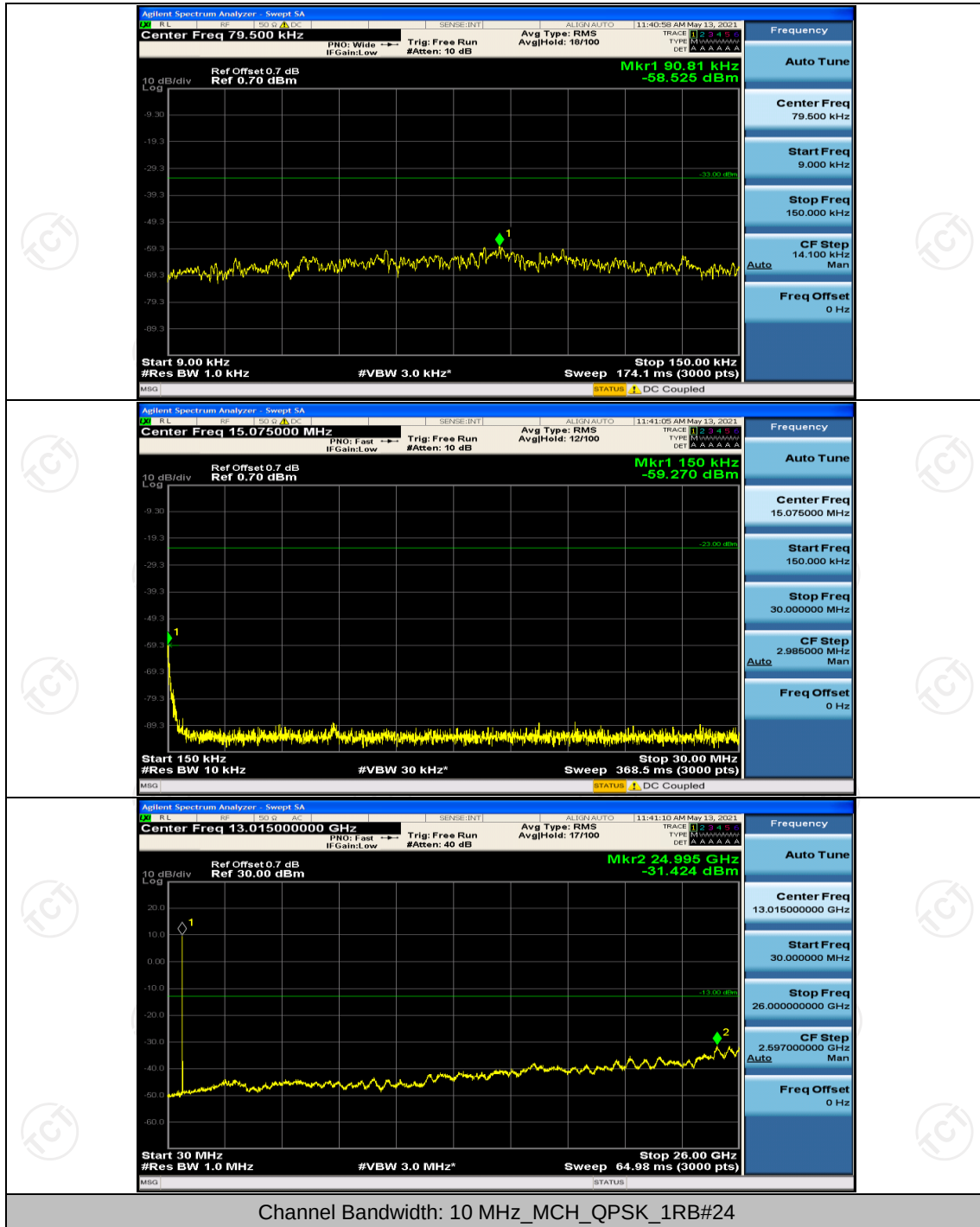
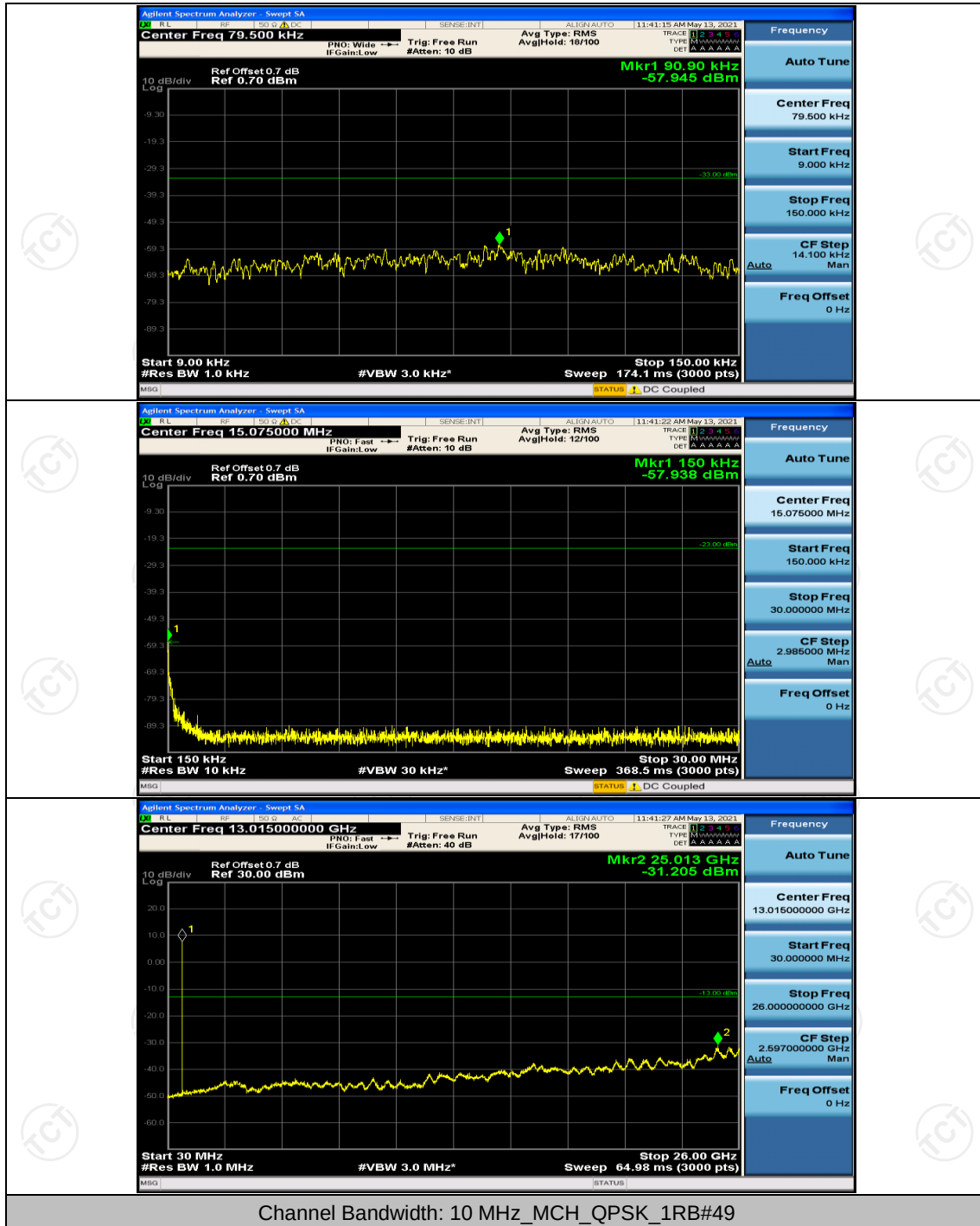
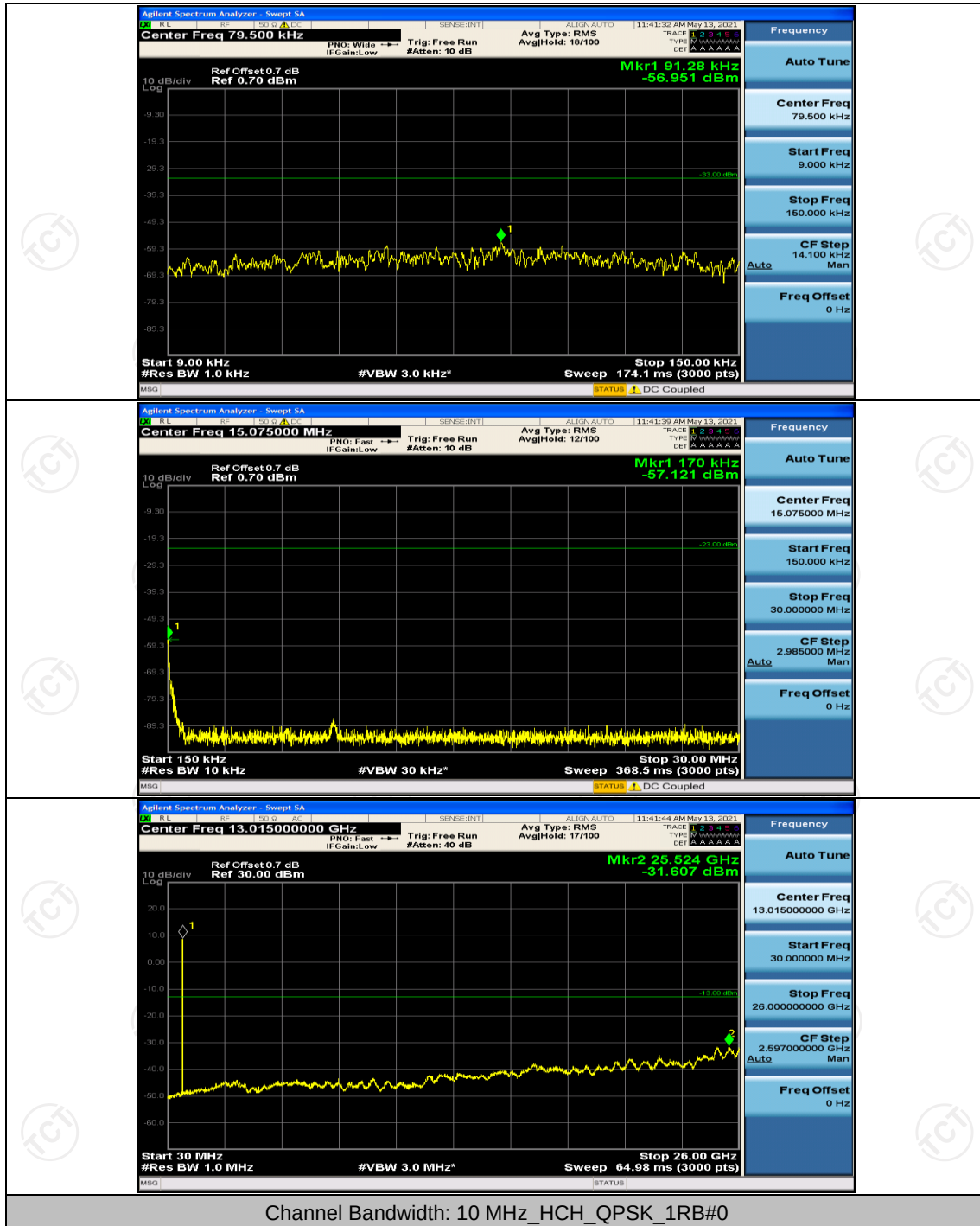
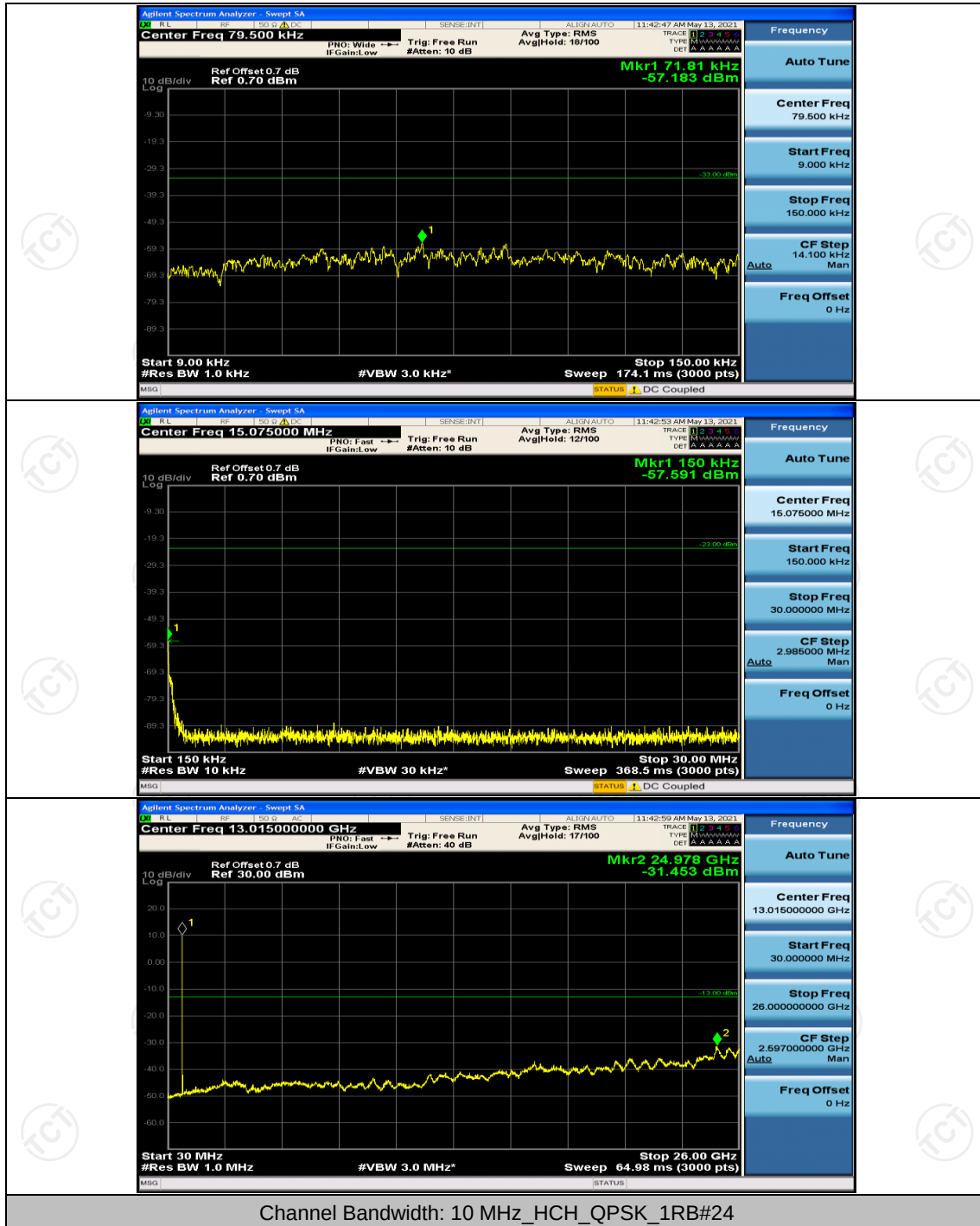
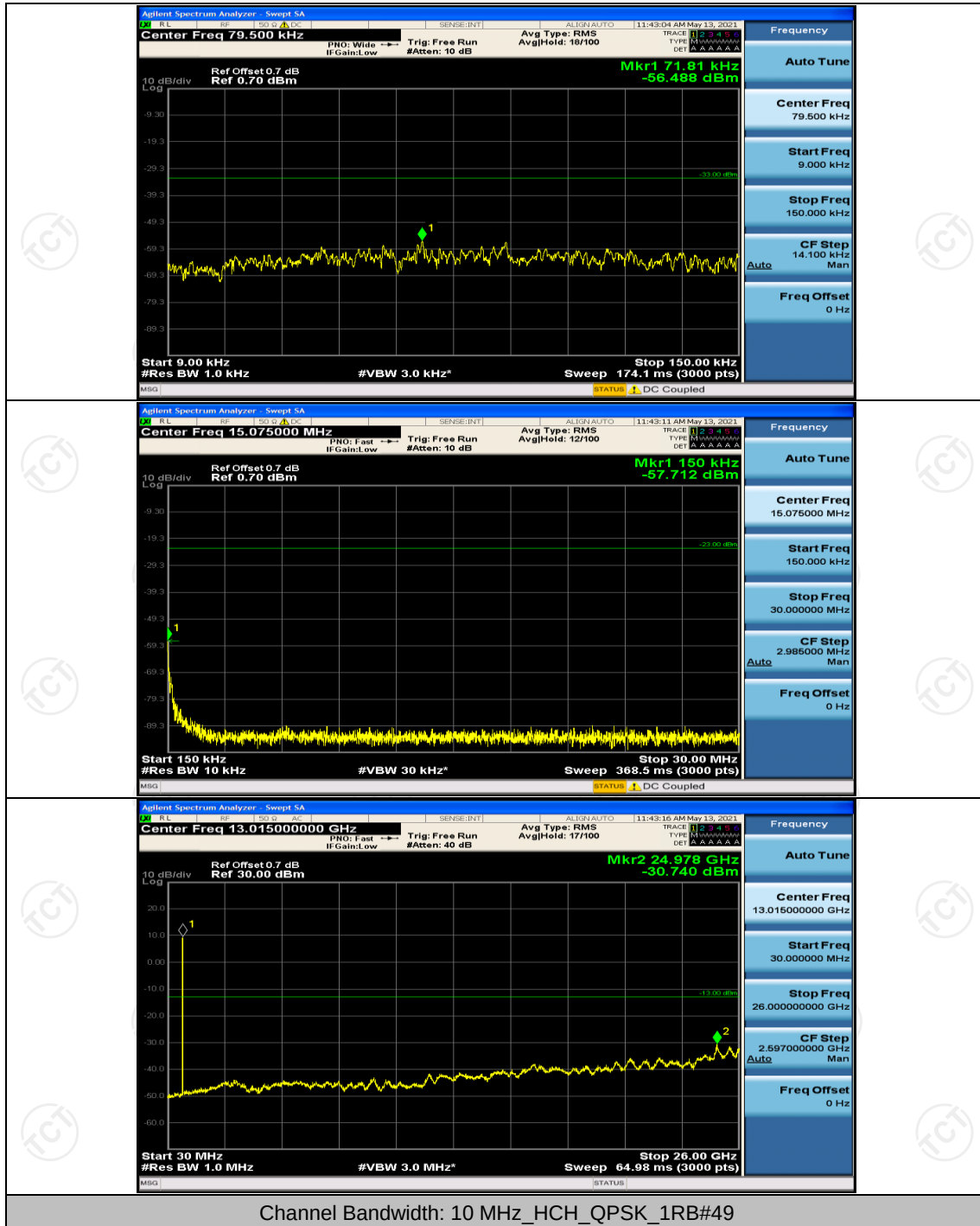


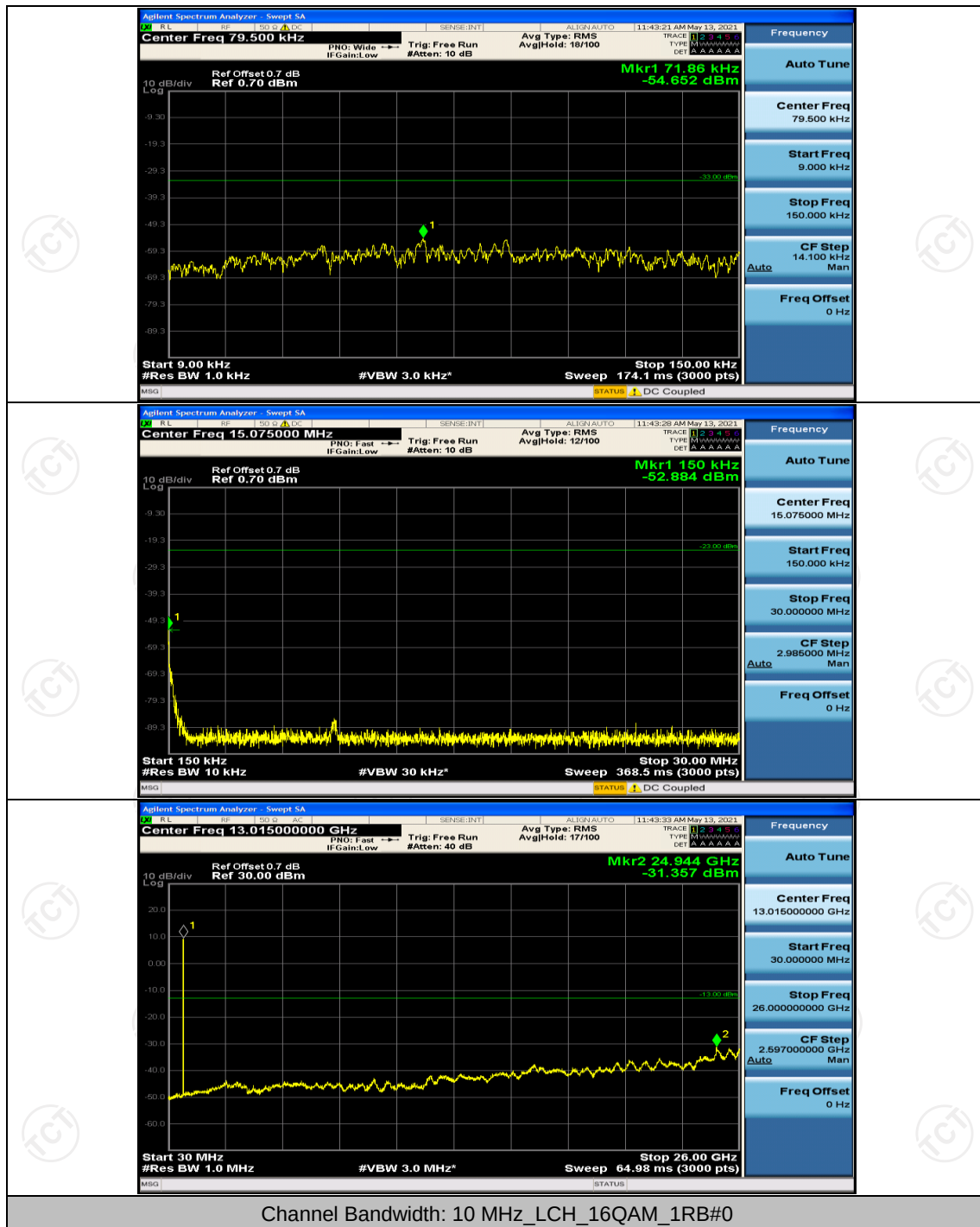


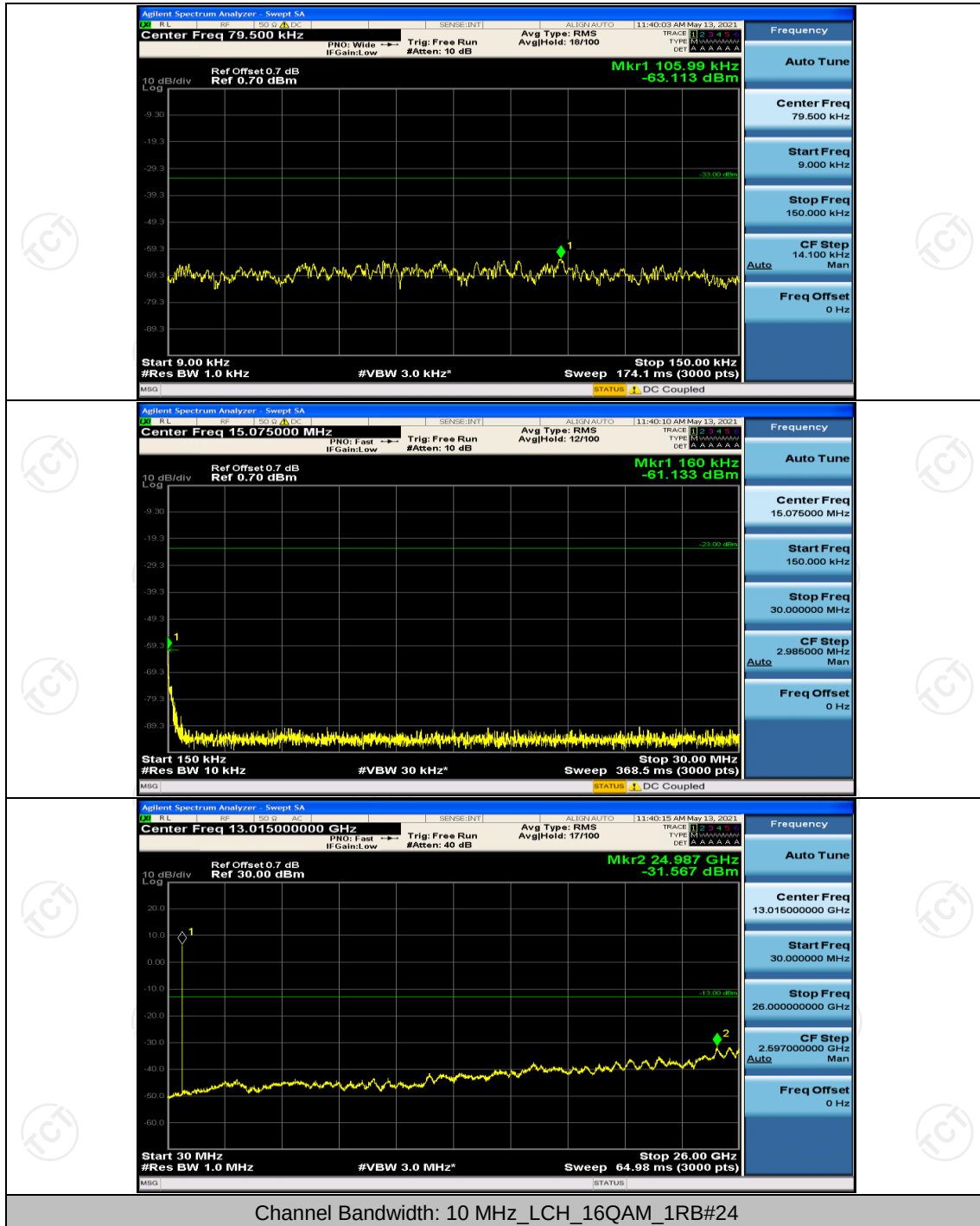


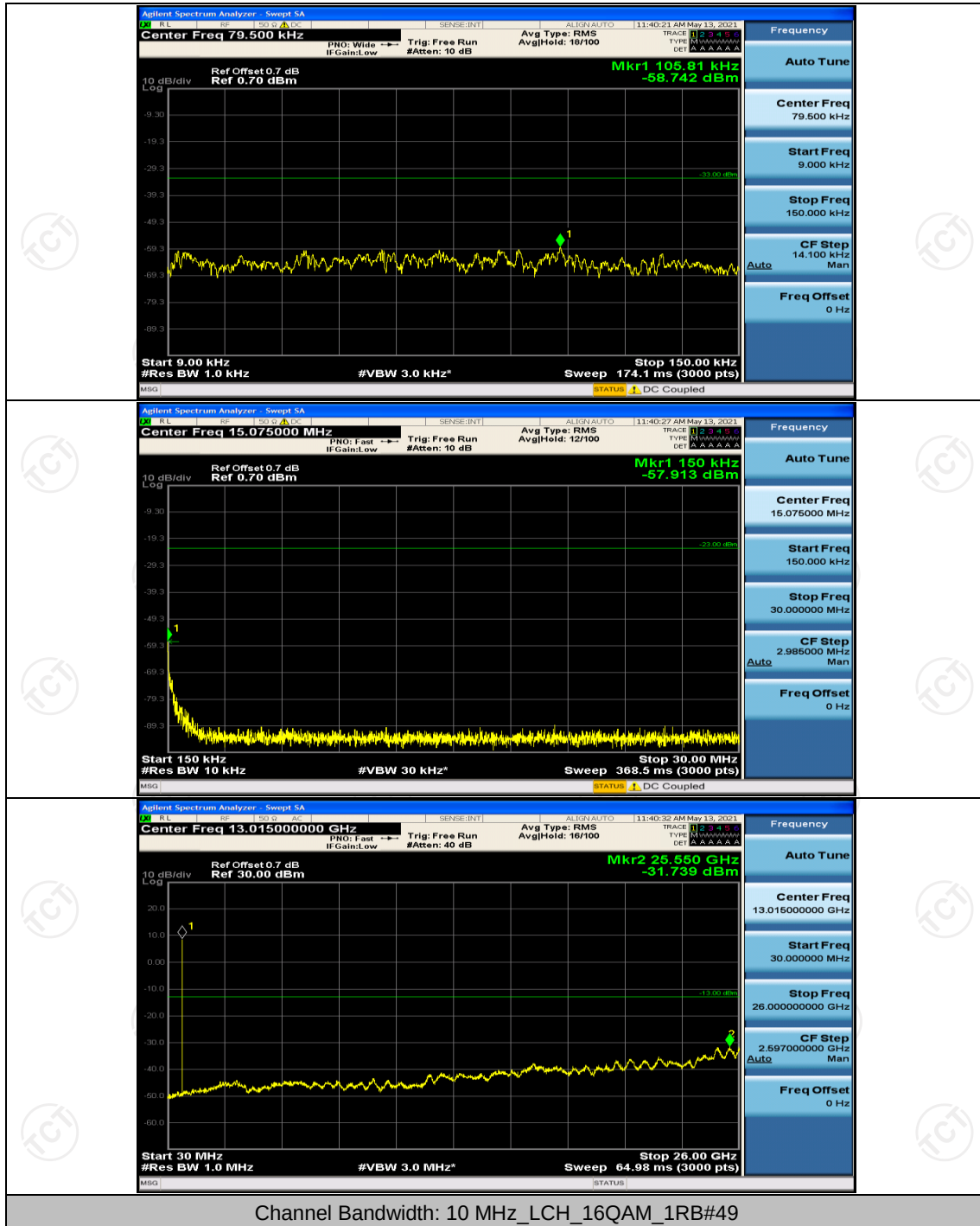


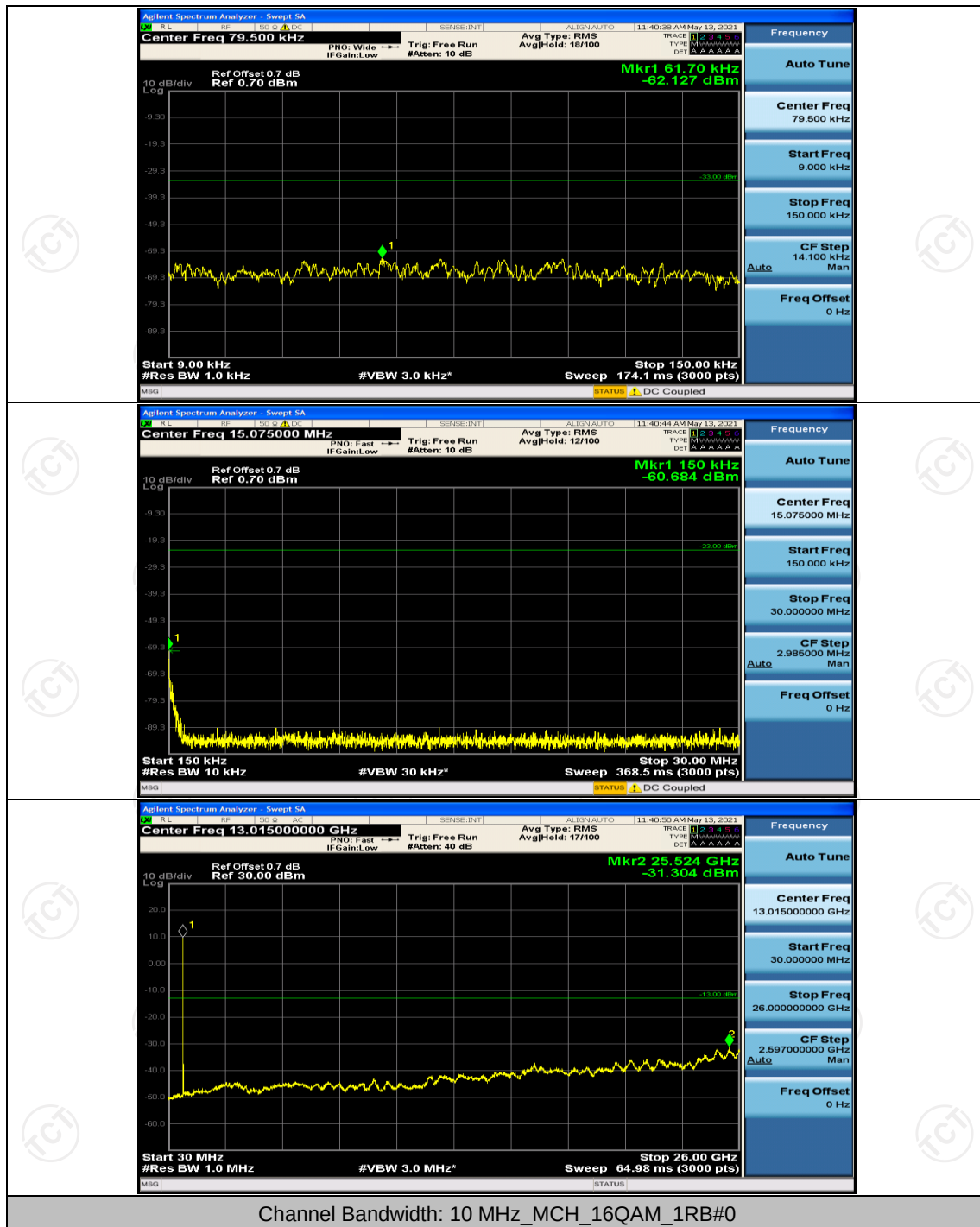


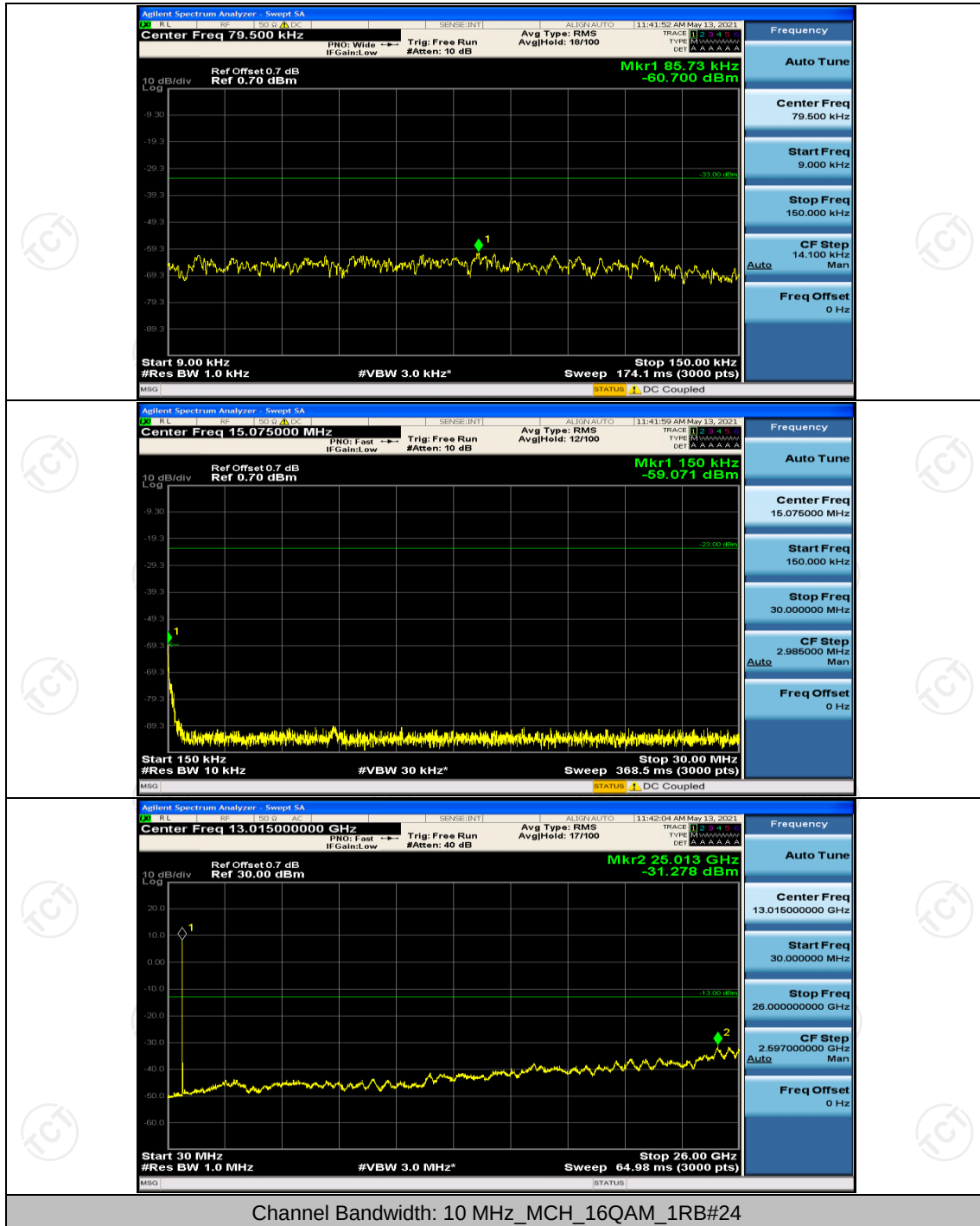


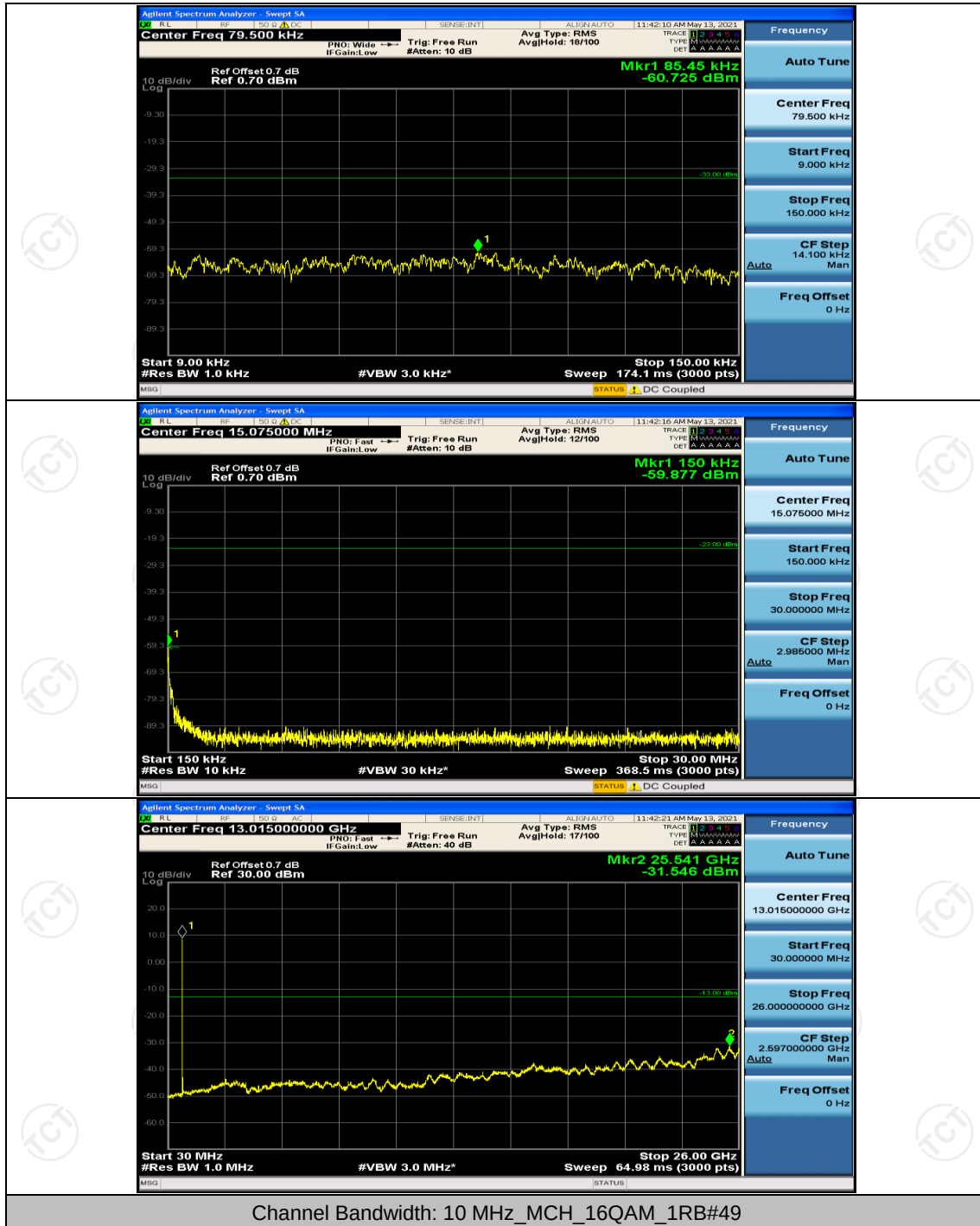


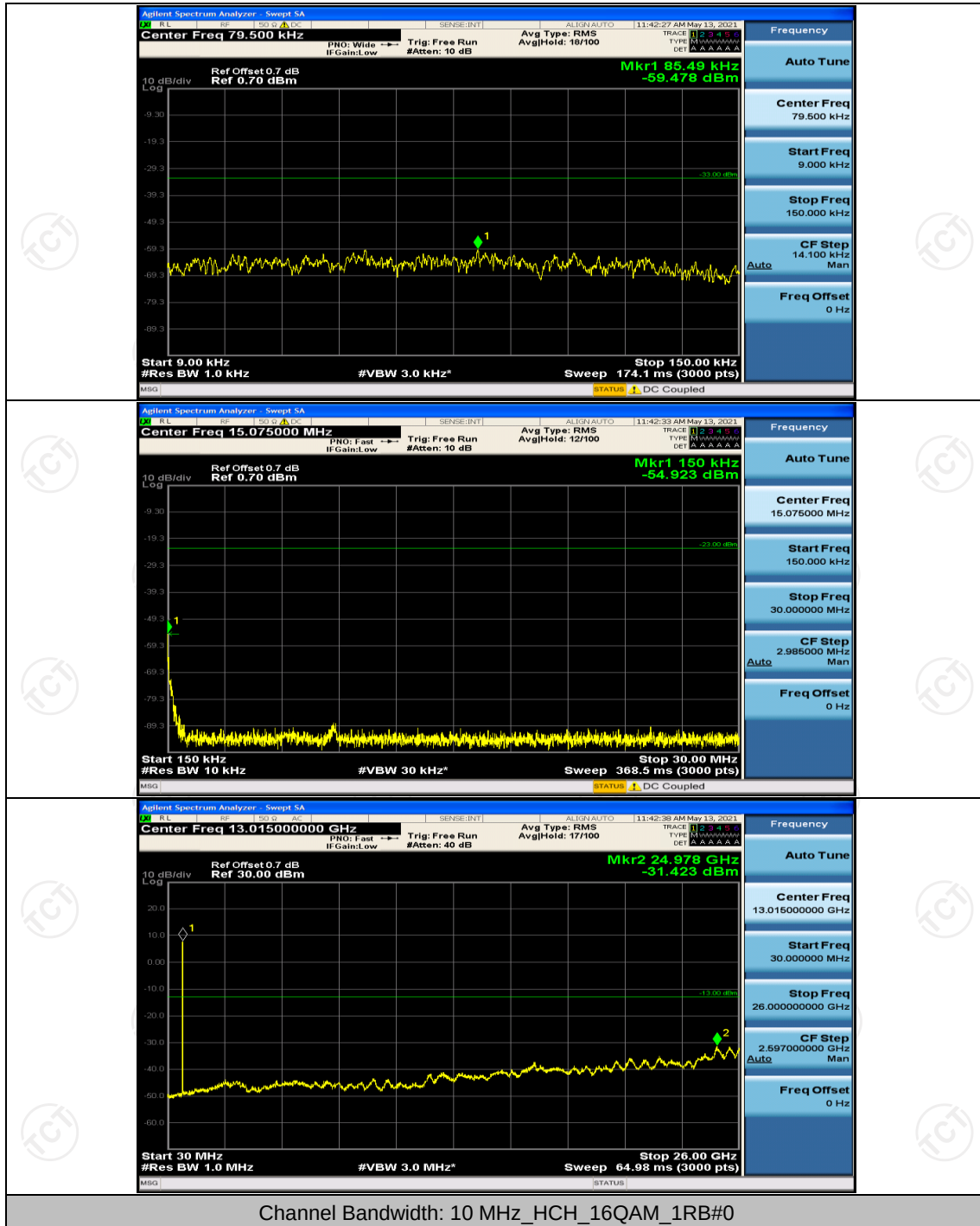


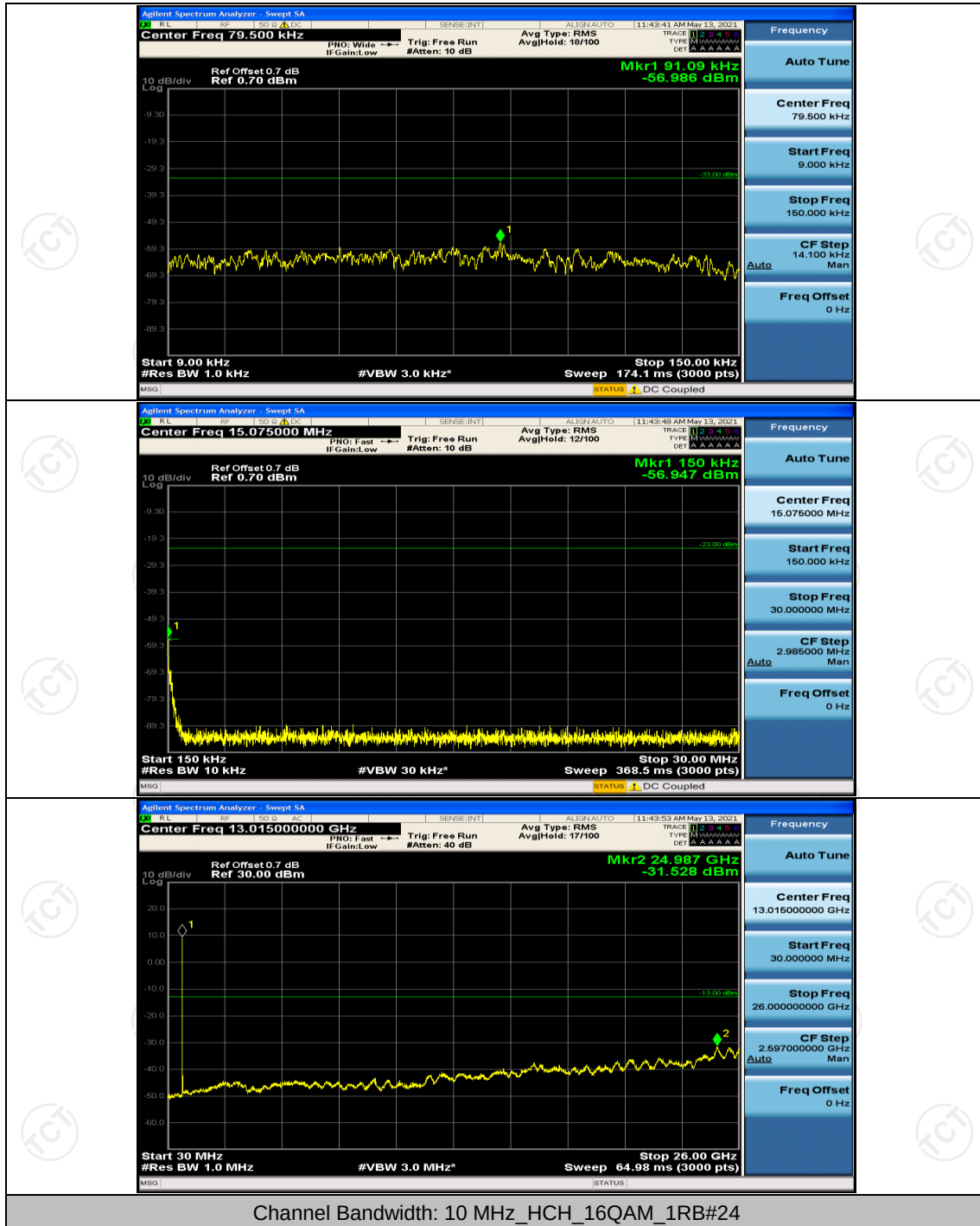


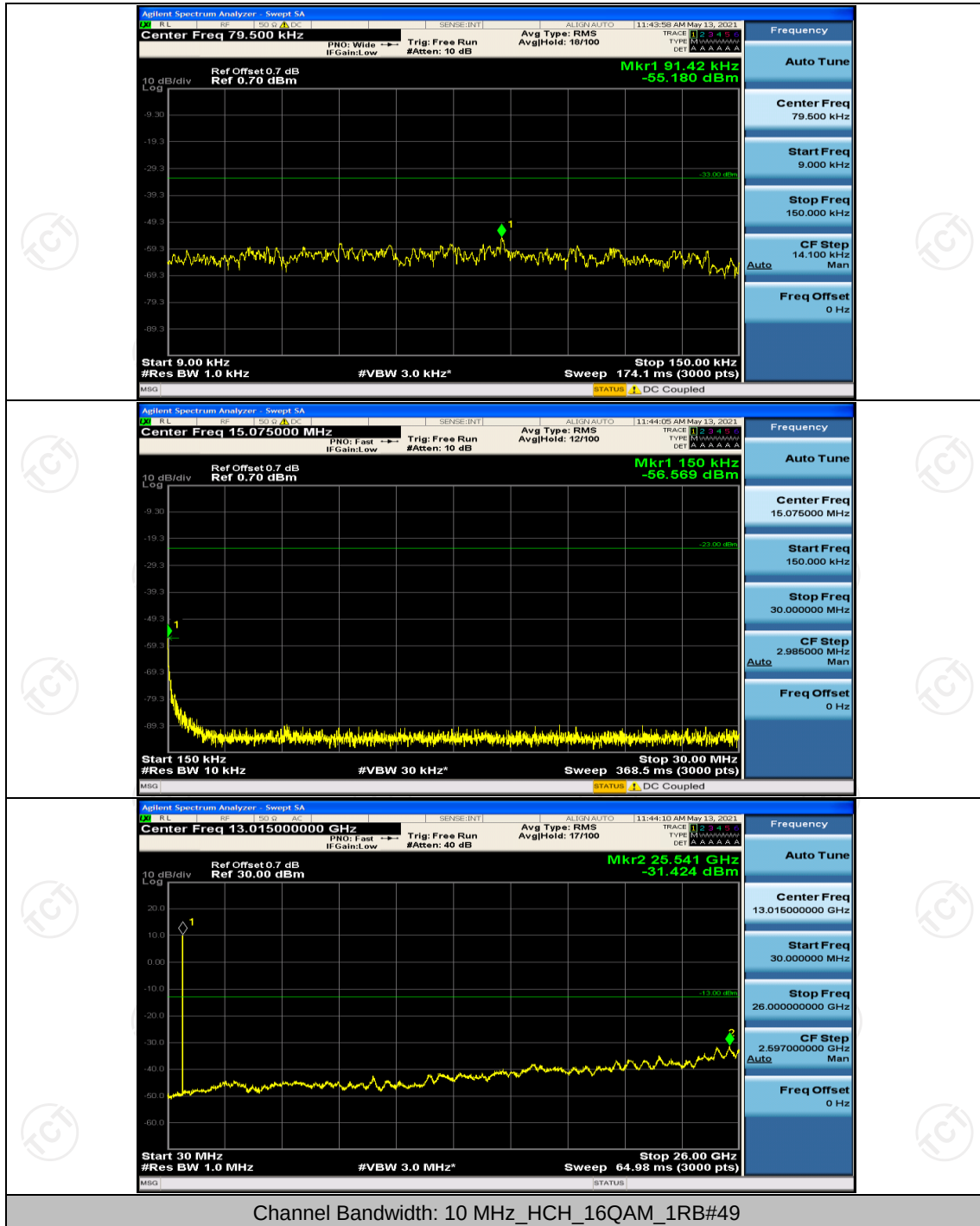


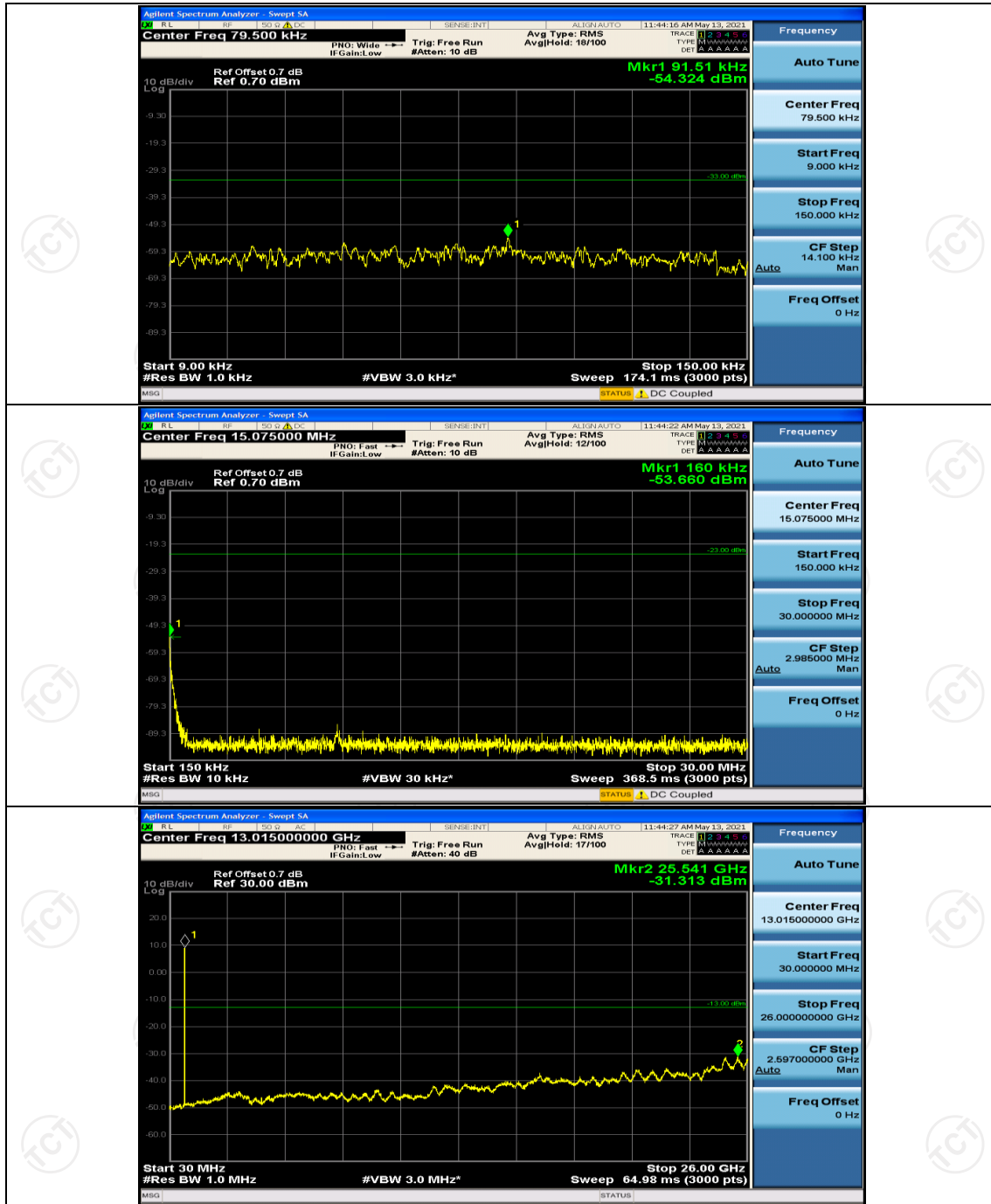












Appendix F: Frequency Stability

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	-1.12	-0.001577	± 2.5	PASS
		VN	TN	-0.04	-0.000061	± 2.5	PASS
		VH	TN	-3.53	-0.005044	± 2.5	PASS
	MCH	VL	TN	-4.78	-0.006821	± 2.5	PASS
		VN	TN	0.54	0.000768	± 2.5	PASS
		VH	TN	0.66	0.000930	± 2.5	PASS
	HCH	VL	TN	-1.72	-0.002426	± 2.5	PASS
		VN	TN	-1.59	-0.002244	± 2.5	PASS
		VH	TN	-1.99	-0.002810	± 2.5	PASS
16QAM	LCH	VL	TN	-0.92	-0.001294	± 2.5	PASS
		VN	TN	-0.27	-0.000388	± 2.5	PASS
		VH	TN	-2.03	-0.002896	± 2.5	PASS
	MCH	VL	TN	-0.54	-0.000775	± 2.5	PASS
		VN	TN	-1.06	-0.001509	± 2.5	PASS
		VH	TN	-0.56	-0.000795	± 2.5	PASS
	HCH	VL	TN	0.23	0.000324	± 2.5	PASS
		VN	TN	0.11	0.000162	± 2.5	PASS
		VH	TN	-0.37	-0.000526	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.04	-0.000061	± 2.5	PASS
		VN	-20	-0.57	-0.000809	± 2.5	PASS
		VN	-10	-0.29	-0.000404	± 2.5	PASS
		VN	0	-0.63	-0.000890	± 2.5	PASS
		VN	10	1.06	0.001482	± 2.5	PASS
		VN	20	-0.31	-0.000450	± 2.5	PASS
		VN	30	-0.37	-0.000532	± 2.5	PASS
		VN	40	-0.21	-0.000307	± 2.5	PASS
	MCH	VN	50	-0.99	-0.001411	± 2.5	PASS
		VN	-30	-1.53	-0.002182	± 2.5	PASS
		VN	-20	-0.73	-0.001023	± 2.5	PASS
		VN	-10	0.76	0.001061	± 2.5	PASS
		VN	0	-0.20	-0.000280	± 2.5	PASS
		VN	10	-0.66	-0.000921	± 2.5	PASS
		VN	20	-0.13	-0.000182	± 2.5	PASS
VN	30	-0.21	-0.000303	± 2.5	PASS		
VN	40	-0.44	-0.000627	± 2.5	PASS		

	HCH	VN	50	-0.46	-0.000647	± 2.5	PASS
		VN	-30	-0.54	-0.000761	± 2.5	PASS
		VN	-20	-1.43	-0.002039	± 2.5	PASS
		VN	-10	-1.02	-0.001448	± 2.5	PASS
		VN	0	-1.09	-0.001550	± 2.5	PASS
		VN	10	-1.33	-0.001896	± 2.5	PASS
		VN	20	-0.50	-0.000700	± 2.5	PASS
		VN	30	-0.53	-0.000740	± 2.5	PASS
		VN	40	-1.36	-0.001900	± 2.5	PASS
		VN	50	-0.70	-0.000980	± 2.5	PASS
16QAM	LCH	VN	-30	-3.39	-0.004840	± 2.5	PASS
		VN	-20	-2.86	-0.004084	± 2.5	PASS
		VN	-10	-2.22	-0.003165	± 2.5	PASS
		VN	0	-2.20	-0.003145	± 2.5	PASS
		VN	10	-3.18	-0.004534	± 2.5	PASS
		VN	20	-0.10	-0.000143	± 2.5	PASS
		VN	30	-0.06	-0.000082	± 2.5	PASS
		VN	40	0.11	0.000164	± 2.5	PASS
		VN	50	-0.41	-0.000593	± 2.5	PASS
	MCH	VN	-30	0.19	0.000260	± 2.5	PASS
		VN	-20	-0.04	-0.000060	± 2.5	PASS
		VN	-10	-1.17	-0.001642	± 2.5	PASS
		VN	0	-3.79	-0.005412	± 2.5	PASS
		VN	10	-3.79	-0.005412	± 2.5	PASS
		VN	20	0.34	0.000485	± 2.5	PASS
		VN	30	-0.49	-0.000687	± 2.5	PASS
		VN	40	-0.73	-0.001031	± 2.5	PASS
		VN	50	-0.77	-0.001092	± 2.5	PASS
	HCH	VN	-30	-1.57	-0.002224	± 2.5	PASS
		VN	-20	-0.83	-0.001173	± 2.5	PASS
		VN	-10	-0.01	-0.000020	± 2.5	PASS
		VN	0	0.44	0.000627	± 2.5	PASS
		VN	10	-0.09	-0.000120	± 2.5	PASS
		VN	20	-1.59	-0.002220	± 2.5	PASS
		VN	30	-0.54	-0.000760	± 2.5	PASS
		VN	40	-0.97	-0.001360	± 2.5	PASS
		VN	50	-0.46	-0.000640	± 2.5	PASS