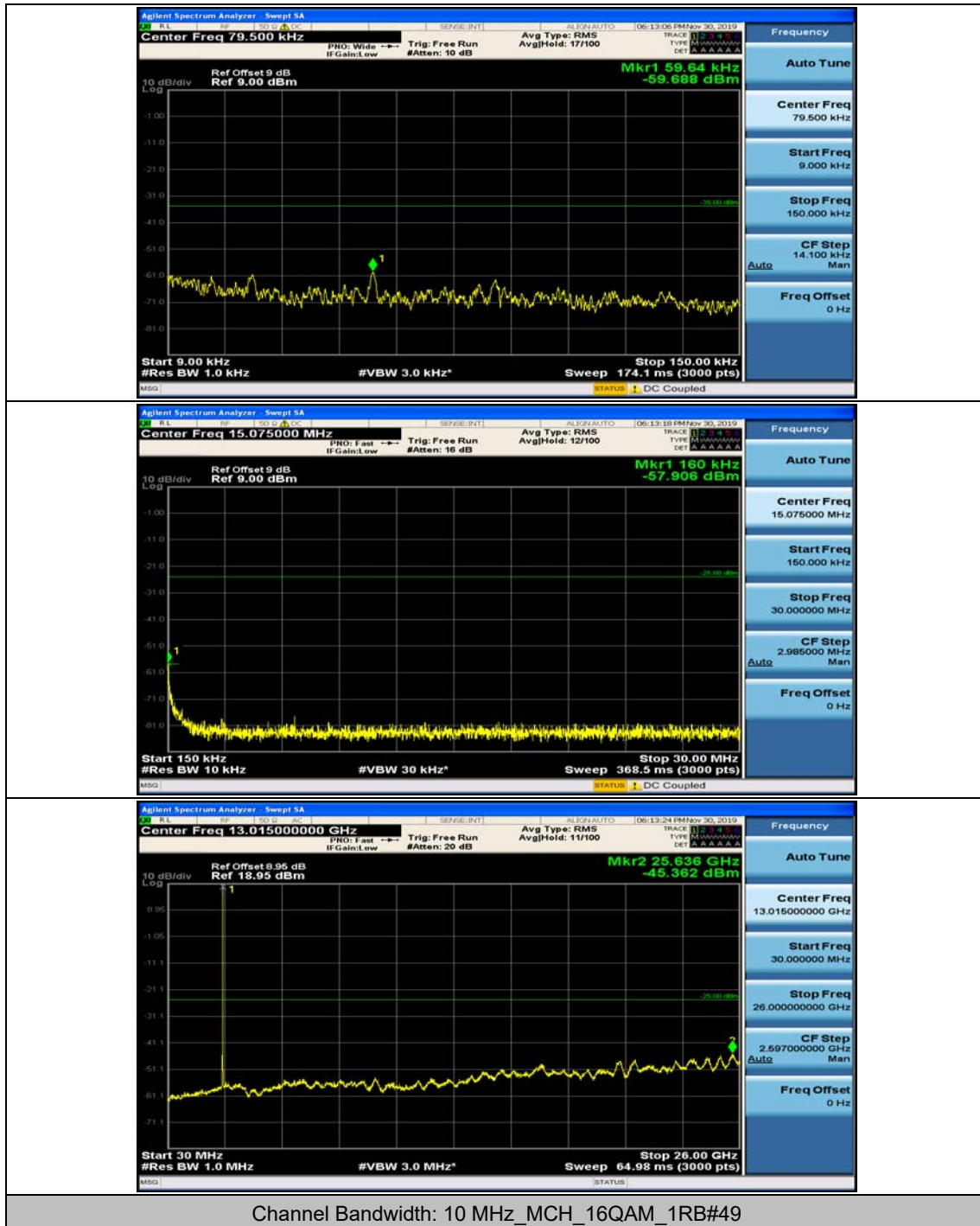
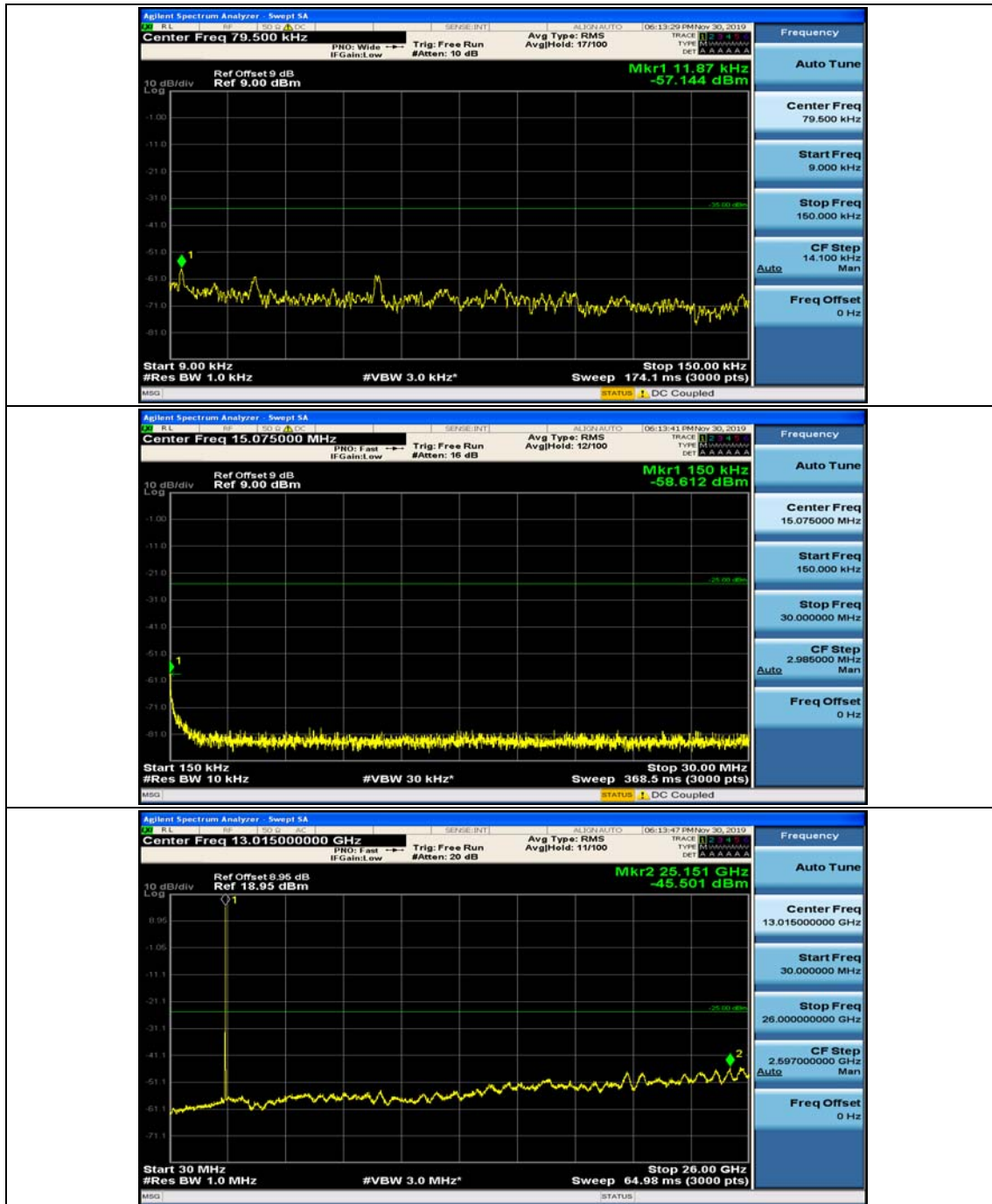
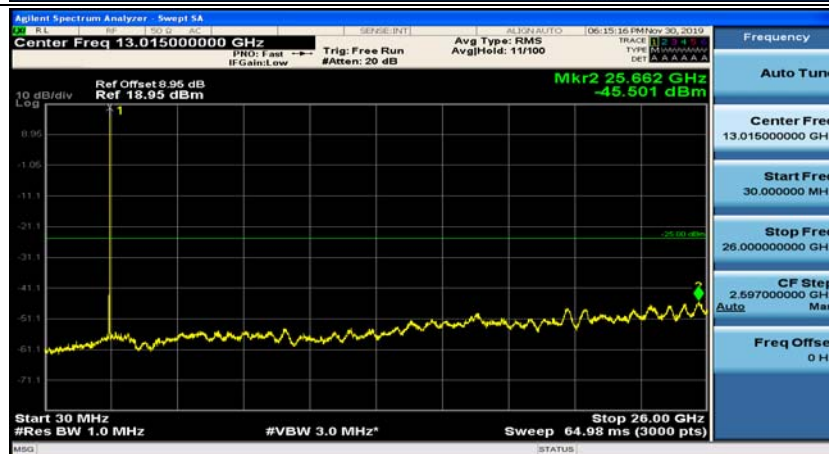
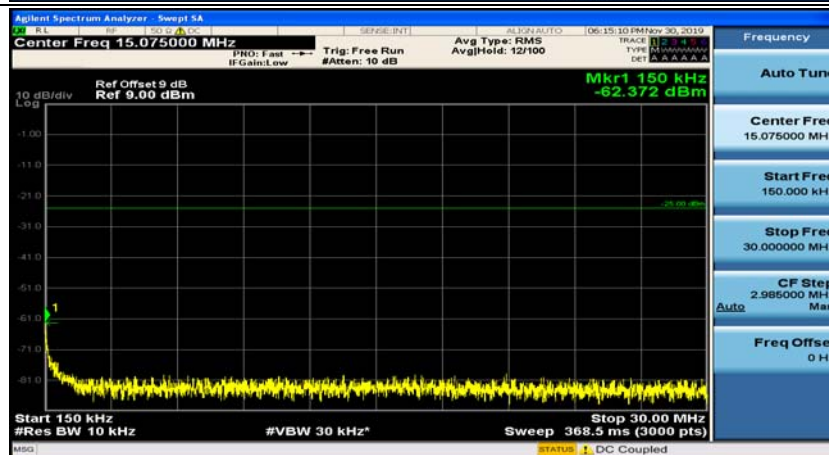
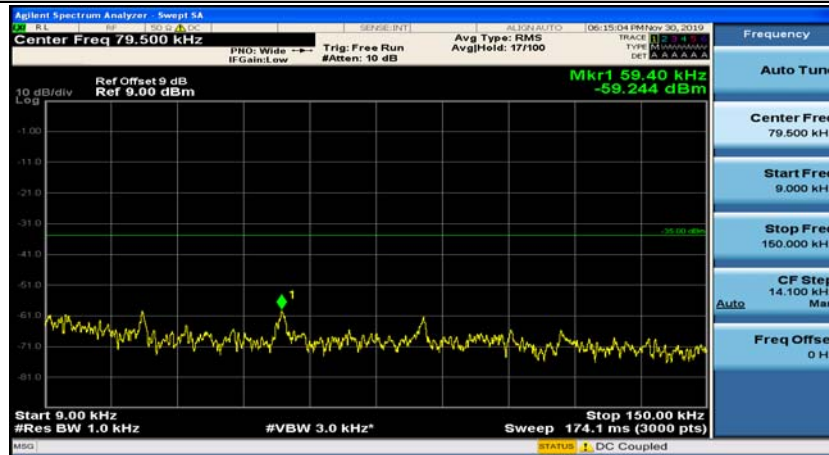


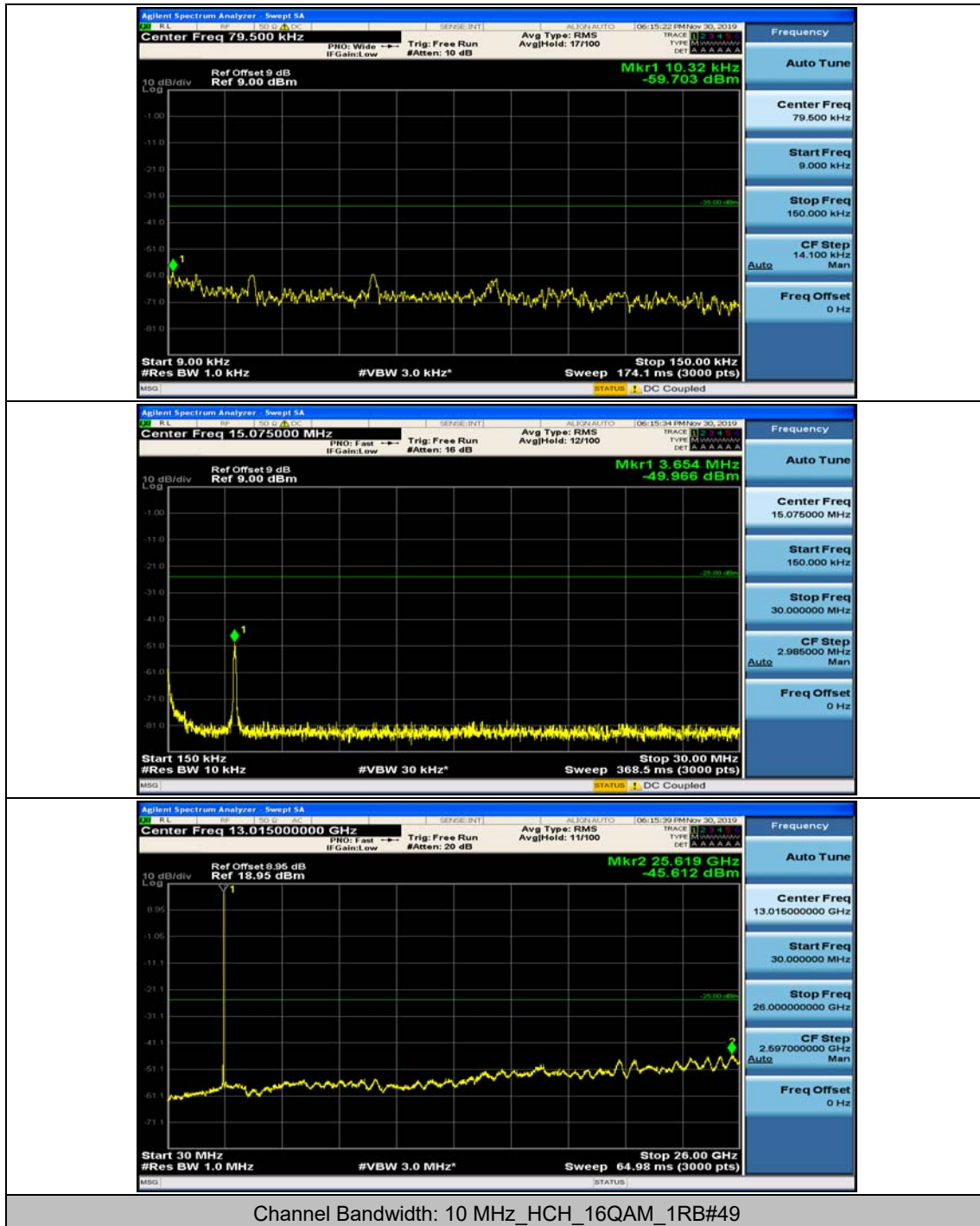


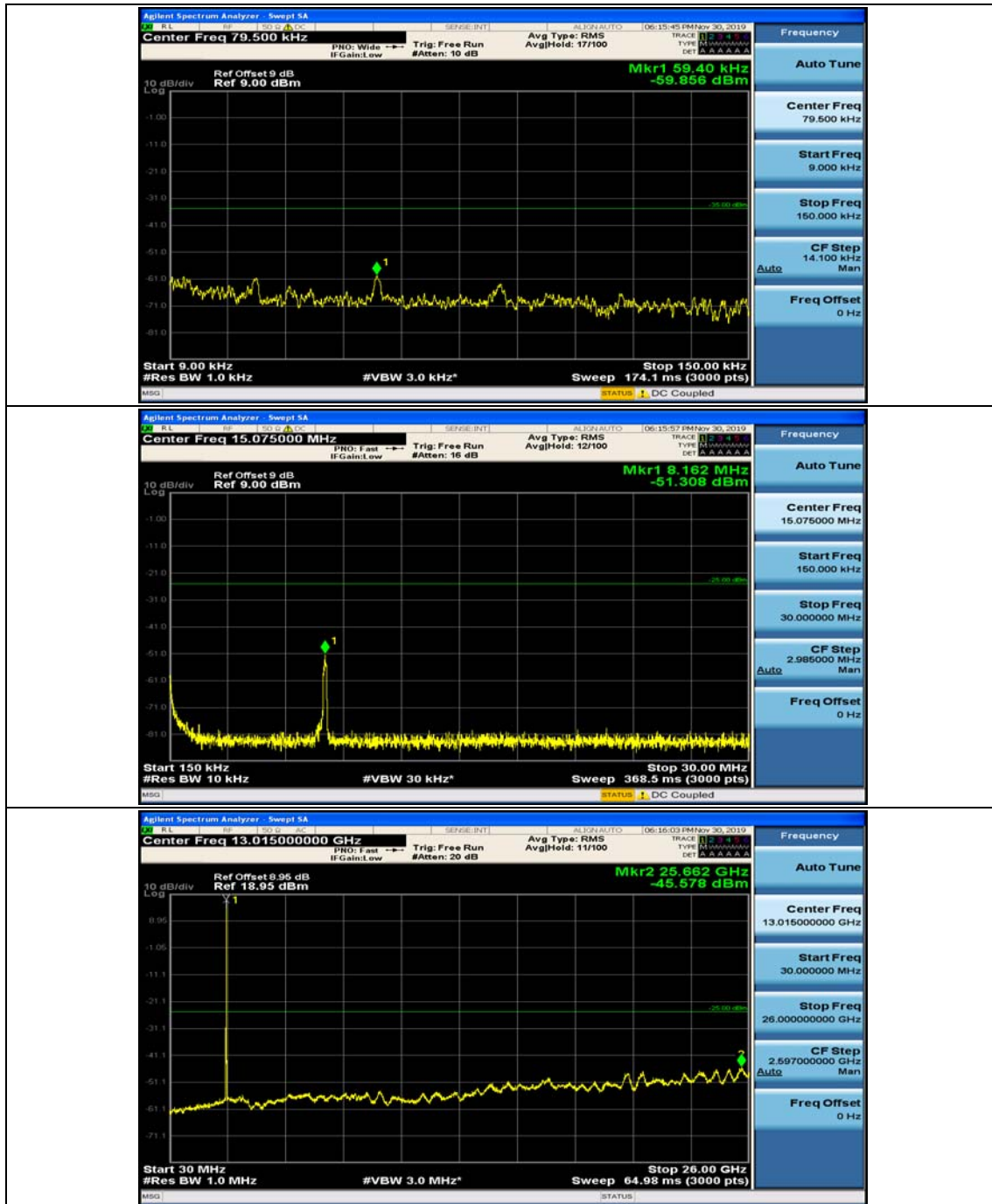


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0

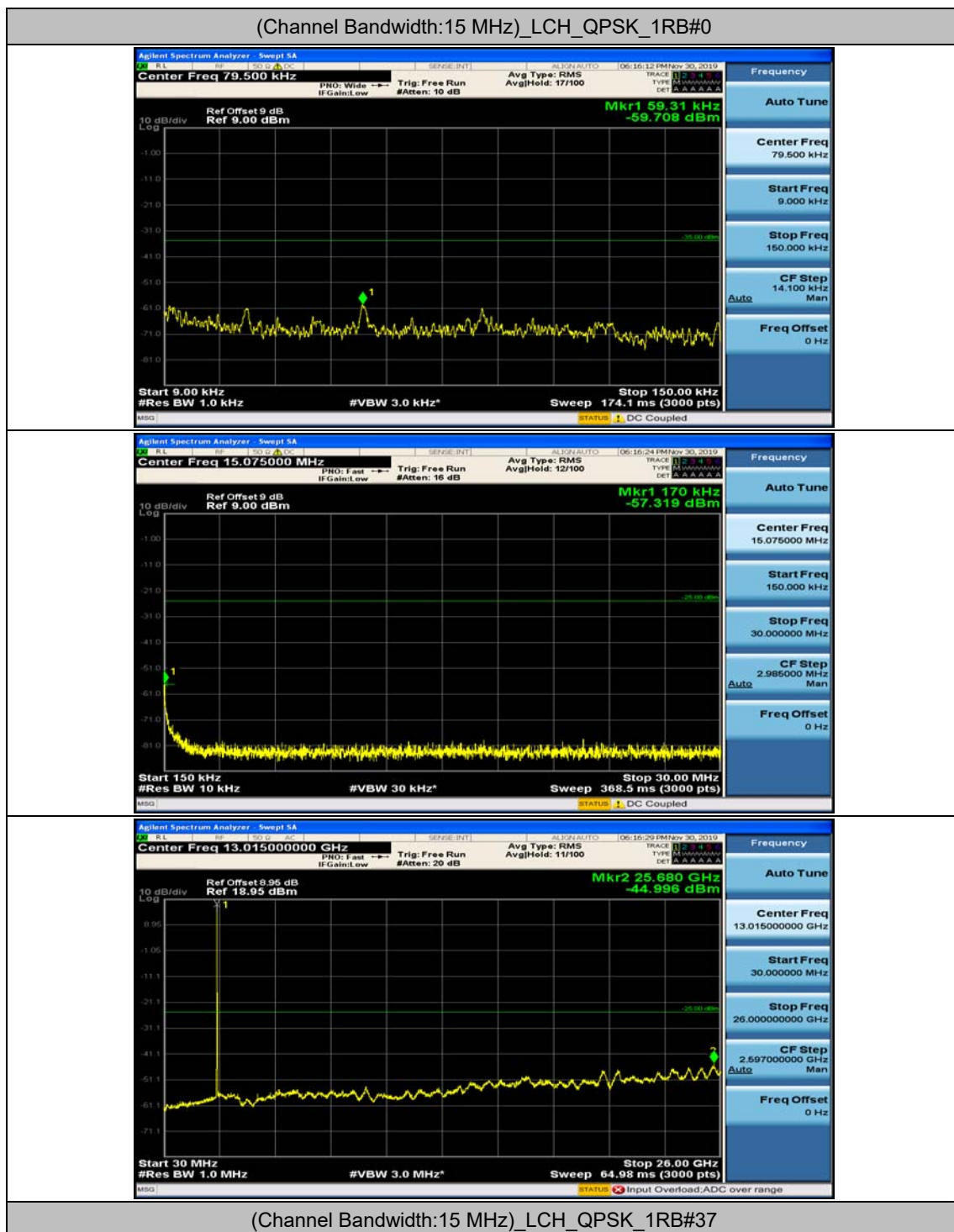


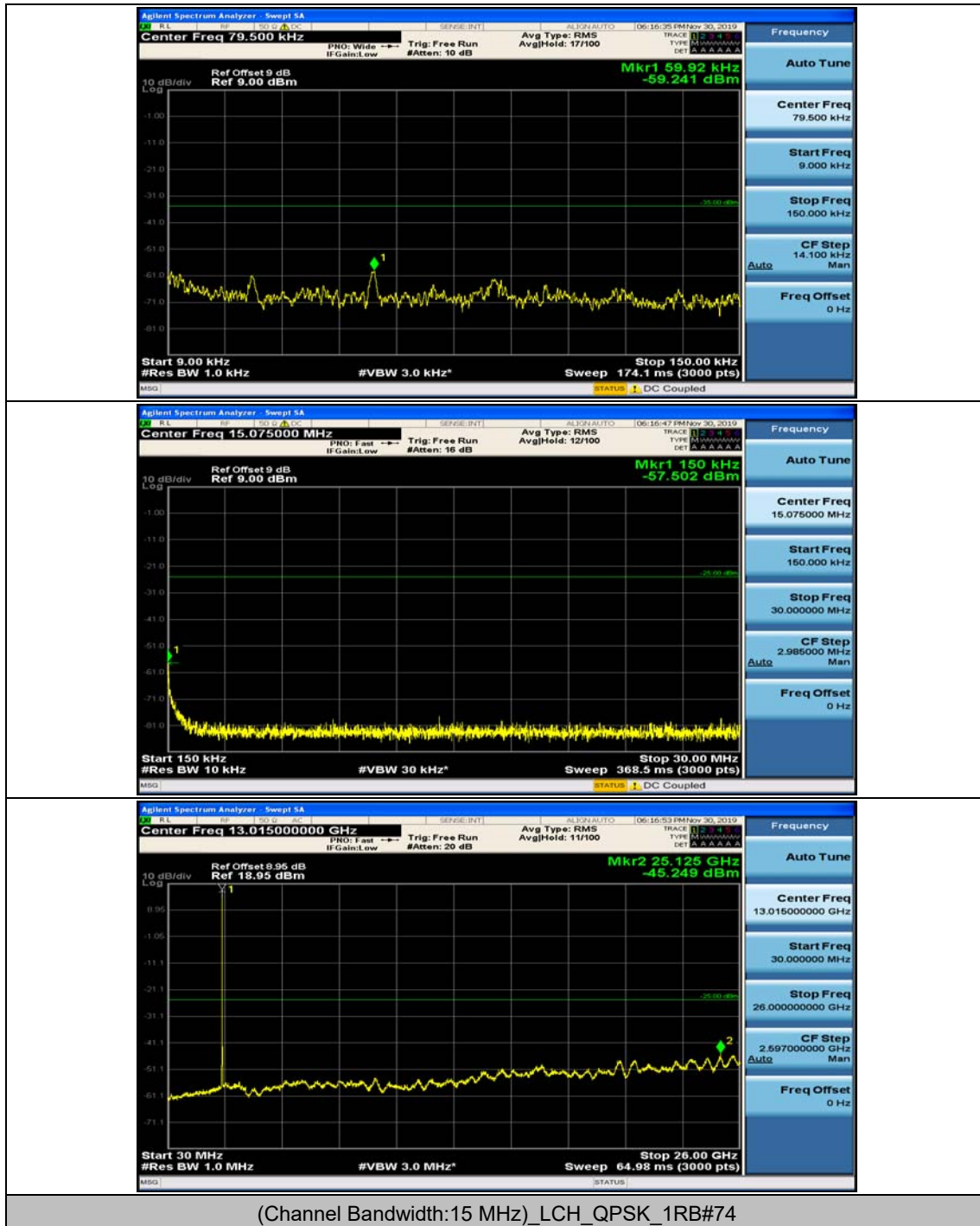
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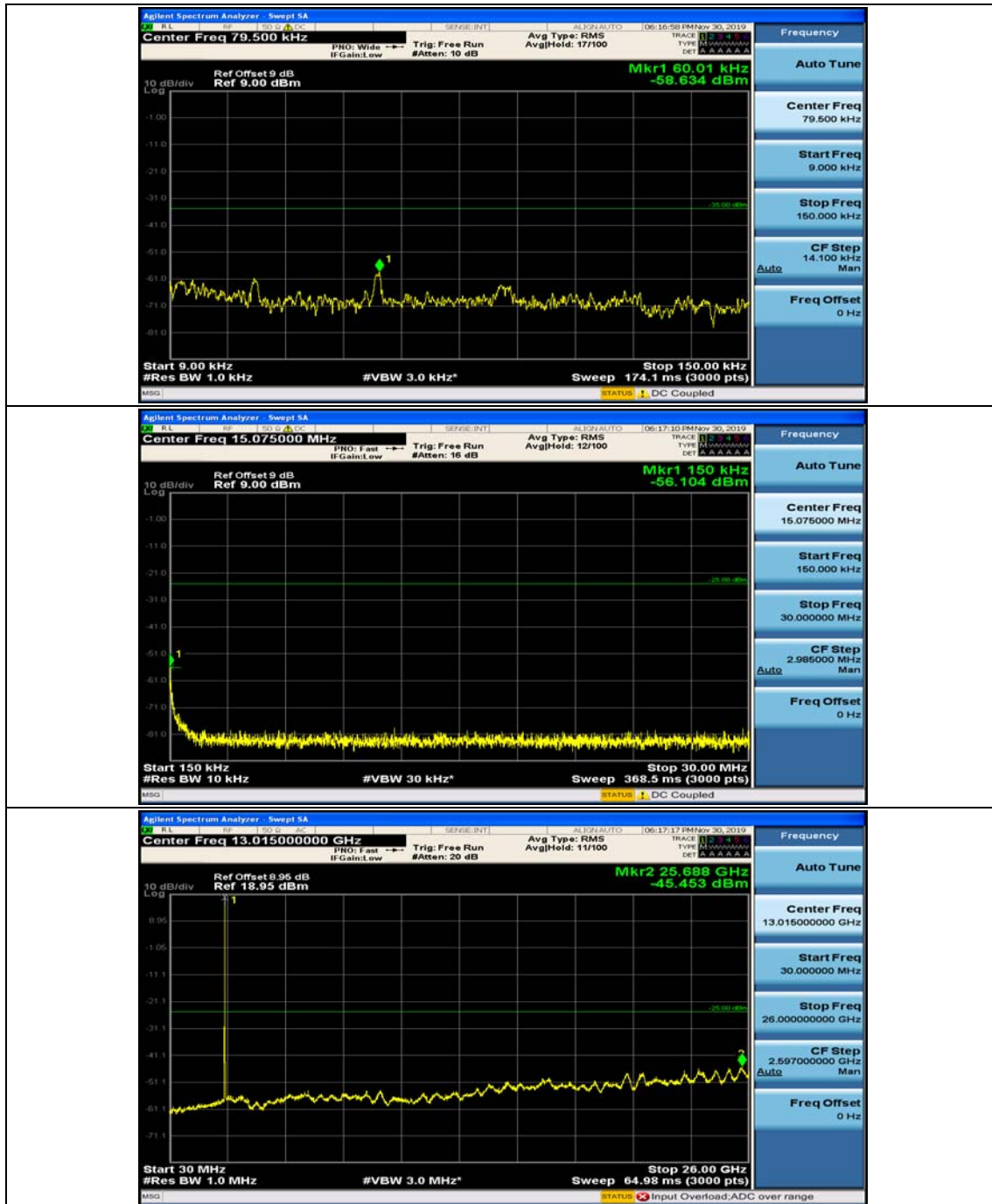




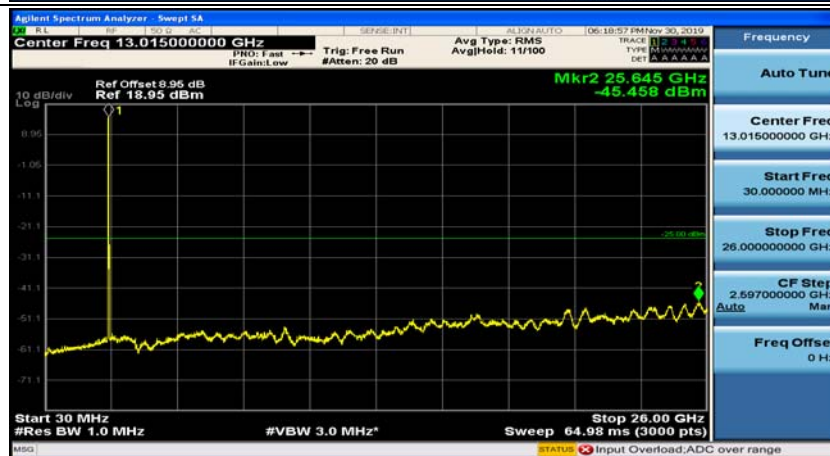
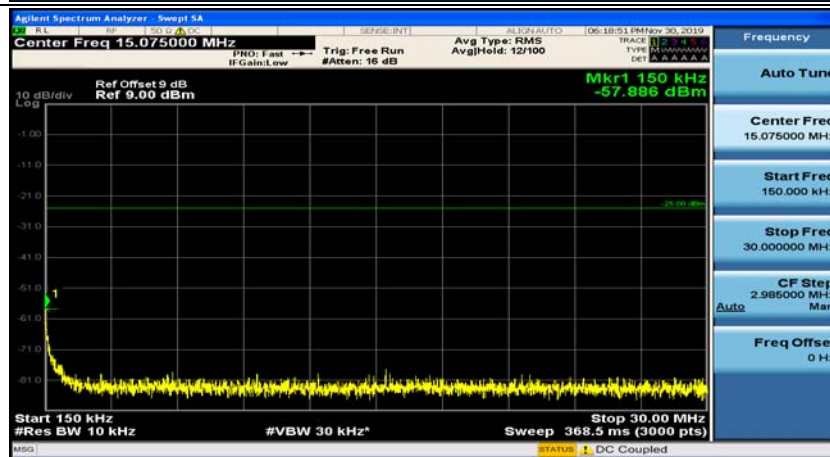
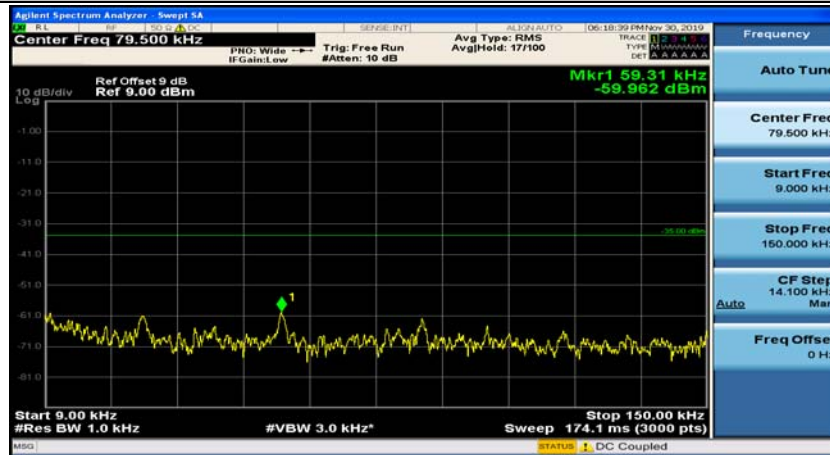
Channel Bandwidth: 15 MHz



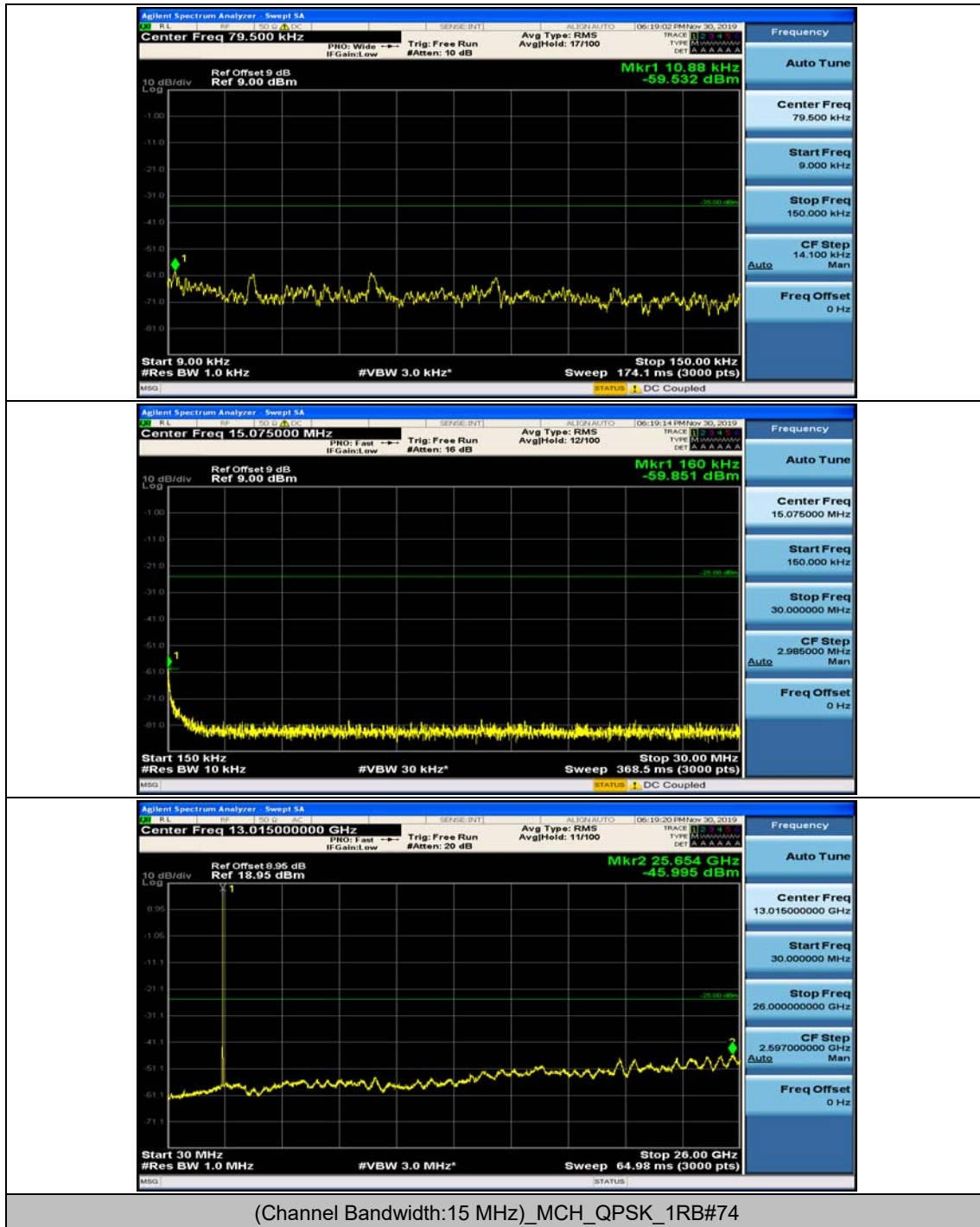


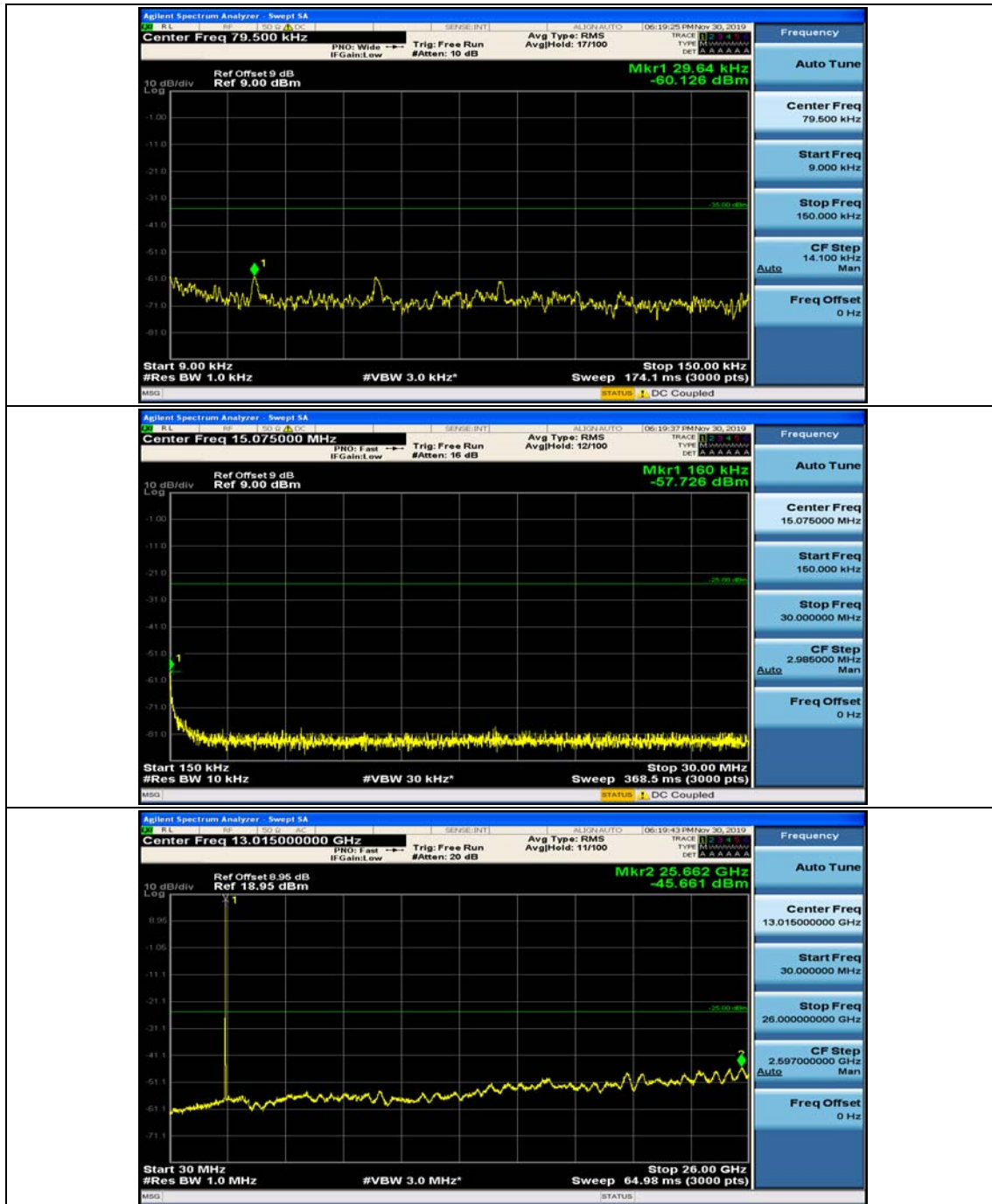


(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0

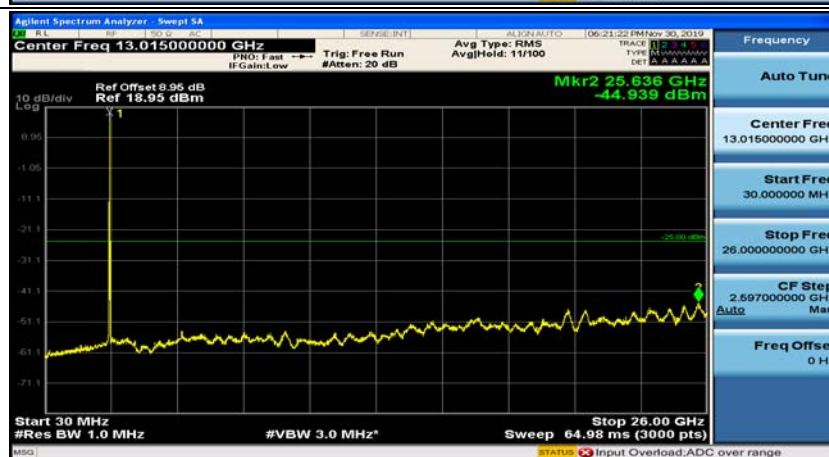
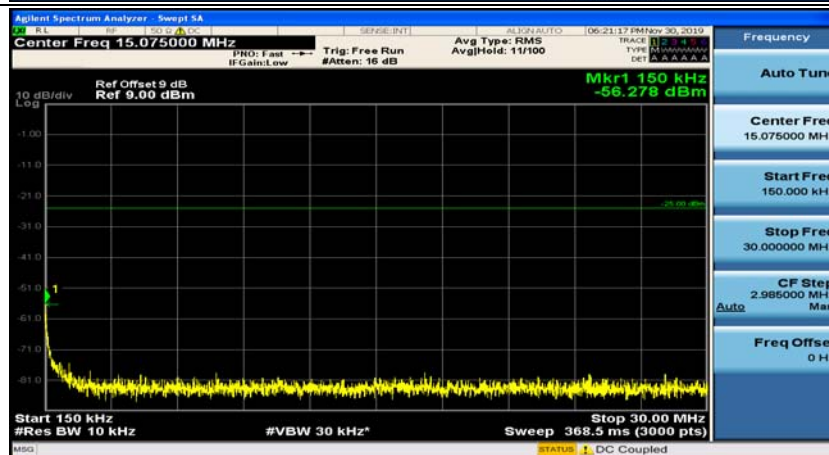
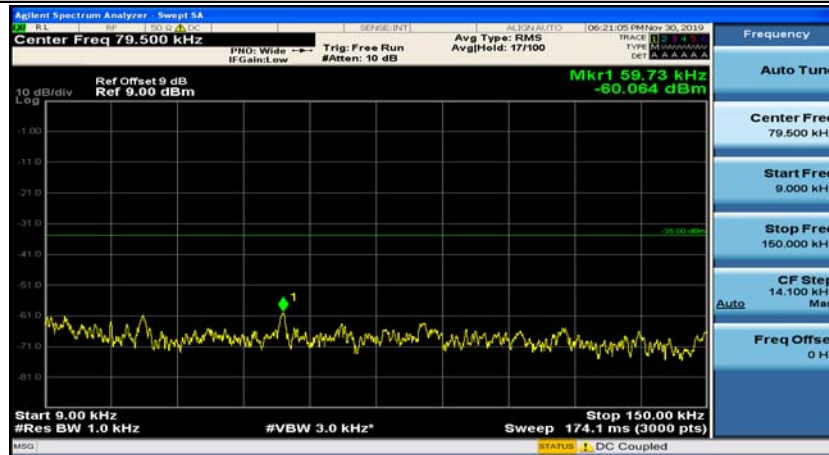


(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#37

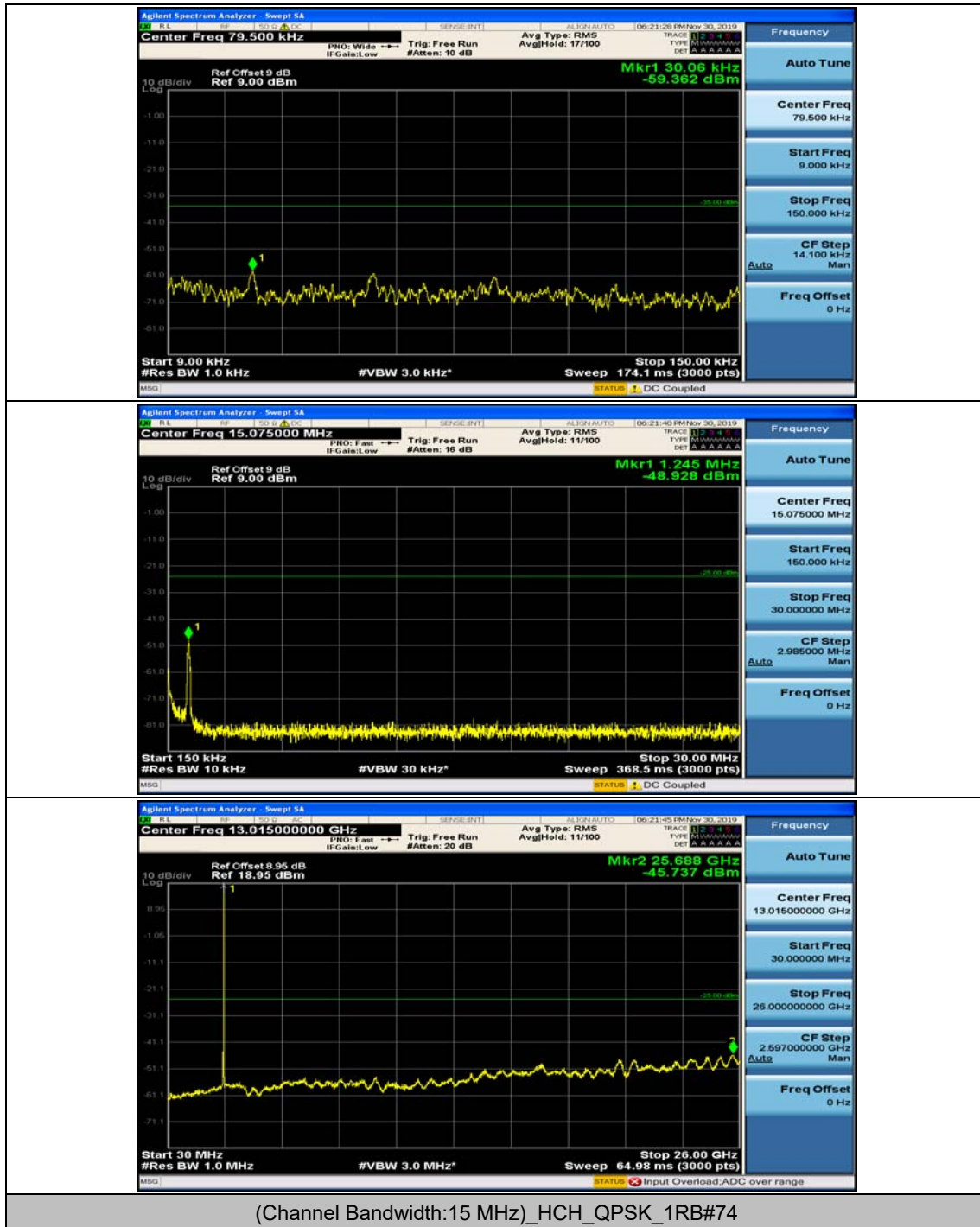


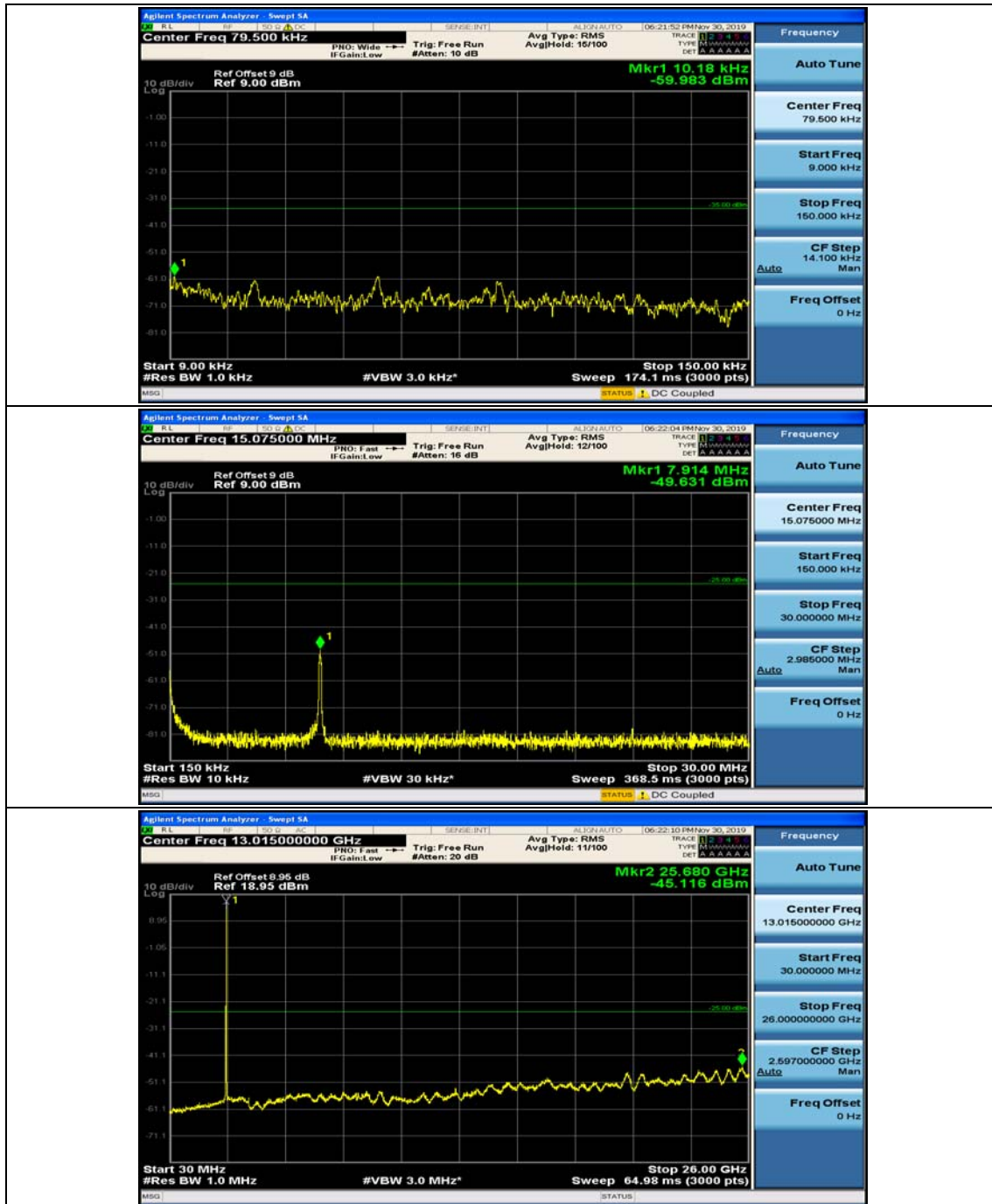


(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0

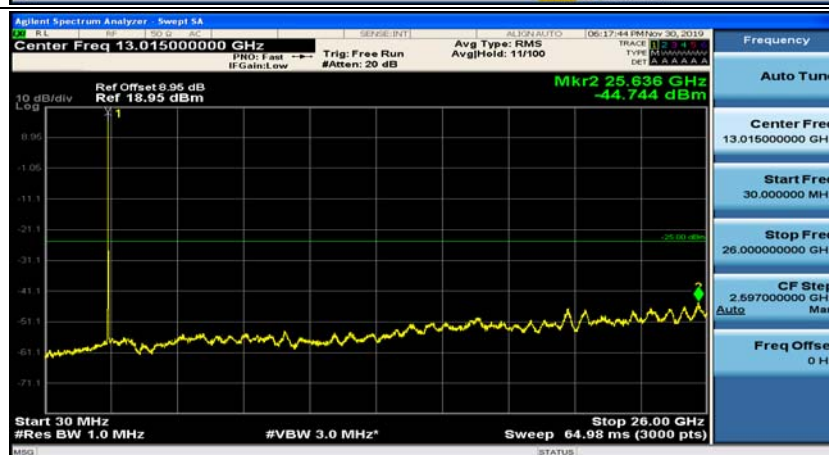
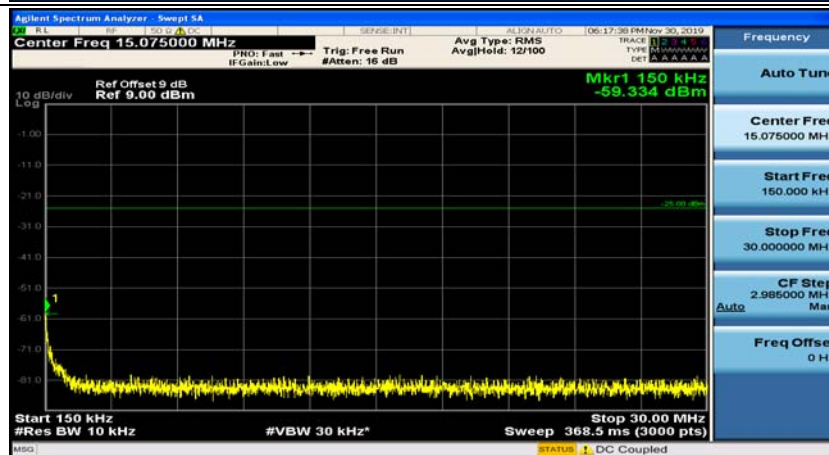
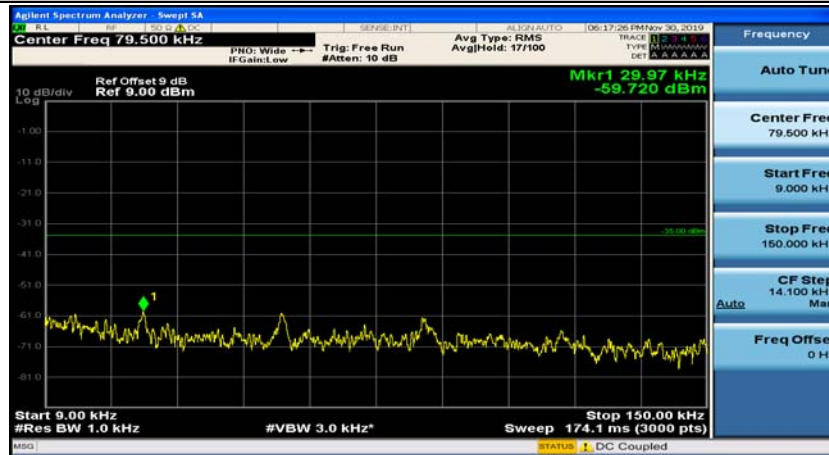


(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37

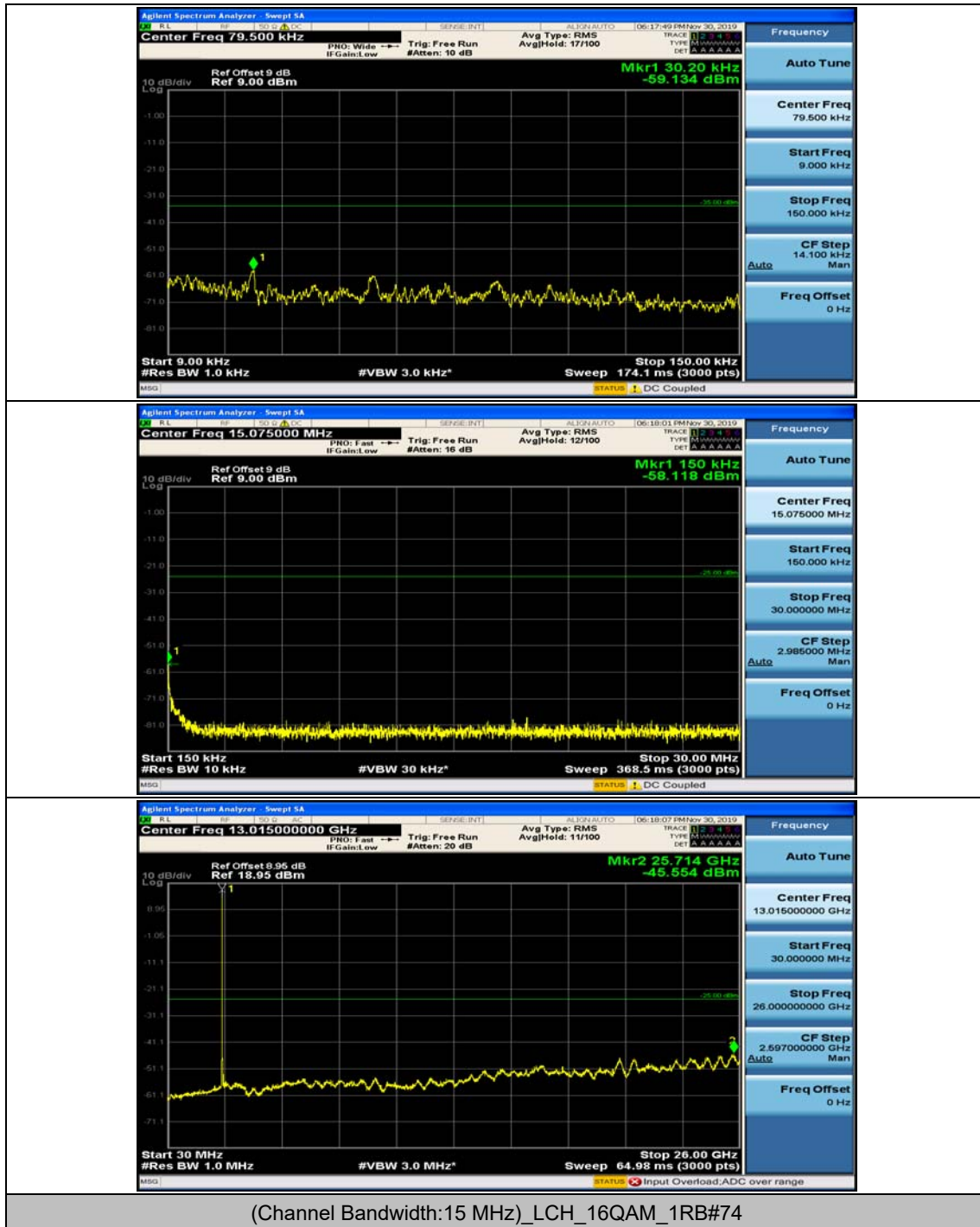


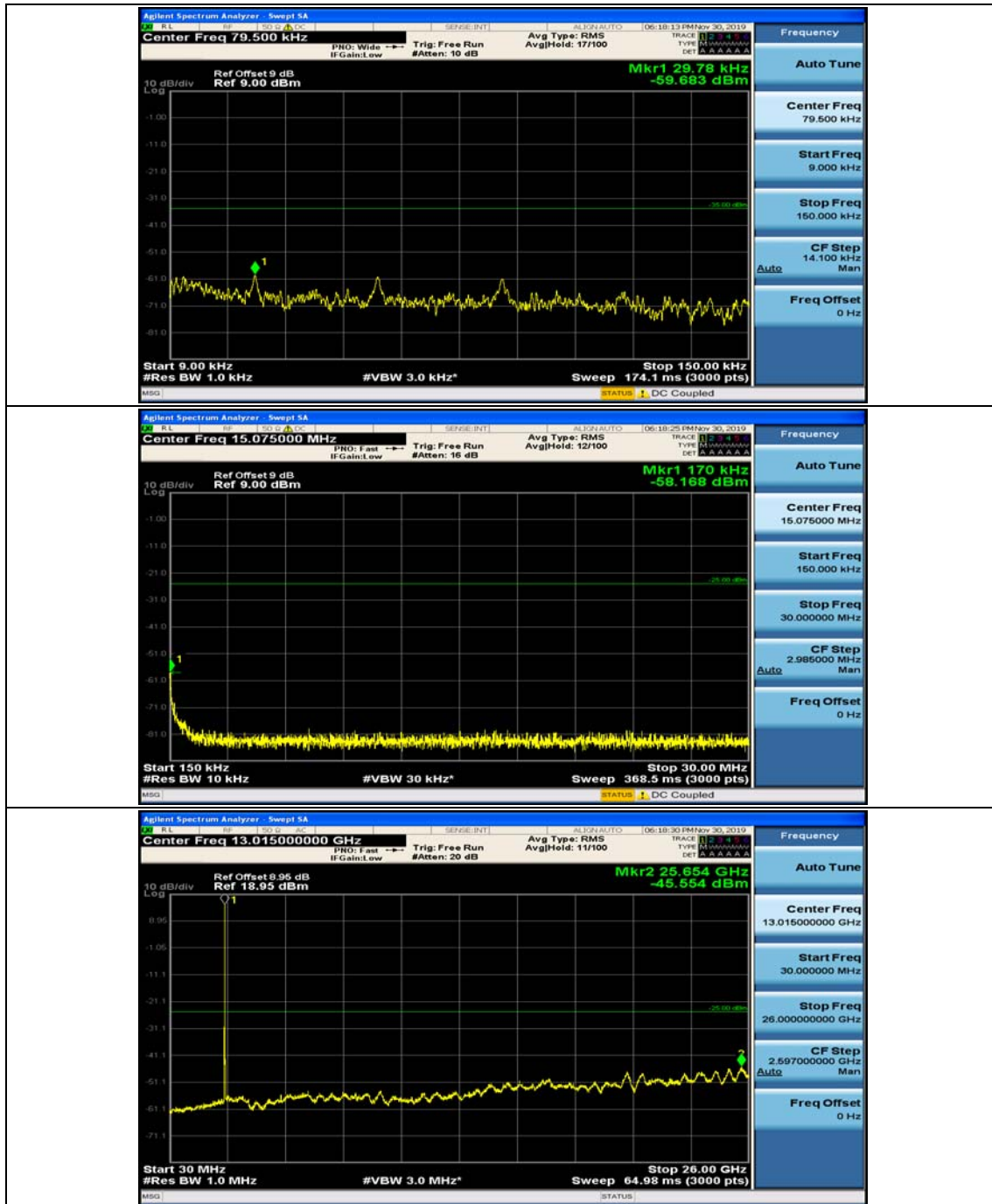


(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0

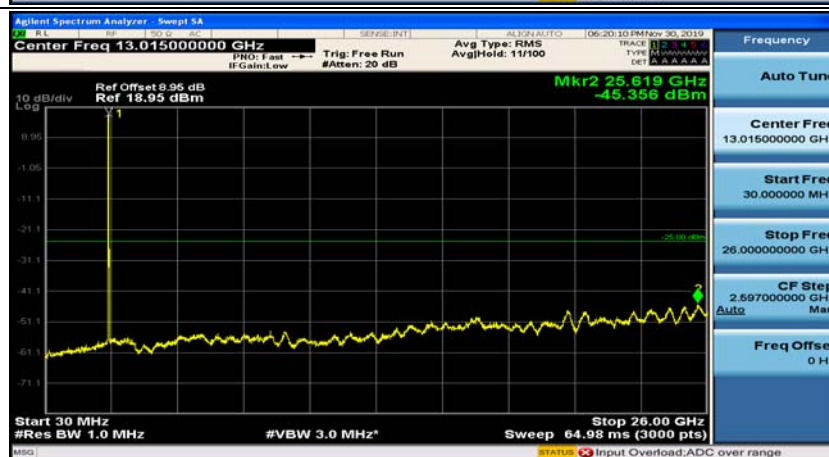
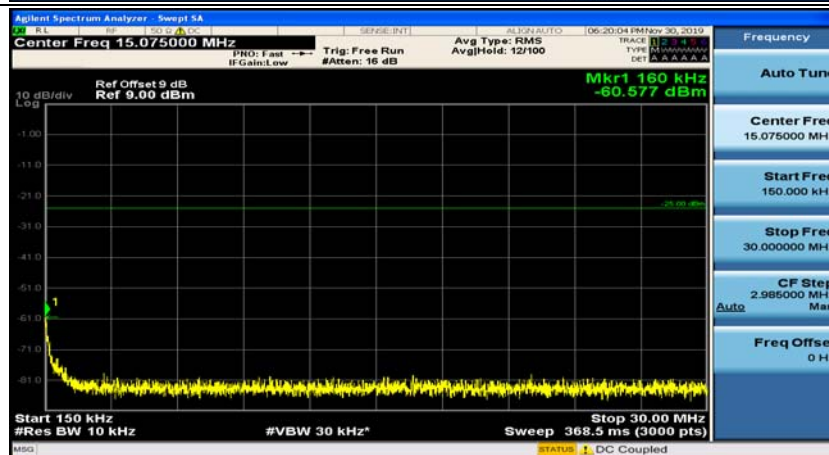
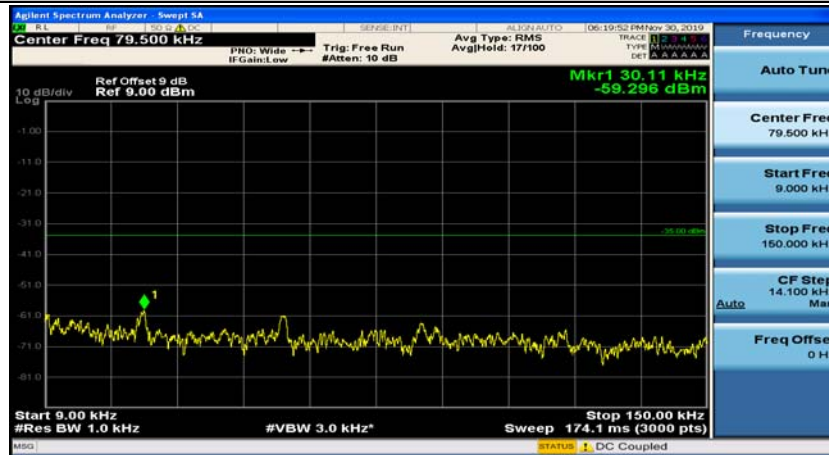


(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#37

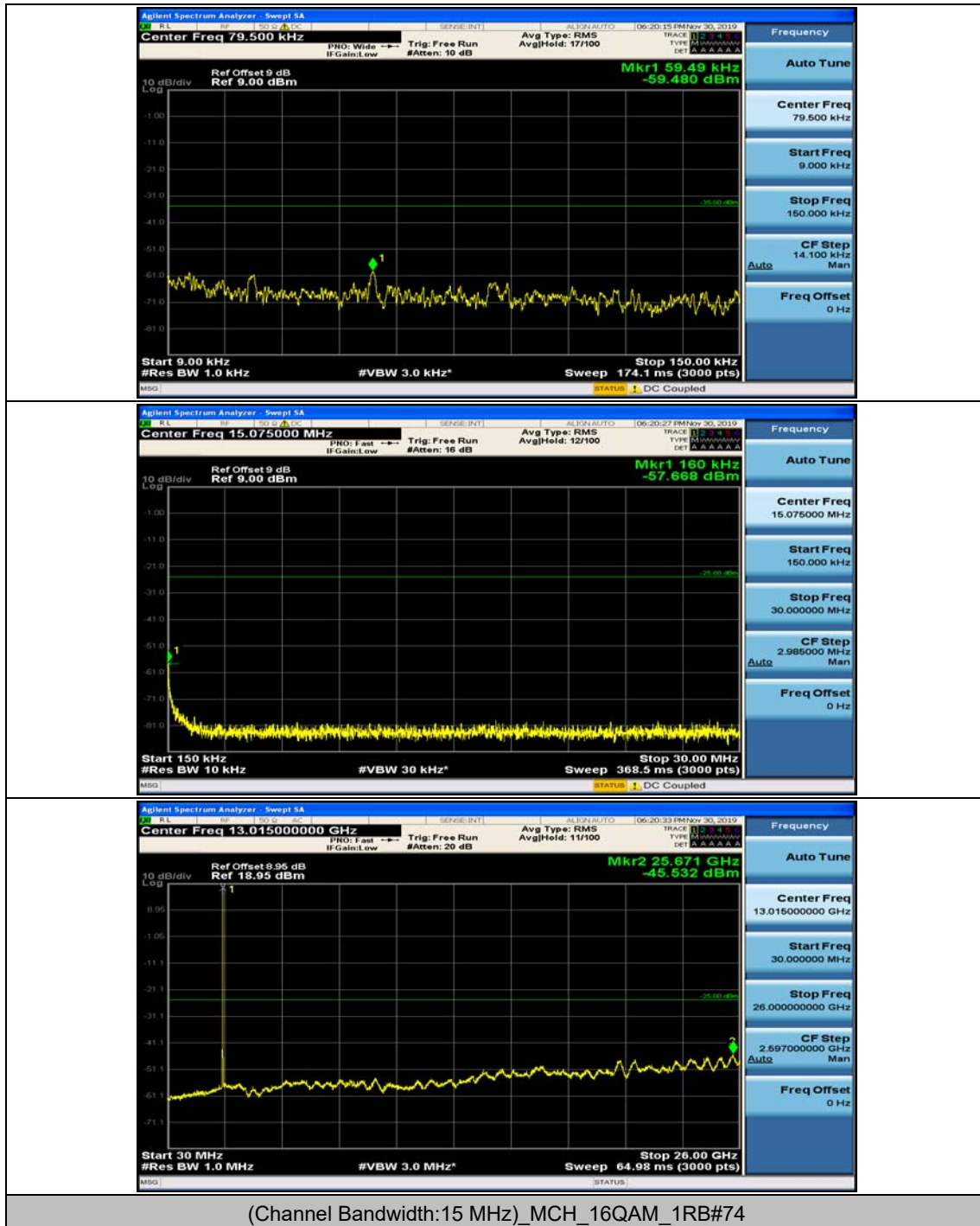


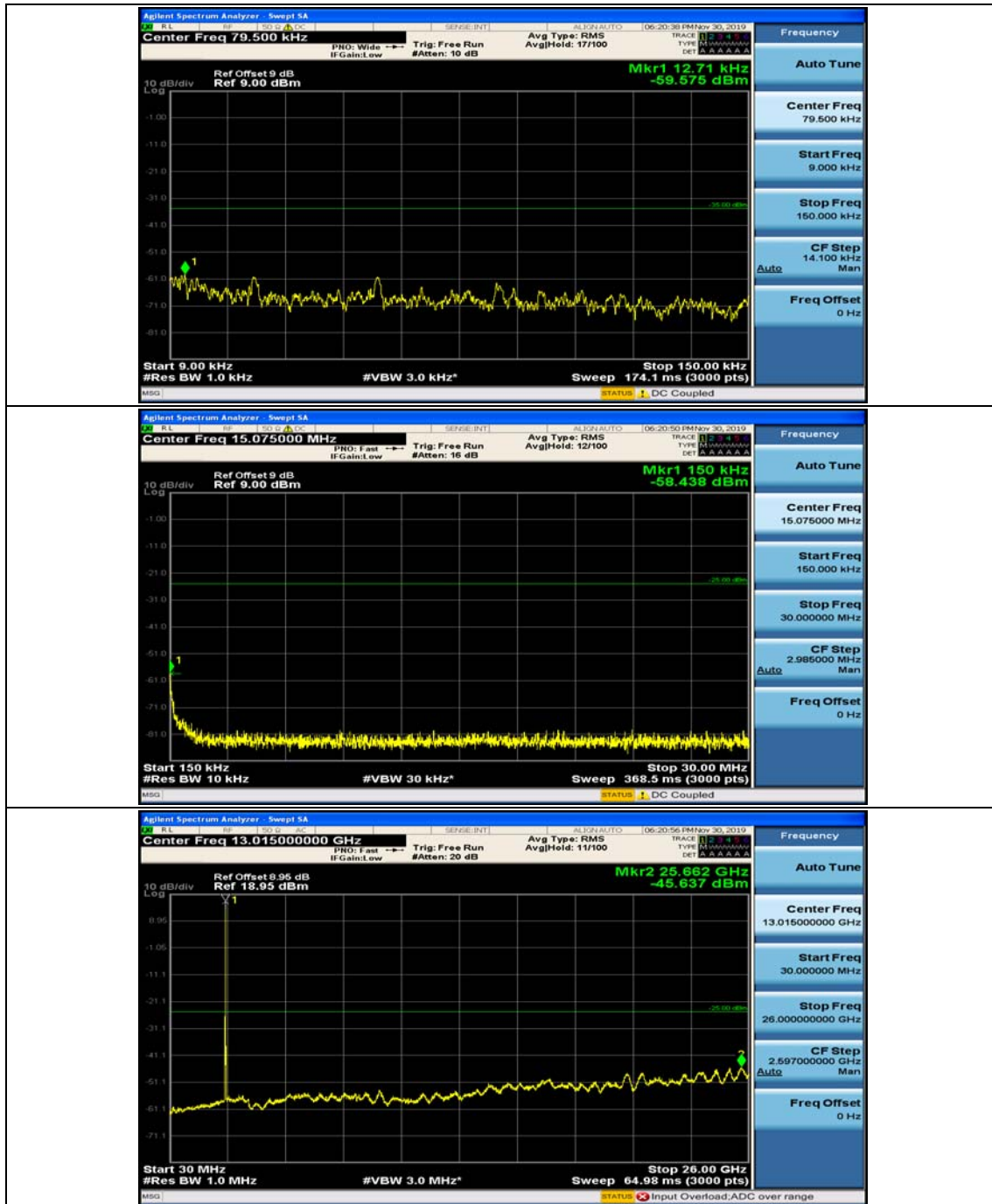


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

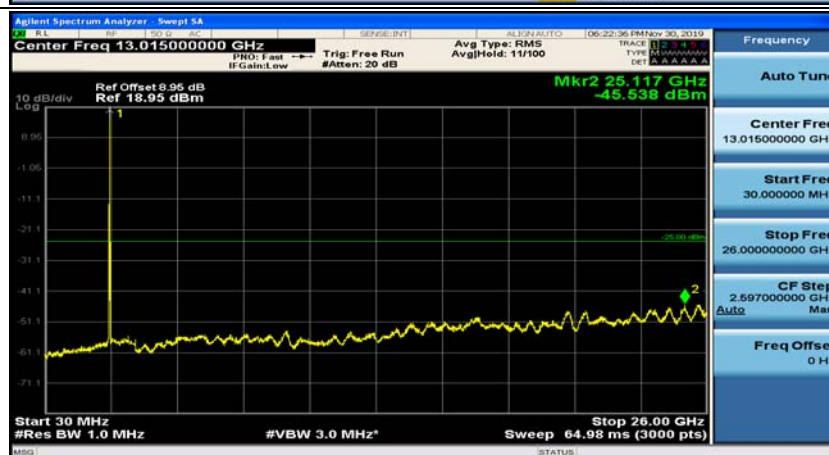
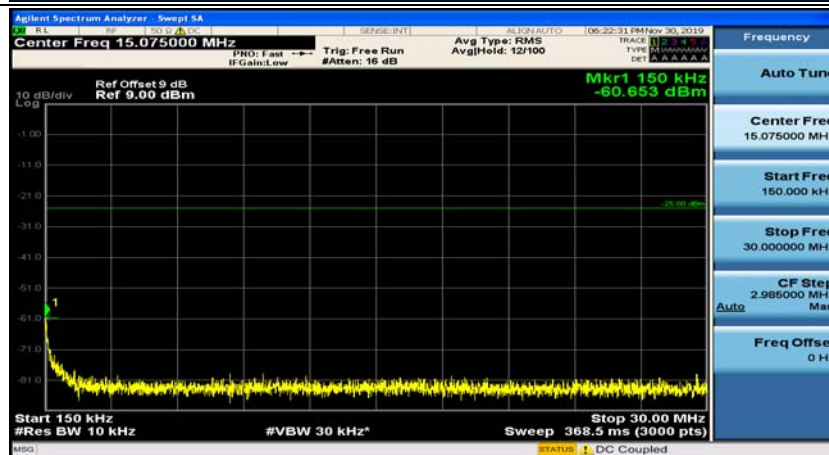
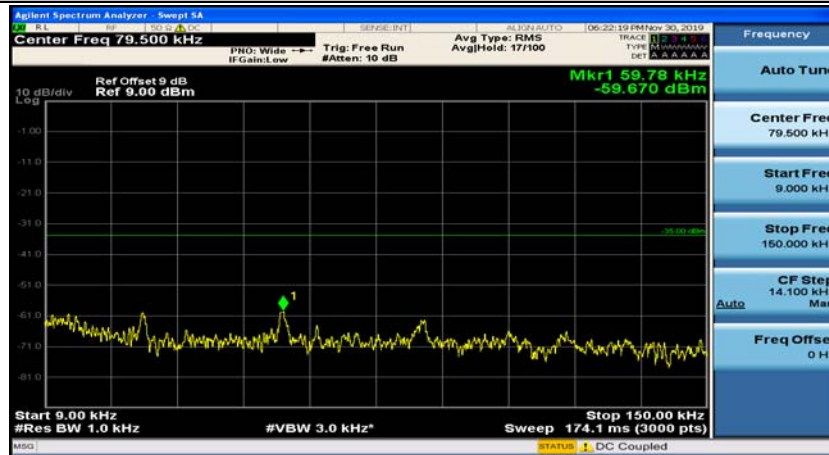


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37

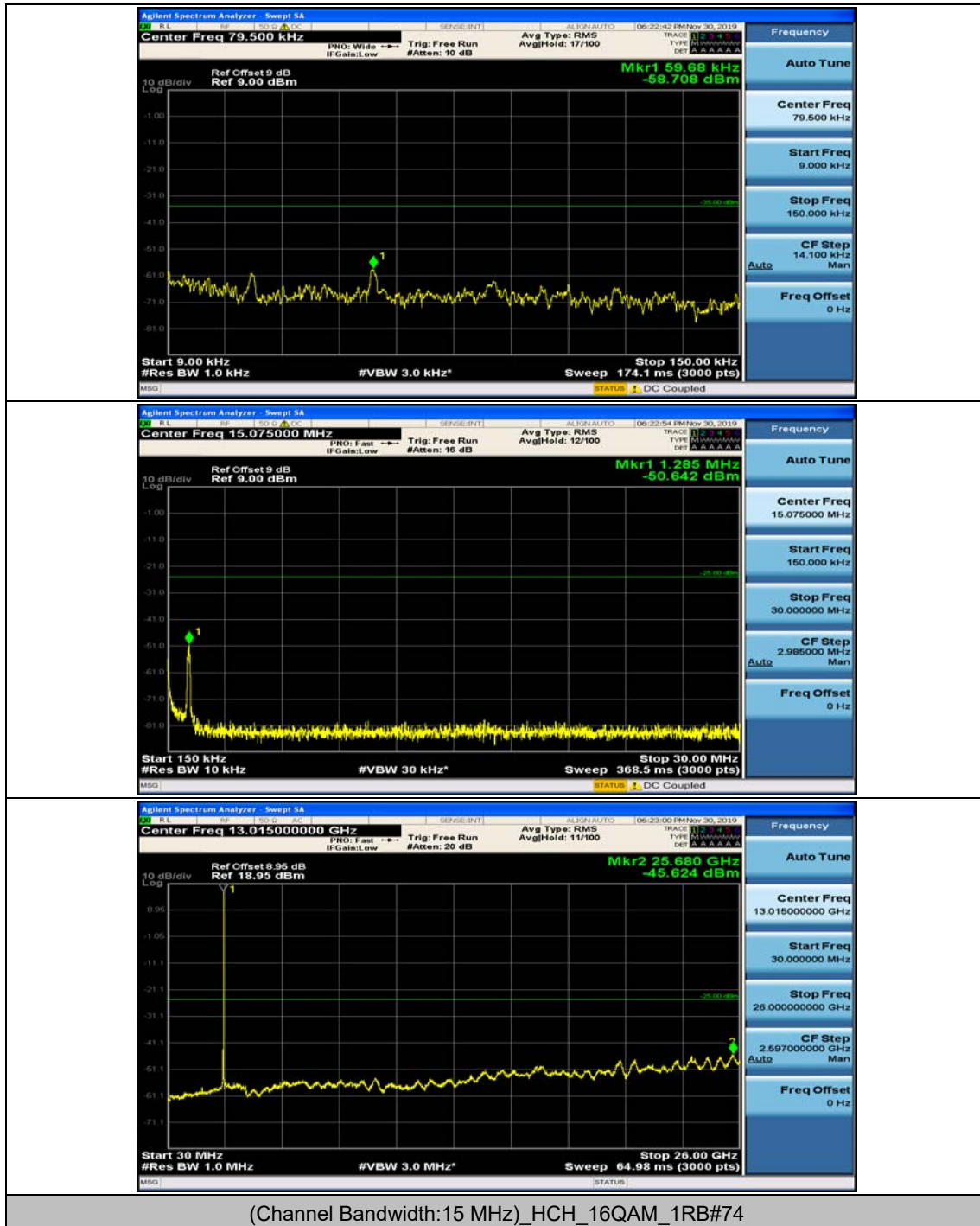


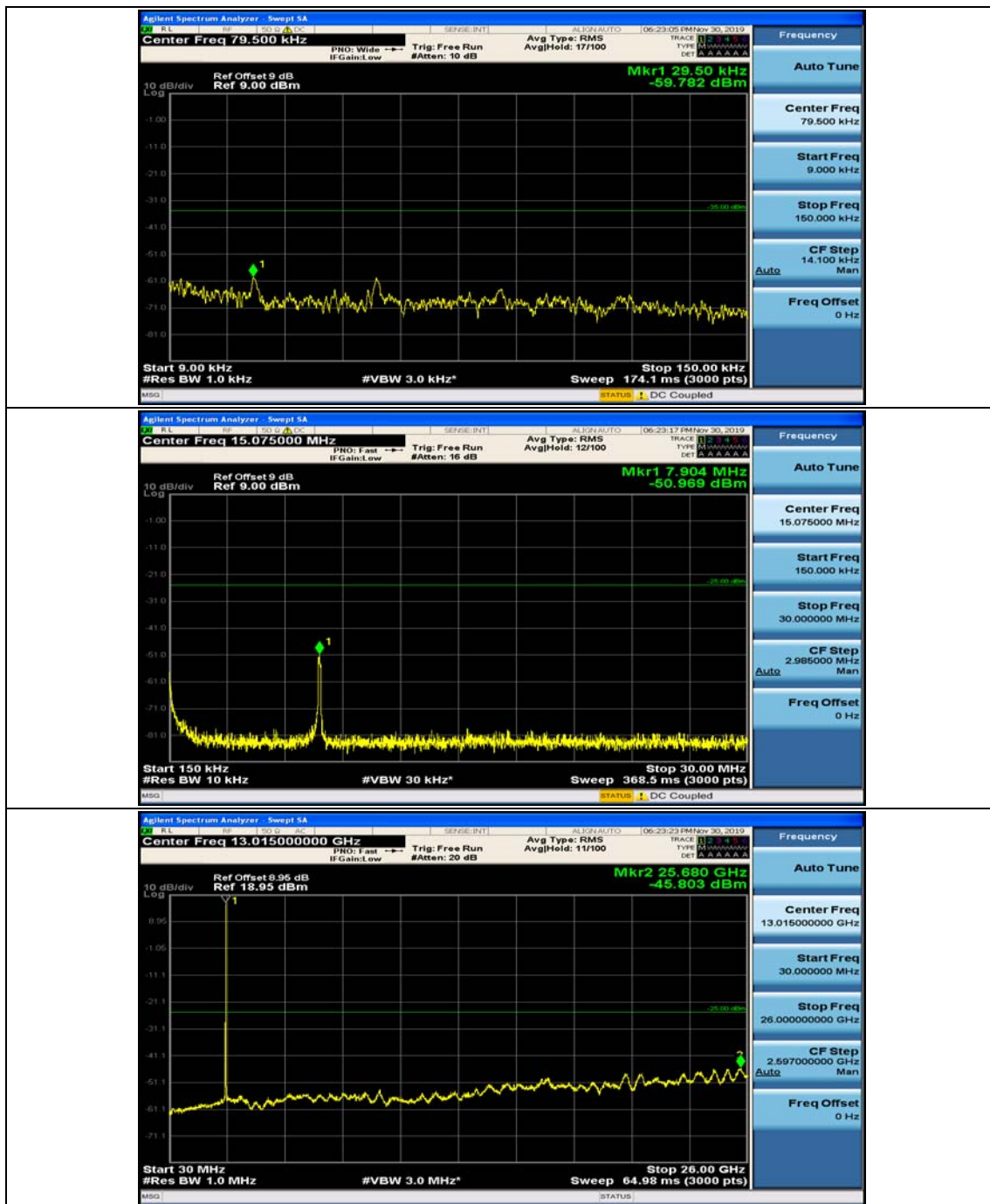


(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0

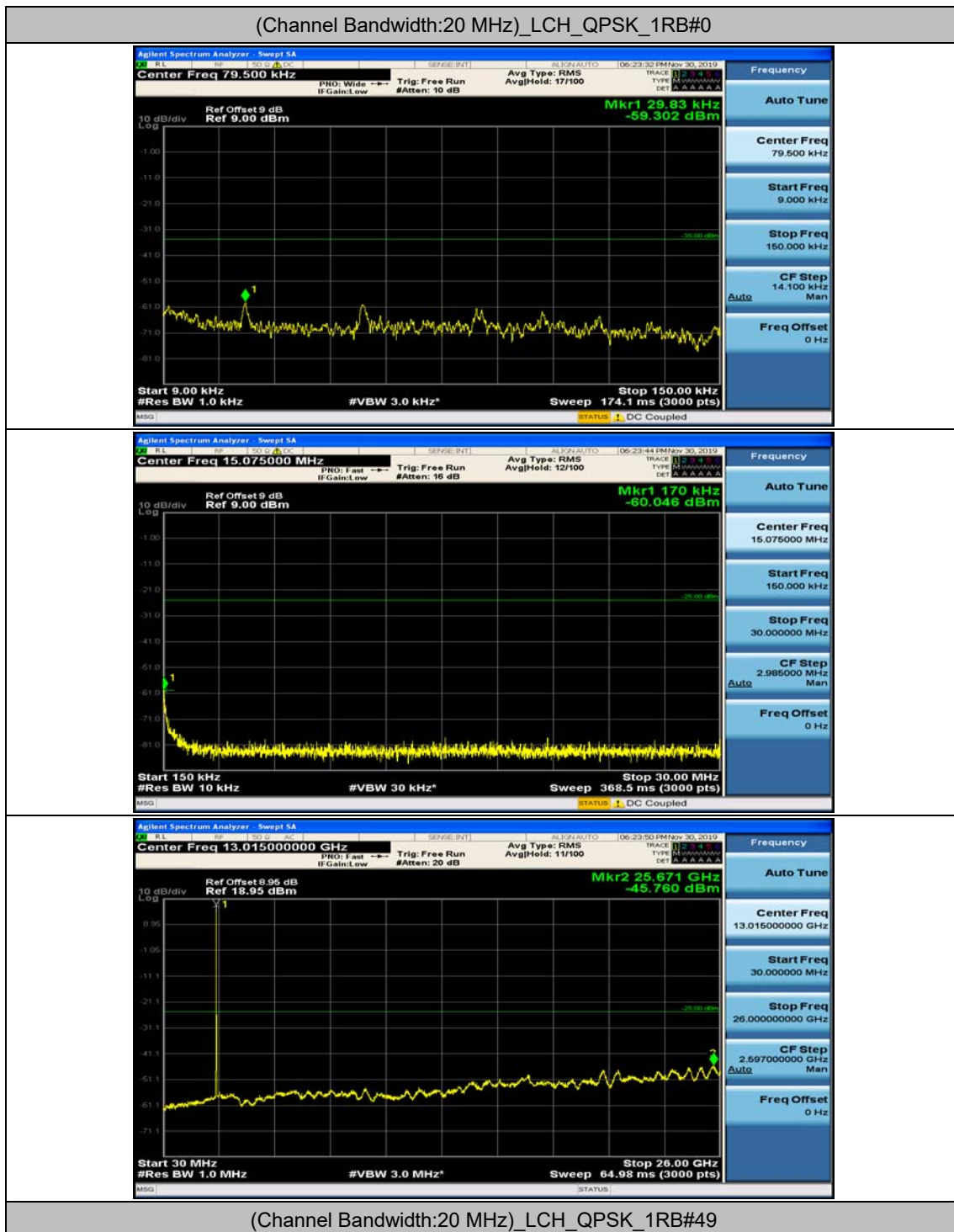


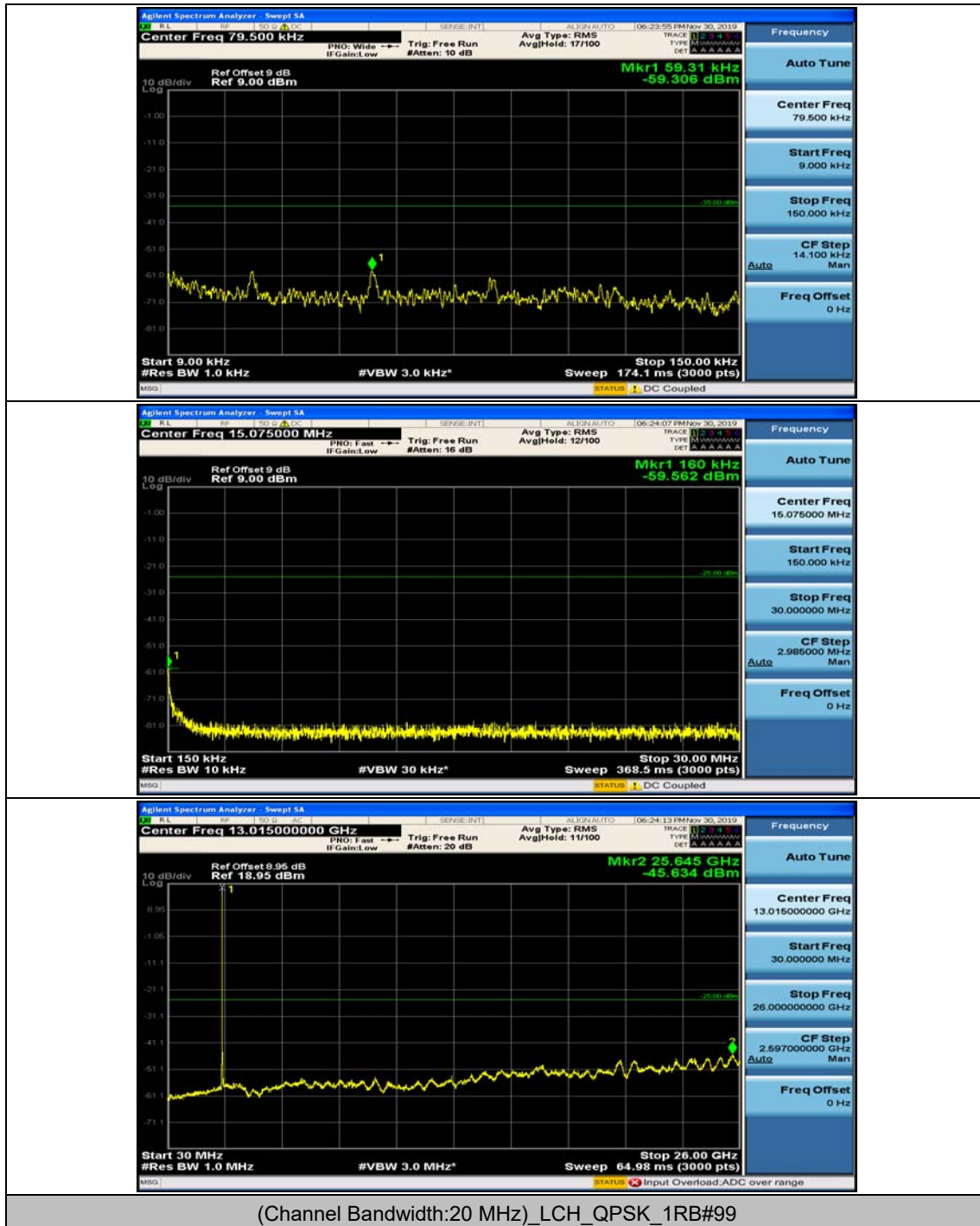
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#37

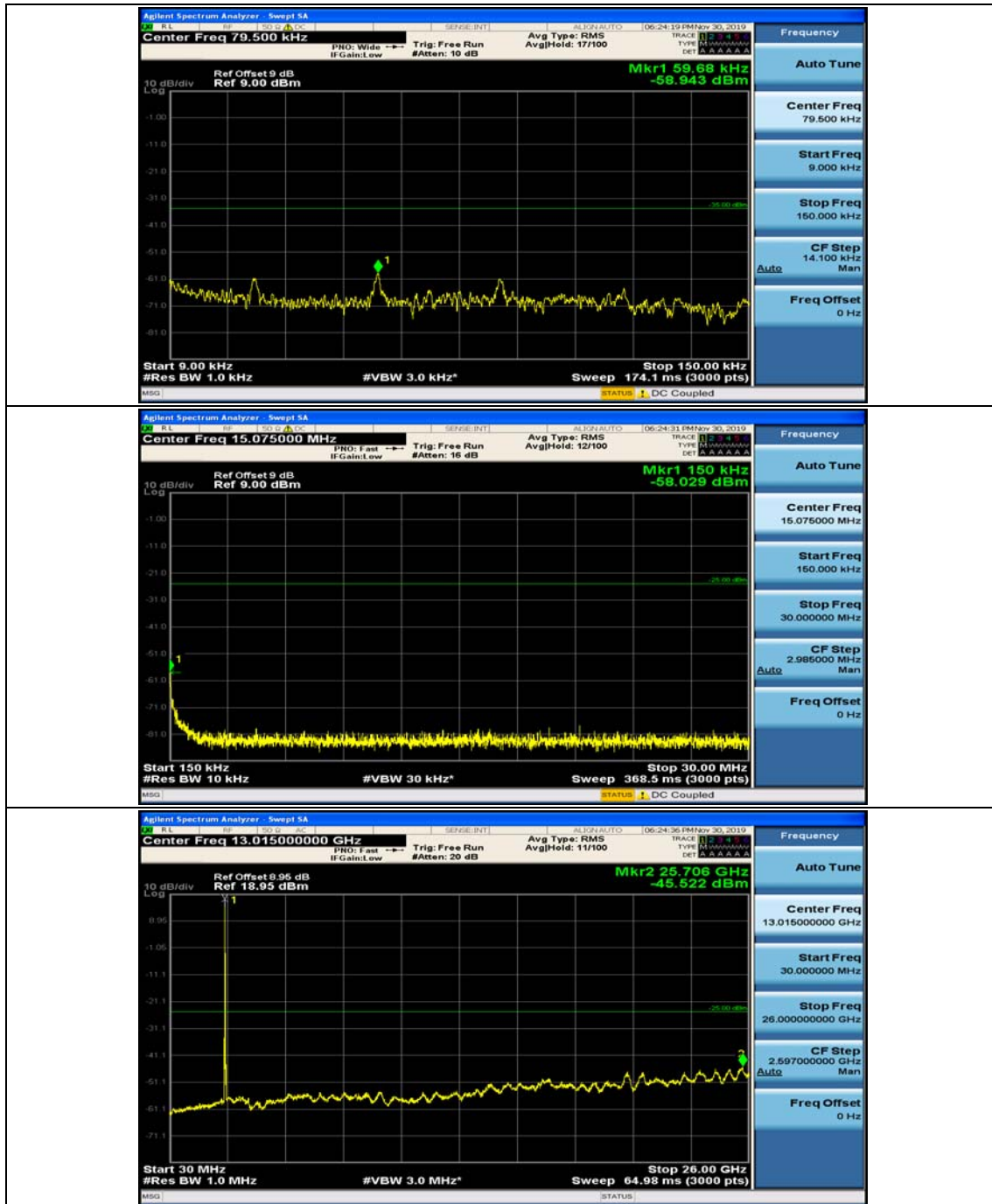




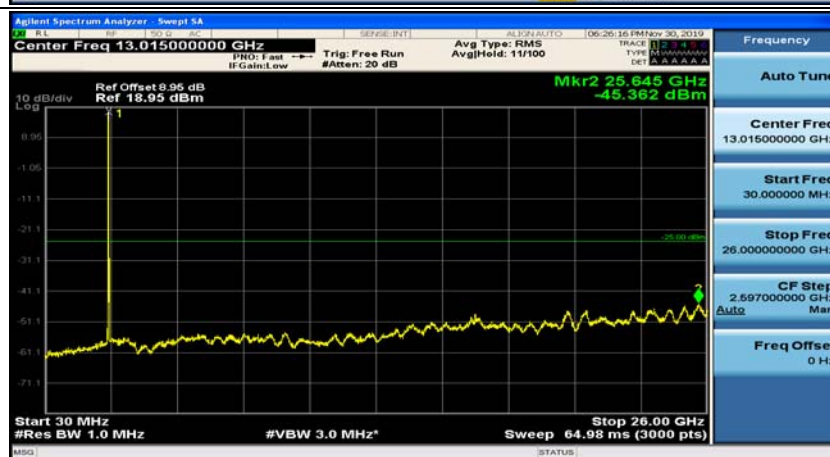
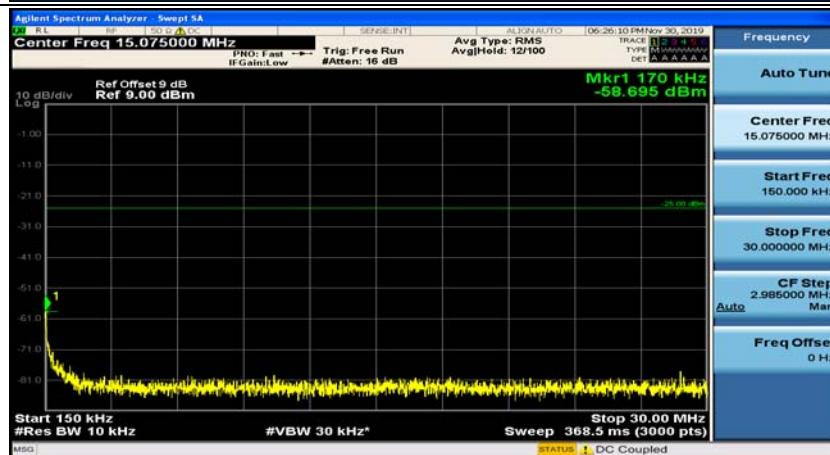
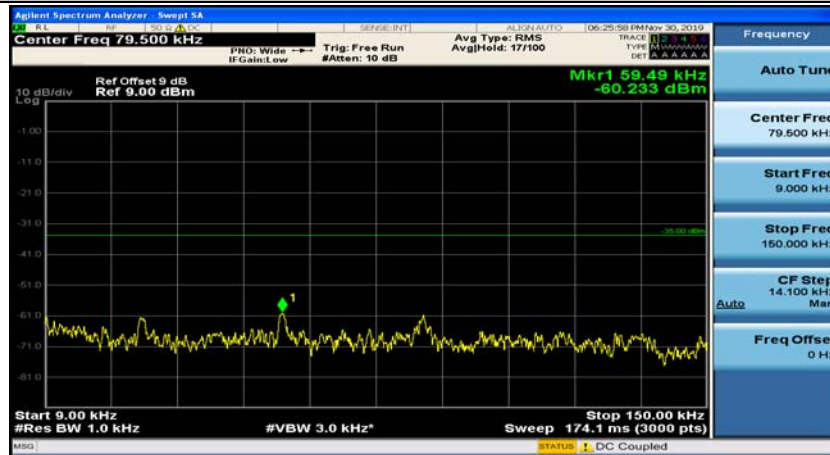
Channel Bandwidth: 20 MHz



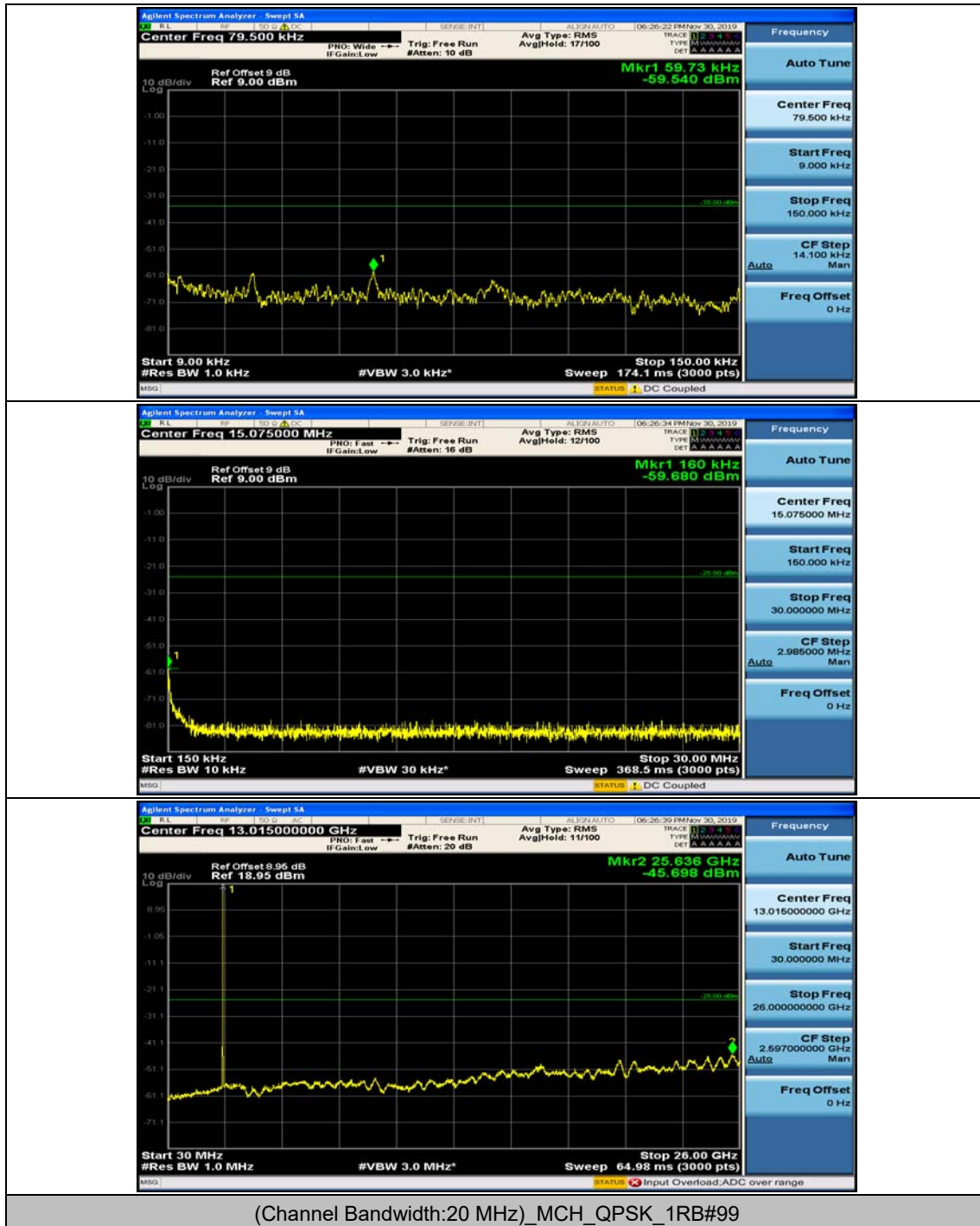


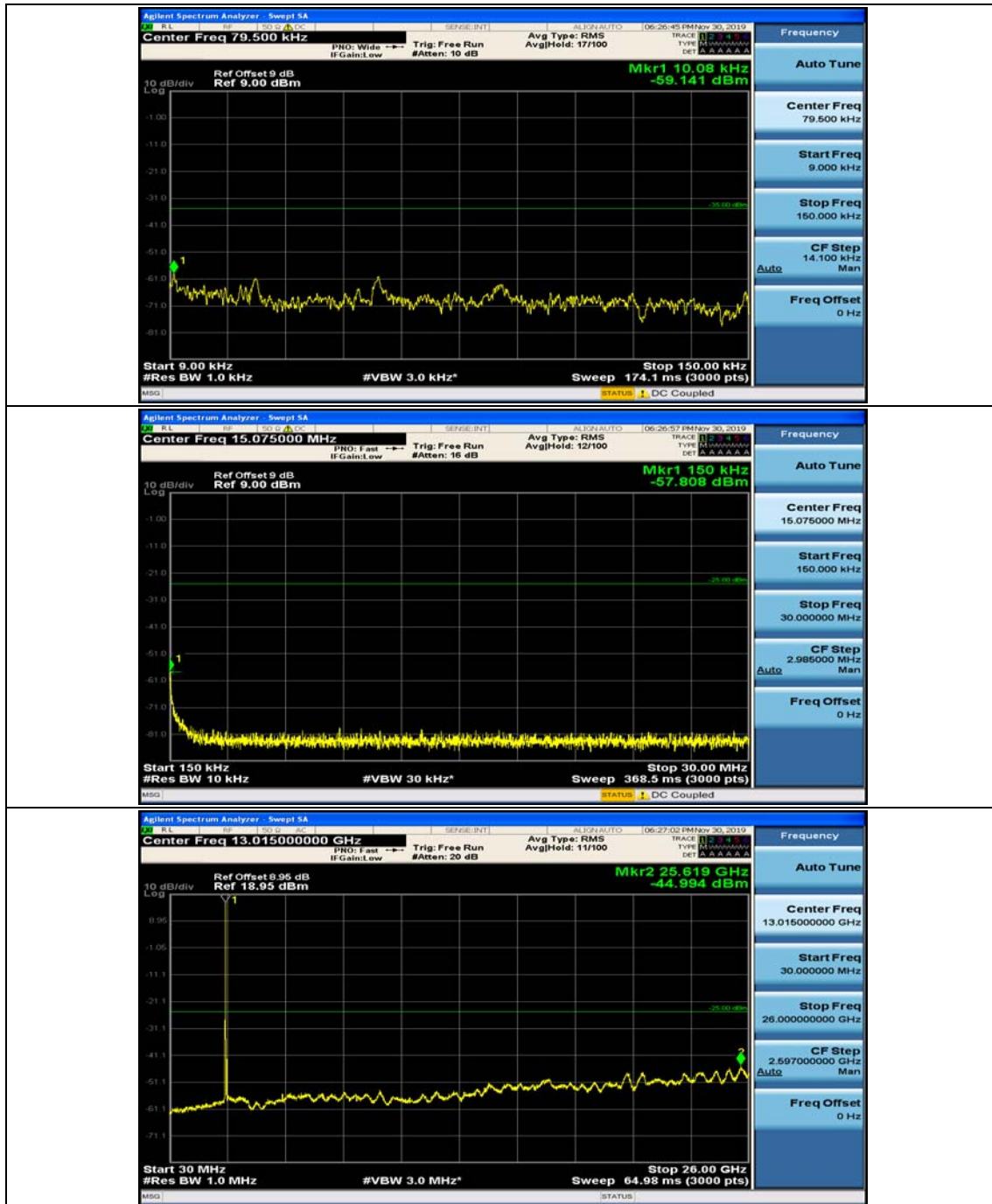


(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

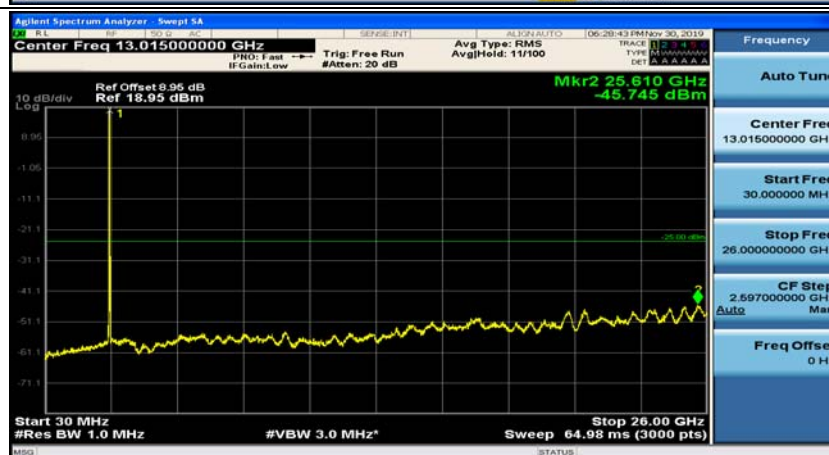
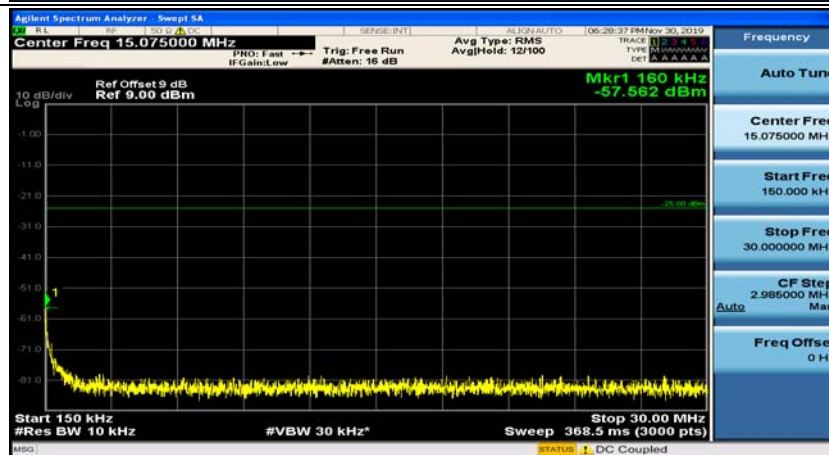
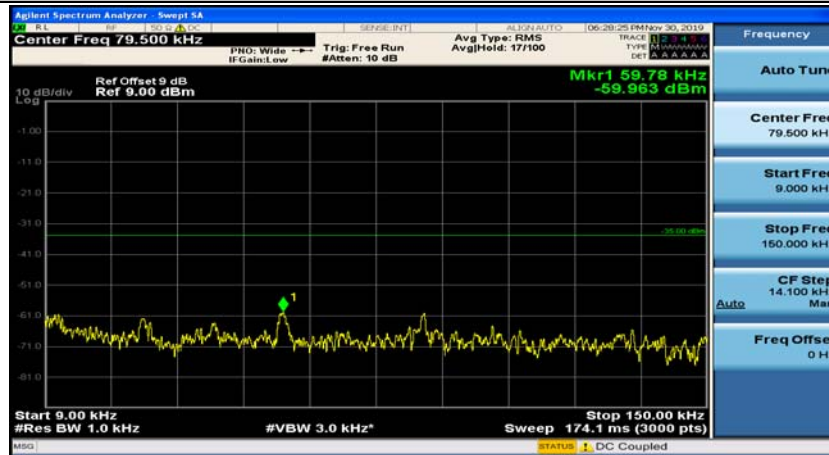


(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49

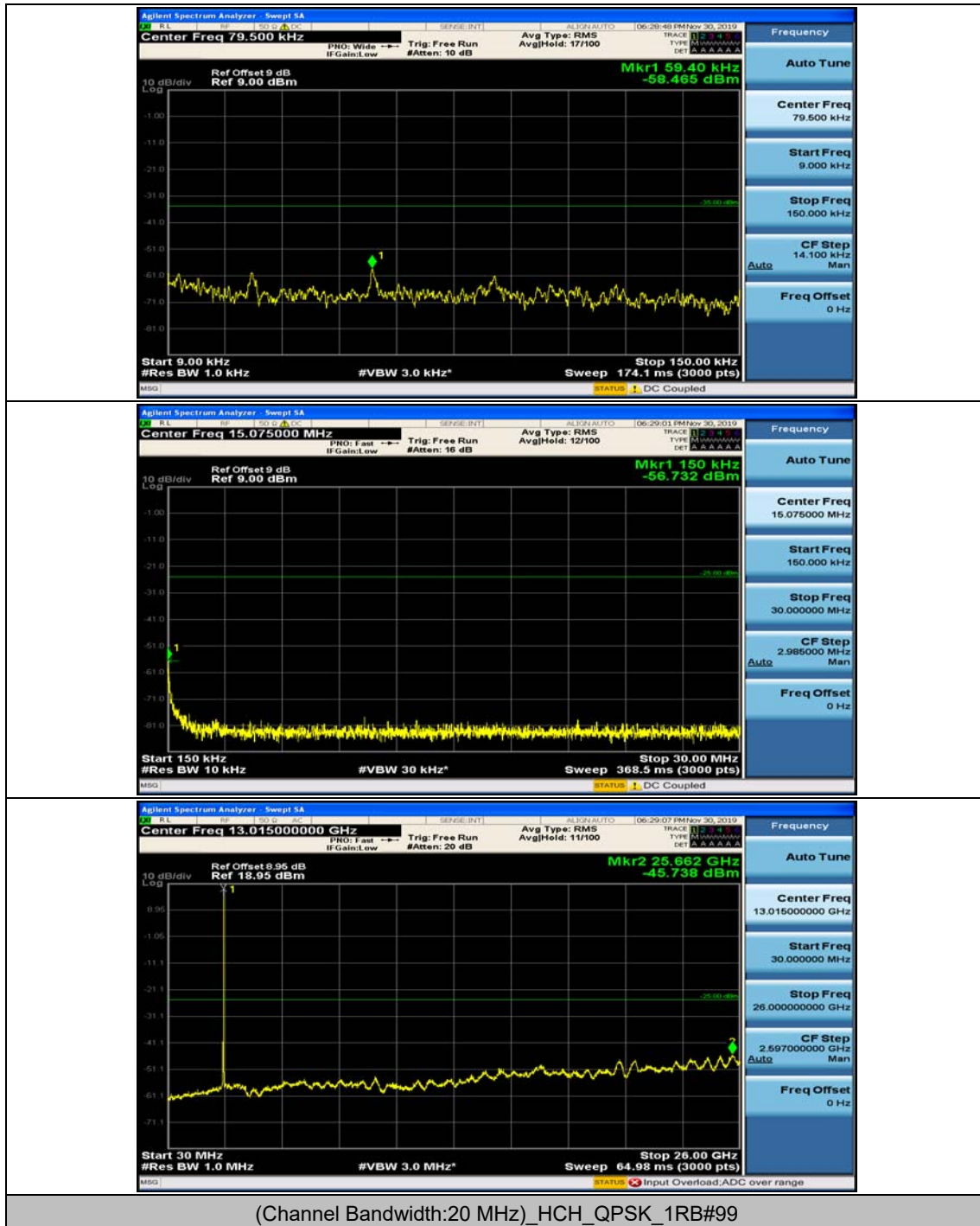


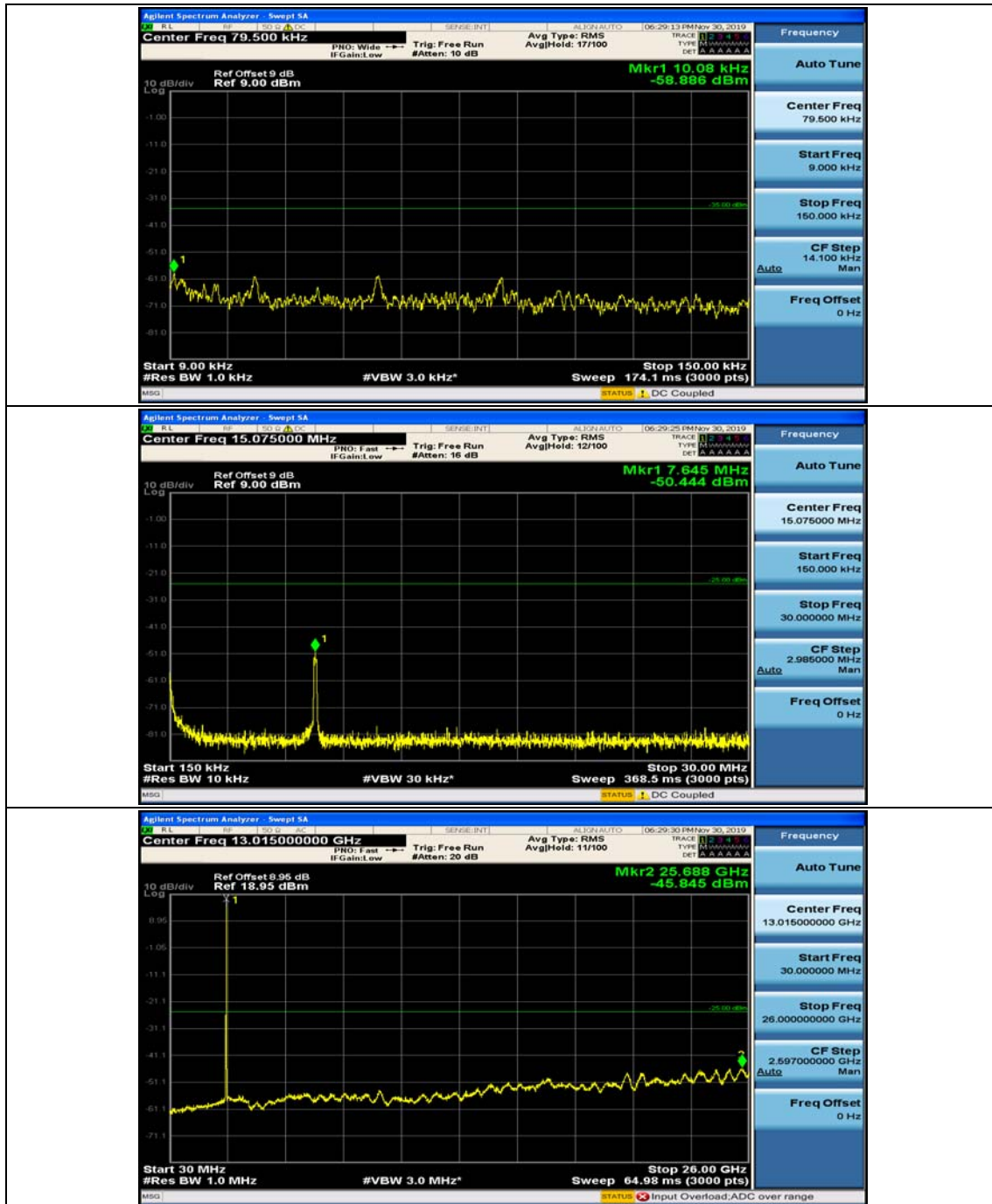


(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0

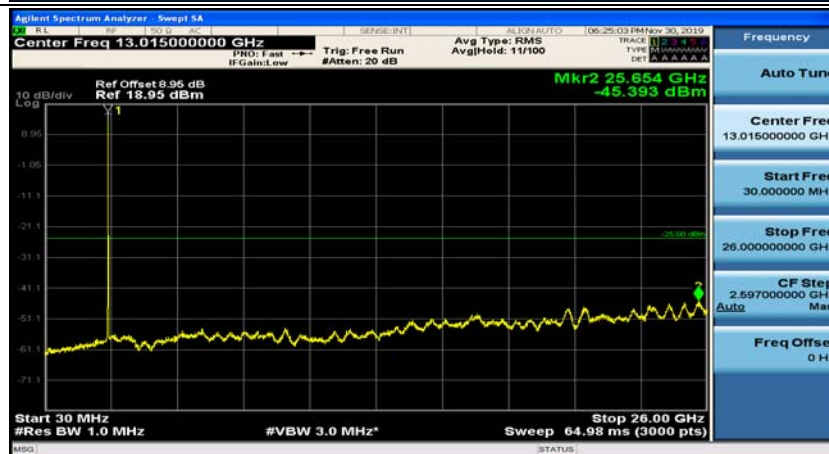
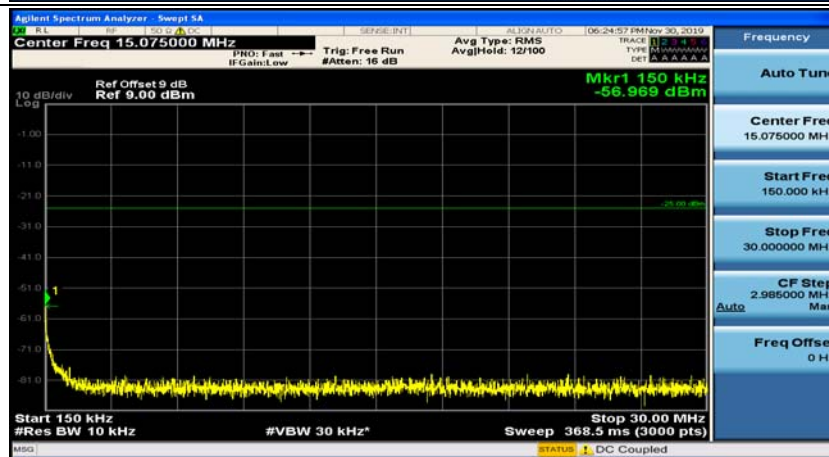
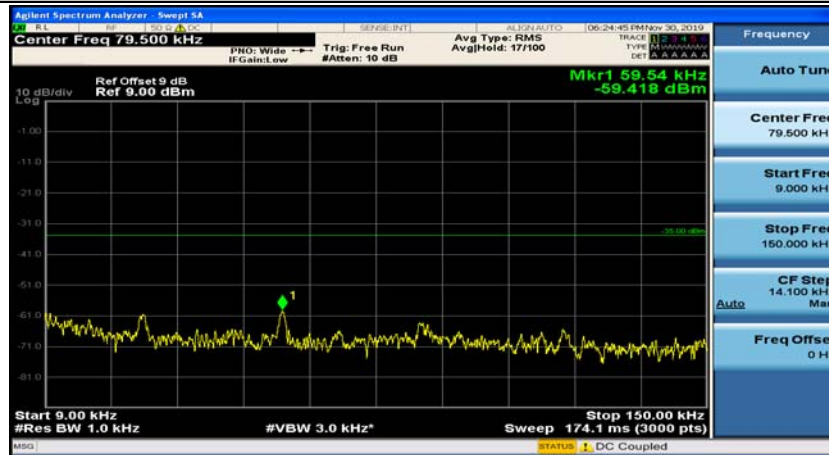


(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#49

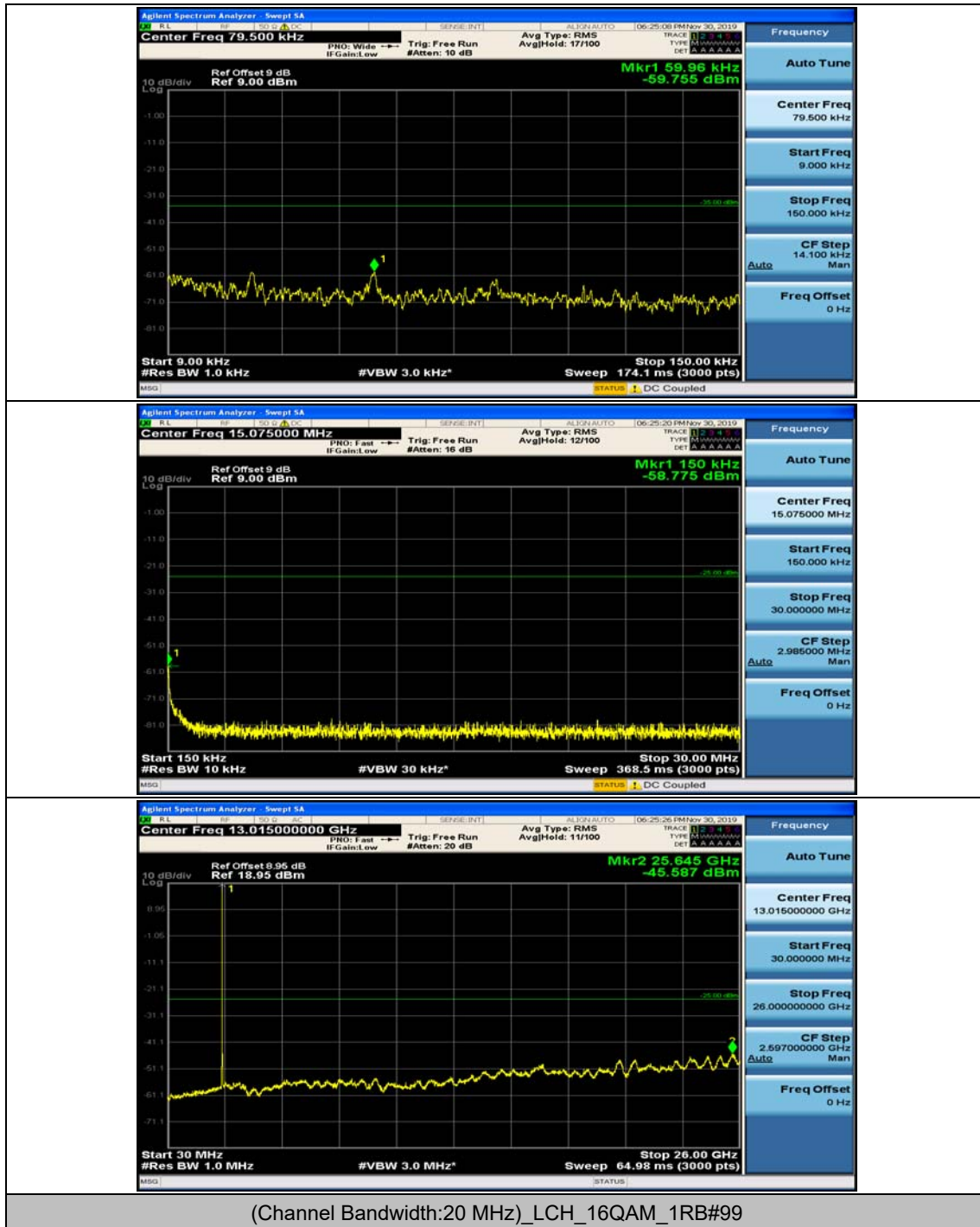


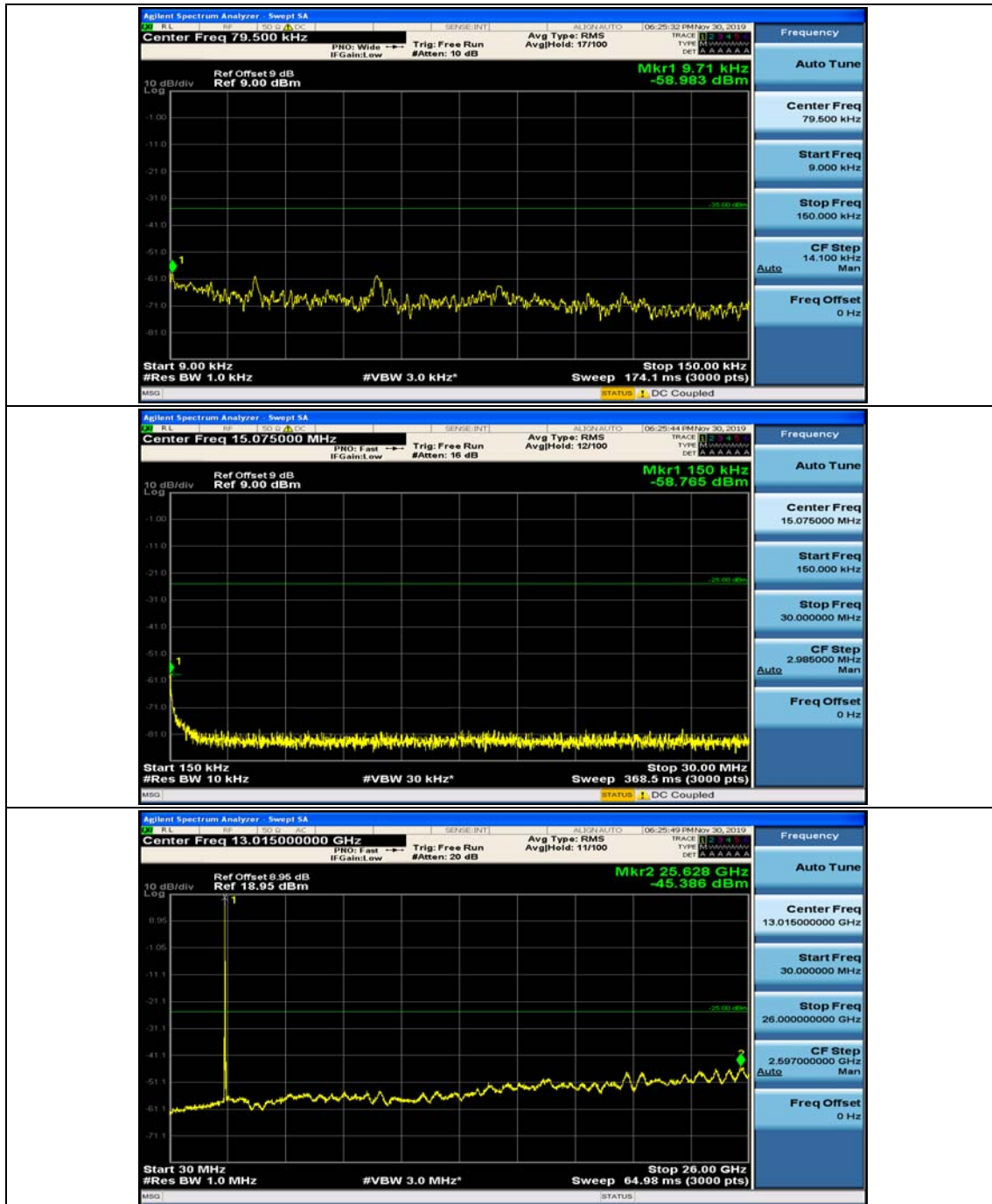


(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0

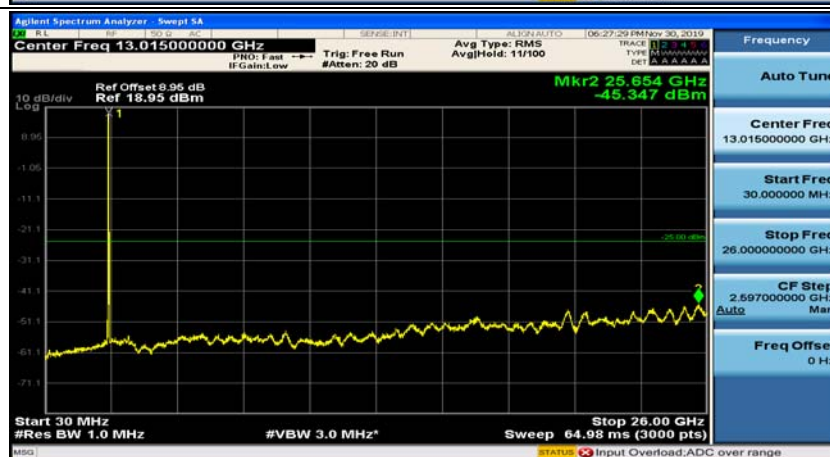
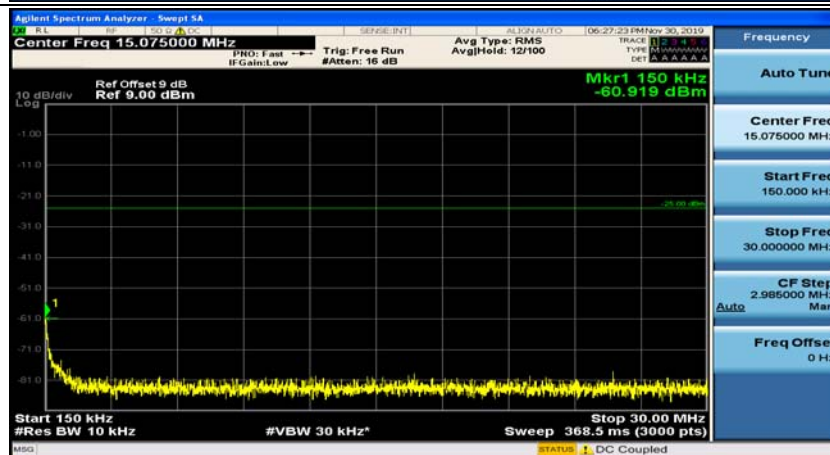
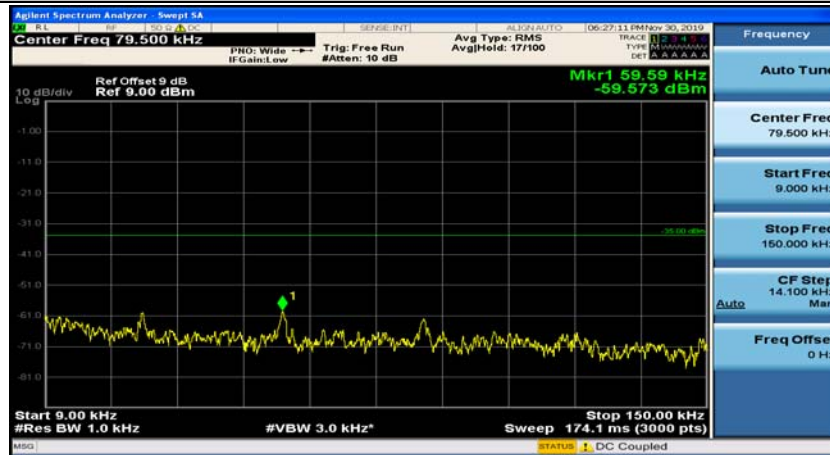


(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49

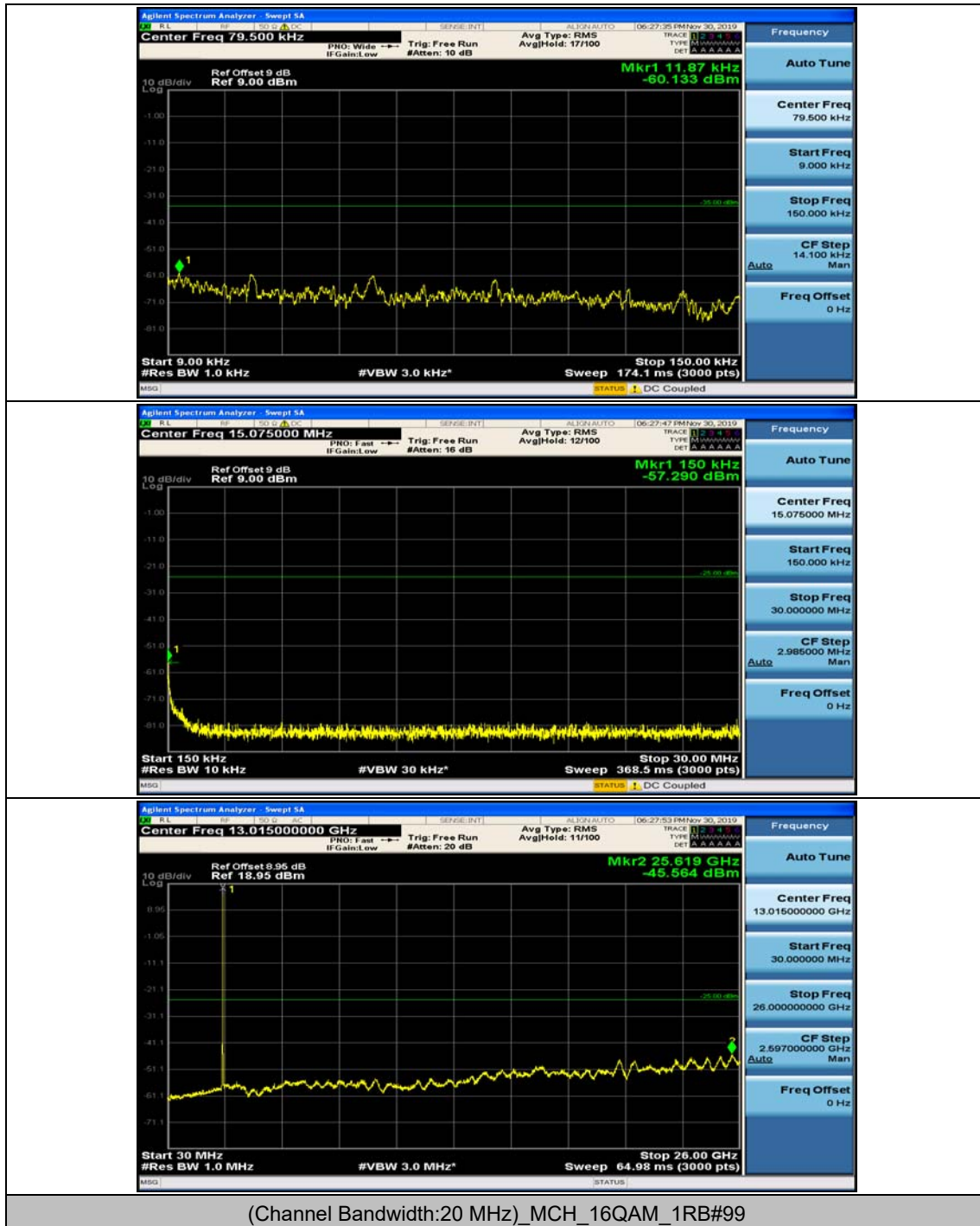


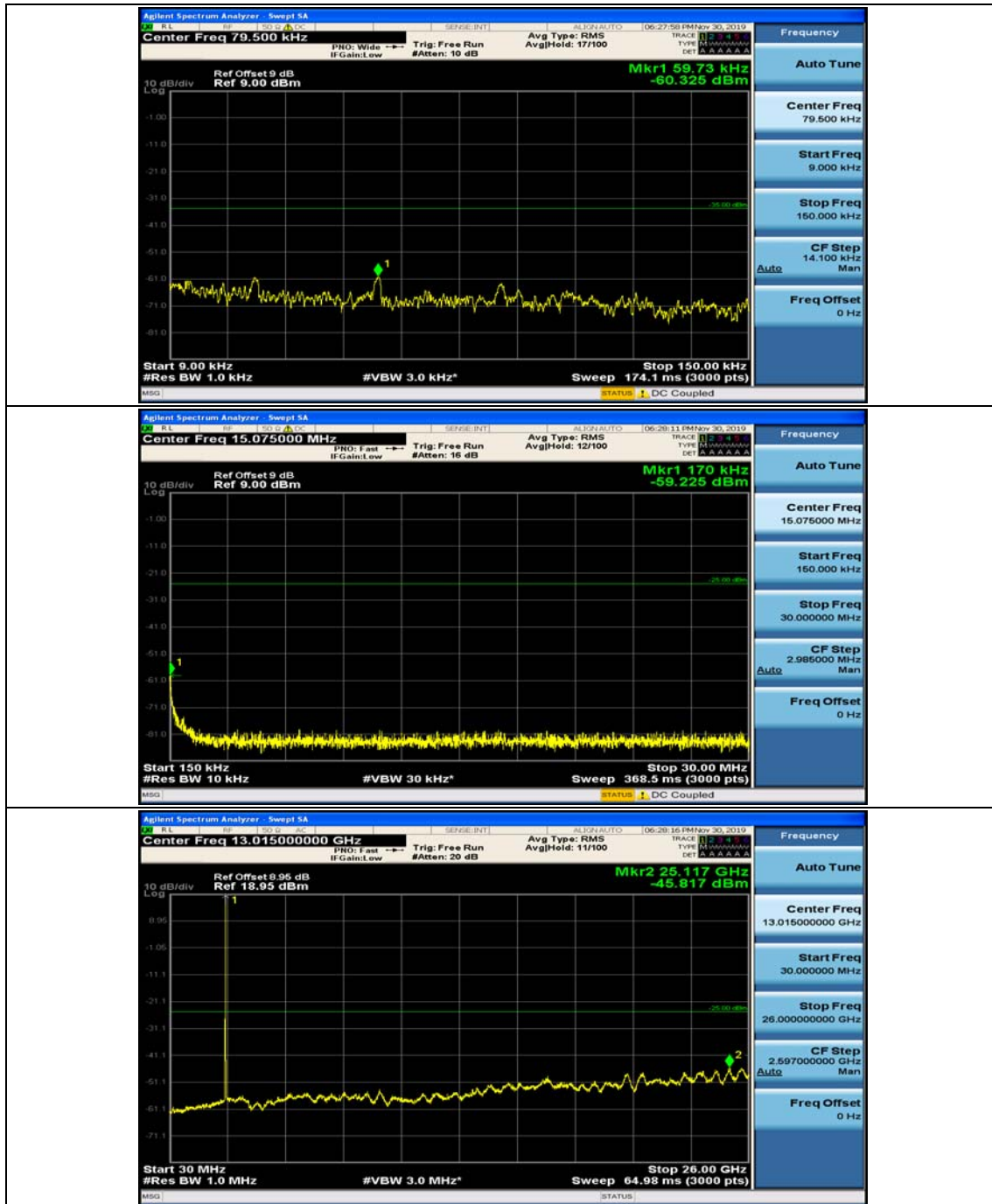


(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0

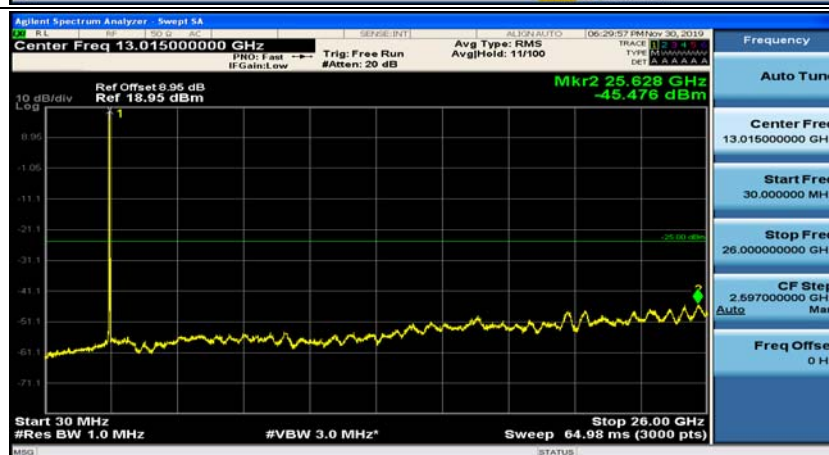
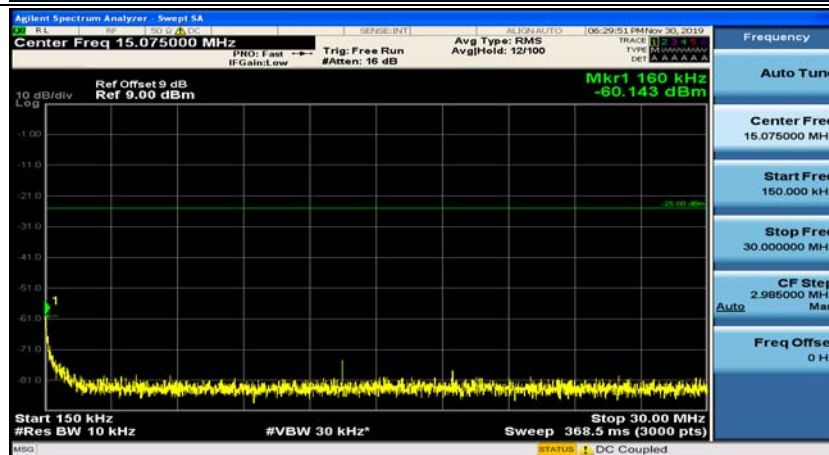
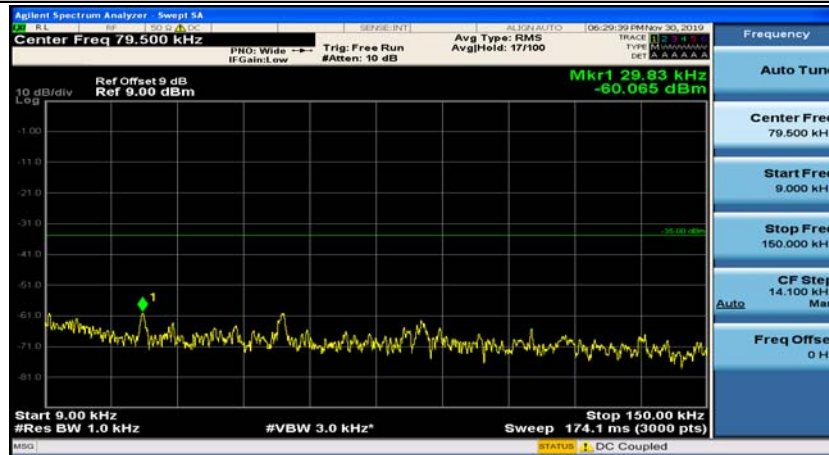


(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49

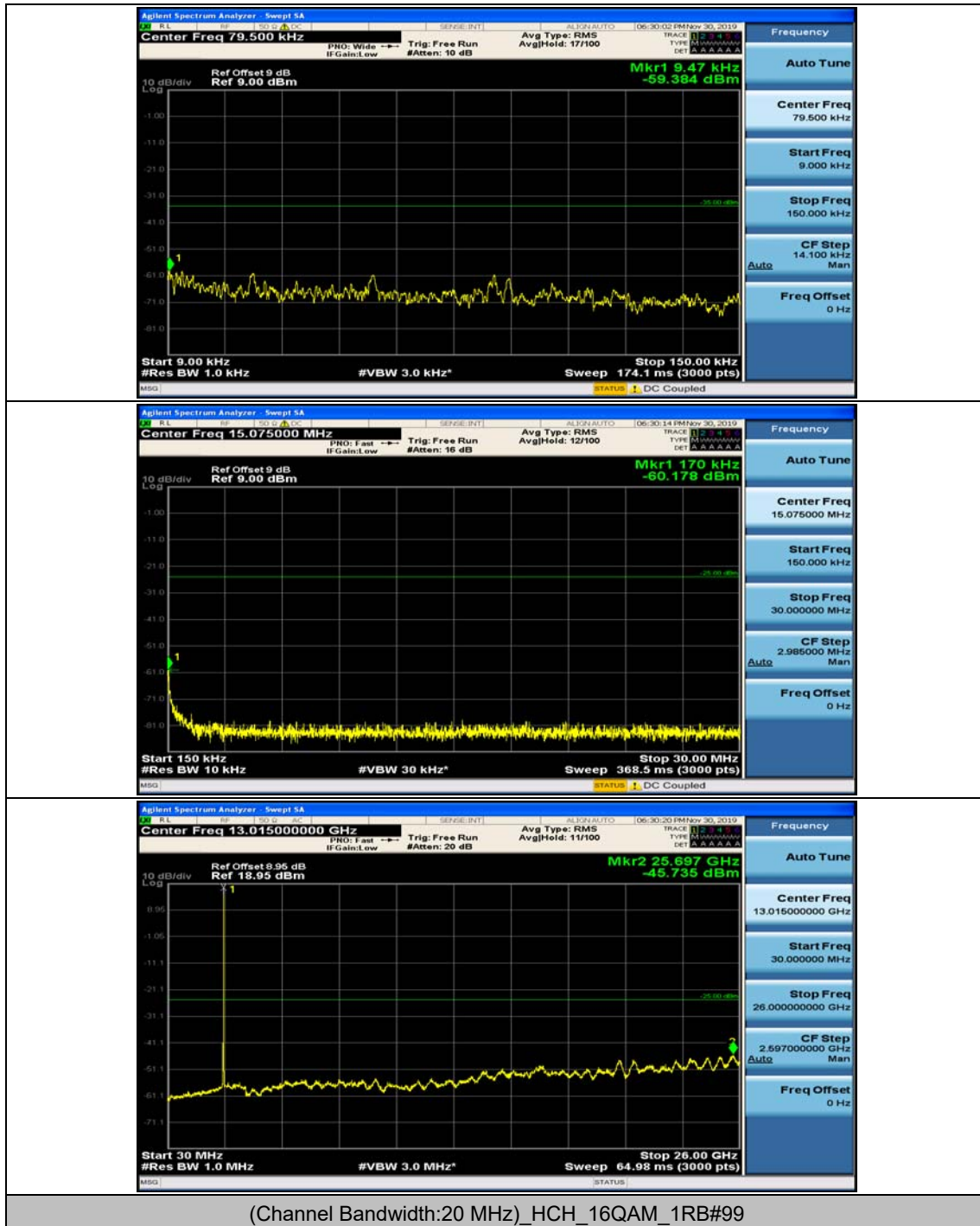


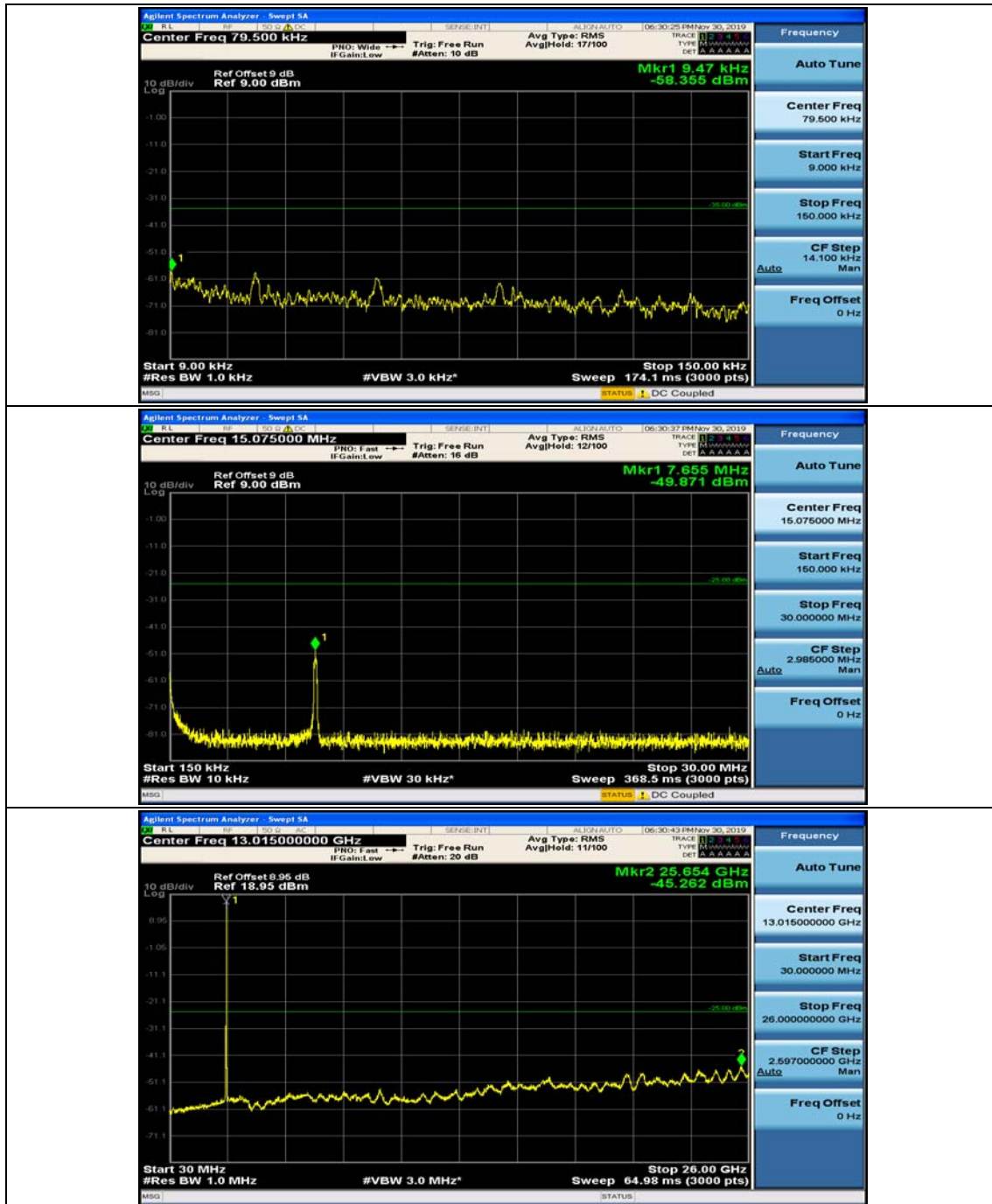


(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0



(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	1.21	0.000484	± 2.5	PASS
		VN	TN	0.17	0.000068	± 2.5	PASS
		VH	TN	3.16	0.001263	± 2.5	PASS
	MCH	VL	TN	-0.04	-0.000016	± 2.5	PASS
		VN	TN	4.86	0.001917	± 2.5	PASS
		VH	TN	-0.61	-0.000241	± 2.5	PASS
	HCH	VL	TN	-0.36	-0.000140	± 2.5	PASS
		VN	TN	2.76	0.001075	± 2.5	PASS
		VH	TN	0.94	0.000366	± 2.5	PASS
16QAM	LCH	VL	TN	3.06	0.001223	± 2.5	PASS
		VN	TN	3.58	0.001431	± 2.5	PASS
		VH	TN	2.41	0.000963	± 2.5	PASS
	MCH	VL	TN	3.96	0.001562	± 2.5	PASS
		VN	TN	-1.03	-0.000406	± 2.5	PASS
		VH	TN	0.73	0.000288	± 2.5	PASS
	HCH	VL	TN	2.98	0.001161	± 2.5	PASS
		VN	TN	4.94	0.001924	± 2.5	PASS
		VH	TN	4.06	0.001581	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.89	0.001554	± 2.5	PASS
		VN	-20	4.74	0.001894	± 2.5	PASS
		VN	-10	-1.8	-0.000719	± 2.5	PASS
		VN	0	-0.75	-0.000300	± 2.5	PASS
		VN	10	-1.78	-0.000711	± 2.5	PASS
		VN	20	2.57	0.001027	± 2.5	PASS
		VN	30	3.74	0.001495	± 2.5	PASS
		VN	40	-0.91	-0.000364	± 2.5	PASS
		VN	50	-0.44	-0.000176	± 2.5	PASS
	MCH	VN	-30	4.56	0.001799	± 2.5	PASS

		VN	-20	-0.71	-0.000280	± 2.5	PASS
		VN	-10	1.14	0.000450	± 2.5	PASS
		VN	0	2.18	0.000860	± 2.5	PASS
		VN	10	4.44	0.001751	± 2.5	PASS
		VN	20	0.17	0.000067	± 2.5	PASS
		VN	30	-0.46	-0.000181	± 2.5	PASS
		VN	40	-1.65	-0.000651	± 2.5	PASS
		VN	50	0.71	0.000280	± 2.5	PASS
	HCH	VN	-30	2.22	0.000865	± 2.5	PASS
		VN	-20	0.15	0.000058	± 2.5	PASS
		VN	-10	0.66	0.000257	± 2.5	PASS
		VN	0	0.31	0.000121	± 2.5	PASS
		VN	10	4.47	0.001741	± 2.5	PASS
		VN	20	3.45	0.001344	± 2.5	PASS
		VN	30	1.16	0.000452	± 2.5	PASS
		VN	40	-0.28	-0.000109	± 2.5	PASS
		VN	50	3.01	0.001172	± 2.5	PASS
16QAM	LCH	VN	-30	0.67	0.000268	± 2.5	PASS
		VN	-20	1.54	0.000615	± 2.5	PASS
		VN	-10	-0.44	-0.000176	± 2.5	PASS
		VN	0	-0.09	-0.000036	± 2.5	PASS
		VN	10	4.03	0.001610	± 2.5	PASS
		VN	20	-0.66	-0.000264	± 2.5	PASS
		VN	30	-1.49	-0.000595	± 2.5	PASS
		VN	40	0.2	0.000080	± 2.5	PASS
		VN	50	1.13	0.000452	± 2.5	PASS
	MCH	VN	-30	0.75	0.000296	± 2.5	PASS
		VN	-20	2.95	0.001164	± 2.5	PASS
		VN	-10	3.85	0.001519	± 2.5	PASS
		VN	0	4.11	0.001621	± 2.5	PASS
		VN	10	2.94	0.001160	± 2.5	PASS
		VN	20	0.46	0.000181	± 2.5	PASS
		VN	30	4.81	0.001897	± 2.5	PASS
		VN	40	1.52	0.000600	± 2.5	PASS
		VN	50	0.75	0.000296	± 2.5	PASS
	HCH	VN	-30	1.93	0.000752	± 2.5	PASS
		VN	-20	-0.85	-0.000331	± 2.5	PASS
		VN	-10	4.02	0.001566	± 2.5	PASS
		VN	0	1.92	0.000748	± 2.5	PASS
		VN	10	-1.72	-0.000670	± 2.5	PASS
		VN	20	0.15	0.000058	± 2.5	PASS

		VN	30	-1.68	-0.000654	± 2.5	PASS
		VN	40	3.84	0.001496	± 2.5	PASS
		VN	50	2.97	0.001157	± 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	-0.3	-0.000120	± 2.5	PASS
		VN	TN	-1.67	-0.000667	± 2.5	PASS
		VH	TN	-1.65	-0.000659	± 2.5	PASS
	MCH	VL	TN	0.71	0.000280	± 2.5	PASS
		VN	TN	-1.89	-0.000746	± 2.5	PASS
		VH	TN	-0.27	-0.000107	± 2.5	PASS
	HCH	VL	TN	-0.85	-0.000331	± 2.5	PASS
		VN	TN	2.55	0.000994	± 2.5	PASS
		VH	TN	-0.09	-0.000035	± 2.5	PASS
16QAM	LCH	VL	TN	4.17	0.001665	± 2.5	PASS
		VN	TN	0.34	0.000136	± 2.5	PASS
		VH	TN	-0.71	-0.000283	± 2.5	PASS
	MCH	VL	TN	4.43	0.001748	± 2.5	PASS
		VN	TN	-0.72	-0.000284	± 2.5	PASS
		VH	TN	3	0.001183	± 2.5	PASS
	HCH	VL	TN	0.21	0.000082	± 2.5	PASS
		VN	TN	3.5	0.001365	± 2.5	PASS
		VH	TN	-1.66	-0.000647	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.71	0.001082	± 2.5	PASS
		VN	-20	-0.1	-0.000040	± 2.5	PASS
		VN	-10	0.92	0.000367	± 2.5	PASS
		VN	0	0.7	0.000279	± 2.5	PASS
		VN	10	1.42	0.000567	± 2.5	PASS
		VN	20	2.94	0.001174	± 2.5	PASS
		VN	30	-1.63	-0.000651	± 2.5	PASS
		VN	40	-1.03	-0.000411	± 2.5	PASS
		VN	50	-1.43	-0.000571	± 2.5	PASS
	MCH	VN	-30	-0.46	-0.000181	± 2.5	PASS
		VN	-20	3.3	0.001302	± 2.5	PASS

		VN	-10	4.03	0.001590	± 2.5	PASS
		VN	0	1.05	0.000414	± 2.5	PASS
		VN	10	3.29	0.001298	± 2.5	PASS
		VN	20	-1.78	-0.000702	± 2.5	PASS
		VN	30	0.34	0.000134	± 2.5	PASS
		VN	40	3.13	0.001235	± 2.5	PASS
		VN	50	-0.19	-0.000075	± 2.5	PASS
	HCH	VN	-30	0.27	0.000105	± 2.5	PASS
		VN	-20	1.74	0.000678	± 2.5	PASS
		VN	-10	4.65	0.001813	± 2.5	PASS
		VN	0	1.17	0.000456	± 2.5	PASS
		VN	10	1.83	0.000713	± 2.5	PASS
		VN	20	-1.66	-0.000647	± 2.5	PASS
		VN	30	-0.6	-0.000234	± 2.5	PASS
		VN	40	3.51	0.001368	± 2.5	PASS
		VN	50	4.95	0.001930	± 2.5	PASS
QPSK	LCH	VN	-30	4.07	0.001625	± 2.5	PASS
		VN	-20	-0.11	-0.000044	± 2.5	PASS
		VN	-10	1.76	0.000703	± 2.5	PASS
		VN	0	3.43	0.001369	± 2.5	PASS
		VN	10	3.25	0.001297	± 2.5	PASS
		VN	20	4.32	0.001725	± 2.5	PASS
		VN	30	4.2	0.001677	± 2.5	PASS
		VN	40	2.91	0.001162	± 2.5	PASS
		VN	50	0.83	0.000331	± 2.5	PASS
	MCH	VN	-30	2.87	0.001132	± 2.5	PASS
		VN	-20	4.43	0.001748	± 2.5	PASS
		VN	-10	-1.16	-0.000458	± 2.5	PASS
		VN	0	2.14	0.000844	± 2.5	PASS
		VN	10	2.7	0.001065	± 2.5	PASS
		VN	20	0.44	0.000174	± 2.5	PASS
		VN	30	1.14	0.000450	± 2.5	PASS
		VN	40	4.12	0.001625	± 2.5	PASS
		VN	50	2.5	0.000986	± 2.5	PASS
	HCH	VN	-30	-1.24	-0.000483	± 2.5	PASS
		VN	-20	4.15	0.001618	± 2.5	PASS
		VN	-10	1.49	0.000581	± 2.5	PASS
		VN	0	4.92	0.001918	± 2.5	PASS
		VN	10	1.02	0.000398	± 2.5	PASS
		VN	20	-0.58	-0.000226	± 2.5	PASS
		VN	30	0.01	0.000004	± 2.5	PASS

		VN	40	2.72	0.001060	± 2.5	PASS
		VN	50	1.66	0.000647	± 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	-1.77	-0.000706	± 2.5	PASS
		VN	TN	4.4	0.001755	± 2.5	PASS
		VH	TN	4.3	0.001715	± 2.5	PASS
	MCH	VL	TN	2.76	0.001089	± 2.5	PASS
		VN	TN	3.07	0.001211	± 2.5	PASS
		VH	TN	0.57	0.000225	± 2.5	PASS
	HCH	VL	TN	0.09	0.000035	± 2.5	PASS
		VN	TN	2.81	0.001097	± 2.5	PASS
		VH	TN	3.59	0.001401	± 2.5	PASS
16QAM	LCH	VL	TN	4.37	0.001743	± 2.5	PASS
		VN	TN	2.39	0.000953	± 2.5	PASS
		VH	TN	2.51	0.001001	± 2.5	PASS
	MCH	VL	TN	1.19	0.000469	± 2.5	PASS
		VN	TN	-0.95	-0.000375	± 2.5	PASS
		VH	TN	2.76	0.001089	± 2.5	PASS
	HCH	VL	TN	1.81	0.000706	± 2.5	PASS
		VN	TN	2.72	0.001061	± 2.5	PASS
		VH	TN	3.55	0.001385	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.96	-0.000782	± 2.5	PASS
		VN	-20	3.91	0.001559	± 2.5	PASS
		VN	-10	3.01	0.001200	± 2.5	PASS
		VN	0	2.58	0.001029	± 2.5	PASS
		VN	10	3.27	0.001304	± 2.5	PASS
		VN	20	-0.07	-0.000028	± 2.5	PASS
		VN	30	3.71	0.001480	± 2.5	PASS
		VN	40	4.64	0.001850	± 2.5	PASS
		VN	50	-1.66	-0.000662	± 2.5	PASS
	MCH	VN	-30	3.9	0.001538	± 2.5	PASS
		VN	-20	1.1	0.000434	± 2.5	PASS
		VN	-10	2.77	0.001093	± 2.5	PASS

		VN	0	-0.62	-0.000245	± 2.5	PASS
		VN	10	2.39	0.000943	± 2.5	PASS
		VN	20	0.2	0.000079	± 2.5	PASS
		VN	30	-0.77	-0.000304	± 2.5	PASS
		VN	40	4.14	0.001633	± 2.5	PASS
		VN	50	2.18	0.000860	± 2.5	PASS
	HCH	VN	-30	-0.68	-0.000265	± 2.5	PASS
		VN	-20	2.71	0.001058	± 2.5	PASS
		VN	-10	4.23	0.001651	± 2.5	PASS
		VN	0	1.31	0.000511	± 2.5	PASS
		VN	10	0.16	0.000062	± 2.5	PASS
		VN	20	0.21	0.000082	± 2.5	PASS
		VN	30	-1.36	-0.000531	± 2.5	PASS
		VN	40	2.05	0.000800	± 2.5	PASS
		VN	50	2.16	0.000843	± 2.5	PASS
16QAM	LCH	VN	-30	4	0.001595	± 2.5	PASS
		VN	-20	0.02	0.000008	± 2.5	PASS
		VN	-10	0.29	0.000116	± 2.5	PASS
		VN	0	2.08	0.000830	± 2.5	PASS
		VN	10	-0.67	-0.000267	± 2.5	PASS
		VN	20	-0.18	-0.000072	± 2.5	PASS
		VN	30	4.25	0.001695	± 2.5	PASS
		VN	40	3.48	0.001388	± 2.5	PASS
		VN	50	1.65	0.000658	± 2.5	PASS
	MCH	VN	-30	3.92	0.001546	± 2.5	PASS
		VN	-20	1.79	0.000706	± 2.5	PASS
		VN	-10	-1.33	-0.000525	± 2.5	PASS
		VN	0	-0.93	-0.000367	± 2.5	PASS
		VN	10	2.8	0.001105	± 2.5	PASS
		VN	20	1.09	0.000430	± 2.5	PASS
		VN	30	1.21	0.000477	± 2.5	PASS
		VN	40	1.27	0.000501	± 2.5	PASS
		VN	50	-0.45	-0.000178	± 2.5	PASS
	HCH	VN	-30	4.08	0.001592	± 2.5	PASS
		VN	-20	4.04	0.001577	± 2.5	PASS
		VN	-10	4.18	0.001631	± 2.5	PASS
		VN	0	3.49	0.001362	± 2.5	PASS
		VN	10	0.81	0.000316	± 2.5	PASS
		VN	20	1.15	0.000449	± 2.5	PASS
		VN	30	3.84	0.001499	± 2.5	PASS
		VN	40	0.18	0.000070	± 2.5	PASS

		VN	50	3.69	0.001440	± 2.5	PASS
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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	-1.02	-0.000406	± 2.5	PASS
		VN	TN	3.1	0.001235	± 2.5	PASS
		VH	TN	3.55	0.001414	± 2.5	PASS
	MCH	VL	TN	4.72	0.001862	± 2.5	PASS
		VN	TN	3.51	0.001385	± 2.5	PASS
		VH	TN	-0.76	-0.000300	± 2.5	PASS
	HCH	VL	TN	-1.41	-0.000551	± 2.5	PASS
		VN	TN	3.73	0.001457	± 2.5	PASS
		VH	TN	3.23	0.001262	± 2.5	PASS
16QAM	LCH	VL	TN	2.54	0.001012	± 2.5	PASS
		VN	TN	1.24	0.000494	± 2.5	PASS
		VH	TN	-1.01	-0.000402	± 2.5	PASS
	MCH	VL	TN	3.33	0.001314	± 2.5	PASS
		VN	TN	-0.76	-0.000300	± 2.5	PASS
		VH	TN	3.38	0.001333	± 2.5	PASS
	HCH	VL	TN	2.12	0.000828	± 2.5	PASS
		VN	TN	2.35	0.000918	± 2.5	PASS
		VH	TN	-0.18	-0.000070	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.29	0.000912	± 2.5	PASS
		VN	-20	0.83	0.000331	± 2.5	PASS
		VN	-10	1.88	0.000749	± 2.5	PASS
		VN	0	-1.85	-0.000737	± 2.5	PASS
		VN	10	2.11	0.000841	± 2.5	PASS
		VN	20	1.39	0.000554	± 2.5	PASS
		VN	30	-1.63	-0.000649	± 2.5	PASS
		VN	40	0.09	0.000036	± 2.5	PASS
		VN	50	-0.76	-0.000303	± 2.5	PASS
	MCH	VN	-30	-0.69	-0.000272	± 2.5	PASS
		VN	-20	4.81	0.001897	± 2.5	PASS
		VN	-10	3.29	0.001298	± 2.5	PASS

		VN	0	-1.22	-0.000481	± 2.5	PASS
		VN	10	1.17	0.000462	± 2.5	PASS
		VN	20	-1.88	-0.000742	± 2.5	PASS
		VN	30	0.82	0.000323	± 2.5	PASS
		VN	40	2.31	0.000911	± 2.5	PASS
		VN	50	0.01	0.000004	± 2.5	PASS
	HCH	VN	-30	4.57	0.001785	± 2.5	PASS
		VN	-20	-1.15	-0.000449	± 2.5	PASS
		VN	-10	0.46	0.000180	± 2.5	PASS
		VN	0	0.43	0.000168	± 2.5	PASS
		VN	10	0.46	0.000180	± 2.5	PASS
		VN	20	-1.2	-0.000469	± 2.5	PASS
		VN	30	-0.48	-0.000188	± 2.5	PASS
		VN	40	0.05	0.000020	± 2.5	PASS
		VN	50	-1.71	-0.000668	± 2.5	PASS
16QAM	LCH	VN	-30	4.77	0.001900	± 2.5	PASS
		VN	-20	-1.13	-0.000450	± 2.5	PASS
		VN	-10	-1.5	-0.000598	± 2.5	PASS
		VN	0	4.42	0.001761	± 2.5	PASS
		VN	10	4.74	0.001888	± 2.5	PASS
		VN	20	4.12	0.001641	± 2.5	PASS
		VN	30	0.84	0.000335	± 2.5	PASS
		VN	40	0.87	0.000347	± 2.5	PASS
		VN	50	-0.74	-0.000295	± 2.5	PASS
	MCH	VN	-30	2.74	0.001081	± 2.5	PASS
		VN	-20	3.49	0.001377	± 2.5	PASS
		VN	-10	-0.25	-0.000099	± 2.5	PASS
		VN	0	3.44	0.001357	± 2.5	PASS
		VN	10	-0.71	-0.000280	± 2.5	PASS
		VN	20	2.53	0.000998	± 2.5	PASS
		VN	30	-1.91	-0.000753	± 2.5	PASS
		VN	40	-1.06	-0.000418	± 2.5	PASS
		VN	50	-1.21	-0.000477	± 2.5	PASS
	HCH	VN	-30	1.16	0.000453	± 2.5	PASS
		VN	-20	2.42	0.000945	± 2.5	PASS
		VN	-10	3.66	0.001430	± 2.5	PASS
		VN	0	1.89	0.000738	± 2.5	PASS
		VN	10	2.81	0.001098	± 2.5	PASS
		VN	20	0.24	0.000094	± 2.5	PASS
		VN	30	4.5	0.001758	± 2.5	PASS
		VN	40	4.61	0.001801	± 2.5	PASS

		VN	50	3.23	0.001262	± 2.5	PASS
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