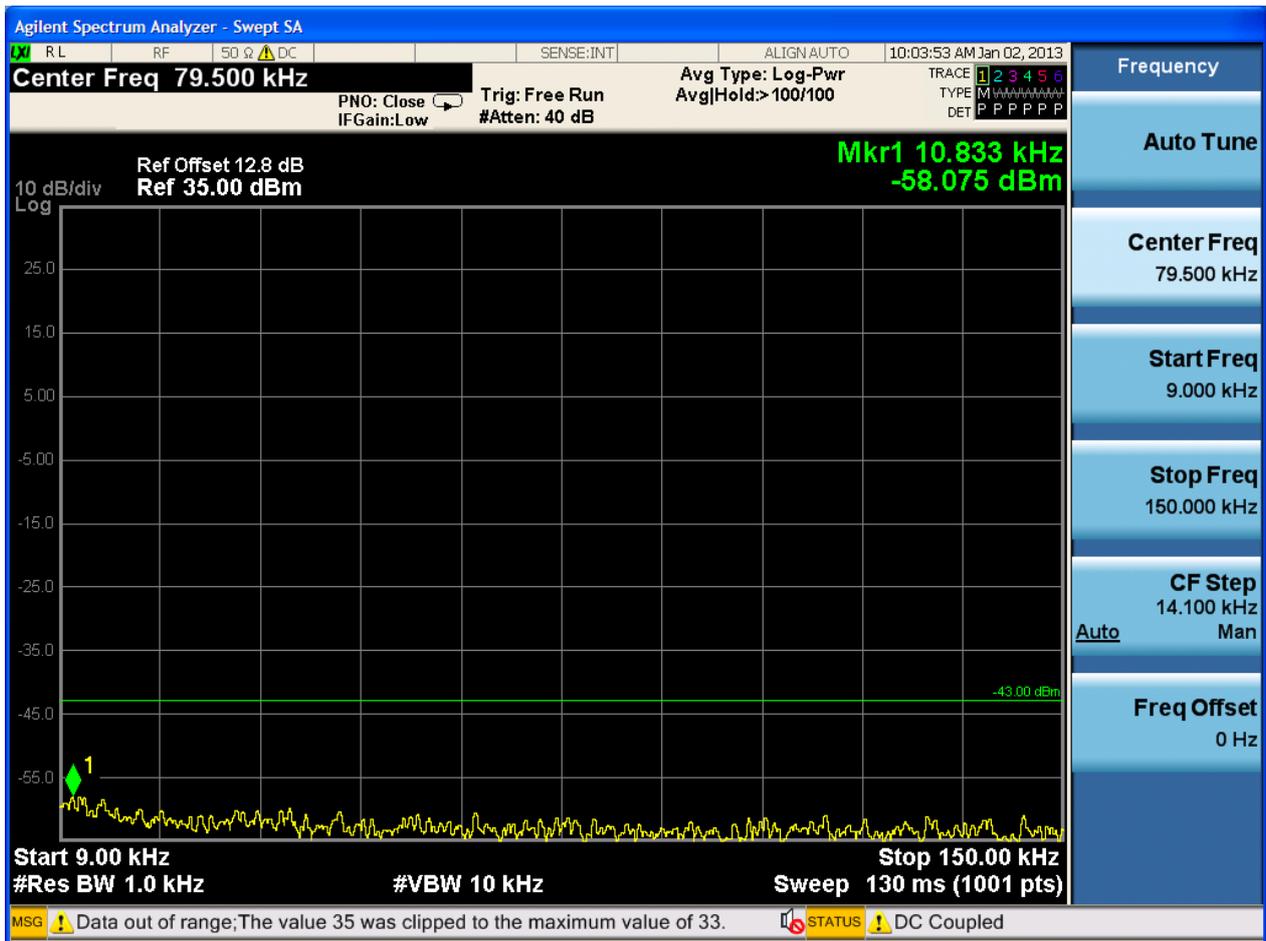


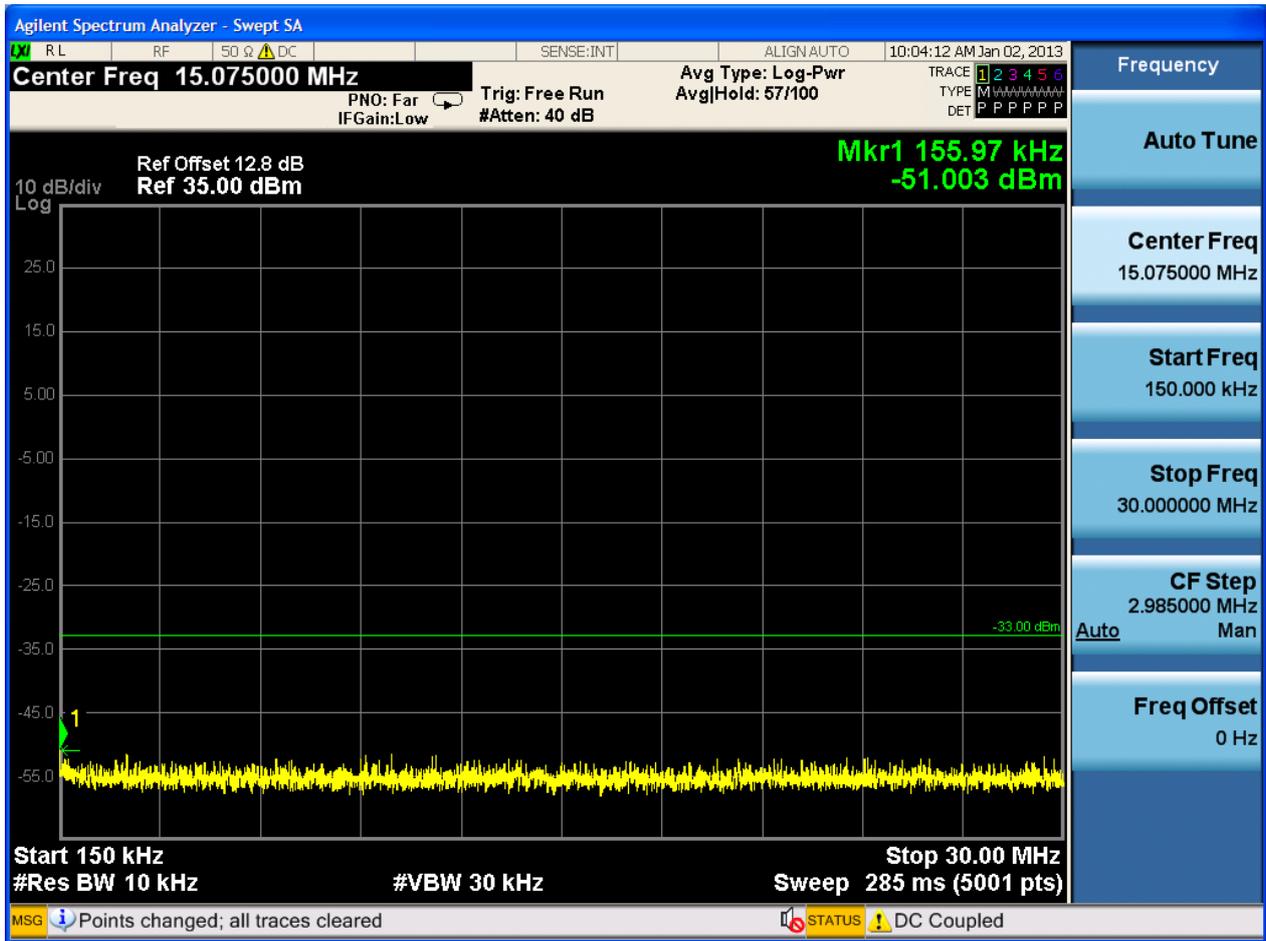


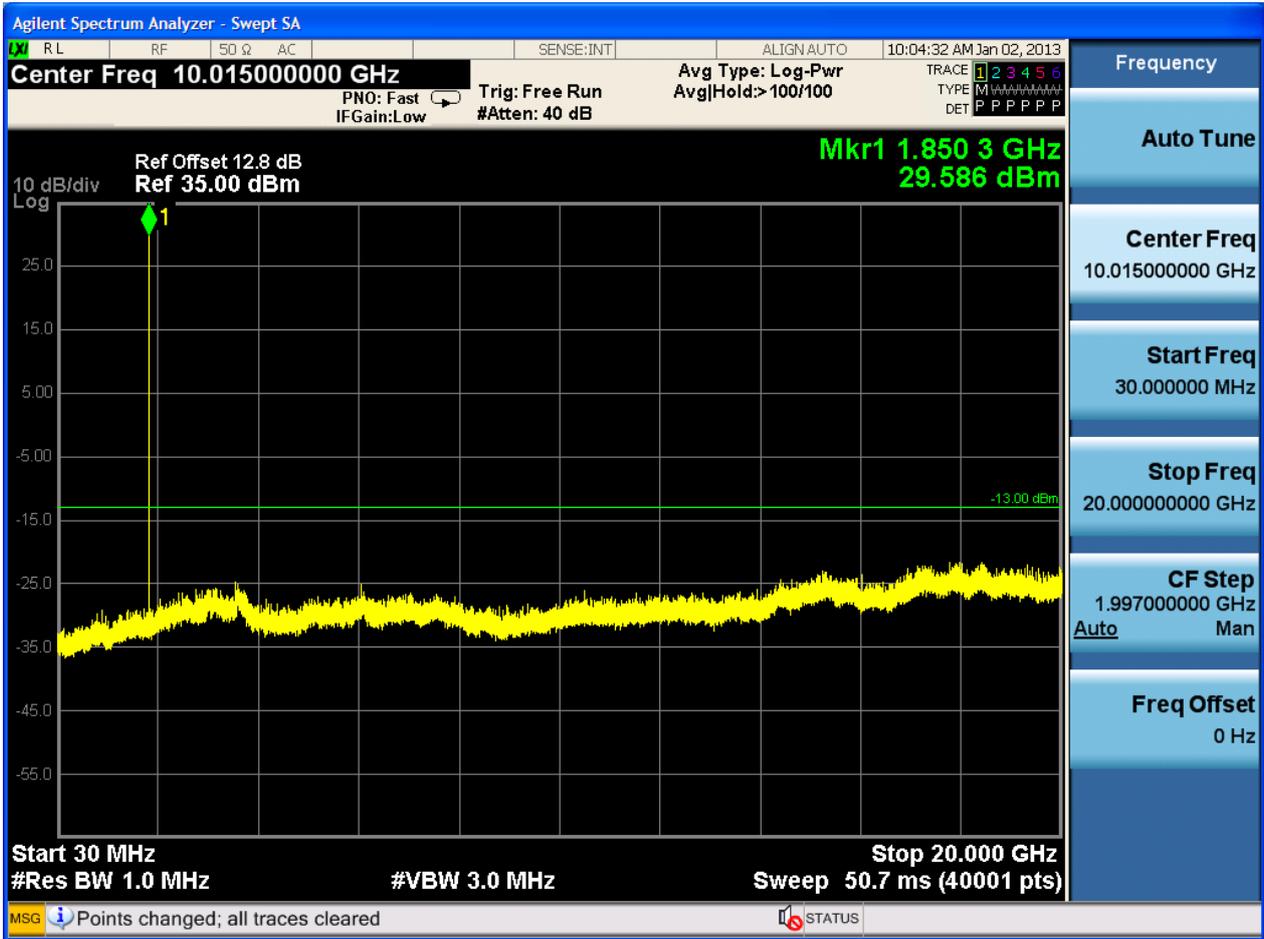
4.1.2 Test Band = GSM1900

4.1.2.1 Test Mode = GSM/TM1

4.1.2.1.1 Test Channel = LCH

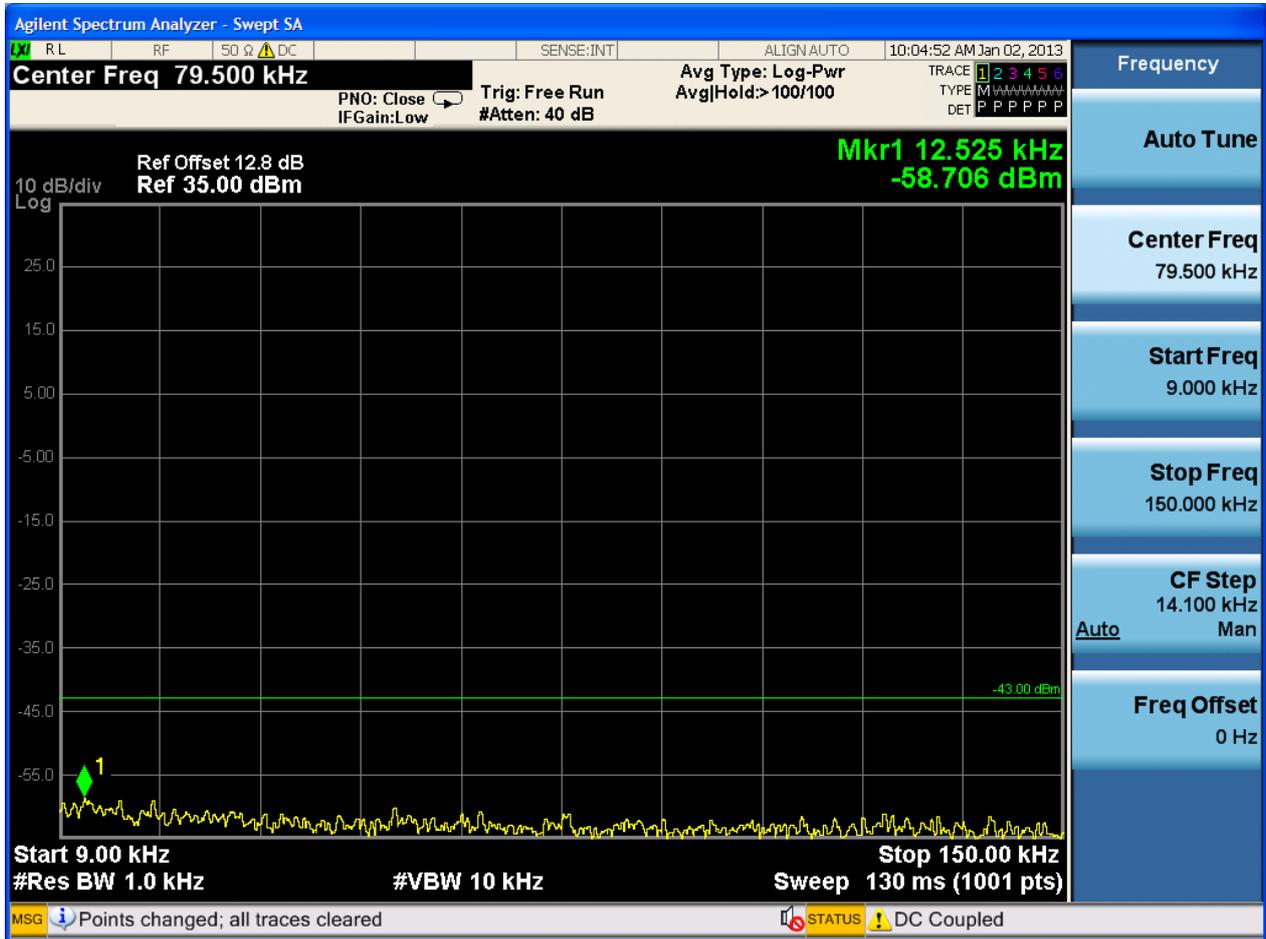


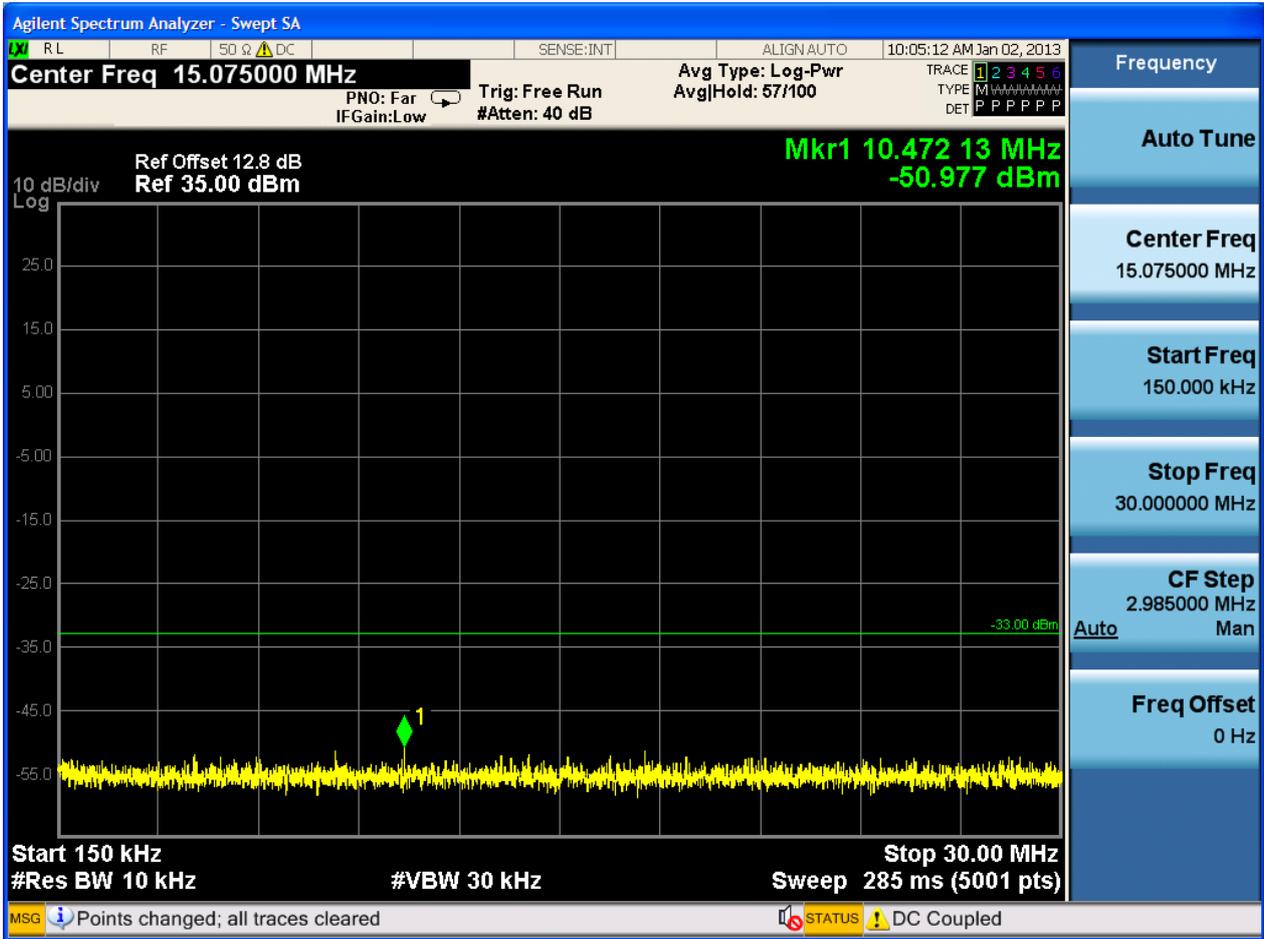


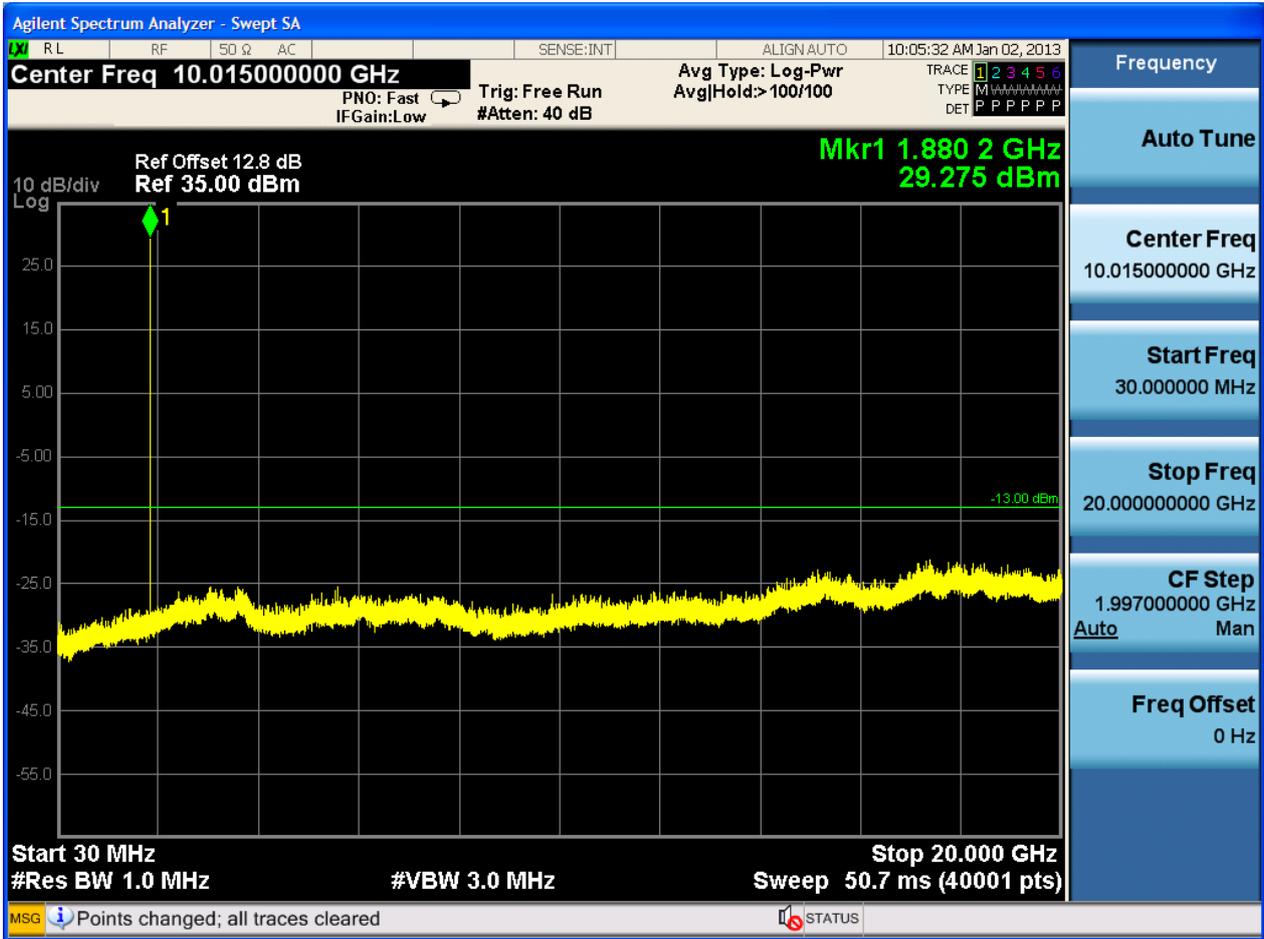




4.1.2.1.2 Test Channel = MCH

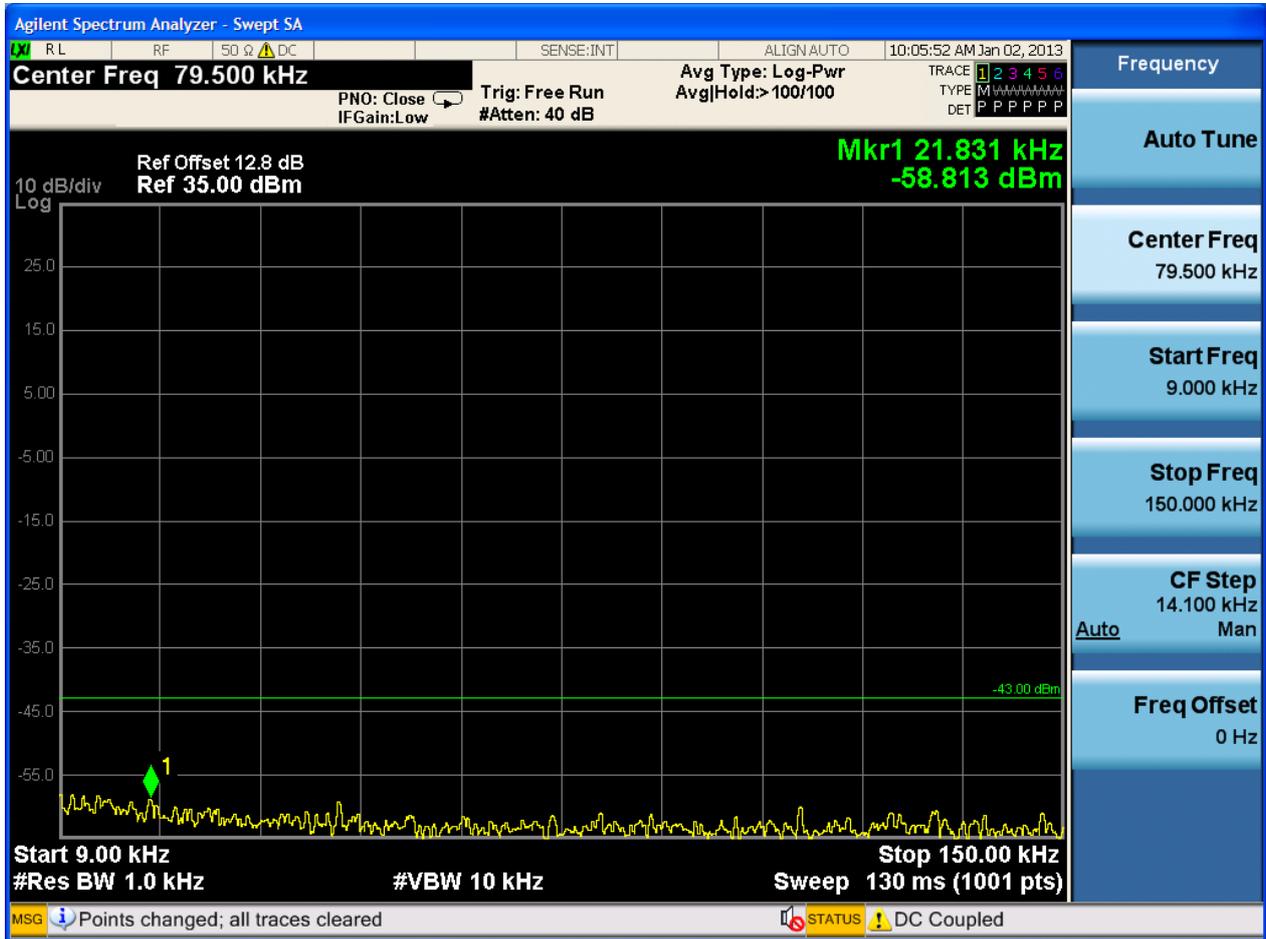


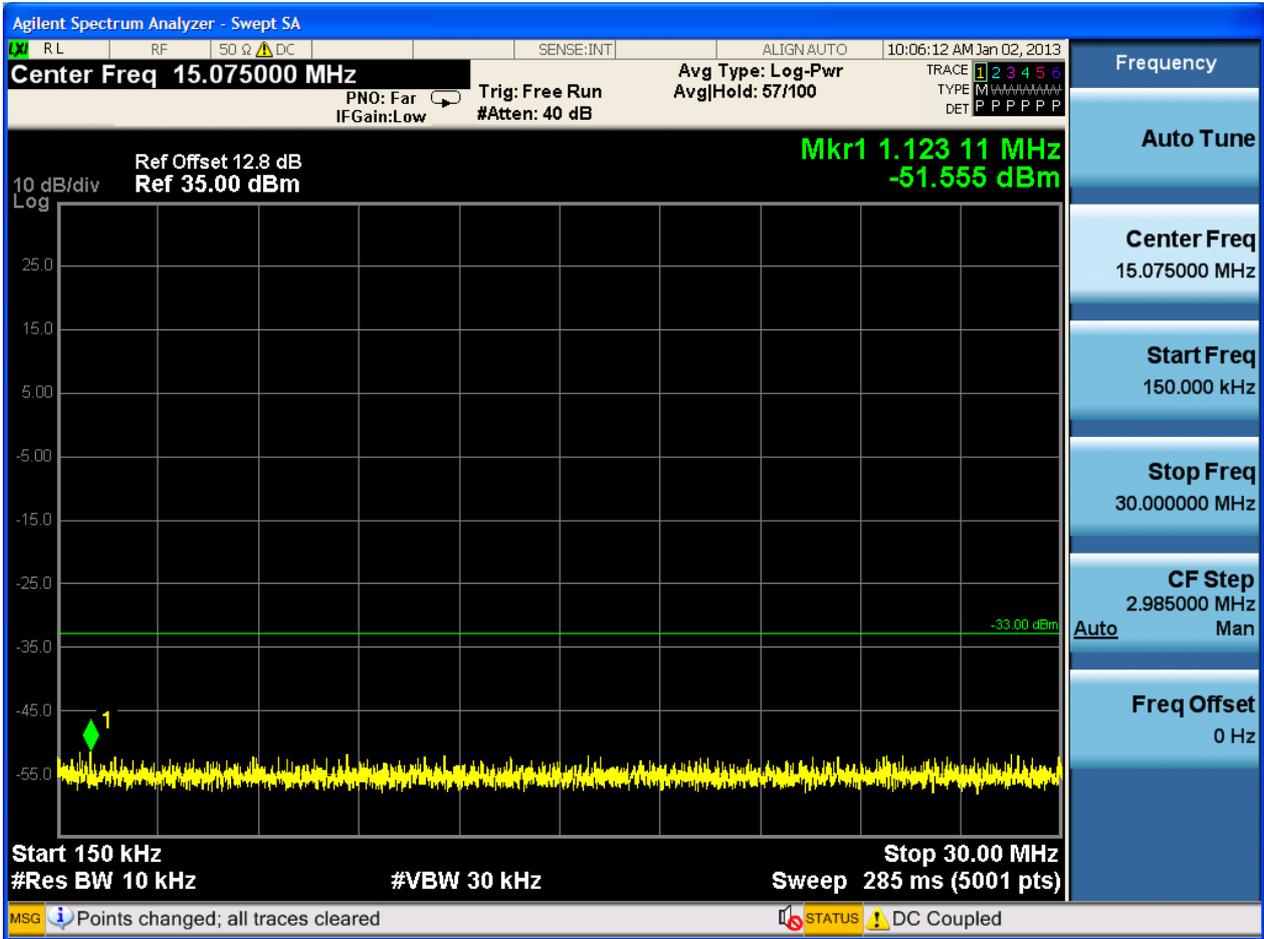


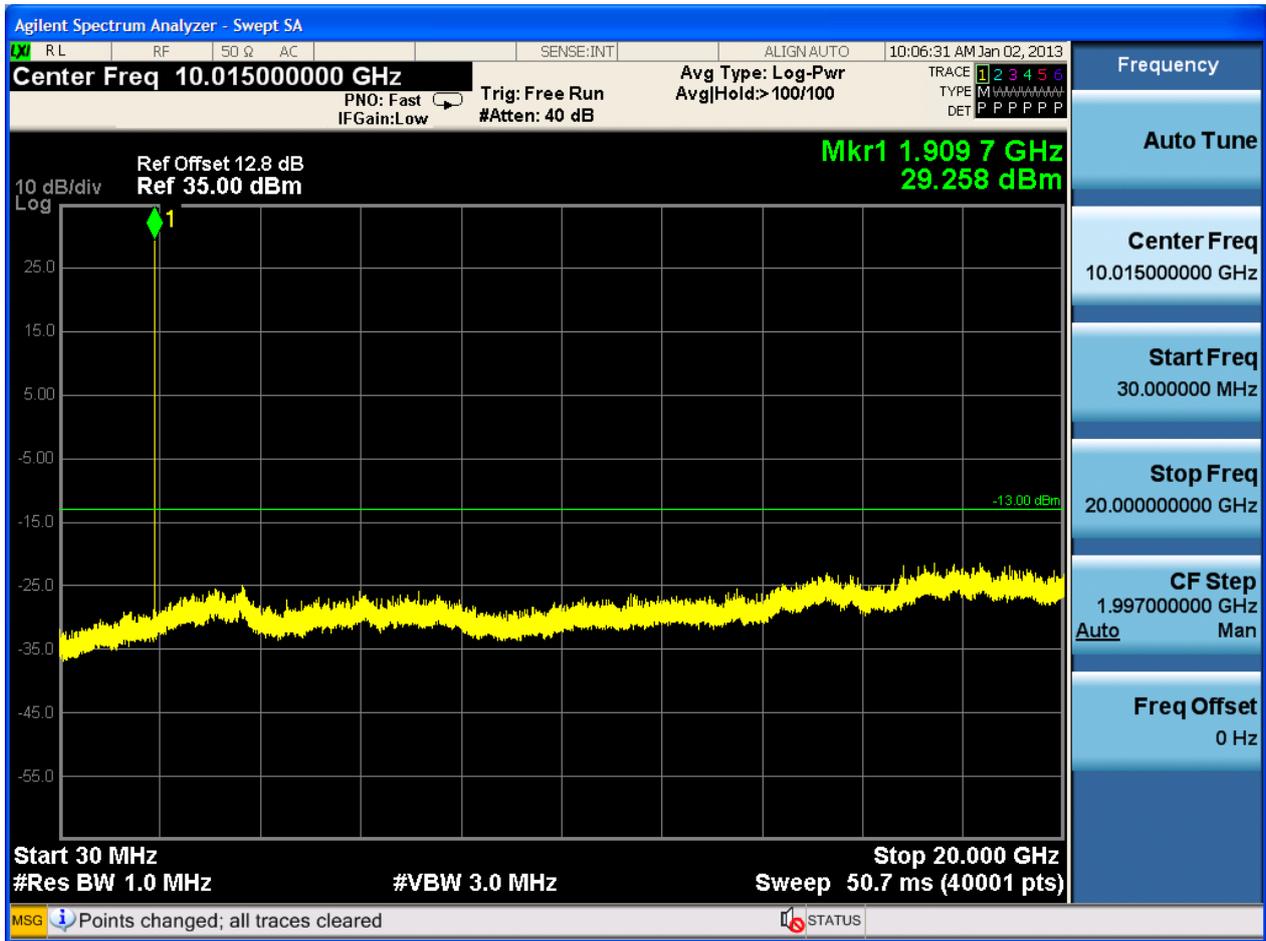




4.1.2.1.3 Test Channel = HCH



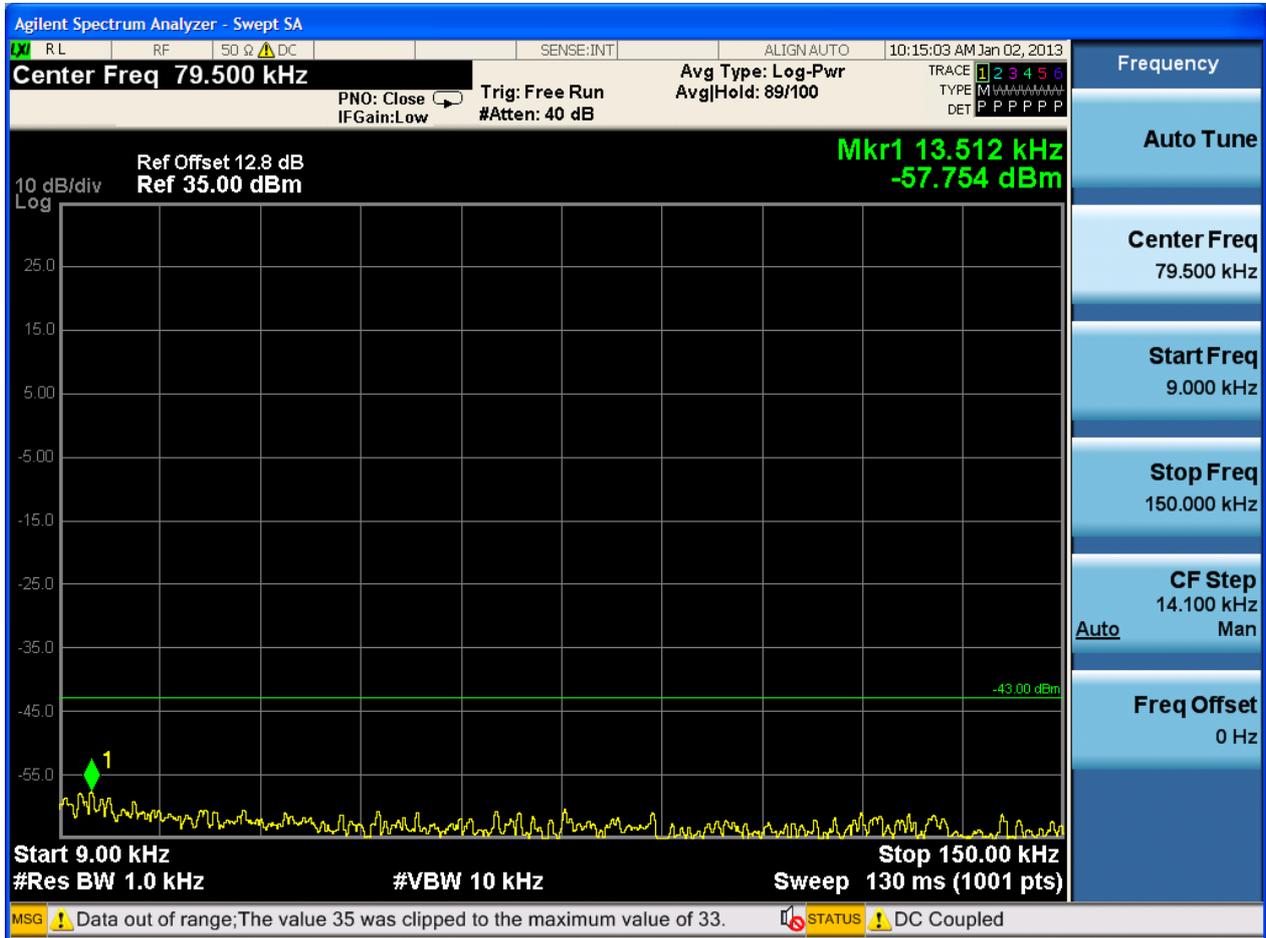


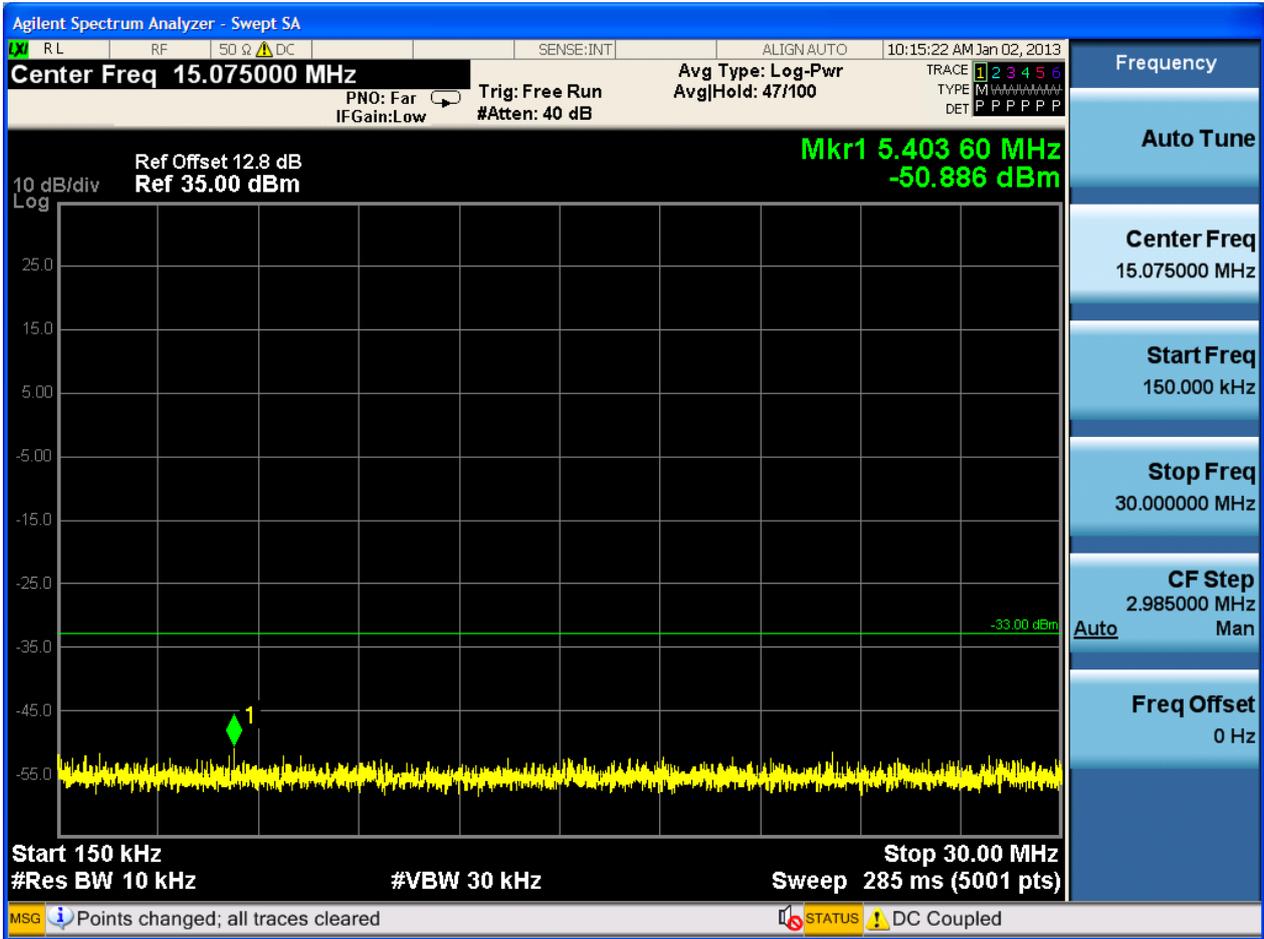


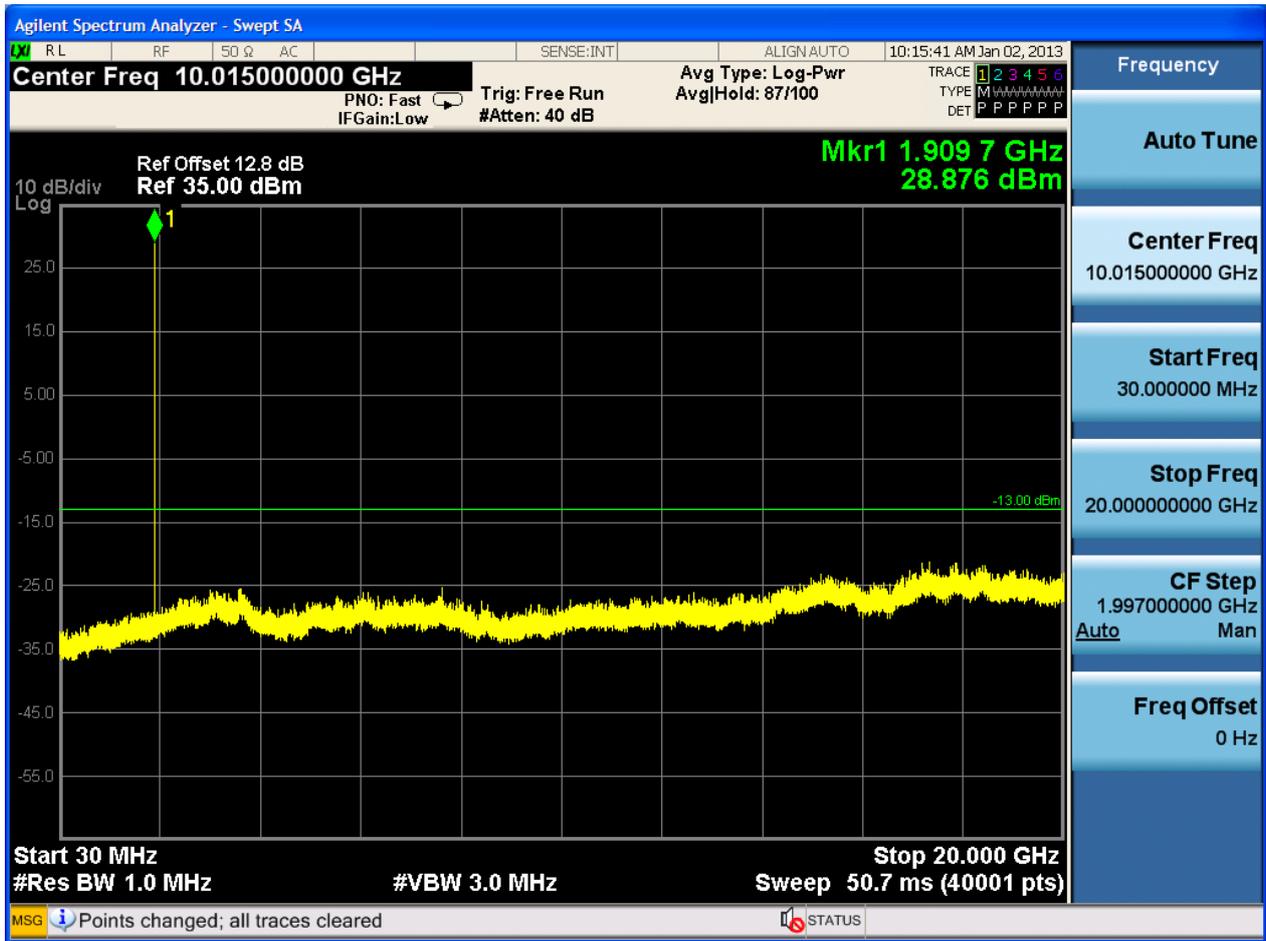


4.1.2.2 Test Mode = GSM/TM2

4.1.2.2.1 Test Channel = LCH

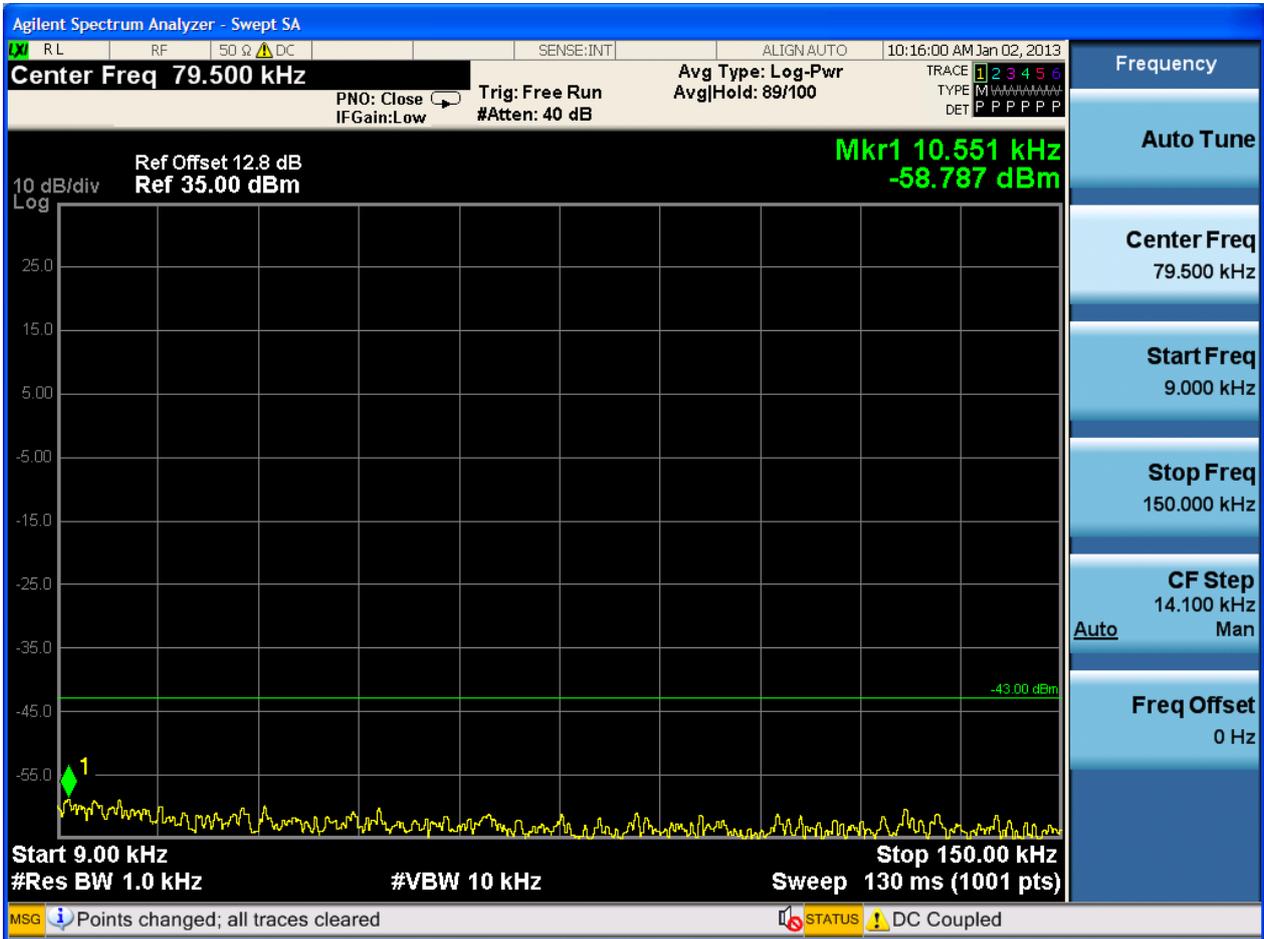


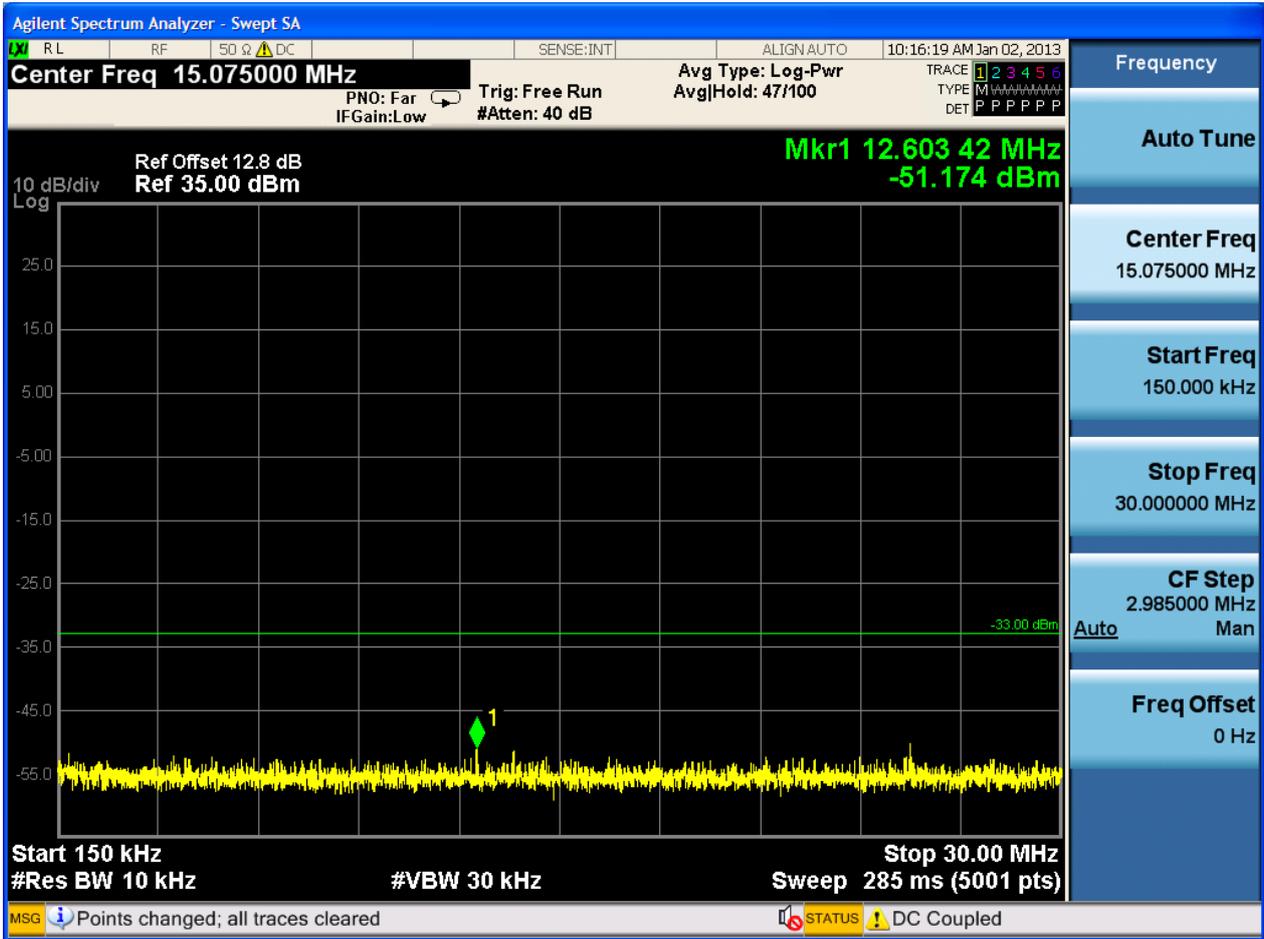


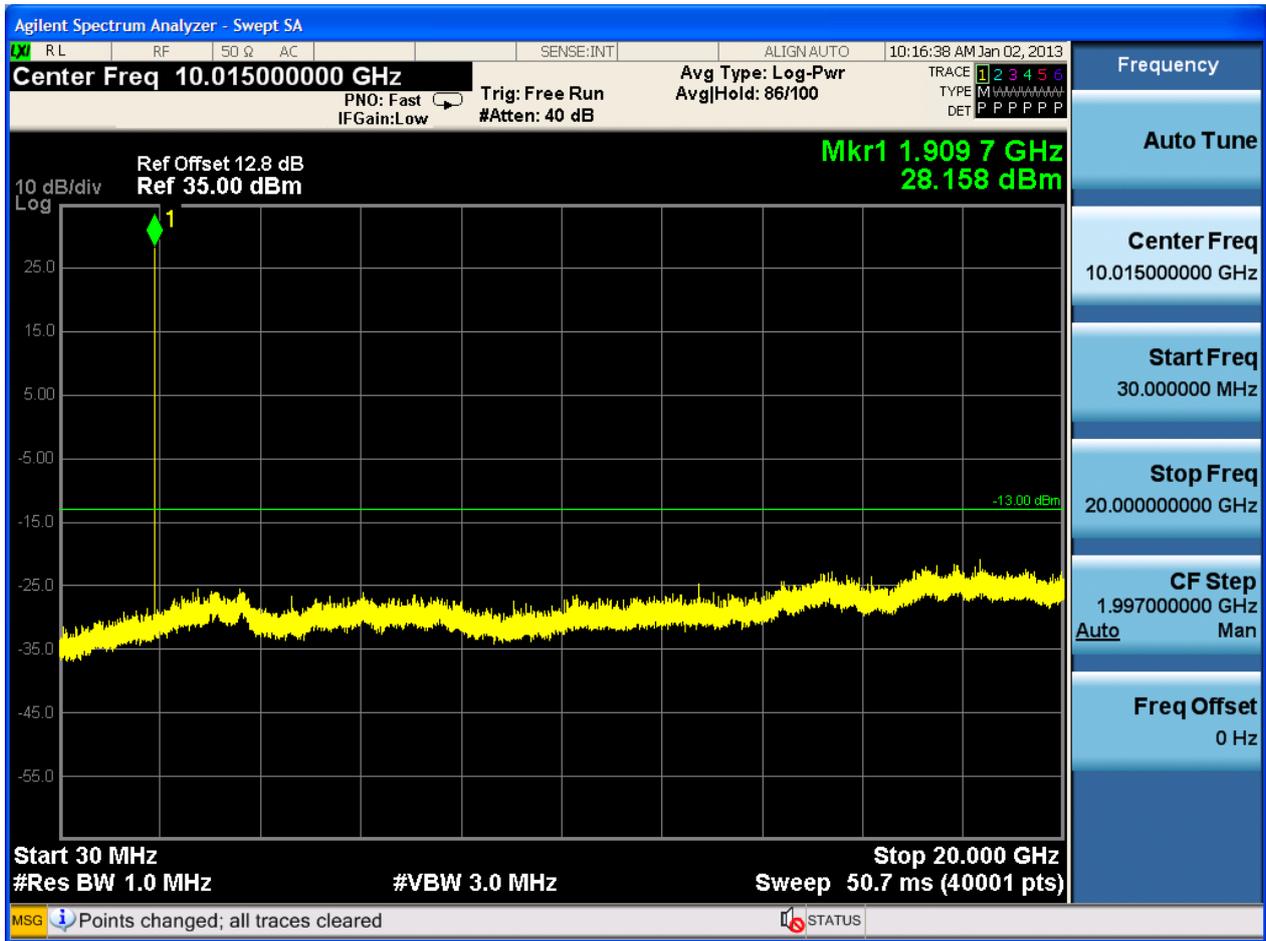




4.1.2.2.2 Test Channel = MCH

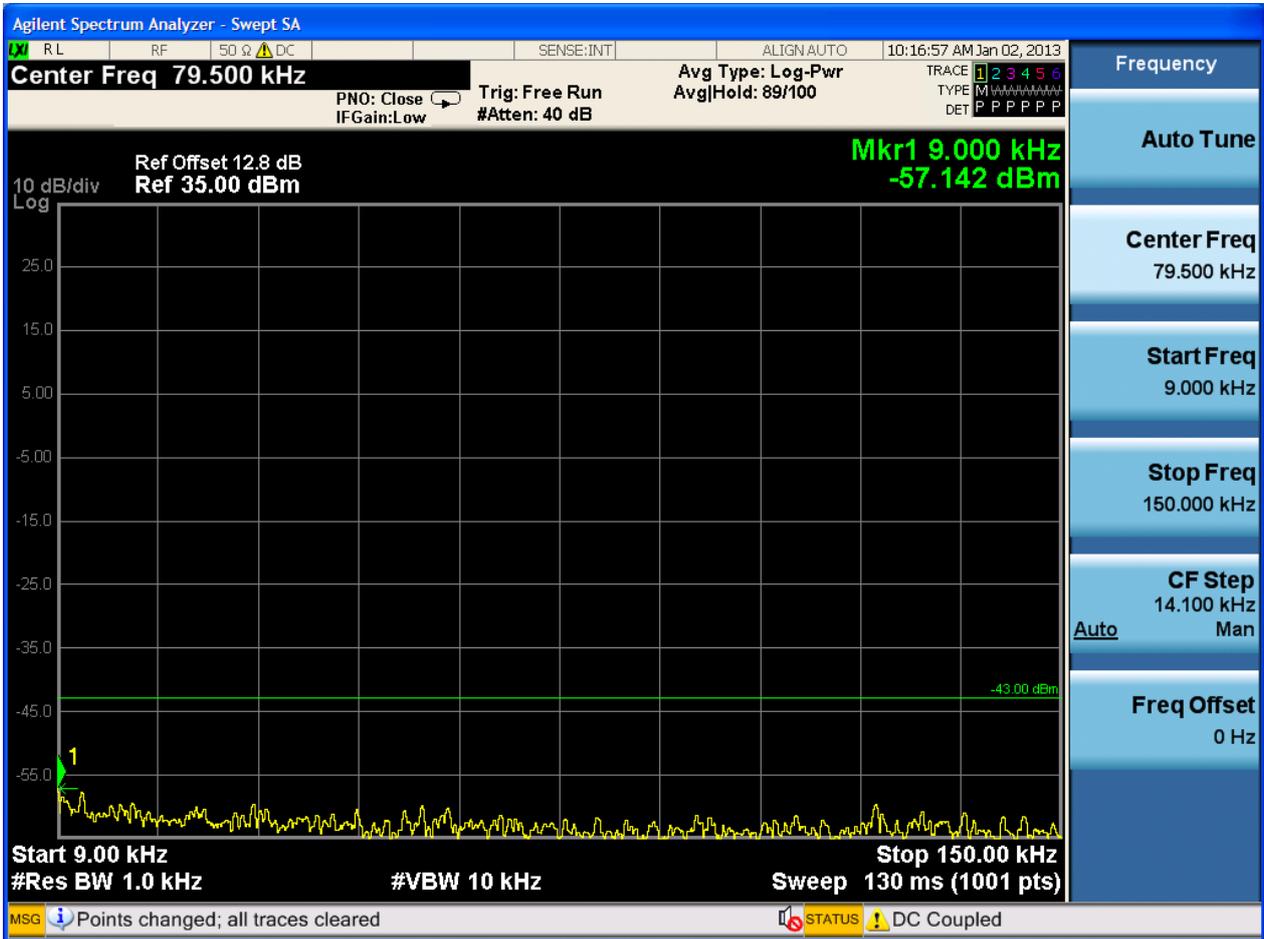


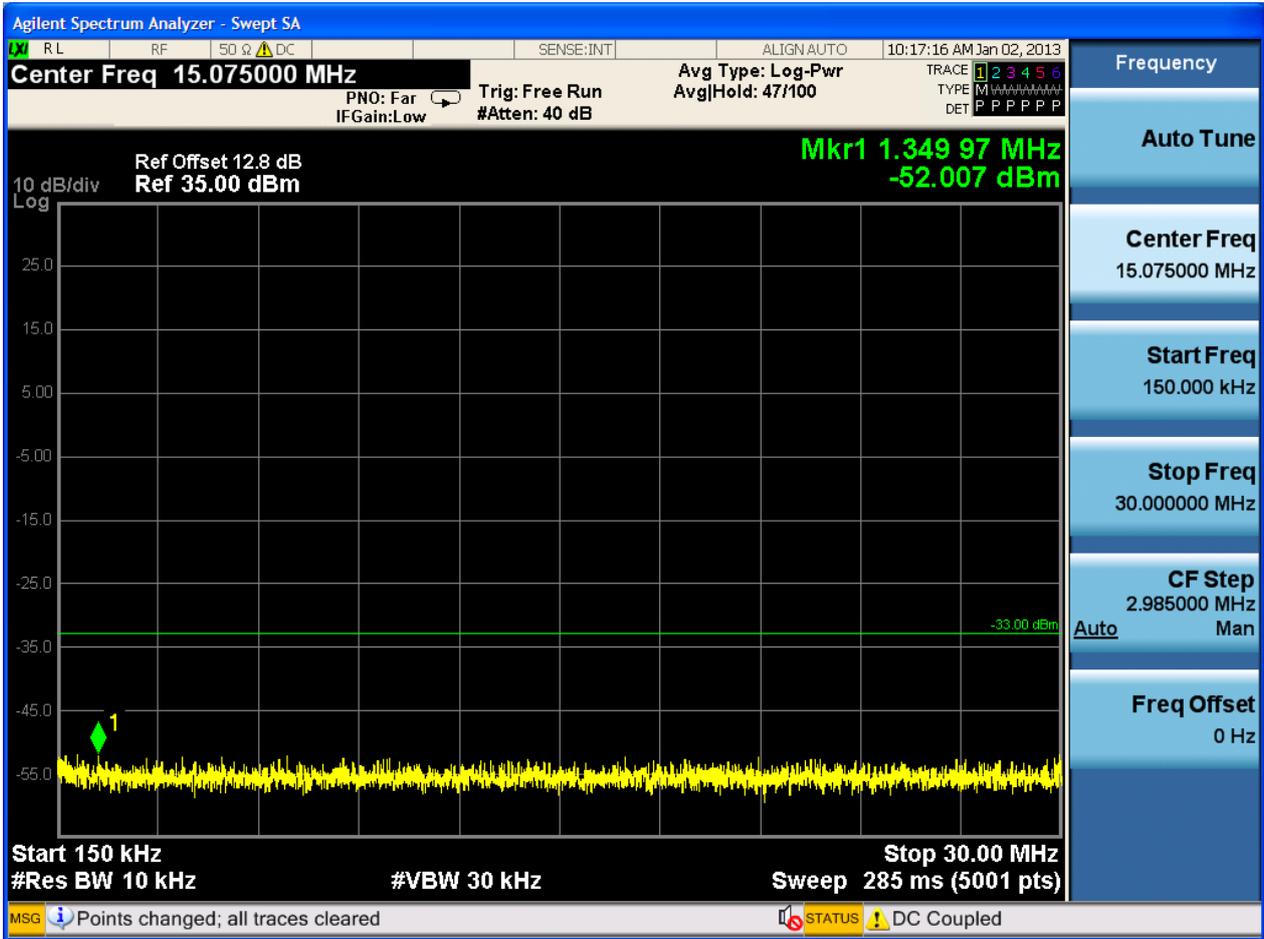


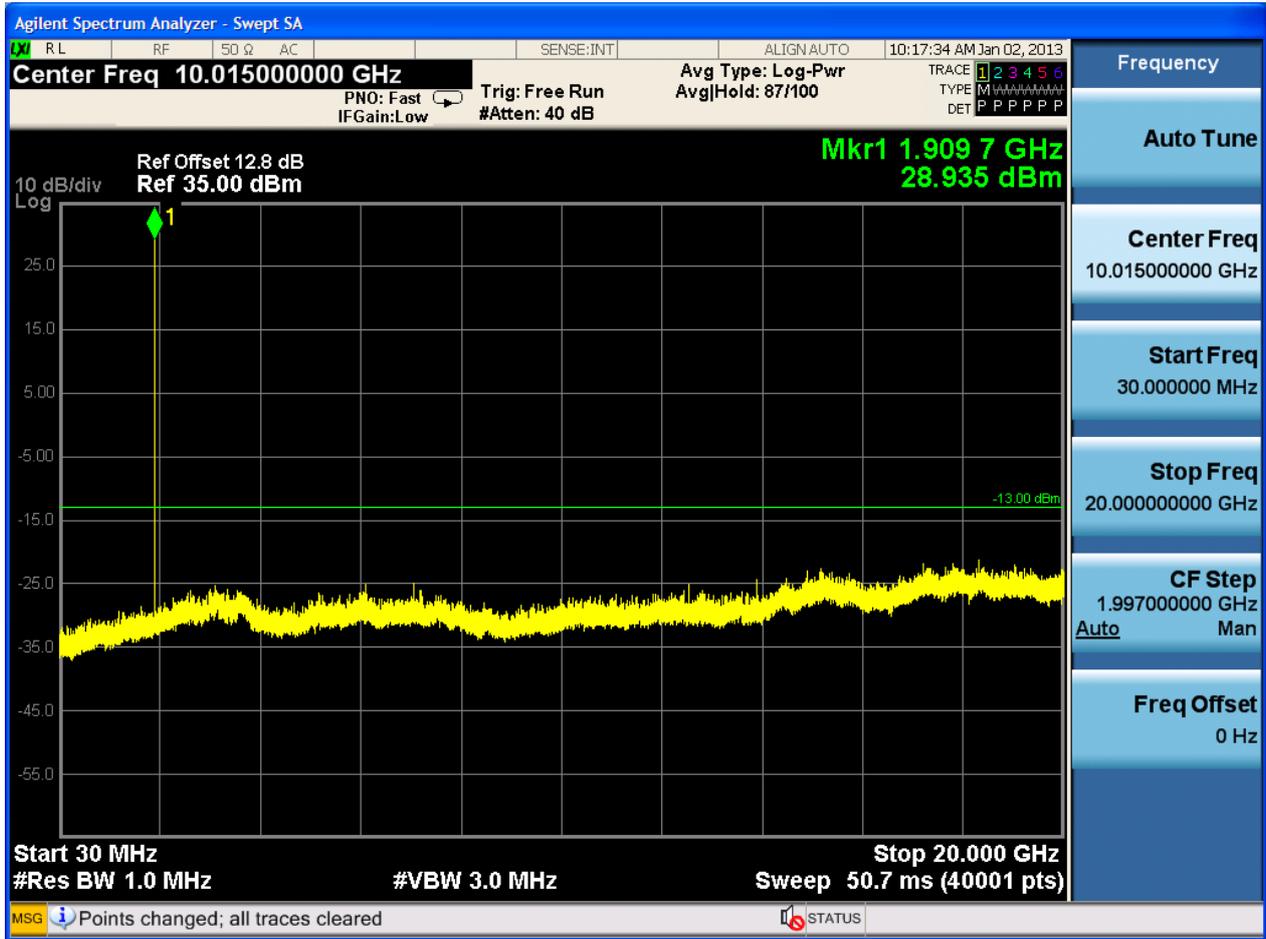




4.1.2.2.3 Test Channel = HCH







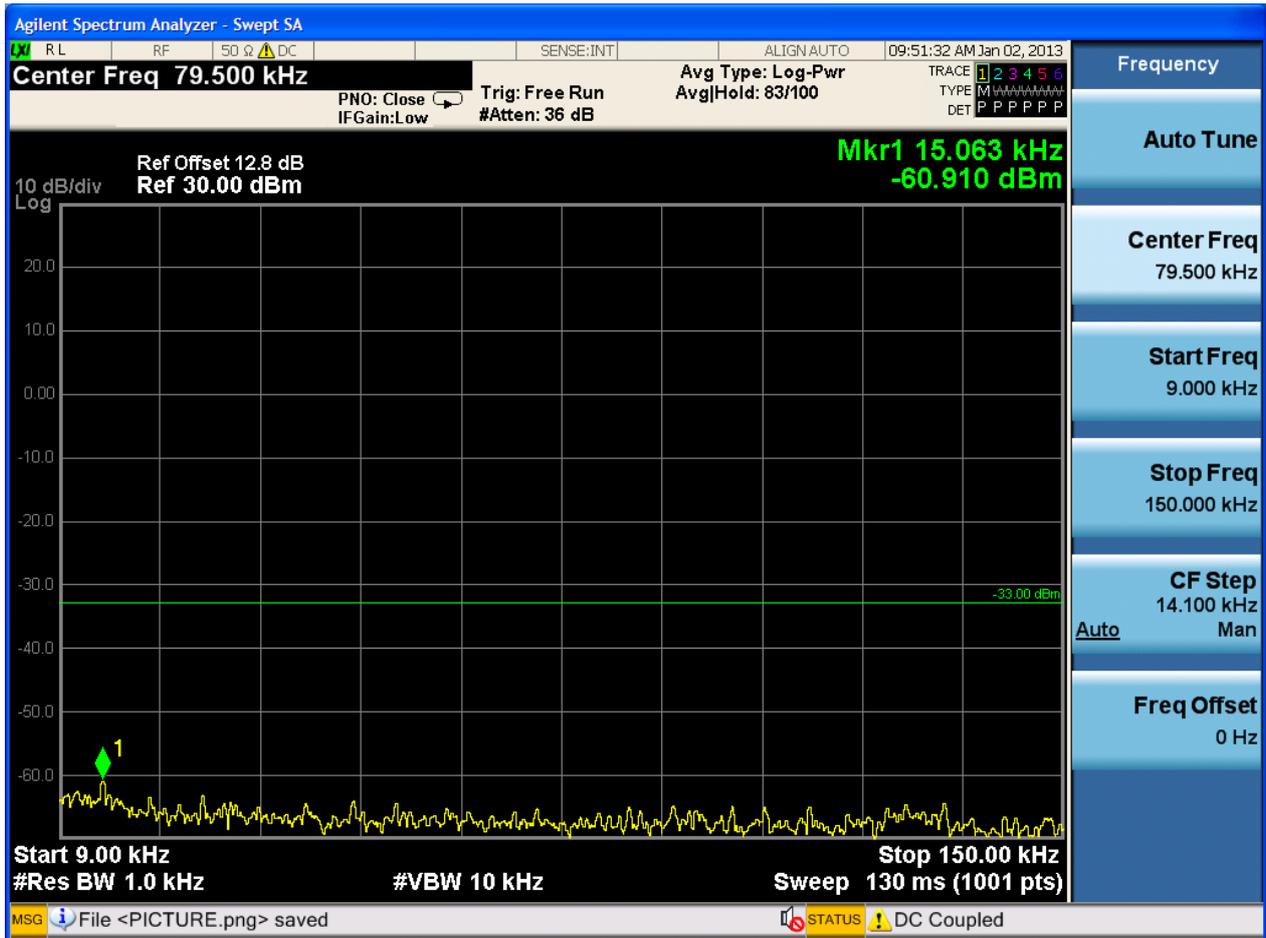


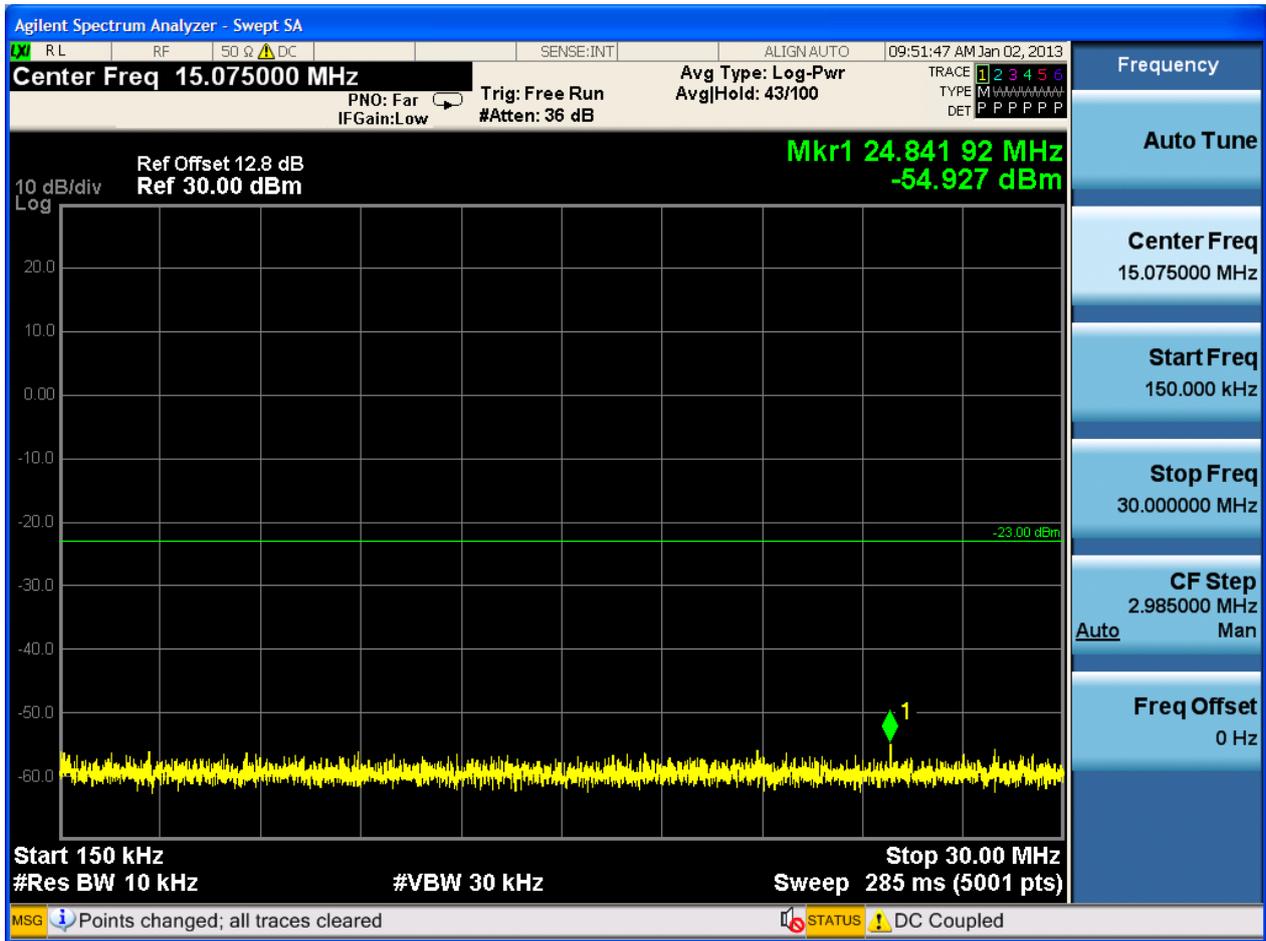
4.2 For UMTS

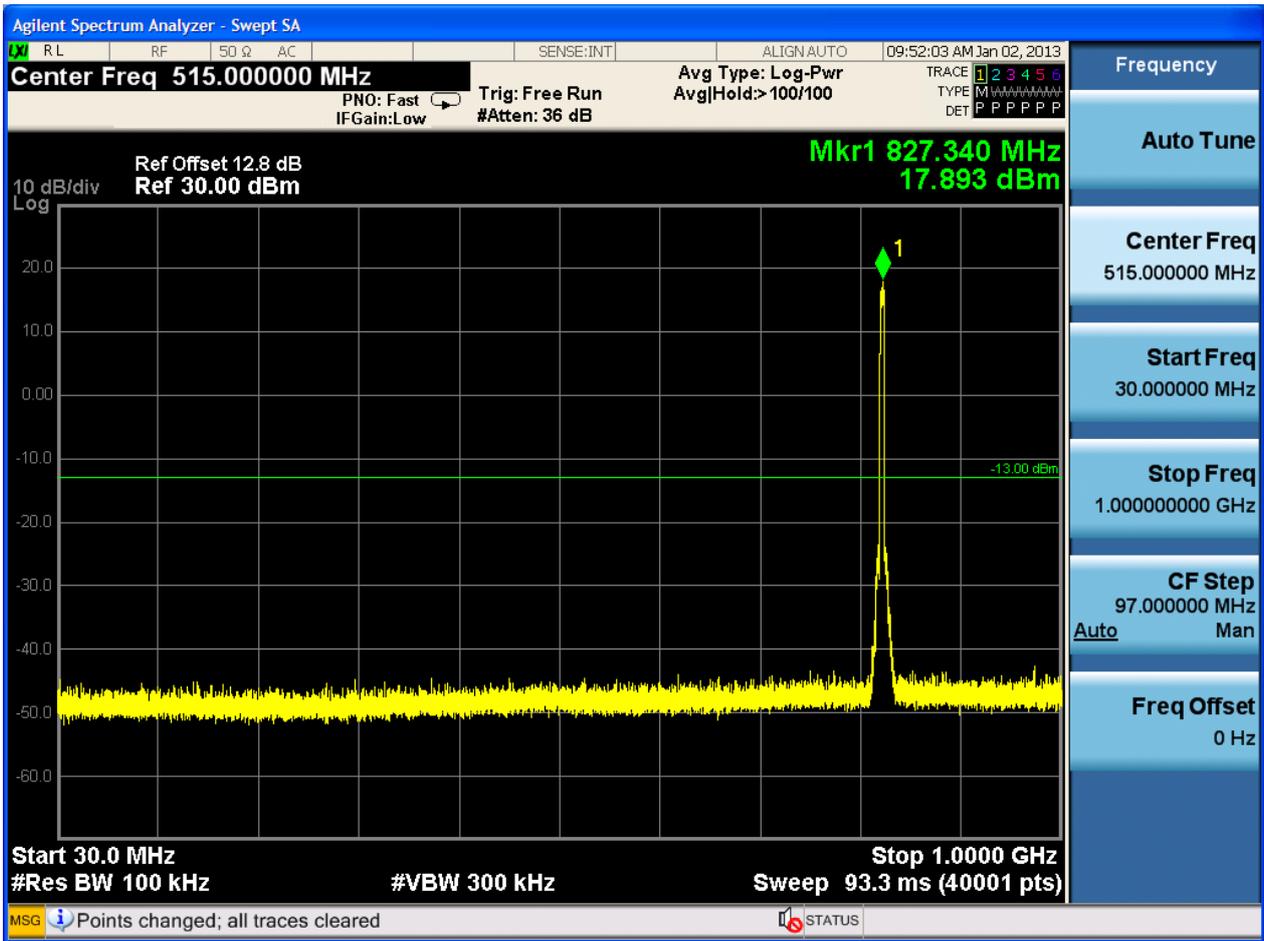
4.2.1 Test Band = WCDMA850

4.2.1.1 Test Mode = UMTS/TM1

4.2.1.1.1 Test Channel = LCH



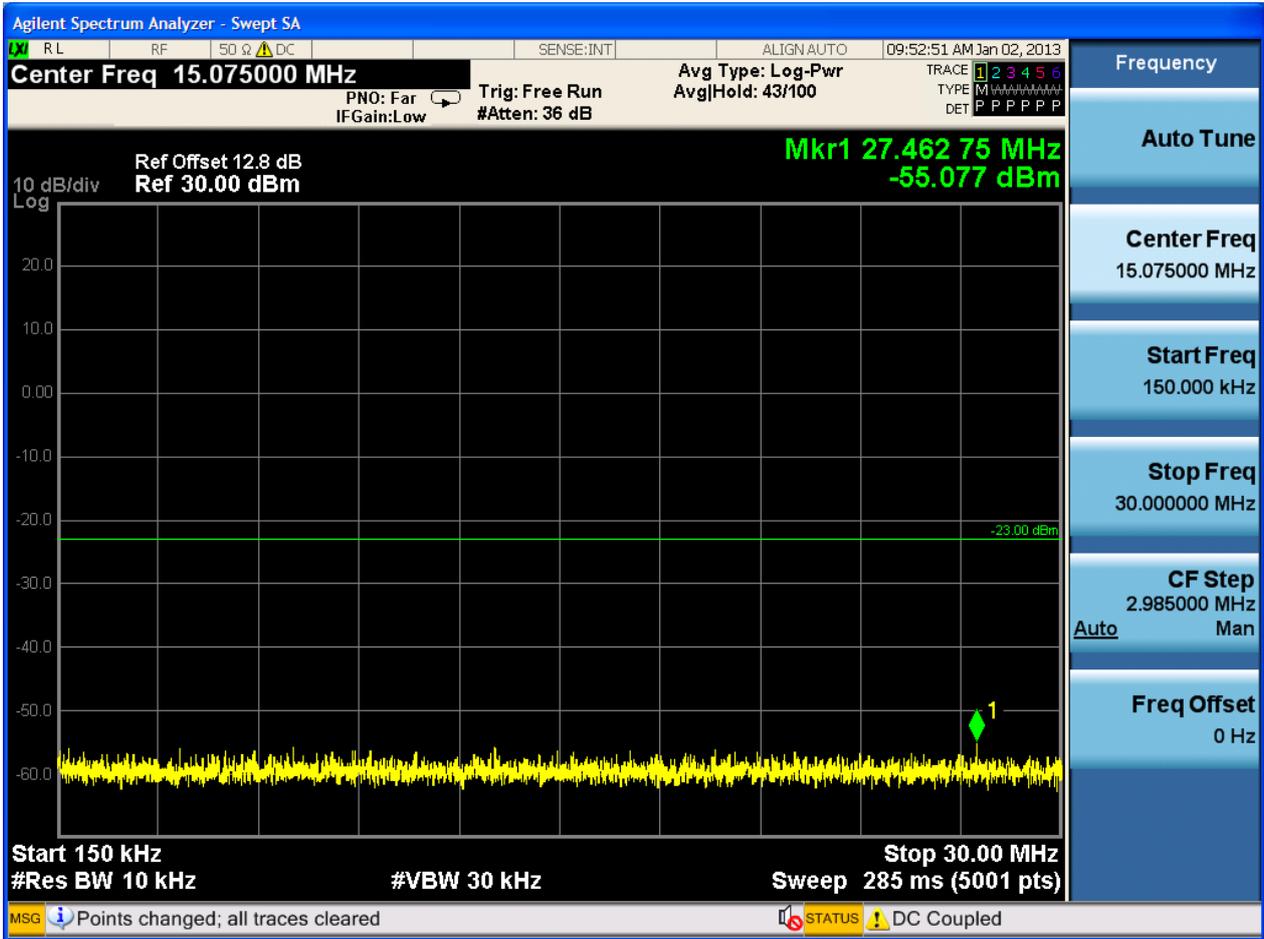


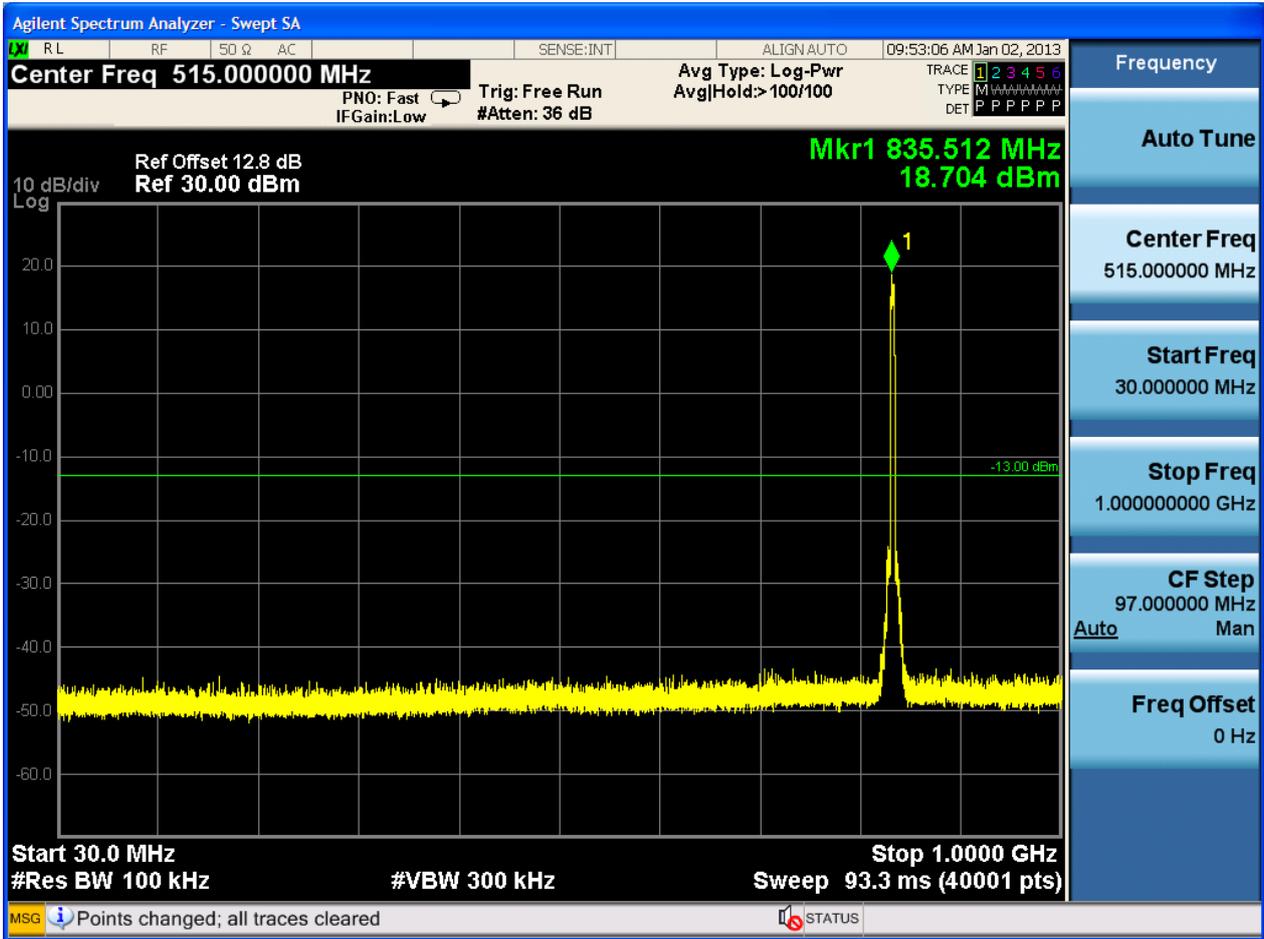


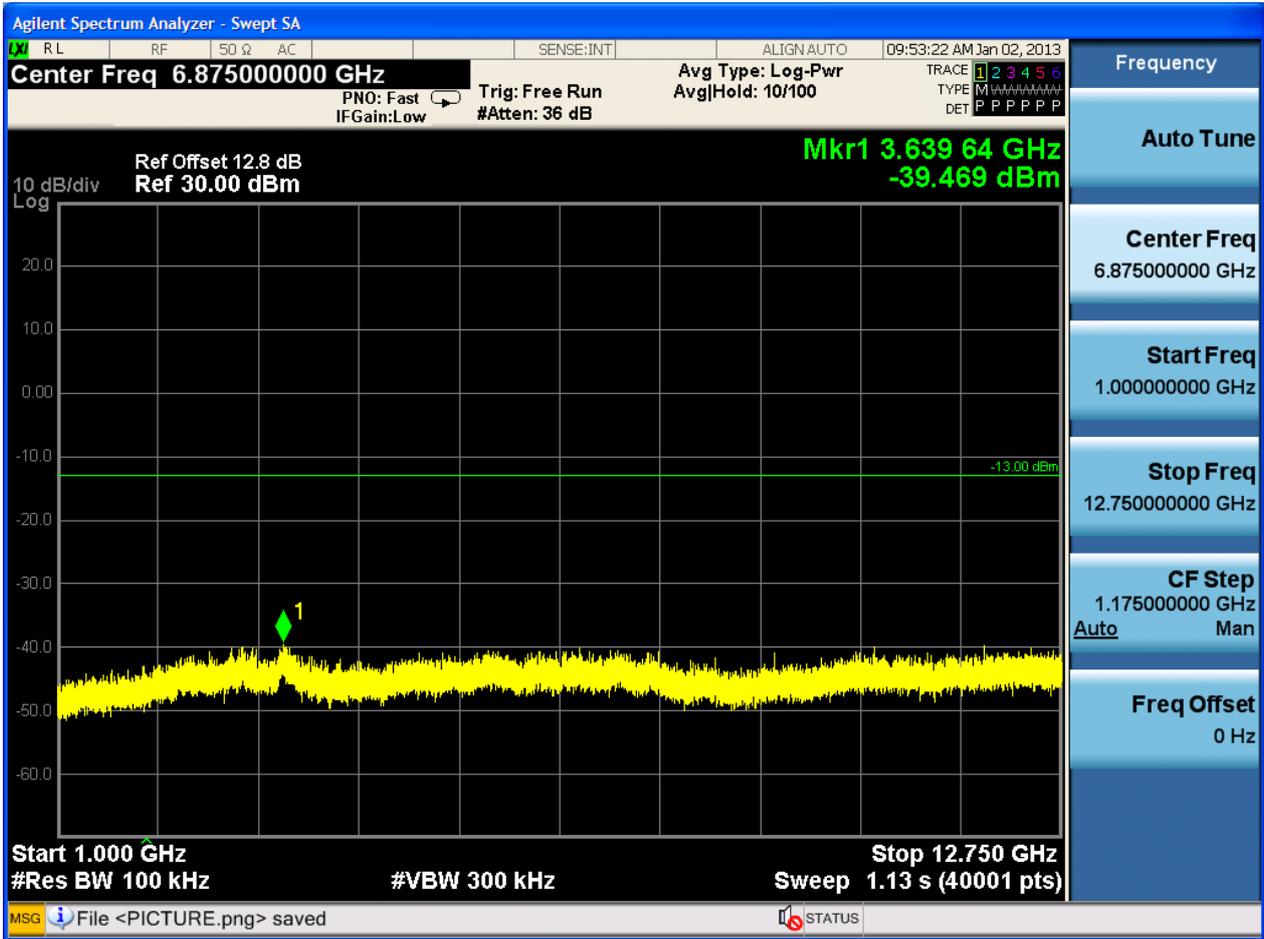


4.2.1.1.2 Test Channel = MCH



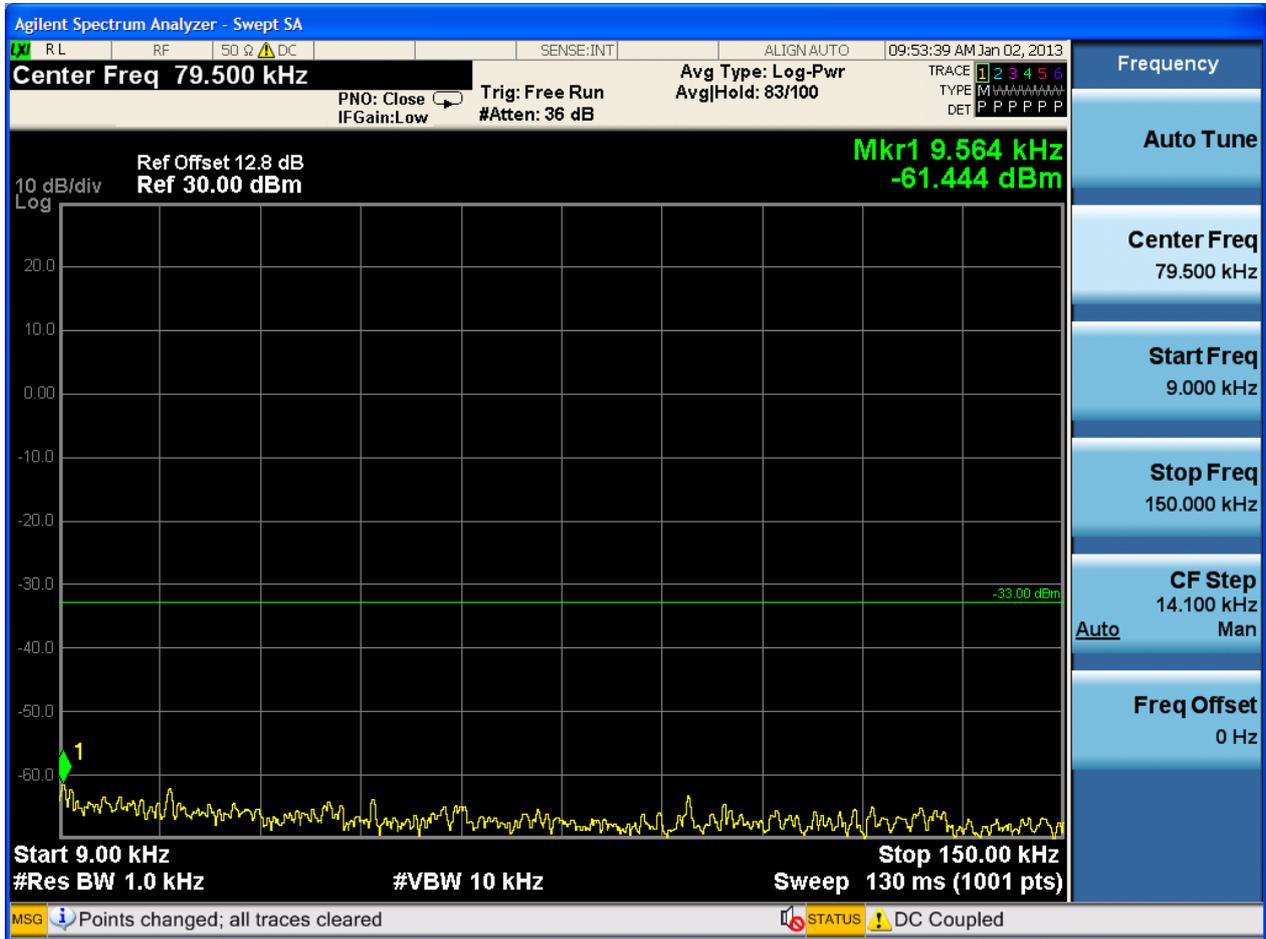


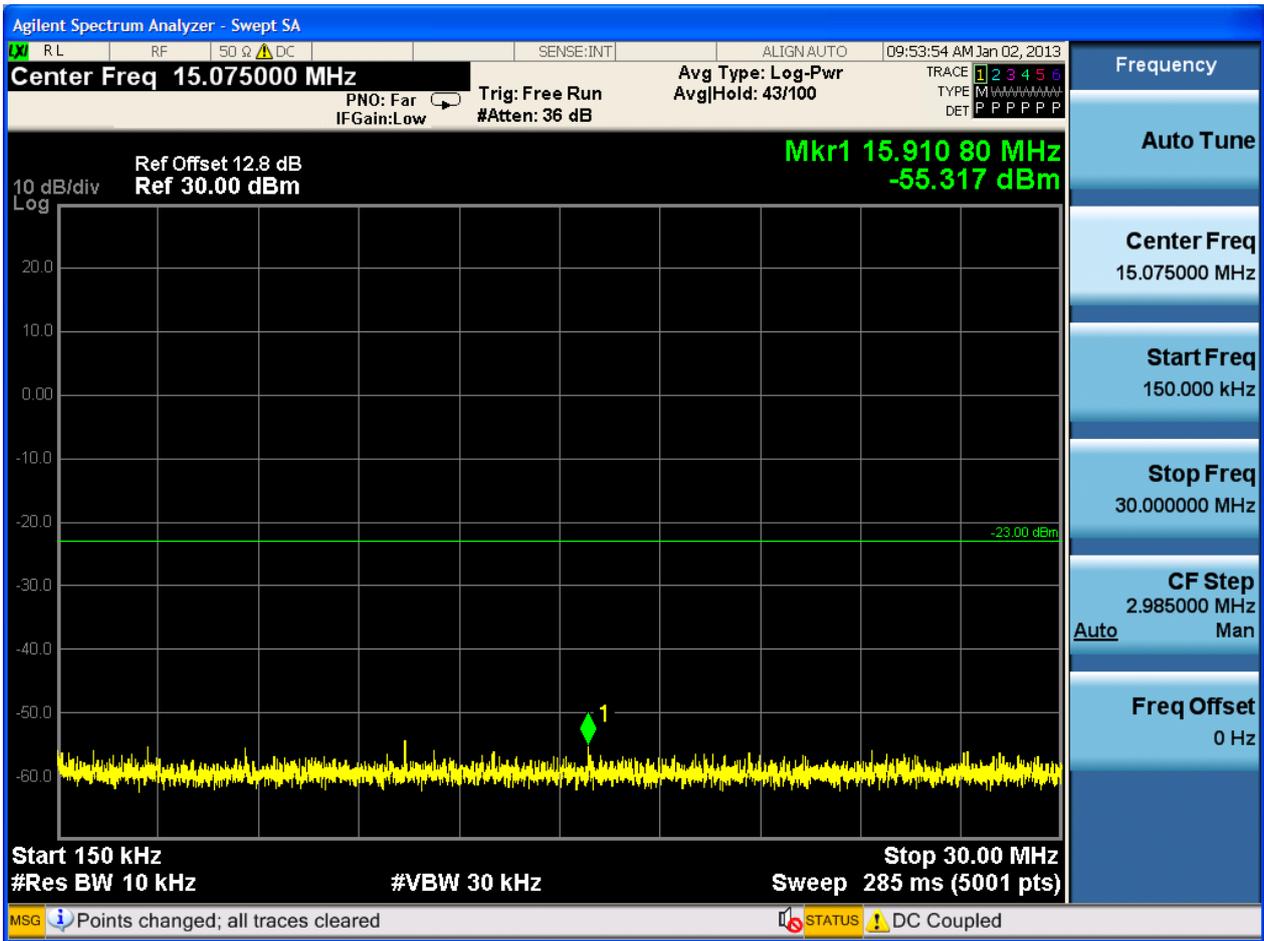


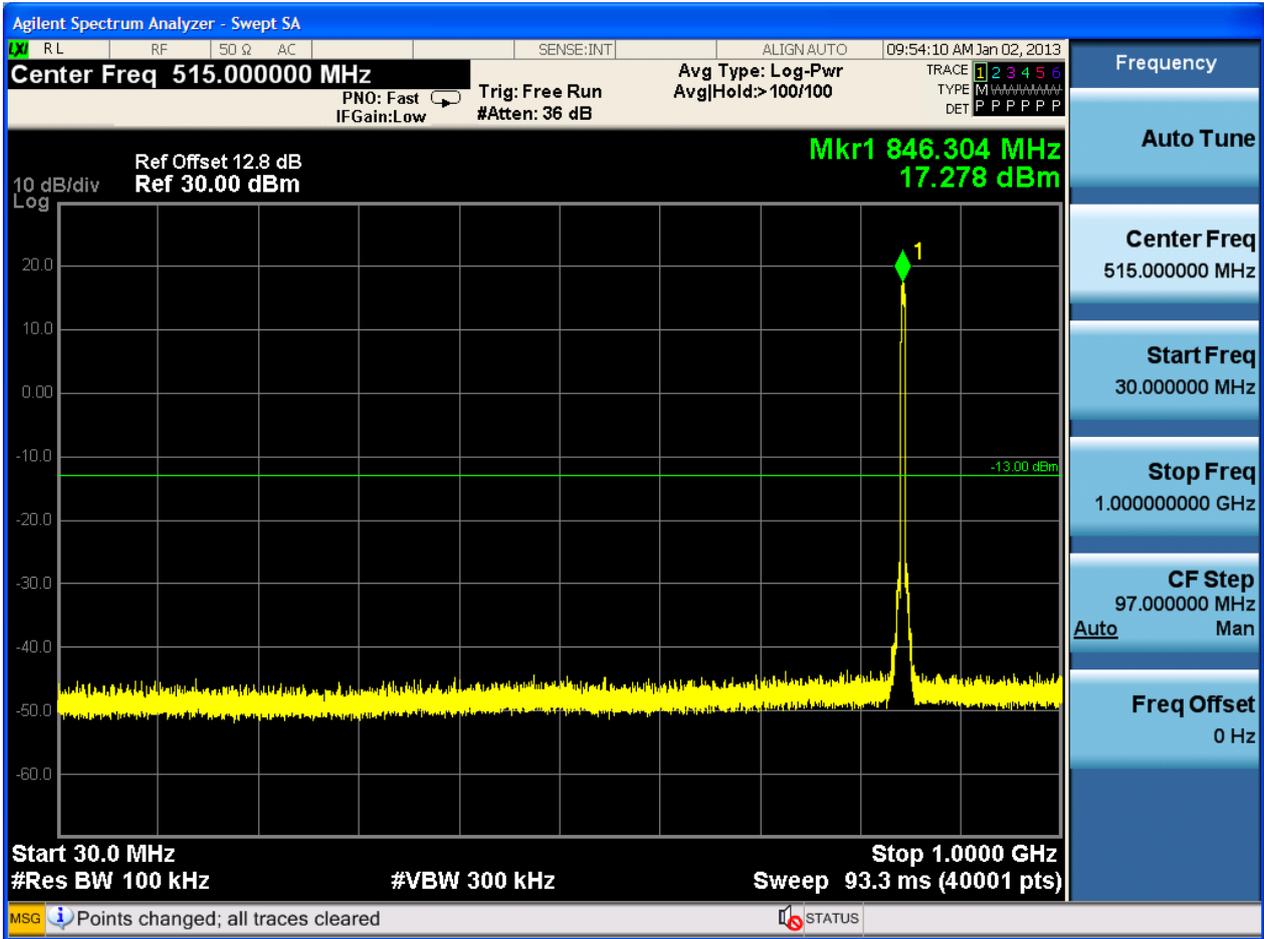




4.2.1.1.3 Test Channel = HCH







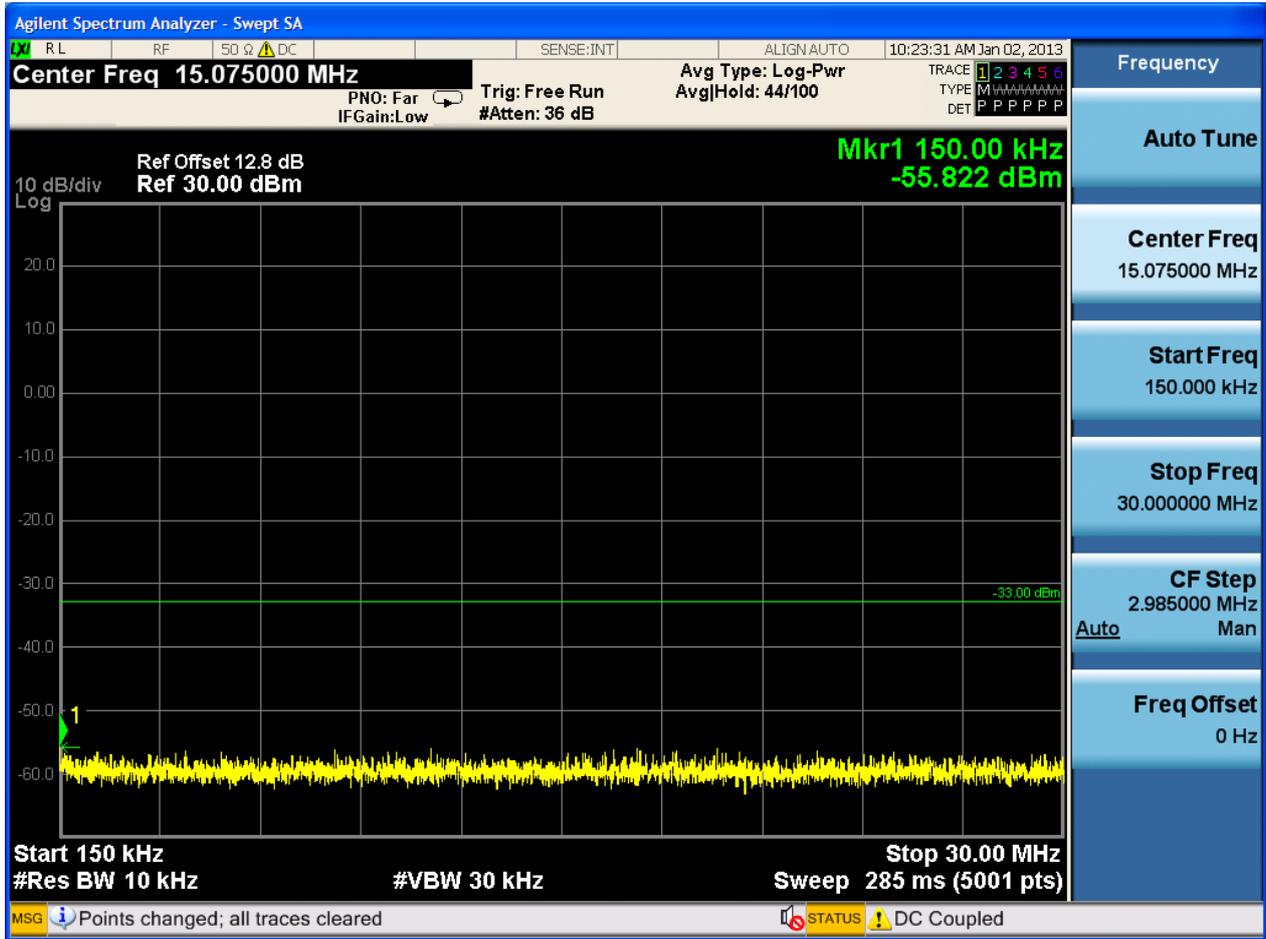


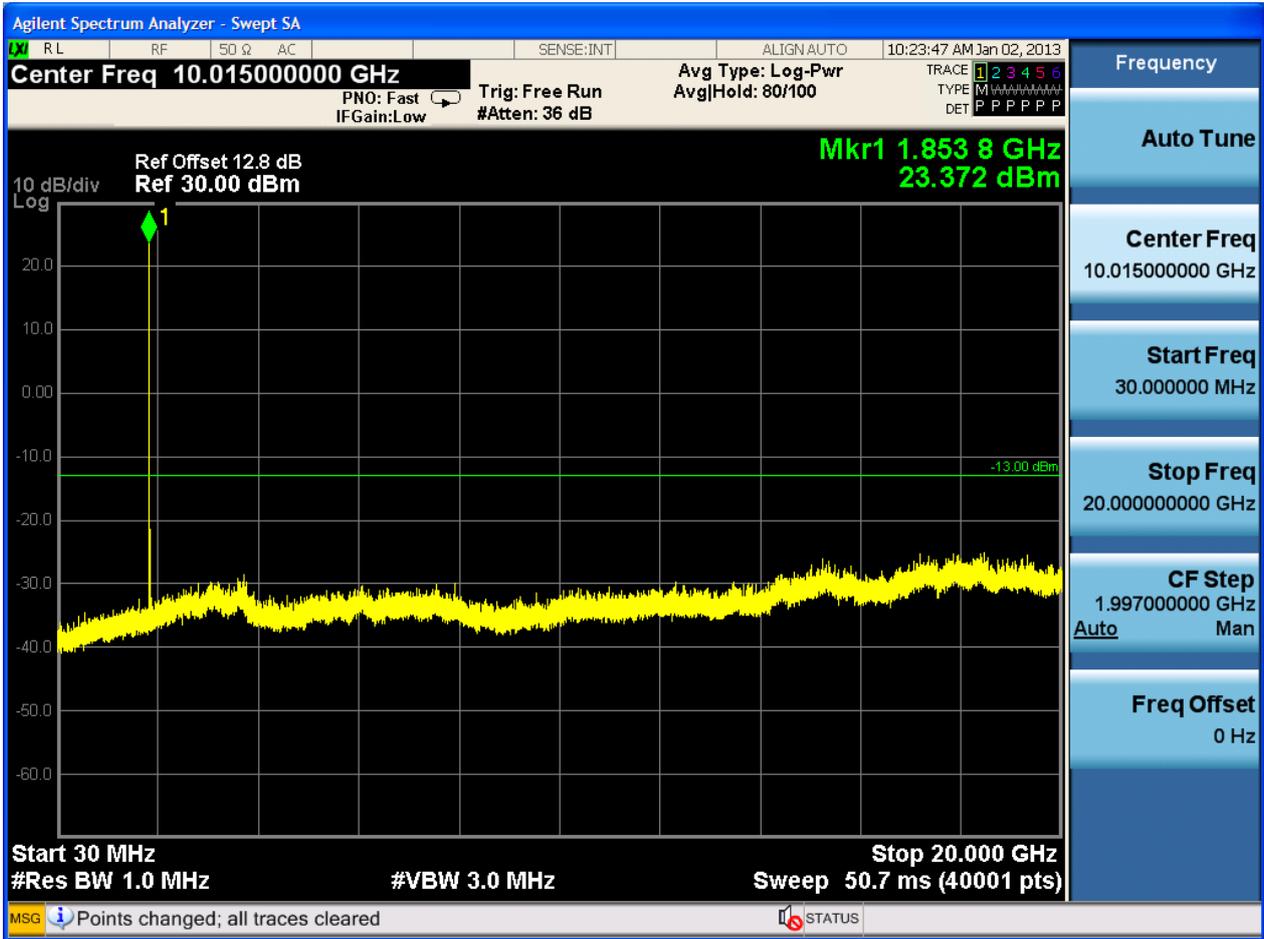
4.2.2 Test Band = WCDMA1900

4.2.2.1 Test Mode = UMTS/TM1

4.2.2.1.1 Test Channel = LCH



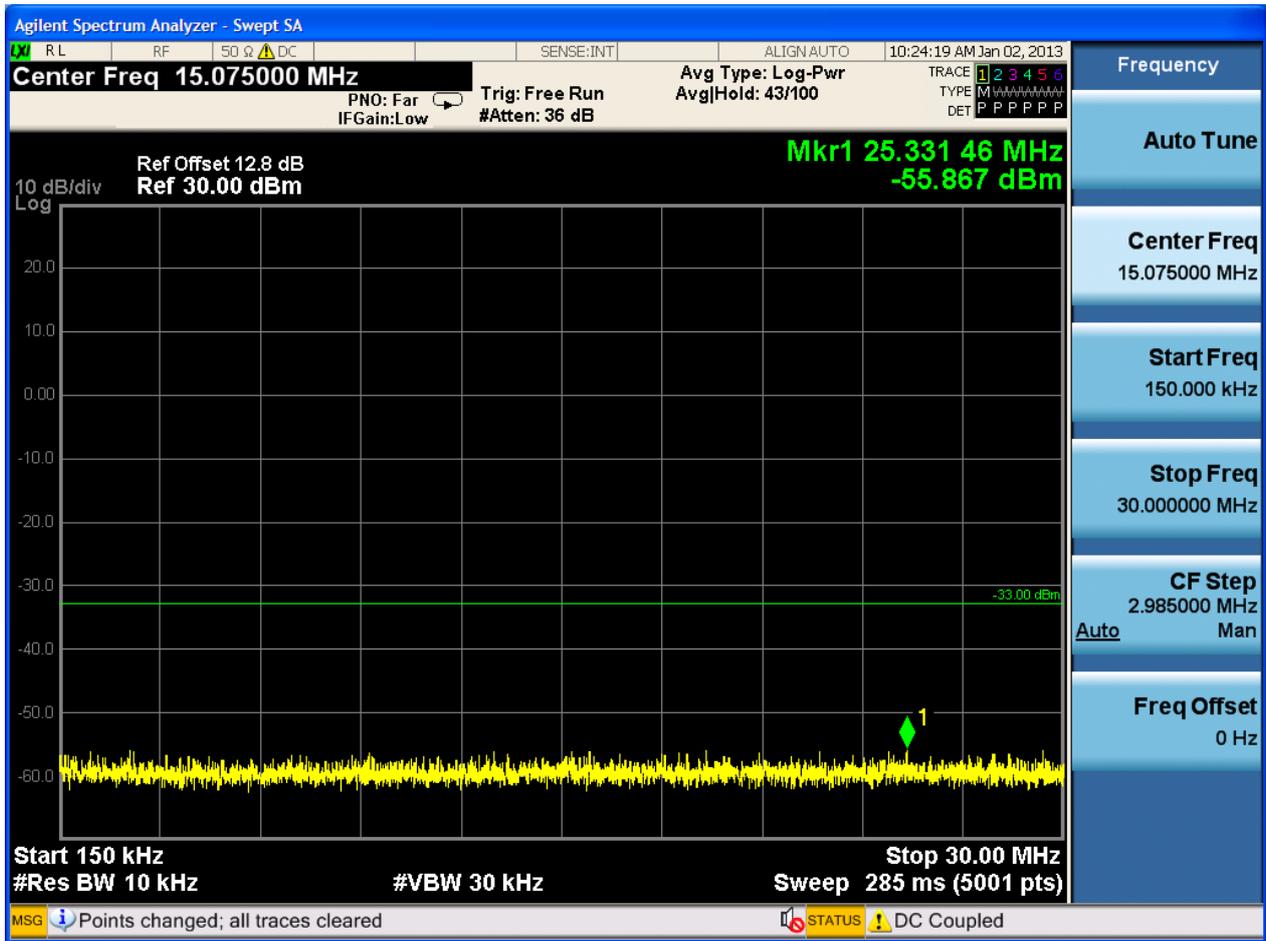






4.2.2.1.2 Test Channel = MCH

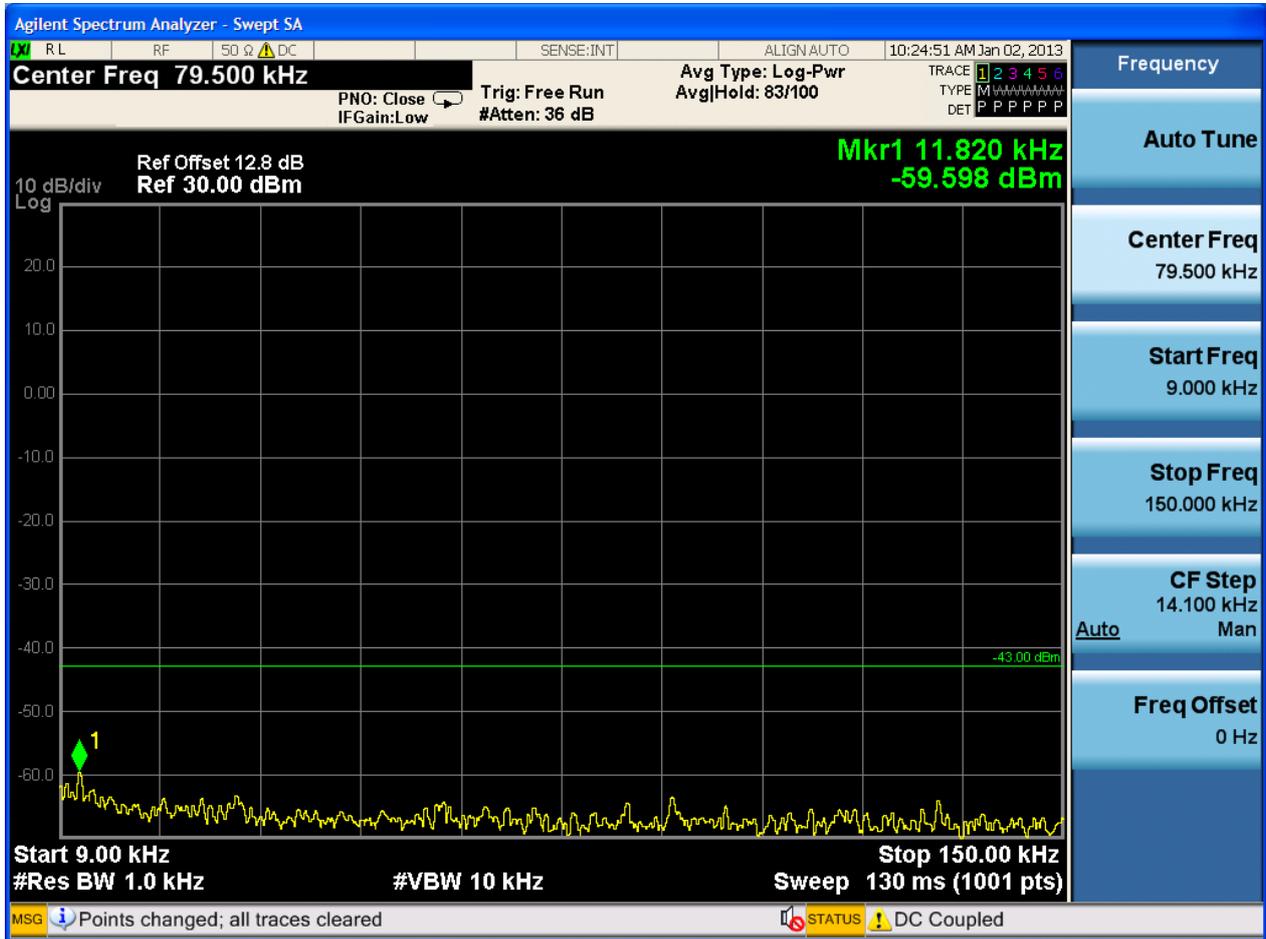


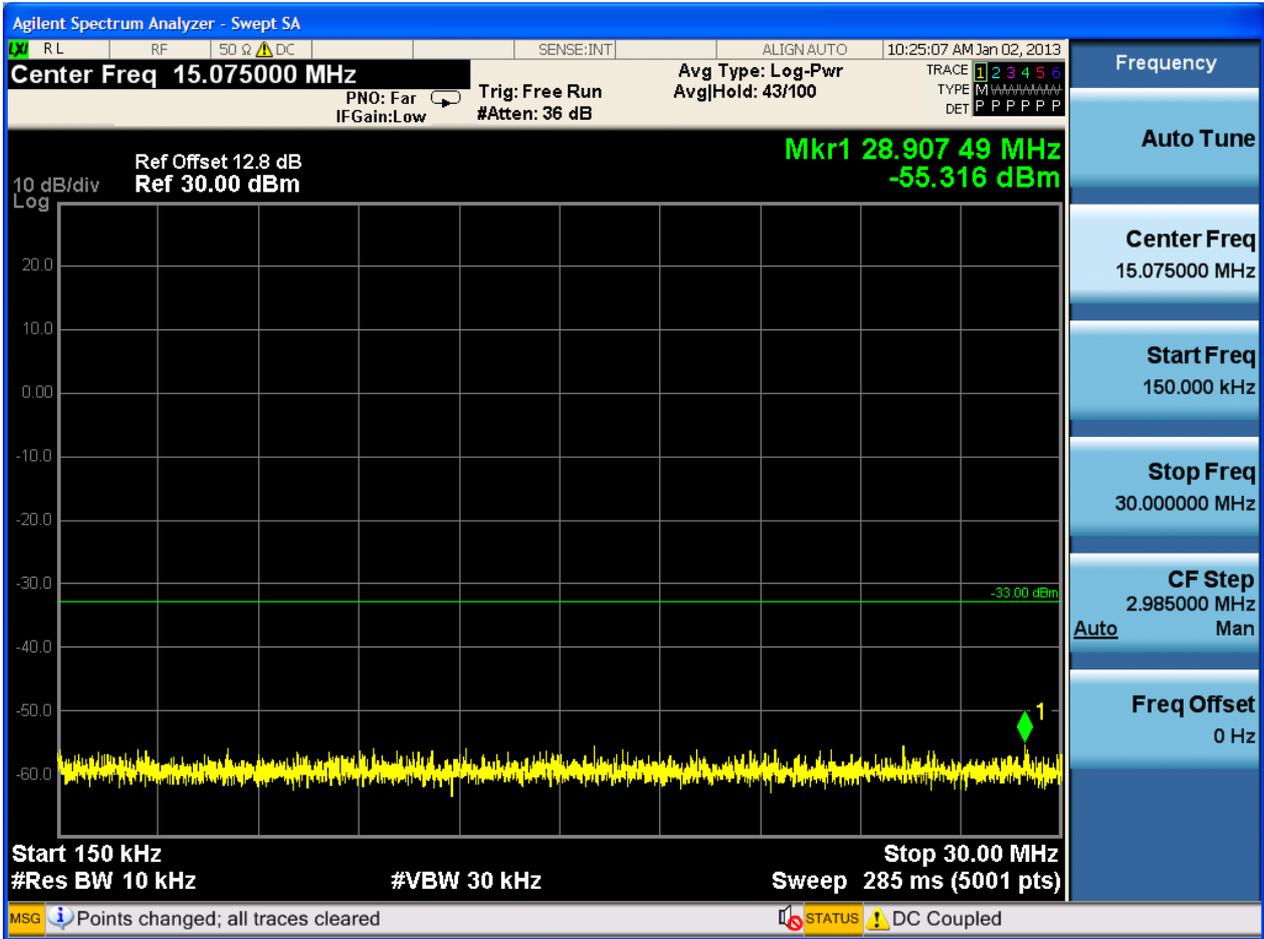






4.2.2.1.3 Test Channel = HCH







5Appendix_E: Frequency Stability

5.1 For GSM

5.1.1Frequency Error vs. Voltage:

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Limit [ppm]	Verdict
GSM850	GSM/TM1	LCH	TN	VL	-33.96	-0.0412	±2.5	PASS
				VN	-30.67	-0.03721	±2.5	PASS
				VH	-24.09	-0.02923	±2.5	PASS
		MCH	TN	VL	-22.92	-0.02738	±2.5	PASS
				VN	-23.63	-0.02823	±2.5	PASS
				VH	-25.12	-0.03001	±2.5	PASS
		HCH	TN	VL	-17.18	-0.02024	±2.5	PASS
				VN	-24.86	-0.02929	±2.5	PASS
				VH	-26.35	-0.03104	±2.5	PASS
	GSM/TM2	LCH	TN	VL	-41.29	-0.0501	±2.5	PASS
				VN	-29.83	-0.03619	±2.5	PASS
				VH	-35.42	-0.04298	±2.5	PASS
		MCH	TN	VL	-36.87	-0.04405	±2.5	PASS
				VN	-38.29	-0.04575	±2.5	PASS
				VH	-39.29	-0.04694	±2.5	PASS
		HCH	TN	VL	-39.78	-0.04687	±2.5	PASS
				VN	-40.26	-0.04743	±2.5	PASS
				VH	-42.68	-0.05028	±2.5	PASS
GSM1900	GSM/TM1	LCH	TN	VL	-37.00	-0.02	±2.5	PASS
				VN	-53.34	-0.02883	±2.5	PASS
				VH	-47.20	-0.02551	±2.5	PASS
		MCH	TN	VL	-40.03	-0.02129	±2.5	PASS
				VN	-51.85	-0.02758	±2.5	PASS
				VH	-50.75	-0.02699	±2.5	PASS
	HCH	TN	VL	-43.84	-0.02296	±2.5	PASS	
			VN	-41.07	-0.0215	±2.5	PASS	
			VH	-42.75	-0.02238	±2.5	PASS	
	GSM/TM2	LCH	TN	VL	-66.19	-0.03577	±2.5	PASS
				VN	-61.57	-0.03328	±2.5	PASS
				VH	-59.08	-0.03193	±2.5	PASS
MCH		TN	VL	-39.87	-0.02121	±2.5	PASS	



Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Limit [ppm]	Verdict
				VN	-59.28	-0.03153	±2.5	PASS
				VH	-63.38	-0.03371	±2.5	PASS
		HCH	TN	VL	-55.37	-0.02899	±2.5	PASS
				VN	-60.28	-0.03156	±2.5	PASS
				VH	-52.85	-0.02767	±2.5	PASS

5.1.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Limit [ppm]	Verdict
GSM850	GSM/TM1	LCH	VN	-30	-32.93	-0.03995	±2.5	PASS
				-20	-35.26	-0.04278	±2.5	PASS
				-10	-33.32	-0.04043	±2.5	PASS
				0	-30.74	-0.0373	±2.5	PASS
				10	-26.28	-0.03189	±2.5	PASS
				20	-20.73	-0.02515	±2.5	PASS
				30	-23.31	-0.02828	±2.5	PASS
				40	-20.21	-0.02452	±2.5	PASS
		50	-20.02	-0.02429	±2.5	PASS		
		MCH	VN	-30	-14.33	-0.01712	±2.5	PASS
				-20	-19.82	-0.02368	±2.5	PASS
				-10	-16.66	-0.0199	±2.5	PASS
				0	-15.43	-0.01843	±2.5	PASS
				10	-16.72	-0.01998	±2.5	PASS
				20	-18.02	-0.02153	±2.5	PASS
				30	-20.02	-0.02392	±2.5	PASS
				40	-24.99	-0.02986	±2.5	PASS
		50	-18.08	-0.0216	±2.5	PASS		
		HCH	VN	-30	-16.14	-0.01902	±2.5	PASS
				-20	-12.07	-0.01422	±2.5	PASS
				-10	-16.21	-0.0191	±2.5	PASS
				0	-18.79	-0.02214	±2.5	PASS
				10	-18.47	-0.02176	±2.5	PASS
				20	-18.21	-0.02145	±2.5	PASS
	30			-12.27	-0.01446	±2.5	PASS	
	40			-20.15	-0.02374	±2.5	PASS	
	50	-19.44	-0.0229	±2.5	PASS			
	GSM/TM2	LCH	VN	-30	-37.10	-0.04501	±2.5	PASS
				-20	-42.10	-0.05108	±2.5	PASS



Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Limit [ppm]	Verdict		
				-10	-42.29	-0.05131	±2.5	PASS		
				0	-38.52	-0.04674	±2.5	PASS		
				10	-38.65	-0.04689	±2.5	PASS		
				20	-34.16	-0.04145	±2.5	PASS		
				30	-36.16	-0.04387	±2.5	PASS		
				40	-28.70	-0.03482	±2.5	PASS		
				50	-28.61	-0.03471	±2.5	PASS		
		MCH	VN	-30	-23.41	-0.02797	±2.5	PASS		
				-20	-26.22	-0.03133	±2.5	PASS		
				-10	-18.27	-0.02183	±2.5	PASS		
				0	-22.79	-0.02723	±2.5	PASS		
				10	-26.44	-0.03159	±2.5	PASS		
				20	-25.67	-0.03067	±2.5	PASS		
				30	-22.37	-0.02673	±2.5	PASS		
				40	-25.67	-0.03067	±2.5	PASS		
		HCH	VN	-30	-18.85	-0.02221	±2.5	PASS		
				-20	-24.28	-0.02861	±2.5	PASS		
				-10	-23.57	-0.02777	±2.5	PASS		
				0	-20.24	-0.02385	±2.5	PASS		
				10	-23.99	-0.02826	±2.5	PASS		
				20	-22.44	-0.02644	±2.5	PASS		
				30	-20.99	-0.02473	±2.5	PASS		
				40	-19.89	-0.02343	±2.5	PASS		
		GSM190 0	GSM/TM1	LCH	VN	-30	-60.31	-0.0326	±2.5	PASS
						-20	-53.27	-0.02879	±2.5	PASS
						-10	-52.04	-0.02813	±2.5	PASS
						0	-47.14	-0.02548	±2.5	PASS
10	-36.16					-0.01954	±2.5	PASS		
20	-31.38					-0.01696	±2.5	PASS		
30	-38.10					-0.02059	±2.5	PASS		
40	-35.51					-0.01919	±2.5	PASS		
50	-19.31					-0.01044	±2.5	PASS		
MCH	VN			-30	-33.19	-0.01765	±2.5	PASS		
				-20	-38.10	-0.02027	±2.5	PASS		
				-10	-41.91	-0.02229	±2.5	PASS		
				0	-48.43	-0.02576	±2.5	PASS		
				10	-33.32	-0.01772	±2.5	PASS		



Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Limit [ppm]	Verdict	
				20	-36.22	-0.01927	±2.5	PASS	
				30	-37.52	-0.01996	±2.5	PASS	
				40	-31.51	-0.01676	±2.5	PASS	
				50	-33.90	-0.01803	±2.5	PASS	
		HCH	VN	-30	-26.67	-0.01396	±2.5	PASS	
				-20	-41.84	-0.02191	±2.5	PASS	
				-10	-34.61	-0.01812	±2.5	PASS	
				0	-31.51	-0.0165	±2.5	PASS	
				10	-31.70	-0.0166	±2.5	PASS	
				20	-27.38	-0.01434	±2.5	PASS	
				30	-25.18	-0.01318	±2.5	PASS	
				40	-26.67	-0.01396	±2.5	PASS	
		50	-37.32	-0.01954	±2.5	PASS			
		GSM/TM2	LCH	VN	-30	-78.13	-0.04223	±2.5	PASS
					-20	-66.19	-0.03577	±2.5	PASS
					-10	-47.88	-0.02588	±2.5	PASS
	0				-36.13	-0.01953	±2.5	PASS	
	10				-43.55	-0.02354	±2.5	PASS	
	20				-35.71	-0.0193	±2.5	PASS	
	30				-42.49	-0.02297	±2.5	PASS	
	40				-26.93	-0.01456	±2.5	PASS	
	50		-33.22	-0.01795	±2.5	PASS			
	MCH		VN	-30	-15.14	-0.00805	±2.5	PASS	
				-20	-27.64	-0.0147	±2.5	PASS	
				-10	-12.27	-0.00653	±2.5	PASS	
				0	-28.90	-0.01537	±2.5	PASS	
				10	-26.60	-0.01415	±2.5	PASS	
		20		-21.53	-0.01145	±2.5	PASS		
		30		-16.24	-0.00864	±2.5	PASS		
	40	-16.79	-0.00893	±2.5	PASS				
	50	-23.89	-0.01271	±2.5	PASS				
	HCH	VN	-30	-15.24	-0.00798	±2.5	PASS		
			-20	-13.79	-0.00722	±2.5	PASS		
			-10	-7.04	-0.00369	±2.5	PASS		
			0	0.77	0.0004	±2.5	PASS		
			10	-9.43	-0.00494	±2.5	PASS		
			20	-4.84	-0.00253	±2.5	PASS		
			30	-5.33	-0.00279	±2.5	PASS		
	40	3.75	0.00196	±2.5	PASS				



Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Limit [ppm]	Verdict
				50	-4.23	-0.00221	±2.5	PASS

5.2 For UMTS

5.2.1 Frequency Error vs. Voltage:

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Limit [ppm]	Verdict
WCDMA850	UMTS/TM1	LCH	TN	VL	4.20	0.00508	±2.5	PASS
				VN	4.12	0.00499	±2.5	PASS
				VH	0.81	0.00098	±2.5	PASS
		MCH	TN	VL	1.77	0.00212	±2.5	PASS
				VN	-4.81	-0.00575	±2.5	PASS
				VH	-8.04	-0.00961	±2.5	PASS
		HCH	TN	VL	-2.91	-0.00344	±2.5	PASS
				VN	-6.10	-0.00721	±2.5	PASS
				VH	-3.11	-0.00367	±2.5	PASS
WCDMA1900	UMTS/TM1	LCH	TN	VL	-2.49	-0.00134	±2.5	PASS
				VN	-5.89	-0.00318	±2.5	PASS
				VH	10.15	0.00548	±2.5	PASS
		MCH	TN	VL	13.26	0.00705	±2.5	PASS
				VN	-2.79	-0.00148	±2.5	PASS
				VH	-8.42	-0.00448	±2.5	PASS
		HCH	TN	VL	-12.92	-0.00677	±2.5	PASS
				VN	4.84	0.00254	±2.5	PASS
				VH	-16.74	-0.00878	±2.5	PASS

5.2.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Limit [ppm]	Verdict
WCDMA850	UMTS/TM1	LCH	VN	-30	-3.19	-0.00386	±2.5	PASS
				-20	4.97	0.00601	±2.5	PASS
				-10	2.93	0.00355	±2.5	PASS
				0	-7.49	-0.00906	±2.5	PASS
				10	-7.00	-0.00847	±2.5	PASS
				20	-4.82	-0.00583	±2.5	PASS
				30	3.22	0.0039	±2.5	PASS
				40	-1.74	-0.00211	±2.5	PASS
				50	-1.07	-0.00129	±2.5	PASS



Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Limit [ppm]	Verdict
		MCH	VN	-30	-6.53	-0.00781	±2.5	PASS
				-20	-14.02	-0.01676	±2.5	PASS
				-10	-1.98	-0.00237	±2.5	PASS
				0	0.56	0.00067	±2.5	PASS
				10	-1.60	-0.00191	±2.5	PASS
				20	-3.11	-0.00372	±2.5	PASS
				30	10.01	0.01197	±2.5	PASS
				40	-9.90	-0.01184	±2.5	PASS
				50	0.67	0.0008	±2.5	PASS
		HCH	VN	-30	-2.24	-0.00265	±2.5	PASS
				-20	6.32	0.00747	±2.5	PASS
				-10	4.03	0.00476	±2.5	PASS
				0	0.38	0.00045	±2.5	PASS
				10	-6.24	-0.00737	±2.5	PASS
				20	-5.31	-0.00627	±2.5	PASS
				30	-7.42	-0.00876	±2.5	PASS
				40	-15.47	-0.01827	±2.5	PASS
				50	-2.37	-0.0028	±2.5	PASS
WCDMA190 0	UMTS/TM 1	LCH	VN	-30	2.55	0.00138	±2.5	PASS
				-20	-6.30	-0.0034	±2.5	PASS
				-10	-13.66	-0.00737	±2.5	PASS
				0	13.02	0.00703	±2.5	PASS
				10	1.25	0.00067	±2.5	PASS
				20	-6.93	-0.00374	±2.5	PASS
				30	-13.73	-0.00741	±2.5	PASS
				40	-8.00	-0.00432	±2.5	PASS
				50	21.99	0.01187	±2.5	PASS
		MCH	VN	-30	8.64	0.0046	±2.5	PASS
				-20	-4.07	-0.00216	±2.5	PASS
				-10	-1.11	-0.00059	±2.5	PASS
				0	-3.37	-0.00179	±2.5	PASS
				10	6.33	0.00337	±2.5	PASS
				20	-5.94	-0.00316	±2.5	PASS
				30	-8.01	-0.00426	±2.5	PASS
				40	6.23	0.00331	±2.5	PASS
				50	-5.34	-0.00284	±2.5	PASS
		HCH	VN	-30	-13.34	-0.00699	±2.5	PASS
				-20	0.11	0.00006	±2.5	PASS
				-10	-5.54	-0.0029	±2.5	PASS



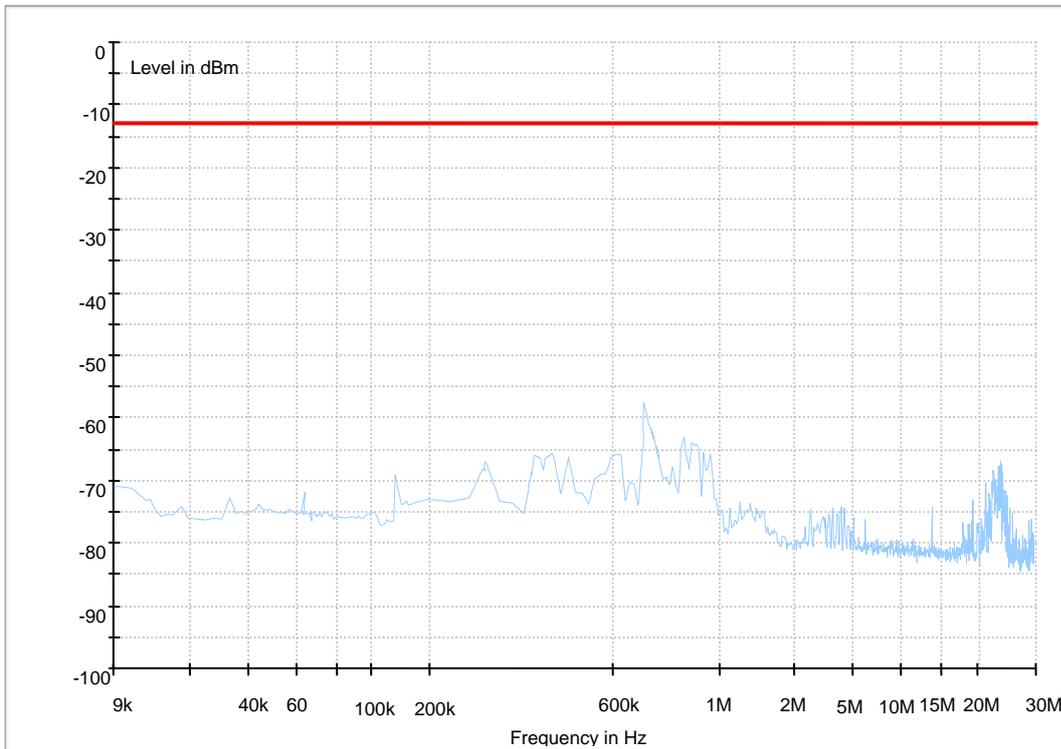
Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Limit [ppm]	Verdict
				0	3.05	0.0016	±2.5	PASS
				10	-12.80	-0.00671	±2.5	PASS
				20	0.73	0.00038	±2.5	PASS
				30	2.40	0.00126	±2.5	PASS
				40	-0.73	-0.00038	±2.5	PASS
				50	8.15	0.00427	±2.5	PASS

6 Appendix F: Radiated spurious emission

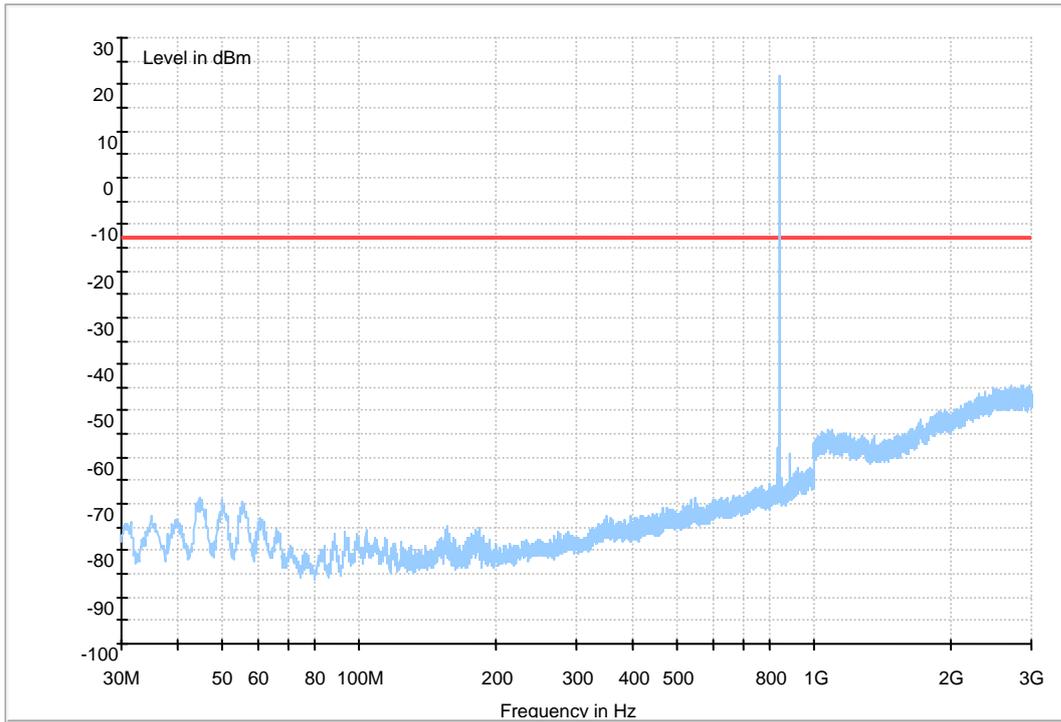
6.1 For GSM850 & WCDMA850

GSM850

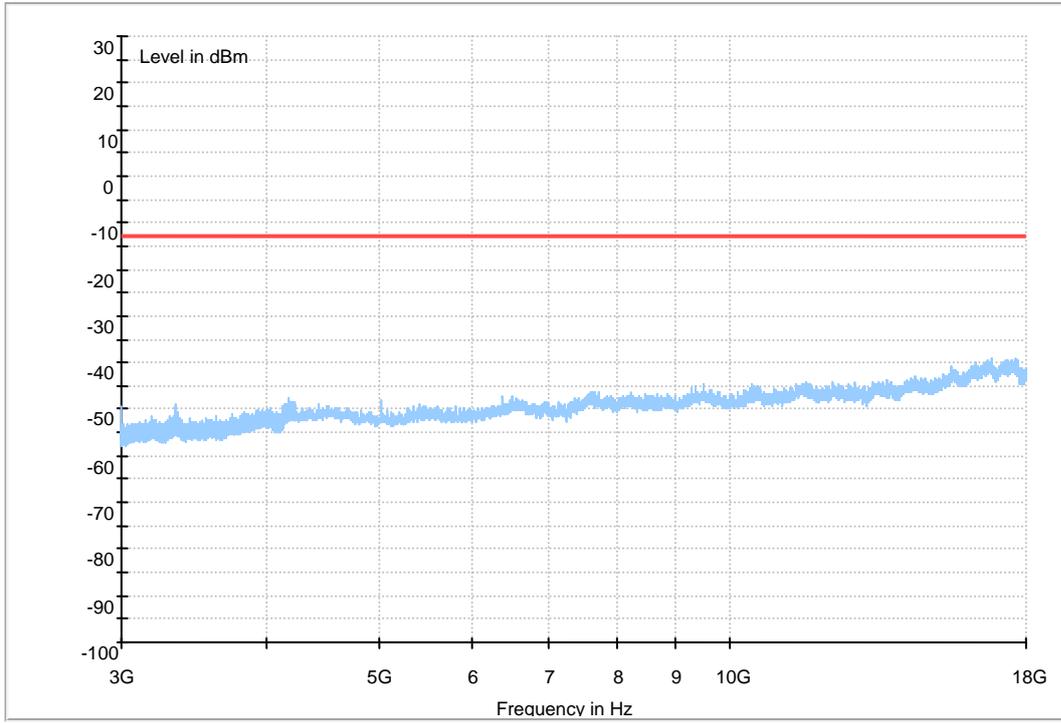
(9kHz~30MHz)



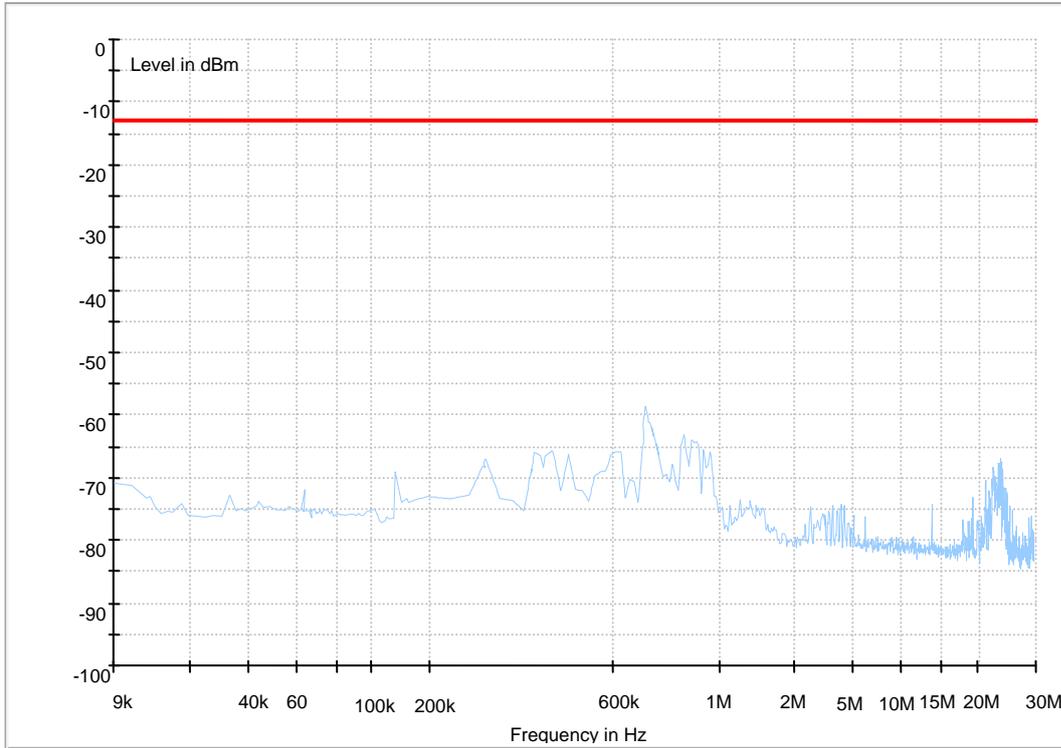
(30MHz~3GHz)



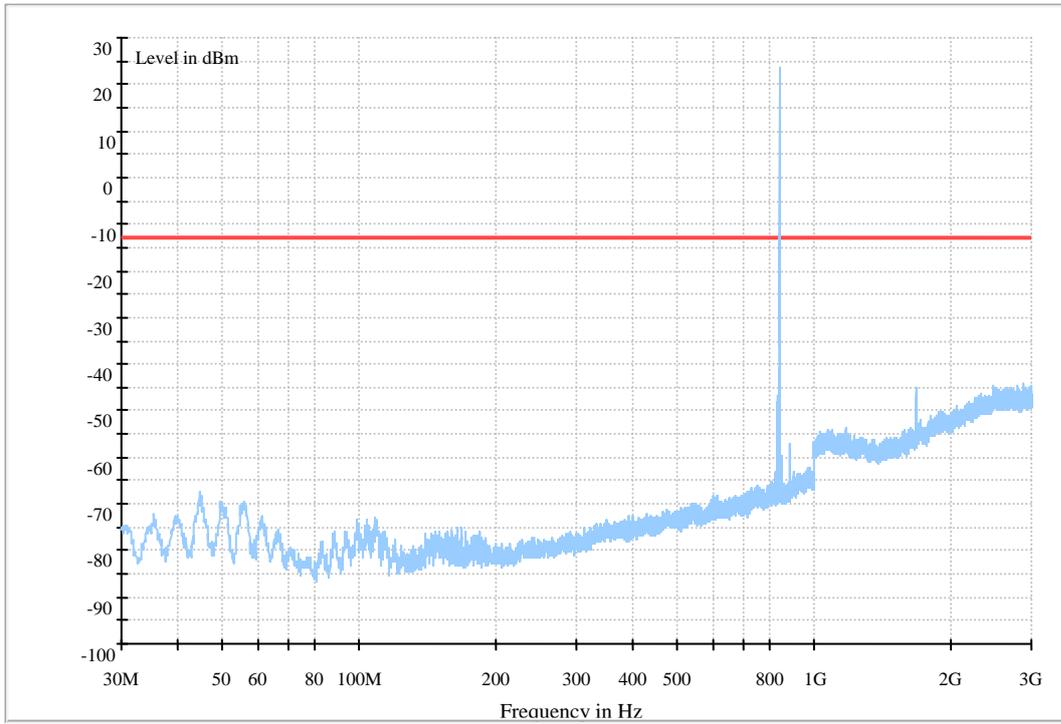
(3GHz~18GHz)



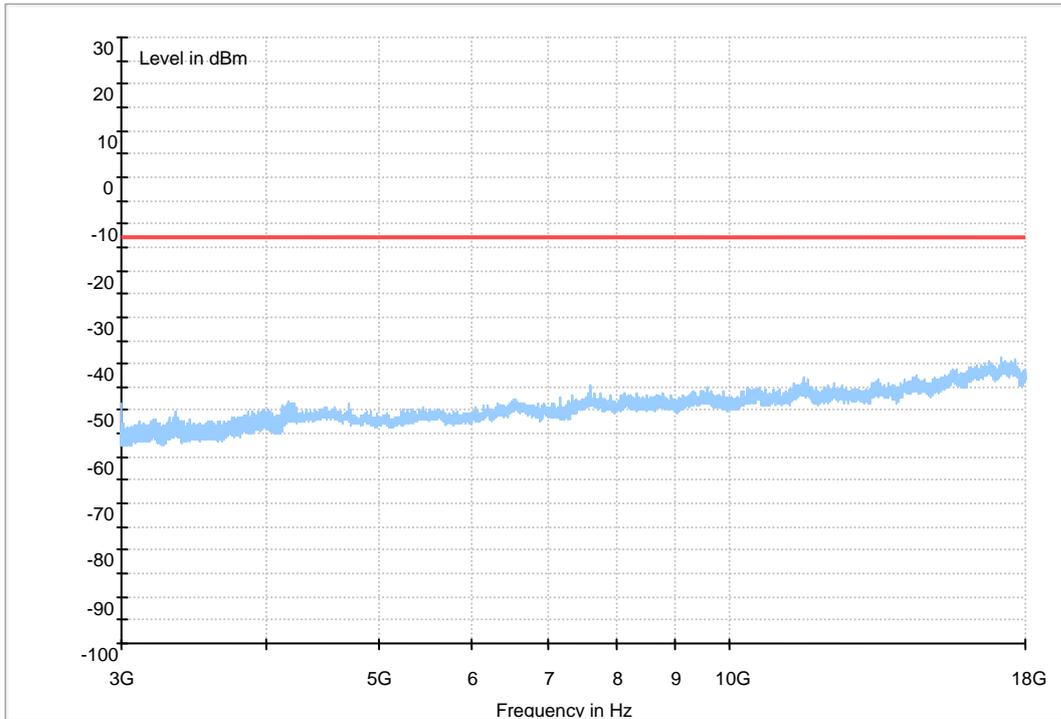
GPRS 850
(9kHz~30MHz)



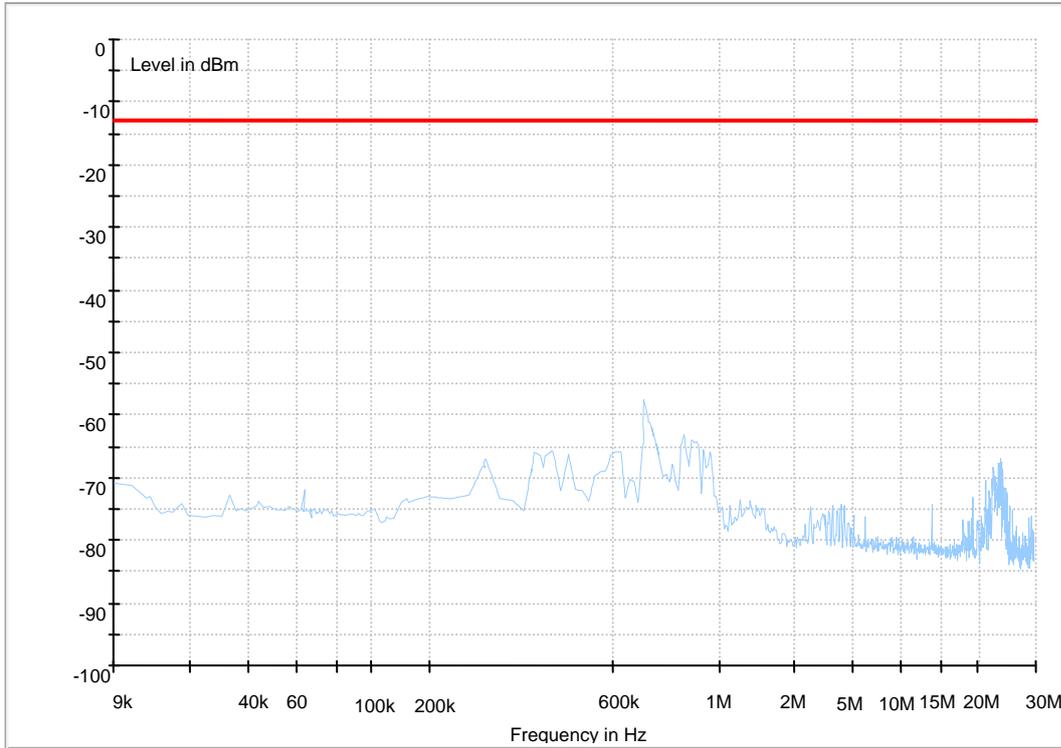
(30MHz~3GHz)



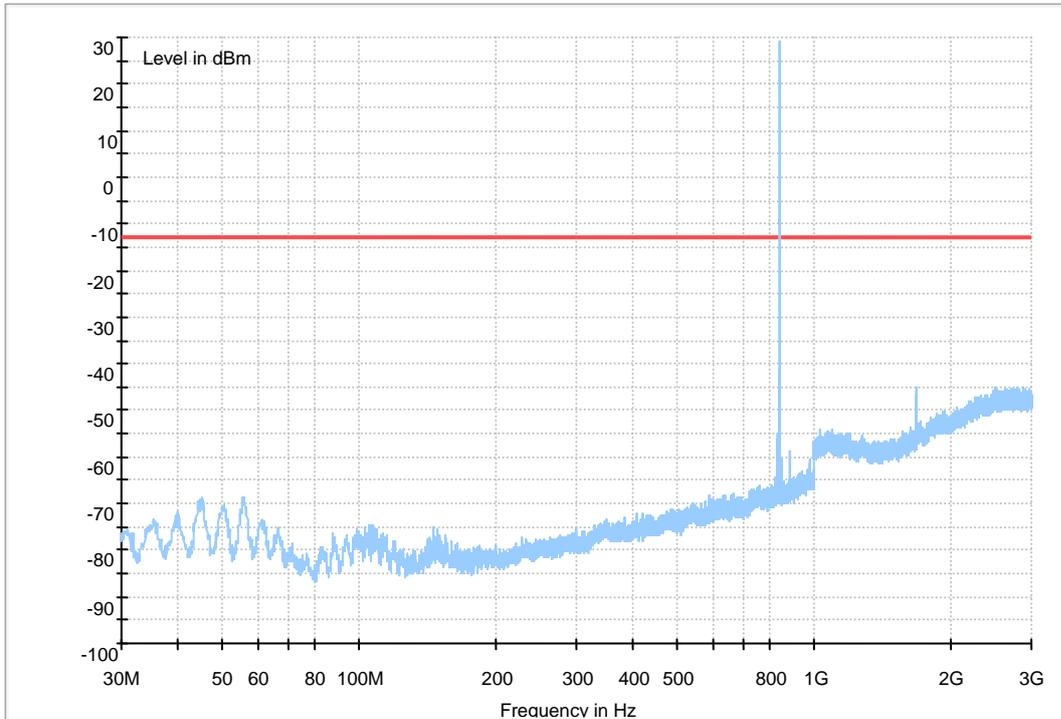
(3GHz~18GHz)



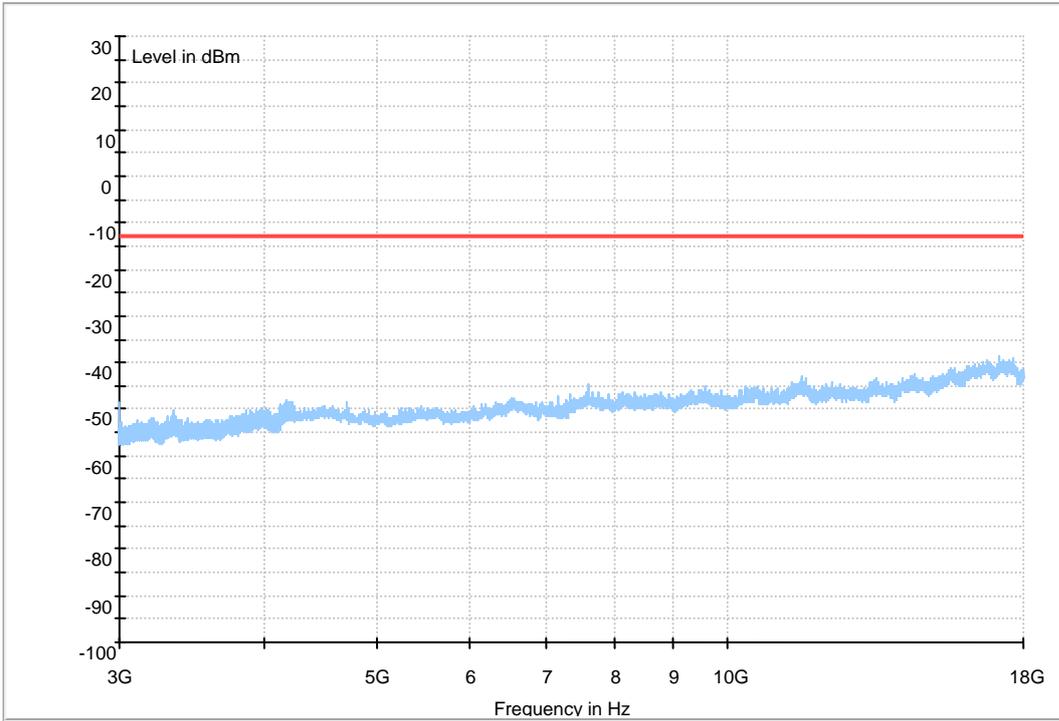
EDGE 850
(9kHz~30MHz)



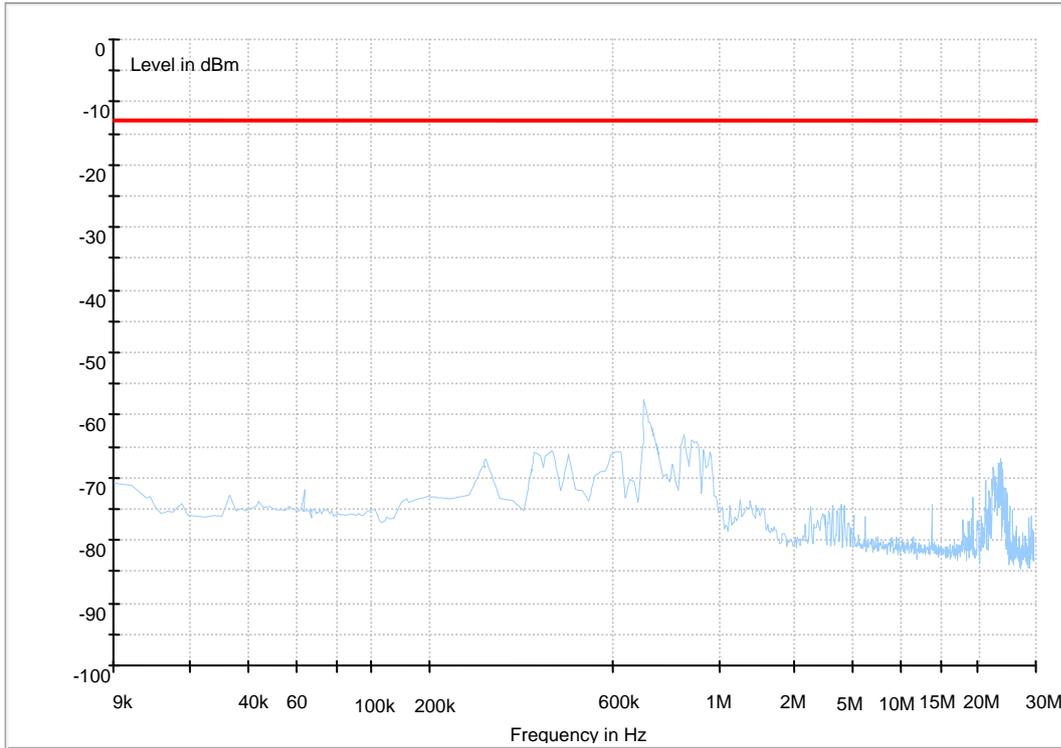
(30MHz~3GHz)



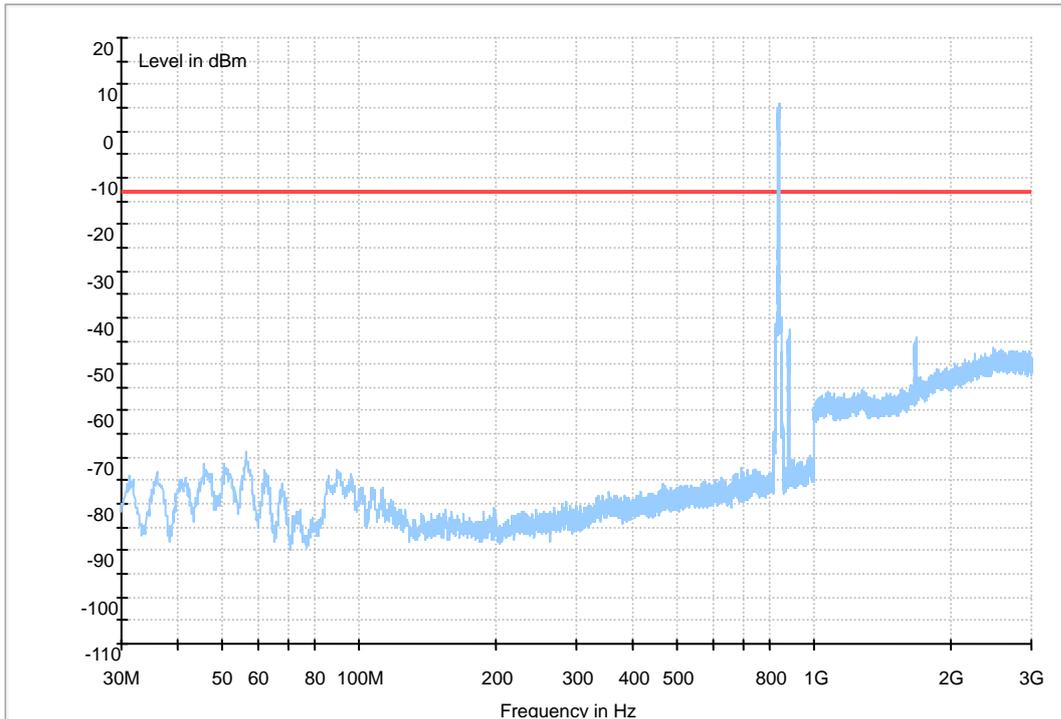
(3GHz~18GHz)



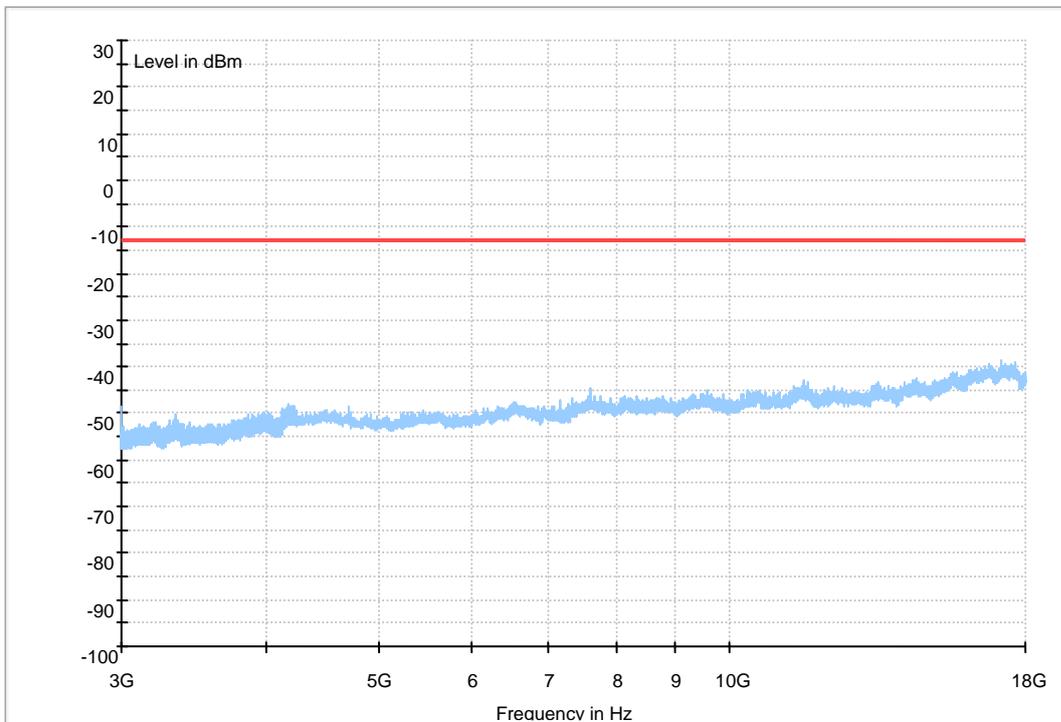
WCDMA 850
(9kHz~30MHz)



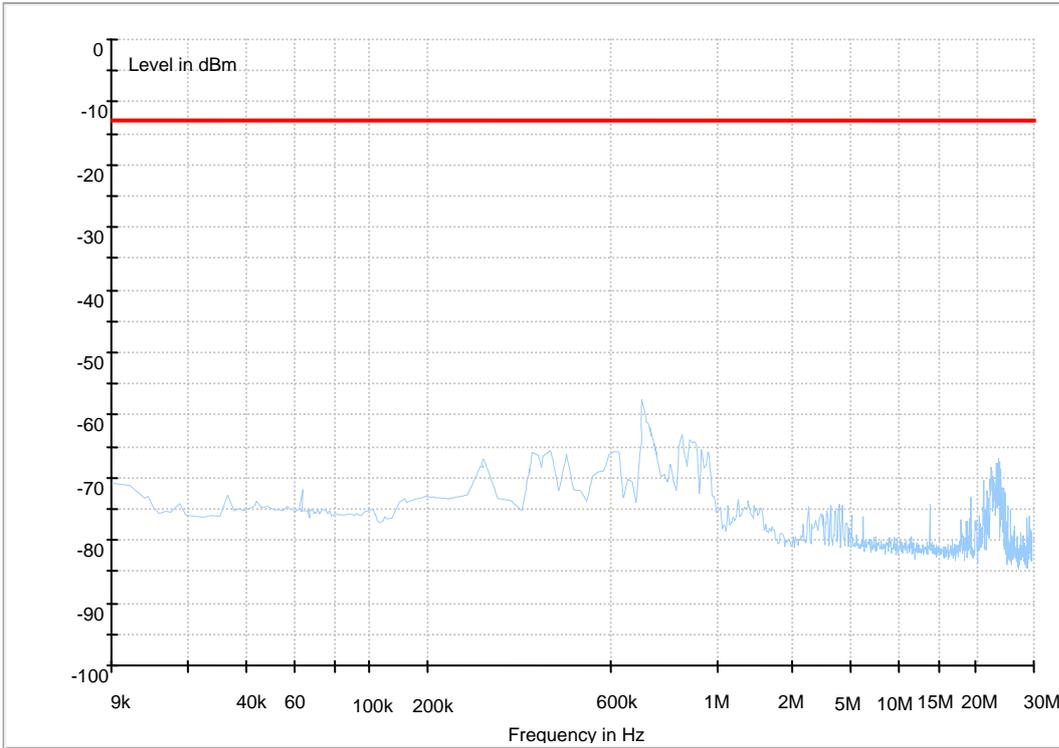
(30MHz~3GHz)



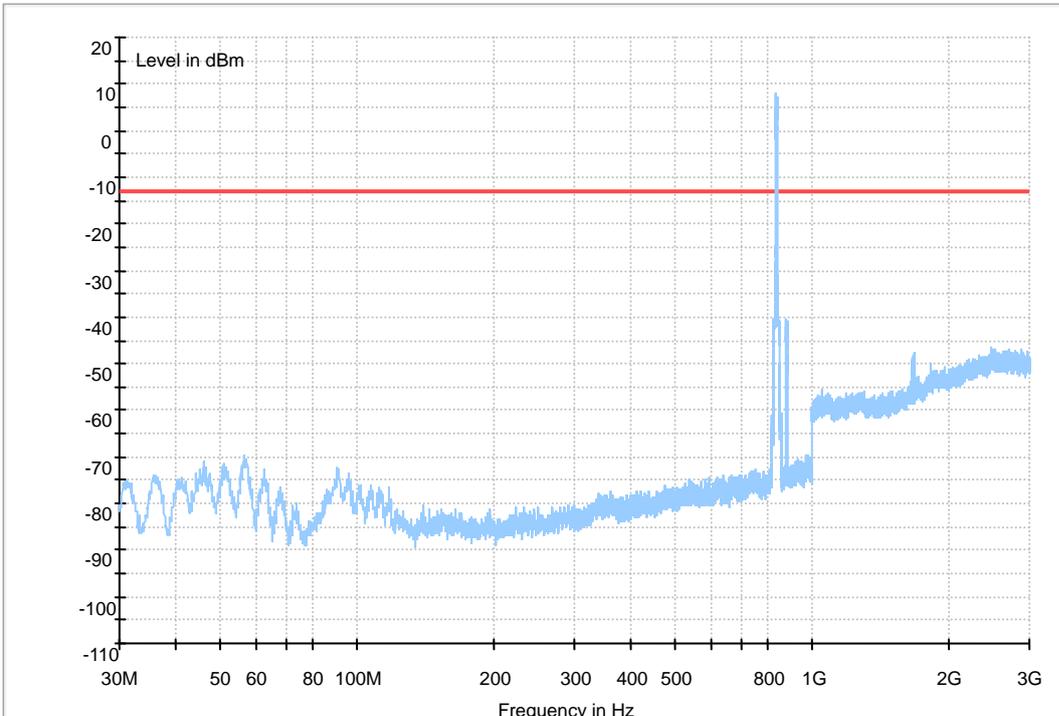
(3GHz~18GHz)



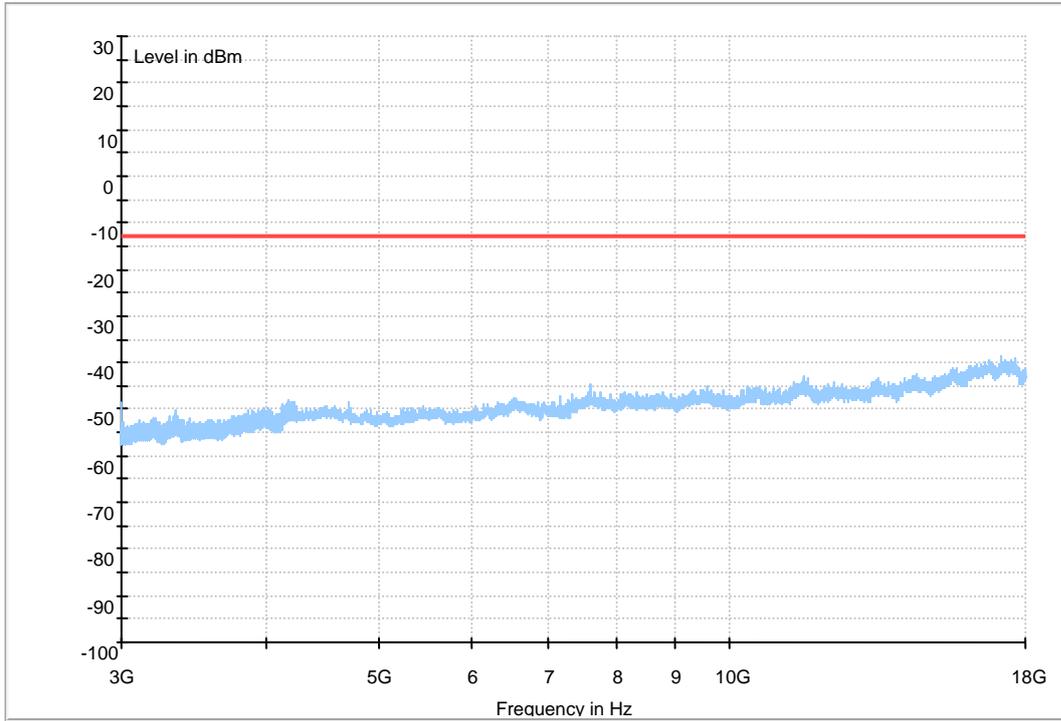
HSDPA 850
(9kHz~30MHz)



(30MHz~3GHz)

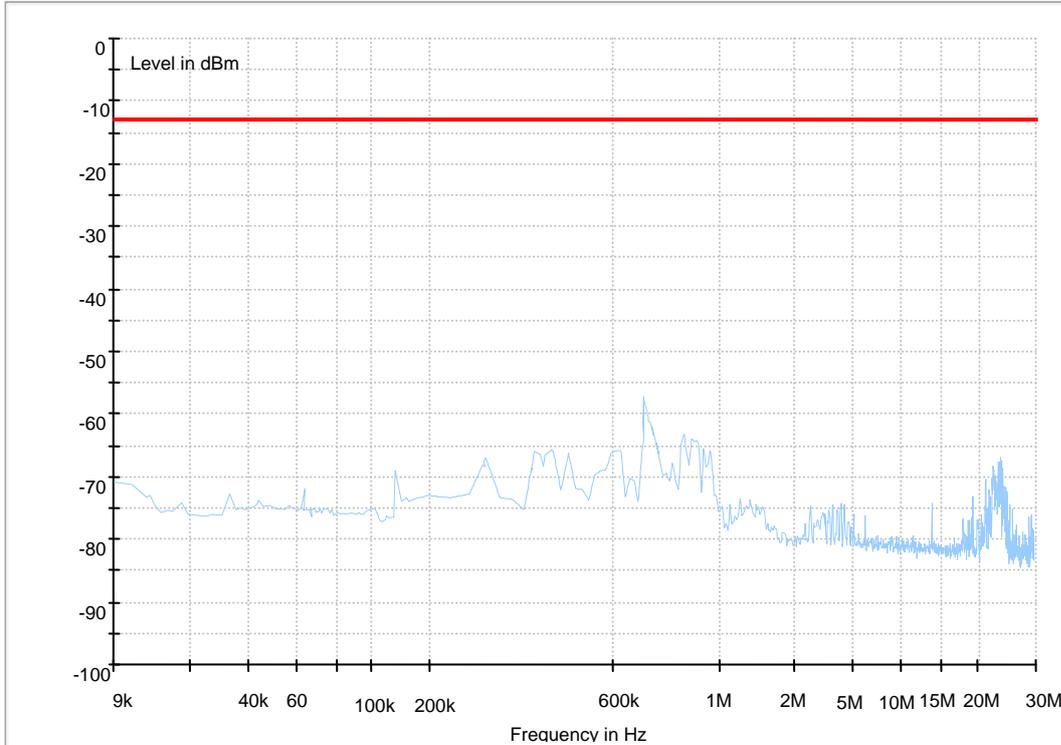


(3GHz~18GHz)

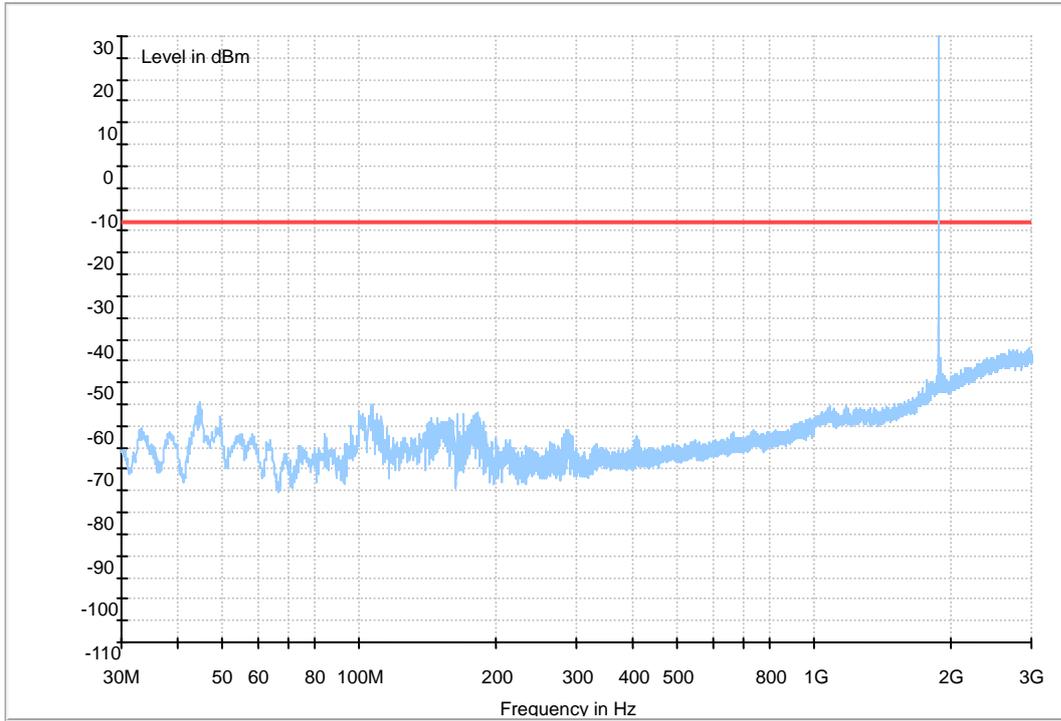


6.2 For GSM1900 & WCDMA1900

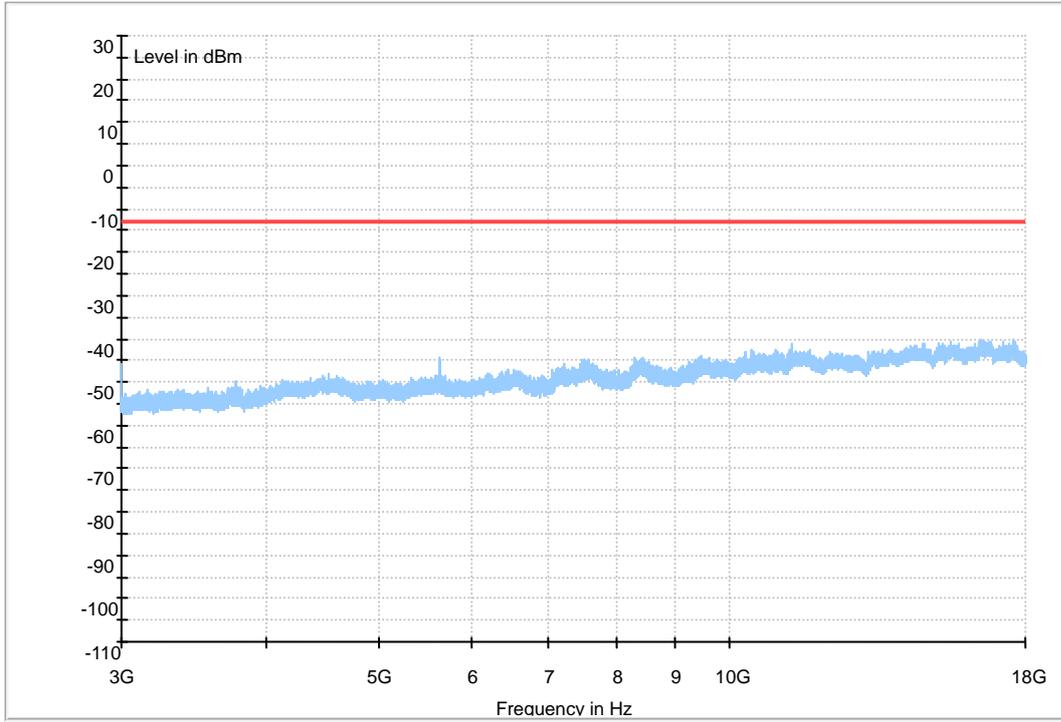
GSM 1900
(9 kHz-30MHz)



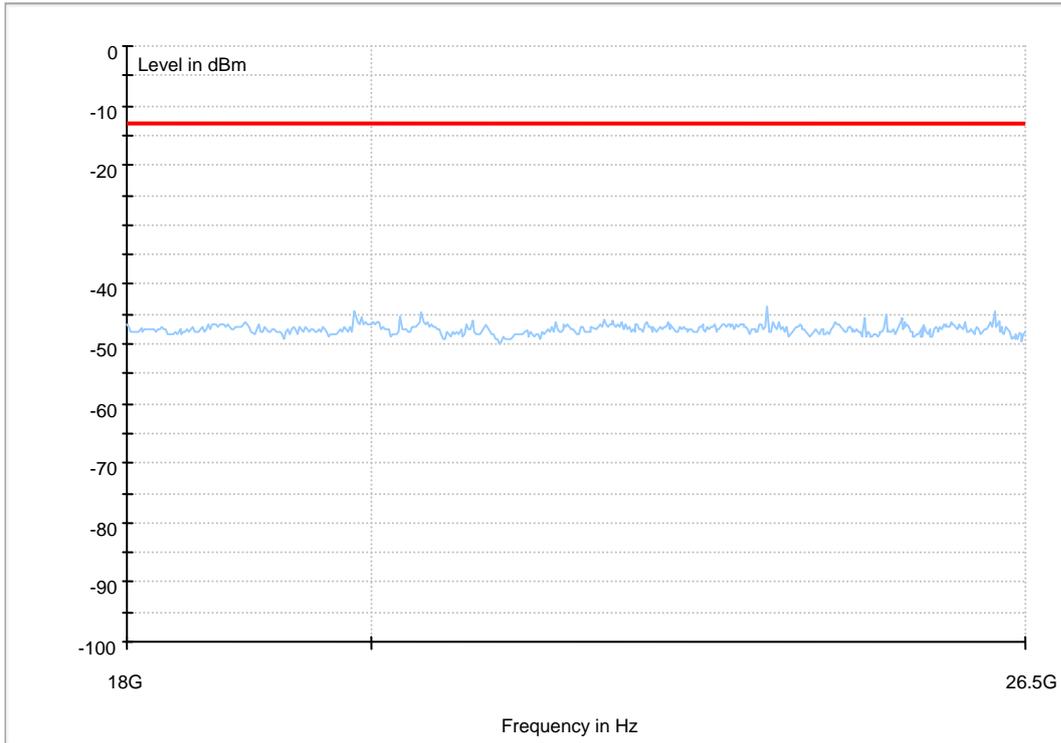
(30MHz~3GHz)



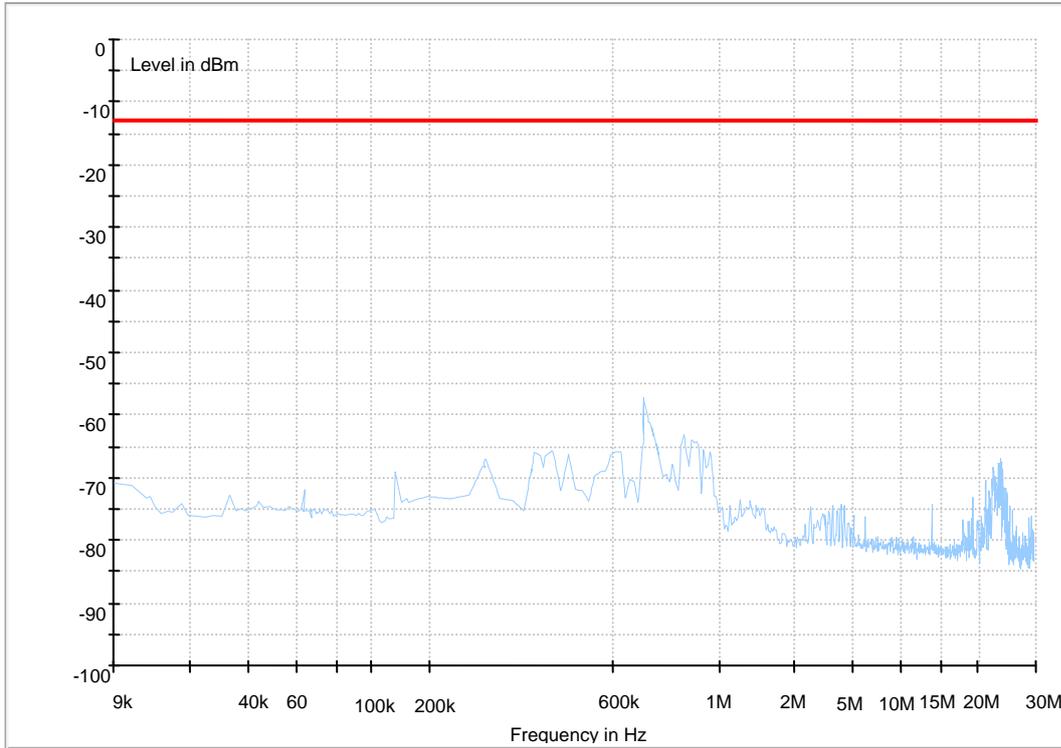
(3GHz~18GHz)



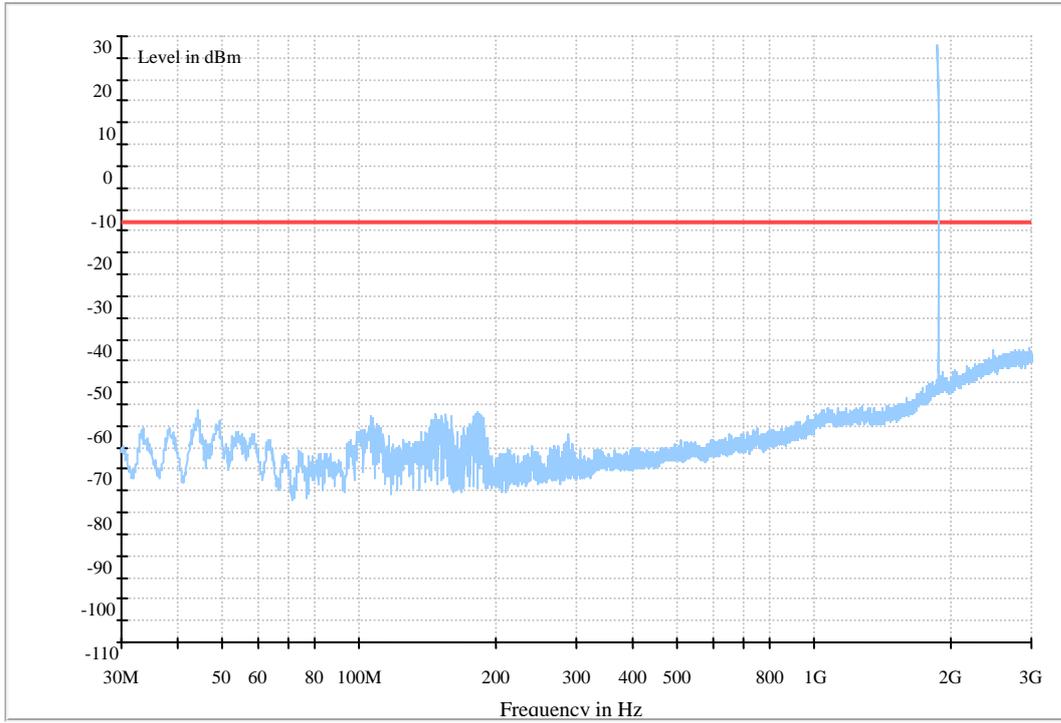
(18GHz-26.5GHz)



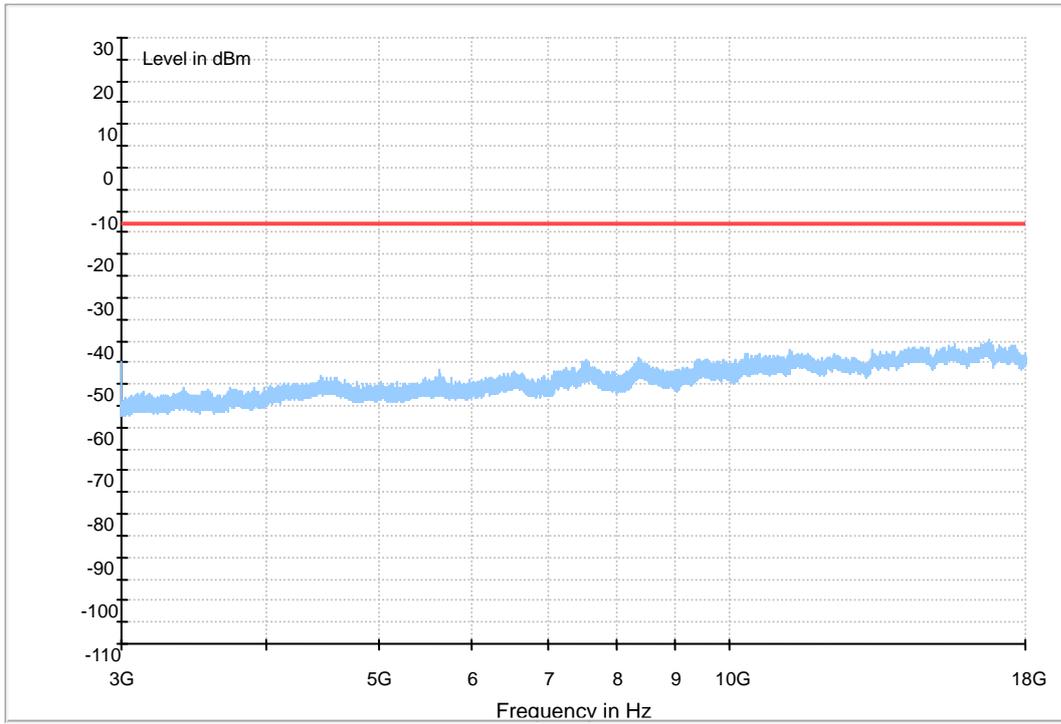
GPRS 1900
(9kHz-30MHz)



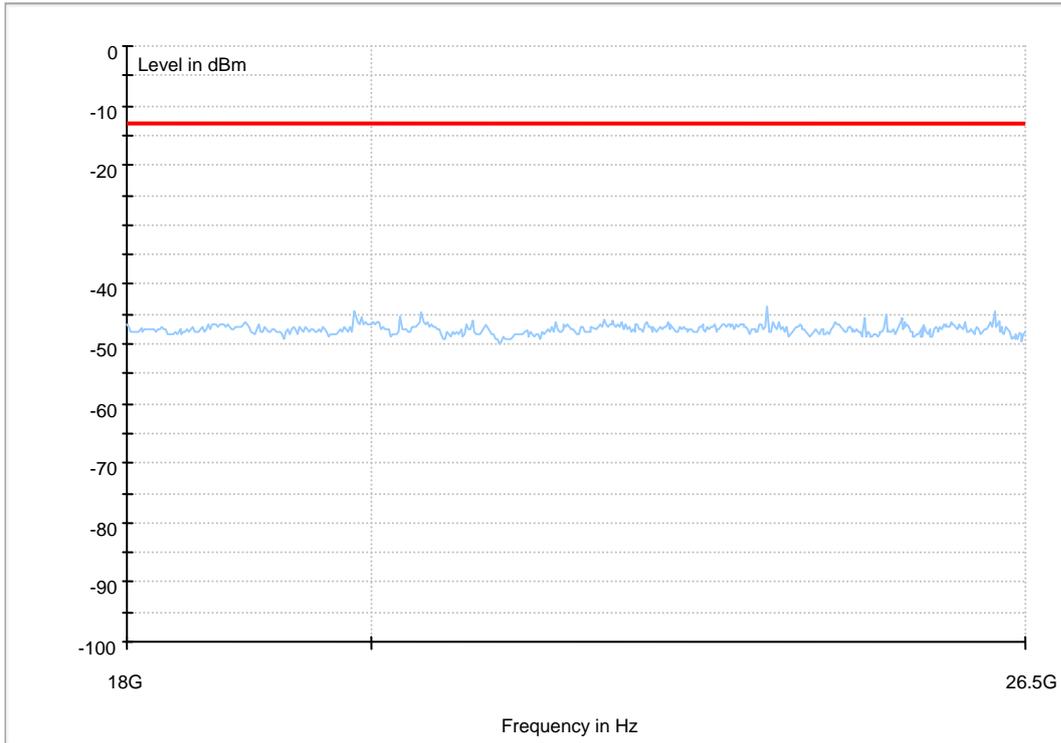
(30MHz~3GHz)



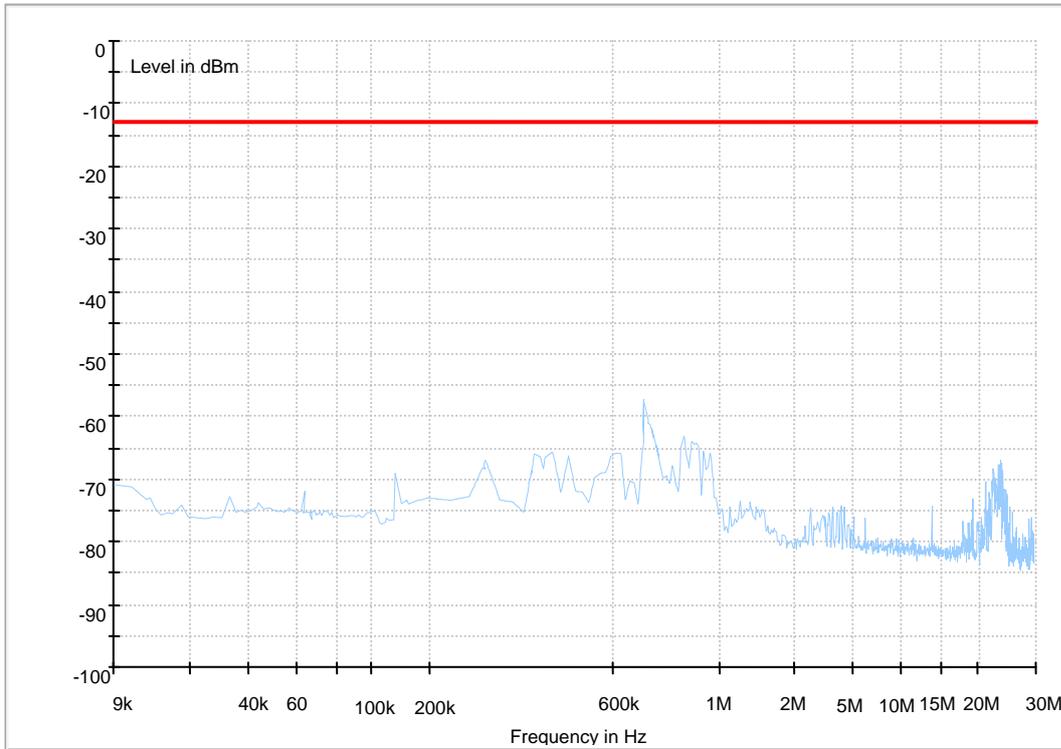
(3GHz~18GHz)



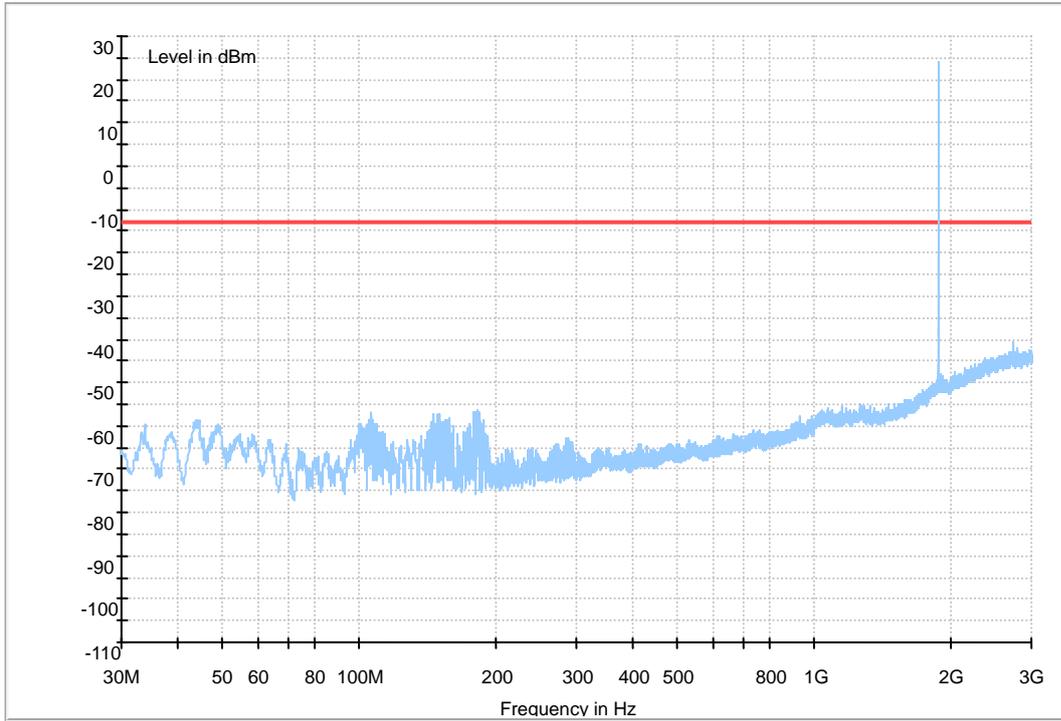
(18GHz-26.5GHz)



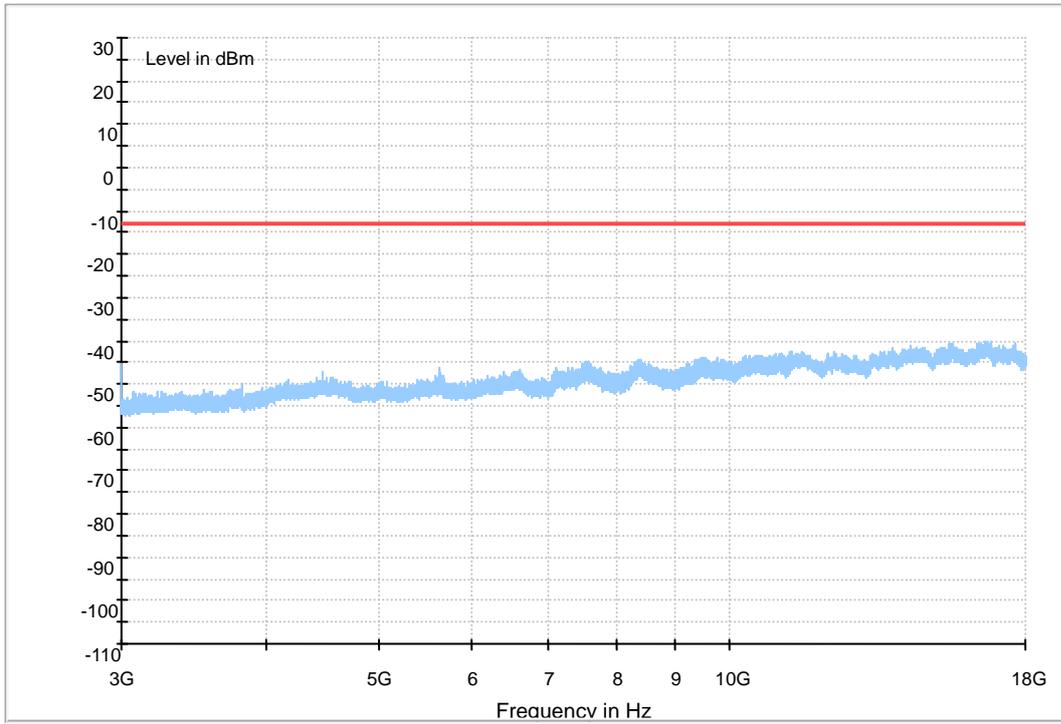
EDGE 1900
(9kHz-30MHz)



(30MHz~3GHz)

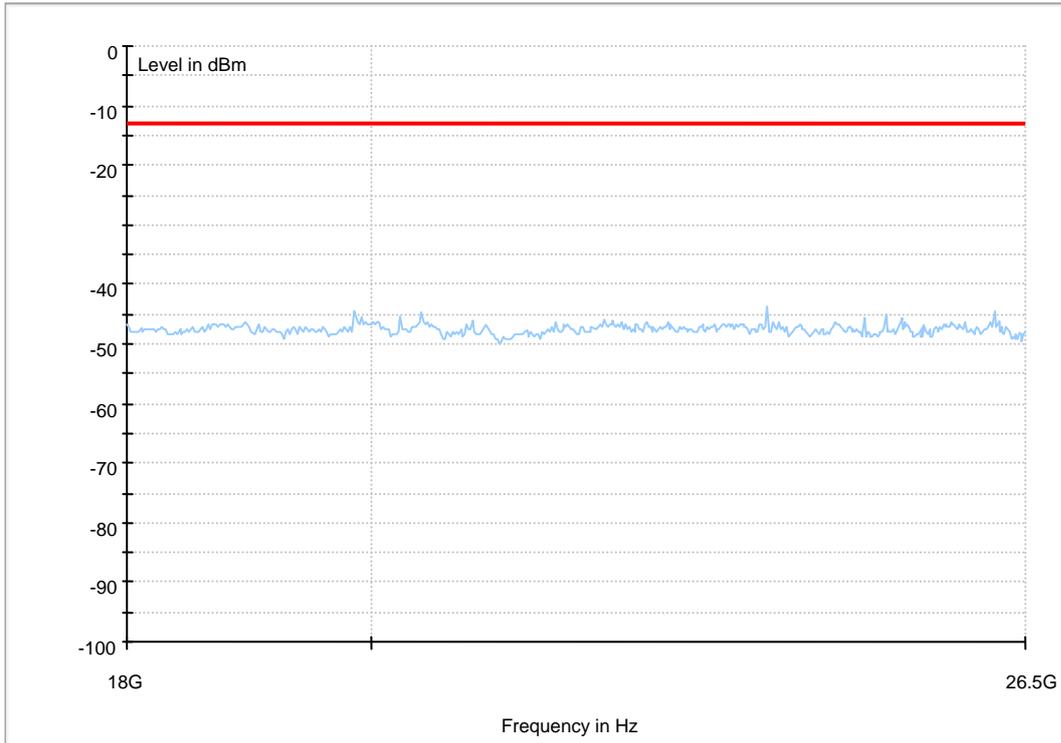


(3GHz~18GHz)

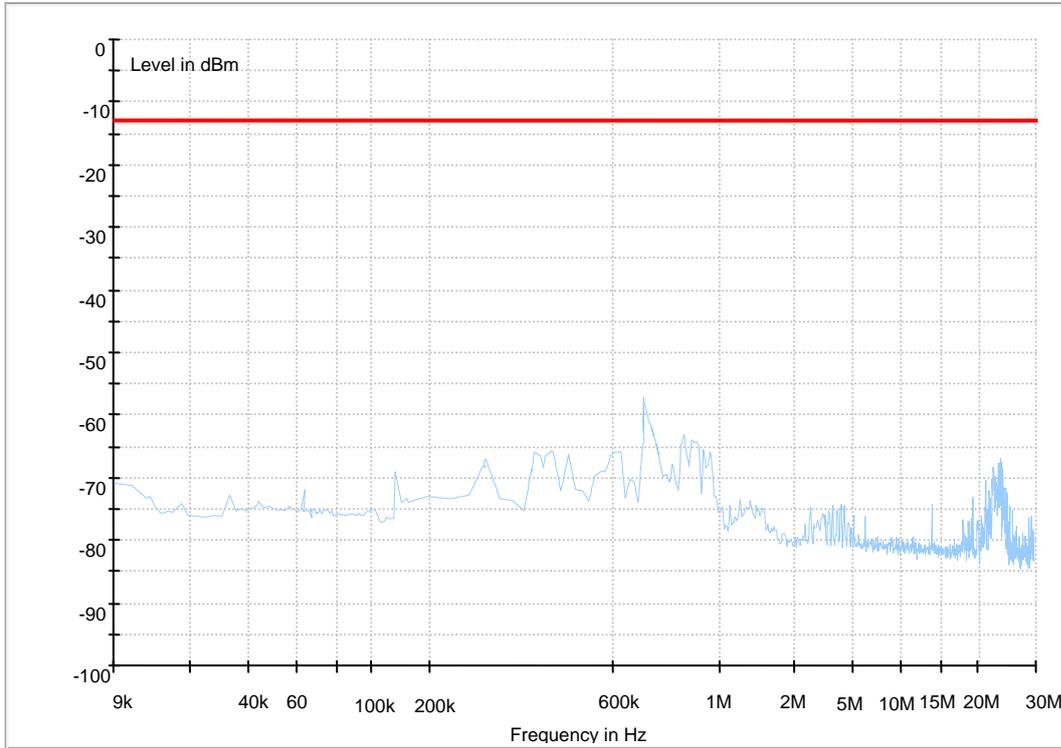




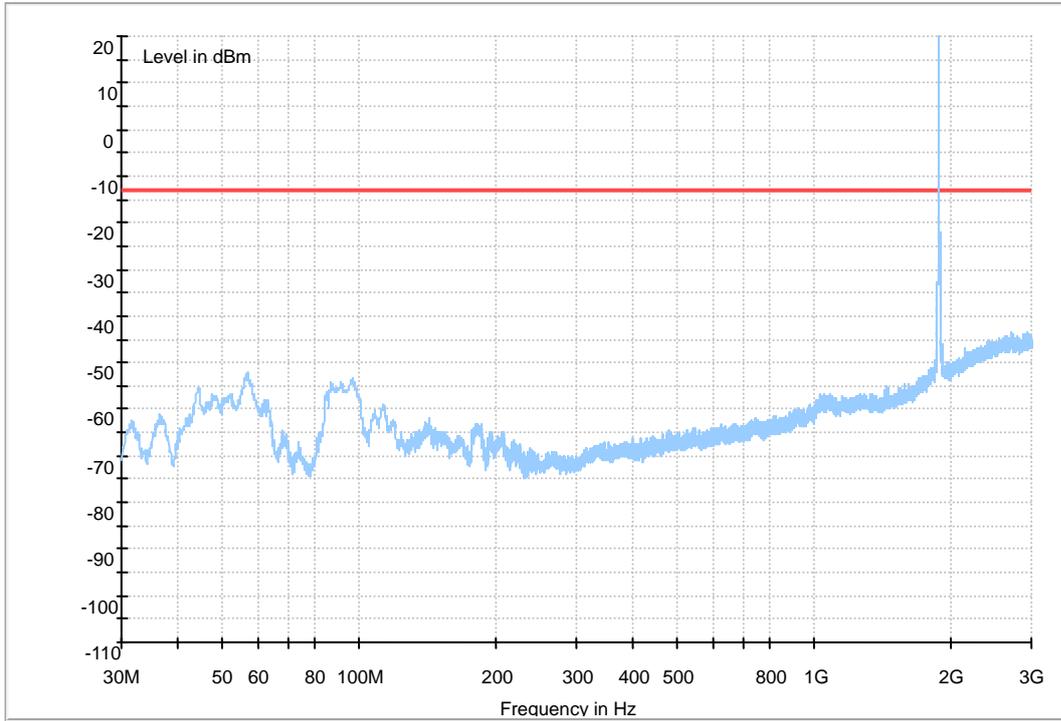
(18GHz-26.5GHz)



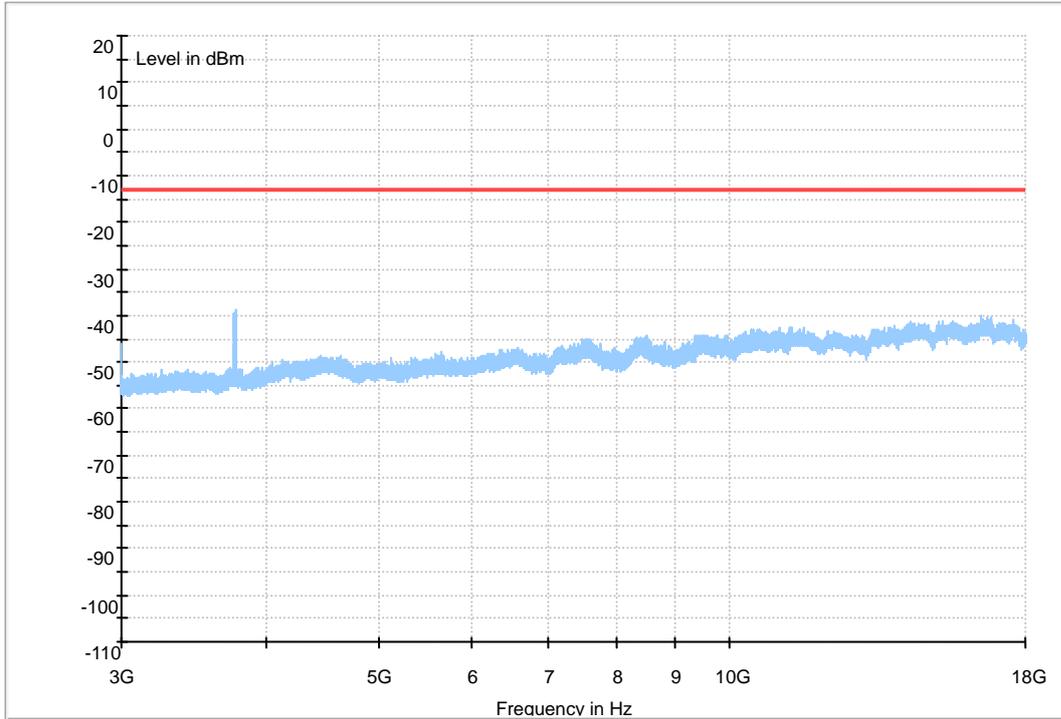
WCDMA 1900
(9kHz-30MHz)



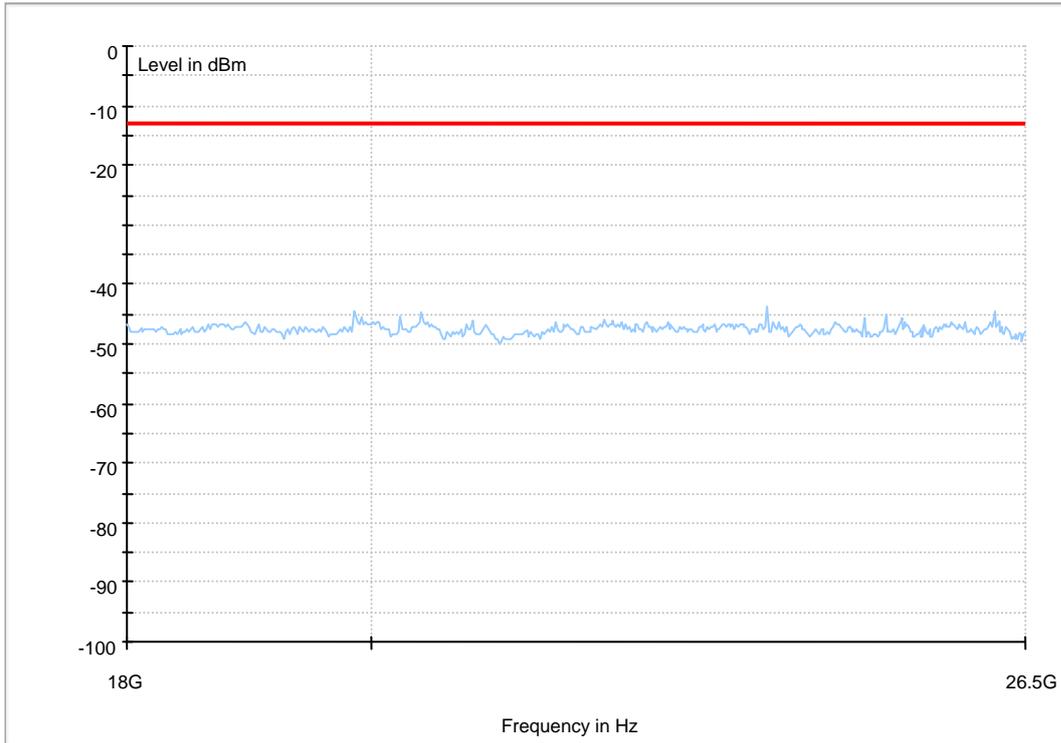
(30MHz~3GHz)



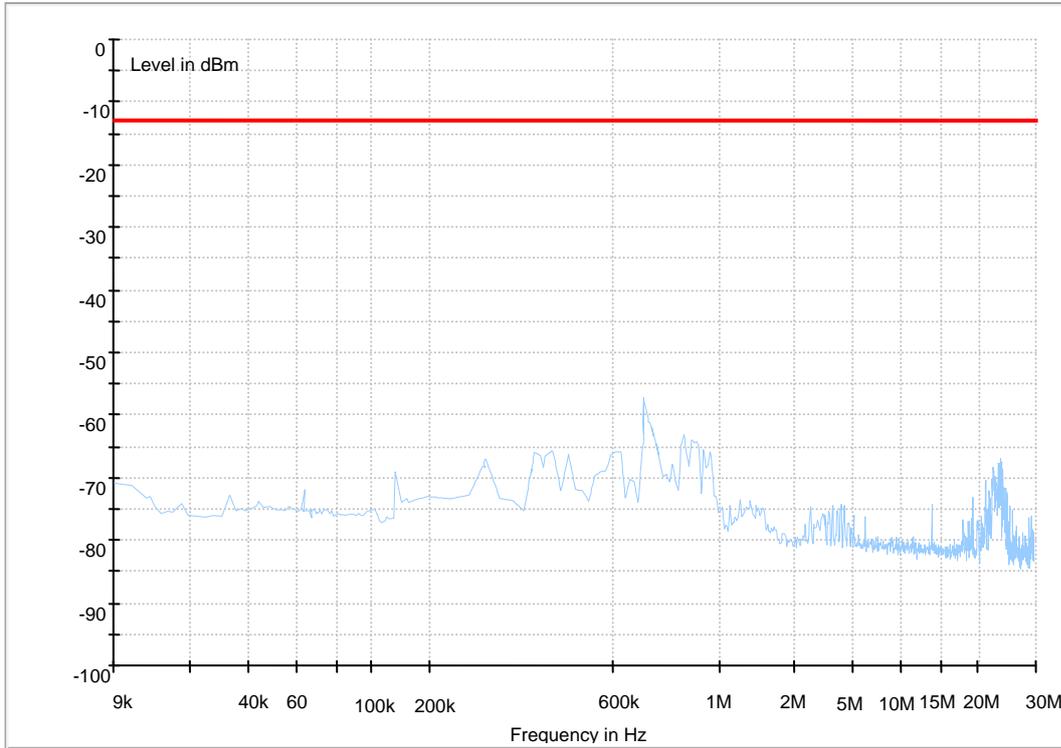
(3GHz~18GHz)



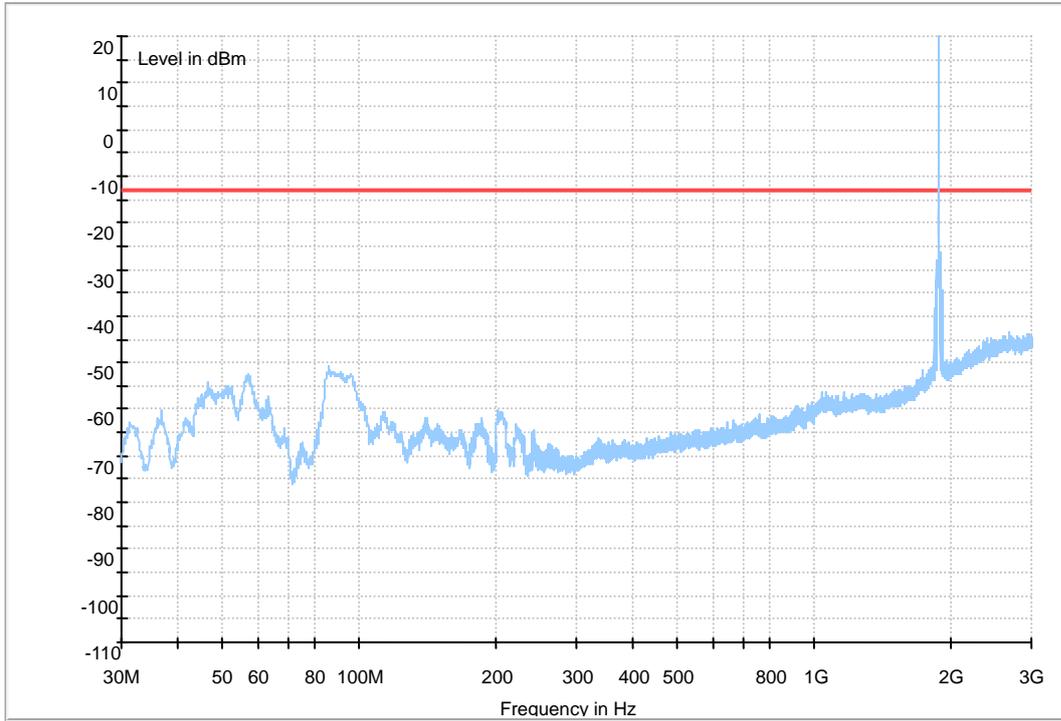
(18GHz-26.5GHz)



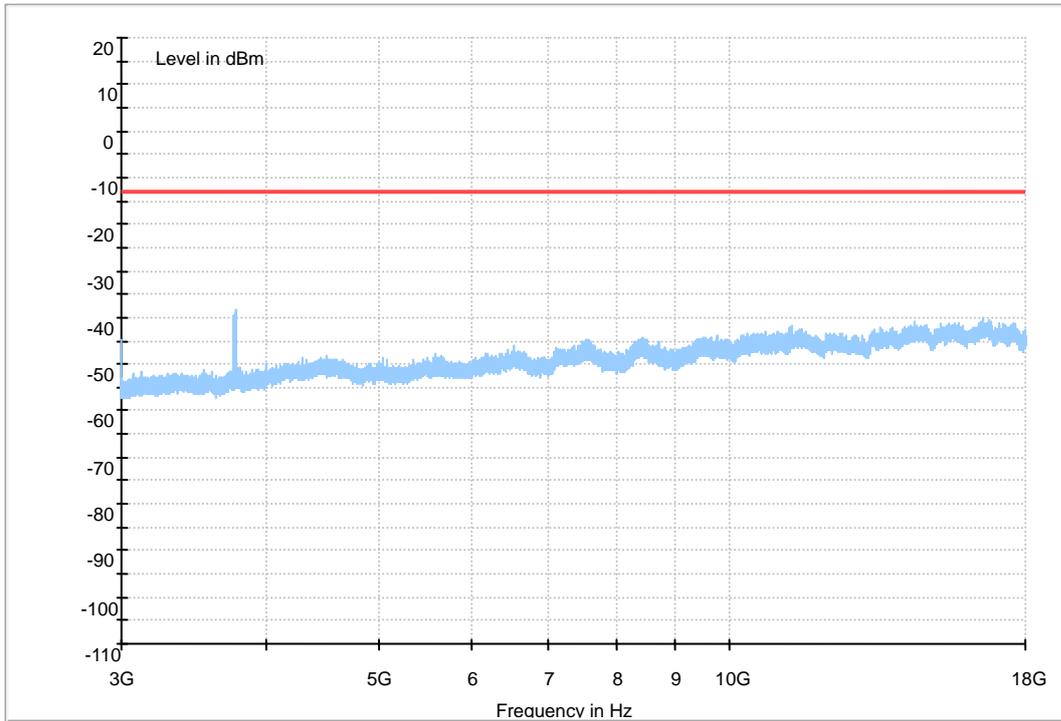
HSDPA 1900
(9kHz-30MHz)



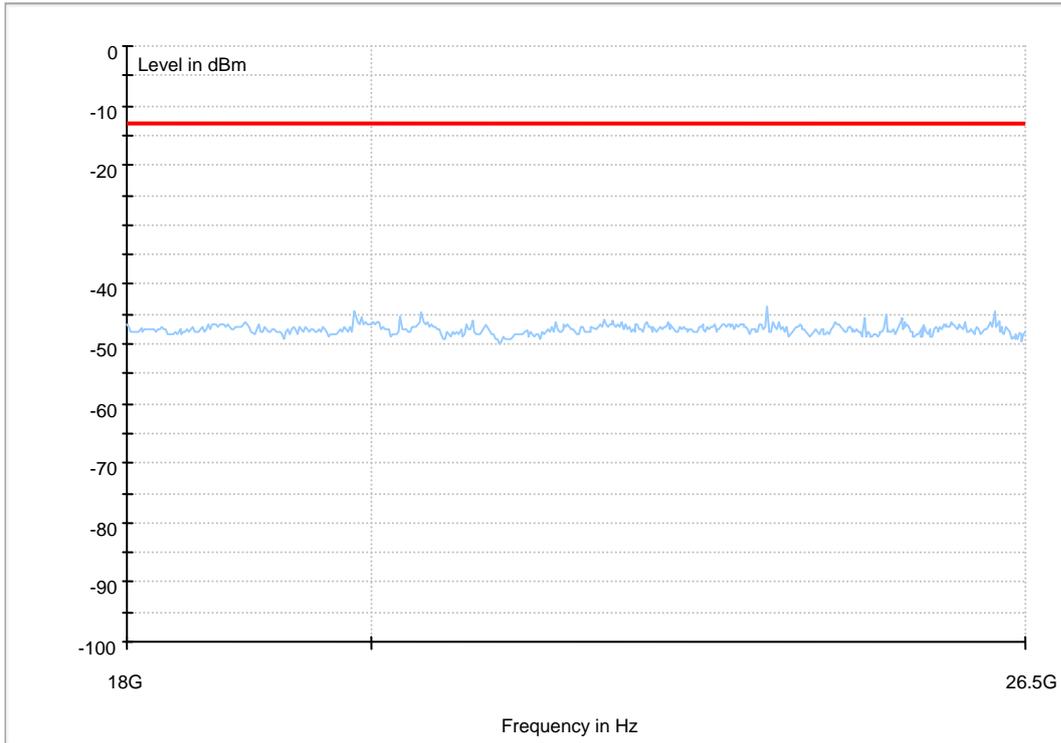
(30MHz~3GHz)



(3GHz~18GHz)



(18GHz-26.5GHz)



END