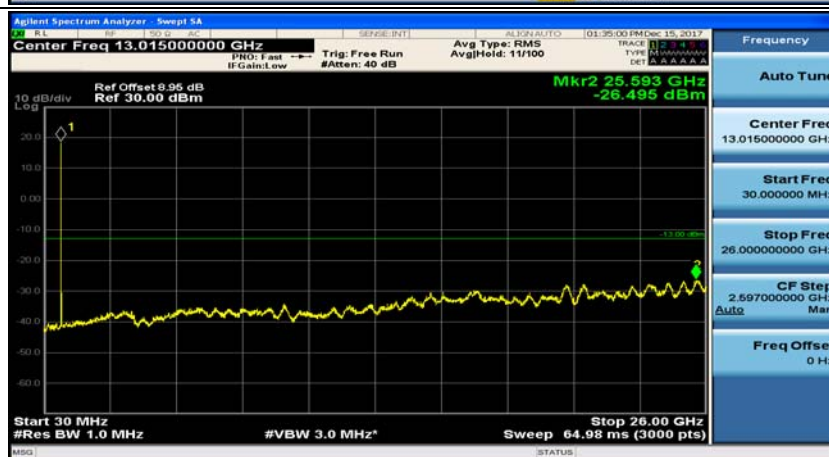
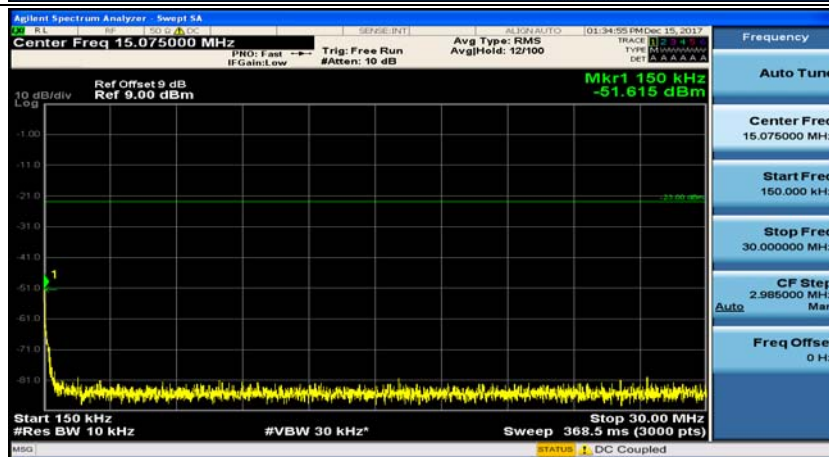
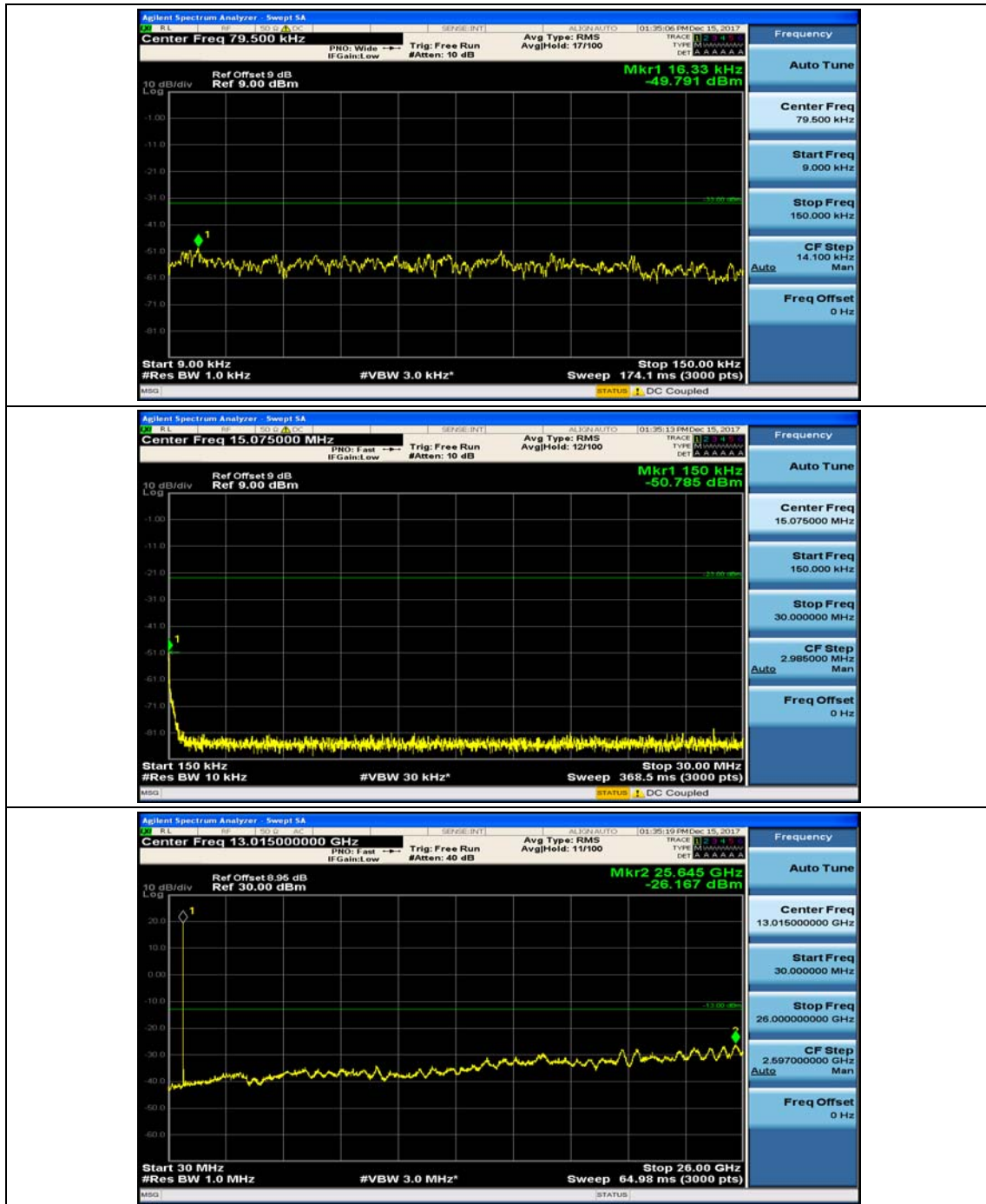


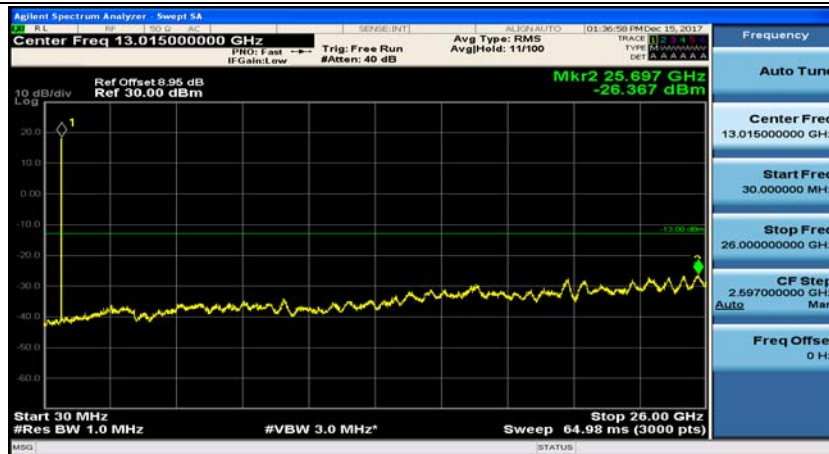
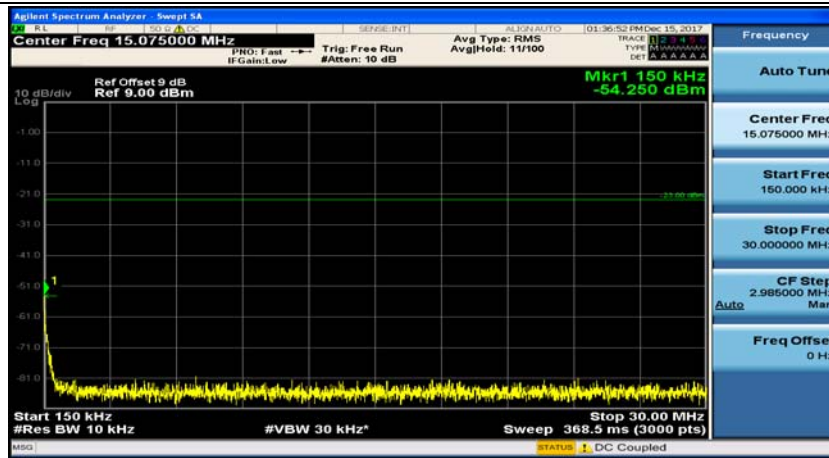
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



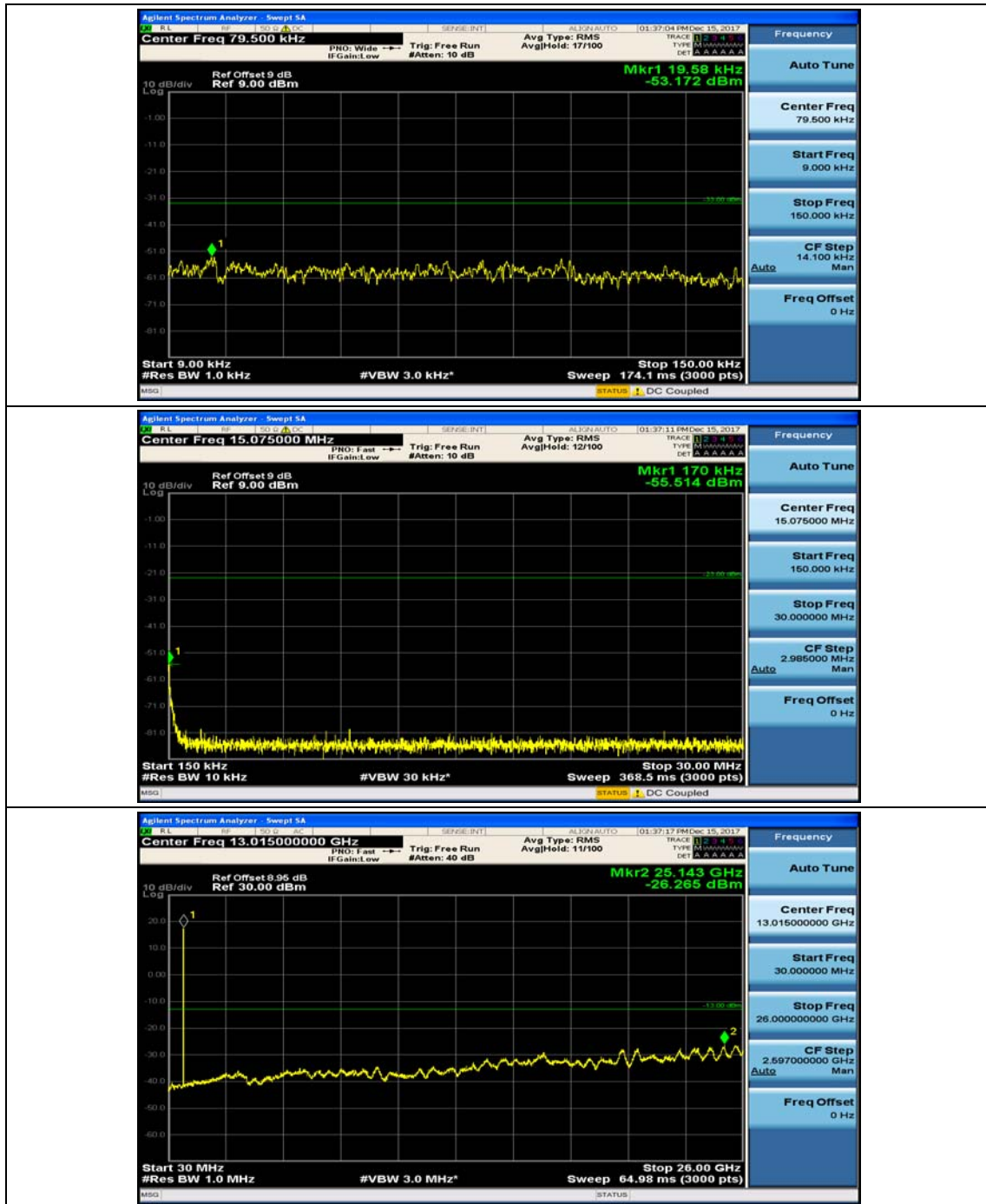
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7



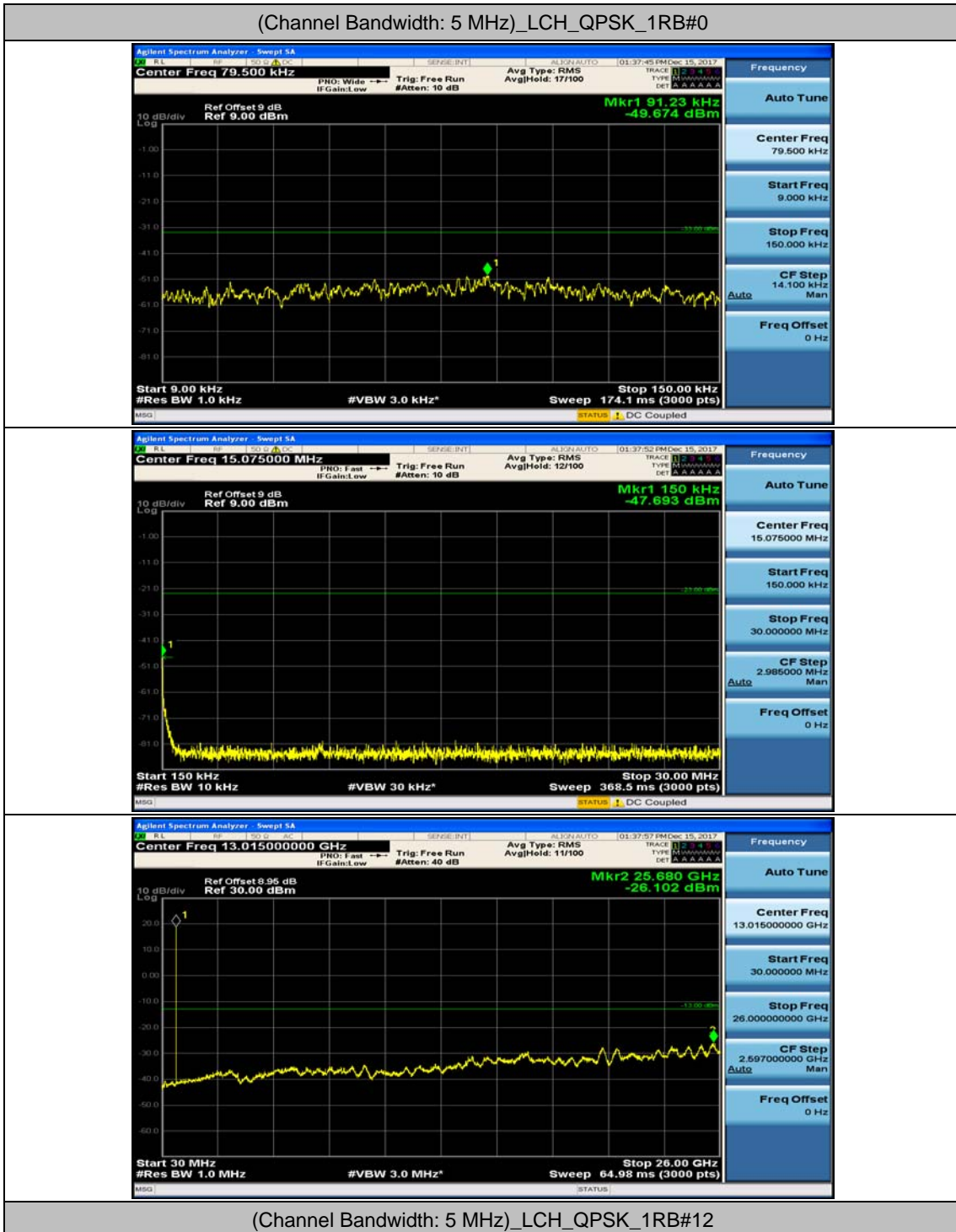
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

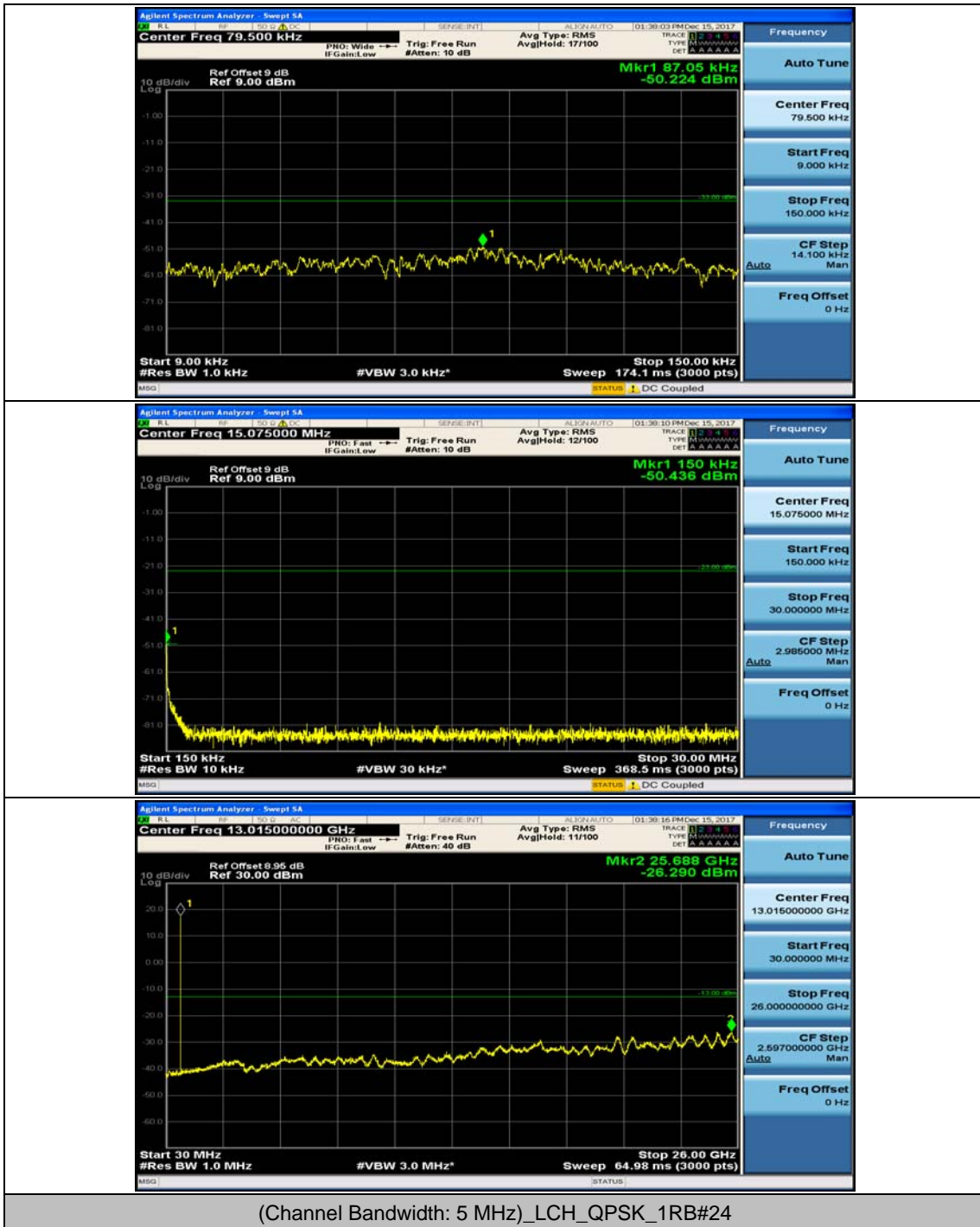


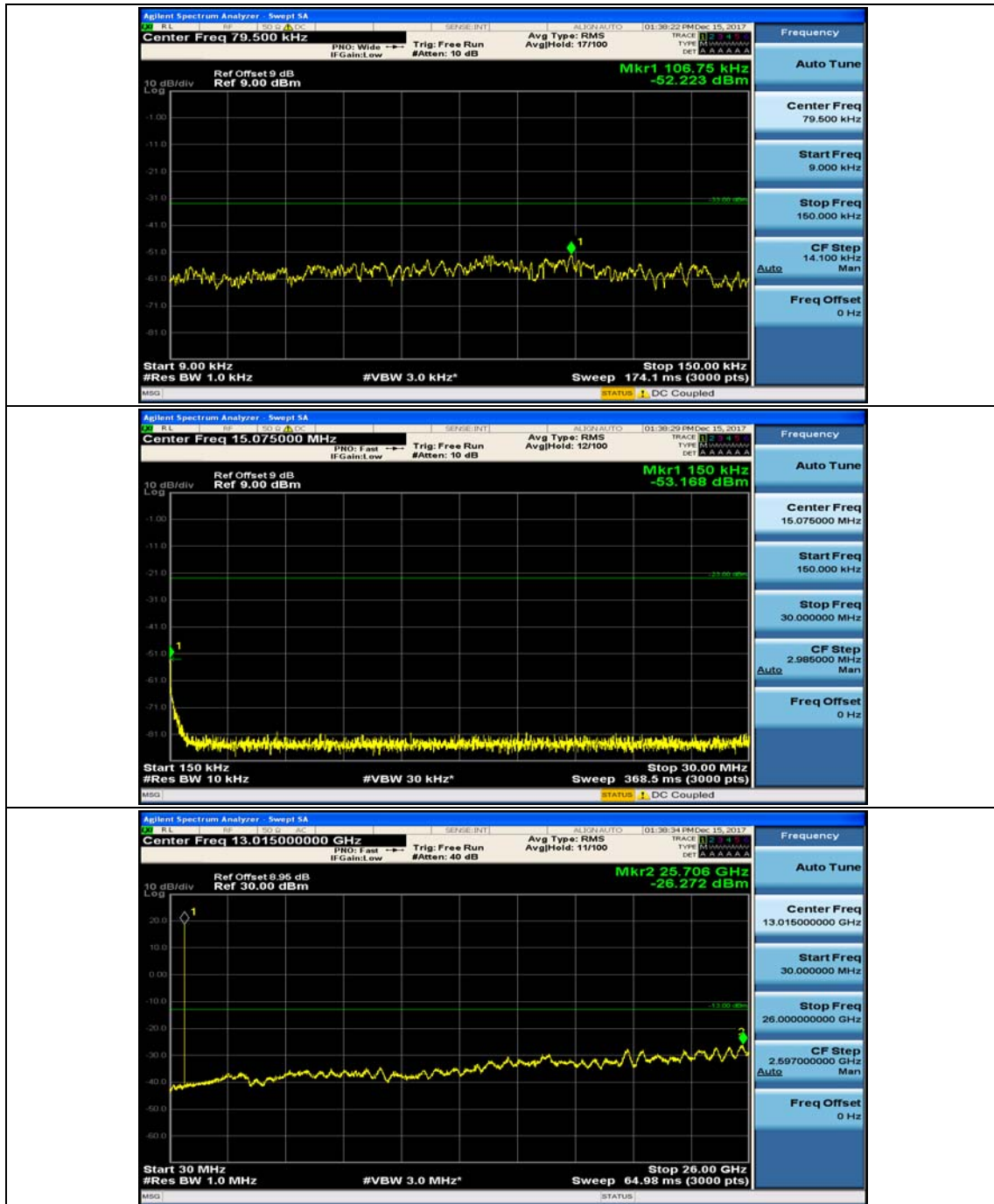
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7



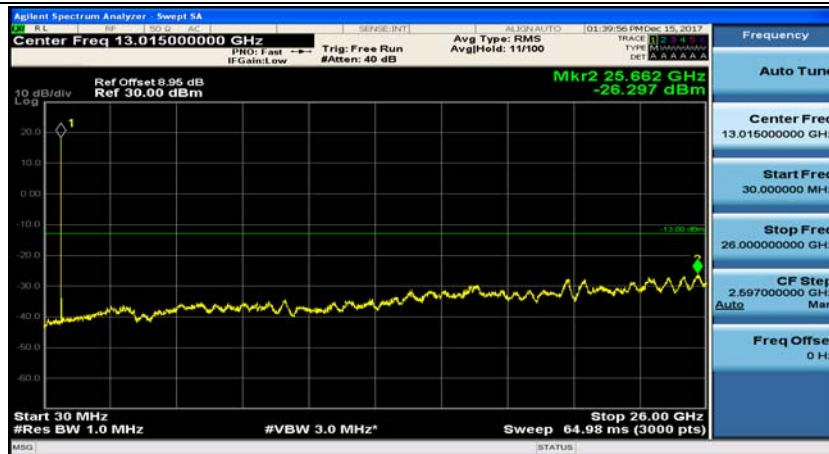
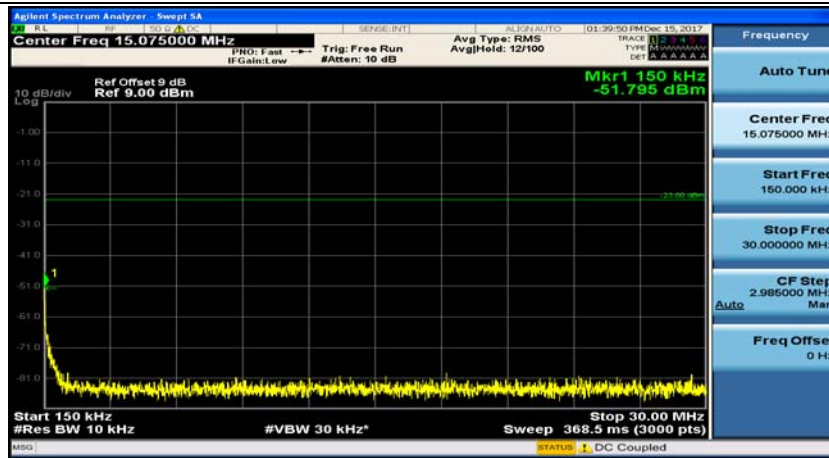
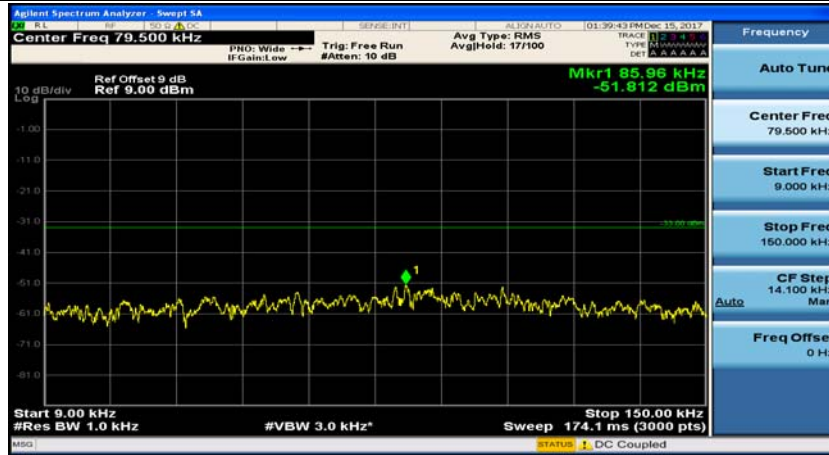
Channel Bandwidth: 5 MHz



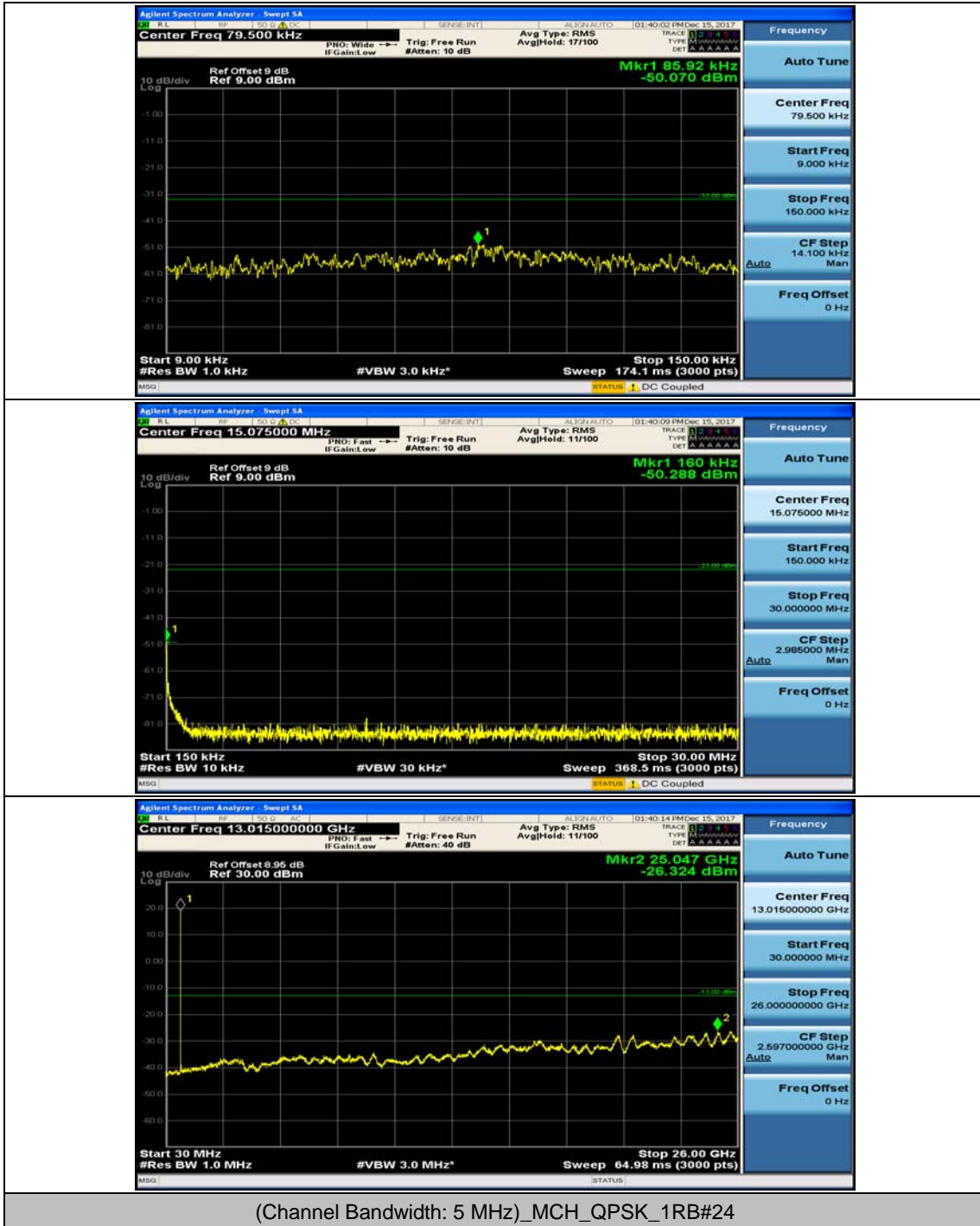


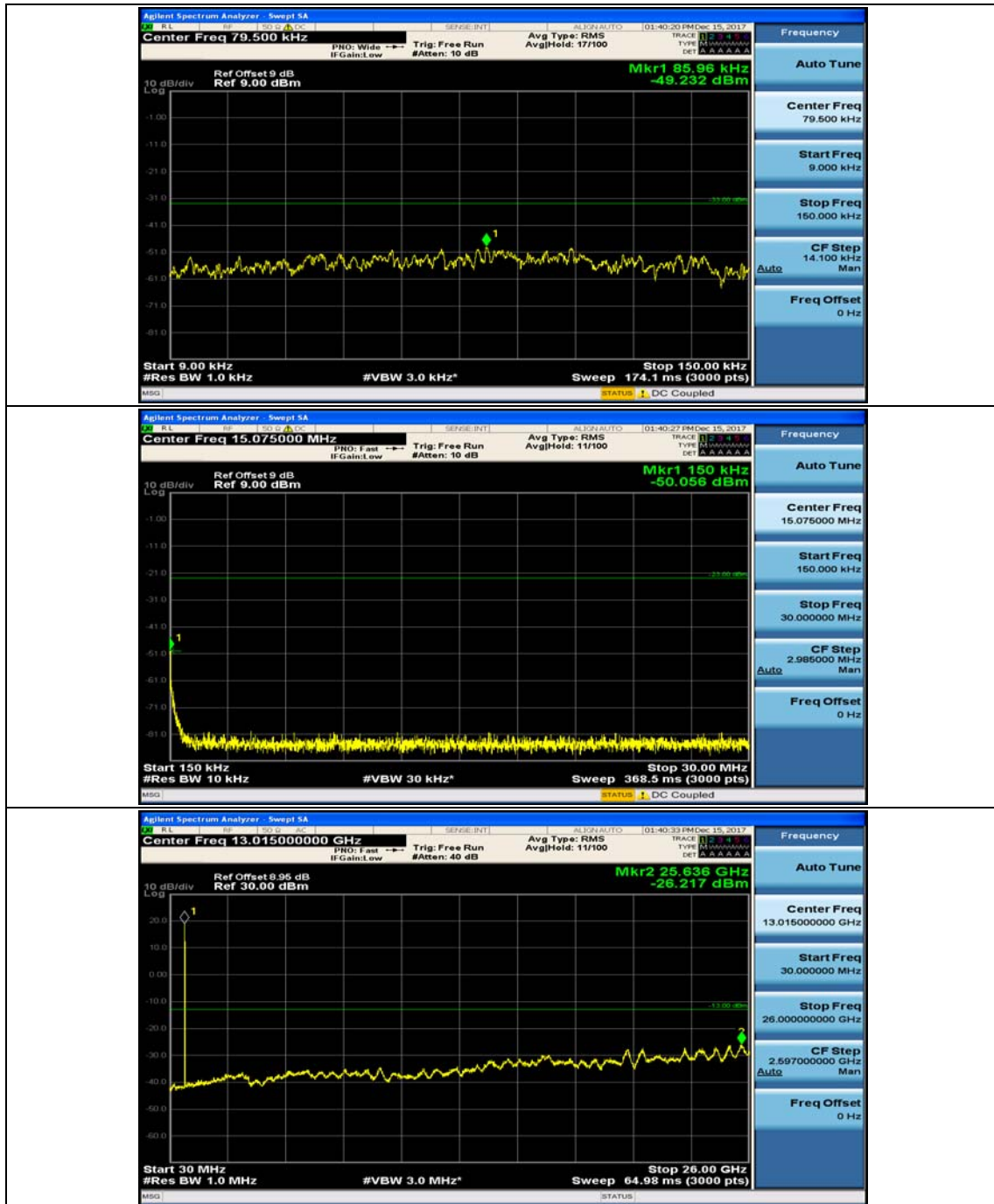


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

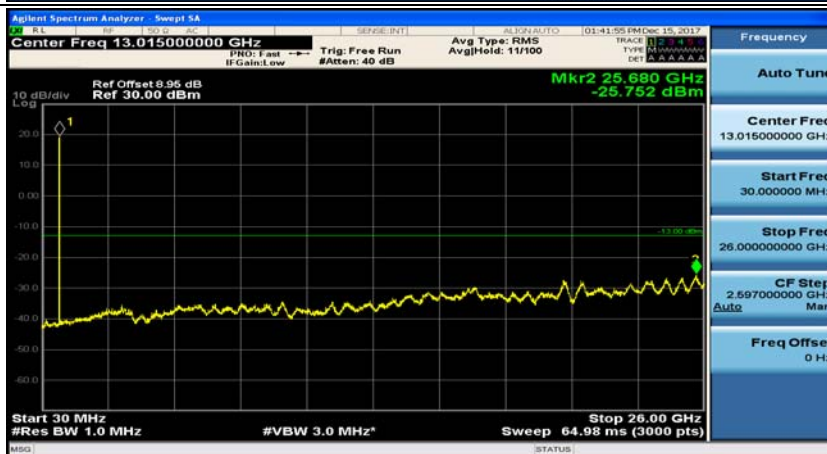
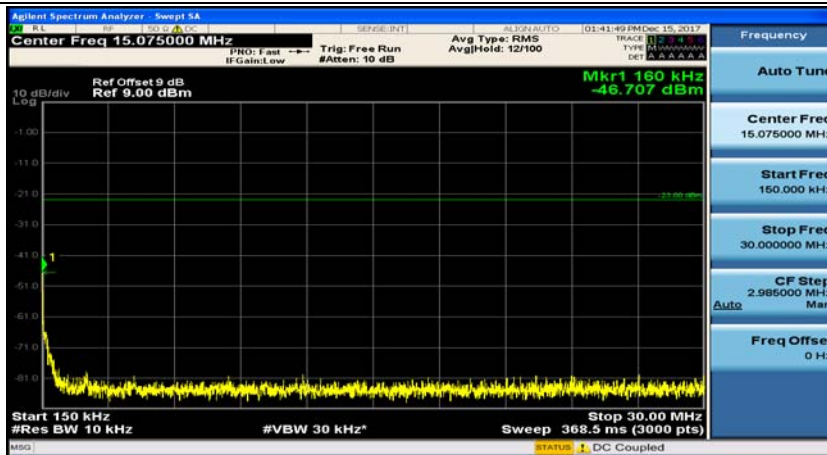


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

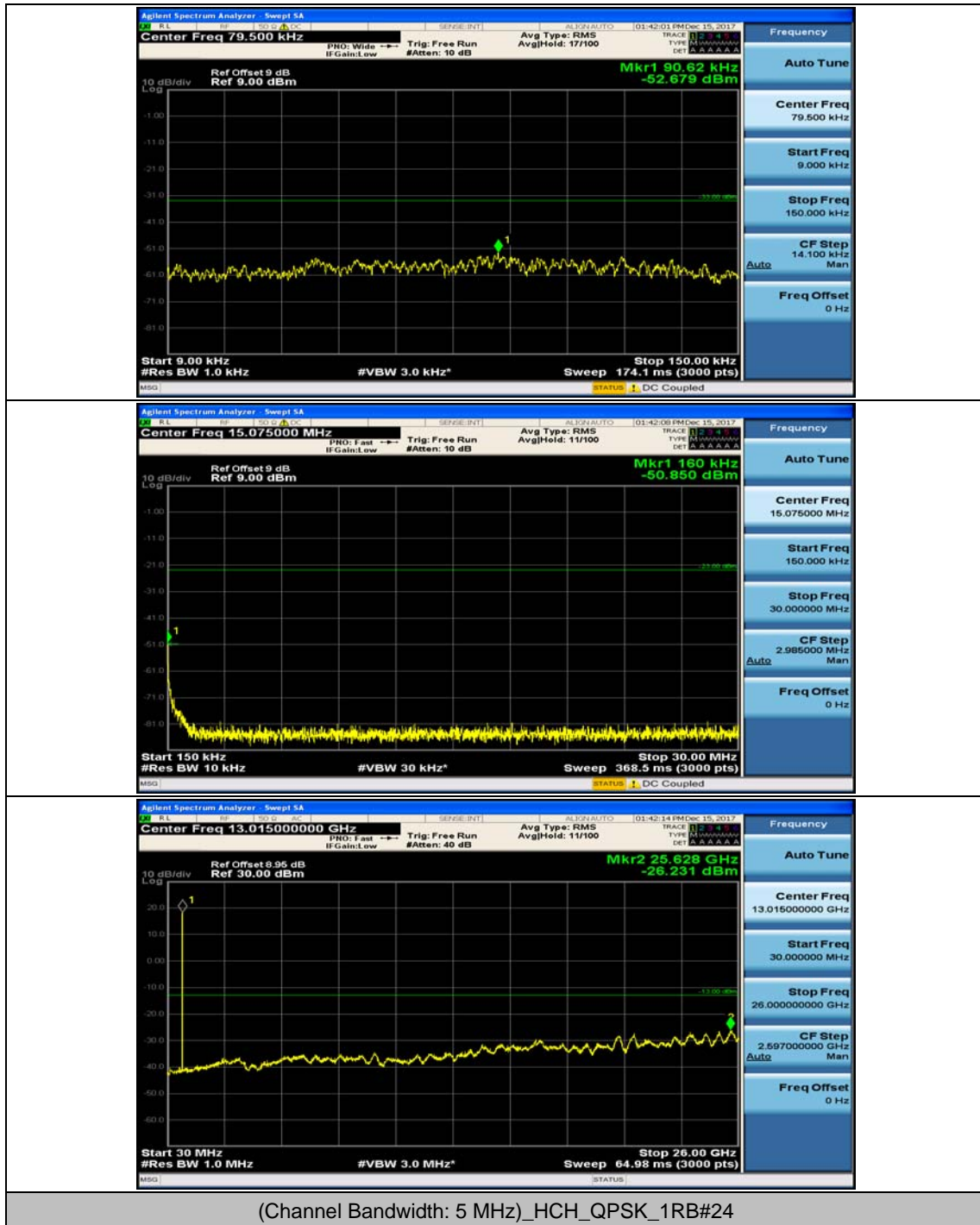


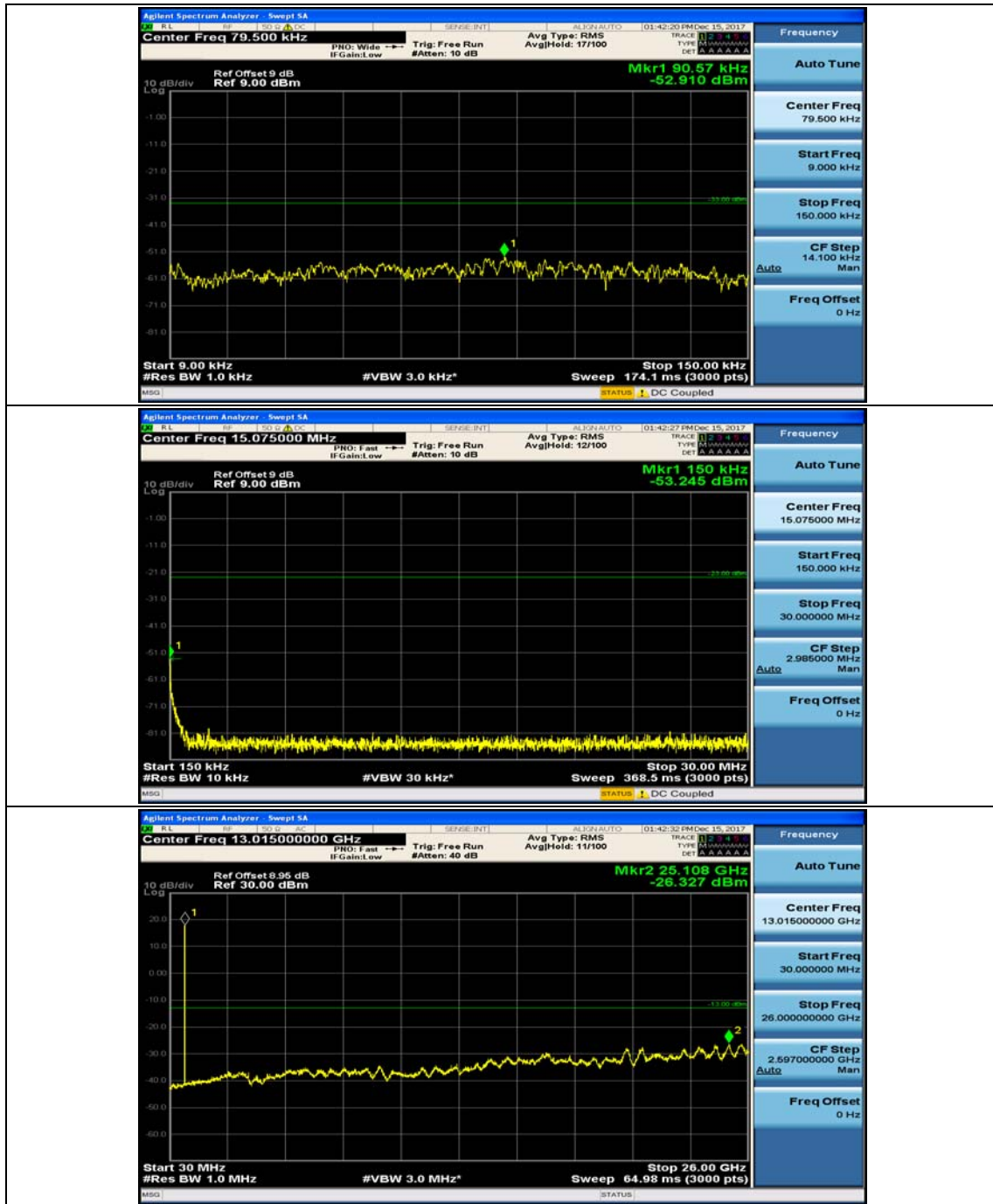


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

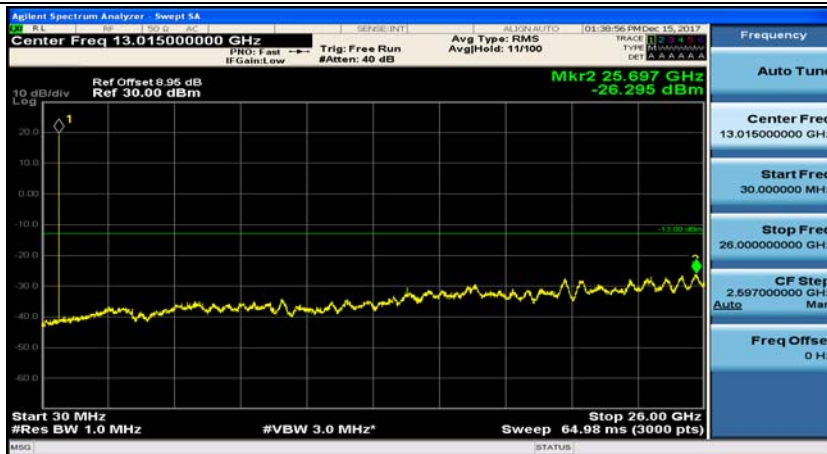
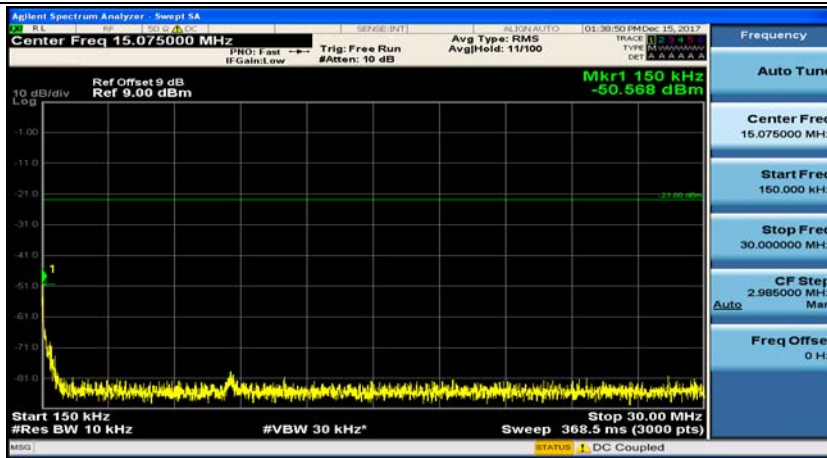
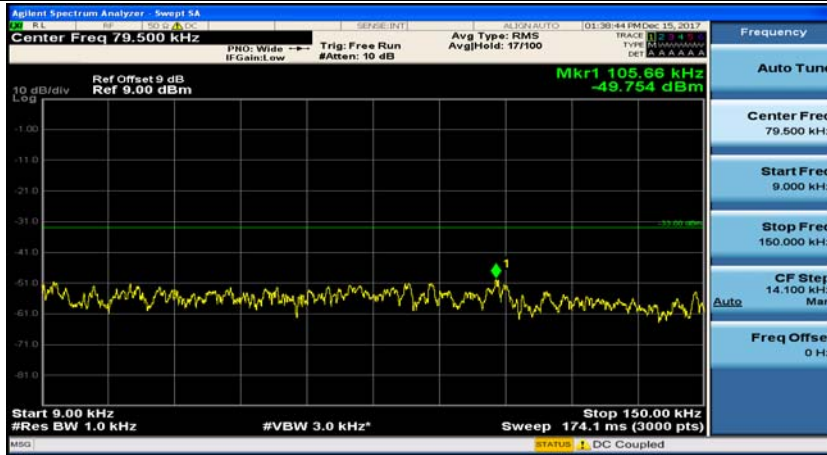


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

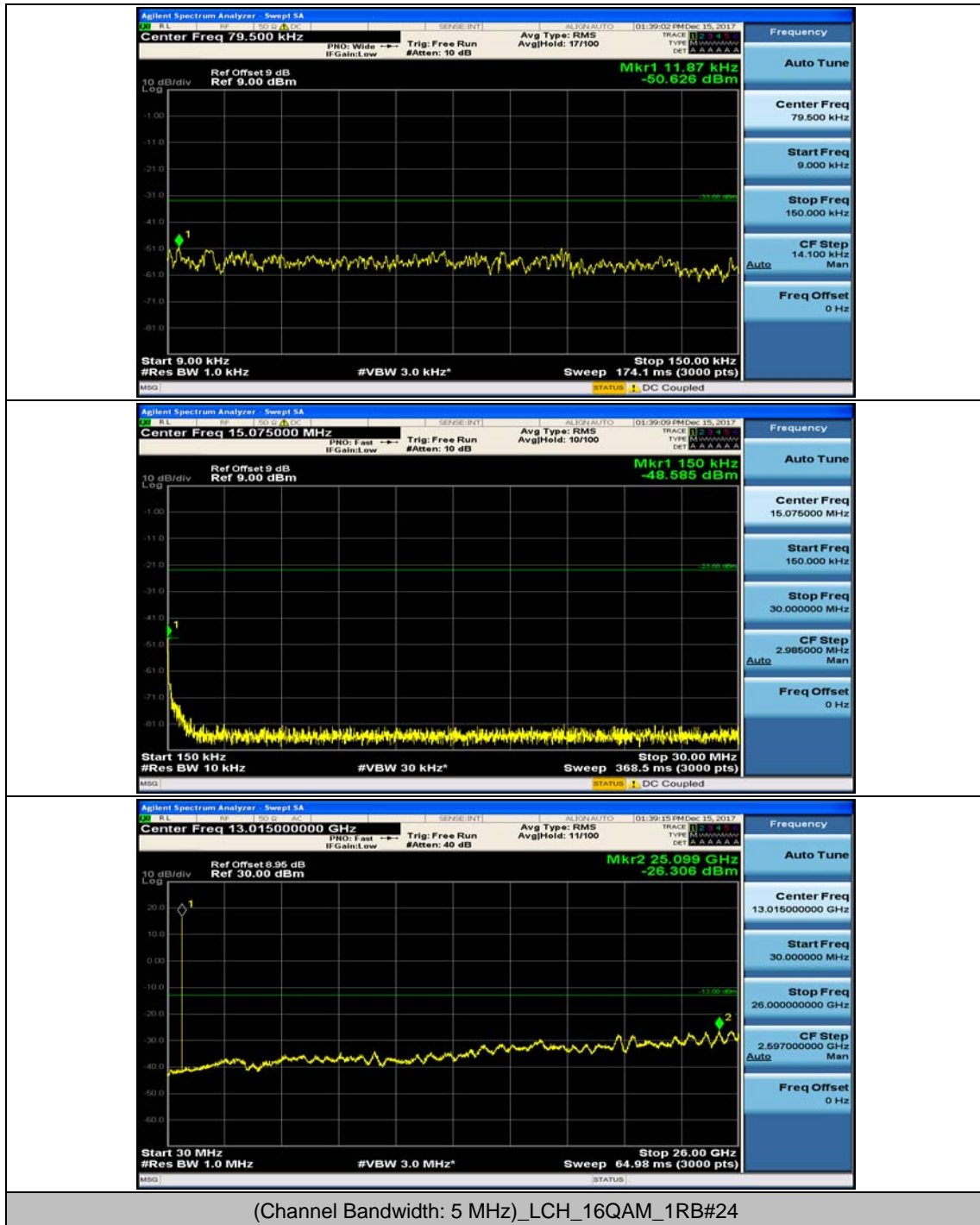


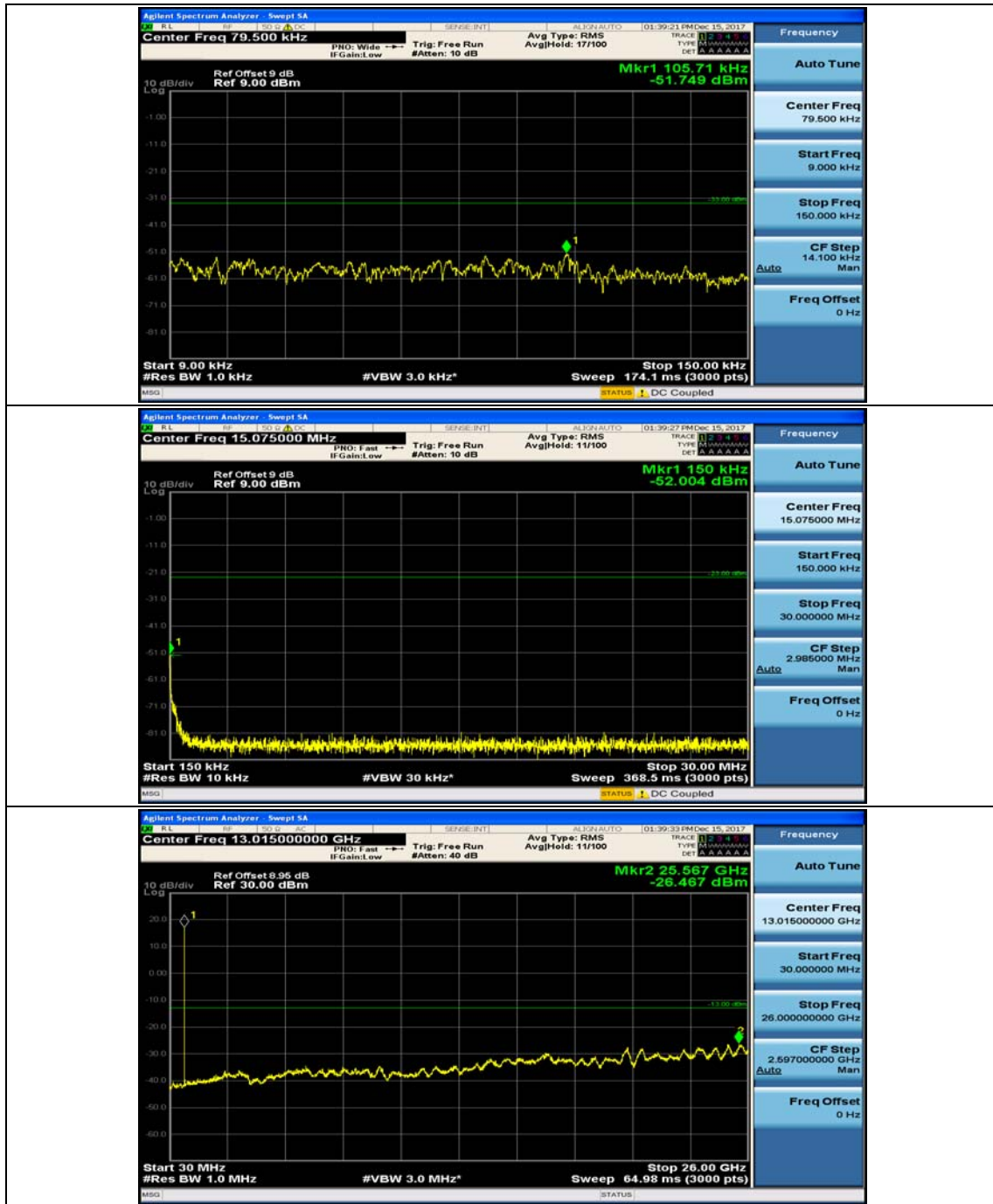


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

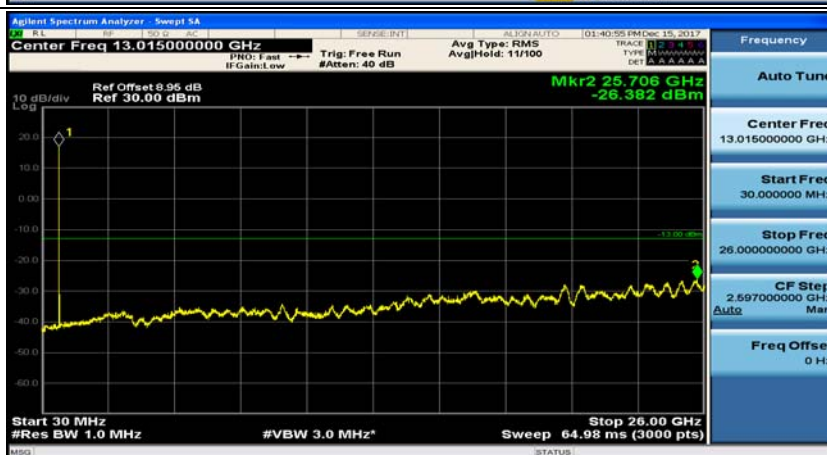
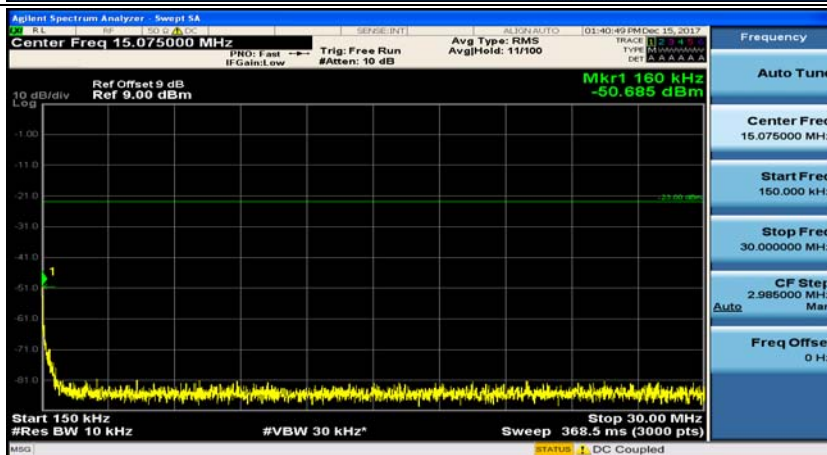


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

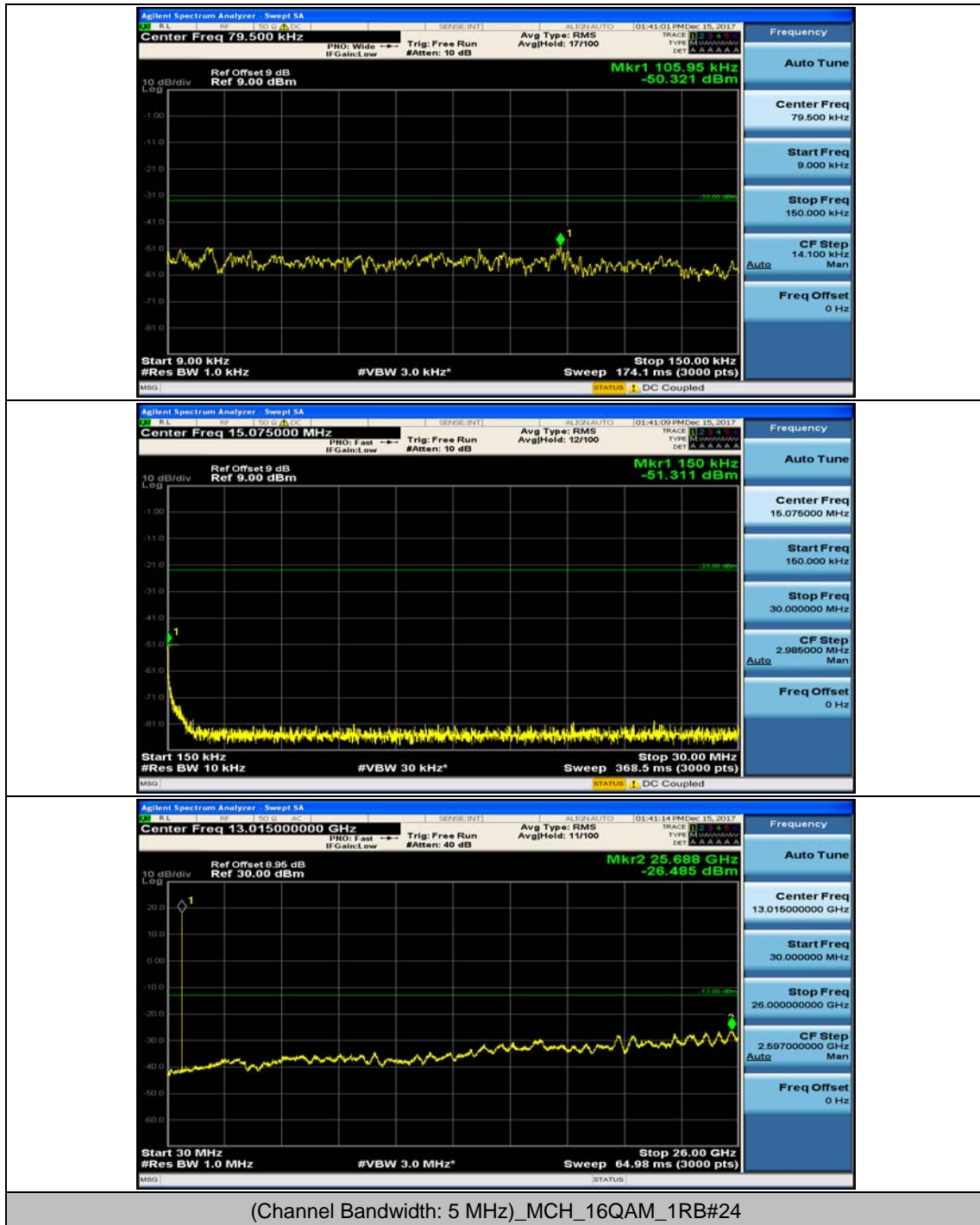


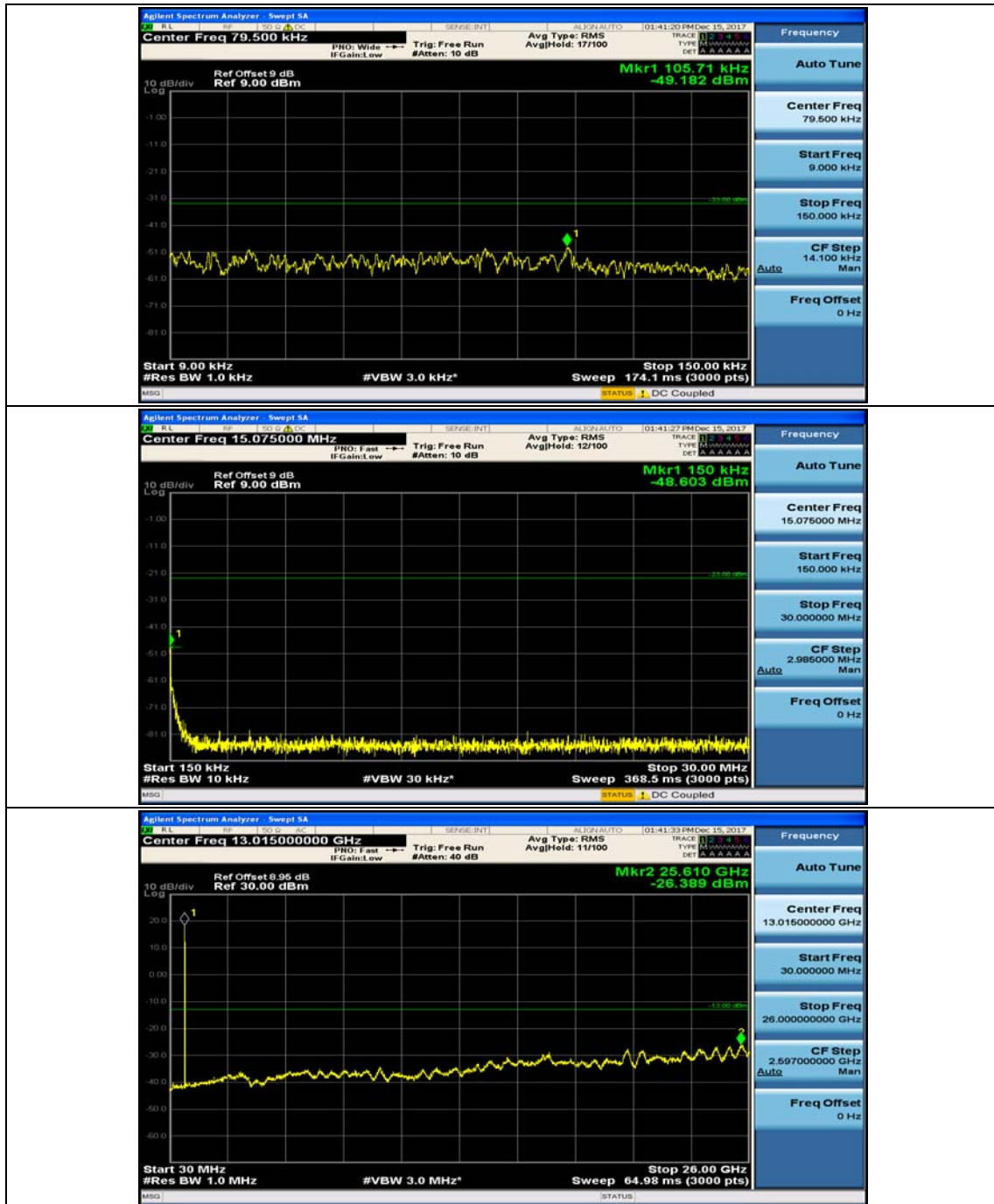


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

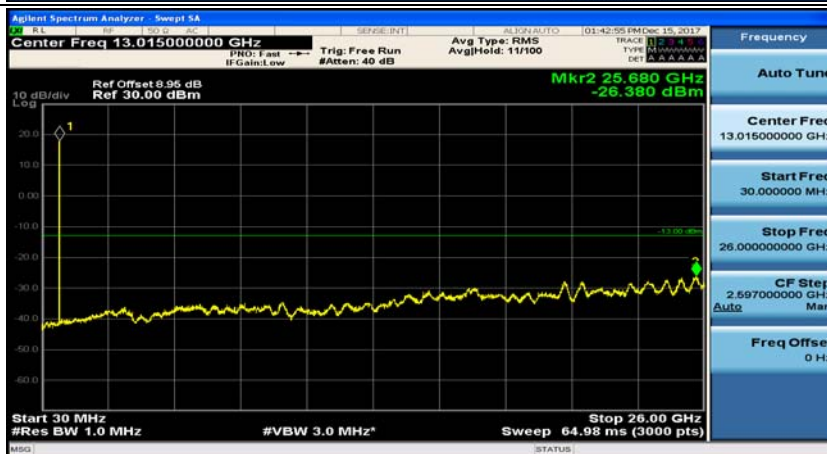
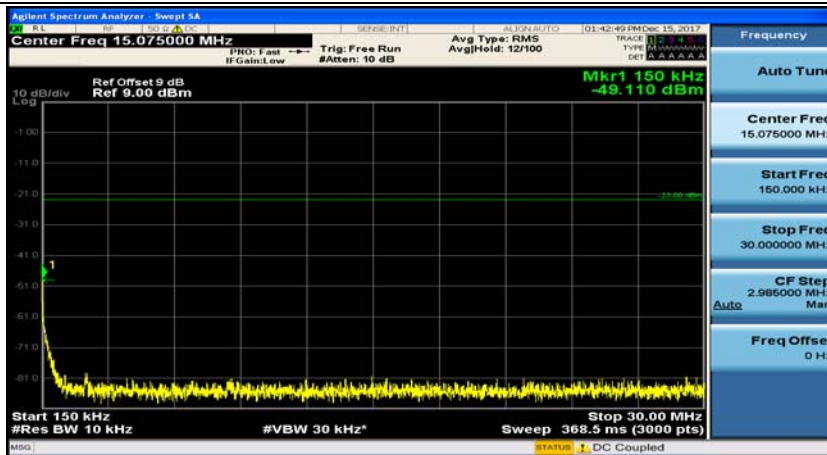
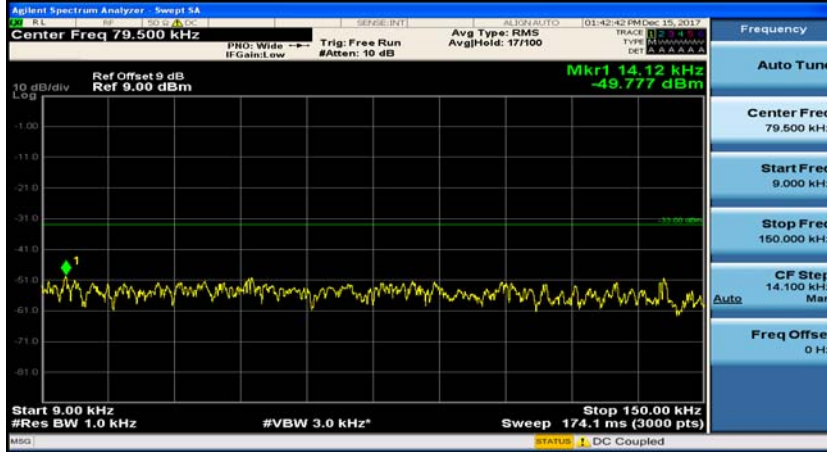


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

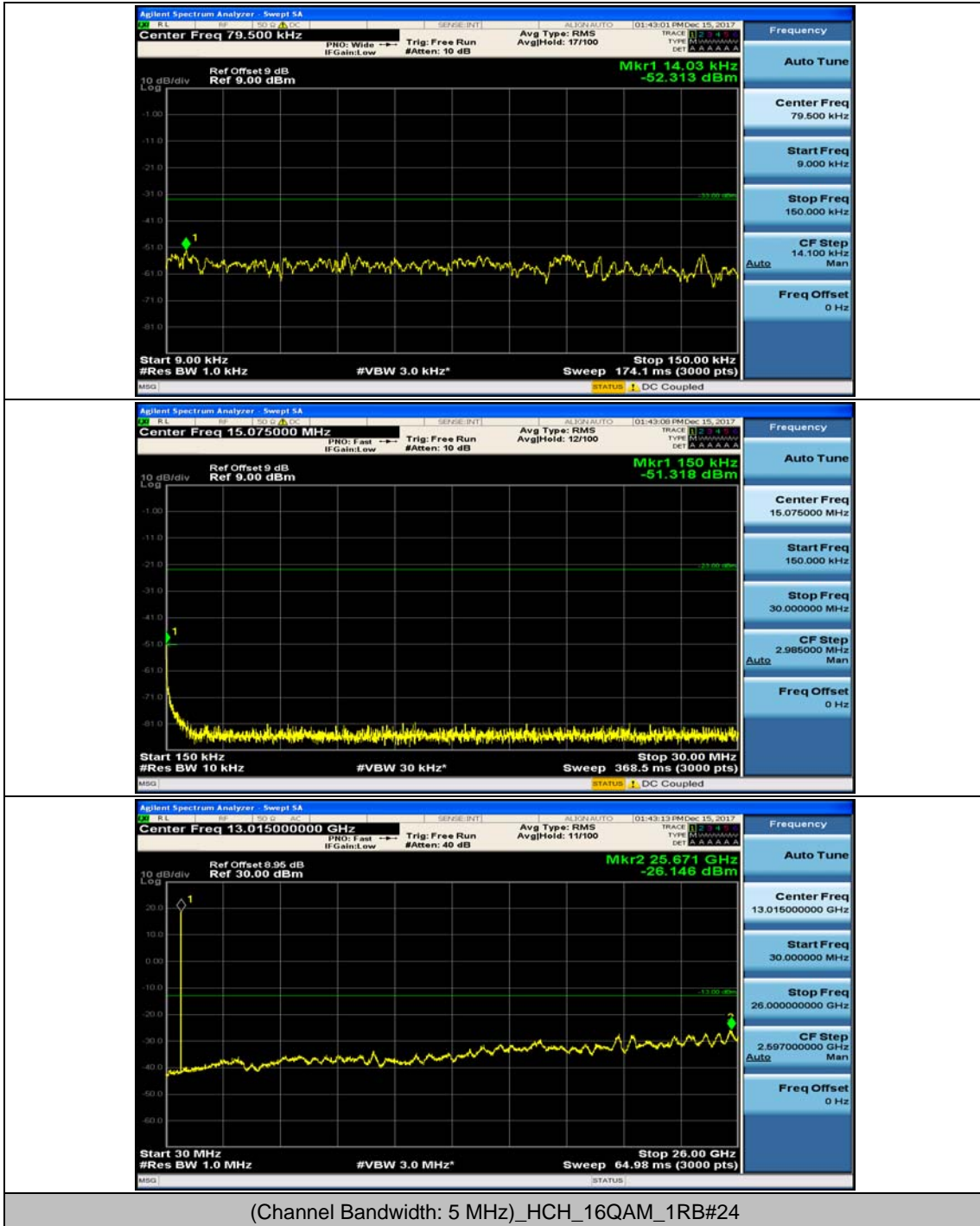


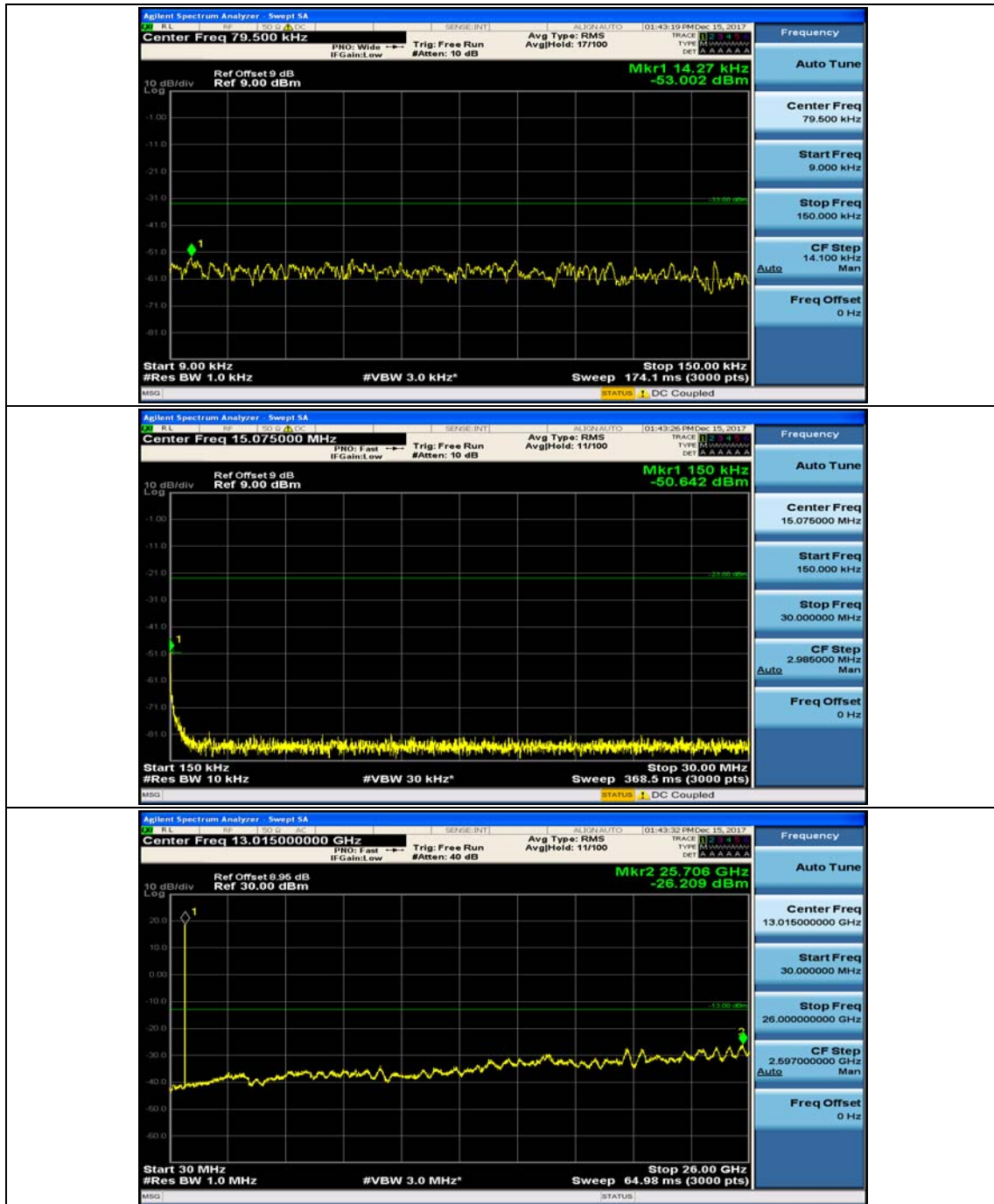


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

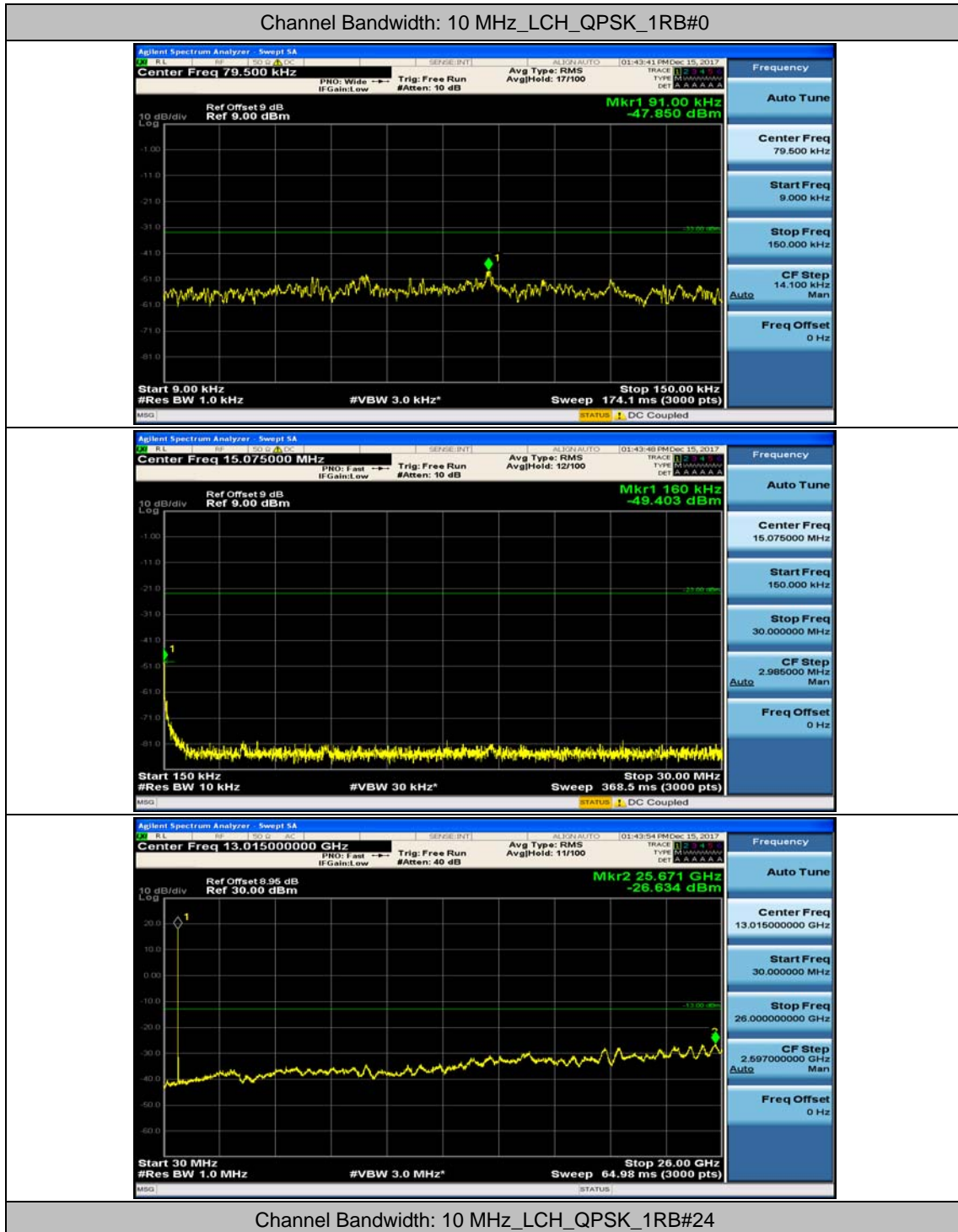


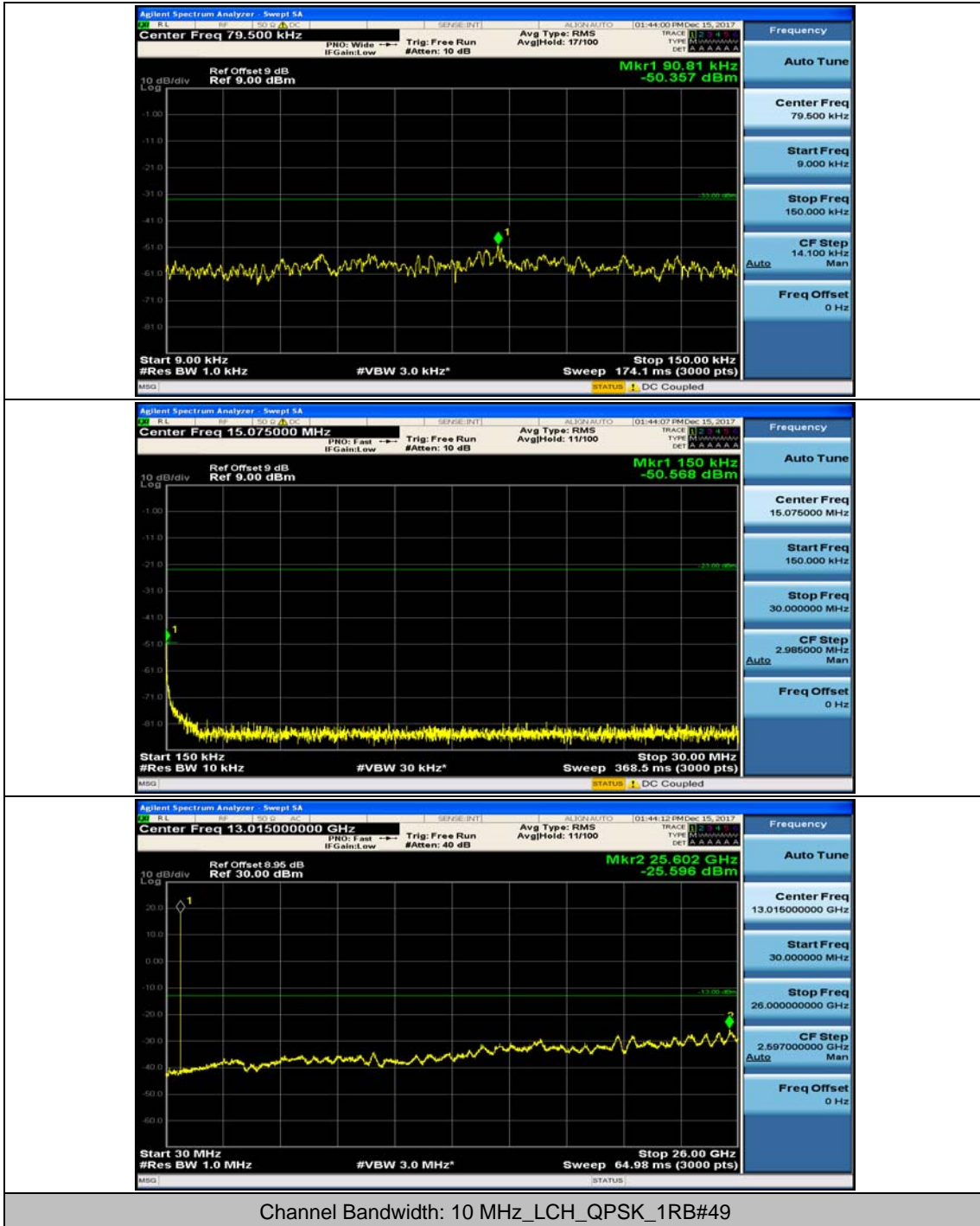
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

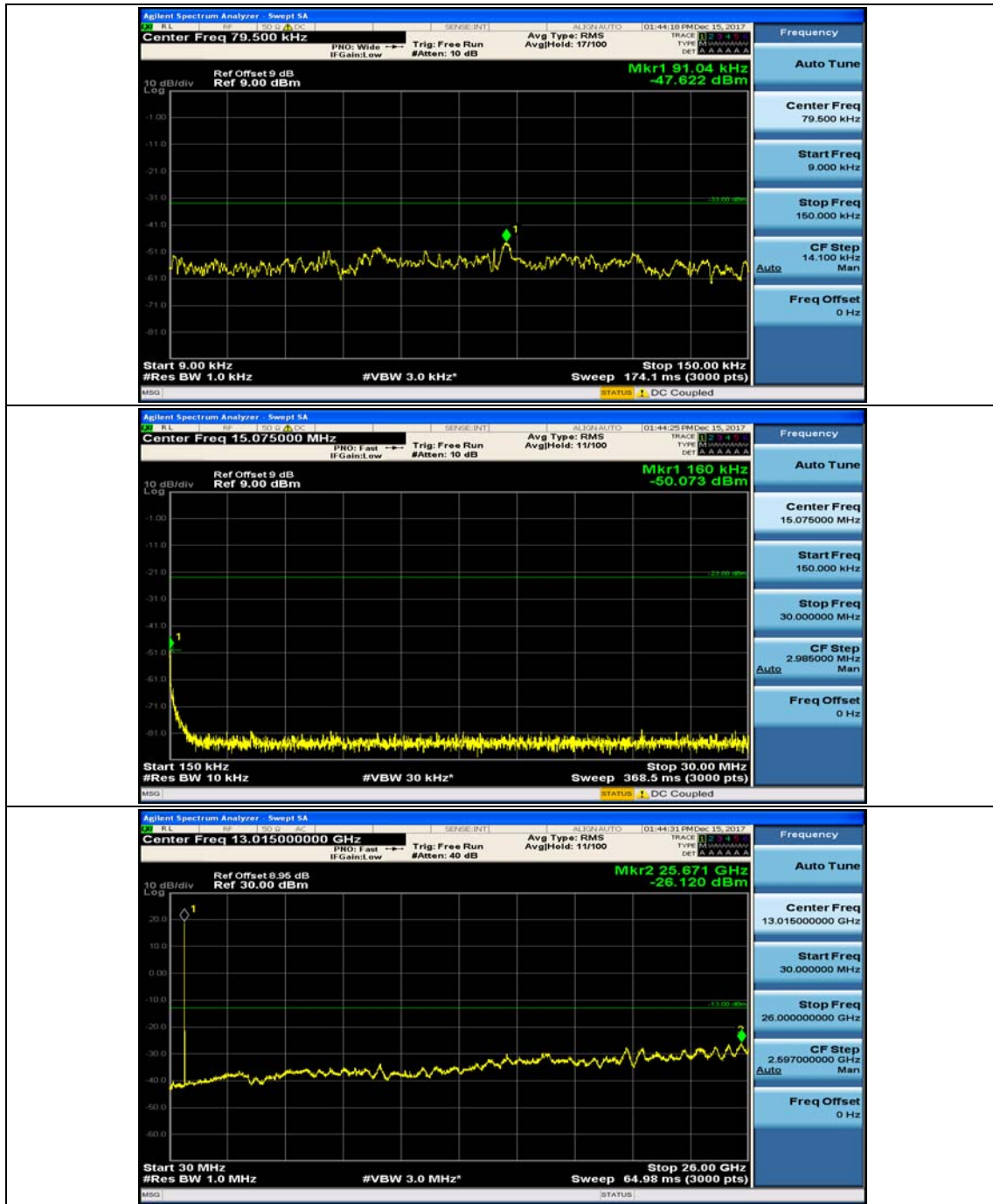




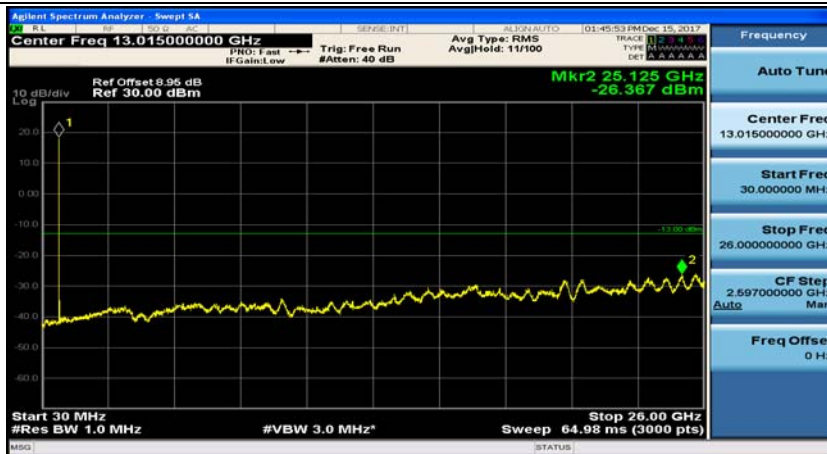
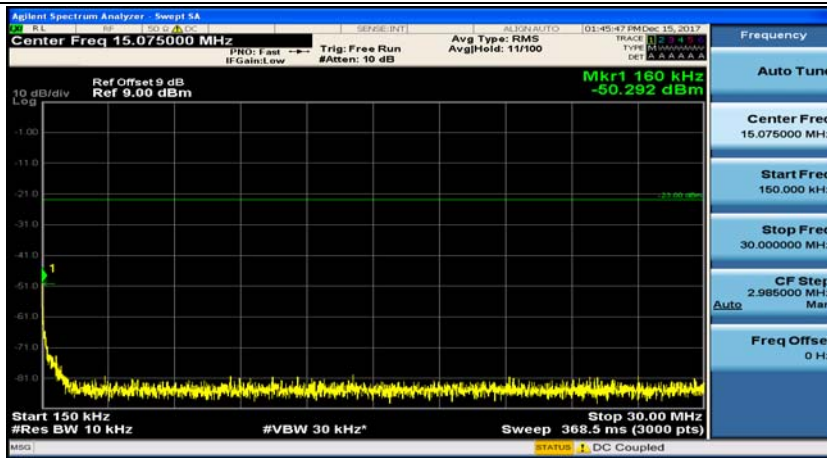
Channel Bandwidth: 10 MHz



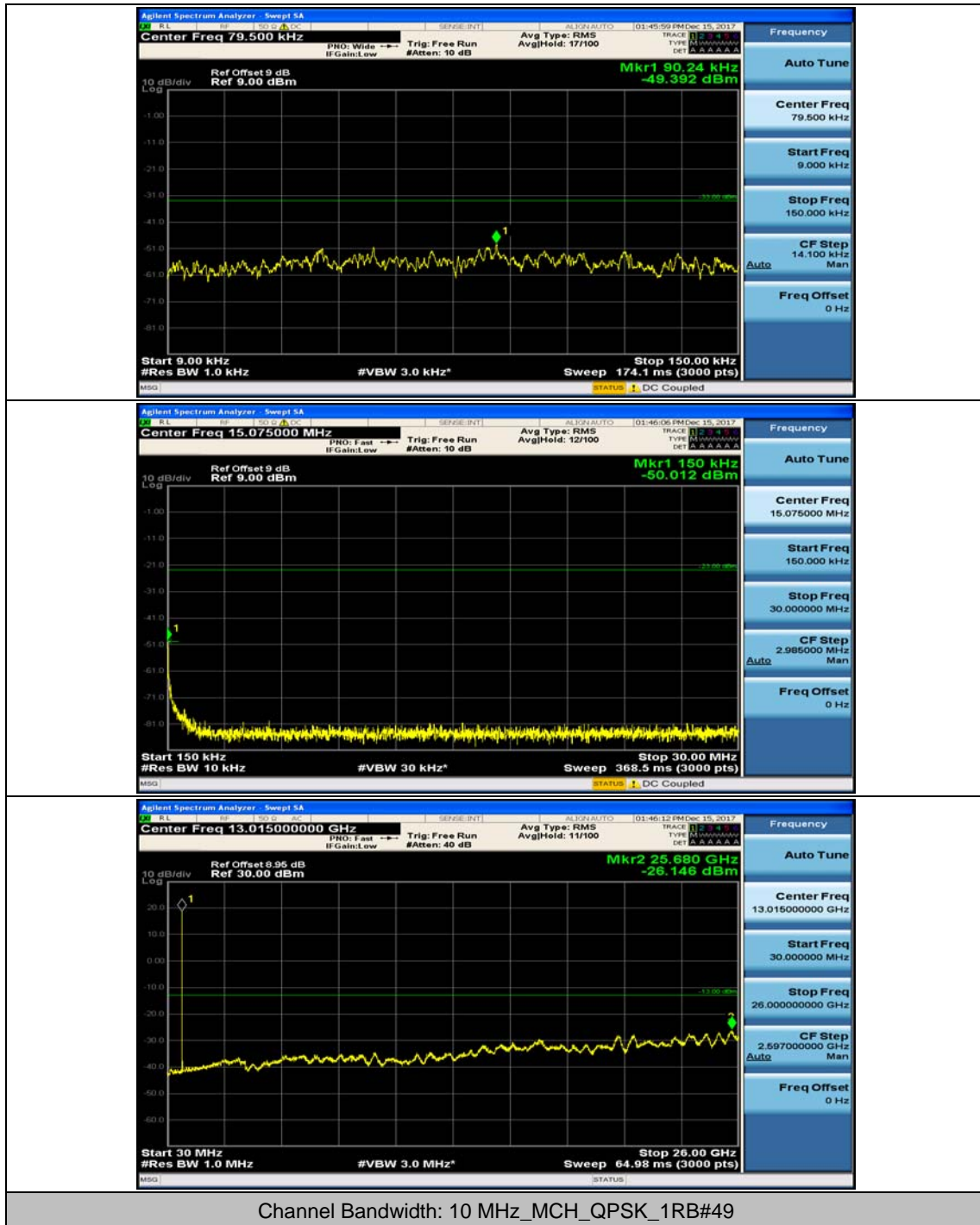


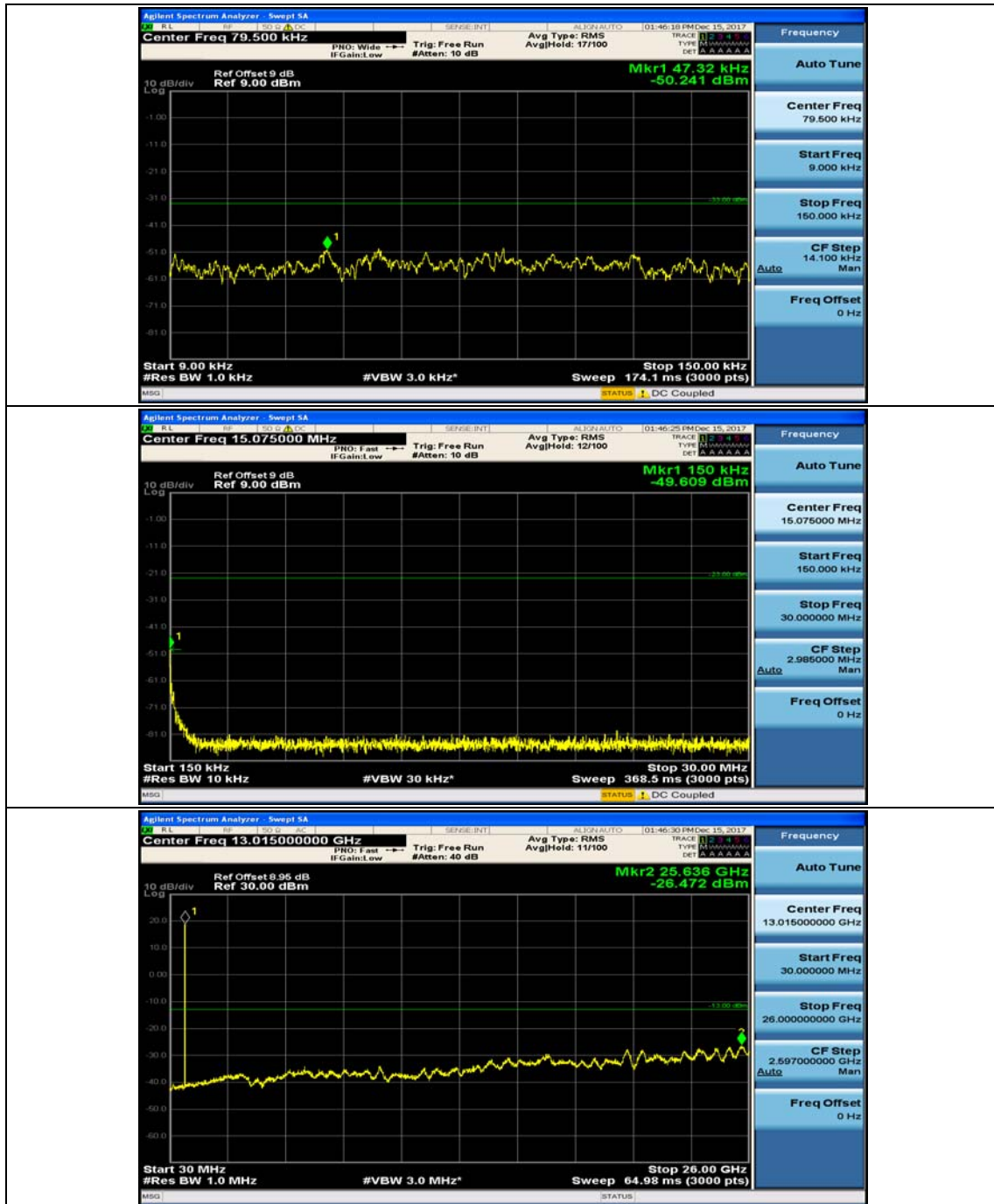


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

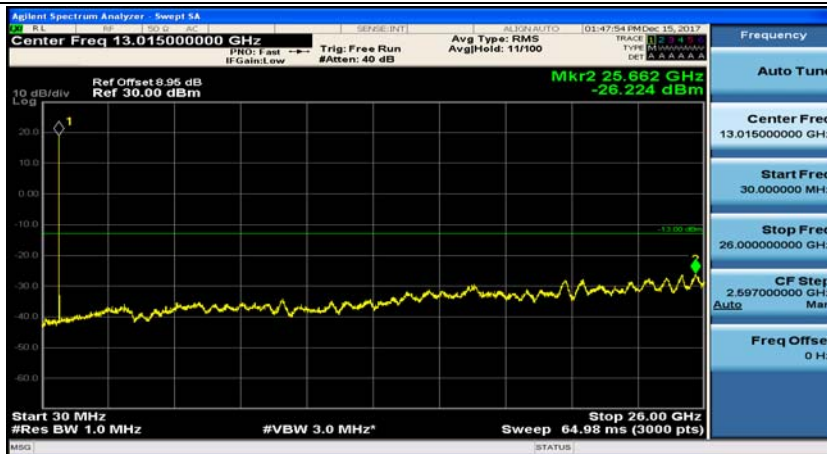
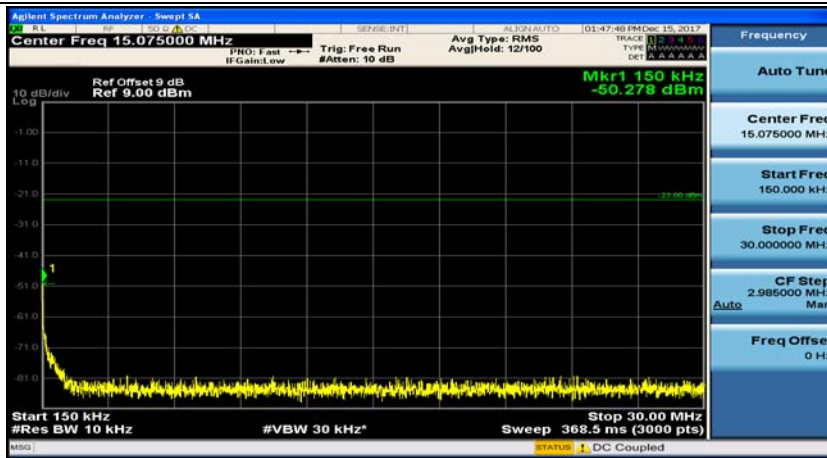
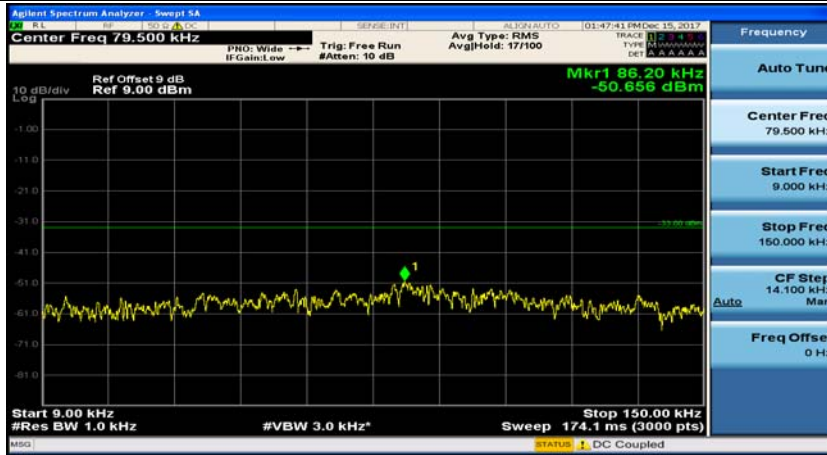


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

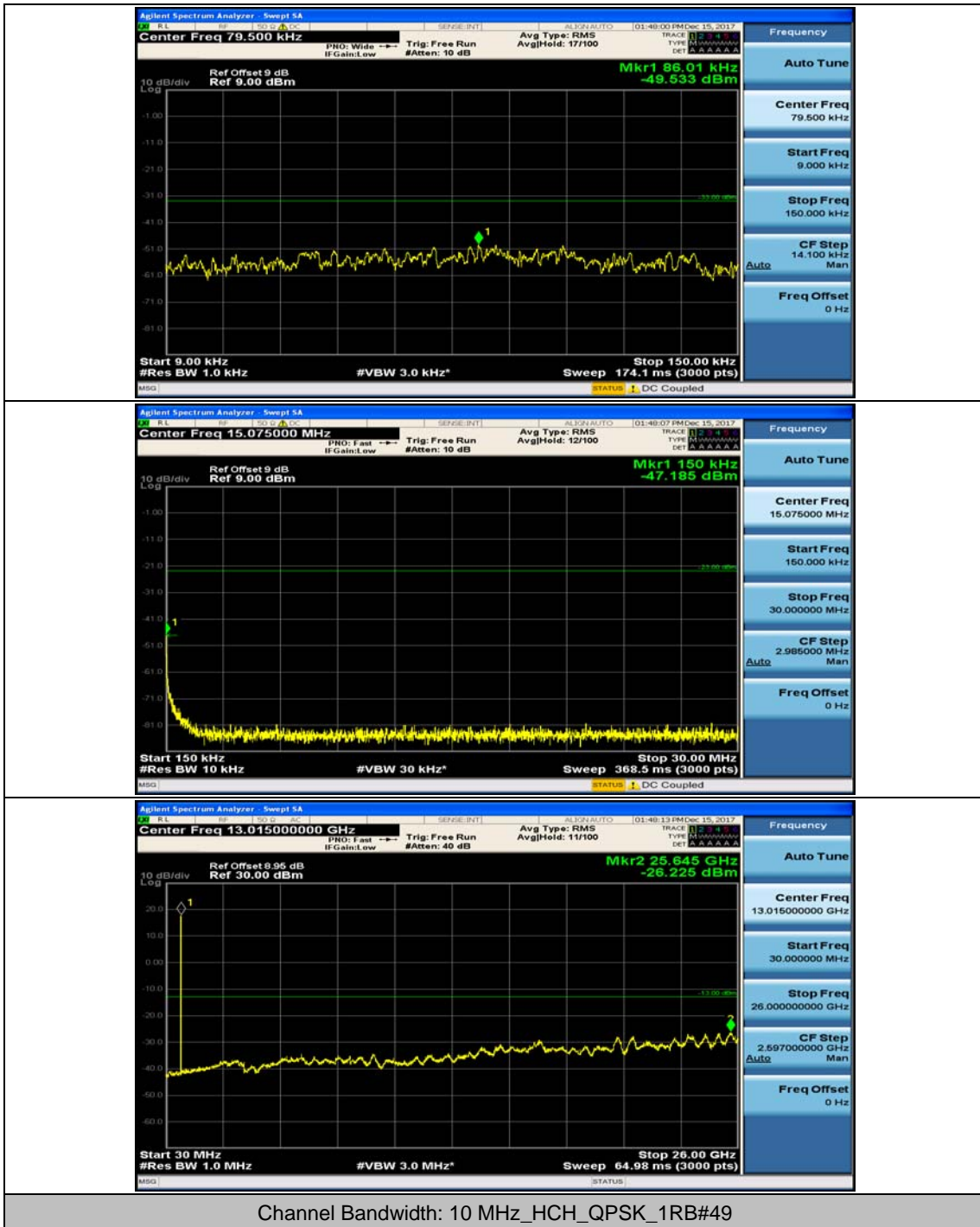


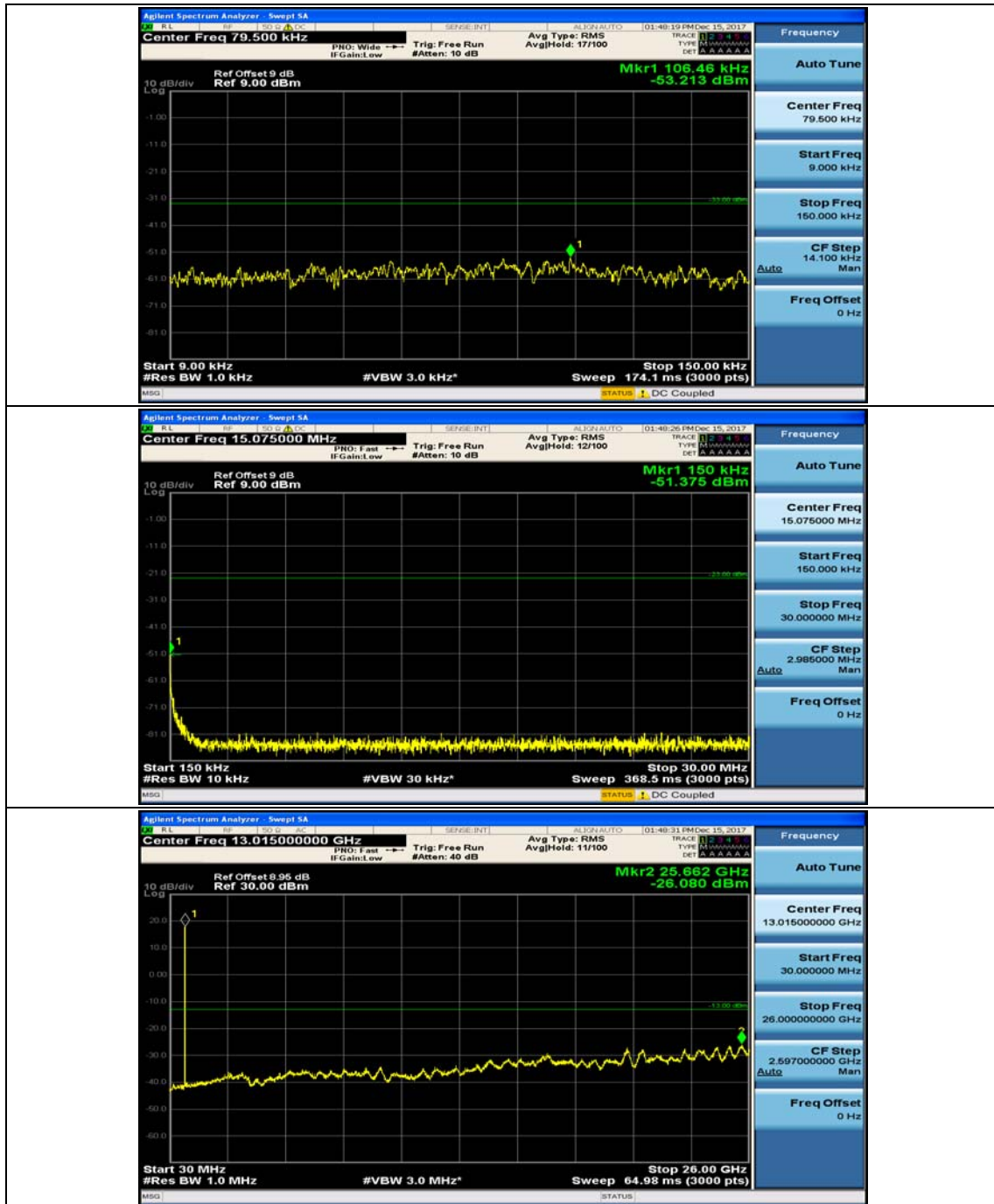


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0

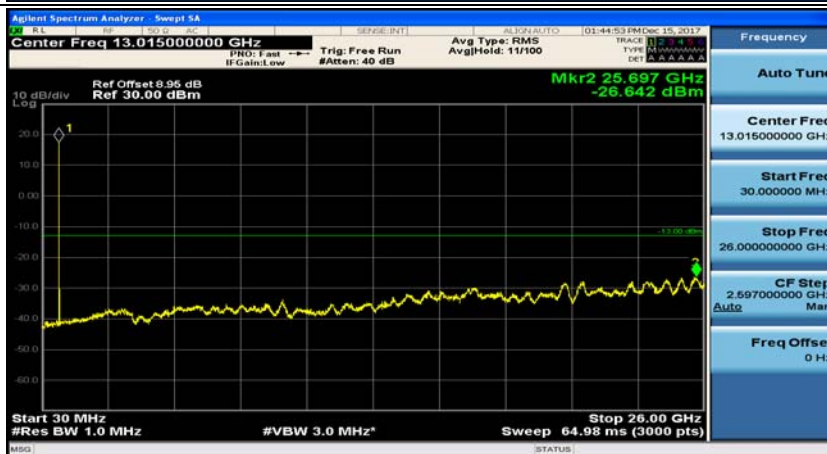
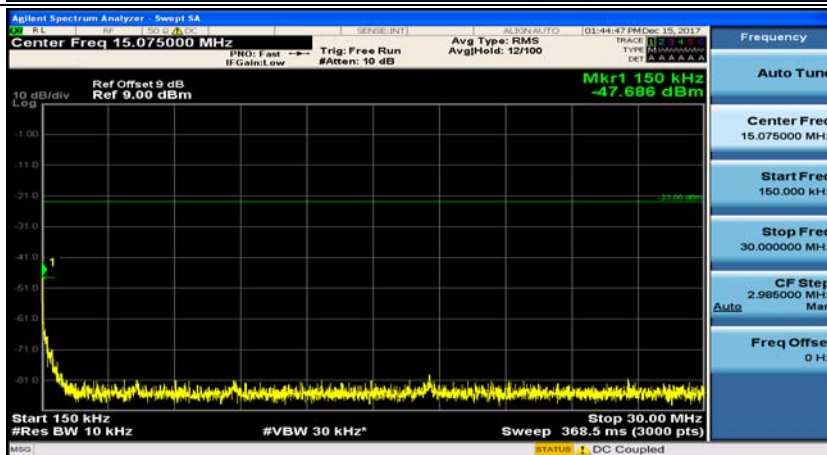
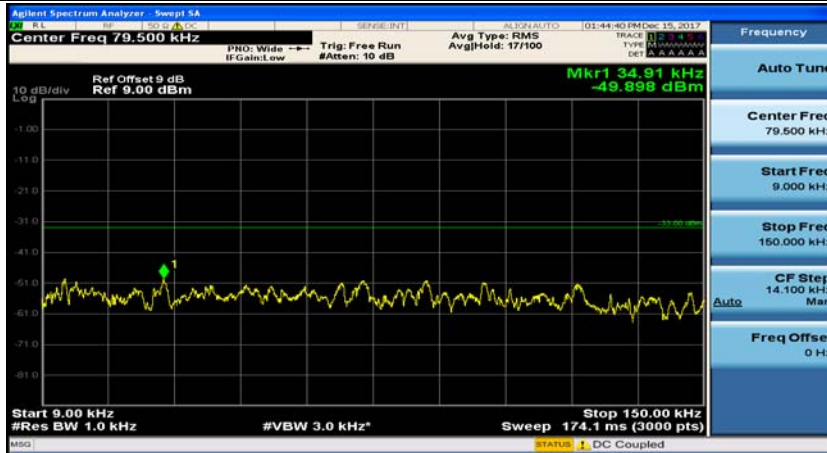


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

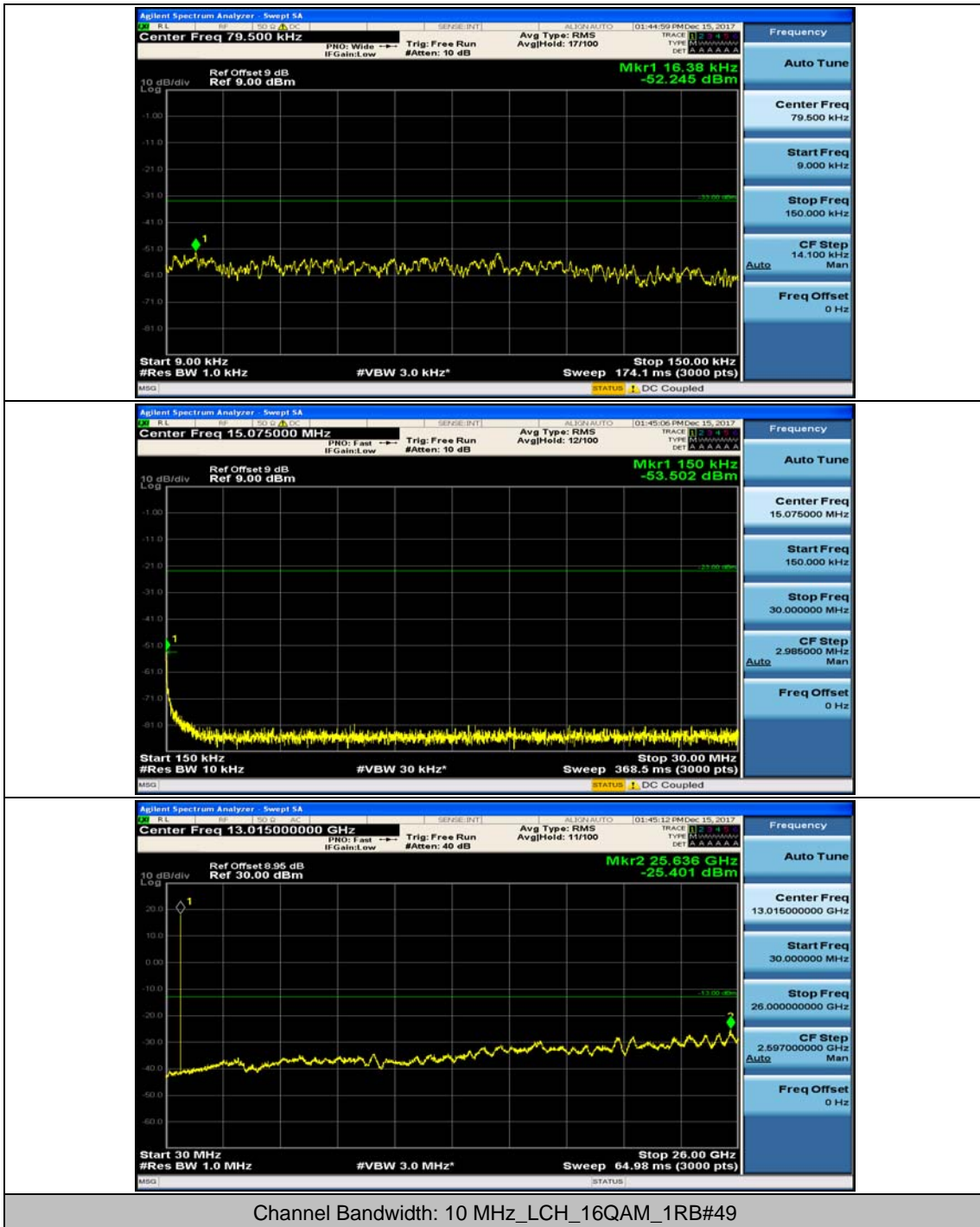


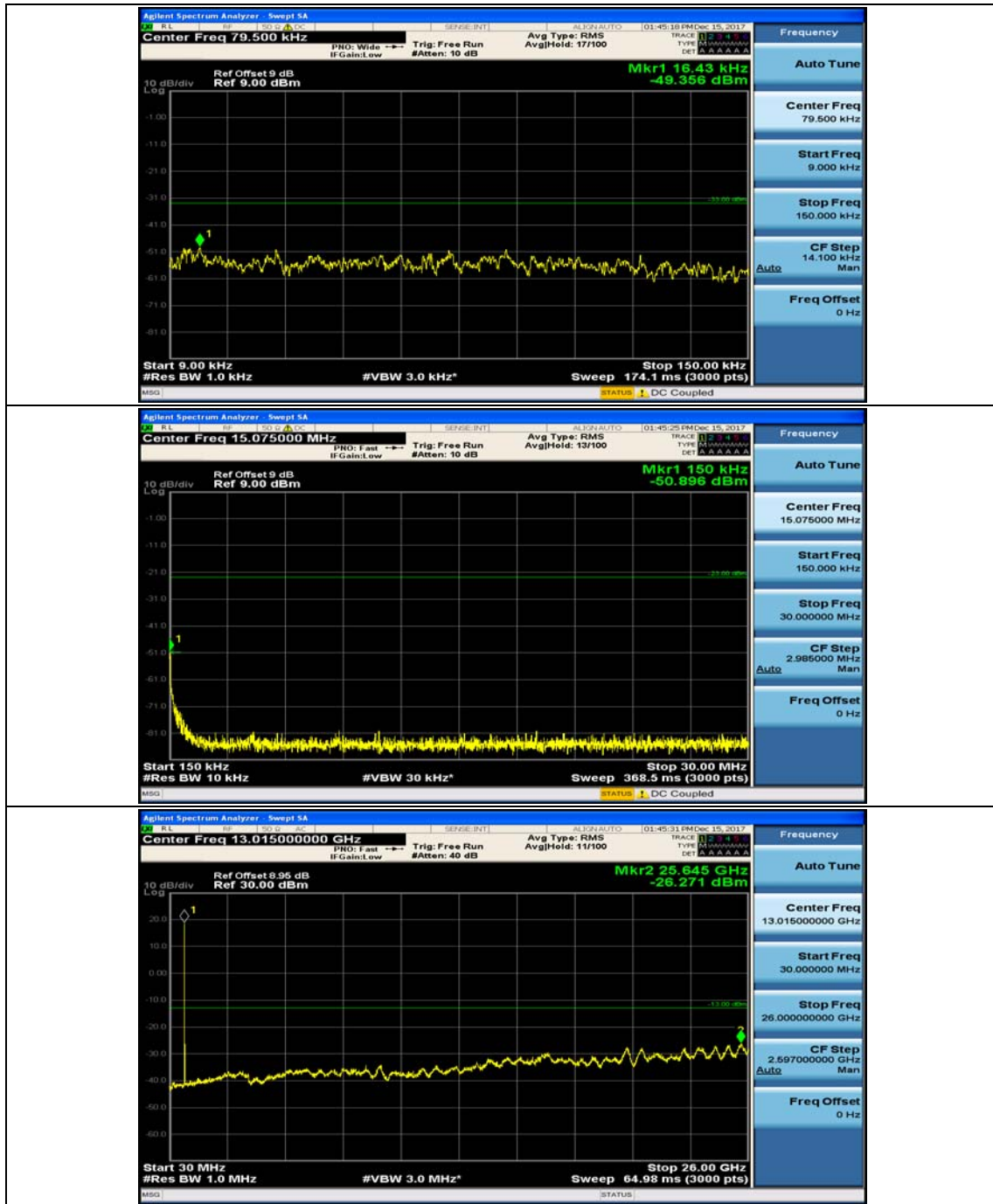


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0

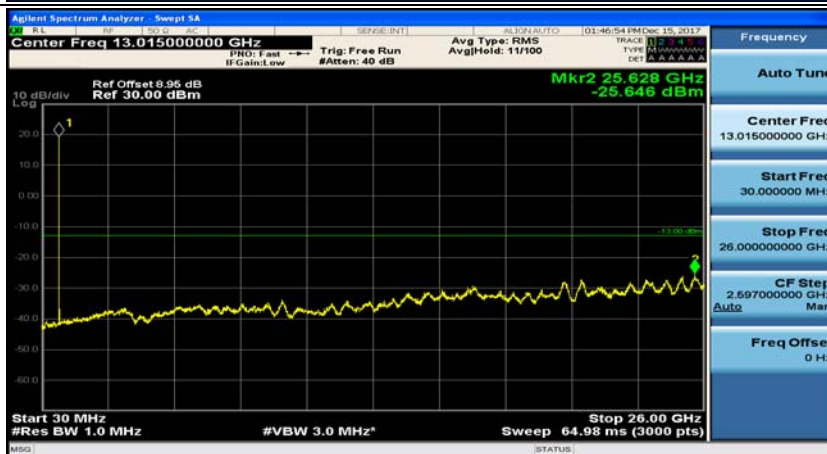
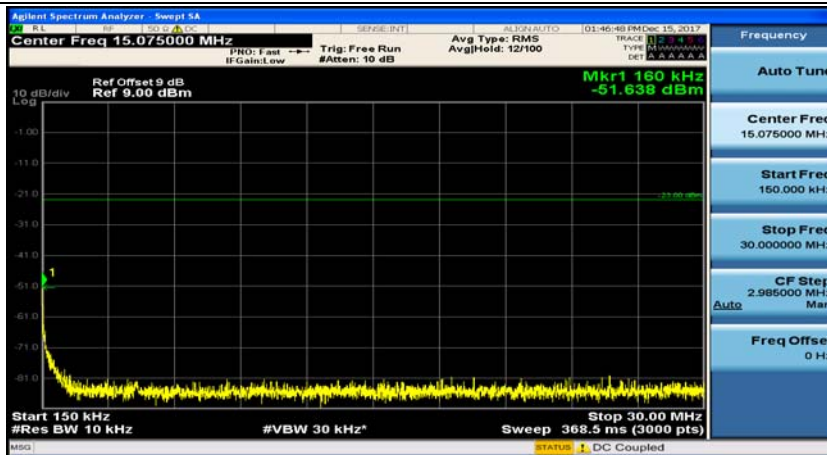


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

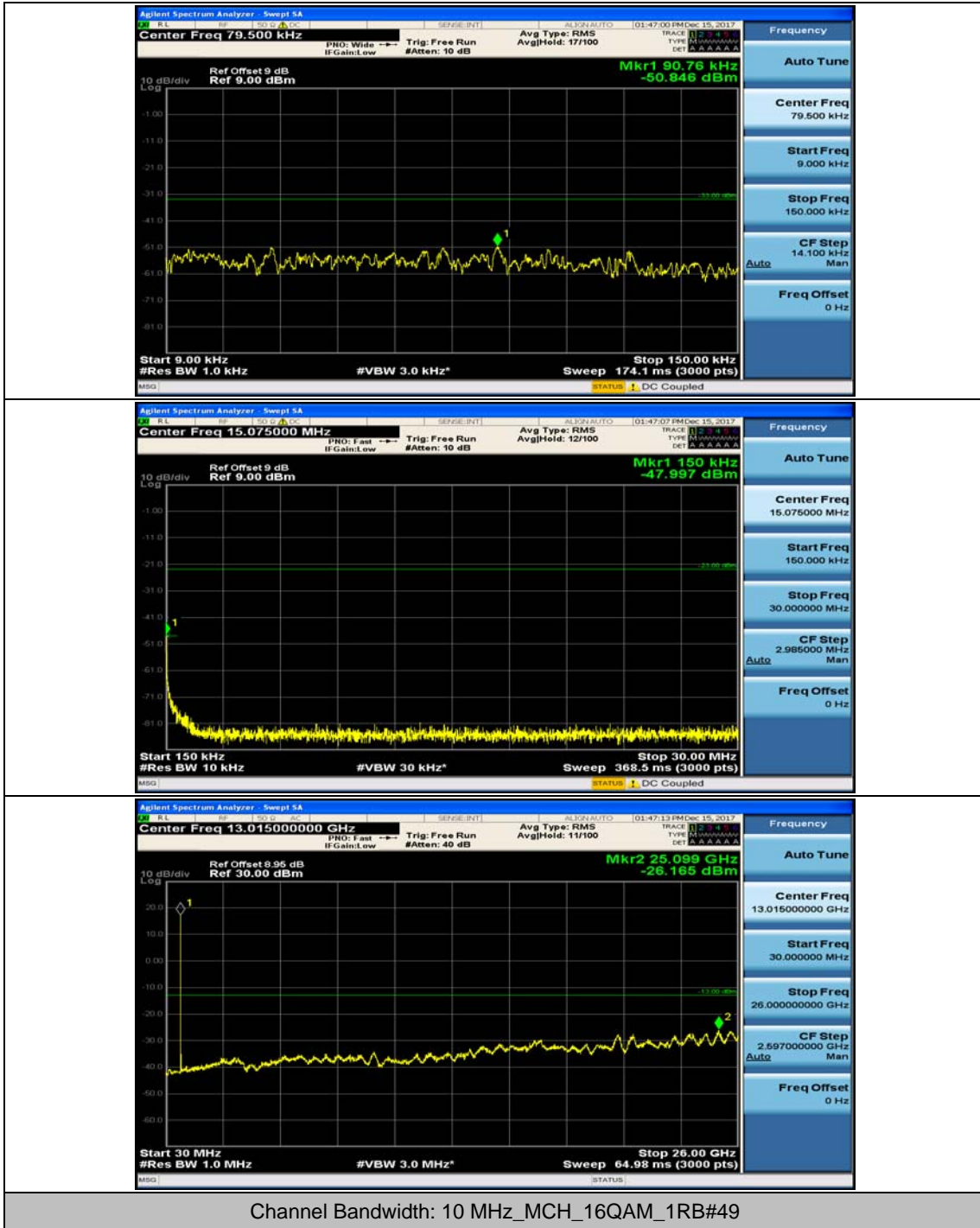


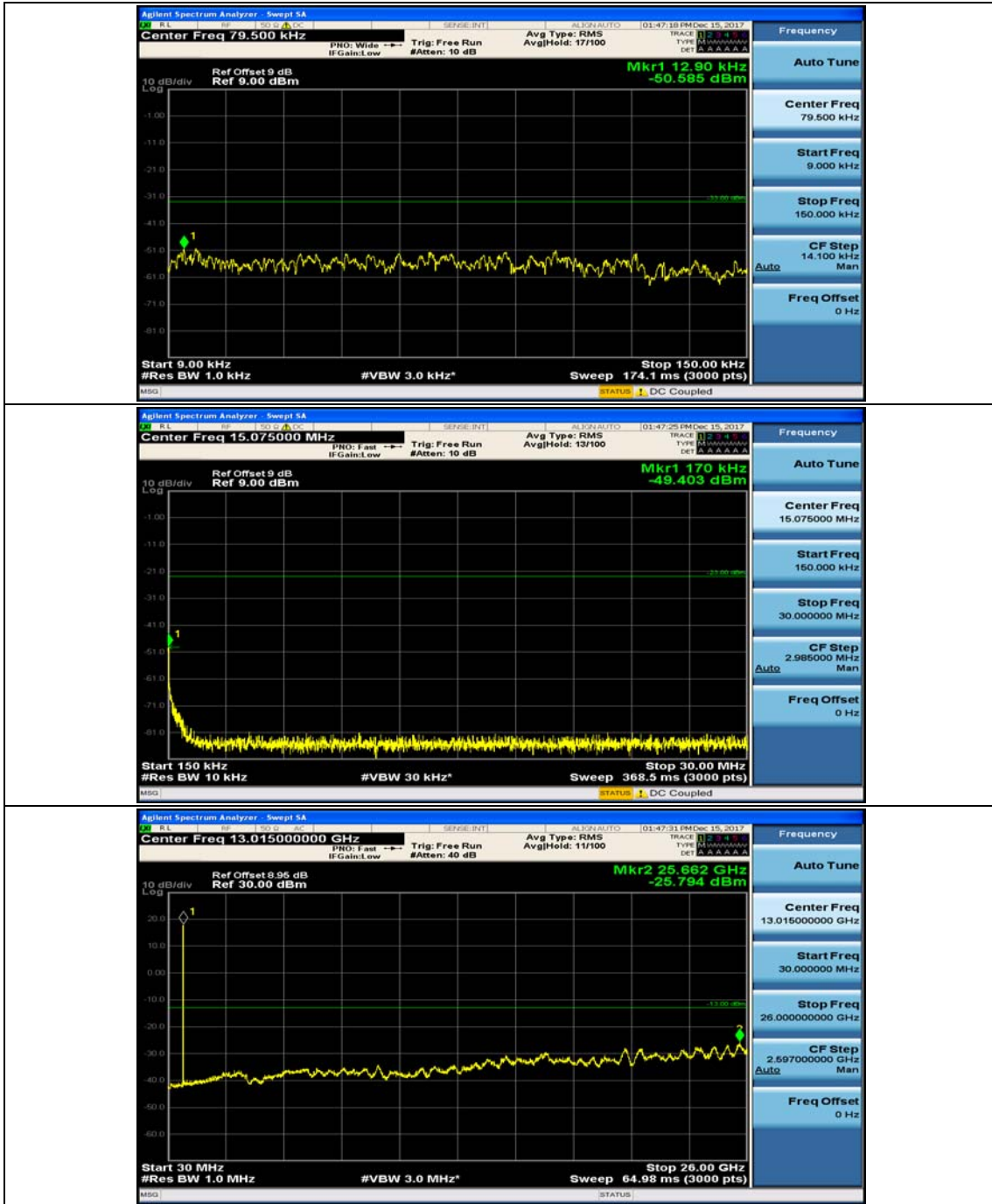


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

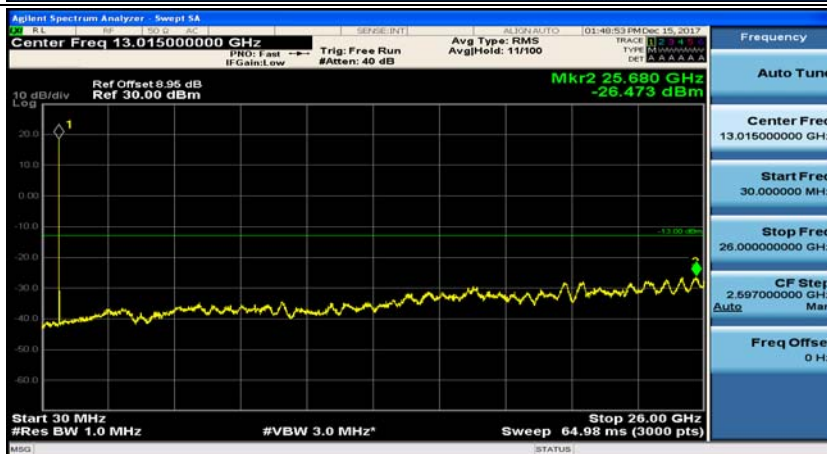
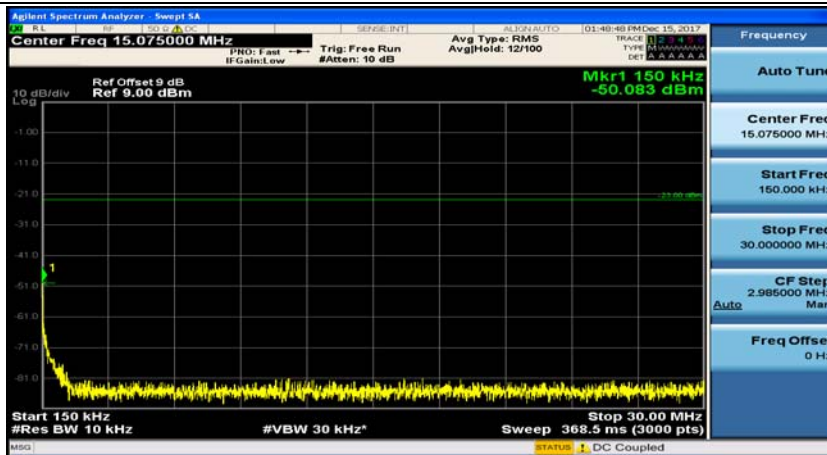


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

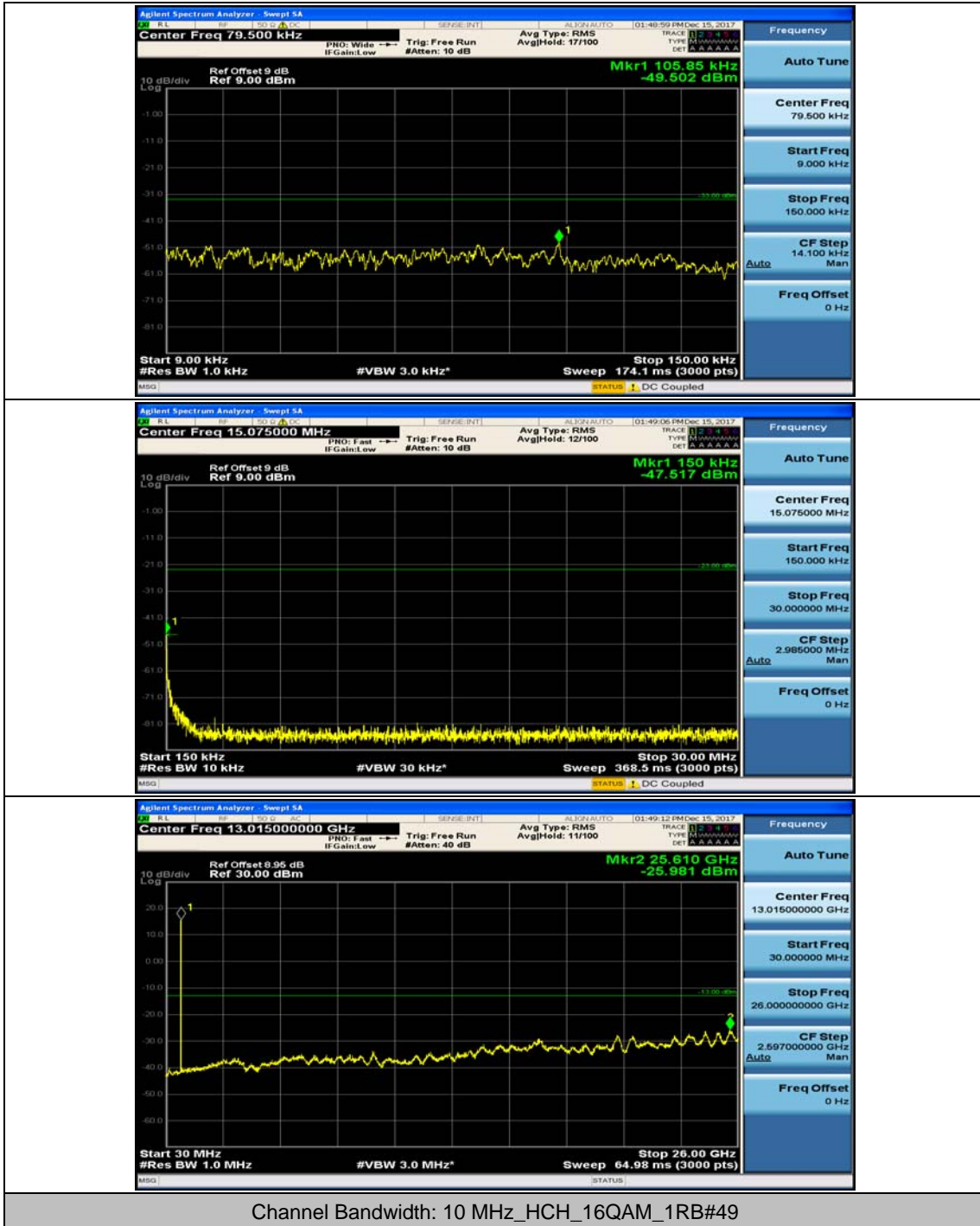


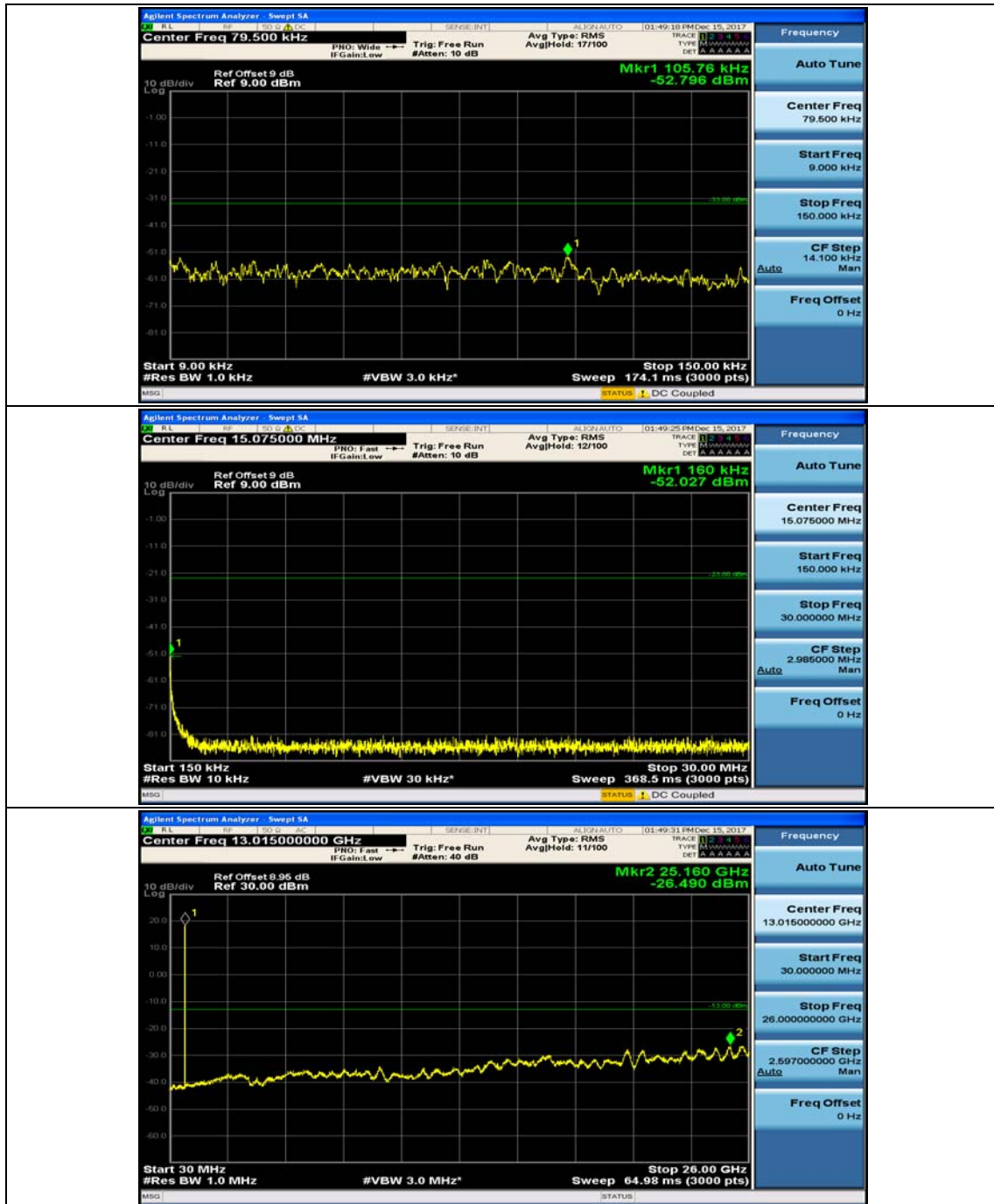


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



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	3.82	0.005459	± 2.5	PASS
		VN	TN	1.79	0.002558	± 2.5	PASS
		VH	TN	0.26	0.000372	± 2.5	PASS
	MCH	VL	TN	-0.08	-0.000113	± 2.5	PASS
		VN	TN	2.73	0.003859	± 2.5	PASS
		VH	TN	0.26	0.000367	± 2.5	PASS
	HCH	VL	TN	-0.38	-0.000531	± 2.5	PASS
		VN	TN	4.87	0.006808	± 2.5	PASS
		VH	TN	0.03	0.000042	± 2.5	PASS
16QAM	LCH	VL	TN	2.59	0.003702	± 2.5	PASS
		VN	TN	3	0.004288	± 2.5	PASS
		VH	TN	0.65	0.000929	± 2.5	PASS
	MCH	VL	TN	-0.84	-0.001187	± 2.5	PASS
		VN	TN	3.76	0.005314	± 2.5	PASS
		VH	TN	-1.75	-0.002473	± 2.5	PASS
	HCH	VL	TN	-0.35	-0.000489	± 2.5	PASS
		VN	TN	-0.14	-0.000196	± 2.5	PASS
		VH	TN	3.48	0.004865	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.73	-0.002472	± 2.5	PASS
		VN	-20	4.75	0.006789	± 2.5	PASS
		VN	-10	0.81	0.001158	± 2.5	PASS
		VN	0	4.73	0.006760	± 2.5	PASS
		VN	10	2.83	0.004045	± 2.5	PASS
		VN	20	1.12	0.001601	± 2.5	PASS
		VN	30	4.65	0.006646	± 2.5	PASS
		VN	40	-1	-0.001429	± 2.5	PASS
		VN	50	4.83	0.006903	± 2.5	PASS
	MCH	VN	-30	-1.34	-0.001894	± 2.5	PASS
		VN	-20	2.54	0.003590	± 2.5	PASS
		VN	-10	0.51	0.000721	± 2.5	PASS

		VN	0	-1.02	-0.001442	± 2.5	PASS		
		VN	10	4.06	0.005739	± 2.5	PASS		
		VN	20	1.7	0.002403	± 2.5	PASS		
		VN	30	-0.82	-0.001159	± 2.5	PASS		
		VN	40	3.28	0.004636	± 2.5	PASS		
		VN	50	2.13	0.003011	± 2.5	PASS		
	HCH	VN	-30	-1.78	-0.002488	± 2.5	PASS		
		VN	-20	4.97	0.006948	± 2.5	PASS		
		VN	-10	0.41	0.000573	± 2.5	PASS		
		VN	0	3.09	0.004320	± 2.5	PASS		
		VN	10	3.18	0.004446	± 2.5	PASS		
		VN	20	4.31	0.006025	± 2.5	PASS		
		VN	30	-0.64	-0.000895	± 2.5	PASS		
		VN	40	1.52	0.002125	± 2.5	PASS		
		VN	50	1.41	0.001971	± 2.5	PASS		
		16QAM	LCH	VN	-30	1.17	0.001672	± 2.5	PASS
				VN	-20	-1.23	-0.001758	± 2.5	PASS
				VN	-10	3.92	0.005602	± 2.5	PASS
VN	0			1.09	0.001558	± 2.5	PASS		
VN	10			-1.58	-0.002258	± 2.5	PASS		
VN	20			-0.67	-0.000958	± 2.5	PASS		
VN	30			-1.09	-0.001558	± 2.5	PASS		
VN	40			3.91	0.005588	± 2.5	PASS		
VN	50			-1.69	-0.002415	± 2.5	PASS		
MCH	VN		-30	3.71	0.005244	± 2.5	PASS		
	VN		-20	3.42	0.004834	± 2.5	PASS		
	VN		-10	0.27	0.000382	± 2.5	PASS		
	VN		0	-1.44	-0.002035	± 2.5	PASS		
	VN		10	2.2	0.003110	± 2.5	PASS		
	VN		20	3.65	0.005159	± 2.5	PASS		
	VN		30	1.04	0.001470	± 2.5	PASS		
	VN		40	1.01	0.001428	± 2.5	PASS		
	VN		50	2.27	0.003208	± 2.5	PASS		
HCH	VN		-30	2.14	0.002992	± 2.5	PASS		
	VN		-20	-0.46	-0.000643	± 2.5	PASS		
	VN		-10	0.3	0.000419	± 2.5	PASS		
	VN		0	5	0.006990	± 2.5	PASS		
	VN		10	3.43	0.004795	± 2.5	PASS		
	VN		20	-0.3	-0.000419	± 2.5	PASS		
	VN		30	3.56	0.004977	± 2.5	PASS		
	VN		40	4.94	0.006906	± 2.5	PASS		

		VN	50	-1.73	-0.002419	± 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	3.39	0.004839	± 2.5	PASS
		VN	TN	1.82	0.002598	± 2.5	PASS
		VH	TN	4.4	0.006281	± 2.5	PASS
	MCH	VL	TN	1.17	0.001654	± 2.5	PASS
		VN	TN	4.88	0.006898	± 2.5	PASS
		VH	TN	1.92	0.002714	± 2.5	PASS
	HCH	VL	TN	0.39	0.000546	± 2.5	PASS
		VN	TN	2.59	0.003625	± 2.5	PASS
		VH	TN	-1.3	-0.001819	± 2.5	PASS
16QAM	LCH	VL	TN	3.36	0.004797	± 2.5	PASS
		VN	TN	-0.6	-0.000857	± 2.5	PASS
		VH	TN	1.45	0.002070	± 2.5	PASS
	MCH	VL	TN	2.13	0.003011	± 2.5	PASS
		VN	TN	1.99	0.002813	± 2.5	PASS
		VH	TN	-1.93	-0.002728	± 2.5	PASS
	HCH	VL	TN	-1.02	-0.001428	± 2.5	PASS
		VN	TN	0.38	0.000532	± 2.5	PASS
		VH	TN	-0.99	-0.001386	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.71	-0.001014	± 2.5	PASS
		VN	-20	2.11	0.003012	± 2.5	PASS
		VN	-10	-1.2	-0.001713	± 2.5	PASS
		VN	0	1.64	0.002341	± 2.5	PASS
		VN	10	2.15	0.003069	± 2.5	PASS
		VN	20	2.9	0.004140	± 2.5	PASS
		VN	30	-0.16	-0.000228	± 2.5	PASS
		VN	40	2.37	0.003383	± 2.5	PASS
		VN	50	0.27	0.000385	± 2.5	PASS
	MCH	VN	-30	1.66	0.002346	± 2.5	PASS
		VN	-20	-0.23	-0.000325	± 2.5	PASS
		VN	-10	4.37	0.006177	± 2.5	PASS
		VN	0	1.41	0.001993	± 2.5	PASS

		VN	10	1.53	0.002163	± 2.5	PASS
		VN	20	0.43	0.000608	± 2.5	PASS
		VN	30	2.77	0.003915	± 2.5	PASS
		VN	40	3.51	0.004961	± 2.5	PASS
		VN	50	1.58	0.002233	± 2.5	PASS
	HCH	VN	-30	1.79	0.002505	± 2.5	PASS
		VN	-20	2.62	0.003667	± 2.5	PASS
		VN	-10	3.13	0.004381	± 2.5	PASS
		VN	0	3.15	0.004409	± 2.5	PASS
		VN	10	-0.51	-0.000714	± 2.5	PASS
		VN	20	3.98	0.005570	± 2.5	PASS
		VN	30	3.37	0.004717	± 2.5	PASS
		VN	40	2.5	0.003499	± 2.5	PASS
		VN	50	1.11	0.001554	± 2.5	PASS
		16QAM	LCH	VN	-30	-0.44	-0.000628
VN	-20			-0.58	-0.000828	± 2.5	PASS
VN	-10			0.34	0.000485	± 2.5	PASS
VN	0			0.39	0.000557	± 2.5	PASS
VN	10			3.08	0.004397	± 2.5	PASS
VN	20			1.01	0.001442	± 2.5	PASS
VN	30			-1.43	-0.002041	± 2.5	PASS
VN	40			-0.35	-0.000500	± 2.5	PASS
VN	50			3.67	0.005239	± 2.5	PASS
MCH	VN		-30	2.49	0.003519	± 2.5	PASS
	VN		-20	0.61	0.000862	± 2.5	PASS
	VN		-10	-1.51	-0.002134	± 2.5	PASS
	VN		0	1.98	0.002799	± 2.5	PASS
	VN		10	-1.92	-0.002714	± 2.5	PASS
	VN		20	-1.55	-0.002191	± 2.5	PASS
	VN		30	4.39	0.006205	± 2.5	PASS
	VN		40	2.4	0.003392	± 2.5	PASS
	VN		50	1.28	0.001809	± 2.5	PASS
HCH	VN		-30	-1.32	-0.001847	± 2.5	PASS
	VN		-20	1.34	0.001875	± 2.5	PASS
	VN		-10	-1.06	-0.001484	± 2.5	PASS
	VN		0	2.88	0.004031	± 2.5	PASS
	VN		10	-0.72	-0.001008	± 2.5	PASS
	VN		20	4.27	0.005976	± 2.5	PASS
	VN		30	2.54	0.003555	± 2.5	PASS
	VN		40	1.21	0.001693	± 2.5	PASS
	VN		50	1.63	0.002281	± 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	0.57	0.000813	± 2.5	PASS
		VN	TN	3.84	0.005474	± 2.5	PASS
		VH	TN	0.65	0.000927	± 2.5	PASS
	MCH	VL	TN	2.46	0.003477	± 2.5	PASS
		VN	TN	4.32	0.006106	± 2.5	PASS
		VH	TN	2.49	0.003519	± 2.5	PASS
	HCH	VL	TN	1.07	0.001500	± 2.5	PASS
		VN	TN	3.6	0.005046	± 2.5	PASS
		VH	TN	-1.37	-0.001920	± 2.5	PASS
16QAM	LCH	VL	TN	2.33	0.003321	± 2.5	PASS
		VN	TN	0.61	0.000870	± 2.5	PASS
		VH	TN	4.39	0.006258	± 2.5	PASS
	MCH	VL	TN	-1.74	-0.002459	± 2.5	PASS
		VN	TN	3.39	0.004792	± 2.5	PASS
		VH	TN	2.67	0.003774	± 2.5	PASS
	HCH	VL	TN	3.98	0.005578	± 2.5	PASS
		VN	TN	3.56	0.004989	± 2.5	PASS
		VH	TN	4.53	0.006349	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.92	0.005588	± 2.5	PASS
		VN	-20	2.54	0.003621	± 2.5	PASS
		VN	-10	1.76	0.002509	± 2.5	PASS
		VN	0	2.05	0.002922	± 2.5	PASS
		VN	10	1.91	0.002723	± 2.5	PASS
		VN	20	4.34	0.006187	± 2.5	PASS
		VN	30	-0.49	-0.000699	± 2.5	PASS
		VN	40	2.16	0.003079	± 2.5	PASS
		VN	50	-1.19	-0.001696	± 2.5	PASS
	MCH	VN	-30	0.58	0.000820	± 2.5	PASS
		VN	-20	4.71	0.006657	± 2.5	PASS
		VN	-10	-0.77	-0.001088	± 2.5	PASS
		VN	0	3.42	0.004834	± 2.5	PASS
		VN	10	3.34	0.004721	± 2.5	PASS
		VN	20	1.12	0.001583	± 2.5	PASS

		VN	30	2.46	0.003477	± 2.5	PASS
		VN	40	-1.43	-0.002021	± 2.5	PASS
		VN	50	0.17	0.000240	± 2.5	PASS
	HCH	VN	-30	0.66	0.000925	± 2.5	PASS
		VN	-20	3.08	0.004317	± 2.5	PASS
		VN	-10	-0.21	-0.000294	± 2.5	PASS
		VN	0	2.96	0.004149	± 2.5	PASS
		VN	10	4.63	0.006489	± 2.5	PASS
		VN	20	4.53	0.006349	± 2.5	PASS
		VN	30	1.08	0.001514	± 2.5	PASS
		VN	40	-0.06	-0.000084	± 2.5	PASS
		VN	50	-1.8	-0.002523	± 2.5	PASS
16QAM	LCH	VN	-30	1.52	0.002167	± 2.5	PASS
		VN	-20	3.89	0.005545	± 2.5	PASS
		VN	-10	0.98	0.001397	± 2.5	PASS
		VN	0	4.54	0.006472	± 2.5	PASS
		VN	10	-0.71	-0.001012	± 2.5	PASS
		VN	20	-0.08	-0.000114	± 2.5	PASS
		VN	30	-1.49	-0.002124	± 2.5	PASS
		VN	40	1.02	0.001454	± 2.5	PASS
		VN	50	2.05	0.002922	± 2.5	PASS
	MCH	VN	-30	-1.69	-0.002389	± 2.5	PASS
		VN	-20	-1.09	-0.001541	± 2.5	PASS
		VN	-10	-1.17	-0.001654	± 2.5	PASS
		VN	0	3.78	0.005343	± 2.5	PASS
		VN	10	1.15	0.001625	± 2.5	PASS
		VN	20	3.35	0.004735	± 2.5	PASS
		VN	30	4.51	0.006375	± 2.5	PASS
		VN	40	1.97	0.002784	± 2.5	PASS
		VN	50	3.06	0.004325	± 2.5	PASS
	HCH	VN	-30	1.32	0.001850	± 2.5	PASS
		VN	-20	4.24	0.005943	± 2.5	PASS
		VN	-10	1.25	0.001752	± 2.5	PASS
		VN	0	3.41	0.004779	± 2.5	PASS
		VN	10	-0.06	-0.000084	± 2.5	PASS
		VN	20	-0.23	-0.000322	± 2.5	PASS
		VN	30	-0.73	-0.001023	± 2.5	PASS
		VN	40	-1.28	-0.001794	± 2.5	PASS
		VN	50	1.27	0.001780	± 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	3.48	0.004943	± 2.5	PASS
		VN	TN	-1.5	-0.002131	± 2.5	PASS
		VH	TN	-0.77	-0.001094	± 2.5	PASS
	MCH	VL	TN	3.77	0.005329	± 2.5	PASS
		VN	TN	2.54	0.003590	± 2.5	PASS
		VH	TN	-0.47	-0.000664	± 2.5	PASS
	HCH	VL	TN	2.28	0.003207	± 2.5	PASS
		VN	TN	2.54	0.003572	± 2.5	PASS
		VH	TN	-0.25	-0.000352	± 2.5	PASS
16QAM	LCH	VL	TN	4.45	0.006321	± 2.5	PASS
		VN	TN	3.53	0.005014	± 2.5	PASS
		VH	TN	2.03	0.002884	± 2.5	PASS
	MCH	VL	TN	-1.34	-0.001894	± 2.5	PASS
		VN	TN	1.93	0.002728	± 2.5	PASS
		VH	TN	-1.01	-0.001428	± 2.5	PASS
	HCH	VL	TN	-1.54	-0.002166	± 2.5	PASS
		VN	TN	-0.3	-0.000422	± 2.5	PASS
		VH	TN	1.98	0.002785	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.43	-0.002031	± 2.5	PASS
		VN	-20	4.45	0.006321	± 2.5	PASS
		VN	-10	0.13	0.000185	± 2.5	PASS
		VN	0	1.95	0.002770	± 2.5	PASS
		VN	10	-0.79	-0.001122	± 2.5	PASS
		VN	20	1.72	0.002443	± 2.5	PASS
		VN	30	1.4	0.001989	± 2.5	PASS
		VN	40	-1.84	-0.002614	± 2.5	PASS
		VN	50	3.74	0.005313	± 2.5	PASS
	MCH	VN	-30	-0.7	-0.000989	± 2.5	PASS
		VN	-20	-0.54	-0.000763	± 2.5	PASS
		VN	-10	-0.02	-0.000028	± 2.5	PASS
		VN	0	2.73	0.003859	± 2.5	PASS
		VN	10	0.02	0.000028	± 2.5	PASS
		VN	20	1.44	0.002035	± 2.5	PASS

		VN	30	2.87	0.004057	± 2.5	PASS
		VN	40	-0.78	-0.001102	± 2.5	PASS
		VN	50	0.71	0.001004	± 2.5	PASS
	HCH	VN	-30	4.97	0.006990	± 2.5	PASS
		VN	-20	-0.16	-0.000225	± 2.5	PASS
		VN	-10	0.38	0.000534	± 2.5	PASS
		VN	0	2.22	0.003122	± 2.5	PASS
		VN	10	2.1	0.002954	± 2.5	PASS
		VN	20	4.28	0.006020	± 2.5	PASS
		VN	30	-0.89	-0.001252	± 2.5	PASS
		VN	40	2.22	0.003122	± 2.5	PASS
		VN	50	2.2	0.003094	± 2.5	PASS
16QAM	LCH	VN	-30	0.12	0.000170	± 2.5	PASS
		VN	-20	-0.56	-0.000795	± 2.5	PASS
		VN	-10	2.4	0.003409	± 2.5	PASS
		VN	0	4.88	0.006932	± 2.5	PASS
		VN	10	3.04	0.004318	± 2.5	PASS
		VN	20	-1.79	-0.002543	± 2.5	PASS
		VN	30	-1.67	-0.002372	± 2.5	PASS
		VN	40	3.9	0.005540	± 2.5	PASS
	MCH	VN	50	1.78	0.002528	± 2.5	PASS
		VN	-30	0.71	0.001004	± 2.5	PASS
		VN	-20	0.76	0.001074	± 2.5	PASS
		VN	-10	3.35	0.004735	± 2.5	PASS
		VN	0	2.81	0.003972	± 2.5	PASS
		VN	10	-1.6	-0.002261	± 2.5	PASS
		VN	20	0.39	0.000551	± 2.5	PASS
		VN	30	4.3	0.006078	± 2.5	PASS
		VN	40	3.83	0.005413	± 2.5	PASS
		VN	50	0.01	0.000014	± 2.5	PASS
	HCH	VN	-30	-1.34	-0.001885	± 2.5	PASS
		VN	-20	0.11	0.000155	± 2.5	PASS
		VN	-10	4.91	0.006906	± 2.5	PASS
		VN	0	1.32	0.001857	± 2.5	PASS
		VN	10	3.64	0.005120	± 2.5	PASS
		VN	20	1.72	0.002419	± 2.5	PASS
VN		30	-0.65	-0.000914	± 2.5	PASS	
VN		40	-0.61	-0.000858	± 2.5	PASS	
VN	50	-0.63	-0.000886	± 2.5	PASS		