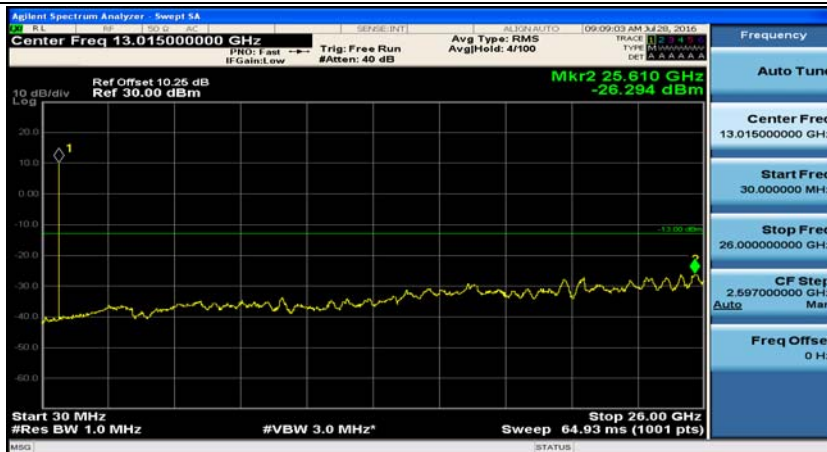
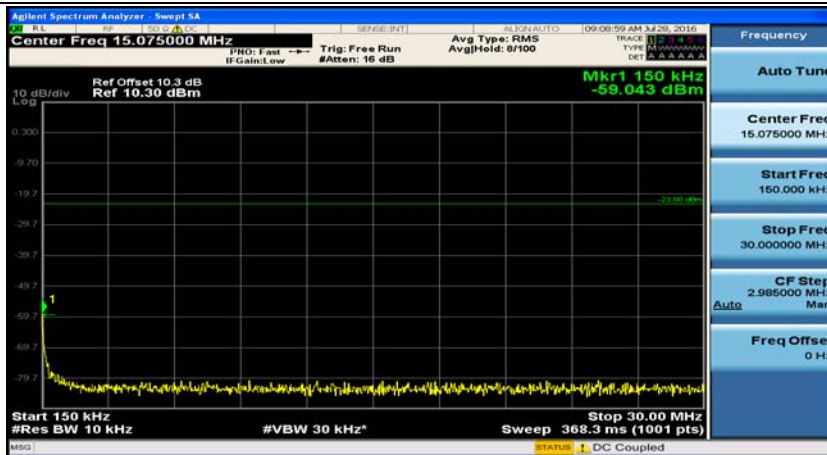
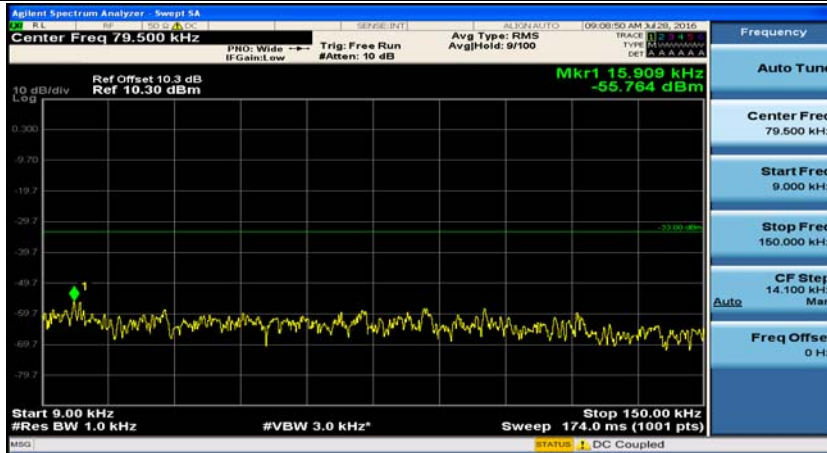
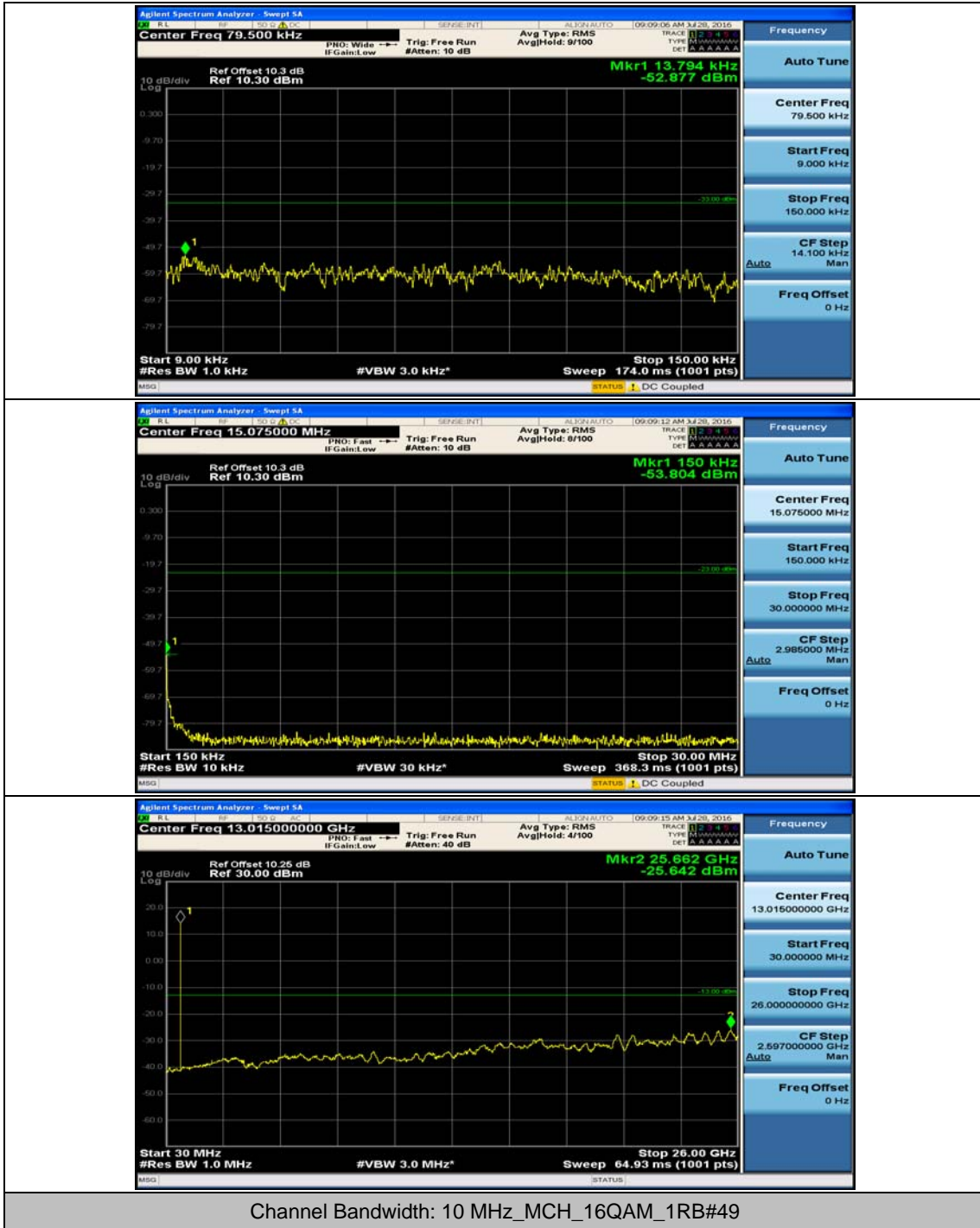
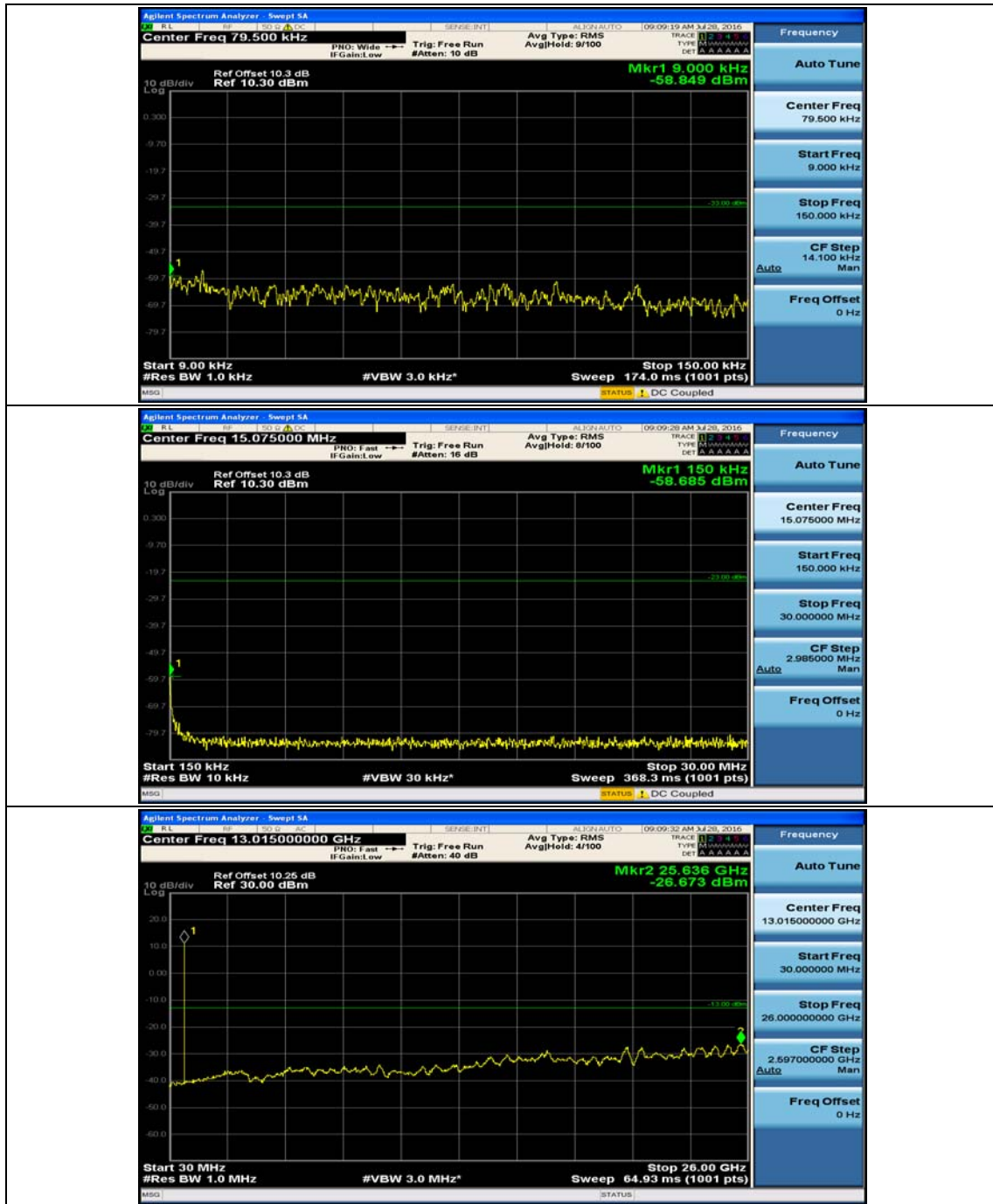


Channel Bandwidth: 10 MHz\_MCH\_16QAM\_1RB#0

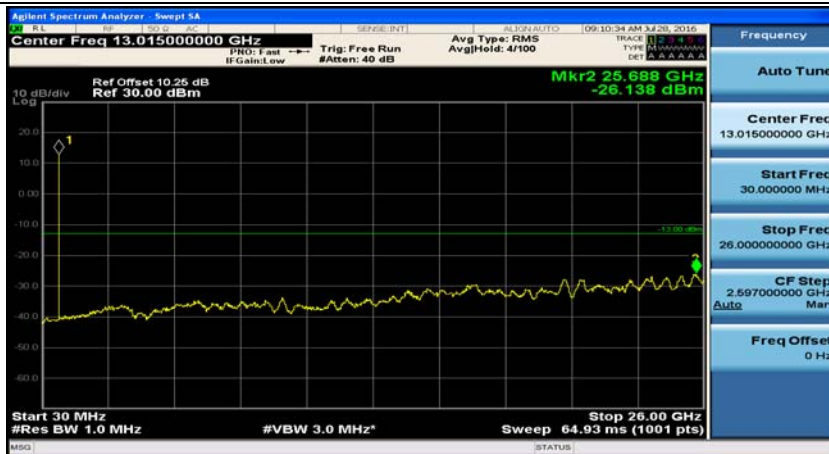


Channel Bandwidth: 10 MHz\_MCH\_16QAM\_1RB#24

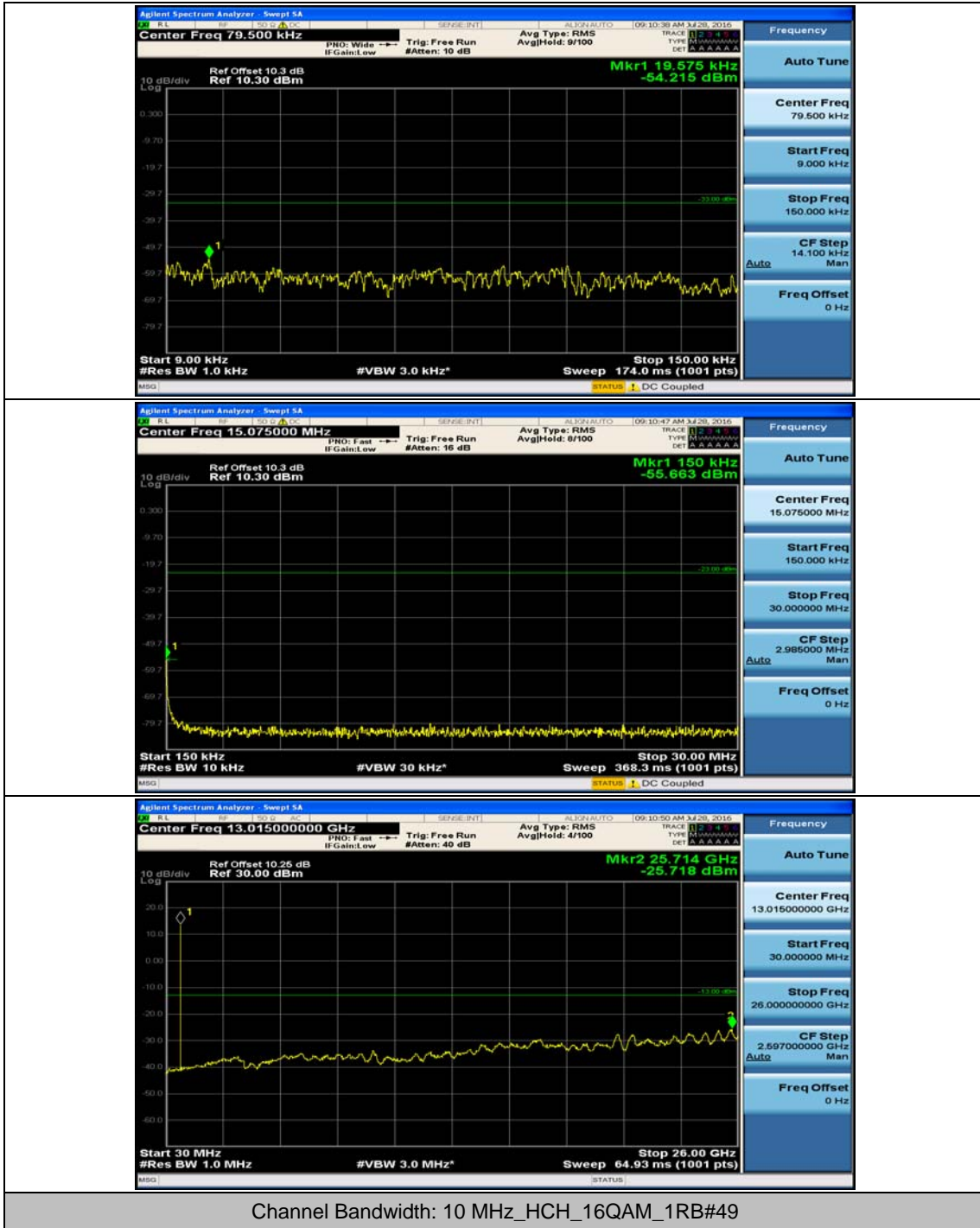




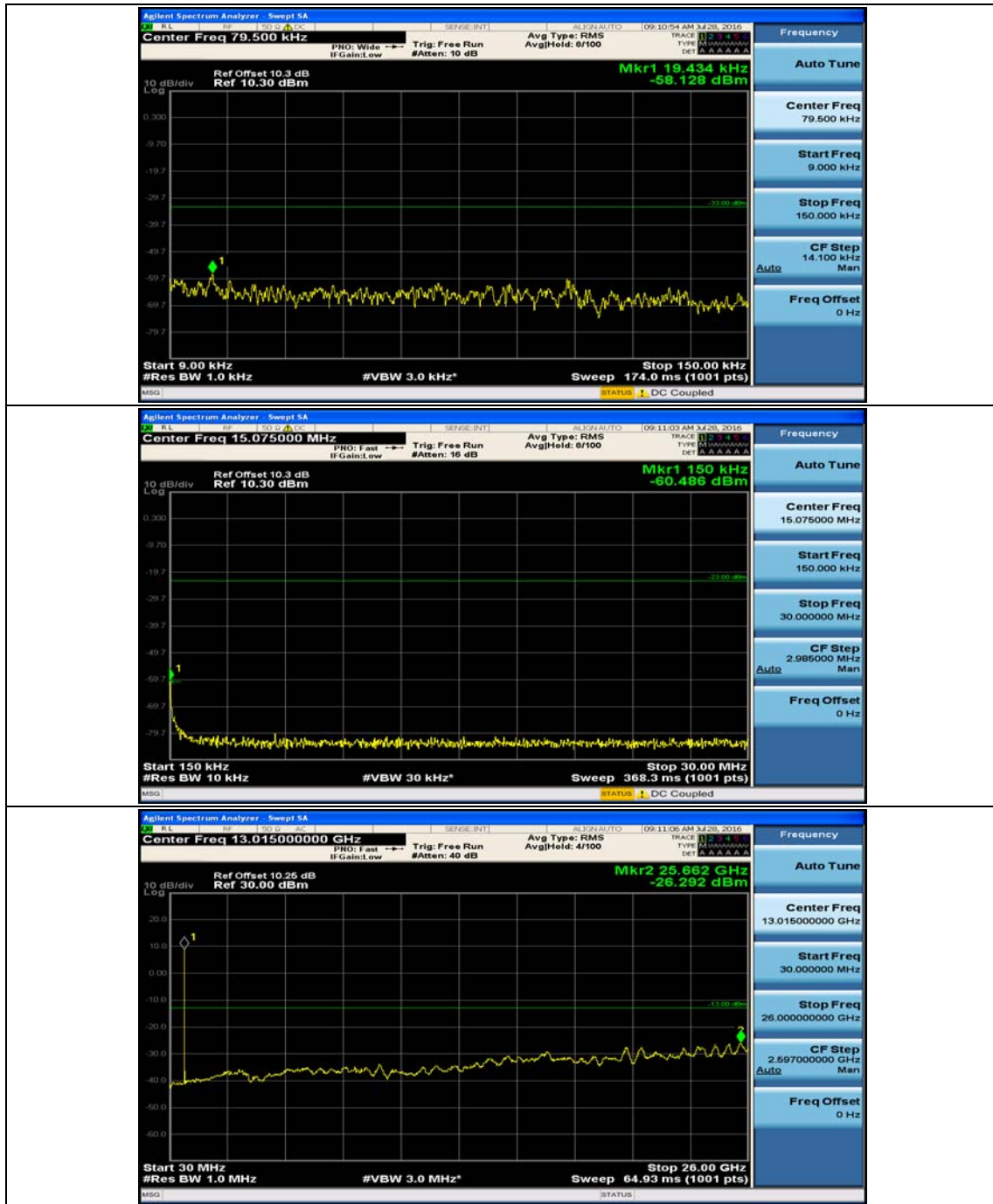
Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#0



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







## Appendix F: Frequency Stability

### Test Result

#### Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	4.69	0.006638	± 2.5	PASS
		VN	TN	0.56	0.000793	± 2.5	PASS
		VH	TN	0.39	0.000552	± 2.5	PASS
	MCH	VL	TN	1.38	0.001944	± 2.5	PASS
		VN	TN	0.11	0.000155	± 2.5	PASS
		VH	TN	-0.78	-0.001099	± 2.5	PASS
	HCH	VL	TN	0.36	0.000505	± 2.5	PASS
		VN	TN	1.85	0.002593	± 2.5	PASS
		VH	TN	3.88	0.005438	± 2.5	PASS
16QAM	LCH	VL	TN	-0.61	-0.000863	± 2.5	PASS
		VN	TN	1.03	0.001458	± 2.5	PASS
		VH	TN	3.85	0.005449	± 2.5	PASS
	MCH	VL	TN	3.99	0.005620	± 2.5	PASS
		VN	TN	1.03	0.001451	± 2.5	PASS
		VH	TN	4.82	0.006789	± 2.5	PASS
	HCH	VL	TN	0.57	0.000799	± 2.5	PASS
		VN	TN	3.4	0.004765	± 2.5	PASS
		VH	TN	4.88	0.006840	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.19	0.004515	± 2.5	PASS
		VN	-20	-1.79	-0.002534	± 2.5	PASS
		VN	-10	-1.36	-0.001925	± 2.5	PASS
		VN	0	4.31	0.006100	± 2.5	PASS
		VN	10	2.25	0.003185	± 2.5	PASS
		VN	20	2.79	0.003949	± 2.5	PASS
		VN	30	1.57	0.002222	± 2.5	PASS
		VN	40	-1.46	-0.002067	± 2.5	PASS
		VN	50	5	0.007077	± 2.5	PASS
	MCH	VN	-30	4.47	0.006296	± 2.5	PASS

		VN	-20	1.67	0.002352	± 2.5	PASS
		VN	-10	-0.34	-0.000479	± 2.5	PASS
		VN	0	-0.11	-0.000155	± 2.5	PASS
		VN	10	1.19	0.001676	± 2.5	PASS
		VN	20	1.72	0.002423	± 2.5	PASS
		VN	30	-0.16	-0.000225	± 2.5	PASS
		VN	40	3.38	0.004761	± 2.5	PASS
		VN	50	4.03	0.005676	± 2.5	PASS
	HCH	VN	-30	-0.25	-0.000350	± 2.5	PASS
		VN	-20	3.62	0.005074	± 2.5	PASS
		VN	-10	1.5	0.002102	± 2.5	PASS
		VN	0	2.46	0.003448	± 2.5	PASS
		VN	10	1.41	0.001976	± 2.5	PASS
		VN	20	1.15	0.001612	± 2.5	PASS
		VN	30	4.56	0.006391	± 2.5	PASS
		VN	40	0.3	0.000420	± 2.5	PASS
		VN	50	-1.83	-0.002565	± 2.5	PASS
		16QAM	LCH	VN	-30	2.97	0.004204
VN	-20			3.44	0.004869	± 2.5	PASS
VN	-10			3.84	0.005435	± 2.5	PASS
VN	0			0.35	0.000495	± 2.5	PASS
VN	10			-1.7	-0.002406	± 2.5	PASS
VN	20			4.26	0.006030	± 2.5	PASS
VN	30			0.4	0.000566	± 2.5	PASS
VN	40			4.52	0.006398	± 2.5	PASS
VN	50			0.67	0.000948	± 2.5	PASS
MCH	VN		-30	1.29	0.001808	± 2.5	PASS
	VN		-20	4.52	0.006335	± 2.5	PASS
	VN		-10	-1.32	-0.001850	± 2.5	PASS
	VN		0	0.57	0.000799	± 2.5	PASS
	VN		10	1.95	0.002733	± 2.5	PASS
	VN		20	2.61	0.003658	± 2.5	PASS
	VN		30	4.93	0.006910	± 2.5	PASS
	VN		40	4.28	0.005999	± 2.5	PASS
	VN		50	-0.25	-0.000350	± 2.5	PASS
HCH	VN		-30	1.29	0.001808	± 2.5	PASS
	VN		-20	0.78	0.001093	± 2.5	PASS
	VN		-10	4.97	0.006966	± 2.5	PASS
	VN		0	4.81	0.006741	± 2.5	PASS
	VN		10	-1.19	-0.001668	± 2.5	PASS
	VN		20	-1.1	-0.001542	± 2.5	PASS



		VN	30	4.49	0.006293	± 2.5	PASS
		VN	40	2.94	0.004121	± 2.5	PASS
		VN	50	-0.59	-0.000827	± 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	1.5	0.002116	± 2.5	PASS
		VN	TN	0.49	0.000691	± 2.5	PASS
		VH	TN	-0.44	-0.000621	± 2.5	PASS
	MCH	VL	TN	3.06	0.004310	± 2.5	PASS
		VN	TN	2.63	0.003704	± 2.5	PASS
		VH	TN	-1.42	-0.002000	± 2.5	PASS
	HCH	VL	TN	0.27	0.000380	± 2.5	PASS
		VN	TN	-0.11	-0.000155	± 2.5	PASS
		VH	TN	-1.09	-0.001533	± 2.5	PASS
16QAM	LCH	VL	TN	0.57	0.000804	± 2.5	PASS
		VN	TN	3.19	0.004499	± 2.5	PASS
		VH	TN	0.04	0.000056	± 2.5	PASS
	MCH	VL	TN	-1.1	-0.001549	± 2.5	PASS
		VN	TN	-1.16	-0.001634	± 2.5	PASS
		VH	TN	2.95	0.004155	± 2.5	PASS
	HCH	VL	TN	-0.85	-0.001195	± 2.5	PASS
		VN	TN	1.55	0.002180	± 2.5	PASS
		VH	TN	1.71	0.002405	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	2.74	0.003865	± 2.5	PASS
		VN	-20	0.25	0.000353	± 2.5	PASS
		VN	-10	-0.87	-0.001227	± 2.5	PASS
		VN	0	-1.05	-0.001481	± 2.5	PASS
		VN	10	2.49	0.003512	± 2.5	PASS
		VN	20	4.67	0.006587	± 2.5	PASS
		VN	30	2.87	0.004048	± 2.5	PASS
		VN	40	-0.05	-0.000071	± 2.5	PASS
		VN	50	1.79	0.002525	± 2.5	PASS
	MCH	VN	-30	1.34	0.001887	± 2.5	PASS
		VN	-20	1.25	0.001761	± 2.5	PASS

		VN	-10	0.21	0.000296	± 2.5	PASS	
		VN	0	-0.47	-0.000662	± 2.5	PASS	
		VN	10	2.47	0.003479	± 2.5	PASS	
		VN	20	2.01	0.002831	± 2.5	PASS	
		VN	30	2.85	0.004014	± 2.5	PASS	
		VN	40	4.65	0.006549	± 2.5	PASS	
		VN	50	-0.41	-0.000577	± 2.5	PASS	
	HCH	VN	-30	-0.33	-0.000464	± 2.5	PASS	
		VN	-20	-0.65	-0.000914	± 2.5	PASS	
		VN	-10	2.6	0.003657	± 2.5	PASS	
		VN	0	2.62	0.003685	± 2.5	PASS	
		VN	10	1.6	0.002250	± 2.5	PASS	
		VN	20	5	0.007032	± 2.5	PASS	
		VN	30	4.04	0.005682	± 2.5	PASS	
	QPSK	LCH	VN	40	1.44	0.002025	± 2.5	PASS
			VN	50	-0.66	-0.000928	± 2.5	PASS
			VN	-30	4.79	0.006746	± 2.5	PASS
			VN	-20	2.58	0.003634	± 2.5	PASS
VN			-10	0.26	0.000366	± 2.5	PASS	
VN			0	1.36	0.001915	± 2.5	PASS	
VN			10	1.49	0.002099	± 2.5	PASS	
VN			20	-1.38	-0.001944	± 2.5	PASS	
VN			30	-1.3	-0.001831	± 2.5	PASS	
MCH		VN	40	-1.82	-0.002563	± 2.5	PASS	
		VN	50	-1.81	-0.002549	± 2.5	PASS	
		VN	-30	-1.5	-0.002110	± 2.5	PASS	
		VN	-20	1.41	0.001983	± 2.5	PASS	
		VN	-10	2.01	0.002827	± 2.5	PASS	
		VN	0	-1.72	-0.002419	± 2.5	PASS	
		VN	10	0.77	0.001083	± 2.5	PASS	
		VN	20	-0.7	-0.000985	± 2.5	PASS	
		VN	30	-1.08	-0.001519	± 2.5	PASS	
HCH	VN	40	1.17	0.001646	± 2.5	PASS		
	VN	50	2.63	0.003699	± 2.5	PASS		
	VN	-30	-1.07	-0.001505	± 2.5	PASS		
	VN	-20	2.81	0.003952	± 2.5	PASS		
	VN	-10	4.79	0.006737	± 2.5	PASS		
	VN	0	3.98	0.005598	± 2.5	PASS		
	VN	10	3.95	0.005556	± 2.5	PASS		
VN	20	4.52	0.006357	± 2.5	PASS			
VN	30	4.79	0.006737	± 2.5	PASS			

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		VN	40	2.05	0.002883	$\pm 2.5$	PASS
		VN	50	-1.9	-0.002672	$\pm 2.5$	PASS