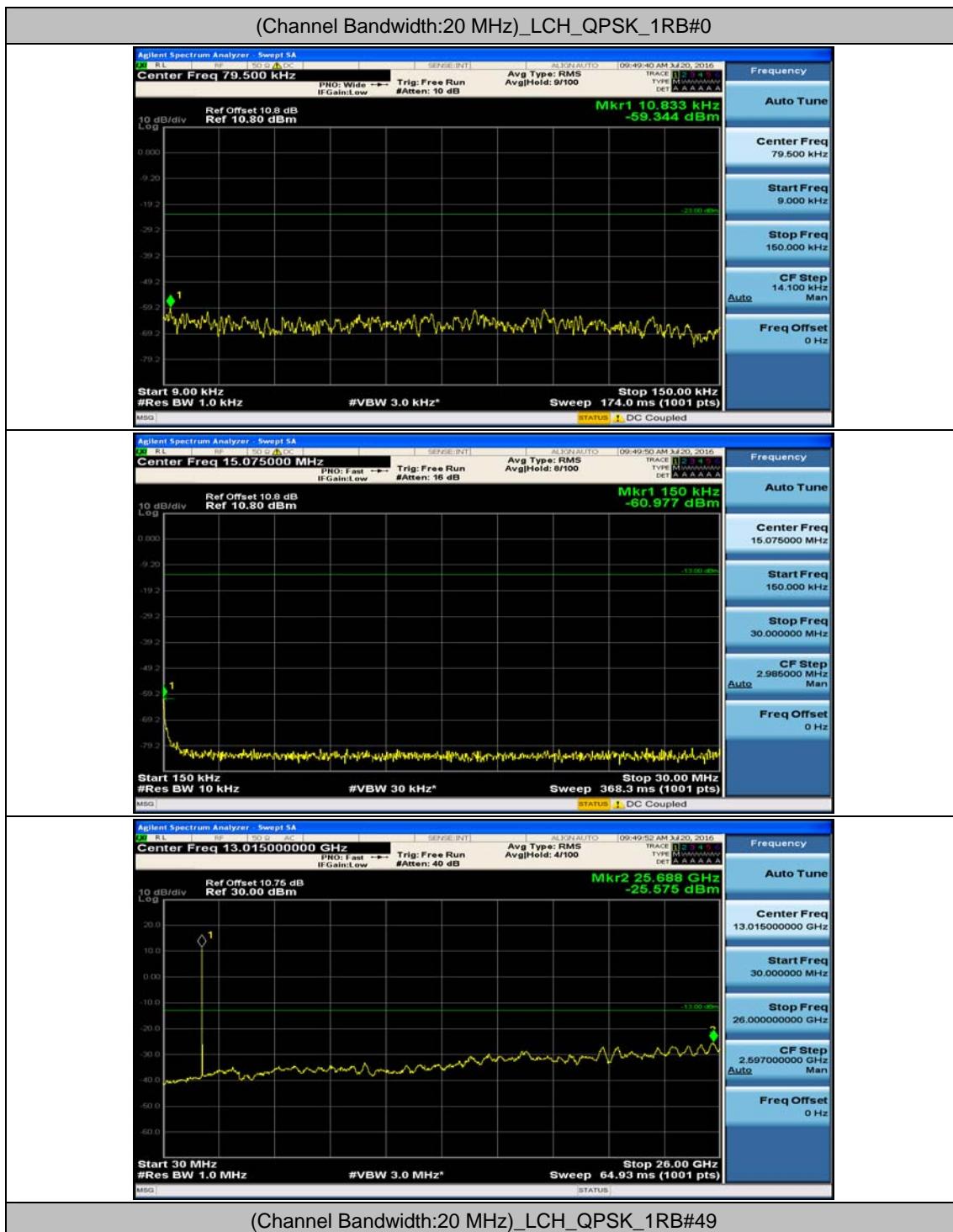
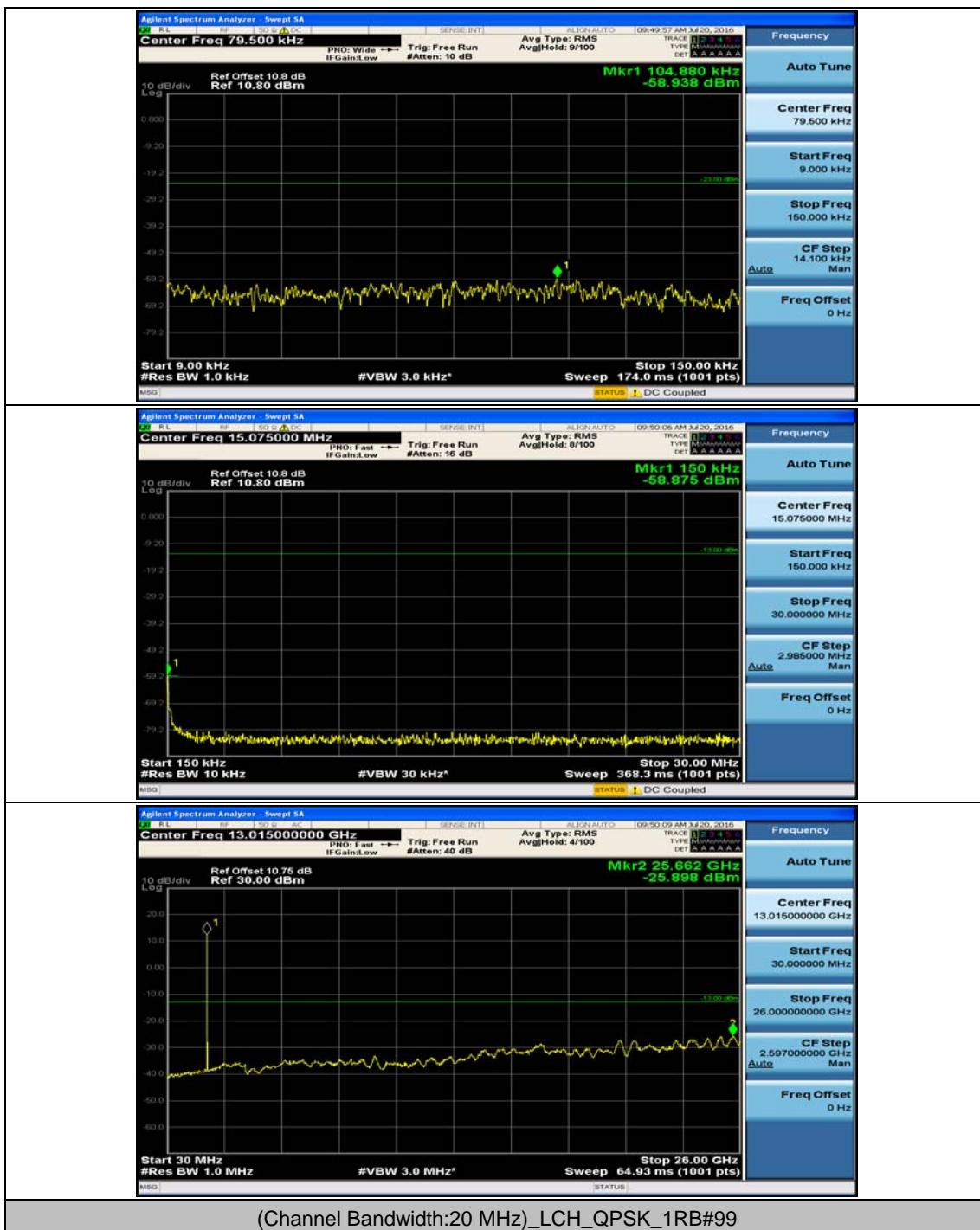
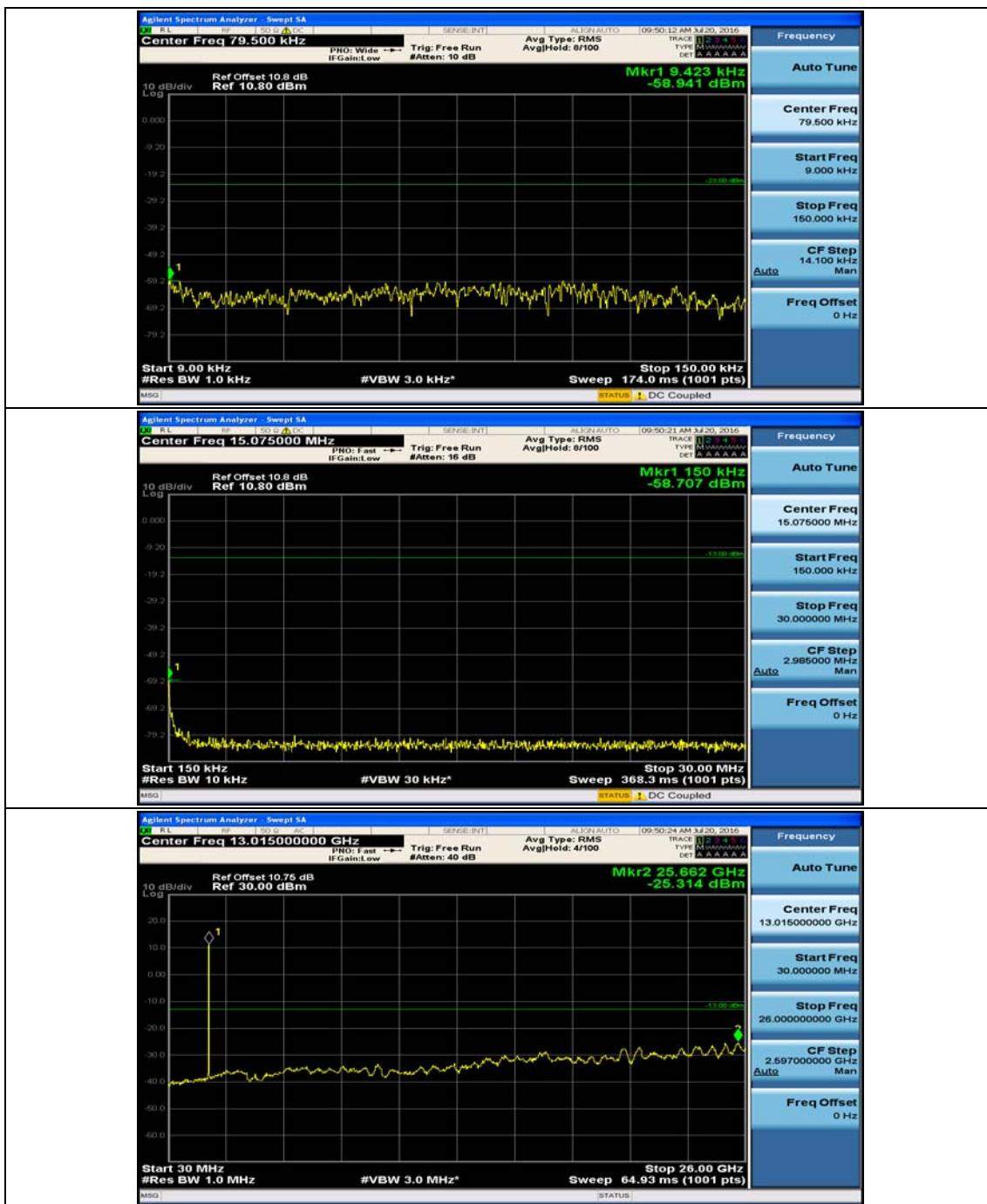
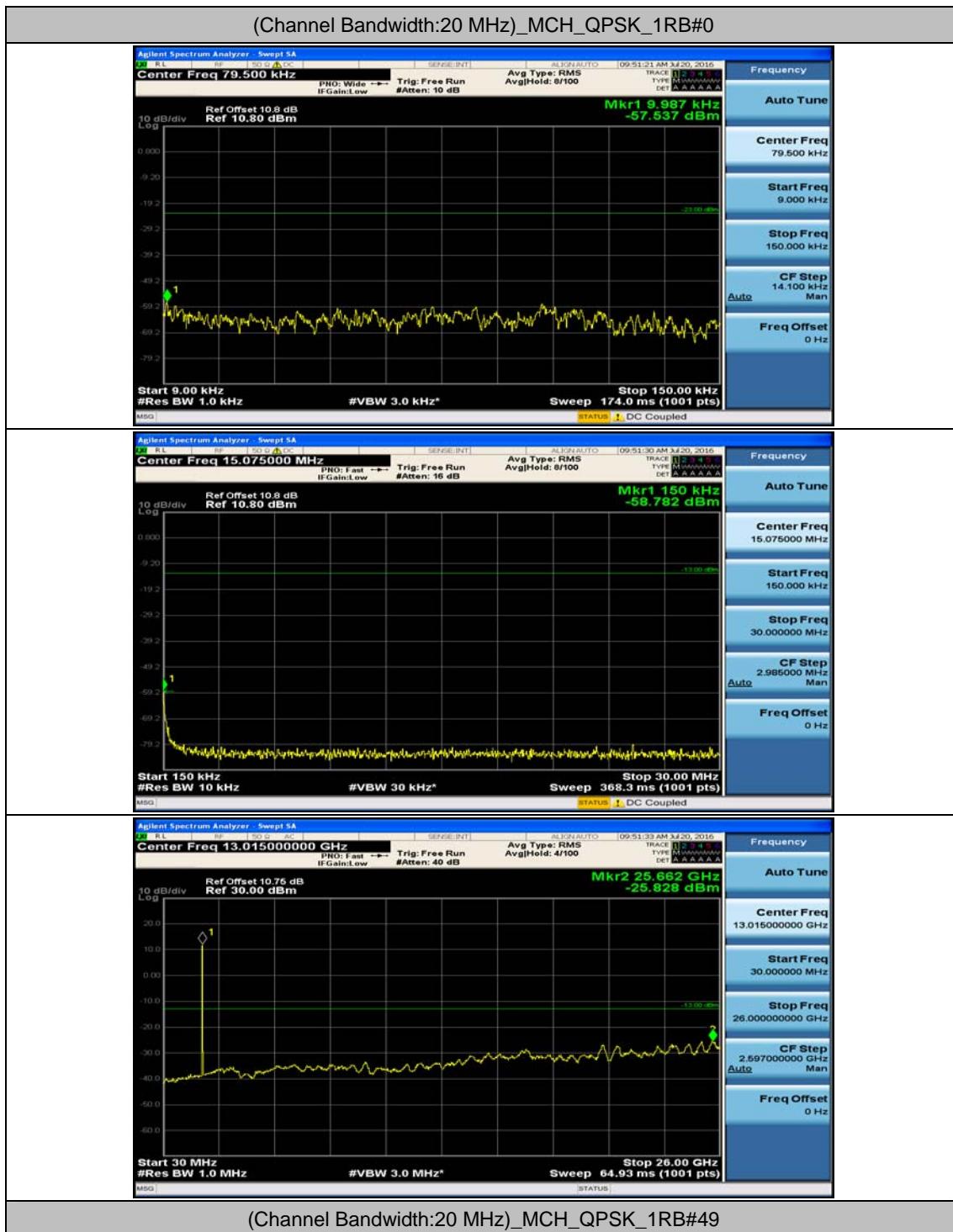


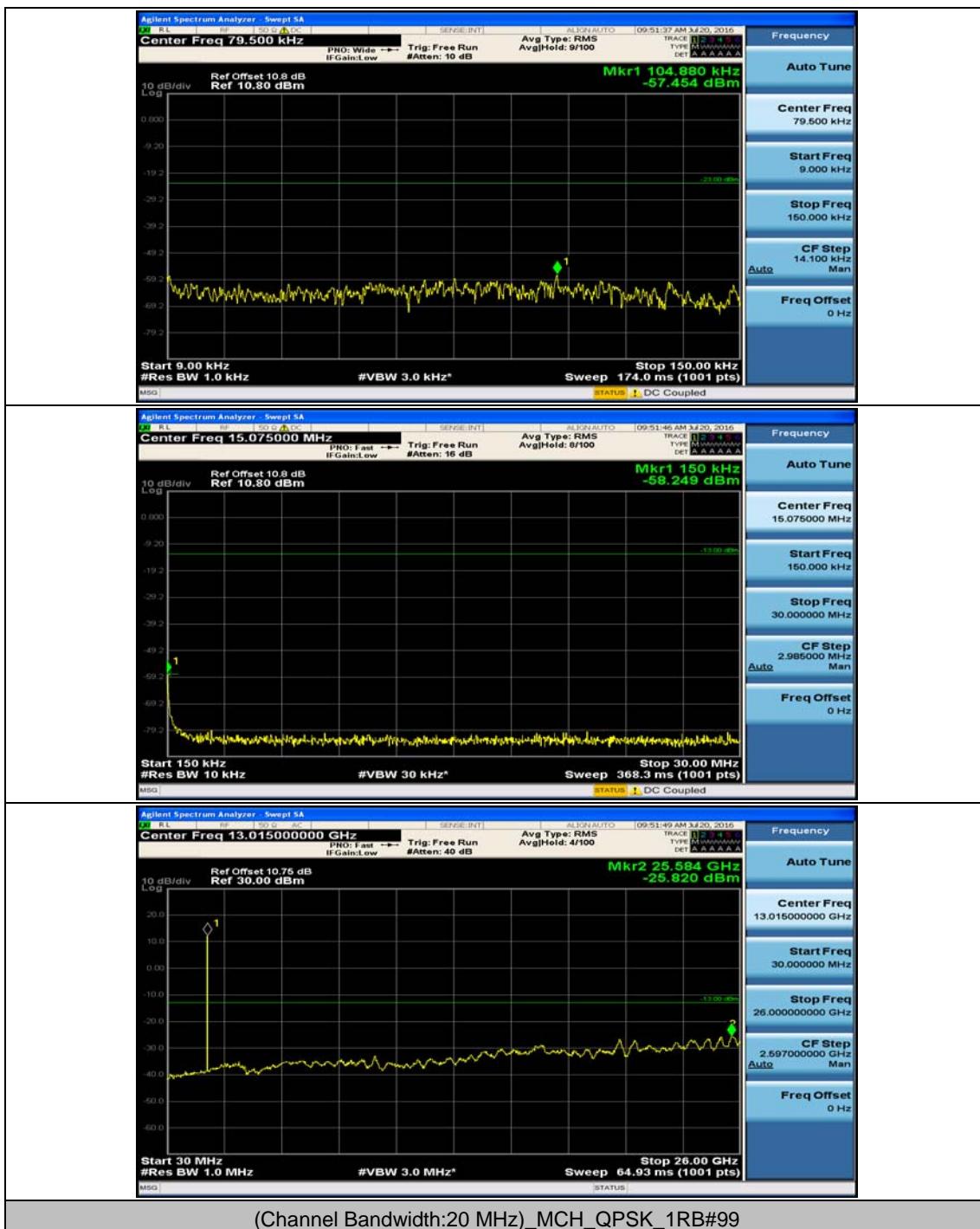
## Channel Bandwidth: 20 MHz

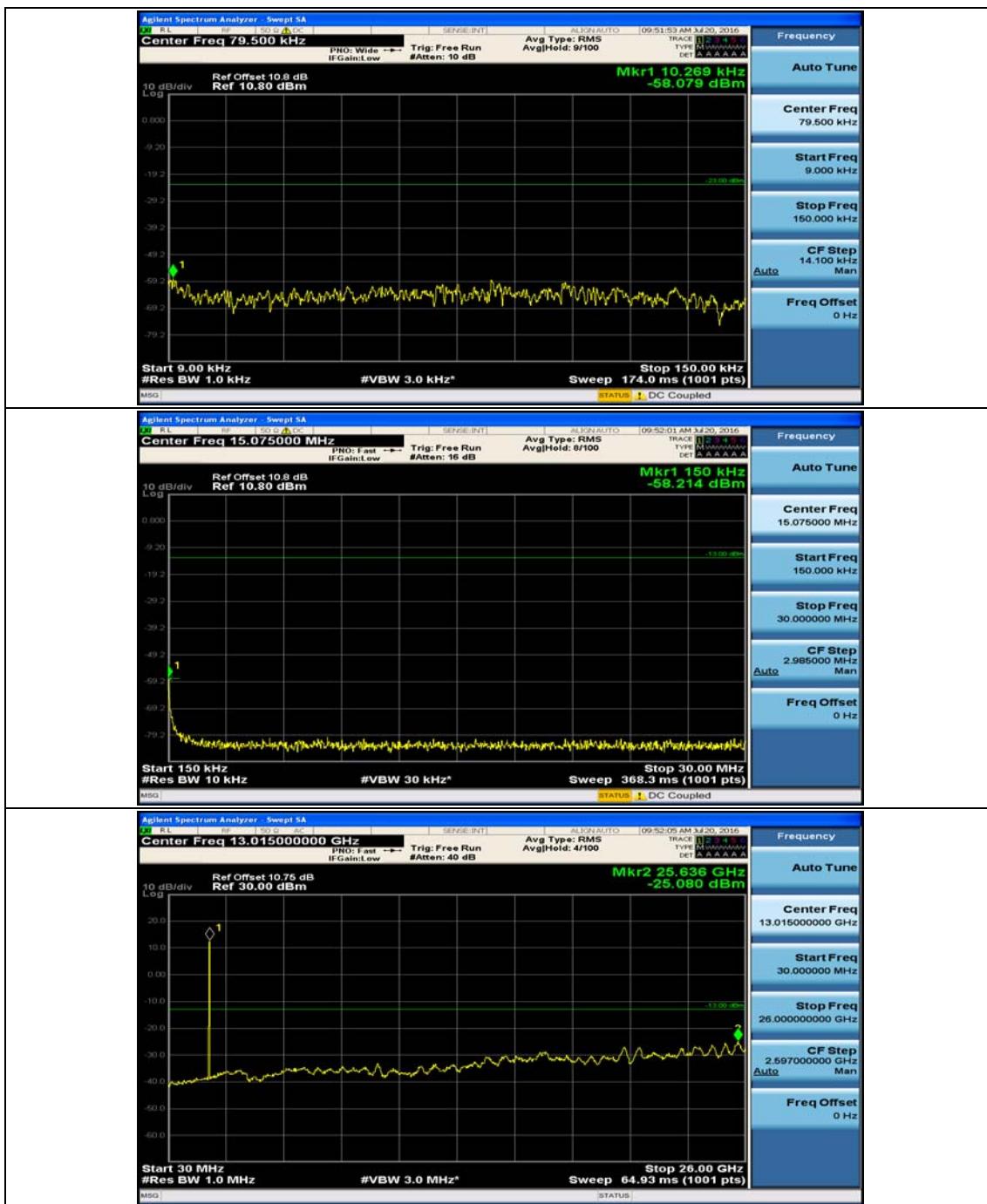


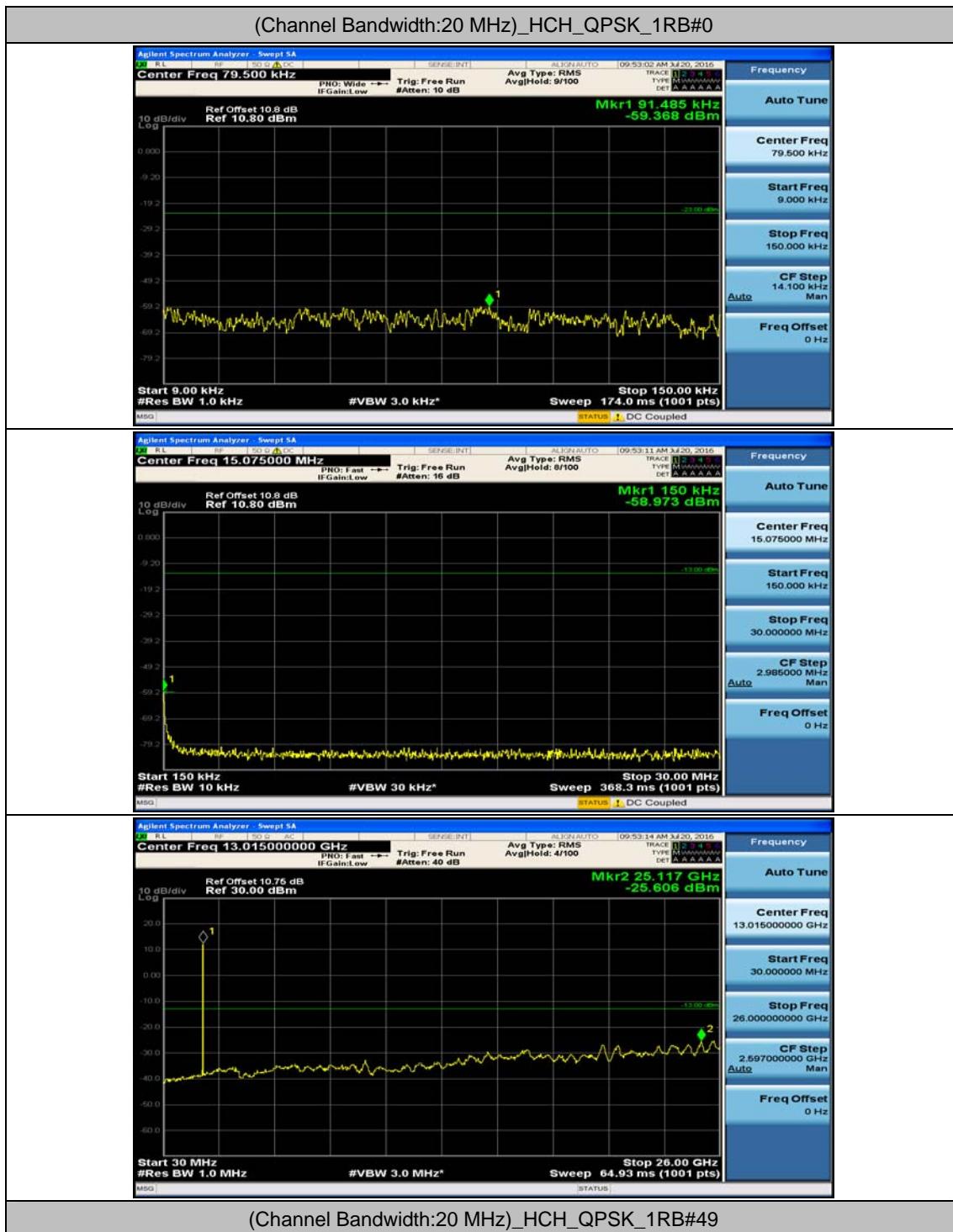


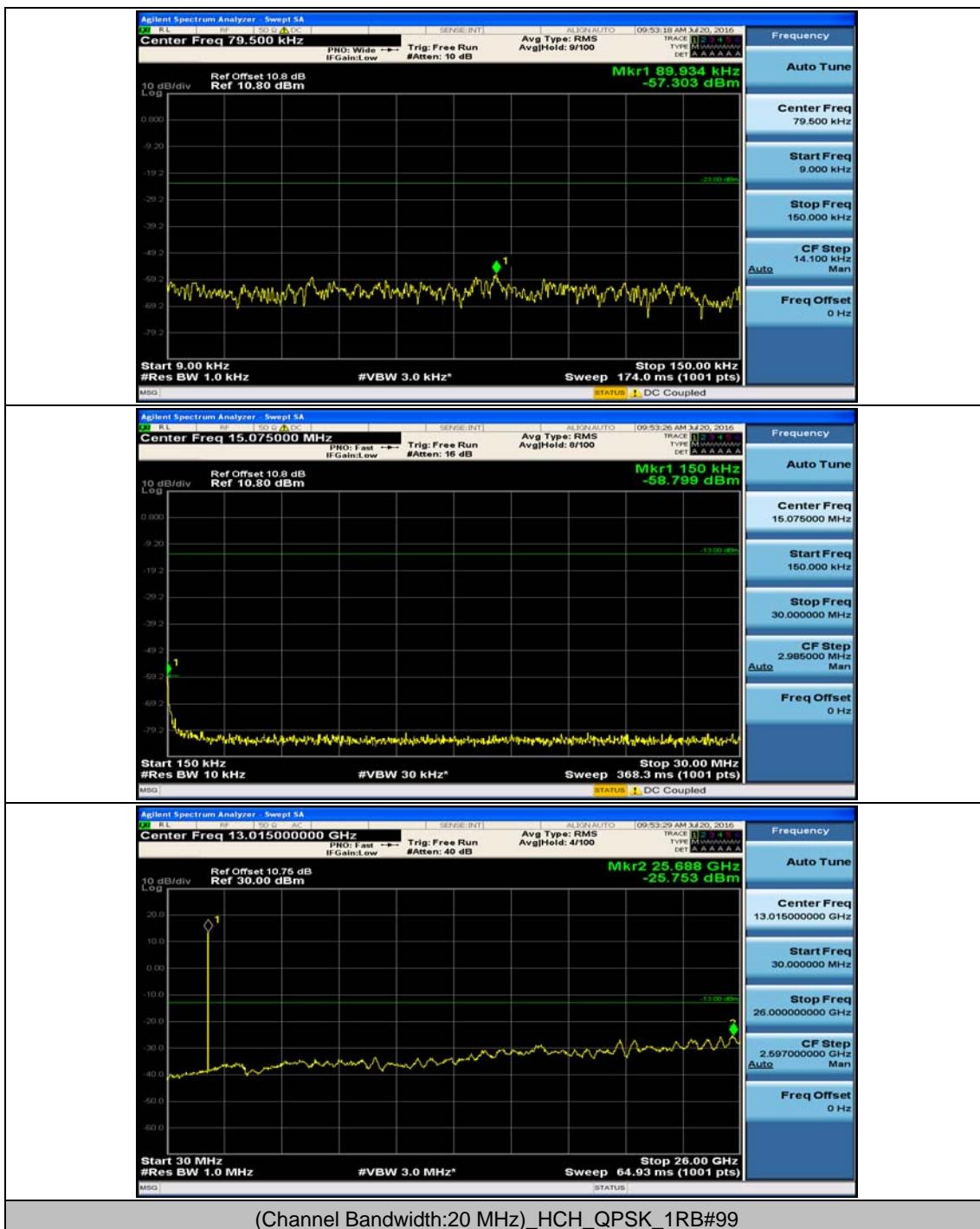


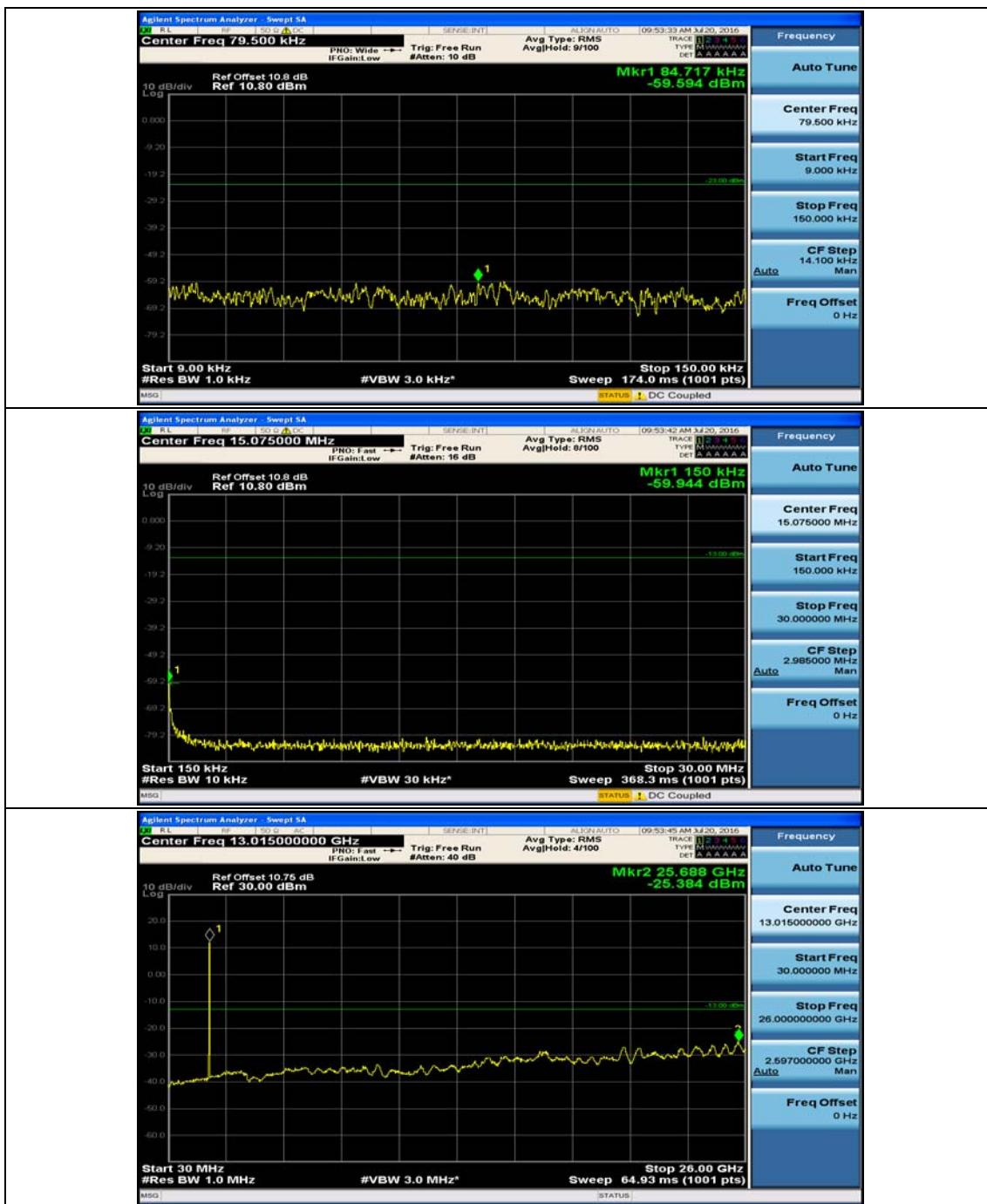


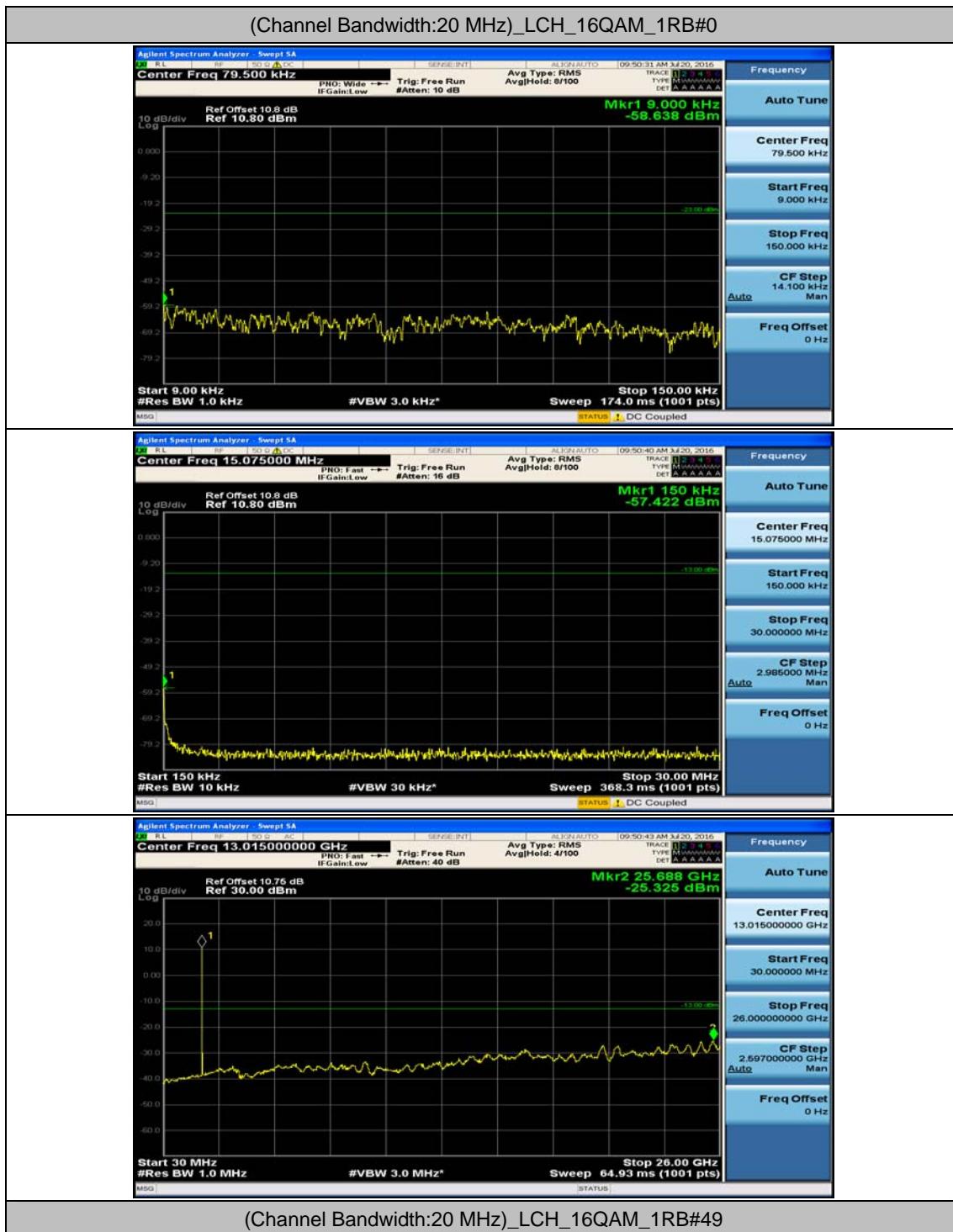


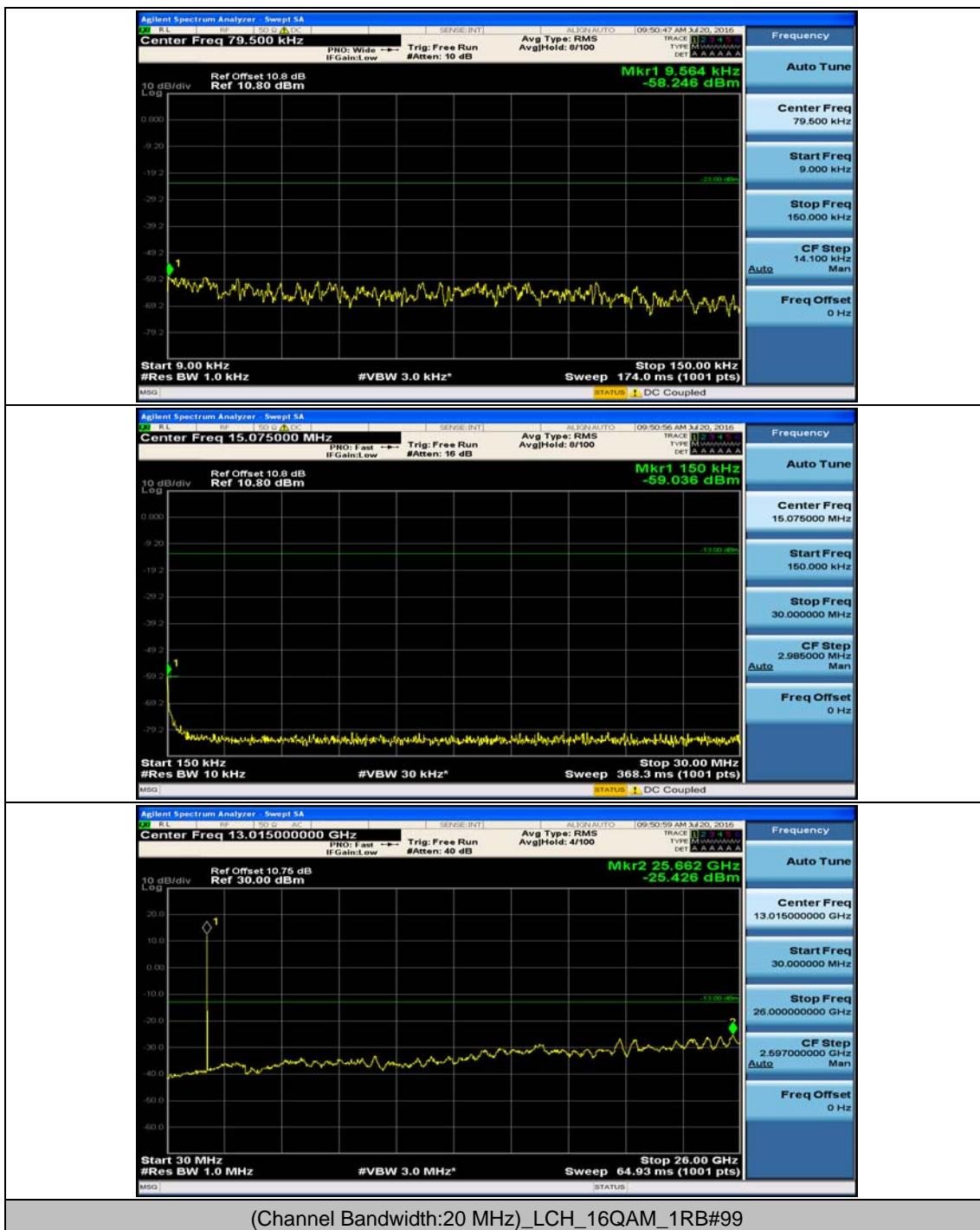


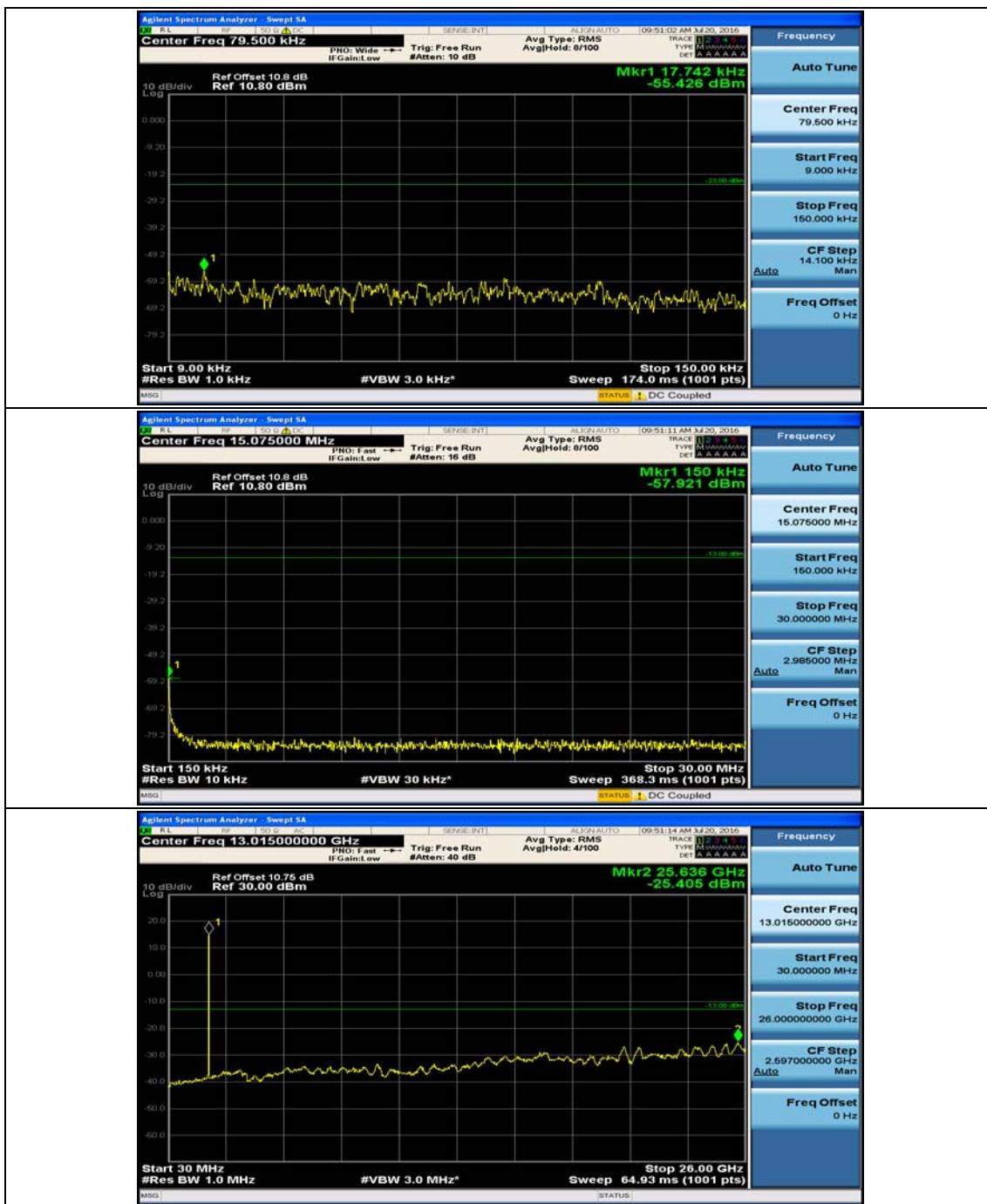


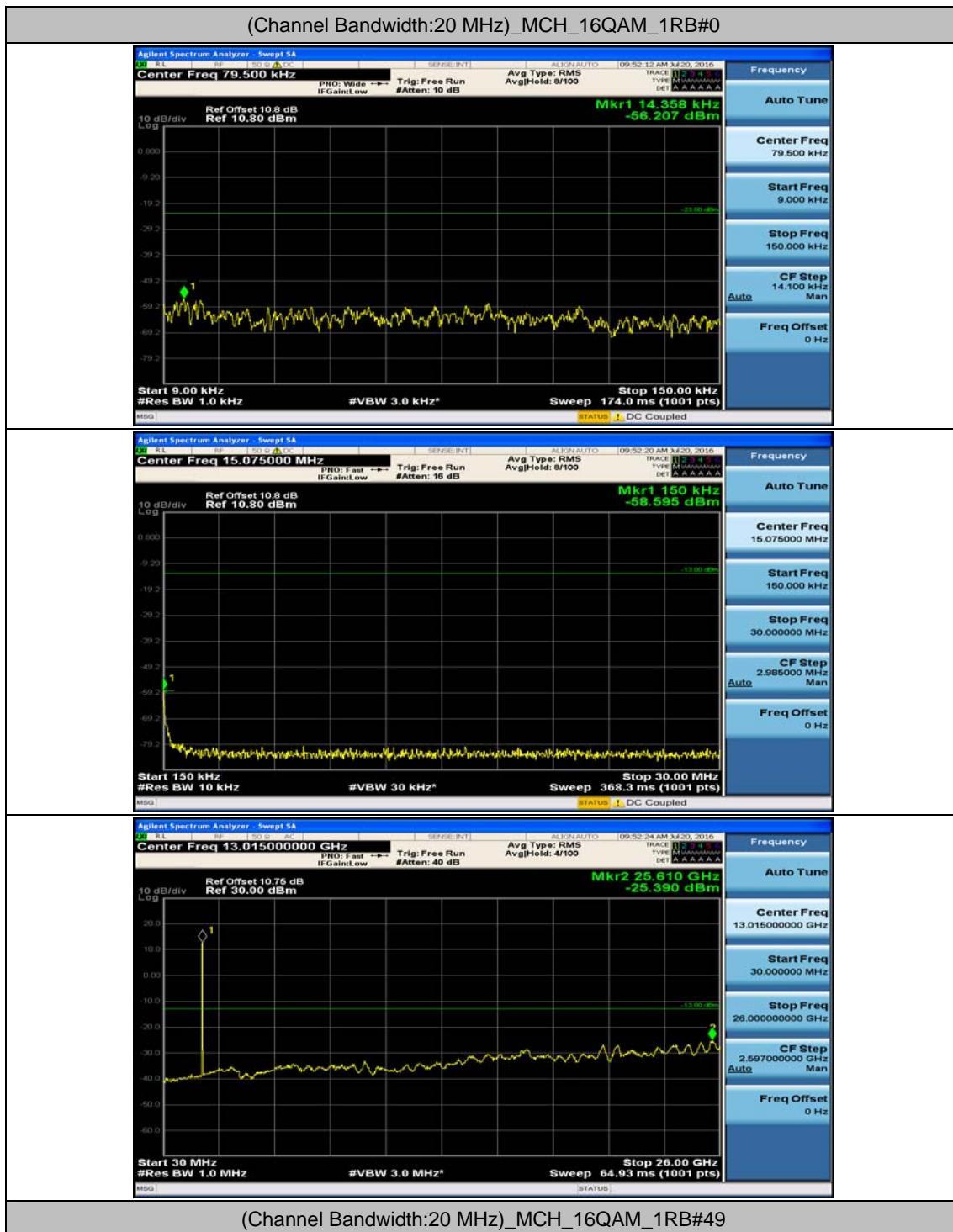


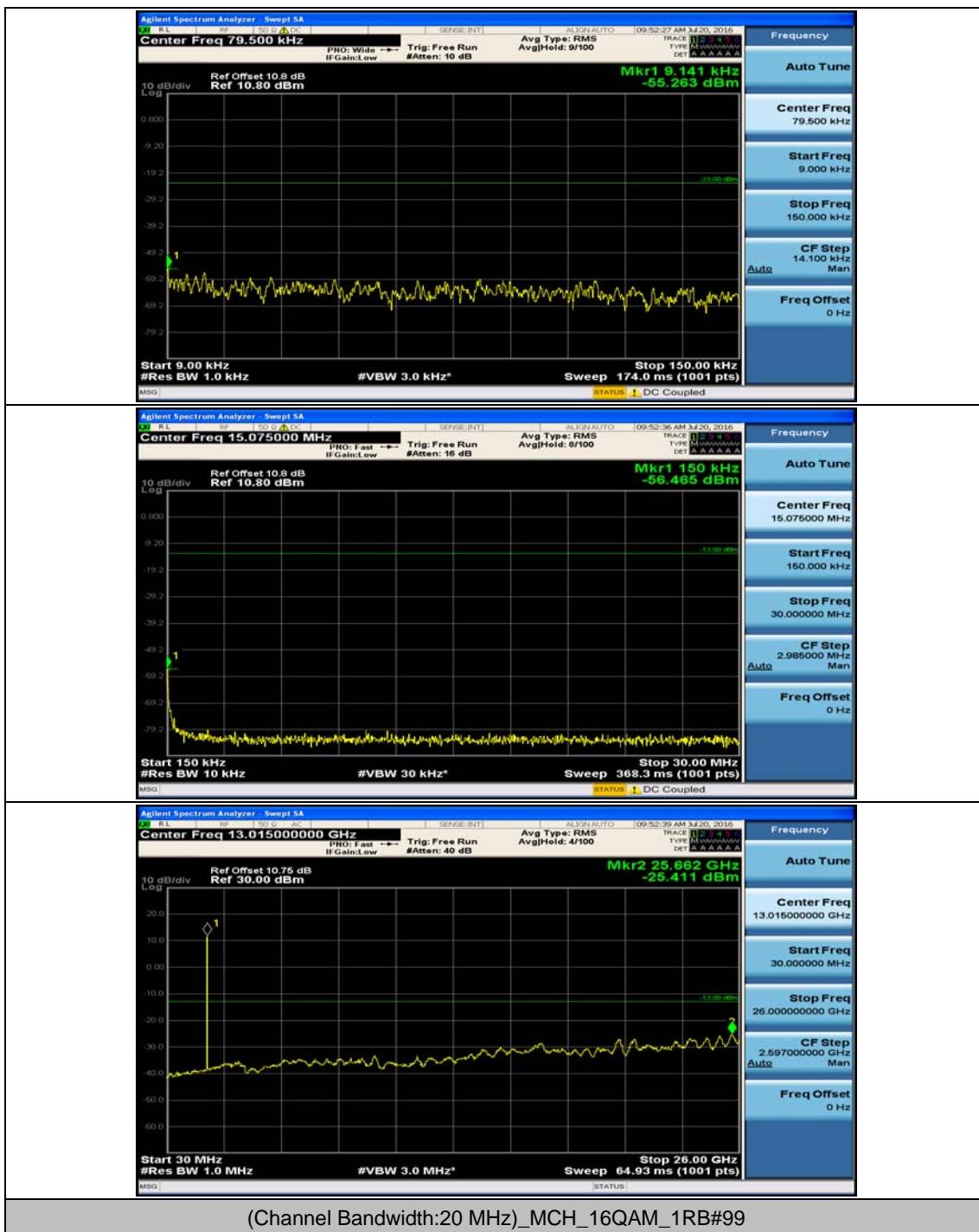


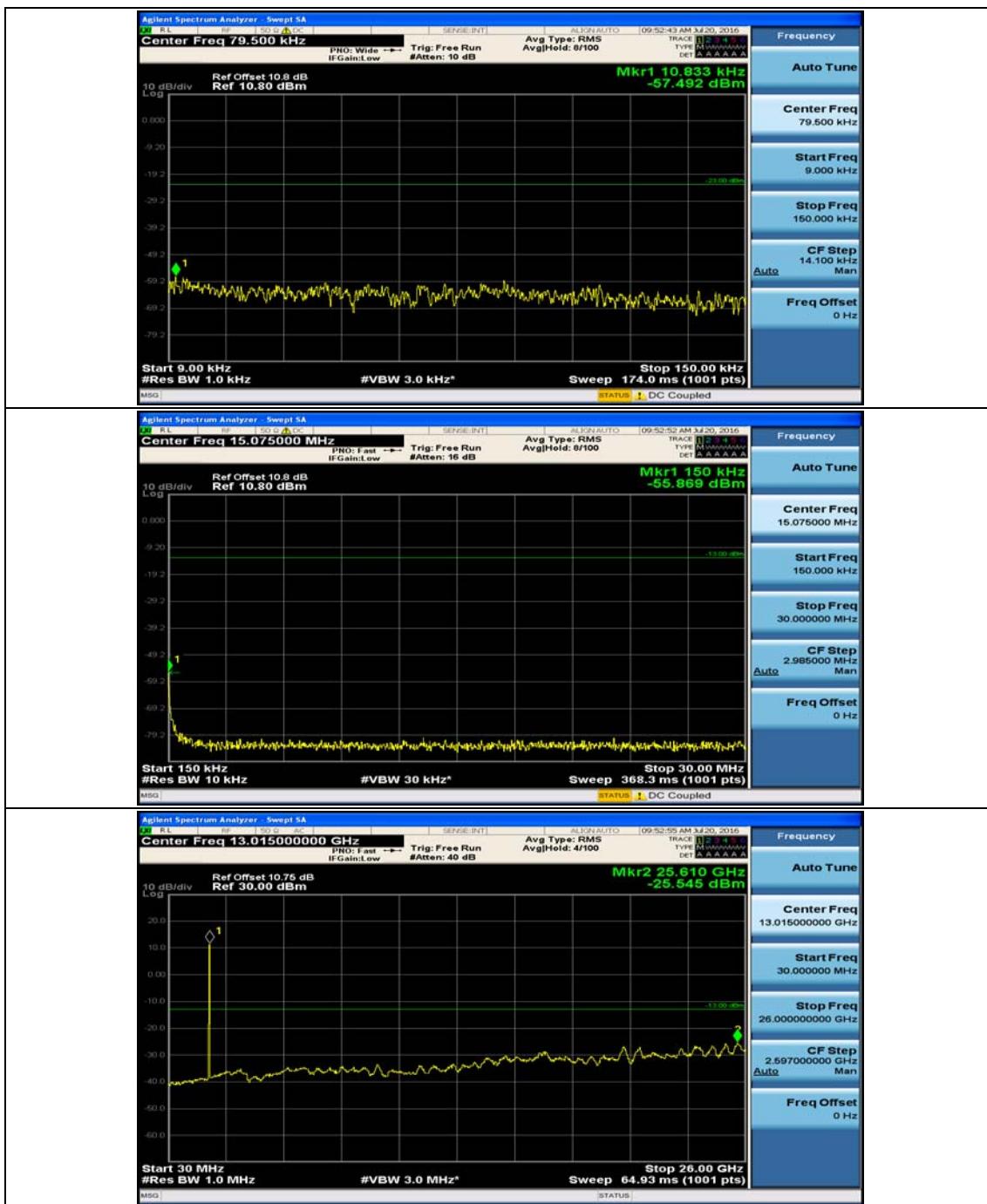


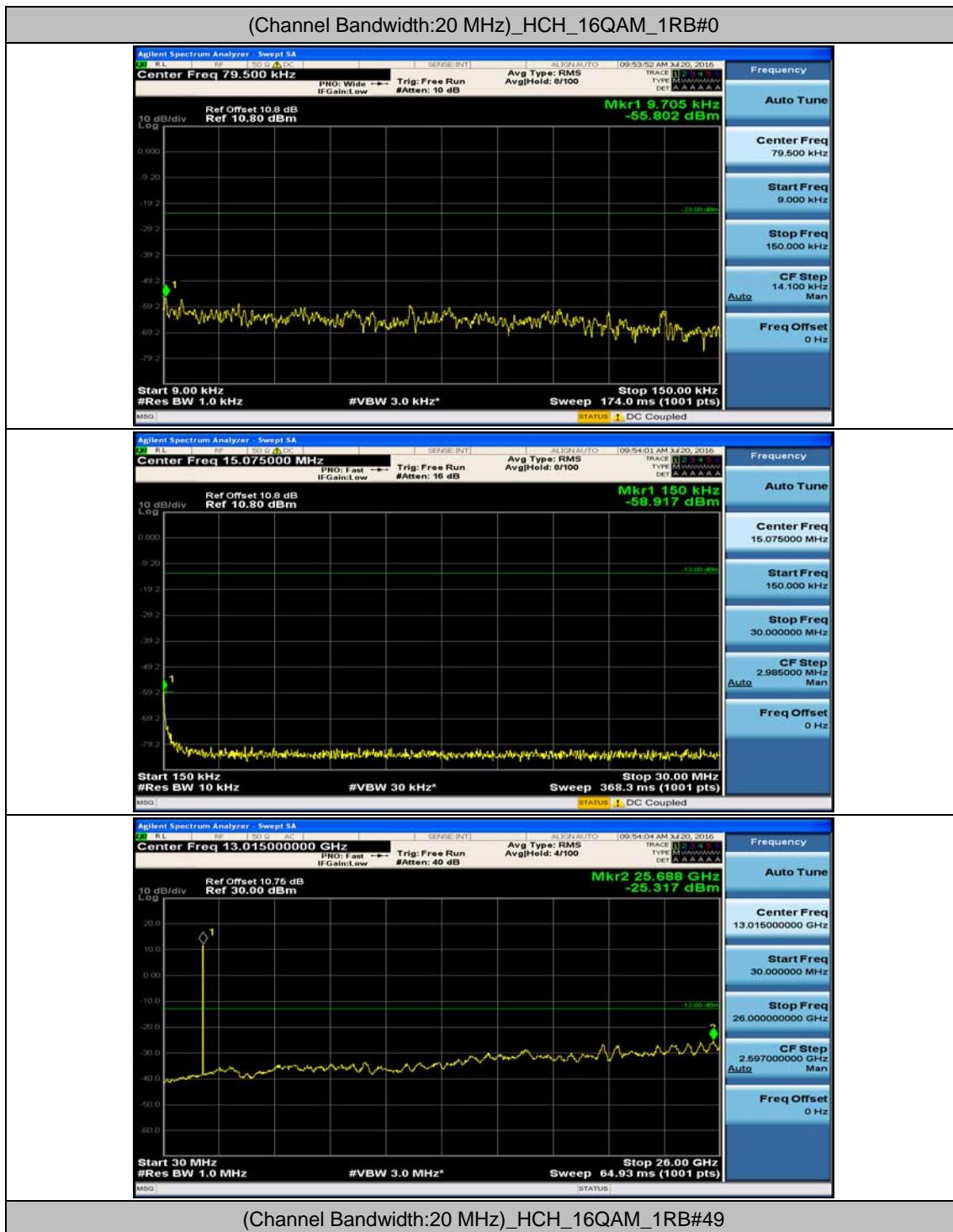


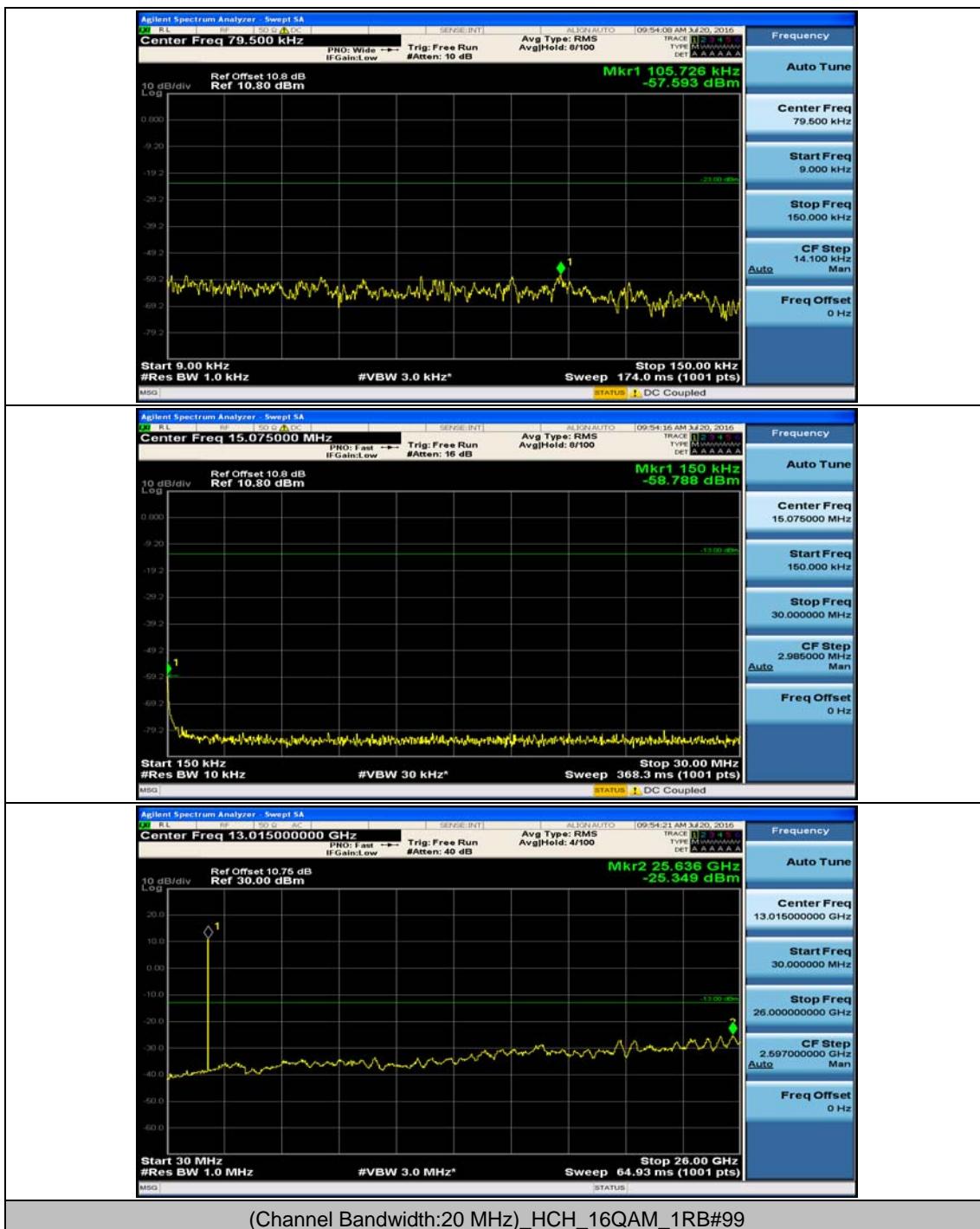


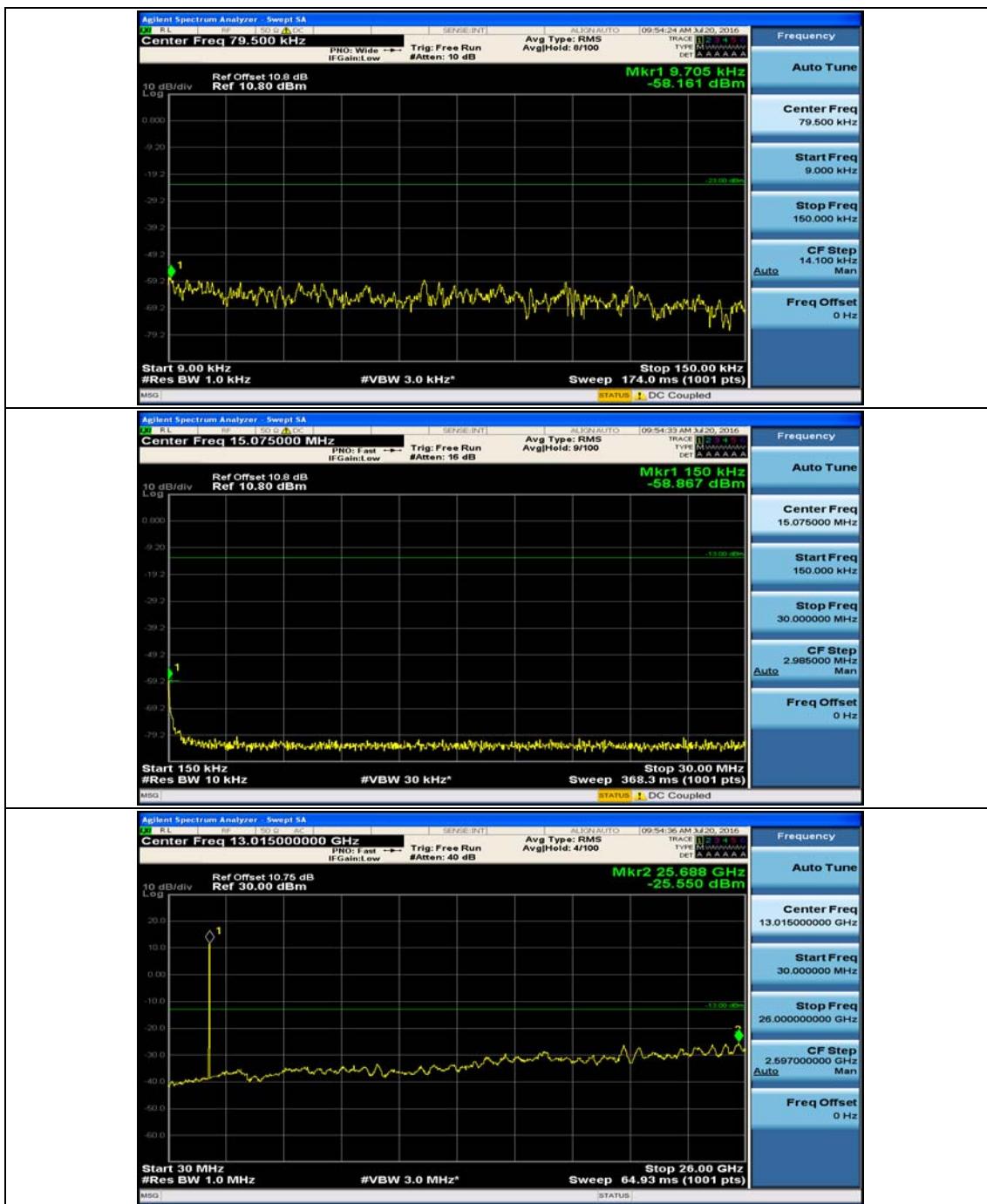












## Appendix F: Frequency Stability

### 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	4	0.002161	± 2.5	PASS
		VN	TN	3.32	0.001794	± 2.5	PASS
		VH	TN	-0.82	-0.000443	± 2.5	PASS
	MCH	VL	TN	-1.03	-0.000548	± 2.5	PASS
		VN	TN	1.7	0.000904	± 2.5	PASS
		VH	TN	-1.93	-0.001027	± 2.5	PASS
	HCH	VL	TN	4.31	0.002257	± 2.5	PASS
		VN	TN	-1.99	-0.001042	± 2.5	PASS
		VH	TN	-0.26	-0.000136	± 2.5	PASS
16QAM	LCH	VL	TN	3.56	0.001924	± 2.5	PASS
		VN	TN	0.79	0.000427	± 2.5	PASS
		VH	TN	2.82	0.001524	± 2.5	PASS
	MCH	VL	TN	2.26	0.001202	± 2.5	PASS
		VN	TN	0.31	0.000165	± 2.5	PASS
		VH	TN	-0.54	-0.000287	± 2.5	PASS
	HCH	VL	TN	3.24	0.001697	± 2.5	PASS
		VN	TN	-1.17	-0.000613	± 2.5	PASS
		VH	TN	-0.98	-0.000513	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.99	0.000535	± 2.5	PASS
		VN	-20	2.85	0.001540	± 2.5	PASS
		VN	-10	-0.24	-0.000130	± 2.5	PASS
		VN	0	3.64	0.001967	± 2.5	PASS
		VN	10	-1.27	-0.000686	± 2.5	PASS
		VN	20	2.37	0.001281	± 2.5	PASS
		VN	30	-1.78	-0.000962	± 2.5	PASS
		VN	40	1.58	0.000854	± 2.5	PASS
		VN	50	3.87	0.002091	± 2.5	PASS
	MCH	VN	-30	3.96	0.002106	± 2.5	PASS

		VN	-20	4.61	0.002452	$\pm 2.5$	PASS
		VN	-10	1.5	0.000798	$\pm 2.5$	PASS
		VN	0	4.46	0.002372	$\pm 2.5$	PASS
		VN	10	-0.16	-0.000085	$\pm 2.5$	PASS
		VN	20	4.81	0.002559	$\pm 2.5$	PASS
		VN	30	0.24	0.000128	$\pm 2.5$	PASS
		VN	40	1.7	0.000904	$\pm 2.5$	PASS
		VN	50	-0.82	-0.000436	$\pm 2.5$	PASS
	HCH	VN	-30	-1.06	-0.000555	$\pm 2.5$	PASS
		VN	-20	0.37	0.000194	$\pm 2.5$	PASS
		VN	-10	3.81	0.001995	$\pm 2.5$	PASS
		VN	0	-1.01	-0.000529	$\pm 2.5$	PASS
		VN	10	0.55	0.000288	$\pm 2.5$	PASS
		VN	20	2.07	0.001084	$\pm 2.5$	PASS
		VN	30	2.86	0.001498	$\pm 2.5$	PASS
		VN	40	-0.65	-0.000340	$\pm 2.5$	PASS
		VN	50	0.64	0.000335	$\pm 2.5$	PASS
16QAM	LCH	VN	-30	2.75	0.001486	$\pm 2.5$	PASS
		VN	-20	-1.31	-0.000708	$\pm 2.5$	PASS
		VN	-10	-0.47	-0.000254	$\pm 2.5$	PASS
		VN	0	1.59	0.000859	$\pm 2.5$	PASS
		VN	10	0.68	0.000367	$\pm 2.5$	PASS
		VN	20	1.26	0.000681	$\pm 2.5$	PASS
		VN	30	4.14	0.002237	$\pm 2.5$	PASS
		VN	40	-1.31	-0.000708	$\pm 2.5$	PASS
		VN	50	1.43	0.000773	$\pm 2.5$	PASS
	MCH	VN	-30	0.63	0.000335	$\pm 2.5$	PASS
		VN	-20	4.94	0.002628	$\pm 2.5$	PASS
		VN	-10	0.28	0.000149	$\pm 2.5$	PASS
		VN	0	2.7	0.001436	$\pm 2.5$	PASS
		VN	10	3.13	0.001665	$\pm 2.5$	PASS
		VN	20	2.94	0.001564	$\pm 2.5$	PASS
		VN	30	0.1	0.000053	$\pm 2.5$	PASS
		VN	40	-0.46	-0.000245	$\pm 2.5$	PASS
	HCH	VN	50	0.27	0.000144	$\pm 2.5$	PASS

		VN	30	4.65	0.002435	$\pm 2.5$	PASS
		VN	40	0.89	0.000466	$\pm 2.5$	PASS
		VN	50	0.37	0.000194	$\pm 2.5$	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	-1.68	-0.000907	$\pm 2.5$	PASS
		VN	TN	-0.84	-0.000454	$\pm 2.5$	PASS
		VH	TN	2.18	0.001177	$\pm 2.5$	PASS
	MCH	VL	TN	-0.77	-0.000410	$\pm 2.5$	PASS
		VN	TN	4.99	0.002654	$\pm 2.5$	PASS
		VH	TN	2.53	0.001346	$\pm 2.5$	PASS
	HCH	VL	TN	4.8	0.002515	$\pm 2.5$	PASS
		VN	TN	-0.36	-0.000189	$\pm 2.5$	PASS
		VH	TN	0.05	0.000026	$\pm 2.5$	PASS
16QAM	LCH	VL	TN	3.7	0.001998	$\pm 2.5$	PASS
		VN	TN	4.7	0.002538	$\pm 2.5$	PASS
		VH	TN	3.62	0.001955	$\pm 2.5$	PASS
	MCH	VL	TN	-1.28	-0.000681	$\pm 2.5$	PASS
		VN	TN	-0.7	-0.000372	$\pm 2.5$	PASS
		VH	TN	-0.29	-0.000154	$\pm 2.5$	PASS
	HCH	VL	TN	4.06	0.002127	$\pm 2.5$	PASS
		VN	TN	0.36	0.000189	$\pm 2.5$	PASS
		VH	TN	-0.99	-0.000519	$\pm 2.5$	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.98	0.001069	$\pm 2.5$	PASS
		VN	-20	2.7	0.001458	$\pm 2.5$	PASS
		VN	-10	1.59	0.000859	$\pm 2.5$	PASS
		VN	0	-0.49	-0.000265	$\pm 2.5$	PASS
		VN	10	0.34	0.000184	$\pm 2.5$	PASS
		VN	20	1.02	0.000551	$\pm 2.5$	PASS
		VN	30	1.78	0.000961	$\pm 2.5$	PASS
		VN	40	4.32	0.002333	$\pm 2.5$	PASS
		VN	50	0.82	0.000443	$\pm 2.5$	PASS
	MCH	VN	-30	0.3	0.000160	$\pm 2.5$	PASS
		VN	-20	2.43	0.001293	$\pm 2.5$	PASS

		VN	-10	-0.18	-0.000096	$\pm 2.5$	PASS
		VN	0	-1.18	-0.000628	$\pm 2.5$	PASS
		VN	10	2.62	0.001394	$\pm 2.5$	PASS
		VN	20	1.61	0.000856	$\pm 2.5$	PASS
		VN	30	4.69	0.002495	$\pm 2.5$	PASS
		VN	40	3.29	0.001750	$\pm 2.5$	PASS
		VN	50	2.39	0.001271	$\pm 2.5$	PASS
		VN	-30	0.12	0.000063	$\pm 2.5$	PASS
		VN	-20	2.4	0.001258	$\pm 2.5$	PASS
		VN	-10	1.06	0.000555	$\pm 2.5$	PASS
	HCH	VN	0	3.03	0.001588	$\pm 2.5$	PASS
		VN	10	3.87	0.002028	$\pm 2.5$	PASS
		VN	20	-0.85	-0.000445	$\pm 2.5$	PASS
		VN	30	1.41	0.000739	$\pm 2.5$	PASS
		VN	40	3.74	0.001960	$\pm 2.5$	PASS
		VN	50	-1.89	-0.000990	$\pm 2.5$	PASS
		VN	-30	-0.14	-0.000076	$\pm 2.5$	PASS
		VN	-20	-0.87	-0.000470	$\pm 2.5$	PASS
		VN	-10	4.09	0.002209	$\pm 2.5$	PASS
		VN	0	1.94	0.001048	$\pm 2.5$	PASS
	LCH	VN	10	2.16	0.001167	$\pm 2.5$	PASS
		VN	20	1.57	0.000848	$\pm 2.5$	PASS
		VN	30	0.09	0.000049	$\pm 2.5$	PASS
		VN	40	-1.55	-0.000837	$\pm 2.5$	PASS
		VN	50	4.49	0.002425	$\pm 2.5$	PASS
		VN	-30	3.57	0.001899	$\pm 2.5$	PASS
		VN	-20	-0.81	-0.000431	$\pm 2.5$	PASS
		VN	-10	1.54	0.000819	$\pm 2.5$	PASS
		VN	0	3.01	0.001601	$\pm 2.5$	PASS
		VN	10	-1.14	-0.000606	$\pm 2.5$	PASS
	MCH	VN	20	1.55	0.000824	$\pm 2.5$	PASS
		VN	30	4.75	0.002527	$\pm 2.5$	PASS
		VN	40	-0.89	-0.000473	$\pm 2.5$	PASS
		VN	50	-0.9	-0.000479	$\pm 2.5$	PASS
		VN	-30	3.53	0.001850	$\pm 2.5$	PASS
		VN	-20	4.69	0.002457	$\pm 2.5$	PASS
		VN	-10	-0.45	-0.000236	$\pm 2.5$	PASS
		VN	0	2.22	0.001163	$\pm 2.5$	PASS
		VN	10	4.62	0.002421	$\pm 2.5$	PASS
		VN	20	-0.35	-0.000183	$\pm 2.5$	PASS
	HCH	VN	30	3.44	0.001802	$\pm 2.5$	PASS

		VN	40	1.62	0.000849	$\pm 2.5$	PASS
		VN	50	2.03	0.001064	$\pm 2.5$	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	1.49	0.000804	$\pm 2.5$	PASS
		VN	TN	1.16	0.000626	$\pm 2.5$	PASS
		VH	TN	-0.15	-0.000081	$\pm 2.5$	PASS
	MCH	VL	TN	0.49	0.000261	$\pm 2.5$	PASS
		VN	TN	-0.16	-0.000085	$\pm 2.5$	PASS
		VH	TN	-0.54	-0.000287	$\pm 2.5$	PASS
	HCH	VL	TN	1.27	0.000666	$\pm 2.5$	PASS
		VN	TN	3.27	0.001714	$\pm 2.5$	PASS
		VH	TN	0.71	0.000372	$\pm 2.5$	PASS
16QAM	LCH	VL	TN	1.48	0.000799	$\pm 2.5$	PASS
		VN	TN	-0.9	-0.000486	$\pm 2.5$	PASS
		VH	TN	-0.99	-0.000534	$\pm 2.5$	PASS
	MCH	VL	TN	-1.83	-0.000973	$\pm 2.5$	PASS
		VN	TN	2.44	0.001298	$\pm 2.5$	PASS
		VH	TN	3.09	0.001644	$\pm 2.5$	PASS
	HCH	VL	TN	-0.33	-0.000173	$\pm 2.5$	PASS
		VN	TN	0.54	0.000283	$\pm 2.5$	PASS
		VH	TN	3.62	0.001898	$\pm 2.5$	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.2	-0.000108	$\pm 2.5$	PASS
		VN	-20	3.75	0.002024	$\pm 2.5$	PASS
		VN	-10	4.35	0.002348	$\pm 2.5$	PASS
		VN	0	1.63	0.000880	$\pm 2.5$	PASS
		VN	10	-1.49	-0.000804	$\pm 2.5$	PASS
		VN	20	0.53	0.000286	$\pm 2.5$	PASS
		VN	30	1.11	0.000599	$\pm 2.5$	PASS
		VN	40	1.02	0.000551	$\pm 2.5$	PASS
		VN	50	2.81	0.001517	$\pm 2.5$	PASS
	MCH	VN	-30	3.63	0.001931	$\pm 2.5$	PASS
		VN	-20	4.54	0.002415	$\pm 2.5$	PASS
		VN	-10	4.46	0.002372	$\pm 2.5$	PASS

		VN	0	-1.48	-0.000787	$\pm 2.5$	PASS
		VN	10	0.28	0.000149	$\pm 2.5$	PASS
		VN	20	0.16	0.000085	$\pm 2.5$	PASS
		VN	30	0.91	0.000484	$\pm 2.5$	PASS
		VN	40	2.11	0.001122	$\pm 2.5$	PASS
		VN	50	-0.76	-0.000404	$\pm 2.5$	PASS
		VN	-30	-1.49	-0.000781	$\pm 2.5$	PASS
		VN	-20	-0.54	-0.000283	$\pm 2.5$	PASS
		VN	-10	0.69	0.000362	$\pm 2.5$	PASS
		VN	0	1.64	0.000860	$\pm 2.5$	PASS
		VN	10	-0.05	-0.000026	$\pm 2.5$	PASS
		VN	20	0.16	0.000084	$\pm 2.5$	PASS
		VN	30	3.84	0.002013	$\pm 2.5$	PASS
		VN	40	4.03	0.002113	$\pm 2.5$	PASS
		VN	50	0.33	0.000173	$\pm 2.5$	PASS
	HCH	VN	-30	1.98	0.001069	$\pm 2.5$	PASS
		VN	-20	0.55	0.000297	$\pm 2.5$	PASS
		VN	-10	1.67	0.000901	$\pm 2.5$	PASS
		VN	0	2.26	0.001220	$\pm 2.5$	PASS
		VN	10	1.15	0.000621	$\pm 2.5$	PASS
		VN	20	4.05	0.002186	$\pm 2.5$	PASS
		VN	30	4.68	0.002526	$\pm 2.5$	PASS
		VN	40	2.6	0.001404	$\pm 2.5$	PASS
		VN	50	1.35	0.000729	$\pm 2.5$	PASS
	LCH	VN	-30	3.68	0.001957	$\pm 2.5$	PASS
		VN	-20	-0.36	-0.000191	$\pm 2.5$	PASS
		VN	-10	4.42	0.002351	$\pm 2.5$	PASS
		VN	0	0.2	0.000106	$\pm 2.5$	PASS
		VN	10	2.91	0.001548	$\pm 2.5$	PASS
		VN	20	2.99	0.001590	$\pm 2.5$	PASS
		VN	30	-0.18	-0.000096	$\pm 2.5$	PASS
		VN	40	1.79	0.000952	$\pm 2.5$	PASS
		VN	50	1.02	0.000543	$\pm 2.5$	PASS
	MCH	VN	-30	4.57	0.002396	$\pm 2.5$	PASS
		VN	-20	-0.63	-0.000330	$\pm 2.5$	PASS
		VN	-10	4.67	0.002448	$\pm 2.5$	PASS
		VN	0	3.76	0.001971	$\pm 2.5$	PASS
		VN	10	0.28	0.000147	$\pm 2.5$	PASS
		VN	20	-1.97	-0.001033	$\pm 2.5$	PASS
		VN	30	-0.32	-0.000168	$\pm 2.5$	PASS
		VN	40	1.65	0.000865	$\pm 2.5$	PASS

		VN	50	2.56	0.001342	$\pm 2.5$	PASS
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## 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	-1.67	-0.000900	$\pm 2.5$	PASS
		VN	TN	3.63	0.001957	$\pm 2.5$	PASS
		VH	TN	-0.67	-0.000361	$\pm 2.5$	PASS
	MCH	VL	TN	-0.6	-0.000319	$\pm 2.5$	PASS
		VN	TN	-1.07	-0.000569	$\pm 2.5$	PASS
		VH	TN	4.8	0.002553	$\pm 2.5$	PASS
	HCH	VL	TN	-1.86	-0.000976	$\pm 2.5$	PASS
		VN	TN	0.99	0.000520	$\pm 2.5$	PASS
		VH	TN	-1.29	-0.000677	$\pm 2.5$	PASS
16QAM	LCH	VL	TN	4.66	0.002512	$\pm 2.5$	PASS
		VN	TN	2.06	0.001111	$\pm 2.5$	PASS
		VH	TN	2.29	0.001235	$\pm 2.5$	PASS
	MCH	VL	TN	0.61	0.000324	$\pm 2.5$	PASS
		VN	TN	2.84	0.001511	$\pm 2.5$	PASS
		VH	TN	4.44	0.002362	$\pm 2.5$	PASS
	HCH	VL	TN	0.71	0.000373	$\pm 2.5$	PASS
		VN	TN	2.37	0.001244	$\pm 2.5$	PASS
		VH	TN	0.6	0.000315	$\pm 2.5$	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	-0.41	-0.000221	$\pm 2.5$	PASS
		VN	-20	0.39	0.000210	$\pm 2.5$	PASS
		VN	-10	1.26	0.000679	$\pm 2.5$	PASS
		VN	0	2.78	0.001499	$\pm 2.5$	PASS
		VN	10	-0.8	-0.000431	$\pm 2.5$	PASS
		VN	20	1.81	0.000976	$\pm 2.5$	PASS
		VN	30	-0.97	-0.000523	$\pm 2.5$	PASS
		VN	40	2.07	0.001116	$\pm 2.5$	PASS
		VN	50	3.1	0.001671	$\pm 2.5$	PASS
	MCH	VN	-30	2.59	0.001378	$\pm 2.5$	PASS
		VN	-20	0.86	0.000457	$\pm 2.5$	PASS
		VN	-10	2.27	0.001207	$\pm 2.5$	PASS
		VN	0	4.11	0.002186	$\pm 2.5$	PASS

		VN	10	0	0.000000	$\pm 2.5$	PASS
		VN	20	-0.03	-0.000016	$\pm 2.5$	PASS
		VN	30	4.6	0.002447	$\pm 2.5$	PASS
		VN	40	1.33	0.000707	$\pm 2.5$	PASS
		VN	50	3.25	0.001729	$\pm 2.5$	PASS
		VN	-30	-0.15	-0.000079	$\pm 2.5$	PASS
		VN	-20	3.03	0.001591	$\pm 2.5$	PASS
		VN	-10	-1.5	-0.000787	$\pm 2.5$	PASS
		VN	0	-1.92	-0.001008	$\pm 2.5$	PASS
		VN	10	1.33	0.000698	$\pm 2.5$	PASS
		VN	20	3.3	0.001732	$\pm 2.5$	PASS
		VN	30	-0.95	-0.000499	$\pm 2.5$	PASS
		VN	40	-0.98	-0.000514	$\pm 2.5$	PASS
		VN	50	-0.36	-0.000189	$\pm 2.5$	PASS
		VN	-30	-0.07	-0.000038	$\pm 2.5$	PASS
		VN	-20	-1.33	-0.000717	$\pm 2.5$	PASS
		VN	-10	-0.24	-0.000129	$\pm 2.5$	PASS
		VN	0	-0.82	-0.000442	$\pm 2.5$	PASS
		VN	10	2.59	0.001396	$\pm 2.5$	PASS
		VN	20	-1.42	-0.000765	$\pm 2.5$	PASS
		VN	30	3.95	0.002129	$\pm 2.5$	PASS
		VN	40	3.14	0.001693	$\pm 2.5$	PASS
		VN	50	-0.29	-0.000156	$\pm 2.5$	PASS
		VN	-30	4.07	0.002165	$\pm 2.5$	PASS
		VN	-20	-1.82	-0.000968	$\pm 2.5$	PASS
		VN	-10	2.6	0.001383	$\pm 2.5$	PASS
		VN	0	1.36	0.000723	$\pm 2.5$	PASS
		VN	10	-1.07	-0.000569	$\pm 2.5$	PASS
		VN	20	4.47	0.002378	$\pm 2.5$	PASS
		VN	30	-1.56	-0.000830	$\pm 2.5$	PASS
		VN	40	-0.13	-0.000069	$\pm 2.5$	PASS
		VN	50	2	0.001064	$\pm 2.5$	PASS
		VN	-30	0.75	0.000394	$\pm 2.5$	PASS
		VN	-20	4.55	0.002388	$\pm 2.5$	PASS
		VN	-10	-0.92	-0.000483	$\pm 2.5$	PASS
		VN	0	2.37	0.001244	$\pm 2.5$	PASS
		VN	10	1.32	0.000693	$\pm 2.5$	PASS
		VN	20	-1.61	-0.000845	$\pm 2.5$	PASS
		VN	30	1.29	0.000677	$\pm 2.5$	PASS
		VN	40	3.82	0.002005	$\pm 2.5$	PASS
		VN	50	2.13	0.001118	$\pm 2.5$	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	1.82	0.000980	± 2.5	PASS
		VN	TN	0.68	0.000366	± 2.5	PASS
		VH	TN	1.7	0.000915	± 2.5	PASS
	MCH	VL	TN	-1.72	-0.000915	± 2.5	PASS
		VN	TN	3.61	0.001920	± 2.5	PASS
		VH	TN	-1.61	-0.000856	± 2.5	PASS
	HCH	VL	TN	-1.52	-0.000799	± 2.5	PASS
		VN	TN	1.36	0.000715	± 2.5	PASS
		VH	TN	0.46	0.000242	± 2.5	PASS
16QAM	LCH	VL	TN	-0.79	-0.000425	± 2.5	PASS
		VN	TN	2.61	0.001405	± 2.5	PASS
		VH	TN	4.38	0.002358	± 2.5	PASS
	MCH	VL	TN	-0.97	-0.000516	± 2.5	PASS
		VN	TN	0.15	0.000080	± 2.5	PASS
		VH	TN	-2	-0.001064	± 2.5	PASS
	HCH	VL	TN	-0.46	-0.000242	± 2.5	PASS
		VN	TN	-0.7	-0.000368	± 2.5	PASS
		VH	TN	2.52	0.001325	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.16	-0.000086	± 2.5	PASS
		VN	-20	3.05	0.001642	± 2.5	PASS
		VN	-10	1.26	0.000678	± 2.5	PASS
		VN	0	-0.89	-0.000479	± 2.5	PASS
		VN	10	0.86	0.000463	± 2.5	PASS
		VN	20	1.78	0.000958	± 2.5	PASS
		VN	30	-0.52	-0.000280	± 2.5	PASS
		VN	40	-1.12	-0.000603	± 2.5	PASS
		VN	50	-1.64	-0.000883	± 2.5	PASS
	MCH	VN	-30	4.98	0.002649	± 2.5	PASS
		VN	-20	2.58	0.001372	± 2.5	PASS
		VN	-10	3.51	0.001867	± 2.5	PASS
		VN	0	2.33	0.001239	± 2.5	PASS
		VN	10	-1.69	-0.000899	± 2.5	PASS
		VN	20	0.66	0.000351	± 2.5	PASS

	HCH	VN	30	-0.51	-0.000271	$\pm 2.5$	PASS
		VN	40	-1.14	-0.000606	$\pm 2.5$	PASS
		VN	50	2.1	0.001117	$\pm 2.5$	PASS
		VN	-30	-1.5	-0.000788	$\pm 2.5$	PASS
		VN	-20	-0.89	-0.000468	$\pm 2.5$	PASS
		VN	-10	4.67	0.002455	$\pm 2.5$	PASS
		VN	0	4.39	0.002307	$\pm 2.5$	PASS
		VN	10	3.57	0.001876	$\pm 2.5$	PASS
		VN	20	-0.43	-0.000226	$\pm 2.5$	PASS
		VN	30	3.48	0.001829	$\pm 2.5$	PASS
16QAM	LCH	VN	40	0.08	0.000042	$\pm 2.5$	PASS
		VN	50	1.06	0.000557	$\pm 2.5$	PASS
		VN	-30	3.26	0.001755	$\pm 2.5$	PASS
		VN	-20	2.7	0.001454	$\pm 2.5$	PASS
		VN	-10	-0.94	-0.000506	$\pm 2.5$	PASS
		VN	0	3.47	0.001868	$\pm 2.5$	PASS
		VN	10	1.53	0.000824	$\pm 2.5$	PASS
		VN	20	1.27	0.000684	$\pm 2.5$	PASS
		VN	30	2.68	0.001443	$\pm 2.5$	PASS
	MCH	VN	40	3.85	0.002073	$\pm 2.5$	PASS
		VN	50	2.92	0.001572	$\pm 2.5$	PASS
		VN	-30	0.44	0.000234	$\pm 2.5$	PASS
		VN	-20	1.03	0.000548	$\pm 2.5$	PASS
		VN	-10	-0.77	-0.000410	$\pm 2.5$	PASS
		VN	0	4.07	0.002165	$\pm 2.5$	PASS
		VN	10	0.93	0.000495	$\pm 2.5$	PASS
		VN	20	1.92	0.001021	$\pm 2.5$	PASS
		VN	30	1.79	0.000952	$\pm 2.5$	PASS
		VN	40	4.28	0.002277	$\pm 2.5$	PASS
	HCH	VN	50	-0.61	-0.000324	$\pm 2.5$	PASS
		VN	-30	2.69	0.001414	$\pm 2.5$	PASS
		VN	-20	1.71	0.000899	$\pm 2.5$	PASS
		VN	-10	-0.75	-0.000394	$\pm 2.5$	PASS
		VN	0	3.42	0.001798	$\pm 2.5$	PASS
		VN	10	1.72	0.000904	$\pm 2.5$	PASS
		VN	20	3.66	0.001924	$\pm 2.5$	PASS
		VN	30	4.41	0.002318	$\pm 2.5$	PASS
		VN	40	-0.12	-0.000063	$\pm 2.5$	PASS
		VN	50	2.7	0.001419	$\pm 2.5$	PASS

## 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	-0.53	-0.000285	± 2.5	PASS
		VN	TN	-0.06	-0.000032	± 2.5	PASS
		VH	TN	-0.76	-0.000409	± 2.5	PASS
	MCH	VL	TN	4.82	0.002564	± 2.5	PASS
		VN	TN	2.68	0.001426	± 2.5	PASS
		VH	TN	2.09	0.001112	± 2.5	PASS
	HCH	VL	TN	2.85	0.001500	± 2.5	PASS
		VN	TN	1.81	0.000953	± 2.5	PASS
		VH	TN	2.71	0.001426	± 2.5	PASS
16QAM	LCH	VL	TN	2.07	0.001113	± 2.5	PASS
		VN	TN	3.11	0.001672	± 2.5	PASS
		VH	TN	3.3	0.001774	± 2.5	PASS
	MCH	VL	TN	3.79	0.002016	± 2.5	PASS
		VN	TN	1.22	0.000649	± 2.5	PASS
		VH	TN	0.15	0.000080	± 2.5	PASS
	HCH	VL	TN	3.88	0.002042	± 2.5	PASS
		VN	TN	3.99	0.002100	± 2.5	PASS
		VH	TN	2.68	0.001411	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.29	-0.000694	± 2.5	PASS
		VN	-20	1.99	0.001070	± 2.5	PASS
		VN	-10	1.21	0.000651	± 2.5	PASS
		VN	0	0.36	0.000194	± 2.5	PASS
		VN	10	4.01	0.002156	± 2.5	PASS
		VN	20	3.89	0.002091	± 2.5	PASS
		VN	30	2.69	0.001446	± 2.5	PASS
		VN	40	-0.87	-0.000468	± 2.5	PASS
		VN	50	4.7	0.002527	± 2.5	PASS
	MCH	VN	-30	-1.48	-0.000787	± 2.5	PASS
		VN	-20	1.98	0.001053	± 2.5	PASS
		VN	-10	4.29	0.002282	± 2.5	PASS
		VN	0	-0.35	-0.000186	± 2.5	PASS
		VN	10	4.4	0.002340	± 2.5	PASS
		VN	20	3.68	0.001957	± 2.5	PASS

		VN	30	3.05	0.001622	$\pm 2.5$	PASS
		VN	40	2.78	0.001479	$\pm 2.5$	PASS
		VN	50	4.72	0.002511	$\pm 2.5$	PASS
	HCH	VN	-30	0.1	0.000053	$\pm 2.5$	PASS
		VN	-20	-0.4	-0.000211	$\pm 2.5$	PASS
		VN	-10	-1.07	-0.000563	$\pm 2.5$	PASS
		VN	0	-1.36	-0.000716	$\pm 2.5$	PASS
		VN	10	-1.33	-0.000700	$\pm 2.5$	PASS
		VN	20	1.37	0.000721	$\pm 2.5$	PASS
		VN	30	3.9	0.002053	$\pm 2.5$	PASS
16QAM	LCH	VN	40	-0.68	-0.000358	$\pm 2.5$	PASS
		VN	50	3.23	0.001700	$\pm 2.5$	PASS
	MCH	VN	-30	1.59	0.000855	$\pm 2.5$	PASS
		VN	-20	-0.5	-0.000269	$\pm 2.5$	PASS
		VN	-10	3.29	0.001769	$\pm 2.5$	PASS
		VN	0	-0.71	-0.000382	$\pm 2.5$	PASS
		VN	10	3.67	0.001973	$\pm 2.5$	PASS
		VN	20	1.22	0.000656	$\pm 2.5$	PASS
		VN	30	-0.66	-0.000355	$\pm 2.5$	PASS
		VN	40	1.66	0.000892	$\pm 2.5$	PASS
		VN	50	0.28	0.000151	$\pm 2.5$	PASS
	HCH	VN	-30	-1.08	-0.000574	$\pm 2.5$	PASS
		VN	-20	4.59	0.002441	$\pm 2.5$	PASS
		VN	-10	-1.89	-0.001005	$\pm 2.5$	PASS
		VN	0	0.51	0.000271	$\pm 2.5$	PASS
		VN	10	2.06	0.001096	$\pm 2.5$	PASS
		VN	20	4.4	0.002340	$\pm 2.5$	PASS
		VN	30	-1.9	-0.001011	$\pm 2.5$	PASS
		VN	40	-0.14	-0.000074	$\pm 2.5$	PASS
		VN	50	-1.88	-0.001000	$\pm 2.5$	PASS