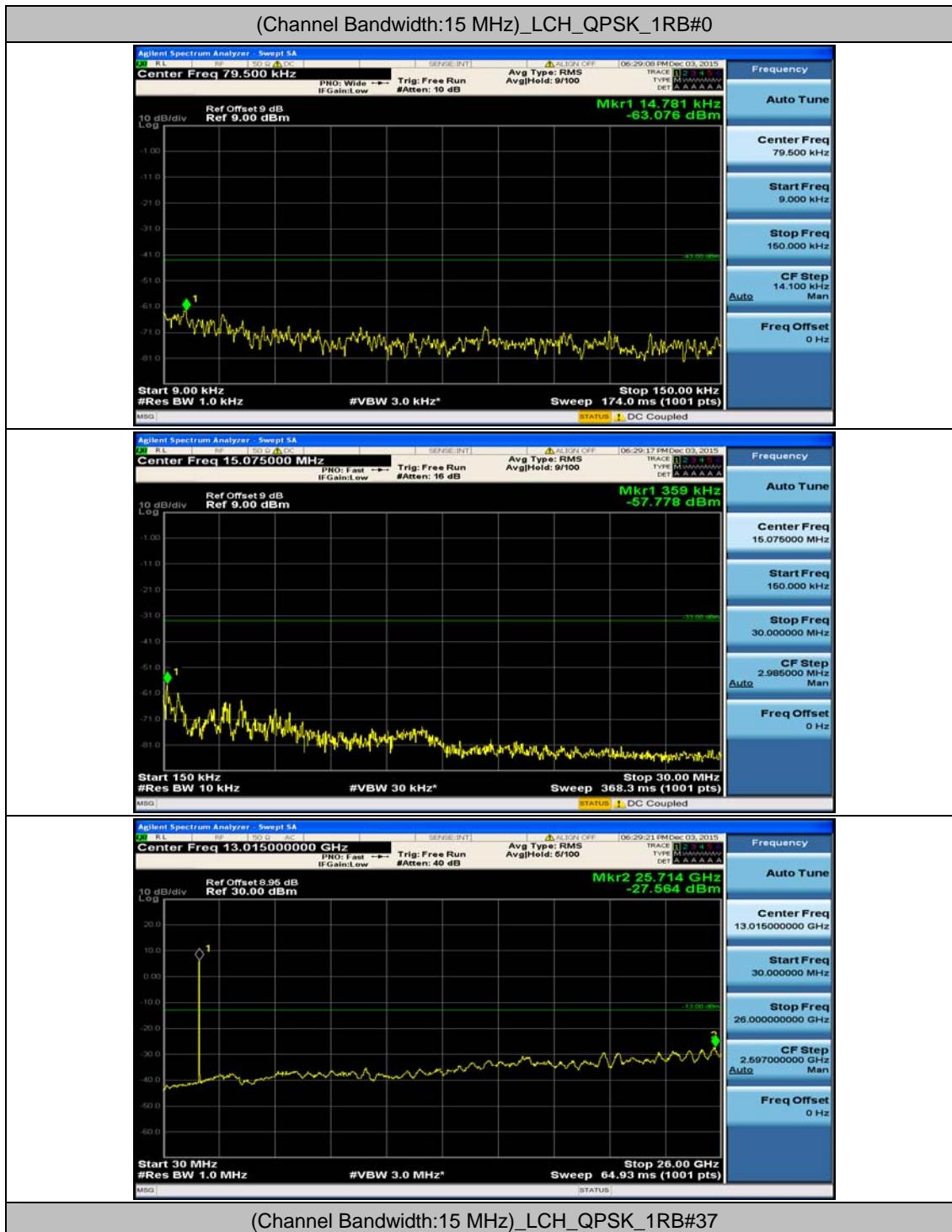
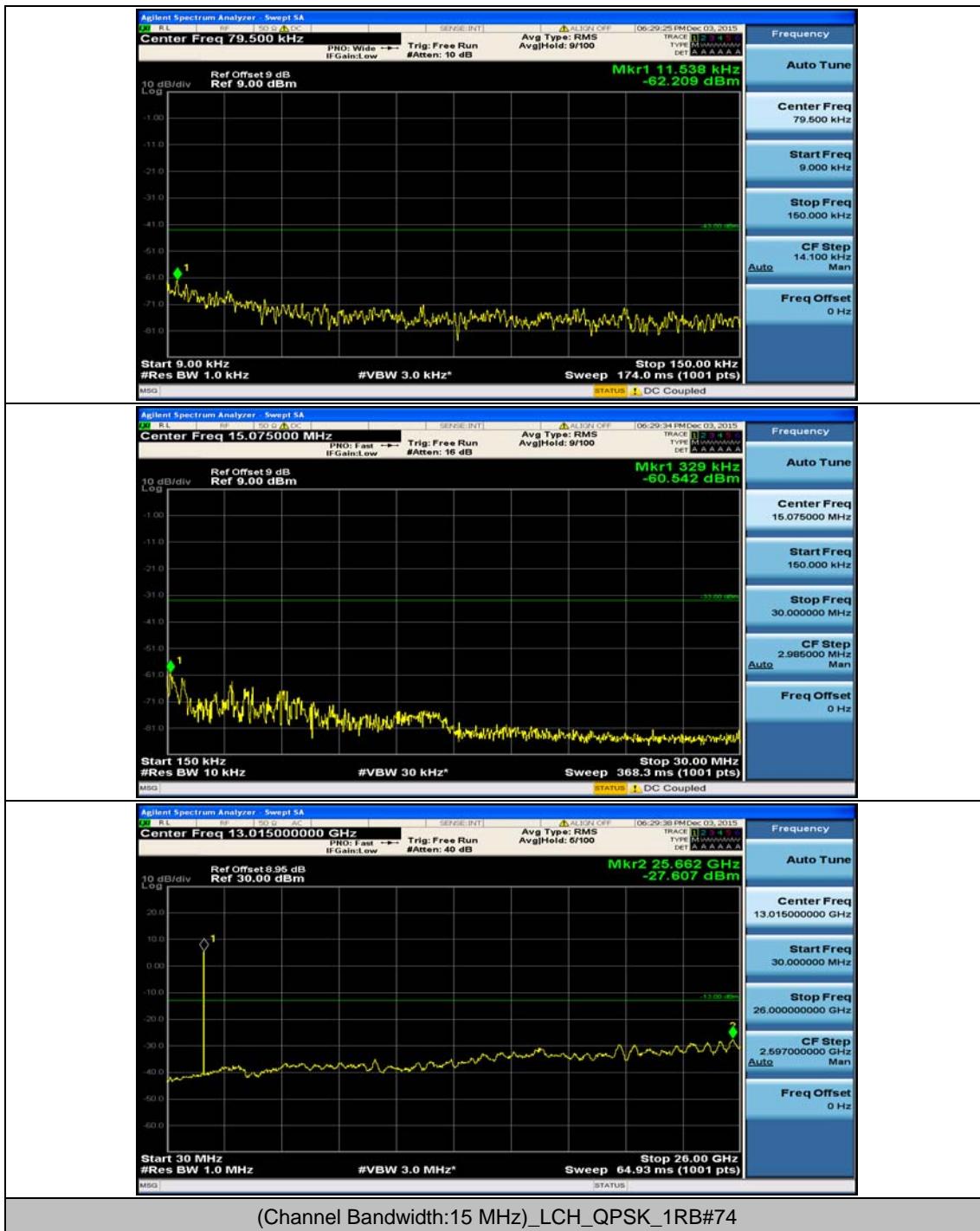
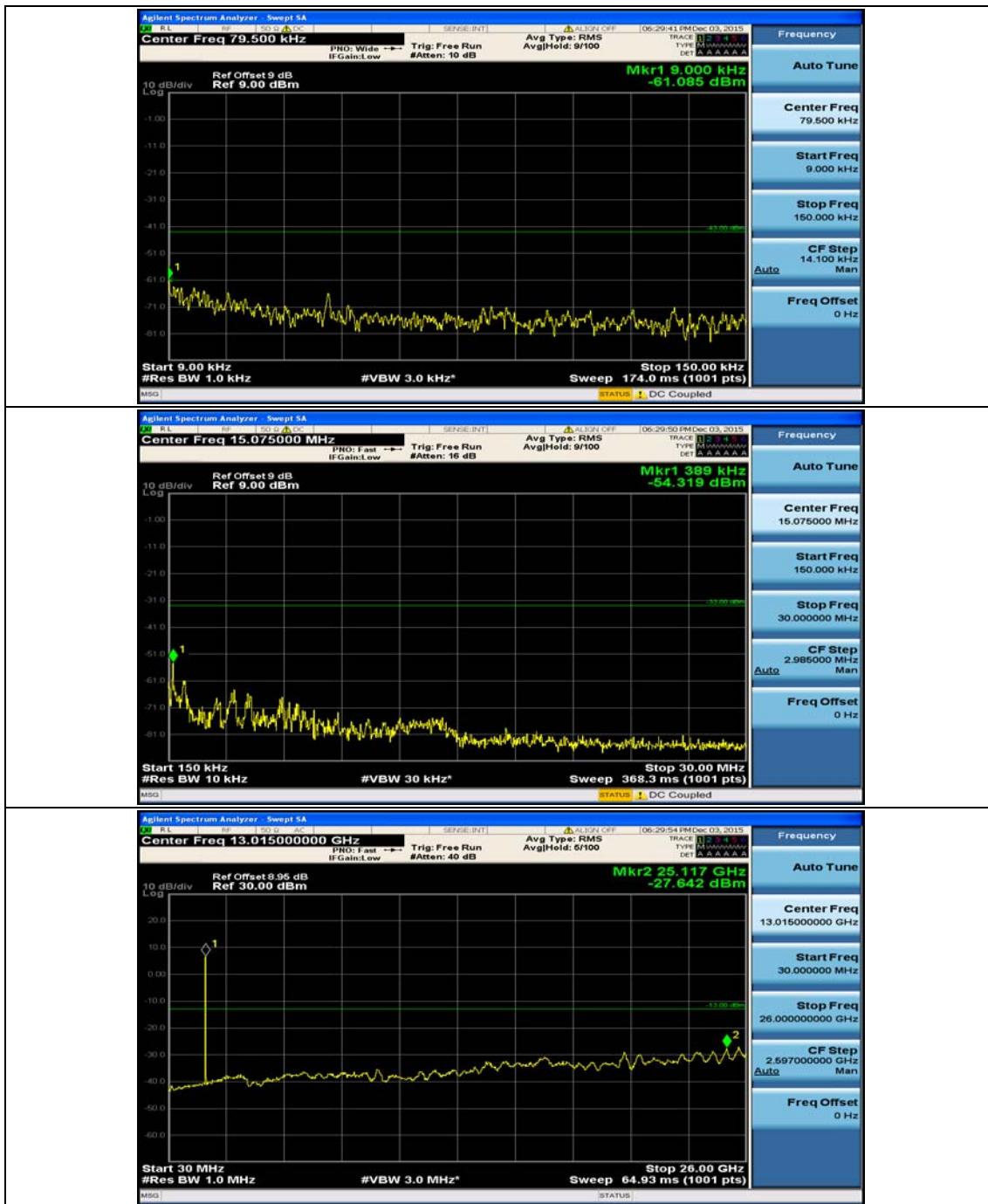
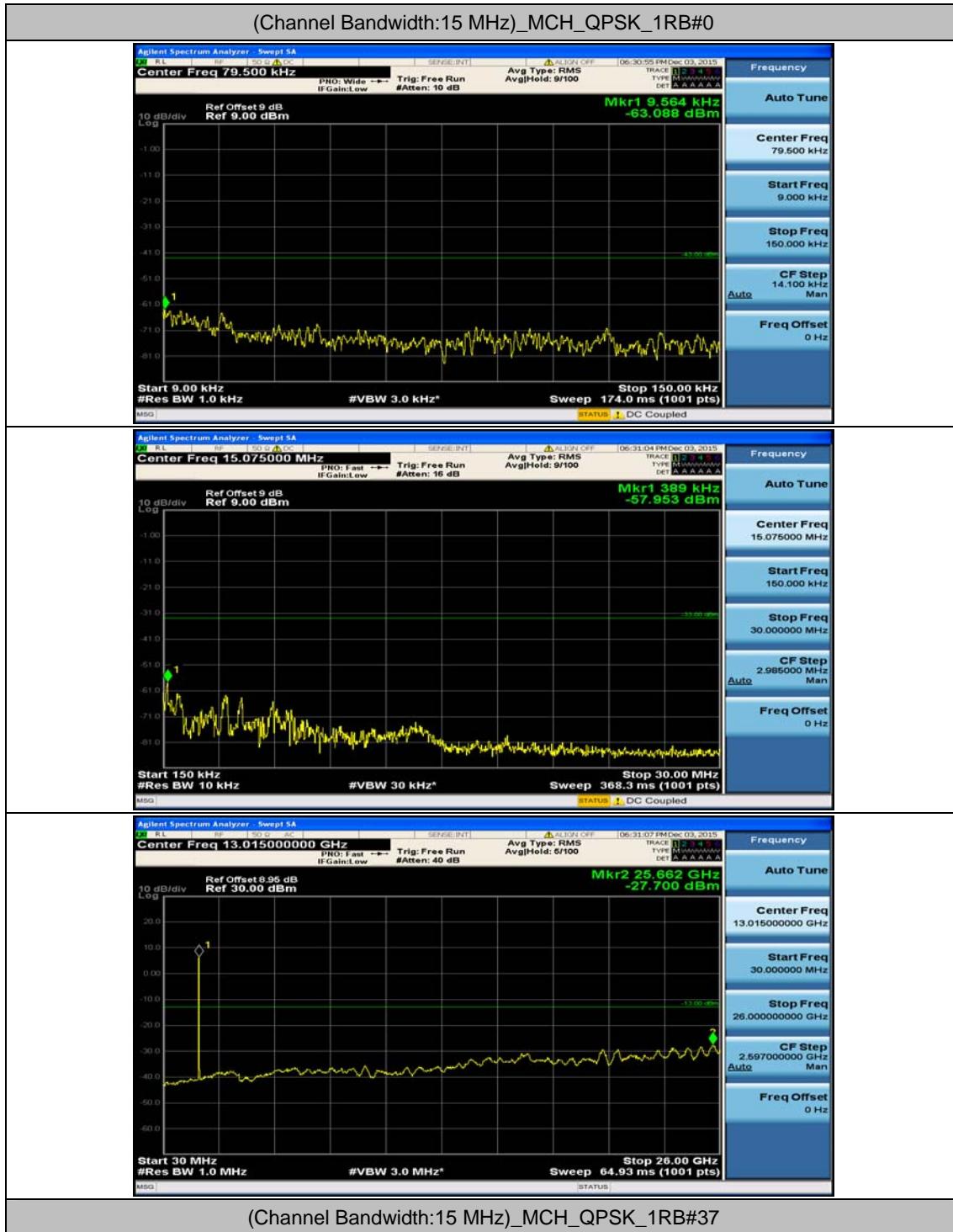


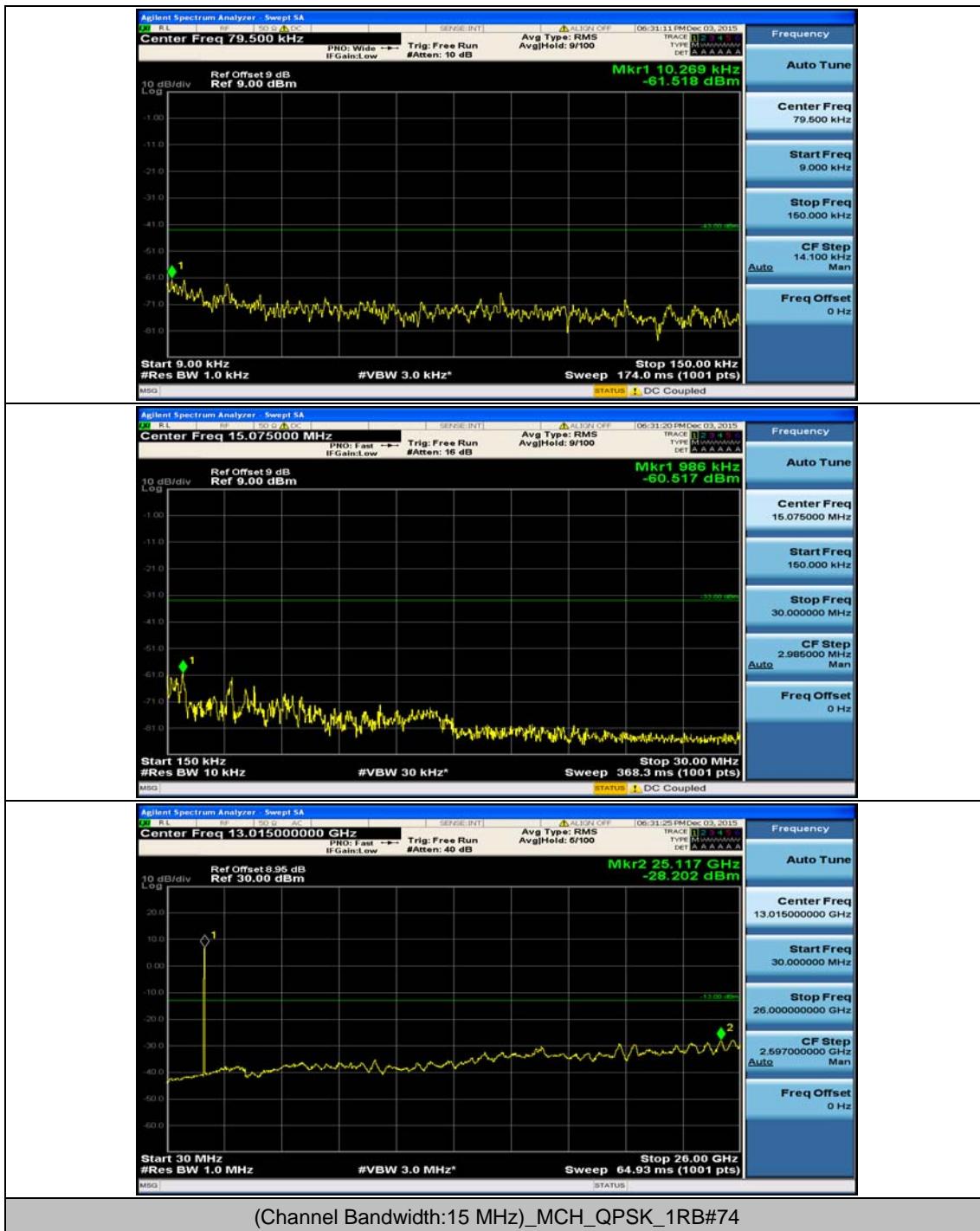
## Channel Bandwidth: 15 MHz

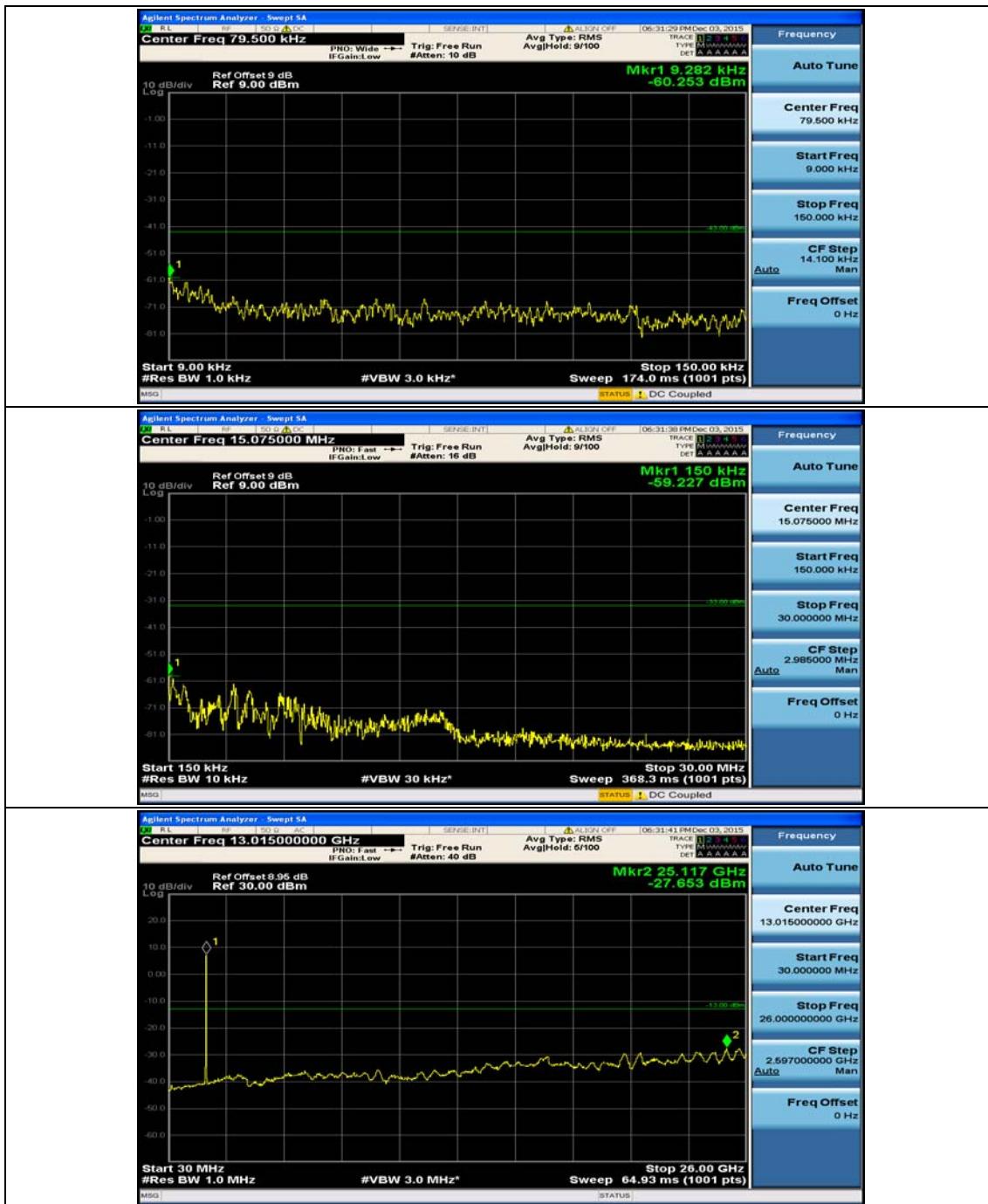


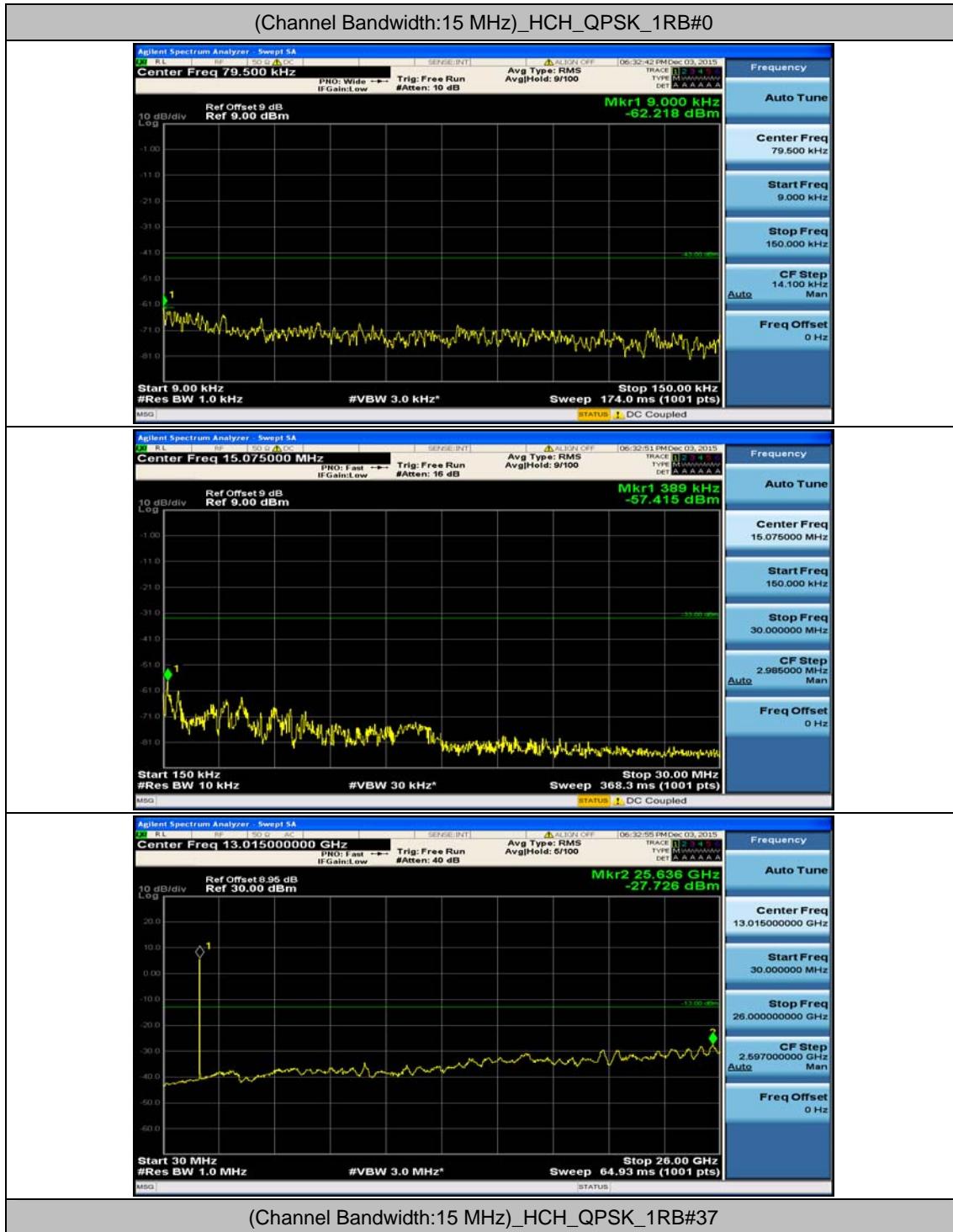


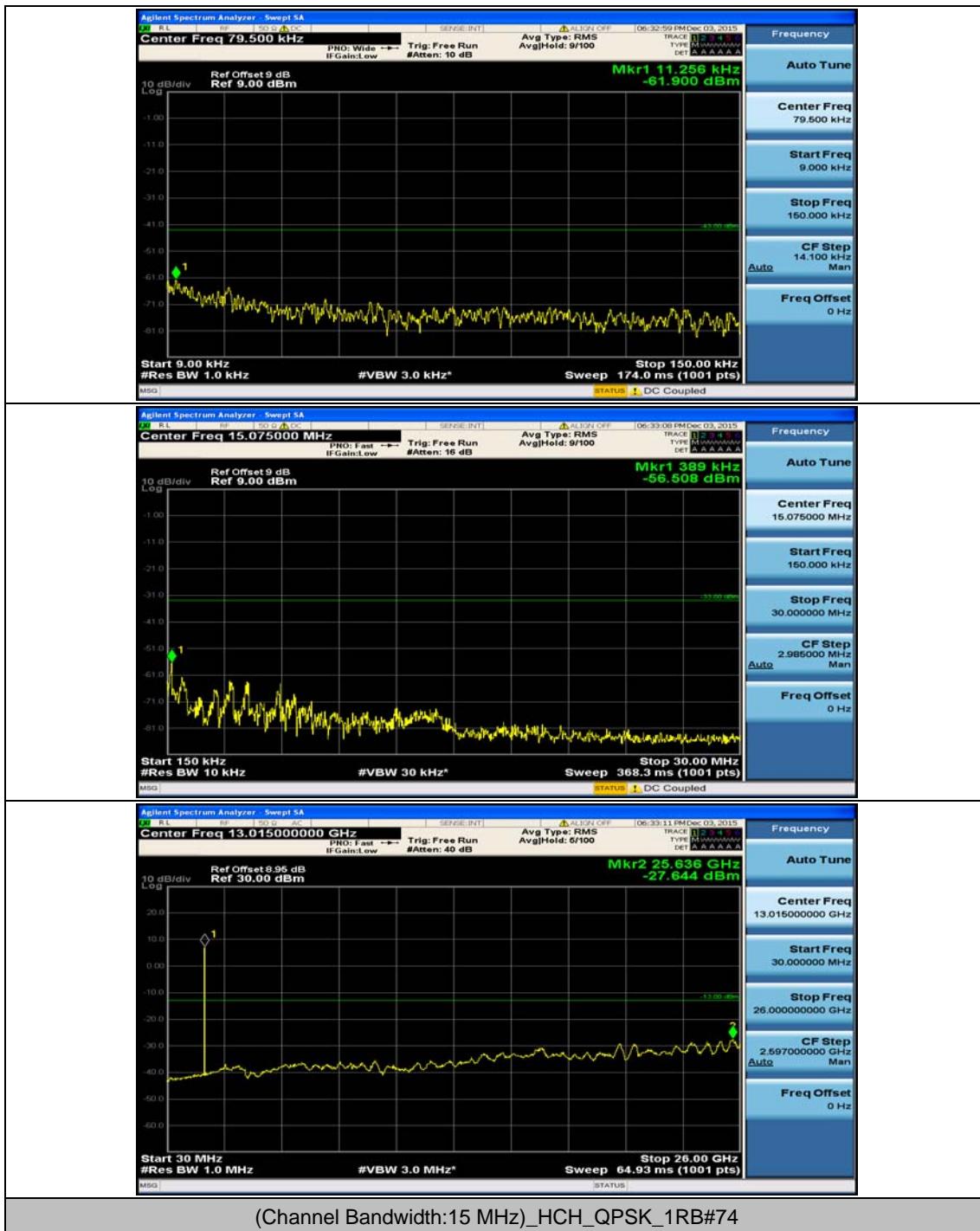


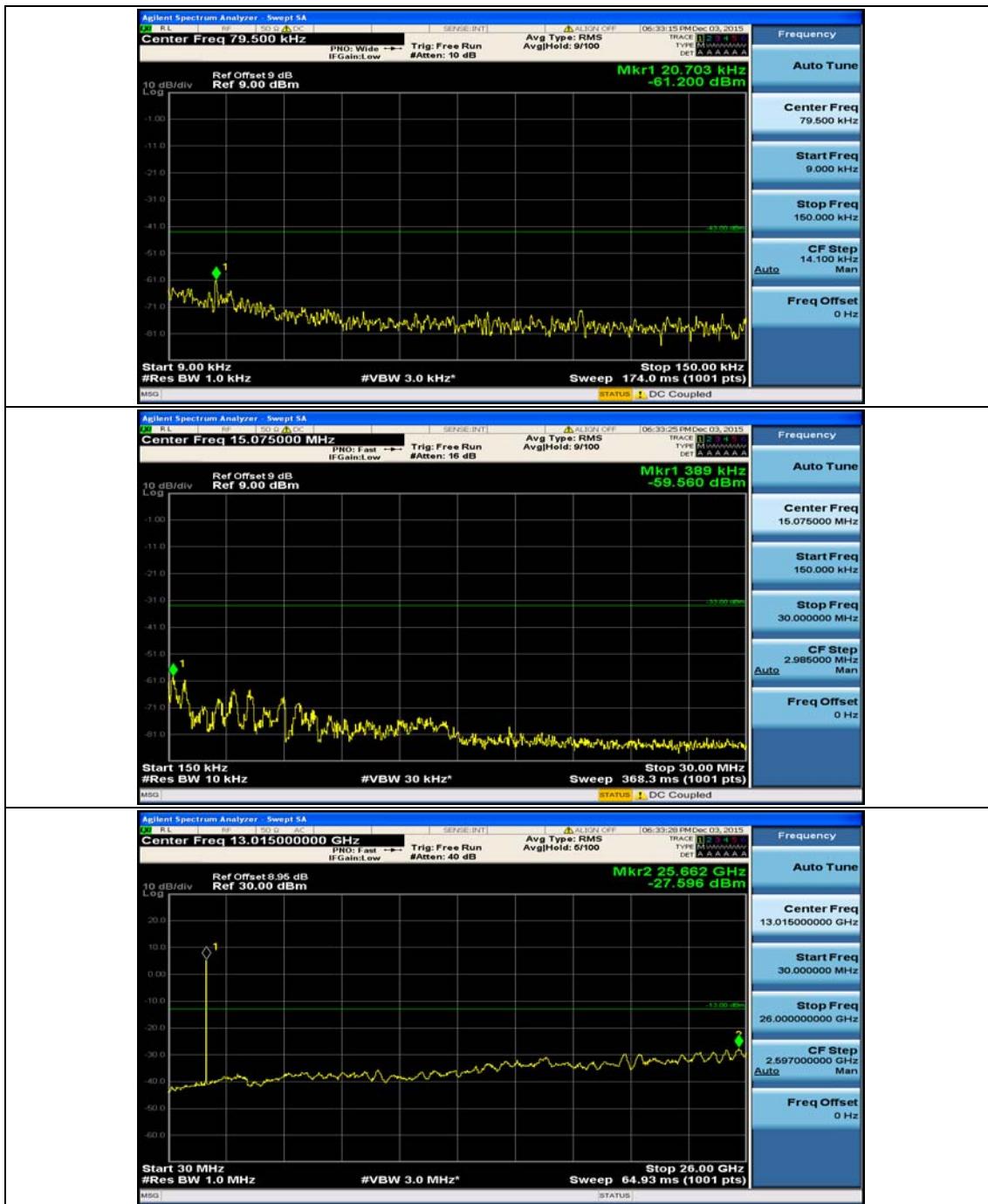


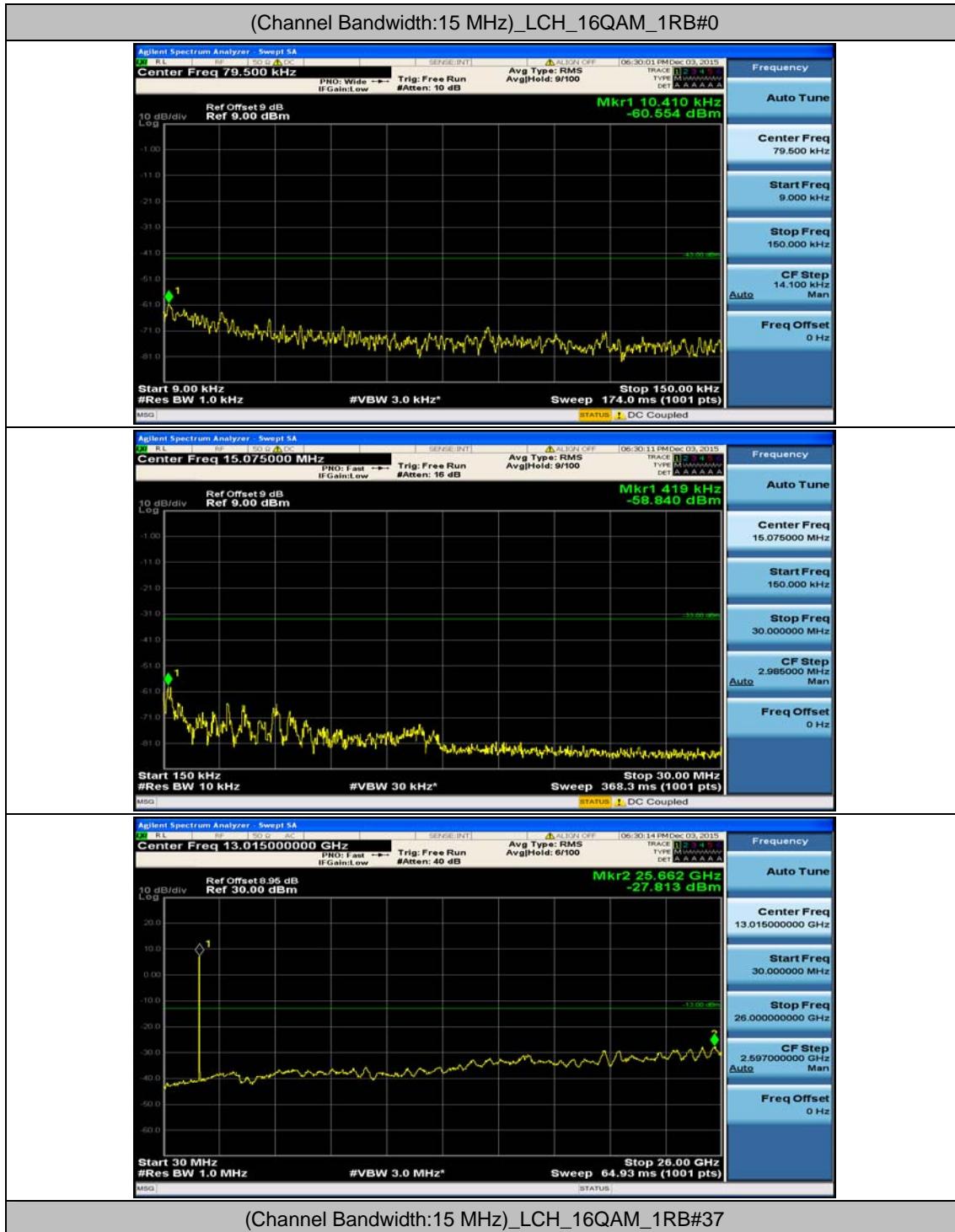


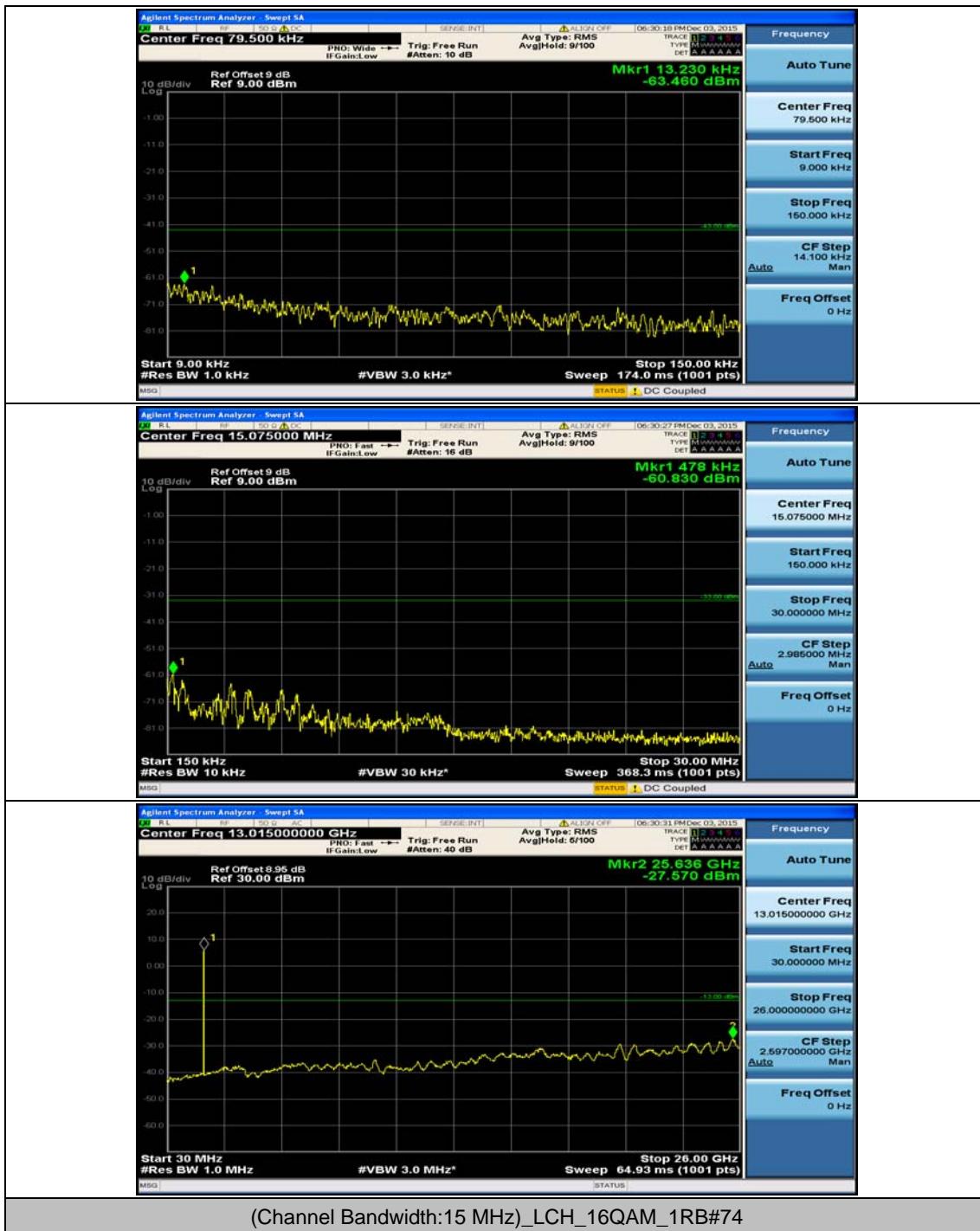


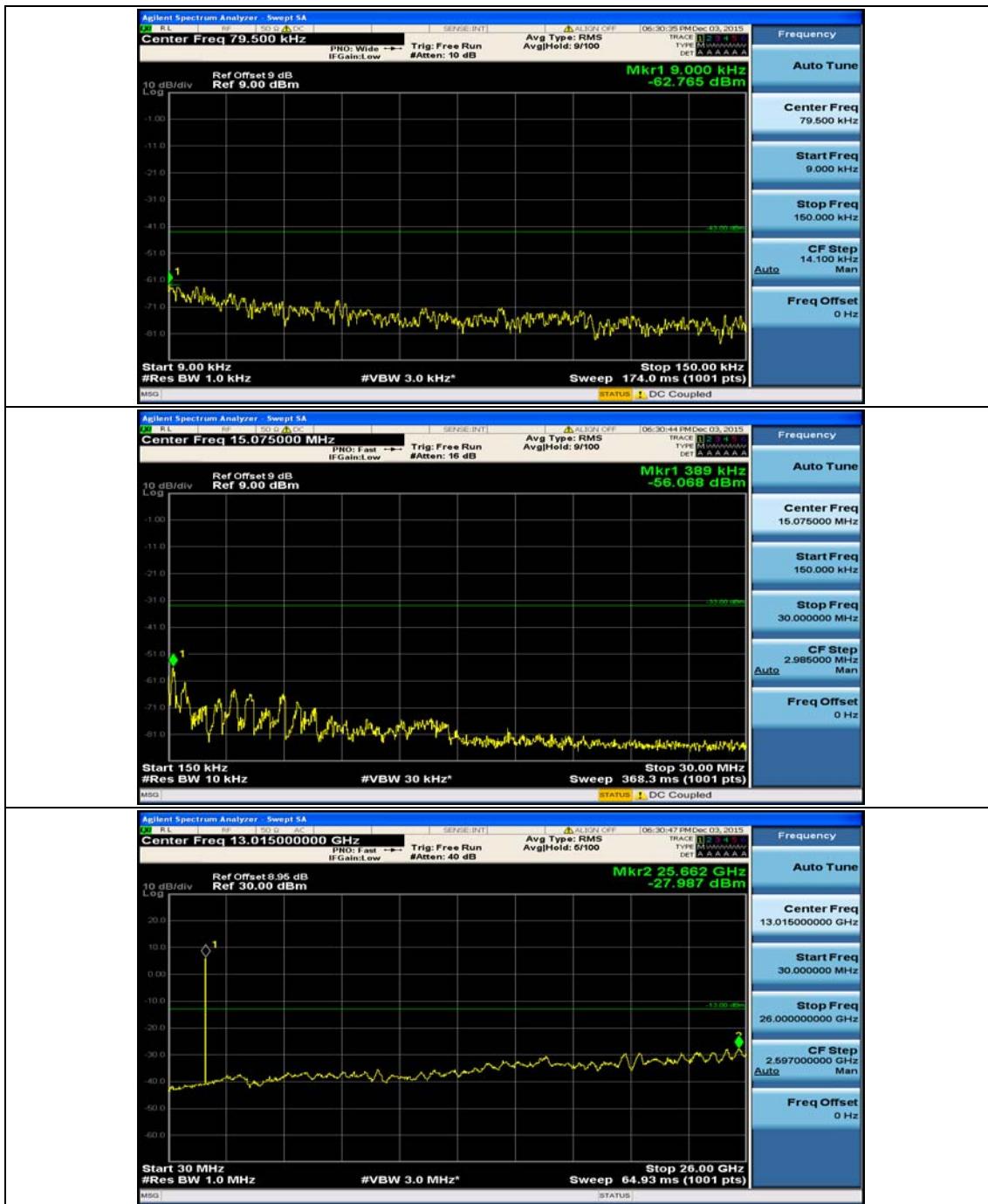


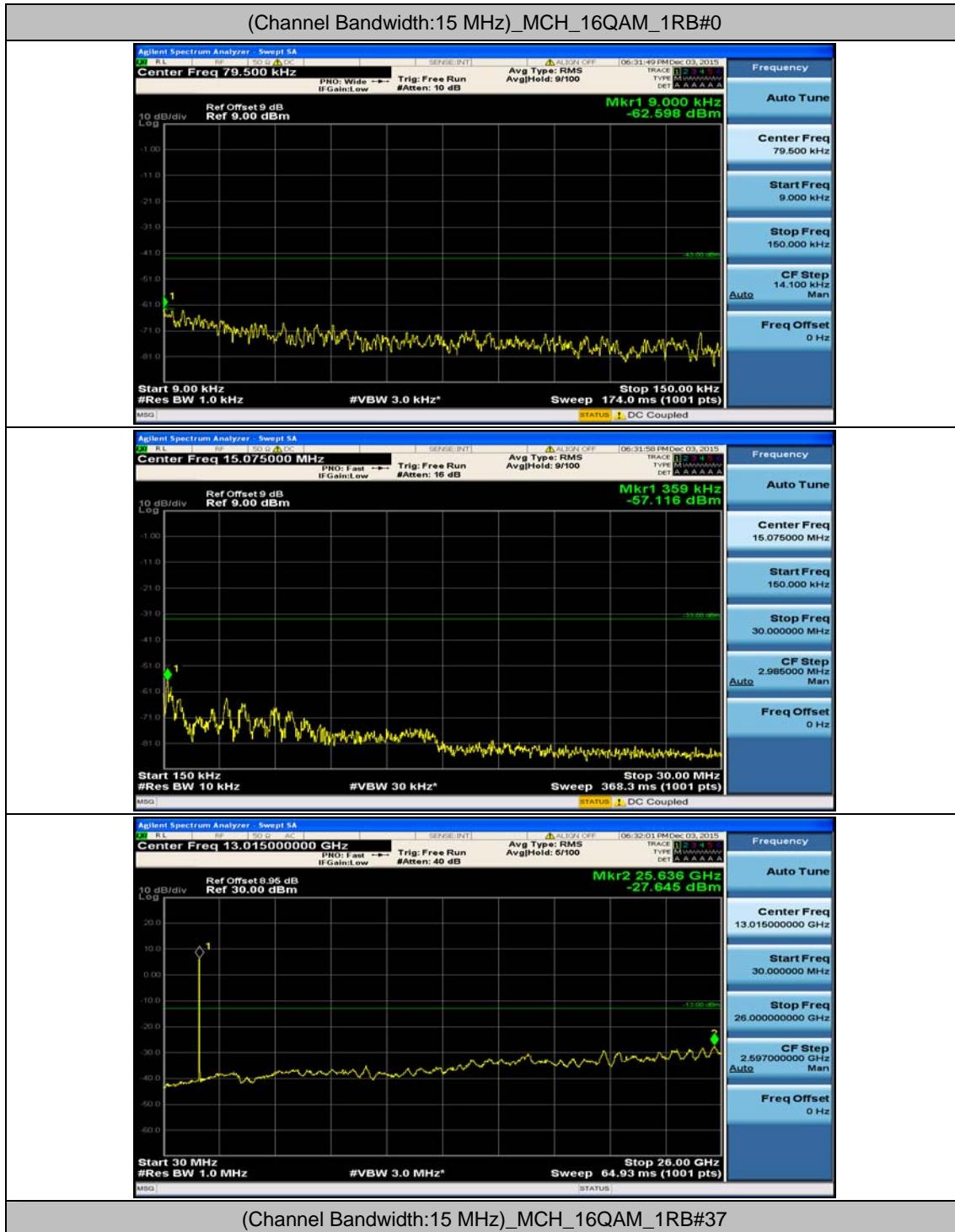


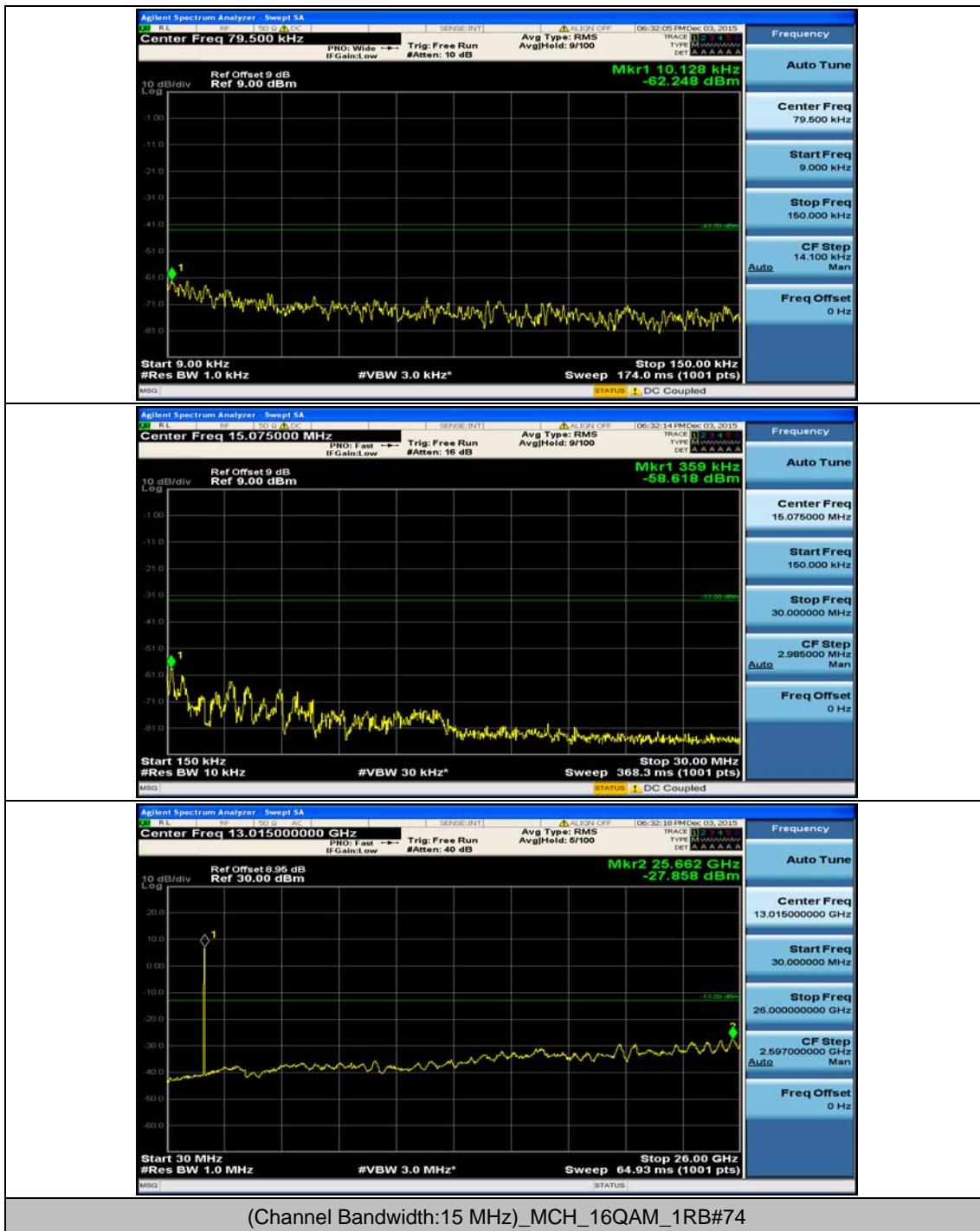


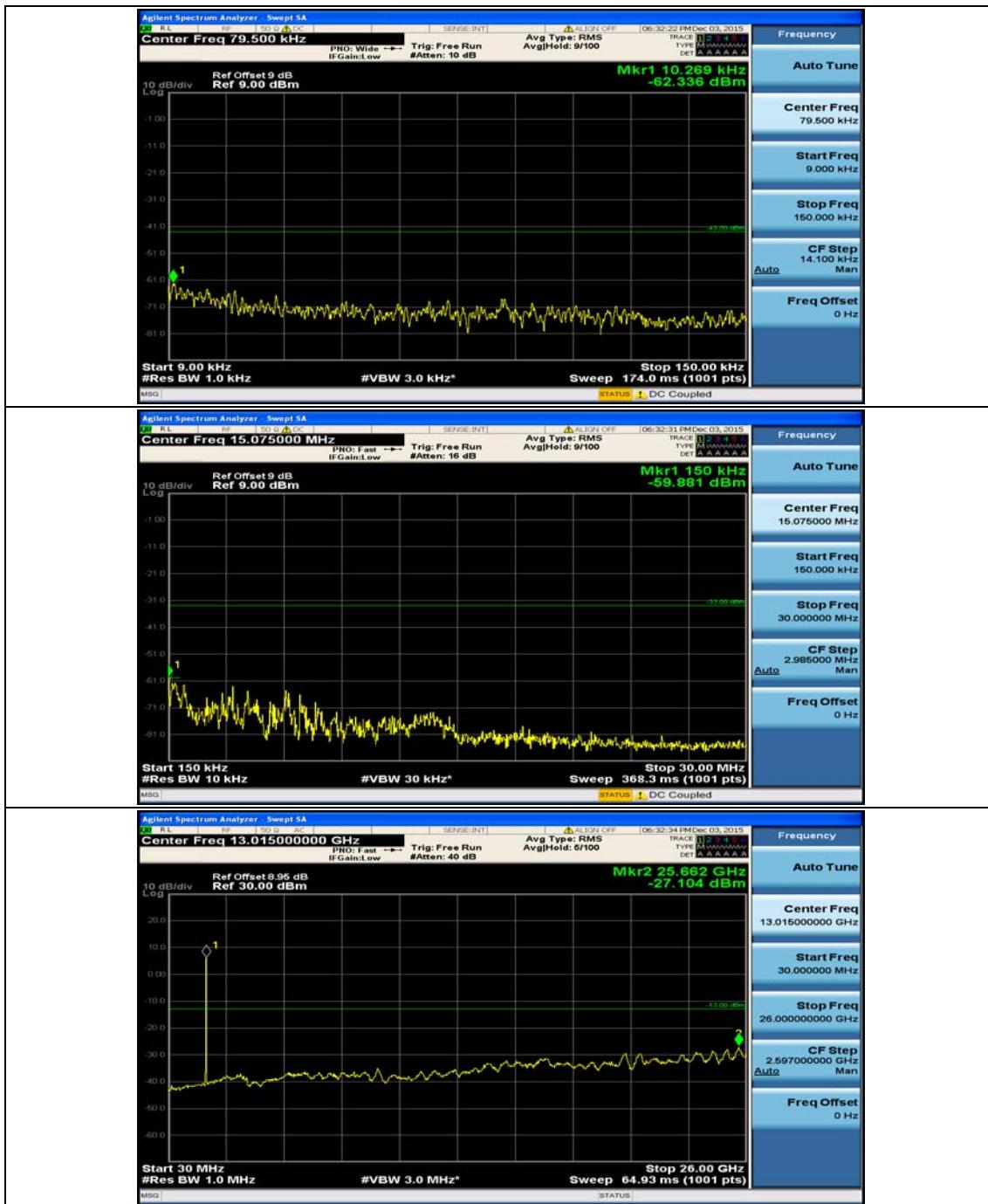


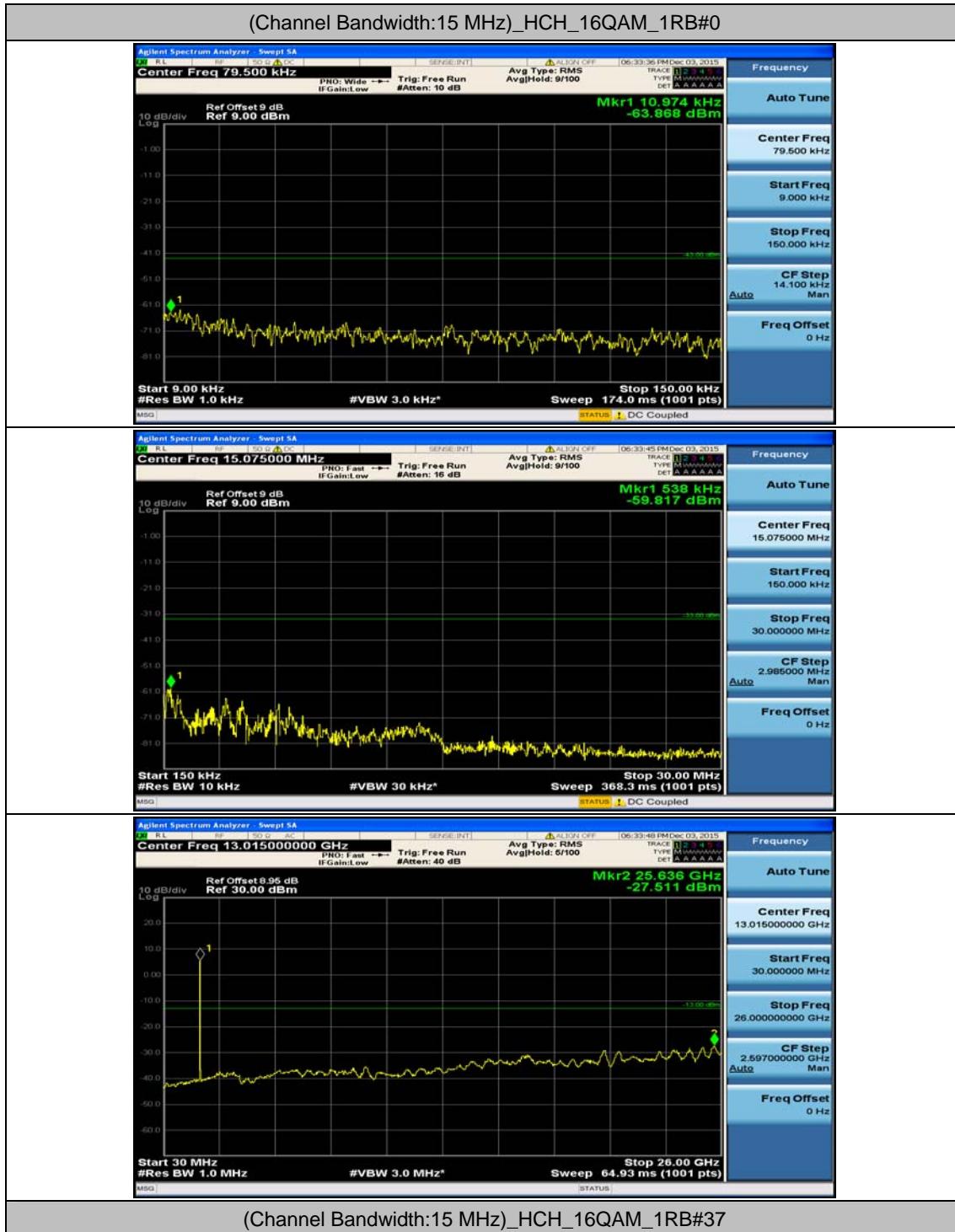


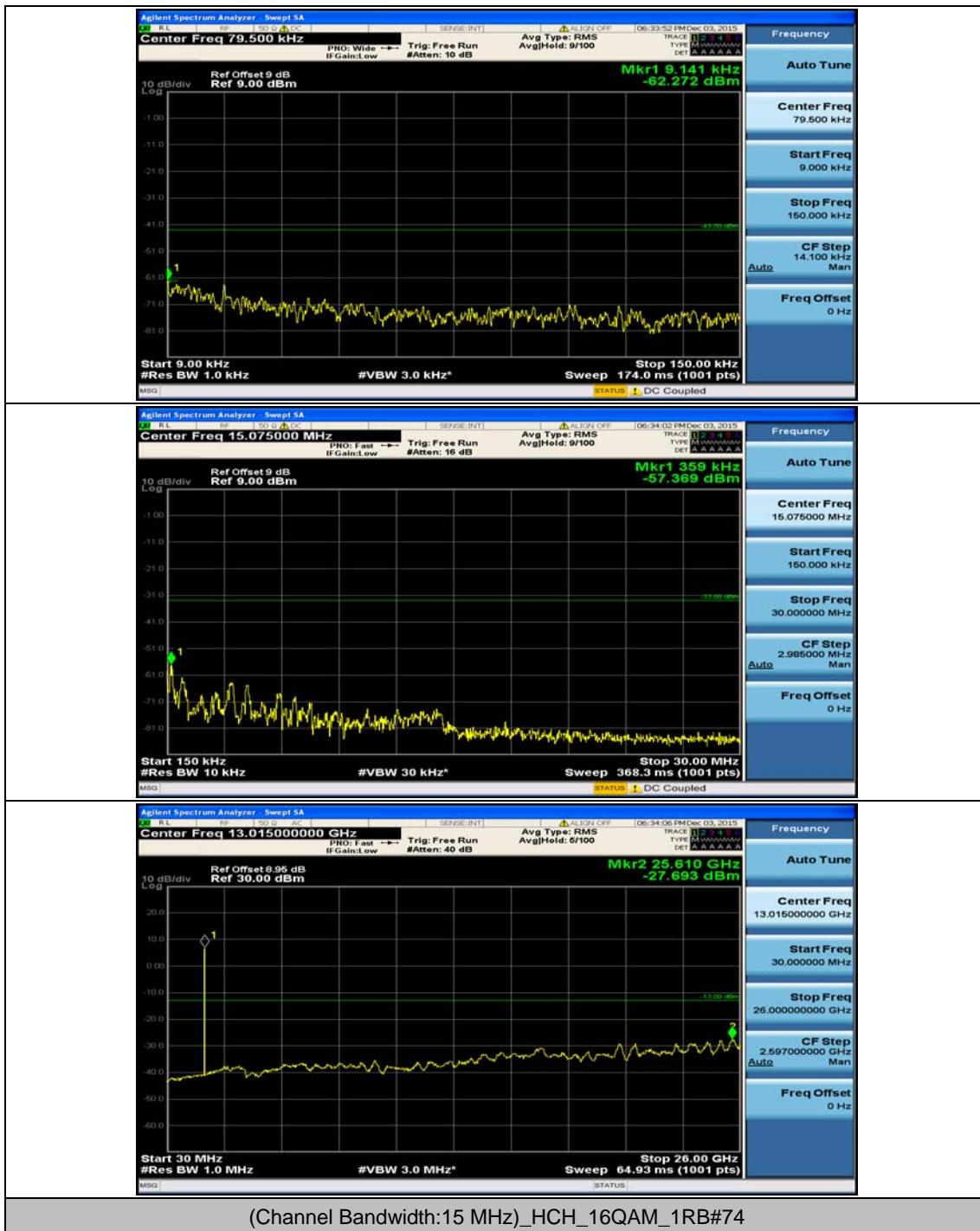


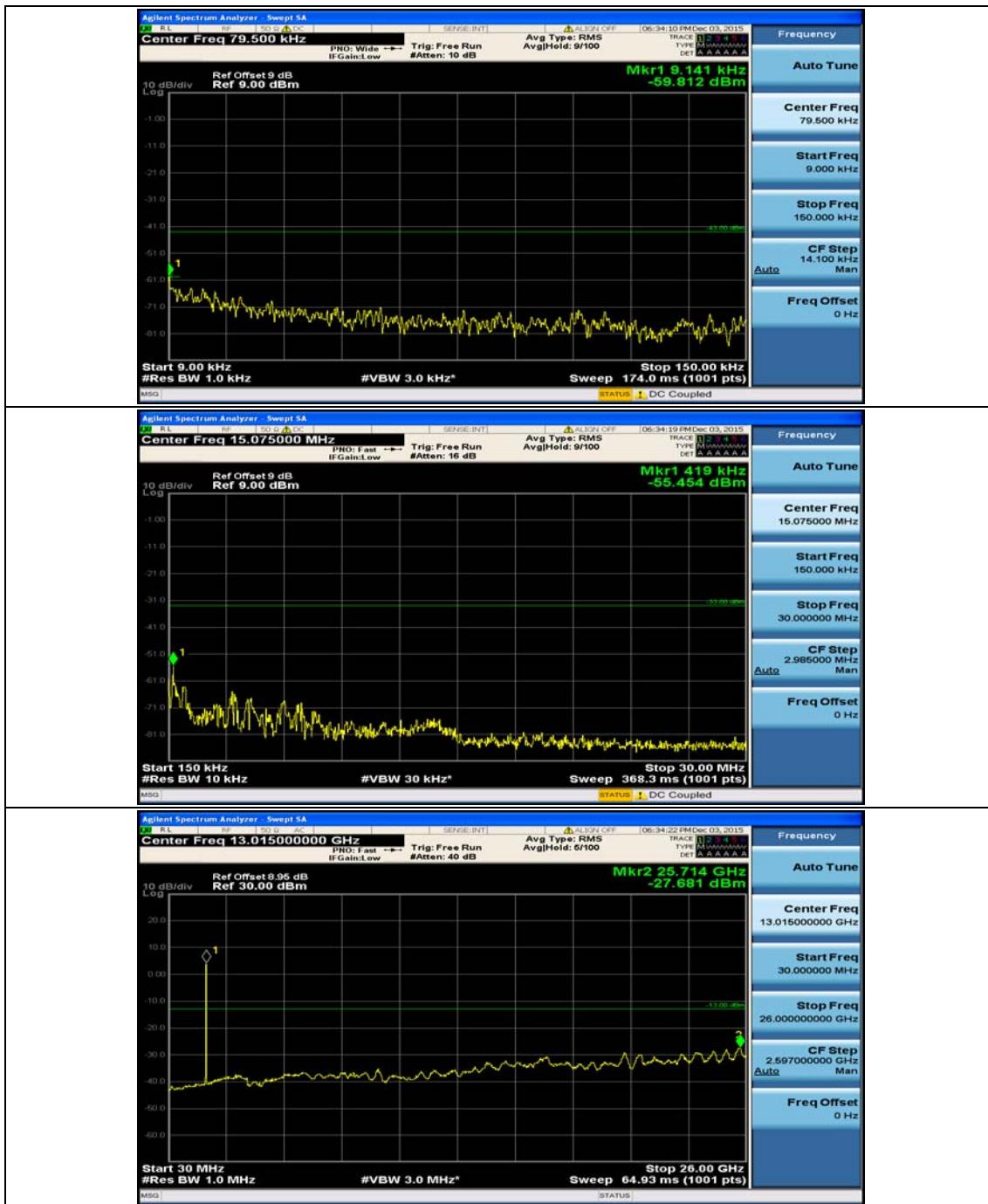




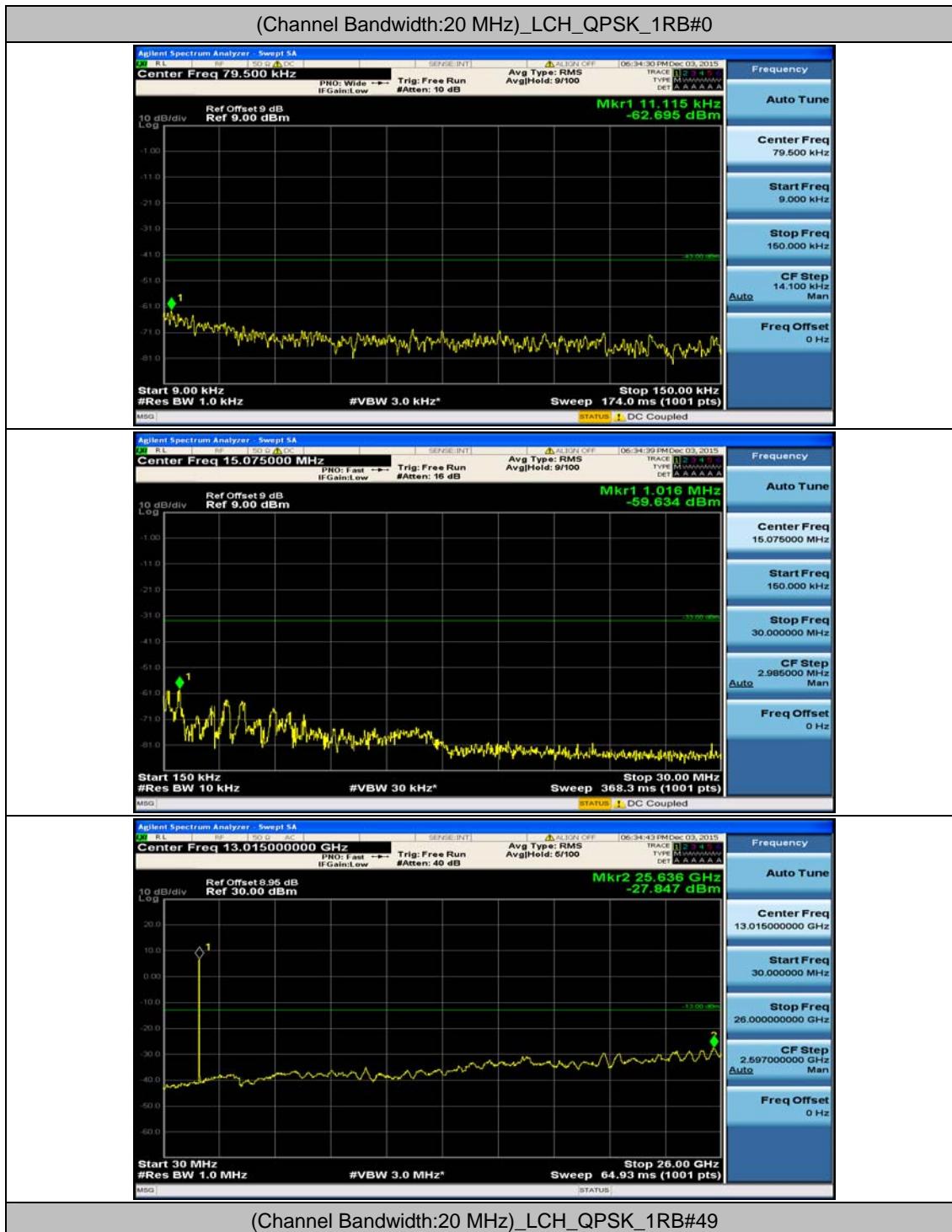


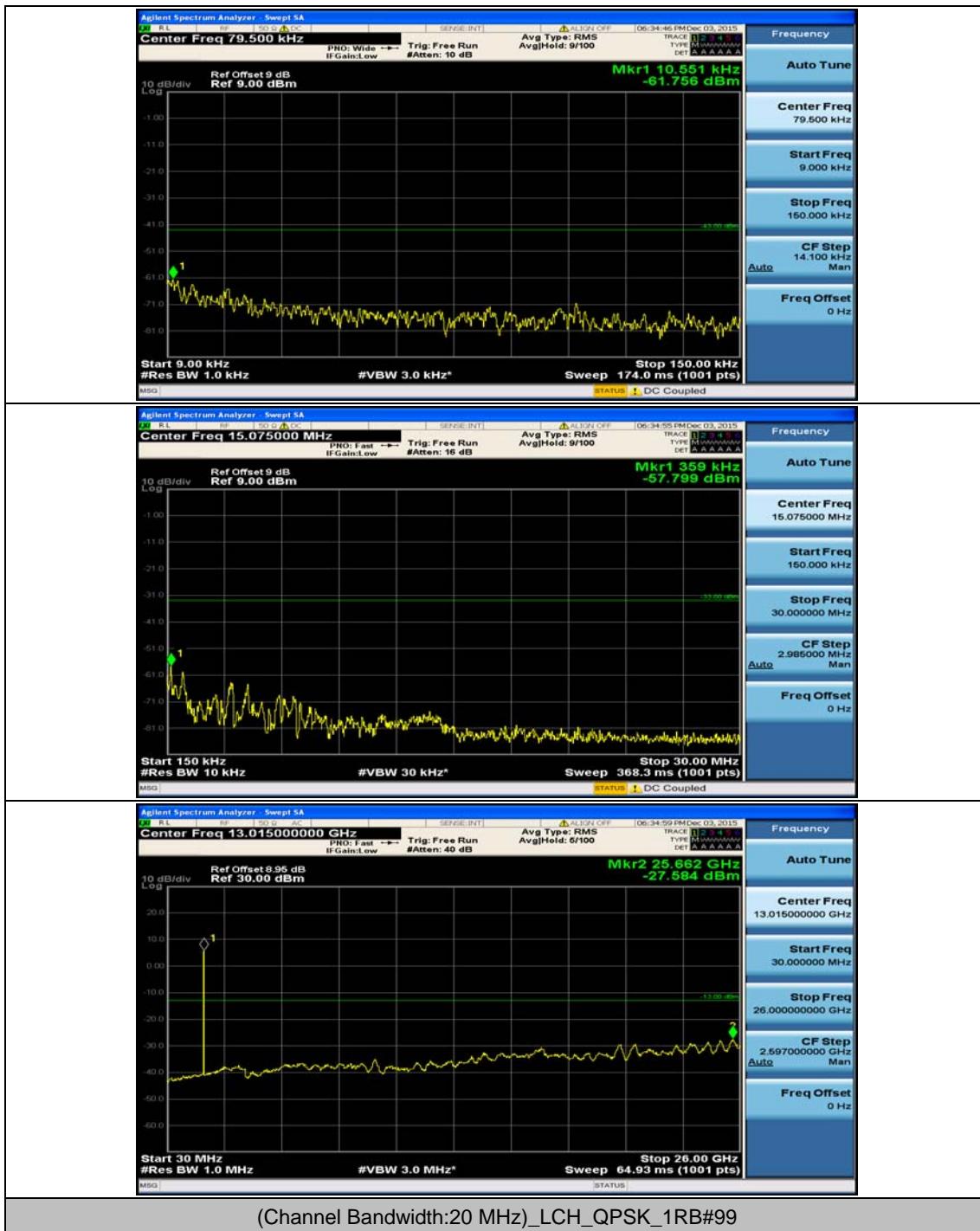


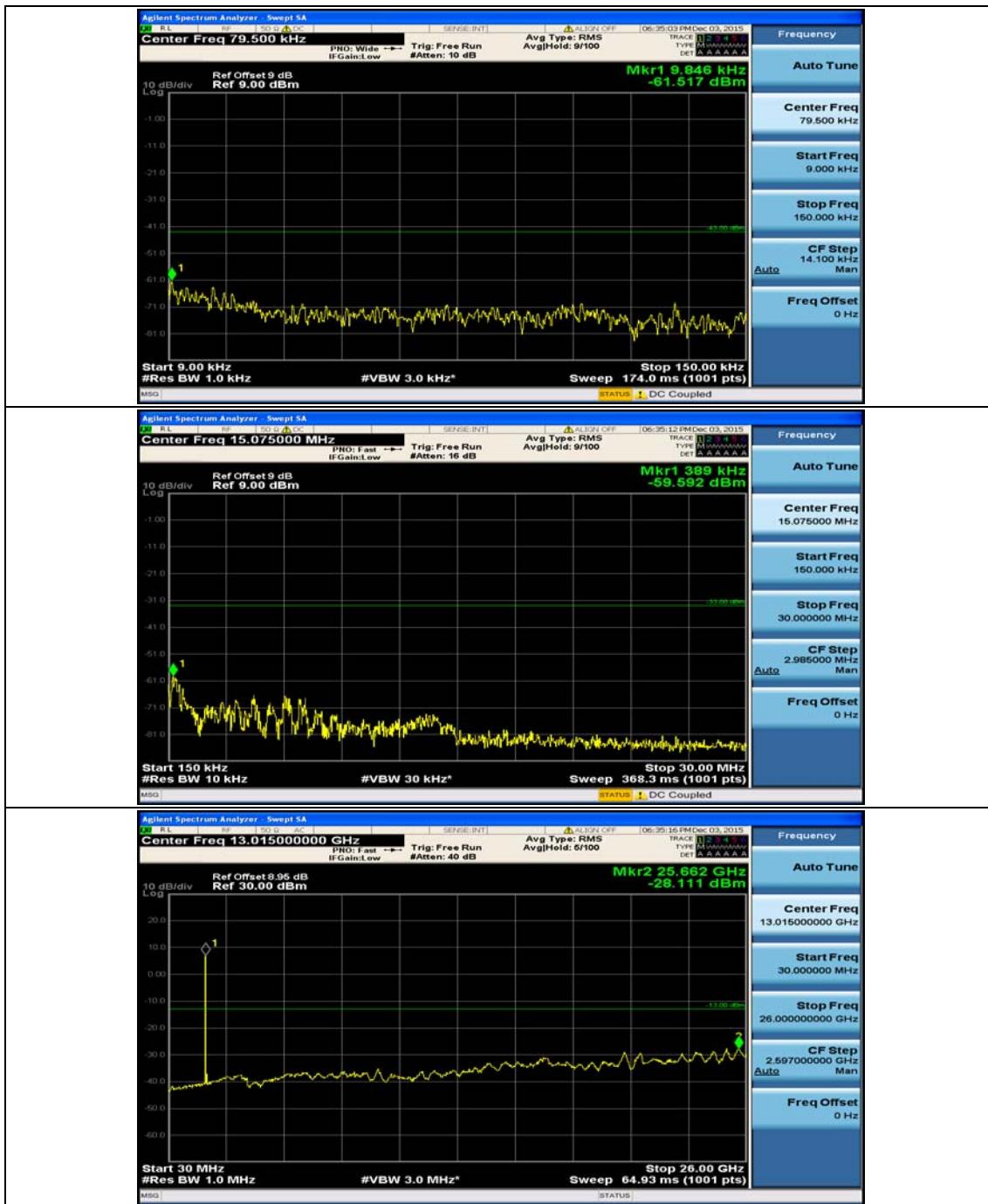


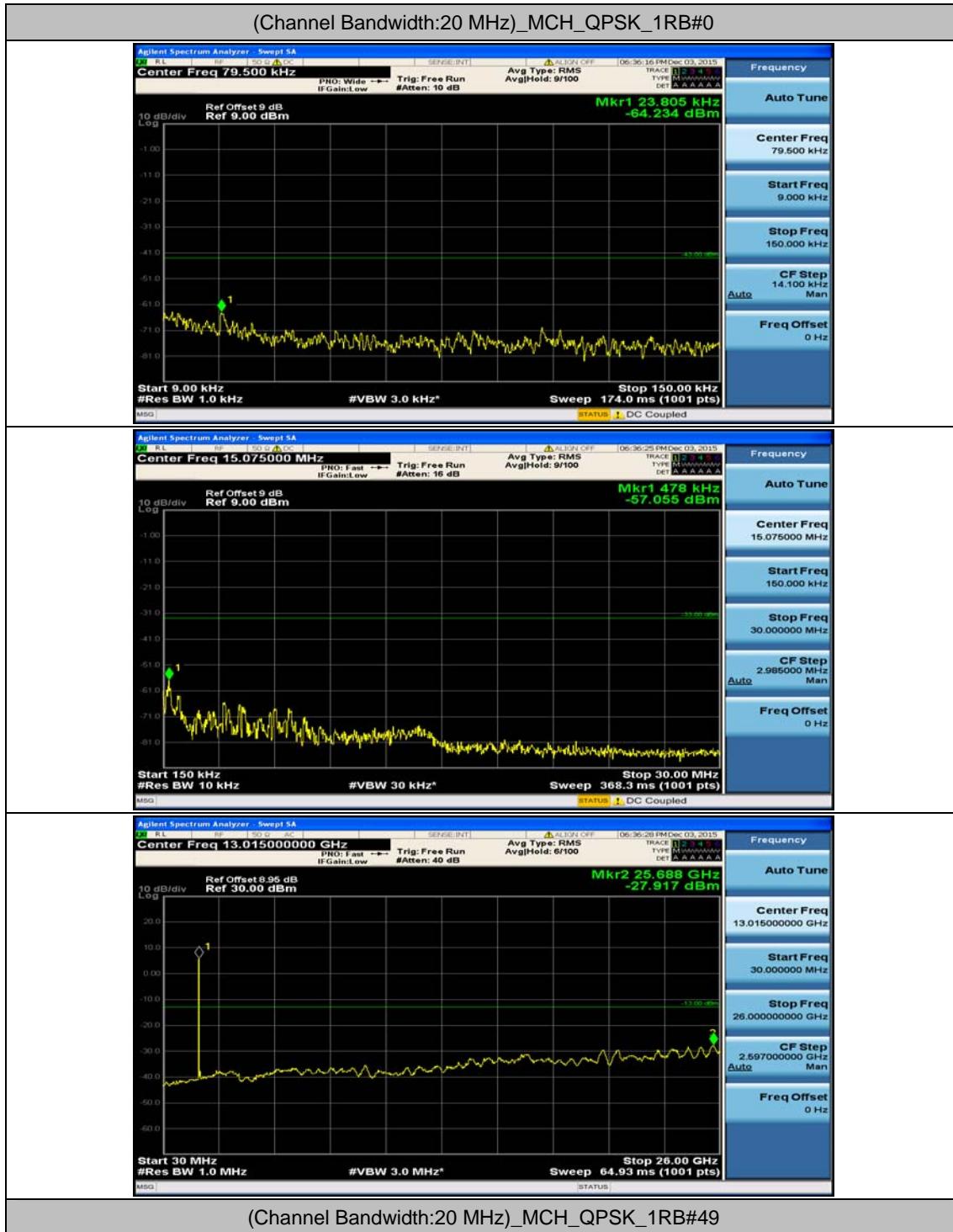


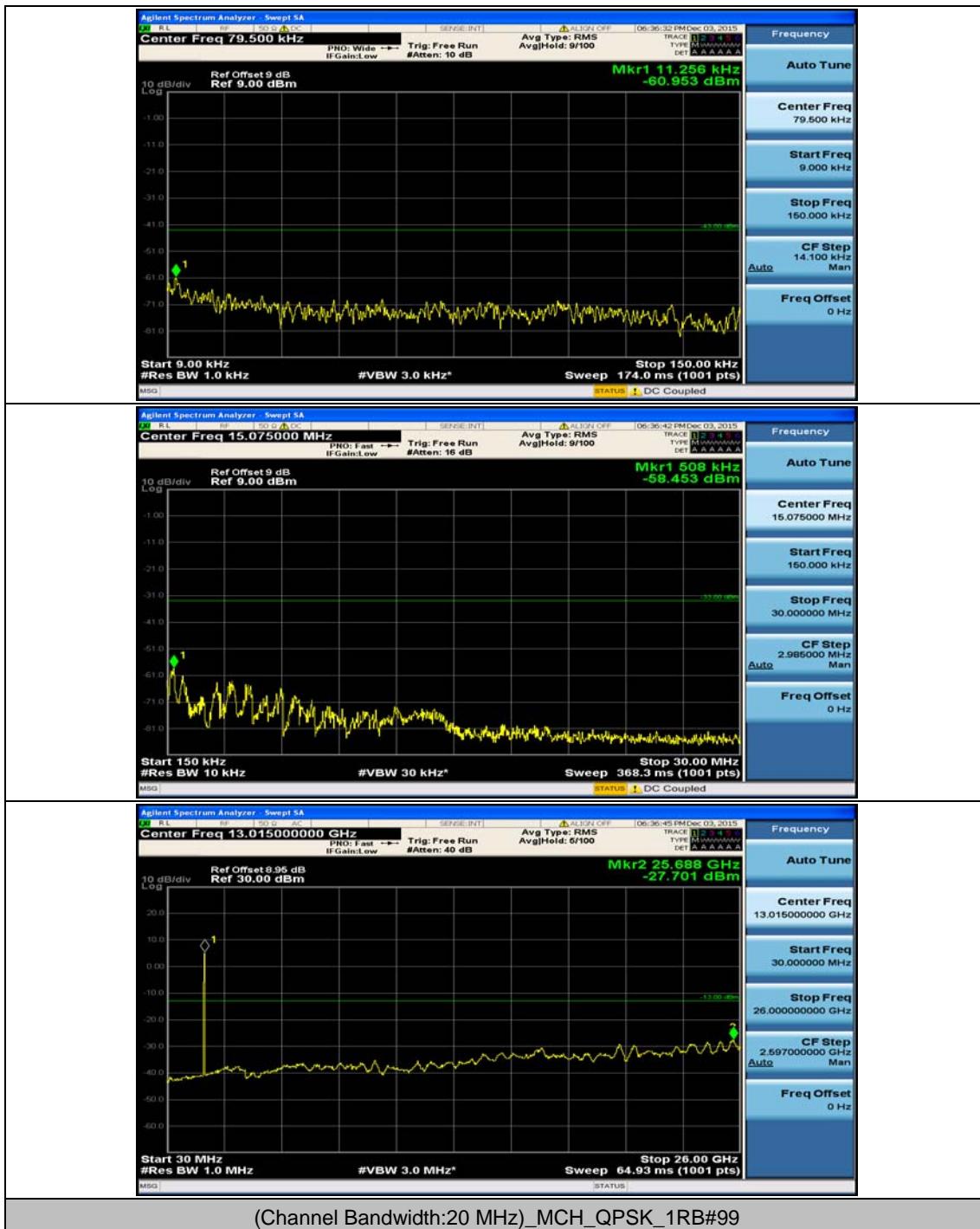
## Channel Bandwidth: 20 MHz

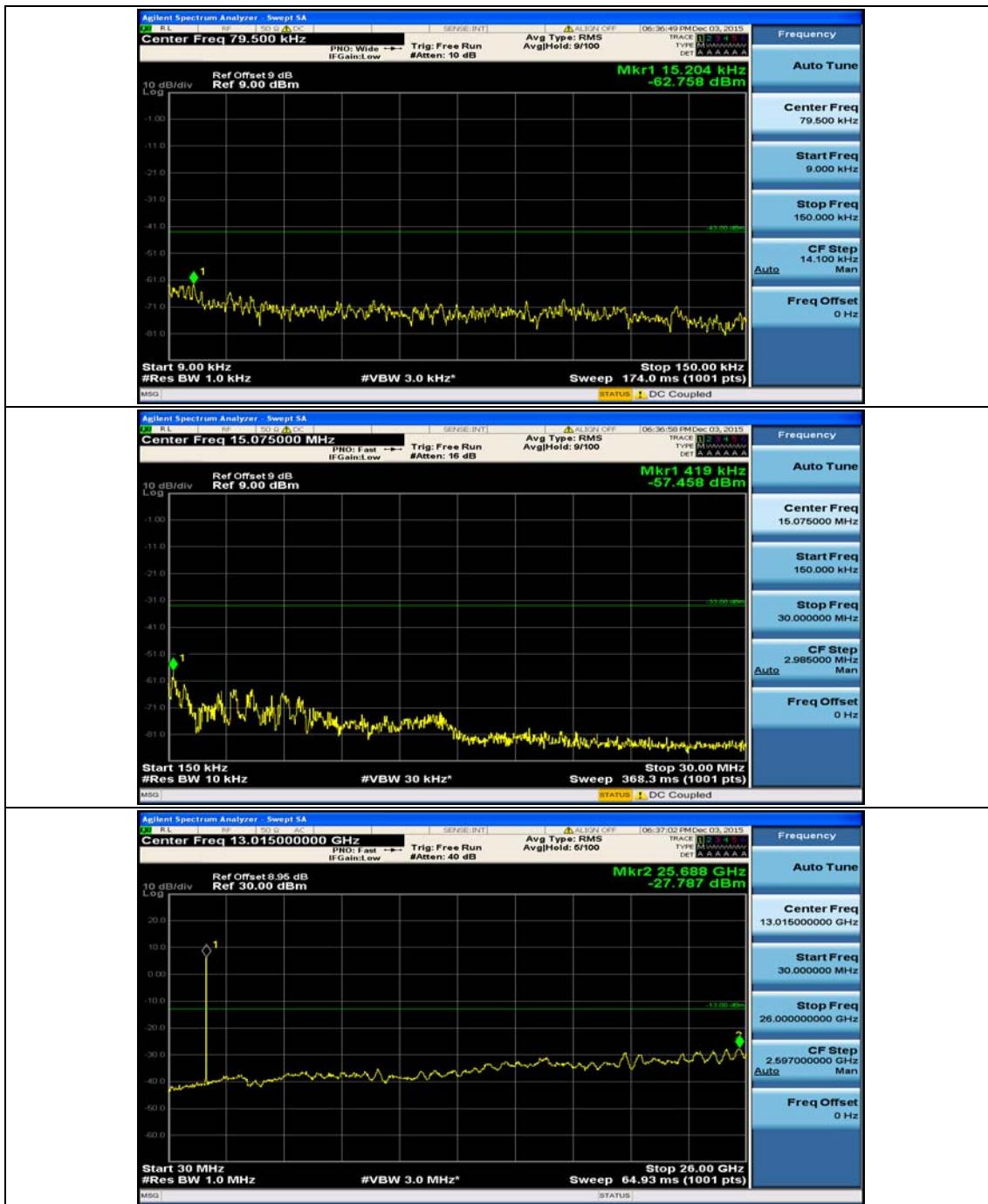


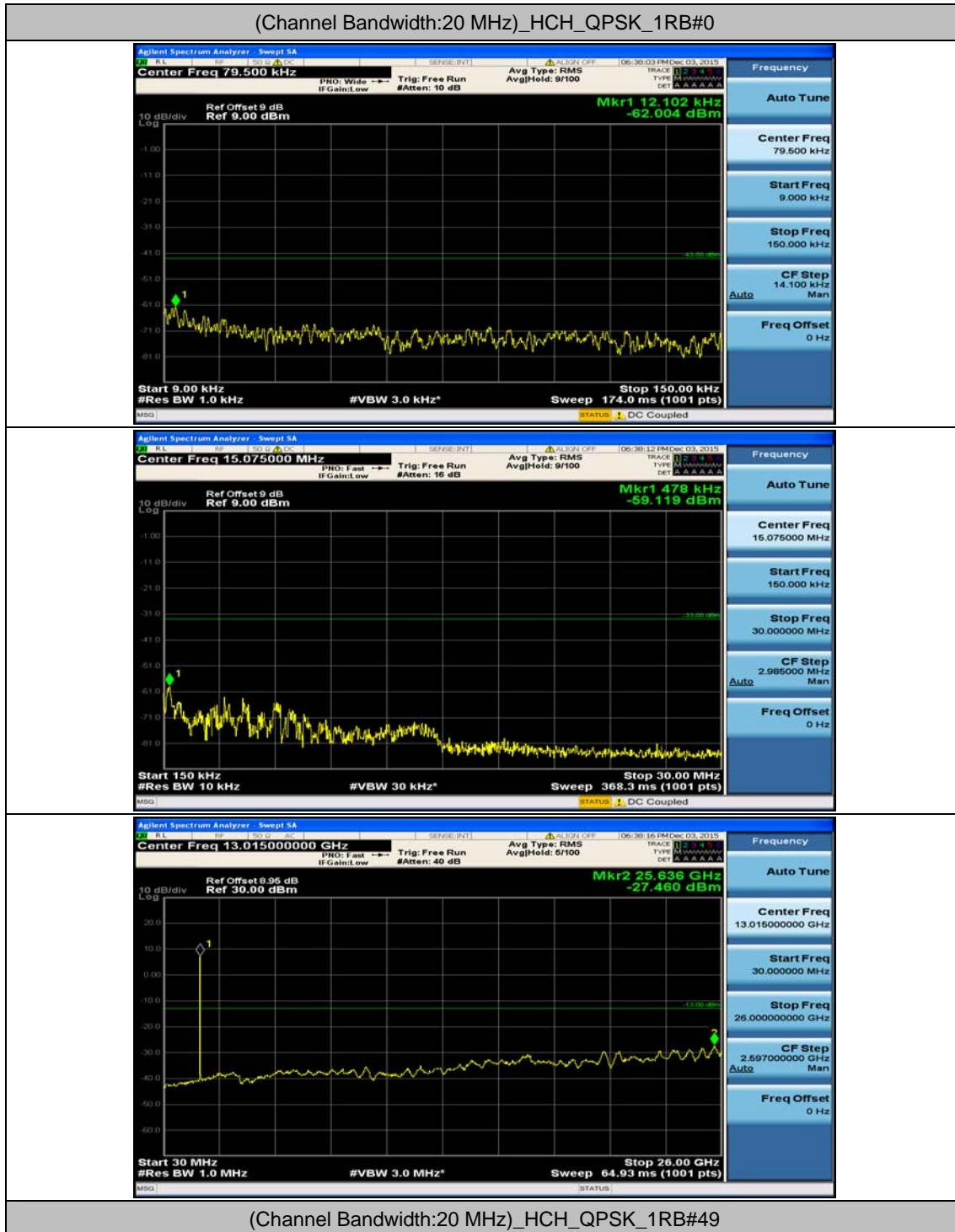


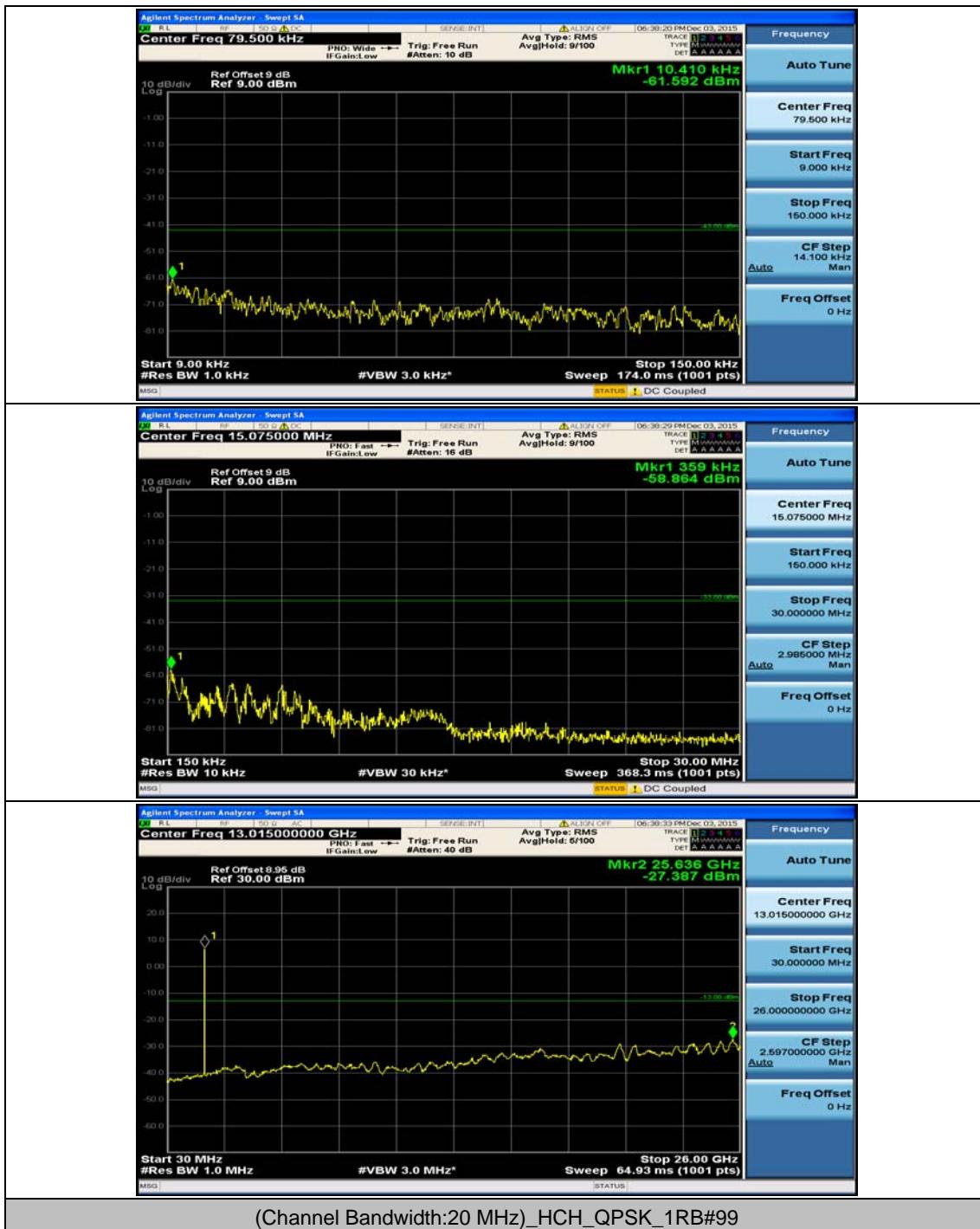


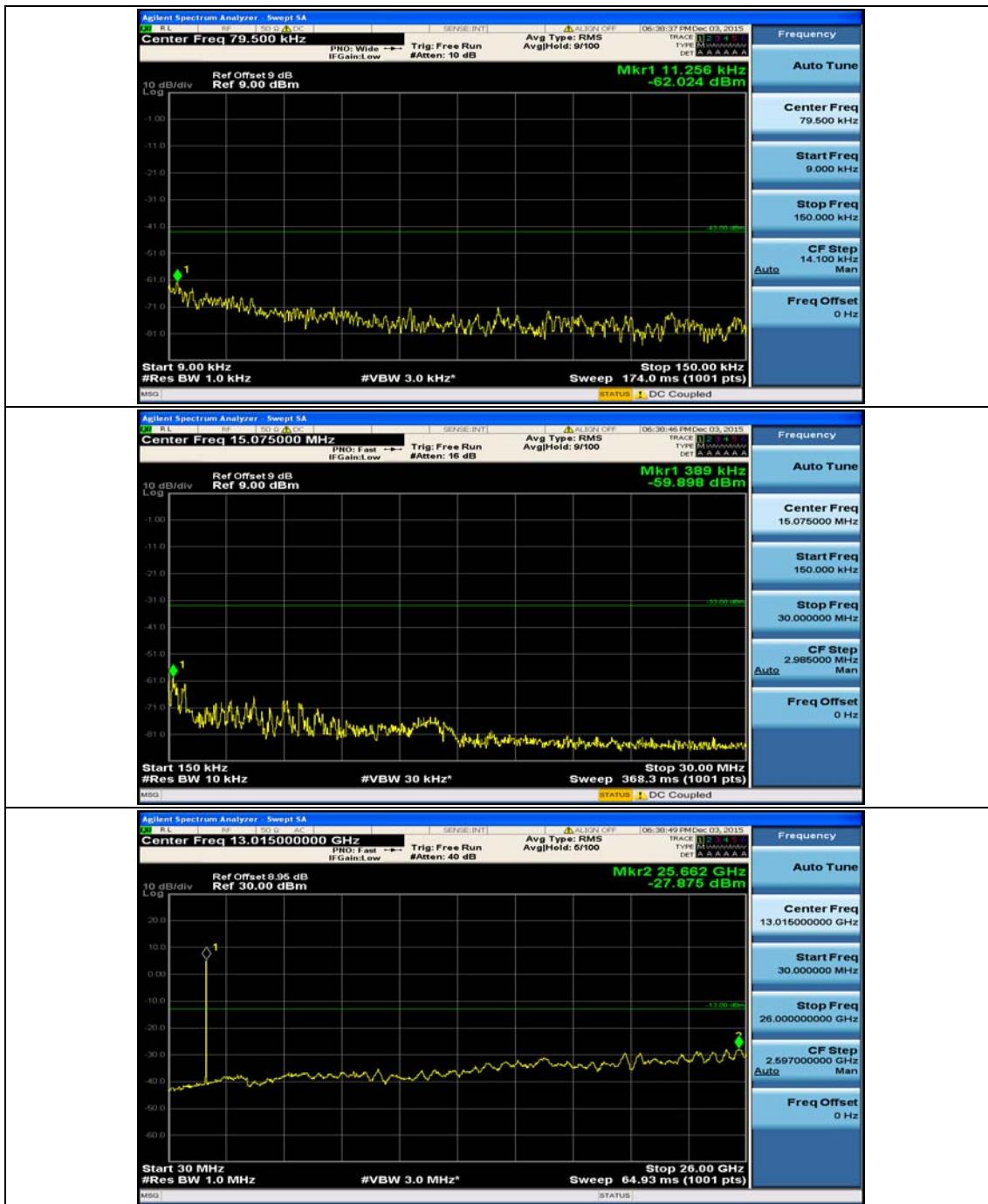


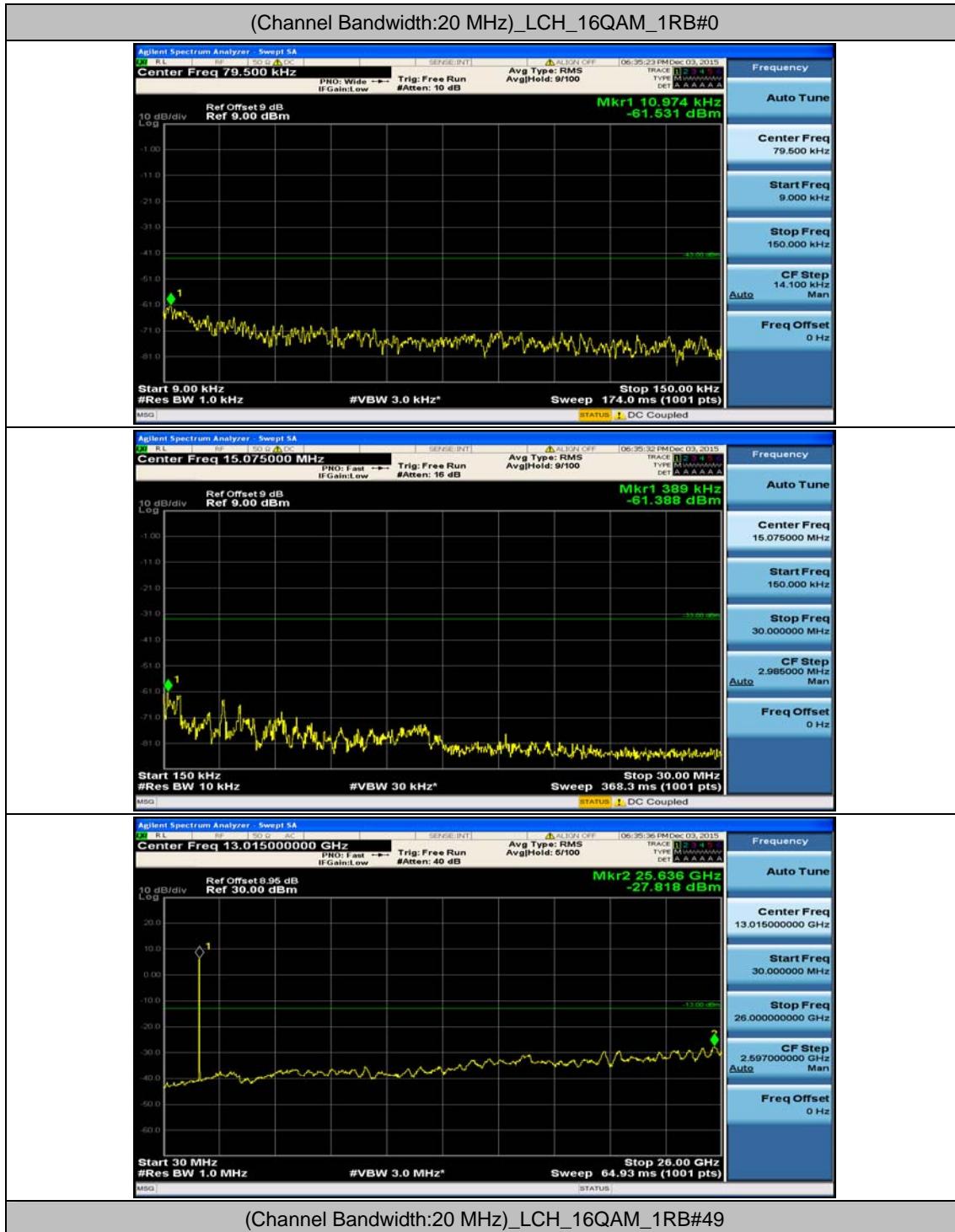


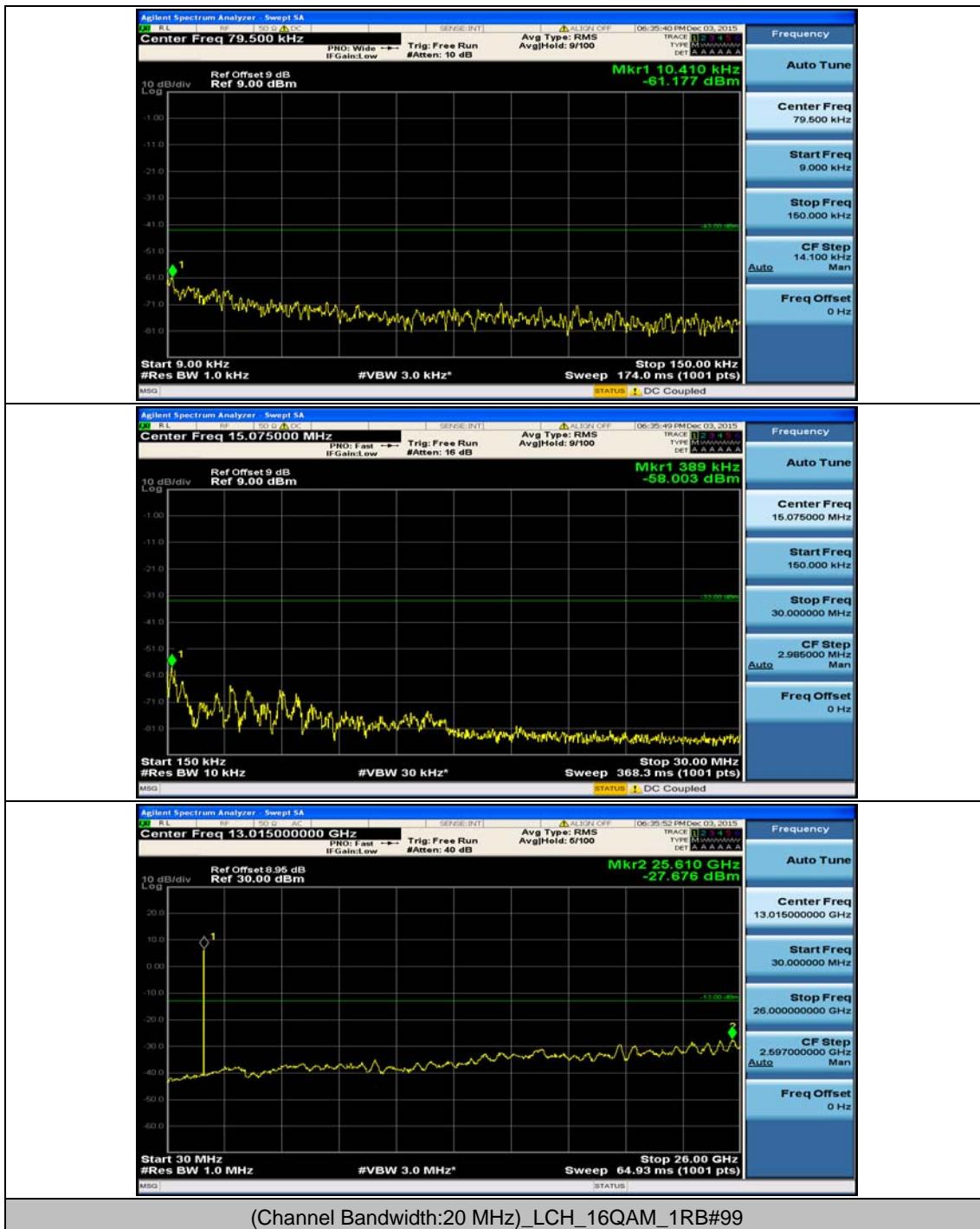


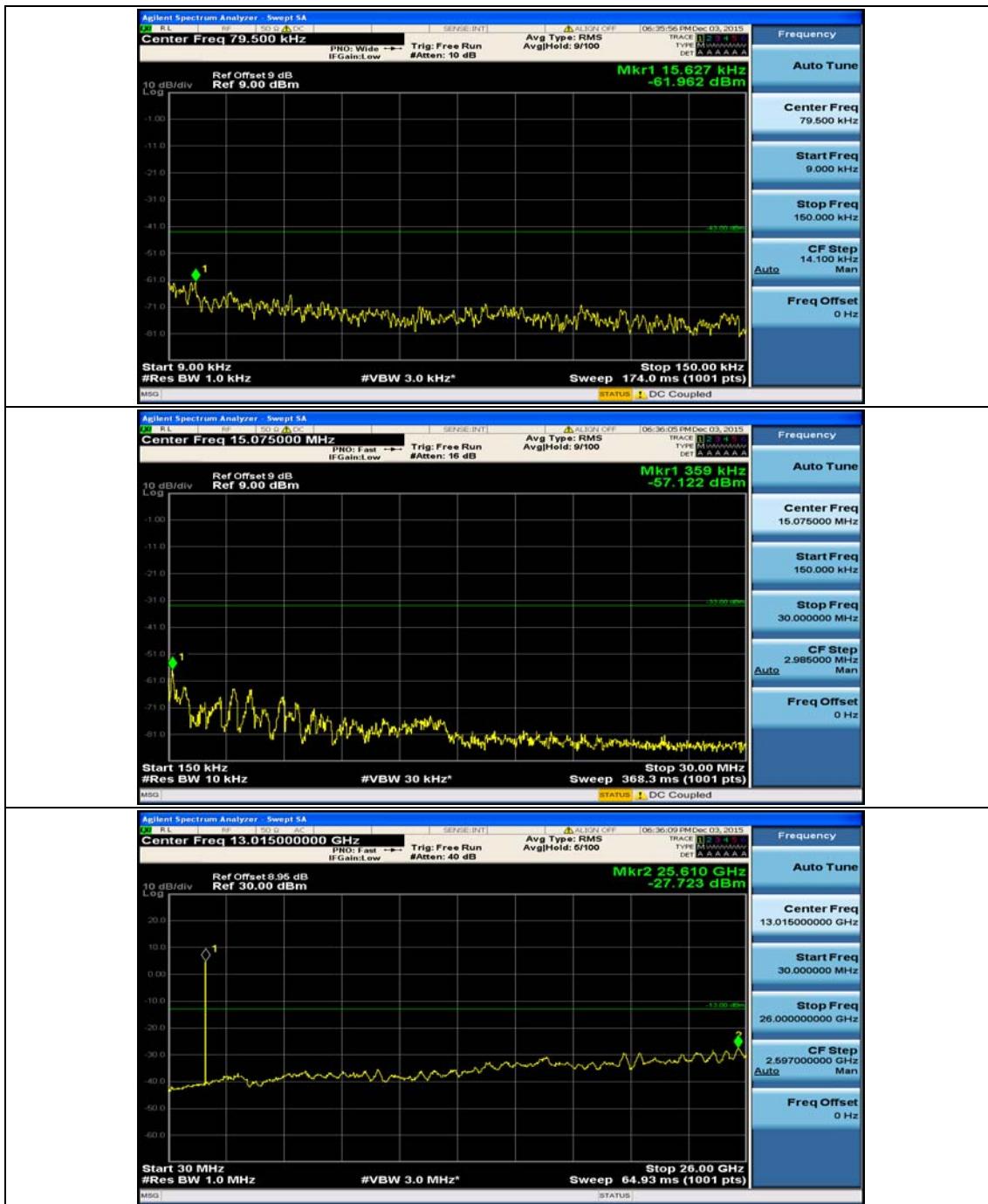


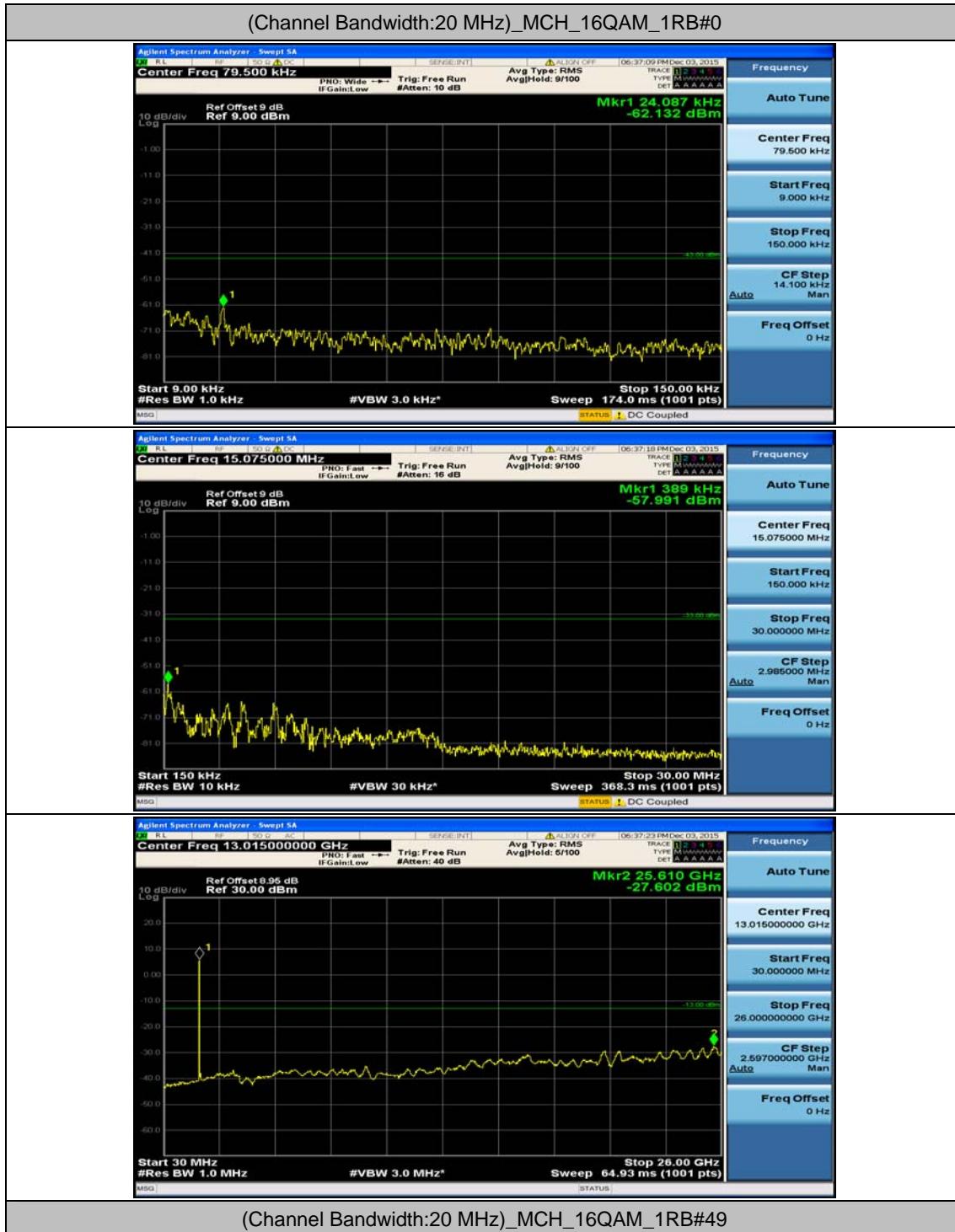


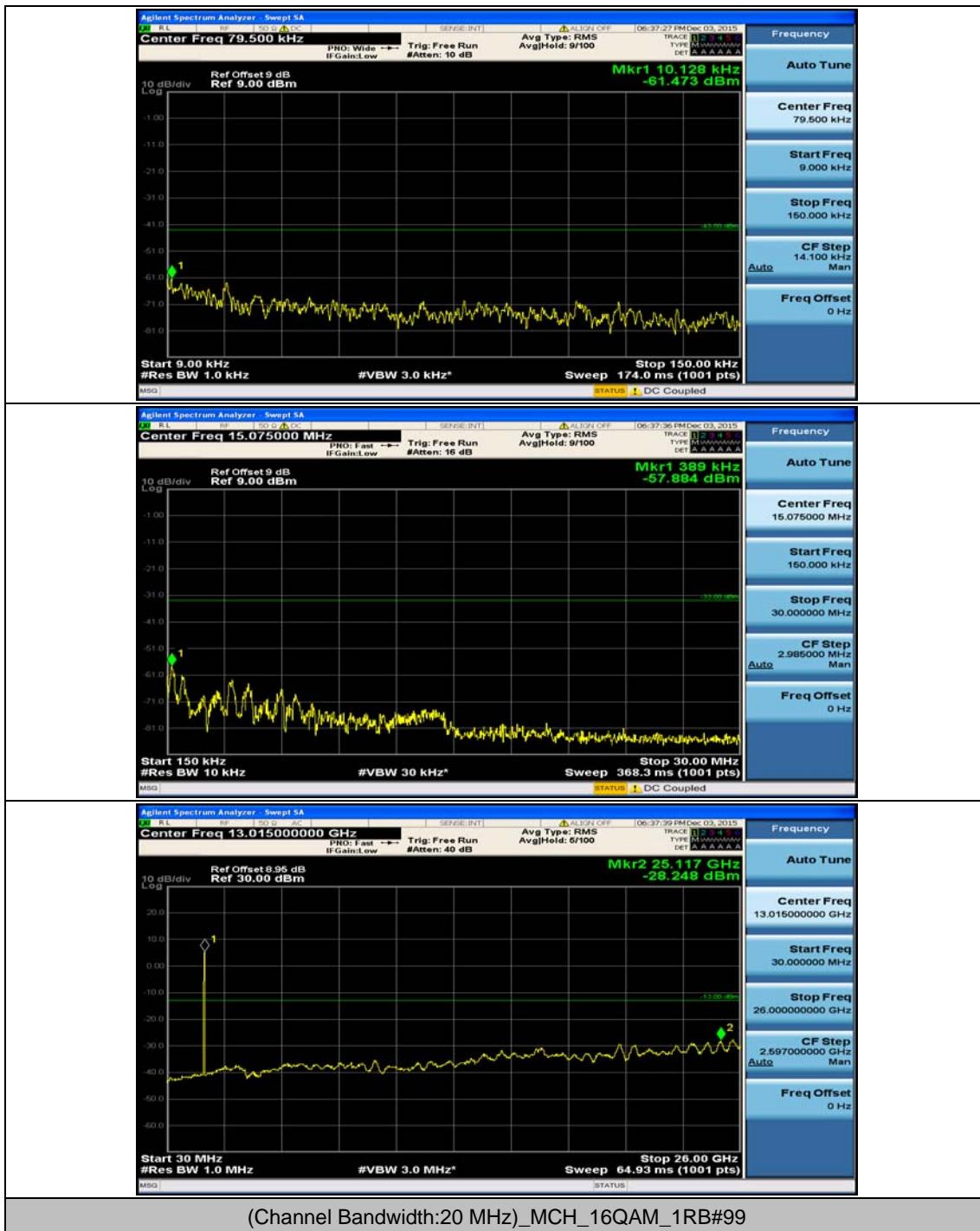


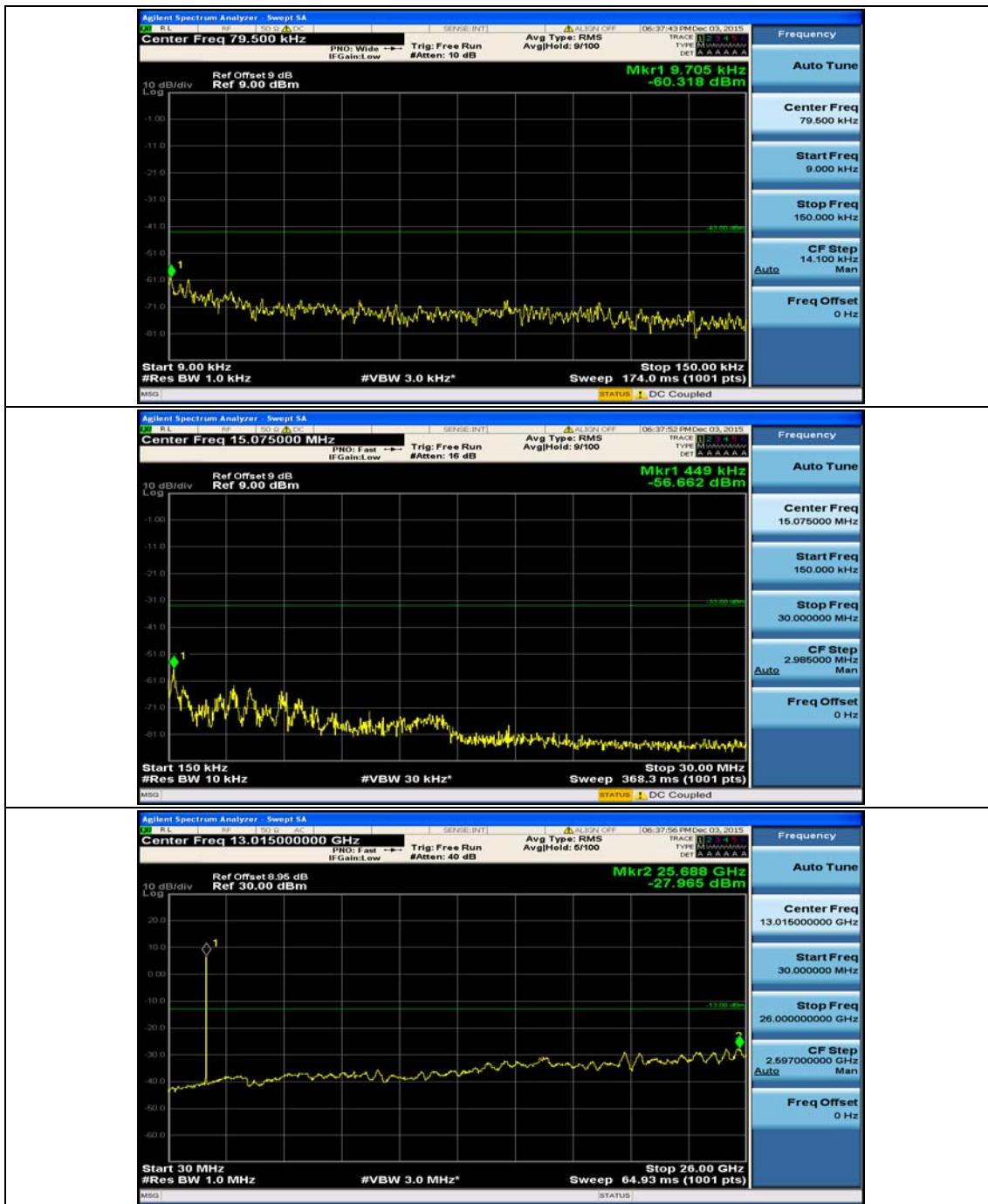


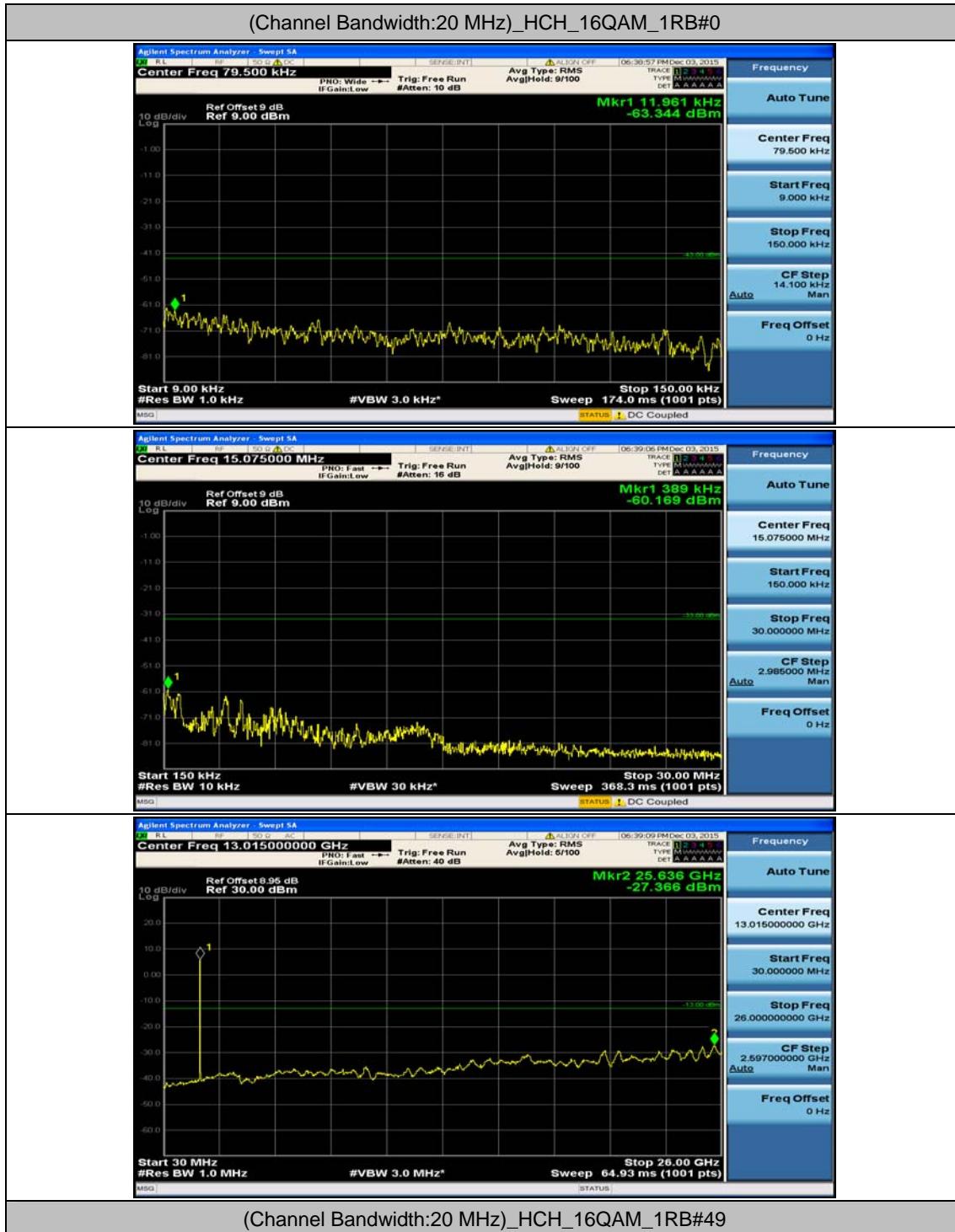


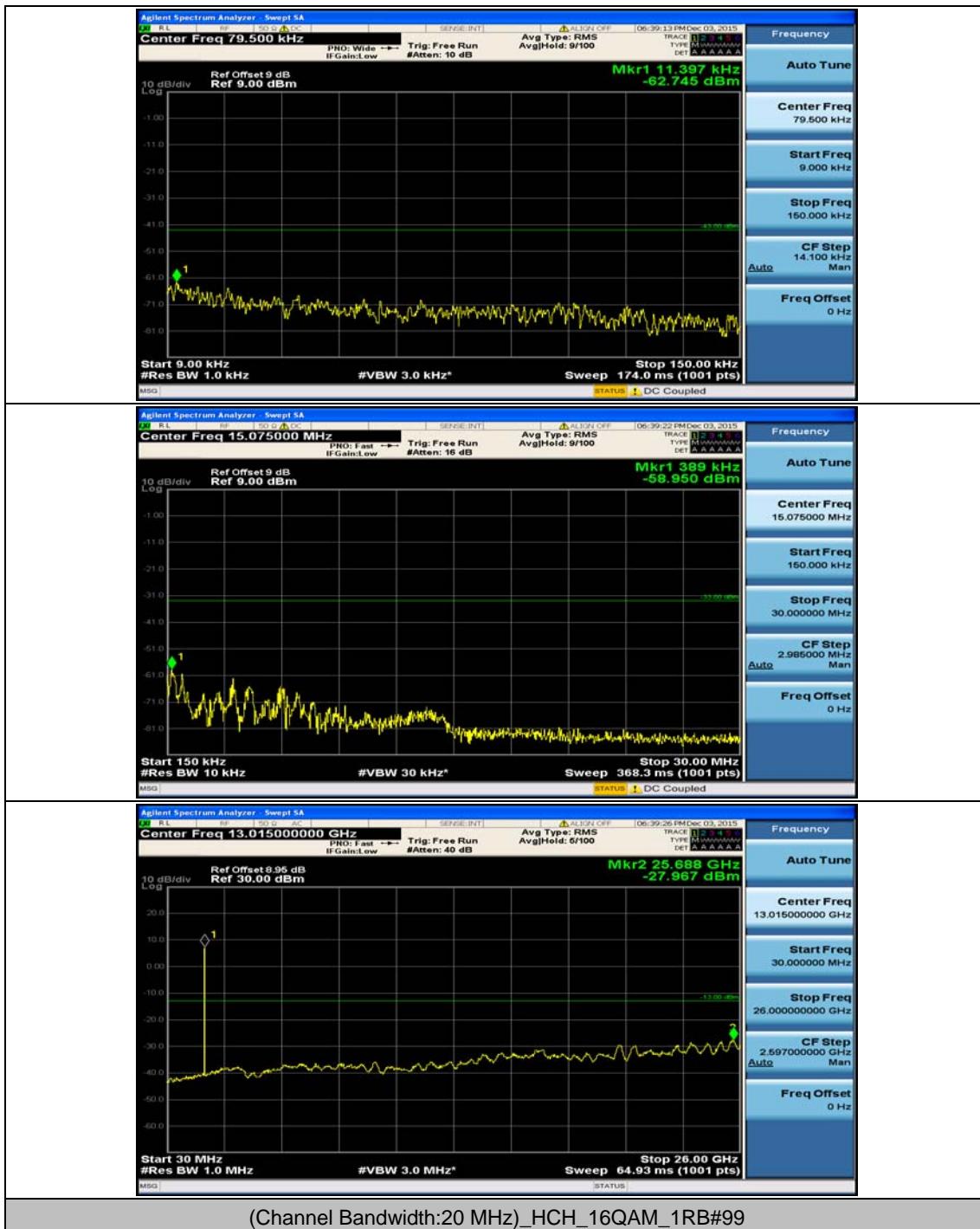


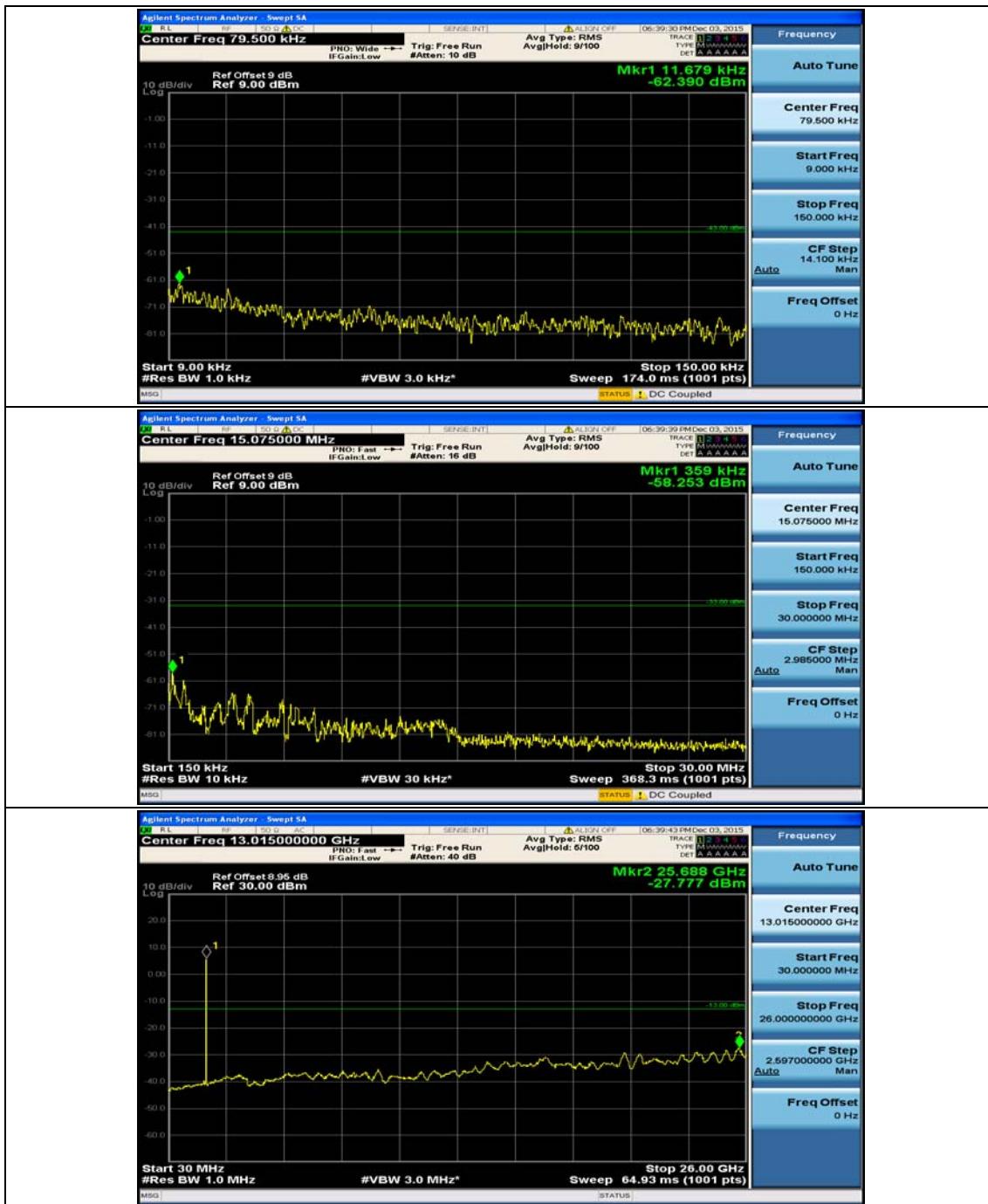












## Appendix F: Frequency Stability

### 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	1.08	0.000631	± 2.5	PASS
		VN	TN	3.82	0.002233	± 2.5	PASS
		VH	TN	4.4	0.002572	± 2.5	PASS
	MCH	VL	TN	4.28	0.002470	± 2.5	PASS
		VN	TN	2.78	0.001605	± 2.5	PASS
		VH	TN	4.06	0.002343	± 2.5	PASS
	HCH	VL	TN	1.39	0.000792	± 2.5	PASS
		VN	TN	2.4	0.001368	± 2.5	PASS
		VH	TN	-1.15	-0.000656	± 2.5	PASS
16QAM	LCH	VL	TN	-0.32	-0.000187	± 2.5	PASS
		VN	TN	-1.57	-0.000918	± 2.5	PASS
		VH	TN	0.32	0.000187	± 2.5	PASS
	MCH	VL	TN	0.21	0.000121	± 2.5	PASS
		VN	TN	4.95	0.002857	± 2.5	PASS
		VH	TN	-0.07	-0.000040	± 2.5	PASS
	HCH	VL	TN	-0.16	-0.000091	± 2.5	PASS
		VN	TN	2.19	0.001248	± 2.5	PASS
		VH	TN	0.39	0.000222	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.85	0.001666	± 2.5	PASS
		VN	-20	3.27	0.001911	± 2.5	PASS
		VN	-10	1.76	0.001029	± 2.5	PASS
		VN	0	4.8	0.002806	± 2.5	PASS
		VN	10	-1.71	-0.001000	± 2.5	PASS
		VN	20	-0.45	-0.000263	± 2.5	PASS
		VN	30	-0.39	-0.000228	± 2.5	PASS
		VN	40	0.84	0.000491	± 2.5	PASS
		VN	50	2.74	0.001602	± 2.5	PASS
	MCH	VN	-30	4.38	0.002528	± 2.5	PASS
		VN	-20	2.58	0.001489	± 2.5	PASS

	HCH	VN	-10	0.7	0.000404	$\pm 2.5$	PASS
		VN	0	2.71	0.001564	$\pm 2.5$	PASS
		VN	10	1.02	0.000589	$\pm 2.5$	PASS
		VN	20	2.18	0.001258	$\pm 2.5$	PASS
		VN	30	-2	-0.001154	$\pm 2.5$	PASS
		VN	40	-0.33	-0.000190	$\pm 2.5$	PASS
		VN	50	4.84	0.002794	$\pm 2.5$	PASS
		VN	-30	1.59	0.000906	$\pm 2.5$	PASS
		VN	-20	0.46	0.000262	$\pm 2.5$	PASS
		VN	-10	2.51	0.001431	$\pm 2.5$	PASS
16QAM	LCH	VN	0	1.83	0.001043	$\pm 2.5$	PASS
		VN	10	0.93	0.000530	$\pm 2.5$	PASS
		VN	20	0.28	0.000160	$\pm 2.5$	PASS
		VN	30	4.84	0.002759	$\pm 2.5$	PASS
		VN	40	-0.62	-0.000353	$\pm 2.5$	PASS
		VN	50	1.26	0.000718	$\pm 2.5$	PASS
		VN	-30	1.76	0.001029	$\pm 2.5$	PASS
		VN	-20	-0.4	-0.000234	$\pm 2.5$	PASS
		VN	-10	1.62	0.000947	$\pm 2.5$	PASS
	MCH	VN	0	4.1	0.002397	$\pm 2.5$	PASS
		VN	10	-1.05	-0.000614	$\pm 2.5$	PASS
		VN	20	-0.87	-0.000509	$\pm 2.5$	PASS
		VN	30	-1.23	-0.000719	$\pm 2.5$	PASS
		VN	40	-0.96	-0.000561	$\pm 2.5$	PASS
		VN	50	3.54	0.002069	$\pm 2.5$	PASS
		VN	-30	-0.01	-0.000006	$\pm 2.5$	PASS
		VN	-20	3.42	0.001949	$\pm 2.5$	PASS
		VN	-10	1.62	0.000923	$\pm 2.5$	PASS
		VN	0	3.19	0.001818	$\pm 2.5$	PASS
	HCH	VN	10	0.45	0.000257	$\pm 2.5$	PASS
		VN	20	4.74	0.002702	$\pm 2.5$	PASS
		VN	30	4.91	0.002799	$\pm 2.5$	PASS
		VN	40	3.93	0.002240	$\pm 2.5$	PASS
		VN	50	0.71	0.000405	$\pm 2.5$	PASS
		VN	-30	-1.91	-0.001089	$\pm 2.5$	PASS
		VN	-20	1.37	0.000781	$\pm 2.5$	PASS

		VN	40	1.57	0.000895	$\pm 2.5$	PASS
		VN	50	3.6	0.002052	$\pm 2.5$	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	0.61	0.000356	$\pm 2.5$	PASS
		VN	TN	-0.06	-0.000035	$\pm 2.5$	PASS
		VH	TN	0.69	0.000403	$\pm 2.5$	PASS
	MCH	VL	TN	0.47	0.000271	$\pm 2.5$	PASS
		VN	TN	-1.93	-0.001114	$\pm 2.5$	PASS
		VH	TN	-0.2	-0.000115	$\pm 2.5$	PASS
	HCH	VL	TN	-0.24	-0.000137	$\pm 2.5$	PASS
		VN	TN	0.89	0.000508	$\pm 2.5$	PASS
		VH	TN	2.59	0.001477	$\pm 2.5$	PASS
16QAM	LCH	VL	TN	0.6	0.000351	$\pm 2.5$	PASS
		VN	TN	-0.66	-0.000386	$\pm 2.5$	PASS
		VH	TN	2.97	0.001735	$\pm 2.5$	PASS
	MCH	VL	TN	-1.06	-0.000612	$\pm 2.5$	PASS
		VN	TN	-1.52	-0.000877	$\pm 2.5$	PASS
		VH	TN	-1.04	-0.000600	$\pm 2.5$	PASS
	HCH	VL	TN	4.81	0.002743	$\pm 2.5$	PASS
		VN	TN	1.45	0.000827	$\pm 2.5$	PASS
		VH	TN	1.37	0.000781	$\pm 2.5$	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.85	0.001665	$\pm 2.5$	PASS
		VN	-20	4.23	0.002472	$\pm 2.5$	PASS
		VN	-10	0.49	0.000286	$\pm 2.5$	PASS
		VN	0	2.78	0.001624	$\pm 2.5$	PASS
		VN	10	-0.11	-0.000064	$\pm 2.5$	PASS
		VN	20	0.04	0.000023	$\pm 2.5$	PASS
		VN	30	0.73	0.000427	$\pm 2.5$	PASS
		VN	40	0.69	0.000403	$\pm 2.5$	PASS
		VN	50	2.63	0.001537	$\pm 2.5$	PASS
	MCH	VN	-30	4.29	0.002476	$\pm 2.5$	PASS
		VN	-20	0.16	0.000092	$\pm 2.5$	PASS
		VN	-10	4.37	0.002522	$\pm 2.5$	PASS

	HCH	VN	0	2.92	0.001685	$\pm 2.5$	PASS
		VN	10	4.13	0.002384	$\pm 2.5$	PASS
		VN	20	1.64	0.000947	$\pm 2.5$	PASS
		VN	30	2.3	0.001328	$\pm 2.5$	PASS
		VN	40	0.62	0.000358	$\pm 2.5$	PASS
		VN	50	-0.51	-0.000294	$\pm 2.5$	PASS
		VN	-30	2.74	0.001563	$\pm 2.5$	PASS
		VN	-20	-0.55	-0.000314	$\pm 2.5$	PASS
		VN	-10	3.08	0.001756	$\pm 2.5$	PASS
		VN	0	-1.83	-0.001044	$\pm 2.5$	PASS
QPSK	LCH	VN	10	4	0.002281	$\pm 2.5$	PASS
		VN	20	2.63	0.001500	$\pm 2.5$	PASS
		VN	30	-1.75	-0.000998	$\pm 2.5$	PASS
		VN	40	-0.78	-0.000445	$\pm 2.5$	PASS
		VN	50	0.18	0.000103	$\pm 2.5$	PASS
		VN	-30	3.09	0.001784	$\pm 2.5$	PASS
		VN	-20	-0.75	-0.000433	$\pm 2.5$	PASS
		VN	-10	-0.58	-0.000335	$\pm 2.5$	PASS
		VN	0	3.5	0.002020	$\pm 2.5$	PASS
QPSK	MCH	VN	10	-0.41	-0.000237	$\pm 2.5$	PASS
		VN	20	-1.55	-0.000895	$\pm 2.5$	PASS
		VN	30	2.69	0.001553	$\pm 2.5$	PASS
		VN	40	4.09	0.002361	$\pm 2.5$	PASS
		VN	50	1.42	0.000820	$\pm 2.5$	PASS
		VN	-30	1.51	0.000861	$\pm 2.5$	PASS
		VN	-20	4.05	0.002310	$\pm 2.5$	PASS
		VN	-10	4.97	0.002834	$\pm 2.5$	PASS
		VN	0	1.16	0.000662	$\pm 2.5$	PASS
QPSK	HCH	VN	10	1.26	0.000719	$\pm 2.5$	PASS
		VN	20	1.26	0.000719	$\pm 2.5$	PASS
		VN	30	-0.56	-0.000319	$\pm 2.5$	PASS
		VN	40	-0.88	-0.000502	$\pm 2.5$	PASS
		VN	50	1.22	0.000696	$\pm 2.5$	PASS
		VN	-30	3.86	0.002201	$\pm 2.5$	PASS
		VN	-20	3.48	0.001985	$\pm 2.5$	PASS
		VN	-10	3.47	0.001979	$\pm 2.5$	PASS
		VN	0	4.13	0.002355	$\pm 2.5$	PASS

		VN	50	-1.85	-0.001055	$\pm 2.5$	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	2.08	0.001215	$\pm 2.5$	PASS
		VN	TN	4.55	0.002657	$\pm 2.5$	PASS
		VH	TN	1.94	0.001133	$\pm 2.5$	PASS
	MCH	VL	TN	3.5	0.002020	$\pm 2.5$	PASS
		VN	TN	-1.84	-0.001062	$\pm 2.5$	PASS
		VH	TN	-1.29	-0.000745	$\pm 2.5$	PASS
	HCH	VL	TN	1.31	0.000748	$\pm 2.5$	PASS
		VN	TN	-0.38	-0.000217	$\pm 2.5$	PASS
		VH	TN	3.22	0.001837	$\pm 2.5$	PASS
16QAM	LCH	VL	TN	-0.26	-0.000152	$\pm 2.5$	PASS
		VN	TN	-1.82	-0.001063	$\pm 2.5$	PASS
		VH	TN	-0.21	-0.000123	$\pm 2.5$	PASS
	MCH	VL	TN	1.32	0.000762	$\pm 2.5$	PASS
		VN	TN	2.48	0.001431	$\pm 2.5$	PASS
		VH	TN	2.54	0.001466	$\pm 2.5$	PASS
	HCH	VL	TN	4.71	0.002688	$\pm 2.5$	PASS
		VN	TN	4.55	0.002596	$\pm 2.5$	PASS
		VH	TN	4.2	0.002397	$\pm 2.5$	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.21	0.000707	$\pm 2.5$	PASS
		VN	-20	1.67	0.000975	$\pm 2.5$	PASS
		VN	-10	2.77	0.001618	$\pm 2.5$	PASS
		VN	0	-0.81	-0.000473	$\pm 2.5$	PASS
		VN	10	-1.93	-0.001127	$\pm 2.5$	PASS
		VN	20	1.03	0.000601	$\pm 2.5$	PASS
		VN	30	3.73	0.002178	$\pm 2.5$	PASS
		VN	40	0.06	0.000035	$\pm 2.5$	PASS
		VN	50	-0.55	-0.000321	$\pm 2.5$	PASS
	MCH	VN	-30	1.4	0.000808	$\pm 2.5$	PASS
		VN	-20	4.5	0.002597	$\pm 2.5$	PASS
		VN	-10	-0.61	-0.000352	$\pm 2.5$	PASS
		VN	0	-0.35	-0.000202	$\pm 2.5$	PASS

		VN	10	-0.01	-0.000006	$\pm 2.5$	PASS
		VN	20	3.09	0.001784	$\pm 2.5$	PASS
		VN	30	2.68	0.001547	$\pm 2.5$	PASS
		VN	40	1.69	0.000975	$\pm 2.5$	PASS
		VN	50	0.49	0.000283	$\pm 2.5$	PASS
		VN	-30	-0.98	-0.000559	$\pm 2.5$	PASS
		VN	-20	1.95	0.001022	$\pm 2.5$	PASS
		VN	-10	4.65	0.002438	$\pm 2.5$	PASS
		VN	0	2.5	0.001311	$\pm 2.5$	PASS
		VN	10	-0.29	-0.000152	$\pm 2.5$	PASS
	HCH	VN	20	0.58	0.000304	$\pm 2.5$	PASS
		VN	30	0.59	0.000309	$\pm 2.5$	PASS
		VN	40	2.53	0.001326	$\pm 2.5$	PASS
		VN	50	-0.11	-0.000058	$\pm 2.5$	PASS
		VN	-30	4.06	0.002343	$\pm 2.5$	PASS
		VN	-20	3.79	0.002188	$\pm 2.5$	PASS
		VN	-10	0.65	0.000375	$\pm 2.5$	PASS
		VN	0	1.59	0.000918	$\pm 2.5$	PASS
		VN	10	2.88	0.001662	$\pm 2.5$	PASS
		VN	20	2.45	0.001414	$\pm 2.5$	PASS
	LCH	VN	30	3.86	0.002228	$\pm 2.5$	PASS
		VN	40	3.81	0.002199	$\pm 2.5$	PASS
		VN	50	0.89	0.000514	$\pm 2.5$	PASS
		VN	-30	-1.25	-0.000713	$\pm 2.5$	PASS
		VN	-20	0.74	0.000422	$\pm 2.5$	PASS
		VN	-10	4.48	0.002556	$\pm 2.5$	PASS
		VN	0	-1.47	-0.000839	$\pm 2.5$	PASS
		VN	10	-0.6	-0.000342	$\pm 2.5$	PASS
		VN	20	-0.19	-0.000108	$\pm 2.5$	PASS
		VN	30	-1.17	-0.000668	$\pm 2.5$	PASS
	MCH	VN	40	2.92	0.001666	$\pm 2.5$	PASS
		VN	50	0.66	0.000377	$\pm 2.5$	PASS
		VN	-30	2.03	0.001064	$\pm 2.5$	PASS
		VN	-20	2.21	0.001159	$\pm 2.5$	PASS
		VN	-10	-0.95	-0.000498	$\pm 2.5$	PASS
		VN	0	4.71	0.002469	$\pm 2.5$	PASS
		VN	10	-0.39	-0.000204	$\pm 2.5$	PASS
		VN	20	2.79	0.001463	$\pm 2.5$	PASS
		VN	30	3.93	0.002060	$\pm 2.5$	PASS
		VN	40	2.9	0.001520	$\pm 2.5$	PASS
	HCH	VN	50	-0.85	-0.000446	$\pm 2.5$	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	0.47	0.000274	± 2.5	PASS
		VN	TN	-1.88	-0.001096	± 2.5	PASS
		VH	TN	1.47	0.000857	± 2.5	PASS
	MCH	VL	TN	1.36	0.000785	± 2.5	PASS
		VN	TN	1.55	0.000895	± 2.5	PASS
		VH	TN	1.6	0.000924	± 2.5	PASS
	HCH	VL	TN	1.85	0.001057	± 2.5	PASS
		VN	TN	-0.28	-0.000160	± 2.5	PASS
		VH	TN	4.38	0.002503	± 2.5	PASS
16QAM	LCH	VL	TN	0.14	0.000082	± 2.5	PASS
		VN	TN	1.17	0.000682	± 2.5	PASS
		VH	TN	2.59	0.001510	± 2.5	PASS
	MCH	VL	TN	3.78	0.002182	± 2.5	PASS
		VN	TN	0.22	0.000127	± 2.5	PASS
		VH	TN	-1.07	-0.000618	± 2.5	PASS
	HCH	VL	TN	-1.5	-0.000857	± 2.5	PASS
		VN	TN	0.13	0.000074	± 2.5	PASS
		VH	TN	-1.8	-0.001029	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	LCH	VN	-30	1.6	0.000933	± 2.5	PASS
		VN	-20	-1.7	-0.000991	± 2.5	PASS
		VN	-10	1.38	0.000805	± 2.5	PASS
		VN	0	3.37	0.001965	± 2.5	PASS
		VN	10	4.74	0.002764	± 2.5	PASS
		VN	20	4.97	0.002898	± 2.5	PASS
		VN	30	3.13	0.001825	± 2.5	PASS
		VN	40	4.19	0.002443	± 2.5	PASS
		VN	50	1.58	0.000921	± 2.5	PASS
	MCH	VN	-30	4.26	0.002459	± 2.5	PASS
		VN	-20	-0.29	-0.000167	± 2.5	PASS
		VN	-10	4.96	0.002863	± 2.5	PASS
		VN	0	-1.11	-0.000641	± 2.5	PASS
		VN	10	-0.7	-0.000404	± 2.5	PASS
		VN	20	0.19	0.000110	± 2.5	PASS

	HCH	VN	30	1	0.000577	$\pm 2.5$	PASS	
		VN	40	-0.88	-0.000508	$\pm 2.5$	PASS	
		VN	50	-0.58	-0.000335	$\pm 2.5$	PASS	
		VN	-30	4.03	0.002303	$\pm 2.5$	PASS	
		VN	-20	1.82	0.001040	$\pm 2.5$	PASS	
		VN	-10	3.53	0.002017	$\pm 2.5$	PASS	
		VN	0	-0.03	-0.000017	$\pm 2.5$	PASS	
		VN	10	0.48	0.000274	$\pm 2.5$	PASS	
		VN	20	3.95	0.002257	$\pm 2.5$	PASS	
		VN	30	0.97	0.000554	$\pm 2.5$	PASS	
	LCH	VN	40	0.19	0.000109	$\pm 2.5$	PASS	
		VN	50	0.36	0.000206	$\pm 2.5$	PASS	
		VN	-30	2.19	0.001264	$\pm 2.5$	PASS	
		VN	-20	4.36	0.002517	$\pm 2.5$	PASS	
		VN	-10	3.65	0.002107	$\pm 2.5$	PASS	
		VN	0	-1.52	-0.000877	$\pm 2.5$	PASS	
		VN	10	4.16	0.002401	$\pm 2.5$	PASS	
		VN	20	0.32	0.000185	$\pm 2.5$	PASS	
		VN	30	-0.73	-0.000421	$\pm 2.5$	PASS	
	MCH	VN	40	-0.43	-0.000248	$\pm 2.5$	PASS	
		VN	50	4.65	0.002684	$\pm 2.5$	PASS	
		VN	-30	-0.28	-0.000160	$\pm 2.5$	PASS	
		VN	-20	0.58	0.000331	$\pm 2.5$	PASS	
		VN	-10	4.81	0.002749	$\pm 2.5$	PASS	
		VN	0	-1.01	-0.000577	$\pm 2.5$	PASS	
		VN	10	0.61	0.000349	$\pm 2.5$	PASS	
		VN	20	1.92	0.001097	$\pm 2.5$	PASS	
		VN	30	0.96	0.000549	$\pm 2.5$	PASS	
	HCH	VN	40	0.55	0.000314	$\pm 2.5$	PASS	
		VN	50	-1.7	-0.000971	$\pm 2.5$	PASS	
		VN	-30	0.32	0.000183	$\pm 2.5$	PASS	
		VN	-20	4.79	0.002737	$\pm 2.5$	PASS	
		VN	-10	1	0.000571	$\pm 2.5$	PASS	
		VN	0	0.42	0.000240	$\pm 2.5$	PASS	
		VN	10	2.64	0.001509	$\pm 2.5$	PASS	
		VN	20	-0.2	-0.000114	$\pm 2.5$	PASS	
		VN	30	1.54	0.000880	$\pm 2.5$	PASS	
		VN	40	0.99	0.000566	$\pm 2.5$	PASS	
		VN	50	3.87	0.002211	$\pm 2.5$	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	-1.21	-0.000705	± 2.5	PASS
		VN	TN	2.4	0.001397	± 2.5	PASS
		VH	TN	-0.57	-0.000332	± 2.5	PASS
	MCH	VL	TN	3.67	0.002118	± 2.5	PASS
		VN	TN	-0.41	-0.000237	± 2.5	PASS
		VH	TN	3.83	0.002211	± 2.5	PASS
	HCH	VL	TN	1.11	0.000635	± 2.5	PASS
		VN	TN	-0.12	-0.000069	± 2.5	PASS
		VH	TN	0.02	0.000011	± 2.5	PASS
16QAM	LCH	VL	TN	3.85	0.002242	± 2.5	PASS
		VN	TN	1.4	0.000815	± 2.5	PASS
		VH	TN	0.36	0.000210	± 2.5	PASS
	MCH	VL	TN	-1.36	-0.000785	± 2.5	PASS
		VN	TN	1.47	0.000848	± 2.5	PASS
		VH	TN	4.67	0.002696	± 2.5	PASS
	HCH	VL	TN	2.7	0.001545	± 2.5	PASS
		VN	TN	4.23	0.002421	± 2.5	PASS
		VH	TN	4.02	0.002300	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.18	0.002434	± 2.5	PASS
		VN	-20	-0.26	-0.000151	± 2.5	PASS
		VN	-10	4.65	0.002707	± 2.5	PASS
		VN	0	2.72	0.001584	± 2.5	PASS
		VN	10	4.02	0.002341	± 2.5	PASS
		VN	20	1.94	0.001130	± 2.5	PASS
		VN	30	-1.81	-0.001054	± 2.5	PASS
		VN	40	4.38	0.002550	± 2.5	PASS
		VN	50	4.97	0.002894	± 2.5	PASS
	MCH	VN	-30	1.53	0.000883	± 2.5	PASS
		VN	-20	4.03	0.002326	± 2.5	PASS
		VN	-10	0.9	0.000519	± 2.5	PASS
		VN	0	-1.83	-0.001056	± 2.5	PASS
		VN	10	-0.48	-0.000277	± 2.5	PASS
		VN	20	1.07	0.000618	± 2.5	PASS

	HCH	VN	30	-0.03	-0.000017	$\pm 2.5$	PASS	
		VN	40	0.61	0.000352	$\pm 2.5$	PASS	
		VN	50	1.12	0.000646	$\pm 2.5$	PASS	
		VN	-30	0.42	0.000240	$\pm 2.5$	PASS	
		VN	-20	4.44	0.002541	$\pm 2.5$	PASS	
		VN	-10	4.82	0.002758	$\pm 2.5$	PASS	
		VN	0	1.3	0.000744	$\pm 2.5$	PASS	
		VN	10	-0.3	-0.000172	$\pm 2.5$	PASS	
		VN	20	0.29	0.000166	$\pm 2.5$	PASS	
		VN	30	3.82	0.002186	$\pm 2.5$	PASS	
	LCH	VN	40	0.86	0.000492	$\pm 2.5$	PASS	
		VN	50	0.61	0.000349	$\pm 2.5$	PASS	
		VN	-30	1.67	0.000964	$\pm 2.5$	PASS	
		VN	-20	1.05	0.000606	$\pm 2.5$	PASS	
		VN	-10	0.01	0.000006	$\pm 2.5$	PASS	
		VN	0	-1.03	-0.000595	$\pm 2.5$	PASS	
		VN	10	3.79	0.002188	$\pm 2.5$	PASS	
		VN	20	1.18	0.000681	$\pm 2.5$	PASS	
		VN	30	2.66	0.001535	$\pm 2.5$	PASS	
	MCH	VN	40	-1.08	-0.000623	$\pm 2.5$	PASS	
		VN	50	2.54	0.001466	$\pm 2.5$	PASS	
		VN	-30	2.27	0.001299	$\pm 2.5$	PASS	
		VN	-20	-0.52	-0.000298	$\pm 2.5$	PASS	
		VN	-10	2.21	0.001265	$\pm 2.5$	PASS	
		VN	0	2.62	0.001499	$\pm 2.5$	PASS	
		VN	10	1.01	0.000578	$\pm 2.5$	PASS	
		VN	20	0.31	0.000177	$\pm 2.5$	PASS	
		VN	30	3.91	0.002237	$\pm 2.5$	PASS	
	HCH	VN	40	-1.03	-0.000589	$\pm 2.5$	PASS	
		VN	50	1.98	0.001133	$\pm 2.5$	PASS	
		VN	-30	-1.21	-0.000692	$\pm 2.5$	PASS	
		VN	-20	1.85	0.001059	$\pm 2.5$	PASS	
		VN	-10	-0.48	-0.000275	$\pm 2.5$	PASS	
		VN	0	0.3	0.000172	$\pm 2.5$	PASS	
		VN	10	-1.85	-0.001059	$\pm 2.5$	PASS	
		VN	20	-1.5	-0.000858	$\pm 2.5$	PASS	
		VN	30	-0.18	-0.000103	$\pm 2.5$	PASS	
		VN	40	4.96	0.002838	$\pm 2.5$	PASS	
		VN	50	-0.46	-0.000263	$\pm 2.5$	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	3.3	0.001919	± 2.5	PASS
		VN	TN	-0.77	-0.000448	± 2.5	PASS
		VH	TN	2.38	0.001384	± 2.5	PASS
	MCH	VL	TN	-1.07	-0.000618	± 2.5	PASS
		VN	TN	1.88	0.001085	± 2.5	PASS
		VH	TN	-1.04	-0.000600	± 2.5	PASS
	HCH	VL	TN	1.46	0.000837	± 2.5	PASS
		VN	TN	-0.5	-0.000287	± 2.5	PASS
		VH	TN	4.05	0.002321	± 2.5	PASS
16QAM	LCH	VL	TN	0.32	0.000186	± 2.5	PASS
		VN	TN	-0.8	-0.000465	± 2.5	PASS
		VH	TN	4.6	0.002674	± 2.5	PASS
	MCH	VL	TN	-1.29	-0.000745	± 2.5	PASS
		VN	TN	3.42	0.001974	± 2.5	PASS
		VH	TN	3.91	0.002257	± 2.5	PASS
	HCH	VL	TN	1.99	0.001140	± 2.5	PASS
		VN	TN	-0.39	-0.000223	± 2.5	PASS
		VH	TN	4.49	0.002573	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.27	0.001901	± 2.5	PASS
		VN	-20	-1.37	-0.000797	± 2.5	PASS
		VN	-10	-1.77	-0.001029	± 2.5	PASS
		VN	0	3.6	0.002093	± 2.5	PASS
		VN	10	3.39	0.001971	± 2.5	PASS
		VN	20	2.65	0.001541	± 2.5	PASS
		VN	30	-0.51	-0.000297	± 2.5	PASS
		VN	40	4.88	0.002837	± 2.5	PASS
		VN	50	-1.73	-0.001006	± 2.5	PASS
	MCH	VN	-30	0.14	0.000081	± 2.5	PASS
		VN	-20	-1.79	-0.001033	± 2.5	PASS
		VN	-10	2.82	0.001628	± 2.5	PASS
		VN	0	4.34	0.002505	± 2.5	PASS
		VN	10	2.47	0.001426	± 2.5	PASS

	HCH	VN	20	4.91	0.002834	$\pm 2.5$	PASS
		VN	30	2.29	0.001322	$\pm 2.5$	PASS
		VN	40	3.61	0.002084	$\pm 2.5$	PASS
		VN	50	2.03	0.001172	$\pm 2.5$	PASS
		VN	-30	3.5	0.002006	$\pm 2.5$	PASS
		VN	-20	1.99	0.001140	$\pm 2.5$	PASS
		VN	-10	-1.59	-0.000911	$\pm 2.5$	PASS
		VN	0	3.91	0.002241	$\pm 2.5$	PASS
		VN	10	0.13	0.000074	$\pm 2.5$	PASS
		VN	20	0.22	0.000126	$\pm 2.5$	PASS
	LCH	VN	30	0.09	0.000052	$\pm 2.5$	PASS
		VN	40	3.91	0.002241	$\pm 2.5$	PASS
		VN	50	3.91	0.002241	$\pm 2.5$	PASS
		VN	-30	4.23	0.002442	$\pm 2.5$	PASS
		VN	-20	1.11	0.000641	$\pm 2.5$	PASS
		VN	-10	4.78	0.002759	$\pm 2.5$	PASS
		VN	0	-0.39	-0.000225	$\pm 2.5$	PASS
		VN	10	4.77	0.002753	$\pm 2.5$	PASS
		VN	20	2.79	0.001610	$\pm 2.5$	PASS
		VN	30	4.42	0.002551	$\pm 2.5$	PASS
	QPSK	VN	40	-1.53	-0.000883	$\pm 2.5$	PASS
		VN	50	0.41	0.000237	$\pm 2.5$	PASS
		VN	-30	2.91	0.001668	$\pm 2.5$	PASS
		VN	-20	1.64	0.000940	$\pm 2.5$	PASS
		VN	-10	-1.36	-0.000779	$\pm 2.5$	PASS
		VN	0	1.89	0.001083	$\pm 2.5$	PASS
		VN	10	3.49	0.002000	$\pm 2.5$	PASS
		VN	20	-1.92	-0.001100	$\pm 2.5$	PASS
		VN	30	3.8	0.002178	$\pm 2.5$	PASS
		VN	40	-1.87	-0.001072	$\pm 2.5$	PASS
	MCH	VN	50	-1.39	-0.000797	$\pm 2.5$	PASS
		VN	-30	-1.41	-0.000808	$\pm 2.5$	PASS
		VN	-20	-1.62	-0.000928	$\pm 2.5$	PASS
		VN	-10	1.78	0.001020	$\pm 2.5$	PASS
		VN	0	-1.78	-0.001020	$\pm 2.5$	PASS
		VN	10	-2	-0.001146	$\pm 2.5$	PASS
		VN	20	1.82	0.001043	$\pm 2.5$	PASS
		VN	30	3.5	0.002006	$\pm 2.5$	PASS
		VN	40	4.6	0.002636	$\pm 2.5$	PASS
		VN	50	-1.24	-0.000711	$\pm 2.5$	PASS