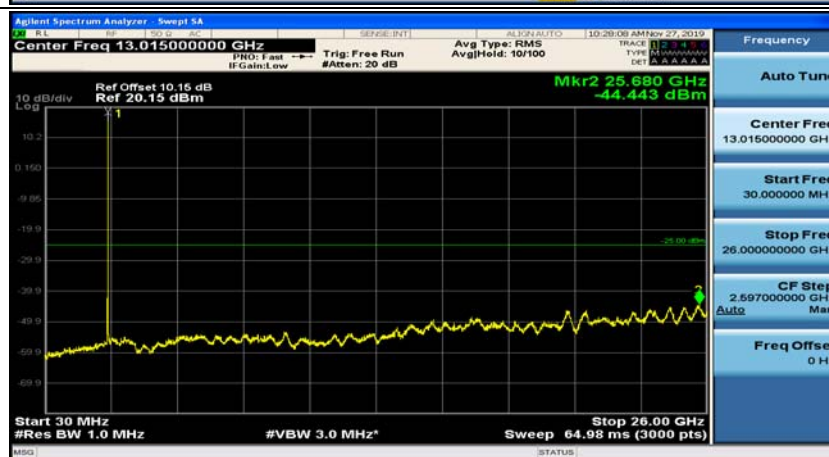
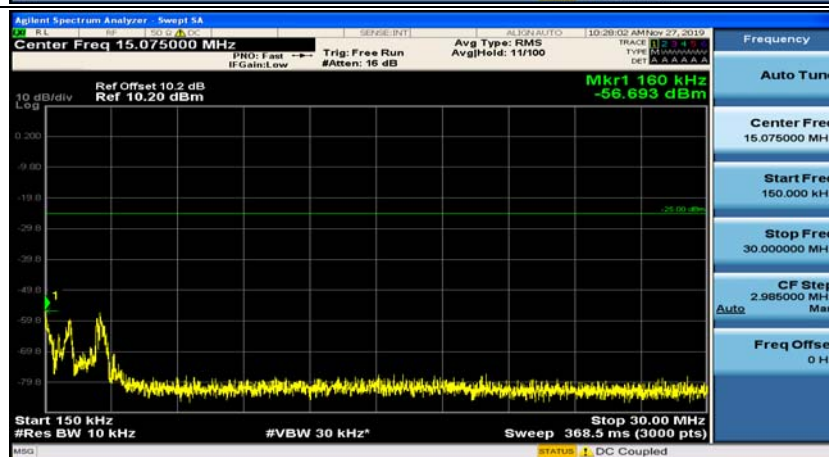
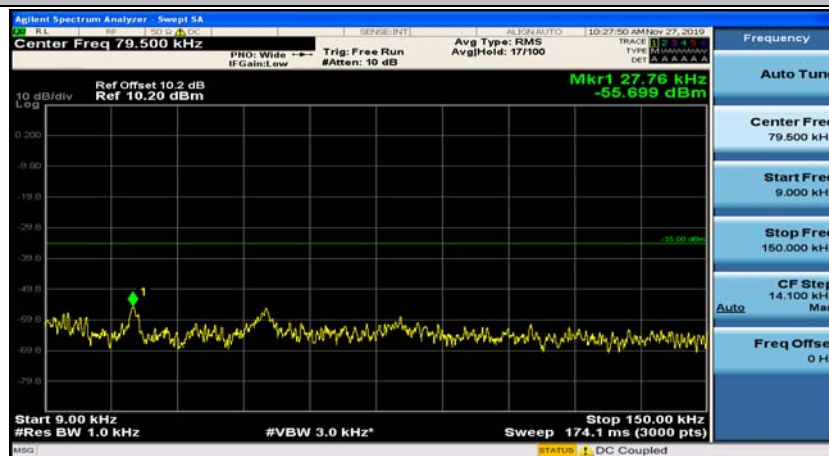
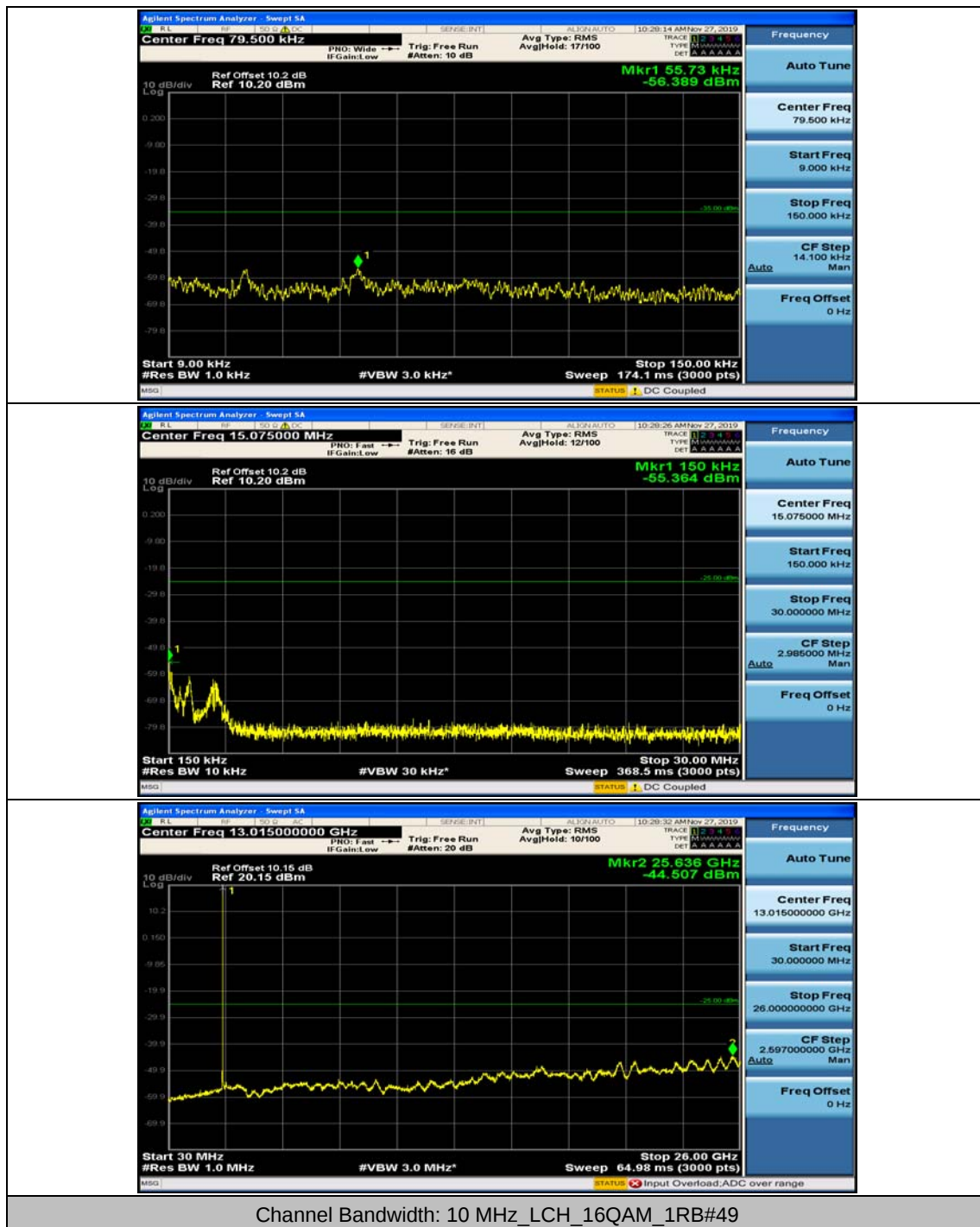
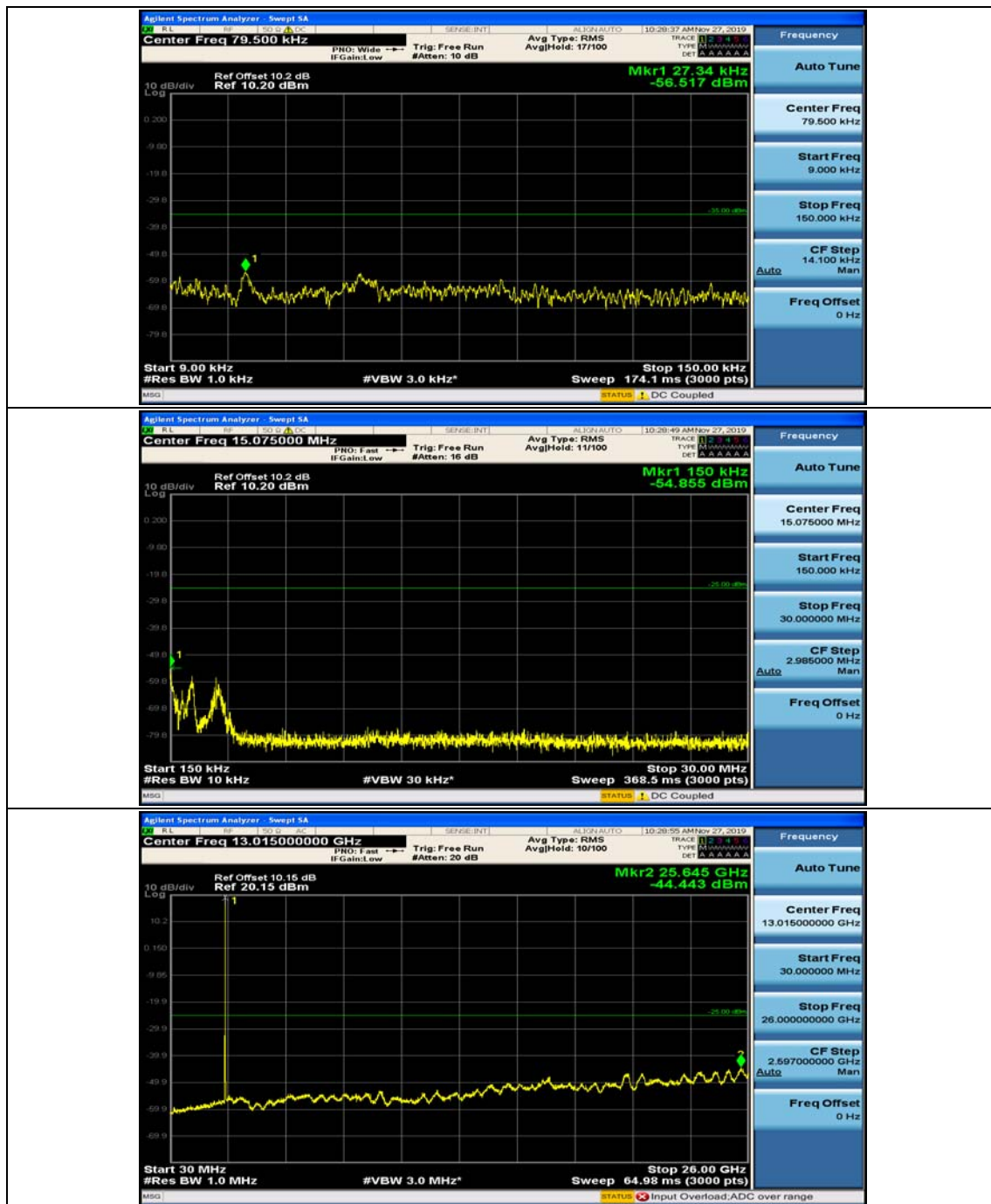


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0

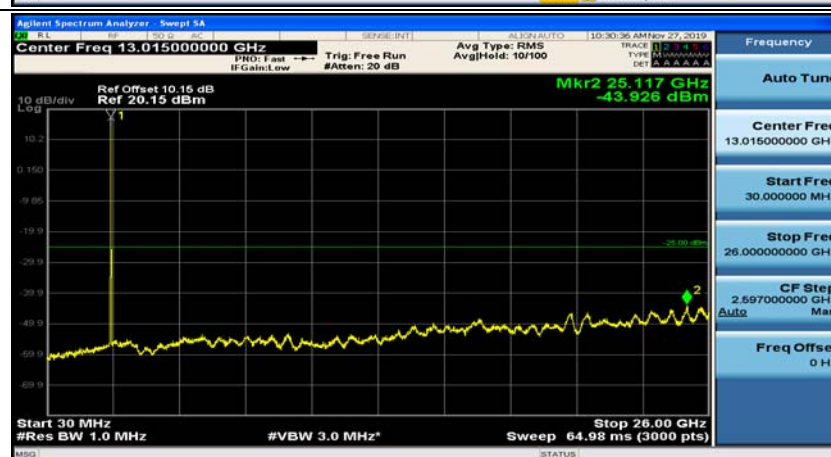
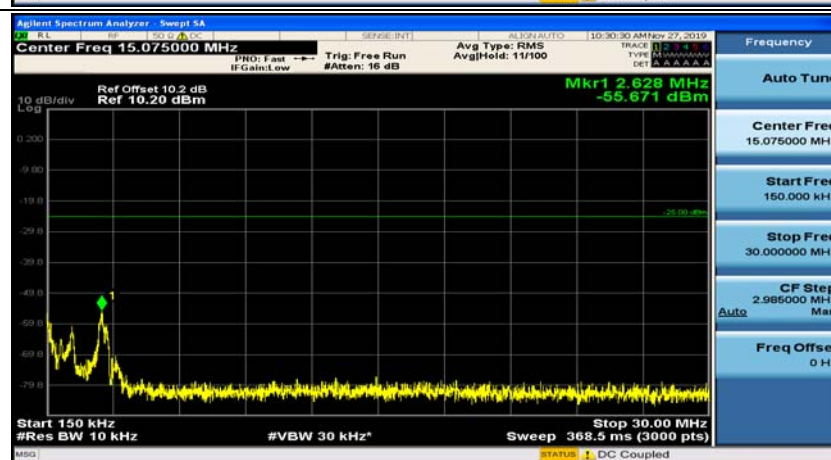
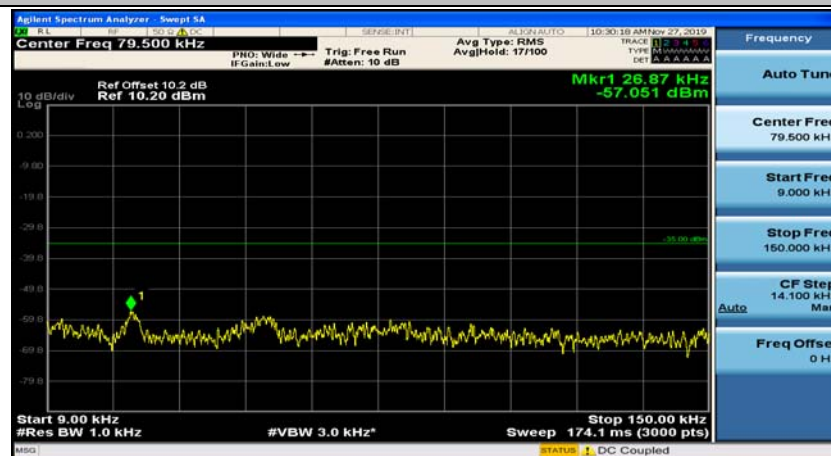


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

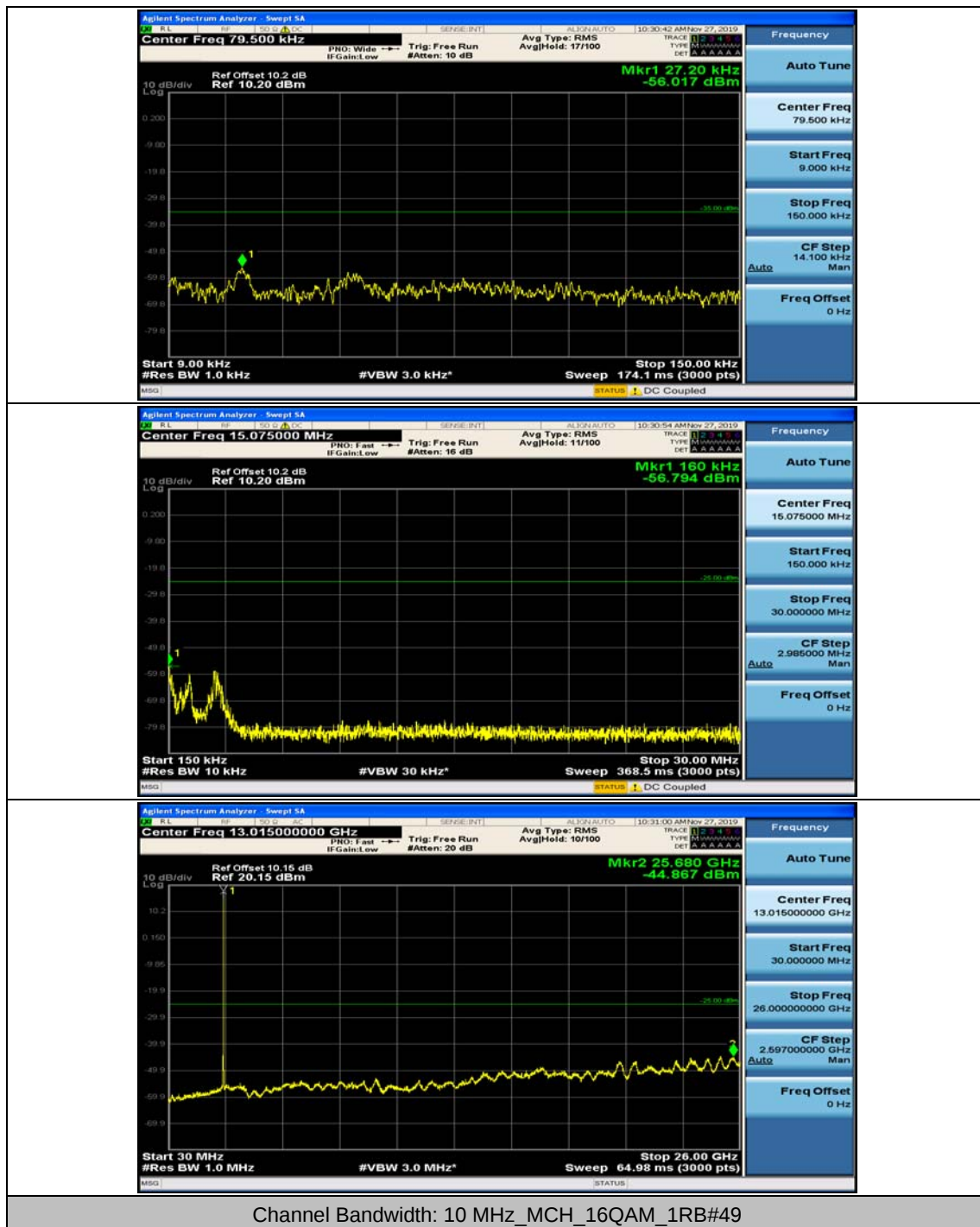


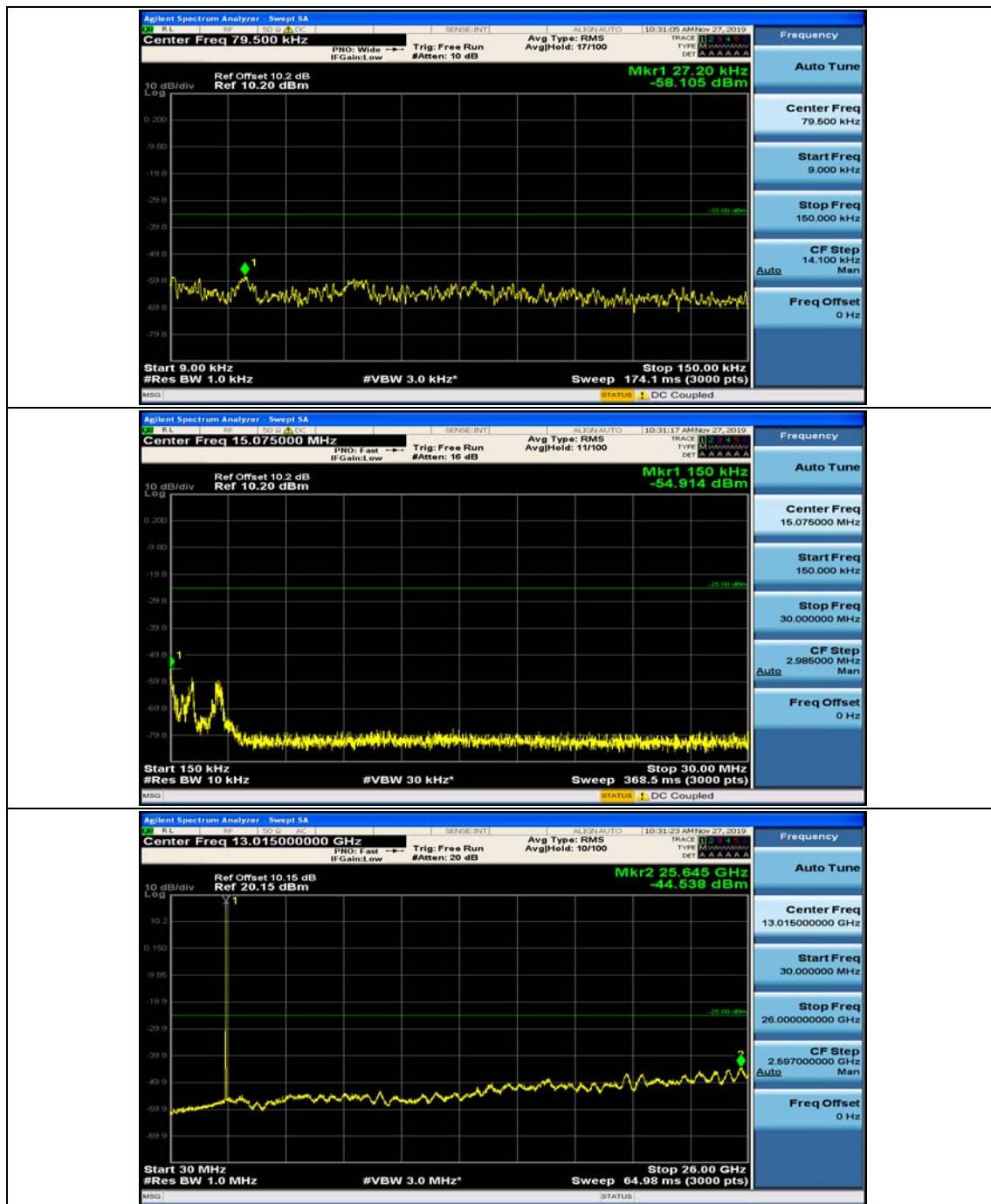


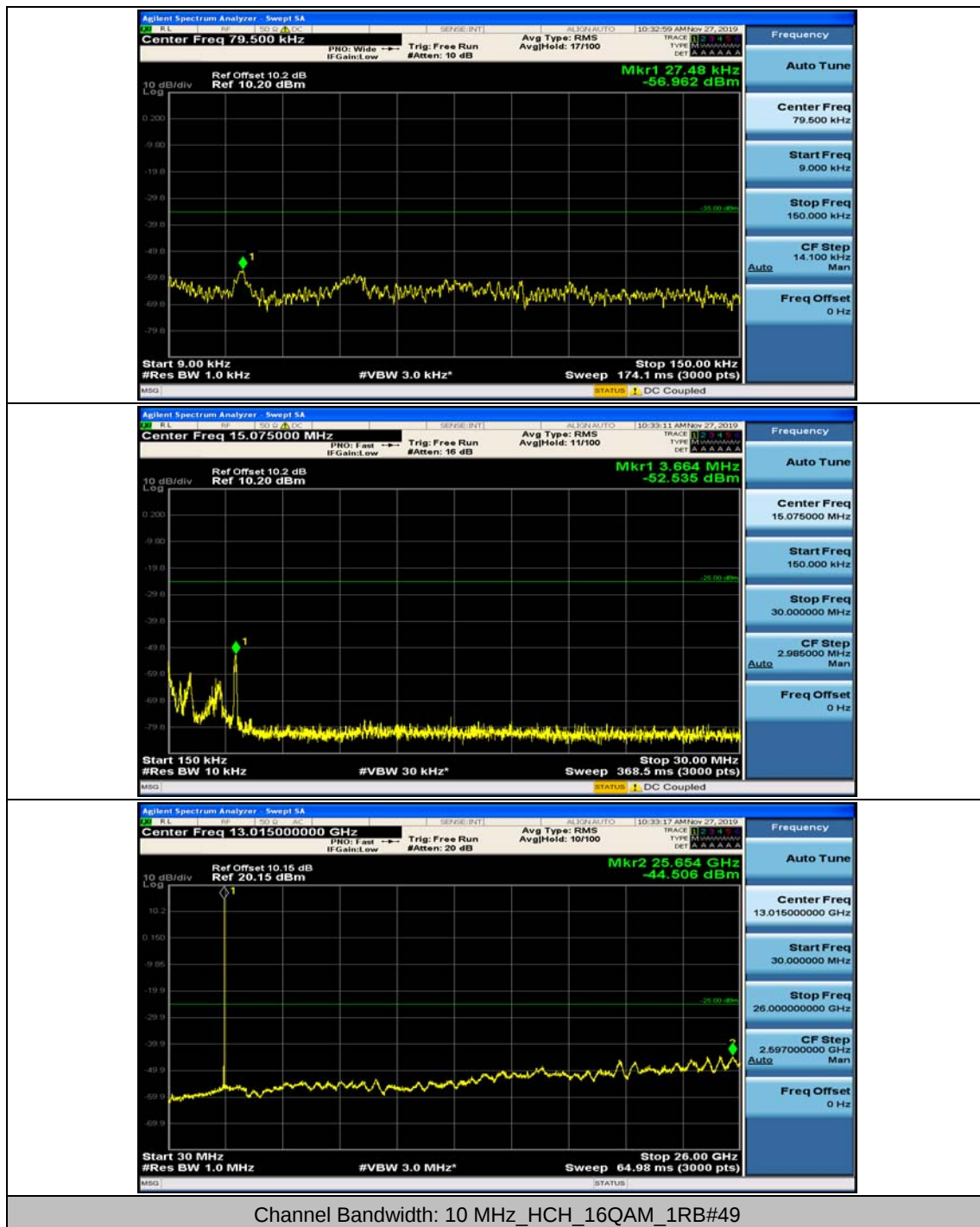
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

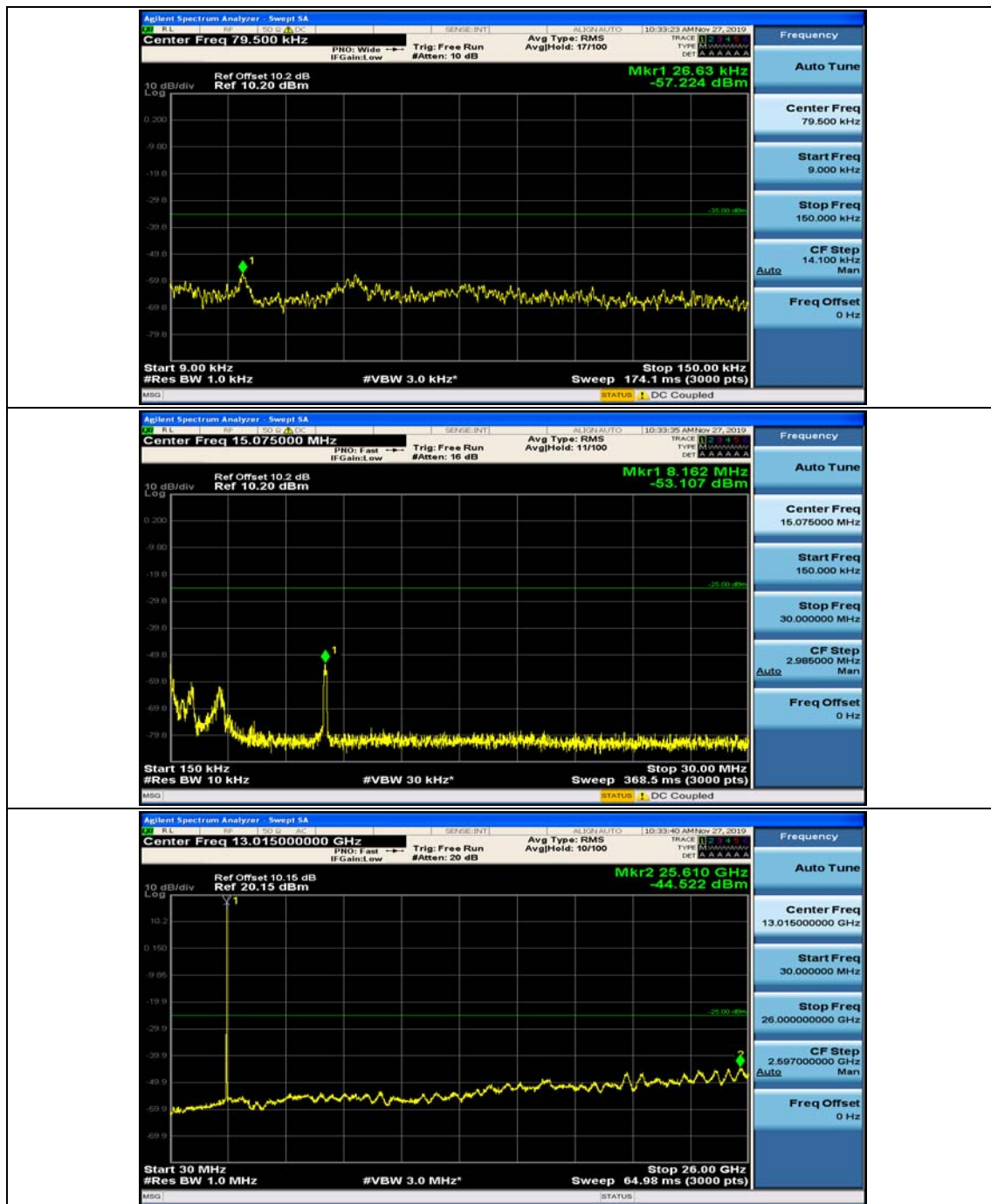


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

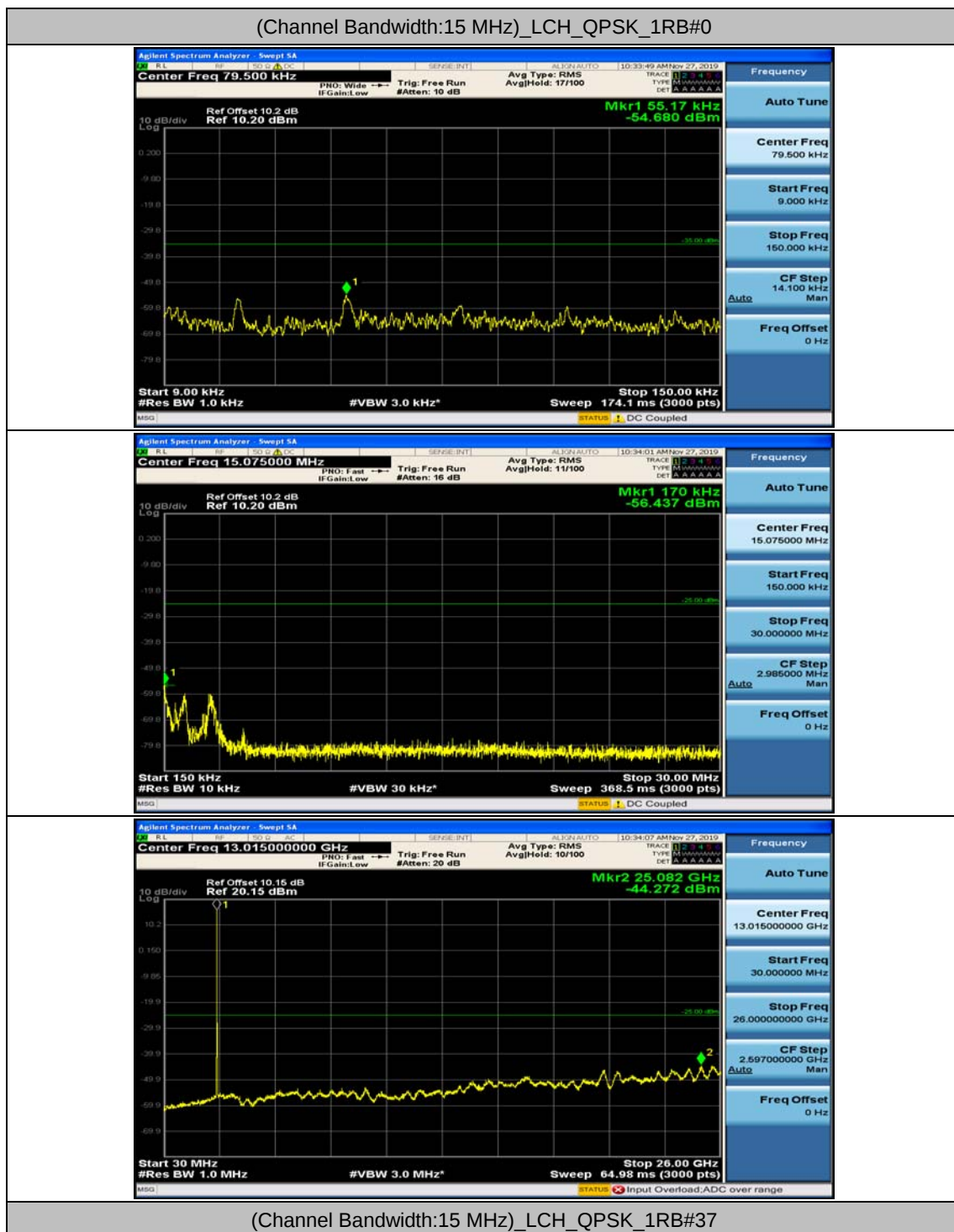


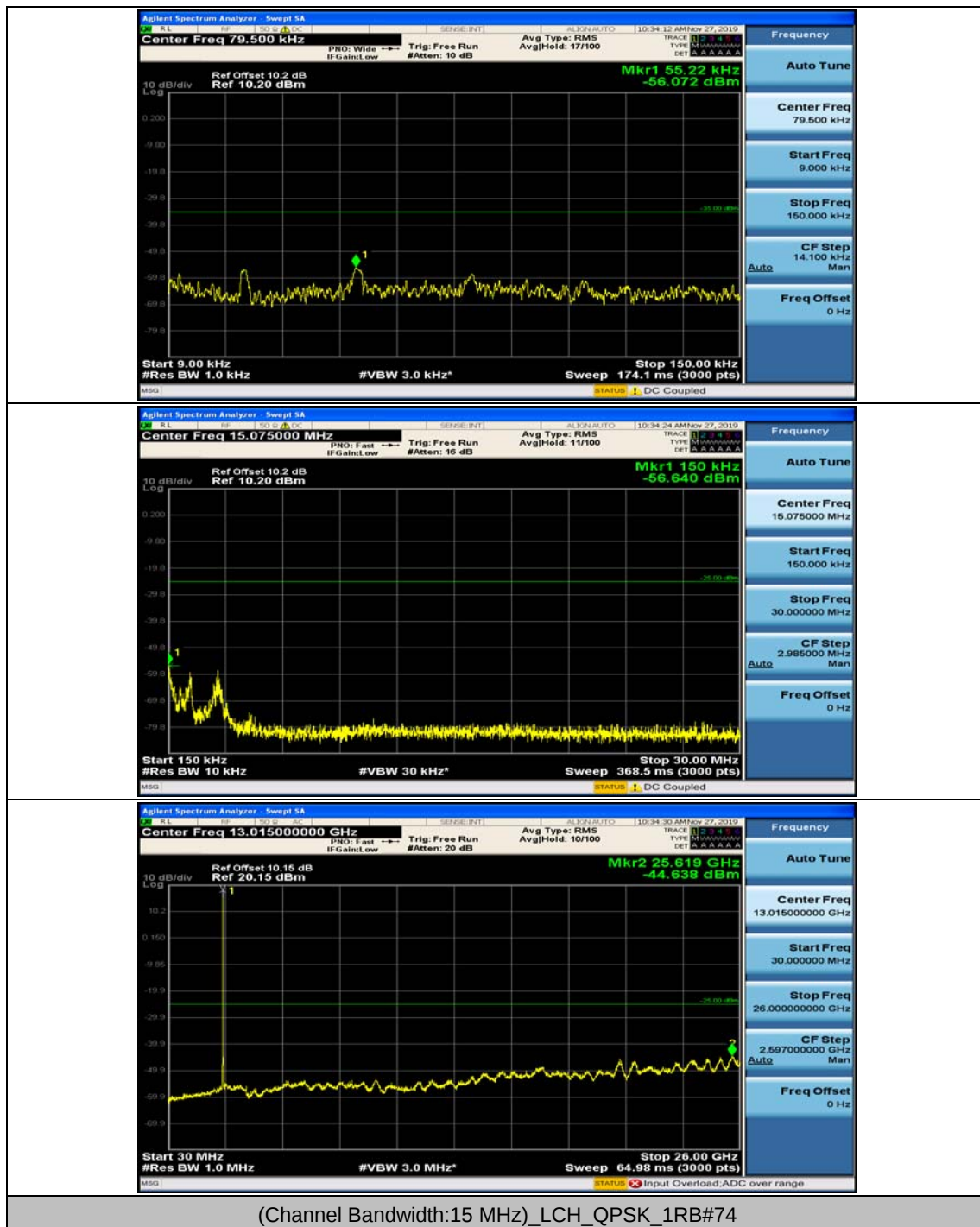


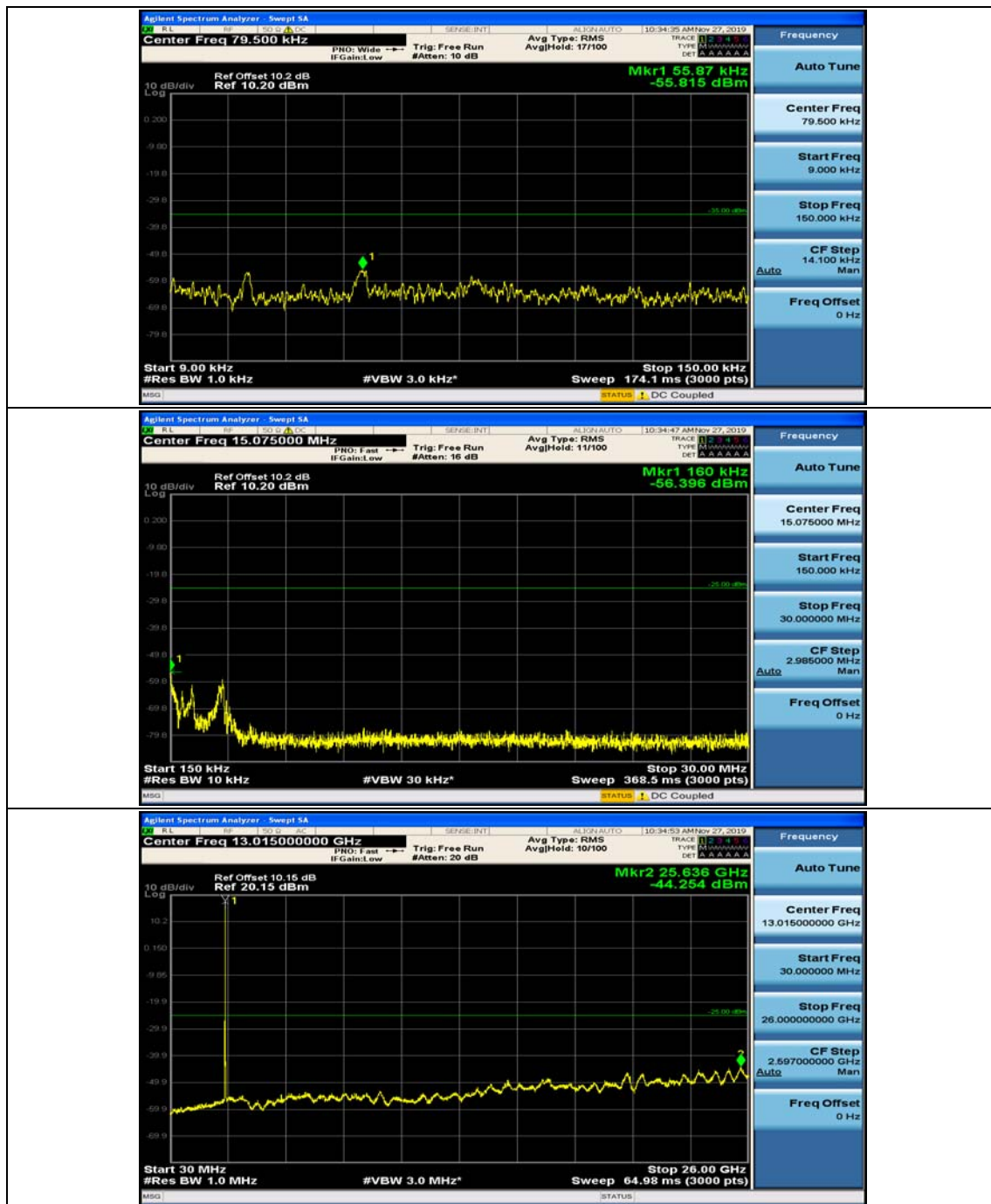




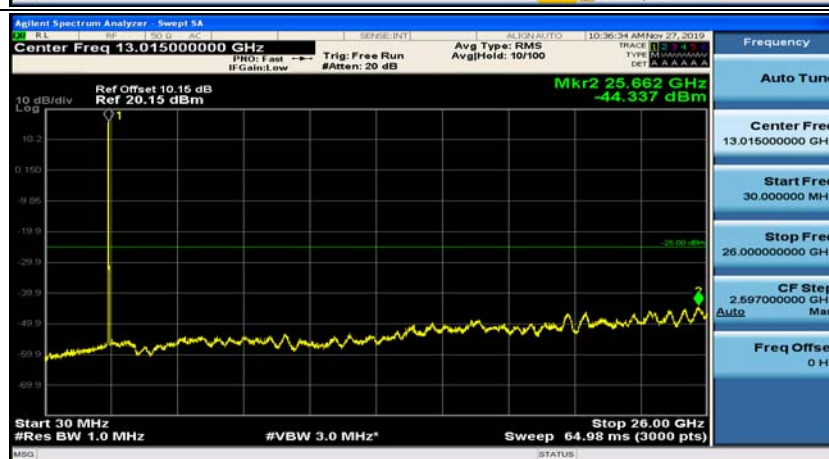
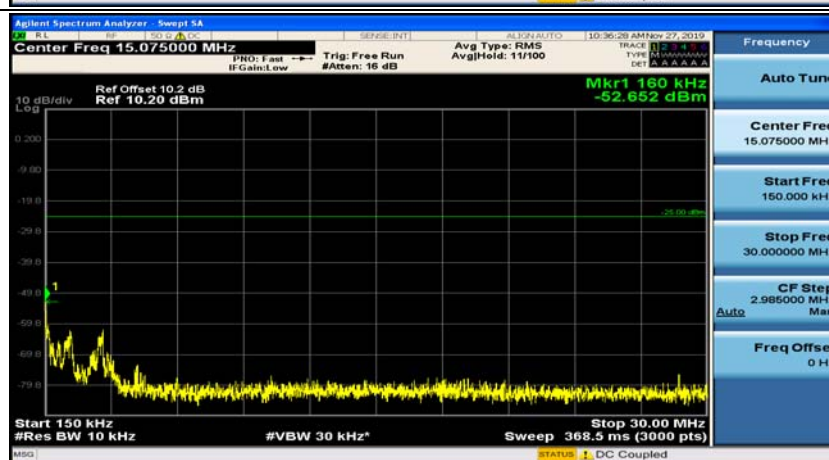
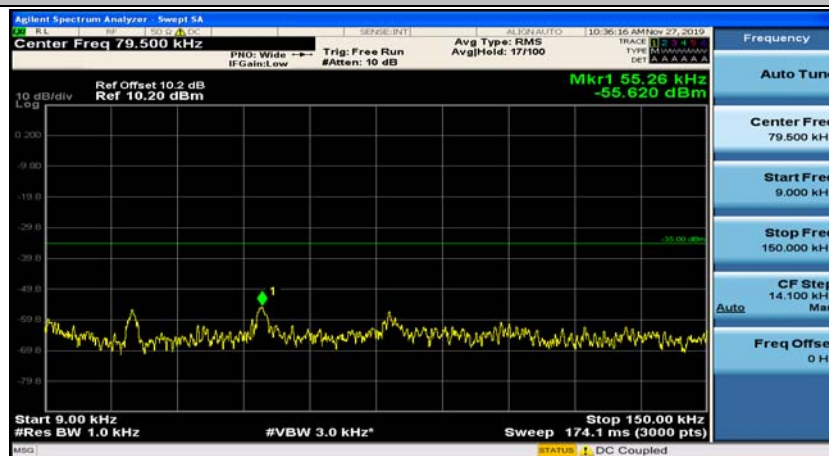
Channel Bandwidth: 15 MHz



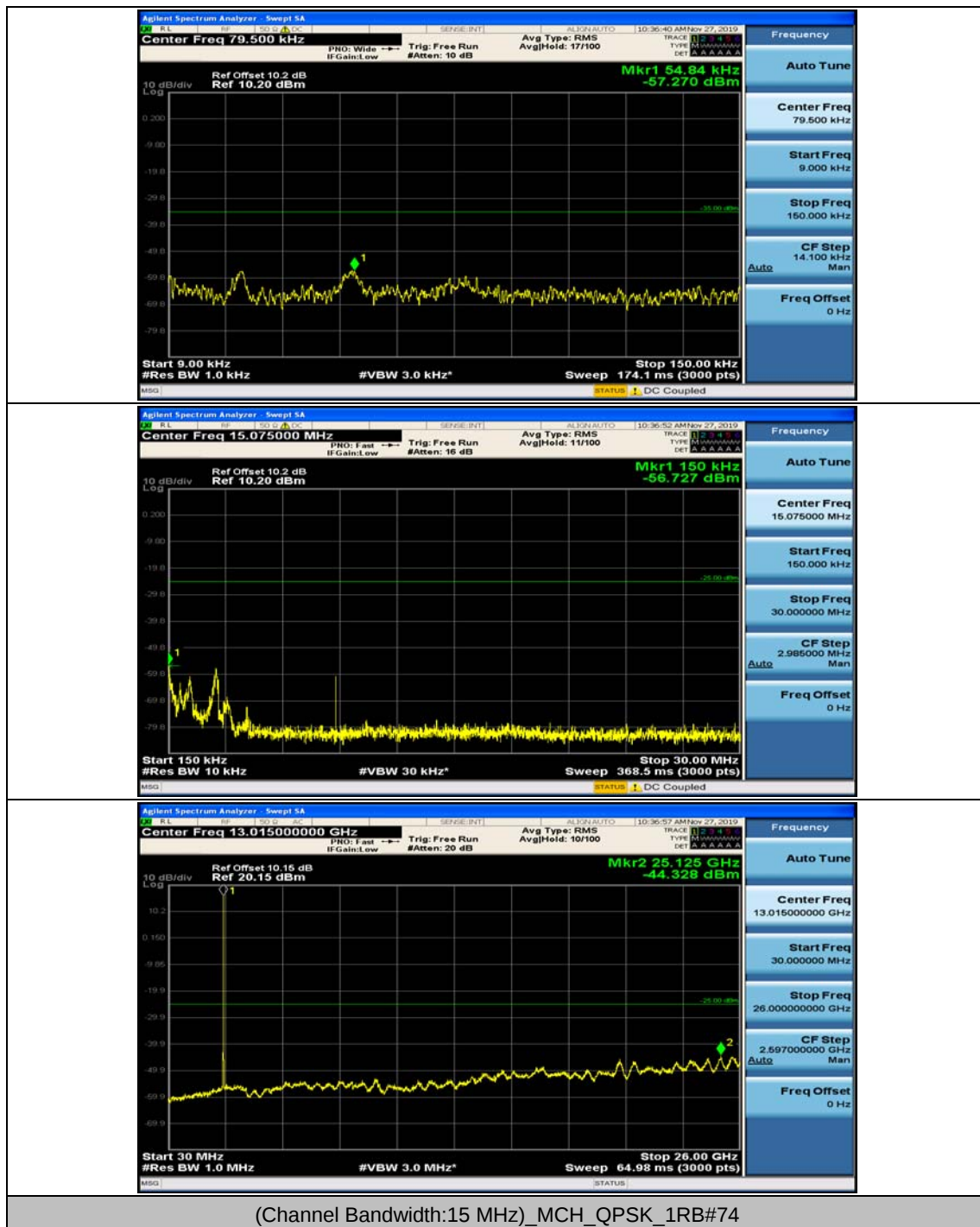


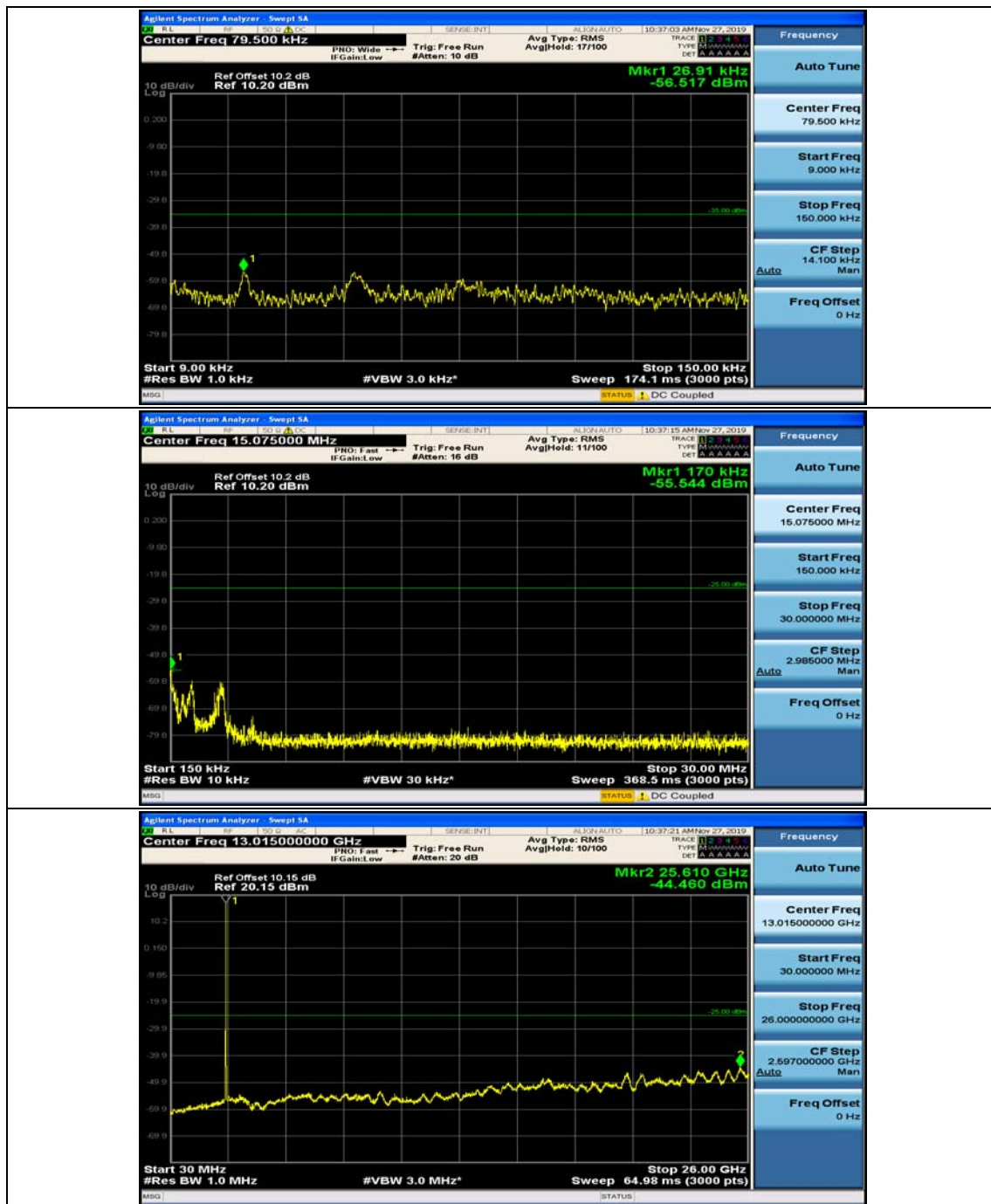


(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0

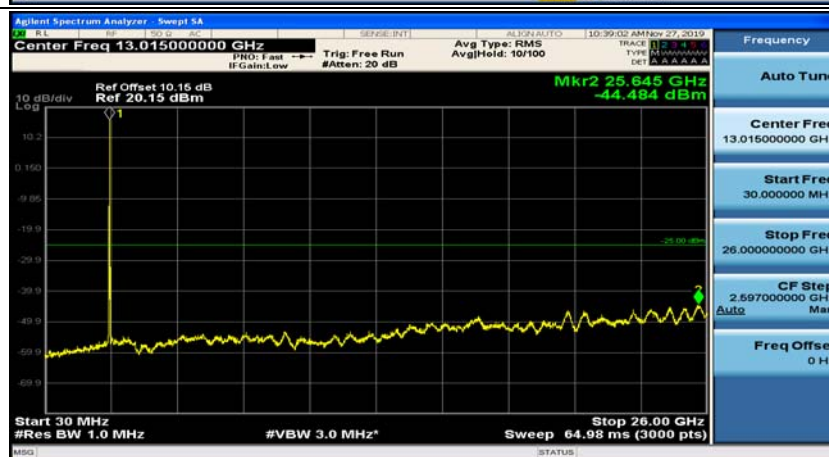
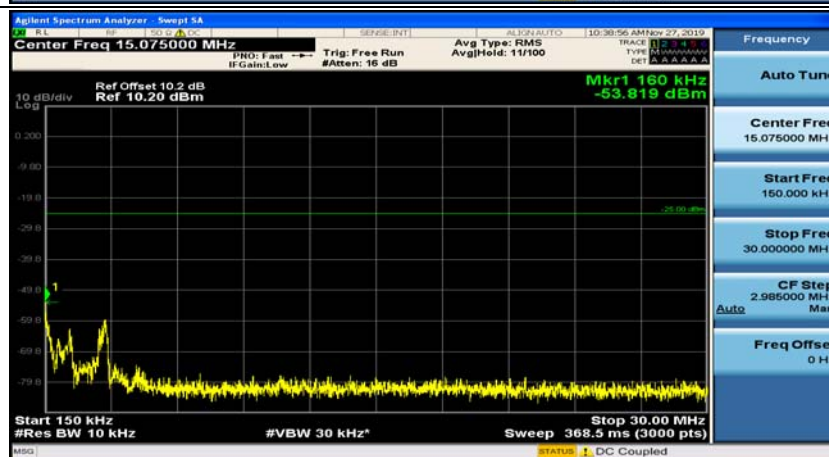
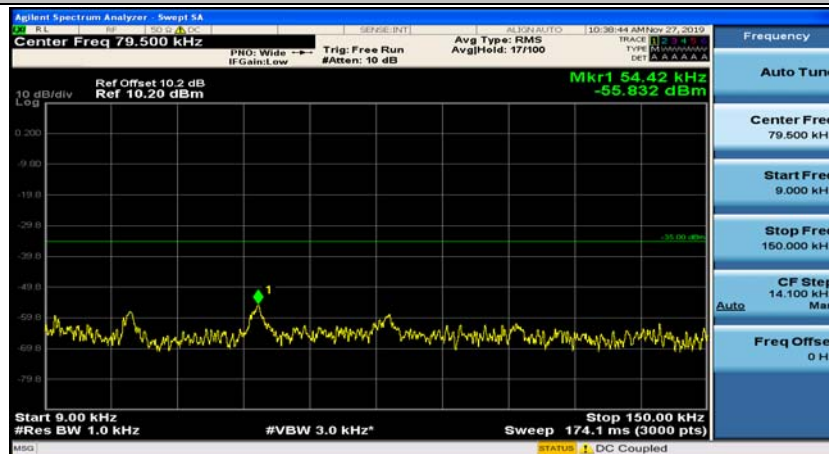


(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#37

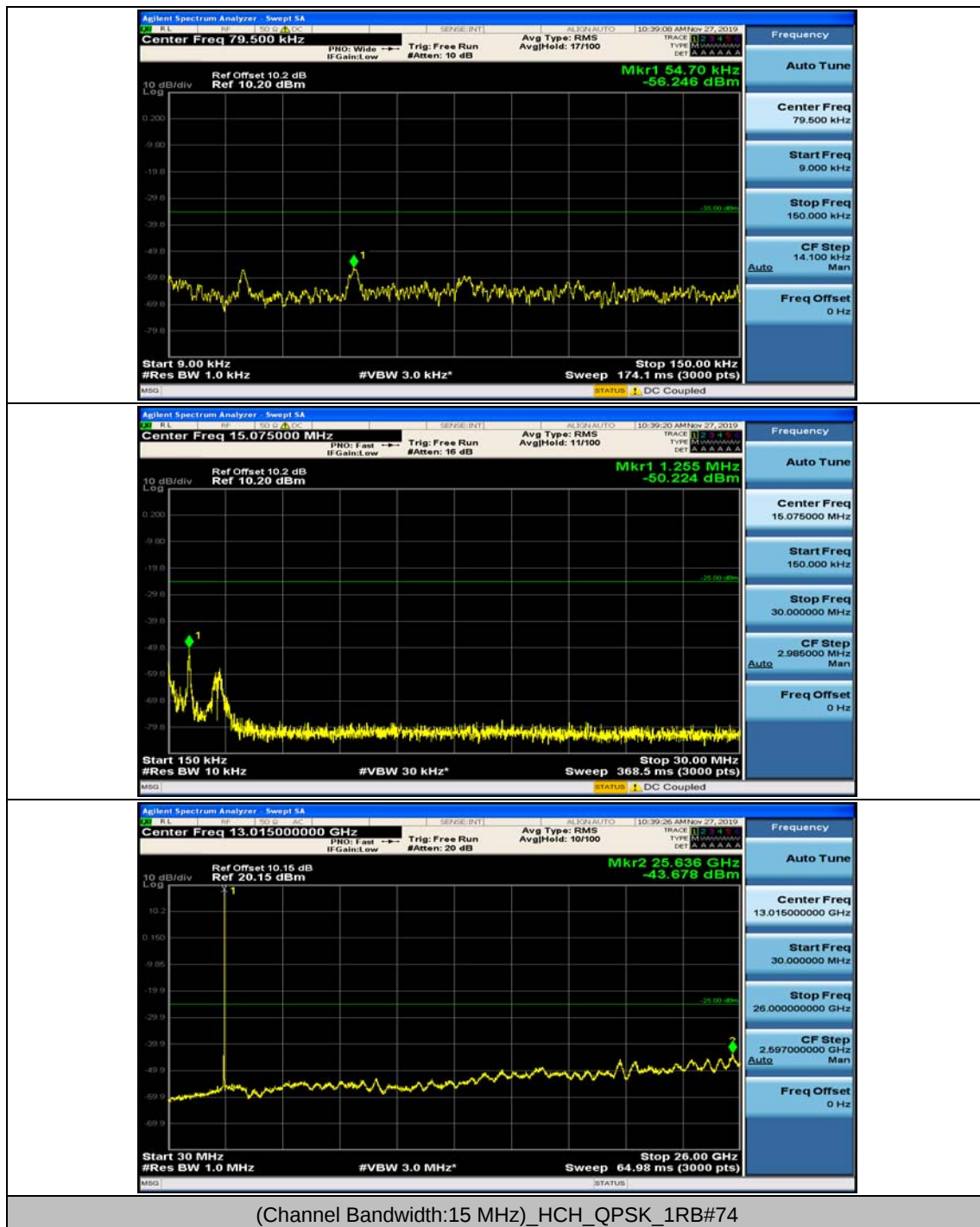


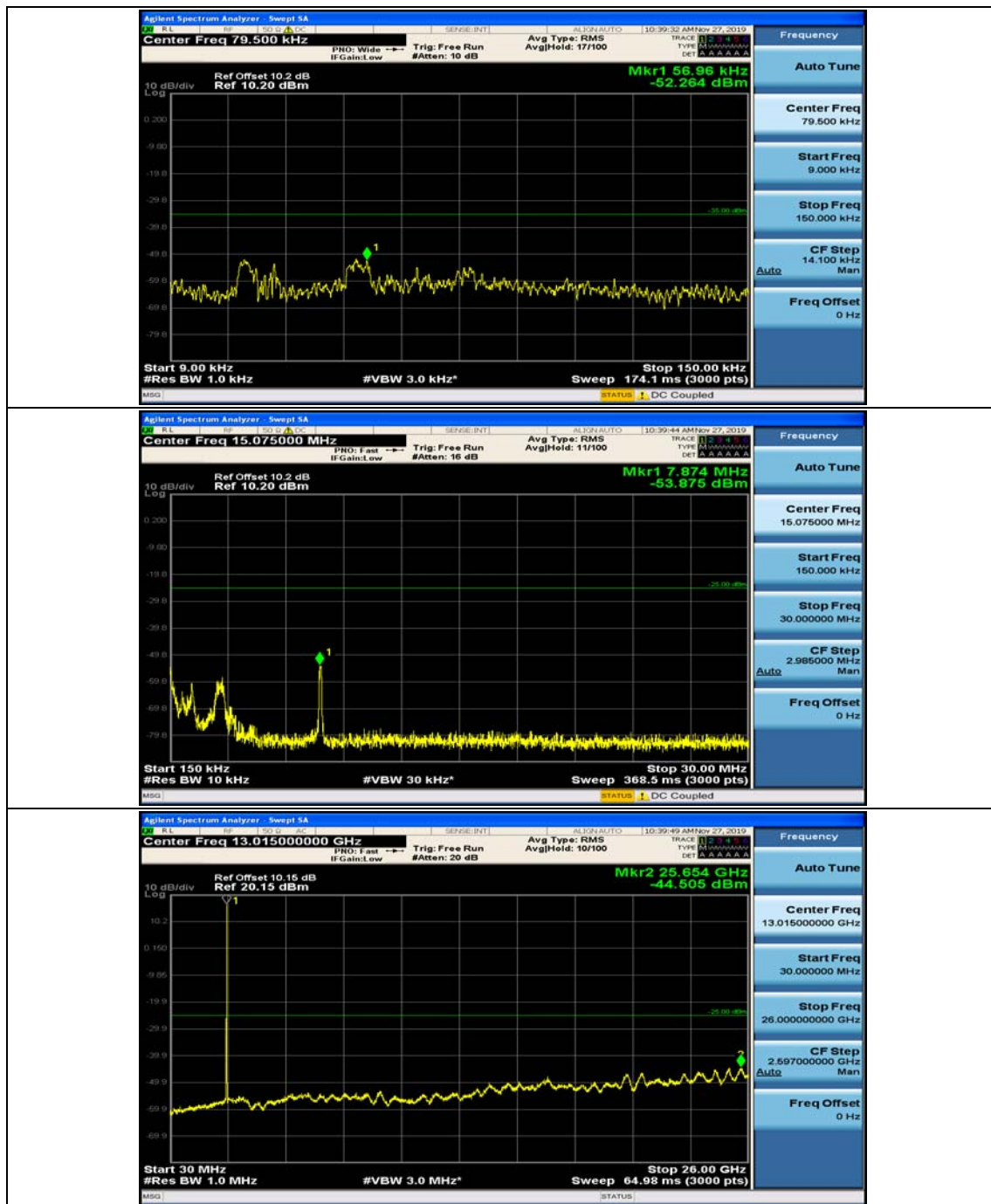


(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0

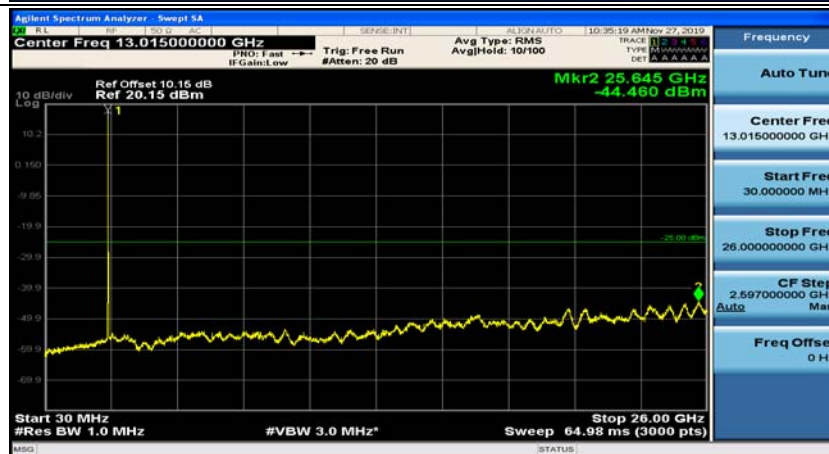
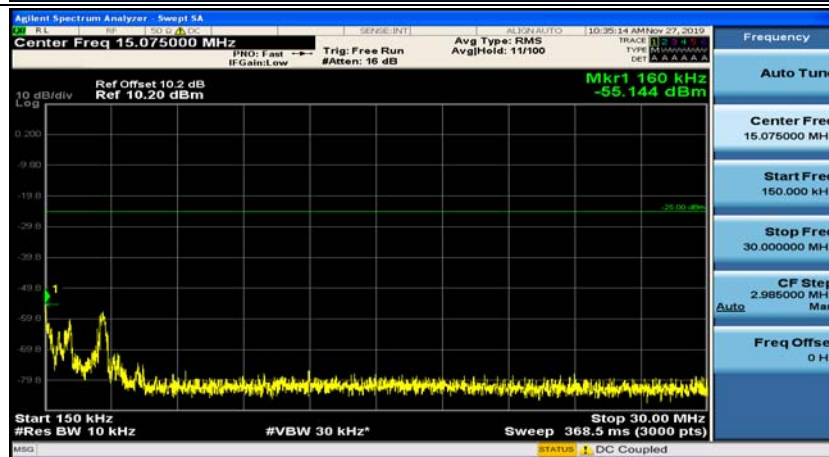
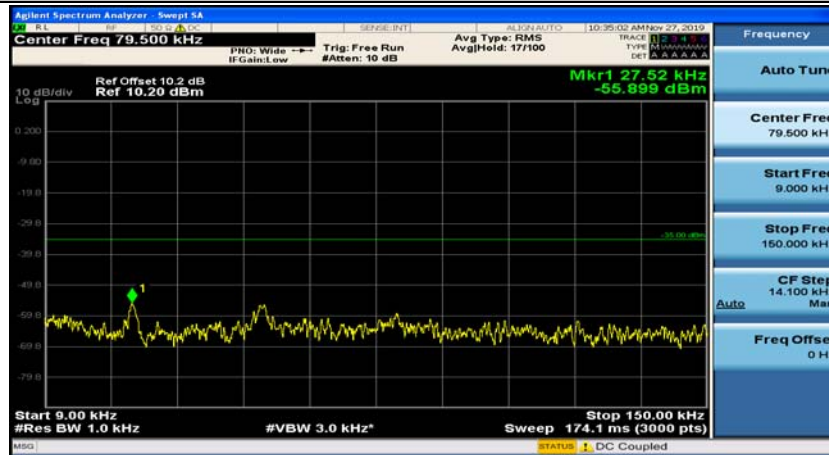


(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37

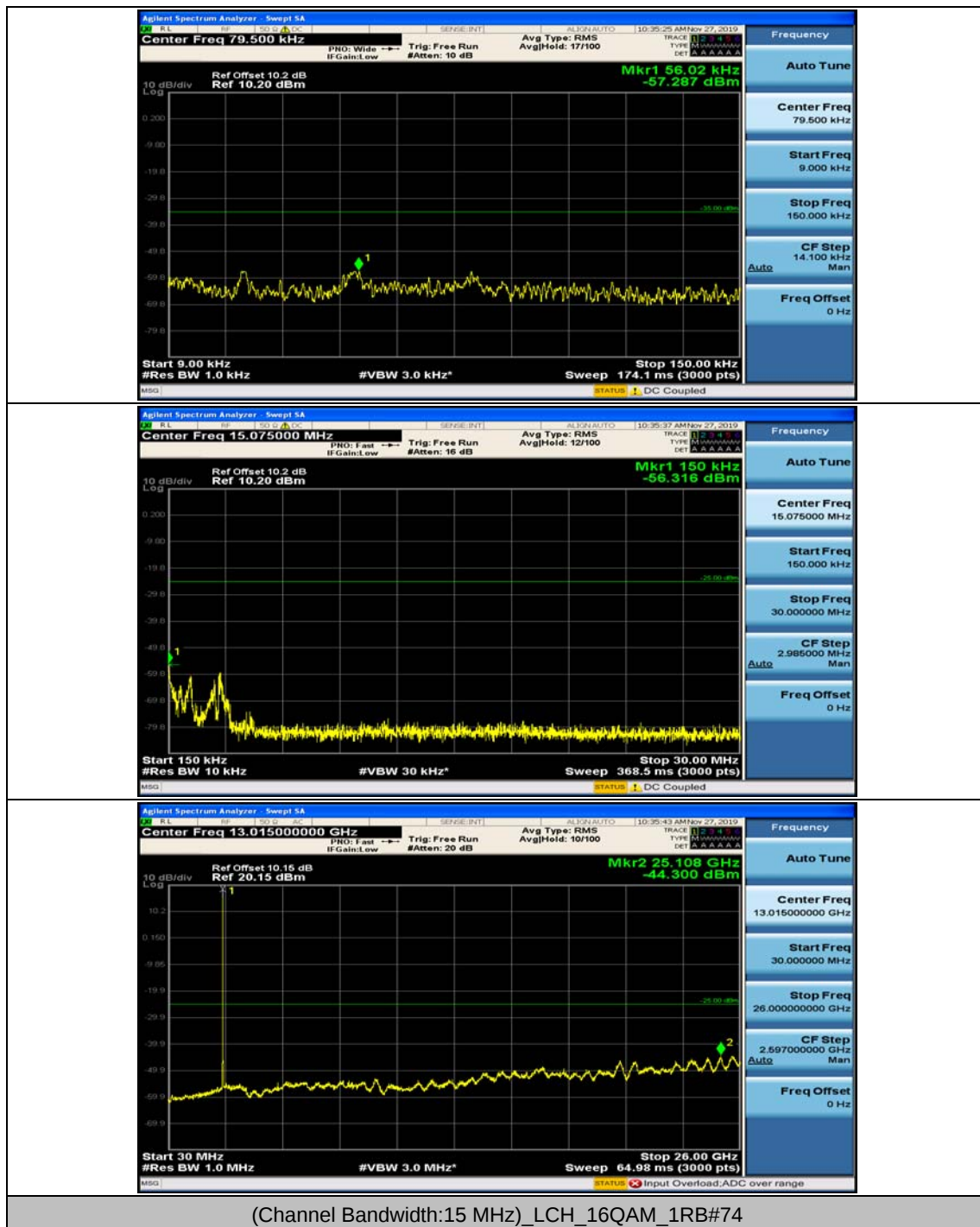


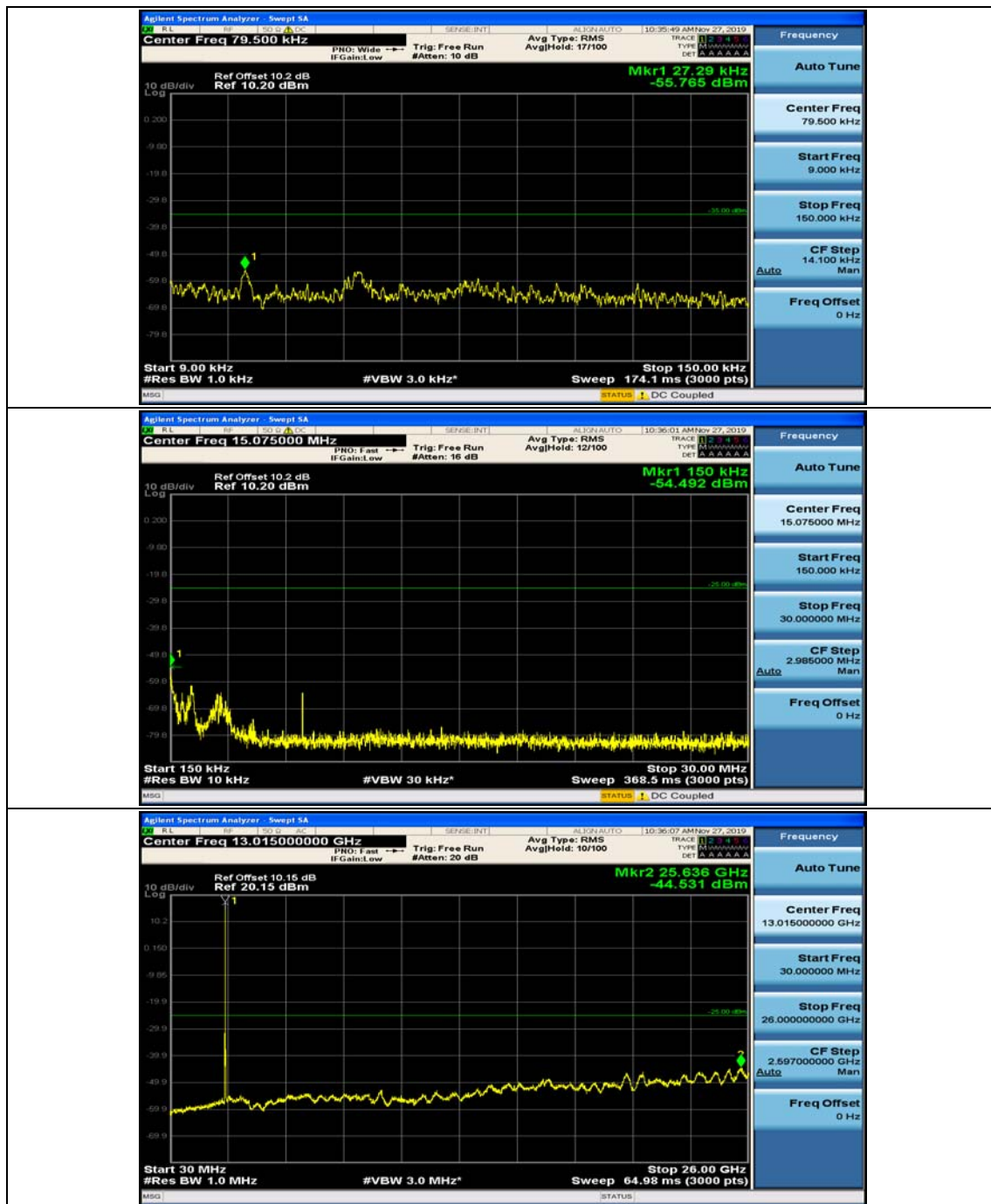


(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0

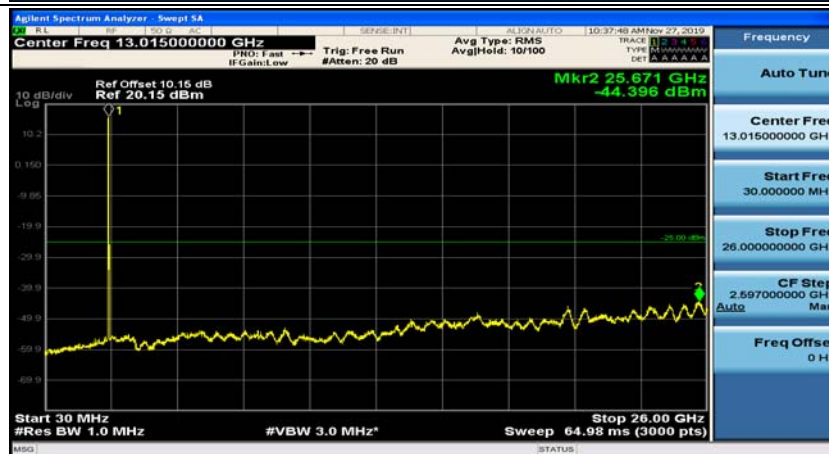
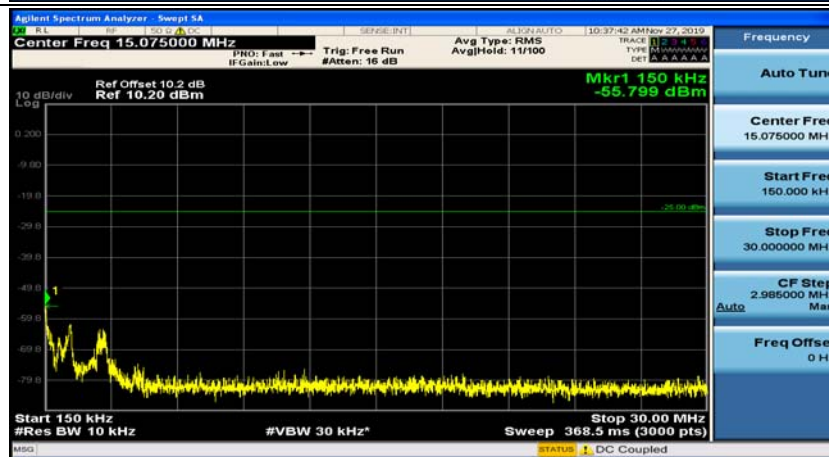
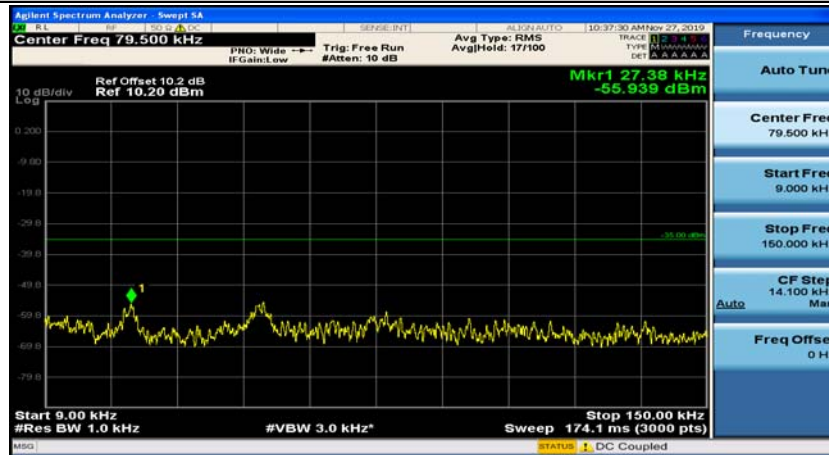


(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#37

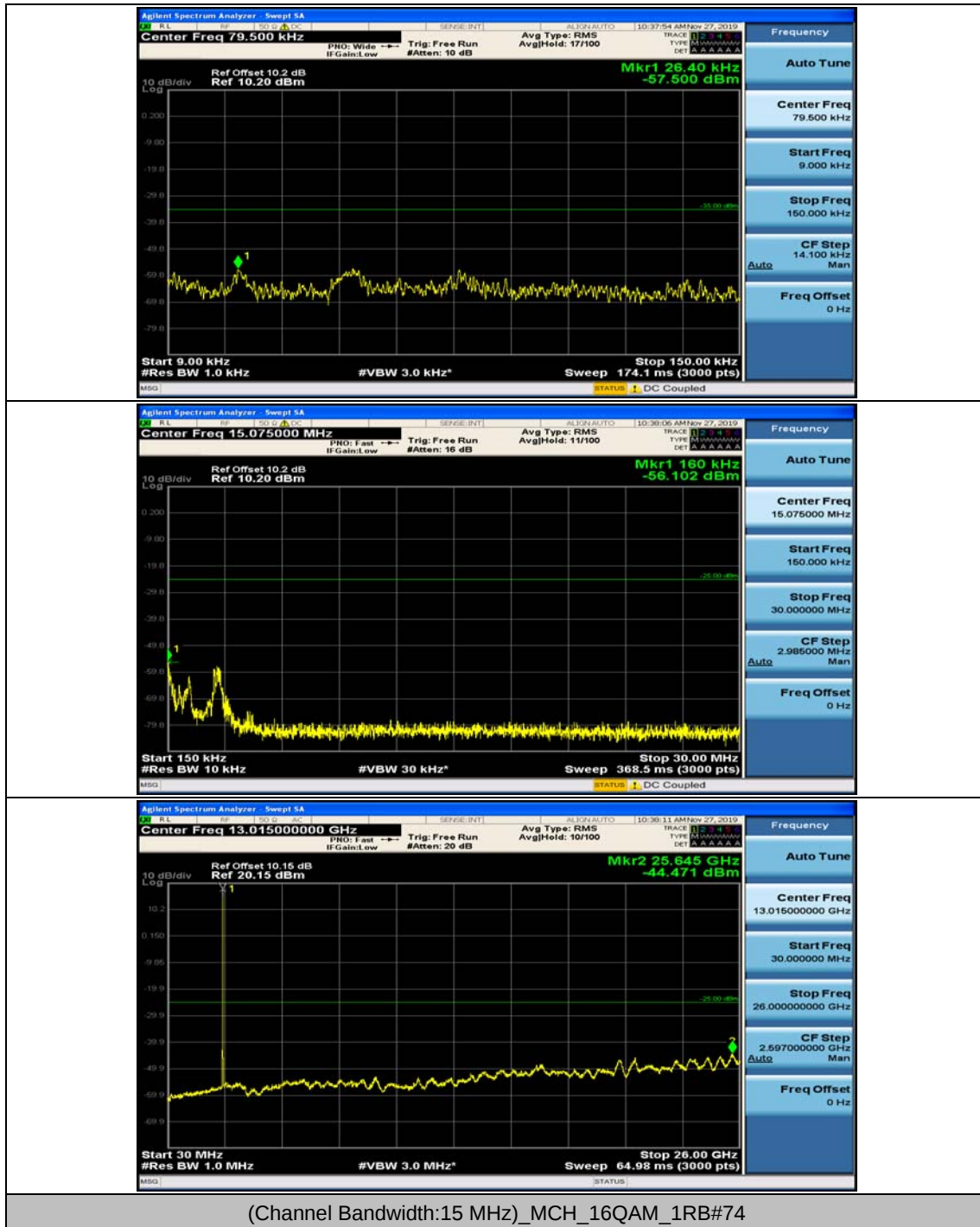


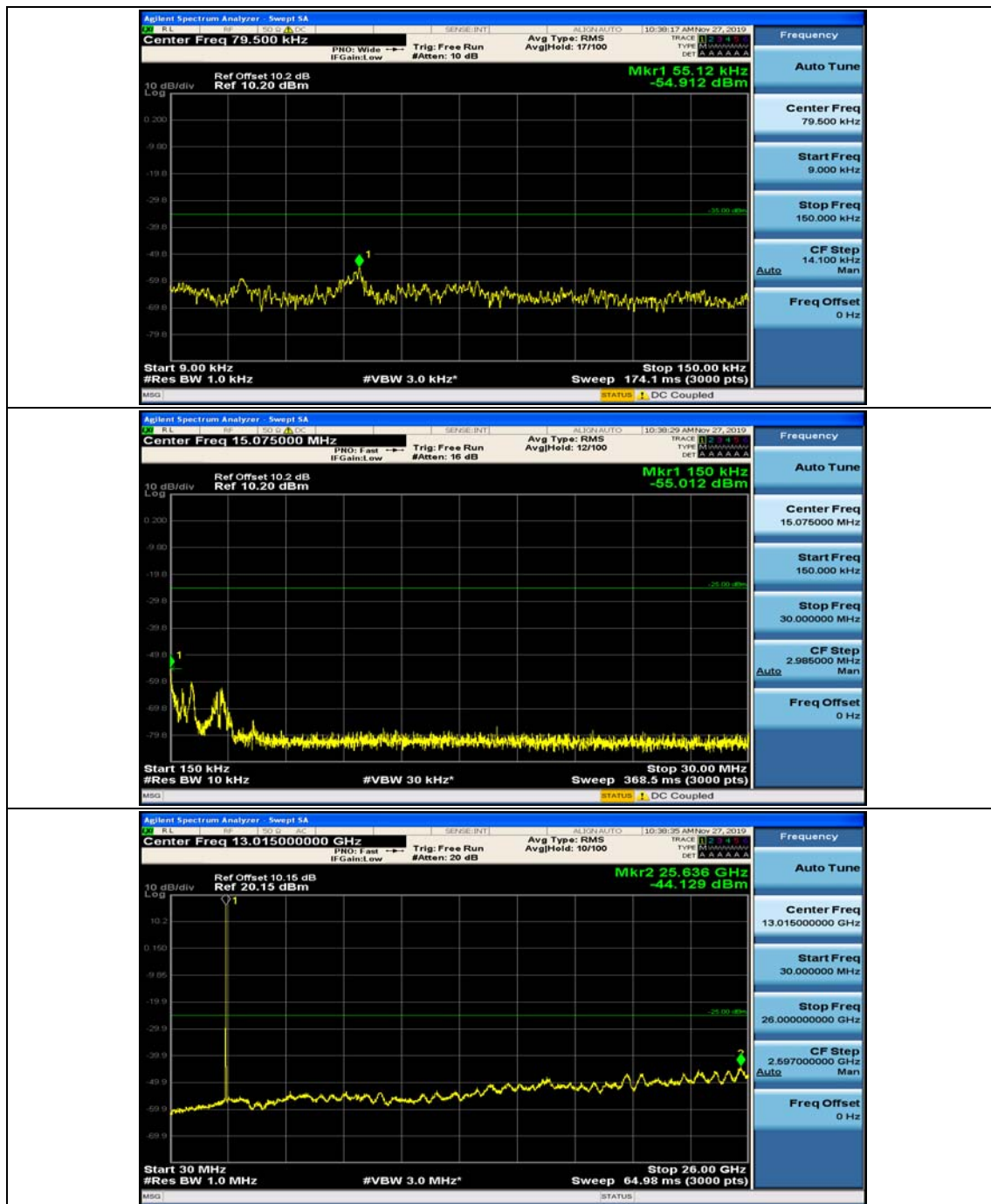


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

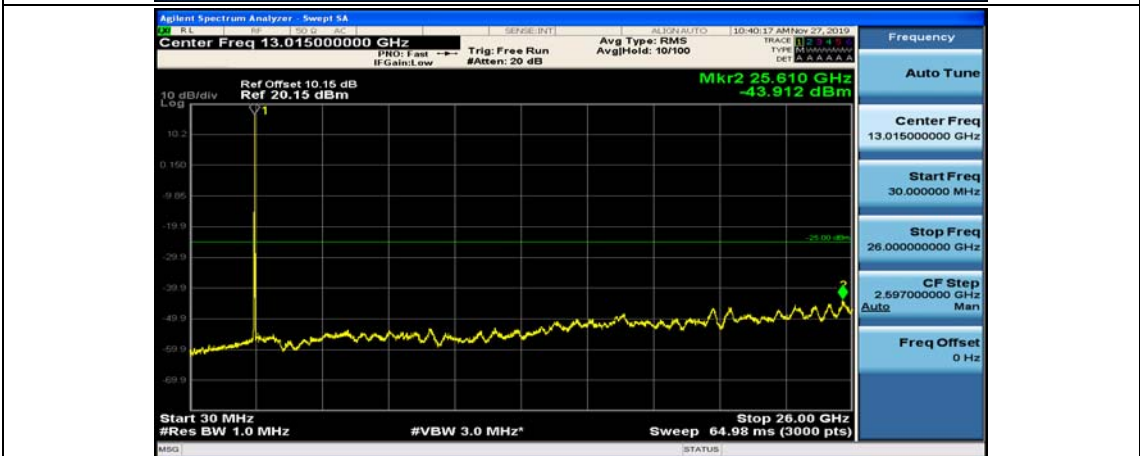
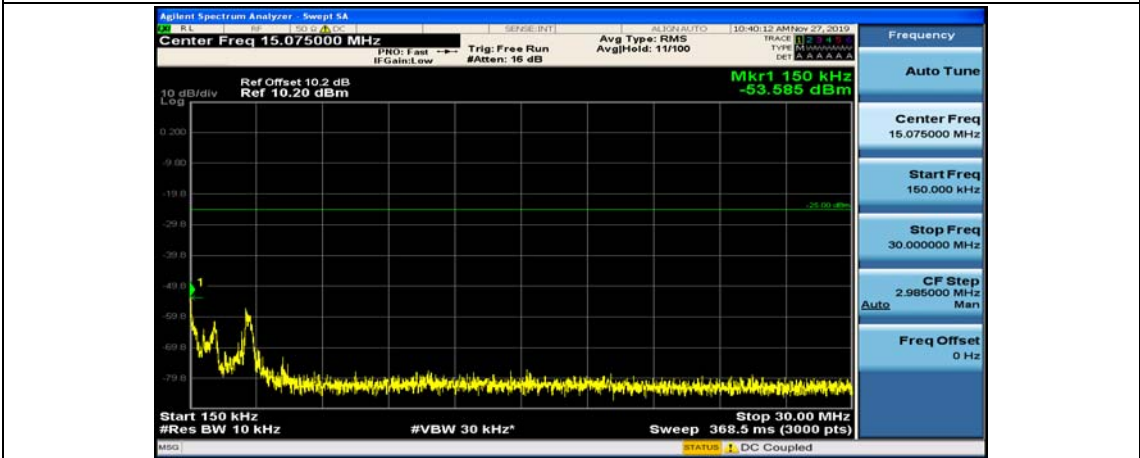
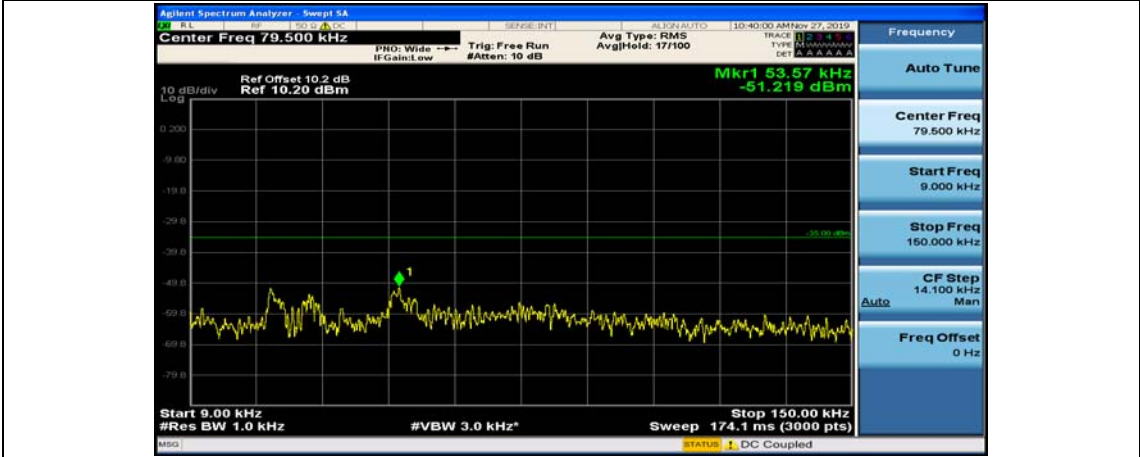


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37

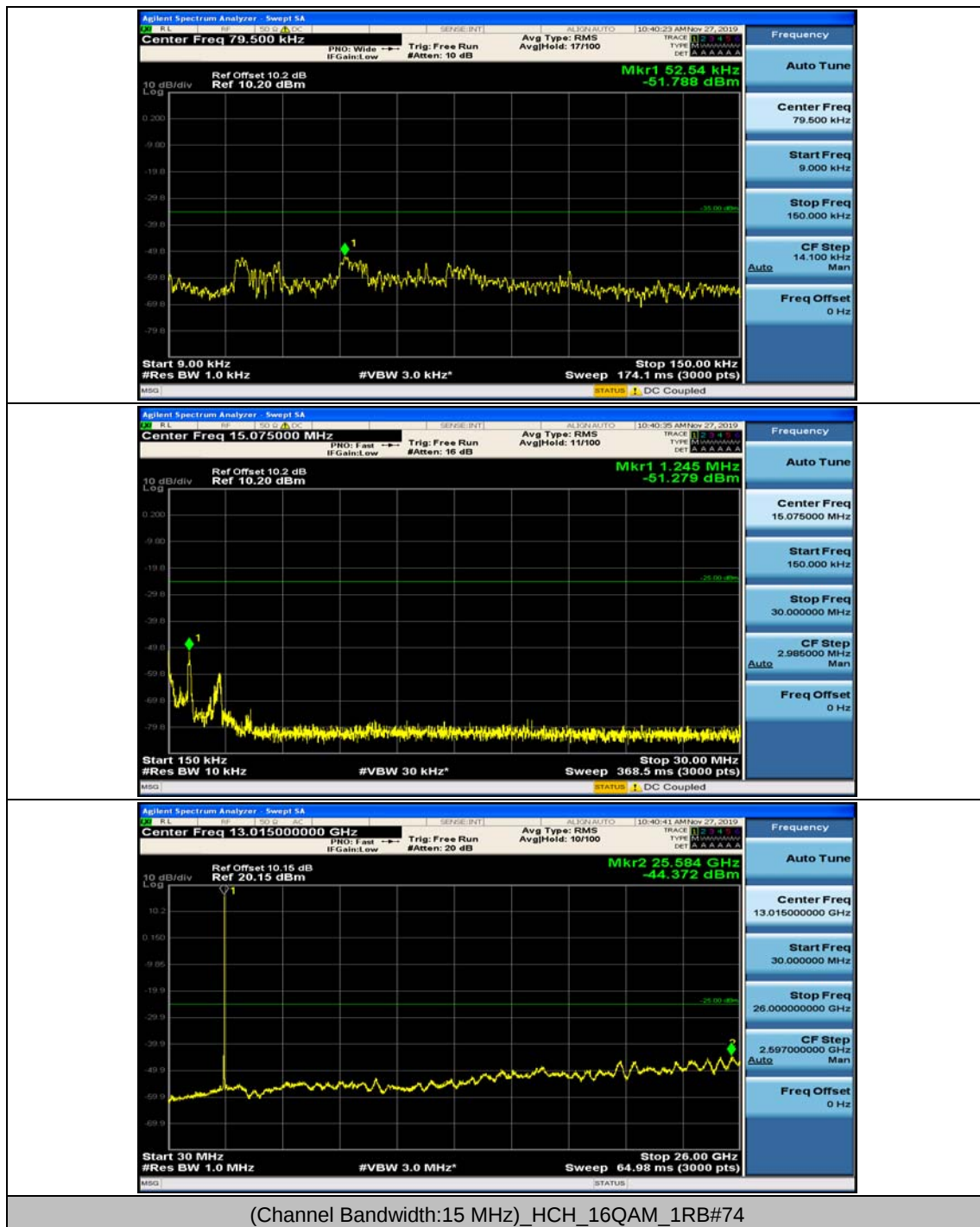


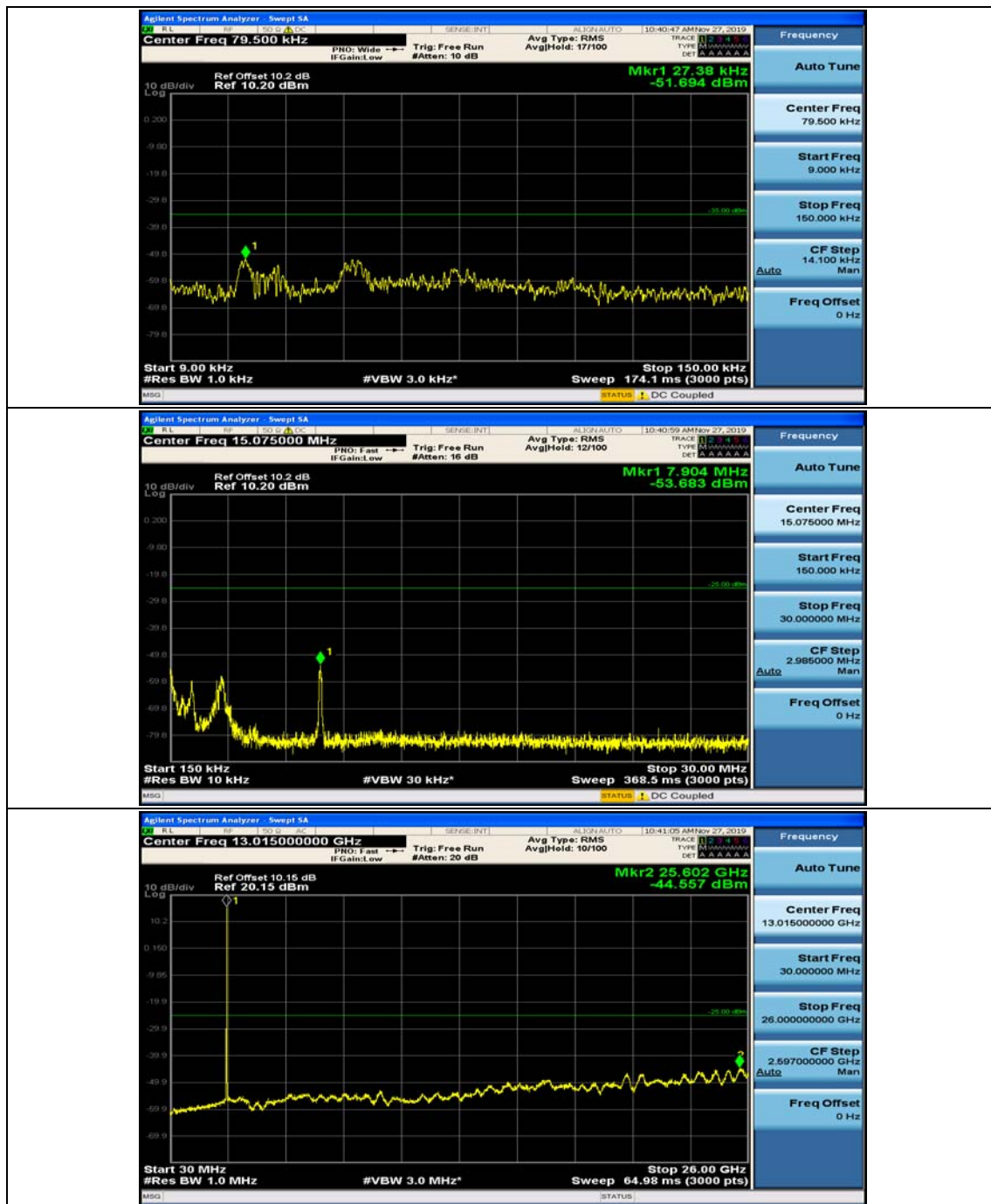


(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0

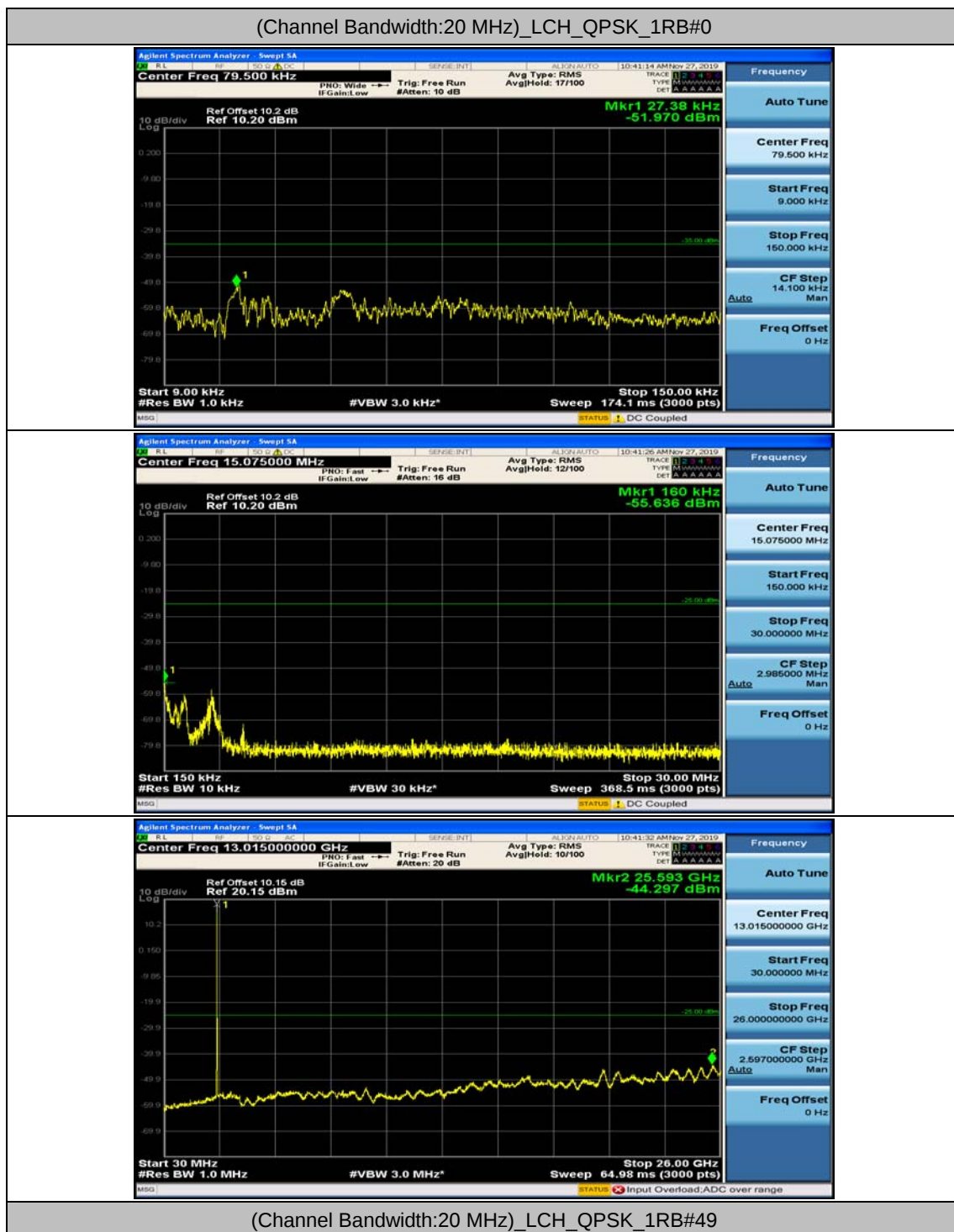


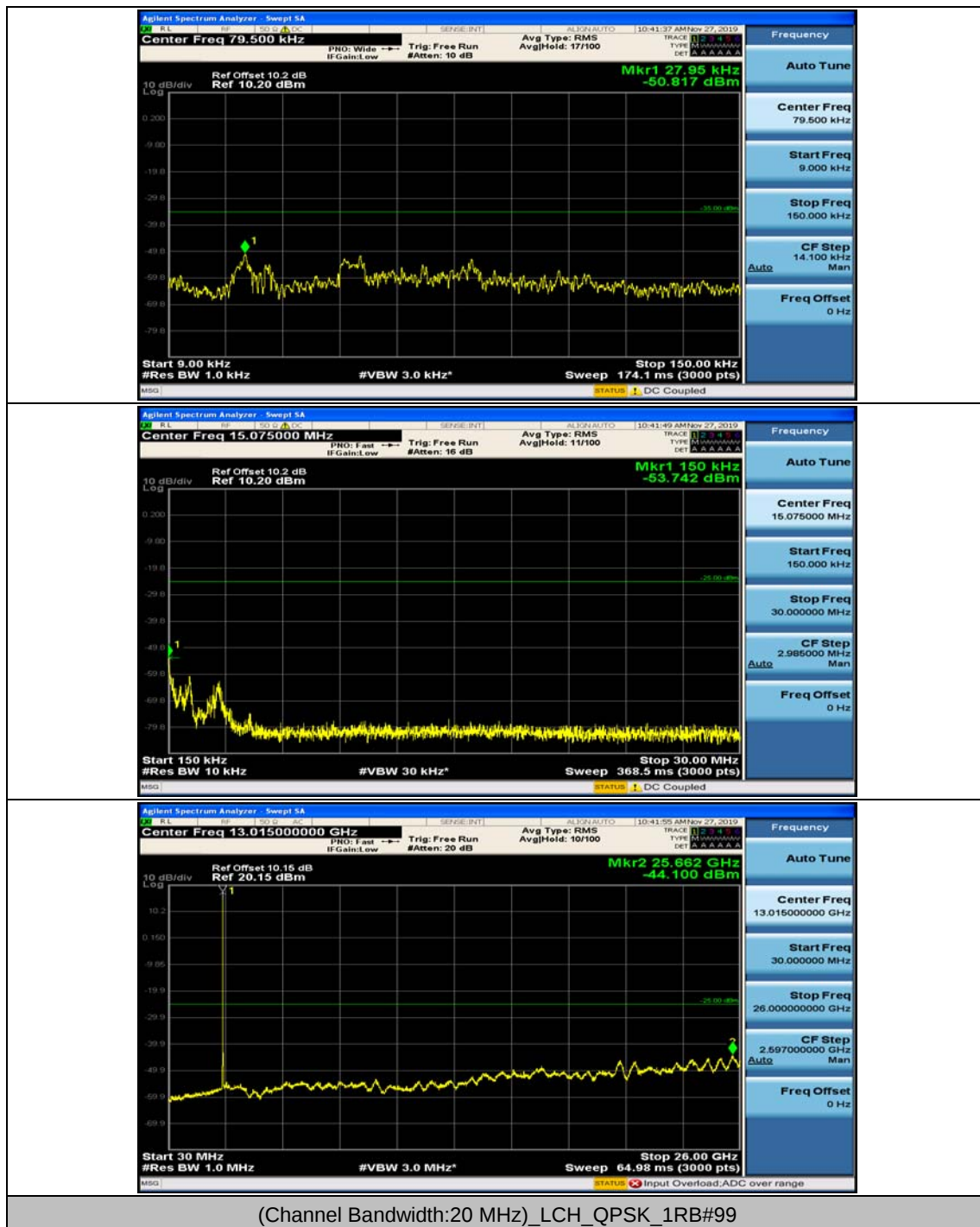
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#37

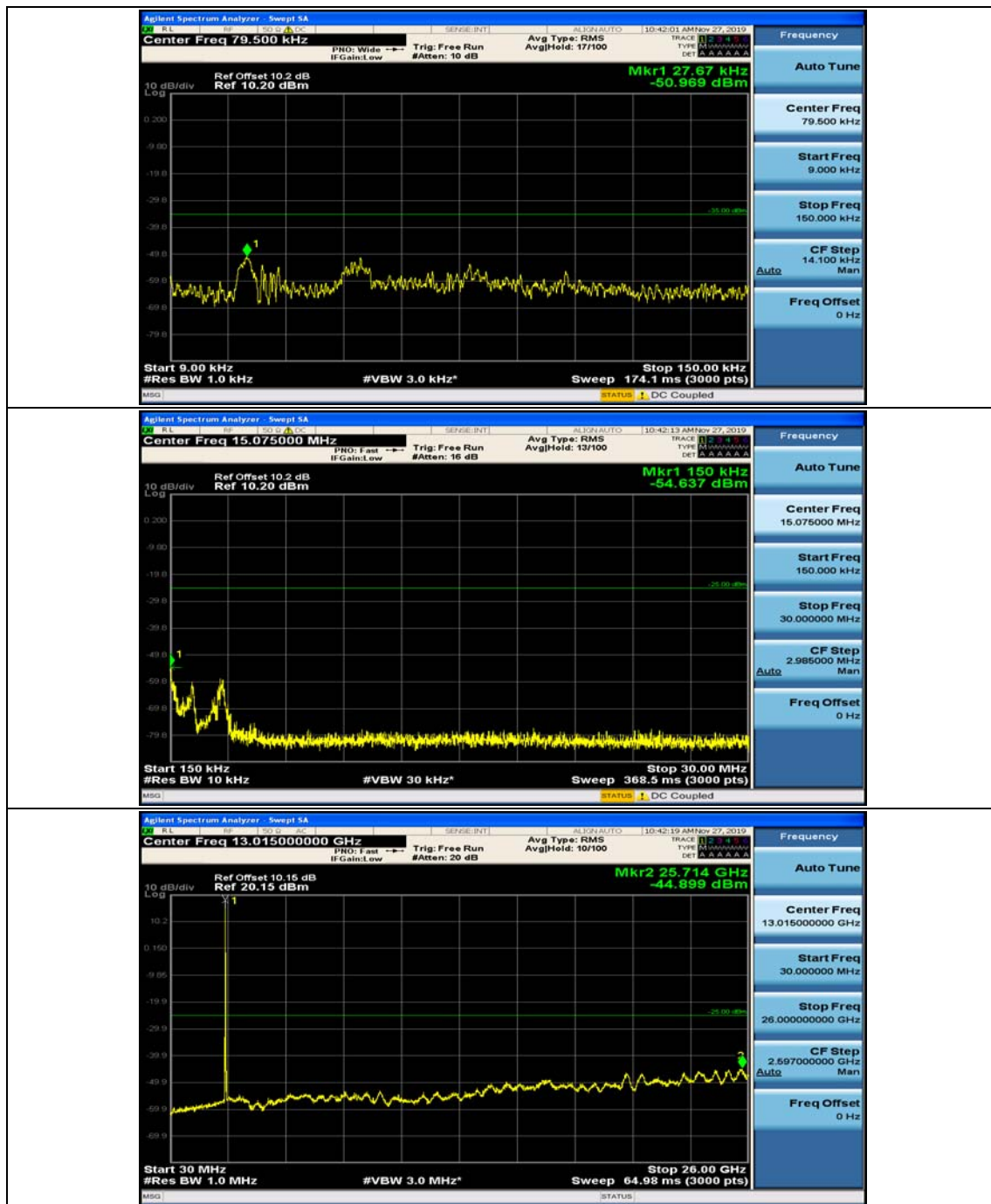




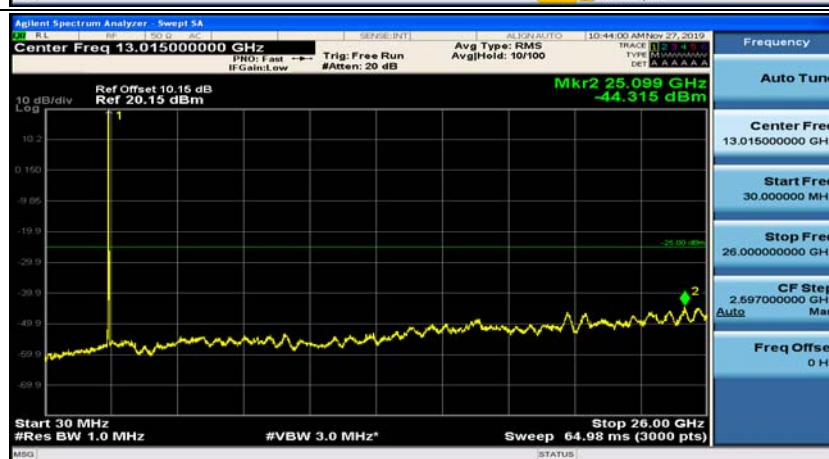
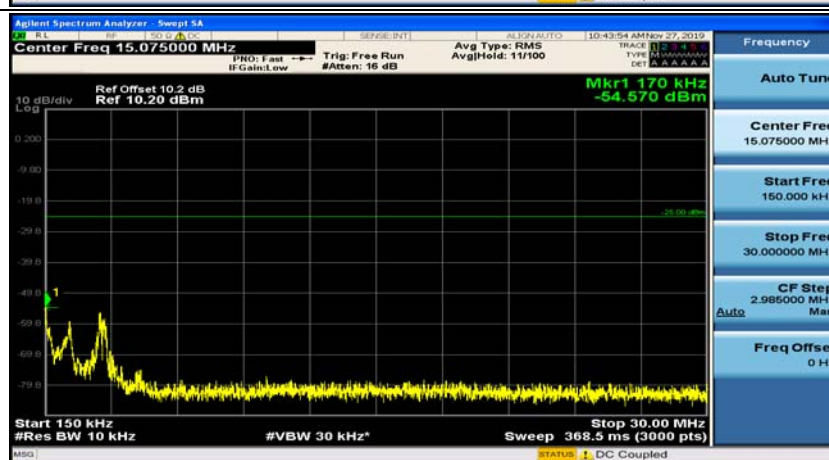
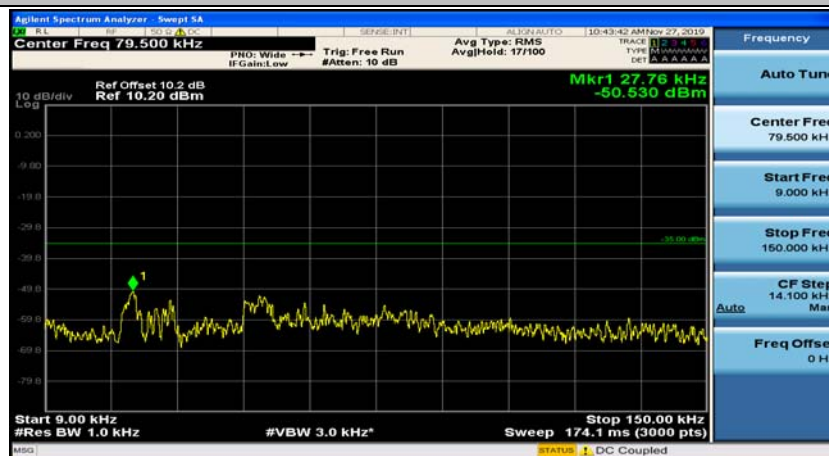
Channel Bandwidth: 20 MHz



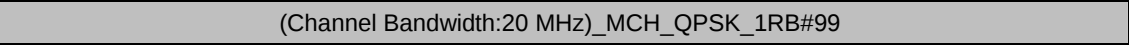


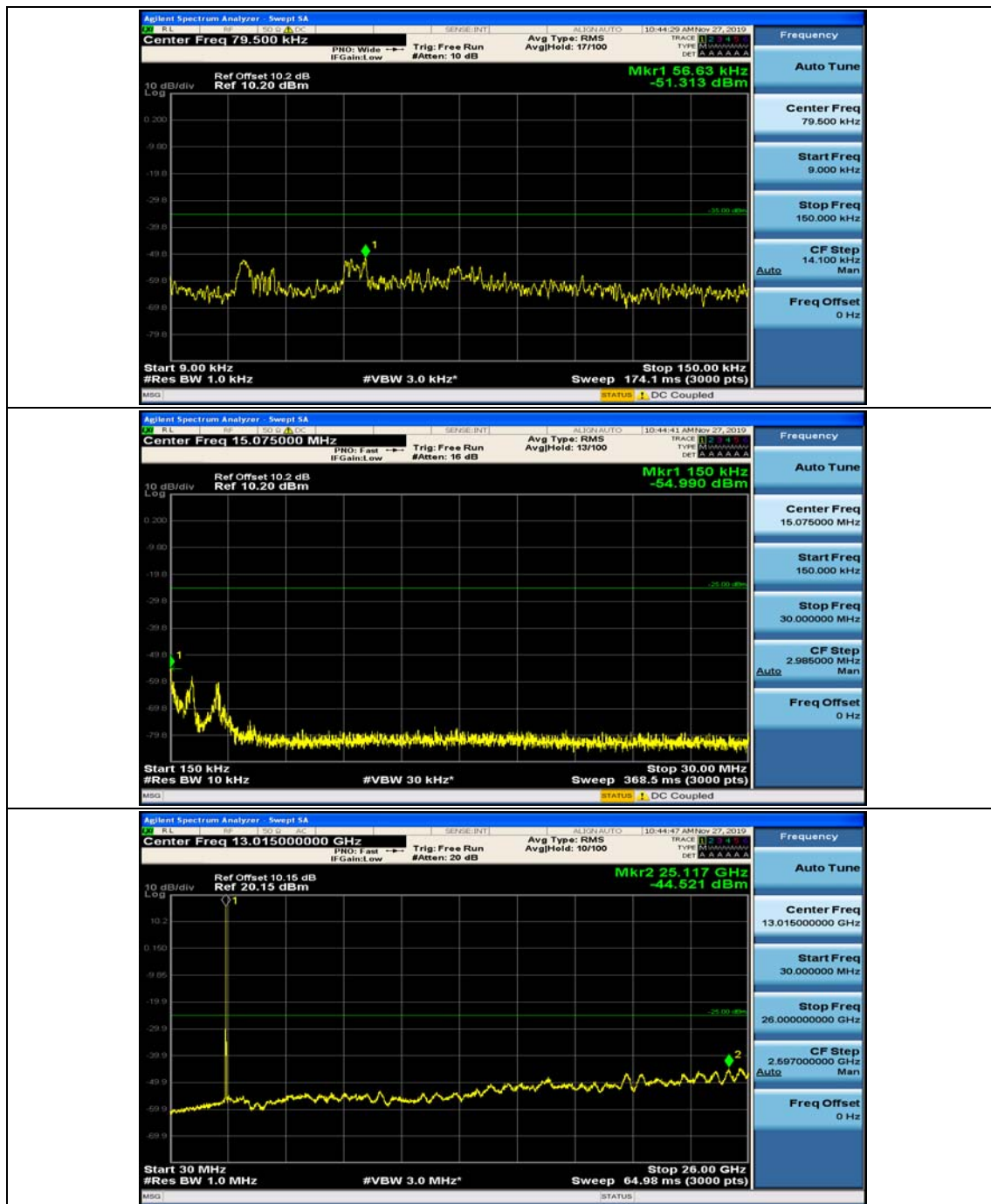


(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

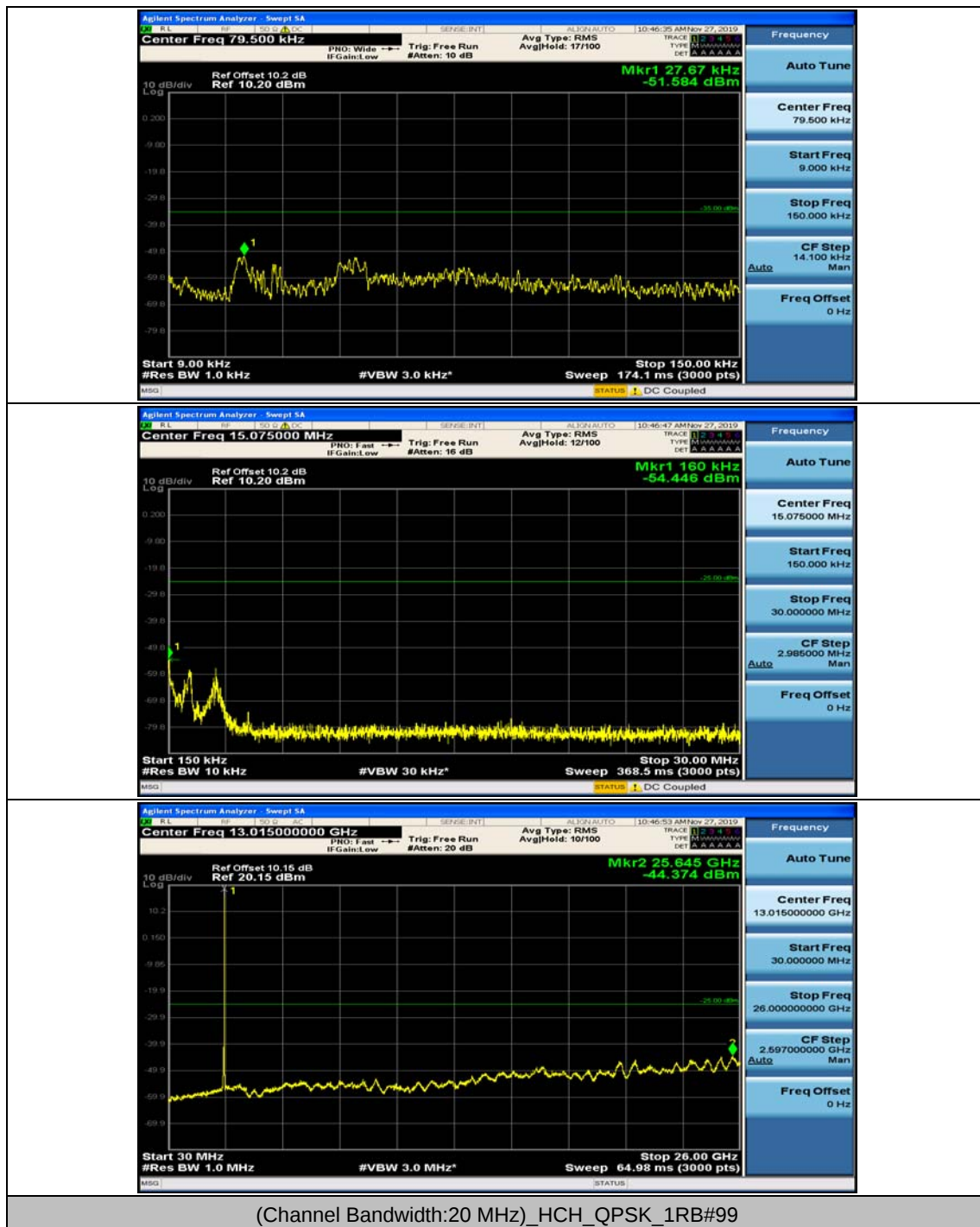


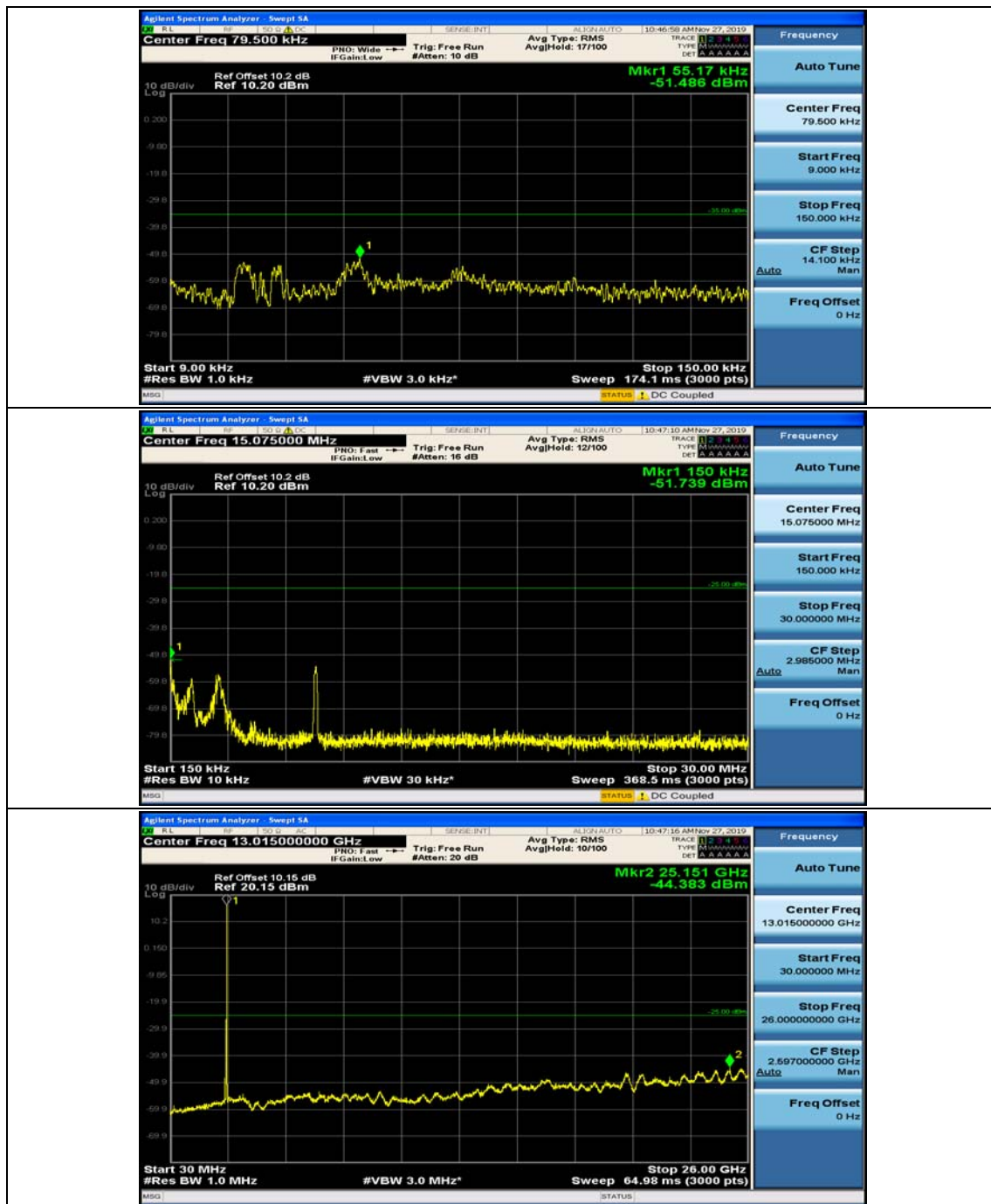
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49



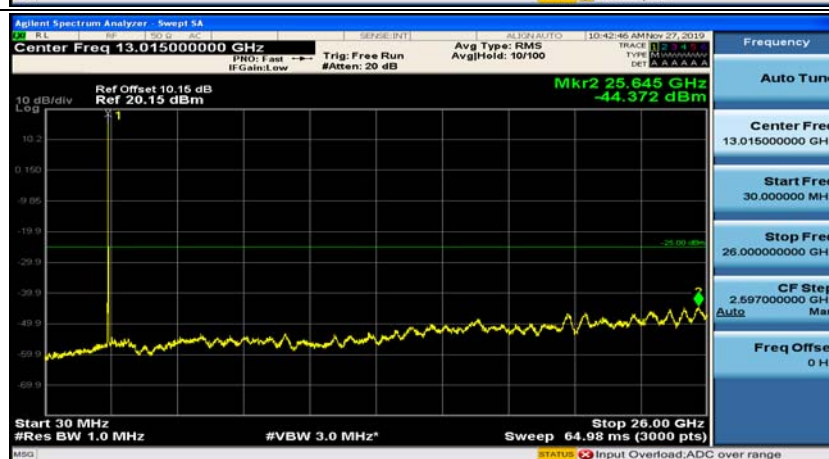
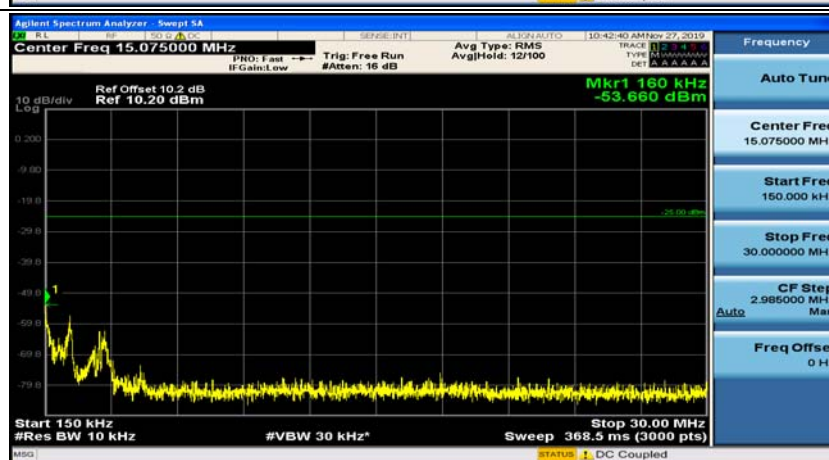
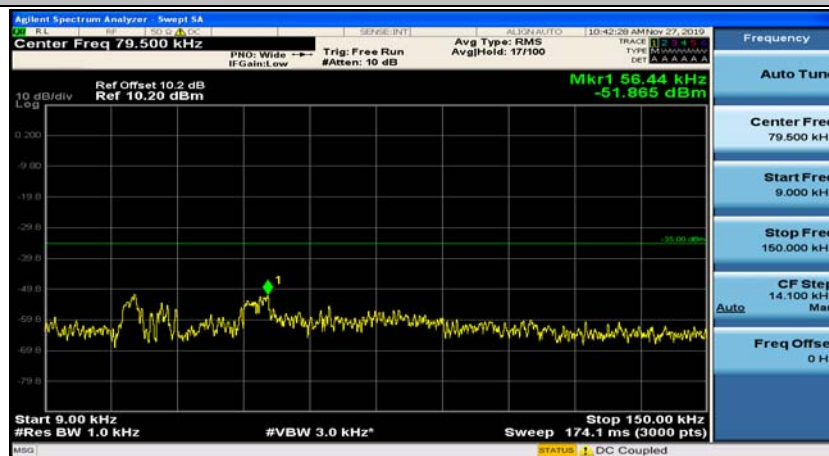




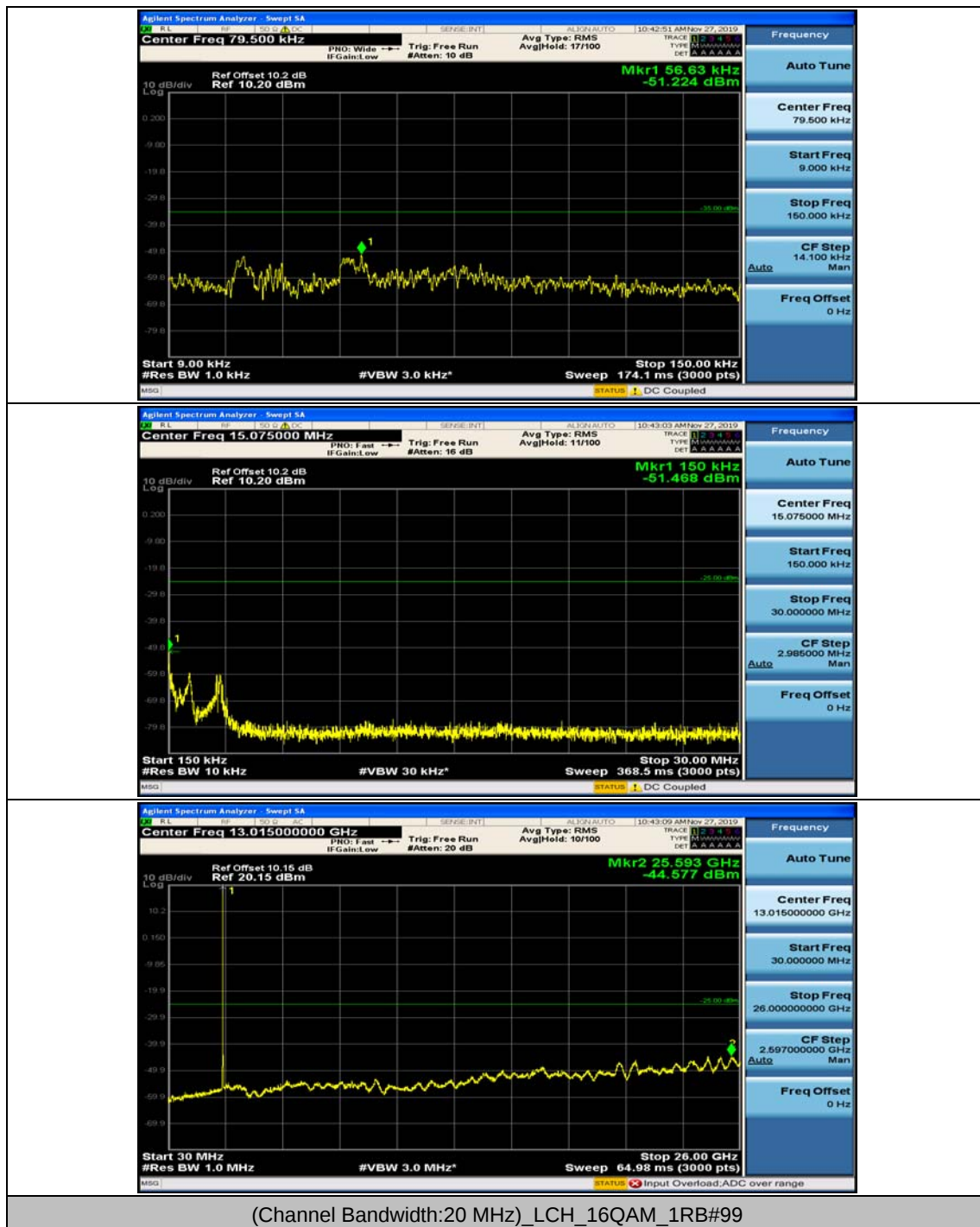


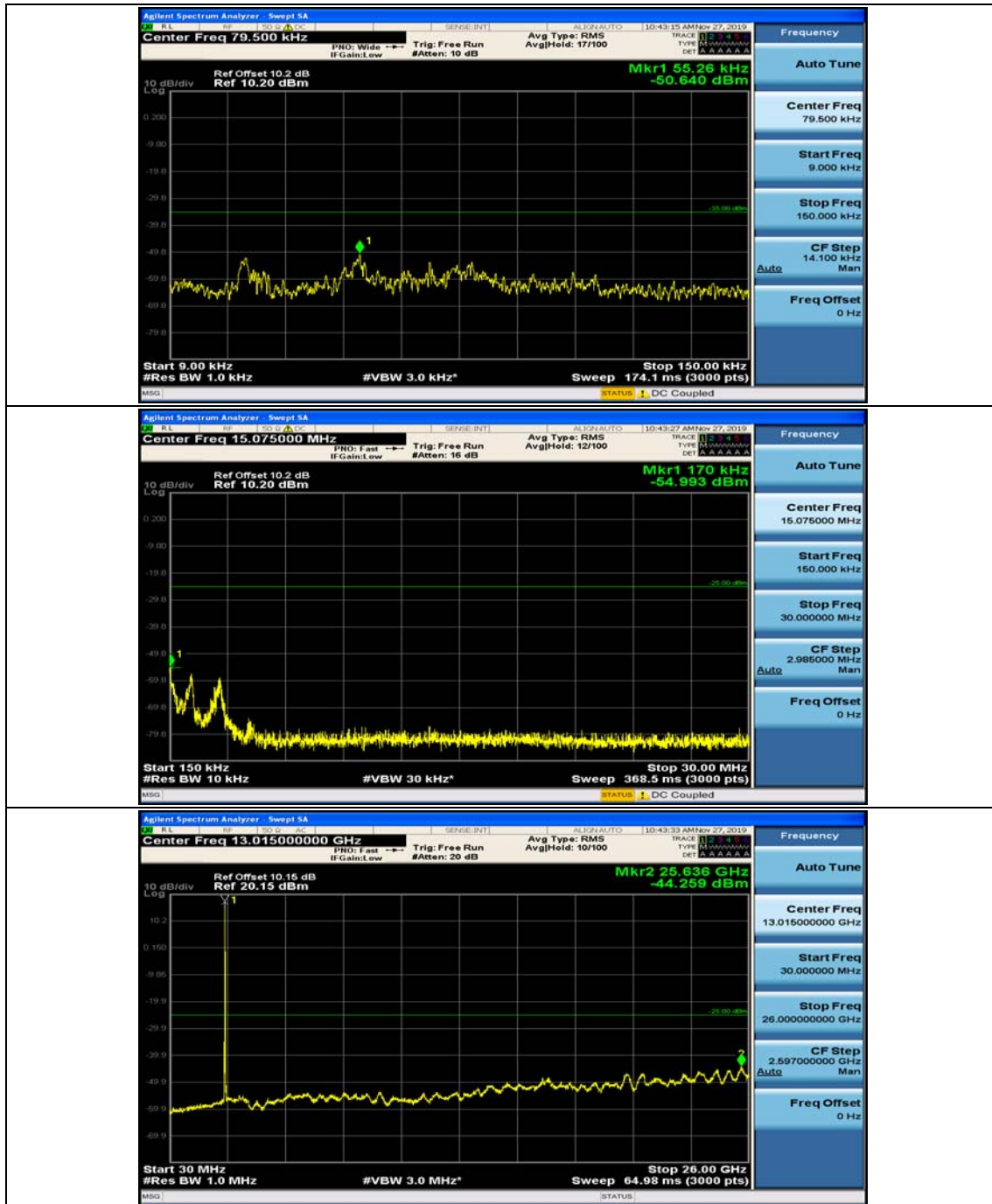


(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0

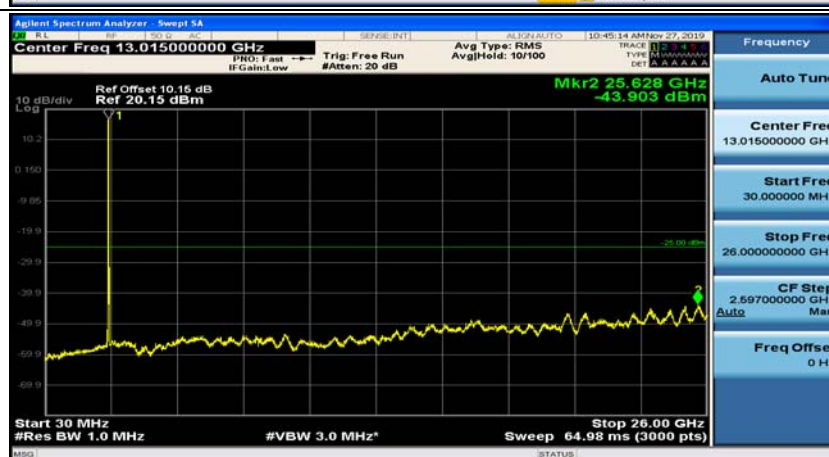
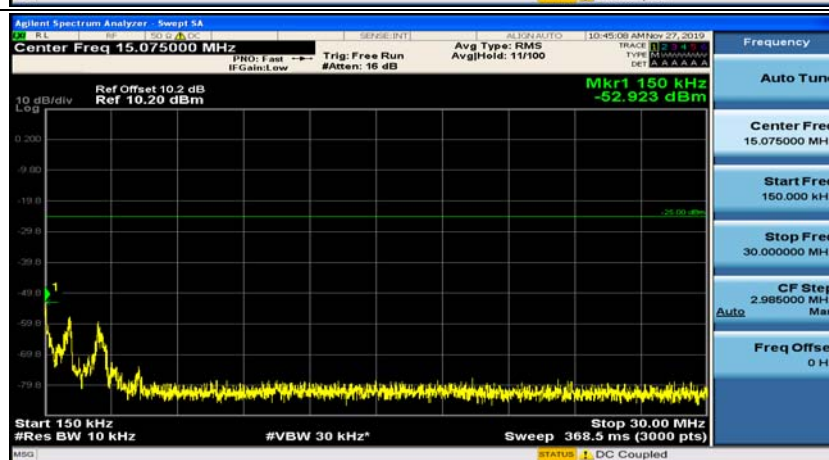
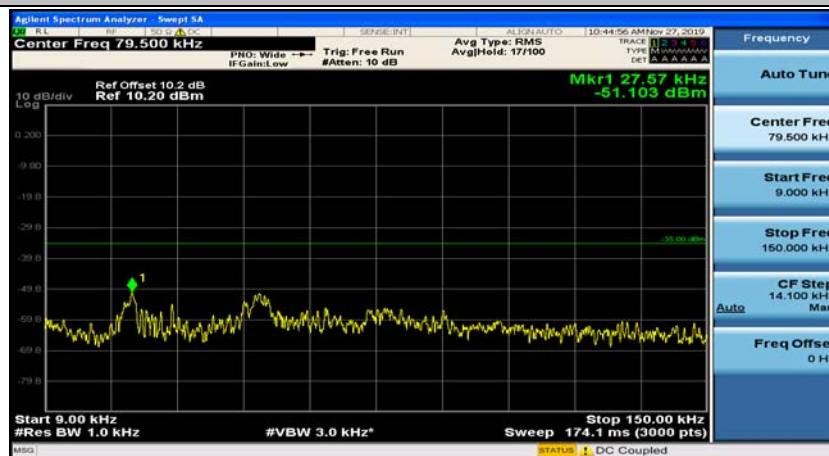


(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49

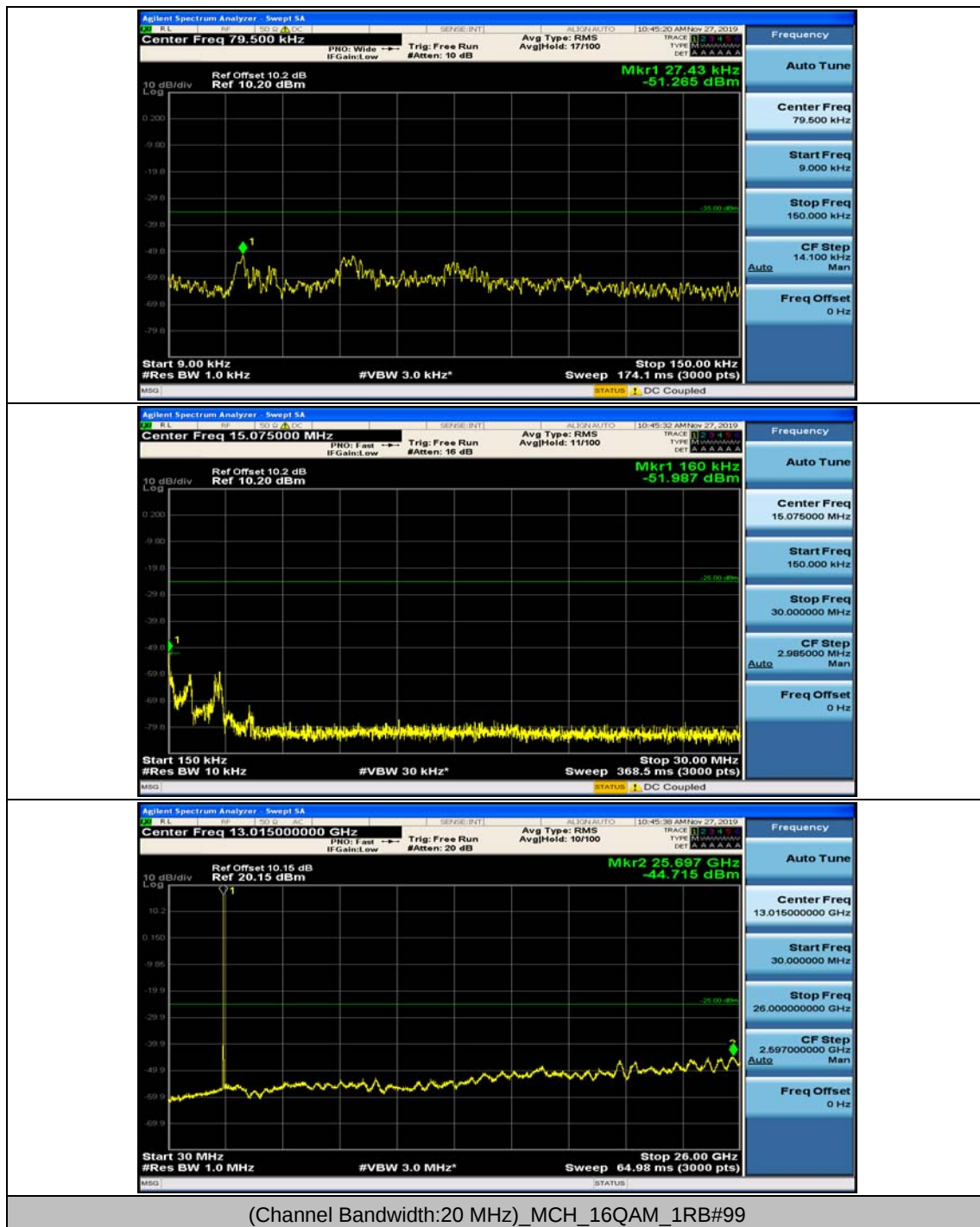


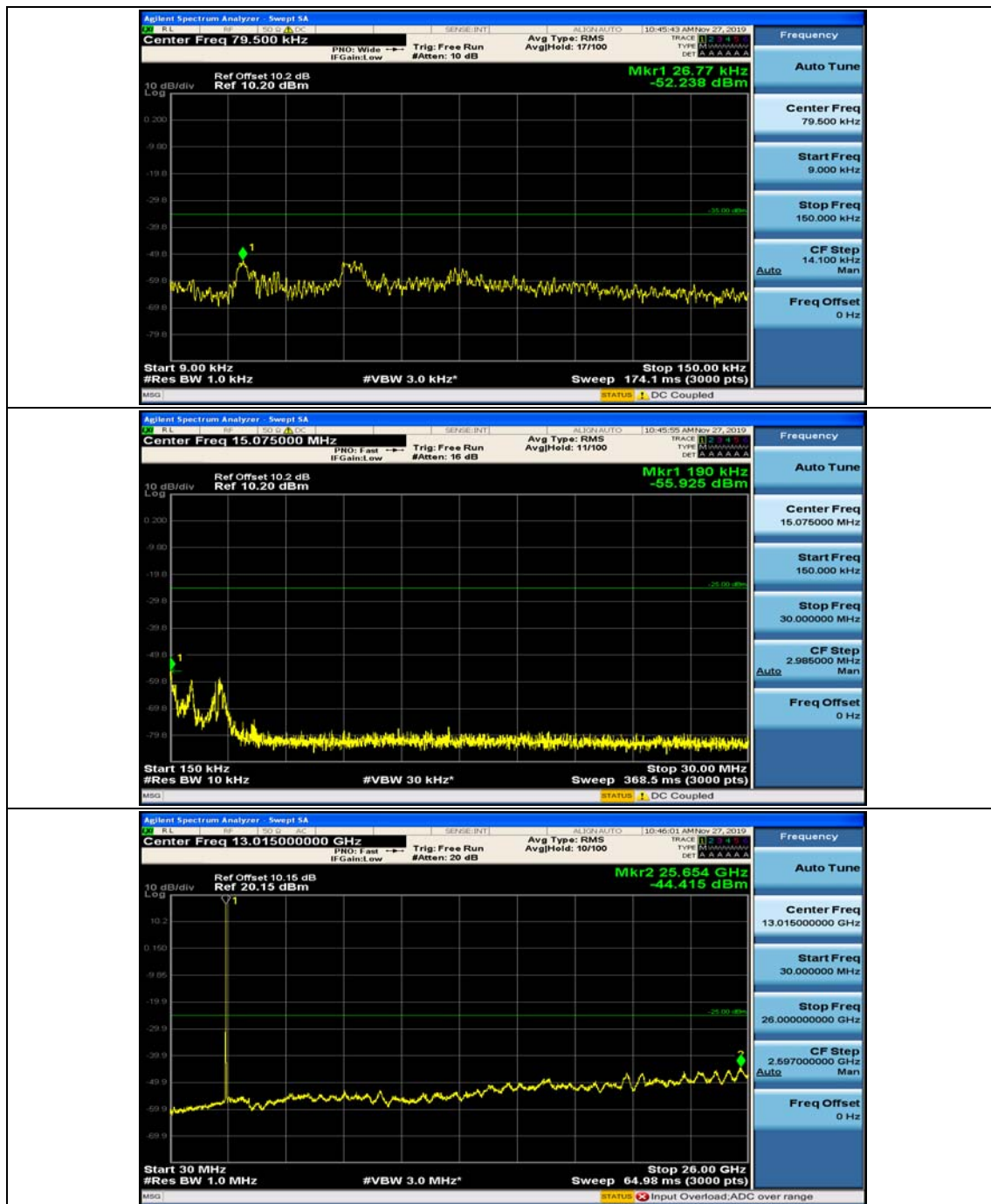


(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0

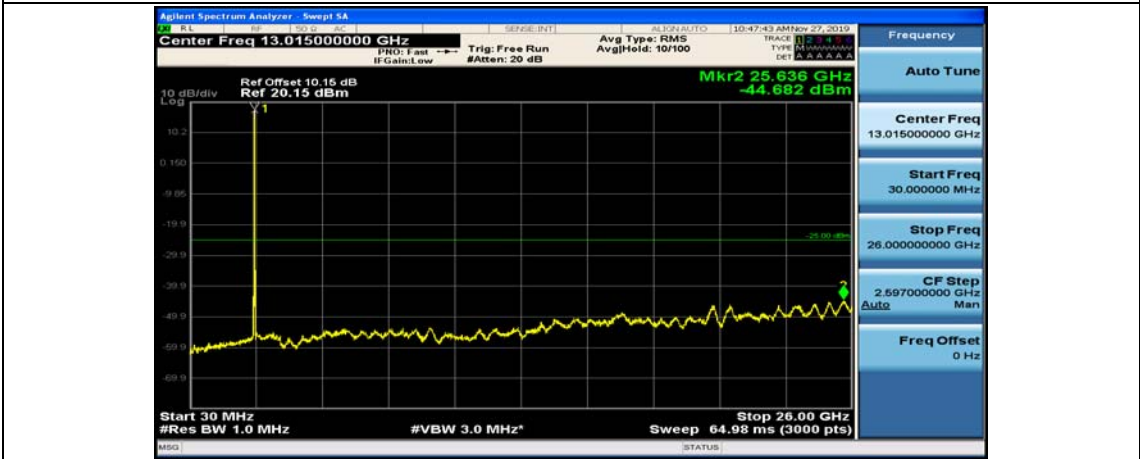
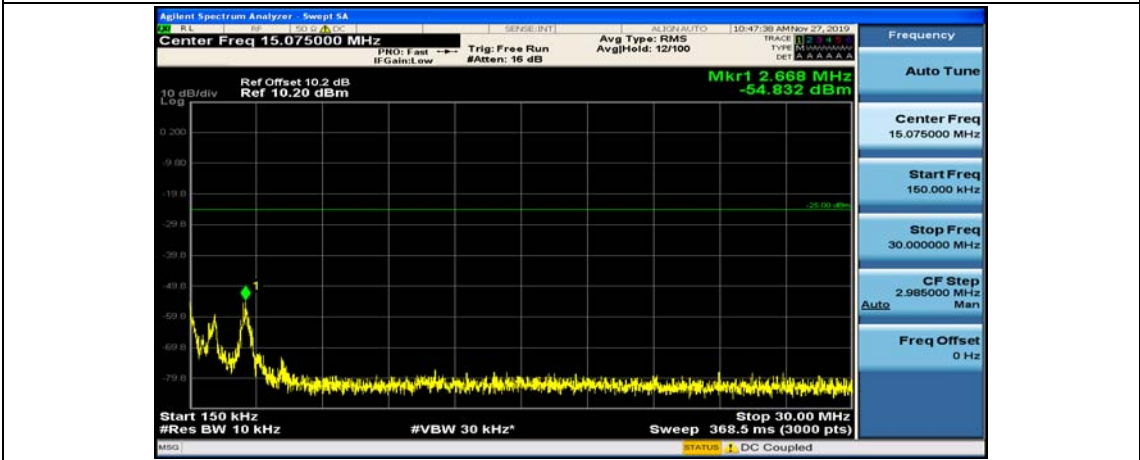
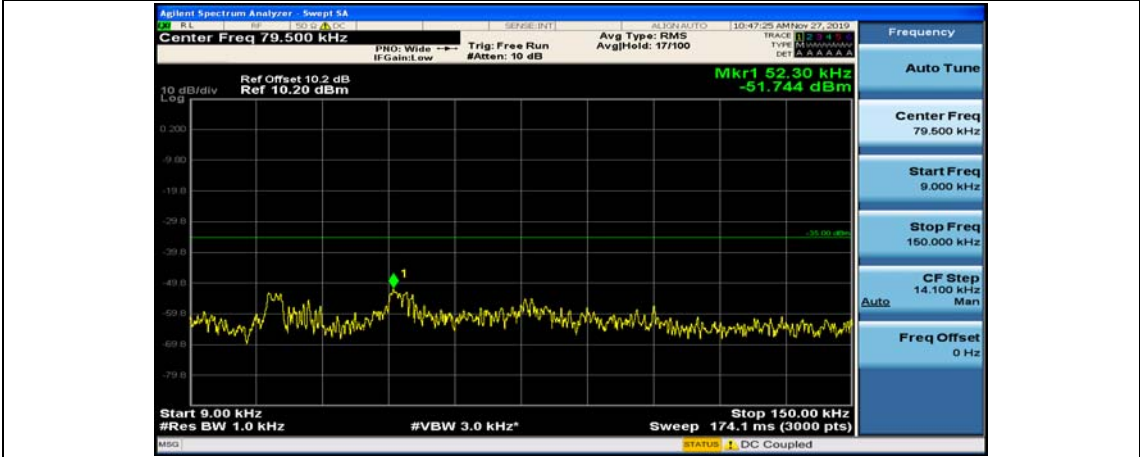


(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49

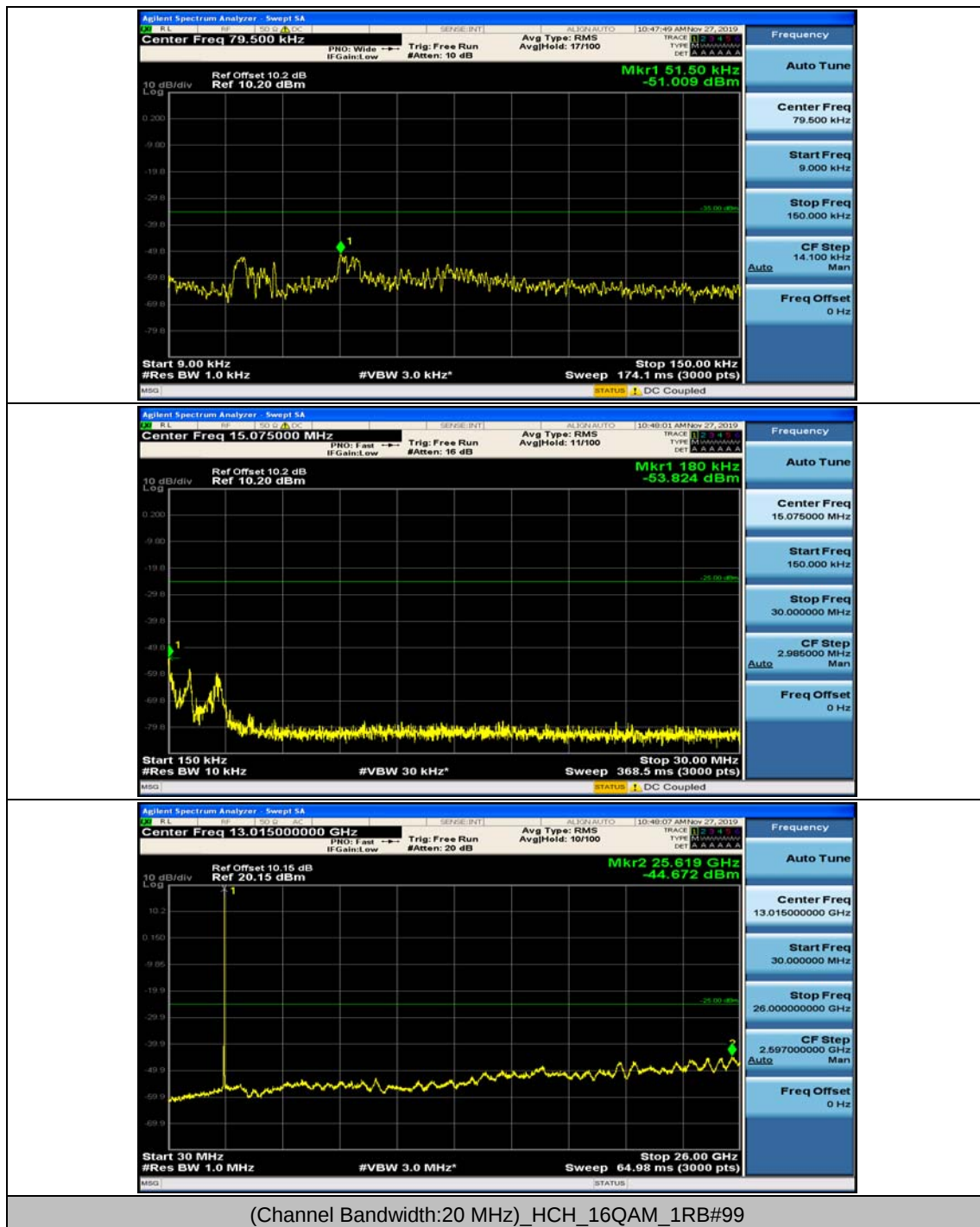


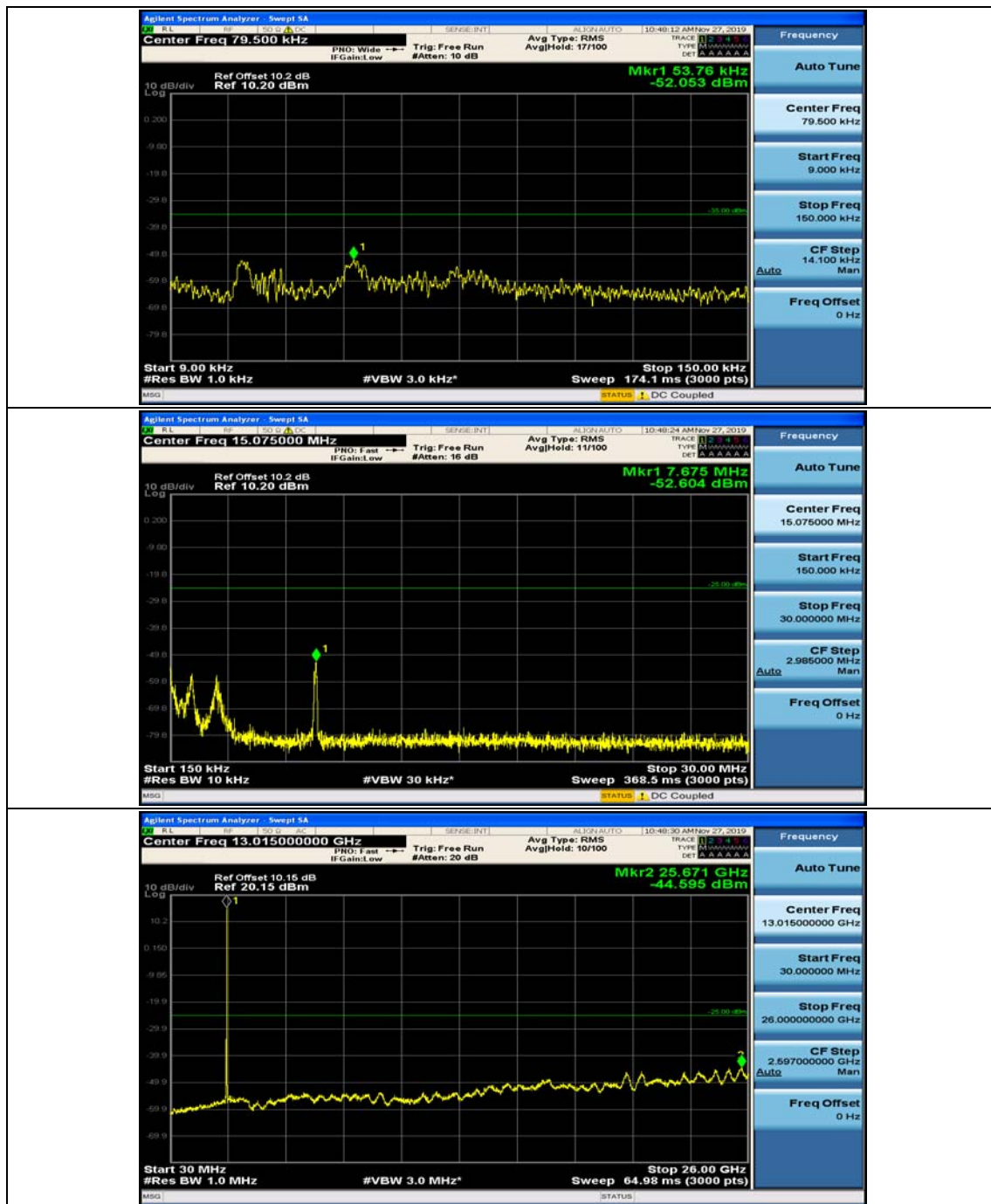


(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0



(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	2.31	0.000923	± 2.5	PASS
		VN	TN	4.27	0.001706	± 2.5	PASS
		VH	TN	0.55	0.000220	± 2.5	PASS
	MCH	VL	TN	-0.81	-0.000320	± 2.5	PASS
		VN	TN	2.47	0.000974	± 2.5	PASS
		VH	TN	2.63	0.001037	± 2.5	PASS
	HCH	VL	TN	0.39	0.000152	± 2.5	PASS
		VN	TN	3.69	0.001437	± 2.5	PASS
		VH	TN	-1.66	-0.000647	± 2.5	PASS
16QAM	LCH	VL	TN	4.97	0.001986	± 2.5	PASS
		VN	TN	3.13	0.001251	± 2.5	PASS
		VH	TN	2.11	0.000843	± 2.5	PASS
	MCH	VL	TN	0	0.000000	± 2.5	PASS
		VN	TN	0.82	0.000323	± 2.5	PASS
		VH	TN	-0.44	-0.000174	± 2.5	PASS
	HCH	VL	TN	-1.58	-0.000615	± 2.5	PASS
		VN	TN	-1.86	-0.000724	± 2.5	PASS
		VH	TN	2.71	0.001056	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.03	0.001610	± 2.5	PASS
		VN	-20	4.6	0.001838	± 2.5	PASS
		VN	-10	4.15	0.001658	± 2.5	PASS
		VN	0	1.7	0.000679	± 2.5	PASS
		VN	10	2.4	0.000959	± 2.5	PASS
		VN	20	-0.07	-0.000028	± 2.5	PASS
		VN	30	-0.58	-0.000232	± 2.5	PASS
		VN	40	3.1	0.001239	± 2.5	PASS
		VN	50	1.36	0.000543	± 2.5	PASS
	MCH	VN	-30	-0.15	-0.000059	± 2.5	PASS

		VN	-20	-1.42	-0.000560	± 2.5	PASS
		VN	-10	4.16	0.001641	± 2.5	PASS
		VN	0	0.29	0.000114	± 2.5	PASS
		VN	10	-0.75	-0.000296	± 2.5	PASS
		VN	20	0.48	0.000189	± 2.5	PASS
		VN	30	-0.85	-0.000335	± 2.5	PASS
		VN	40	2.1	0.000828	± 2.5	PASS
		VN	50	-1.01	-0.000398	± 2.5	PASS
	HCH	VN	-30	0.08	0.000031	± 2.5	PASS
		VN	-20	-0.94	-0.000366	± 2.5	PASS
		VN	-10	-0.16	-0.000062	± 2.5	PASS
		VN	0	0.9	0.000351	± 2.5	PASS
		VN	10	0.54	0.000210	± 2.5	PASS
		VN	20	3.83	0.001492	± 2.5	PASS
		VN	30	2.98	0.001161	± 2.5	PASS
		VN	40	3.3	0.001285	± 2.5	PASS
16QAM	LCH	VN	50	3.79	0.001476	± 2.5	PASS
		VN	-30	-0.93	-0.000372	± 2.5	PASS
		VN	-20	4.82	0.001926	± 2.5	PASS
		VN	-10	-1.77	-0.000707	± 2.5	PASS
		VN	0	-1.41	-0.000563	± 2.5	PASS
		VN	10	3.25	0.001299	± 2.5	PASS
		VN	20	0.58	0.000232	± 2.5	PASS
		VN	30	-0.22	-0.000088	± 2.5	PASS
		VN	40	0.12	0.000048	± 2.5	PASS
	MCH	VN	50	-1.61	-0.000643	± 2.5	PASS
		VN	-30	1.28	0.000505	± 2.5	PASS
		VN	-20	1.05	0.000414	± 2.5	PASS
		VN	-10	-1.05	-0.000414	± 2.5	PASS
		VN	0	3.26	0.001286	± 2.5	PASS
		VN	10	1.34	0.000529	± 2.5	PASS
		VN	20	-0.29	-0.000114	± 2.5	PASS
		VN	30	1.11	0.000438	± 2.5	PASS
		VN	40	0.69	0.000272	± 2.5	PASS
	HCH	VN	50	2.24	0.000884	± 2.5	PASS
		VN	-30	2.92	0.001137	± 2.5	PASS
		VN	-20	-1.34	-0.000522	± 2.5	PASS
		VN	-10	3.68	0.001433	± 2.5	PASS
		VN	0	3.3	0.001285	± 2.5	PASS
		VN	10	2.14	0.000833	± 2.5	PASS
		VN	20	1.87	0.000728	± 2.5	PASS

		VN	30	4.31	0.001679	± 2.5	PASS
		VN	40	0.84	0.000327	± 2.5	PASS
		VN	50	2.04	0.000795	± 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	4.52	0.001804	± 2.5	PASS
		VN	TN	2.63	0.001050	± 2.5	PASS
		VH	TN	3.55	0.001417	± 2.5	PASS
	MCH	VL	TN	-0.9	-0.000355	± 2.5	PASS
		VN	TN	-0.06	-0.000024	± 2.5	PASS
		VH	TN	0.5	0.000197	± 2.5	PASS
	HCH	VL	TN	4.09	0.001595	± 2.5	PASS
		VN	TN	4.07	0.001587	± 2.5	PASS
		VH	TN	1.93	0.000752	± 2.5	PASS
16QAM	LCH	VL	TN	-1.89	-0.000754	± 2.5	PASS
		VN	TN	1.42	0.000567	± 2.5	PASS
		VH	TN	4.1	0.001637	± 2.5	PASS
	MCH	VL	TN	-1.4	-0.000552	± 2.5	PASS
		VN	TN	-0.49	-0.000193	± 2.5	PASS
		VH	TN	-0.62	-0.000245	± 2.5	PASS
	HCH	VL	TN	2.77	0.001080	± 2.5	PASS
		VN	TN	-1.44	-0.000561	± 2.5	PASS
		VH	TN	4.59	0.001789	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.45	0.000579	± 2.5	PASS
		VN	-20	4.7	0.001876	± 2.5	PASS
		VN	-10	0.3	0.000120	± 2.5	PASS
		VN	0	3.74	0.001493	± 2.5	PASS
		VN	10	1.76	0.000703	± 2.5	PASS
		VN	20	0.02	0.000008	± 2.5	PASS
		VN	30	0.71	0.000283	± 2.5	PASS
		VN	40	2	0.000798	± 2.5	PASS
		VN	50	-1.38	-0.000551	± 2.5	PASS
	MCH	VN	-30	0.9	0.000355	± 2.5	PASS
		VN	-20	1.63	0.000643	± 2.5	PASS

		VN	-10	0.94	0.000371	± 2.5	PASS	
		VN	0	1.67	0.000659	± 2.5	PASS	
		VN	10	3.52	0.001389	± 2.5	PASS	
		VN	20	3.74	0.001475	± 2.5	PASS	
		VN	30	1.79	0.000706	± 2.5	PASS	
		VN	40	1.87	0.000738	± 2.5	PASS	
		VN	50	2.33	0.000919	± 2.5	PASS	
	HCH	VN	-30	1.4	0.000546	± 2.5	PASS	
		VN	-20	3.65	0.001423	± 2.5	PASS	
		VN	-10	1.33	0.000519	± 2.5	PASS	
		VN	0	-1.3	-0.000507	± 2.5	PASS	
		VN	10	1.65	0.000643	± 2.5	PASS	
		VN	20	-0.67	-0.000261	± 2.5	PASS	
		VN	30	1.76	0.000686	± 2.5	PASS	
		VN	40	0.21	0.000082	± 2.5	PASS	
		VN	50	-1.16	-0.000452	± 2.5	PASS	
	QPSK	LCH	VN	-30	0.27	0.000108	± 2.5	PASS
			VN	-20	2.3	0.000918	± 2.5	PASS
VN			-10	-0.51	-0.000204	± 2.5	PASS	
VN			0	3.76	0.001501	± 2.5	PASS	
VN			10	4.28	0.001709	± 2.5	PASS	
VN			20	2.43	0.000970	± 2.5	PASS	
VN			30	3.51	0.001401	± 2.5	PASS	
VN			40	3.35	0.001337	± 2.5	PASS	
VN			50	2.1	0.000838	± 2.5	PASS	
MCH		VN	-30	1.02	0.000402	± 2.5	PASS	
		VN	-20	-1.33	-0.000525	± 2.5	PASS	
		VN	-10	4.48	0.001767	± 2.5	PASS	
		VN	0	0.18	0.000071	± 2.5	PASS	
		VN	10	-1.26	-0.000497	± 2.5	PASS	
		VN	20	0.21	0.000083	± 2.5	PASS	
		VN	30	2.81	0.001108	± 2.5	PASS	
		VN	40	-1.06	-0.000418	± 2.5	PASS	
		VN	50	4.21	0.001661	± 2.5	PASS	
HCH		VN	-30	-1.04	-0.000405	± 2.5	PASS	
		VN	-20	2.57	0.001002	± 2.5	PASS	
		VN	-10	-0.87	-0.000339	± 2.5	PASS	
		VN	0	4.6	0.001793	± 2.5	PASS	
		VN	10	4.73	0.001844	± 2.5	PASS	
		VN	20	2.02	0.000788	± 2.5	PASS	
		VN	30	-0.1	-0.000039	± 2.5	PASS	

		VN	40	-1.05	-0.000409	± 2.5	PASS
		VN	50	0.99	0.000386	± 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	-1.76	-0.000702	± 2.5	PASS
		VN	TN	-1.12	-0.000447	± 2.5	PASS
		VH	TN	-0.73	-0.000291	± 2.5	PASS
	MCH	VL	TN	4.18	0.001649	± 2.5	PASS
		VN	TN	0.9	0.000355	± 2.5	PASS
		VH	TN	2.51	0.000990	± 2.5	PASS
	HCH	VL	TN	4.05	0.001580	± 2.5	PASS
		VN	TN	3.66	0.001428	± 2.5	PASS
		VH	TN	0.69	0.000269	± 2.5	PASS
16QAM	LCH	VL	TN	3.21	0.001280	± 2.5	PASS
		VN	TN	3.34	0.001332	± 2.5	PASS
		VH	TN	0.05	0.000020	± 2.5	PASS
	MCH	VL	TN	3.39	0.001337	± 2.5	PASS
		VN	TN	0.45	0.000178	± 2.5	PASS
		VH	TN	2.78	0.001097	± 2.5	PASS
	HCH	VL	TN	2.73	0.001065	± 2.5	PASS
		VN	TN	4.22	0.001647	± 2.5	PASS
		VH	TN	-1.88	-0.000734	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.28	-0.000510	± 2.5	PASS
		VN	-20	1.39	0.000554	± 2.5	PASS
		VN	-10	2.16	0.000861	± 2.5	PASS
		VN	0	1.25	0.000499	± 2.5	PASS
		VN	10	-1.71	-0.000682	± 2.5	PASS
		VN	20	2.59	0.001033	± 2.5	PASS
		VN	30	3.23	0.001288	± 2.5	PASS
		VN	40	3.94	0.001571	± 2.5	PASS
		VN	50	2.25	0.000897	± 2.5	PASS
	MCH	VN	-30	1.8	0.000710	± 2.5	PASS
		VN	-20	0.25	0.000099	± 2.5	PASS
		VN	-10	1.47	0.000580	± 2.5	PASS

		VN	0	4.03	0.001590	± 2.5	PASS
		VN	10	2.57	0.001014	± 2.5	PASS
		VN	20	-0.54	-0.000213	± 2.5	PASS
		VN	30	0.52	0.000205	± 2.5	PASS
		VN	40	-1.26	-0.000497	± 2.5	PASS
		VN	50	0.3	0.000118	± 2.5	PASS
	HCH	VN	-30	4.75	0.001854	± 2.5	PASS
		VN	-20	2.71	0.001058	± 2.5	PASS
		VN	-10	1.88	0.000734	± 2.5	PASS
		VN	0	0.17	0.000066	± 2.5	PASS
		VN	10	-1.25	-0.000488	± 2.5	PASS
		VN	20	3.2	0.001249	± 2.5	PASS
		VN	30	-1.84	-0.000718	± 2.5	PASS
		VN	40	4.43	0.001729	± 2.5	PASS
		VN	50	-1.62	-0.000632	± 2.5	PASS
16QAM	LCH	VN	-30	1.85	0.000738	± 2.5	PASS
		VN	-20	-0.91	-0.000363	± 2.5	PASS
		VN	-10	-1.25	-0.000499	± 2.5	PASS
		VN	0	1.17	0.000467	± 2.5	PASS
		VN	10	-0.25	-0.000100	± 2.5	PASS
		VN	20	-0.94	-0.000375	± 2.5	PASS
		VN	30	3.86	0.001539	± 2.5	PASS
		VN	40	1.46	0.000582	± 2.5	PASS
		VN	50	2.91	0.001161	± 2.5	PASS
	MCH	VN	-30	0.62	0.000245	± 2.5	PASS
		VN	-20	2.95	0.001164	± 2.5	PASS
		VN	-10	2.66	0.001049	± 2.5	PASS
		VN	0	4.02	0.001586	± 2.5	PASS
		VN	10	-1.16	-0.000458	± 2.5	PASS
		VN	20	4.22	0.001665	± 2.5	PASS
		VN	30	3.78	0.001491	± 2.5	PASS
		VN	40	1.91	0.000753	± 2.5	PASS
		VN	50	1.26	0.000497	± 2.5	PASS
	HCH	VN	-30	2.98	0.001163	± 2.5	PASS
		VN	-20	1.69	0.000660	± 2.5	PASS
		VN	-10	1.76	0.000687	± 2.5	PASS
		VN	0	2.74	0.001069	± 2.5	PASS
		VN	10	3.7	0.001444	± 2.5	PASS
		VN	20	3.27	0.001276	± 2.5	PASS
		VN	30	3.43	0.001339	± 2.5	PASS
		VN	40	-1.72	-0.000671	± 2.5	PASS

		VN	50	2.93	0.001143	± 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	-0.26	-0.000104	± 2.5	PASS
		VN	TN	3.59	0.001430	± 2.5	PASS
		VH	TN	1.46	0.000582	± 2.5	PASS
	MCH	VL	TN	2.74	0.001081	± 2.5	PASS
		VN	TN	-1.6	-0.000631	± 2.5	PASS
		VH	TN	2.12	0.000836	± 2.5	PASS
	HCH	VL	TN	4.87	0.001902	± 2.5	PASS
		VN	TN	1.29	0.000504	± 2.5	PASS
		VH	TN	0.74	0.000289	± 2.5	PASS
16QAM	LCH	VL	TN	1.75	0.000697	± 2.5	PASS
		VN	TN	-0.05	-0.000020	± 2.5	PASS
		VH	TN	-0.93	-0.000371	± 2.5	PASS
	MCH	VL	TN	3.38	0.001333	± 2.5	PASS
		VN	TN	0.48	0.000189	± 2.5	PASS
		VH	TN	4.41	0.001740	± 2.5	PASS
	HCH	VL	TN	2.81	0.001098	± 2.5	PASS
		VN	TN	-0.16	-0.000063	± 2.5	PASS
		VH	TN	-1.71	-0.000668	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.18	-0.000470	± 2.5	PASS
		VN	-20	0.07	0.000028	± 2.5	PASS
		VN	-10	-1.22	-0.000486	± 2.5	PASS
		VN	0	3.26	0.001299	± 2.5	PASS
		VN	10	3.12	0.001243	± 2.5	PASS
		VN	20	1.45	0.000578	± 2.5	PASS
		VN	30	0.29	0.000116	± 2.5	PASS
		VN	40	-0.21	-0.000084	± 2.5	PASS
		VN	50	-1.55	-0.000618	± 2.5	PASS
	MCH	VN	-30	1.23	0.000485	± 2.5	PASS
		VN	-20	3.4	0.001341	± 2.5	PASS
		VN	-10	2.19	0.000864	± 2.5	PASS
		VN	0	3.01	0.001187	± 2.5	PASS

		VN	10	4.21	0.001661	± 2.5	PASS
		VN	20	-0.22	-0.000087	± 2.5	PASS
		VN	30	2.34	0.000923	± 2.5	PASS
		VN	40	0.35	0.000138	± 2.5	PASS
		VN	50	1.57	0.000619	± 2.5	PASS
	HCH	VN	-30	1.06	0.000414	± 2.5	PASS
		VN	-20	3.21	0.001254	± 2.5	PASS
		VN	-10	-0.55	-0.000215	± 2.5	PASS
		VN	0	2.59	0.001012	± 2.5	PASS
		VN	10	-0.12	-0.000047	± 2.5	PASS
		VN	20	-1.53	-0.000598	± 2.5	PASS
		VN	30	4.81	0.001879	± 2.5	PASS
		VN	40	3.96	0.001547	± 2.5	PASS
		VN	50	0.34	0.000133	± 2.5	PASS
16QAM	LCH	VN	-30	-0.84	-0.000335	± 2.5	PASS
		VN	-20	2.66	0.001060	± 2.5	PASS
		VN	-10	4.51	0.001797	± 2.5	PASS
		VN	0	3.84	0.001530	± 2.5	PASS
		VN	10	0.78	0.000311	± 2.5	PASS
		VN	20	3.32	0.001323	± 2.5	PASS
		VN	30	4.9	0.001952	± 2.5	PASS
		VN	40	2.45	0.000976	± 2.5	PASS
		VN	50	3.49	0.001390	± 2.5	PASS
	MCH	VN	-30	-0.35	-0.000138	± 2.5	PASS
		VN	-20	3.21	0.001266	± 2.5	PASS
		VN	-10	3.27	0.001290	± 2.5	PASS
		VN	0	1.46	0.000576	± 2.5	PASS
		VN	10	2.68	0.001057	± 2.5	PASS
		VN	20	-1.52	-0.000600	± 2.5	PASS
		VN	30	-1.21	-0.000477	± 2.5	PASS
		VN	40	0.44	0.000174	± 2.5	PASS
		VN	50	0.34	0.000134	± 2.5	PASS
	HCH	VN	-30	0.36	0.000141	± 2.5	PASS
		VN	-20	0.8	0.000313	± 2.5	PASS
		VN	-10	1.7	0.000664	± 2.5	PASS
		VN	0	-0.45	-0.000176	± 2.5	PASS
		VN	10	4.83	0.001887	± 2.5	PASS
		VN	20	0.7	0.000273	± 2.5	PASS
		VN	30	-0.74	-0.000289	± 2.5	PASS
		VN	40	4.44	0.001734	± 2.5	PASS
		VN	50	0.73	0.000285	± 2.5	PASS