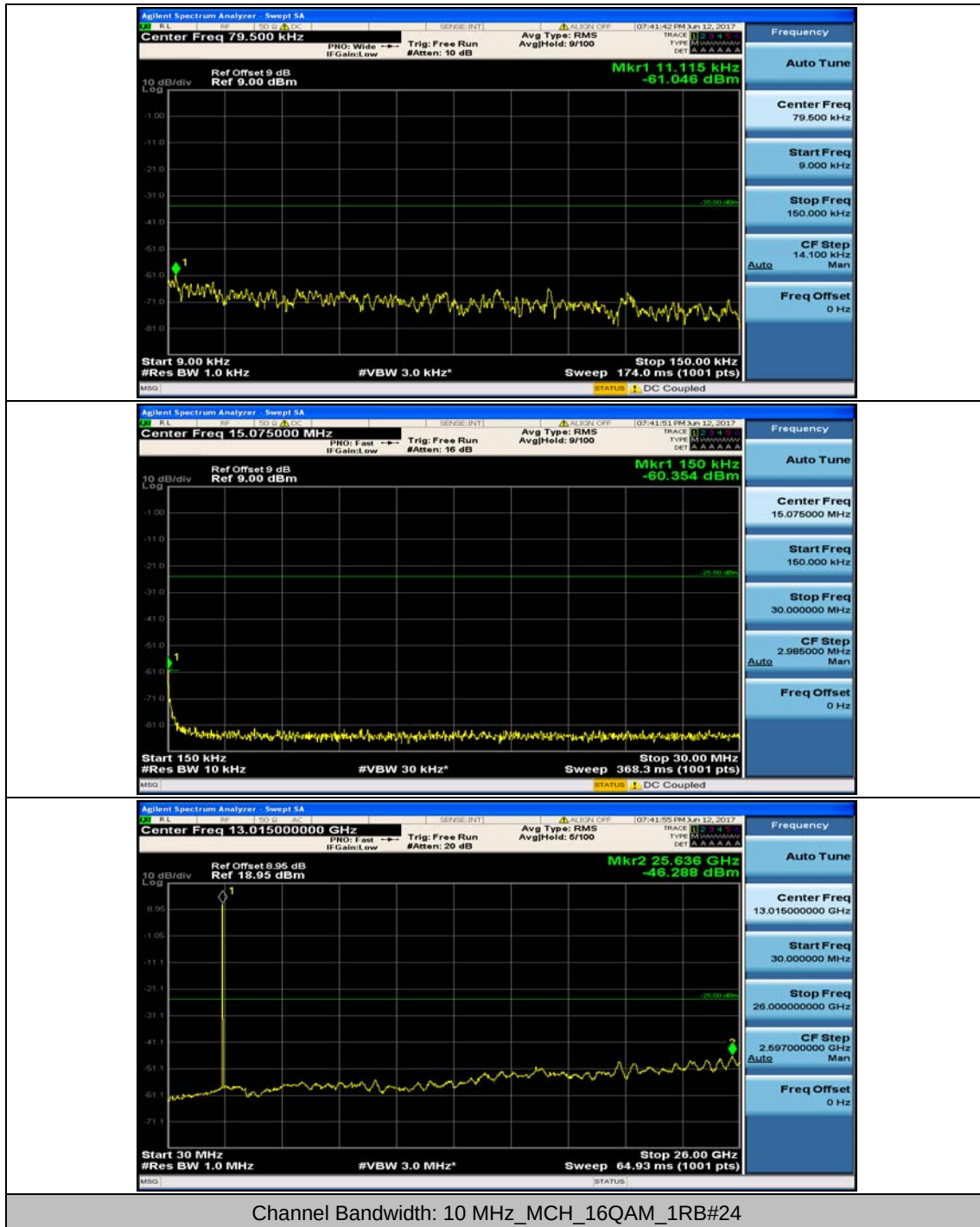
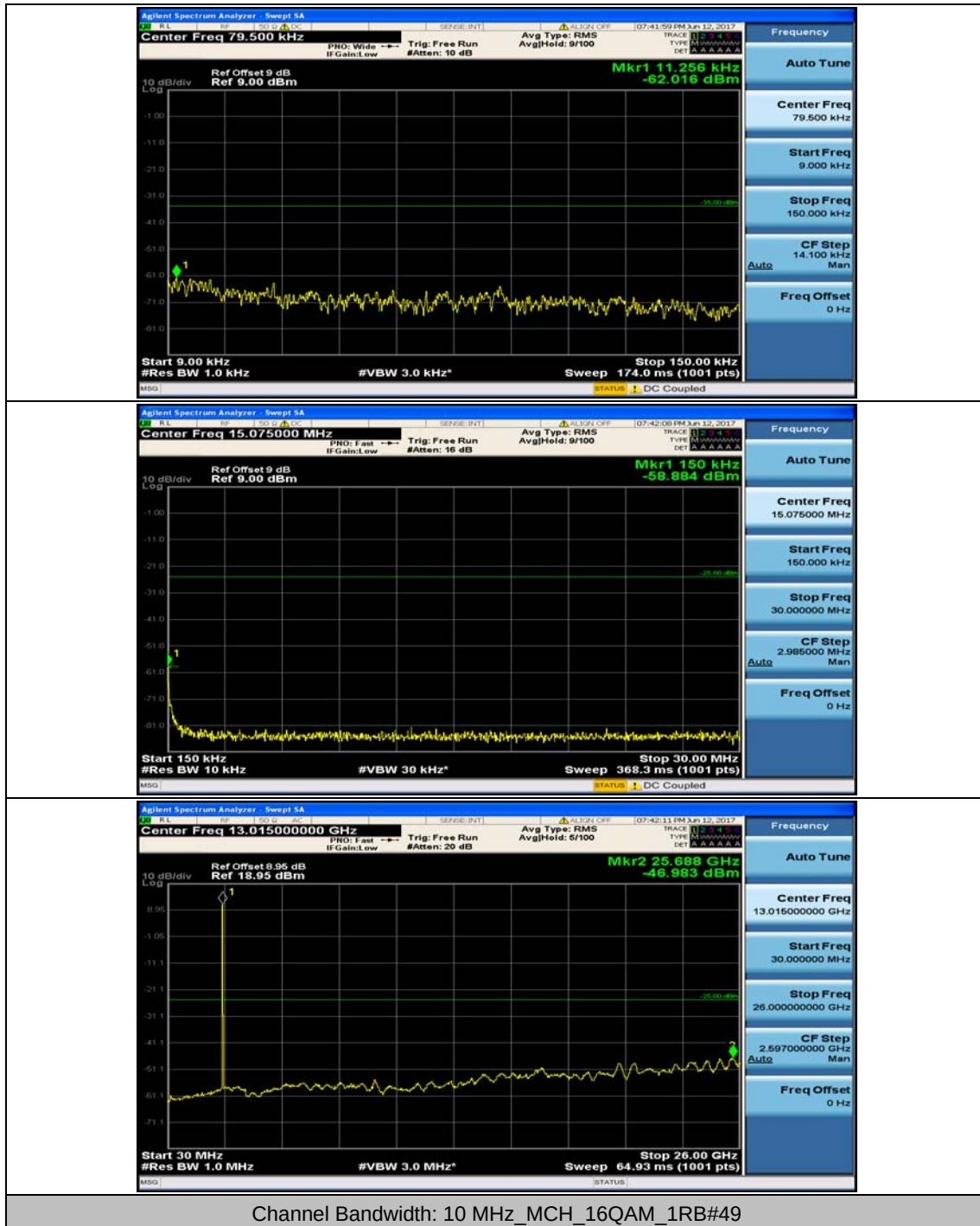
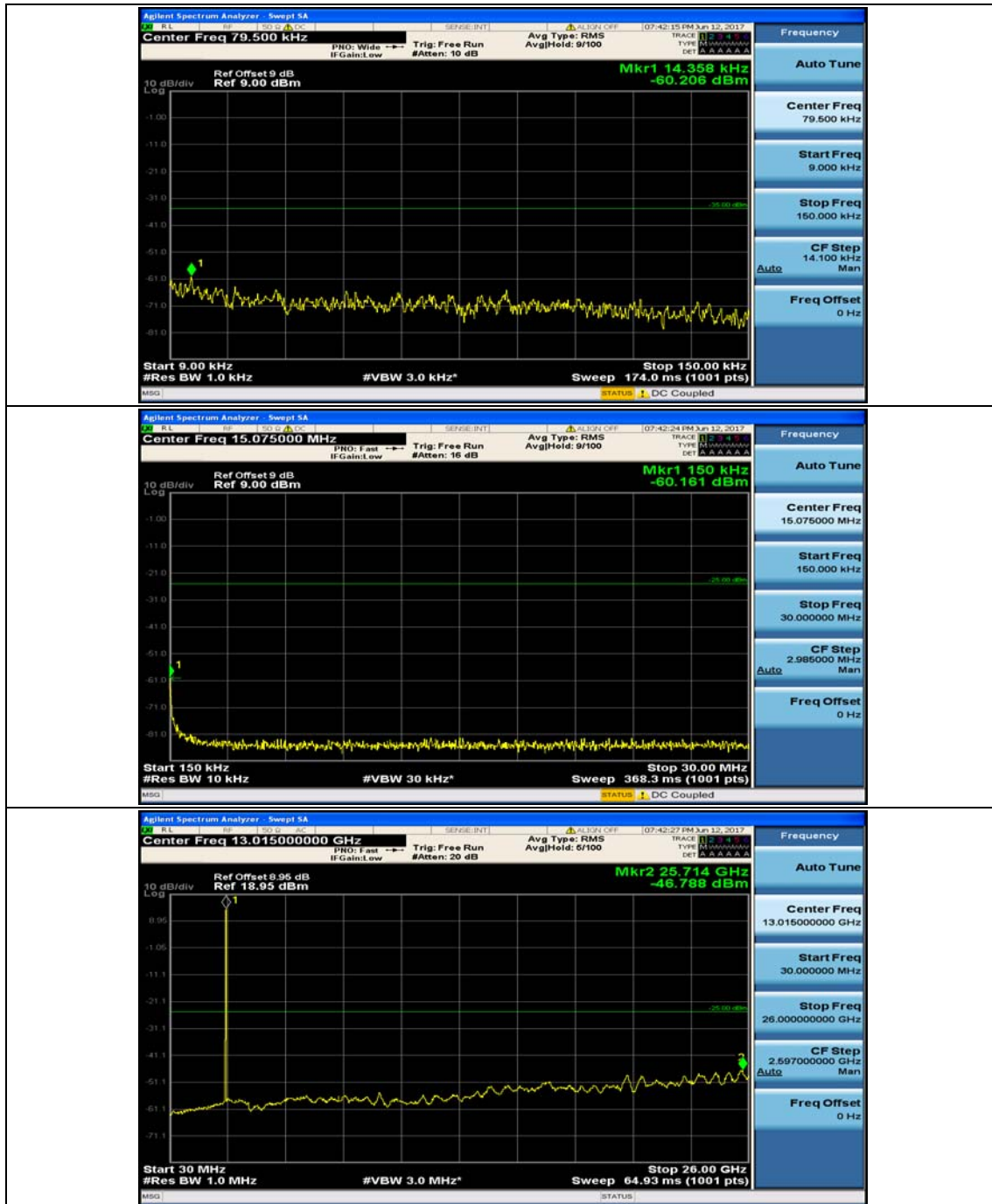
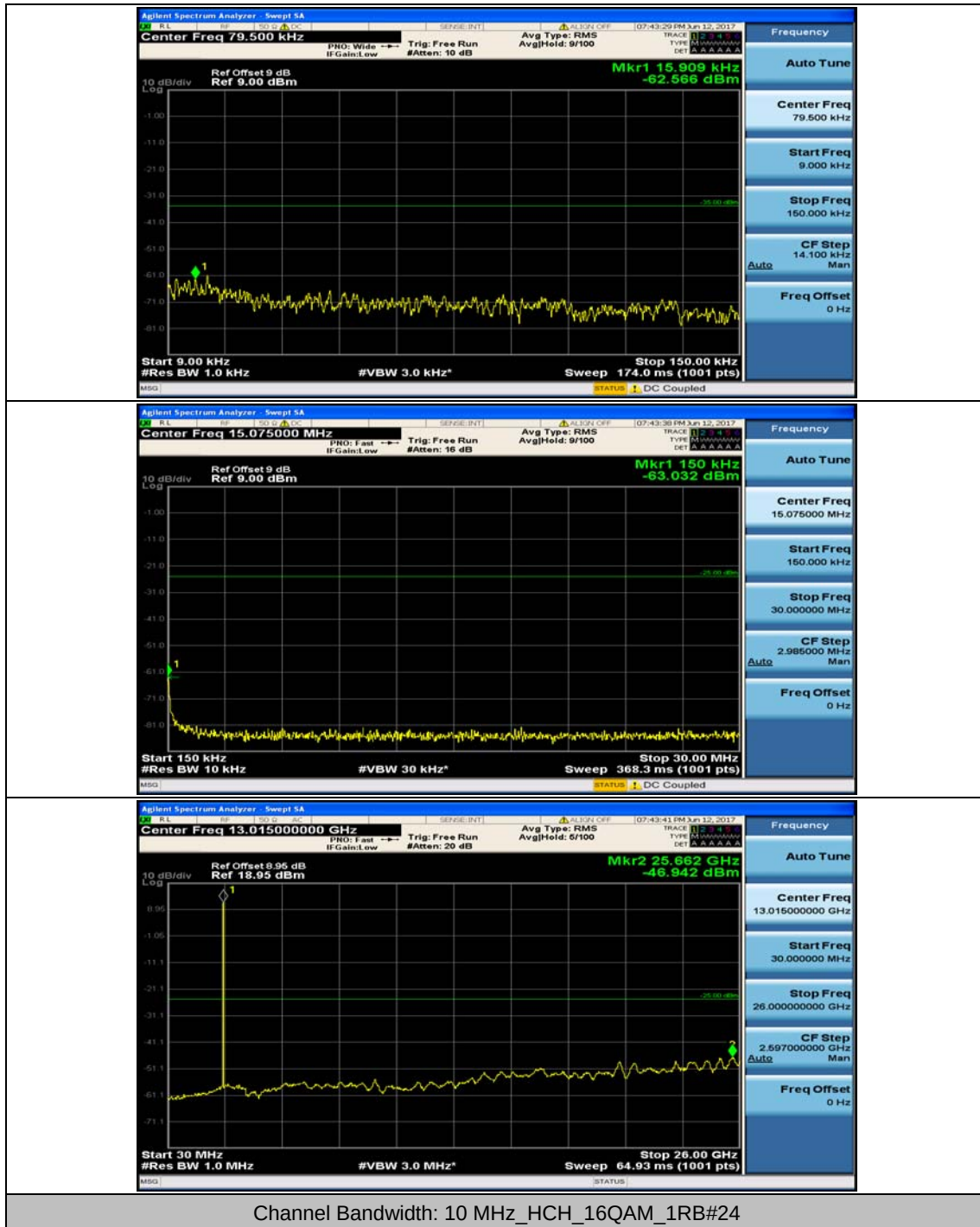


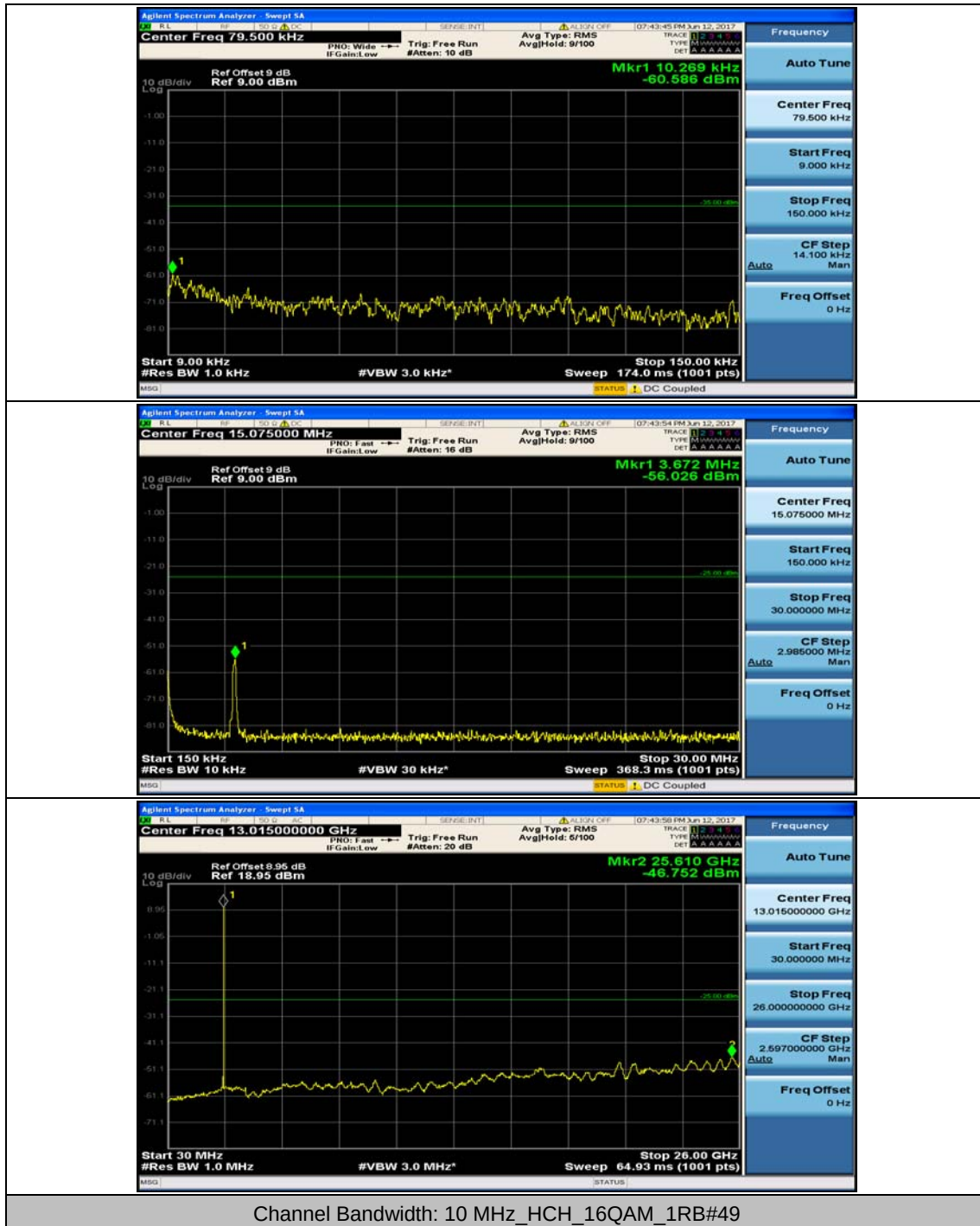


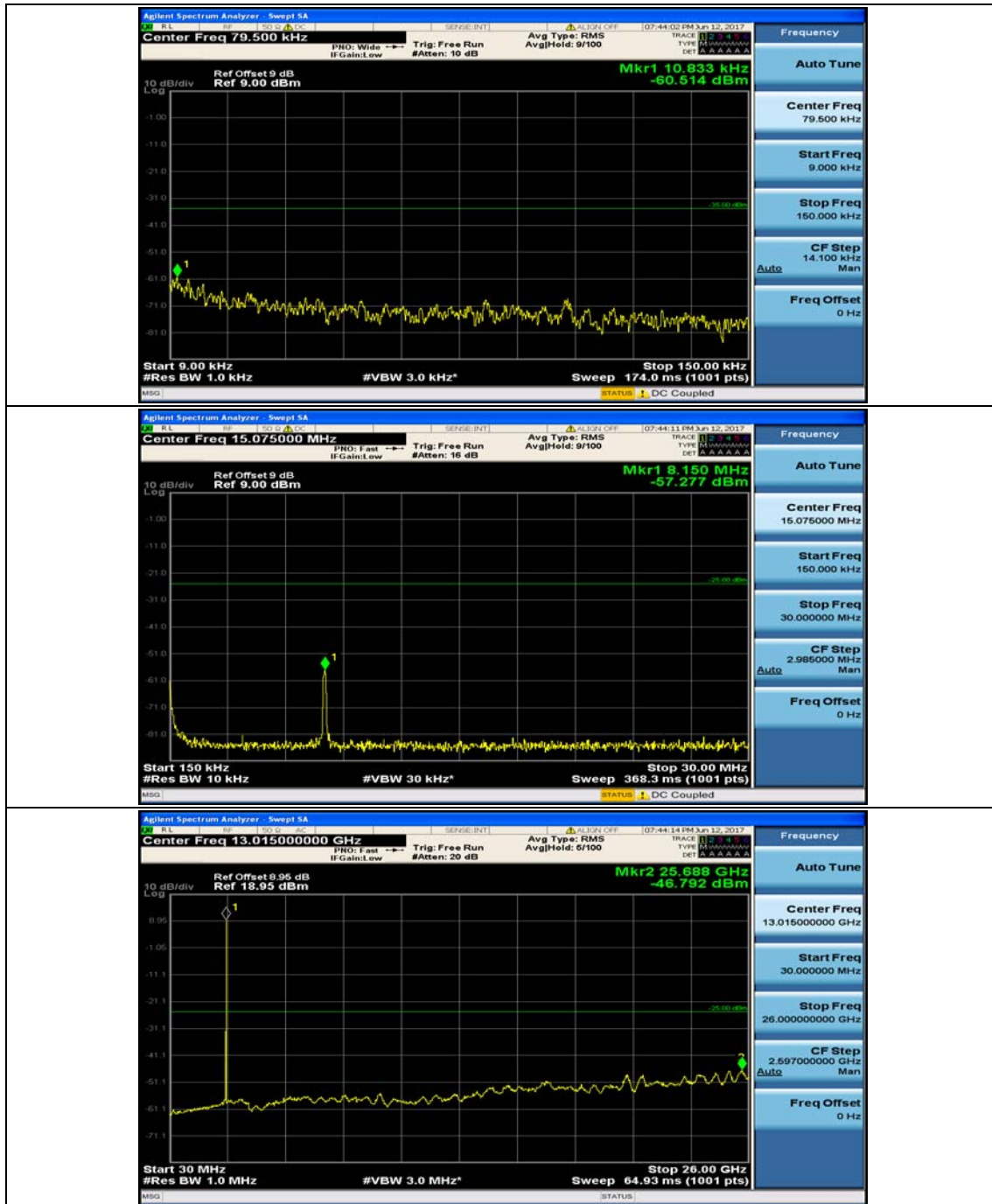




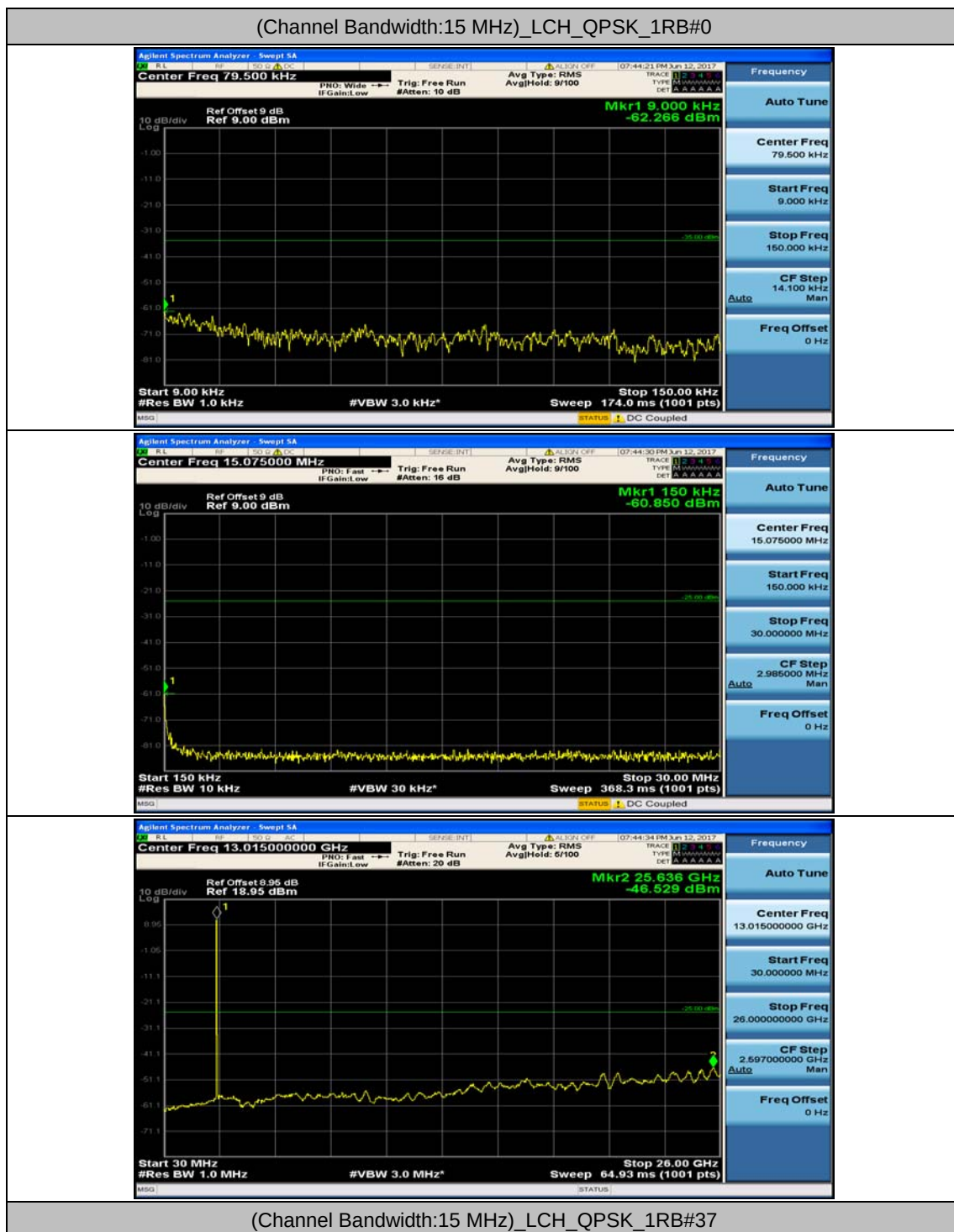
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0

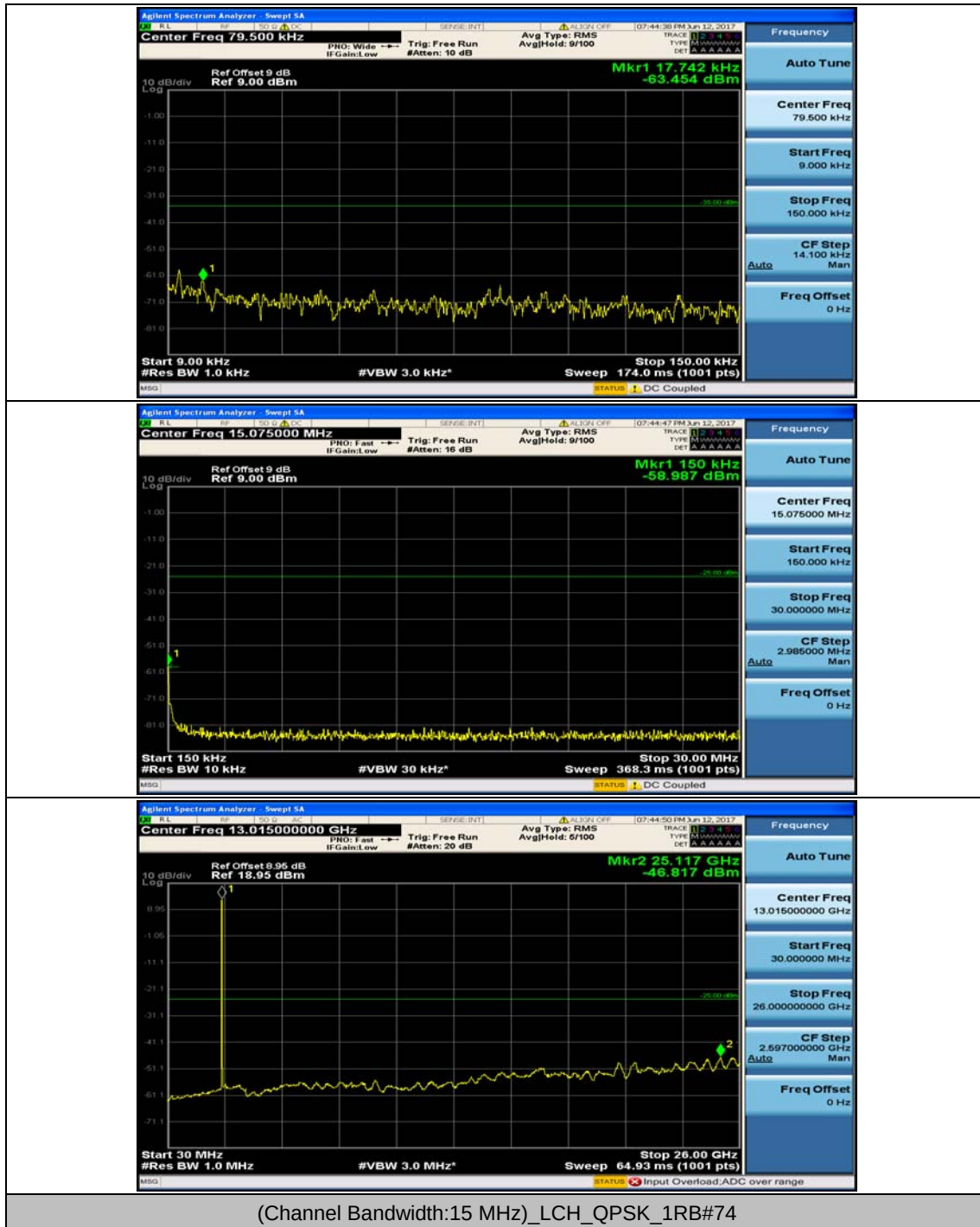


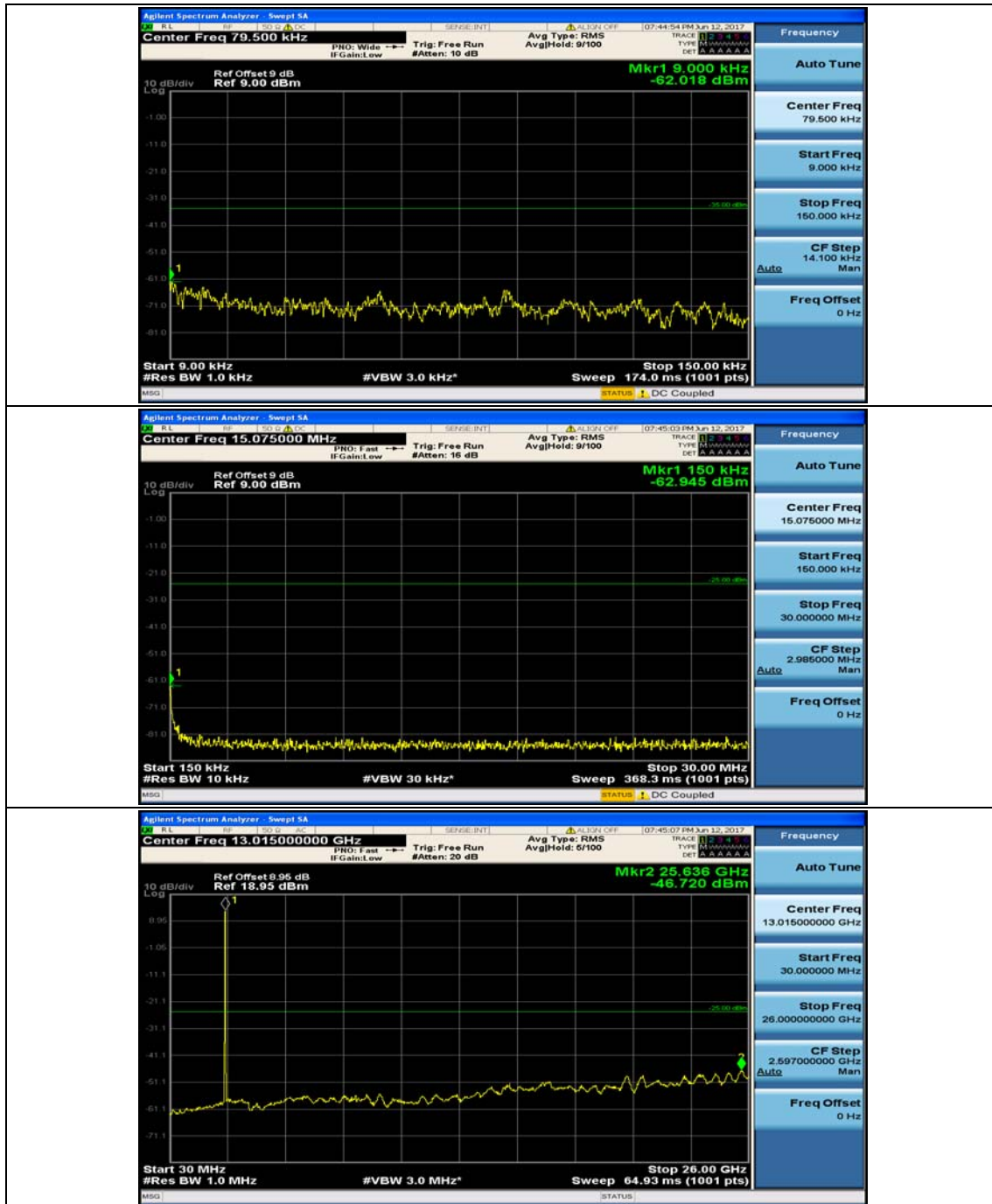




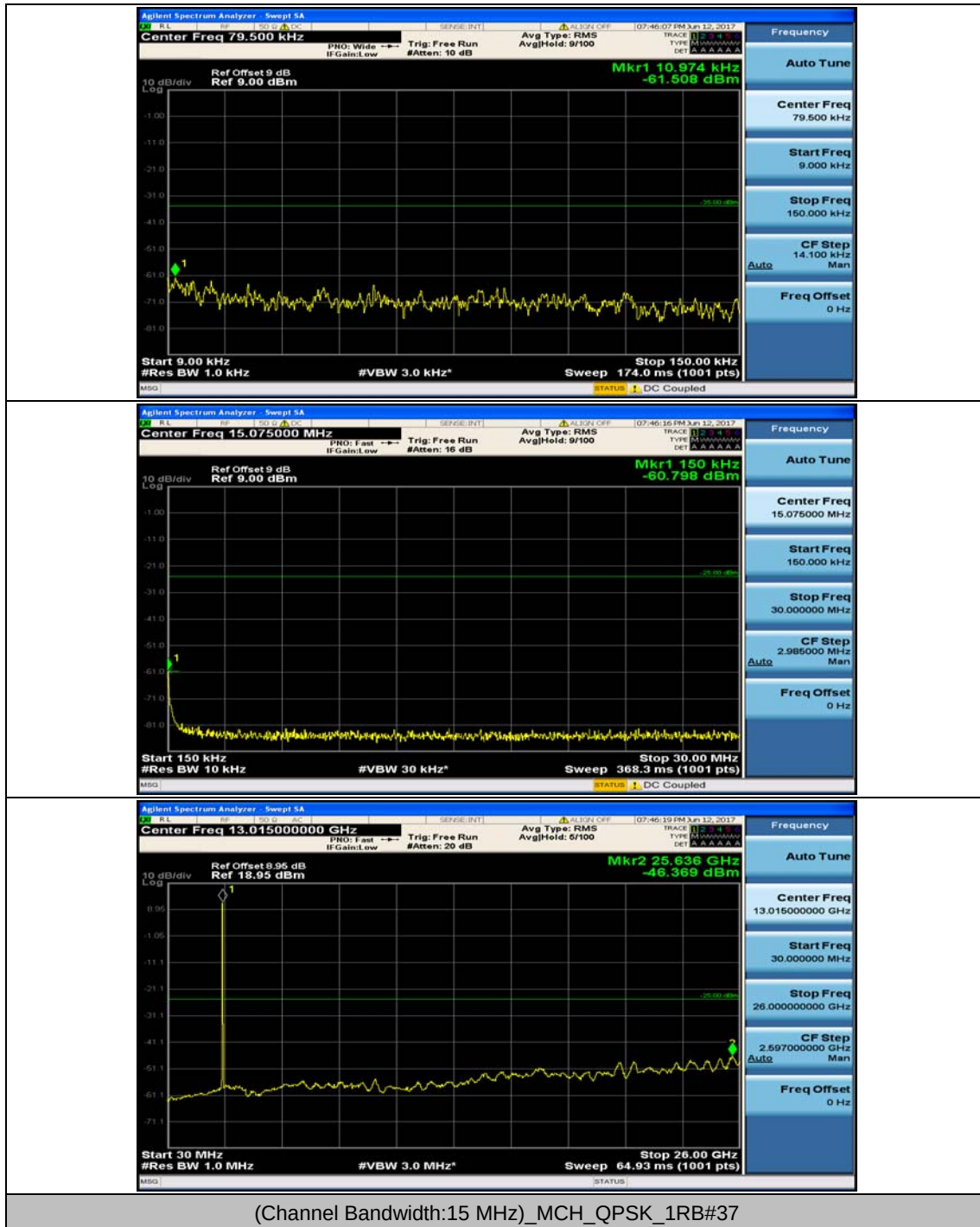
Channel Bandwidth: 15 MHz

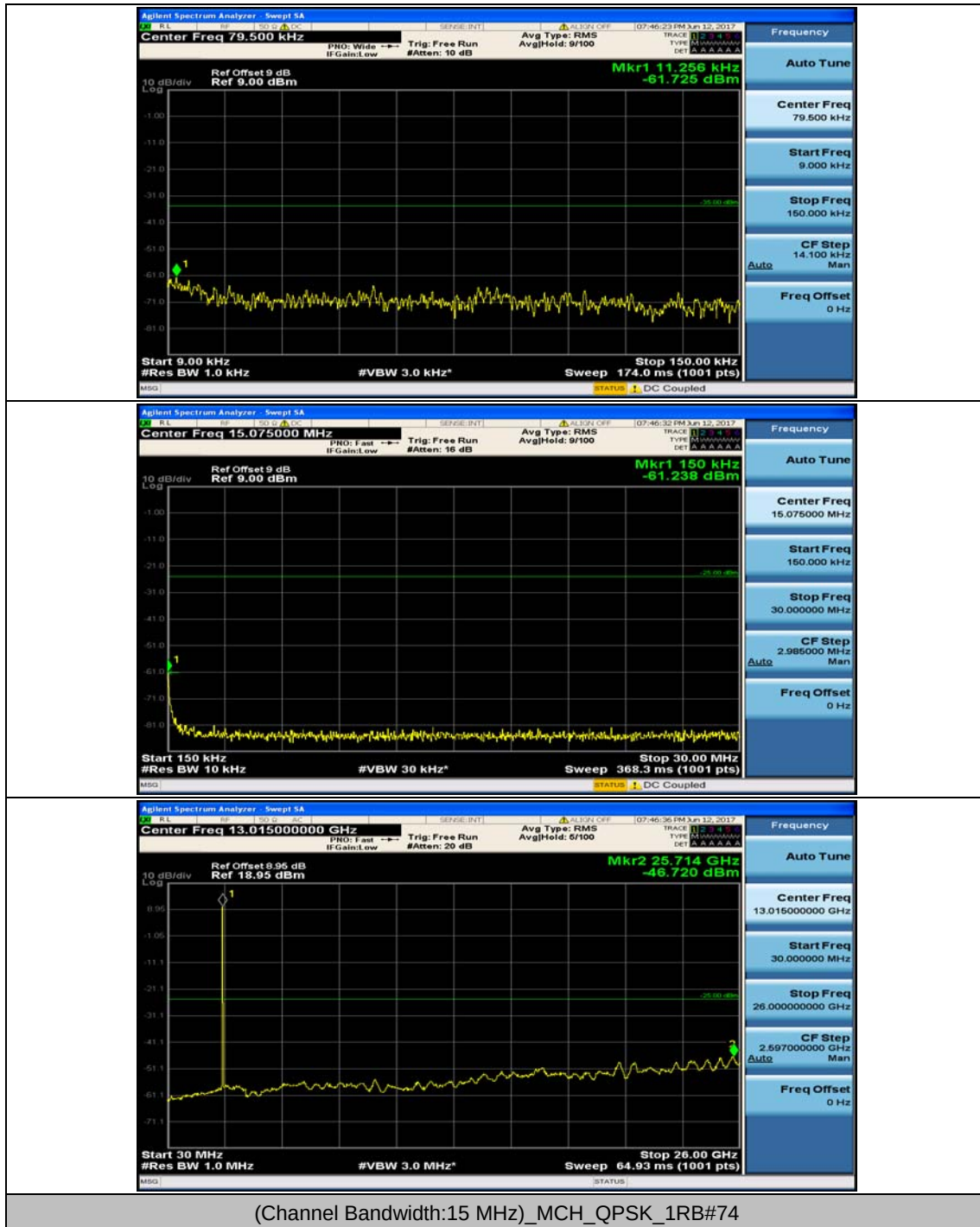


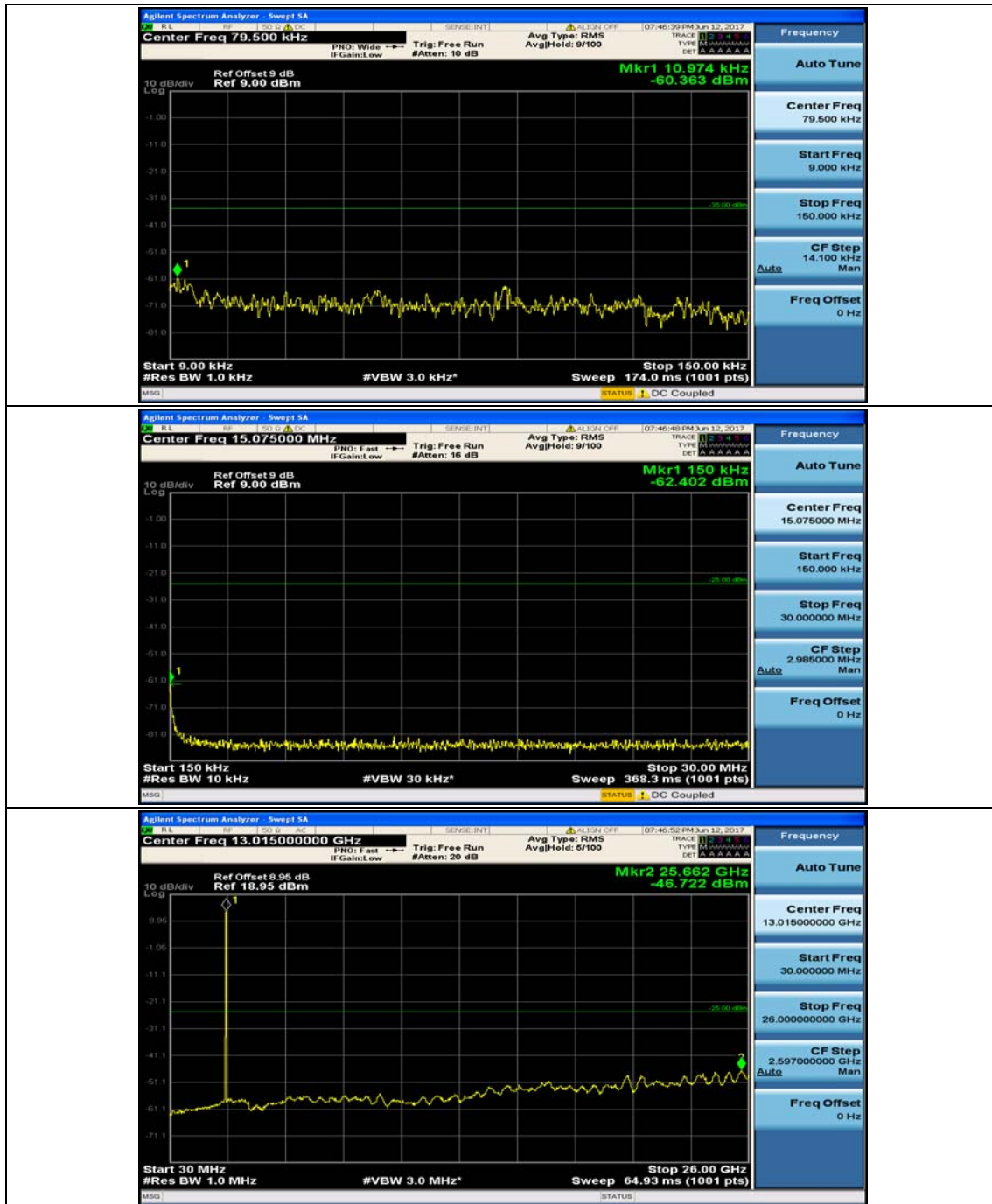




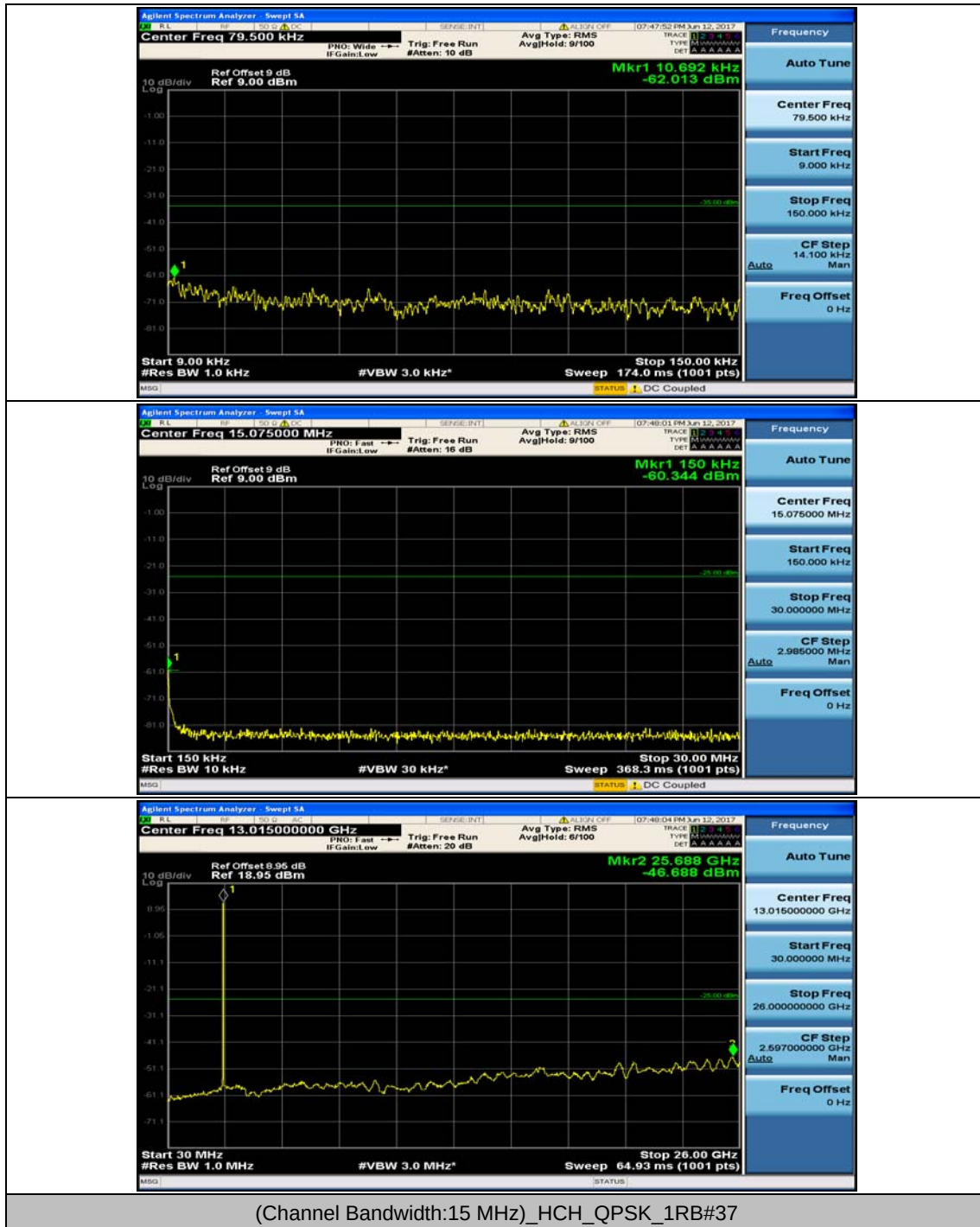
(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0

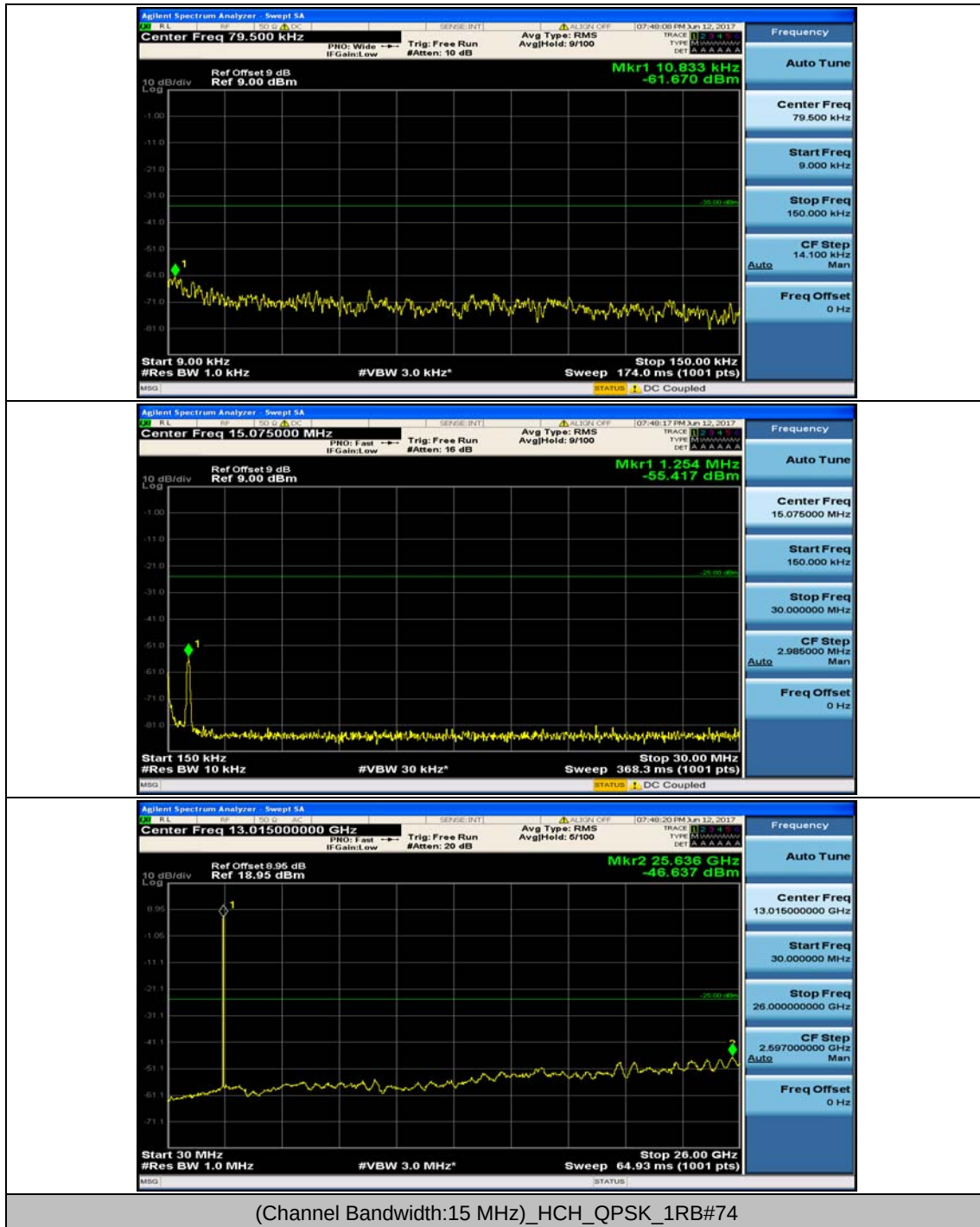


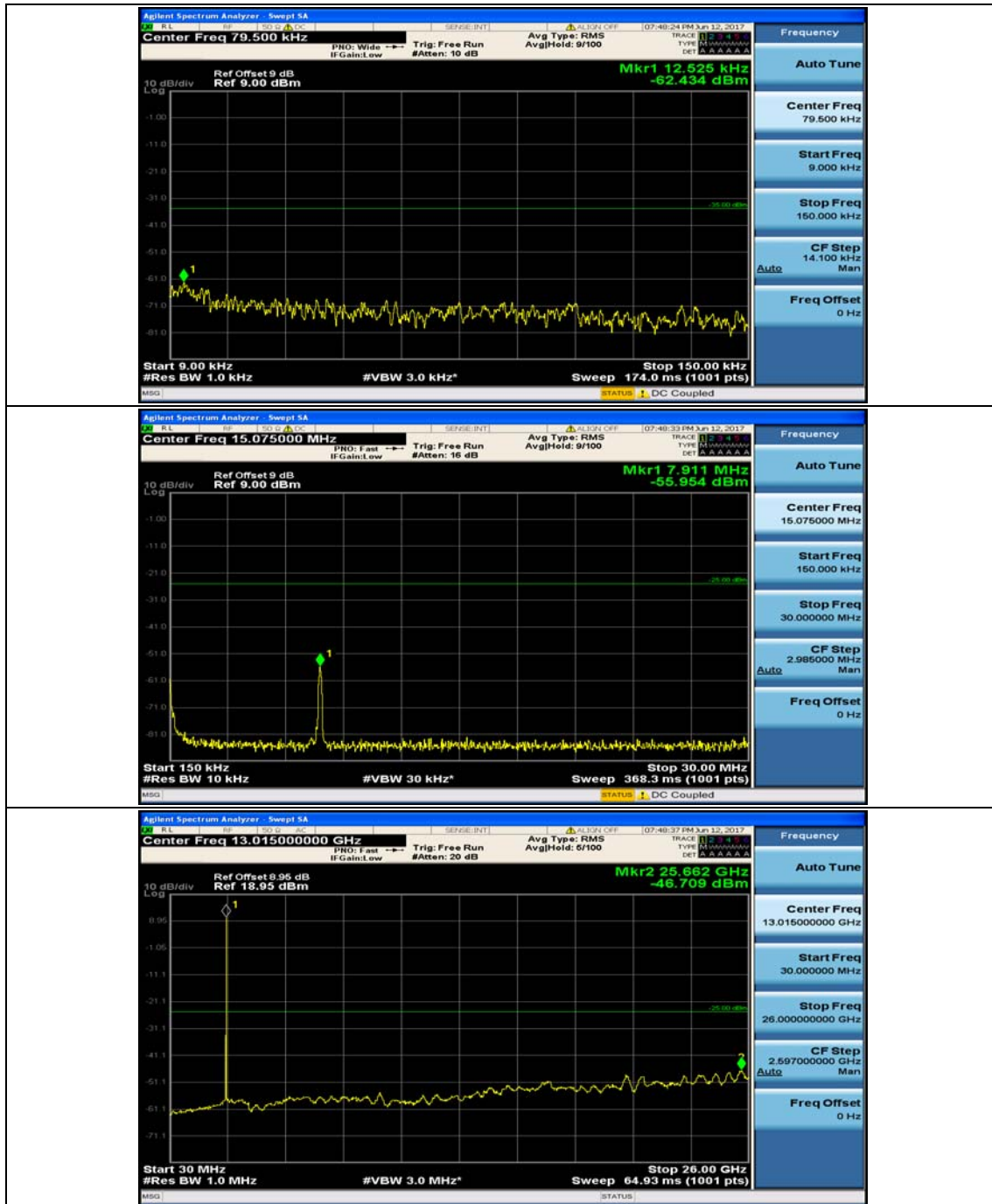




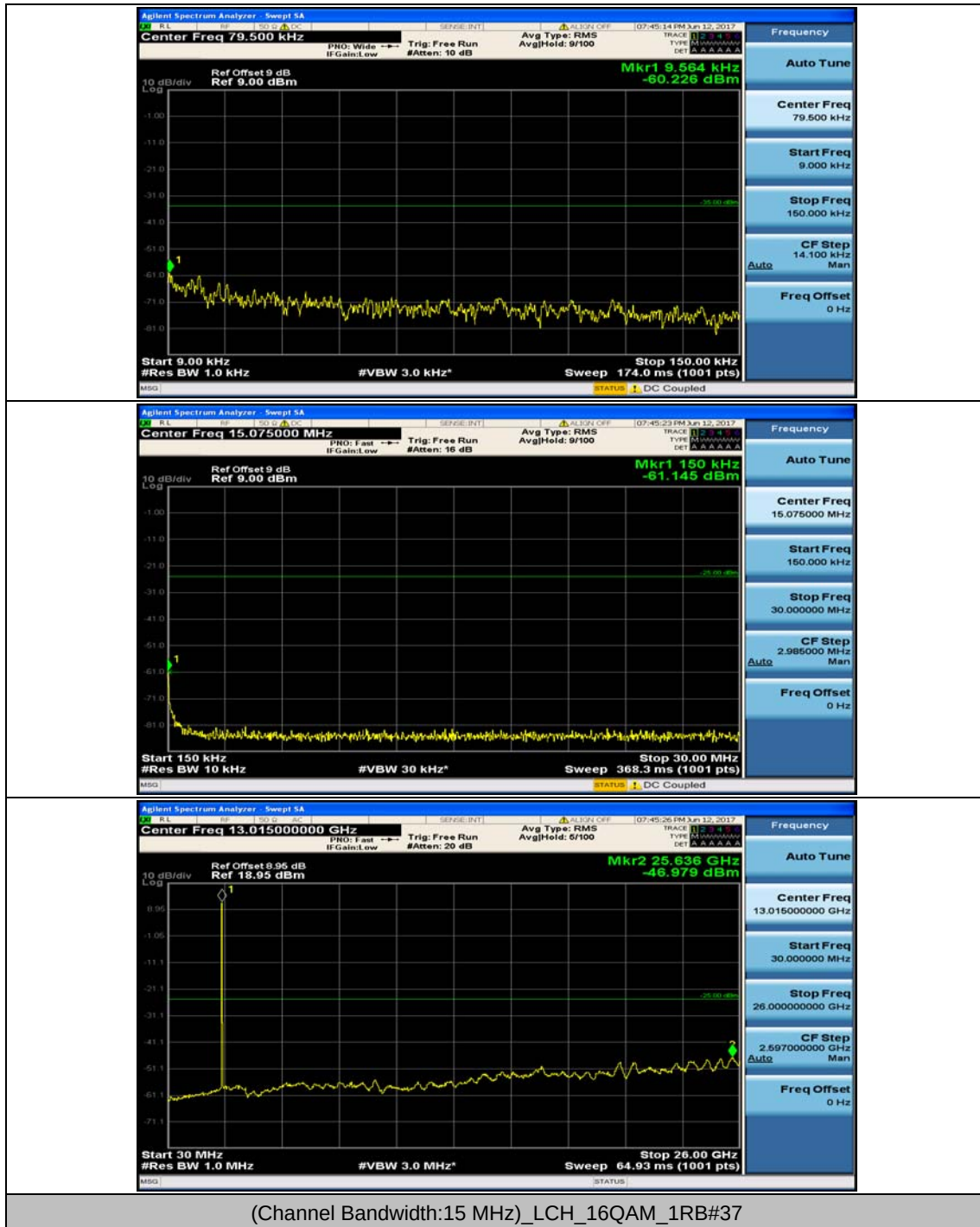
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0

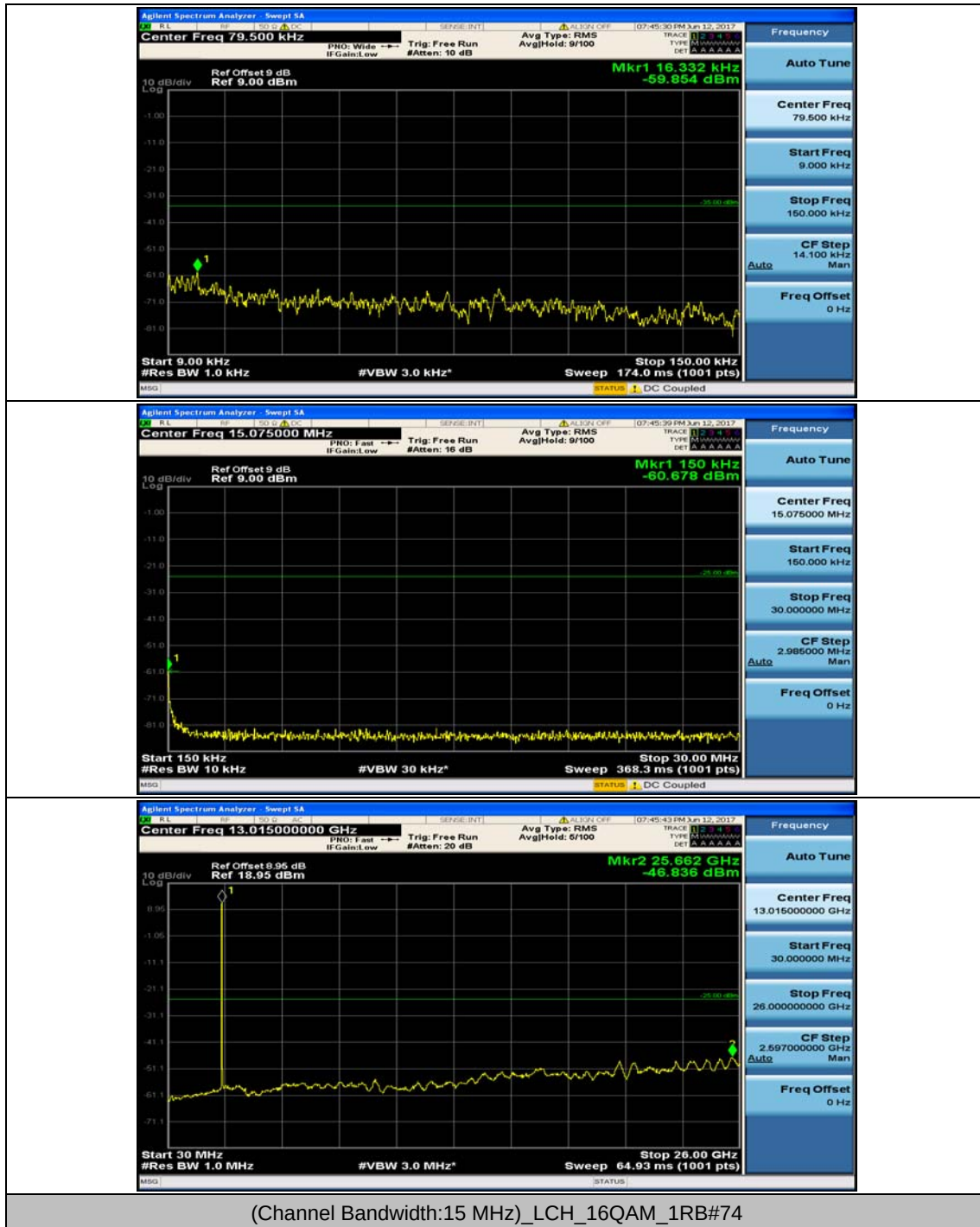


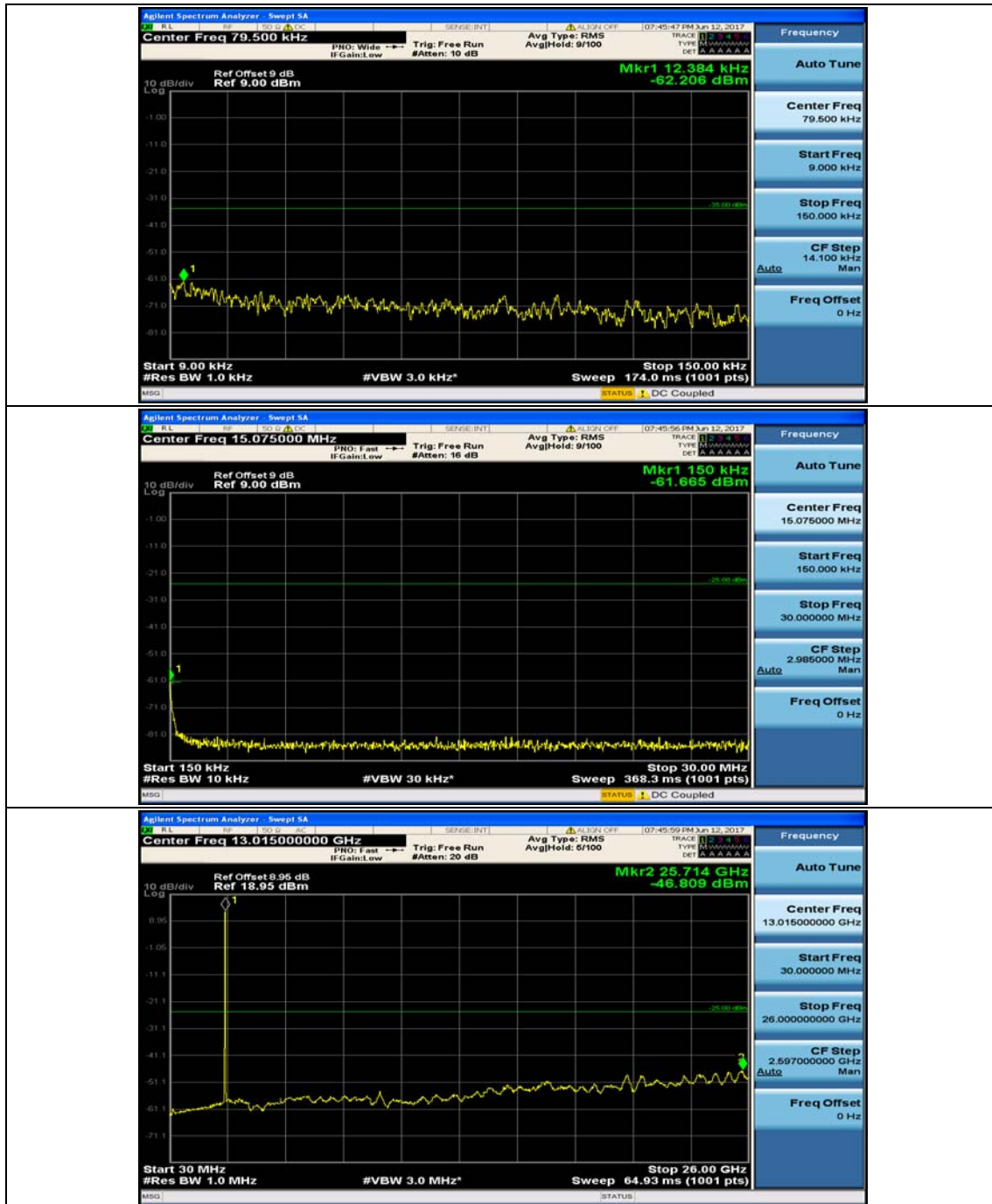




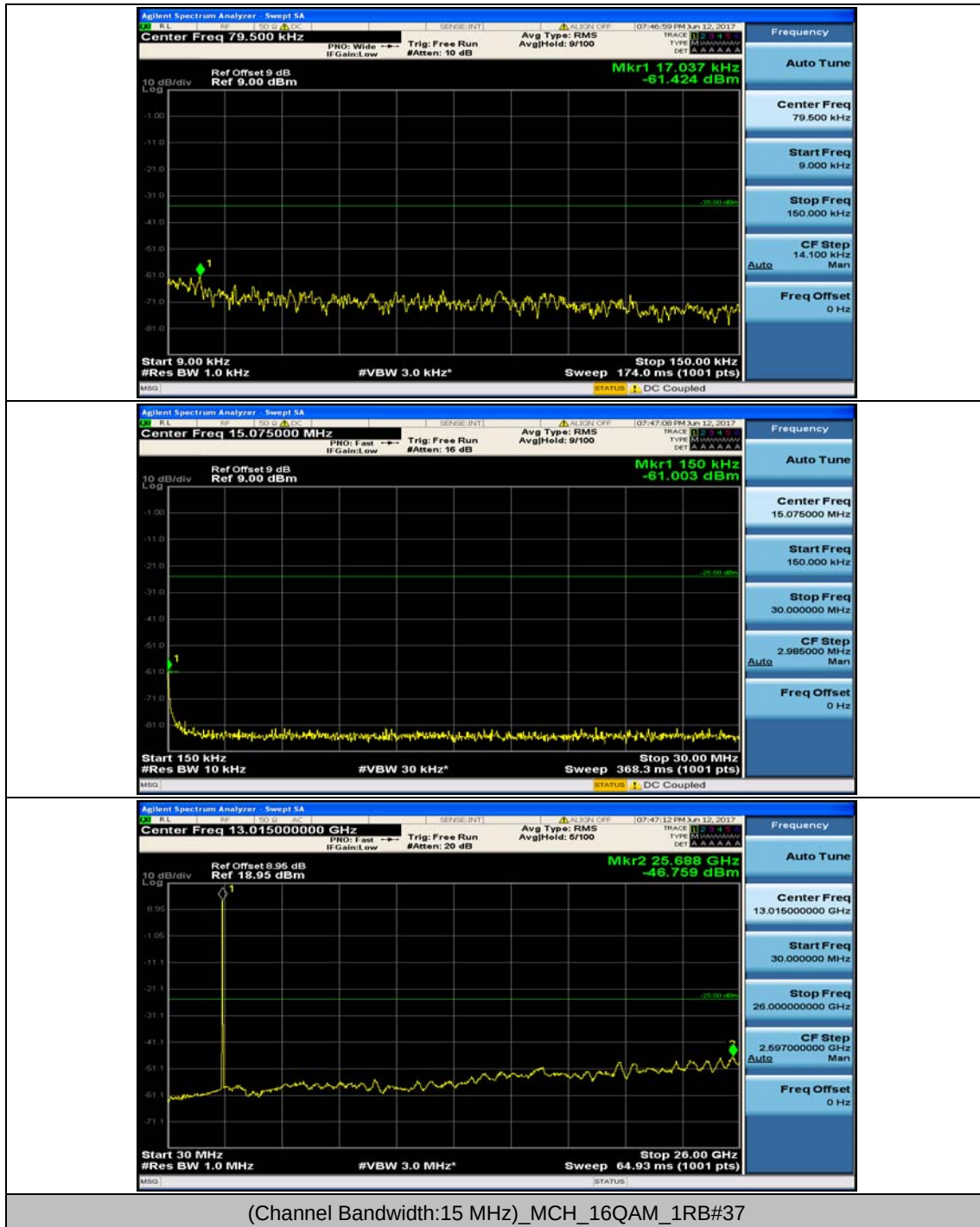
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0

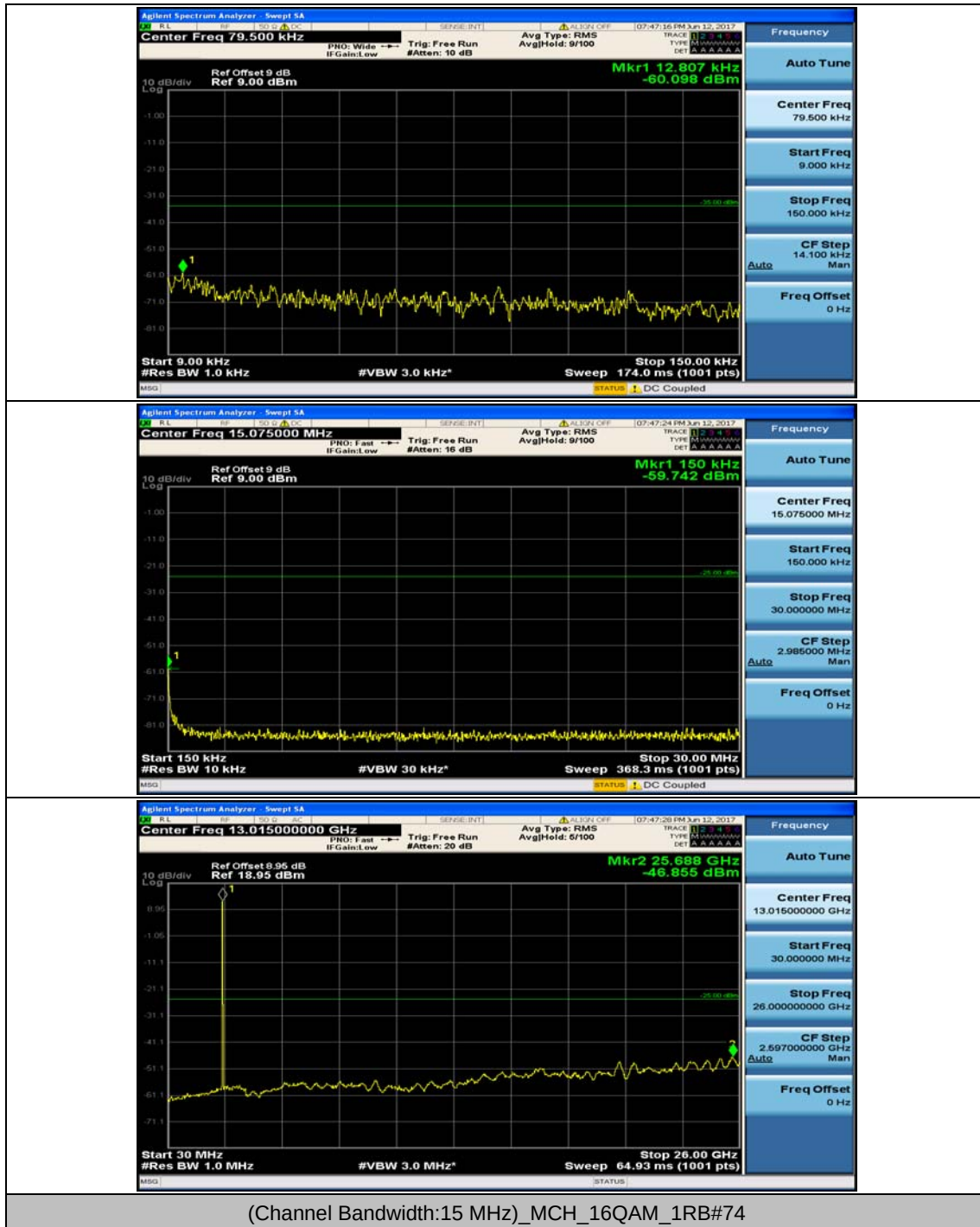


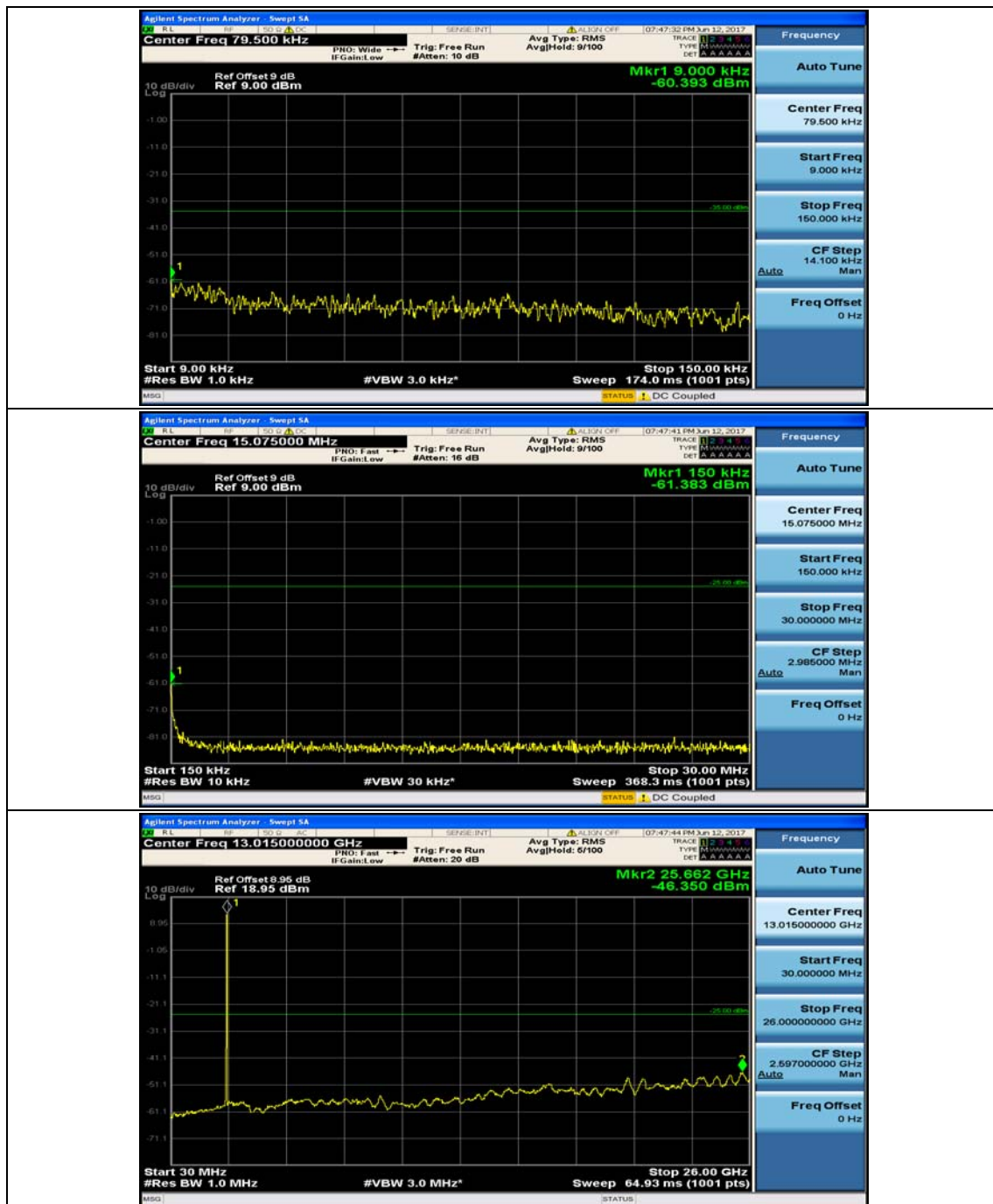




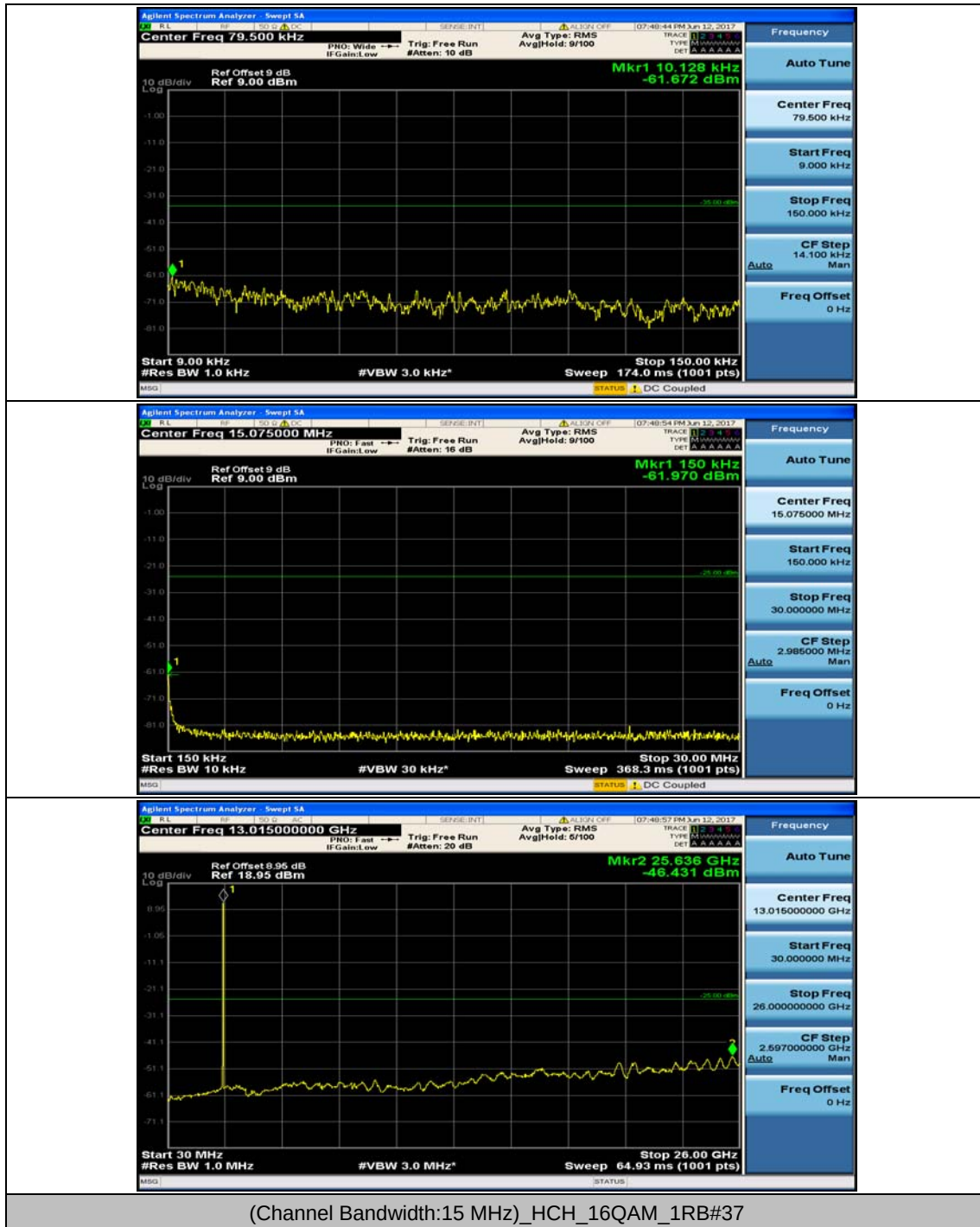
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

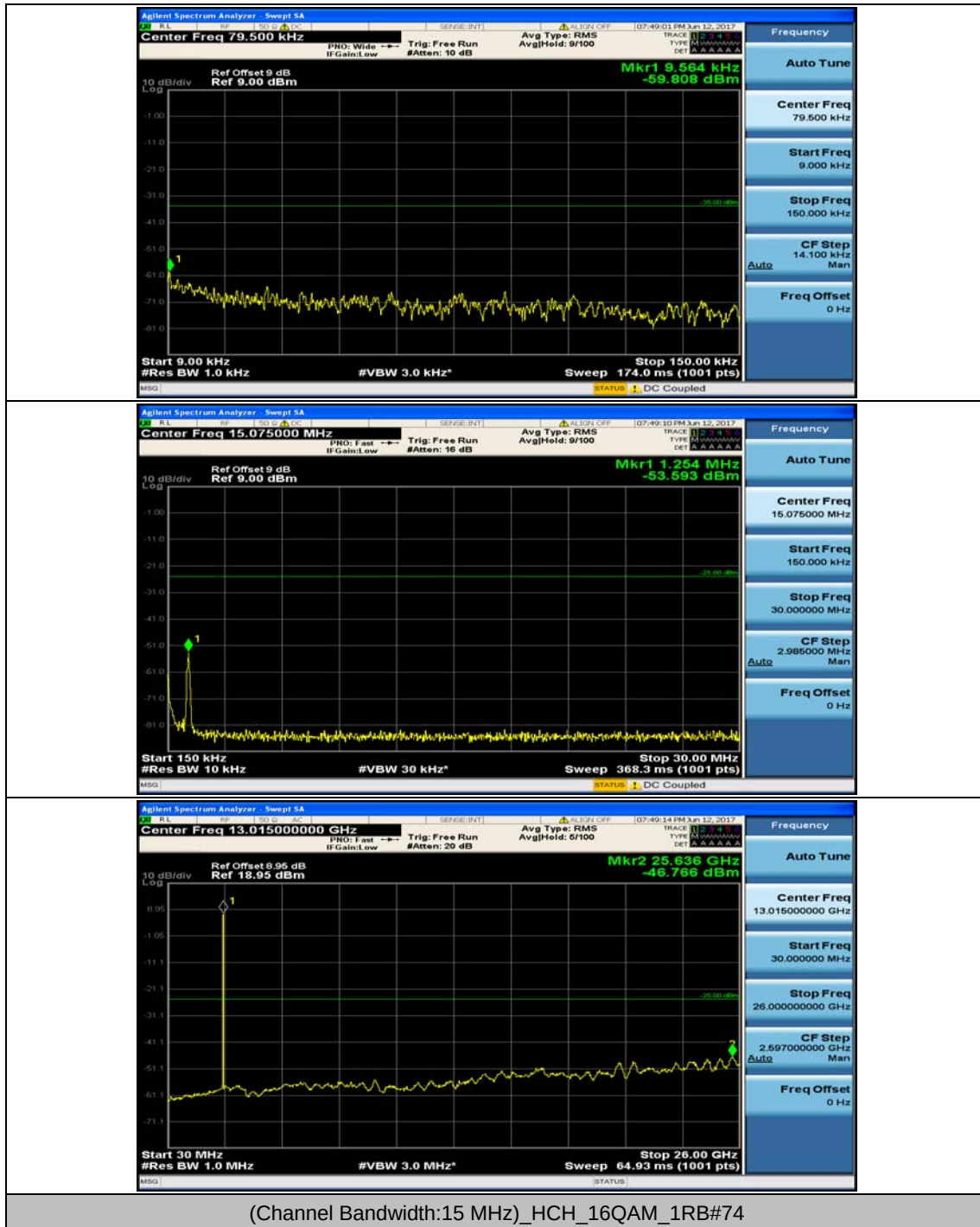


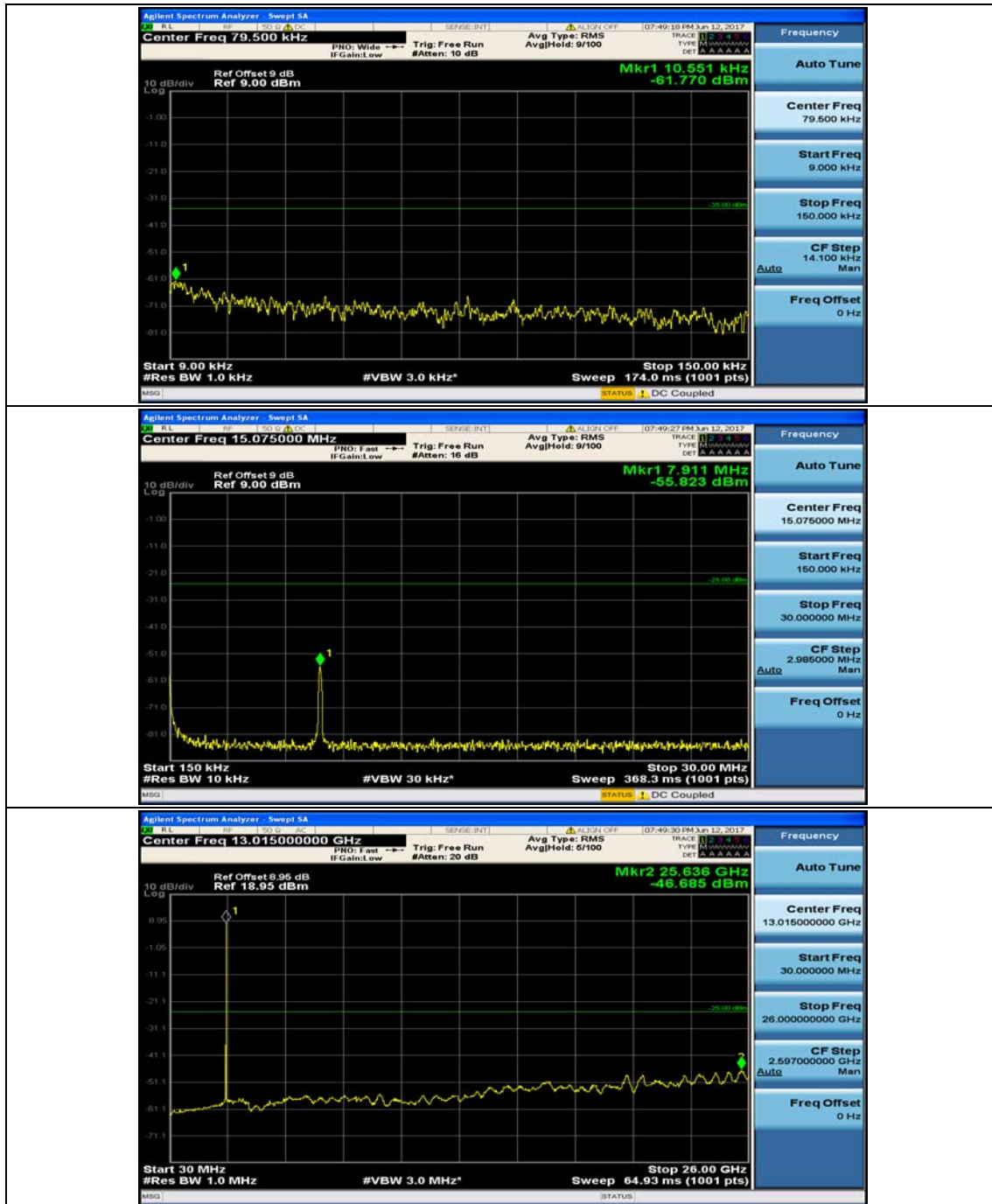




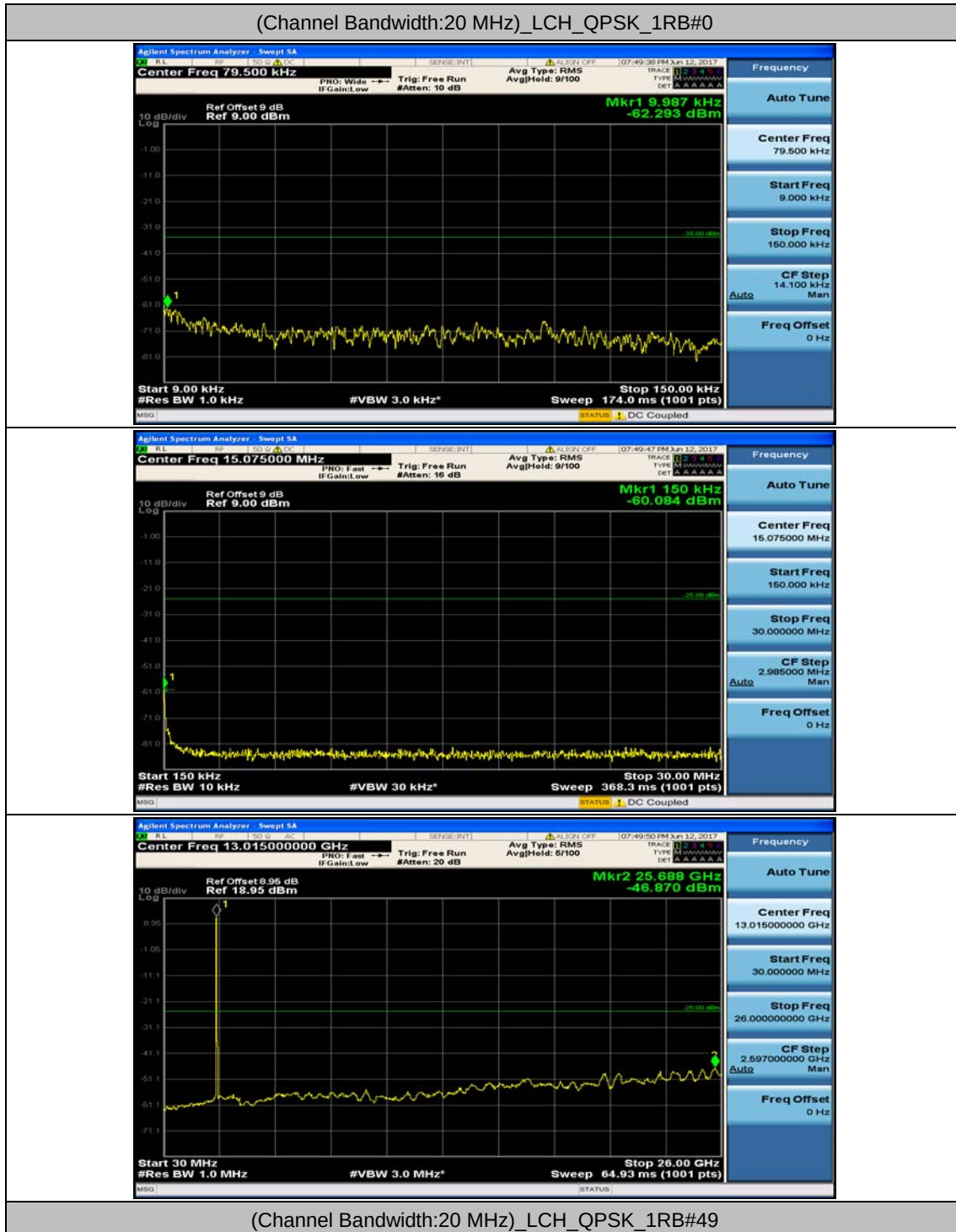
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0

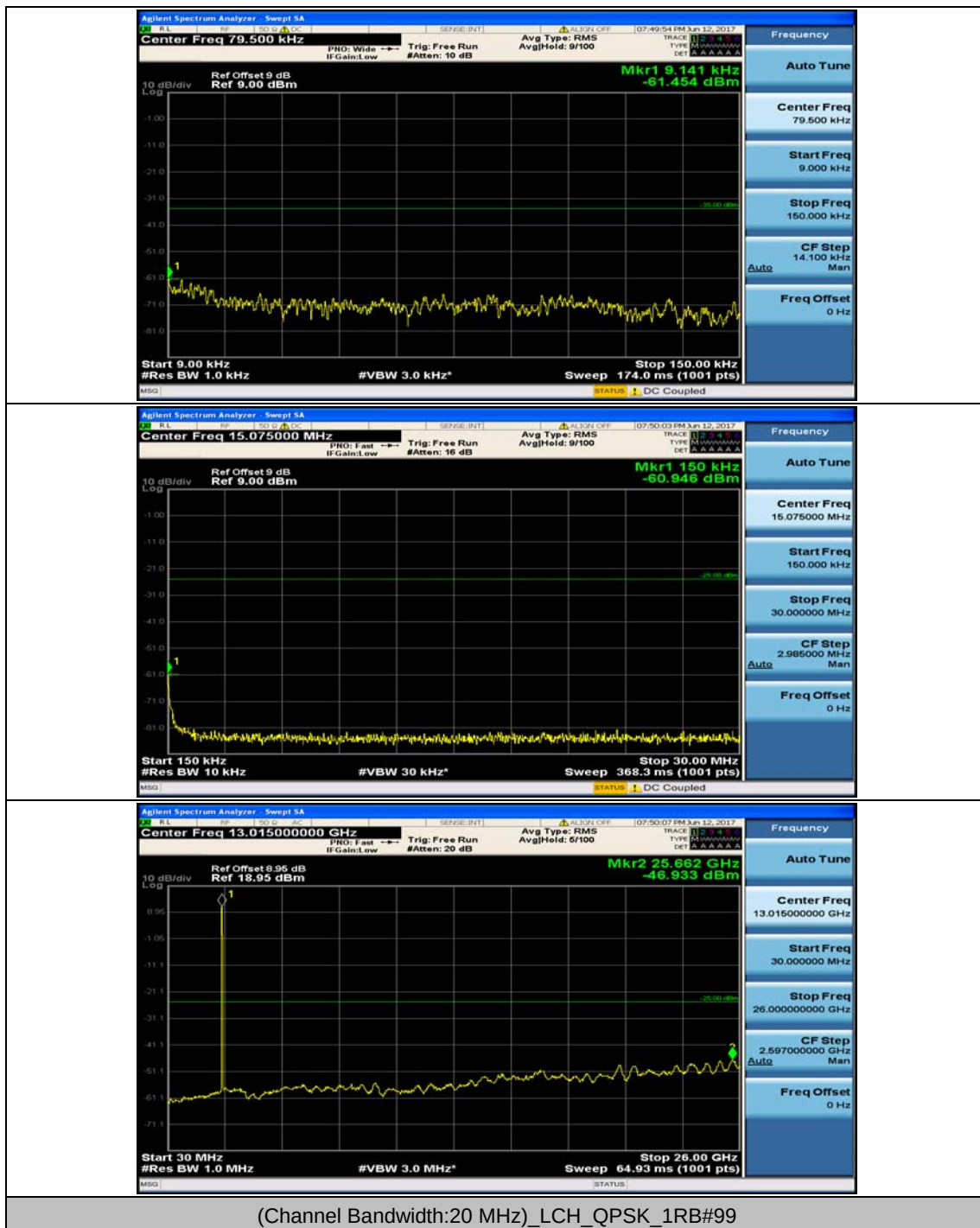


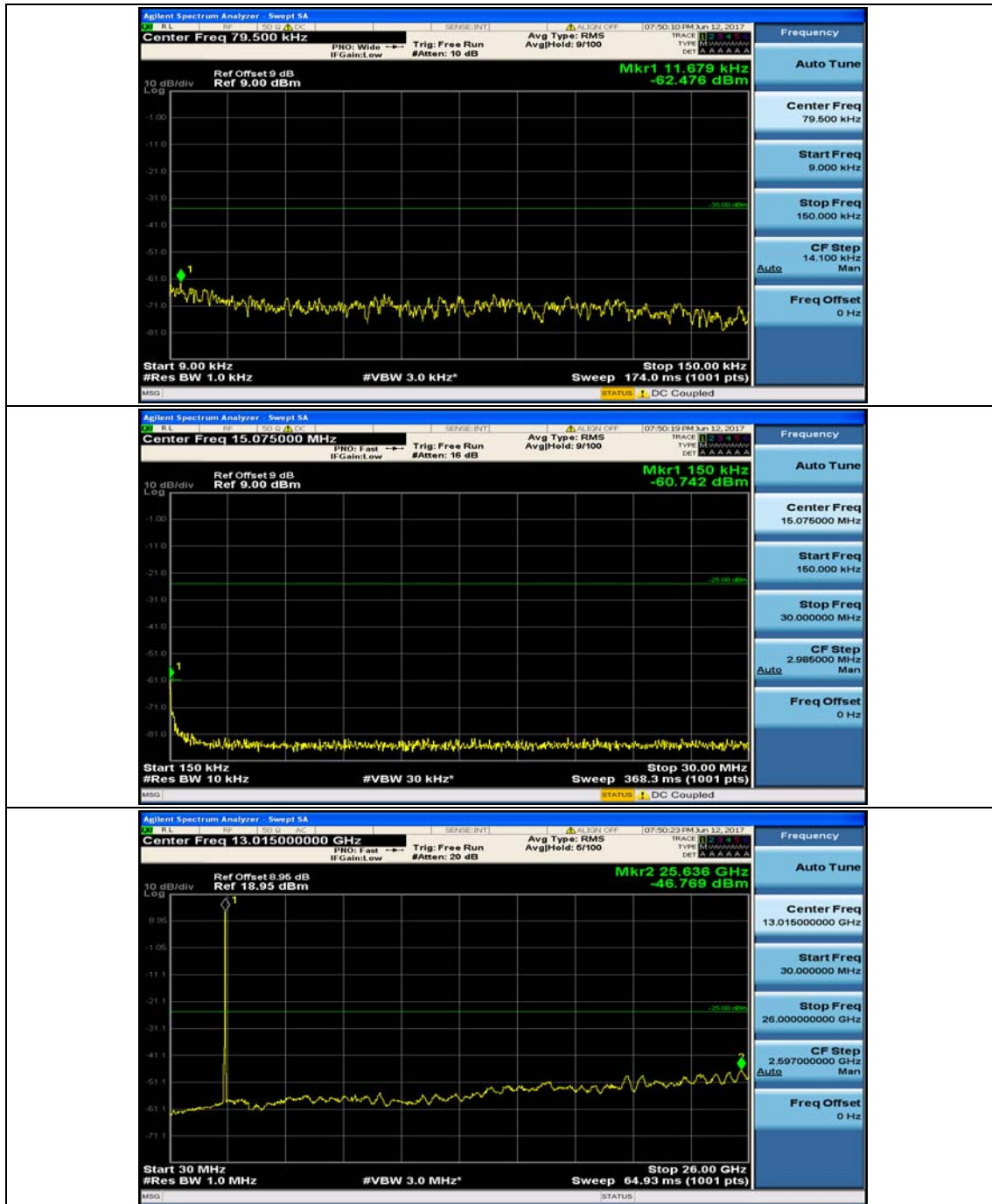




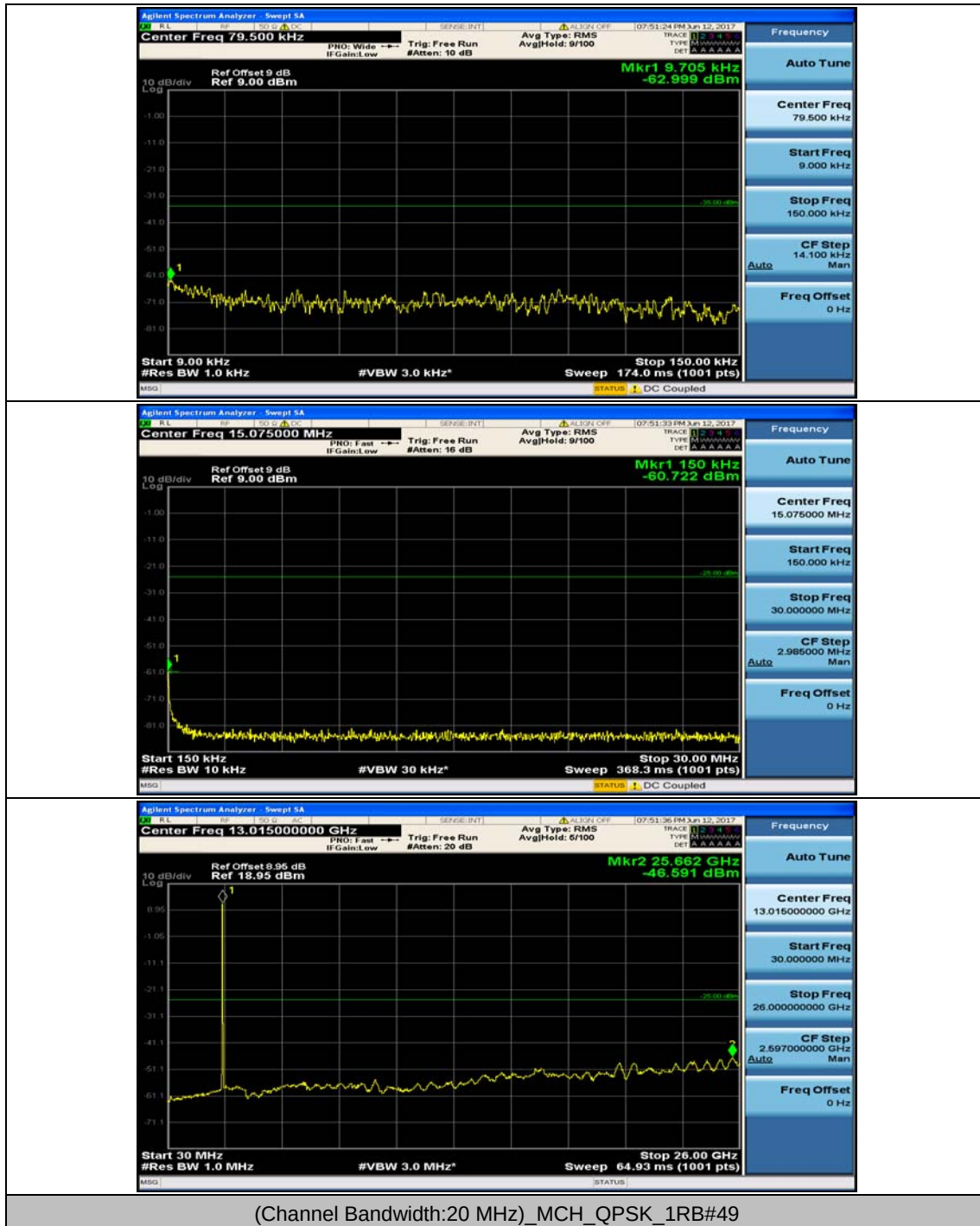
Channel Bandwidth: 20 MHz

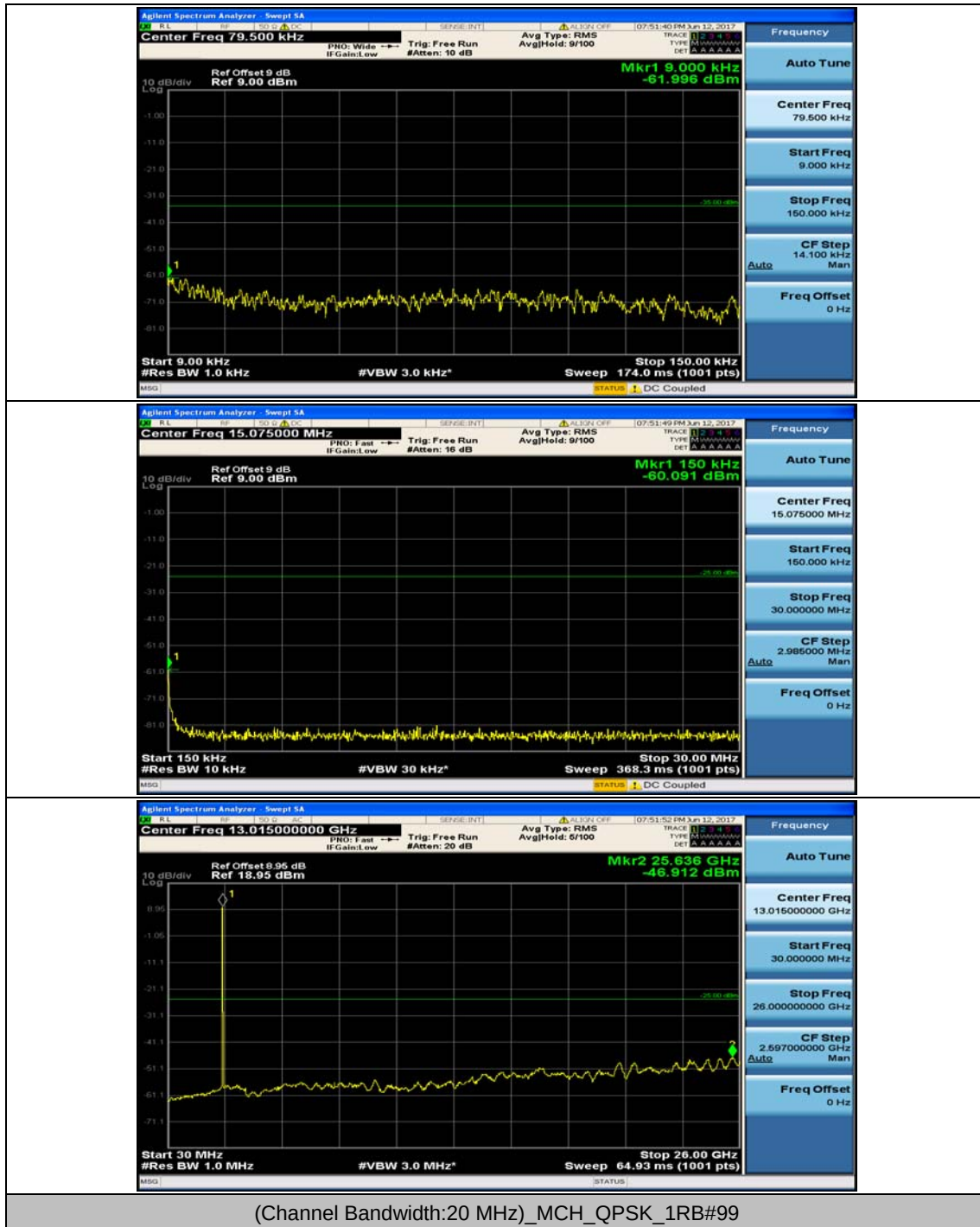


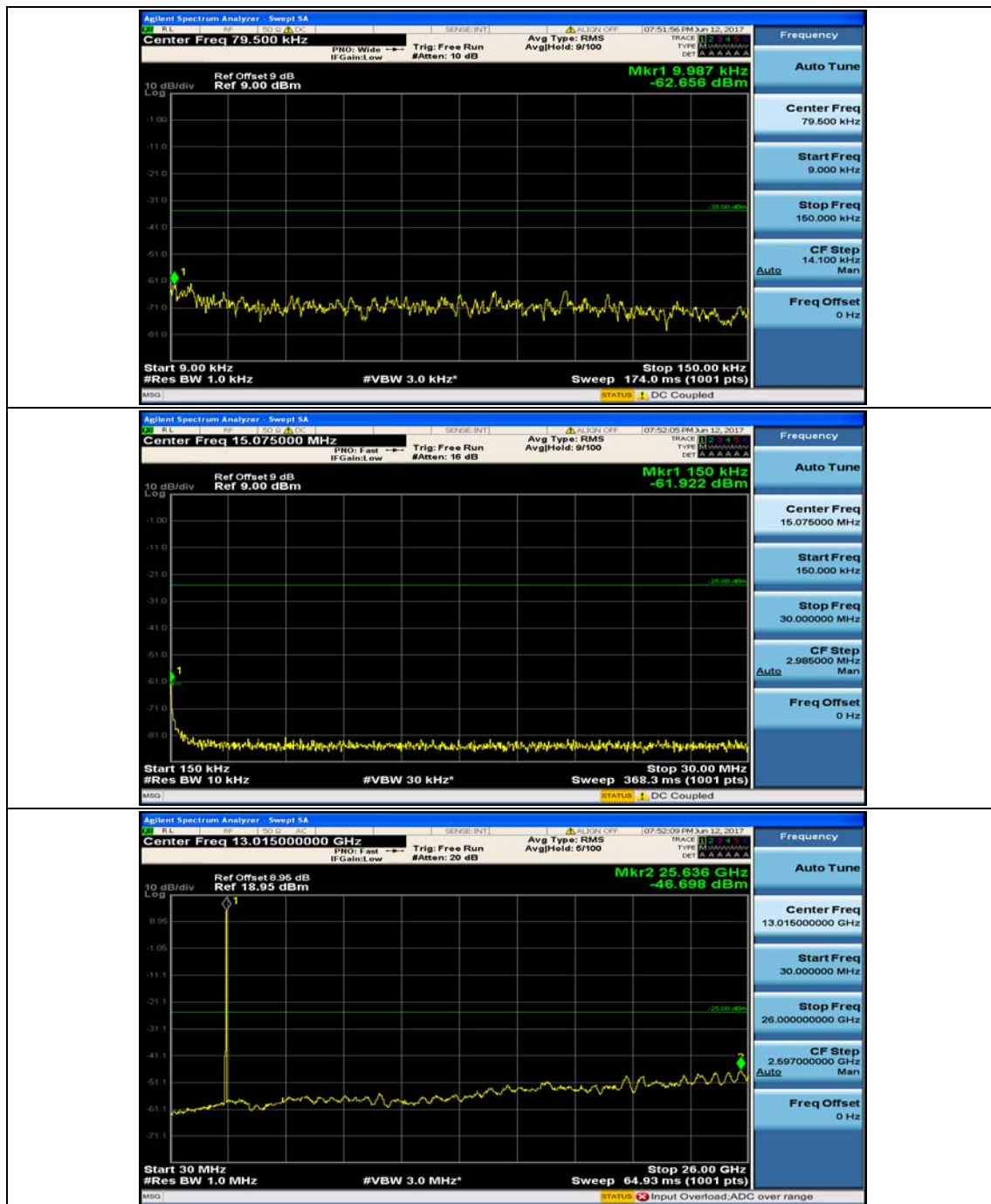




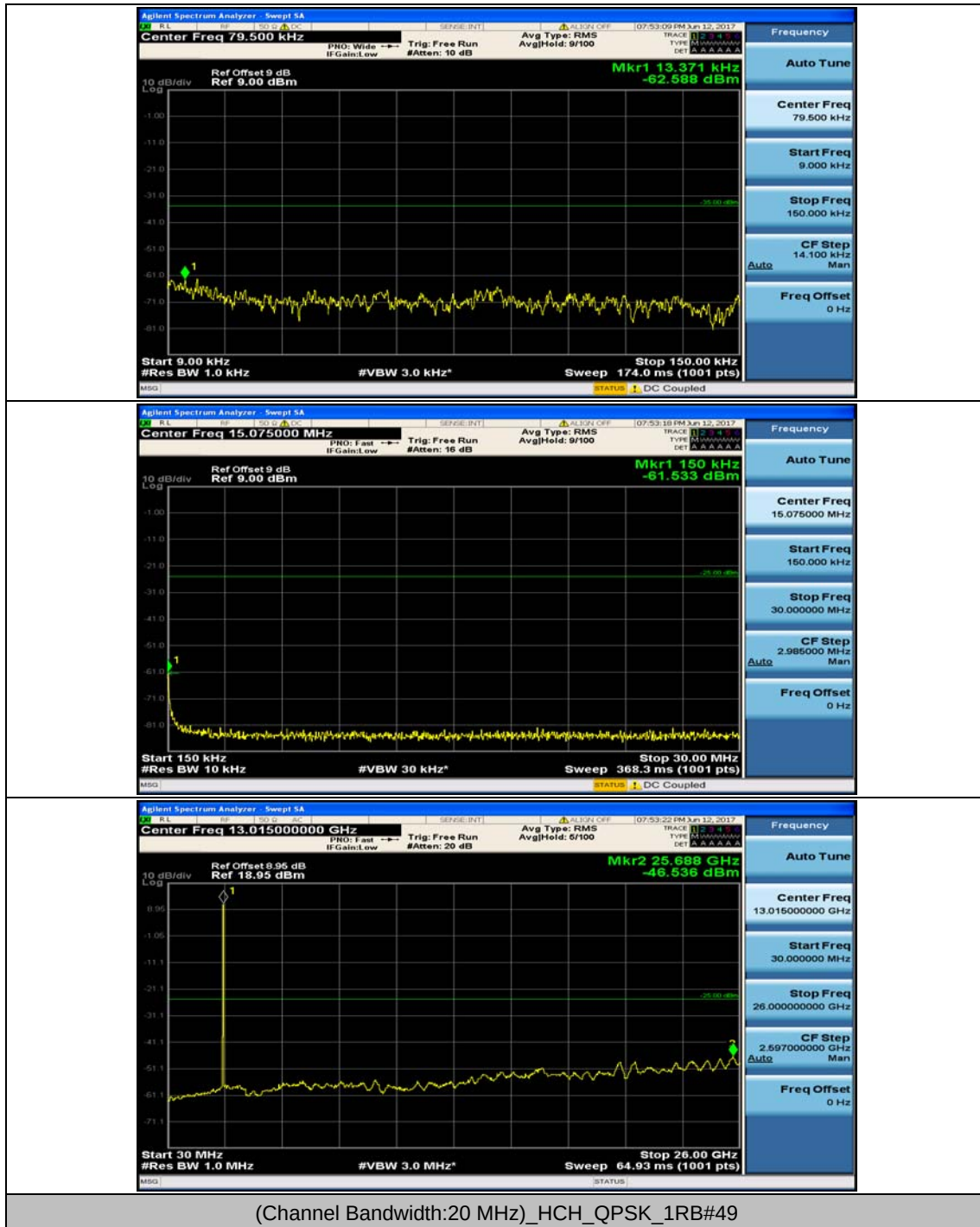
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

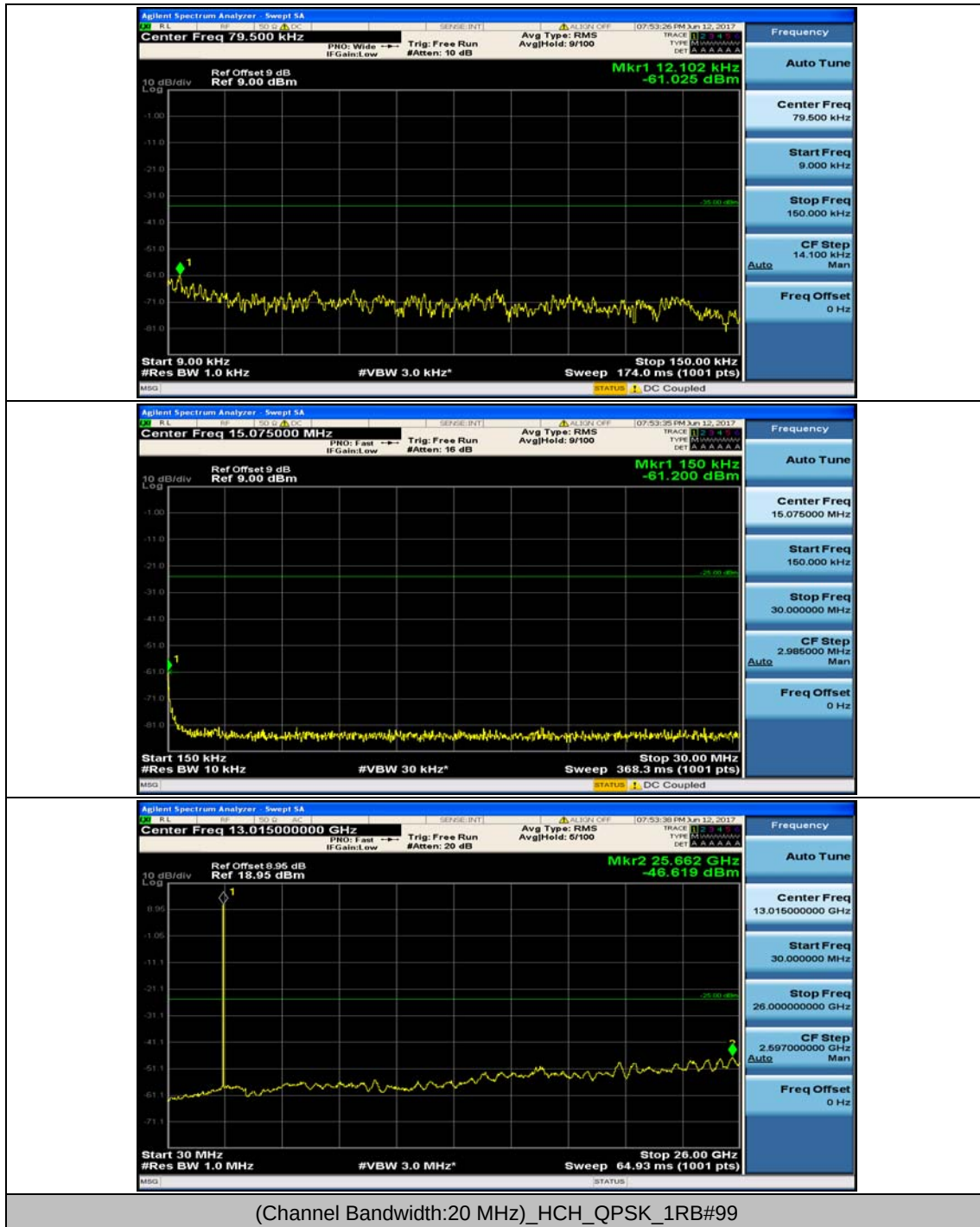


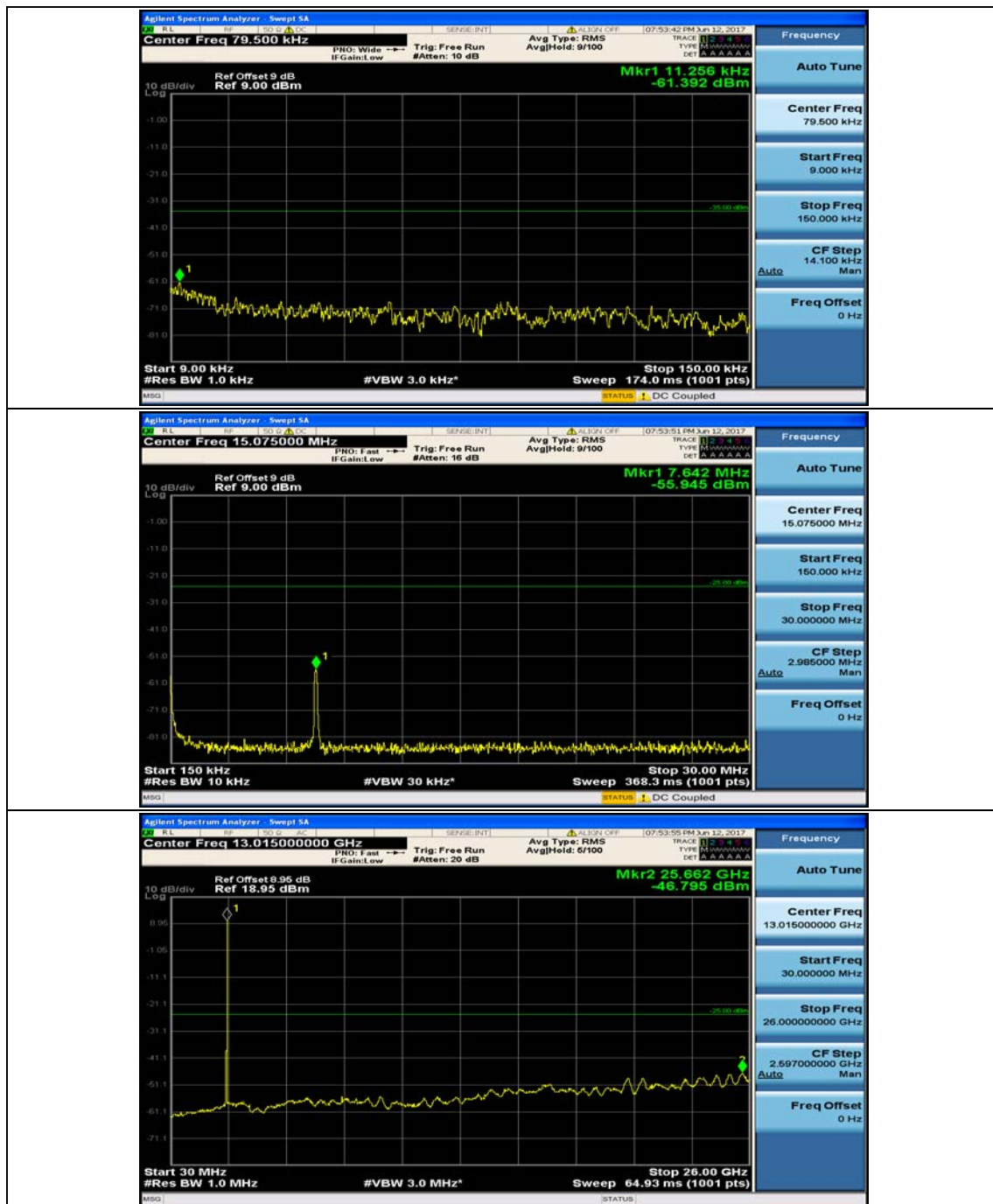




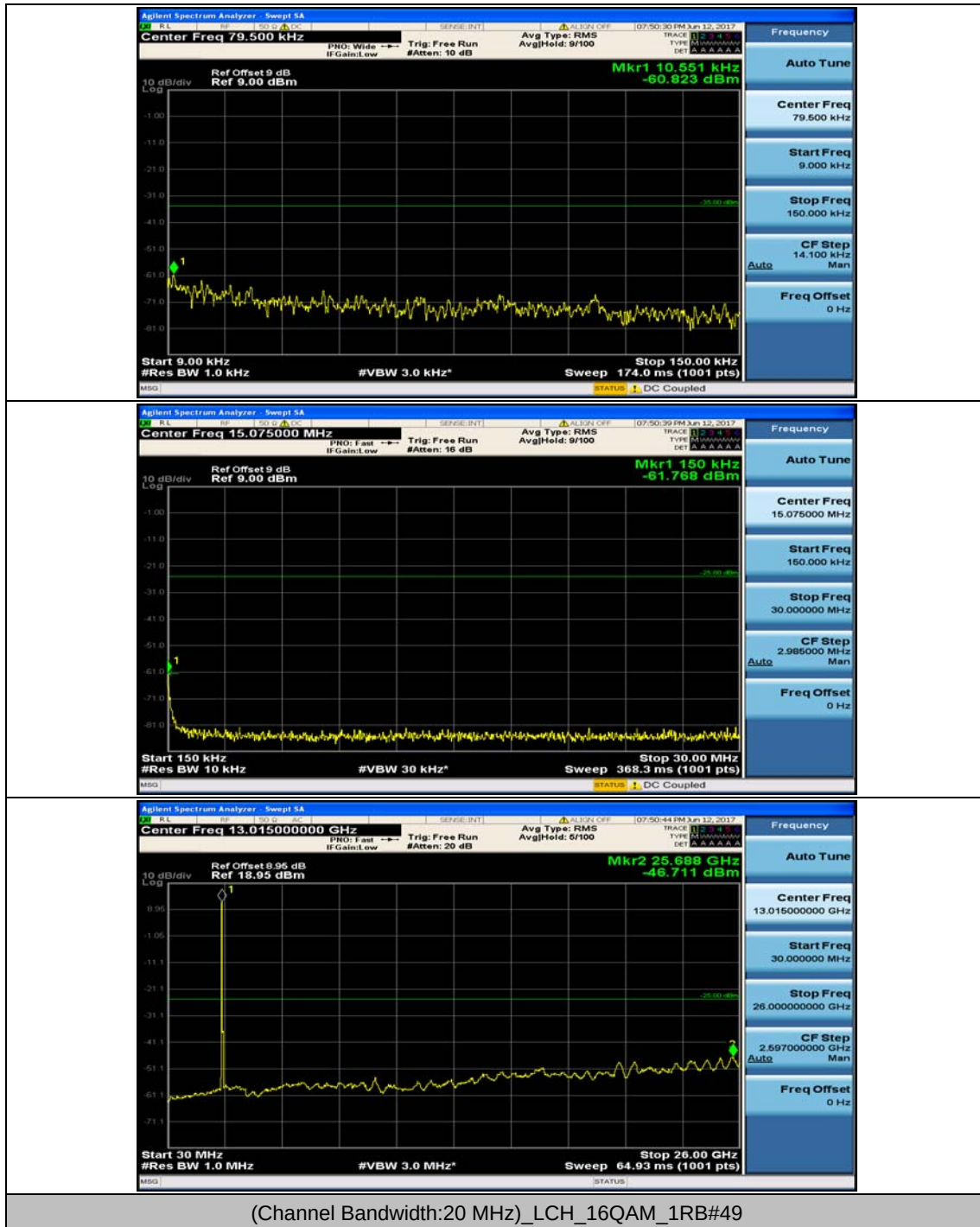
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0

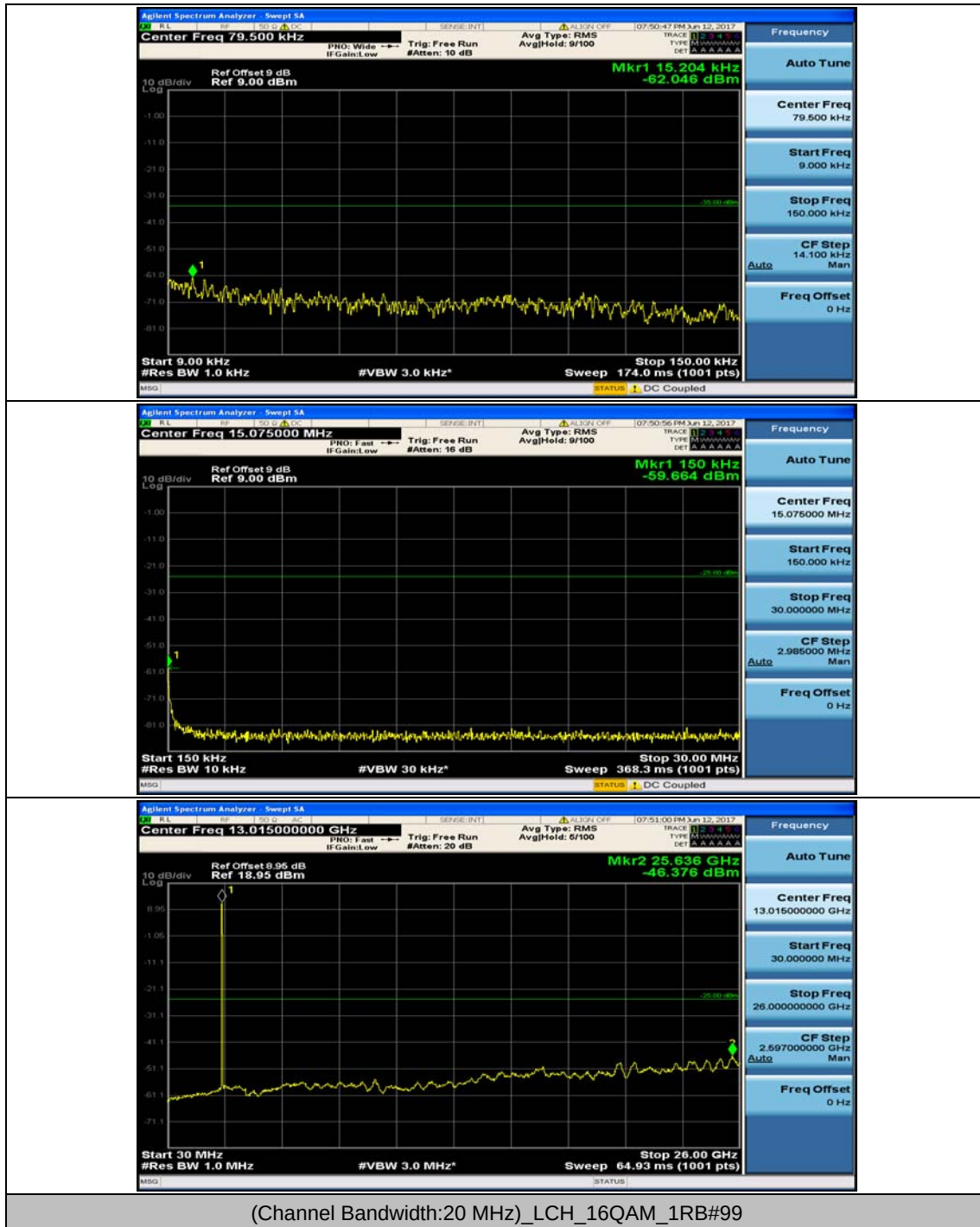


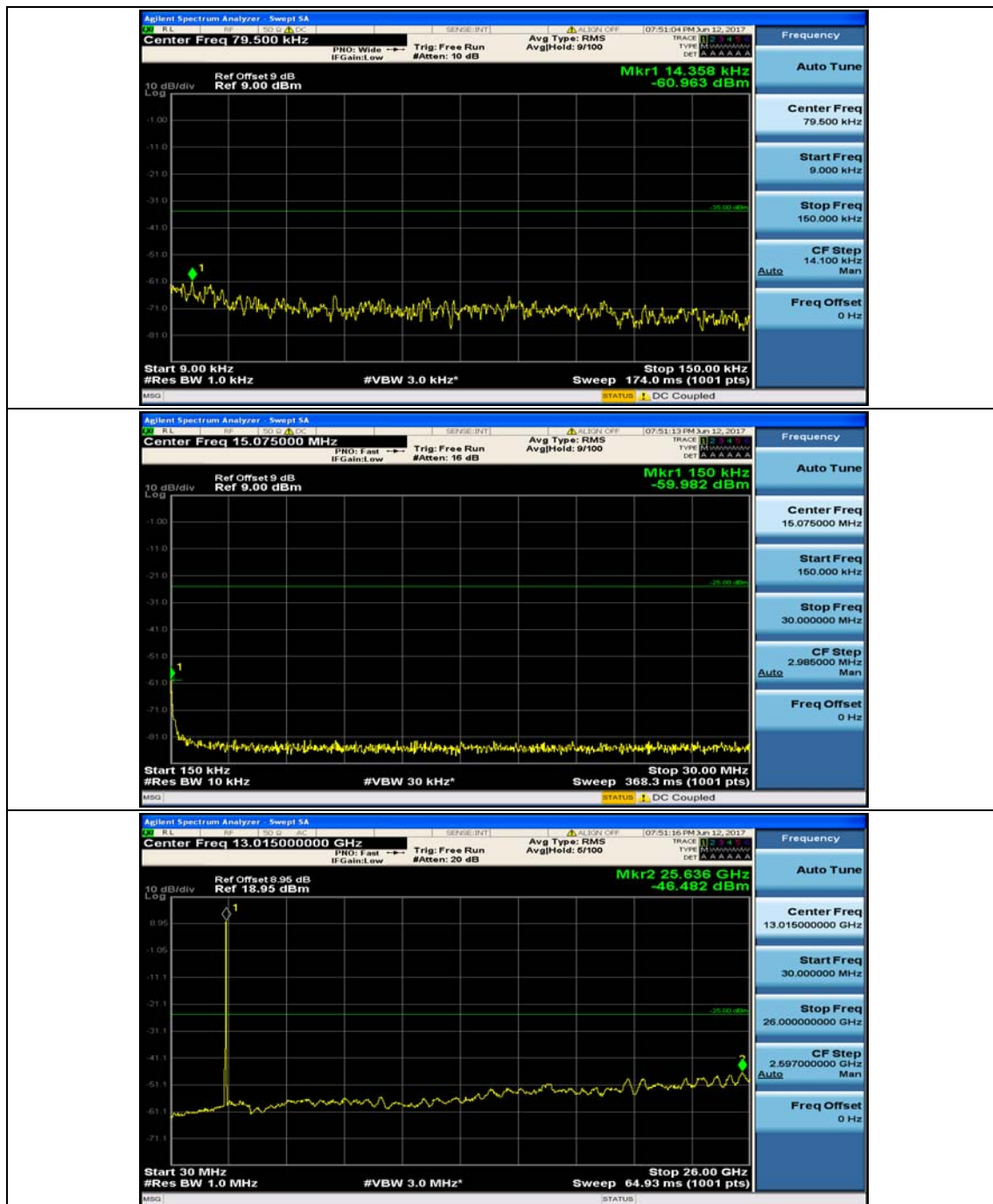




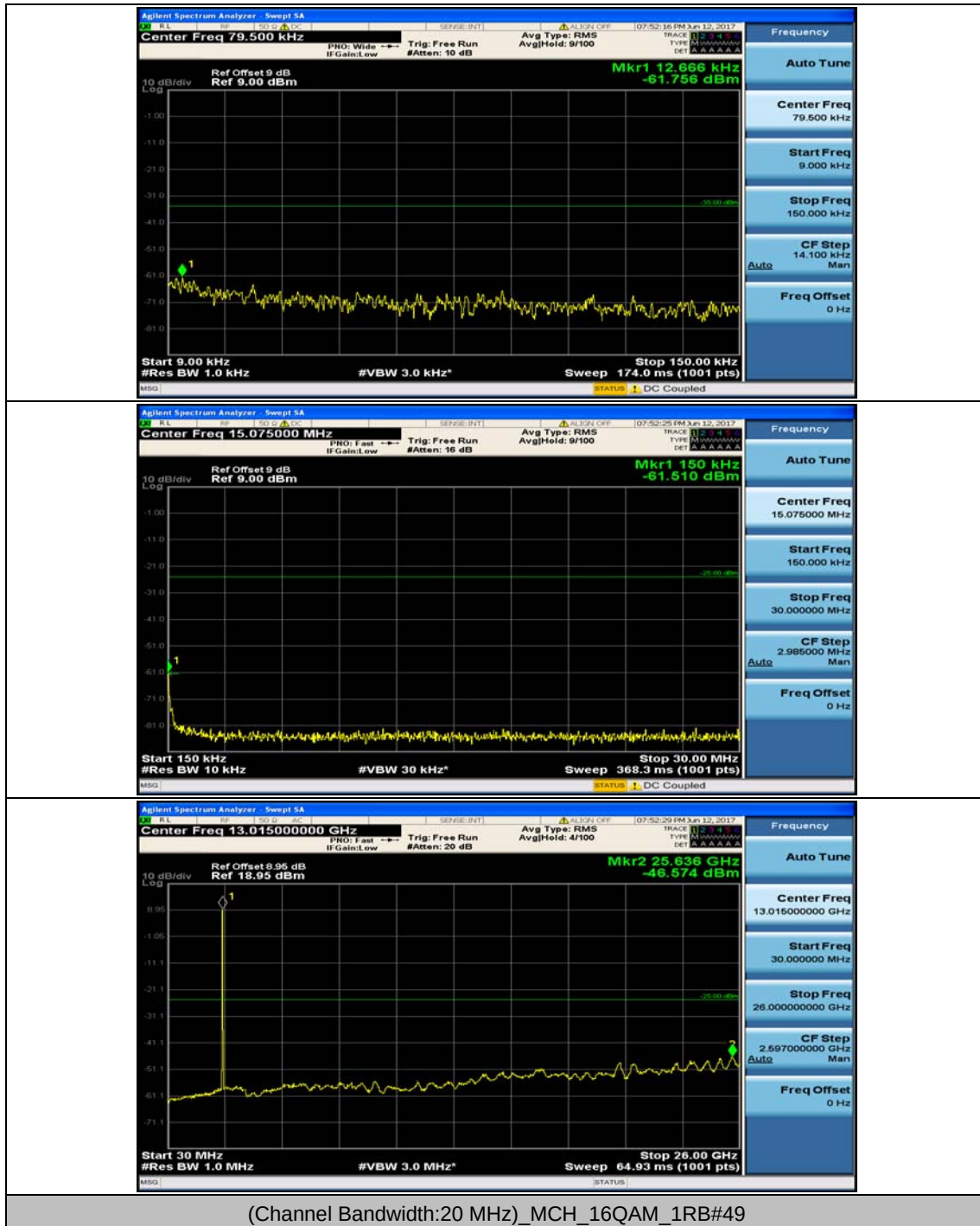
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0

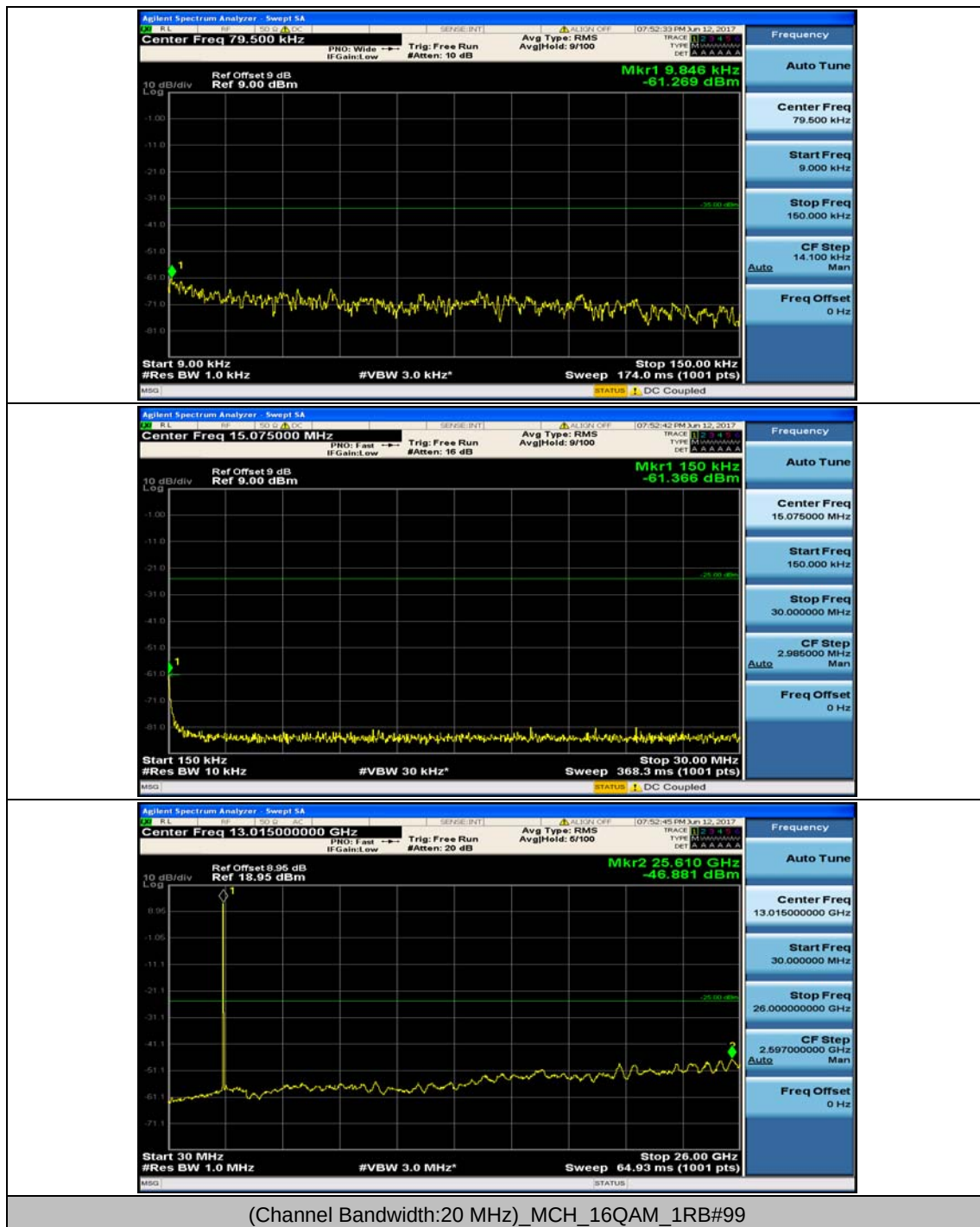


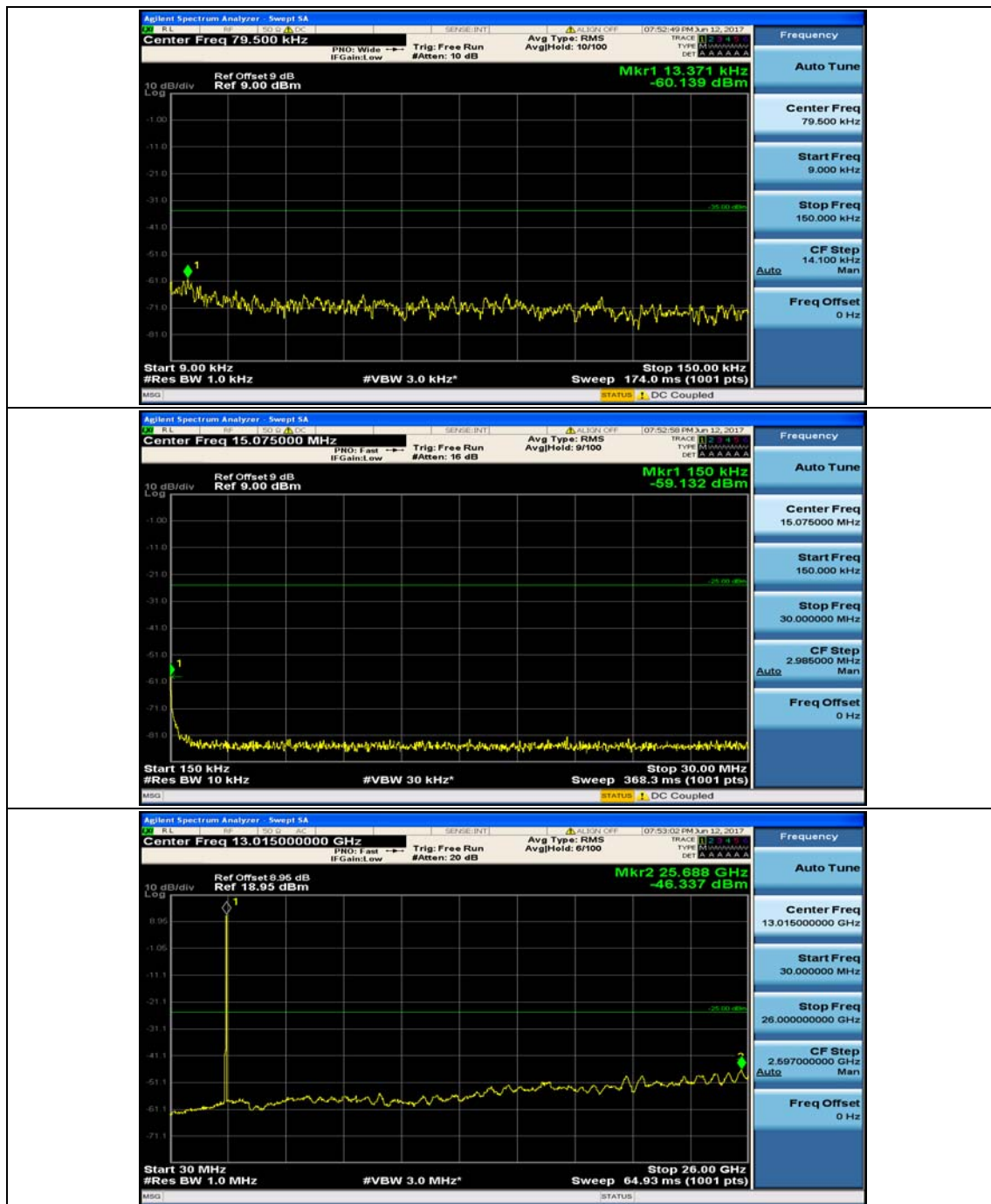




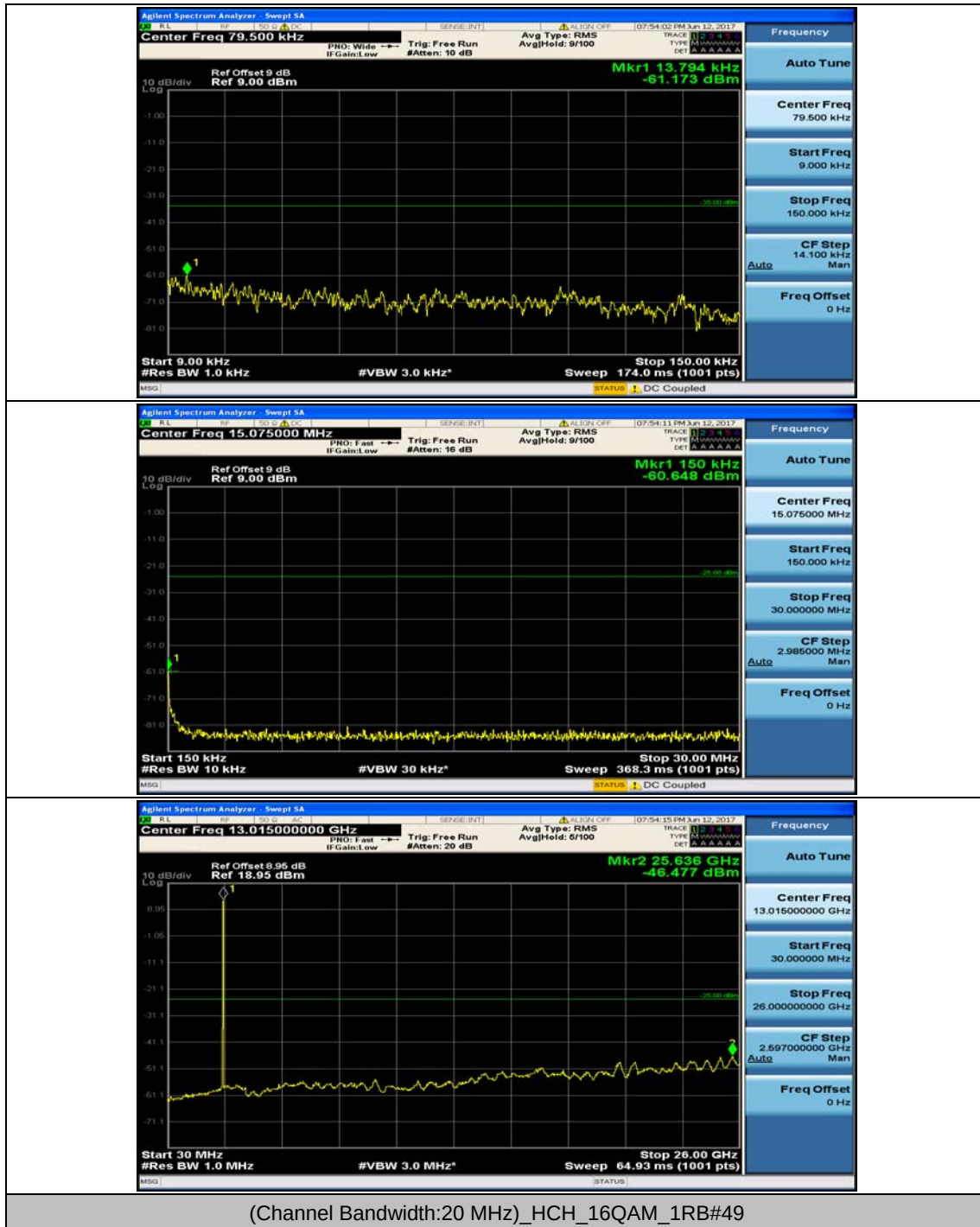
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0

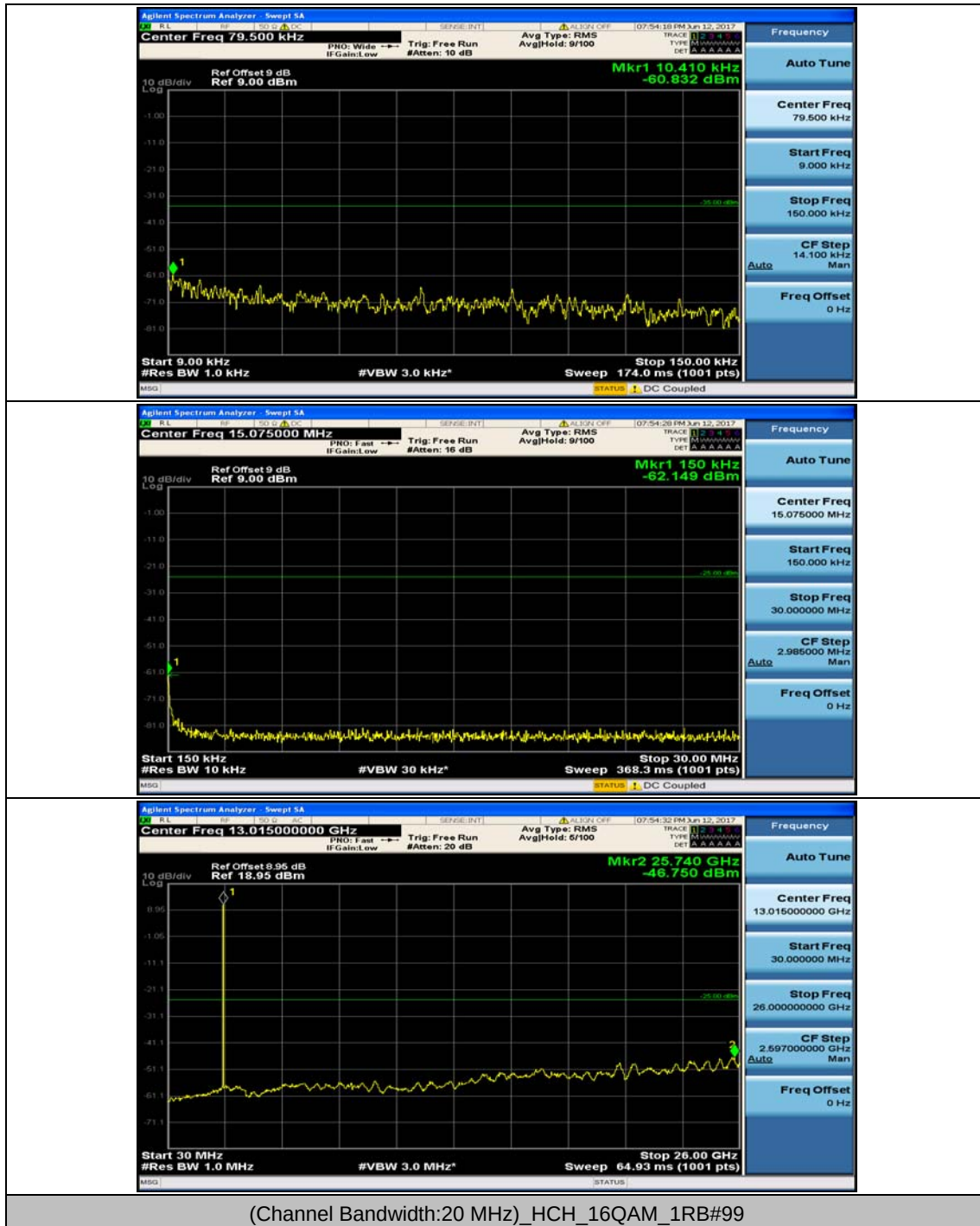


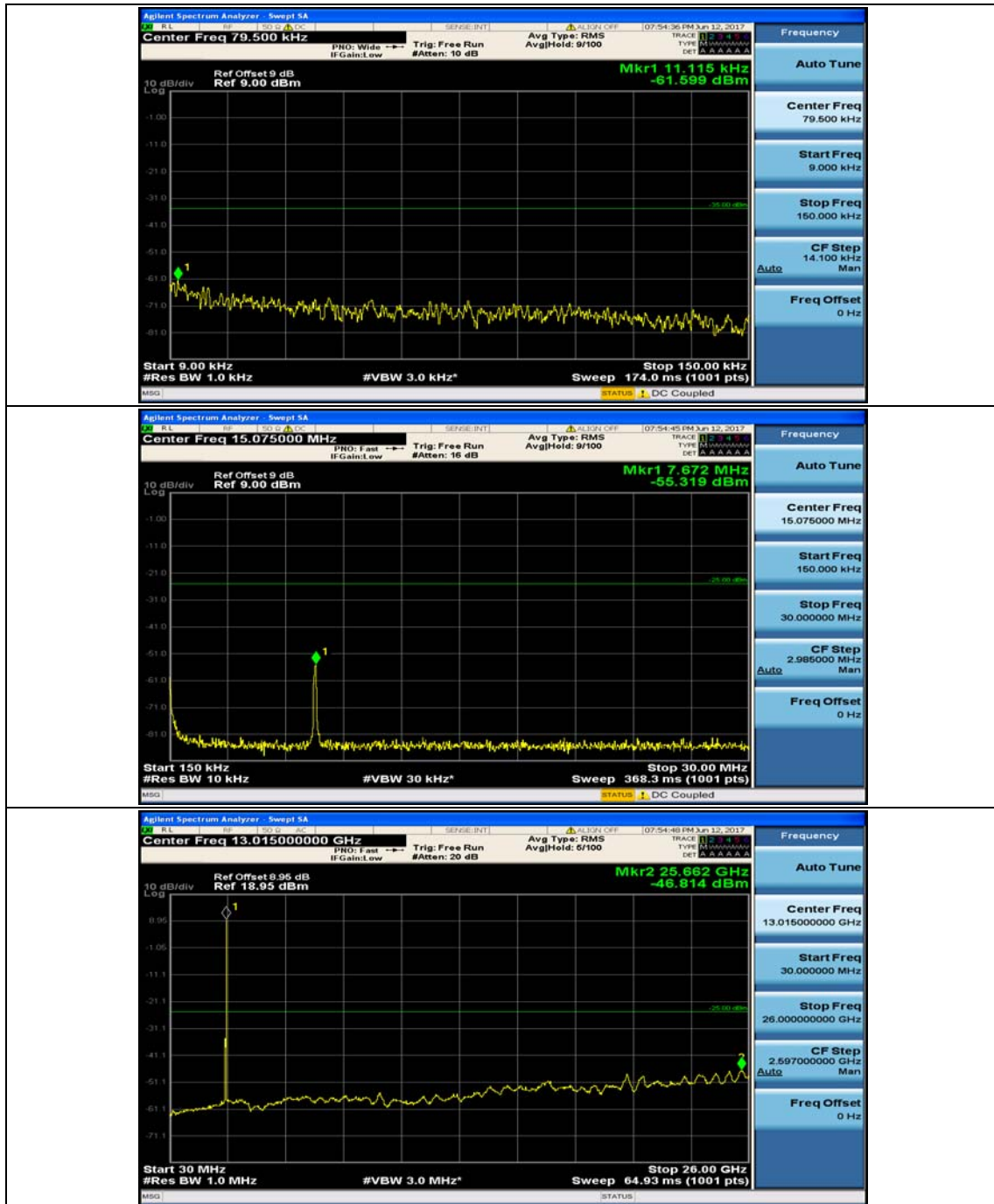




(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0







Appendix F: Frequency Stability

Test Result

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	3.98	0.001590	± 2.5	PASS
		VN	TN	0.69	0.000276	± 2.5	PASS
		VH	TN	2.6	0.001039	± 2.5	PASS
	MCH	VL	TN	4.92	0.001941	± 2.5	PASS
		VN	TN	4.61	0.001819	± 2.5	PASS
		VH	TN	-0.89	-0.000351	± 2.5	PASS
	HCH	VL	TN	4.37	0.001702	± 2.5	PASS
		VN	TN	4.84	0.001885	± 2.5	PASS
		VH	TN	-1.01	-0.000393	± 2.5	PASS
16QAM	LCH	VL	TN	0.19	0.000076	± 2.5	PASS
		VN	TN	-1.41	-0.000563	± 2.5	PASS
		VH	TN	-1.56	-0.000623	± 2.5	PASS
	MCH	VL	TN	4.94	0.001949	± 2.5	PASS
		VN	TN	4.62	0.001822	± 2.5	PASS
		VH	TN	1.8	0.000710	± 2.5	PASS
	HCH	VL	TN	1.72	0.000670	± 2.5	PASS
		VN	TN	1.34	0.000522	± 2.5	PASS
		VH	TN	4.65	0.001811	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.25	0.000899	± 2.5	PASS
		VN	-20	2.18	0.000871	± 2.5	PASS
		VN	-10	2.82	0.001127	± 2.5	PASS
		VN	0	3.01	0.001203	± 2.5	PASS
		VN	10	4.38	0.001750	± 2.5	PASS
		VN	20	1.22	0.000488	± 2.5	PASS
		VN	30	1.19	0.000476	± 2.5	PASS
		VN	40	2.37	0.000947	± 2.5	PASS
		VN	50	3.08	0.001231	± 2.5	PASS
	MCH	VN	-30	0	0.000000	± 2.5	PASS
		VN	-20	-0.75	-0.000296	± 2.5	PASS

		VN	-10	0.96	0.000379	± 2.5	PASS
		VN	0	-1.38	-0.000544	± 2.5	PASS
		VN	10	1.26	0.000497	± 2.5	PASS
		VN	20	1.08	0.000426	± 2.5	PASS
		VN	30	-0.32	-0.000126	± 2.5	PASS
		VN	40	-1.01	-0.000398	± 2.5	PASS
		VN	50	4.6	0.001815	± 2.5	PASS
	HCH	VN	-30	3.11	0.001211	± 2.5	PASS
		VN	-20	0.39	0.000152	± 2.5	PASS
		VN	-10	0.98	0.000382	± 2.5	PASS
		VN	0	0	0.000000	± 2.5	PASS
		VN	10	3.35	0.001305	± 2.5	PASS
		VN	20	1.58	0.000615	± 2.5	PASS
		VN	30	-1.67	-0.000650	± 2.5	PASS
		VN	40	2.18	0.000849	± 2.5	PASS
		VN	50	-0.58	-0.000226	± 2.5	PASS
16QAM	LCH	VN	-30	1.26	0.000503	± 2.5	PASS
		VN	-20	4.92	0.001966	± 2.5	PASS
		VN	-10	1.79	0.000715	± 2.5	PASS
		VN	0	0.41	0.000164	± 2.5	PASS
		VN	10	3.55	0.001419	± 2.5	PASS
		VN	20	-0.98	-0.000392	± 2.5	PASS
		VN	30	1.54	0.000615	± 2.5	PASS
		VN	40	3.26	0.001303	± 2.5	PASS
		VN	50	-1.27	-0.000507	± 2.5	PASS
	MCH	VN	-30	4.9	0.001933	± 2.5	PASS
		VN	-20	4.82	0.001901	± 2.5	PASS
		VN	-10	-0.27	-0.000107	± 2.5	PASS
		VN	0	0.87	0.000343	± 2.5	PASS
		VN	10	2.12	0.000836	± 2.5	PASS
		VN	20	-1.03	-0.000406	± 2.5	PASS
		VN	30	4.41	0.001740	± 2.5	PASS
		VN	40	4.98	0.001964	± 2.5	PASS
		VN	50	-1.26	-0.000497	± 2.5	PASS
	HCH	VN	-30	0.11	0.000043	± 2.5	PASS
		VN	-20	2.27	0.000884	± 2.5	PASS
		VN	-10	4.49	0.001749	± 2.5	PASS
		VN	0	4.62	0.001799	± 2.5	PASS
		VN	10	4.94	0.001924	± 2.5	PASS
		VN	20	2.33	0.000907	± 2.5	PASS
		VN	30	-1.69	-0.000658	± 2.5	PASS

		VN	40	-1.54	-0.000600	± 2.5	PASS
		VN	50	1.3	0.000506	± 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	-0.36	-0.000144	± 2.5	PASS
		VN	TN	-1.14	-0.000455	± 2.5	PASS
		VH	TN	2.95	0.001178	± 2.5	PASS
	MCH	VL	TN	-0.32	-0.000126	± 2.5	PASS
		VN	TN	1.71	0.000675	± 2.5	PASS
		VH	TN	0.63	0.000249	± 2.5	PASS
	HCH	VL	TN	1.76	0.000686	± 2.5	PASS
		VN	TN	-0.65	-0.000253	± 2.5	PASS
		VH	TN	0.29	0.000113	± 2.5	PASS
16QAM	LCH	VL	TN	3.11	0.001242	± 2.5	PASS
		VN	TN	4.81	0.001920	± 2.5	PASS
		VH	TN	-1.55	-0.000619	± 2.5	PASS
	MCH	VL	TN	-1.57	-0.000619	± 2.5	PASS
		VN	TN	-0.28	-0.000110	± 2.5	PASS
		VH	TN	4.56	0.001799	± 2.5	PASS
	HCH	VL	TN	0.76	0.000296	± 2.5	PASS
		VN	TN	2.39	0.000932	± 2.5	PASS
		VH	TN	-0.28	-0.000109	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	4.62	0.001844	± 2.5	PASS
		VN	-20	3.52	0.001405	± 2.5	PASS
		VN	-10	2.34	0.000934	± 2.5	PASS
		VN	0	0.25	0.000100	± 2.5	PASS
		VN	10	-1.32	-0.000527	± 2.5	PASS
		VN	20	0.93	0.000371	± 2.5	PASS
		VN	30	2.02	0.000806	± 2.5	PASS
		VN	40	-1.76	-0.000703	± 2.5	PASS
		VN	50	0.83	0.000331	± 2.5	PASS
	MCH	VN	-30	-1.82	-0.000718	± 2.5	PASS
		VN	-20	0.61	0.000241	± 2.5	PASS
		VN	-10	-1.27	-0.000501	± 2.5	PASS

		VN	0	2.91	0.001148	± 2.5	PASS
		VN	10	-1.6	-0.000631	± 2.5	PASS
		VN	20	-1.03	-0.000406	± 2.5	PASS
		VN	30	0.31	0.000122	± 2.5	PASS
		VN	40	-0.32	-0.000126	± 2.5	PASS
		VN	50	-1.13	-0.000446	± 2.5	PASS
	HCH	VN	-30	4.24	0.001653	± 2.5	PASS
		VN	-20	1.58	0.000616	± 2.5	PASS
		VN	-10	4.94	0.001926	± 2.5	PASS
		VN	0	0.07	0.000027	± 2.5	PASS
		VN	10	0.39	0.000152	± 2.5	PASS
		VN	20	3.45	0.001345	± 2.5	PASS
		VN	30	1.2	0.000468	± 2.5	PASS
		VN	40	2.01	0.000784	± 2.5	PASS
		VN	50	-0.58	-0.000226	± 2.5	PASS
QPSK	LCH	VN	-30	3.51	0.001401	± 2.5	PASS
		VN	-20	0.18	0.000072	± 2.5	PASS
		VN	-10	4.85	0.001936	± 2.5	PASS
		VN	0	1.93	0.000770	± 2.5	PASS
		VN	10	3.76	0.001501	± 2.5	PASS
		VN	20	2.78	0.001110	± 2.5	PASS
		VN	30	2.26	0.000902	± 2.5	PASS
		VN	40	3.46	0.001381	± 2.5	PASS
		VN	50	-1	-0.000399	± 2.5	PASS
	MCH	VN	-30	1.88	0.000742	± 2.5	PASS
		VN	-20	3.38	0.001333	± 2.5	PASS
		VN	-10	-0.35	-0.000138	± 2.5	PASS
		VN	0	-0.08	-0.000032	± 2.5	PASS
		VN	10	2.91	0.001148	± 2.5	PASS
		VN	20	2.19	0.000864	± 2.5	PASS
		VN	30	4.26	0.001680	± 2.5	PASS
		VN	40	-1.27	-0.000501	± 2.5	PASS
		VN	50	2.4	0.000947	± 2.5	PASS
	HCH	VN	-30	-0.05	-0.000019	± 2.5	PASS
		VN	-20	0.77	0.000300	± 2.5	PASS
		VN	-10	0.14	0.000055	± 2.5	PASS
		VN	0	3.14	0.001224	± 2.5	PASS
		VN	10	-0.11	-0.000043	± 2.5	PASS
		VN	20	4.52	0.001762	± 2.5	PASS
		VN	30	4.98	0.001942	± 2.5	PASS
		VN	40	-0.76	-0.000296	± 2.5	PASS

		VN	50	-1.18	-0.000460	± 2.5	PASS
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Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.57	0.000227	± 2.5	PASS
		VN	TN	-1.47	-0.000586	± 2.5	PASS
		VH	TN	4.87	0.001942	± 2.5	PASS
	MCH	VL	TN	1.84	0.000726	± 2.5	PASS
		VN	TN	0.84	0.000331	± 2.5	PASS
		VH	TN	2.15	0.000848	± 2.5	PASS
	HCH	VL	TN	0.31	0.000121	± 2.5	PASS
		VN	TN	2.41	0.000940	± 2.5	PASS
		VH	TN	-0.6	-0.000234	± 2.5	PASS
16QAM	LCH	VL	TN	2.89	0.001153	± 2.5	PASS
		VN	TN	1.25	0.000499	± 2.5	PASS
		VH	TN	1.87	0.000746	± 2.5	PASS
	MCH	VL	TN	1.33	0.000525	± 2.5	PASS
		VN	TN	4.45	0.001755	± 2.5	PASS
		VH	TN	4.29	0.001692	± 2.5	PASS
	HCH	VL	TN	4.76	0.001858	± 2.5	PASS
		VN	TN	-0.23	-0.000090	± 2.5	PASS
		VH	TN	-0.72	-0.000281	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.53	-0.000610	± 2.5	PASS
		VN	-20	2.47	0.000985	± 2.5	PASS
		VN	-10	2.18	0.000869	± 2.5	PASS
		VN	0	0.82	0.000327	± 2.5	PASS
		VN	10	-1.25	-0.000499	± 2.5	PASS
		VN	20	1.39	0.000554	± 2.5	PASS
		VN	30	1.47	0.000586	± 2.5	PASS
		VN	40	1.3	0.000518	± 2.5	PASS
		VN	50	-0.29	-0.000116	± 2.5	PASS
	MCH	VN	-30	-0.55	-0.000217	± 2.5	PASS
		VN	-20	1.06	0.000418	± 2.5	PASS
		VN	-10	1.88	0.000742	± 2.5	PASS
		VN	0	2.79	0.001101	± 2.5	PASS

		VN	10	4.12	0.001625	± 2.5	PASS
		VN	20	3.86	0.001523	± 2.5	PASS
		VN	30	1.92	0.000757	± 2.5	PASS
		VN	40	-1.87	-0.000738	± 2.5	PASS
		VN	50	1.89	0.000746	± 2.5	PASS
	HCH	VN	-30	3.08	0.001202	± 2.5	PASS
		VN	-20	-0.81	-0.000316	± 2.5	PASS
		VN	-10	2.95	0.001151	± 2.5	PASS
		VN	0	0.58	0.000226	± 2.5	PASS
		VN	10	3.63	0.001417	± 2.5	PASS
		VN	20	-1.77	-0.000691	± 2.5	PASS
		VN	30	0.48	0.000187	± 2.5	PASS
		VN	40	0.39	0.000152	± 2.5	PASS
		VN	50	4.69	0.001830	± 2.5	PASS
		VN	-30	1.76	0.000702	± 2.5	PASS
16QAM	LCH	VN	-20	4.87	0.001942	± 2.5	PASS
		VN	-10	4.52	0.001803	± 2.5	PASS
		VN	0	4.48	0.001787	± 2.5	PASS
		VN	10	-0.48	-0.000191	± 2.5	PASS
		VN	20	-1.07	-0.000427	± 2.5	PASS
		VN	30	2.92	0.001165	± 2.5	PASS
		VN	40	3.88	0.001547	± 2.5	PASS
		VN	50	3.11	0.001240	± 2.5	PASS
	MCH	VN	-30	-0.07	-0.000028	± 2.5	PASS
		VN	-20	2.24	0.000884	± 2.5	PASS
		VN	-10	4.53	0.001787	± 2.5	PASS
		VN	0	-0.99	-0.000391	± 2.5	PASS
		VN	10	1.36	0.000536	± 2.5	PASS
		VN	20	0.71	0.000280	± 2.5	PASS
		VN	30	-0.07	-0.000028	± 2.5	PASS
		VN	40	1.74	0.000686	± 2.5	PASS
		VN	50	2.27	0.000895	± 2.5	PASS
	HCH	VN	-30	-1.95	-0.000761	± 2.5	PASS
		VN	-20	2.57	0.001003	± 2.5	PASS
		VN	-10	0.35	0.000137	± 2.5	PASS
		VN	0	4.12	0.001608	± 2.5	PASS
		VN	10	4.98	0.001943	± 2.5	PASS
		VN	20	1.59	0.000620	± 2.5	PASS
		VN	30	4.97	0.001940	± 2.5	PASS
		VN	40	4.44	0.001733	± 2.5	PASS
		VN	50	3.15	0.001229	± 2.5	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.05	0.000020	± 2.5	PASS
		VN	TN	4.83	0.001924	± 2.5	PASS
		VH	TN	-1.62	-0.000645	± 2.5	PASS
	MCH	VL	TN	0.65	0.000256	± 2.5	PASS
		VN	TN	2.98	0.001176	± 2.5	PASS
		VH	TN	0.86	0.000339	± 2.5	PASS
	HCH	VL	TN	-0.58	-0.000227	± 2.5	PASS
		VN	TN	3.74	0.001461	± 2.5	PASS
		VH	TN	-1.42	-0.000555	± 2.5	PASS
16QAM	LCH	VL	TN	2.74	0.001092	± 2.5	PASS
		VN	TN	2.84	0.001131	± 2.5	PASS
		VH	TN	1.3	0.000518	± 2.5	PASS
	MCH	VL	TN	3.95	0.001558	± 2.5	PASS
		VN	TN	4.34	0.001712	± 2.5	PASS
		VH	TN	3.42	0.001349	± 2.5	PASS
	HCH	VL	TN	0.2	0.000078	± 2.5	PASS
		VN	TN	3.82	0.001492	± 2.5	PASS
		VH	TN	-1.34	-0.000523	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.4	0.001753	± 2.5	PASS
		VN	-20	-0.08	-0.000032	± 2.5	PASS
		VN	-10	-0.37	-0.000147	± 2.5	PASS
		VN	0	2.61	0.001040	± 2.5	PASS
		VN	10	-1.07	-0.000426	± 2.5	PASS
		VN	20	0.44	0.000175	± 2.5	PASS
		VN	30	2.82	0.001124	± 2.5	PASS
		VN	40	4.45	0.001773	± 2.5	PASS
		VN	50	4.12	0.001641	± 2.5	PASS
	MCH	VN	-30	4.1	0.001617	± 2.5	PASS
		VN	-20	1.34	0.000529	± 2.5	PASS
		VN	-10	-1.06	-0.000418	± 2.5	PASS
		VN	0	-0.63	-0.000249	± 2.5	PASS
		VN	10	1.85	0.000730	± 2.5	PASS
		VN	20	1.56	0.000615	± 2.5	PASS
		VN	30	2.83	0.001116	± 2.5	PASS

		VN	40	1.26	0.000497	± 2.5	PASS
		VN	50	4.37	0.001724	± 2.5	PASS
	HCH	VN	-30	0.45	0.000176	± 2.5	PASS
		VN	-20	0.36	0.000141	± 2.5	PASS
		VN	-10	1.27	0.000496	± 2.5	PASS
		VN	0	-1.69	-0.000660	± 2.5	PASS
		VN	10	0.88	0.000344	± 2.5	PASS
		VN	20	1.04	0.000406	± 2.5	PASS
		VN	30	3.96	0.001547	± 2.5	PASS
		VN	40	1.44	0.000563	± 2.5	PASS
		VN	50	3.91	0.001527	± 2.5	PASS
16QAM	LCH	VN	-30	-1.96	-0.000781	± 2.5	PASS
		VN	-20	2.74	0.001092	± 2.5	PASS
		VN	-10	2.29	0.000912	± 2.5	PASS
		VN	0	2.11	0.000841	± 2.5	PASS
		VN	10	4.3	0.001713	± 2.5	PASS
		VN	20	0.87	0.000347	± 2.5	PASS
		VN	30	1.98	0.000789	± 2.5	PASS
		VN	40	1.09	0.000434	± 2.5	PASS
		VN	50	4.88	0.001944	± 2.5	PASS
	MCH	VN	-30	0.82	0.000323	± 2.5	PASS
		VN	-20	3.68	0.001452	± 2.5	PASS
		VN	-10	4.34	0.001712	± 2.5	PASS
		VN	0	1.27	0.000501	± 2.5	PASS
		VN	10	3.22	0.001270	± 2.5	PASS
		VN	20	0.25	0.000099	± 2.5	PASS
		VN	30	3.04	0.001199	± 2.5	PASS
		VN	40	1.41	0.000556	± 2.5	PASS
		VN	50	1.93	0.000761	± 2.5	PASS
	HCH	VN	-30	3.55	0.001387	± 2.5	PASS
		VN	-20	4.25	0.001660	± 2.5	PASS
		VN	-10	-1.52	-0.000594	± 2.5	PASS
		VN	0	-1.1	-0.000430	± 2.5	PASS
		VN	10	2.35	0.000918	± 2.5	PASS
		VN	20	2.79	0.001090	± 2.5	PASS
		VN	30	-0.5	-0.000195	± 2.5	PASS
		VN	40	-0.7	-0.000273	± 2.5	PASS
		VN	50	3.71	0.001448	± 2.5	PASS