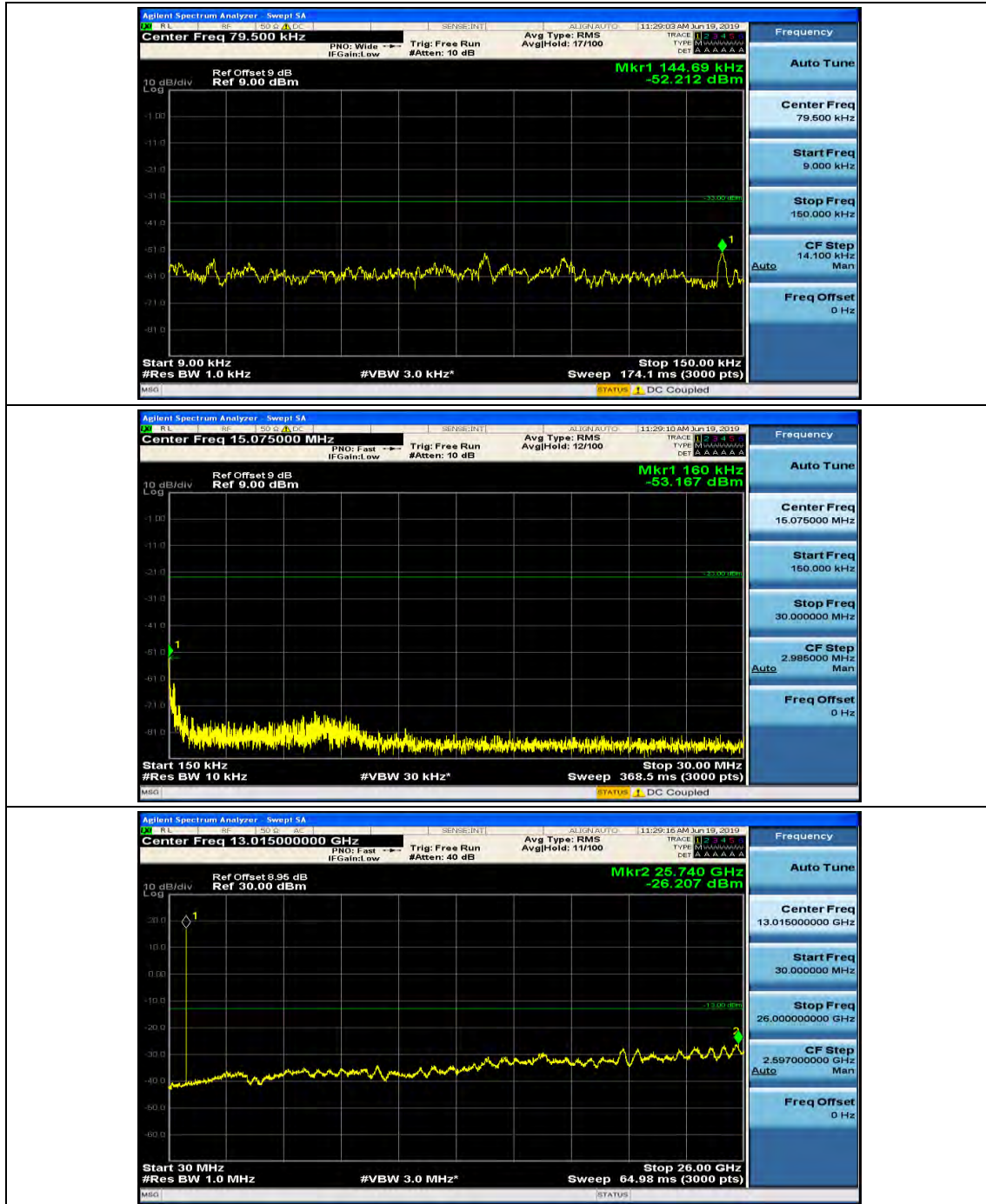
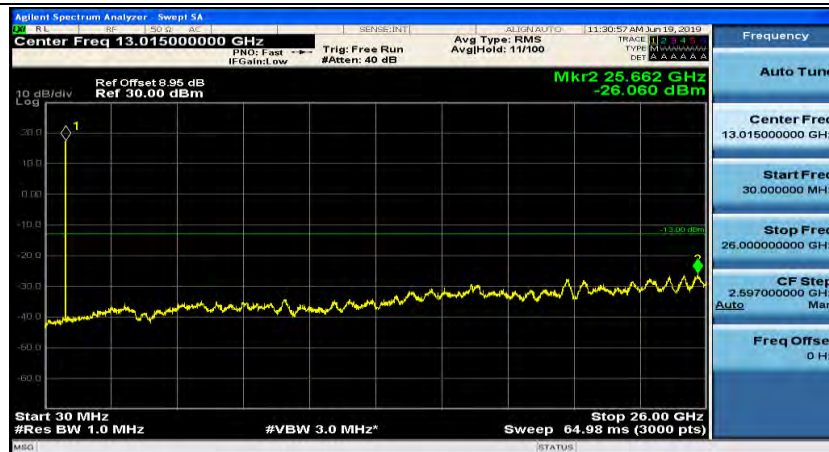
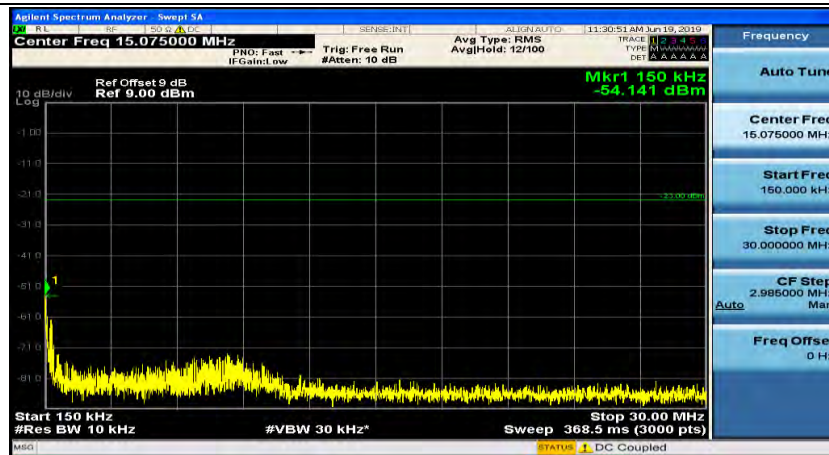
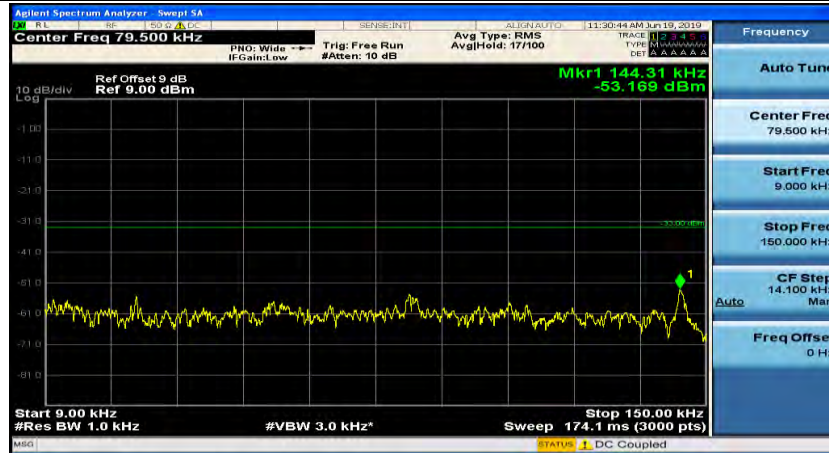
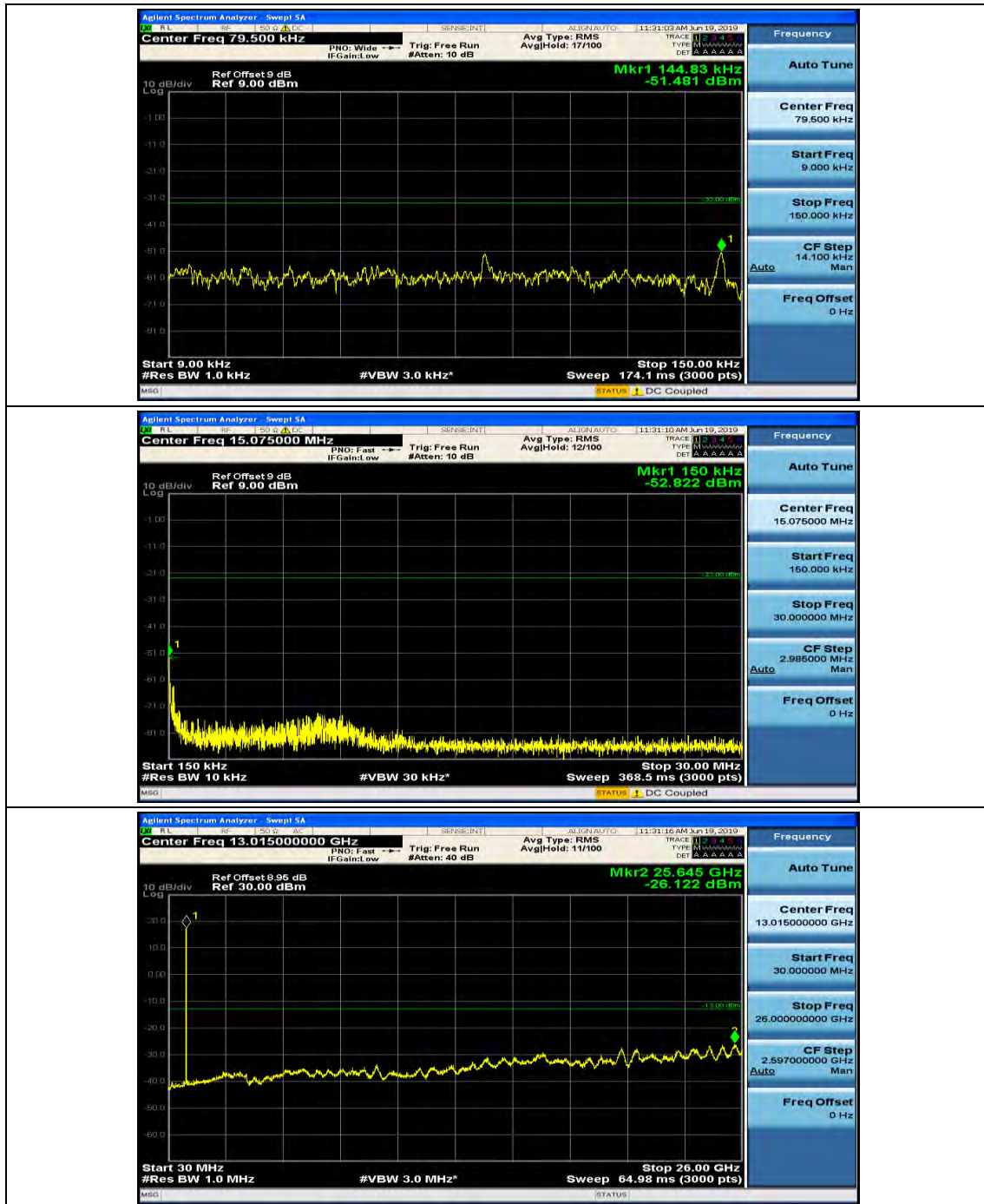




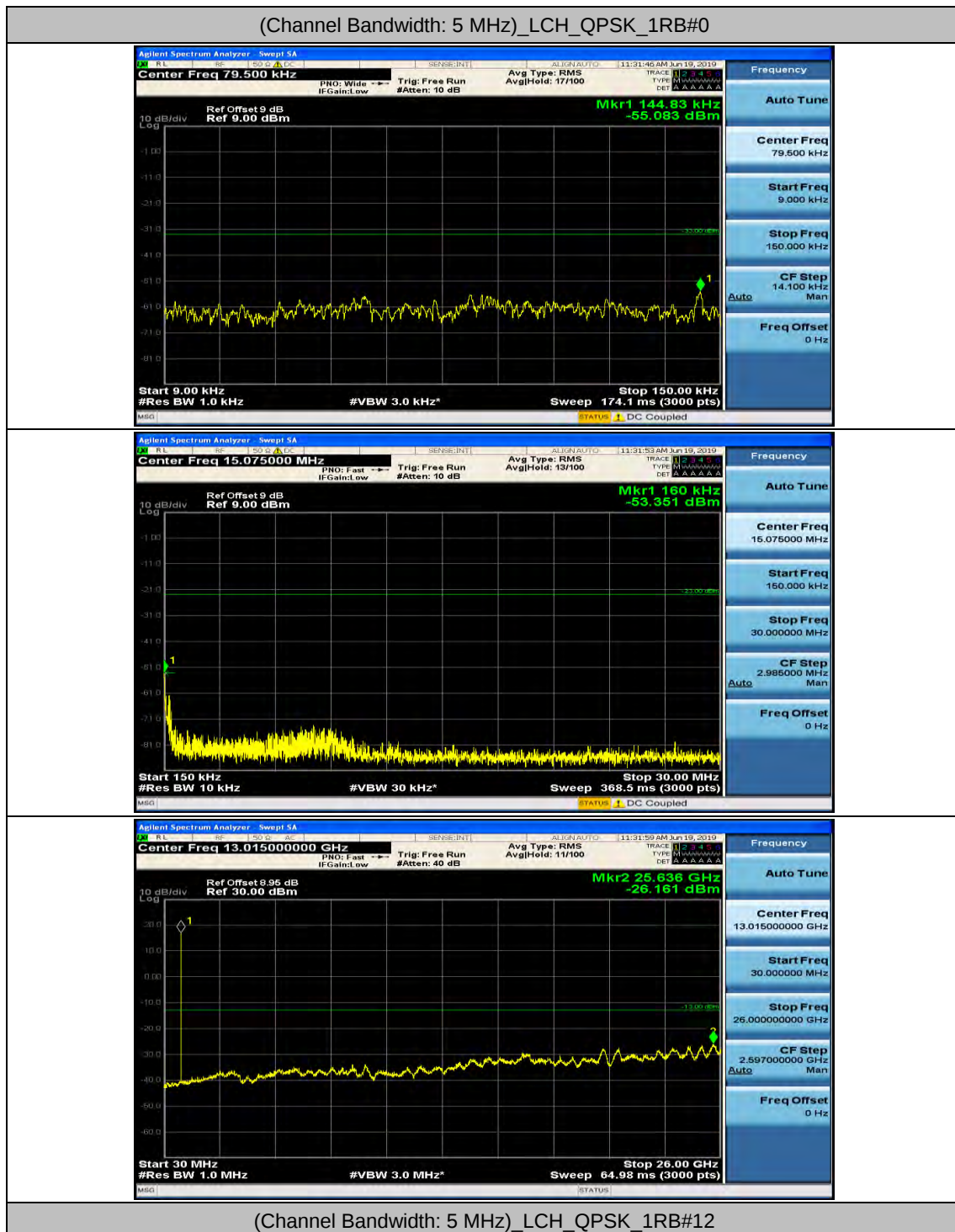
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

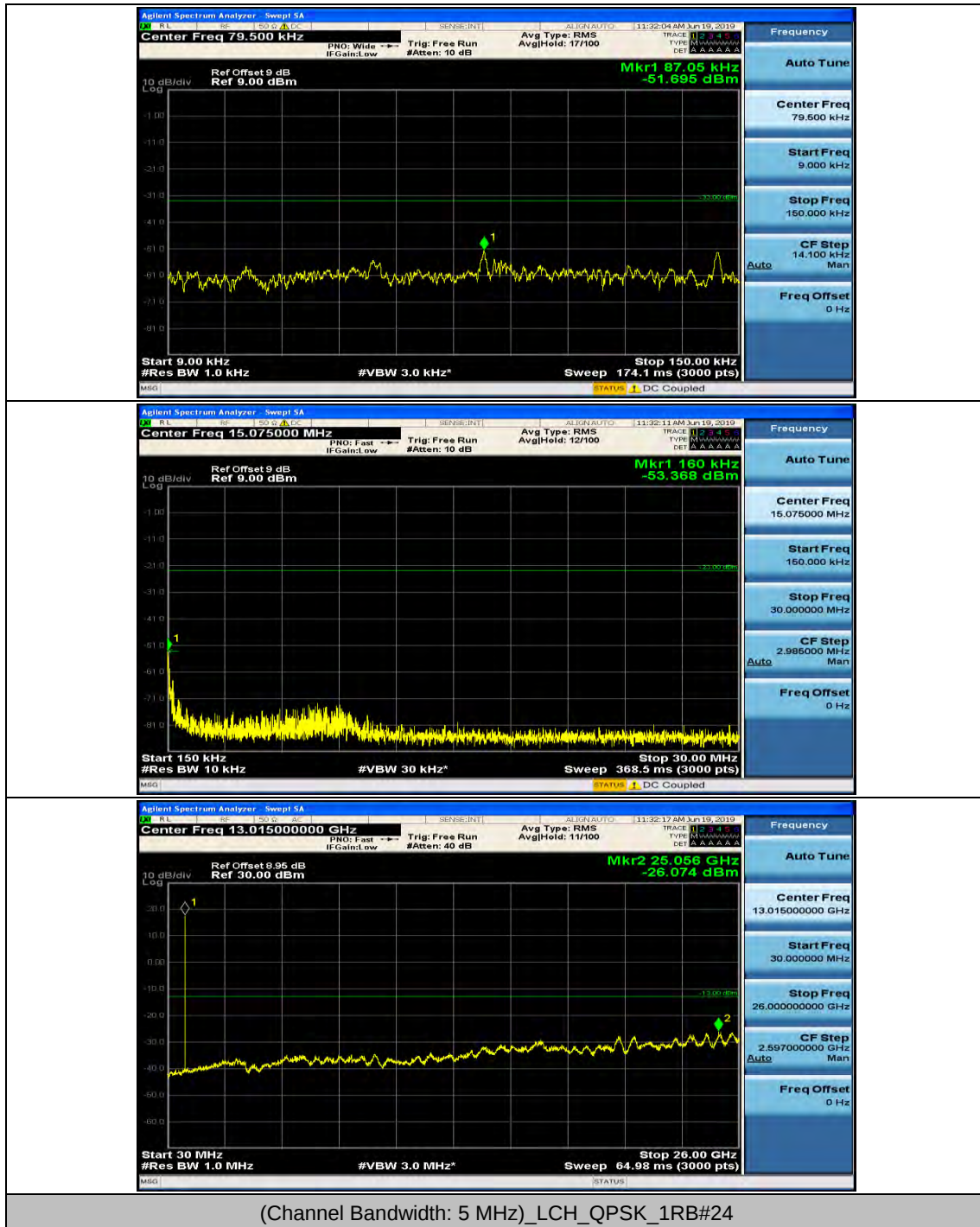


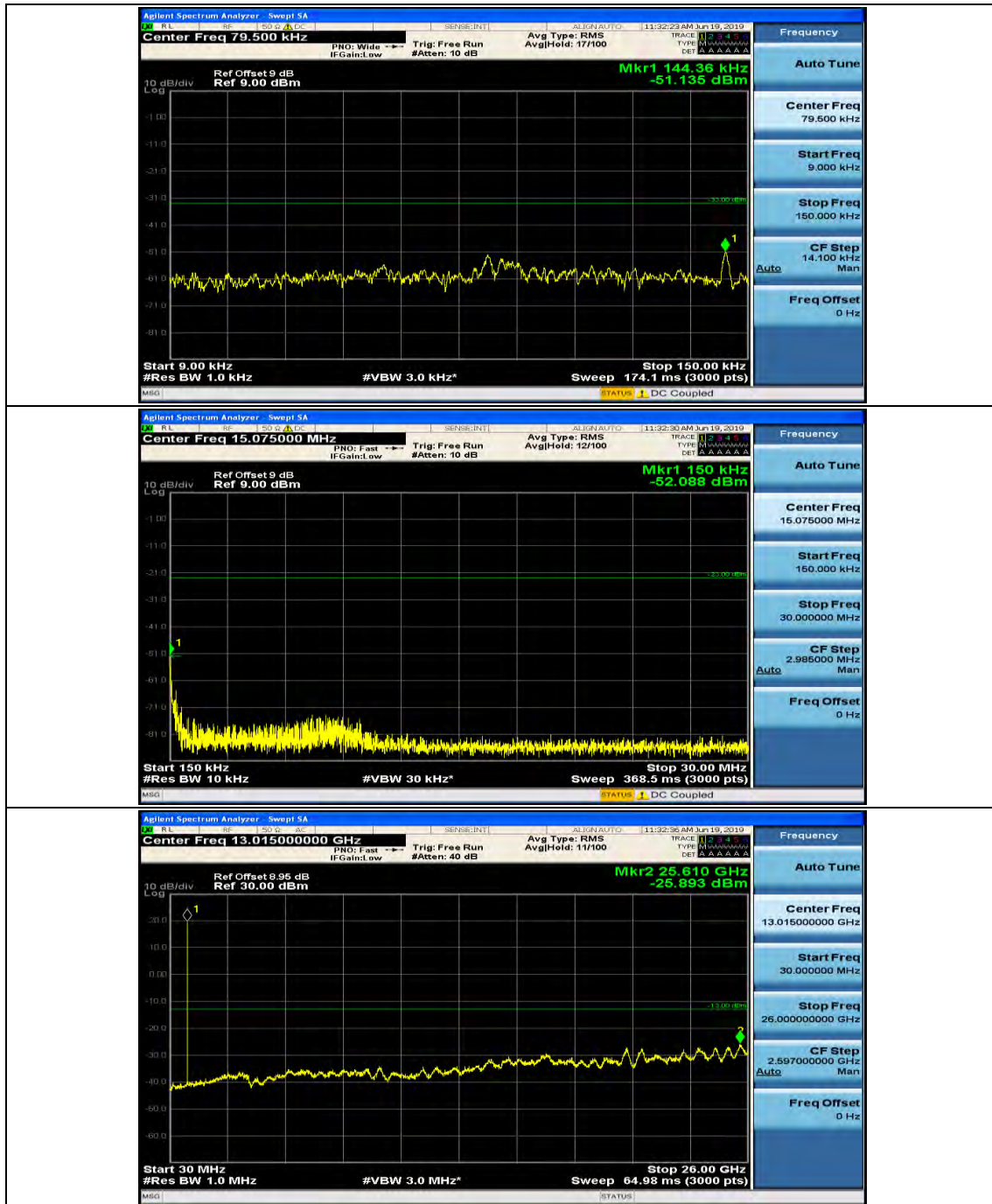
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7



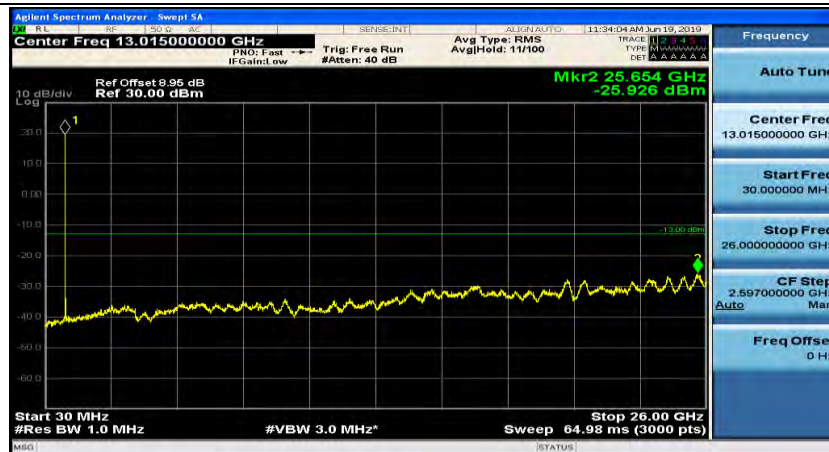
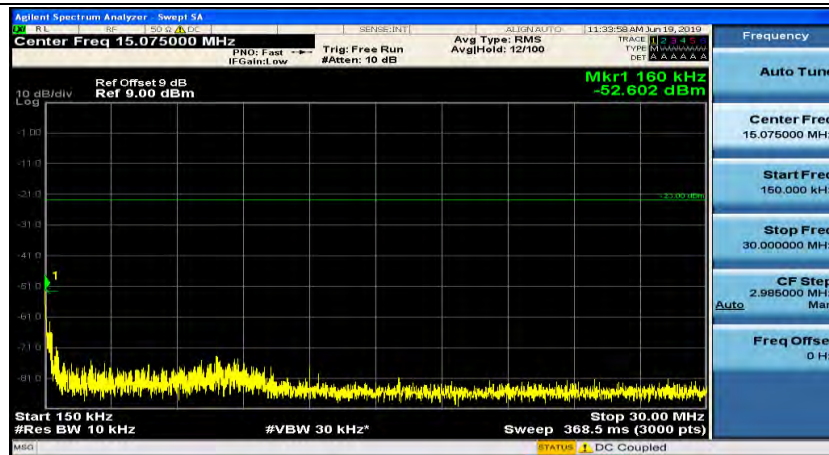
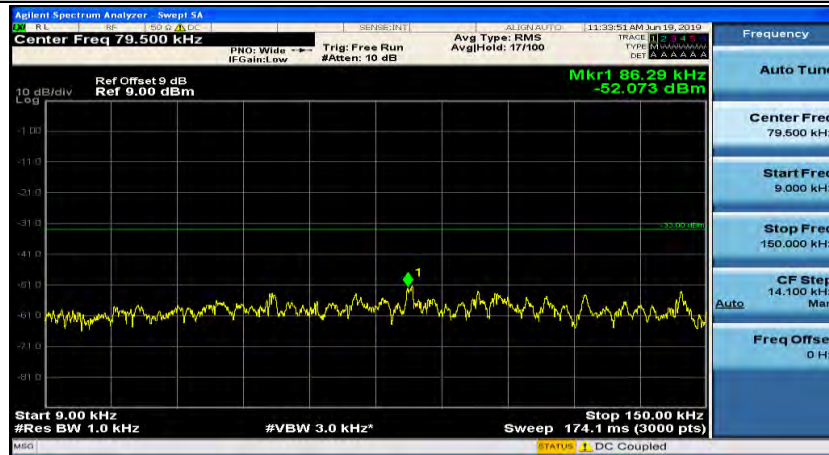
Channel Bandwidth: 5 MHz



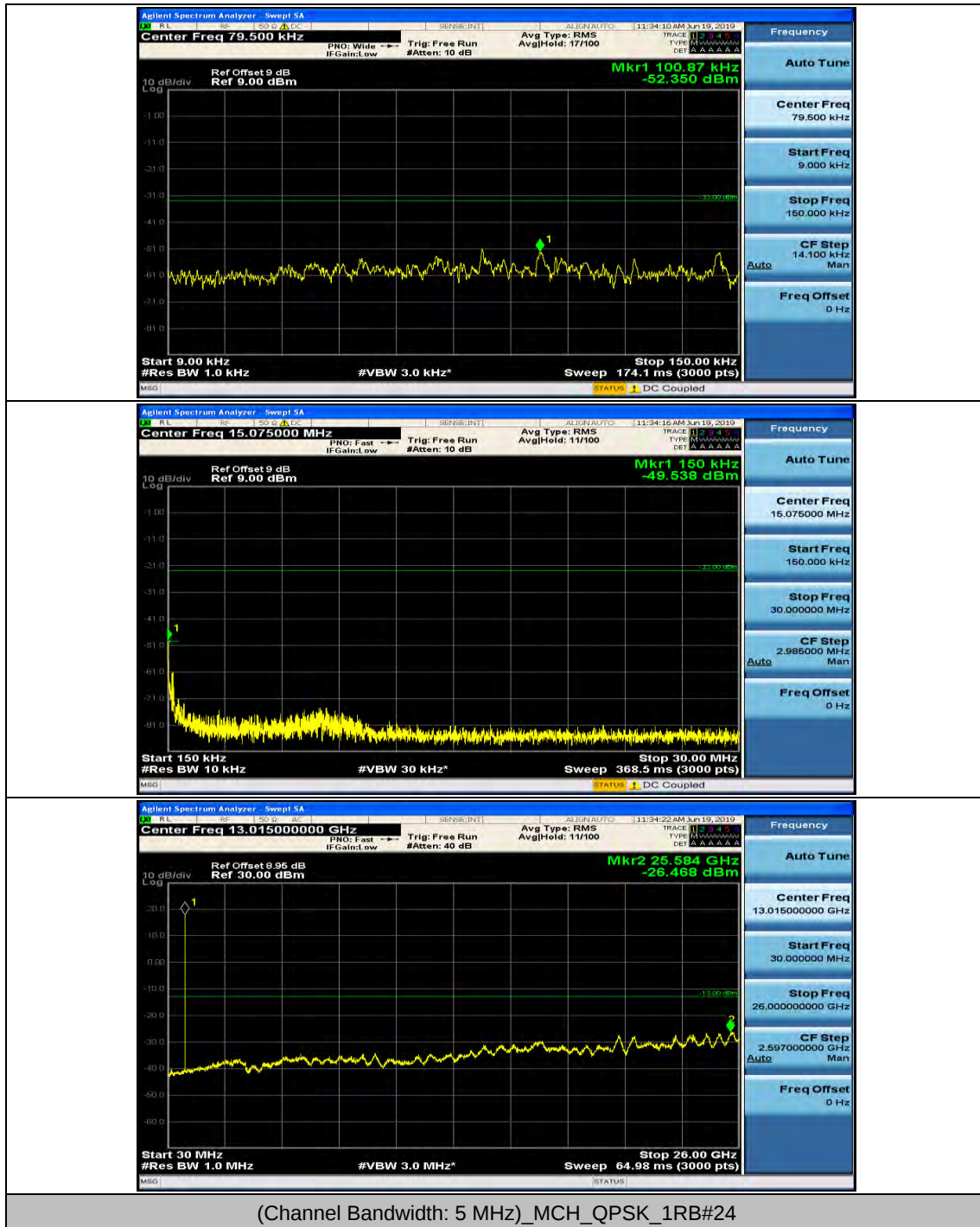


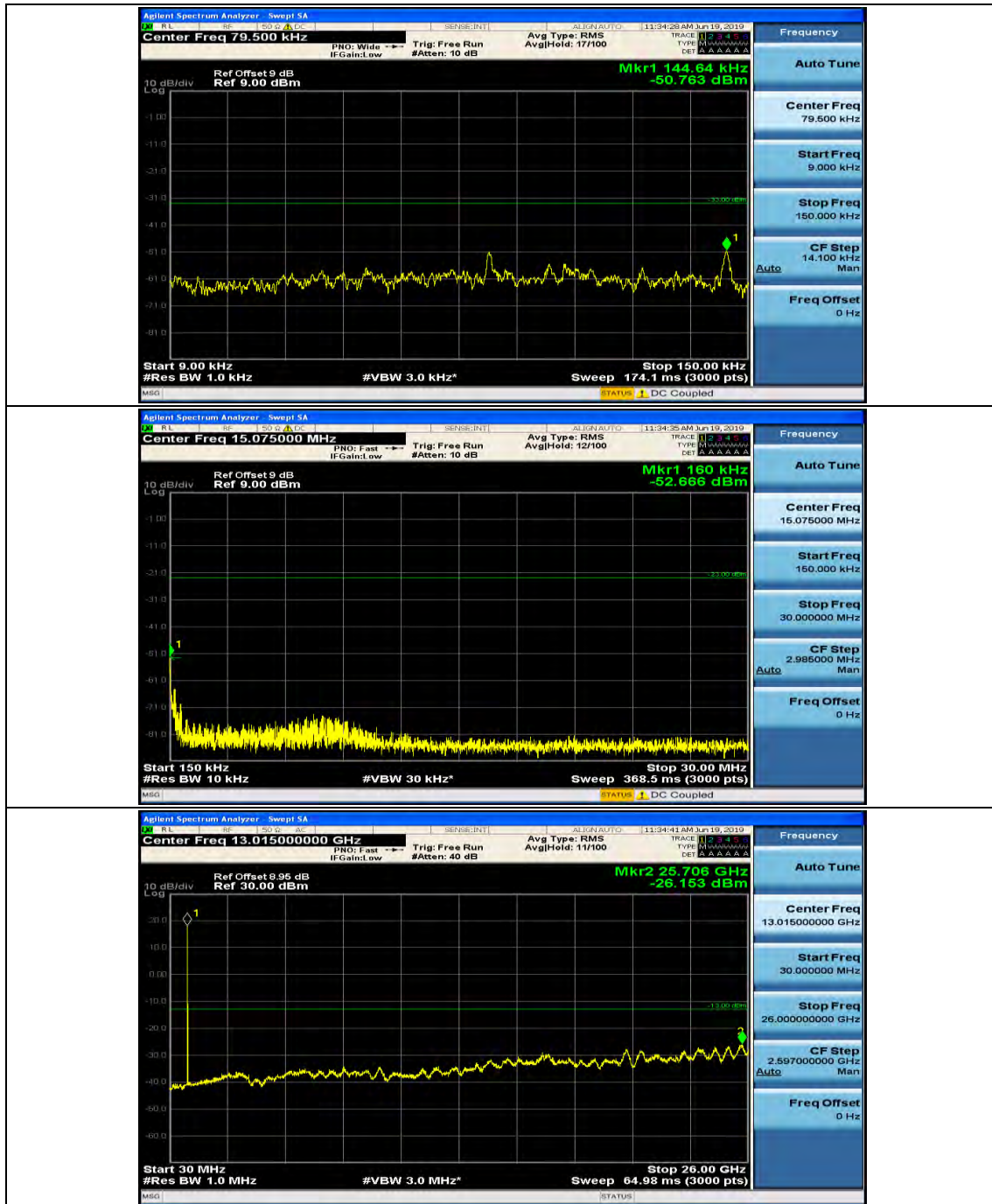


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

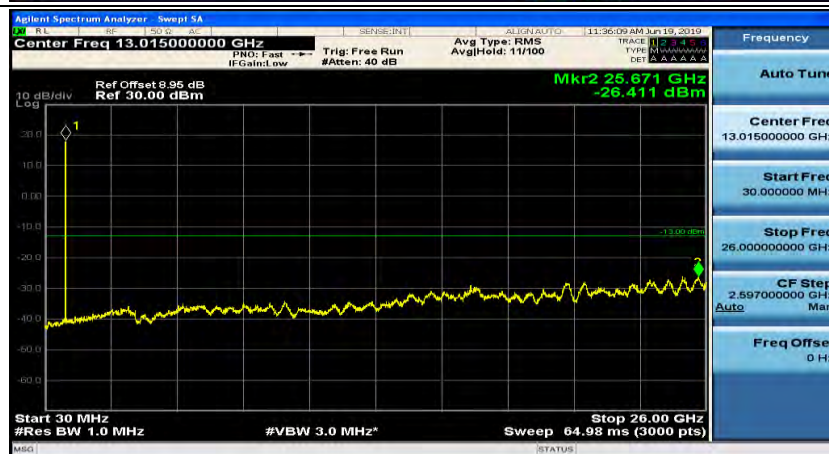
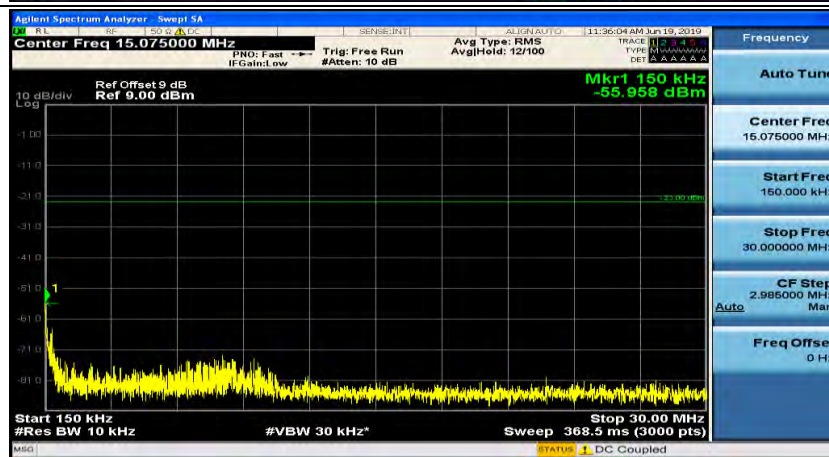


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

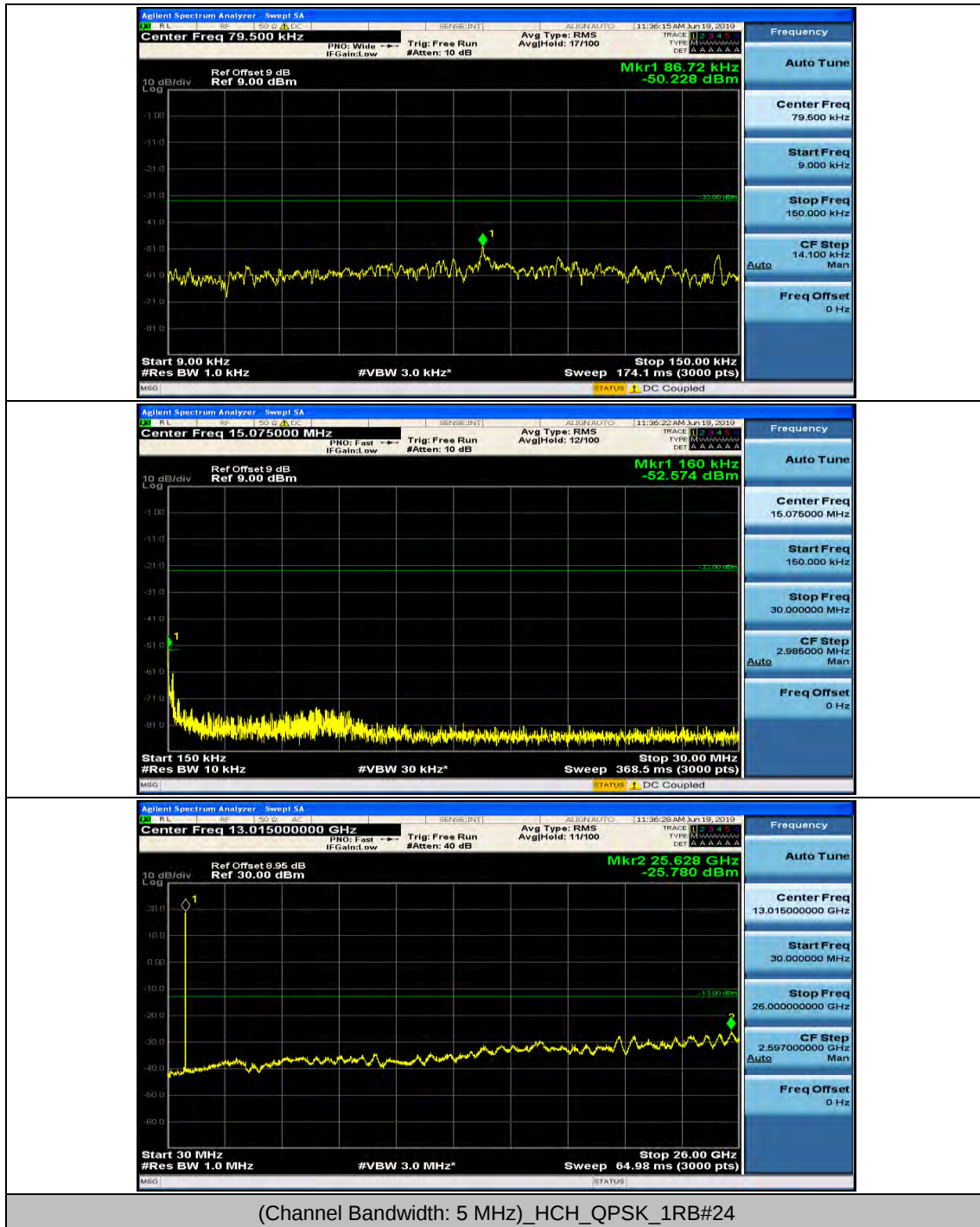


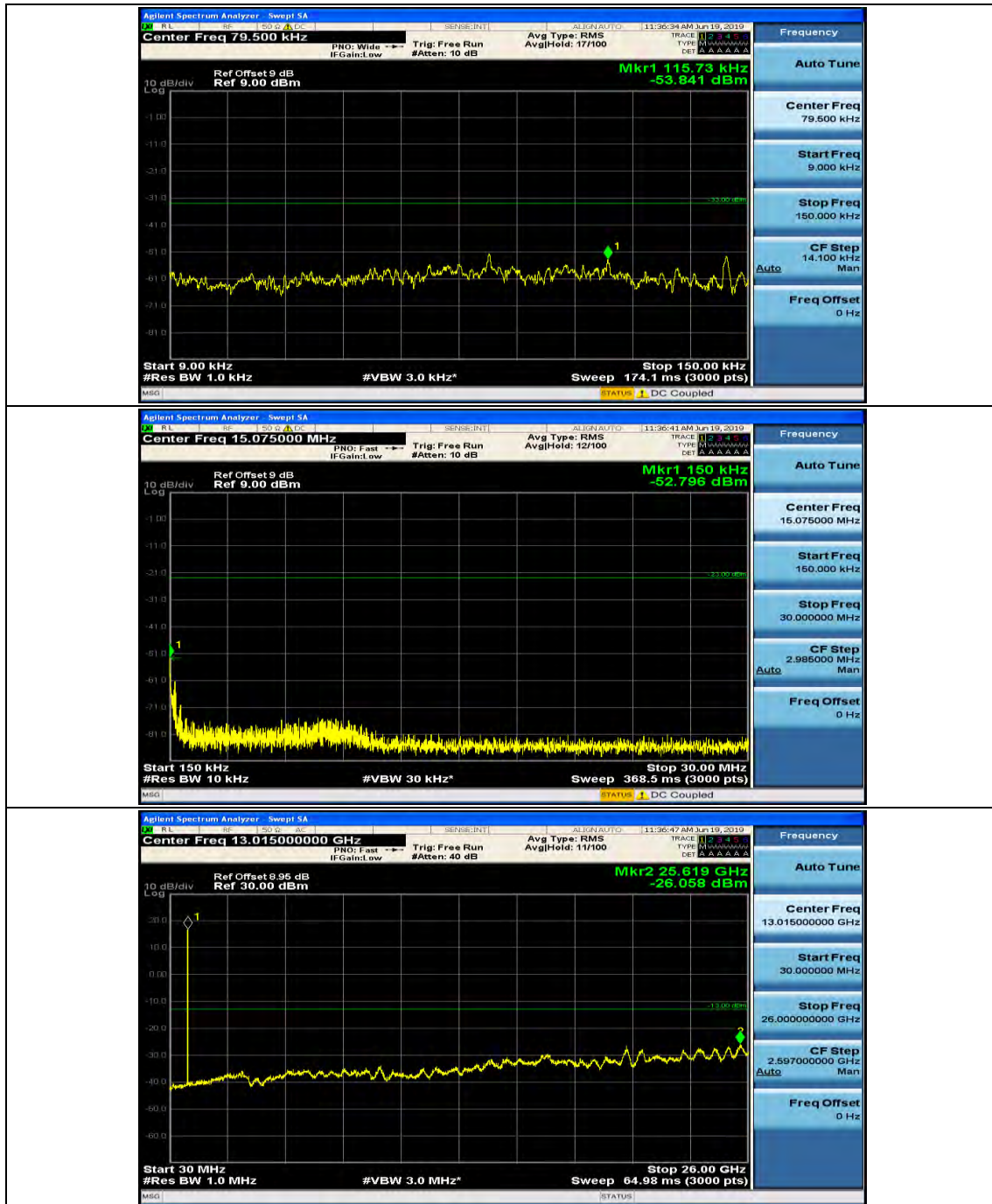


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

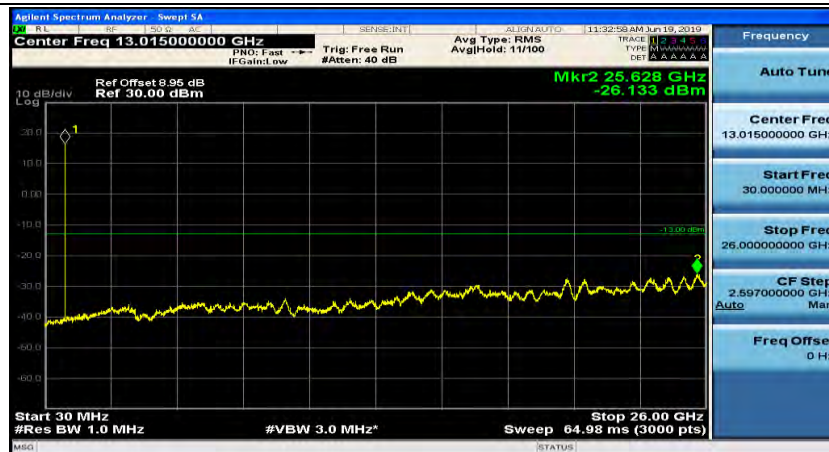
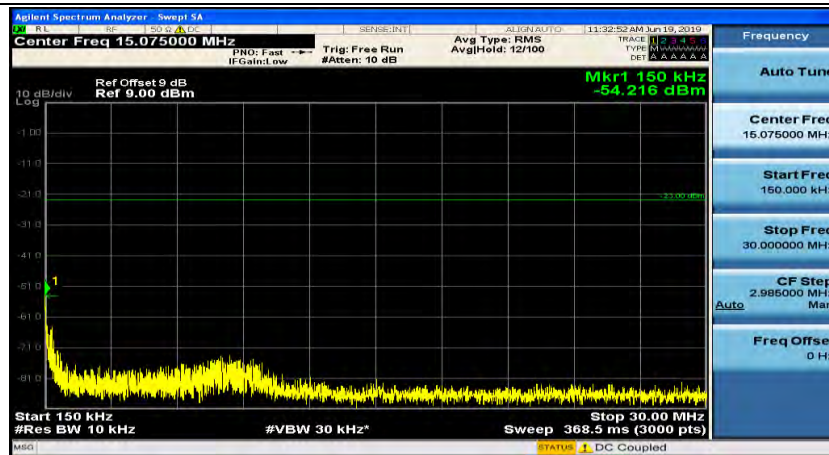
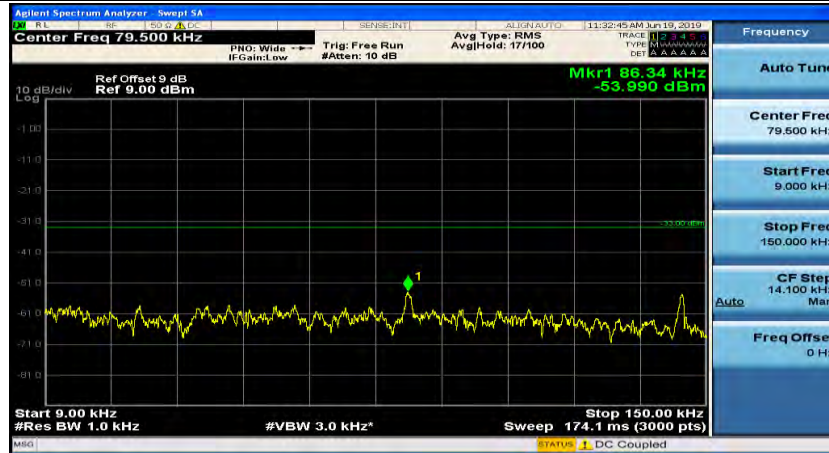


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

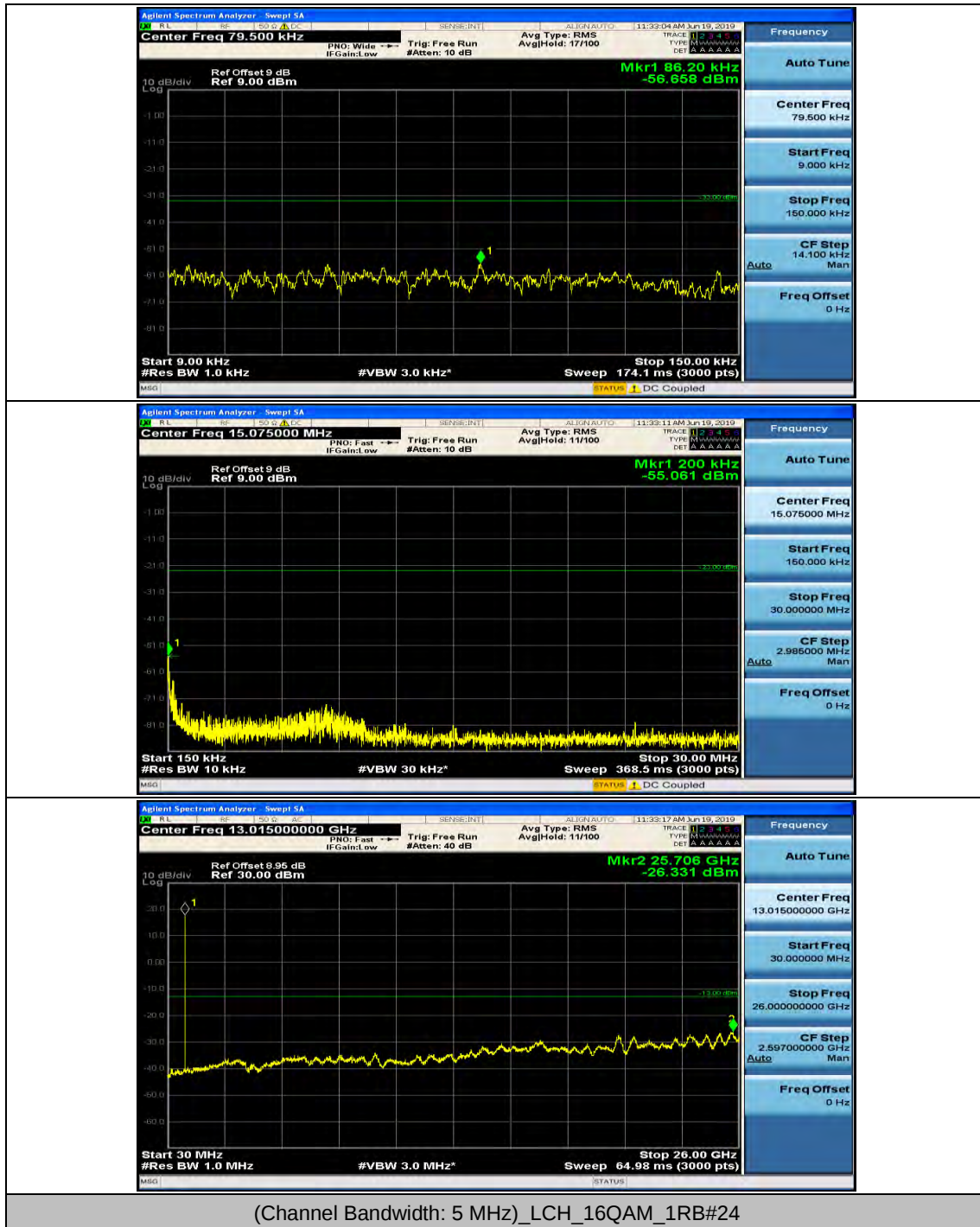


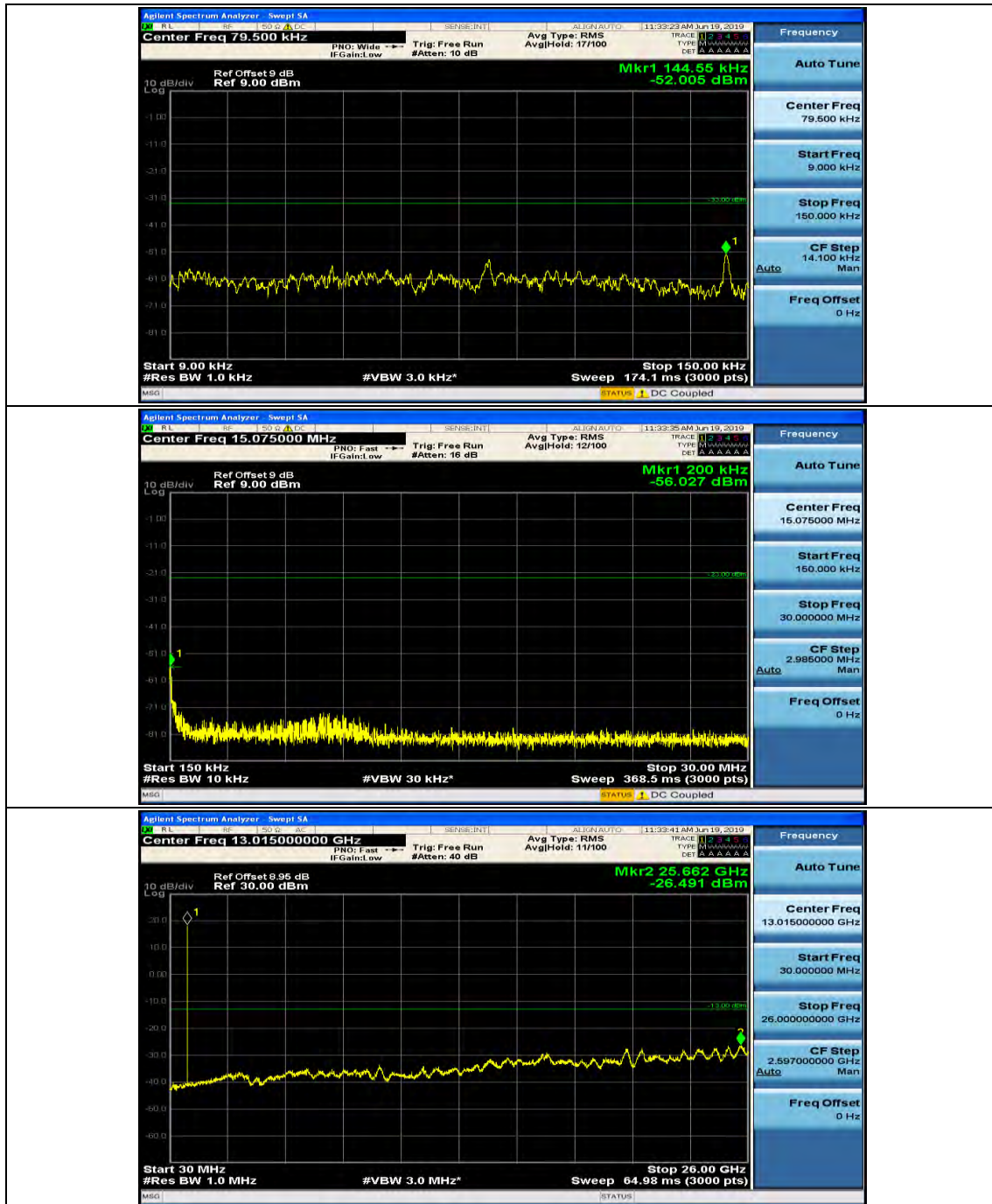


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

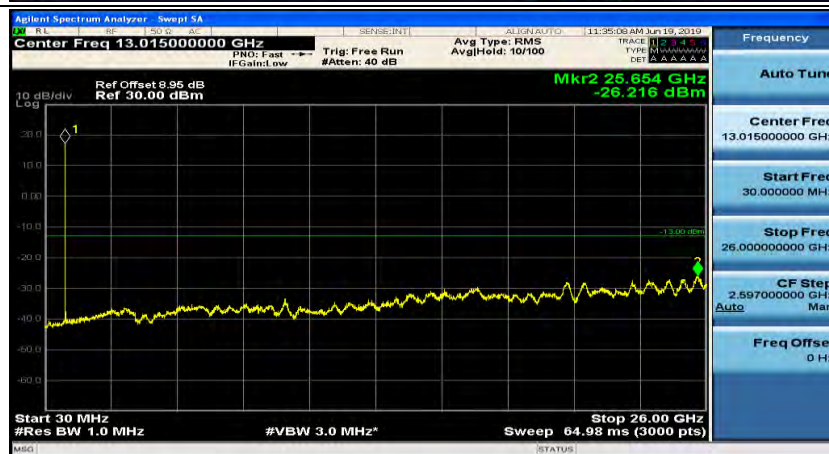
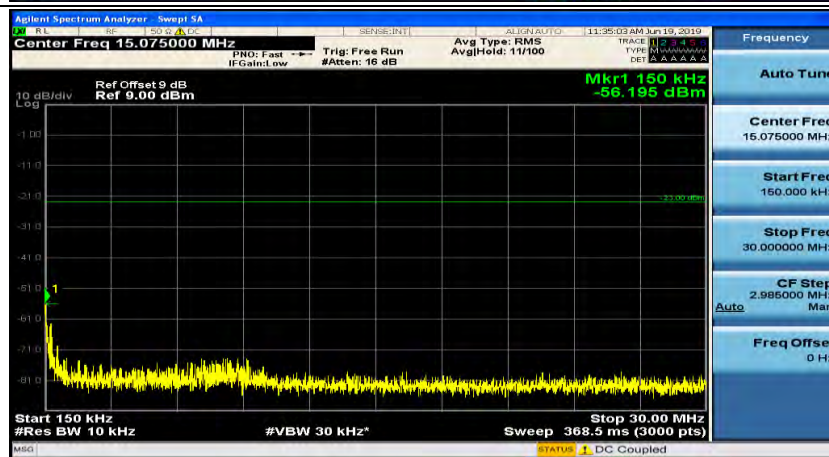


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

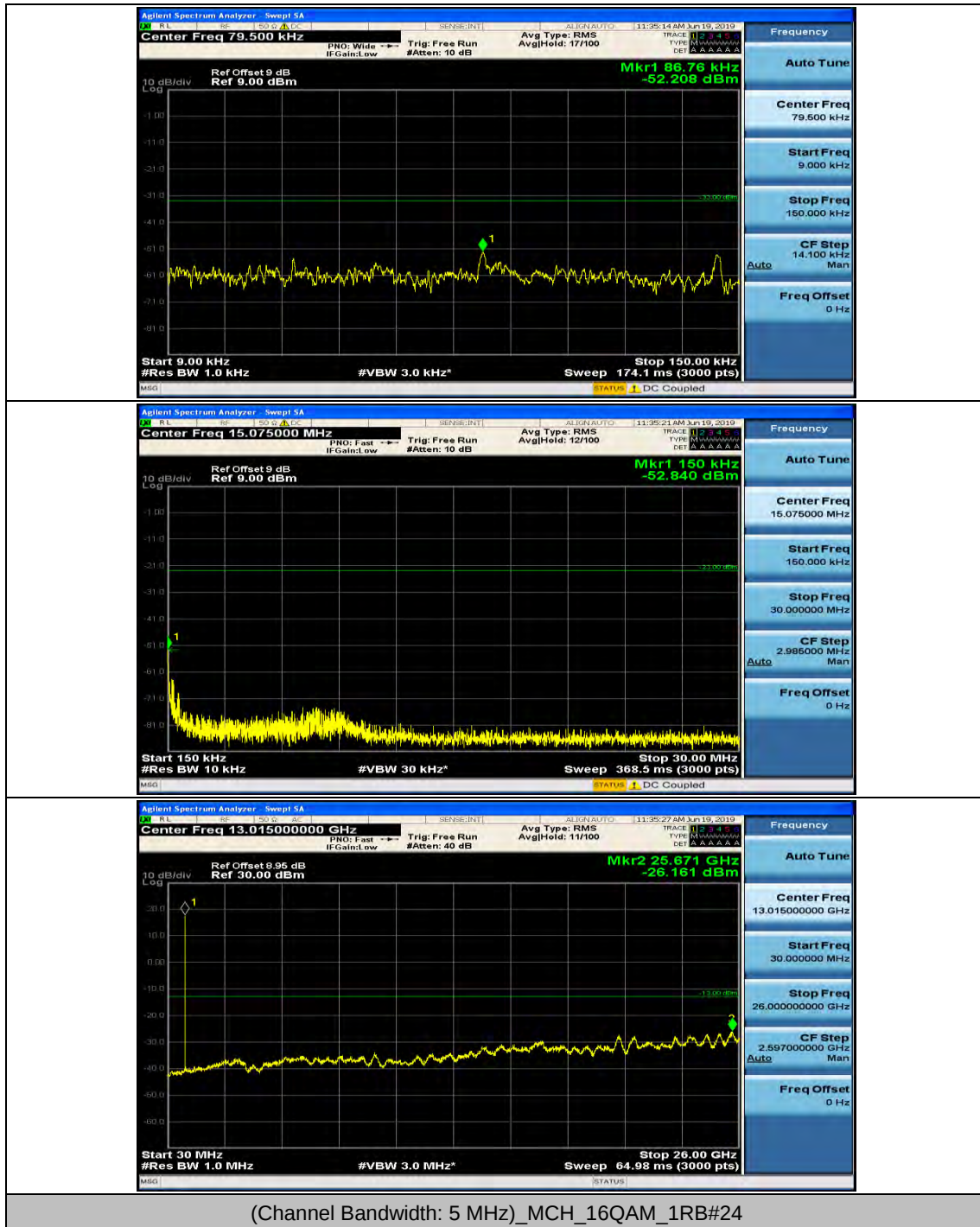


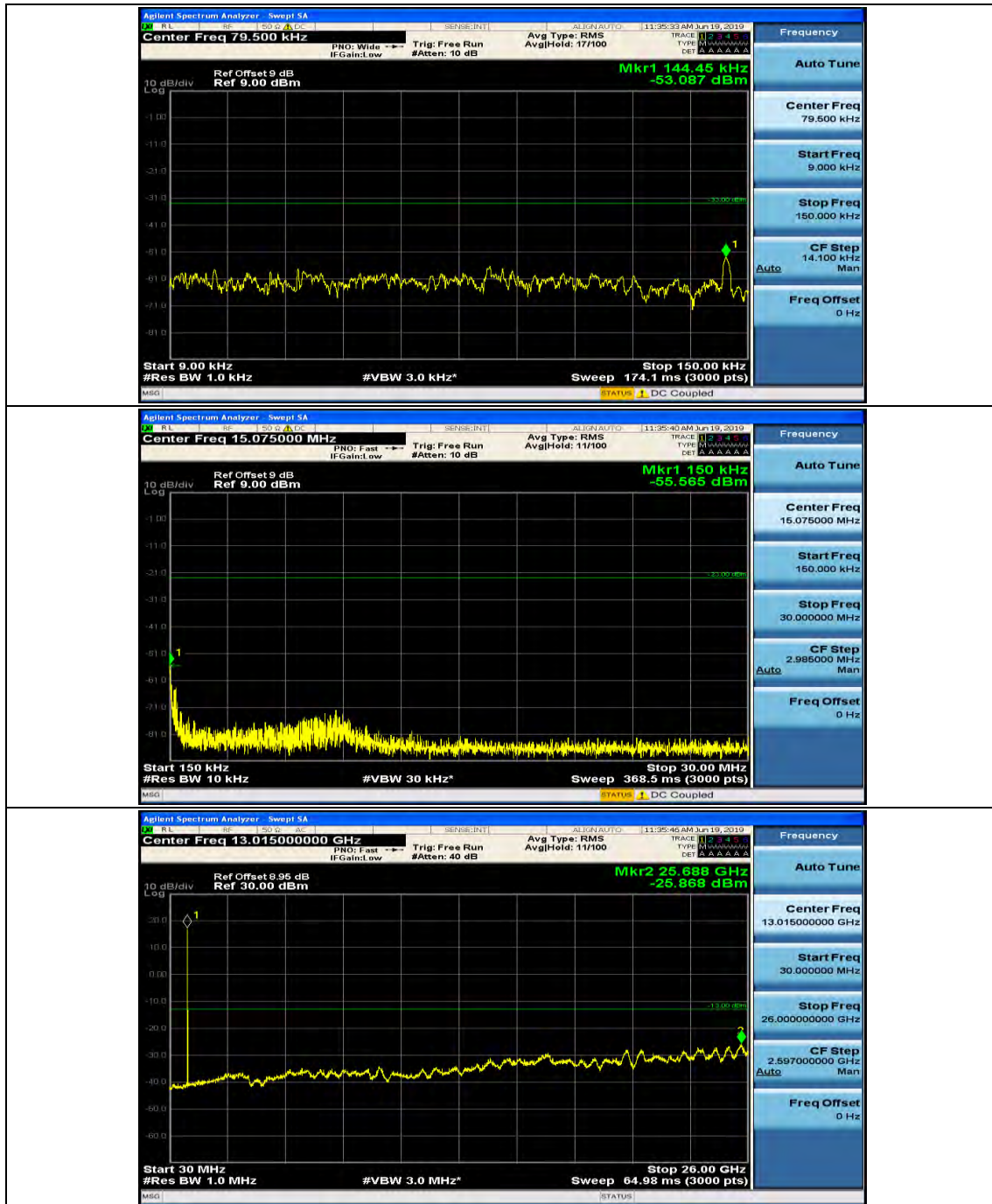


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

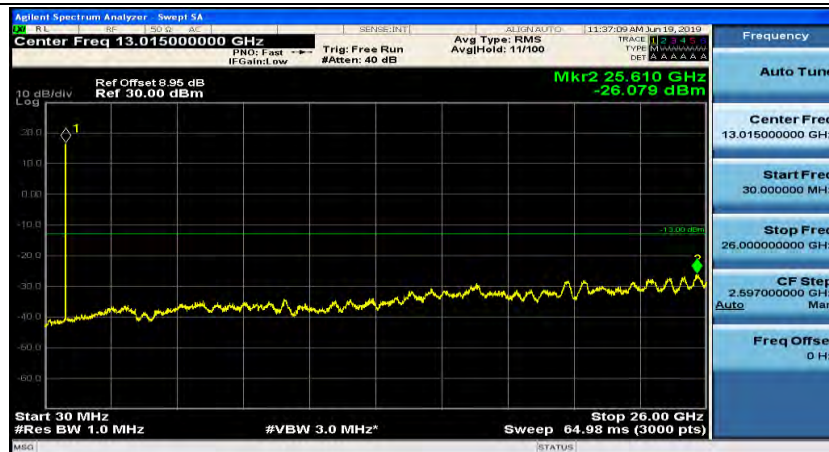
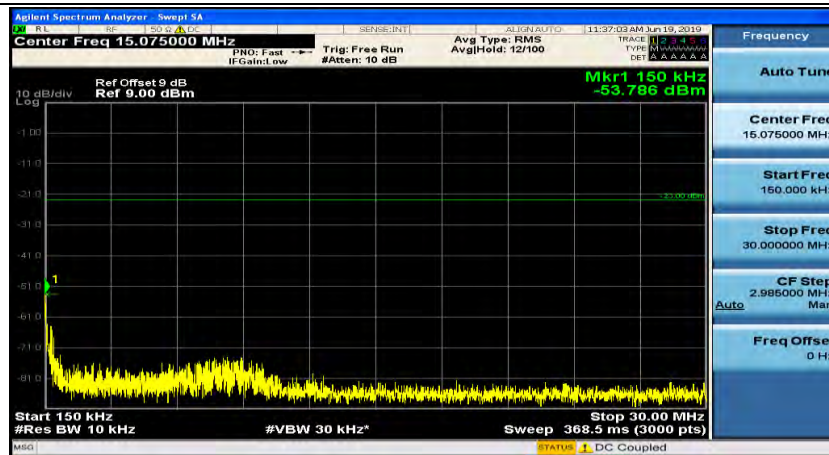


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

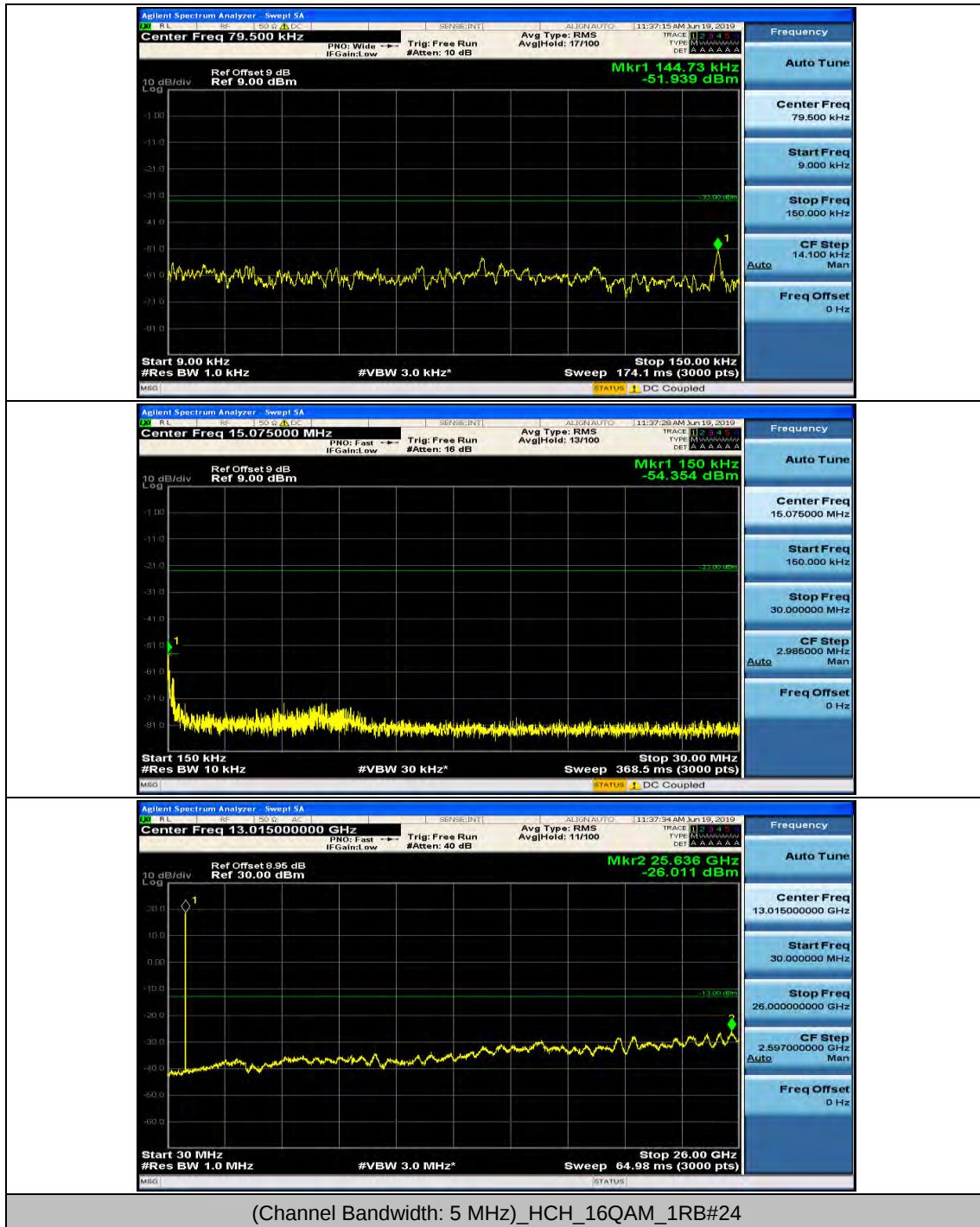


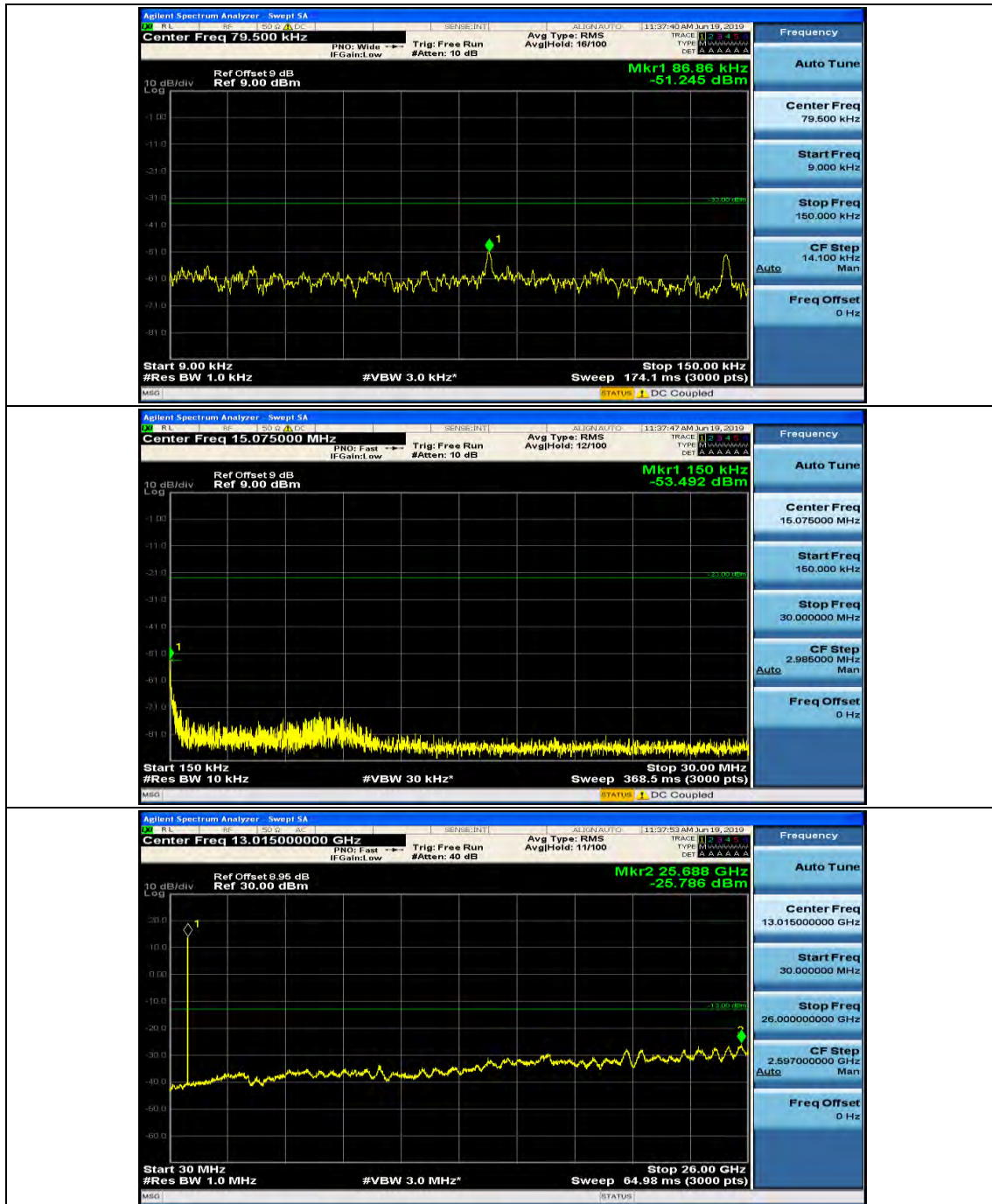


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

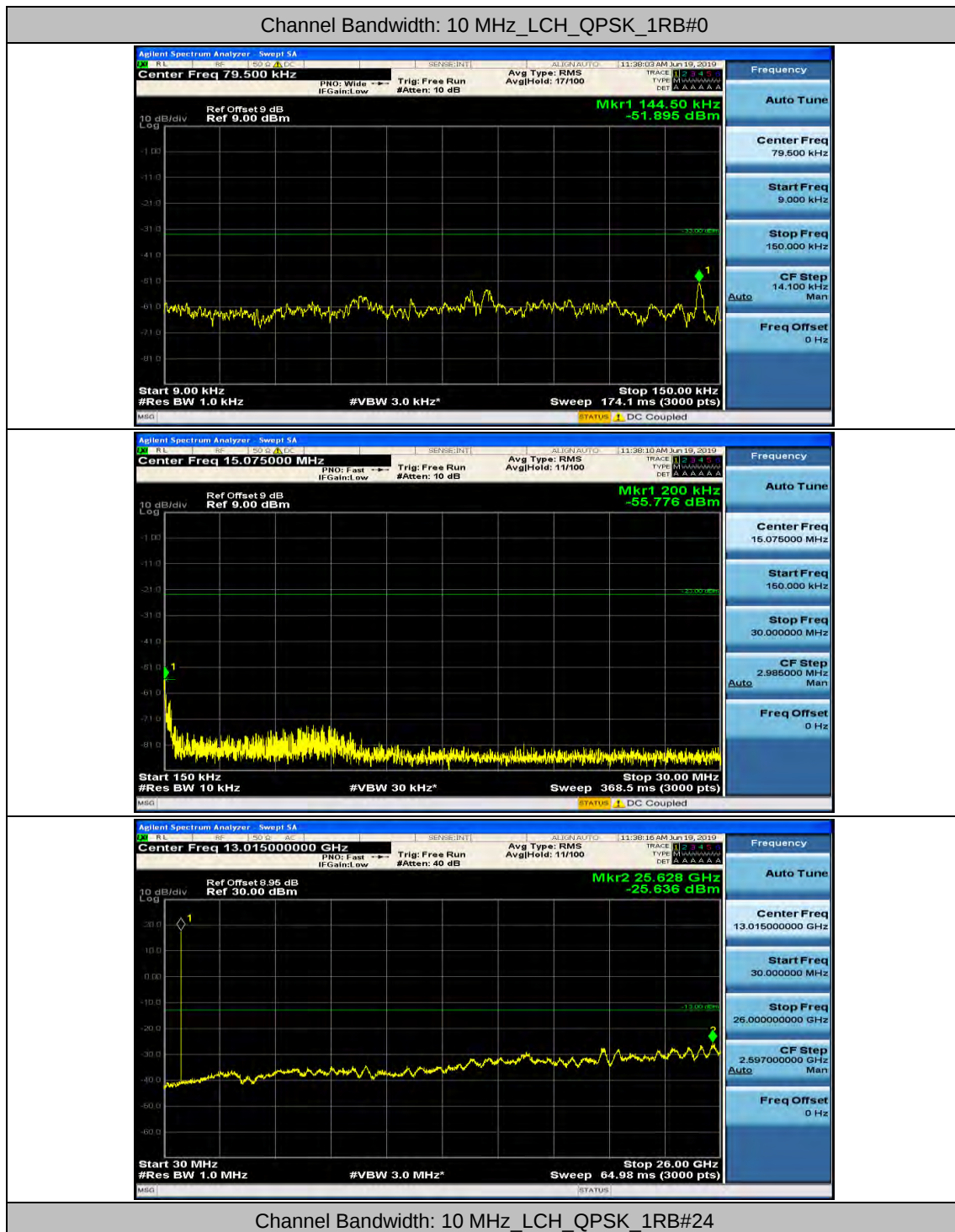


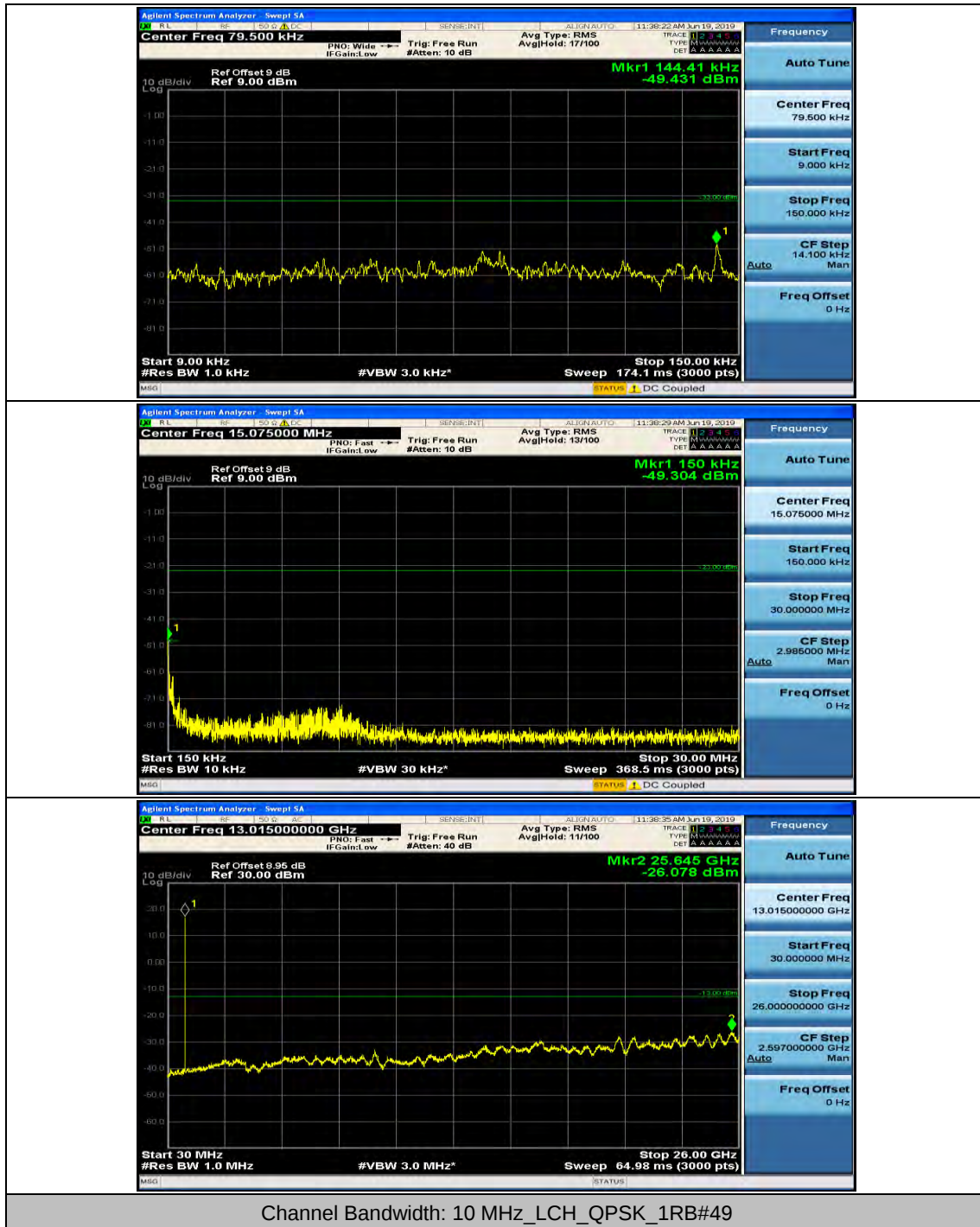
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

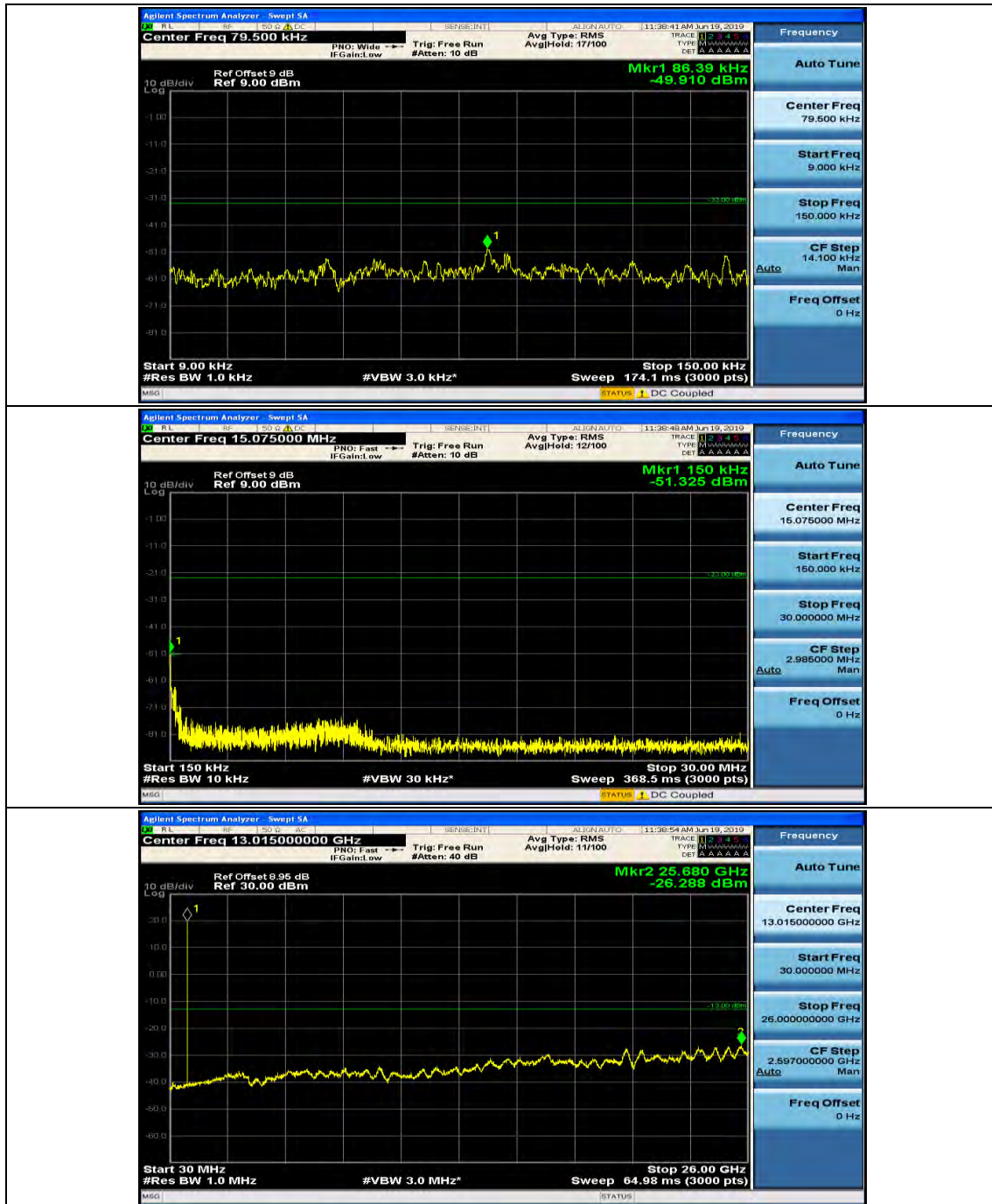




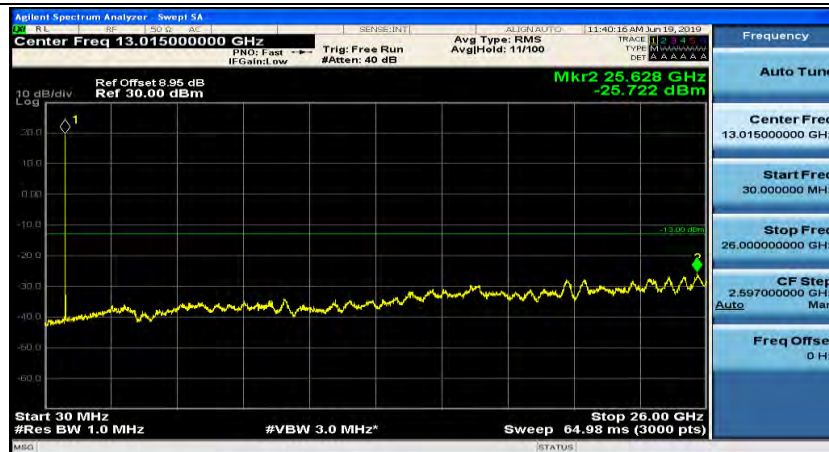
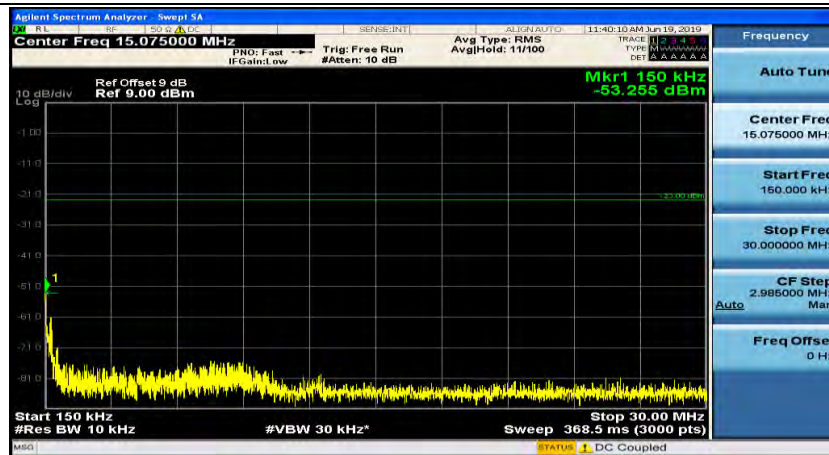
Channel Bandwidth: 10 MHz



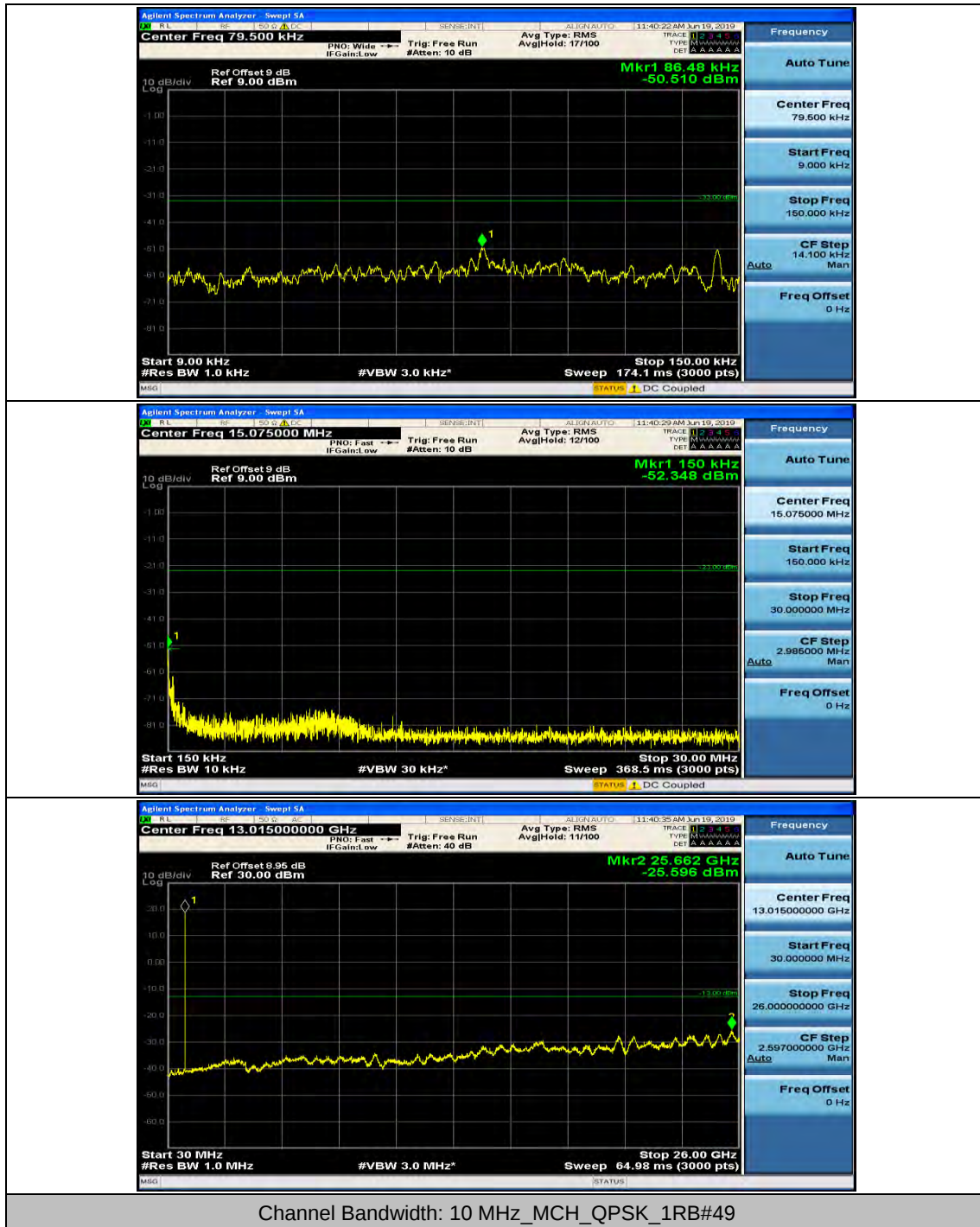


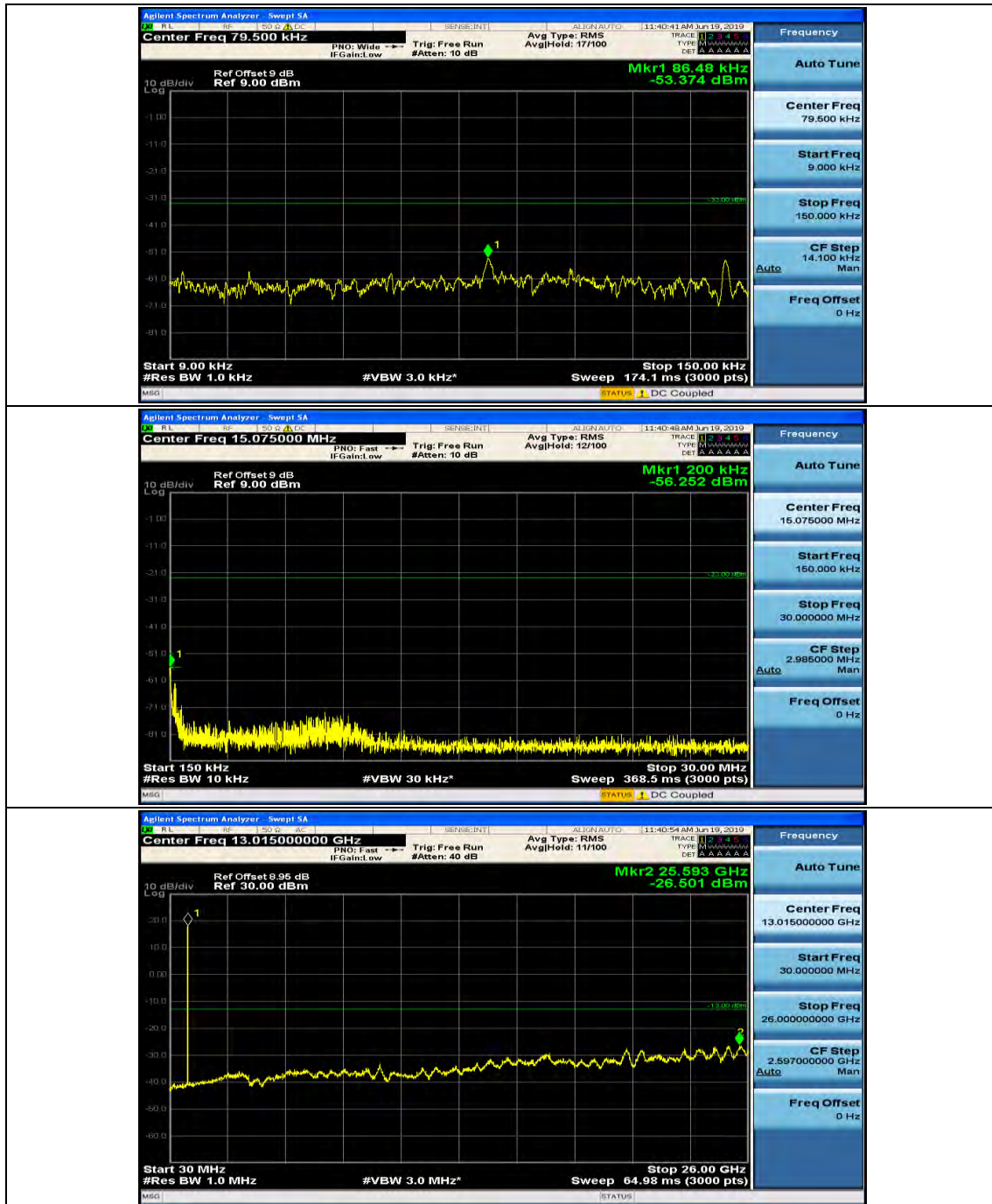


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

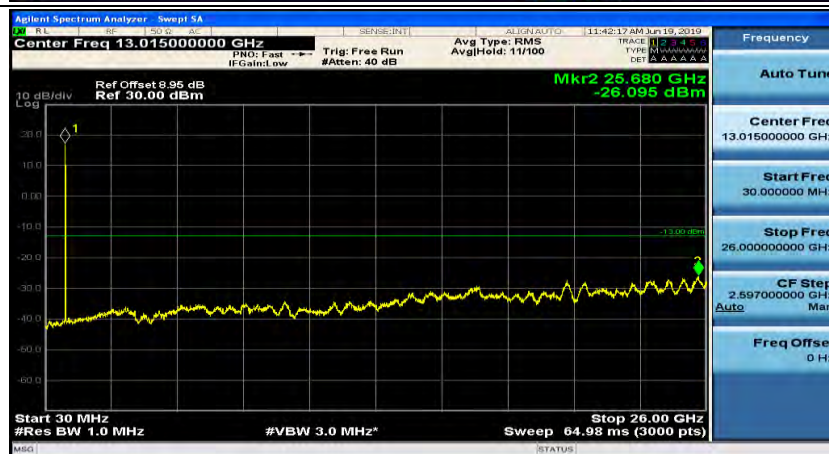
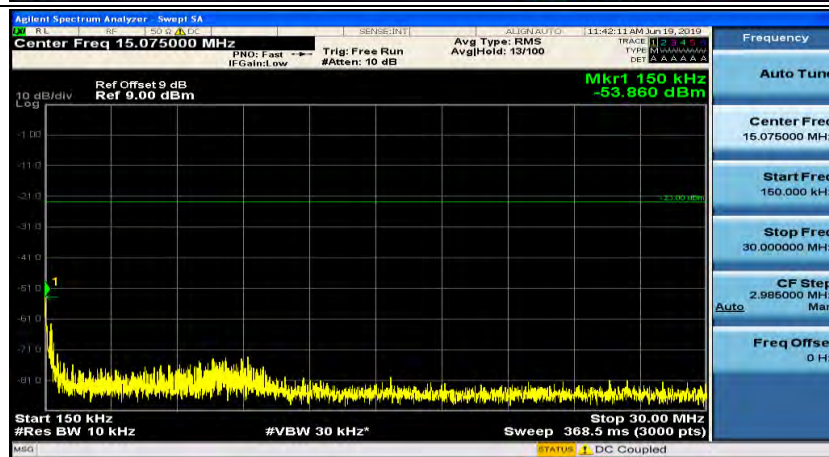
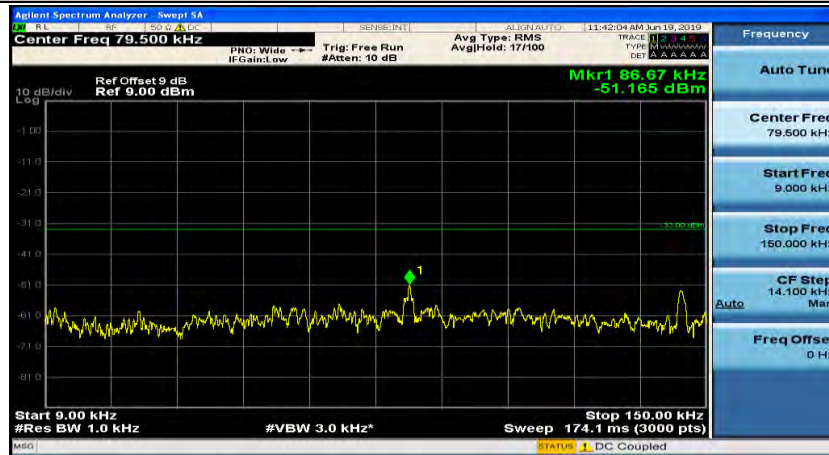


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

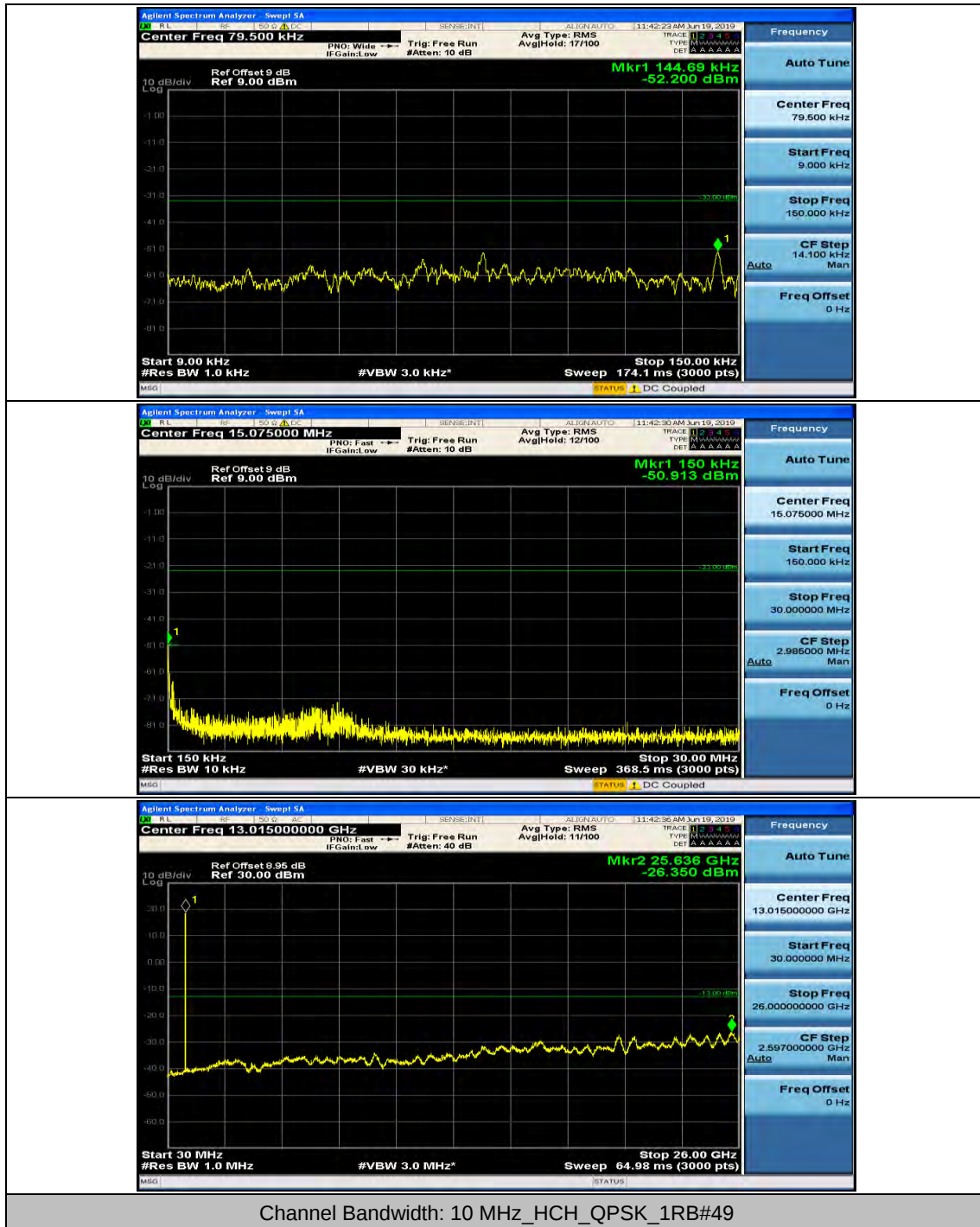


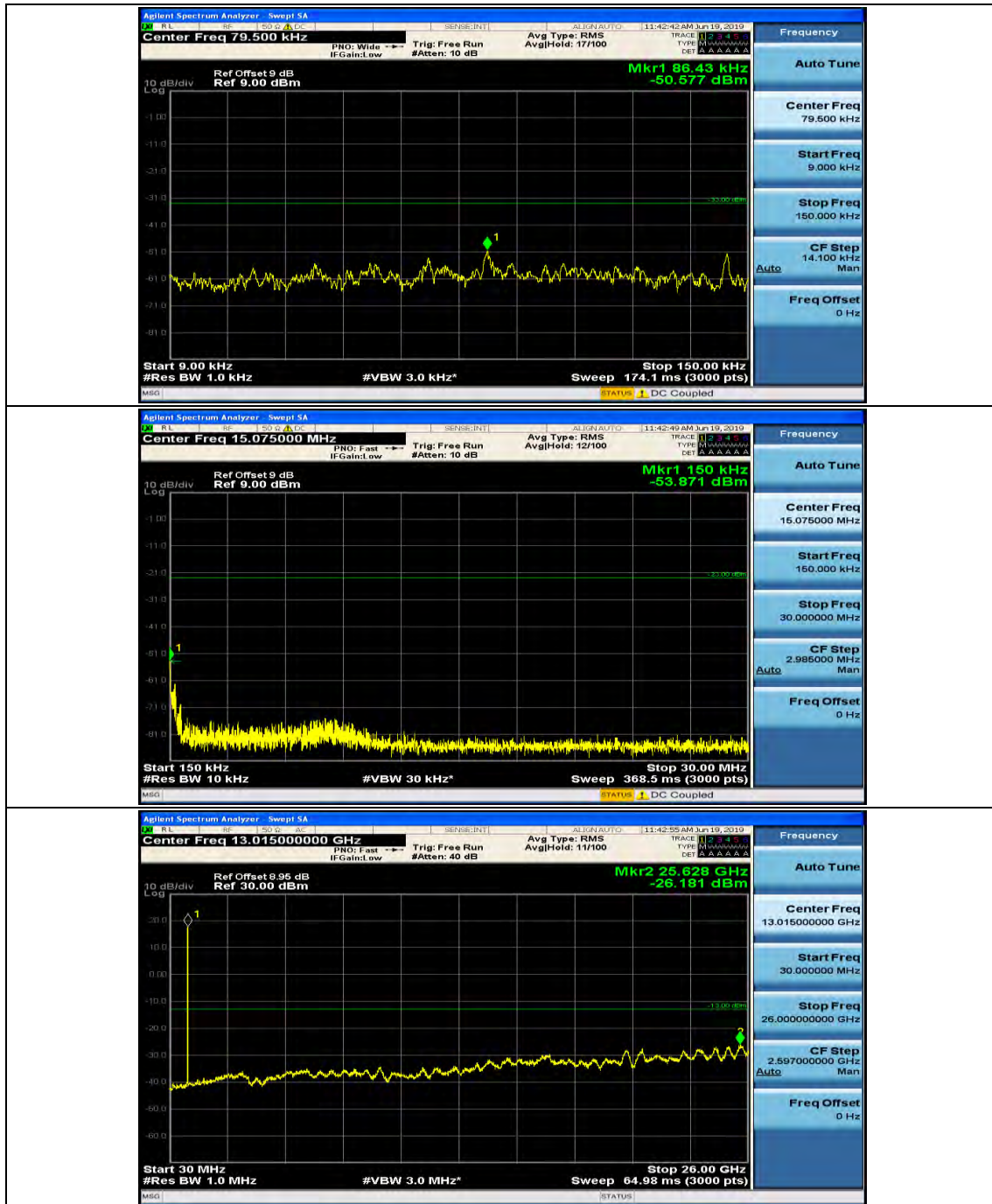


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0

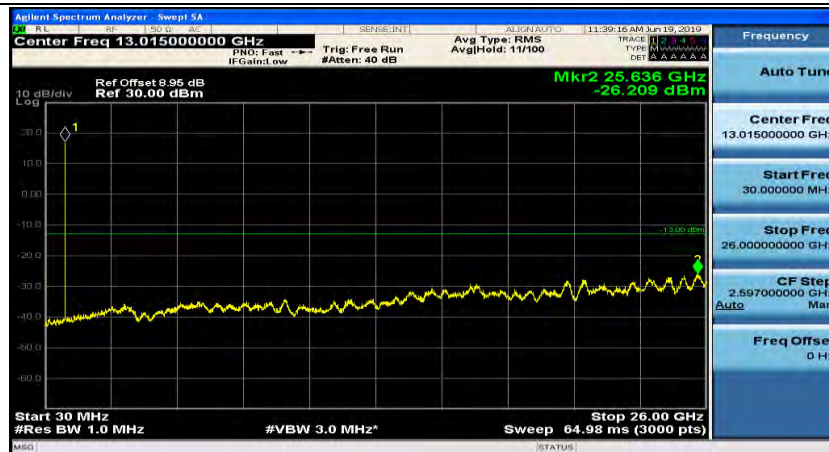
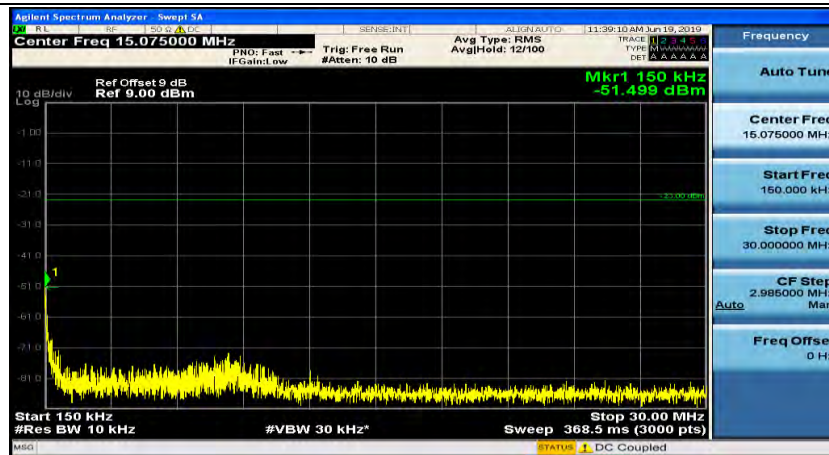


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

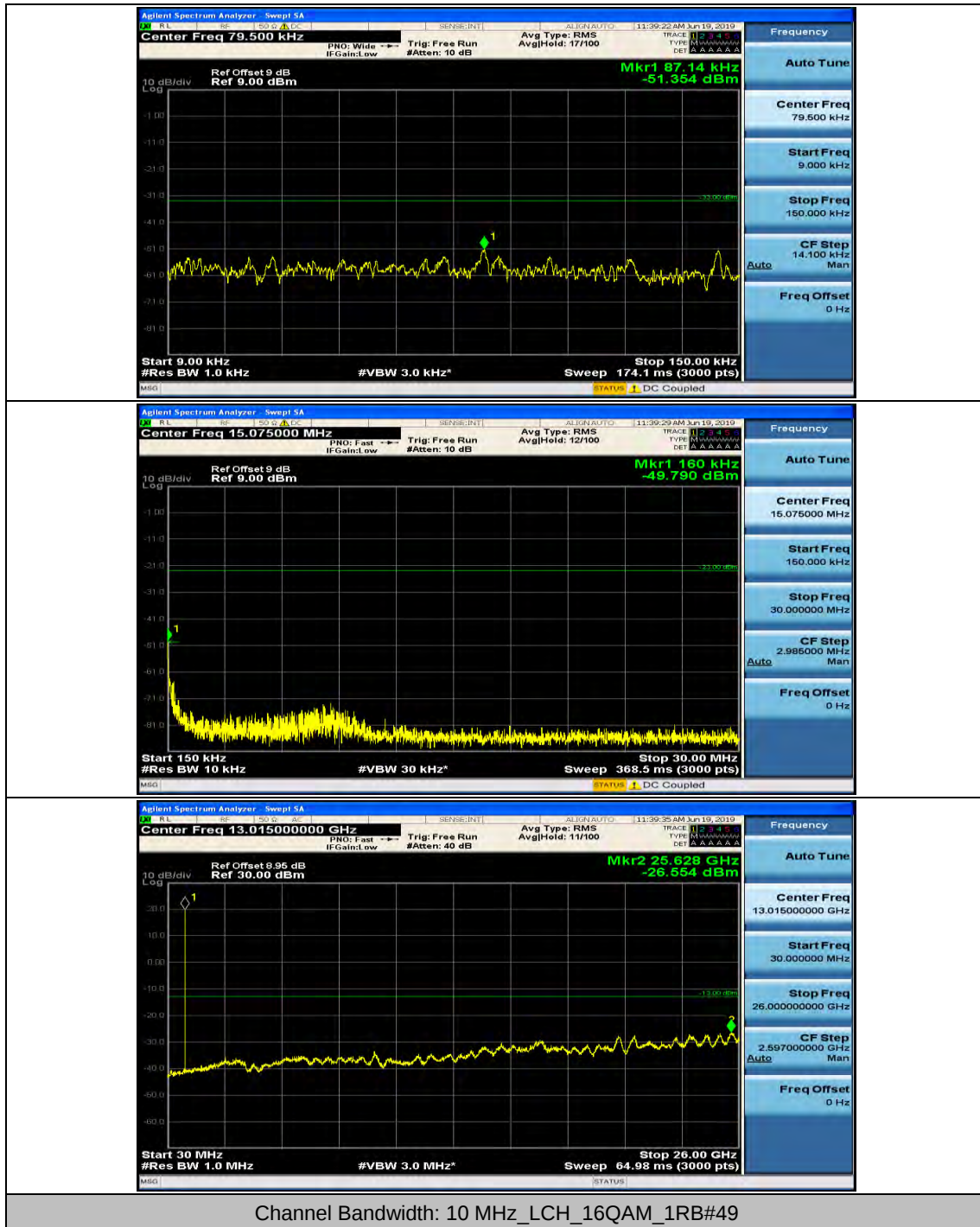


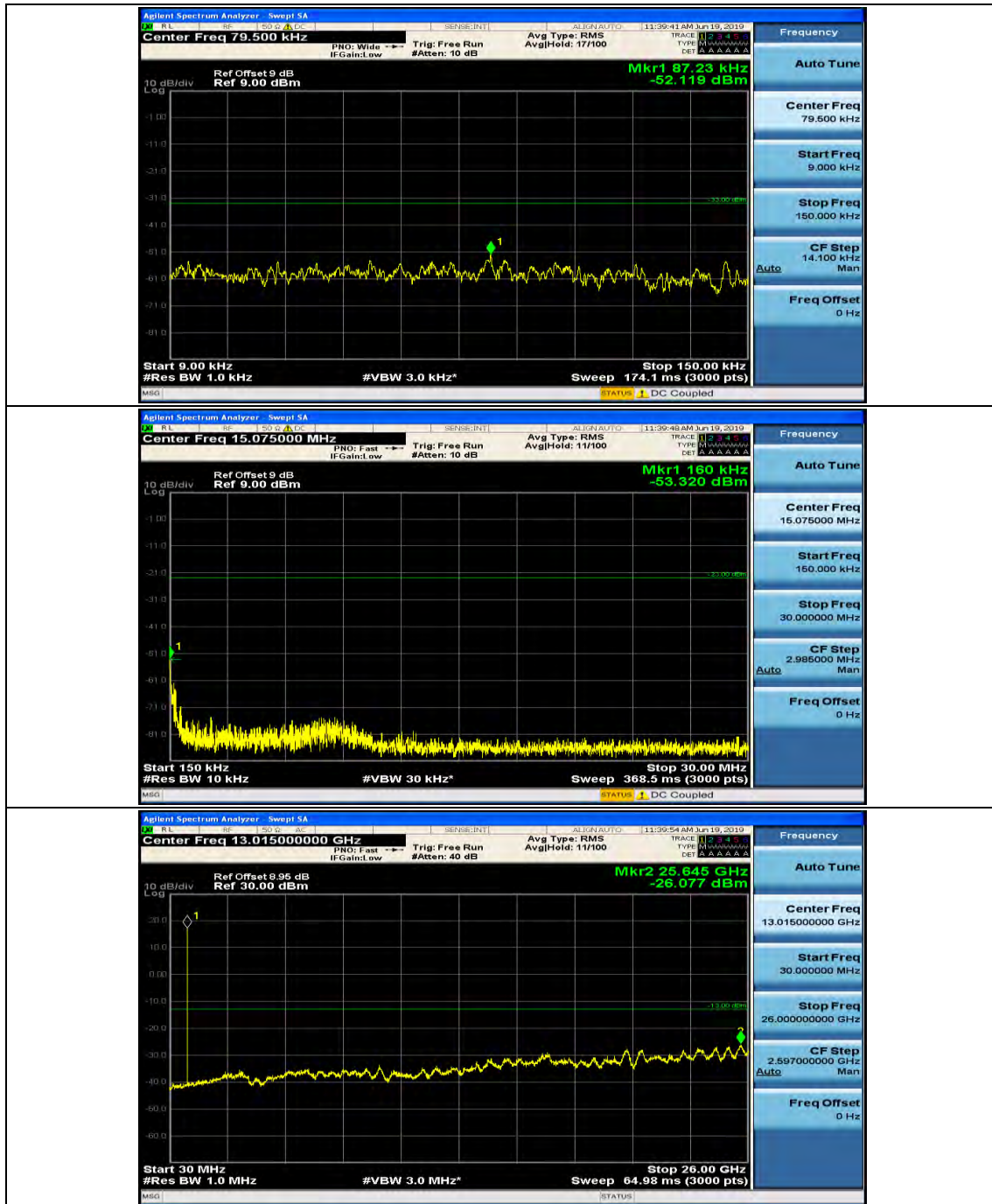


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0

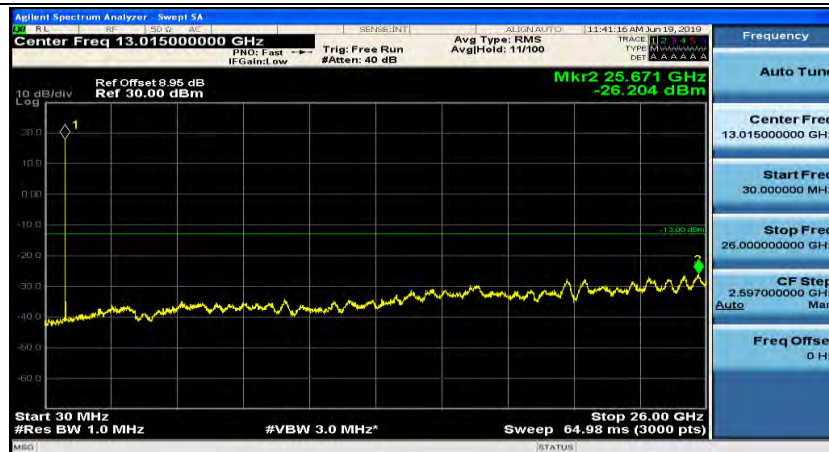
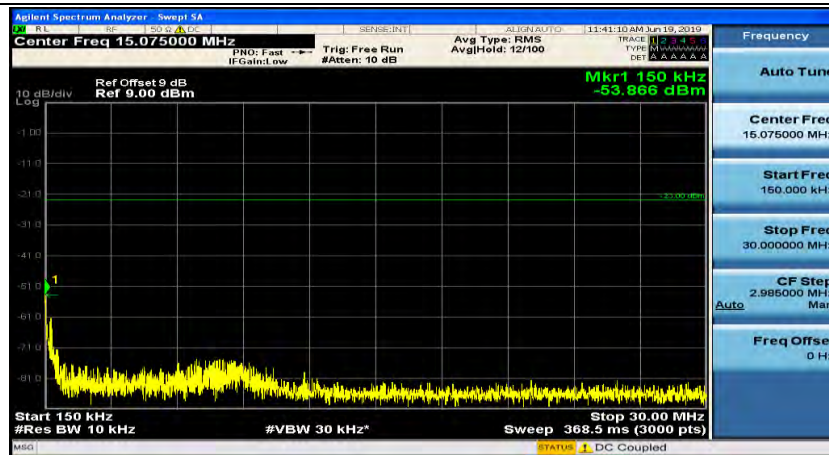


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

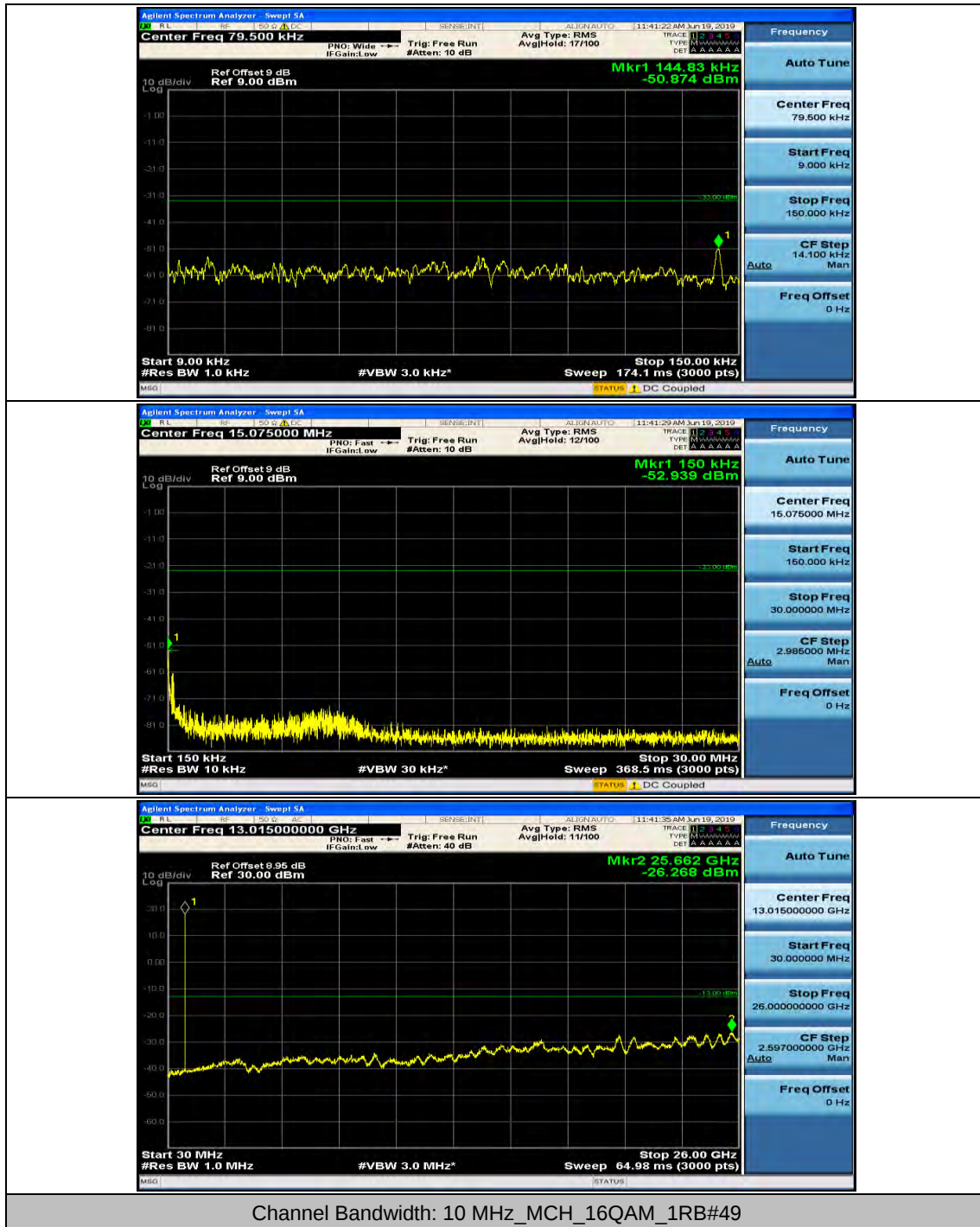


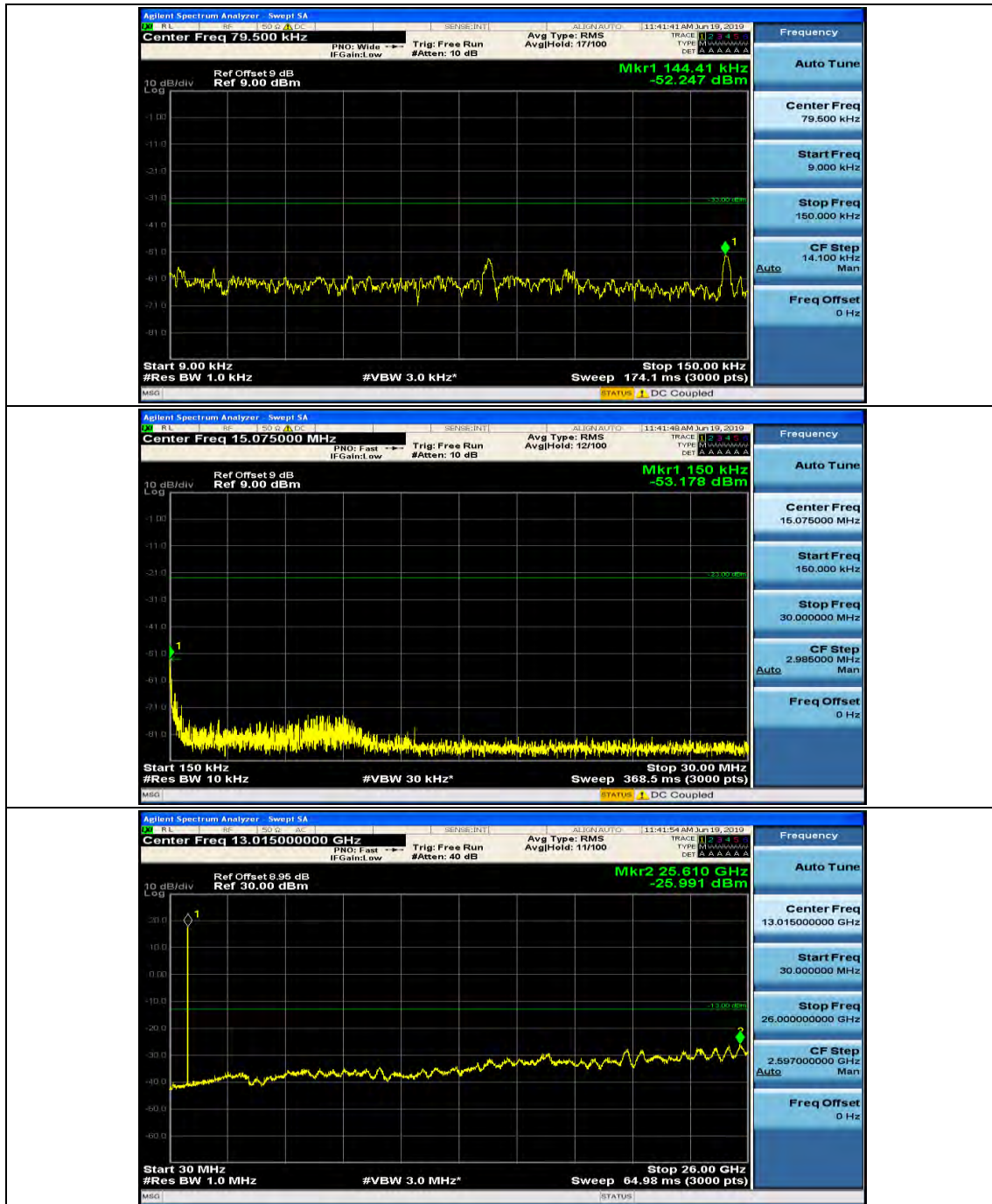


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

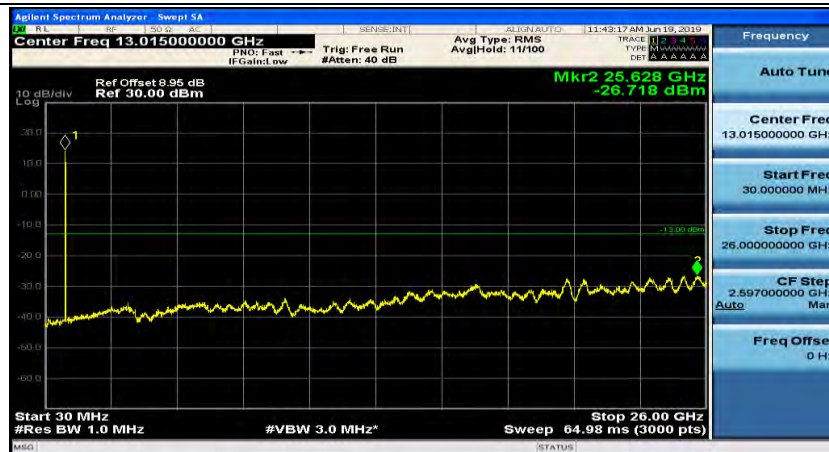
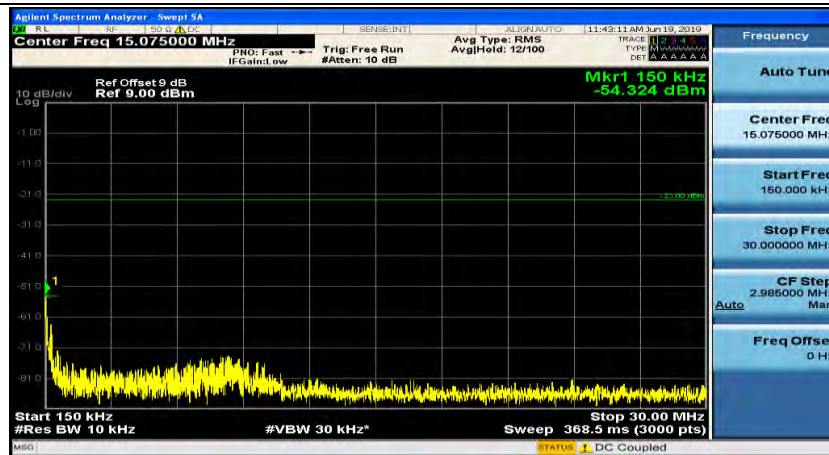


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

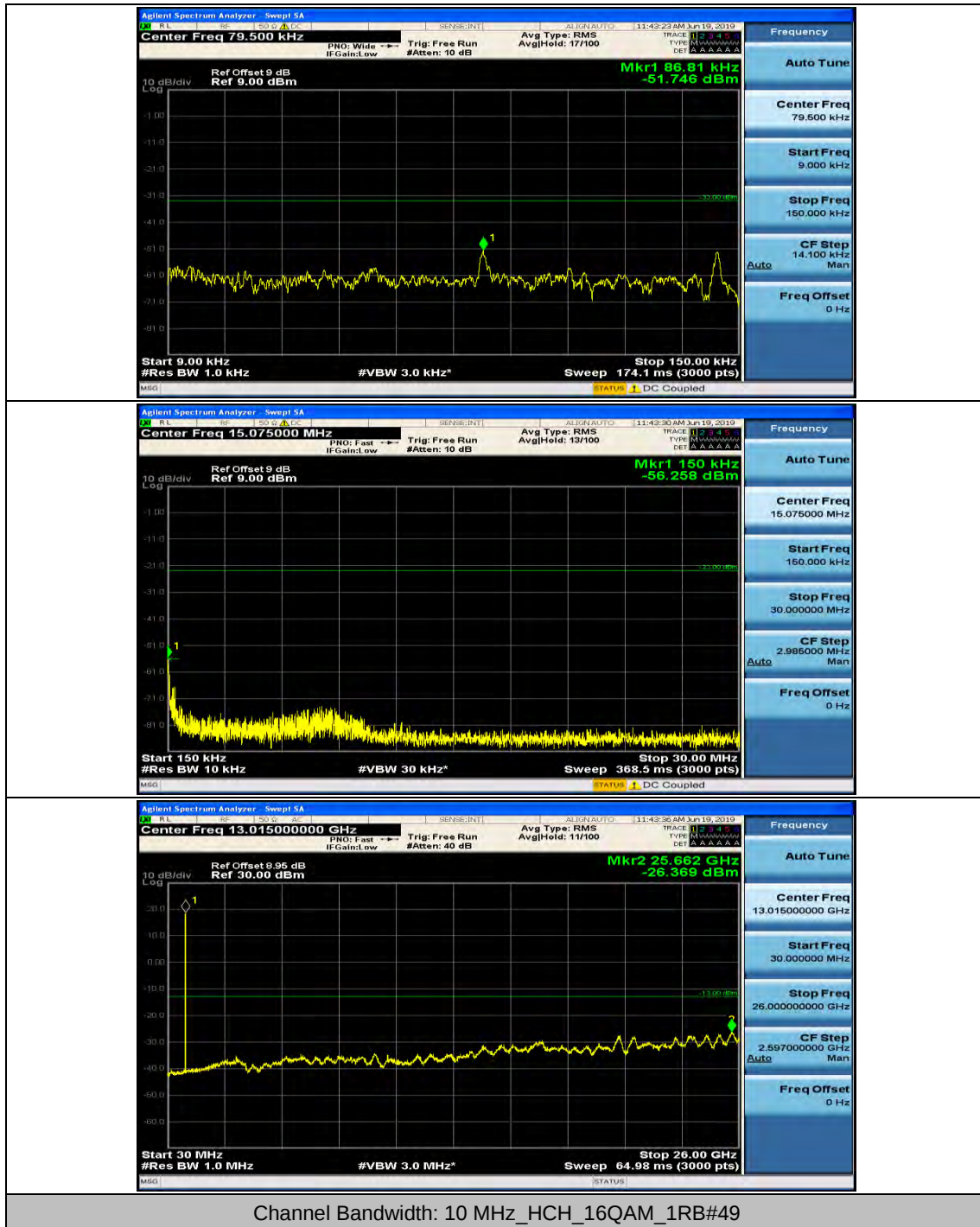


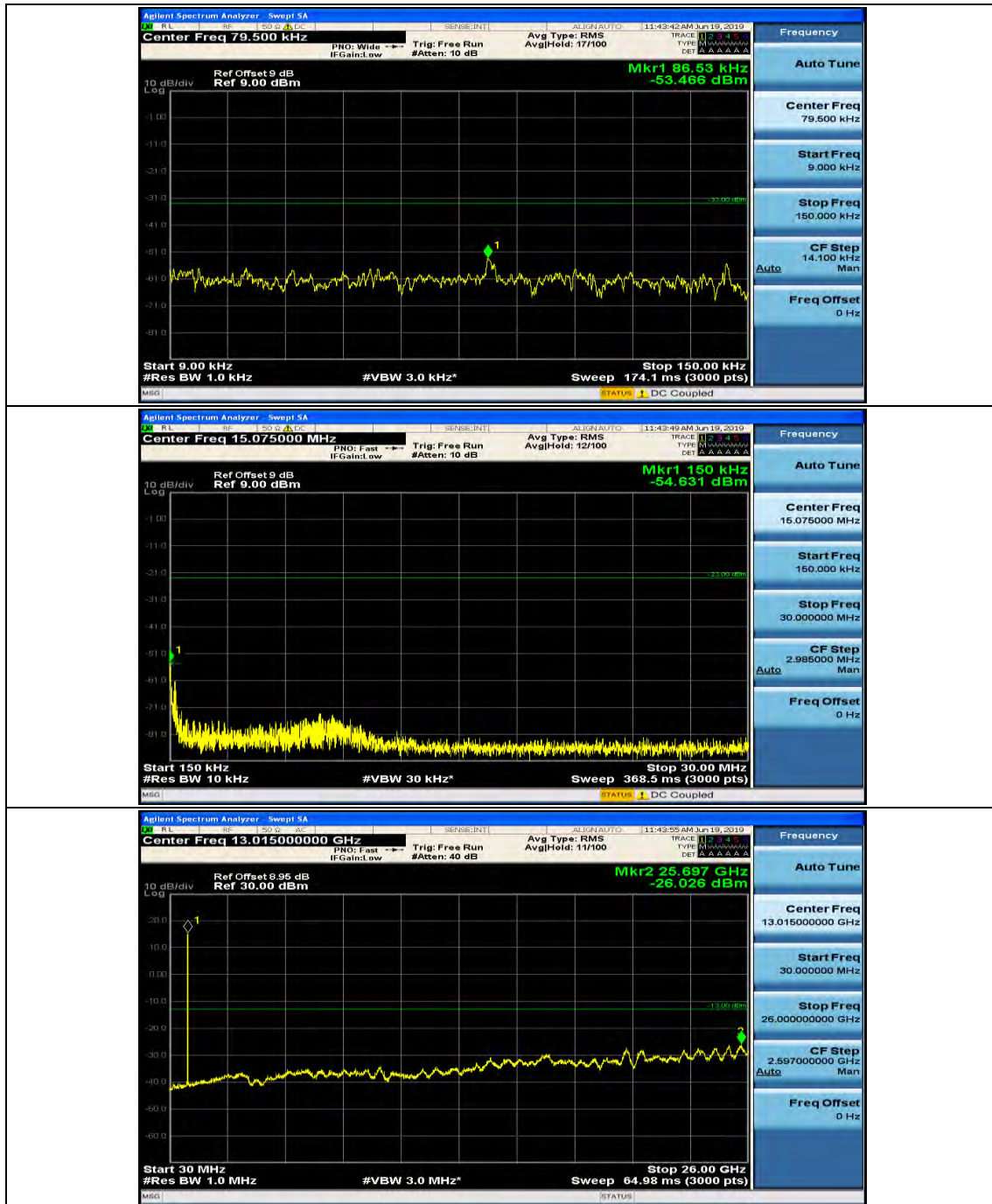


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



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	-0.79	-0.000958	± 2.5	PASS
		VN	TN	4.56	0.005529	± 2.5	PASS
		VH	TN	-0.45	-0.000546	± 2.5	PASS
	MCH	VL	TN	0.93	0.001112	± 2.5	PASS
		VN	TN	4.87	0.005822	± 2.5	PASS
		VH	TN	0.3	0.000359	± 2.5	PASS
	HCH	VL	TN	2.07	0.002440	± 2.5	PASS
		VN	TN	0.73	0.000861	± 2.5	PASS
		VH	TN	2.26	0.002664	± 2.5	PASS
16QAM	LCH	VL	TN	0.42	0.000509	± 2.5	PASS
		VN	TN	-0.25	-0.000303	± 2.5	PASS
		VH	TN	3.46	0.004195	± 2.5	PASS
	MCH	VL	TN	1.43	0.001710	± 2.5	PASS
		VN	TN	-1.33	-0.001590	± 2.5	PASS
		VH	TN	-0.99	-0.001184	± 2.5	PASS
	HCH	VL	TN	3.47	0.004091	± 2.5	PASS
		VN	TN	2.37	0.002794	± 2.5	PASS
		VH	TN	4.3	0.005069	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.15	0.003820	± 2.5	PASS
		VN	-20	0.31	0.000376	± 2.5	PASS
		VN	-10	2.23	0.002704	± 2.5	PASS
		VN	0	1.53	0.001855	± 2.5	PASS
		VN	10	2.98	0.003613	± 2.5	PASS
		VN	20	4.44	0.005384	± 2.5	PASS
		VN	30	1.63	0.001976	± 2.5	PASS
		VN	40	4.27	0.005178	± 2.5	PASS
		VN	50	2.51	0.003044	± 2.5	PASS
	MCH	VN	-30	-1.1	-0.001315	± 2.5	PASS
		VN	-20	3.82	0.004567	± 2.5	PASS

		VN	-10	-0.8	-0.000956	± 2.5	PASS
		VN	0	4.11	0.004913	± 2.5	PASS
		VN	10	4.14	0.004949	± 2.5	PASS
		VN	20	4.13	0.004937	± 2.5	PASS
		VN	30	-0.81	-0.000968	± 2.5	PASS
		VN	40	-1.19	-0.001423	± 2.5	PASS
		VN	50	4.55	0.005439	± 2.5	PASS
	HCH	VN	-30	2.79	0.003289	± 2.5	PASS
		VN	-20	-0.81	-0.000955	± 2.5	PASS
		VN	-10	-1.34	-0.001580	± 2.5	PASS
		VN	0	-1.31	-0.001544	± 2.5	PASS
		VN	10	4.83	0.005694	± 2.5	PASS
		VN	20	0.36	0.000424	± 2.5	PASS
		VN	30	4.24	0.004998	± 2.5	PASS
		VN	40	4.8	0.005658	± 2.5	PASS
		VN	50	4.1	0.004833	± 2.5	PASS
16QAM	LCH	VN	-30	-0.07	-0.000085	± 2.5	PASS
		VN	-20	0.5	0.000606	± 2.5	PASS
		VN	-10	-0.66	-0.000800	± 2.5	PASS
		VN	0	2.99	0.003626	± 2.5	PASS
		VN	10	3.84	0.004656	± 2.5	PASS
		VN	20	4.82	0.005845	± 2.5	PASS
		VN	30	-1.81	-0.002195	± 2.5	PASS
		VN	40	4.34	0.005263	± 2.5	PASS
		VN	50	0.83	0.001006	± 2.5	PASS
	MCH	VN	-30	0.31	0.000365	± 2.5	PASS
		VN	-20	3.53	0.004161	± 2.5	PASS
		VN	-10	4.93	0.005812	± 2.5	PASS
		VN	0	0.92	0.001085	± 2.5	PASS
		VN	10	4	0.004715	± 2.5	PASS
		VN	20	-0.65	-0.000766	± 2.5	PASS
		VN	30	2.22	0.002617	± 2.5	PASS
		VN	40	0.91	0.001073	± 2.5	PASS
		VN	50	2.21	0.002605	± 2.5	PASS
	HCH	VN	-30	3.06	0.003607	± 2.5	PASS
		VN	-20	3.29	0.003878	± 2.5	PASS
		VN	-10	-0.44	-0.000519	± 2.5	PASS
		VN	0	1.99	0.002346	± 2.5	PASS
		VN	10	2.57	0.003030	± 2.5	PASS
		VN	20	0.7	0.000825	± 2.5	PASS
		VN	30	0.7	0.000825	± 2.5	PASS

		VN	40	-1.63	-0.001921	± 2.5	PASS
		VN	50	4.39	0.005175	± 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	0.44	0.000533	± 2.5	PASS
		VN	TN	4.49	0.005439	± 2.5	PASS
		VH	TN	-1.39	-0.001684	± 2.5	PASS
	MCH	VL	TN	2.71	0.003240	± 2.5	PASS
		VN	TN	-0.23	-0.000275	± 2.5	PASS
		VH	TN	1.77	0.002116	± 2.5	PASS
	HCH	VL	TN	4.82	0.005687	± 2.5	PASS
		VN	TN	-0.63	-0.000743	± 2.5	PASS
		VH	TN	3.96	0.004673	± 2.5	PASS
16QAM	LCH	VL	TN	1.83	0.002217	± 2.5	PASS
		VN	TN	0.37	0.000448	± 2.5	PASS
		VH	TN	-1.07	-0.001296	± 2.5	PASS
	MCH	VL	TN	0.56	0.000669	± 2.5	PASS
		VN	TN	4.68	0.005595	± 2.5	PASS
		VH	TN	-1.43	-0.001710	± 2.5	PASS
	HCH	VL	TN	2.99	0.003528	± 2.5	PASS
		VN	TN	1.57	0.001853	± 2.5	PASS
		VH	TN	1.45	0.001711	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.91	0.004737	± 2.5	PASS
		VN	-20	2.81	0.003404	± 2.5	PASS
		VN	-10	4.03	0.004882	± 2.5	PASS
		VN	0	3.31	0.004010	± 2.5	PASS
		VN	10	-0.14	-0.000170	± 2.5	PASS
		VN	20	-0.59	-0.000715	± 2.5	PASS
		VN	30	4.47	0.005415	± 2.5	PASS
		VN	40	1.81	0.002193	± 2.5	PASS
		VN	50	3.92	0.004749	± 2.5	PASS
	MCH	VN	-30	1.12	0.001339	± 2.5	PASS
		VN	-20	1.26	0.001506	± 2.5	PASS
		VN	-10	4.24	0.005069	± 2.5	PASS

		VN	0	4.13	0.004937	± 2.5	PASS
		VN	10	1.39	0.001662	± 2.5	PASS
		VN	20	-1.65	-0.001973	± 2.5	PASS
		VN	30	0.59	0.000705	± 2.5	PASS
		VN	40	4.64	0.005547	± 2.5	PASS
		VN	50	3.37	0.004029	± 2.5	PASS
	HCH	VN	-30	2.38	0.002808	± 2.5	PASS
		VN	-20	0.64	0.000755	± 2.5	PASS
		VN	-10	-0.83	-0.000979	± 2.5	PASS
		VN	0	2.74	0.003233	± 2.5	PASS
		VN	10	-0.76	-0.000897	± 2.5	PASS
		VN	20	2.37	0.002796	± 2.5	PASS
		VN	30	4.32	0.005097	± 2.5	PASS
		VN	40	-1.07	-0.001263	± 2.5	PASS
		VN	50	3.3	0.003894	± 2.5	PASS
QPSK	LCH	VN	-30	4.67	0.005583	± 2.5	PASS
		VN	-20	1.42	0.001698	± 2.5	PASS
		VN	-10	2.26	0.002702	± 2.5	PASS
		VN	0	0.15	0.000179	± 2.5	PASS
		VN	10	2.9	0.003467	± 2.5	PASS
		VN	20	2.7	0.003228	± 2.5	PASS
		VN	30	0.54	0.000646	± 2.5	PASS
		VN	40	1.1	0.001315	± 2.5	PASS
		VN	50	4.04	0.004830	± 2.5	PASS
	MCH	VN	-30	-0.24	-0.000283	± 2.5	PASS
		VN	-20	1.38	0.001628	± 2.5	PASS
		VN	-10	4.49	0.005298	± 2.5	PASS
		VN	0	-1.46	-0.001723	± 2.5	PASS
		VN	10	2.17	0.002560	± 2.5	PASS
		VN	20	-1.51	-0.001782	± 2.5	PASS
		VN	30	-0.55	-0.000649	± 2.5	PASS
		VN	40	2.63	0.003103	± 2.5	PASS
		VN	50	4.44	0.005239	± 2.5	PASS
	HCH	VN	-30	0.55	0.000649	± 2.5	PASS
		VN	-20	-1.12	-0.001322	± 2.5	PASS
		VN	-10	1.97	0.002324	± 2.5	PASS
		VN	0	-1.58	-0.001864	± 2.5	PASS
		VN	10	4.77	0.005628	± 2.5	PASS
		VN	20	4.35	0.005133	± 2.5	PASS
		VN	30	0.63	0.000743	± 2.5	PASS
		VN	40	1.15	0.001357	± 2.5	PASS

		VN	50	4.04	0.004767	± 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	4.15	0.005021	± 2.5	PASS
		VN	TN	-0.94	-0.001137	± 2.5	PASS
		VH	TN	0.14	0.000169	± 2.5	PASS
	MCH	VL	TN	-1.83	-0.002188	± 2.5	PASS
		VN	TN	2.83	0.003383	± 2.5	PASS
		VH	TN	-0.92	-0.001100	± 2.5	PASS
	HCH	VL	TN	-1.74	-0.002056	± 2.5	PASS
		VN	TN	2.43	0.002871	± 2.5	PASS
		VH	TN	4.01	0.004737	± 2.5	PASS
16QAM	LCH	VL	TN	-0.18	-0.000218	± 2.5	PASS
		VN	TN	2.17	0.002626	± 2.5	PASS
		VH	TN	3.62	0.004380	± 2.5	PASS
	MCH	VL	TN	4.85	0.005798	± 2.5	PASS
		VN	TN	2.58	0.003084	± 2.5	PASS
		VH	TN	1.97	0.002355	± 2.5	PASS
	HCH	VL	TN	-1.95	-0.002304	± 2.5	PASS
		VN	TN	1.87	0.002209	± 2.5	PASS
		VH	TN	-0.14	-0.000165	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.5	0.000605	± 2.5	PASS
		VN	-20	-1.84	-0.002226	± 2.5	PASS
		VN	-10	4.28	0.005178	± 2.5	PASS
		VN	0	3.94	0.004767	± 2.5	PASS
		VN	10	-1.77	-0.002142	± 2.5	PASS
		VN	20	1.46	0.001766	± 2.5	PASS
		VN	30	0.55	0.000665	± 2.5	PASS
		VN	40	-1.26	-0.001525	± 2.5	PASS
		VN	50	0.69	0.000835	± 2.5	PASS
	MCH	VN	-30	0.82	0.000980	± 2.5	PASS
		VN	-20	0.06	0.000072	± 2.5	PASS
		VN	-10	0.27	0.000323	± 2.5	PASS
		VN	0	0.65	0.000777	± 2.5	PASS

		VN	10	1.86	0.002224	± 2.5	PASS
		VN	20	2.51	0.003001	± 2.5	PASS
		VN	30	1.23	0.001470	± 2.5	PASS
		VN	40	3.33	0.003981	± 2.5	PASS
		VN	50	4.71	0.005631	± 2.5	PASS
	HCH	VN	-30	1.21	0.001429	± 2.5	PASS
		VN	-20	-1.14	-0.001347	± 2.5	PASS
		VN	-10	2.14	0.002528	± 2.5	PASS
		VN	0	0.52	0.000614	± 2.5	PASS
		VN	10	3.7	0.004371	± 2.5	PASS
		VN	20	1.41	0.001666	± 2.5	PASS
		VN	30	1.57	0.001855	± 2.5	PASS
		VN	40	0.98	0.001158	± 2.5	PASS
		VN	50	2	0.002363	± 2.5	PASS
16QAM	LCH	VN	-30	-0.95	-0.001136	± 2.5	PASS
		VN	-20	1.75	0.002092	± 2.5	PASS
		VN	-10	3.64	0.004351	± 2.5	PASS
		VN	0	3.63	0.004340	± 2.5	PASS
		VN	10	2.92	0.003491	± 2.5	PASS
		VN	20	-1.73	-0.002068	± 2.5	PASS
		VN	30	0.3	0.000359	± 2.5	PASS
		VN	40	0.59	0.000705	± 2.5	PASS
		VN	50	3.91	0.004674	± 2.5	PASS
	MCH	VN	-30	1.18	0.001394	± 2.5	PASS
		VN	-20	-0.16	-0.000189	± 2.5	PASS
		VN	-10	1.85	0.002185	± 2.5	PASS
		VN	0	2.52	0.002977	± 2.5	PASS
		VN	10	3.7	0.004371	± 2.5	PASS
		VN	20	4.91	0.005800	± 2.5	PASS
		VN	30	2.56	0.003024	± 2.5	PASS
		VN	40	1.79	0.002115	± 2.5	PASS
		VN	50	-0.68	-0.000803	± 2.5	PASS
	HCH	VN	-30	2.4	0.002835	± 2.5	PASS
		VN	-20	2.18	0.002575	± 2.5	PASS
		VN	-10	3.96	0.004678	± 2.5	PASS
		VN	0	-1.7	-0.002008	± 2.5	PASS
		VN	10	-0.88	-0.001040	± 2.5	PASS
		VN	20	-1.91	-0.002256	± 2.5	PASS
		VN	30	-0.26	-0.000307	± 2.5	PASS
		VN	40	-1.65	-0.001949	± 2.5	PASS
		VN	50	-0.74	-0.000874	± 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	3.09	0.003727	± 2.5	PASS
		VN	TN	0.26	0.000314	± 2.5	PASS
		VH	TN	1.87	0.002256	± 2.5	PASS
	MCH	VL	TN	3.44	0.004112	± 2.5	PASS
		VN	TN	-0.72	-0.000861	± 2.5	PASS
		VH	TN	2.16	0.002582	± 2.5	PASS
	HCH	VL	TN	-1.59	-0.001884	± 2.5	PASS
		VN	TN	0.09	0.000107	± 2.5	PASS
		VH	TN	1.92	0.002275	± 2.5	PASS
16QAM	LCH	VL	TN	-0.36	-0.000434	± 2.5	PASS
		VN	TN	2.81	0.003390	± 2.5	PASS
		VH	TN	-1.96	-0.002364	± 2.5	PASS
	MCH	VL	TN	0.54	0.000646	± 2.5	PASS
		VN	TN	4.58	0.005475	± 2.5	PASS
		VH	TN	-0.38	-0.000454	± 2.5	PASS
	HCH	VL	TN	-0.65	-0.000770	± 2.5	PASS
		VN	TN	0.06	0.000071	± 2.5	PASS
		VH	TN	2.32	0.002749	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	1.03	0.001242	± 2.5	PASS
		VN	-20	0.15	0.000181	± 2.5	PASS
		VN	-10	-0.18	-0.000217	± 2.5	PASS
		VN	0	-1.16	-0.001399	± 2.5	PASS
		VN	10	0.93	0.001122	± 2.5	PASS
		VN	20	2.43	0.002931	± 2.5	PASS
		VN	30	3.11	0.003752	± 2.5	PASS
		VN	40	3.24	0.003908	± 2.5	PASS
		VN	50	-1	-0.001206	± 2.5	PASS
	MCH	VN	-30	1.42	0.001698	± 2.5	PASS
		VN	-20	2.43	0.002905	± 2.5	PASS
		VN	-10	4.66	0.005571	± 2.5	PASS
		VN	0	3.24	0.003873	± 2.5	PASS
		VN	10	3.38	0.004041	± 2.5	PASS
		VN	20	-1.85	-0.002212	± 2.5	PASS

		VN	30	0.42	0.000502	± 2.5	PASS
		VN	40	1.03	0.001231	± 2.5	PASS
		VN	50	0.56	0.000669	± 2.5	PASS
	HCH	VN	-30	-0.49	-0.000581	± 2.5	PASS
		VN	-20	4.79	0.005675	± 2.5	PASS
		VN	-10	3.78	0.004479	± 2.5	PASS
		VN	0	3.02	0.003578	± 2.5	PASS
		VN	10	1.11	0.001315	± 2.5	PASS
		VN	20	0.52	0.000616	± 2.5	PASS
		VN	30	2.84	0.003365	± 2.5	PASS
		VN	40	2.74	0.003246	± 2.5	PASS
		VN	50	1.27	0.001505	± 2.5	PASS
QPSK	LCH	VN	-30	-1.76	-0.002104	± 2.5	PASS
		VN	-20	-1.92	-0.002295	± 2.5	PASS
		VN	-10	1.3	0.001554	± 2.5	PASS
		VN	0	4.36	0.005212	± 2.5	PASS
		VN	10	2.16	0.002582	± 2.5	PASS
		VN	20	0.82	0.000980	± 2.5	PASS
		VN	30	3.83	0.004579	± 2.5	PASS
		VN	40	1.44	0.001721	± 2.5	PASS
		VN	50	-1.84	-0.002200	± 2.5	PASS
	MCH	VN	-30	3.33	0.003945	± 2.5	PASS
		VN	-20	2.23	0.002642	± 2.5	PASS
		VN	-10	0.82	0.000972	± 2.5	PASS
		VN	0	3.22	0.003815	± 2.5	PASS
		VN	10	-1.76	-0.002085	± 2.5	PASS
		VN	20	4.1	0.004858	± 2.5	PASS
		VN	30	0.83	0.000983	± 2.5	PASS
		VN	40	-0.03	-0.000036	± 2.5	PASS
		VN	50	0.58	0.000687	± 2.5	PASS
	HCH	VN	-30	4.13	0.004893	± 2.5	PASS
		VN	-20	3.09	0.003661	± 2.5	PASS
		VN	-10	-1.7	-0.002014	± 2.5	PASS
		VN	0	0.65	0.000770	± 2.5	PASS
		VN	10	4.02	0.004763	± 2.5	PASS
		VN	20	-1.96	-0.002322	± 2.5	PASS
		VN	30	-1.76	-0.002085	± 2.5	PASS
		VN	40	-1.71	-0.002026	± 2.5	PASS
		VN	50	2.85	0.003377	± 2.5	PASS