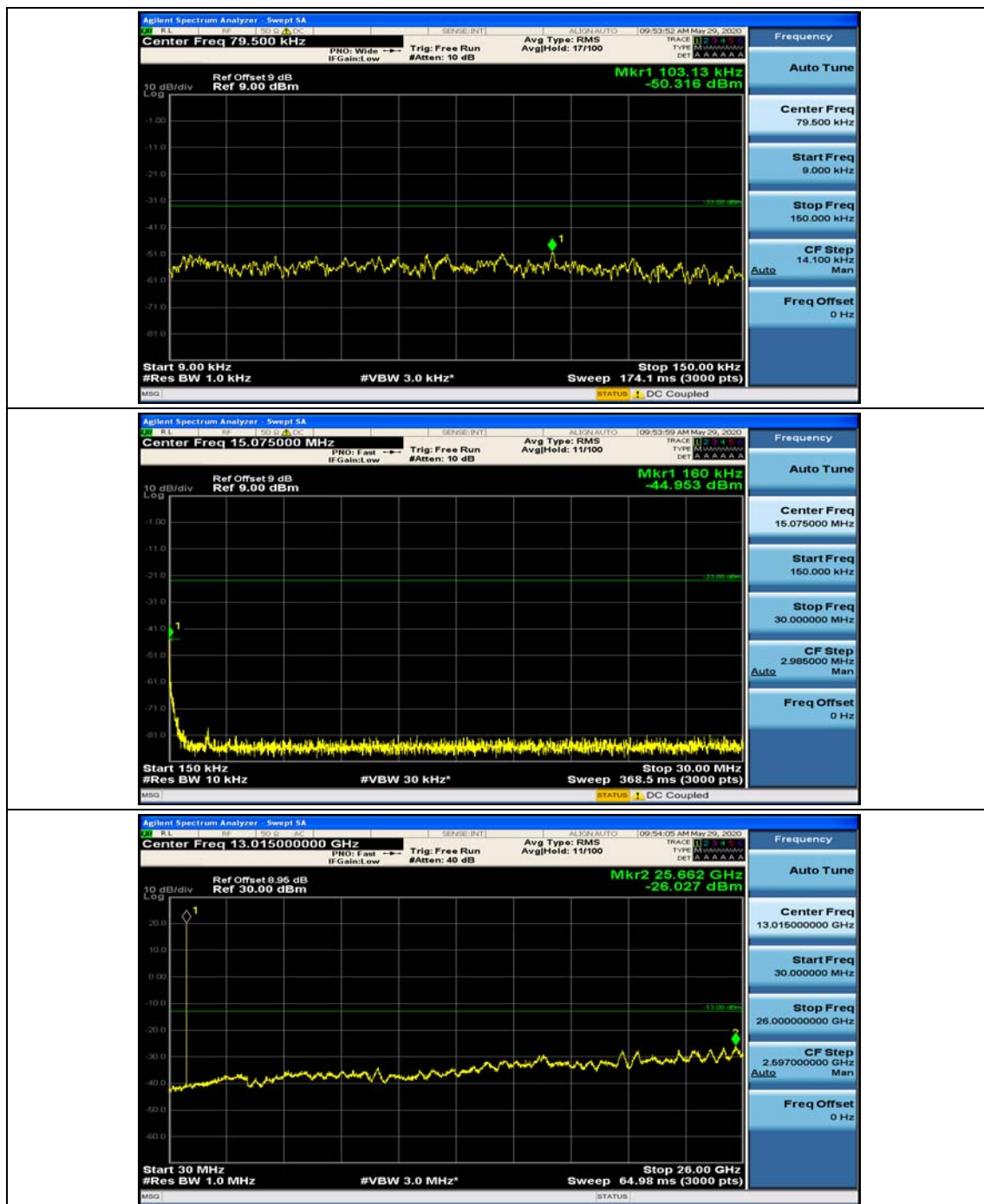
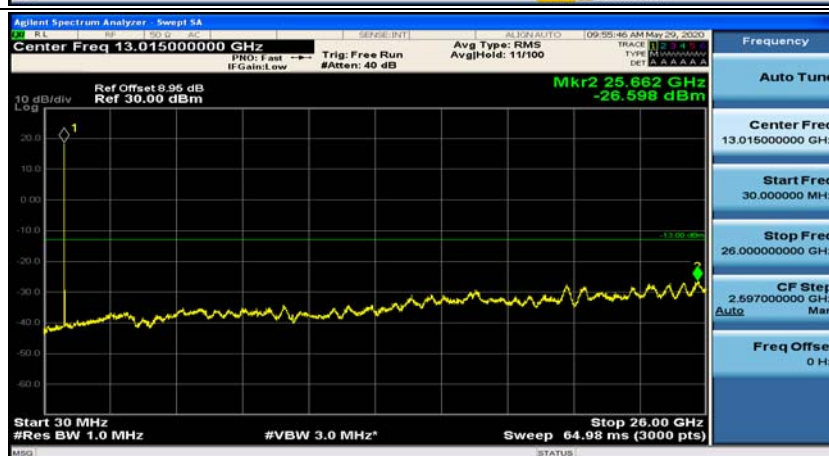
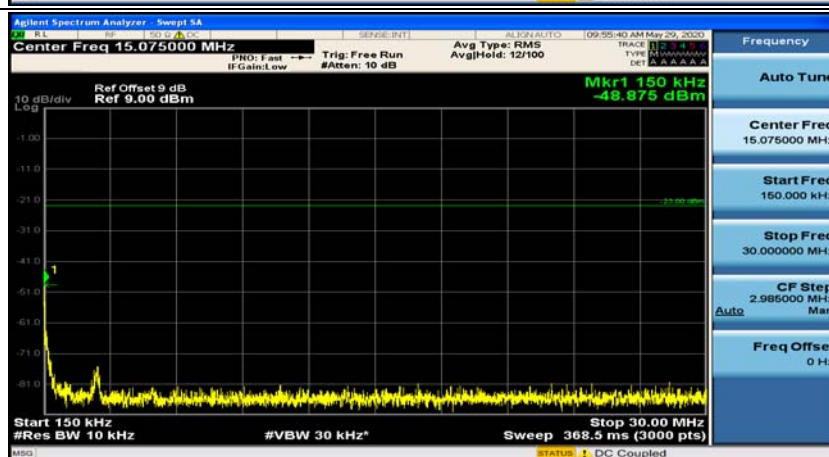
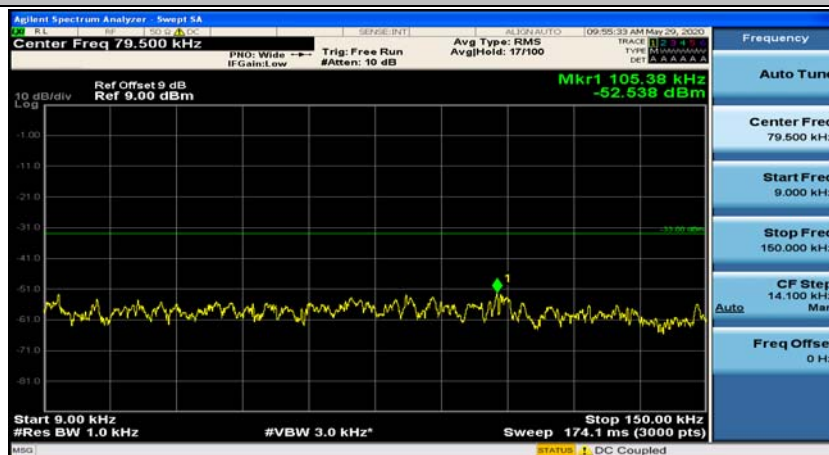
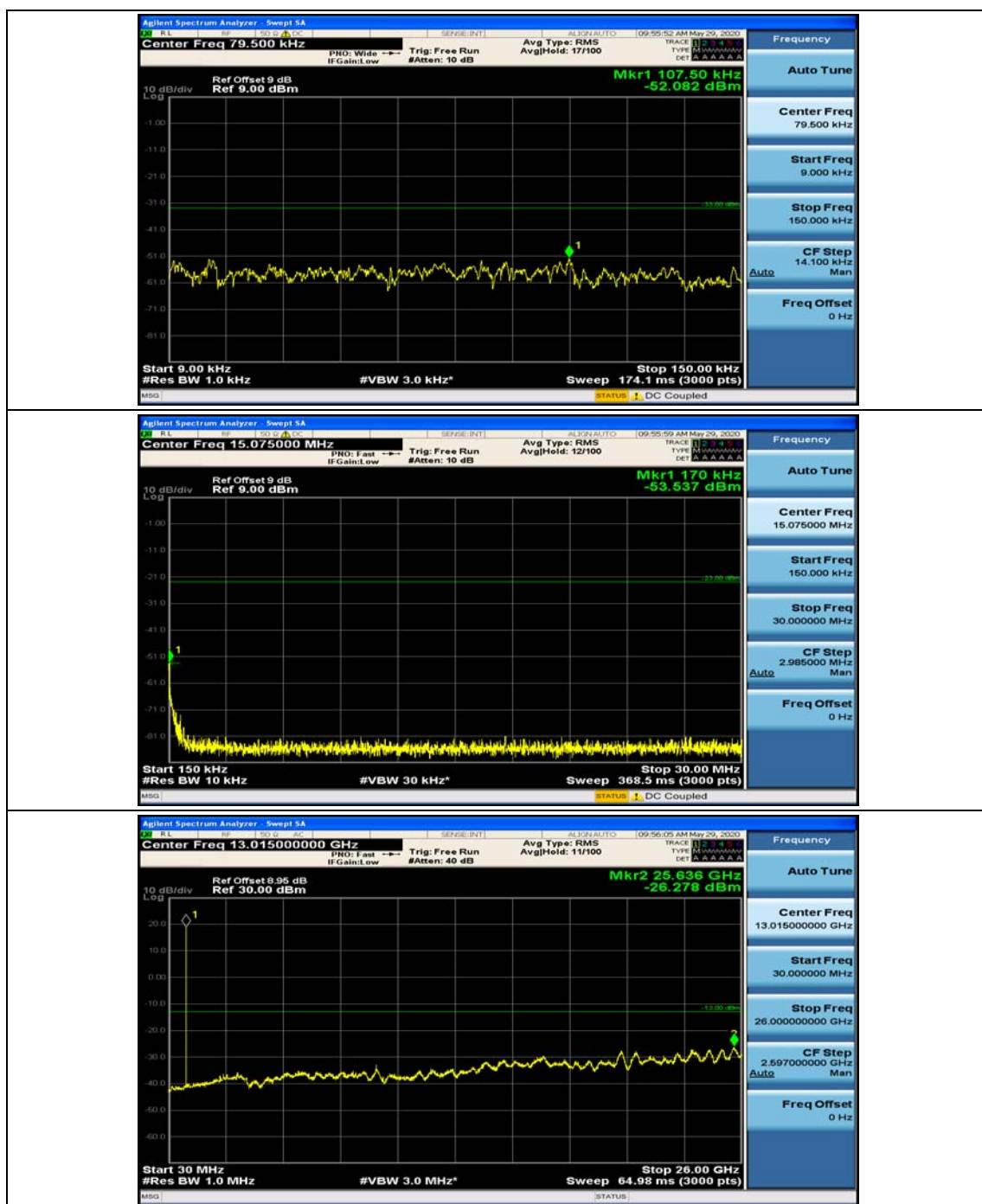


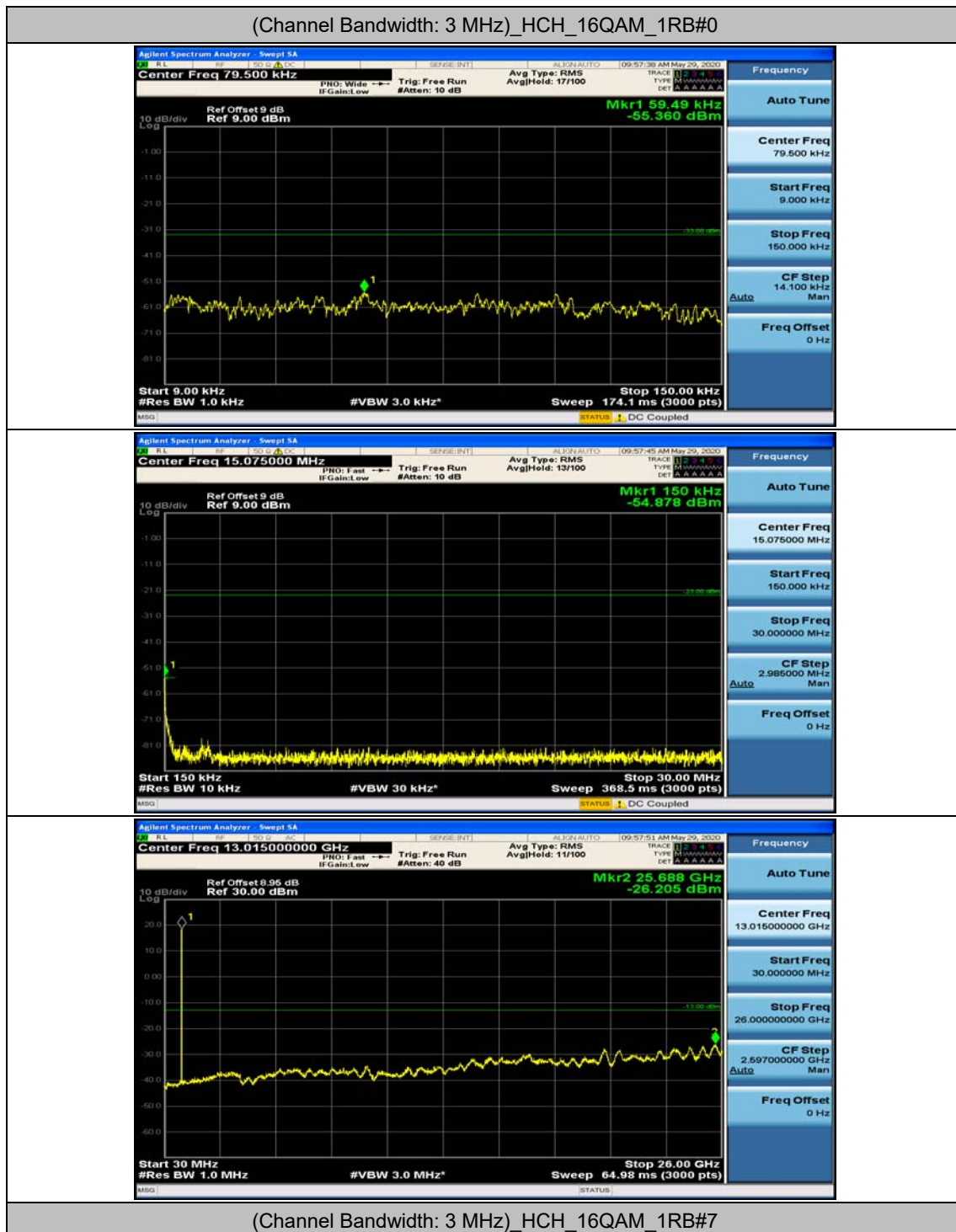


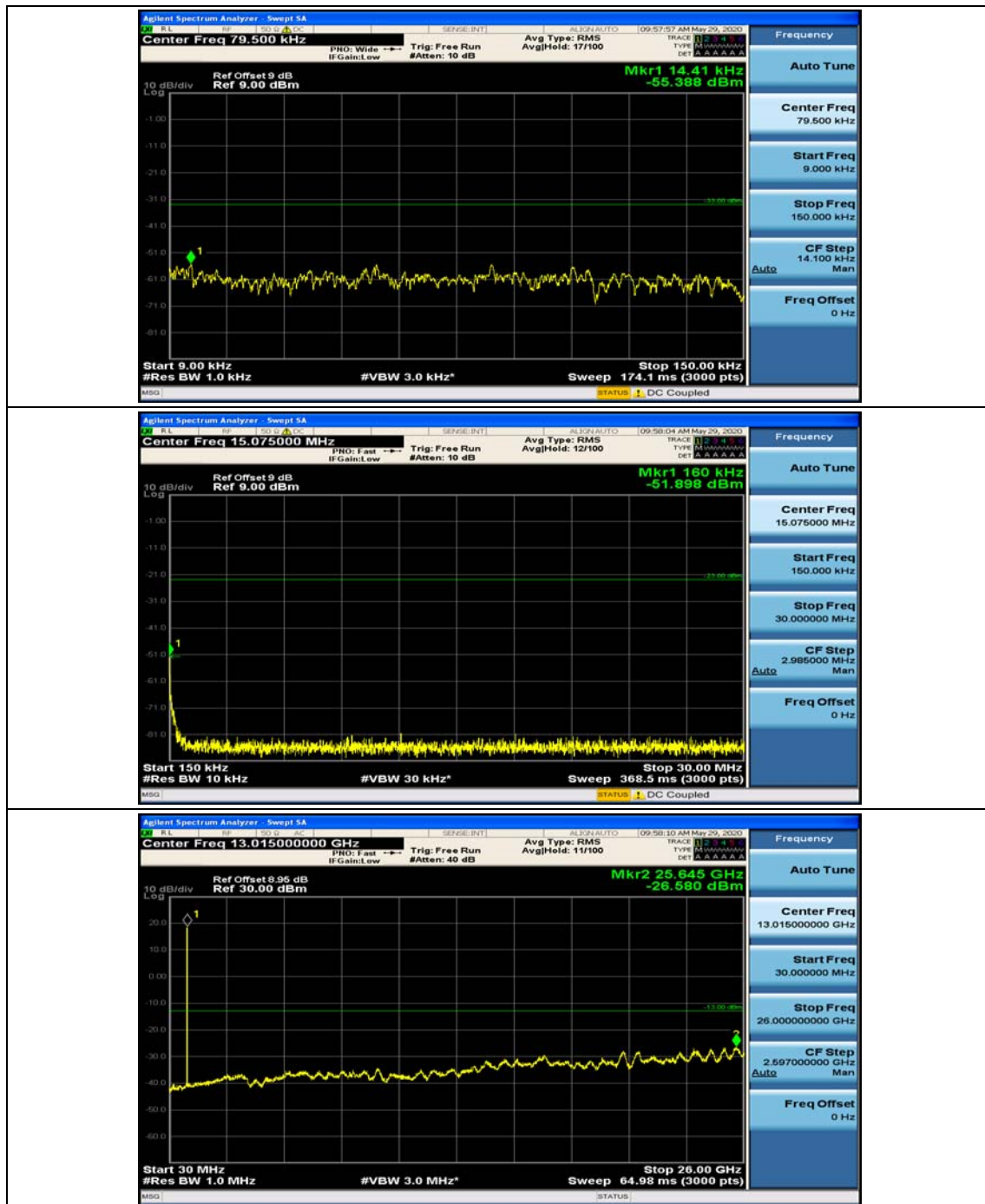
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



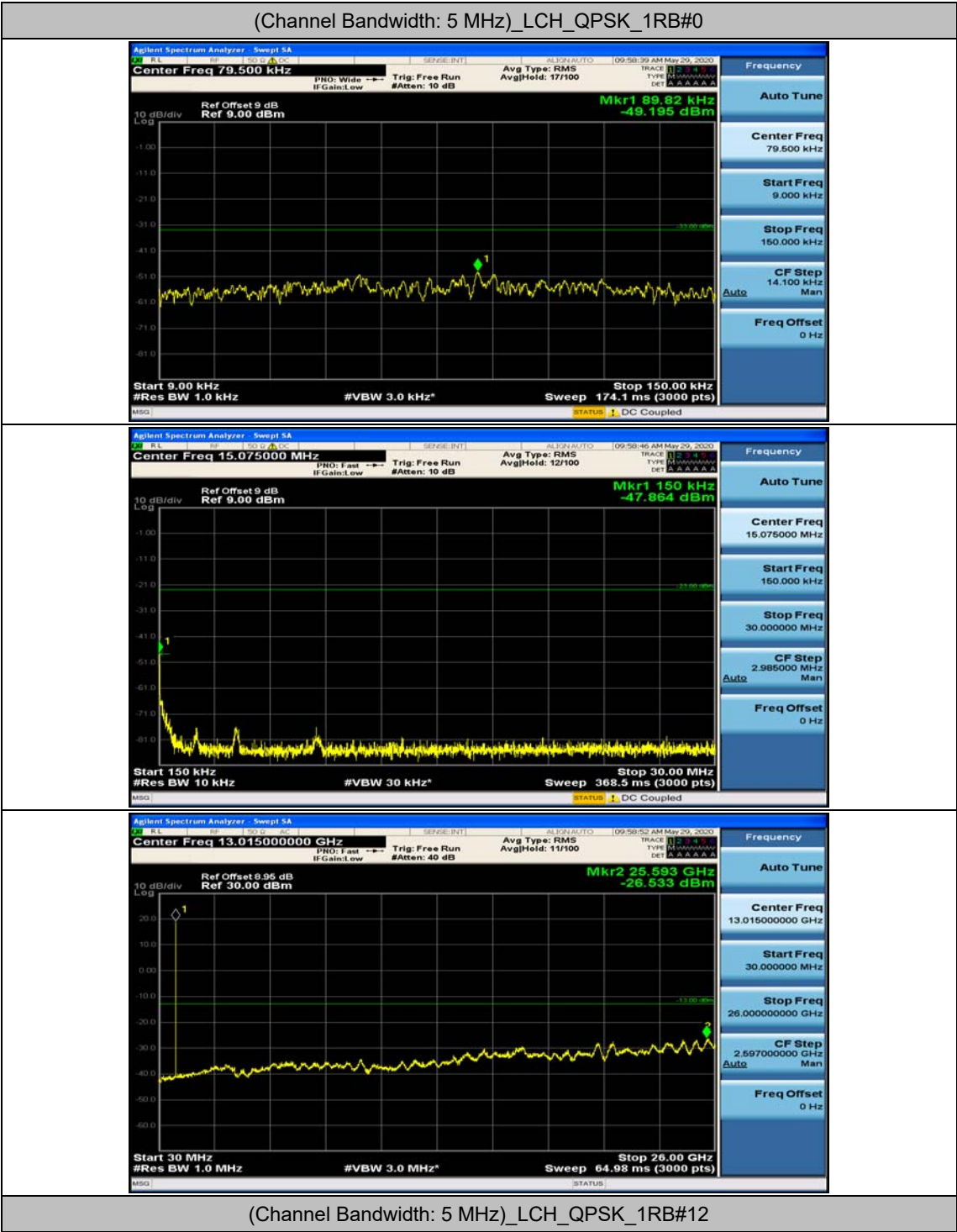
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7

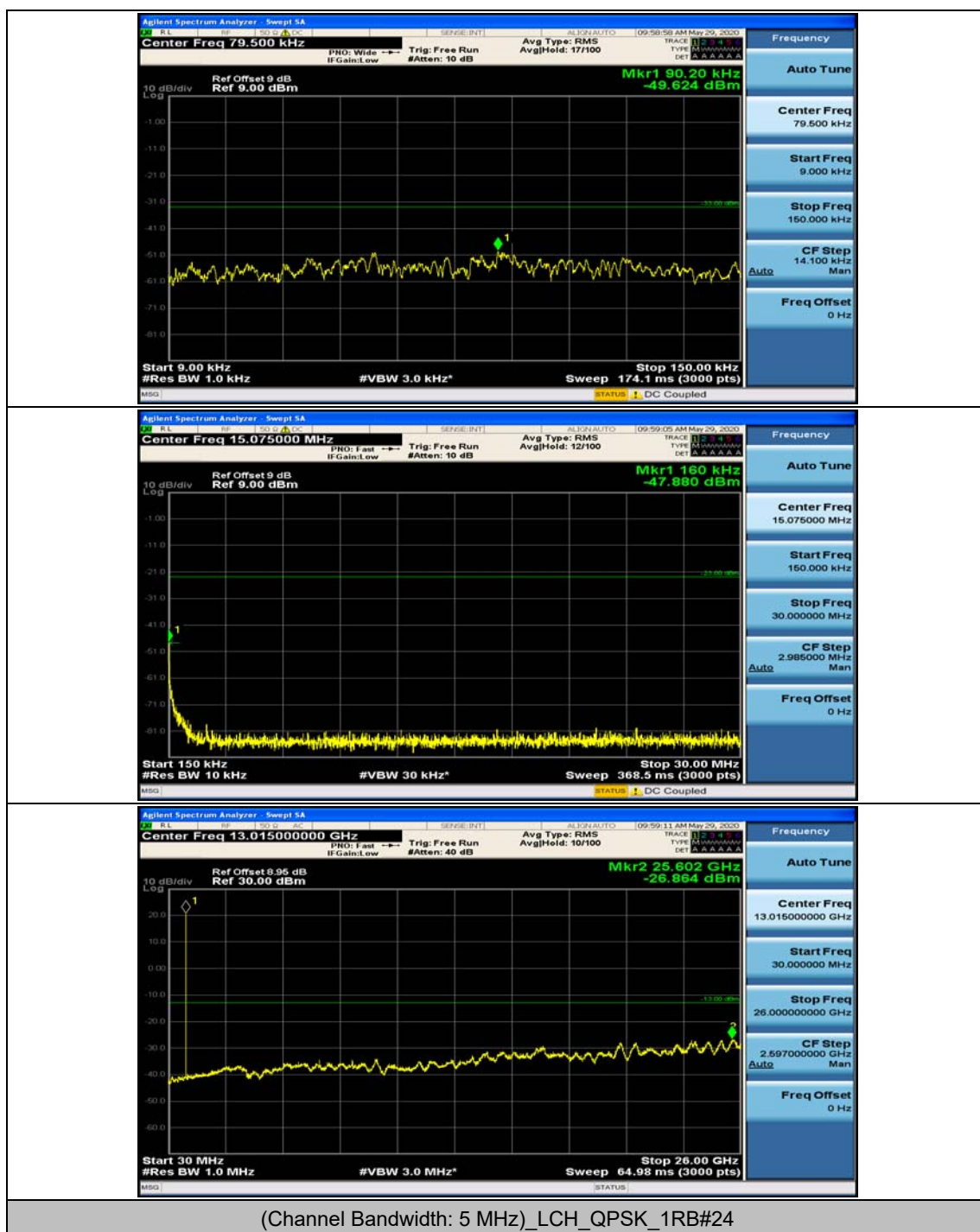


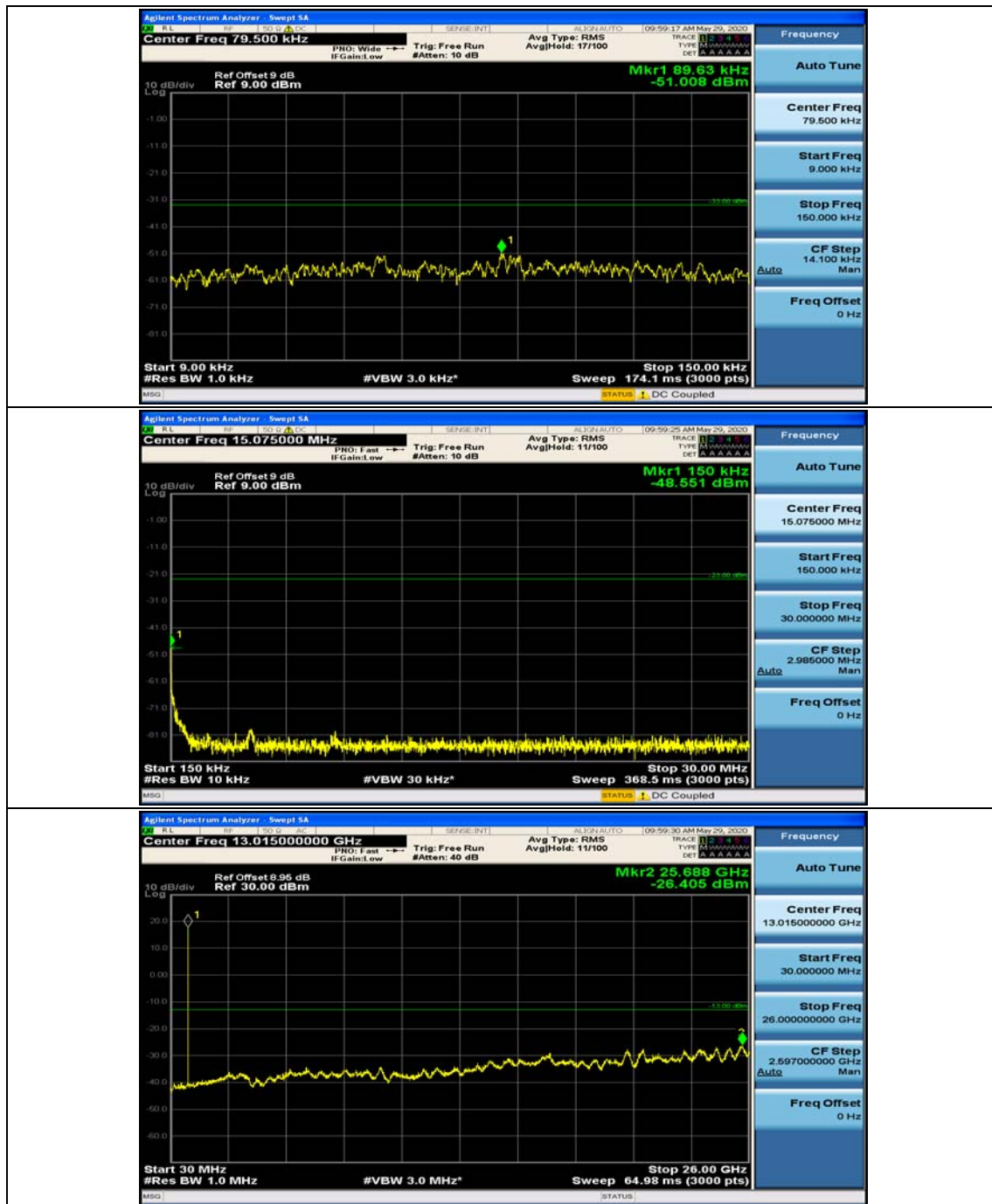


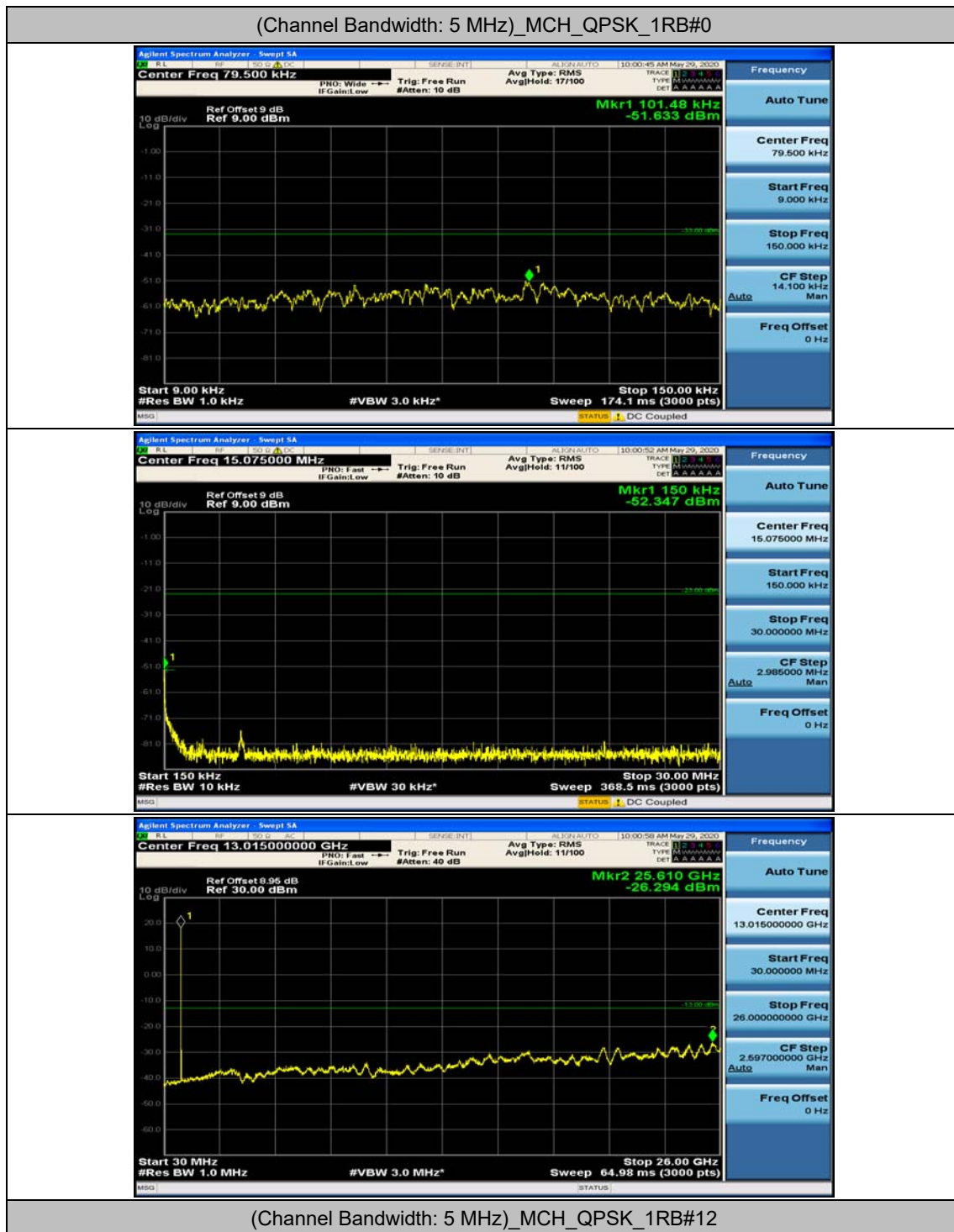


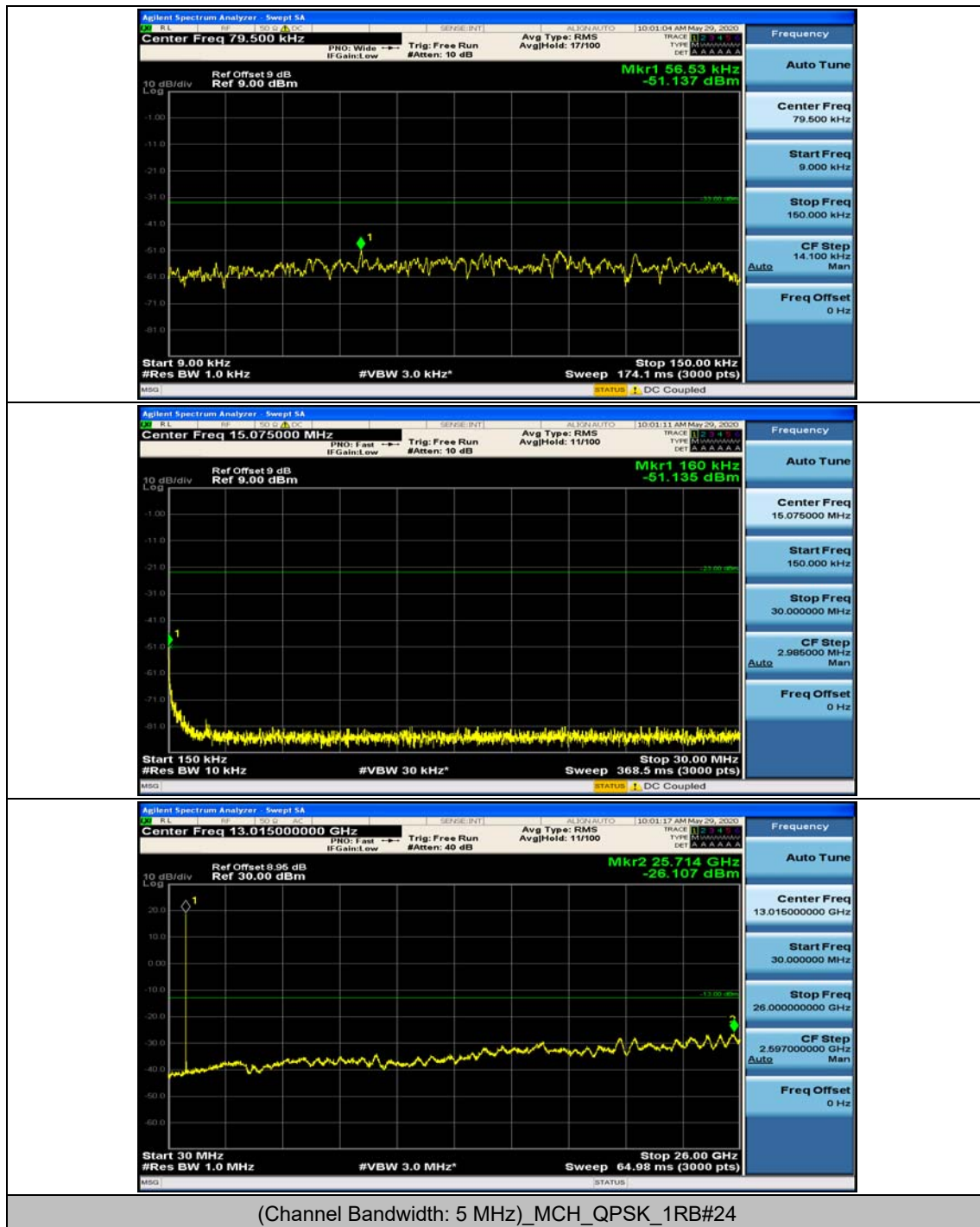
Channel Bandwidth: 5 MHz

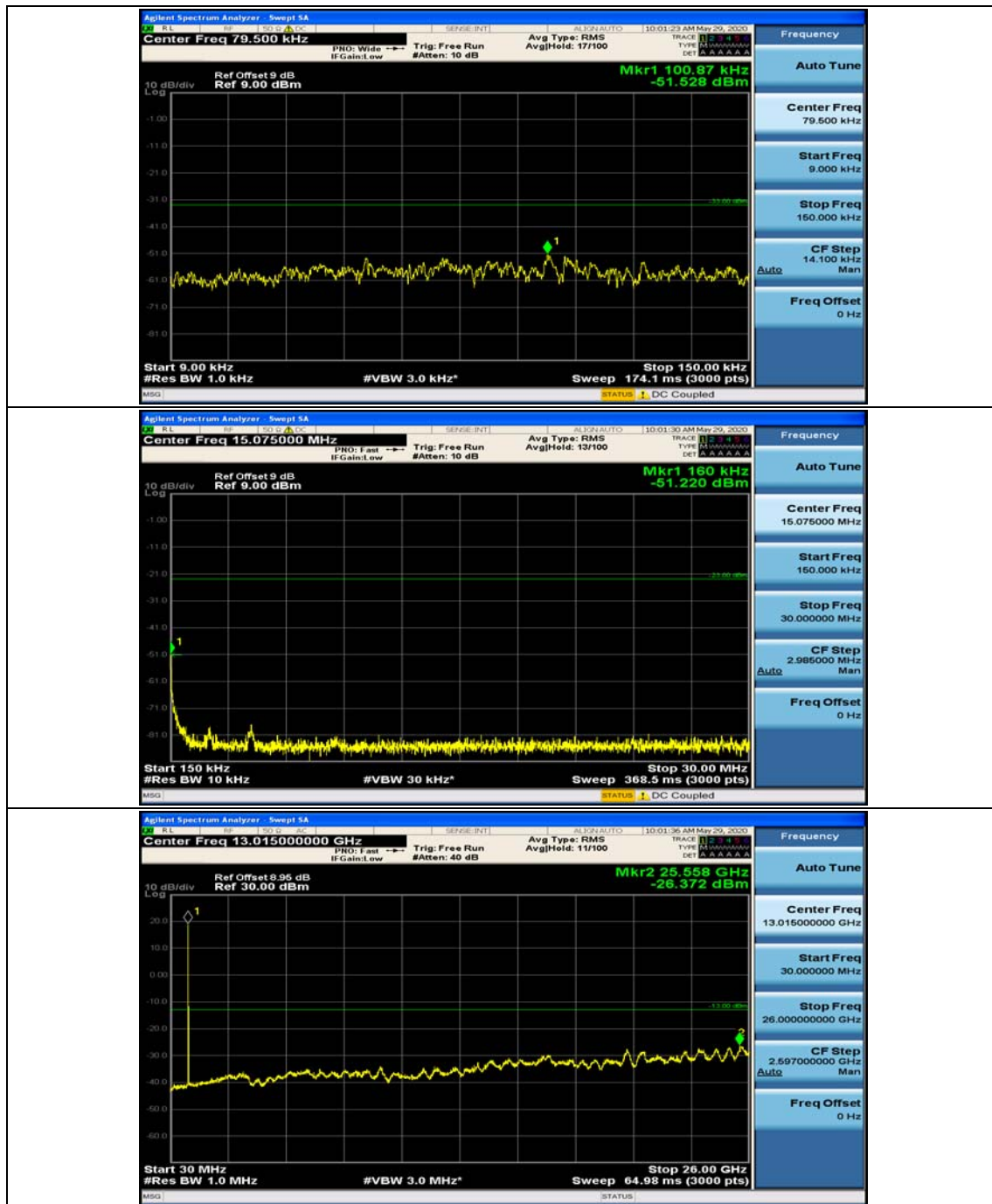




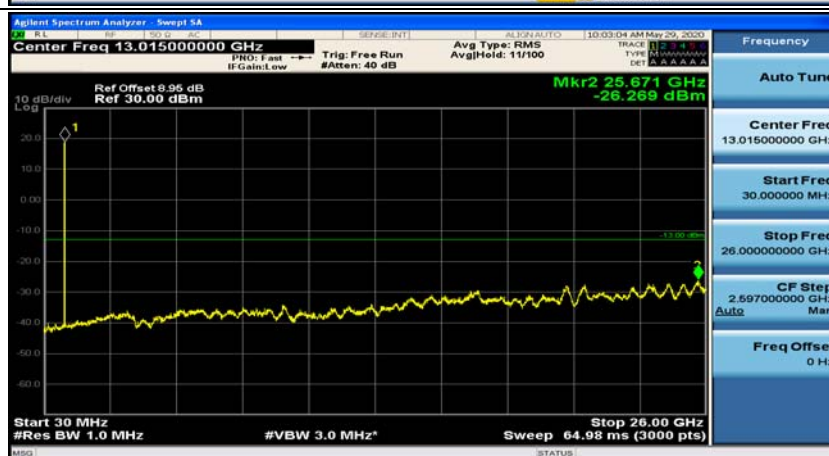
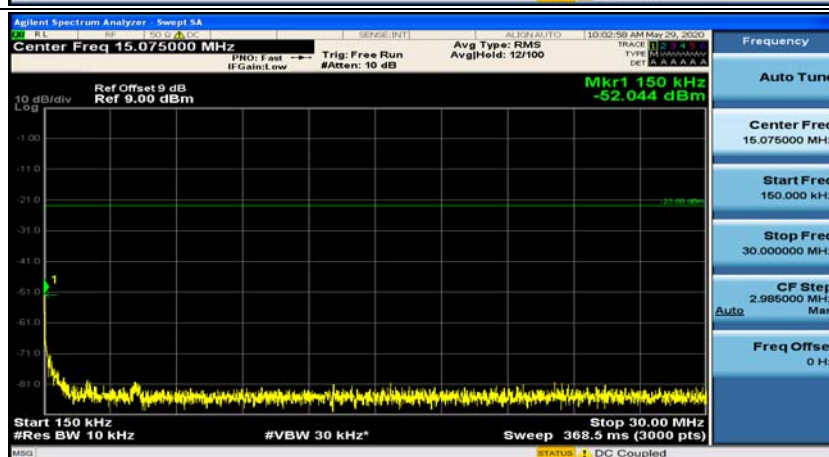
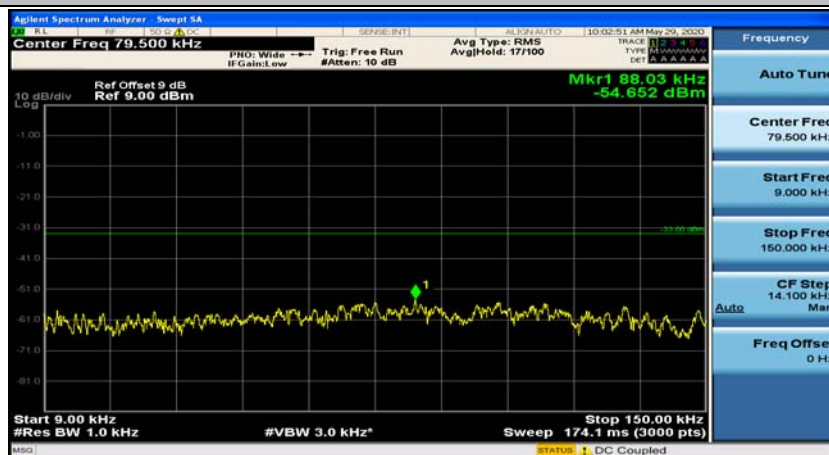




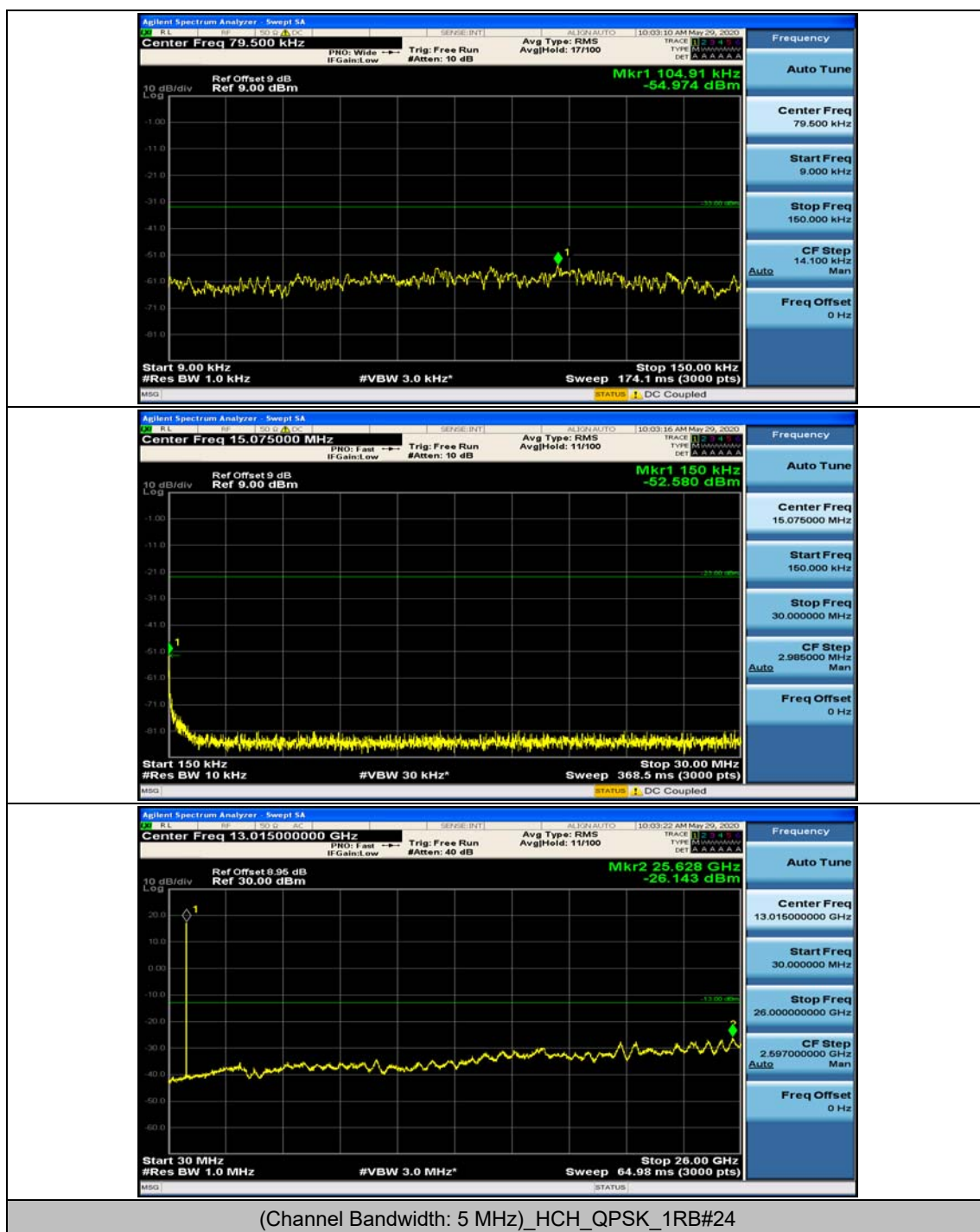


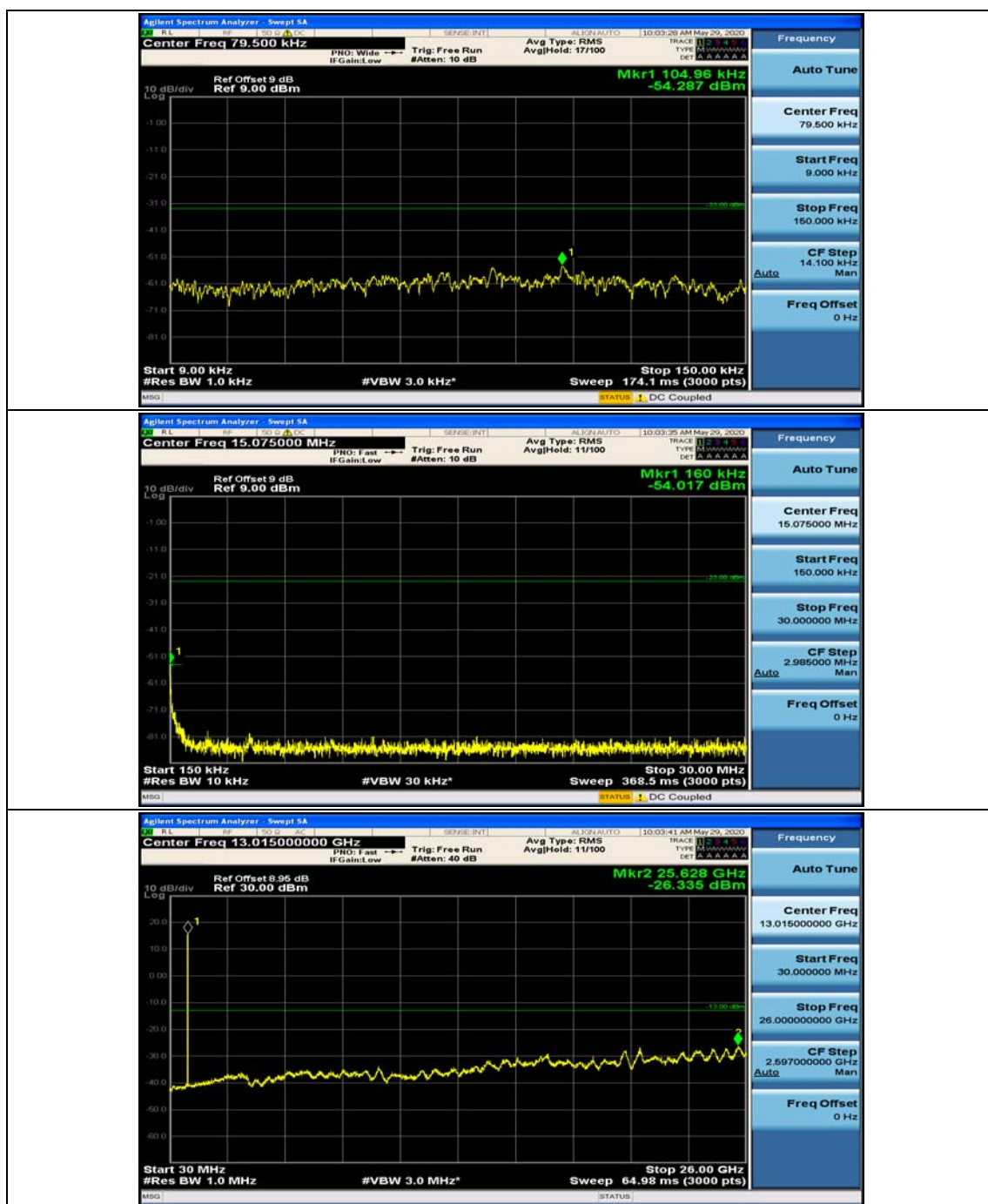


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

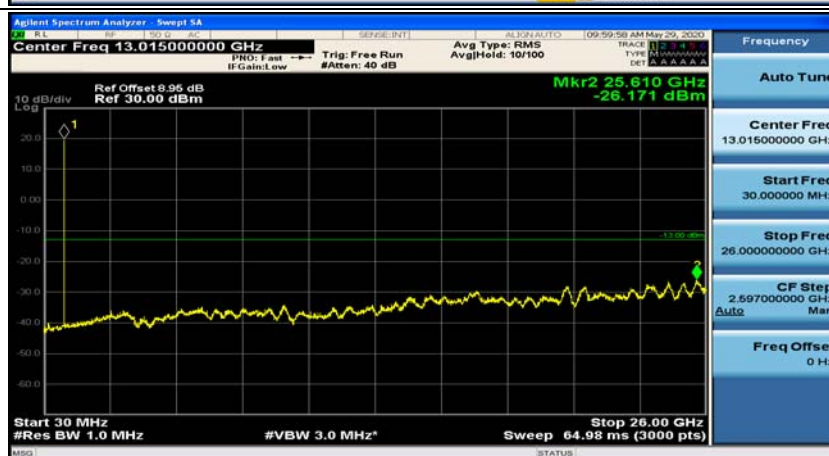
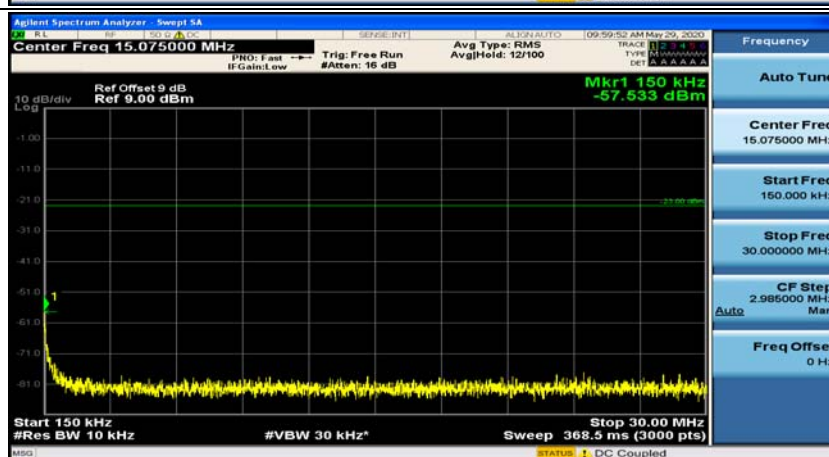
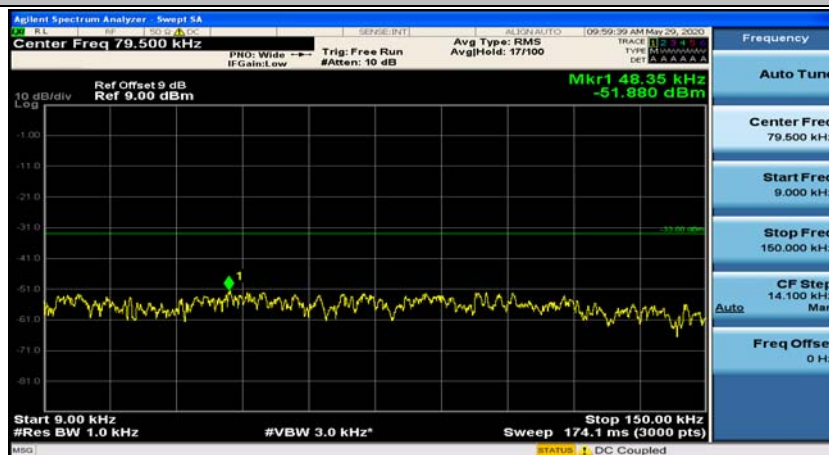


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

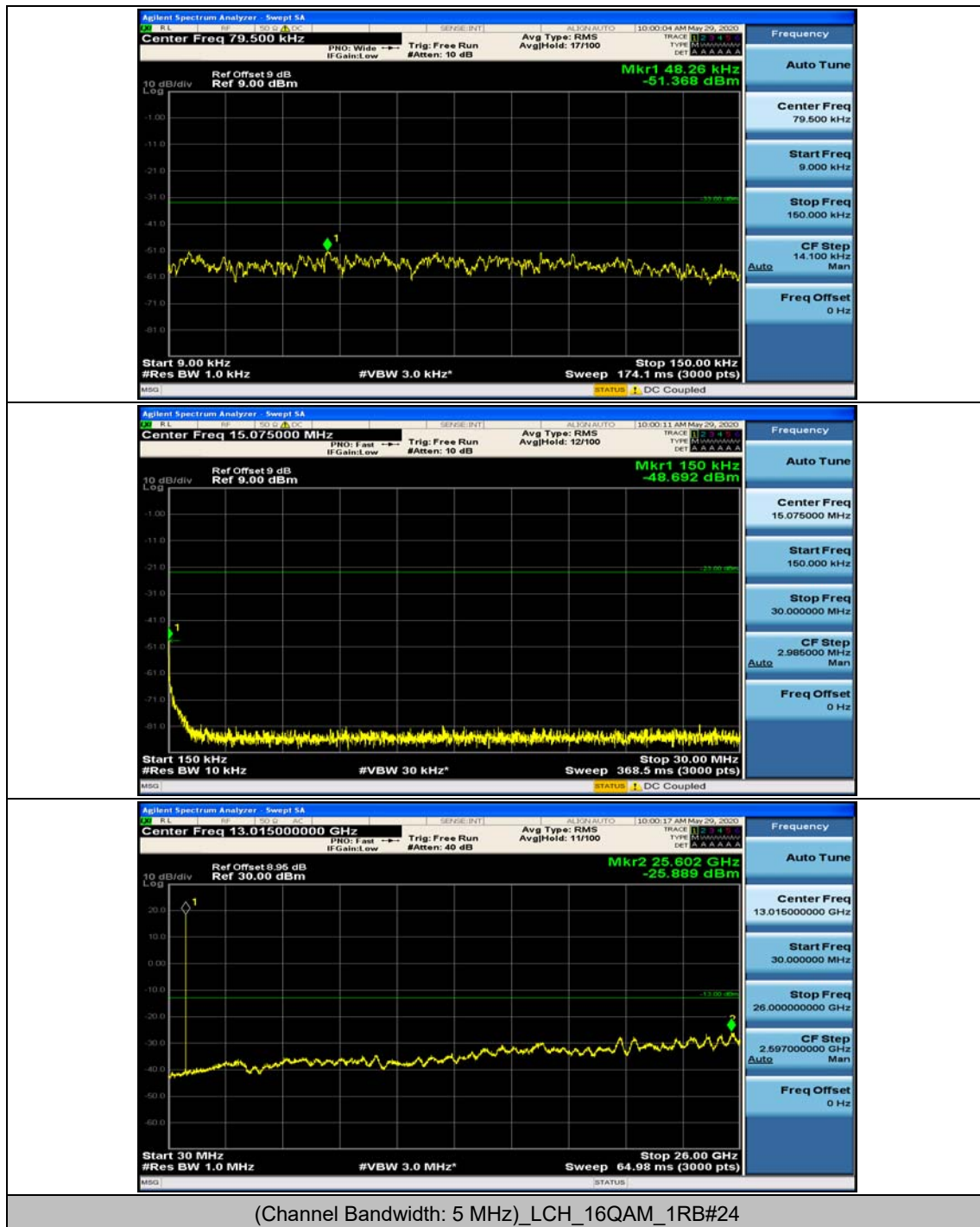


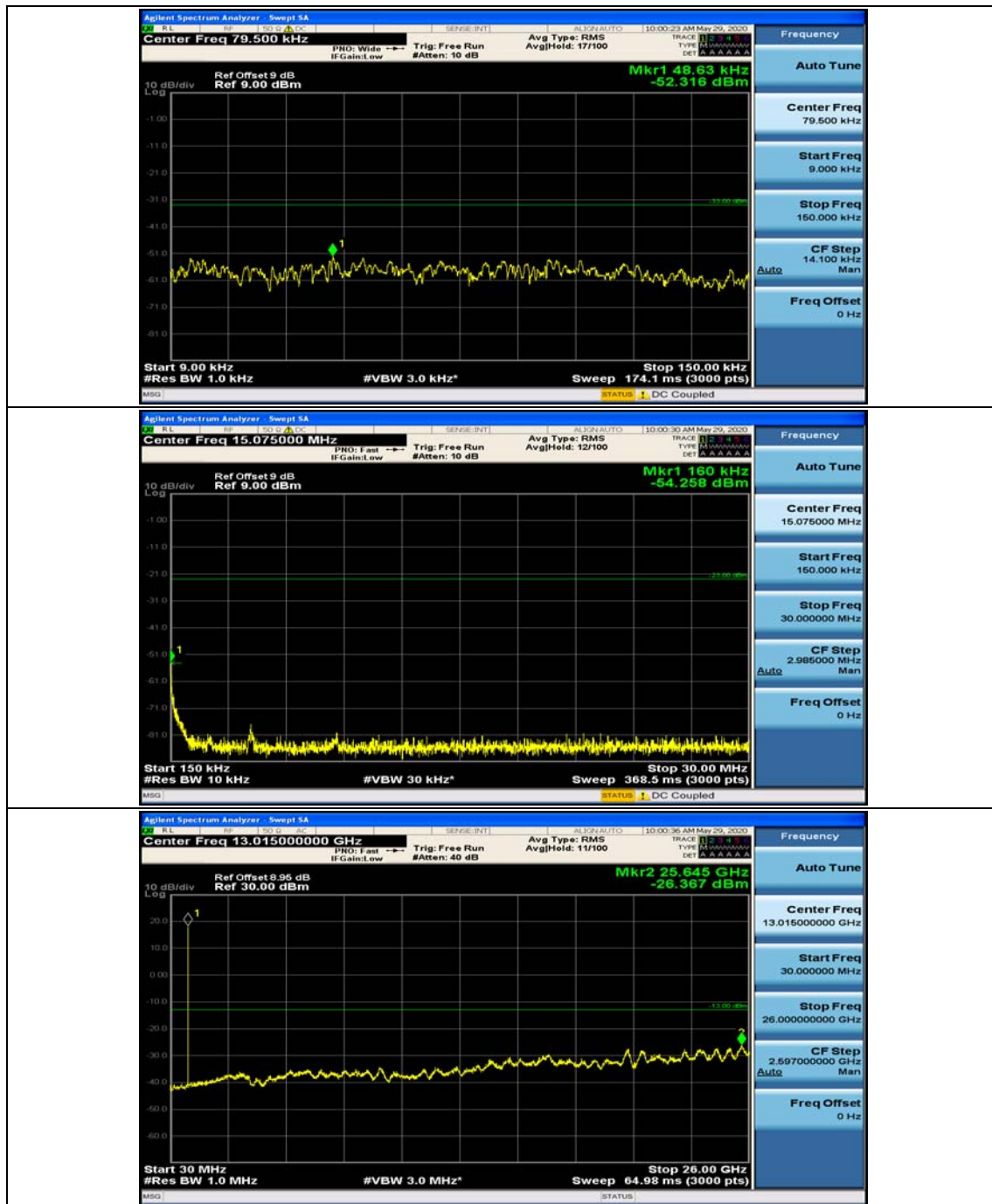


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

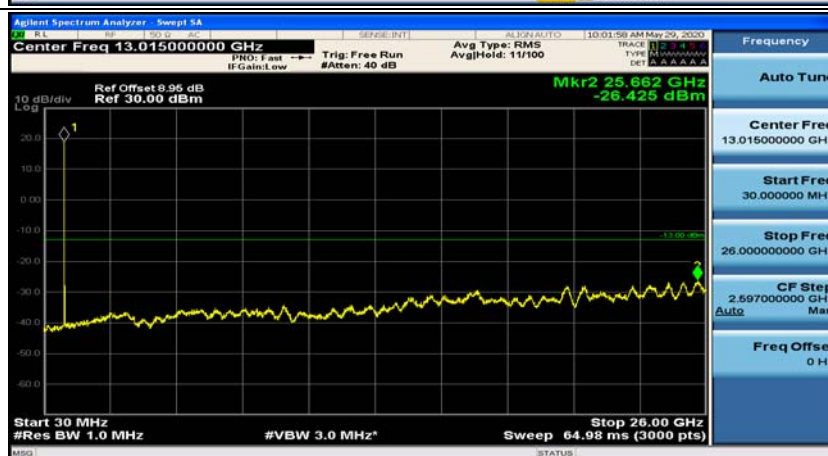
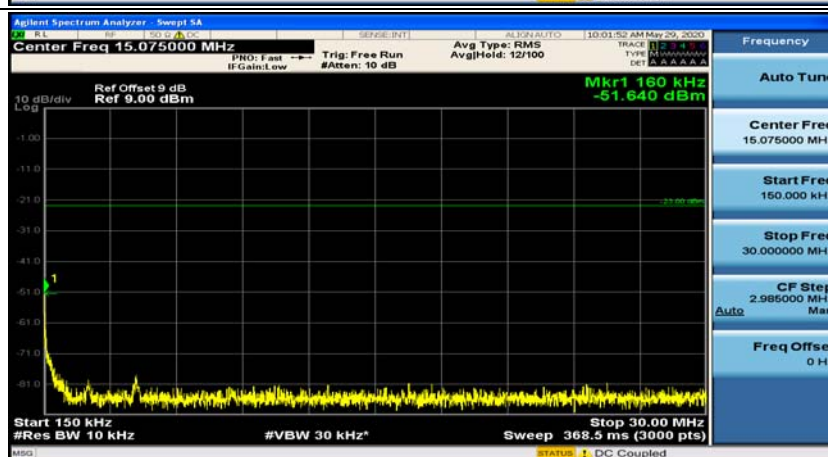
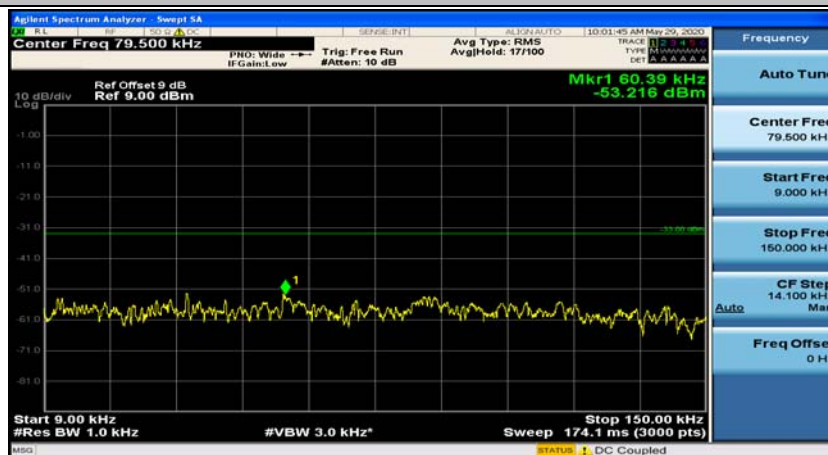


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

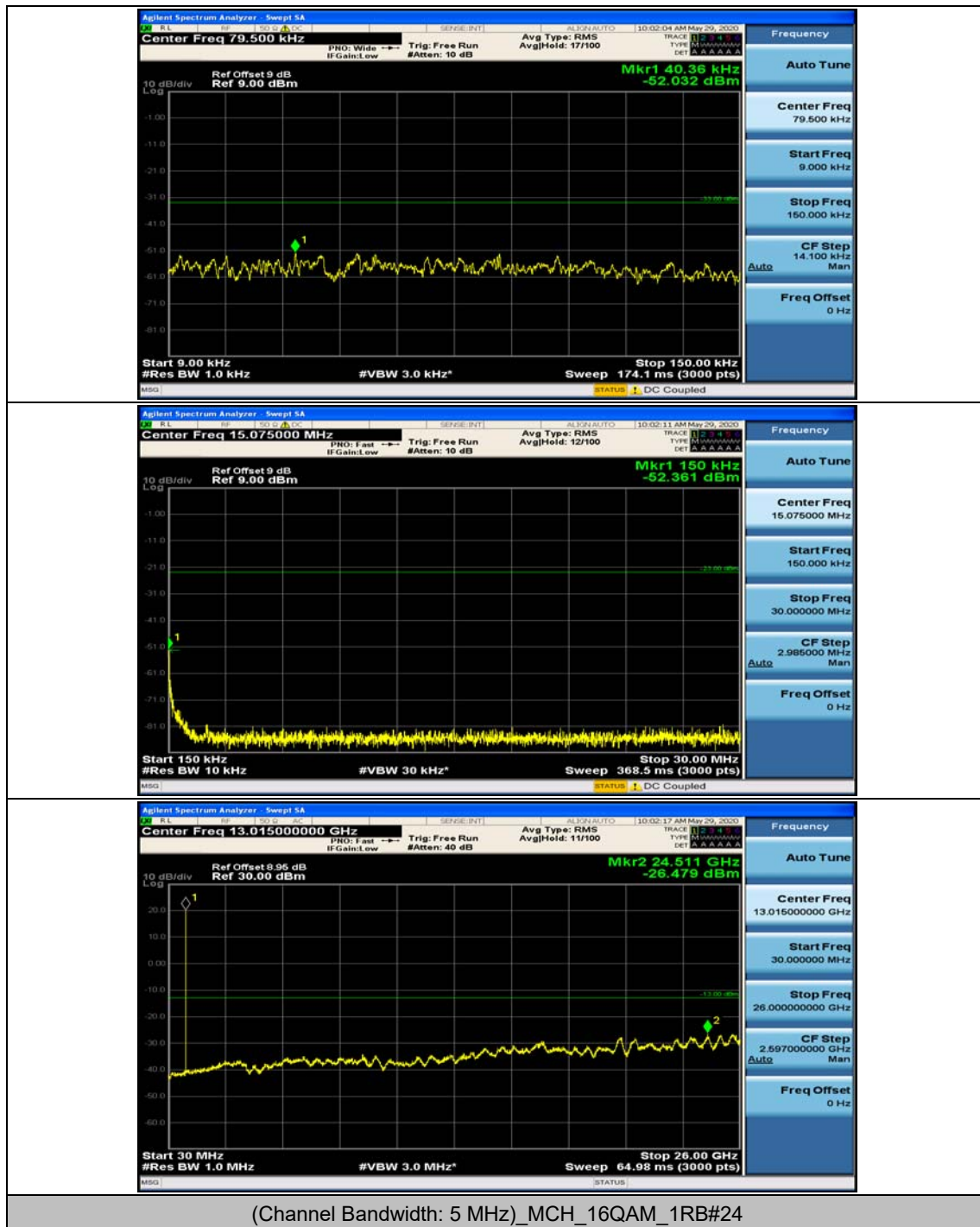


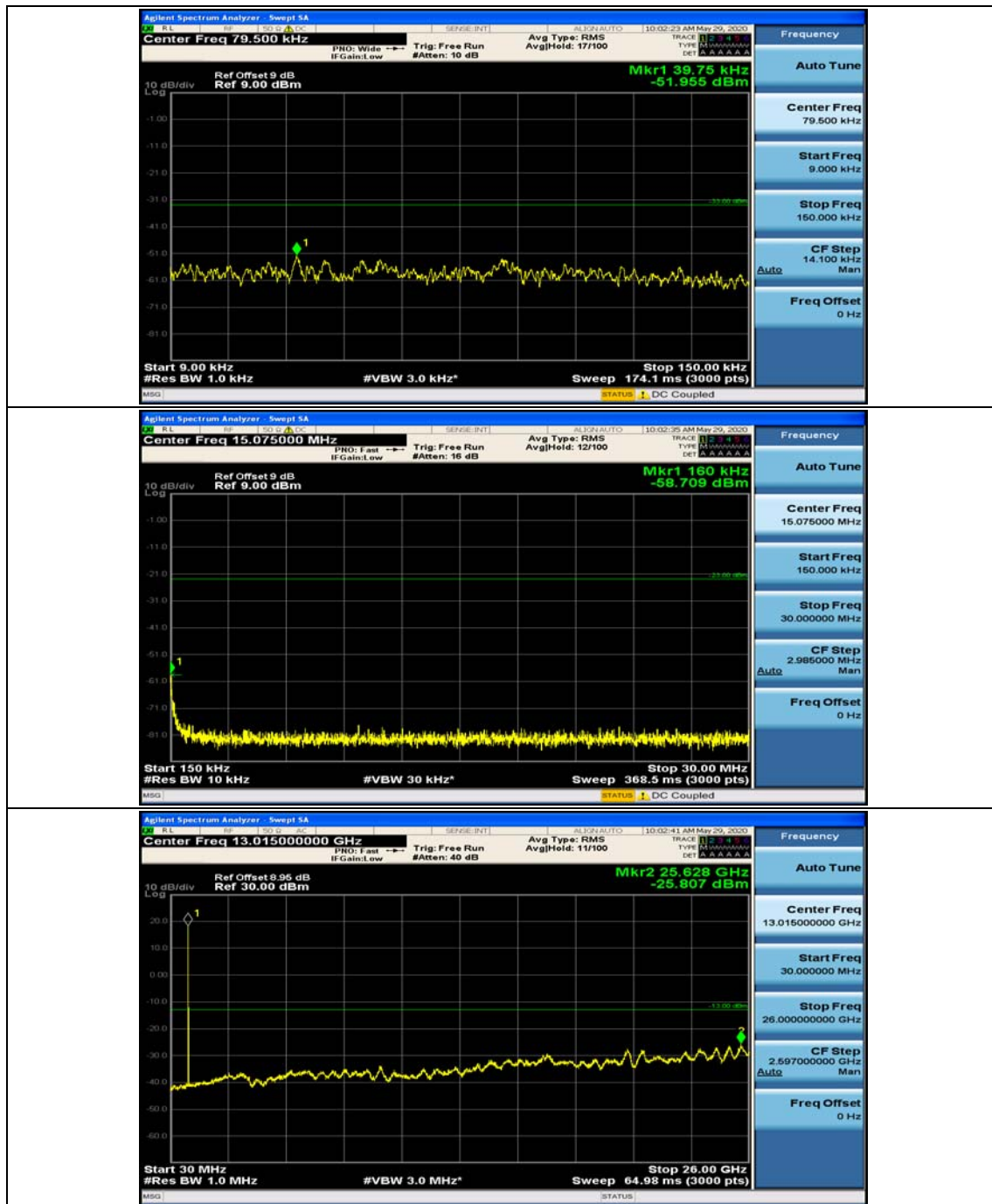


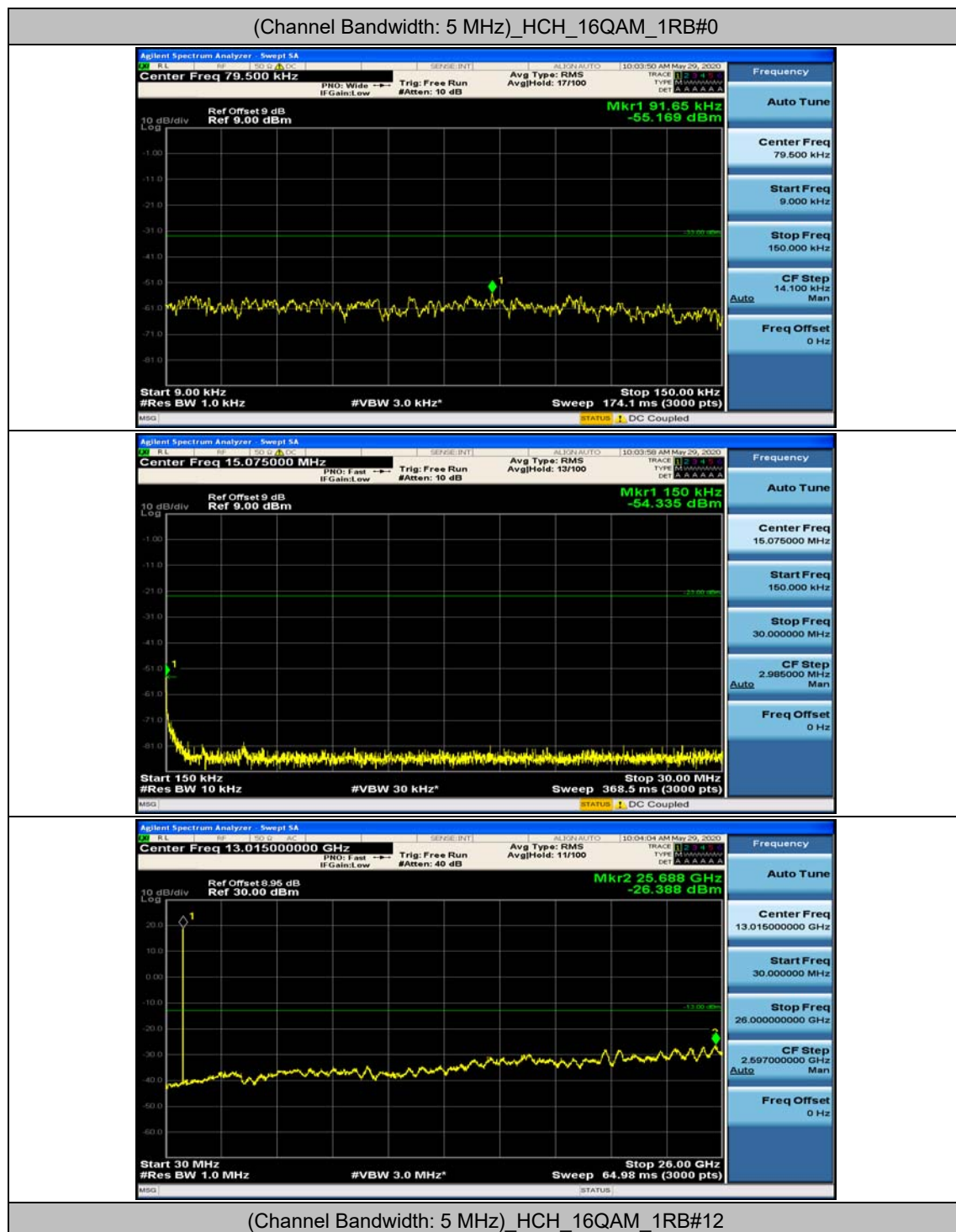
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

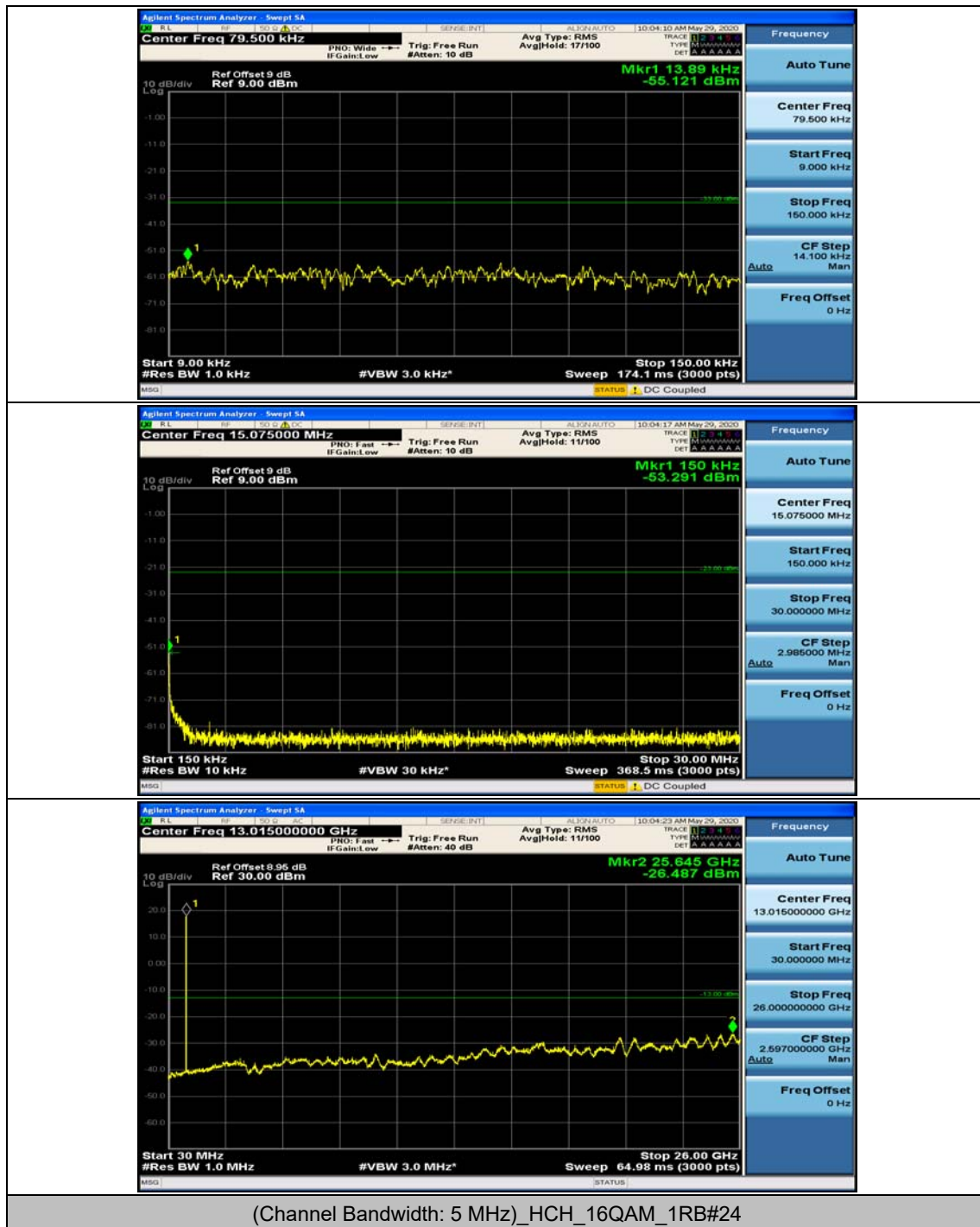


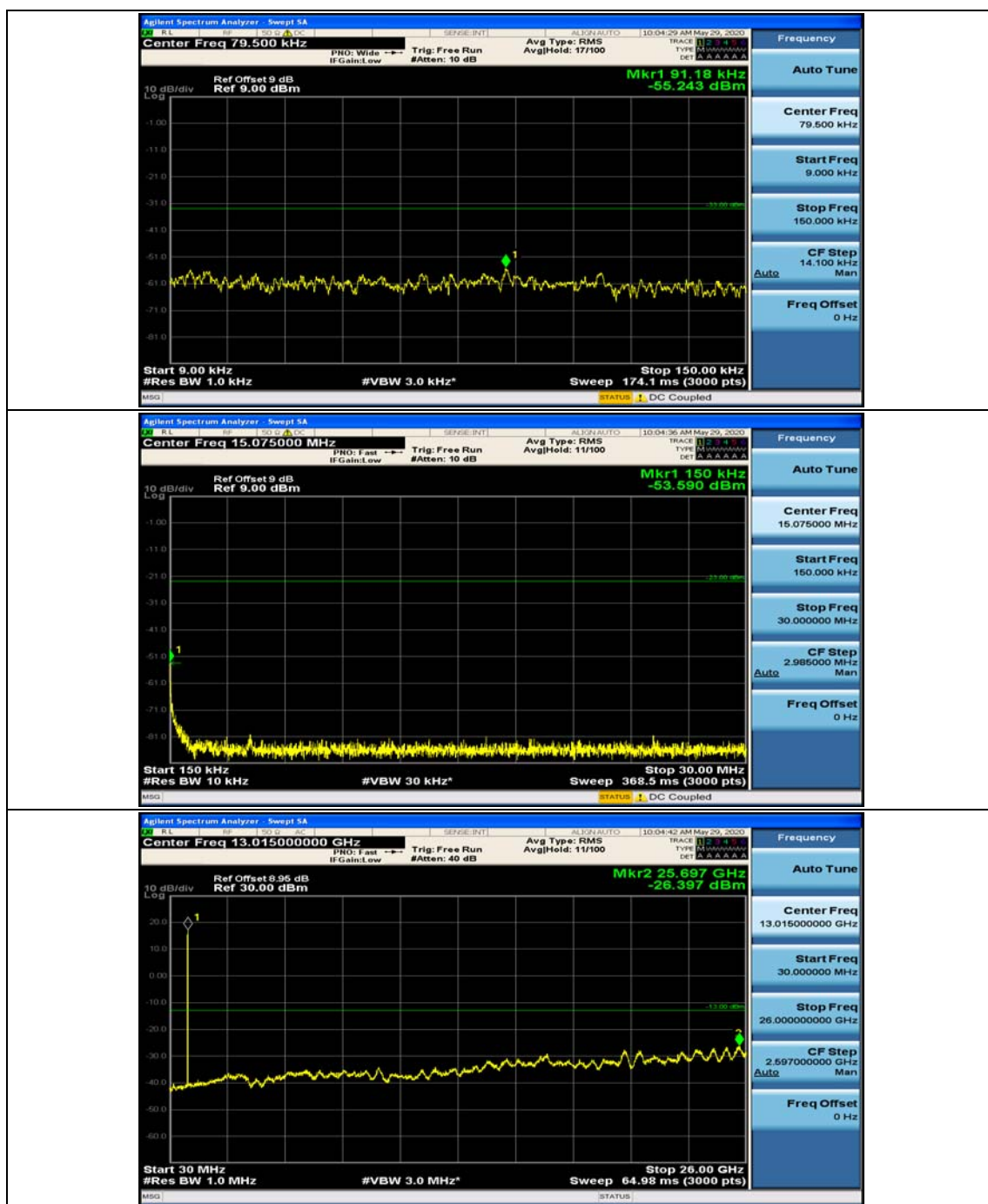
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12



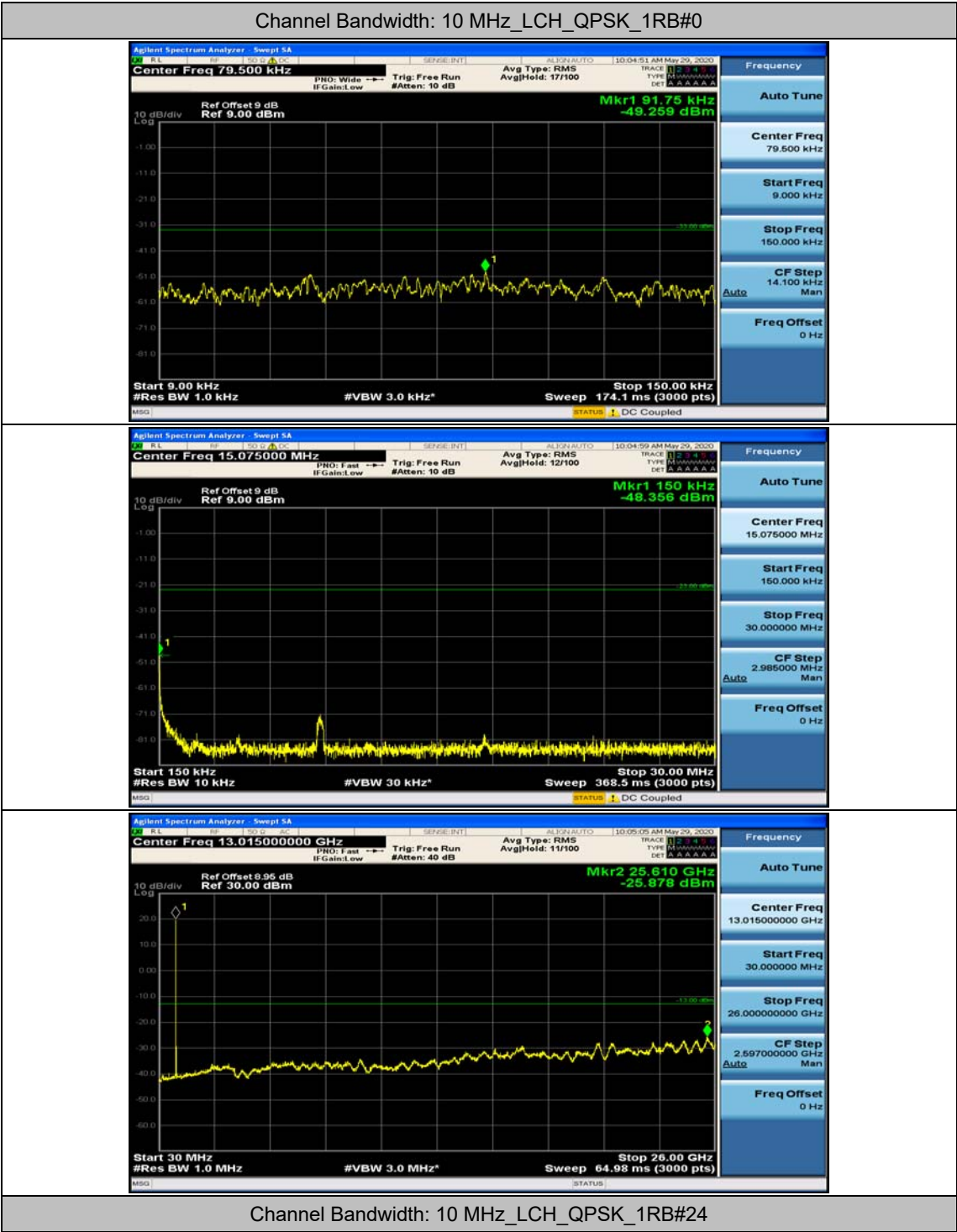


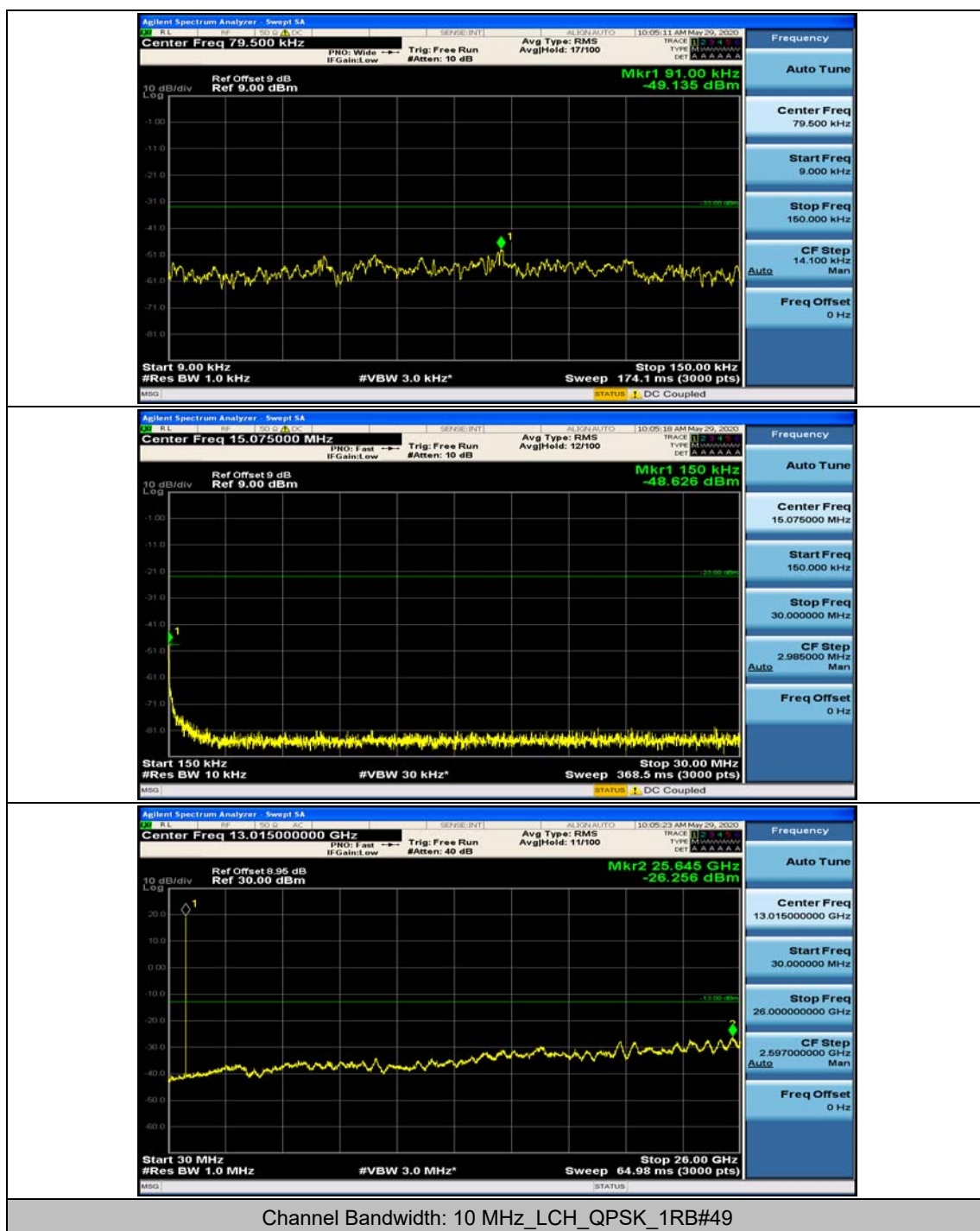


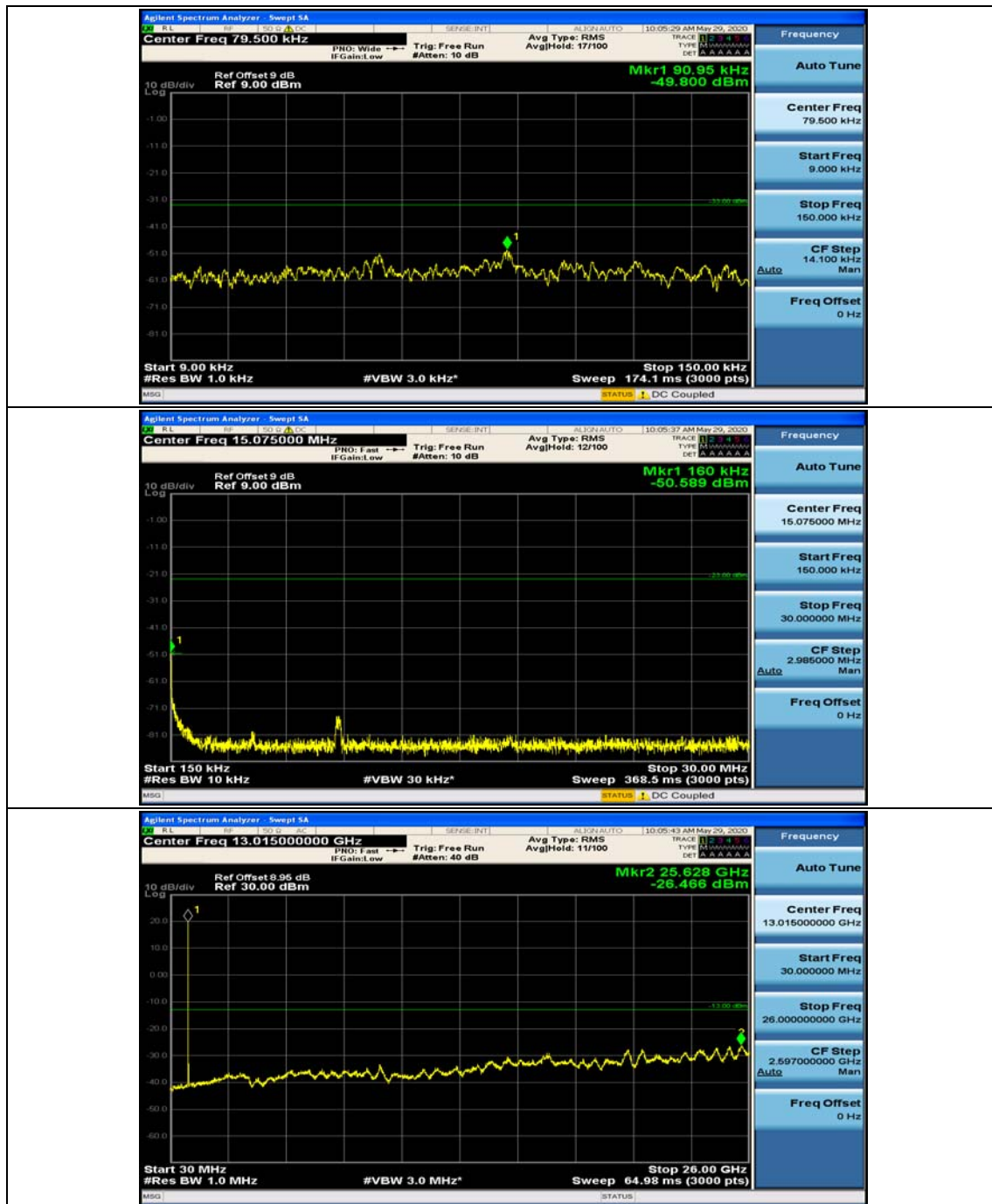


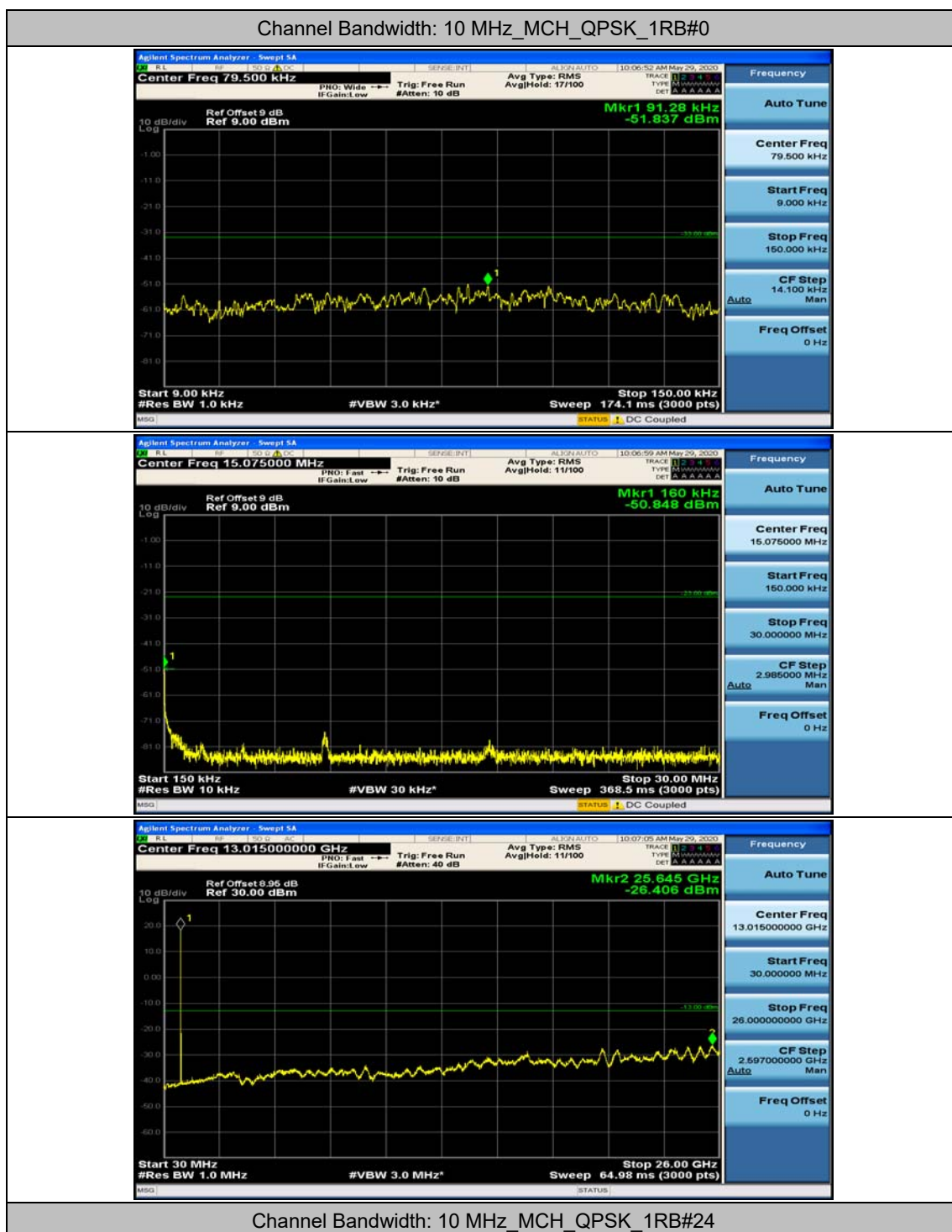


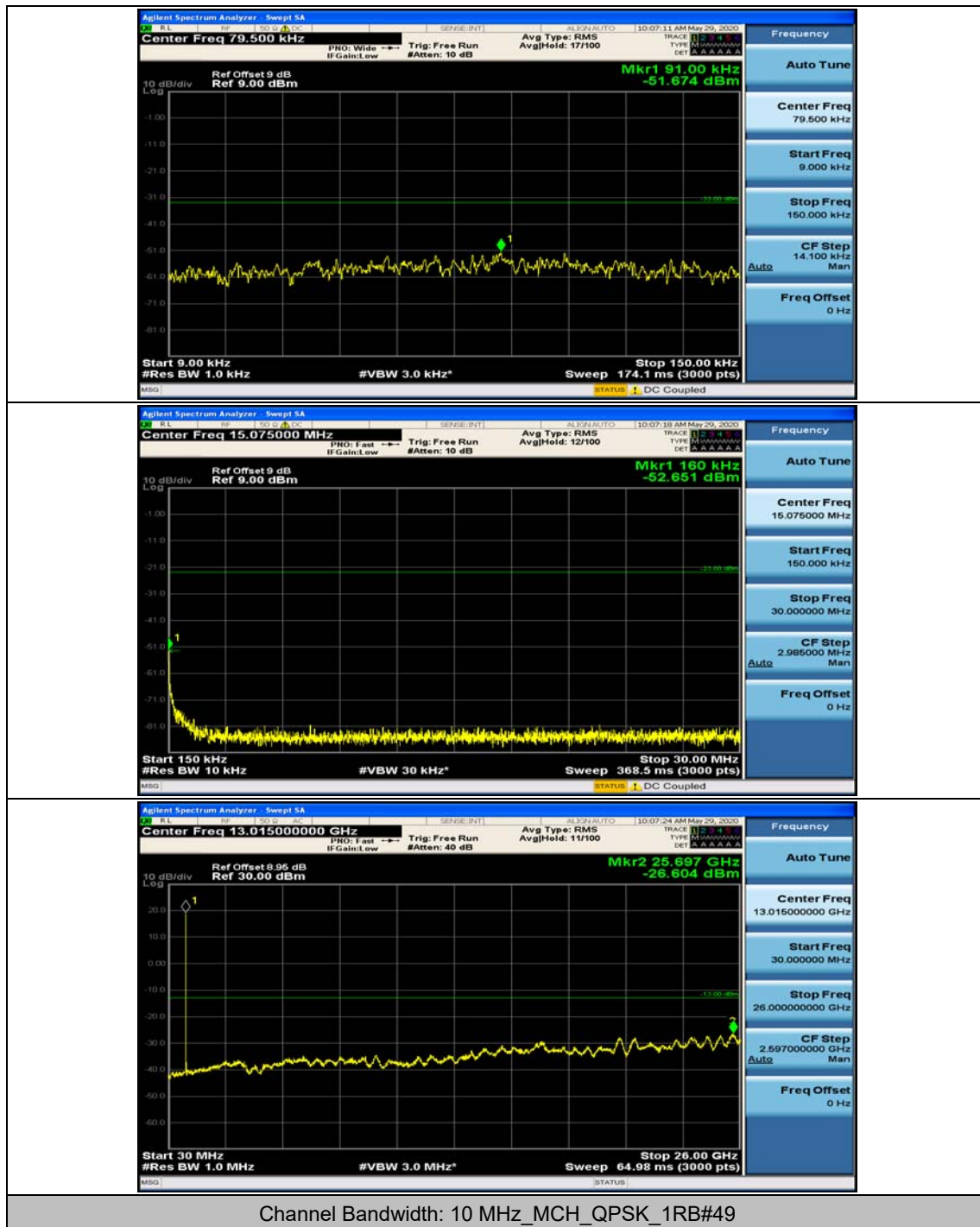
Channel Bandwidth: 10 MHz

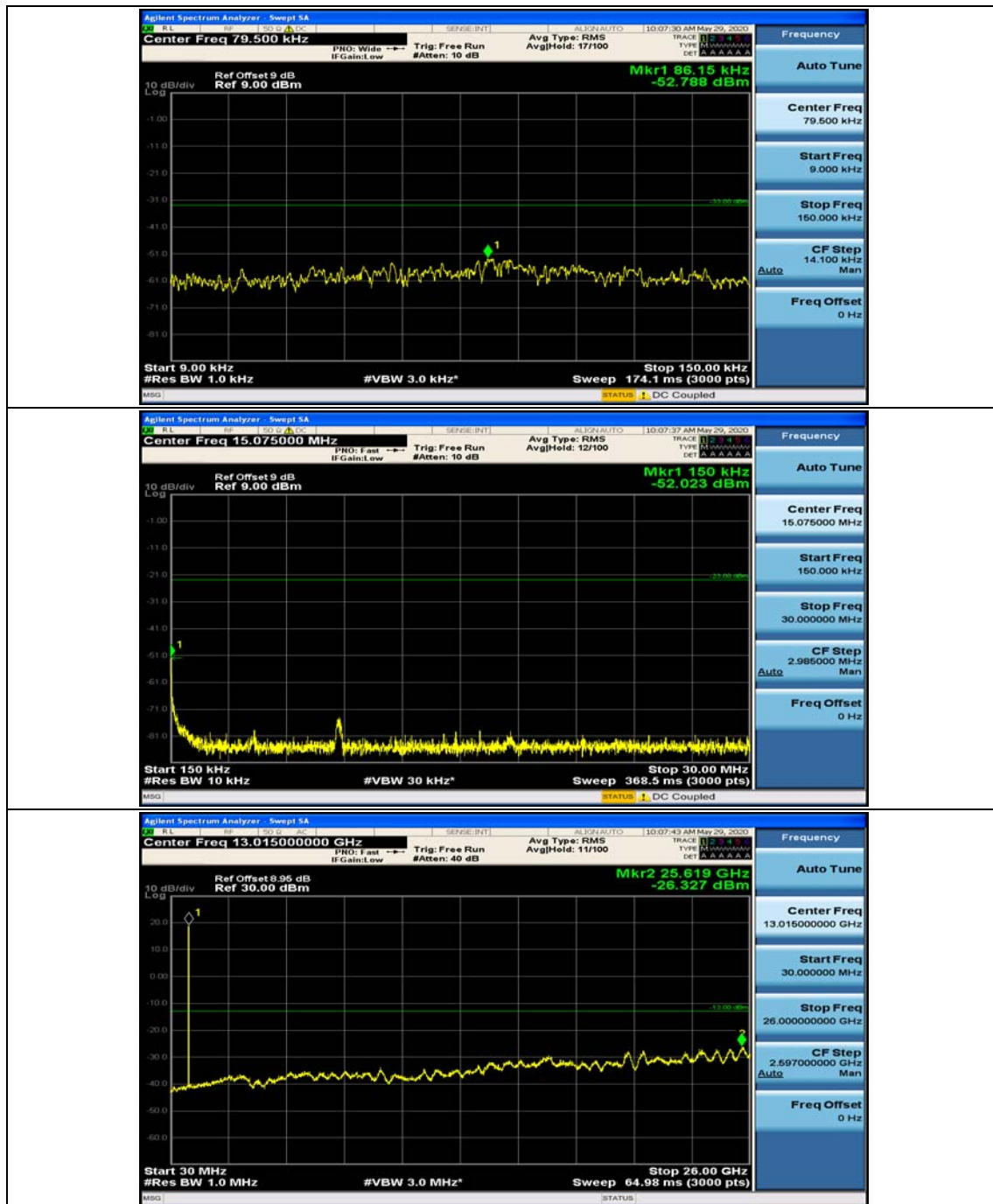


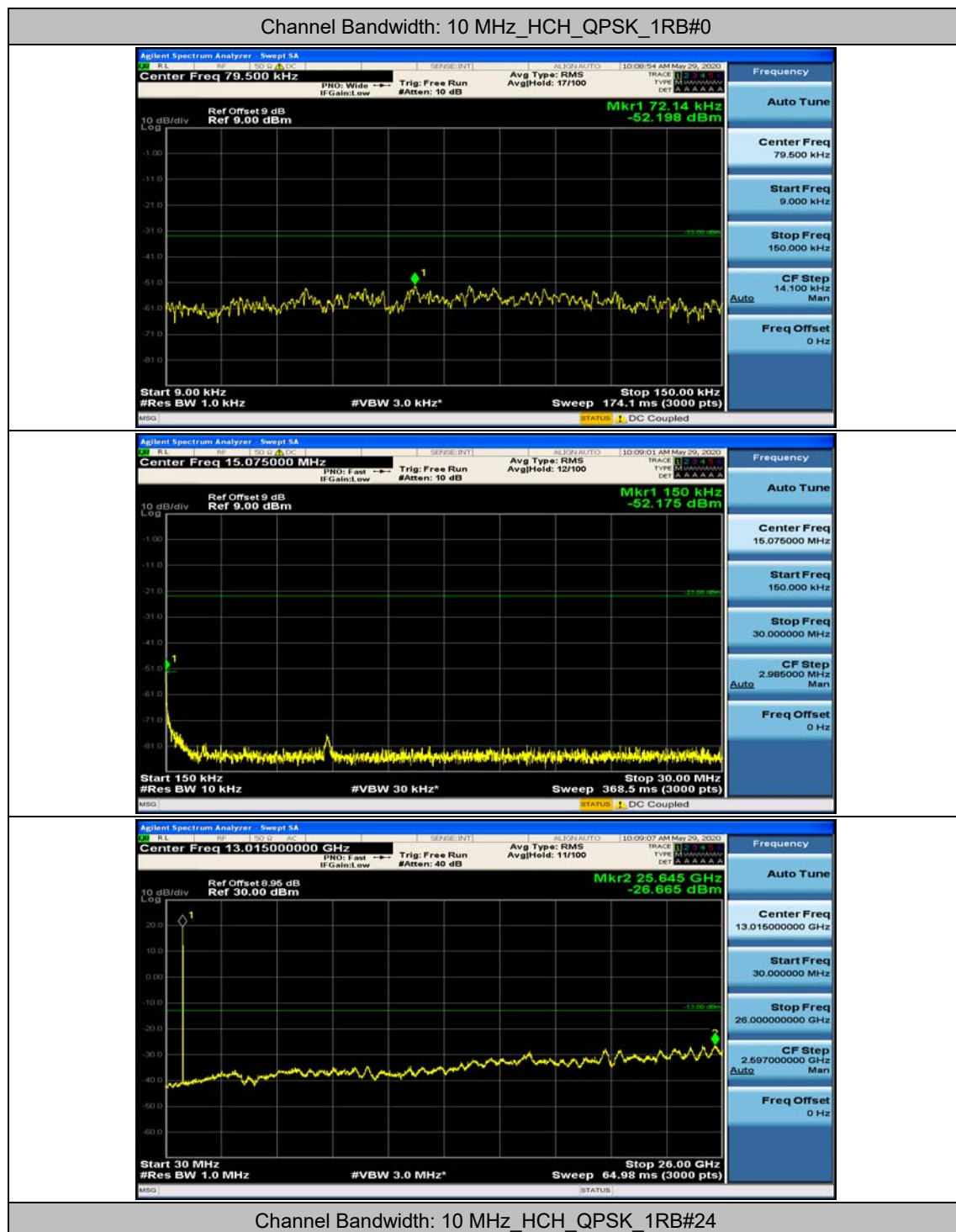


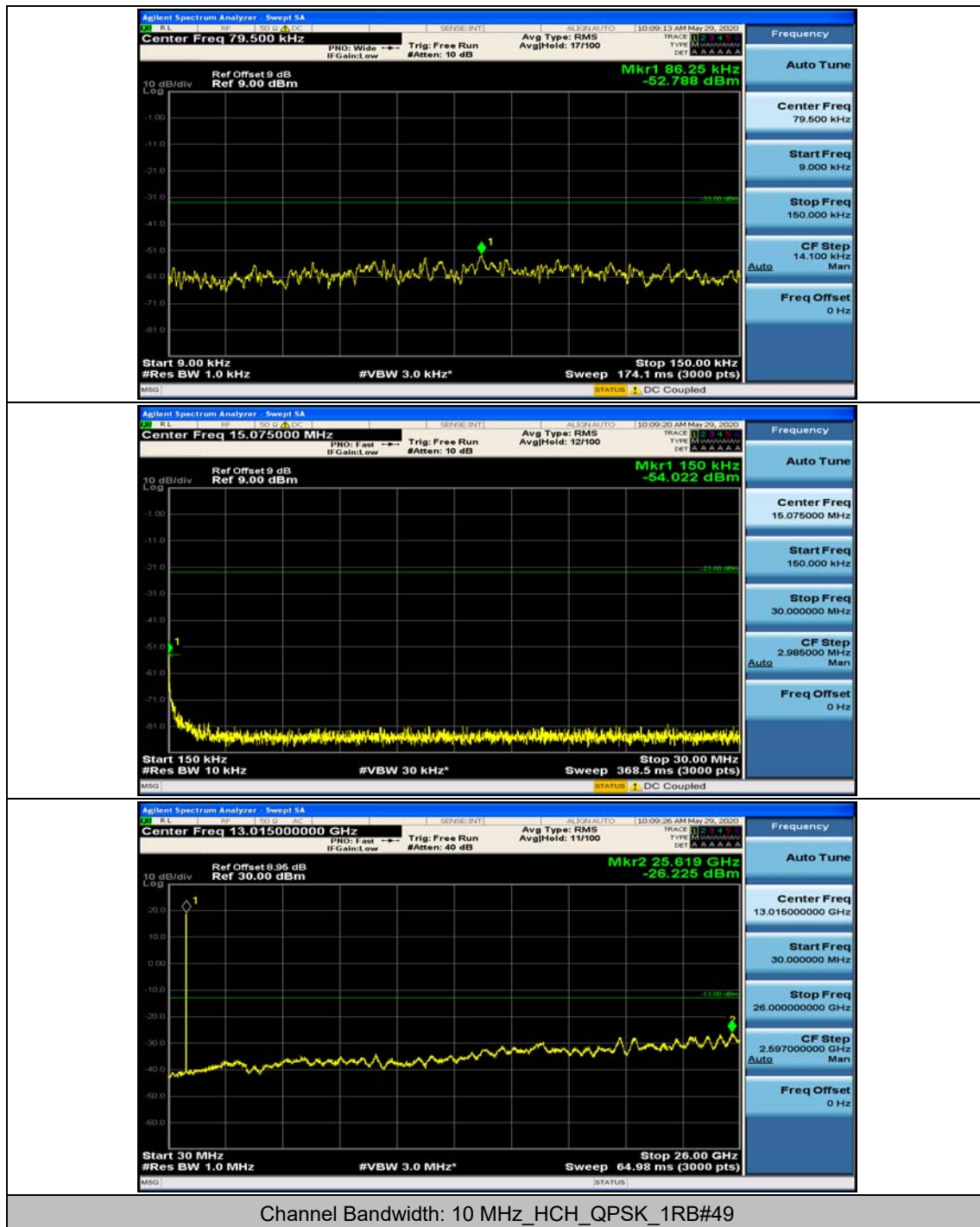


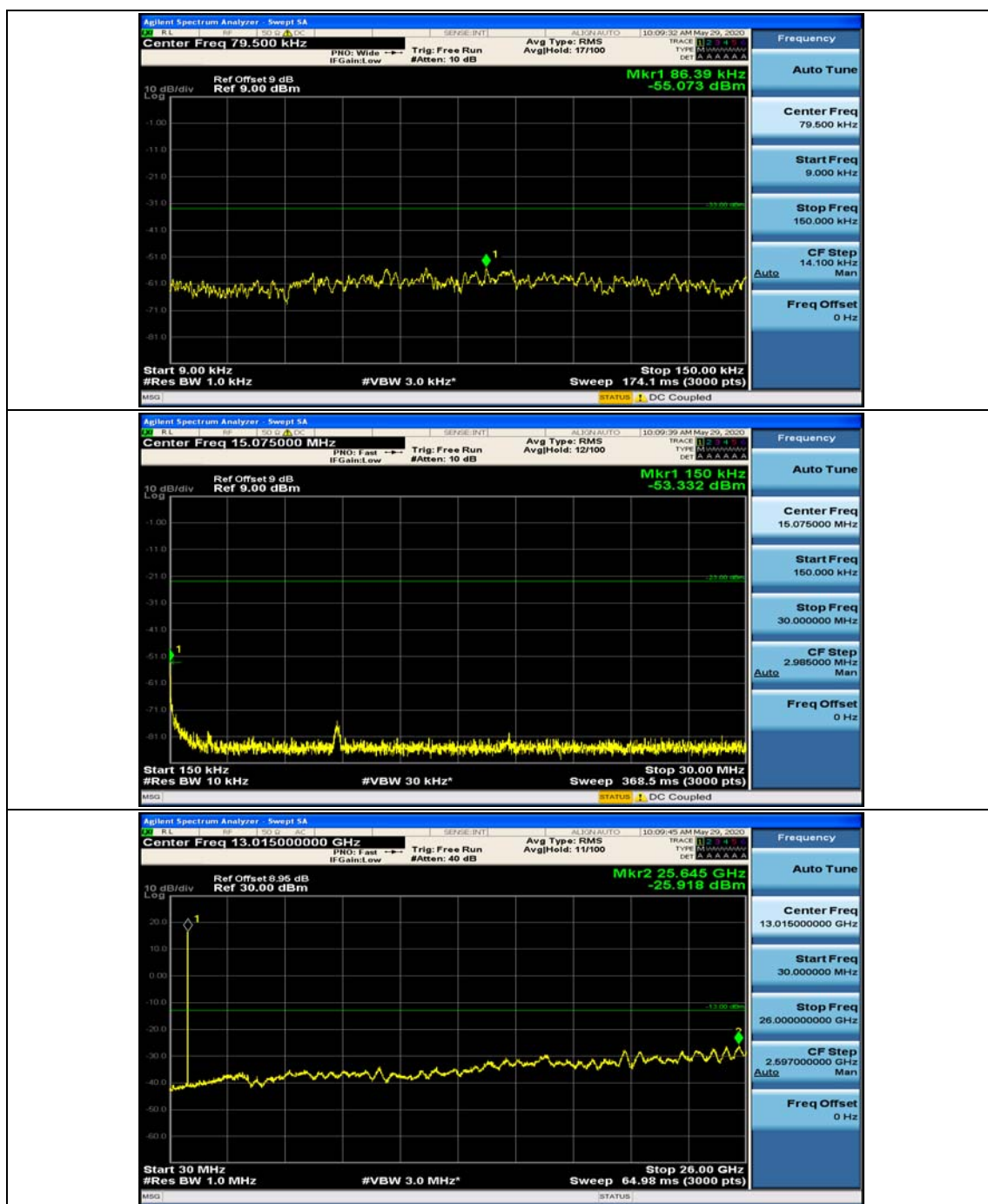


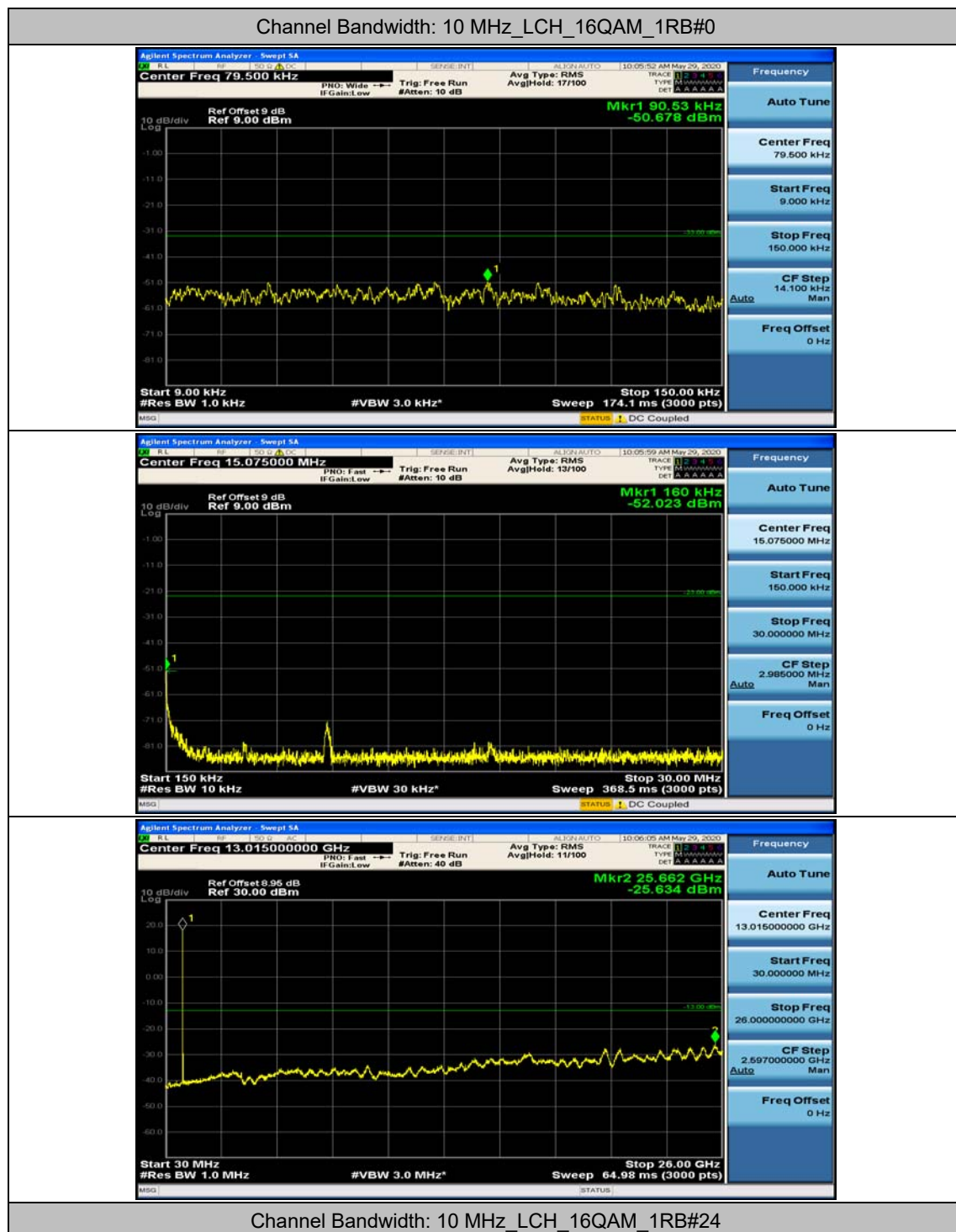


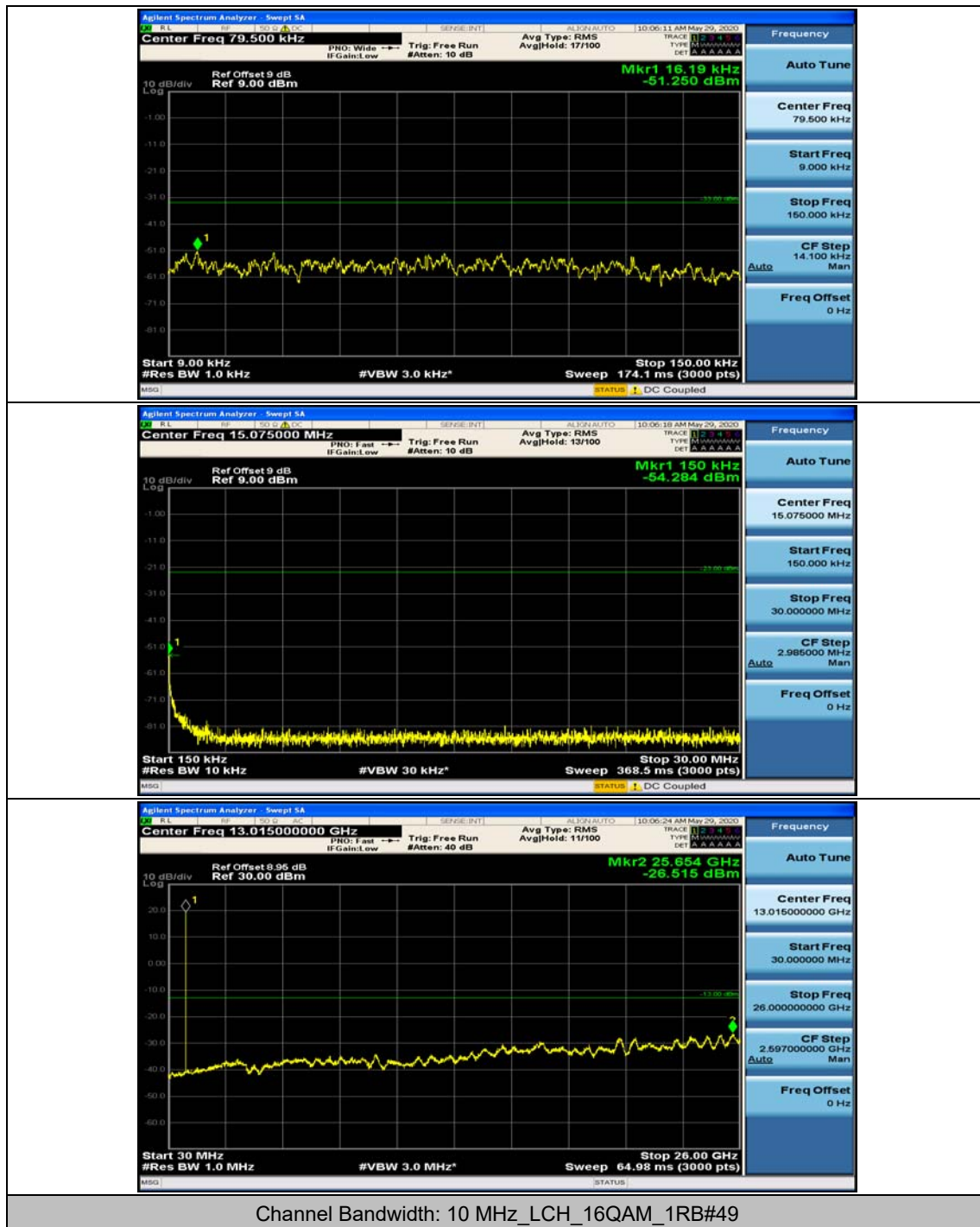


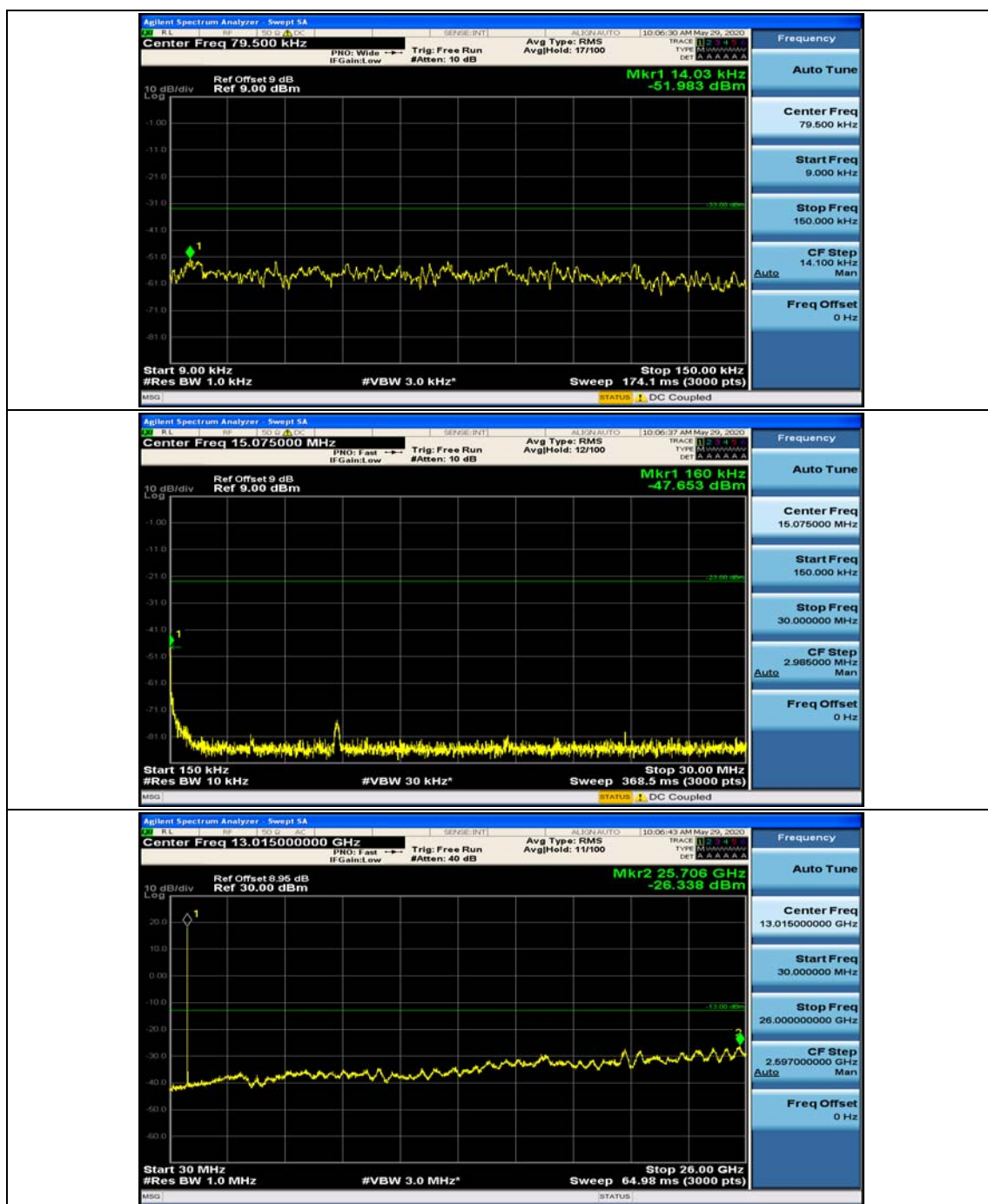


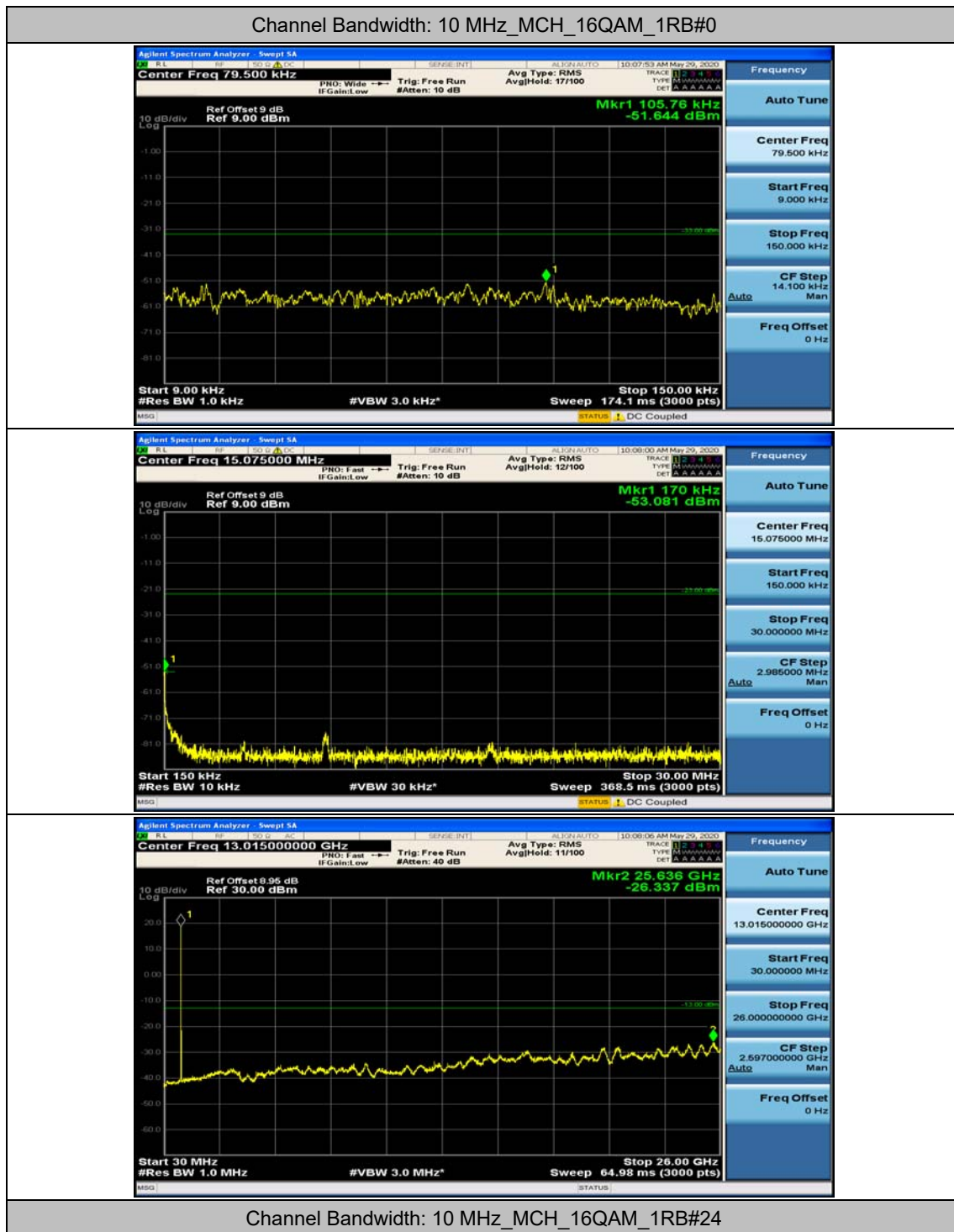


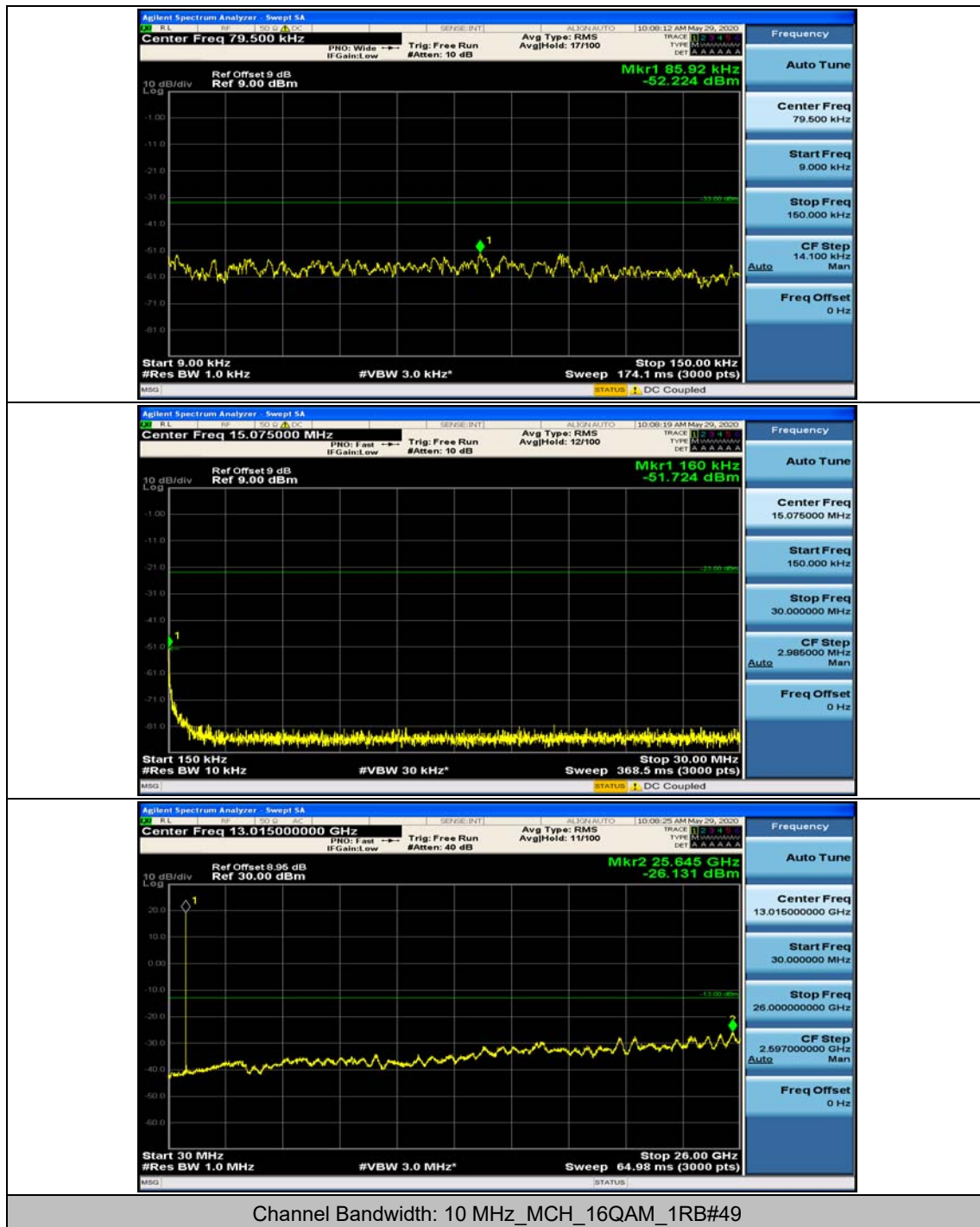


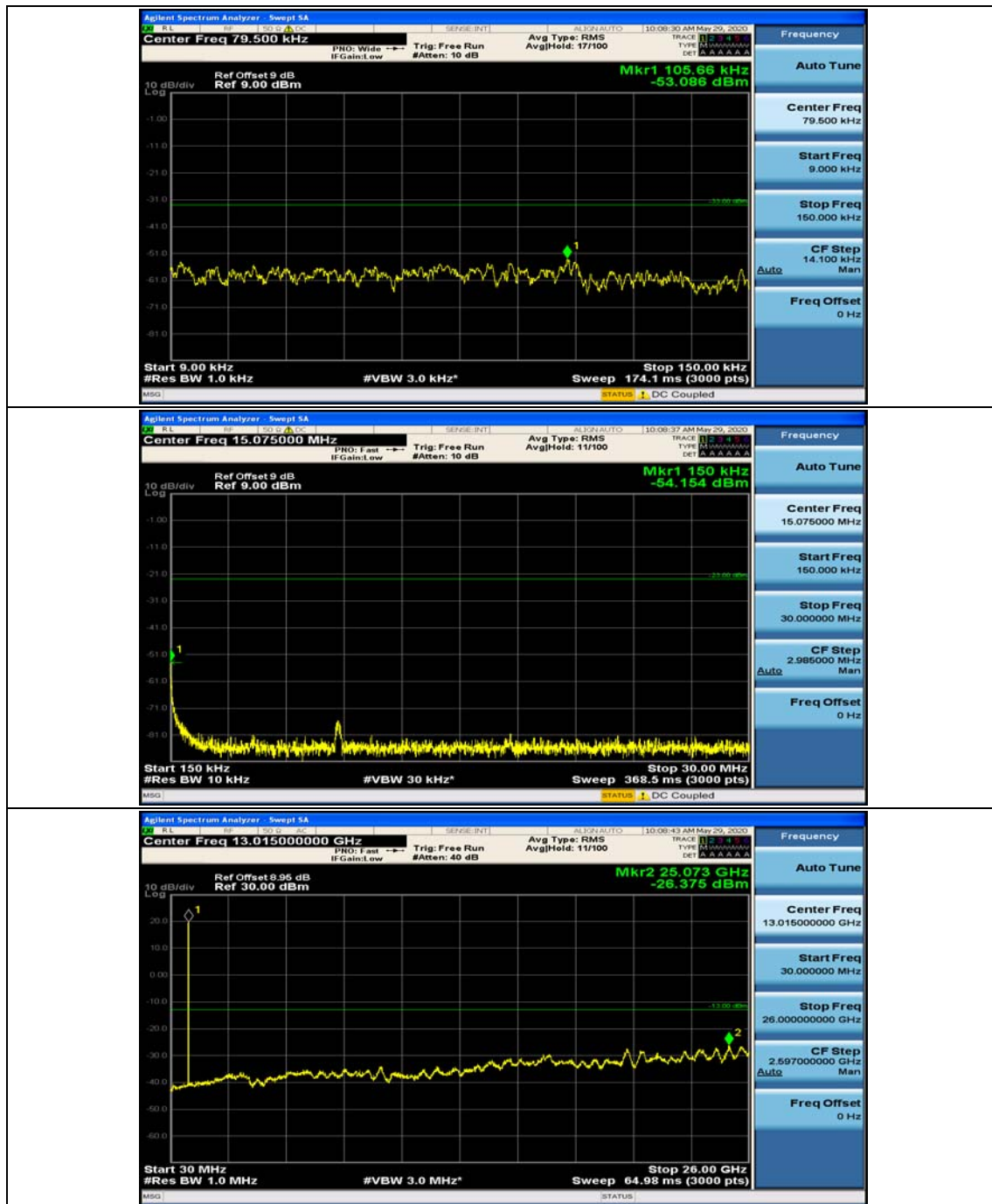


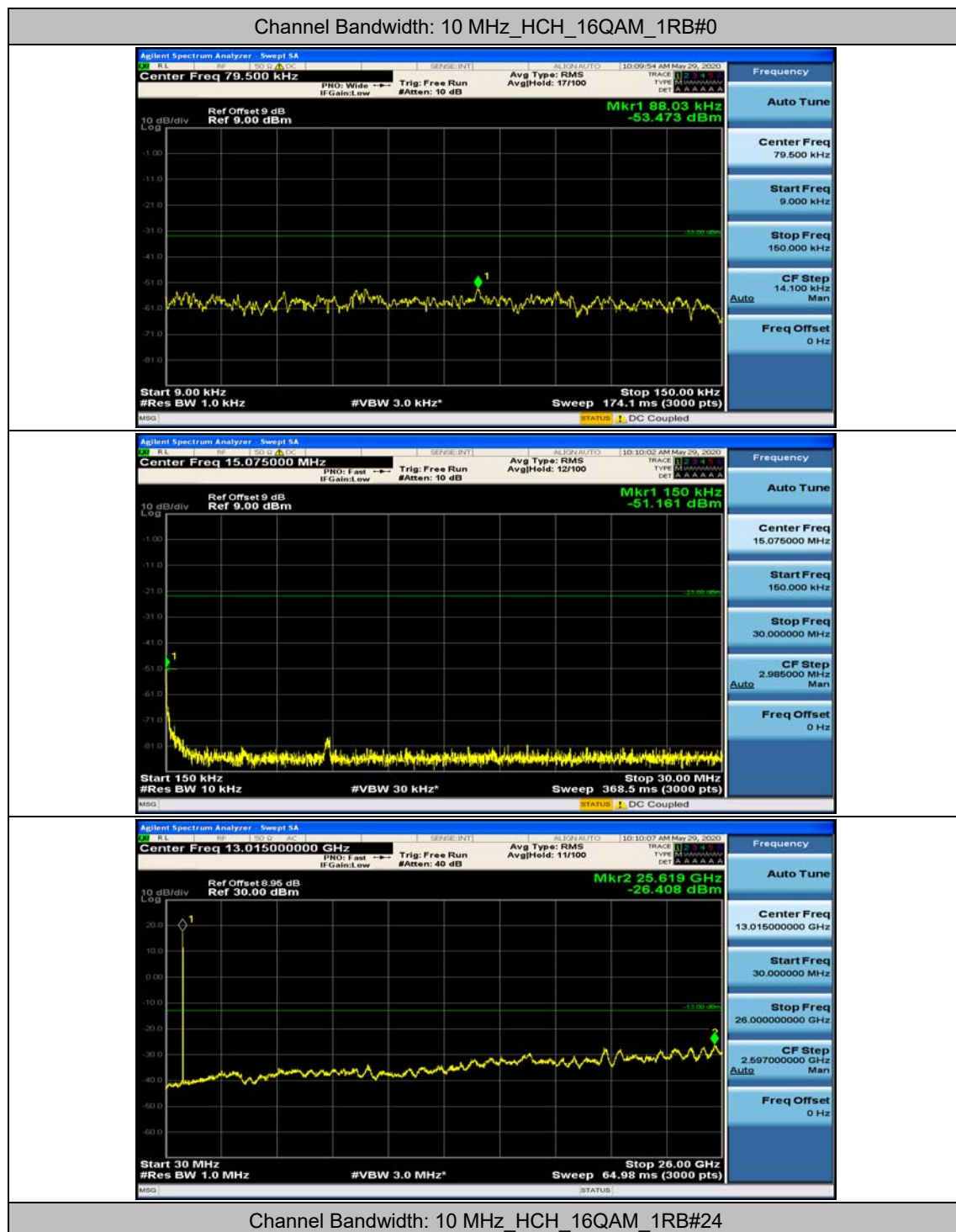


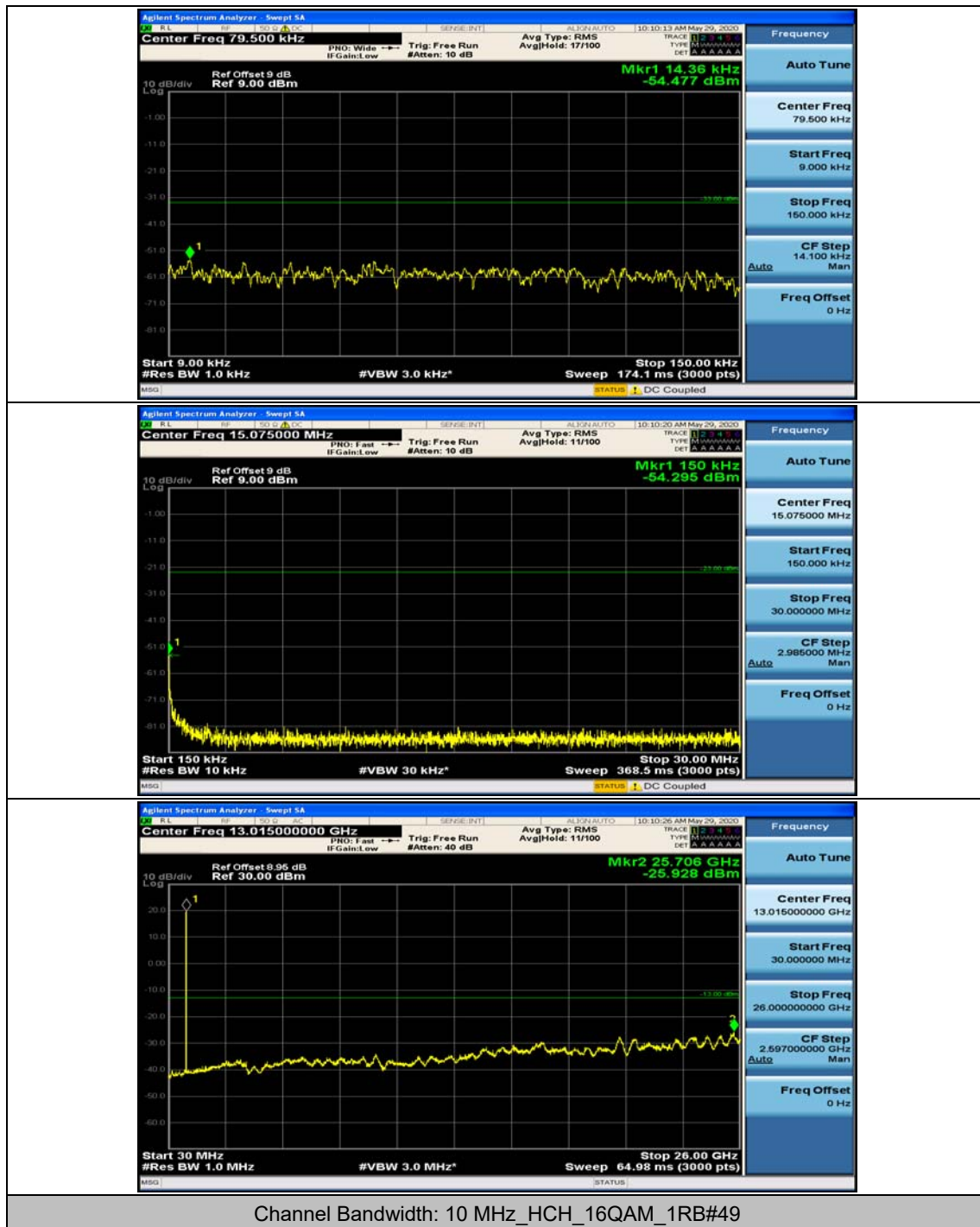


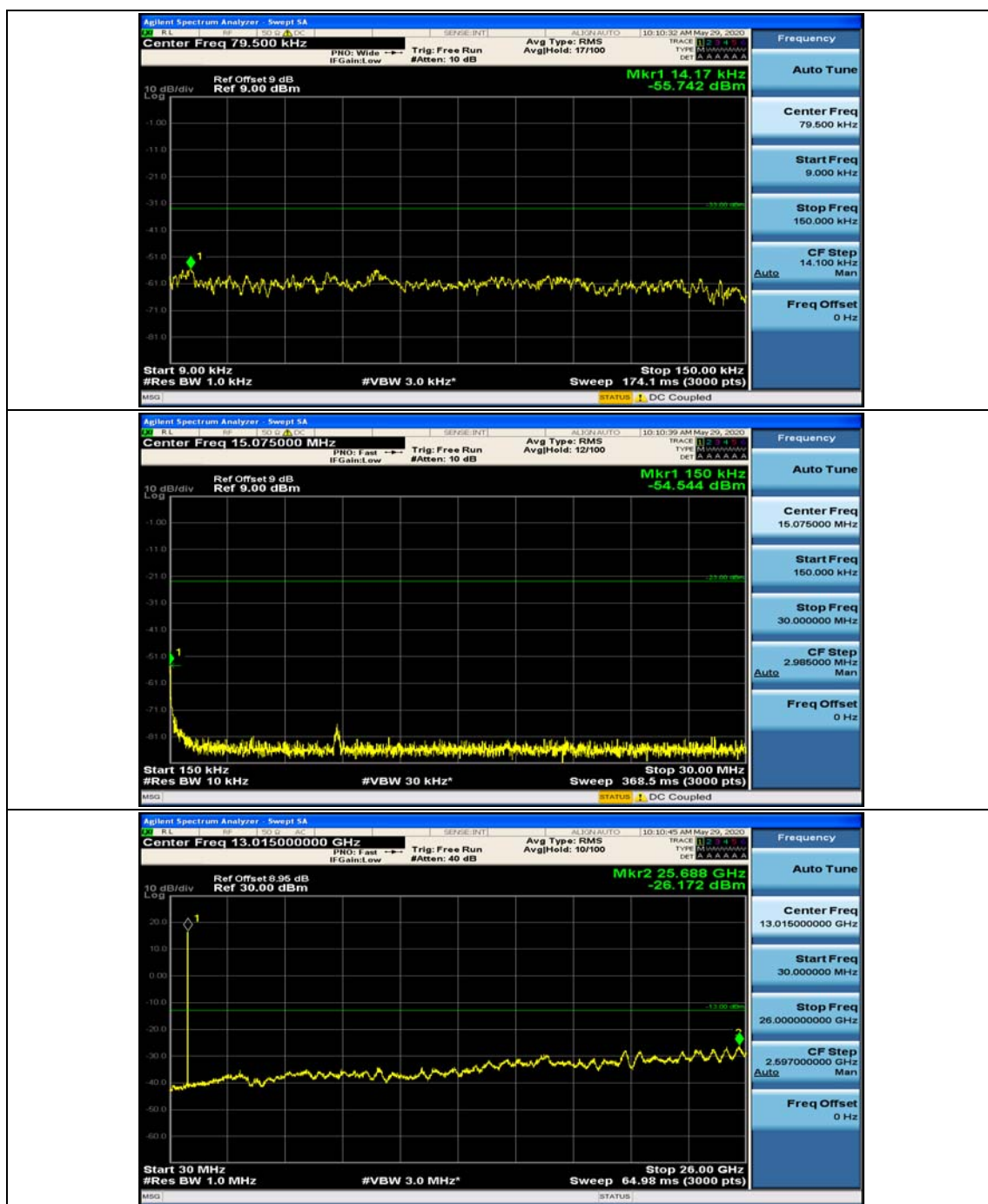












Appendix F: Frequency Stability

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	2.77	0.003359	± 2.5	PASS
		VN	TN	0.72	0.000873	± 2.5	PASS
		VH	TN	-0.73	-0.000885	± 2.5	PASS
	MCH	VL	TN	-1.35	-0.001614	± 2.5	PASS
		VN	TN	1.82	0.002176	± 2.5	PASS
		VH	TN	-0.18	-0.000215	± 2.5	PASS
	HCH	VL	TN	-0.52	-0.000613	± 2.5	PASS
		VN	TN	1.05	0.001238	± 2.5	PASS
		VH	TN	-1.88	-0.002216	± 2.5	PASS
16QAM	LCH	VL	TN	-1.93	-0.002340	± 2.5	PASS
		VN	TN	2.51	0.003044	± 2.5	PASS
		VH	TN	3.73	0.004523	± 2.5	PASS
	MCH	VL	TN	4.34	0.005188	± 2.5	PASS
		VN	TN	2.84	0.003395	± 2.5	PASS
		VH	TN	1.48	0.001769	± 2.5	PASS
	HCH	VL	TN	0.14	0.000165	± 2.5	PASS
		VN	TN	0.02	0.000024	± 2.5	PASS
		VH	TN	-1.75	-0.002063	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.81	0.004620	± 2.5	PASS
		VN	-20	1.34	0.001625	± 2.5	PASS
		VN	-10	-1.32	-0.001601	± 2.5	PASS
		VN	0	4.95	0.006002	± 2.5	PASS
		VN	10	2.32	0.002813	± 2.5	PASS
		VN	20	-0.55	-0.000667	± 2.5	PASS
		VN	30	4.12	0.004996	± 2.5	PASS
		VN	40	4.62	0.005602	± 2.5	PASS
		VN	50	-1.91	-0.002316	± 2.5	PASS
	MCH	VN	-30	-0.53	-0.000634	± 2.5	PASS

		VN	-20	2.62	0.003132	± 2.5	PASS
		VN	-10	-1.87	-0.002236	± 2.5	PASS
		VN	0	-0.88	-0.001052	± 2.5	PASS
		VN	10	-0.84	-0.001004	± 2.5	PASS
		VN	20	-1.1	-0.001315	± 2.5	PASS
		VN	30	-0.45	-0.000538	± 2.5	PASS
		VN	40	2.9	0.003467	± 2.5	PASS
		VN	50	4.73	0.005655	± 2.5	PASS
	HCH	VN	-30	-0.54	-0.000637	± 2.5	PASS
		VN	-20	-1.73	-0.002039	± 2.5	PASS
		VN	-10	0.54	0.000637	± 2.5	PASS
		VN	0	2.72	0.003206	± 2.5	PASS
		VN	10	-0.49	-0.000578	± 2.5	PASS
		VN	20	-0.61	-0.000719	± 2.5	PASS
		VN	30	1.09	0.001285	± 2.5	PASS
		VN	40	1.01	0.001191	± 2.5	PASS
		VN	50	-0.45	-0.000530	± 2.5	PASS
16QAM	LCH	VN	-30	1.31	0.001588	± 2.5	PASS
		VN	-20	1.44	0.001746	± 2.5	PASS
		VN	-10	0.12	0.000146	± 2.5	PASS
		VN	0	0.75	0.000909	± 2.5	PASS
		VN	10	0.65	0.000788	± 2.5	PASS
		VN	20	-1.89	-0.002292	± 2.5	PASS
		VN	30	0.64	0.000776	± 2.5	PASS
		VN	40	3.43	0.004159	± 2.5	PASS
		VN	50	3.36	0.004074	± 2.5	PASS
	MCH	VN	-30	4.81	0.005670	± 2.5	PASS
		VN	-20	2.4	0.002829	± 2.5	PASS
		VN	-10	1.28	0.001509	± 2.5	PASS
		VN	0	-0.35	-0.000413	± 2.5	PASS
		VN	10	-1.78	-0.002098	± 2.5	PASS
		VN	20	-0.52	-0.000613	± 2.5	PASS
		VN	30	-0.37	-0.000436	± 2.5	PASS
		VN	40	4.41	0.005199	± 2.5	PASS
		VN	50	-1.85	-0.002181	± 2.5	PASS
	HCH	VN	-30	2.14	0.002523	± 2.5	PASS
		VN	-20	-1.52	-0.001792	± 2.5	PASS
		VN	-10	1.26	0.001485	± 2.5	PASS
		VN	0	0.06	0.000071	± 2.5	PASS
		VN	10	-1.25	-0.001474	± 2.5	PASS
		VN	20	2.29	0.002700	± 2.5	PASS

		VN	30	1.23	0.001450	± 2.5	PASS
		VN	40	3.52	0.004149	± 2.5	PASS
		VN	50	3.16	0.003725	± 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	2.77	0.003356	± 2.5	PASS
		VN	TN	-0.09	-0.000109	± 2.5	PASS
		VH	TN	-1.02	-0.001236	± 2.5	PASS
	MCH	VL	TN	-0.7	-0.000837	± 2.5	PASS
		VN	TN	-0.72	-0.000861	± 2.5	PASS
		VH	TN	3	0.003586	± 2.5	PASS
	HCH	VL	TN	-1.3	-0.001534	± 2.5	PASS
		VN	TN	2.63	0.003103	± 2.5	PASS
		VH	TN	-0.29	-0.000342	± 2.5	PASS
16QAM	LCH	VL	TN	2.83	0.003428	± 2.5	PASS
		VN	TN	3.64	0.004409	± 2.5	PASS
		VH	TN	-0.32	-0.000388	± 2.5	PASS
	MCH	VL	TN	1.8	0.002152	± 2.5	PASS
		VN	TN	2.46	0.002941	± 2.5	PASS
		VH	TN	0.66	0.000789	± 2.5	PASS
	HCH	VL	TN	-1.01	-0.001192	± 2.5	PASS
		VN	TN	-0.88	-0.001038	± 2.5	PASS
		VH	TN	-1.75	-0.002065	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.03	-0.001248	± 2.5	PASS
		VN	-20	4.1	0.004967	± 2.5	PASS
		VN	-10	-0.5	-0.000606	± 2.5	PASS
		VN	0	1.06	0.001284	± 2.5	PASS
		VN	10	3.58	0.004337	± 2.5	PASS
		VN	20	3.24	0.003925	± 2.5	PASS
		VN	30	-0.26	-0.000315	± 2.5	PASS
		VN	40	4.1	0.004967	± 2.5	PASS
		VN	50	3.44	0.004167	± 2.5	PASS
	MCH	VN	-30	-1.48	-0.001769	± 2.5	PASS

		VN	-20	4.04	0.004830	± 2.5	PASS
		VN	-10	2.32	0.002773	± 2.5	PASS
		VN	0	5	0.005977	± 2.5	PASS
		VN	10	4.38	0.005236	± 2.5	PASS
		VN	20	2.58	0.003084	± 2.5	PASS
		VN	30	0.37	0.000442	± 2.5	PASS
		VN	40	0.05	0.000060	± 2.5	PASS
		VN	50	3.48	0.004160	± 2.5	PASS
	HCH	VN	-30	2.62	0.003091	± 2.5	PASS
		VN	-20	1.43	0.001687	± 2.5	PASS
		VN	-10	2.23	0.002631	± 2.5	PASS
		VN	0	2.91	0.003434	± 2.5	PASS
		VN	10	4.55	0.005369	± 2.5	PASS
		VN	20	3.64	0.004295	± 2.5	PASS
		VN	30	3.31	0.003906	± 2.5	PASS
		VN	40	1.53	0.001805	± 2.5	PASS
		VN	50	4.77	0.005628	± 2.5	PASS
16QAM	LCH	VN	-30	1.27	0.001518	± 2.5	PASS
		VN	-20	3.58	0.004280	± 2.5	PASS
		VN	-10	-1.84	-0.002200	± 2.5	PASS
		VN	0	-2	-0.002391	± 2.5	PASS
		VN	10	-0.04	-0.000048	± 2.5	PASS
		VN	20	2.96	0.003539	± 2.5	PASS
		VN	30	0.71	0.000849	± 2.5	PASS
		VN	40	2.24	0.002678	± 2.5	PASS
		VN	50	2.76	0.003299	± 2.5	PASS
	MCH	VN	-30	4.49	0.005298	± 2.5	PASS
		VN	-20	-1.9	-0.002242	± 2.5	PASS
		VN	-10	1.47	0.001735	± 2.5	PASS
		VN	0	3.13	0.003693	± 2.5	PASS
		VN	10	0.25	0.000295	± 2.5	PASS
		VN	20	4.61	0.005440	± 2.5	PASS
		VN	30	-0.66	-0.000779	± 2.5	PASS
		VN	40	3.34	0.003941	± 2.5	PASS
		VN	50	-1.94	-0.002289	± 2.5	PASS
	HCH	VN	-30	-1.36	-0.001605	± 2.5	PASS
		VN	-20	4.57	0.005392	± 2.5	PASS
		VN	-10	4.45	0.005251	± 2.5	PASS
		VN	0	4.58	0.005404	± 2.5	PASS
		VN	10	3.22	0.003799	± 2.5	PASS
		VN	20	2.67	0.003150	± 2.5	PASS

		VN	30	0.26	0.000307	± 2.5	PASS
		VN	40	0.73	0.000861	± 2.5	PASS
		VN	50	1.89	0.002230	± 2.5	PASS

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	2.77	0.003351	± 2.5	PASS
		VN	TN	-1.32	-0.001597	± 2.5	PASS
		VH	TN	0.03	0.000036	± 2.5	PASS
	MCH	VL	TN	0.77	0.000921	± 2.5	PASS
		VN	TN	0.62	0.000741	± 2.5	PASS
		VH	TN	1.82	0.002176	± 2.5	PASS
	HCH	VL	TN	4.36	0.005151	± 2.5	PASS
		VN	TN	1.54	0.001819	± 2.5	PASS
		VH	TN	1.53	0.001807	± 2.5	PASS
16QAM	LCH	VL	TN	2.03	0.002456	± 2.5	PASS
		VN	TN	0.09	0.000109	± 2.5	PASS
		VH	TN	4.66	0.005638	± 2.5	PASS
	MCH	VL	TN	-0.2	-0.000239	± 2.5	PASS
		VN	TN	3.81	0.004555	± 2.5	PASS
		VH	TN	0.58	0.000693	± 2.5	PASS
	HCH	VL	TN	3.45	0.004076	± 2.5	PASS
		VN	TN	0.95	0.001122	± 2.5	PASS
		VH	TN	-1.26	-0.001488	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.34	0.005251	± 2.5	PASS
		VN	-20	4.05	0.004900	± 2.5	PASS
		VN	-10	3.19	0.003860	± 2.5	PASS
		VN	0	2.84	0.003436	± 2.5	PASS
		VN	10	-0.84	-0.001016	± 2.5	PASS
		VN	20	-1.36	-0.001645	± 2.5	PASS
		VN	30	-0.36	-0.000436	± 2.5	PASS
		VN	40	0.85	0.001028	± 2.5	PASS
		VN	50	0.13	0.000157	± 2.5	PASS
	MCH	VN	-30	2.09	0.002499	± 2.5	PASS

		VN	-20	2.33	0.002785	± 2.5	PASS
		VN	-10	-0.99	-0.001184	± 2.5	PASS
		VN	0	-0.48	-0.000574	± 2.5	PASS
		VN	10	-1.57	-0.001877	± 2.5	PASS
		VN	20	1.63	0.001949	± 2.5	PASS
		VN	30	-1.85	-0.002212	± 2.5	PASS
		VN	40	2.63	0.003144	± 2.5	PASS
		VN	50	0.08	0.000096	± 2.5	PASS
	HCH	VN	-30	2.01	0.002374	± 2.5	PASS
		VN	-20	-0.47	-0.000555	± 2.5	PASS
		VN	-10	4.26	0.005032	± 2.5	PASS
		VN	0	1.34	0.001583	± 2.5	PASS
		VN	10	-1.66	-0.001961	± 2.5	PASS
		VN	20	3.68	0.004347	± 2.5	PASS
		VN	30	0.69	0.000815	± 2.5	PASS
		VN	40	2.63	0.003107	± 2.5	PASS
		VN	50	4.03	0.004761	± 2.5	PASS
16QAM	LCH	VN	-30	1.85	0.002212	± 2.5	PASS
		VN	-20	3.9	0.004662	± 2.5	PASS
		VN	-10	1.06	0.001267	± 2.5	PASS
		VN	0	2.45	0.002929	± 2.5	PASS
		VN	10	-0.72	-0.000861	± 2.5	PASS
		VN	20	3.42	0.004088	± 2.5	PASS
		VN	30	0.72	0.000861	± 2.5	PASS
		VN	40	1.48	0.001769	± 2.5	PASS
		VN	50	-1.02	-0.001219	± 2.5	PASS
	MCH	VN	-30	3.23	0.003816	± 2.5	PASS
		VN	-20	-0.7	-0.000827	± 2.5	PASS
		VN	-10	3.59	0.004241	± 2.5	PASS
		VN	0	3.93	0.004643	± 2.5	PASS
		VN	10	3.77	0.004454	± 2.5	PASS
		VN	20	2.76	0.003260	± 2.5	PASS
		VN	30	3.16	0.003733	± 2.5	PASS
		VN	40	1.92	0.002268	± 2.5	PASS
		VN	50	2.55	0.003012	± 2.5	PASS
	HCH	VN	-30	-1.81	-0.002138	± 2.5	PASS
		VN	-20	0.67	0.000791	± 2.5	PASS
		VN	-10	4.15	0.004903	± 2.5	PASS
		VN	0	0.53	0.000626	± 2.5	PASS
		VN	10	2.62	0.003095	± 2.5	PASS
		VN	20	1.33	0.001571	± 2.5	PASS

		VN	30	0.24	0.000284	± 2.5	PASS
		VN	40	-0.17	-0.000201	± 2.5	PASS
		VN	50	-1.29	-0.001524	± 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	2.77	0.003341	± 2.5	PASS
		VN	TN	4.15	0.005006	± 2.5	PASS
		VH	TN	-1.8	-0.002171	± 2.5	PASS
	MCH	VL	TN	2	0.002391	± 2.5	PASS
		VN	TN	0.56	0.000669	± 2.5	PASS
		VH	TN	1.36	0.001626	± 2.5	PASS
	HCH	VL	TN	2.68	0.003175	± 2.5	PASS
		VN	TN	3.18	0.003768	± 2.5	PASS
		VH	TN	-0.99	-0.001173	± 2.5	PASS
16QAM	LCH	VL	TN	3.14	0.003788	± 2.5	PASS
		VN	TN	0.65	0.000784	± 2.5	PASS
		VH	TN	-0.62	-0.000748	± 2.5	PASS
	MCH	VL	TN	4.38	0.005236	± 2.5	PASS
		VN	TN	2.07	0.002475	± 2.5	PASS
		VH	TN	-1.71	-0.002044	± 2.5	PASS
	HCH	VL	TN	2.25	0.002666	± 2.5	PASS
		VN	TN	1.42	0.001682	± 2.5	PASS
		VH	TN	-0.39	-0.000462	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.51	0.000615	± 2.5	PASS
		VN	-20	3.84	0.004632	± 2.5	PASS
		VN	-10	-1.68	-0.002027	± 2.5	PASS
		VN	0	-0.15	-0.000181	± 2.5	PASS
		VN	10	2.29	0.002762	± 2.5	PASS
		VN	20	-0.09	-0.000109	± 2.5	PASS
		VN	30	4.47	0.005392	± 2.5	PASS
		VN	40	-1.41	-0.001701	± 2.5	PASS
		VN	50	4.9	0.005911	± 2.5	PASS
	MCH	VN	-30	2.22	0.002654	± 2.5	PASS

		VN	-20	4.28	0.005117	± 2.5	PASS
		VN	-10	-0.71	-0.000849	± 2.5	PASS
		VN	0	2.13	0.002546	± 2.5	PASS
		VN	10	0.39	0.000466	± 2.5	PASS
		VN	20	0.92	0.001100	± 2.5	PASS
		VN	30	-0.1	-0.000120	± 2.5	PASS
		VN	40	1.99	0.002379	± 2.5	PASS
		VN	50	2.6	0.003108	± 2.5	PASS
	HCH	VN	-30	1.04	0.001232	± 2.5	PASS
		VN	-20	1.56	0.001848	± 2.5	PASS
		VN	-10	0.76	0.000900	± 2.5	PASS
		VN	0	0.06	0.000071	± 2.5	PASS
		VN	10	-1.37	-0.001623	± 2.5	PASS
		VN	20	1.85	0.002192	± 2.5	PASS
		VN	30	1.23	0.001457	± 2.5	PASS
		VN	40	4.24	0.005024	± 2.5	PASS
		VN	50	-0.7	-0.000829	± 2.5	PASS
16QAM	LCH	VN	-30	-0.99	-0.001184	± 2.5	PASS
		VN	-20	0.18	0.000215	± 2.5	PASS
		VN	-10	1.88	0.002247	± 2.5	PASS
		VN	0	4.53	0.005415	± 2.5	PASS
		VN	10	-0.87	-0.001040	± 2.5	PASS
		VN	20	4.74	0.005666	± 2.5	PASS
		VN	30	3.41	0.004077	± 2.5	PASS
		VN	40	3.24	0.003873	± 2.5	PASS
		VN	50	0.33	0.000395	± 2.5	PASS
	MCH	VN	-30	4.72	0.005592	± 2.5	PASS
		VN	-20	-1.85	-0.002192	± 2.5	PASS
		VN	-10	0.29	0.000344	± 2.5	PASS
		VN	0	4.48	0.005308	± 2.5	PASS
		VN	10	1.4	0.001659	± 2.5	PASS
		VN	20	1.57	0.001860	± 2.5	PASS
		VN	30	0.33	0.000391	± 2.5	PASS
		VN	40	1.37	0.001623	± 2.5	PASS
		VN	50	2.42	0.002867	± 2.5	PASS
	HCH	VN	-30	-0.57	-0.000675	± 2.5	PASS
		VN	-20	-0.92	-0.001090	± 2.5	PASS
		VN	-10	-0.47	-0.000557	± 2.5	PASS
		VN	0	4.44	0.005261	± 2.5	PASS
		VN	10	3.49	0.004135	± 2.5	PASS
		VN	20	-1.19	-0.001410	± 2.5	PASS

		VN	30	1.41	0.001671	± 2.5	PASS
		VN	40	2.9	0.003436	± 2.5	PASS
		VN	50	4.43	0.005249	± 2.5	PASS