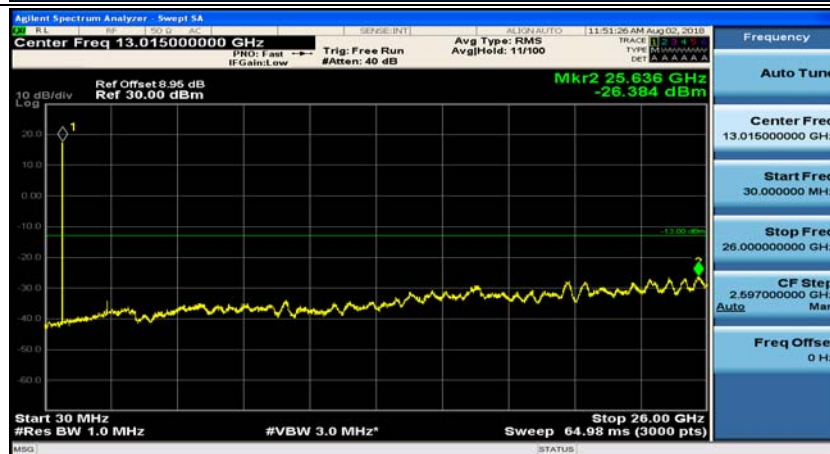
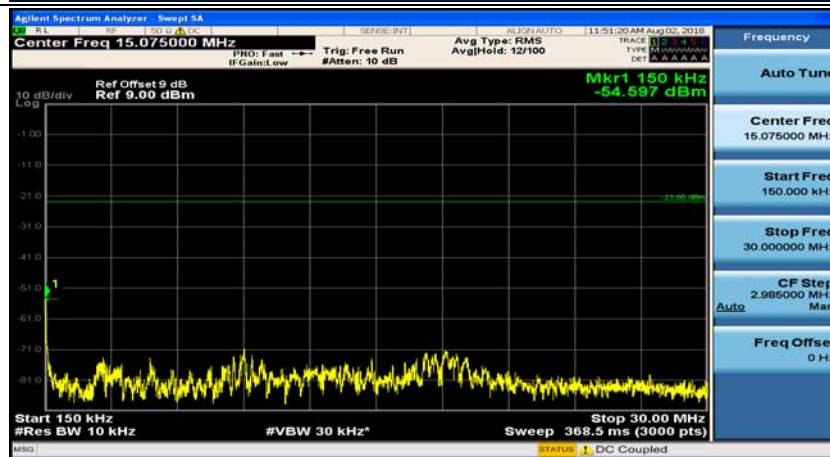
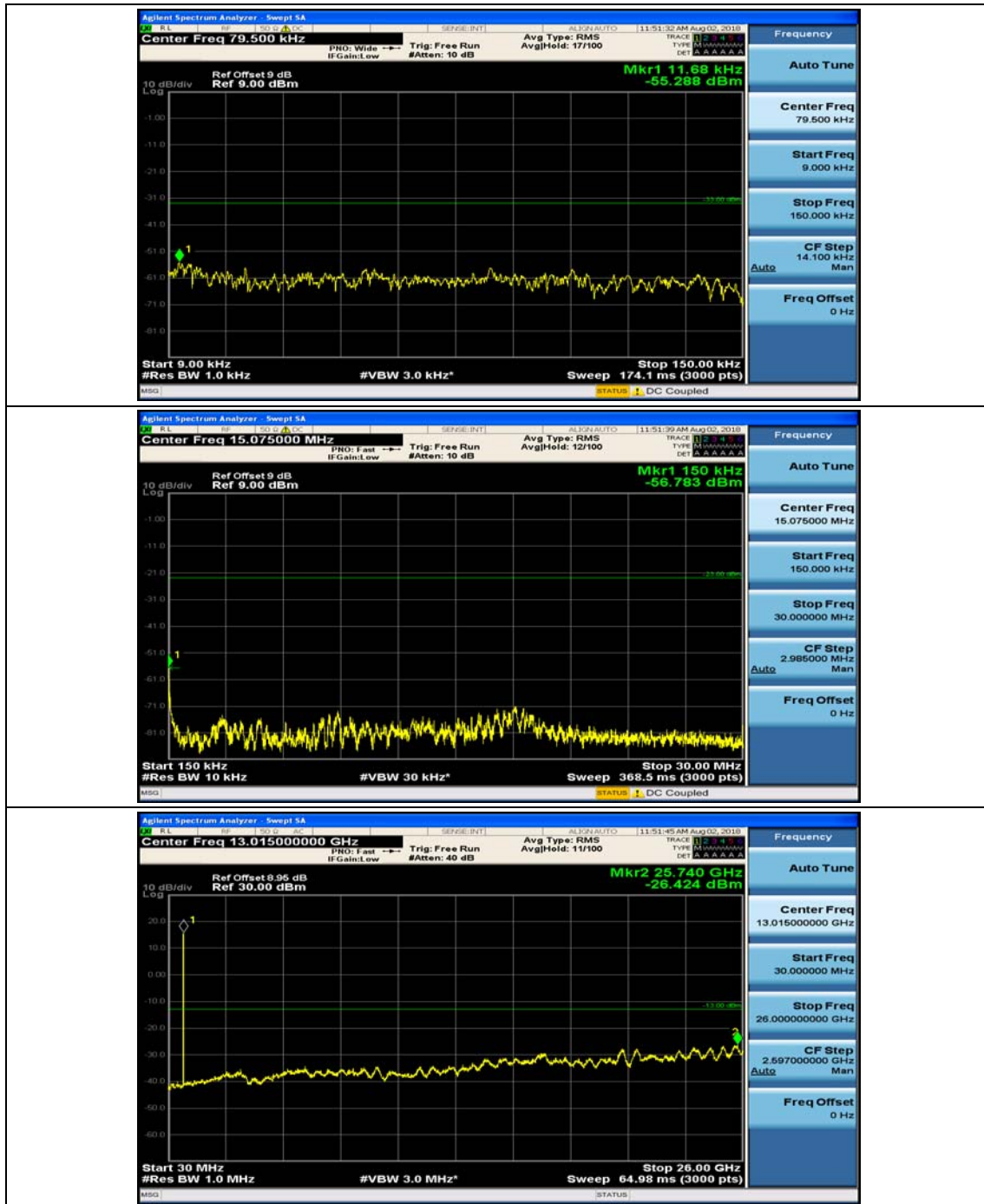


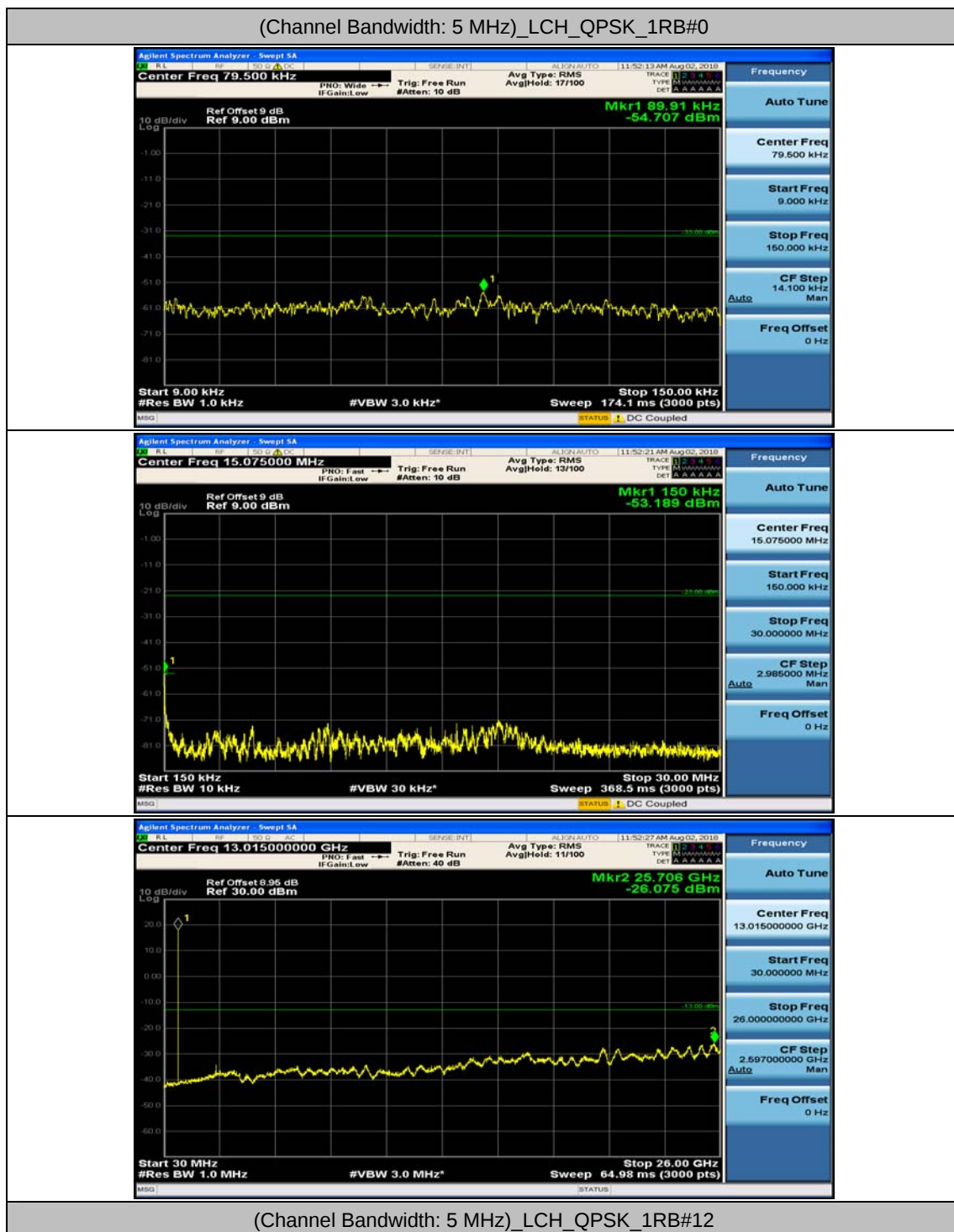
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

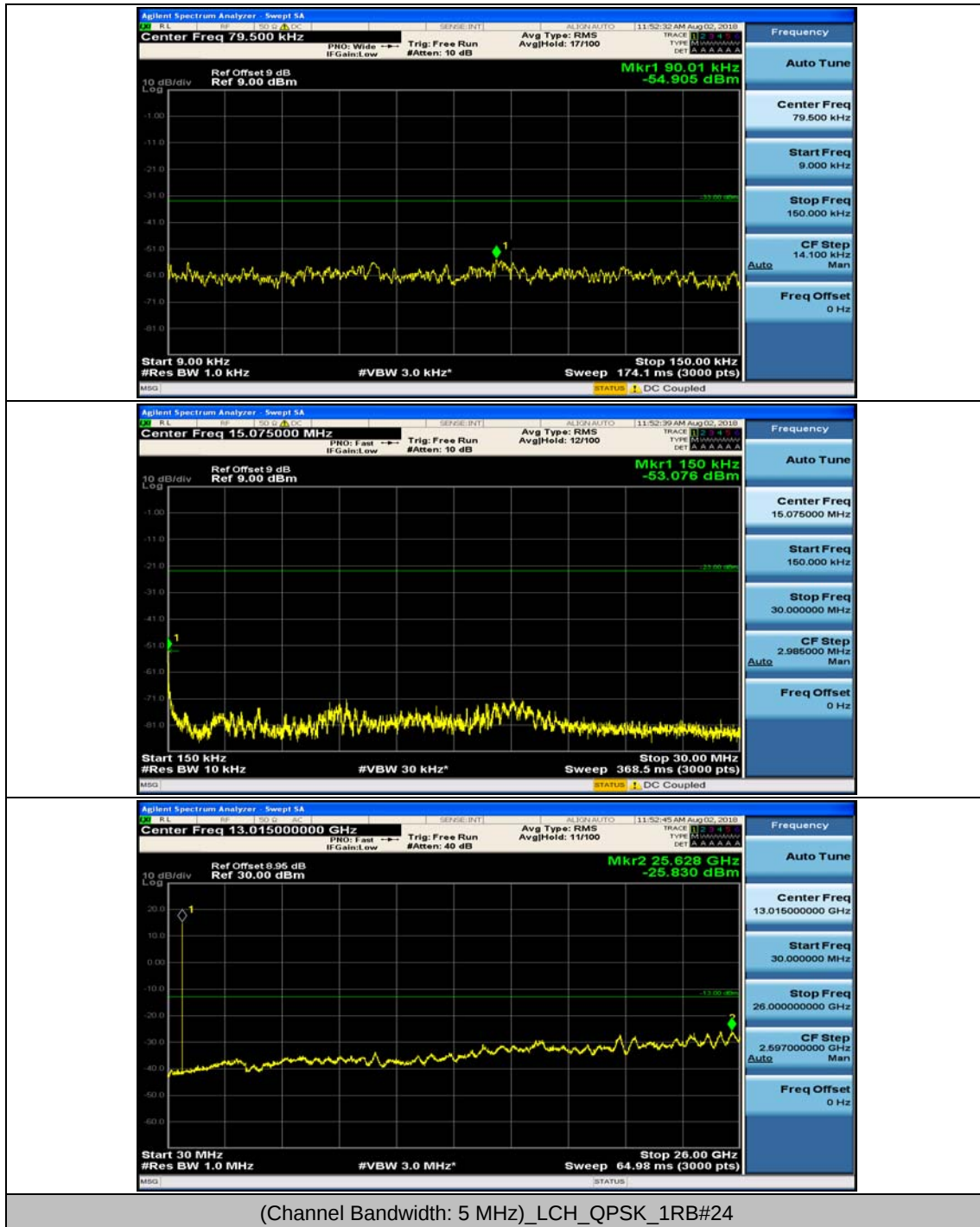


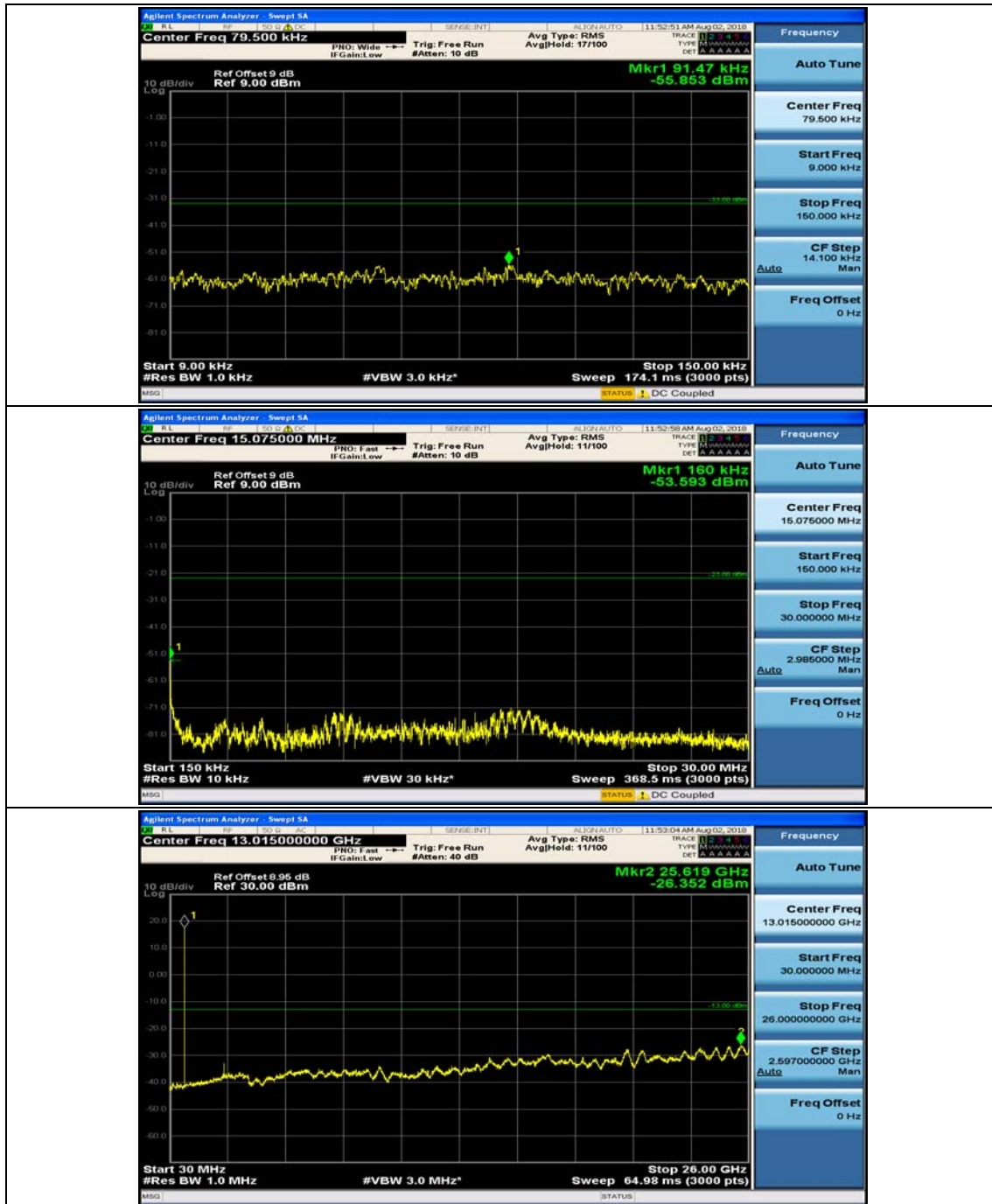
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7



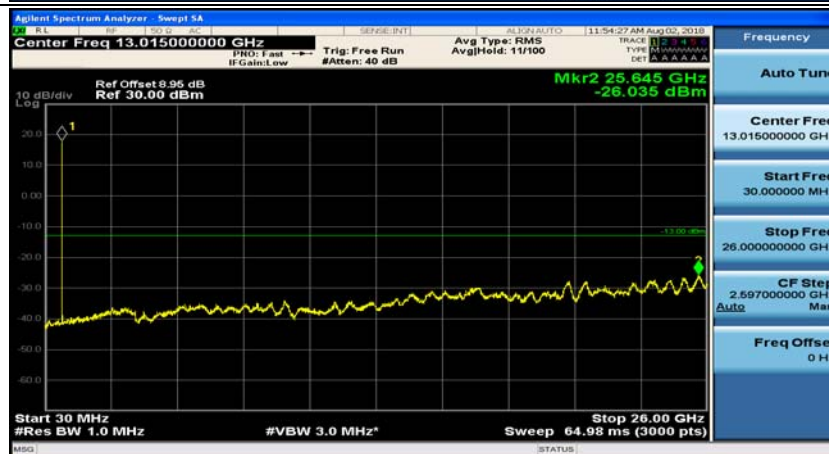
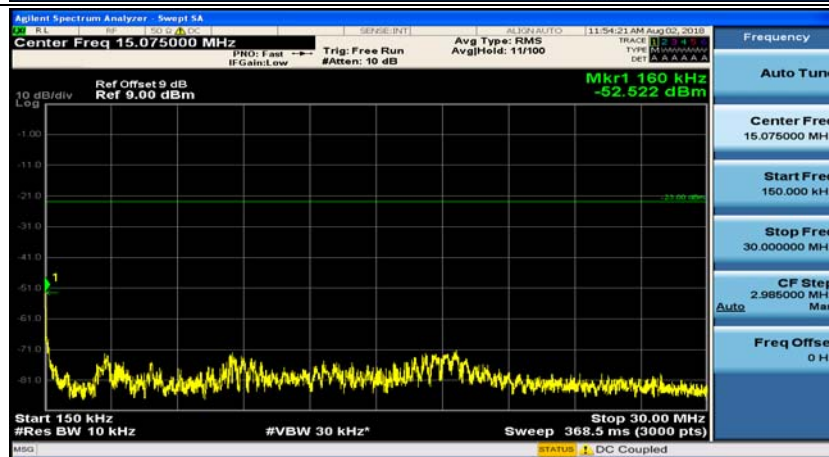
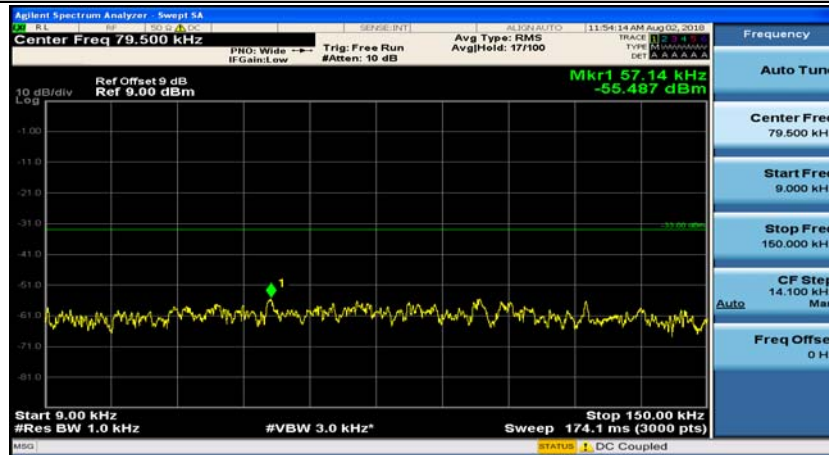
Channel Bandwidth: 5 MHz



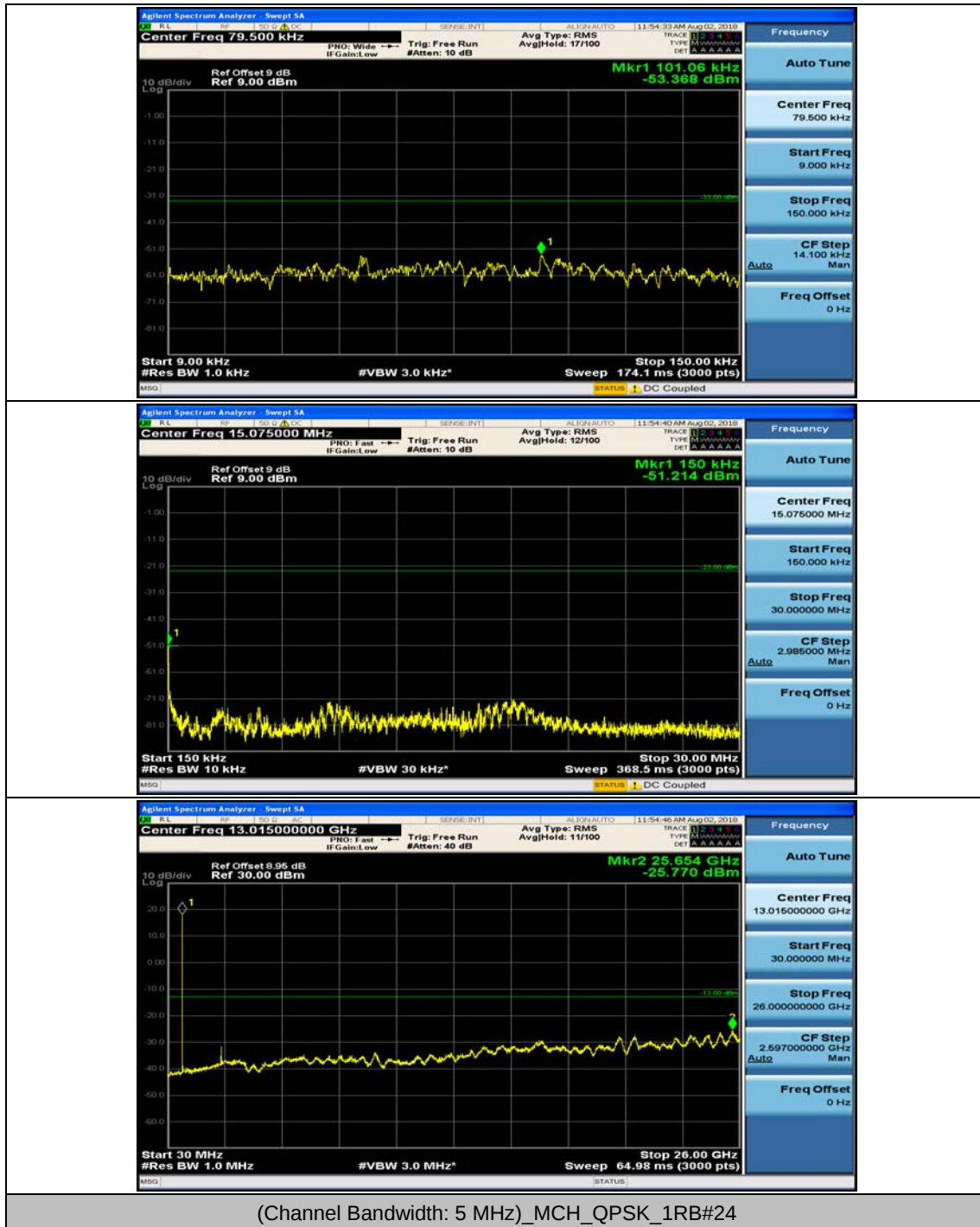


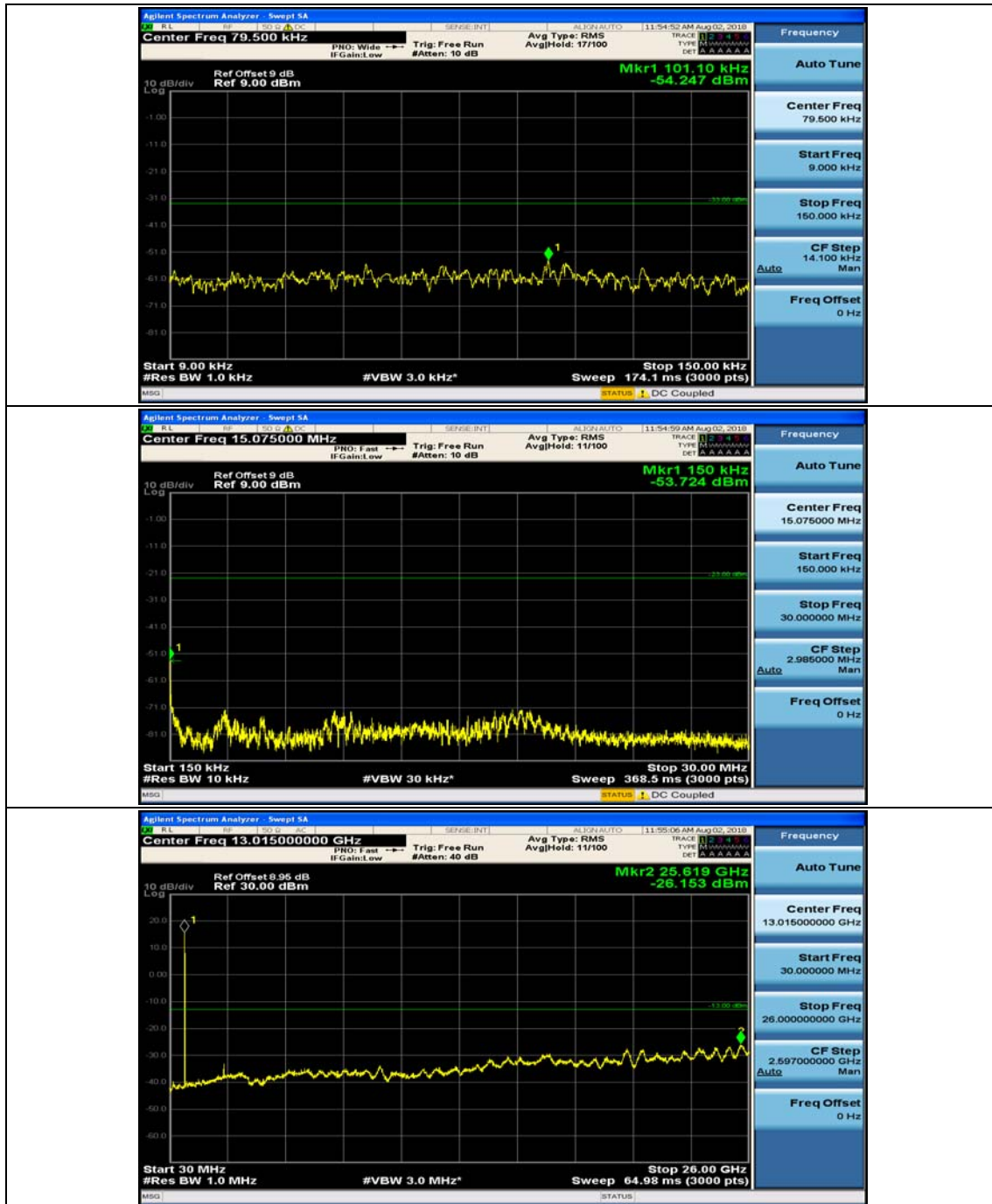


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

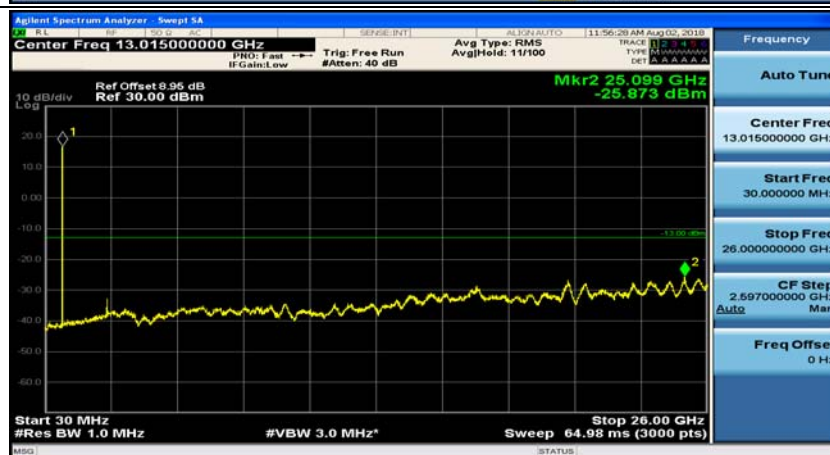
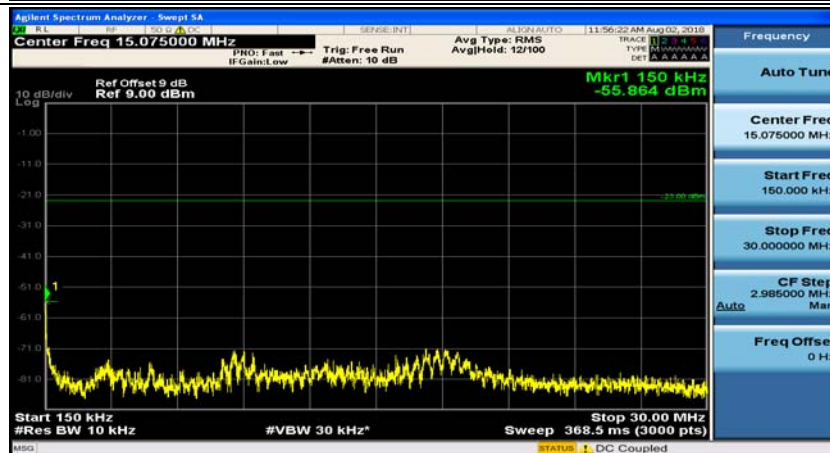
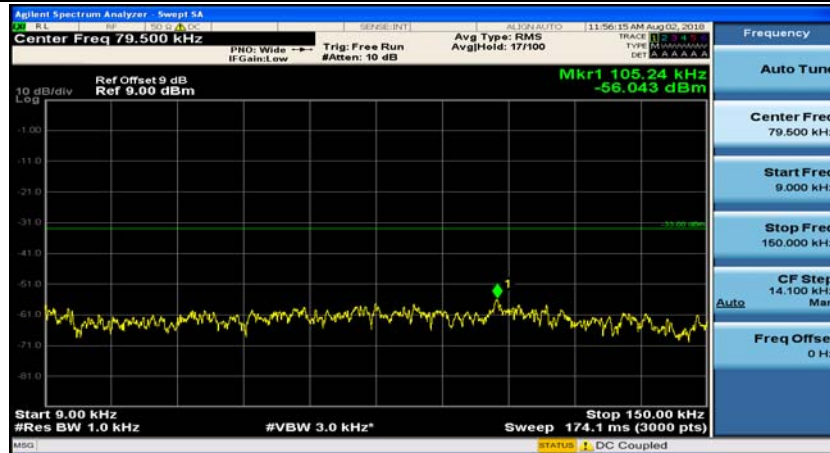


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

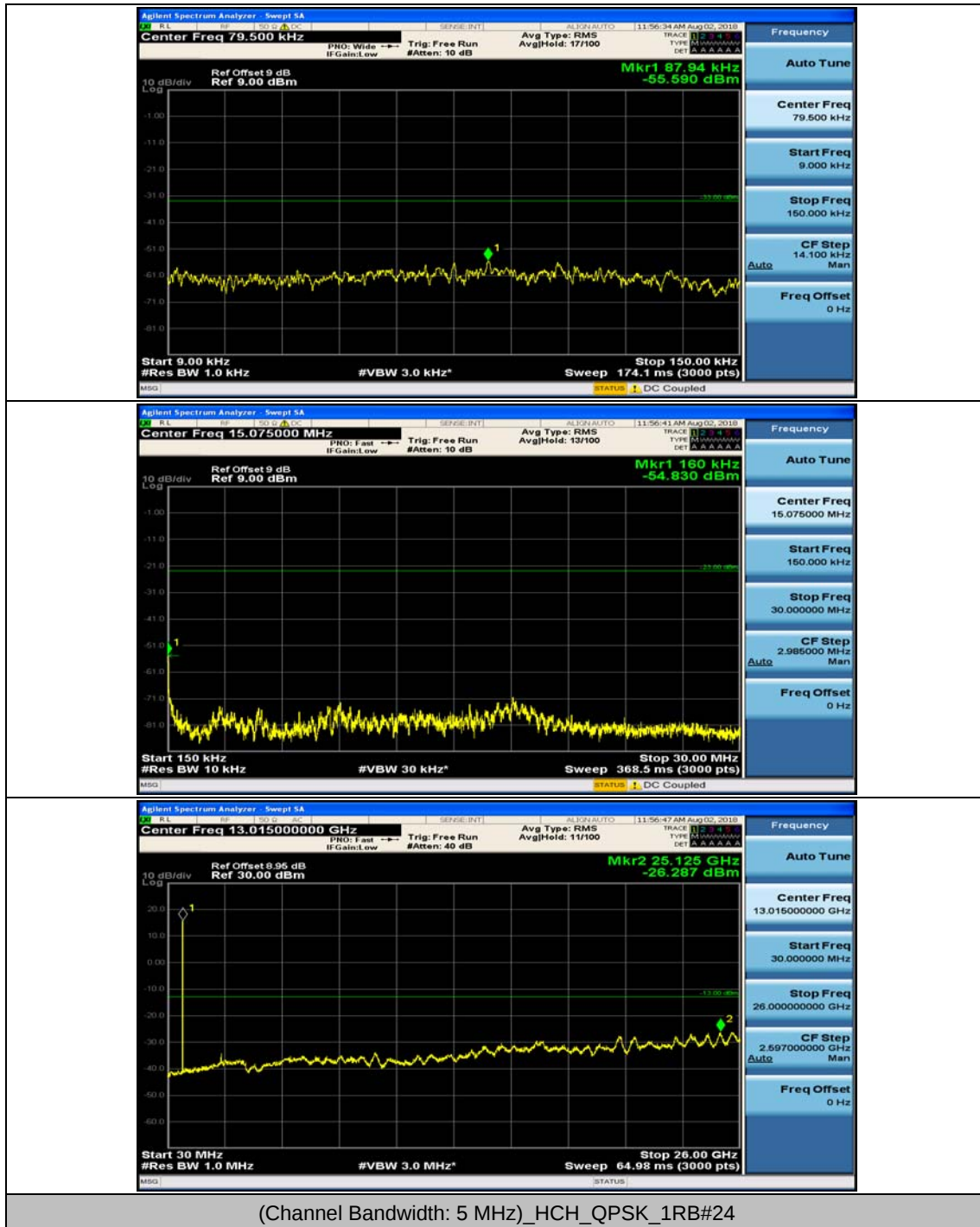


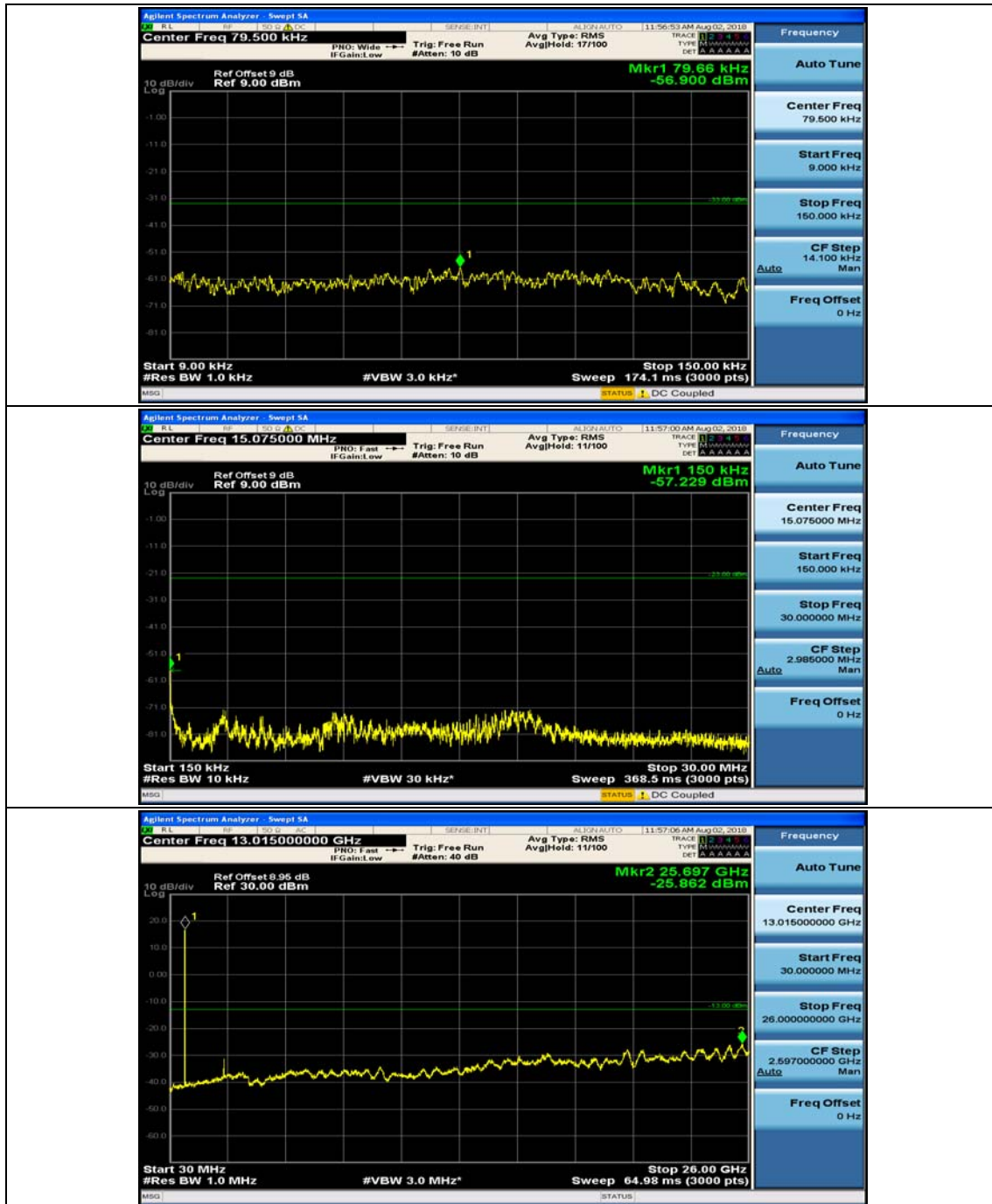


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

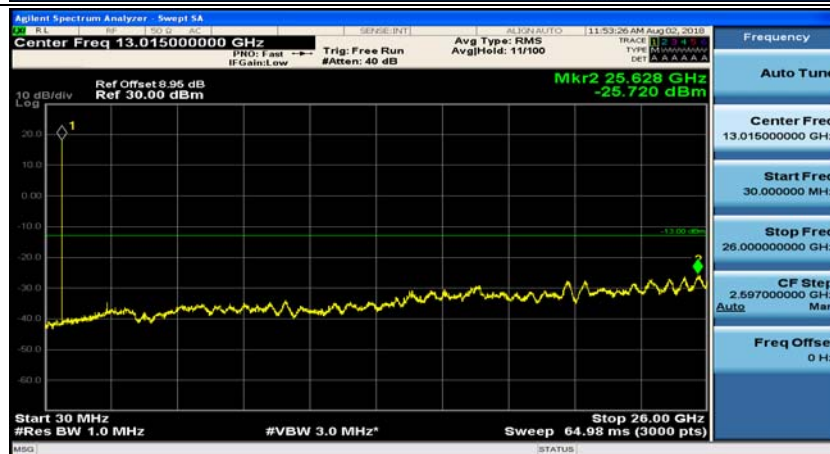
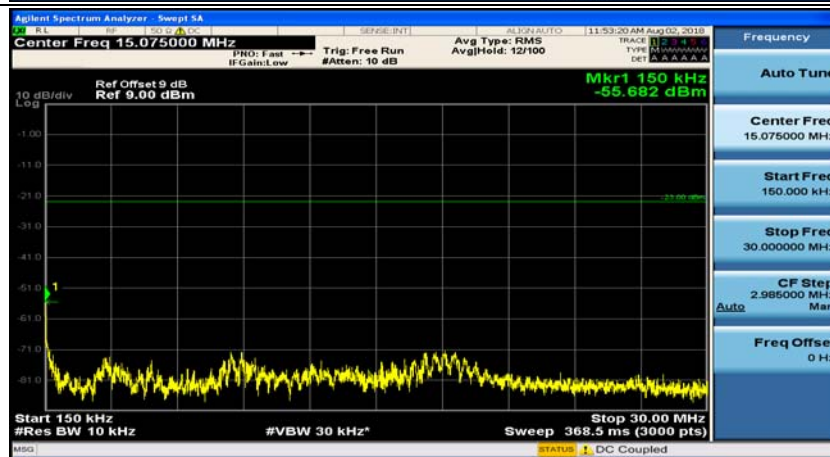


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

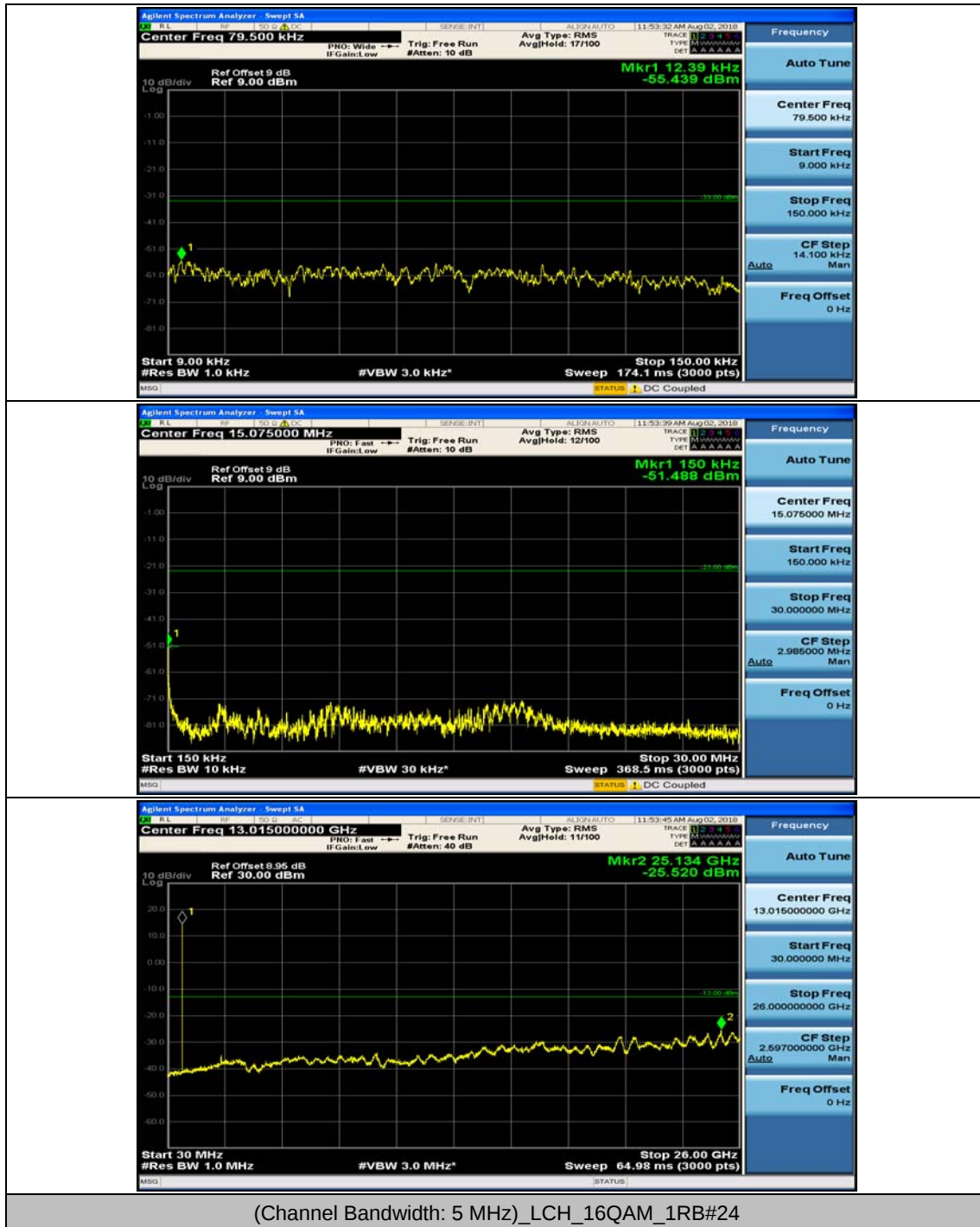


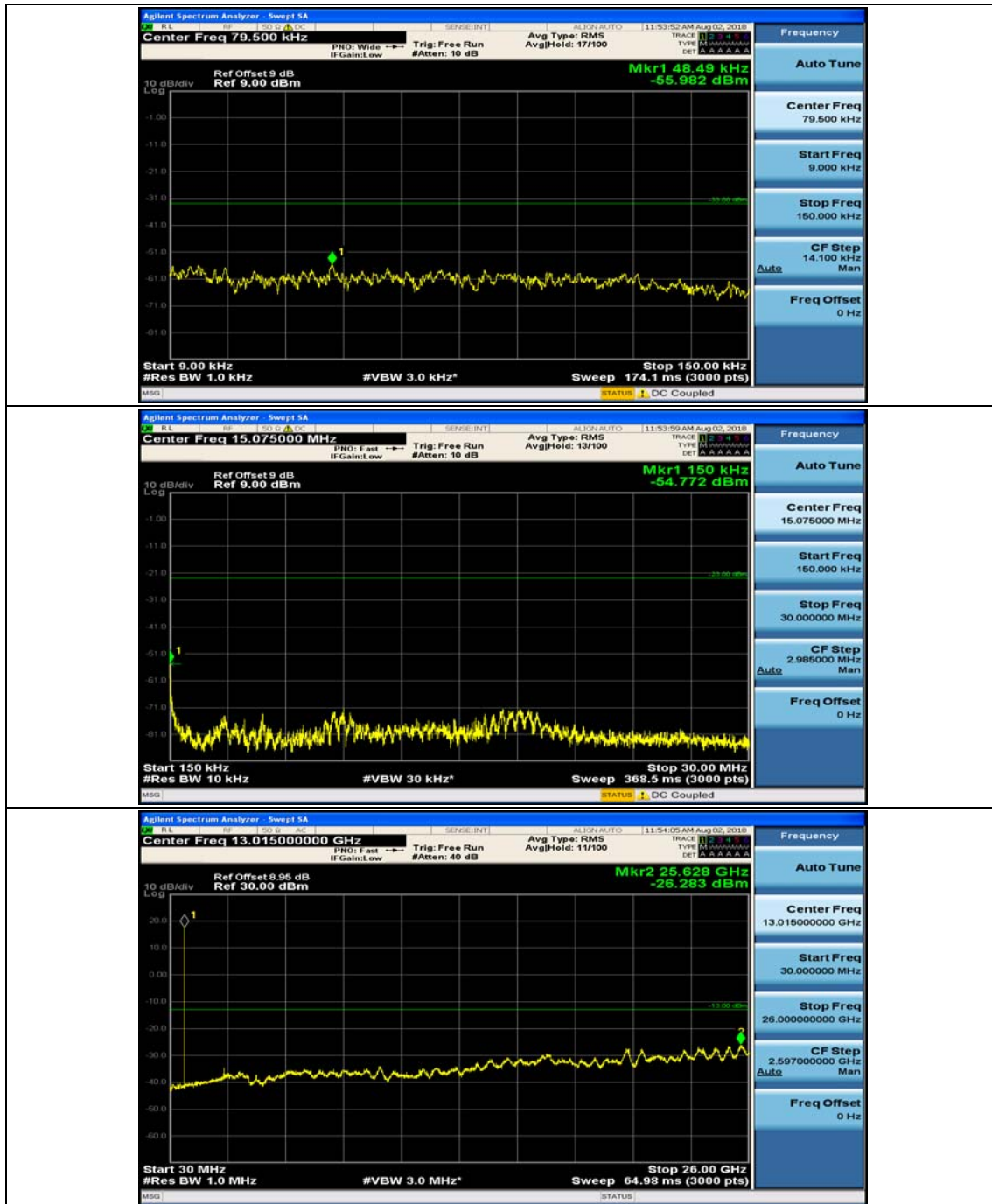


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

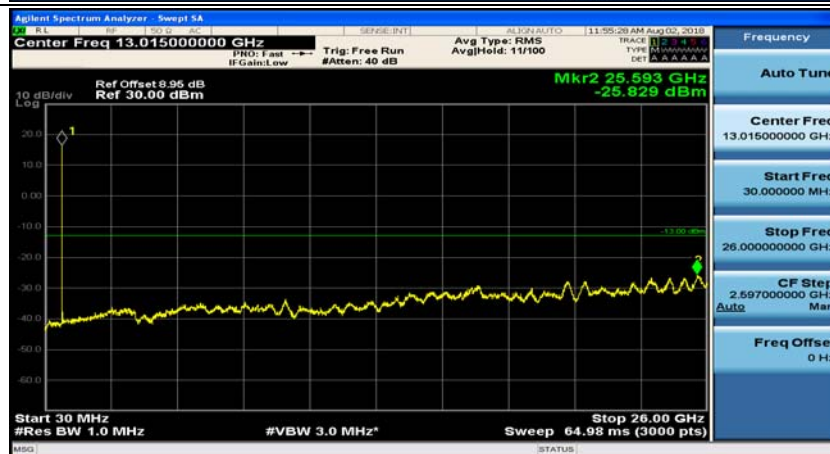
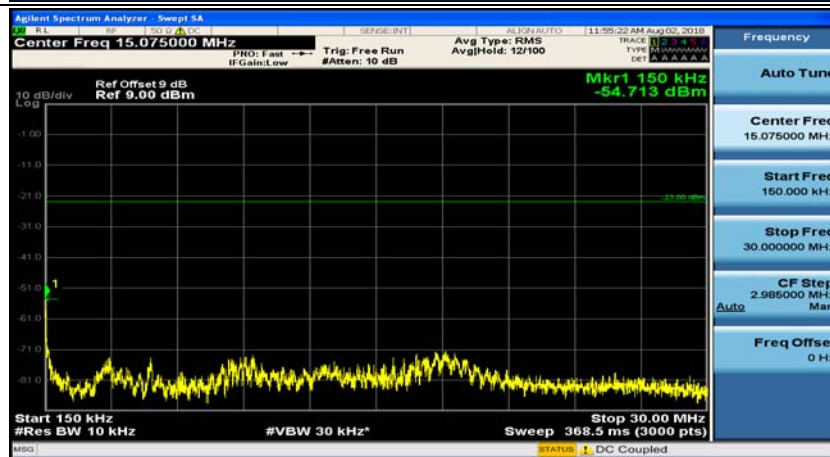
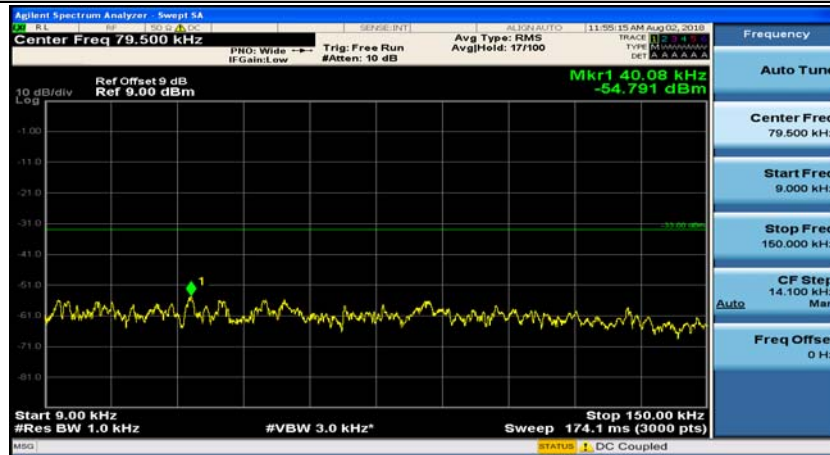


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

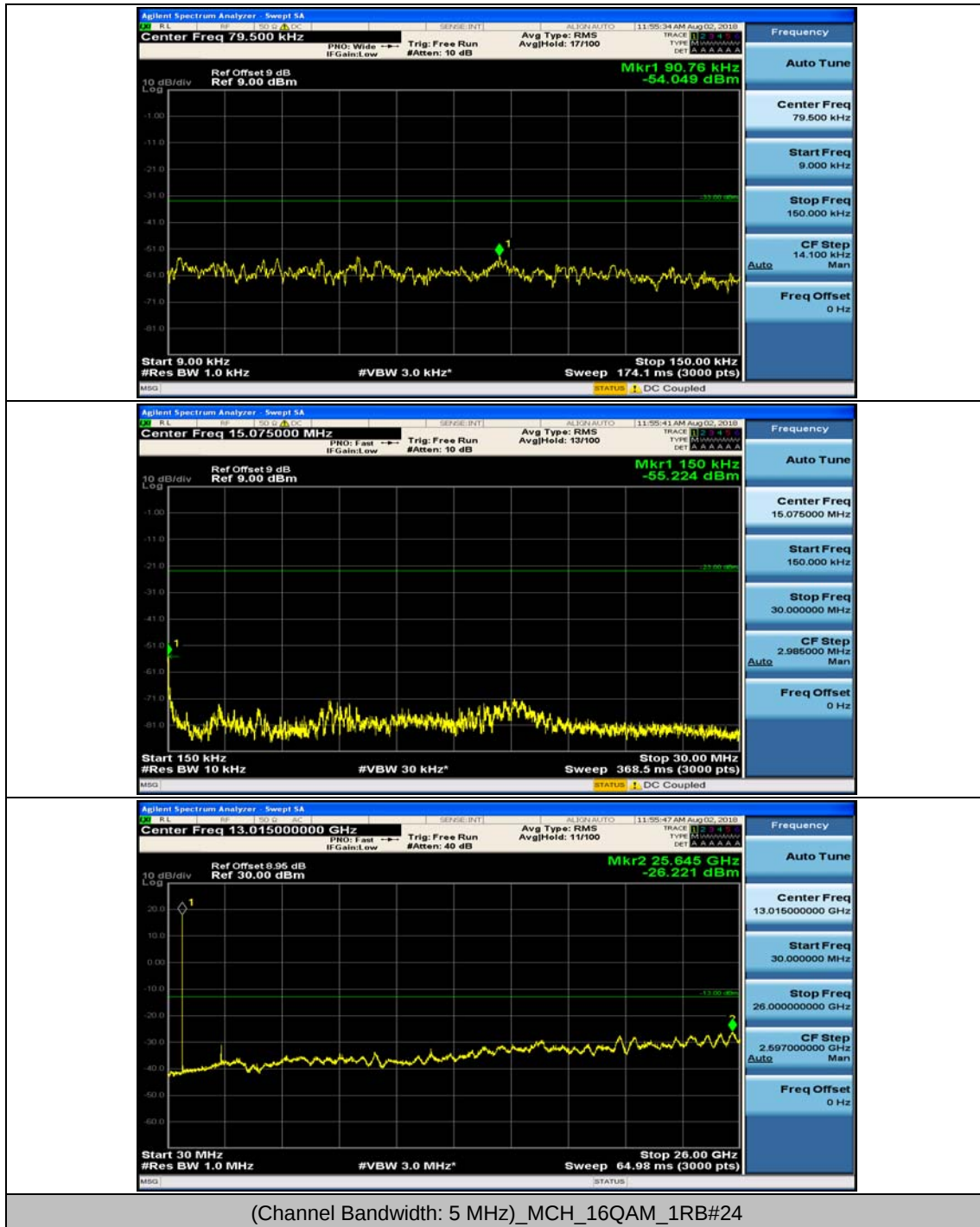


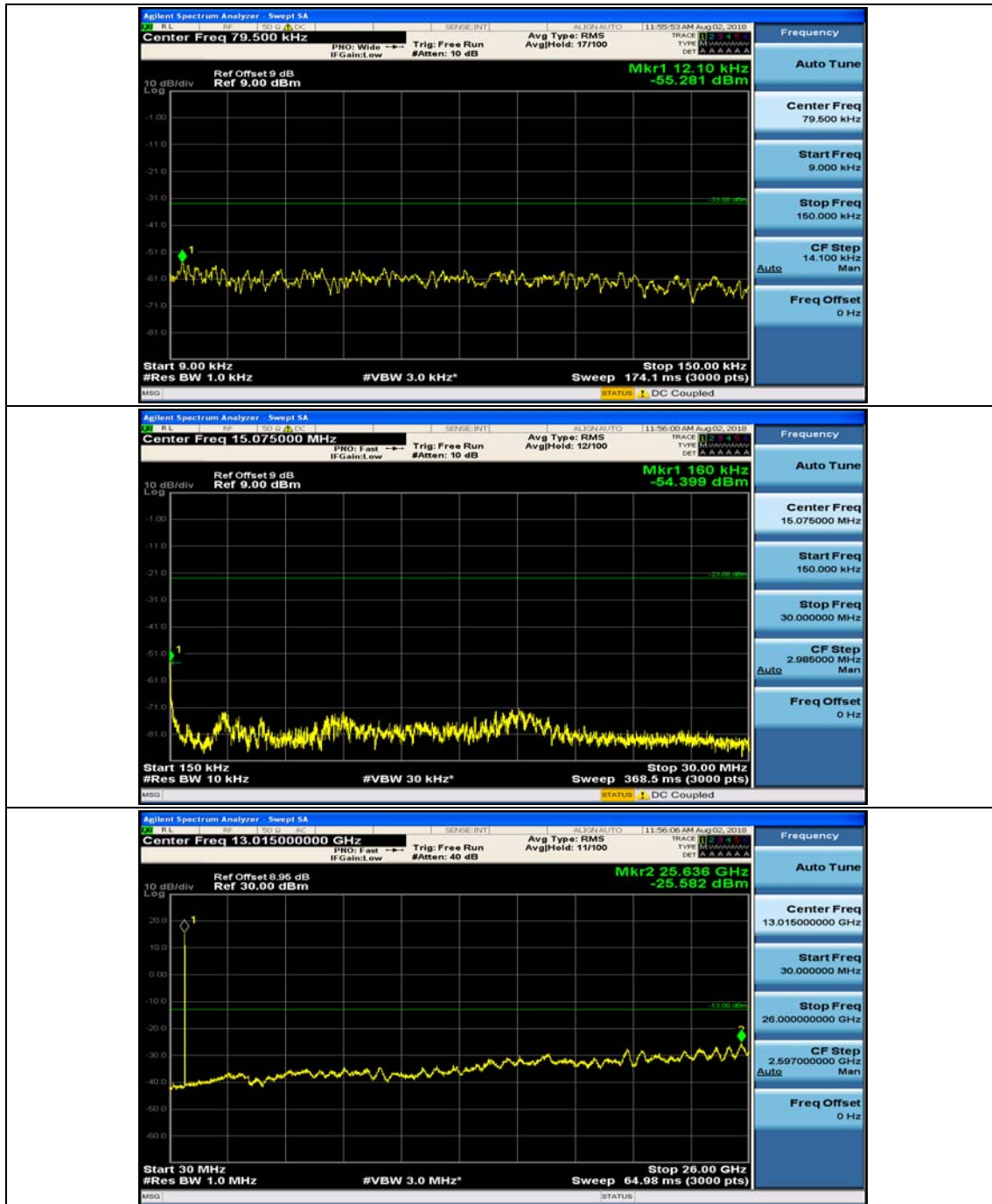


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

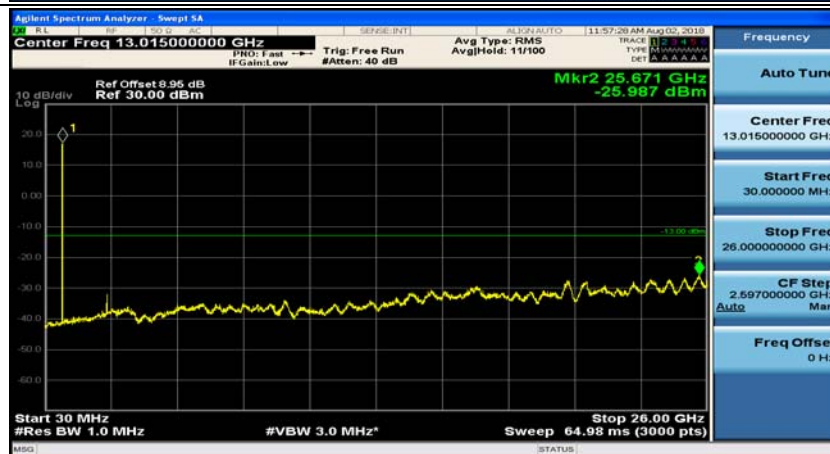
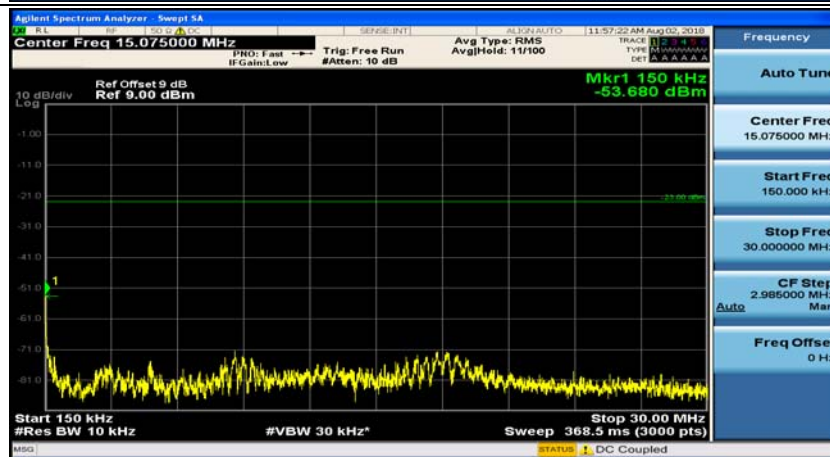
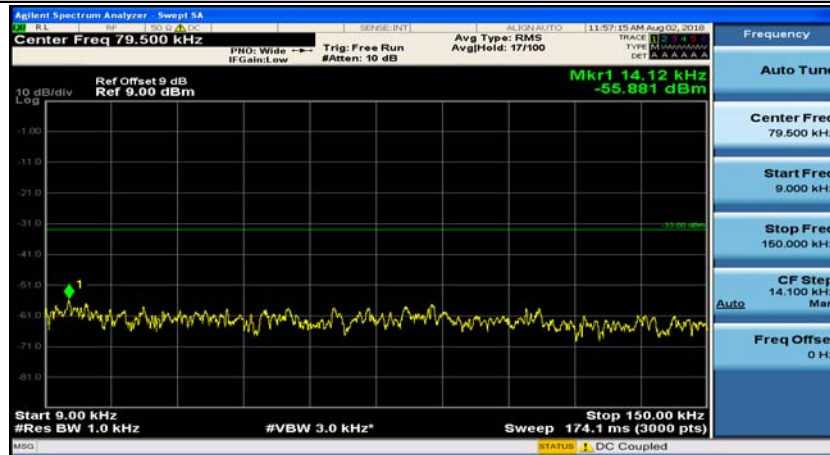


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

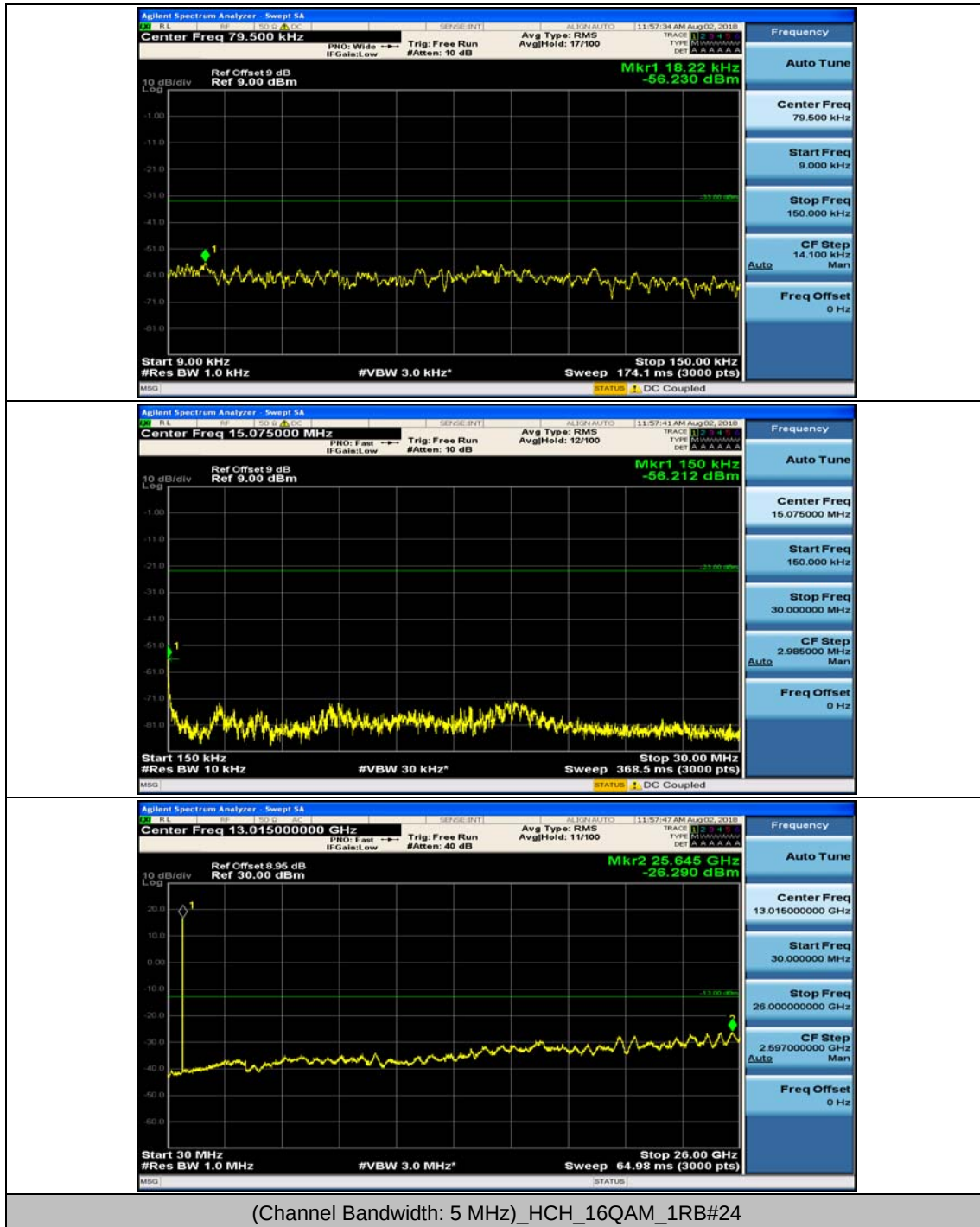


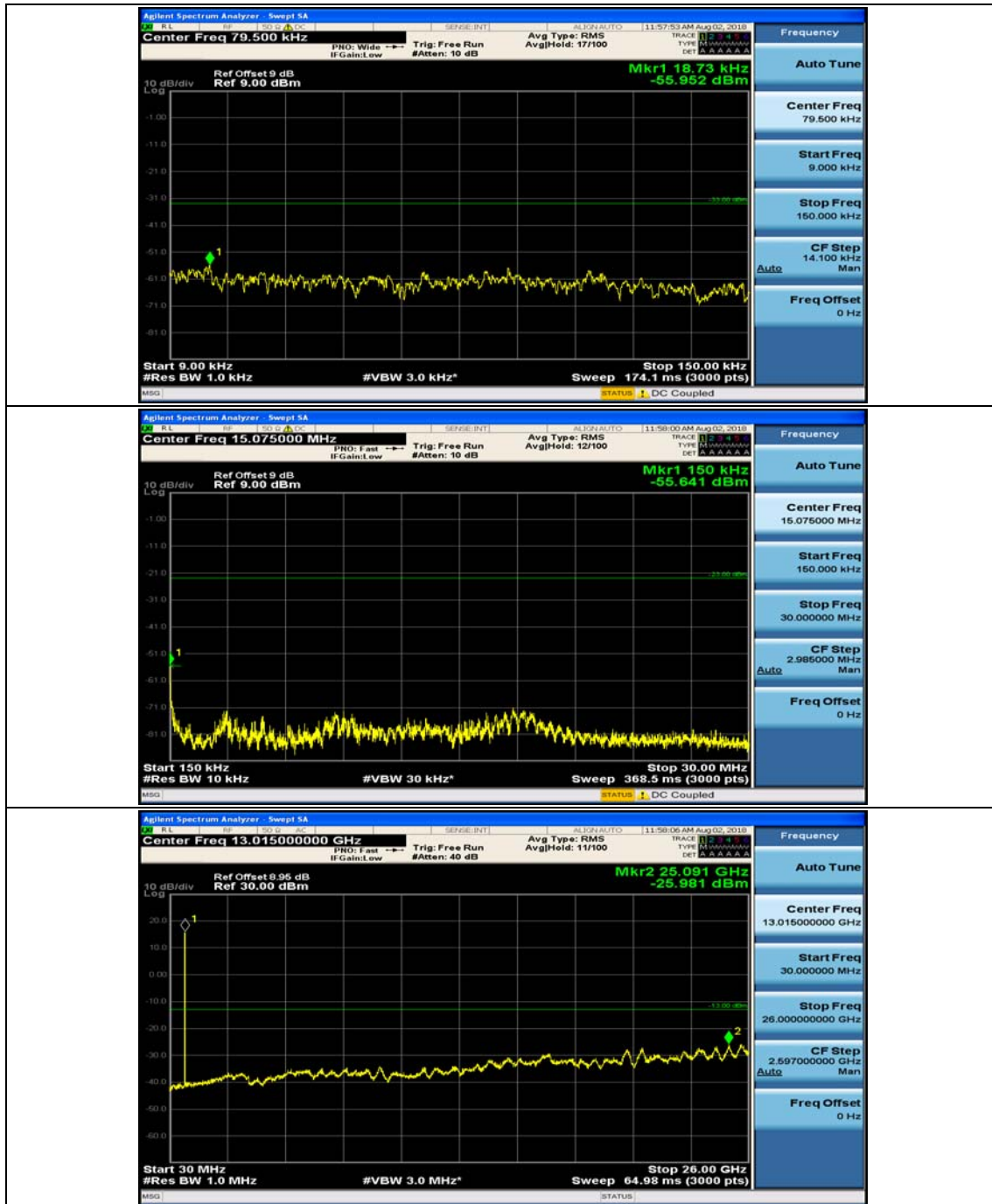


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

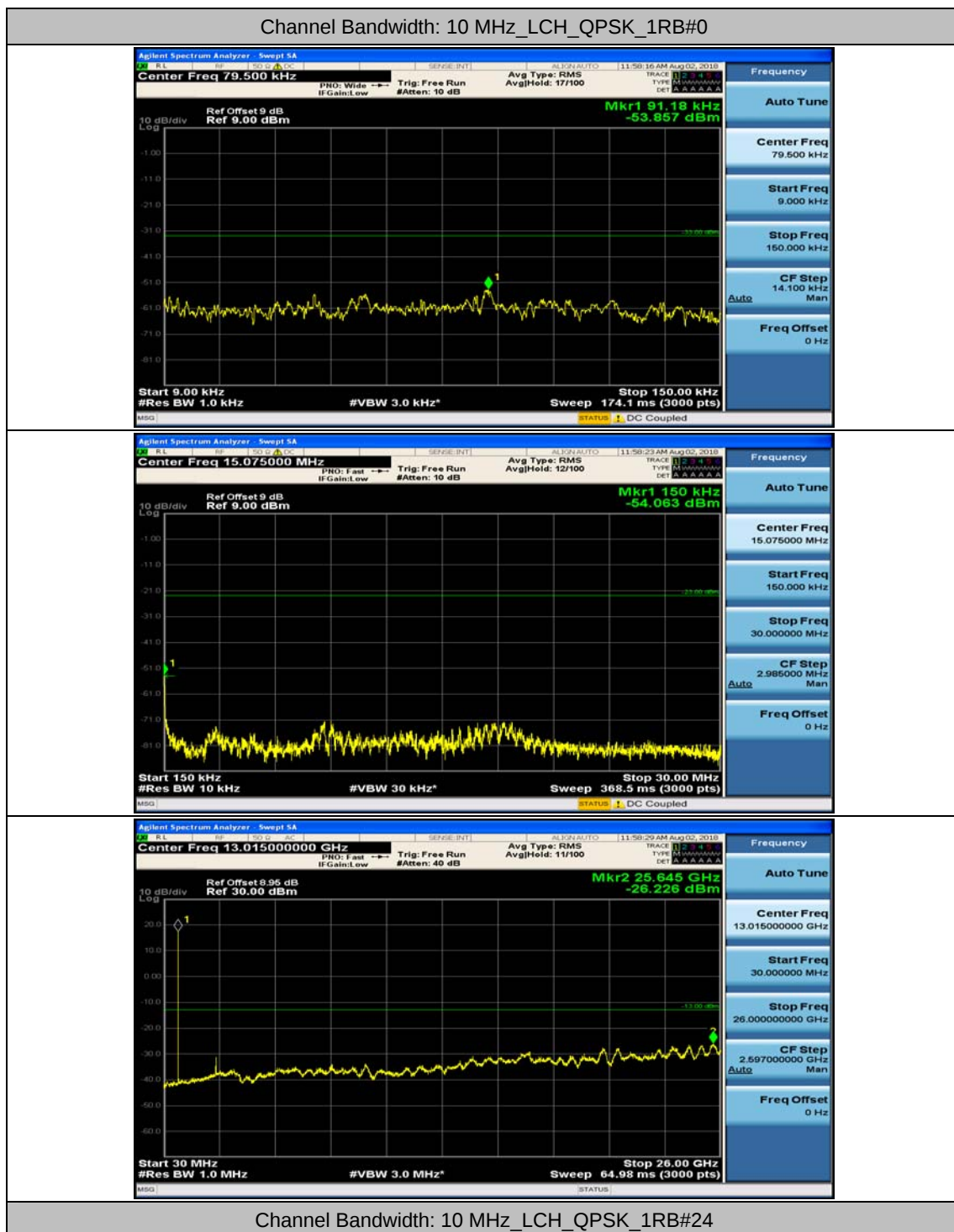


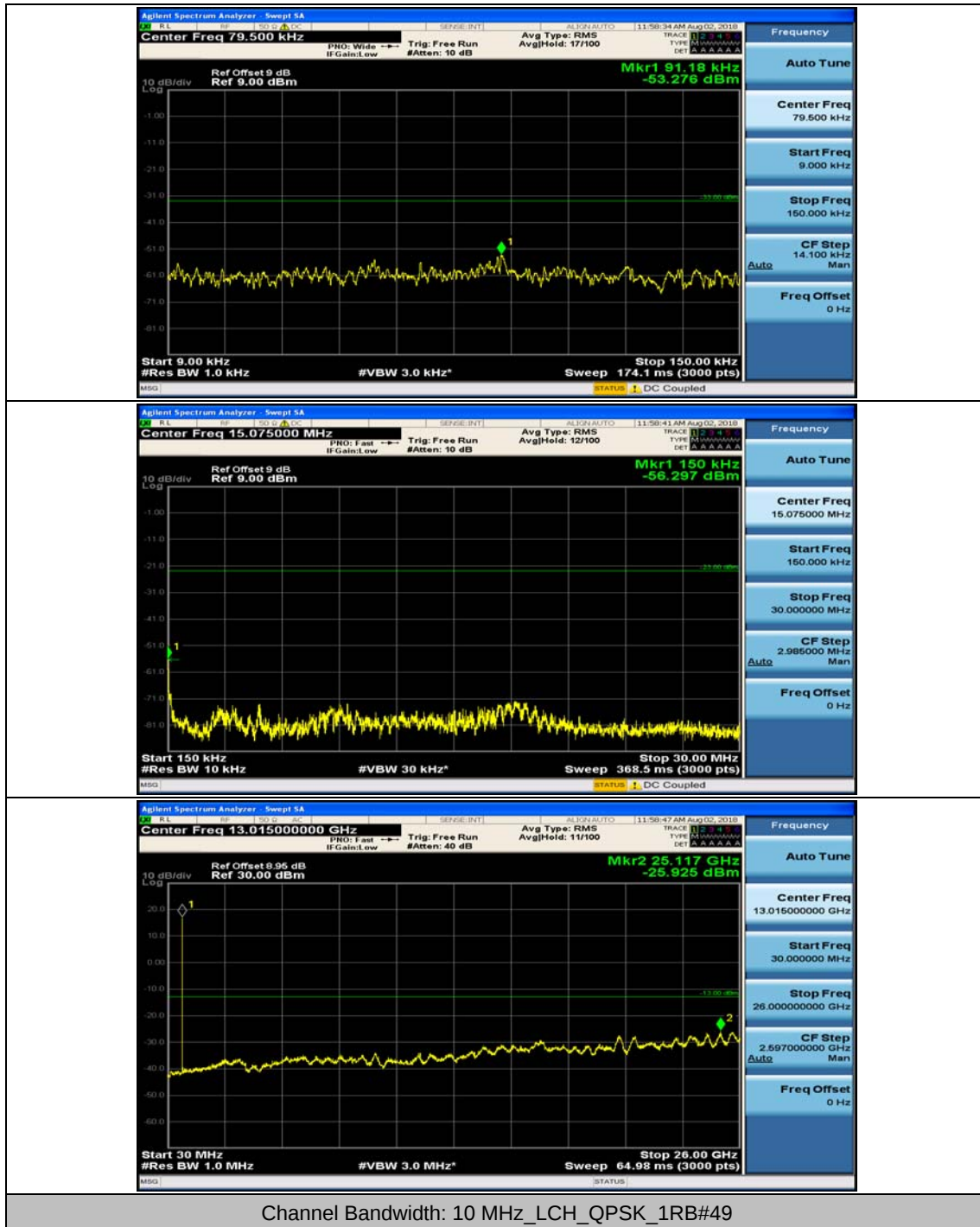
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

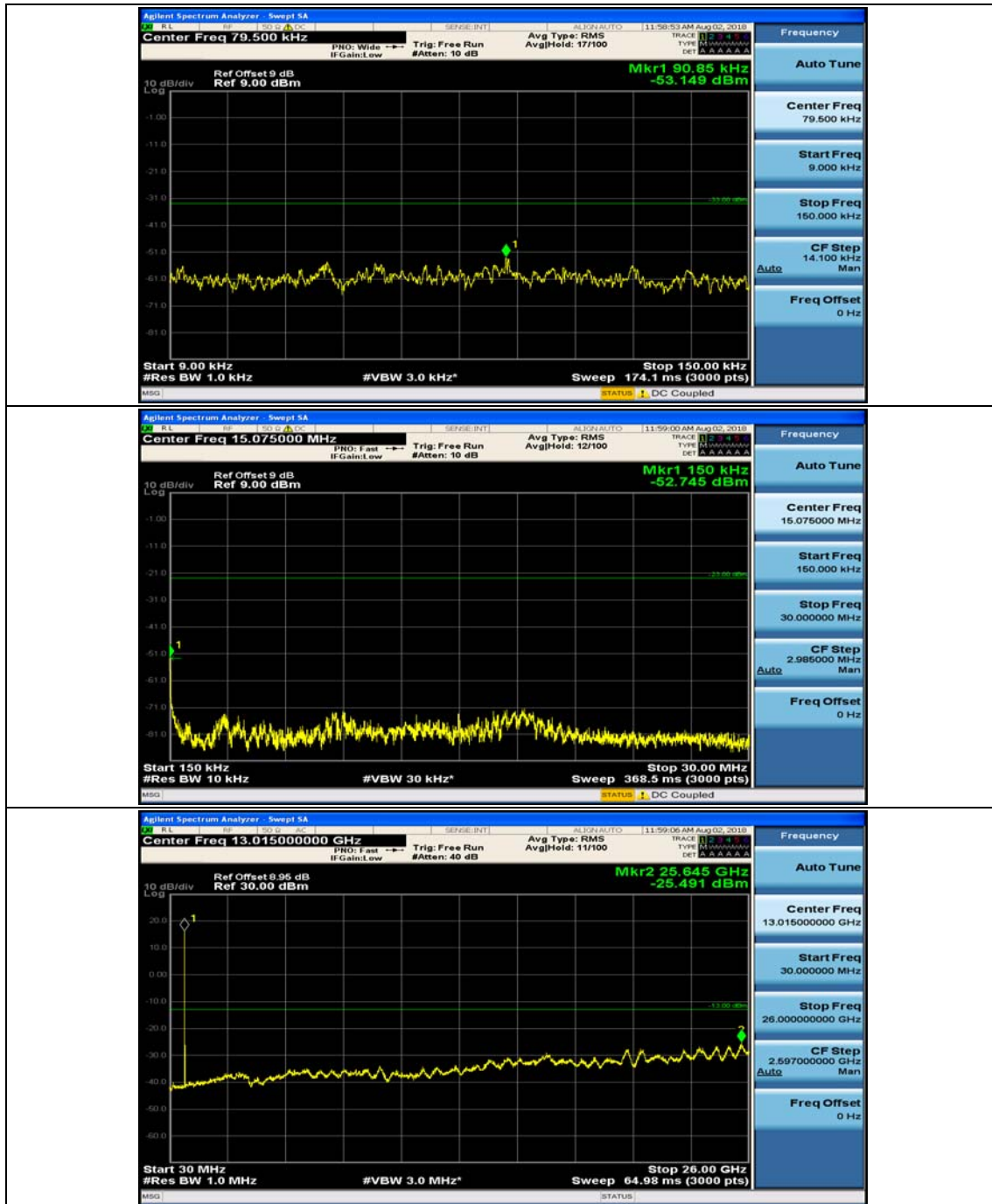




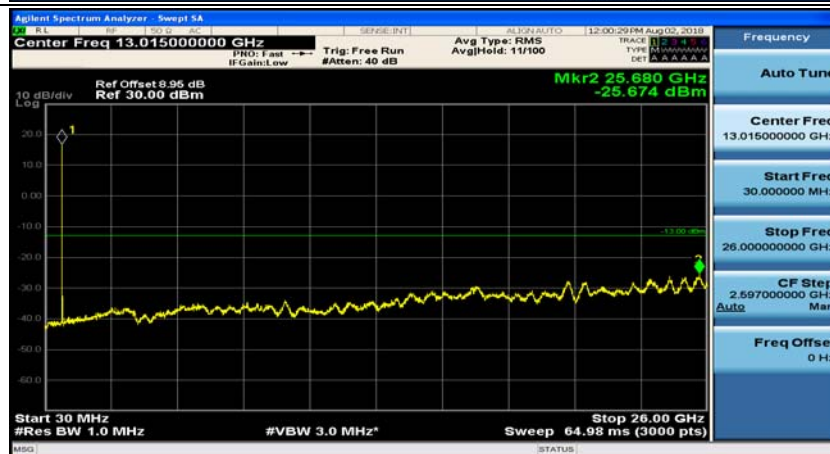
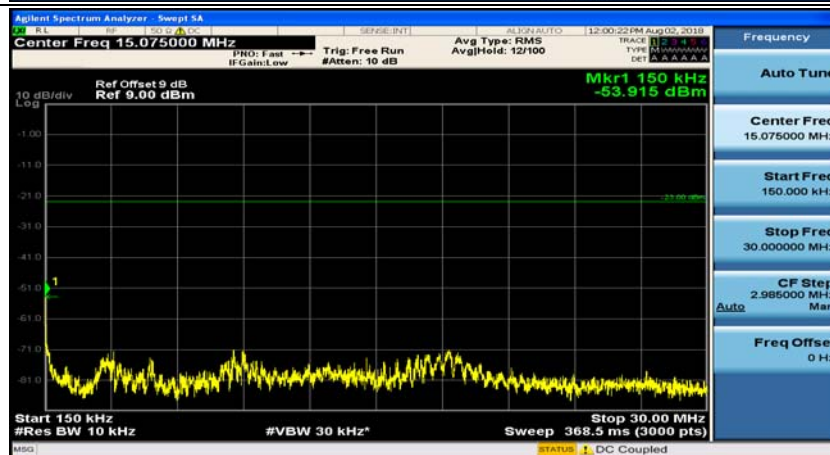
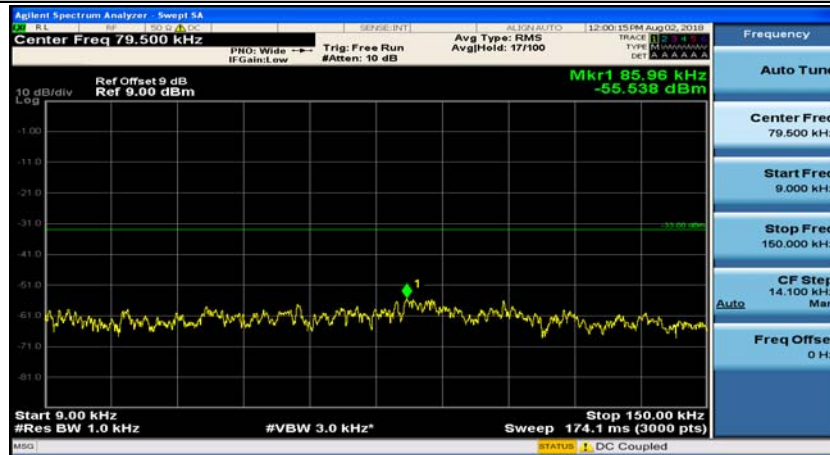
Channel Bandwidth: 10 MHz



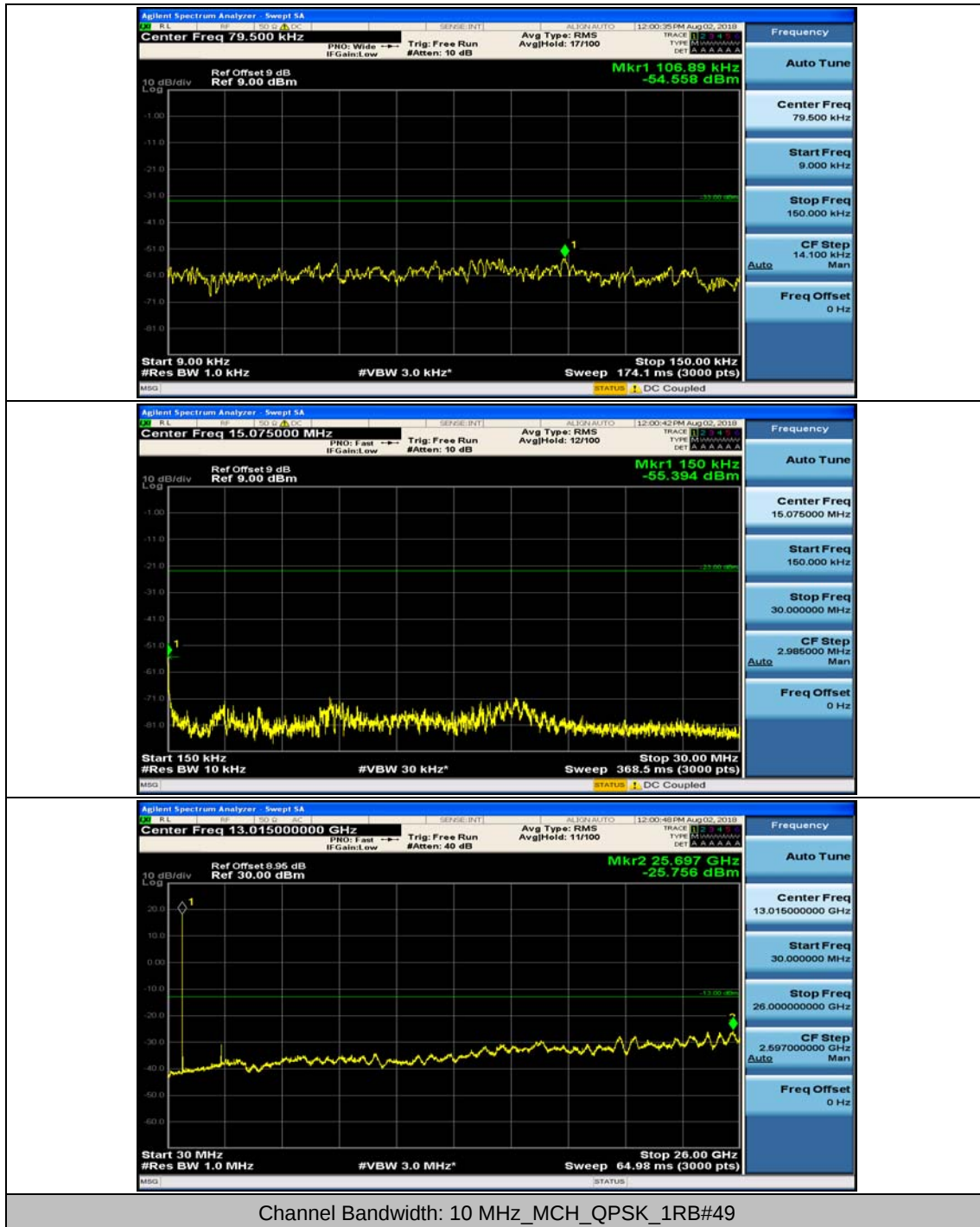


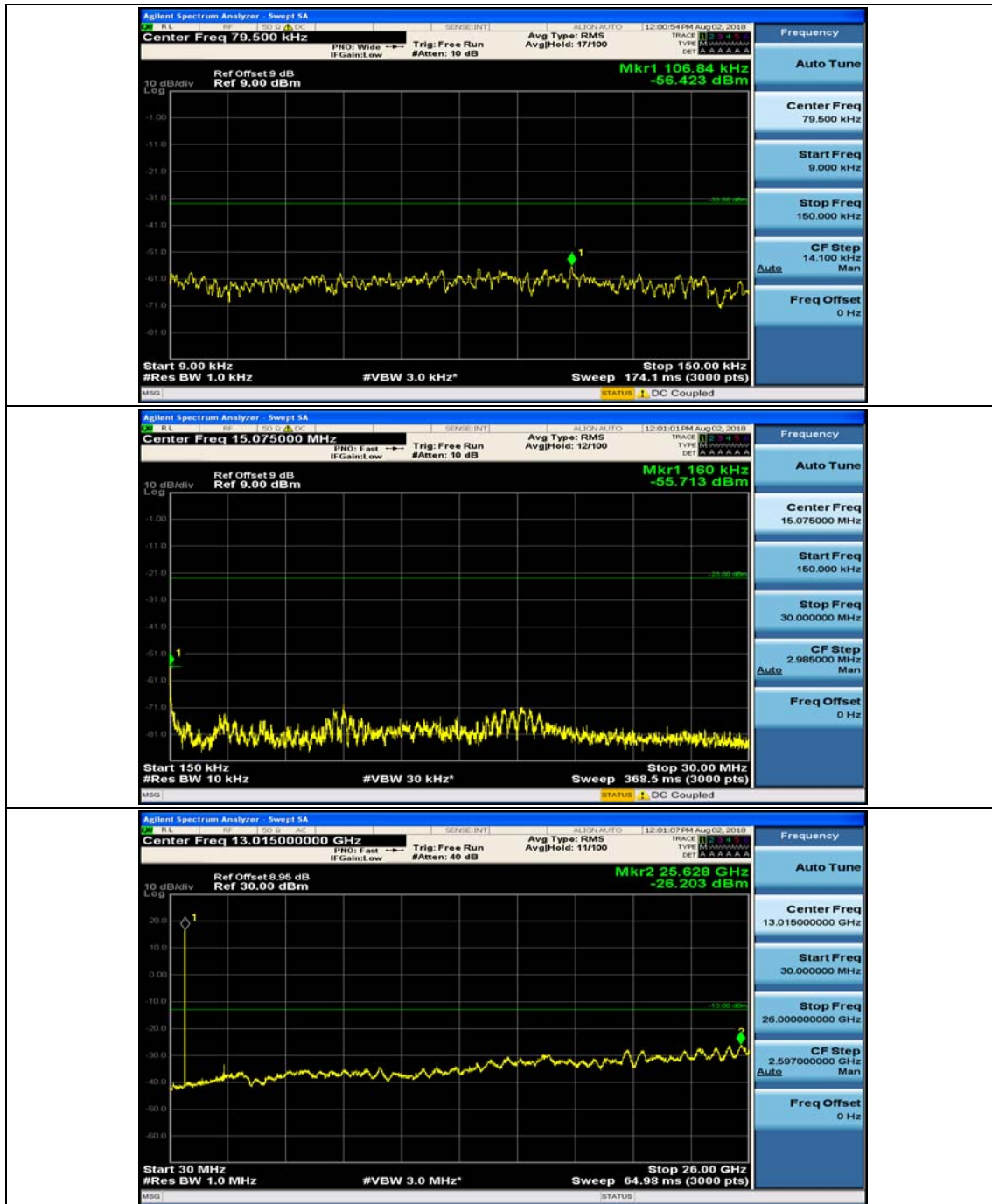


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

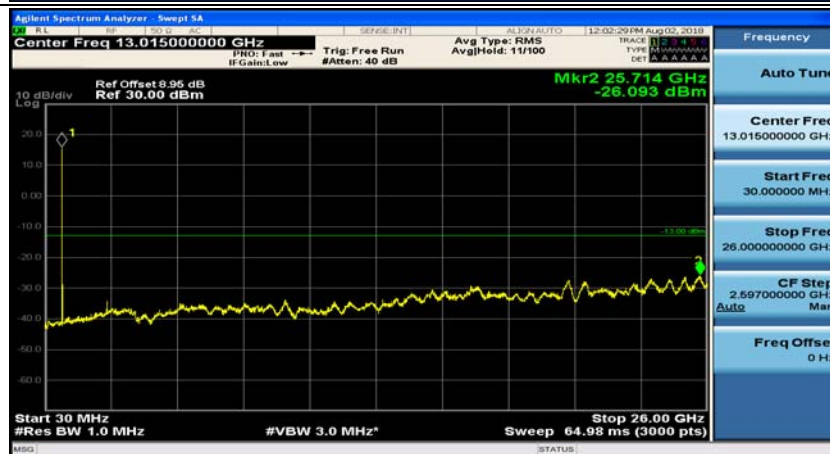
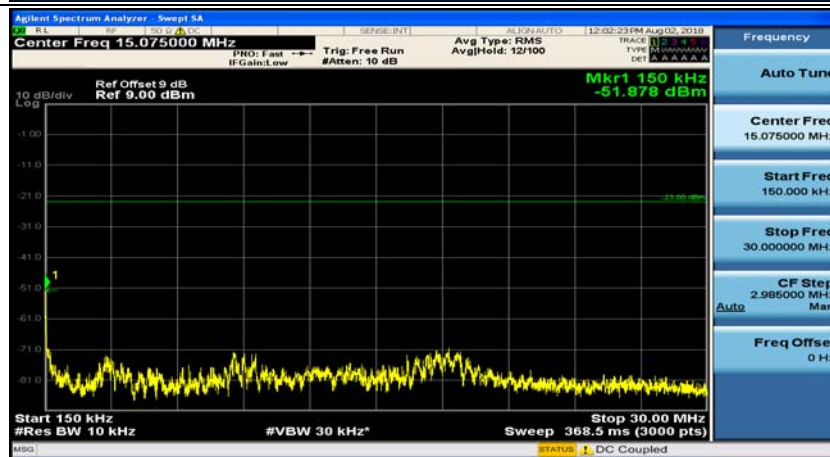
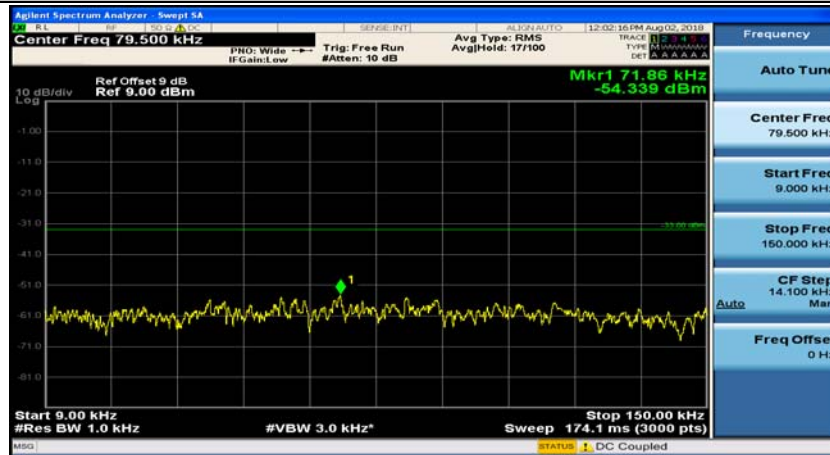


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

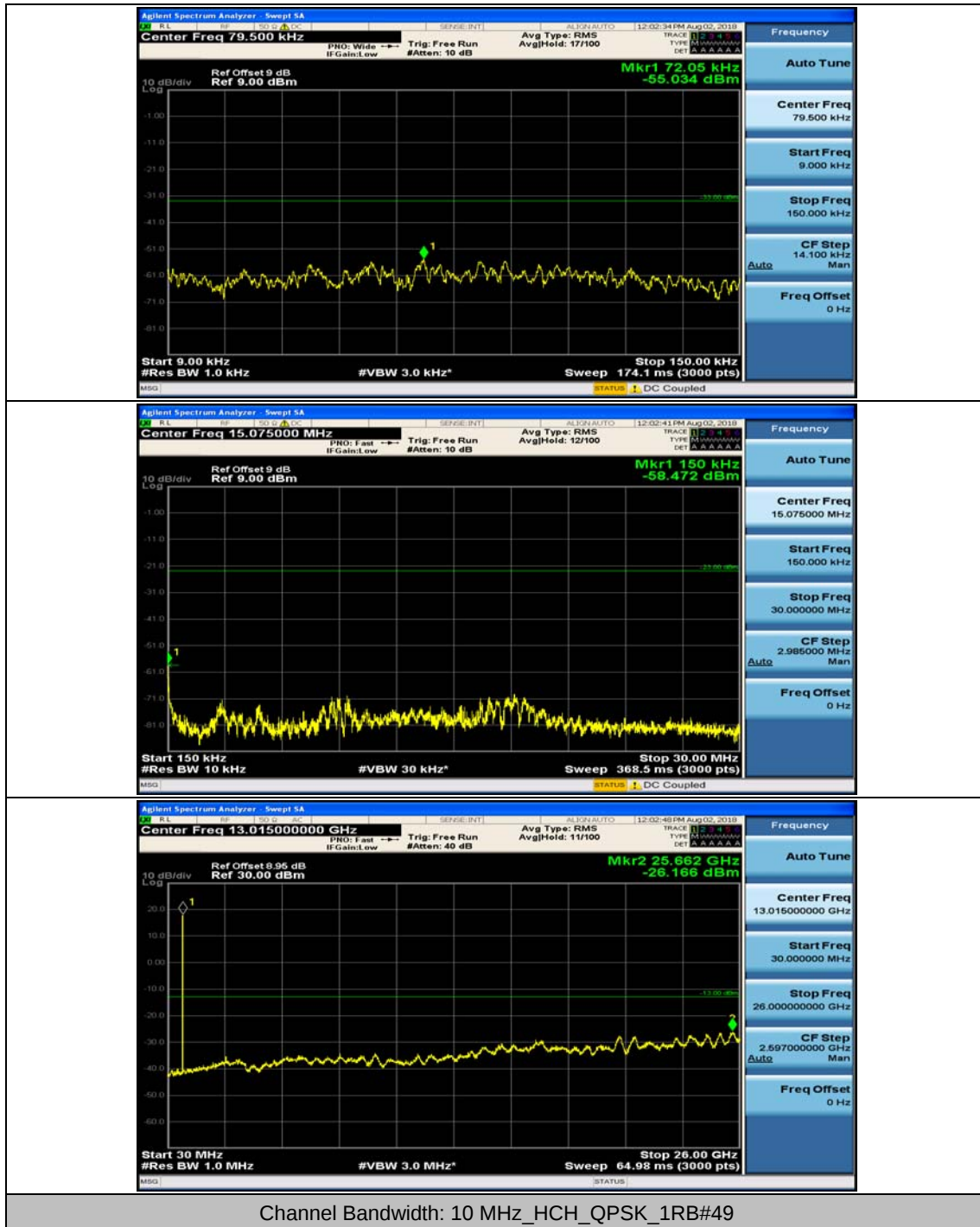


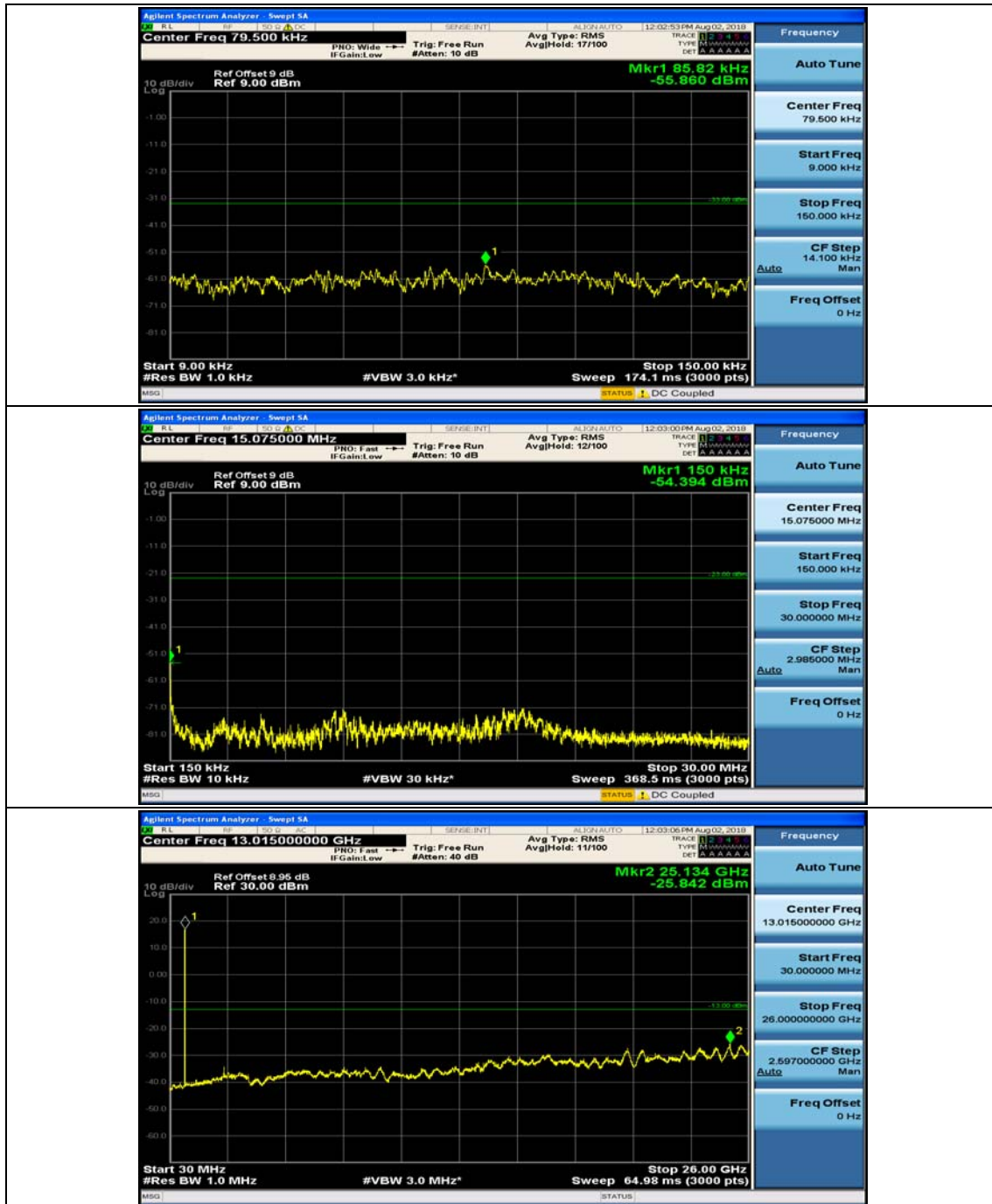


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0

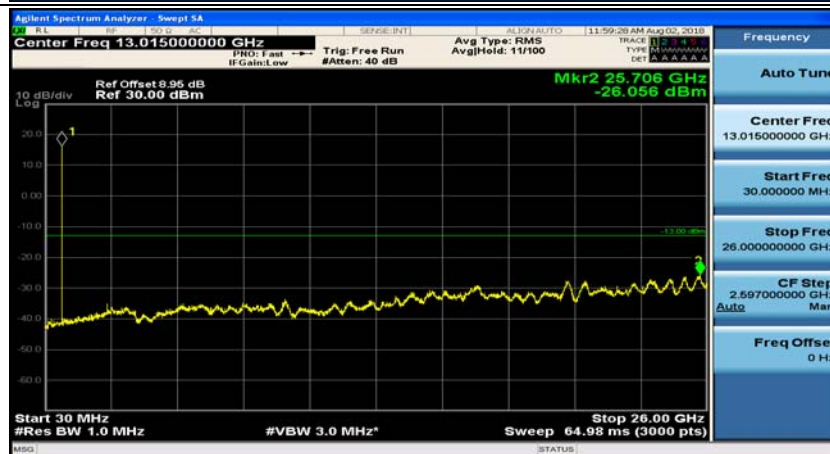
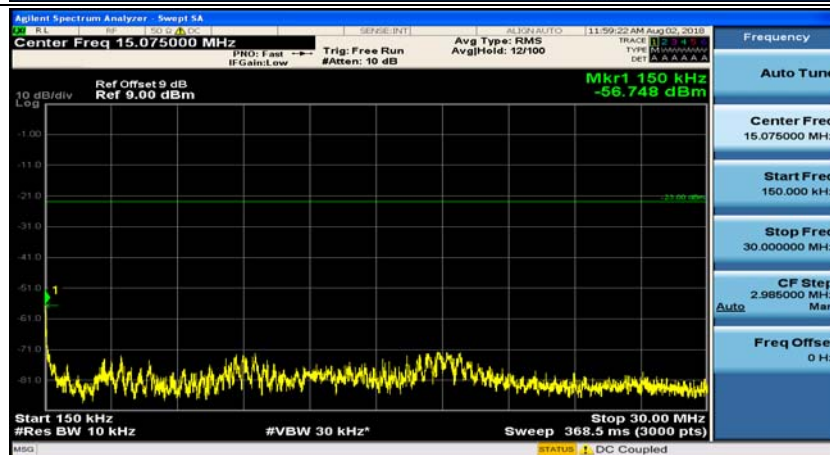
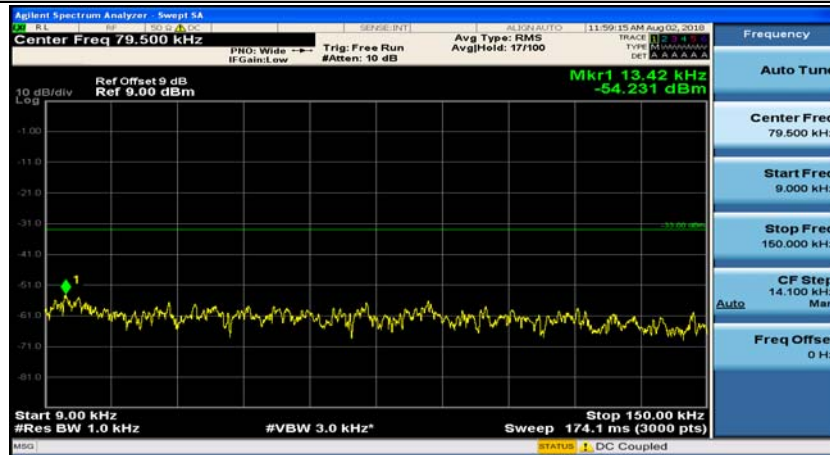


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

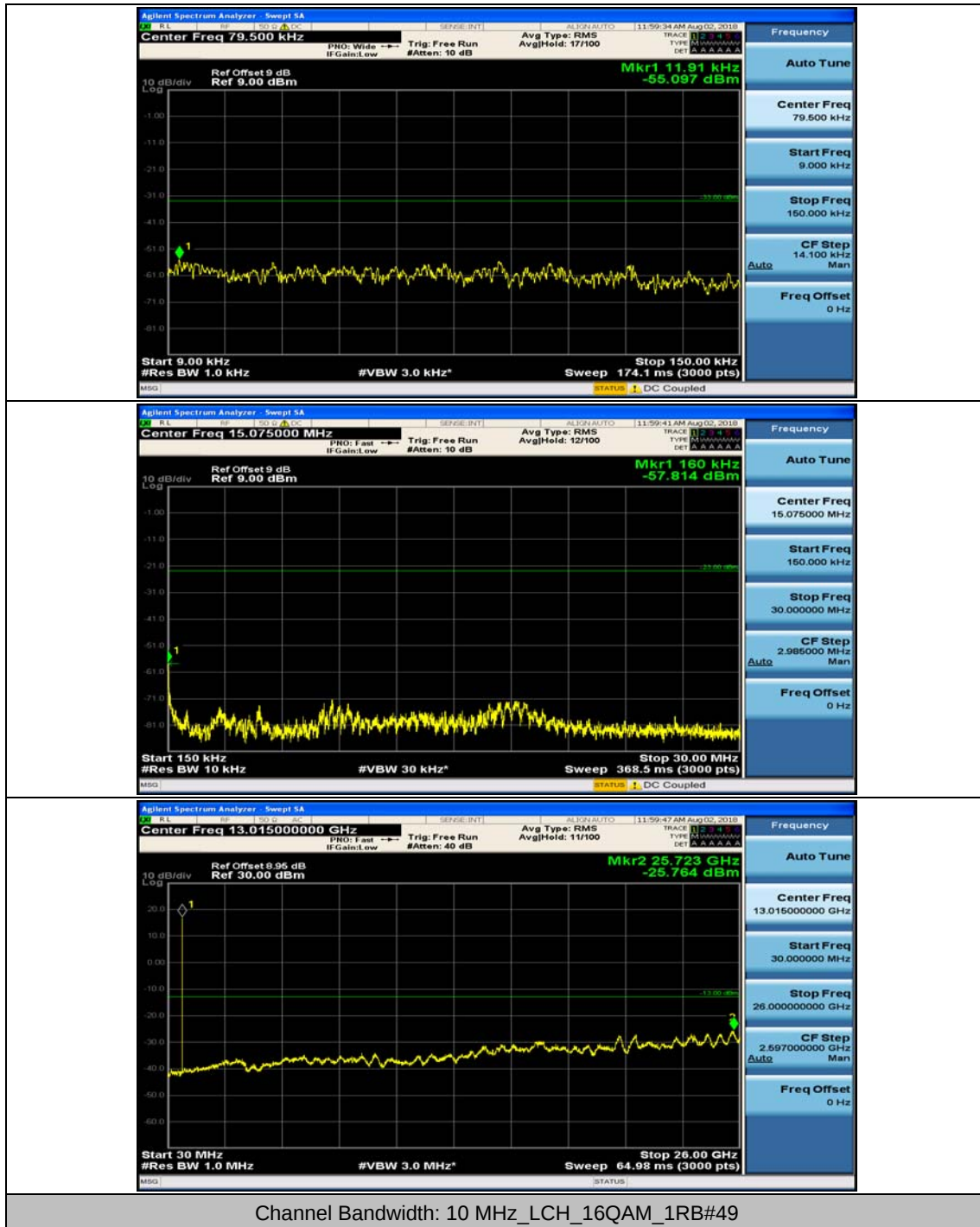


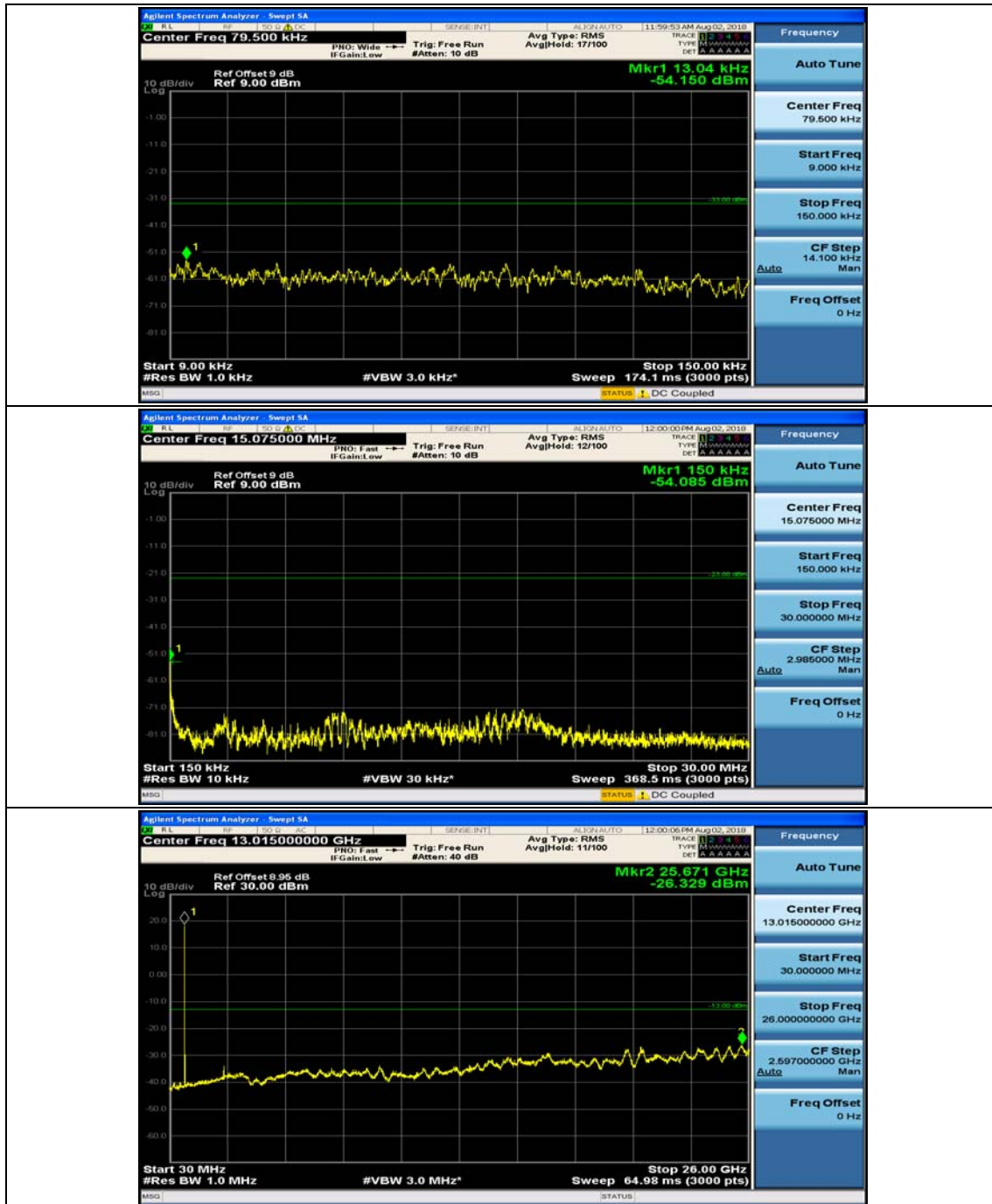


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0

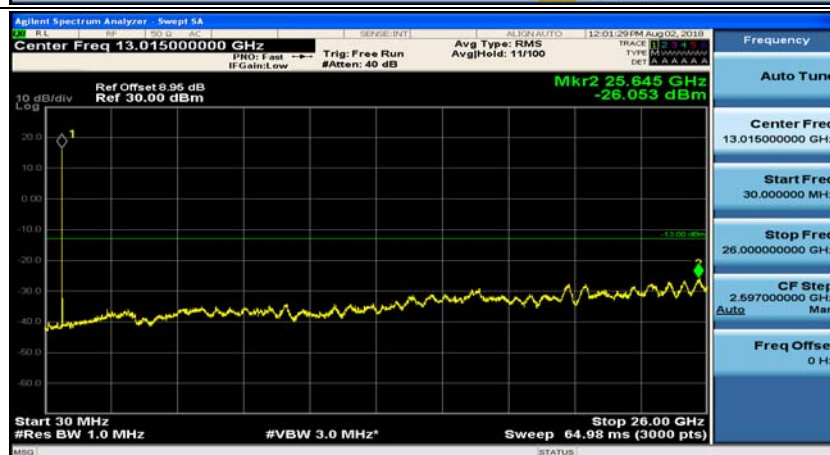
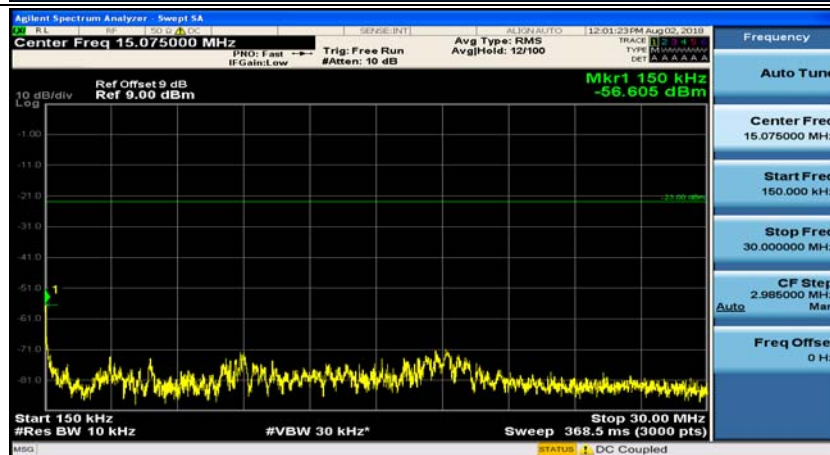
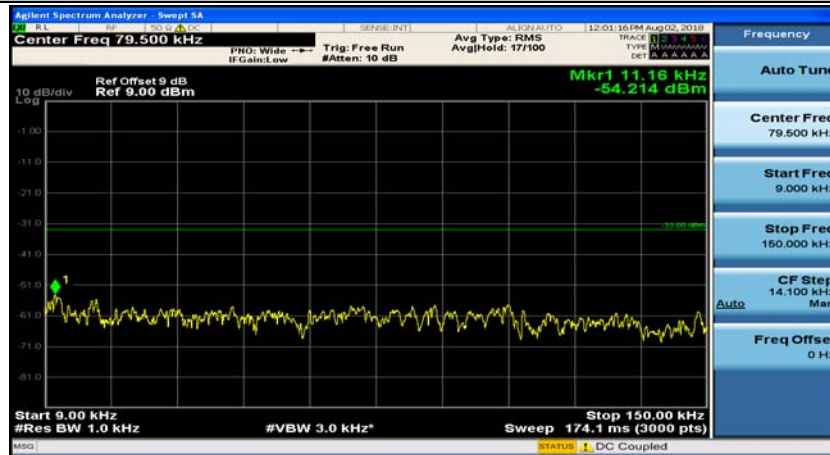


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

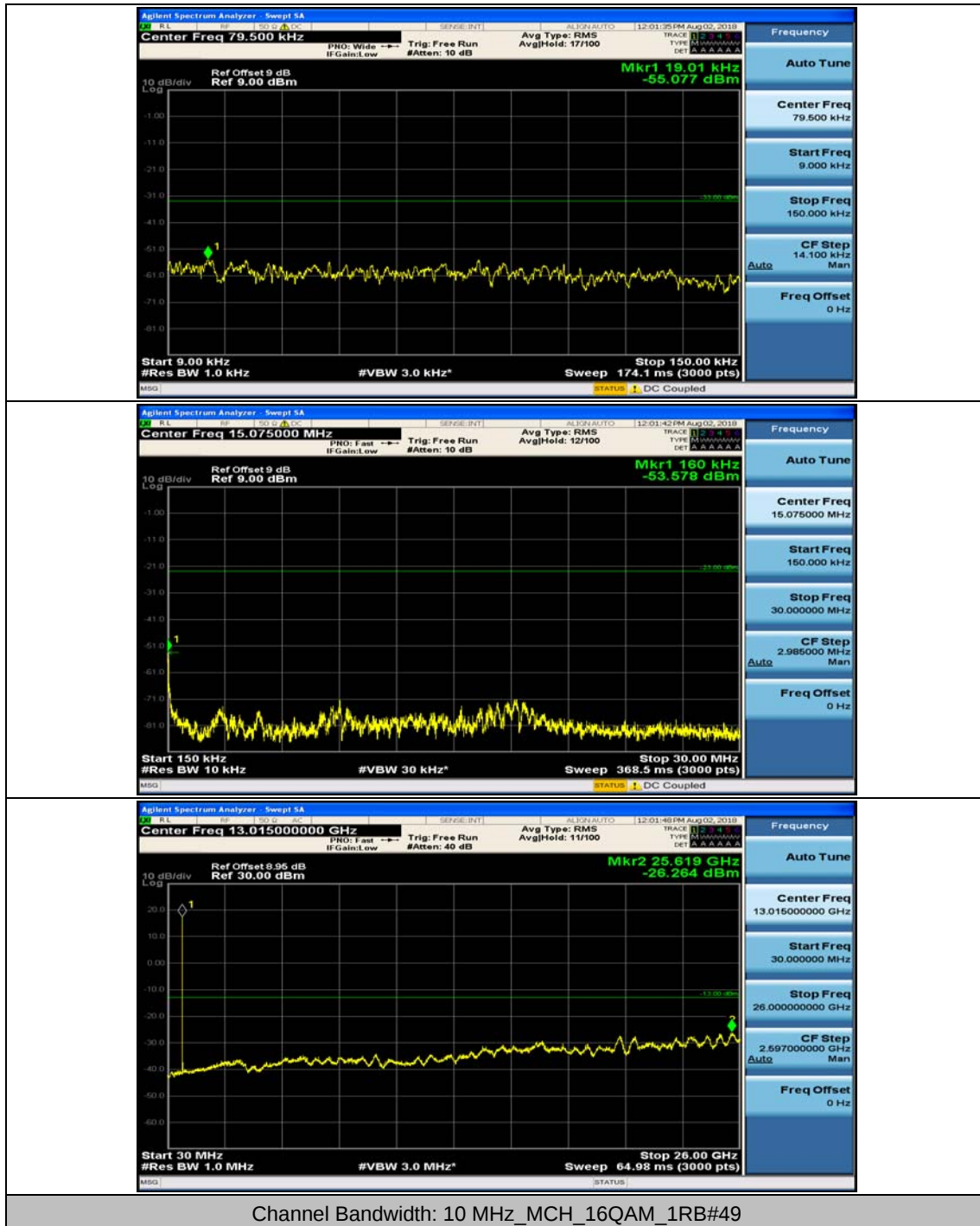


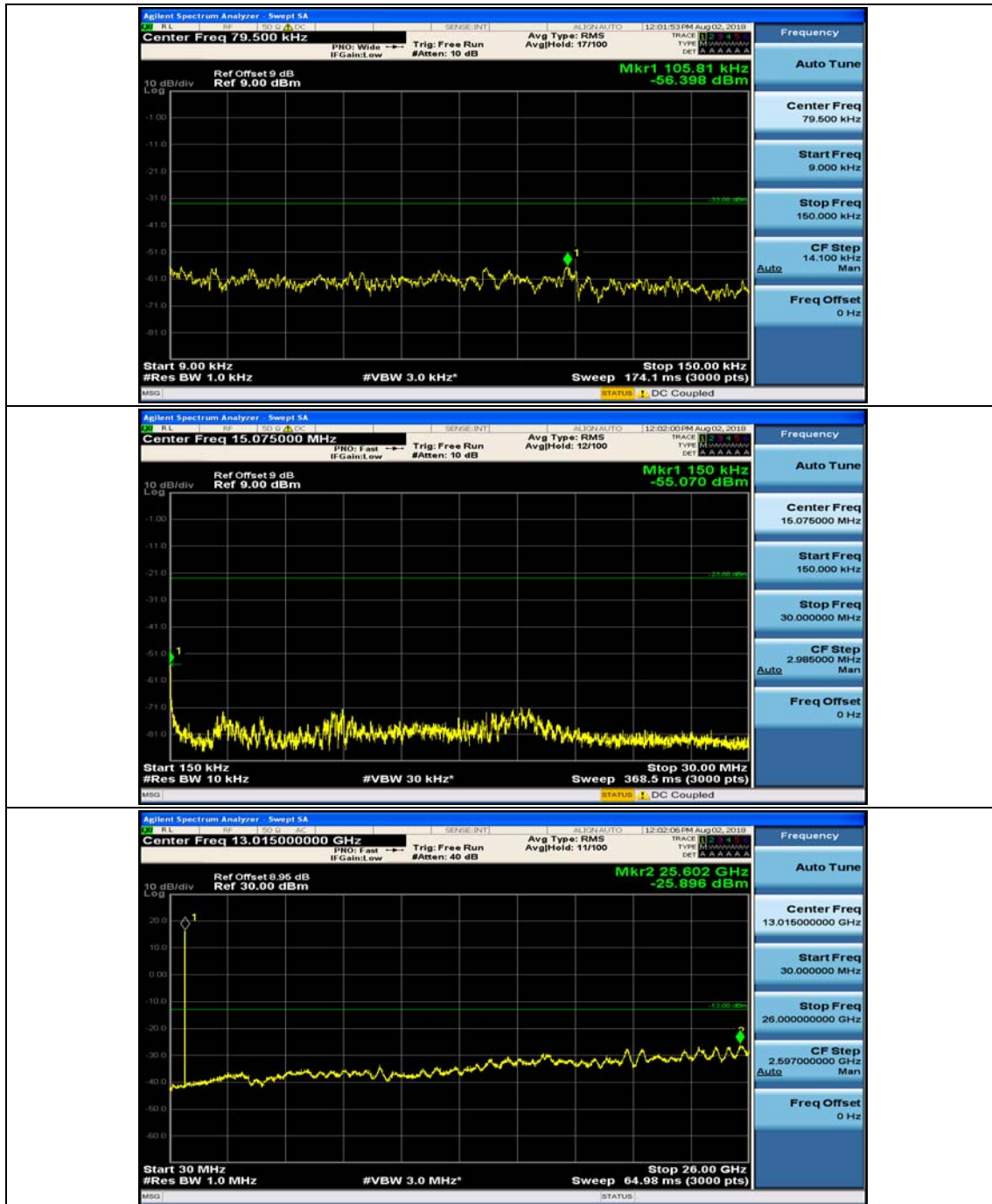


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

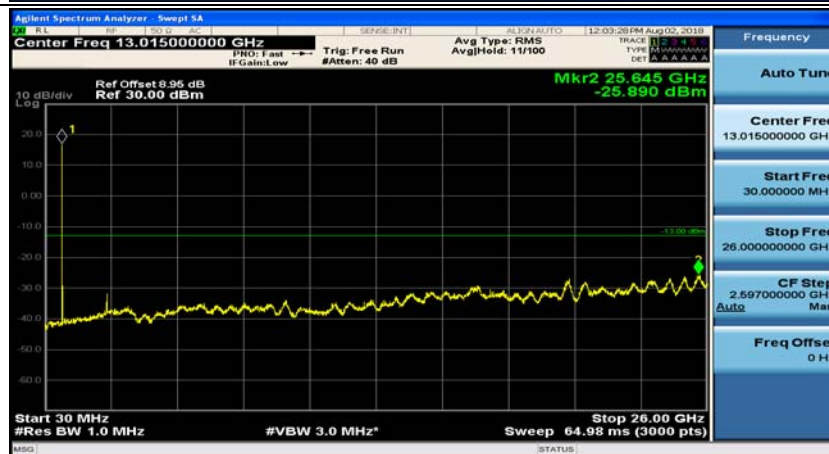
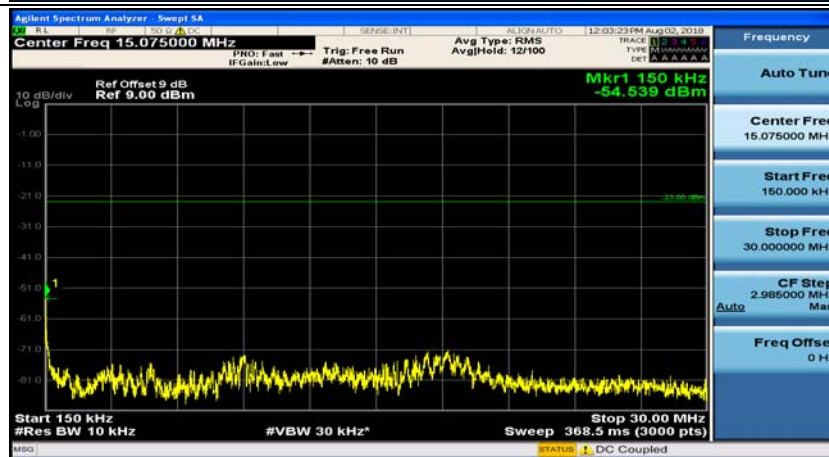


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

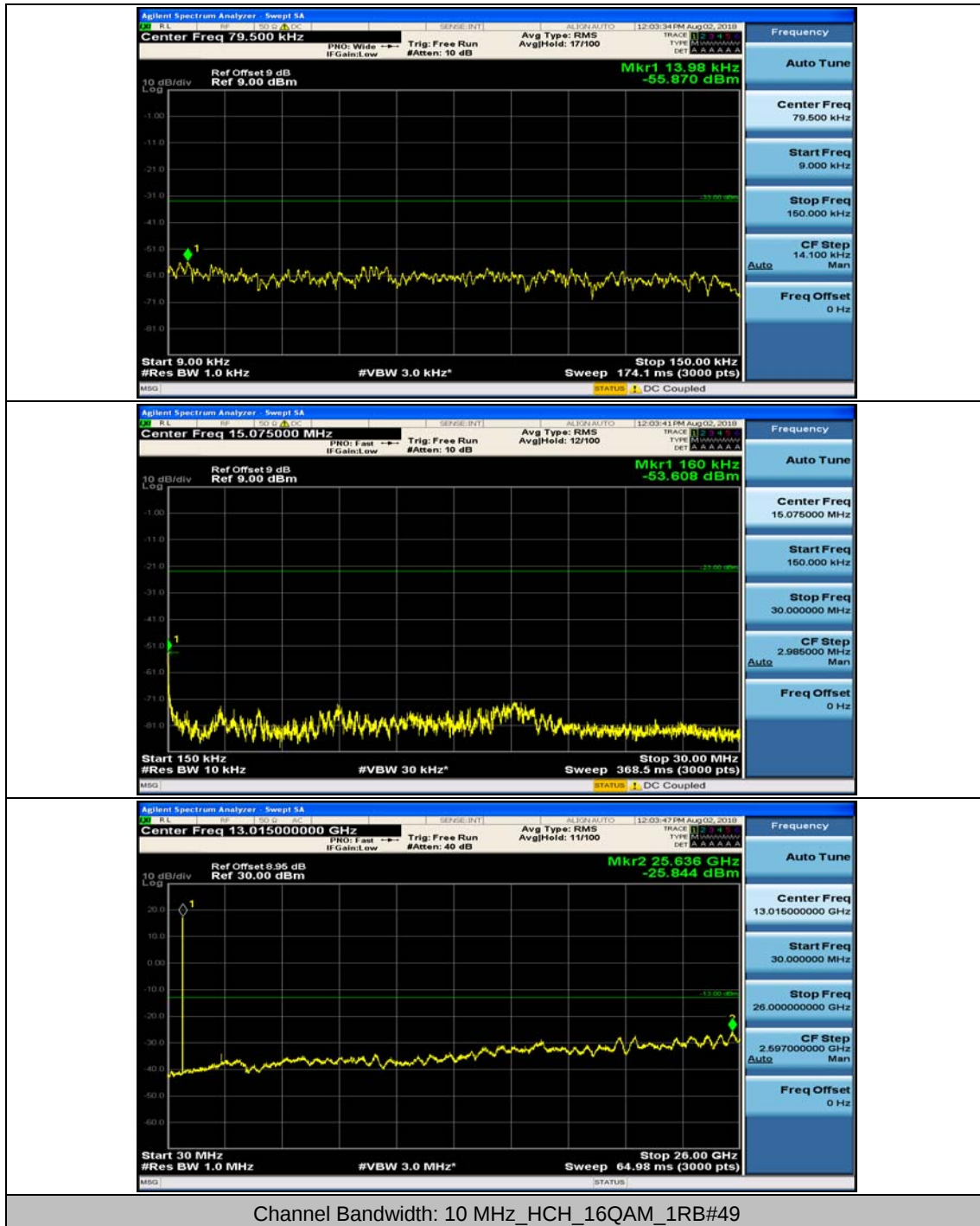


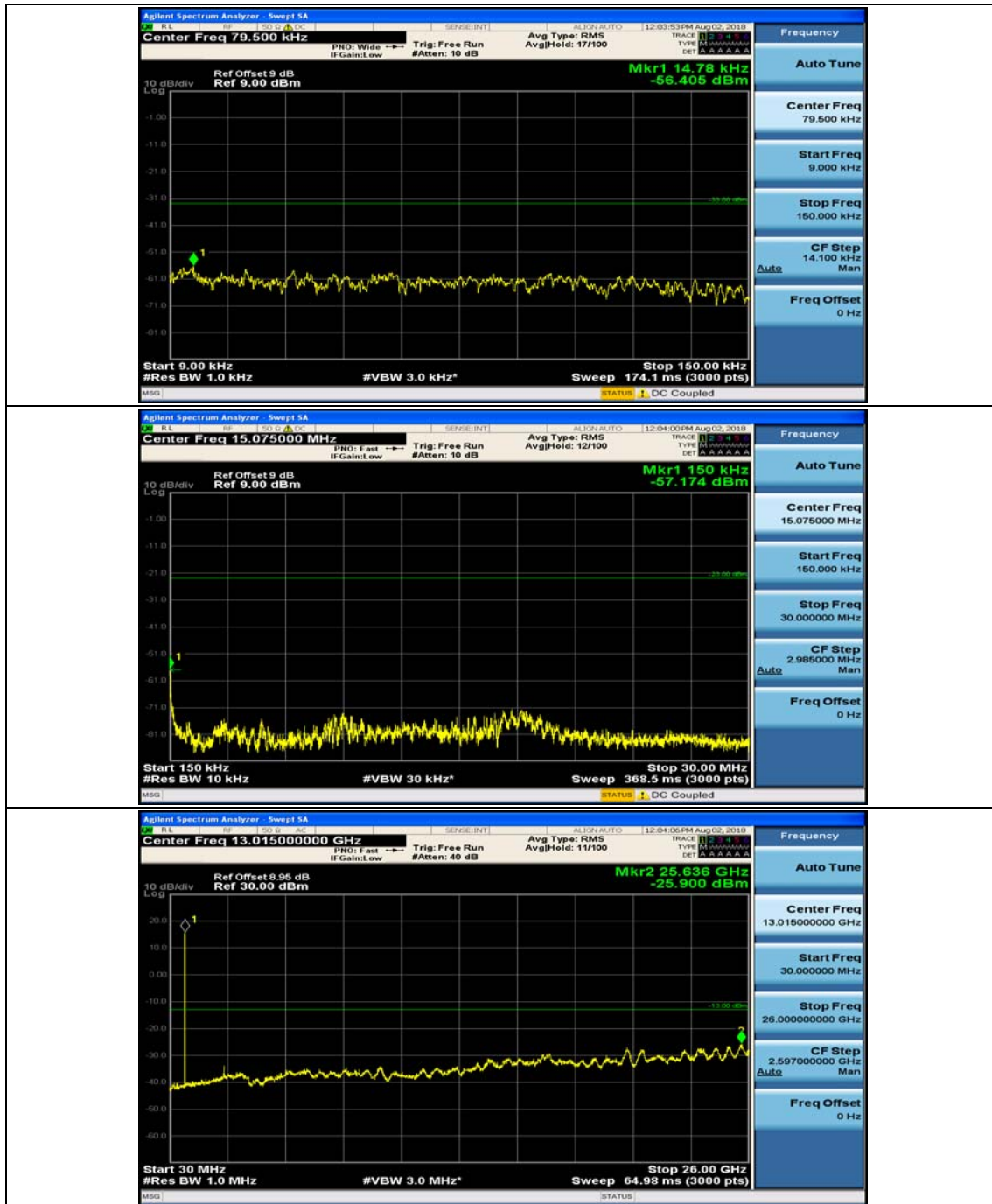


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



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	2.01	0.002873	± 2.5	PASS
		VN	TN	3.16	0.004516	± 2.5	PASS
		VH	TN	4.4	0.006288	± 2.5	PASS
	MCH	VL	TN	2.22	0.003138	± 2.5	PASS
		VN	TN	3.84	0.005428	± 2.5	PASS
		VH	TN	-0.98	-0.001385	± 2.5	PASS
	HCH	VL	TN	-1.22	-0.001706	± 2.5	PASS
		VN	TN	1.16	0.001622	± 2.5	PASS
		VH	TN	-0.37	-0.000517	± 2.5	PASS
16QAM	LCH	VL	TN	4.31	0.006160	± 2.5	PASS
		VN	TN	4.5	0.006431	± 2.5	PASS
		VH	TN	3.59	0.005131	± 2.5	PASS
	MCH	VL	TN	-0.07	-0.000099	± 2.5	PASS
		VN	TN	2.87	0.004057	± 2.5	PASS
		VH	TN	3.63	0.005131	± 2.5	PASS
	HCH	VL	TN	1.73	0.002419	± 2.5	PASS
		VN	TN	1.44	0.002013	± 2.5	PASS
		VH	TN	3.44	0.004809	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.28	0.006117	± 2.5	PASS
		VN	-20	3.13	0.004473	± 2.5	PASS
		VN	-10	0.31	0.000443	± 2.5	PASS
		VN	0	3.2	0.004573	± 2.5	PASS
		VN	10	-1.14	-0.001629	± 2.5	PASS
		VN	20	2.24	0.003201	± 2.5	PASS
		VN	30	1.83	0.002615	± 2.5	PASS
		VN	40	-0.74	-0.001058	± 2.5	PASS
		VN	50	-0.33	-0.000472	± 2.5	PASS
	MCH	VN	-30	2.17	0.003067	± 2.5	PASS
		VN	-20	-1.74	-0.002459	± 2.5	PASS

		VN	-10	4.83	0.006827	± 2.5	PASS
		VN	0	2.45	0.003463	± 2.5	PASS
		VN	10	-0.41	-0.000580	± 2.5	PASS
		VN	20	4.21	0.005951	± 2.5	PASS
		VN	30	-0.63	-0.000890	± 2.5	PASS
		VN	40	-1.09	-0.001541	± 2.5	PASS
		VN	50	0.27	0.000382	± 2.5	PASS
	HCH	VN	-30	4.3	0.006011	± 2.5	PASS
		VN	-20	-1.62	-0.002265	± 2.5	PASS
		VN	-10	-1.72	-0.002405	± 2.5	PASS
		VN	0	-0.06	-0.000084	± 2.5	PASS
		VN	10	-0.13	-0.000182	± 2.5	PASS
		VN	20	4.38	0.006123	± 2.5	PASS
		VN	30	0.79	0.001104	± 2.5	PASS
		VN	40	2.11	0.002950	± 2.5	PASS
		VN	50	-1.36	-0.001901	± 2.5	PASS
16QAM	LCH	VN	-30	3.21	0.004588	± 2.5	PASS
		VN	-20	0.07	0.000100	± 2.5	PASS
		VN	-10	-0.29	-0.000414	± 2.5	PASS
		VN	0	-0.6	-0.000858	± 2.5	PASS
		VN	10	-0.87	-0.001243	± 2.5	PASS
		VN	20	1.82	0.002601	± 2.5	PASS
		VN	30	1.93	0.002758	± 2.5	PASS
		VN	40	4.39	0.006274	± 2.5	PASS
		VN	50	0.19	0.000272	± 2.5	PASS
	MCH	VN	-30	2.38	0.003364	± 2.5	PASS
		VN	-20	3.4	0.004806	± 2.5	PASS
		VN	-10	3.85	0.005442	± 2.5	PASS
		VN	0	3.33	0.004707	± 2.5	PASS
		VN	10	-1.6	-0.002261	± 2.5	PASS
		VN	20	2.94	0.004155	± 2.5	PASS
		VN	30	3.09	0.004367	± 2.5	PASS
		VN	40	3.24	0.004580	± 2.5	PASS
		VN	50	3.47	0.004905	± 2.5	PASS
	HCH	VN	-30	2.86	0.003998	± 2.5	PASS
		VN	-20	0.63	0.000881	± 2.5	PASS
		VN	-10	-0.66	-0.000923	± 2.5	PASS
		VN	0	2.54	0.003551	± 2.5	PASS
		VN	10	1.48	0.002069	± 2.5	PASS
		VN	20	1.44	0.002013	± 2.5	PASS
		VN	30	1.19	0.001664	± 2.5	PASS

		VN	40	-1.9	-0.002656	± 2.5	PASS
		VN	50	-1.76	-0.002461	± 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	2.69	0.003840	± 2.5	PASS
		VN	TN	2.84	0.004054	± 2.5	PASS
		VH	TN	3.58	0.005111	± 2.5	PASS
	MCH	VL	TN	-1.2	-0.001696	± 2.5	PASS
		VN	TN	3.39	0.004792	± 2.5	PASS
		VH	TN	2.64	0.003731	± 2.5	PASS
	HCH	VL	TN	3.47	0.004857	± 2.5	PASS
		VN	TN	2.98	0.004171	± 2.5	PASS
		VH	TN	0.55	0.000770	± 2.5	PASS
16QAM	LCH	VL	TN	4.36	0.006224	± 2.5	PASS
		VN	TN	-1.38	-0.001970	± 2.5	PASS
		VH	TN	3.67	0.005239	± 2.5	PASS
	MCH	VL	TN	2.07	0.002926	± 2.5	PASS
		VN	TN	-1.29	-0.001823	± 2.5	PASS
		VH	TN	-1.6	-0.002261	± 2.5	PASS
	HCH	VL	TN	-0.09	-0.000126	± 2.5	PASS
		VN	TN	-1.86	-0.002603	± 2.5	PASS
		VH	TN	-1.34	-0.001875	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.7	0.005282	± 2.5	PASS
		VN	-20	0.51	0.000728	± 2.5	PASS
		VN	-10	3.69	0.005268	± 2.5	PASS
		VN	0	4.24	0.006053	± 2.5	PASS
		VN	10	3.17	0.004525	± 2.5	PASS
		VN	20	1.41	0.002013	± 2.5	PASS
		VN	30	1.29	0.001842	± 2.5	PASS
		VN	40	4.88	0.006966	± 2.5	PASS
		VN	50	-0.71	-0.001014	± 2.5	PASS
	MCH	VN	-30	0.94	0.001329	± 2.5	PASS
		VN	-20	-0.66	-0.000933	± 2.5	PASS
		VN	-10	-1.51	-0.002134	± 2.5	PASS

		VN	0	-0.3	-0.000424	± 2.5	PASS
		VN	10	1.93	0.002728	± 2.5	PASS
		VN	20	-0.28	-0.000396	± 2.5	PASS
		VN	30	4.54	0.006417	± 2.5	PASS
		VN	40	3.08	0.004353	± 2.5	PASS
		VN	50	1.65	0.002332	± 2.5	PASS
	HCH	VN	-30	0.84	0.001176	± 2.5	PASS
		VN	-20	0.25	0.000350	± 2.5	PASS
		VN	-10	2.73	0.003821	± 2.5	PASS
		VN	0	2.48	0.003471	± 2.5	PASS
		VN	10	4.75	0.006648	± 2.5	PASS
		VN	20	0.47	0.000658	± 2.5	PASS
		VN	30	3.71	0.005192	± 2.5	PASS
		VN	40	3.89	0.005444	± 2.5	PASS
		VN	50	0.45	0.000630	± 2.5	PASS
16QAM	LCH	VN	-30	-0.53	-0.000757	± 2.5	PASS
		VN	-20	3.7	0.005282	± 2.5	PASS
		VN	-10	3.35	0.004782	± 2.5	PASS
		VN	0	1.54	0.002198	± 2.5	PASS
		VN	10	3.36	0.004797	± 2.5	PASS
		VN	20	4.76	0.006795	± 2.5	PASS
		VN	30	3.33	0.004754	± 2.5	PASS
		VN	40	4.65	0.006638	± 2.5	PASS
		VN	50	0.49	0.000700	± 2.5	PASS
	MCH	VN	-30	0.35	0.000495	± 2.5	PASS
		VN	-20	-0.92	-0.001300	± 2.5	PASS
		VN	-10	3.99	0.005640	± 2.5	PASS
		VN	0	-1.69	-0.002389	± 2.5	PASS
		VN	10	3.6	0.005088	± 2.5	PASS
		VN	20	4.43	0.006261	± 2.5	PASS
		VN	30	2.84	0.004014	± 2.5	PASS
		VN	40	1.41	0.001993	± 2.5	PASS
		VN	50	1.92	0.002714	± 2.5	PASS
	HCH	VN	-30	1.67	0.002337	± 2.5	PASS
		VN	-20	-0.72	-0.001008	± 2.5	PASS
		VN	-10	2.76	0.003863	± 2.5	PASS
		VN	0	3.64	0.005094	± 2.5	PASS
		VN	10	4.82	0.006746	± 2.5	PASS
		VN	20	0.19	0.000266	± 2.5	PASS
		VN	30	-1.56	-0.002183	± 2.5	PASS
		VN	40	-1.46	-0.002043	± 2.5	PASS

		VN	50	0.67	0.000938	± 2.5	PASS
--	--	----	----	------	----------	-------	------

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	3.95	0.005631	± 2.5	PASS
		VN	TN	3.64	0.005189	± 2.5	PASS
		VH	TN	0.37	0.000527	± 2.5	PASS
	MCH	VL	TN	4.01	0.005668	± 2.5	PASS
		VN	TN	3.46	0.004890	± 2.5	PASS
		VH	TN	1.93	0.002728	± 2.5	PASS
	HCH	VL	TN	0.42	0.000589	± 2.5	PASS
		VN	TN	2.16	0.003027	± 2.5	PASS
		VH	TN	0.6	0.000841	± 2.5	PASS
16QAM	LCH	VL	TN	2.96	0.004220	± 2.5	PASS
		VN	TN	2.47	0.003521	± 2.5	PASS
		VH	TN	1.03	0.001468	± 2.5	PASS
	MCH	VL	TN	0.6	0.000848	± 2.5	PASS
		VN	TN	2.37	0.003350	± 2.5	PASS
		VH	TN	0.5	0.000707	± 2.5	PASS
	HCH	VL	TN	3.25	0.004555	± 2.5	PASS
		VN	TN	-0.39	-0.000547	± 2.5	PASS
		VH	TN	1.56	0.002186	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.63	0.003749	± 2.5	PASS
		VN	-20	1.46	0.002081	± 2.5	PASS
		VN	-10	2.19	0.003122	± 2.5	PASS
		VN	0	-0.54	-0.000770	± 2.5	PASS
		VN	10	4.24	0.006044	± 2.5	PASS
		VN	20	1.56	0.002224	± 2.5	PASS
		VN	30	4.33	0.006172	± 2.5	PASS
		VN	40	-0.15	-0.000214	± 2.5	PASS
		VN	50	-1.12	-0.001597	± 2.5	PASS
	MCH	VN	-30	0.04	0.000057	± 2.5	PASS
		VN	-20	-1.79	-0.002530	± 2.5	PASS
		VN	-10	4.22	0.005965	± 2.5	PASS
		VN	0	-1.84	-0.002601	± 2.5	PASS

		VN	10	3.86	0.005456	± 2.5	PASS
		VN	20	3.24	0.004580	± 2.5	PASS
		VN	30	3.81	0.005385	± 2.5	PASS
		VN	40	1.15	0.001625	± 2.5	PASS
		VN	50	3.2	0.004523	± 2.5	PASS
	HCH	VN	-30	2.19	0.003069	± 2.5	PASS
		VN	-20	0.5	0.000701	± 2.5	PASS
		VN	-10	3.62	0.005074	± 2.5	PASS
		VN	0	-1.34	-0.001878	± 2.5	PASS
		VN	10	2.47	0.003462	± 2.5	PASS
		VN	20	-0.76	-0.001065	± 2.5	PASS
		VN	30	1.14	0.001598	± 2.5	PASS
		VN	40	0.89	0.001247	± 2.5	PASS
		VN	50	-0.95	-0.001331	± 2.5	PASS
16QAM	LCH	VN	-30	2.51	0.003578	± 2.5	PASS
		VN	-20	-0.76	-0.001083	± 2.5	PASS
		VN	-10	-0.52	-0.000741	± 2.5	PASS
		VN	0	1.41	0.002010	± 2.5	PASS
		VN	10	0.5	0.000713	± 2.5	PASS
		VN	20	1.93	0.002751	± 2.5	PASS
		VN	30	0.85	0.001212	± 2.5	PASS
		VN	40	1.8	0.002566	± 2.5	PASS
		VN	50	3.47	0.004947	± 2.5	PASS
	MCH	VN	-30	-1.58	-0.002233	± 2.5	PASS
		VN	-20	3.08	0.004353	± 2.5	PASS
		VN	-10	4.83	0.006827	± 2.5	PASS
		VN	0	4.77	0.006742	± 2.5	PASS
		VN	10	-0.9	-0.001272	± 2.5	PASS
		VN	20	1.37	0.001936	± 2.5	PASS
		VN	30	4.43	0.006261	± 2.5	PASS
		VN	40	4.39	0.006205	± 2.5	PASS
		VN	50	3.26	0.004608	± 2.5	PASS
	HCH	VN	-30	-1.98	-0.002775	± 2.5	PASS
		VN	-20	2.5	0.003504	± 2.5	PASS
		VN	-10	1.03	0.001444	± 2.5	PASS
		VN	0	0.93	0.001303	± 2.5	PASS
		VN	10	0.18	0.000252	± 2.5	PASS
		VN	20	2.3	0.003224	± 2.5	PASS
		VN	30	0.61	0.000855	± 2.5	PASS
		VN	40	-1.18	-0.001654	± 2.5	PASS
		VN	50	1.05	0.001472	± 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	-0.08	-0.000114	± 2.5	PASS
		VN	TN	4.64	0.006591	± 2.5	PASS
		VH	TN	3.34	0.004744	± 2.5	PASS
	MCH	VL	TN	1.07	0.001512	± 2.5	PASS
		VN	TN	-0.81	-0.001145	± 2.5	PASS
		VH	TN	2.34	0.003307	± 2.5	PASS
	HCH	VL	TN	4.28	0.006020	± 2.5	PASS
		VN	TN	3.21	0.004515	± 2.5	PASS
		VH	TN	0.43	0.000605	± 2.5	PASS
16QAM	LCH	VL	TN	3.4	0.004830	± 2.5	PASS
		VN	TN	-1.89	-0.002685	± 2.5	PASS
		VH	TN	-0.63	-0.000895	± 2.5	PASS
	MCH	VL	TN	2.89	0.004085	± 2.5	PASS
		VN	TN	-1.04	-0.001470	± 2.5	PASS
		VH	TN	2.81	0.003972	± 2.5	PASS
	HCH	VL	TN	4.28	0.006020	± 2.5	PASS
		VN	TN	1.19	0.001674	± 2.5	PASS
		VH	TN	4.6	0.006470	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	3.35	0.004759	± 2.5	PASS
		VN	-20	-0.78	-0.001108	± 2.5	PASS
		VN	-10	3.05	0.004332	± 2.5	PASS
		VN	0	-0.98	-0.001392	± 2.5	PASS
		VN	10	1.56	0.002216	± 2.5	PASS
		VN	20	-1.64	-0.002330	± 2.5	PASS
		VN	30	4.34	0.006165	± 2.5	PASS
		VN	40	3.81	0.005412	± 2.5	PASS
		VN	50	-1.3	-0.001847	± 2.5	PASS
	MCH	VN	-30	0.54	0.000763	± 2.5	PASS
		VN	-20	1.29	0.001823	± 2.5	PASS
		VN	-10	4.98	0.007039	± 2.5	PASS
		VN	0	-0.84	-0.001187	± 2.5	PASS
		VN	10	0.56	0.000792	± 2.5	PASS
		VN	20	0.53	0.000749	± 2.5	PASS

		VN	30	-1.18	-0.001668	± 2.5	PASS
		VN	40	-0.43	-0.000608	± 2.5	PASS
		VN	50	-0.33	-0.000466	± 2.5	PASS
	HCH	VN	-30	-0.03	-0.000042	± 2.5	PASS
		VN	-20	1.4	0.001969	± 2.5	PASS
		VN	-10	1.31	0.001842	± 2.5	PASS
		VN	0	4.57	0.006428	± 2.5	PASS
		VN	10	2.81	0.003952	± 2.5	PASS
		VN	20	2.49	0.003502	± 2.5	PASS
		VN	30	1.59	0.002236	± 2.5	PASS
		VN	40	1.35	0.001899	± 2.5	PASS
		VN	50	3.43	0.004824	± 2.5	PASS
QPSK	LCH	VN	-30	-1.67	-0.002372	± 2.5	PASS
		VN	-20	3.43	0.004872	± 2.5	PASS
		VN	-10	2.33	0.003310	± 2.5	PASS
		VN	0	-0.13	-0.000185	± 2.5	PASS
		VN	10	-0.01	-0.000014	± 2.5	PASS
		VN	20	2.67	0.003793	± 2.5	PASS
		VN	30	2.44	0.003466	± 2.5	PASS
		VN	40	1.16	0.001648	± 2.5	PASS
		VN	50	0.96	0.001364	± 2.5	PASS
	MCH	VN	-30	-1.61	-0.002276	± 2.5	PASS
		VN	-20	-1.95	-0.002756	± 2.5	PASS
		VN	-10	4.24	0.005993	± 2.5	PASS
		VN	0	4.63	0.006544	± 2.5	PASS
		VN	10	3.01	0.004254	± 2.5	PASS
		VN	20	-1.63	-0.002304	± 2.5	PASS
		VN	30	0.44	0.000622	± 2.5	PASS
		VN	40	4.48	0.006332	± 2.5	PASS
		VN	50	2.6	0.003675	± 2.5	PASS
	HCH	VN	-30	1.47	0.002068	± 2.5	PASS
		VN	-20	-0.17	-0.000239	± 2.5	PASS
		VN	-10	2.79	0.003924	± 2.5	PASS
		VN	0	0.33	0.000464	± 2.5	PASS
		VN	10	2.16	0.003038	± 2.5	PASS
		VN	20	2.65	0.003727	± 2.5	PASS
		VN	30	4.49	0.006315	± 2.5	PASS
		VN	40	0.69	0.000970	± 2.5	PASS
		VN	50	4.15	0.005837	± 2.5	PASS