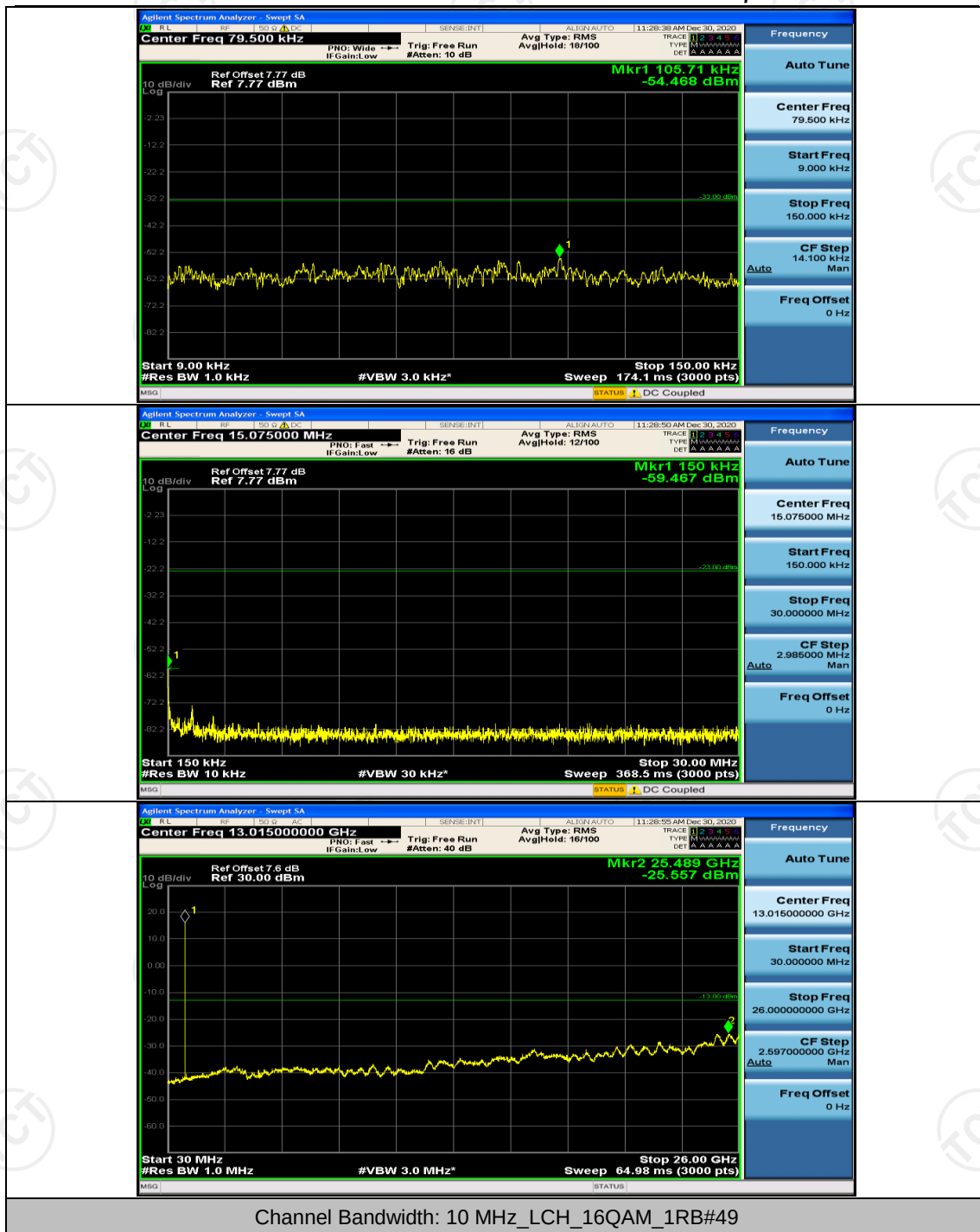
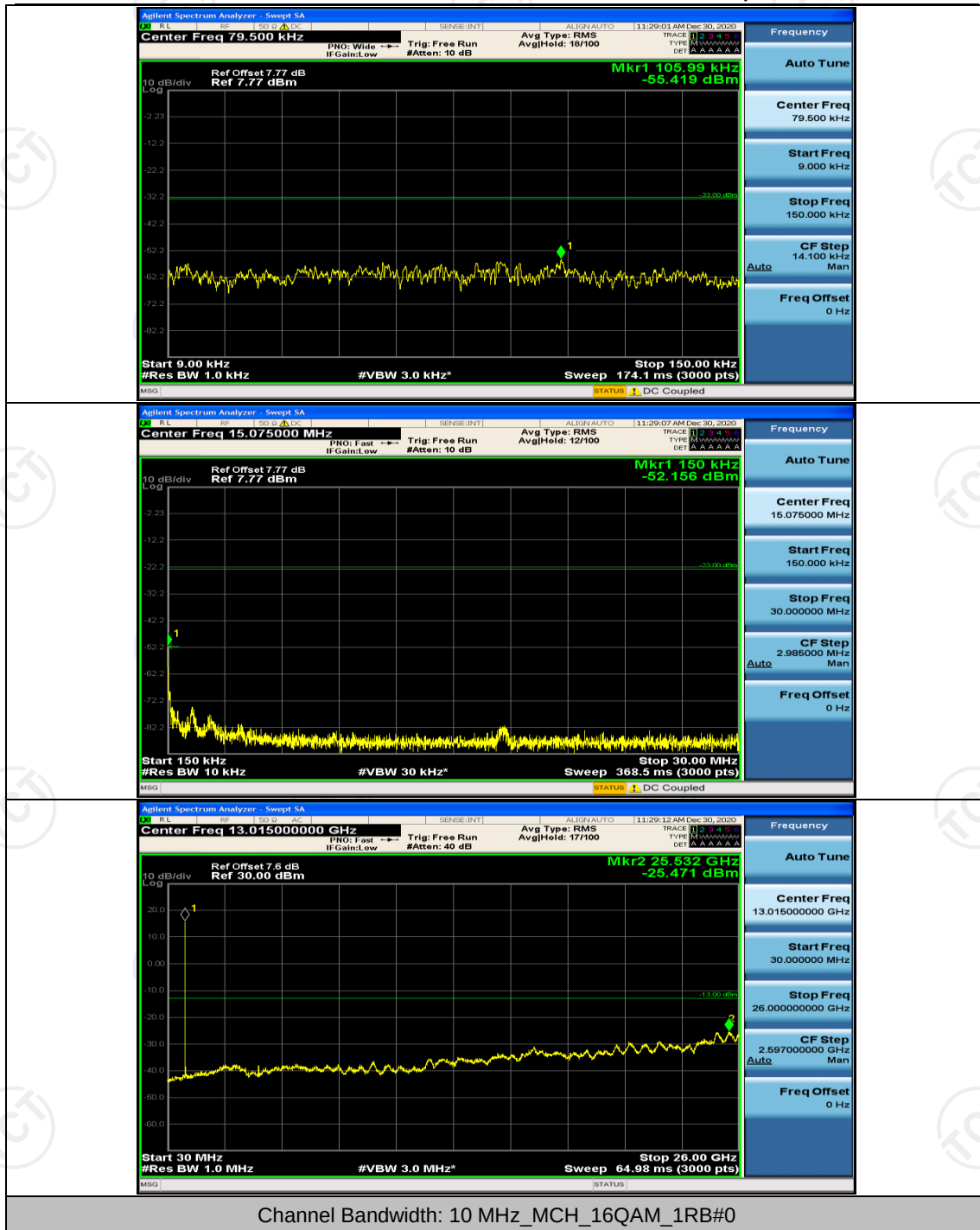
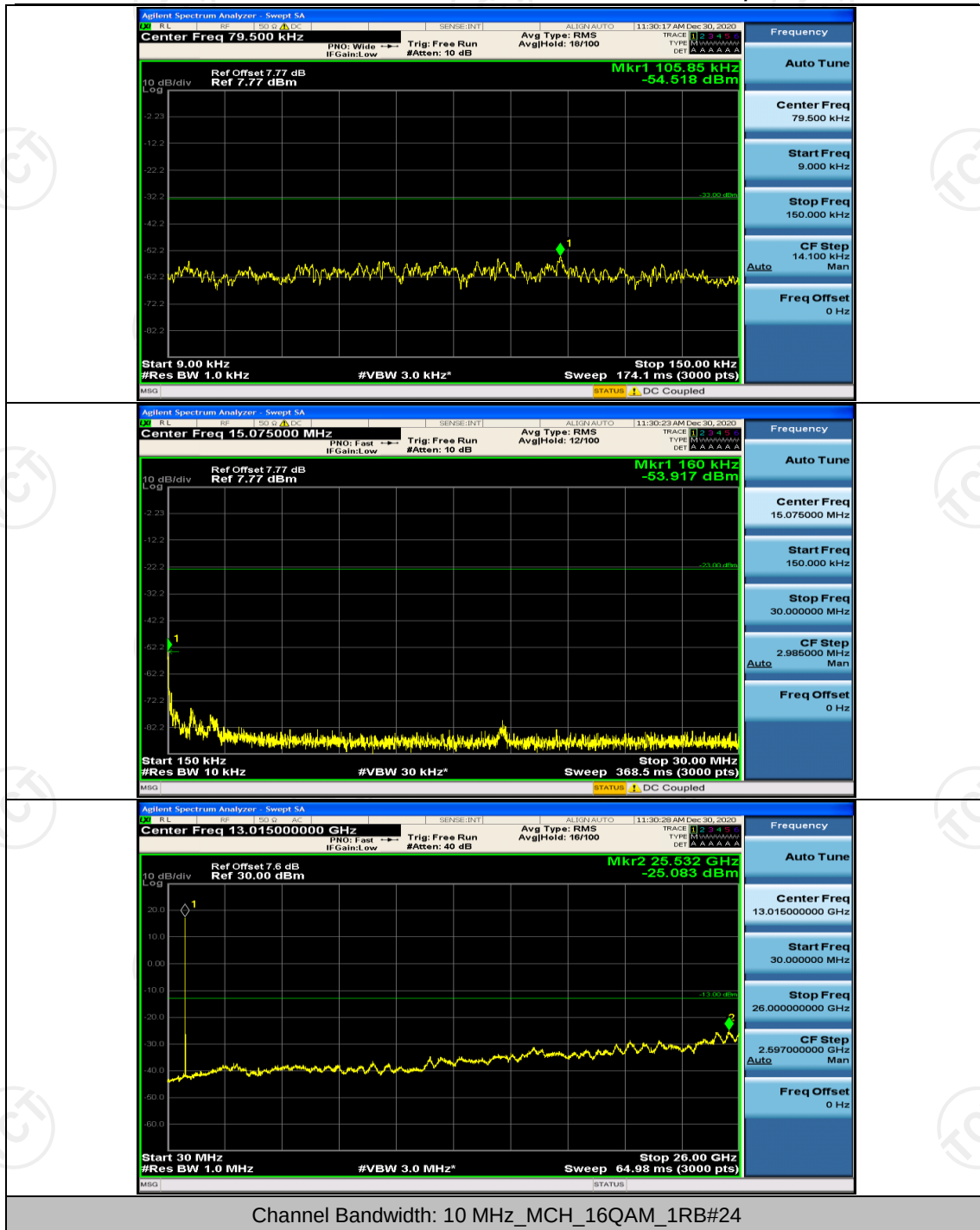
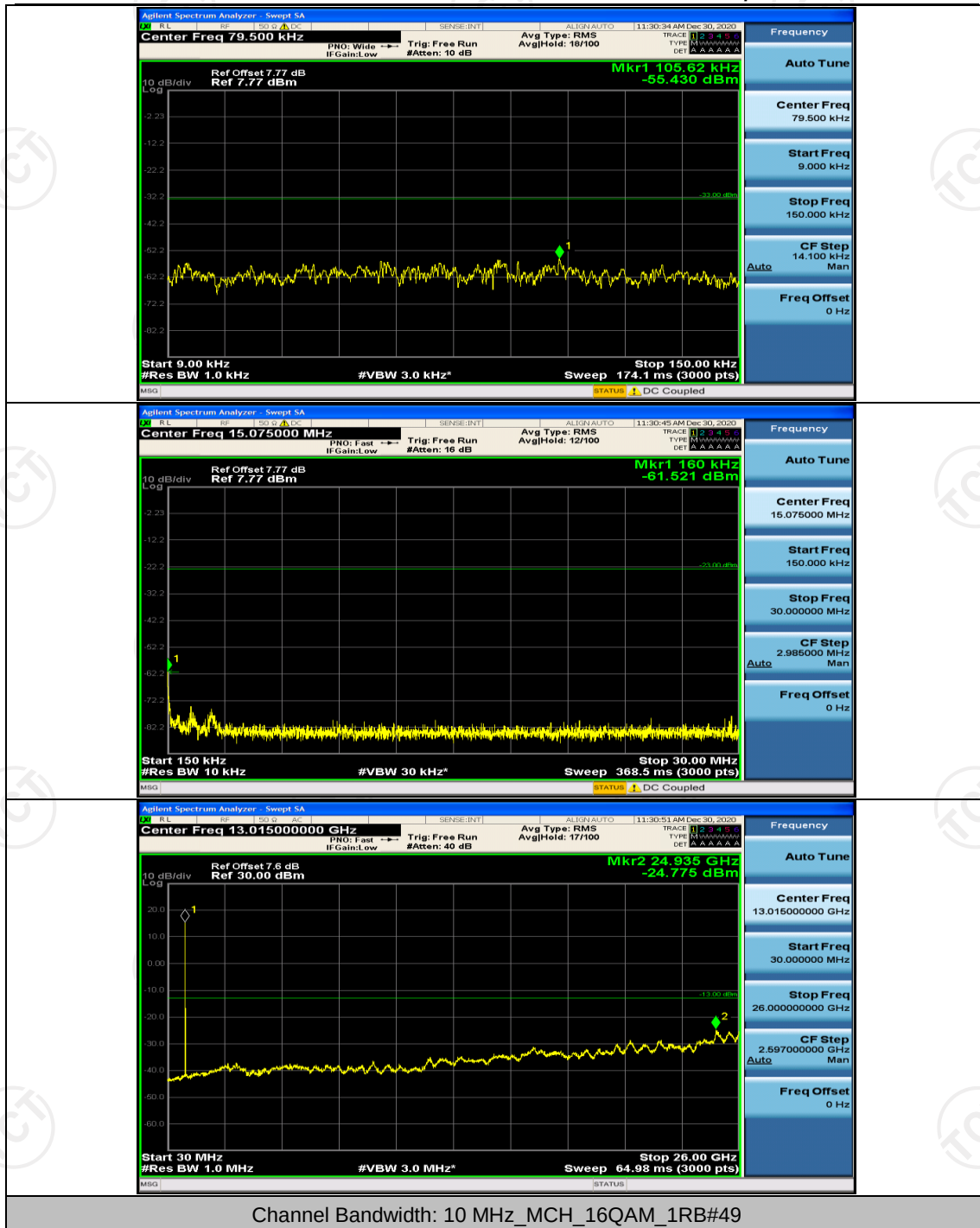
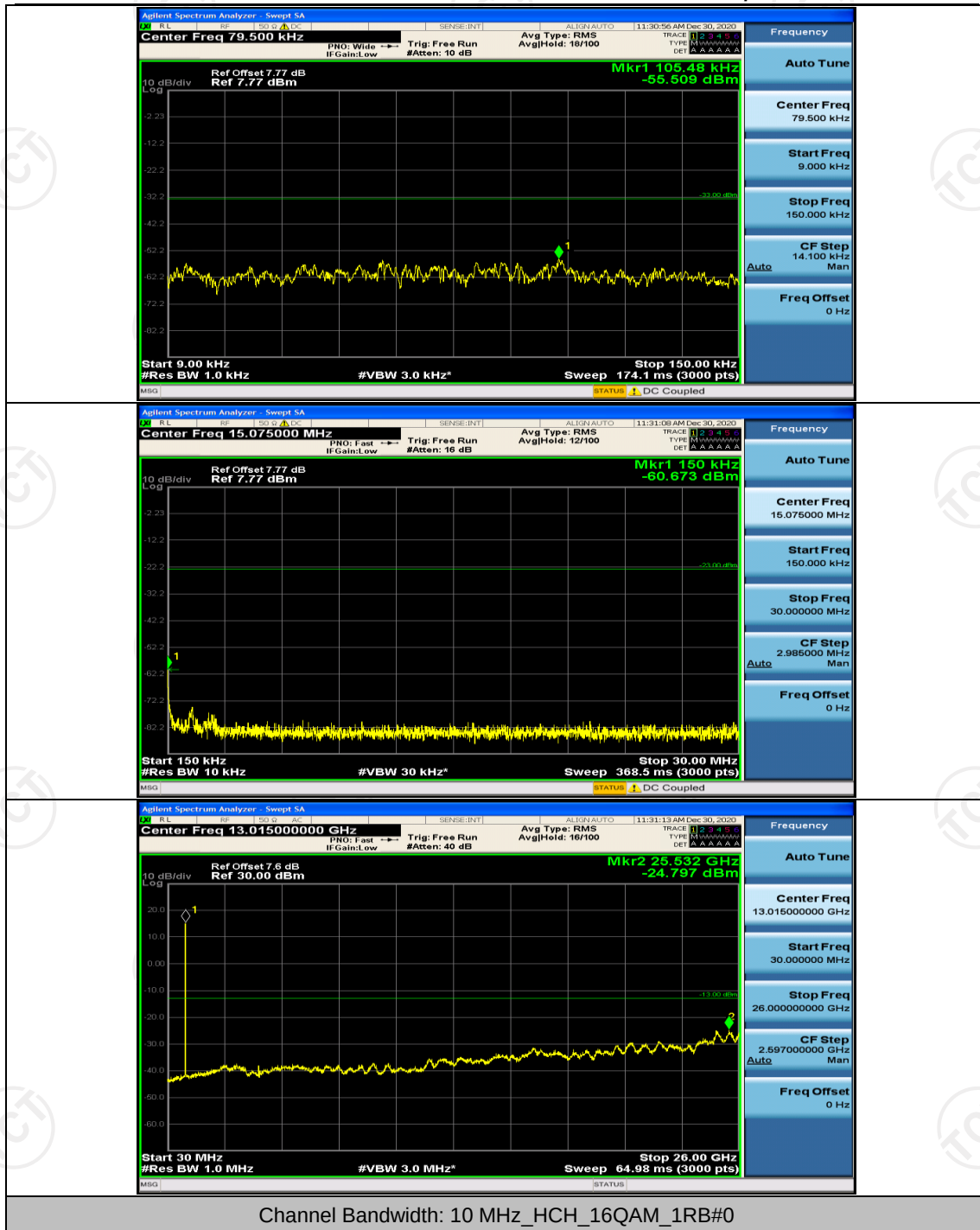


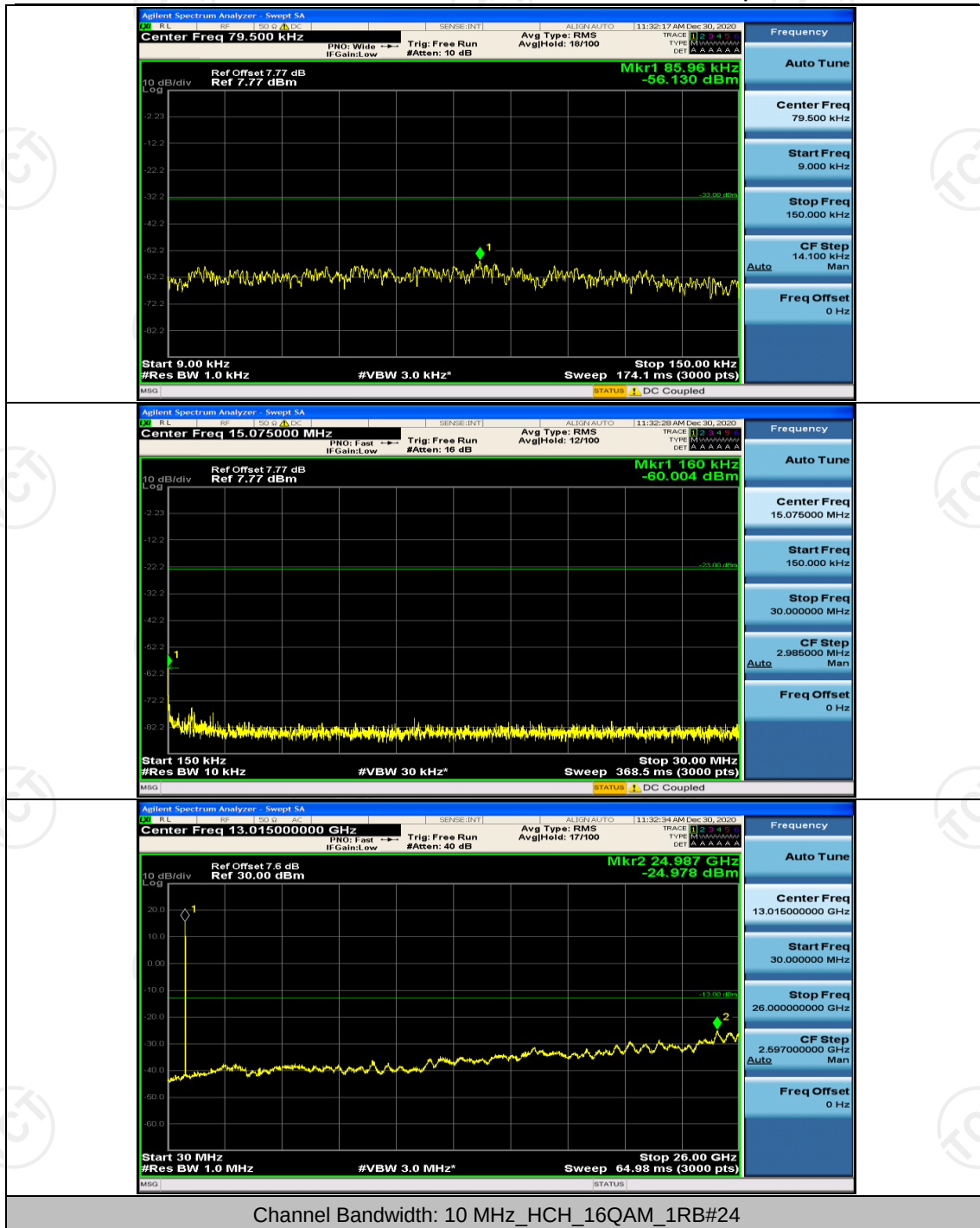


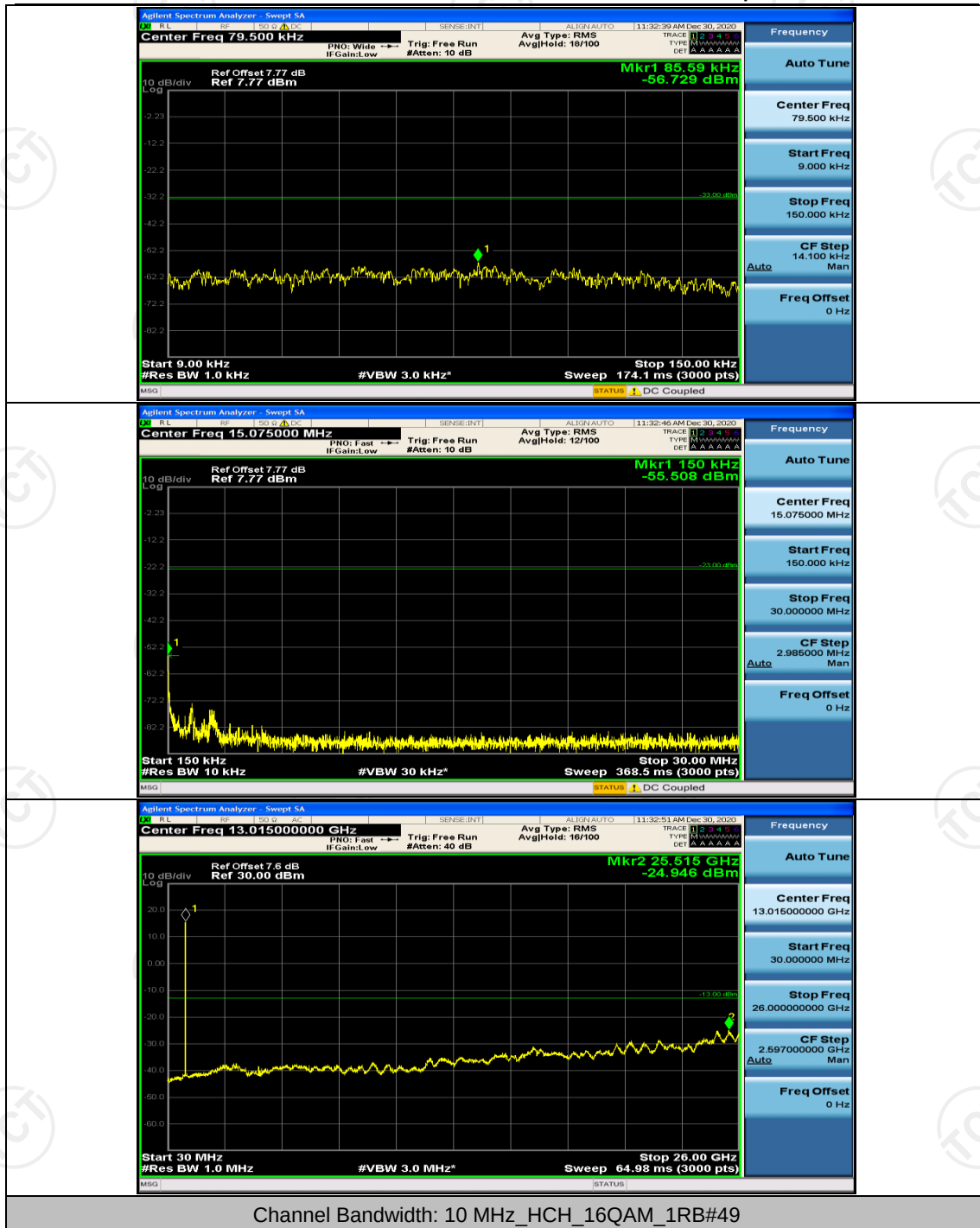


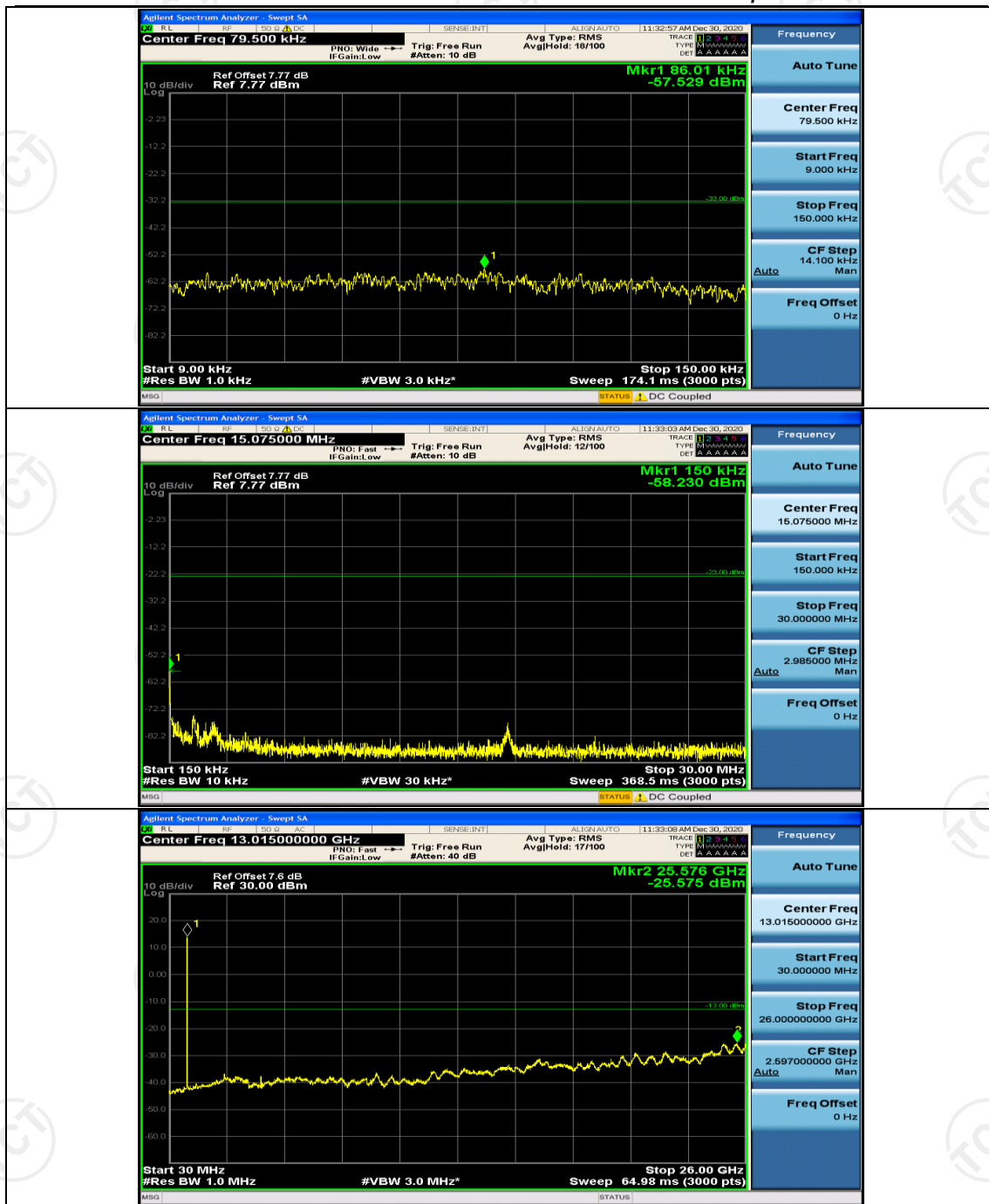












Appendix F: Frequency Stability

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	4.88	0.005831	± 2.5	PASS
		3.8	25	5.42	0.006481	± 2.5	PASS
		4.35	25	5.59	0.006687	± 2.5	PASS
	MCH	3.6	25	4.23	0.005062	± 2.5	PASS
		3.8	25	7.90	0.009440	± 2.5	PASS
		4.35	25	5.87	0.007105	± 2.5	PASS
	HCH	3.6	25	1.87	0.002240	± 2.5	PASS
		3.8	25	2.47	0.002958	± 2.5	PASS
		4.35	25	3.46	0.004138	± 2.5	PASS
16QAM	LCH	3.6	25	5.71	0.006823	± 2.5	PASS
		3.8	25	-3.88	-0.004701	± 2.5	PASS
		4.35	25	13.98	0.016510	± 2.5	PASS
	MCH	3.6	25	6.02	0.007200	± 2.5	PASS
		3.8	25	-12.26	-0.014656	± 2.5	PASS
		4.35	25	6.92	0.008277	± 2.5	PASS
	HCH	3.6	25	5.84	0.006977	± 2.5	PASS
		3.8	25	5.89	0.007046	± 2.5	PASS
		4.35	25	5.39	0.006447	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.8	-30	6.05	0.007330	± 2.5	PASS
		3.8	-20	5.38	0.006516	± 2.5	PASS
		3.8	-10	5.16	0.006256	± 2.5	PASS
		3.8	0	3.72	0.004506	± 2.5	PASS
		3.8	10	5.38	0.006430	± 2.5	PASS
		3.8	20	-6.62	-0.008031	± 2.5	PASS
		3.8	30	-8.67	-0.010512	± 2.5	PASS
		3.8	40	-9.28	-0.011257	± 2.5	PASS
		3.8	50	-11.53	-0.013981	± 2.5	PASS
	MCH	3.8	-30	2.19	0.002648	± 2.5	PASS
		3.8	-20	2.12	0.002562	± 2.5	PASS
		3.8	-10	1.27	0.001540	± 2.5	PASS
		3.8	0	2.45	0.002960	± 2.5	PASS
		3.8	10	14.83	0.017524	± 2.5	PASS

		3.8	20	2.89	0.003454	± 2.5	PASS
		3.8	30	-0.20	-0.000239	± 2.5	PASS
		3.8	40	-5.14	-0.006139	± 2.5	PASS
		3.8	50	-5.49	-0.006567	± 2.5	PASS
	HCH	3.8	-30	14.28	0.016865	± 2.5	PASS
		3.8	-20	8.34	0.009841	± 2.5	PASS
		3.8	-10	8.54	0.010077	± 2.5	PASS
		3.8	0	5.97	0.007039	± 2.5	PASS
		3.8	10	5.91	0.006971	± 2.5	PASS
		3.8	20	6.91	0.008145	± 2.5	PASS
		3.8	30	-0.14	-0.000169	± 2.5	PASS
		3.8	40	-7.75	-0.009140	± 2.5	PASS
		3.8	50	-14.92	-0.017588	± 2.5	PASS
16QAM	LCH	3.8	-30	4.99	0.005968	± 2.5	PASS
		3.8	-20	5.92	0.007080	± 2.5	PASS
		3.8	-10	5.88	0.007029	± 2.5	PASS
		3.8	0	5.76	0.006892	± 2.5	PASS
		3.8	10	4.48	0.005353	± 2.5	PASS
		3.8	20	-0.62	-0.000746	± 2.5	PASS
		3.8	30	-1.92	-0.002324	± 2.5	PASS
		3.8	40	-2.76	-0.003348	± 2.5	PASS
		3.8	50	-3.59	-0.004354	± 2.5	PASS
	MCH	3.8	-30	7.87	0.009531	± 2.5	PASS
		3.8	-20	8.23	0.009964	± 2.5	PASS
		3.8	-10	6.21	0.007521	± 2.5	PASS
		3.8	0	6.25	0.007573	± 2.5	PASS
		3.8	10	4.19	0.004946	± 2.5	PASS
		3.8	20	-10.47	-0.012518	± 2.5	PASS
		3.8	30	-11.80	-0.014108	± 2.5	PASS
		3.8	40	-11.86	-0.014177	± 2.5	PASS
		3.8	50	-13.55	-0.016195	± 2.5	PASS
	HCH	3.8	-30	10.07	0.012200	± 2.5	PASS
		3.8	-20	4.45	0.005249	± 2.5	PASS
		3.8	-10	4.18	0.004929	± 2.5	PASS
		3.8	0	5.62	0.006634	± 2.5	PASS
		3.8	10	5.04	0.005941	± 2.5	PASS
		3.8	20	-31.27	-0.036863	± 2.5	PASS
		3.8	30	-32.20	-0.037959	± 2.5	PASS
		3.8	40	-30.31	-0.035733	± 2.5	PASS
		3.8	50	-29.27	-0.034502	± 2.5	PASS