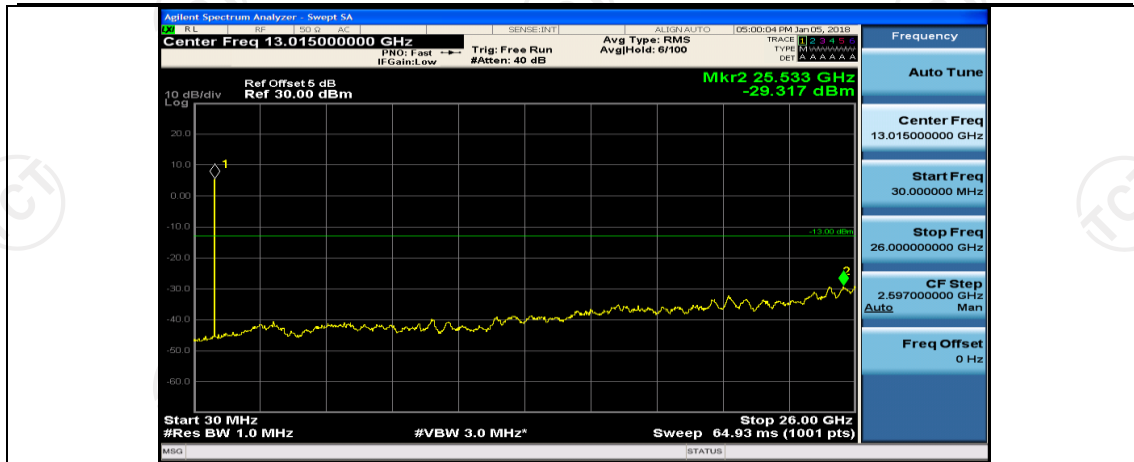
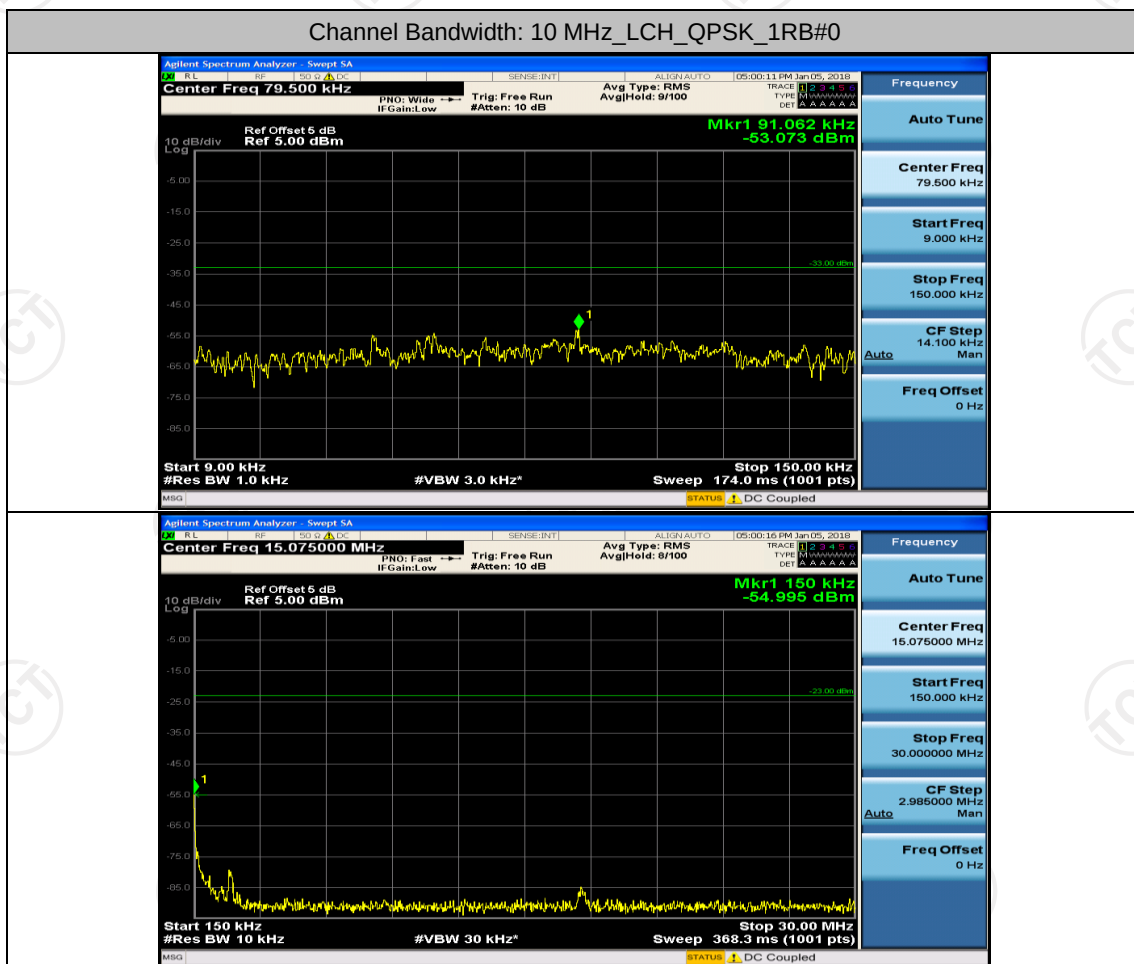
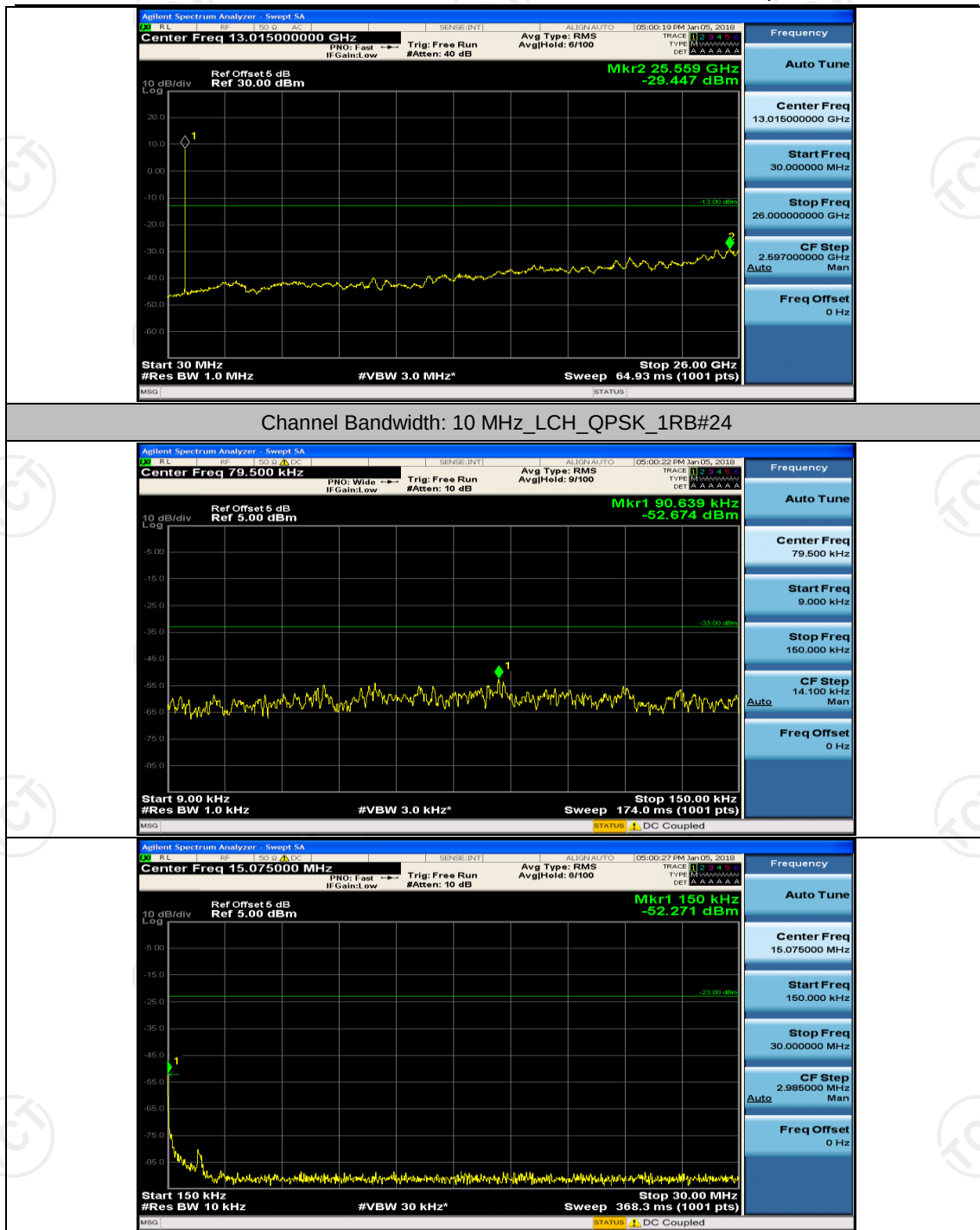
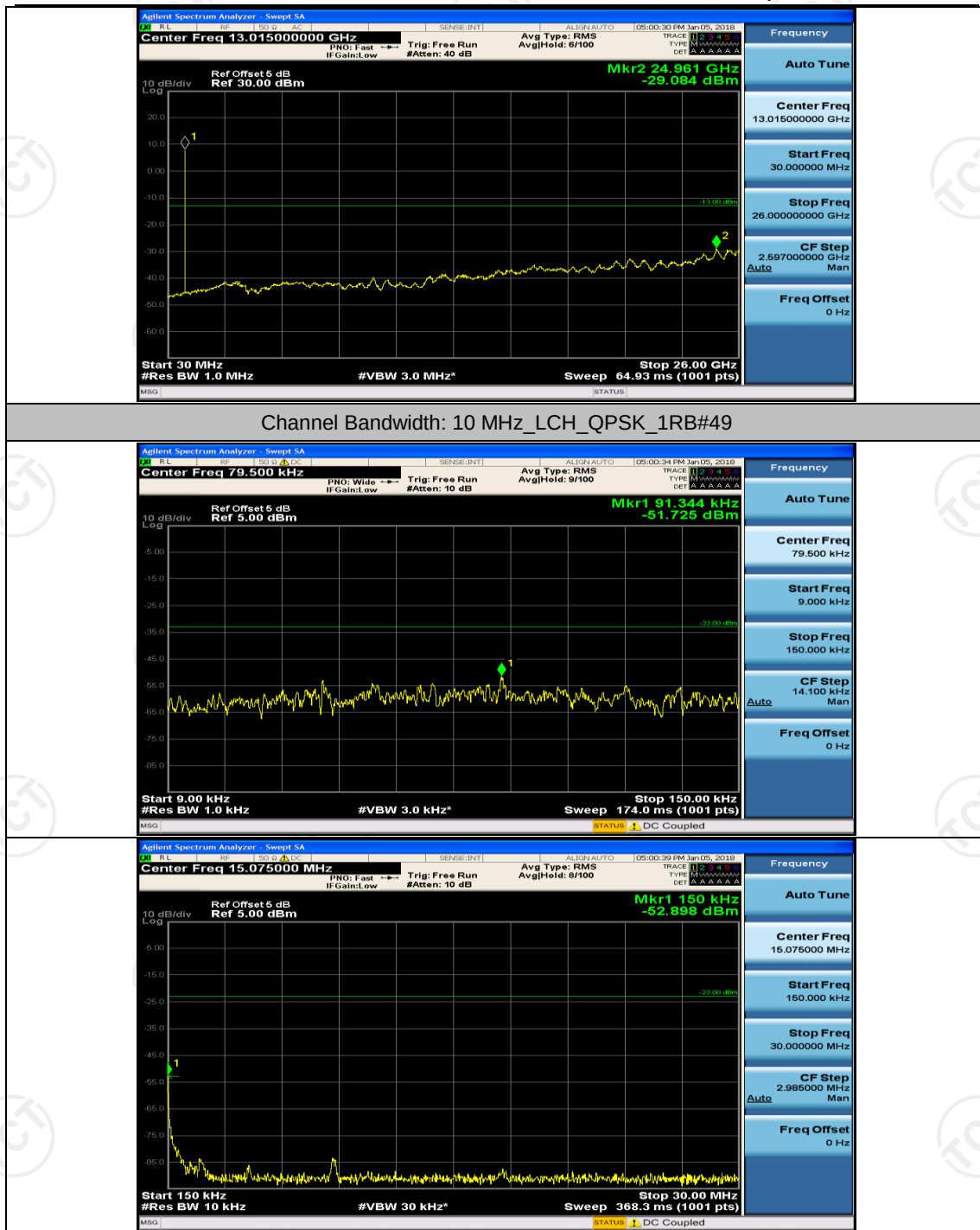


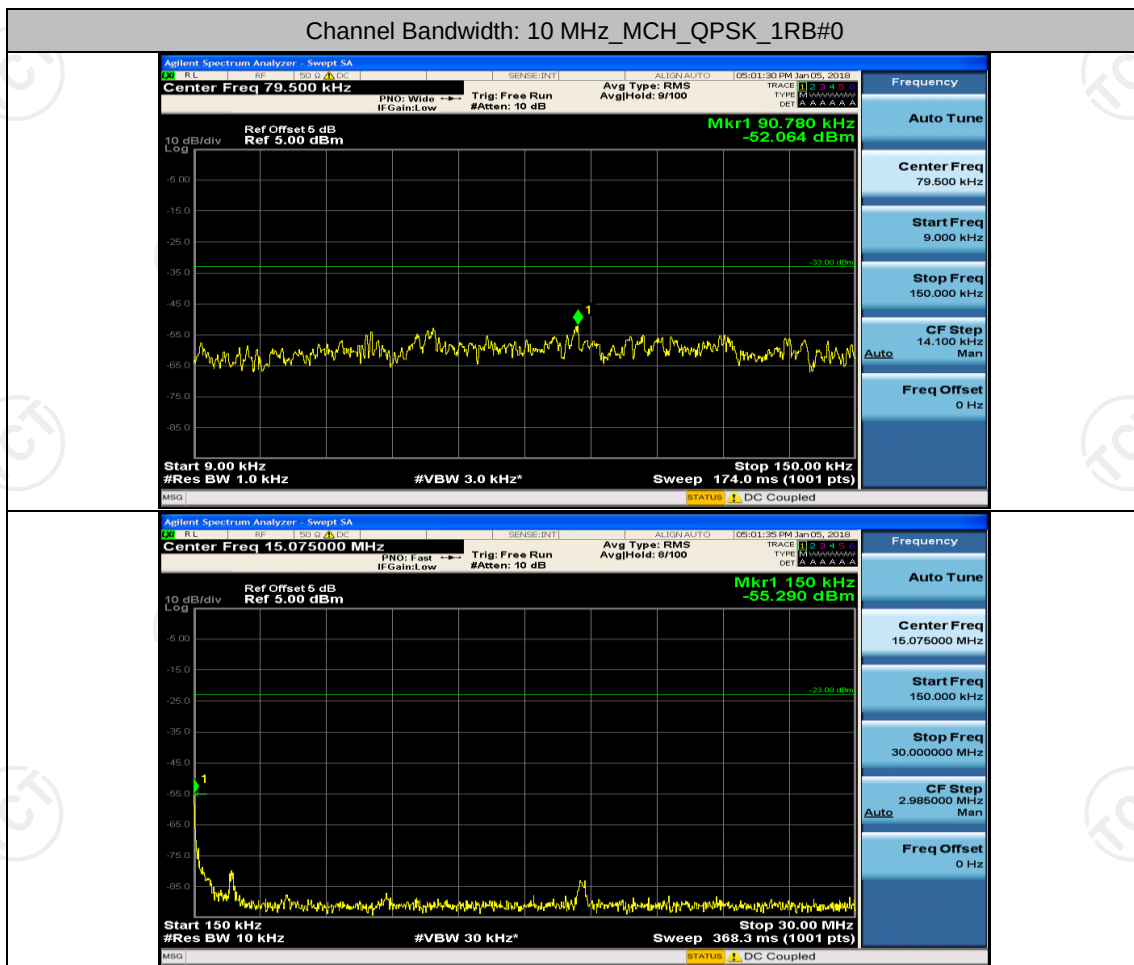
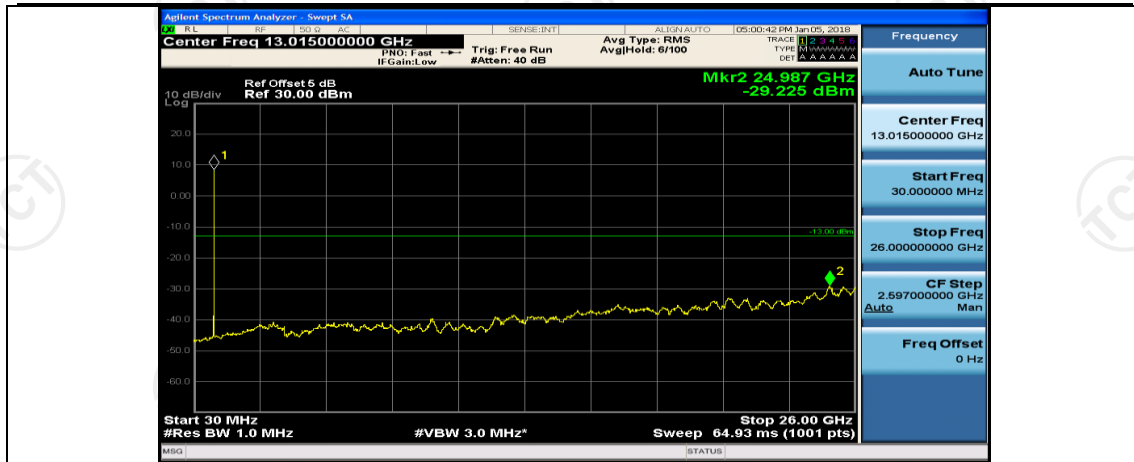


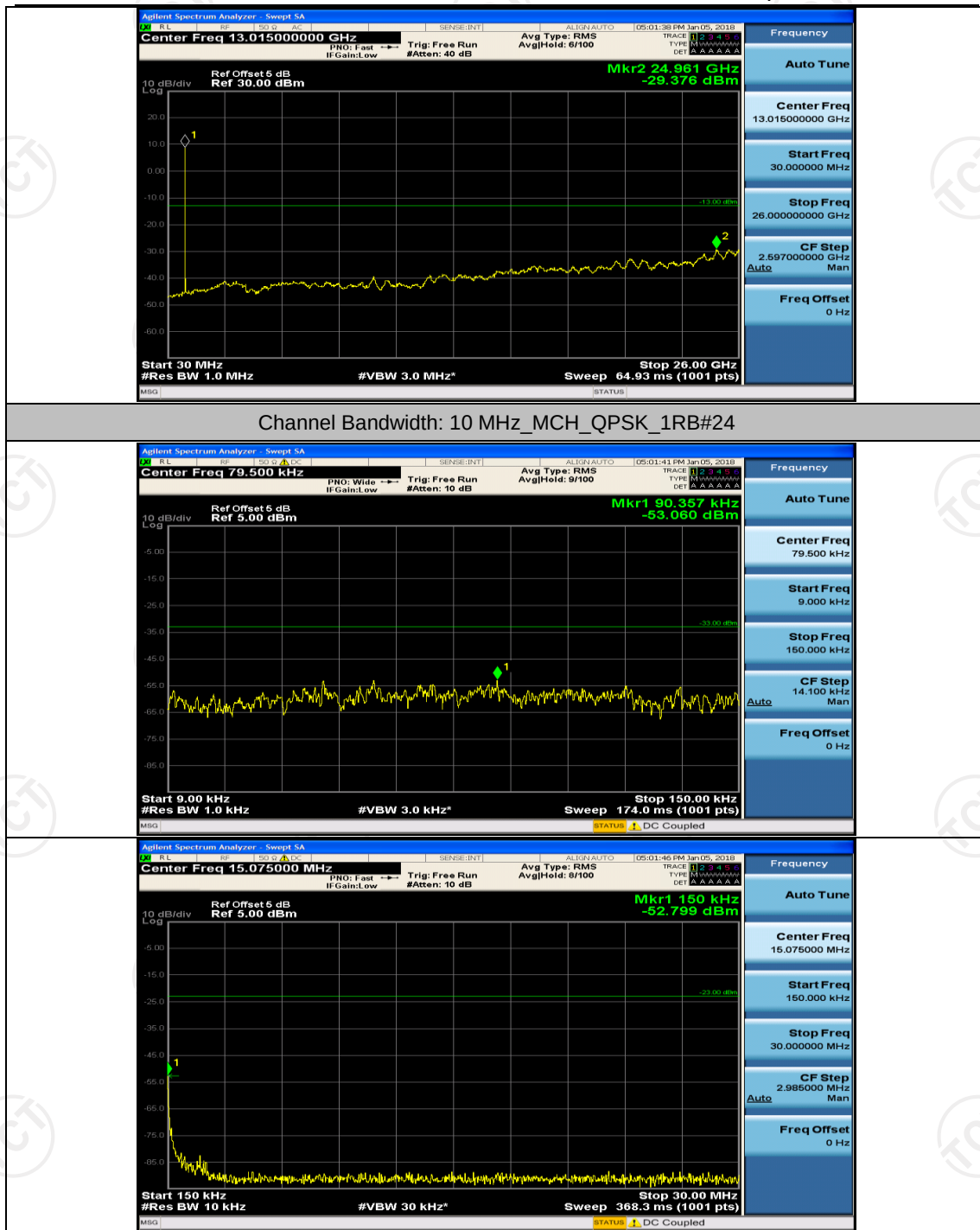
Channel Bandwidth: 10 MHz

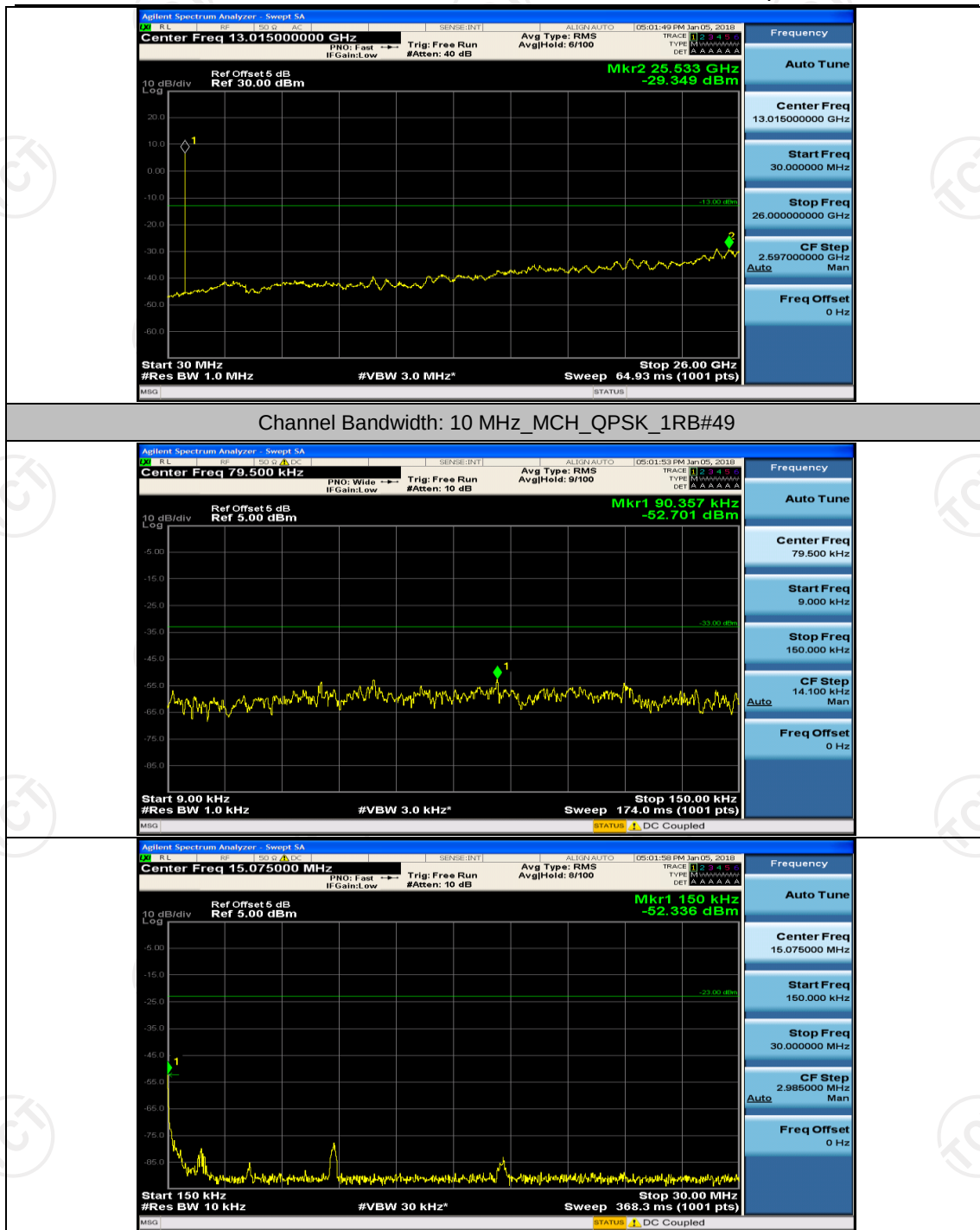


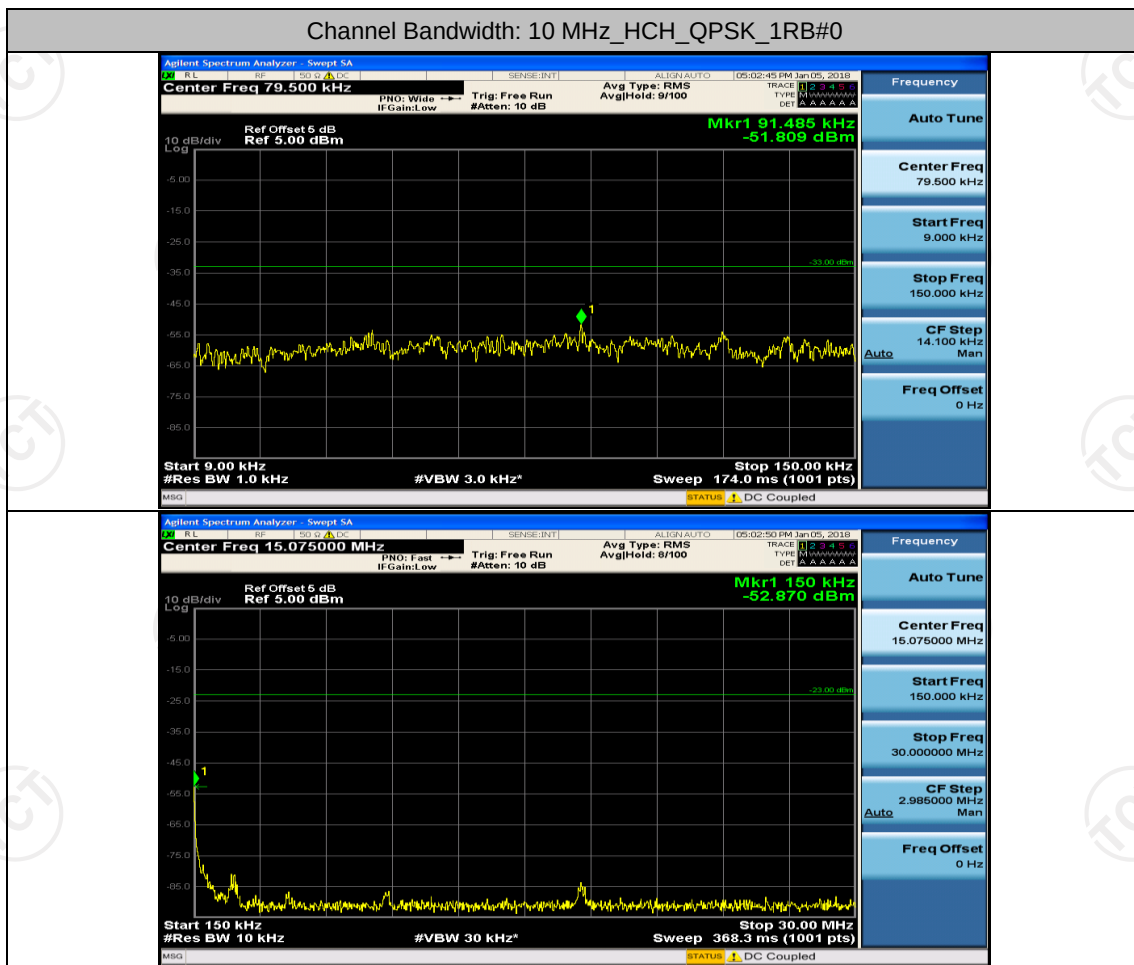
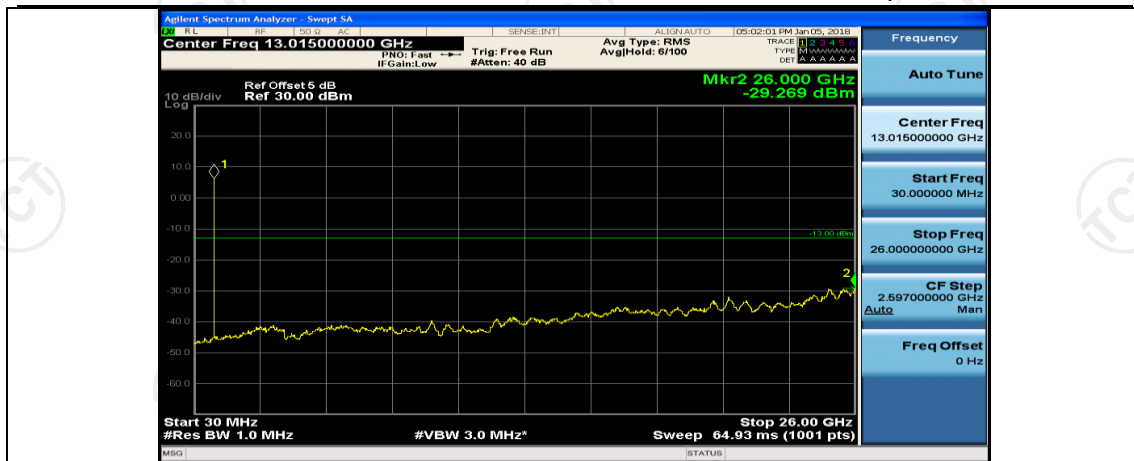


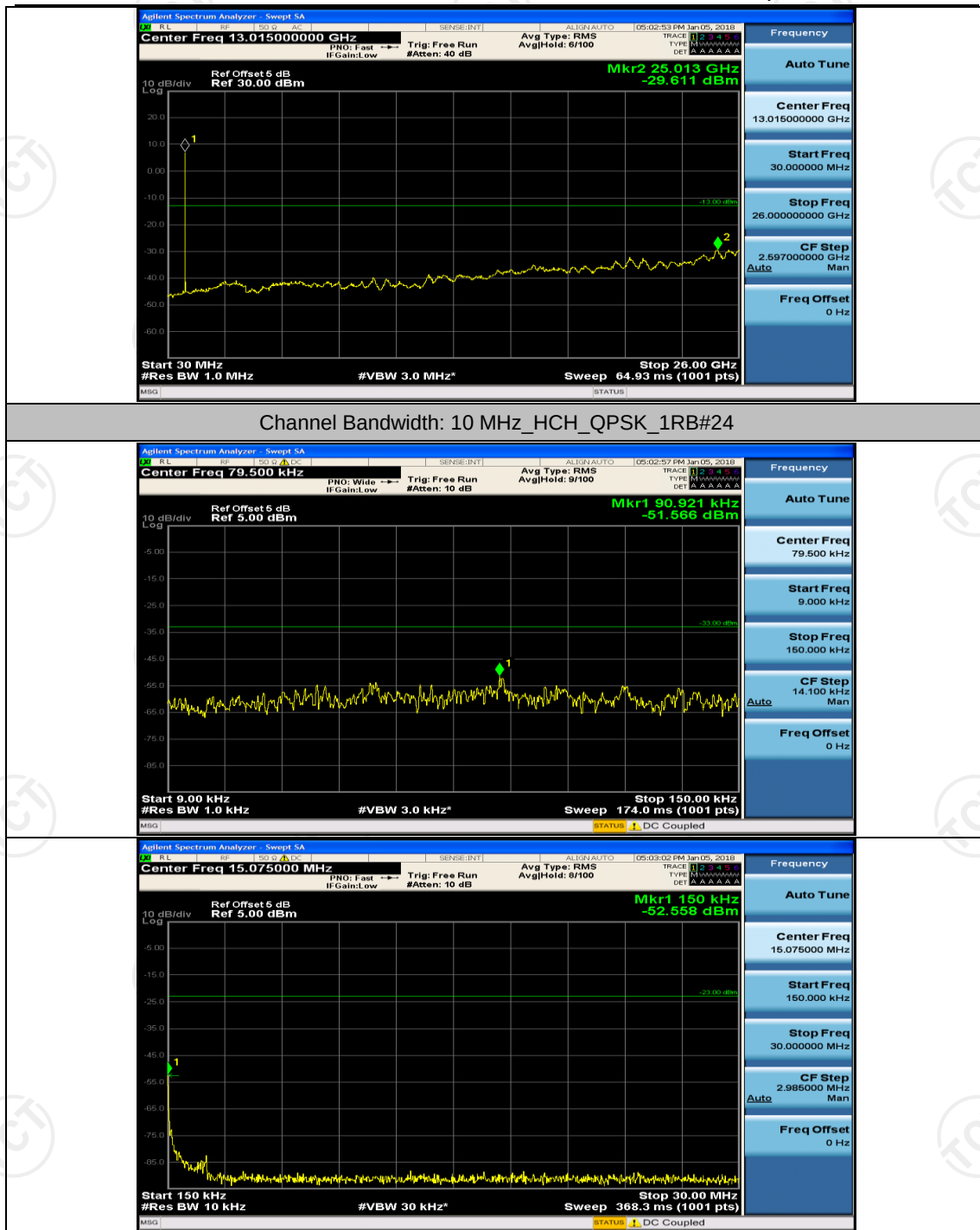


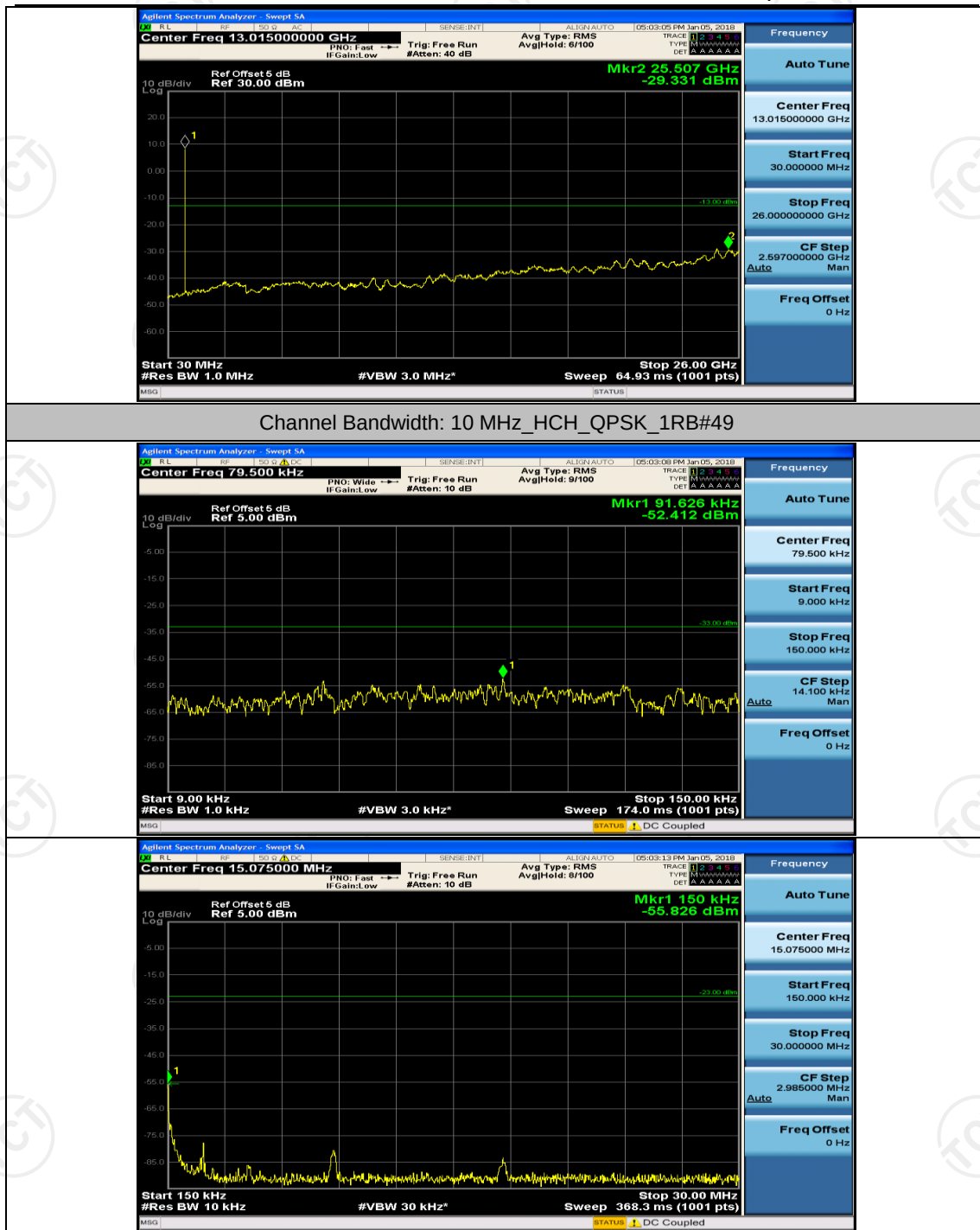


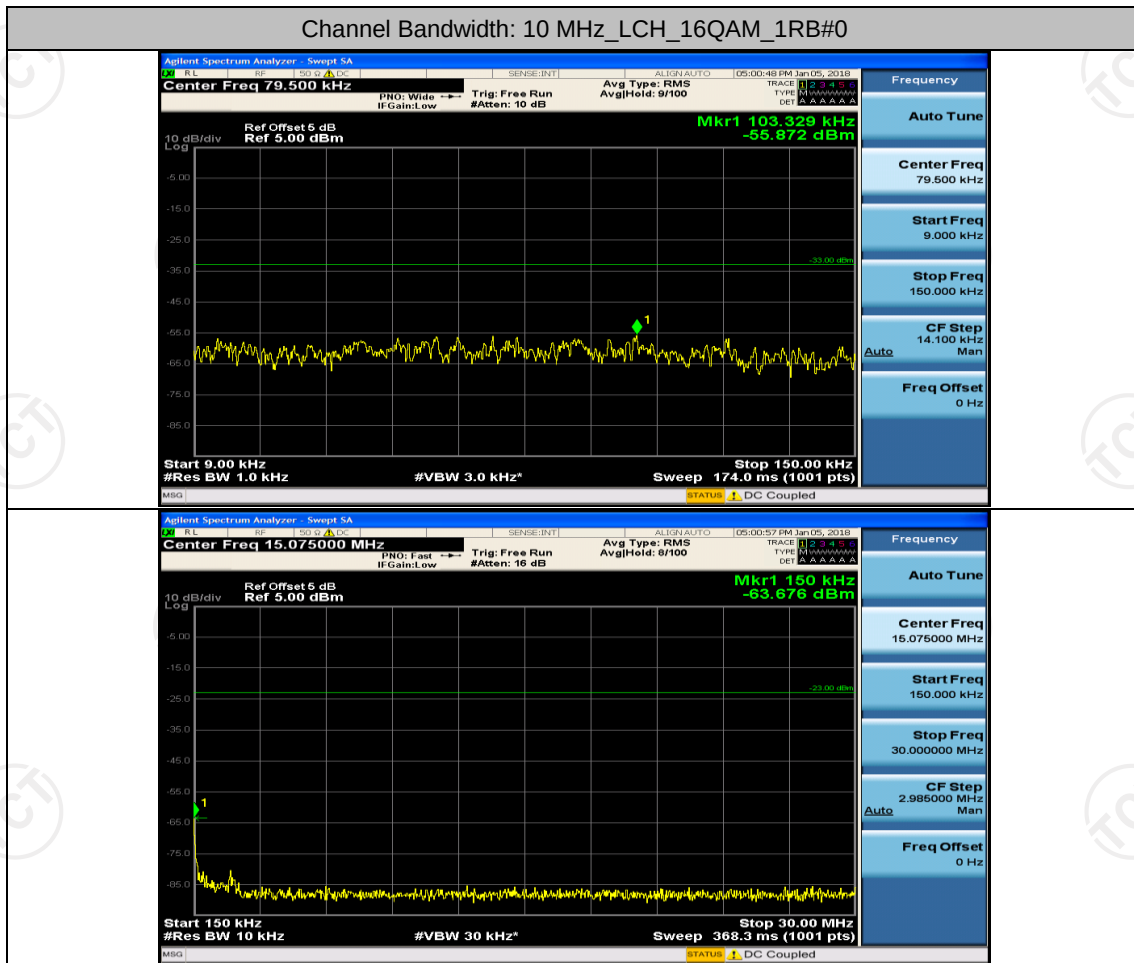
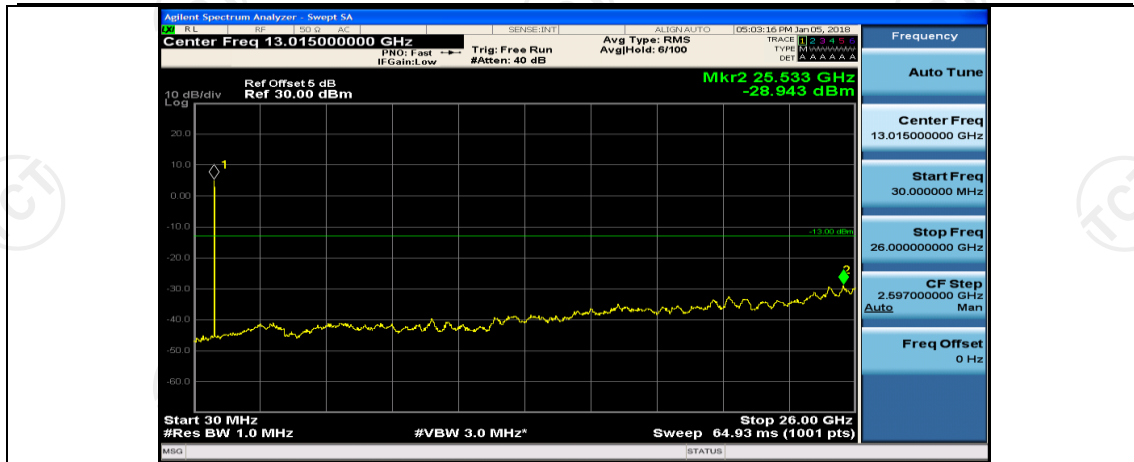


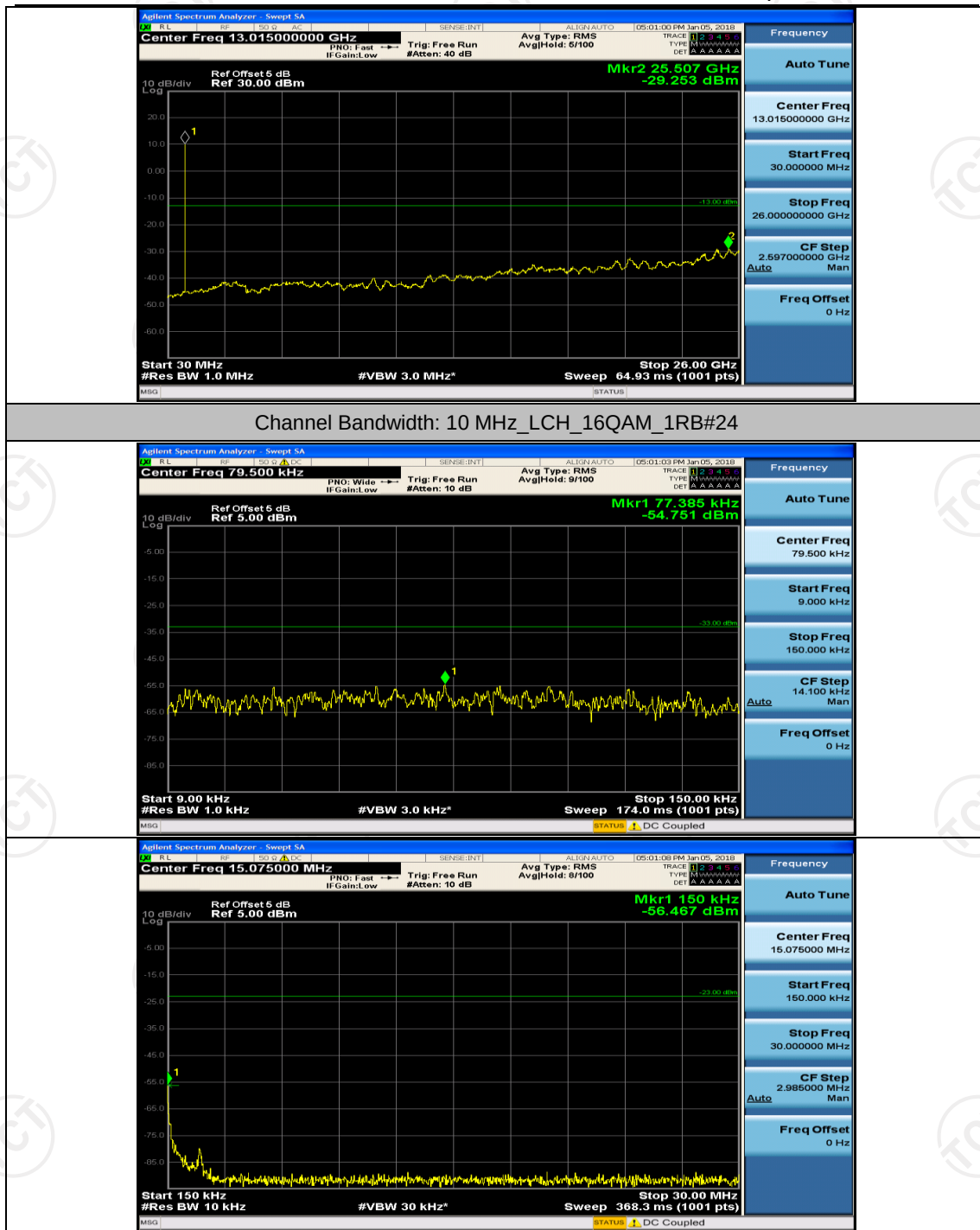


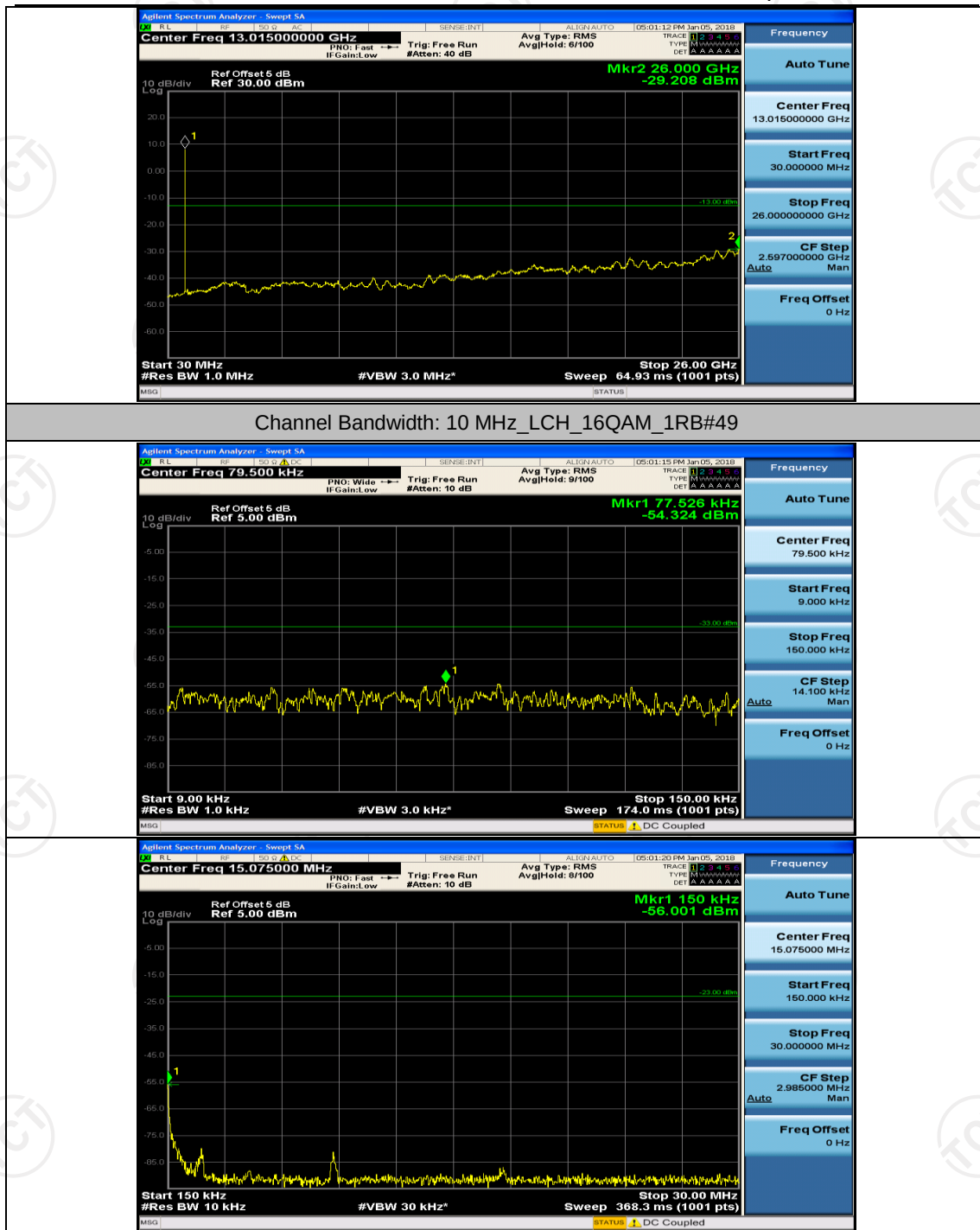


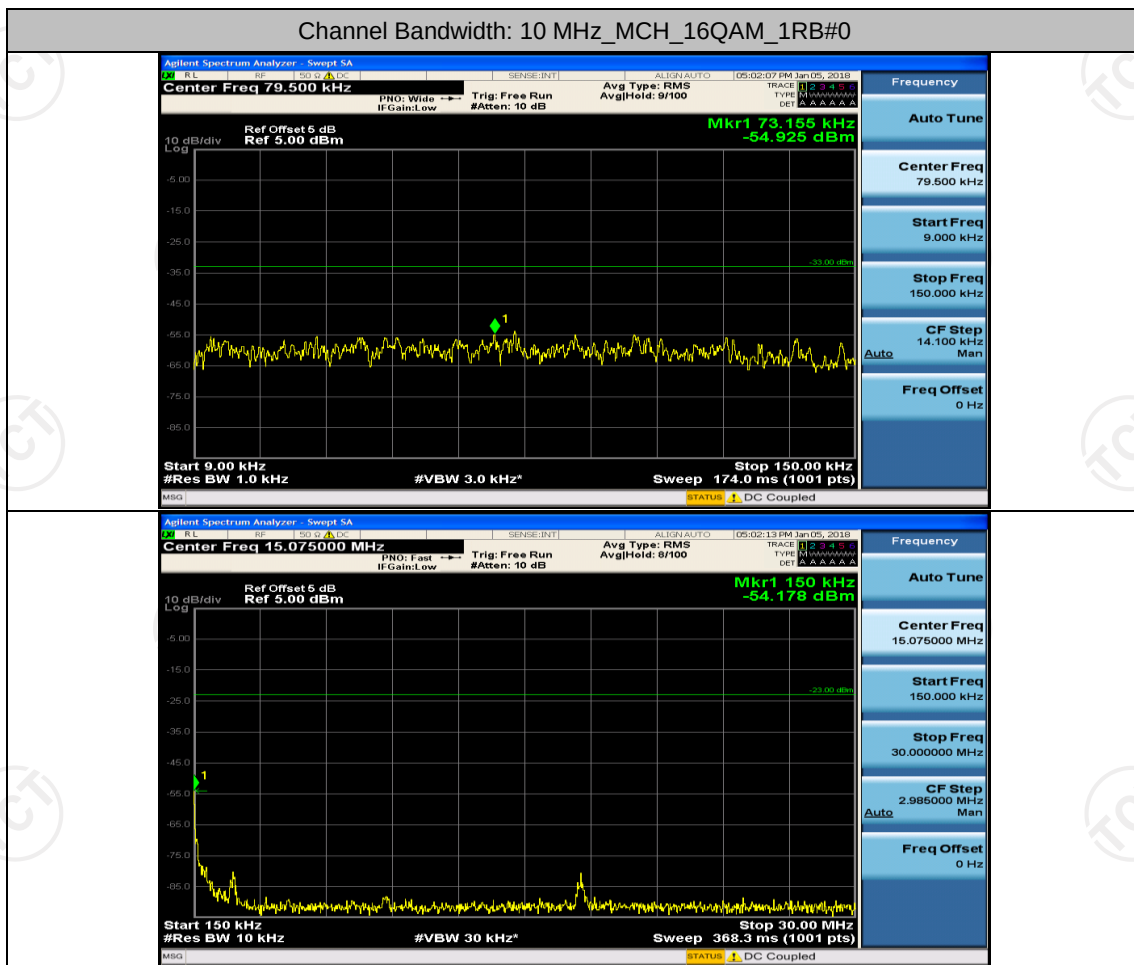
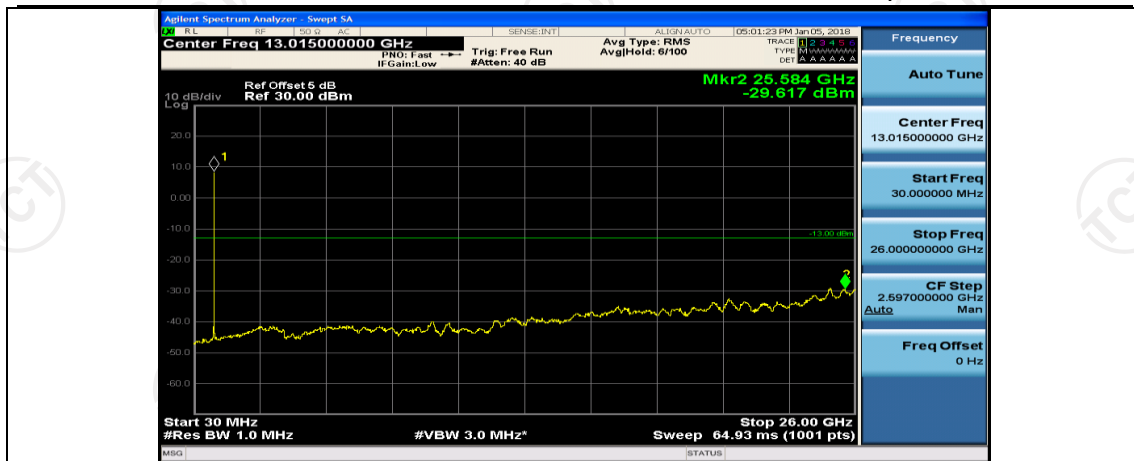


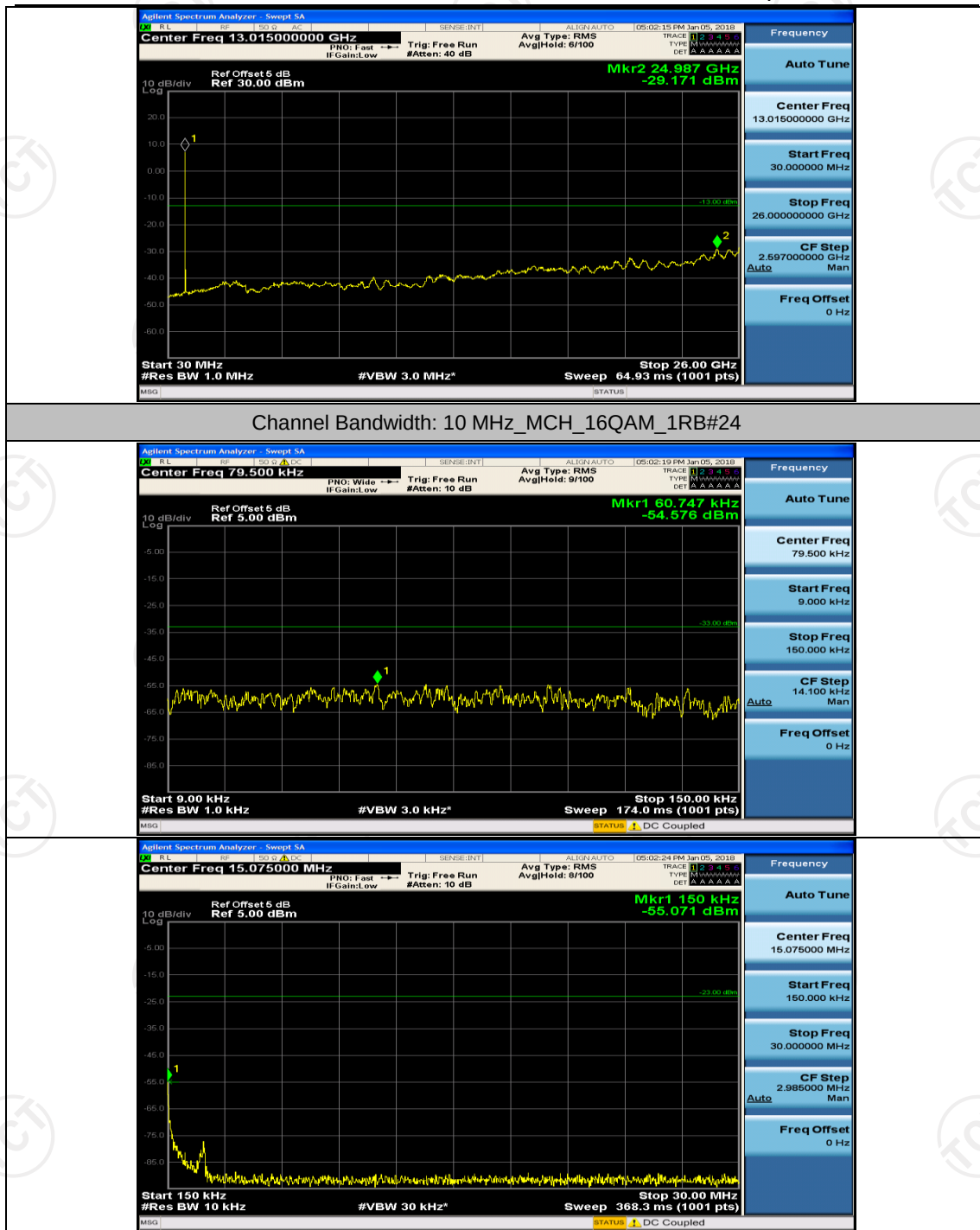


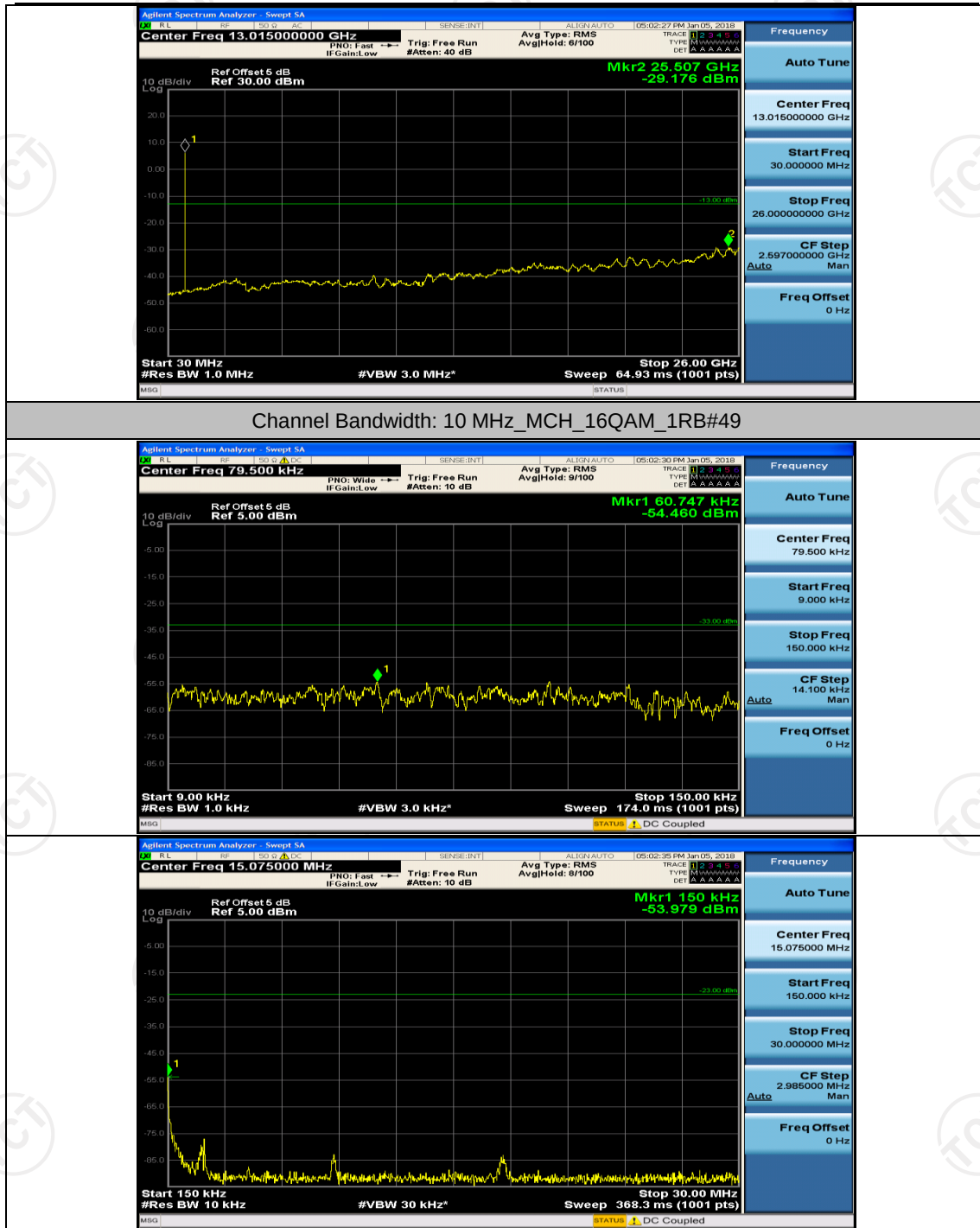


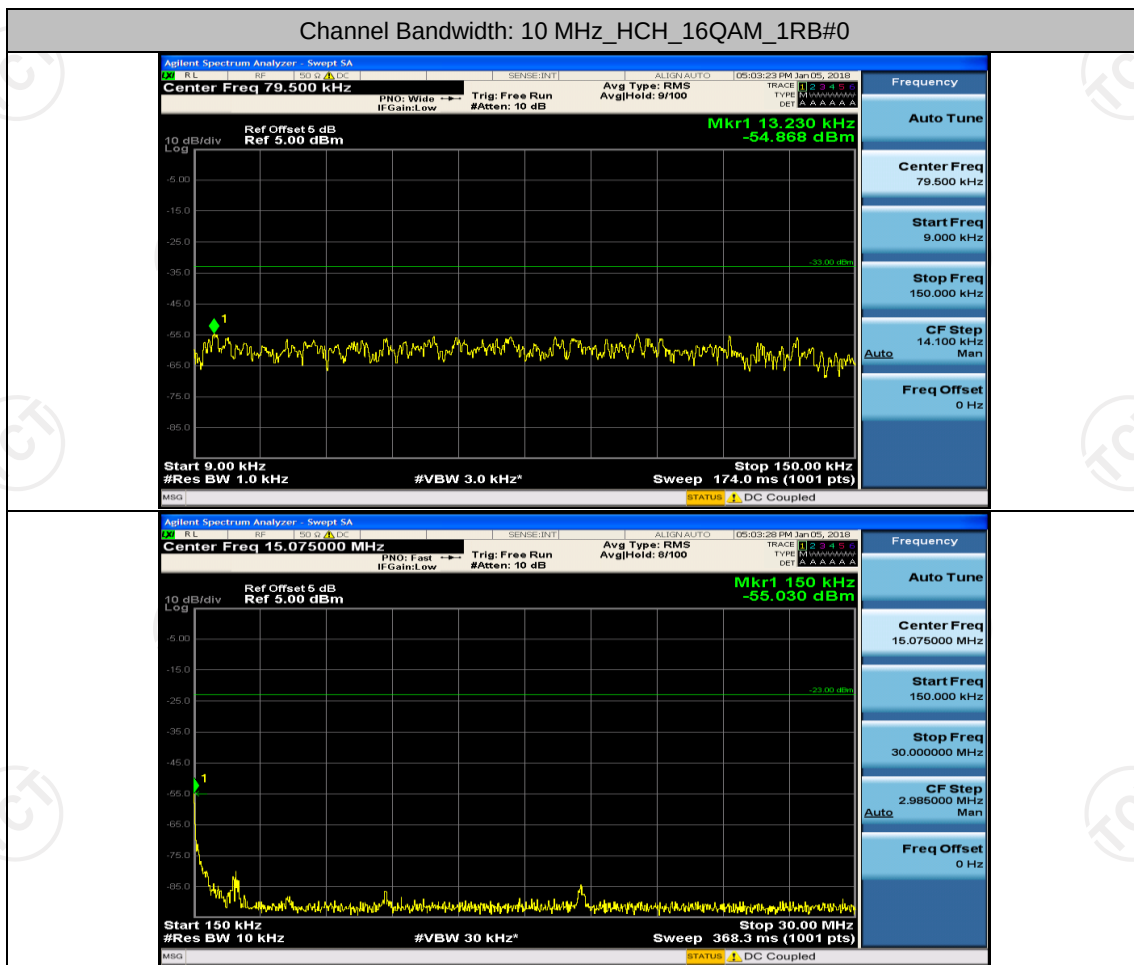
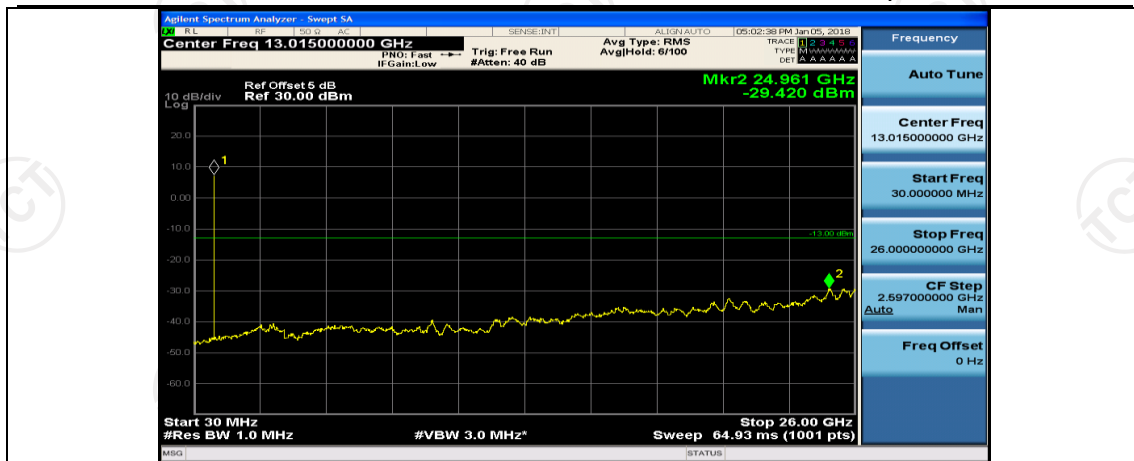


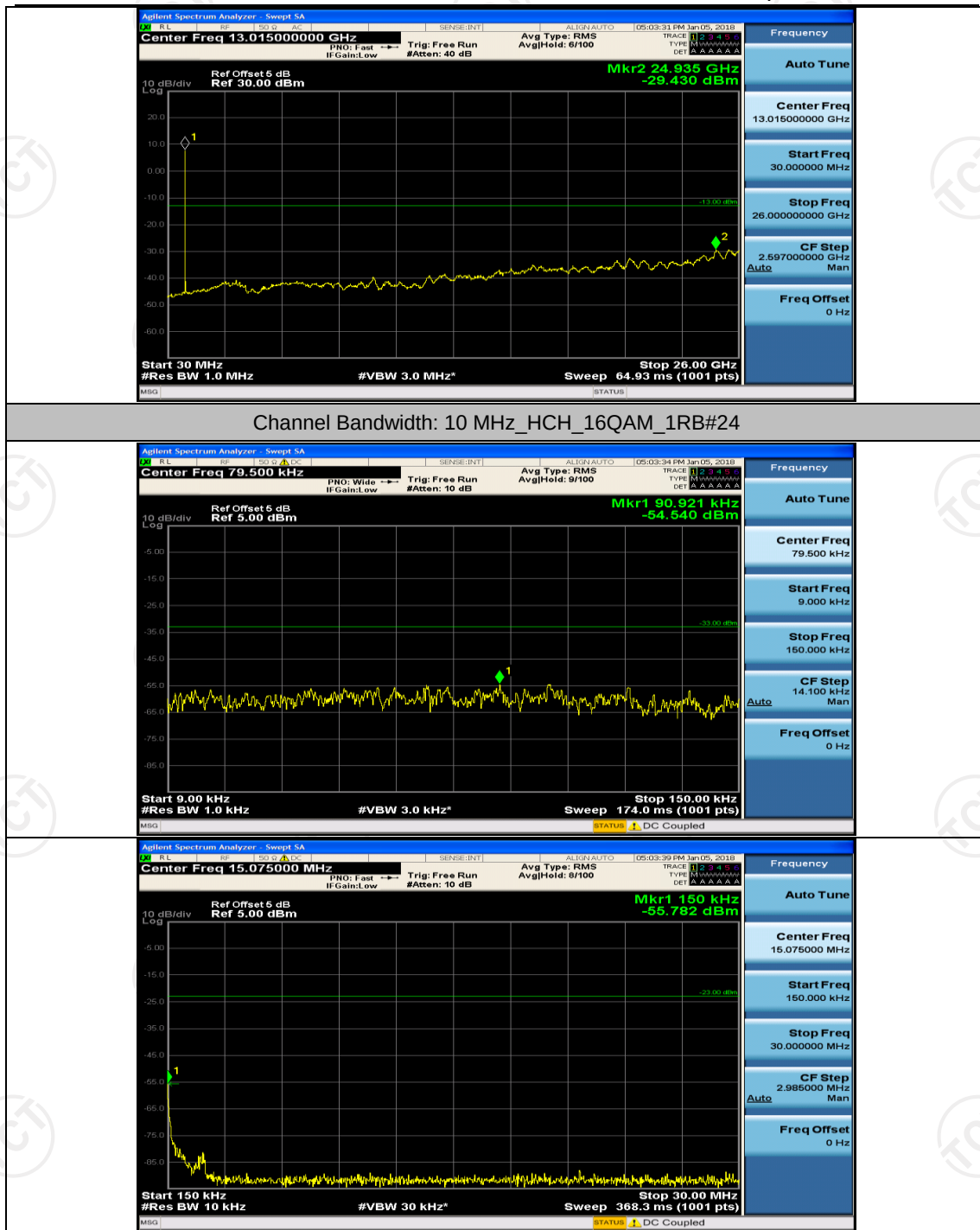


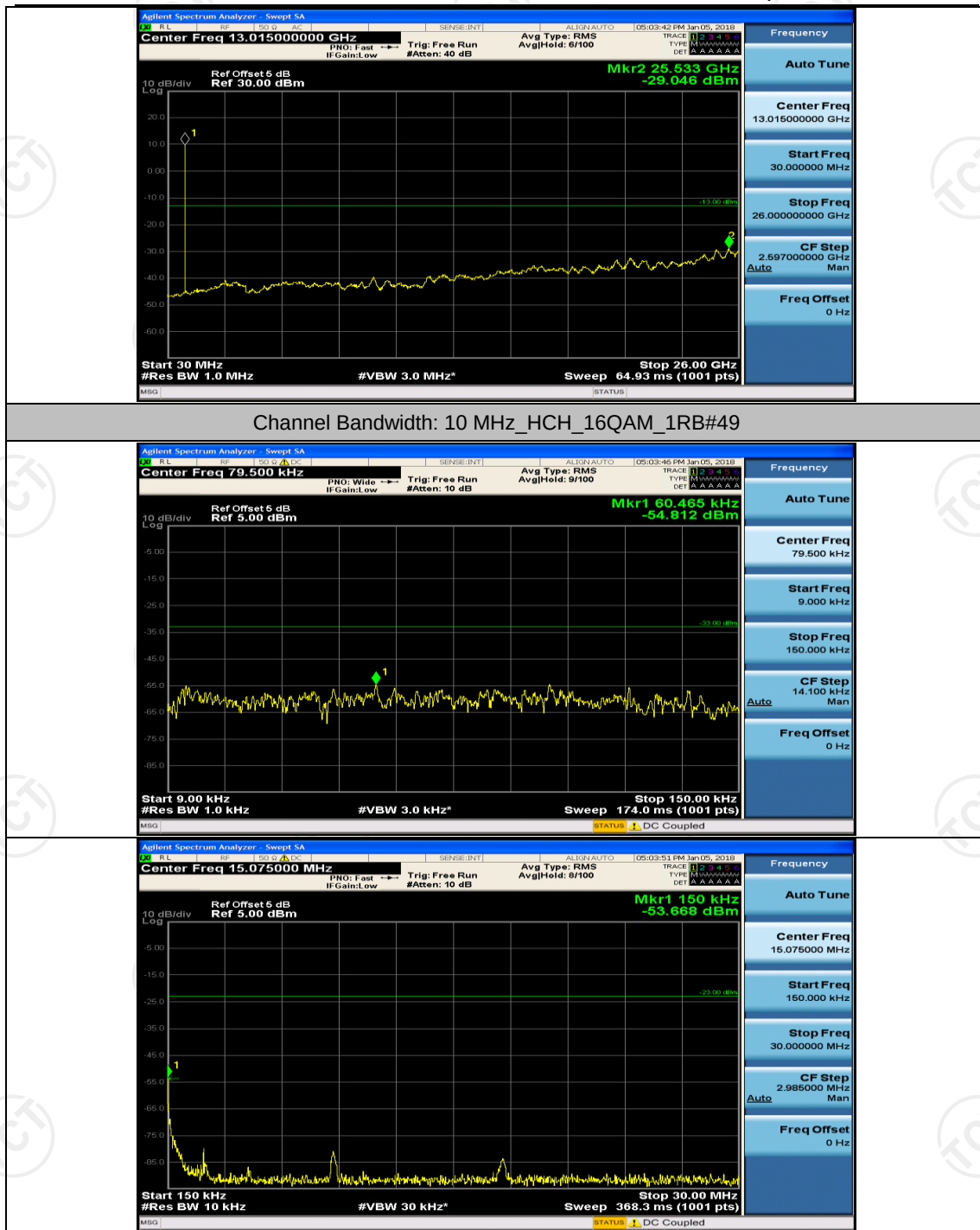


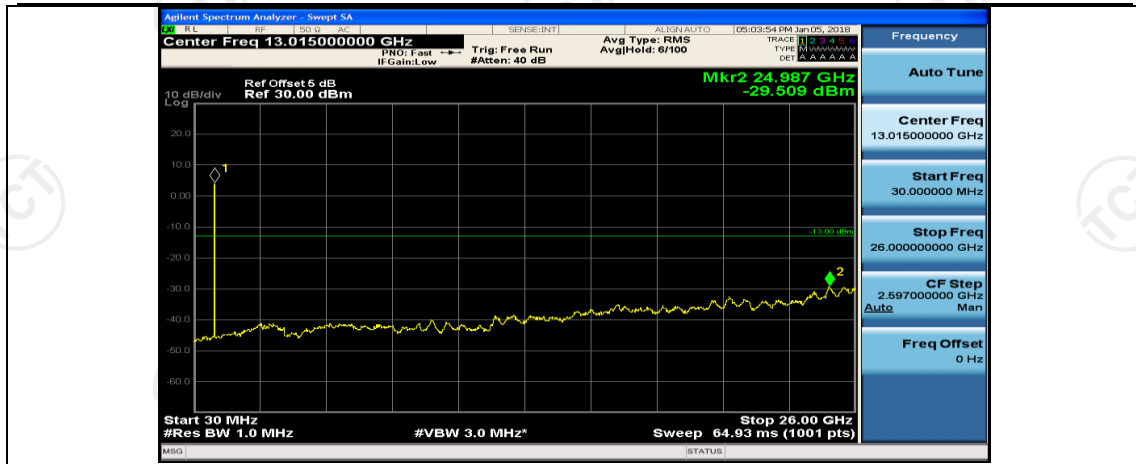












Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.6	25	0.002737	± 2.5	PASS
		3.8	25	0.001249	± 2.5	PASS
		4.2	25	0.001910	± 2.5	PASS
	MCH	3.6	25	0.003282	± 2.5	PASS
		3.8	25	0.001710	± 2.5	PASS
		4.2	25	0.002325	± 2.5	PASS
	HCH	3.6	25	0.004353	± 2.5	PASS
		3.8	25	0.004772	± 2.5	PASS
		4.2	25	0.004477	± 2.5	PASS
16QAM	LCH	3.6	25	-0.002393	± 2.5	PASS
		3.8	25	-0.001370	± 2.5	PASS
		4.2	25	-0.001657	± 2.5	PASS
	MCH	3.6	25	0.002125	± 2.5	PASS
		3.8	25	0.000171	± 2.5	PASS
		4.2	25	0.000564	± 2.5	PASS
	HCH	3.6	25	-0.000742	± 2.5	PASS
		3.8	25	-0.000438	± 2.5	PASS
		4.2	25	-0.000518	± 2.5	PASS
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.8	-30	-0.001456	± 2.5	PASS
		3.8	-20	-0.005824	± 2.5	PASS
		3.8	-10	-0.004396	± 2.5	PASS
		3.8	0	-0.002554	± 2.5	PASS
		3.8	10	-0.000399	± 2.5	PASS
		3.8	20	-0.000069	± 2.5	PASS
		3.8	30	-0.002775	± 2.5	PASS
		3.8	40	-0.000399	± 2.5	PASS
		3.8	50	0.000781	± 2.5	PASS
	MCH	3.8	-30	0.001453	± 2.5	PASS
		3.8	-20	0.002554	± 2.5	PASS
		3.8	-10	0.002055	± 2.5	PASS
		3.8	0	0.000825	± 2.5	PASS
		3.8	10	0.001557	± 2.5	PASS
		3.8	20	0.000479	± 2.5	PASS
		3.8	30	0.002839	± 2.5	PASS
		3.8	40	-0.000530	± 2.5	PASS
		3.8	50	0.001761	± 2.5	PASS

	HCH	3.8	-30	0.003546	± 2.5	PASS
		3.8	-20	0.003152	± 2.5	PASS
		3.8	-10	0.002576	± 2.5	PASS
		3.8	0	0.003057	± 2.5	PASS
		3.8	10	0.004852	± 2.5	PASS
		3.8	20	0.002293	± 2.5	PASS
		3.8	30	0.002833	± 2.5	PASS
		3.8	40	0.002546	± 2.5	PASS
		3.8	50	0.003002	± 2.5	PASS
16QAM	LCH	3.8	-30	0.001198	± 2.5	PASS
		3.8	-20	0.001205	± 2.5	PASS
		3.8	-10	0.002813	± 2.5	PASS
		3.8	0	0.002064	± 2.5	PASS
		3.8	10	0.001765	± 2.5	PASS
		3.8	20	0.001318	± 2.5	PASS
		3.8	30	-0.002186	± 2.5	PASS
		3.8	40	-0.002029	± 2.5	PASS
		3.8	50	0.001023	± 2.5	PASS
	MCH	3.8	-30	0.002044	± 2.5	PASS
		3.8	-20	0.001252	± 2.5	PASS
		3.8	-10	0.002554	± 2.5	PASS
		3.8	0	0.003105	± 2.5	PASS
		3.8	10	0.004610	± 2.5	PASS
		3.8	20	0.000735	± 2.5	PASS
		3.8	30	-0.001043	± 2.5	PASS
		3.8	40	-0.001146	± 2.5	PASS
		3.8	50	0.001779	± 2.5	PASS
	HCH	3.8	-30	0.003041	± 2.5	PASS
		3.8	-20	0.003560	± 2.5	PASS
		3.8	-10	0.002725	± 2.5	PASS
		3.8	0	0.004312	± 2.5	PASS
		3.8	10	0.003541	± 2.5	PASS
		3.8	20	0.003170	± 2.5	PASS
		3.8	30	0.001990	± 2.5	PASS
		3.8	40	-0.001804	± 2.5	PASS
		3.8	50	0.001079	± 2.5	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.6	25	0.001531	± 2.5	PASS
		3.8	25	0.001768	± 2.5	PASS
		4.2	25	0.001215	± 2.5	PASS
	MCH	3.6	25	0.004265	± 2.5	PASS
		3.8	25	0.003728	± 2.5	PASS
		4.2	25	0.002581	± 2.5	PASS
	HCH	3.6	25	-0.002515	± 2.5	PASS
		3.8	25	-0.000321	± 2.5	PASS

		4.2	25	-0.001554	± 2.5	PASS
16QAM	LCH	3.6	25	0.002245	± 2.5	PASS
		3.8	25	0.001109	± 2.5	PASS
		4.2	25	0.001534	± 2.5	PASS
	MCH	3.6	25	0.001055	± 2.5	PASS
		3.8	25	0.000325	± 2.5	PASS
		4.2	25	0.006545	± 2.5	PASS
	HCH	3.6	25	0.001552	± 2.5	PASS
		3.8	25	0.000489	± 2.5	PASS
		4.2	25	0.000584	± 2.5	PASS
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.8	-30	-0.001563	± 2.5	PASS
		3.8	-20	0.0001052	± 2.5	PASS
		3.8	-10	-0.001377	± 2.5	PASS
		3.8	0	-0.002304	± 2.5	PASS
		3.8	10	-0.001058	± 2.5	PASS
		3.8	20	-0.000970	± 2.5	PASS
		3.8	30	-0.000087	± 2.5	PASS
		3.8	40	0.000814	± 2.5	PASS
		3.8	50	0.002218	± 2.5	PASS
	MCH	3.8	-30	0.005541	± 2.5	PASS
		3.8	-20	0.004235	± 2.5	PASS
		3.8	-10	0.004512	± 2.5	PASS
		3.8	0	0.003512	± 2.5	PASS
		3.8	10	0.002723	± 2.5	PASS
		3.8	20	0.002531	± 2.5	PASS
		3.8	30	0.000188	± 2.5	PASS
		3.8	40	0.003095	± 2.5	PASS
		3.8	50	0.000325	± 2.5	PASS
	HCH	3.8	-30	0.002055	± 2.5	PASS
		3.8	-20	0.002354	± 2.5	PASS
		3.8	-10	0.01533	± 2.5	PASS
		3.8	0	0.001237	± 2.5	PASS
		3.8	10	0.001574	± 2.5	PASS
		3.8	20	0.000641	± 2.5	PASS
		3.8	30	-0.000068	± 2.5	PASS
		3.8	40	-0.000034	± 2.5	PASS
		3.8	50	0.000743	± 2.5	PASS
QPSK	LCH	3.8	-30	-0.002124	± 2.5	PASS
		3.8	-20	-0.001635	± 2.5	PASS
		3.8	-10	-0.00453	± 2.5	PASS
		3.8	0	-0.001573	± 2.5	PASS
		3.8	10	-0.002573	± 2.5	PASS
		3.8	20	-0.000139	± 2.5	PASS
		3.8	30	0.000225	± 2.5	PASS
		3.8	40	-0.001317	± 2.5	PASS
		3.8	50	0.003483	± 2.5	PASS
	MCH	3.8	-30	0.004253	± 2.5	PASS
		3.8	-20	0.004521	± 2.5	PASS

		3.8	-10	0.002454	± 2.5	PASS
		3.8	0	0.003651	± 2.5	PASS
		3.8	10	0.004562	± 2.5	PASS
		3.8	20	0.004173	± 2.5	PASS
		3.8	30	0.001625	± 2.5	PASS
		3.8	40	-0.000906	± 2.5	PASS
		3.8	50	0.002907	± 2.5	PASS
	HCH	3.8	-30	-0.001353	± 2.5	PASS
		3.8	-20	-0.002653	± 2.5	PASS
		3.8	-10	-0.001863	± 2.5	PASS
		3.8	0	-0.003572	± 2.5	PASS
		3.8	10	-0.004346	± 2.5	PASS
		3.8	20	-0.000253	± 2.5	PASS
		3.8	30	-0.001418	± 2.5	PASS
		3.8	40	-0.001519	± 2.5	PASS
		3.8	50	0.001131	± 2.5	PASS

Channel Bandwidth: 5 MHz

Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.6	25	0.001732	± 2.5	PASS
		3.8	25	0.000900	± 2.5	PASS
		4.2	25	0.001234	± 2.5	PASS
	MCH	3.6	25	0.002345	± 2.5	PASS
		3.8	25	0.001864	± 2.5	PASS
		4.2	25	0.002035	± 2.5	PASS
	HCH	3.6	25	-0.001855	± 2.5	PASS
		3.8	25	-0.000237	± 2.5	PASS
		4.2	25	-0.000634	± 2.5	PASS
16QAM	LCH	3.6	25	-0.003544	± 2.5	PASS
		3.8	25	-0.002302	± 2.5	PASS
		4.2	25	-0.004243	± 2.5	PASS
	MCH	3.6	25	0.002491	± 2.5	PASS
		3.8	25	0.001522	± 2.5	PASS
		4.2	25	0.001854	± 2.5	PASS
	HCH	3.6	25	0.002241	± 2.5	PASS
		3.8	25	0.000710	± 2.5	PASS
		4.2	25	0.001572	± 2.5	PASS
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.8	-30	-0.002537	± 2.5	PASS
		3.8	-20	-0.002494	± 2.5	PASS
		3.8	-10	-0.002163	± 2.5	PASS
		3.8	0	-0.001587	± 2.5	PASS
		3.8	10	-0.001394	± 2.5	PASS
		3.8	20	-0.001281	± 2.5	PASS
		3.8	30	0.000848	± 2.5	PASS
		3.8	40	0.001298	± 2.5	PASS

	MCH	3.8	50	-0.001437	± 2.5	PASS
		3.8	-30	-0.002543	± 2.5	PASS
		3.8	-20	-0.003144	± 2.5	PASS
		3.8	-10	-0.002543	± 2.5	PASS
		3.8	0	-0.002153	± 2.5	PASS
		3.8	10	-0.002612	± 2.5	PASS
		3.8	20	-0.002001	± 2.5	PASS
		3.8	30	0.001009	± 2.5	PASS
		3.8	40	0.003454	± 2.5	PASS
		3.8	50	-0.002428	± 2.5	PASS
	HCH	3.8	-30	-0.005485	± 2.5	PASS
		3.8	-20	-0.004524	± 2.5	PASS
		3.8	-10	-0.003404	± 2.5	PASS
		3.8	0	-0.003442	± 2.5	PASS
		3.8	10	-0.003206	± 2.5	PASS
		3.8	20	-0.003853	± 2.5	PASS
		3.8	30	-0.000270	± 2.5	PASS
		3.8	40	-0.001656	± 2.5	PASS
		3.8	50	-0.000693	± 2.5	PASS
16QAM	LCH	3.8	-30	0.001575	± 2.5	PASS
		3.8	-20	0.001553	± 2.5	PASS
		3.8	-10	0.002056	± 2.5	PASS
		3.8	0	0.002345	± 2.5	PASS
		3.8	10	0.001439	± 2.5	PASS
		3.8	20	0.000935	± 2.5	PASS
		3.8	30	0.000554	± 2.5	PASS
		3.8	40	-0.000415	± 2.5	PASS
		3.8	50	-0.002077	± 2.5	PASS
	MCH	3.8	-30	0.004232	± 2.5	PASS
		3.8	-20	0.001423	± 2.5	PASS
		3.8	-10	0.002344	± 2.5	PASS
		3.8	0	0.001437	± 2.5	PASS
		3.8	10	0.000952	± 2.5	PASS
		3.8	20	0.000342	± 2.5	PASS
		3.8	30	-0.000410	± 2.5	PASS
		3.8	40	-0.002941	± 2.5	PASS
		3.8	50	0.000975	± 2.5	PASS
	HCH	3.8	-30	-0.001563	± 2.5	PASS
		3.8	-20	-0.002054	± 2.5	PASS
		3.8	-10	-0.001573	± 2.5	PASS
		3.8	0	-0.002453	± 2.5	PASS
		3.8	10	-0.003574	± 2.5	PASS
		3.8	20	-0.002569	± 2.5	PASS
		3.8	30	-0.000220	± 2.5	PASS
		3.8	40	-0.001251	± 2.5	PASS
		3.8	50	-0.001791	± 2.5	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	3.6	25	-0.003104	± 2.5	PASS
		3.8	25	-0.003542	± 2.5	PASS
		4.2	25	-0.001852	± 2.5	PASS
	MCH	3.6	25	0.002545	± 2.5	PASS
		3.8	25	0.001864	± 2.5	PASS
		4.2	25	0.001563	± 2.5	PASS
	HCH	3.6	25	-0.000453	± 2.5	PASS
		3.8	25	-0.000068	± 2.5	PASS
		4.2	25	-0.002534	± 2.5	PASS
16QAM	LCH	3.6	25	-0.003541	± 2.5	PASS
		3.8	25	-0.002019	± 2.5	PASS
		4.2	25	-0.002543	± 2.5	PASS
	MCH	3.6	25	0.003212	± 2.5	PASS
		3.8	25	0.001524	± 2.5	PASS
		4.2	25	0.001694	± 2.5	PASS
	HCH	3.6	25	-0.00253	± 2.5	PASS
		3.8	25	-0.001678	± 2.5	PASS
		4.2	25	-0.003451	± 2.5	PASS
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	3.8	-30	-0.003243	± 2.5	PASS
		3.8	-20	-0.002354	± 2.5	PASS
		3.8	-10	-0.001354	± 2.5	PASS
		3.8	0	-0.000644	± 2.5	PASS
		3.8	10	-0.001354	± 2.5	PASS
		3.8	20	-0.001534	± 2.5	PASS
		3.8	30	-0.002330	± 2.5	PASS
		3.8	40	-0.000966	± 2.5	PASS
		3.8	50	-0.001795	± 2.5	PASS
	MCH	3.8	-30	0.001324	± 2.5	PASS
		3.8	-20	0.002433	± 2.5	PASS
		3.8	-10	0.004534	± 2.5	PASS
		3.8	0	0.001323	± 2.5	PASS
		3.8	10	0.003340	± 2.5	PASS
		3.8	20	0.000906	± 2.5	PASS
		3.8	30	0.003112	± 2.5	PASS
		3.8	40	0.000941	± 2.5	PASS
		3.8	50	0.001710	± 2.5	PASS
	HCH	3.8	-30	-0.002065	± 2.5	PASS
		3.8	-20	-0.003044	± 2.5	PASS
		3.8	-10	-0.002456	± 2.5	PASS
		3.8	0	-0.002541	± 2.5	PASS
		3.8	10	-0.003404	± 2.5	PASS
		3.8	20	-0.002475	± 2.5	PASS
		3.8	30	-0.000339	± 2.5	PASS
		3.8	40	-0.002119	± 2.5	PASS
		3.8	50	0.000051	± 2.5	PASS
QPSK	LCH	3.8	-30	-0.001432	± 2.5	PASS

		3.8	-20	-0.001324	± 2.5	PASS
		3.8	-10	-0.002342	± 2.5	PASS
		3.8	0	-0.000534	± 2.5	PASS
		3.8	10	-0.001342	± 2.5	PASS
		3.8	20	-0.000846	± 2.5	PASS
		3.8	30	-0.000518	± 2.5	PASS
		3.8	40	-0.000569	± 2.5	PASS
		3.8	50	-0.000604	± 2.5	PASS
	MCH	3.8	-30	0.002433	± 2.5	PASS
		3.8	-20	0.001431	± 2.5	PASS
		3.8	-10	0.002304	± 2.5	PASS
		3.8	0	0.001345	± 2.5	PASS
		3.8	10	0.000864	± 2.5	PASS
		3.8	20	0.000735	± 2.5	PASS
		3.8	30	0.000735	± 2.5	PASS
		3.8	40	-0.000051	± 2.5	PASS
		3.8	50	0.001813	± 2.5	PASS
	HCH	3.8	-30	-0.002433	± 2.5	PASS
		3.8	-20	-0.001542	± 2.5	PASS
		3.8	-10	-0.002064	± 2.5	PASS
		3.8	0	-0.002354	± 2.5	PASS
		3.8	10	-0.001857	± 2.5	PASS
		3.8	20	-0.001932	± 2.5	PASS
		3.8	30	0.000729	± 2.5	PASS
		3.8	40	-0.001373	± 2.5	PASS
		3.8	50	-0.001780	± 2.5	PASS