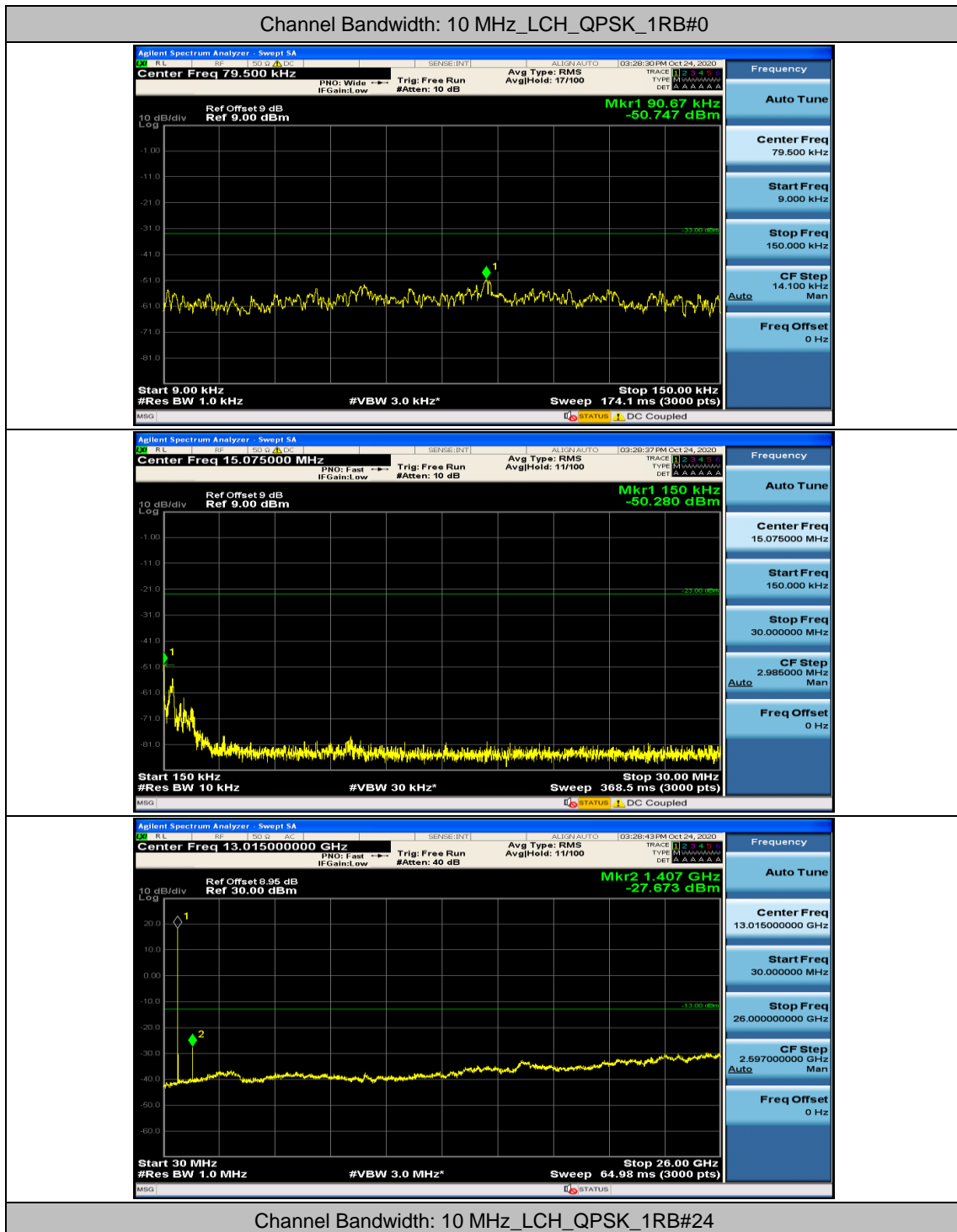
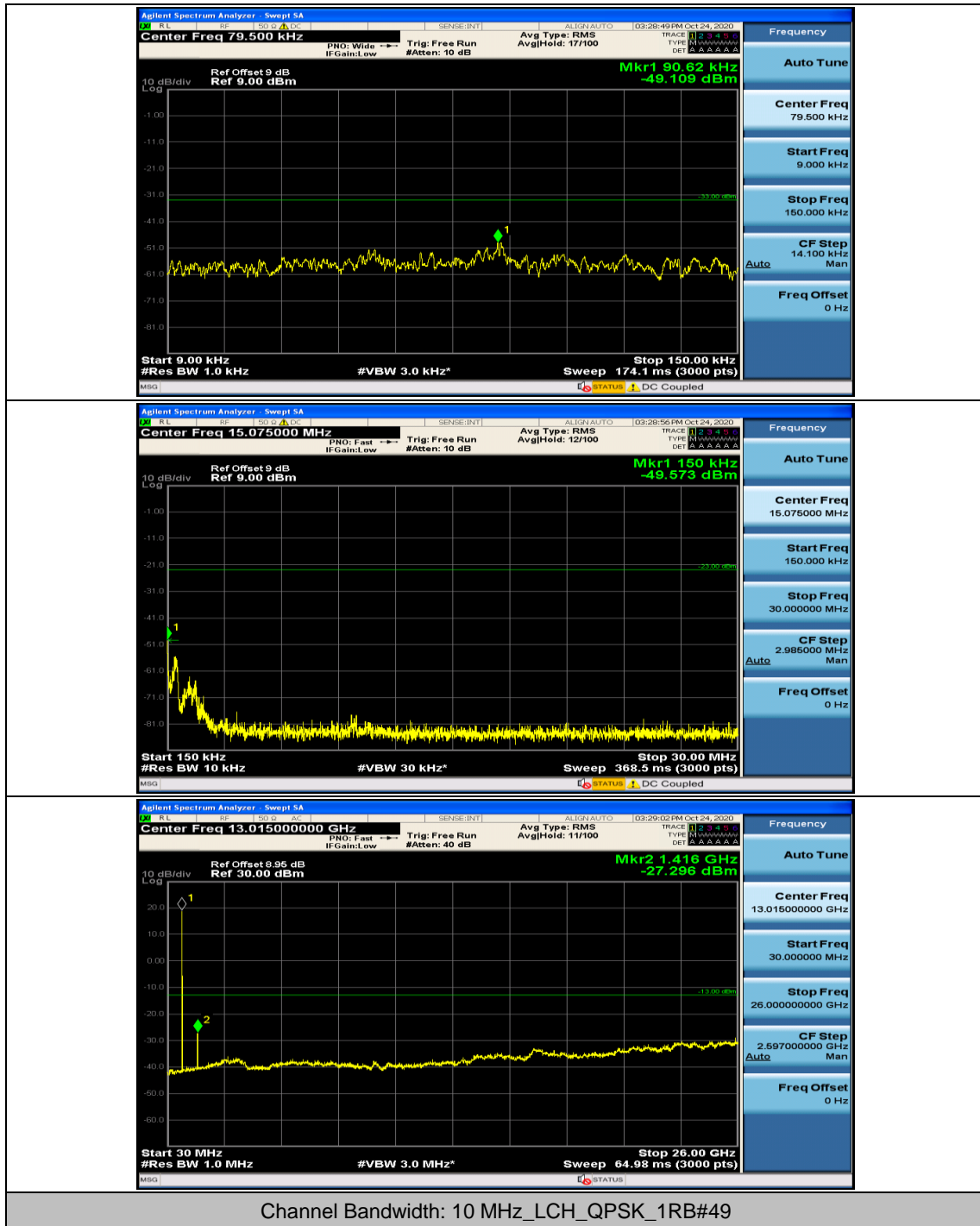
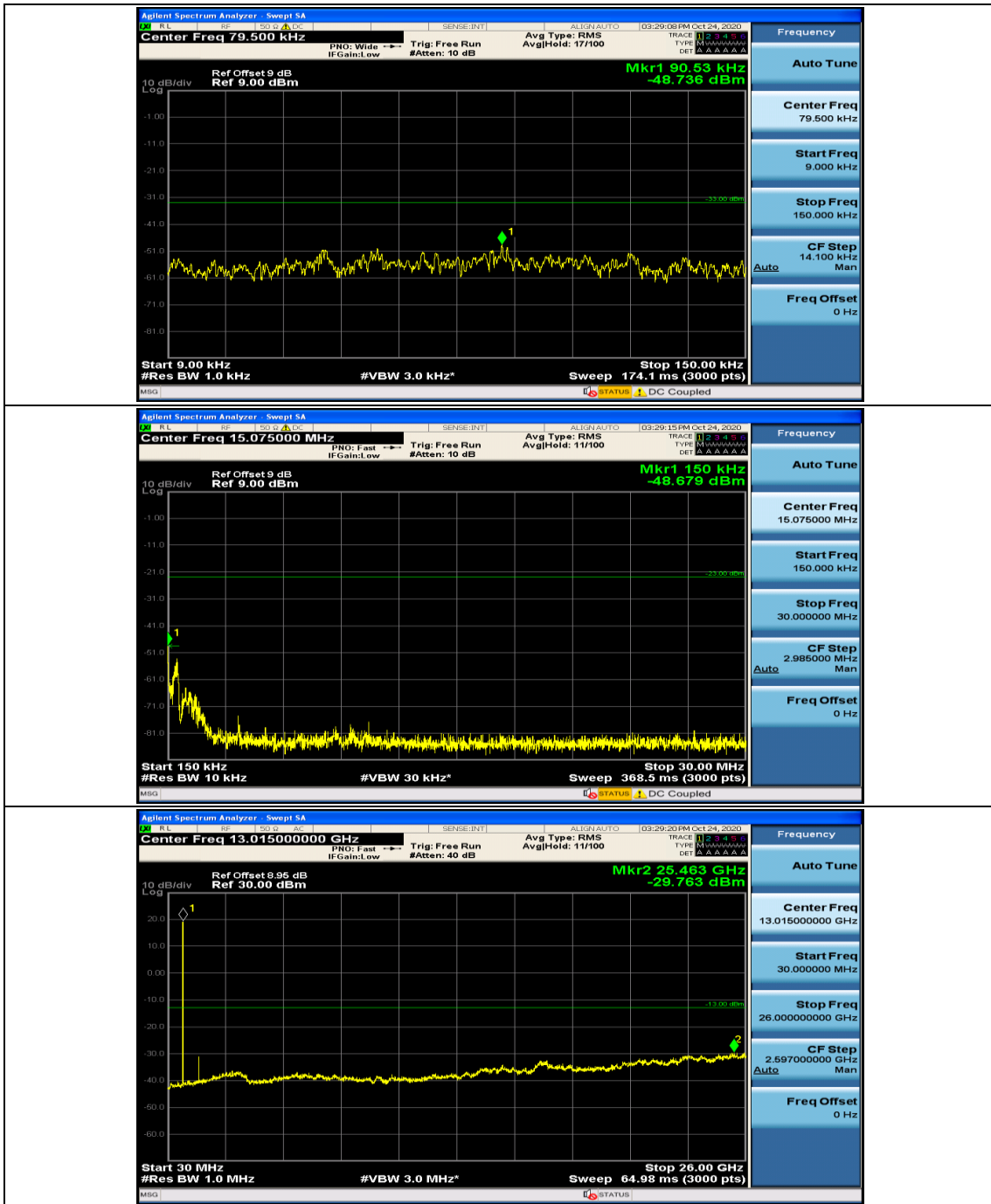


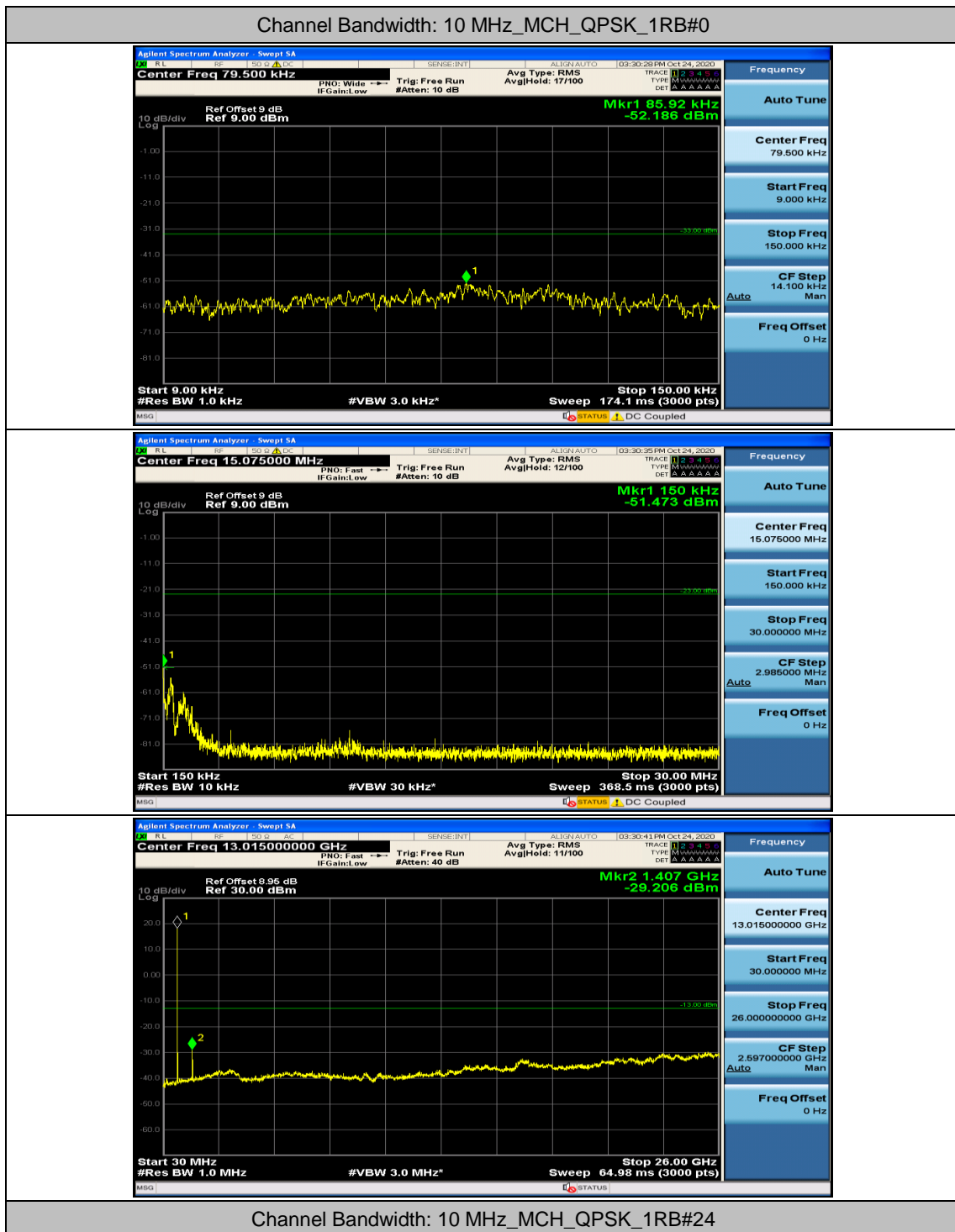
### Channel Bandwidth: 10 MHz

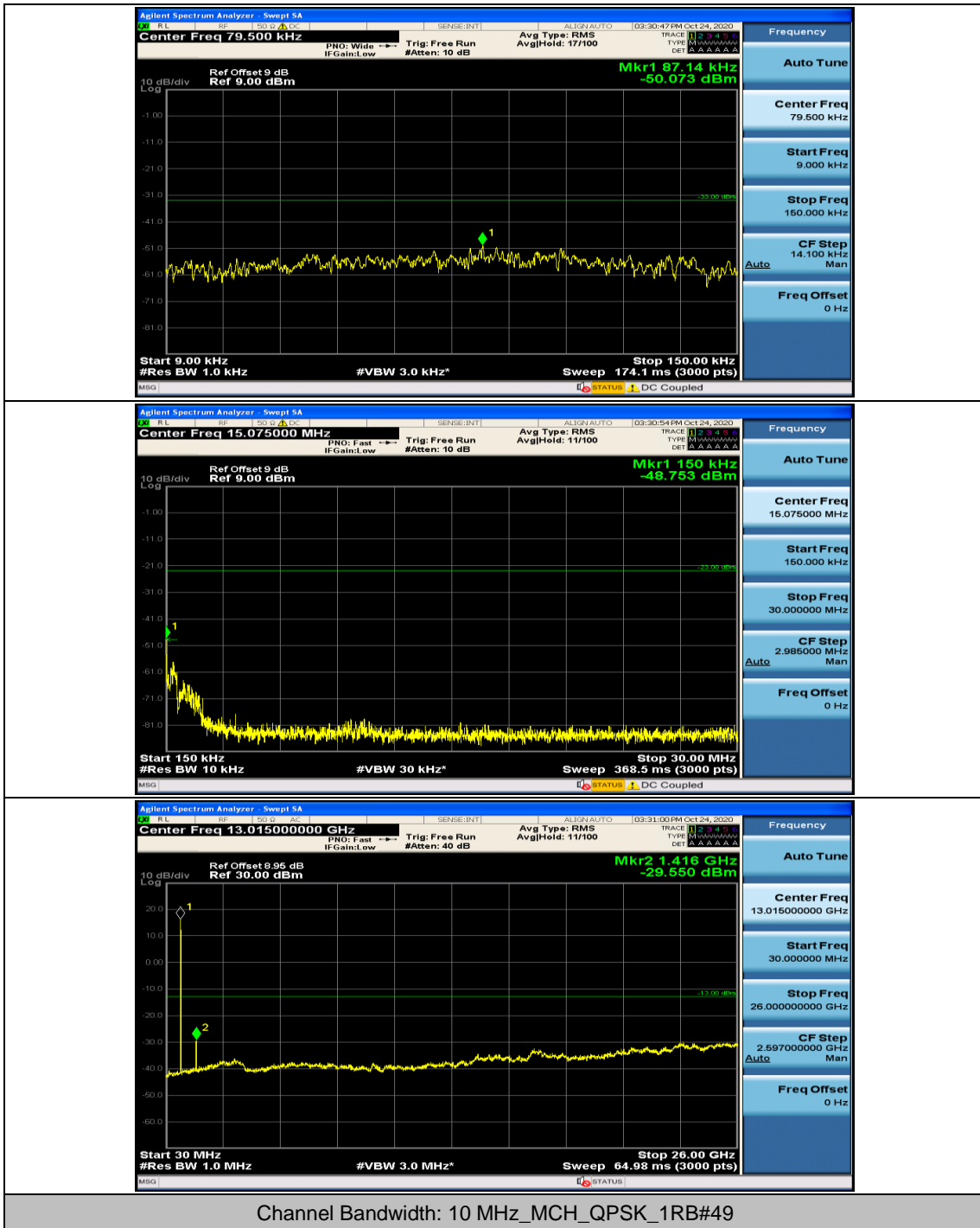


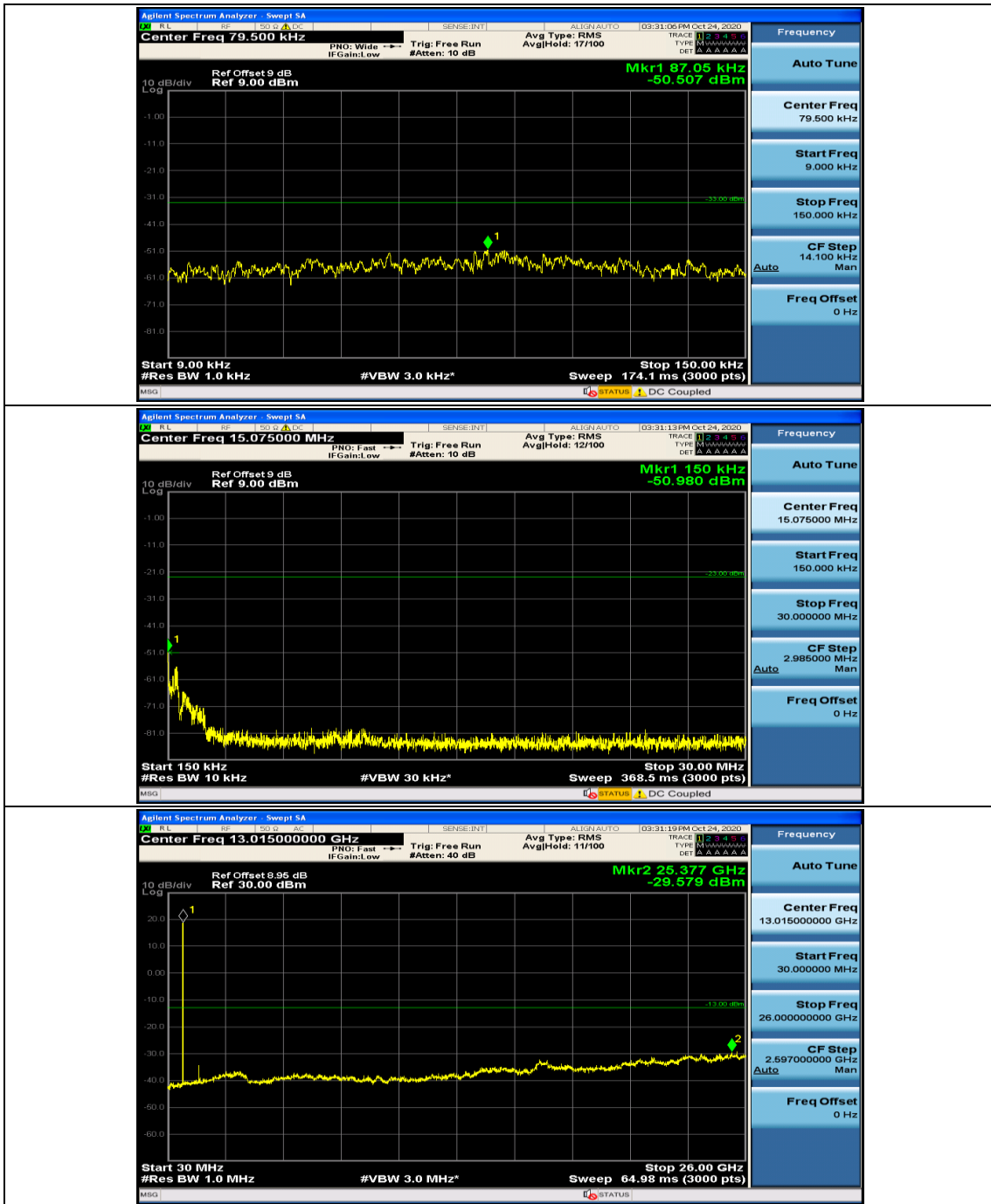


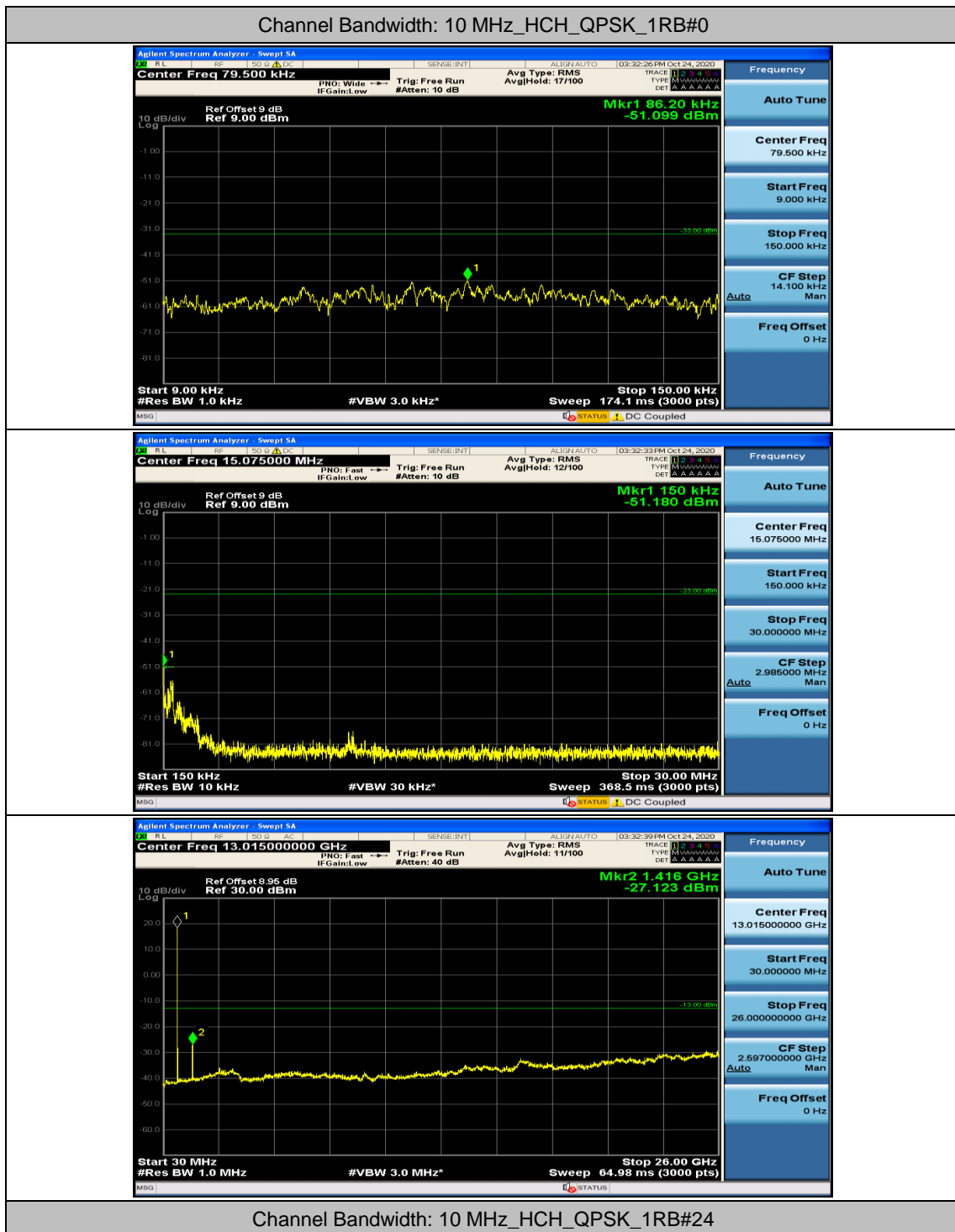


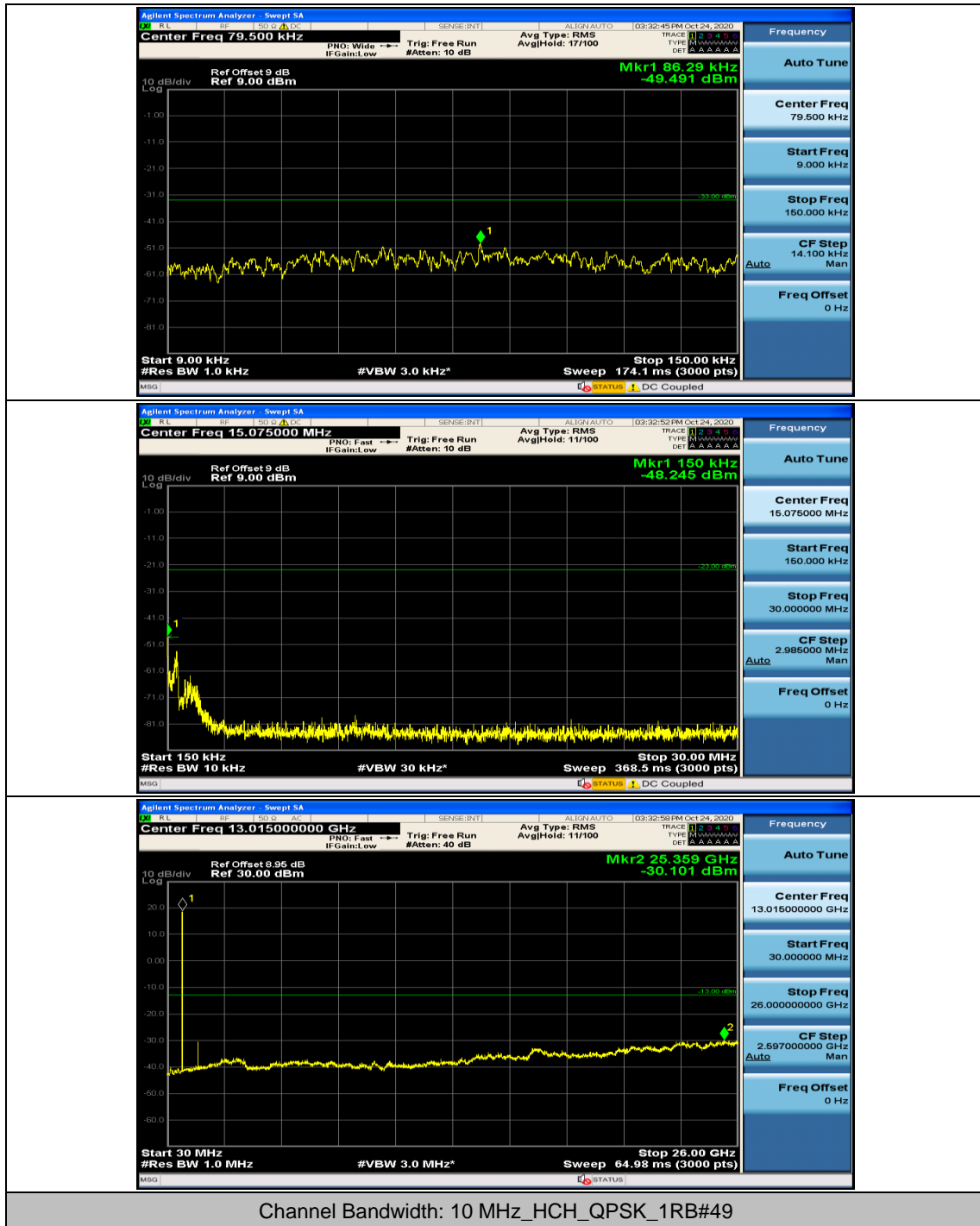


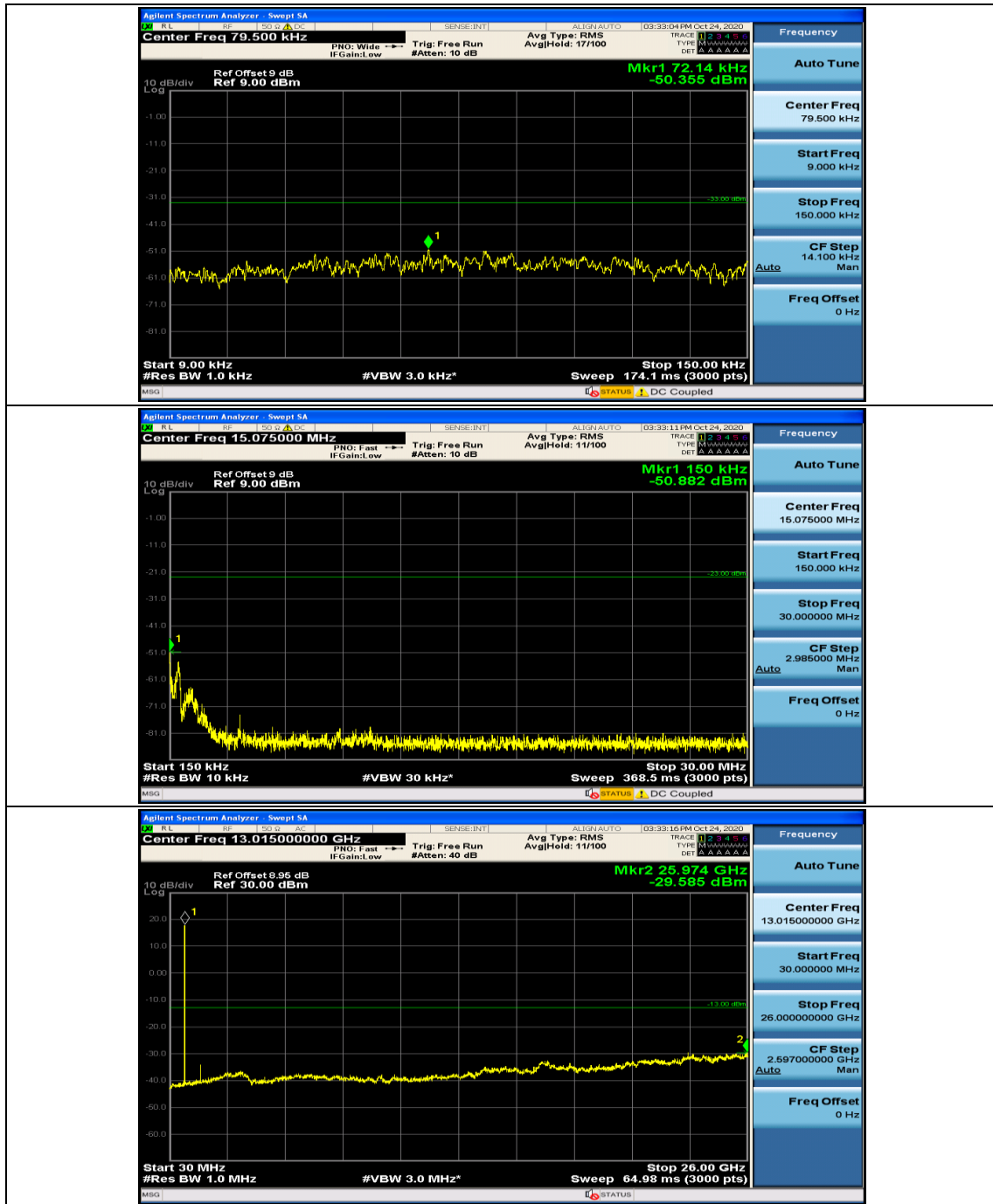




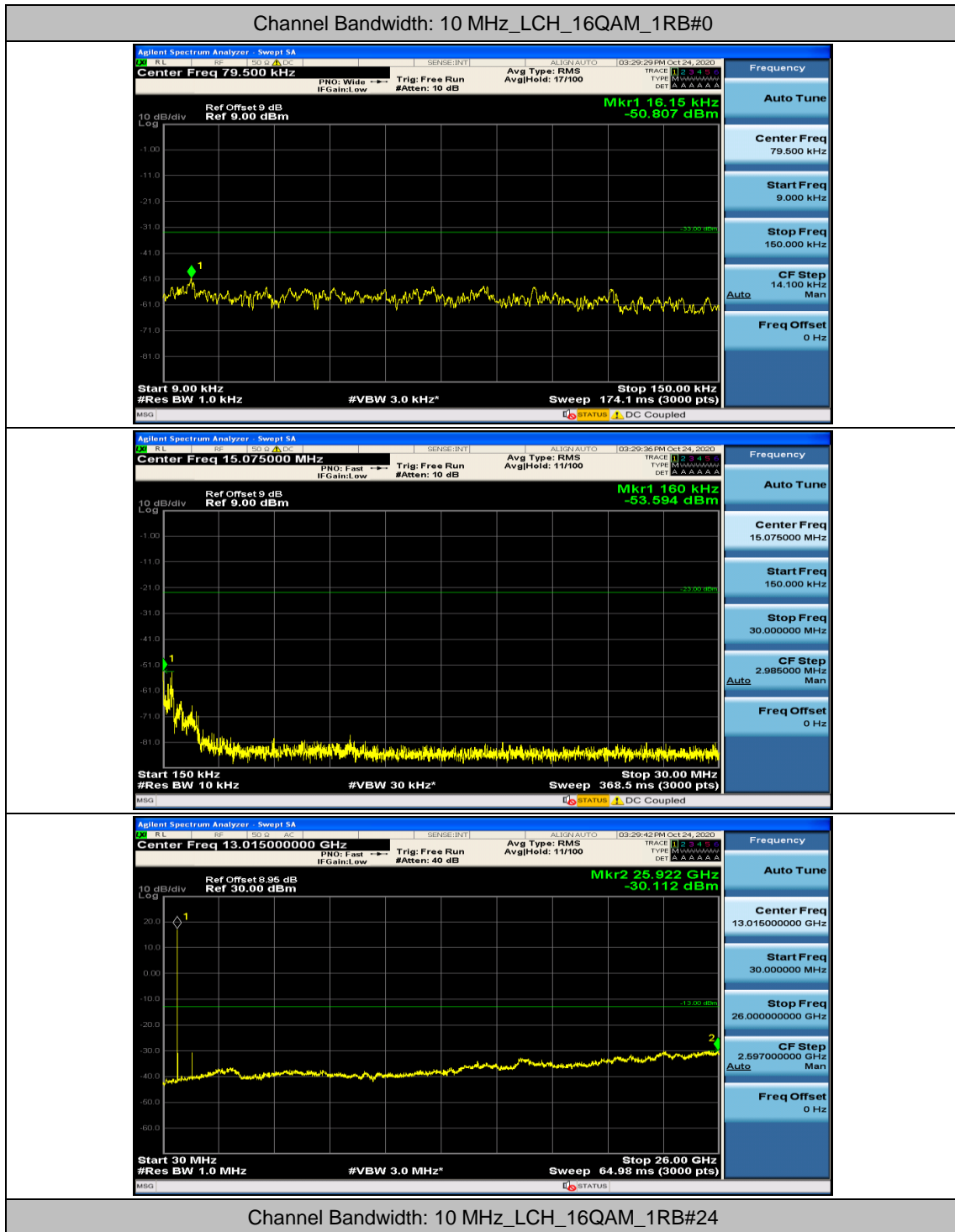


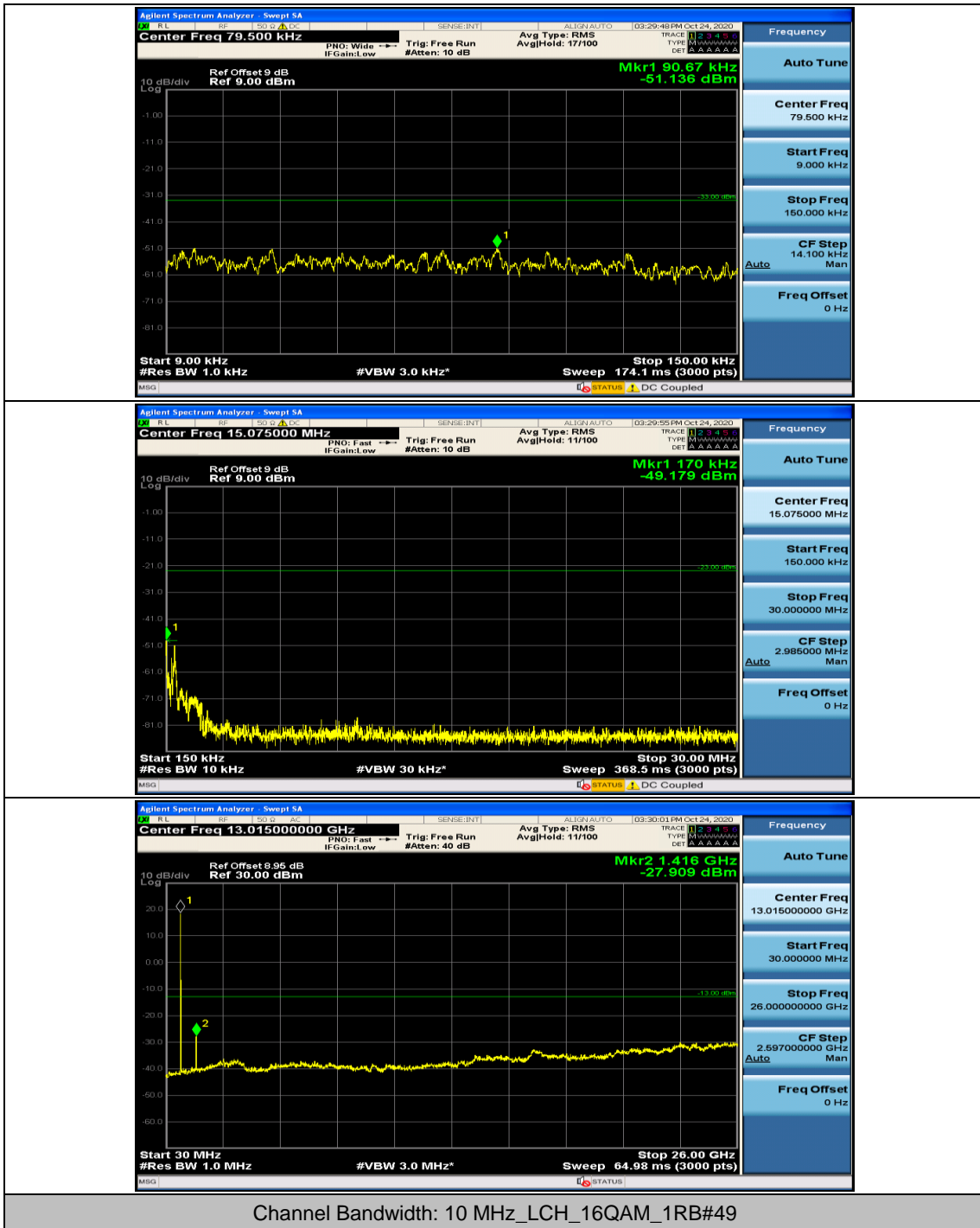


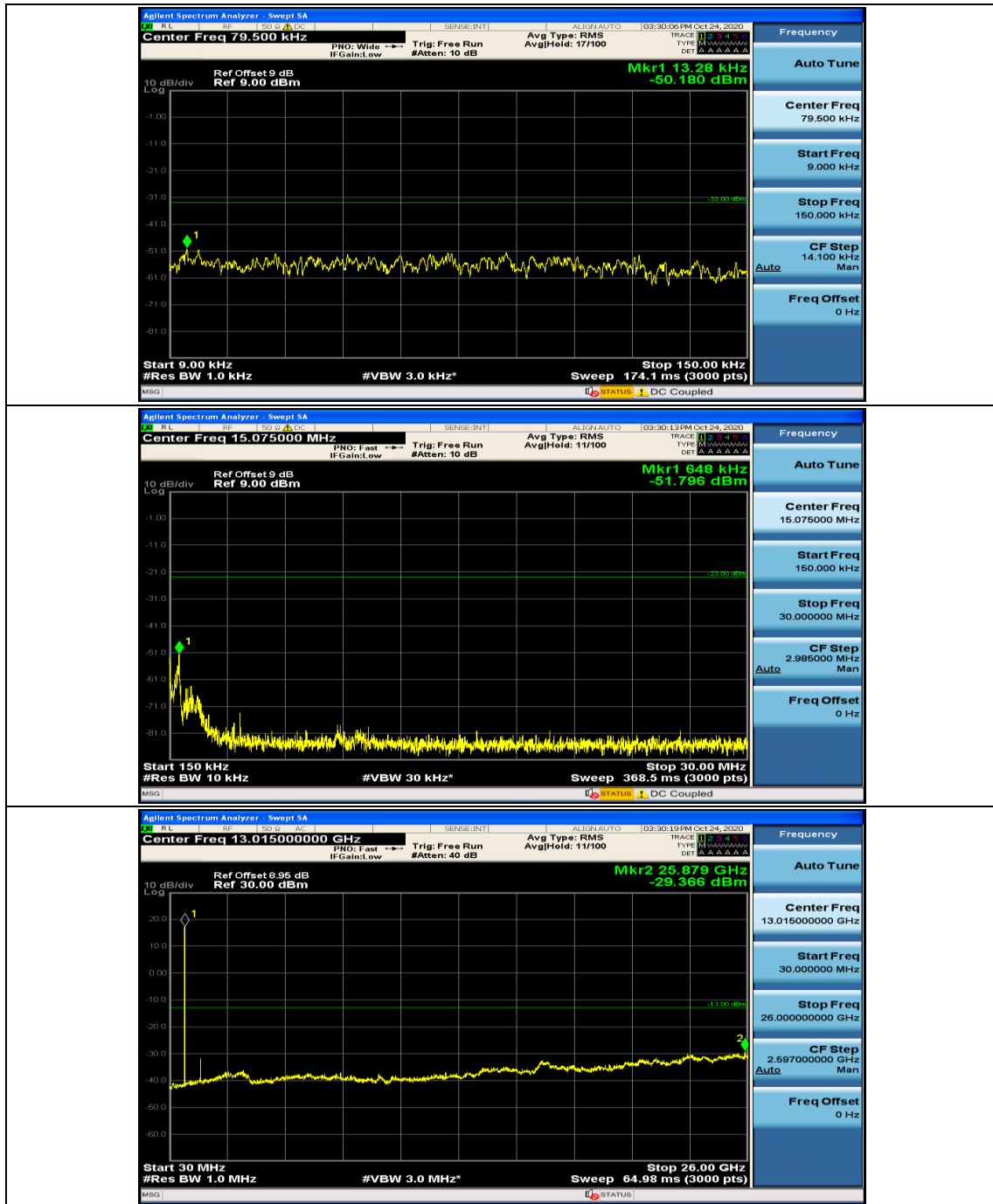


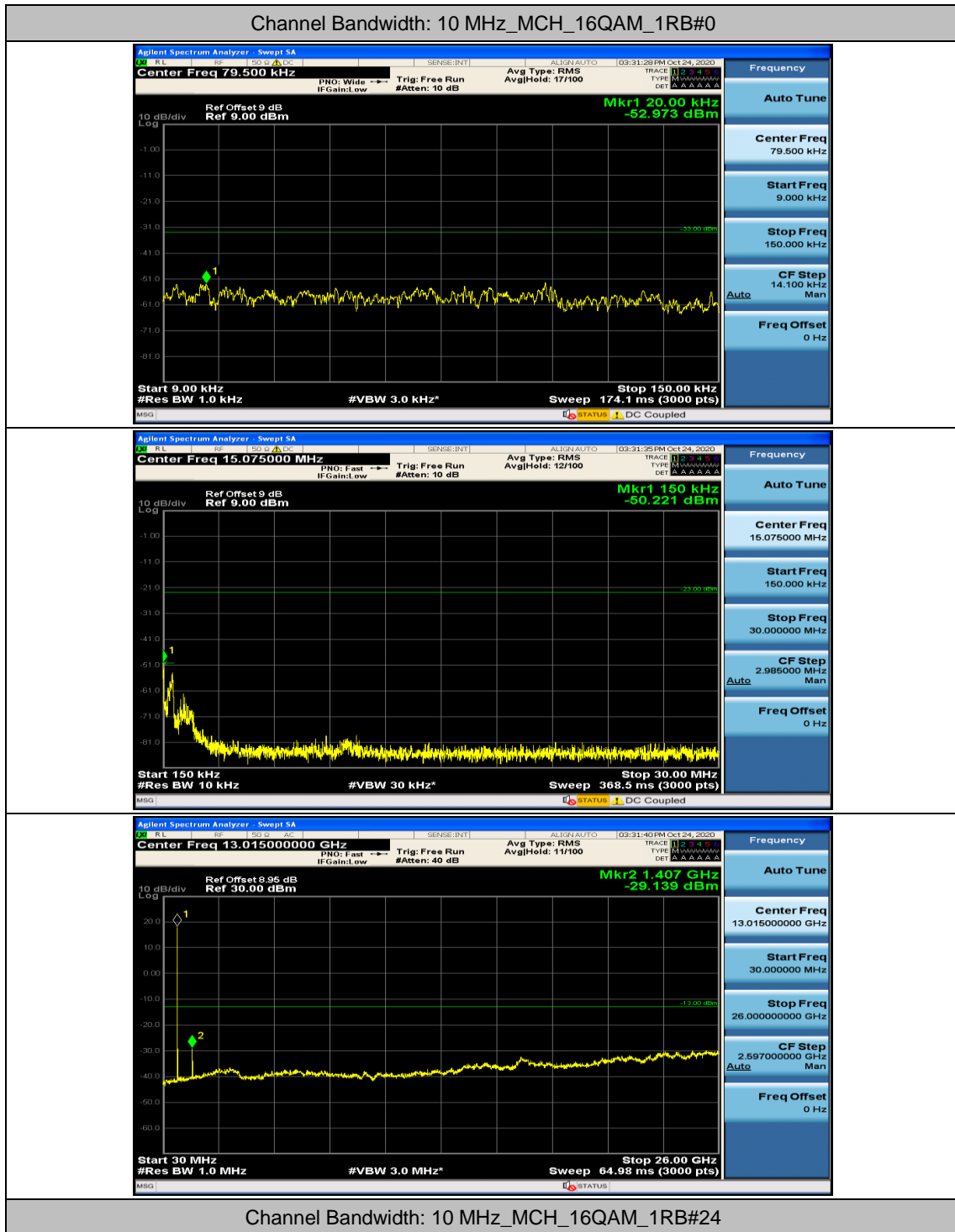


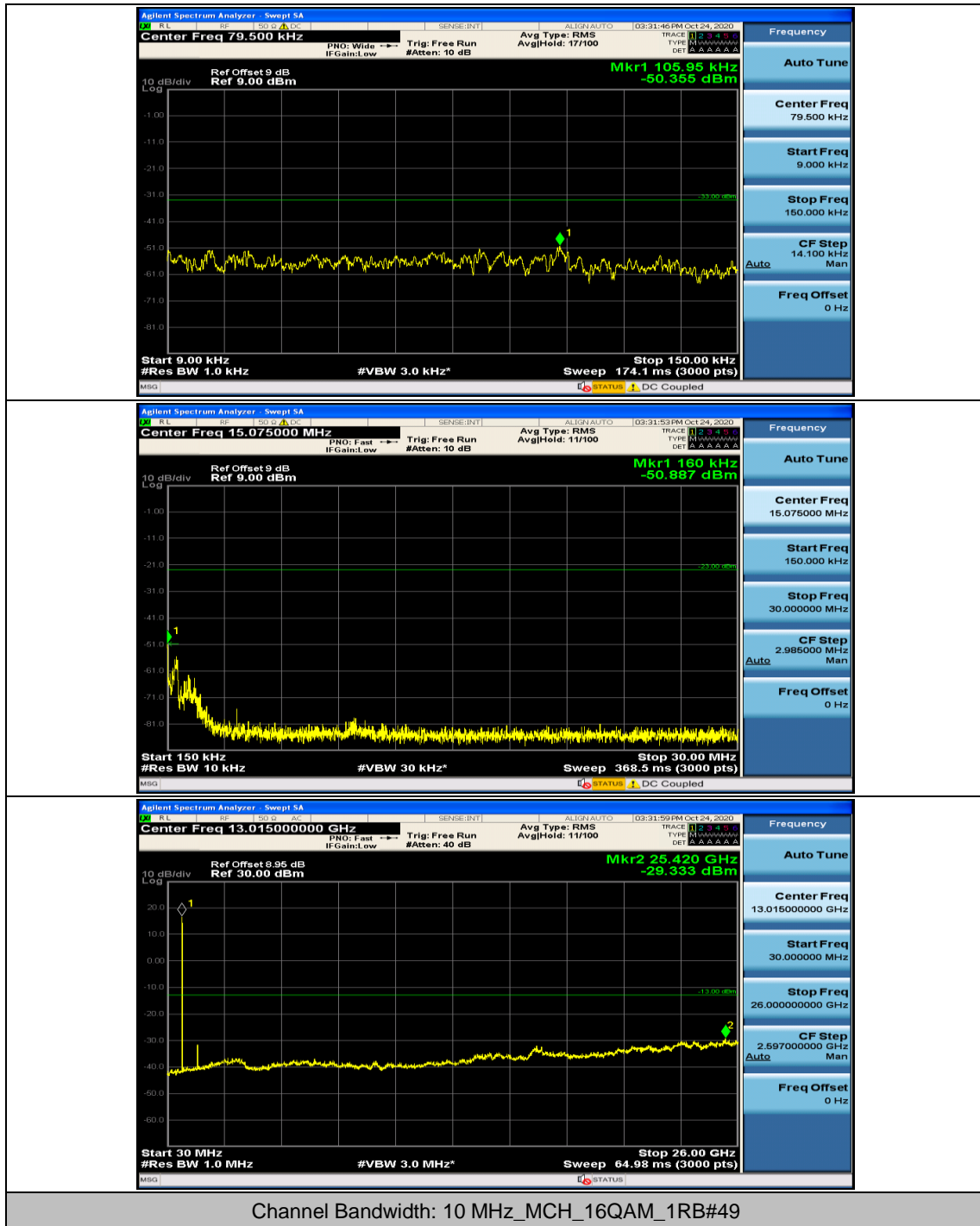


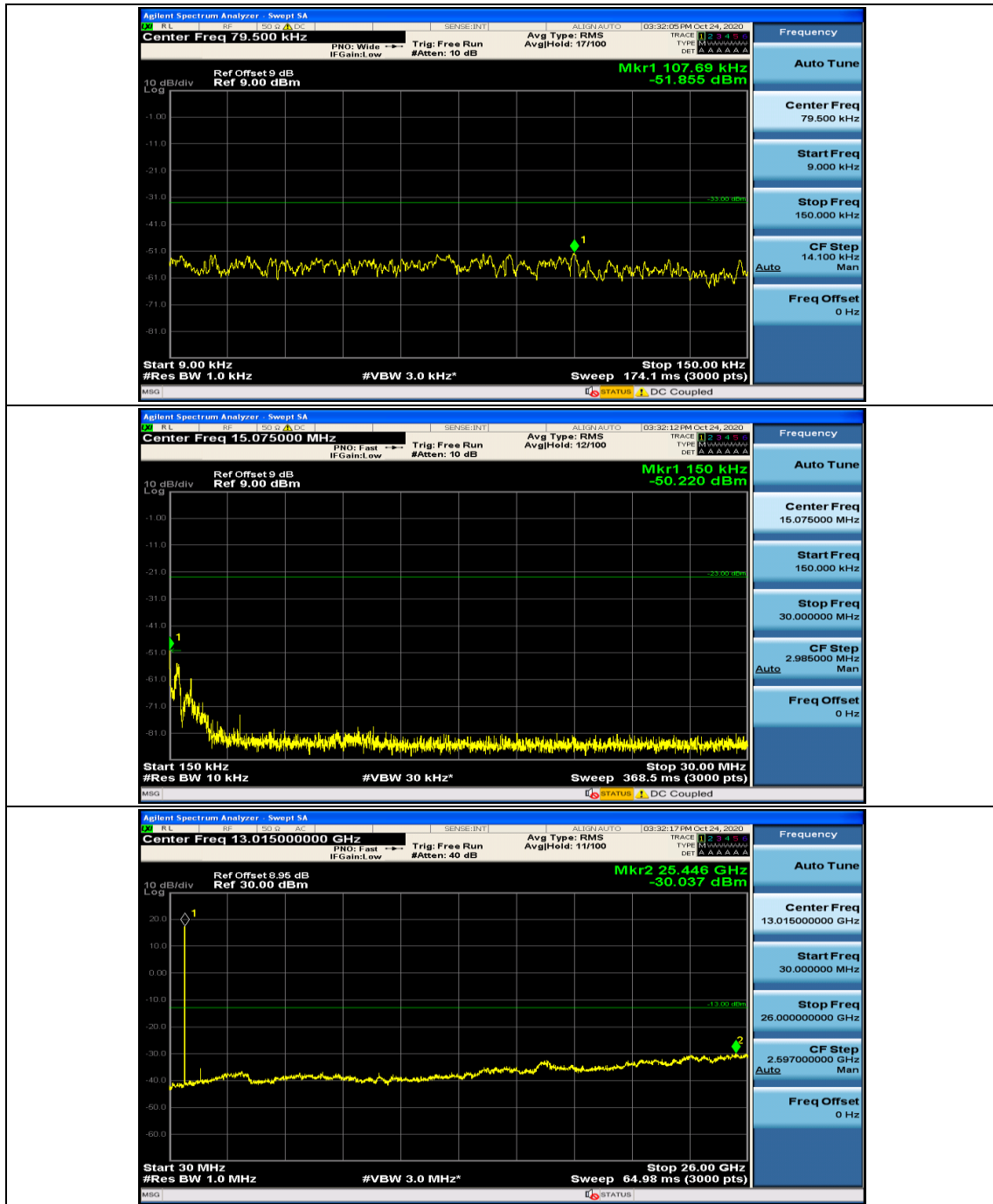


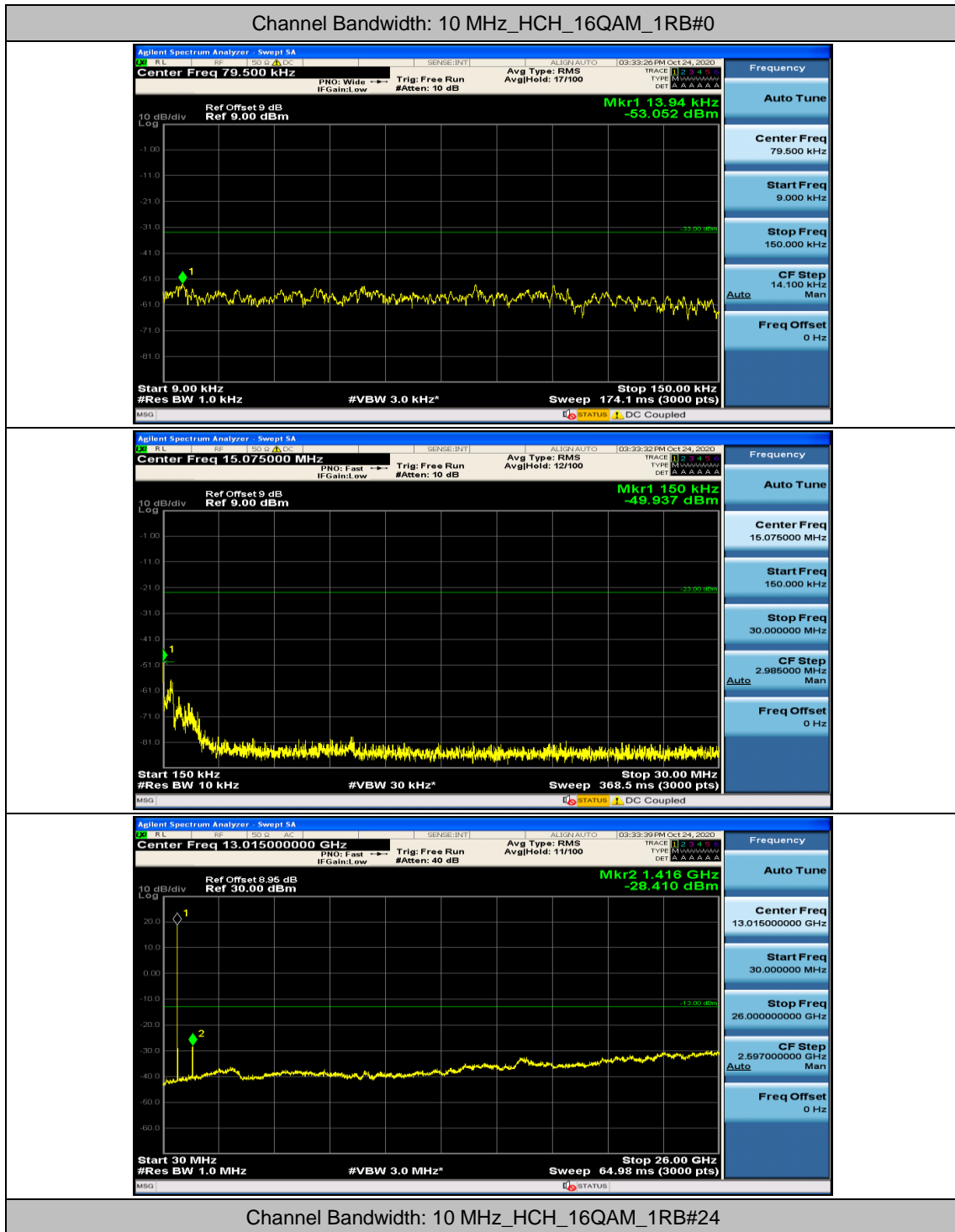


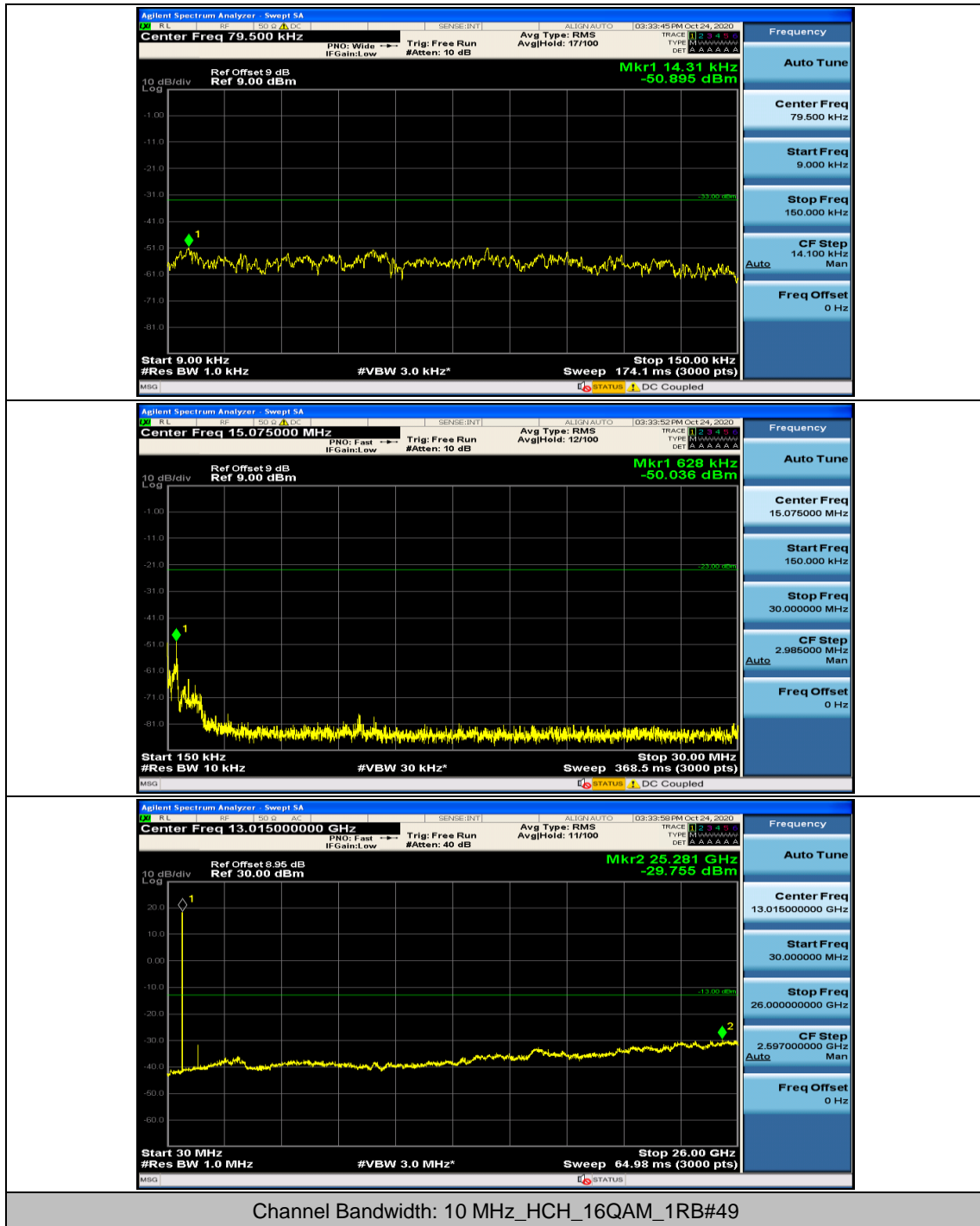




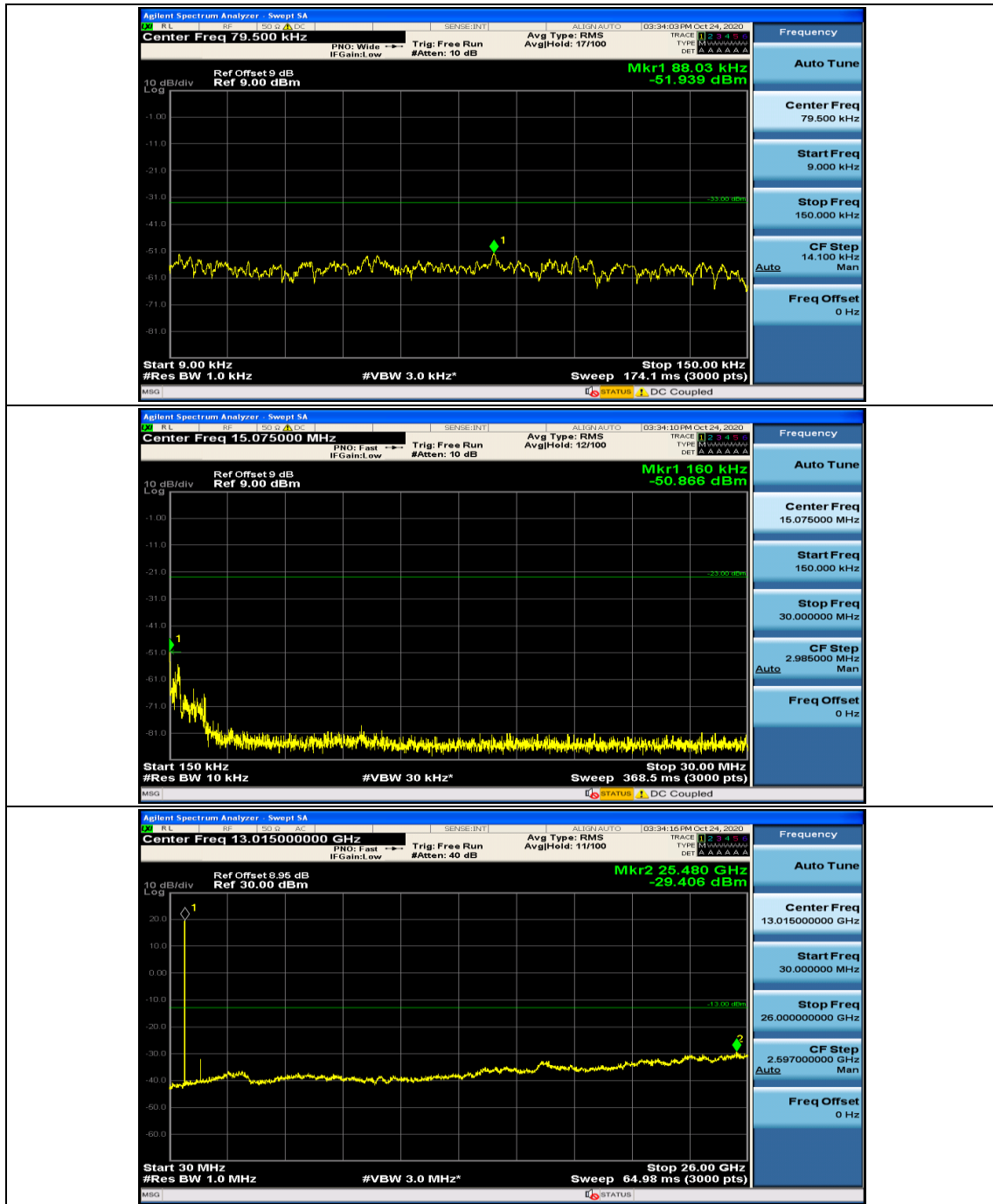












## Appendix F: Frequency Stability

### 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	VL	TN	3.43	0.004855	± 2.5	PASS
		VN	TN	-0.8	-0.001132	± 2.5	PASS
		VH	TN	0.67	0.000948	± 2.5	PASS
	MCH	VL	TN	2.19	0.003085	± 2.5	PASS
		VN	TN	-1.27	-0.001789	± 2.5	PASS
		VH	TN	1.54	0.002169	± 2.5	PASS
	HCH	VL	TN	0.27	0.000378	± 2.5	PASS
		VN	TN	4.27	0.005985	± 2.5	PASS
		VH	TN	0.56	0.000785	± 2.5	PASS
16QAM	LCH	VL	TN	3.34	0.004728	± 2.5	PASS
		VN	TN	-0.2	-0.000283	± 2.5	PASS
		VH	TN	2.3	0.003255	± 2.5	PASS
	MCH	VL	TN	2.56	0.003606	± 2.5	PASS
		VN	TN	4.1	0.005775	± 2.5	PASS
		VH	TN	0.05	0.000070	± 2.5	PASS
	HCH	VL	TN	4.21	0.005900	± 2.5	PASS
		VN	TN	-1.2	-0.001682	± 2.5	PASS
		VH	TN	2.78	0.003896	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.49	0.002109	± 2.5	PASS
		VN	-20	3.3	0.004671	± 2.5	PASS
		VN	-10	3.57	0.005053	± 2.5	PASS
		VN	0	-1.83	-0.002590	± 2.5	PASS
		VN	10	-1.04	-0.001472	± 2.5	PASS
		VN	20	1.5	0.002123	± 2.5	PASS
		VN	30	-0.88	-0.001246	± 2.5	PASS
		VN	40	4.2	0.005945	± 2.5	PASS
		VN	50	1.76	0.002491	± 2.5	PASS
	MCH	VN	-30	2.03	0.002859	± 2.5	PASS

	VN	VN	-20	-0.32	-0.000451	± 2.5	PASS
		VN	-10	4.9	0.006901	± 2.5	PASS
		VN	0	1.93	0.002718	± 2.5	PASS
		VN	10	2.42	0.003408	± 2.5	PASS
		VN	20	-0.92	-0.001296	± 2.5	PASS
		VN	30	3.2	0.004507	± 2.5	PASS
		VN	40	2.7	0.003803	± 2.5	PASS
		VN	50	0.5	0.000704	± 2.5	PASS
	HCH	VN	-30	3.97	0.005564	± 2.5	PASS
		VN	-20	2.46	0.003448	± 2.5	PASS
		VN	-10	-1.64	-0.002299	± 2.5	PASS
		VN	0	4.68	0.006559	± 2.5	PASS
		VN	10	4.28	0.005999	± 2.5	PASS
		VN	20	-0.37	-0.000519	± 2.5	PASS
		VN	30	3.01	0.004219	± 2.5	PASS
		VN	40	3.52	0.004933	± 2.5	PASS
		VN	50	3.36	0.004709	± 2.5	PASS
		16QAM	LCH	VN	-30	4.59	0.006497
VN	-20			4.75	0.006723	± 2.5	PASS
VN	-10			4.28	0.006058	± 2.5	PASS
VN	0			-1.34	-0.001897	± 2.5	PASS
VN	10			-1.39	-0.001967	± 2.5	PASS
VN	20			2.44	0.003454	± 2.5	PASS
VN	30			-1.54	-0.002180	± 2.5	PASS
VN	40			4.17	0.005902	± 2.5	PASS
VN	50			4.72	0.006681	± 2.5	PASS
MCH	VN		-30	-0.35	-0.000491	± 2.5	PASS
	VN		-20	0.96	0.001345	± 2.5	PASS
	VN		-10	3.21	0.004499	± 2.5	PASS
	VN		0	3.41	0.004779	± 2.5	PASS
	VN		10	-0.32	-0.000448	± 2.5	PASS
	VN		20	-0.14	-0.000196	± 2.5	PASS
	VN		30	2.44	0.003420	± 2.5	PASS
	VN		40	4.47	0.006265	± 2.5	PASS
	VN		50	2	0.002803	± 2.5	PASS
HCH	VN		-30	-0.81	-0.001135	± 2.5	PASS
	VN		-20	0.62	0.000869	± 2.5	PASS
	VN		-10	1.64	0.002299	± 2.5	PASS
	VN		0	0.84	0.001177	± 2.5	PASS
	VN		10	-0.09	-0.000126	± 2.5	PASS
	VN		20	-0.21	-0.000294	± 2.5	PASS

		VN	30	4.65	0.006517	± 2.5	PASS
		VN	40	1.83	0.002565	± 2.5	PASS
		VN	50	1.01	0.001416	± 2.5	PASS

**Channel Bandwidth: 10 MHz**

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.31	-0.000437	± 2.5	PASS
		VN	TN	3.93	0.005543	± 2.5	PASS
		VH	TN	-0.86	-0.001213	± 2.5	PASS
	MCH	VL	TN	4.52	0.006366	± 2.5	PASS
		VN	TN	3.03	0.004268	± 2.5	PASS
		VH	TN	2.26	0.003183	± 2.5	PASS
	HCH	VL	TN	-1.45	-0.002039	± 2.5	PASS
		VN	TN	0.7	0.000985	± 2.5	PASS
		VH	TN	3.25	0.004571	± 2.5	PASS
16QAM	LCH	VL	TN	0.32	0.000451	± 2.5	PASS
		VN	TN	-0.55	-0.000776	± 2.5	PASS
		VH	TN	-0.96	-0.001354	± 2.5	PASS
	MCH	VL	TN	1.06	0.001493	± 2.5	PASS
		VN	TN	-0.68	-0.000958	± 2.5	PASS
		VH	TN	3.79	0.005338	± 2.5	PASS
	HCH	VL	TN	4.59	0.006456	± 2.5	PASS
		VN	TN	2.74	0.003854	± 2.5	PASS
		VH	TN	3.21	0.004515	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.33	0.004697	± 2.5	PASS
		VN	-20	-0.79	-0.001114	± 2.5	PASS
		VN	-10	0.6	0.000846	± 2.5	PASS
		VN	0	3.16	0.004457	± 2.5	PASS
		VN	10	-0.91	-0.001283	± 2.5	PASS
		VN	20	1.86	0.002623	± 2.5	PASS
		VN	30	4.09	0.005769	± 2.5	PASS
		VN	40	4.32	0.006093	± 2.5	PASS
		VN	50	3.13	0.004415	± 2.5	PASS
	MCH	VN	-30	2.44	0.003437	± 2.5	PASS
		VN	-20	-0.35	-0.000493	± 2.5	PASS

		VN	-10	3.07	0.004324	± 2.5	PASS		
		VN	0	1.84	0.002592	± 2.5	PASS		
		VN	10	1.96	0.002761	± 2.5	PASS		
		VN	20	-0.17	-0.000239	± 2.5	PASS		
		VN	30	4.15	0.005845	± 2.5	PASS		
		VN	40	-0.16	-0.000225	± 2.5	PASS		
		VN	50	1.89	0.002662	± 2.5	PASS		
	HCH	VN	-30	4.27	0.006006	± 2.5	PASS		
		VN	-20	2.93	0.004121	± 2.5	PASS		
		VN	-10	0.31	0.000436	± 2.5	PASS		
		VN	0	2.97	0.004177	± 2.5	PASS		
		VN	10	3.98	0.005598	± 2.5	PASS		
		VN	20	3.39	0.004768	± 2.5	PASS		
		VN	30	4.4	0.006188	± 2.5	PASS		
		VN	40	3.28	0.004613	± 2.5	PASS		
		VN	50	1.82	0.002560	± 2.5	PASS		
		16QAM	LCH	VN	-30	-1.19	-0.001676	± 2.5	PASS
				VN	-20	1.37	0.001930	± 2.5	PASS
				VN	-10	3.65	0.005141	± 2.5	PASS
VN	0			3.89	0.005479	± 2.5	PASS		
VN	10			-0.35	-0.000493	± 2.5	PASS		
VN	20			3.99	0.005620	± 2.5	PASS		
VN	30			2.14	0.003014	± 2.5	PASS		
VN	40			0.62	0.000873	± 2.5	PASS		
VN	50			0.82	0.001155	± 2.5	PASS		
MCH	VN		-30	-0.81	-0.001139	± 2.5	PASS		
	VN		-20	2.69	0.003783	± 2.5	PASS		
	VN		-10	4.51	0.006343	± 2.5	PASS		
	VN		0	4.56	0.006414	± 2.5	PASS		
	VN		10	0.96	0.001350	± 2.5	PASS		
	VN		20	-1.09	-0.001533	± 2.5	PASS		
	VN		30	-0.82	-0.001153	± 2.5	PASS		
	VN		40	-1.74	-0.002447	± 2.5	PASS		
	VN		50	1.28	0.001800	± 2.5	PASS		
HCH	VN		-30	1.46	0.002053	± 2.5	PASS		
	VN	-20	-0.05	-0.000070	± 2.5	PASS			
	VN	-10	-1.8	-0.002532	± 2.5	PASS			
	VN	0	1.63	0.002293	± 2.5	PASS			
	VN	10	-0.97	-0.001364	± 2.5	PASS			
	VN	20	0.12	0.000169	± 2.5	PASS			
	VN	30	2.47	0.003474	± 2.5	PASS			

		VN	40	-1.46	-0.002053	± 2.5	PASS
		VN	50	2.01	0.002827	± 2.5	PASS