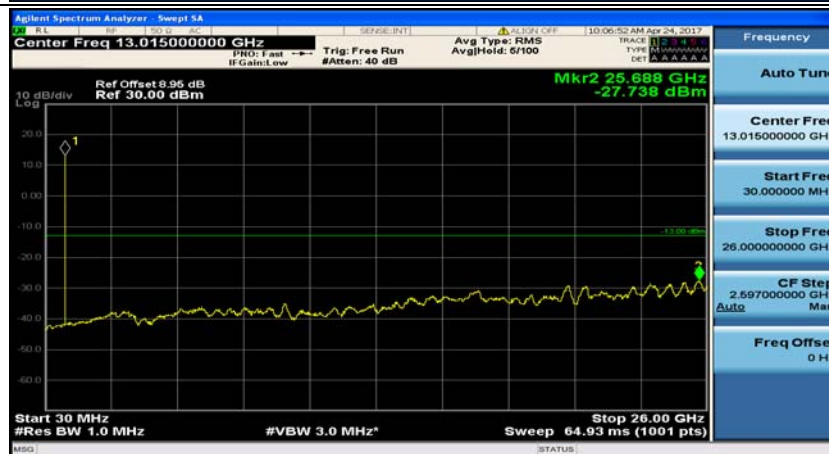
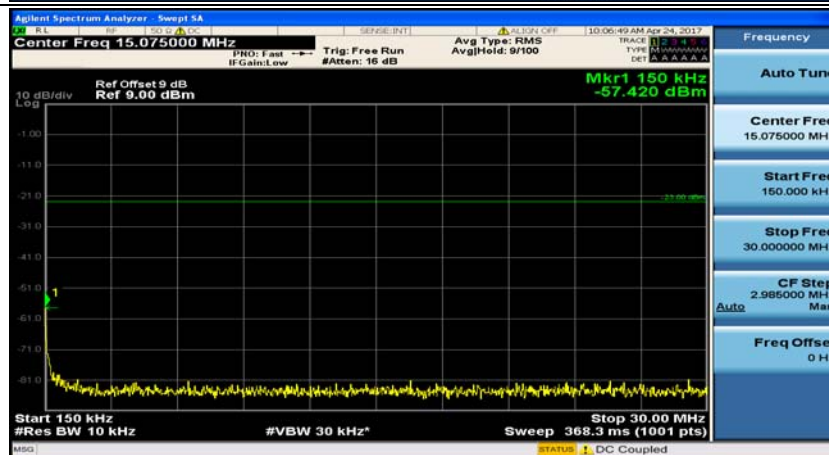
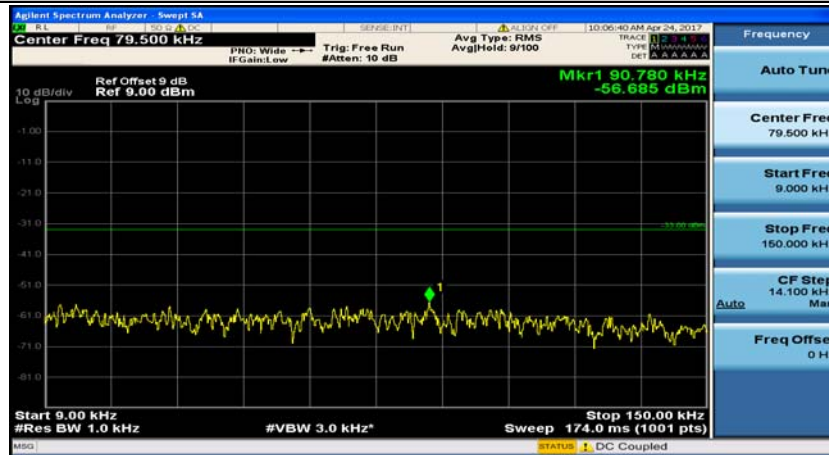
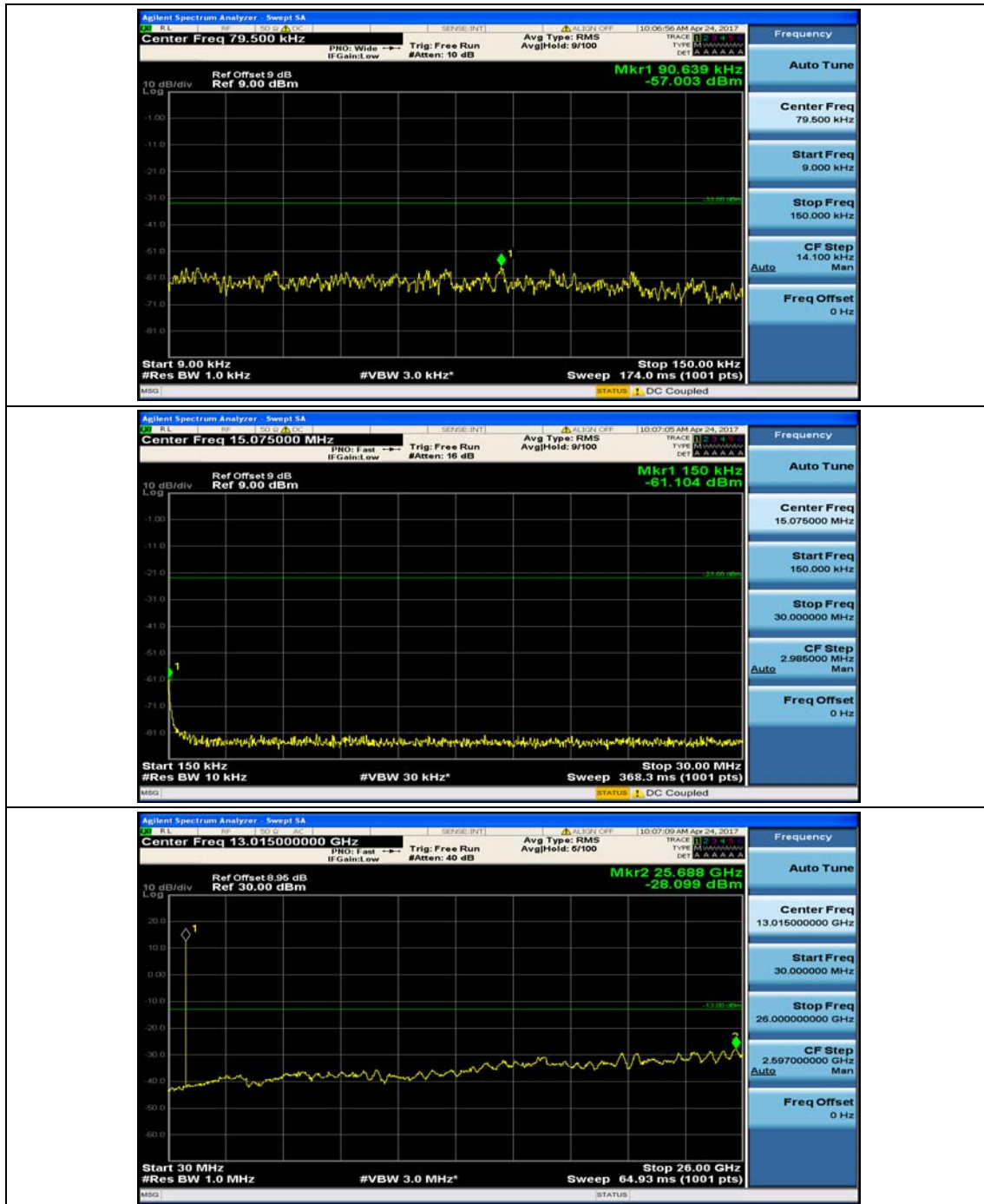


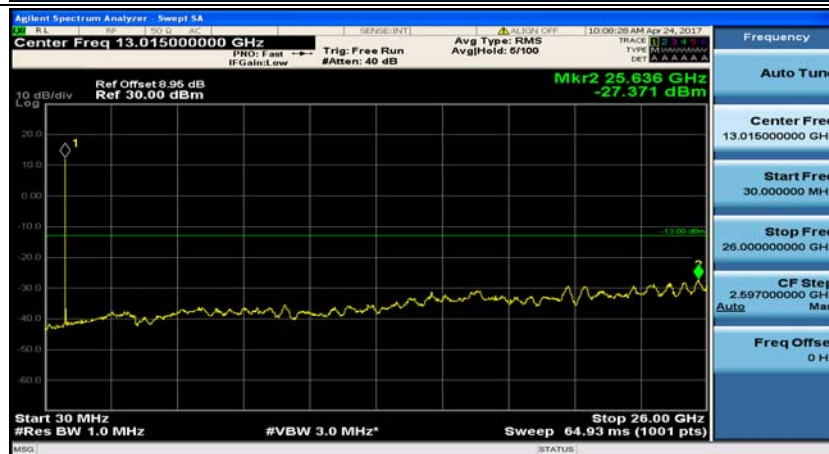
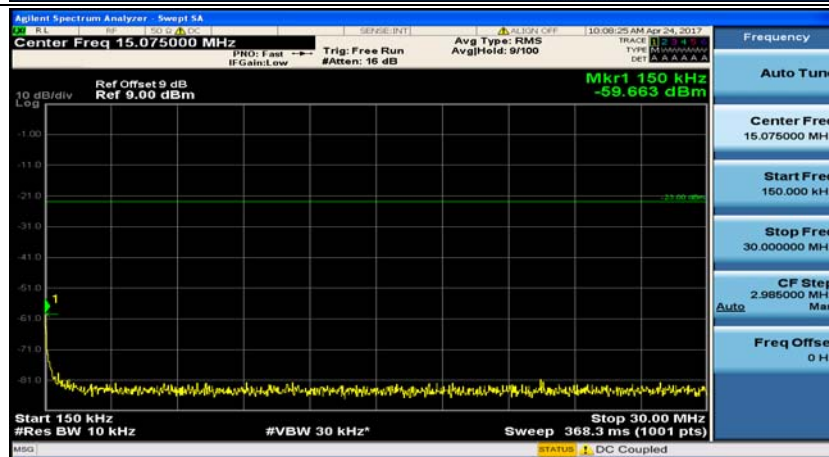
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



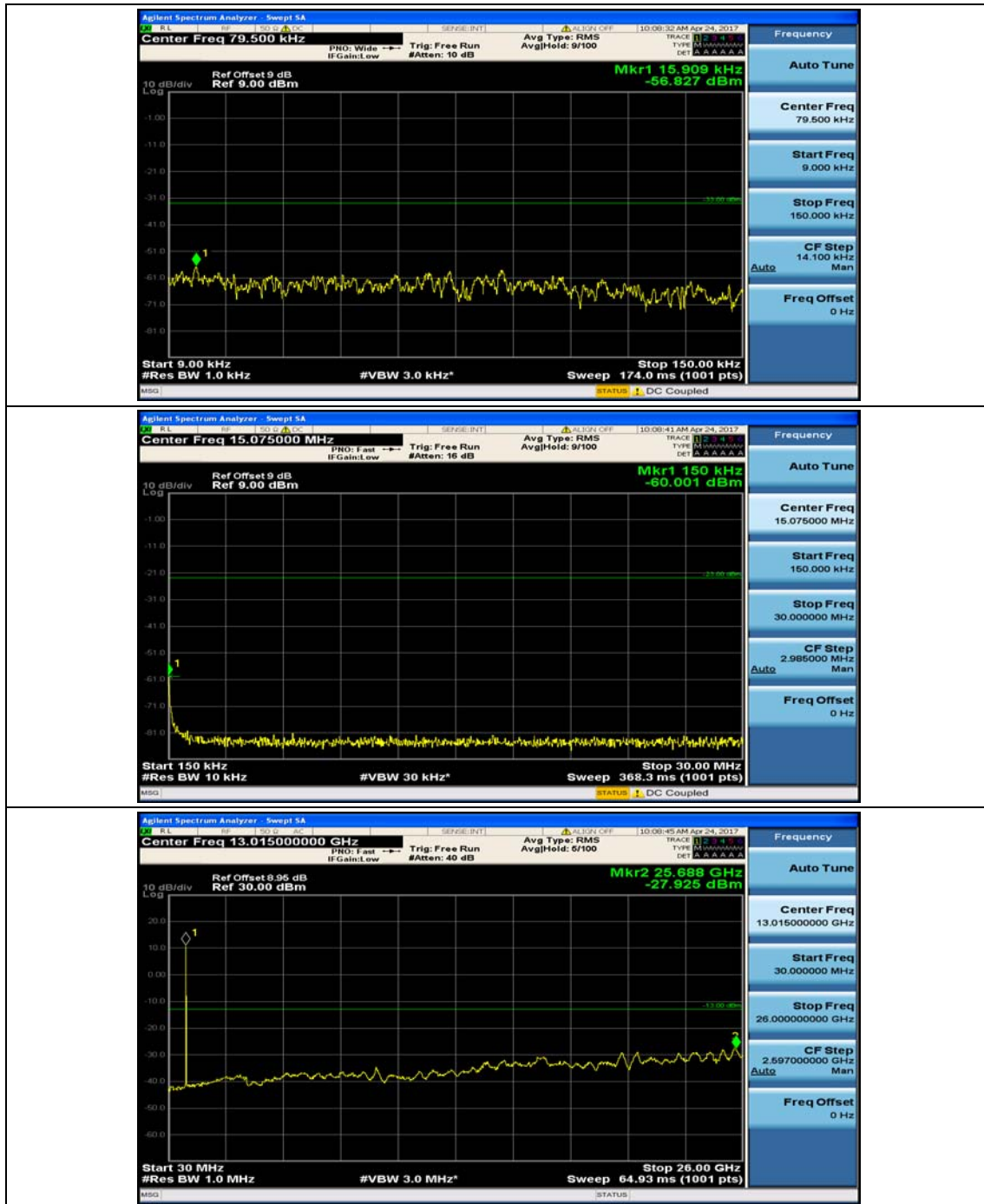
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7



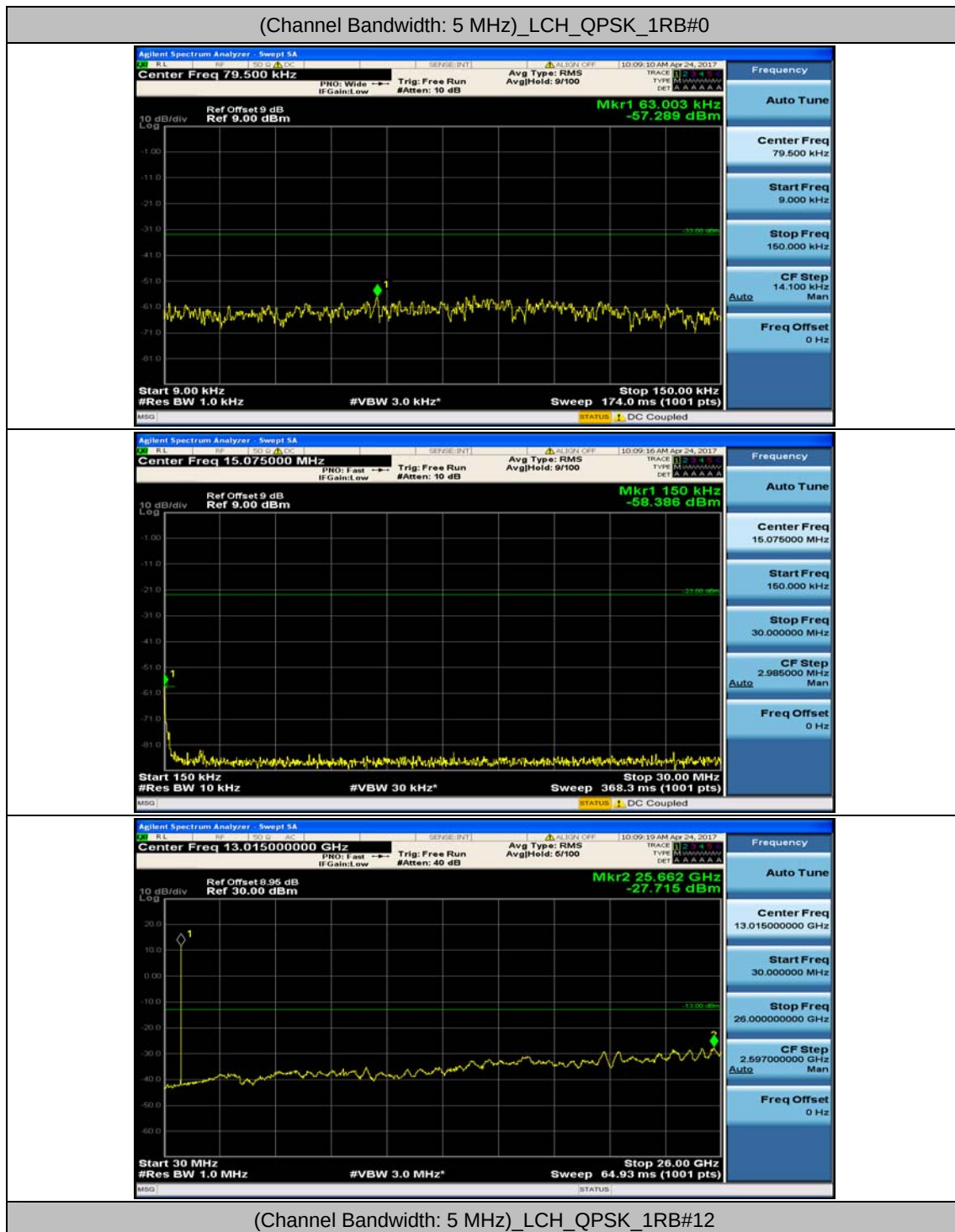
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

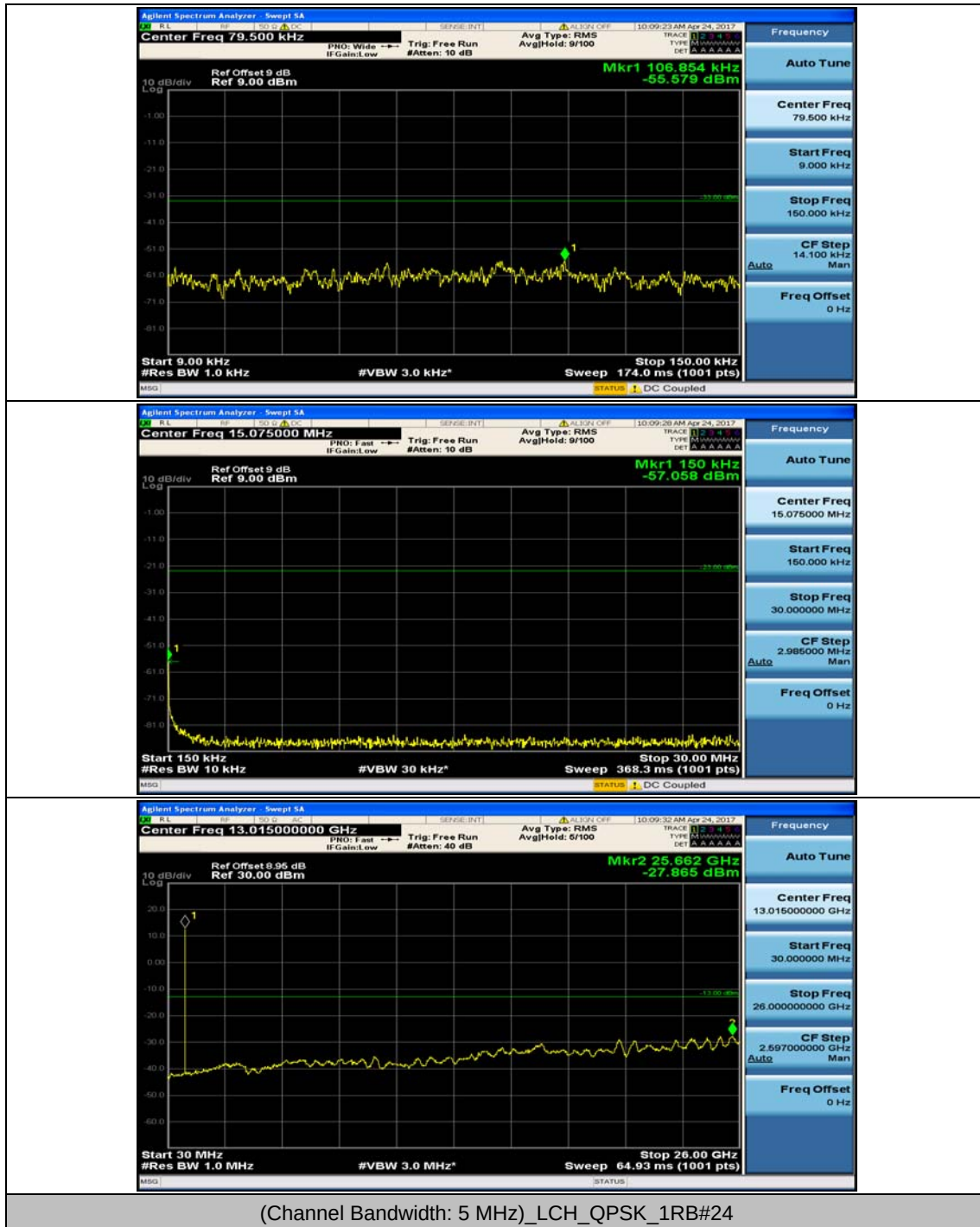


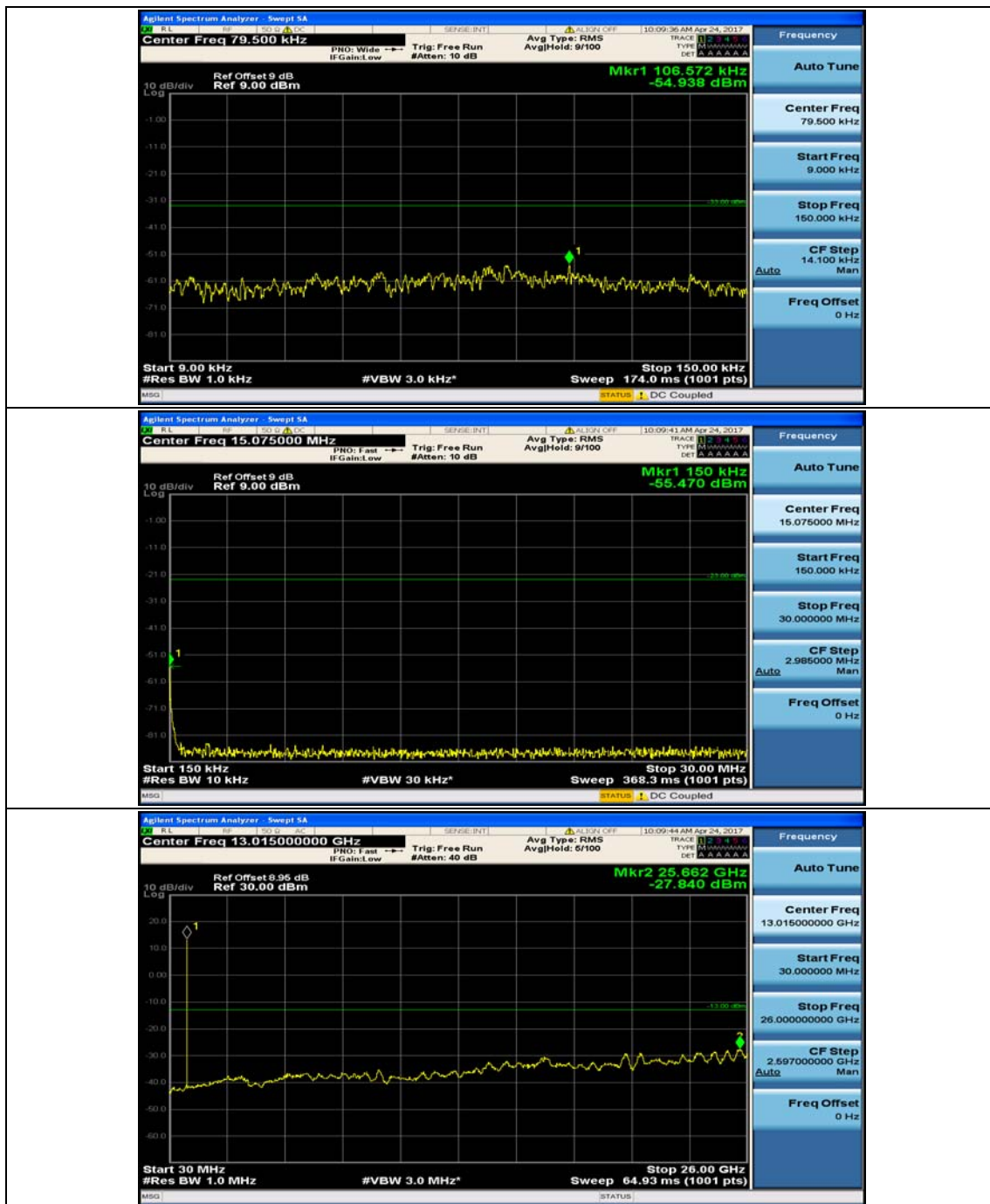
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7



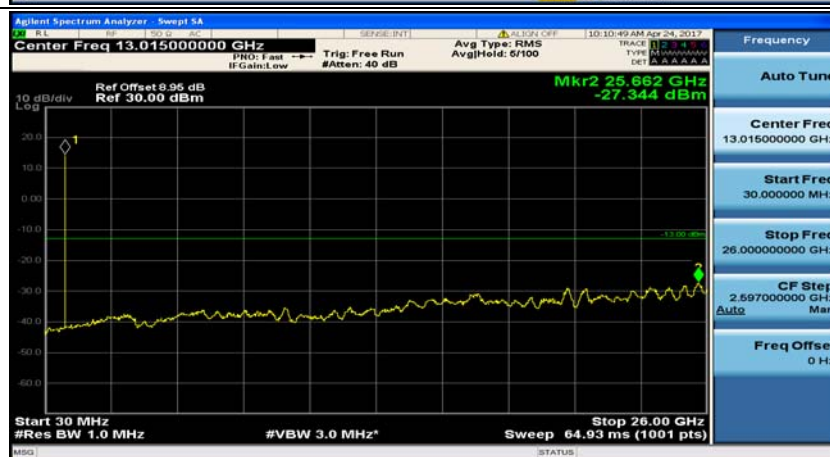
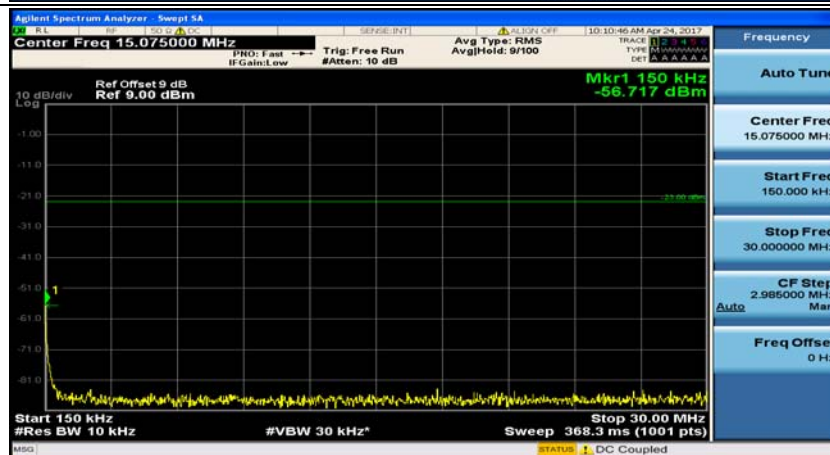
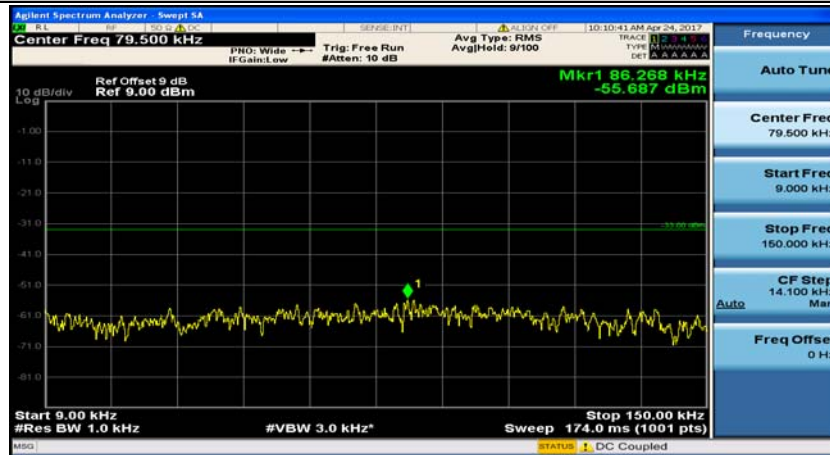
Channel Bandwidth: 5 MHz



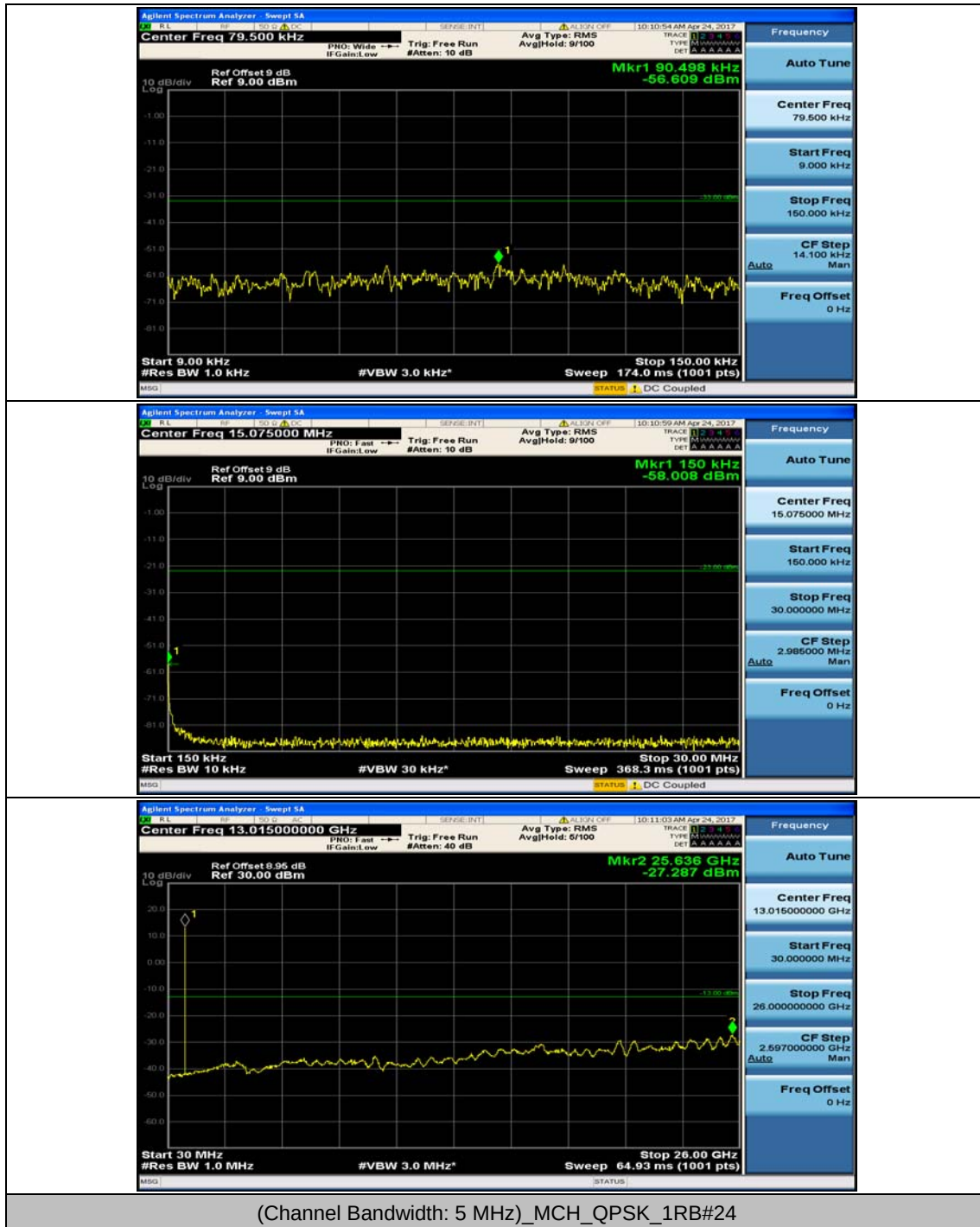


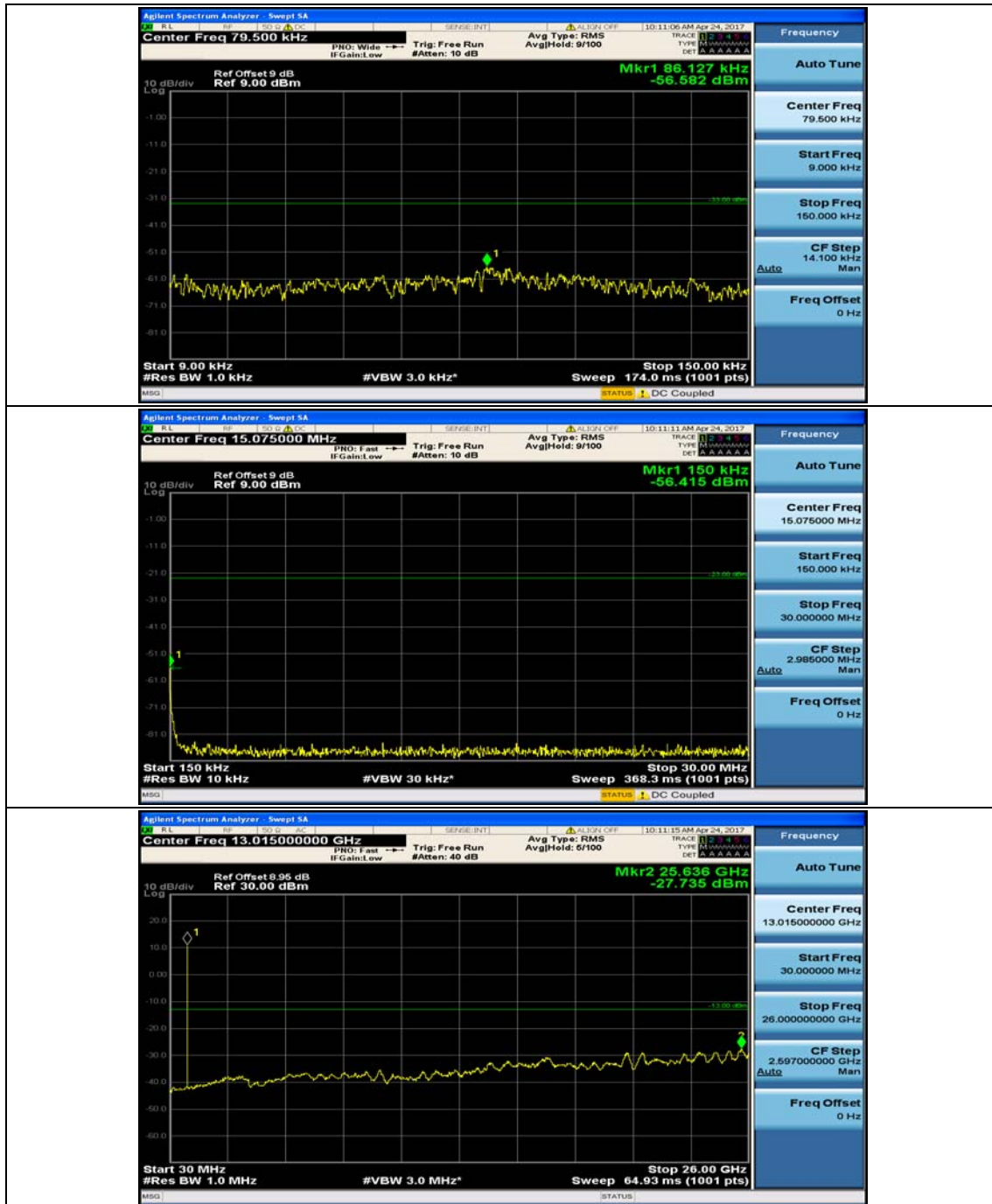


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

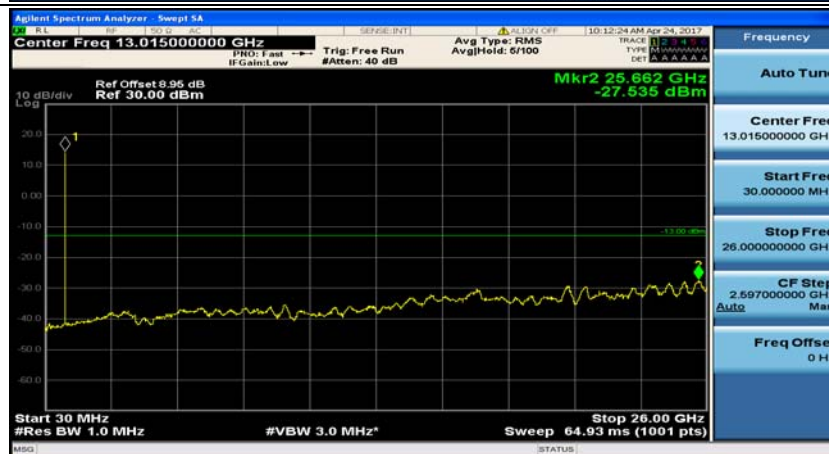
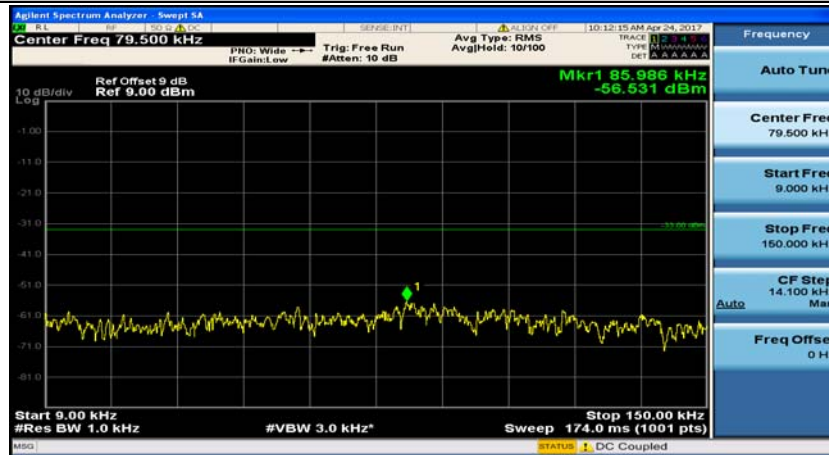


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

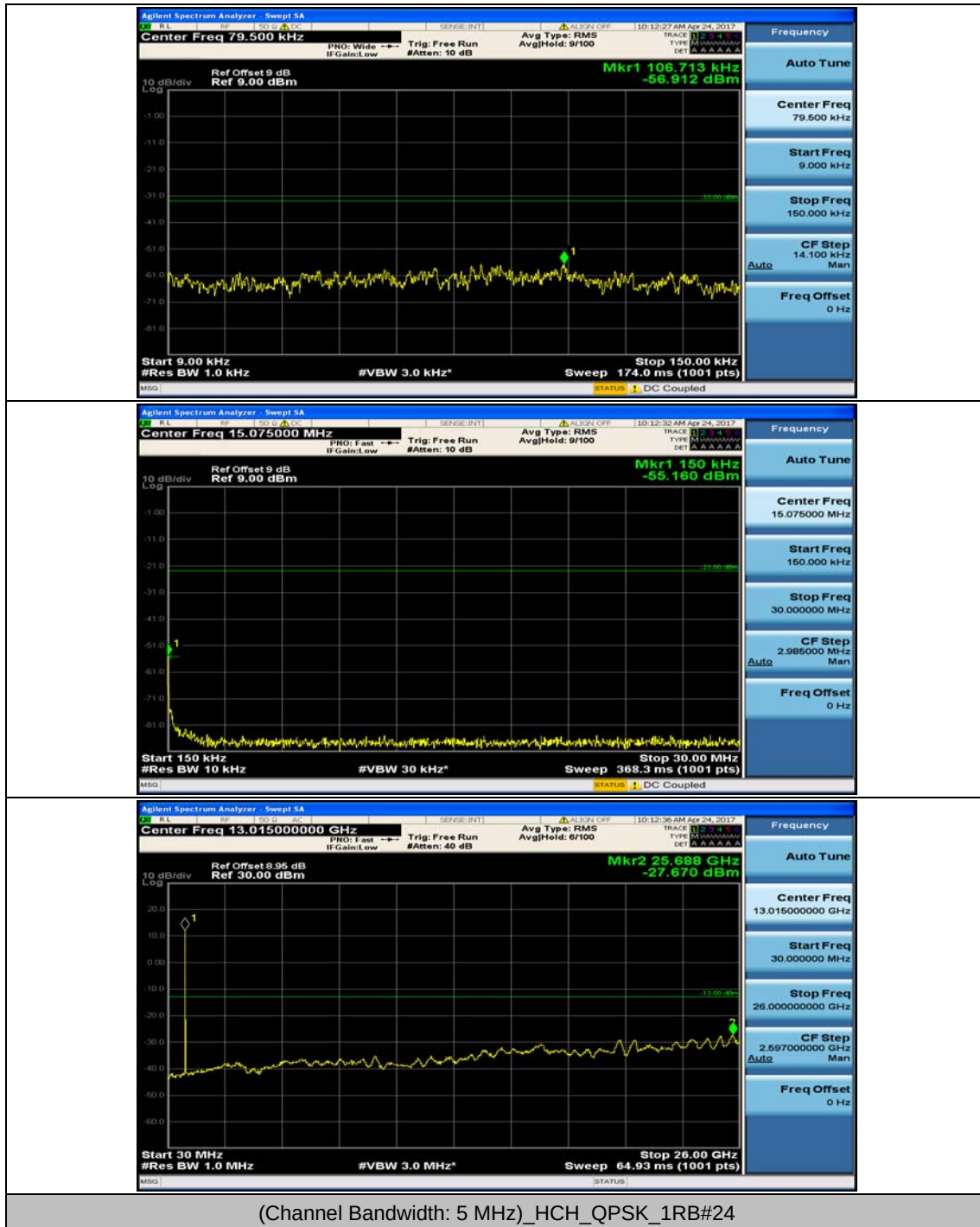


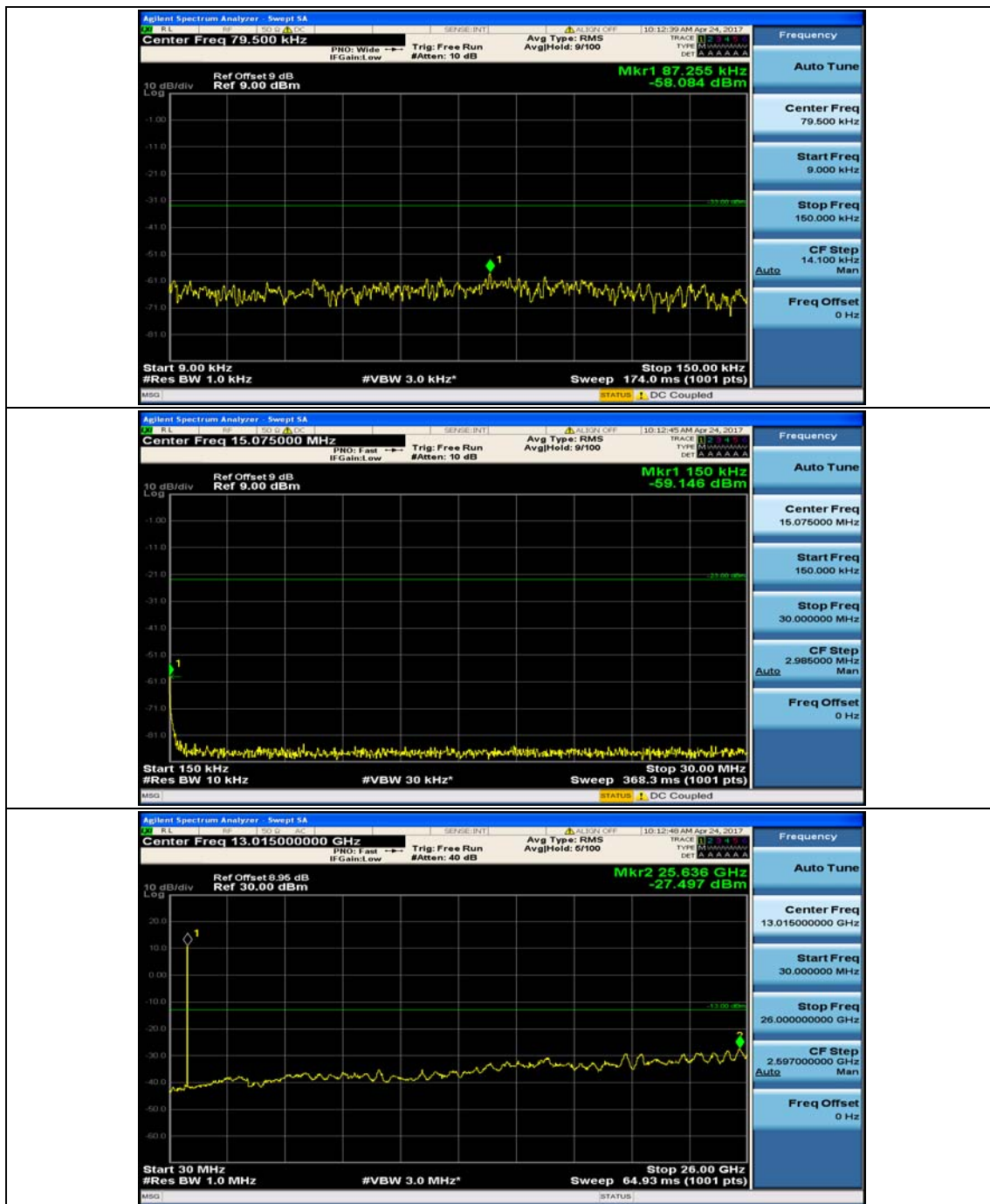


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

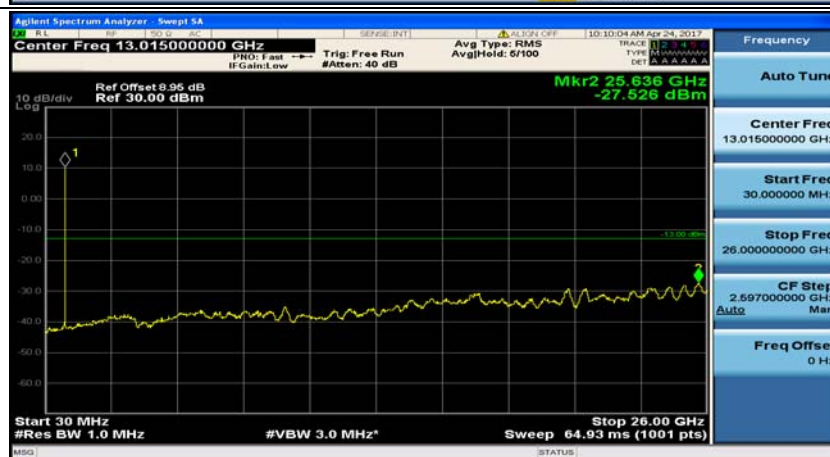
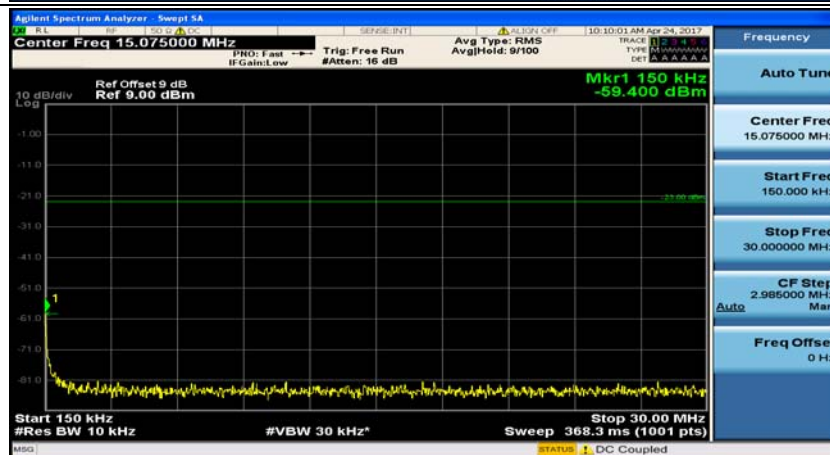
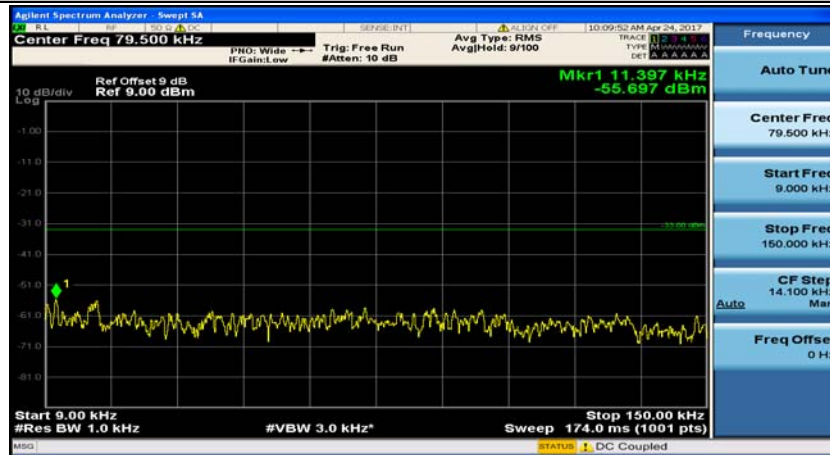


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

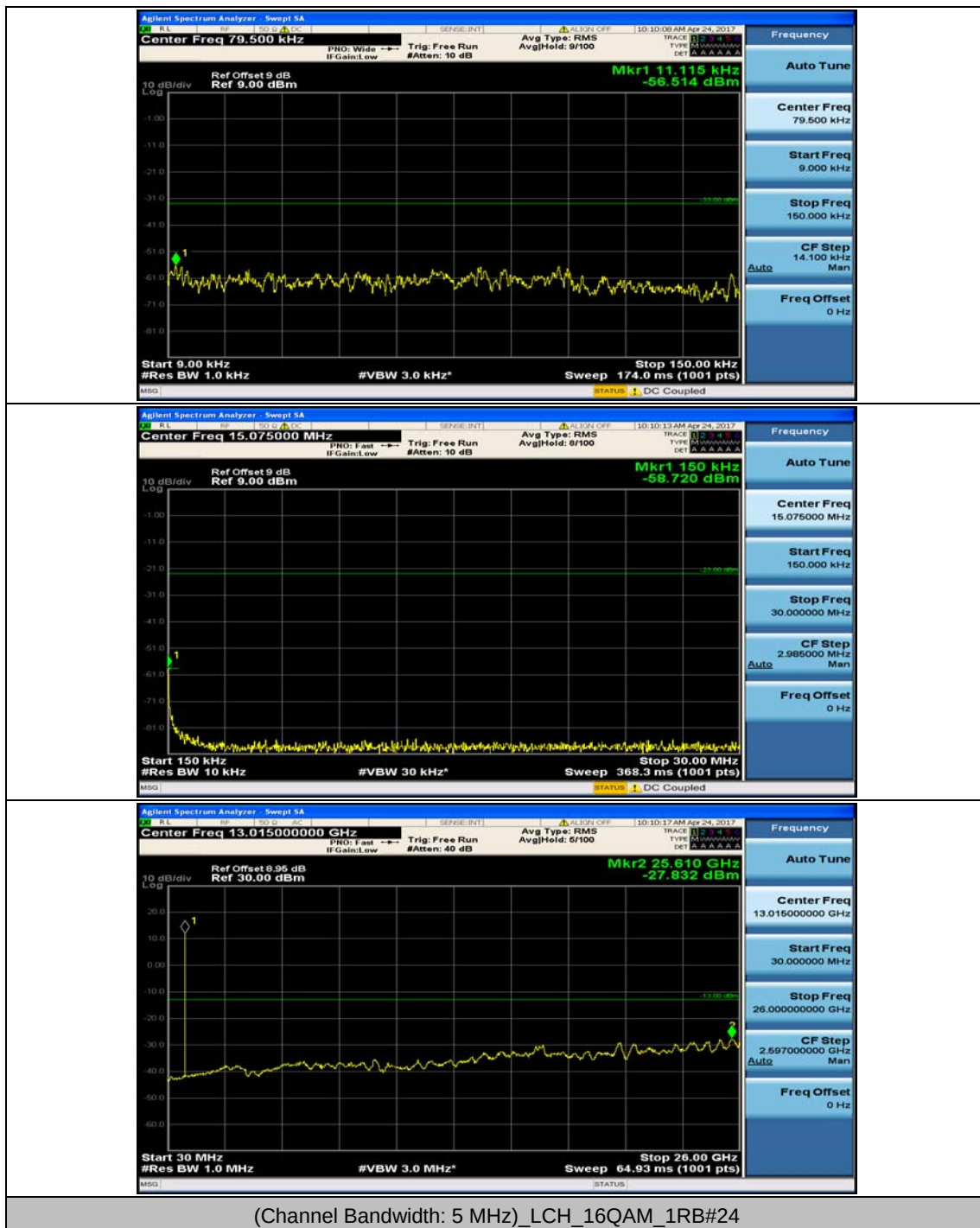


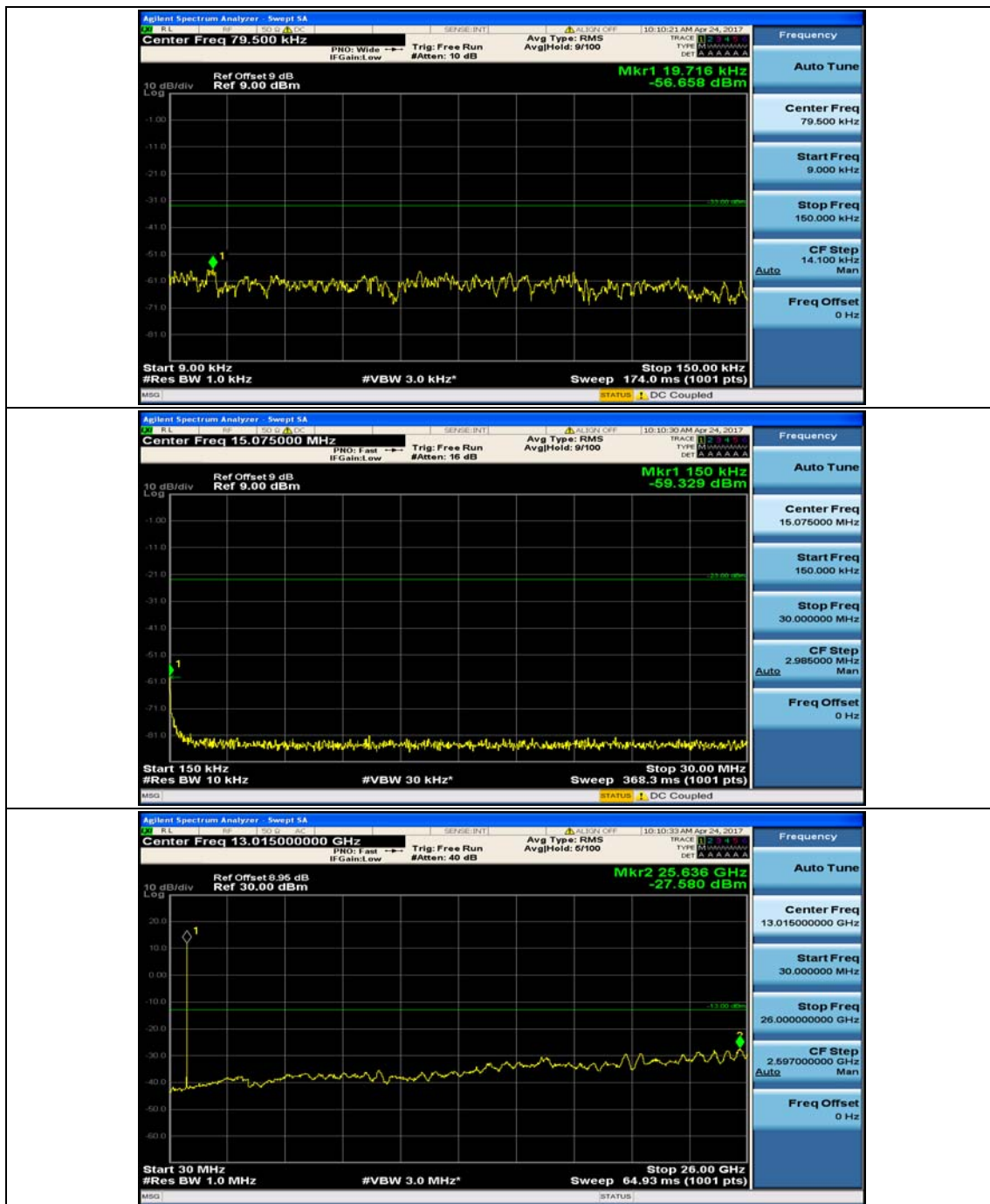


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

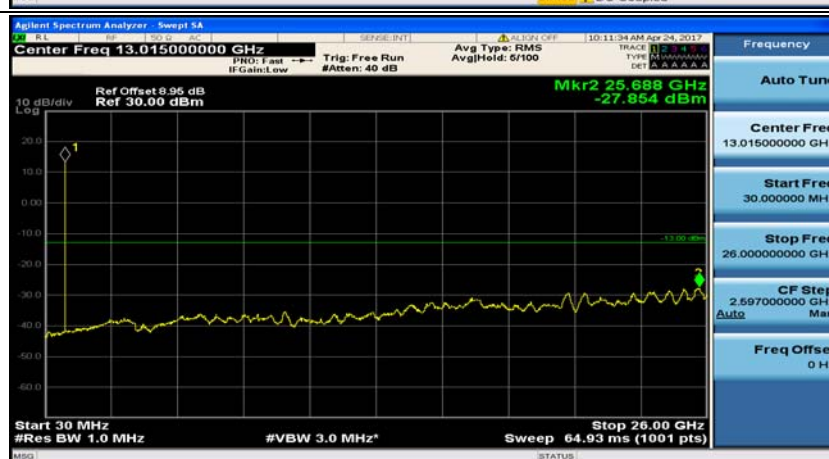
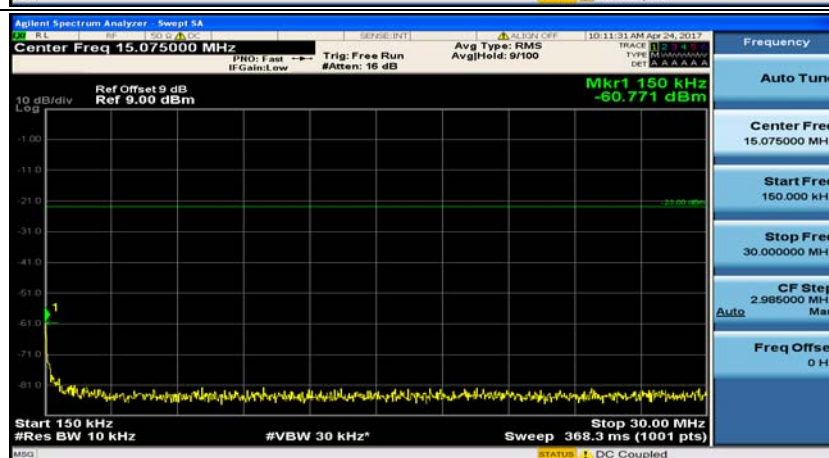
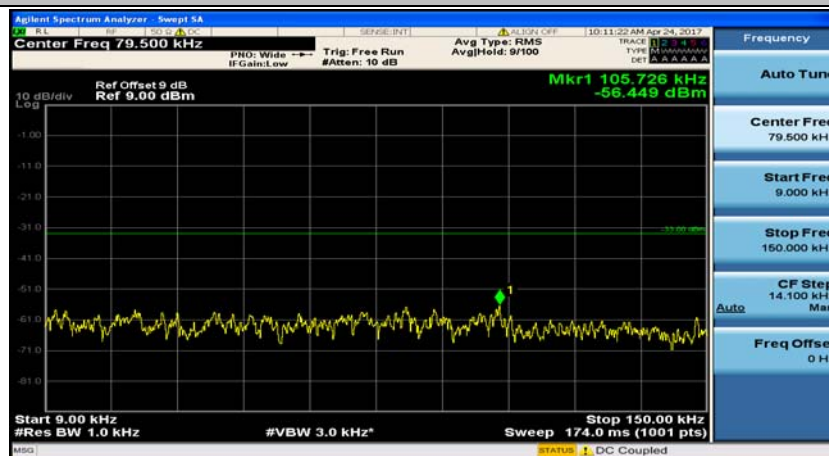


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

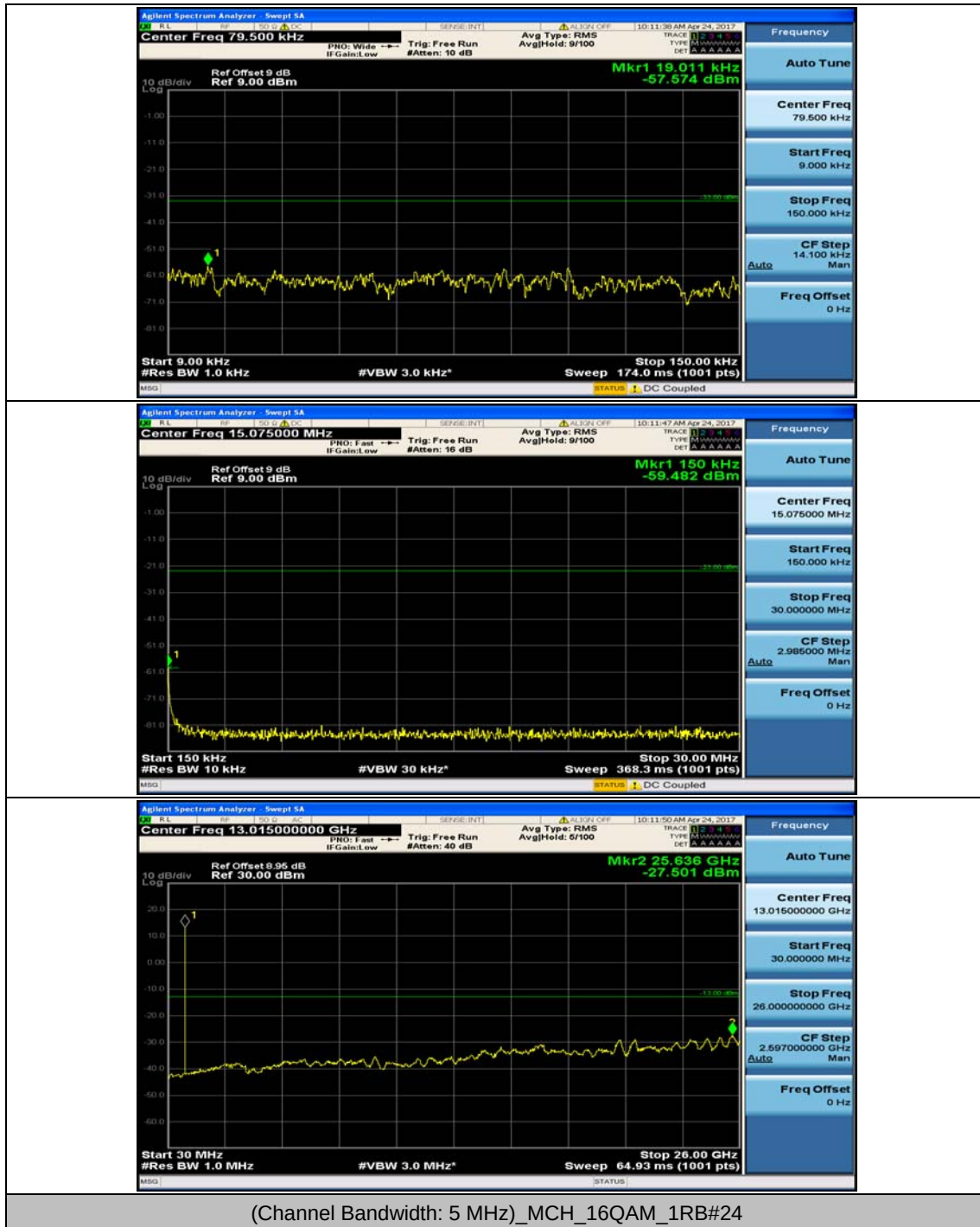


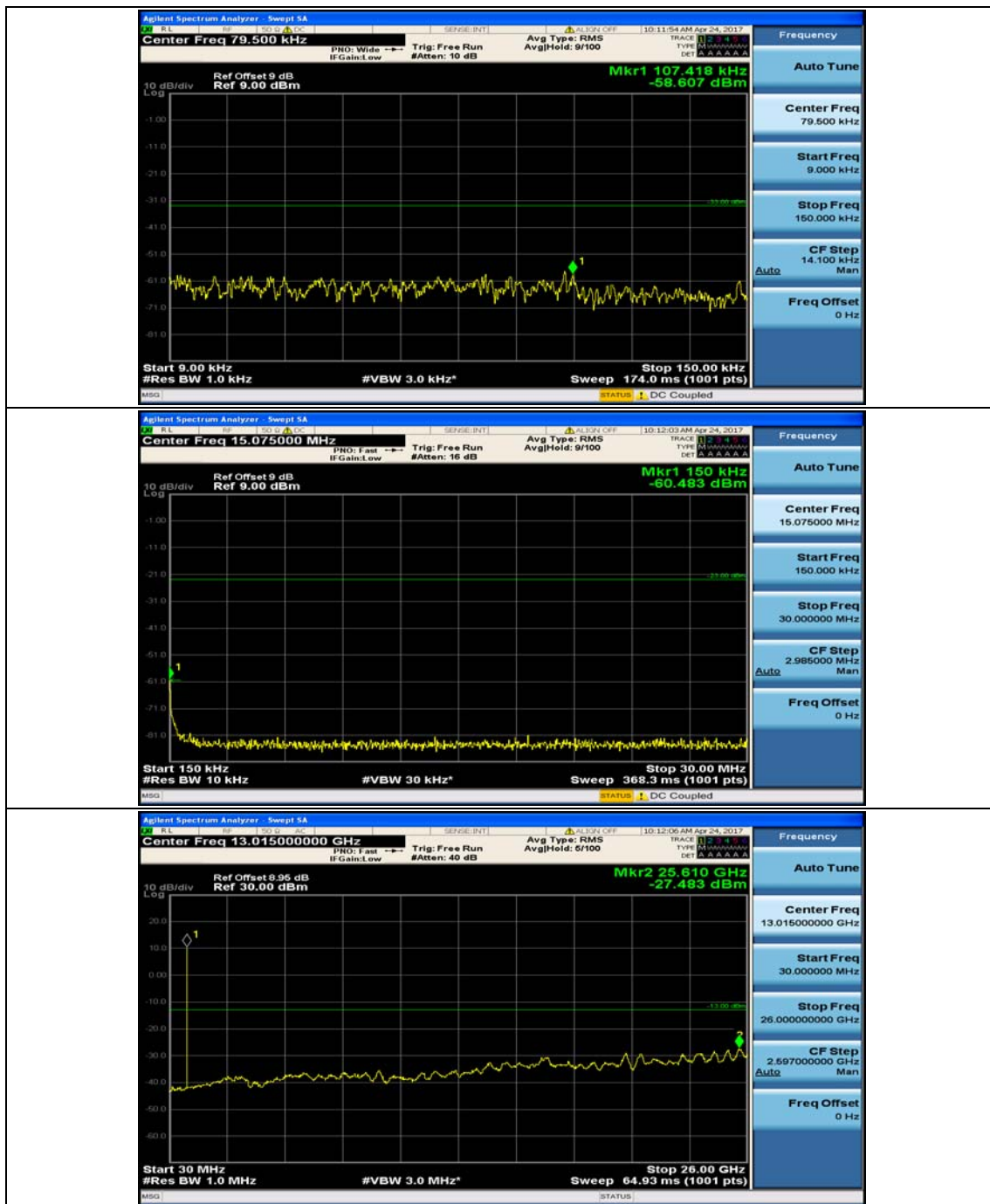


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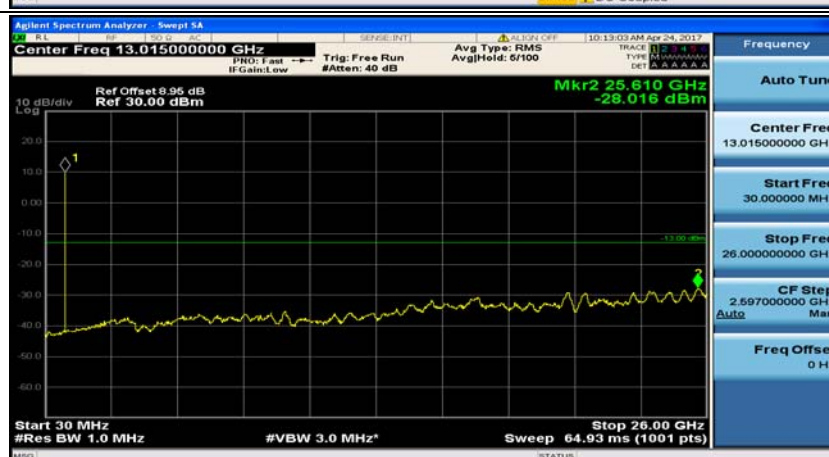
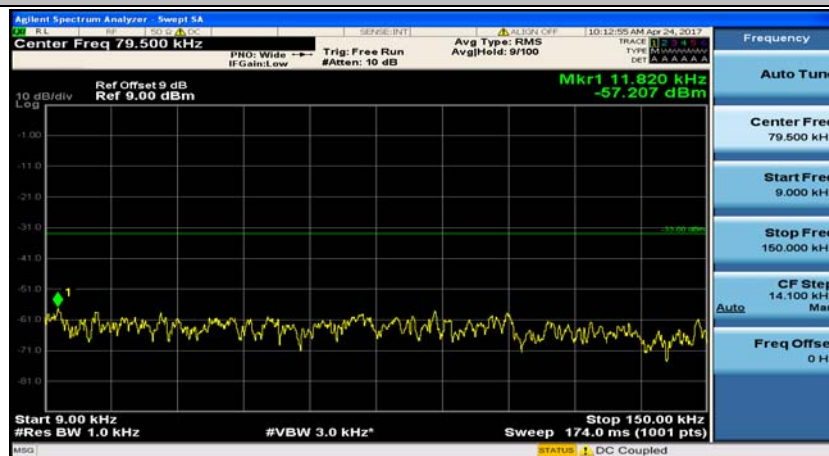


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

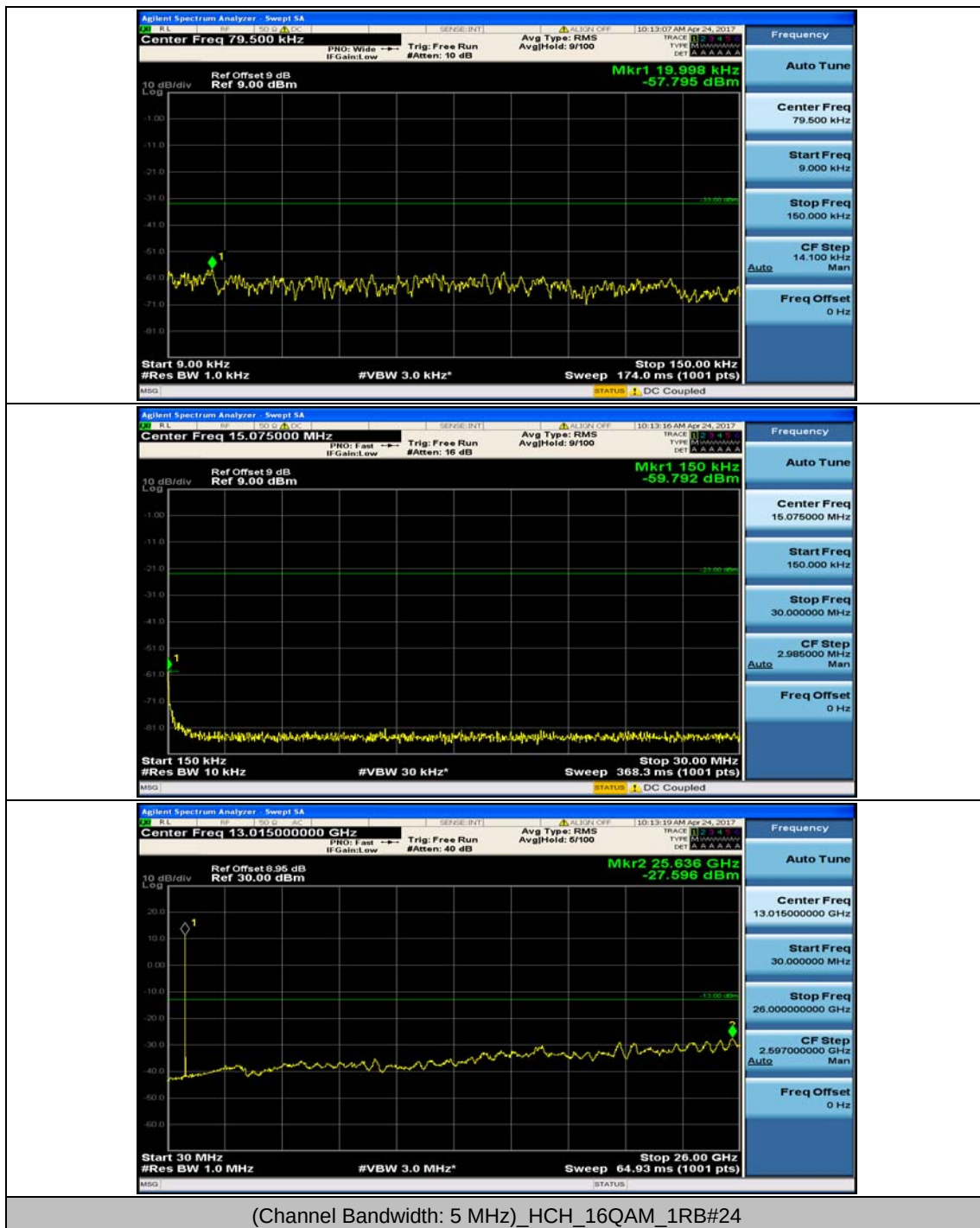


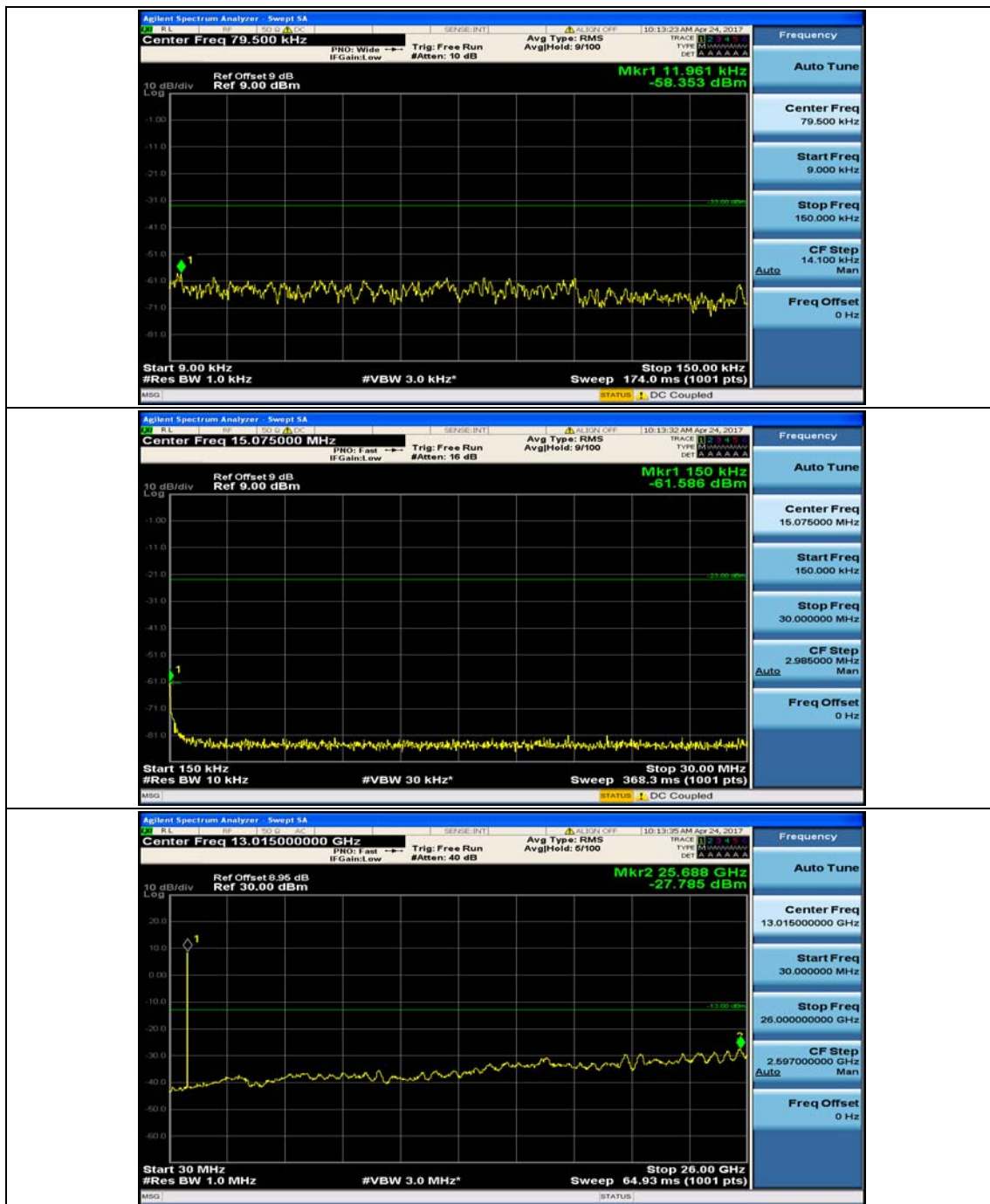


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

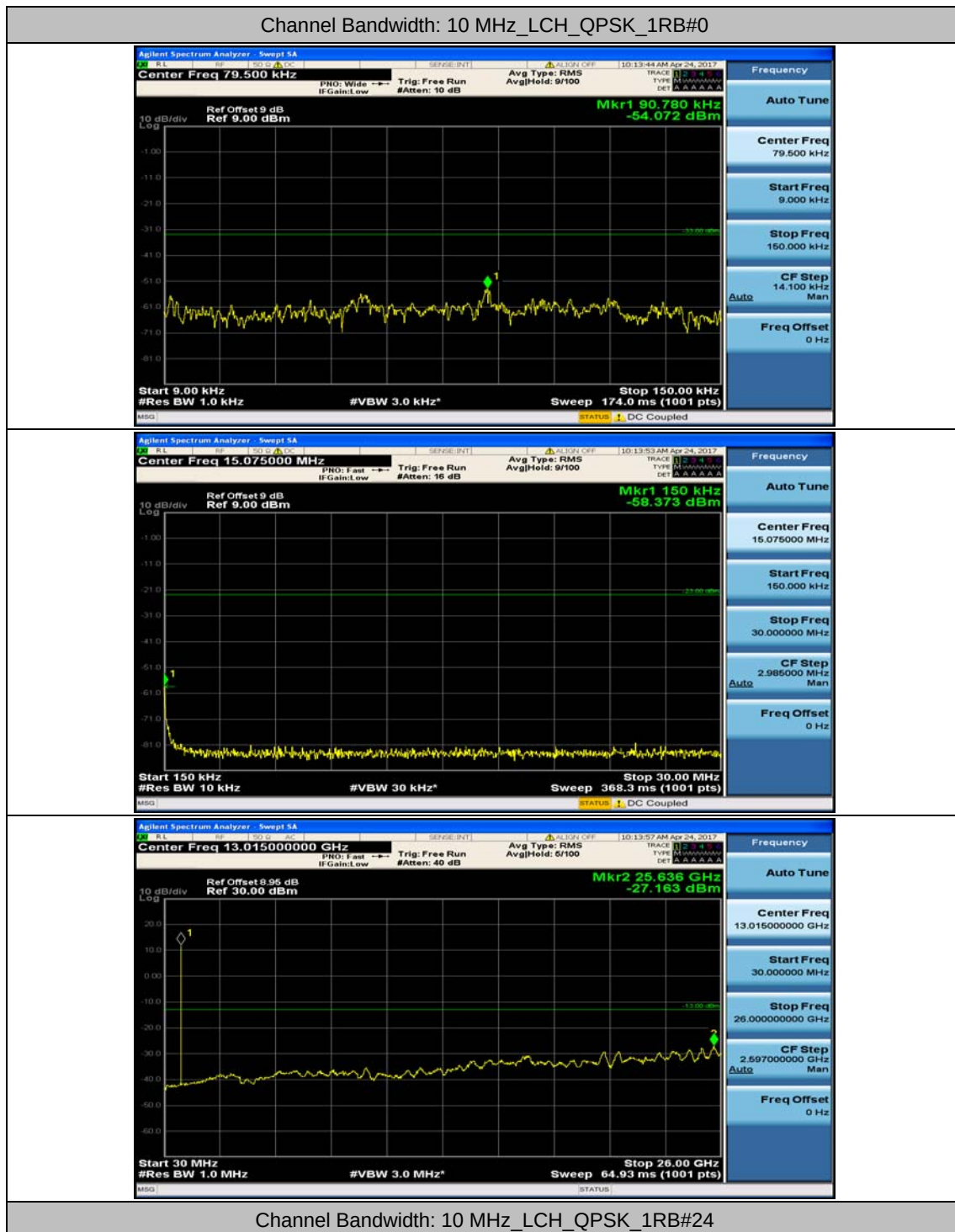


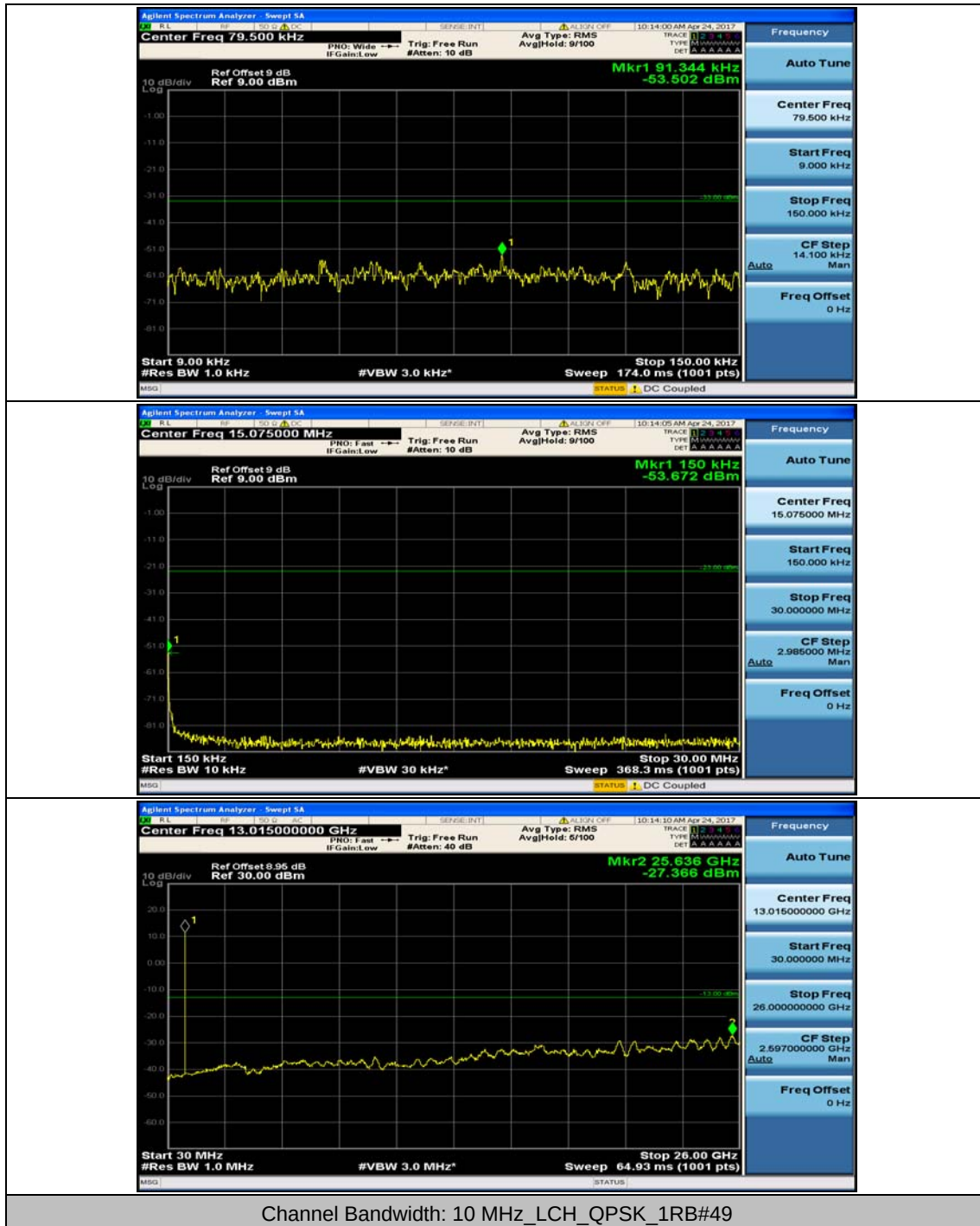
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

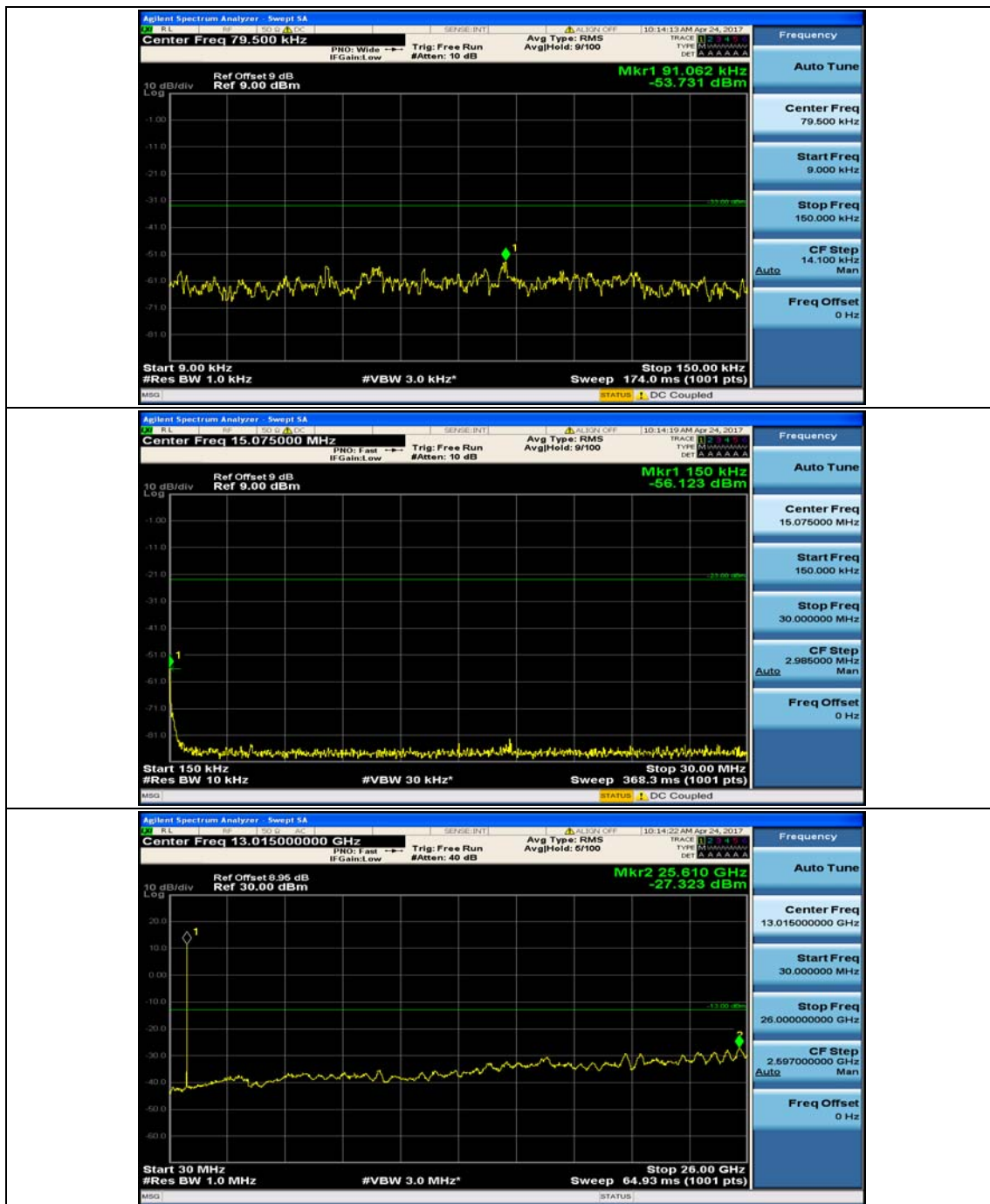




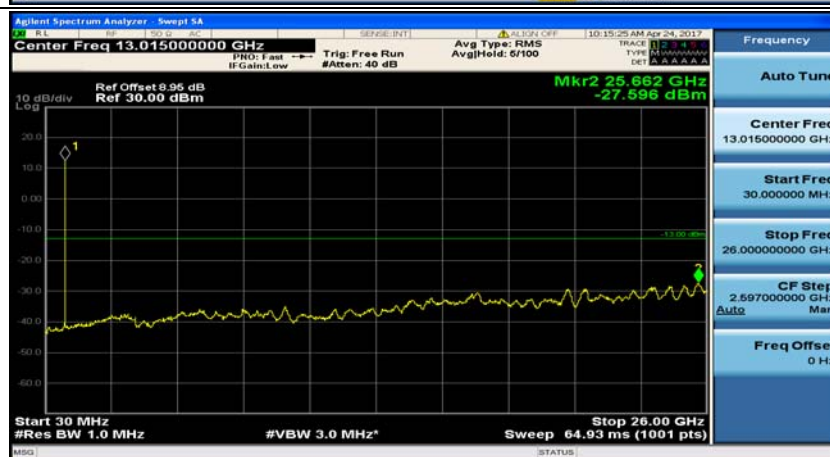
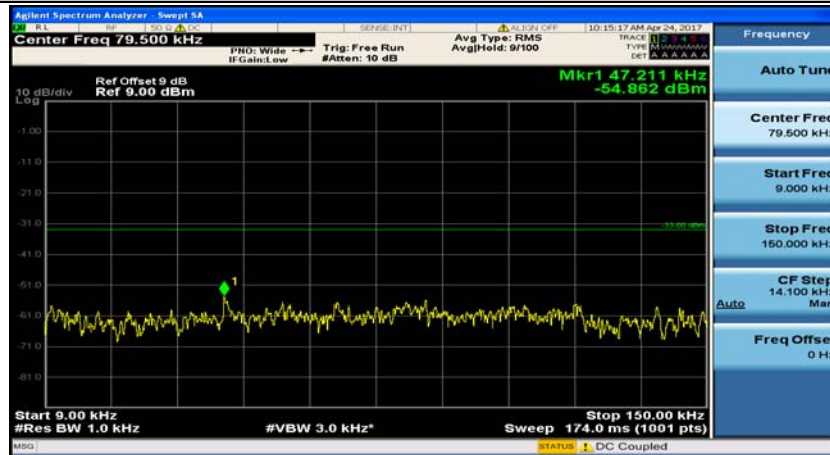
Channel Bandwidth: 10 MHz



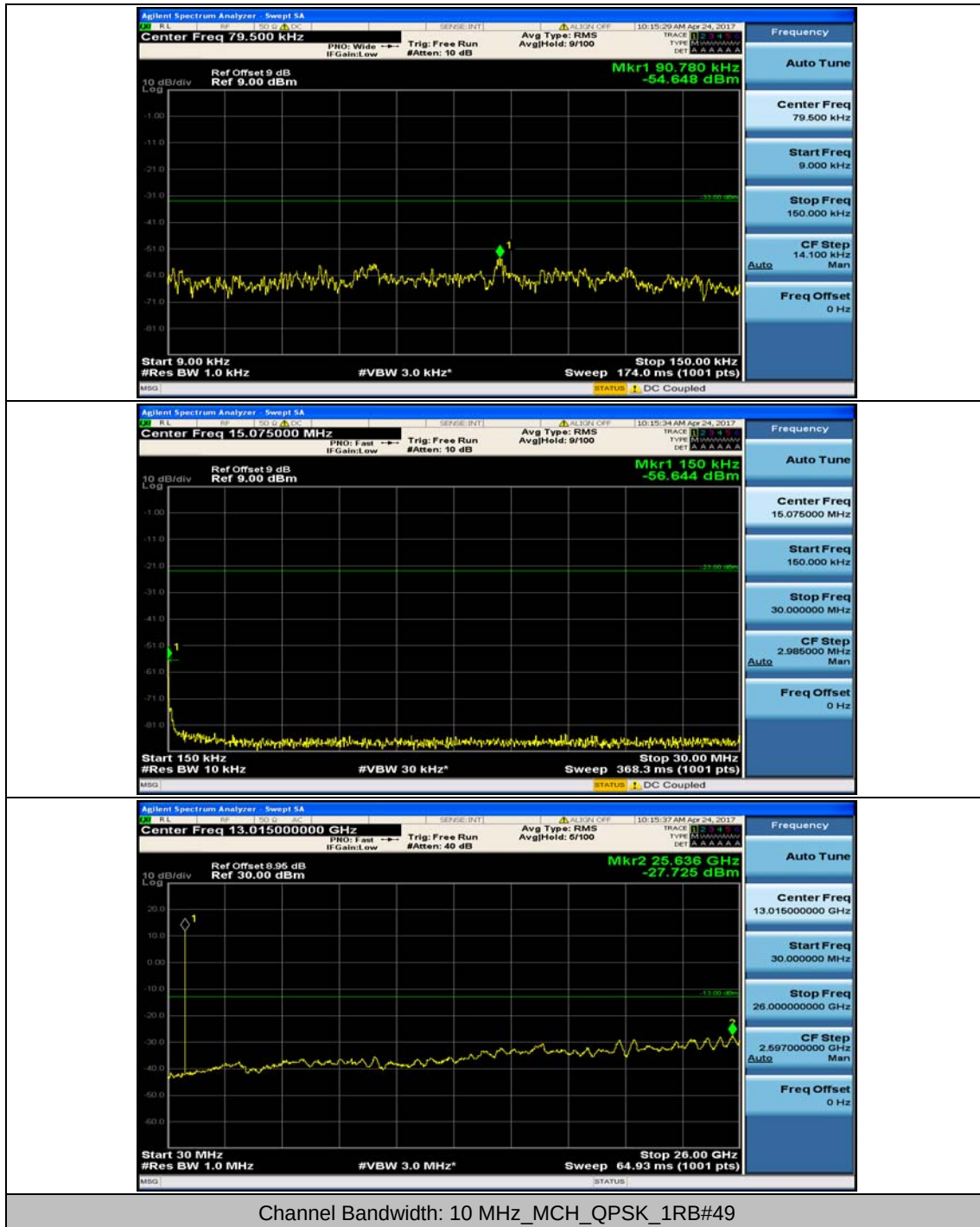


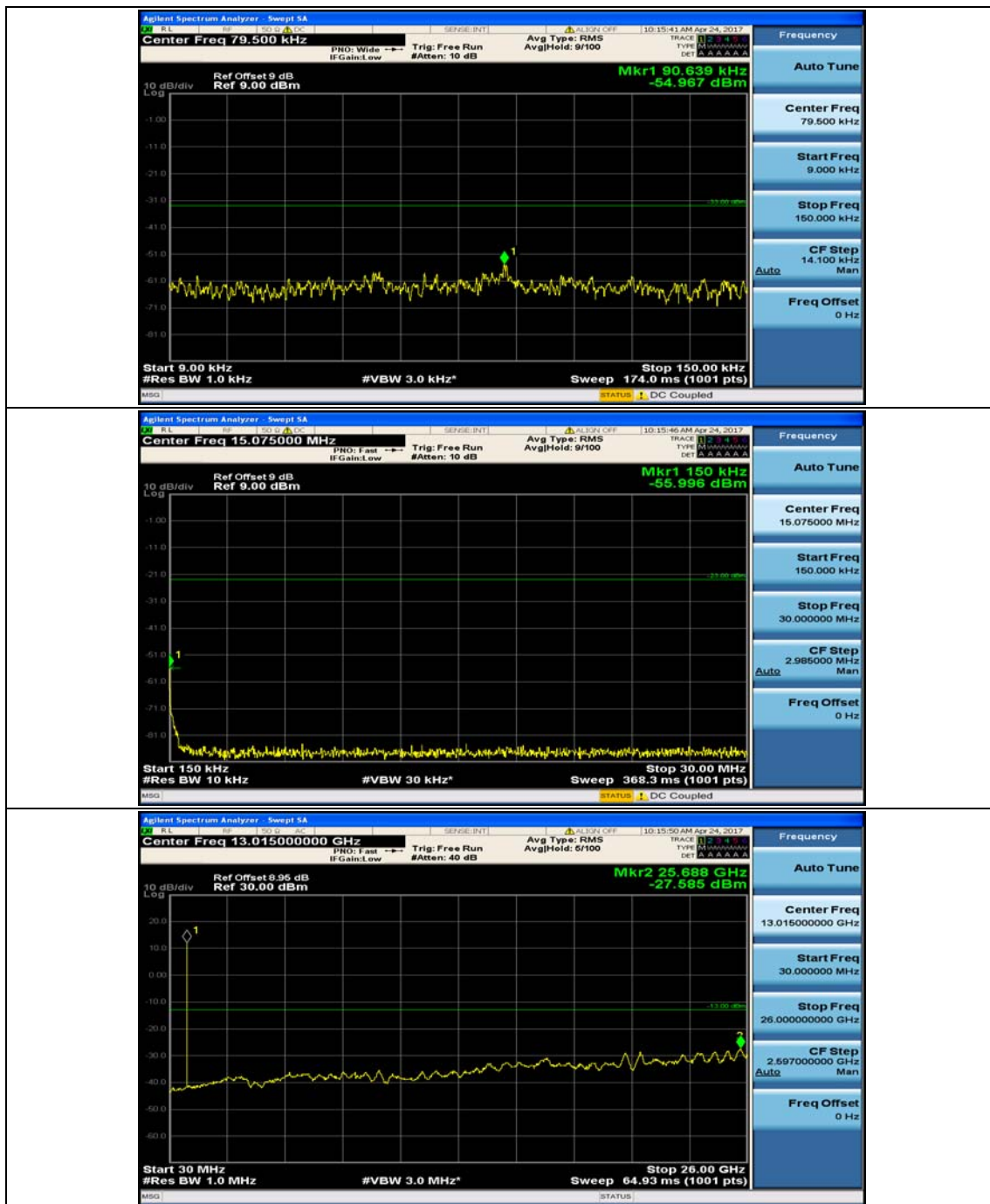


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

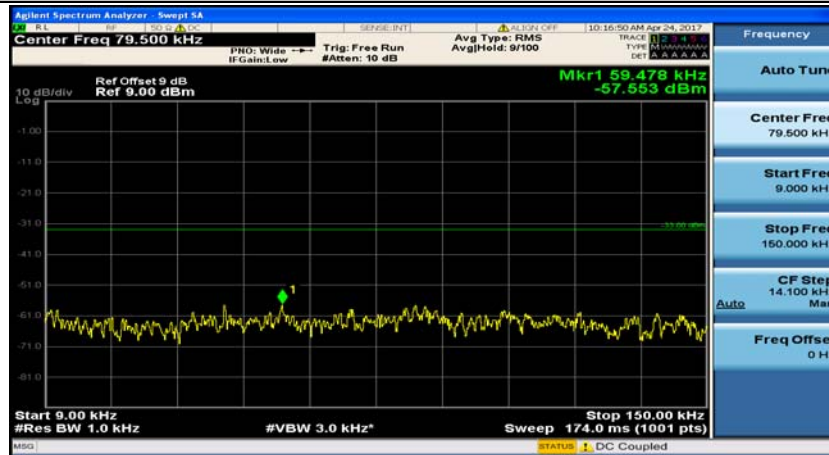


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

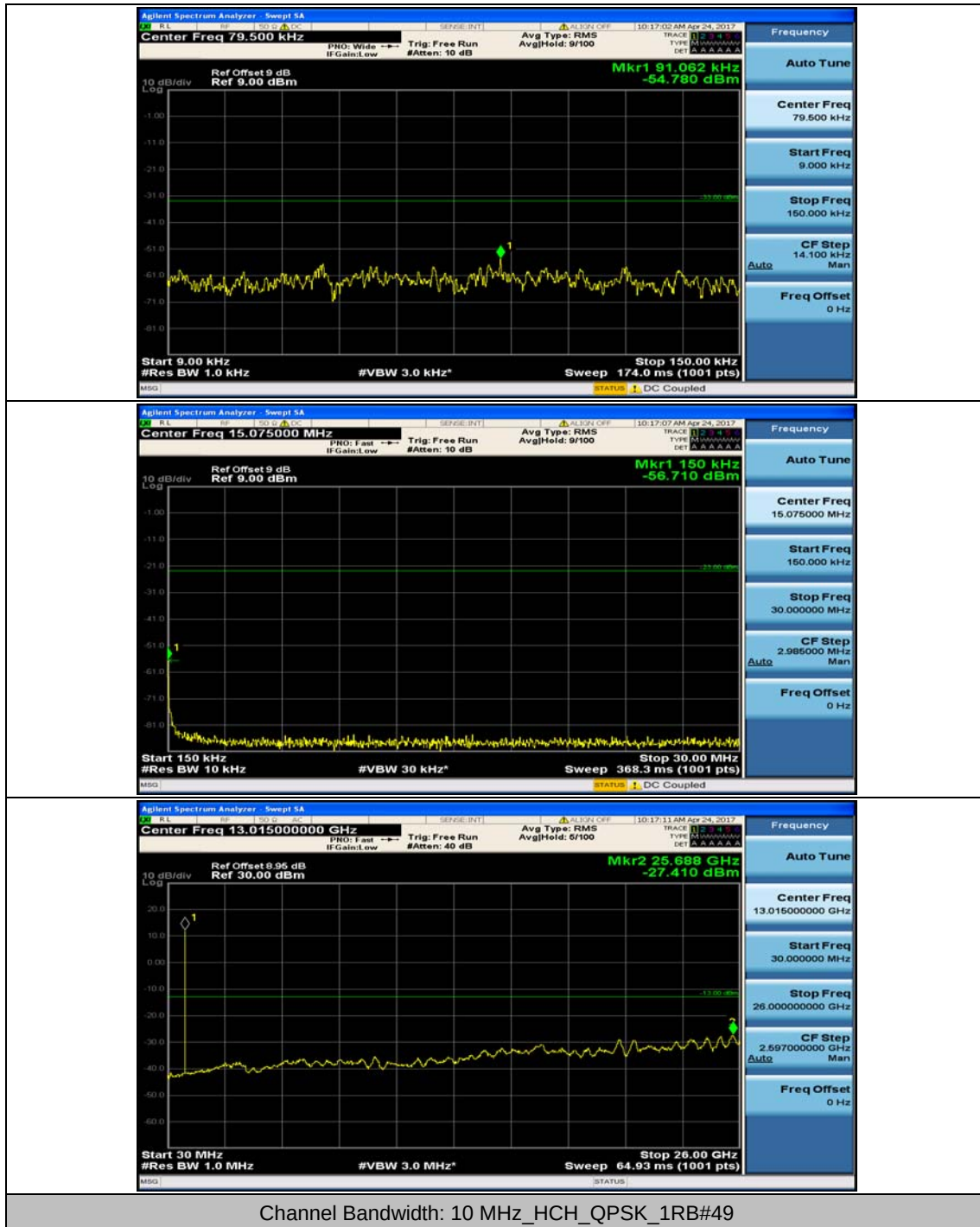


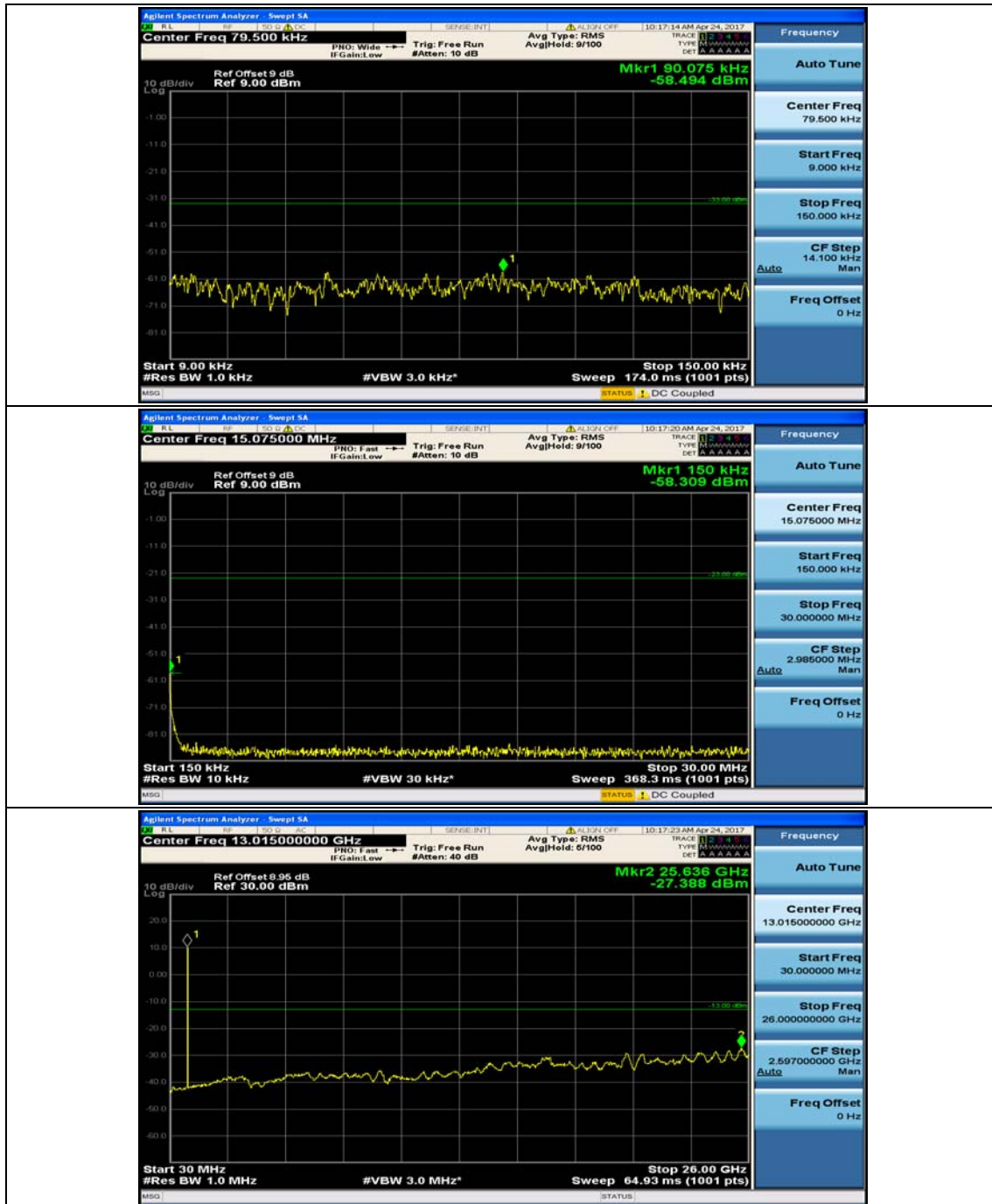


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0

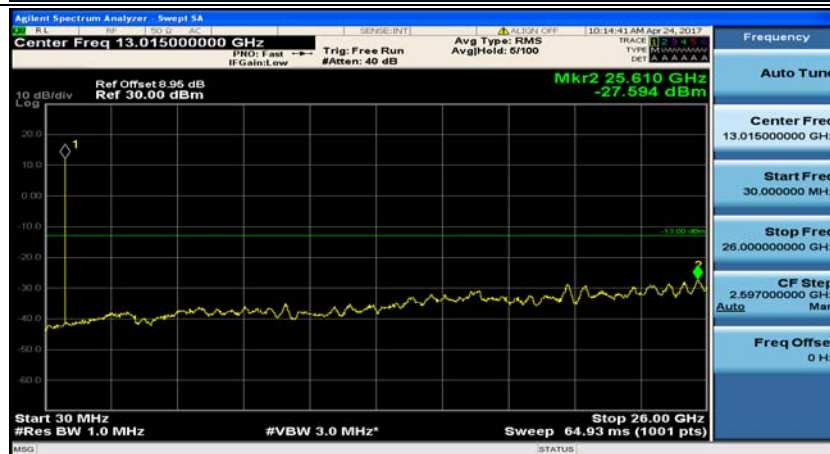
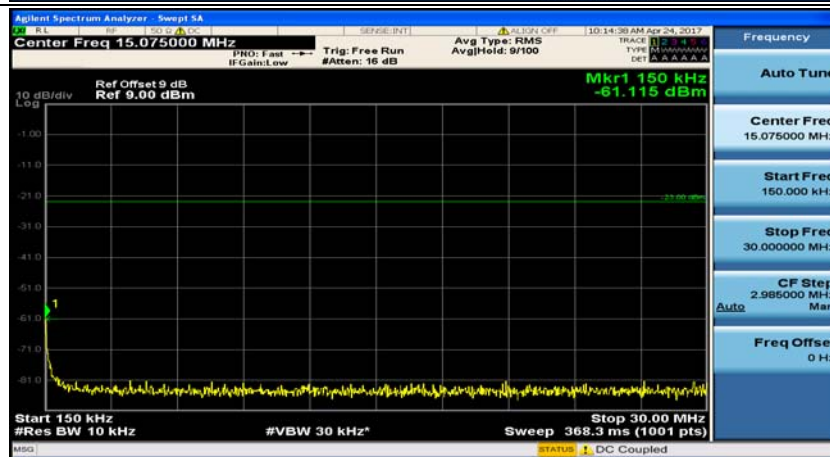


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

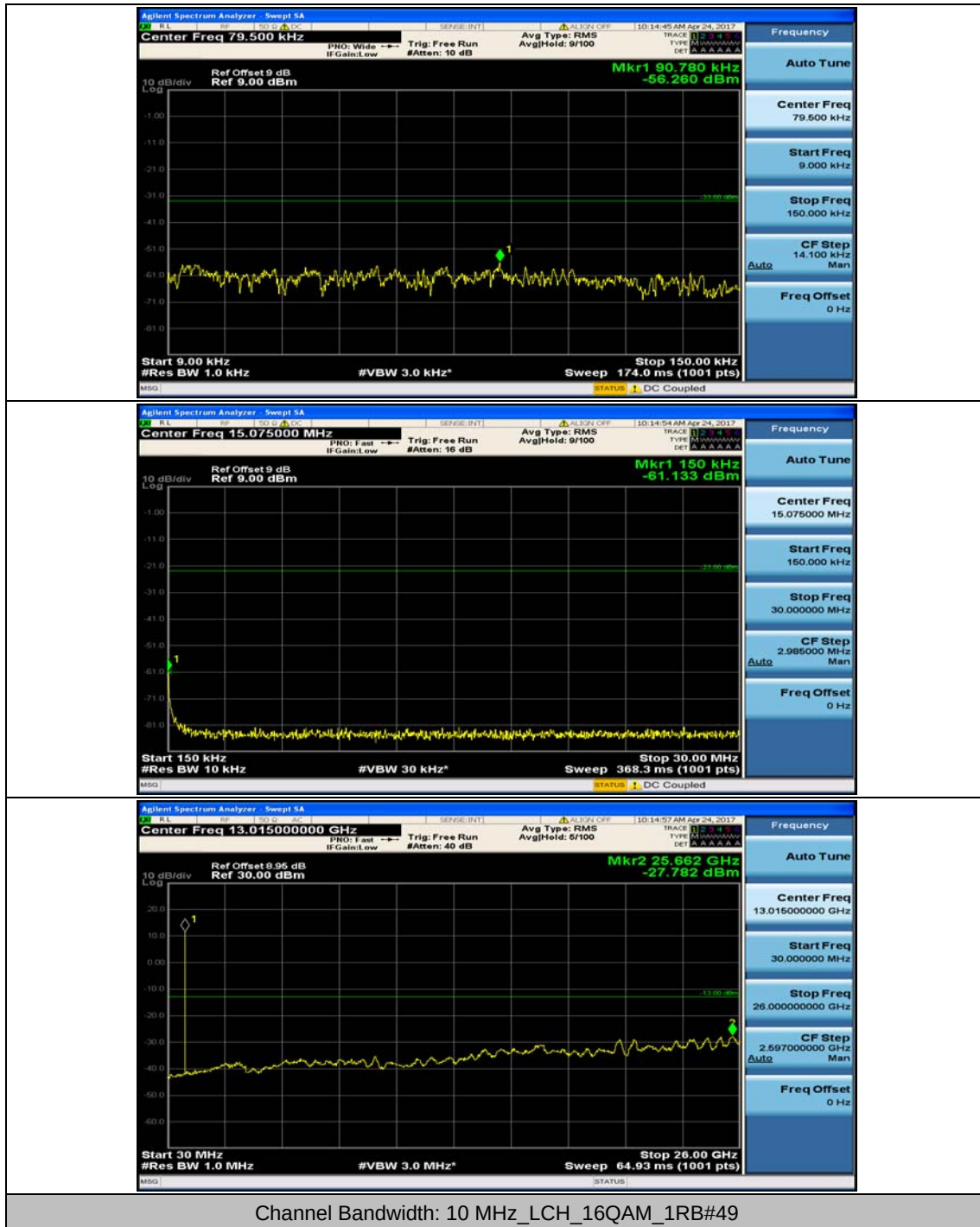


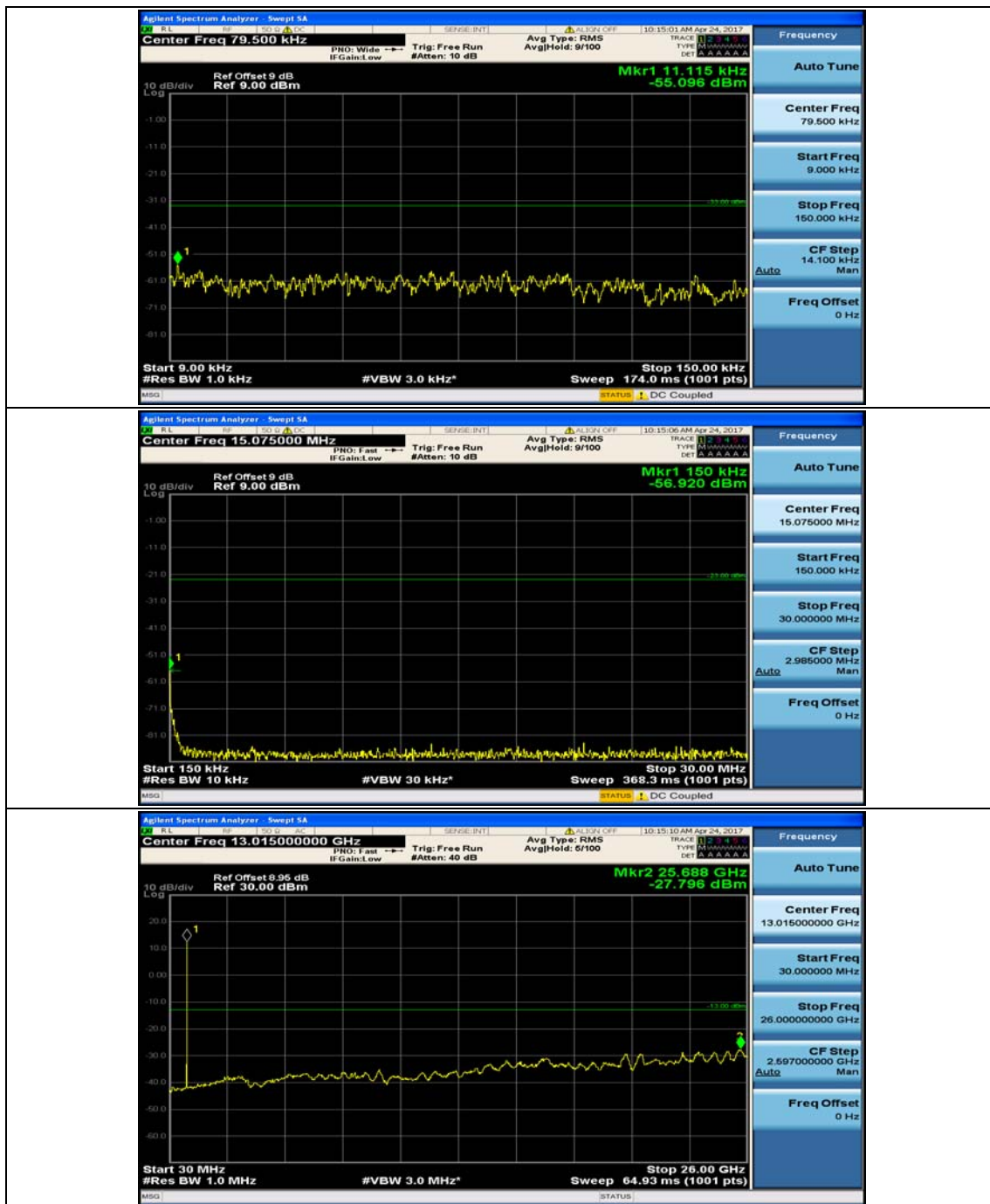


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0

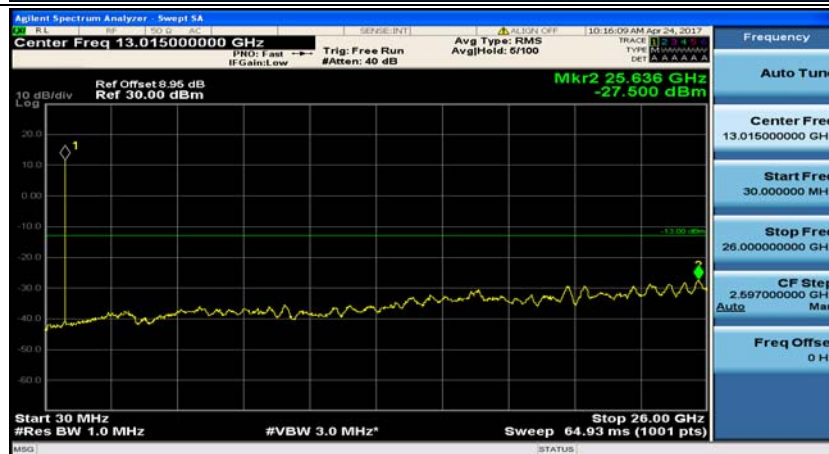
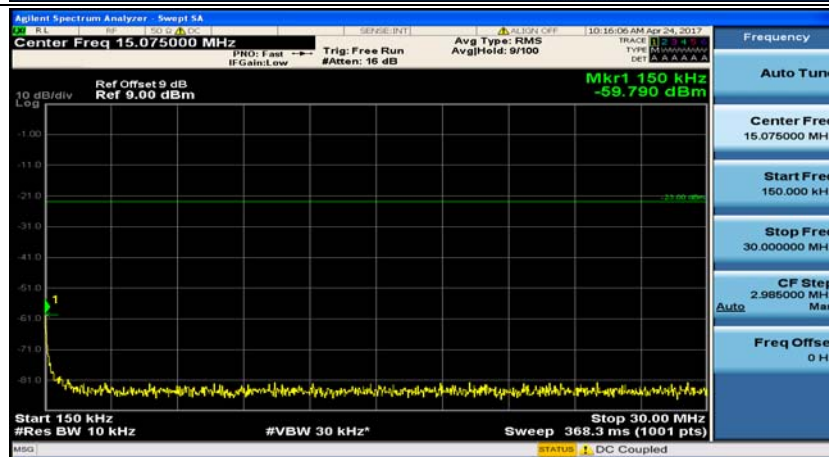
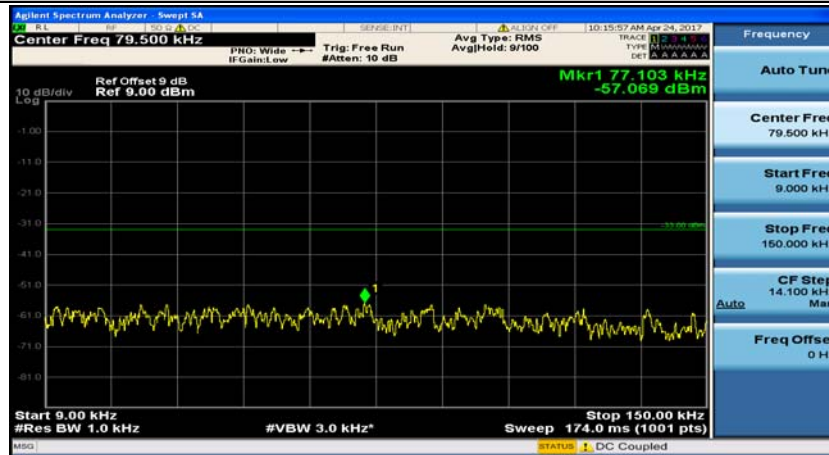


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

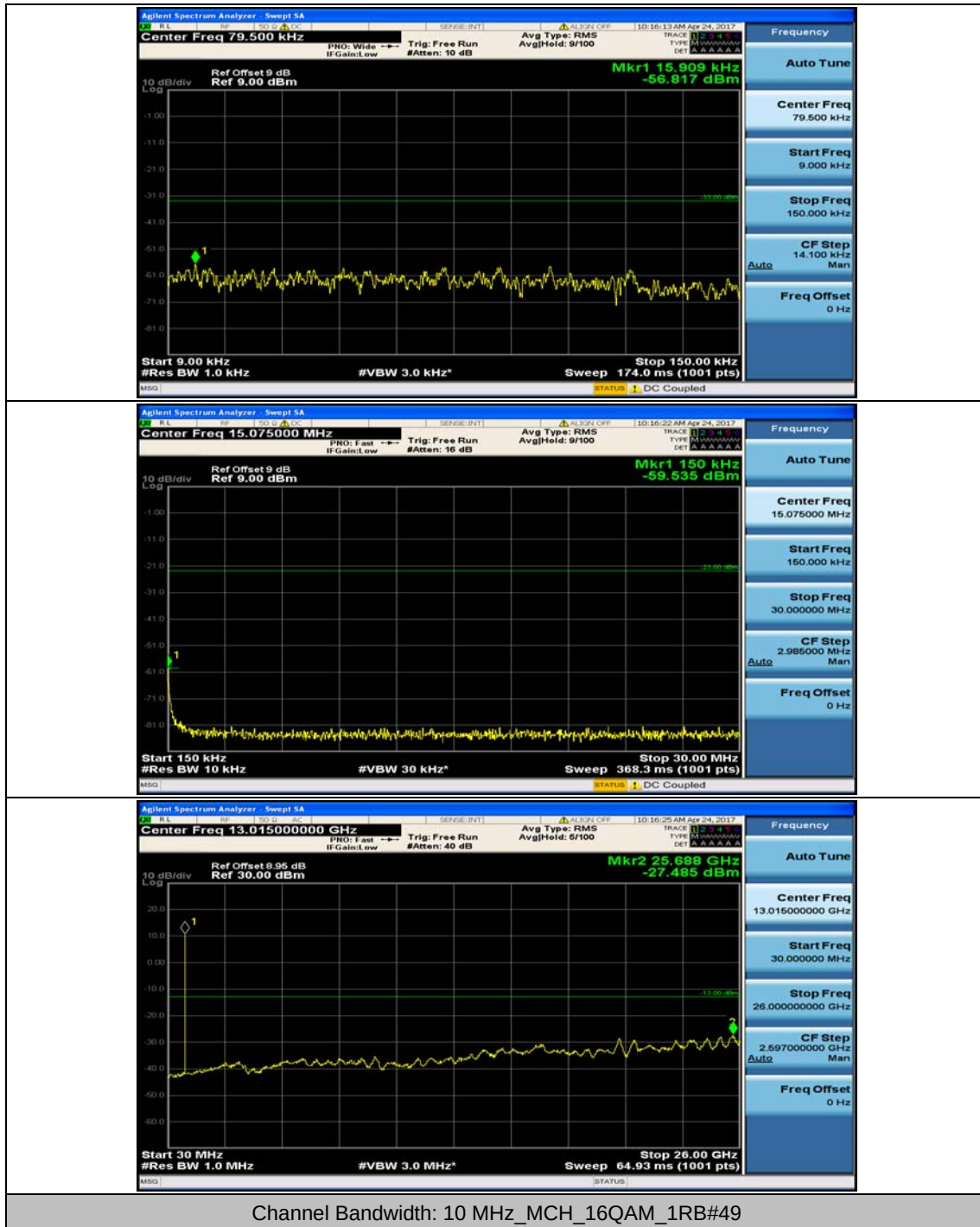


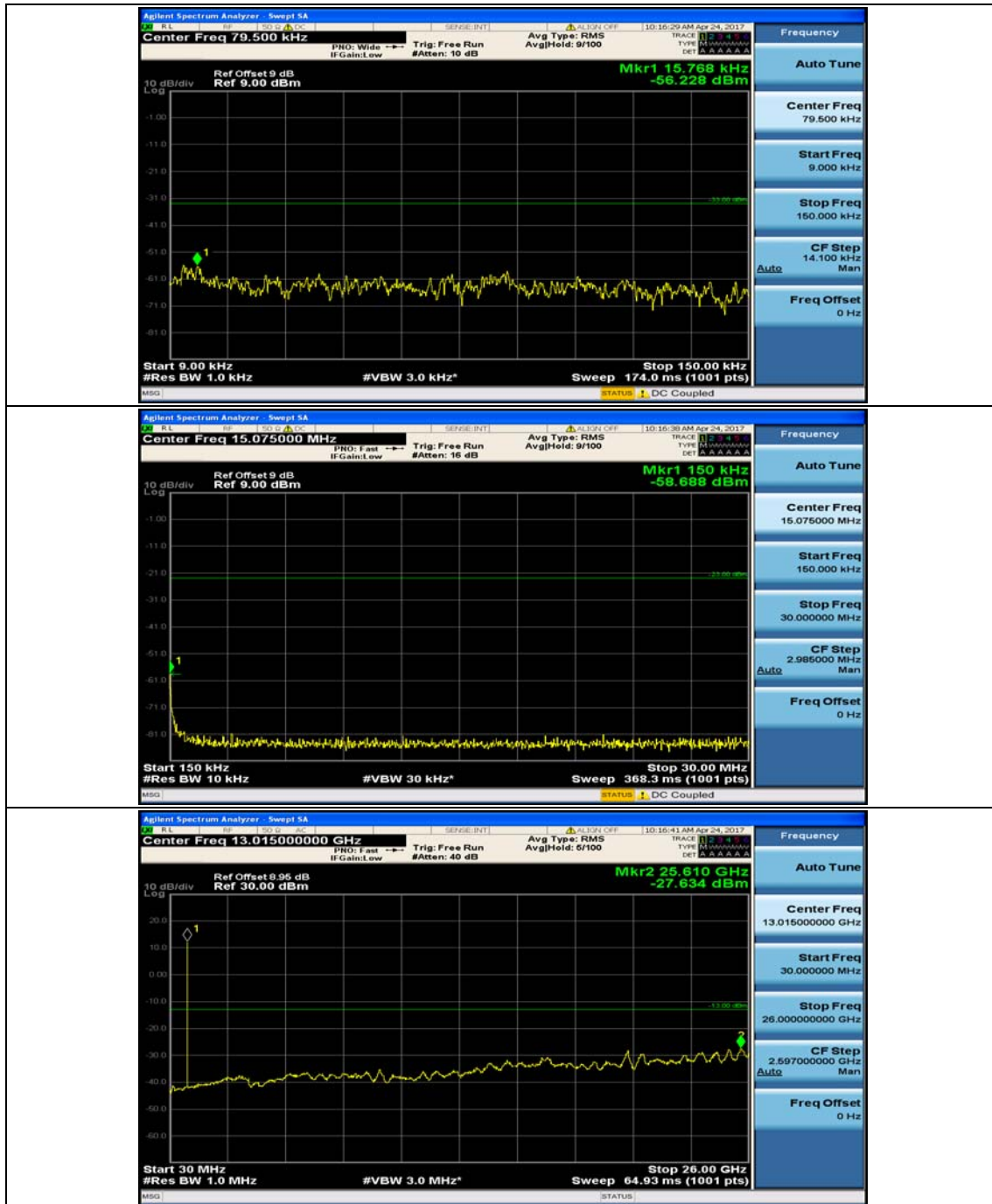


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

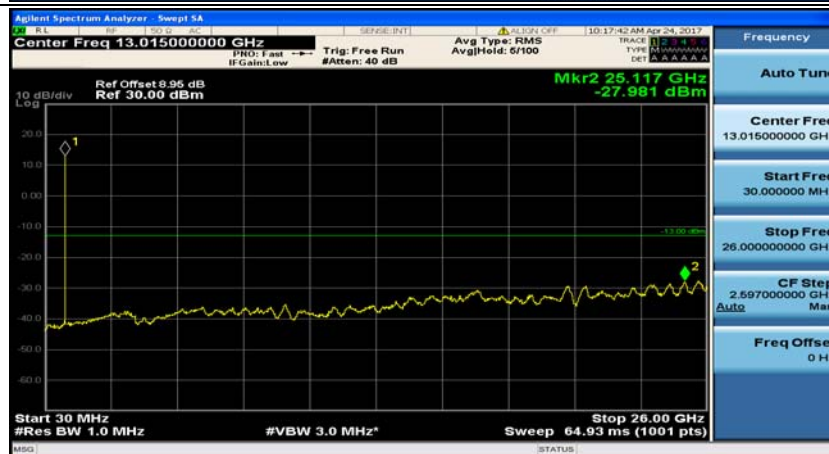
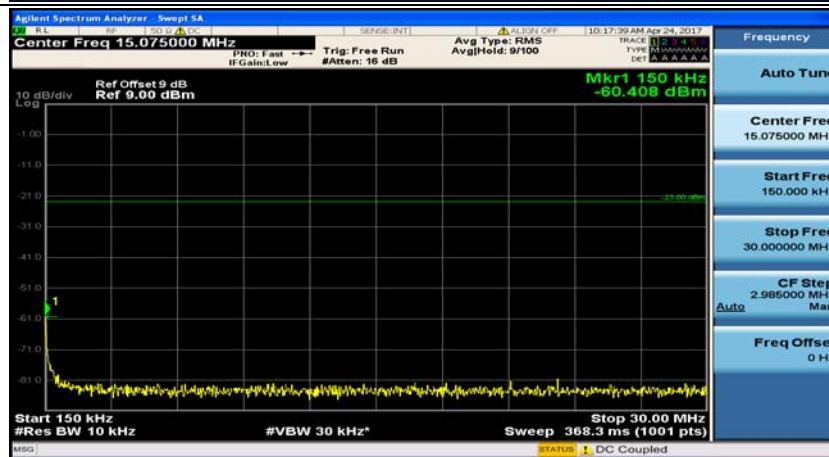
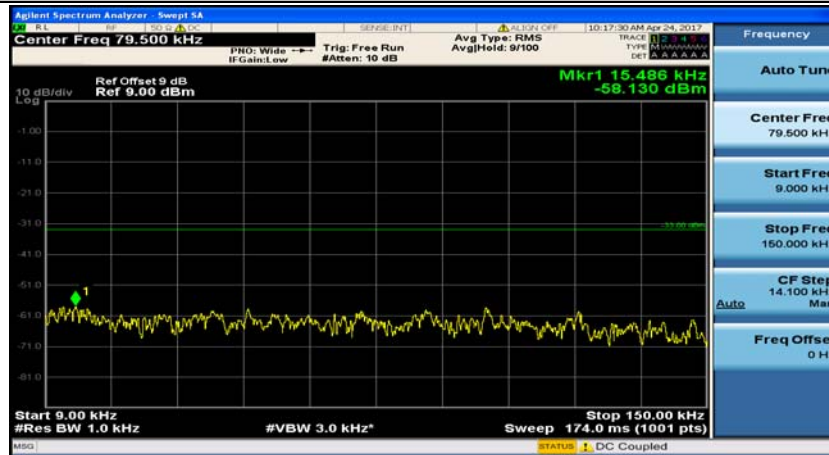


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

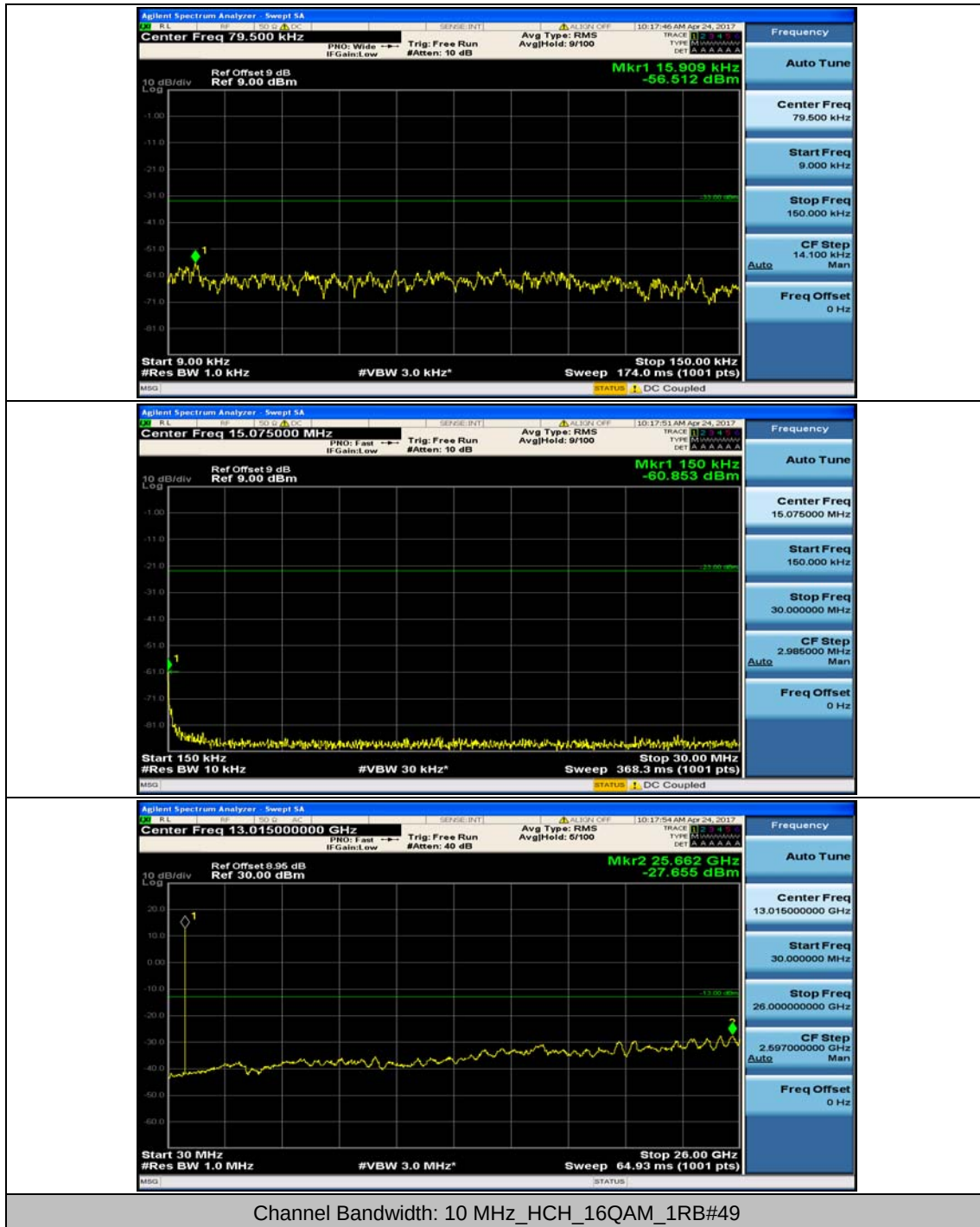


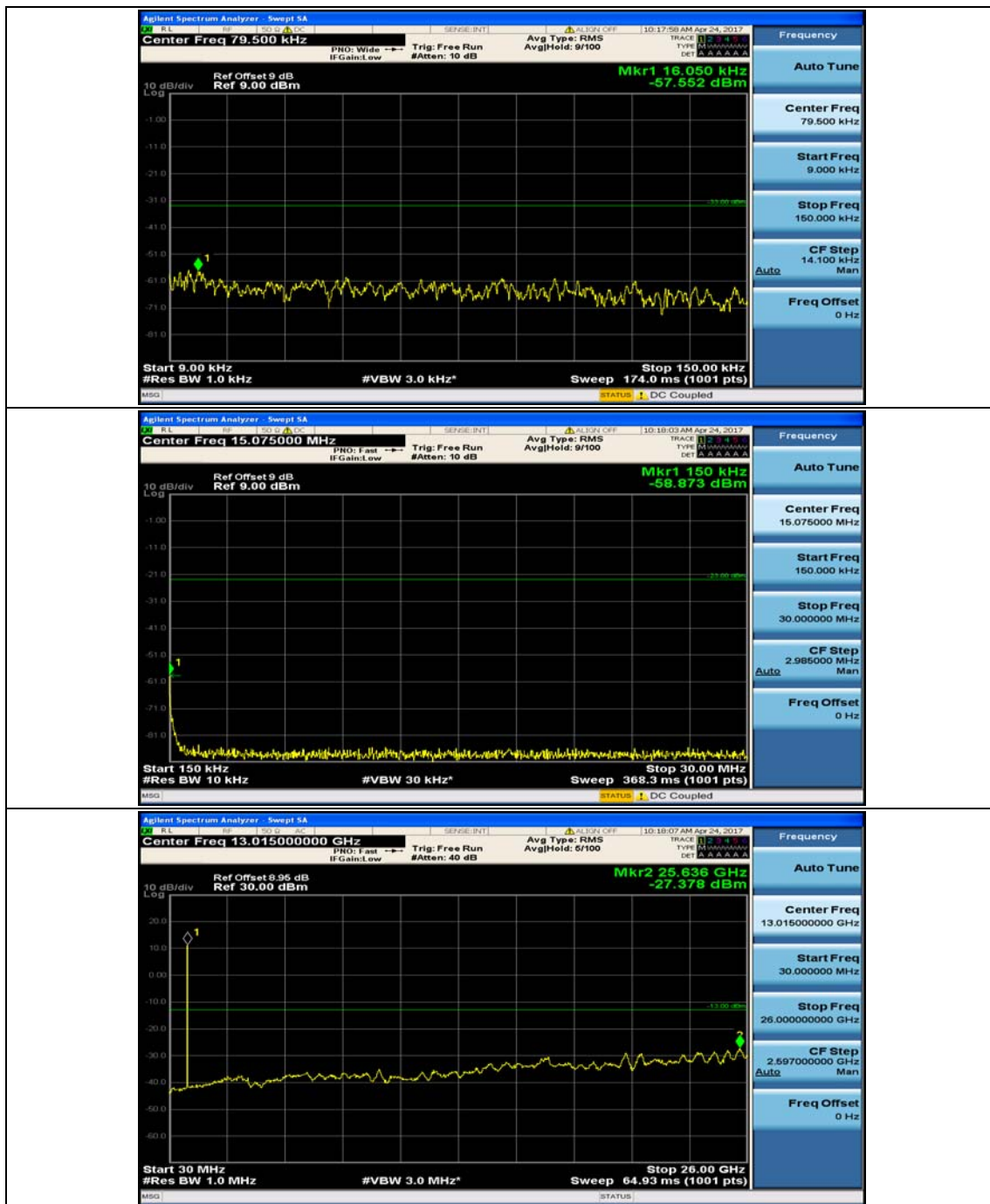


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24





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	3.85	0.004668	± 2.5	PASS
		VN	TN	-0.76	-0.000922	± 2.5	PASS
		VH	TN	4.51	0.005469	± 2.5	PASS
	MCH	VL	TN	3.2	0.003825	± 2.5	PASS
		VN	TN	1.63	0.001949	± 2.5	PASS
		VH	TN	-0.05	-0.000060	± 2.5	PASS
	HCH	VL	TN	4.94	0.005823	± 2.5	PASS
		VN	TN	0.98	0.001155	± 2.5	PASS
		VH	TN	4.7	0.005540	± 2.5	PASS
16QAM	LCH	VL	TN	0.99	0.001200	± 2.5	PASS
		VN	TN	2.09	0.002534	± 2.5	PASS
		VH	TN	2.83	0.003432	± 2.5	PASS
	MCH	VL	TN	1.92	0.002295	± 2.5	PASS
		VN	TN	2.56	0.003060	± 2.5	PASS
		VH	TN	-1.43	-0.001710	± 2.5	PASS
	HCH	VL	TN	4.03	0.004751	± 2.5	PASS
		VN	TN	1.24	0.001462	± 2.5	PASS
		VH	TN	4.89	0.005764	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.05	0.003698	± 2.5	PASS
		VN	-20	0.75	0.000909	± 2.5	PASS
		VN	-10	-1.27	-0.001540	± 2.5	PASS
		VN	0	-1.54	-0.001867	± 2.5	PASS
		VN	10	-1.44	-0.001746	± 2.5	PASS
		VN	20	2.85	0.003456	± 2.5	PASS
		VN	30	3.95	0.004790	± 2.5	PASS
		VN	40	4.93	0.005978	± 2.5	PASS
		VN	50	0.38	0.000461	± 2.5	PASS
	MCH	VN	-30	1.96	0.002343	± 2.5	PASS
		VN	-20	1.32	0.001578	± 2.5	PASS
		VN	-10	2.67	0.003192	± 2.5	PASS

		VN	0	2.14	0.002558	± 2.5	PASS
		VN	10	-0.25	-0.000299	± 2.5	PASS
		VN	20	-0.95	-0.001136	± 2.5	PASS
		VN	30	2.13	0.002546	± 2.5	PASS
		VN	40	0.63	0.000753	± 2.5	PASS
		VN	50	0.34	0.000406	± 2.5	PASS
	HCH	VN	-30	-0.17	-0.000200	± 2.5	PASS
		VN	-20	0.03	0.000035	± 2.5	PASS
		VN	-10	-0.03	-0.000035	± 2.5	PASS
		VN	0	-1.32	-0.001556	± 2.5	PASS
		VN	10	0.18	0.000212	± 2.5	PASS
		VN	20	1.04	0.001226	± 2.5	PASS
		VN	30	-0.01	-0.000012	± 2.5	PASS
		VN	40	4.64	0.005470	± 2.5	PASS
		VN	50	-1.5	-0.001768	± 2.5	PASS
16QAM	LCH	VN	-30	-0.44	-0.000534	± 2.5	PASS
		VN	-20	4.57	0.005541	± 2.5	PASS
		VN	-10	2.31	0.002801	± 2.5	PASS
		VN	0	1.49	0.001807	± 2.5	PASS
		VN	10	0.7	0.000849	± 2.5	PASS
		VN	20	4.18	0.005069	± 2.5	PASS
		VN	30	-0.77	-0.000934	± 2.5	PASS
		VN	40	-1.16	-0.001407	± 2.5	PASS
		VN	50	4.62	0.005602	± 2.5	PASS
	MCH	VN	-30	2.86	0.003371	± 2.5	PASS
		VN	-20	1.76	0.002075	± 2.5	PASS
		VN	-10	0.59	0.000696	± 2.5	PASS
		VN	0	0.11	0.000130	± 2.5	PASS
		VN	10	3.03	0.003572	± 2.5	PASS
		VN	20	-1.02	-0.001202	± 2.5	PASS
		VN	30	4.57	0.005387	± 2.5	PASS
		VN	40	4.82	0.005682	± 2.5	PASS
		VN	50	0.07	0.000083	± 2.5	PASS
	HCH	VN	-30	1.5	0.001768	± 2.5	PASS
		VN	-20	1.71	0.002016	± 2.5	PASS
		VN	-10	1.03	0.001214	± 2.5	PASS
		VN	0	-0.86	-0.001014	± 2.5	PASS
		VN	10	-1.25	-0.001474	± 2.5	PASS
		VN	20	2.95	0.003478	± 2.5	PASS
		VN	30	1.67	0.001969	± 2.5	PASS
		VN	40	2.2	0.002593	± 2.5	PASS

		VN	50	3.89	0.004586	± 2.5	PASS
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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	1.12	0.001357	± 2.5	PASS
		VN	TN	-1.76	-0.002132	± 2.5	PASS
		VH	TN	0.26	0.000315	± 2.5	PASS
	MCH	VL	TN	3.36	0.004017	± 2.5	PASS
		VN	TN	-1.34	-0.001602	± 2.5	PASS
		VH	TN	3.23	0.003861	± 2.5	PASS
	HCH	VL	TN	-0.37	-0.000437	± 2.5	PASS
		VN	TN	-0.82	-0.000968	± 2.5	PASS
		VH	TN	2.81	0.003316	± 2.5	PASS
16QAM	LCH	VL	TN	2.01	0.002435	± 2.5	PASS
		VN	TN	-1.18	-0.001429	± 2.5	PASS
		VH	TN	4.32	0.005233	± 2.5	PASS
	MCH	VL	TN	0.73	0.000873	± 2.5	PASS
		VN	TN	3.84	0.004591	± 2.5	PASS
		VH	TN	3.91	0.004674	± 2.5	PASS
	HCH	VL	TN	4.06	0.004791	± 2.5	PASS
		VN	TN	-1.98	-0.002336	± 2.5	PASS
		VH	TN	3.12	0.003681	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.93	0.002338	± 2.5	PASS
		VN	-20	-0.85	-0.001030	± 2.5	PASS
		VN	-10	0.21	0.000254	± 2.5	PASS
		VN	0	1.28	0.001551	± 2.5	PASS
		VN	10	-0.12	-0.000145	± 2.5	PASS
		VN	20	2.12	0.002568	± 2.5	PASS
		VN	30	3.58	0.004337	± 2.5	PASS
		VN	40	4.55	0.005512	± 2.5	PASS
		VN	50	-1.67	-0.002023	± 2.5	PASS
	MCH	VN	-30	1.85	0.002212	± 2.5	PASS
		VN	-20	3.83	0.004579	± 2.5	PASS
		VN	-10	1.16	0.001387	± 2.5	PASS
		VN	0	-0.91	-0.001088	± 2.5	PASS

		VN	10	3.96	0.004734	± 2.5	PASS
		VN	20	-1.34	-0.001602	± 2.5	PASS
		VN	30	0.56	0.000669	± 2.5	PASS
		VN	40	0.7	0.000837	± 2.5	PASS
		VN	50	1.25	0.001494	± 2.5	PASS
	HCH	VN	-30	0.42	0.000496	± 2.5	PASS
		VN	-20	-1.49	-0.001758	± 2.5	PASS
		VN	-10	1.4	0.001652	± 2.5	PASS
		VN	0	2	0.002360	± 2.5	PASS
		VN	10	-0.9	-0.001062	± 2.5	PASS
		VN	20	0.66	0.000779	± 2.5	PASS
		VN	30	3.82	0.004507	± 2.5	PASS
		VN	40	2.77	0.003268	± 2.5	PASS
		VN	50	-1.78	-0.002100	± 2.5	PASS
16QAM	LCH	VN	-30	-0.12	-0.000143	± 2.5	PASS
		VN	-20	2.05	0.002451	± 2.5	PASS
		VN	-10	-1.93	-0.002307	± 2.5	PASS
		VN	0	3	0.003586	± 2.5	PASS
		VN	10	2.73	0.003264	± 2.5	PASS
		VN	20	0.85	0.001016	± 2.5	PASS
		VN	30	0.72	0.000861	± 2.5	PASS
		VN	40	-0.45	-0.000538	± 2.5	PASS
		VN	50	4.8	0.005738	± 2.5	PASS
	MCH	VN	-30	0.79	0.000932	± 2.5	PASS
		VN	-20	0.72	0.000850	± 2.5	PASS
		VN	-10	3.89	0.004590	± 2.5	PASS
		VN	0	-1.71	-0.002018	± 2.5	PASS
		VN	10	-1.05	-0.001239	± 2.5	PASS
		VN	20	3.14	0.003705	± 2.5	PASS
		VN	30	4.79	0.005652	± 2.5	PASS
		VN	40	1.88	0.002218	± 2.5	PASS
		VN	50	4.32	0.005097	± 2.5	PASS
	HCH	VN	-30	-0.96	-0.001133	± 2.5	PASS
		VN	-20	0.58	0.000684	± 2.5	PASS
		VN	-10	2.42	0.002855	± 2.5	PASS
		VN	0	1.87	0.002206	± 2.5	PASS
		VN	10	1.41	0.001664	± 2.5	PASS
		VN	20	4.23	0.004991	± 2.5	PASS
		VN	30	-1.57	-0.001853	± 2.5	PASS
		VN	40	3.07	0.003622	± 2.5	PASS
		VN	50	2.31	0.002726	± 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	-1.03	-0.001246	± 2.5	PASS
		VN	TN	3.22	0.003896	± 2.5	PASS
		VH	TN	2.31	0.002795	± 2.5	PASS
	MCH	VL	TN	-1.94	-0.002319	± 2.5	PASS
		VN	TN	3.31	0.003957	± 2.5	PASS
		VH	TN	2.2	0.002630	± 2.5	PASS
	HCH	VL	TN	-0.21	-0.000248	± 2.5	PASS
		VN	TN	0.87	0.001028	± 2.5	PASS
		VH	TN	2.94	0.003473	± 2.5	PASS
16QAM	LCH	VL	TN	3.96	0.004791	± 2.5	PASS
		VN	TN	2.41	0.002916	± 2.5	PASS
		VH	TN	1.48	0.001791	± 2.5	PASS
	MCH	VL	TN	4.58	0.005475	± 2.5	PASS
		VN	TN	-1.83	-0.002188	± 2.5	PASS
		VH	TN	-1.83	-0.002188	± 2.5	PASS
	HCH	VL	TN	2.53	0.002989	± 2.5	PASS
		VN	TN	-1.62	-0.001914	± 2.5	PASS
		VH	TN	-1.56	-0.001843	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.84	0.002226	± 2.5	PASS
		VN	-20	0.8	0.000968	± 2.5	PASS
		VN	-10	1.96	0.002371	± 2.5	PASS
		VN	0	3.82	0.004622	± 2.5	PASS
		VN	10	1.27	0.001537	± 2.5	PASS
		VN	20	-1.64	-0.001984	± 2.5	PASS
		VN	30	-0.58	-0.000702	± 2.5	PASS
		VN	40	4.04	0.004888	± 2.5	PASS
		VN	50	0.56	0.000678	± 2.5	PASS
	MCH	VN	-30	4.87	0.005822	± 2.5	PASS
		VN	-20	4.5	0.005380	± 2.5	PASS
		VN	-10	0.64	0.000765	± 2.5	PASS
		VN	0	3.81	0.004555	± 2.5	PASS
		VN	10	3.24	0.003873	± 2.5	PASS
		VN	20	1.61	0.001925	± 2.5	PASS

		VN	30	3.79	0.004531	± 2.5	PASS
		VN	40	-0.85	-0.001016	± 2.5	PASS
		VN	50	-0.12	-0.000143	± 2.5	PASS
	HCH	VN	-30	4.56	0.005387	± 2.5	PASS
		VN	-20	4.37	0.005162	± 2.5	PASS
		VN	-10	0.83	0.000981	± 2.5	PASS
		VN	0	1.09	0.001288	± 2.5	PASS
		VN	10	2.24	0.002646	± 2.5	PASS
		VN	20	1.86	0.002197	± 2.5	PASS
		VN	30	3.42	0.004040	± 2.5	PASS
		VN	40	3.75	0.004430	± 2.5	PASS
		VN	50	0.25	0.000295	± 2.5	PASS
16QAM	LCH	VN	-30	0.22	0.000263	± 2.5	PASS
		VN	-20	0.8	0.000956	± 2.5	PASS
		VN	-10	-0.8	-0.000956	± 2.5	PASS
		VN	0	-1.76	-0.002104	± 2.5	PASS
		VN	10	3.74	0.004471	± 2.5	PASS
		VN	20	0.61	0.000729	± 2.5	PASS
		VN	30	2.55	0.003048	± 2.5	PASS
		VN	40	2.11	0.002522	± 2.5	PASS
		VN	50	3.82	0.004567	± 2.5	PASS
	MCH	VN	-30	1.53	0.001807	± 2.5	PASS
		VN	-20	-1.39	-0.001642	± 2.5	PASS
		VN	-10	-0.3	-0.000354	± 2.5	PASS
		VN	0	4.12	0.004867	± 2.5	PASS
		VN	10	-1.2	-0.001418	± 2.5	PASS
		VN	20	-1.67	-0.001973	± 2.5	PASS
		VN	30	-0.67	-0.000791	± 2.5	PASS
		VN	40	-1.17	-0.001382	± 2.5	PASS
		VN	50	1.64	0.001937	± 2.5	PASS
	HCH	VN	-30	3.22	0.003804	± 2.5	PASS
		VN	-20	-1.36	-0.001607	± 2.5	PASS
		VN	-10	-1.07	-0.001264	± 2.5	PASS
		VN	0	-0.67	-0.000791	± 2.5	PASS
		VN	10	3.49	0.004123	± 2.5	PASS
		VN	20	1.32	0.001559	± 2.5	PASS
		VN	30	1.91	0.002256	± 2.5	PASS
		VN	40	-1.22	-0.001441	± 2.5	PASS
		VN	50	-1.51	-0.001784	± 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	2.28	0.002750	± 2.5	PASS
		VN	TN	-1.69	-0.002039	± 2.5	PASS
		VH	TN	0.94	0.001134	± 2.5	PASS
	MCH	VL	TN	2.01	0.002403	± 2.5	PASS
		VN	TN	-1.57	-0.001877	± 2.5	PASS
		VH	TN	3.37	0.004029	± 2.5	PASS
	HCH	VL	TN	-1.08	-0.001280	± 2.5	PASS
		VN	TN	1.25	0.001481	± 2.5	PASS
		VH	TN	0.13	0.000154	± 2.5	PASS
16QAM	LCH	VL	TN	1.13	0.001363	± 2.5	PASS
		VN	TN	2.96	0.003571	± 2.5	PASS
		VH	TN	2.5	0.003016	± 2.5	PASS
	MCH	VL	TN	3.72	0.004447	± 2.5	PASS
		VN	TN	-1.58	-0.001889	± 2.5	PASS
		VH	TN	0.55	0.000658	± 2.5	PASS
	HCH	VL	TN	0.4	0.000474	± 2.5	PASS
		VN	TN	3.76	0.004455	± 2.5	PASS
		VH	TN	-1.75	-0.002073	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.37	0.001653	± 2.5	PASS
		VN	-20	2.72	0.003281	± 2.5	PASS
		VN	-10	-1.84	-0.002220	± 2.5	PASS
		VN	0	0.96	0.001158	± 2.5	PASS
		VN	10	4.68	0.005645	± 2.5	PASS
		VN	20	0.24	0.000290	± 2.5	PASS
		VN	30	3.16	0.003812	± 2.5	PASS
		VN	40	1.14	0.001375	± 2.5	PASS
		VN	50	0.1	0.000121	± 2.5	PASS
	MCH	VN	-30	1.68	0.002008	± 2.5	PASS
		VN	-20	-1.65	-0.001973	± 2.5	PASS
		VN	-10	3.76	0.004495	± 2.5	PASS
		VN	0	-1.08	-0.001291	± 2.5	PASS
		VN	10	-0.62	-0.000741	± 2.5	PASS
		VN	20	1.81	0.002164	± 2.5	PASS

		VN	30	-1.57	-0.001877	± 2.5	PASS
		VN	40	2.13	0.002546	± 2.5	PASS
		VN	50	4.01	0.004794	± 2.5	PASS
	HCH	VN	-30	-0.55	-0.000652	± 2.5	PASS
		VN	-20	-1.43	-0.001694	± 2.5	PASS
		VN	-10	-1.6	-0.001896	± 2.5	PASS
		VN	0	1.8	0.002133	± 2.5	PASS
		VN	10	0.5	0.000592	± 2.5	PASS
		VN	20	3.82	0.004526	± 2.5	PASS
		VN	30	2.01	0.002382	± 2.5	PASS
		VN	40	3.61	0.004277	± 2.5	PASS
		VN	50	2.3	0.002725	± 2.5	PASS
16QAM	LCH	VN	-30	-1.52	-0.001817	± 2.5	PASS
		VN	-20	-0.8	-0.000956	± 2.5	PASS
		VN	-10	2.02	0.002415	± 2.5	PASS
		VN	0	0.46	0.000550	± 2.5	PASS
		VN	10	4.38	0.005236	± 2.5	PASS
		VN	20	3.42	0.004088	± 2.5	PASS
		VN	30	1.23	0.001470	± 2.5	PASS
		VN	40	2.55	0.003048	± 2.5	PASS
		VN	50	-0.49	-0.000586	± 2.5	PASS
	MCH	VN	-30	2.99	0.003543	± 2.5	PASS
		VN	-20	-0.96	-0.001137	± 2.5	PASS
		VN	-10	0.36	0.000427	± 2.5	PASS
		VN	0	3.48	0.004123	± 2.5	PASS
		VN	10	4.96	0.005877	± 2.5	PASS
		VN	20	-0.93	-0.001102	± 2.5	PASS
		VN	30	0.79	0.000936	± 2.5	PASS
		VN	40	4.74	0.005616	± 2.5	PASS
		VN	50	3.25	0.003851	± 2.5	PASS
	HCH	VN	-30	2.32	0.002749	± 2.5	PASS
		VN	-20	-0.02	-0.000024	± 2.5	PASS
		VN	-10	0.75	0.000889	± 2.5	PASS
		VN	0	0.93	0.001102	± 2.5	PASS
		VN	10	-1.11	-0.001315	± 2.5	PASS
		VN	20	2.58	0.003057	± 2.5	PASS
		VN	30	1.8	0.002133	± 2.5	PASS
		VN	40	3.08	0.003649	± 2.5	PASS
		VN	50	1.02	0.001209	± 2.5	PASS