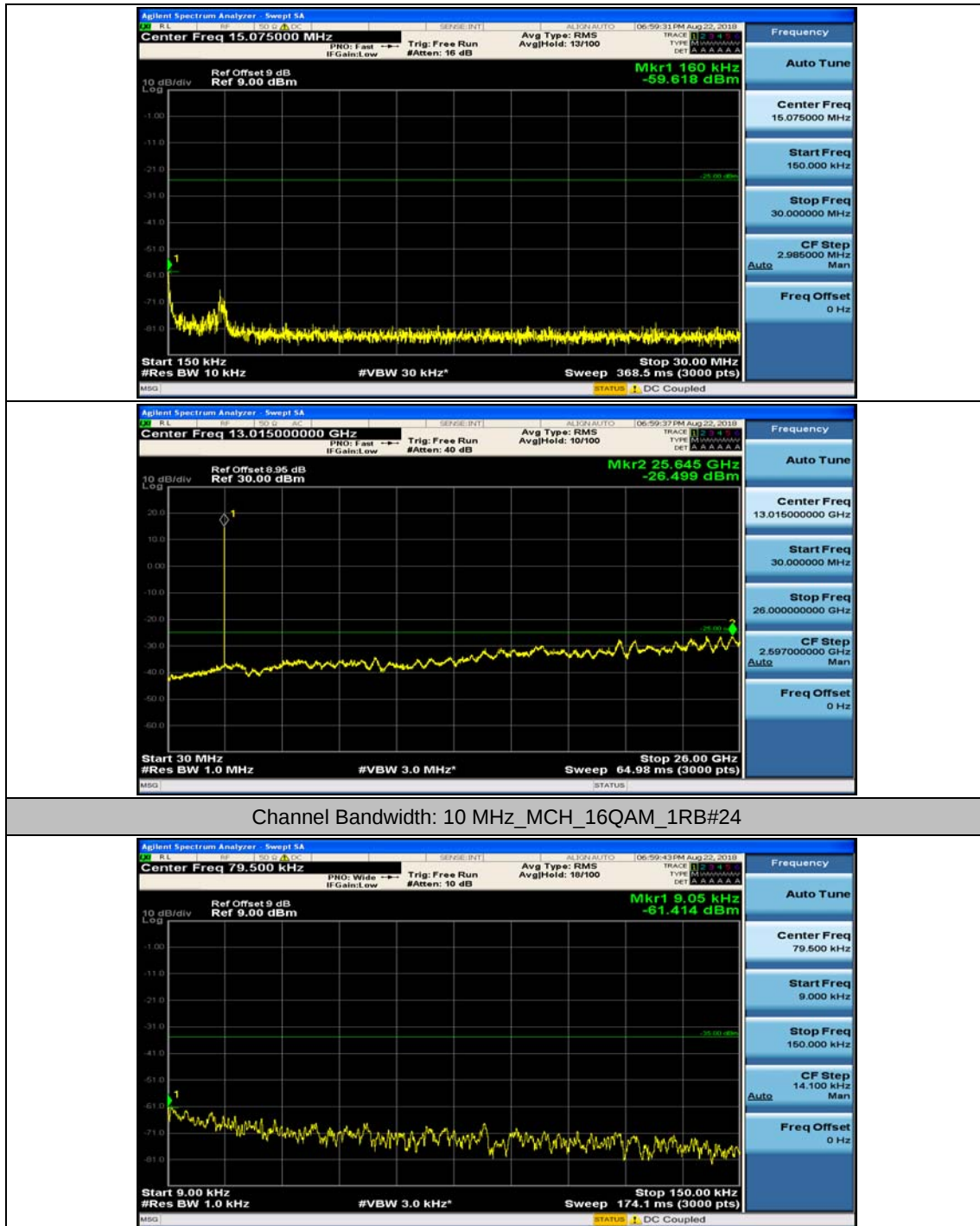
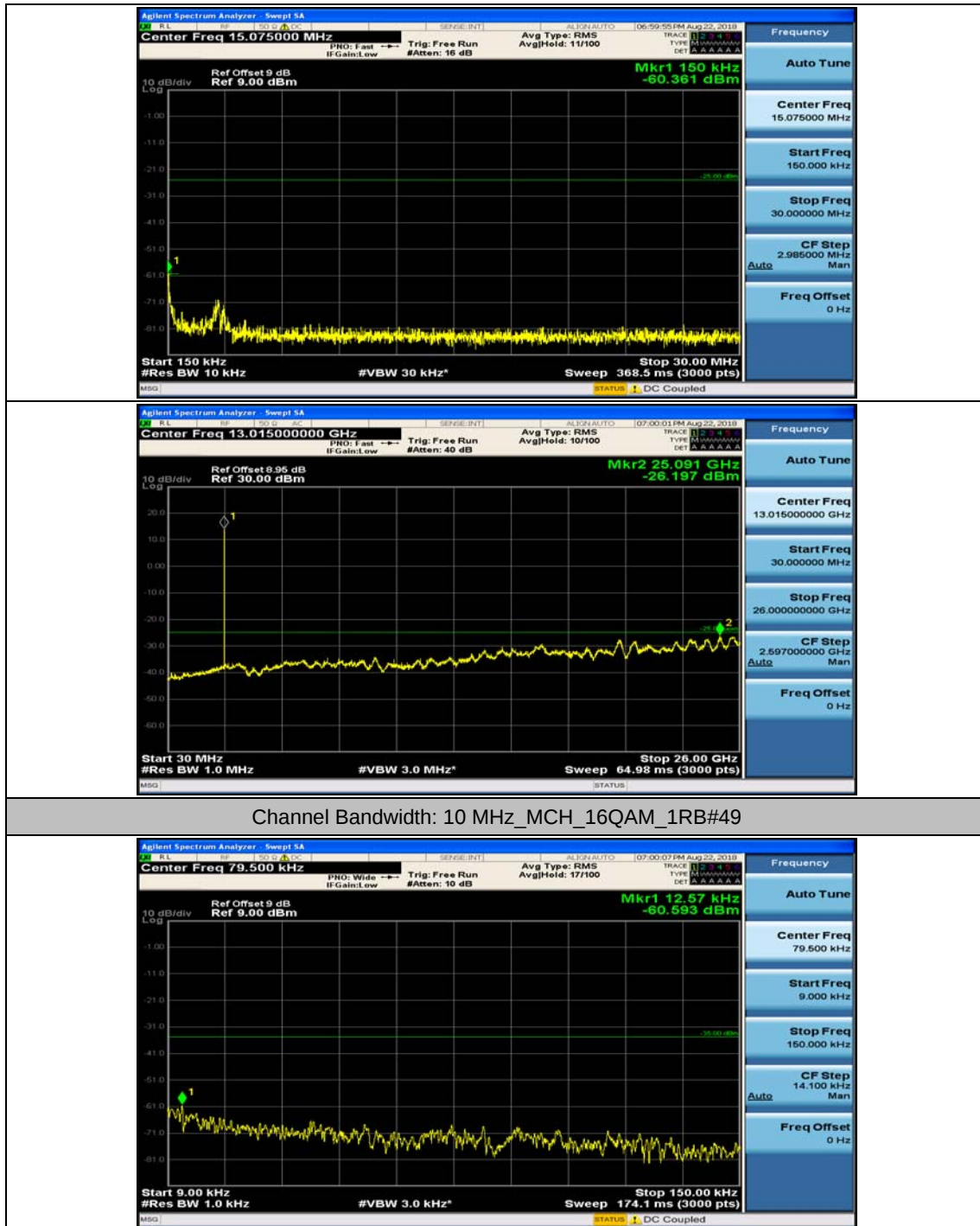
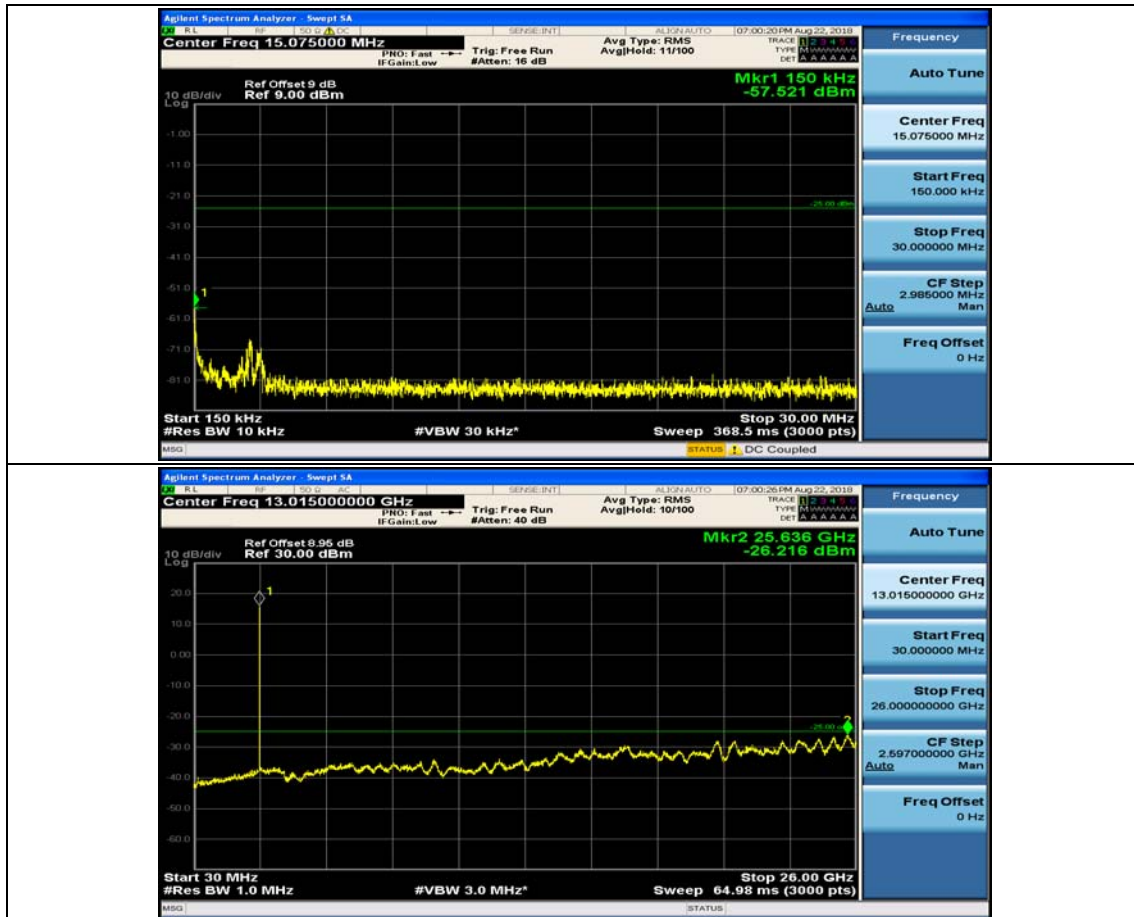
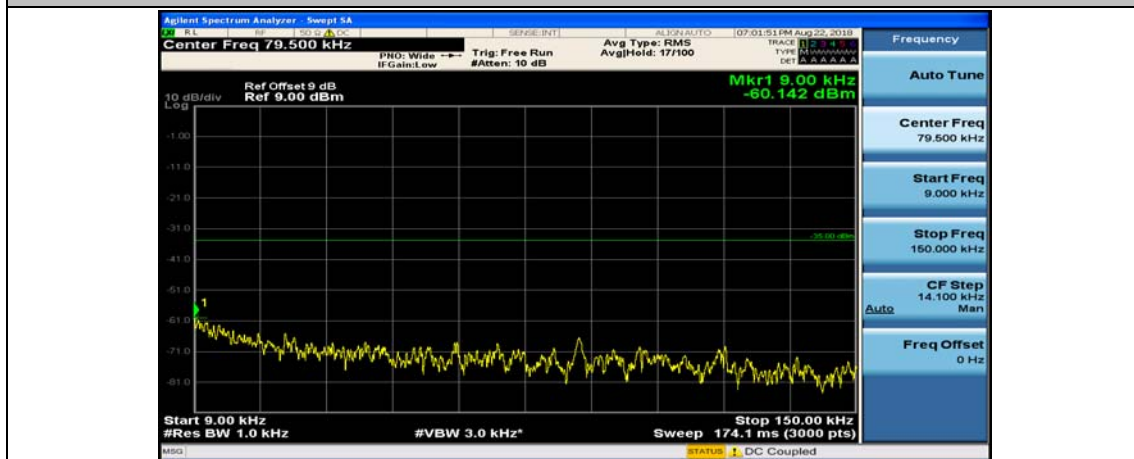


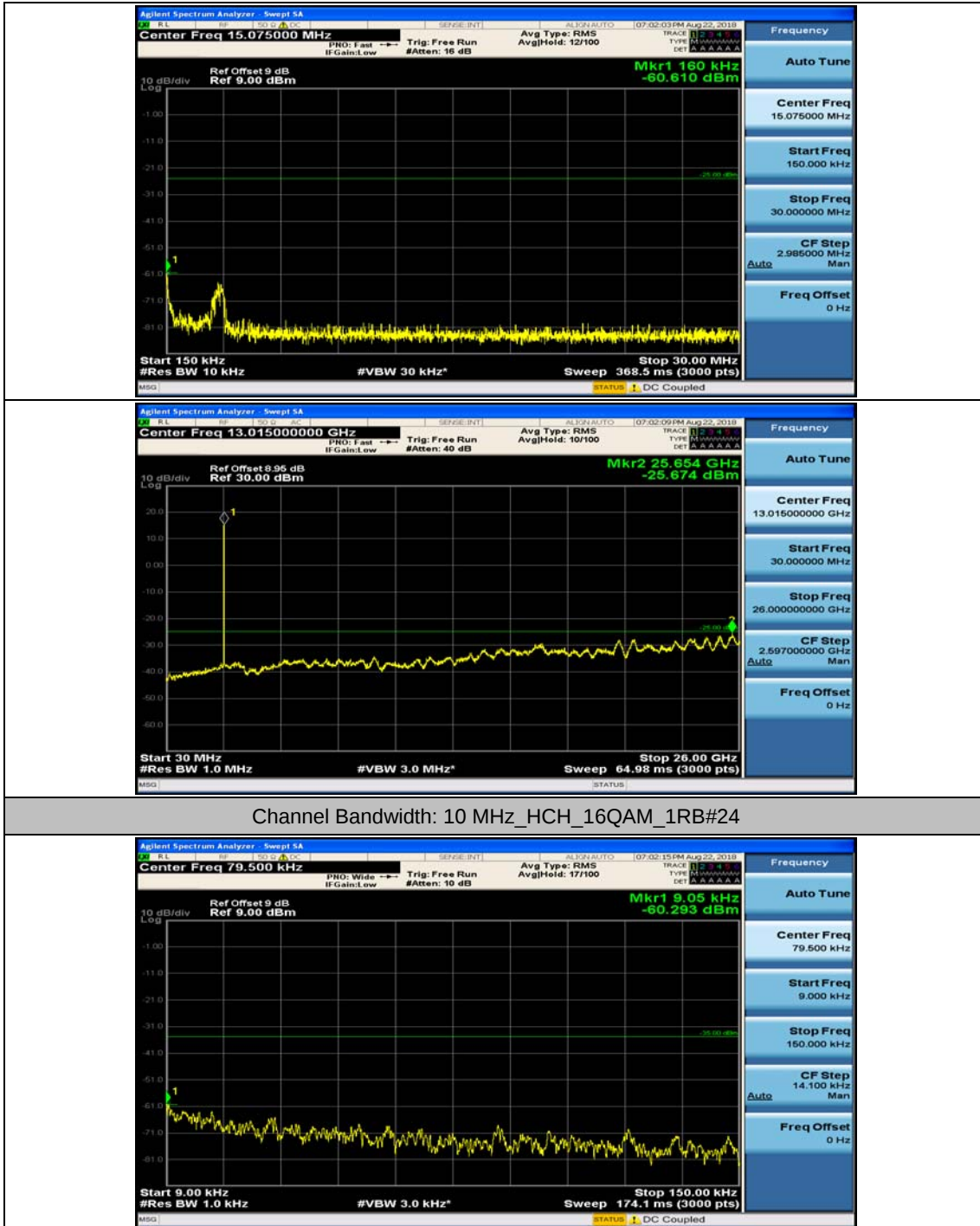


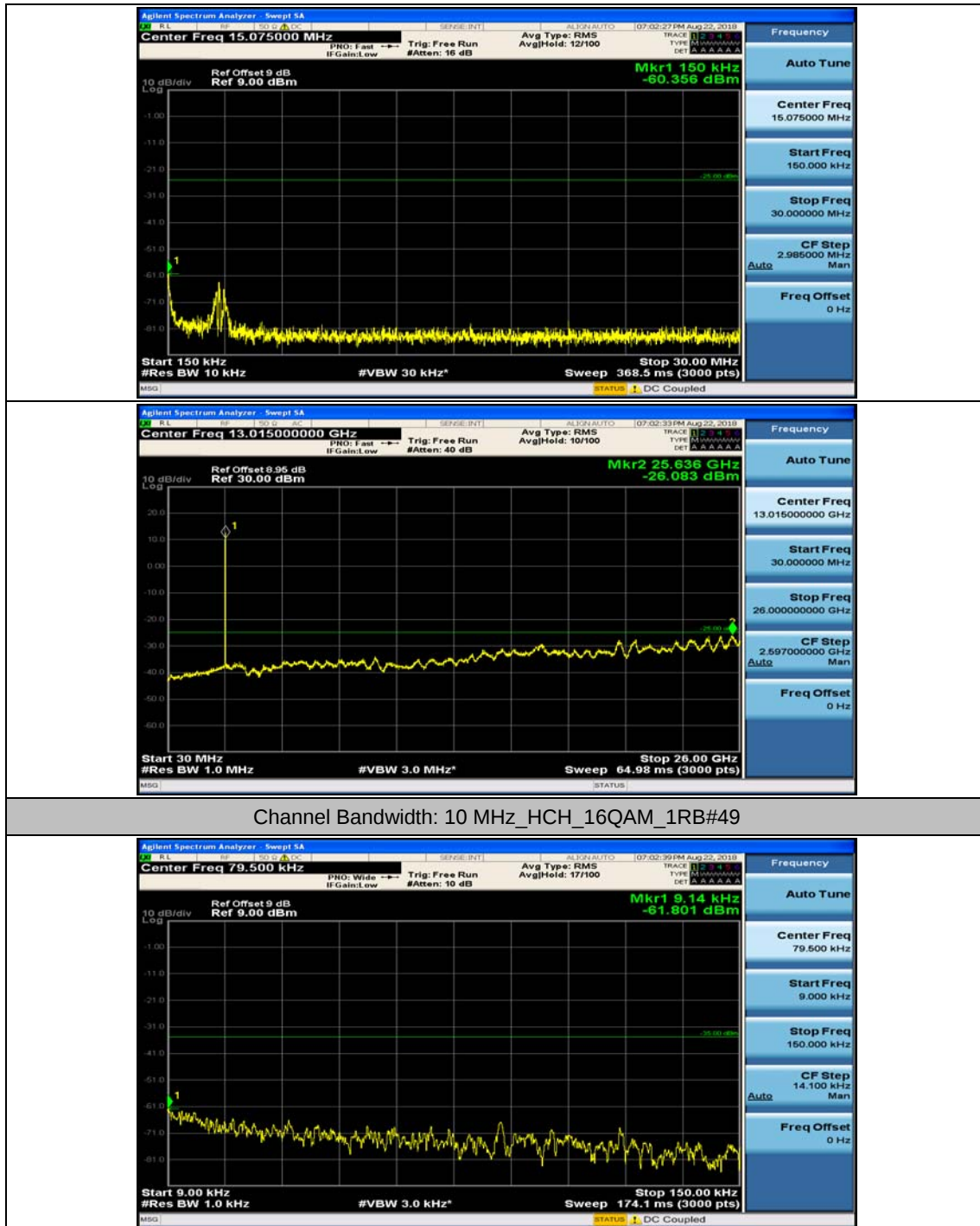


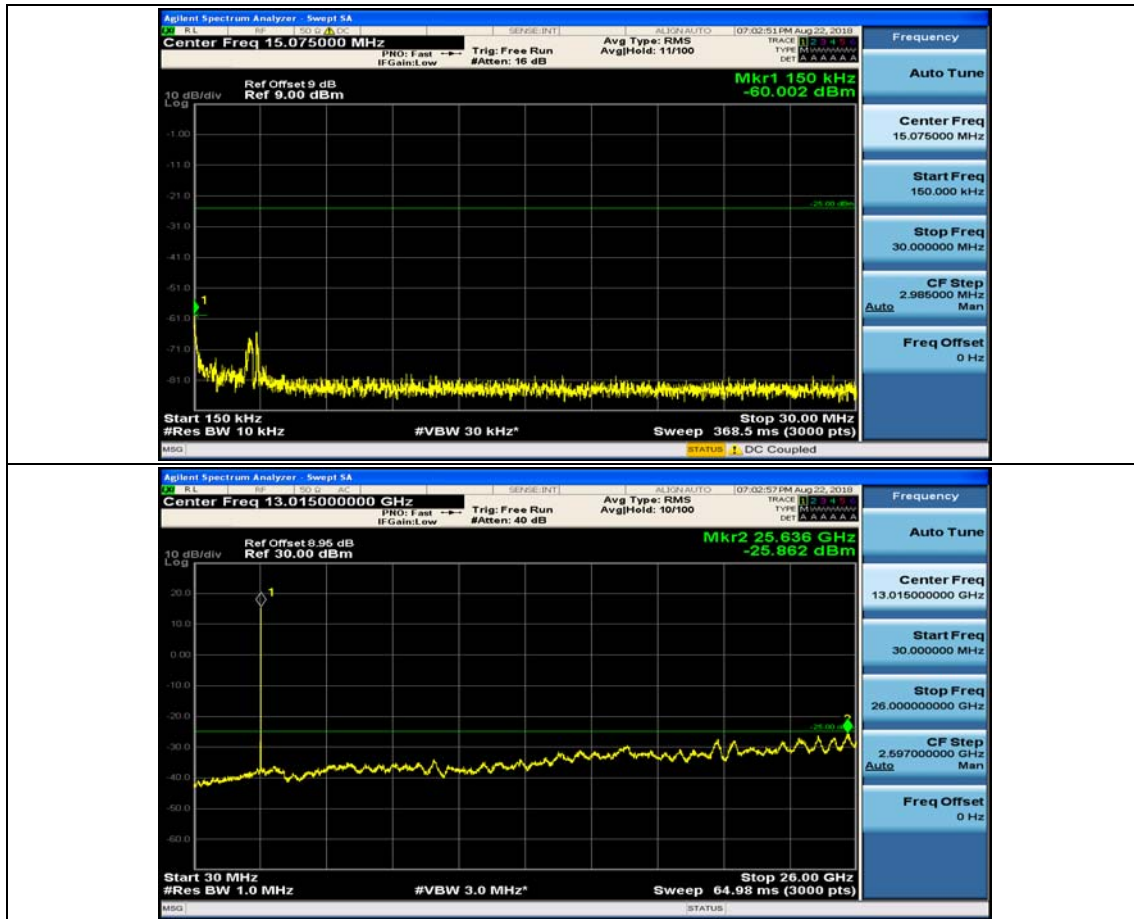


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0

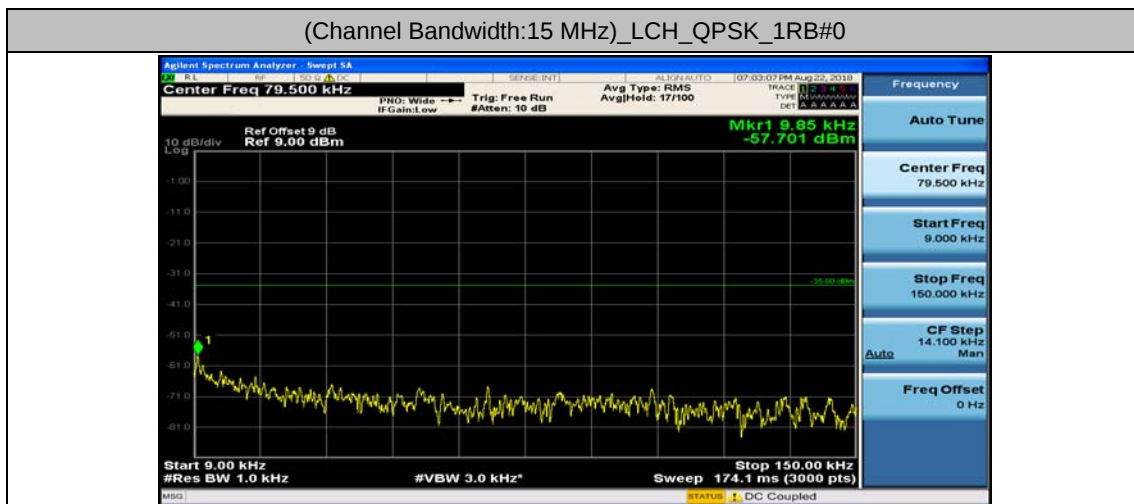


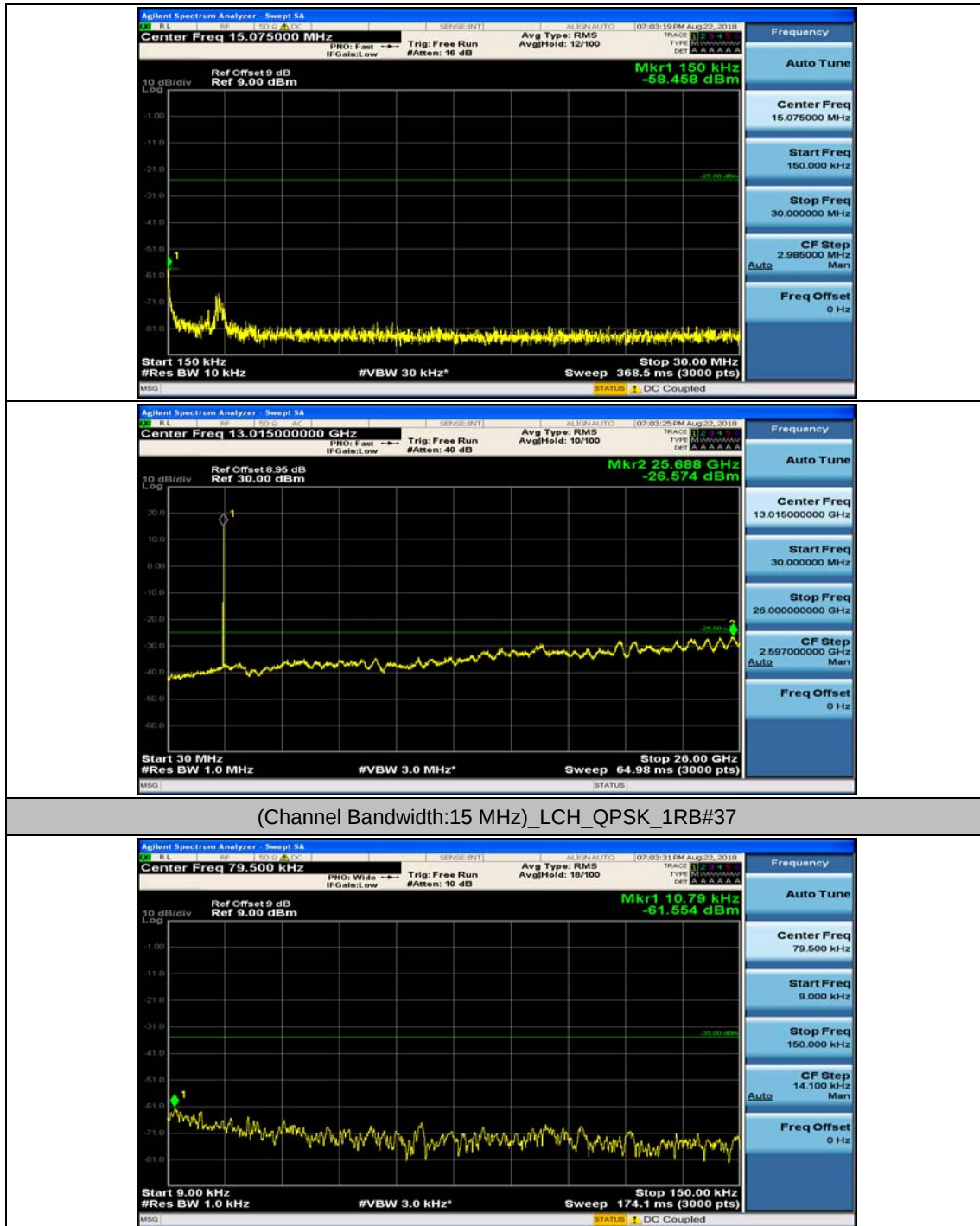


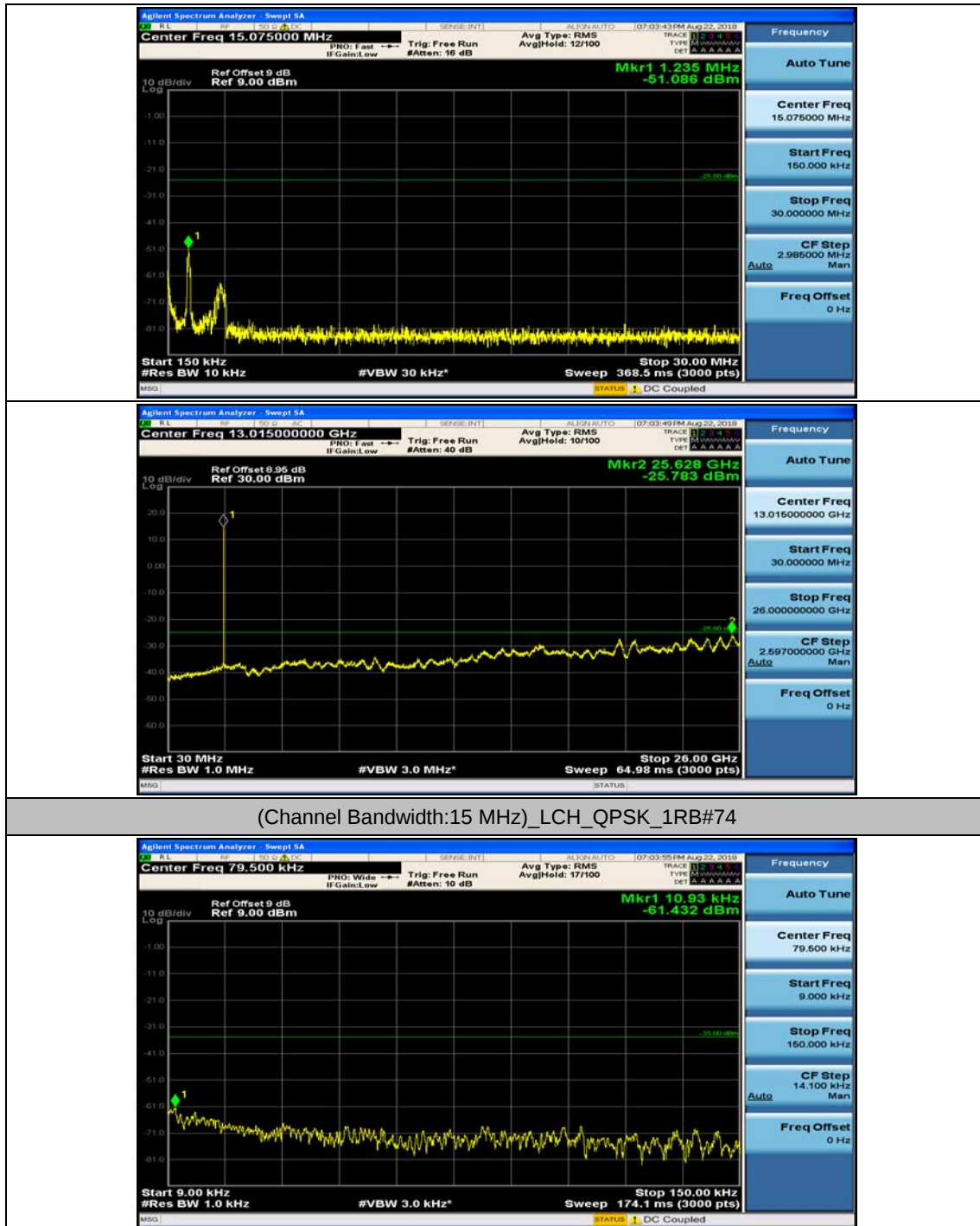


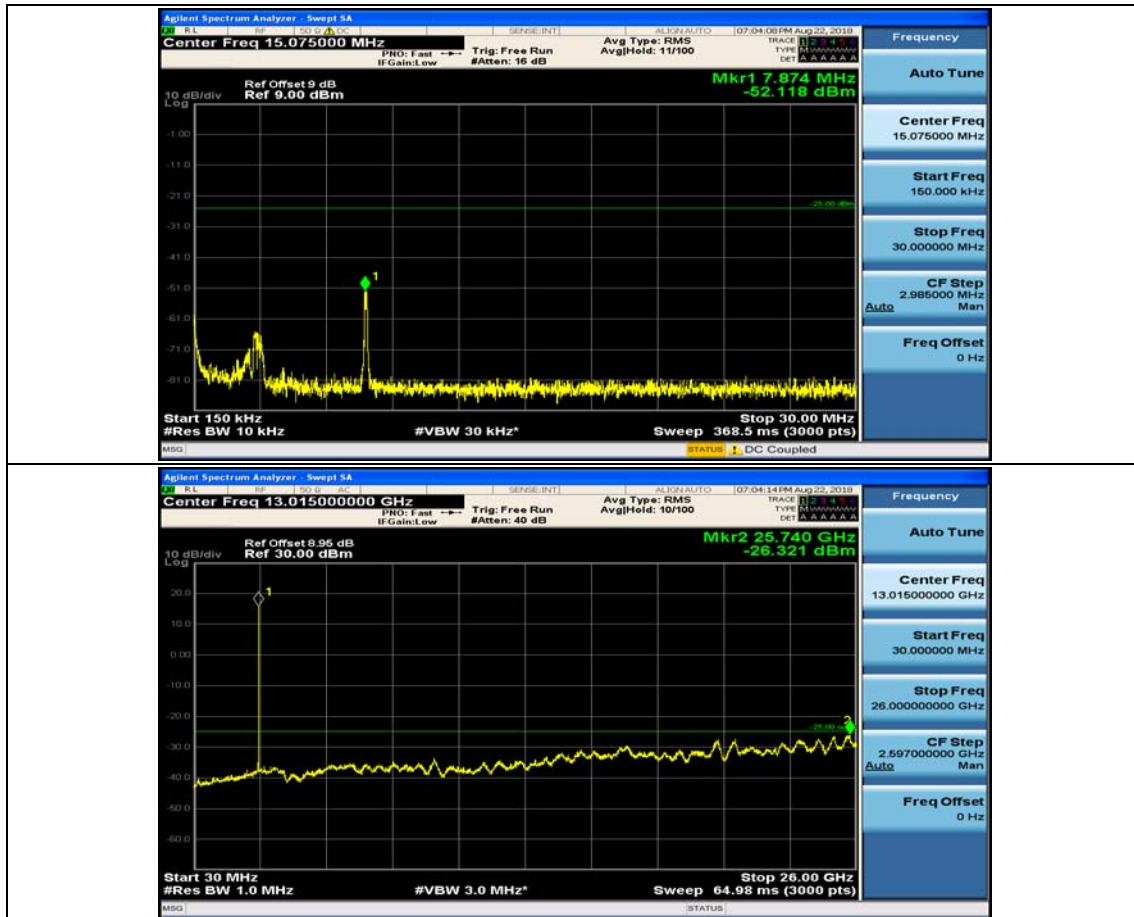


Channel Bandwidth: 15 MHz

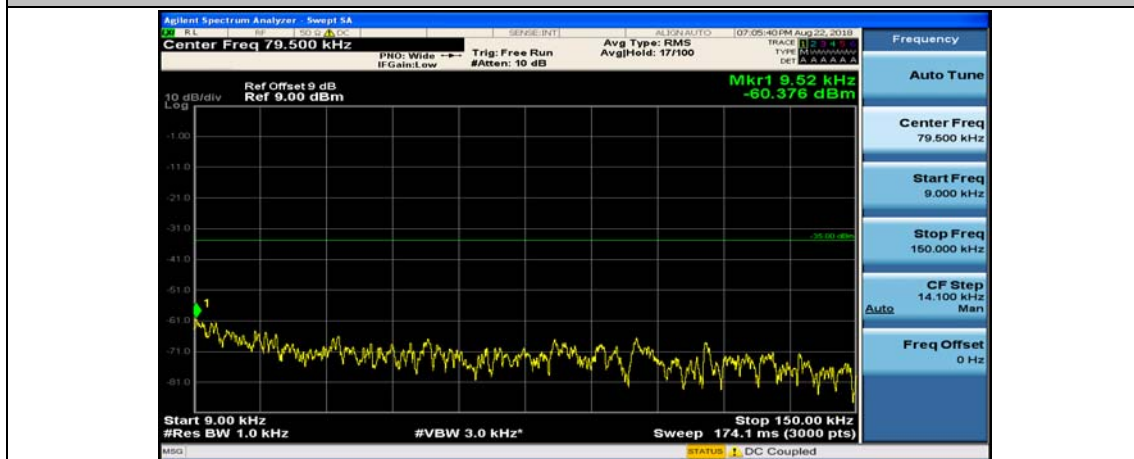


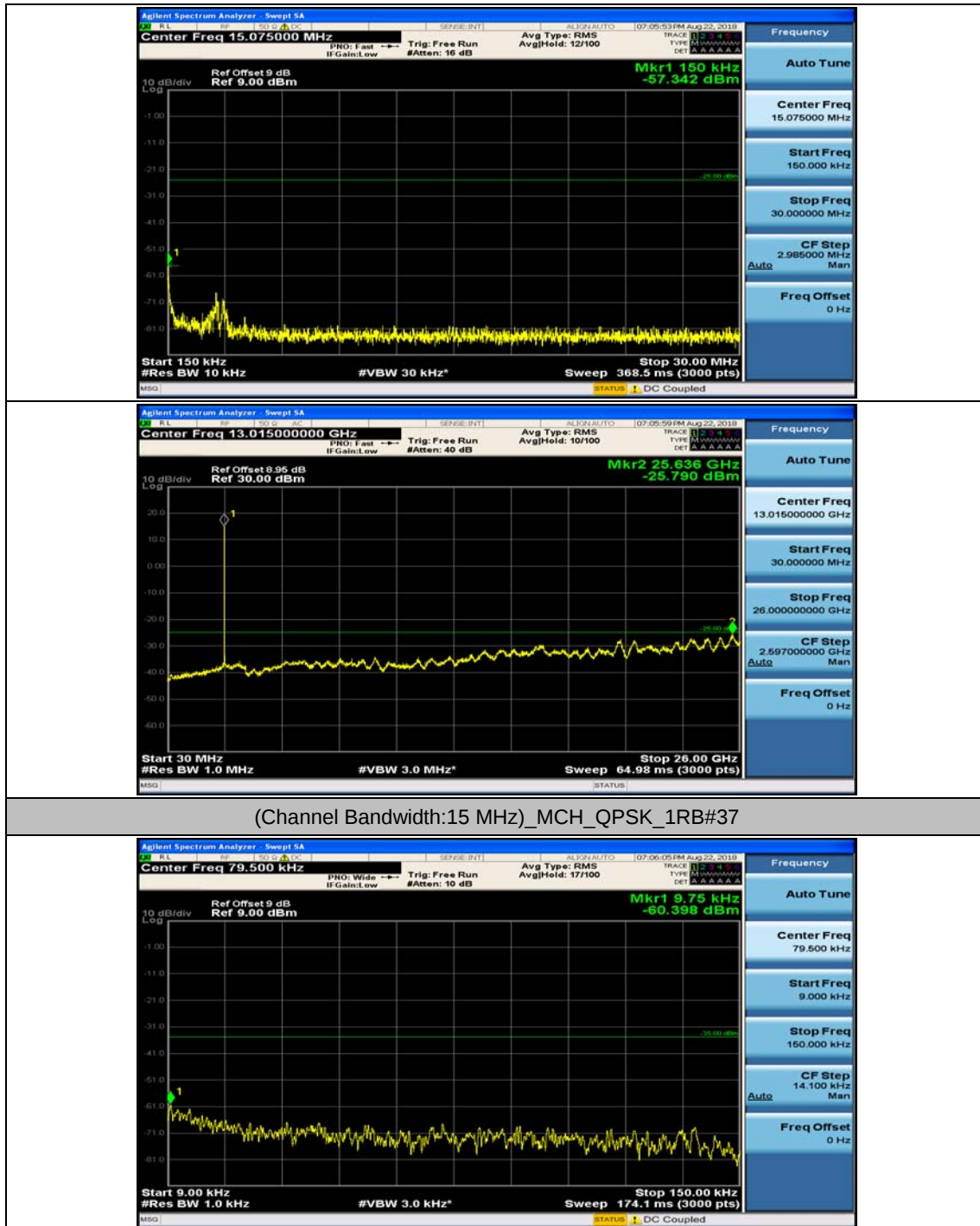


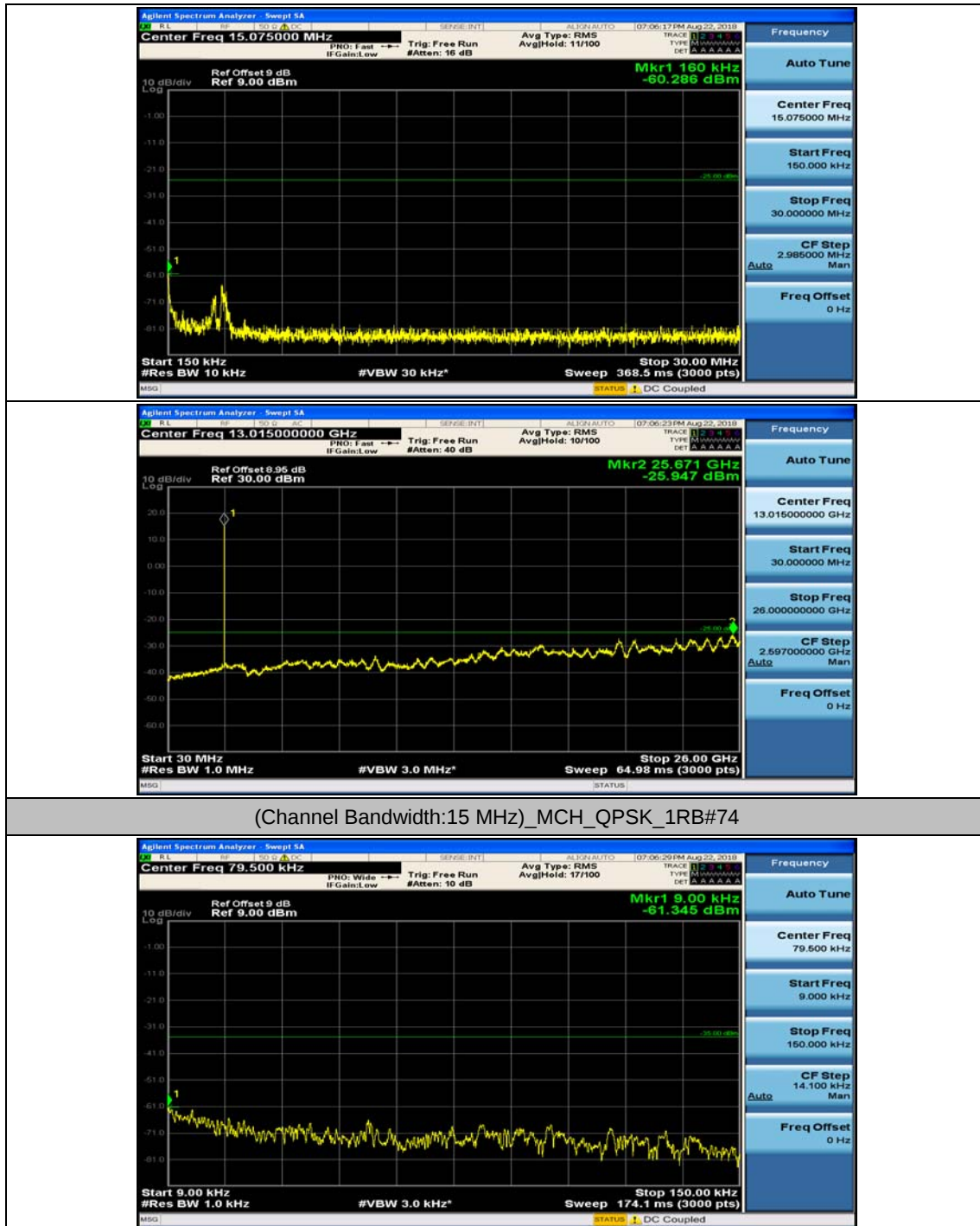


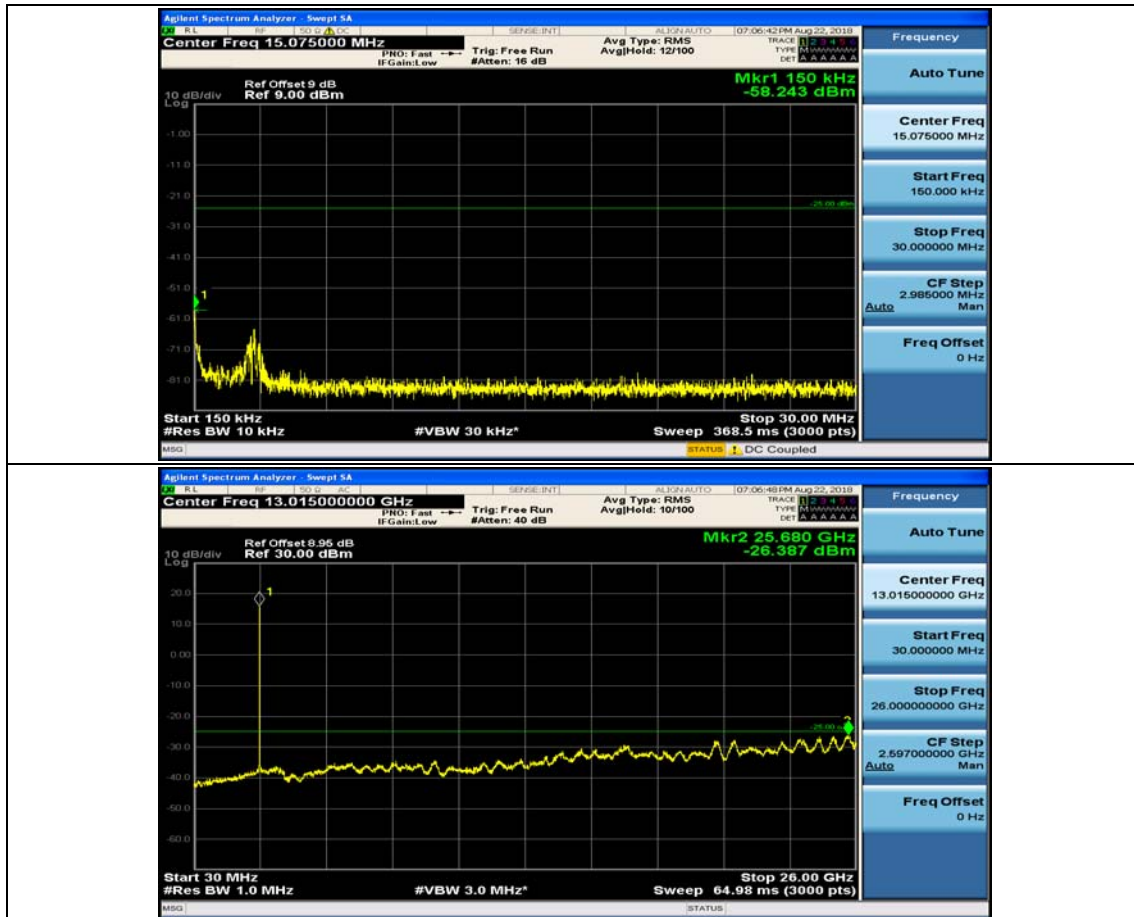


(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0

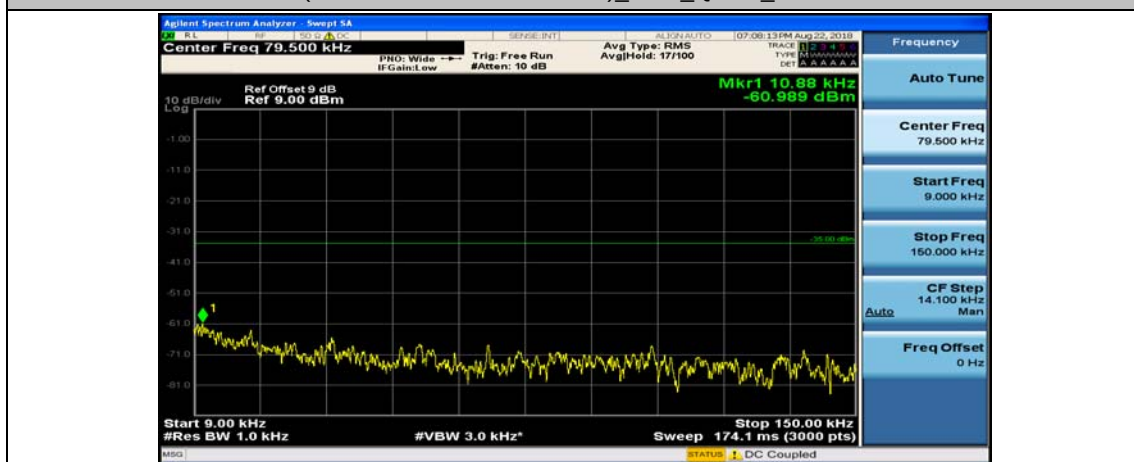


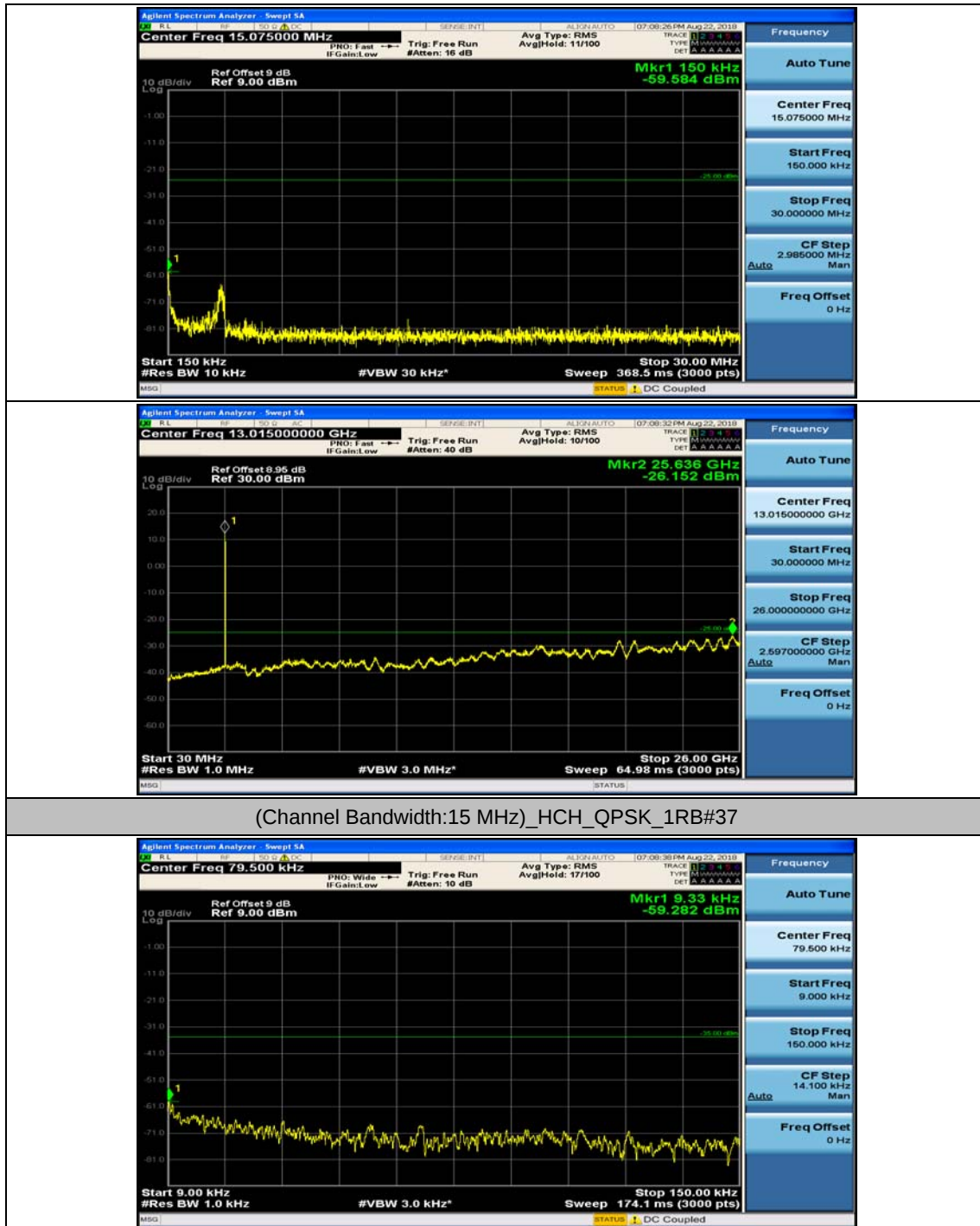


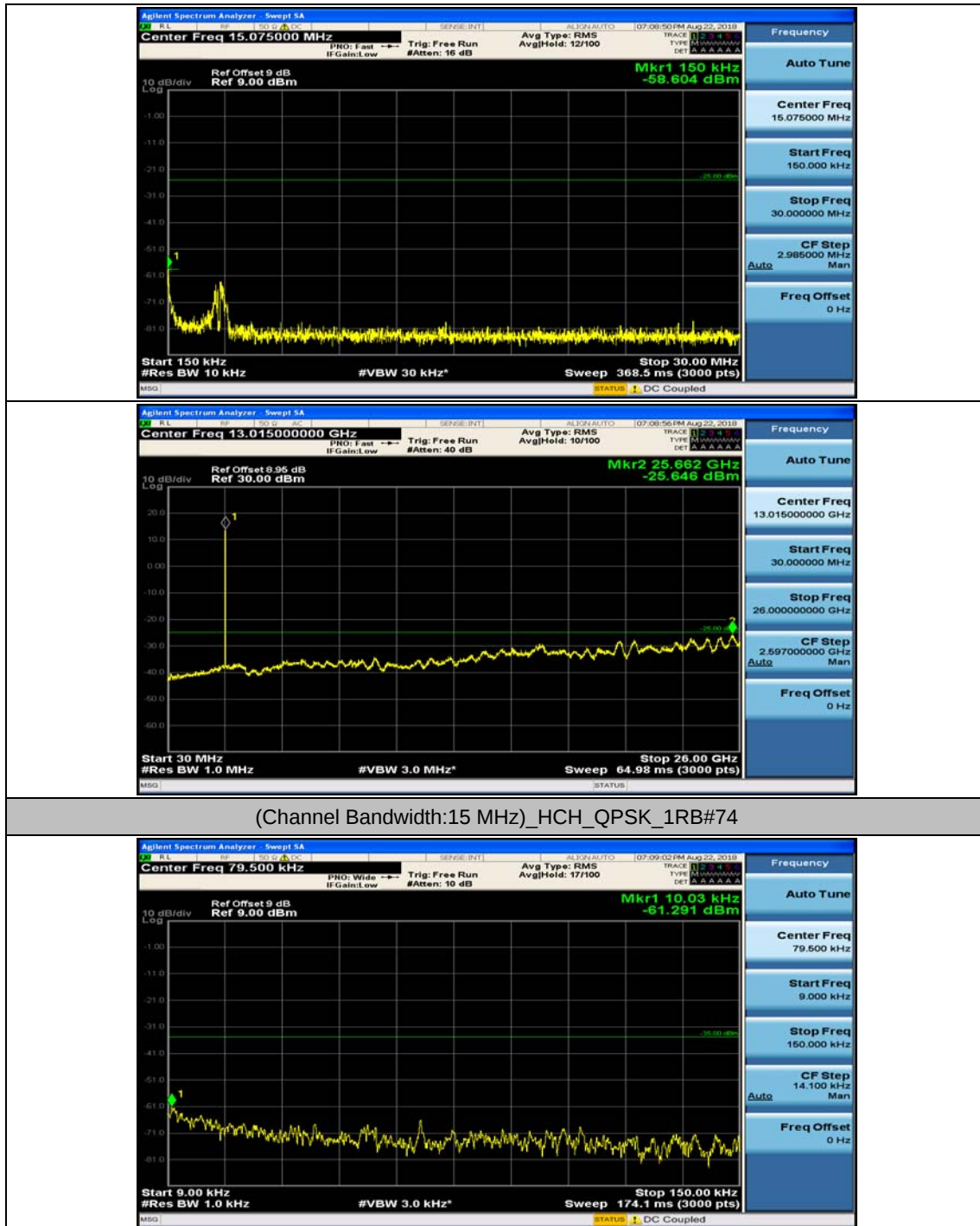


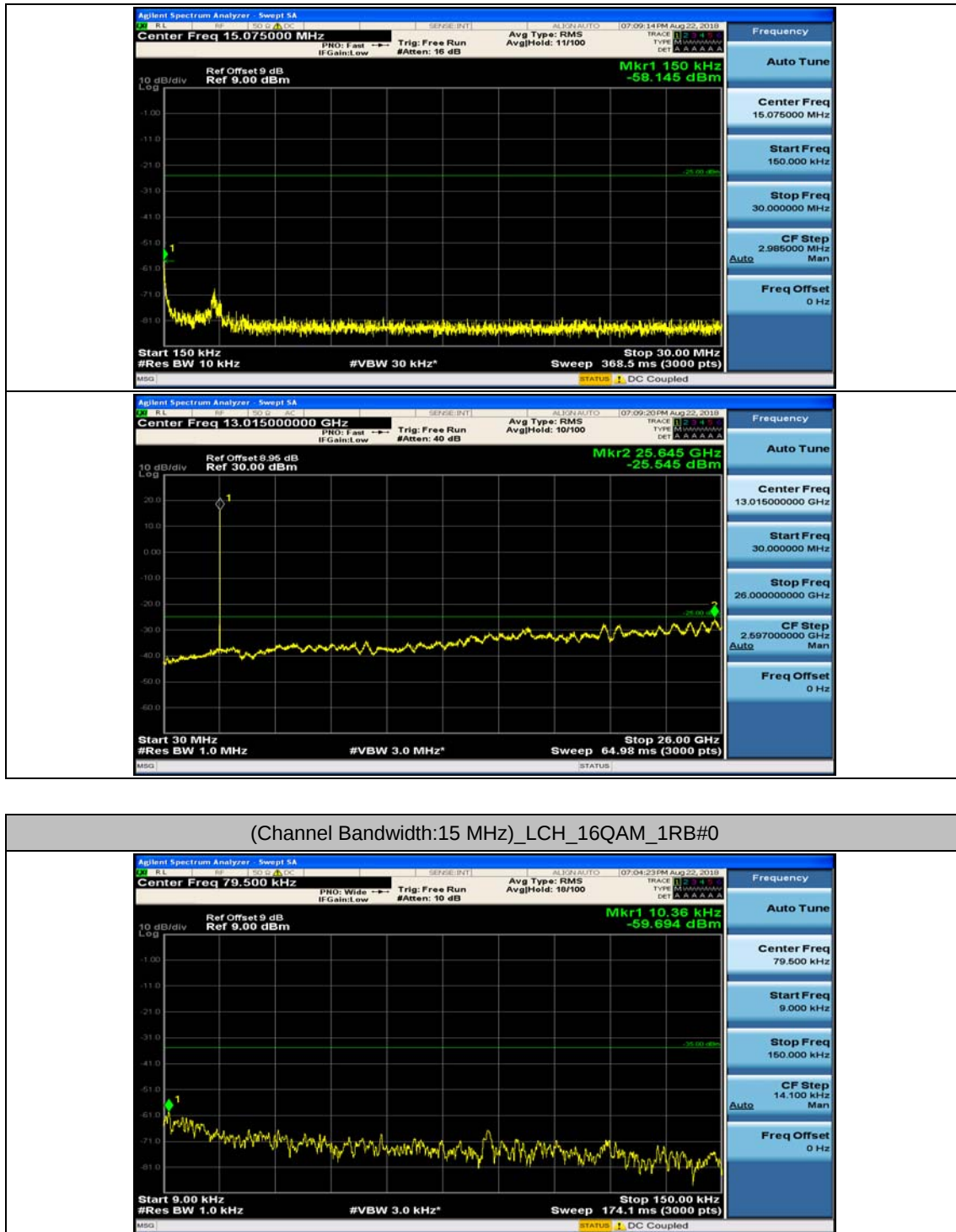


(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0

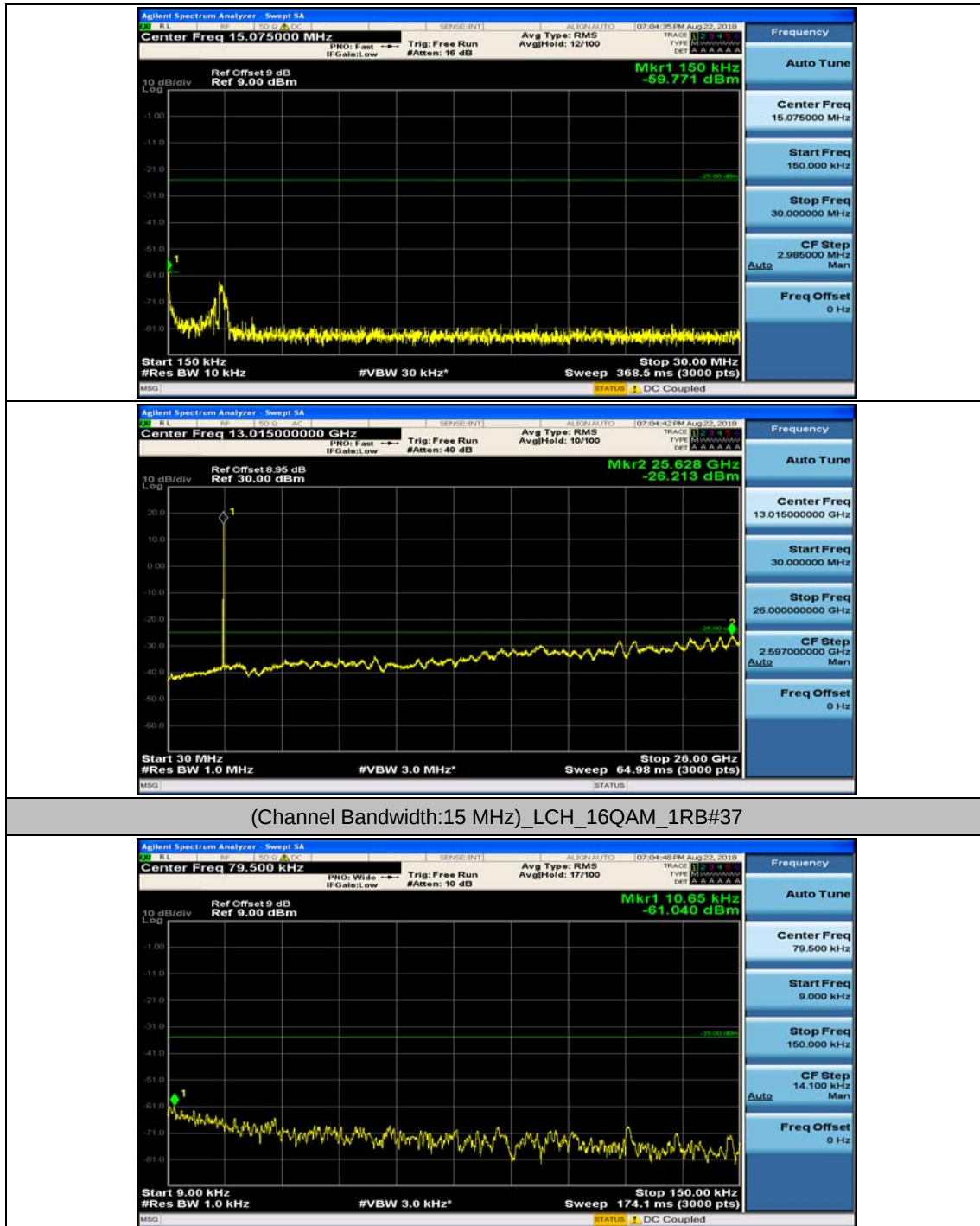


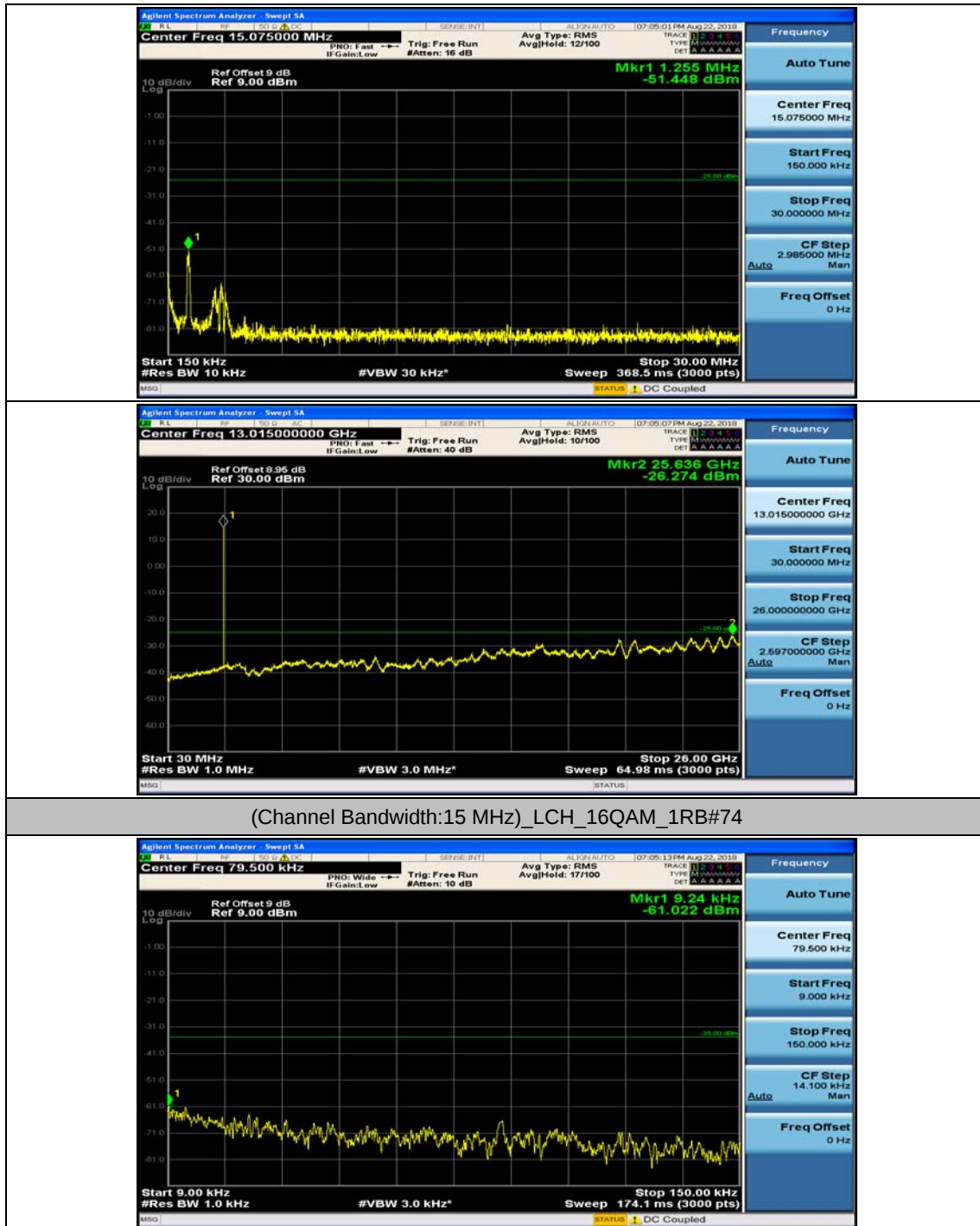


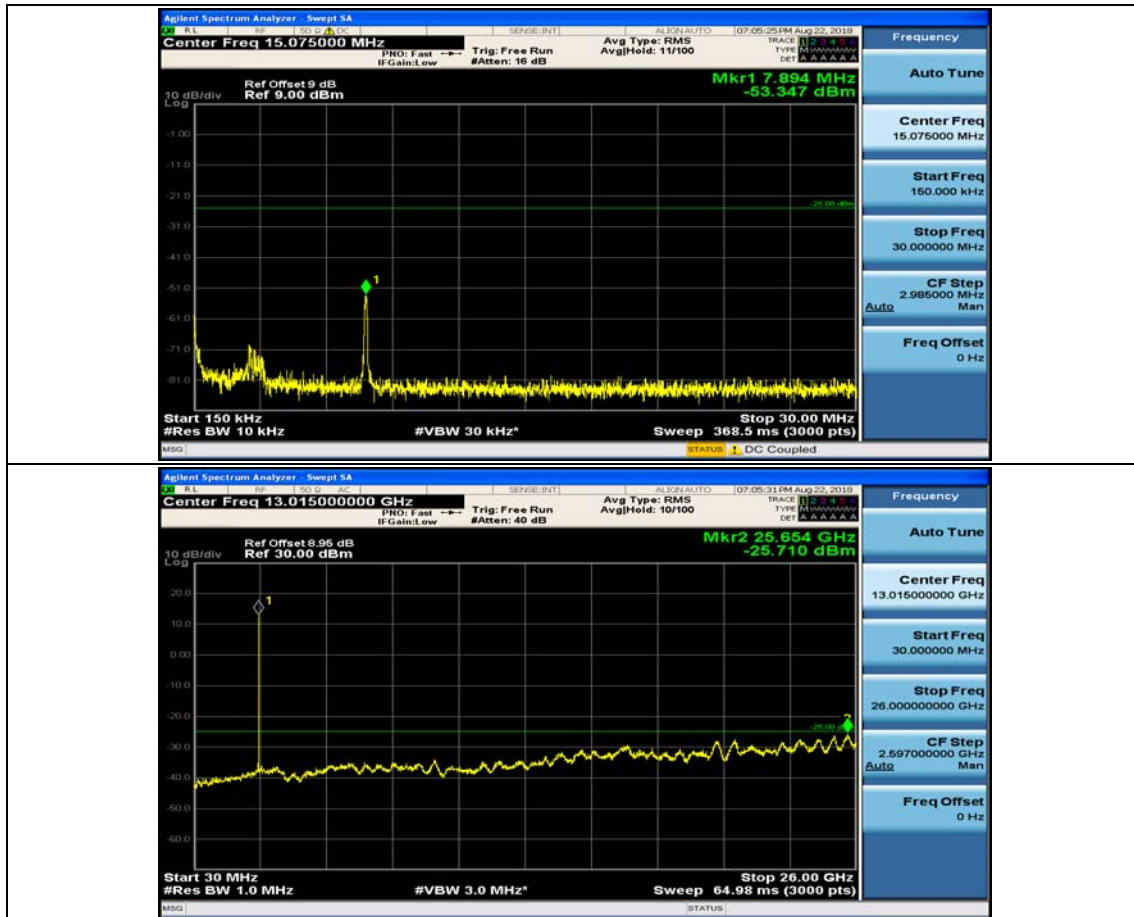




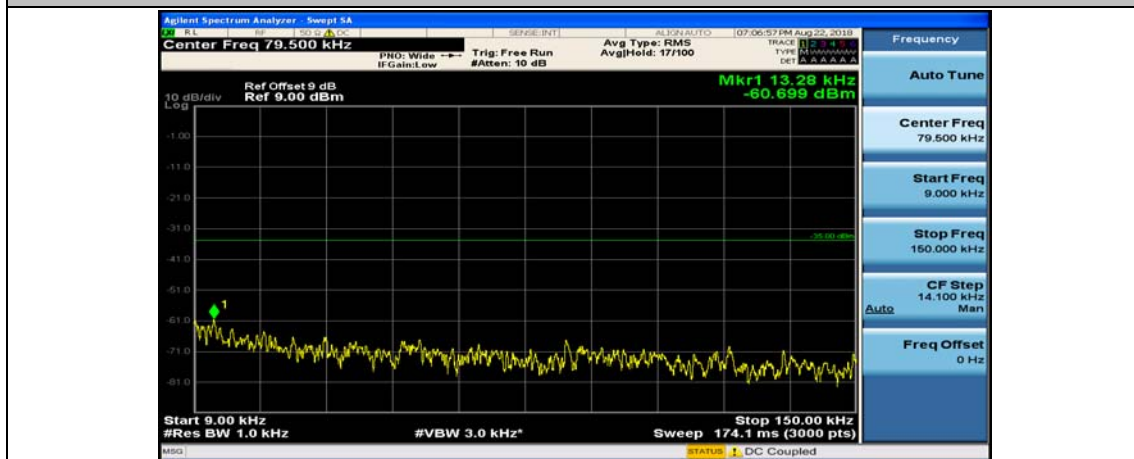
(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0

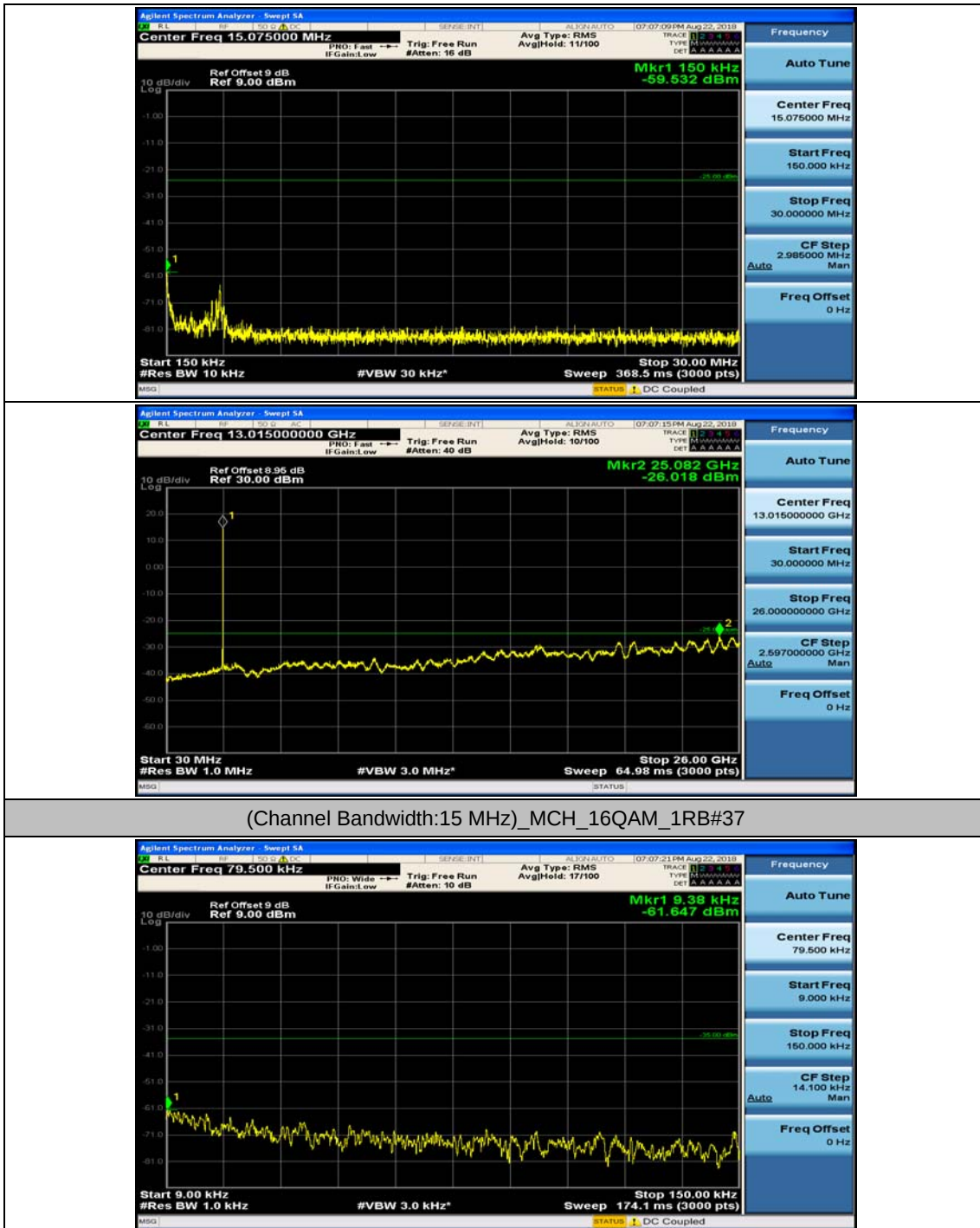


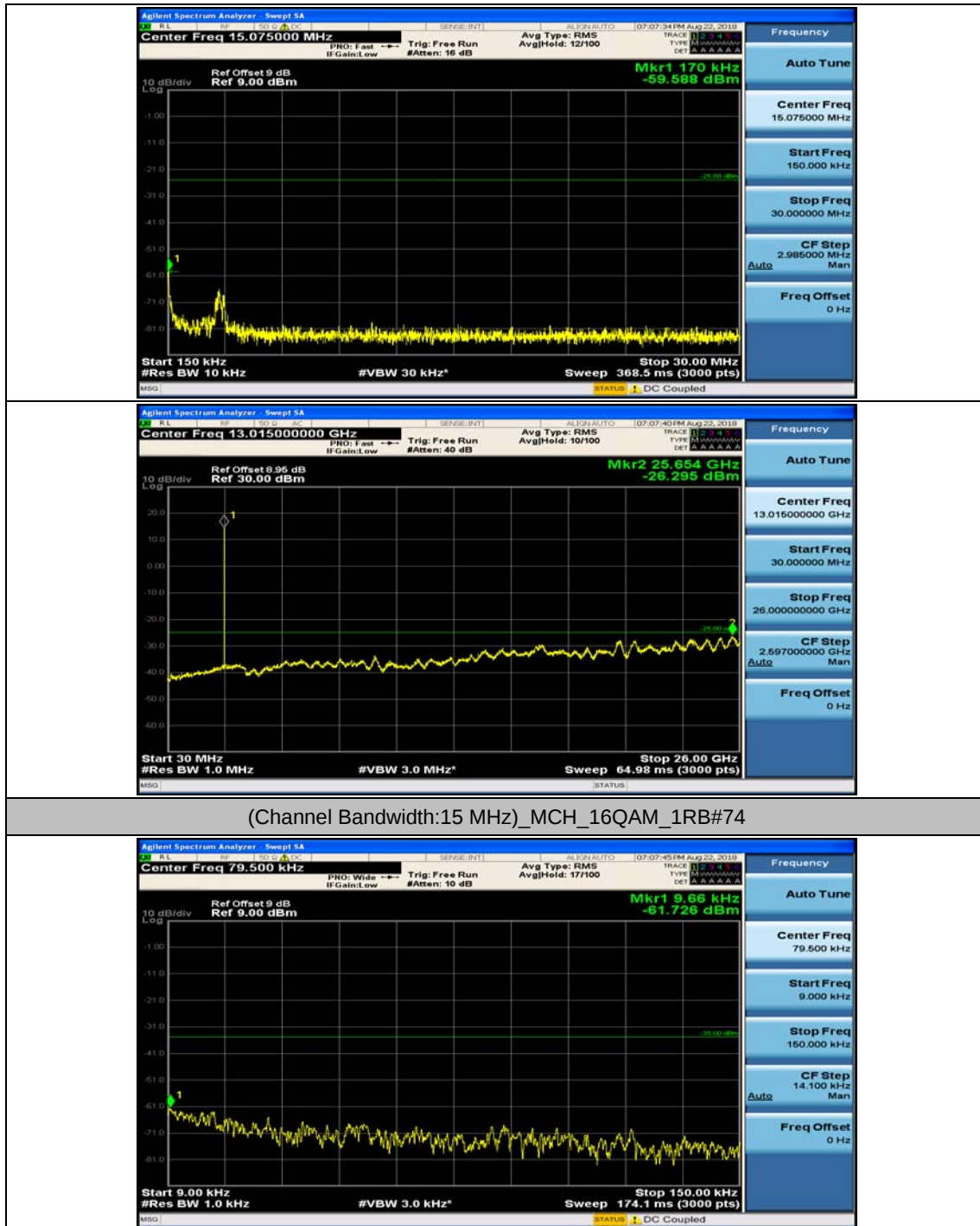


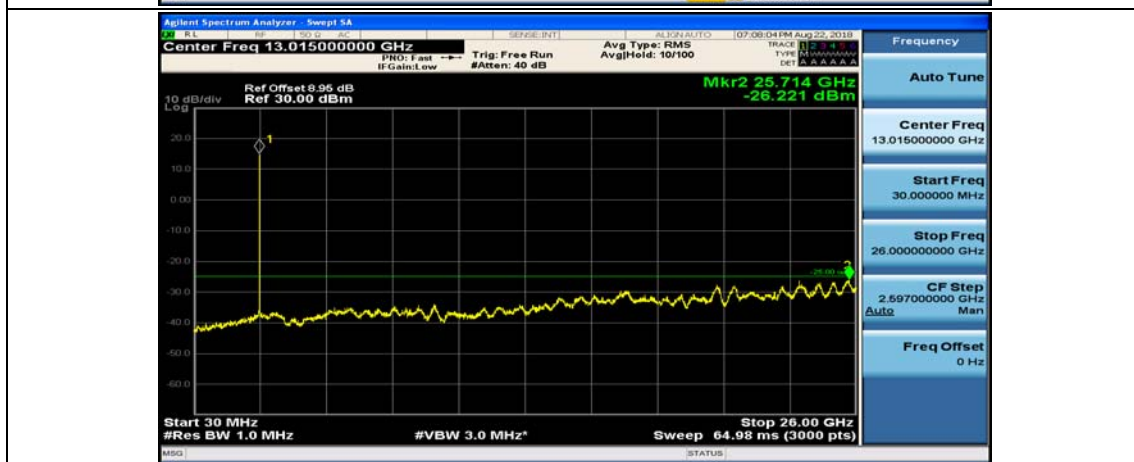
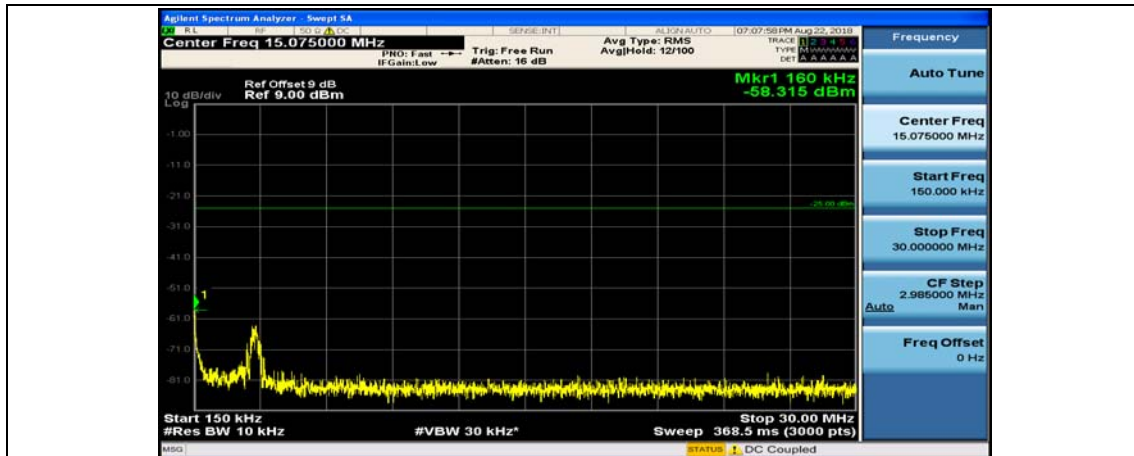


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

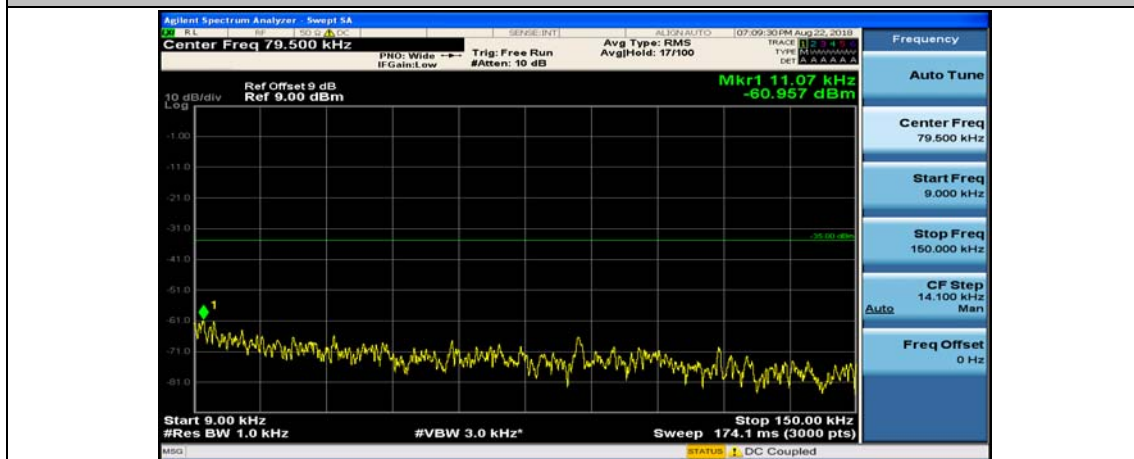


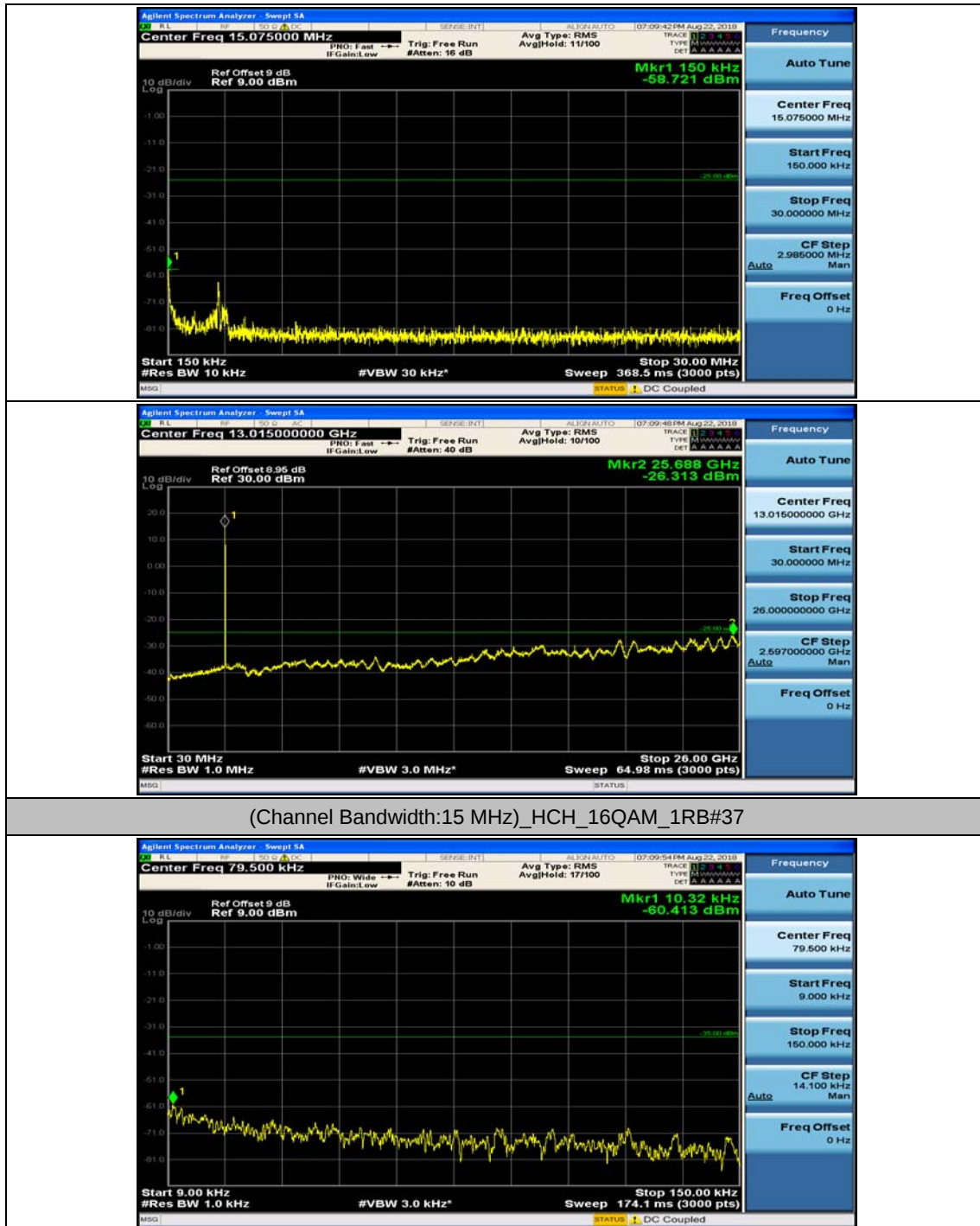


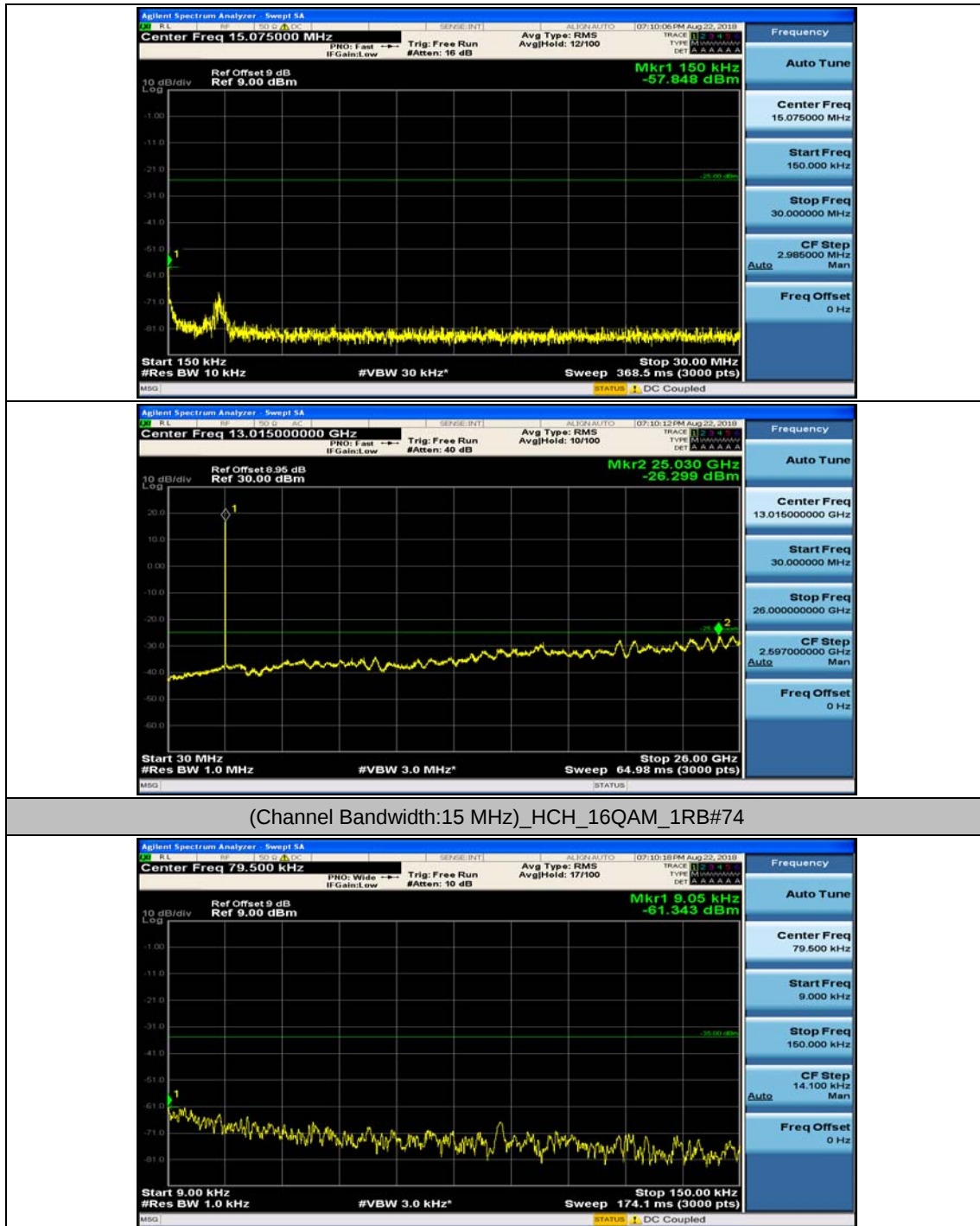


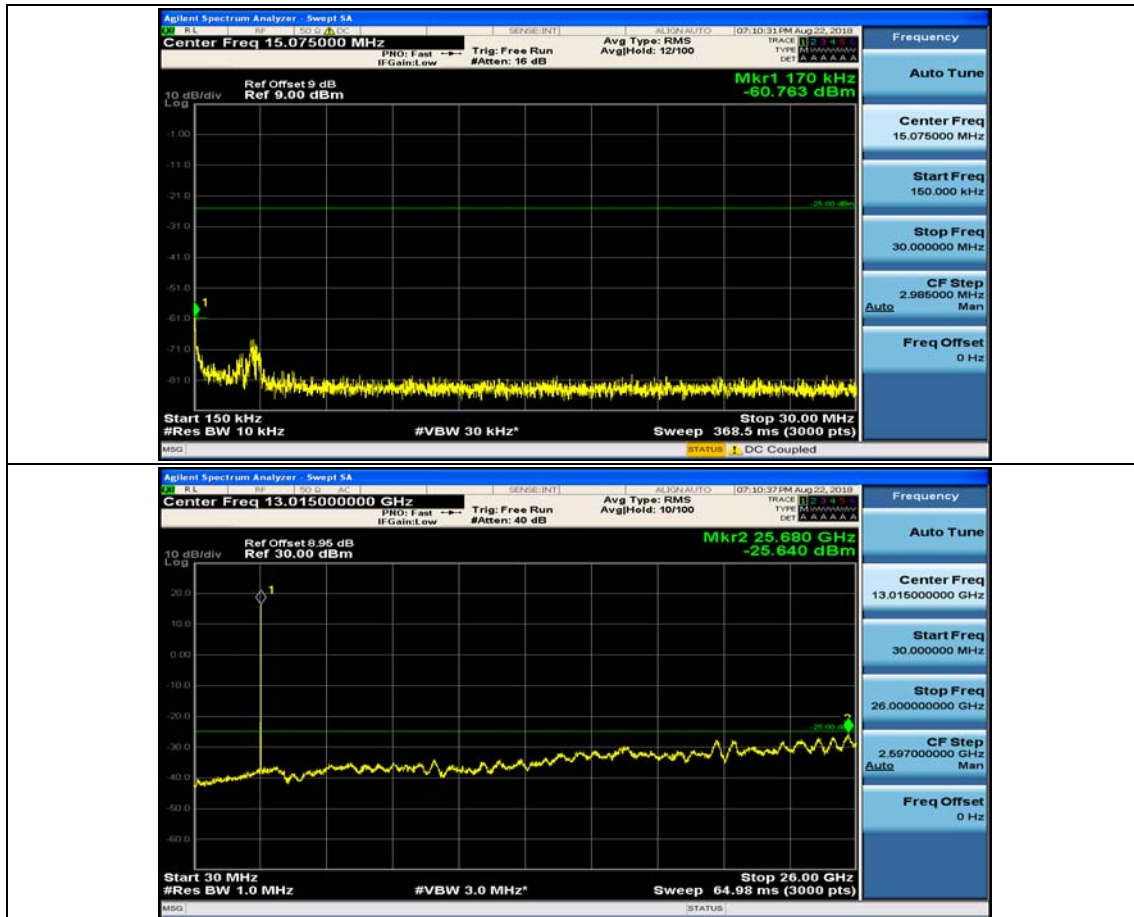


(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0

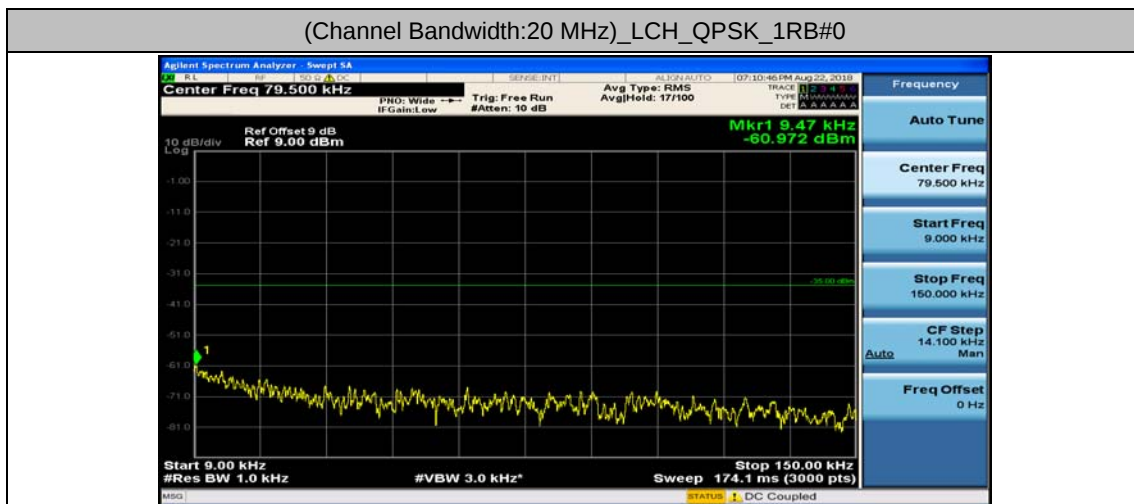


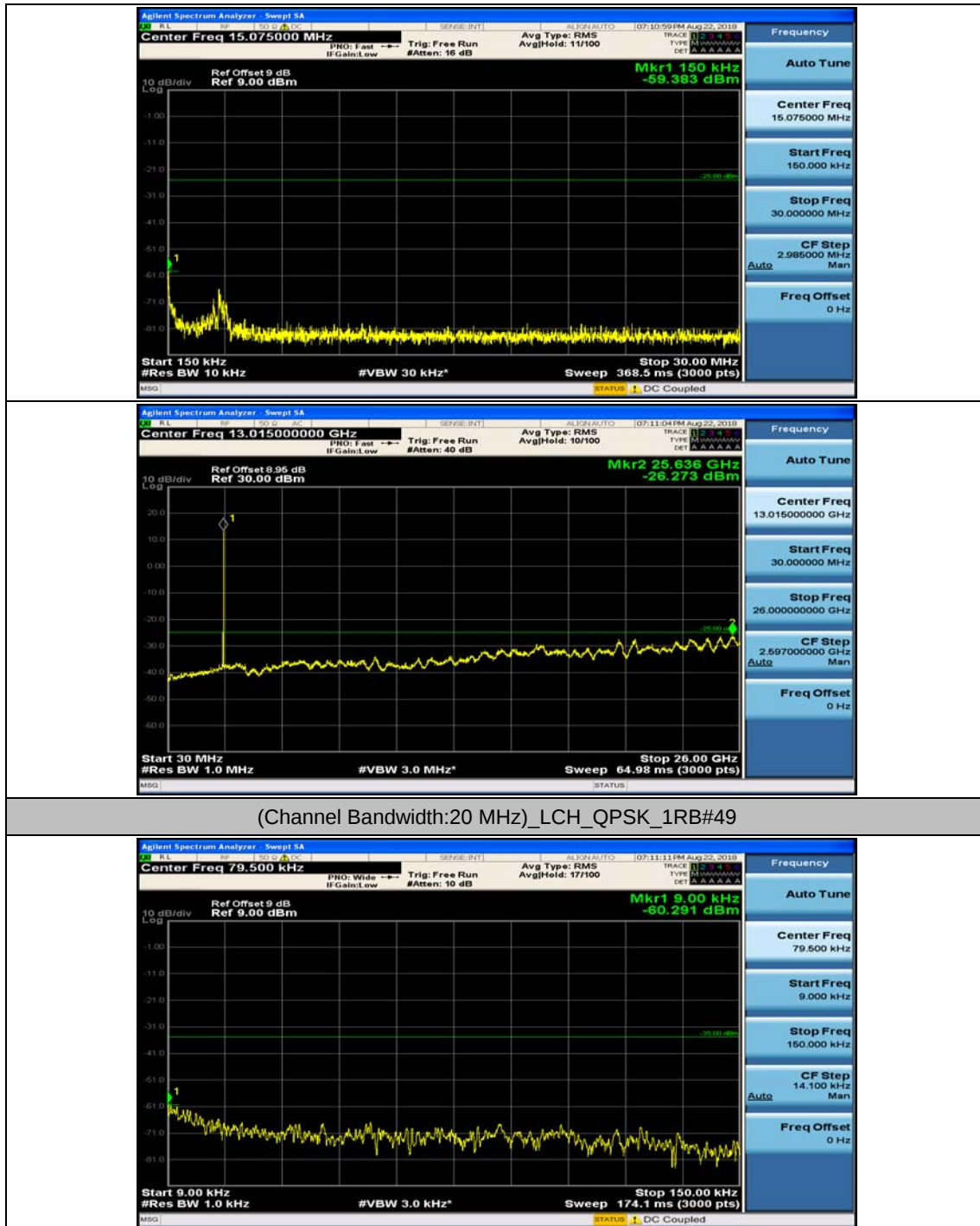


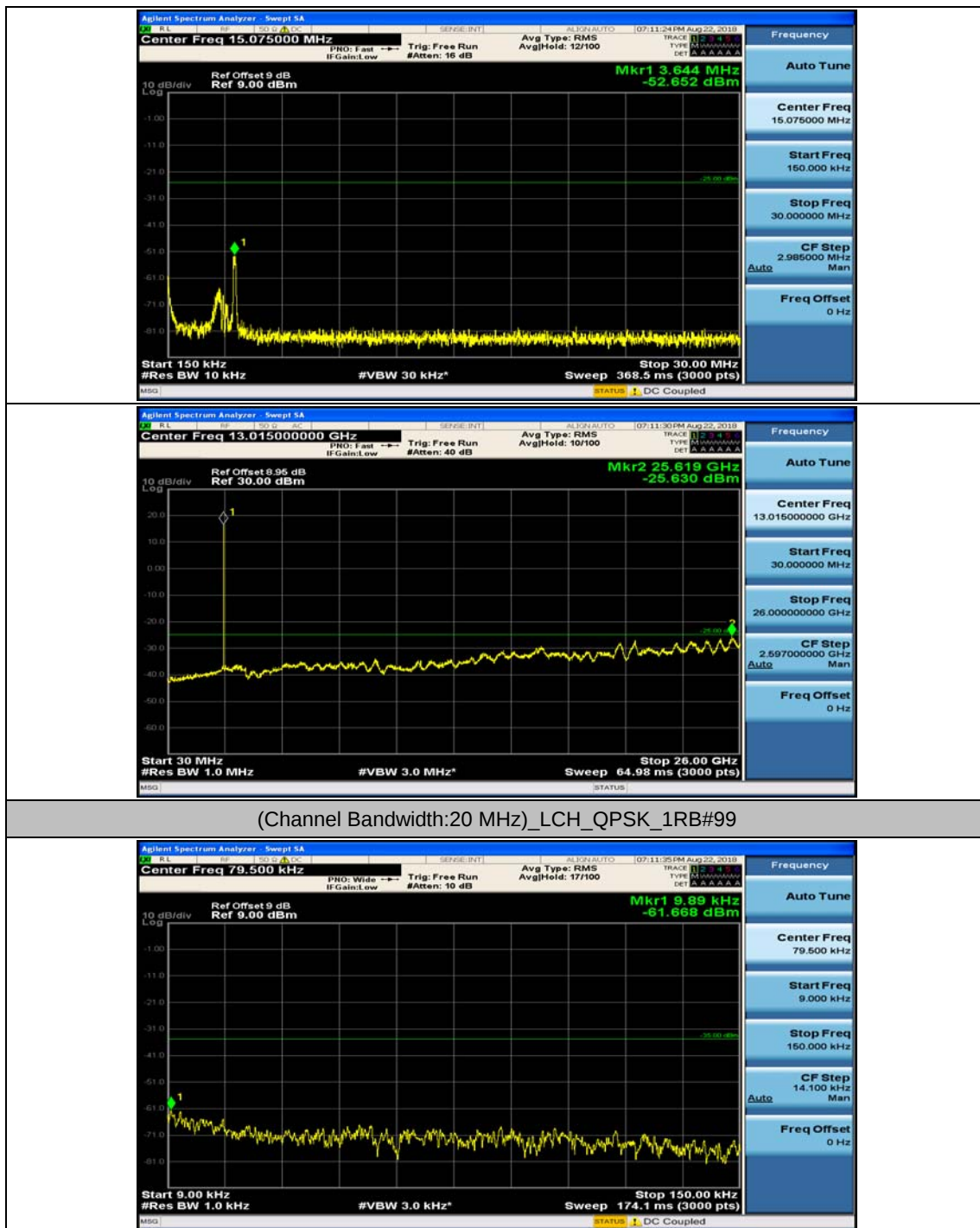


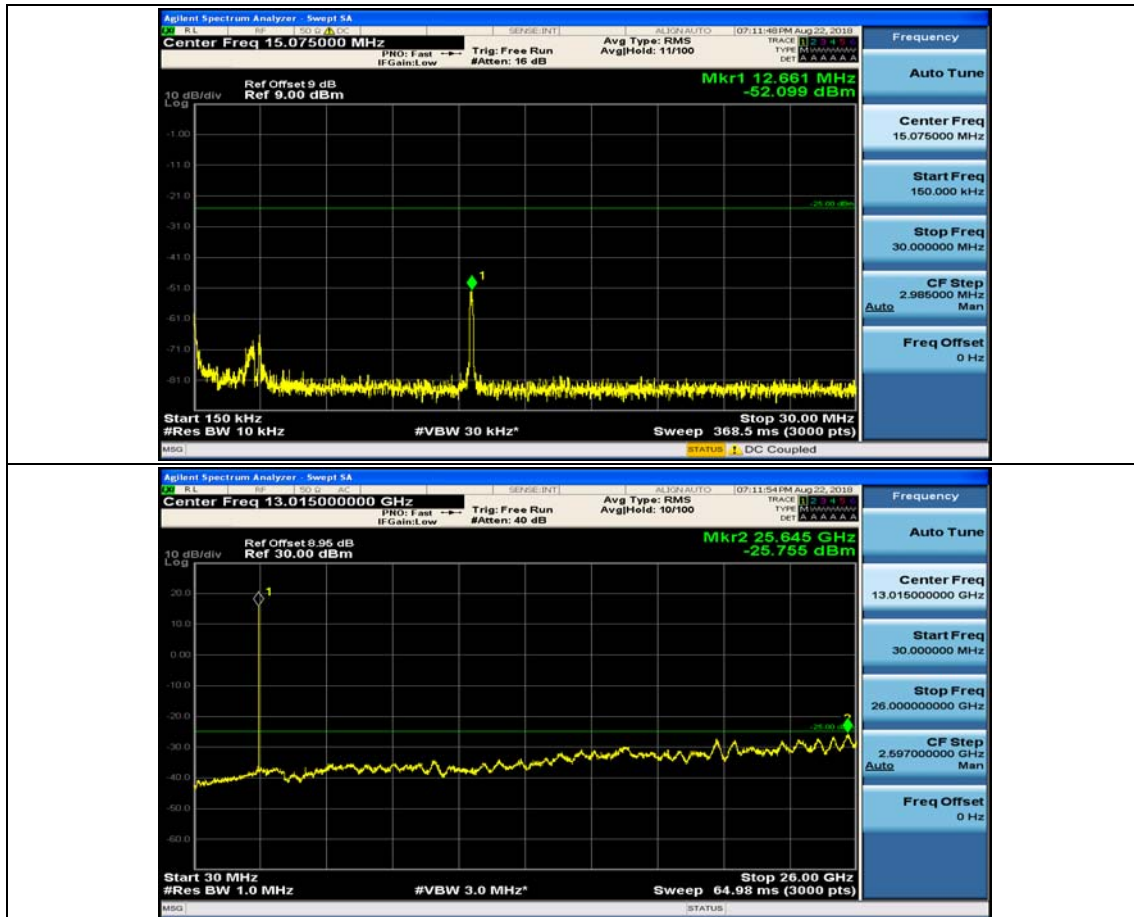


Channel Bandwidth: 20 MHz

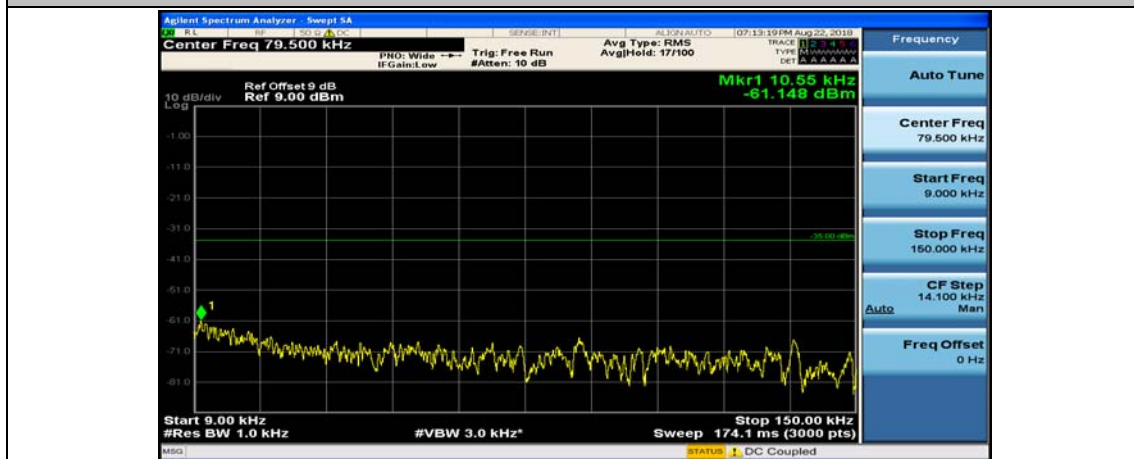


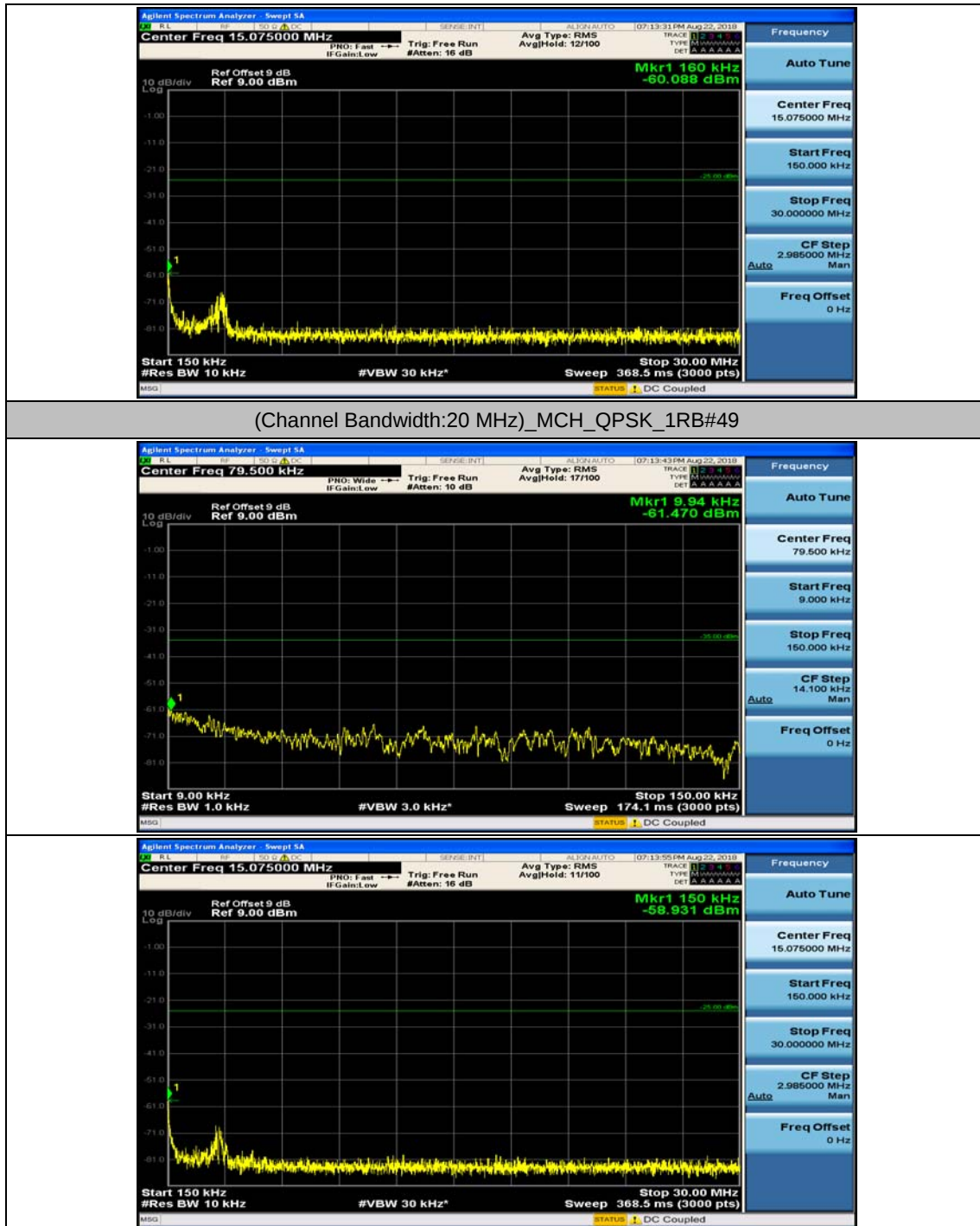






(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

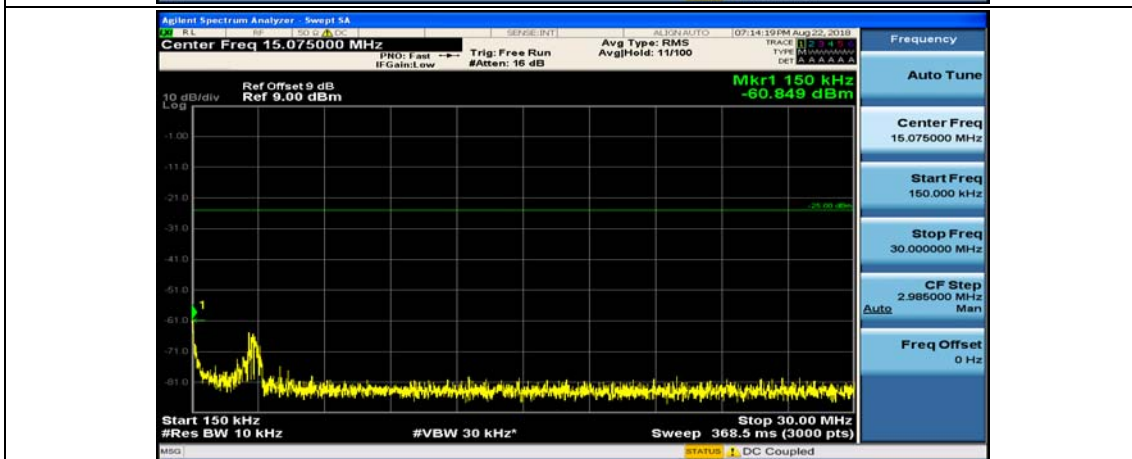
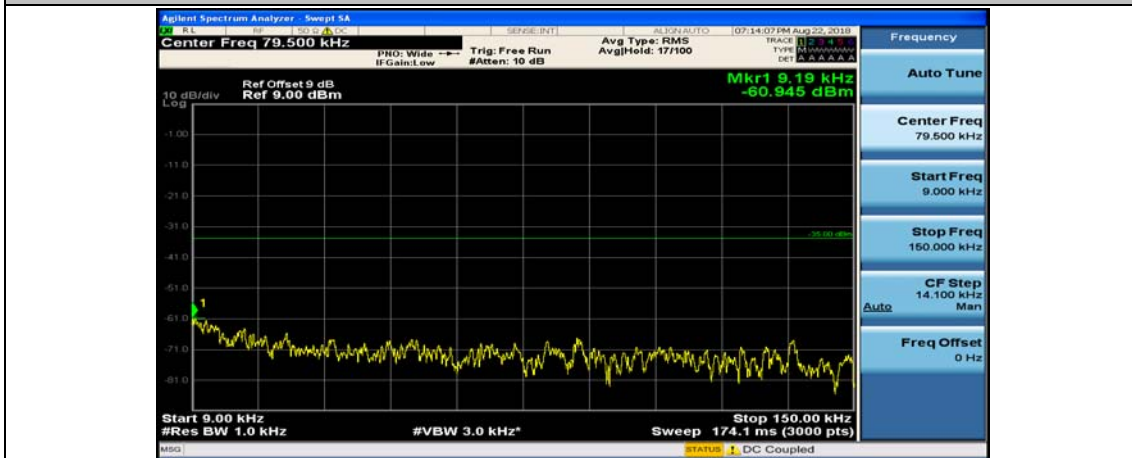




(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49

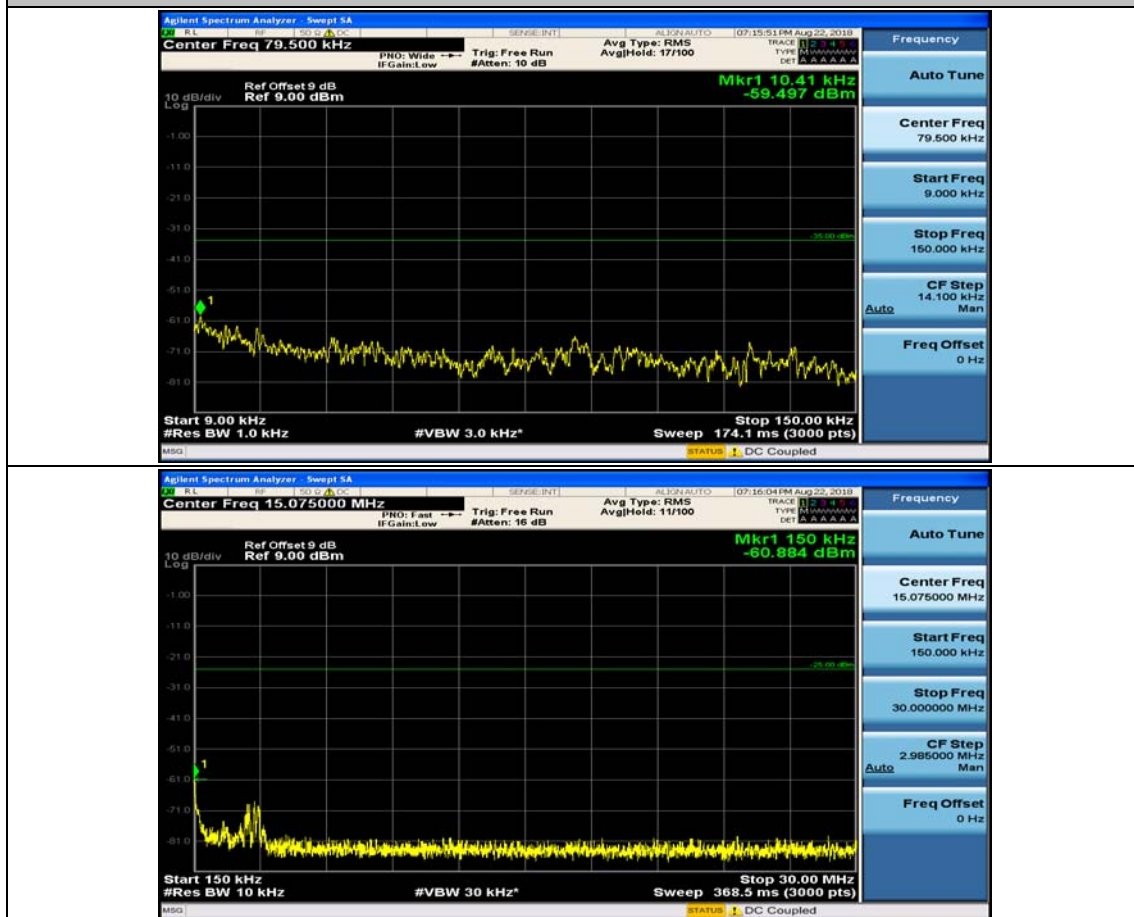


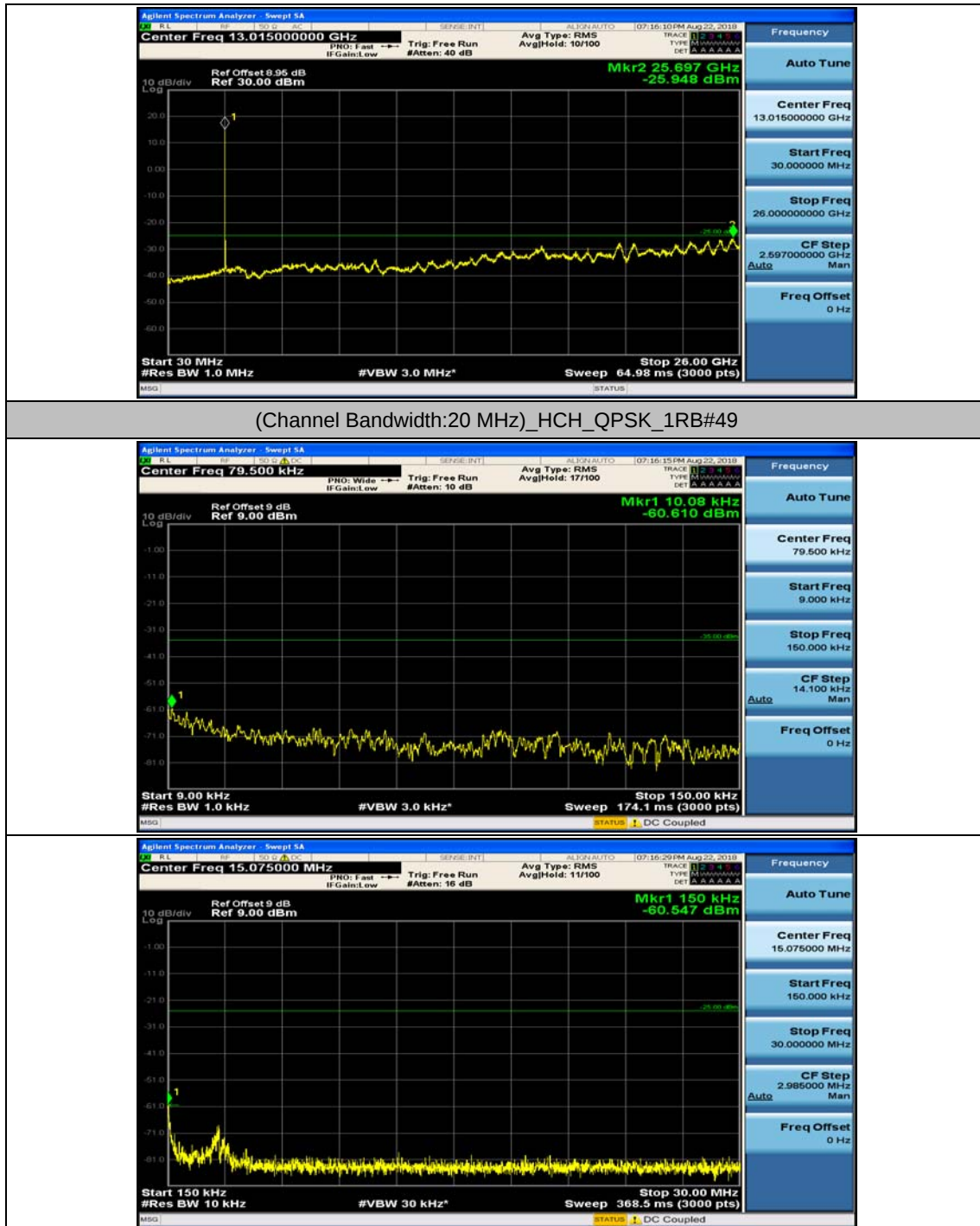
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#99

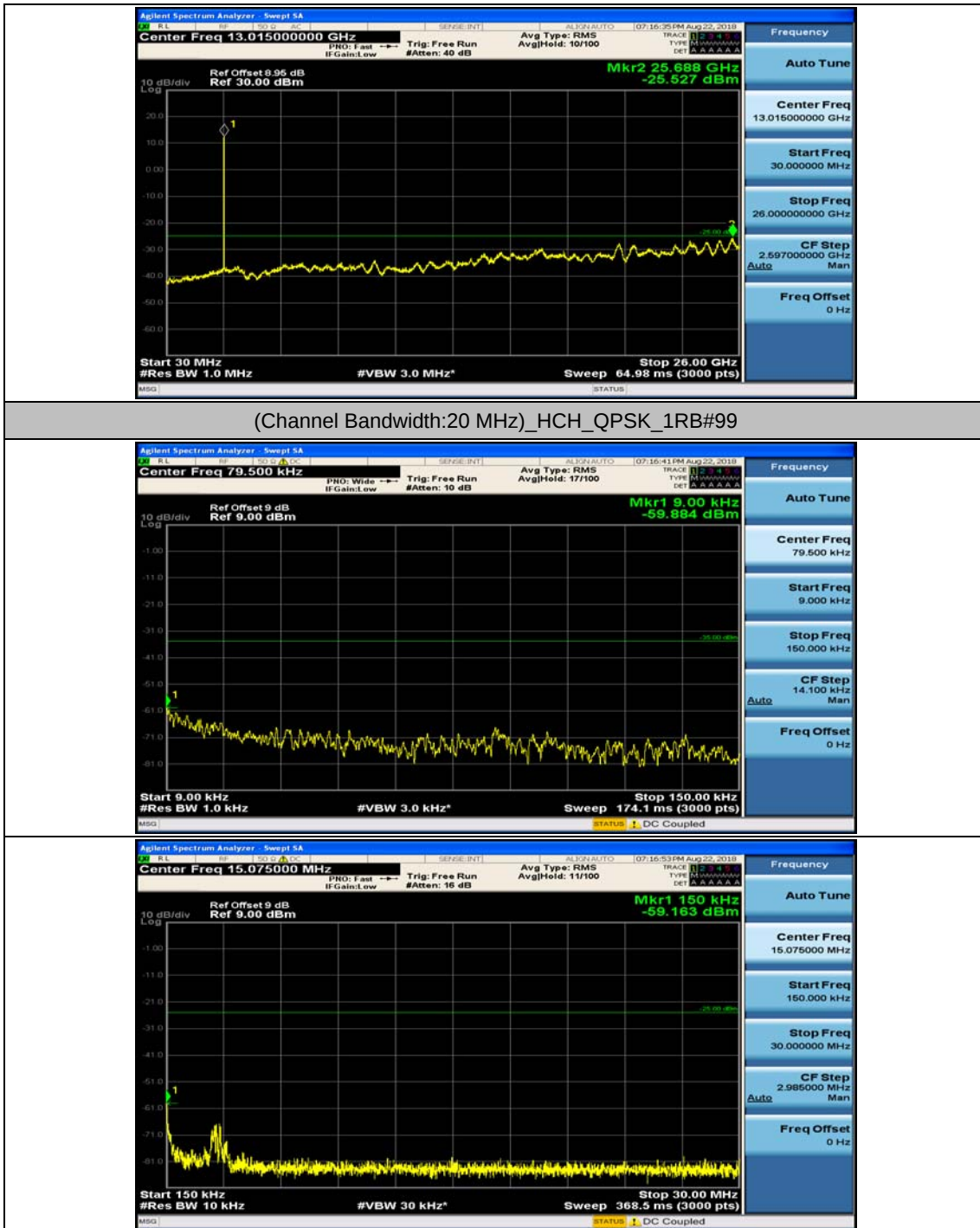




(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0



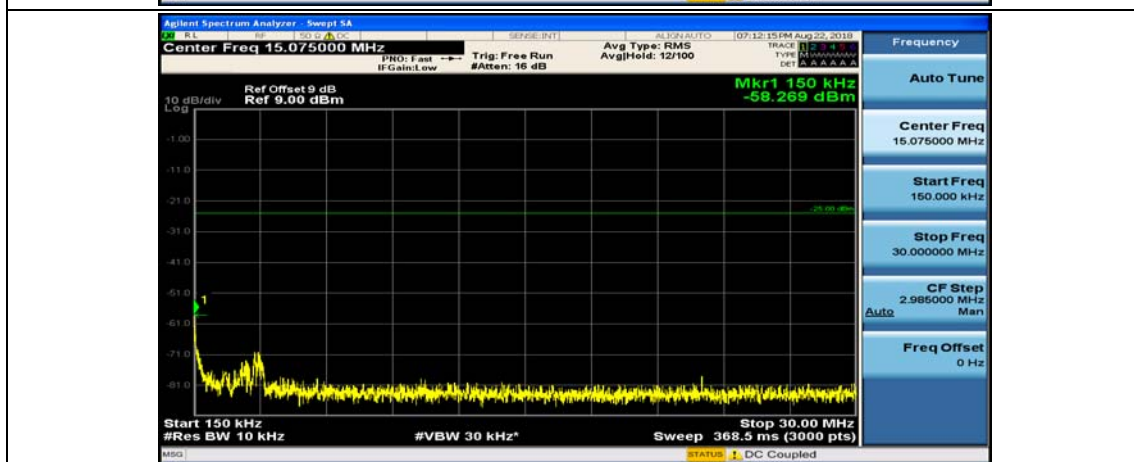
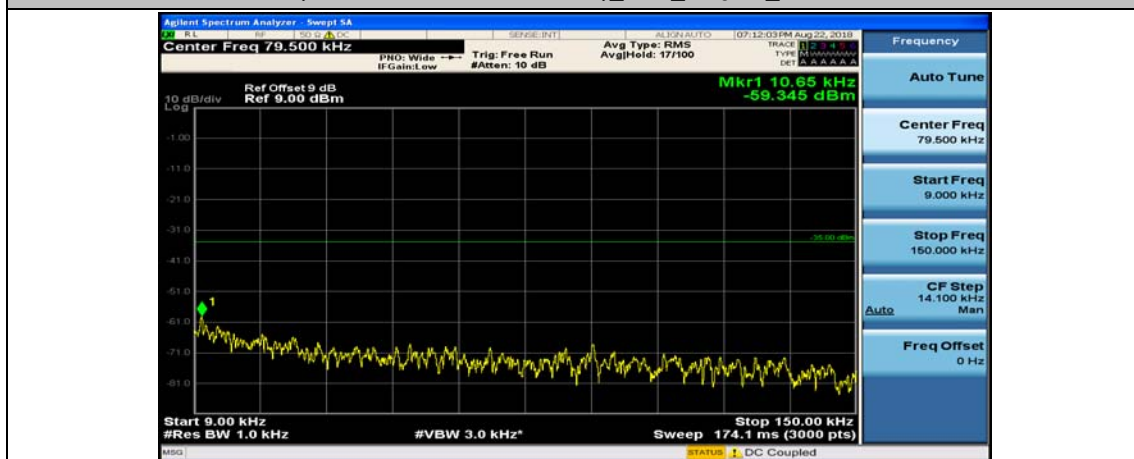


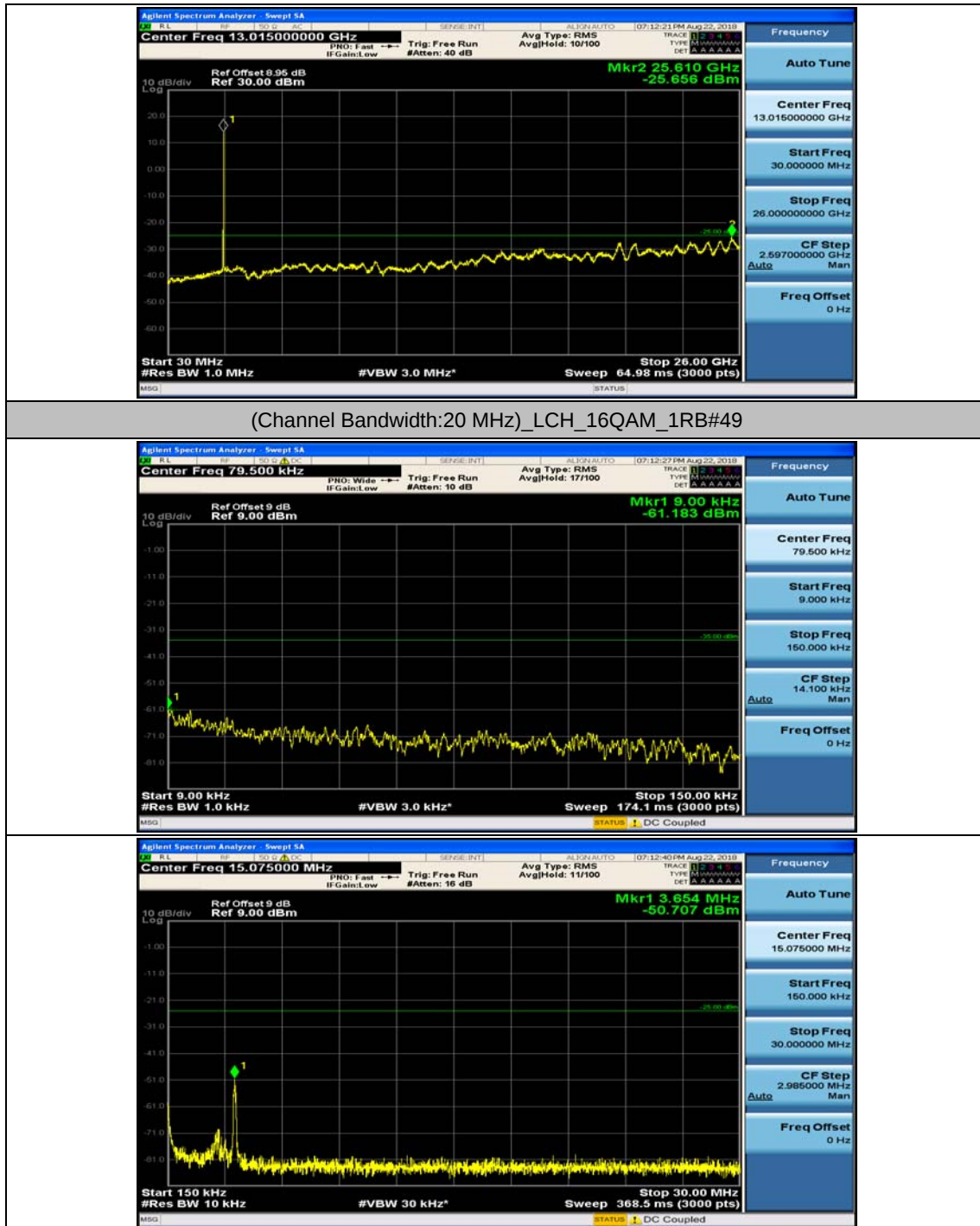


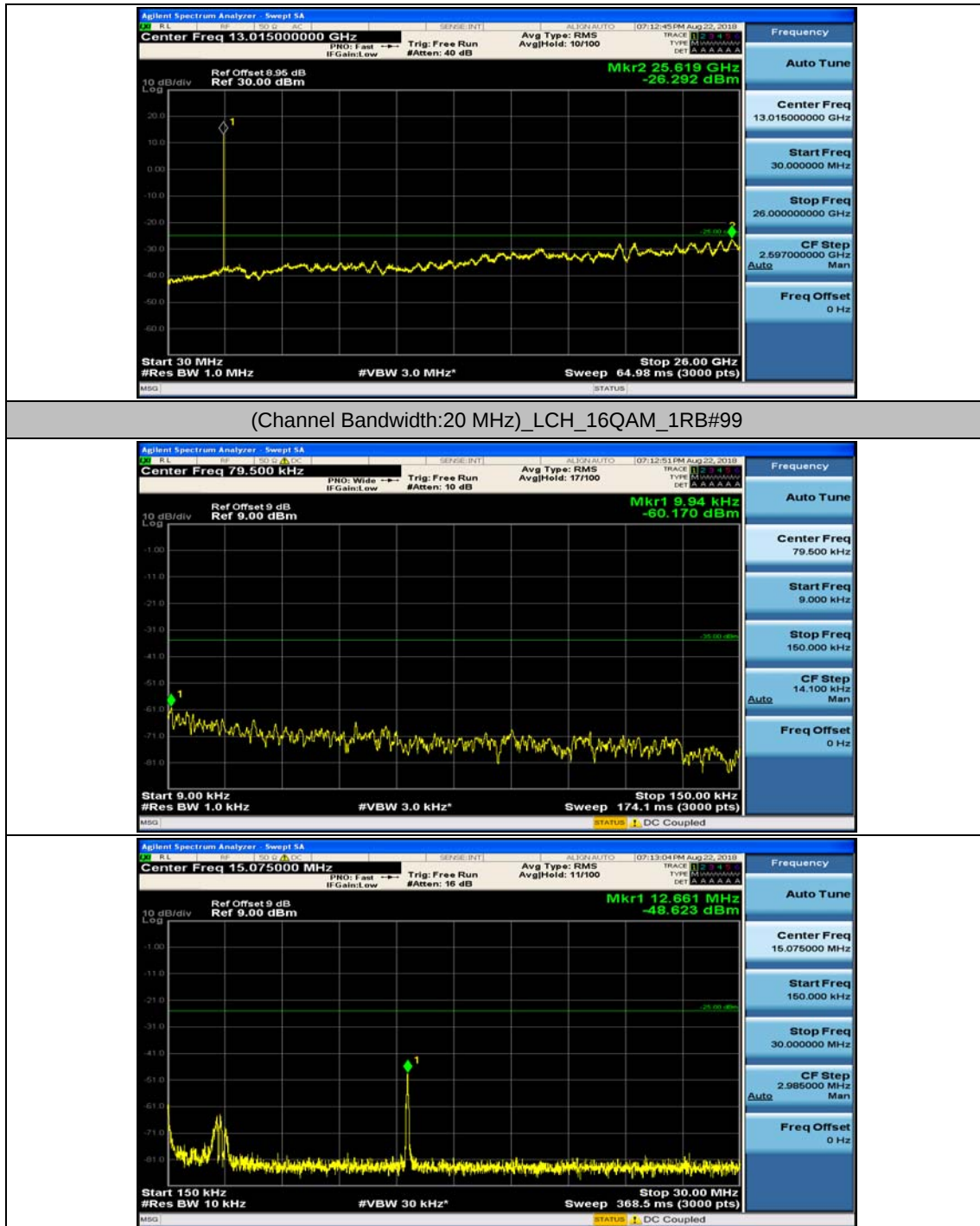
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#99



(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0



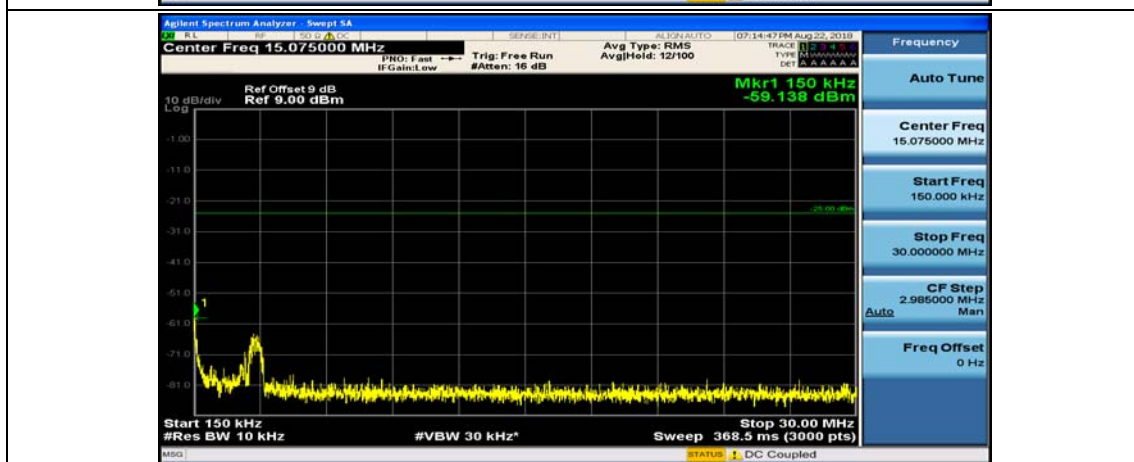
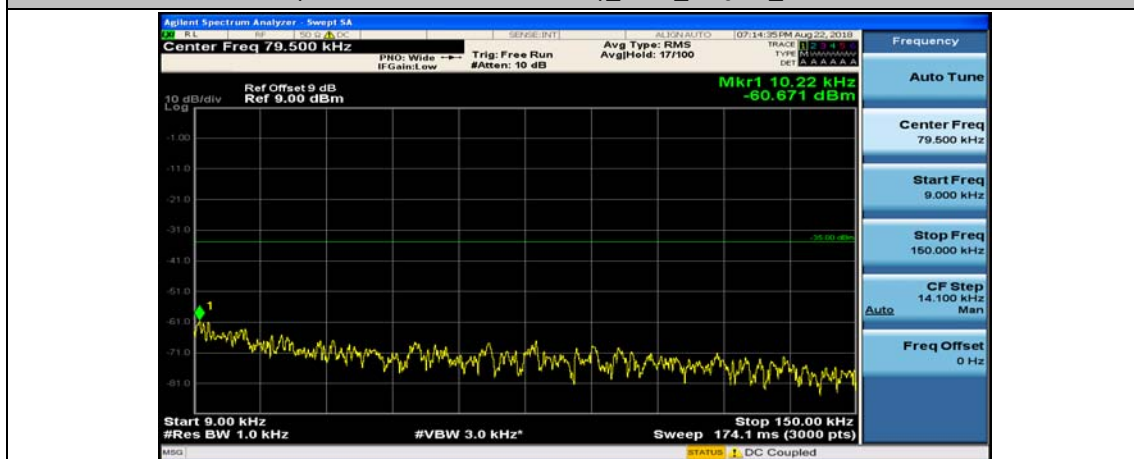


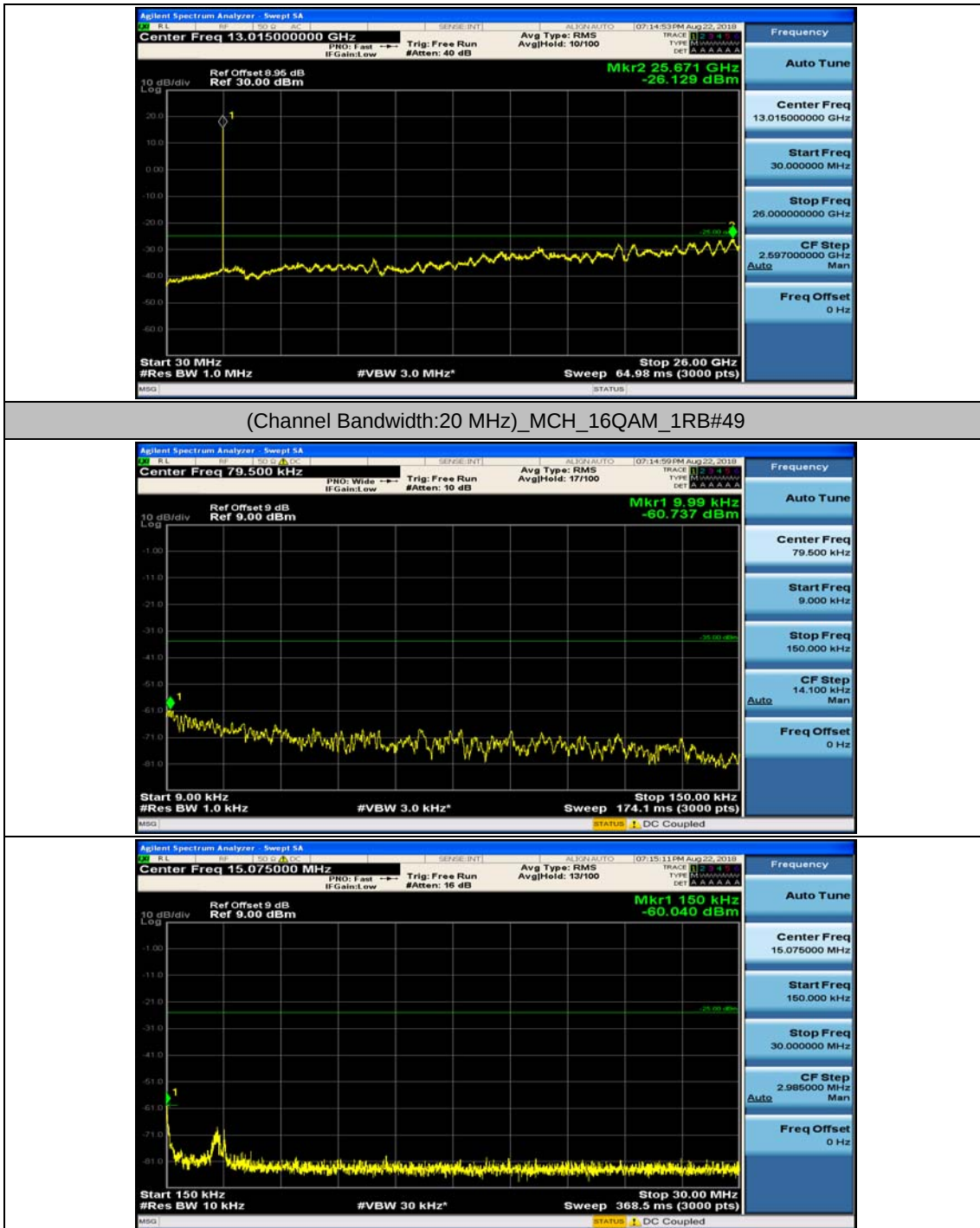


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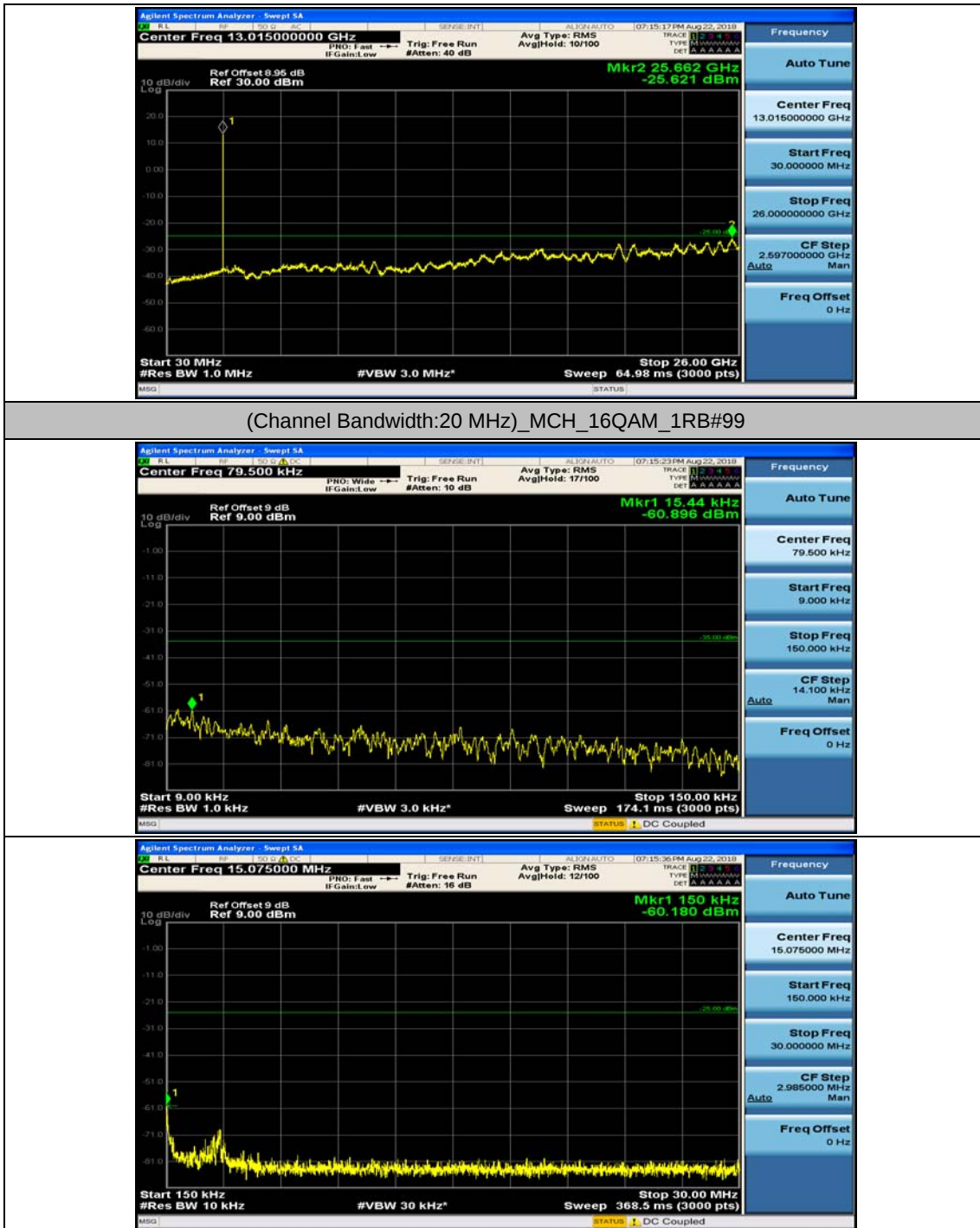


(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0





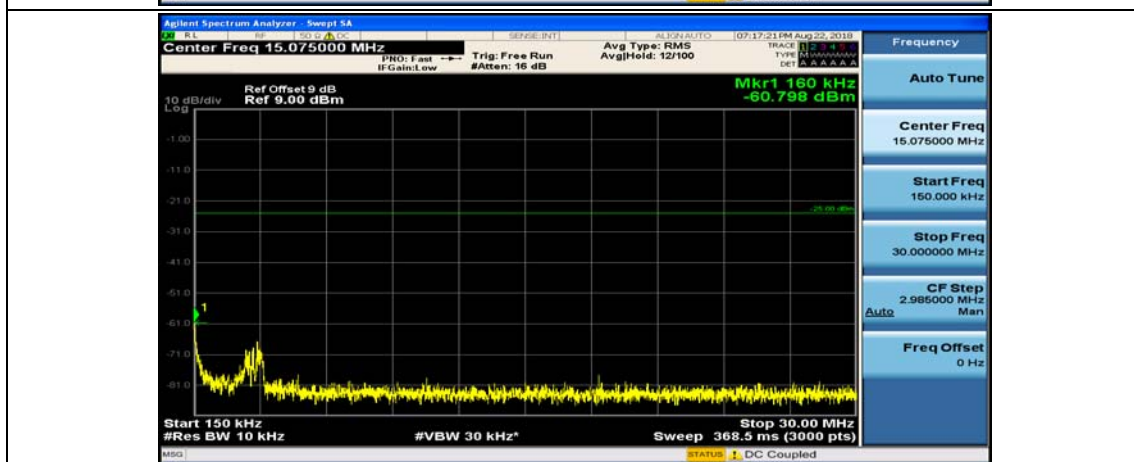
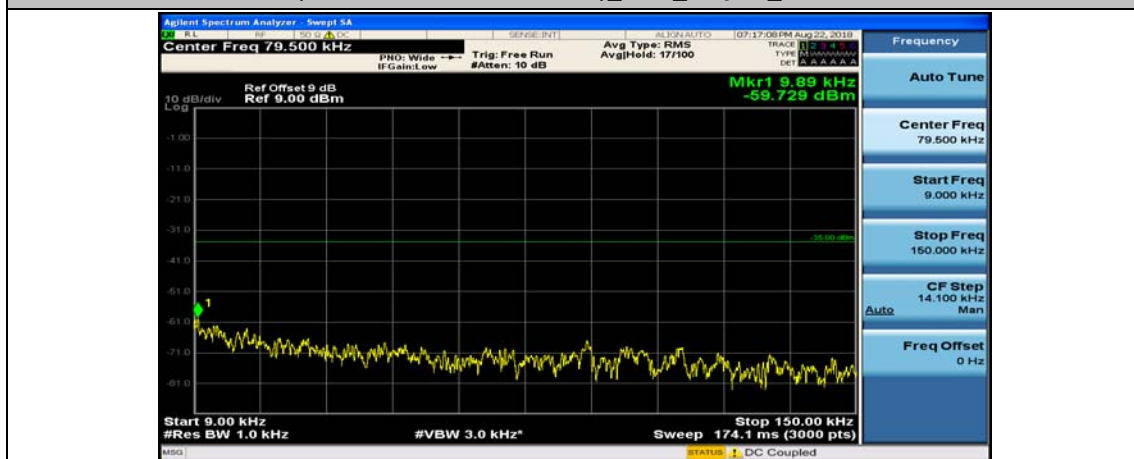
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49

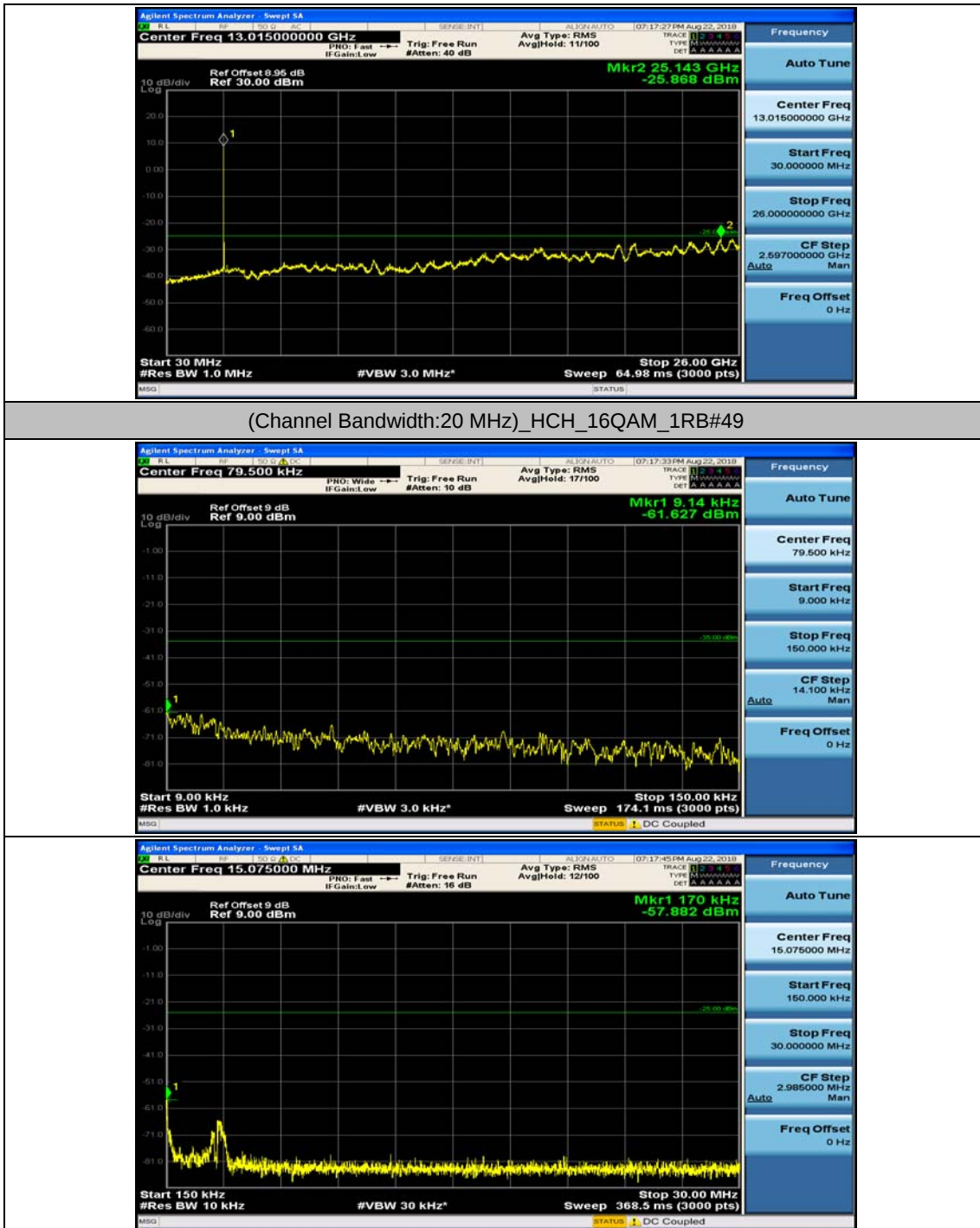


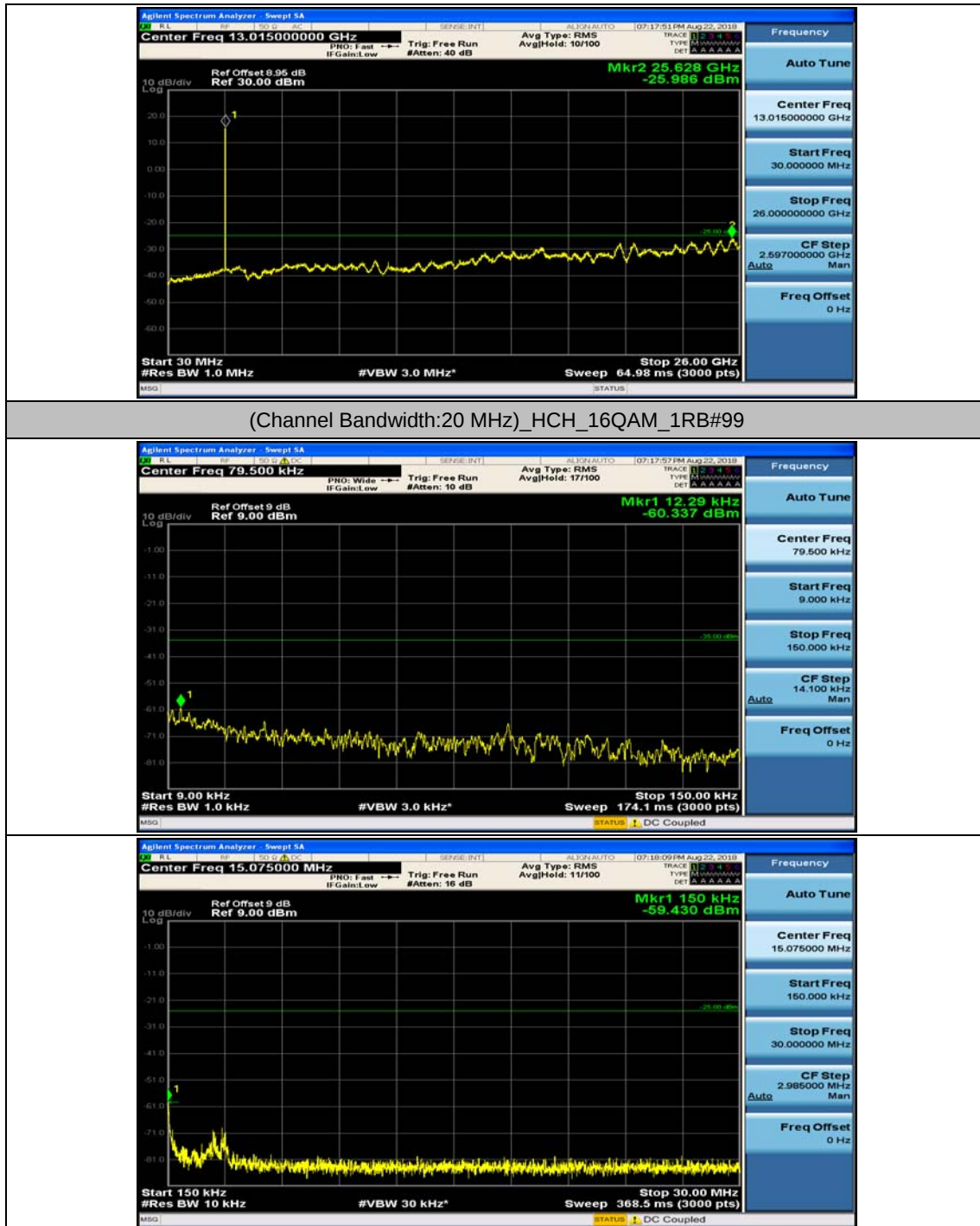
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#99



(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0









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	1.55	0.000620	± 2.5	PASS
		VN	TN	3.49	0.001397	± 2.5	PASS
		VH	TN	3.67	0.001469	± 2.5	PASS
	MCH	VL	TN	2.38	0.000918	± 2.5	PASS
		VN	TN	3.97	0.001531	± 2.5	PASS
		VH	TN	4.69	0.001809	± 2.5	PASS
	HCH	VL	TN	-0.84	-0.000313	± 2.5	PASS
		VN	TN	1.47	0.000547	± 2.5	PASS
		VH	TN	3.53	0.001313	± 2.5	PASS
16QAM	LCH	VL	TN	1.25	0.000500	± 2.5	PASS
		VN	TN	-1.1	-0.000440	± 2.5	PASS
		VH	TN	1.84	0.000736	± 2.5	PASS
	MCH	VL	TN	-0.48	-0.000185	± 2.5	PASS
		VN	TN	3.55	0.001369	± 2.5	PASS
		VH	TN	4.13	0.001593	± 2.5	PASS
	HCH	VL	TN	-0.08	-0.000030	± 2.5	PASS
		VN	TN	3.64	0.001354	± 2.5	PASS
		VH	TN	-1.55	-0.000577	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.8	0.001521	± 2.5	PASS
		VN	-20	3.25	0.001301	± 2.5	PASS
		VN	-10	-0.03	-0.000012	± 2.5	PASS
		VN	0	-0.23	-0.000092	± 2.5	PASS
		VN	10	3.8	0.001521	± 2.5	PASS
		VN	20	3.74	0.001497	± 2.5	PASS
		VN	30	2.63	0.001053	± 2.5	PASS
		VN	40	-1.09	-0.000436	± 2.5	PASS
		VN	50	1.11	0.000444	± 2.5	PASS
	MCH	VN	-30	3.44	0.001327	± 2.5	PASS
		VN	-20	-1.53	-0.000590	± 2.5	PASS

		VN	-10	1.21	0.000467	± 2.5	PASS
		VN	0	2.99	0.001153	± 2.5	PASS
		VN	10	0.59	0.000228	± 2.5	PASS
		VN	20	3.66	0.001411	± 2.5	PASS
		VN	30	2.88	0.001111	± 2.5	PASS
		VN	40	3.94	0.001519	± 2.5	PASS
		VN	50	-1.39	-0.000536	± 2.5	PASS
	HCH	VN	-30	-1.76	-0.000655	± 2.5	PASS
		VN	-20	4.73	0.001760	± 2.5	PASS
		VN	-10	0.36	0.000134	± 2.5	PASS
		VN	0	0.92	0.000342	± 2.5	PASS
		VN	10	4.39	0.001633	± 2.5	PASS
		VN	20	-0.97	-0.000361	± 2.5	PASS
		VN	30	1.78	0.000662	± 2.5	PASS
		VN	40	1.92	0.000714	± 2.5	PASS
		VN	50	-1.83	-0.000681	± 2.5	PASS
16QAM	LCH	VN	-30	0.6	0.000240	± 2.5	PASS
		VN	-20	-1.85	-0.000740	± 2.5	PASS
		VN	-10	2.28	0.000913	± 2.5	PASS
		VN	0	2.9	0.001161	± 2.5	PASS
		VN	10	3.03	0.001213	± 2.5	PASS
		VN	20	3.65	0.001461	± 2.5	PASS
		VN	30	-0.62	-0.000248	± 2.5	PASS
		VN	40	3.52	0.001409	± 2.5	PASS
		VN	50	3.85	0.001541	± 2.5	PASS
	MCH	VN	-30	4.47	0.001724	± 2.5	PASS
		VN	-20	4.76	0.001836	± 2.5	PASS
		VN	-10	4.29	0.001654	± 2.5	PASS
		VN	0	2.31	0.000891	± 2.5	PASS
		VN	10	1.45	0.000559	± 2.5	PASS
		VN	20	0.92	0.000355	± 2.5	PASS
		VN	30	0.78	0.000301	± 2.5	PASS
		VN	40	1.63	0.000629	± 2.5	PASS
		VN	50	3.12	0.001203	± 2.5	PASS
	HCH	VN	-30	0.12	0.000045	± 2.5	PASS
		VN	-20	4.69	0.001745	± 2.5	PASS
		VN	-10	4.7	0.001749	± 2.5	PASS
		VN	0	4.68	0.001741	± 2.5	PASS
		VN	10	2.05	0.000763	± 2.5	PASS
		VN	20	0.93	0.000346	± 2.5	PASS
		VN	30	2.44	0.000908	± 2.5	PASS

		VN	40	4.35	0.001619	± 2.5	PASS
		VN	50	-11.63	-0.004327	± 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	4.56	0.001823	± 2.5	PASS
		VN	TN	0.5	0.000200	± 2.5	PASS
		VH	TN	-1.91	-0.000764	± 2.5	PASS
	MCH	VL	TN	-0.36	-0.000139	± 2.5	PASS
		VN	TN	3.97	0.001531	± 2.5	PASS
		VH	TN	3.13	0.001207	± 2.5	PASS
	HCH	VL	TN	2.71	0.001009	± 2.5	PASS
		VN	TN	0.66	0.000246	± 2.5	PASS
		VH	TN	2.16	0.000804	± 2.5	PASS
16QAM	LCH	VL	TN	-0.67	-0.000268	± 2.5	PASS
		VN	TN	-1.94	-0.000776	± 2.5	PASS
		VH	TN	-0.71	-0.000284	± 2.5	PASS
	MCH	VL	TN	3.7	0.001427	± 2.5	PASS
		VN	TN	2.52	0.000972	± 2.5	PASS
		VH	TN	3.33	0.001284	± 2.5	PASS
	HCH	VL	TN	3.8	0.001415	± 2.5	PASS
		VN	TN	3.91	0.001456	± 2.5	PASS
		VH	TN	0.23	0.000086	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	0.84	0.000336	± 2.5	PASS
		VN	-20	0.01	0.000004	± 2.5	PASS
		VN	-10	1.17	0.000468	± 2.5	PASS
		VN	0	-1.58	-0.000632	± 2.5	PASS
		VN	10	3.93	0.001571	± 2.5	PASS
		VN	20	4.06	0.001623	± 2.5	PASS
		VN	30	2.05	0.000820	± 2.5	PASS
		VN	40	0.51	0.000204	± 2.5	PASS
		VN	50	1.63	0.000652	± 2.5	PASS
	MCH	VN	-30	2.41	0.000929	± 2.5	PASS
		VN	-20	0.08	0.000031	± 2.5	PASS
		VN	-10	4.55	0.001755	± 2.5	PASS

		VN	0	4.28	0.001651	± 2.5	PASS
		VN	10	4.81	0.001855	± 2.5	PASS
		VN	20	4.58	0.001766	± 2.5	PASS
		VN	30	-0.85	-0.000328	± 2.5	PASS
		VN	40	1.74	0.000671	± 2.5	PASS
		VN	50	0.21	0.000081	± 2.5	PASS
	HCH	VN	-30	4.95	0.001844	± 2.5	PASS
		VN	-20	1.83	0.000682	± 2.5	PASS
		VN	-10	-1.77	-0.000659	± 2.5	PASS
		VN	0	0.06	0.000022	± 2.5	PASS
		VN	10	0.96	0.000358	± 2.5	PASS
		VN	20	1.13	0.000421	± 2.5	PASS
		VN	30	-1.76	-0.000655	± 2.5	PASS
		VN	40	2.82	0.001050	± 2.5	PASS
		VN	50	0.57	0.000212	± 2.5	PASS
QPSK	LCH	VN	-30	0.47	0.000188	± 2.5	PASS
		VN	-20	2.63	0.001052	± 2.5	PASS
		VN	-10	2.71	0.001084	± 2.5	PASS
		VN	0	1.06	0.000424	± 2.5	PASS
		VN	10	4.41	0.001763	± 2.5	PASS
		VN	20	4.62	0.001847	± 2.5	PASS
		VN	30	4.36	0.001743	± 2.5	PASS
		VN	40	-1.89	-0.000756	± 2.5	PASS
		VN	50	-0.83	-0.000332	± 2.5	PASS
	MCH	VN	-30	1.95	0.000752	± 2.5	PASS
		VN	-20	1.01	0.000390	± 2.5	PASS
		VN	-10	-1.75	-0.000675	± 2.5	PASS
		VN	0	1.37	0.000528	± 2.5	PASS
		VN	10	-0.2	-0.000077	± 2.5	PASS
		VN	20	2.22	0.000856	± 2.5	PASS
		VN	30	-1.4	-0.000540	± 2.5	PASS
		VN	40	4.75	0.001832	± 2.5	PASS
		VN	50	3.31	0.001277	± 2.5	PASS
	HCH	VN	-30	4.69	0.001747	± 2.5	PASS
		VN	-20	1.24	0.000462	± 2.5	PASS
		VN	-10	0.13	0.000048	± 2.5	PASS
		VN	0	4.38	0.001631	± 2.5	PASS
		VN	10	3.45	0.001285	± 2.5	PASS
		VN	20	4.64	0.001728	± 2.5	PASS
		VN	30	3.73	0.001389	± 2.5	PASS
		VN	40	4.36	0.001624	± 2.5	PASS

		VN	50	-11.63	-0.004331	± 2.5	PASS
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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	1.74	0.000695	± 2.5	PASS
		VN	TN	4.61	0.001841	± 2.5	PASS
		VH	TN	-0.2	-0.000080	± 2.5	PASS
	MCH	VL	TN	-1.63	-0.000629	± 2.5	PASS
		VN	TN	2.18	0.000841	± 2.5	PASS
		VH	TN	-0.7	-0.000270	± 2.5	PASS
	HCH	VL	TN	2.86	0.001066	± 2.5	PASS
		VN	TN	1.86	0.000693	± 2.5	PASS
		VH	TN	1.92	0.000716	± 2.5	PASS
16QAM	LCH	VL	TN	1.65	0.000659	± 2.5	PASS
		VN	TN	2.24	0.000895	± 2.5	PASS
		VH	TN	2.65	0.001059	± 2.5	PASS
	MCH	VL	TN	0.02	0.000008	± 2.5	PASS
		VN	TN	3.08	0.001188	± 2.5	PASS
		VH	TN	3.88	0.001496	± 2.5	PASS
	HCH	VL	TN	1.75	0.000652	± 2.5	PASS
		VN	TN	-0.77	-0.000287	± 2.5	PASS
		VH	TN	4.2	0.001566	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.32	-0.000128	± 2.5	PASS
		VN	-20	3.36	0.001342	± 2.5	PASS
		VN	-10	1.89	0.000755	± 2.5	PASS
		VN	0	0.08	0.000032	± 2.5	PASS
		VN	10	2.75	0.001098	± 2.5	PASS
		VN	20	1.28	0.000511	± 2.5	PASS
		VN	30	3.23	0.001290	± 2.5	PASS
		VN	40	2.48	0.000991	± 2.5	PASS
		VN	50	4.52	0.001805	± 2.5	PASS
	MCH	VN	-30	0.01	0.000004	± 2.5	PASS
		VN	-20	0.39	0.000150	± 2.5	PASS
		VN	-10	1.53	0.000590	± 2.5	PASS
		VN	0	0.5	0.000193	± 2.5	PASS

		VN	10	0.57	0.000220	± 2.5	PASS
		VN	20	3.24	0.001250	± 2.5	PASS
		VN	30	-1.43	-0.000551	± 2.5	PASS
		VN	40	1.11	0.000428	± 2.5	PASS
		VN	50	1.59	0.000613	± 2.5	PASS
	HCH	VN	-30	1.49	0.000555	± 2.5	PASS
		VN	-20	0.3	0.000112	± 2.5	PASS
		VN	-10	3.22	0.001200	± 2.5	PASS
		VN	0	1.43	0.000533	± 2.5	PASS
		VN	10	3.17	0.001182	± 2.5	PASS
		VN	20	3.8	0.001417	± 2.5	PASS
		VN	30	1.66	0.000619	± 2.5	PASS
		VN	40	1.79	0.000667	± 2.5	PASS
		VN	50	0.73	0.000272	± 2.5	PASS
16QAM	LCH	VN	-30	2.07	0.000827	± 2.5	PASS
		VN	-20	-0.06	-0.000024	± 2.5	PASS
		VN	-10	-1.06	-0.000423	± 2.5	PASS
		VN	0	3.87	0.001546	± 2.5	PASS
		VN	10	3.22	0.001286	± 2.5	PASS
		VN	20	4.95	0.001977	± 2.5	PASS
		VN	30	-1.9	-0.000759	± 2.5	PASS
		VN	40	1	0.000399	± 2.5	PASS
		VN	50	4.08	0.001630	± 2.5	PASS
	MCH	VN	-30	3.55	0.001369	± 2.5	PASS
		VN	-20	-1.68	-0.000648	± 2.5	PASS
		VN	-10	1.01	0.000390	± 2.5	PASS
		VN	0	4.33	0.001670	± 2.5	PASS
		VN	10	2.88	0.001111	± 2.5	PASS
		VN	20	4.64	0.001789	± 2.5	PASS
		VN	30	-1.81	-0.000698	± 2.5	PASS
		VN	40	1.41	0.000544	± 2.5	PASS
		VN	50	3.21	0.001238	± 2.5	PASS
	HCH	VN	-30	-0.04	-0.000015	± 2.5	PASS
		VN	-20	-1.37	-0.000511	± 2.5	PASS
		VN	-10	4.36	0.001625	± 2.5	PASS
		VN	0	-0.51	-0.000190	± 2.5	PASS
		VN	10	3.02	0.001126	± 2.5	PASS
		VN	20	2.99	0.001115	± 2.5	PASS
		VN	30	0.15	0.000056	± 2.5	PASS
		VN	40	4.82	0.001797	± 2.5	PASS
		VN	50	-11.63	-0.004336	± 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	-1.94	-0.000774	± 2.5	PASS
		VN	TN	-1.72	-0.000686	± 2.5	PASS
		VH	TN	1.1	0.000424	± 2.5	PASS
	MCH	VL	TN	0.92	0.000355	± 2.5	PASS
		VN	TN	4.5	0.001735	± 2.5	PASS
		VH	TN	-1.51	-0.000563	± 2.5	PASS
	HCH	VL	TN	0.76	0.000284	± 2.5	PASS
		VN	TN	-1.73	-0.000646	± 2.5	PASS
		VH	TN	3.53	0.001409	± 2.5	PASS
16QAM	LCH	VL	TN	-1.7	-0.000678	± 2.5	PASS
		VN	TN	4.46	0.001780	± 2.5	PASS
		VH	TN	1.5	0.000578	± 2.5	PASS
	MCH	VL	TN	1.53	0.000590	± 2.5	PASS
		VN	TN	0.96	0.000370	± 2.5	PASS
		VH	TN	4.82	0.001799	± 2.5	PASS
	HCH	VL	TN	-1.61	-0.000601	± 2.5	PASS
		VN	TN	4.54	0.001694	± 2.5	PASS
		VH	TN	-1.94	-0.000774	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.02	0.001604	± 2.5	PASS
		VN	-20	4.03	0.001608	± 2.5	PASS
		VN	-10	3.31	0.001321	± 2.5	PASS
		VN	0	1.48	0.000591	± 2.5	PASS
		VN	10	-0.36	-0.000144	± 2.5	PASS
		VN	20	4.48	0.001788	± 2.5	PASS
		VN	30	4.07	0.001624	± 2.5	PASS
		VN	40	-0.38	-0.000152	± 2.5	PASS
		VN	50	-0.7	-0.000279	± 2.5	PASS
	MCH	VN	-30	-0.01	-0.000004	± 2.5	PASS
		VN	-20	1.74	0.000671	± 2.5	PASS
		VN	-10	2.95	0.001138	± 2.5	PASS
		VN	0	0.53	0.000204	± 2.5	PASS
		VN	10	4.86	0.001874	± 2.5	PASS
		VN	20	4.19	0.001616	± 2.5	PASS

		VN	30	2.73	0.001053	± 2.5	PASS
		VN	40	-0.71	-0.000274	± 2.5	PASS
		VN	50	-0.59	-0.000228	± 2.5	PASS
	HCH	VN	-30	2.93	0.001093	± 2.5	PASS
		VN	-20	2.56	0.000955	± 2.5	PASS
		VN	-10	2.06	0.000769	± 2.5	PASS
		VN	0	1.35	0.000504	± 2.5	PASS
		VN	10	3.67	0.001369	± 2.5	PASS
		VN	20	-0.82	-0.000306	± 2.5	PASS
		VN	30	3.63	0.001354	± 2.5	PASS
		VN	40	1.19	0.000444	± 2.5	PASS
		VN	50	4.58	0.001709	± 2.5	PASS
16QAM	LCH	VN	-30	1.2	0.000479	± 2.5	PASS
		VN	-20	-1.66	-0.000662	± 2.5	PASS
		VN	-10	3.29	0.001313	± 2.5	PASS
		VN	0	1.32	0.000527	± 2.5	PASS
		VN	10	-1.57	-0.000626	± 2.5	PASS
		VN	20	3.33	0.001329	± 2.5	PASS
		VN	30	-0.53	-0.000211	± 2.5	PASS
		VN	40	4.9	0.001955	± 2.5	PASS
		VN	50	0.34	0.000136	± 2.5	PASS
	MCH	VN	-30	2.55	0.000983	± 2.5	PASS
		VN	-20	-1.32	-0.000509	± 2.5	PASS
		VN	-10	-0.89	-0.000343	± 2.5	PASS
		VN	0	0.51	0.000197	± 2.5	PASS
		VN	10	4.43	0.001708	± 2.5	PASS
		VN	20	0.58	0.000224	± 2.5	PASS
		VN	30	3.67	0.001415	± 2.5	PASS
		VN	40	-1.6	-0.000617	± 2.5	PASS
		VN	50	4.73	0.001824	± 2.5	PASS
	HCH	VN	-30	-0.48	-0.000179	± 2.5	PASS
		VN	-20	2.68	0.001000	± 2.5	PASS
		VN	-10	-0.49	-0.000183	± 2.5	PASS
		VN	0	1.43	0.000534	± 2.5	PASS
		VN	10	-0.99	-0.000369	± 2.5	PASS
		VN	20	-0.3	-0.000112	± 2.5	PASS
		VN	30	3.56	0.001328	± 2.5	PASS
		VN	40	-1.67	-0.000623	± 2.5	PASS
		VN	50	-11.63	-0.004340	± 2.5	PASS