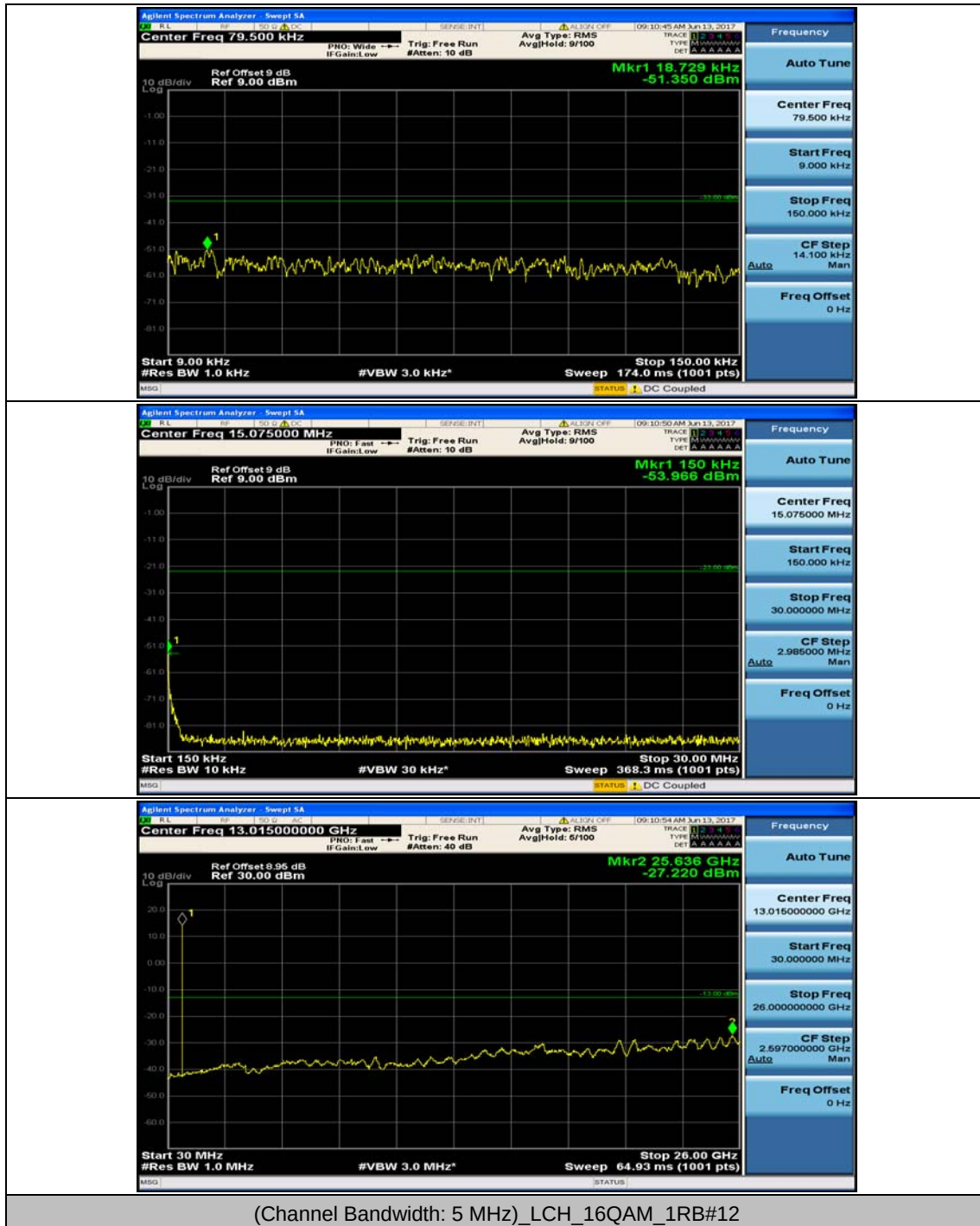
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

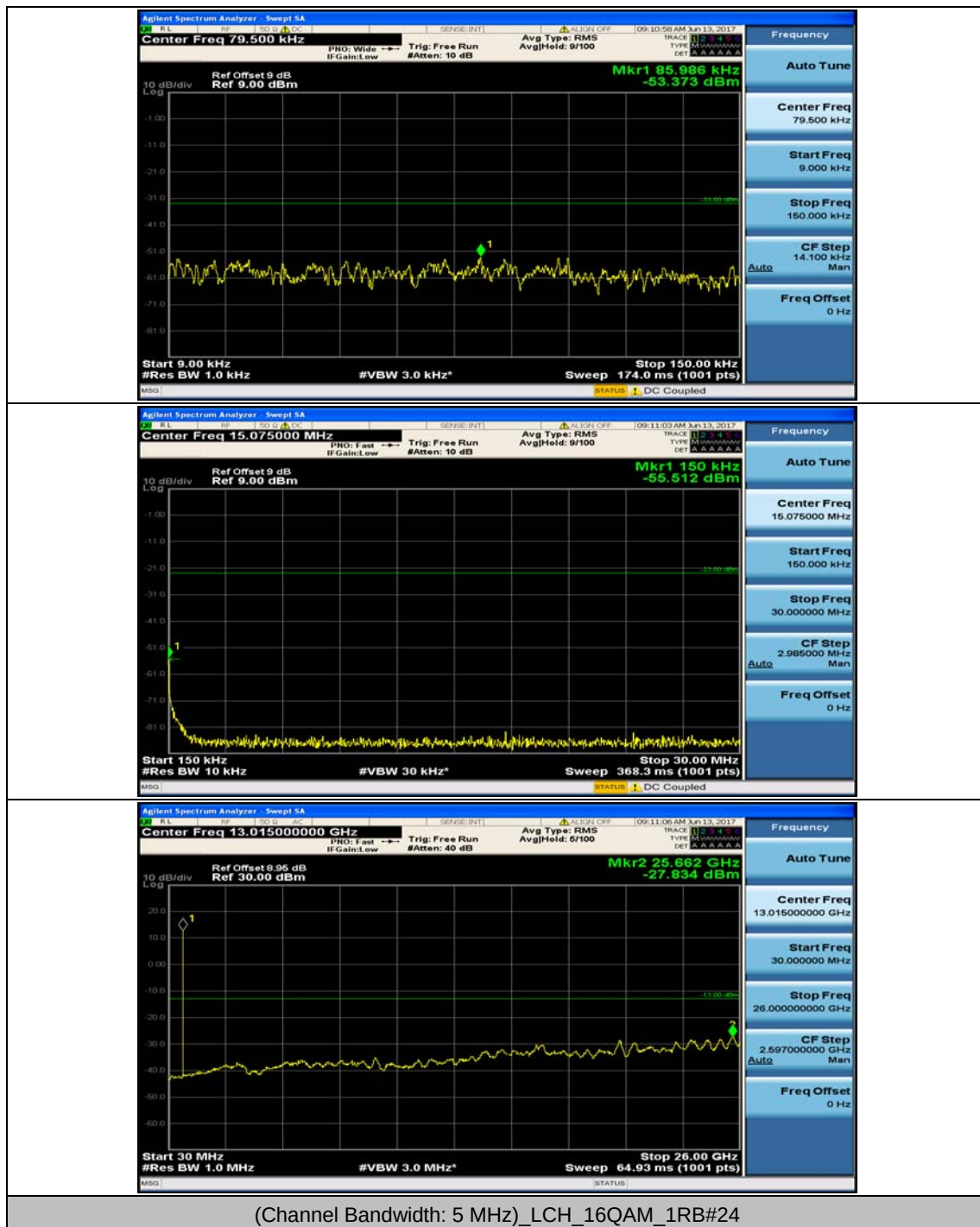


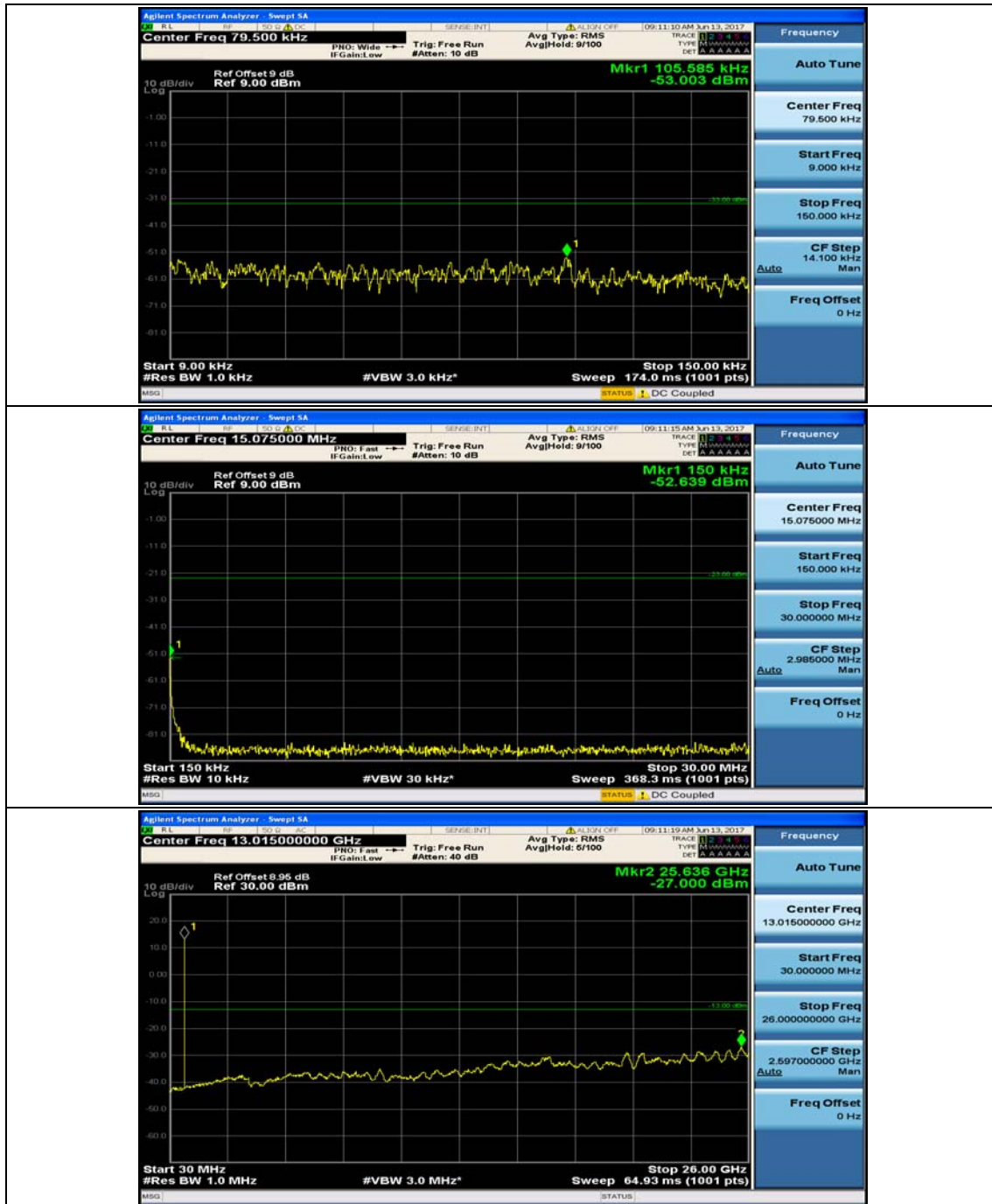




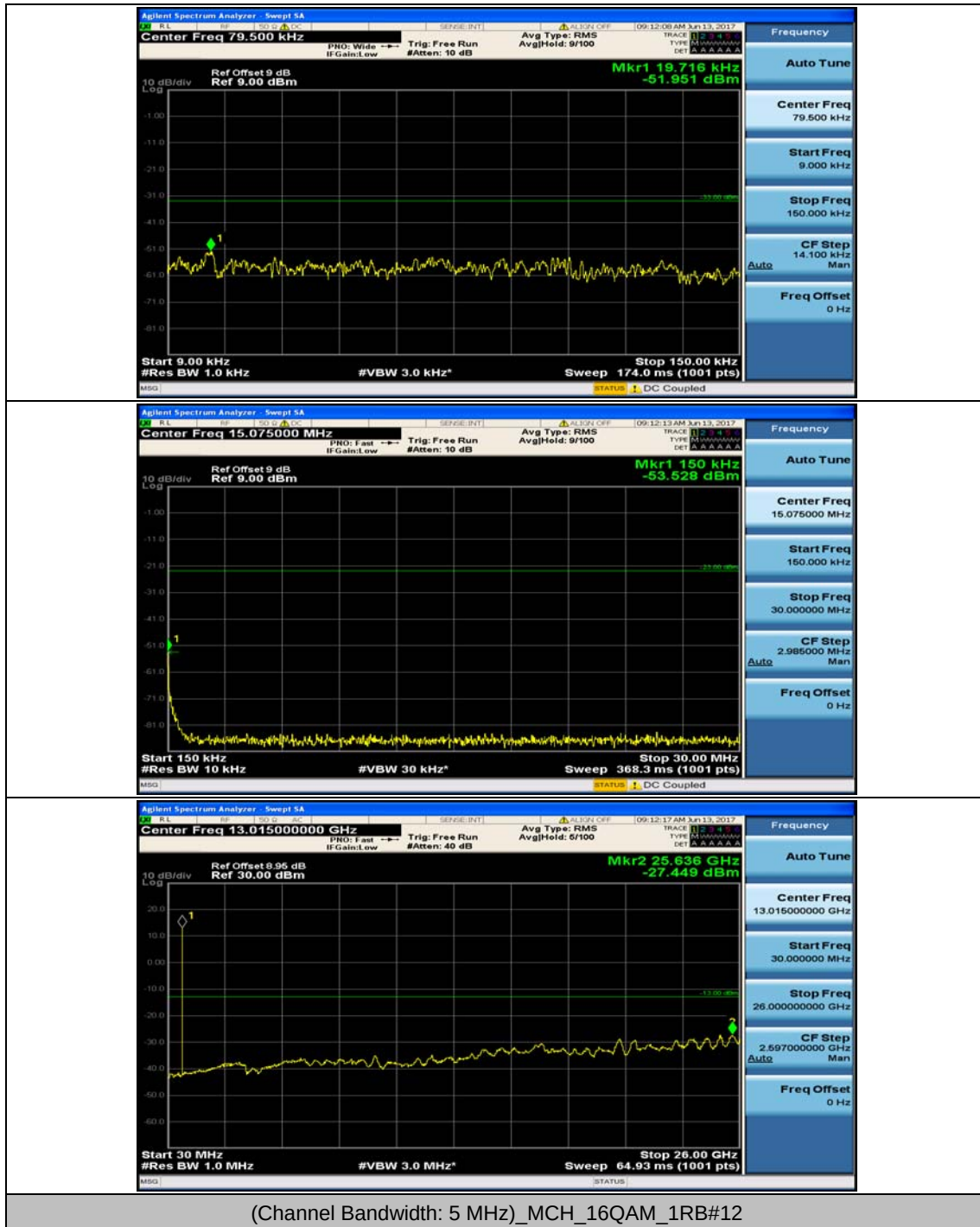
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

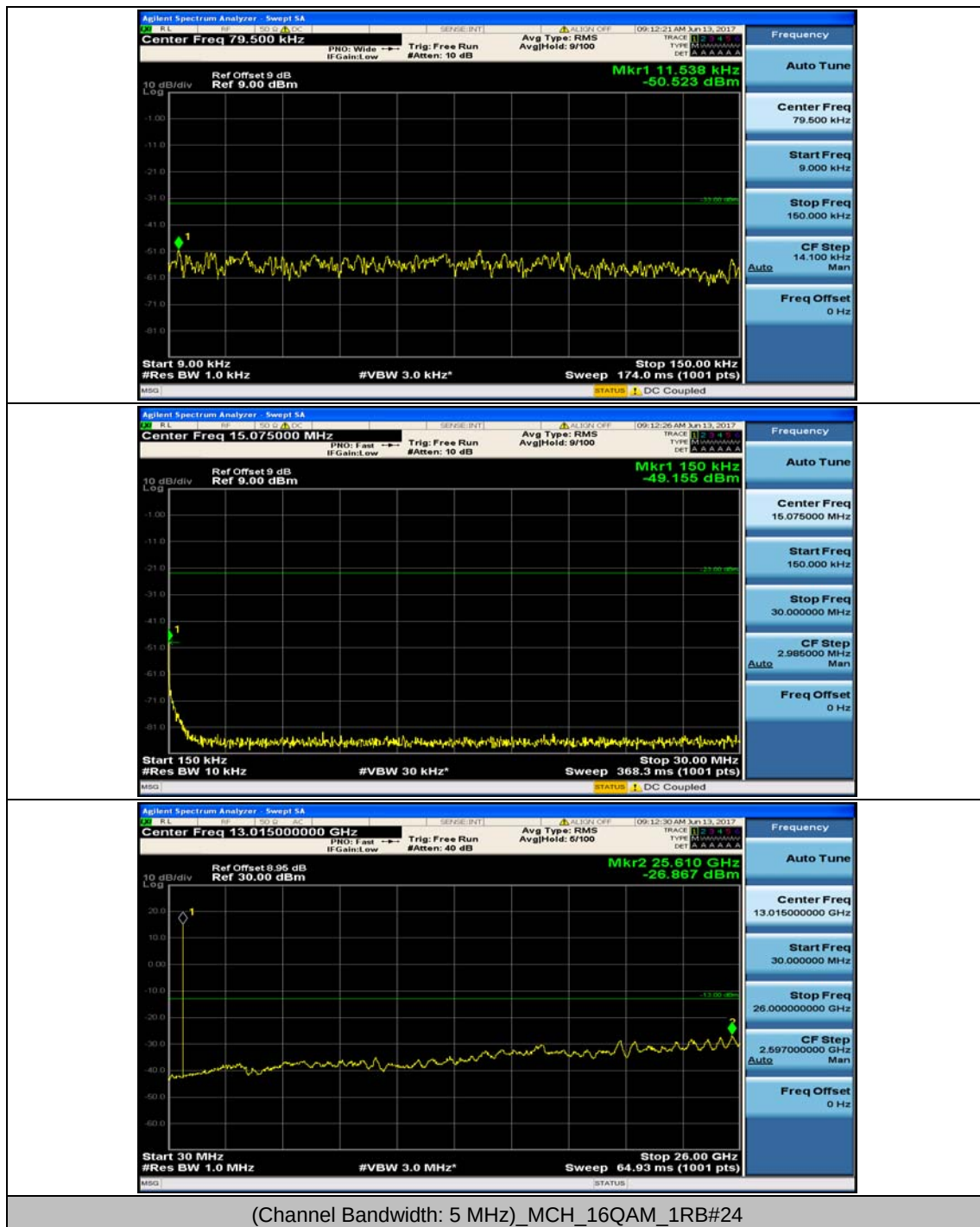


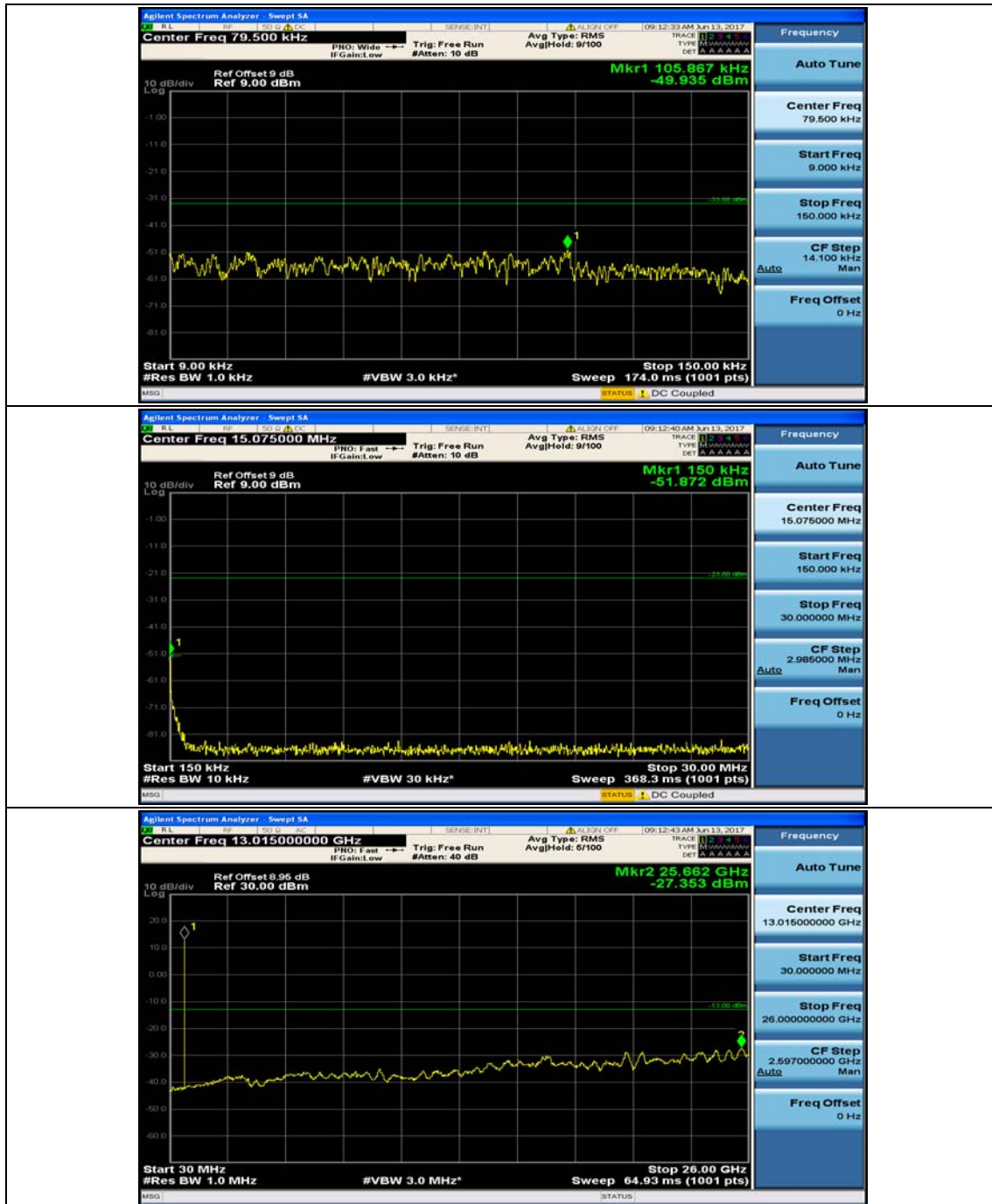




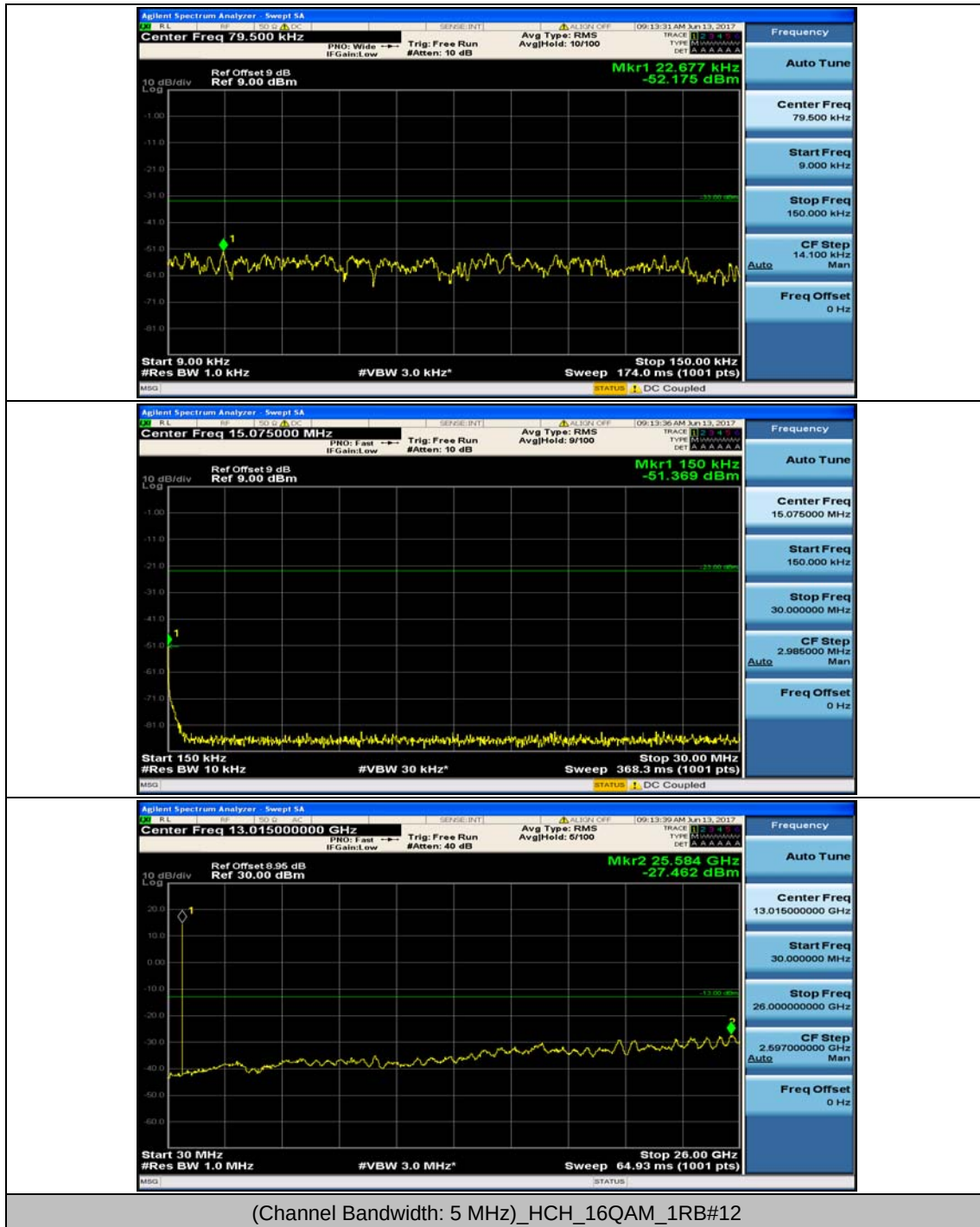
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

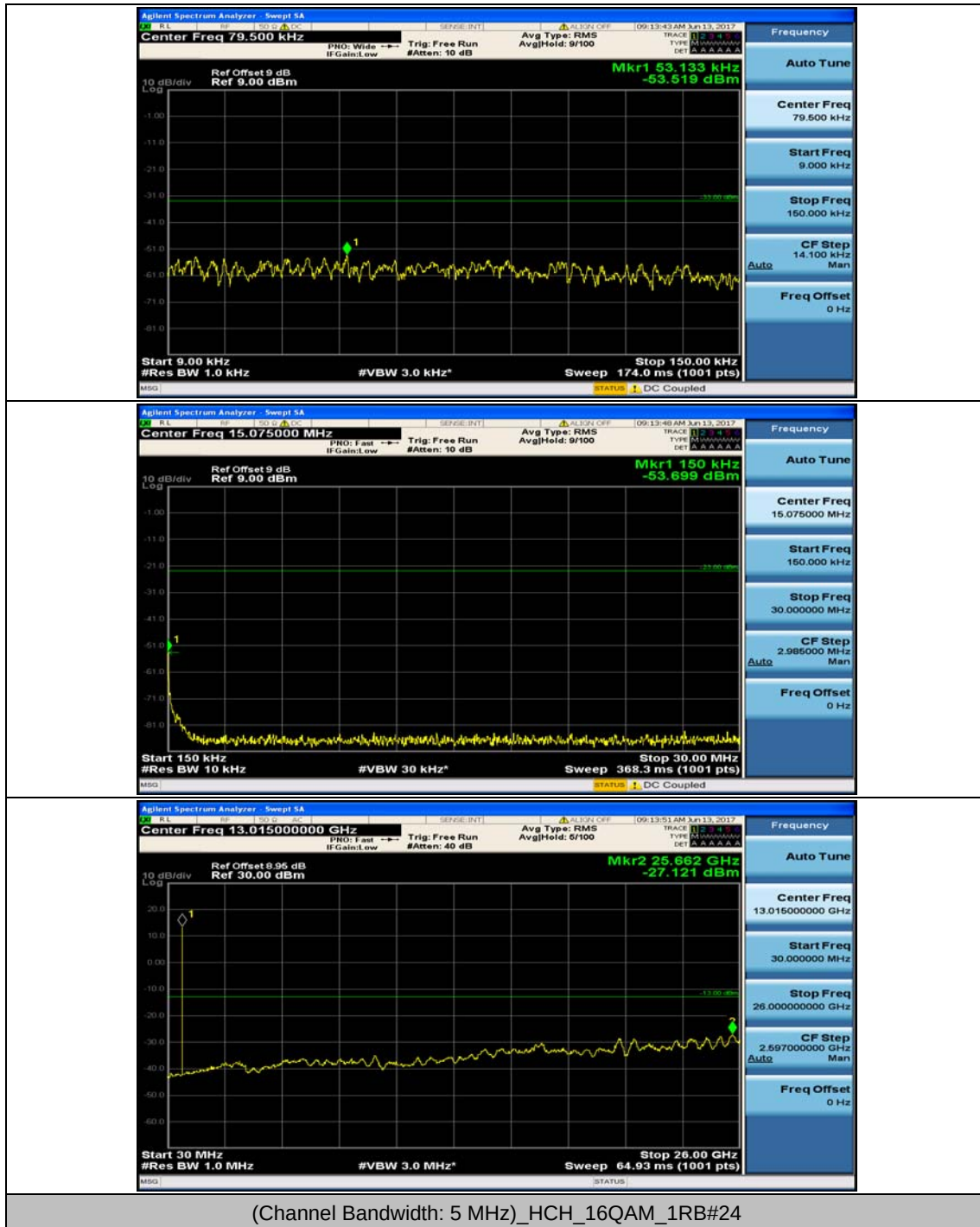


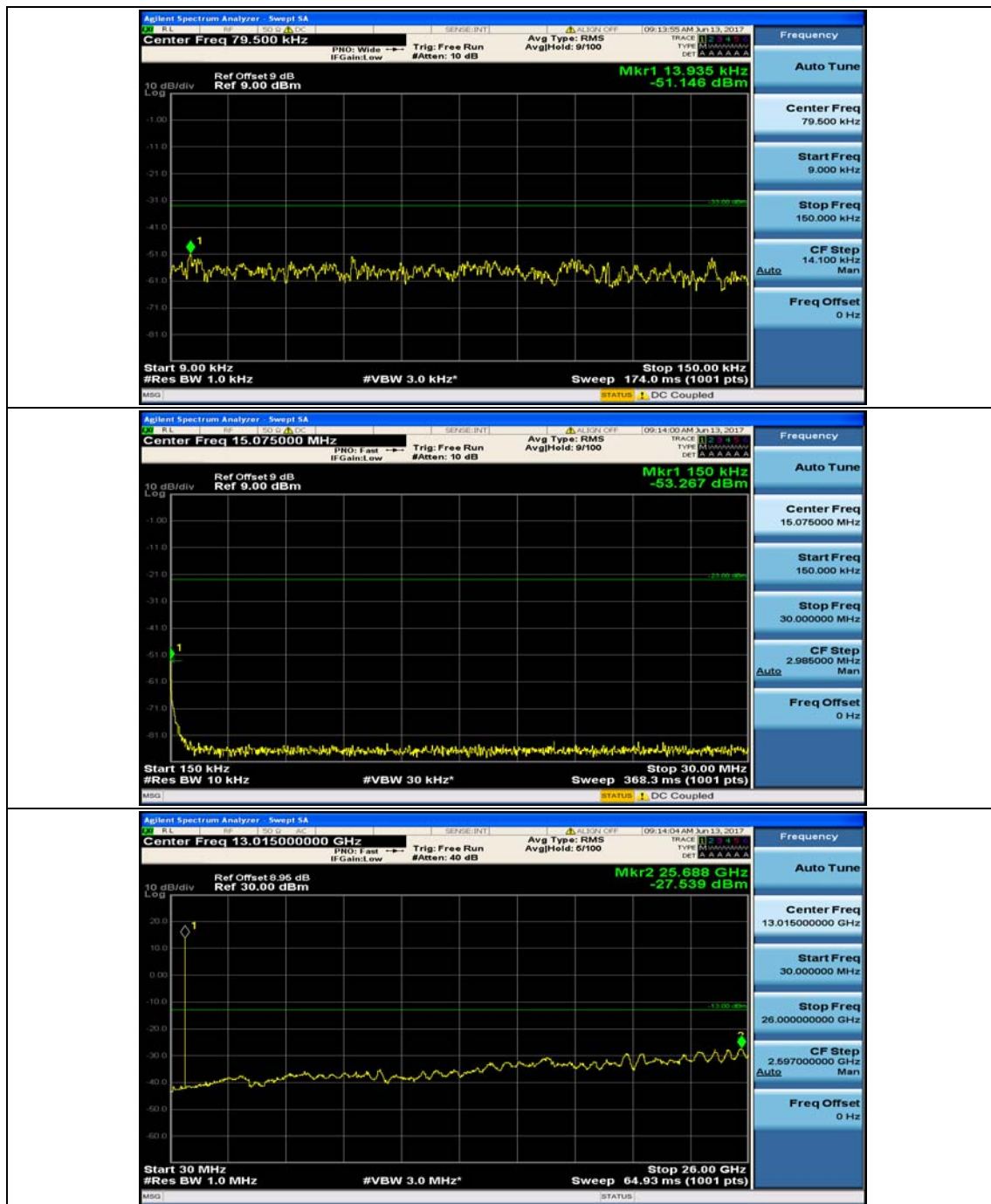




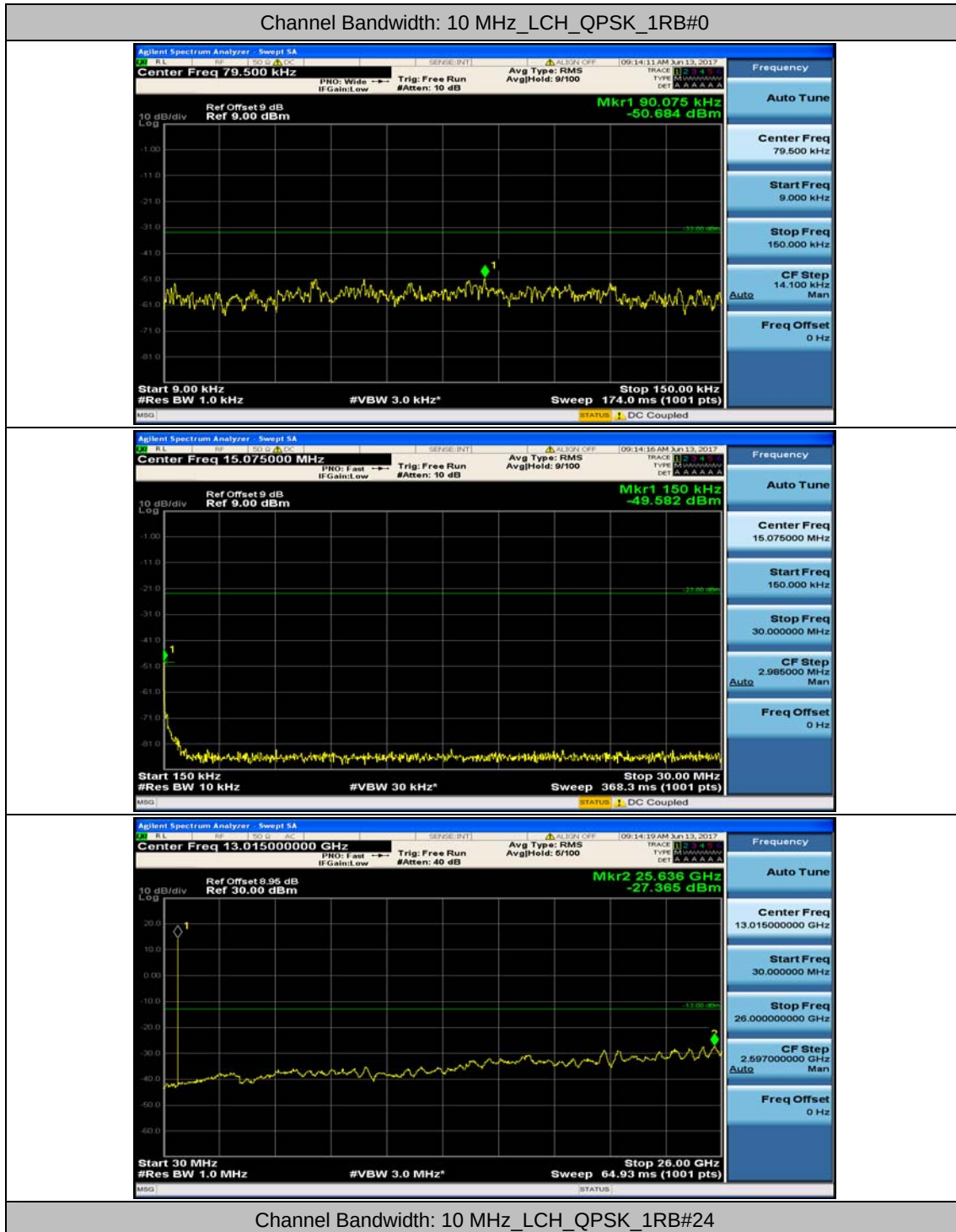
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

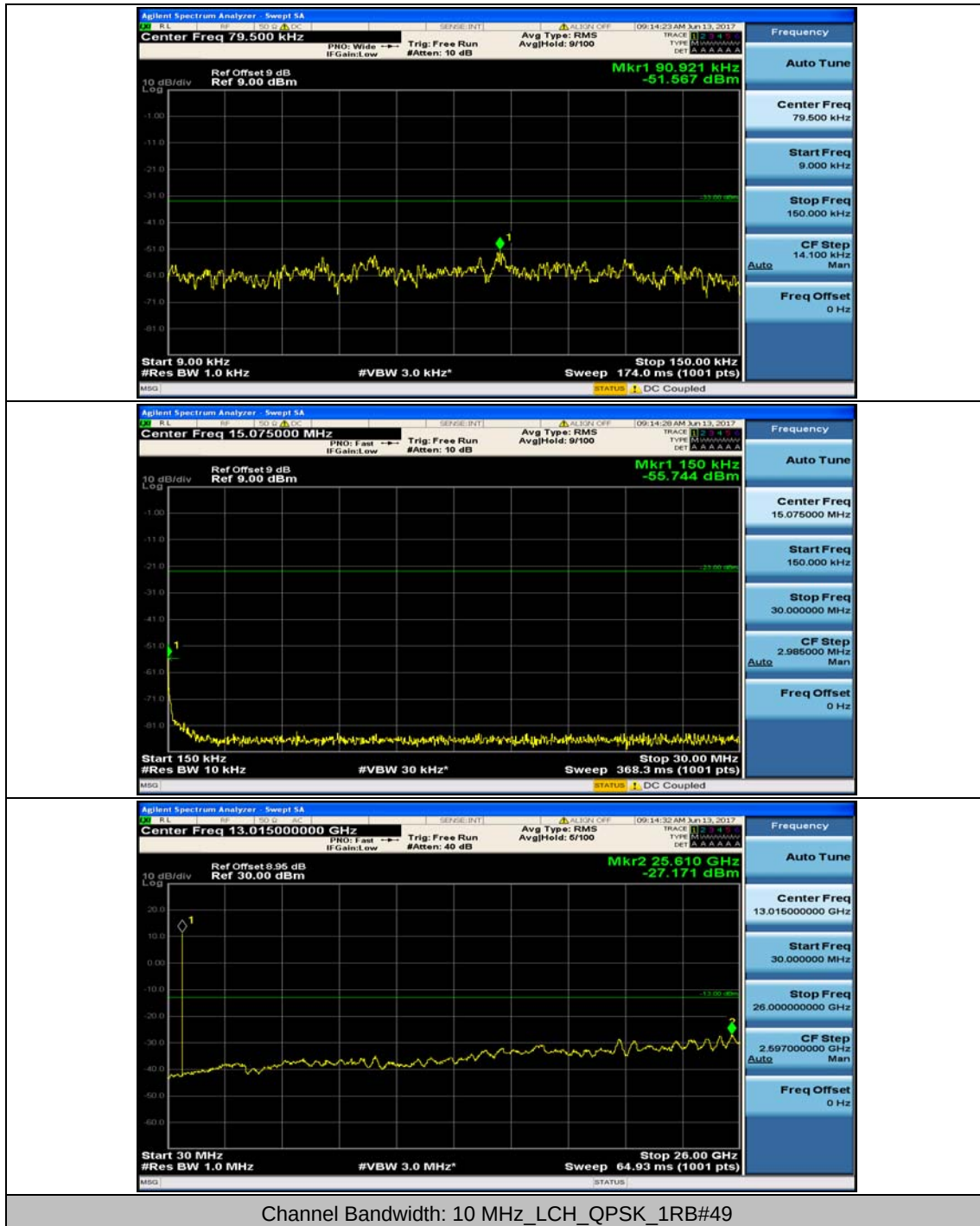


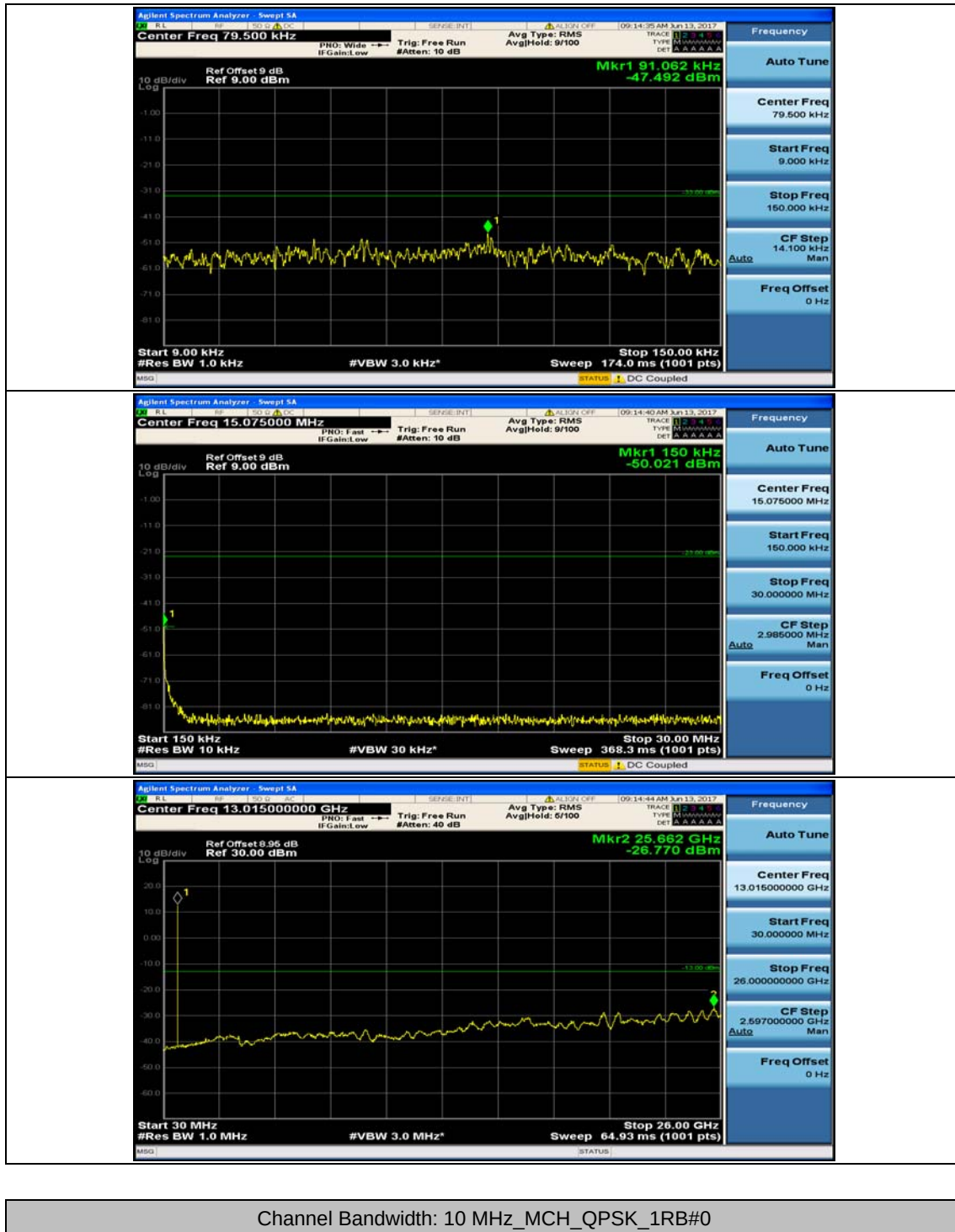


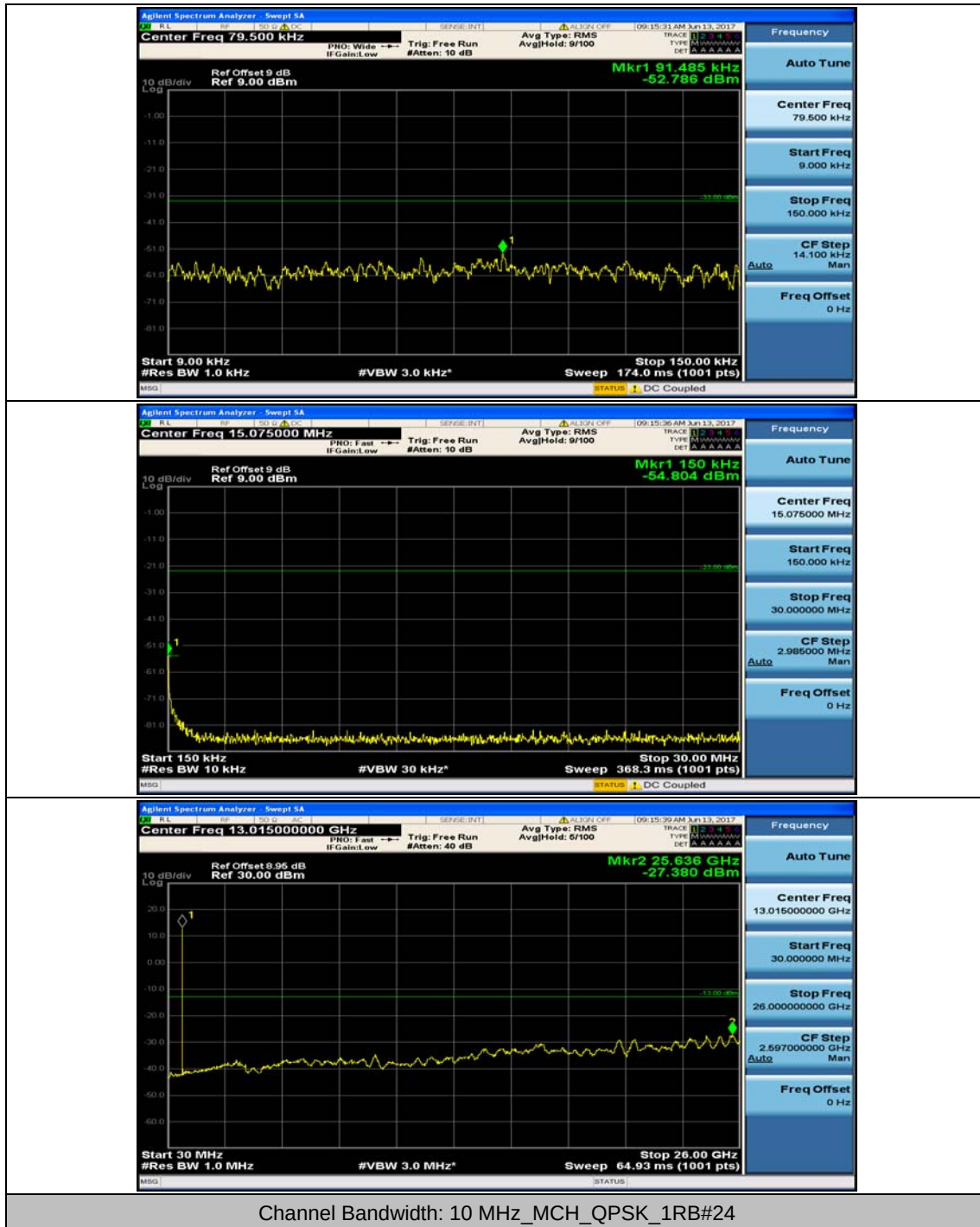


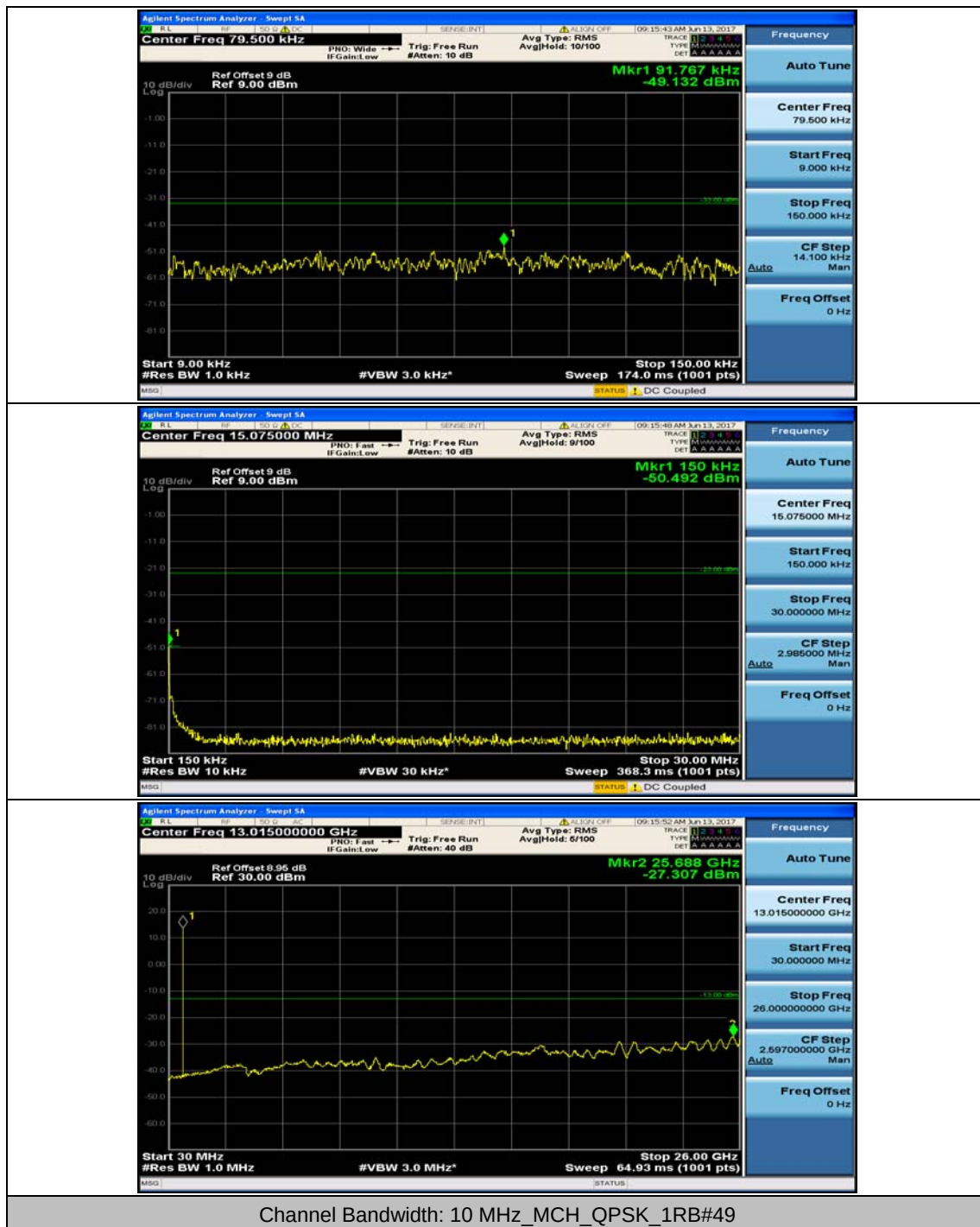
Channel Bandwidth: 10 MHz

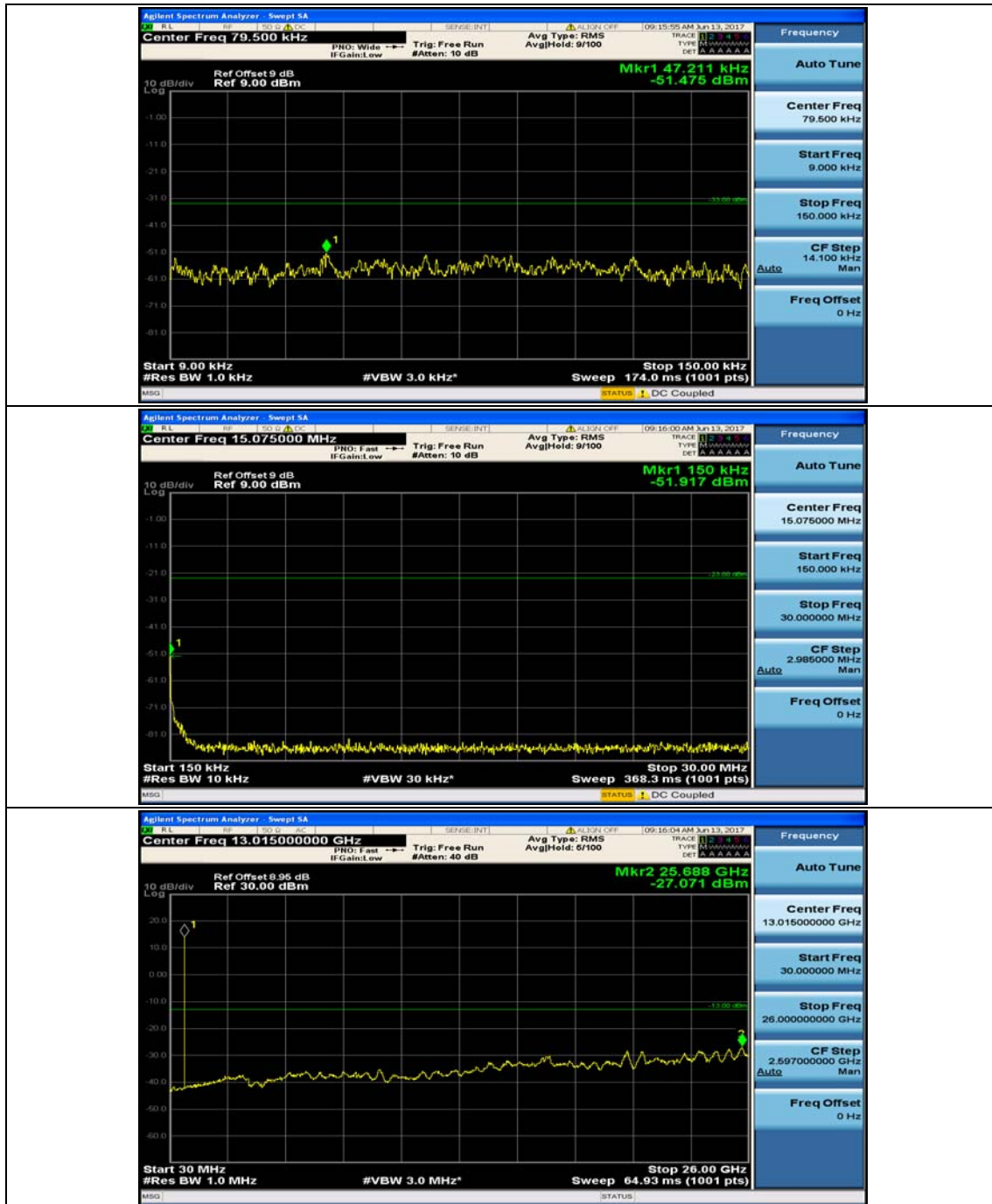




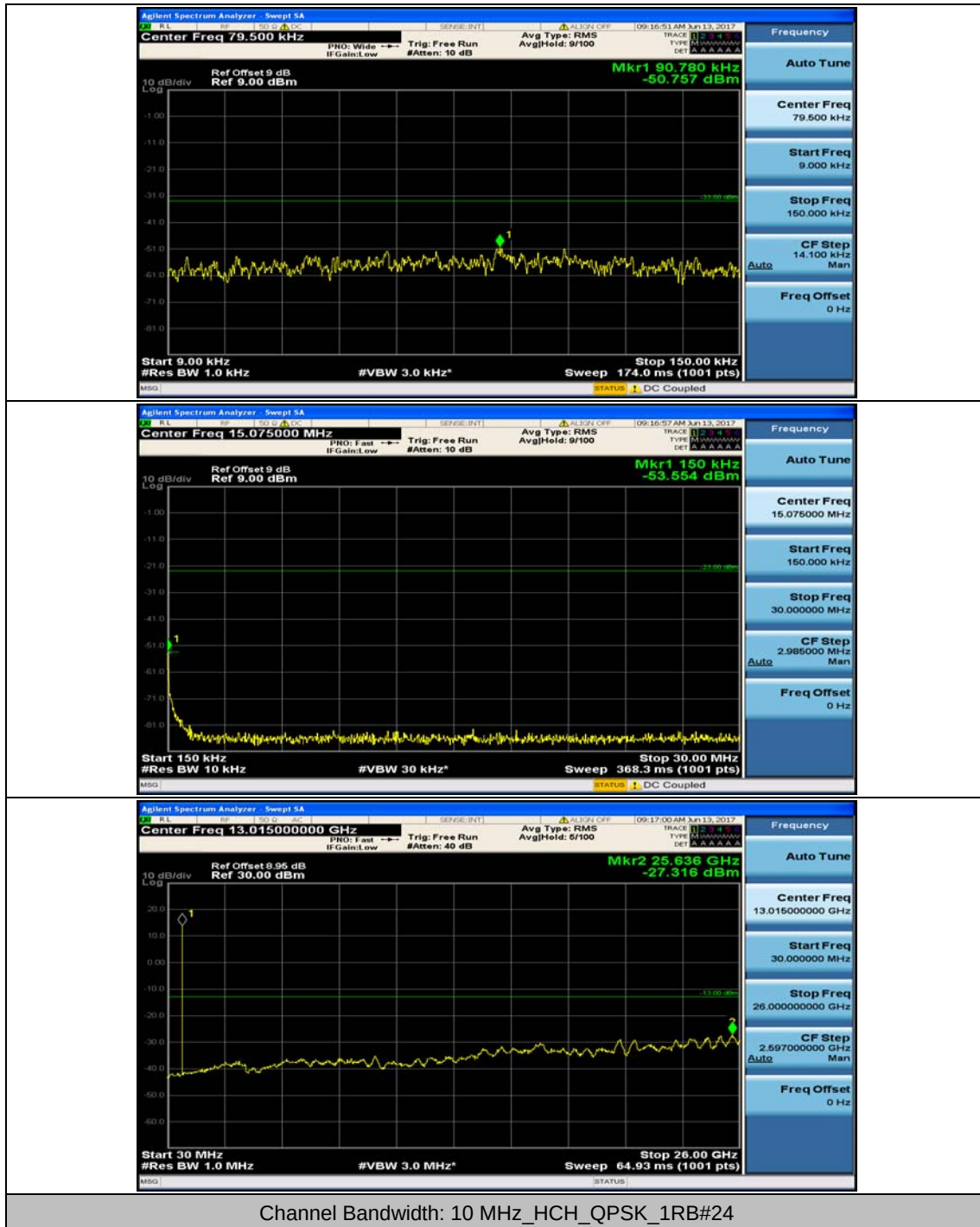


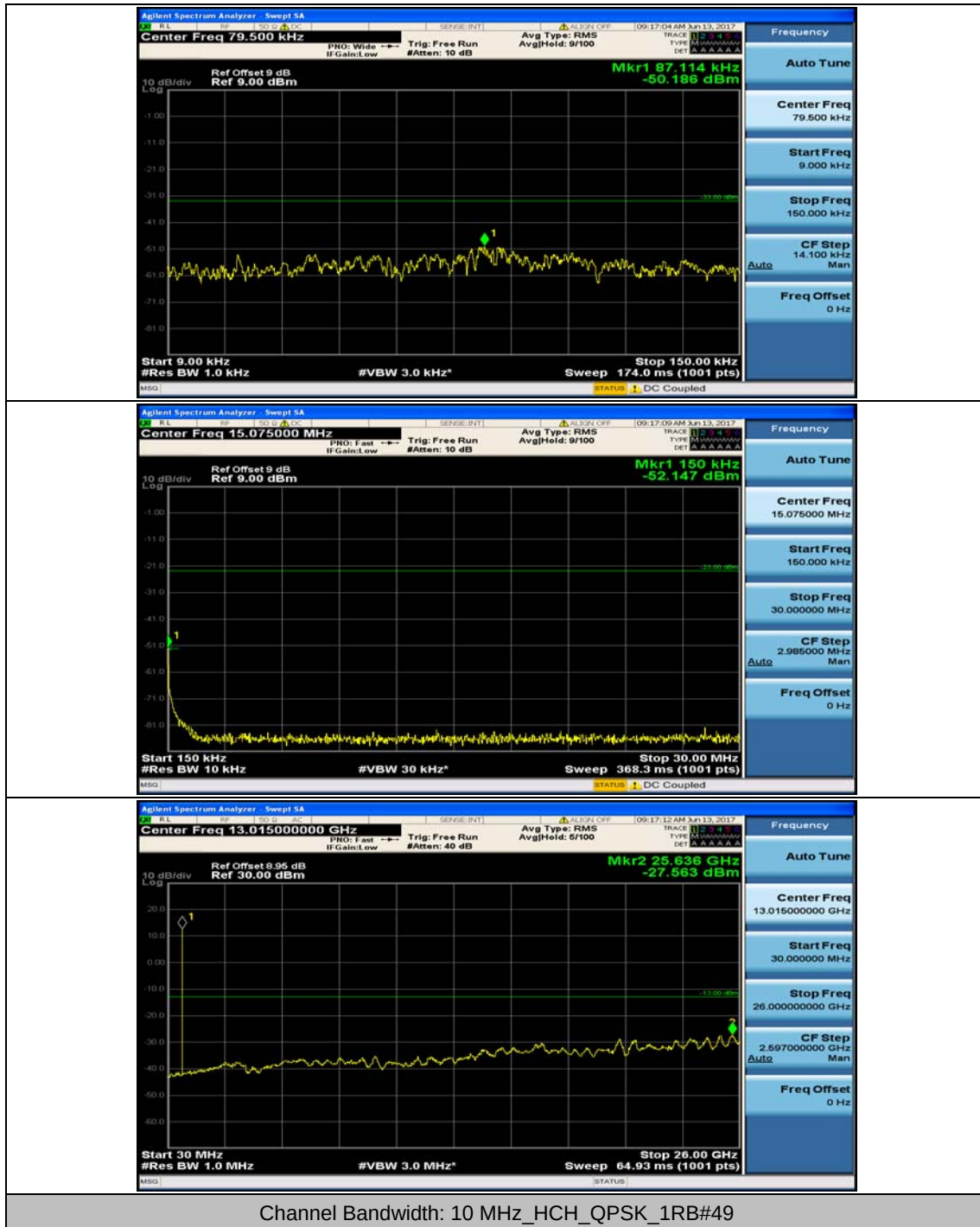


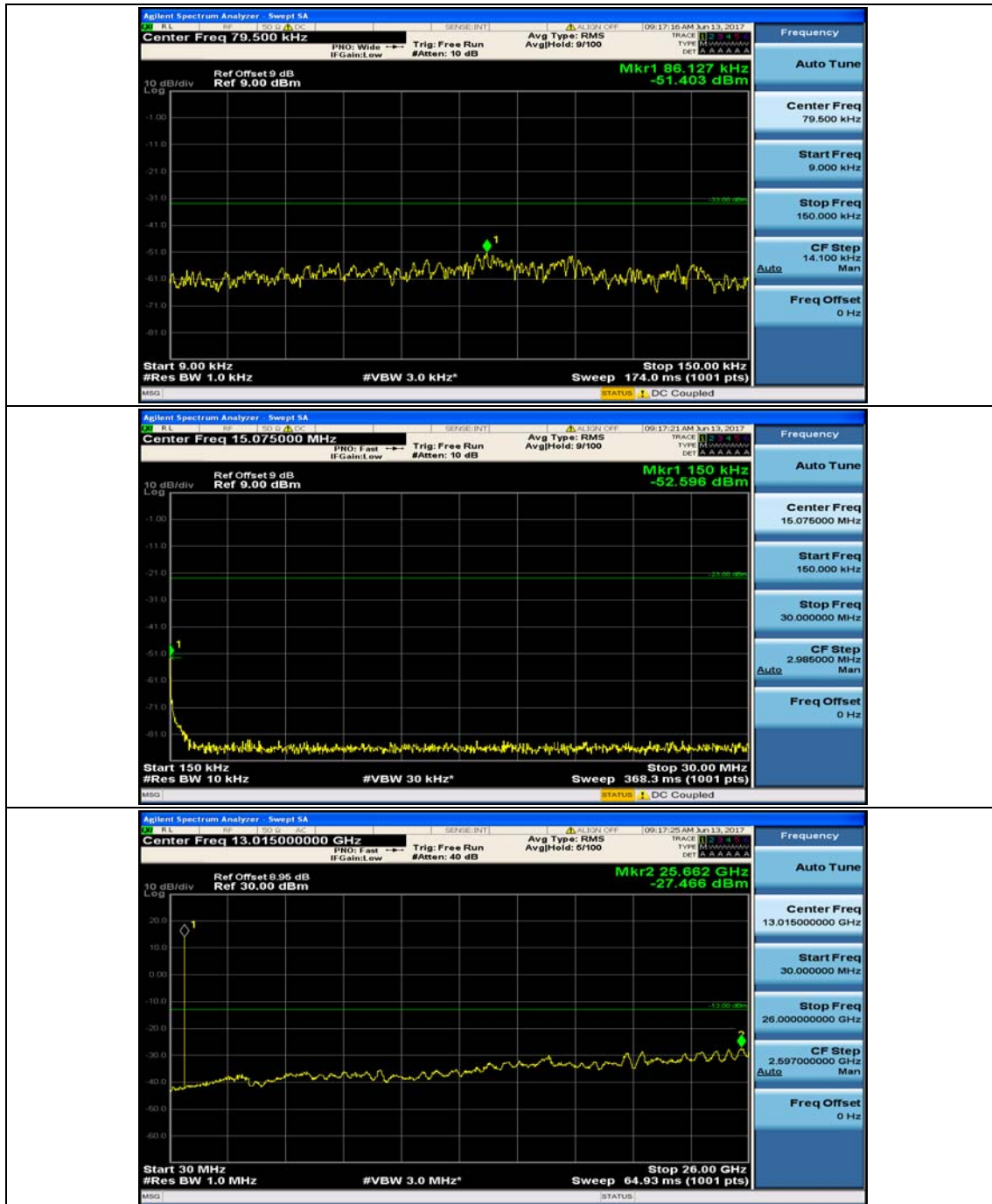




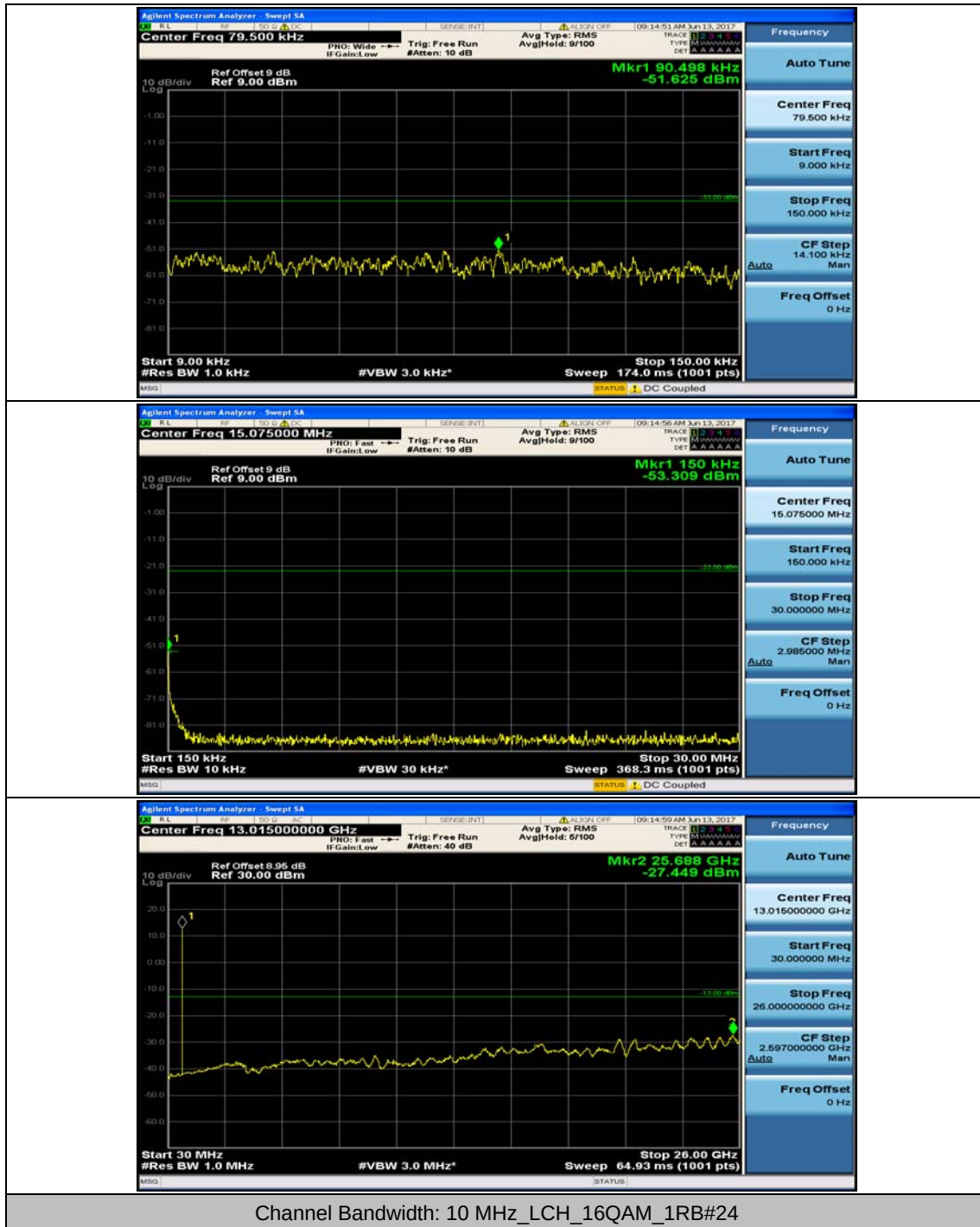
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0

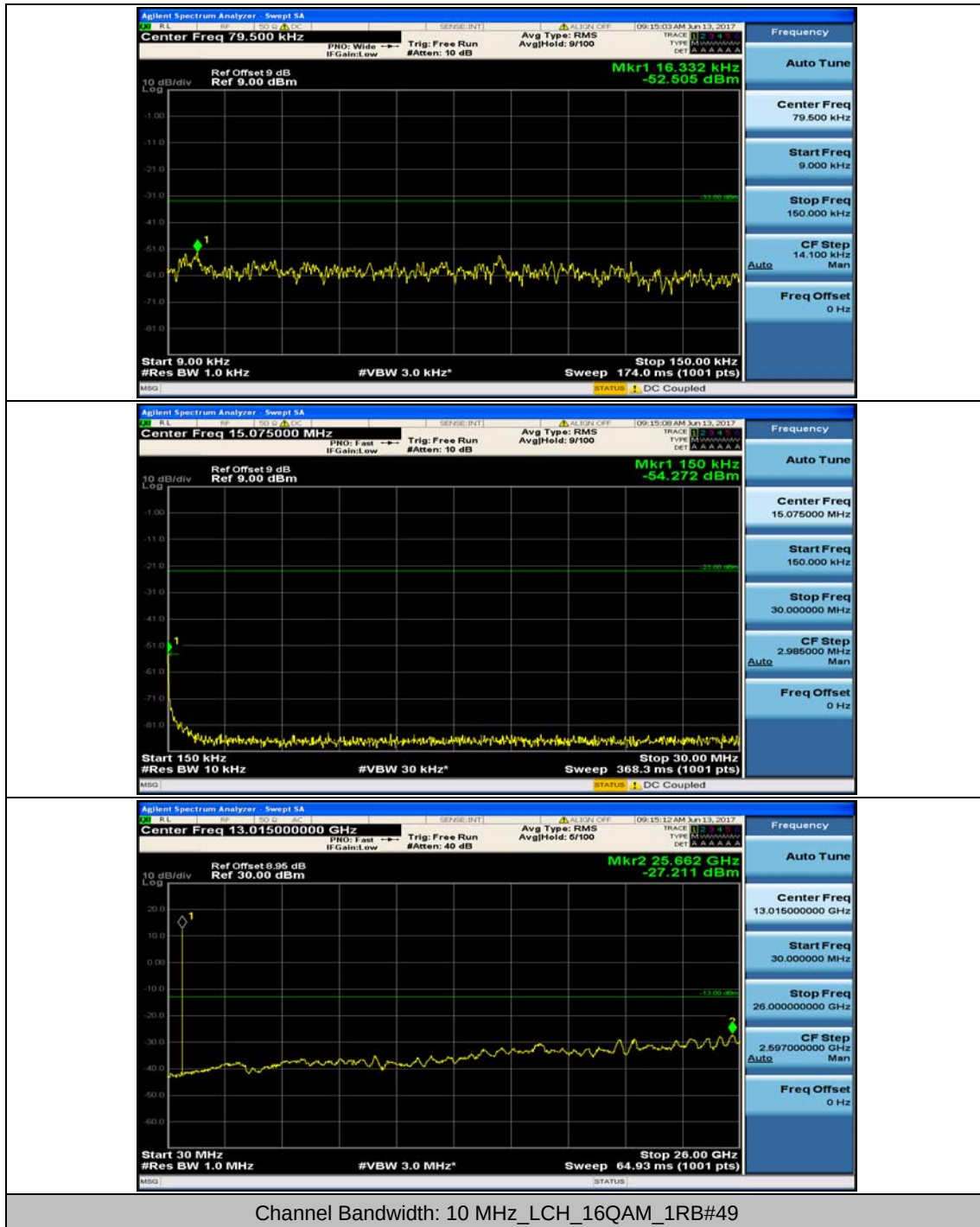


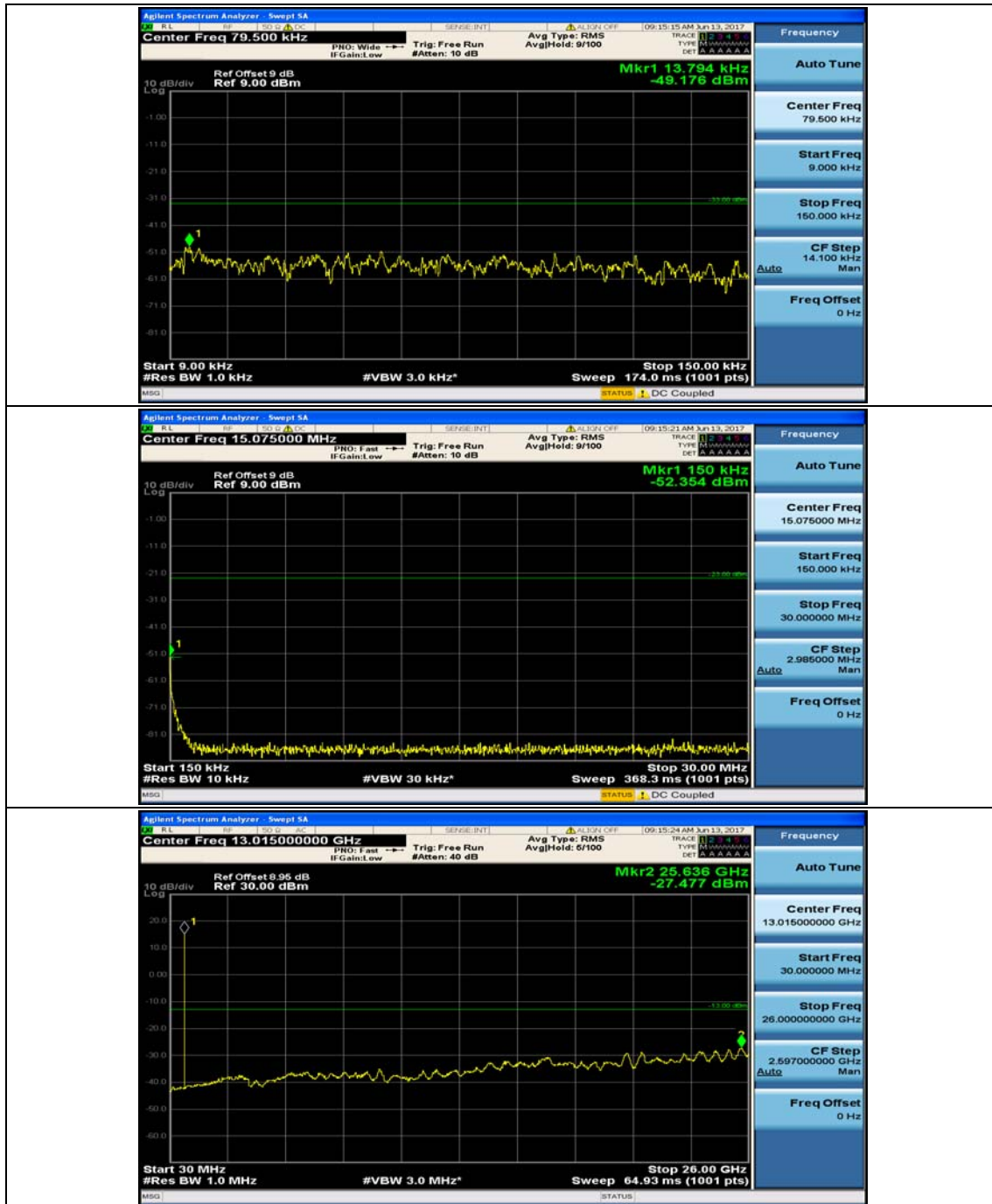




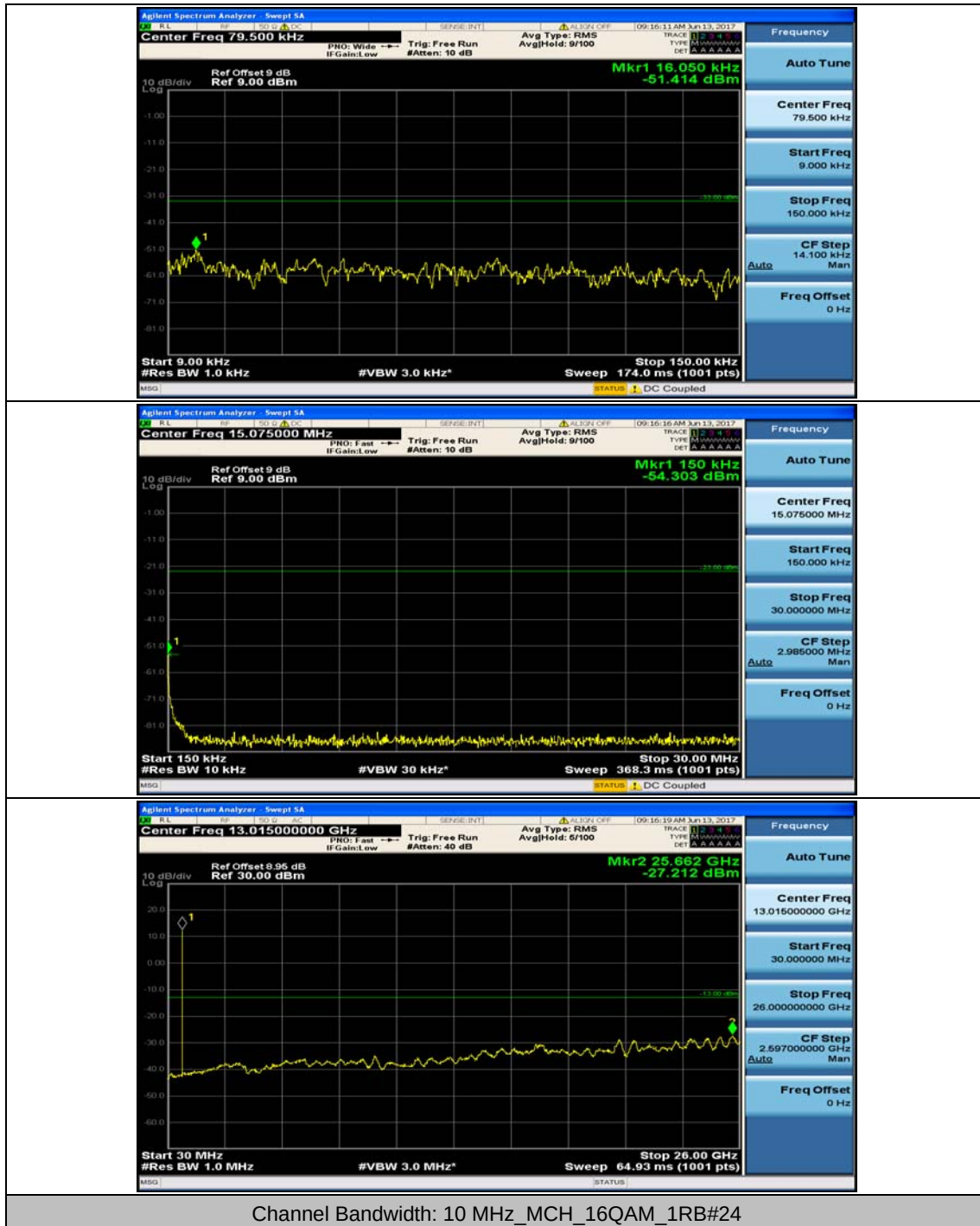
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0

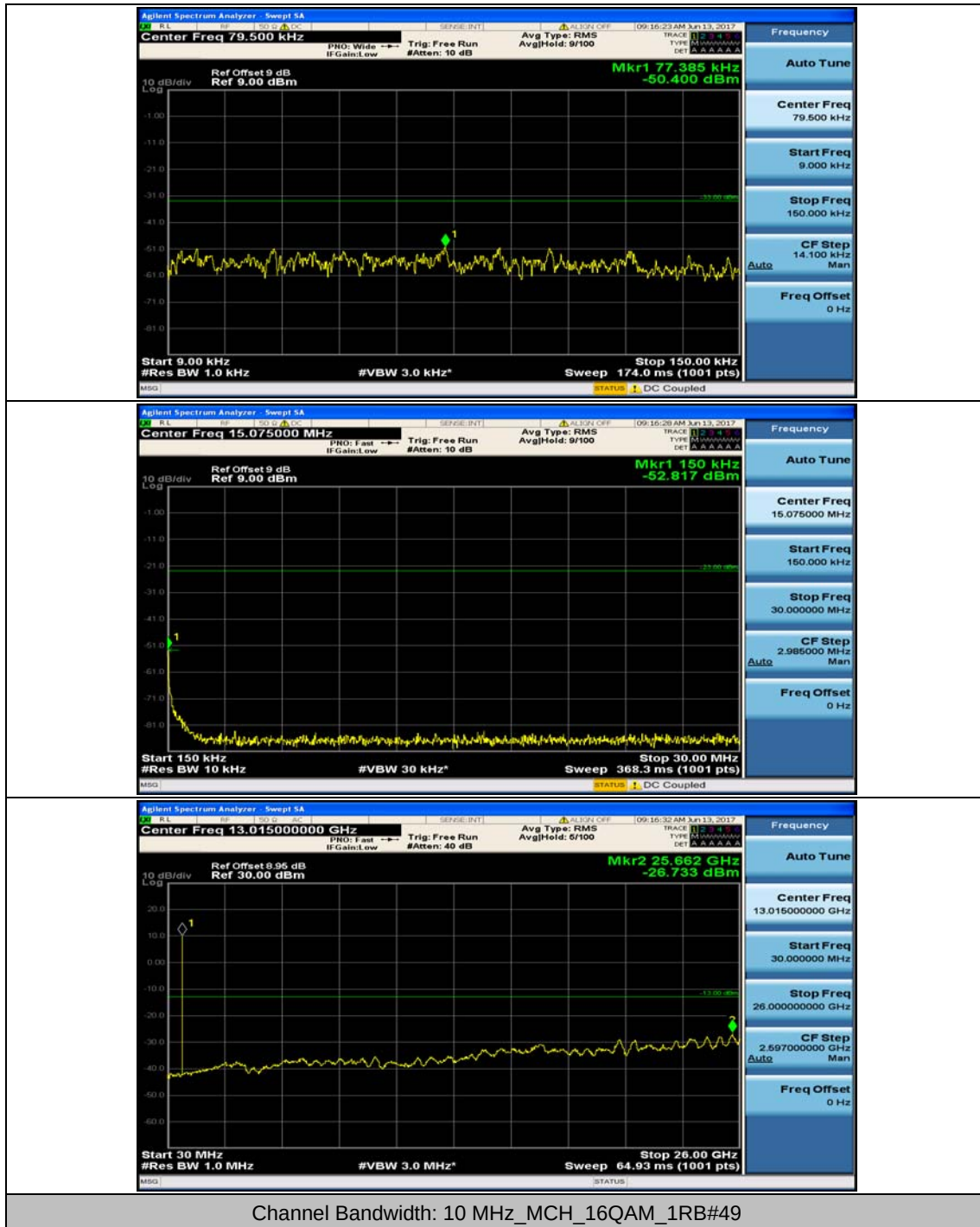


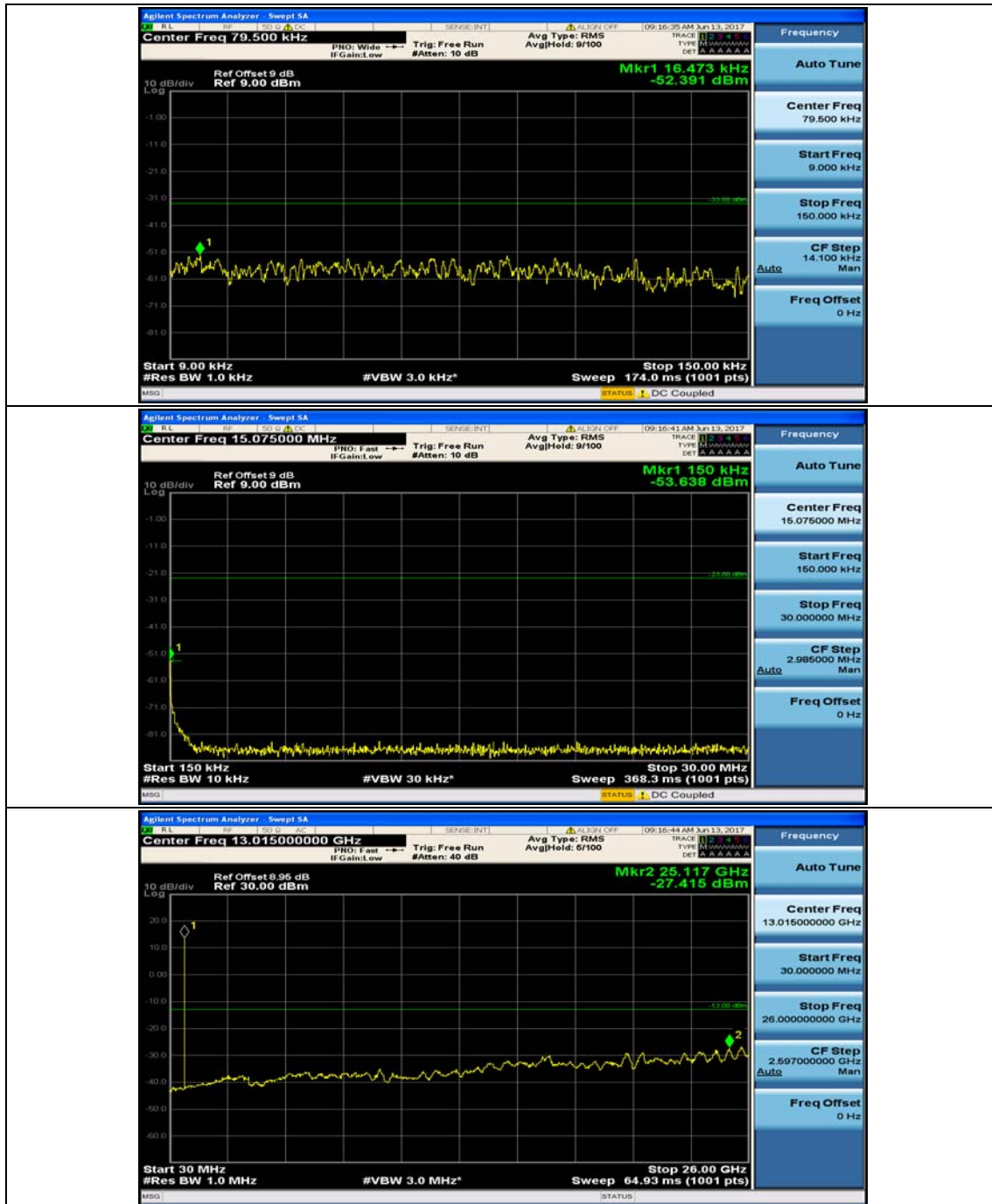




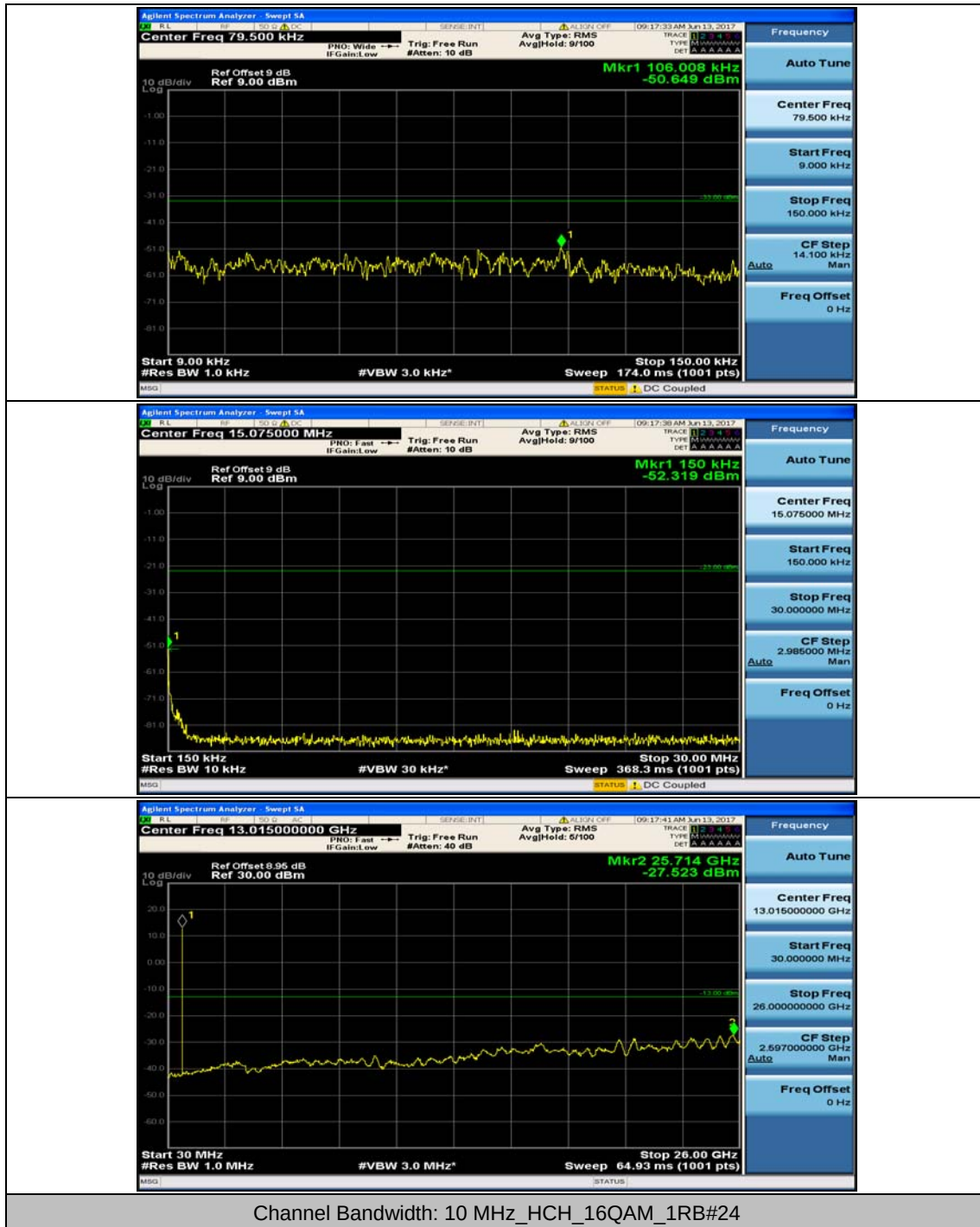
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

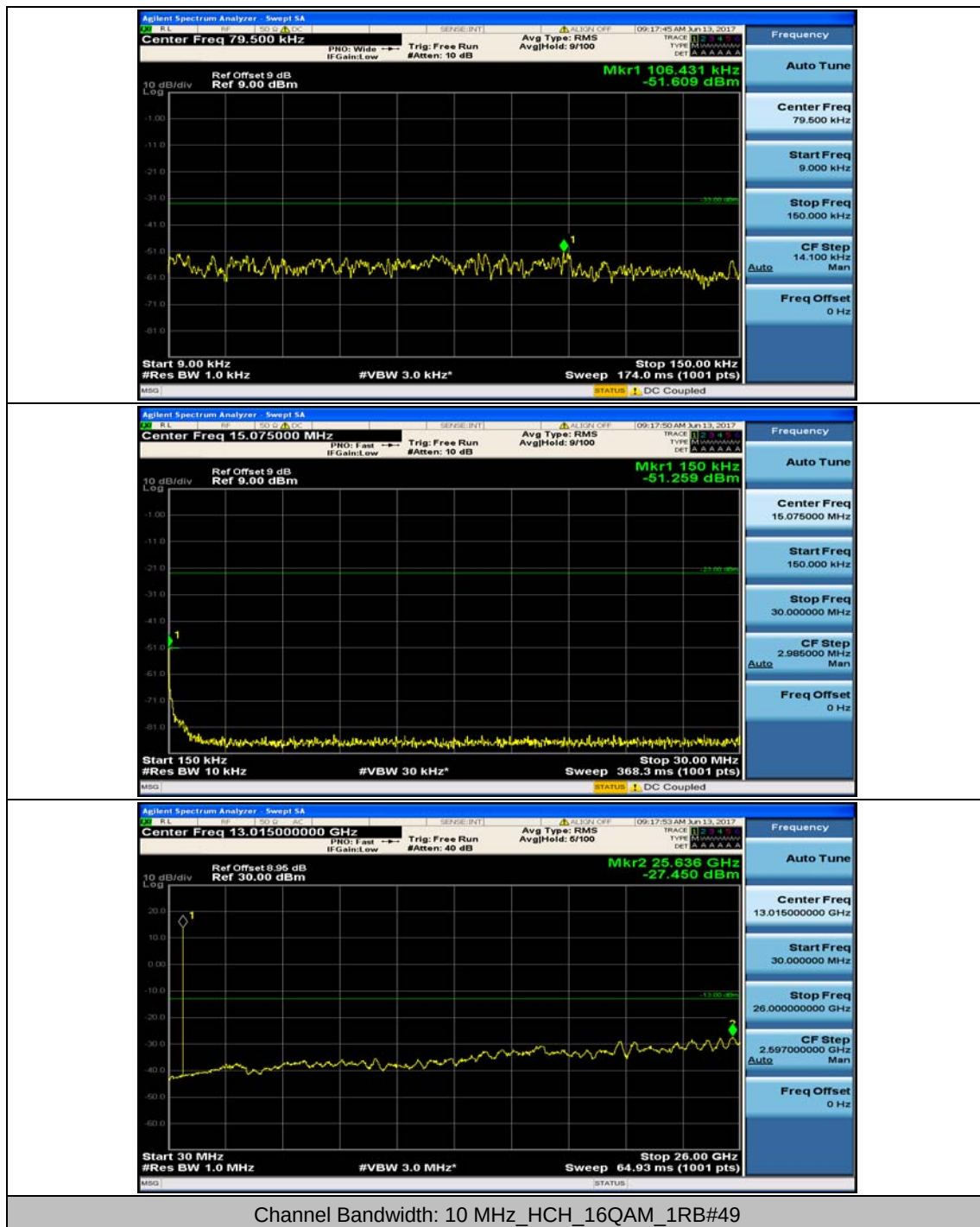


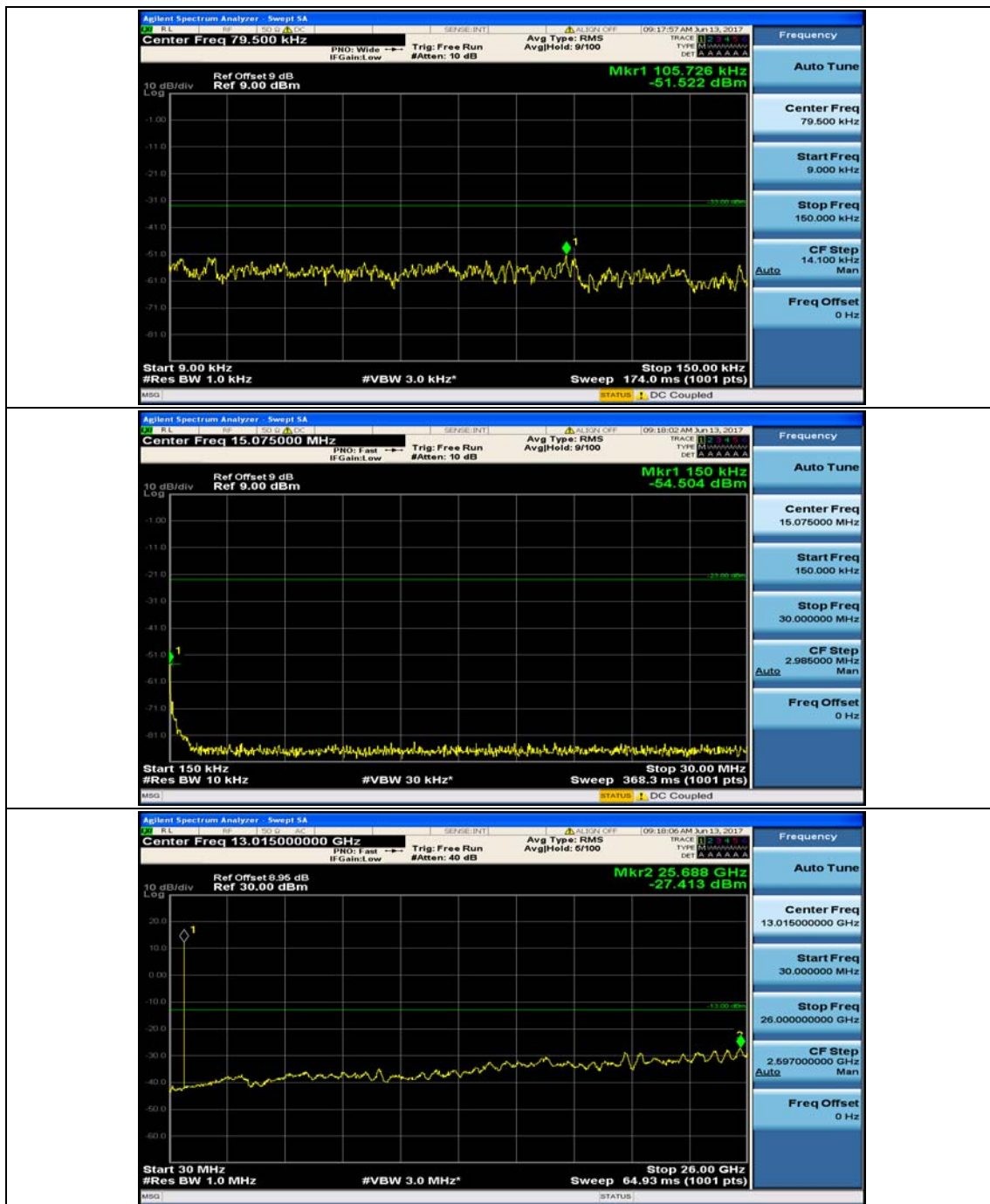




Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0







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	1.3	0.001858	± 2.5	PASS
		VN	TN	-0.69	-0.000986	± 2.5	PASS
		VH	TN	0.79	0.001129	± 2.5	PASS
	MCH	VL	TN	4.21	0.005951	± 2.5	PASS
		VN	TN	4	0.005654	± 2.5	PASS
		VH	TN	-1.17	-0.001654	± 2.5	PASS
	HCH	VL	TN	2.04	0.002852	± 2.5	PASS
		VN	TN	3.07	0.004292	± 2.5	PASS
		VH	TN	-1.9	-0.002656	± 2.5	PASS
16QAM	LCH	VL	TN	-0.79	-0.001129	± 2.5	PASS
		VN	TN	-0.87	-0.001243	± 2.5	PASS
		VH	TN	4.92	0.007032	± 2.5	PASS
	MCH	VL	TN	-0.07	-0.000099	± 2.5	PASS
		VN	TN	2.11	0.002982	± 2.5	PASS
		VH	TN	0.16	0.000226	± 2.5	PASS
	HCH	VL	TN	4.33	0.006053	± 2.5	PASS
		VN	TN	3.59	0.005019	± 2.5	PASS
		VH	TN	1.44	0.002013	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.18	-0.001686	± 2.5	PASS
		VN	-20	-1.78	-0.002544	± 2.5	PASS
		VN	-10	0.81	0.001158	± 2.5	PASS
		VN	0	0.04	0.000057	± 2.5	PASS
		VN	10	-1.06	-0.001515	± 2.5	PASS
		VN	20	4.61	0.006589	± 2.5	PASS
		VN	30	3.18	0.004545	± 2.5	PASS
		VN	40	0.44	0.000629	± 2.5	PASS
	MCH	VN	50	-1.99	-0.002844	± 2.5	PASS
		VN	-30	-1.04	-0.001470	± 2.5	PASS
		VN	-20	1.7	0.002403	± 2.5	PASS

		VN	-10	1.09	0.001541	± 2.5	PASS
		VN	0	-1.8	-0.002544	± 2.5	PASS
		VN	10	1.38	0.001951	± 2.5	PASS
		VN	20	2.72	0.003845	± 2.5	PASS
		VN	30	3.45	0.004876	± 2.5	PASS
		VN	40	4.4	0.006219	± 2.5	PASS
		VN	50	3.76	0.005314	± 2.5	PASS
	HCH	VN	-30	4.08	0.005704	± 2.5	PASS
		VN	-20	0.96	0.001342	± 2.5	PASS
		VN	-10	-1.04	-0.001454	± 2.5	PASS
		VN	0	-0.86	-0.001202	± 2.5	PASS
		VN	10	-1.46	-0.002041	± 2.5	PASS
		VN	20	3.71	0.005187	± 2.5	PASS
		VN	30	-0.73	-0.001021	± 2.5	PASS
		VN	40	2.34	0.003271	± 2.5	PASS
		VN	50	3.94	0.005508	± 2.5	PASS
16QAM	LCH	VN	-30	2.94	0.004202	± 2.5	PASS
		VN	-20	2.91	0.004159	± 2.5	PASS
		VN	-10	1.08	0.001544	± 2.5	PASS
		VN	0	-0.74	-0.001058	± 2.5	PASS
		VN	10	-1.86	-0.002658	± 2.5	PASS
		VN	20	-0.48	-0.000686	± 2.5	PASS
		VN	30	2.28	0.003259	± 2.5	PASS
		VN	40	1.32	0.001887	± 2.5	PASS
		VN	50	-0.08	-0.000114	± 2.5	PASS
	MCH	VN	-30	2.57	0.003633	± 2.5	PASS
		VN	-20	2.11	0.002982	± 2.5	PASS
		VN	-10	1.44	0.002035	± 2.5	PASS
		VN	0	-1.15	-0.001625	± 2.5	PASS
		VN	10	0.5	0.000707	± 2.5	PASS
		VN	20	-0.16	-0.000226	± 2.5	PASS
		VN	30	2.47	0.003491	± 2.5	PASS
		VN	40	0.43	0.000608	± 2.5	PASS
		VN	50	3.43	0.004848	± 2.5	PASS
	HCH	VN	-30	2.05	0.002866	± 2.5	PASS
		VN	-20	1.55	0.002167	± 2.5	PASS
		VN	-10	2.5	0.003495	± 2.5	PASS
		VN	0	4.89	0.006836	± 2.5	PASS
		VN	10	3.72	0.005201	± 2.5	PASS
		VN	20	-1.36	-0.001901	± 2.5	PASS
		VN	30	2.85	0.003984	± 2.5	PASS

		VN	40	-0.77	-0.001076	± 2.5	PASS
		VN	50	-0.33	-0.000461	± 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	3.33	0.004754	± 2.5	PASS
		VN	TN	-1.12	-0.001599	± 2.5	PASS
		VH	TN	-0.89	-0.001271	± 2.5	PASS
	MCH	VL	TN	-0.51	-0.000721	± 2.5	PASS
		VN	TN	-0.78	-0.001102	± 2.5	PASS
		VH	TN	0.02	0.000028	± 2.5	PASS
	HCH	VL	TN	3.05	0.004269	± 2.5	PASS
		VN	TN	1.29	0.001805	± 2.5	PASS
		VH	TN	3.73	0.005220	± 2.5	PASS
16QAM	LCH	VL	TN	3.6	0.005139	± 2.5	PASS
		VN	TN	0.11	0.000157	± 2.5	PASS
		VH	TN	1.47	0.002099	± 2.5	PASS
	MCH	VL	TN	1.89	0.002671	± 2.5	PASS
		VN	TN	-0.54	-0.000763	± 2.5	PASS
		VH	TN	-0.5	-0.000707	± 2.5	PASS
	HCH	VL	TN	-1.42	-0.001987	± 2.5	PASS
		VN	TN	-0.97	-0.001358	± 2.5	PASS
		VH	TN	2.67	0.003737	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.91	0.005582	± 2.5	PASS
		VN	-20	1.86	0.002655	± 2.5	PASS
		VN	-10	3.11	0.004440	± 2.5	PASS
		VN	0	0.9	0.001285	± 2.5	PASS
		VN	10	4.57	0.006524	± 2.5	PASS
		VN	20	0.52	0.000742	± 2.5	PASS
		VN	30	4.54	0.006481	± 2.5	PASS
		VN	40	1.43	0.002041	± 2.5	PASS
		VN	50	0.18	0.000257	± 2.5	PASS
	MCH	VN	-30	0.03	0.000042	± 2.5	PASS
		VN	-20	1.4	0.001979	± 2.5	PASS
		VN	-10	4.67	0.006601	± 2.5	PASS

		VN	0	3.14	0.004438	± 2.5	PASS
		VN	10	-0.01	-0.000014	± 2.5	PASS
		VN	20	4.31	0.006092	± 2.5	PASS
		VN	30	3.17	0.004481	± 2.5	PASS
		VN	40	1.37	0.001936	± 2.5	PASS
		VN	50	2.02	0.002855	± 2.5	PASS
	HCH	VN	-30	0.62	0.000868	± 2.5	PASS
		VN	-20	-1.79	-0.002505	± 2.5	PASS
		VN	-10	1.21	0.001693	± 2.5	PASS
		VN	0	-1.26	-0.001763	± 2.5	PASS
		VN	10	2	0.002799	± 2.5	PASS
		VN	20	-1.53	-0.002141	± 2.5	PASS
		VN	30	-1.59	-0.002225	± 2.5	PASS
		VN	40	4.4	0.006158	± 2.5	PASS
		VN	50	3.98	0.005570	± 2.5	PASS
16QAM	LCH	VN	-30	2.96	0.004226	± 2.5	PASS
		VN	-20	3.37	0.004811	± 2.5	PASS
		VN	-10	2.04	0.002912	± 2.5	PASS
		VN	0	3.32	0.004739	± 2.5	PASS
		VN	10	2.33	0.003326	± 2.5	PASS
		VN	20	-0.21	-0.000300	± 2.5	PASS
		VN	30	-1.68	-0.002398	± 2.5	PASS
		VN	40	2.08	0.002969	± 2.5	PASS
		VN	50	3.03	0.004325	± 2.5	PASS
	MCH	VN	-30	-0.33	-0.000466	± 2.5	PASS
		VN	-20	-1.75	-0.002473	± 2.5	PASS
		VN	-10	1.99	0.002813	± 2.5	PASS
		VN	0	1.87	0.002643	± 2.5	PASS
		VN	10	4.42	0.006247	± 2.5	PASS
		VN	20	-0.78	-0.001102	± 2.5	PASS
		VN	30	4.07	0.005753	± 2.5	PASS
		VN	40	1.46	0.002064	± 2.5	PASS
		VN	50	2.63	0.003717	± 2.5	PASS
	HCH	VN	-30	2.64	0.003695	± 2.5	PASS
		VN	-20	4.01	0.005612	± 2.5	PASS
		VN	-10	4.55	0.006368	± 2.5	PASS
		VN	0	2.36	0.003303	± 2.5	PASS
		VN	10	4.16	0.005822	± 2.5	PASS
		VN	20	3.65	0.005108	± 2.5	PASS
		VN	30	-1.33	-0.001861	± 2.5	PASS
		VN	40	2.2	0.003079	± 2.5	PASS

		VN	50	-0.64	-0.000896	± 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	-1.5	-0.002138	± 2.5	PASS
		VN	TN	3.27	0.004661	± 2.5	PASS
		VH	TN	2.8	0.003991	± 2.5	PASS
	MCH	VL	TN	1.5	0.002120	± 2.5	PASS
		VN	TN	4.23	0.005979	± 2.5	PASS
		VH	TN	0.2	0.000283	± 2.5	PASS
	HCH	VL	TN	2.15	0.003013	± 2.5	PASS
		VN	TN	-1.78	-0.002495	± 2.5	PASS
		VH	TN	-1.17	-0.001640	± 2.5	PASS
16QAM	LCH	VL	TN	1.22	0.001739	± 2.5	PASS
		VN	TN	0.83	0.001183	± 2.5	PASS
		VH	TN	1.65	0.002352	± 2.5	PASS
	MCH	VL	TN	4.62	0.006530	± 2.5	PASS
		VN	TN	0.95	0.001343	± 2.5	PASS
		VH	TN	1.78	0.002516	± 2.5	PASS
	HCH	VL	TN	-0.77	-0.001079	± 2.5	PASS
		VN	TN	-0.1	-0.000140	± 2.5	PASS
		VH	TN	2.36	0.003308	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.03	-0.001468	± 2.5	PASS
		VN	-20	1.2	0.001711	± 2.5	PASS
		VN	-10	3.21	0.004576	± 2.5	PASS
		VN	0	3.94	0.005617	± 2.5	PASS
		VN	10	-0.99	-0.001411	± 2.5	PASS
		VN	20	1.95	0.002780	± 2.5	PASS
		VN	30	3.68	0.005246	± 2.5	PASS
		VN	40	-1.96	-0.002794	± 2.5	PASS
		VN	50	3.78	0.005388	± 2.5	PASS
	MCH	VN	-30	1.63	0.002304	± 2.5	PASS
		VN	-20	3.25	0.004594	± 2.5	PASS
		VN	-10	-0.14	-0.000198	± 2.5	PASS
		VN	0	0.47	0.000664	± 2.5	PASS

		VN	10	1.32	0.001866	± 2.5	PASS
		VN	20	-0.43	-0.000608	± 2.5	PASS
		VN	30	0.94	0.001329	± 2.5	PASS
		VN	40	-0.8	-0.001131	± 2.5	PASS
		VN	50	3.71	0.005244	± 2.5	PASS
	HCH	VN	-30	3.05	0.004275	± 2.5	PASS
		VN	-20	1.28	0.001794	± 2.5	PASS
		VN	-10	4.54	0.006363	± 2.5	PASS
		VN	0	-0.64	-0.000897	± 2.5	PASS
		VN	10	0.05	0.000070	± 2.5	PASS
		VN	20	0.34	0.000477	± 2.5	PASS
		VN	30	-1.98	-0.002775	± 2.5	PASS
		VN	40	4.47	0.006265	± 2.5	PASS
		VN	50	1.87	0.002621	± 2.5	PASS
		VN	-30	4.78	0.006814	± 2.5	PASS
16QAM	LCH	VN	-20	2.32	0.003307	± 2.5	PASS
		VN	-10	-1.49	-0.002124	± 2.5	PASS
		VN	0	-1.51	-0.002153	± 2.5	PASS
		VN	10	3.12	0.004448	± 2.5	PASS
		VN	20	4.1	0.005845	± 2.5	PASS
		VN	30	-0.25	-0.000356	± 2.5	PASS
		VN	40	3.28	0.004676	± 2.5	PASS
		VN	50	3.88	0.005531	± 2.5	PASS
	MCH	VN	-30	0.36	0.000509	± 2.5	PASS
		VN	-20	0.22	0.000311	± 2.5	PASS
		VN	-10	1.96	0.002770	± 2.5	PASS
		VN	0	4.07	0.005753	± 2.5	PASS
		VN	10	-1.14	-0.001611	± 2.5	PASS
		VN	20	-0.73	-0.001032	± 2.5	PASS
		VN	30	0.05	0.000071	± 2.5	PASS
		VN	40	3.23	0.004565	± 2.5	PASS
		VN	50	-1.78	-0.002516	± 2.5	PASS
	HCH	VN	-30	-1.39	-0.001948	± 2.5	PASS
		VN	-20	3.73	0.005228	± 2.5	PASS
		VN	-10	1.22	0.001710	± 2.5	PASS
		VN	0	1.6	0.002242	± 2.5	PASS
		VN	10	2.09	0.002929	± 2.5	PASS
		VN	20	1.73	0.002425	± 2.5	PASS
		VN	30	-1.96	-0.002747	± 2.5	PASS
		VN	40	-0.68	-0.000953	± 2.5	PASS
		VN	50	1.67	0.002341	± 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	0.43	0.000611	± 2.5	PASS
		VN	TN	-0.61	-0.000866	± 2.5	PASS
		VH	TN	4.86	0.006903	± 2.5	PASS
	MCH	VL	TN	-1.05	-0.001484	± 2.5	PASS
		VN	TN	4.83	0.006827	± 2.5	PASS
		VH	TN	0.88	0.001244	± 2.5	PASS
	HCH	VL	TN	1.07	0.001505	± 2.5	PASS
		VN	TN	3.56	0.005007	± 2.5	PASS
		VH	TN	4.73	0.006653	± 2.5	PASS
16QAM	LCH	VL	TN	1.43	0.002031	± 2.5	PASS
		VN	TN	-1.05	-0.001491	± 2.5	PASS
		VH	TN	2.5	0.003551	± 2.5	PASS
	MCH	VL	TN	-1.53	-0.002163	± 2.5	PASS
		VN	TN	1.39	0.001965	± 2.5	PASS
		VH	TN	0.82	0.001159	± 2.5	PASS
	HCH	VL	TN	0.94	0.001322	± 2.5	PASS
		VN	TN	1.27	0.001786	± 2.5	PASS
		VH	TN	2.06	0.002897	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	2.98	0.004233	± 2.5	PASS
		VN	-20	3.92	0.005568	± 2.5	PASS
		VN	-10	-1.83	-0.002599	± 2.5	PASS
		VN	0	3.19	0.004531	± 2.5	PASS
		VN	10	2.72	0.003864	± 2.5	PASS
		VN	20	1.76	0.002500	± 2.5	PASS
		VN	30	4.31	0.006122	± 2.5	PASS
		VN	40	1.68	0.002386	± 2.5	PASS
		VN	50	1.66	0.002358	± 2.5	PASS
	MCH	VN	-30	2.86	0.004042	± 2.5	PASS
		VN	-20	0.84	0.001187	± 2.5	PASS
		VN	-10	4.09	0.005781	± 2.5	PASS
		VN	0	3.98	0.005625	± 2.5	PASS
		VN	10	2.6	0.003675	± 2.5	PASS
		VN	20	-0.91	-0.001286	± 2.5	PASS

		VN	30	0.42	0.000594	± 2.5	PASS
		VN	40	2.59	0.003661	± 2.5	PASS
		VN	50	-1.25	-0.001767	± 2.5	PASS
	HCH	VN	-30	-0.75	-0.001055	± 2.5	PASS
		VN	-20	3.58	0.005035	± 2.5	PASS
		VN	-10	-0.26	-0.000366	± 2.5	PASS
		VN	0	2.81	0.003952	± 2.5	PASS
		VN	10	2.07	0.002911	± 2.5	PASS
		VN	20	0.15	0.000211	± 2.5	PASS
		VN	30	-0.08	-0.000113	± 2.5	PASS
		VN	40	-1.33	-0.001871	± 2.5	PASS
		VN	50	-1.49	-0.002096	± 2.5	PASS
QPSK	LCH	VN	-30	0.96	0.001364	± 2.5	PASS
		VN	-20	-1.63	-0.002315	± 2.5	PASS
		VN	-10	2.39	0.003395	± 2.5	PASS
		VN	0	1.65	0.002344	± 2.5	PASS
		VN	10	0.38	0.000540	± 2.5	PASS
		VN	20	-1.5	-0.002131	± 2.5	PASS
		VN	30	-1.52	-0.002159	± 2.5	PASS
		VN	40	4.79	0.006804	± 2.5	PASS
		VN	50	-1.6	-0.002273	± 2.5	PASS
	MCH	VN	-30	-0.17	-0.000240	± 2.5	PASS
		VN	-20	4.21	0.005951	± 2.5	PASS
		VN	-10	-1.76	-0.002488	± 2.5	PASS
		VN	0	3.48	0.004919	± 2.5	PASS
		VN	10	-0.37	-0.000523	± 2.5	PASS
		VN	20	1.97	0.002784	± 2.5	PASS
		VN	30	-1.65	-0.002332	± 2.5	PASS
		VN	40	1.74	0.002459	± 2.5	PASS
		VN	50	3.82	0.005399	± 2.5	PASS
	HCH	VN	-30	1.33	0.001871	± 2.5	PASS
		VN	-20	2.51	0.003530	± 2.5	PASS
		VN	-10	3.79	0.005331	± 2.5	PASS
		VN	0	-0.73	-0.001027	± 2.5	PASS
		VN	10	2.27	0.003193	± 2.5	PASS
		VN	20	0.37	0.000520	± 2.5	PASS
		VN	30	-0.21	-0.000295	± 2.5	PASS
		VN	40	1.61	0.002264	± 2.5	PASS
		VN	50	1.1	0.001547	± 2.5	PASS