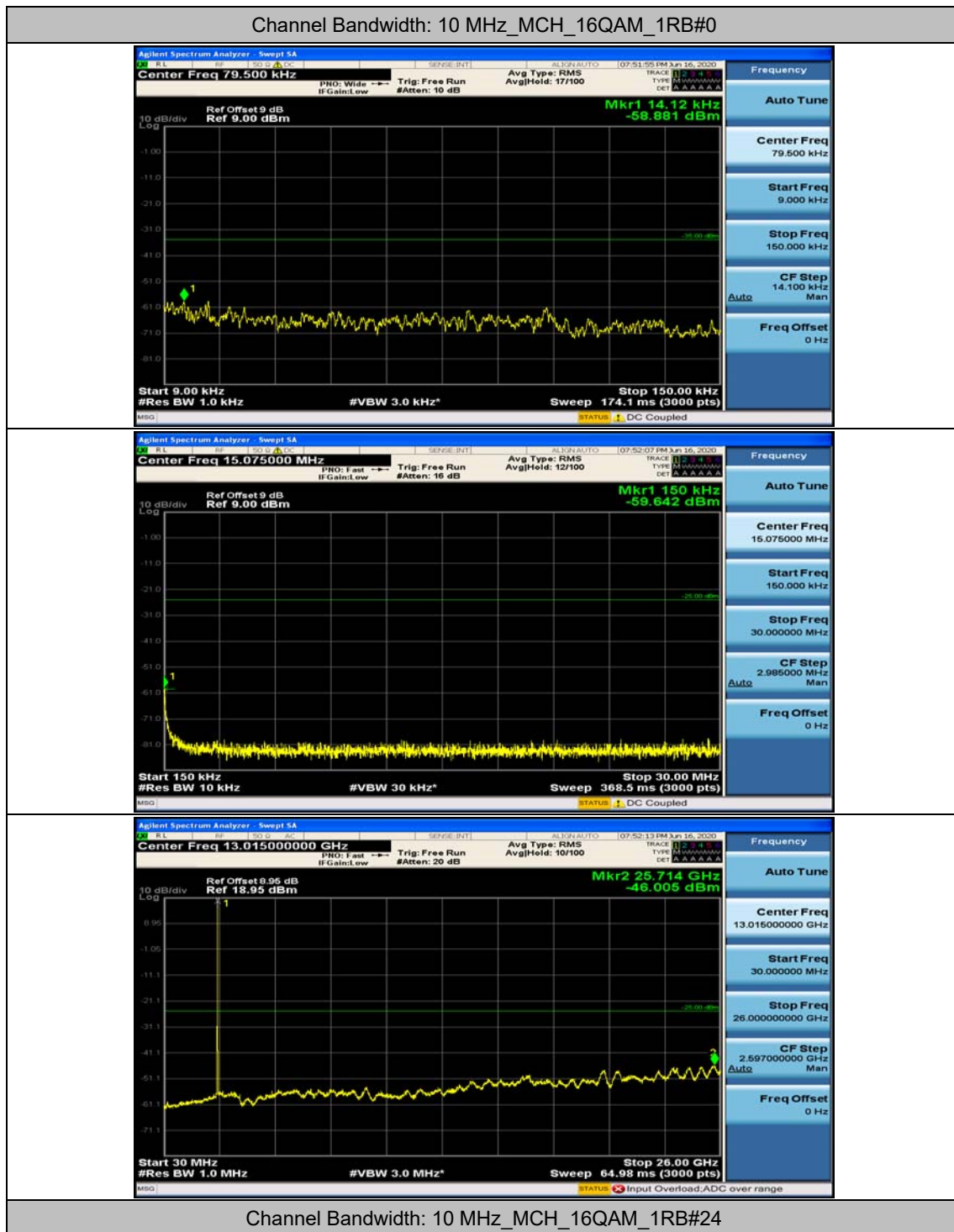
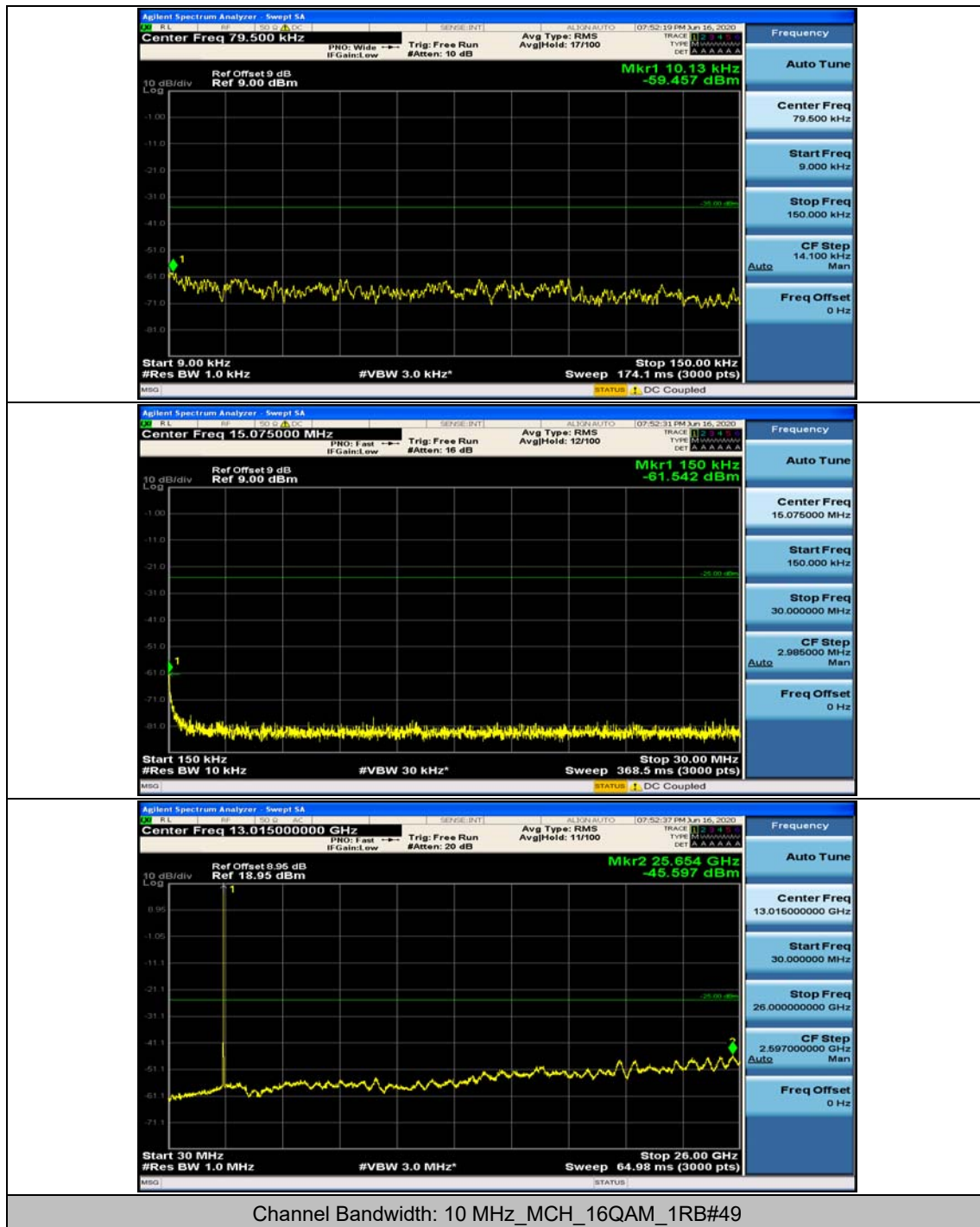
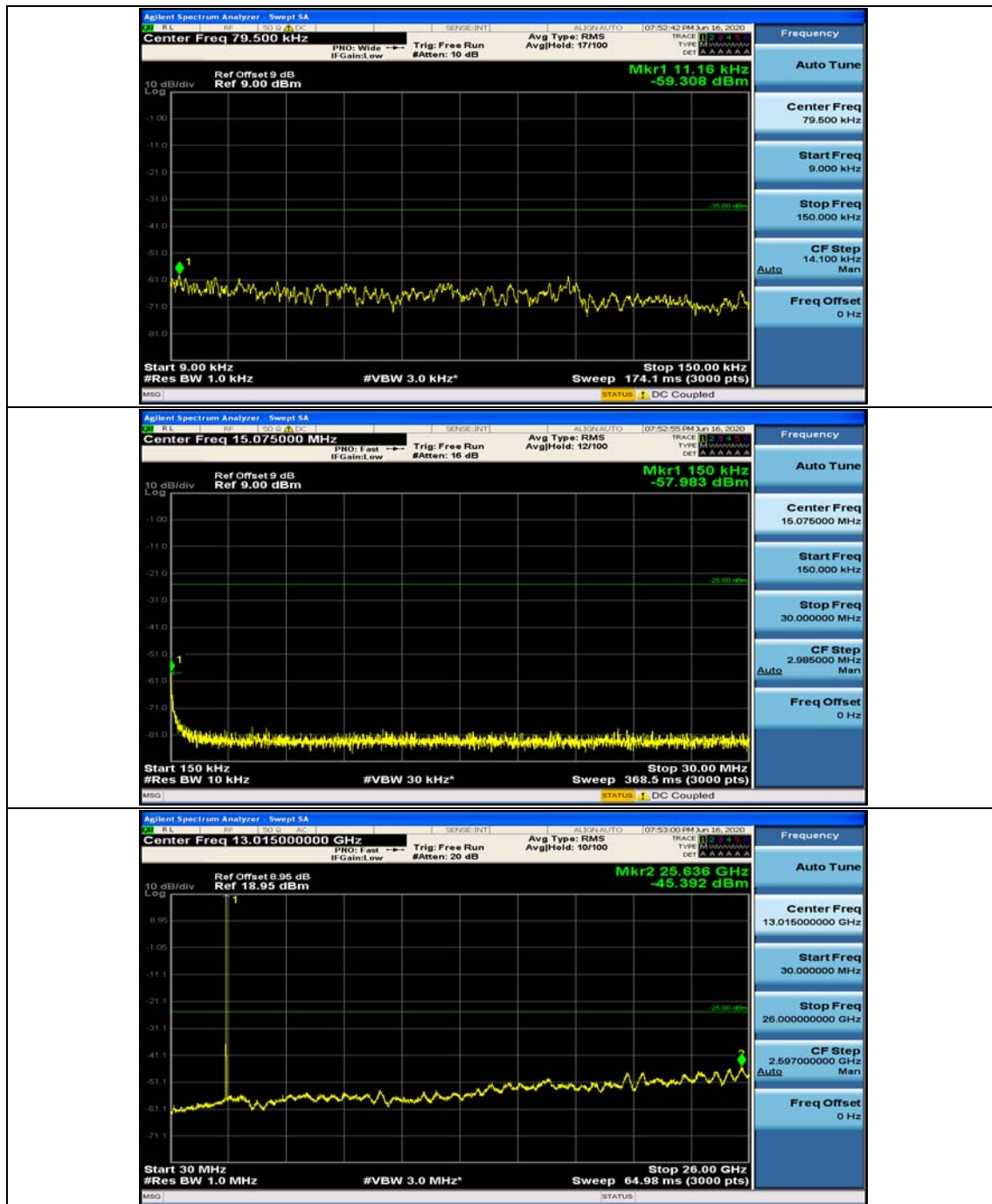
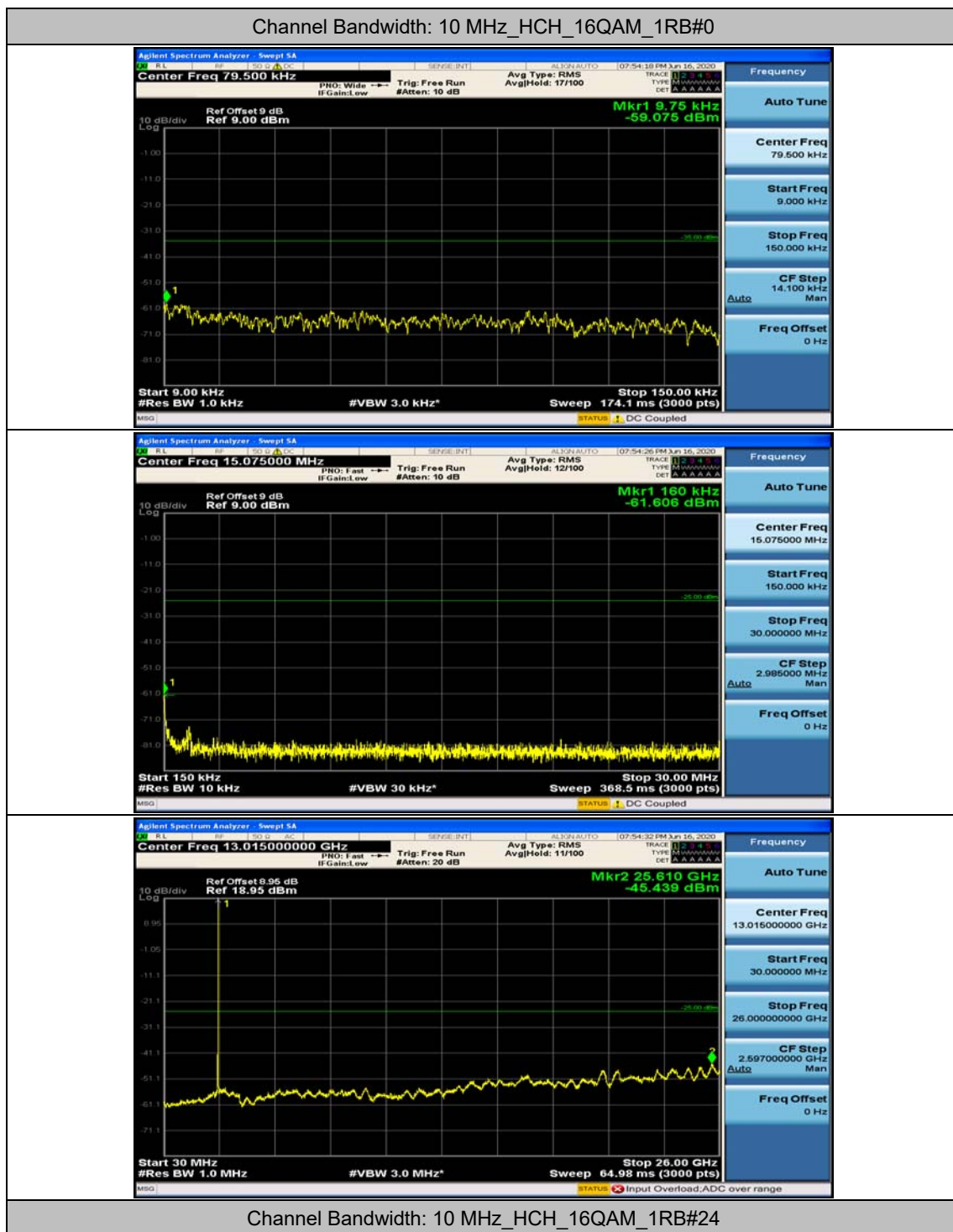
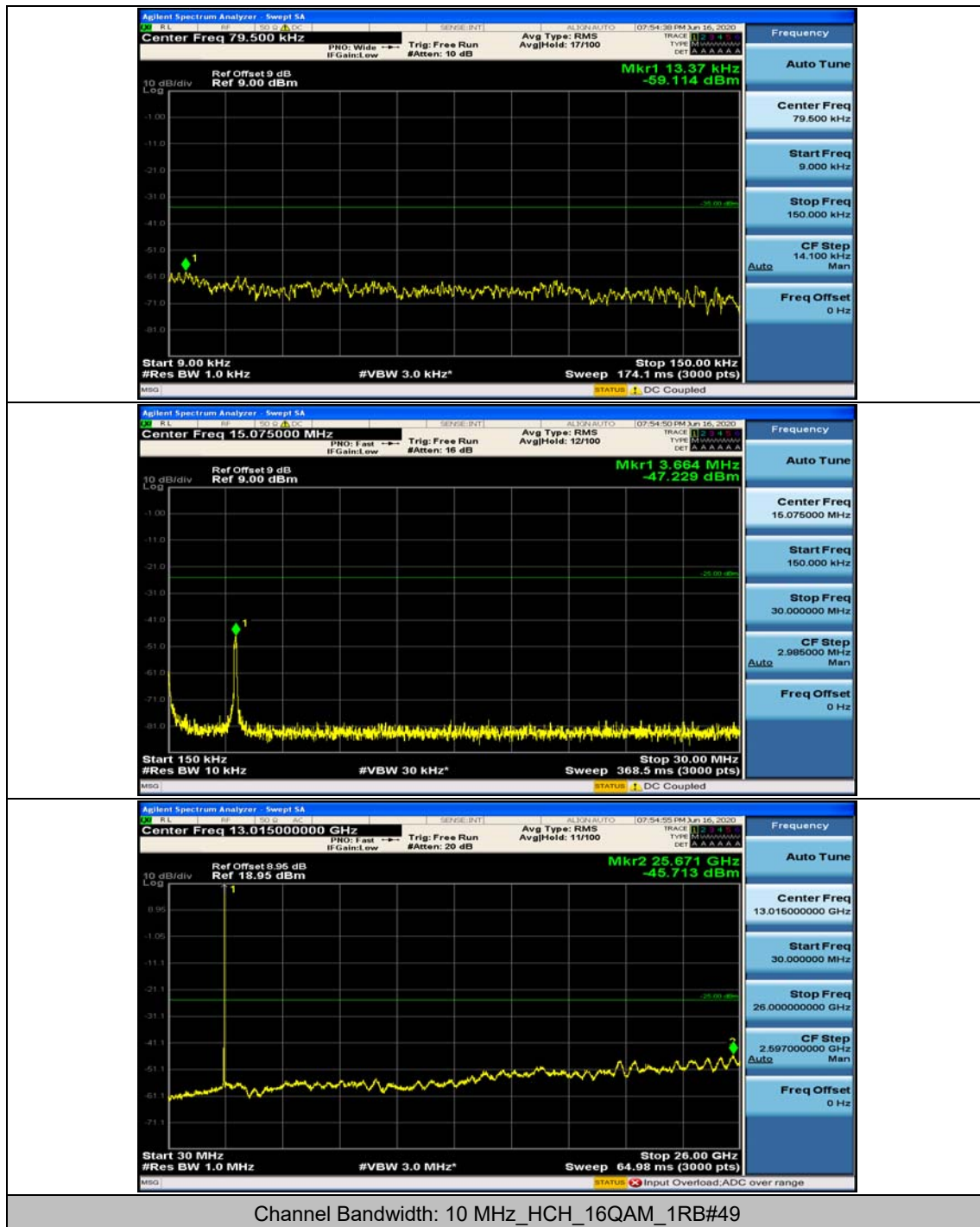


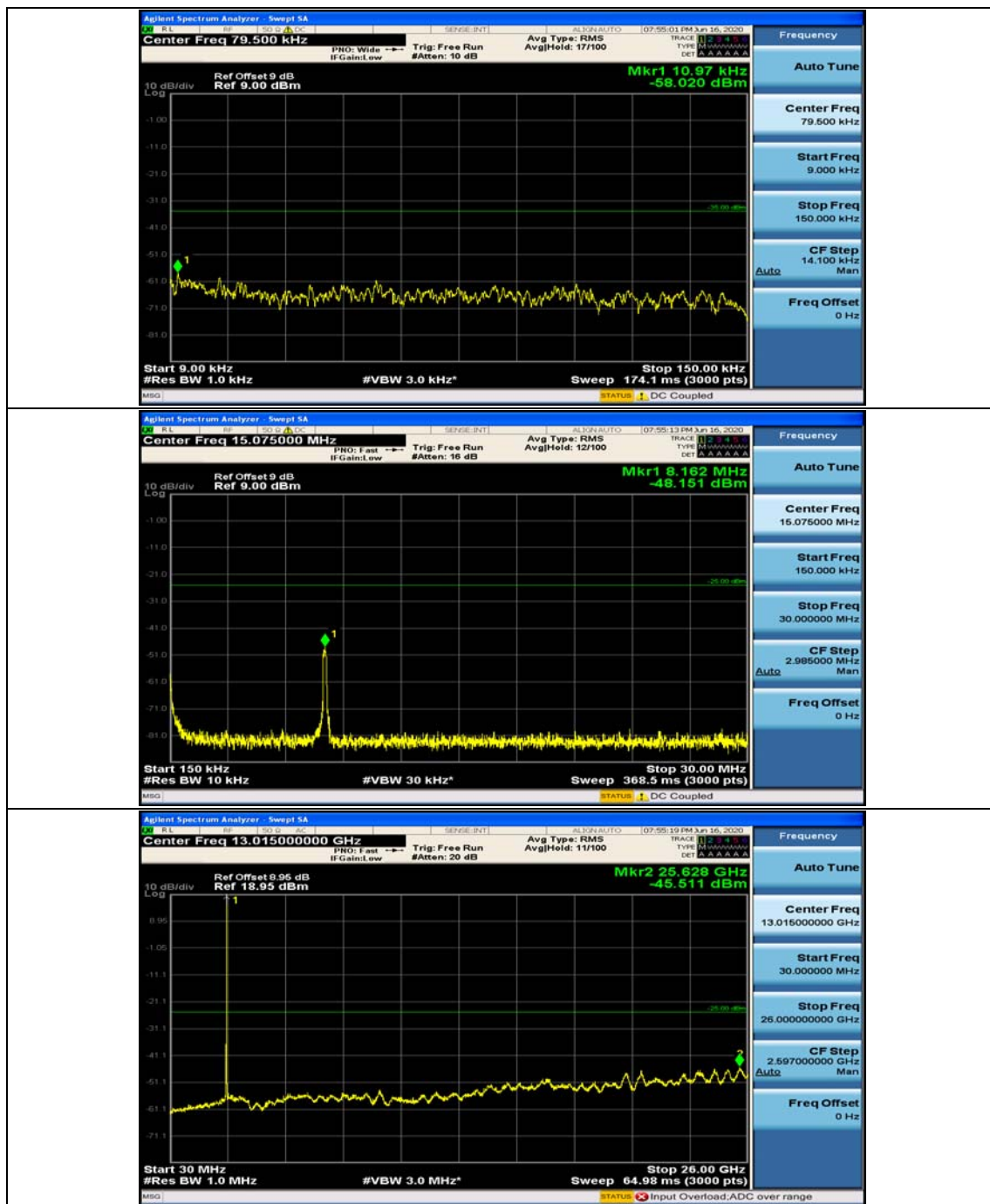




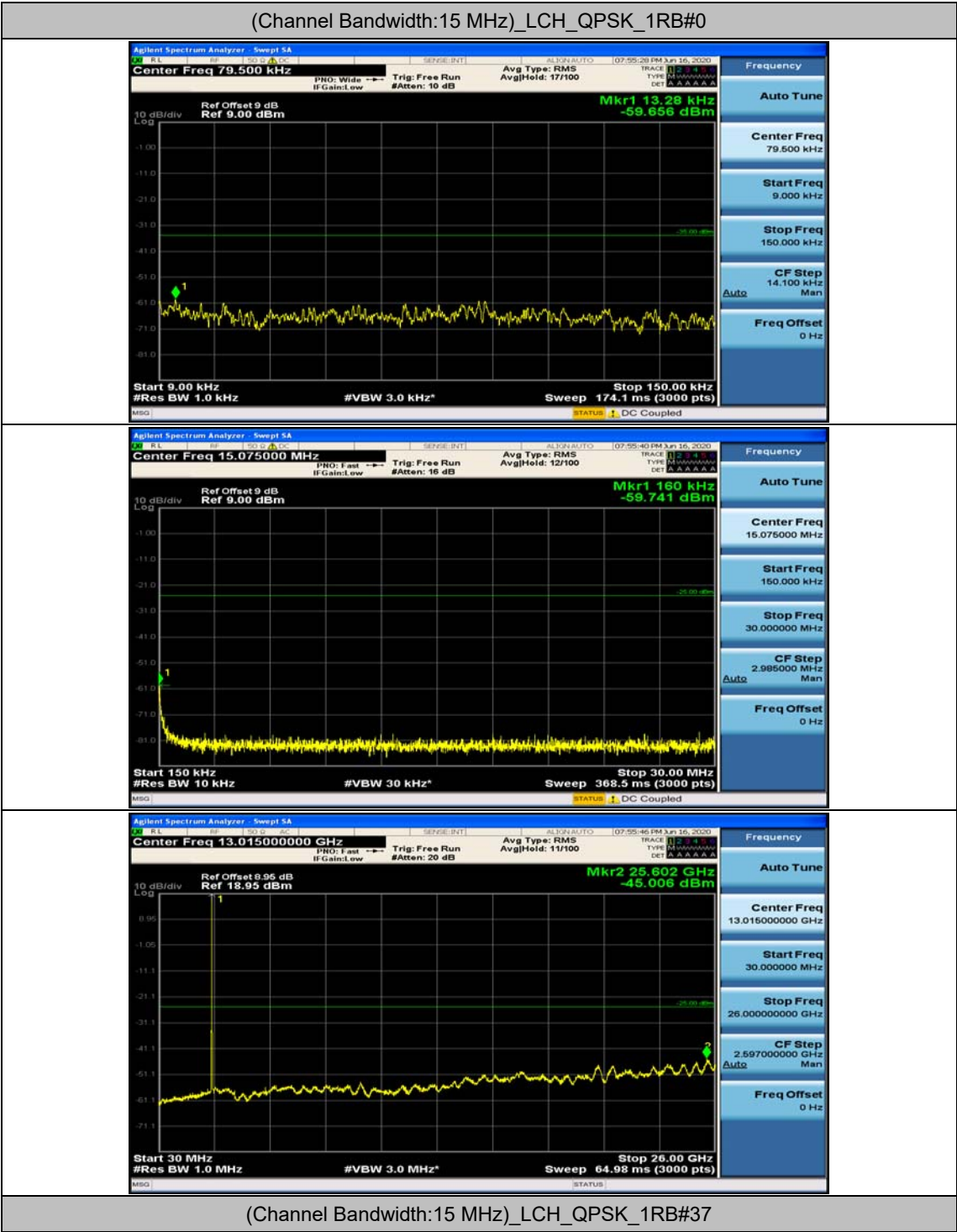


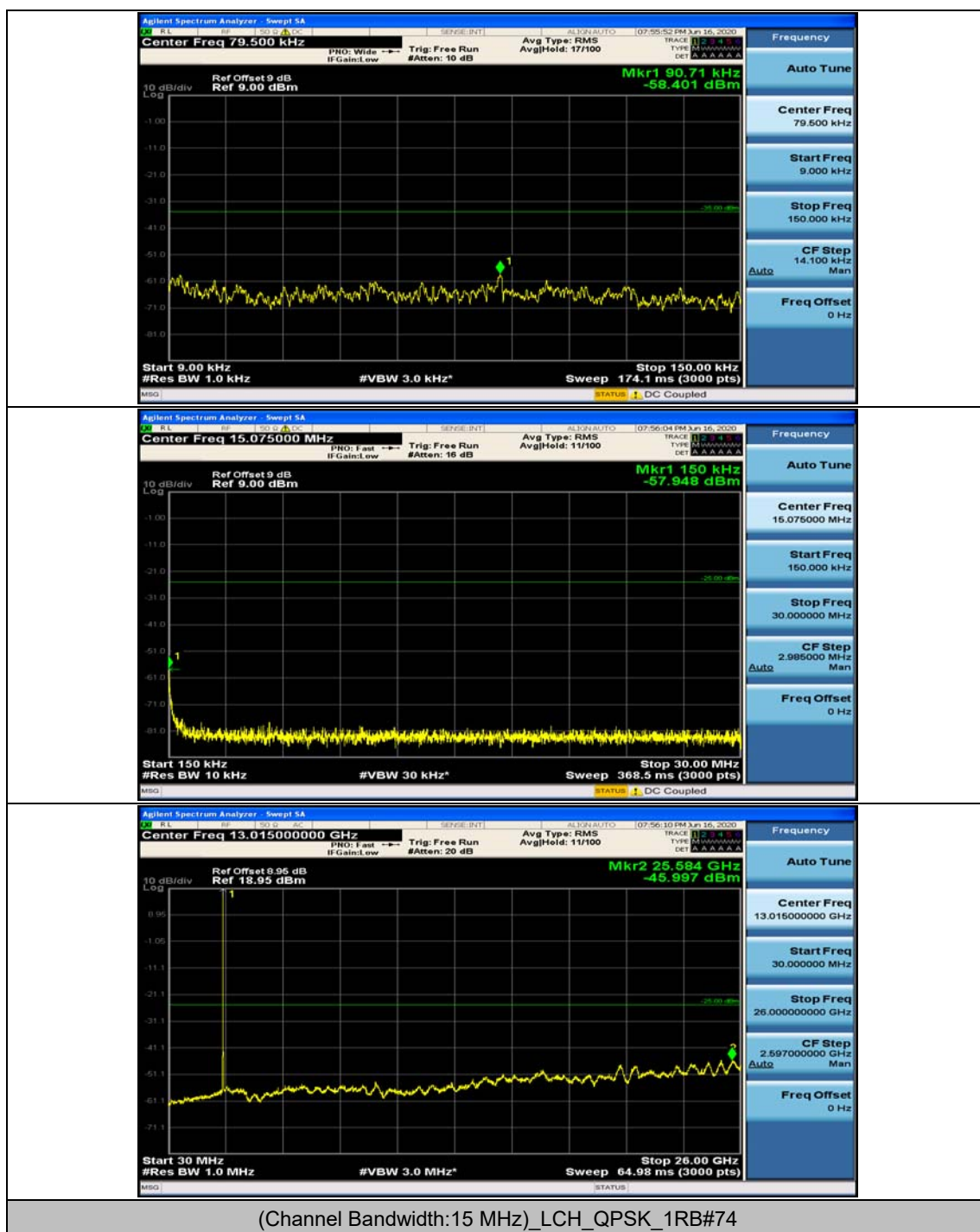


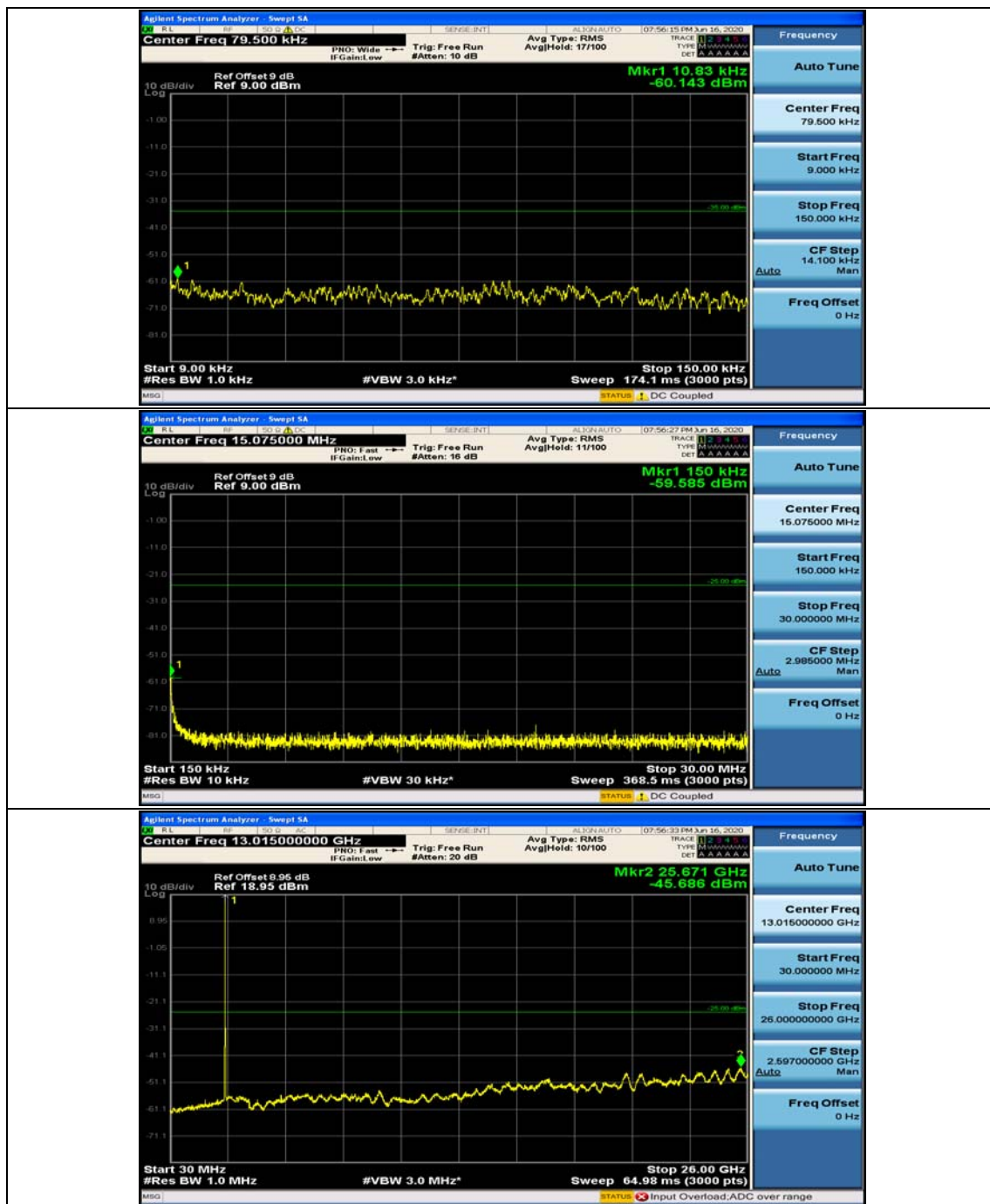




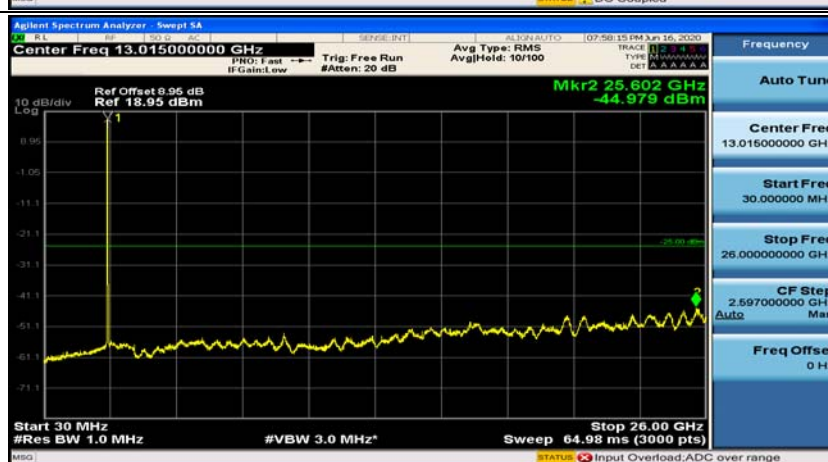
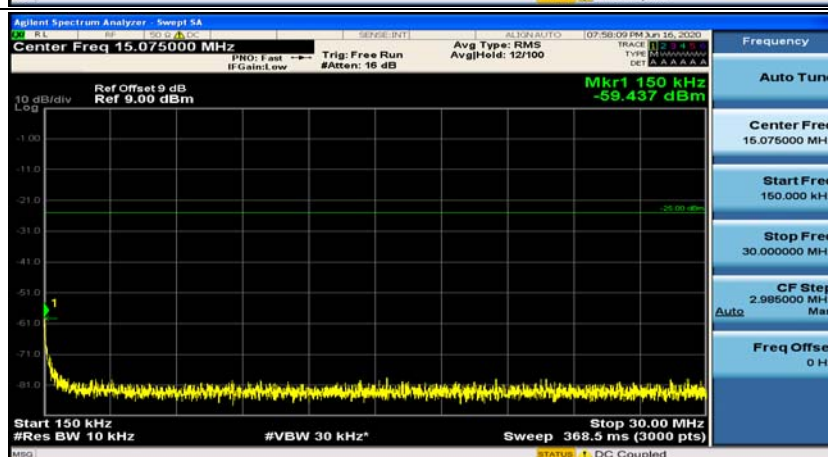
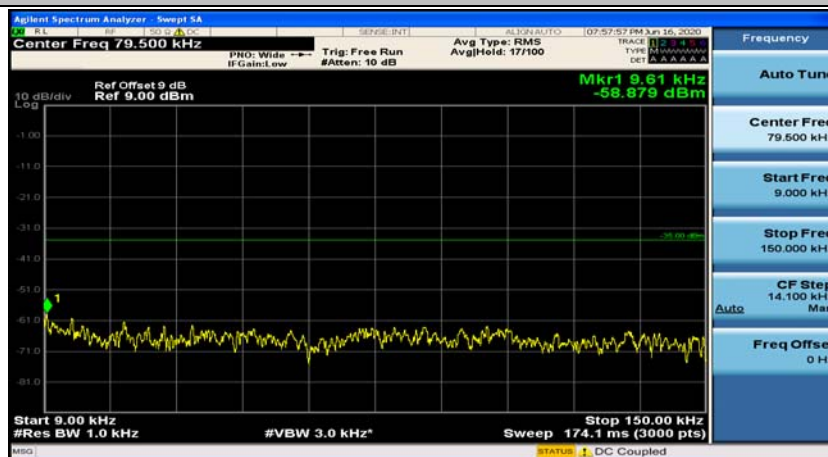
Channel Bandwidth: 15 MHz



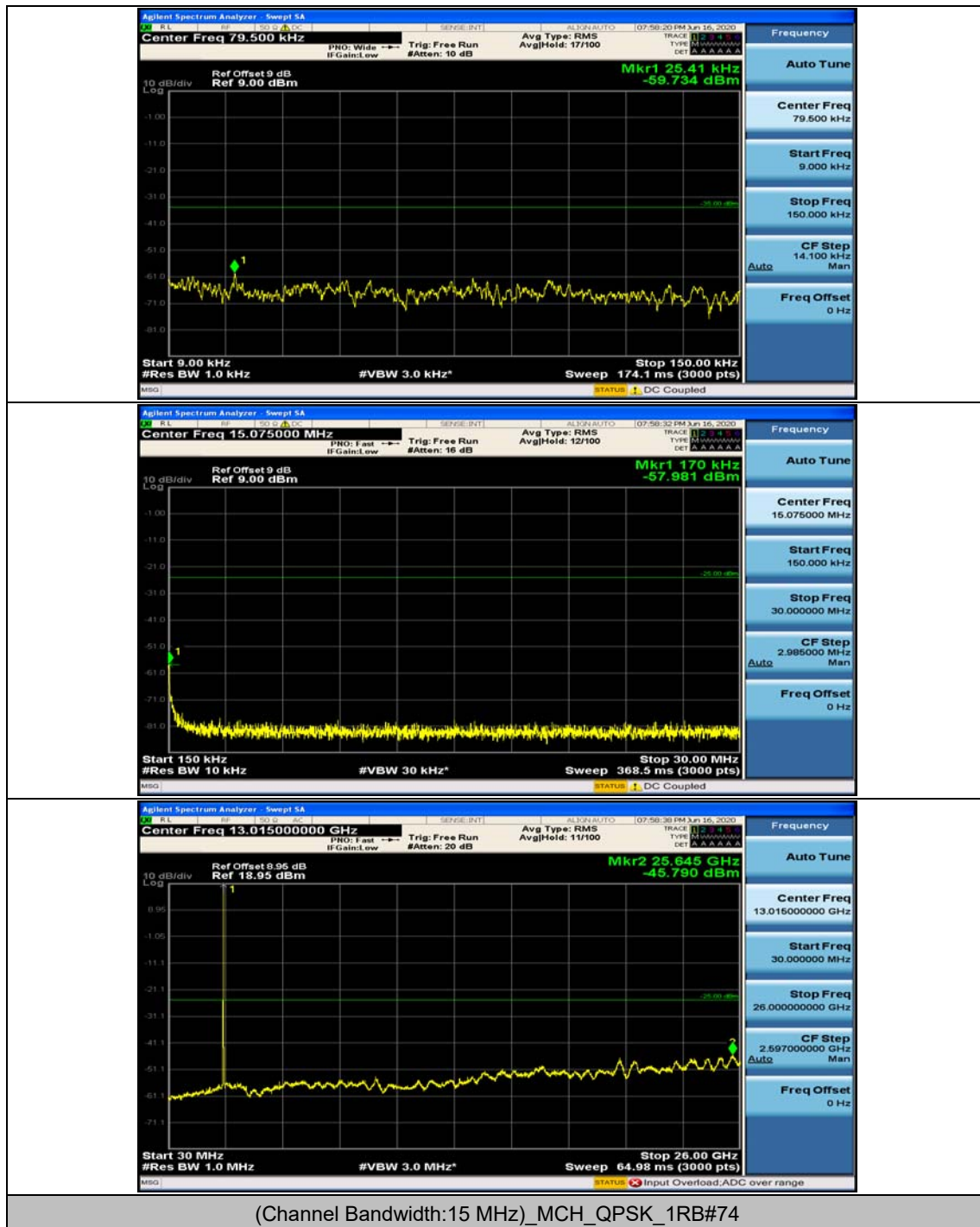


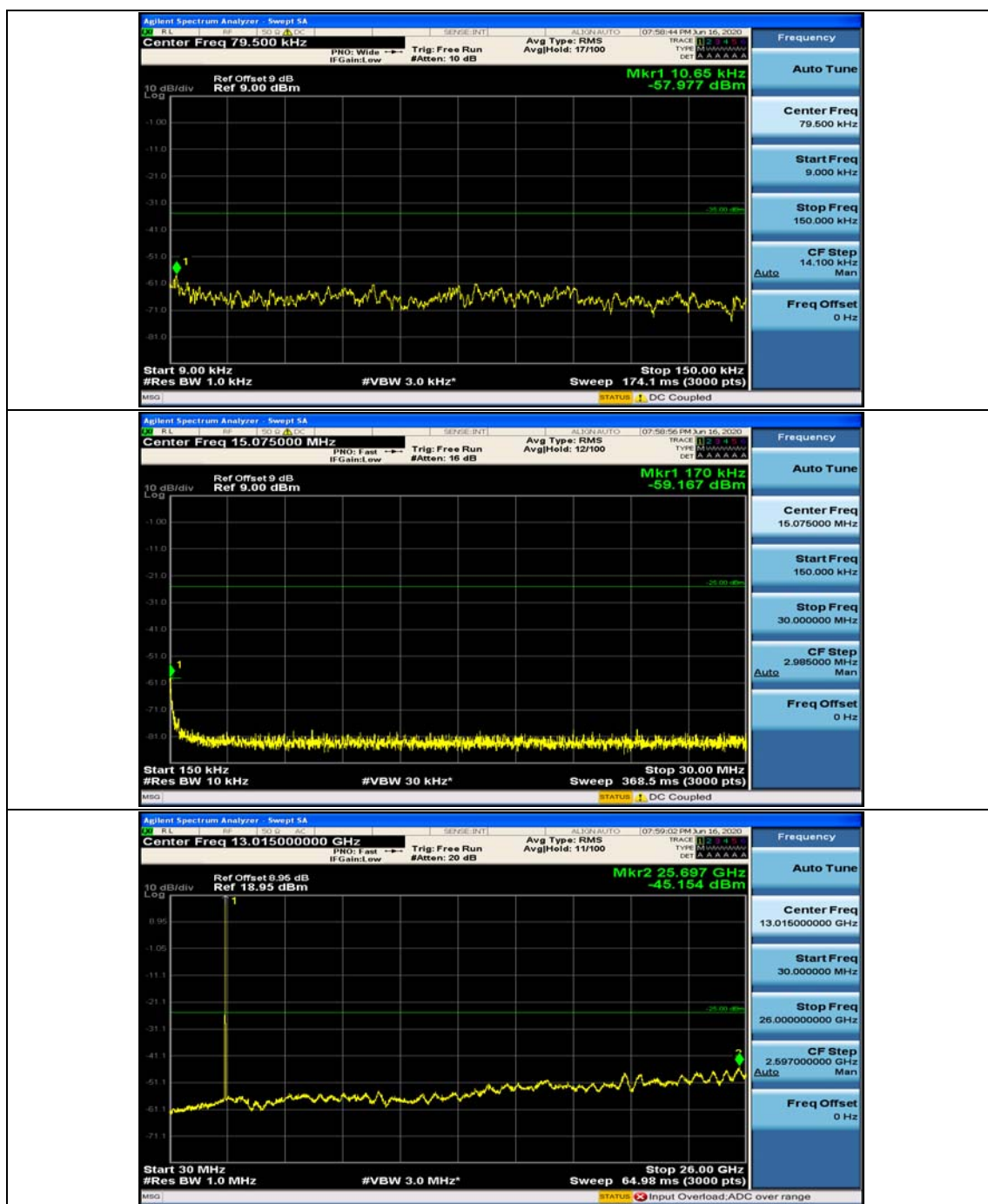


(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0

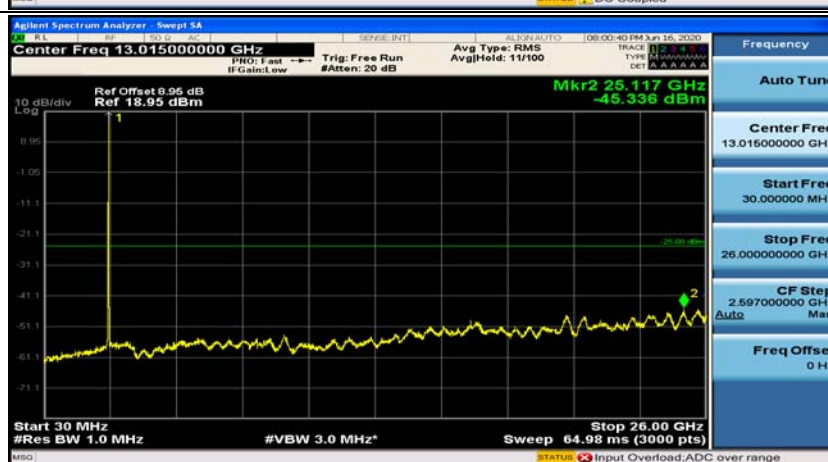
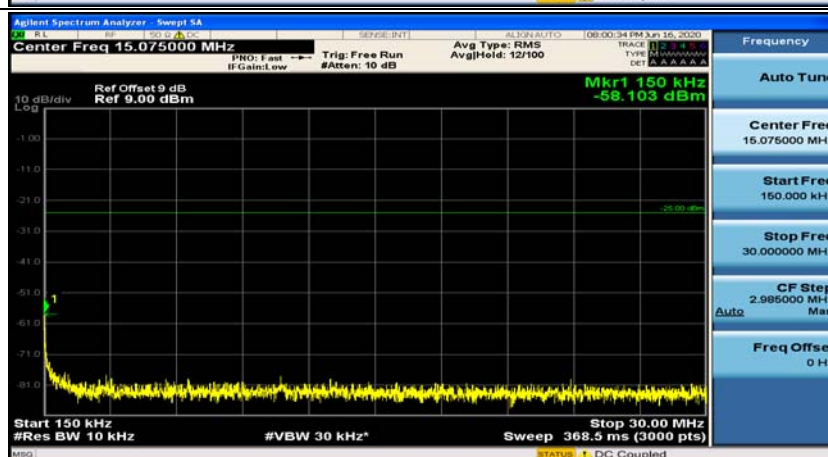
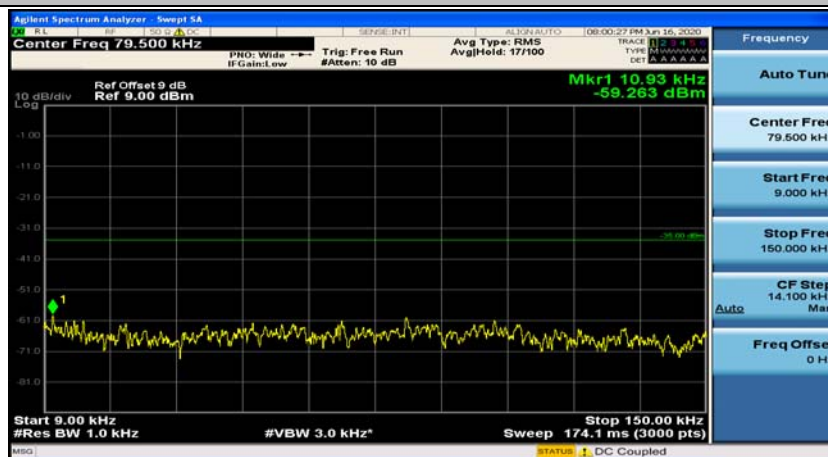


(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#37

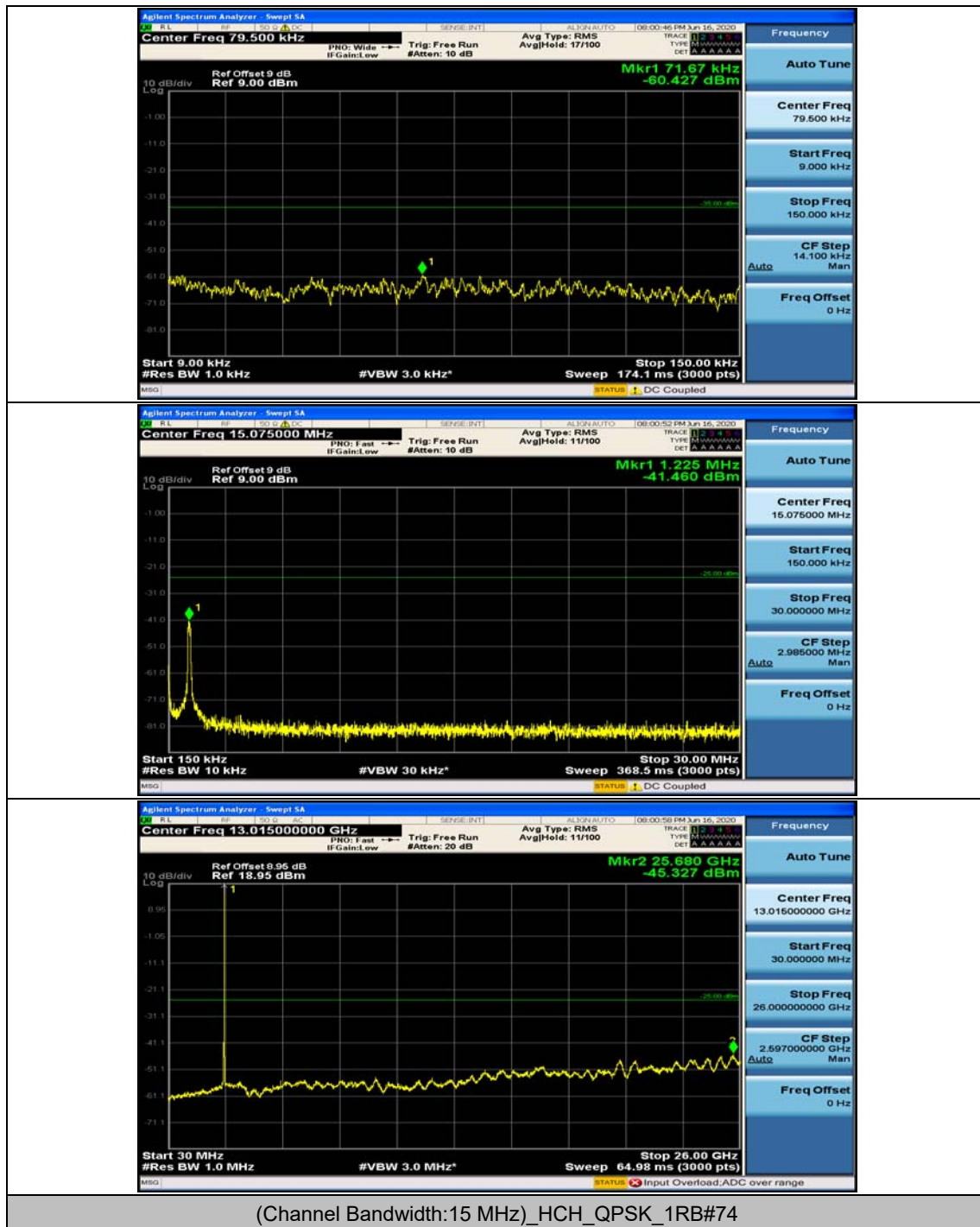


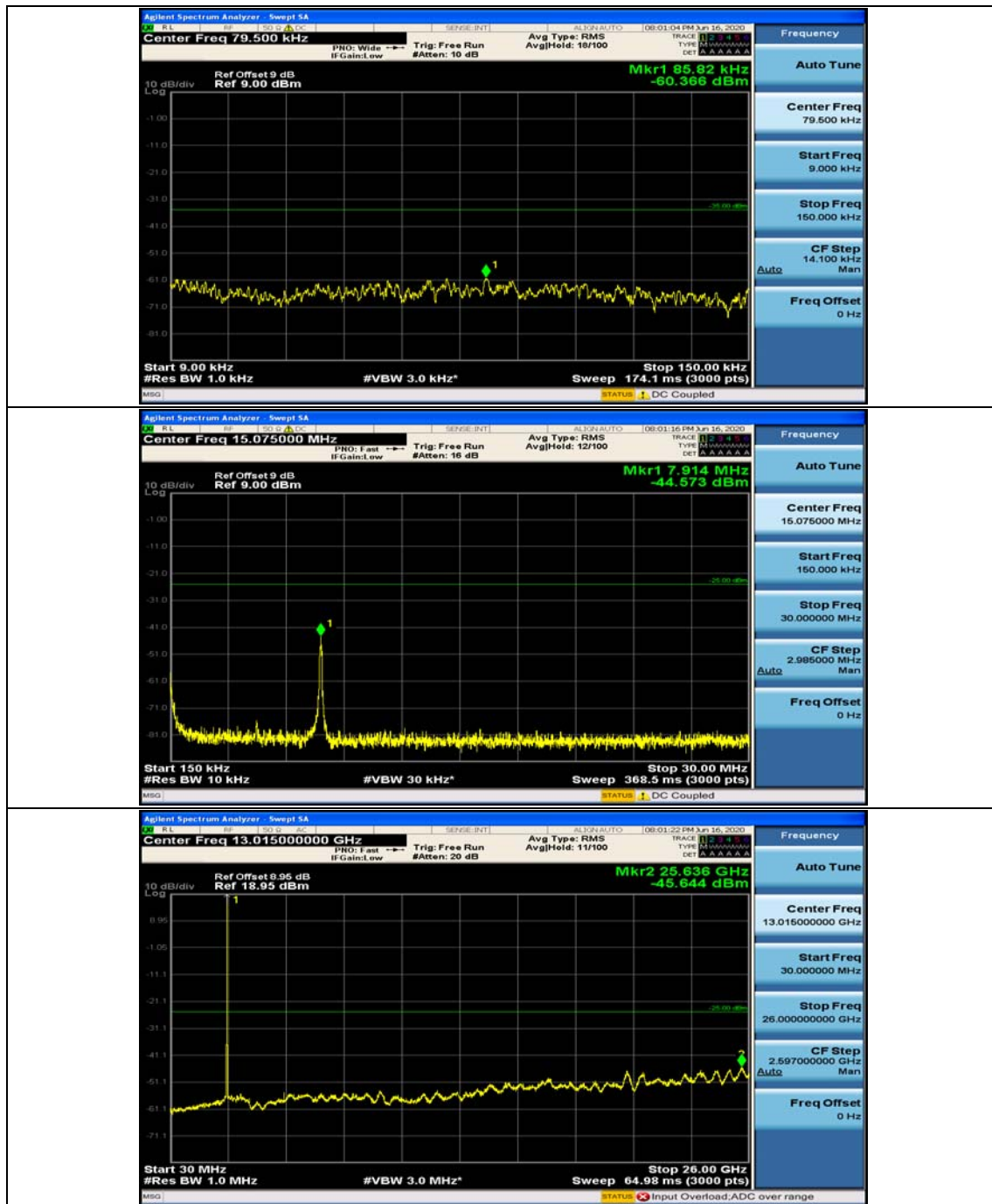


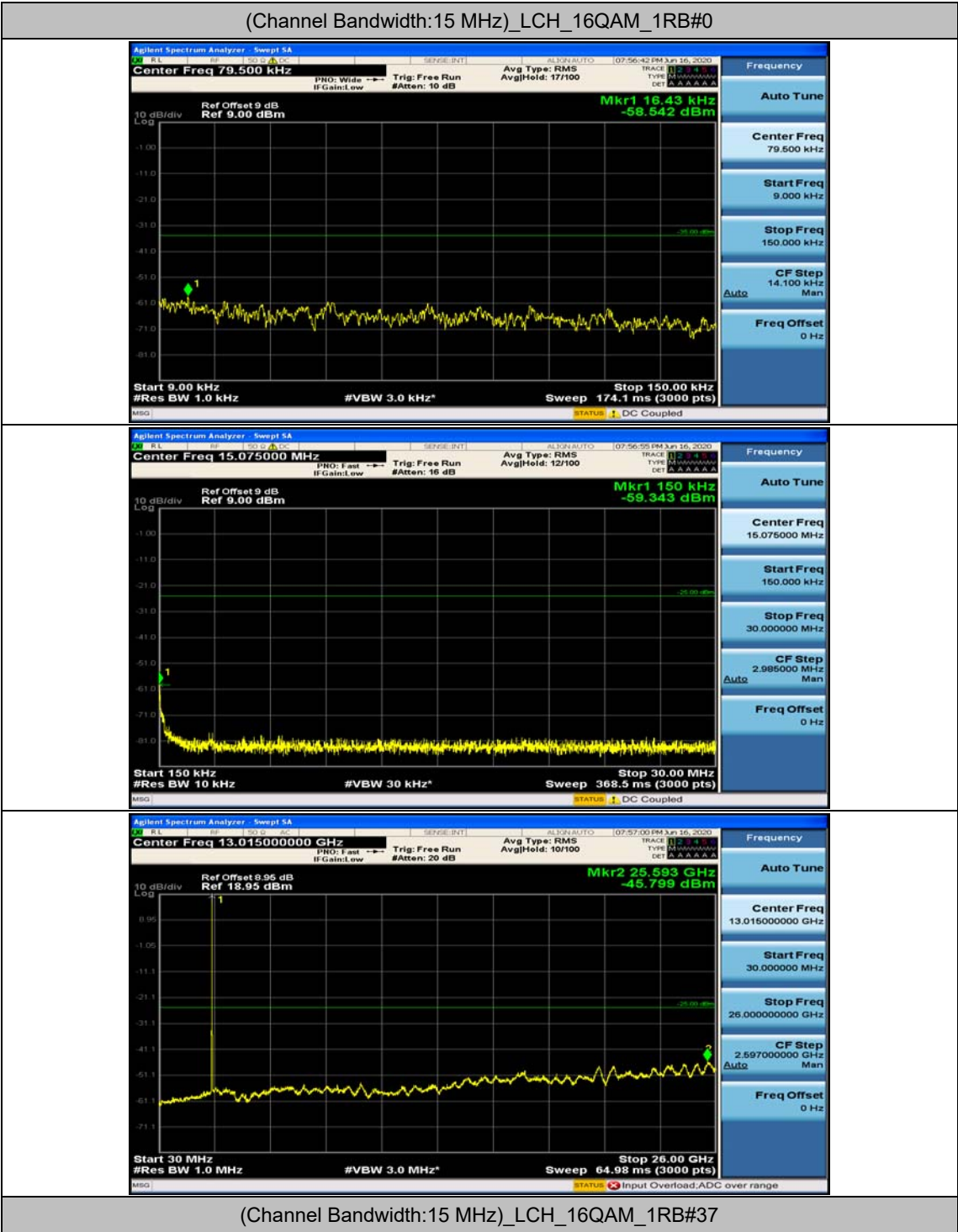
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0

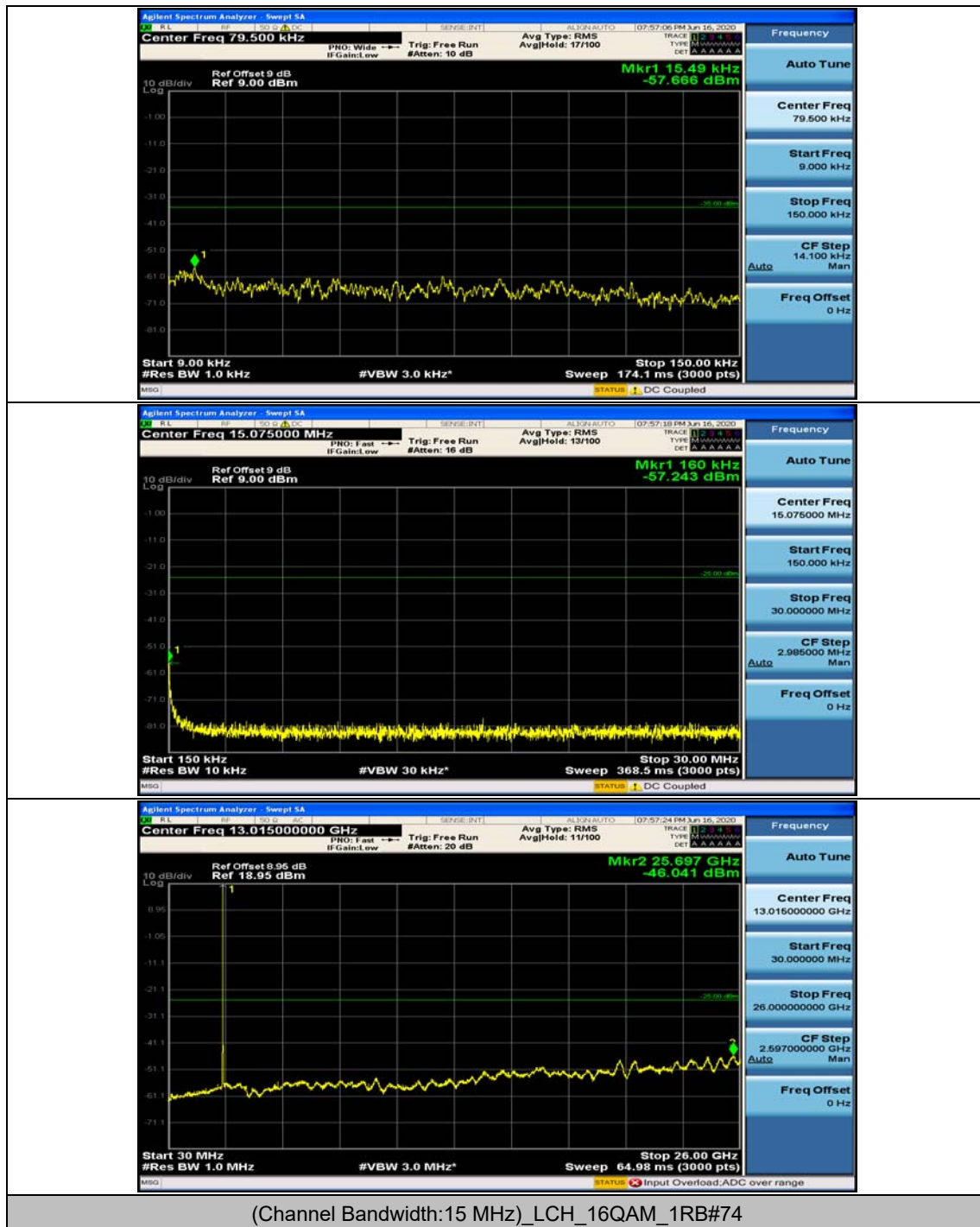


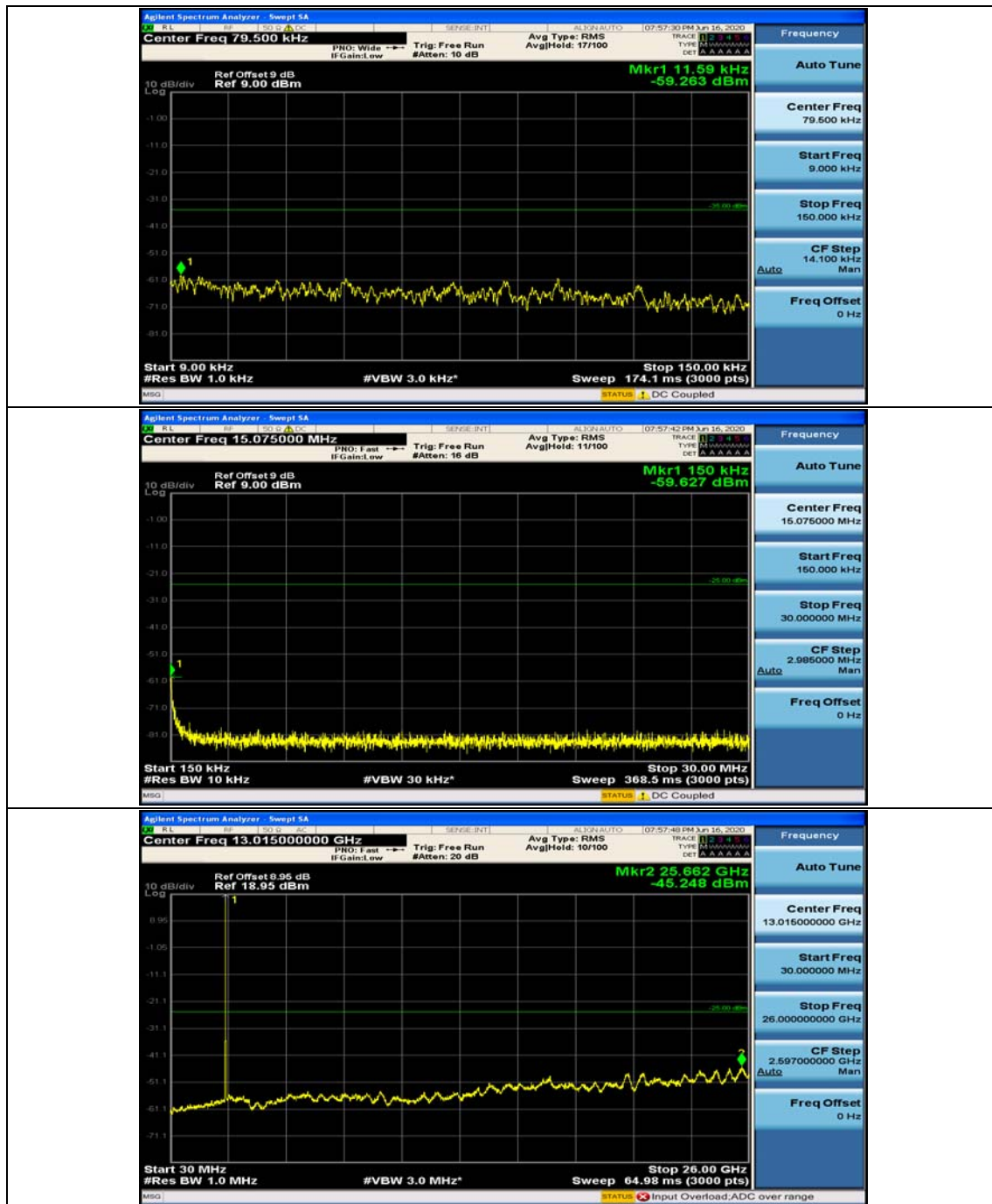
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37

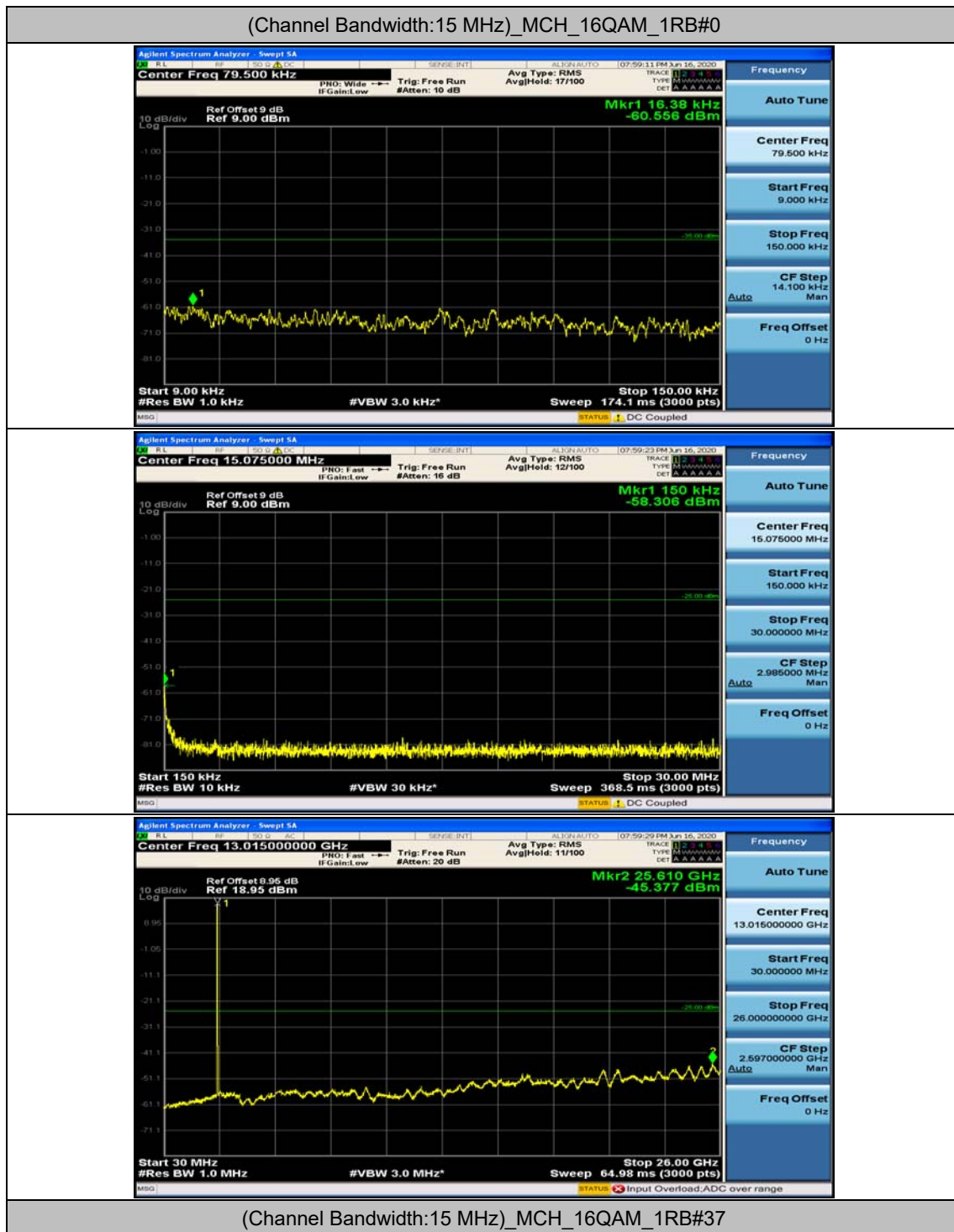


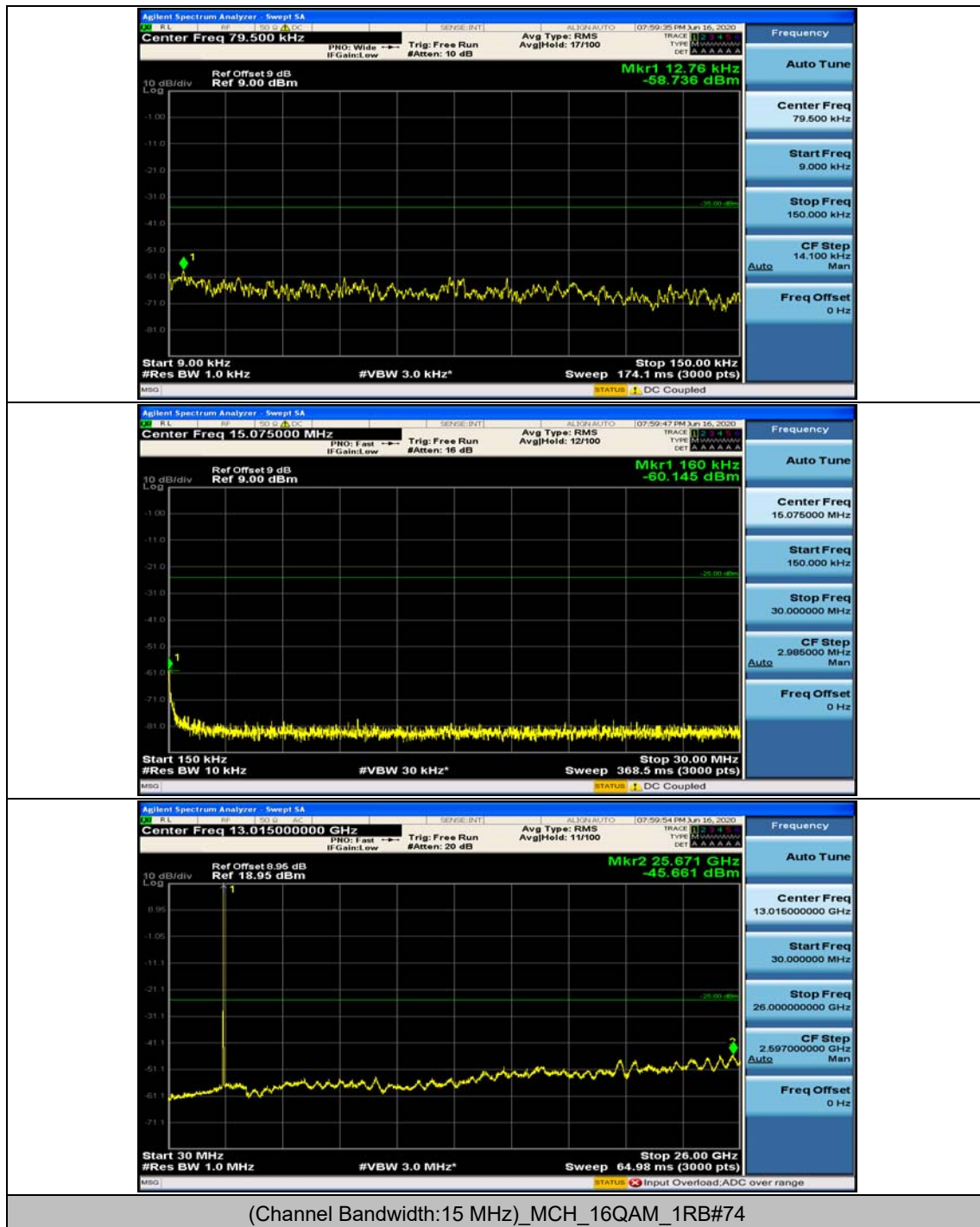


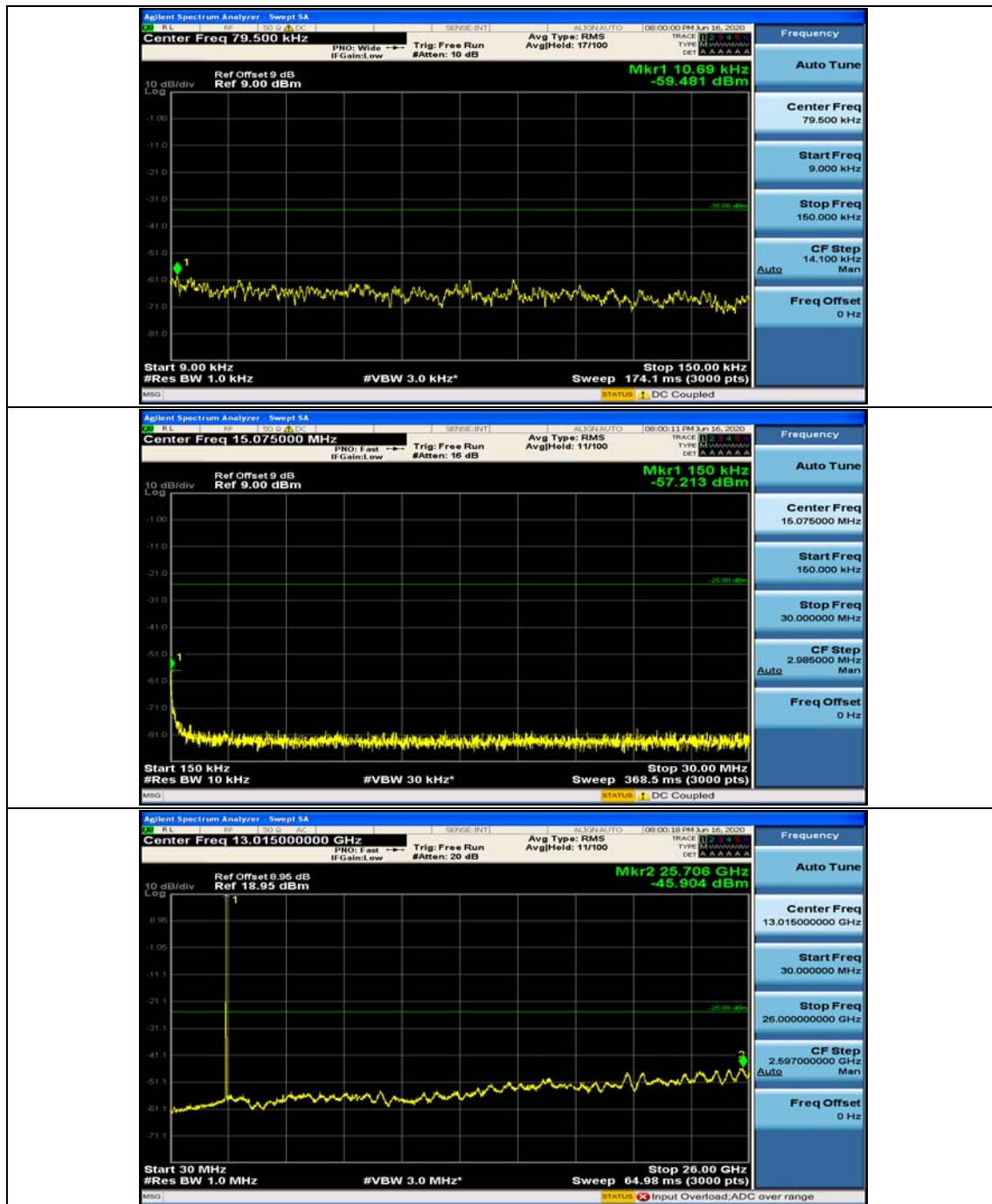


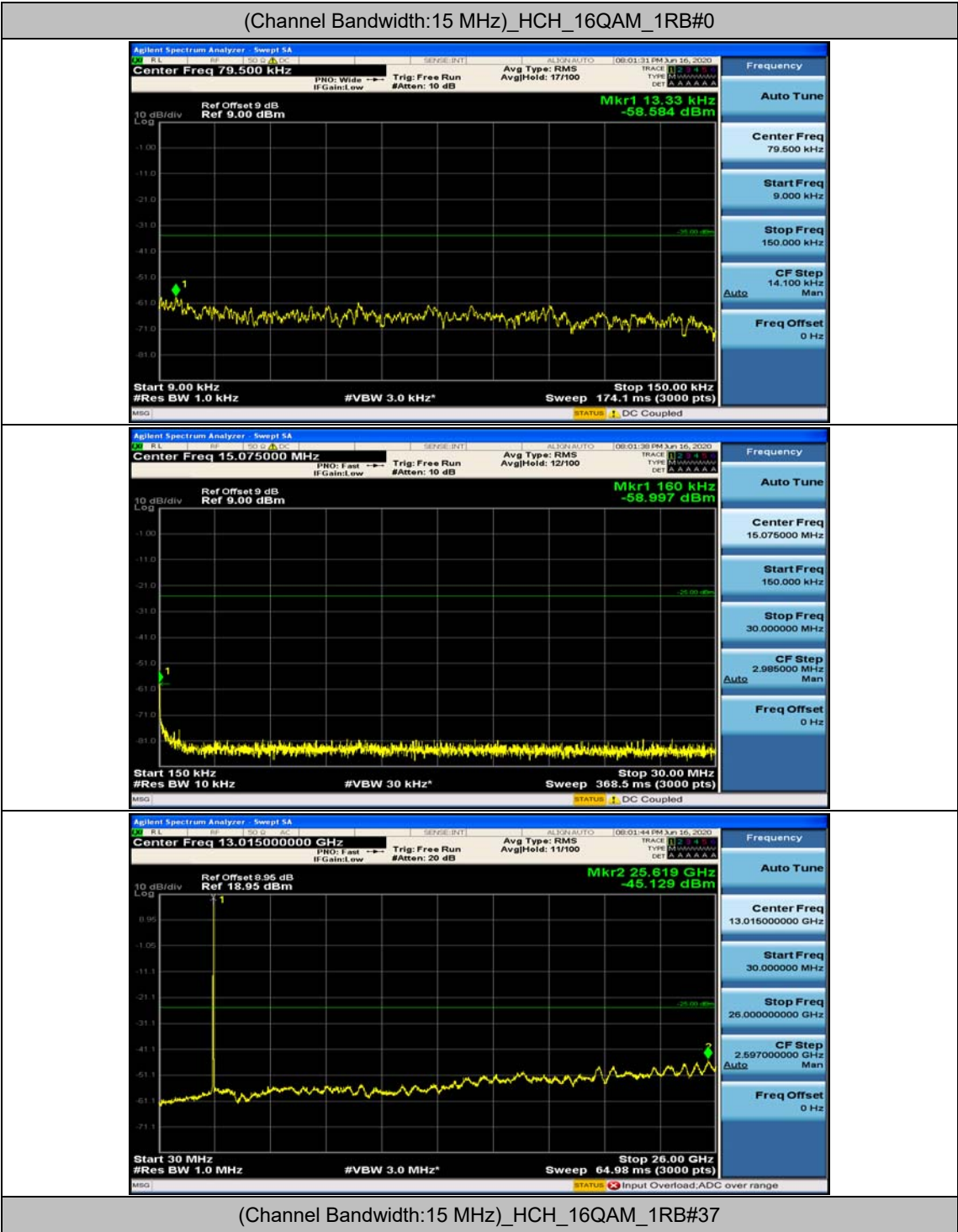


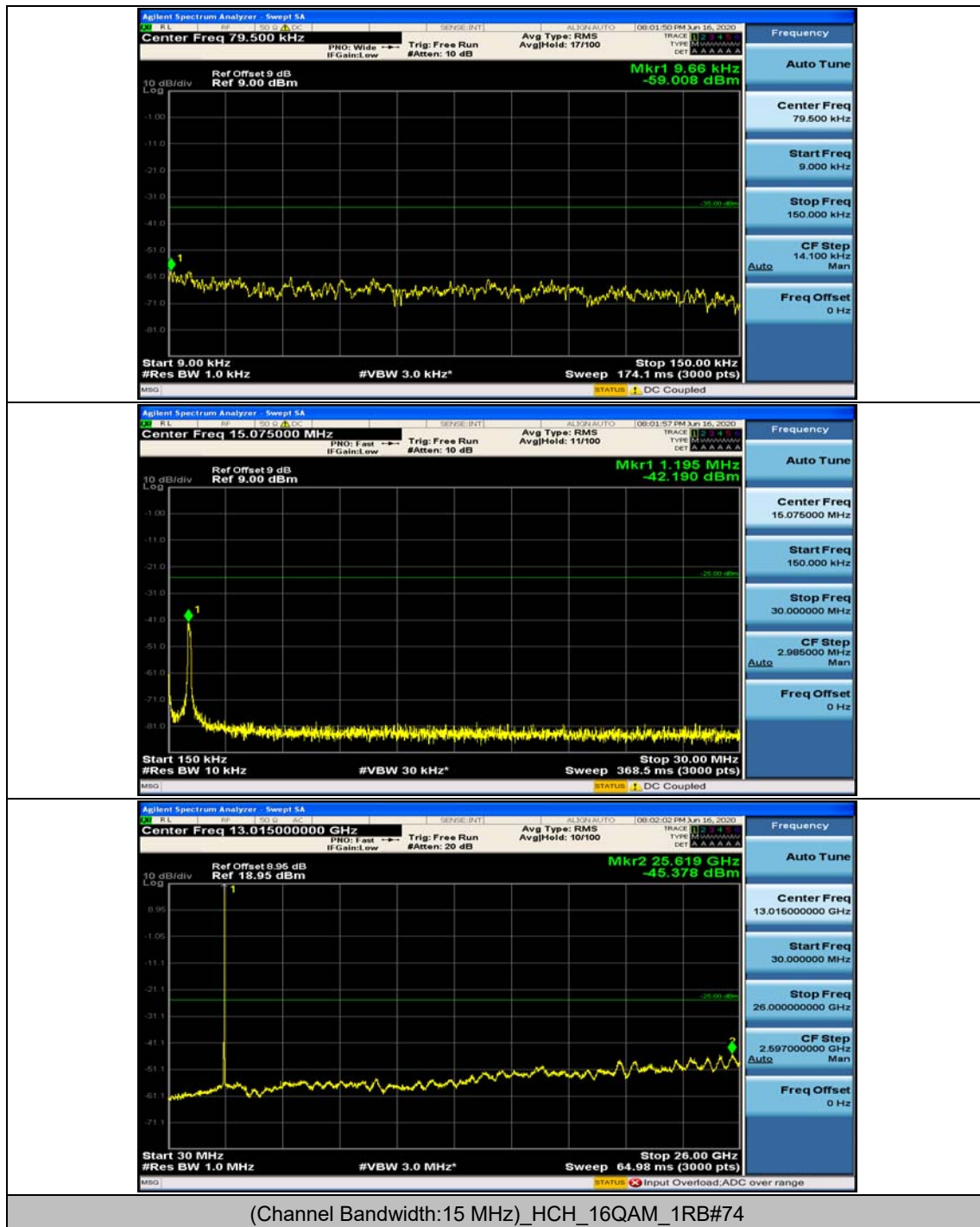


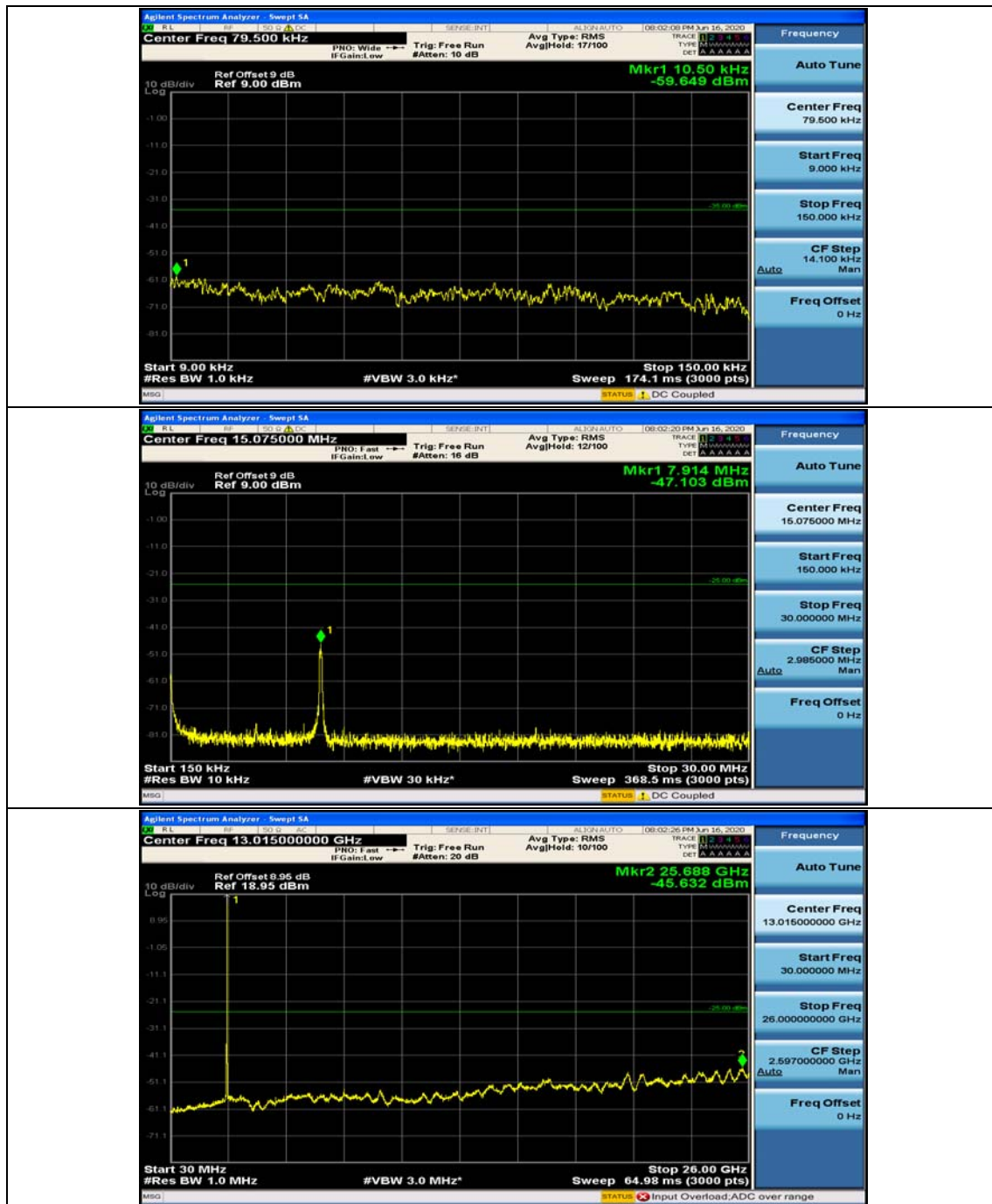




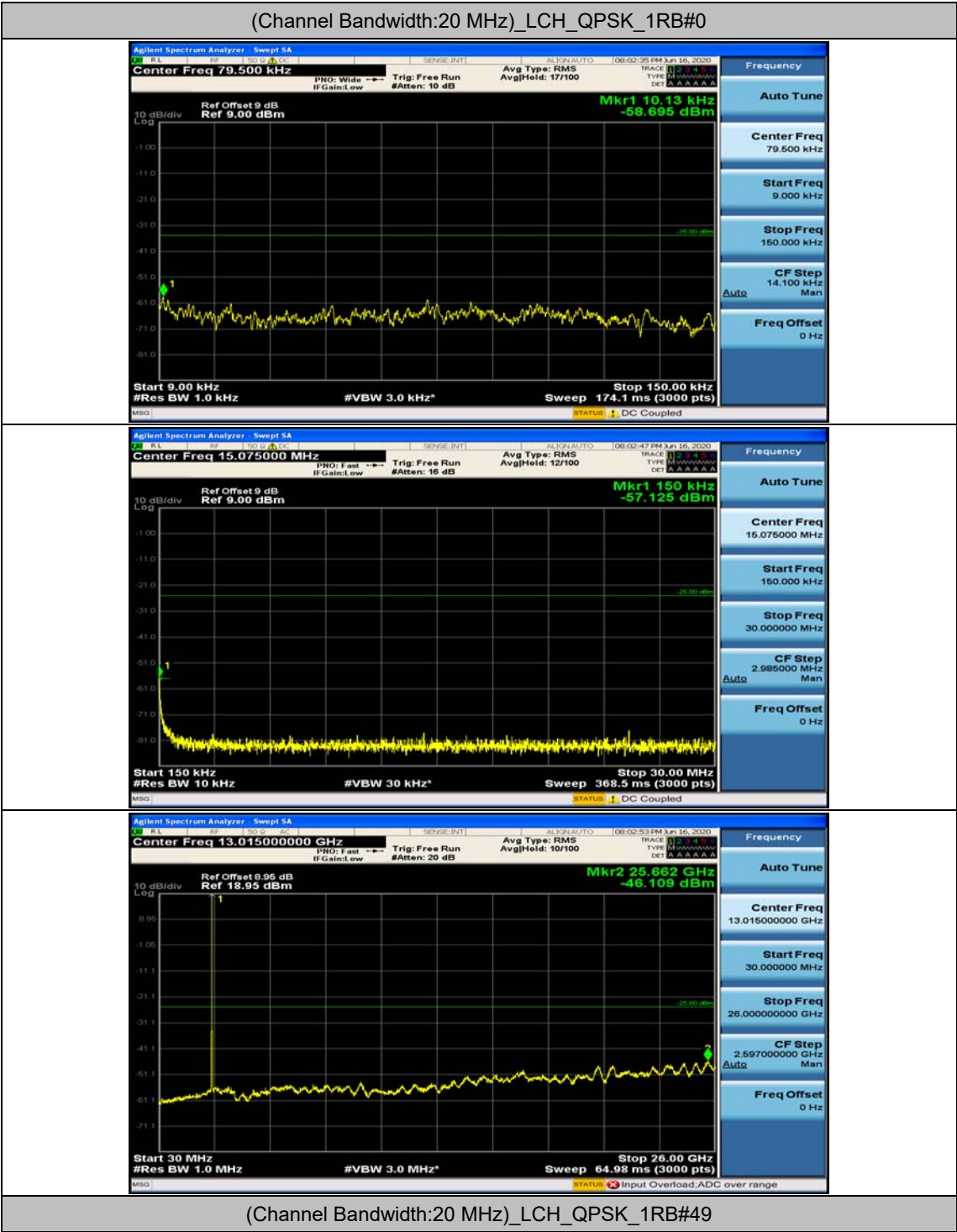


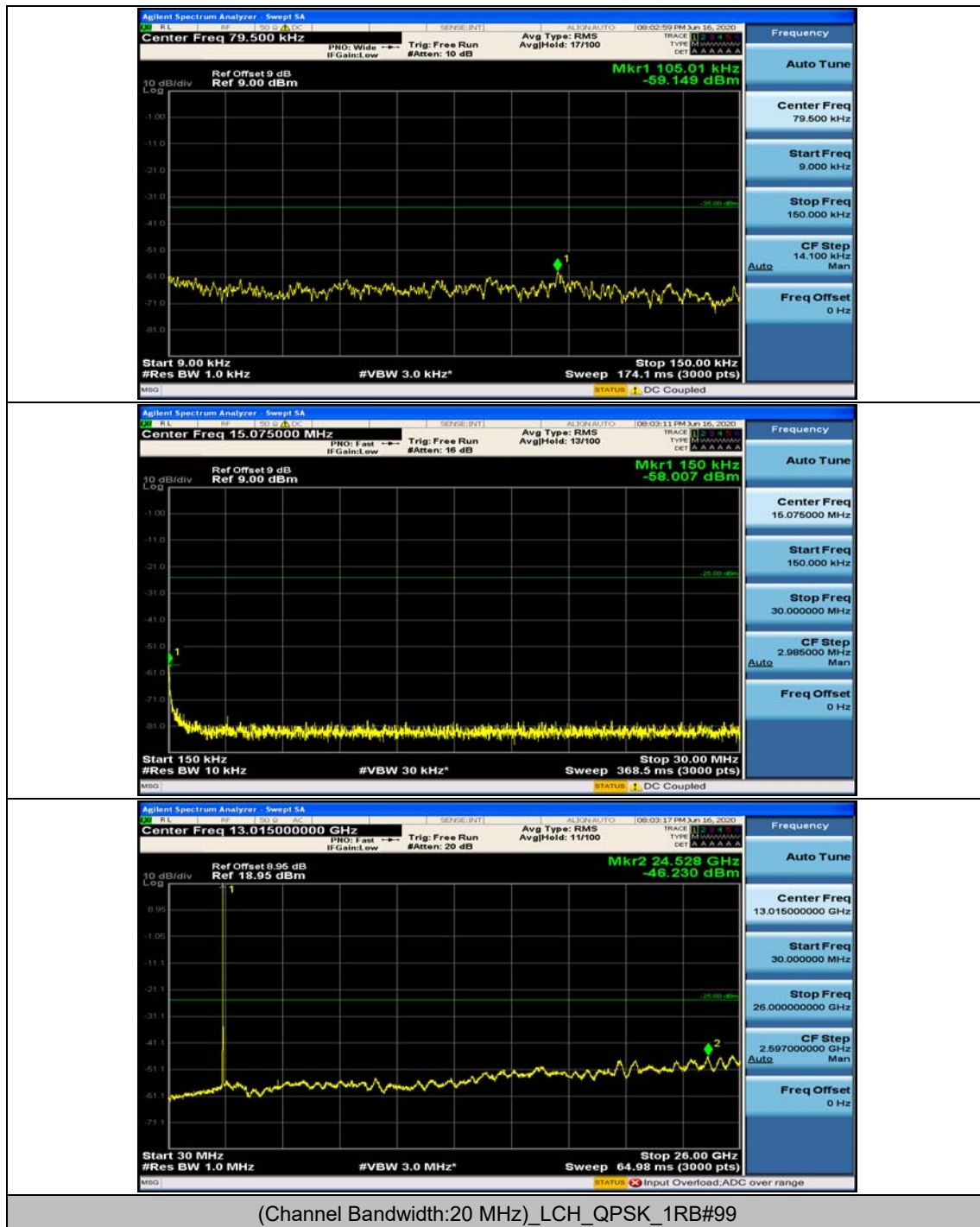


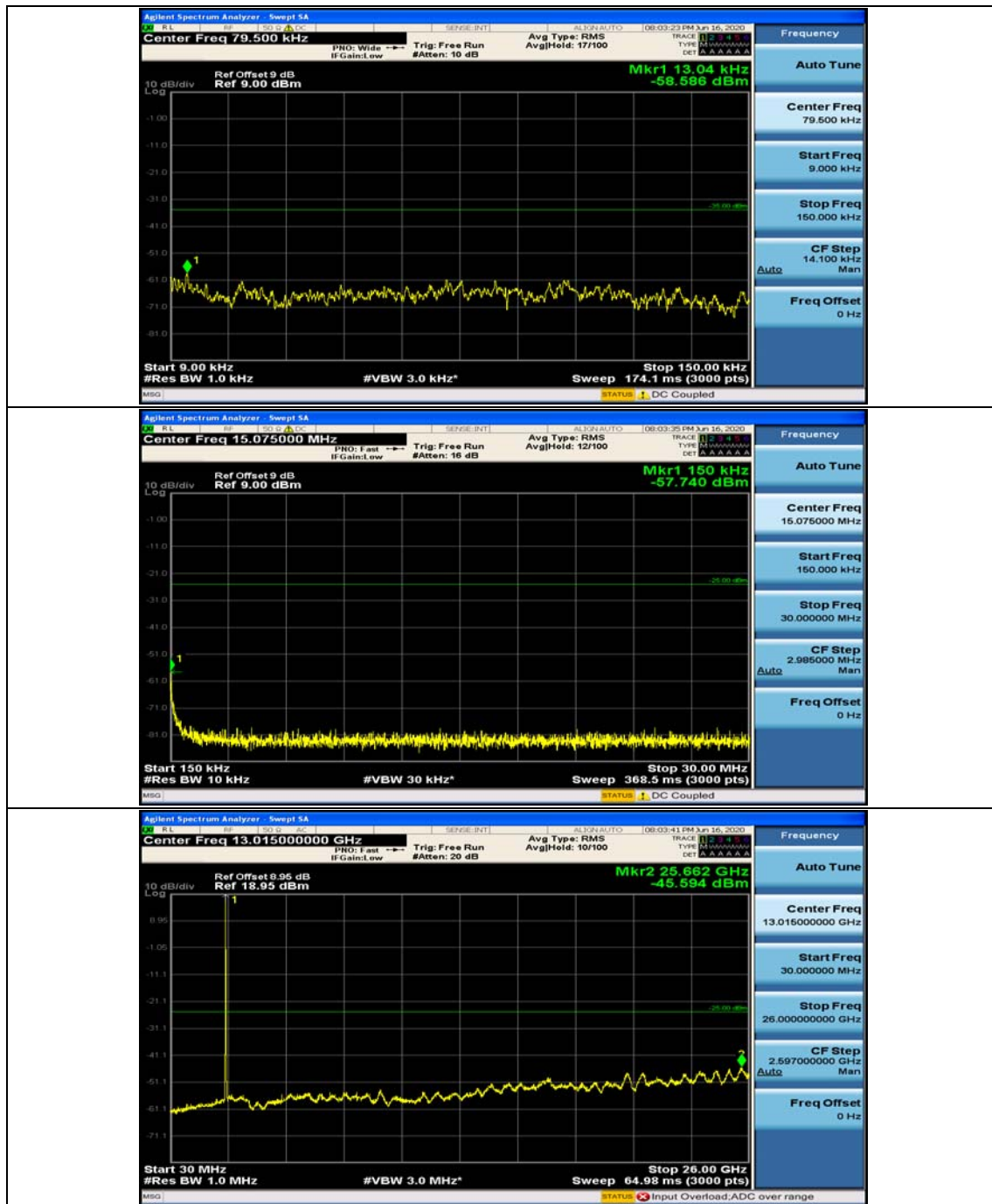




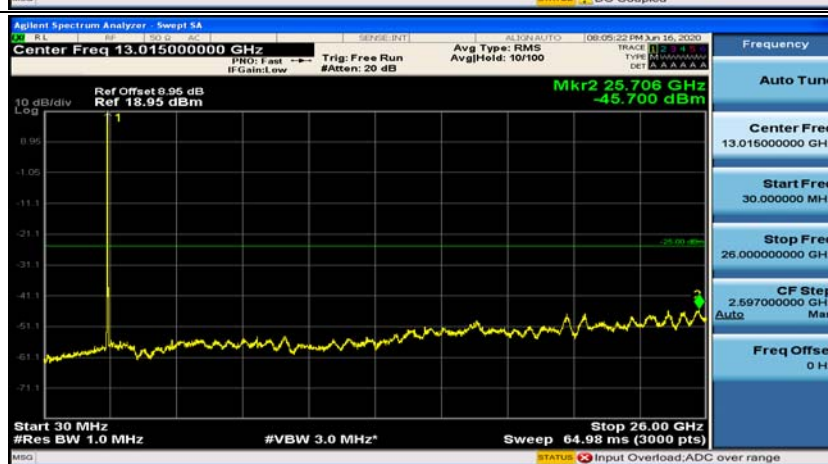
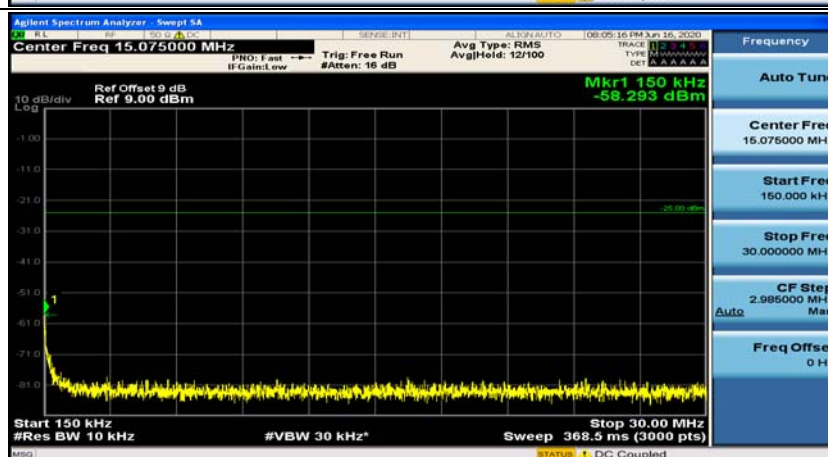
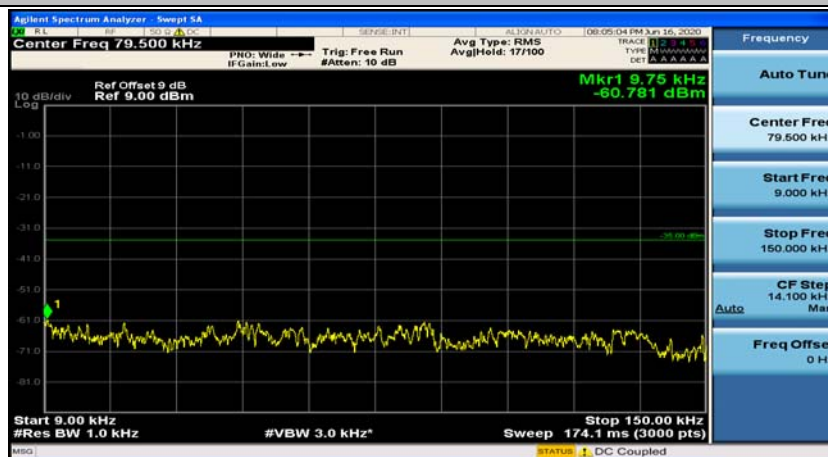
Channel Bandwidth: 20 MHz



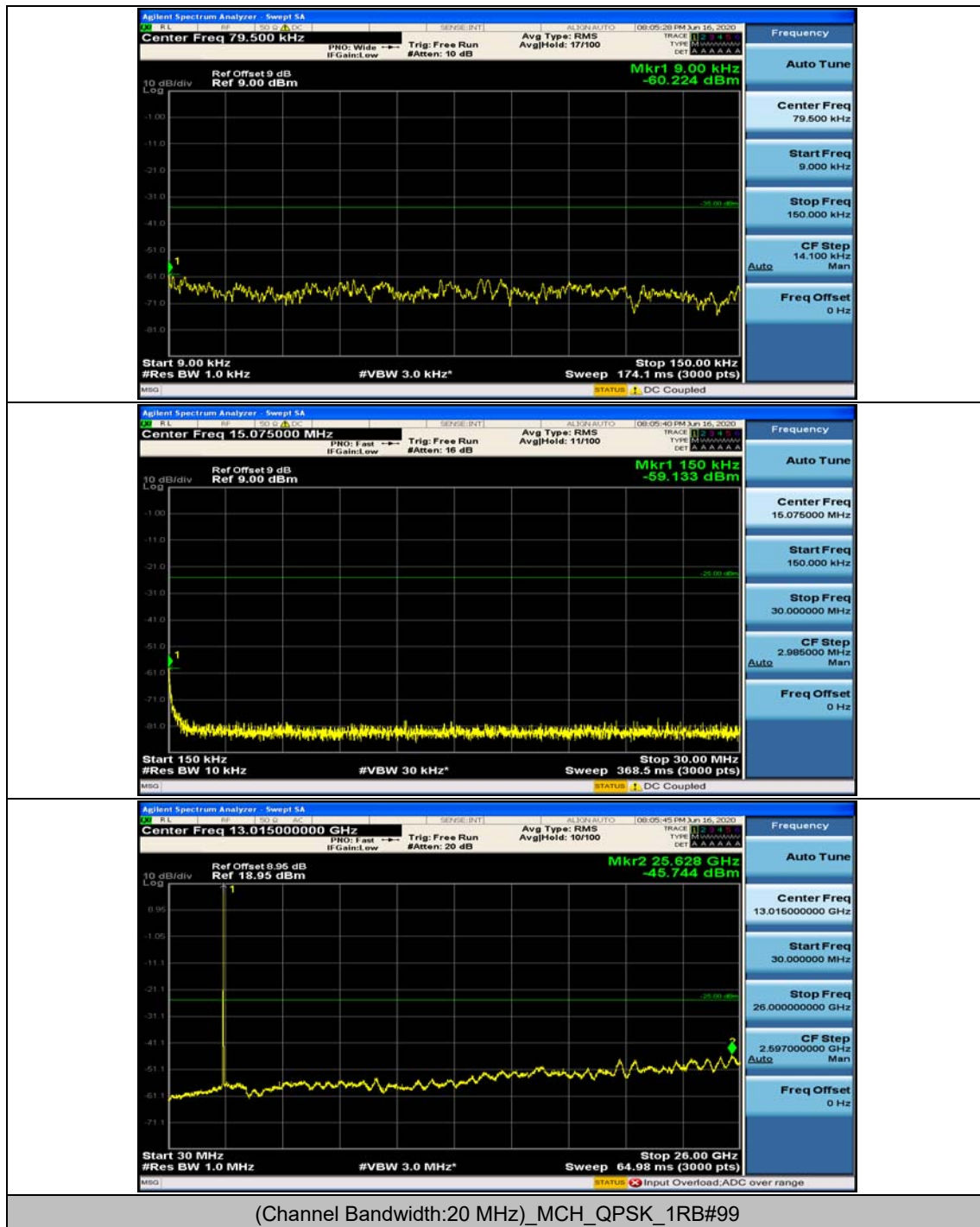


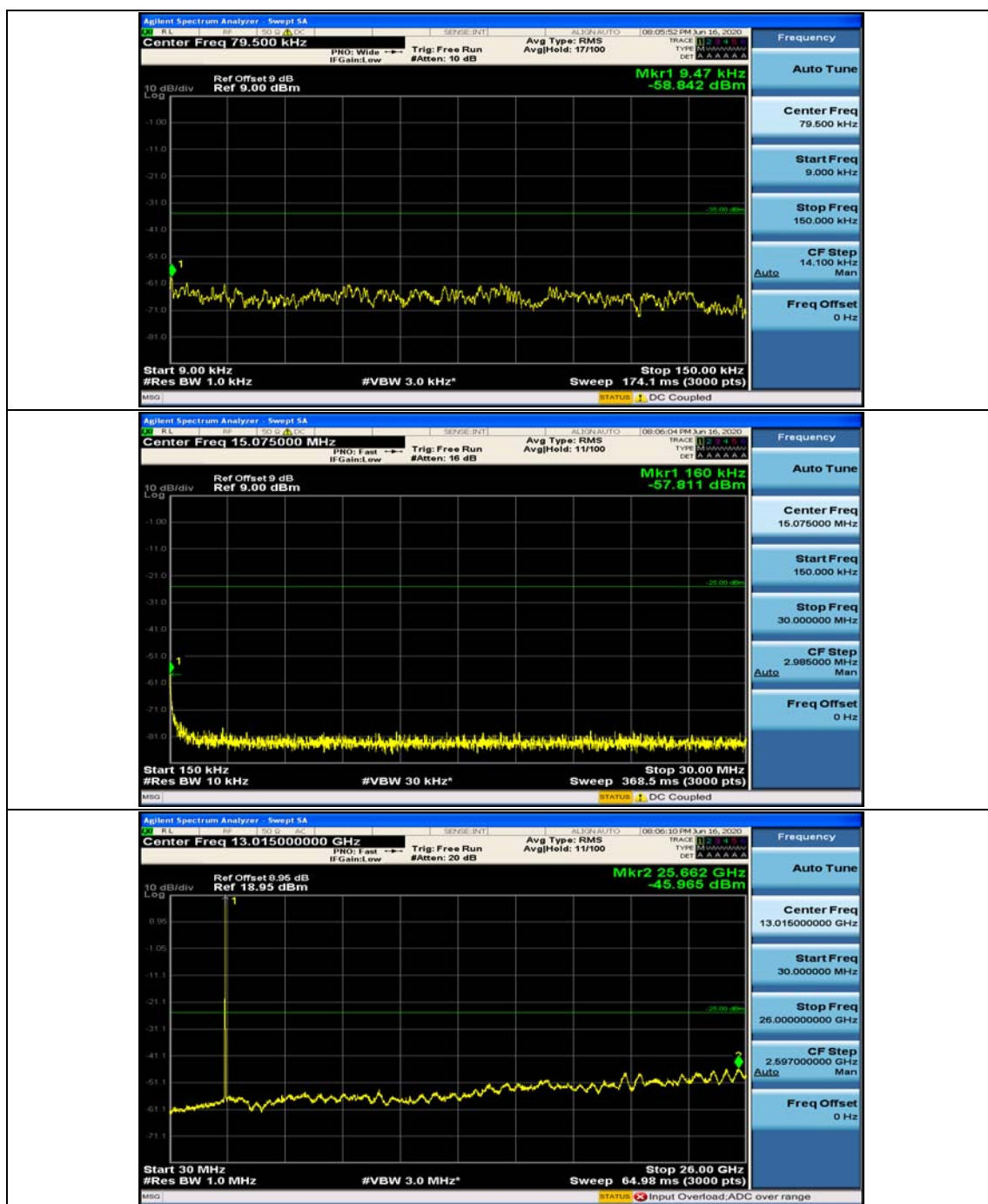


(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

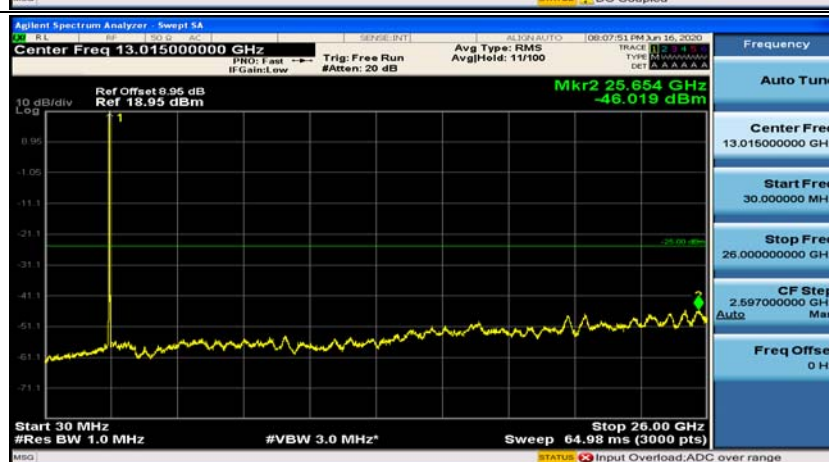
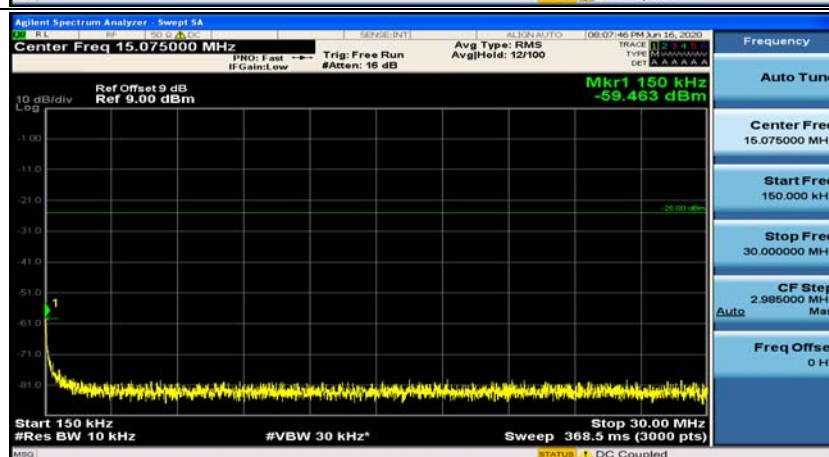
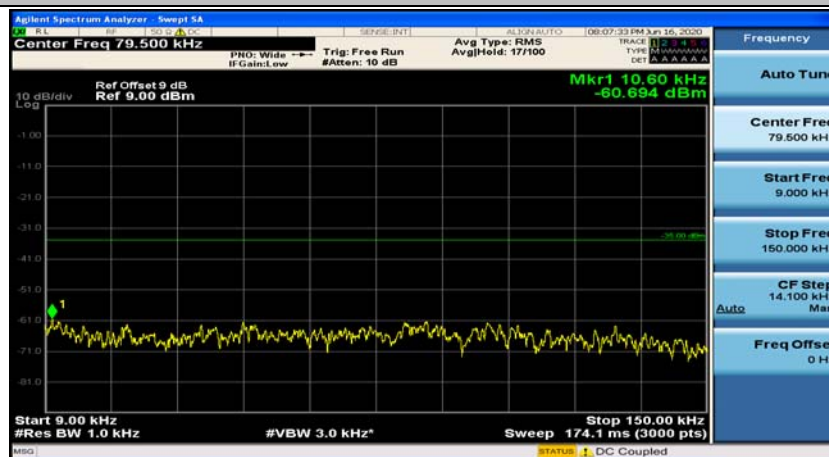


(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49

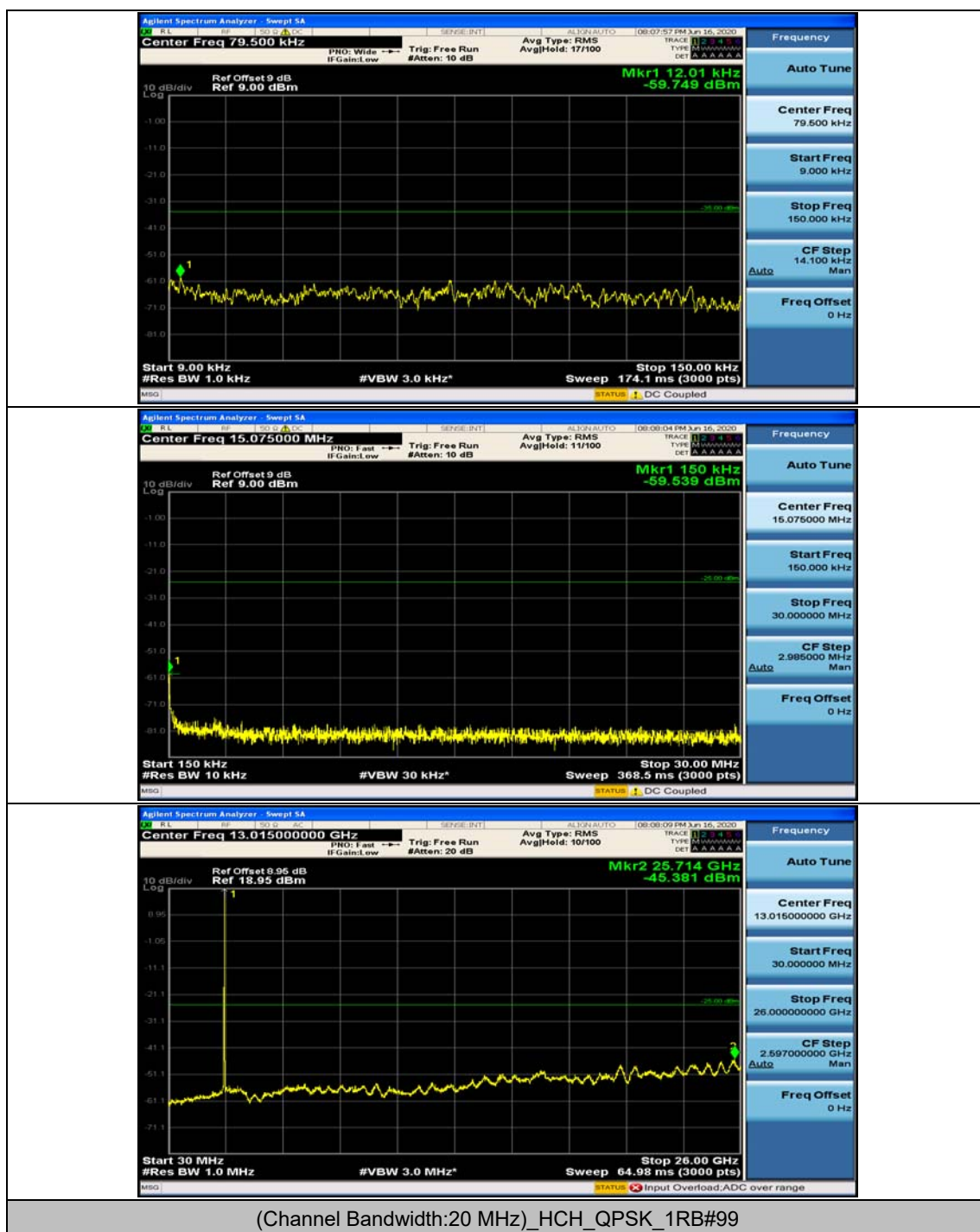


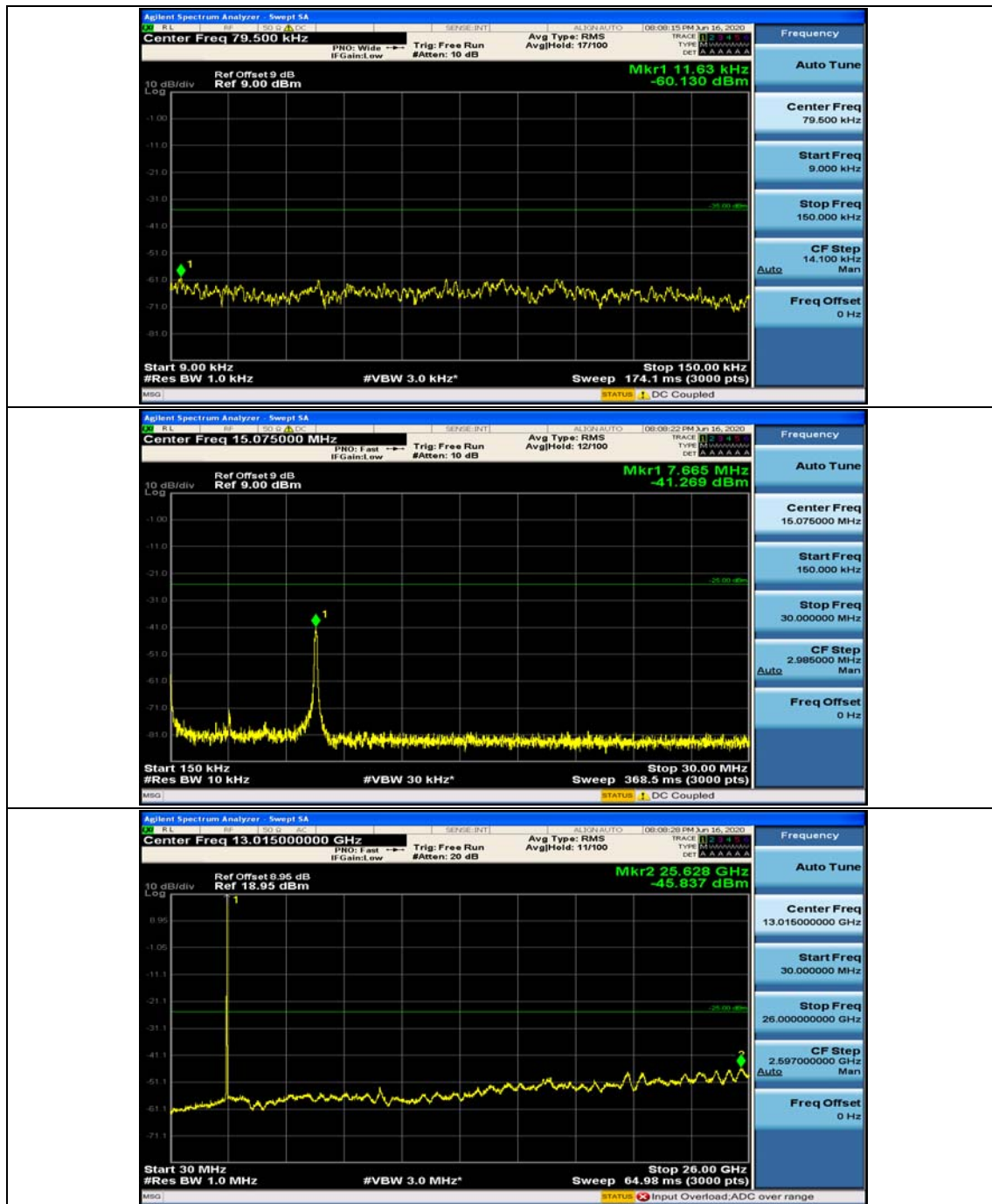


(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0

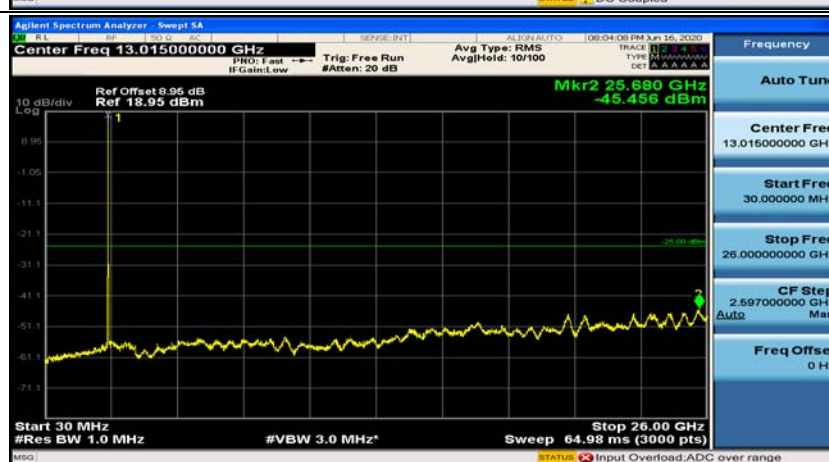
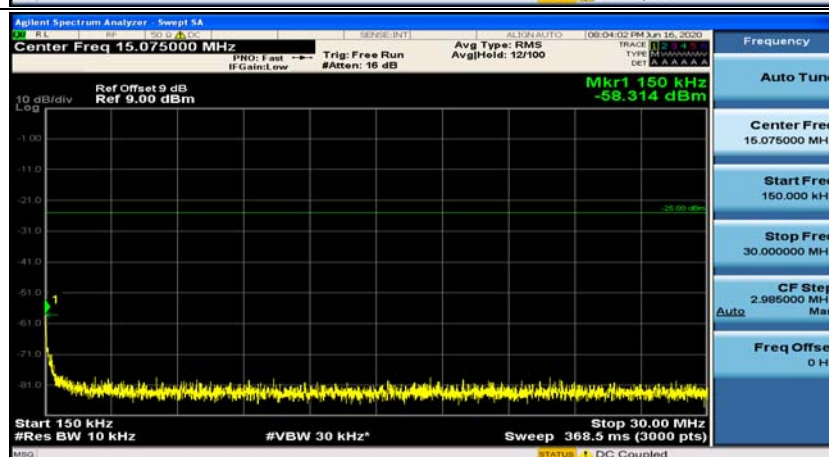
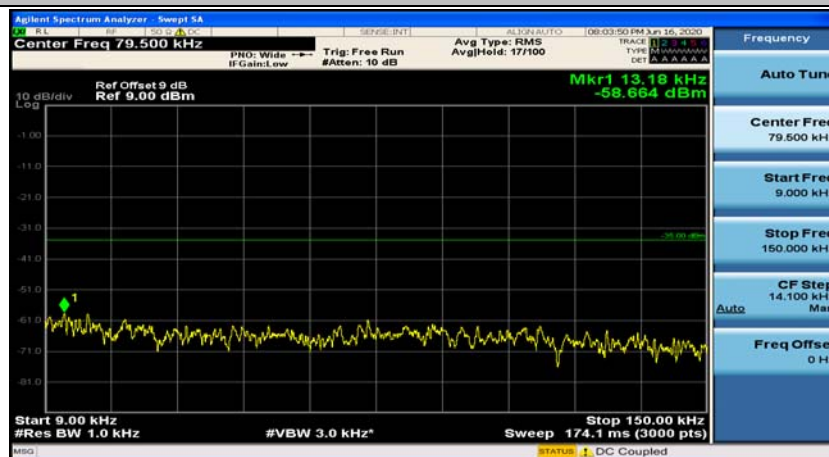


(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#49

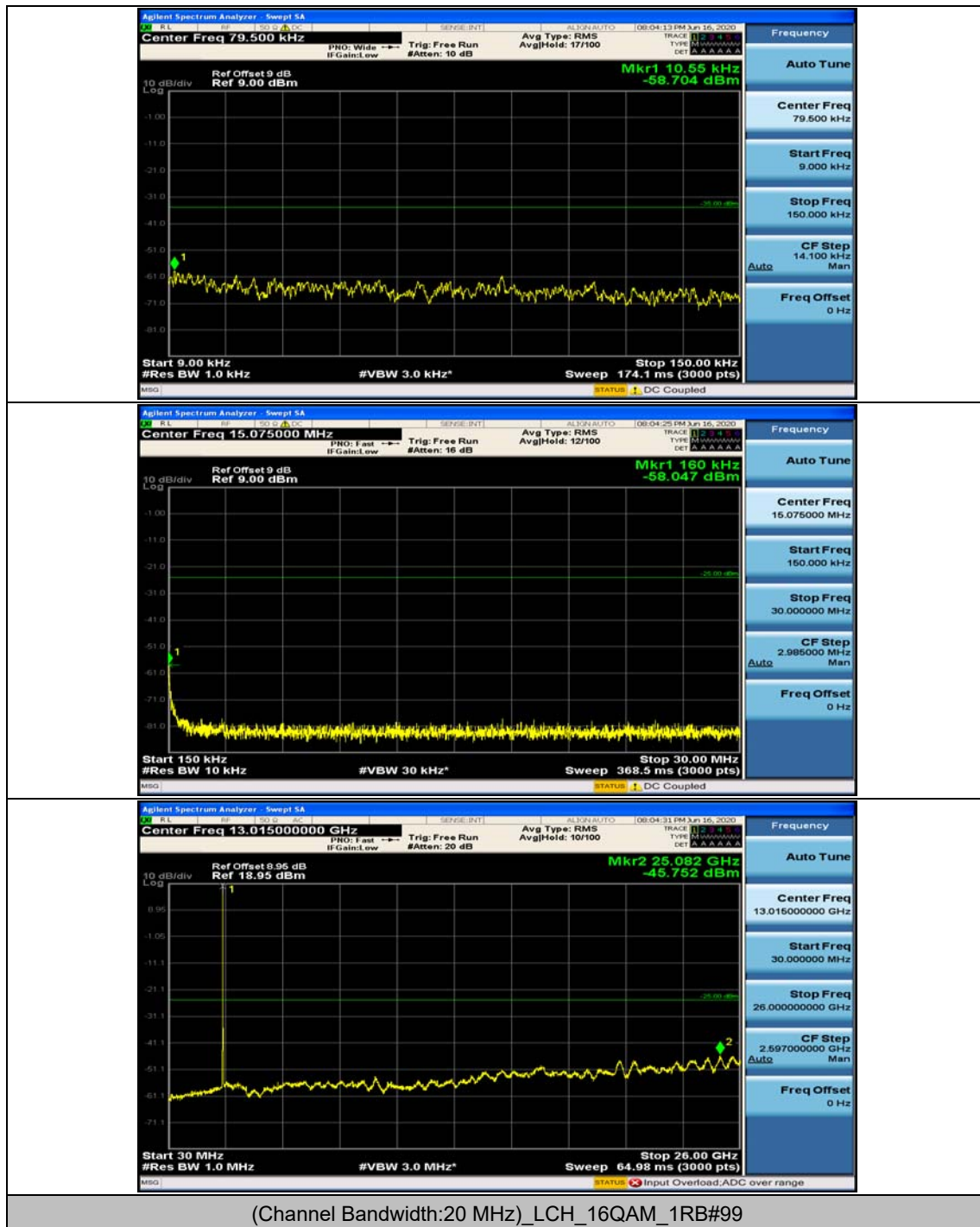


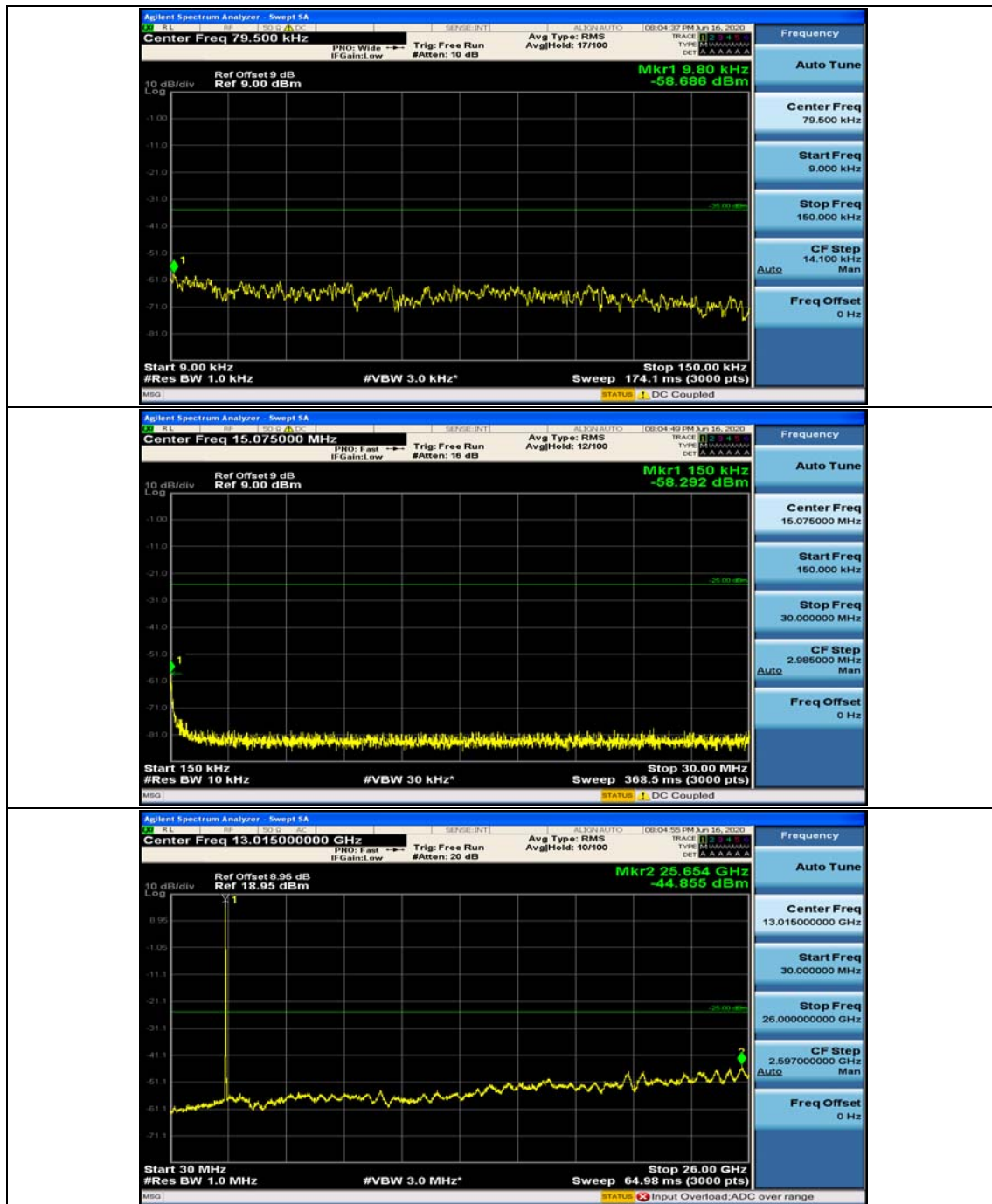


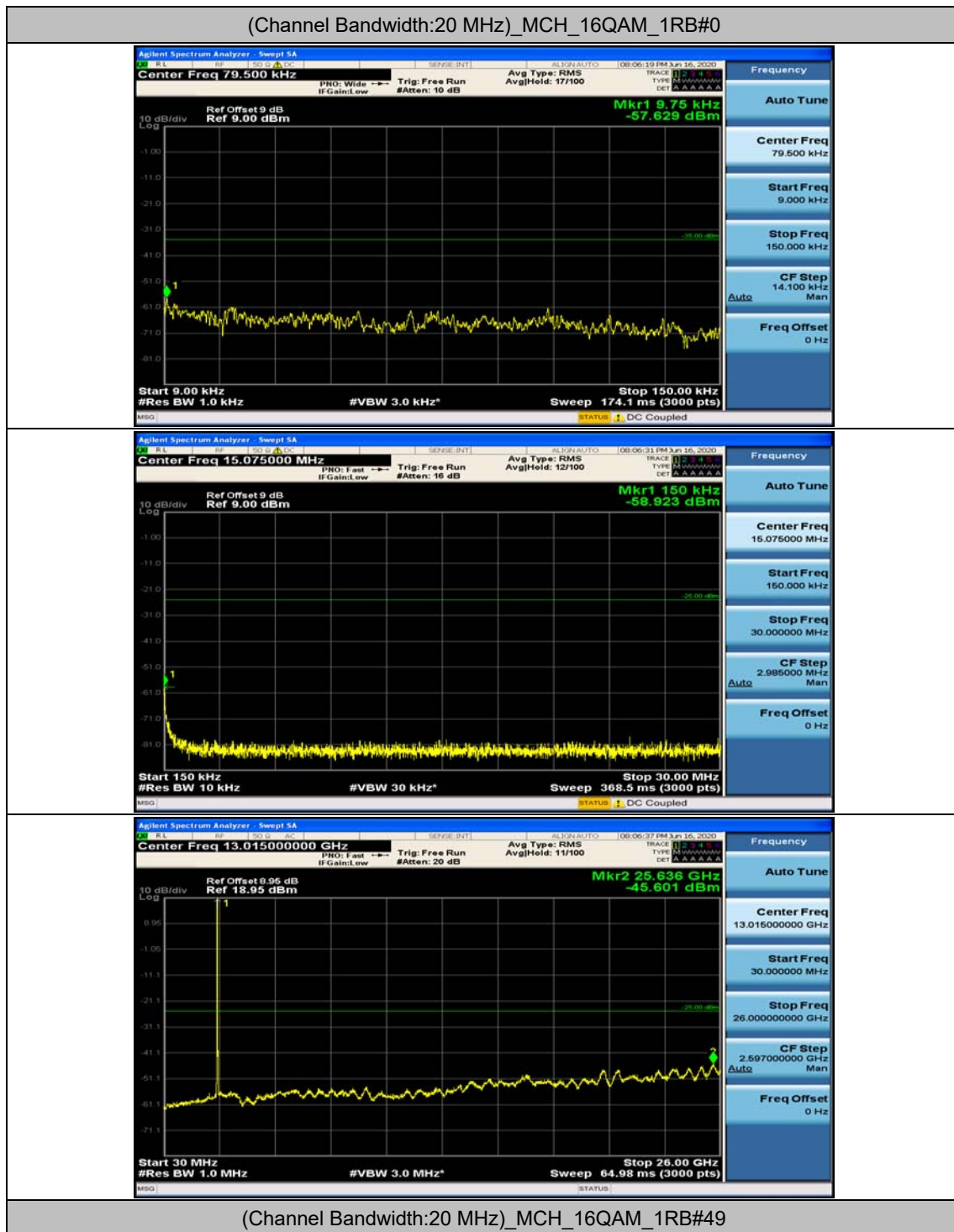
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0

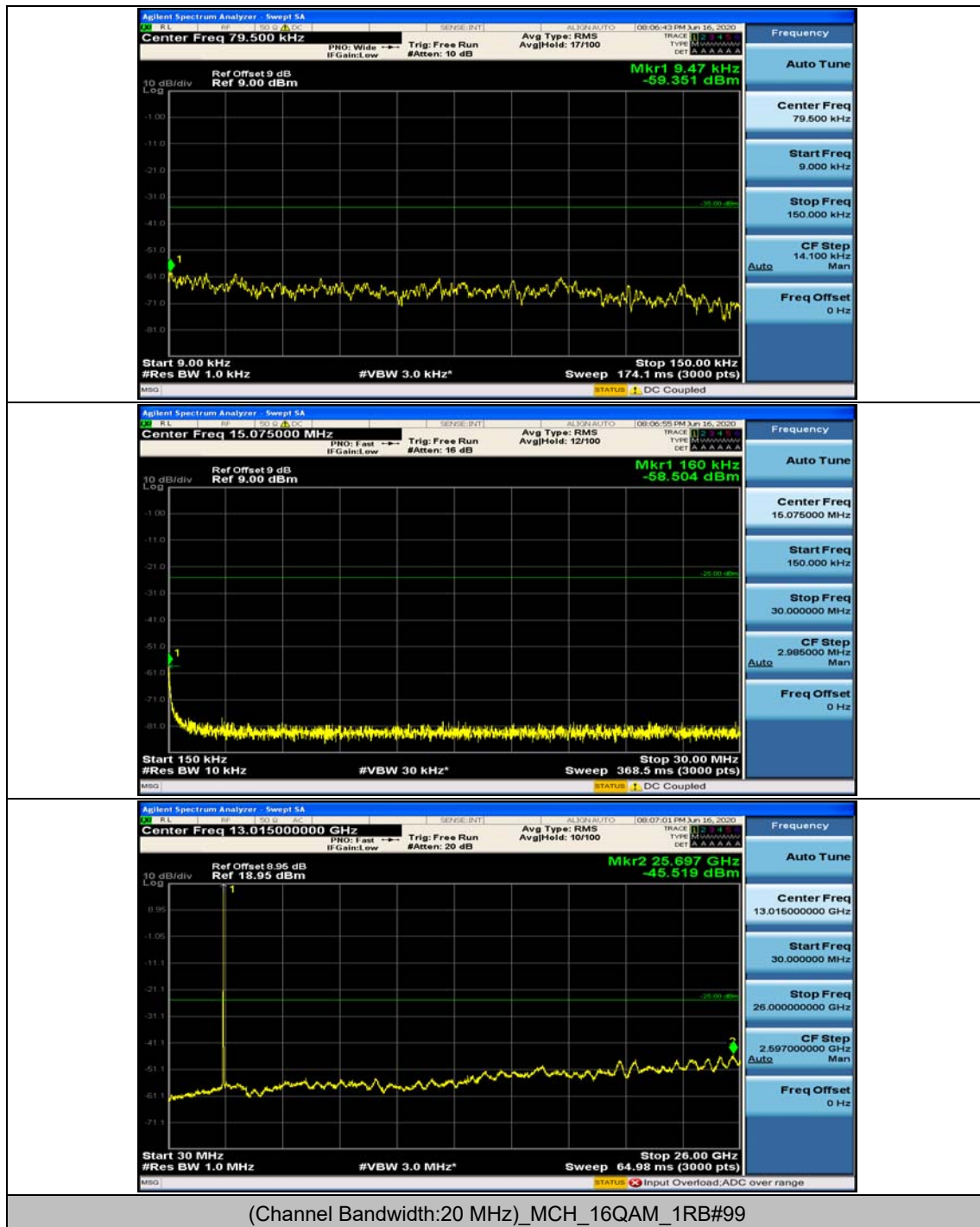


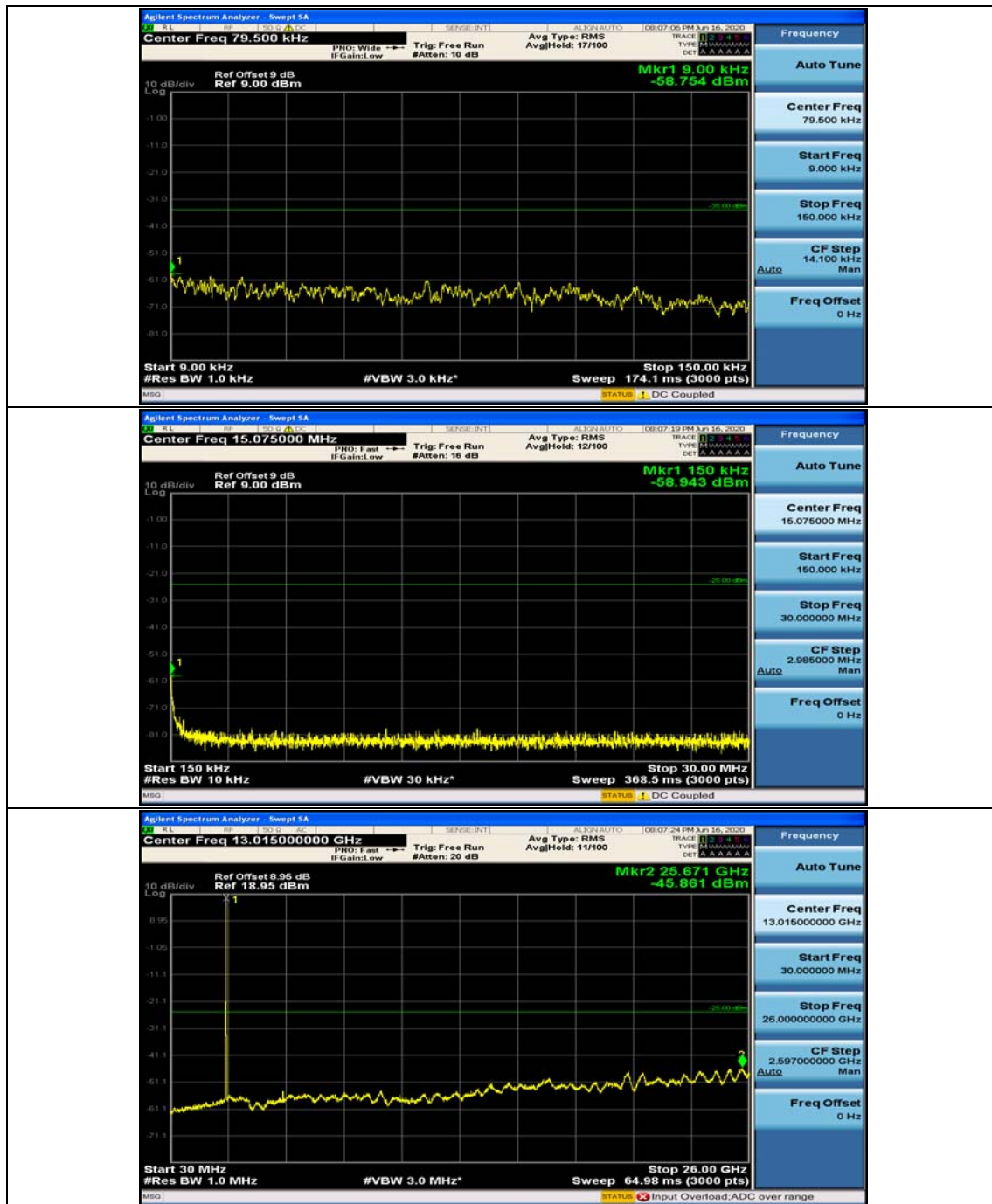
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49



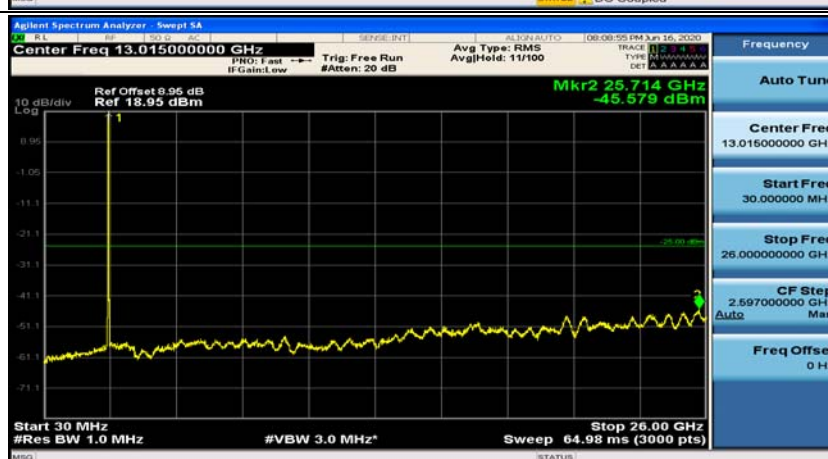
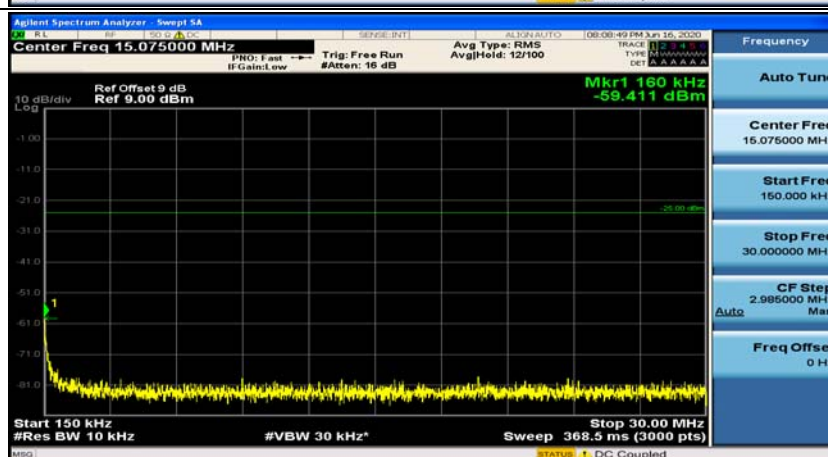
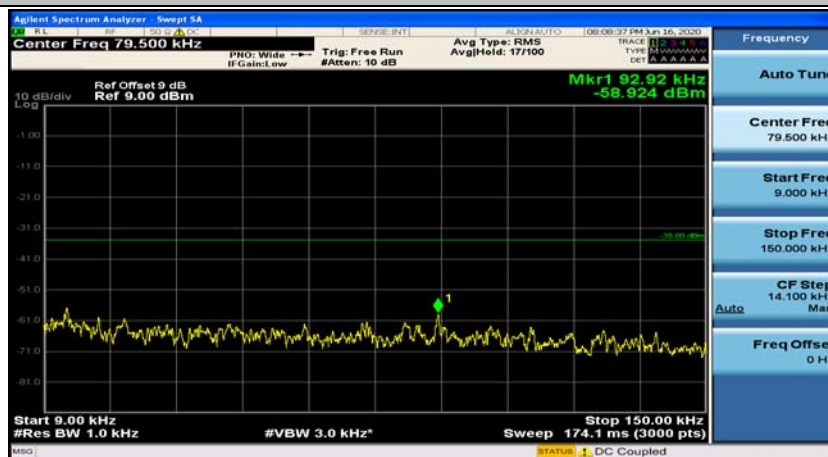




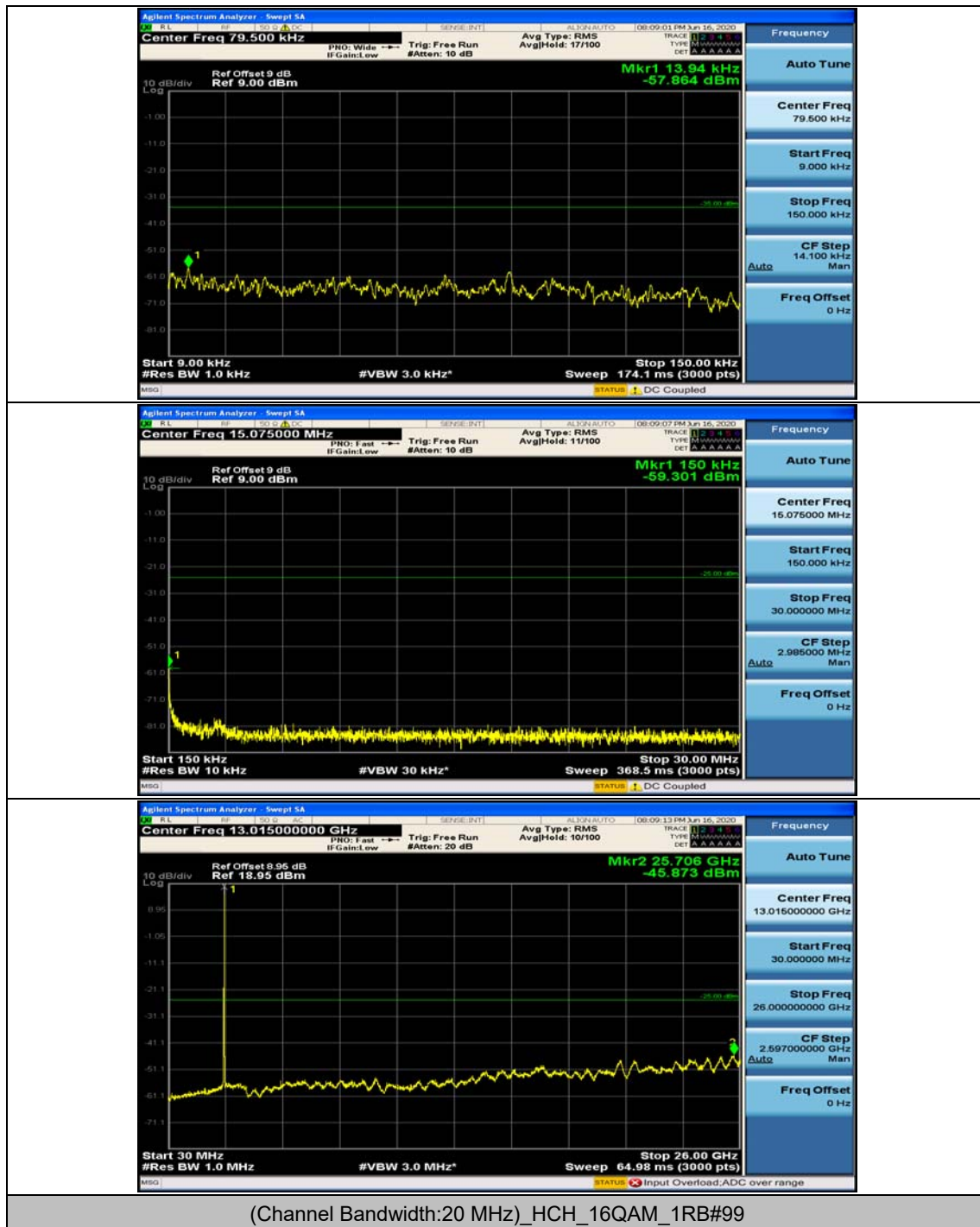


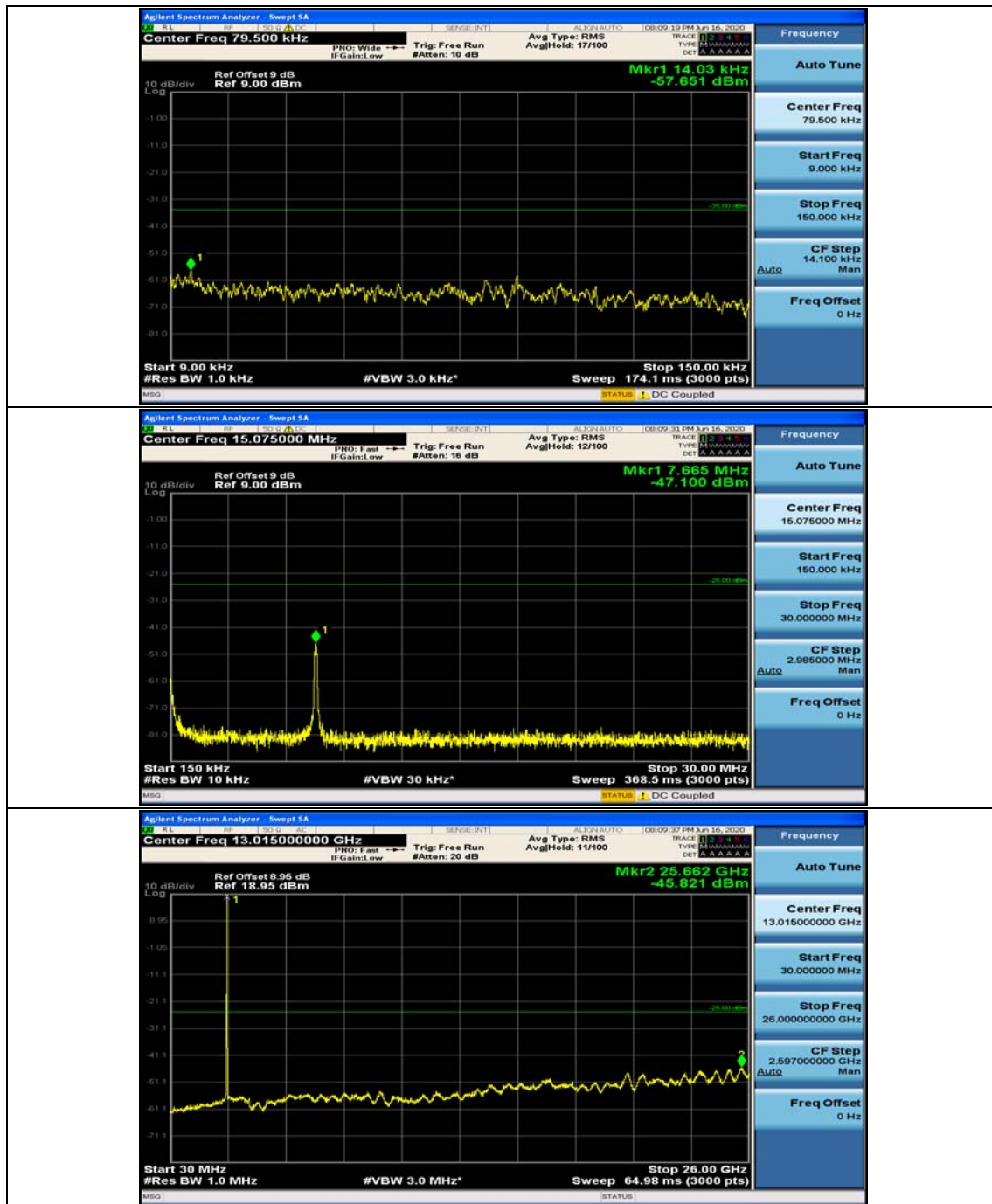


(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#49





Appendix F: Frequency Stability

Test Result

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	1.88	0.000751	± 2.5	PASS
		VN	TN	-0.43	-0.000172	± 2.5	PASS
		VH	TN	3.4	0.001359	± 2.5	PASS
	MCH	VL	TN	2.6	0.001026	± 2.5	PASS
		VN	TN	1.46	0.000576	± 2.5	PASS
		VH	TN	1	0.000394	± 2.5	PASS
	HCH	VL	TN	4.45	0.001733	± 2.5	PASS
		VN	TN	4.93	0.001920	± 2.5	PASS
		VH	TN	1.89	0.000736	± 2.5	PASS
16QAM	LCH	VL	TN	-1.2	-0.000480	± 2.5	PASS
		VN	TN	3.39	0.001355	± 2.5	PASS
		VH	TN	4.38	0.001750	± 2.5	PASS
	MCH	VL	TN	-0.58	-0.000229	± 2.5	PASS
		VN	TN	4.74	0.001870	± 2.5	PASS
		VH	TN	1.54	0.000607	± 2.5	PASS
	HCH	VL	TN	1.14	0.000444	± 2.5	PASS
		VN	TN	2.6	0.001013	± 2.5	PASS
		VH	TN	3.12	0.001215	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.27	-0.000108	± 2.5	PASS
		VN	-20	4.03	0.001610	± 2.5	PASS
		VN	-10	2.35	0.000939	± 2.5	PASS
		VN	0	1.98	0.000791	± 2.5	PASS
		VN	10	-1.32	-0.000527	± 2.5	PASS
		VN	20	0.35	0.000140	± 2.5	PASS
		VN	30	-0.51	-0.000204	± 2.5	PASS
		VN	40	3.85	0.001538	± 2.5	PASS
		VN	50	1.31	0.000523	± 2.5	PASS

	MCH	VN	-30	-0.68	-0.000268	± 2.5	PASS
		VN	-20	-0.12	-0.000047	± 2.5	PASS
		VN	-10	2.26	0.000892	± 2.5	PASS
		VN	0	4.36	0.001720	± 2.5	PASS
		VN	10	-1.27	-0.000501	± 2.5	PASS
		VN	20	2.74	0.001081	± 2.5	PASS
		VN	30	4.24	0.001673	± 2.5	PASS
		VN	40	0.64	0.000252	± 2.5	PASS
		VN	50	0.43	0.000170	± 2.5	PASS
	HCH	VN	-30	0.36	0.000140	± 2.5	PASS
		VN	-20	2.46	0.000958	± 2.5	PASS
		VN	-10	-0.42	-0.000164	± 2.5	PASS
		VN	0	4.4	0.001714	± 2.5	PASS
		VN	10	1.07	0.000417	± 2.5	PASS
		VN	20	3.68	0.001433	± 2.5	PASS
		VN	30	-1.27	-0.000495	± 2.5	PASS
		VN	40	2.04	0.000795	± 2.5	PASS
		VN	50	1.38	0.000537	± 2.5	PASS
16QAM	LCH	VN	-30	-1.28	-0.000511	± 2.5	PASS
		VN	-20	2.8	0.001119	± 2.5	PASS
		VN	-10	-0.77	-0.000308	± 2.5	PASS
		VN	0	3.69	0.001475	± 2.5	PASS
		VN	10	0.35	0.000140	± 2.5	PASS
		VN	20	1.13	0.000452	± 2.5	PASS
		VN	30	-0.78	-0.000312	± 2.5	PASS
		VN	40	3.88	0.001550	± 2.5	PASS
		VN	50	2.77	0.001107	± 2.5	PASS
	MCH	VN	-30	2.46	0.000970	± 2.5	PASS
		VN	-20	4.72	0.001862	± 2.5	PASS
		VN	-10	-0.86	-0.000339	± 2.5	PASS
		VN	0	2.84	0.001120	± 2.5	PASS
		VN	10	-0.62	-0.000245	± 2.5	PASS
		VN	20	0.45	0.000178	± 2.5	PASS
		VN	30	3.14	0.001239	± 2.5	PASS
		VN	40	3.64	0.001436	± 2.5	PASS
		VN	50	1.06	0.000418	± 2.5	PASS
	HCH	VN	-30	4.85	0.001889	± 2.5	PASS
		VN	-20	4.7	0.001831	± 2.5	PASS
		VN	-10	-1.86	-0.000724	± 2.5	PASS
		VN	0	0.19	0.000074	± 2.5	PASS
		VN	10	0.79	0.000308	± 2.5	PASS

		VN	20	2.96	0.001153	± 2.5	PASS
		VN	30	2.79	0.001087	± 2.5	PASS
		VN	40	2.53	0.000985	± 2.5	PASS
		VN	50	2.32	0.000904	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	1.05	0.000419	± 2.5	PASS
		VN	TN	4.46	0.001780	± 2.5	PASS
		VH	TN	4.57	0.001824	± 2.5	PASS
	MCH	VL	TN	-0.19	-0.000075	± 2.5	PASS
		VN	TN	-0.51	-0.000201	± 2.5	PASS
		VH	TN	-0.53	-0.000209	± 2.5	PASS
	HCH	VL	TN	3.27	0.001275	± 2.5	PASS
		VN	TN	3.77	0.001470	± 2.5	PASS
		VH	TN	0.9	0.000351	± 2.5	PASS
16QAM	LCH	VL	TN	4.07	0.001625	± 2.5	PASS
		VN	TN	2.81	0.001122	± 2.5	PASS
		VH	TN	4.85	0.001936	± 2.5	PASS
	MCH	VL	TN	2.33	0.000919	± 2.5	PASS
		VN	TN	-0.21	-0.000083	± 2.5	PASS
		VH	TN	-1.04	-0.000410	± 2.5	PASS
	HCH	VL	TN	4.67	0.001821	± 2.5	PASS
		VN	TN	-0.85	-0.000331	± 2.5	PASS
		VH	TN	4.74	0.001848	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.64	0.000255	± 2.5	PASS
		VN	-20	2.33	0.000930	± 2.5	PASS
		VN	-10	3.76	0.001501	± 2.5	PASS
		VN	0	0.44	0.000176	± 2.5	PASS
		VN	10	3.73	0.001489	± 2.5	PASS
		VN	20	-0.09	-0.000036	± 2.5	PASS
		VN	30	1.41	0.000563	± 2.5	PASS
		VN	40	3.55	0.001417	± 2.5	PASS
		VN	50	4.75	0.001896	± 2.5	PASS

	MCH	VN	-30	2.83	0.001116	± 2.5	PASS
		VN	-20	3.99	0.001574	± 2.5	PASS
		VN	-10	-0.71	-0.000280	± 2.5	PASS
		VN	0	1.31	0.000517	± 2.5	PASS
		VN	10	-0.56	-0.000221	± 2.5	PASS
		VN	20	1.64	0.000647	± 2.5	PASS
		VN	30	-1.19	-0.000469	± 2.5	PASS
		VN	40	1.71	0.000675	± 2.5	PASS
		VN	50	1.24	0.000489	± 2.5	PASS
	HCH	VN	-30	-1.49	-0.000581	± 2.5	PASS
		VN	-20	2.06	0.000803	± 2.5	PASS
		VN	-10	1.06	0.000413	± 2.5	PASS
		VN	0	4.75	0.001852	± 2.5	PASS
		VN	10	0.14	0.000055	± 2.5	PASS
		VN	20	0.88	0.000343	± 2.5	PASS
		VN	30	2.43	0.000947	± 2.5	PASS
		VN	40	2.45	0.000955	± 2.5	PASS
		VN	50	-1.92	-0.000749	± 2.5	PASS
16QAM	LCH	VN	-30	4.38	0.001749	± 2.5	PASS
		VN	-20	3.7	0.001477	± 2.5	PASS
		VN	-10	-1.39	-0.000555	± 2.5	PASS
		VN	0	-1.51	-0.000603	± 2.5	PASS
		VN	10	-1.89	-0.000754	± 2.5	PASS
		VN	20	4.16	0.001661	± 2.5	PASS
		VN	30	1.29	0.000515	± 2.5	PASS
		VN	40	2.2	0.000878	± 2.5	PASS
		VN	50	4.17	0.001665	± 2.5	PASS
	MCH	VN	-30	0.38	0.000150	± 2.5	PASS
		VN	-20	-1.86	-0.000734	± 2.5	PASS
		VN	-10	2.33	0.000919	± 2.5	PASS
		VN	0	4.55	0.001795	± 2.5	PASS
		VN	10	2.37	0.000935	± 2.5	PASS
		VN	20	2.56	0.001010	± 2.5	PASS
		VN	30	-1.39	-0.000548	± 2.5	PASS
		VN	40	1.89	0.000746	± 2.5	PASS
		VN	50	2.15	0.000848	± 2.5	PASS
	HCH	VN	-30	-1.33	-0.000519	± 2.5	PASS
		VN	-20	4.5	0.001754	± 2.5	PASS
		VN	-10	0.16	0.000062	± 2.5	PASS
		VN	0	1.17	0.000456	± 2.5	PASS
		VN	10	1.19	0.000464	± 2.5	PASS

		VN	20	0.88	0.000343	± 2.5	PASS
		VN	30	4.65	0.001813	± 2.5	PASS
		VN	40	2.79	0.001088	± 2.5	PASS
		VN	50	4.79	0.001867	± 2.5	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.05	-0.000419	± 2.5	PASS
		VN	TN	1.75	0.000698	± 2.5	PASS
		VH	TN	1.25	0.000499	± 2.5	PASS
	MCH	VL	TN	1.36	0.000536	± 2.5	PASS
		VN	TN	0.81	0.000320	± 2.5	PASS
		VH	TN	4.18	0.001649	± 2.5	PASS
	HCH	VL	TN	2.68	0.001046	± 2.5	PASS
		VN	TN	2.71	0.001058	± 2.5	PASS
		VH	TN	3.94	0.001538	± 2.5	PASS
16QAM	LCH	VL	TN	1.18	0.000471	± 2.5	PASS
		VN	TN	0.81	0.000323	± 2.5	PASS
		VH	TN	-0.79	-0.000315	± 2.5	PASS
	MCH	VL	TN	1.08	0.000426	± 2.5	PASS
		VN	TN	-0.11	-0.000043	± 2.5	PASS
		VH	TN	-1.96	-0.000773	± 2.5	PASS
	HCH	VL	TN	4.91	0.001916	± 2.5	PASS
		VN	TN	-0.18	-0.000070	± 2.5	PASS
		VH	TN	1.75	0.000683	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.93	0.000371	± 2.5	PASS
		VN	-20	3.47	0.001384	± 2.5	PASS
		VN	-10	2.08	0.000830	± 2.5	PASS
		VN	0	-0.06	-0.000024	± 2.5	PASS
		VN	10	3.76	0.001500	± 2.5	PASS
		VN	20	3.59	0.001432	± 2.5	PASS
		VN	30	0.88	0.000351	± 2.5	PASS
		VN	40	1.55	0.000618	± 2.5	PASS
		VN	50	1.93	0.000770	± 2.5	PASS

	MCH	VN	-30	4.83	0.001905	± 2.5	PASS
		VN	-20	0.09	0.000036	± 2.5	PASS
		VN	-10	-1.88	-0.000742	± 2.5	PASS
		VN	0	0.83	0.000327	± 2.5	PASS
		VN	10	3.6	0.001420	± 2.5	PASS
		VN	20	1.96	0.000773	± 2.5	PASS
		VN	30	4.3	0.001696	± 2.5	PASS
		VN	40	-0.54	-0.000213	± 2.5	PASS
		VN	50	4.28	0.001688	± 2.5	PASS
	HCH	VN	-30	1.99	0.000777	± 2.5	PASS
		VN	-20	-0.4	-0.000156	± 2.5	PASS
		VN	-10	4.53	0.001768	± 2.5	PASS
		VN	0	0.29	0.000113	± 2.5	PASS
		VN	10	-1.09	-0.000425	± 2.5	PASS
		VN	20	0.86	0.000336	± 2.5	PASS
		VN	30	4.22	0.001647	± 2.5	PASS
		VN	40	0.68	0.000265	± 2.5	PASS
		VN	50	-1.07	-0.000418	± 2.5	PASS
16QAM	LCH	VN	-30	0.78	0.000311	± 2.5	PASS
		VN	-20	-1.48	-0.000590	± 2.5	PASS
		VN	-10	1	0.000399	± 2.5	PASS
		VN	0	1.81	0.000722	± 2.5	PASS
		VN	10	3.11	0.001240	± 2.5	PASS
		VN	20	3.99	0.001591	± 2.5	PASS
		VN	30	-0.65	-0.000259	± 2.5	PASS
		VN	40	-1.71	-0.000682	± 2.5	PASS
		VN	50	2.43	0.000969	± 2.5	PASS
	MCH	VN	-30	4.41	0.001740	± 2.5	PASS
		VN	-20	4.07	0.001606	± 2.5	PASS
		VN	-10	1.92	0.000757	± 2.5	PASS
		VN	0	2.36	0.000931	± 2.5	PASS
		VN	10	1.12	0.000442	± 2.5	PASS
		VN	20	4.24	0.001673	± 2.5	PASS
		VN	30	2.98	0.001176	± 2.5	PASS
		VN	40	4.46	0.001759	± 2.5	PASS
		VN	50	4.79	0.001890	± 2.5	PASS
	HCH	VN	-30	0.8	0.000312	± 2.5	PASS
		VN	-20	3.54	0.001381	± 2.5	PASS
		VN	-10	3.06	0.001194	± 2.5	PASS
		VN	0	-1.41	-0.000550	± 2.5	PASS
		VN	10	3.09	0.001206	± 2.5	PASS

		VN	20	4.2	0.001639	± 2.5	PASS
		VN	30	1.41	0.000550	± 2.5	PASS
		VN	40	0.59	0.000230	± 2.5	PASS
		VN	50	0.76	0.000297	± 2.5	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.25	-0.000100	± 2.5	PASS
		VN	TN	1.7	0.000677	± 2.5	PASS
		VH	TN	-0.08	-0.000032	± 2.5	PASS
	MCH	VL	TN	3.37	0.001329	± 2.5	PASS
		VN	TN	1.55	0.000611	± 2.5	PASS
		VH	TN	3.57	0.001408	± 2.5	PASS
	HCH	VL	TN	-1.68	-0.000656	± 2.5	PASS
		VN	TN	3.4	0.001328	± 2.5	PASS
		VH	TN	2.11	0.000824	± 2.5	PASS
16QAM	LCH	VL	TN	-1.07	-0.000426	± 2.5	PASS
		VN	TN	-0.15	-0.000060	± 2.5	PASS
		VH	TN	0.32	0.000127	± 2.5	PASS
	MCH	VL	TN	-1.4	-0.000552	± 2.5	PASS
		VN	TN	2.35	0.000927	± 2.5	PASS
		VH	TN	1.39	0.000548	± 2.5	PASS
	HCH	VL	TN	2.68	0.001047	± 2.5	PASS
		VN	TN	4.38	0.001711	± 2.5	PASS
		VH	TN	2.05	0.000801	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.82	0.001522	± 2.5	PASS
		VN	-20	2.64	0.001052	± 2.5	PASS
		VN	-10	3.3	0.001315	± 2.5	PASS
		VN	0	3.08	0.001227	± 2.5	PASS
		VN	10	0.75	0.000299	± 2.5	PASS
		VN	20	2.93	0.001167	± 2.5	PASS
		VN	30	1.68	0.000669	± 2.5	PASS
		VN	40	1.82	0.000725	± 2.5	PASS
		VN	50	4.12	0.001641	± 2.5	PASS

	MCH	VN	-30	1.77	0.000698	± 2.5	PASS
		VN	-20	3.56	0.001404	± 2.5	PASS
		VN	-10	3.41	0.001345	± 2.5	PASS
		VN	0	-1.29	-0.000509	± 2.5	PASS
		VN	10	-0.15	-0.000059	± 2.5	PASS
		VN	20	3.34	0.001318	± 2.5	PASS
		VN	30	3.77	0.001487	± 2.5	PASS
		VN	40	1.21	0.000477	± 2.5	PASS
		VN	50	-1.82	-0.000718	± 2.5	PASS
	HCH	VN	-30	3.68	0.001438	± 2.5	PASS
		VN	-20	2.93	0.001145	± 2.5	PASS
		VN	-10	2.87	0.001121	± 2.5	PASS
		VN	0	1.3	0.000508	± 2.5	PASS
		VN	10	3.43	0.001340	± 2.5	PASS
		VN	20	-1.11	-0.000434	± 2.5	PASS
		VN	30	-1.54	-0.000602	± 2.5	PASS
		VN	40	4.61	0.001801	± 2.5	PASS
		VN	50	1.92	0.000750	± 2.5	PASS
16QAM	LCH	VN	-30	4.47	0.001781	± 2.5	PASS
		VN	-20	-0.02	-0.000008	± 2.5	PASS
		VN	-10	0.42	0.000167	± 2.5	PASS
		VN	0	2.88	0.001147	± 2.5	PASS
		VN	10	1.36	0.000542	± 2.5	PASS
		VN	20	1	0.000398	± 2.5	PASS
		VN	30	-1.81	-0.000721	± 2.5	PASS
		VN	40	-1.49	-0.000594	± 2.5	PASS
		VN	50	3.73	0.001486	± 2.5	PASS
	MCH	VN	-30	-1.04	-0.000410	± 2.5	PASS
		VN	-20	1.09	0.000430	± 2.5	PASS
		VN	-10	2.25	0.000888	± 2.5	PASS
		VN	0	3.5	0.001381	± 2.5	PASS
		VN	10	0.31	0.000122	± 2.5	PASS
		VN	20	0.82	0.000323	± 2.5	PASS
		VN	30	4.69	0.001850	± 2.5	PASS
		VN	40	3.85	0.001519	± 2.5	PASS
		VN	50	2.55	0.001006	± 2.5	PASS
	HCH	VN	-30	-1.7	-0.000664	± 2.5	PASS
		VN	-20	-1.6	-0.000625	± 2.5	PASS
		VN	-10	-1.28	-0.000500	± 2.5	PASS
		VN	0	1.67	0.000652	± 2.5	PASS
		VN	10	4.49	0.001754	± 2.5	PASS

		VN	20	2.59	0.001012	± 2.5	PASS
		VN	30	3.09	0.001207	± 2.5	PASS
		VN	40	3.27	0.001277	± 2.5	PASS
		VN	50	2.71	0.001059	± 2.5	PASS