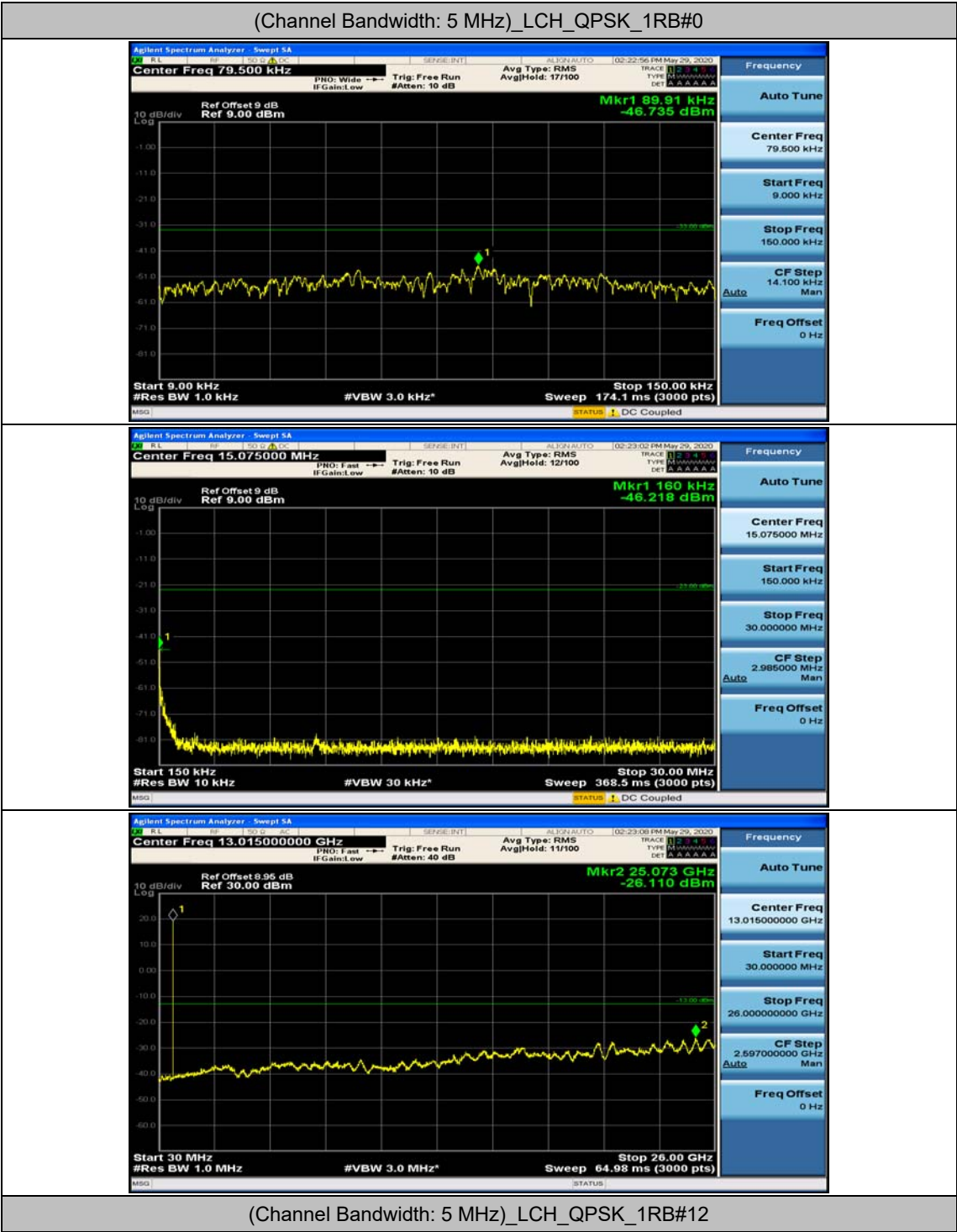
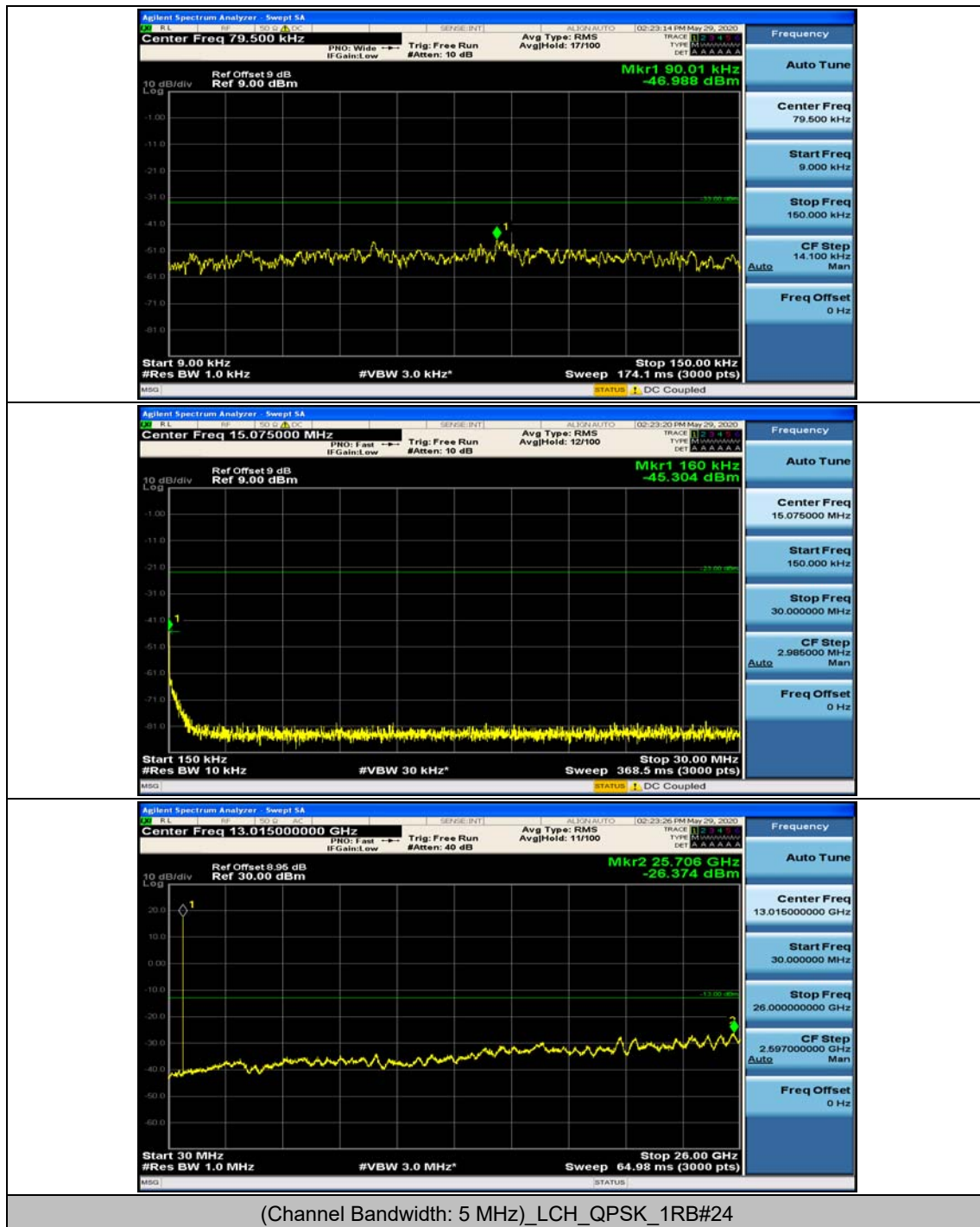
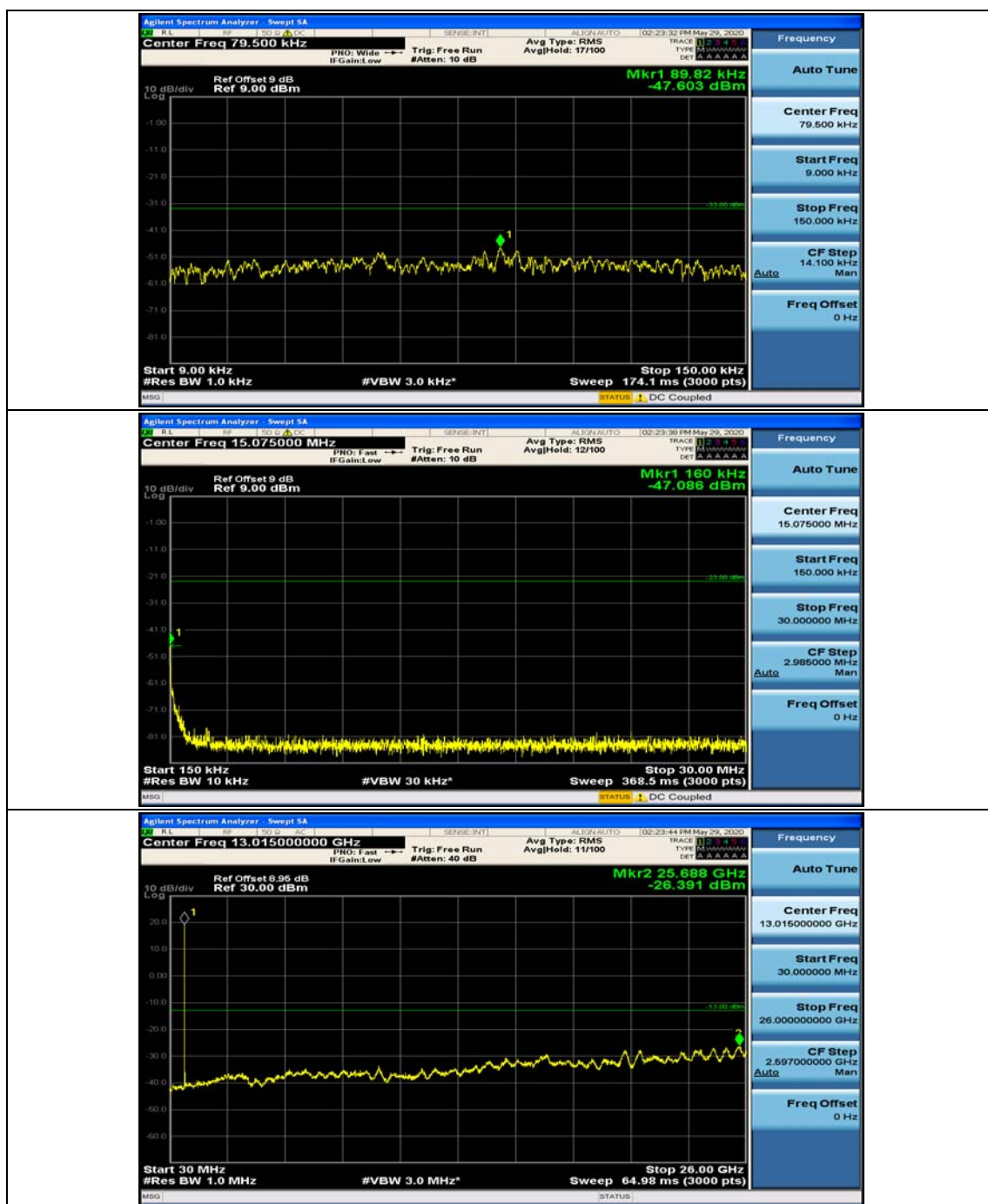


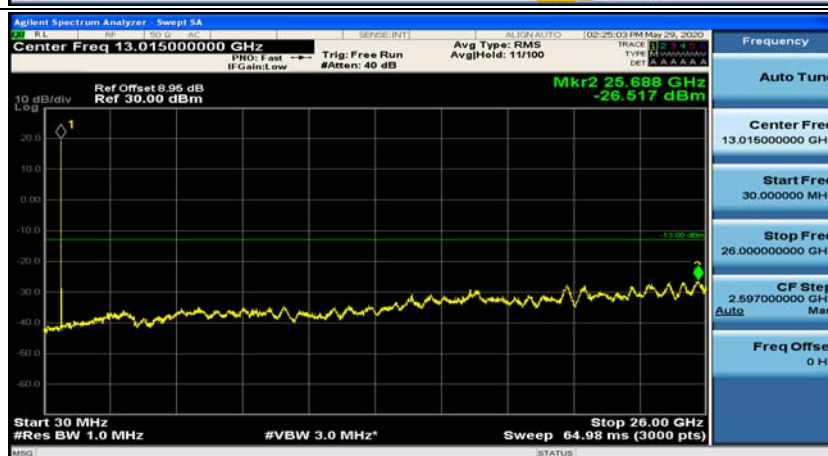
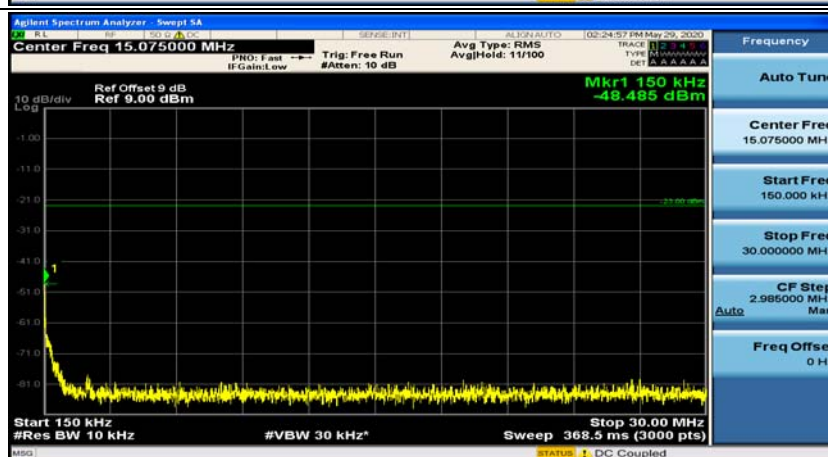
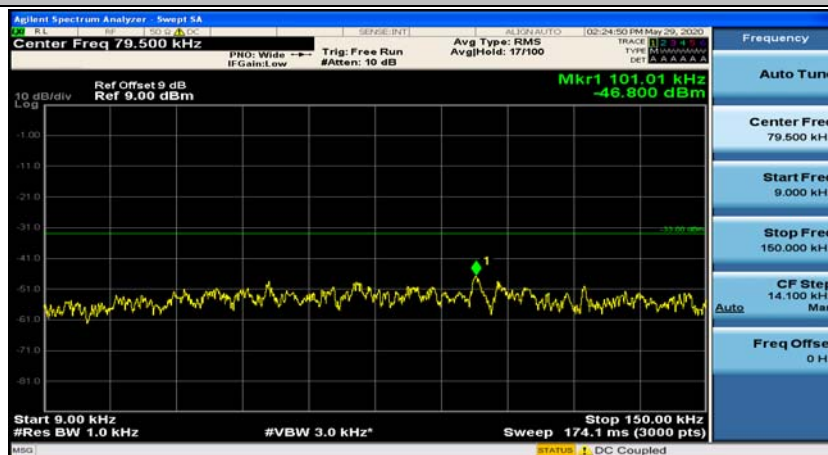
Channel Bandwidth: 5 MHz



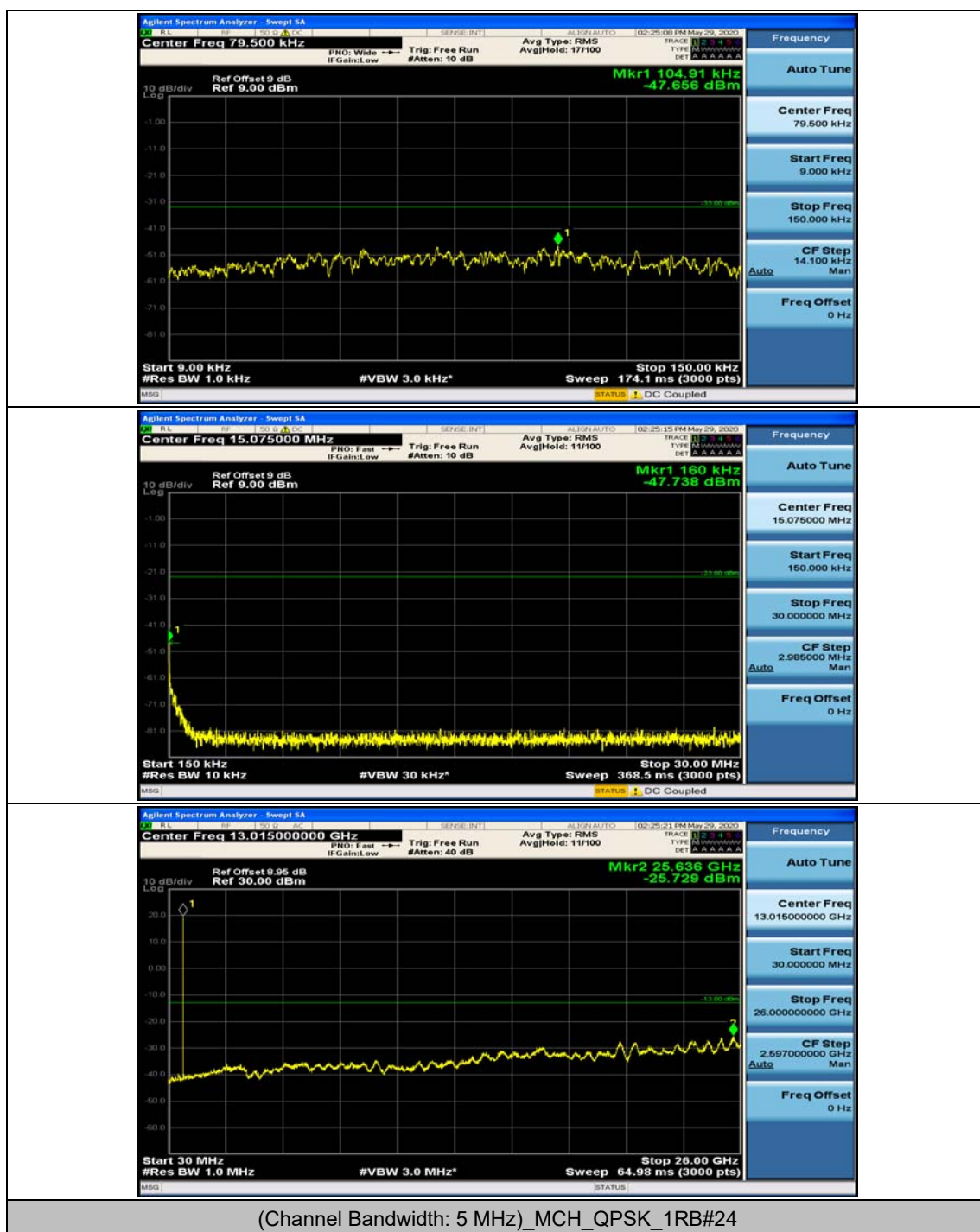


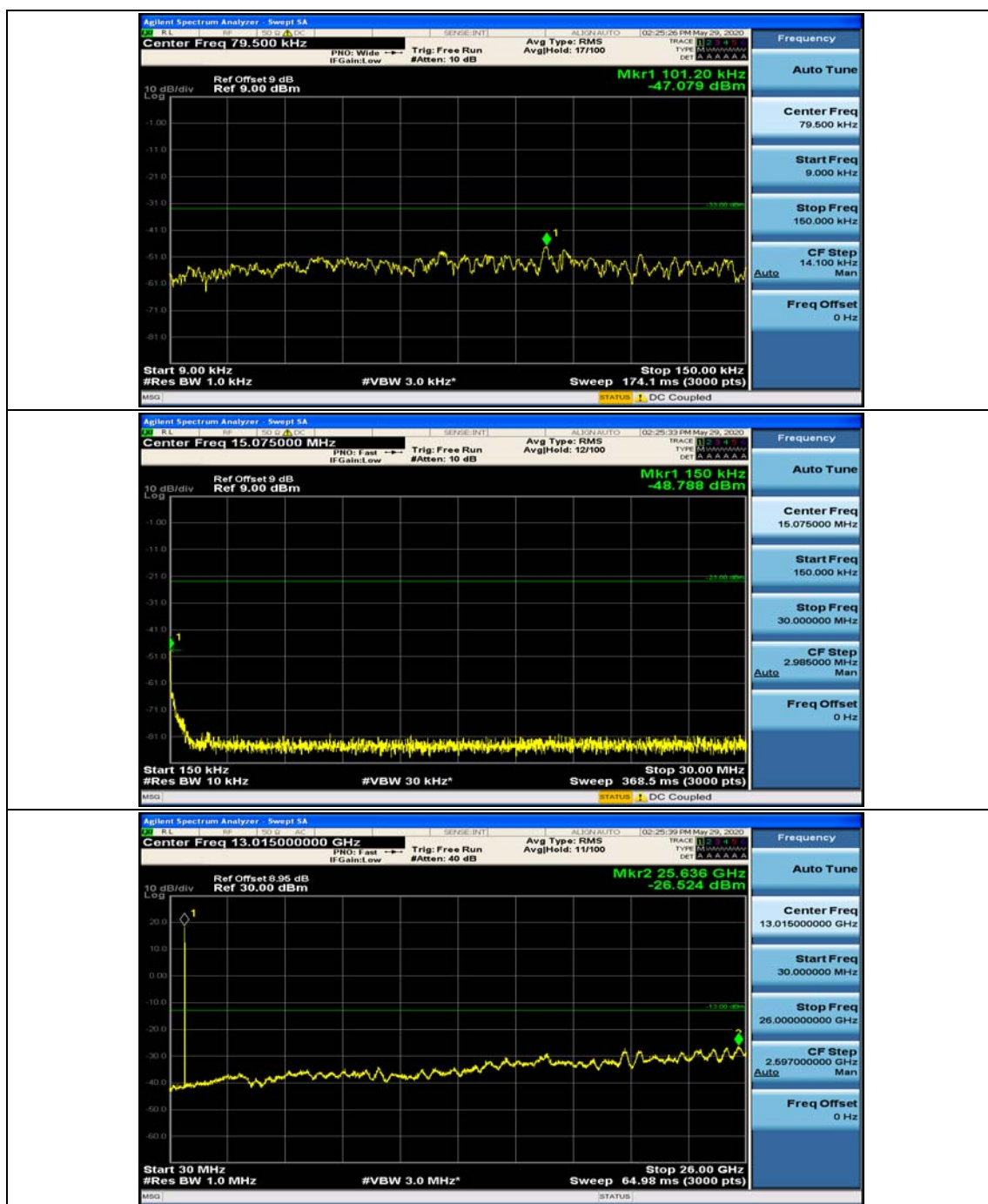


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

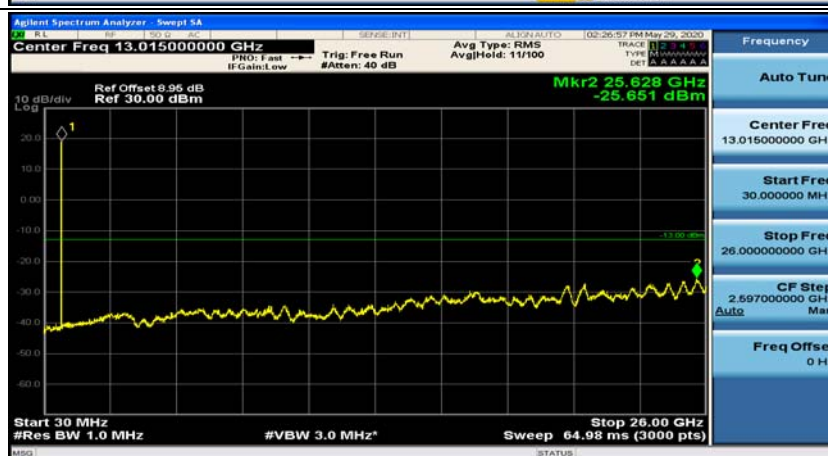
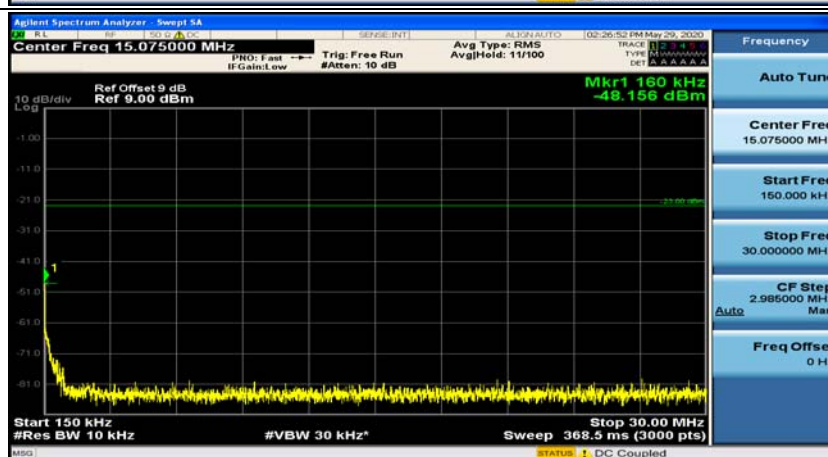
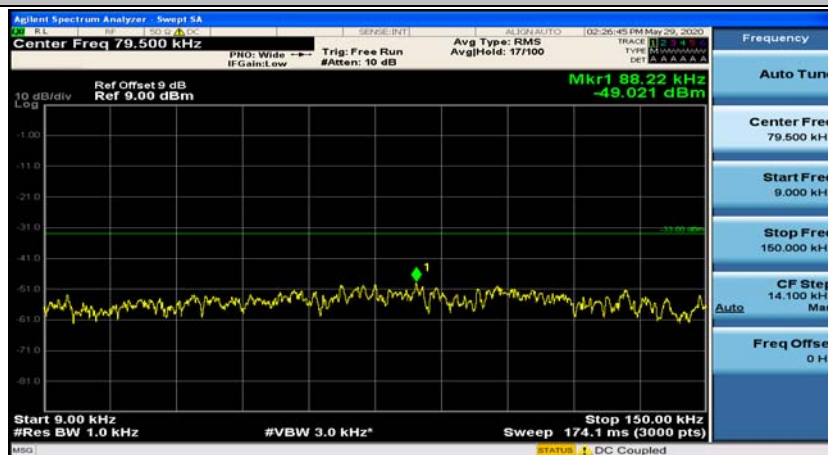


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

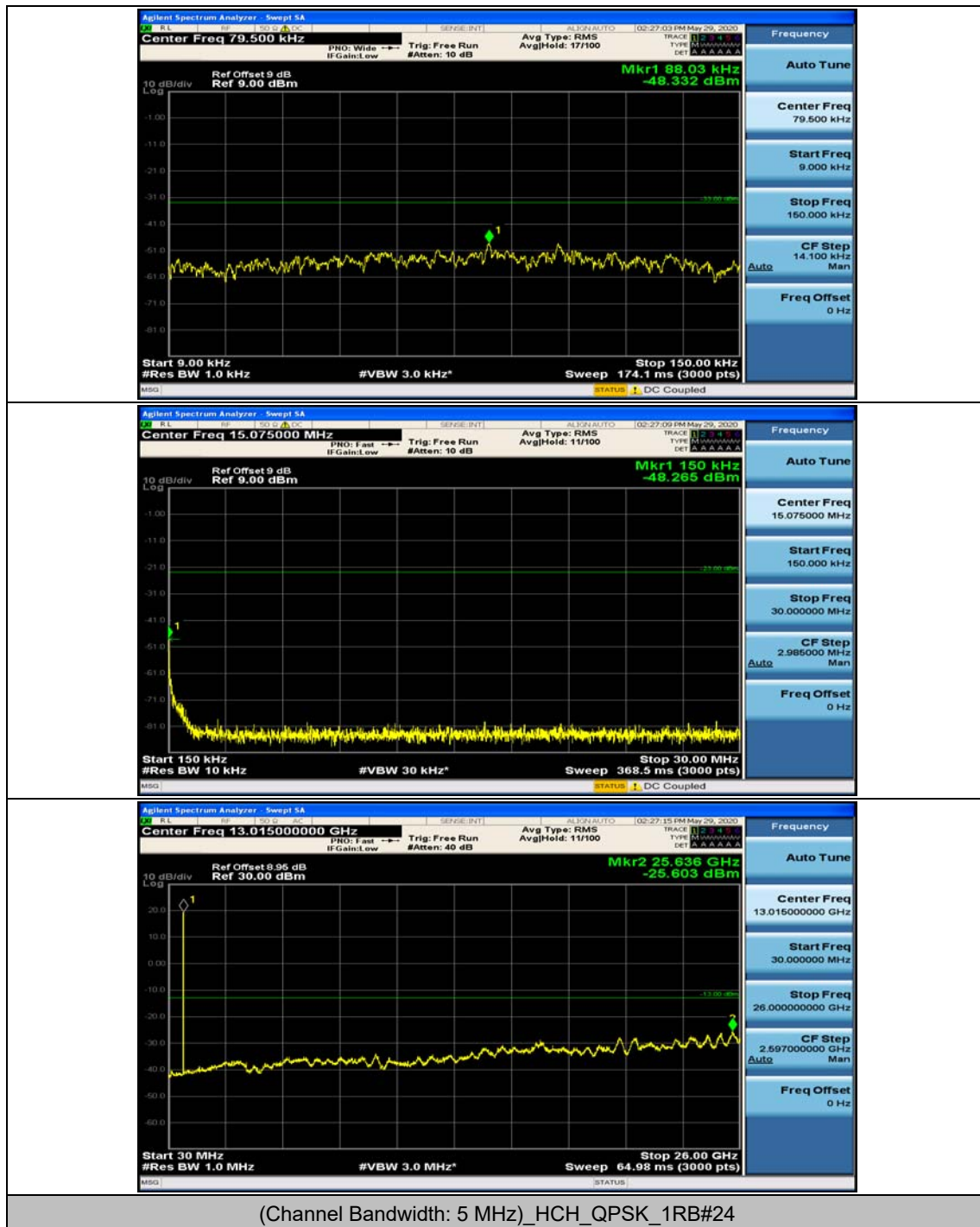




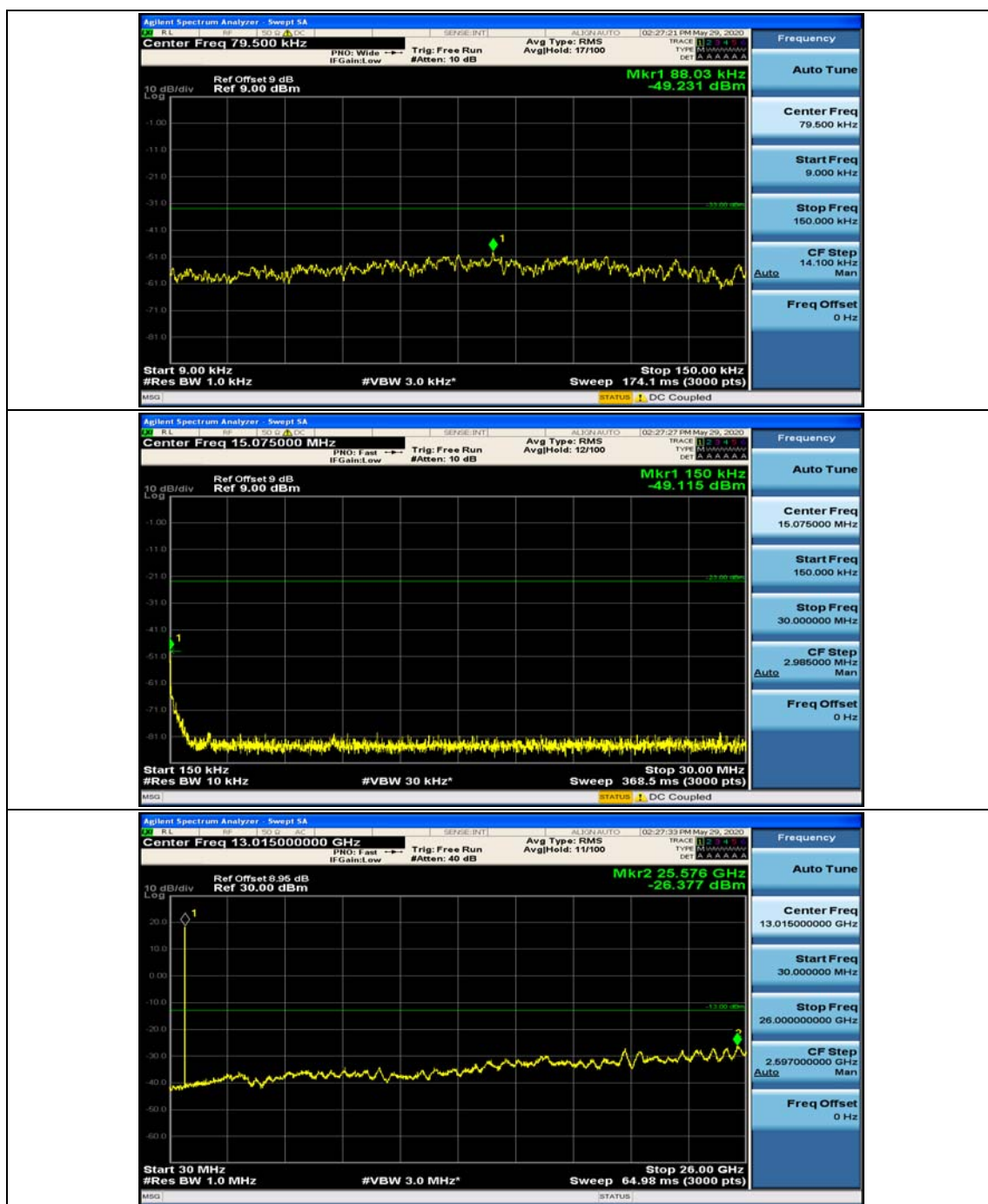
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



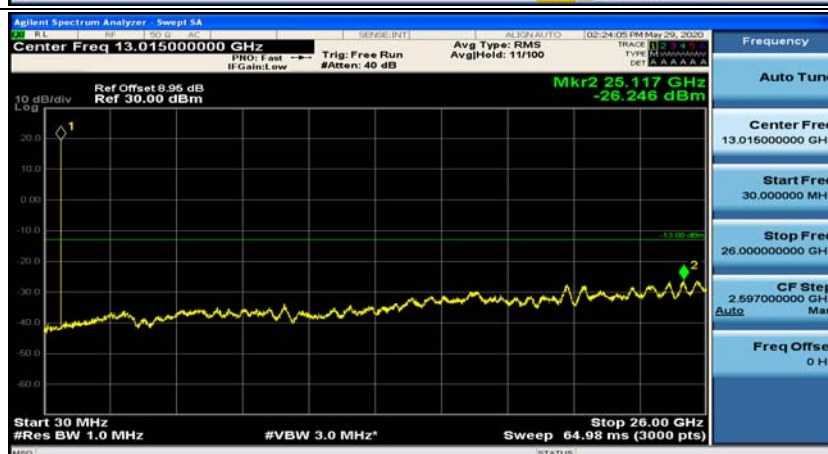
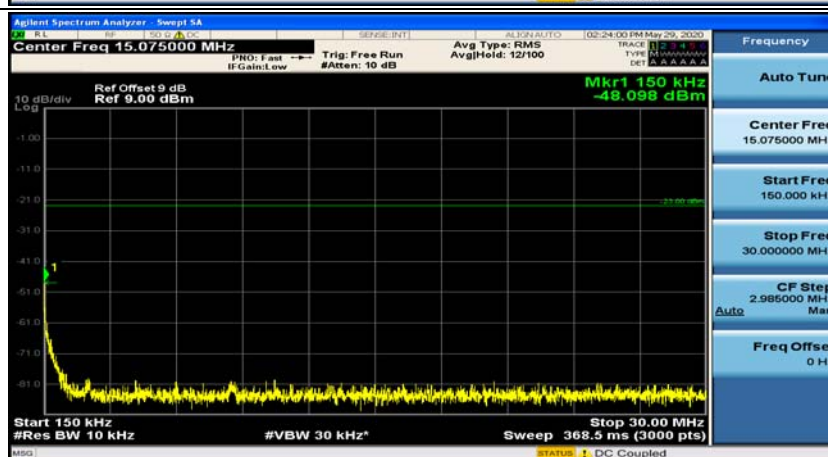
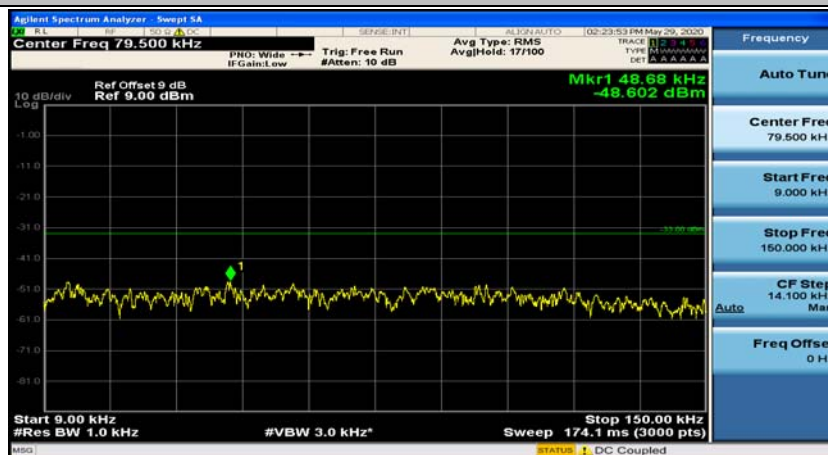
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12



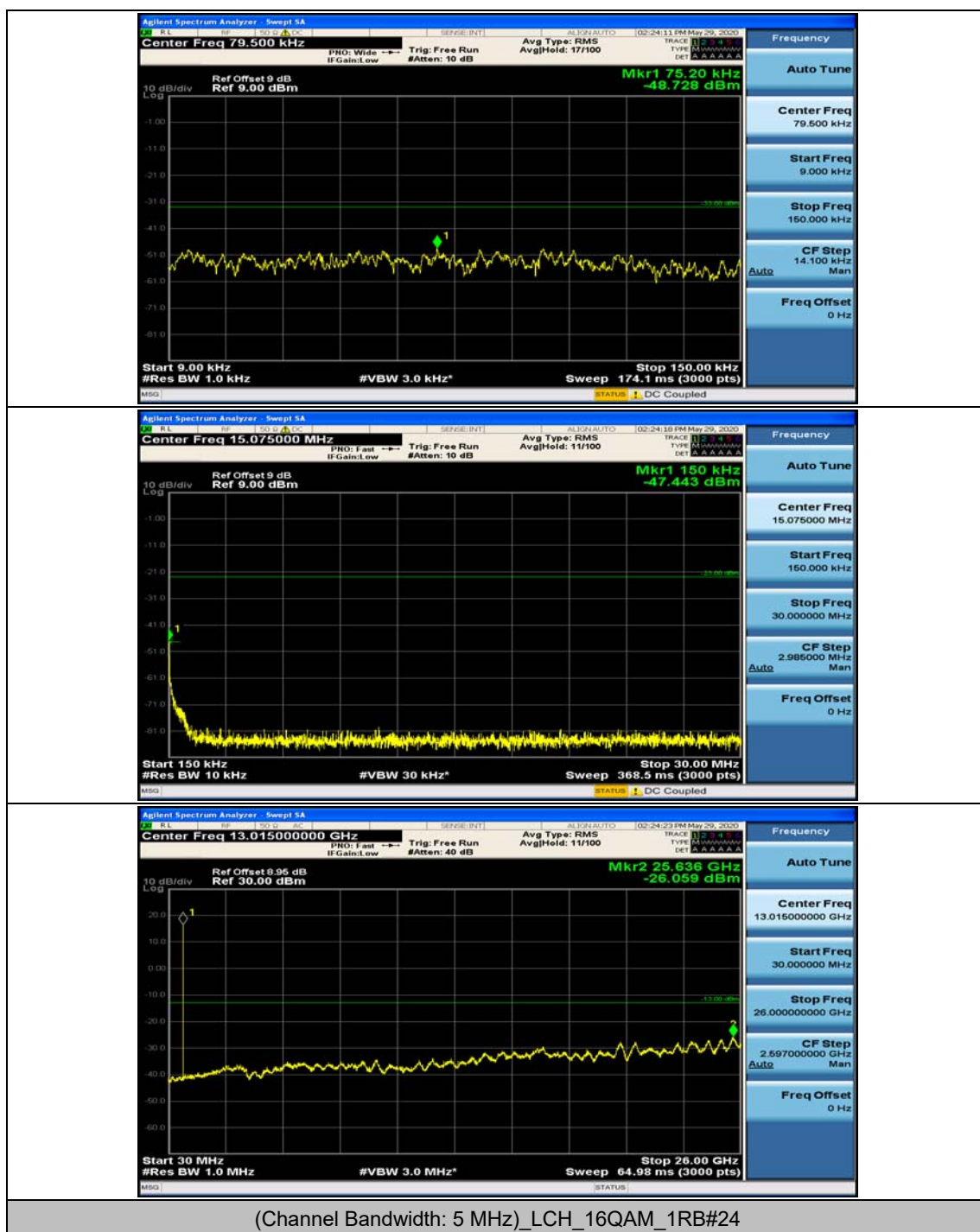
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

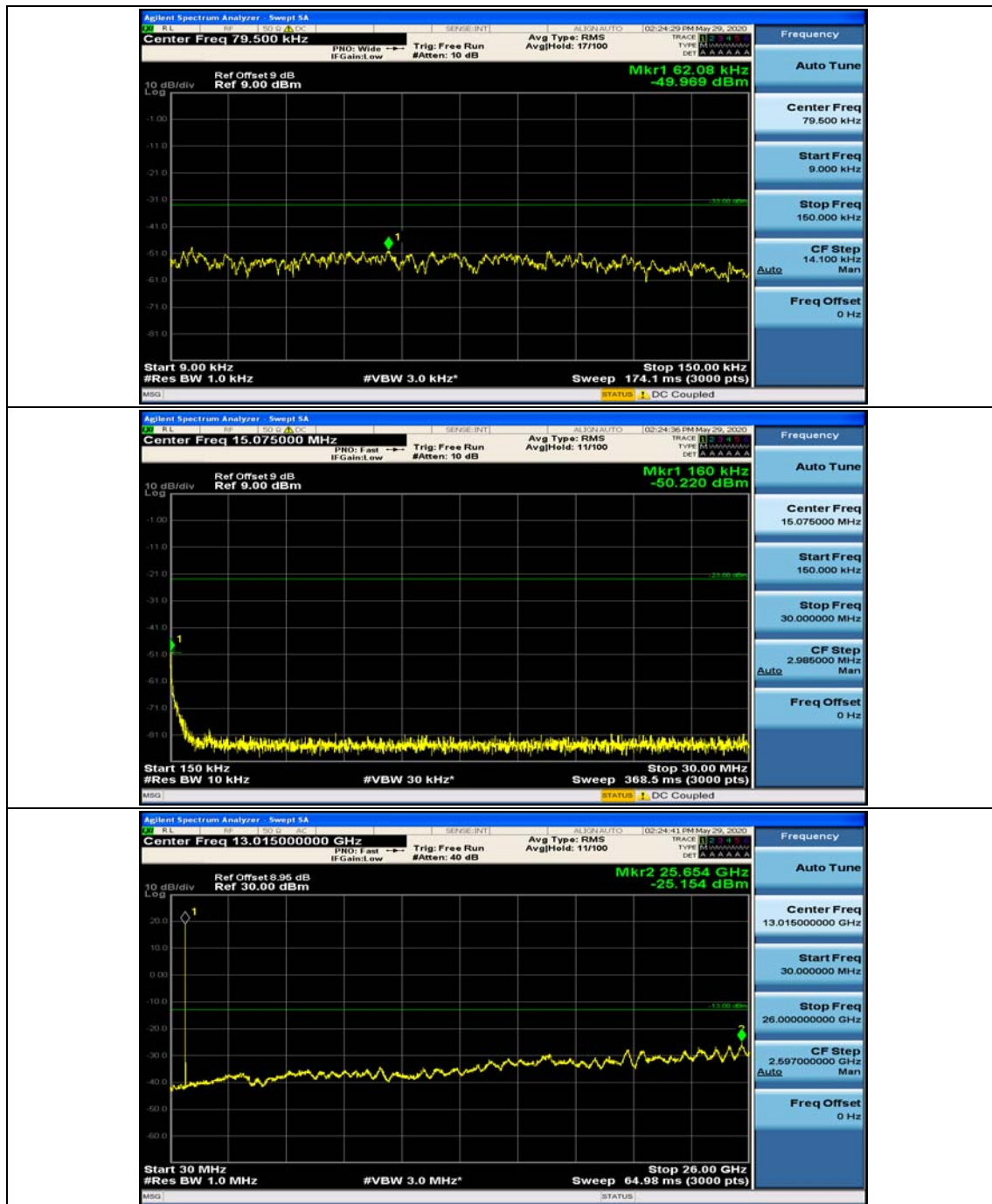


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

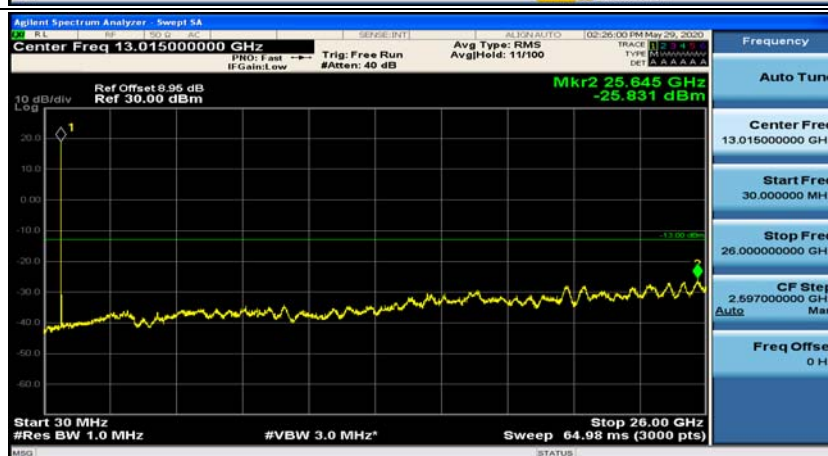
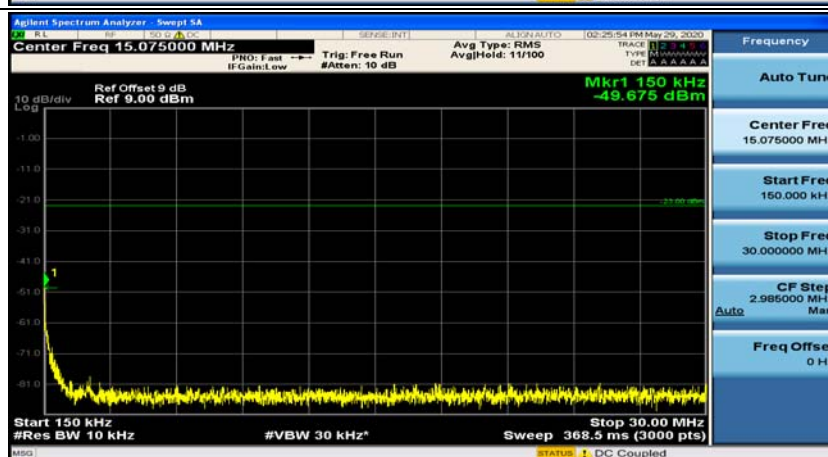
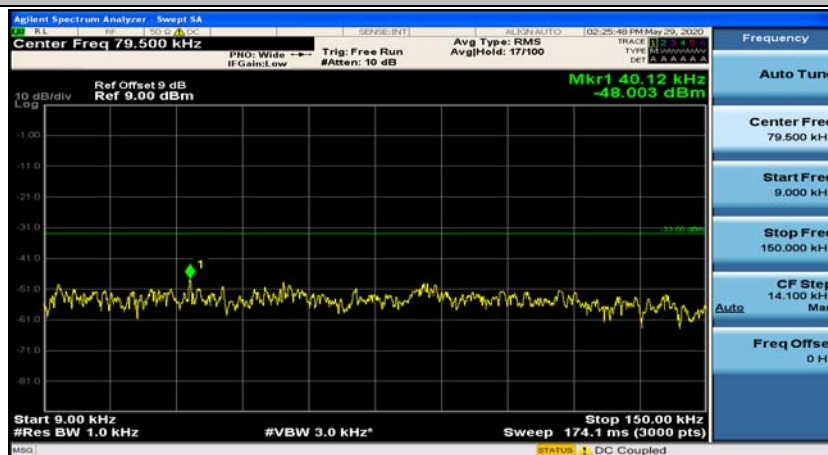


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

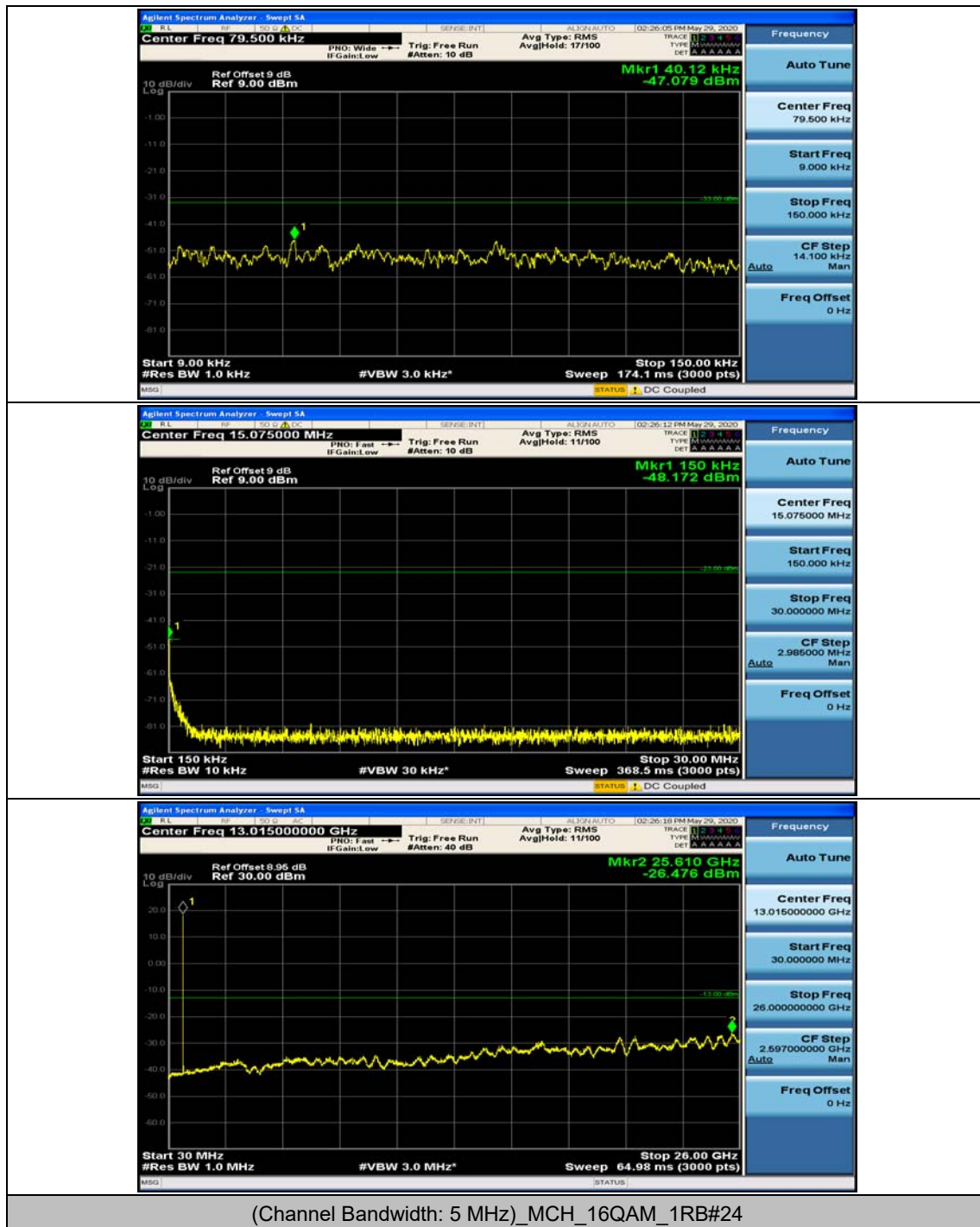


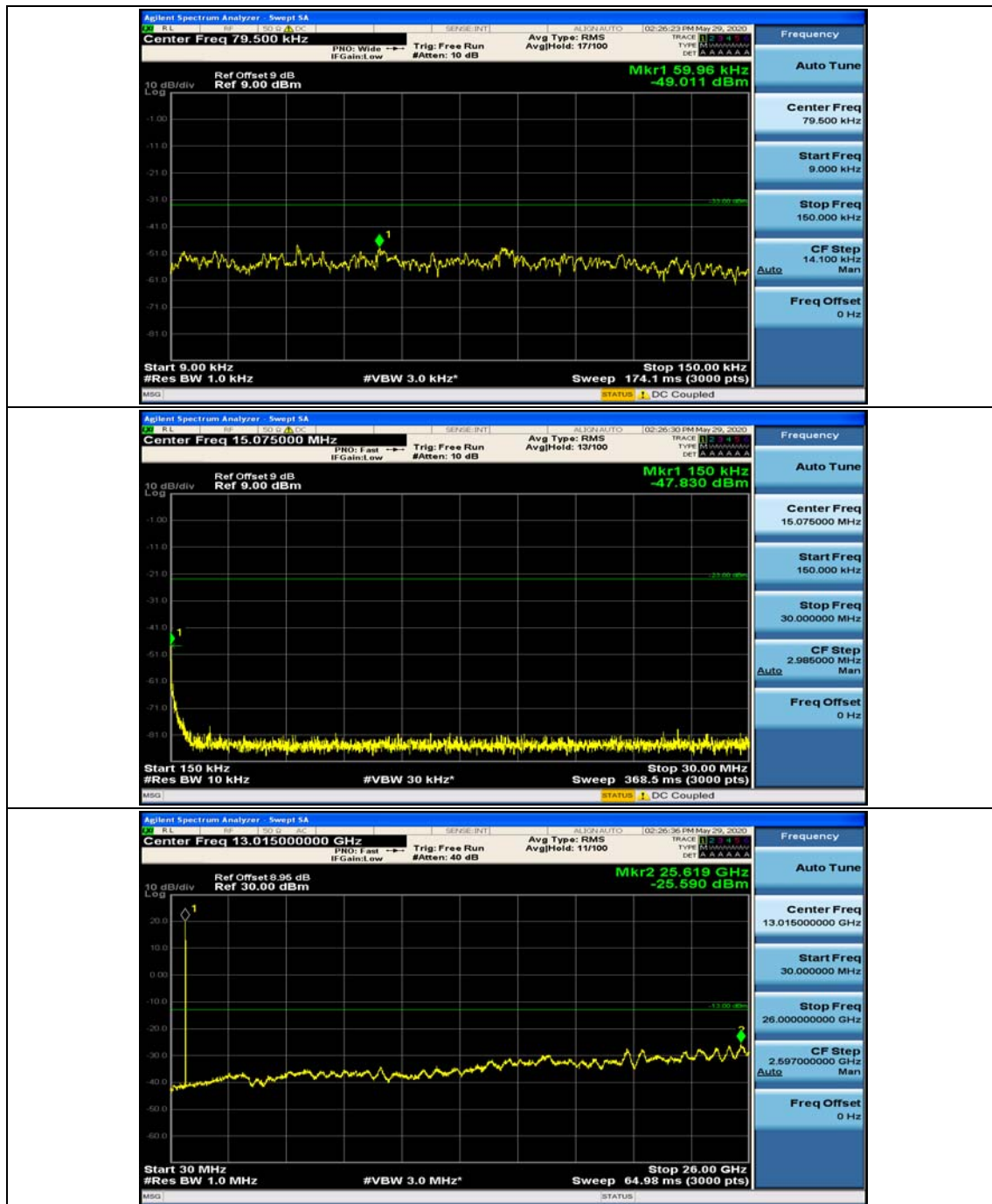


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

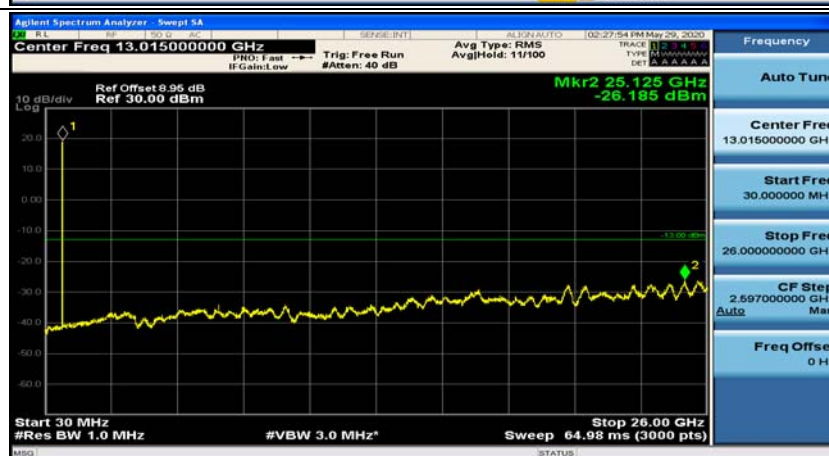
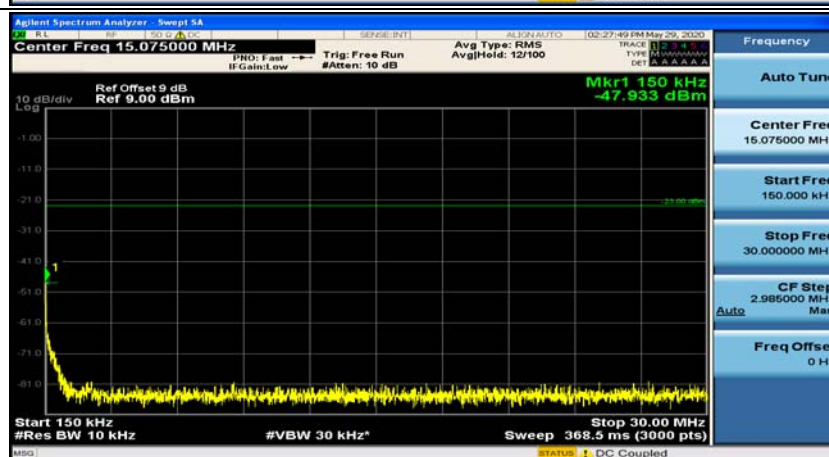
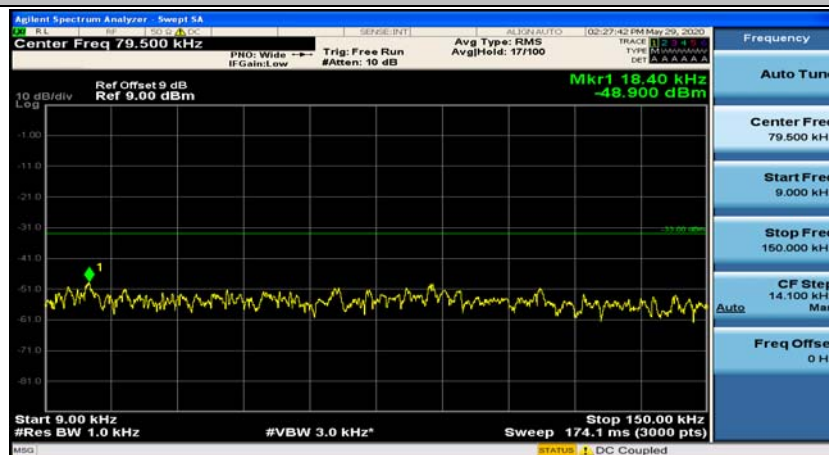


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

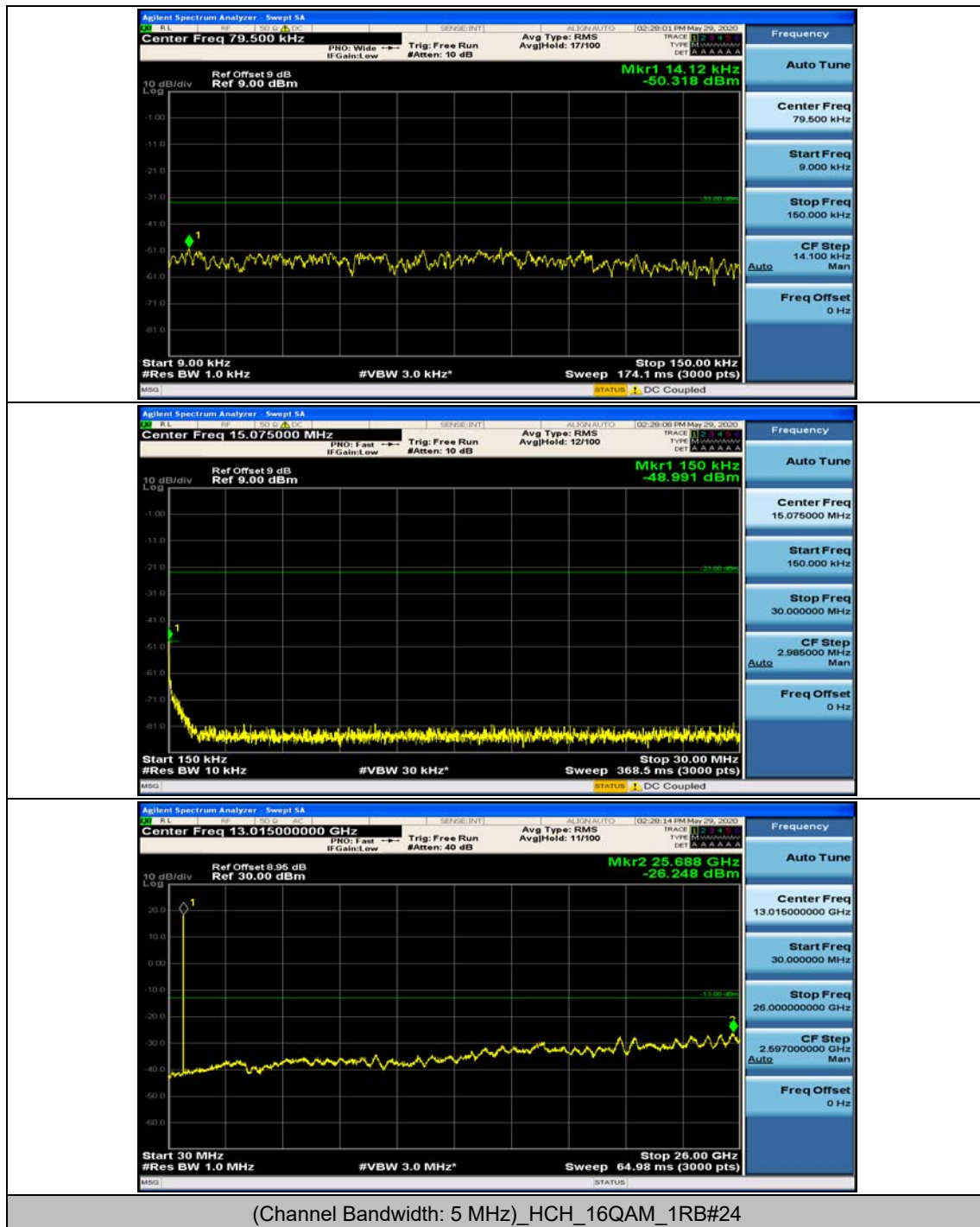


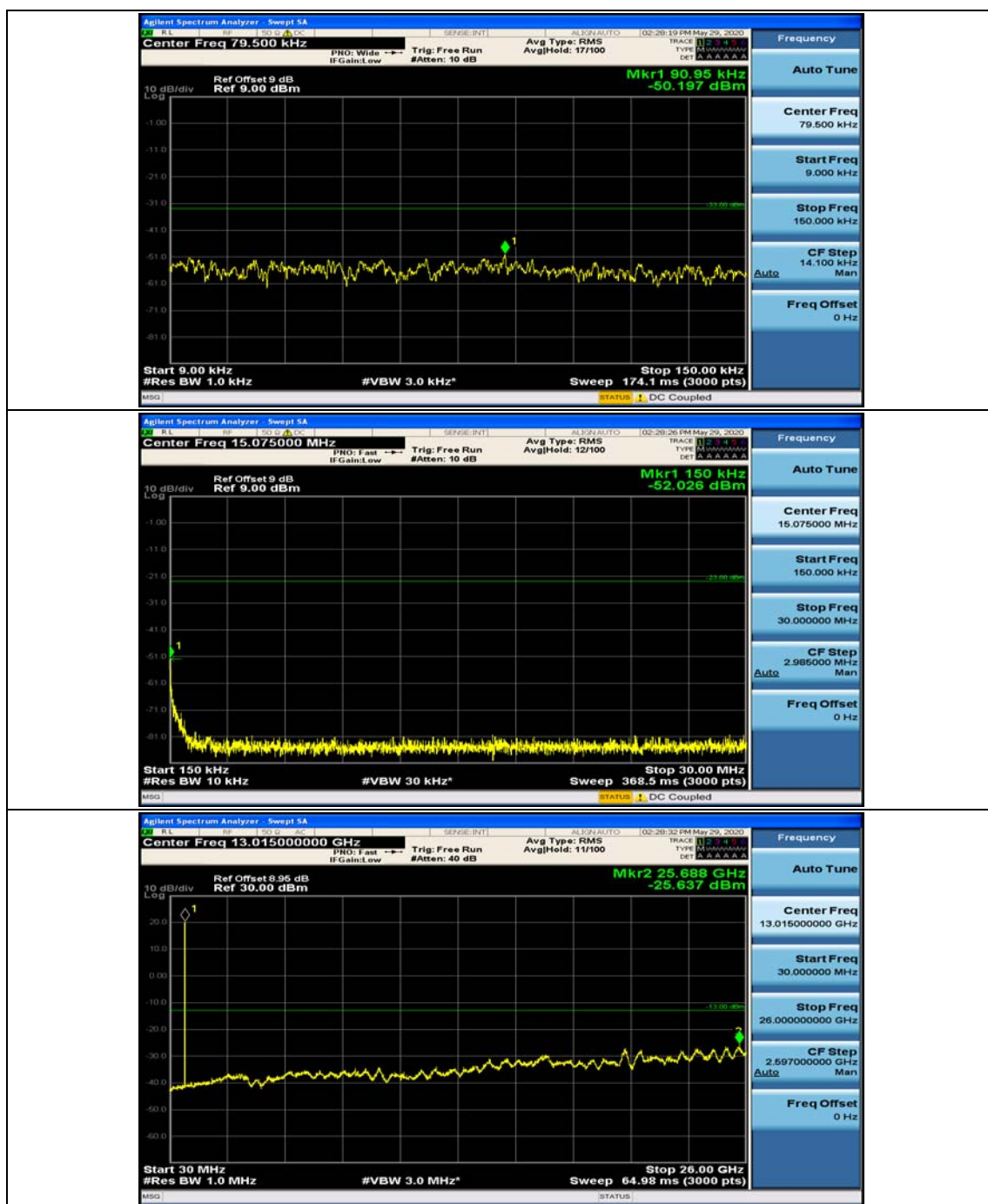


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

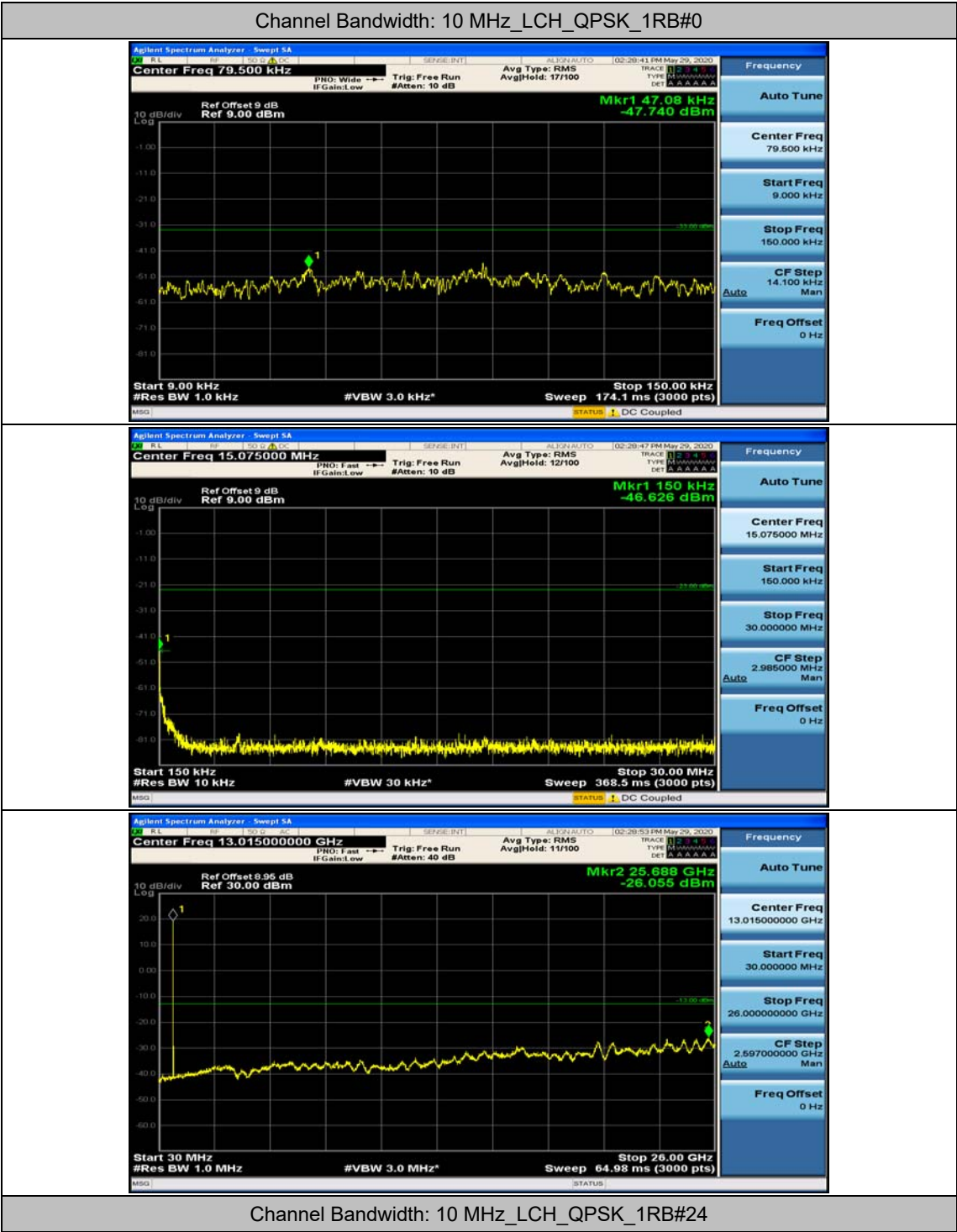


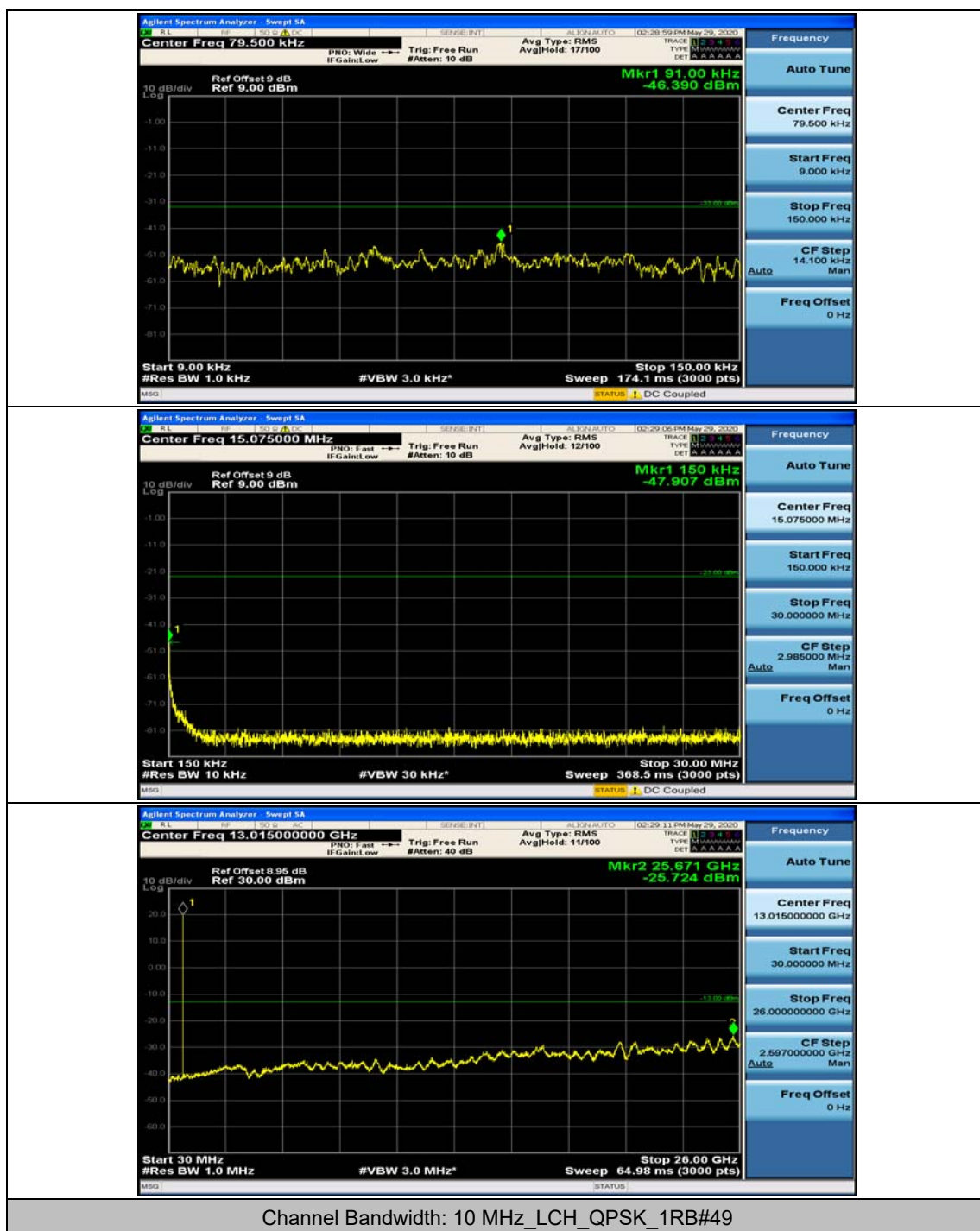
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

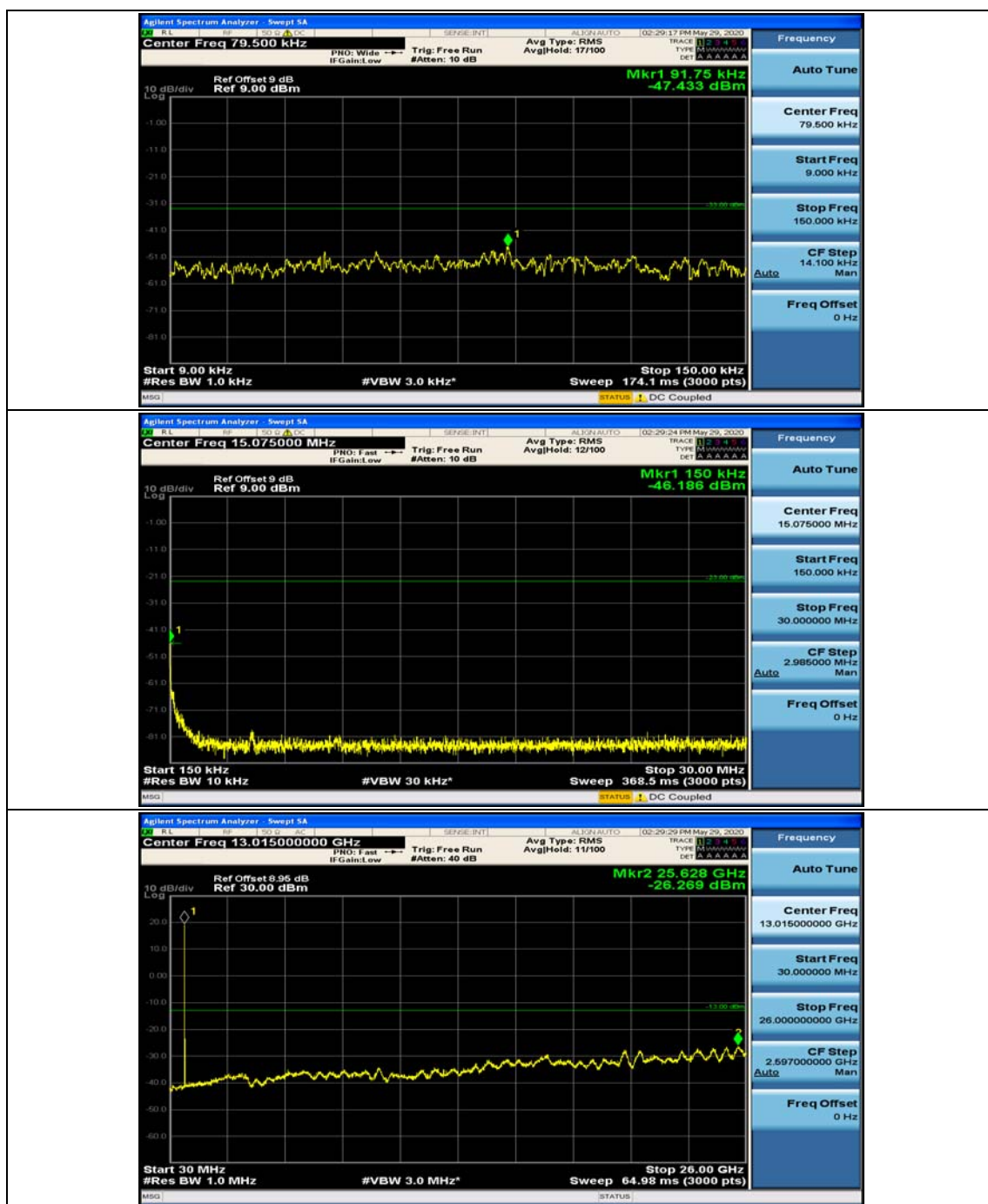


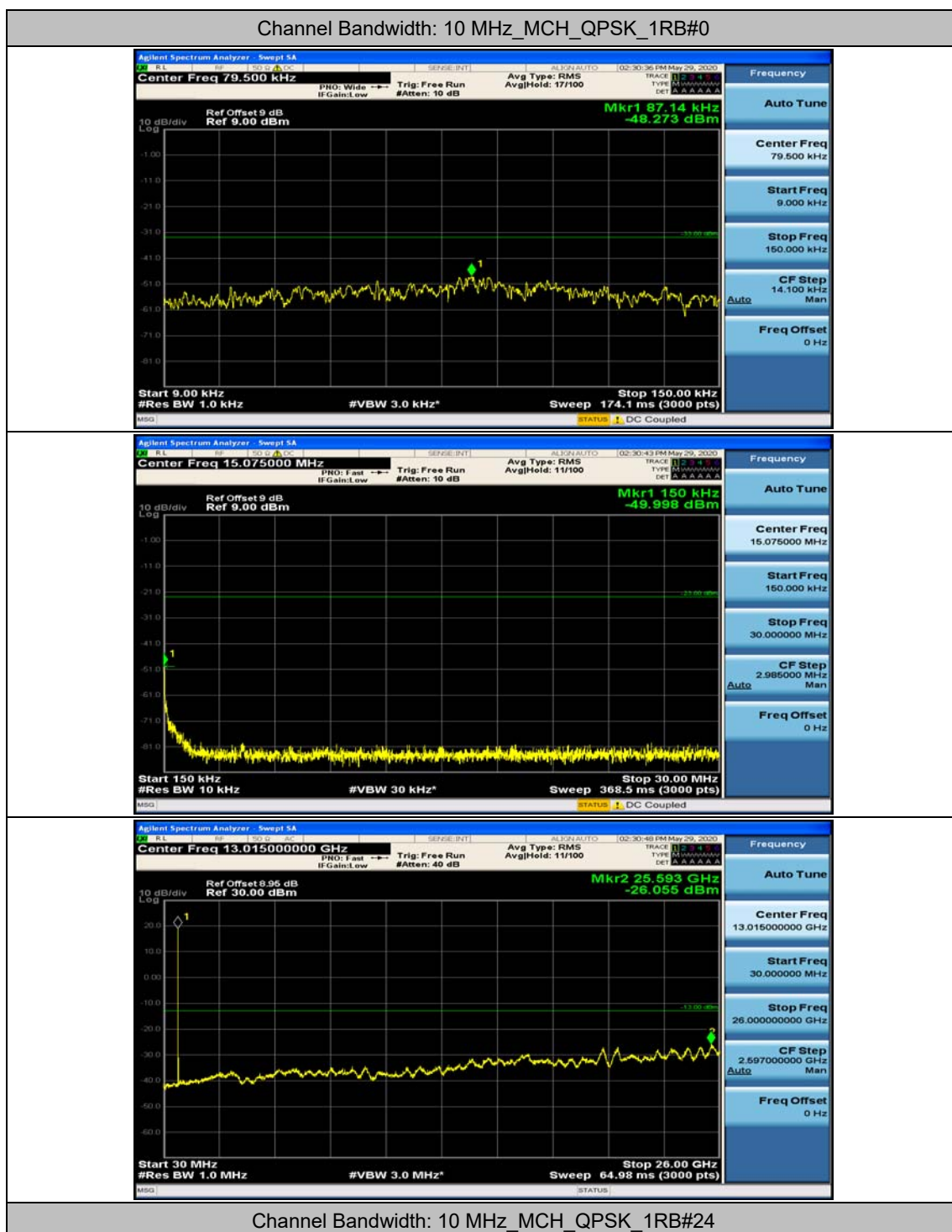


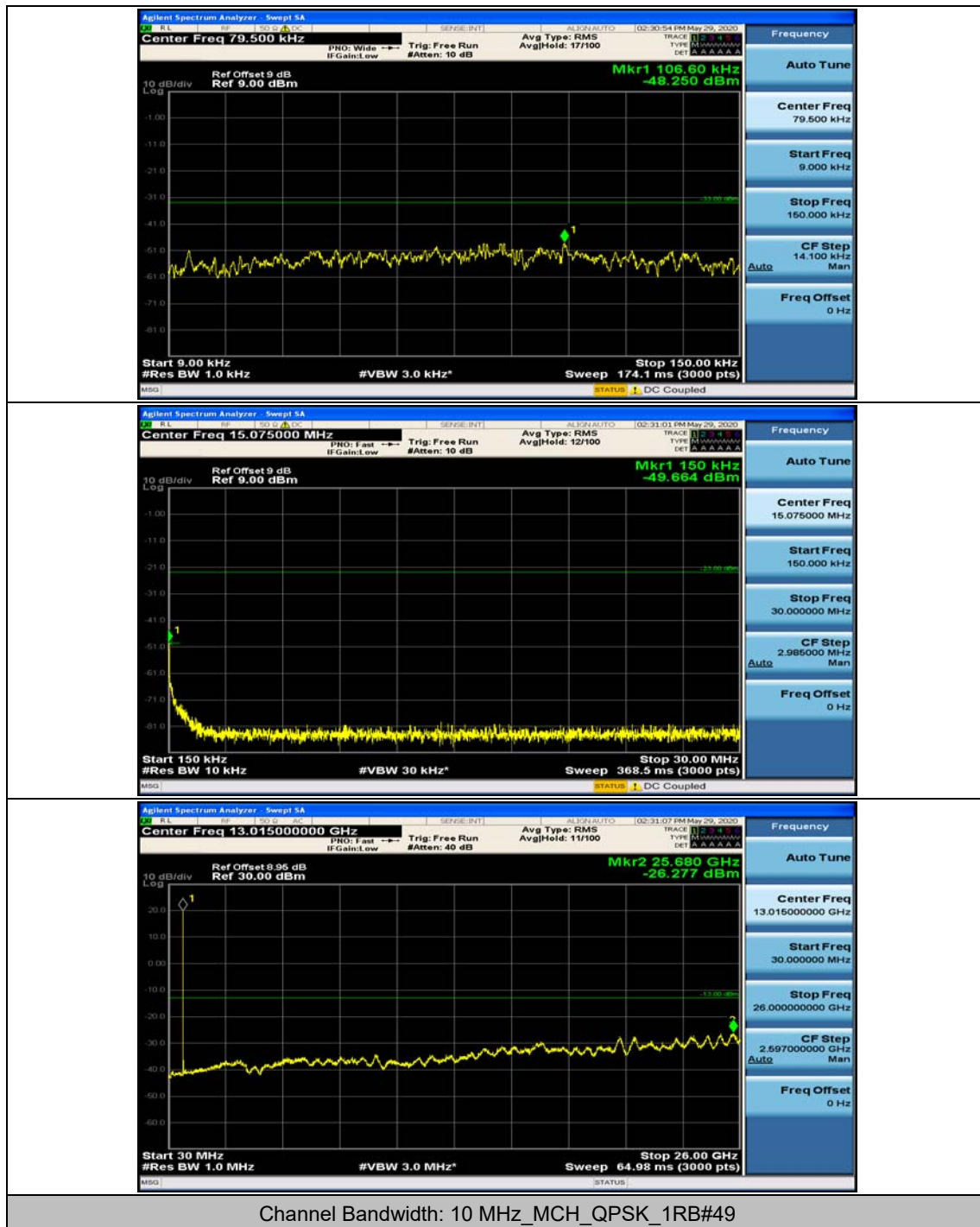
Channel Bandwidth: 10 MHz

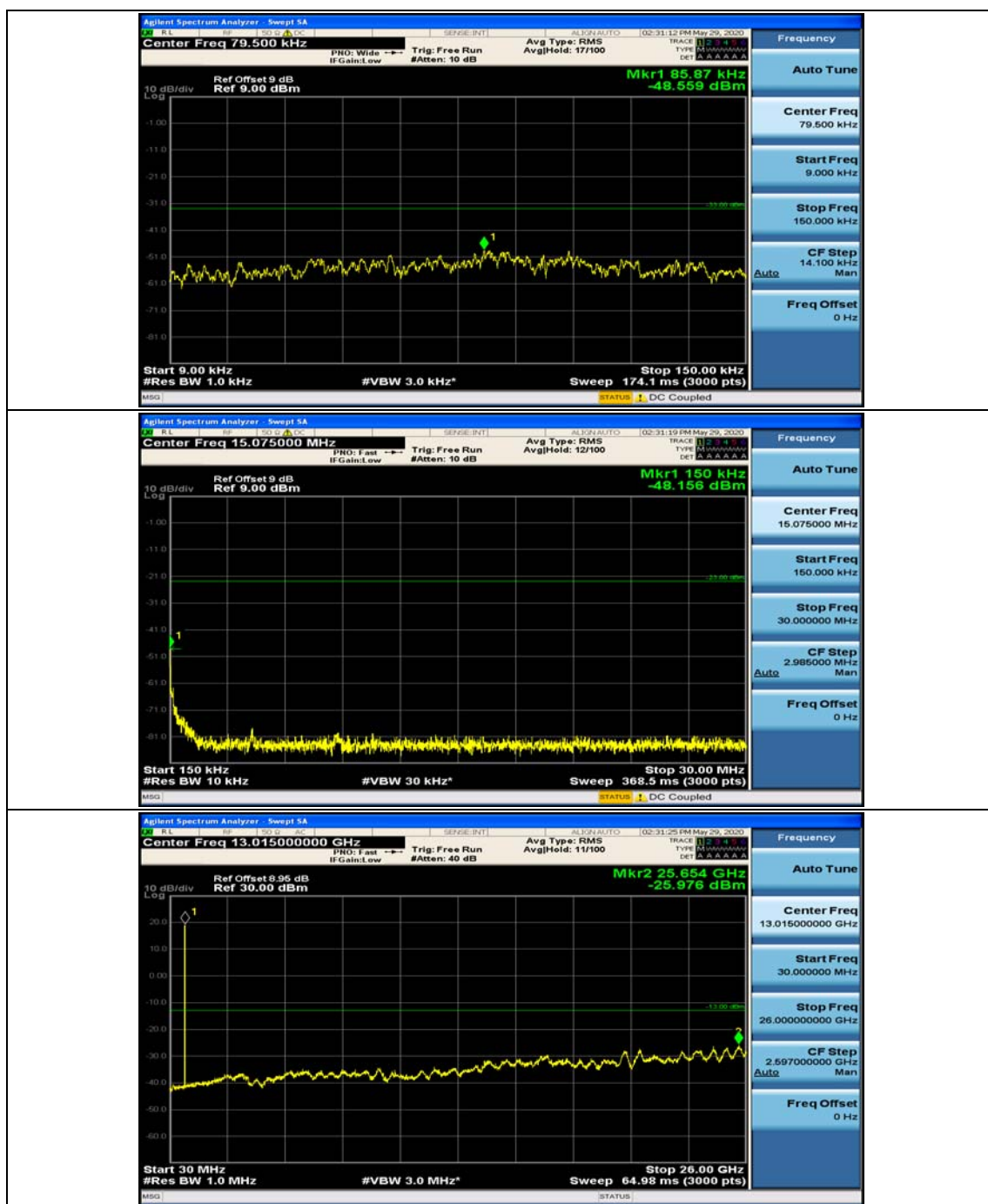


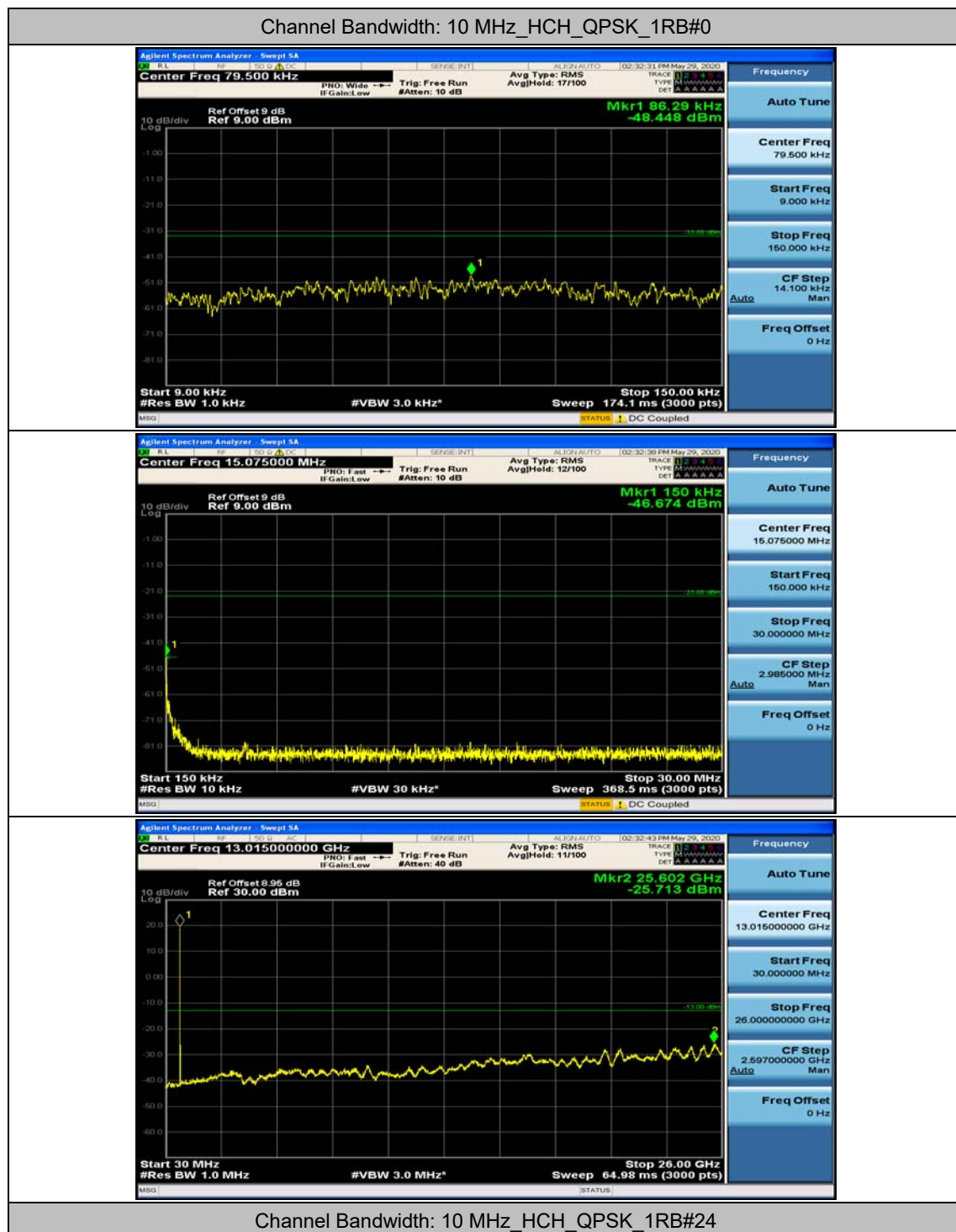


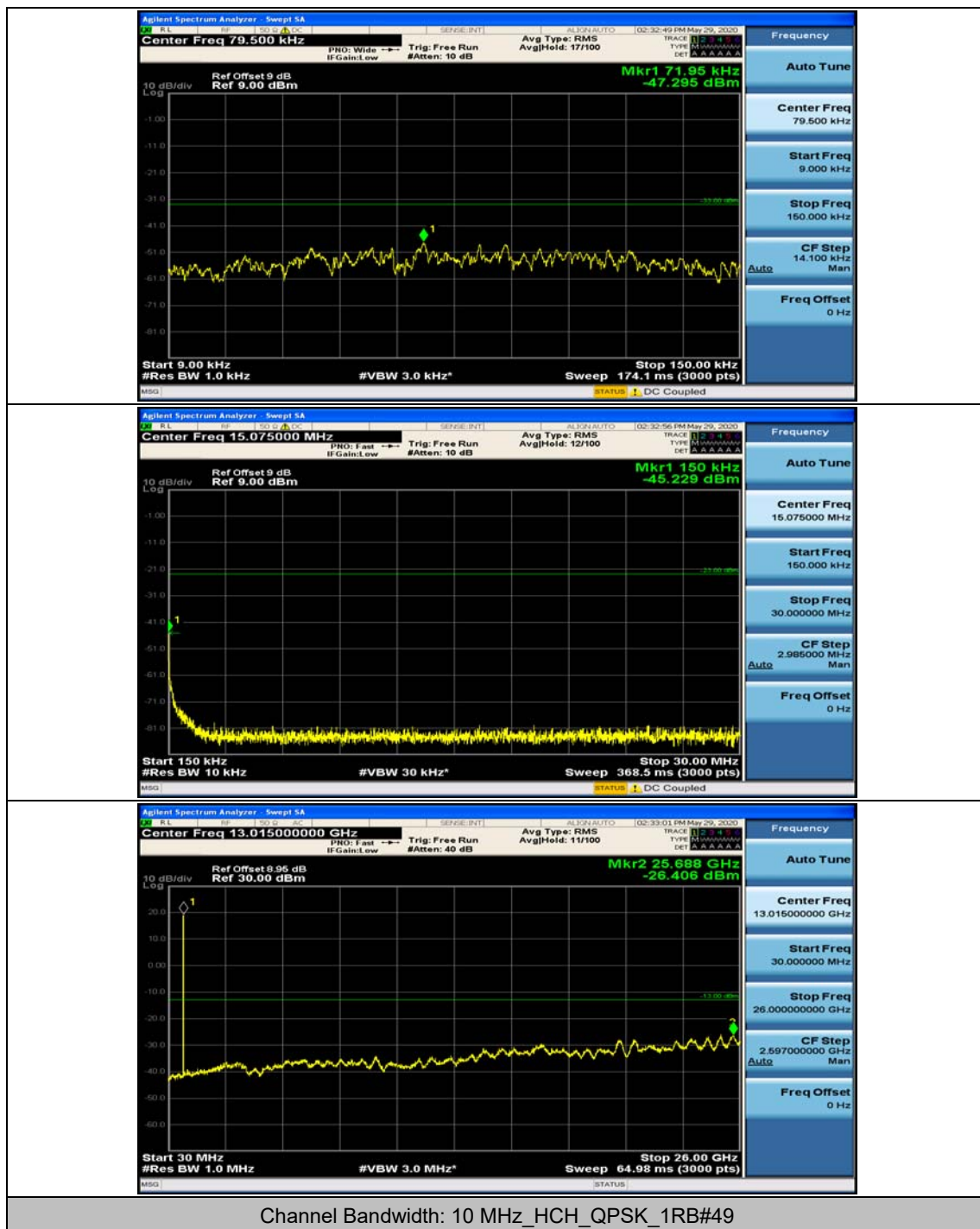


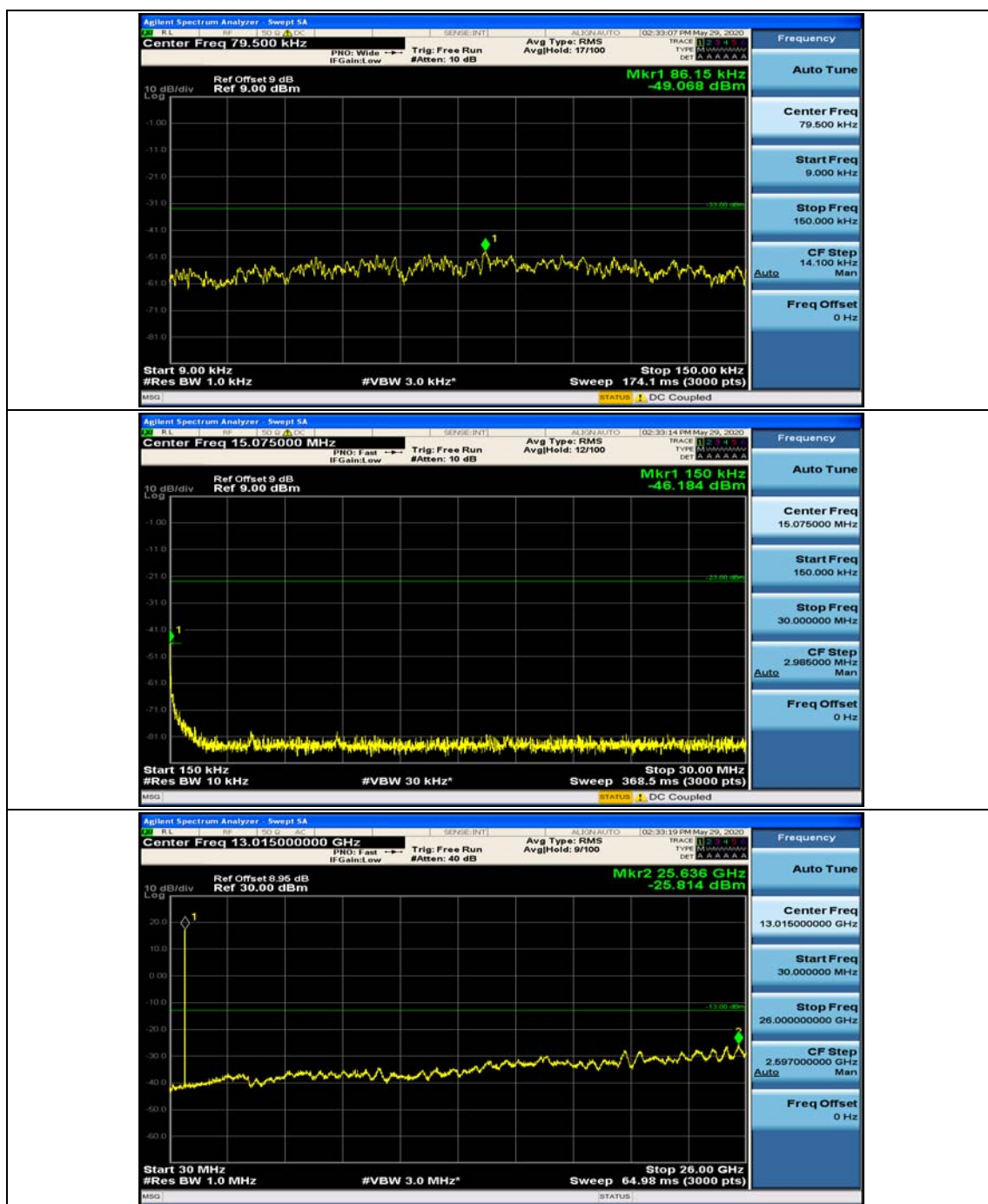


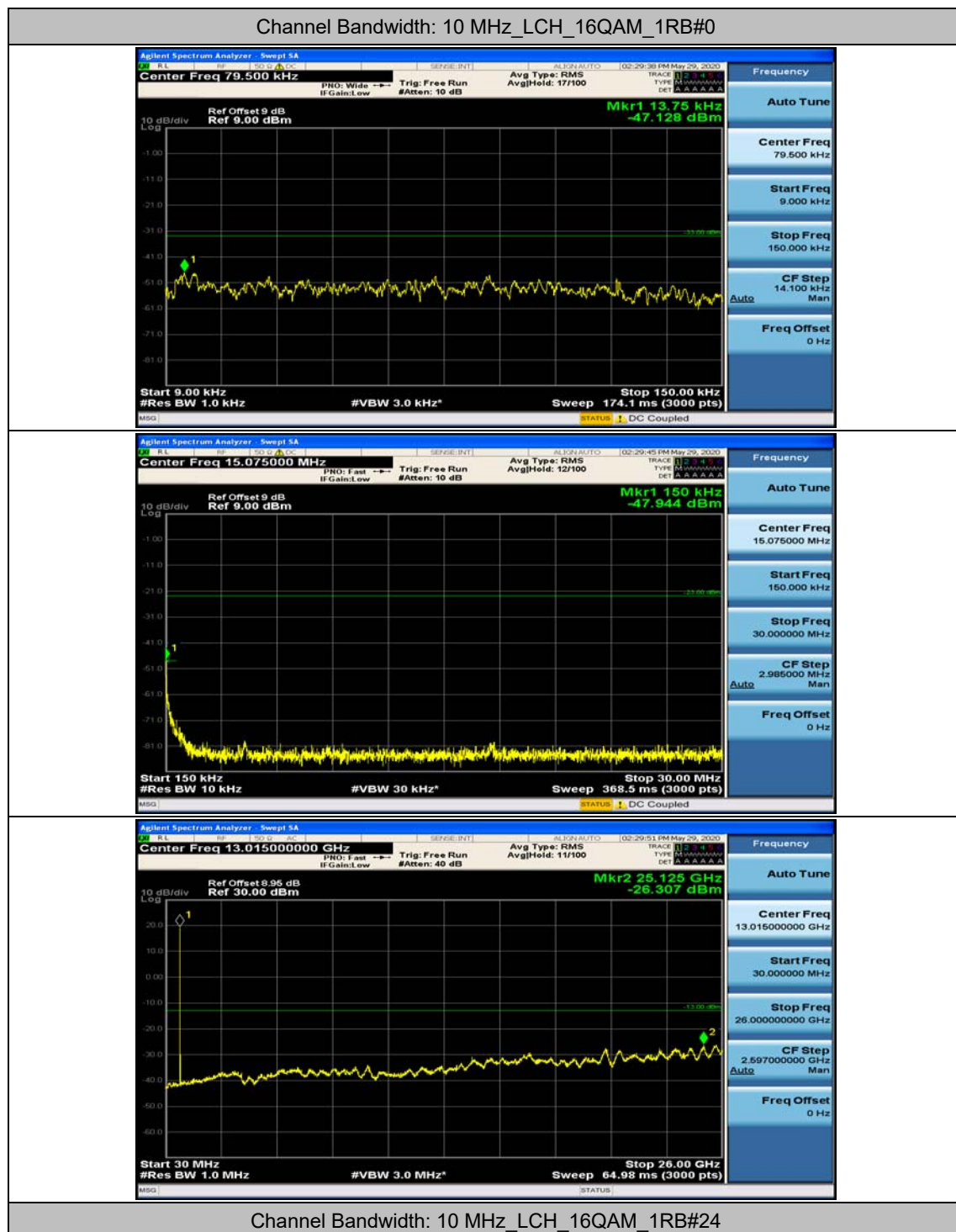


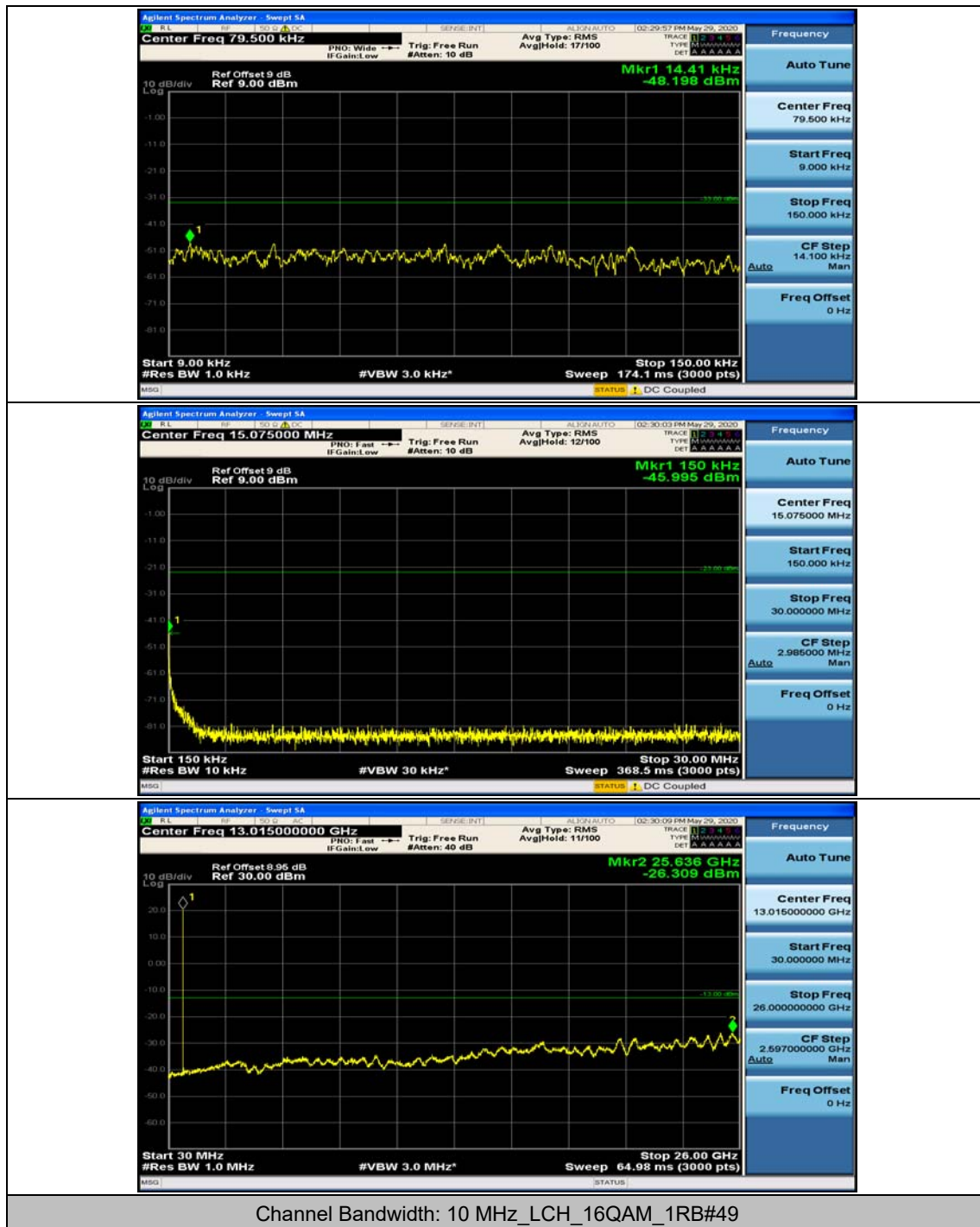


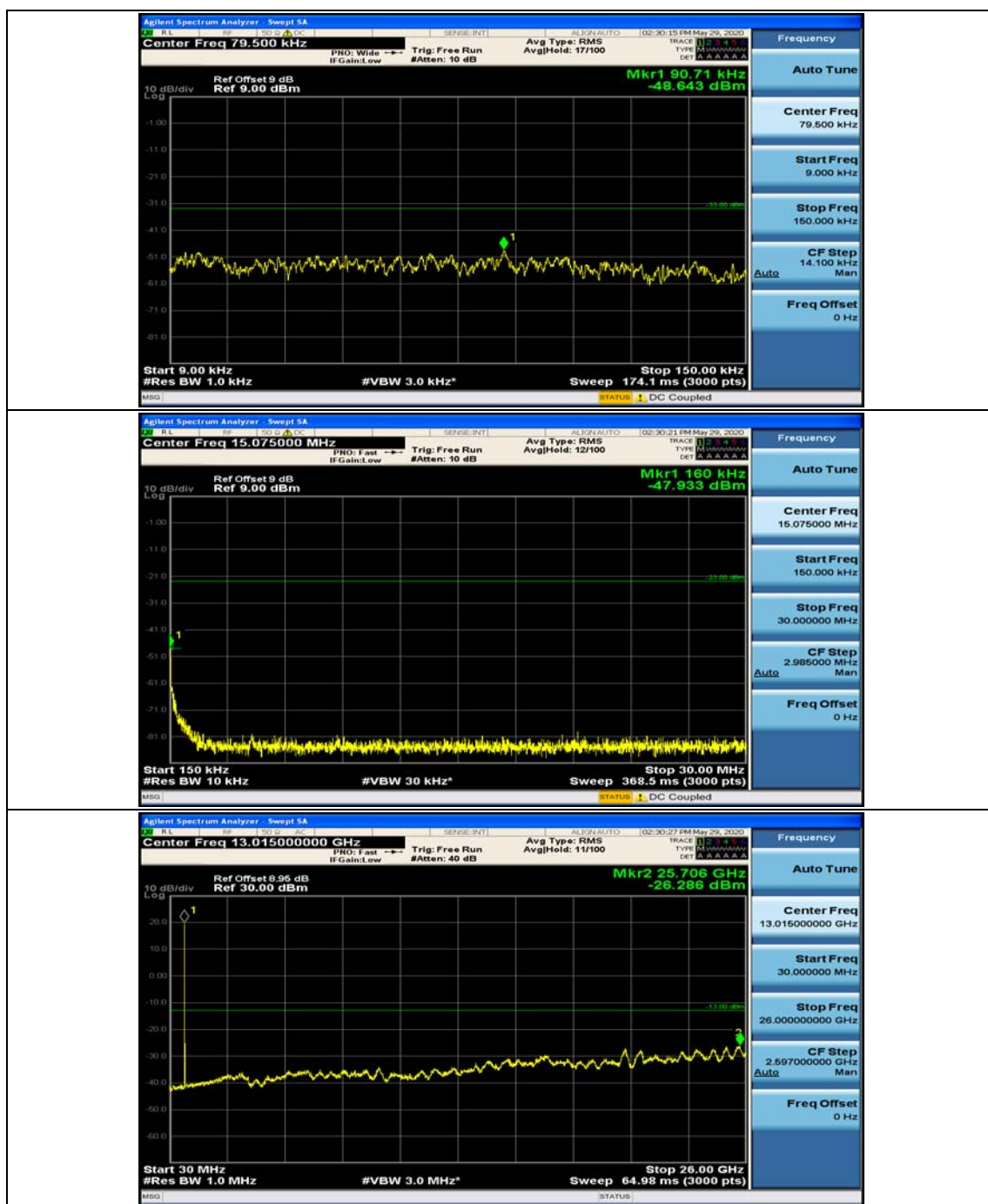


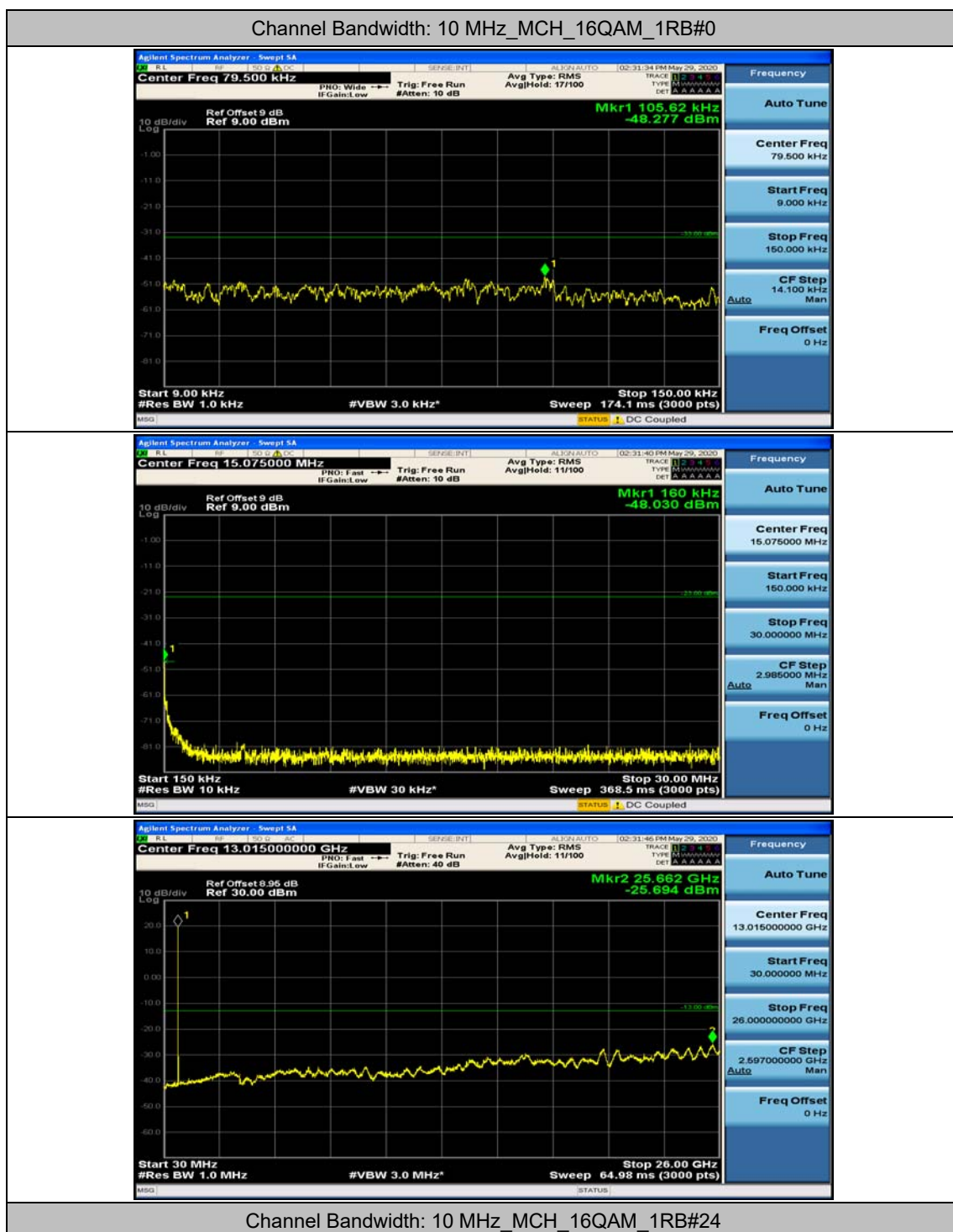


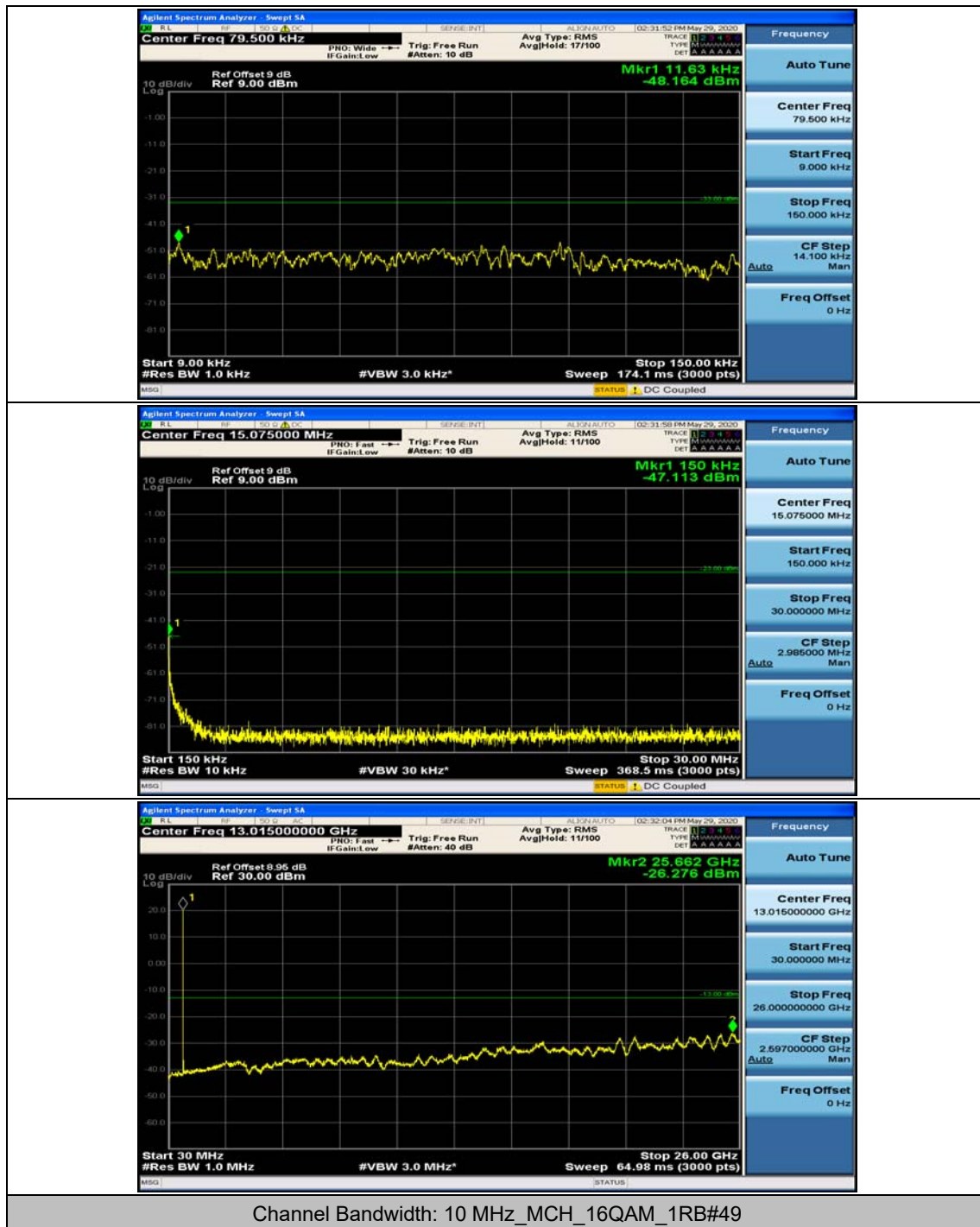


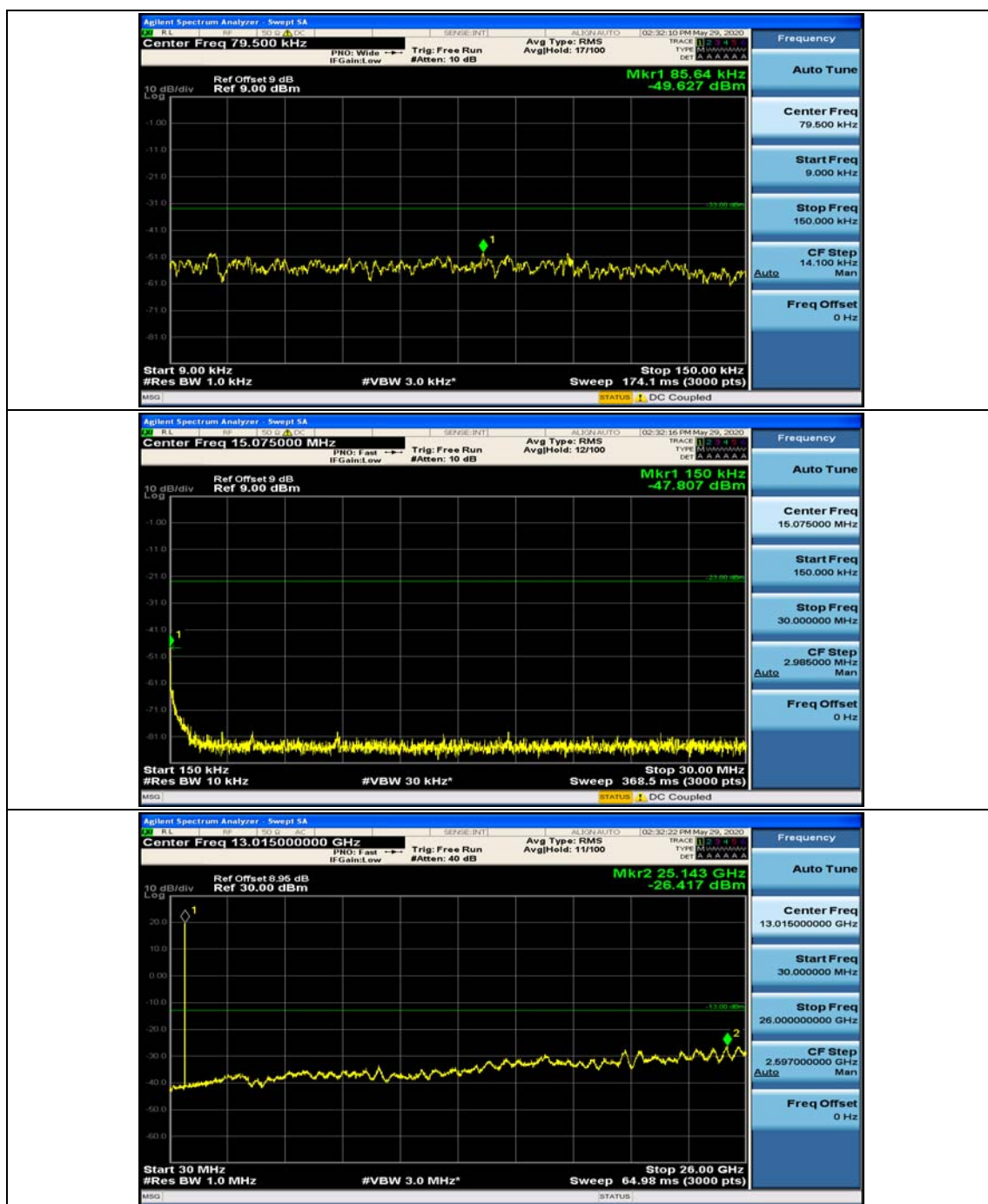


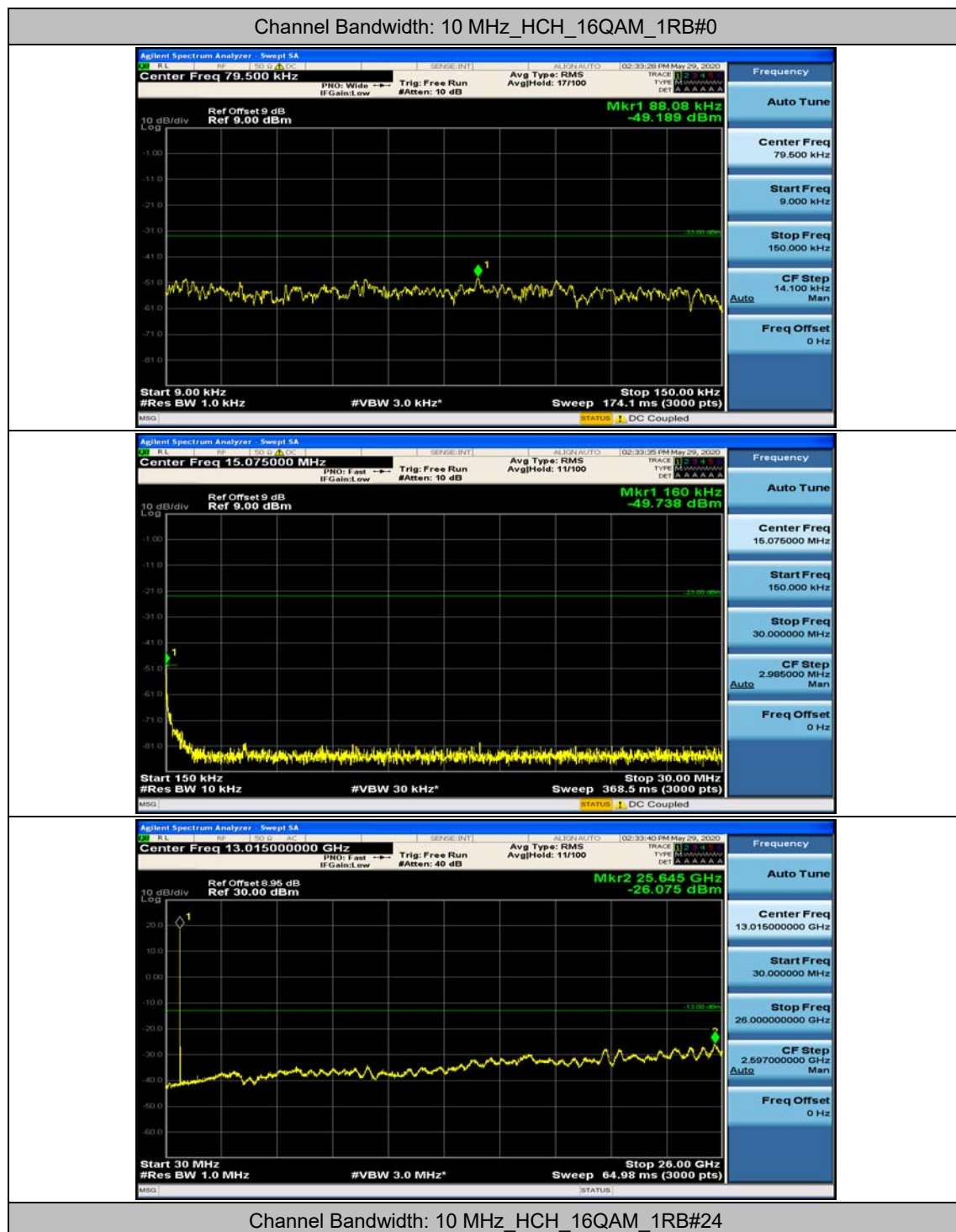


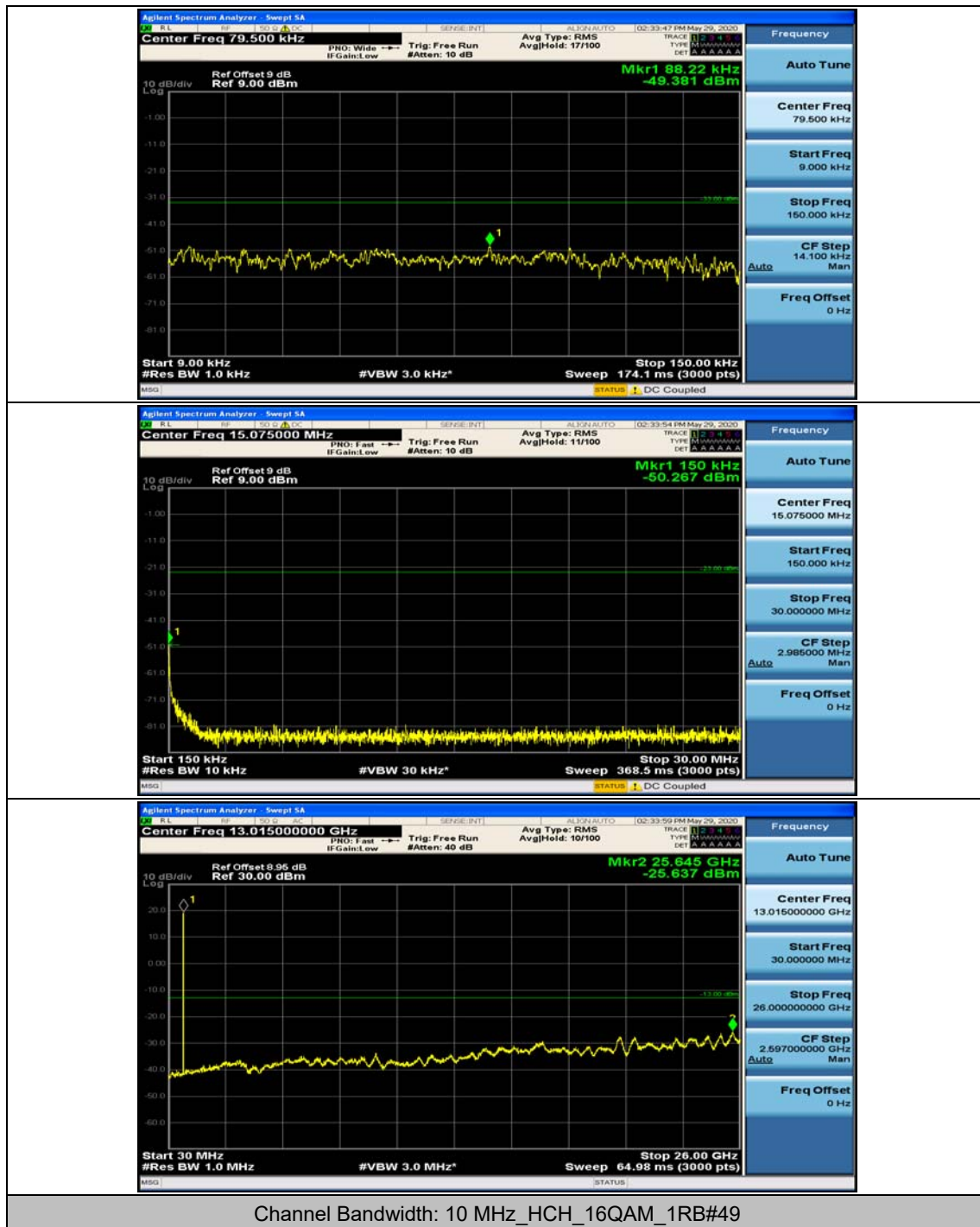


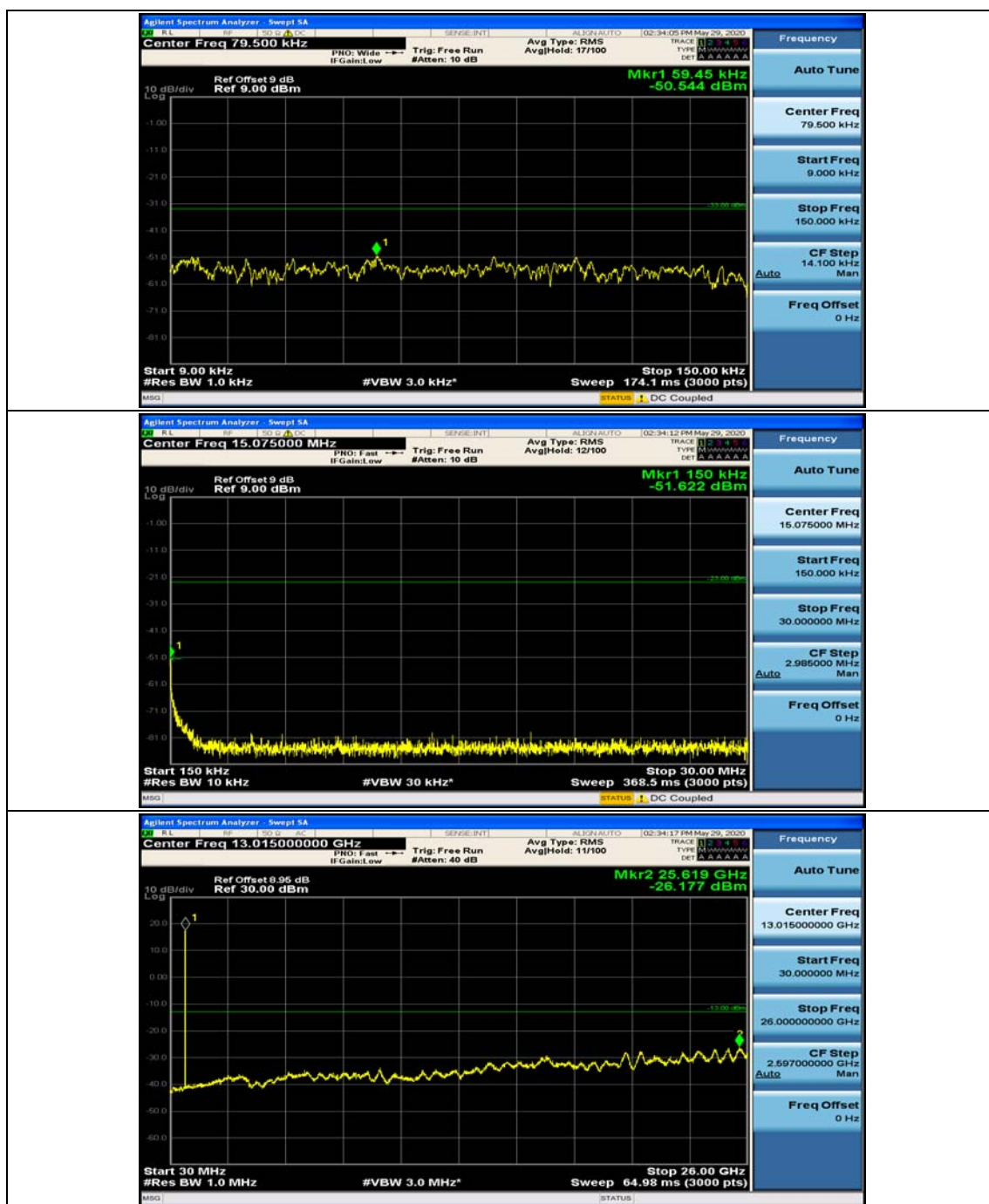












Appendix F: Frequency Stability

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	VL	TN	3.55	0.005074	± 2.5	PASS
		VN	TN	-1.11	-0.001586	± 2.5	PASS
		VH	TN	2.79	0.003987	± 2.5	PASS
	MCH	VL	TN	0.35	0.000495	± 2.5	PASS
		VN	TN	0.59	0.000834	± 2.5	PASS
		VH	TN	-1.16	-0.001640	± 2.5	PASS
	HCH	VL	TN	4.56	0.006375	± 2.5	PASS
		VN	TN	1.43	0.001999	± 2.5	PASS
		VH	TN	0.75	0.001049	± 2.5	PASS
16QAM	LCH	VL	TN	4.5	0.006431	± 2.5	PASS
		VN	TN	-1.3	-0.001858	± 2.5	PASS
		VH	TN	-0.76	-0.001086	± 2.5	PASS
	MCH	VL	TN	2.64	0.003731	± 2.5	PASS
		VN	TN	4.68	0.006615	± 2.5	PASS
		VH	TN	0.96	0.001357	± 2.5	PASS
	HCH	VL	TN	-1.27	-0.001775	± 2.5	PASS
		VN	TN	0.1	0.000140	± 2.5	PASS
		VH	TN	1.16	0.001622	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.55	0.003644	± 2.5	PASS
		VN	-20	-1.81	-0.002587	± 2.5	PASS
		VN	-10	1.17	0.001672	± 2.5	PASS
		VN	0	-0.3	-0.000429	± 2.5	PASS
		VN	10	1.22	0.001744	± 2.5	PASS
		VN	20	0.67	0.000958	± 2.5	PASS
		VN	30	0.04	0.000057	± 2.5	PASS
		VN	40	-0.47	-0.000672	± 2.5	PASS
		VN	50	-0.23	-0.000329	± 2.5	PASS

	MCH	VN	-30	-0.84	-0.001187	± 2.5	PASS
		VN	-20	0.52	0.000735	± 2.5	PASS
		VN	-10	2.98	0.004212	± 2.5	PASS
		VN	0	1.14	0.001611	± 2.5	PASS
		VN	10	-1.82	-0.002572	± 2.5	PASS
		VN	20	0.13	0.000184	± 2.5	PASS
		VN	30	2.19	0.003095	± 2.5	PASS
		VN	40	4.12	0.005823	± 2.5	PASS
		VN	50	-1.79	-0.002530	± 2.5	PASS
	HCH	VN	-30	0.78	0.001090	± 2.5	PASS
		VN	-20	0.35	0.000489	± 2.5	PASS
		VN	-10	1.76	0.002461	± 2.5	PASS
		VN	0	4.41	0.006165	± 2.5	PASS
		VN	10	-1.97	-0.002754	± 2.5	PASS
		VN	20	-0.49	-0.000685	± 2.5	PASS
		VN	30	-0.54	-0.000755	± 2.5	PASS
		VN	40	-0.11	-0.000154	± 2.5	PASS
		VN	50	-0.03	-0.000042	± 2.5	PASS
16QAM	LCH	VN	-30	2.61	0.003730	± 2.5	PASS
		VN	-20	0.39	0.000557	± 2.5	PASS
		VN	-10	1.08	0.001544	± 2.5	PASS
		VN	0	2.92	0.004173	± 2.5	PASS
		VN	10	4.2	0.006003	± 2.5	PASS
		VN	20	3.88	0.005545	± 2.5	PASS
		VN	30	4.02	0.005745	± 2.5	PASS
		VN	40	-0.37	-0.000529	± 2.5	PASS
		VN	50	1.65	0.002358	± 2.5	PASS
	MCH	VN	-30	4.49	0.006346	± 2.5	PASS
		VN	-20	2.96	0.004184	± 2.5	PASS
		VN	-10	3.41	0.004820	± 2.5	PASS
		VN	0	-0.68	-0.000961	± 2.5	PASS
		VN	10	1.93	0.002728	± 2.5	PASS
		VN	20	1.76	0.002488	± 2.5	PASS
		VN	30	1.66	0.002346	± 2.5	PASS
		VN	40	1.82	0.002572	± 2.5	PASS
		VN	50	2.4	0.003392	± 2.5	PASS
	HCH	VN	-30	0.43	0.000601	± 2.5	PASS
		VN	-20	4.77	0.006669	± 2.5	PASS
		VN	-10	1.95	0.002726	± 2.5	PASS
		VN	0	1.96	0.002740	± 2.5	PASS
		VN	10	0.29	0.000405	± 2.5	PASS

		VN	20	-0.38	-0.000531	± 2.5	PASS
		VN	30	-1.8	-0.002516	± 2.5	PASS
		VN	40	-0.94	-0.001314	± 2.5	PASS
		VN	50	4.16	0.005816	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.66	-0.002370	± 2.5	PASS
		VN	TN	-1.84	-0.002627	± 2.5	PASS
		VH	TN	4.35	0.006210	± 2.5	PASS
	MCH	VL	TN	0.79	0.001117	± 2.5	PASS
		VN	TN	4.49	0.006346	± 2.5	PASS
		VH	TN	4.59	0.006488	± 2.5	PASS
	HCH	VL	TN	4.86	0.006802	± 2.5	PASS
		VN	TN	4.63	0.006480	± 2.5	PASS
		VH	TN	4.63	0.006480	± 2.5	PASS
16QAM	LCH	VL	TN	2.51	0.003583	± 2.5	PASS
		VN	TN	1.12	0.001599	± 2.5	PASS
		VH	TN	4.7	0.006709	± 2.5	PASS
	MCH	VL	TN	0.68	0.000961	± 2.5	PASS
		VN	TN	3.02	0.004269	± 2.5	PASS
		VH	TN	3.76	0.005314	± 2.5	PASS
	HCH	VL	TN	4.49	0.006284	± 2.5	PASS
		VN	TN	-1.49	-0.002085	± 2.5	PASS
		VH	TN	2.07	0.002897	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.4	-0.000571	± 2.5	PASS
		VN	-20	-1.75	-0.002498	± 2.5	PASS
		VN	-10	0.46	0.000657	± 2.5	PASS
		VN	0	2.28	0.003255	± 2.5	PASS
		VN	10	3.38	0.004825	± 2.5	PASS
		VN	20	4.03	0.005753	± 2.5	PASS
		VN	30	0.43	0.000614	± 2.5	PASS
		VN	40	4.03	0.005753	± 2.5	PASS
		VN	50	3.11	0.004440	± 2.5	PASS

	MCH	VN	-30	0.06	0.000085	± 2.5	PASS
		VN	-20	3.37	0.004763	± 2.5	PASS
		VN	-10	-1.47	-0.002078	± 2.5	PASS
		VN	0	4.03	0.005696	± 2.5	PASS
		VN	10	-1.91	-0.002700	± 2.5	PASS
		VN	20	2.51	0.003548	± 2.5	PASS
		VN	30	3.71	0.005244	± 2.5	PASS
		VN	40	4.15	0.005866	± 2.5	PASS
		VN	50	-1.06	-0.001498	± 2.5	PASS
	HCH	VN	-30	3.5	0.004899	± 2.5	PASS
		VN	-20	0.05	0.000070	± 2.5	PASS
		VN	-10	4.36	0.006102	± 2.5	PASS
		VN	0	1.06	0.001484	± 2.5	PASS
		VN	10	4.99	0.006984	± 2.5	PASS
		VN	20	0.23	0.000322	± 2.5	PASS
		VN	30	0.2	0.000280	± 2.5	PASS
		VN	40	2.99	0.004185	± 2.5	PASS
		VN	50	0.74	0.001036	± 2.5	PASS
16QAM	LCH	VN	-30	2.01	0.002869	± 2.5	PASS
		VN	-20	1.23	0.001756	± 2.5	PASS
		VN	-10	3.54	0.005054	± 2.5	PASS
		VN	0	1.63	0.002327	± 2.5	PASS
		VN	10	2.98	0.004254	± 2.5	PASS
		VN	20	-0.74	-0.001056	± 2.5	PASS
		VN	30	4.66	0.006652	± 2.5	PASS
		VN	40	2.72	0.003883	± 2.5	PASS
		VN	50	3.25	0.004640	± 2.5	PASS
	MCH	VN	-30	0.56	0.000792	± 2.5	PASS
		VN	-20	1.19	0.001682	± 2.5	PASS
		VN	-10	4.7	0.006643	± 2.5	PASS
		VN	0	4.39	0.006205	± 2.5	PASS
		VN	10	4.15	0.005866	± 2.5	PASS
		VN	20	1.3	0.001837	± 2.5	PASS
		VN	30	3.13	0.004424	± 2.5	PASS
		VN	40	2.42	0.003420	± 2.5	PASS
		VN	50	-1.5	-0.002120	± 2.5	PASS
	HCH	VN	-30	1.2	0.001679	± 2.5	PASS
		VN	-20	2.03	0.002841	± 2.5	PASS
		VN	-10	0.56	0.000784	± 2.5	PASS
		VN	0	1.09	0.001526	± 2.5	PASS
		VN	10	3.46	0.004843	± 2.5	PASS

		VN	20	3.42	0.004787	± 2.5	PASS
		VN	30	3.54	0.004955	± 2.5	PASS
		VN	40	4.01	0.005612	± 2.5	PASS
		VN	50	1.86	0.002603	± 2.5	PASS

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	0.81	0.001155	± 2.5	PASS
		VN	TN	-0.3	-0.000428	± 2.5	PASS
		VH	TN	3.32	0.004733	± 2.5	PASS
	MCH	VL	TN	0.85	0.001201	± 2.5	PASS
		VN	TN	1.35	0.001908	± 2.5	PASS
		VH	TN	1.6	0.002261	± 2.5	PASS
	HCH	VL	TN	1.75	0.002453	± 2.5	PASS
		VN	TN	2.24	0.003139	± 2.5	PASS
		VH	TN	3.47	0.004863	± 2.5	PASS
16QAM	LCH	VL	TN	0.87	0.001240	± 2.5	PASS
		VN	TN	-0.45	-0.000641	± 2.5	PASS
		VH	TN	0.49	0.000699	± 2.5	PASS
	MCH	VL	TN	4.94	0.006982	± 2.5	PASS
		VN	TN	-0.91	-0.001286	± 2.5	PASS
		VH	TN	2.82	0.003986	± 2.5	PASS
	HCH	VL	TN	1.52	0.002130	± 2.5	PASS
		VN	TN	1.15	0.001612	± 2.5	PASS
		VH	TN	0.49	0.000687	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.49	0.003550	± 2.5	PASS
		VN	-20	0.76	0.001083	± 2.5	PASS
		VN	-10	-0.85	-0.001212	± 2.5	PASS
		VN	0	1.46	0.002081	± 2.5	PASS
		VN	10	-0.07	-0.000100	± 2.5	PASS
		VN	20	4.3	0.006130	± 2.5	PASS
		VN	30	0.65	0.000927	± 2.5	PASS
		VN	40	-1.79	-0.002552	± 2.5	PASS
		VN	50	3.31	0.004718	± 2.5	PASS

	MCH	VN	-30	3.44	0.004862	± 2.5	PASS
		VN	-20	1.47	0.002078	± 2.5	PASS
		VN	-10	0.35	0.000495	± 2.5	PASS
		VN	0	4.31	0.006092	± 2.5	PASS
		VN	10	0.03	0.000042	± 2.5	PASS
		VN	20	4.7	0.006643	± 2.5	PASS
		VN	30	3.41	0.004820	± 2.5	PASS
		VN	40	-0.82	-0.001159	± 2.5	PASS
		VN	50	4.03	0.005696	± 2.5	PASS
	HCH	VN	-30	-0.46	-0.000645	± 2.5	PASS
		VN	-20	-1.52	-0.002130	± 2.5	PASS
		VN	-10	2.83	0.003966	± 2.5	PASS
		VN	0	0.96	0.001345	± 2.5	PASS
		VN	10	3.98	0.005578	± 2.5	PASS
		VN	20	2.3	0.003224	± 2.5	PASS
		VN	30	-1.91	-0.002677	± 2.5	PASS
		VN	40	-0.84	-0.001177	± 2.5	PASS
		VN	50	3.27	0.004583	± 2.5	PASS
16QAM	LCH	VN	-30	-1.19	-0.001696	± 2.5	PASS
		VN	-20	0.79	0.001126	± 2.5	PASS
		VN	-10	2.14	0.003051	± 2.5	PASS
		VN	0	-1.03	-0.001468	± 2.5	PASS
		VN	10	1.92	0.002737	± 2.5	PASS
		VN	20	-0.18	-0.000257	± 2.5	PASS
		VN	30	4.33	0.006172	± 2.5	PASS
		VN	40	4.03	0.005745	± 2.5	PASS
		VN	50	4.75	0.006771	± 2.5	PASS
	MCH	VN	-30	3.51	0.004961	± 2.5	PASS
		VN	-20	2.08	0.002940	± 2.5	PASS
		VN	-10	0.99	0.001399	± 2.5	PASS
		VN	0	-0.57	-0.000806	± 2.5	PASS
		VN	10	-0.87	-0.001230	± 2.5	PASS
		VN	20	-0.43	-0.000608	± 2.5	PASS
		VN	30	0.51	0.000721	± 2.5	PASS
		VN	40	4.28	0.006049	± 2.5	PASS
		VN	50	4.7	0.006643	± 2.5	PASS
	HCH	VN	-30	0.93	0.001303	± 2.5	PASS
		VN	-20	3.31	0.004639	± 2.5	PASS
		VN	-10	2.7	0.003784	± 2.5	PASS
		VN	0	-1.36	-0.001906	± 2.5	PASS
		VN	10	-0.13	-0.000182	± 2.5	PASS

		VN	20	4.87	0.006826	± 2.5	PASS
		VN	30	4.99	0.006994	± 2.5	PASS
		VN	40	4.35	0.006097	± 2.5	PASS
		VN	50	-0.36	-0.000505	± 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	-0.002244	± 2.5	PASS
		VN	TN	3.9	0.005540	± 2.5	PASS
		VH	TN	1.54	0.002188	± 2.5	PASS
	MCH	VL	TN	4.97	0.007025	± 2.5	PASS
		VN	TN	2.12	0.002996	± 2.5	PASS
		VH	TN	1.9	0.002686	± 2.5	PASS
	HCH	VL	TN	2.39	0.003361	± 2.5	PASS
		VN	TN	2.4	0.003376	± 2.5	PASS
		VH	TN	4.27	0.006006	± 2.5	PASS
16QAM	LCH	VL	TN	4.9	0.006960	± 2.5	PASS
		VN	TN	2.96	0.004205	± 2.5	PASS
		VH	TN	4.43	0.006293	± 2.5	PASS
	MCH	VL	TN	-1.88	-0.002657	± 2.5	PASS
		VN	TN	0.49	0.000693	± 2.5	PASS
		VH	TN	0.94	0.001329	± 2.5	PASS
	HCH	VL	TN	3.79	0.005331	± 2.5	PASS
		VN	TN	-1.96	-0.002757	± 2.5	PASS
		VH	TN	-0.71	-0.000999	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.92	0.001307	± 2.5	PASS
		VN	-20	0.74	0.001051	± 2.5	PASS
		VN	-10	-0.79	-0.001122	± 2.5	PASS
		VN	0	4.76	0.006761	± 2.5	PASS
		VN	10	0	0.000000	± 2.5	PASS
		VN	20	4.58	0.006506	± 2.5	PASS
		VN	30	-1.35	-0.001918	± 2.5	PASS
		VN	40	2.46	0.003494	± 2.5	PASS
		VN	50	-1.32	-0.001875	± 2.5	PASS

	MCH	VN	-30	-1.14	-0.001611	± 2.5	PASS
		VN	-20	-1.05	-0.001484	± 2.5	PASS
		VN	-10	-0.85	-0.001201	± 2.5	PASS
		VN	0	-1.53	-0.002163	± 2.5	PASS
		VN	10	-1.43	-0.002021	± 2.5	PASS
		VN	20	0.26	0.000367	± 2.5	PASS
		VN	30	2.75	0.003887	± 2.5	PASS
		VN	40	3.31	0.004678	± 2.5	PASS
		VN	50	0.38	0.000537	± 2.5	PASS
	HCH	VN	-30	3.33	0.004684	± 2.5	PASS
		VN	-20	0.1	0.000141	± 2.5	PASS
		VN	-10	2.54	0.003572	± 2.5	PASS
		VN	0	4.02	0.005654	± 2.5	PASS
		VN	10	4.44	0.006245	± 2.5	PASS
		VN	20	4.43	0.006231	± 2.5	PASS
		VN	30	0.28	0.000394	± 2.5	PASS
		VN	40	3.27	0.004599	± 2.5	PASS
		VN	50	4.24	0.005963	± 2.5	PASS
16QAM	LCH	VN	-30	3.6	0.005114	± 2.5	PASS
		VN	-20	3.63	0.005156	± 2.5	PASS
		VN	-10	-0.22	-0.000313	± 2.5	PASS
		VN	0	1.75	0.002486	± 2.5	PASS
		VN	10	4.07	0.005781	± 2.5	PASS
		VN	20	-1.74	-0.002472	± 2.5	PASS
		VN	30	1.81	0.002571	± 2.5	PASS
		VN	40	1.9	0.002699	± 2.5	PASS
		VN	50	-1.09	-0.001548	± 2.5	PASS
	MCH	VN	-30	4.28	0.006049	± 2.5	PASS
		VN	-20	4.21	0.005951	± 2.5	PASS
		VN	-10	-0.61	-0.000862	± 2.5	PASS
		VN	0	-1.16	-0.001640	± 2.5	PASS
		VN	10	3.31	0.004678	± 2.5	PASS
		VN	20	3.02	0.004269	± 2.5	PASS
		VN	30	1.53	0.002163	± 2.5	PASS
		VN	40	3.03	0.004283	± 2.5	PASS
		VN	50	3.84	0.005428	± 2.5	PASS
	HCH	VN	-30	3.11	0.004374	± 2.5	PASS
		VN	-20	2.5	0.003516	± 2.5	PASS
		VN	-10	4.83	0.006793	± 2.5	PASS
		VN	0	0.83	0.001167	± 2.5	PASS
		VN	10	-0.5	-0.000703	± 2.5	PASS

		VN	20	0.74	0.001041	± 2.5	PASS
		VN	30	2.02	0.002841	± 2.5	PASS
		VN	40	-0.29	-0.000408	± 2.5	PASS
		VN	50	4.23	0.005949	± 2.5	PASS