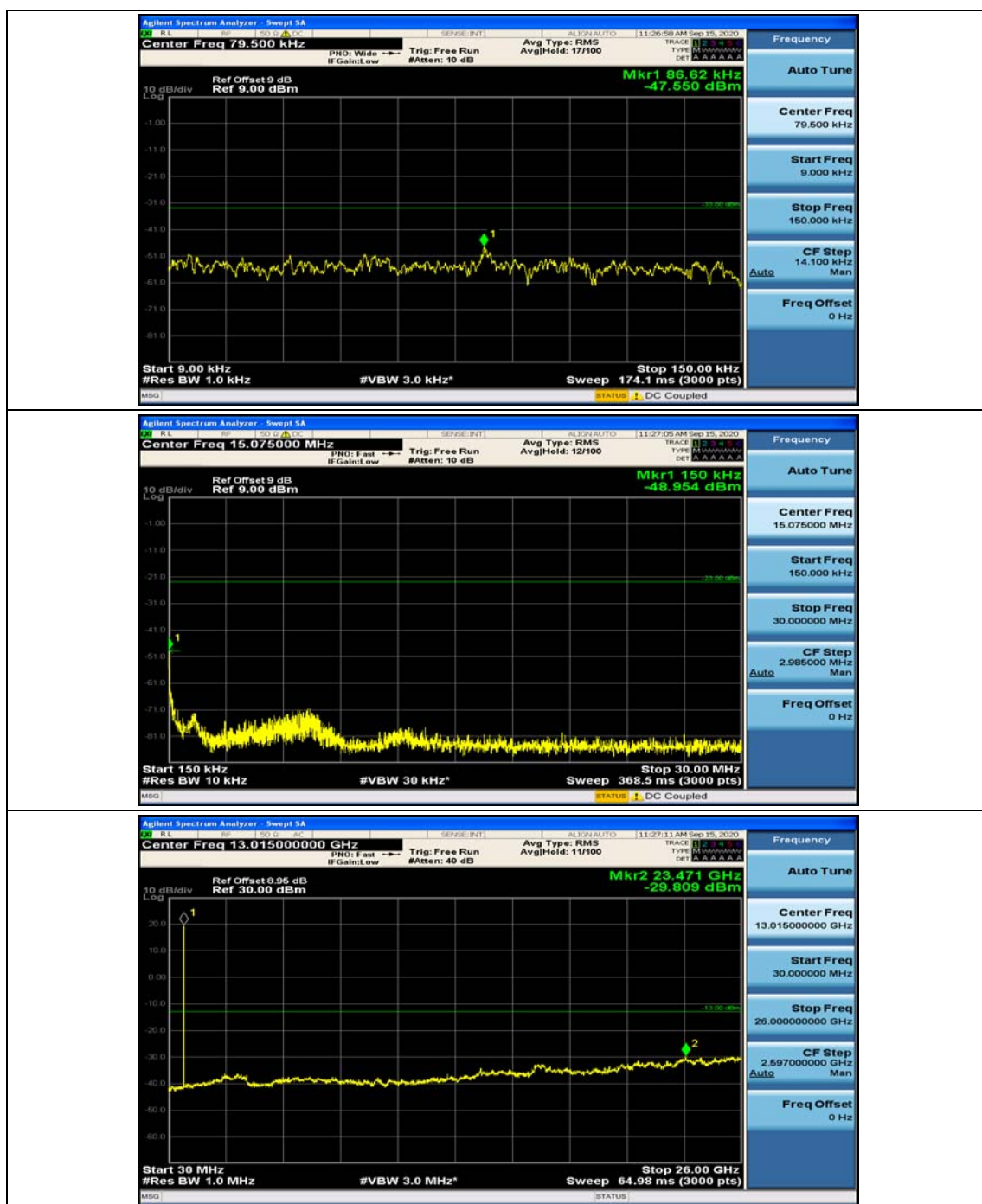
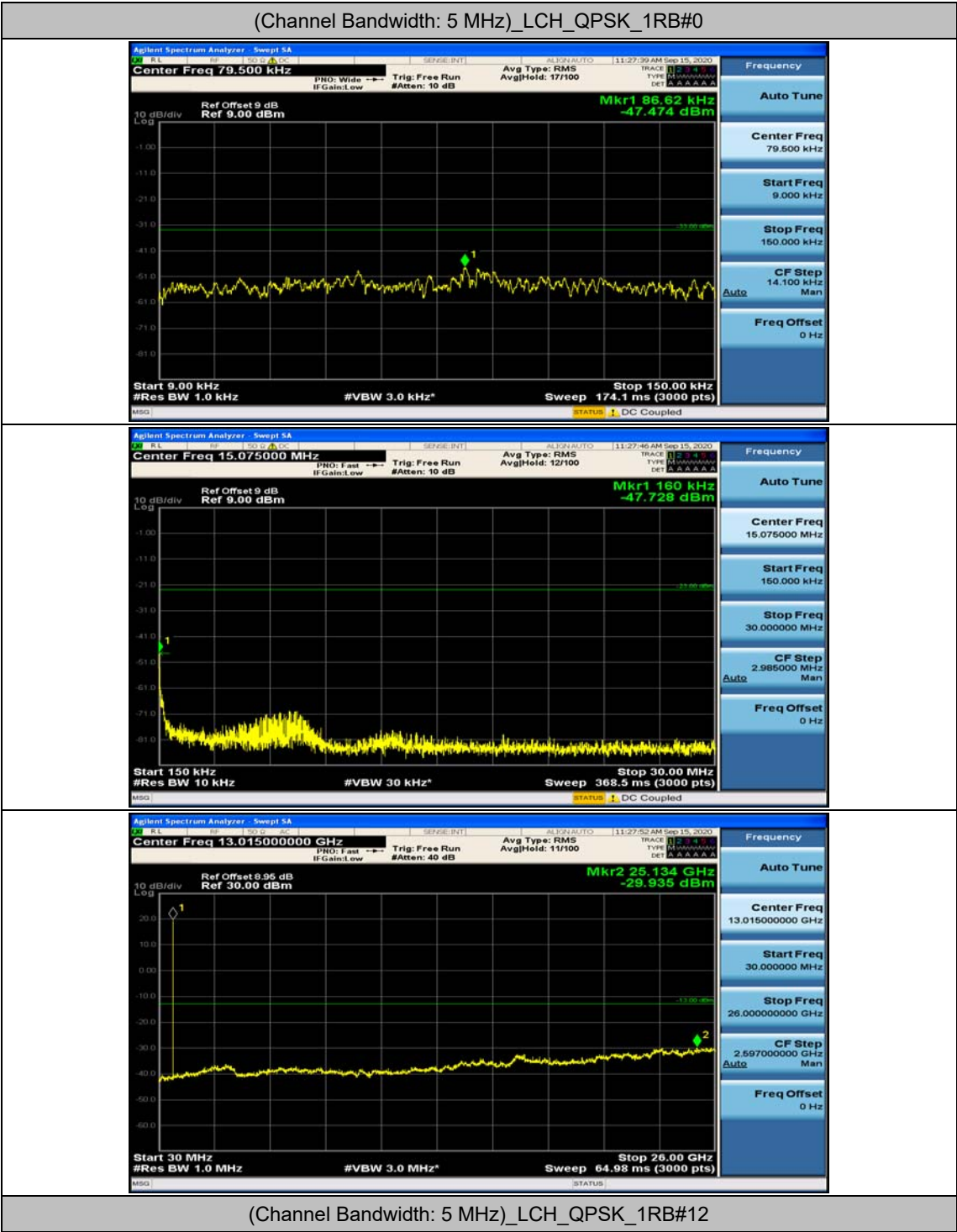
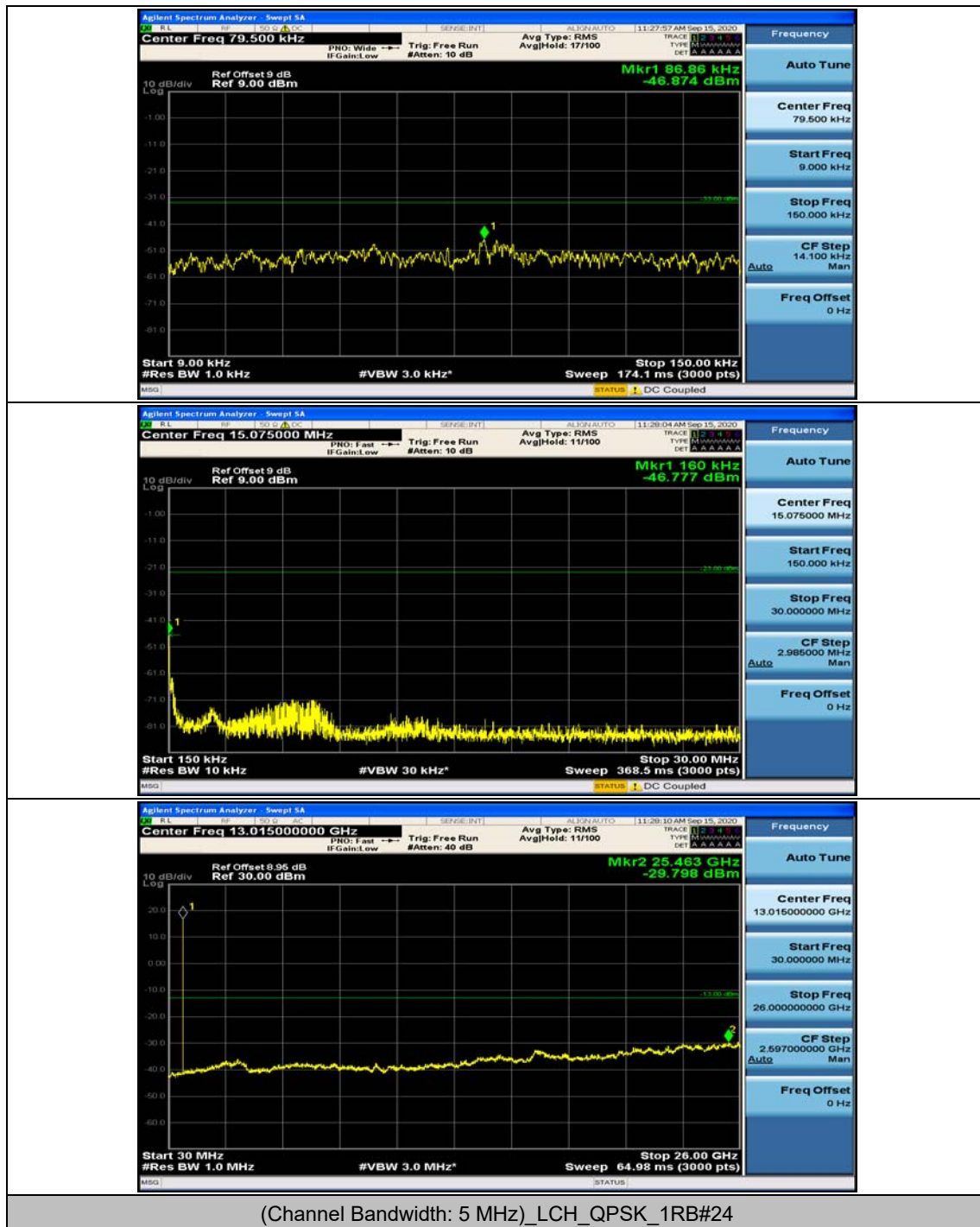
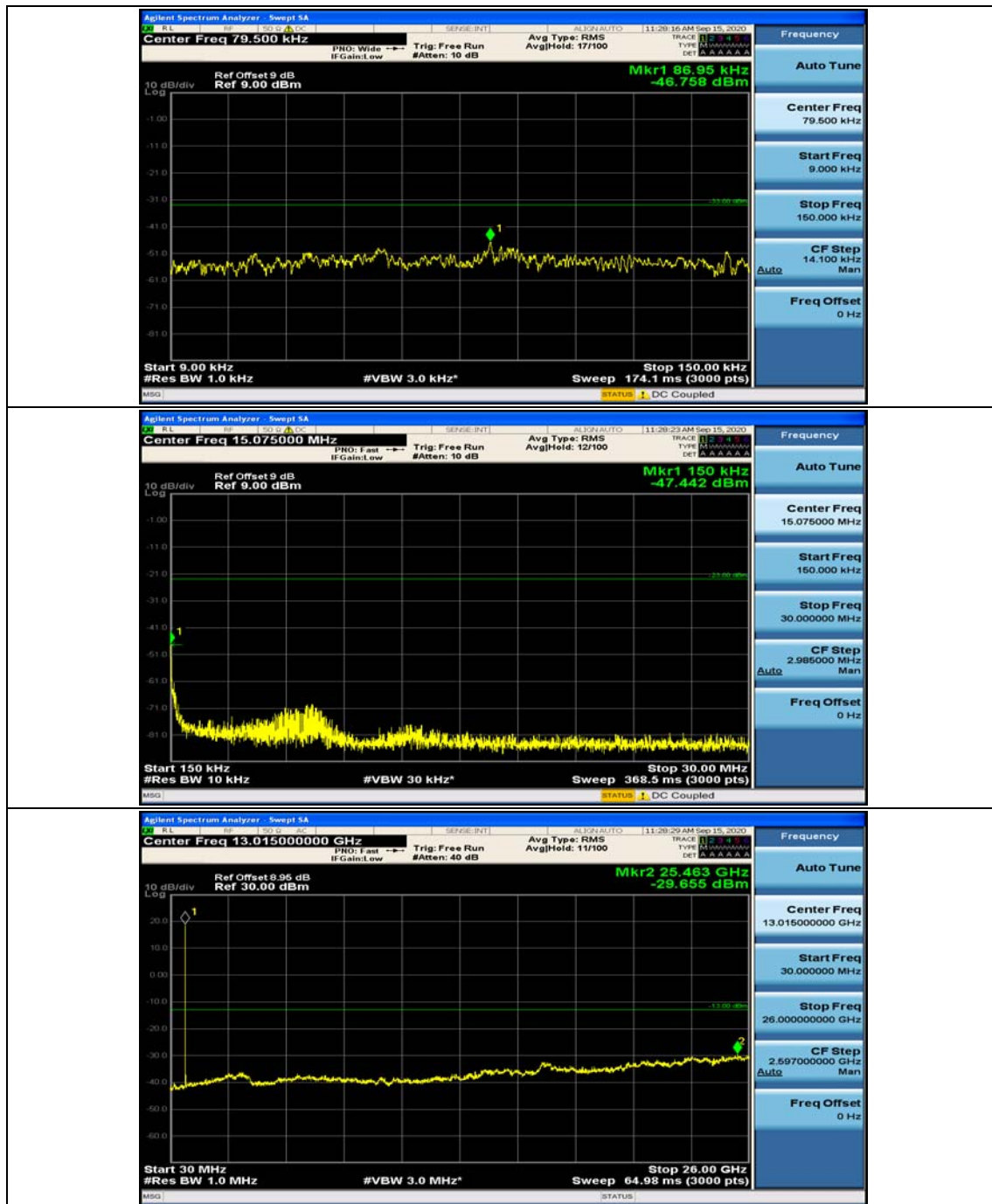


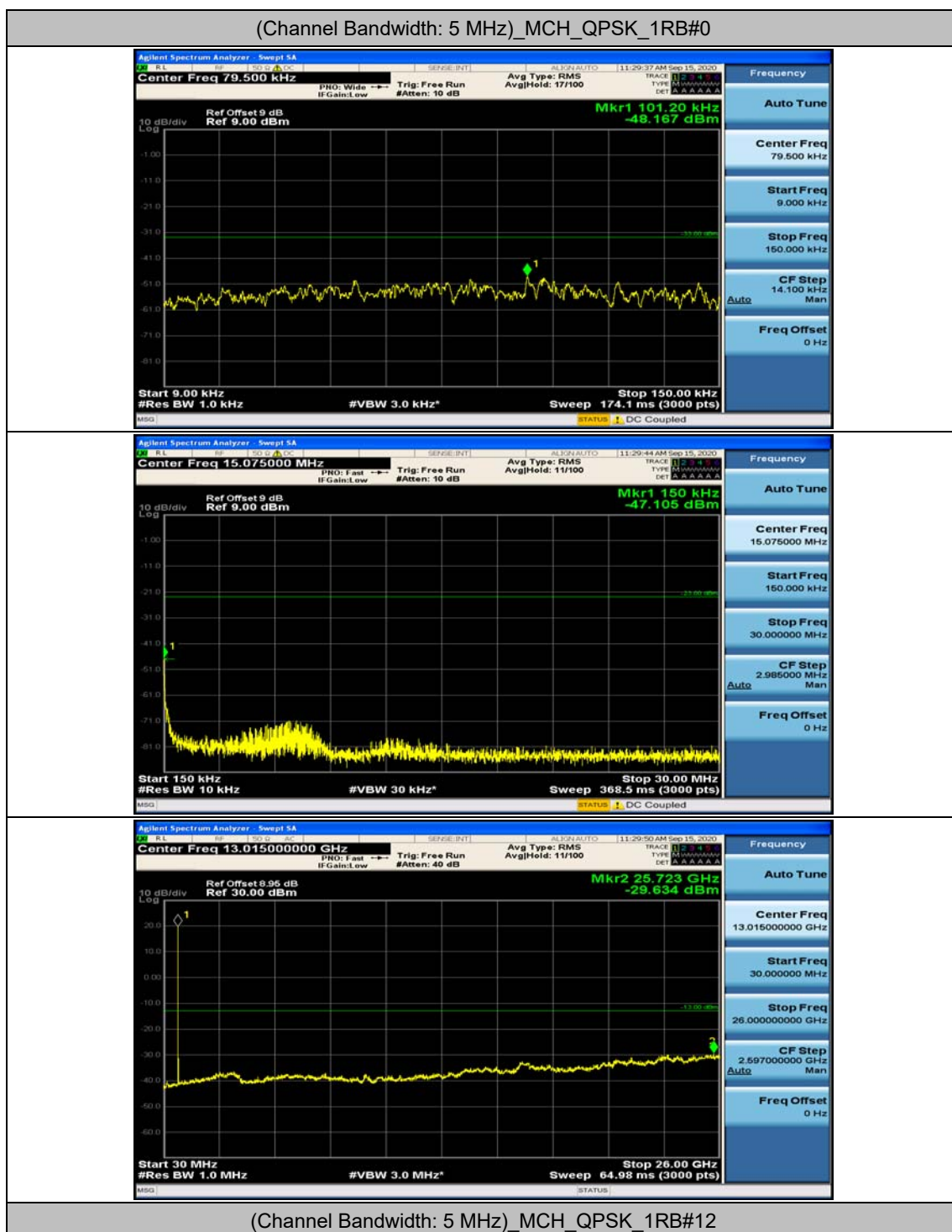


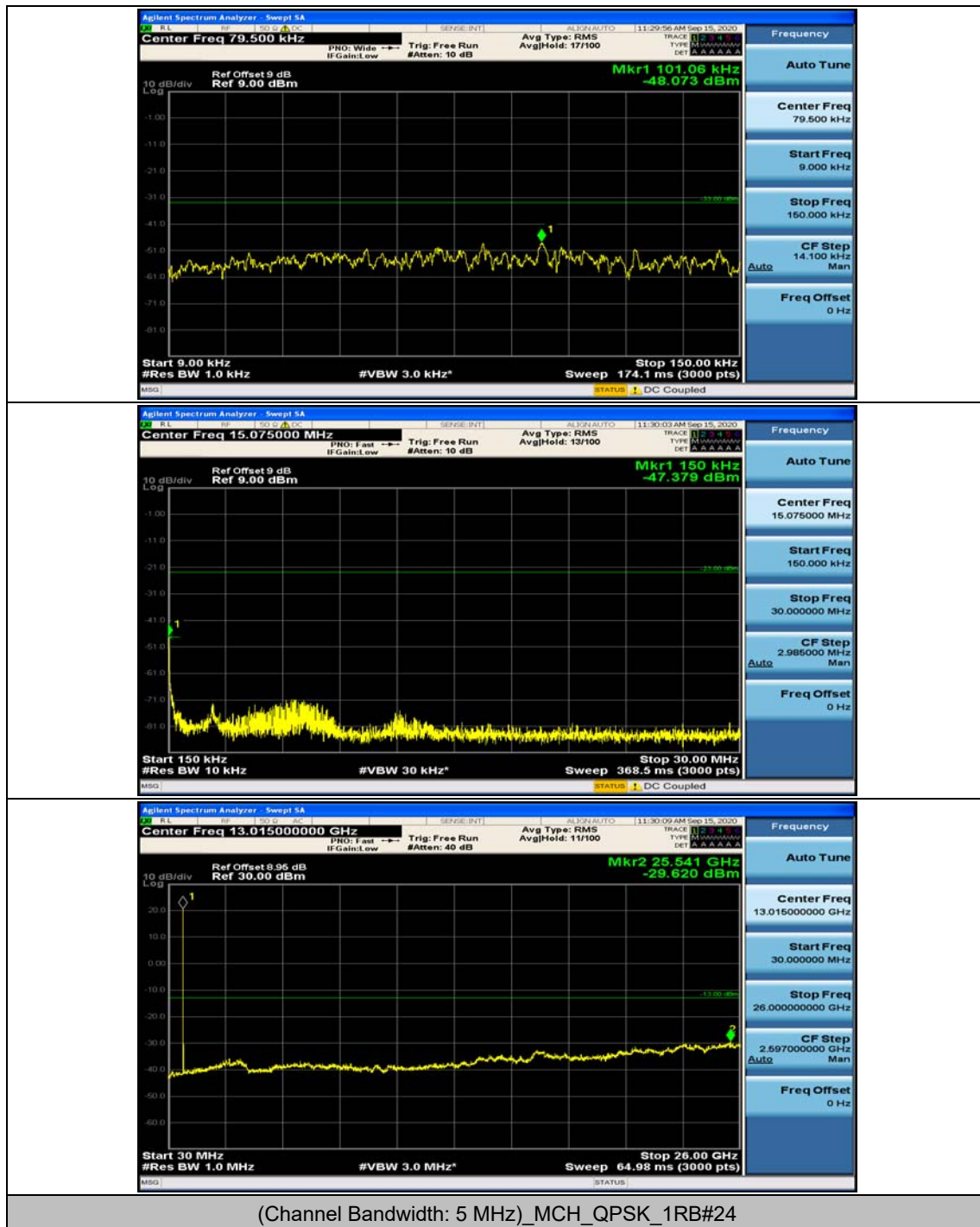
Channel Bandwidth: 5 MHz

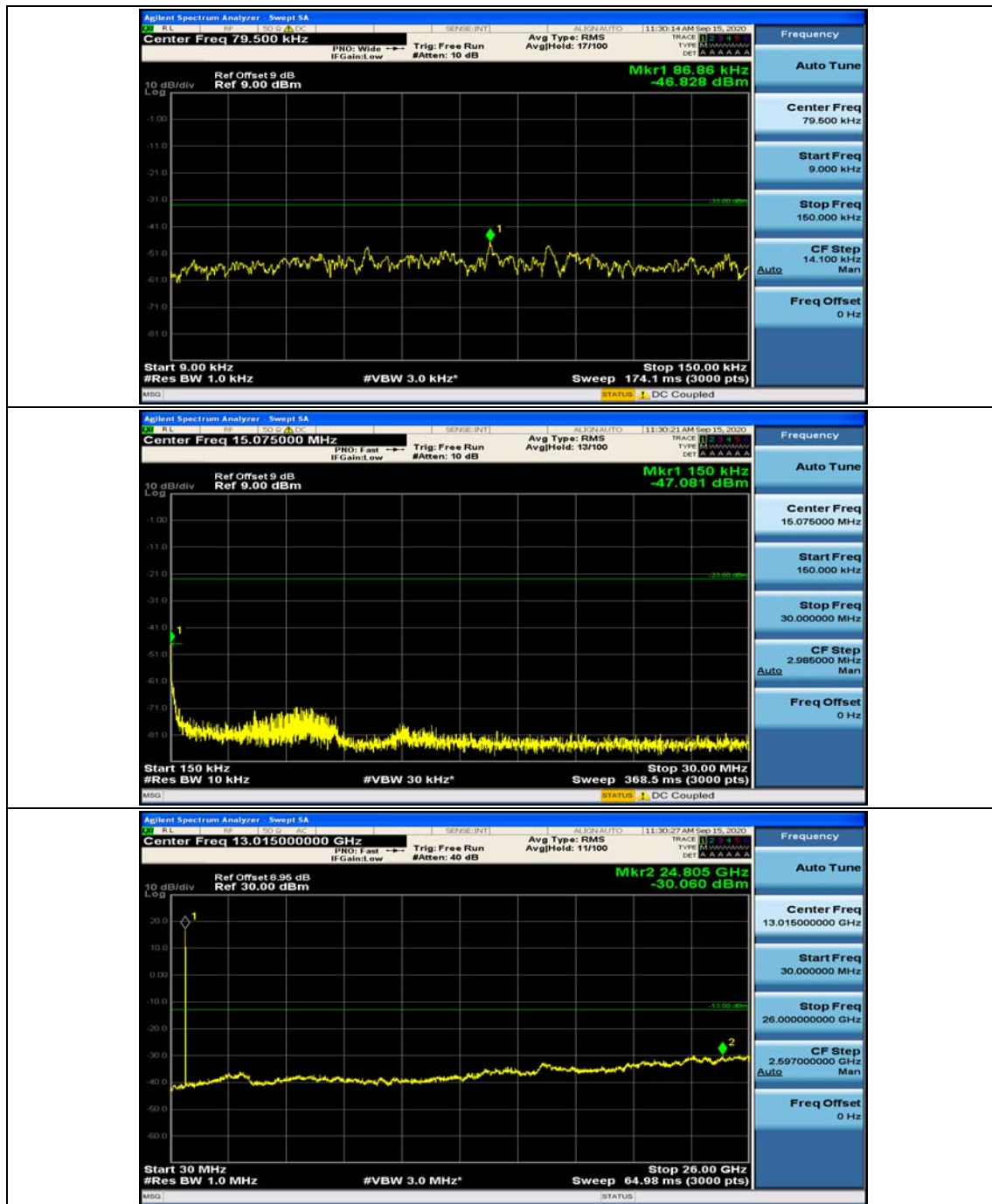




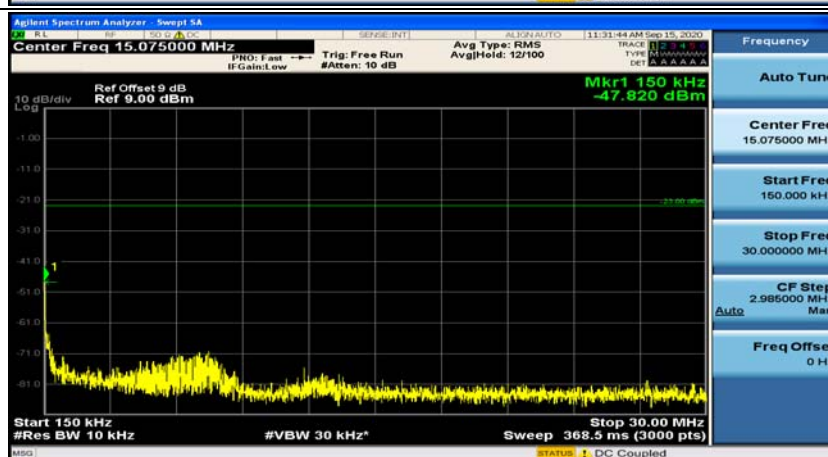
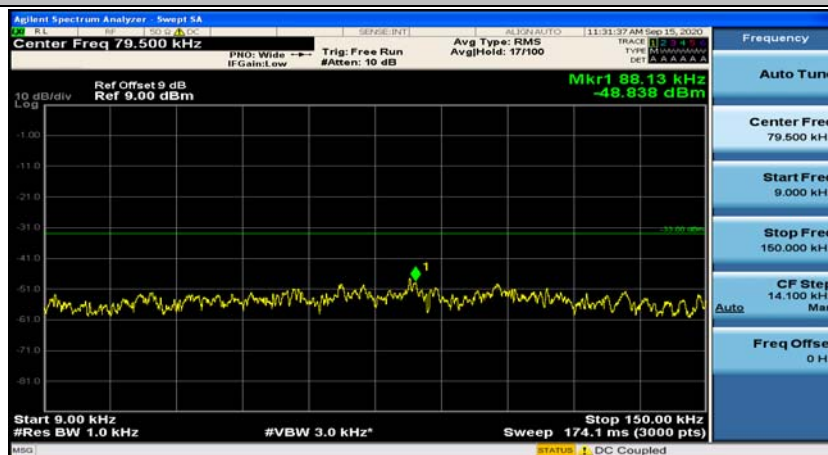




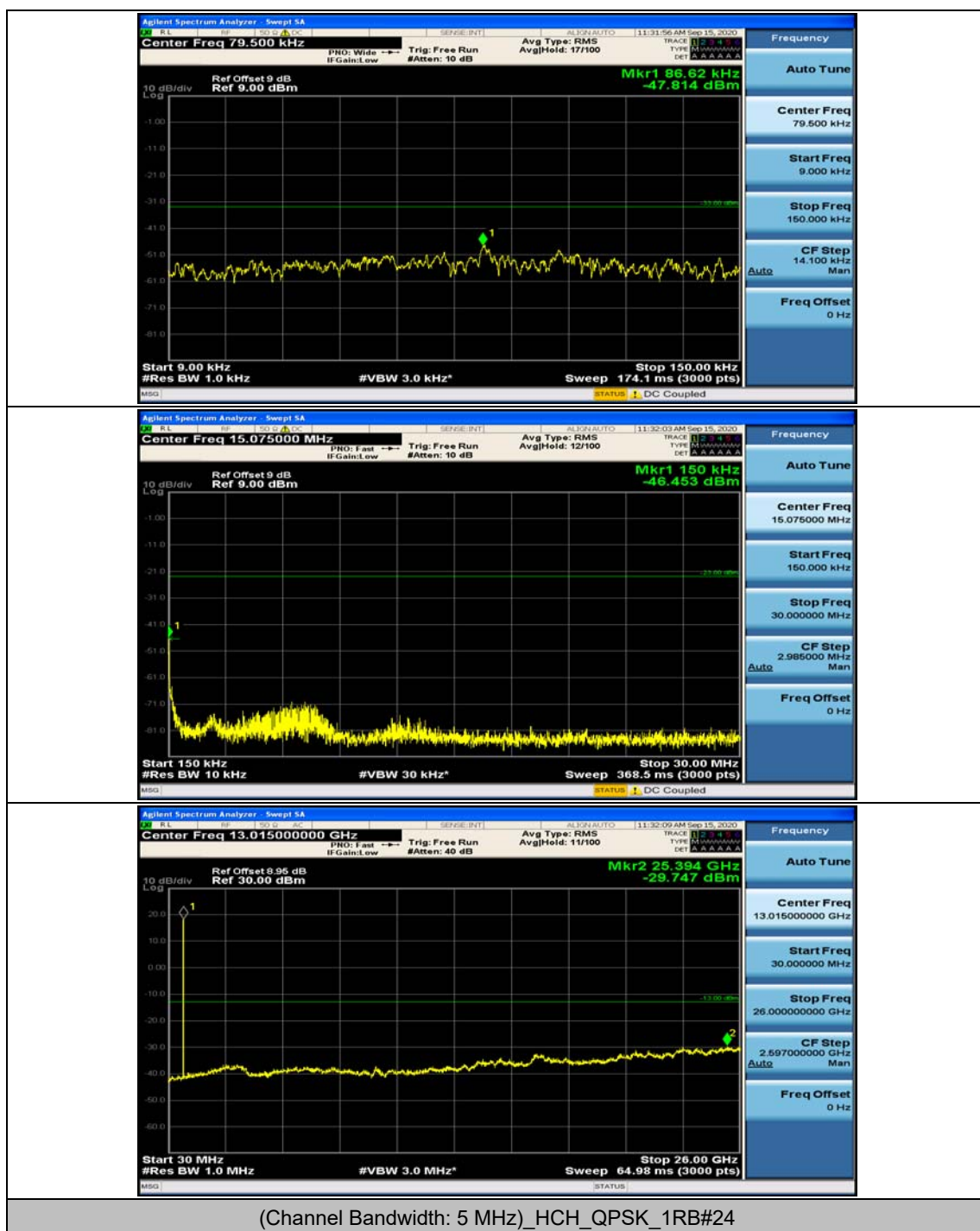


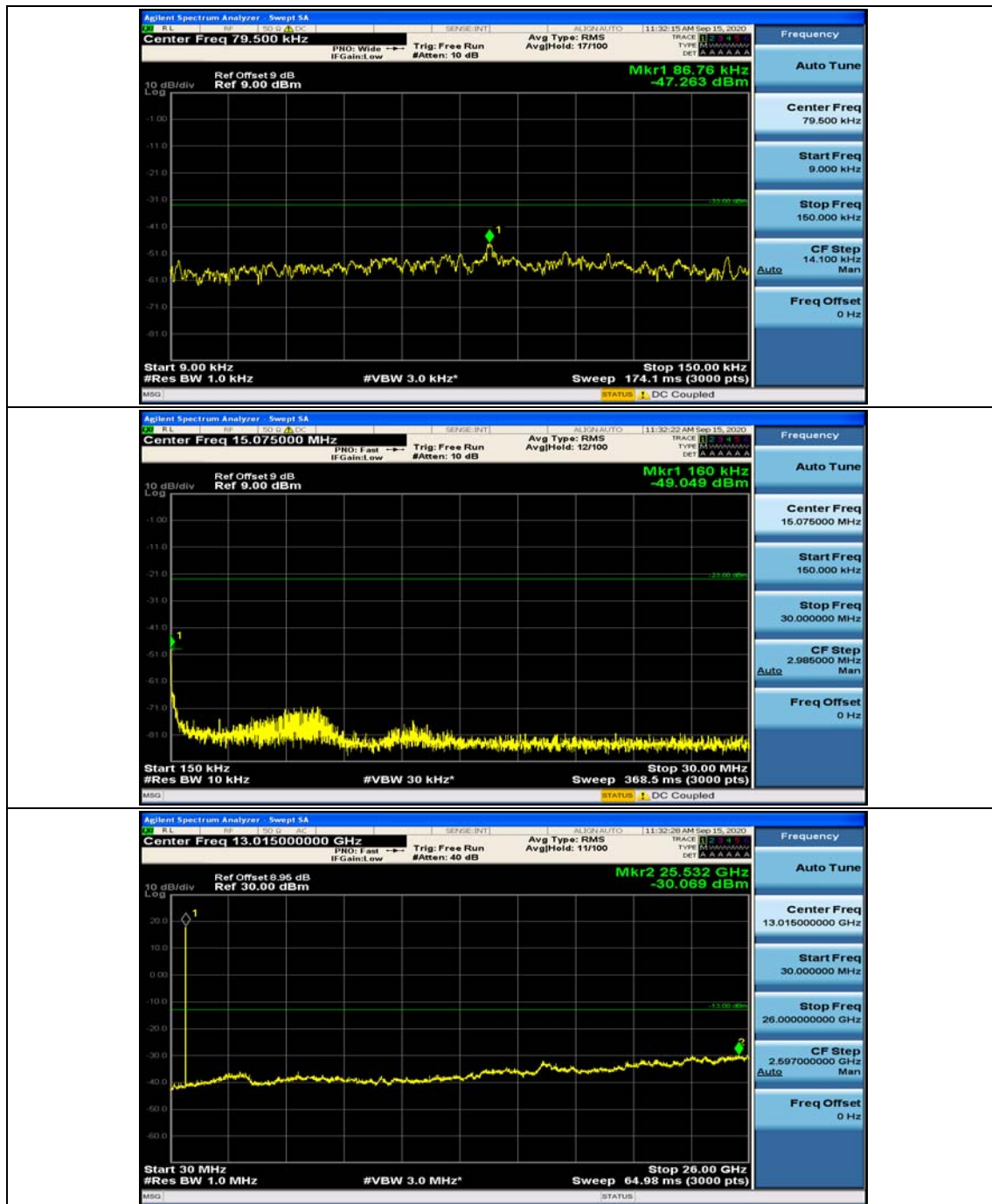


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

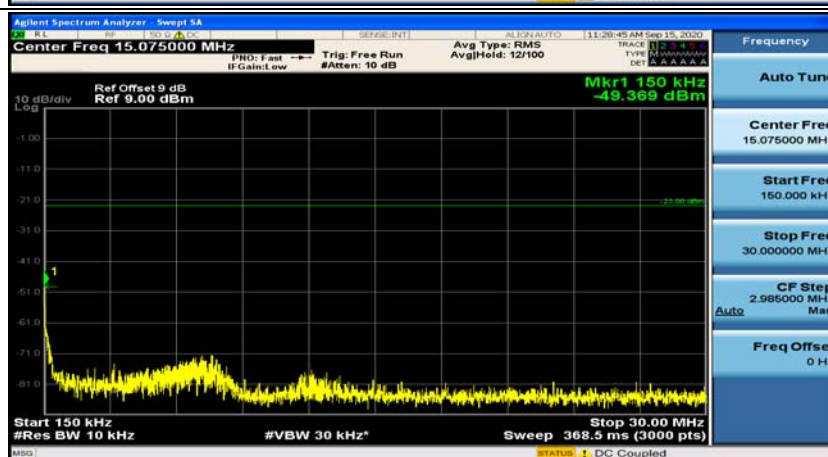
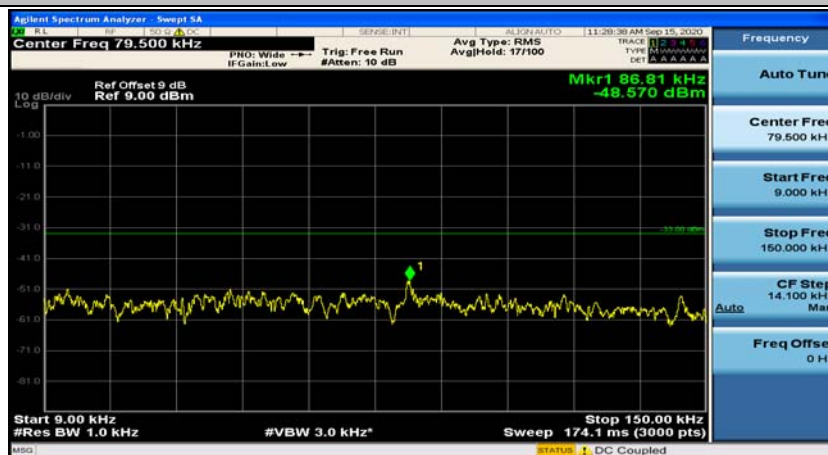


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

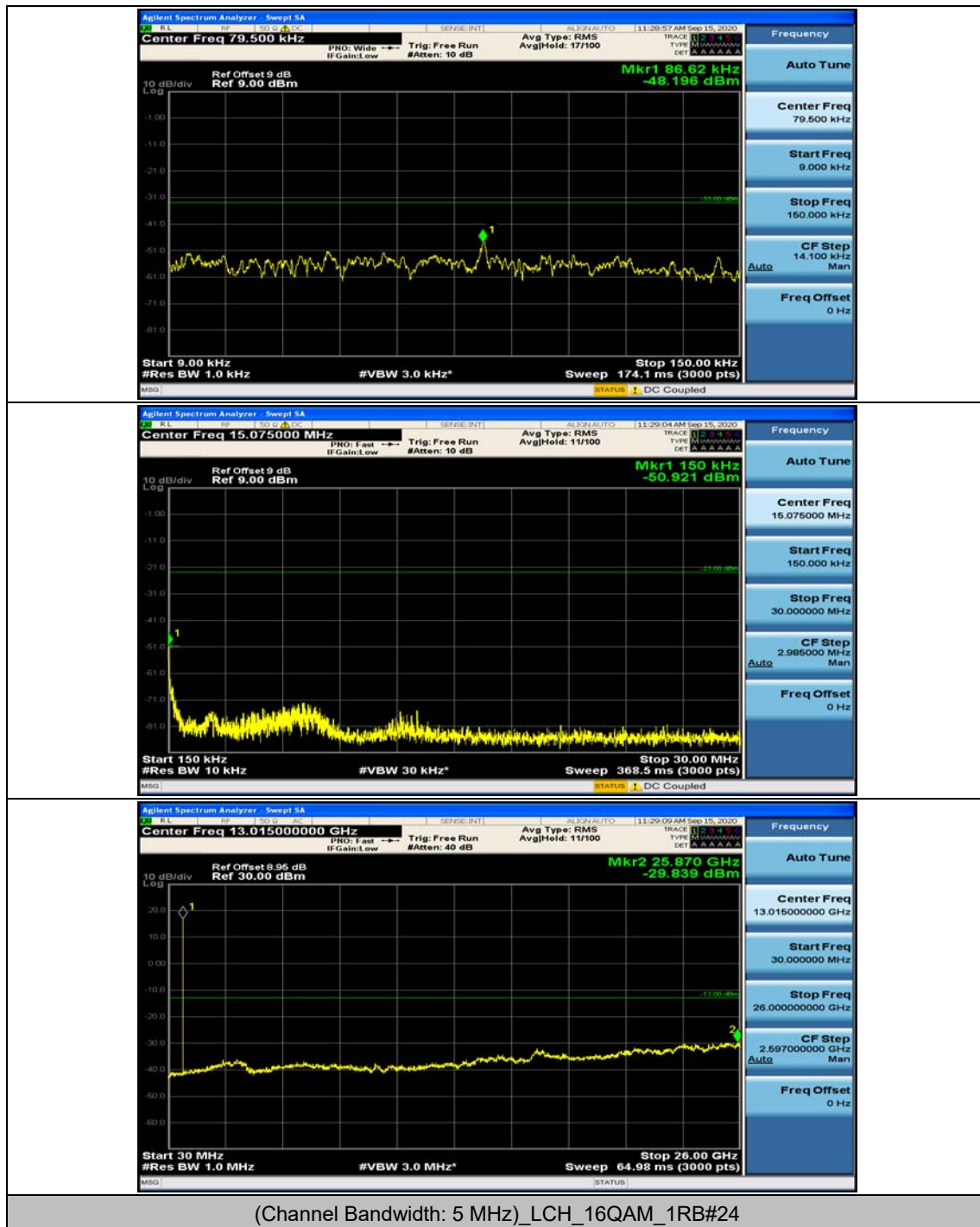


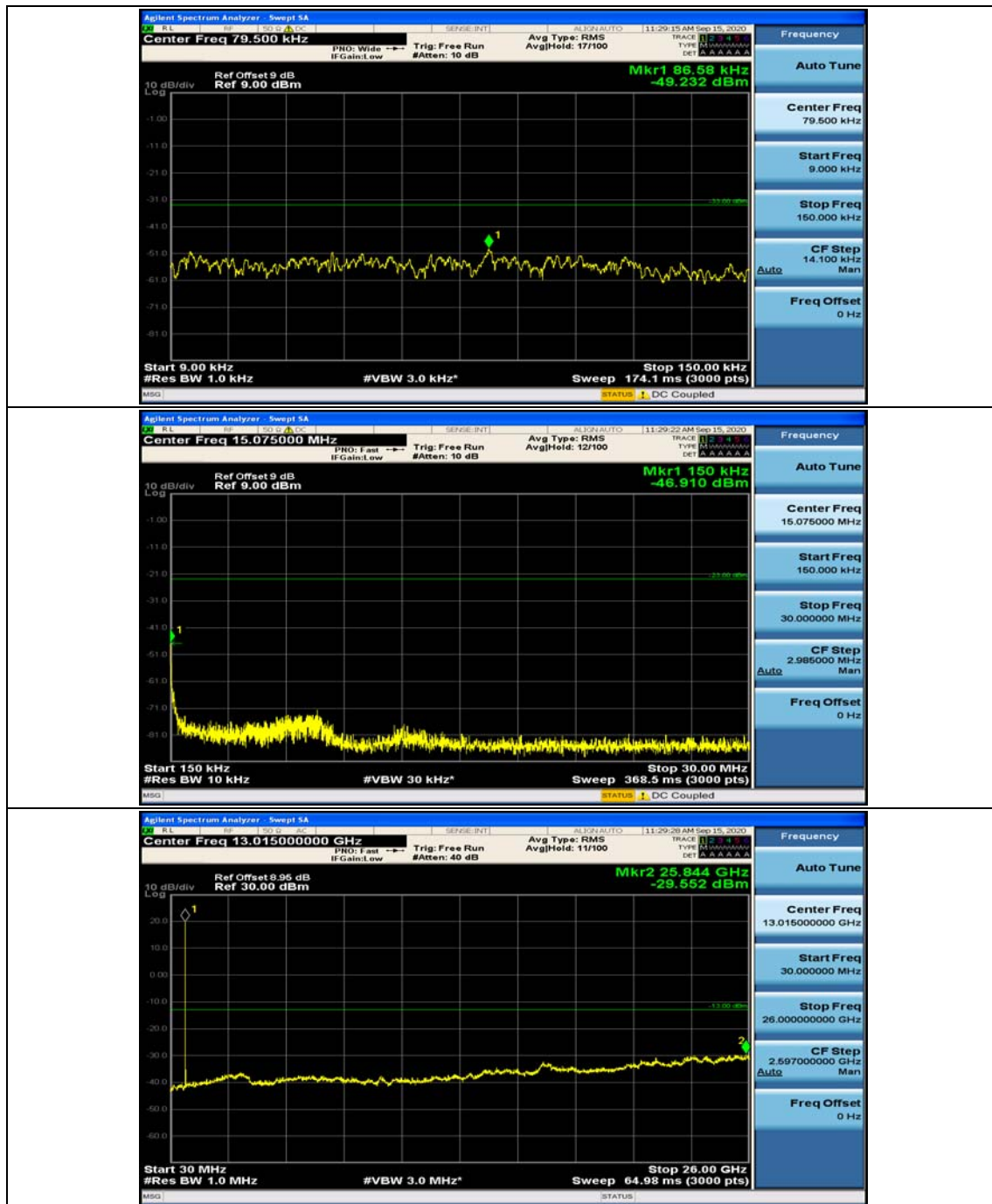


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

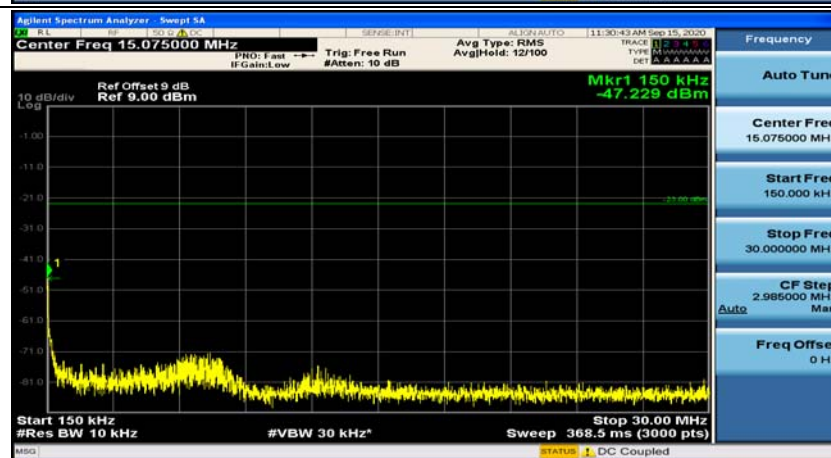
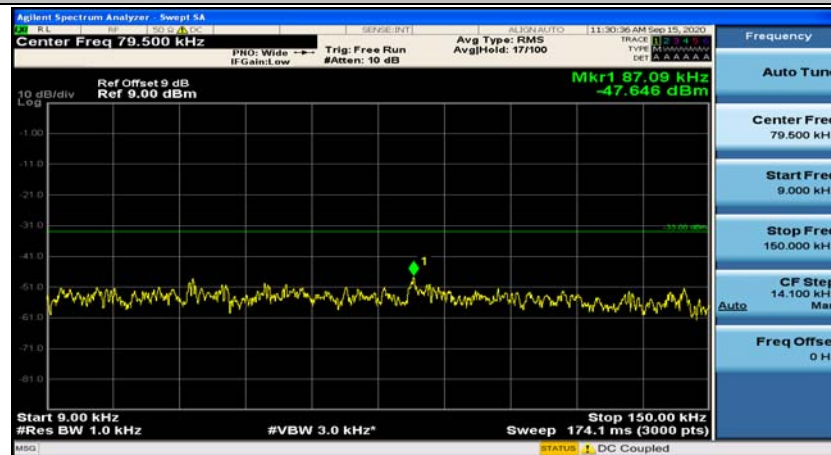


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

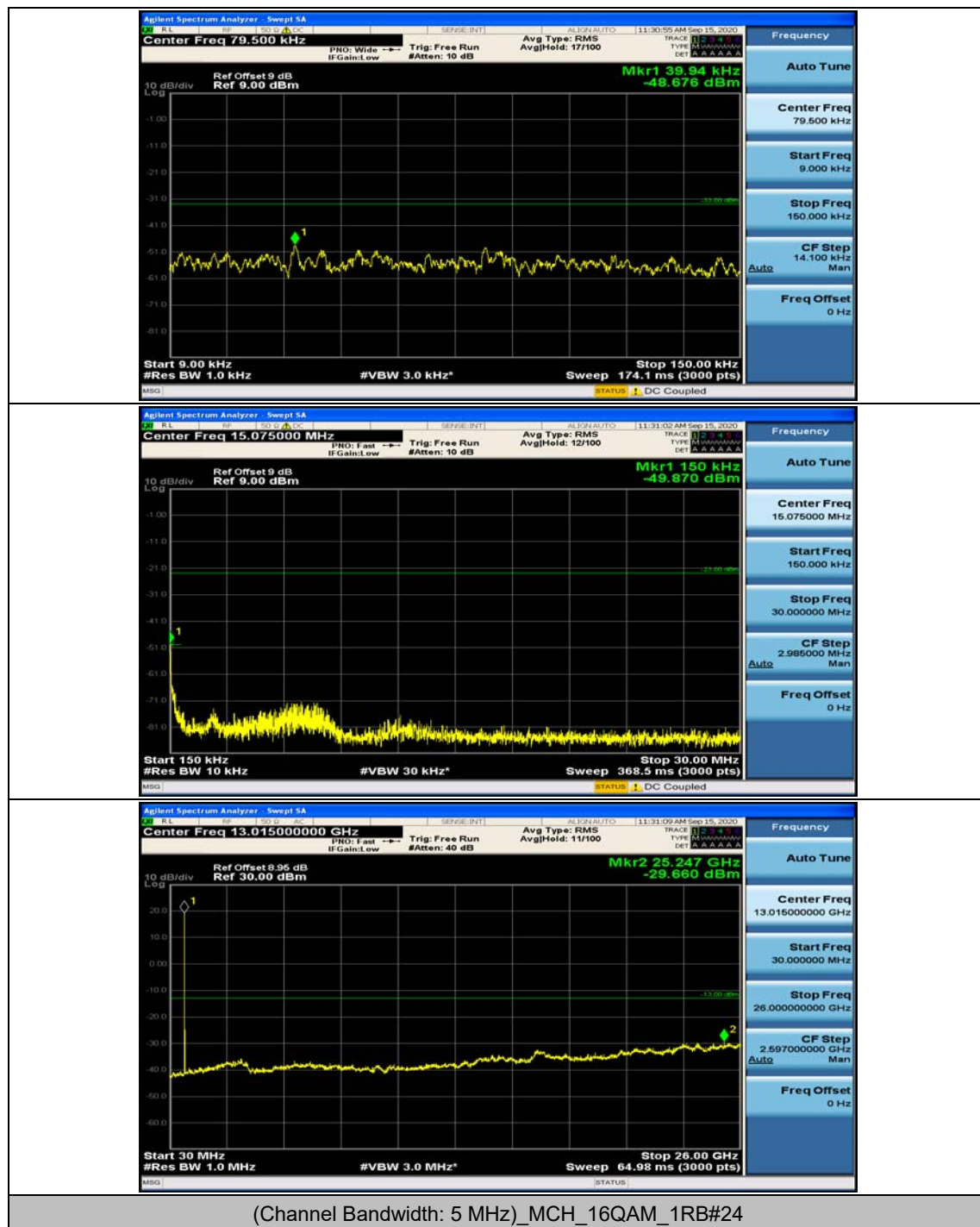


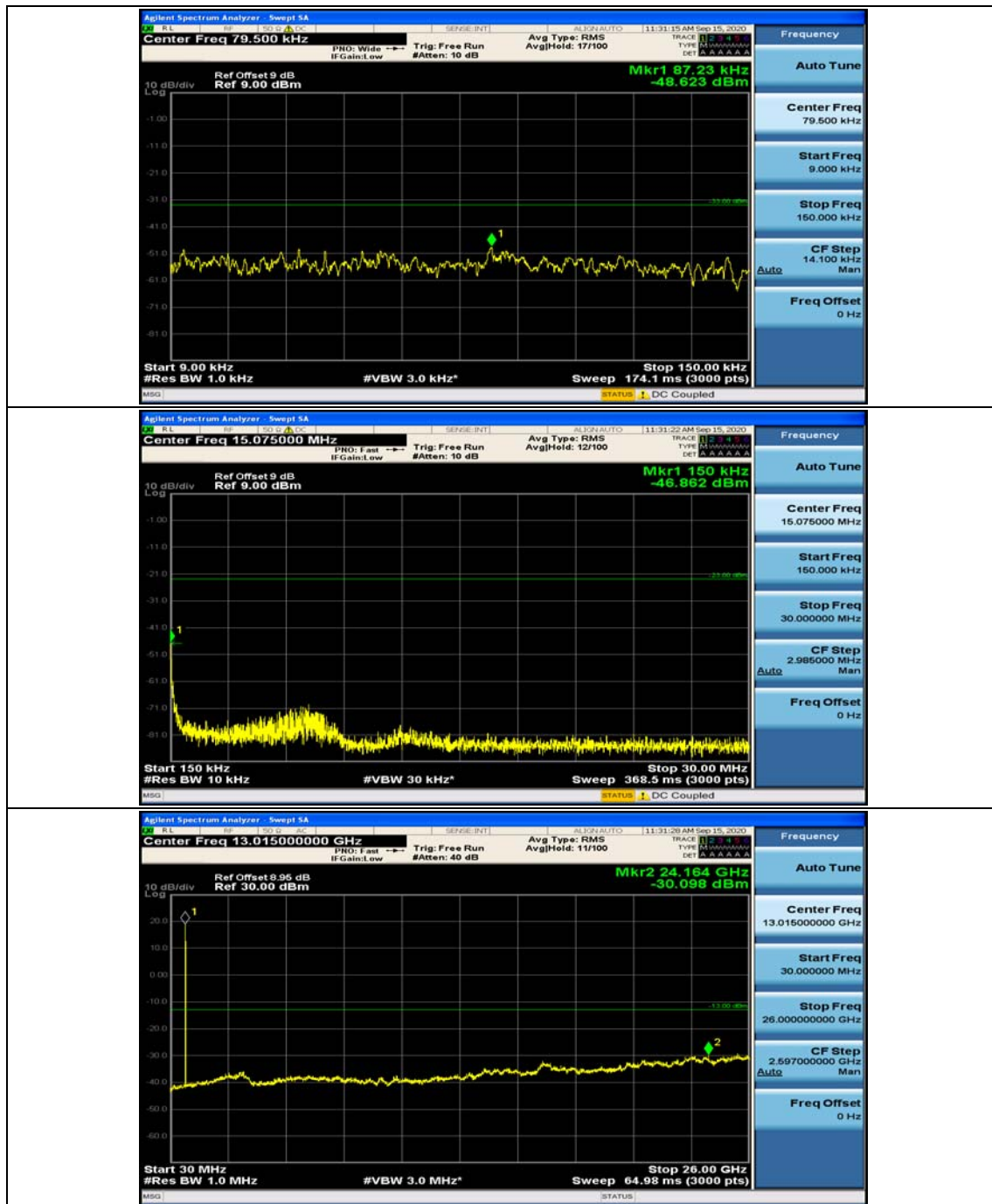


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

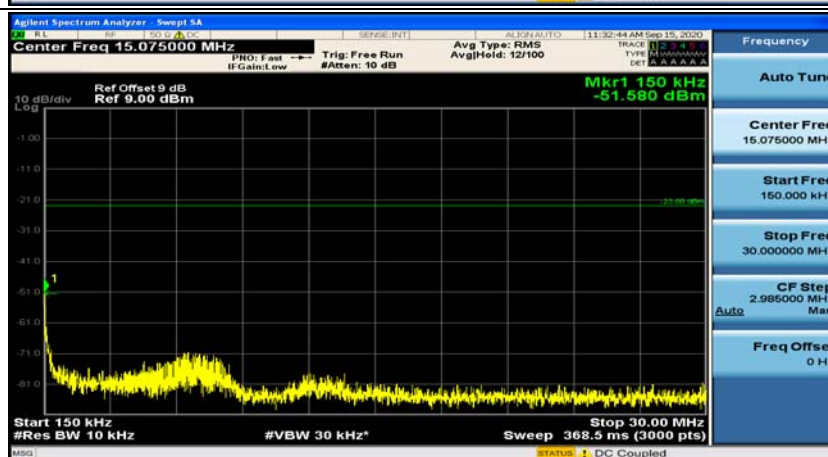
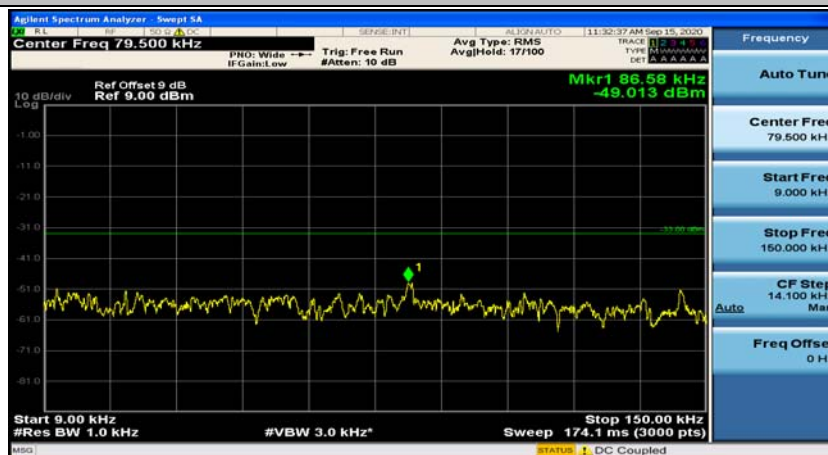


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

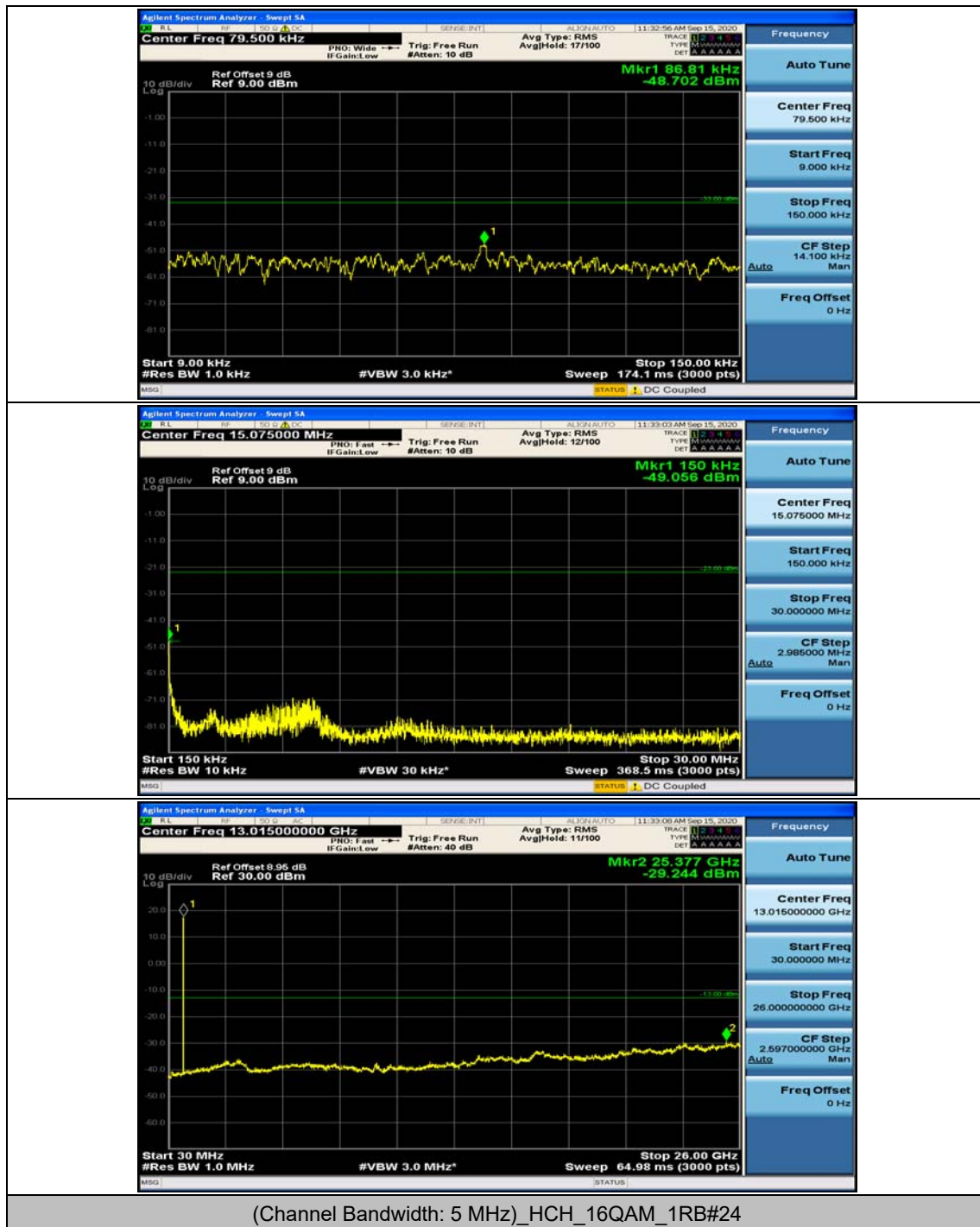


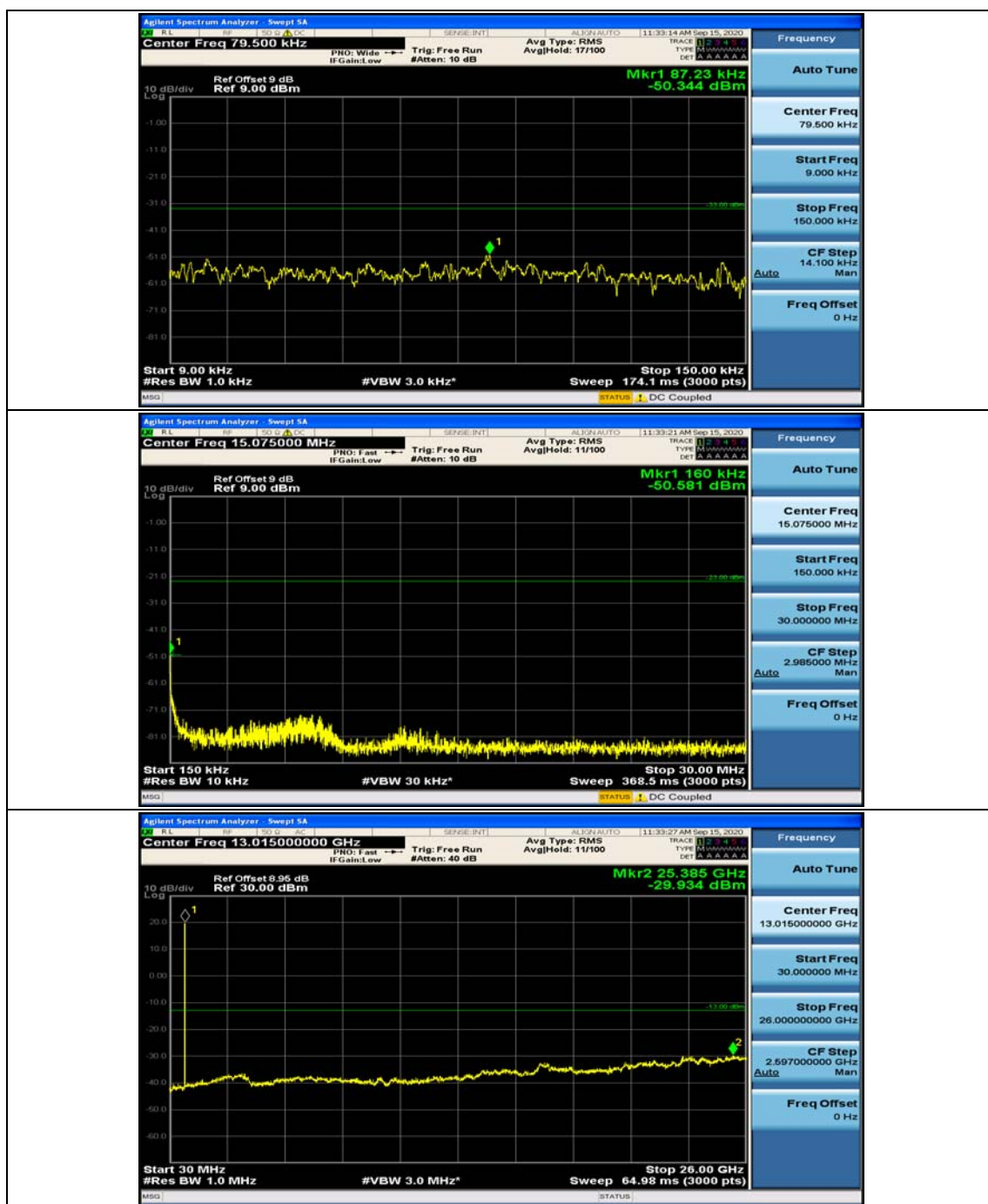


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

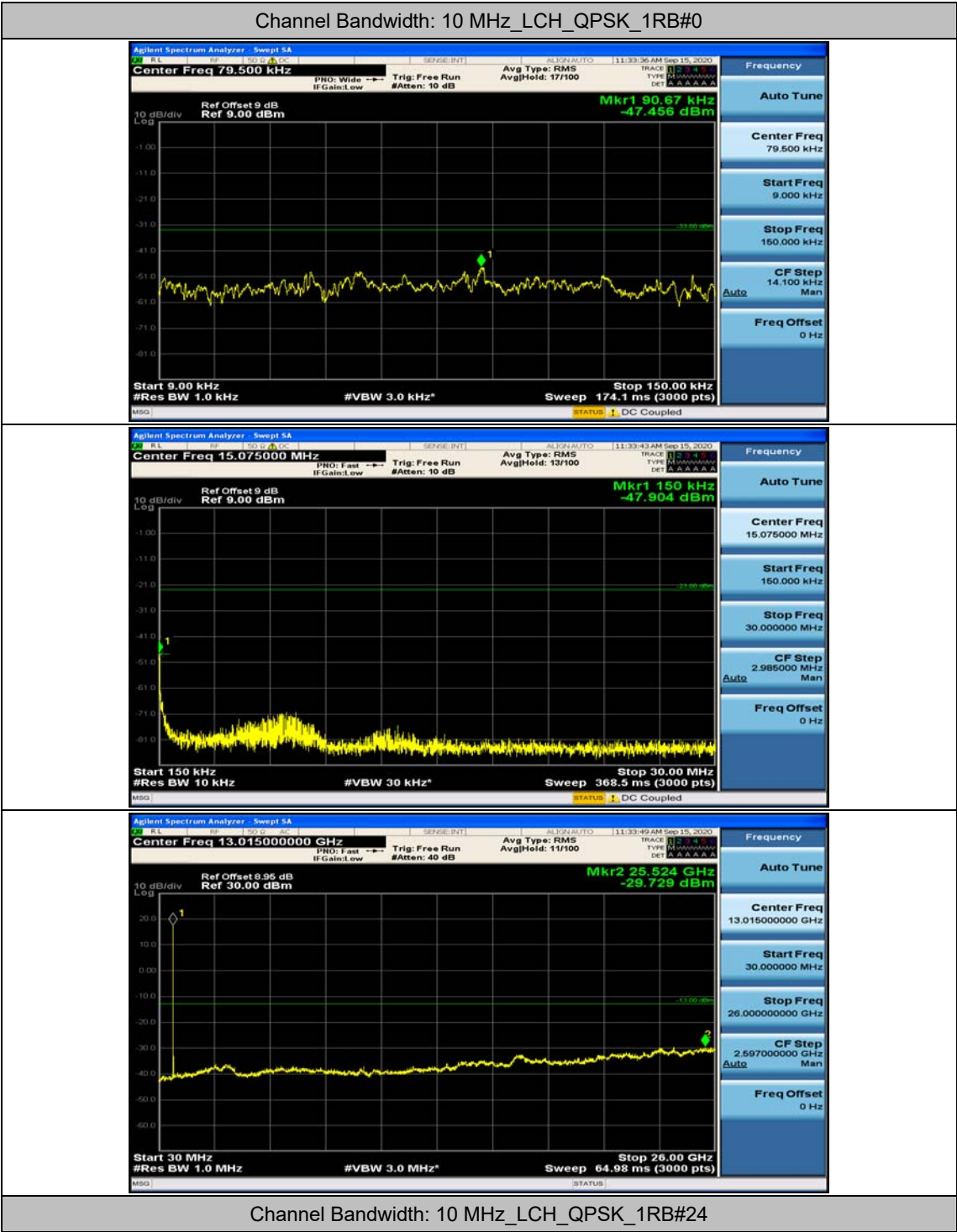


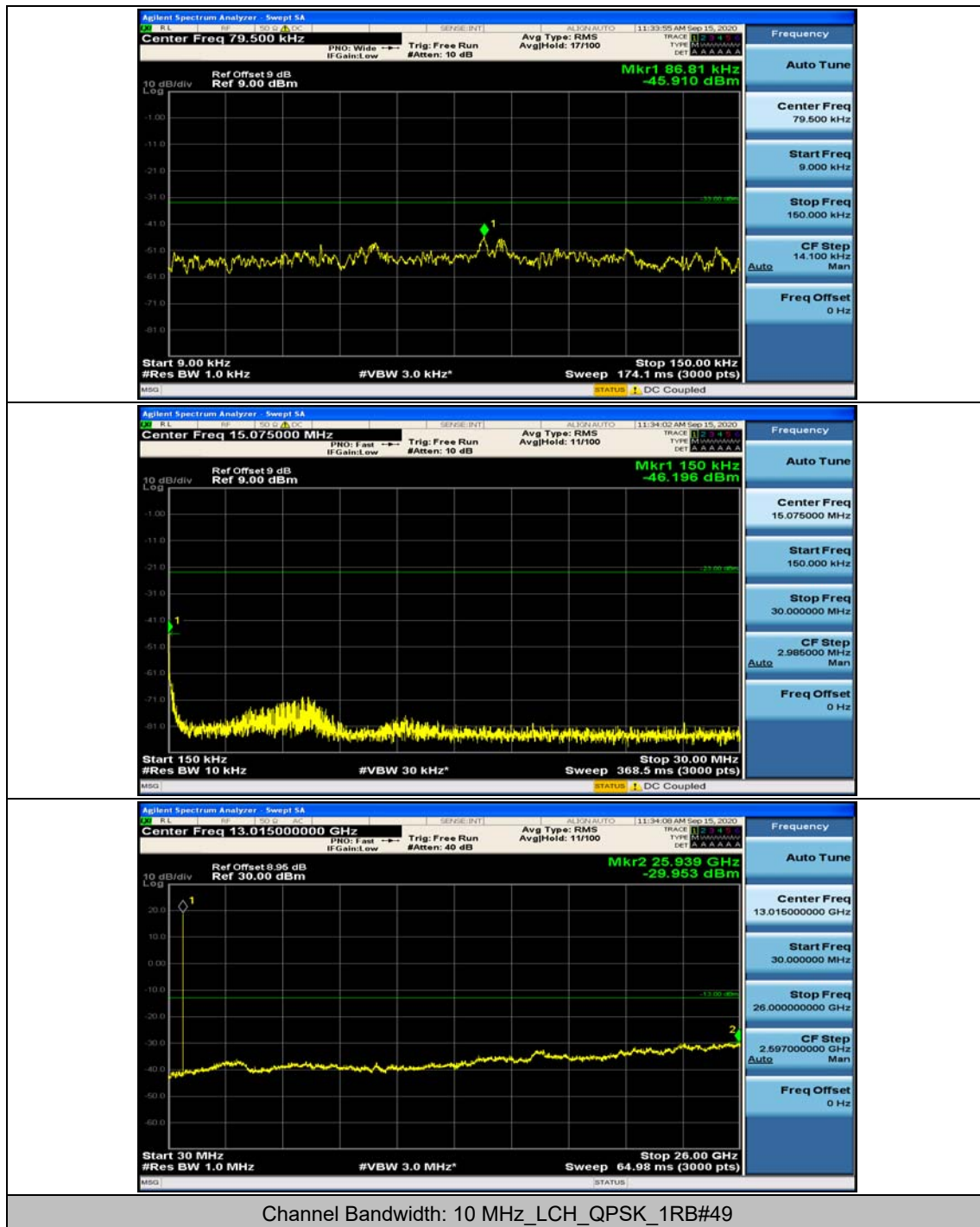
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

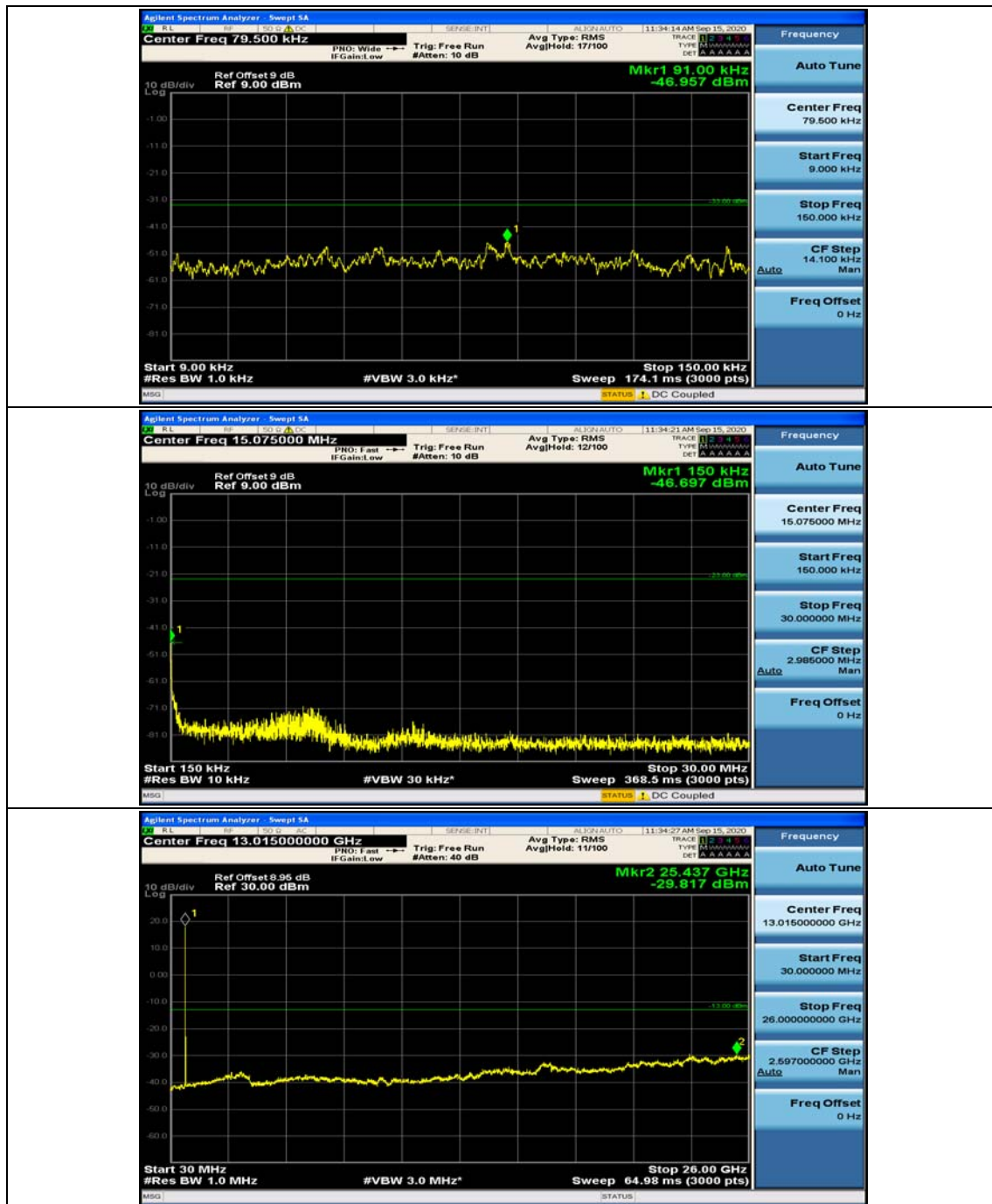


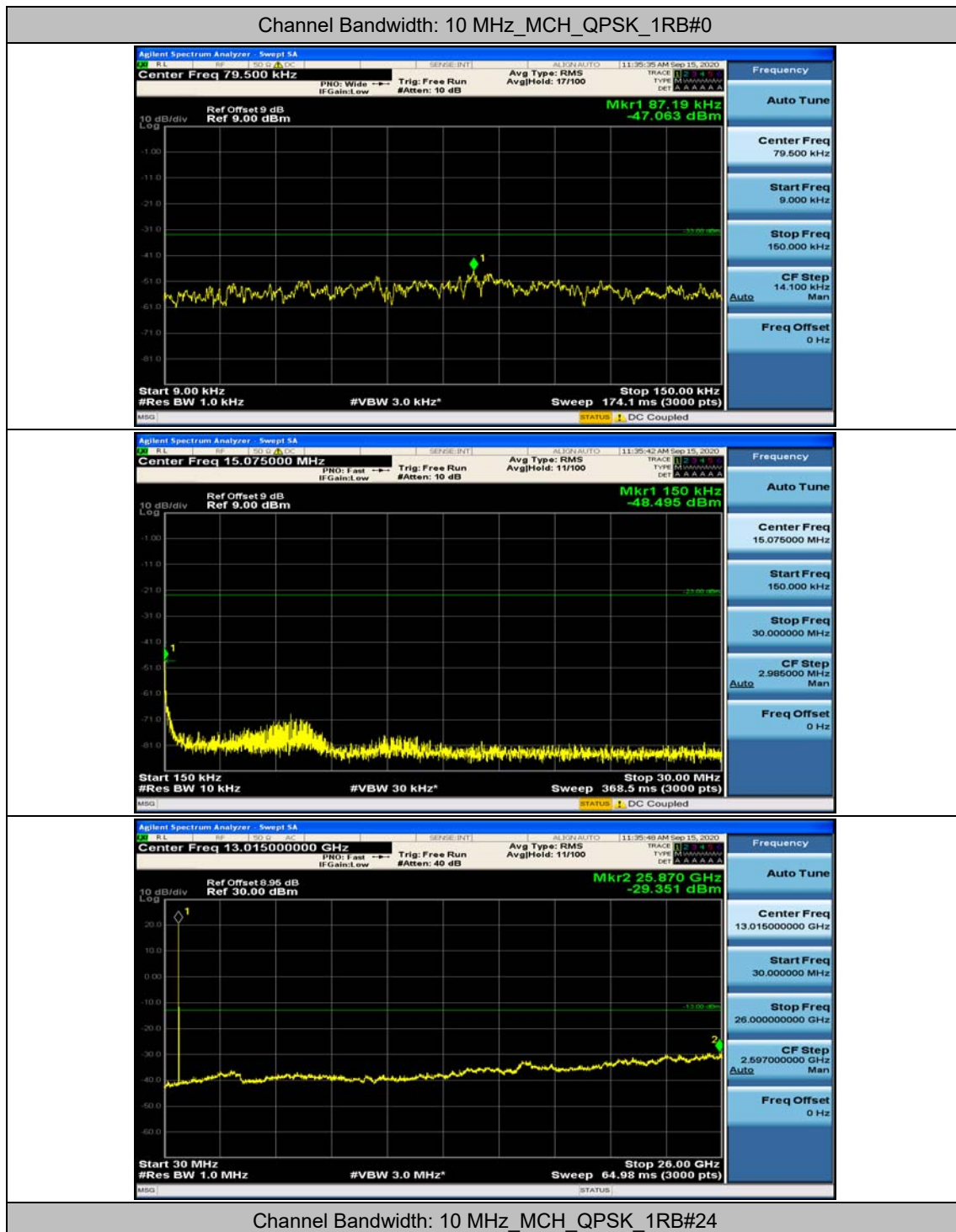


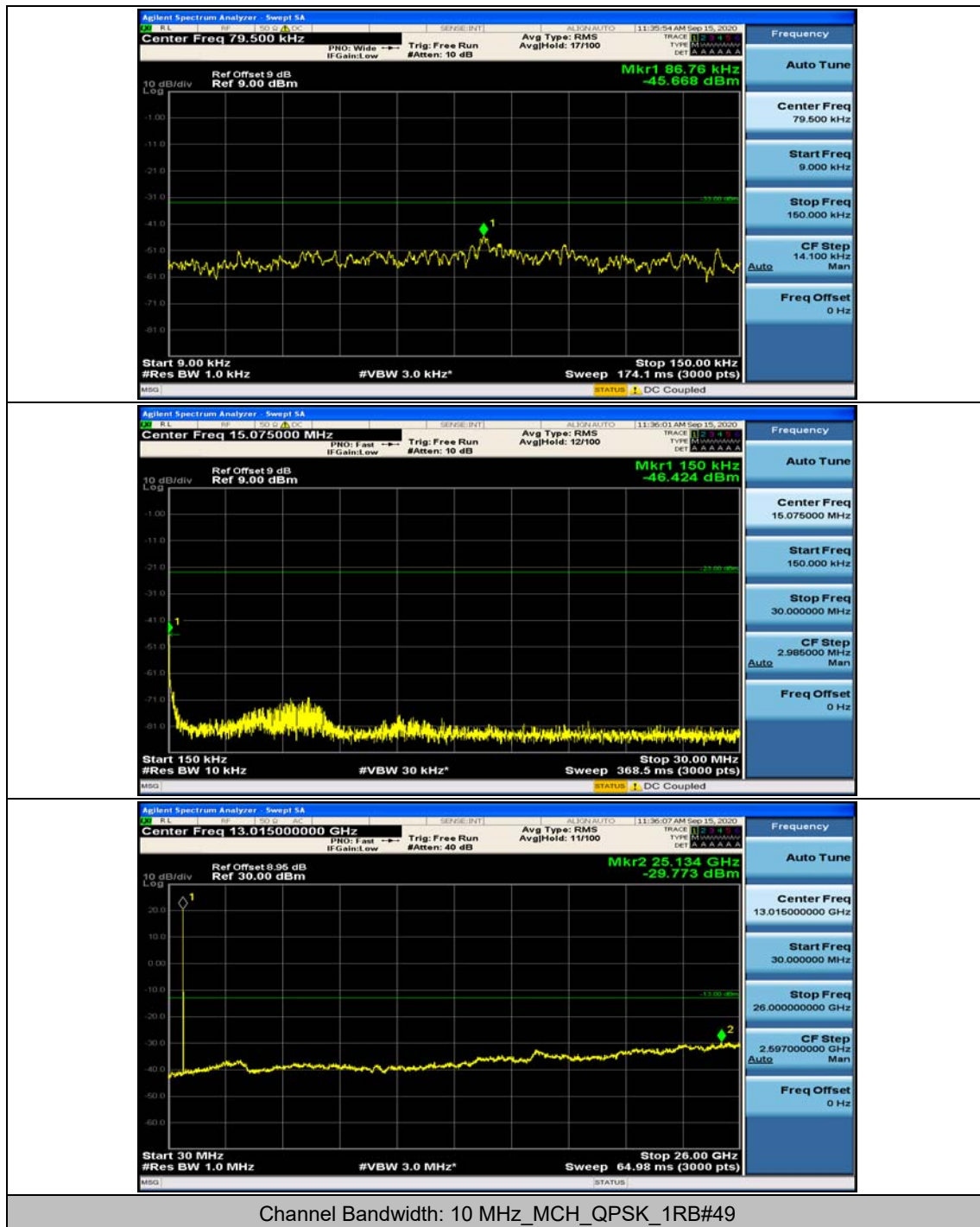
Channel Bandwidth: 10 MHz

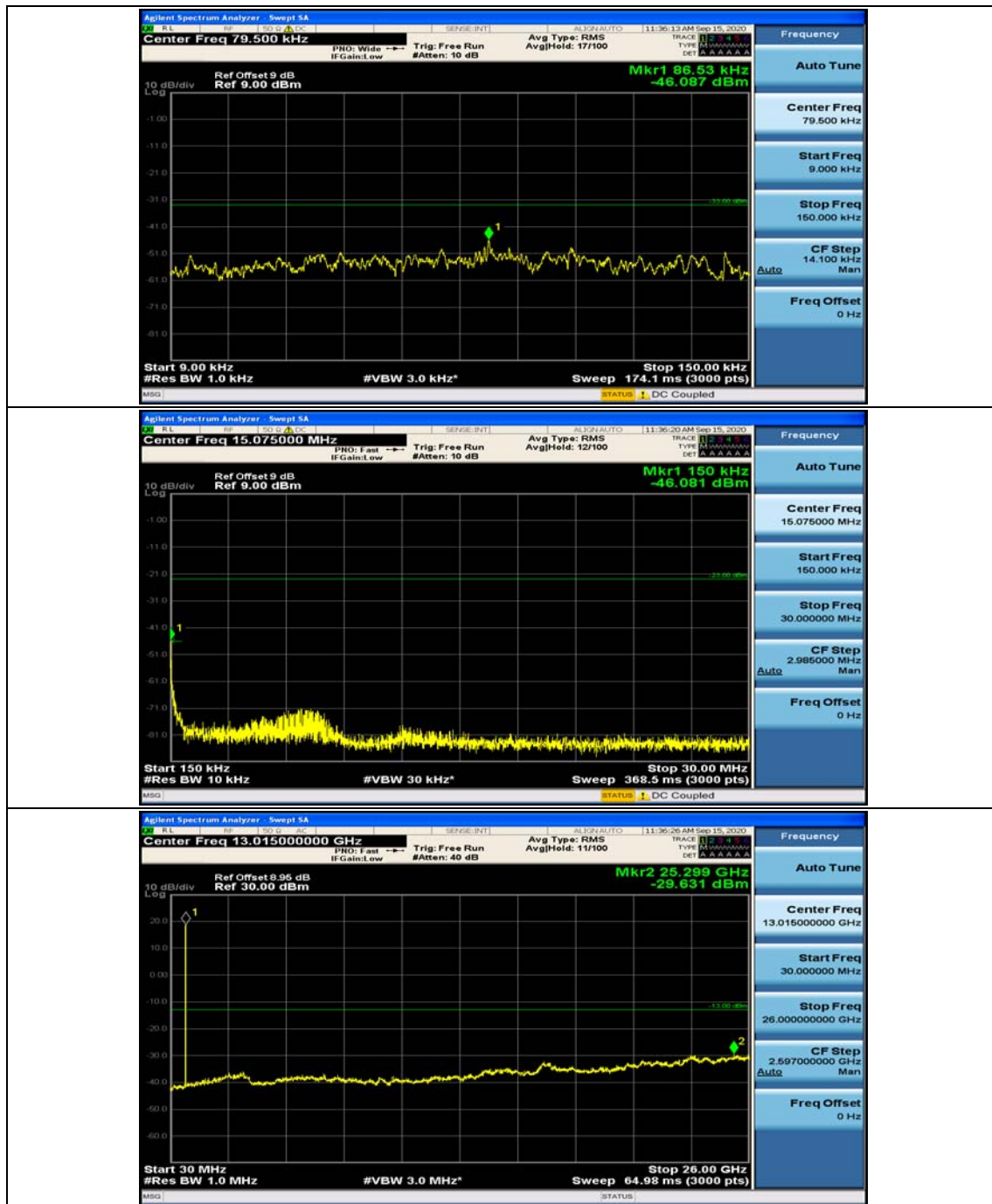


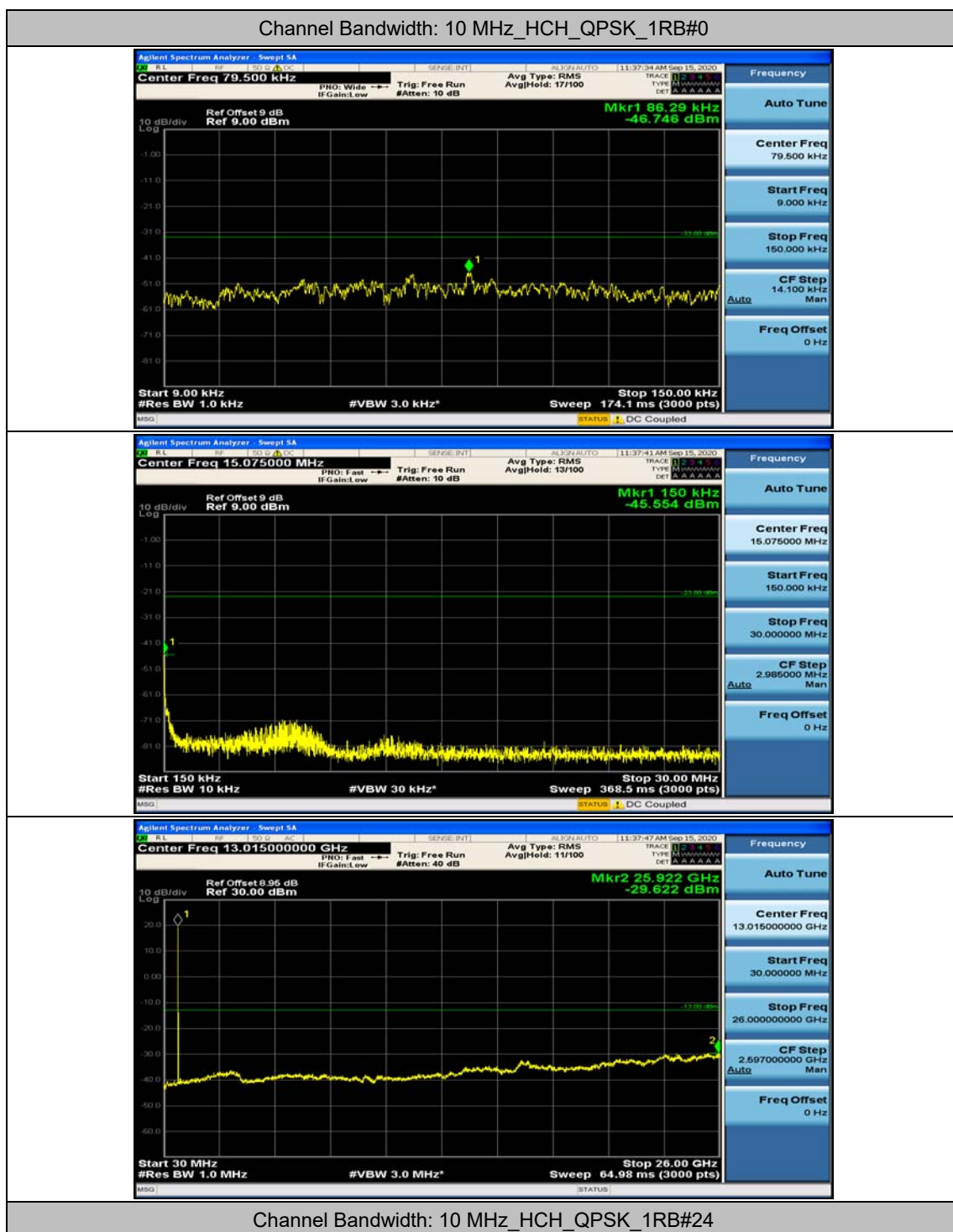


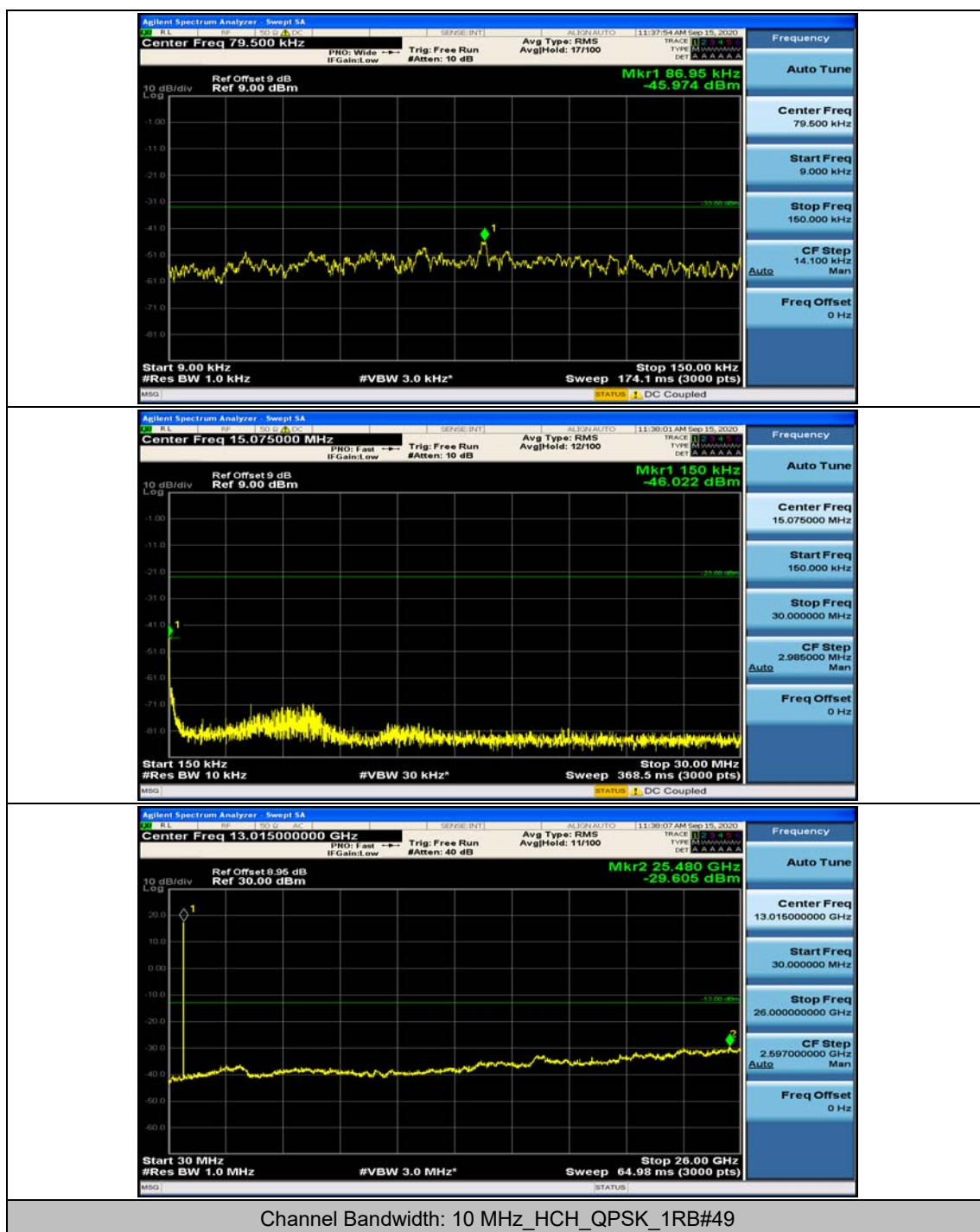


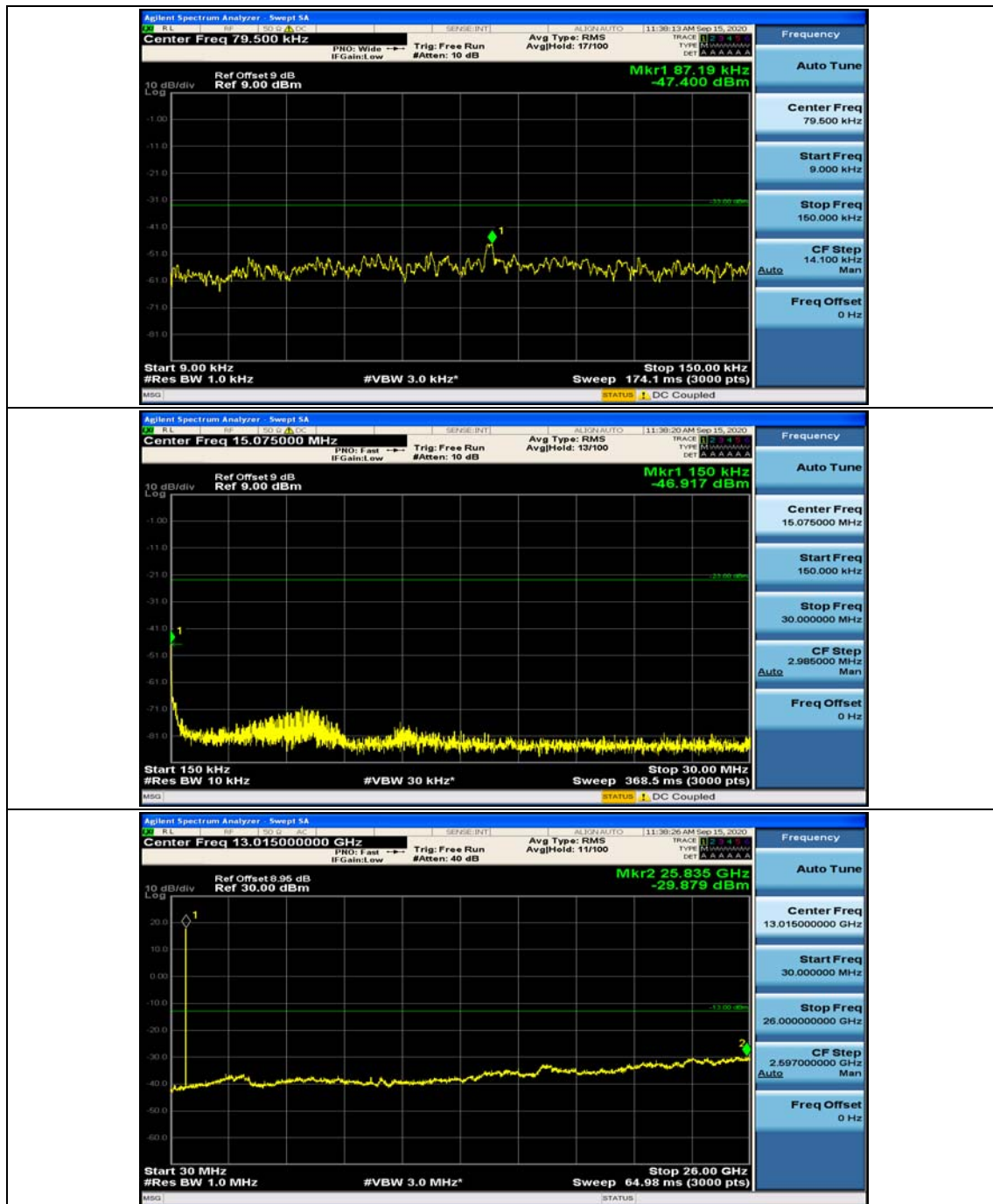


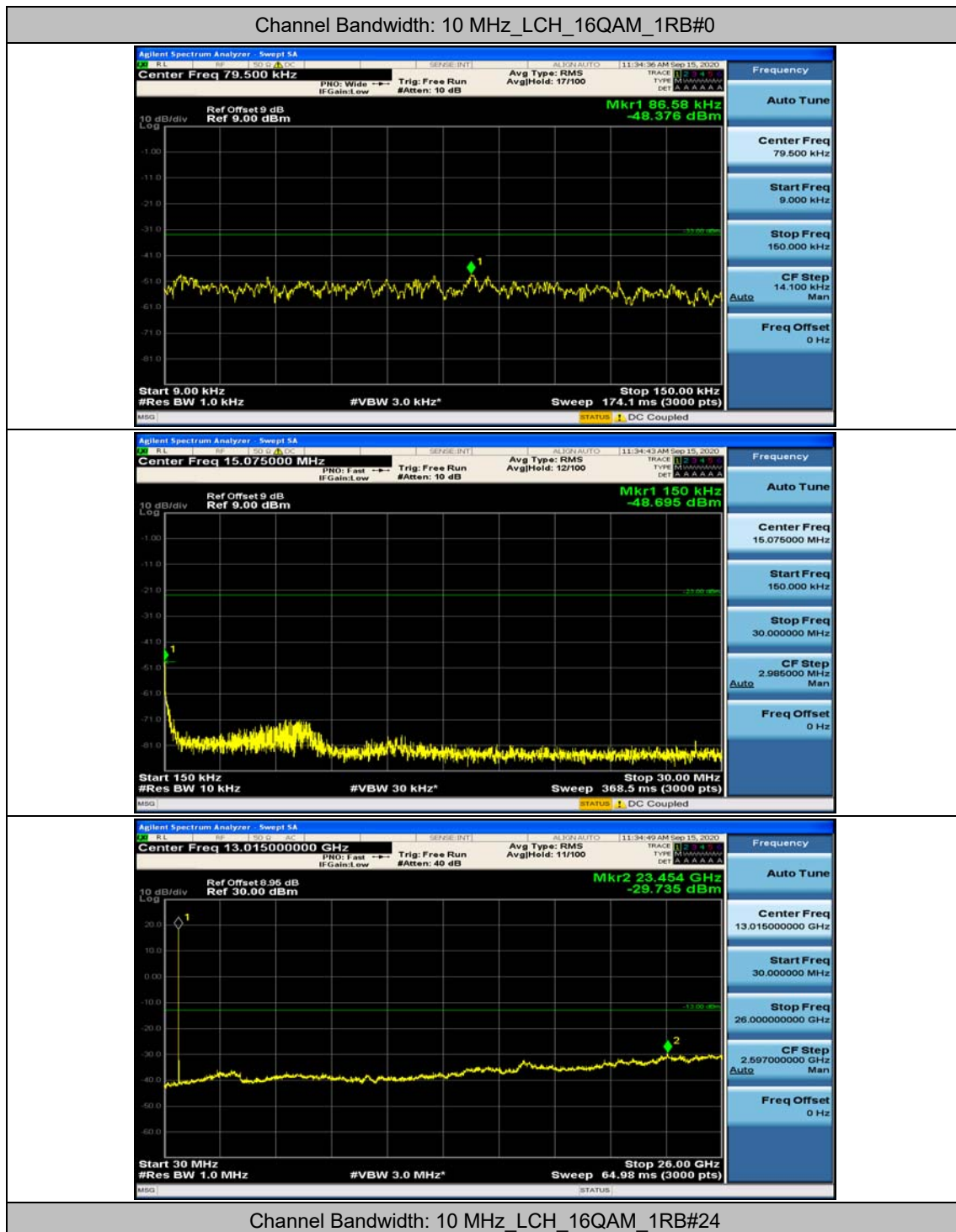


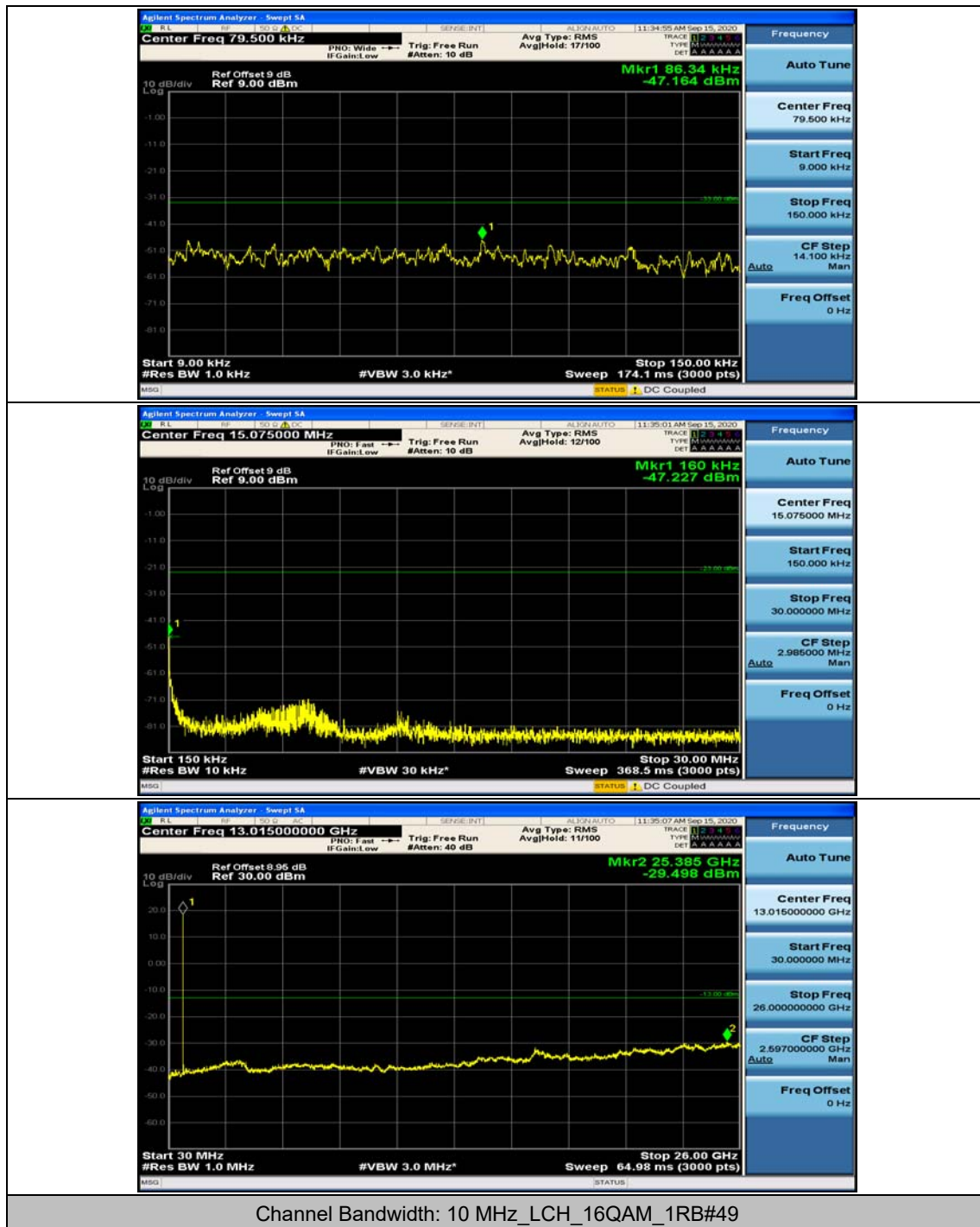


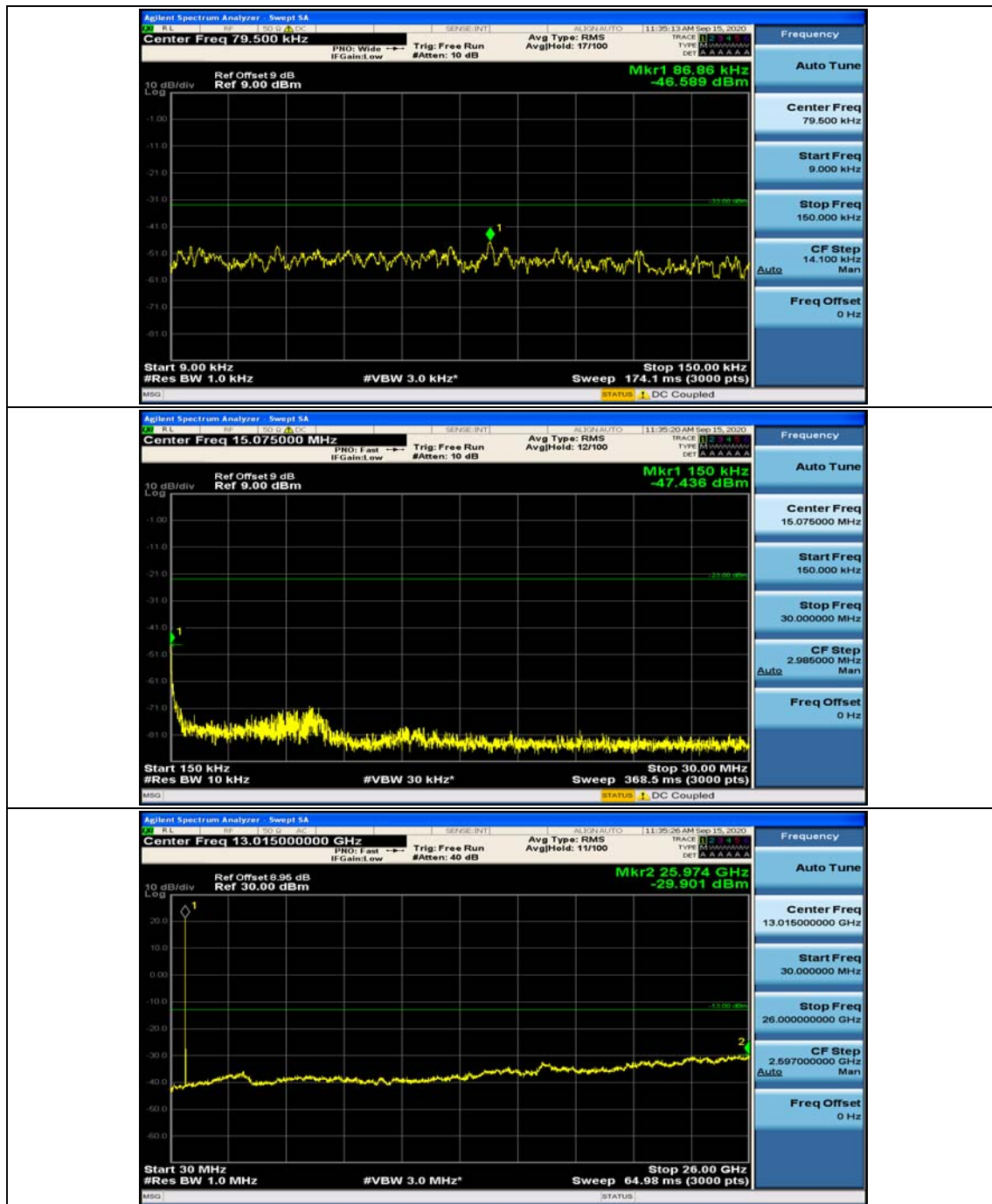


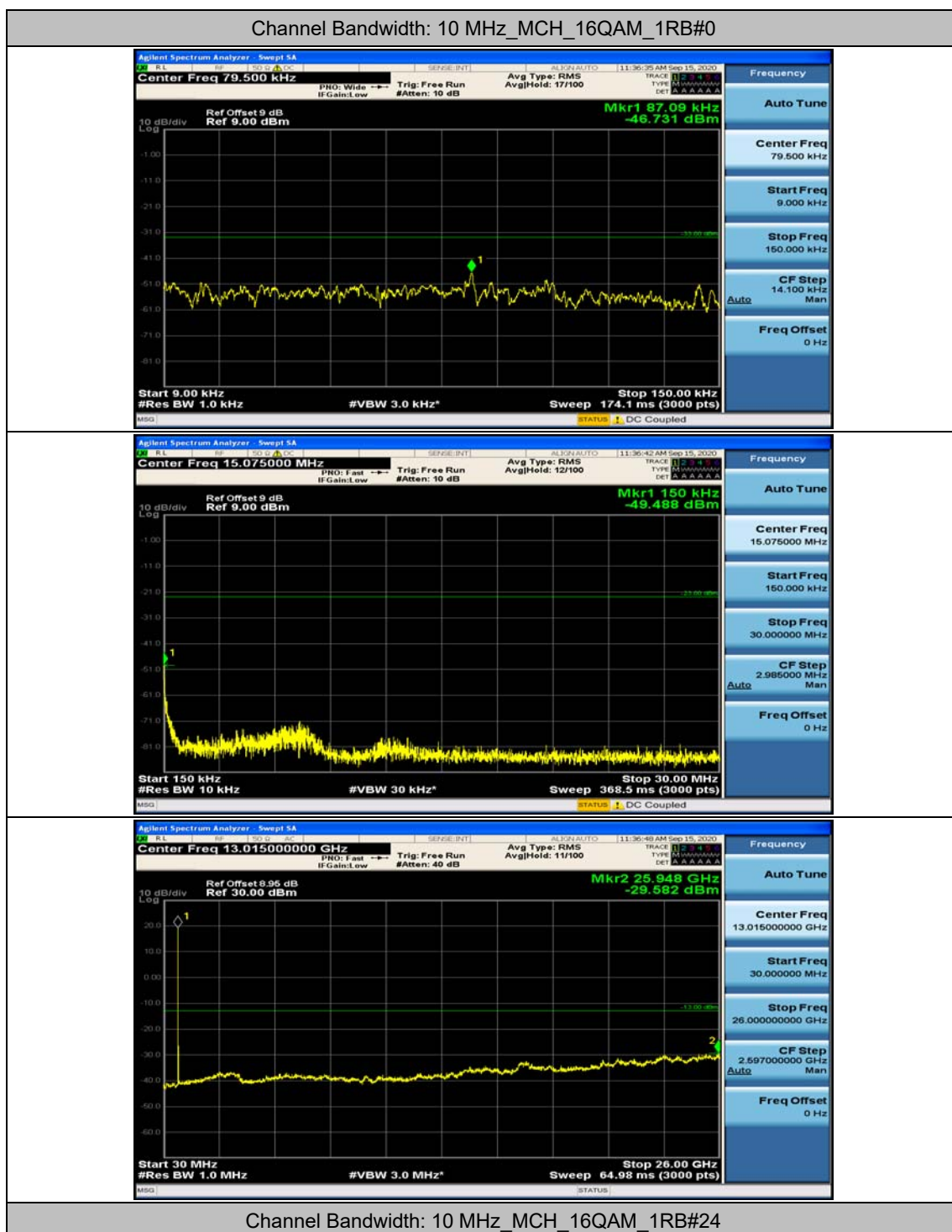


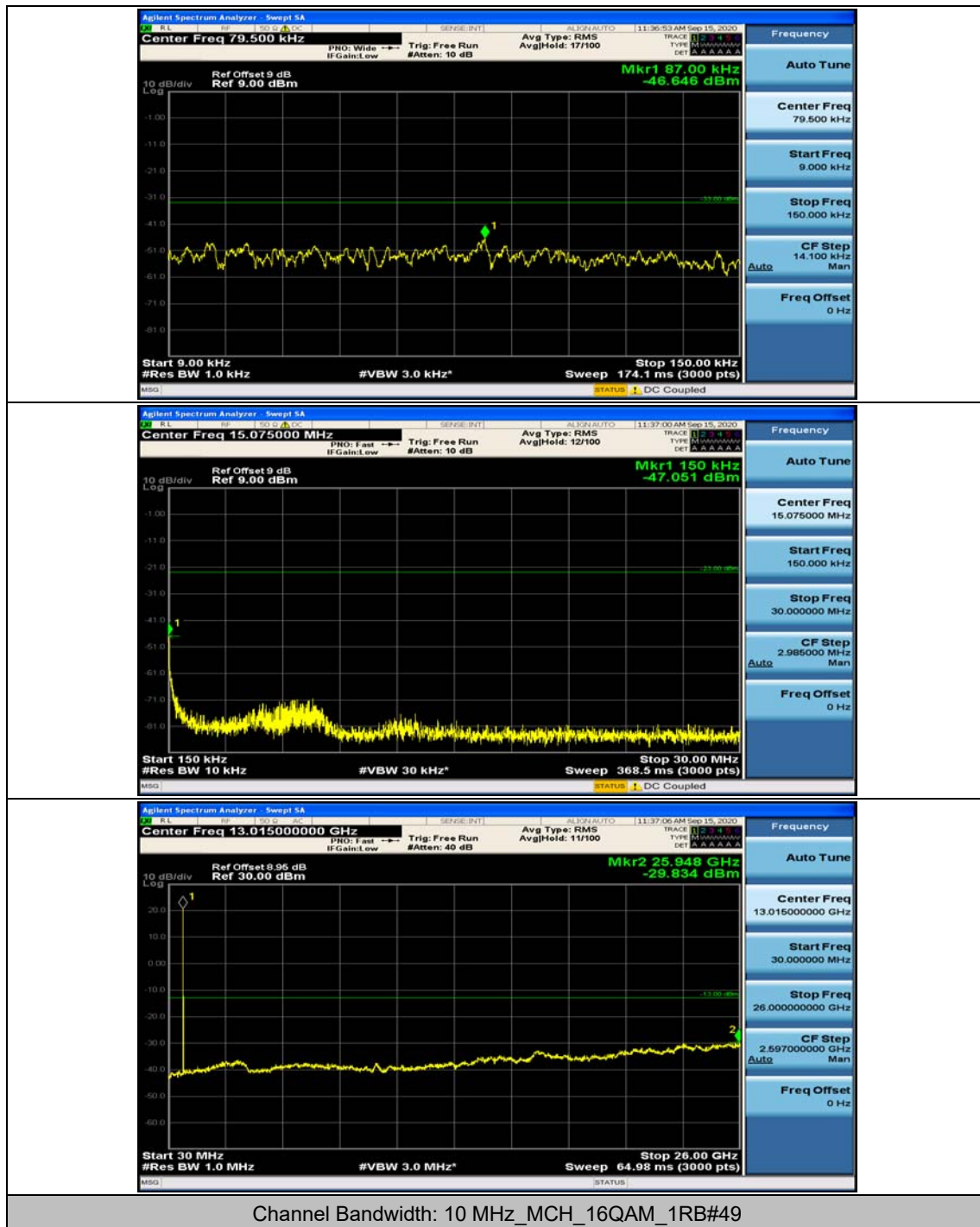


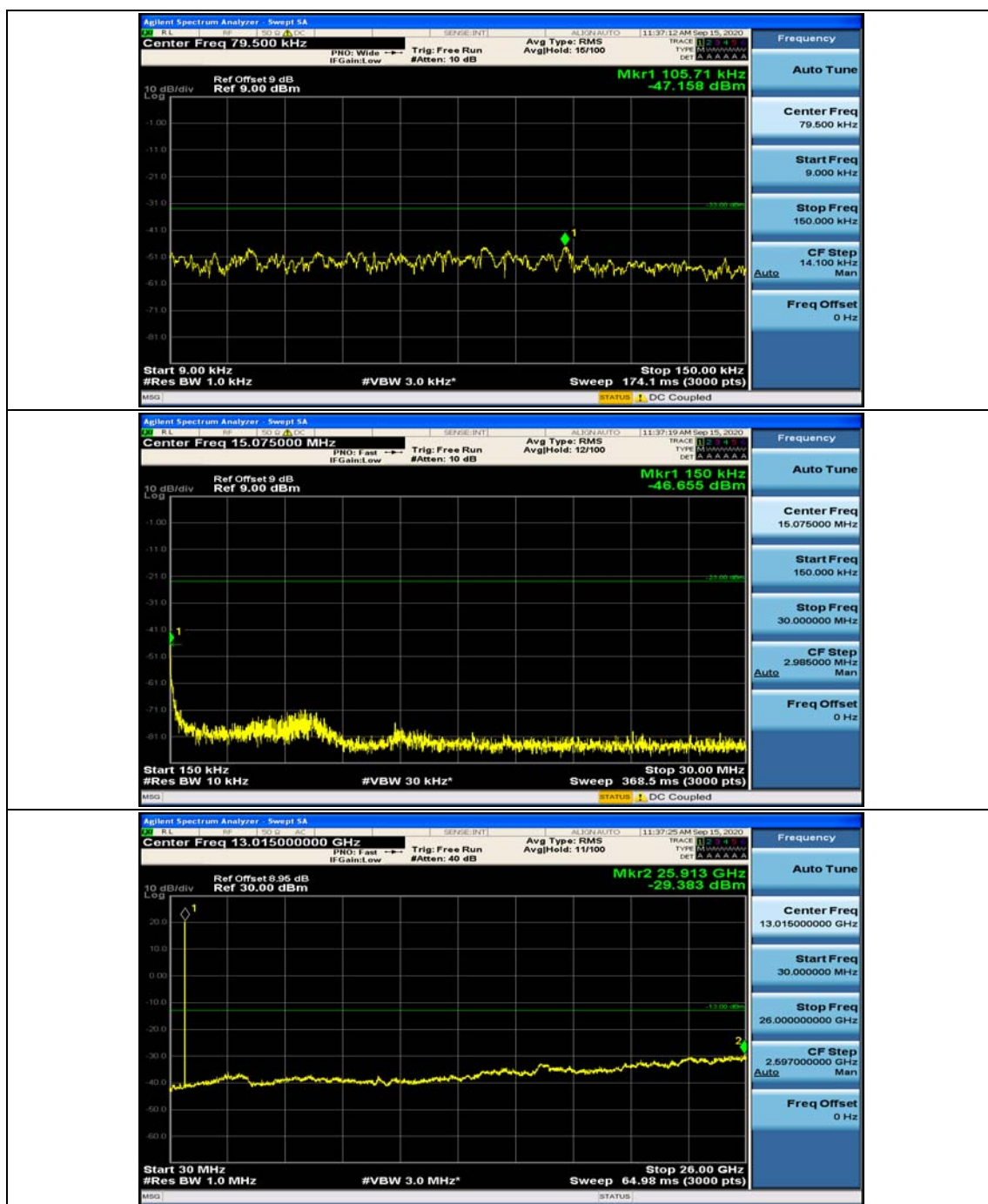


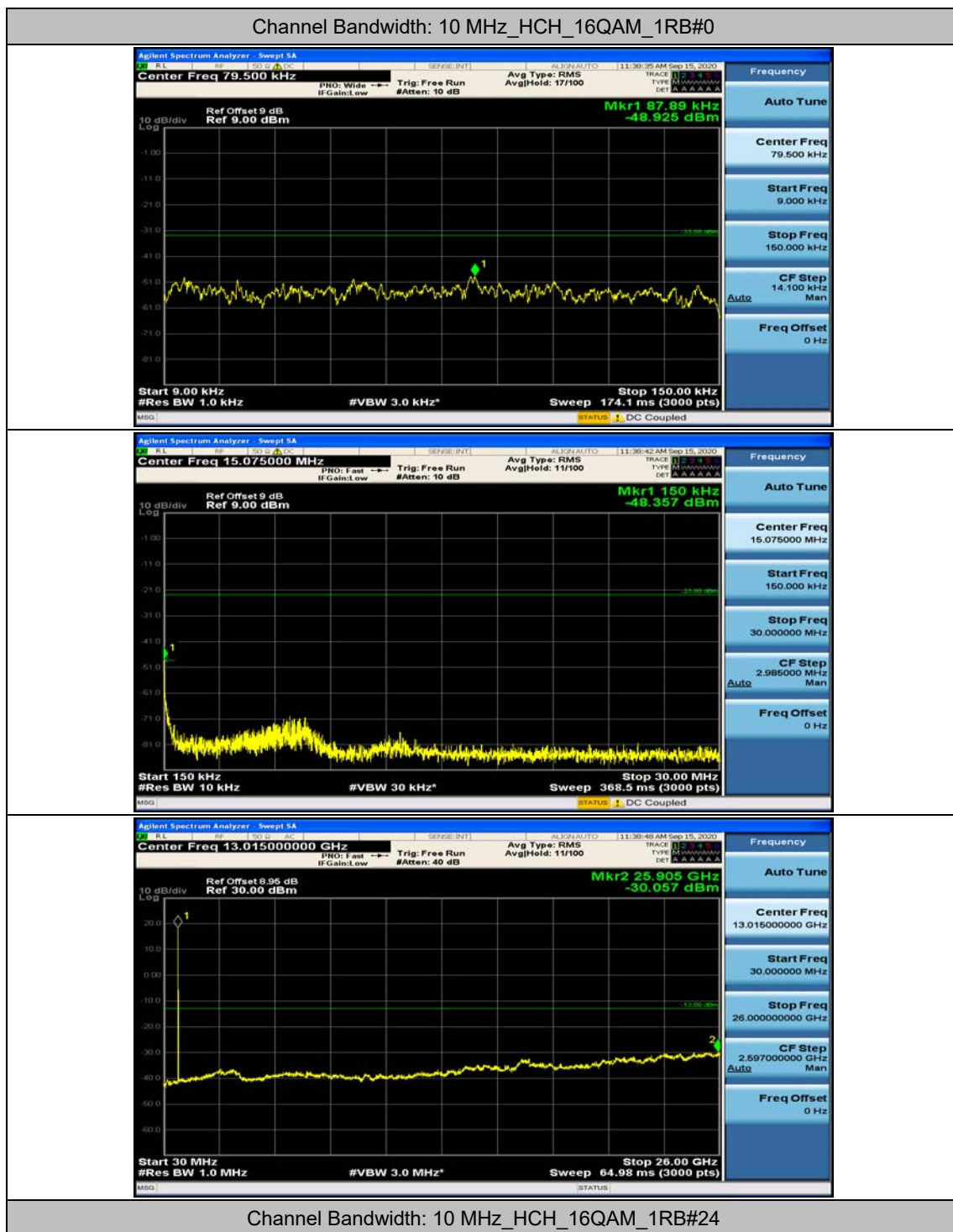


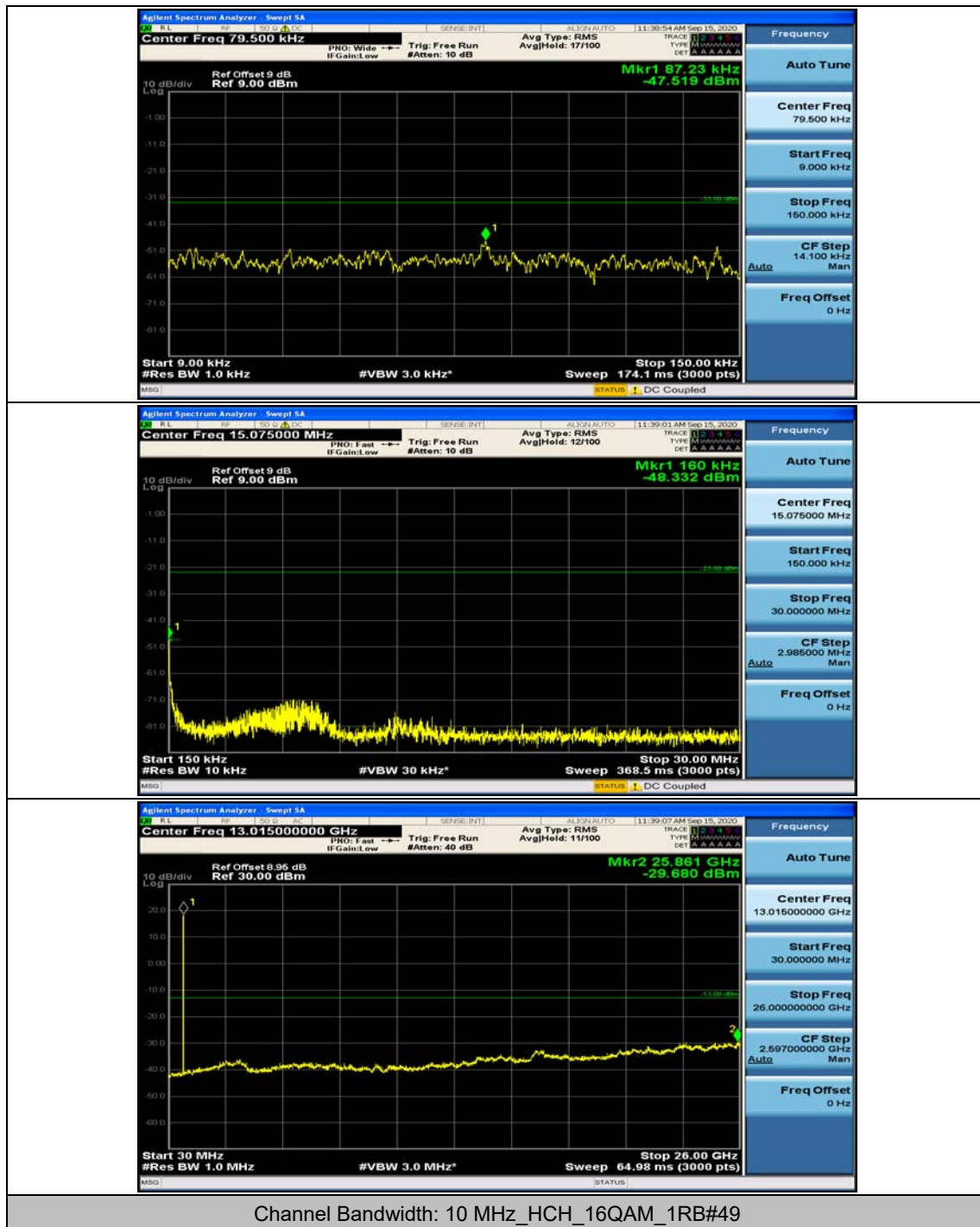


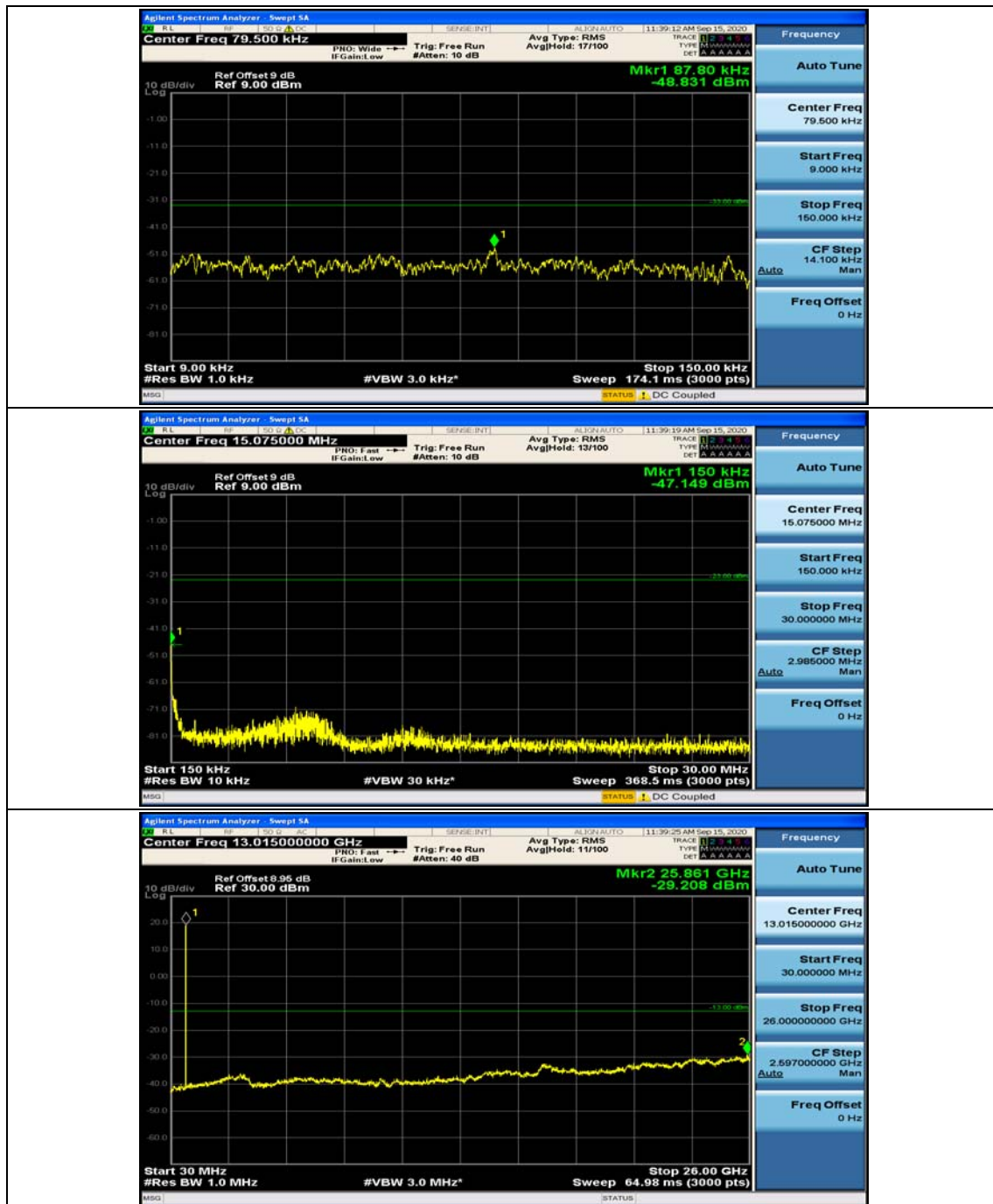












Appendix F: Frequency Stability

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	2.72	0.003887	± 2.5	PASS
		VN	TN	-0.68	-0.000972	± 2.5	PASS
		VH	TN	4.11	0.005874	± 2.5	PASS
	MCH	VL	TN	4.82	0.006813	± 2.5	PASS
		VN	TN	4.99	0.007053	± 2.5	PASS
		VH	TN	3.77	0.005329	± 2.5	PASS
	HCH	VL	TN	-0.92	-0.001286	± 2.5	PASS
		VN	TN	0.06	0.000084	± 2.5	PASS
		VH	TN	2.83	0.003956	± 2.5	PASS
16QAM	LCH	VL	TN	3.34	0.004773	± 2.5	PASS
		VN	TN	4.38	0.006260	± 2.5	PASS
		VH	TN	3.82	0.005459	± 2.5	PASS
	MCH	VL	TN	-1.68	-0.002375	± 2.5	PASS
		VN	TN	-0.92	-0.001300	± 2.5	PASS
		VH	TN	4.74	0.006700	± 2.5	PASS
	HCH	VL	TN	-1.98	-0.002768	± 2.5	PASS
		VN	TN	4.16	0.005816	± 2.5	PASS
		VH	TN	1.66	0.002321	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.8	0.006860	± 2.5	PASS
		VN	-20	2.16	0.003087	± 2.5	PASS
		VN	-10	0.26	0.000372	± 2.5	PASS
		VN	0	0.12	0.000172	± 2.5	PASS
		VN	10	-1.37	-0.001958	± 2.5	PASS
		VN	20	3.34	0.004773	± 2.5	PASS
		VN	30	1.85	0.002644	± 2.5	PASS
		VN	40	0.84	0.001201	± 2.5	PASS
		VN	50	0.04	0.000057	± 2.5	PASS

	MCH	VN	-30	2.68	0.003788	± 2.5	PASS
		VN	-20	3.02	0.004269	± 2.5	PASS
		VN	-10	4.67	0.006601	± 2.5	PASS
		VN	0	2.4	0.003392	± 2.5	PASS
		VN	10	4.18	0.005908	± 2.5	PASS
		VN	20	3.79	0.005357	± 2.5	PASS
		VN	30	1.63	0.002304	± 2.5	PASS
		VN	40	3.83	0.005413	± 2.5	PASS
		VN	50	0.58	0.000820	± 2.5	PASS
	HCH	VN	-30	4.8	0.006710	± 2.5	PASS
		VN	-20	-0.67	-0.000937	± 2.5	PASS
		VN	-10	2.53	0.003537	± 2.5	PASS
		VN	0	4.76	0.006655	± 2.5	PASS
		VN	10	-0.25	-0.000350	± 2.5	PASS
		VN	20	-0.63	-0.000881	± 2.5	PASS
		VN	30	0.83	0.001160	± 2.5	PASS
		VN	40	0.99	0.001384	± 2.5	PASS
		VN	50	-1.08	-0.001510	± 2.5	PASS
16QAM	LCH	VN	-30	3.44	0.004916	± 2.5	PASS
		VN	-20	2.94	0.004202	± 2.5	PASS
		VN	-10	0.97	0.001386	± 2.5	PASS
		VN	0	4.19	0.005988	± 2.5	PASS
		VN	10	0.68	0.000972	± 2.5	PASS
		VN	20	-0.46	-0.000657	± 2.5	PASS
		VN	30	3.59	0.005131	± 2.5	PASS
		VN	40	-0.46	-0.000657	± 2.5	PASS
		VN	50	2.02	0.002887	± 2.5	PASS
	MCH	VN	-30	4.39	0.006205	± 2.5	PASS
		VN	-20	0.08	0.000113	± 2.5	PASS
		VN	-10	-0.55	-0.000777	± 2.5	PASS
		VN	0	1.43	0.002021	± 2.5	PASS
		VN	10	3.09	0.004367	± 2.5	PASS
		VN	20	2.33	0.003293	± 2.5	PASS
		VN	30	-0.07	-0.000099	± 2.5	PASS
		VN	40	1.56	0.002205	± 2.5	PASS
		VN	50	0.71	0.001004	± 2.5	PASS
	HCH	VN	-30	0.22	0.000308	± 2.5	PASS
		VN	-20	-0.01	-0.000014	± 2.5	PASS
		VN	-10	4.91	0.006864	± 2.5	PASS
		VN	0	0.19	0.000266	± 2.5	PASS
		VN	10	-1.24	-0.001734	± 2.5	PASS

		VN	20	1.67	0.002335	± 2.5	PASS
		VN	30	4.52	0.006319	± 2.5	PASS
		VN	40	1.7	0.002377	± 2.5	PASS
		VN	50	-0.21	-0.000294	± 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	4.62	0.006595	± 2.5	PASS
		VN	TN	1.99	0.002841	± 2.5	PASS
		VH	TN	-1.14	-0.001627	± 2.5	PASS
	MCH	VL	TN	1.85	0.002615	± 2.5	PASS
		VN	TN	0.45	0.000636	± 2.5	PASS
		VH	TN	1.73	0.002445	± 2.5	PASS
	HCH	VL	TN	4.79	0.006704	± 2.5	PASS
		VN	TN	2.39	0.003345	± 2.5	PASS
		VH	TN	0.19	0.000266	± 2.5	PASS
16QAM	LCH	VL	TN	1.38	0.001970	± 2.5	PASS
		VN	TN	3.51	0.005011	± 2.5	PASS
		VH	TN	3.07	0.004383	± 2.5	PASS
	MCH	VL	TN	1.63	0.002304	± 2.5	PASS
		VN	TN	-0.51	-0.000721	± 2.5	PASS
		VH	TN	3.31	0.004678	± 2.5	PASS
	HCH	VL	TN	-0.75	-0.001050	± 2.5	PASS
		VN	TN	-1.55	-0.002169	± 2.5	PASS
		VH	TN	-1.12	-0.001568	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.65	0.003783	± 2.5	PASS
		VN	-20	-1.46	-0.002084	± 2.5	PASS
		VN	-10	4.98	0.007109	± 2.5	PASS
		VN	0	3.33	0.004754	± 2.5	PASS
		VN	10	4.04	0.005767	± 2.5	PASS
		VN	20	0.17	0.000243	± 2.5	PASS
		VN	30	-1.64	-0.002341	± 2.5	PASS
		VN	40	1.52	0.002170	± 2.5	PASS
		VN	50	1.41	0.002013	± 2.5	PASS
	MCH	VN	-30	3.23	0.004565	± 2.5	PASS

		VN	-20	-1.65	-0.002332	± 2.5	PASS
		VN	-10	3.1	0.004382	± 2.5	PASS
		VN	0	-1.58	-0.002233	± 2.5	PASS
		VN	10	-1.01	-0.001428	± 2.5	PASS
		VN	20	1.16	0.001640	± 2.5	PASS
		VN	30	0.4	0.000565	± 2.5	PASS
		VN	40	-0.67	-0.000947	± 2.5	PASS
		VN	50	4.16	0.005880	± 2.5	PASS
	HCH	VN	-30	4.03	0.005640	± 2.5	PASS
		VN	-20	1.73	0.002421	± 2.5	PASS
		VN	-10	3.05	0.004269	± 2.5	PASS
		VN	0	4.56	0.006382	± 2.5	PASS
		VN	10	0.61	0.000854	± 2.5	PASS
		VN	20	2.49	0.003485	± 2.5	PASS
		VN	30	2.08	0.002911	± 2.5	PASS
		VN	40	3.13	0.004381	± 2.5	PASS
		VN	50	4.35	0.006088	± 2.5	PASS
16QAM	LCH	VN	-30	0.16	0.000228	± 2.5	PASS
		VN	-20	3.25	0.004640	± 2.5	PASS
		VN	-10	-0.94	-0.001342	± 2.5	PASS
		VN	0	2.6	0.003712	± 2.5	PASS
		VN	10	0.31	0.000443	± 2.5	PASS
		VN	20	4.4	0.006281	± 2.5	PASS
		VN	30	-0.1	-0.000143	± 2.5	PASS
		VN	40	-1.47	-0.002099	± 2.5	PASS
		VN	50	2.12	0.003026	± 2.5	PASS
	MCH	VN	-30	4	0.005654	± 2.5	PASS
		VN	-20	-1.62	-0.002290	± 2.5	PASS
		VN	-10	4.88	0.006898	± 2.5	PASS
		VN	0	-0.31	-0.000438	± 2.5	PASS
		VN	10	-1.97	-0.002784	± 2.5	PASS
		VN	20	3.09	0.004367	± 2.5	PASS
		VN	30	3.12	0.004410	± 2.5	PASS
		VN	40	3.35	0.004735	± 2.5	PASS
		VN	50	-0.17	-0.000240	± 2.5	PASS
	HCH	VN	-30	1.11	0.001554	± 2.5	PASS
		VN	-20	4.3	0.006018	± 2.5	PASS
		VN	-10	4.49	0.006284	± 2.5	PASS
		VN	0	1.93	0.002701	± 2.5	PASS
		VN	10	0.62	0.000868	± 2.5	PASS
		VN	20	2.45	0.003429	± 2.5	PASS

		VN	30	3.01	0.004213	± 2.5	PASS
		VN	40	4.77	0.006676	± 2.5	PASS
		VN	50	4.62	0.006466	± 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	1.14	0.001625	± 2.5	PASS
		VN	TN	3.92	0.005588	± 2.5	PASS
		VH	TN	-0.76	-0.001083	± 2.5	PASS
	MCH	VL	TN	0.93	0.001314	± 2.5	PASS
		VN	TN	4.9	0.006926	± 2.5	PASS
		VH	TN	4.22	0.005965	± 2.5	PASS
	HCH	VL	TN	-1.52	-0.002130	± 2.5	PASS
		VN	TN	-0.21	-0.000294	± 2.5	PASS
		VH	TN	3.08	0.004317	± 2.5	PASS
16QAM	LCH	VL	TN	2.7	0.003849	± 2.5	PASS
		VN	TN	-1.73	-0.002466	± 2.5	PASS
		VH	TN	0.87	0.001240	± 2.5	PASS
	MCH	VL	TN	4.18	0.005908	± 2.5	PASS
		VN	TN	4.24	0.005993	± 2.5	PASS
		VH	TN	-0.85	-0.001201	± 2.5	PASS
	HCH	VL	TN	4.54	0.006363	± 2.5	PASS
		VN	TN	1.46	0.002046	± 2.5	PASS
		VH	TN	2.83	0.003966	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.41	0.000584	± 2.5	PASS
		VN	-20	0.94	0.001340	± 2.5	PASS
		VN	-10	-0.27	-0.000385	± 2.5	PASS
		VN	0	3.36	0.004790	± 2.5	PASS
		VN	10	0.44	0.000627	± 2.5	PASS
		VN	20	0.75	0.001069	± 2.5	PASS
		VN	30	3.28	0.004676	± 2.5	PASS
		VN	40	0.14	0.000200	± 2.5	PASS
		VN	50	3.85	0.005488	± 2.5	PASS
	MCH	VN	-30	1.09	0.001541	± 2.5	PASS
		VN	-20	3.85	0.005442	± 2.5	PASS

		VN	-10	-0.98	-0.001385	± 2.5	PASS	
		VN	0	3.46	0.004890	± 2.5	PASS	
		VN	10	4.11	0.005809	± 2.5	PASS	
		VN	20	1.81	0.002558	± 2.5	PASS	
		VN	30	2.41	0.003406	± 2.5	PASS	
		VN	40	1.31	0.001852	± 2.5	PASS	
		VN	50	1.12	0.001583	± 2.5	PASS	
	HCH	VN	-30	1.16	0.001626	± 2.5	PASS	
		VN	-20	4.98	0.006980	± 2.5	PASS	
		VN	-10	0.52	0.000729	± 2.5	PASS	
		VN	0	4	0.005606	± 2.5	PASS	
		VN	10	3.63	0.005088	± 2.5	PASS	
		VN	20	0.12	0.000168	± 2.5	PASS	
		VN	30	3.55	0.004975	± 2.5	PASS	
		VN	40	1.1	0.001542	± 2.5	PASS	
		VN	50	1.6	0.002242	± 2.5	PASS	
	16QAM	LCH	VN	-30	0.74	0.001055	± 2.5	PASS
			VN	-20	3.98	0.005674	± 2.5	PASS
VN			-10	3.32	0.004733	± 2.5	PASS	
VN			0	4.34	0.006187	± 2.5	PASS	
VN			10	-0.99	-0.001411	± 2.5	PASS	
VN			20	1.35	0.001924	± 2.5	PASS	
VN			30	-0.11	-0.000157	± 2.5	PASS	
VN			40	-1.98	-0.002823	± 2.5	PASS	
VN			50	-1.62	-0.002309	± 2.5	PASS	
MCH		VN	-30	-0.21	-0.000297	± 2.5	PASS	
		VN	-20	-1.95	-0.002756	± 2.5	PASS	
		VN	-10	2.36	0.003336	± 2.5	PASS	
		VN	0	2.58	0.003647	± 2.5	PASS	
		VN	10	4.02	0.005682	± 2.5	PASS	
		VN	20	-0.21	-0.000297	± 2.5	PASS	
		VN	30	1.34	0.001894	± 2.5	PASS	
		VN	40	-0.49	-0.000693	± 2.5	PASS	
		VN	50	2.34	0.003307	± 2.5	PASS	
HCH		VN	-30	3.11	0.004359	± 2.5	PASS	
		VN	-20	3.22	0.004513	± 2.5	PASS	
		VN	-10	1.03	0.001444	± 2.5	PASS	
		VN	0	4.42	0.006195	± 2.5	PASS	
		VN	10	1.93	0.002705	± 2.5	PASS	
		VN	20	-1.76	-0.002467	± 2.5	PASS	
		VN	30	1.6	0.002242	± 2.5	PASS	

		VN	40	-1.23	-0.001724	± 2.5	PASS
		VN	50	-1.17	-0.001640	± 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	1.25	0.001776	± 2.5	PASS
		VN	TN	0.93	0.001321	± 2.5	PASS
		VH	TN	2.88	0.004091	± 2.5	PASS
	MCH	VL	TN	-1.61	-0.002276	± 2.5	PASS
		VN	TN	0.75	0.001060	± 2.5	PASS
		VH	TN	-1.02	-0.001442	± 2.5	PASS
	HCH	VL	TN	2.59	0.003643	± 2.5	PASS
		VN	TN	3.56	0.005007	± 2.5	PASS
		VH	TN	-0.16	-0.000225	± 2.5	PASS
16QAM	LCH	VL	TN	2.6	0.003693	± 2.5	PASS
		VN	TN	-1.13	-0.001605	± 2.5	PASS
		VH	TN	4.6	0.006534	± 2.5	PASS
	MCH	VL	TN	3.02	0.004269	± 2.5	PASS
		VN	TN	-1.33	-0.001880	± 2.5	PASS
		VH	TN	0.75	0.001060	± 2.5	PASS
	HCH	VL	TN	0.06	0.000084	± 2.5	PASS
		VN	TN	1.7	0.002391	± 2.5	PASS
		VH	TN	3.08	0.004332	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.82	0.001165	± 2.5	PASS
		VN	-20	4.96	0.007045	± 2.5	PASS
		VN	-10	3.65	0.005185	± 2.5	PASS
		VN	0	3.09	0.004389	± 2.5	PASS
		VN	10	-1.26	-0.001790	± 2.5	PASS
		VN	20	3.16	0.004489	± 2.5	PASS
		VN	30	0.47	0.000668	± 2.5	PASS
		VN	40	-1.96	-0.002784	± 2.5	PASS
		VN	50	-0.78	-0.001108	± 2.5	PASS
	MCH	VN	-30	4.55	0.006431	± 2.5	PASS
		VN	-20	1.22	0.001724	± 2.5	PASS
		VN	-10	3	0.004240	± 2.5	PASS

		VN	0	1.38	0.001951	± 2.5	PASS
		VN	10	2.78	0.003929	± 2.5	PASS
		VN	20	4.74	0.006700	± 2.5	PASS
		VN	30	3.29	0.004650	± 2.5	PASS
		VN	40	0.6	0.000848	± 2.5	PASS
		VN	50	0.4	0.000565	± 2.5	PASS
	HCH	VN	-30	2.24	0.003150	± 2.5	PASS
		VN	-20	3.54	0.004979	± 2.5	PASS
		VN	-10	0.23	0.000323	± 2.5	PASS
		VN	0	0.87	0.001224	± 2.5	PASS
		VN	10	2.35	0.003305	± 2.5	PASS
		VN	20	3.39	0.004768	± 2.5	PASS
		VN	30	-1.92	-0.002700	± 2.5	PASS
		VN	40	3.81	0.005359	± 2.5	PASS
		VN	50	0.03	0.000042	± 2.5	PASS
16QAM	LCH	VN	-30	4.4	0.006250	± 2.5	PASS
		VN	-20	2.34	0.003324	± 2.5	PASS
		VN	-10	4.93	0.007003	± 2.5	PASS
		VN	0	-0.94	-0.001335	± 2.5	PASS
		VN	10	3.94	0.005597	± 2.5	PASS
		VN	20	3.23	0.004588	± 2.5	PASS
		VN	30	2.56	0.003636	± 2.5	PASS
		VN	40	2.48	0.003523	± 2.5	PASS
		VN	50	2.19	0.003111	± 2.5	PASS
	MCH	VN	-30	2.54	0.003590	± 2.5	PASS
		VN	-20	-1.02	-0.001442	± 2.5	PASS
		VN	-10	-1.6	-0.002261	± 2.5	PASS
		VN	0	3.33	0.004707	± 2.5	PASS
		VN	10	-0.37	-0.000523	± 2.5	PASS
		VN	20	0.1	0.000141	± 2.5	PASS
		VN	30	1.11	0.001569	± 2.5	PASS
		VN	40	-0.71	-0.001004	± 2.5	PASS
		VN	50	0.73	0.001032	± 2.5	PASS
	HCH	VN	-30	3.89	0.005471	± 2.5	PASS
		VN	-20	0.34	0.000478	± 2.5	PASS
		VN	-10	-1.71	-0.002405	± 2.5	PASS
		VN	0	-0.57	-0.000802	± 2.5	PASS
		VN	10	3.38	0.004754	± 2.5	PASS
		VN	20	3.81	0.005359	± 2.5	PASS
		VN	30	2.58	0.003629	± 2.5	PASS
		VN	40	2.6	0.003657	± 2.5	PASS

		VN	50	-0.91	-0.001280	± 2.5	PASS
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