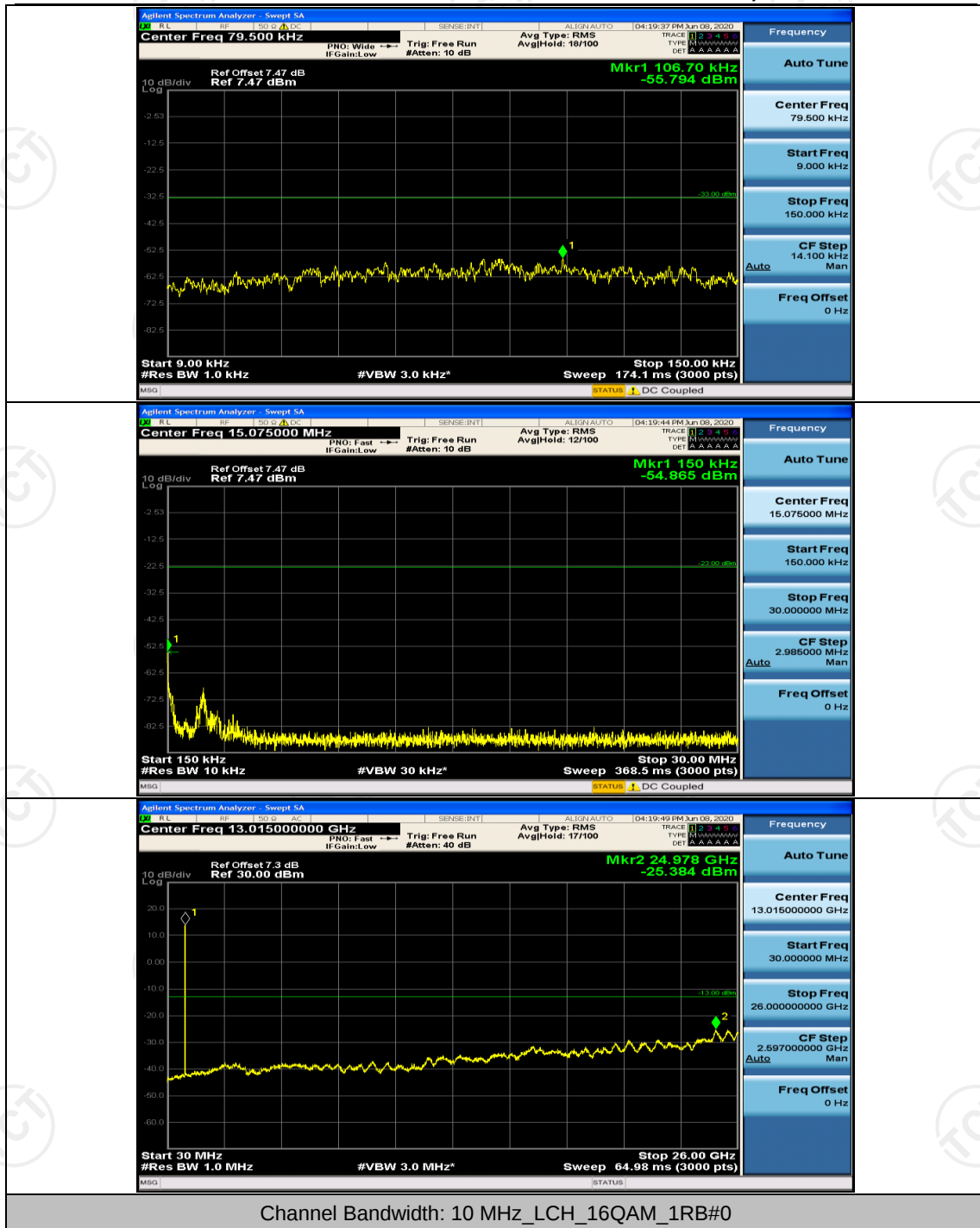
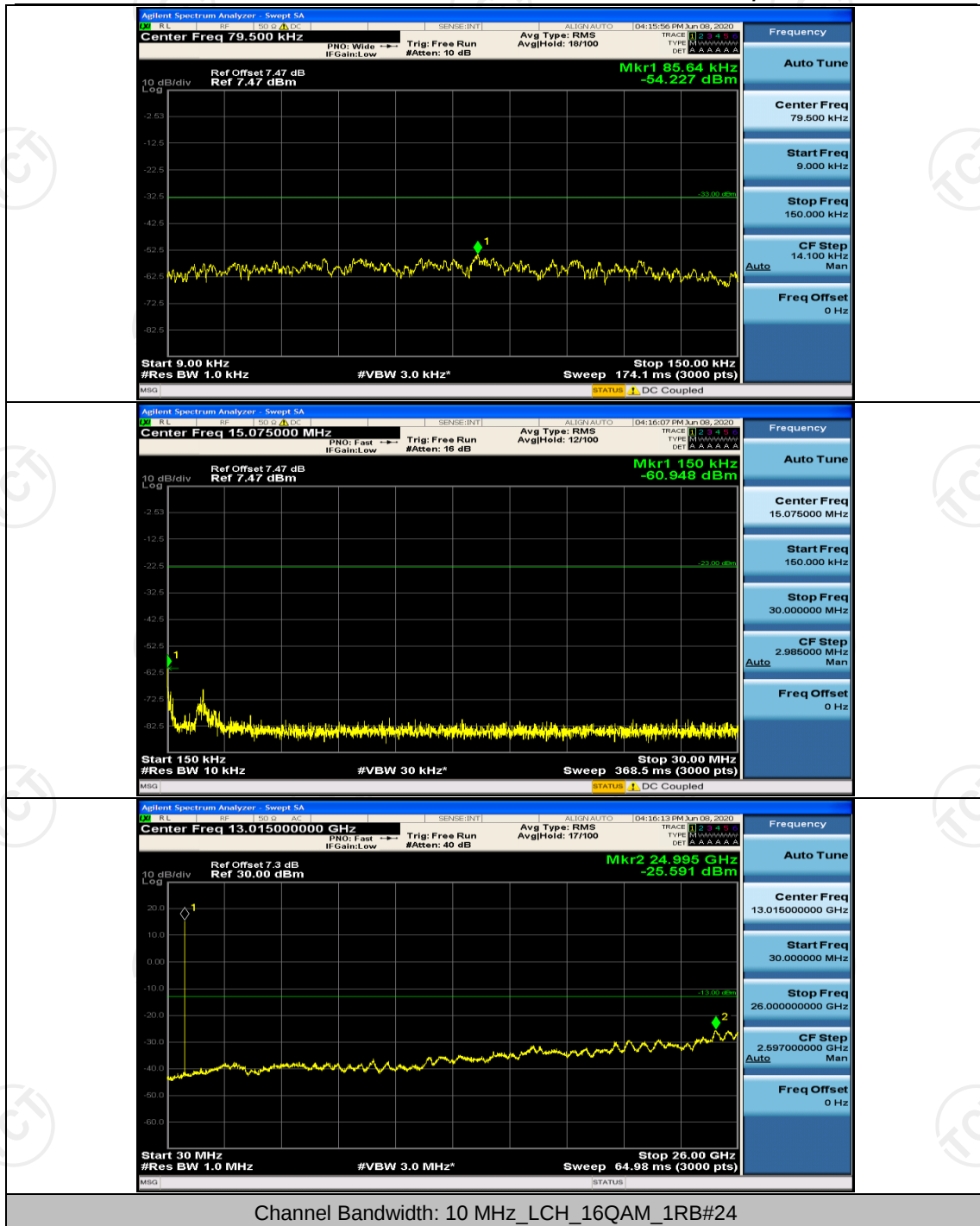
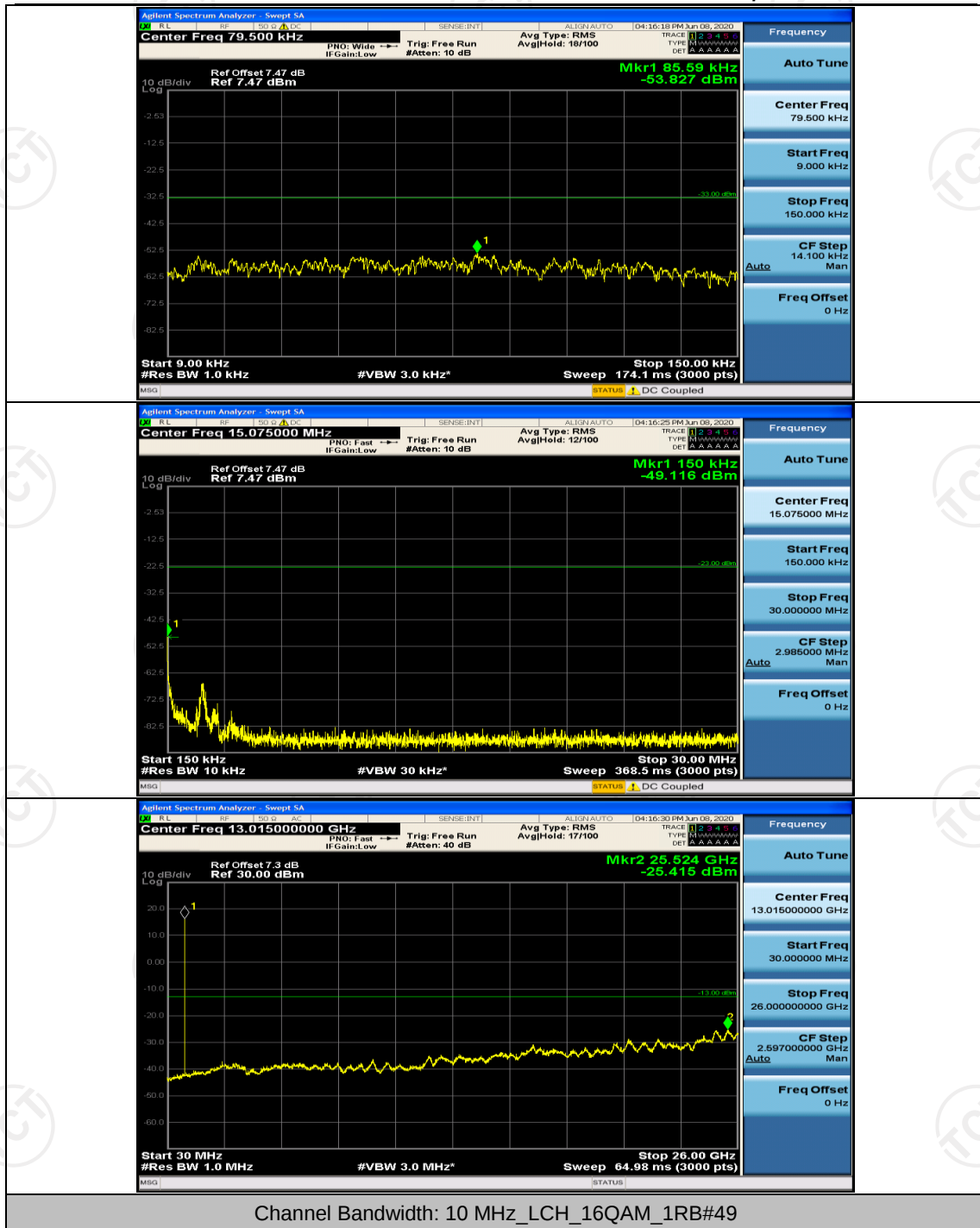
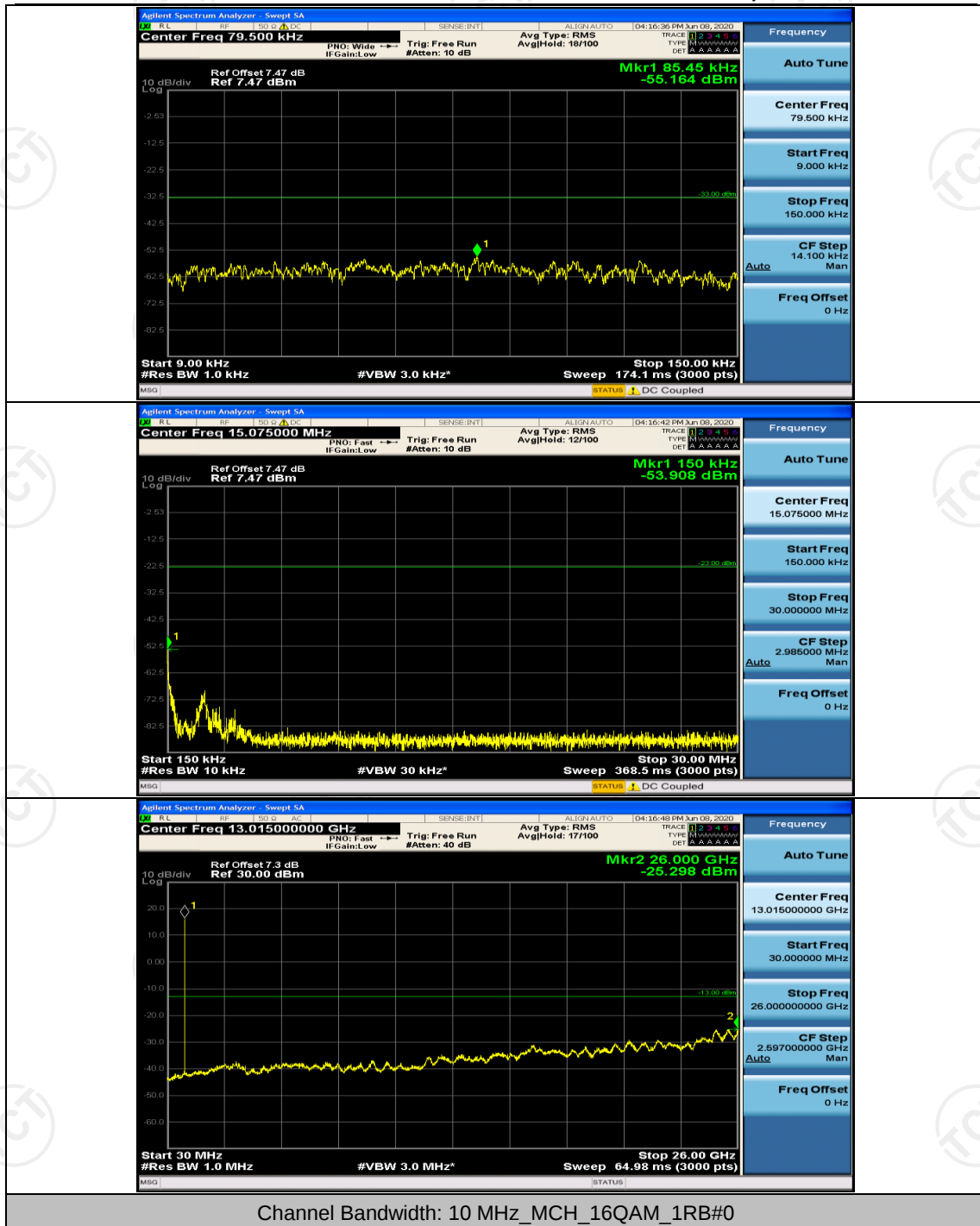
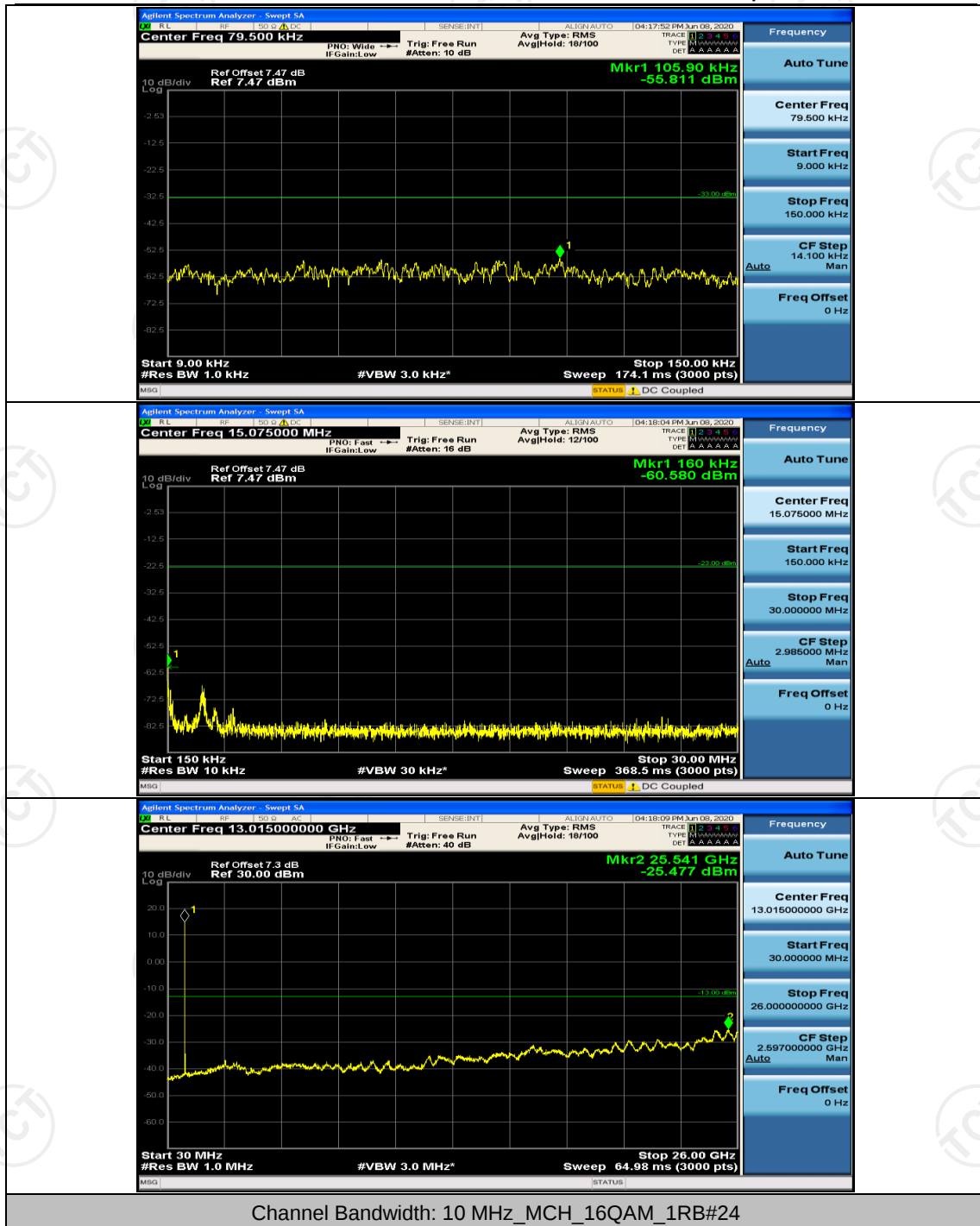


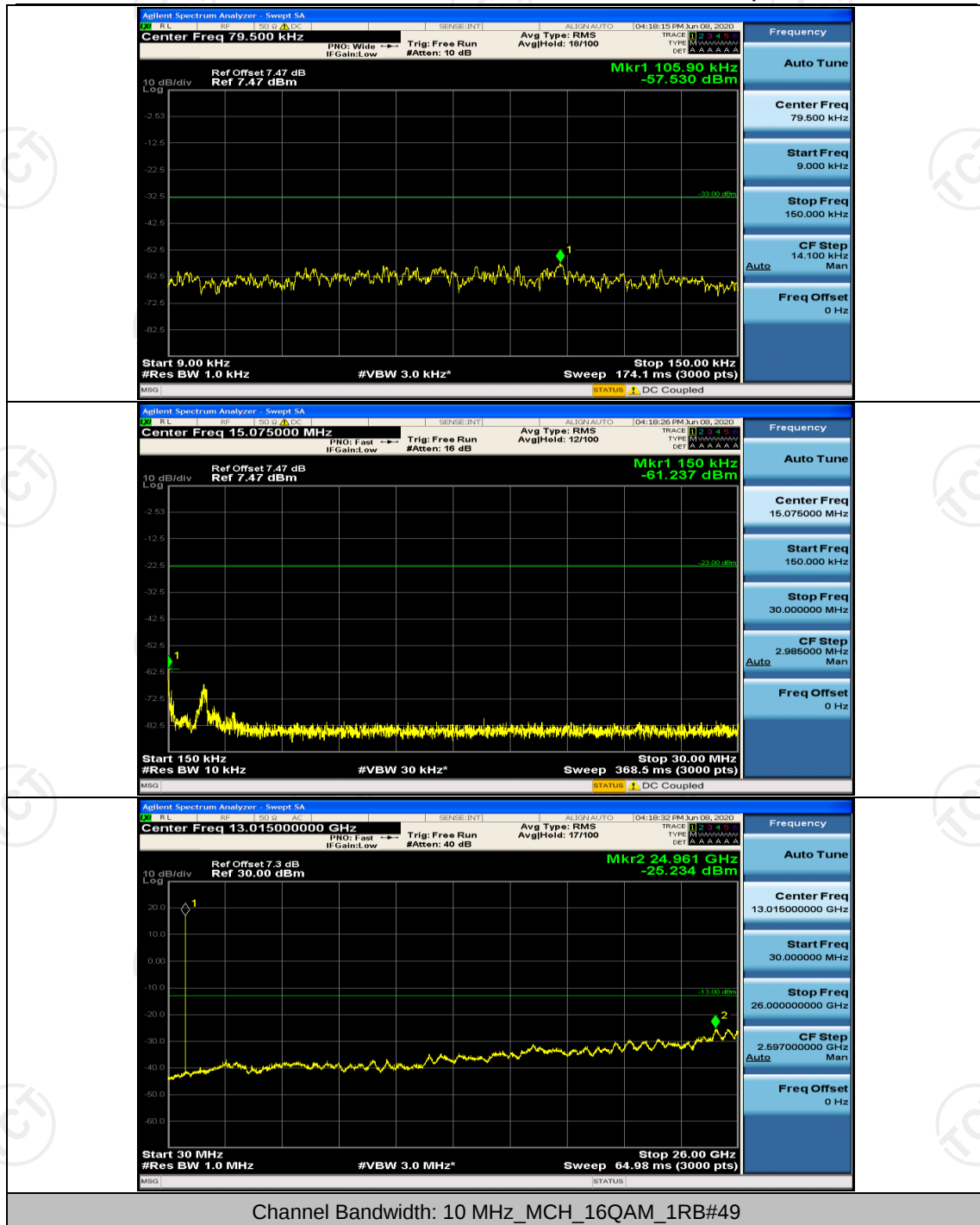


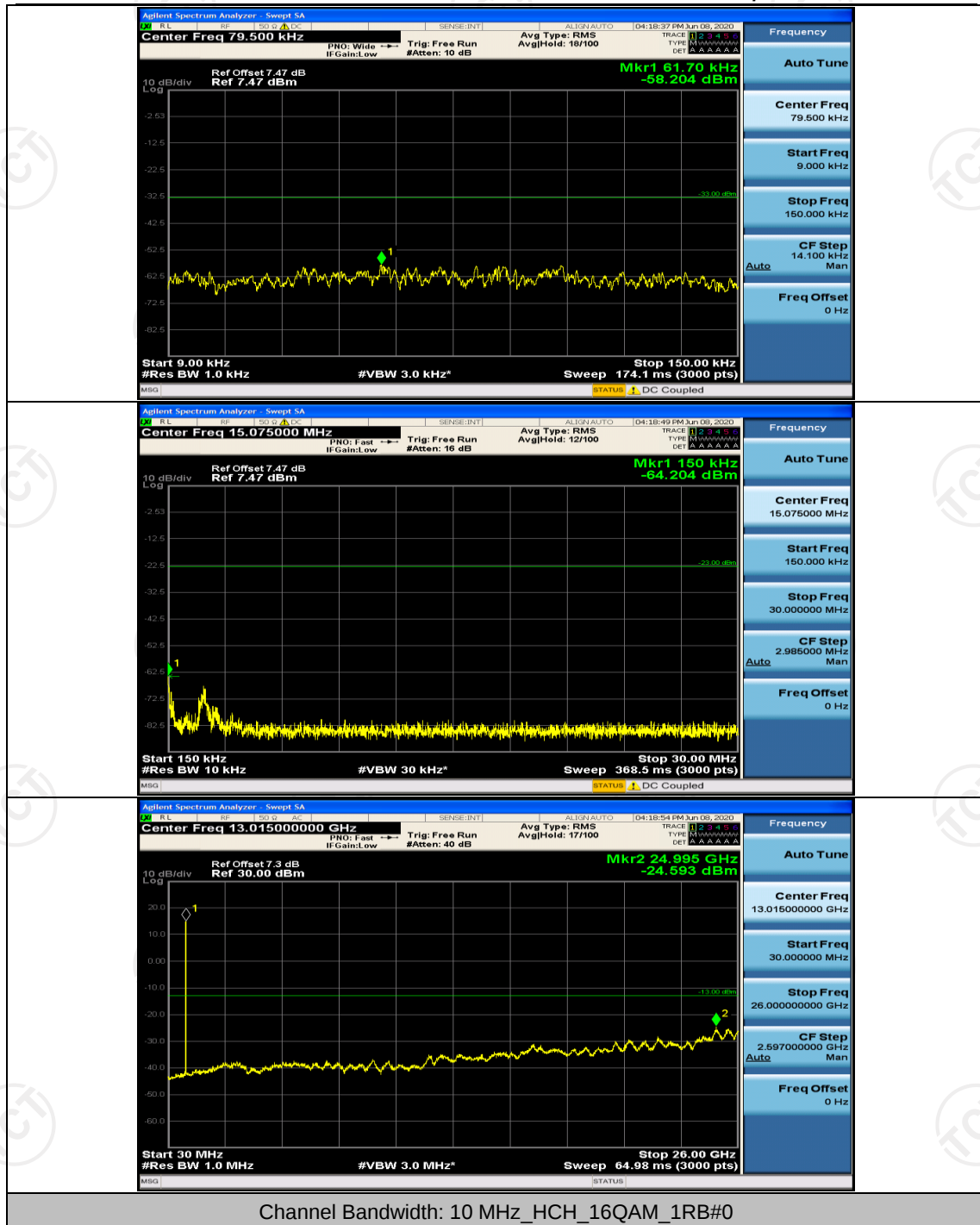


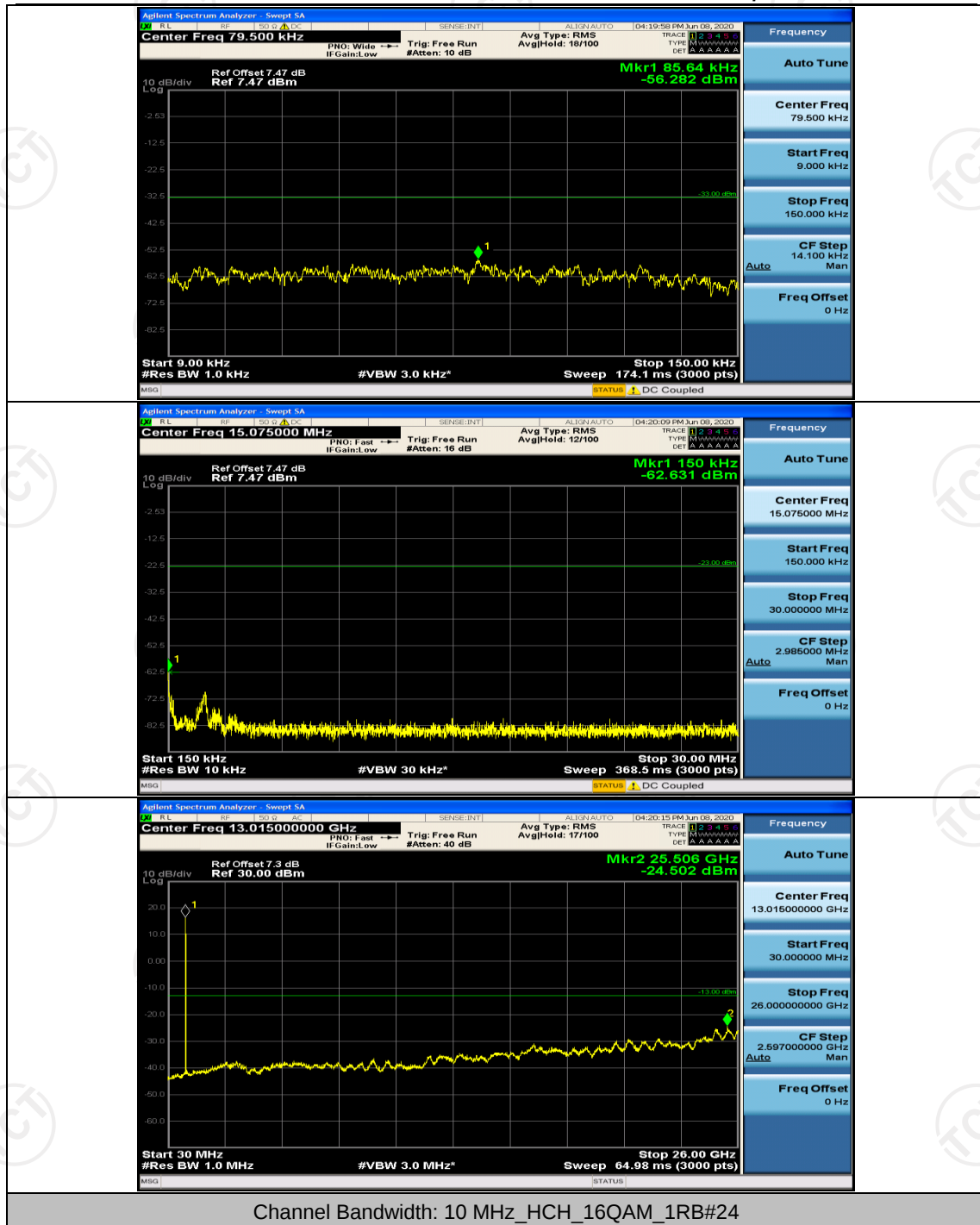


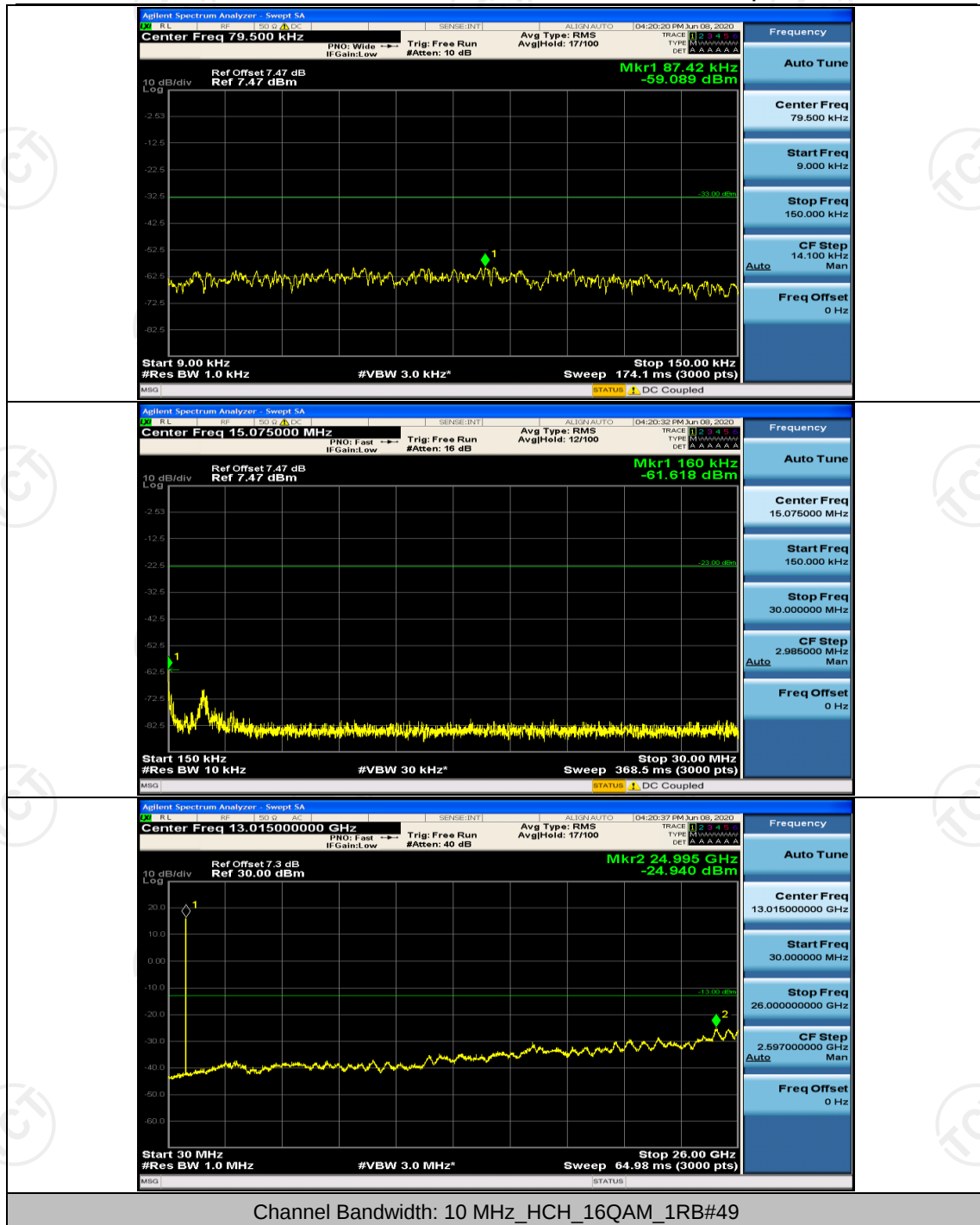


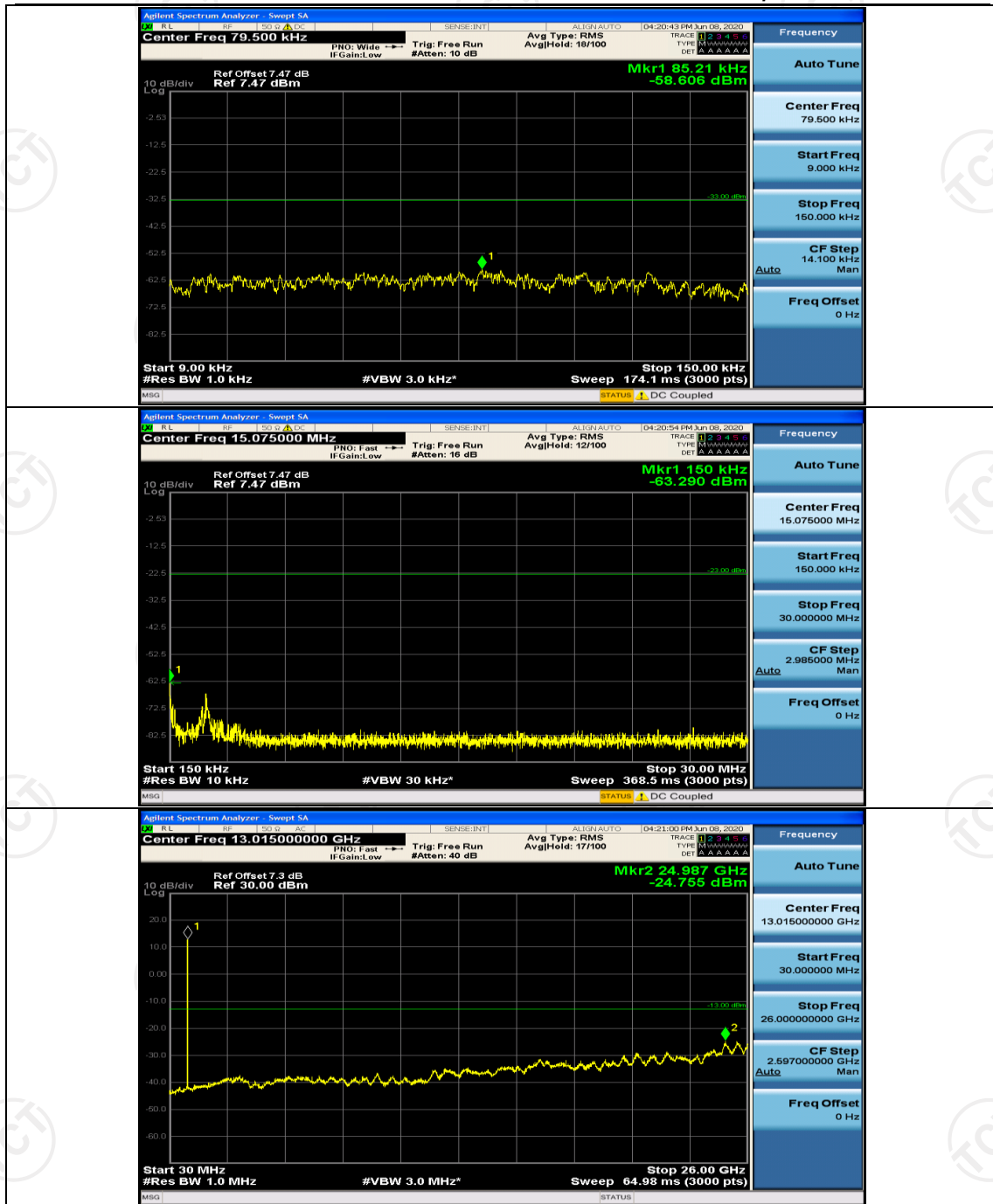












Appendix F: Frequency Stability

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	3.4	25	-0.73	-0.000884	± 2.5	PASS
		3.7	25	-0.97	-0.001180	± 2.5	PASS
		4.2	25	-3.49	-0.004119	± 2.5	PASS
	MCH	3.4	25	-0.43	-0.000520	± 2.5	PASS
		3.7	25	-0.63	-0.000752	± 2.5	PASS
		4.2	25	-1.06	-0.001249	± 2.5	PASS
	HCH	3.4	25	-0.51	-0.000608	± 2.5	PASS
		3.7	25	-1.97	-0.002332	± 2.5	PASS
		4.2	25	-1.87	-0.002214	± 2.5	PASS
16QAM	LCH	3.4	25	-0.70	-0.000828	± 2.5	PASS
		3.7	25	-0.99	-0.001197	± 2.5	PASS
		4.2	25	-0.80	-0.000958	± 2.5	PASS
	MCH	3.4	25	-2.82	-0.003410	± 2.5	PASS
		3.7	25	-3.08	-0.003721	± 2.5	PASS
		4.2	25	-1.34	-0.001627	± 2.5	PASS
	HCH	3.4	25	-1.60	-0.001939	± 2.5	PASS
		3.7	25	-0.27	-0.000320	± 2.5	PASS
		4.2	25	-1.23	-0.001471	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.7	-30	-1.69	-0.002042	± 2.5	PASS
		3.7	-20	-0.70	-0.000838	± 2.5	PASS
		3.7	-10	-0.74	-0.000889	± 2.5	PASS
		3.7	0	-0.74	-0.000889	± 2.5	PASS
		3.7	10	-0.94	-0.001129	± 2.5	PASS
		3.7	20	-0.96	-0.001162	± 2.5	PASS
		3.7	30	-1.36	-0.001648	± 2.5	PASS
		3.7	40	-1.83	-0.002220	± 2.5	PASS
	MCH	3.7	50	-2.82	-0.003417	± 2.5	PASS
		3.7	-30	-0.80	-0.000958	± 2.5	PASS
		3.7	-20	-2.37	-0.002873	± 2.5	PASS
		3.7	-10	-1.75	-0.002112	± 2.5	PASS
		3.7	0	-1.80	-0.002181	± 2.5	PASS
		3.7	10	-1.40	-0.001696	± 2.5	PASS
		3.7	20	-1.23	-0.001471	± 2.5	PASS
		3.7	30	-1.39	-0.001659	± 2.5	PASS
		3.7	40	-0.43	-0.000513	± 2.5	PASS

	HCH	3.7	50	-1.53	-0.001830	± 2.5	PASS
		3.7	-30	-1.23	-0.001471	± 2.5	PASS
		3.7	-20	-1.82	-0.002144	± 2.5	PASS
		3.7	-10	-1.80	-0.002127	± 2.5	PASS
		3.7	0	-2.32	-0.002734	± 2.5	PASS
		3.7	10	-0.99	-0.001165	± 2.5	PASS
		3.7	20	-1.49	-0.001754	± 2.5	PASS
		3.7	30	-0.86	-0.001012	± 2.5	PASS
		3.7	40	-0.93	-0.001096	± 2.5	PASS
		3.7	50	-2.36	-0.002782	± 2.5	PASS
16QAM	LCH	3.7	-30	-1.69	-0.002042	± 2.5	PASS
		3.7	-20	-0.63	-0.000752	± 2.5	PASS
		3.7	-10	0.07	0.000086	± 2.5	PASS
		3.7	0	-1.17	-0.001402	± 2.5	PASS
		3.7	10	-1.14	-0.001368	± 2.5	PASS
		3.7	20	-2.15	-0.002602	± 2.5	PASS
		3.7	30	-1.46	-0.001769	± 2.5	PASS
		3.7	40	-2.32	-0.002810	± 2.5	PASS
		3.7	50	-1.20	-0.001457	± 2.5	PASS
	MCH	3.7	-30	-0.54	-0.000650	± 2.5	PASS
		3.7	-20	0.43	0.000513	± 2.5	PASS
		3.7	-10	-1.52	-0.001813	± 2.5	PASS
		3.7	0	-0.86	-0.001026	± 2.5	PASS
		3.7	10	-0.54	-0.000650	± 2.5	PASS
		3.7	20	-1.63	-0.001950	± 2.5	PASS
		3.7	30	-0.64	-0.000770	± 2.5	PASS
		3.7	40	0.27	0.000330	± 2.5	PASS
		3.7	50	-1.06	-0.001265	± 2.5	PASS
	HCH	3.7	-30	-1.86	-0.002253	± 2.5	PASS
		3.7	-20	-1.44	-0.001750	± 2.5	PASS
		3.7	-10	-0.80	-0.000970	± 2.5	PASS
		3.7	0	-0.63	-0.000762	± 2.5	PASS
		3.7	10	-1.86	-0.002253	± 2.5	PASS
		3.7	20	-0.92	-0.001079	± 2.5	PASS
		3.7	30	0.60	0.000708	± 2.5	PASS
		3.7	40	0.53	0.000624	± 2.5	PASS
		3.7	50	-0.76	-0.000894	± 2.5	PASS