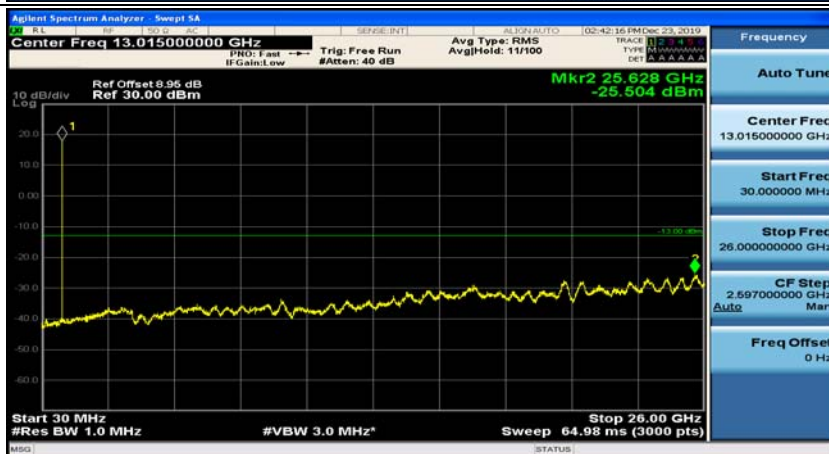
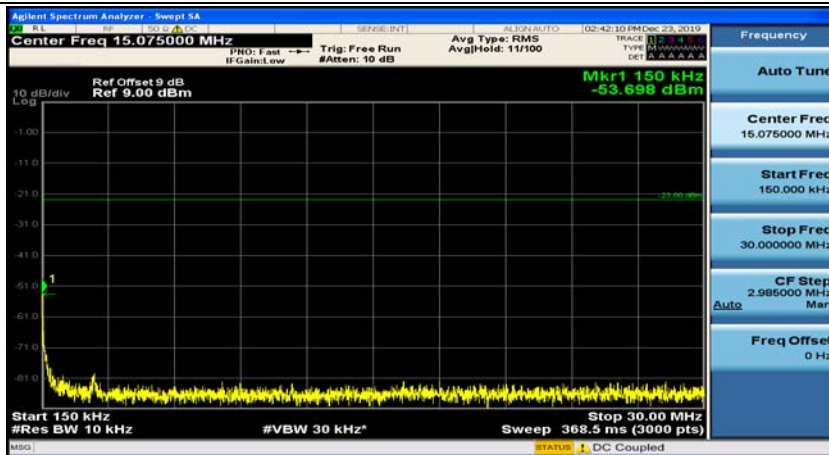
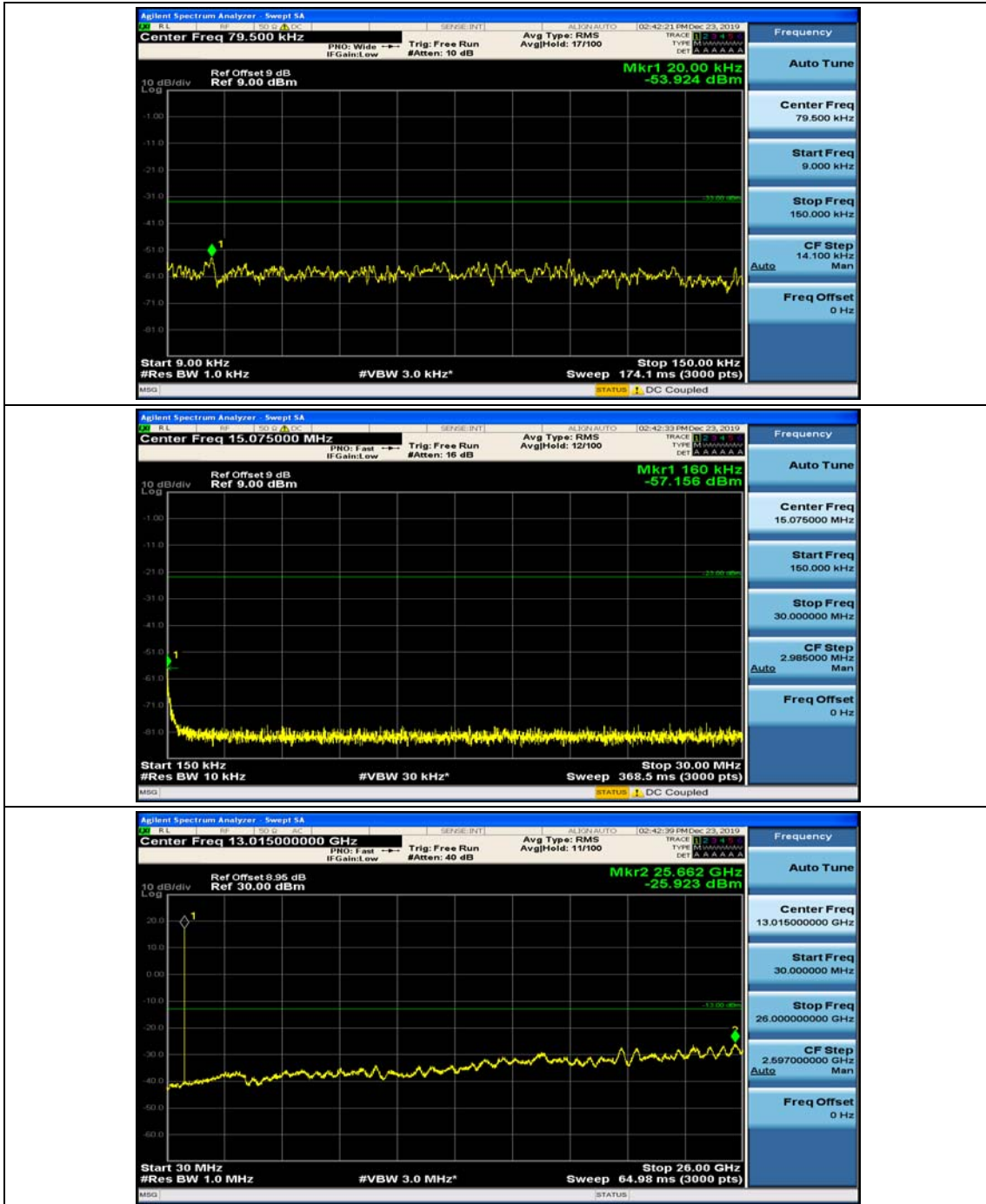


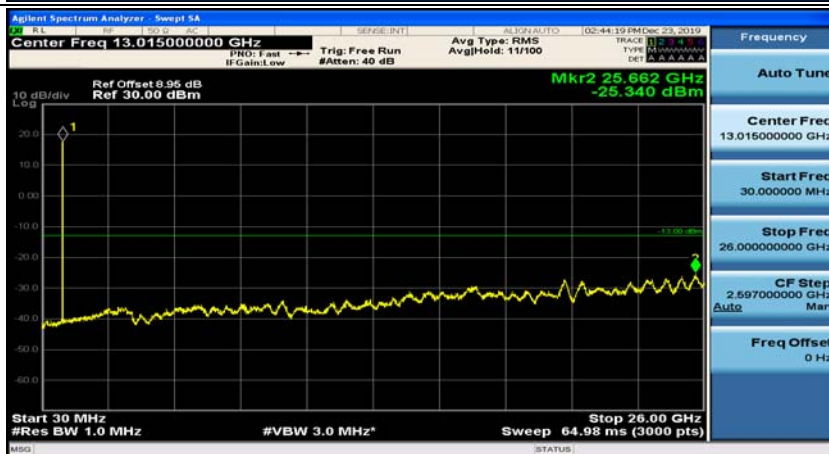
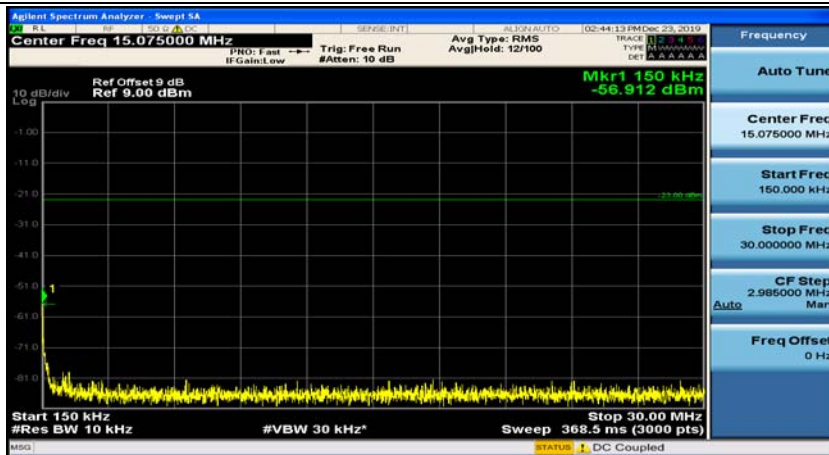
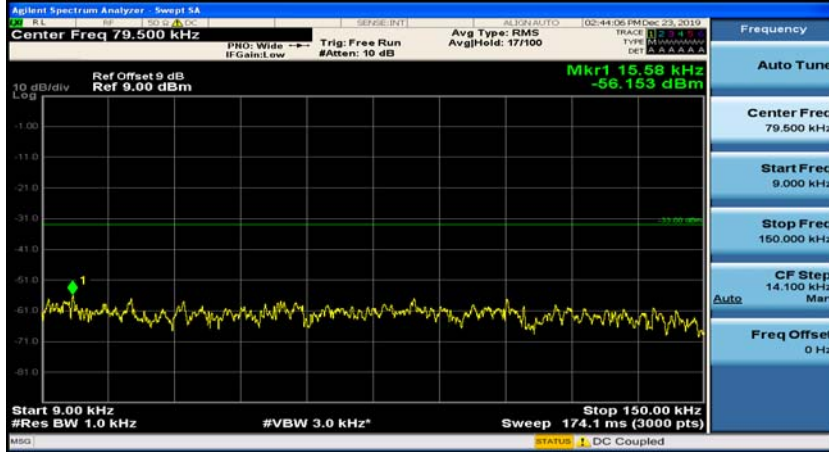
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



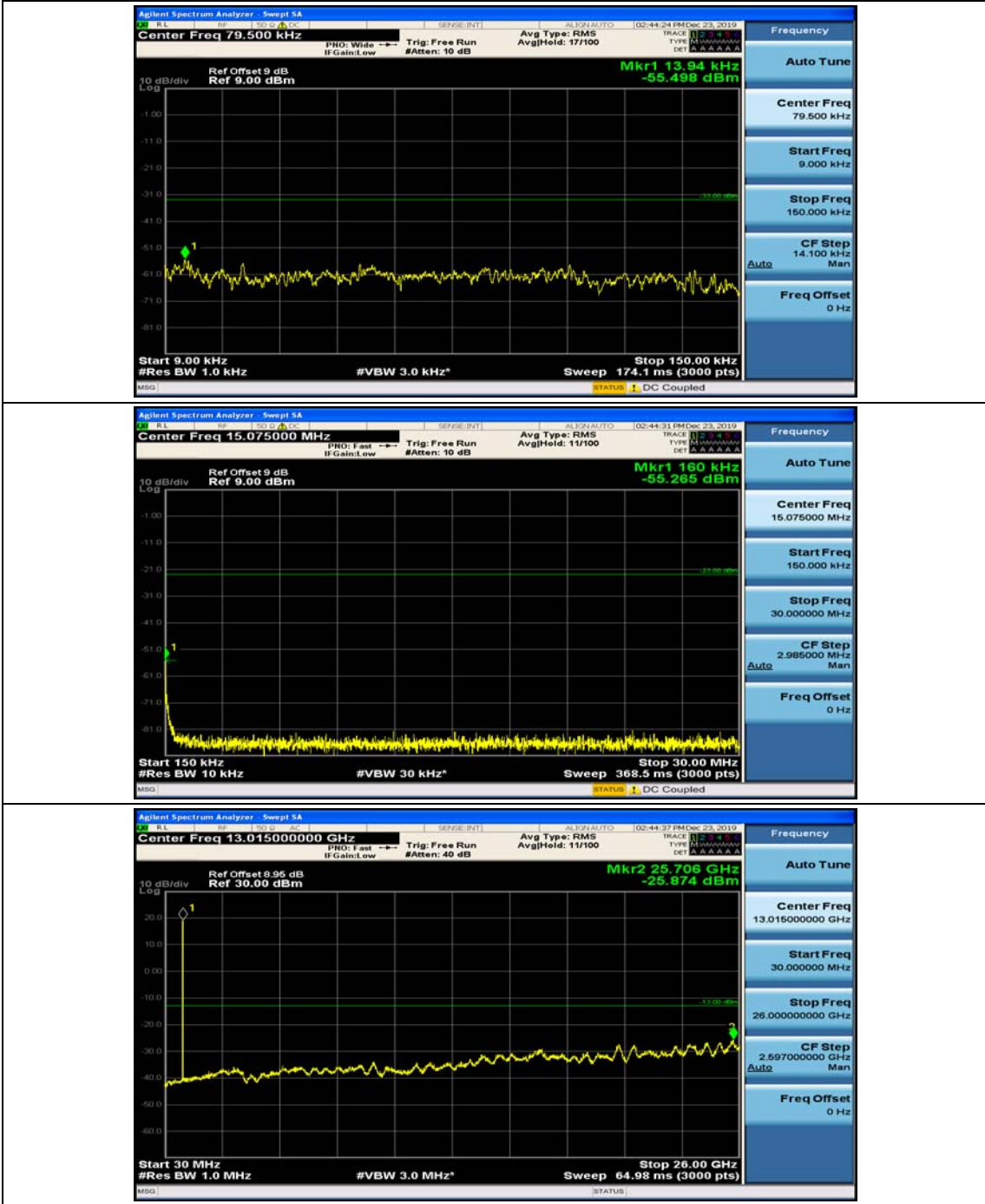
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7



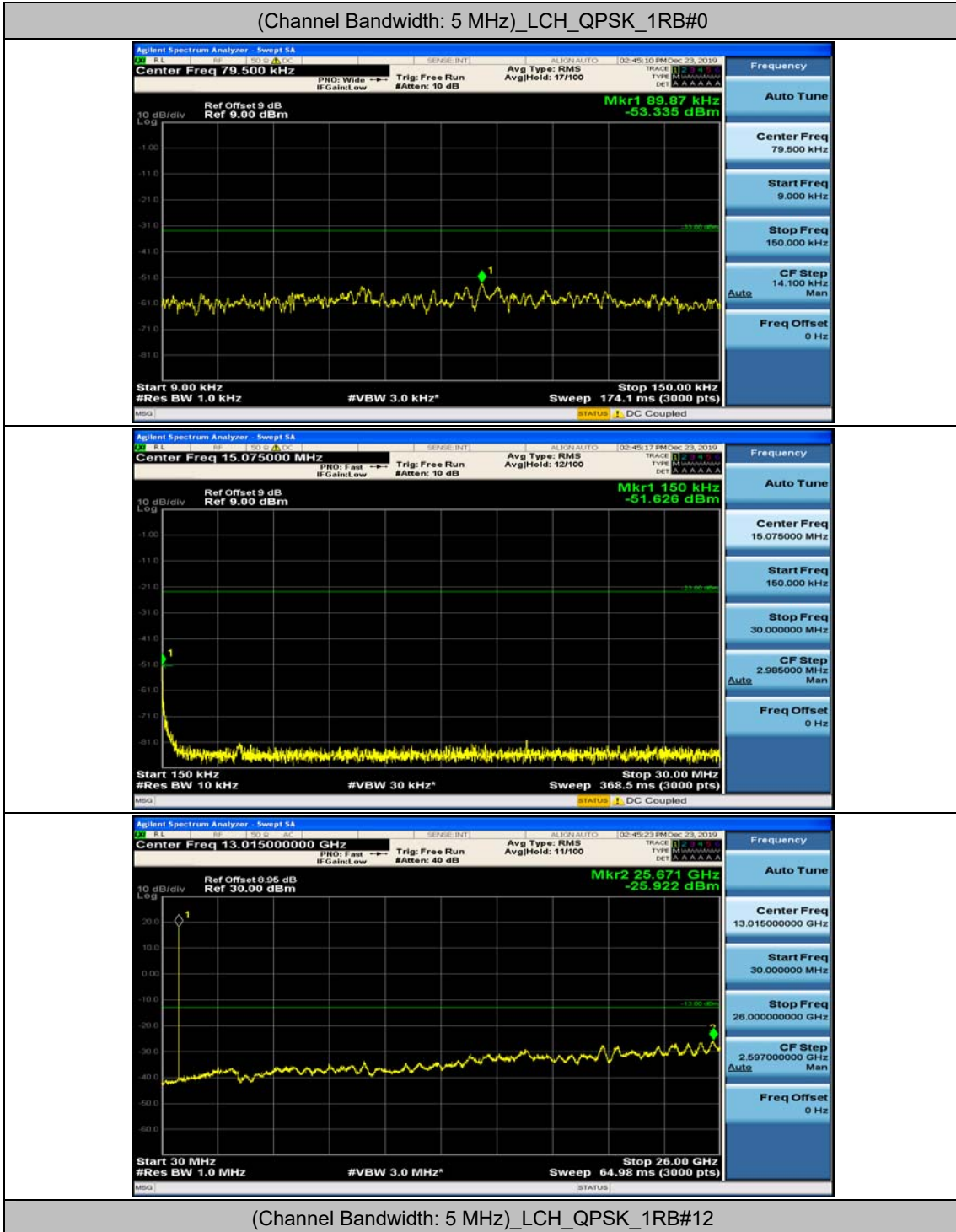
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

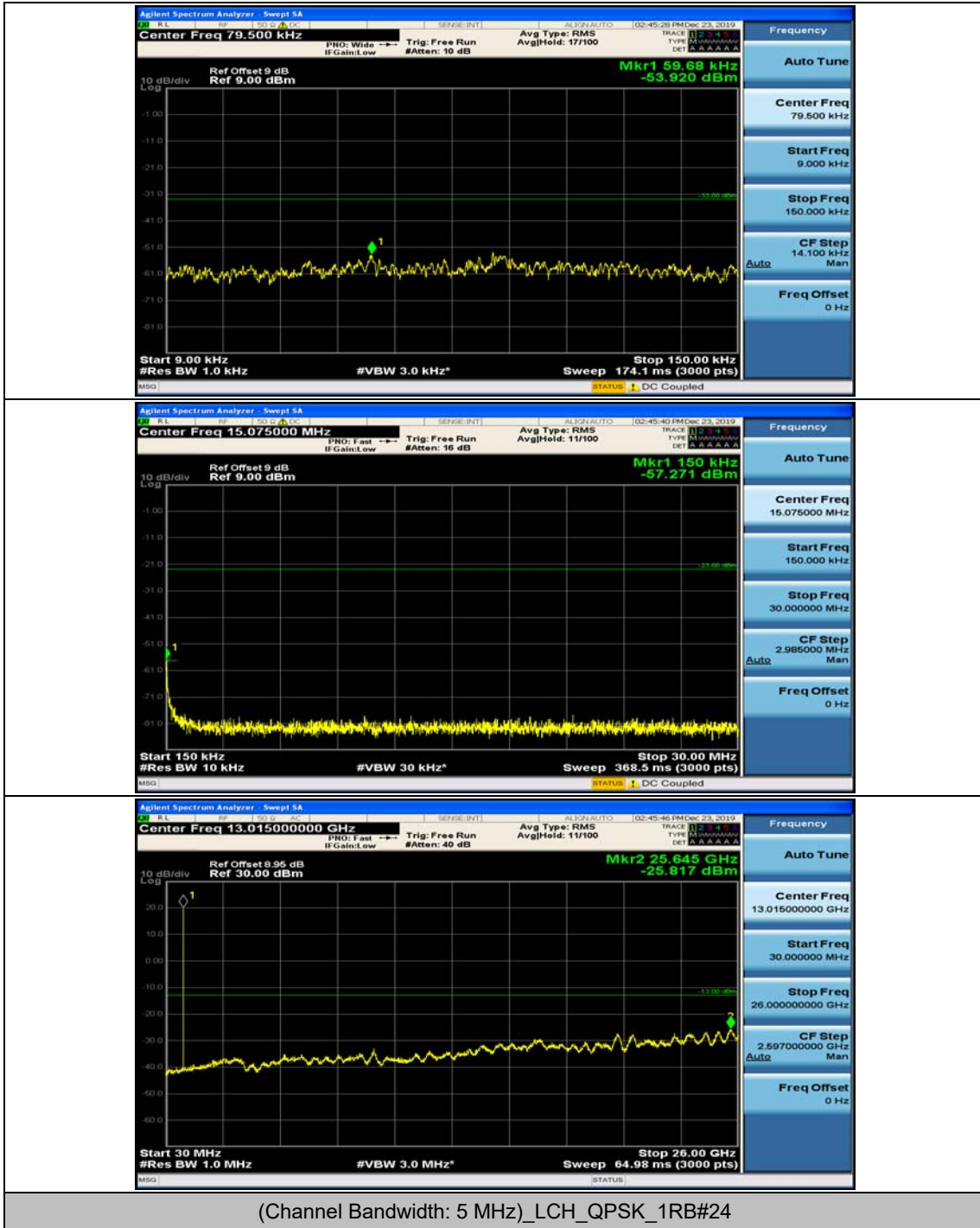


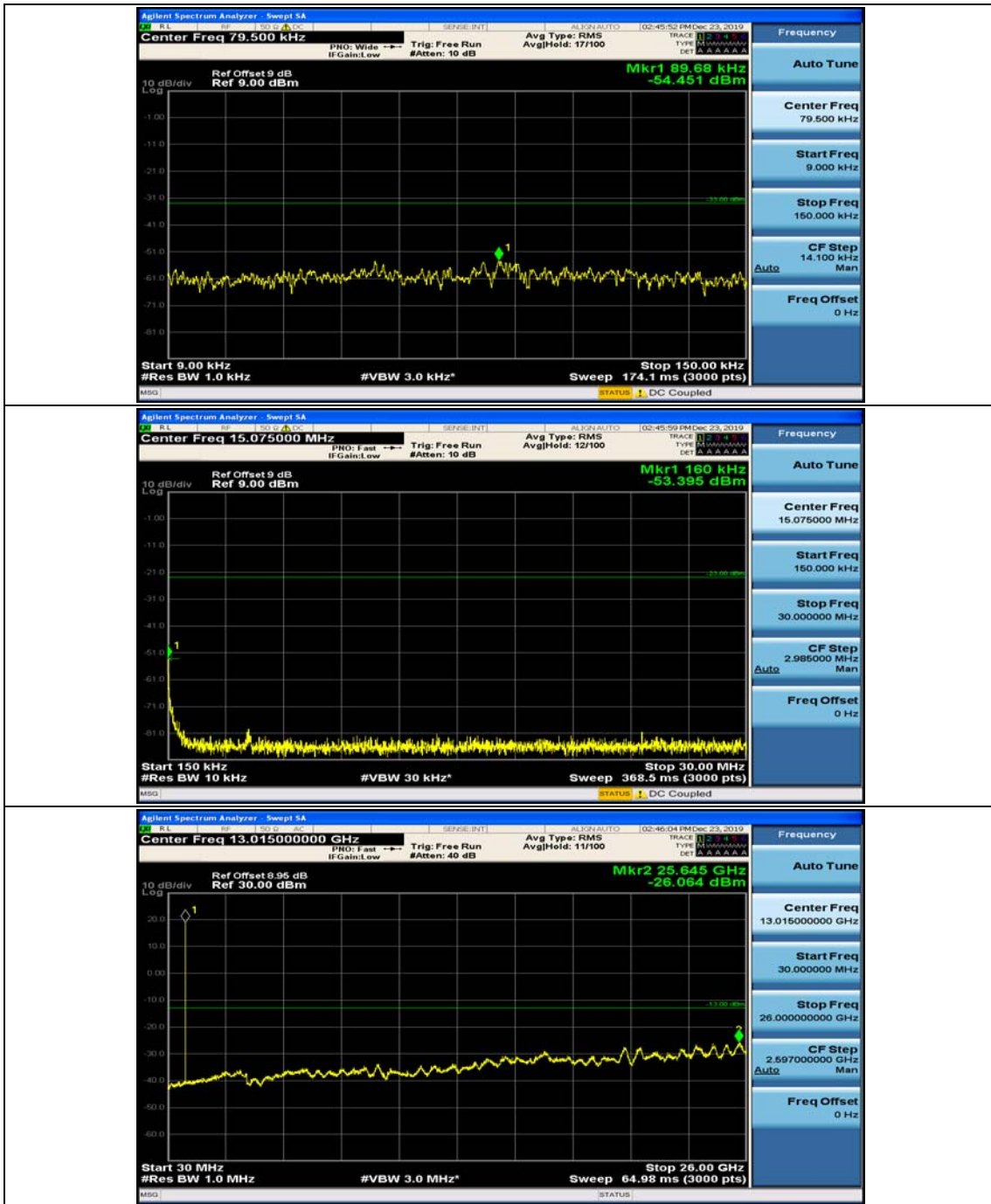
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7



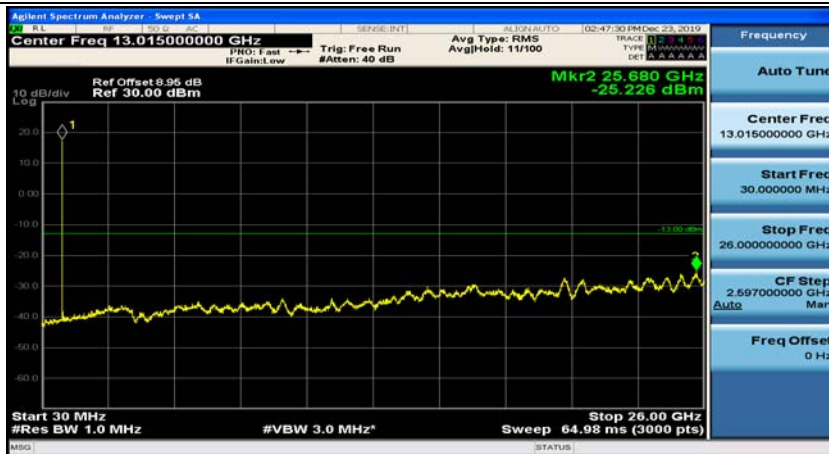
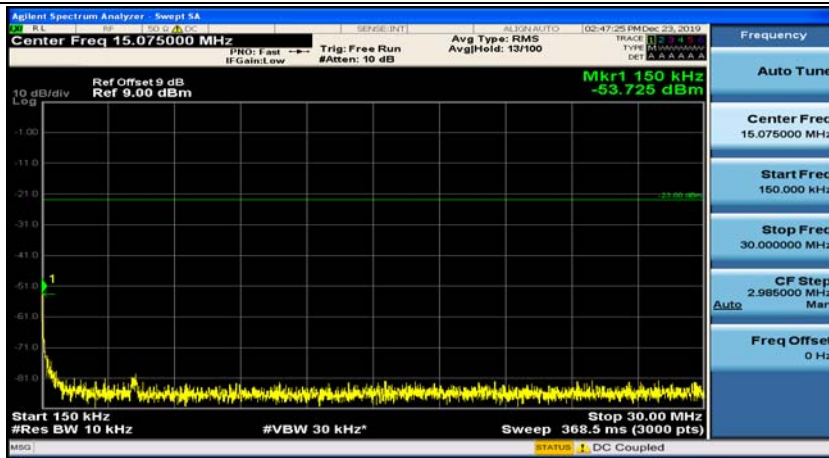
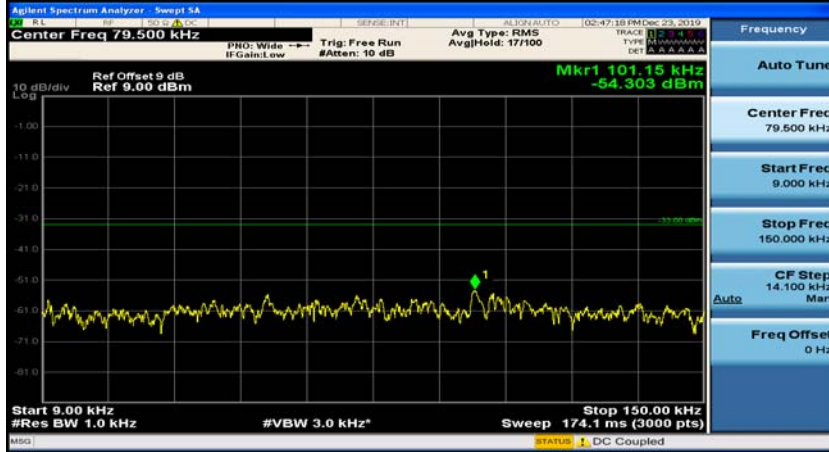
Channel Bandwidth: 5 MHz



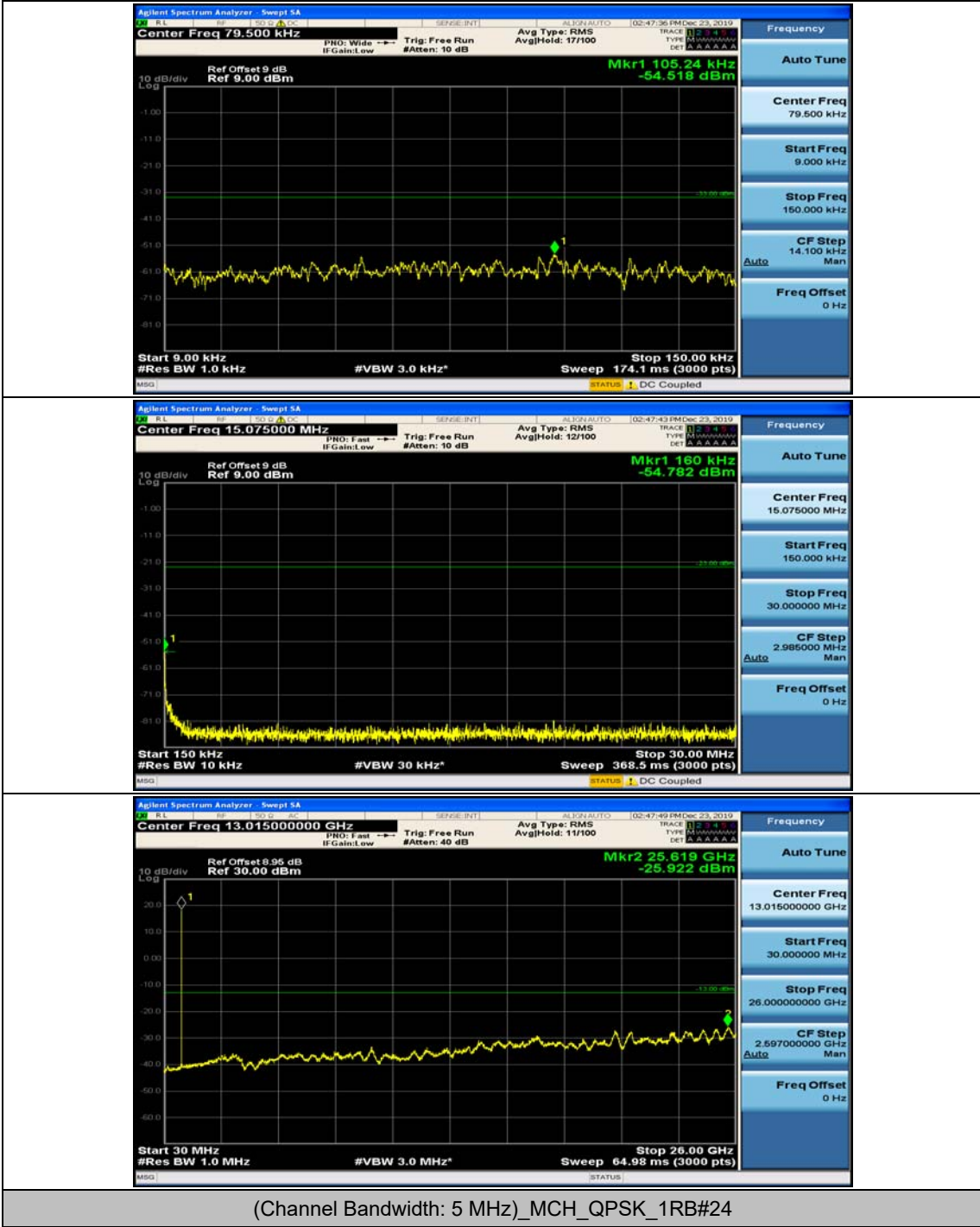


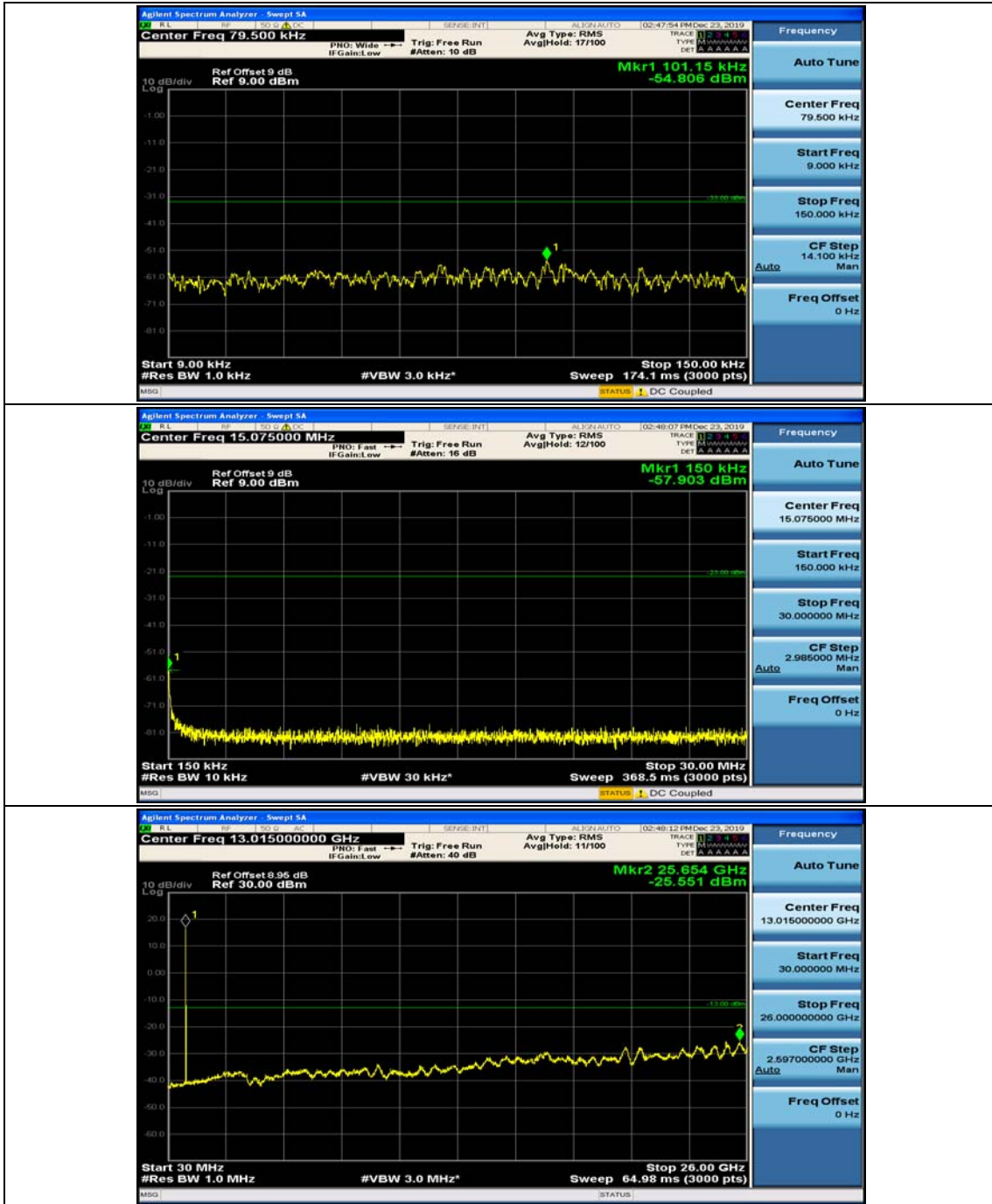


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

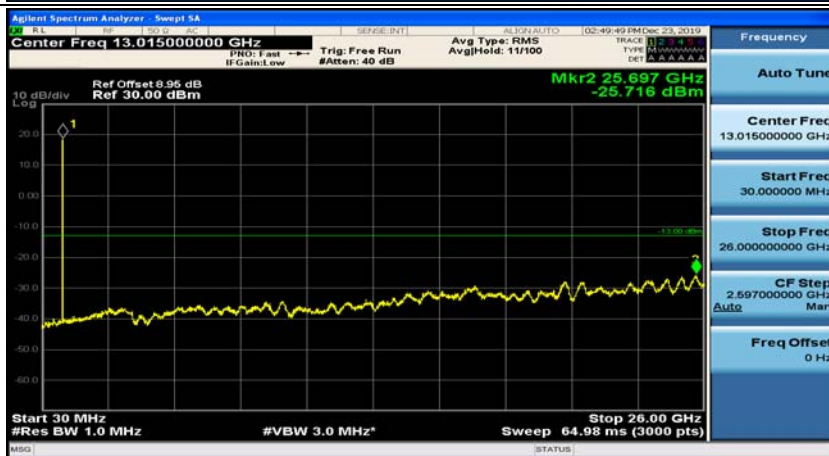
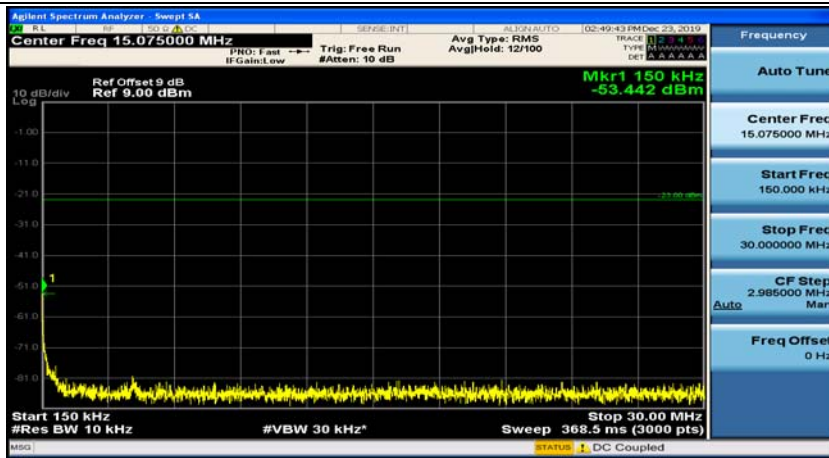
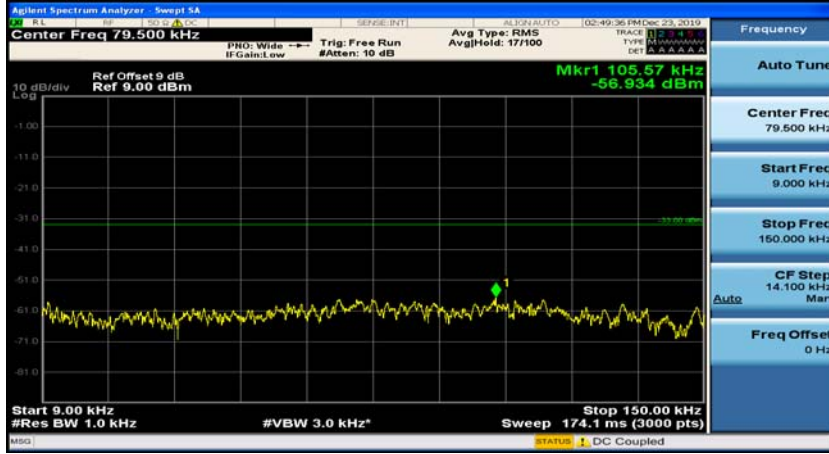


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

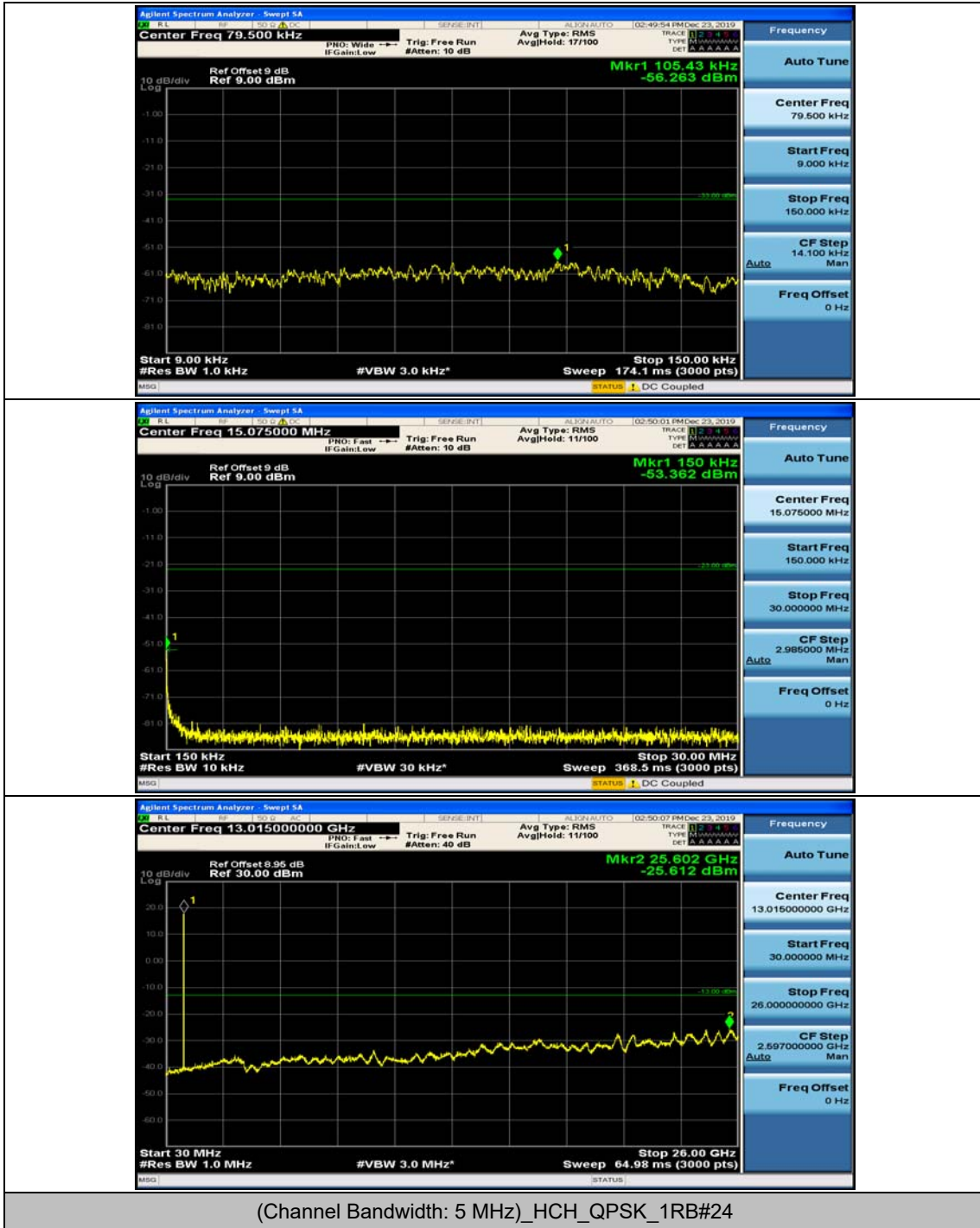


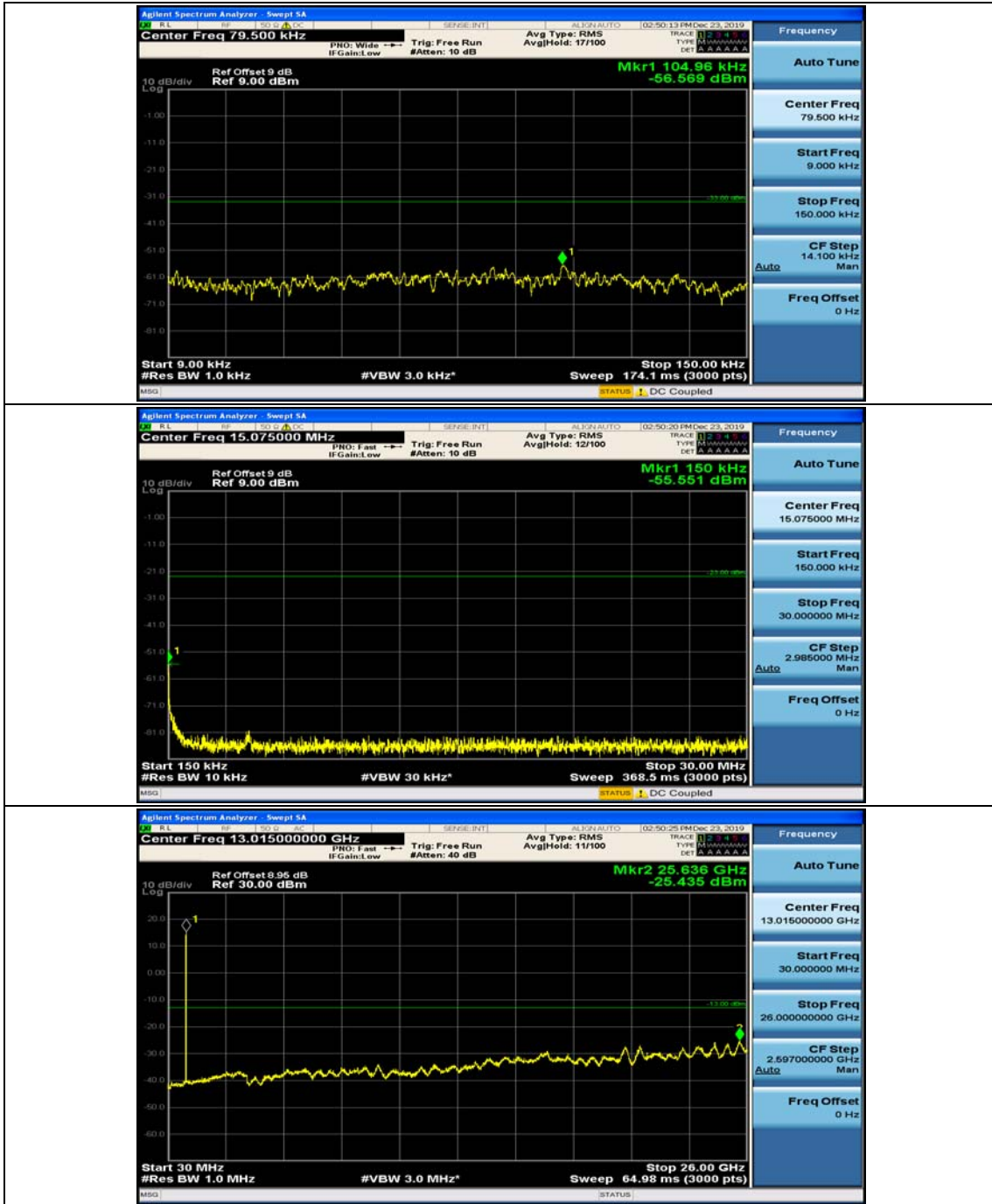


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

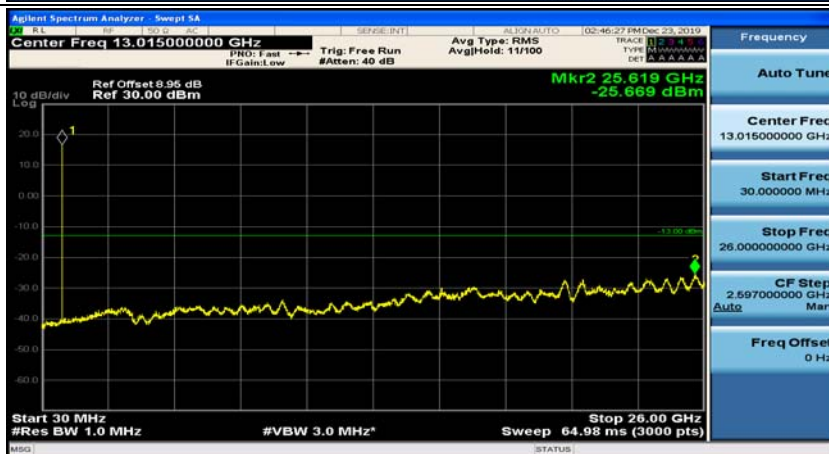
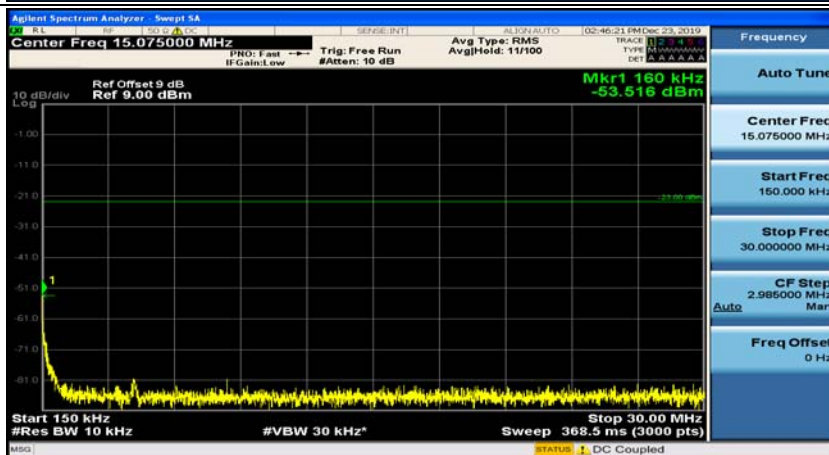
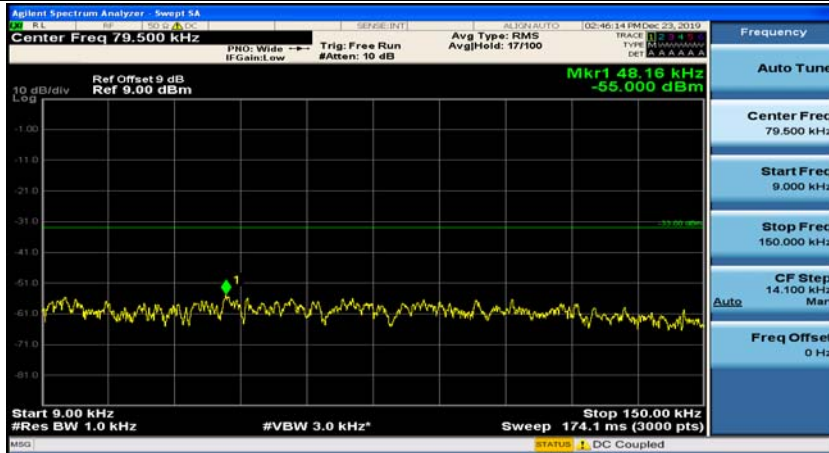


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

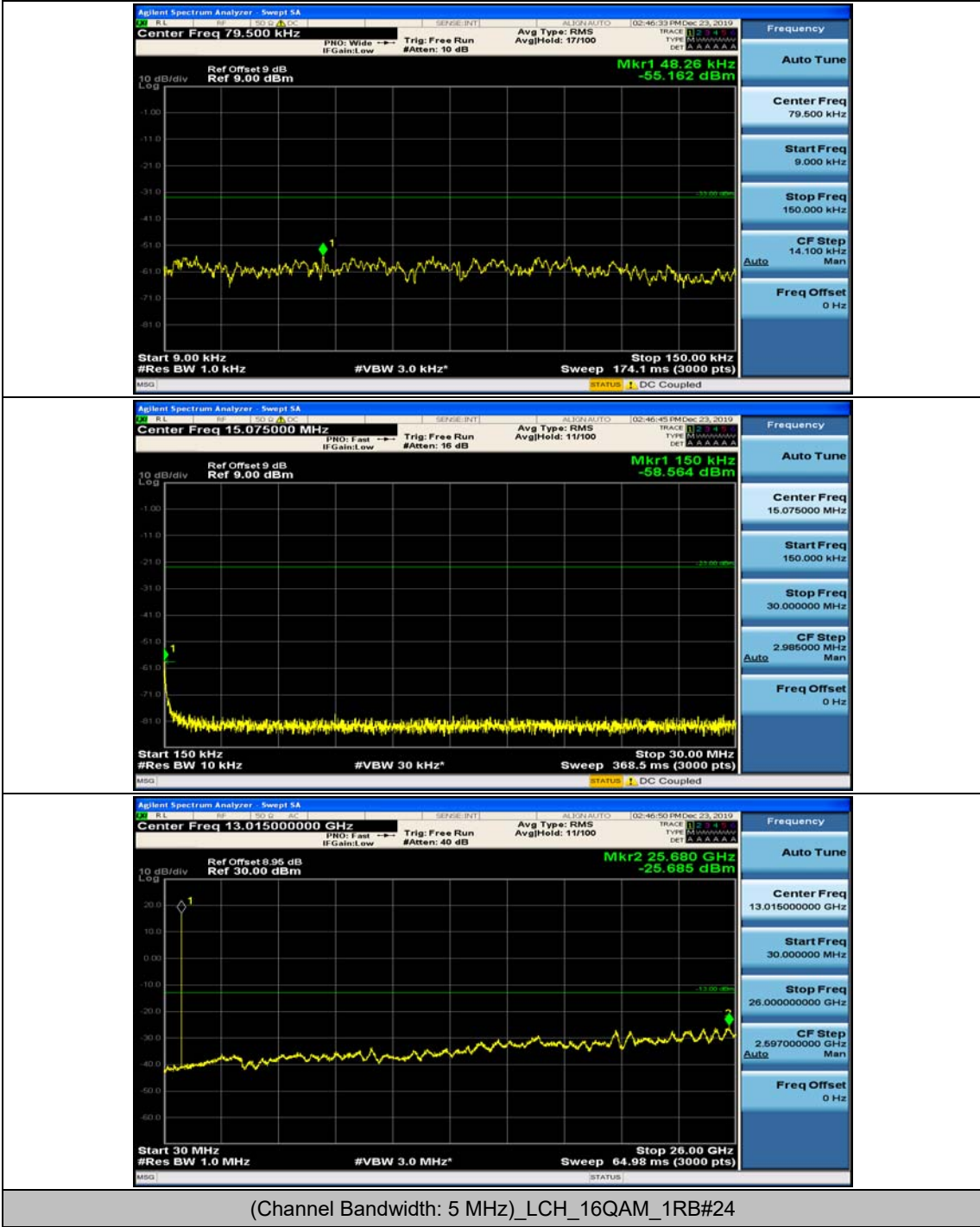


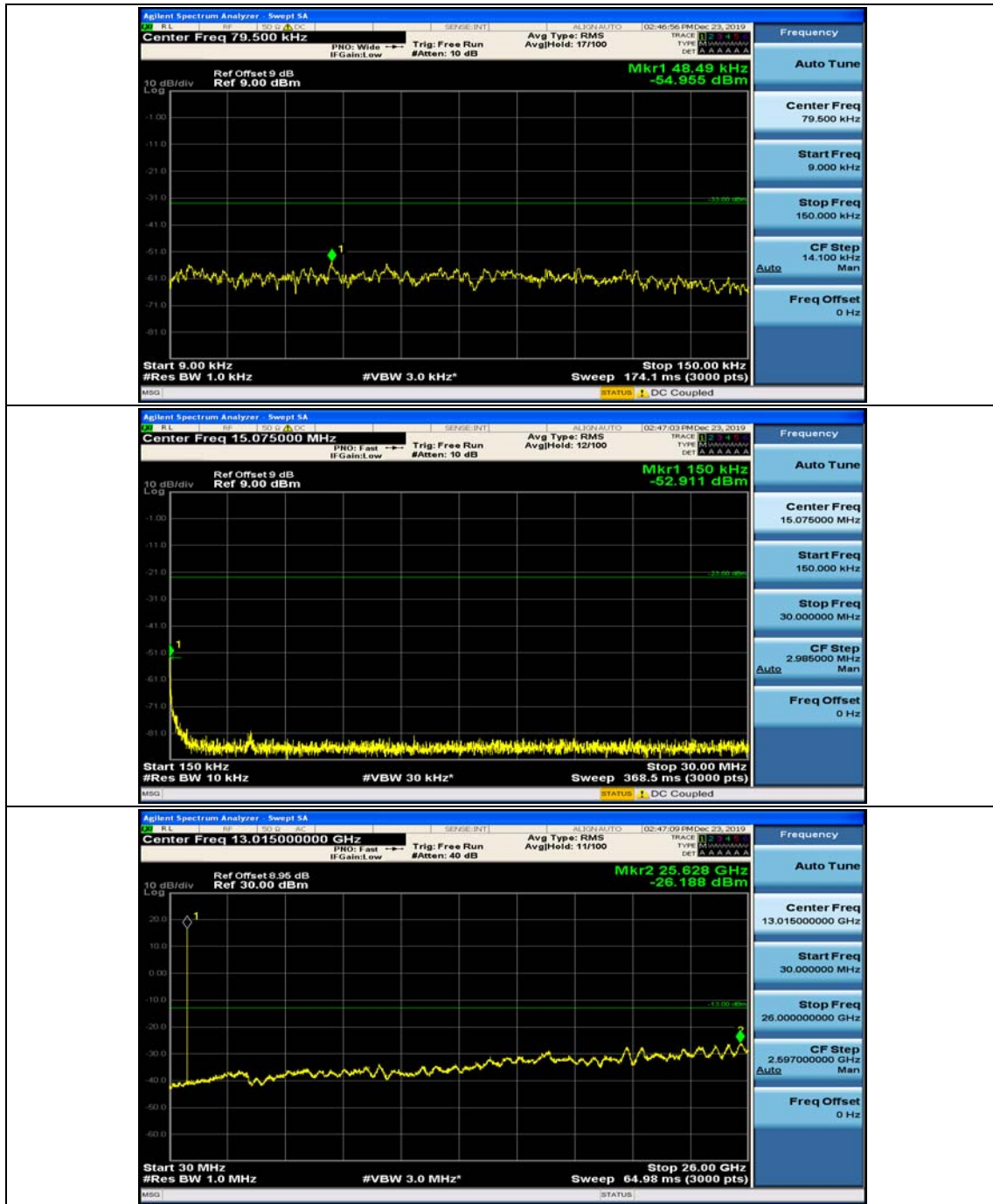


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

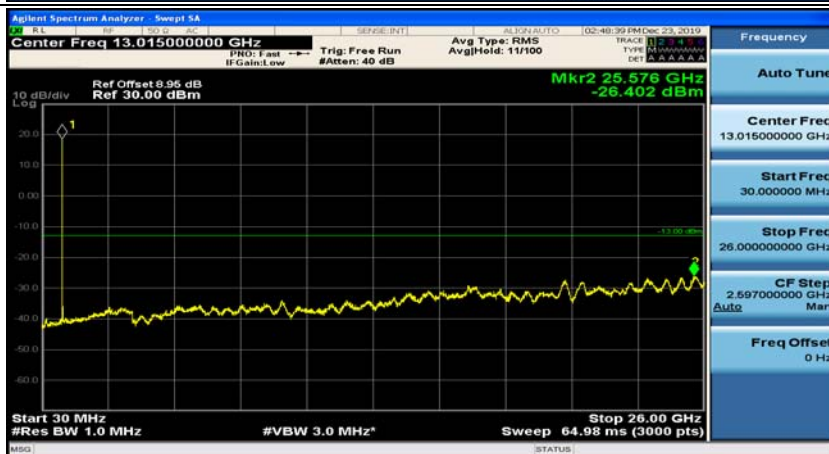
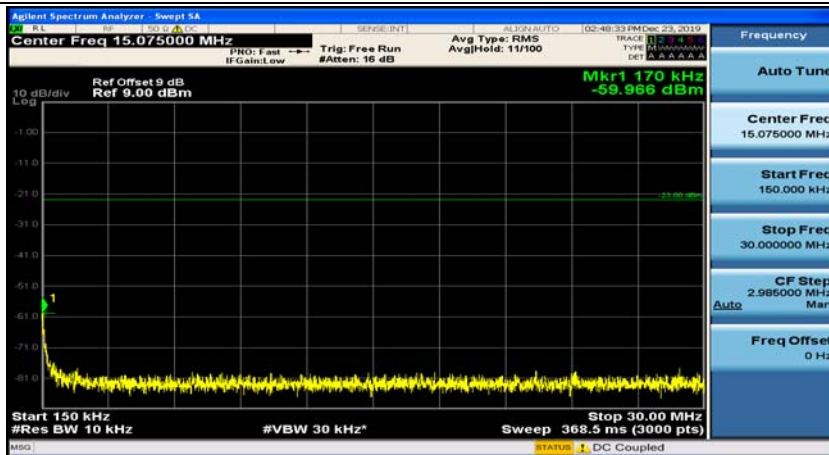
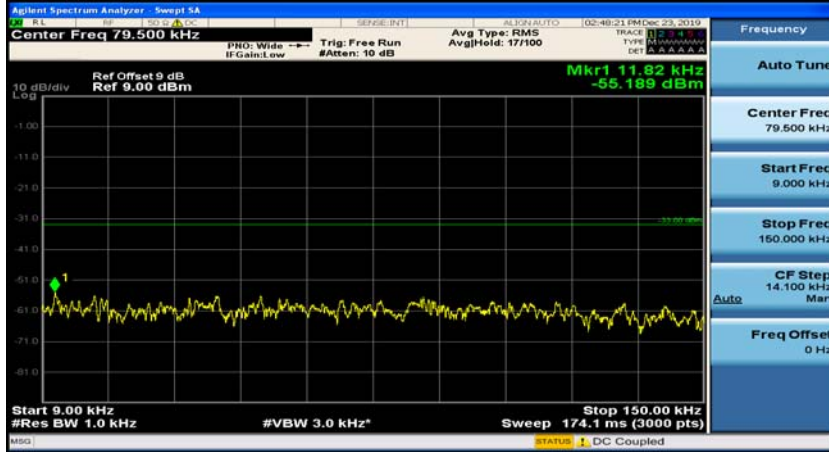


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

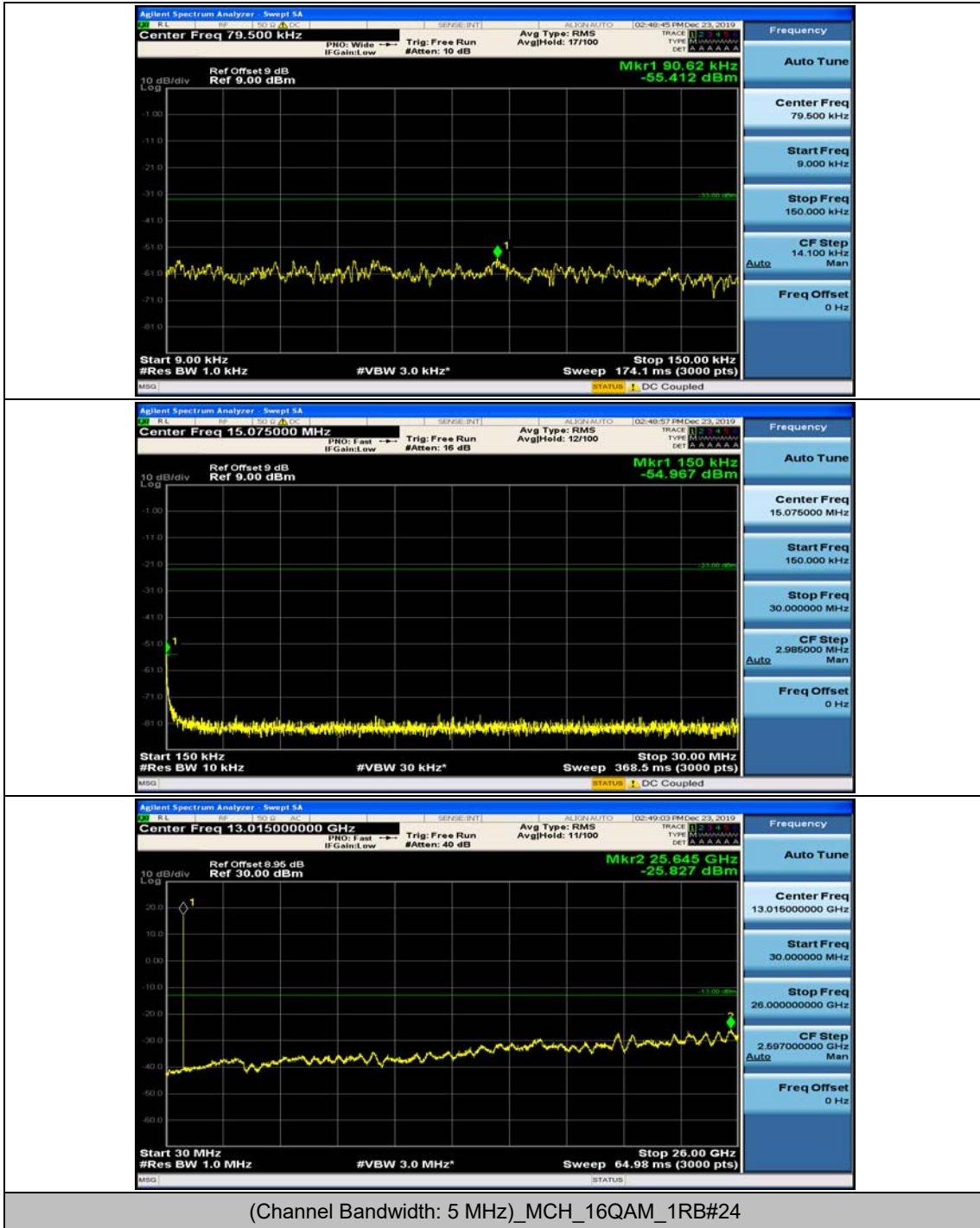


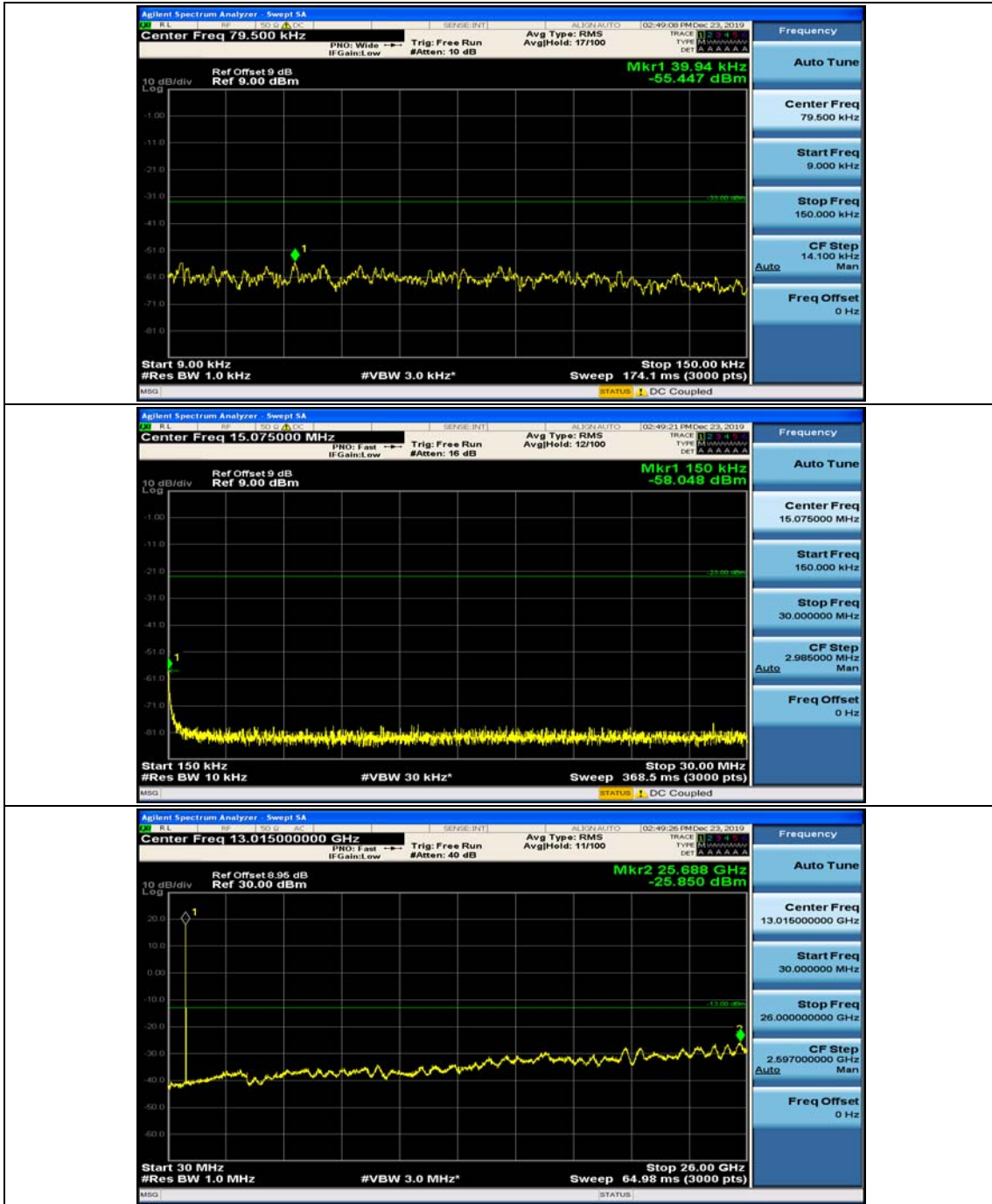


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

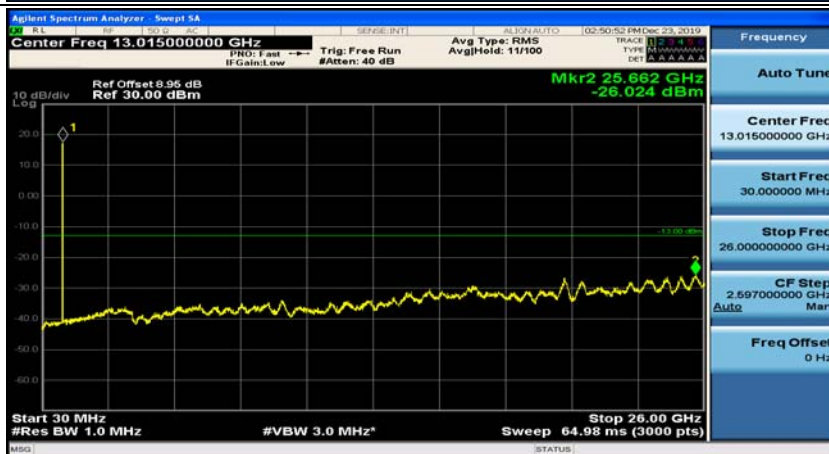
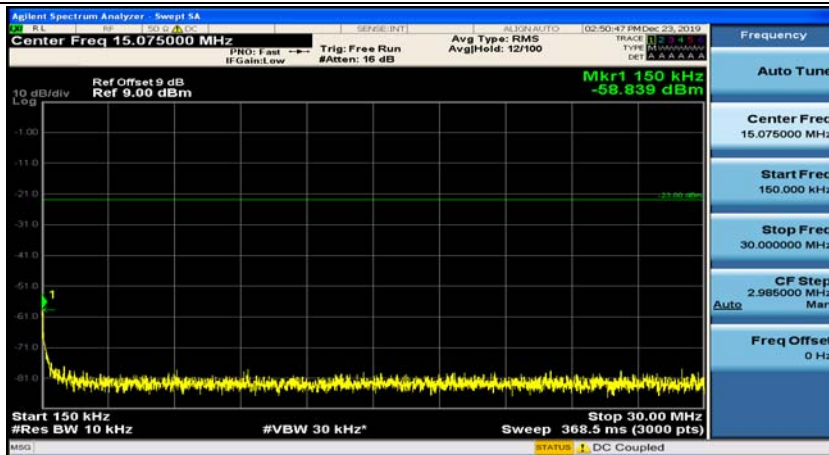


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

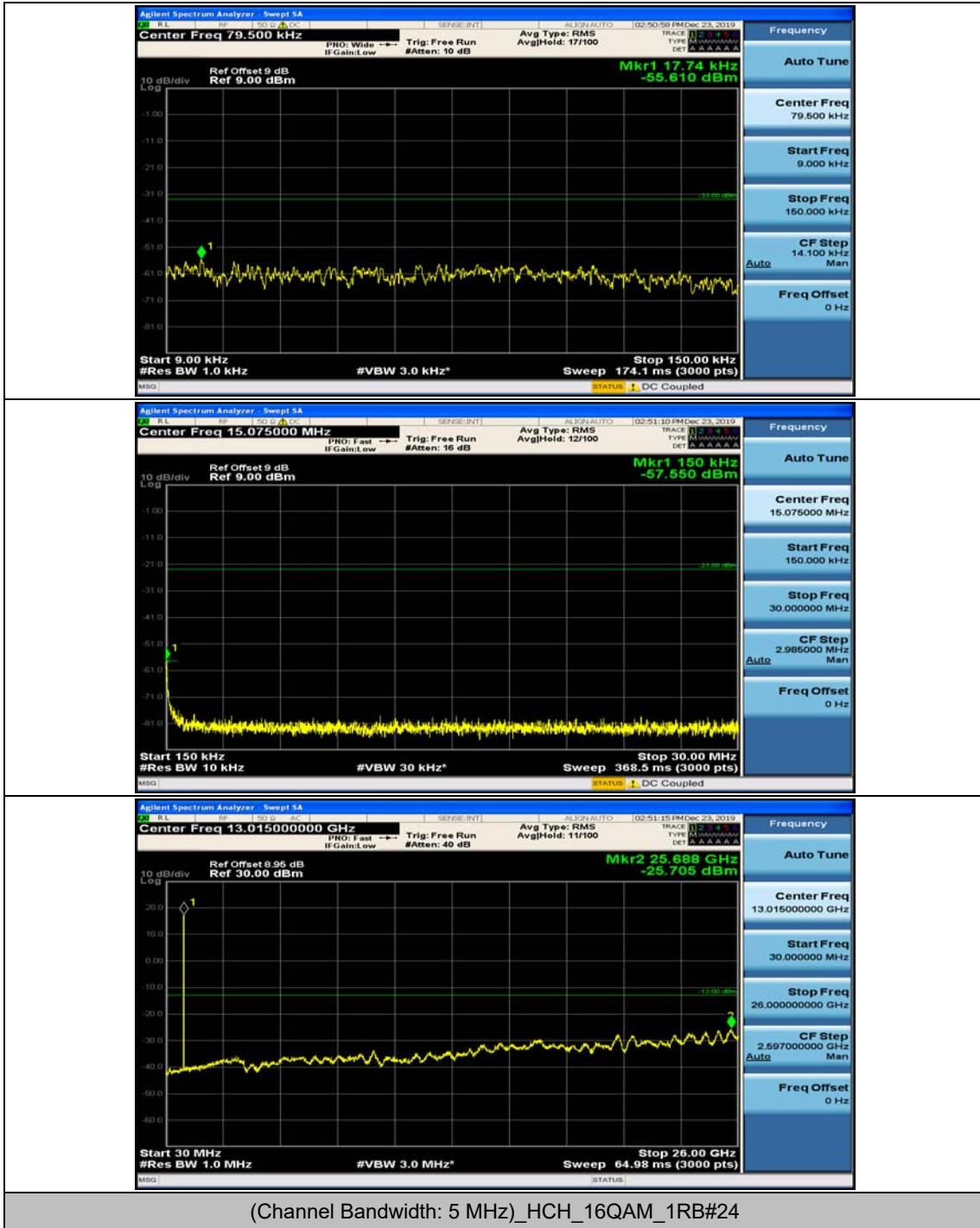


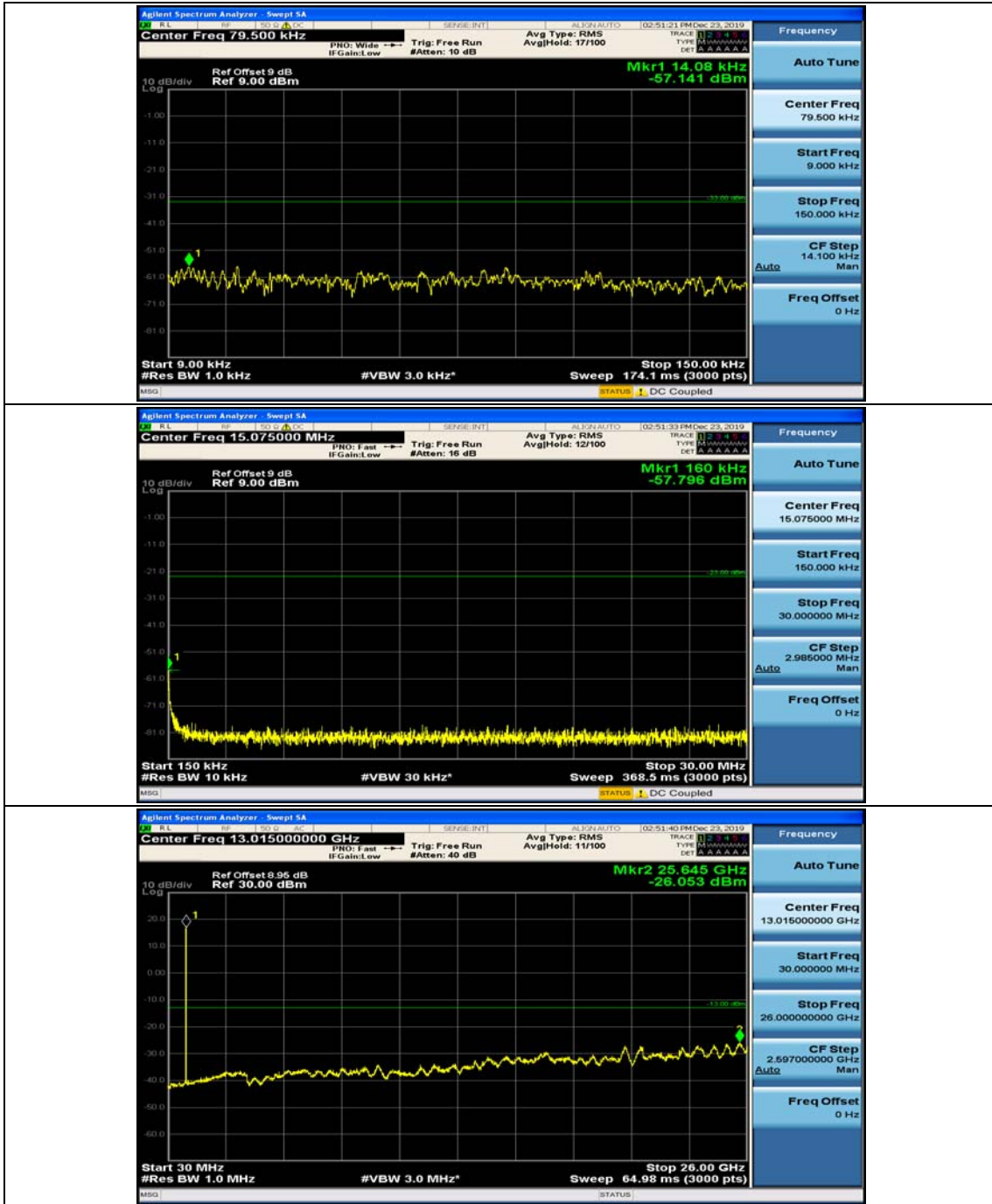


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

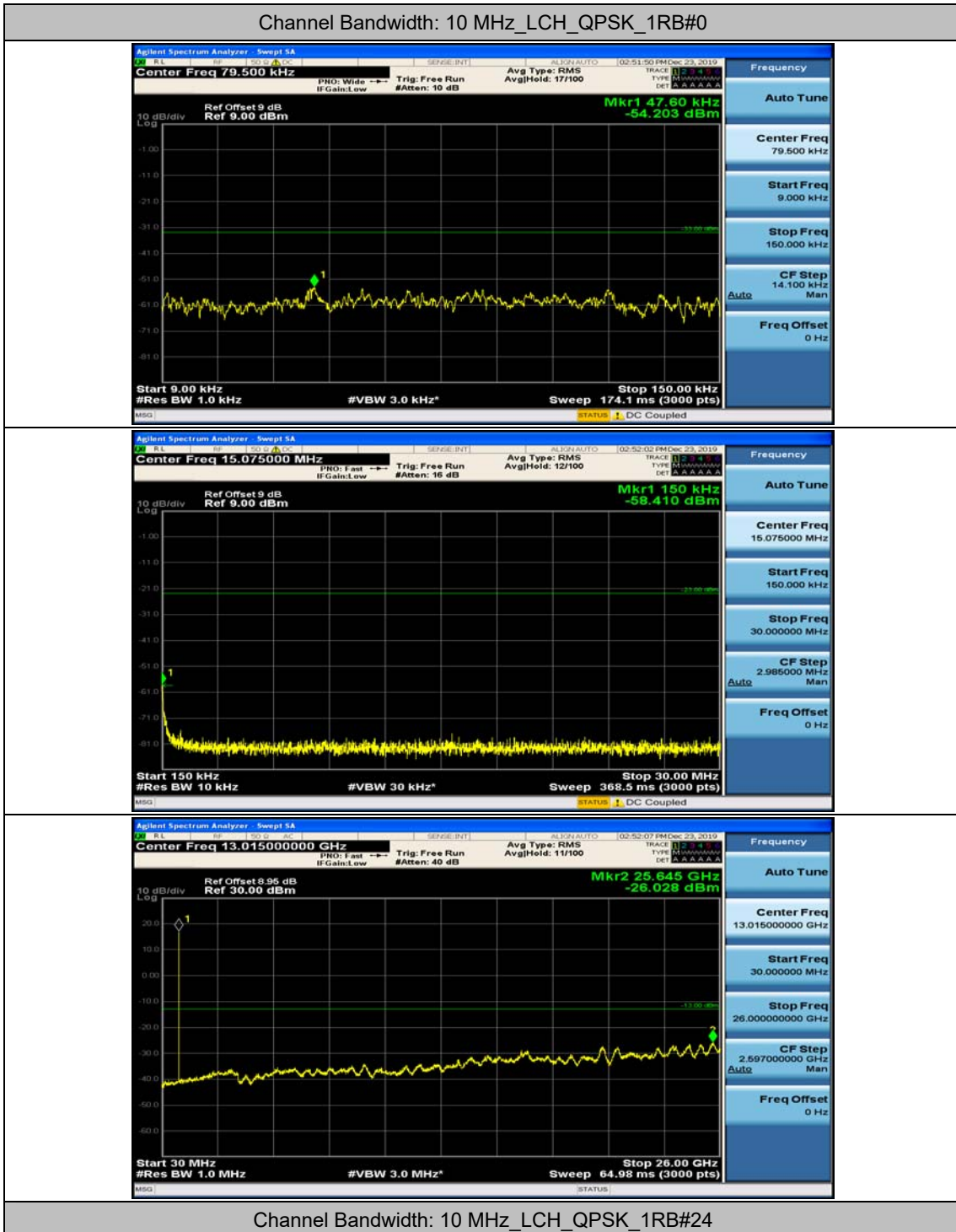


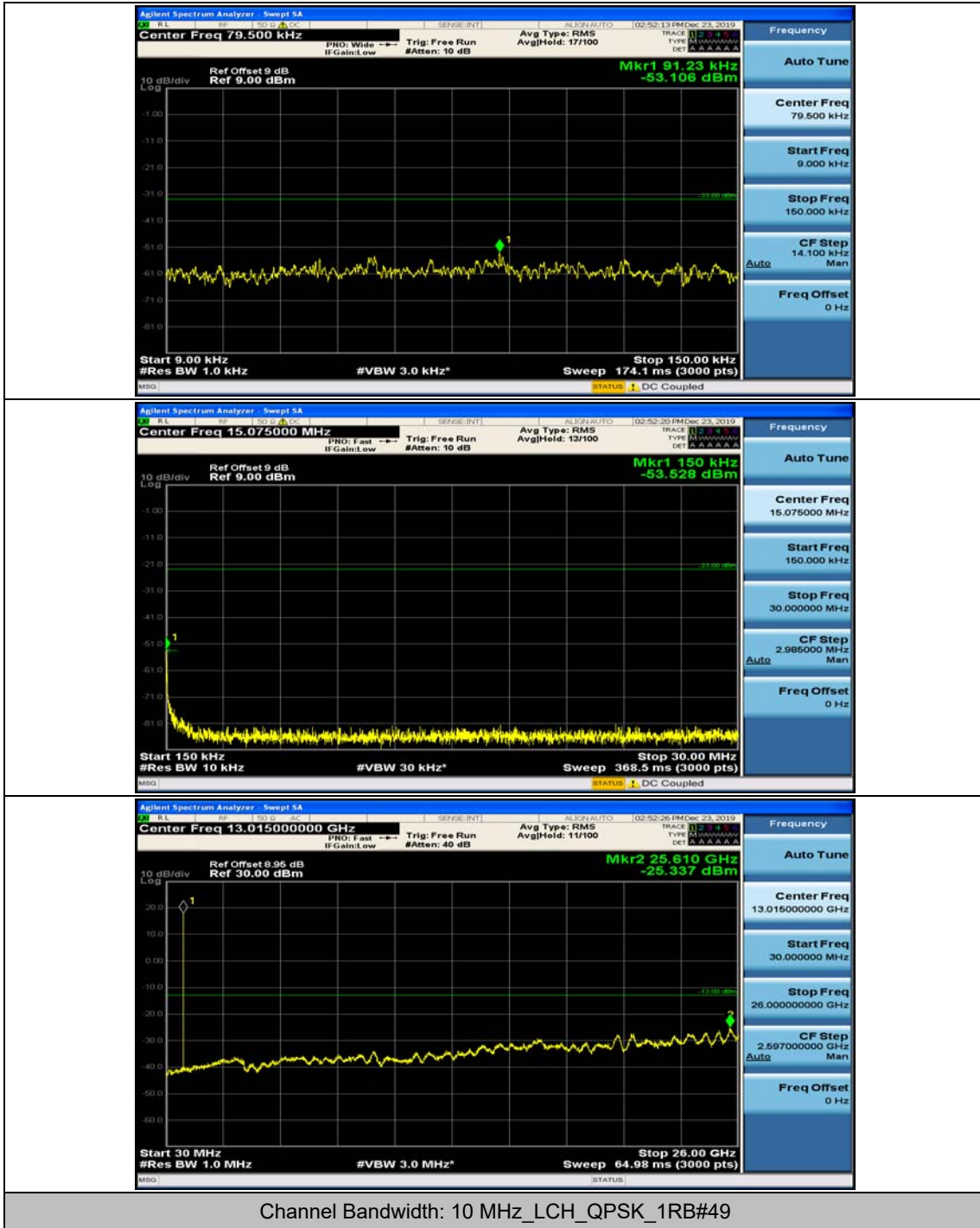
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

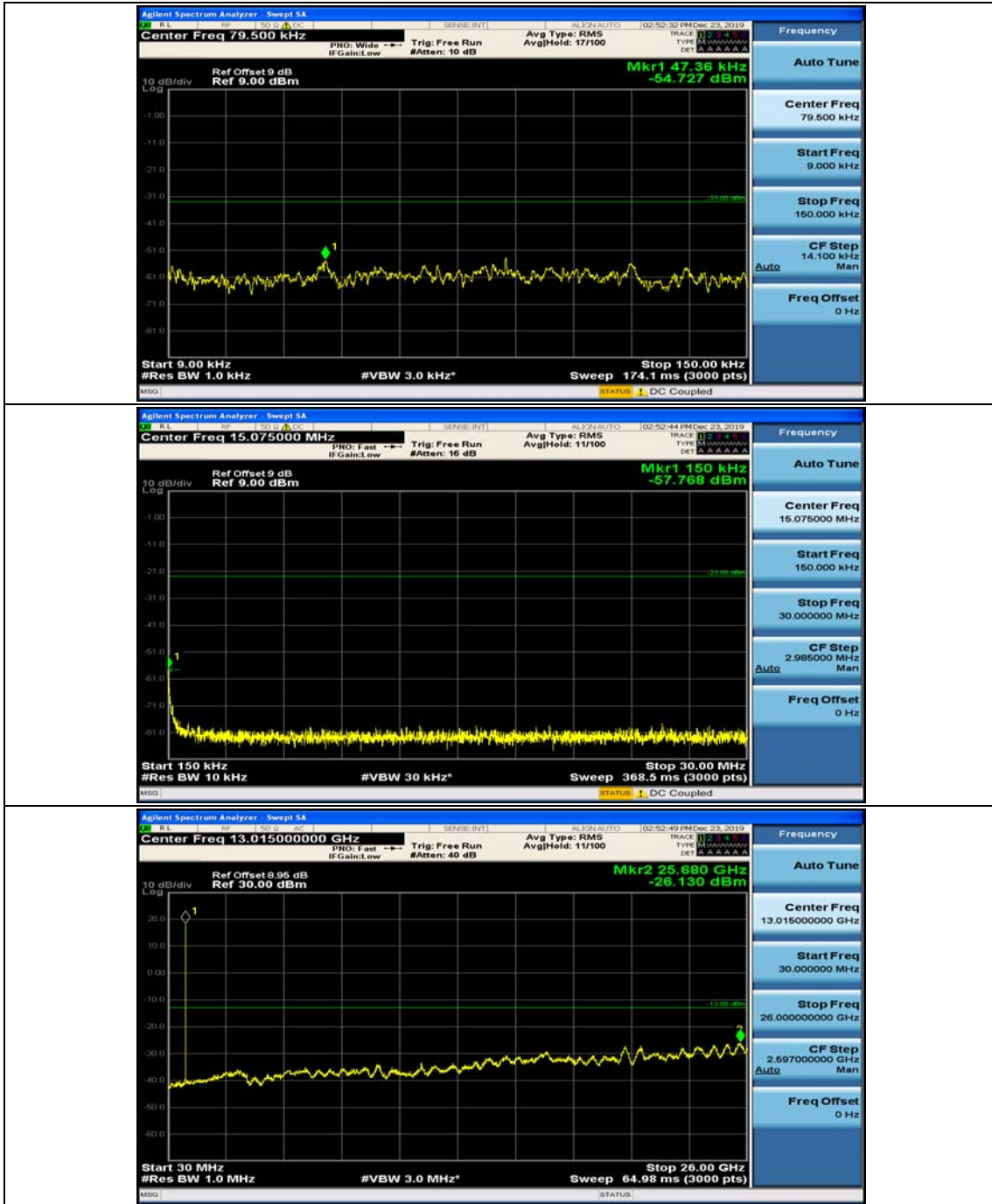




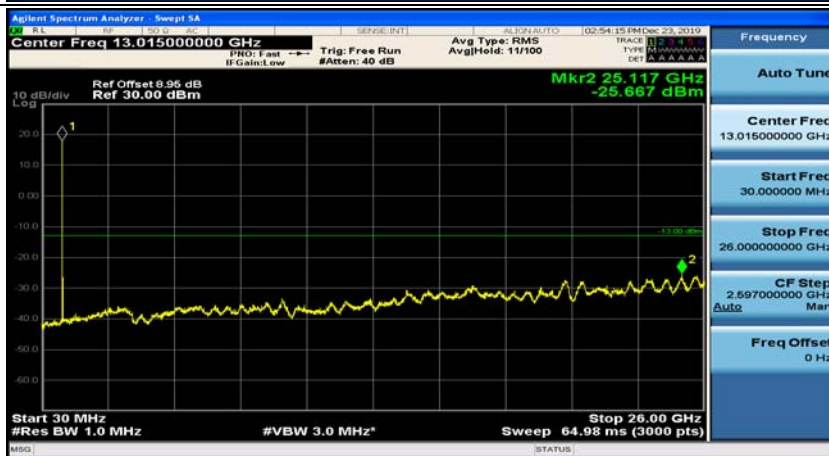
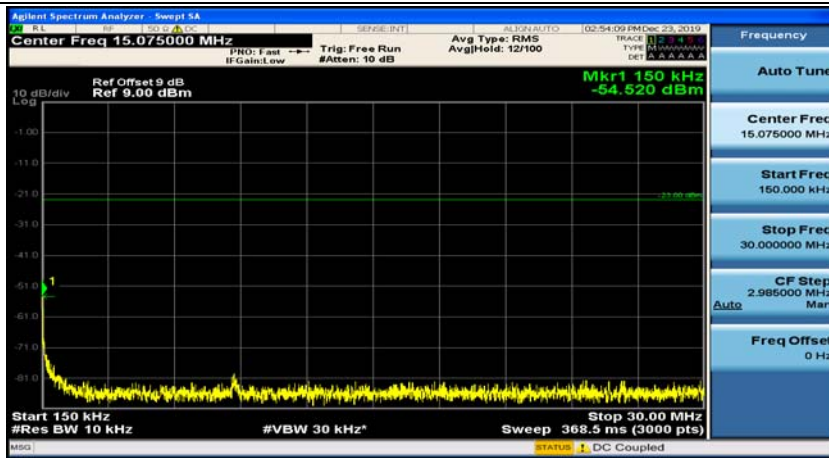
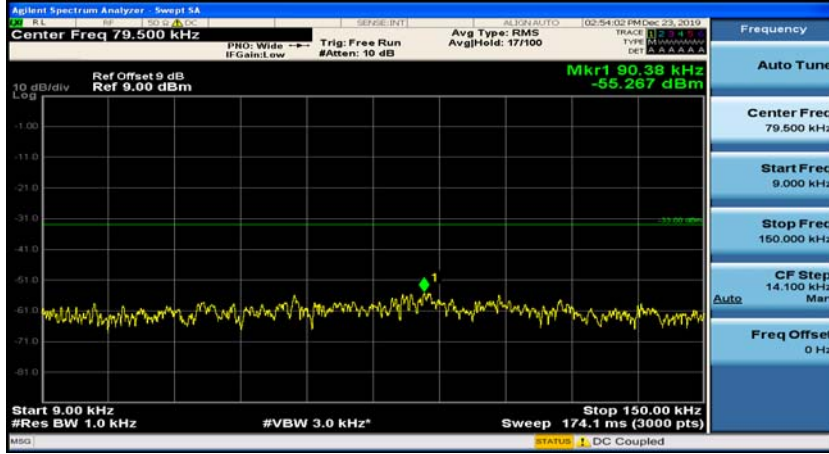
Channel Bandwidth: 10 MHz



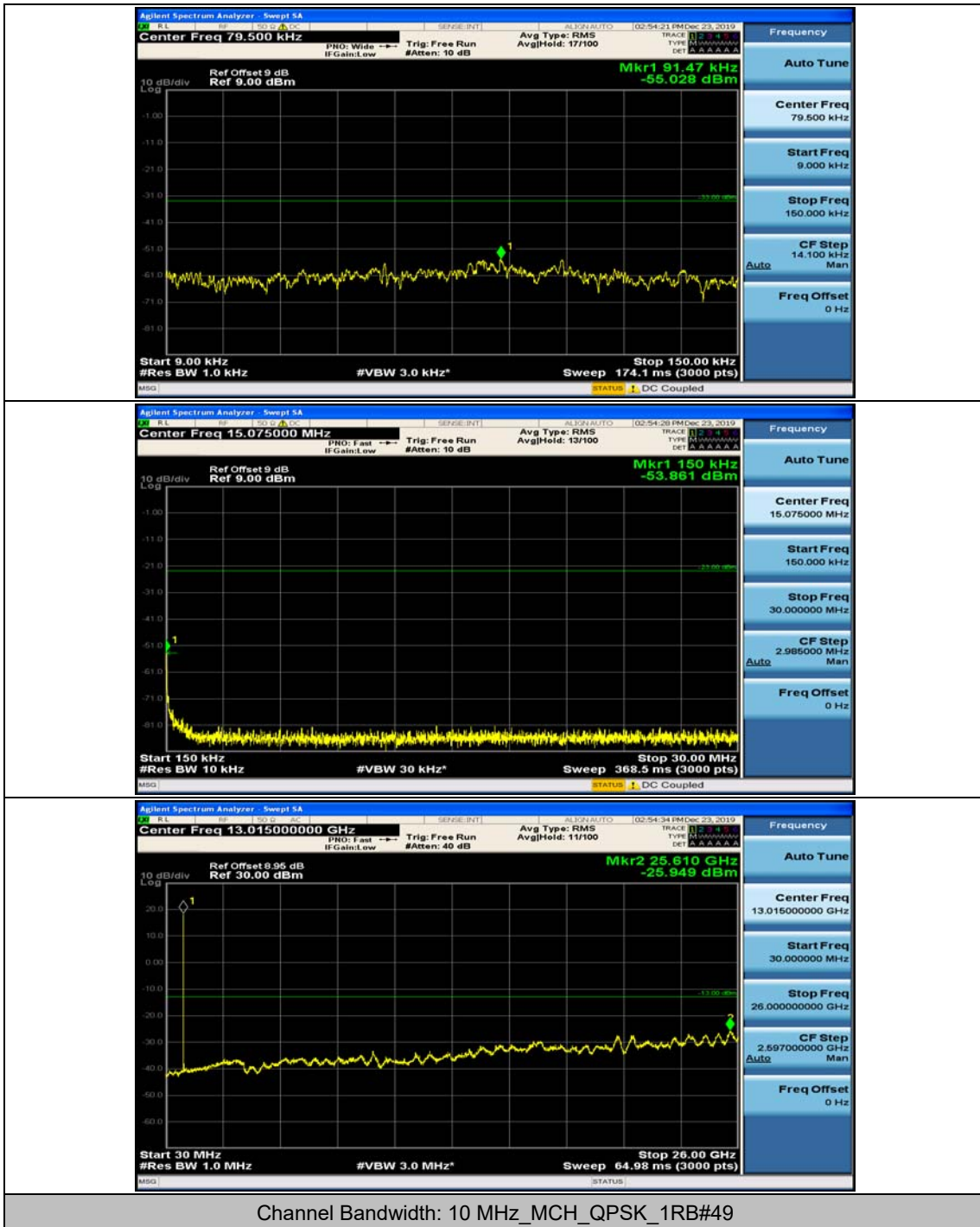


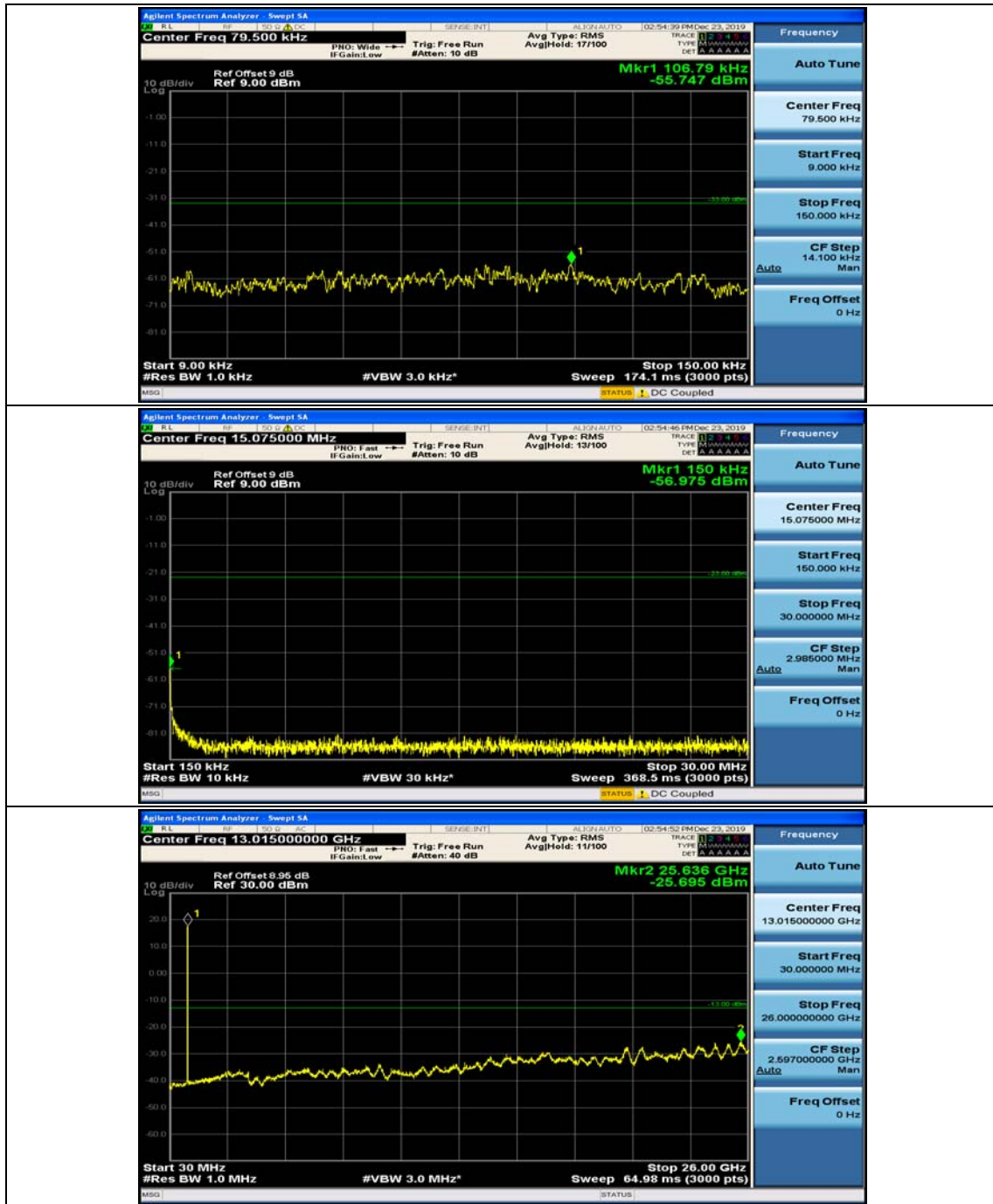


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

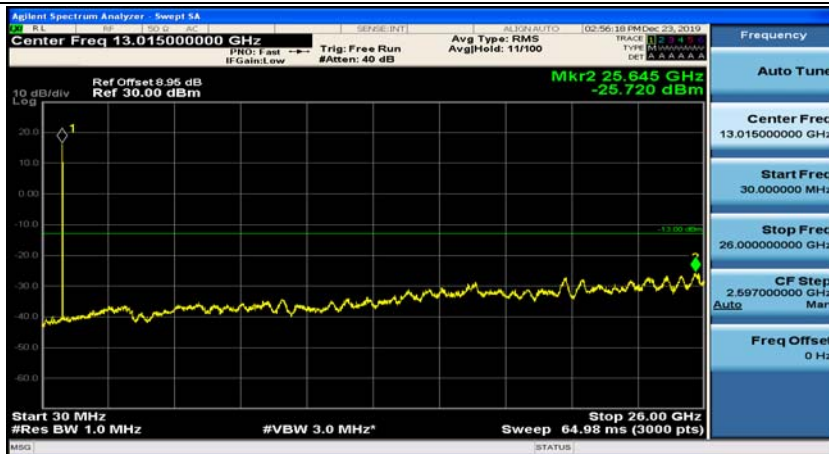
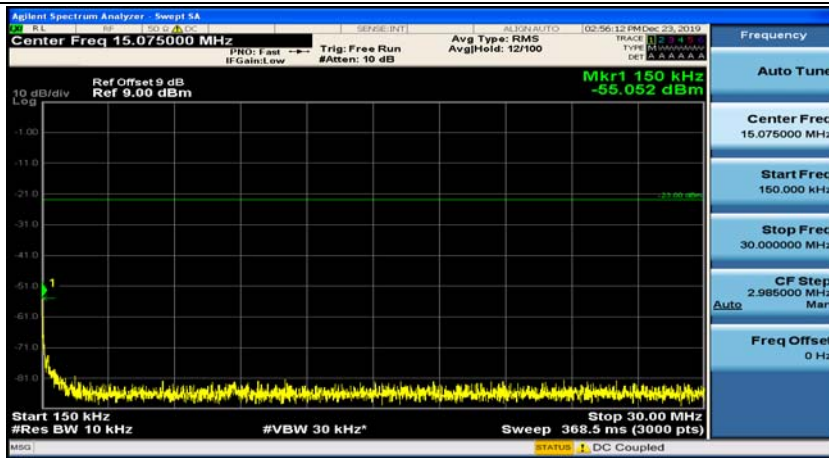


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

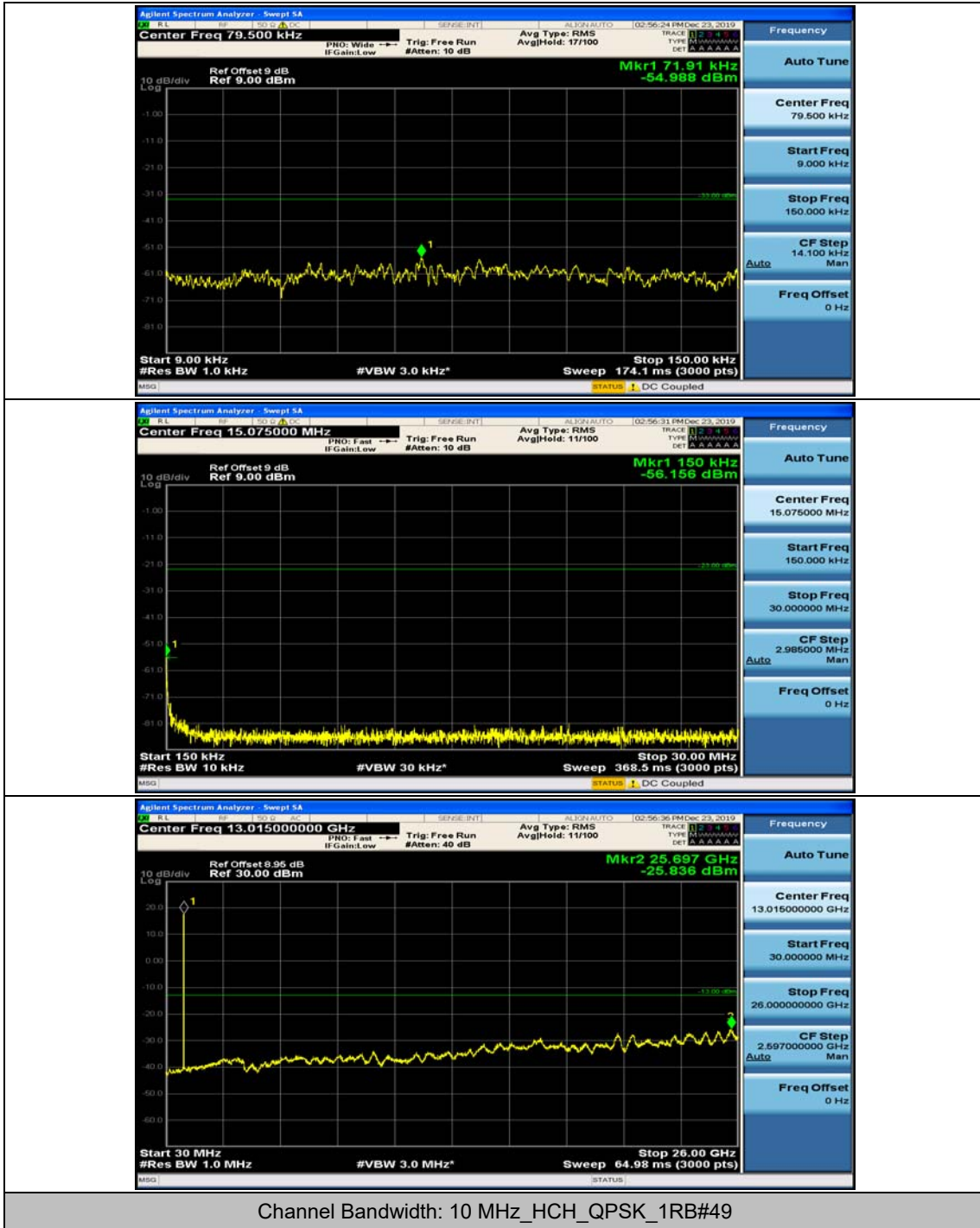


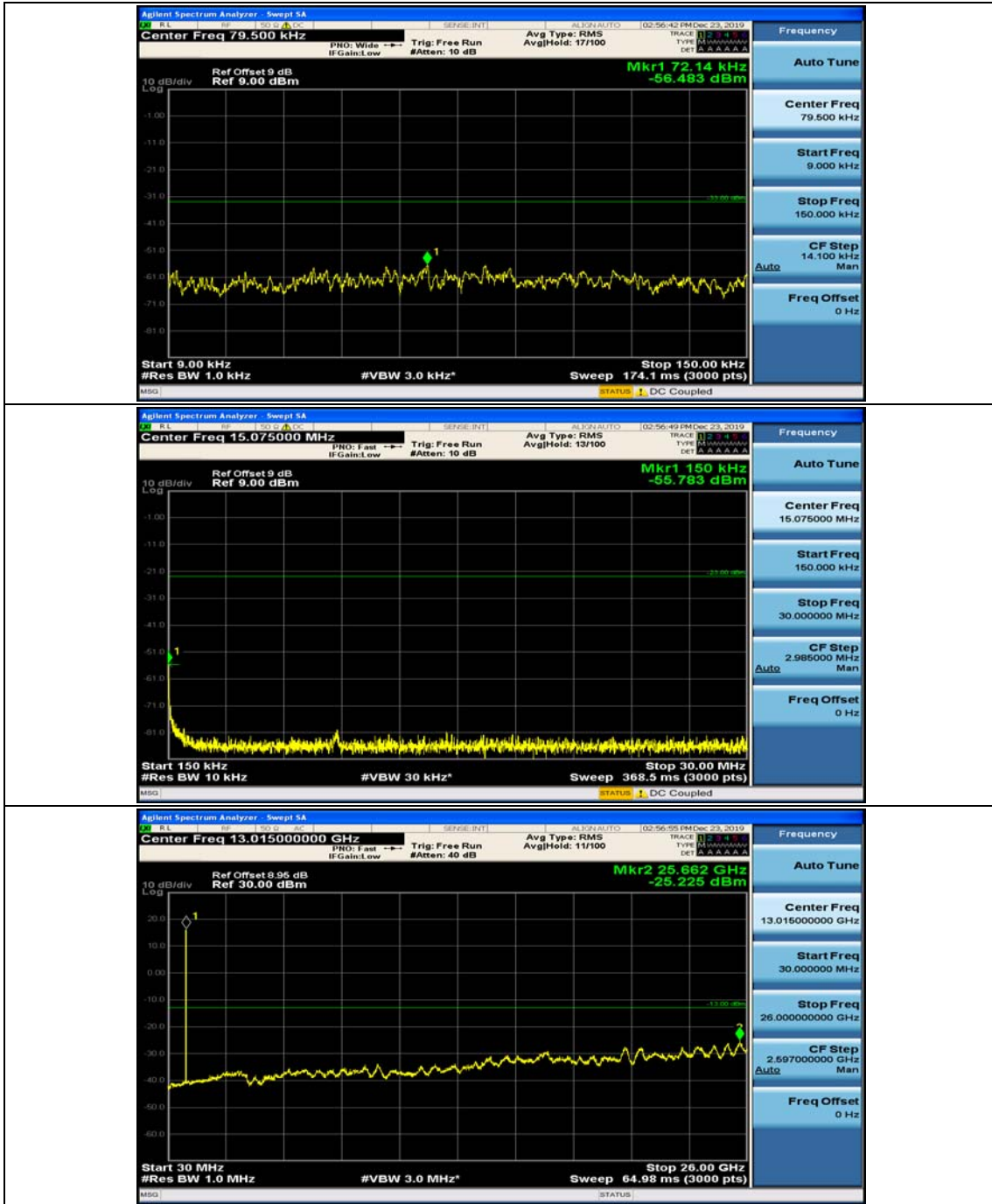


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0

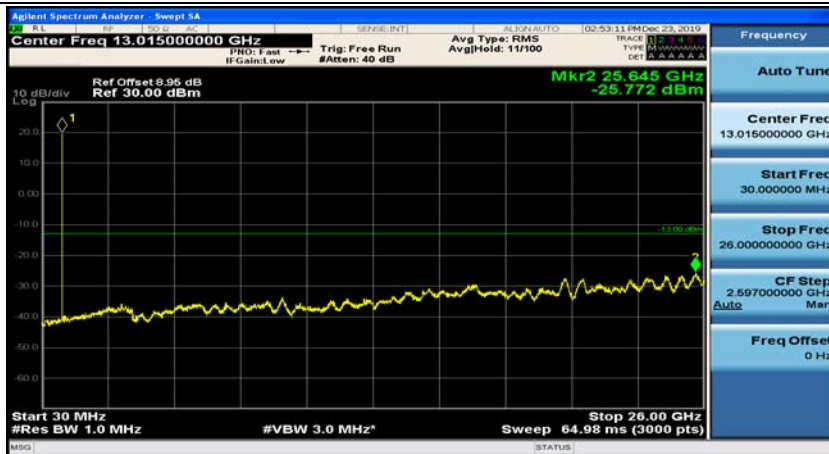
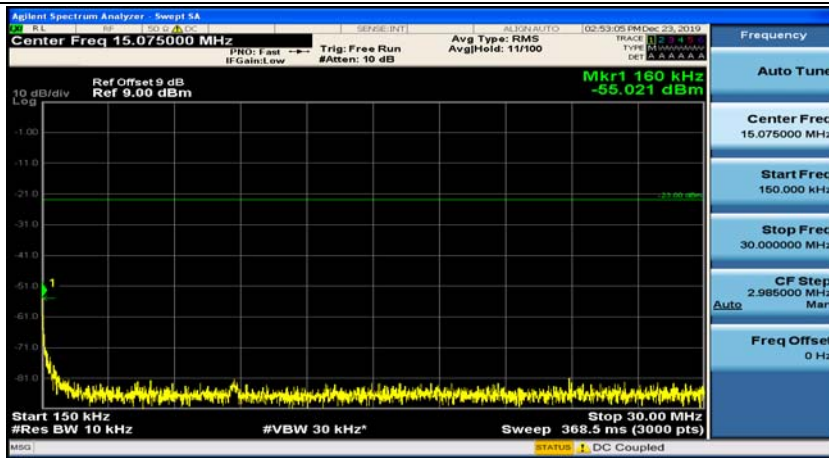
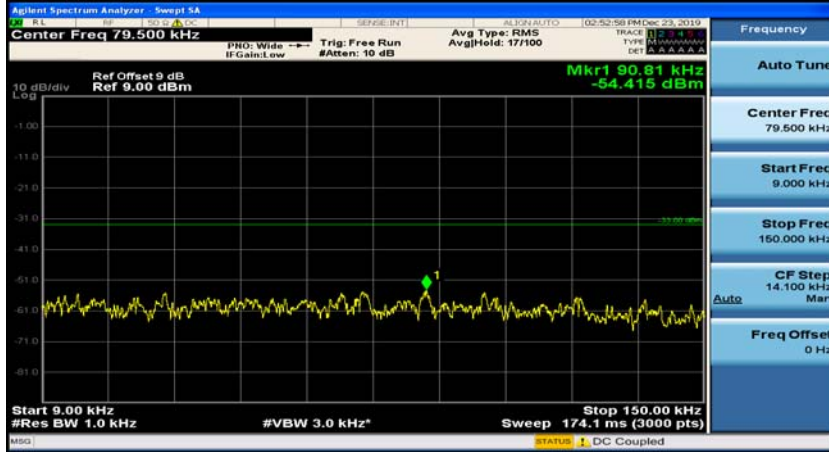


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

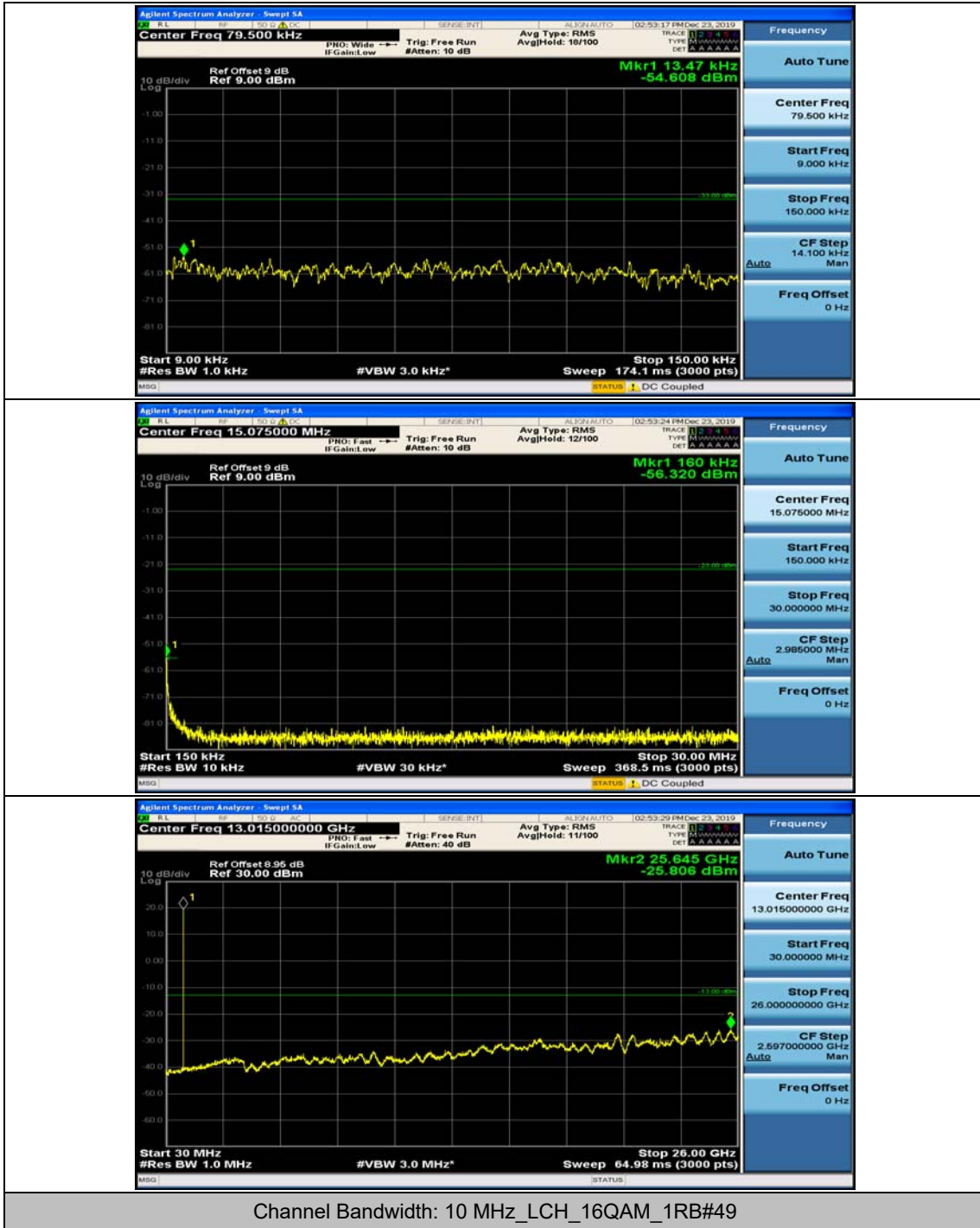


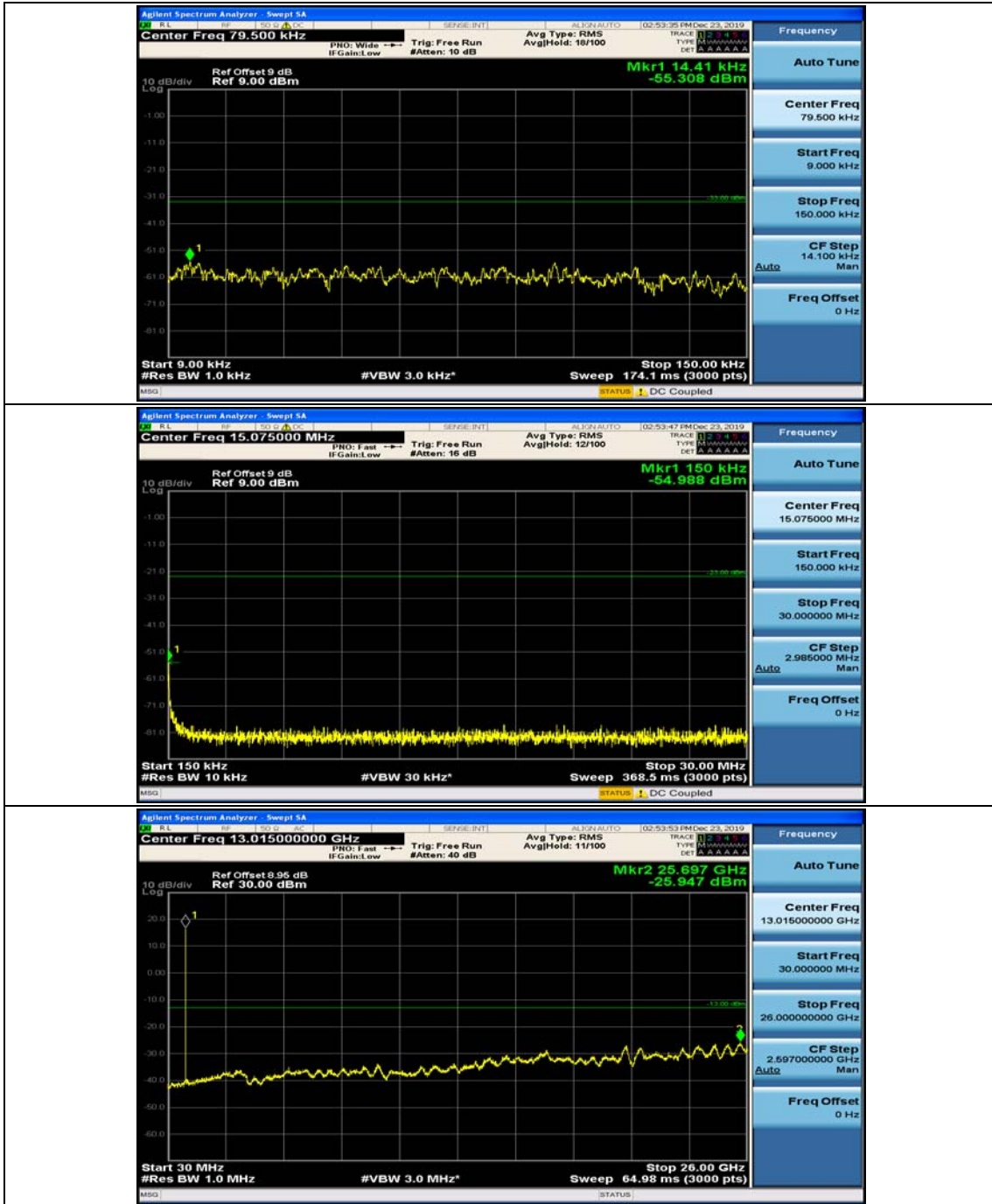


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0

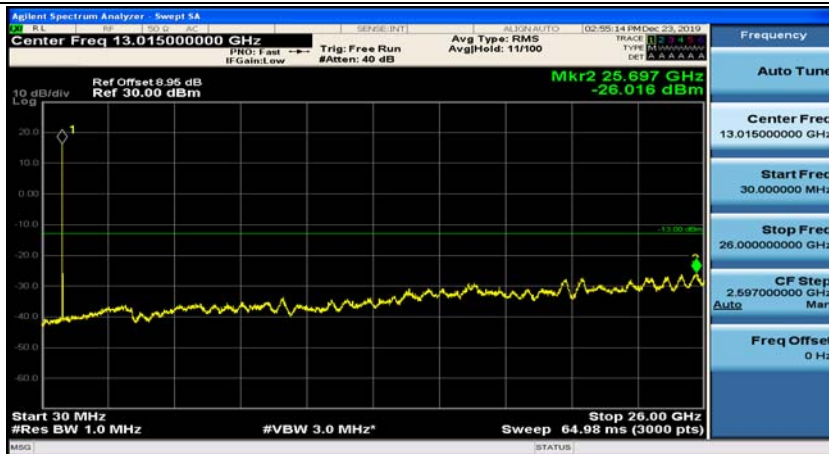
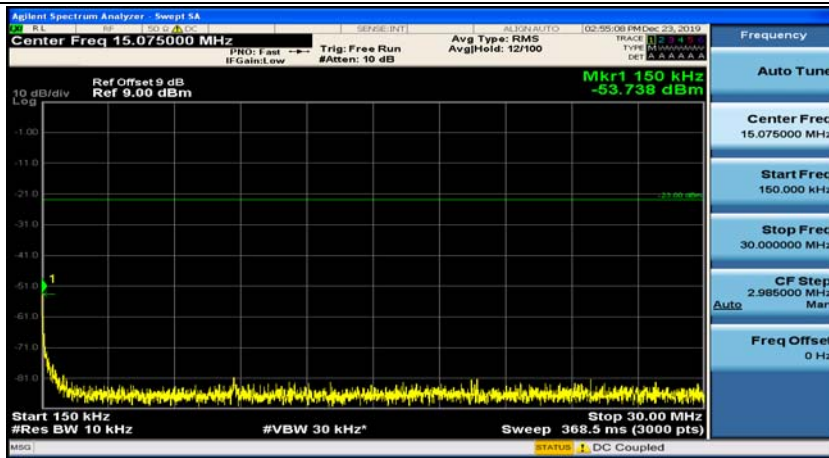


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

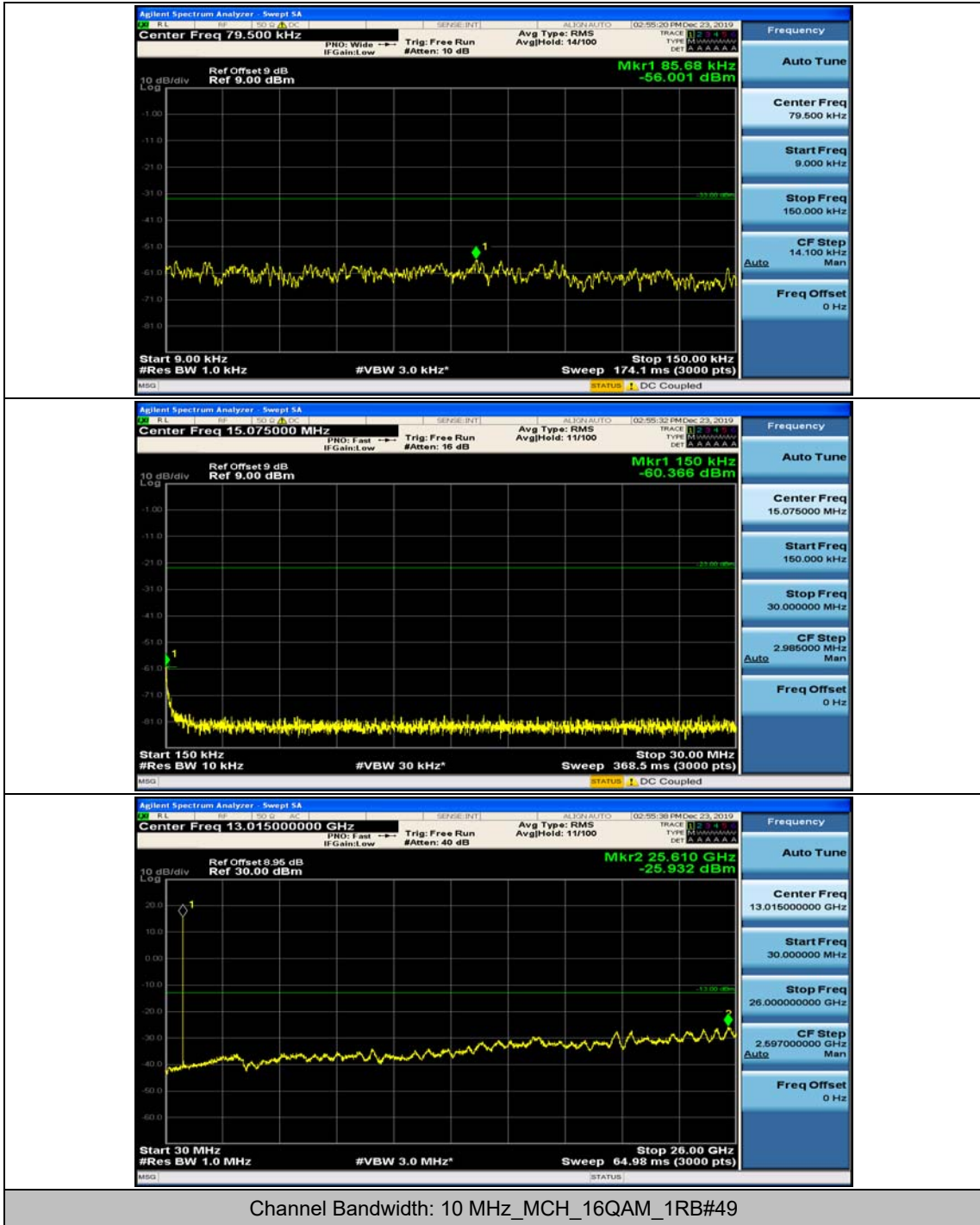


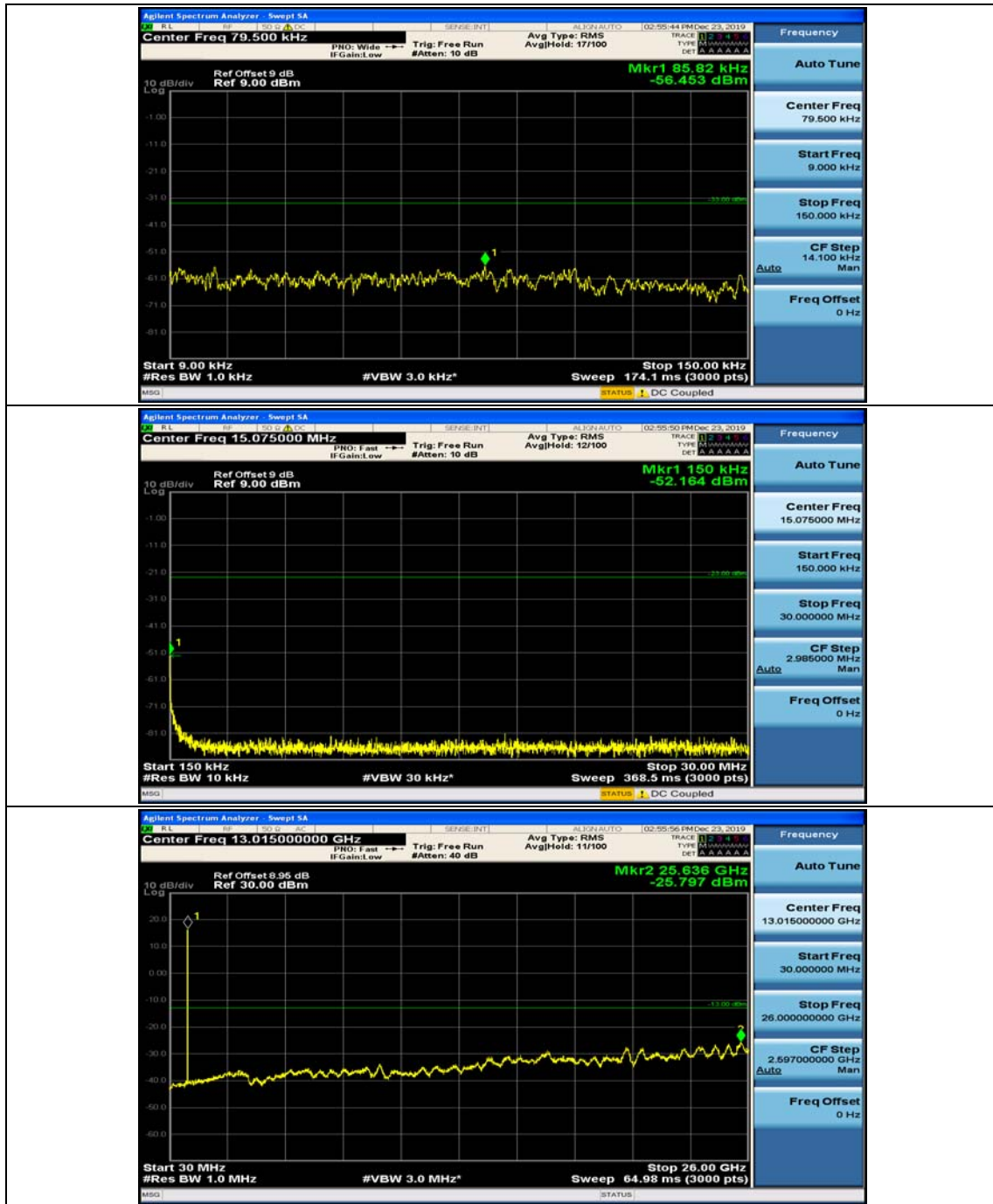


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

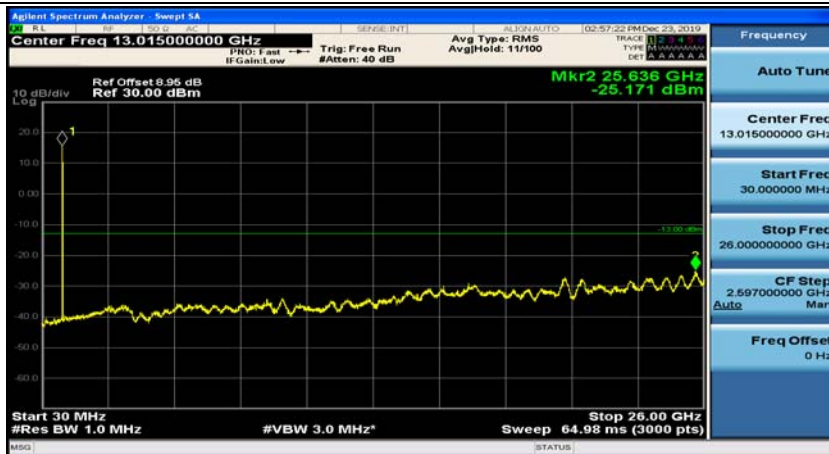
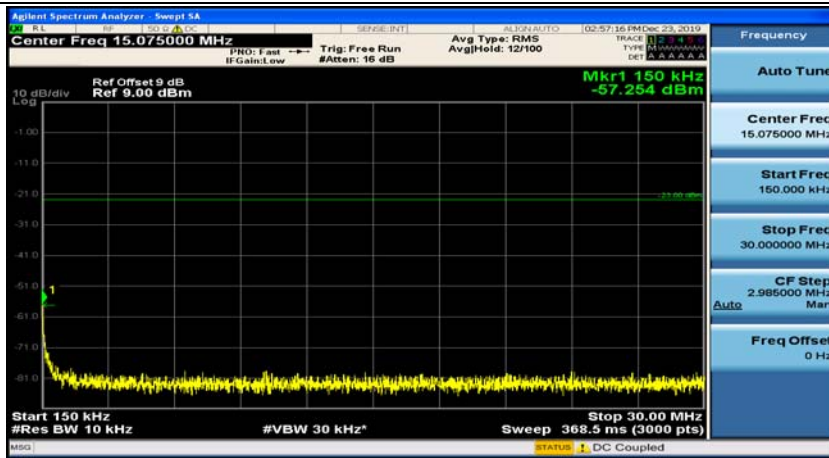
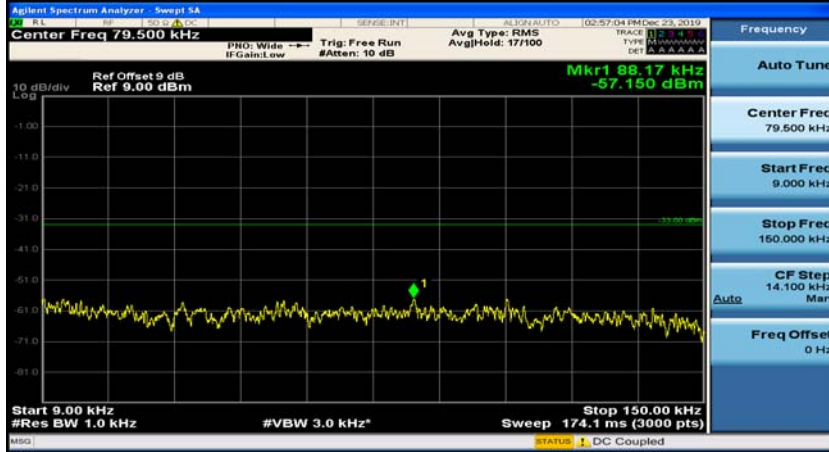


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

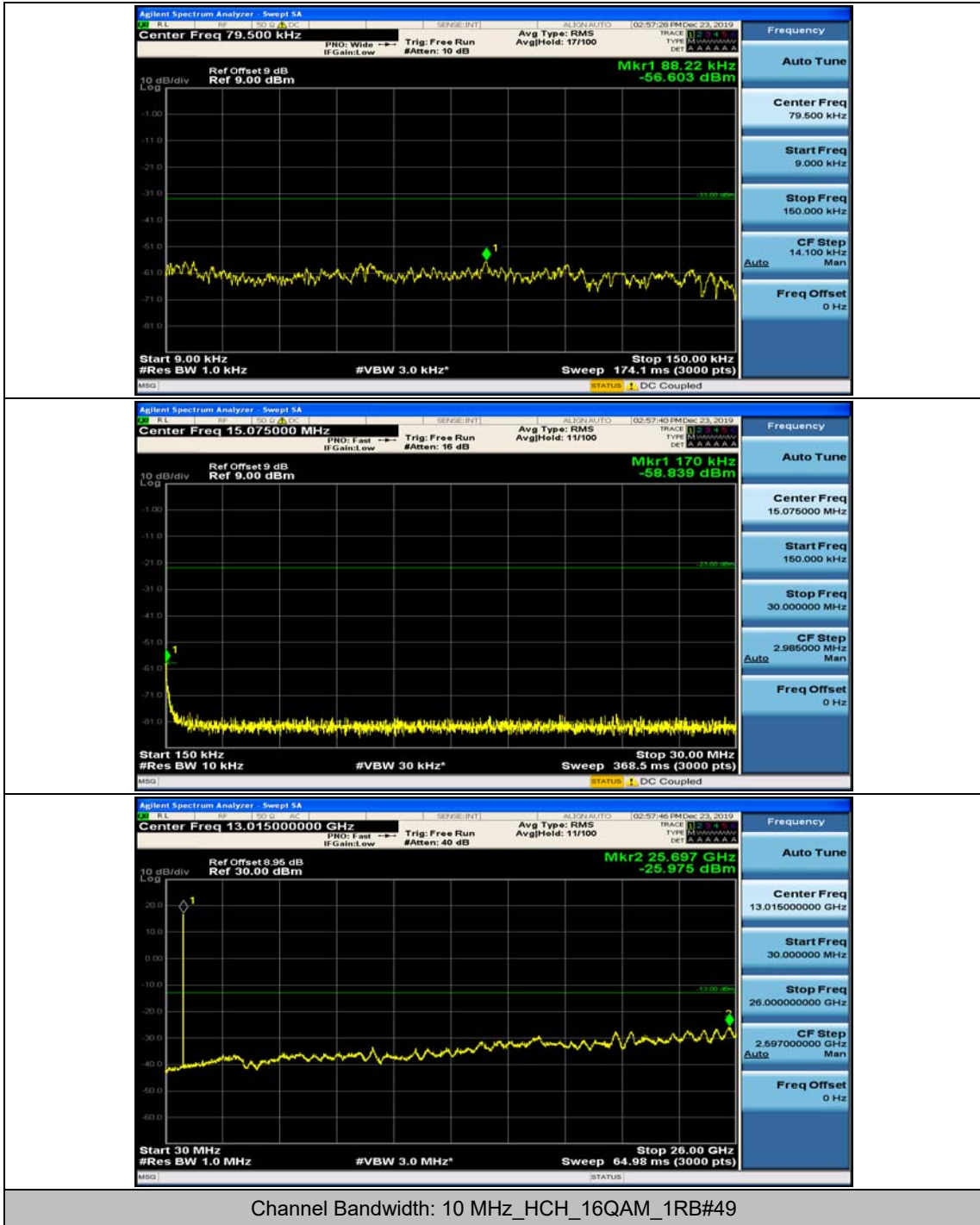


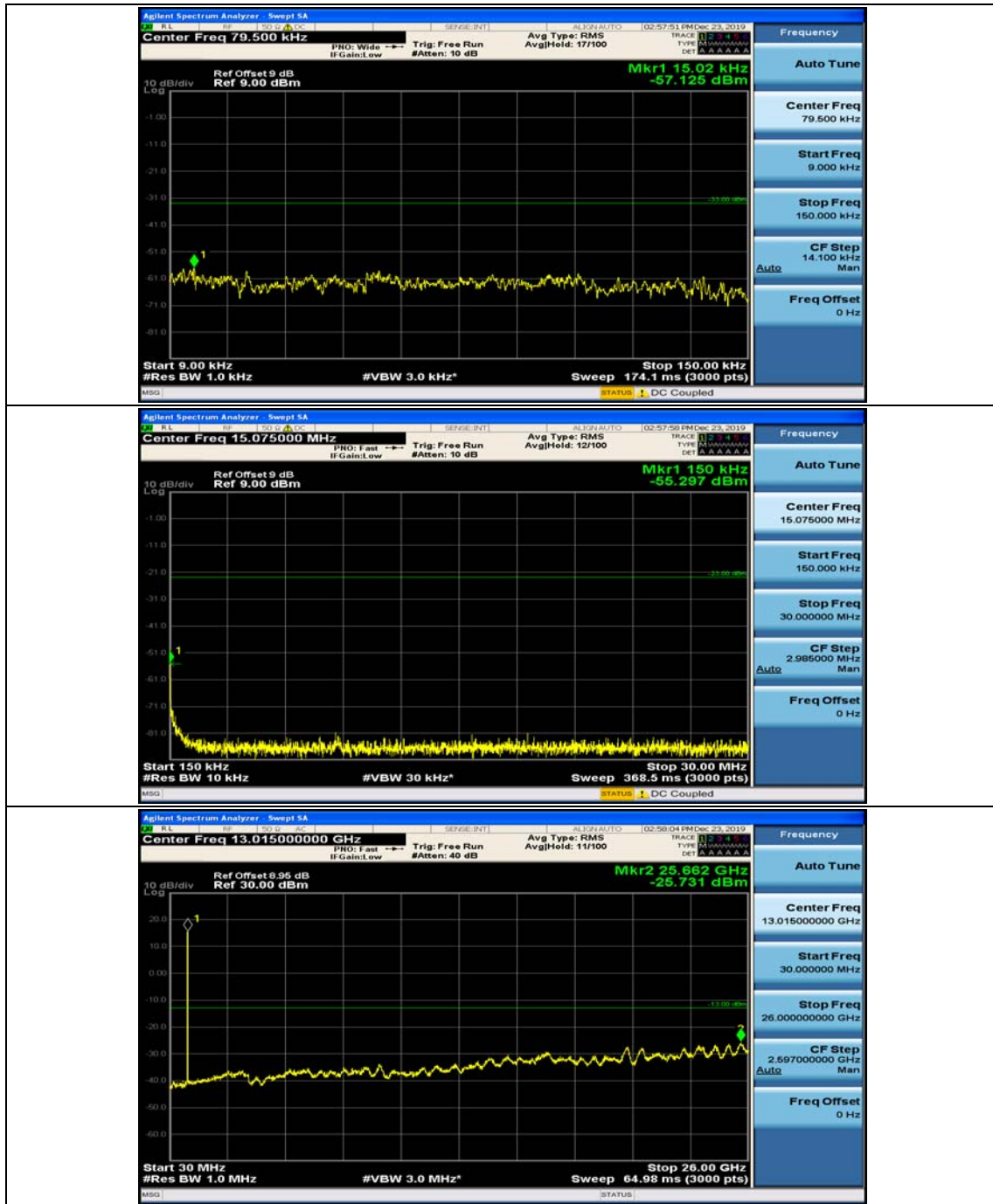


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



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	2.4	0.002910	± 2.5	PASS
		VN	TN	0.43	0.000521	± 2.5	PASS
		VH	TN	1.53	0.001855	± 2.5	PASS
	MCH	VL	TN	2.73	0.003264	± 2.5	PASS
		VN	TN	3.05	0.003646	± 2.5	PASS
		VH	TN	2.23	0.002666	± 2.5	PASS
	HCH	VL	TN	4.93	0.005812	± 2.5	PASS
		VN	TN	-1.35	-0.001591	± 2.5	PASS
		VH	TN	3.55	0.004185	± 2.5	PASS
16QAM	LCH	VL	TN	3.93	0.004765	± 2.5	PASS
		VN	TN	-0.07	-0.000085	± 2.5	PASS
		VH	TN	0.01	0.000012	± 2.5	PASS
	MCH	VL	TN	0.79	0.000944	± 2.5	PASS
		VN	TN	1.88	0.002247	± 2.5	PASS
		VH	TN	4.61	0.005511	± 2.5	PASS
	HCH	VL	TN	-1.46	-0.001721	± 2.5	PASS
		VN	TN	4.23	0.004986	± 2.5	PASS
		VH	TN	4.01	0.004727	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.82	-0.000994	± 2.5	PASS
		VN	-20	3.26	0.003953	± 2.5	PASS
		VN	-10	0.1	0.000121	± 2.5	PASS
		VN	0	1.66	0.002013	± 2.5	PASS
		VN	10	3.71	0.004499	± 2.5	PASS
		VN	20	1.82	0.002207	± 2.5	PASS
		VN	30	4.4	0.005335	± 2.5	PASS
		VN	40	2.81	0.003407	± 2.5	PASS
	MCH	VN	-30	2.8	0.003347	± 2.5	PASS
		VN	-20	2	0.002391	± 2.5	PASS

		VN	-10	3.34	0.003993	± 2.5	PASS		
		VN	0	2.38	0.002845	± 2.5	PASS		
		VN	10	4.16	0.004973	± 2.5	PASS		
		VN	20	1.39	0.001662	± 2.5	PASS		
		VN	30	1.81	0.002164	± 2.5	PASS		
		VN	40	2.03	0.002427	± 2.5	PASS		
		VN	50	1.14	0.001363	± 2.5	PASS		
	HCH	VN	-30	-1.89	-0.002228	± 2.5	PASS		
		VN	-20	-0.74	-0.000872	± 2.5	PASS		
		VN	-10	3.5	0.004126	± 2.5	PASS		
		VN	0	2.75	0.003242	± 2.5	PASS		
		VN	10	3.24	0.003819	± 2.5	PASS		
		VN	20	4.23	0.004986	± 2.5	PASS		
		VN	30	0.85	0.001002	± 2.5	PASS		
		VN	40	-0.39	-0.000460	± 2.5	PASS		
		VN	50	3.98	0.004692	± 2.5	PASS		
		16QAM	LCH	VN	-30	1.79	0.002170	± 2.5	PASS
				VN	-20	4.28	0.005190	± 2.5	PASS
VN	-10			-1.86	-0.002255	± 2.5	PASS		
VN	0			1.68	0.002037	± 2.5	PASS		
VN	10			-0.9	-0.001091	± 2.5	PASS		
VN	20			3.89	0.004717	± 2.5	PASS		
VN	30			-0.03	-0.000036	± 2.5	PASS		
VN	40			0.92	0.001116	± 2.5	PASS		
VN	50			-0.98	-0.001188	± 2.5	PASS		
MCH	VN		-30	2.98	0.003513	± 2.5	PASS		
	VN		-20	1.98	0.002334	± 2.5	PASS		
	VN		-10	4.91	0.005788	± 2.5	PASS		
	VN		0	4.05	0.004774	± 2.5	PASS		
	VN		10	-1.04	-0.001226	± 2.5	PASS		
	VN		20	1.77	0.002087	± 2.5	PASS		
	VN		30	1.25	0.001474	± 2.5	PASS		
	VN		40	1.11	0.001308	± 2.5	PASS		
	VN		50	1.02	0.001202	± 2.5	PASS		
HCH	VN		-30	2.48	0.002923	± 2.5	PASS		
	VN		-20	-1.27	-0.001497	± 2.5	PASS		
	VN		-10	2.62	0.003089	± 2.5	PASS		
	VN		0	3.45	0.004067	± 2.5	PASS		
	VN		10	0.23	0.000271	± 2.5	PASS		
	VN		20	-1.7	-0.002004	± 2.5	PASS		
	VN		30	2.34	0.002758	± 2.5	PASS		

		VN	40	-1.76	-0.002075	± 2.5	PASS
		VN	50	4.16	0.004904	± 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	1.82	0.002205	± 2.5	PASS
		VN	TN	2.66	0.003222	± 2.5	PASS
		VH	TN	3.52	0.004264	± 2.5	PASS
	MCH	VL	TN	1.07	0.001279	± 2.5	PASS
		VN	TN	-1.8	-0.002152	± 2.5	PASS
		VH	TN	2.36	0.002821	± 2.5	PASS
	HCH	VL	TN	4.73	0.005581	± 2.5	PASS
		VN	TN	-1.25	-0.001475	± 2.5	PASS
		VH	TN	1.75	0.002065	± 2.5	PASS
16QAM	LCH	VL	TN	0.61	0.000739	± 2.5	PASS
		VN	TN	-0.11	-0.000133	± 2.5	PASS
		VH	TN	0.6	0.000727	± 2.5	PASS
	MCH	VL	TN	1.71	0.002044	± 2.5	PASS
		VN	TN	4.77	0.005702	± 2.5	PASS
		VH	TN	0.26	0.000311	± 2.5	PASS
	HCH	VL	TN	-1.58	-0.001864	± 2.5	PASS
		VN	TN	2.43	0.002867	± 2.5	PASS
		VH	TN	2.35	0.002773	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.19	0.000230	± 2.5	PASS
		VN	-20	3.77	0.004567	± 2.5	PASS
		VN	-10	0.23	0.000279	± 2.5	PASS
		VN	0	4.54	0.005500	± 2.5	PASS
		VN	10	-1.06	-0.001284	± 2.5	PASS
		VN	20	-1.44	-0.001744	± 2.5	PASS
		VN	30	-1.44	-0.001744	± 2.5	PASS
		VN	40	1.86	0.002253	± 2.5	PASS
		VN	50	-1.41	-0.001708	± 2.5	PASS
	MCH	VN	-30	4.02	0.004806	± 2.5	PASS
		VN	-20	1.45	0.001733	± 2.5	PASS
		VN	-10	3.22	0.003849	± 2.5	PASS

		VN	0	3.03	0.003622	± 2.5	PASS		
		VN	10	2.78	0.003323	± 2.5	PASS		
		VN	20	0.48	0.000574	± 2.5	PASS		
		VN	30	-0.63	-0.000753	± 2.5	PASS		
		VN	40	4.17	0.004985	± 2.5	PASS		
		VN	50	-0.26	-0.000311	± 2.5	PASS		
	HCH	VN	-30	-0.4	-0.000472	± 2.5	PASS		
		VN	-20	-1.22	-0.001440	± 2.5	PASS		
		VN	-10	2.97	0.003504	± 2.5	PASS		
		VN	0	2.04	0.002407	± 2.5	PASS		
		VN	10	3.19	0.003764	± 2.5	PASS		
		VN	20	-1.08	-0.001274	± 2.5	PASS		
		VN	30	2.53	0.002985	± 2.5	PASS		
		VN	40	2.96	0.003493	± 2.5	PASS		
		VN	50	0.66	0.000779	± 2.5	PASS		
		16QAM	LCH	VN	-30	-1.7	-0.002032	± 2.5	PASS
				VN	-20	3.53	0.004220	± 2.5	PASS
				VN	-10	4.15	0.004961	± 2.5	PASS
VN	0			1.52	0.001817	± 2.5	PASS		
VN	10			3.06	0.003658	± 2.5	PASS		
VN	20			1.02	0.001219	± 2.5	PASS		
VN	30			4.23	0.005057	± 2.5	PASS		
VN	40			1.79	0.002140	± 2.5	PASS		
VN	50			-0.32	-0.000383	± 2.5	PASS		
MCH	VN		-30	4.63	0.005463	± 2.5	PASS		
	VN		-20	4.9	0.005782	± 2.5	PASS		
	VN		-10	3.58	0.004224	± 2.5	PASS		
	VN		0	2.31	0.002726	± 2.5	PASS		
	VN		10	3.56	0.004201	± 2.5	PASS		
	VN		20	-1.33	-0.001569	± 2.5	PASS		
	VN		30	3.25	0.003835	± 2.5	PASS		
	VN		40	0.71	0.000838	± 2.5	PASS		
	VN		50	4.35	0.005133	± 2.5	PASS		
HCH	VN		-30	-1.85	-0.002183	± 2.5	PASS		
	VN		-20	4.48	0.005286	± 2.5	PASS		
	VN		-10	3.21	0.003788	± 2.5	PASS		
	VN		0	2.77	0.003268	± 2.5	PASS		
	VN		10	1.7	0.002006	± 2.5	PASS		
	VN		20	3.12	0.003681	± 2.5	PASS		
	VN		30	3.02	0.003563	± 2.5	PASS		
	VN		40	4.4	0.005192	± 2.5	PASS		

		VN	50	-1.15	-0.001357	± 2.5	PASS
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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	4.38	0.005299	± 2.5	PASS
		VN	TN	2.76	0.003339	± 2.5	PASS
		VH	TN	3.93	0.004755	± 2.5	PASS
	MCH	VL	TN	2.61	0.003120	± 2.5	PASS
		VN	TN	4.05	0.004842	± 2.5	PASS
		VH	TN	-0.81	-0.000968	± 2.5	PASS
	HCH	VL	TN	4.46	0.005269	± 2.5	PASS
		VN	TN	2.24	0.002646	± 2.5	PASS
		VH	TN	-1.69	-0.001996	± 2.5	PASS
16QAM	LCH	VL	TN	3.9	0.004719	± 2.5	PASS
		VN	TN	2.22	0.002686	± 2.5	PASS
		VH	TN	1.3	0.001573	± 2.5	PASS
	MCH	VL	TN	-0.9	-0.001076	± 2.5	PASS
		VN	TN	2.7	0.003228	± 2.5	PASS
		VH	TN	0.82	0.000980	± 2.5	PASS
	HCH	VL	TN	1.48	0.001748	± 2.5	PASS
		VN	TN	4.32	0.005103	± 2.5	PASS
		VH	TN	2.14	0.002528	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1	0.001210	± 2.5	PASS
		VN	-20	0.3	0.000363	± 2.5	PASS
		VN	-10	1.01	0.001222	± 2.5	PASS
		VN	0	2.26	0.002734	± 2.5	PASS
		VN	10	4.16	0.005033	± 2.5	PASS
		VN	20	4.98	0.006025	± 2.5	PASS
		VN	30	4.66	0.005638	± 2.5	PASS
		VN	40	1.08	0.001307	± 2.5	PASS
		VN	50	3.25	0.003932	± 2.5	PASS
	MCH	VN	-30	-0.87	-0.001040	± 2.5	PASS
		VN	-20	1.27	0.001518	± 2.5	PASS
		VN	-10	1.97	0.002355	± 2.5	PASS
		VN	0	-1.22	-0.001458	± 2.5	PASS

		VN	10	0.14	0.000167	± 2.5	PASS
		VN	20	-0.13	-0.000155	± 2.5	PASS
		VN	30	-1.74	-0.002080	± 2.5	PASS
		VN	40	1	0.001195	± 2.5	PASS
		VN	50	2.84	0.003395	± 2.5	PASS
	HCH	VN	-30	1.72	0.002032	± 2.5	PASS
		VN	-20	4.42	0.005222	± 2.5	PASS
		VN	-10	3.92	0.004631	± 2.5	PASS
		VN	0	0.61	0.000721	± 2.5	PASS
		VN	10	0.8	0.000945	± 2.5	PASS
		VN	20	3.54	0.004182	± 2.5	PASS
		VN	30	4.02	0.004749	± 2.5	PASS
		VN	40	0.6	0.000709	± 2.5	PASS
		VN	50	3.05	0.003603	± 2.5	PASS
		16QAM	LCH	VN	-30	-1.28	-0.001530
VN	-20			-0.13	-0.000155	± 2.5	PASS
VN	-10			4.47	0.005344	± 2.5	PASS
VN	0			-0.31	-0.000371	± 2.5	PASS
VN	10			-1.84	-0.002200	± 2.5	PASS
VN	20			3.4	0.004065	± 2.5	PASS
VN	30			1.1	0.001315	± 2.5	PASS
VN	40			0.93	0.001112	± 2.5	PASS
VN	50			1.64	0.001961	± 2.5	PASS
MCH	VN		-30	1.79	0.002115	± 2.5	PASS
	VN		-20	-1.49	-0.001760	± 2.5	PASS
	VN		-10	1.54	0.001819	± 2.5	PASS
	VN		0	0.81	0.000957	± 2.5	PASS
	VN		10	1.5	0.001772	± 2.5	PASS
	VN		20	-0.32	-0.000378	± 2.5	PASS
	VN		30	-0.5	-0.000591	± 2.5	PASS
	VN		40	1.04	0.001229	± 2.5	PASS
	VN		50	-0.87	-0.001028	± 2.5	PASS
HCH	VN		-30	0.96	0.001134	± 2.5	PASS
	VN		-20	4.58	0.005411	± 2.5	PASS
	VN		-10	4.75	0.005611	± 2.5	PASS
	VN		0	0.51	0.000602	± 2.5	PASS
	VN		10	0.55	0.000650	± 2.5	PASS
	VN		20	3.05	0.003603	± 2.5	PASS
	VN		30	3.32	0.003922	± 2.5	PASS
	VN		40	-0.97	-0.001146	± 2.5	PASS
	VN		50	2.66	0.003142	± 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	0.21	0.000253	± 2.5	PASS
		VN	TN	4.79	0.005778	± 2.5	PASS
		VH	TN	4.76	0.005742	± 2.5	PASS
	MCH	VL	TN	2.23	0.002666	± 2.5	PASS
		VN	TN	-0.84	-0.001004	± 2.5	PASS
		VH	TN	1.47	0.001757	± 2.5	PASS
	HCH	VL	TN	1.05	0.001244	± 2.5	PASS
		VN	TN	3.38	0.004005	± 2.5	PASS
		VH	TN	-0.51	-0.000604	± 2.5	PASS
16QAM	LCH	VL	TN	0.19	0.000229	± 2.5	PASS
		VN	TN	-0.64	-0.000772	± 2.5	PASS
		VH	TN	1.38	0.001665	± 2.5	PASS
	MCH	VL	TN	0.44	0.000526	± 2.5	PASS
		VN	TN	0.58	0.000693	± 2.5	PASS
		VH	TN	-1.31	-0.001566	± 2.5	PASS
	HCH	VL	TN	1.22	0.001445	± 2.5	PASS
		VN	TN	-0.34	-0.000403	± 2.5	PASS
		VH	TN	1.47	0.001742	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.54	0.004270	± 2.5	PASS
		VN	-20	4.77	0.005754	± 2.5	PASS
		VN	-10	4.76	0.005742	± 2.5	PASS
		VN	0	1.89	0.002280	± 2.5	PASS
		VN	10	-0.24	-0.000290	± 2.5	PASS
		VN	20	4.57	0.005513	± 2.5	PASS
		VN	30	2.67	0.003221	± 2.5	PASS
		VN	40	3.73	0.004499	± 2.5	PASS
		VN	50	-0.51	-0.000615	± 2.5	PASS
	MCH	VN	-30	3.18	0.003802	± 2.5	PASS
		VN	-20	-0.32	-0.000383	± 2.5	PASS
		VN	-10	4.17	0.004985	± 2.5	PASS
		VN	0	-1.09	-0.001303	± 2.5	PASS
		VN	10	-1.14	-0.001363	± 2.5	PASS
		VN	20	-1.12	-0.001339	± 2.5	PASS

		VN	30	0.21	0.000251	± 2.5	PASS
		VN	40	0.85	0.001016	± 2.5	PASS
		VN	50	2.44	0.002917	± 2.5	PASS
	HCH	VN	-30	-0.76	-0.000900	± 2.5	PASS
		VN	-20	-2	-0.002370	± 2.5	PASS
		VN	-10	4.96	0.005877	± 2.5	PASS
		VN	0	0.67	0.000794	± 2.5	PASS
		VN	10	2.07	0.002453	± 2.5	PASS
		VN	20	2.46	0.002915	± 2.5	PASS
		VN	30	1.88	0.002227	± 2.5	PASS
		VN	40	1.83	0.002168	± 2.5	PASS
		VN	50	0.78	0.000924	± 2.5	PASS
16QAM	LCH	VN	-30	3.24	0.003873	± 2.5	PASS
		VN	-20	3.91	0.004674	± 2.5	PASS
		VN	-10	-0.96	-0.001148	± 2.5	PASS
		VN	0	2.44	0.002917	± 2.5	PASS
		VN	10	4.85	0.005798	± 2.5	PASS
		VN	20	4.49	0.005368	± 2.5	PASS
		VN	30	-1.4	-0.001674	± 2.5	PASS
		VN	40	0.1	0.000120	± 2.5	PASS
		VN	50	0.99	0.001184	± 2.5	PASS
	MCH	VN	-30	1.32	0.001564	± 2.5	PASS
		VN	-20	2.1	0.002488	± 2.5	PASS
		VN	-10	2.41	0.002855	± 2.5	PASS
		VN	0	2.72	0.003223	± 2.5	PASS
		VN	10	1.13	0.001339	± 2.5	PASS
		VN	20	1.59	0.001884	± 2.5	PASS
		VN	30	2.94	0.003483	± 2.5	PASS
		VN	40	3.87	0.004585	± 2.5	PASS
		VN	50	1.75	0.002073	± 2.5	PASS
	HCH	VN	-30	3.37	0.003993	± 2.5	PASS
		VN	-20	-1.51	-0.001789	± 2.5	PASS
		VN	-10	0.19	0.000225	± 2.5	PASS
		VN	0	-1.64	-0.001943	± 2.5	PASS
		VN	10	4.13	0.004893	± 2.5	PASS
		VN	20	3.71	0.004396	± 2.5	PASS
		VN	30	0.27	0.000320	± 2.5	PASS
		VN	40	-0.2	-0.000237	± 2.5	PASS
		VN	50	-1.35	-0.001600	± 2.5	PASS