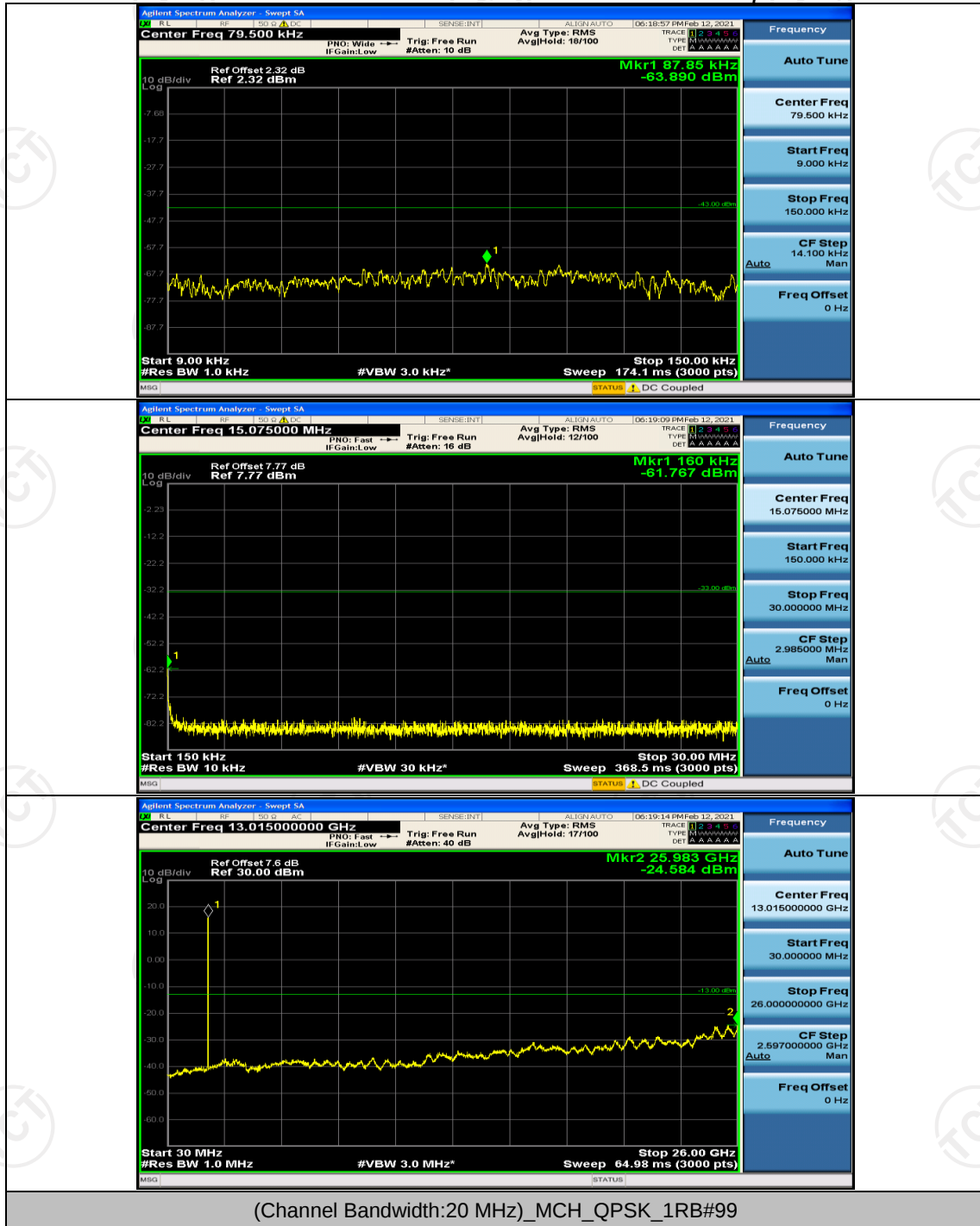
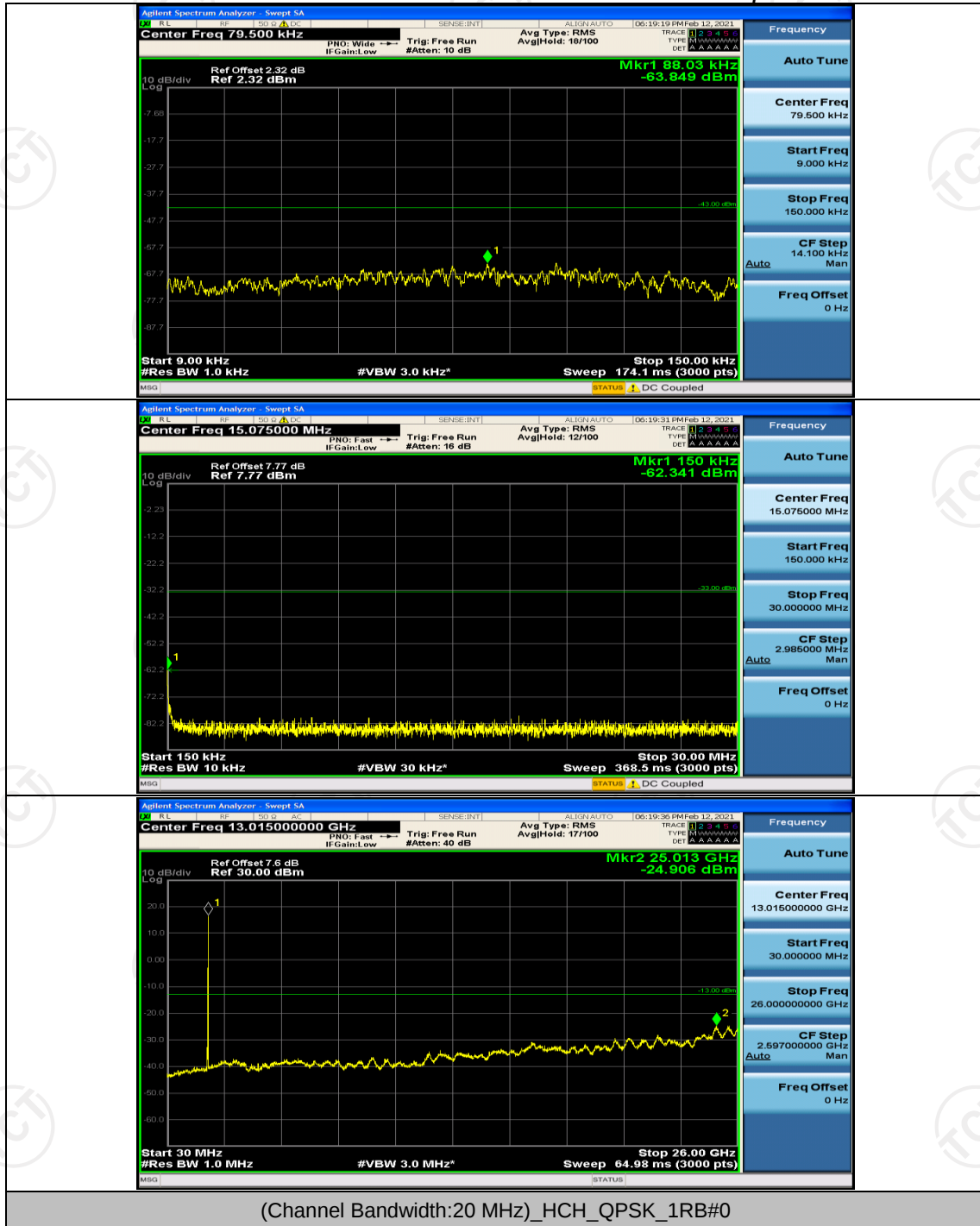
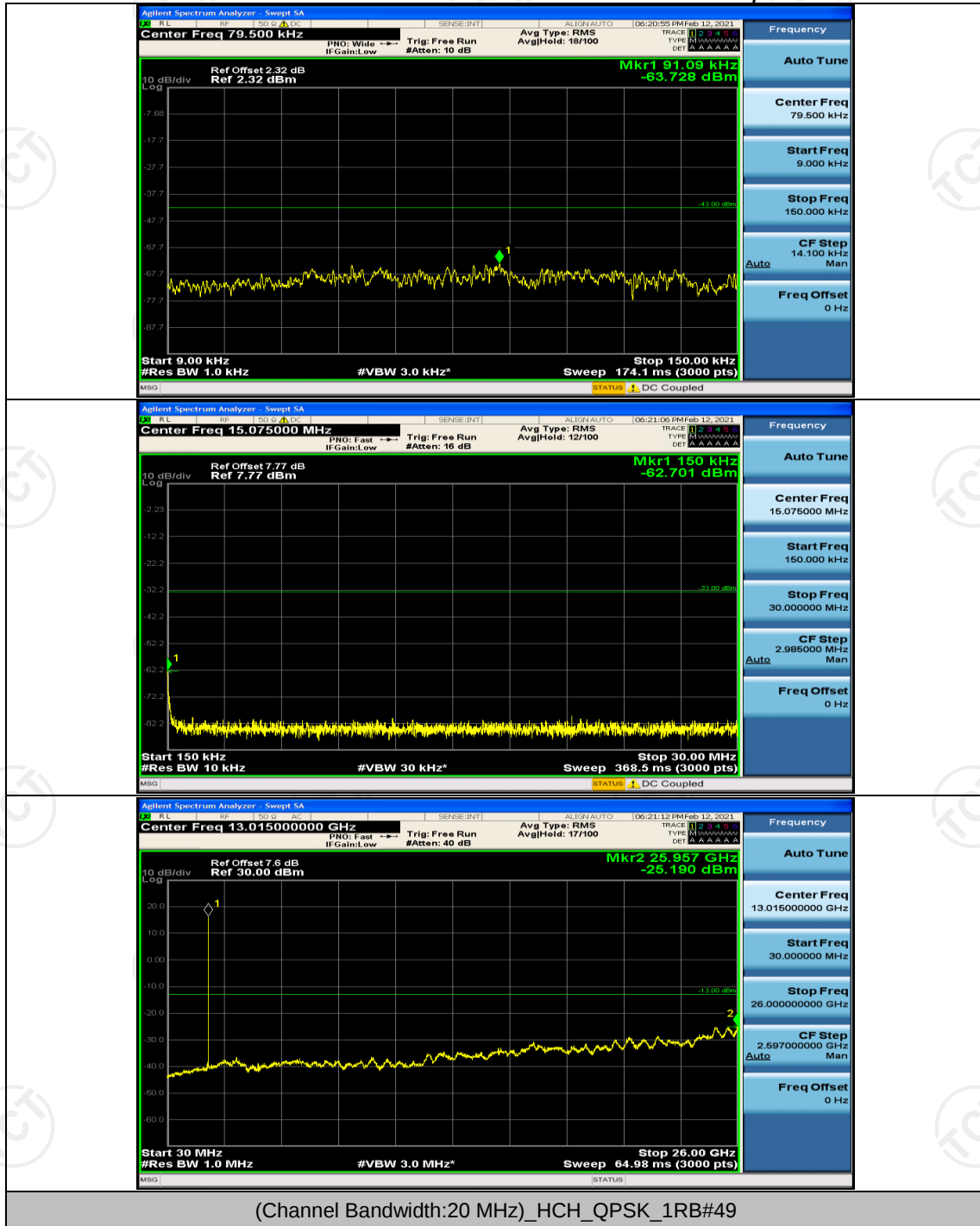
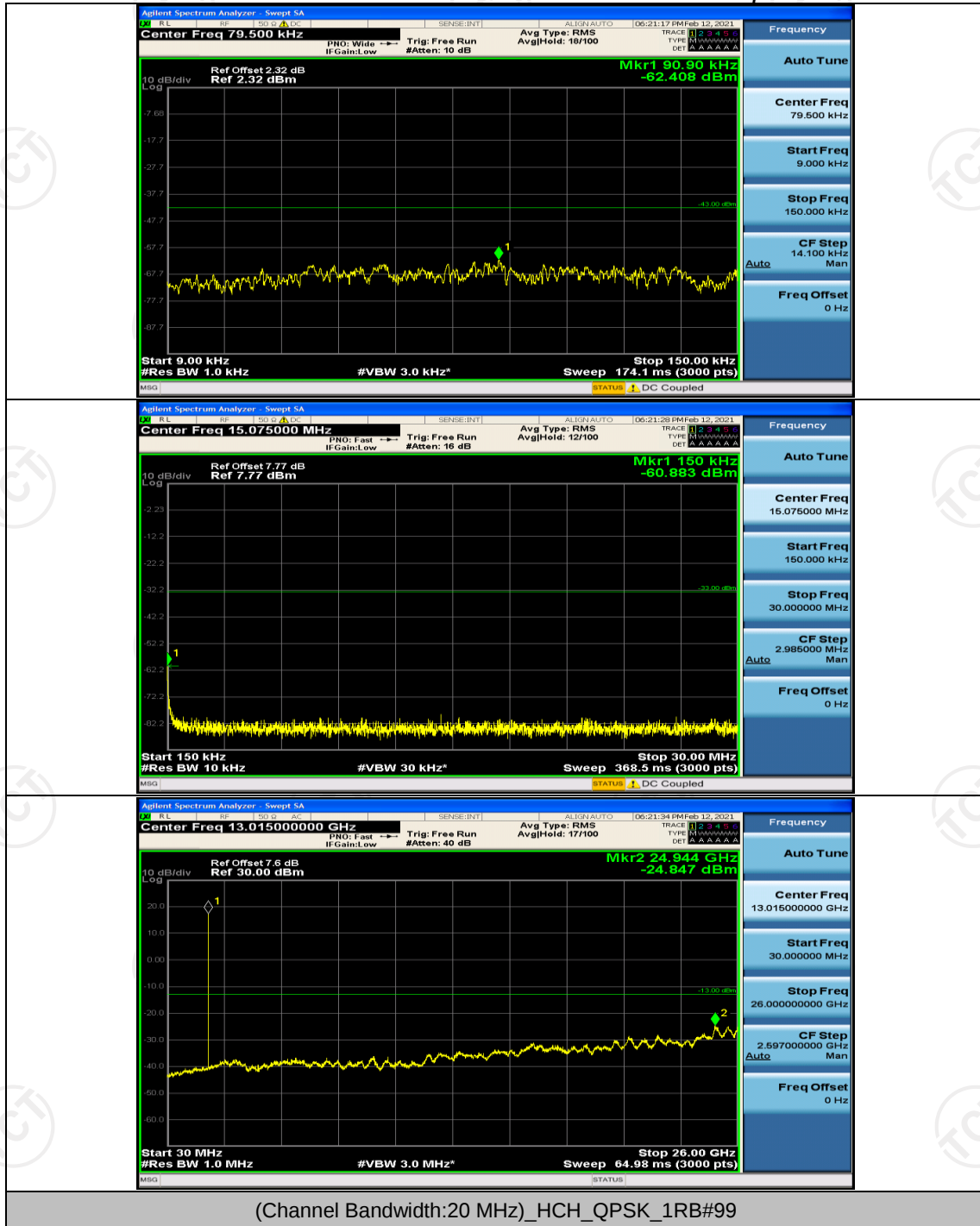
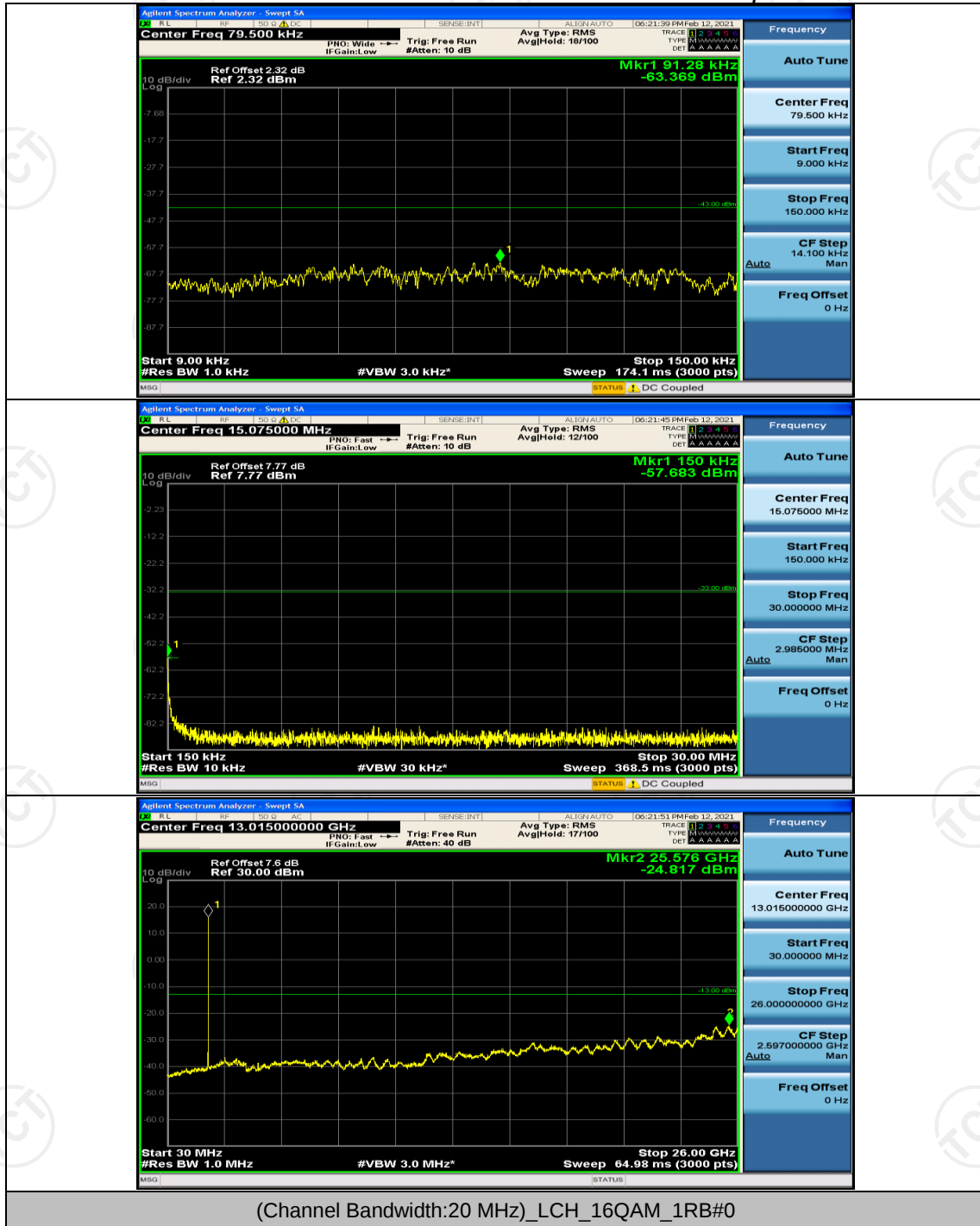


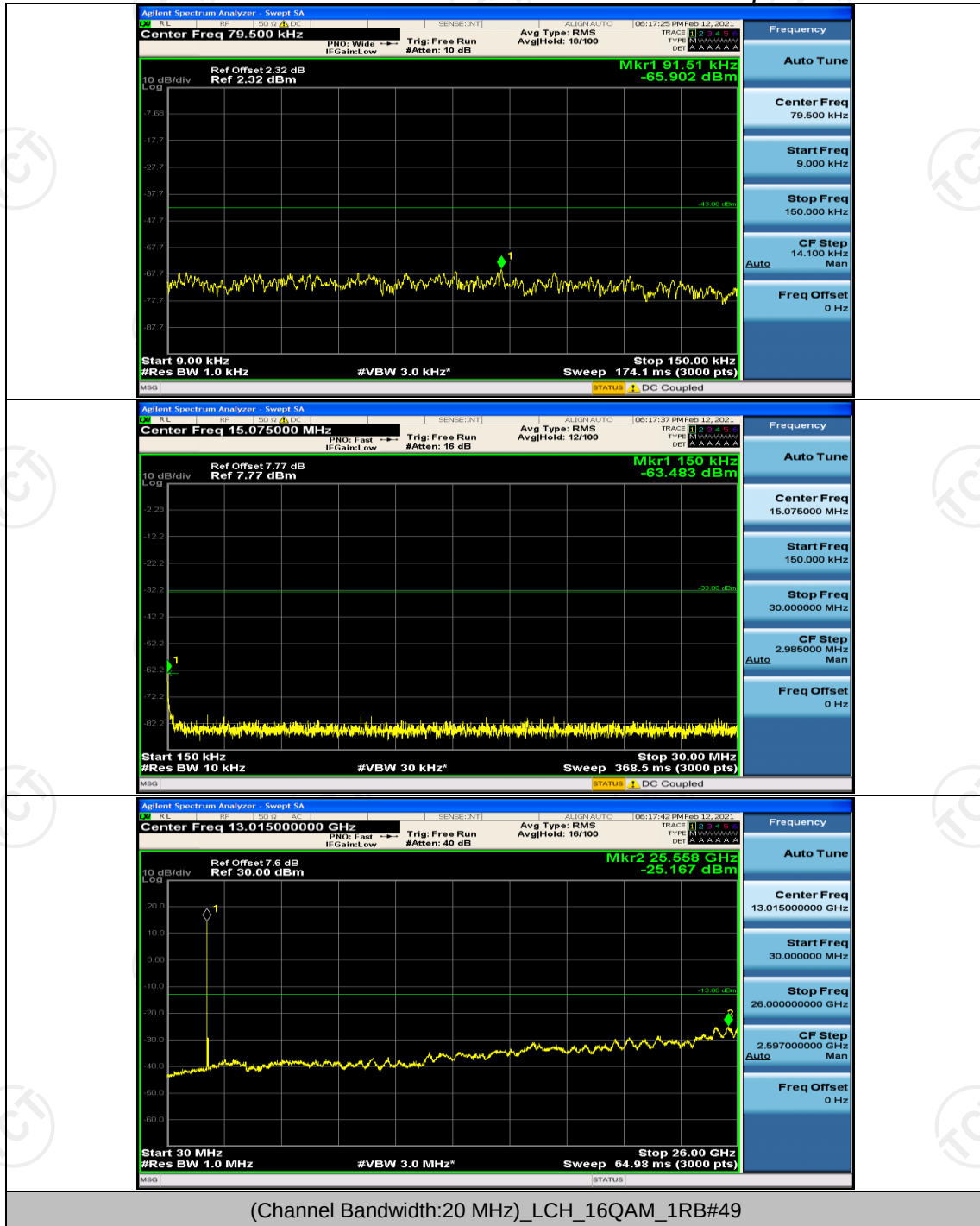


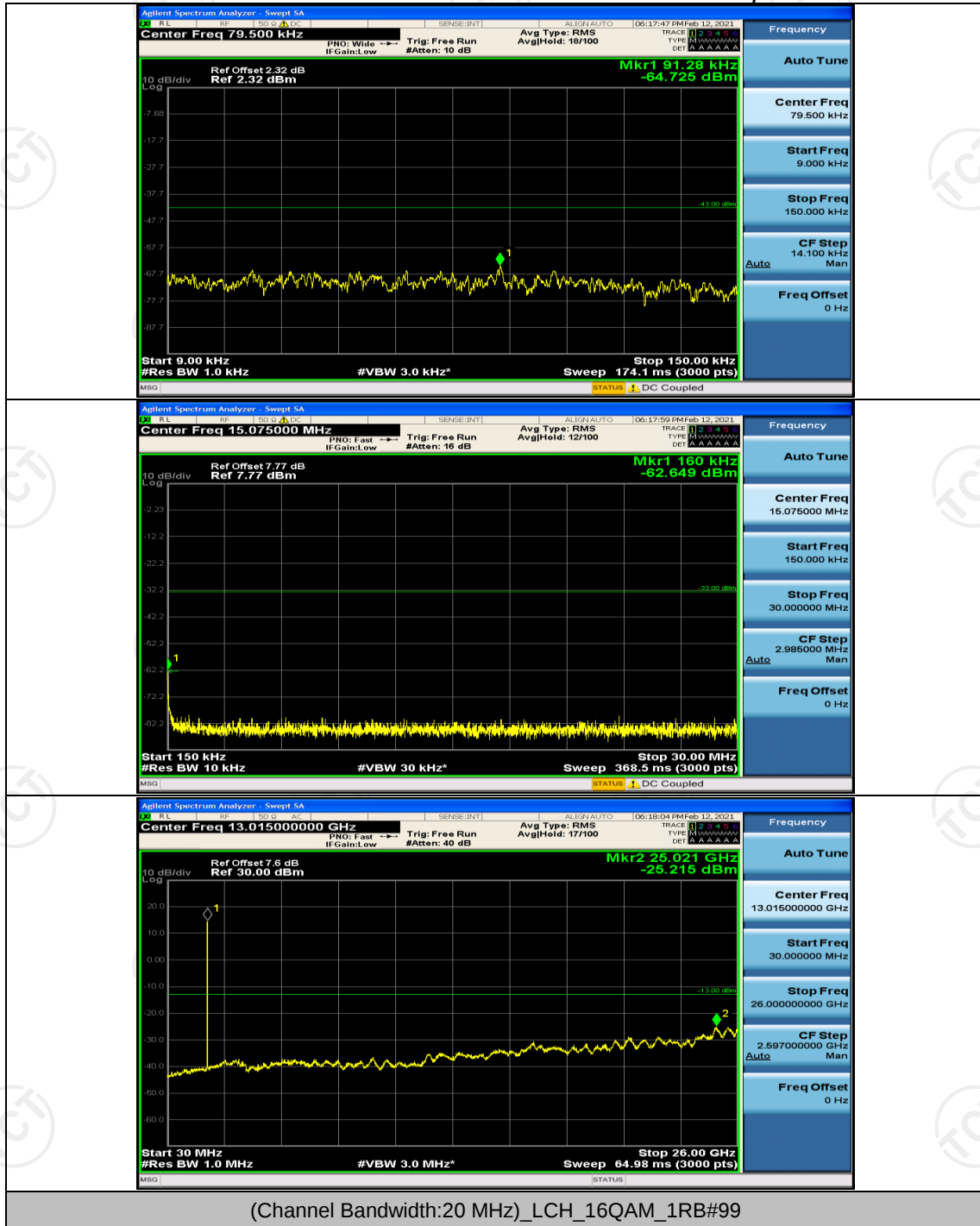


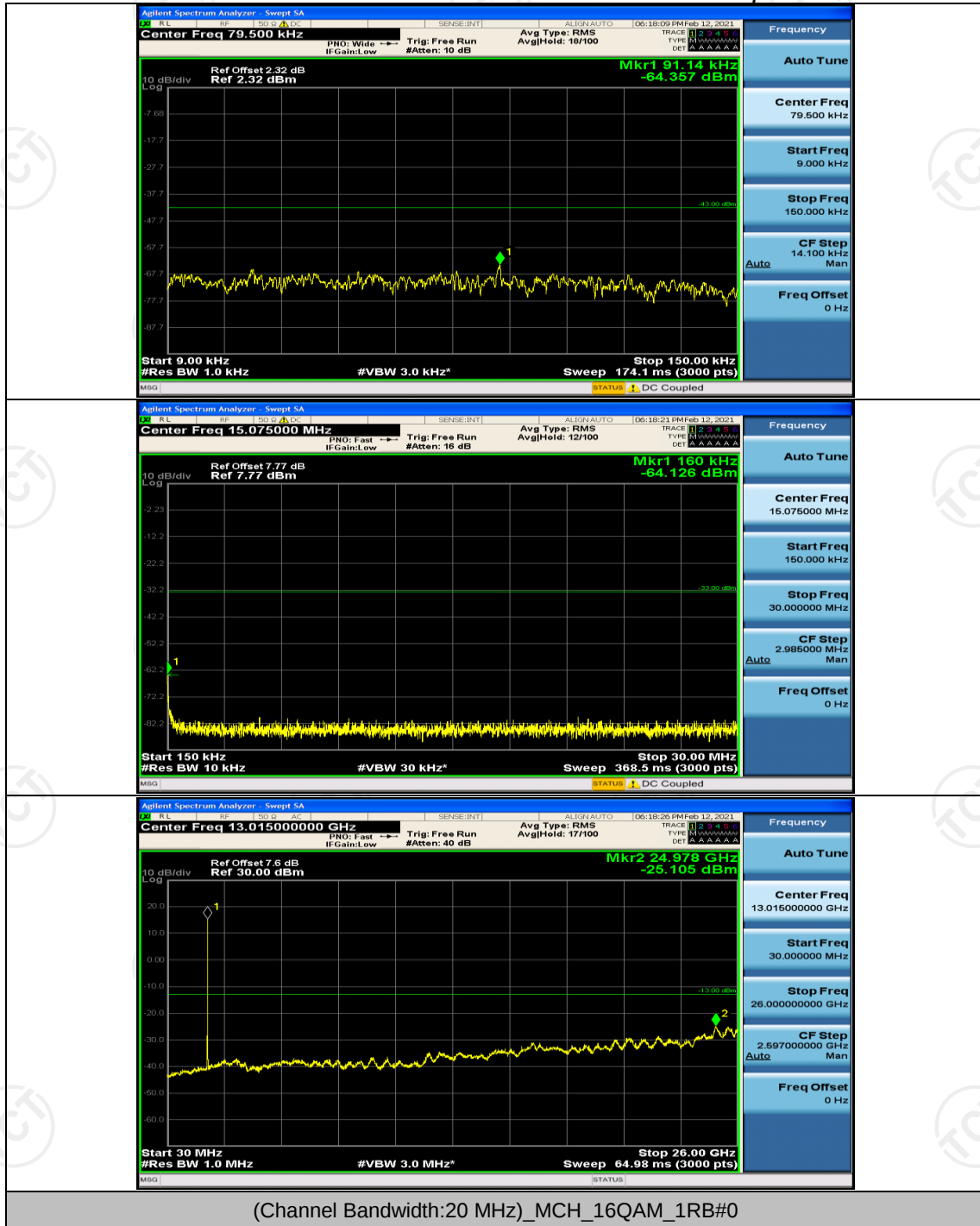


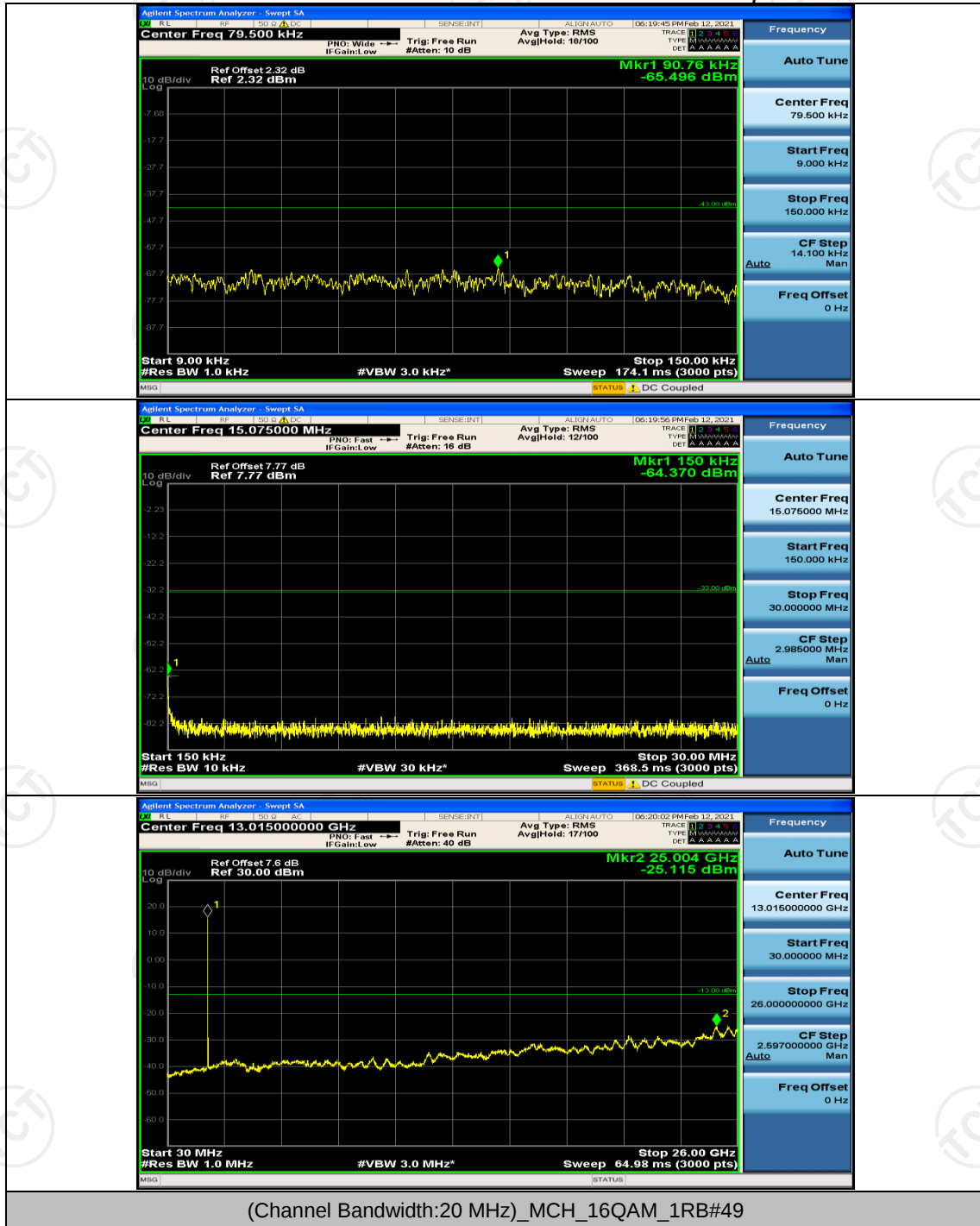


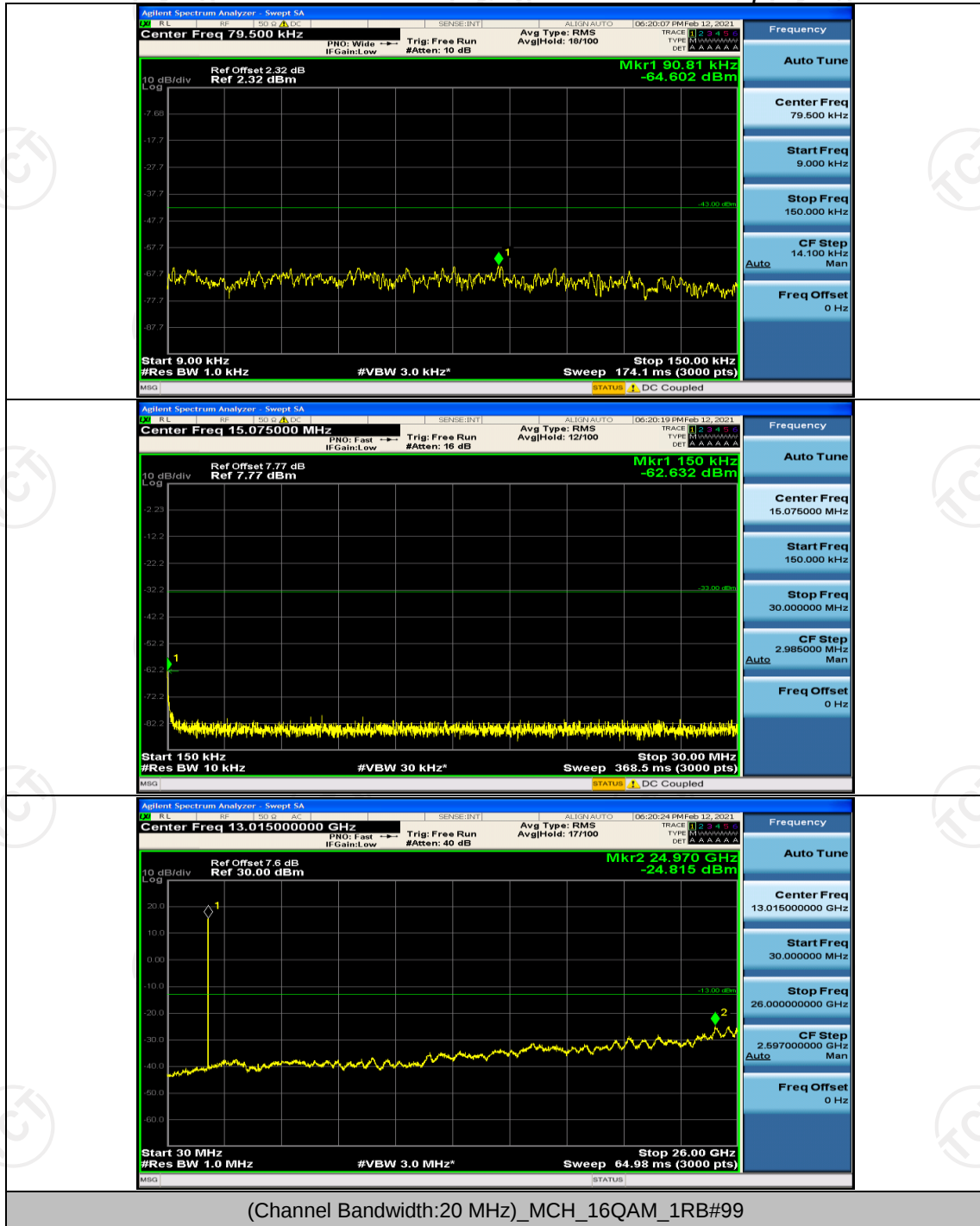


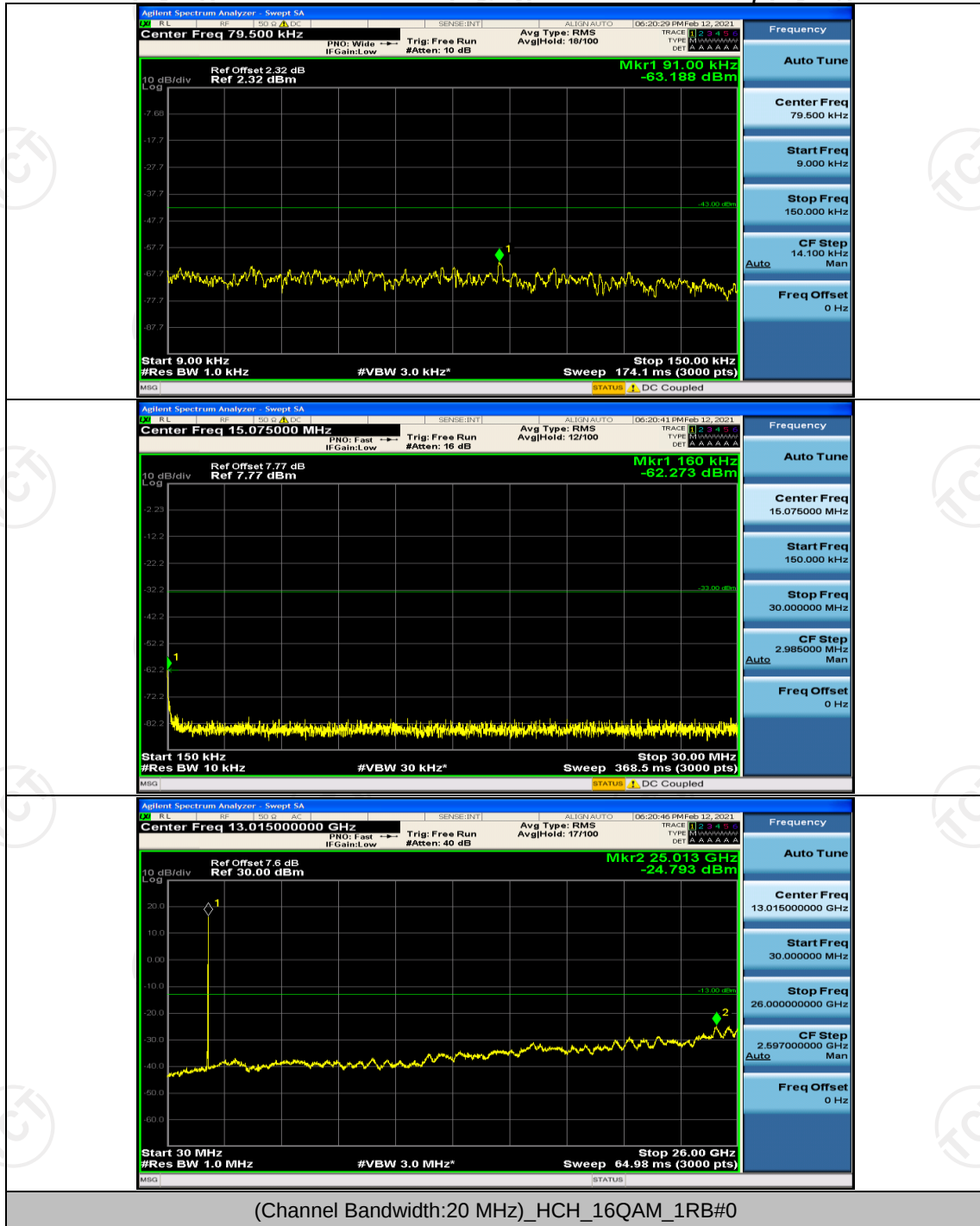


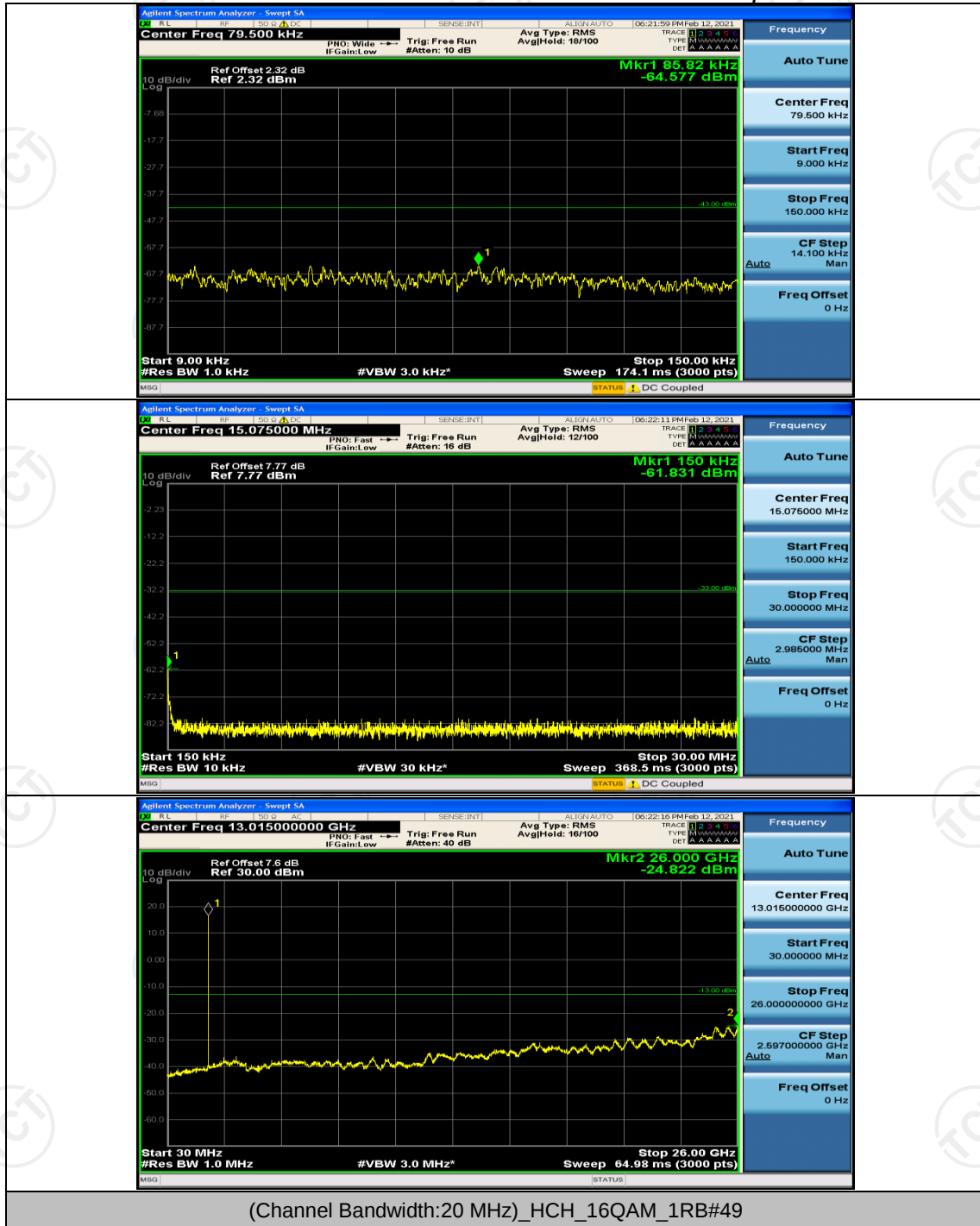


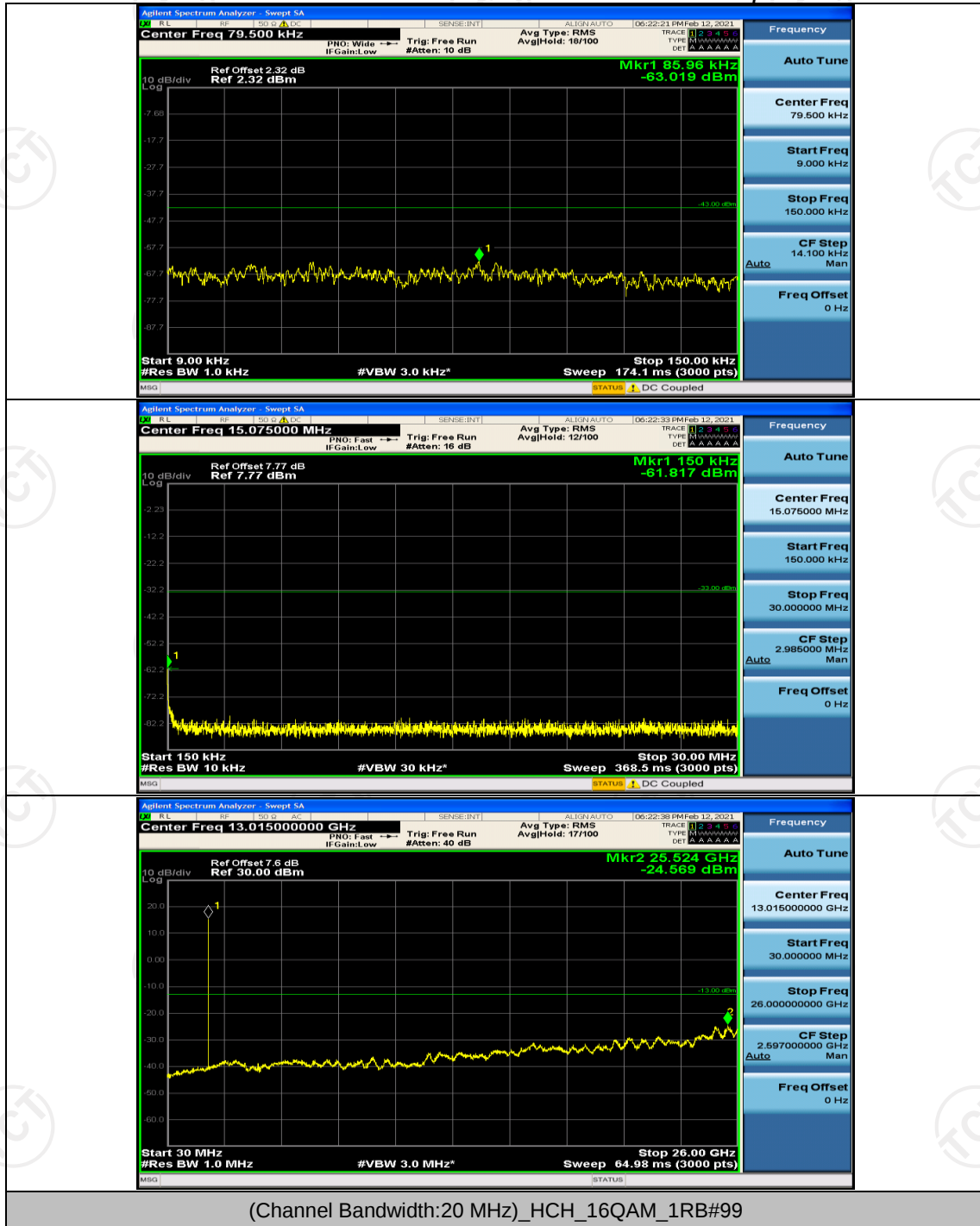


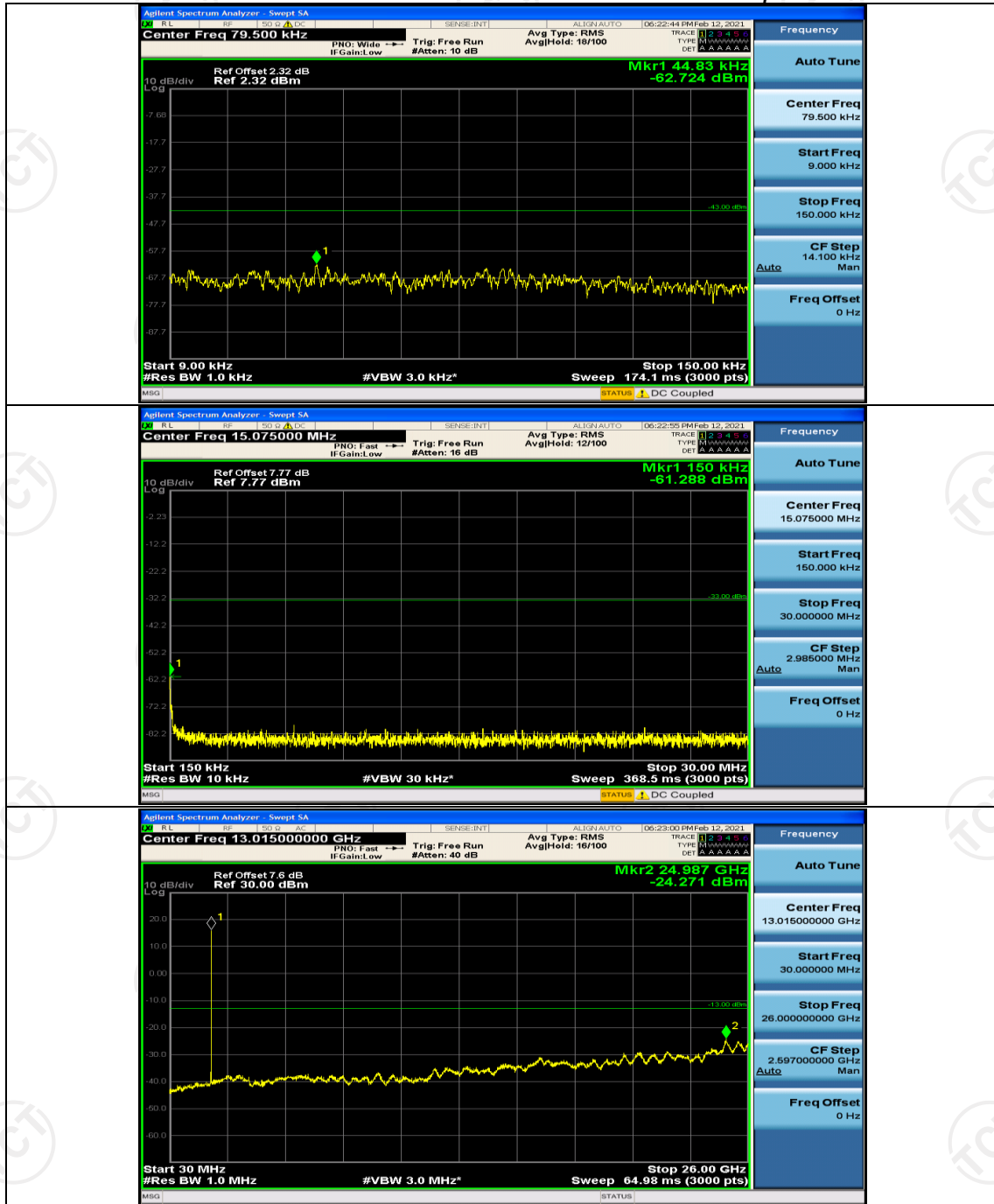












Appendix F: Frequency Stability

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	3.35	25	17.97	0.009419	± 2.5	PASS
		3.85	25	-11.49	-0.006207	± 2.5	PASS
		4.45	25	-9.78	-0.005205	± 2.5	PASS
	MCH	3.35	25	-22.00	-0.011703	± 2.5	PASS
		3.85	25	32.37	0.017219	± 2.5	PASS
		4.45	25	-44.86	-0.023518	± 2.5	PASS
	HCH	3.35	25	-31.76	-0.016649	± 2.5	PASS
		3.85	25	-32.79	-0.017189	± 2.5	PASS
		4.45	25	1.39	0.000727	± 2.5	PASS
16QAM	LCH	3.35	25	-40.98	-0.022094	± 2.5	PASS
		3.85	25	-27.82	-0.014999	± 2.5	PASS
		4.45	25	-20.18	-0.010881	± 2.5	PASS
	MCH	3.35	25	-43.80	-0.023613	± 2.5	PASS
		3.85	25	18.17	0.009664	± 2.5	PASS
		4.45	25	-4.16	-0.002247	± 2.5	PASS
	HCH	3.35	25	-36.96	-0.019954	± 2.5	PASS
		3.85	25	-23.89	-0.012896	± 2.5	PASS
		4.45	25	-47.51	-0.025645	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.85	-30	37.91	0.020164	± 2.5	PASS
		3.85	-20	5.48	0.002914	± 2.5	PASS
		3.85	-10	39.63	0.021077	± 2.5	PASS
		3.85	0	36.49	0.019411	± 2.5	PASS
		3.85	10	-2.12	-0.001126	± 2.5	PASS
		3.85	20	-40.50	-0.021882	± 2.5	PASS
		3.85	30	-19.94	-0.010775	± 2.5	PASS
		3.85	40	-13.26	-0.007165	± 2.5	PASS
		3.85	50	-20.30	-0.010968	± 2.5	PASS
	MCH	3.85	-30	29.97	0.016186	± 2.5	PASS
		3.85	-20	11.57	0.006251	± 2.5	PASS

		3.85	-10	36.46	0.019694	± 2.5	PASS
		3.85	0	2.27	0.001228	± 2.5	PASS
		3.85	10	-1.32	-0.000690	± 2.5	PASS
		3.85	20	23.65	0.012578	± 2.5	PASS
		3.85	30	11.62	0.006179	± 2.5	PASS
		3.85	40	-0.84	-0.000449	± 2.5	PASS
		3.85	50	-8.33	-0.004428	± 2.5	PASS
	HCH	3.85	-30	-3.72	-0.002009	± 2.5	PASS
		3.85	-20	2.45	0.001282	± 2.5	PASS
		3.85	-10	-22.99	-0.012045	± 2.5	PASS
		3.85	0	-22.14	-0.011603	± 2.5	PASS
		3.85	10	-7.25	-0.003800	± 2.5	PASS
		3.85	20	-43.47	-0.022769	± 2.5	PASS
		3.85	30	-17.95	-0.009403	± 2.5	PASS
		3.85	40	-22.76	-0.011920	± 2.5	PASS
		3.85	50	-19.64	-0.010287	± 2.5	PASS
16QAM	LCH	3.85	-30	-26.02	-0.013841	± 2.5	PASS
		3.85	-20	-39.80	-0.021169	± 2.5	PASS
		3.85	-10	-1.04	-0.000555	± 2.5	PASS
		3.85	0	-13.89	-0.007388	± 2.5	PASS
		3.85	10	-20.96	-0.010981	± 2.5	PASS
		3.85	20	-17.17	-0.009275	± 2.5	PASS
		3.85	30	21.82	0.011788	± 2.5	PASS
		3.85	40	6.84	0.003695	± 2.5	PASS
		3.85	50	22.33	0.012066	± 2.5	PASS
	MCH	3.85	-30	41.34	0.021662	± 2.5	PASS
		3.85	-20	26.56	0.013919	± 2.5	PASS
		3.85	-10	5.04	0.002638	± 2.5	PASS
		3.85	0	20.66	0.010823	± 2.5	PASS
		3.85	10	-6.22	-0.003310	± 2.5	PASS
		3.85	20	-10.63	-0.005654	± 2.5	PASS
		3.85	30	21.82	0.011604	± 2.5	PASS
		3.85	40	17.21	0.009154	± 2.5	PASS
		3.85	50	41.28	0.021960	± 2.5	PASS
	HCH	3.85	-30	-13.90	-0.007510	± 2.5	PASS
		3.85	-20	-0.83	-0.000448	± 2.5	PASS
		3.85	-10	-48.37	-0.026122	± 2.5	PASS
		3.85	0	-22.09	-0.011929	± 2.5	PASS
		3.85	10	-16.48	-0.008901	± 2.5	PASS
		3.85	20	42.27	0.022140	± 2.5	PASS
		3.85	30	38.50	0.020162	± 2.5	PASS
		3.85	40	8.74	0.004578	± 2.5	PASS

		3.85	50	29.58	0.015494	± 2.5	PASS
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