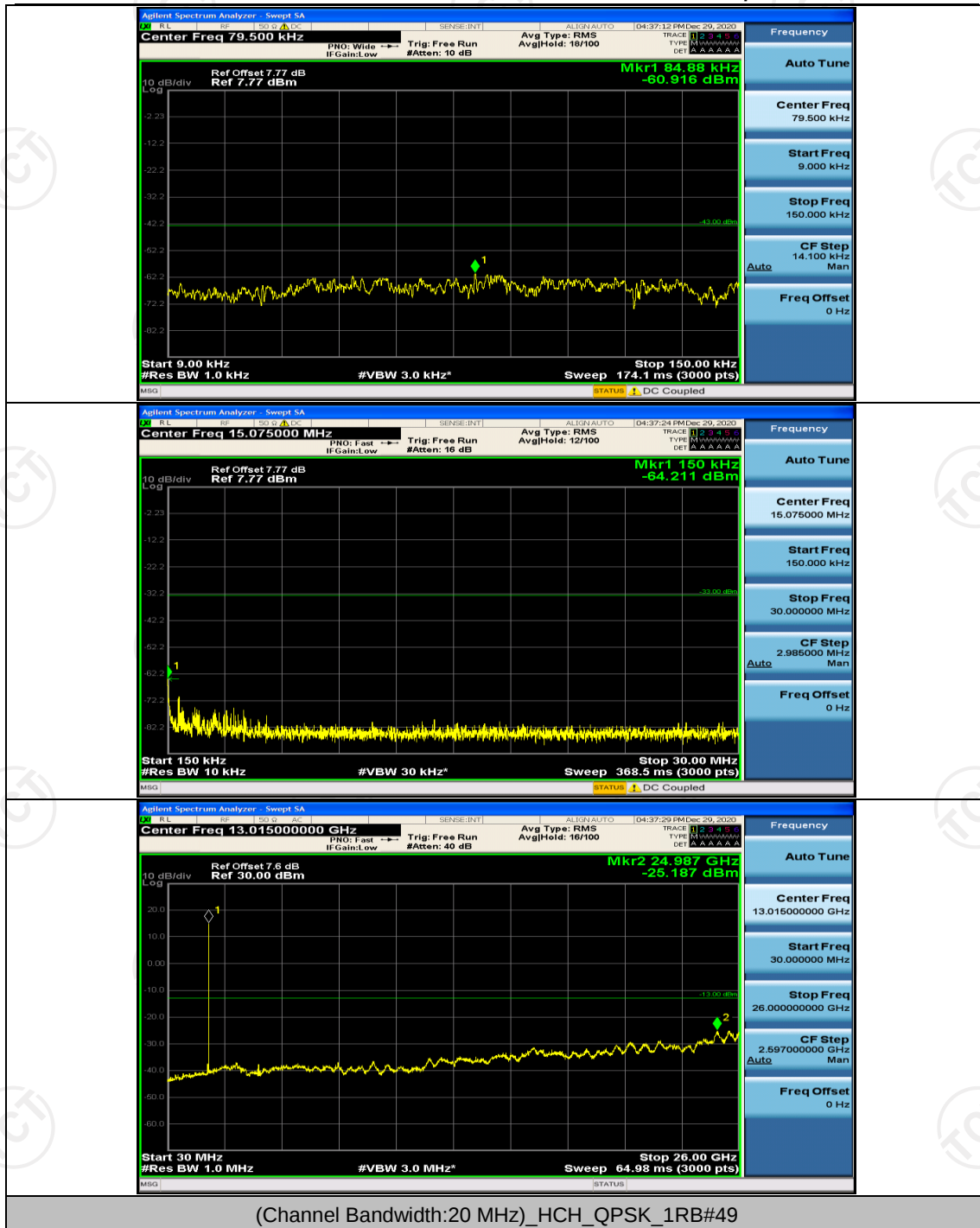
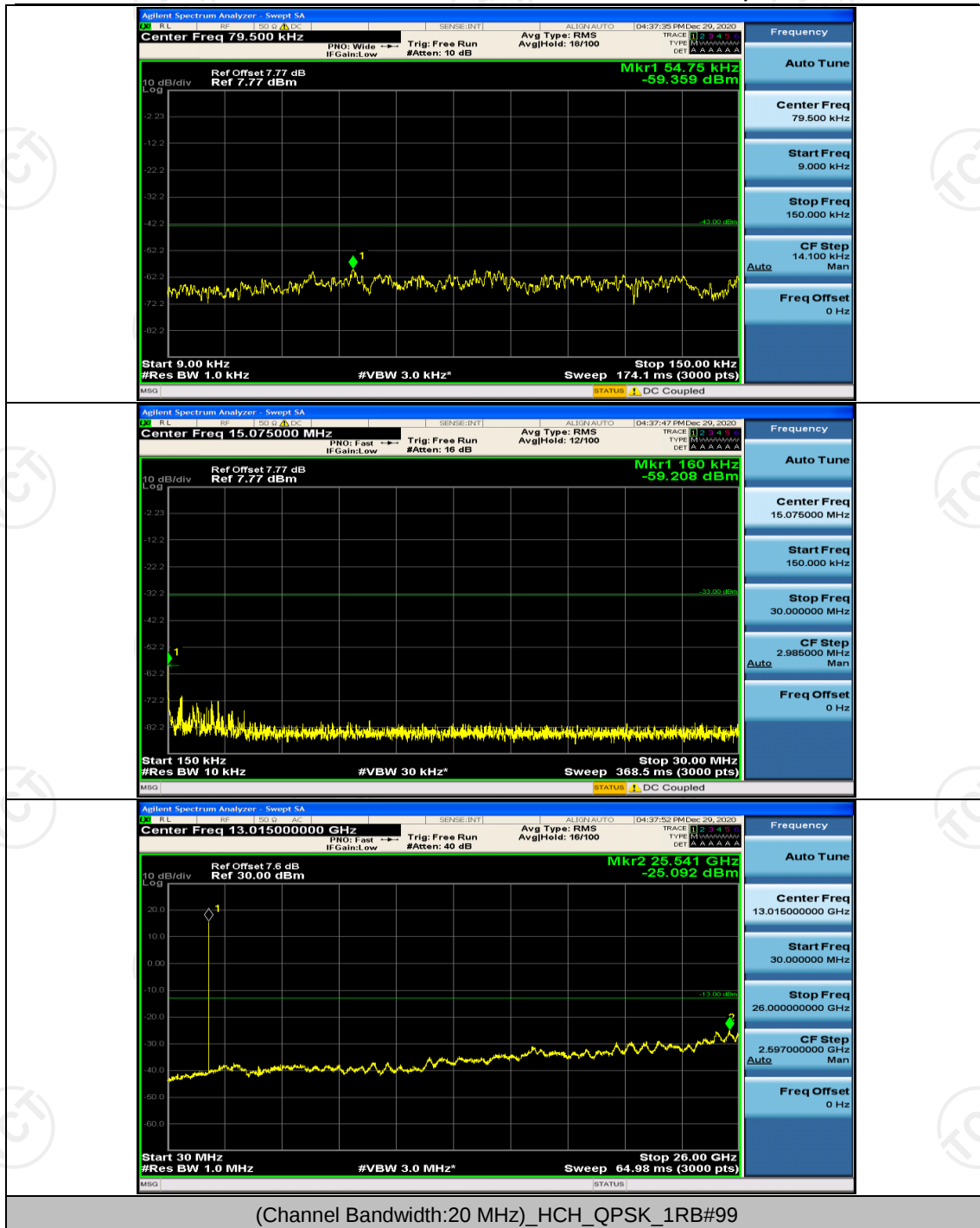
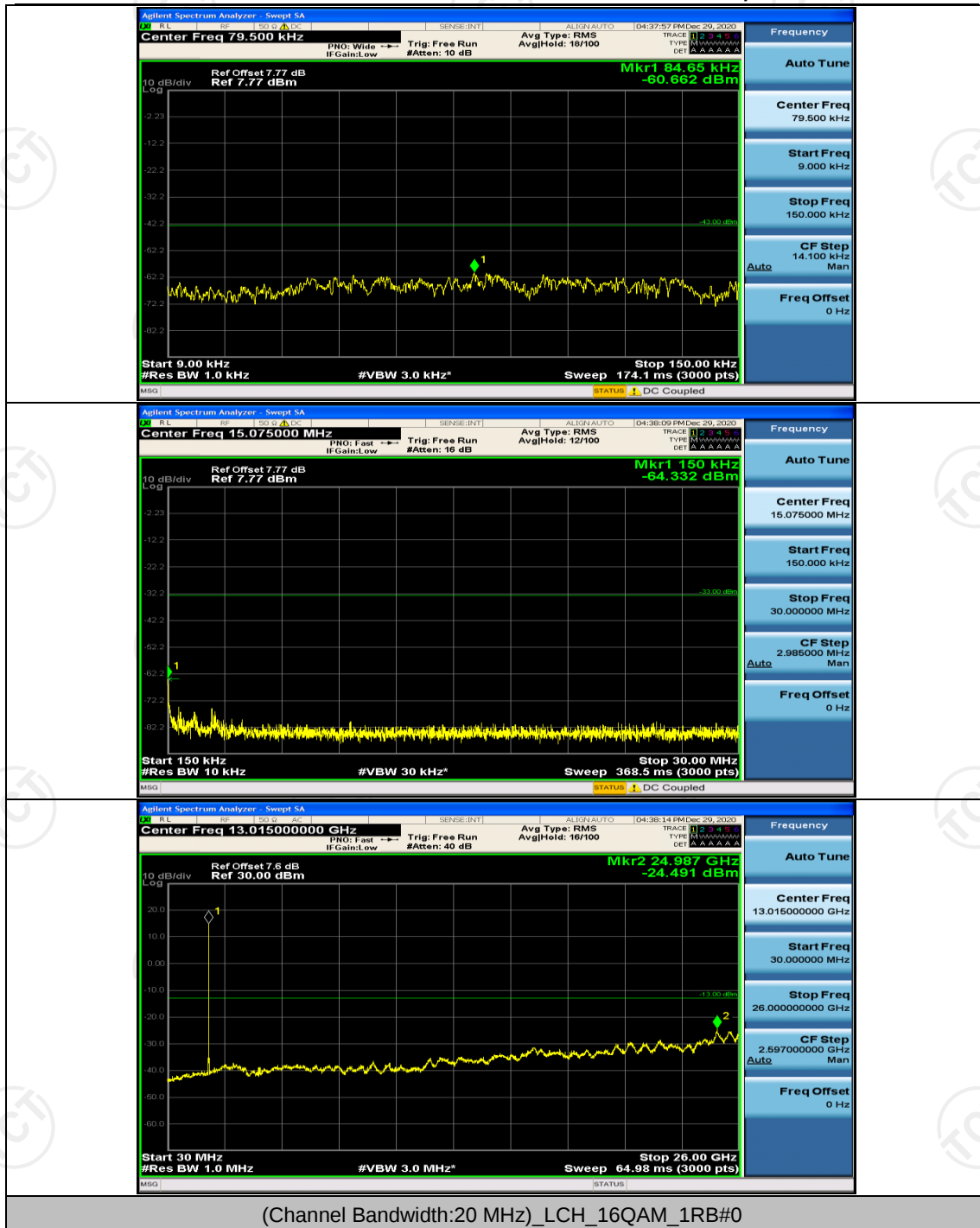
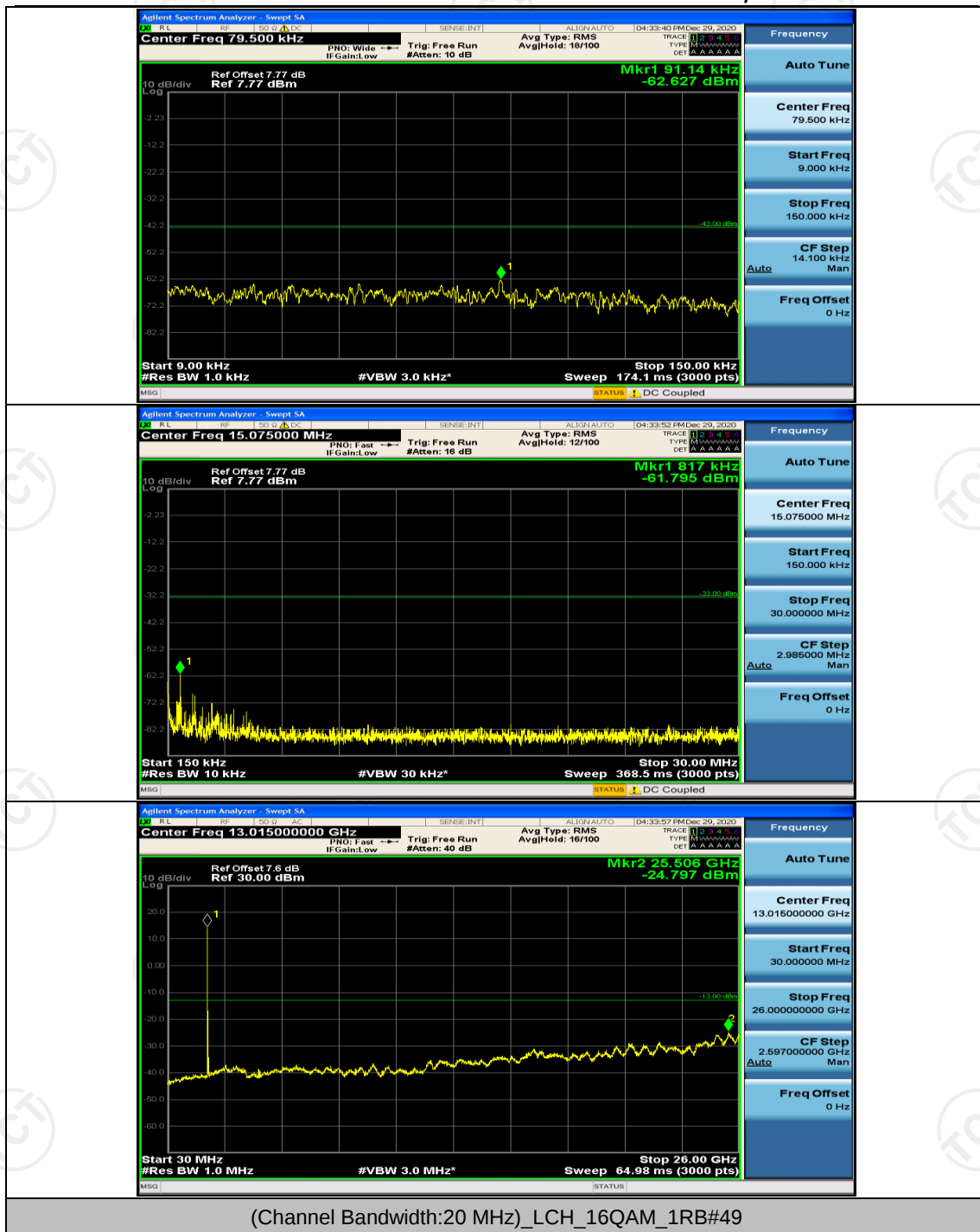
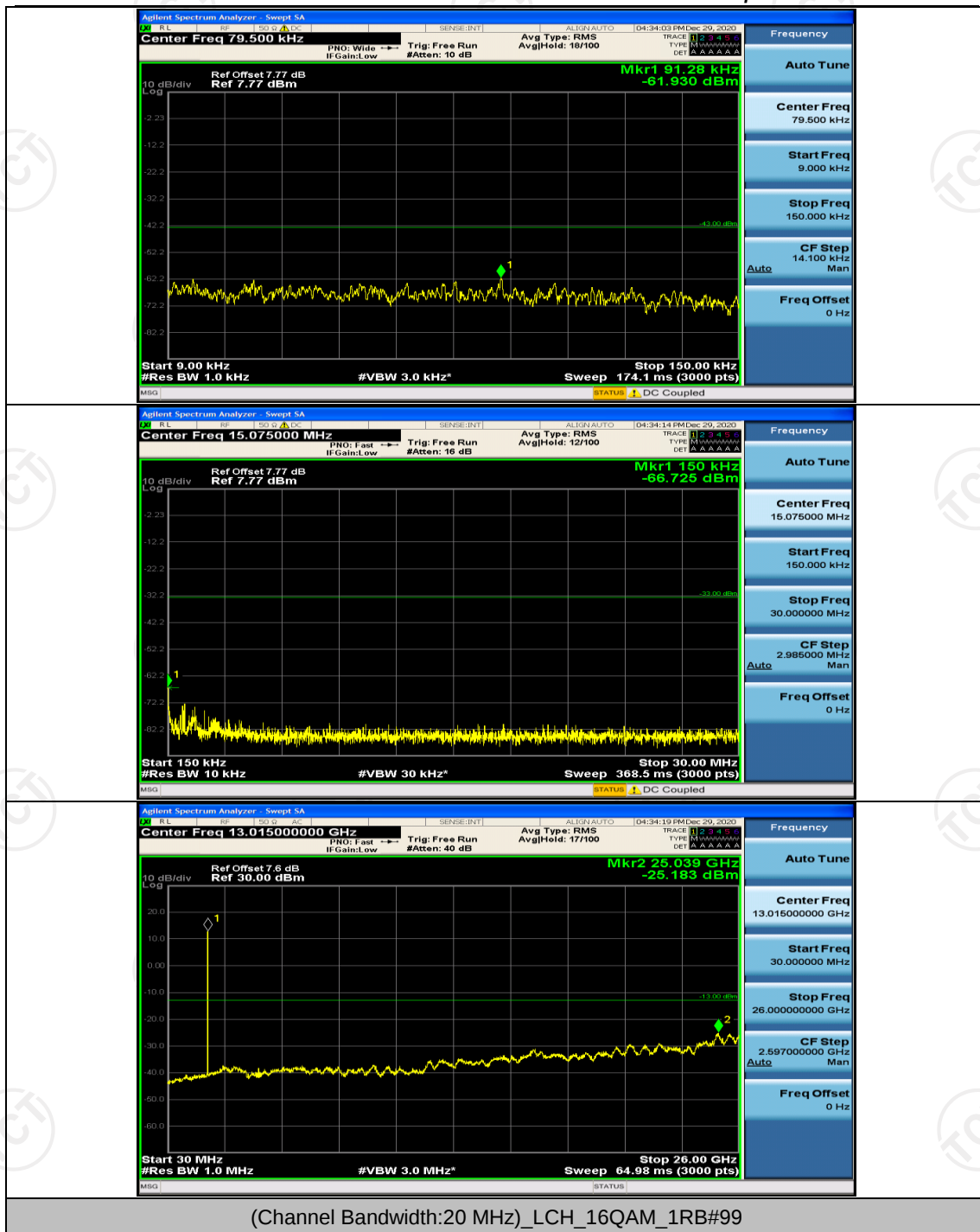


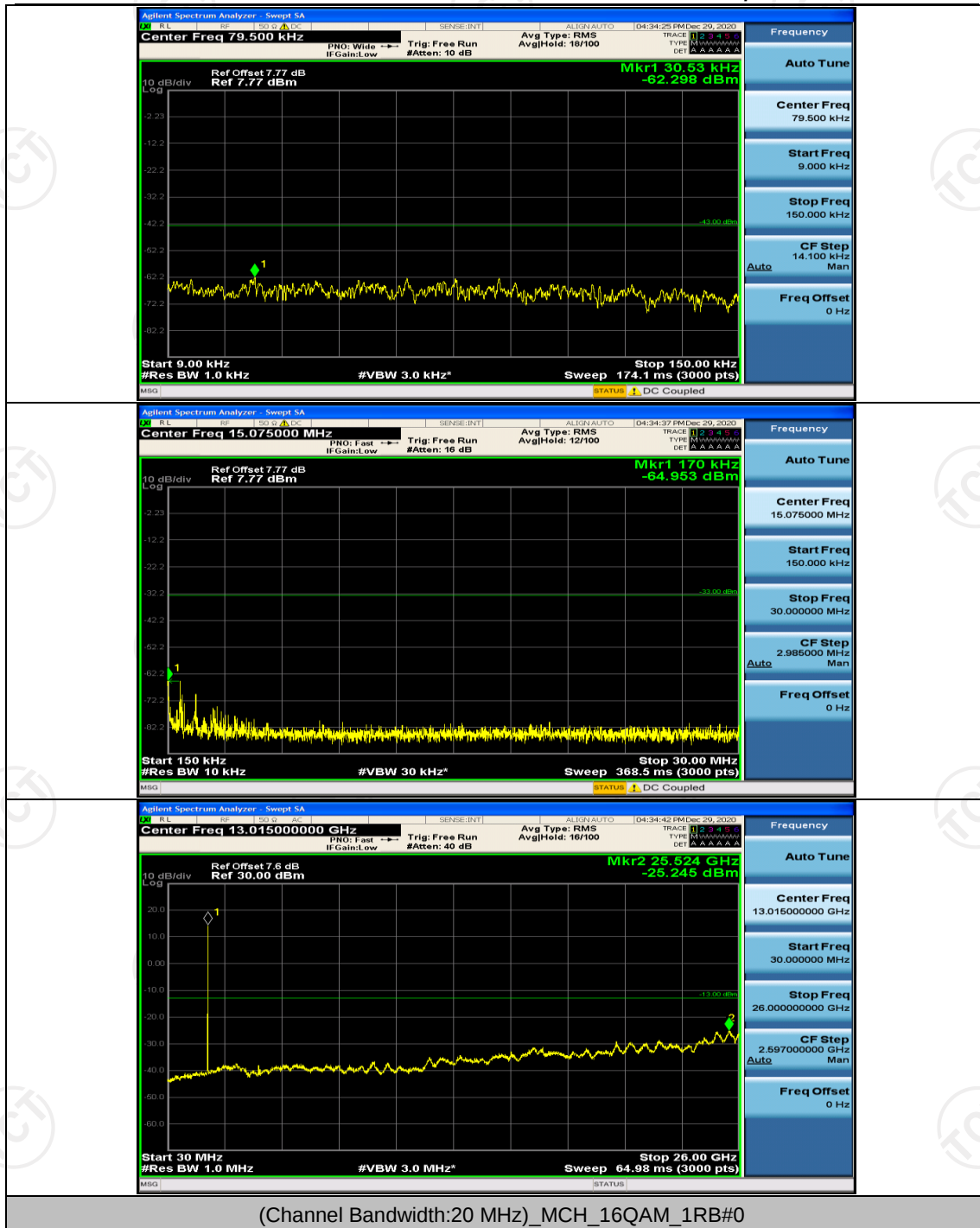


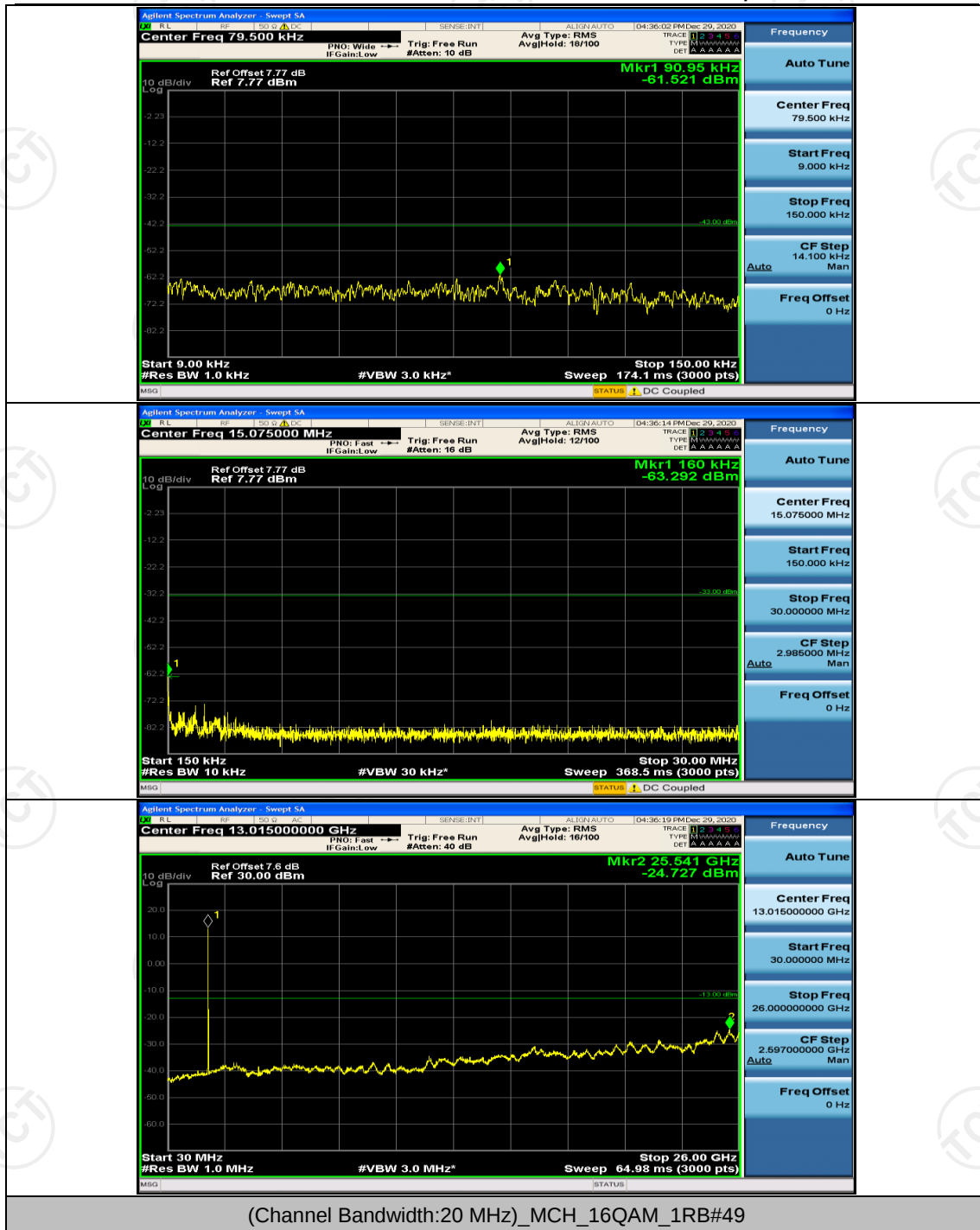


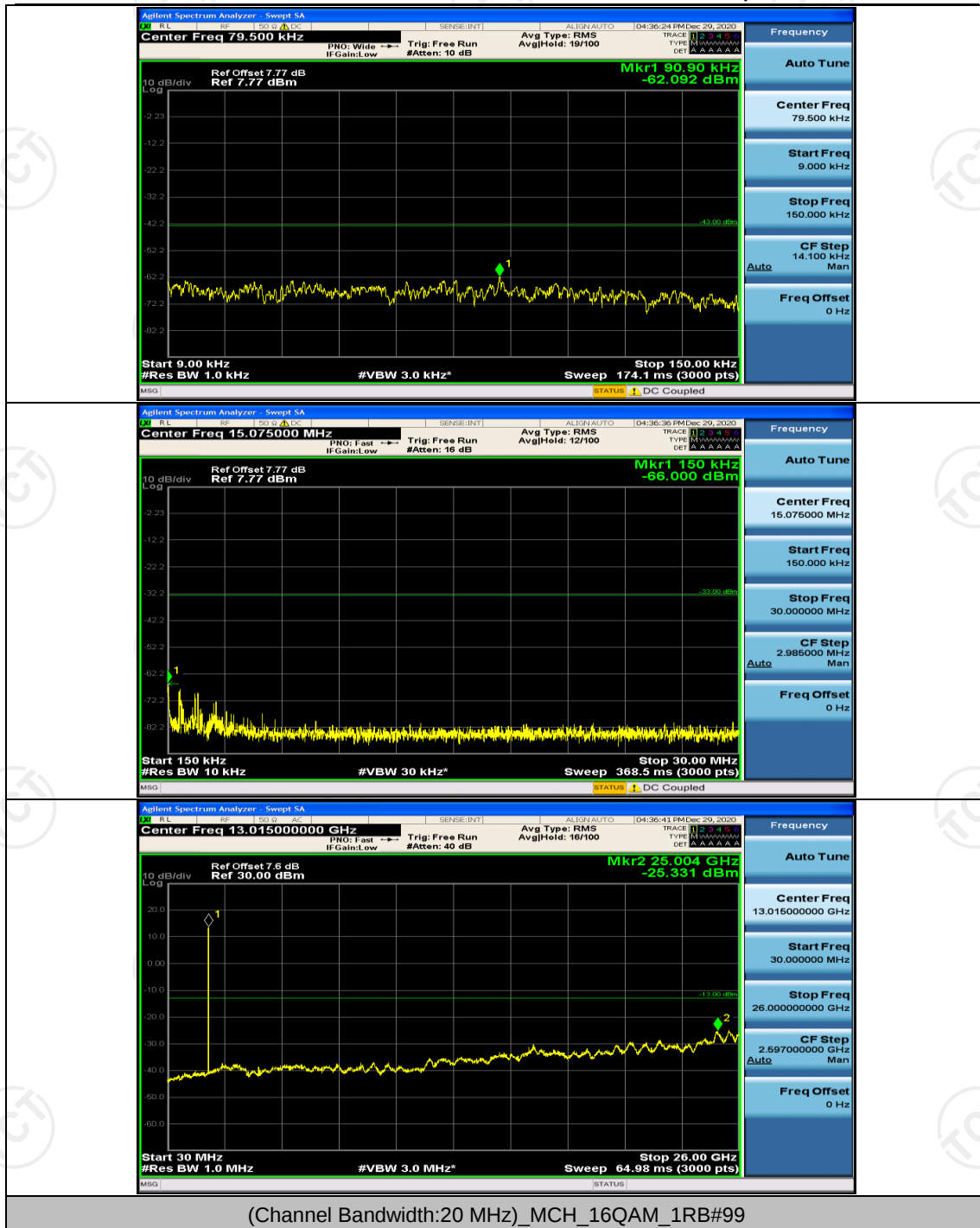


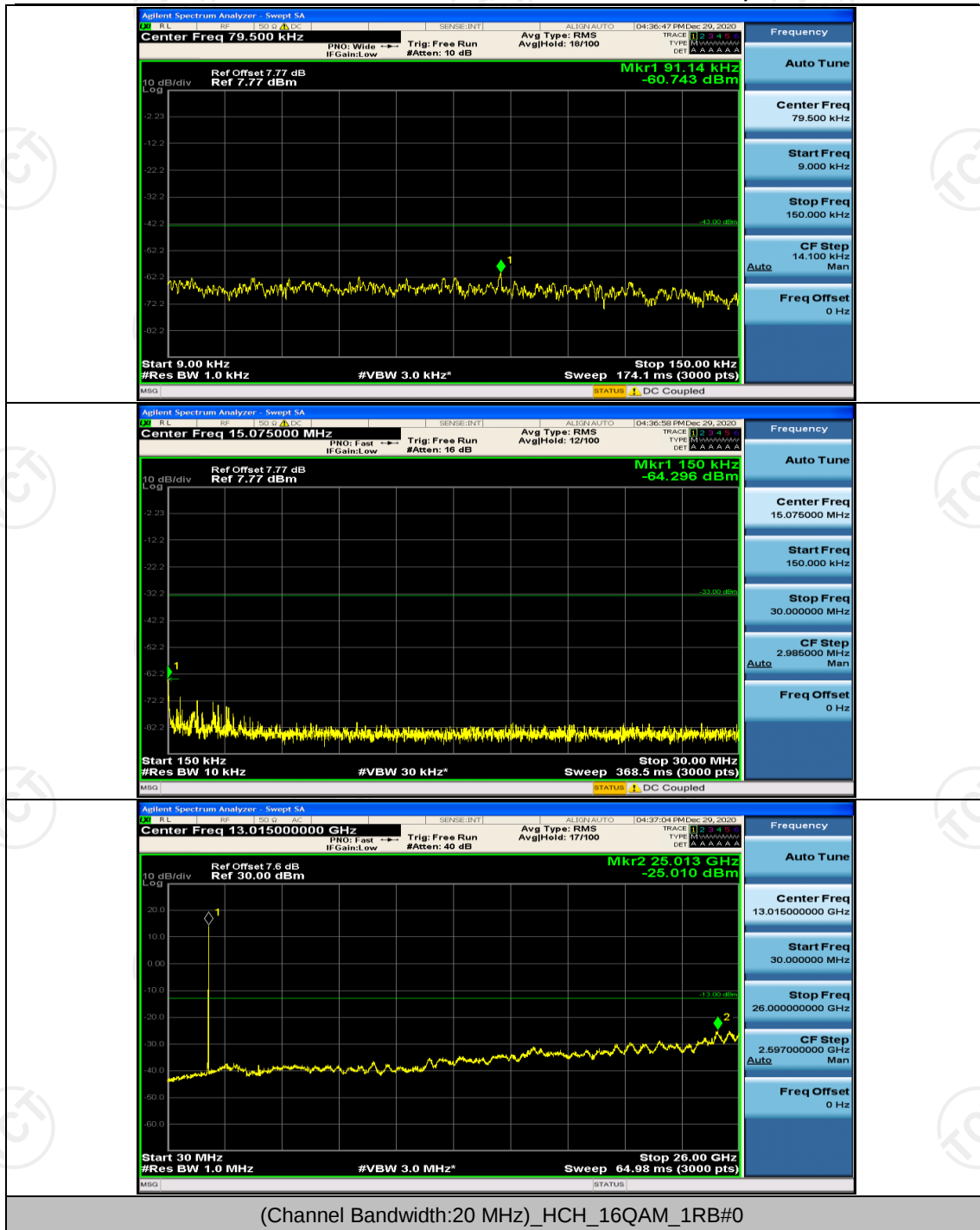


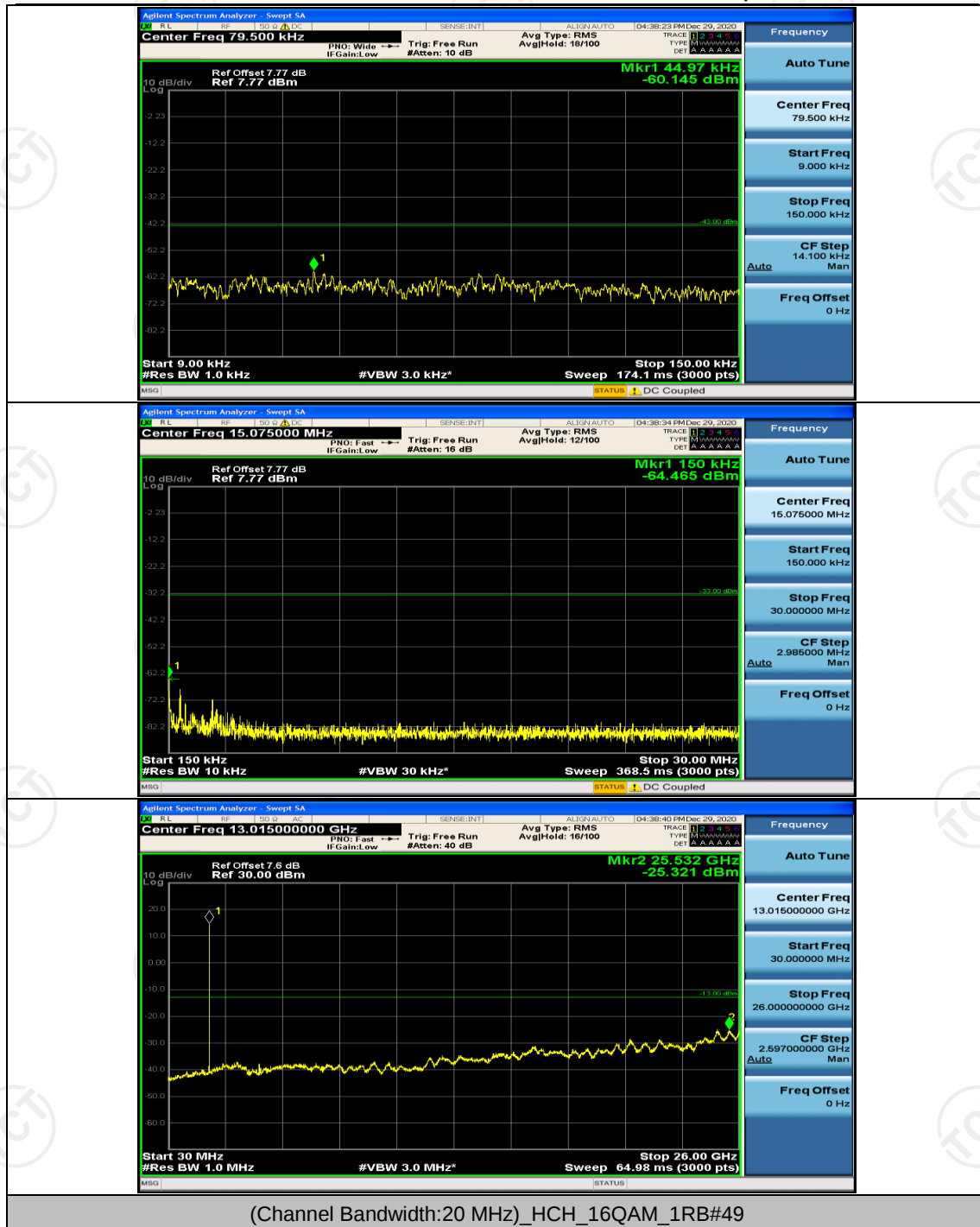


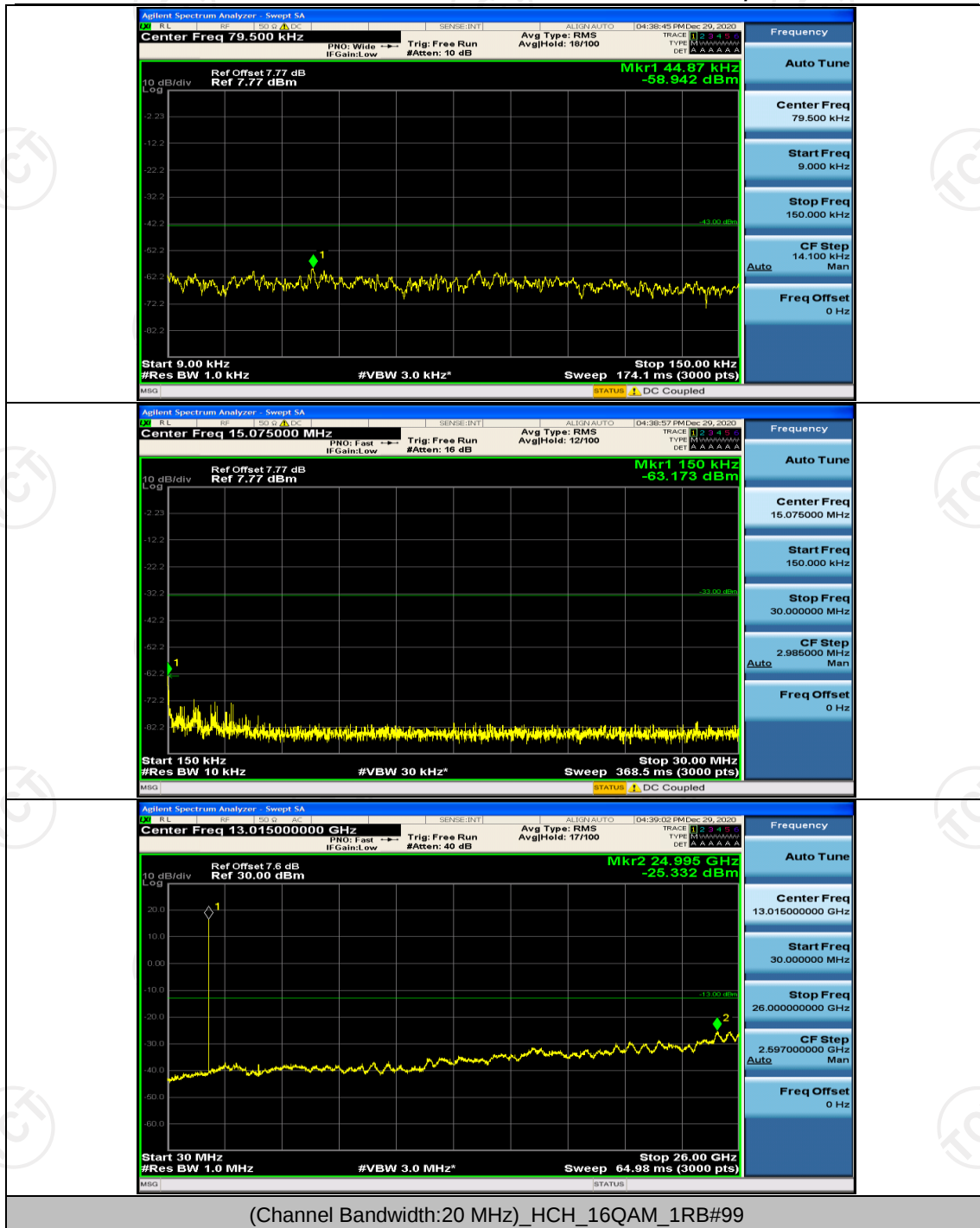


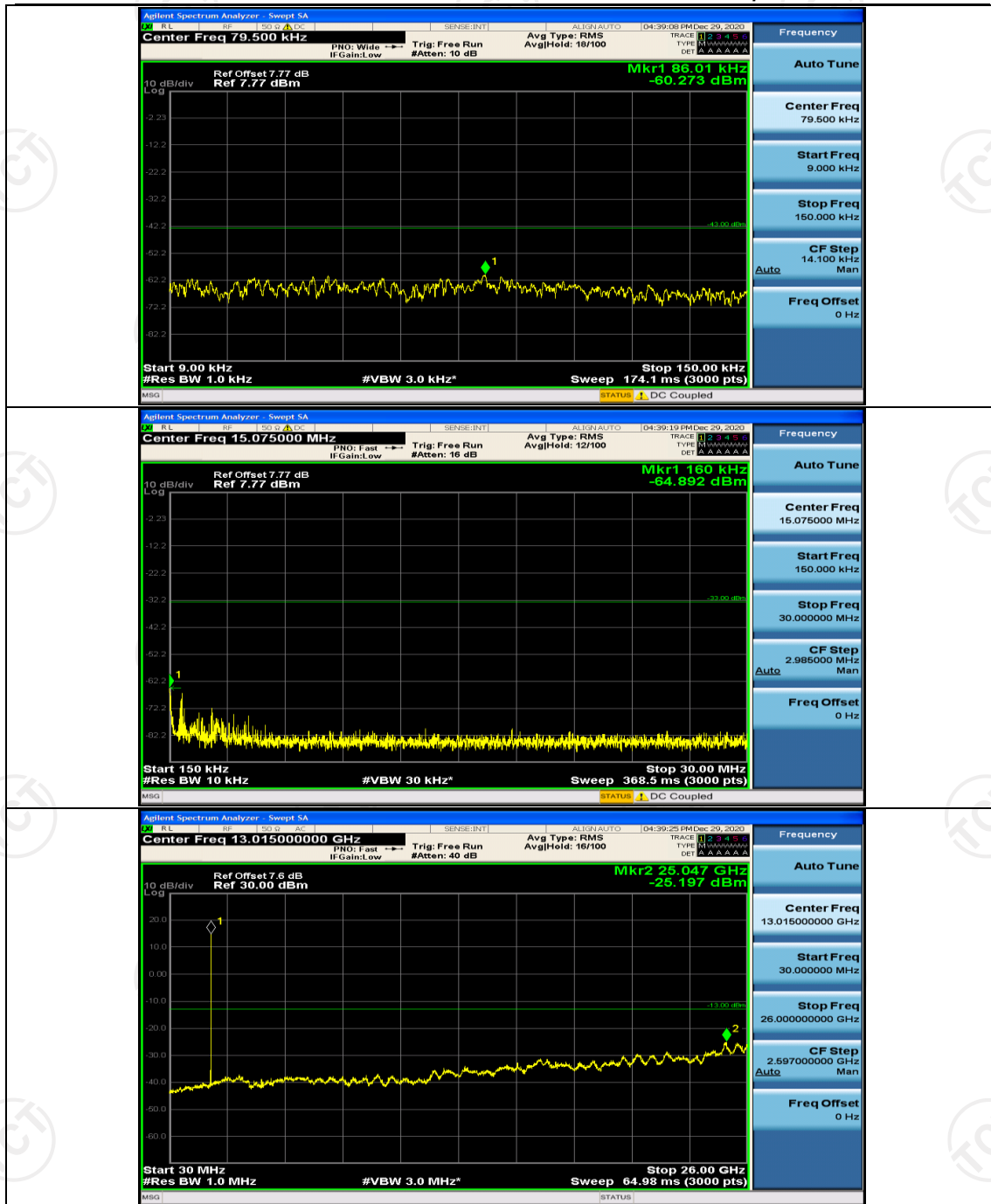












Appendix F: Frequency Stability

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	3.6	25	-34.55	-0.018649	± 2.5	PASS
		3.8	25	-31.09	-0.016780	± 2.5	PASS
		4.35	25	-33.06	-0.017846	± 2.5	PASS
	MCH	3.6	25	-23.19	-0.012517	± 2.5	PASS
		3.8	25	29.61	0.015751	± 2.5	PASS
		4.35	25	19.54	0.010244	± 2.5	PASS
	HCH	3.6	25	24.89	0.013049	± 2.5	PASS
		3.8	25	33.42	0.017519	± 2.5	PASS
		4.35	25	32.57	0.017076	± 2.5	PASS
16QAM	LCH	3.6	25	-29.73	-0.016046	± 2.5	PASS
		3.8	25	-29.58	-0.015969	± 2.5	PASS
		4.35	25	-29.64	-0.016000	± 2.5	PASS
	MCH	3.6	25	-31.33	-0.016911	± 2.5	PASS
		3.8	25	-31.67	-0.016847	± 2.5	PASS
		4.35	25	24.42	0.012795	± 2.5	PASS
	HCH	3.6	25	27.27	0.014286	± 2.5	PASS
		3.8	25	18.32	0.009602	± 2.5	PASS
		4.35	25	13.53	0.007091	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.8	-30	7.38	0.003926	± 2.5	PASS
		3.8	-20	17.47	0.009291	± 2.5	PASS
		3.8	-10	15.58	0.008286	± 2.5	PASS
		3.8	0	10.21	0.005433	± 2.5	PASS
		3.8	10	15.13	0.008050	± 2.5	PASS
		3.8	20	-3.76	-0.002033	± 2.5	PASS
		3.8	30	-14.26	-0.007706	± 2.5	PASS
		3.8	40	-23.27	-0.012576	± 2.5	PASS
		3.8	50	-31.57	-0.017059	± 2.5	PASS
	MCH	3.8	-30	13.45	0.007263	± 2.5	PASS
		3.8	-20	7.85	0.004177	± 2.5	PASS
		3.8	-10	7.17	0.003812	± 2.5	PASS
		3.8	0	4.22	0.002245	± 2.5	PASS
		3.8	10	3.38	0.001796	± 2.5	PASS

		3.8	20	6.69	0.003561	± 2.5	PASS
		3.8	30	-14.16	-0.007533	± 2.5	PASS
		3.8	40	-44.23	-0.023527	± 2.5	PASS
		3.8	50	-20.10	-0.010691	± 2.5	PASS
	HCH	3.8	-30	20.53	0.010756	± 2.5	PASS
		3.8	-20	-0.60	-0.000325	± 2.5	PASS
		3.8	-10	0.04	0.000023	± 2.5	PASS
		3.8	0	1.72	0.000927	± 2.5	PASS
		3.8	10	6.32	0.003415	± 2.5	PASS
		3.8	20	3.98	0.002083	± 2.5	PASS
		3.8	30	-15.05	-0.007882	± 2.5	PASS
		3.8	40	-47.01	-0.024620	± 2.5	PASS
		3.8	50	-14.52	-0.007605	± 2.5	PASS
16QAM	LCH	3.8	-30	0.72	0.000386	± 2.5	PASS
		3.8	-20	10.54	0.005524	± 2.5	PASS
		3.8	-10	21.44	0.011236	± 2.5	PASS
		3.8	0	21.72	0.011378	± 2.5	PASS
		3.8	10	18.85	0.009879	± 2.5	PASS
		3.8	20	0.30	0.000162	± 2.5	PASS
		3.8	30	0.51	0.000278	± 2.5	PASS
		3.8	40	4.46	0.002412	± 2.5	PASS
		3.8	50	0.46	0.000247	± 2.5	PASS
	MCH	3.8	-30	6.72	0.003576	± 2.5	PASS
		3.8	-20	7.55	0.004018	± 2.5	PASS
		3.8	-10	4.71	0.002503	± 2.5	PASS
		3.8	0	-3.92	-0.002085	± 2.5	PASS
		3.8	10	15.44	0.008088	± 2.5	PASS
		3.8	20	-29.27	-0.015568	± 2.5	PASS
		3.8	30	-30.16	-0.016040	± 2.5	PASS
		3.8	40	-35.19	-0.018718	± 2.5	PASS
		3.8	50	-31.64	-0.016831	± 2.5	PASS
	HCH	3.8	-30	3.59	0.001910	± 2.5	PASS
		3.8	-20	9.08	0.004906	± 2.5	PASS
		3.8	-10	5.66	0.003060	± 2.5	PASS
		3.8	0	2.79	0.001507	± 2.5	PASS
		3.8	10	1.00	0.000541	± 2.5	PASS
		3.8	20	-9.71	-0.005087	± 2.5	PASS
		3.8	30	-22.37	-0.011718	± 2.5	PASS
		3.8	40	-26.22	-0.013733	± 2.5	PASS
		3.8	50	-35.10	-0.018386	± 2.5	PASS