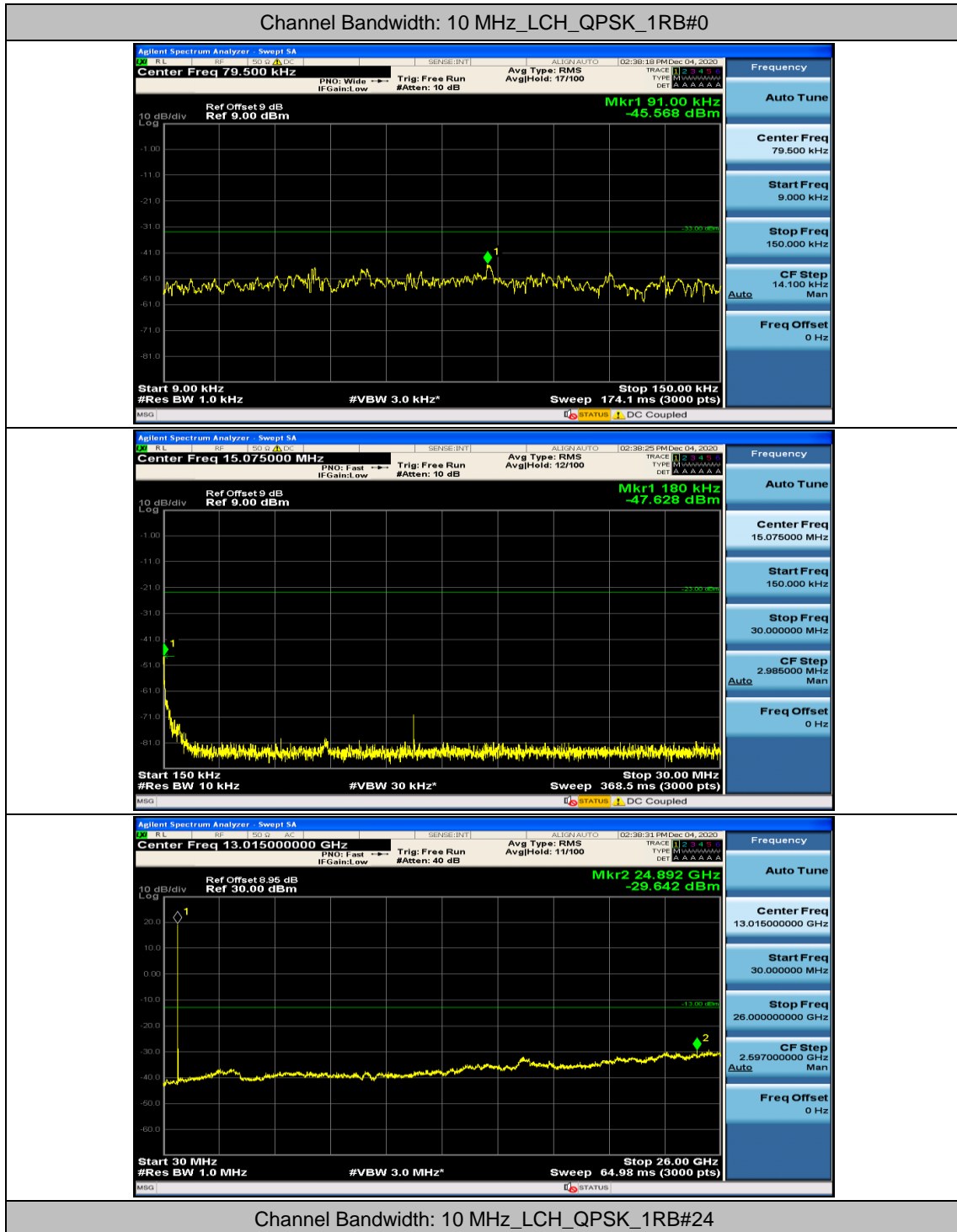
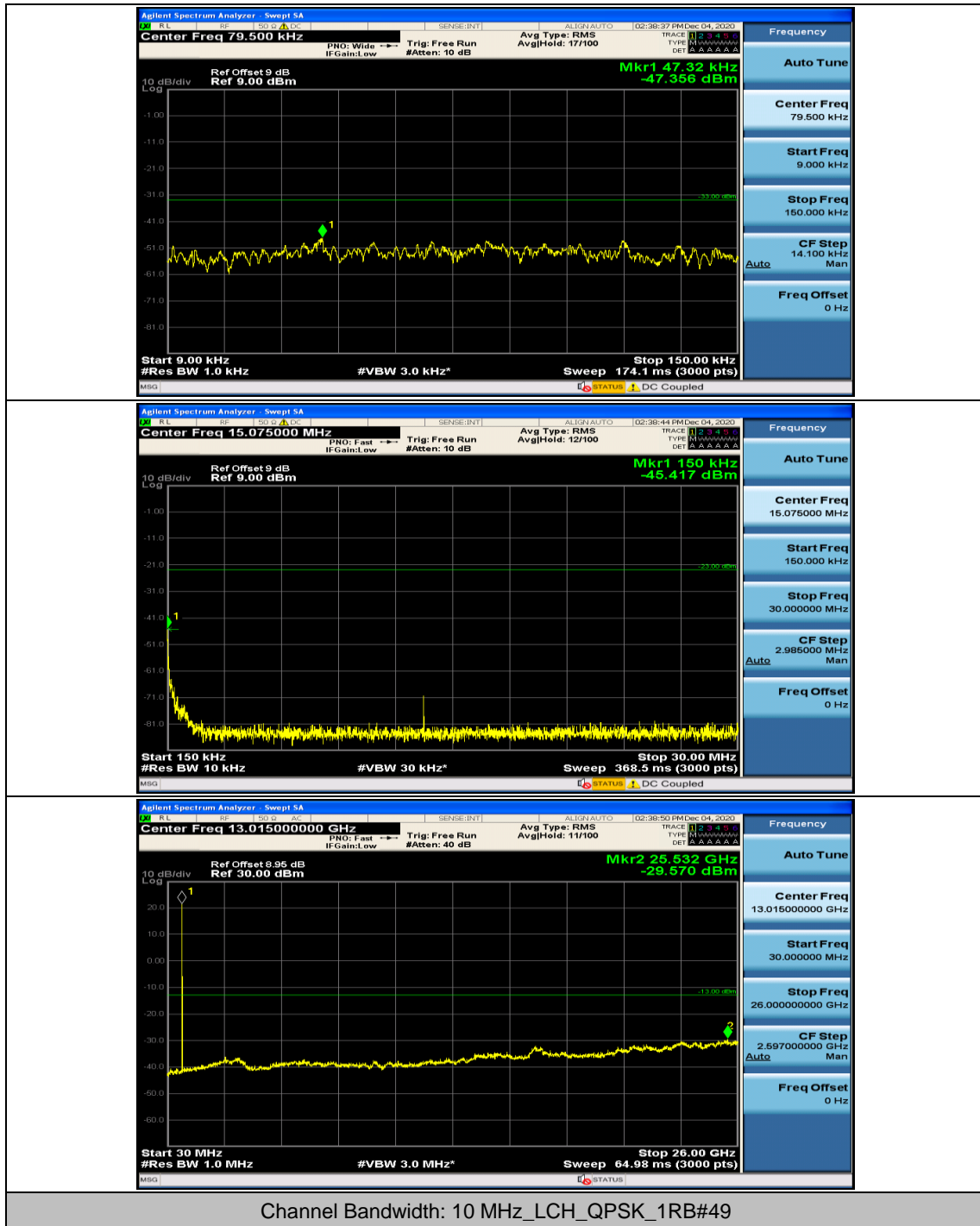
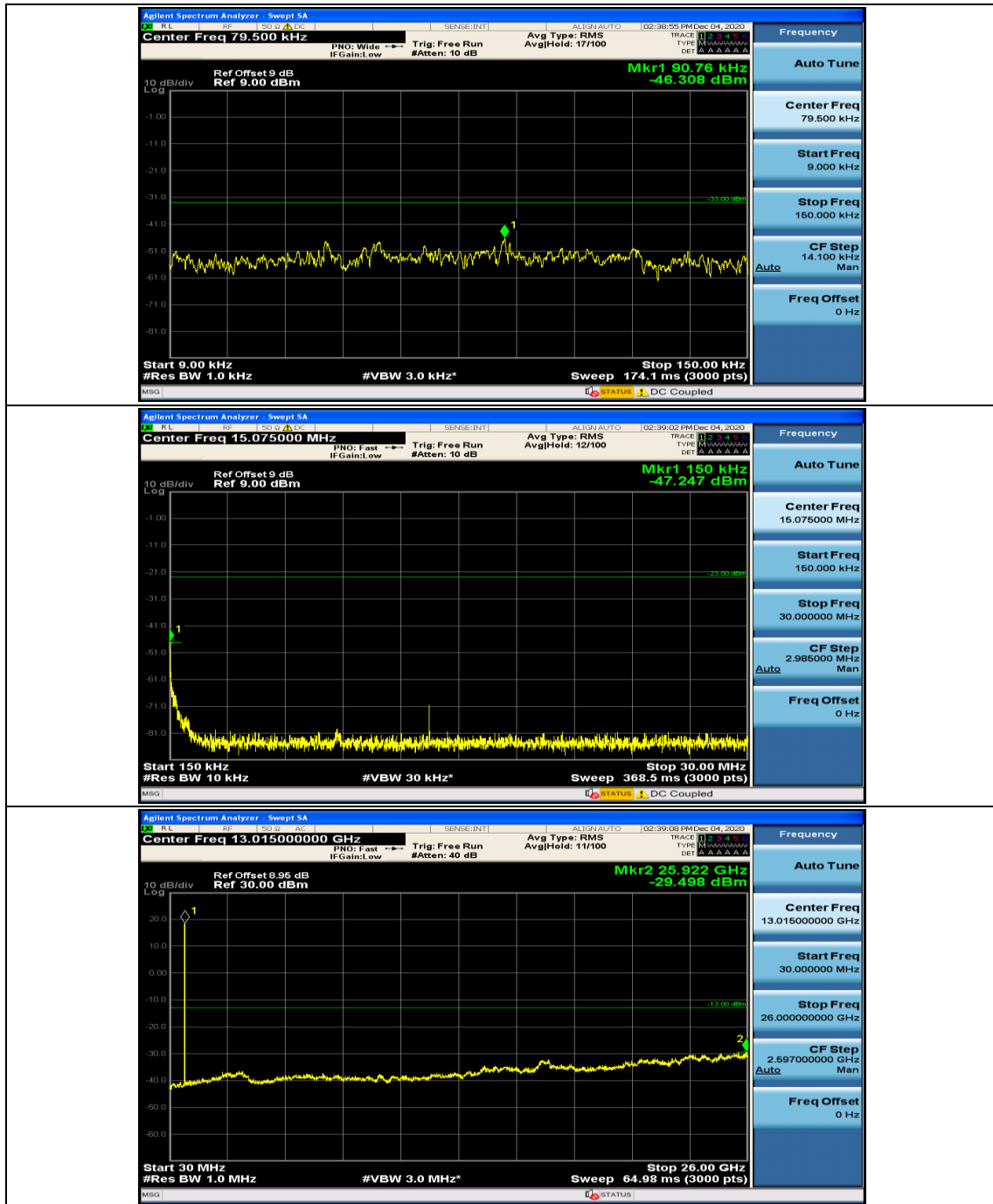
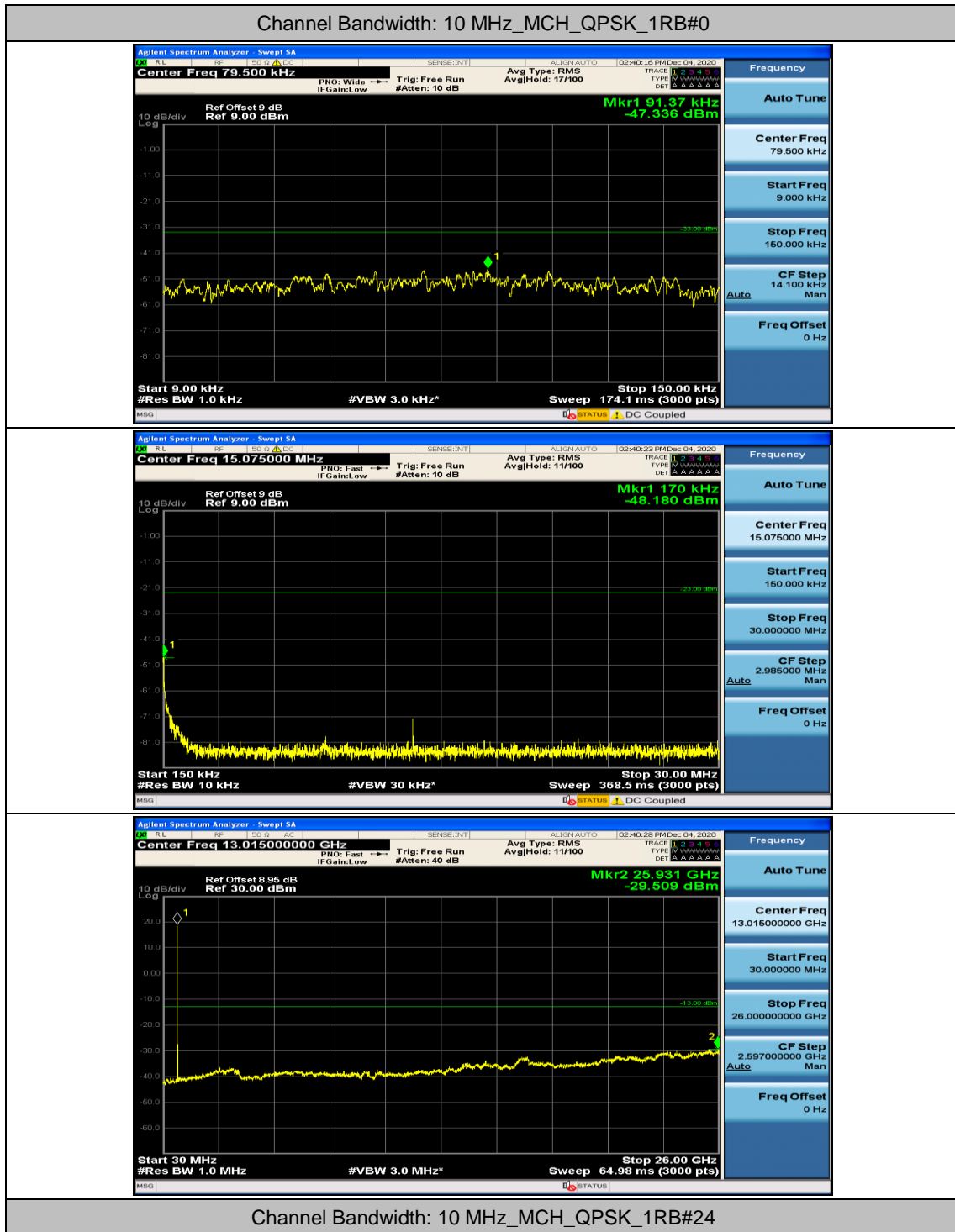


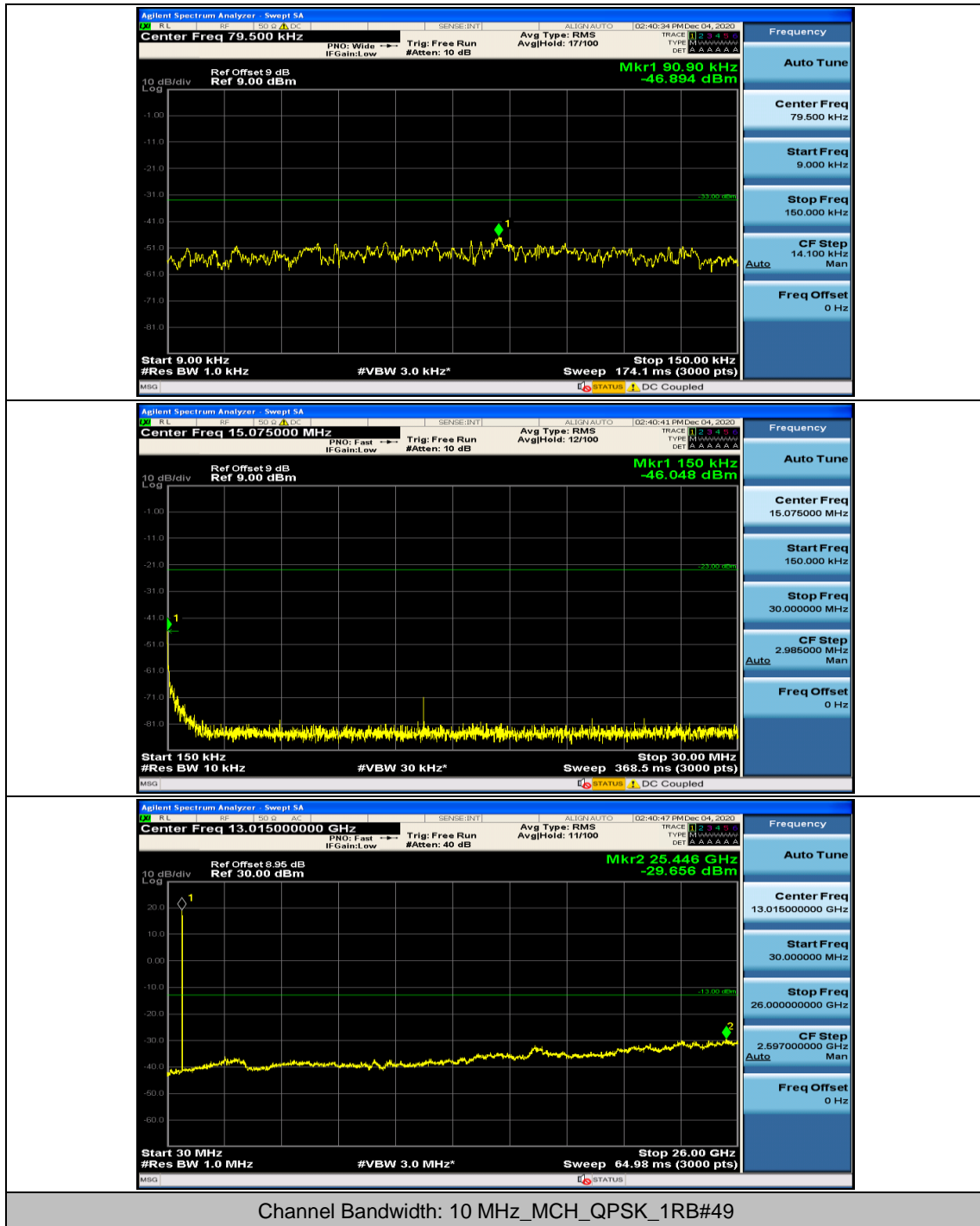
Channel Bandwidth: 10 MHz

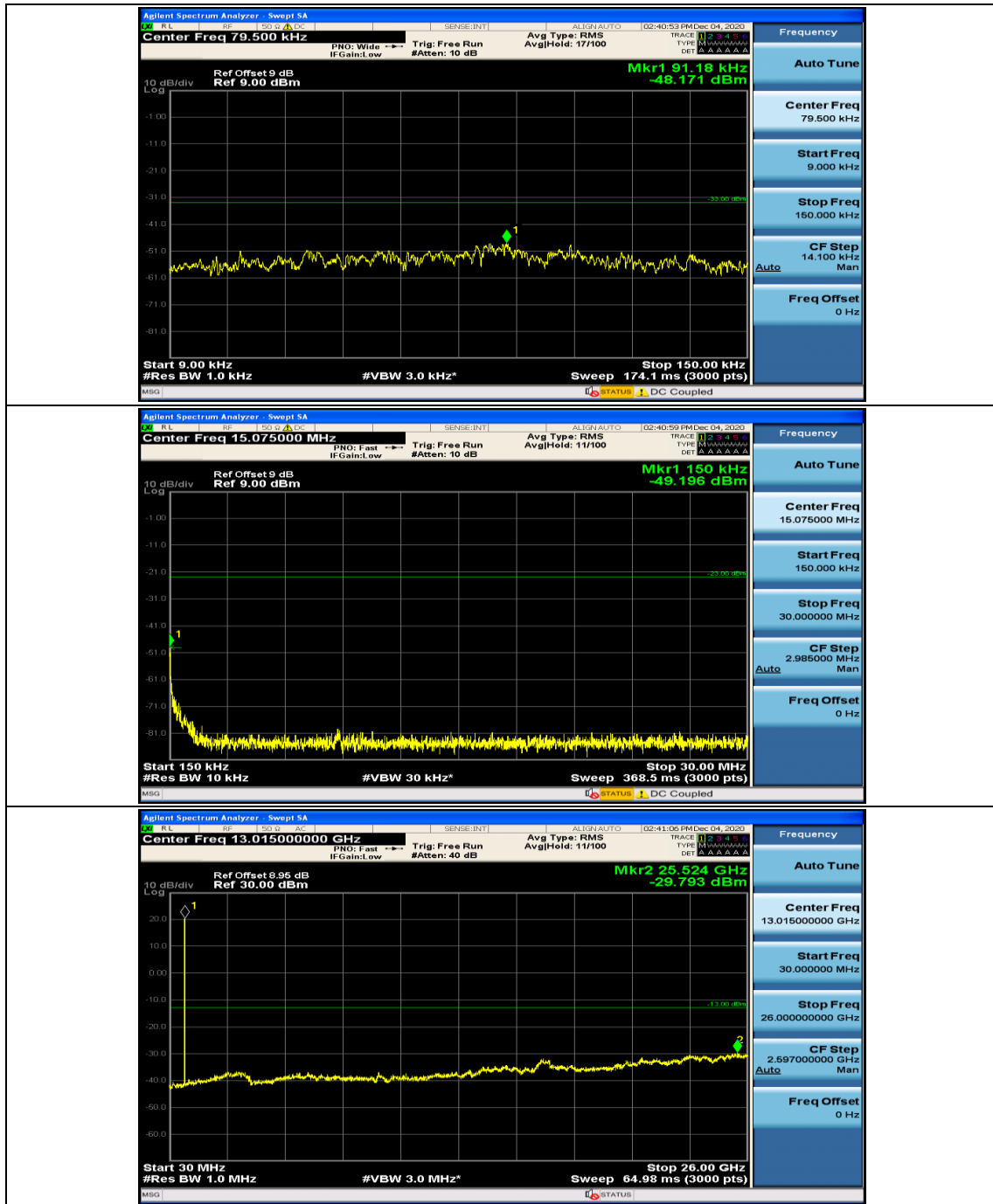


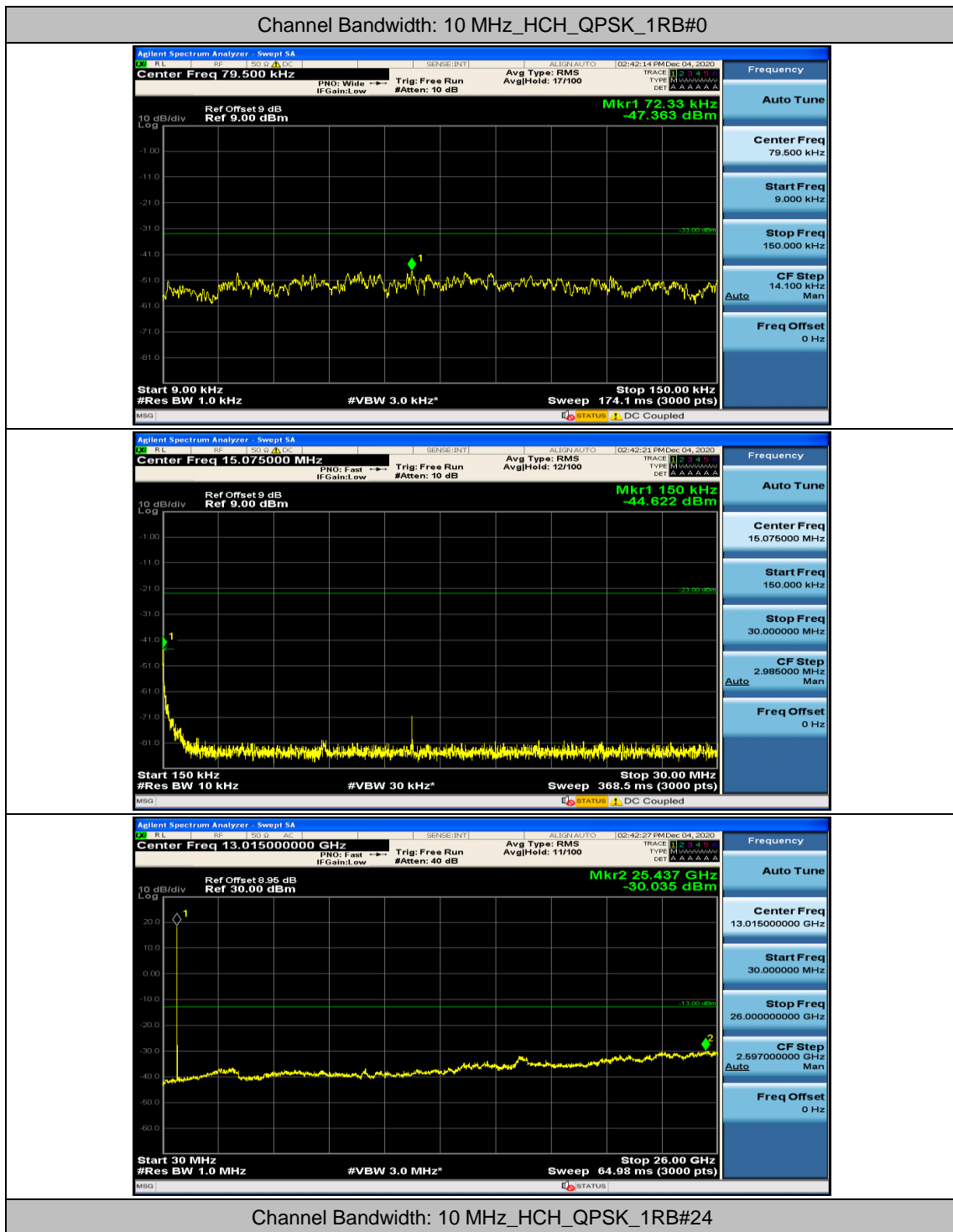


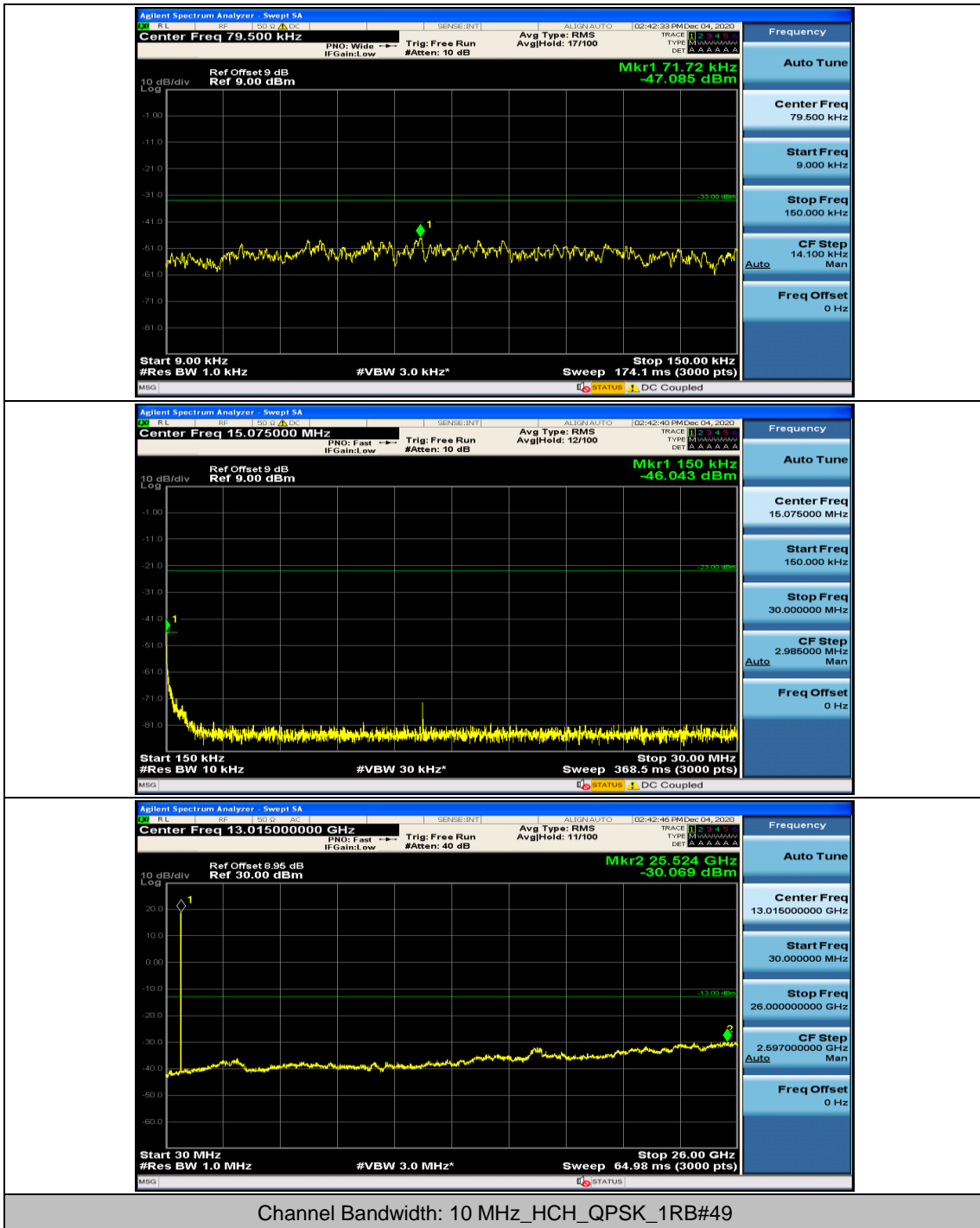


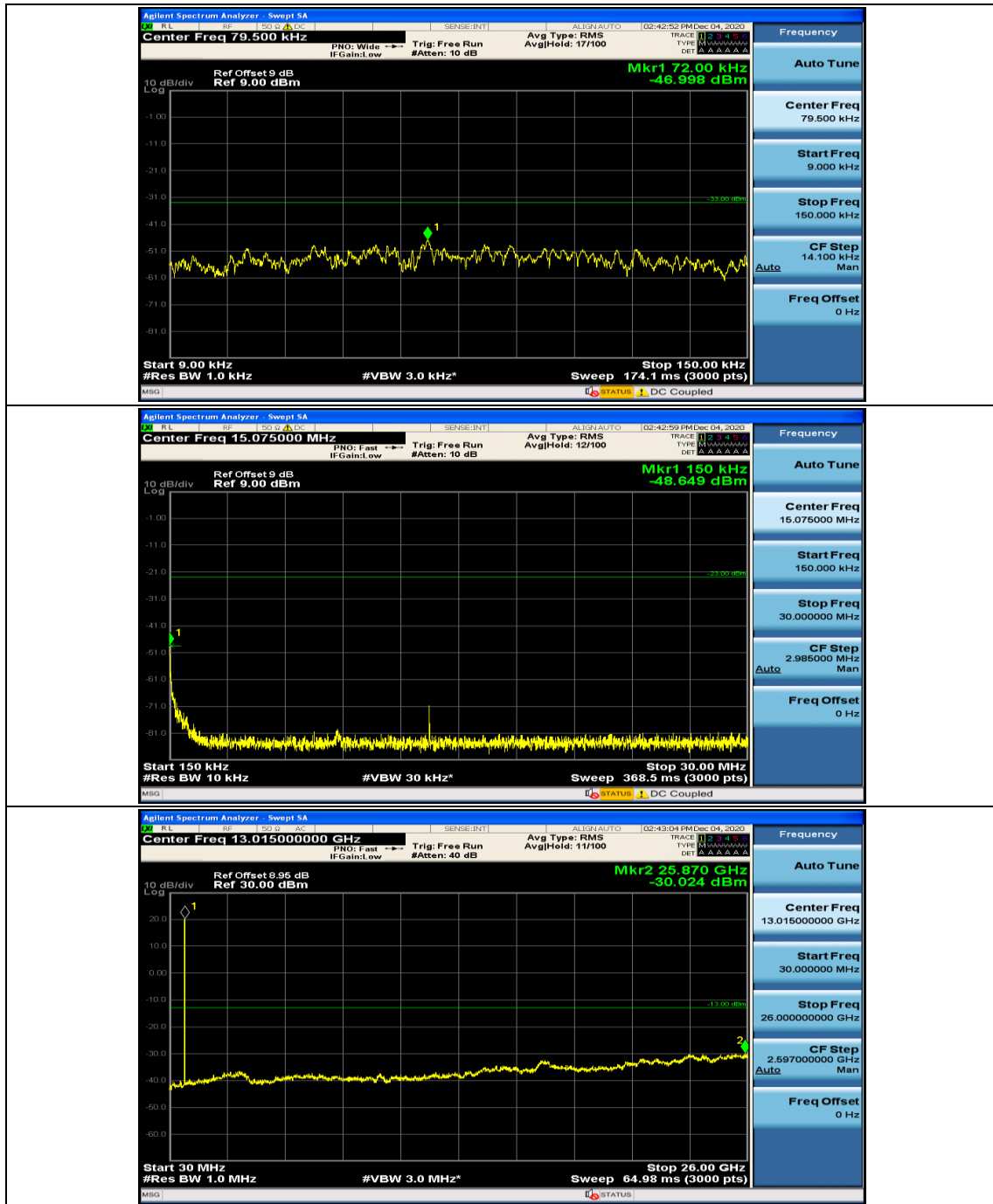


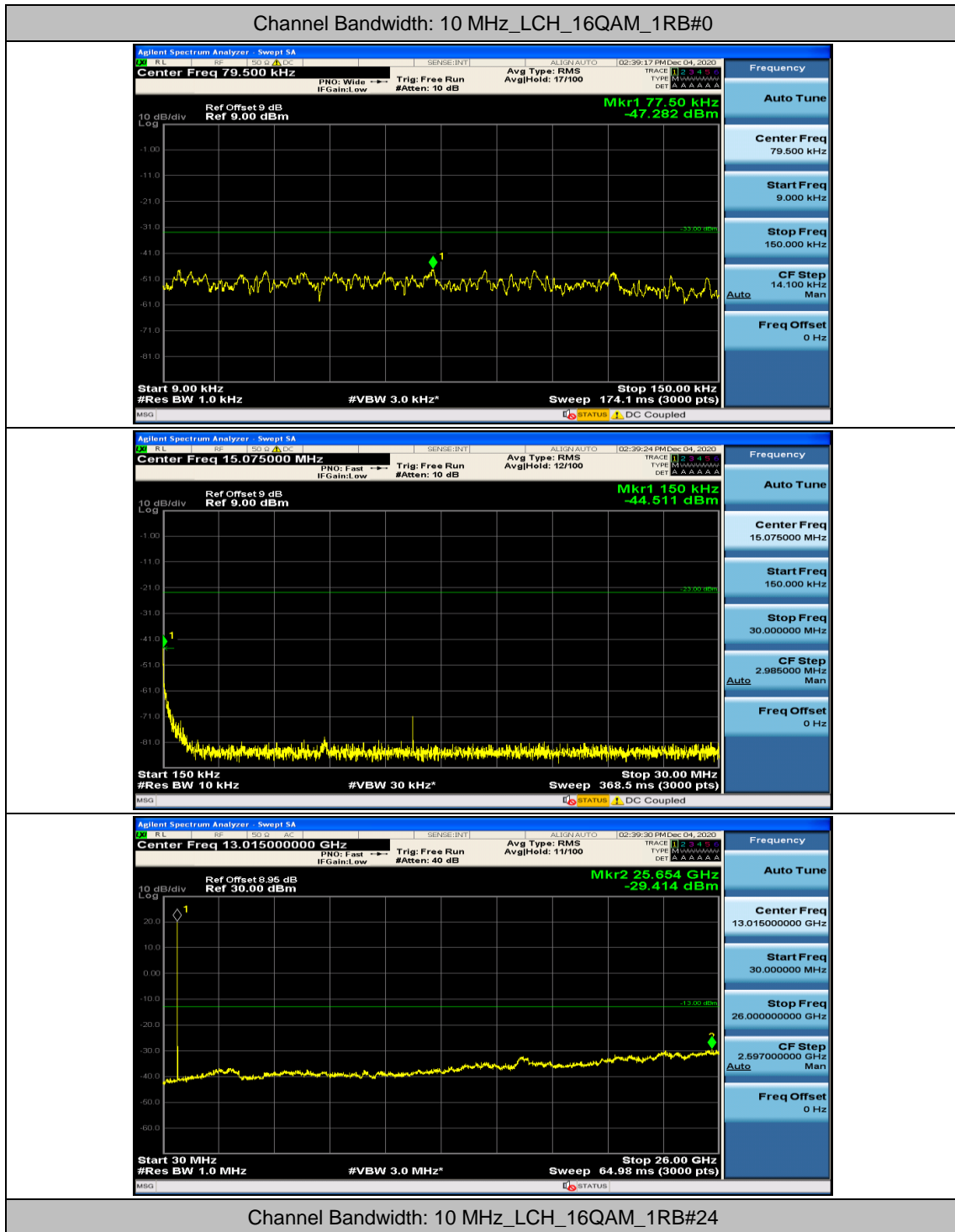


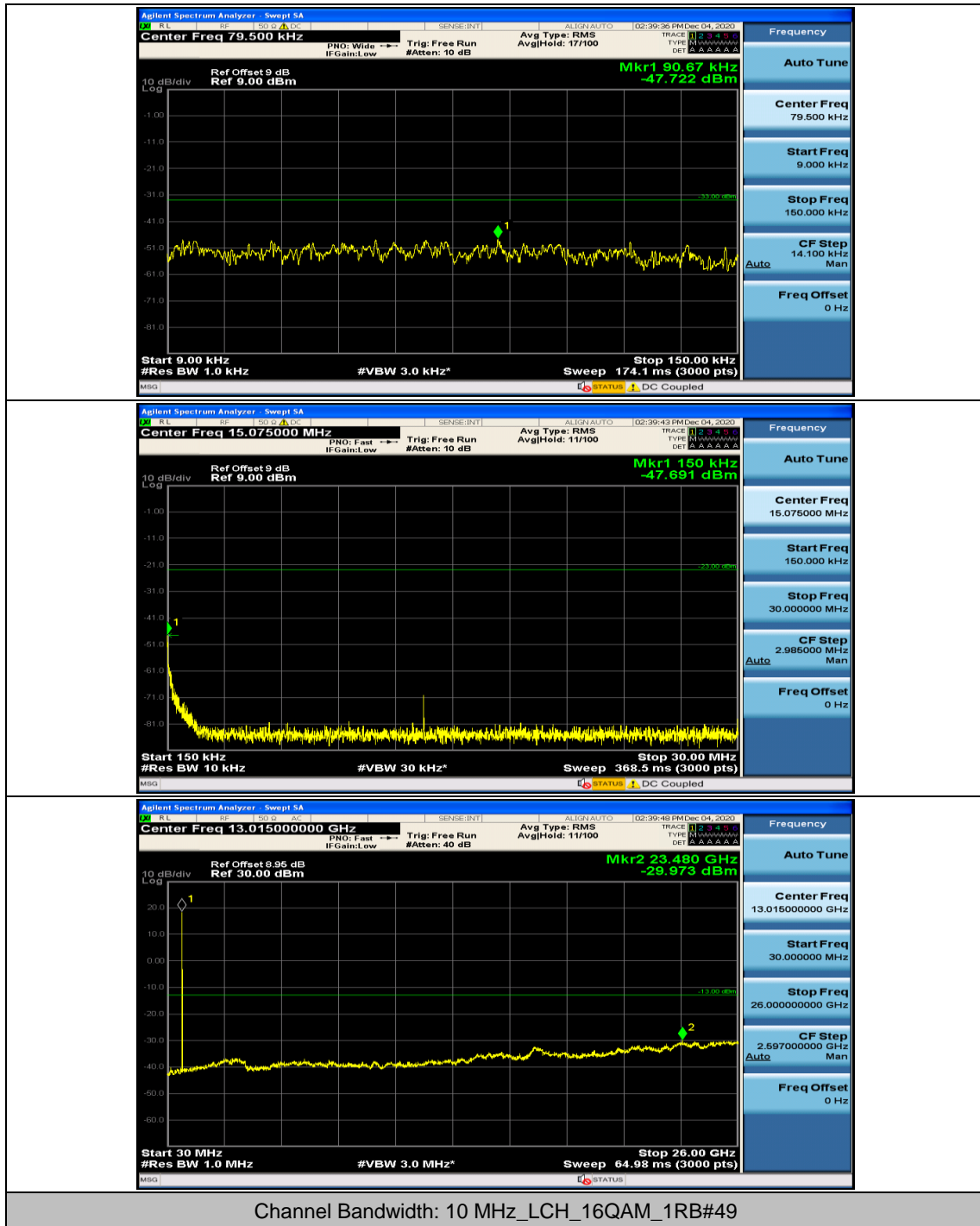


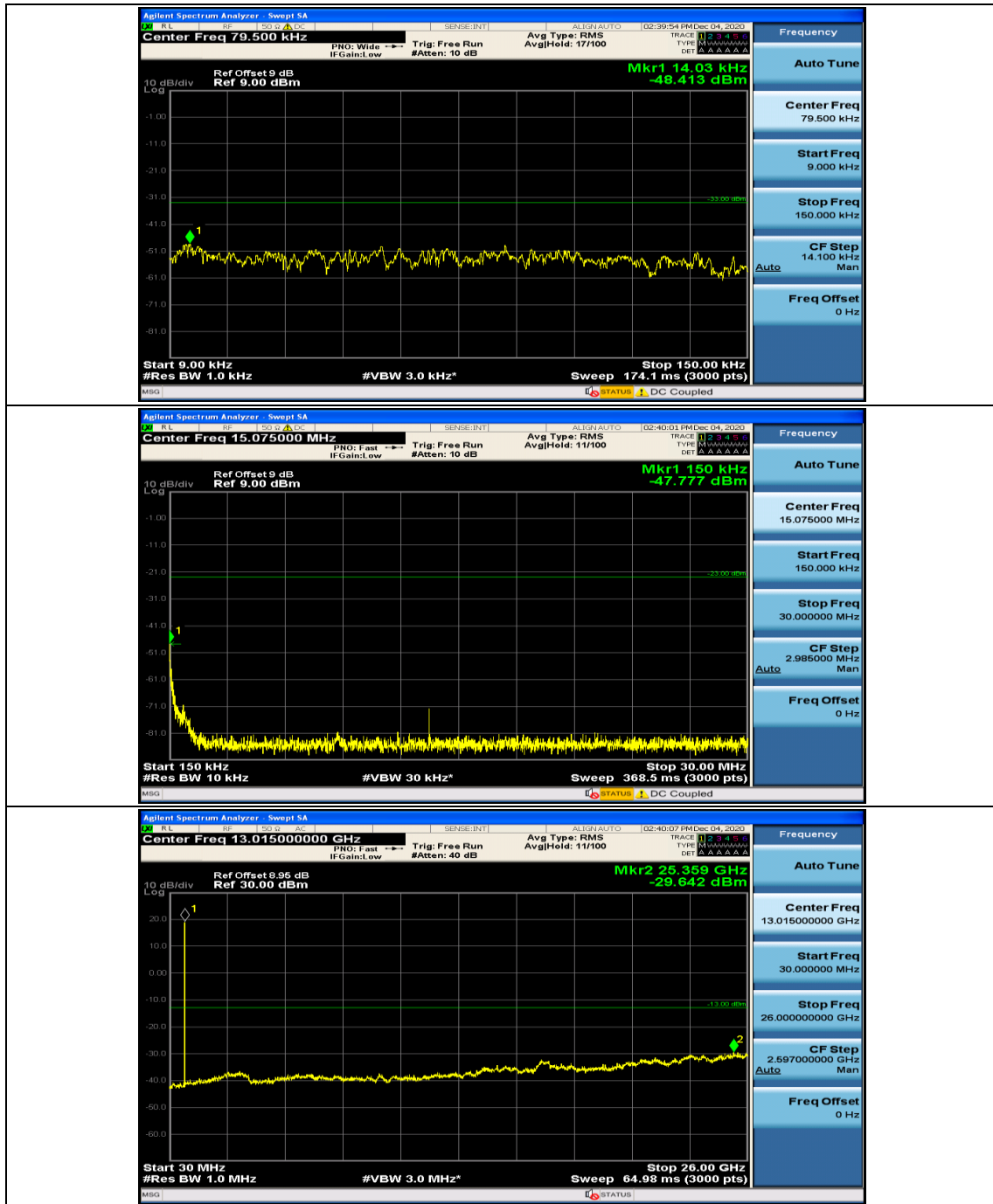


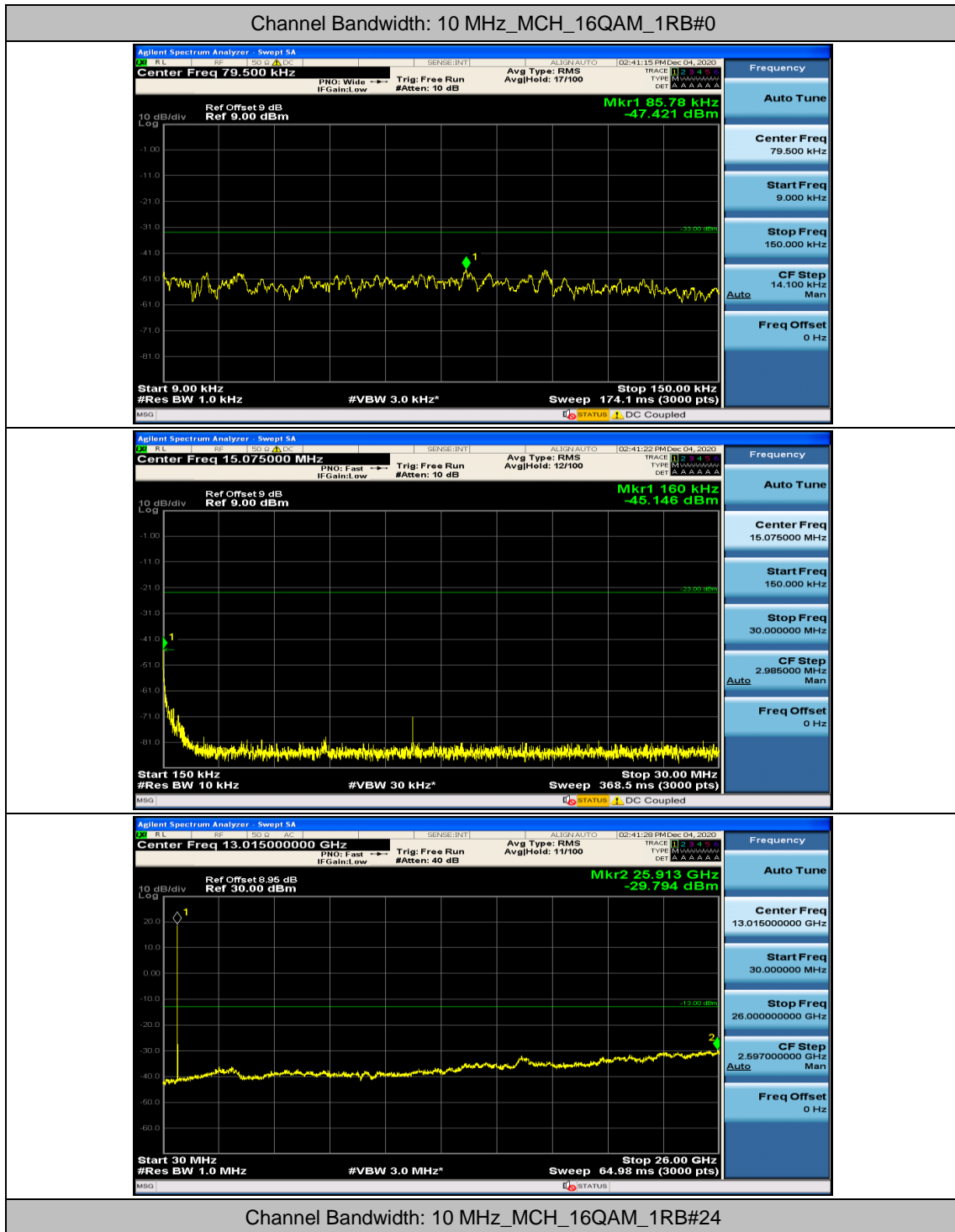


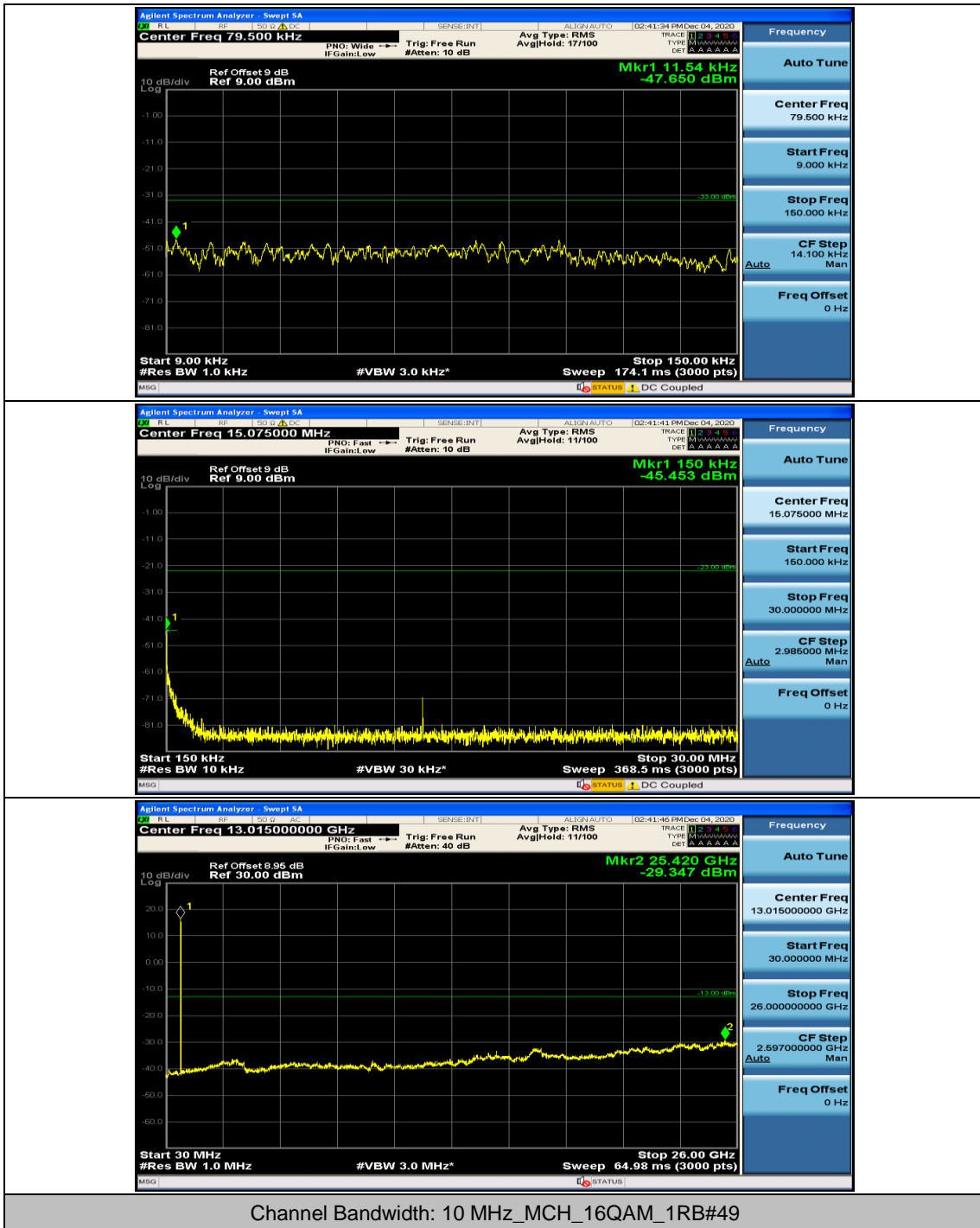


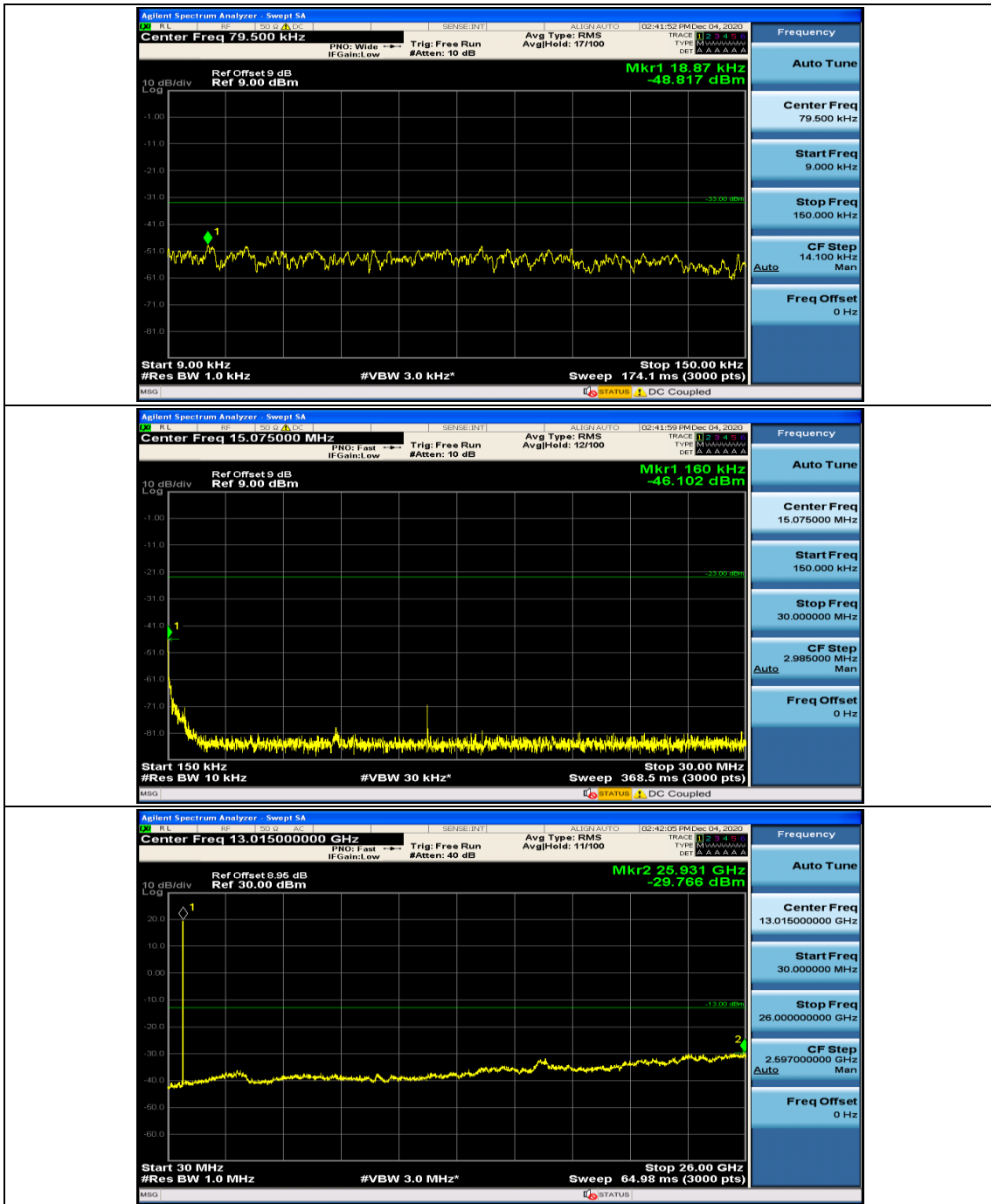


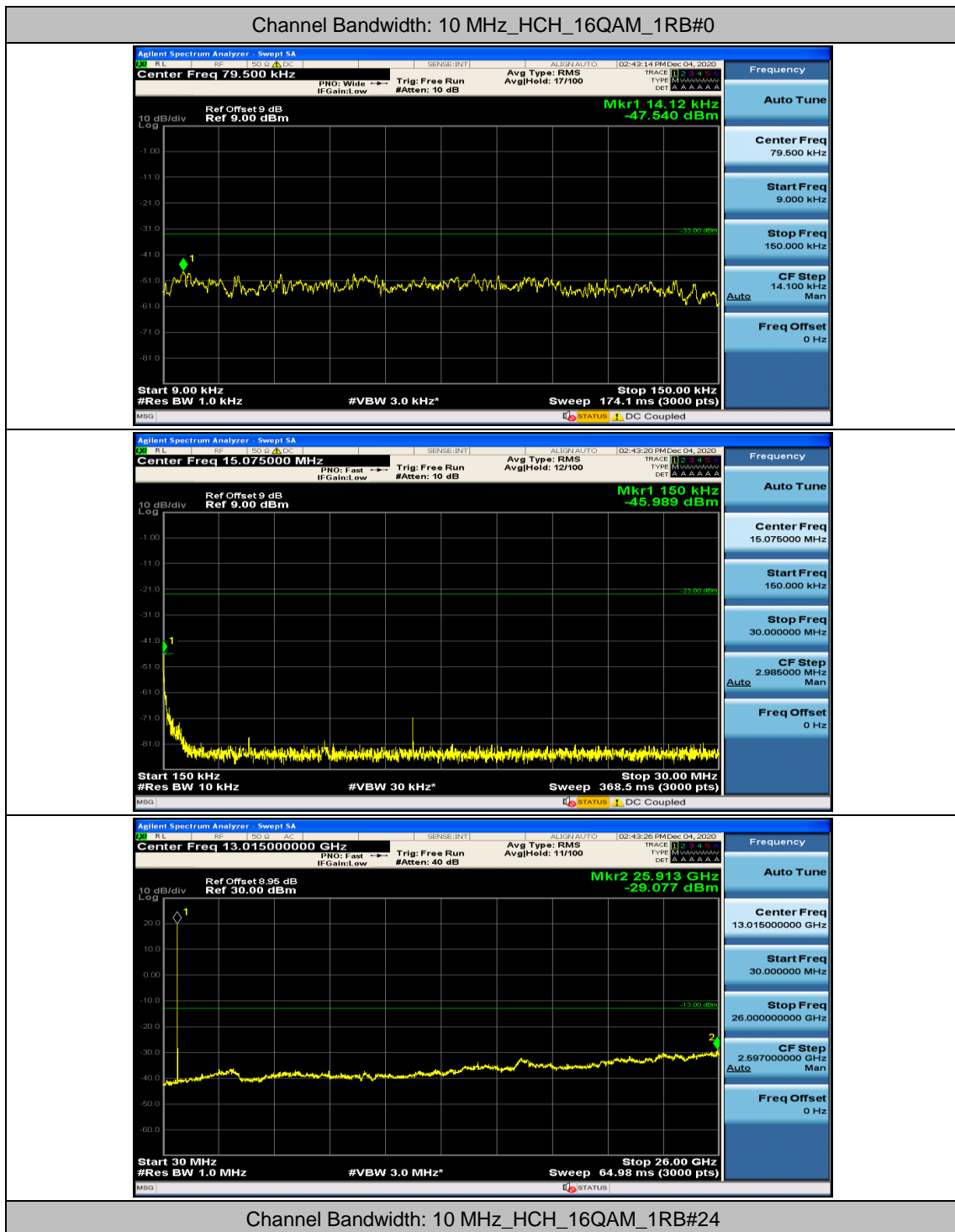


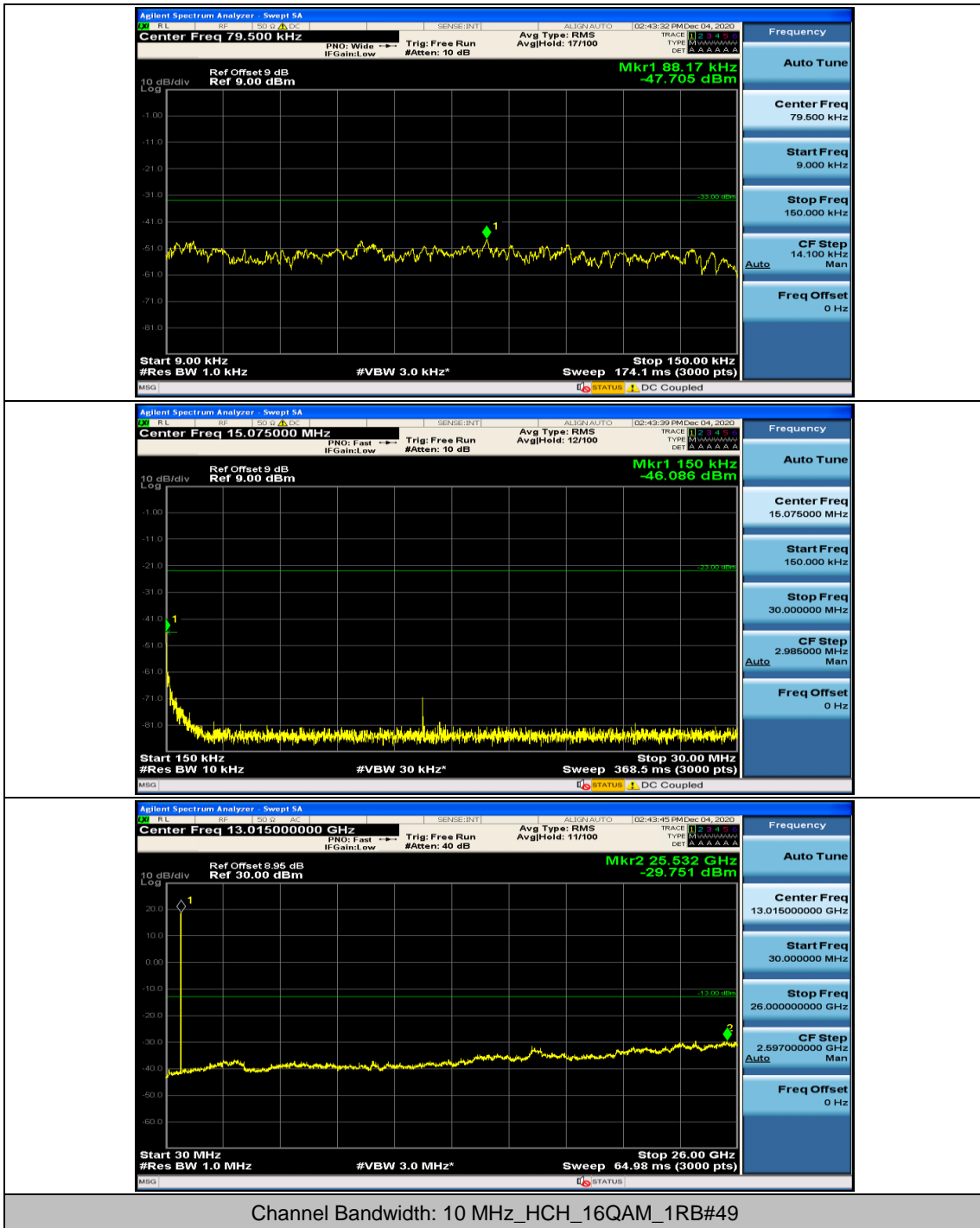


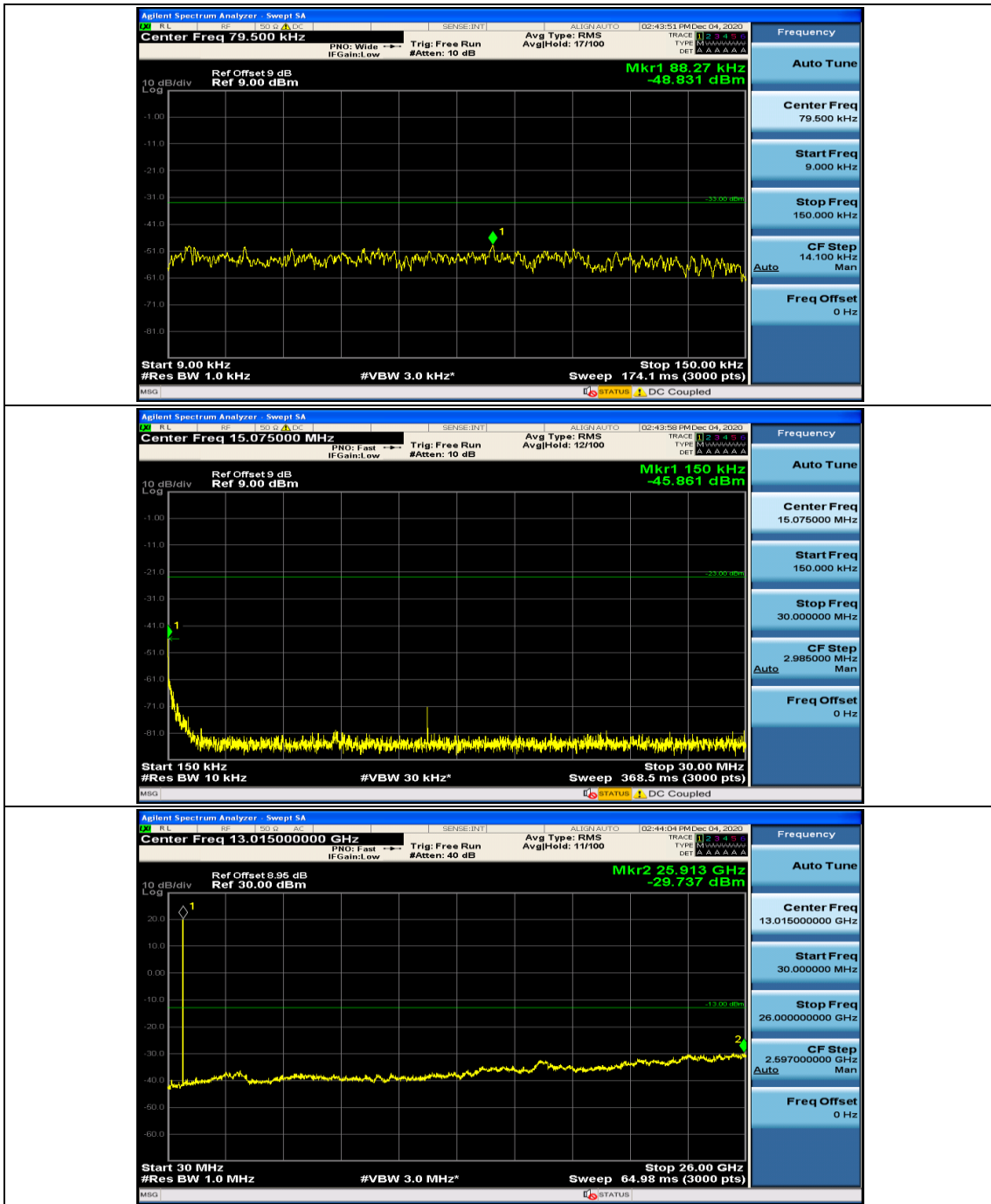












Appendix F: Frequency Stability

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	-1.47	-0.002081	± 2.5	PASS
		VN	TN	-0.26	-0.000368	± 2.5	PASS
		VH	TN	2.19	0.003100	± 2.5	PASS
	MCH	VL	TN	3.08	0.004338	± 2.5	PASS
		VN	TN	2.51	0.003535	± 2.5	PASS
		VH	TN	-1.1	-0.001549	± 2.5	PASS
	HCH	VL	TN	4.74	0.006643	± 2.5	PASS
		VN	TN	3.15	0.004415	± 2.5	PASS
		VH	TN	4.87	0.006826	± 2.5	PASS
16QAM	LCH	VL	TN	-1.23	-0.001741	± 2.5	PASS
		VN	TN	0.57	0.000807	± 2.5	PASS
		VH	TN	-1.01	-0.001430	± 2.5	PASS
	MCH	VL	TN	3.15	0.004437	± 2.5	PASS
		VN	TN	2.53	0.003563	± 2.5	PASS
		VH	TN	2.41	0.003394	± 2.5	PASS
	HCH	VL	TN	0.9	0.001261	± 2.5	PASS
		VN	TN	0.31	0.000434	± 2.5	PASS
		VH	TN	-1.7	-0.002383	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.67	0.006610	± 2.5	PASS
		VN	-20	-1.52	-0.002151	± 2.5	PASS
		VN	-10	-0.31	-0.000439	± 2.5	PASS
		VN	0	2.67	0.003779	± 2.5	PASS
		VN	10	-1.33	-0.001883	± 2.5	PASS
		VN	20	4.32	0.006115	± 2.5	PASS
		VN	30	3.29	0.004657	± 2.5	PASS
		VN	40	1.68	0.002378	± 2.5	PASS
		VN	50	0.57	0.000807	± 2.5	PASS

	MCH	VN	-30	-0.43	-0.000606	± 2.5	PASS
		VN	-20	1.05	0.001479	± 2.5	PASS
		VN	-10	1.88	0.002648	± 2.5	PASS
		VN	0	2.85	0.004014	± 2.5	PASS
		VN	10	-1.7	-0.002394	± 2.5	PASS
		VN	20	-1.99	-0.002803	± 2.5	PASS
		VN	30	-1.78	-0.002507	± 2.5	PASS
		VN	40	-0.83	-0.001169	± 2.5	PASS
		VN	50	3.73	0.005254	± 2.5	PASS
	HCH	VN	-30	-0.52	-0.000729	± 2.5	PASS
		VN	-20	2.71	0.003798	± 2.5	PASS
		VN	-10	-1.97	-0.002761	± 2.5	PASS
		VN	0	-1.68	-0.002355	± 2.5	PASS
		VN	10	0.33	0.000463	± 2.5	PASS
		VN	20	0.33	0.000463	± 2.5	PASS
		VN	30	3.61	0.005060	± 2.5	PASS
		VN	40	4.22	0.005915	± 2.5	PASS
		VN	50	-1.49	-0.002088	± 2.5	PASS
16QAM	LCH	VN	-30	2.06	0.002916	± 2.5	PASS
		VN	-20	2.82	0.003992	± 2.5	PASS
		VN	-10	0.22	0.000311	± 2.5	PASS
		VN	0	4.56	0.006454	± 2.5	PASS
		VN	10	1.8	0.002548	± 2.5	PASS
		VN	20	1.47	0.002081	± 2.5	PASS
		VN	30	3.21	0.004544	± 2.5	PASS
		VN	40	2.71	0.003836	± 2.5	PASS
		VN	50	0.62	0.000878	± 2.5	PASS
	MCH	VN	-30	1.38	0.001934	± 2.5	PASS
		VN	-20	4.84	0.006783	± 2.5	PASS
		VN	-10	1.06	0.001486	± 2.5	PASS
		VN	0	-1.04	-0.001458	± 2.5	PASS
		VN	10	0.05	0.000070	± 2.5	PASS
		VN	20	-0.61	-0.000855	± 2.5	PASS
		VN	30	1.1	0.001542	± 2.5	PASS
		VN	40	2.27	0.003181	± 2.5	PASS
		VN	50	1.9	0.002663	± 2.5	PASS
	HCH	VN	-30	3.6	0.005046	± 2.5	PASS
		VN	-20	4.52	0.006335	± 2.5	PASS
		VN	-10	0.99	0.001388	± 2.5	PASS
		VN	0	0.92	0.001289	± 2.5	PASS
		VN	10	1.06	0.001486	± 2.5	PASS

		VN	20	-1.3	-0.001822	± 2.5	PASS
		VN	30	4.65	0.006517	± 2.5	PASS
		VN	40	4.95	0.006938	± 2.5	PASS
		VN	50	-1.91	-0.002677	± 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	-1.58	-0.002228	± 2.5	PASS
		VN	TN	-1.61	-0.002271	± 2.5	PASS
		VH	TN	4.12	0.005811	± 2.5	PASS
	MCH	VL	TN	2.96	0.004169	± 2.5	PASS
		VN	TN	1.85	0.002606	± 2.5	PASS
		VH	TN	4.97	0.007000	± 2.5	PASS
	HCH	VL	TN	3.29	0.004627	± 2.5	PASS
		VN	TN	0.75	0.001055	± 2.5	PASS
		VH	TN	1.77	0.002489	± 2.5	PASS
16QAM	LCH	VL	TN	-0.59	-0.000832	± 2.5	PASS
		VN	TN	3.45	0.004866	± 2.5	PASS
		VH	TN	3.51	0.004951	± 2.5	PASS
	MCH	VL	TN	2.76	0.003887	± 2.5	PASS
		VN	TN	-1.26	-0.001775	± 2.5	PASS
		VH	TN	0.04	0.000056	± 2.5	PASS
	HCH	VL	TN	2.83	0.003980	± 2.5	PASS
		VN	TN	0.66	0.000928	± 2.5	PASS
		VH	TN	2.77	0.003896	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1	0.001410	± 2.5	PASS
		VN	-20	2.99	0.004217	± 2.5	PASS
		VN	-10	3.18	0.004485	± 2.5	PASS
		VN	0	-0.14	-0.000197	± 2.5	PASS
		VN	10	0.22	0.000310	± 2.5	PASS
		VN	20	1.27	0.001791	± 2.5	PASS
		VN	30	3.77	0.005317	± 2.5	PASS
		VN	40	3.55	0.005007	± 2.5	PASS
	VN	50	-0.54	-0.000762	± 2.5	PASS	
MCH	VN	-30	2.81	0.003958	± 2.5	PASS	

	VN	VN	-20	-1.32	-0.001859	± 2.5	PASS
		VN	-10	1.94	0.002732	± 2.5	PASS
		VN	0	-0.18	-0.000254	± 2.5	PASS
		VN	10	4.19	0.005901	± 2.5	PASS
		VN	20	3.2	0.004507	± 2.5	PASS
		VN	30	1.31	0.001845	± 2.5	PASS
		VN	40	-0.69	-0.000972	± 2.5	PASS
		VN	50	-0.2	-0.000282	± 2.5	PASS
	HCH	VN	-30	-1.04	-0.001463	± 2.5	PASS
		VN	-20	1.85	0.002602	± 2.5	PASS
		VN	-10	2.97	0.004177	± 2.5	PASS
		VN	0	-0.22	-0.000309	± 2.5	PASS
		VN	10	3.78	0.005316	± 2.5	PASS
		VN	20	1.82	0.002560	± 2.5	PASS
		VN	30	2.84	0.003994	± 2.5	PASS
		VN	40	2.41	0.003390	± 2.5	PASS
		VN	50	0.93	0.001308	± 2.5	PASS
		16QAM	LCH	VN	-30	2.33	0.003282
VN	-20			4.8	0.006761	± 2.5	PASS
VN	-10			3.54	0.004986	± 2.5	PASS
VN	0			-1.63	-0.002296	± 2.5	PASS
VN	10			1.06	0.001493	± 2.5	PASS
VN	20			-1.22	-0.001718	± 2.5	PASS
VN	30			2.76	0.003887	± 2.5	PASS
VN	40			0.77	0.001085	± 2.5	PASS
VN	50			4.76	0.006704	± 2.5	PASS
MCH	VN		-30	1.51	0.002124	± 2.5	PASS
	VN		-20	1.28	0.001800	± 2.5	PASS
	VN		-10	3.6	0.005063	± 2.5	PASS
	VN		0	2.66	0.003741	± 2.5	PASS
	VN		10	-0.06	-0.000084	± 2.5	PASS
	VN		20	1.71	0.002405	± 2.5	PASS
	VN		30	3.3	0.004641	± 2.5	PASS
	VN		40	-0.36	-0.000506	± 2.5	PASS
	VN		50	4.86	0.006835	± 2.5	PASS
HCH	VN		-30	-0.75	-0.001055	± 2.5	PASS
	VN		-20	2.48	0.003488	± 2.5	PASS
	VN		-10	4.83	0.006793	± 2.5	PASS
	VN		0	2.8	0.003938	± 2.5	PASS
	VN		10	-1.37	-0.001927	± 2.5	PASS
	VN		20	1.92	0.002700	± 2.5	PASS

		VN	30	4.08	0.005738	± 2.5	PASS
		VN	40	4.32	0.006076	± 2.5	PASS
		VN	50	1.29	0.001814	± 2.5	PASS