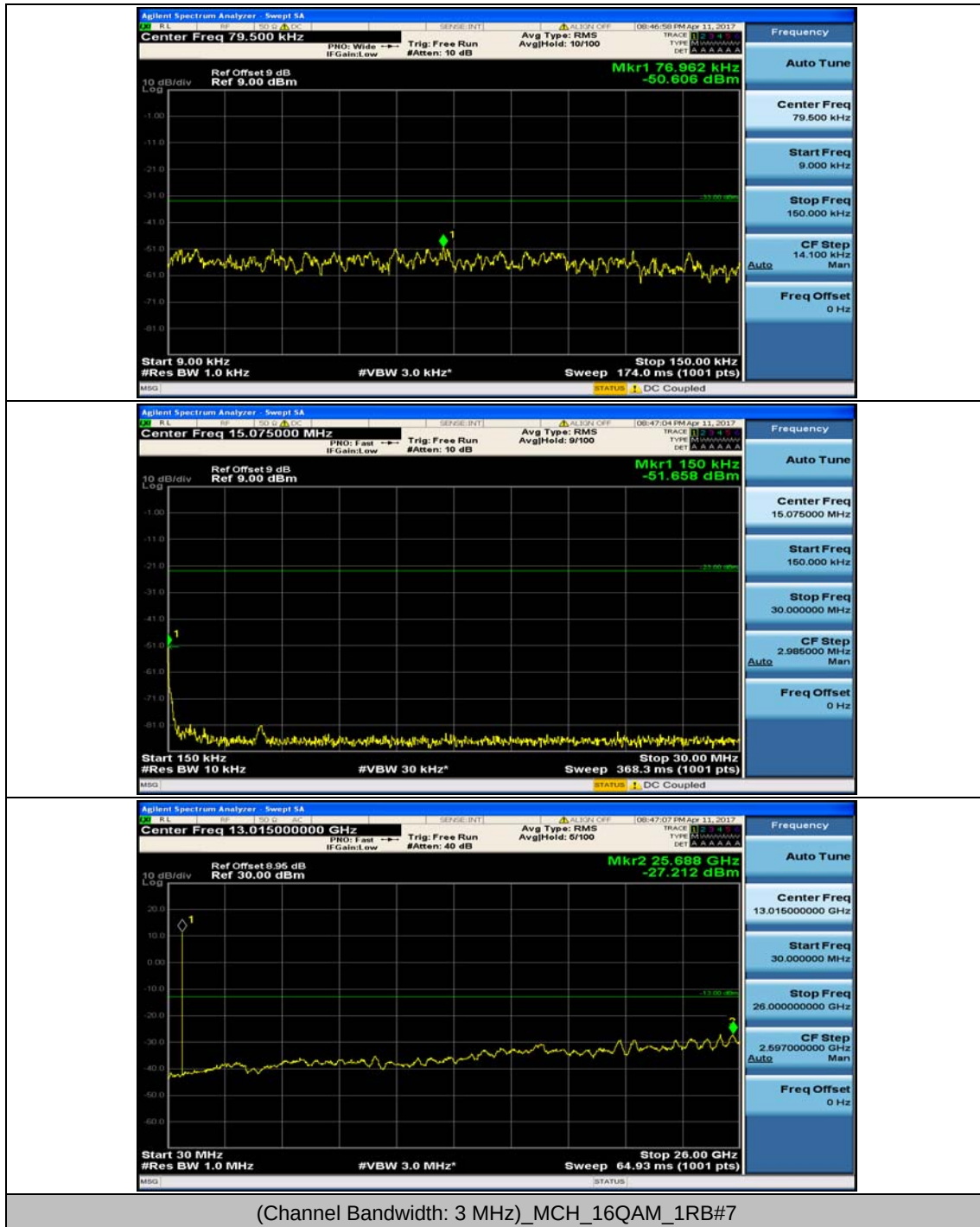
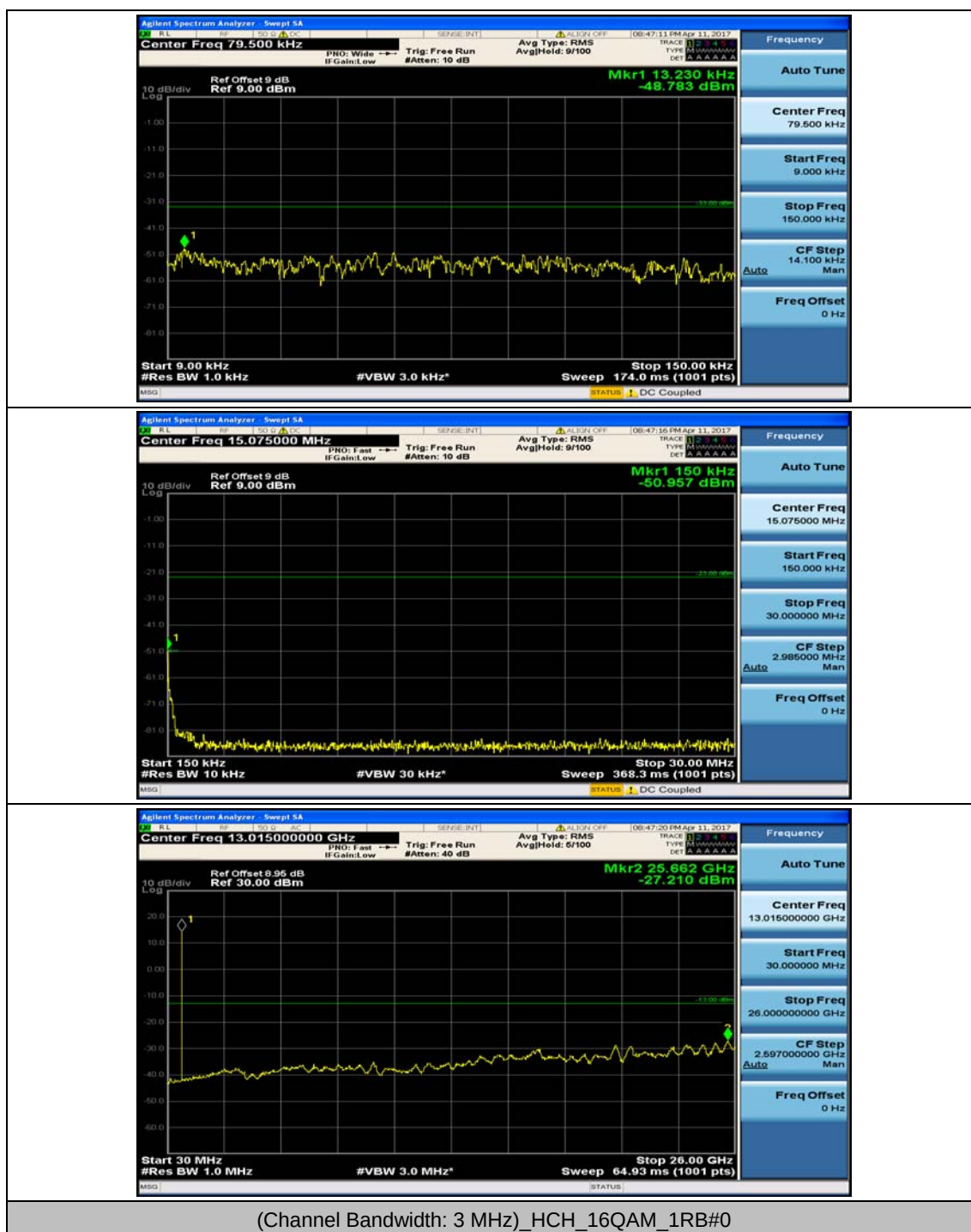
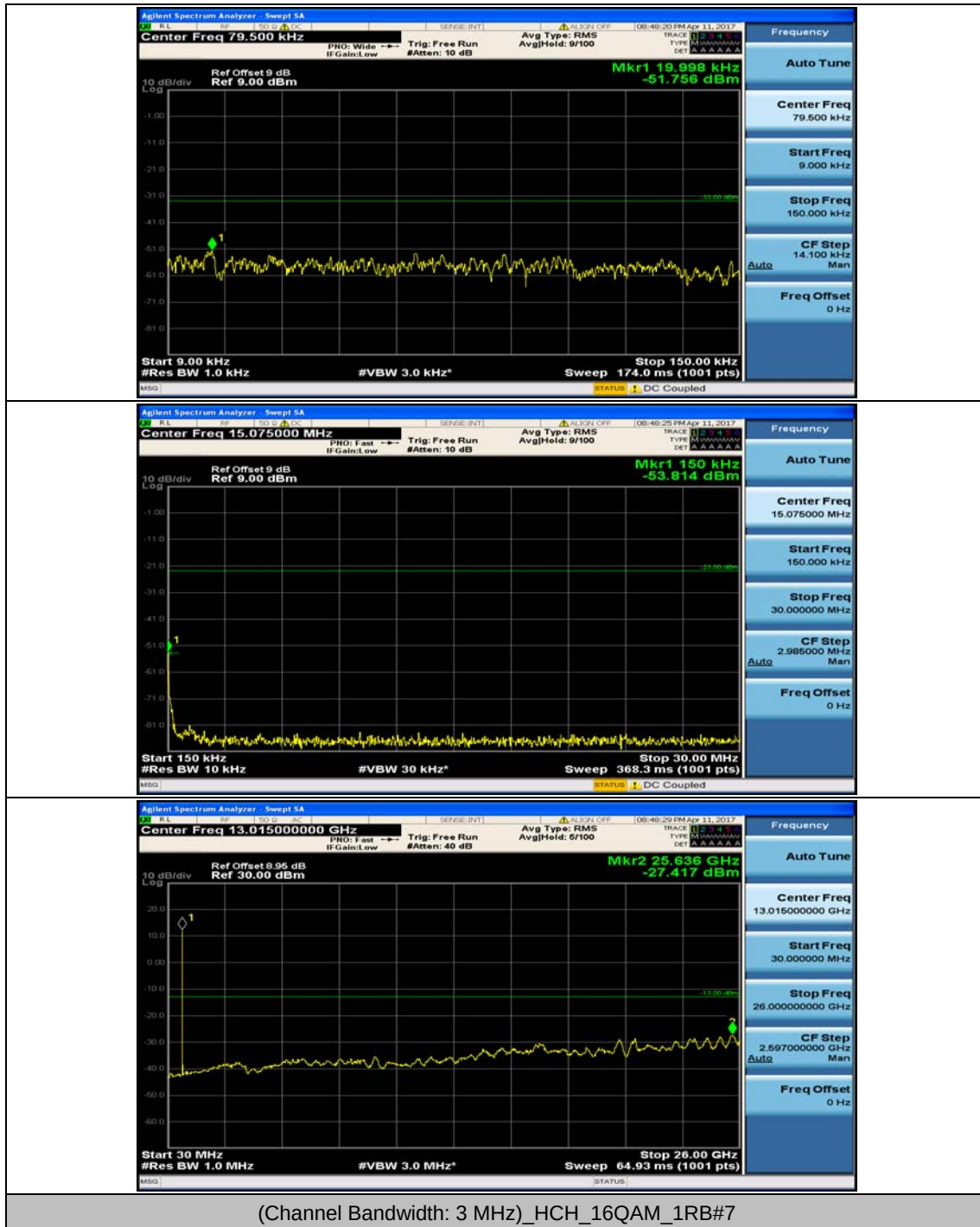
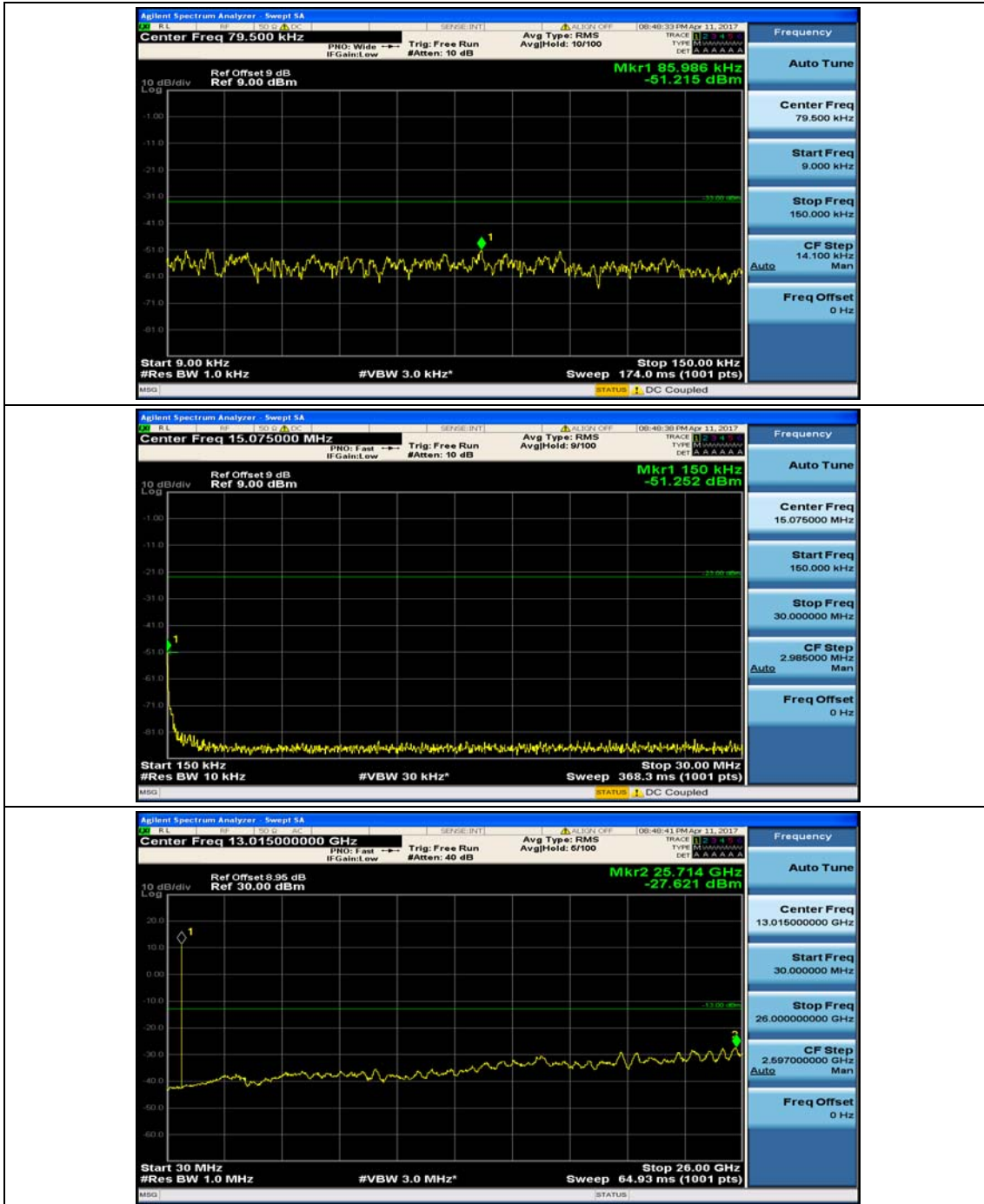


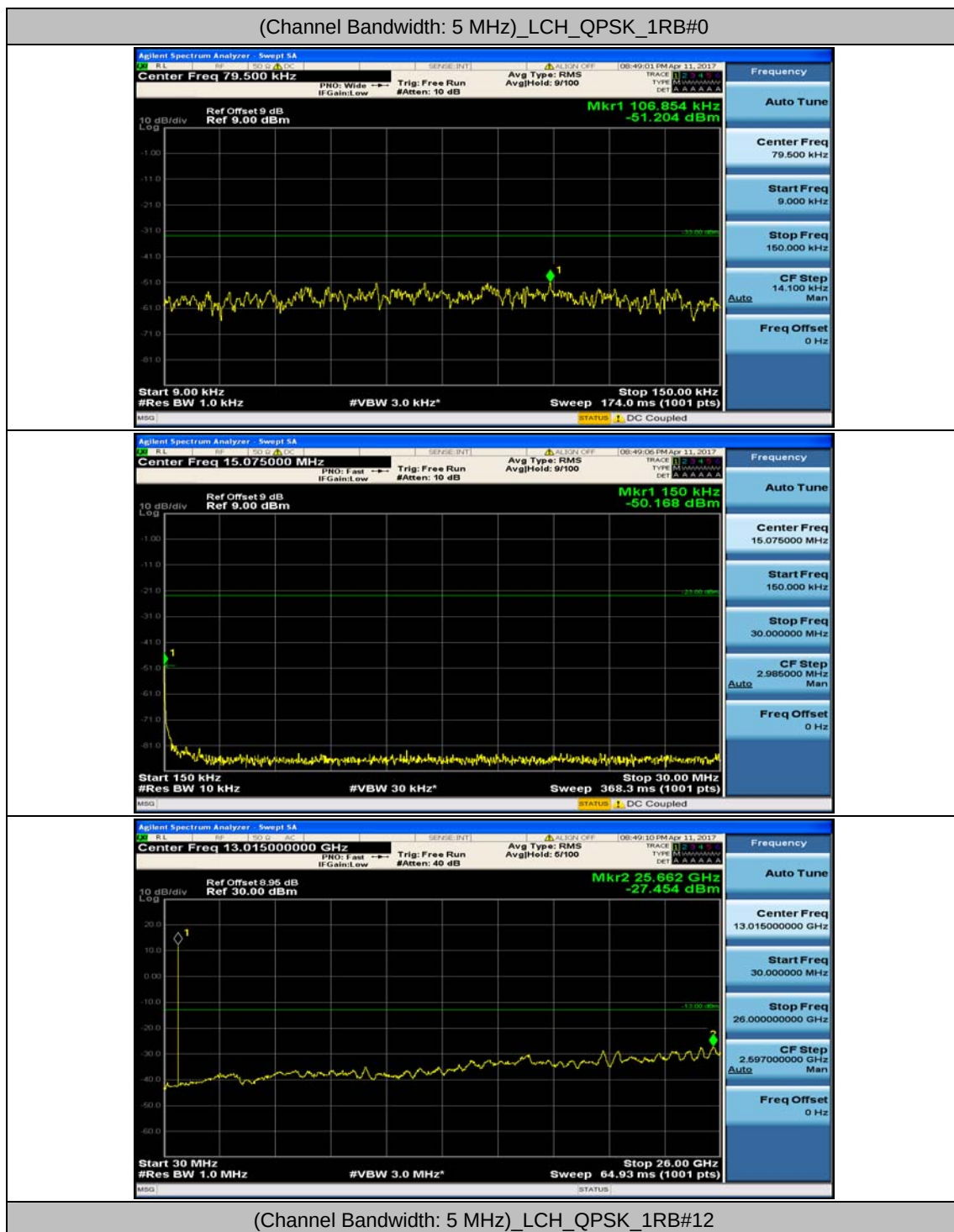


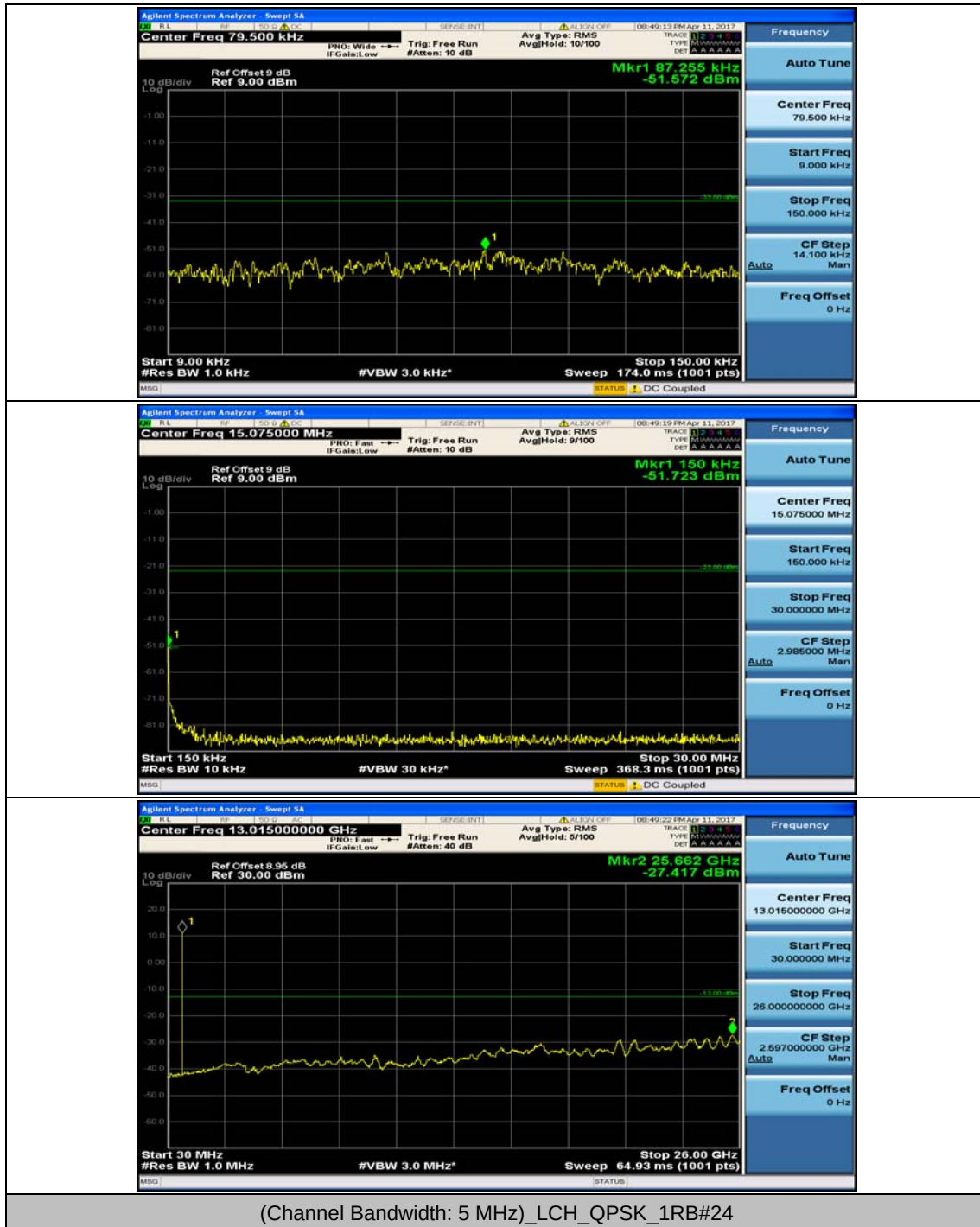


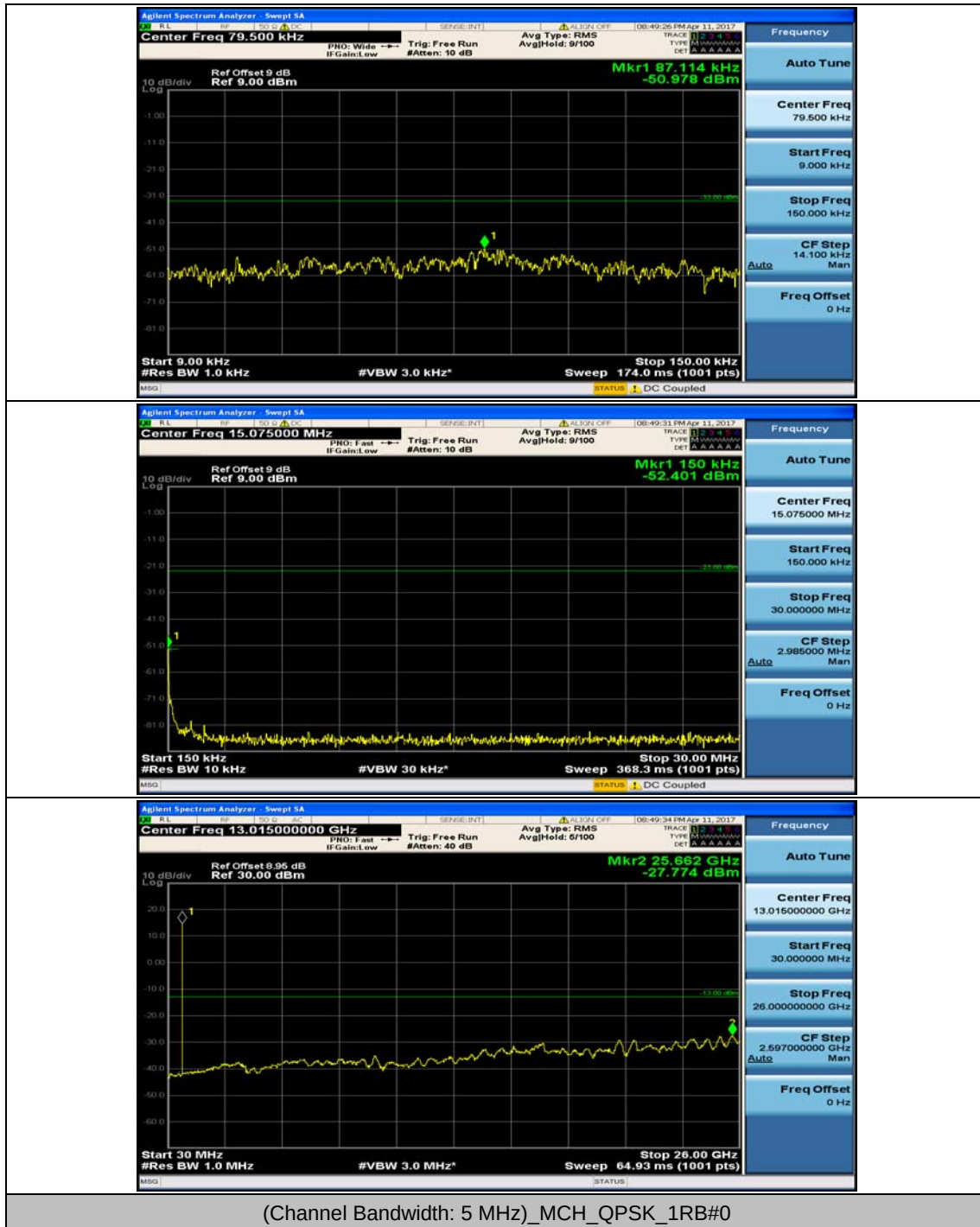


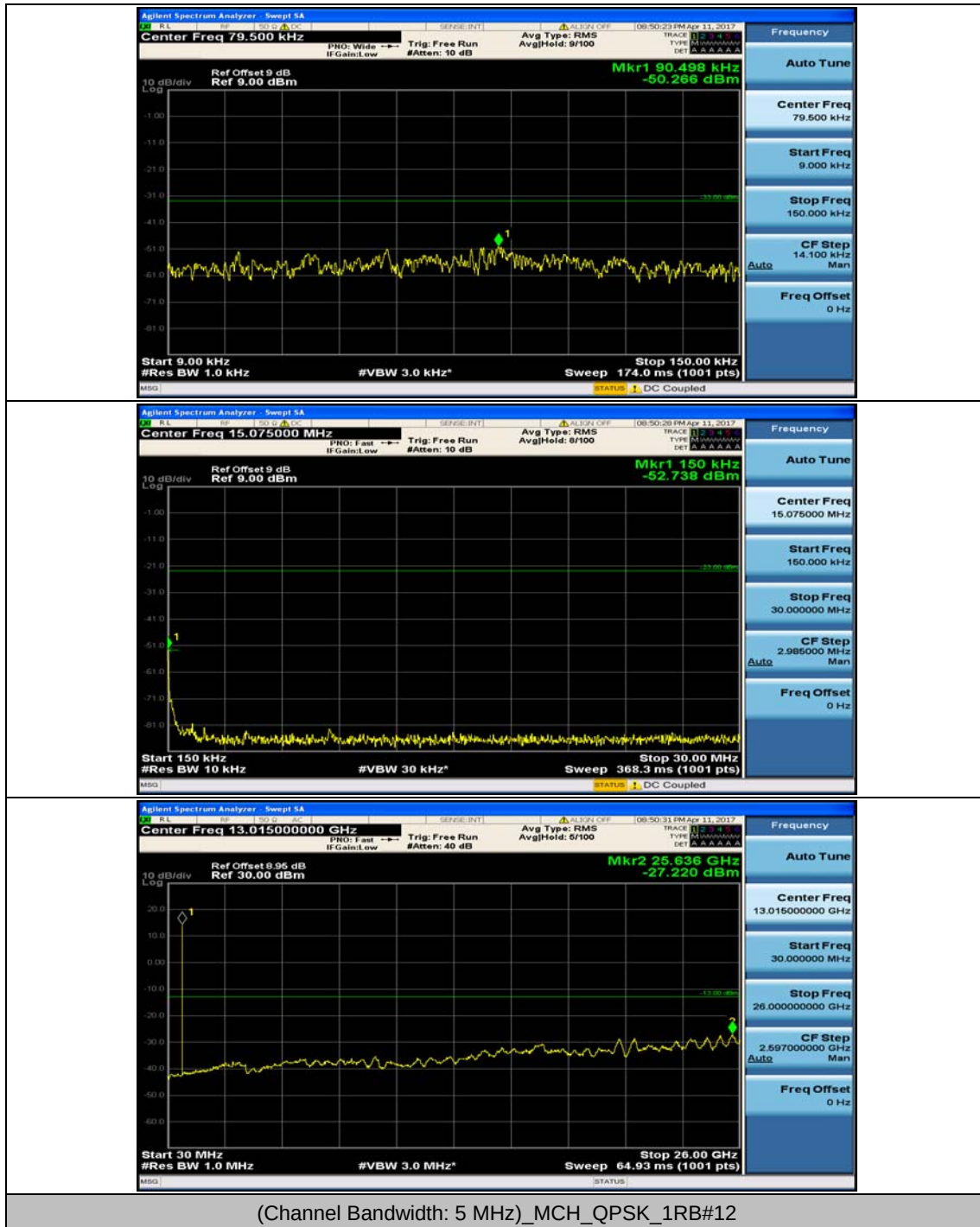


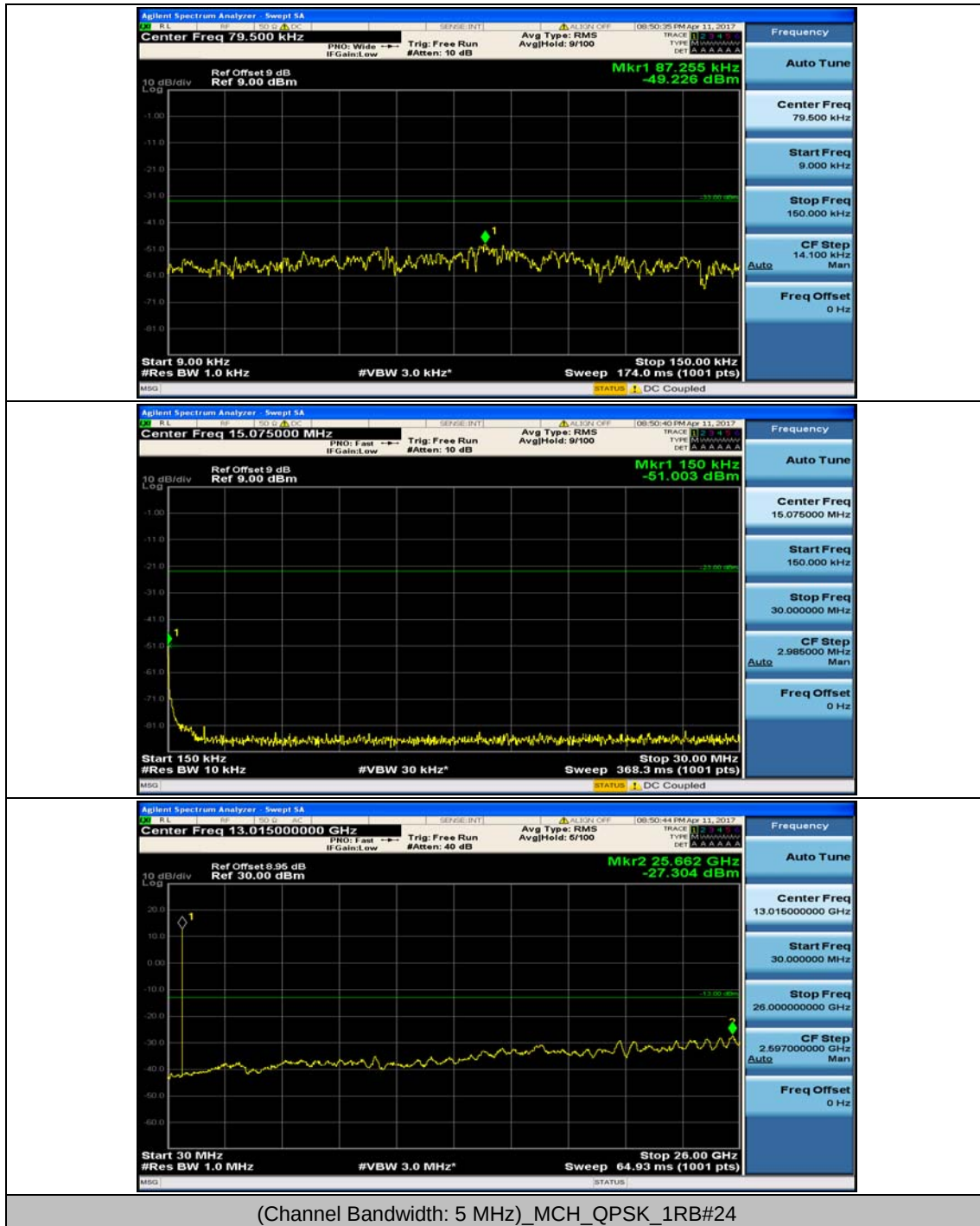
Channel Bandwidth: 5 MHz

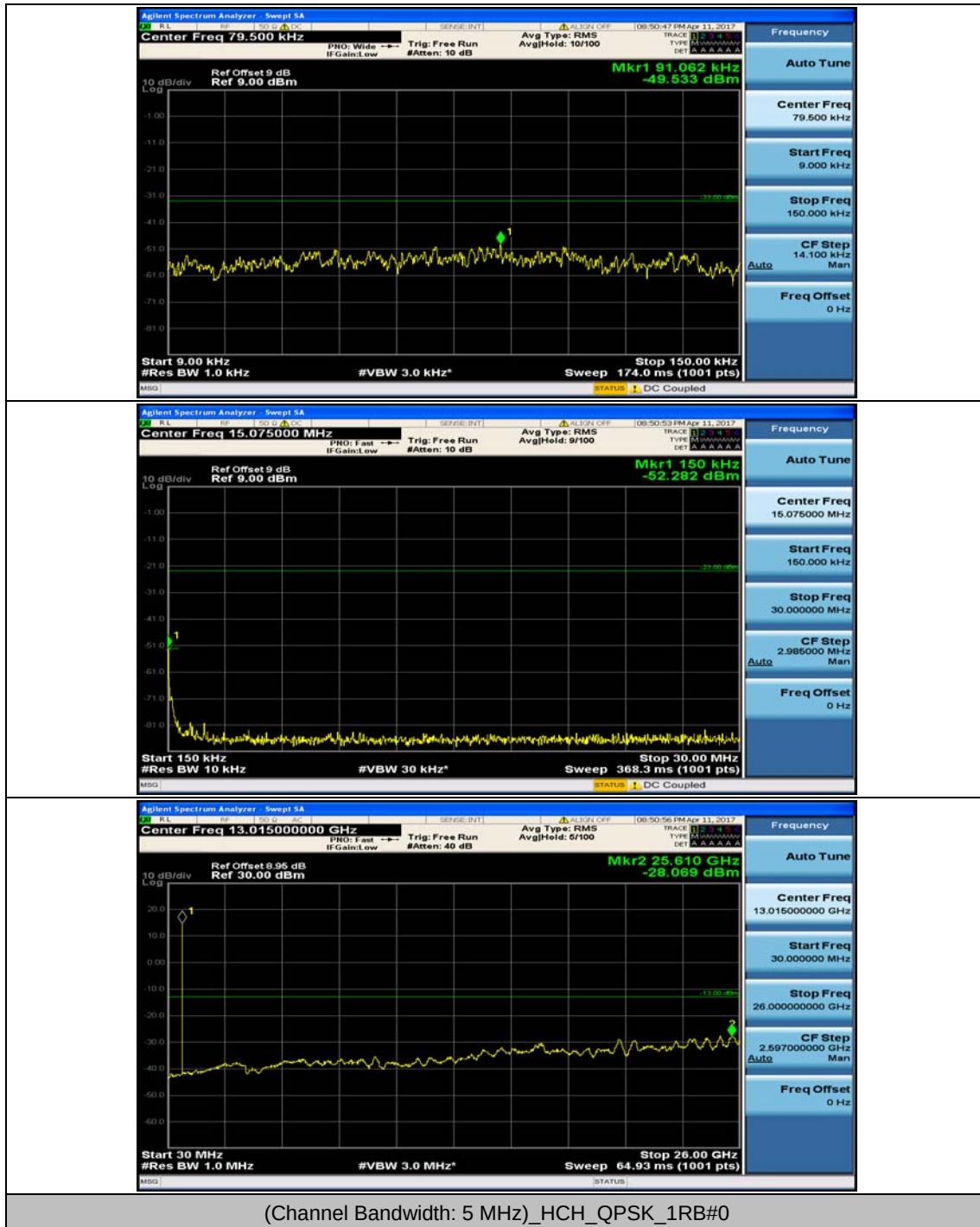


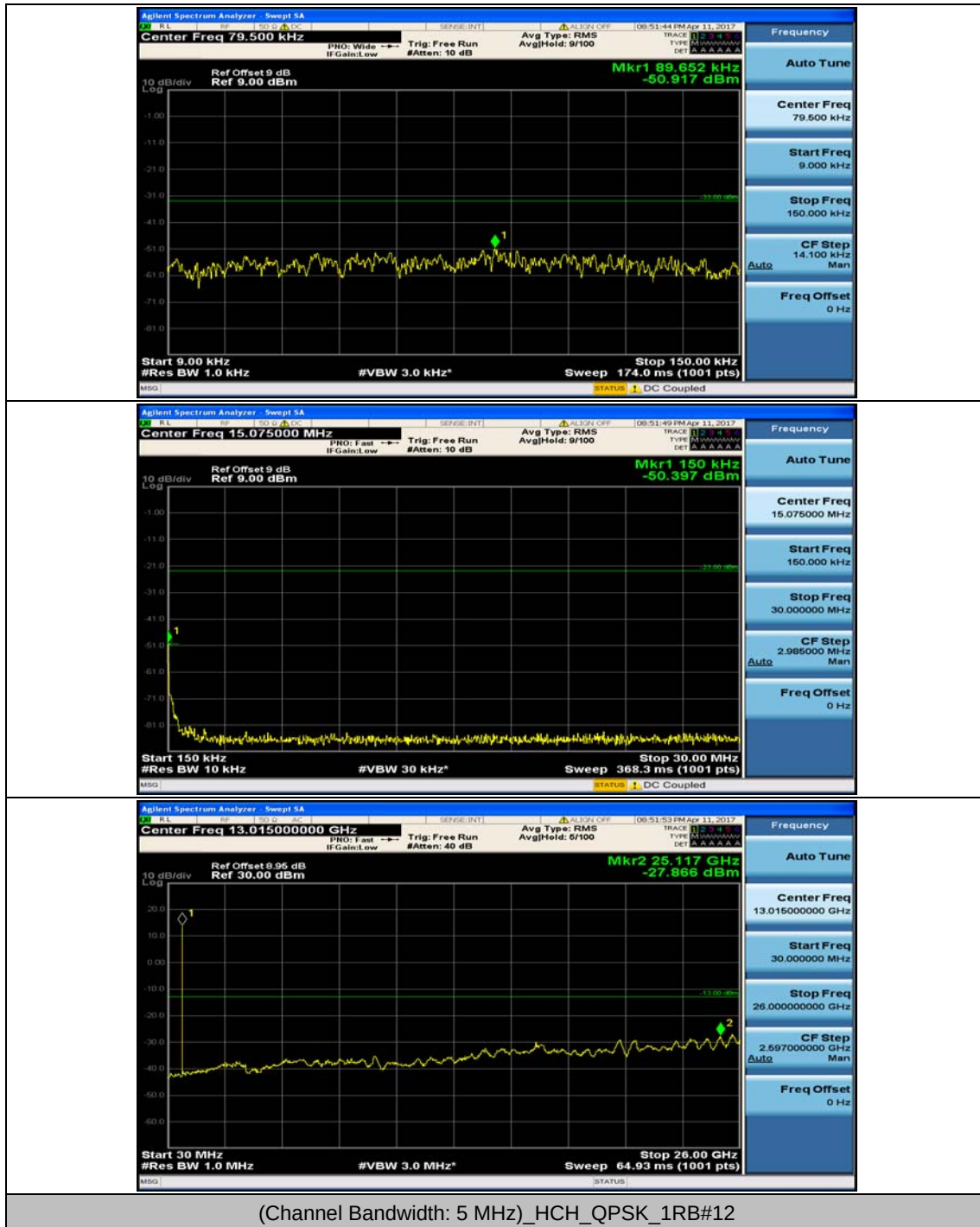


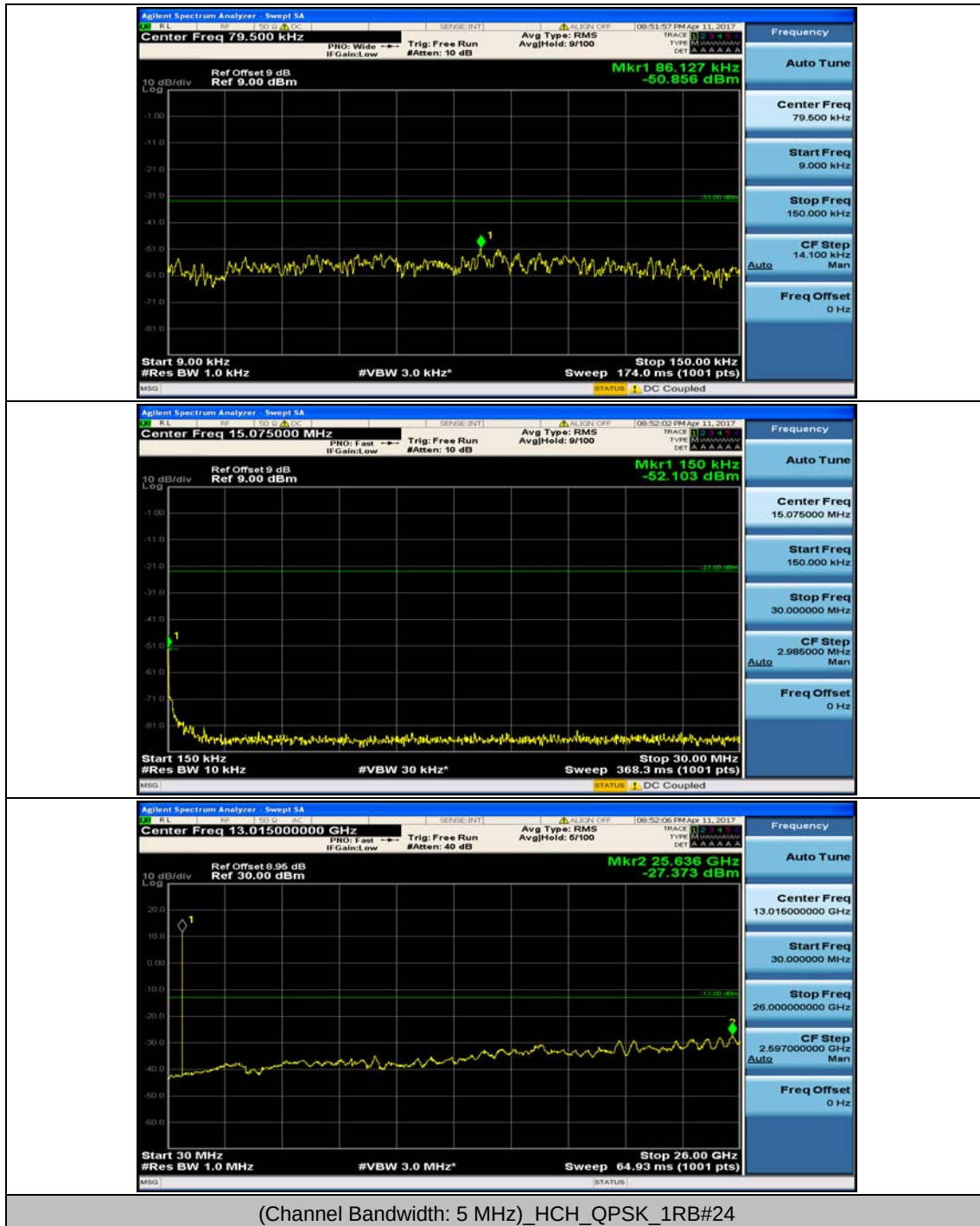


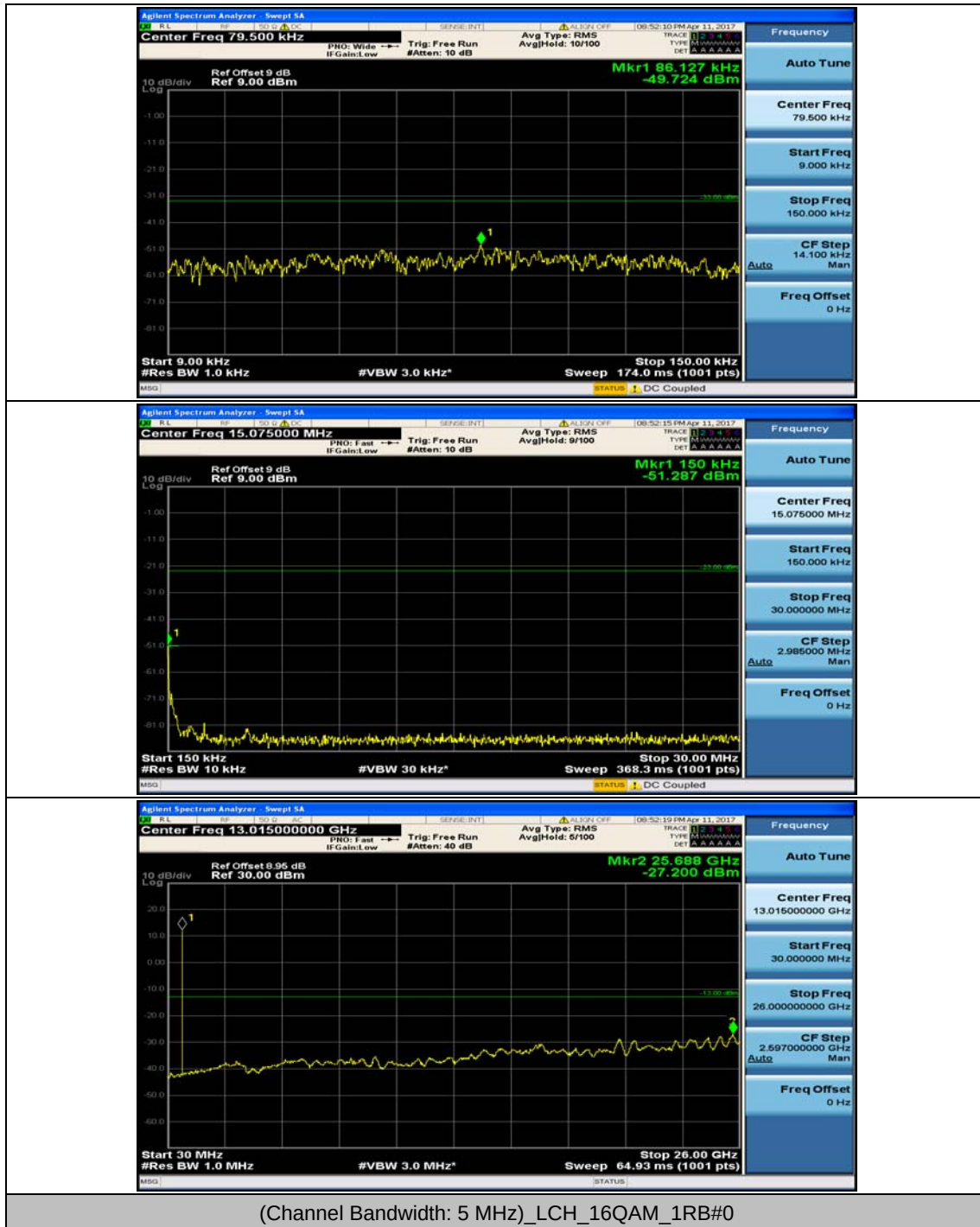


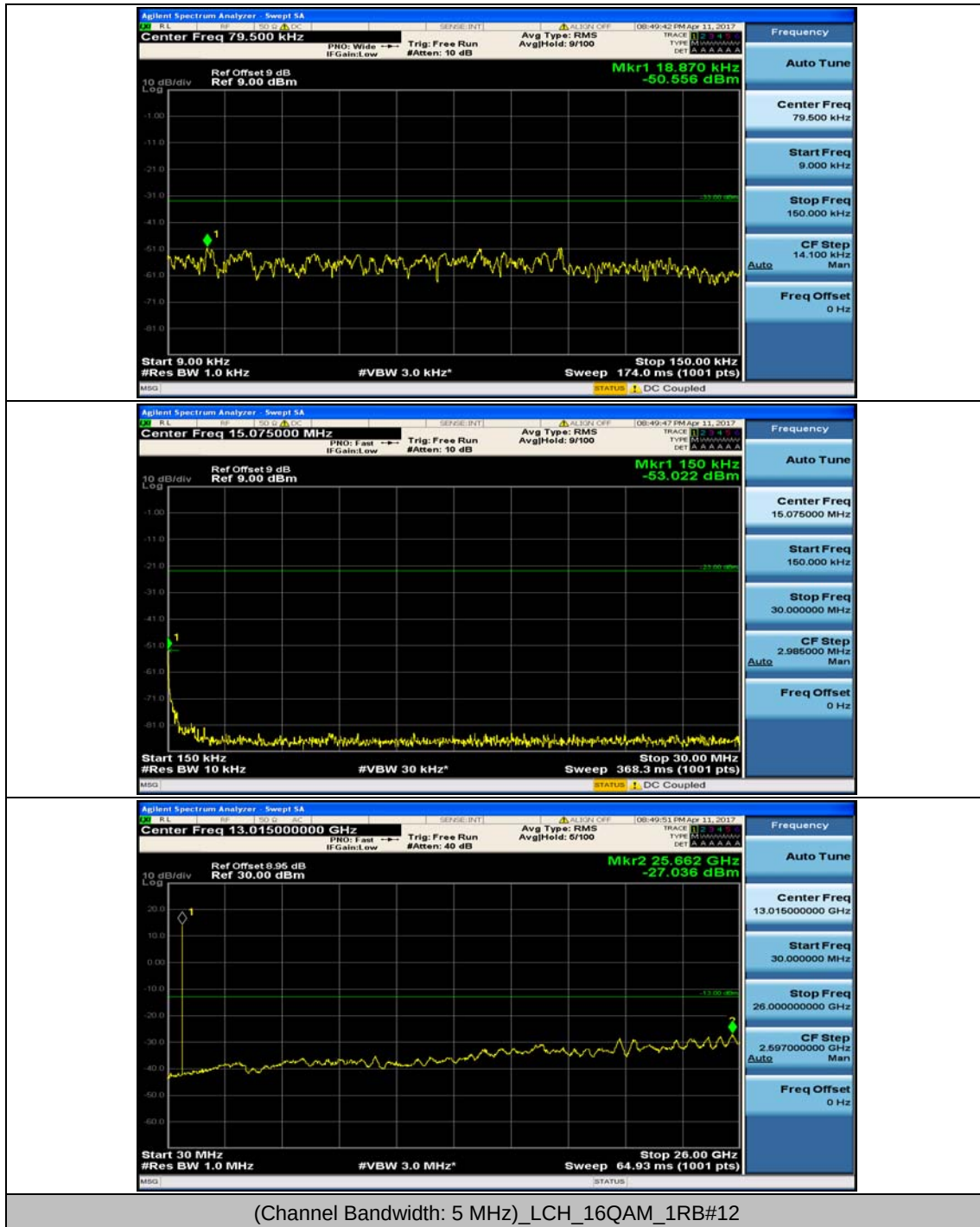


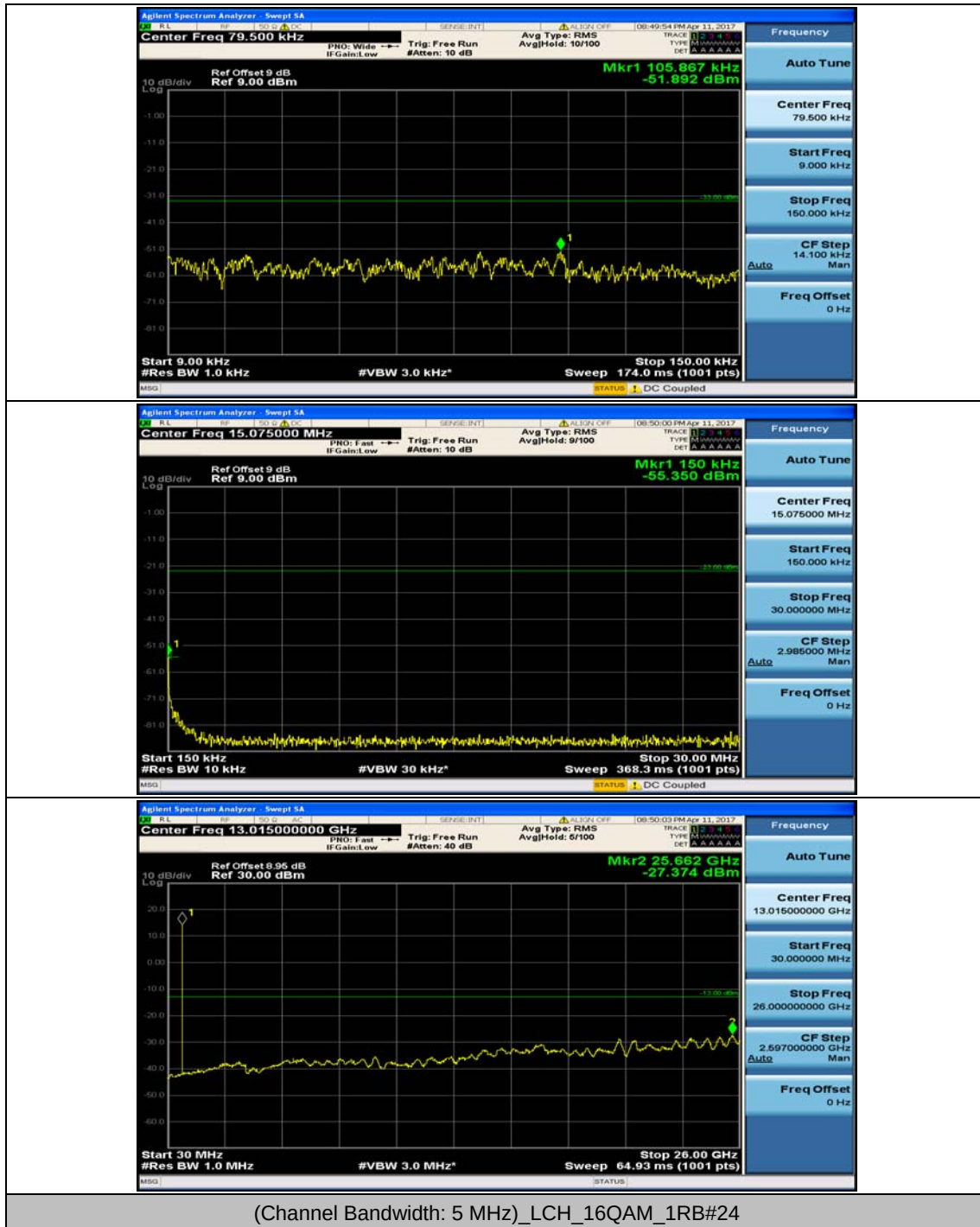


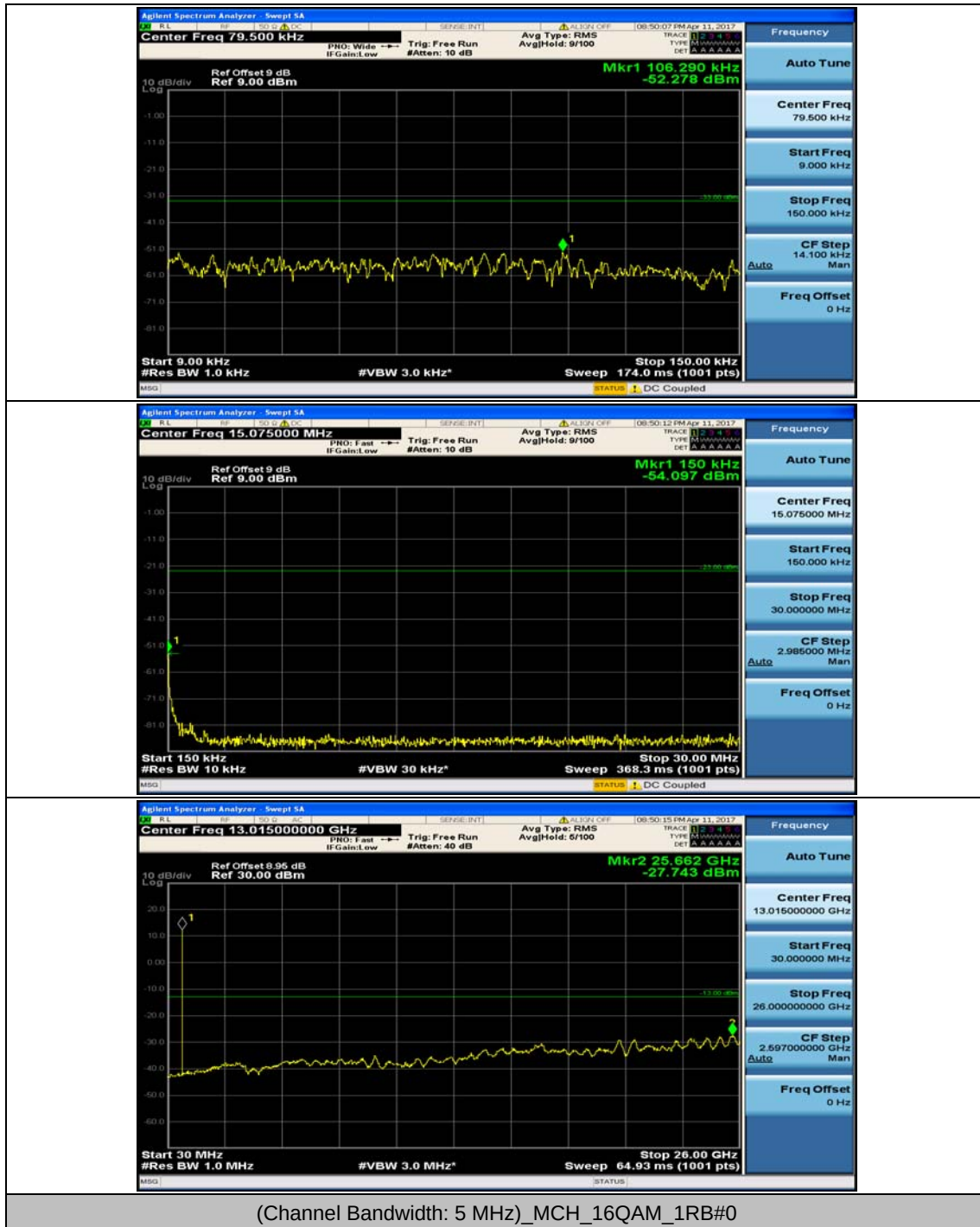


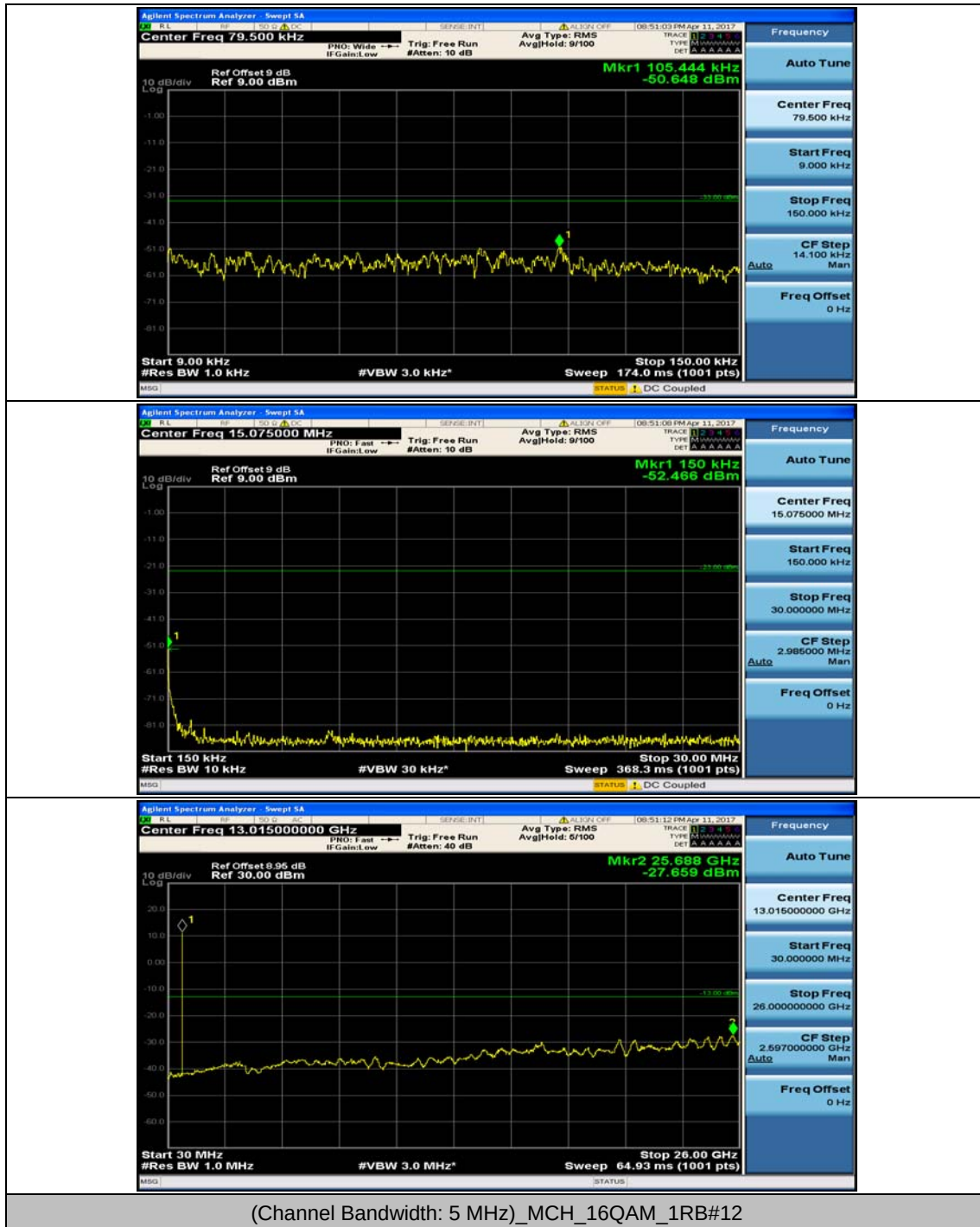


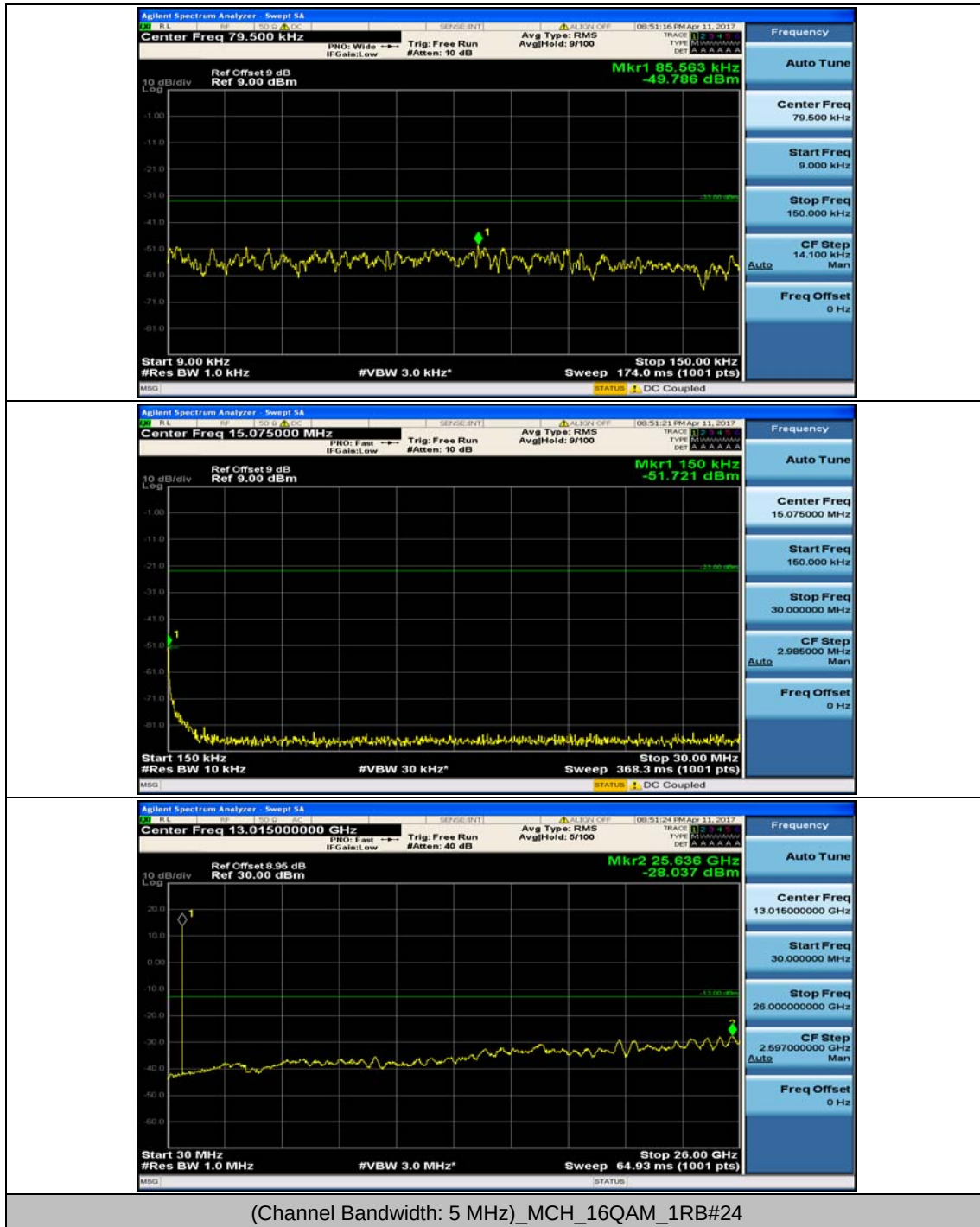


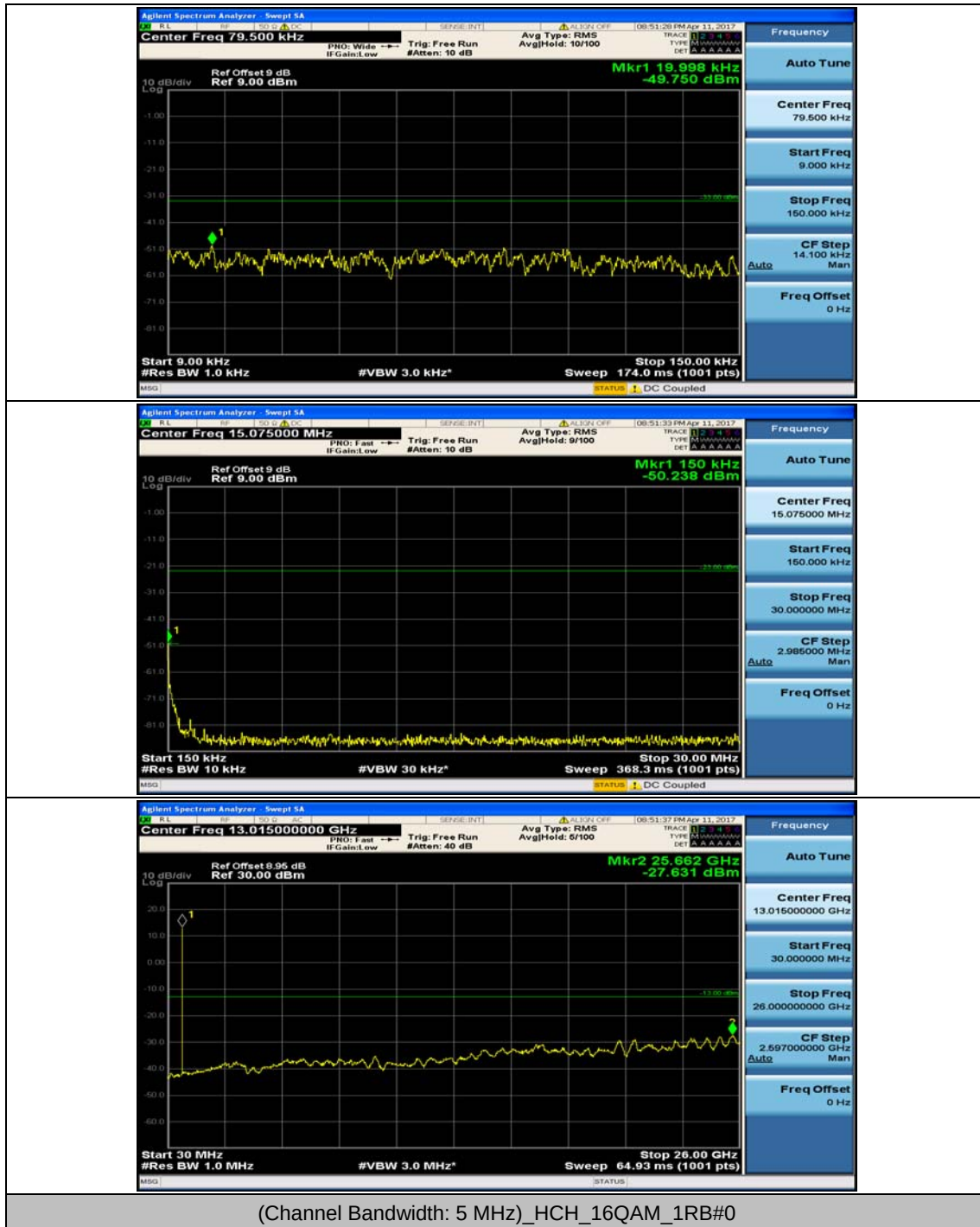


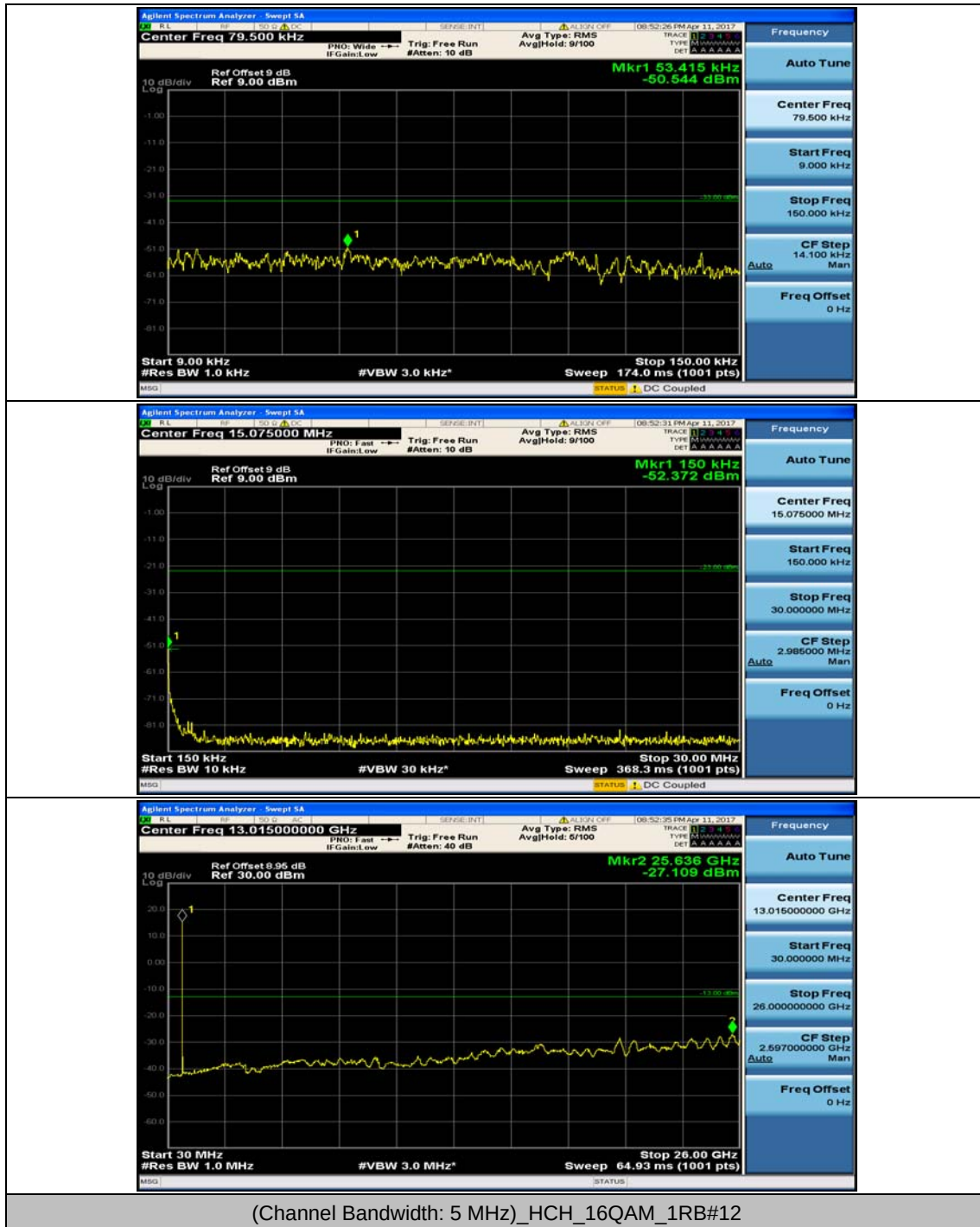


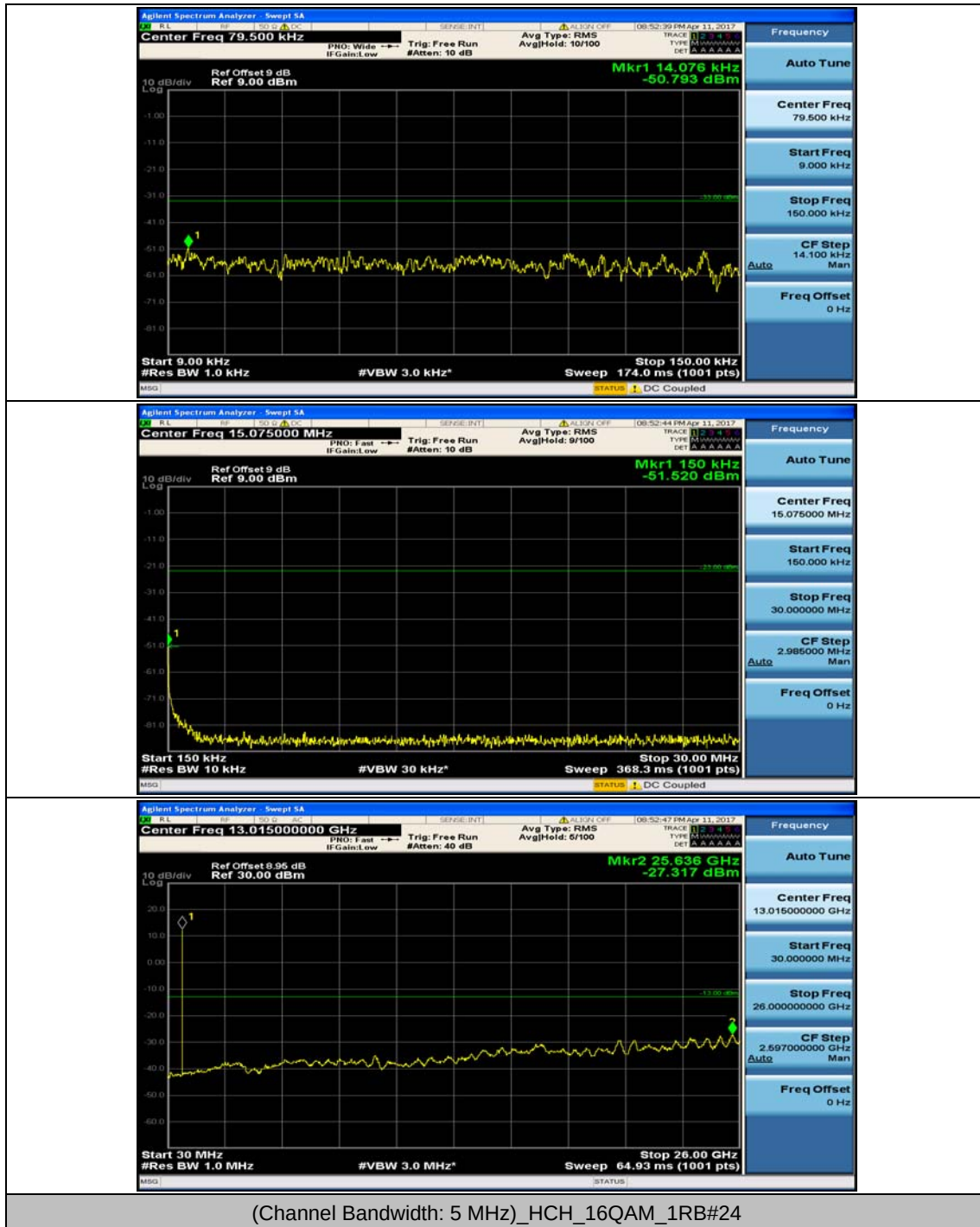


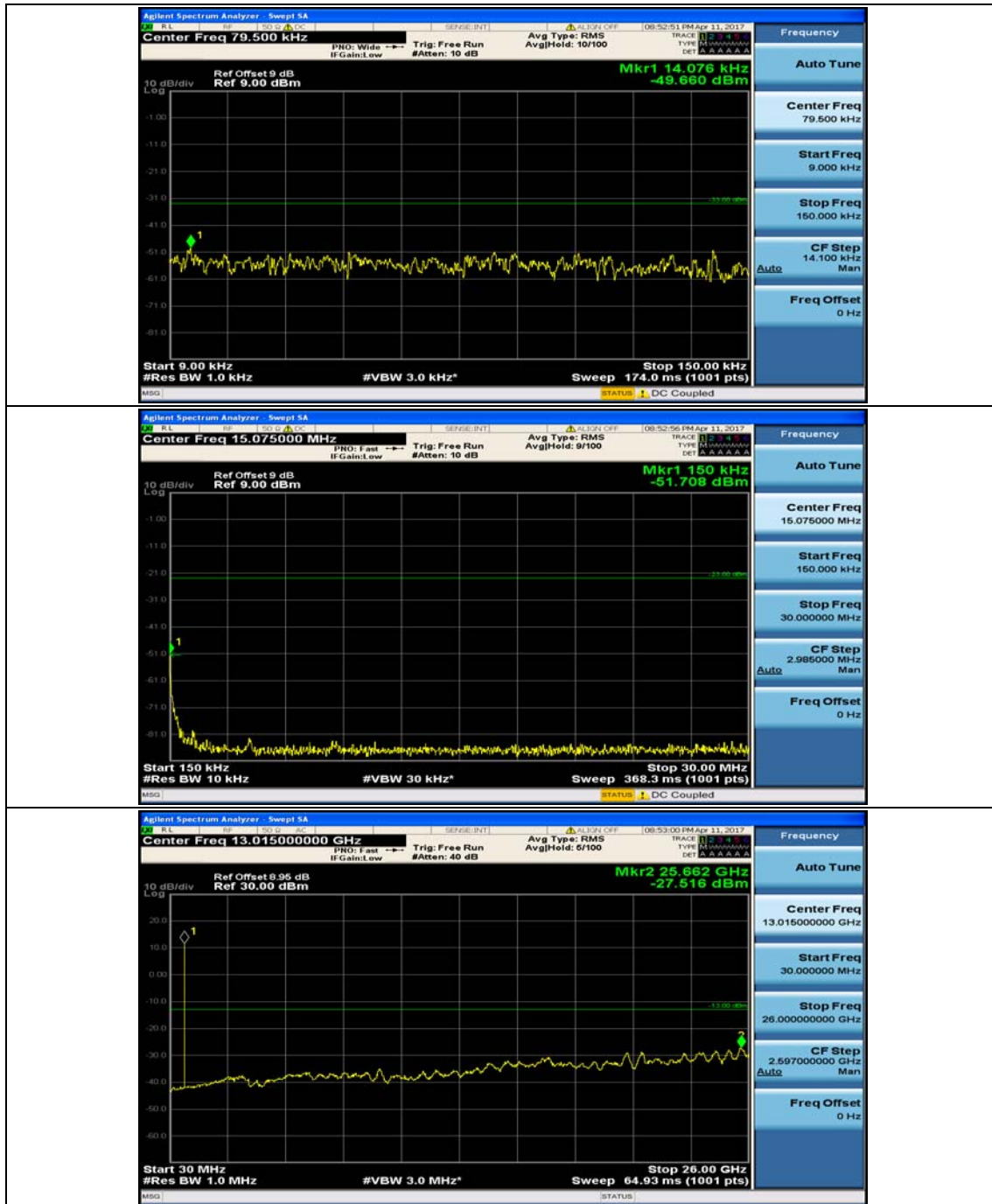




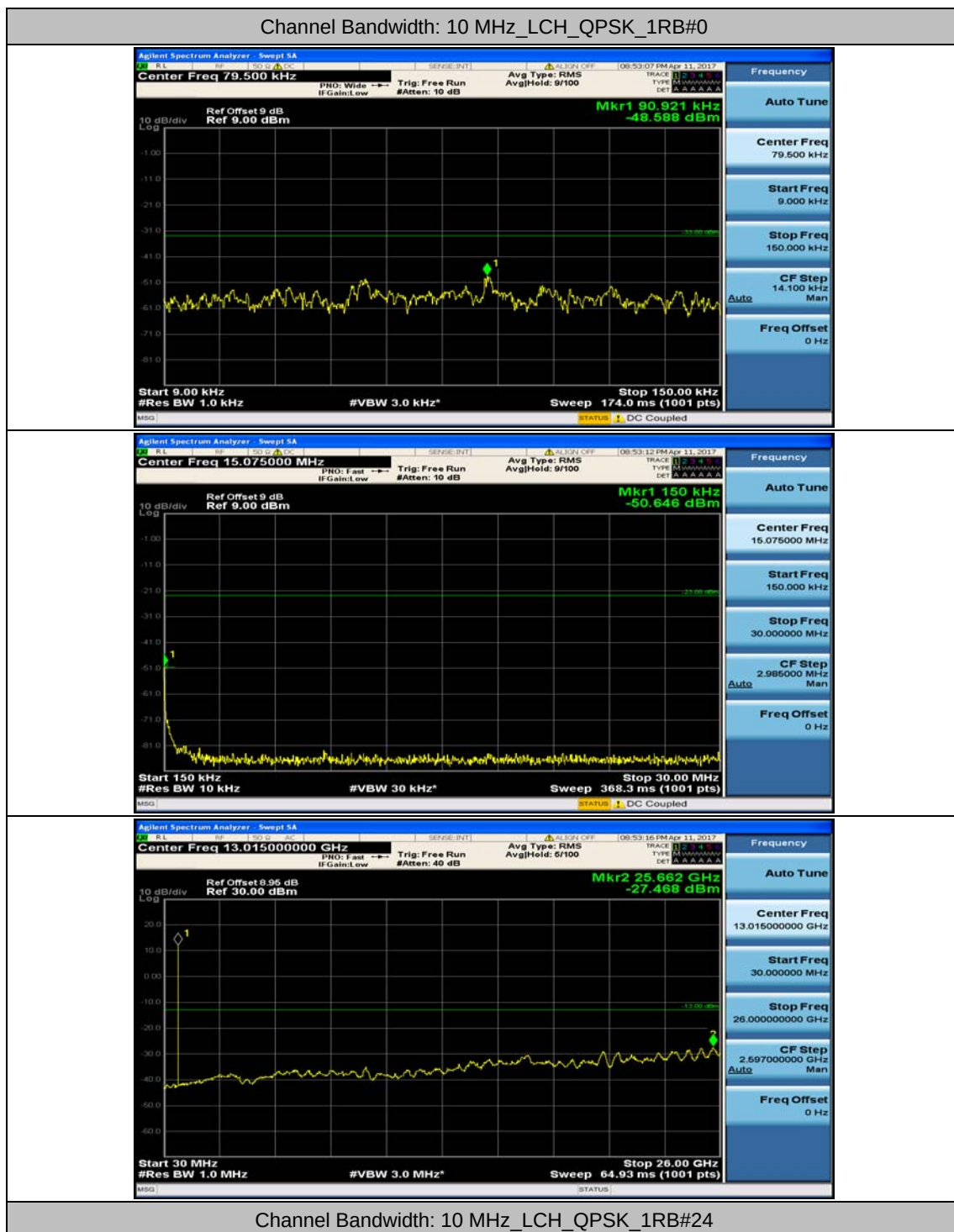


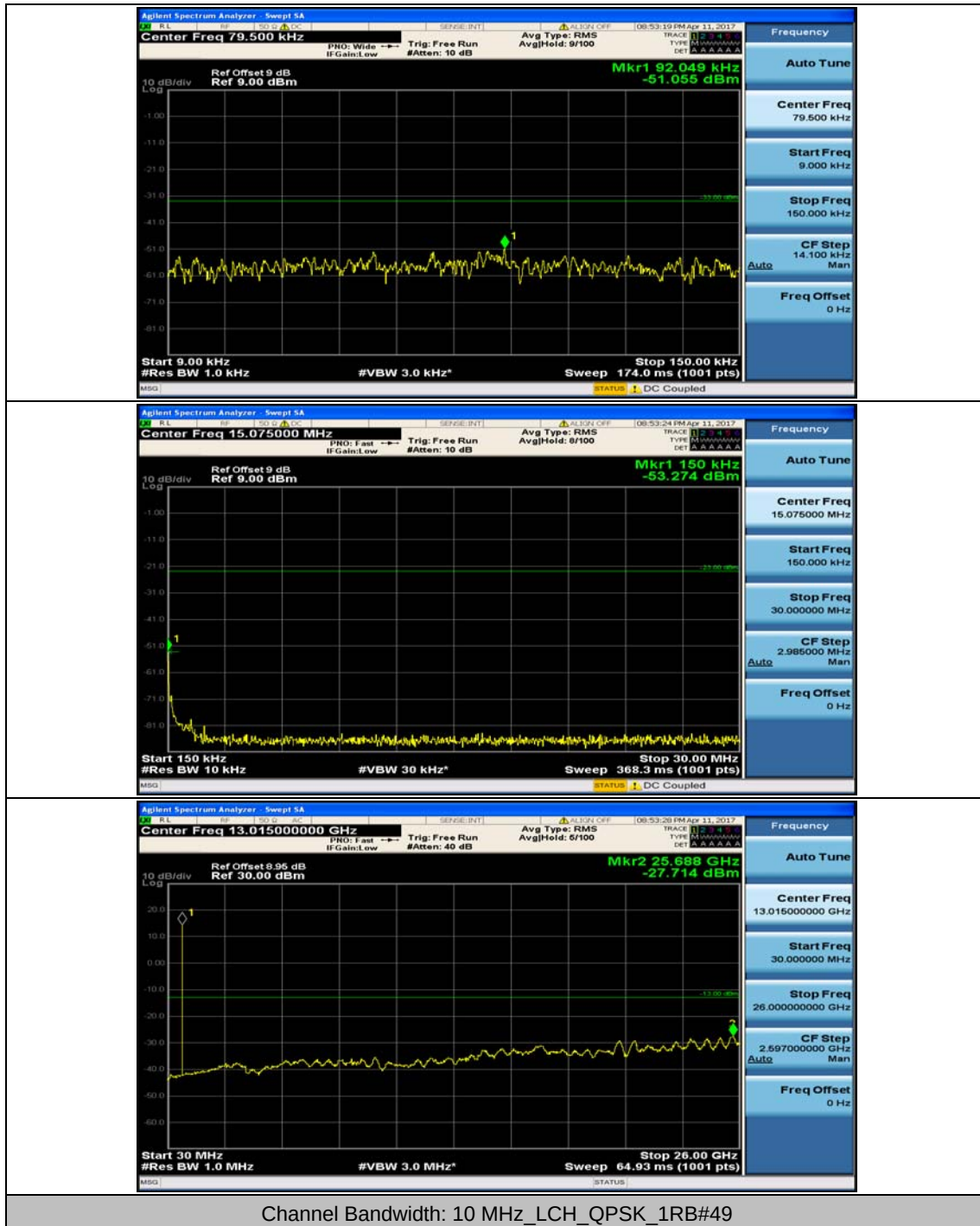


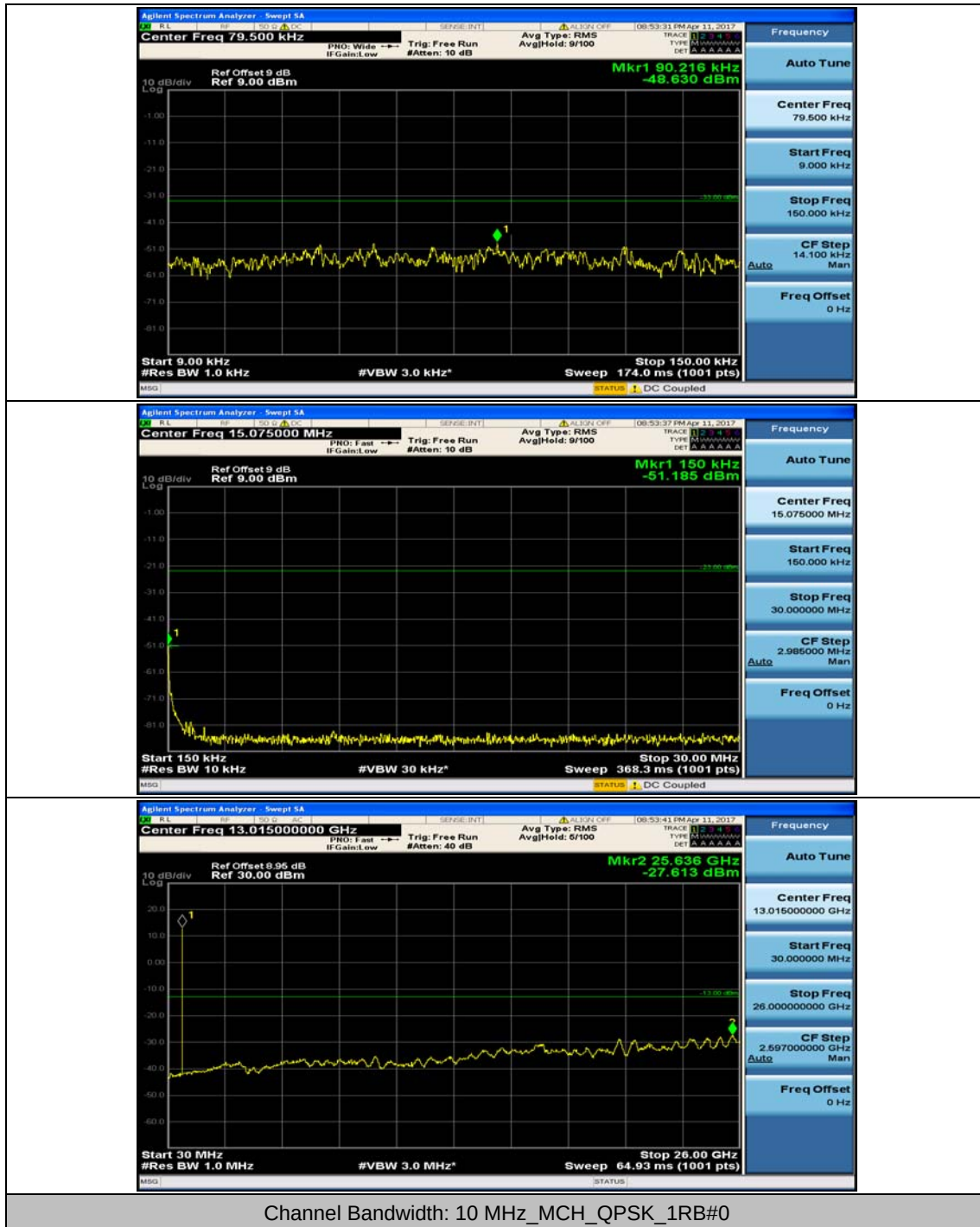


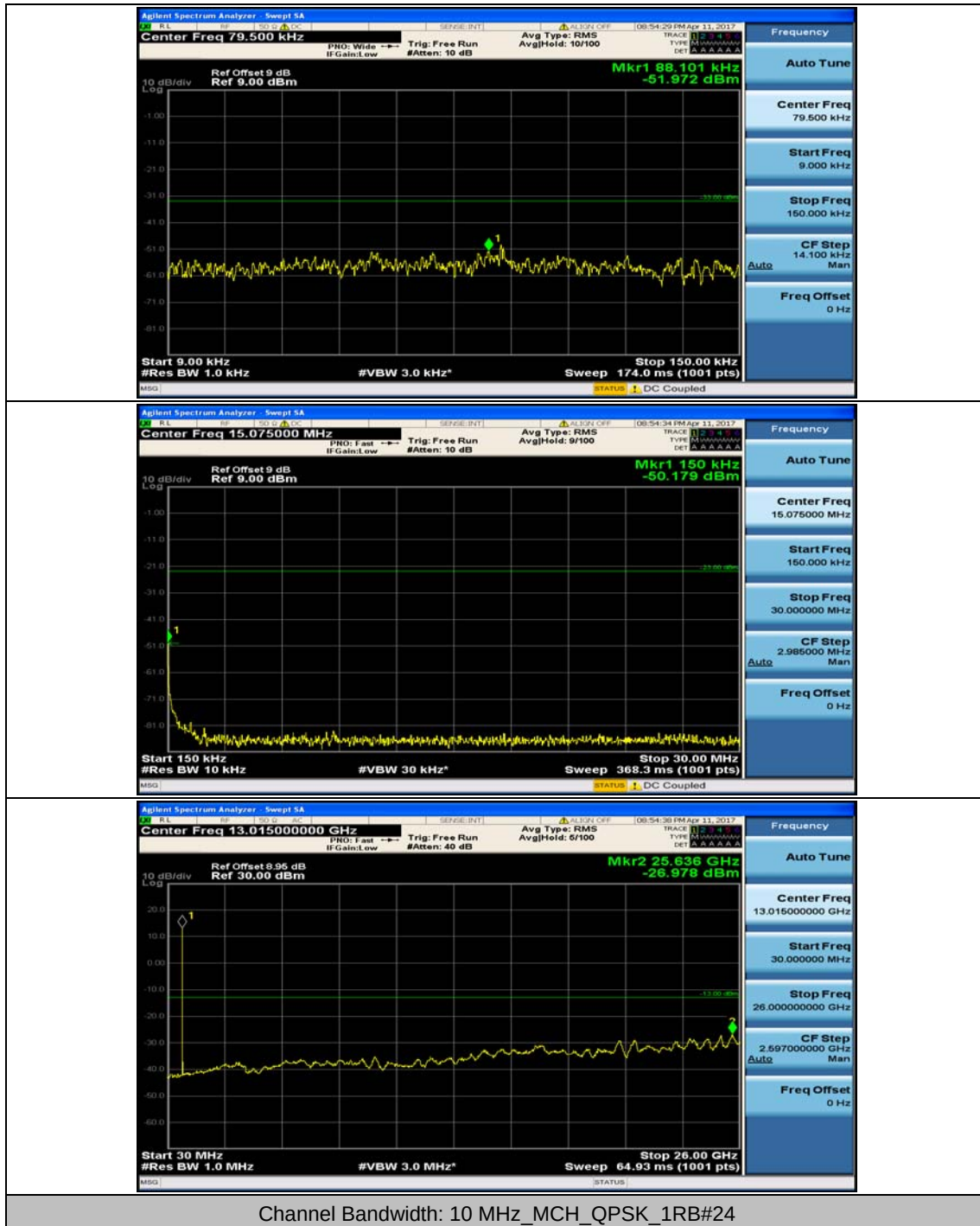


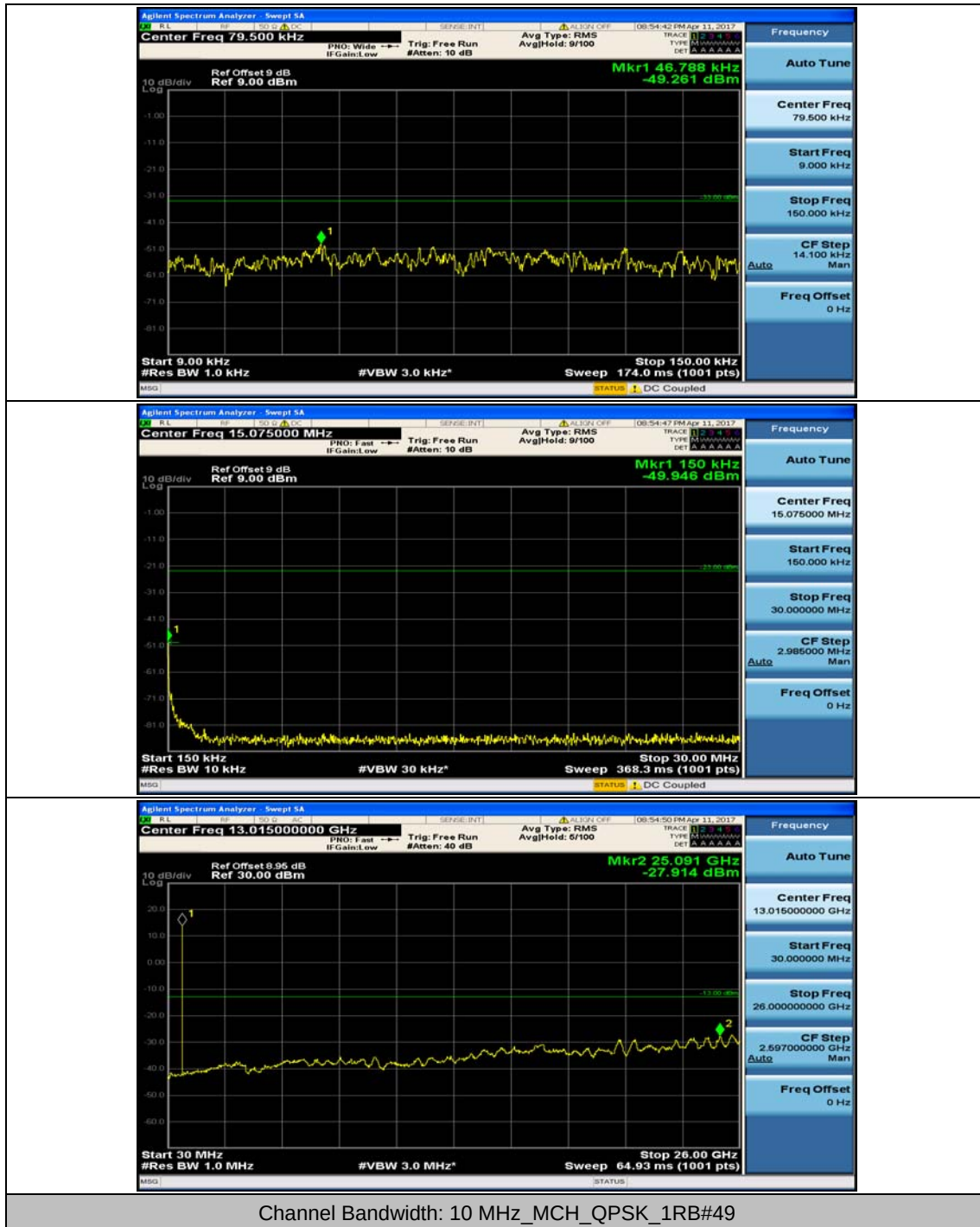
Channel Bandwidth: 10 MHz

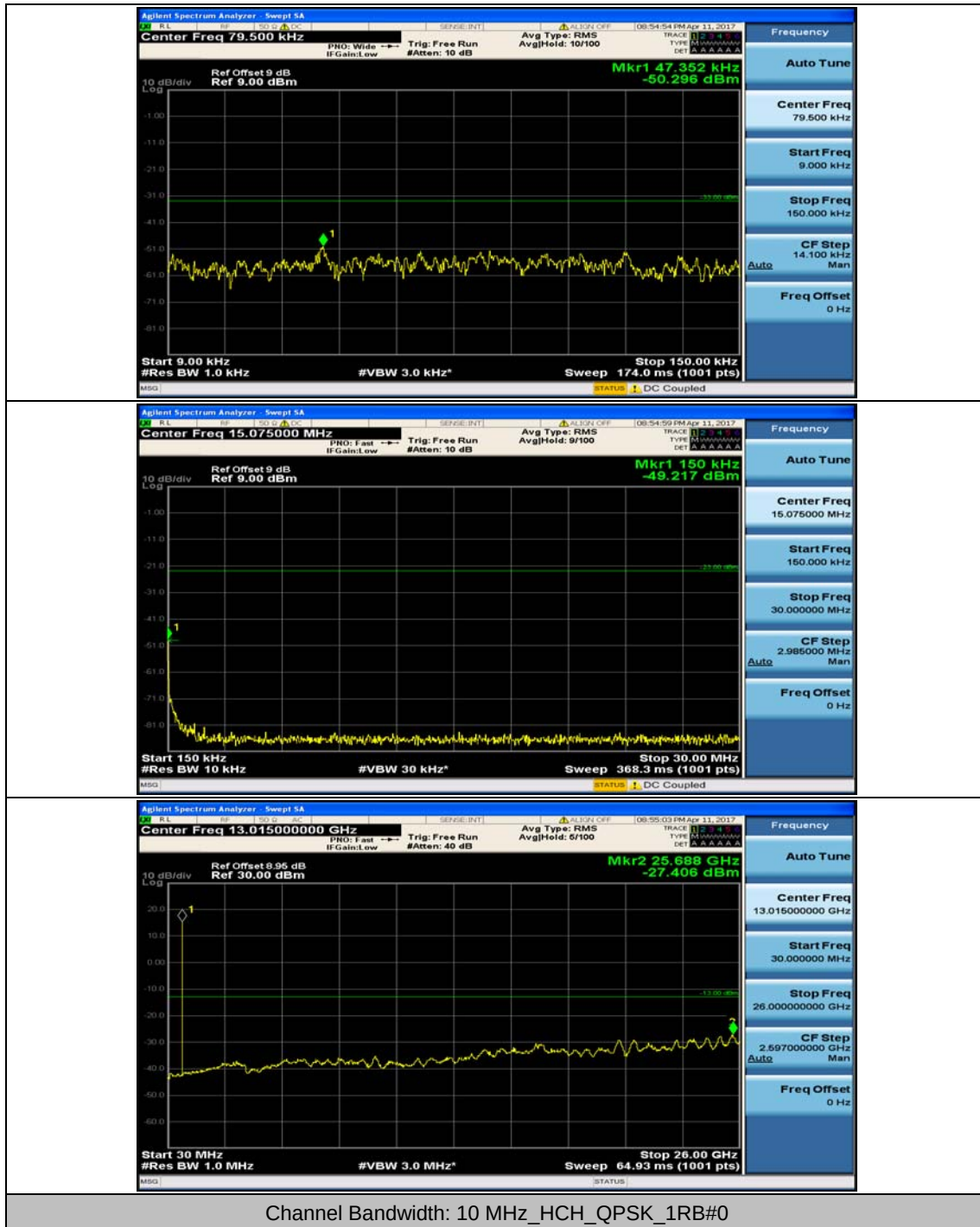


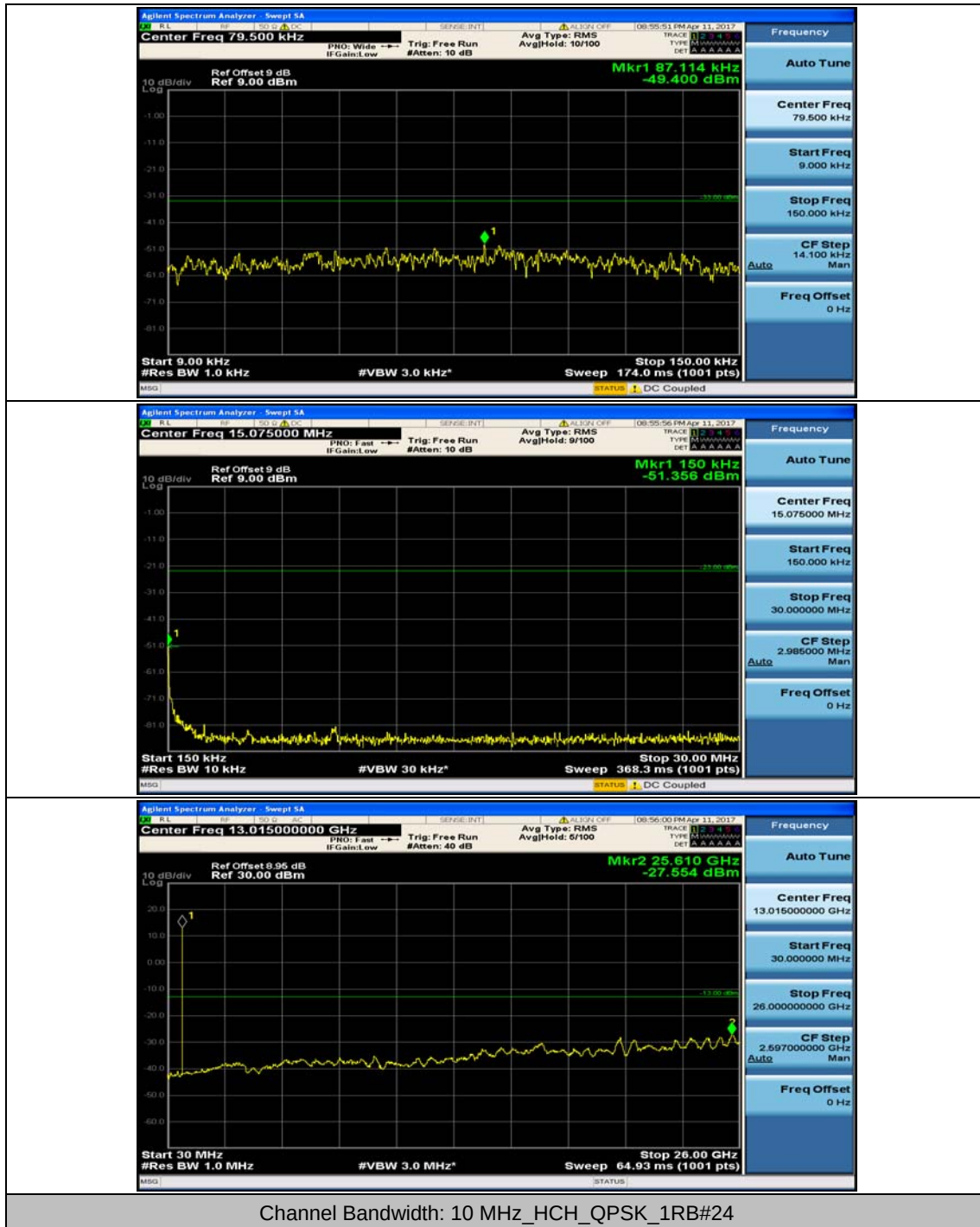


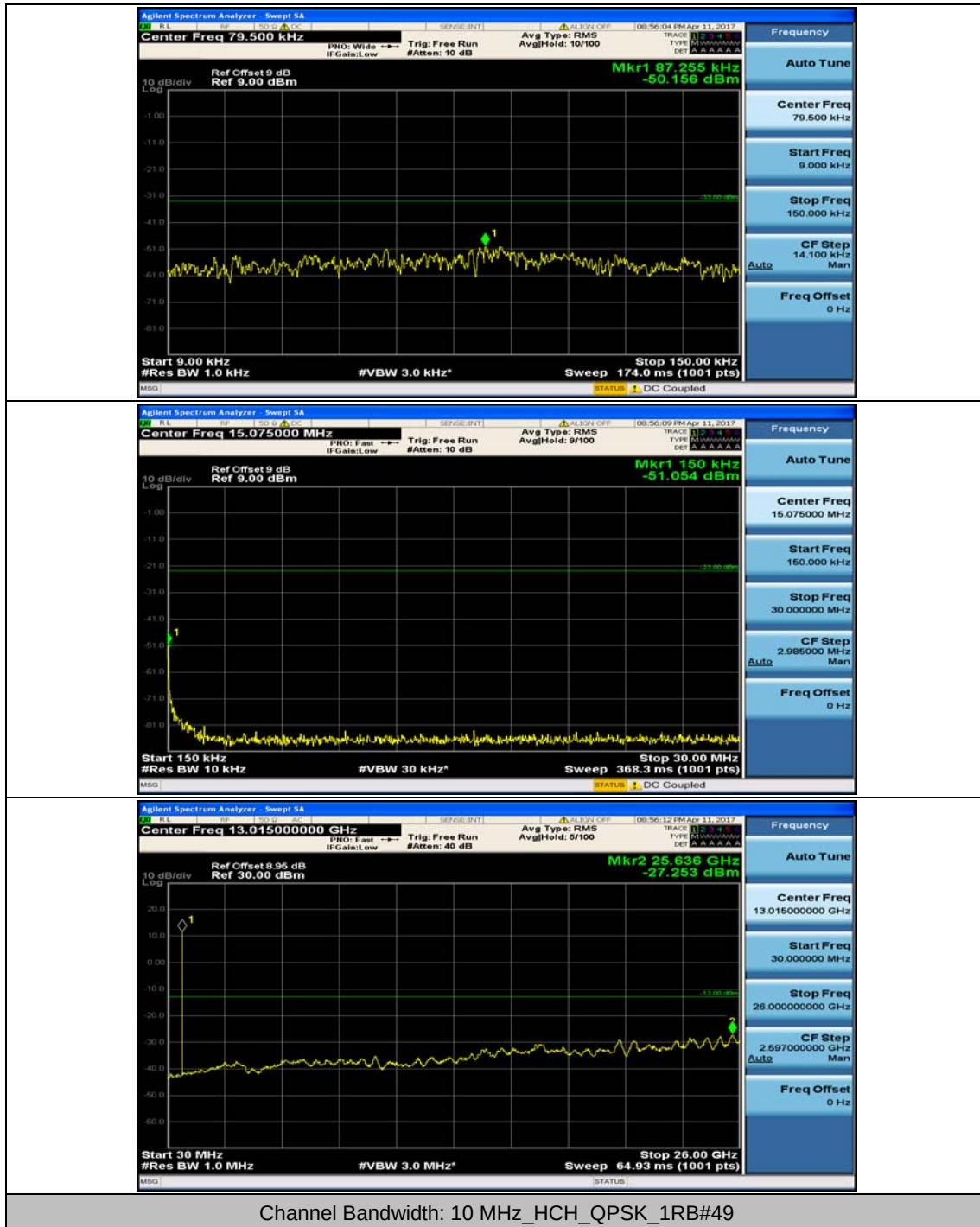


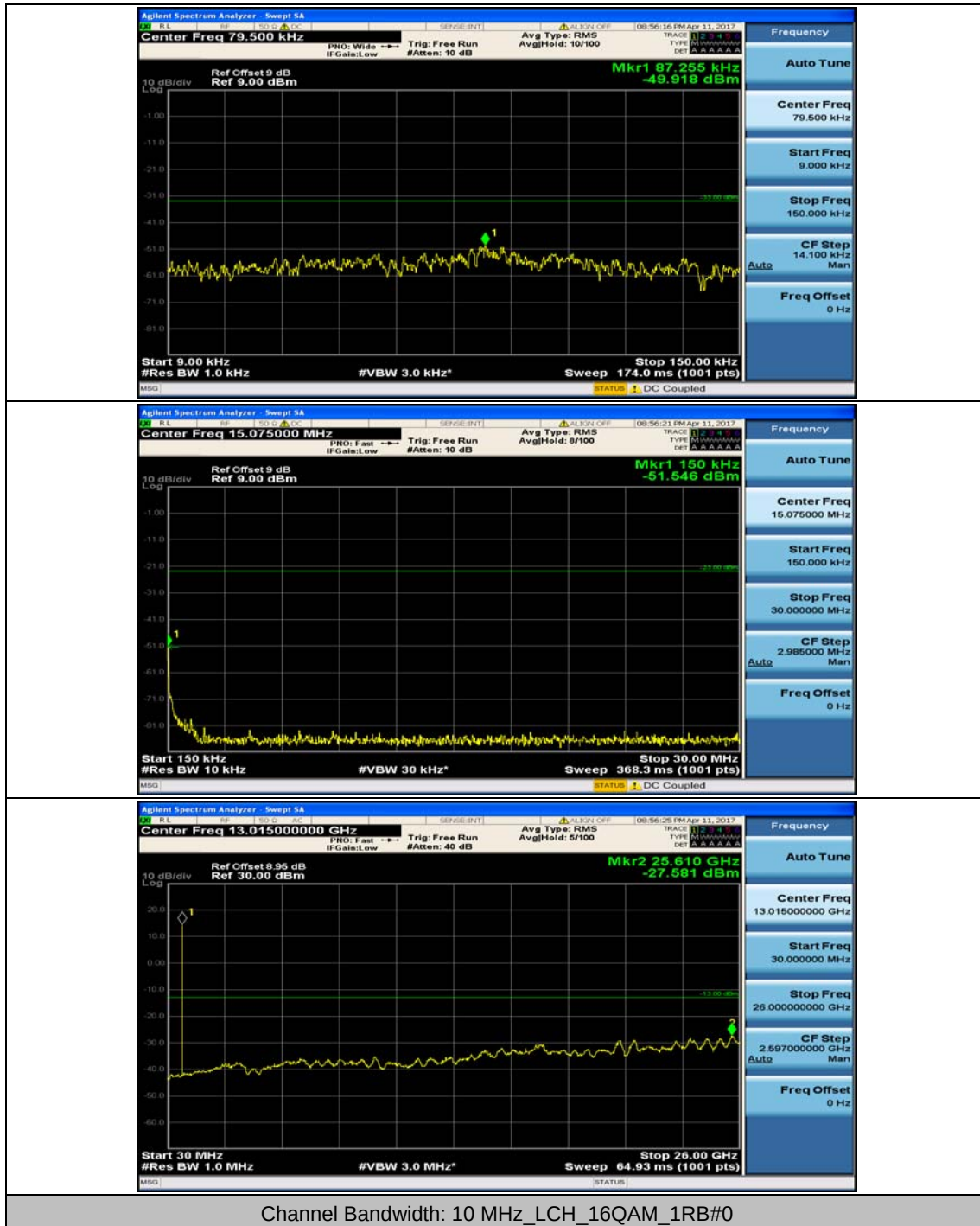


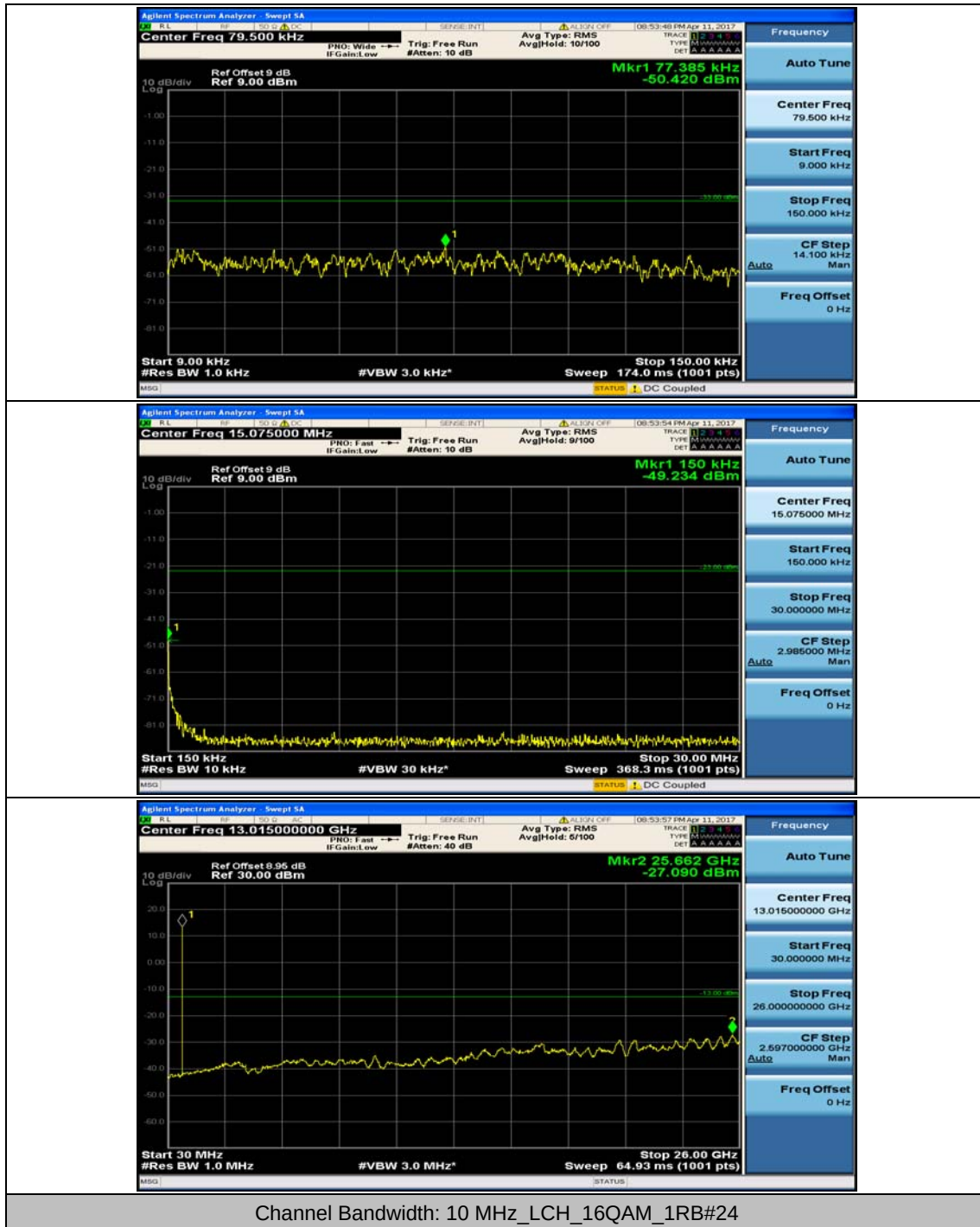


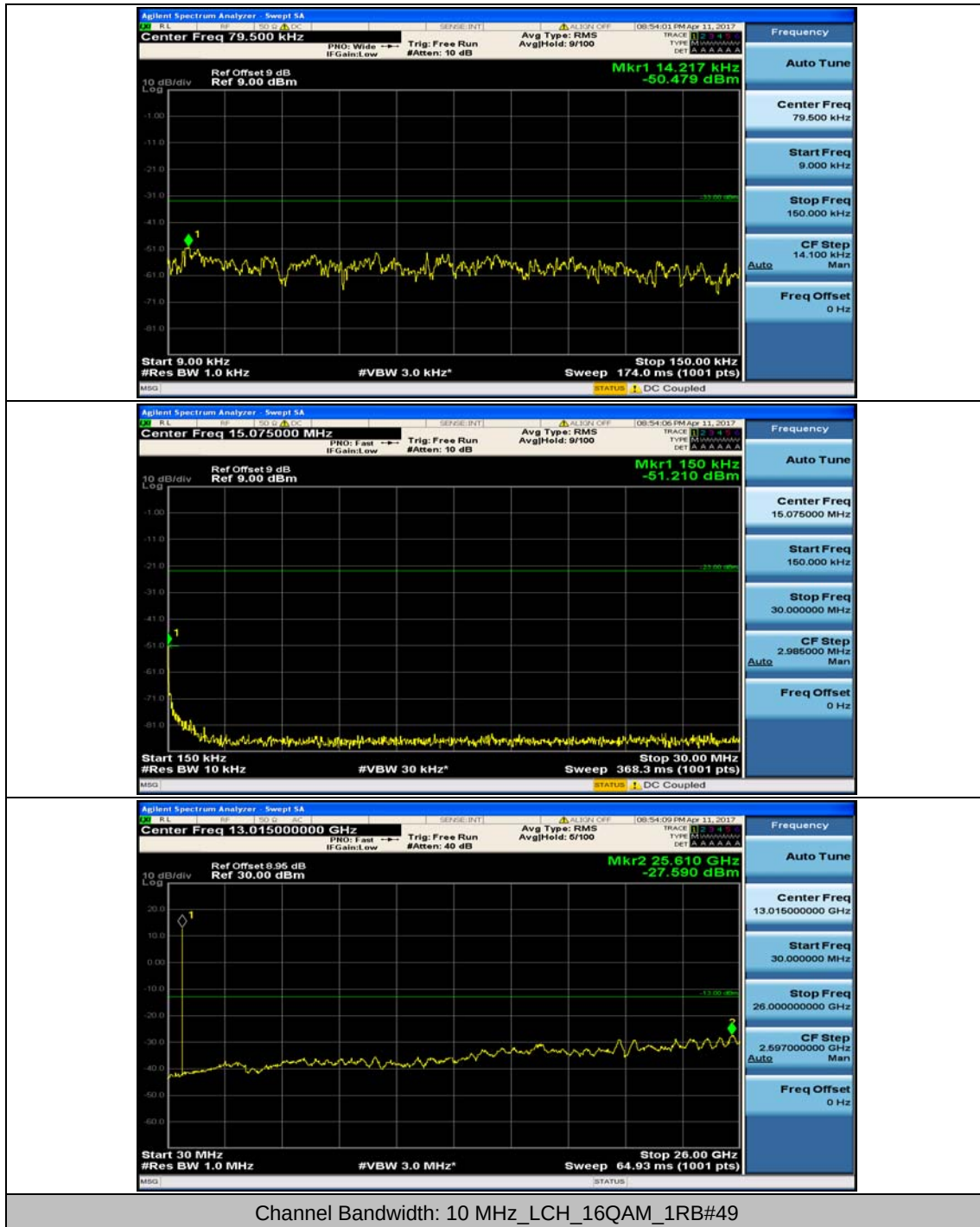


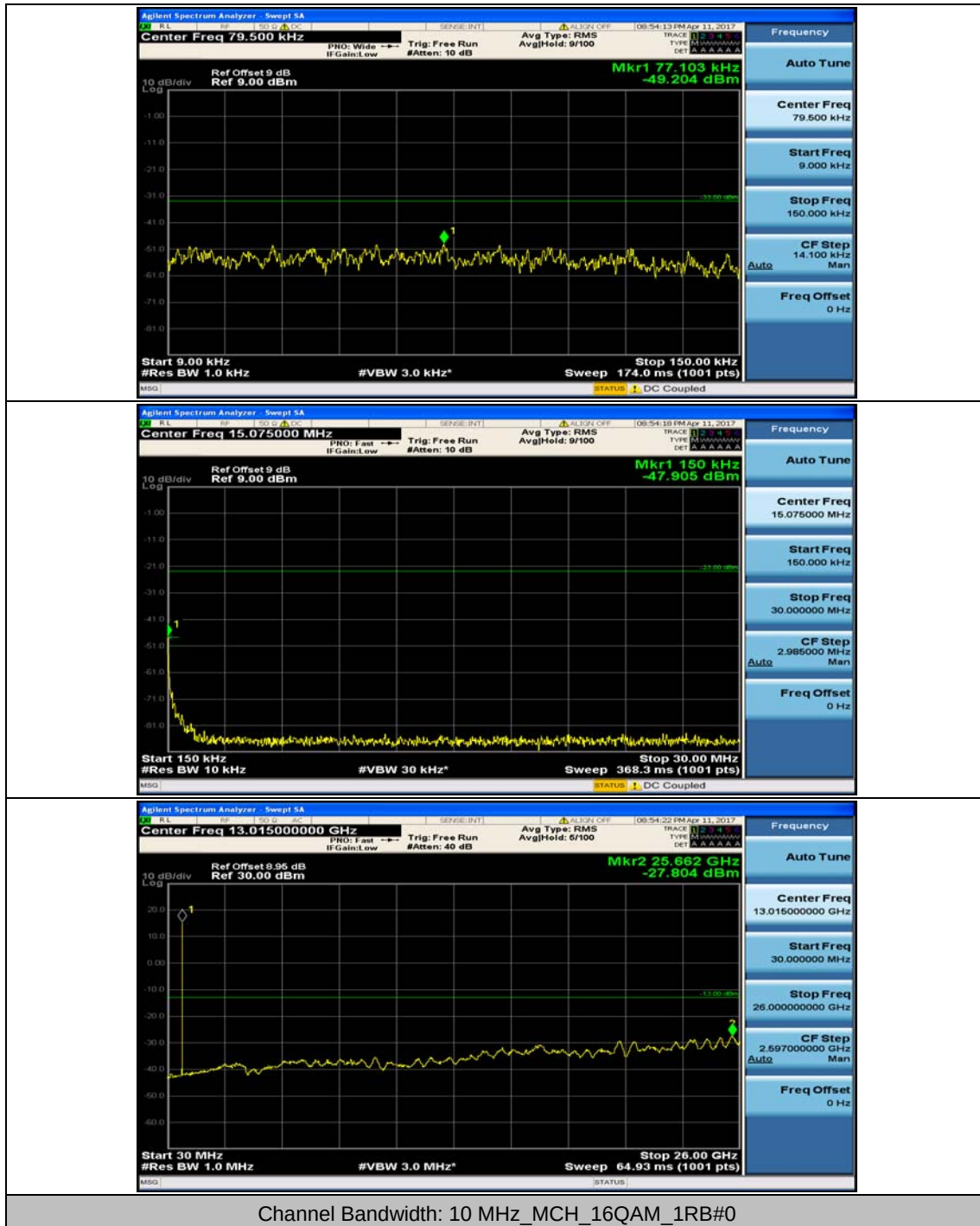


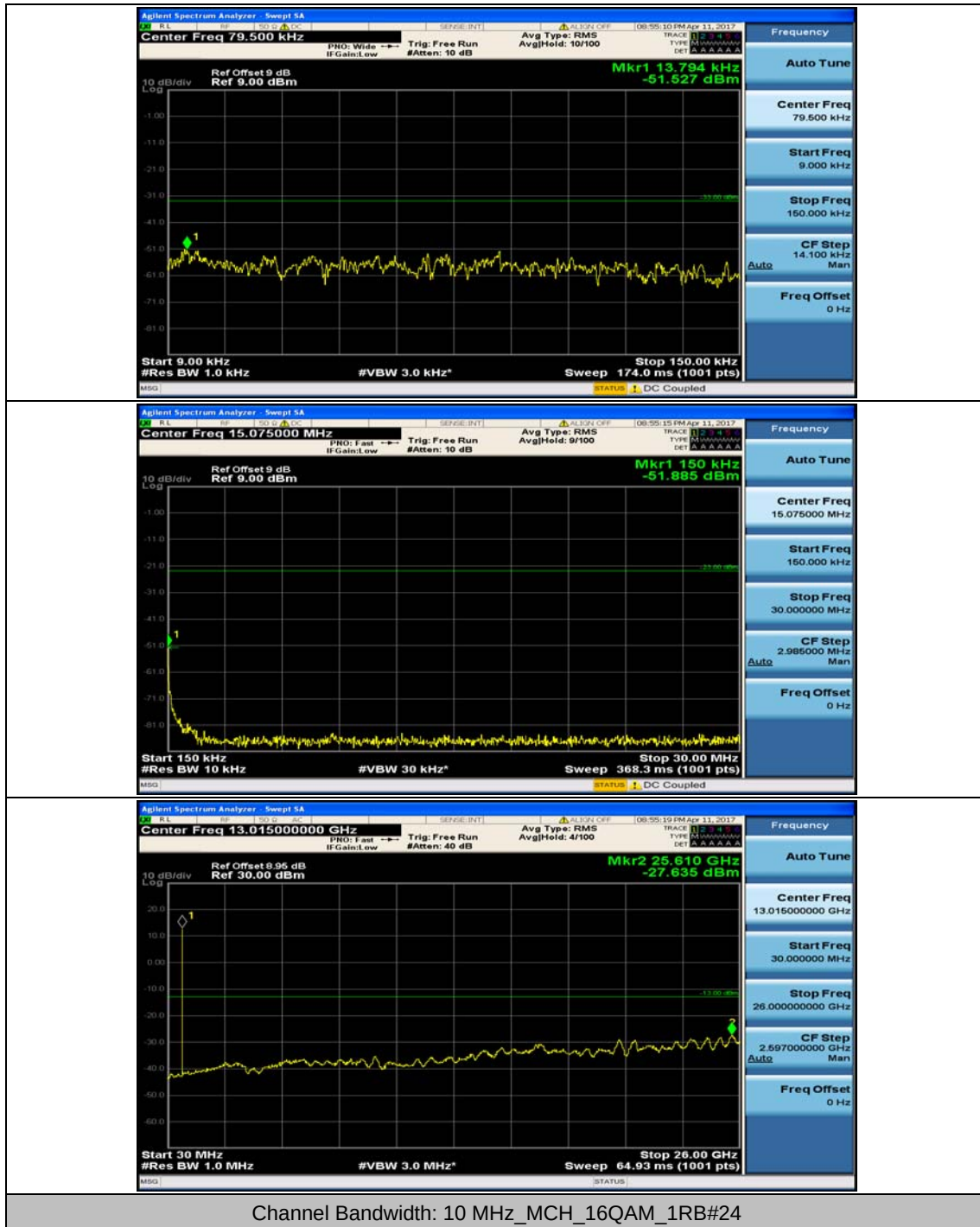


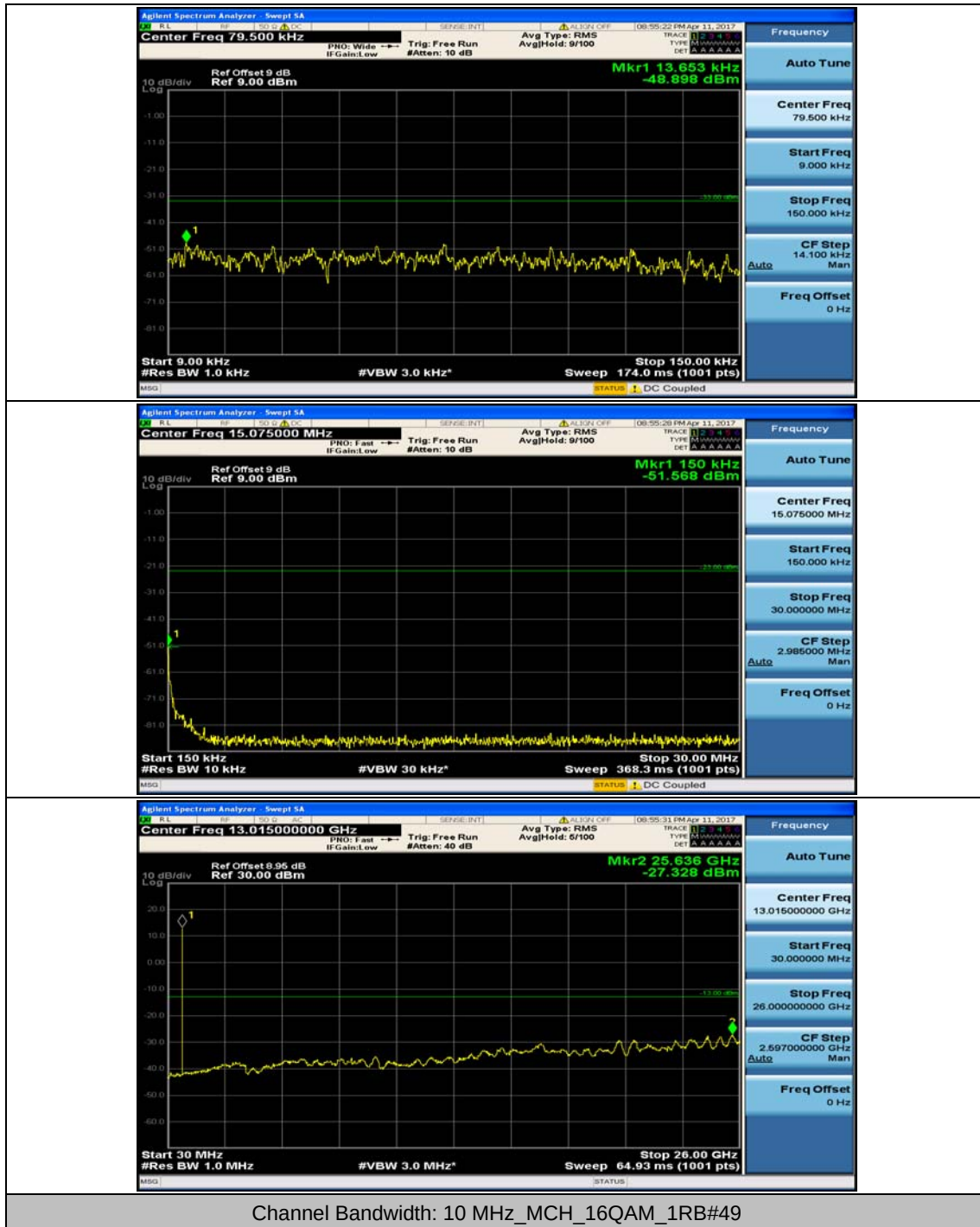


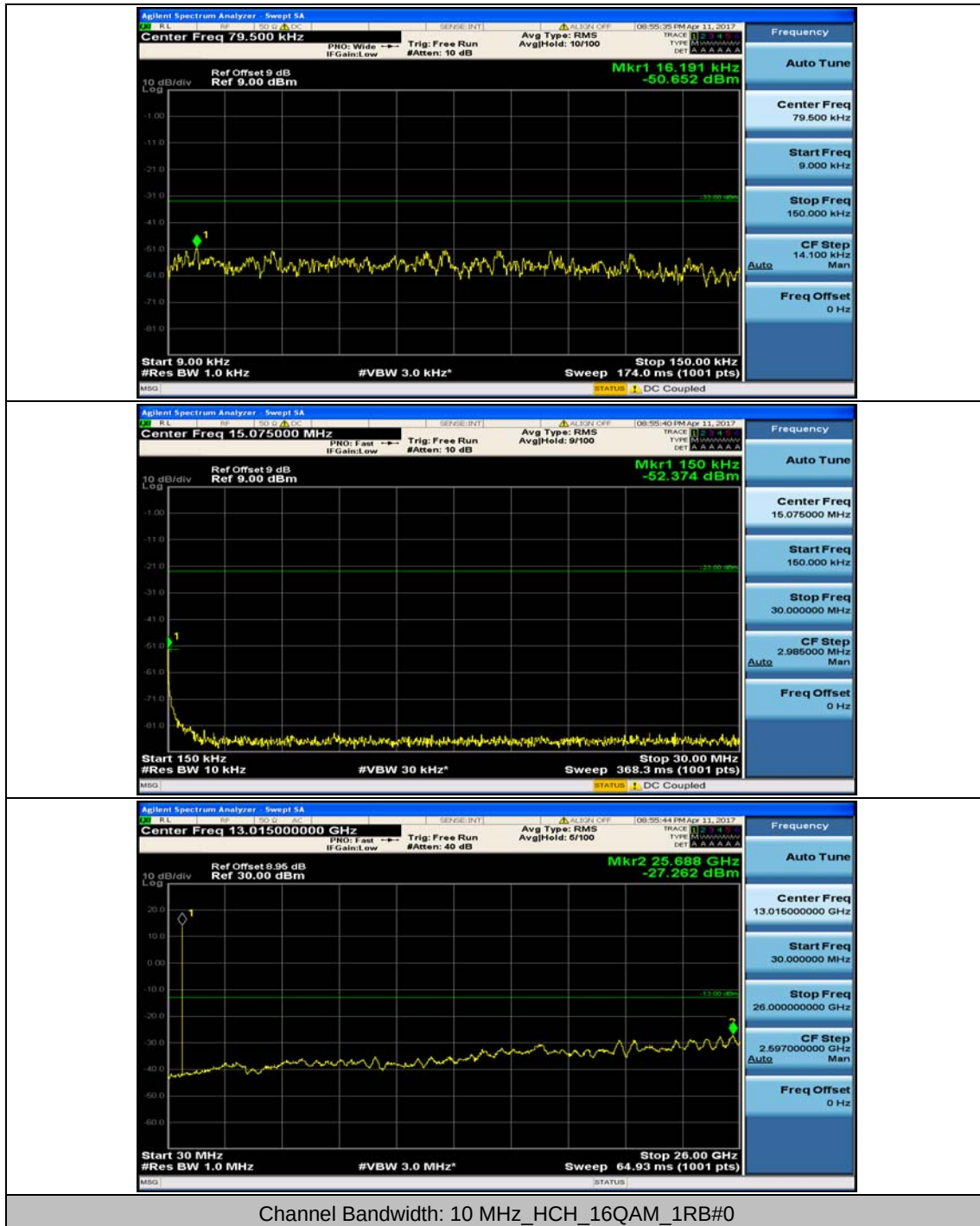


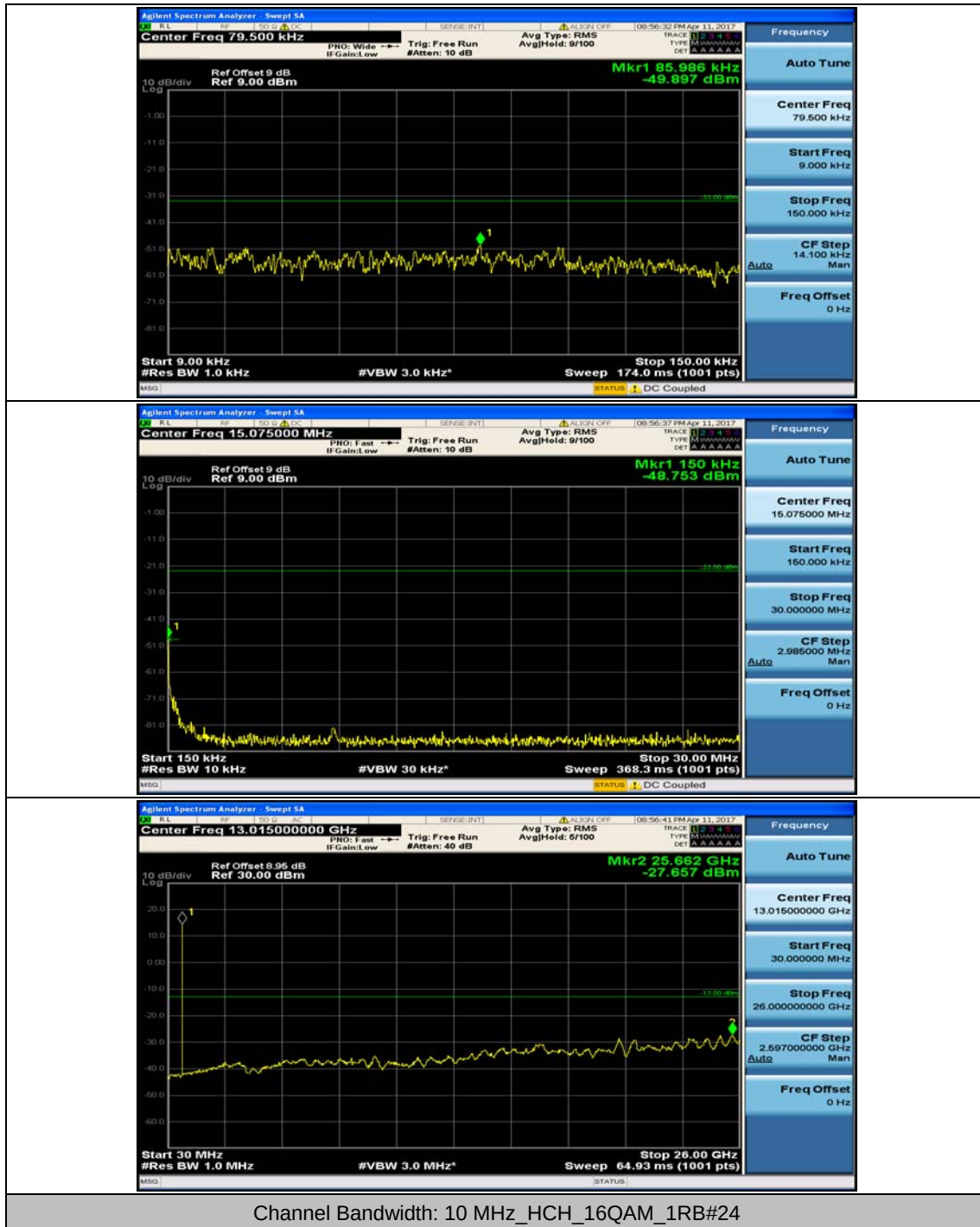


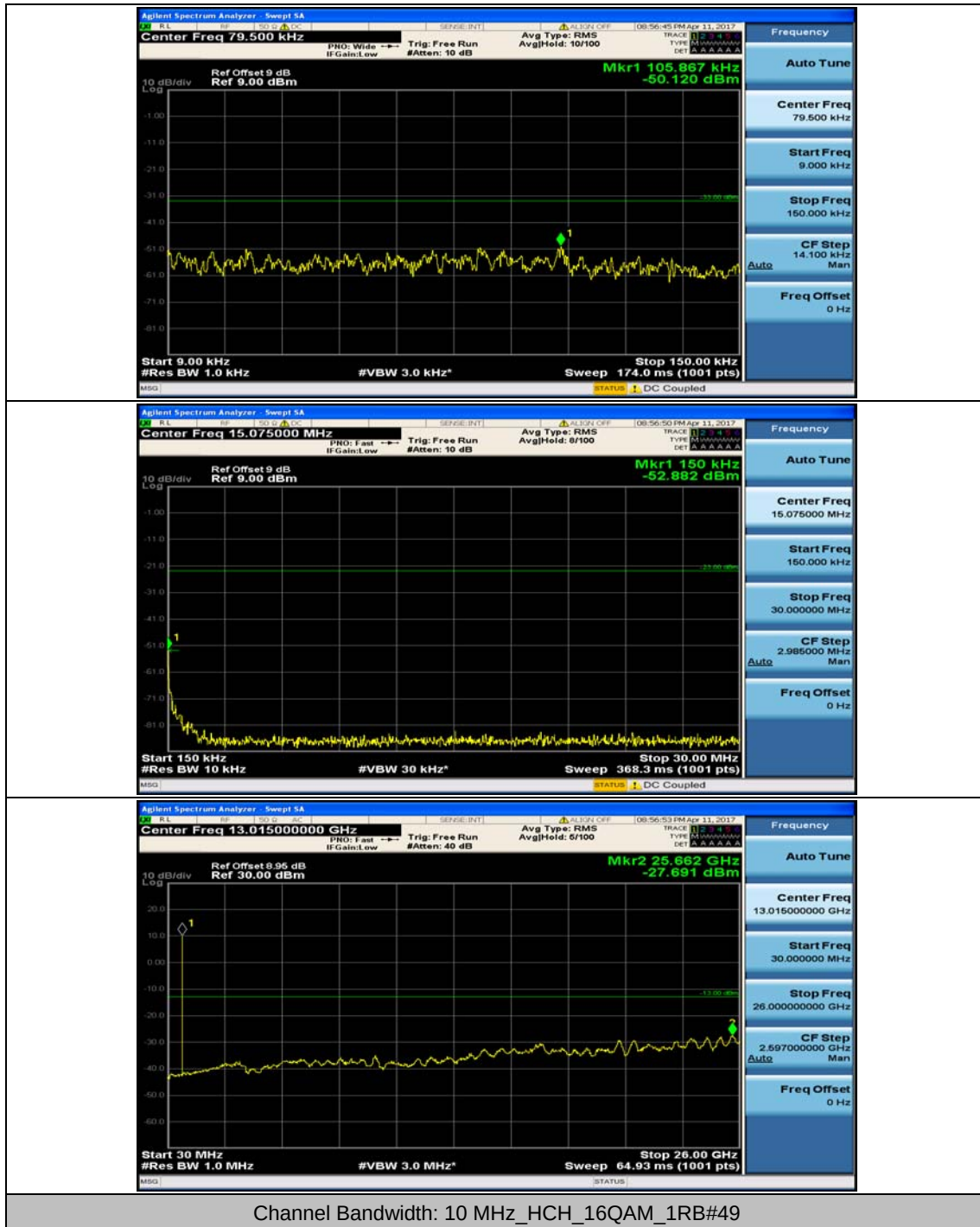


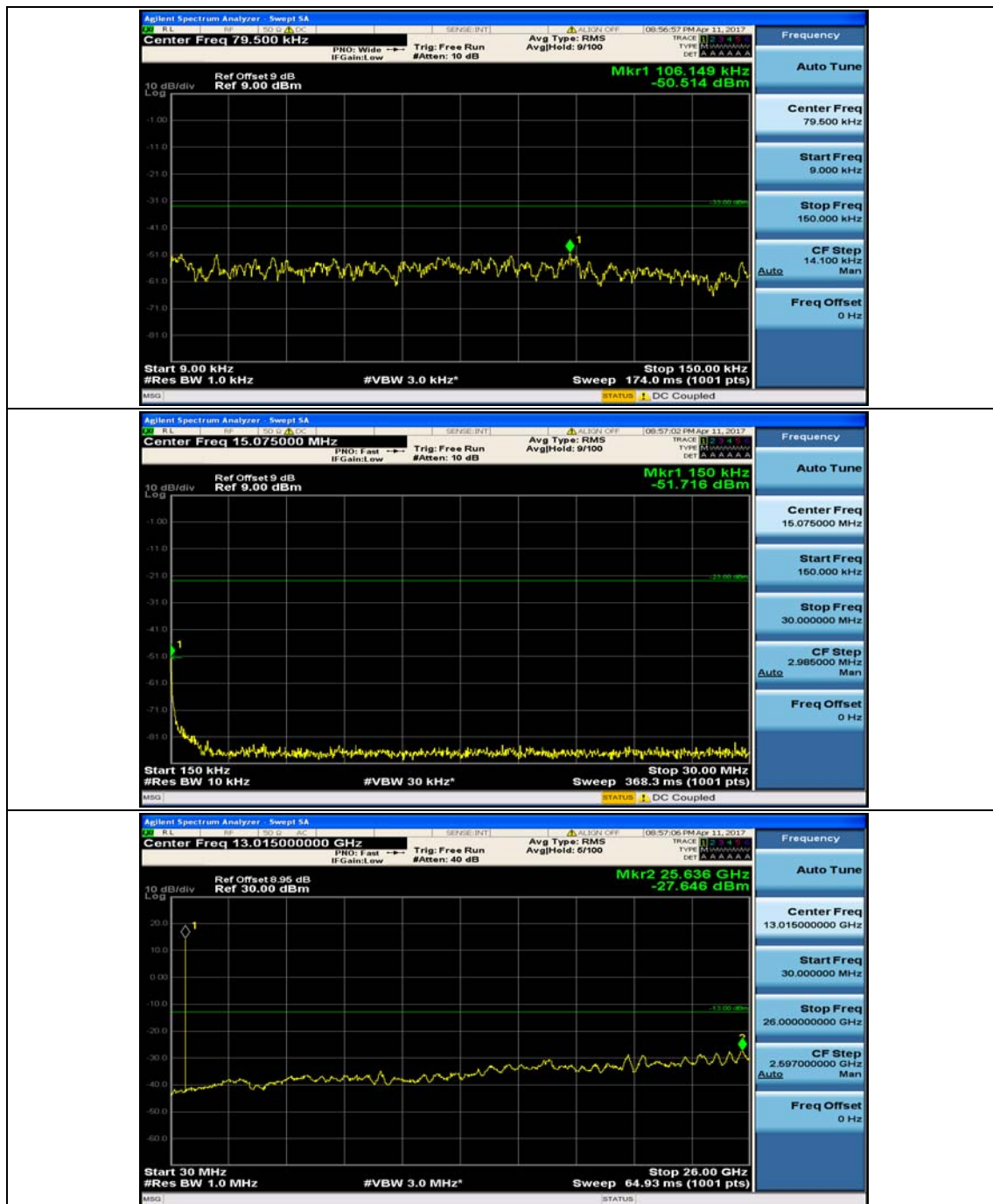












Appendix F: Frequency Stability

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	4.37	0.006246	± 2.5	PASS
		VN	TN	1.71	0.002444	± 2.5	PASS
		VH	TN	4.71	0.006731	± 2.5	PASS
	MCH	VL	TN	-1.31	-0.001852	± 2.5	PASS
		VN	TN	-0.31	-0.000438	± 2.5	PASS
		VH	TN	2.93	0.004141	± 2.5	PASS
	HCH	VL	TN	-1.37	-0.001915	± 2.5	PASS
		VN	TN	4.45	0.006221	± 2.5	PASS
		VH	TN	4.93	0.006892	± 2.5	PASS
16QAM	LCH	VL	TN	3.69	0.005274	± 2.5	PASS
		VN	TN	0.12	0.000172	± 2.5	PASS
		VH	TN	2.23	0.003187	± 2.5	PASS
	MCH	VL	TN	4.95	0.006996	± 2.5	PASS
		VN	TN	0.6	0.000848	± 2.5	PASS
		VH	TN	3.94	0.005569	± 2.5	PASS
	HCH	VL	TN	3.48	0.004865	± 2.5	PASS
		VN	TN	4.23	0.005914	± 2.5	PASS
		VH	TN	-1.6	-0.002237	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.69	0.005274	± 2.5	PASS
		VN	-20	3.28	0.004688	± 2.5	PASS
		VN	-10	1.1	0.001572	± 2.5	PASS
		VN	0	-0.29	-0.000414	± 2.5	PASS
		VN	10	0.14	0.000200	± 2.5	PASS
		VN	20	3.91	0.005588	± 2.5	PASS
		VN	30	2.06	0.002944	± 2.5	PASS
		VN	40	0.19	0.000272	± 2.5	PASS
		VN	50	3.35	0.004788	± 2.5	PASS
	MCH	VN	-30	-1.48	-0.002092	± 2.5	PASS
		VN	-20	-1.94	-0.002742	± 2.5	PASS

		VN	-10	4.45	0.006290	± 2.5	PASS
		VN	0	4.35	0.006148	± 2.5	PASS
		VN	10	-2	-0.002827	± 2.5	PASS
		VN	20	4.5	0.006360	± 2.5	PASS
		VN	30	1.43	0.002021	± 2.5	PASS
		VN	40	4.23	0.005979	± 2.5	PASS
		VN	50	2.79	0.003943	± 2.5	PASS
	HCH	VN	-30	0.07	0.000098	± 2.5	PASS
		VN	-20	-0.26	-0.000363	± 2.5	PASS
		VN	-10	1.91	0.002670	± 2.5	PASS
		VN	0	2.44	0.003411	± 2.5	PASS
		VN	10	0.64	0.000895	± 2.5	PASS
		VN	20	0.97	0.001356	± 2.5	PASS
		VN	30	3.41	0.004767	± 2.5	PASS
		VN	40	0.08	0.000112	± 2.5	PASS
		VN	50	2.67	0.003733	± 2.5	PASS
16QAM	LCH	VN	-30	3.68	0.005259	± 2.5	PASS
		VN	-20	-1.64	-0.002344	± 2.5	PASS
		VN	-10	-1.24	-0.001772	± 2.5	PASS
		VN	0	-1.6	-0.002287	± 2.5	PASS
		VN	10	4.35	0.006217	± 2.5	PASS
		VN	20	3.7	0.005288	± 2.5	PASS
		VN	30	2.17	0.003101	± 2.5	PASS
		VN	40	4.94	0.007060	± 2.5	PASS
		VN	50	2.75	0.003930	± 2.5	PASS
	MCH	VN	-30	-1.39	-0.001965	± 2.5	PASS
		VN	-20	2.99	0.004226	± 2.5	PASS
		VN	-10	2.79	0.003943	± 2.5	PASS
		VN	0	4.52	0.006389	± 2.5	PASS
		VN	10	-1.38	-0.001951	± 2.5	PASS
		VN	20	2.84	0.004014	± 2.5	PASS
		VN	30	2.03	0.002869	± 2.5	PASS
		VN	40	1.17	0.001654	± 2.5	PASS
		VN	50	-0.53	-0.000749	± 2.5	PASS
	HCH	VN	-30	1.56	0.002181	± 2.5	PASS
		VN	-20	1.85	0.002586	± 2.5	PASS
		VN	-10	-1.51	-0.002111	± 2.5	PASS
		VN	0	4	0.005592	± 2.5	PASS
		VN	10	0.53	0.000741	± 2.5	PASS
		VN	20	1.85	0.002586	± 2.5	PASS
		VN	30	3.42	0.004781	± 2.5	PASS

		VN	40	0.74	0.001035	± 2.5	PASS
		VN	50	4.06	0.005676	± 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	2.57	0.003669	± 2.5	PASS
		VN	TN	4.09	0.005839	± 2.5	PASS
		VH	TN	-1.62	-0.002313	± 2.5	PASS
	MCH	VL	TN	4.27	0.006035	± 2.5	PASS
		VN	TN	-0.77	-0.001088	± 2.5	PASS
		VH	TN	2.03	0.002869	± 2.5	PASS
	HCH	VL	TN	1.72	0.002407	± 2.5	PASS
		VN	TN	3.77	0.005276	± 2.5	PASS
		VH	TN	3.11	0.004353	± 2.5	PASS
16QAM	LCH	VL	TN	-0.25	-0.000357	± 2.5	PASS
		VN	TN	-1.1	-0.001570	± 2.5	PASS
		VH	TN	0.45	0.000642	± 2.5	PASS
	MCH	VL	TN	0.81	0.001145	± 2.5	PASS
		VN	TN	-0.11	-0.000155	± 2.5	PASS
		VH	TN	4.53	0.006403	± 2.5	PASS
	HCH	VL	TN	0.38	0.000532	± 2.5	PASS
		VN	TN	4.18	0.005850	± 2.5	PASS
		VH	TN	-1.68	-0.002351	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.9	0.001285	± 2.5	PASS
		VN	-20	-1.71	-0.002441	± 2.5	PASS
		VN	-10	1.23	0.001756	± 2.5	PASS
		VN	0	-1.39	-0.001984	± 2.5	PASS
		VN	10	0.11	0.000157	± 2.5	PASS
		VN	20	3.68	0.005253	± 2.5	PASS
		VN	30	4.06	0.005796	± 2.5	PASS
		VN	40	2.13	0.003041	± 2.5	PASS
		VN	50	1.47	0.002099	± 2.5	PASS
	MCH	VN	-30	-0.88	-0.001244	± 2.5	PASS
		VN	-20	-1.13	-0.001597	± 2.5	PASS
		VN	-10	4.45	0.006290	± 2.5	PASS

		VN	0	0.46	0.000650	± 2.5	PASS
		VN	10	3.52	0.004975	± 2.5	PASS
		VN	20	1.54	0.002177	± 2.5	PASS
		VN	30	-0.55	-0.000777	± 2.5	PASS
		VN	40	-1.11	-0.001569	± 2.5	PASS
		VN	50	1.38	0.001951	± 2.5	PASS
	HCH	VN	-30	1.88	0.002631	± 2.5	PASS
		VN	-20	3.36	0.004703	± 2.5	PASS
		VN	-10	0.2	0.000280	± 2.5	PASS
		VN	0	-0.28	-0.000392	± 2.5	PASS
		VN	10	1.55	0.002169	± 2.5	PASS
		VN	20	4.73	0.006620	± 2.5	PASS
		VN	30	-0.51	-0.000714	± 2.5	PASS
		VN	40	2.26	0.003163	± 2.5	PASS
		VN	50	-1.96	-0.002743	± 2.5	PASS
16QAM	LCH	VN	-30	-1.36	-0.001941	± 2.5	PASS
		VN	-20	4.39	0.006267	± 2.5	PASS
		VN	-10	-0.49	-0.000700	± 2.5	PASS
		VN	0	2.14	0.003055	± 2.5	PASS
		VN	10	-0.15	-0.000214	± 2.5	PASS
		VN	20	0.23	0.000328	± 2.5	PASS
		VN	30	4.34	0.006196	± 2.5	PASS
		VN	40	-0.16	-0.000228	± 2.5	PASS
		VN	50	3.34	0.004768	± 2.5	PASS
	MCH	VN	-30	0.43	0.000608	± 2.5	PASS
		VN	-20	1.6	0.002261	± 2.5	PASS
		VN	-10	-1.23	-0.001739	± 2.5	PASS
		VN	0	-1.66	-0.002346	± 2.5	PASS
		VN	10	3.79	0.005357	± 2.5	PASS
		VN	20	4.96	0.007011	± 2.5	PASS
		VN	30	2.29	0.003237	± 2.5	PASS
		VN	40	0.02	0.000028	± 2.5	PASS
		VN	50	2.11	0.002982	± 2.5	PASS
	HCH	VN	-30	-0.86	-0.001204	± 2.5	PASS
		VN	-20	0.16	0.000224	± 2.5	PASS
		VN	-10	0.66	0.000924	± 2.5	PASS
		VN	0	2.78	0.003891	± 2.5	PASS
		VN	10	1.19	0.001666	± 2.5	PASS
		VN	20	3.52	0.004927	± 2.5	PASS
		VN	30	-1.2	-0.001679	± 2.5	PASS
		VN	40	0.92	0.001288	± 2.5	PASS

		VN	50	2.06	0.002883	± 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	-0.35	-0.000499	± 2.5	PASS
		VN	TN	2.26	0.003222	± 2.5	PASS
		VH	TN	-1.27	-0.001810	± 2.5	PASS
	MCH	VL	TN	0.3	0.000424	± 2.5	PASS
		VN	TN	4.63	0.006544	± 2.5	PASS
		VH	TN	0.48	0.000678	± 2.5	PASS
	HCH	VL	TN	-1.81	-0.002537	± 2.5	PASS
		VN	TN	1.98	0.002775	± 2.5	PASS
		VH	TN	3.7	0.005186	± 2.5	PASS
16QAM	LCH	VL	TN	-1.61	-0.002295	± 2.5	PASS
		VN	TN	-1.81	-0.002580	± 2.5	PASS
		VH	TN	1.04	0.001483	± 2.5	PASS
	MCH	VL	TN	-0.59	-0.000834	± 2.5	PASS
		VN	TN	1	0.001413	± 2.5	PASS
		VH	TN	-0.71	-0.001004	± 2.5	PASS
	HCH	VL	TN	4.66	0.006531	± 2.5	PASS
		VN	TN	1.75	0.002453	± 2.5	PASS
		VH	TN	4.25	0.005957	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.11	0.000157	± 2.5	PASS
		VN	-20	3.71	0.005289	± 2.5	PASS
		VN	-10	3.03	0.004319	± 2.5	PASS
		VN	0	3.55	0.005061	± 2.5	PASS
		VN	10	1.23	0.001753	± 2.5	PASS
		VN	20	-1.29	-0.001839	± 2.5	PASS
		VN	30	1.02	0.001454	± 2.5	PASS
		VN	40	0.2	0.000285	± 2.5	PASS
		VN	50	1	0.001426	± 2.5	PASS
	MCH	VN	-30	-1.57	-0.002219	± 2.5	PASS
		VN	-20	0.16	0.000226	± 2.5	PASS
		VN	-10	1.89	0.002671	± 2.5	PASS
		VN	0	4.19	0.005922	± 2.5	PASS

		VN	10	-1.51	-0.002134	± 2.5	PASS
		VN	20	0.27	0.000382	± 2.5	PASS
		VN	30	3.74	0.005286	± 2.5	PASS
		VN	40	1.6	0.002261	± 2.5	PASS
		VN	50	0.43	0.000608	± 2.5	PASS
	HCH	VN	-30	-0.73	-0.001023	± 2.5	PASS
		VN	-20	3.5	0.004905	± 2.5	PASS
		VN	-10	2.49	0.003490	± 2.5	PASS
		VN	0	-0.69	-0.000967	± 2.5	PASS
		VN	10	1.94	0.002719	± 2.5	PASS
		VN	20	2.22	0.003111	± 2.5	PASS
		VN	30	2.57	0.003602	± 2.5	PASS
		VN	40	-1.36	-0.001906	± 2.5	PASS
		VN	50	-0.12	-0.000168	± 2.5	PASS
16QAM	LCH	VN	-30	3.1	0.004419	± 2.5	PASS
		VN	-20	3.48	0.004961	± 2.5	PASS
		VN	-10	4.19	0.005973	± 2.5	PASS
		VN	0	1.71	0.002438	± 2.5	PASS
		VN	10	-1.04	-0.001483	± 2.5	PASS
		VN	20	1.95	0.002780	± 2.5	PASS
		VN	30	0.5	0.000713	± 2.5	PASS
		VN	40	3.55	0.005061	± 2.5	PASS
		VN	50	0.89	0.001269	± 2.5	PASS
	MCH	VN	-30	-0.5	-0.000707	± 2.5	PASS
		VN	-20	1.78	0.002516	± 2.5	PASS
		VN	-10	0.66	0.000933	± 2.5	PASS
		VN	0	4.27	0.006035	± 2.5	PASS
		VN	10	3.04	0.004297	± 2.5	PASS
		VN	20	1.09	0.001541	± 2.5	PASS
		VN	30	-0.45	-0.000636	± 2.5	PASS
		VN	40	-1.78	-0.002516	± 2.5	PASS
		VN	50	3.21	0.004537	± 2.5	PASS
	HCH	VN	-30	1.31	0.001836	± 2.5	PASS
		VN	-20	3.31	0.004639	± 2.5	PASS
		VN	-10	-0.85	-0.001191	± 2.5	PASS
		VN	0	-1.83	-0.002565	± 2.5	PASS
		VN	10	3.08	0.004317	± 2.5	PASS
		VN	20	3.39	0.004751	± 2.5	PASS
		VN	30	-1.77	-0.002481	± 2.5	PASS
		VN	40	-1.61	-0.002256	± 2.5	PASS
		VN	50	3.99	0.005592	± 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	1.83	0.002599	± 2.5	PASS
		VN	TN	3.16	0.004489	± 2.5	PASS
		VH	TN	2.44	0.003466	± 2.5	PASS
	MCH	VL	TN	3.62	0.005117	± 2.5	PASS
		VN	TN	0.42	0.000594	± 2.5	PASS
		VH	TN	0.38	0.000537	± 2.5	PASS
	HCH	VL	TN	-1.1	-0.001547	± 2.5	PASS
		VN	TN	3.41	0.004796	± 2.5	PASS
		VH	TN	-1.88	-0.002644	± 2.5	PASS
16QAM	LCH	VL	TN	3.62	0.005142	± 2.5	PASS
		VN	TN	1.34	0.001903	± 2.5	PASS
		VH	TN	-1.35	-0.001918	± 2.5	PASS
	MCH	VL	TN	3.56	0.005032	± 2.5	PASS
		VN	TN	0.6	0.000848	± 2.5	PASS
		VH	TN	0.21	0.000297	± 2.5	PASS
	HCH	VL	TN	2.43	0.003418	± 2.5	PASS
		VN	TN	1.48	0.002082	± 2.5	PASS
		VH	TN	2.51	0.003530	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	1.74	0.002472	± 2.5	PASS
		VN	-20	1.93	0.002741	± 2.5	PASS
		VN	-10	0.59	0.000838	± 2.5	PASS
		VN	0	3.06	0.004347	± 2.5	PASS
		VN	10	-1.29	-0.001832	± 2.5	PASS
		VN	20	2.53	0.003594	± 2.5	PASS
		VN	30	4.09	0.005810	± 2.5	PASS
		VN	40	-0.94	-0.001335	± 2.5	PASS
		VN	50	2.05	0.002912	± 2.5	PASS
	MCH	VN	-30	4.78	0.006756	± 2.5	PASS
		VN	-20	0.54	0.000763	± 2.5	PASS
		VN	-10	1.22	0.001724	± 2.5	PASS
		VN	0	3.55	0.005018	± 2.5	PASS
		VN	10	0.47	0.000664	± 2.5	PASS
		VN	20	-0.63	-0.000890	± 2.5	PASS
VN	30	4.96	0.007011	± 2.5	PASS		

		VN	40	0.81	0.001145	± 2.5	PASS
		VN	50	4.2	0.005936	± 2.5	PASS
	HCH	VN	-30	-1.35	-0.001899	± 2.5	PASS
		VN	-20	1.86	0.002616	± 2.5	PASS
		VN	-10	-1	-0.001406	± 2.5	PASS
		VN	0	3.9	0.005485	± 2.5	PASS
		VN	10	-0.83	-0.001167	± 2.5	PASS
		VN	20	4.74	0.006667	± 2.5	PASS
		VN	30	0.02	0.000028	± 2.5	PASS
		VN	40	-0.69	-0.000970	± 2.5	PASS
		VN	50	4.63	0.006512	± 2.5	PASS
QPSK	LCH	VN	-30	0.1	0.000142	± 2.5	PASS
		VN	-20	3.75	0.005327	± 2.5	PASS
		VN	-10	0.34	0.000483	± 2.5	PASS
		VN	0	2.25	0.003196	± 2.5	PASS
		VN	10	4.11	0.005838	± 2.5	PASS
		VN	20	-1.26	-0.001790	± 2.5	PASS
		VN	30	3.66	0.005199	± 2.5	PASS
		VN	40	3.44	0.004886	± 2.5	PASS
		VN	50	4.66	0.006619	± 2.5	PASS
	MCH	VN	-30	-0.68	-0.000961	± 2.5	PASS
		VN	-20	-1.74	-0.002459	± 2.5	PASS
		VN	-10	1.33	0.001880	± 2.5	PASS
		VN	0	1.46	0.002064	± 2.5	PASS
		VN	10	0.55	0.000777	± 2.5	PASS
		VN	20	1.39	0.001965	± 2.5	PASS
		VN	30	4.68	0.006615	± 2.5	PASS
		VN	40	-0.28	-0.000396	± 2.5	PASS
		VN	50	1.8	0.002544	± 2.5	PASS
	HCH	VN	-30	4.45	0.006259	± 2.5	PASS
		VN	-20	-1.33	-0.001871	± 2.5	PASS
		VN	-10	4.24	0.005963	± 2.5	PASS
		VN	0	0.74	0.001041	± 2.5	PASS
		VN	10	0.43	0.000605	± 2.5	PASS
		VN	20	1.63	0.002293	± 2.5	PASS
		VN	30	4.58	0.006442	± 2.5	PASS
		VN	40	4.73	0.006653	± 2.5	PASS
		VN	50	4.41	0.006203	± 2.5	PASS