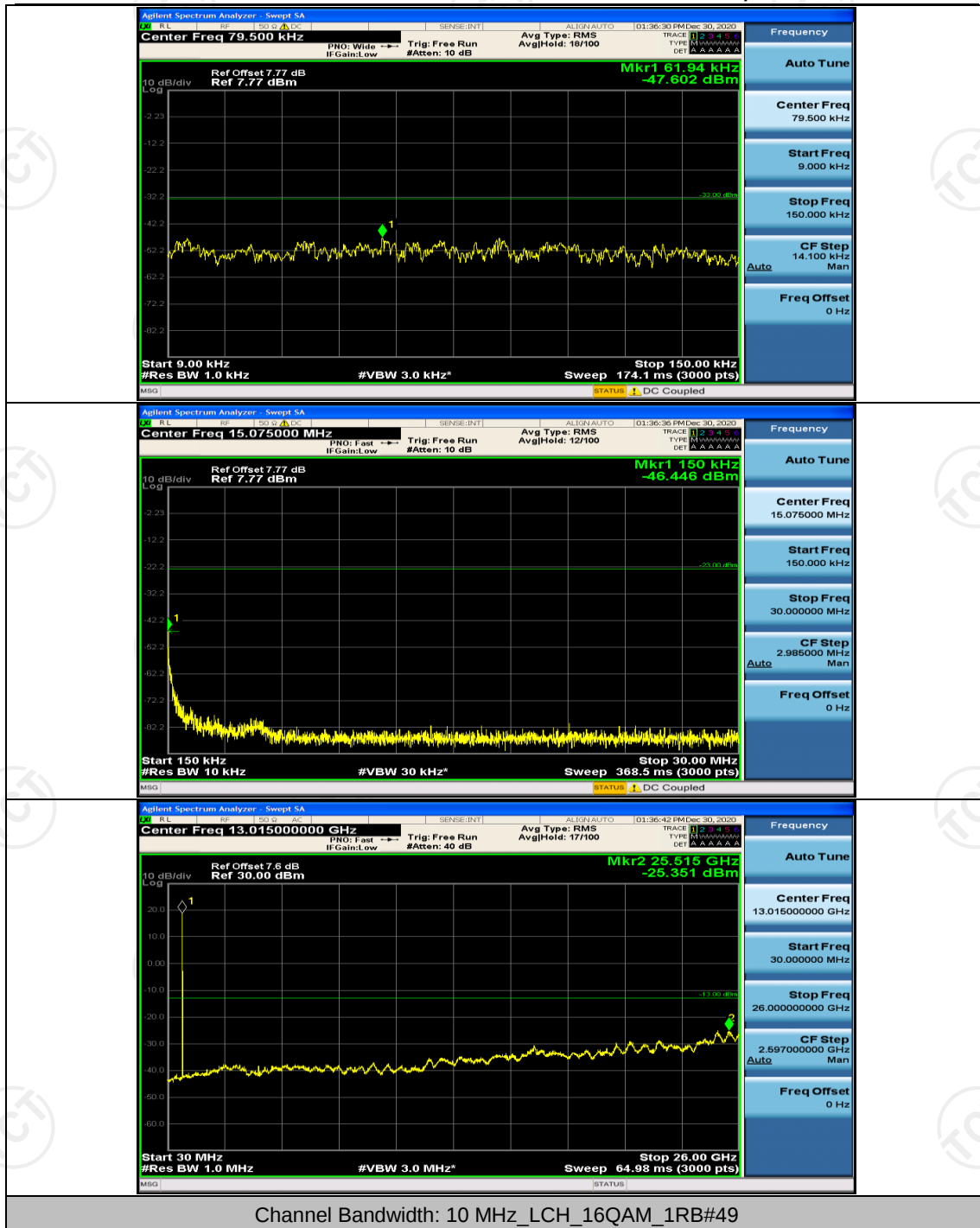
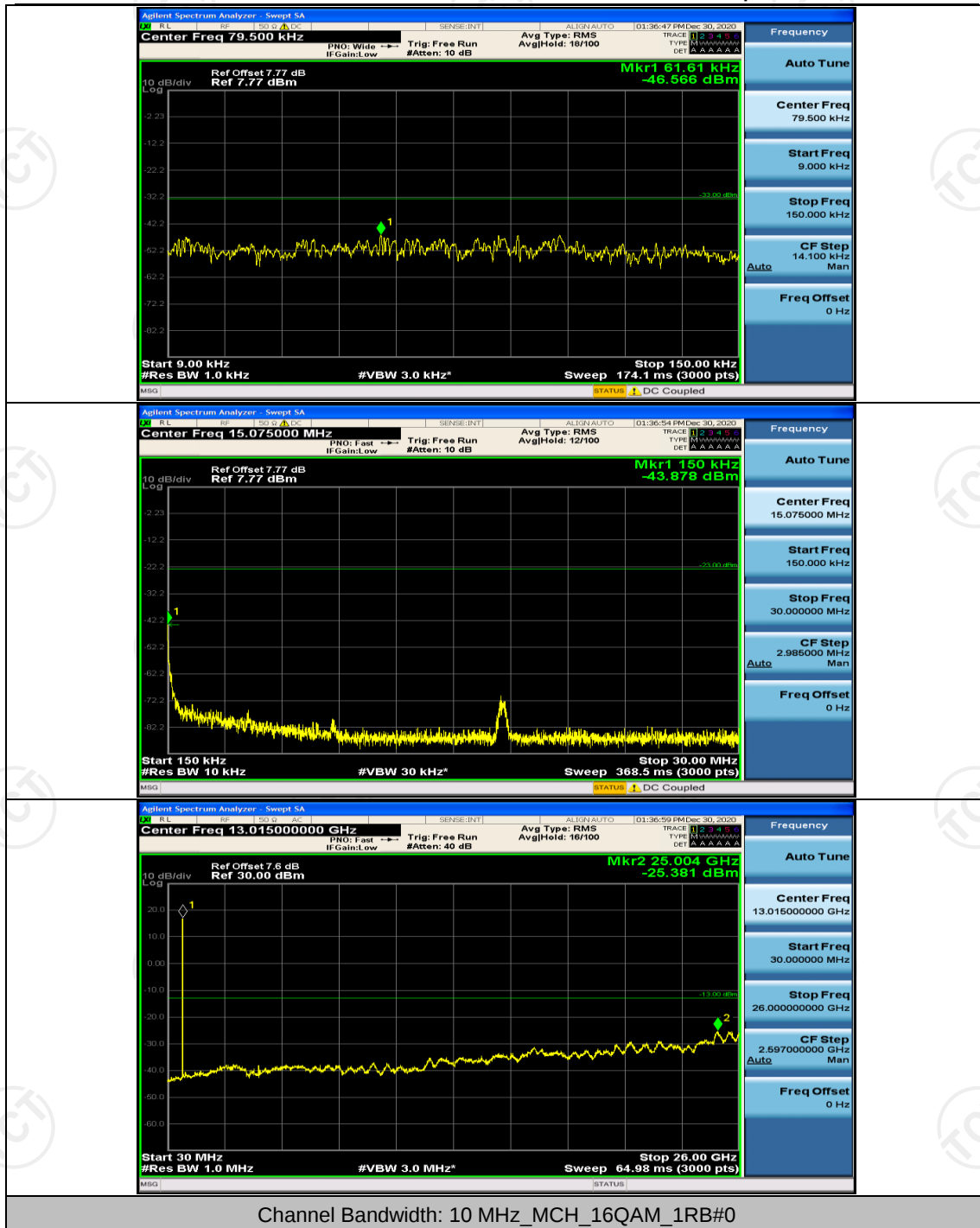
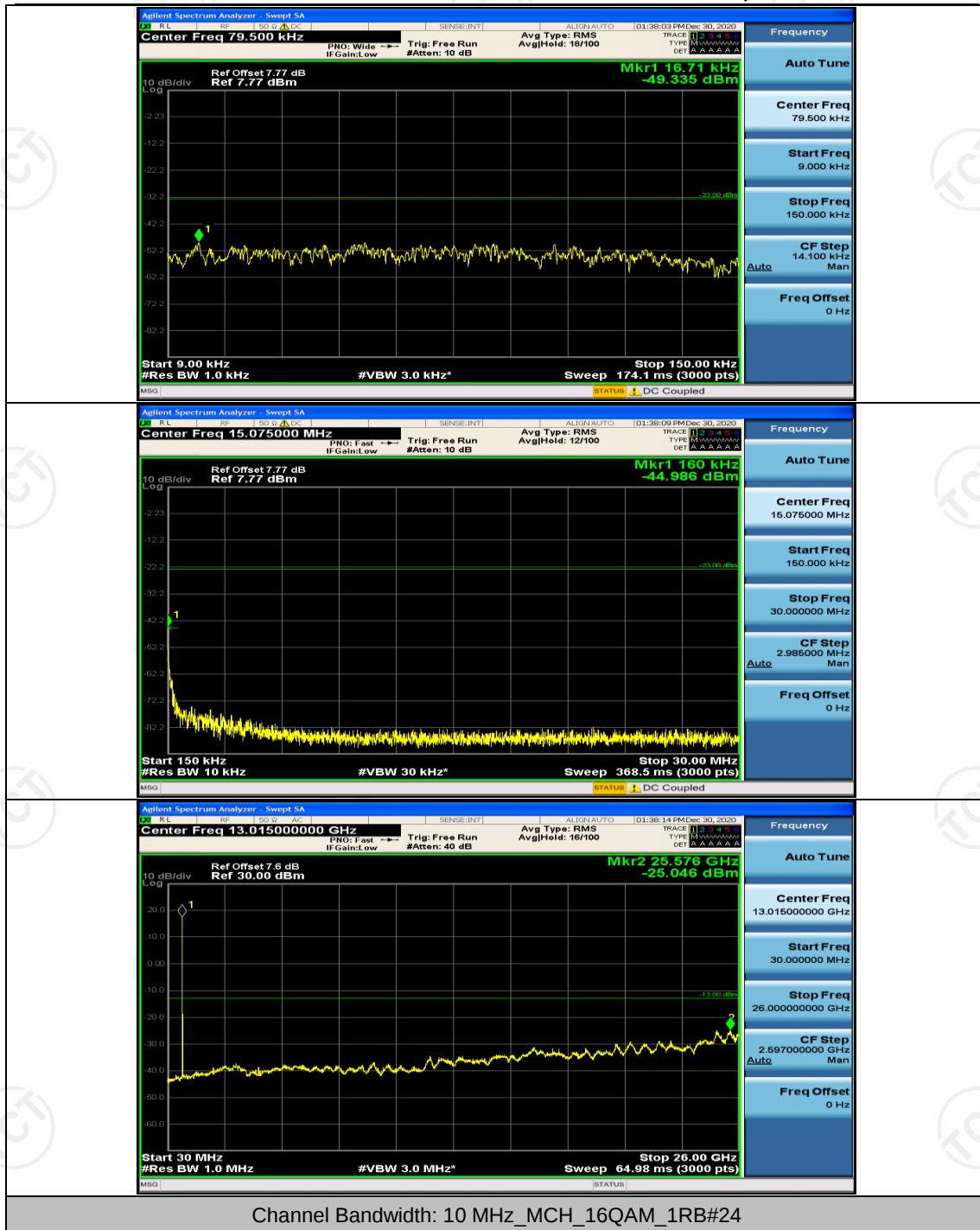
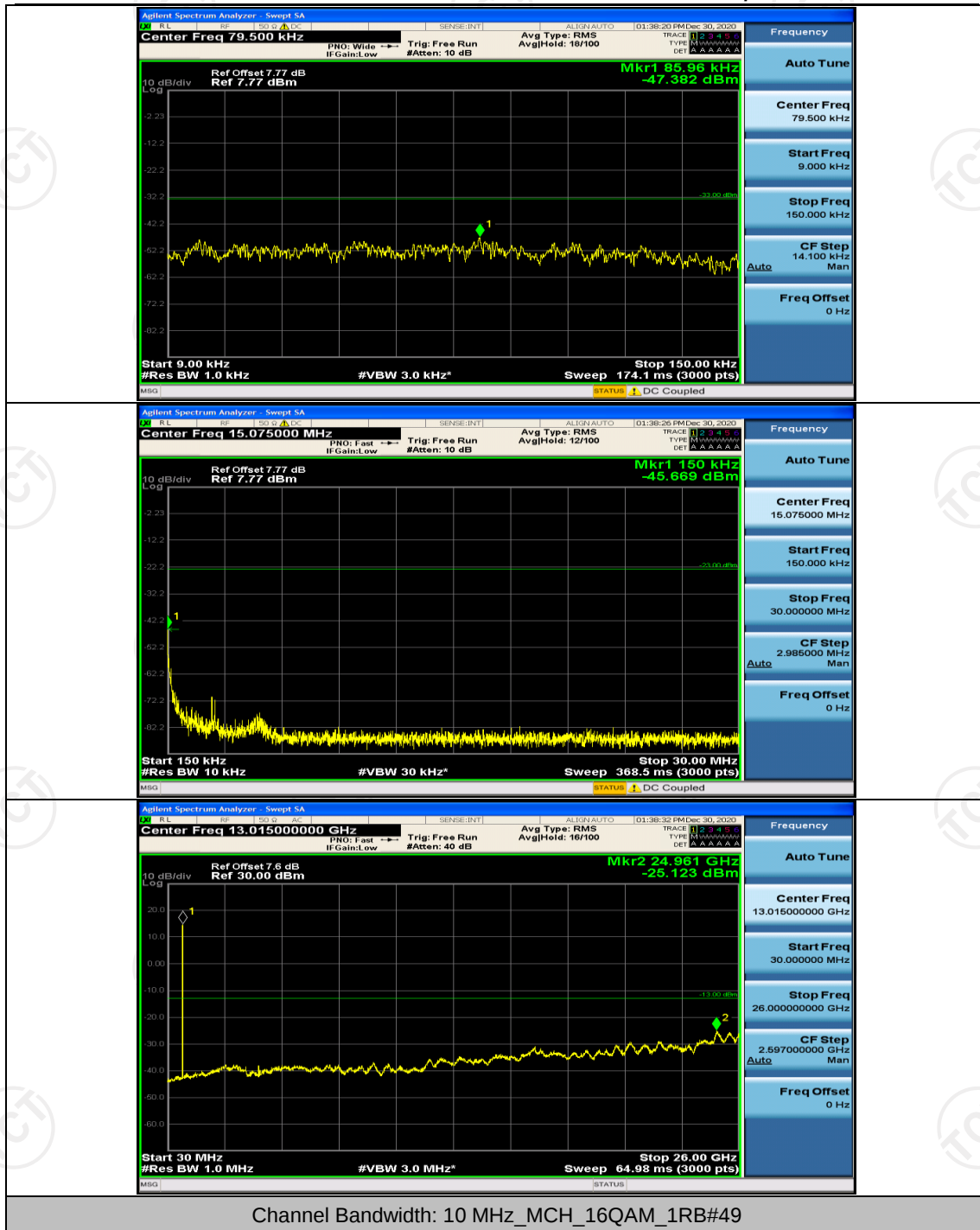
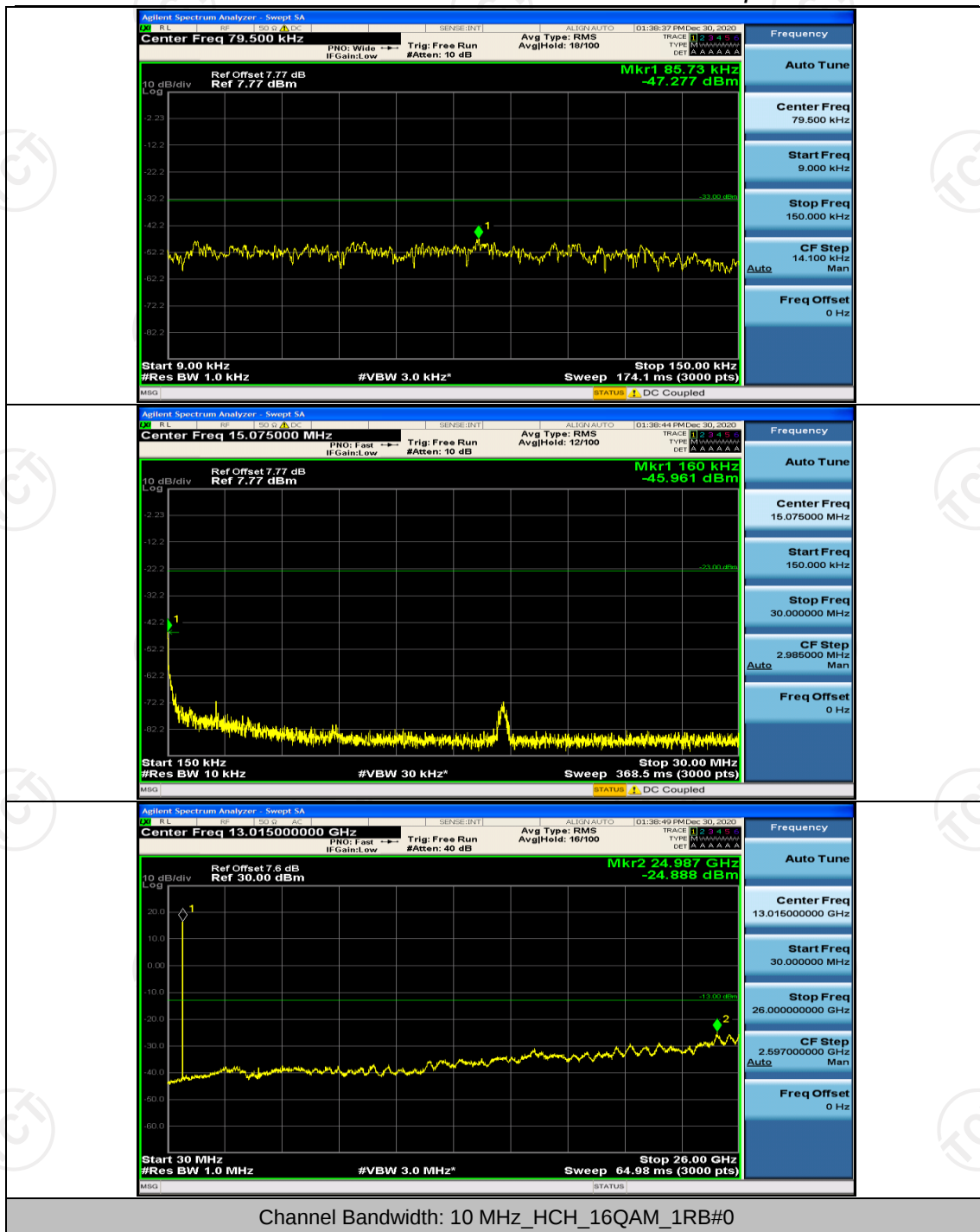


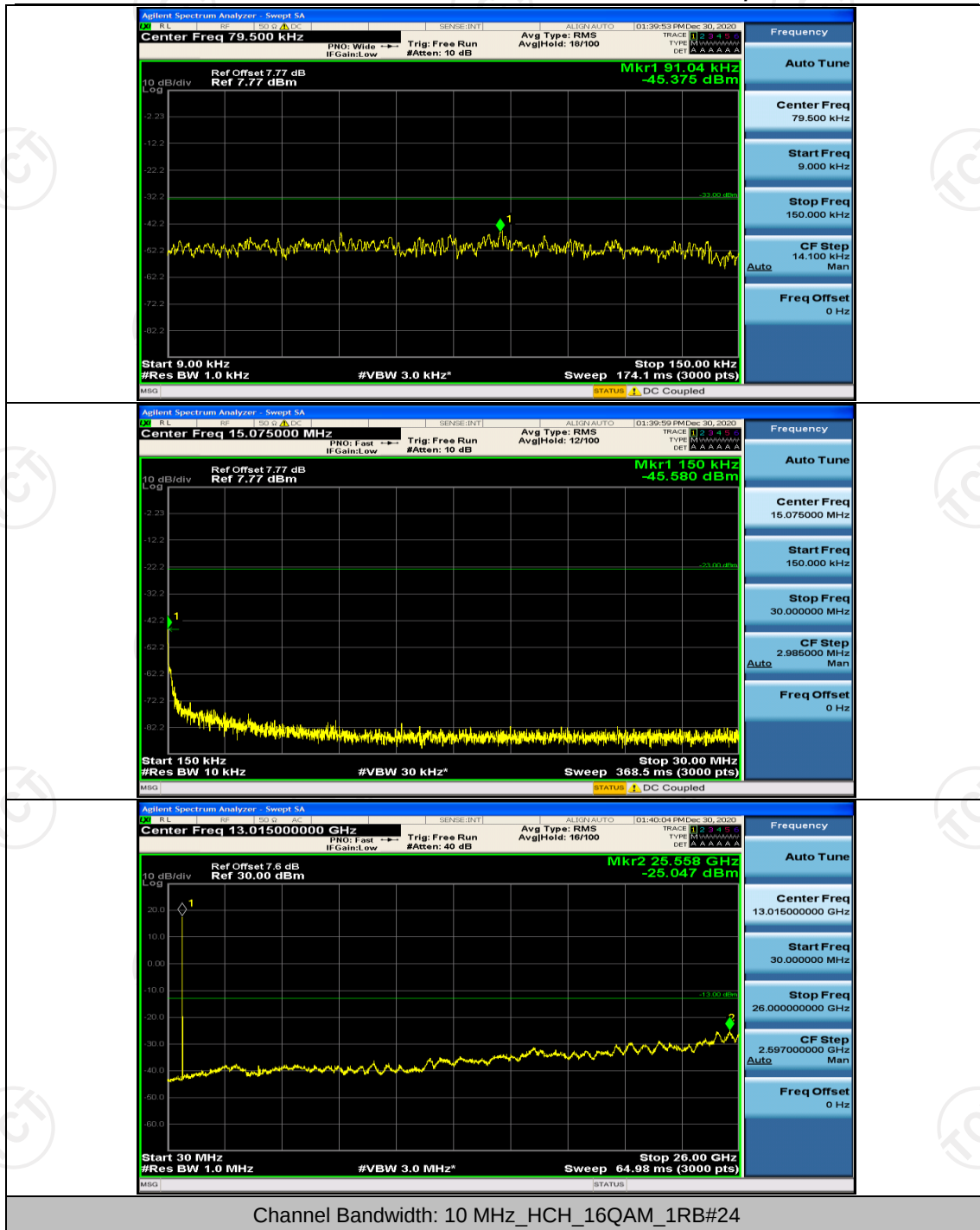


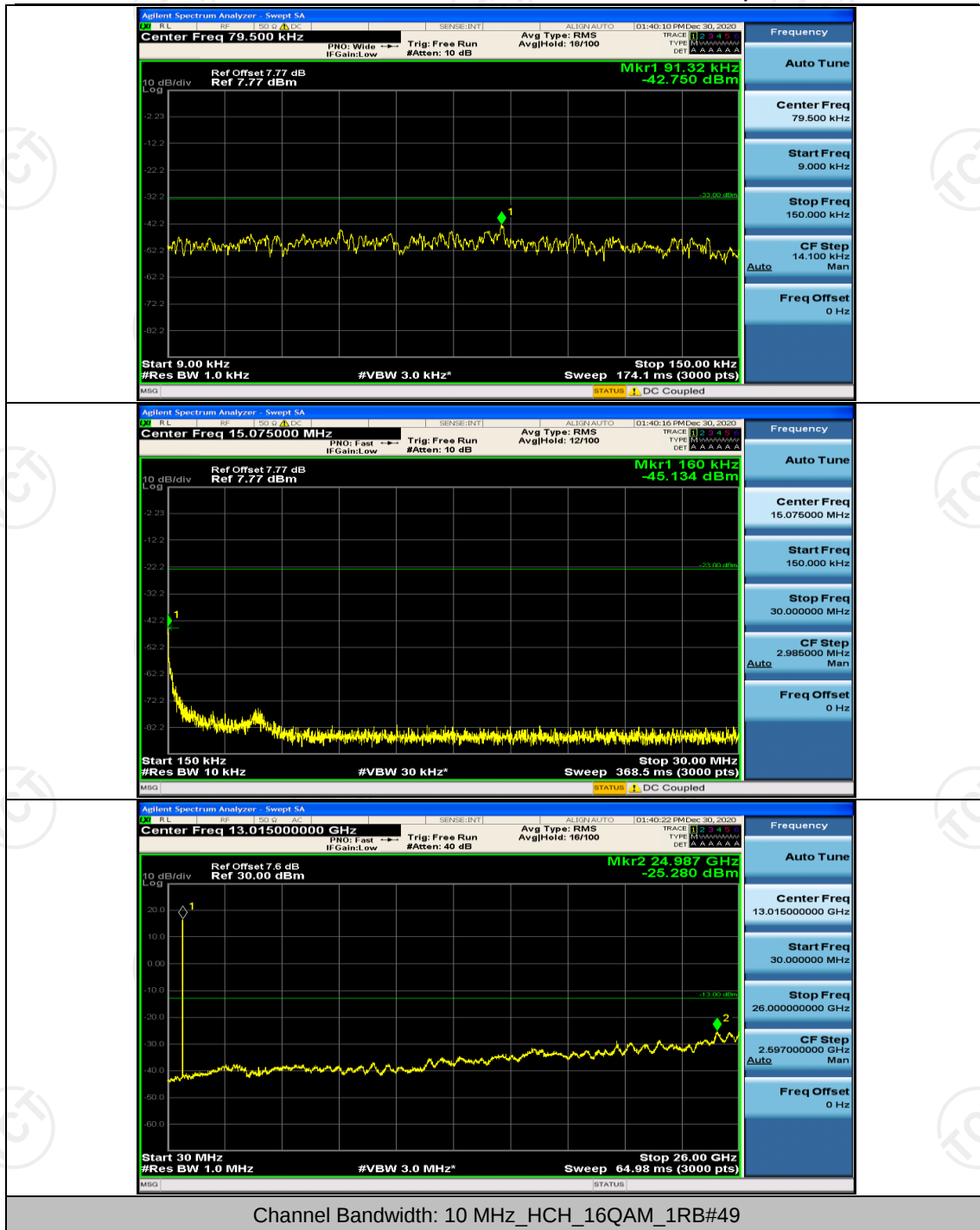


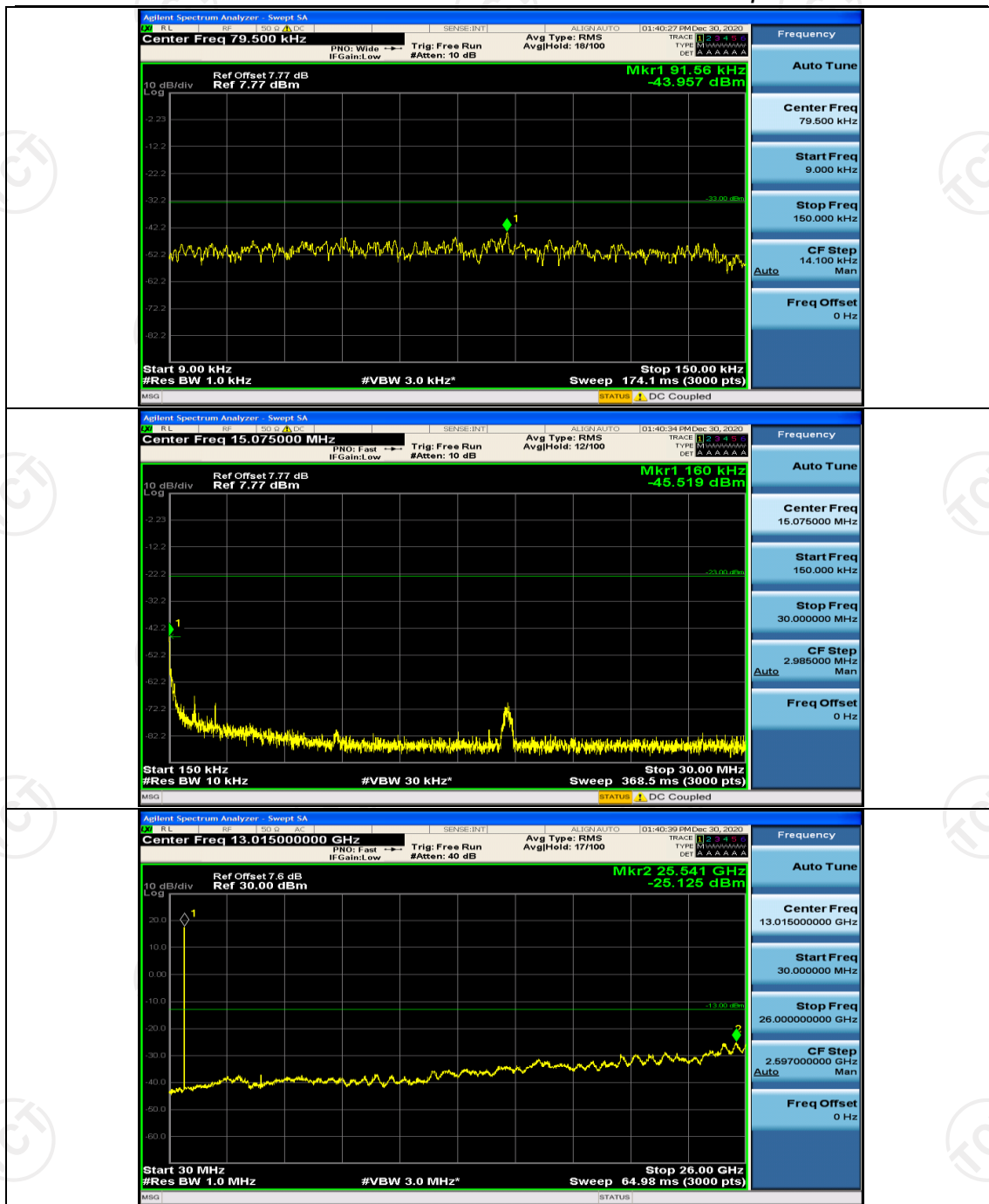












Appendix F: Frequency Stability

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	3.6	25	-27.78	-0.039183	± 2.5	PASS
		3.8	25	-38.74	-0.054638	± 2.5	PASS
		4.35	25	-4.63	-0.006537	± 2.5	PASS
	MCH	3.6	25	-13.85	-0.019531	± 2.5	PASS
		3.8	25	-3.85	-0.005420	± 2.5	PASS
		4.35	25	-2.07	-0.002917	± 2.5	PASS
	HCH	3.6	25	-11.64	-0.016377	± 2.5	PASS
		3.8	25	18.17	0.025624	± 2.5	PASS
		4.35	25	-8.71	-0.012210	± 2.5	PASS
16QAM	LCH	3.6	25	2.69	0.003769	± 2.5	PASS
		3.8	25	-38.97	-0.055155	± 2.5	PASS
		4.35	25	28.00	0.039625	± 2.5	PASS
	MCH	3.6	25	-1.09	-0.001531	± 2.5	PASS
		3.8	25	5.06	0.007122	± 2.5	PASS
		4.35	25	19.91	0.028007	± 2.5	PASS
	HCH	3.6	25	31.64	0.044505	± 2.5	PASS
		3.8	25	40.51	0.056779	± 2.5	PASS
		4.35	25	2.98	0.004191	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.8	-30	-33.99	-0.047872	± 2.5	PASS
		3.8	-20	-2.33	-0.003284	± 2.5	PASS
		3.8	-10	-12.77	-0.017992	± 2.5	PASS
		3.8	0	-3.03	-0.004250	± 2.5	PASS
		3.8	10	-12.17	-0.017062	± 2.5	PASS
		3.8	20	-11.39	-0.016117	± 2.5	PASS
		3.8	30	-16.59	-0.023488	± 2.5	PASS
		3.8	40	-19.90	-0.028165	± 2.5	PASS
		3.8	50	-24.65	-0.034887	± 2.5	PASS
	MCH	3.8	-30	-15.59	-0.021992	± 2.5	PASS
		3.8	-20	-4.09	-0.005754	± 2.5	PASS
		3.8	-10	-10.96	-0.015412	± 2.5	PASS
		3.8	0	-18.57	-0.026115	± 2.5	PASS
		3.8	10	-25.26	-0.035531	± 2.5	PASS

		3.8	20	-3.18	-0.004473	± 2.5	PASS
		3.8	30	-1.03	-0.001451	± 2.5	PASS
		3.8	40	4.62	0.006508	± 2.5	PASS
		3.8	50	7.40	0.010417	± 2.5	PASS
	HCH	3.8	-30	1.44	0.002032	± 2.5	PASS
		3.8	-20	8.71	0.012253	± 2.5	PASS
		3.8	-10	19.24	0.027061	± 2.5	PASS
		3.8	0	28.28	0.039777	± 2.5	PASS
		3.8	10	36.88	0.051869	± 2.5	PASS
		3.8	20	16.54	0.023177	± 2.5	PASS
		3.8	30	28.77	0.040319	± 2.5	PASS
		3.8	40	41.81	0.058604	± 2.5	PASS
		3.8	50	4.36	0.006115	± 2.5	PASS
16QAM	LCH	3.8	-30	41.77	0.058832	± 2.5	PASS
		3.8	-20	32.46	0.045716	± 2.5	PASS
		3.8	-10	23.03	0.032438	± 2.5	PASS
		3.8	0	14.88	0.020954	± 2.5	PASS
		3.8	10	7.82	0.011021	± 2.5	PASS
		3.8	20	-48.18	-0.068195	± 2.5	PASS
		3.8	30	-7.21	-0.010205	± 2.5	PASS
		3.8	40	-17.31	-0.024500	± 2.5	PASS
		3.8	50	-26.25	-0.037155	± 2.5	PASS
	MCH	3.8	-30	0.36	0.000504	± 2.5	PASS
		3.8	-20	-13.65	-0.019248	± 2.5	PASS
		3.8	-10	-14.13	-0.019934	± 2.5	PASS
		3.8	0	-13.13	-0.018522	± 2.5	PASS
		3.8	10	-12.00	-0.016928	± 2.5	PASS
		3.8	20	7.27	0.010235	± 2.5	PASS
		3.8	30	2.73	0.003848	± 2.5	PASS
		3.8	40	-3.85	-0.005420	± 2.5	PASS
		3.8	50	-8.14	-0.011464	± 2.5	PASS
	HCH	3.8	-30	3.95	0.005553	± 2.5	PASS
		3.8	-20	6.82	0.009611	± 2.5	PASS
		3.8	-10	15.23	0.021458	± 2.5	PASS
		3.8	0	22.80	0.032116	± 2.5	PASS
		3.8	10	29.71	0.041847	± 2.5	PASS
		3.8	20	40.54	0.056819	± 2.5	PASS
		3.8	30	41.31	0.057902	± 2.5	PASS
		3.8	40	39.63	0.055536	± 2.5	PASS
		3.8	50	37.49	0.052549	± 2.5	PASS