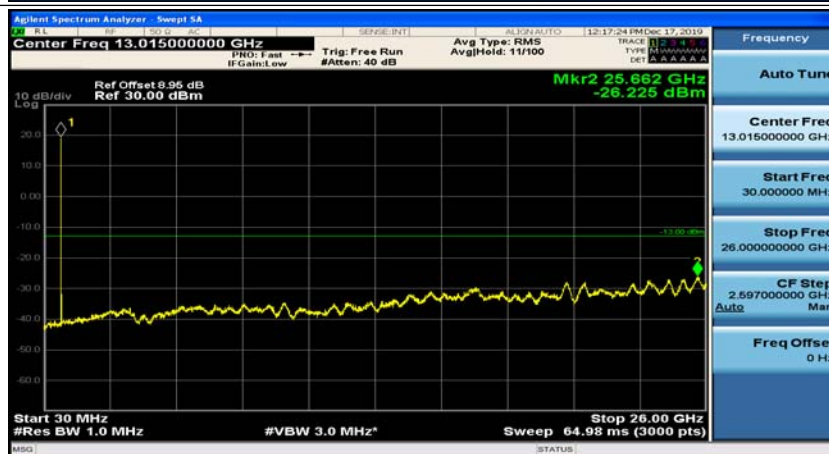
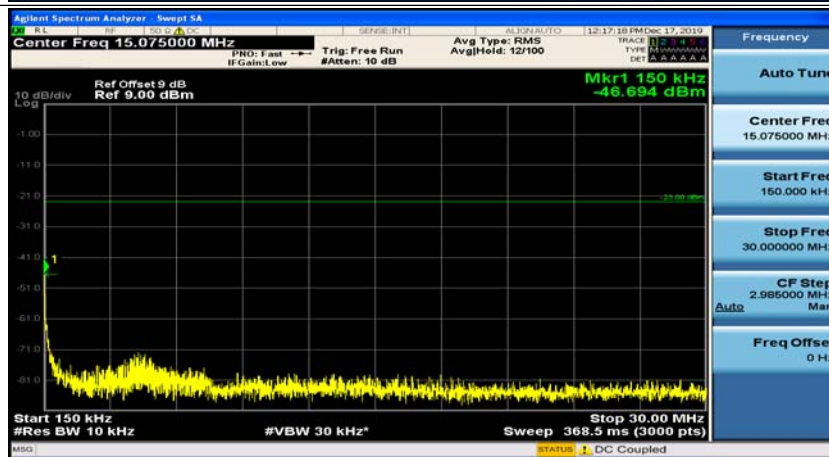
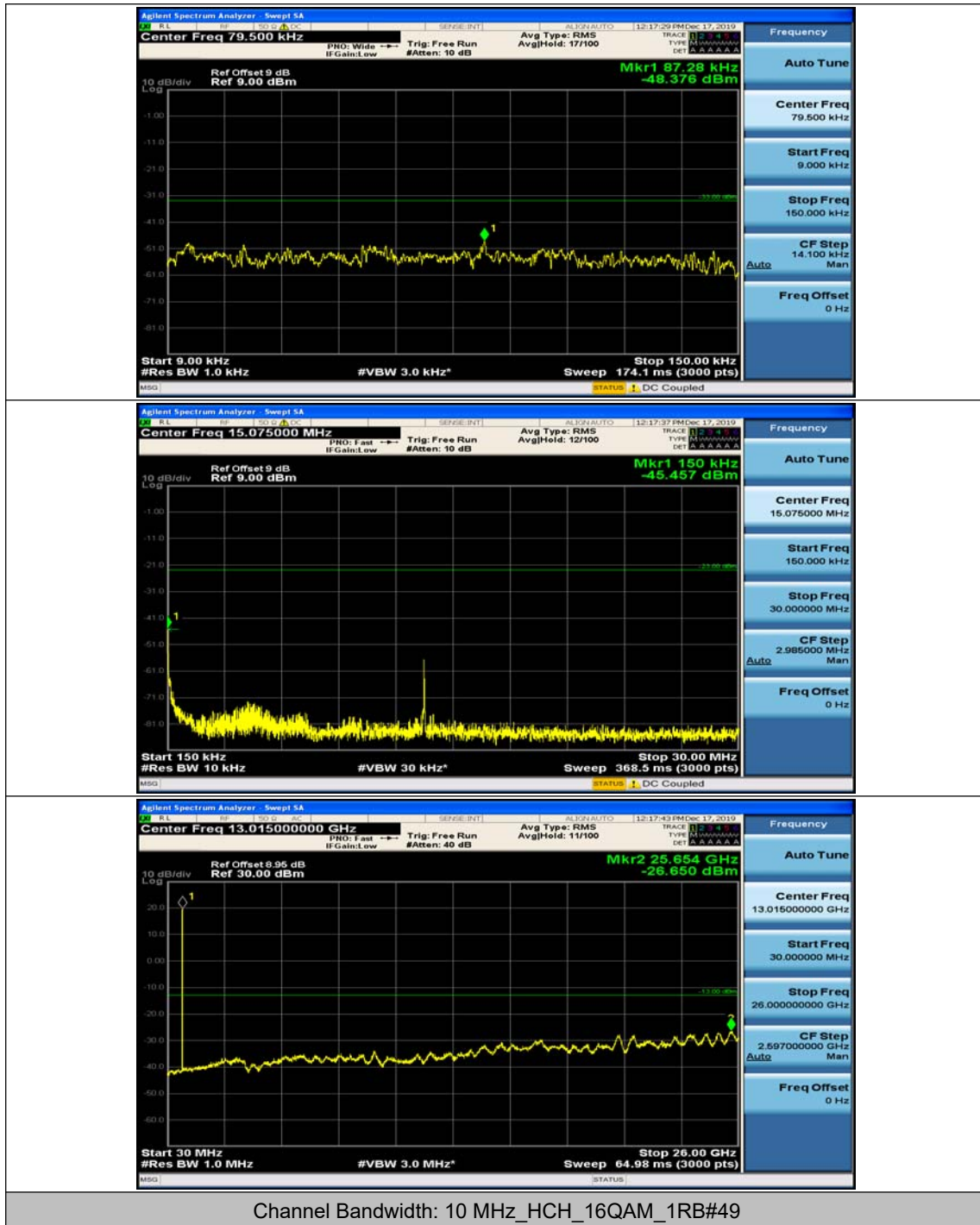
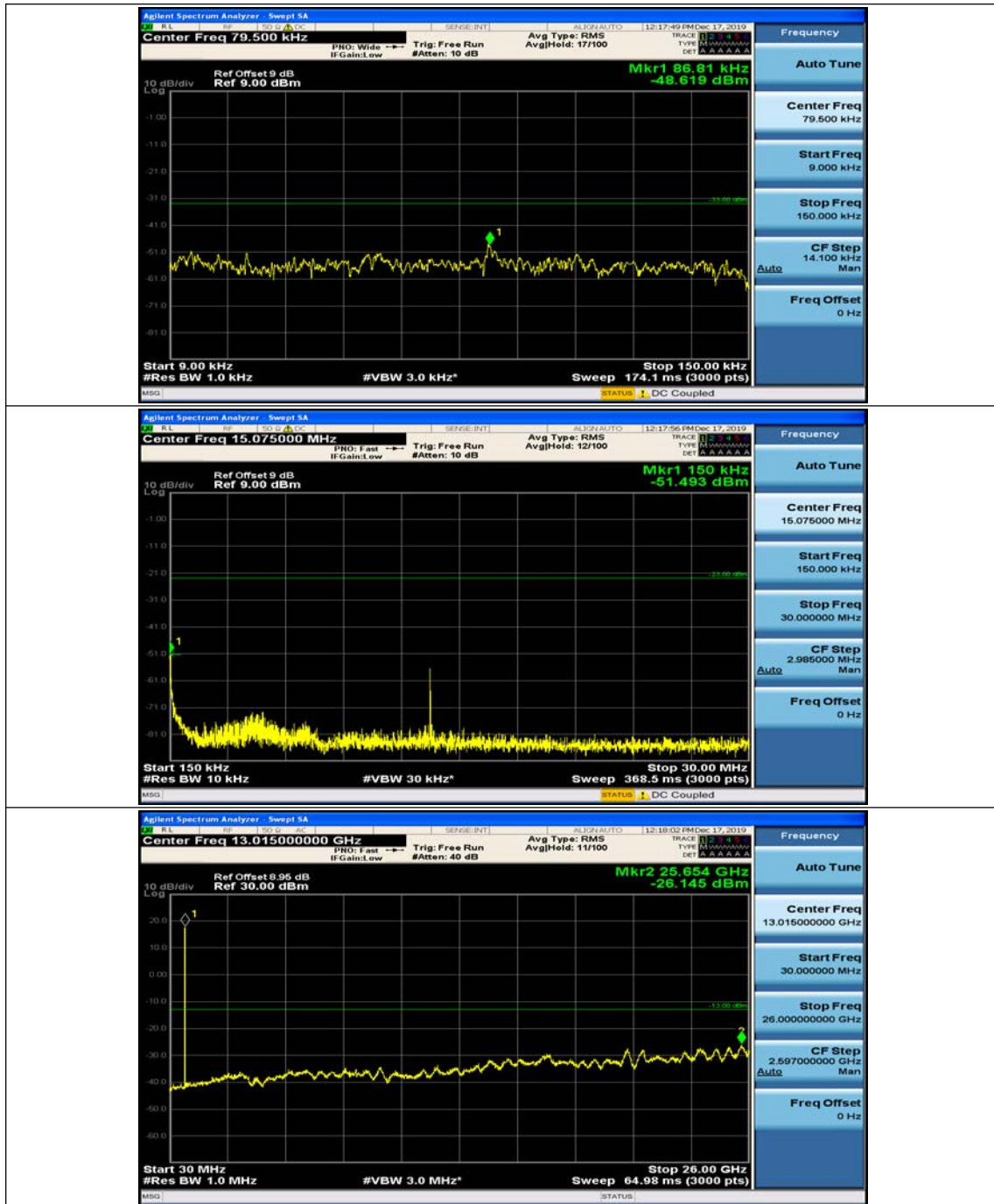


Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#0



Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#24





## 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	1.56	0.002208	± 2.5	PASS
		VN	TN	0.88	0.001246	± 2.5	PASS
		VH	TN	3.58	0.005067	± 2.5	PASS
	MCH	VL	TN	0.87	0.001225	± 2.5	PASS
		VN	TN	-1.29	-0.001817	± 2.5	PASS
		VH	TN	-1.54	-0.002169	± 2.5	PASS
	HCH	VL	TN	1.86	0.002607	± 2.5	PASS
		VN	TN	1.95	0.002733	± 2.5	PASS
		VH	TN	2.74	0.003840	± 2.5	PASS
16QAM	LCH	VL	TN	2.27	0.003213	± 2.5	PASS
		VN	TN	-0.53	-0.000750	± 2.5	PASS
		VH	TN	4.33	0.006129	± 2.5	PASS
	MCH	VL	TN	0.61	0.000859	± 2.5	PASS
		VN	TN	0.35	0.000493	± 2.5	PASS
		VH	TN	4.26	0.006000	± 2.5	PASS
	HCH	VL	TN	1.5	0.002102	± 2.5	PASS
		VN	TN	0.96	0.001345	± 2.5	PASS
		VH	TN	-0.15	-0.000210	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.58	0.000821	± 2.5	PASS
		VN	-20	2.09	0.002958	± 2.5	PASS
		VN	-10	-0.9	-0.001274	± 2.5	PASS
		VN	0	-1.08	-0.001529	± 2.5	PASS
		VN	10	-0.62	-0.000878	± 2.5	PASS
		VN	20	-0.21	-0.000297	± 2.5	PASS
		VN	30	4.57	0.006469	± 2.5	PASS
		VN	40	3.75	0.005308	± 2.5	PASS
		VN	50	-0.61	-0.000863	± 2.5	PASS
	MCH	VN	-30	3.26	0.004592	± 2.5	PASS
		VN	-20	3.64	0.005127	± 2.5	PASS

	VN	-10	3.09	0.004352	± 2.5	PASS			
		VN	0	0.81	0.001141	± 2.5	PASS		
		VN	10	1.49	0.002099	± 2.5	PASS		
		VN	20	2.97	0.004183	± 2.5	PASS		
		VN	30	3.89	0.005479	± 2.5	PASS		
		VN	40	-1.24	-0.001746	± 2.5	PASS		
		VN	50	1.84	0.002592	± 2.5	PASS		
	HCH	VN	-30	1.14	0.001598	± 2.5	PASS		
		VN	-20	-1.91	-0.002677	± 2.5	PASS		
		VN	-10	1.61	0.002256	± 2.5	PASS		
		VN	0	4.5	0.006307	± 2.5	PASS		
		VN	10	2.59	0.003630	± 2.5	PASS		
		VN	20	-0.87	-0.001219	± 2.5	PASS		
		VN	30	0.05	0.000070	± 2.5	PASS		
		VN	40	2.57	0.003602	± 2.5	PASS		
		VN	50	2.49	0.003490	± 2.5	PASS		
		16QAM	LCH	VN	-30	4.82	0.006822	± 2.5	PASS
				VN	-20	4.26	0.006030	± 2.5	PASS
VN	-10			0.1	0.000142	± 2.5	PASS		
VN	0			-0.32	-0.000453	± 2.5	PASS		
VN	10			4.61	0.006525	± 2.5	PASS		
VN	20			3.99	0.005648	± 2.5	PASS		
VN	30			2.52	0.003567	± 2.5	PASS		
VN	40			0.51	0.000722	± 2.5	PASS		
VN	50			2.34	0.003312	± 2.5	PASS		
MCH	VN		-30	0.3	0.000420	± 2.5	PASS		
	VN		-20	-0.87	-0.001219	± 2.5	PASS		
	VN		-10	2.71	0.003798	± 2.5	PASS		
	VN		0	-1.04	-0.001458	± 2.5	PASS		
	VN		10	-1.63	-0.002285	± 2.5	PASS		
	VN		20	3.88	0.005438	± 2.5	PASS		
	VN		30	4.07	0.005704	± 2.5	PASS		
	VN		40	4.78	0.006699	± 2.5	PASS		
	VN		50	2.26	0.003167	± 2.5	PASS		
HCH	VN		-30	-1.56	-0.002186	± 2.5	PASS		
	VN		-20	0.15	0.000210	± 2.5	PASS		
	VN		-10	0.34	0.000477	± 2.5	PASS		
	VN		0	2.09	0.002929	± 2.5	PASS		
	VN		10	0.26	0.000364	± 2.5	PASS		
	VN		20	3.85	0.005396	± 2.5	PASS		
	VN		30	4.32	0.006055	± 2.5	PASS		

		VN	40	-0.48	-0.000673	± 2.5	PASS
		VN	50	-0.46	-0.000645	± 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	3.76	0.005303	± 2.5	PASS
		VN	TN	0.6	0.000846	± 2.5	PASS
		VH	TN	3.27	0.004612	± 2.5	PASS
	MCH	VL	TN	-0.86	-0.001211	± 2.5	PASS
		VN	TN	0.33	0.000465	± 2.5	PASS
		VH	TN	0.09	0.000127	± 2.5	PASS
	HCH	VL	TN	-1.32	-0.001857	± 2.5	PASS
		VN	TN	1.59	0.002236	± 2.5	PASS
		VH	TN	-0.12	-0.000169	± 2.5	PASS
16QAM	LCH	VL	TN	4.62	0.006516	± 2.5	PASS
		VN	TN	1.03	0.001453	± 2.5	PASS
		VH	TN	-0.66	-0.000931	± 2.5	PASS
	MCH	VL	TN	3.58	0.005042	± 2.5	PASS
		VN	TN	-1.38	-0.001944	± 2.5	PASS
		VH	TN	4.24	0.005972	± 2.5	PASS
	HCH	VL	TN	-1.44	-0.002025	± 2.5	PASS
		VN	TN	2.63	0.003699	± 2.5	PASS
		VH	TN	2.44	0.003432	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.49	0.000691	± 2.5	PASS
		VN	-20	-1.85	-0.002609	± 2.5	PASS
		VN	-10	-0.19	-0.000268	± 2.5	PASS
		VN	0	4.6	0.006488	± 2.5	PASS
		VN	10	4.61	0.006502	± 2.5	PASS
		VN	20	-0.13	-0.000183	± 2.5	PASS
		VN	30	3.67	0.005176	± 2.5	PASS
		VN	40	-1.39	-0.001961	± 2.5	PASS
		VN	50	4.55	0.006417	± 2.5	PASS
	MCH	VN	-30	3.67	0.005169	± 2.5	PASS
		VN	-20	1.23	0.001732	± 2.5	PASS
		VN	-10	-1.33	-0.001873	± 2.5	PASS

		VN	0	-1.85	-0.002606	± 2.5	PASS		
		VN	10	0.72	0.001014	± 2.5	PASS		
		VN	20	4.17	0.005873	± 2.5	PASS		
		VN	30	2.33	0.003282	± 2.5	PASS		
		VN	40	4.93	0.006944	± 2.5	PASS		
		VN	50	0.21	0.000296	± 2.5	PASS		
	HCH	VN	-30	-0.24	-0.000338	± 2.5	PASS		
		VN	-20	0.65	0.000914	± 2.5	PASS		
		VN	-10	5	0.007032	± 2.5	PASS		
		VN	0	-1.54	-0.002166	± 2.5	PASS		
		VN	10	0.1	0.000141	± 2.5	PASS		
		VN	20	-1.28	-0.001800	± 2.5	PASS		
		VN	30	2.93	0.004121	± 2.5	PASS		
		VN	40	3.38	0.004754	± 2.5	PASS		
		VN	50	4.79	0.006737	± 2.5	PASS		
		QPSK	LCH	VN	-30	0.36	0.000507	± 2.5	PASS
				VN	-20	-0.09	-0.000127	± 2.5	PASS
				VN	-10	-0.87	-0.001225	± 2.5	PASS
VN	0			3.37	0.004746	± 2.5	PASS		
VN	10			1.05	0.001479	± 2.5	PASS		
VN	20			-0.11	-0.000155	± 2.5	PASS		
VN	30			1.4	0.001972	± 2.5	PASS		
VN	40			1.83	0.002577	± 2.5	PASS		
VN	50			-1.46	-0.002056	± 2.5	PASS		
MCH	VN		-30	1.76	0.002475	± 2.5	PASS		
	VN		-20	4.54	0.006385	± 2.5	PASS		
	VN		-10	-0.29	-0.000408	± 2.5	PASS		
	VN		0	1.89	0.002658	± 2.5	PASS		
	VN		10	-1.39	-0.001955	± 2.5	PASS		
	VN		20	2.25	0.003165	± 2.5	PASS		
	VN		30	-0.72	-0.001013	± 2.5	PASS		
	VN		40	-1.06	-0.001491	± 2.5	PASS		
	VN		50	-1.97	-0.002771	± 2.5	PASS		
HCH	VN		-30	1.11	0.001561	± 2.5	PASS		
	VN		-20	4.23	0.005949	± 2.5	PASS		
	VN		-10	0.41	0.000577	± 2.5	PASS		
	VN		0	-0.17	-0.000239	± 2.5	PASS		
	VN		10	2.36	0.003319	± 2.5	PASS		
	VN		20	2.87	0.004037	± 2.5	PASS		
	VN		30	1.03	0.001449	± 2.5	PASS		
	VN		40	-1.01	-0.001421	± 2.5	PASS		

---

		VN	50	3.88	0.005457	± 2.5	PASS
--	--	----	----	------	----------	-------	------