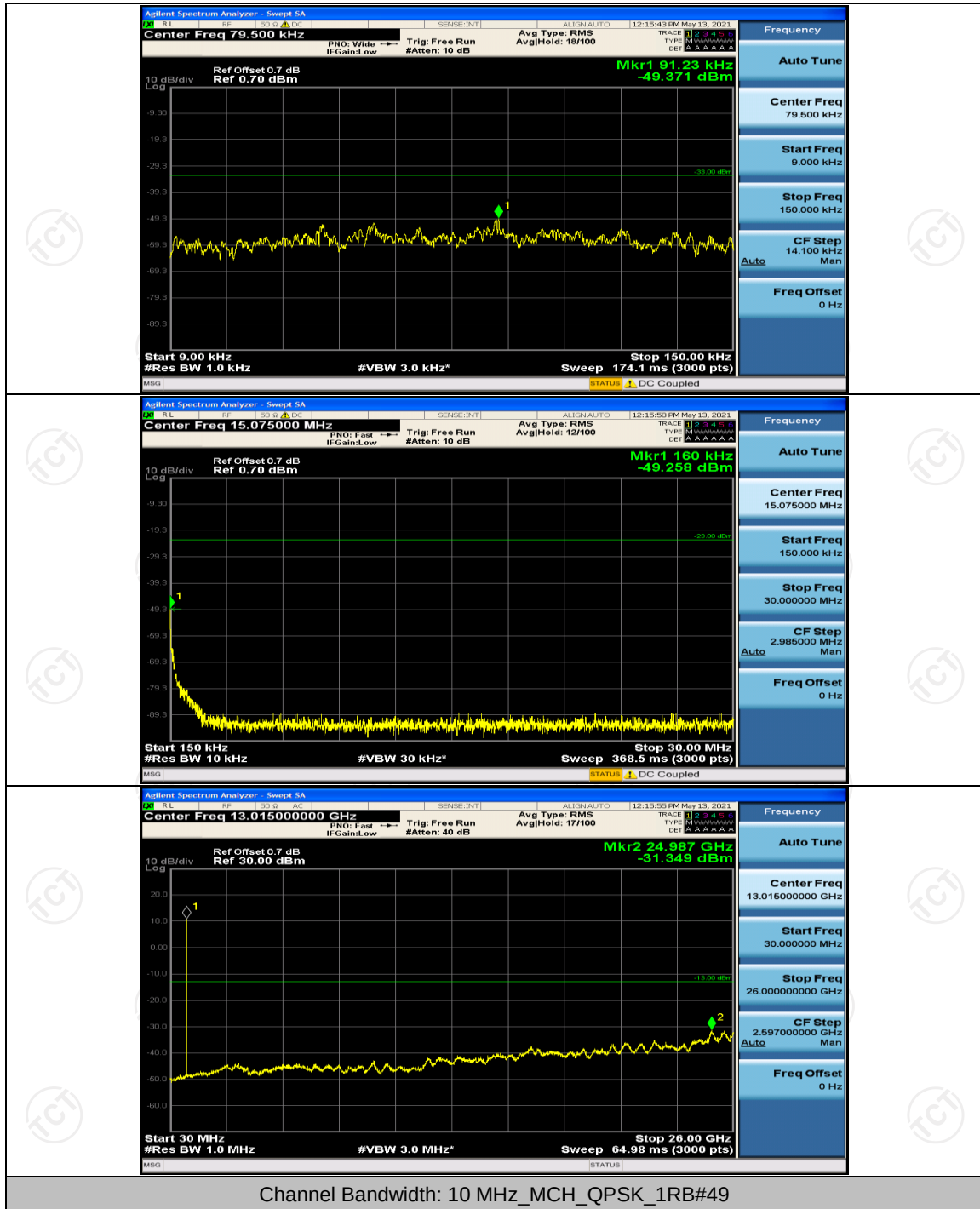
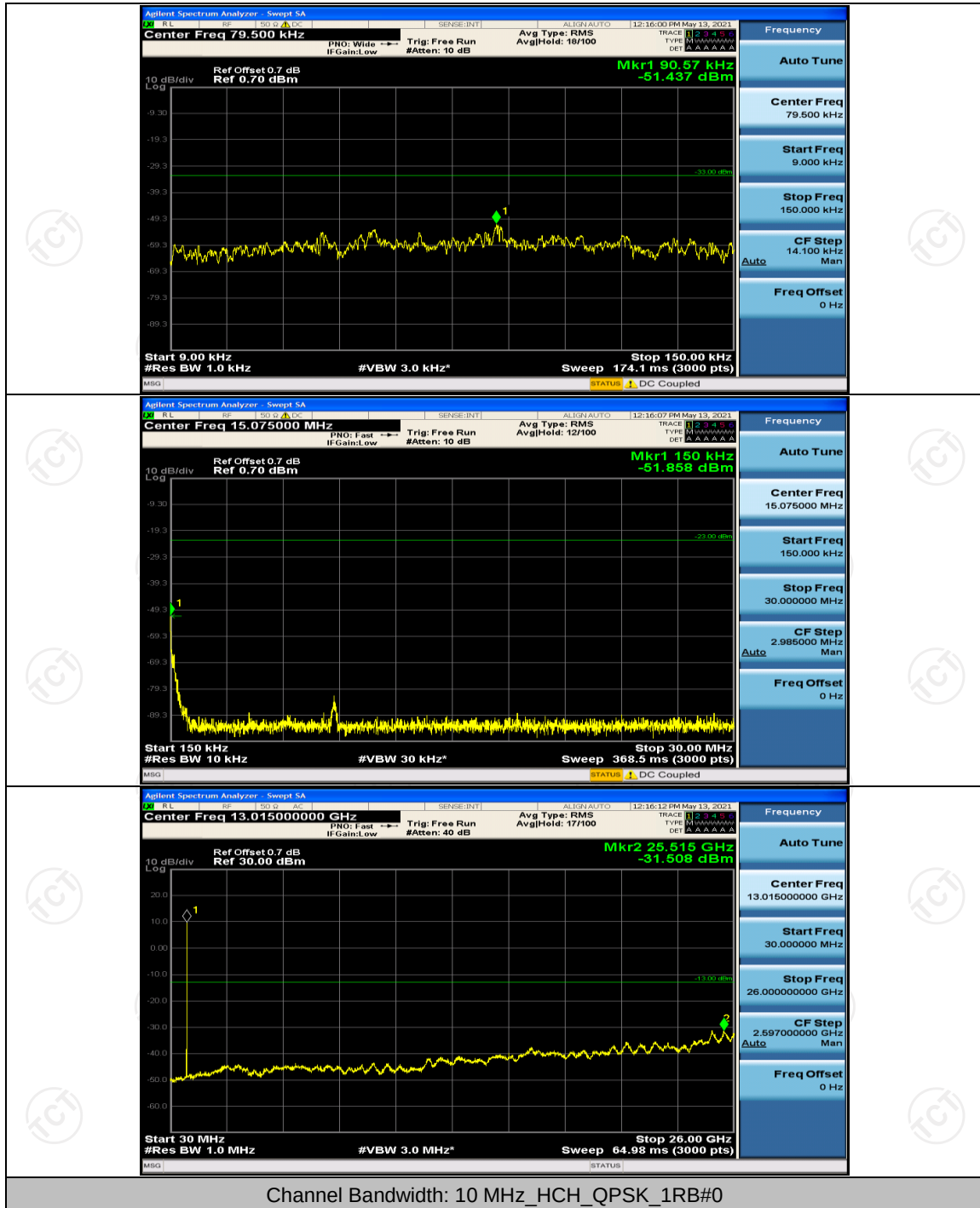
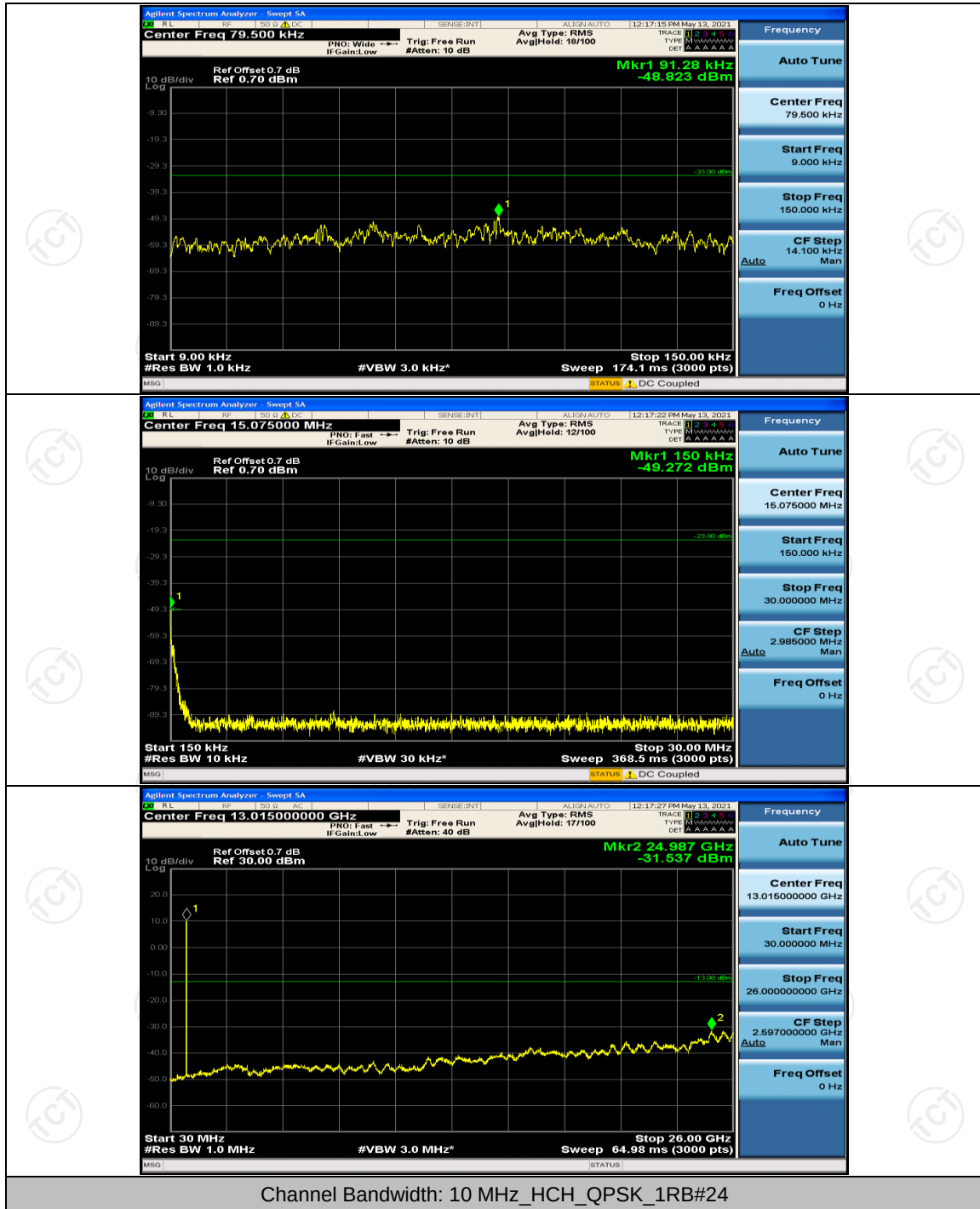
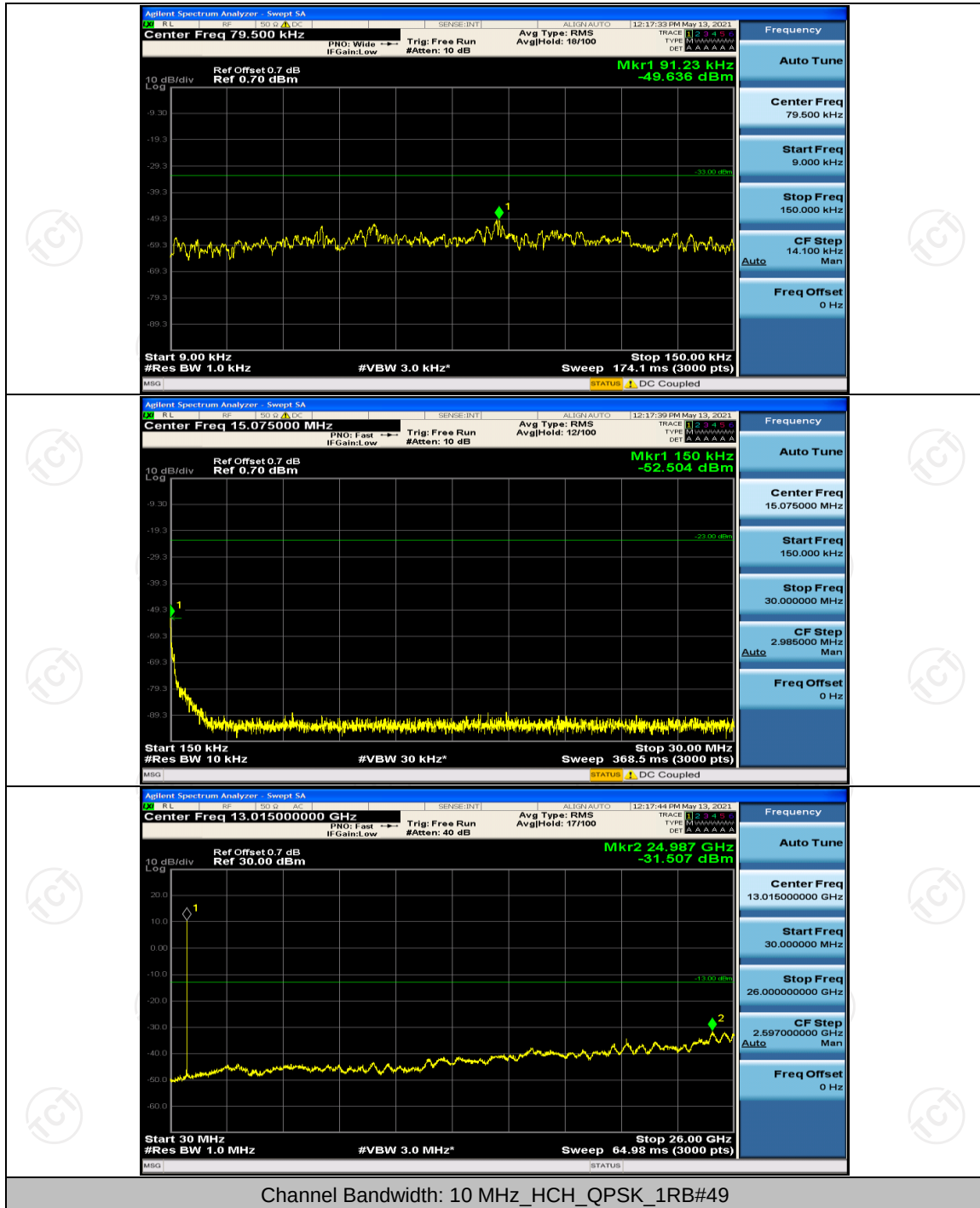
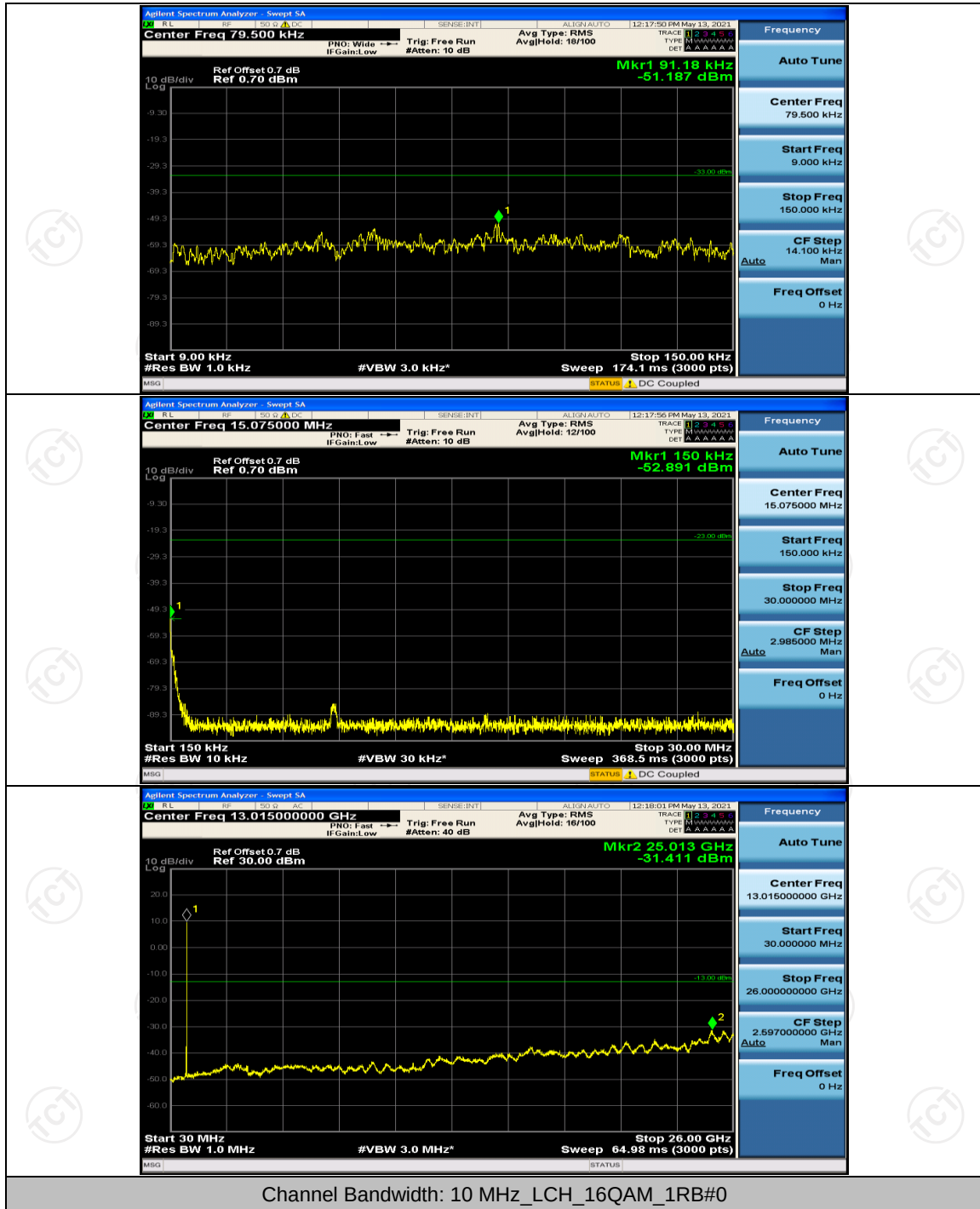


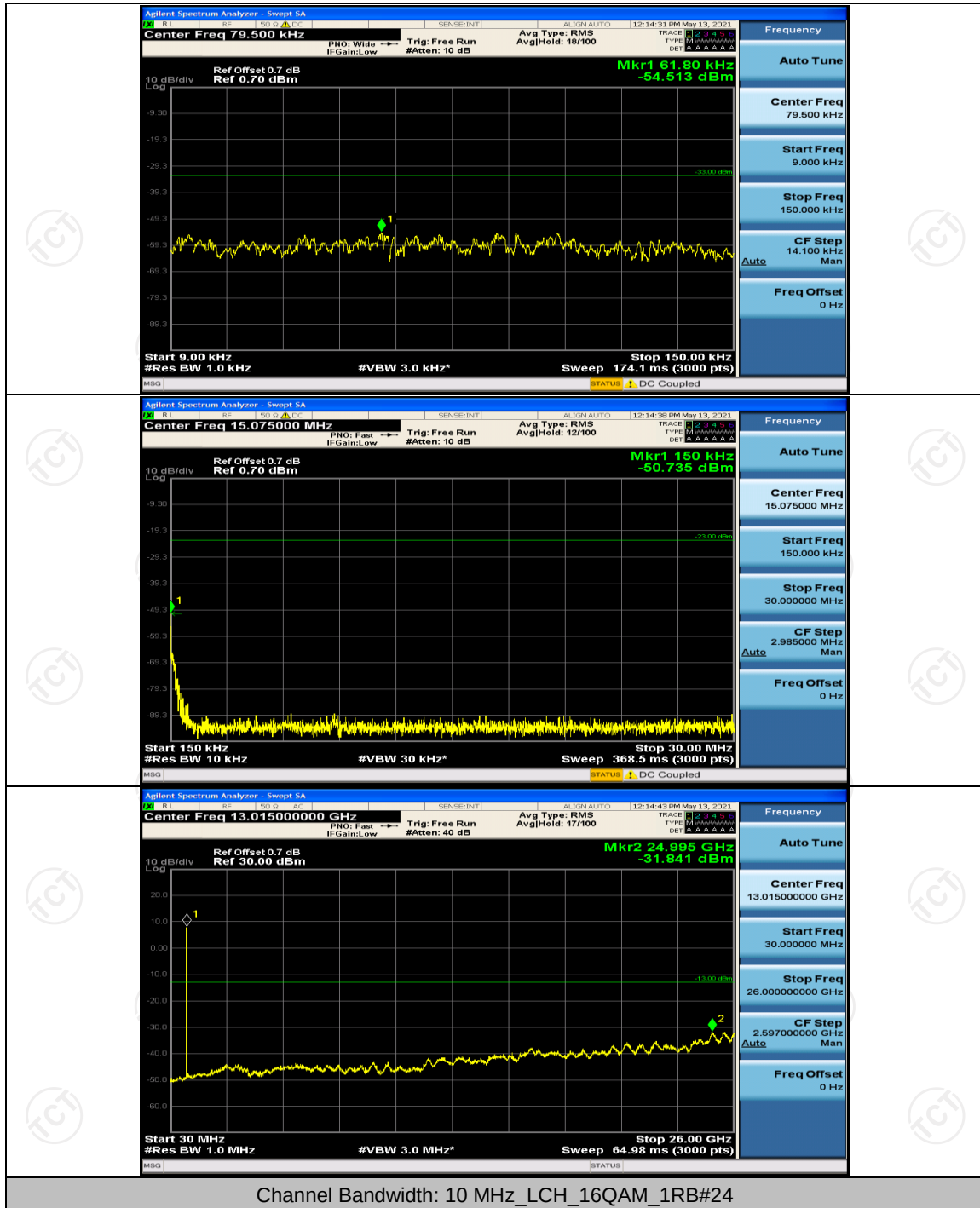


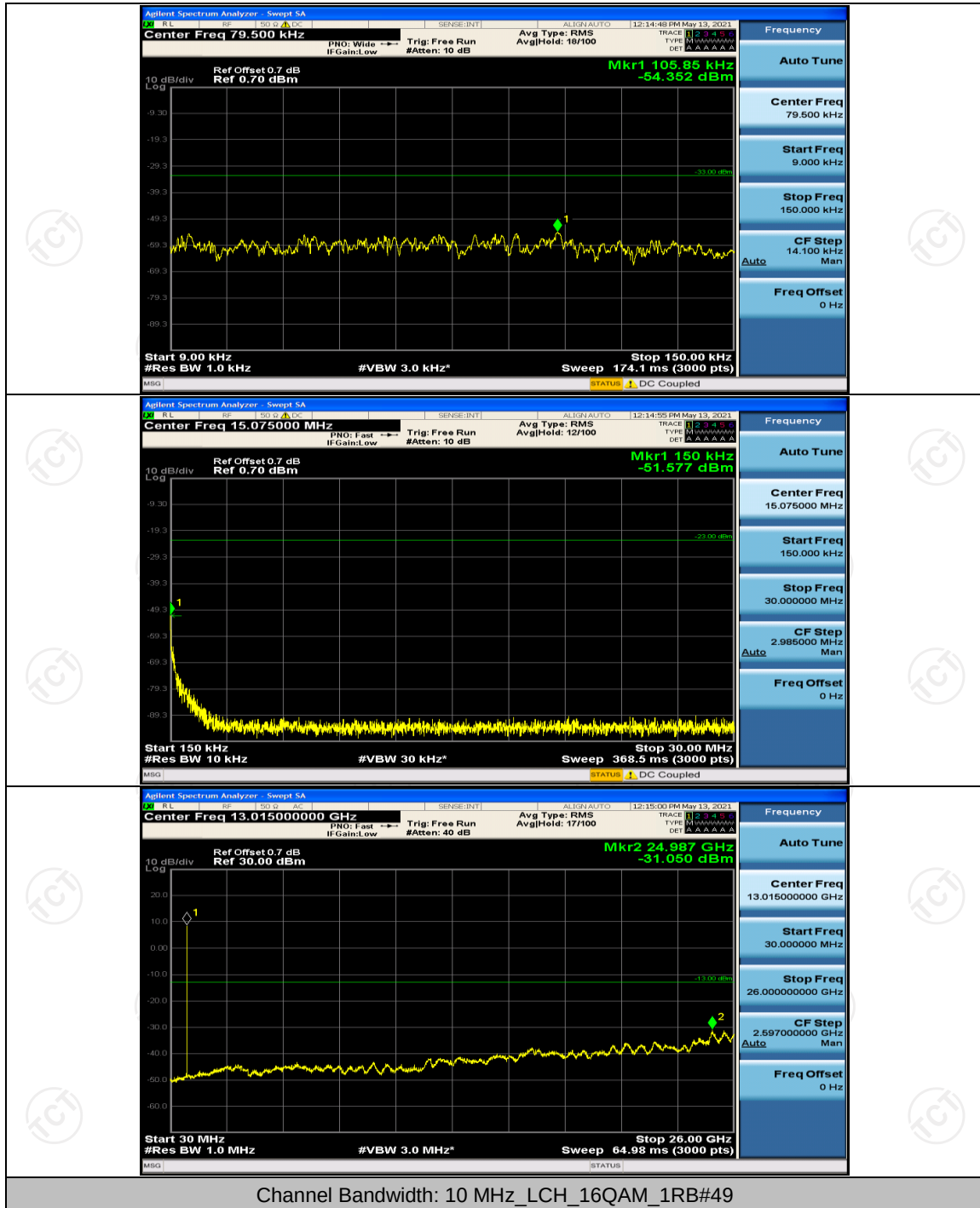


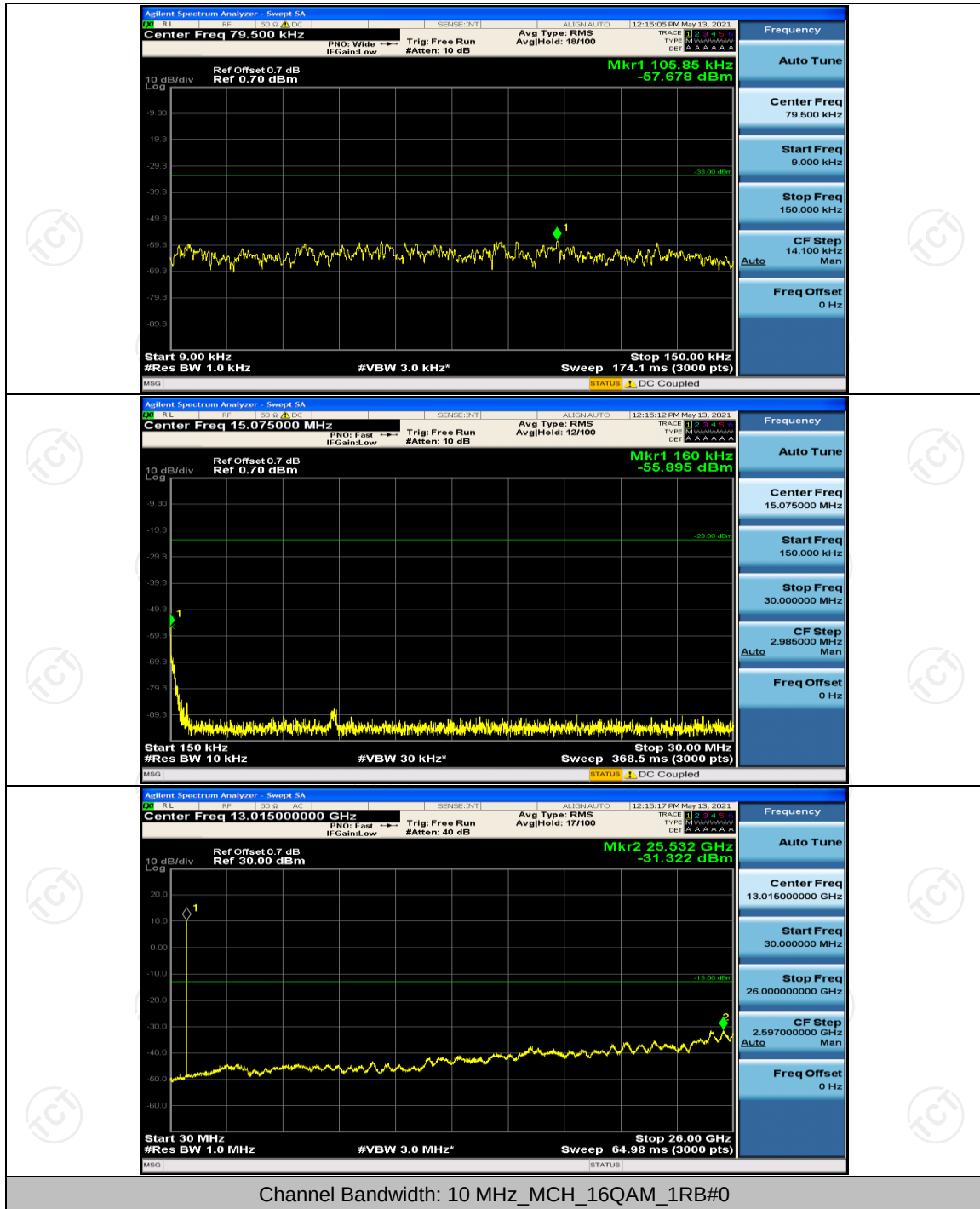


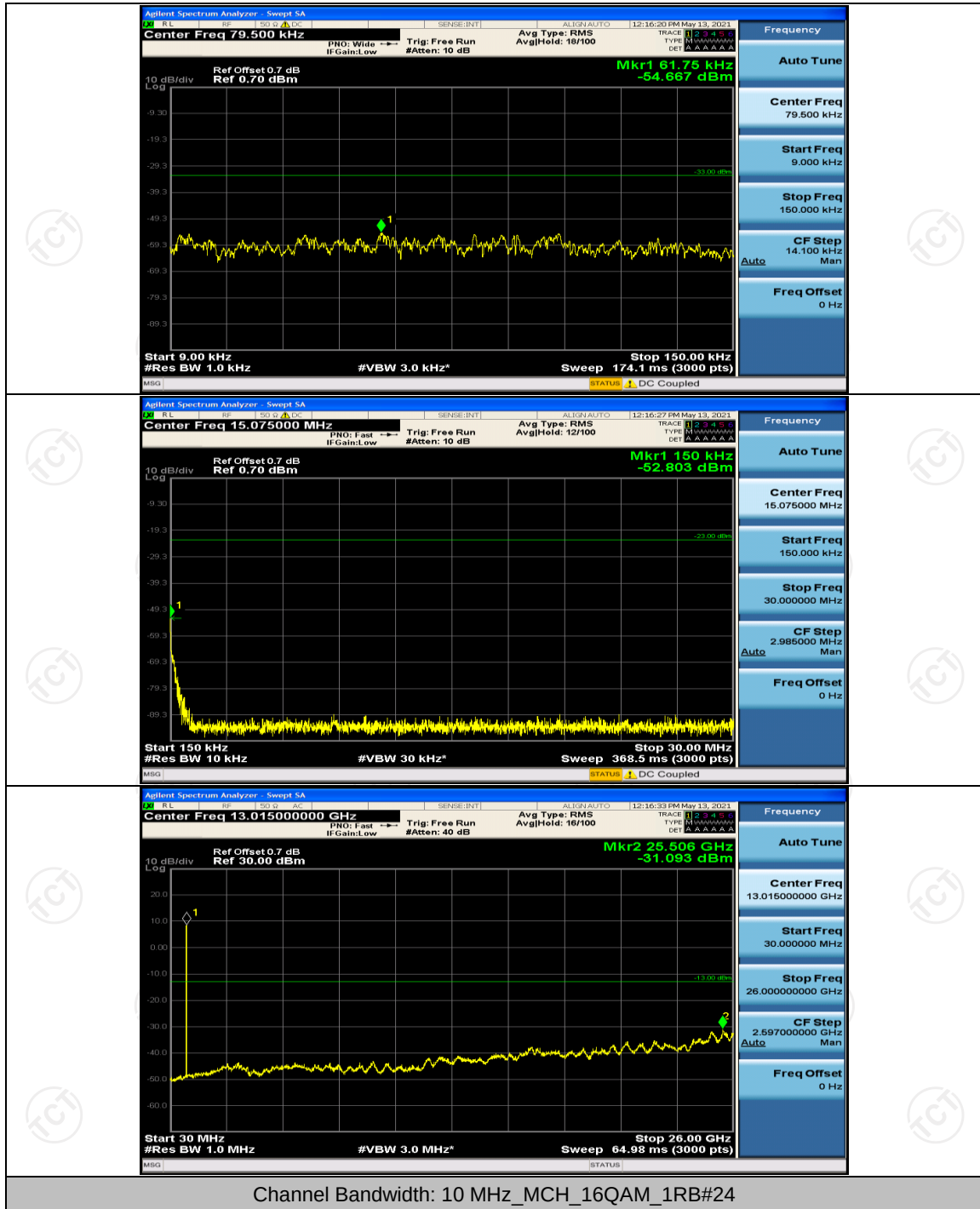


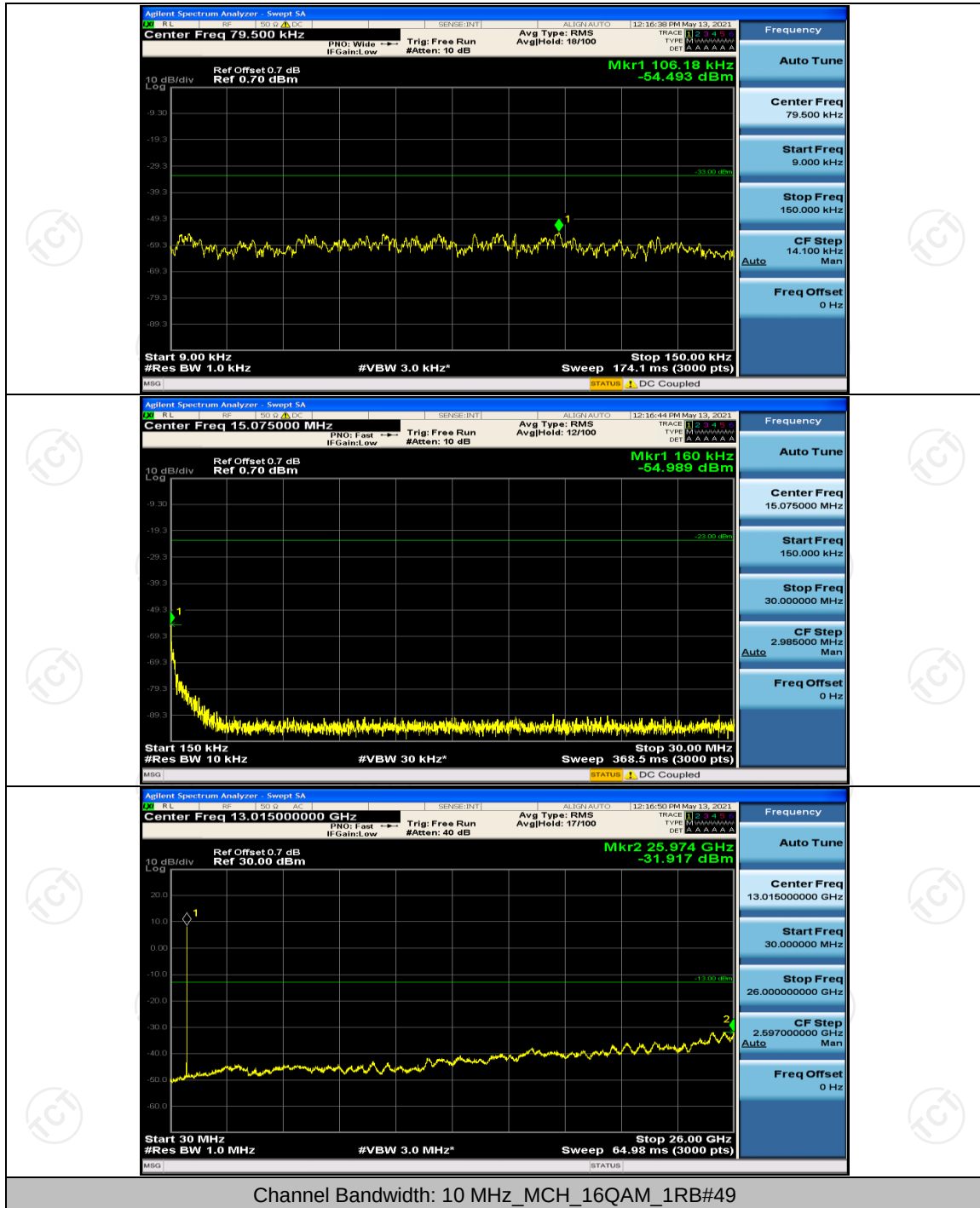


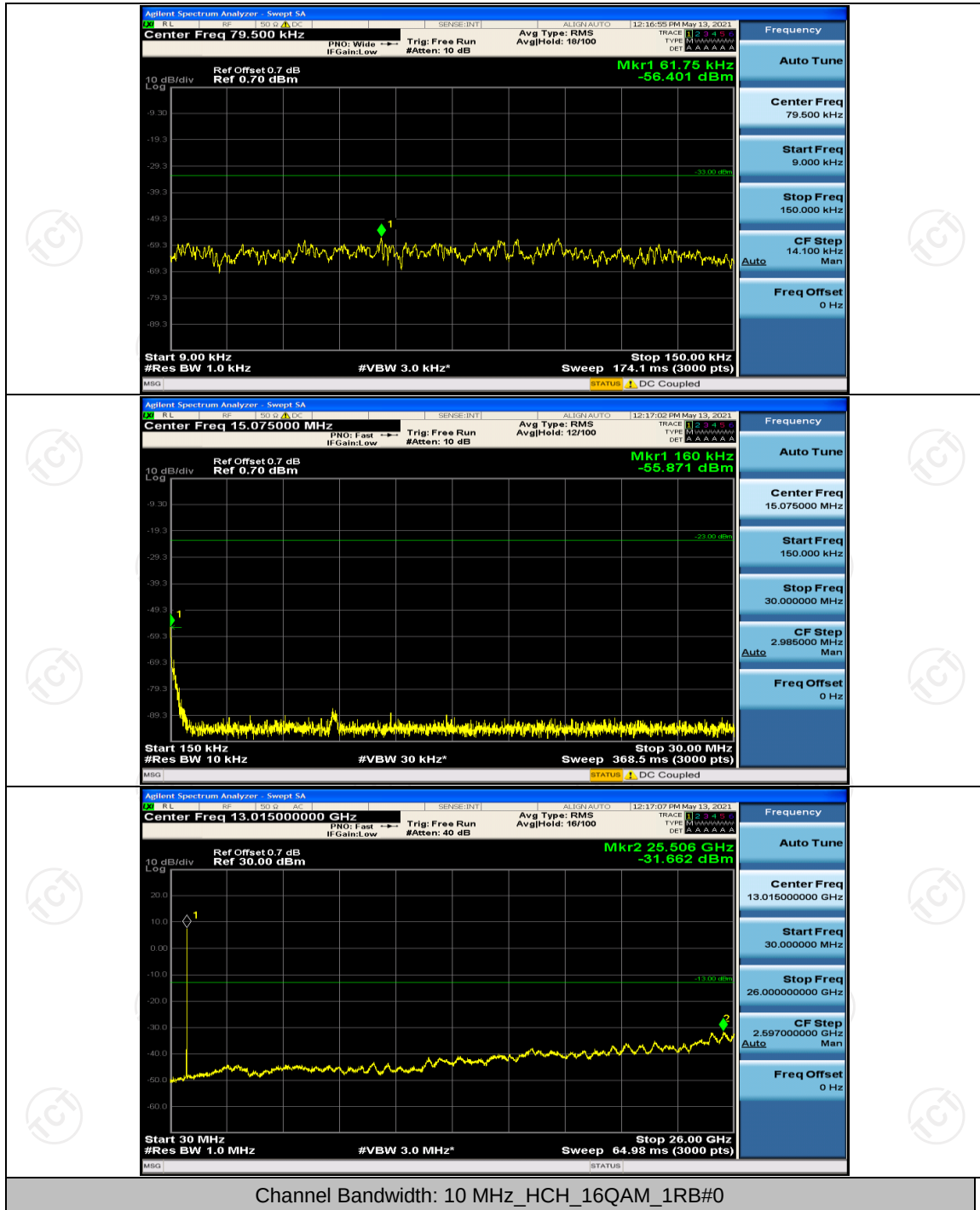


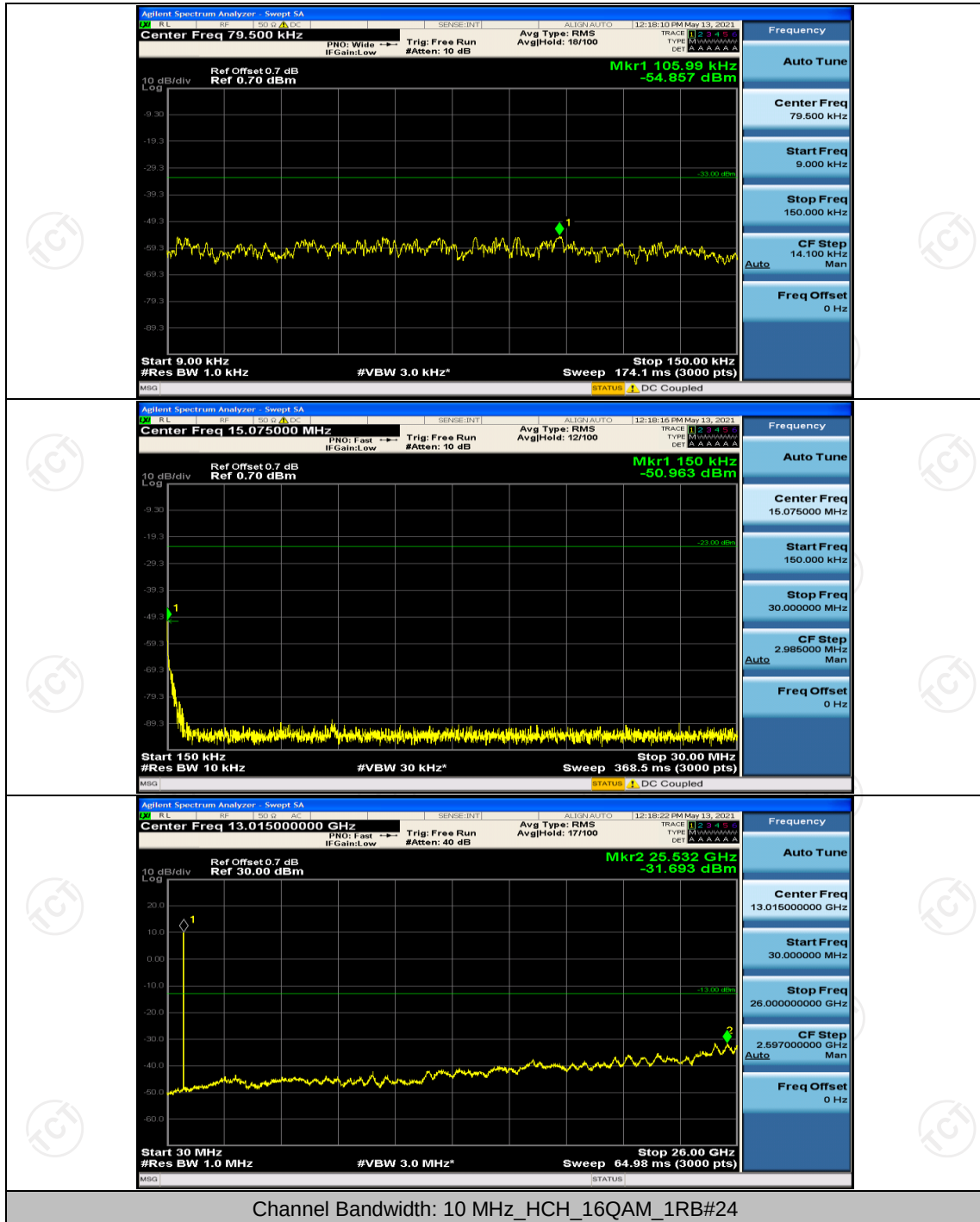


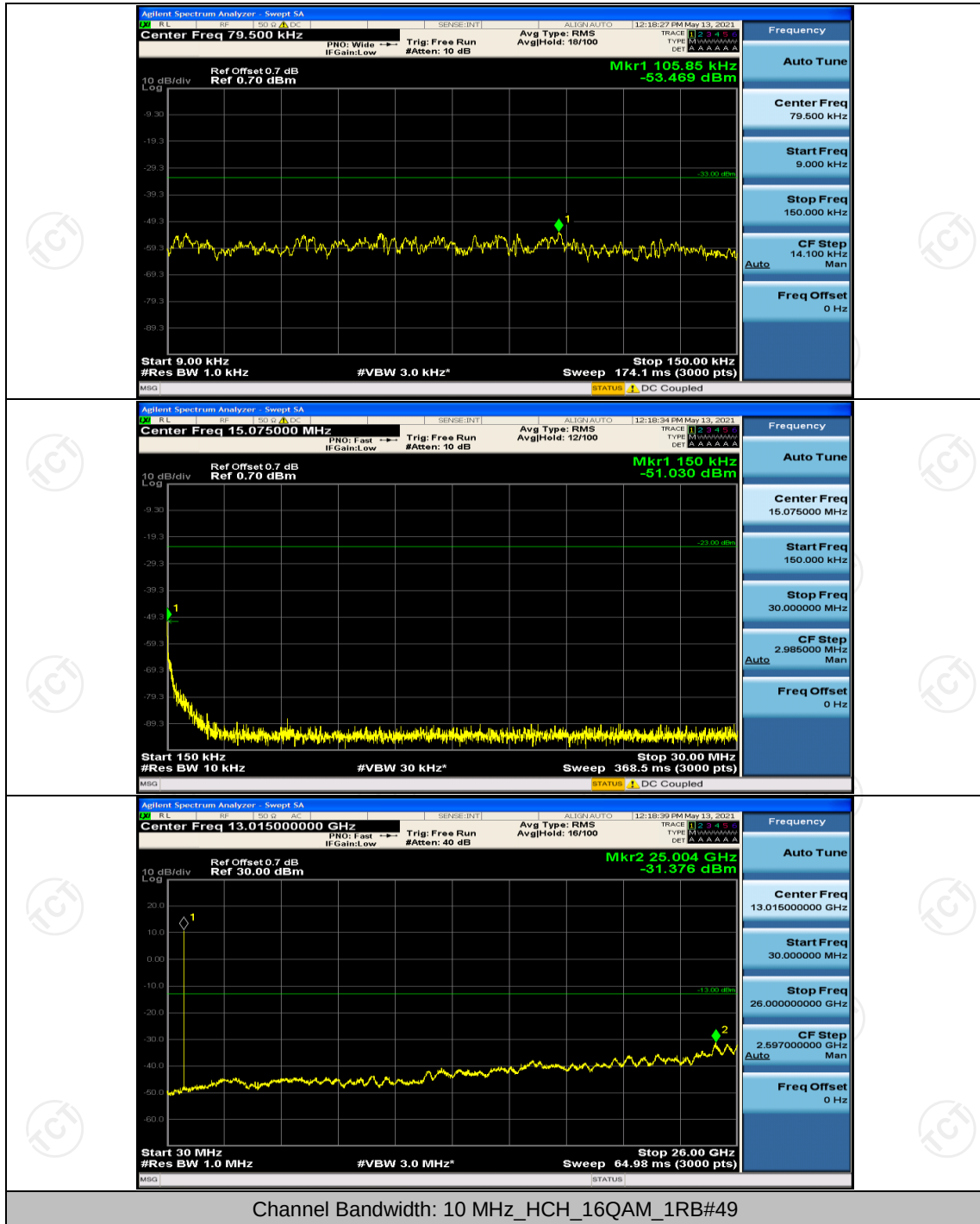


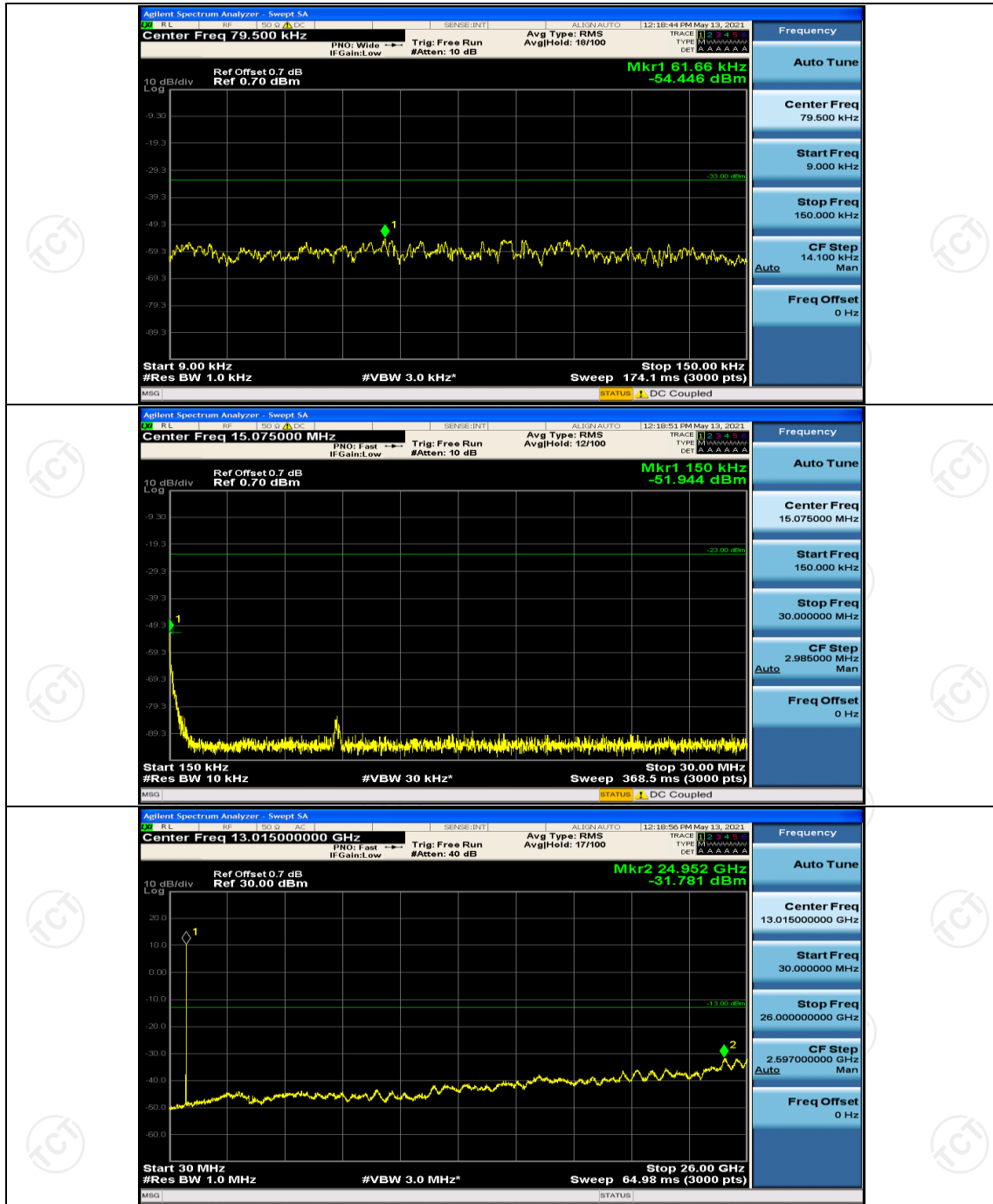












Appendix F: Frequency Stability

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	0.30	0.000384	± 2.5	PASS
		VN	TN	-1.75	-0.002239	± 2.5	PASS
		VH	TN	-1.13	-0.001445	± 2.5	PASS
	MCH	VL	TN	-1.09	-0.001390	± 2.5	PASS
		VN	TN	0.03	0.000037	± 2.5	PASS
		VH	TN	0.51	0.000659	± 2.5	PASS
	HCH	VL	TN	-1.89	-0.001082	± 2.5	PASS
		VN	TN	0.73	0.000930	± 2.5	PASS
		VH	TN	-0.82	-0.001043	± 2.5	PASS
16QAM	LCH	VL	TN	-0.66	-0.000841	± 2.5	PASS
		VN	TN	-1.29	-0.001652	± 2.5	PASS
		VH	TN	0.50	0.000283	± 2.5	PASS
	MCH	VL	TN	0.30	0.000175	± 2.5	PASS
		VN	TN	0.62	0.000358	± 2.5	PASS
		VH	TN	1.33	0.000773	± 2.5	PASS
	HCH	VL	TN	0.34	0.000200	± 2.5	PASS
		VN	TN	-0.10	-0.000128	± 2.5	PASS
		VH	TN	-1.33	-0.001701	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-3.72	-0.002131	± 2.5	PASS
		VN	-20	-0.09	-0.000110	± 2.5	PASS
		VN	-10	0.03	0.000037	± 2.5	PASS
		VN	0	0.51	0.000659	± 2.5	PASS
		VN	10	0.31	0.000402	± 2.5	PASS
		VN	20	-2.27	-0.002918	± 2.5	PASS
		VN	30	-1.39	-0.001780	± 2.5	PASS
		VN	40	-1.57	-0.002019	± 2.5	PASS
	VN	50	-1.46	-0.001872	± 2.5	PASS	
	MCH	VN	-30	-1.00	-0.001281	± 2.5	PASS
		VN	-20	-1.42	-0.001811	± 2.5	PASS
		VN	-10	-2.93	-0.001681	± 2.5	PASS
		VN	0	-4.06	-0.002328	± 2.5	PASS
		VN	10	0.00	0.000000	± 2.5	PASS
		VN	20	-1.17	-0.001500	± 2.5	PASS
VN		30	-1.29	-0.001646	± 2.5	PASS	
VN	40	-1.26	-0.001610	± 2.5	PASS		

	HCH	VN	50	-0.57	-0.000732	± 2.5	PASS
		VN	-30	-0.09	-0.000048	± 2.5	PASS
		VN	-20	-0.37	-0.000476	± 2.5	PASS
		VN	-10	-0.16	-0.000201	± 2.5	PASS
		VN	0	0.34	0.000439	± 2.5	PASS
		VN	10	0.34	0.000439	± 2.5	PASS
		VN	20	0.30	0.000383	± 2.5	PASS
		VN	30	0.44	0.000565	± 2.5	PASS
		VN	40	-0.19	-0.000237	± 2.5	PASS
		VN	50	-0.11	-0.000146	± 2.5	PASS
16QAM	LCH	VN	-30	-0.36	-0.000202	± 2.5	PASS
		VN	-20	-0.44	-0.000567	± 2.5	PASS
		VN	-10	-1.02	-0.001299	± 2.5	PASS
		VN	0	-0.39	-0.000494	± 2.5	PASS
		VN	10	-1.14	-0.001463	± 2.5	PASS
		VN	20	-0.39	-0.000495	± 2.5	PASS
		VN	30	-2.69	-0.003450	± 2.5	PASS
		VN	40	-1.24	-0.001597	± 2.5	PASS
	MCH	VN	50	-0.70	-0.000899	± 2.5	PASS
		VN	-30	0.49	0.000275	± 2.5	PASS
		VN	-20	-1.65	-0.002104	± 2.5	PASS
		VN	-10	-1.82	-0.002323	± 2.5	PASS
		VN	0	-0.79	-0.001006	± 2.5	PASS
		VN	10	-0.90	-0.001152	± 2.5	PASS
		VN	20	-2.15	-0.002744	± 2.5	PASS
		VN	30	-1.93	-0.002470	± 2.5	PASS
	HCH	VN	40	-1.66	-0.002122	± 2.5	PASS
		VN	50	-2.15	-0.002744	± 2.5	PASS
		VN	-30	-0.17	-0.000220	± 2.5	PASS
		VN	-20	-0.11	-0.000146	± 2.5	PASS
		VN	-10	0.40	0.000512	± 2.5	PASS
		VN	0	0.34	0.000439	± 2.5	PASS
		VN	10	0.43	0.000549	± 2.5	PASS
		VN	20	-0.86	-0.001094	± 2.5	PASS
		VN	30	-0.80	-0.001021	± 2.5	PASS
		VN	40	-0.79	-0.001003	± 2.5	PASS
		VN	50	-0.72	-0.000912	± 2.5	PASS