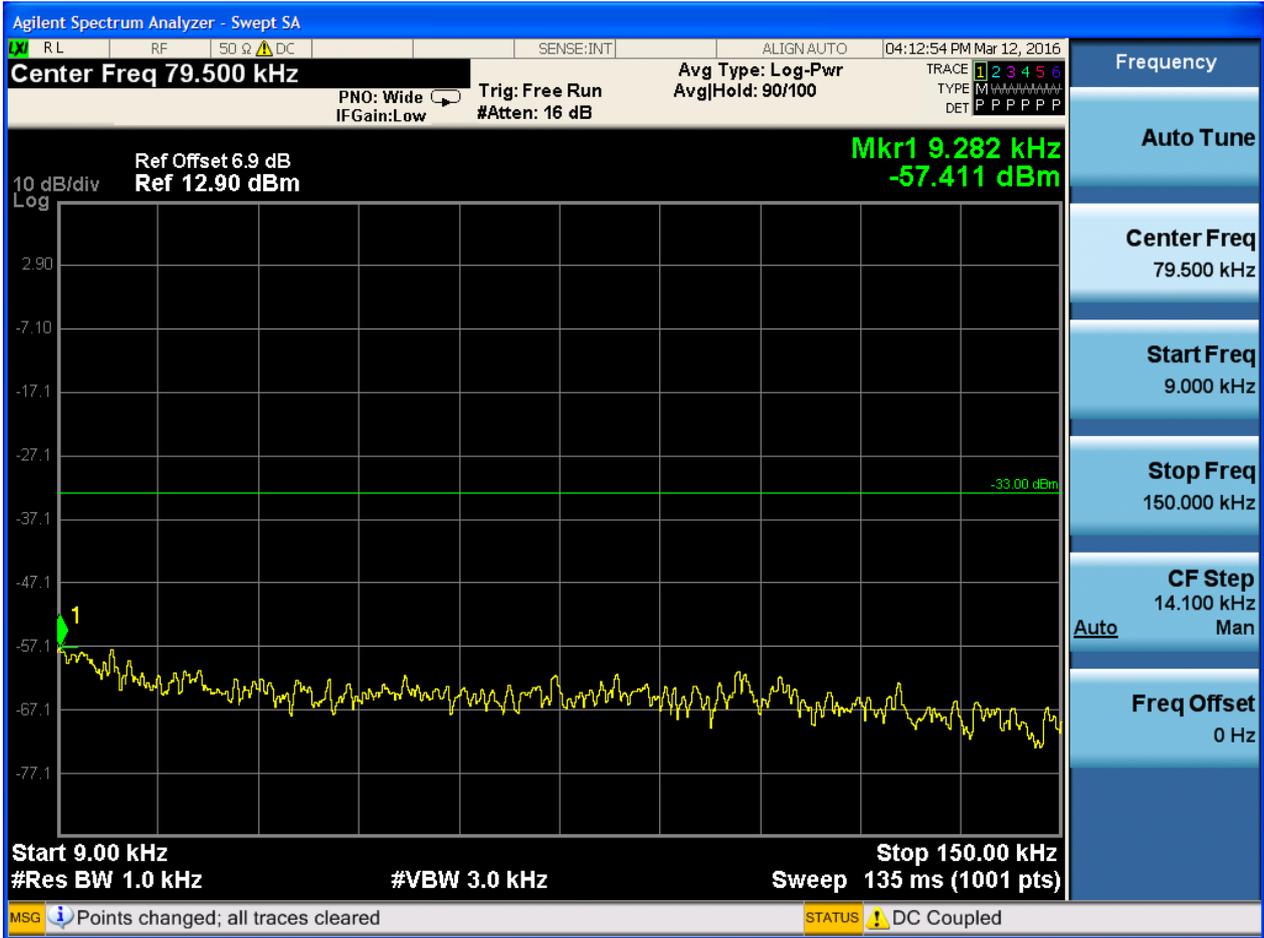


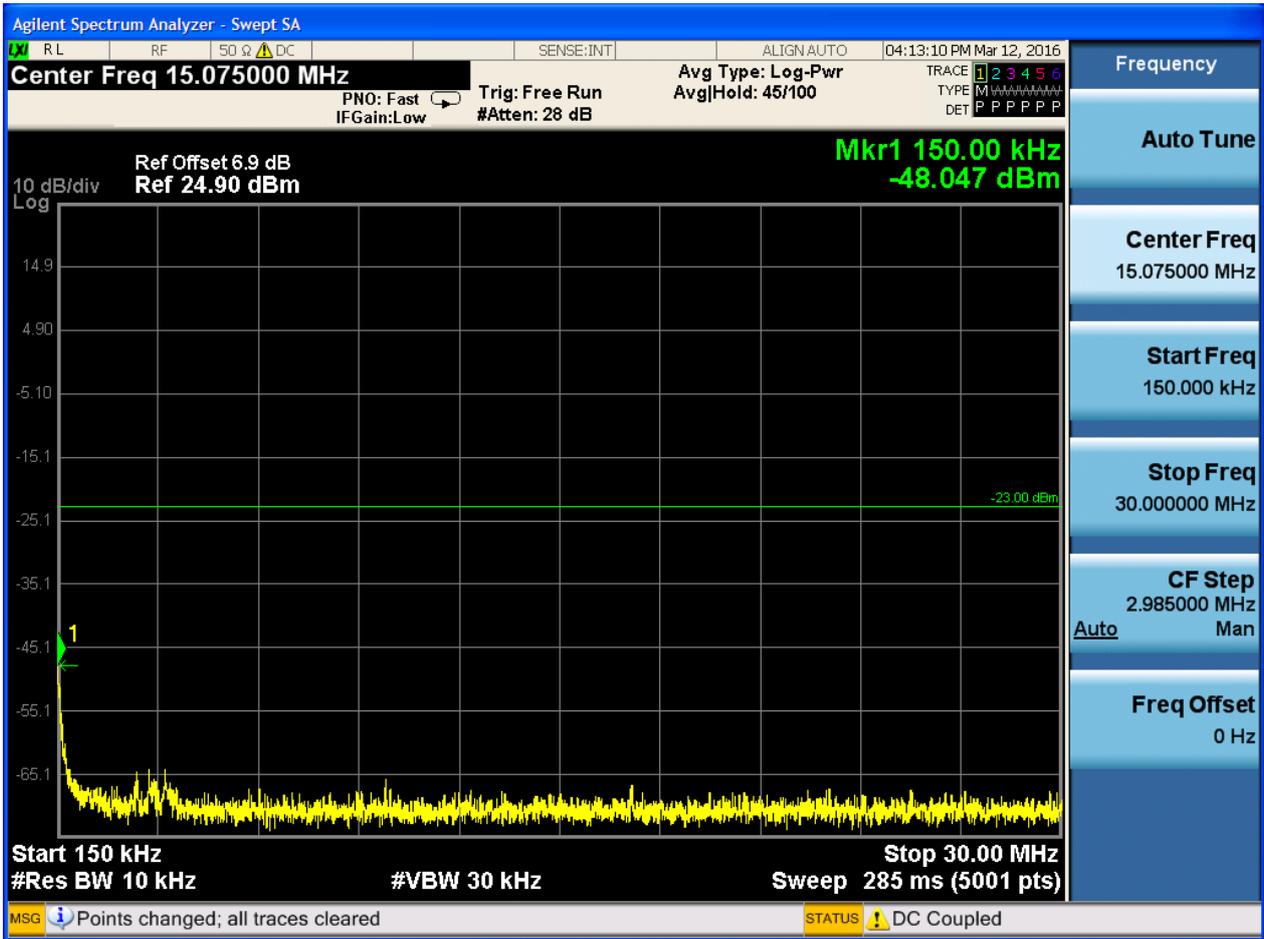
6.1.1.2 Test Mode = LTE/TM2

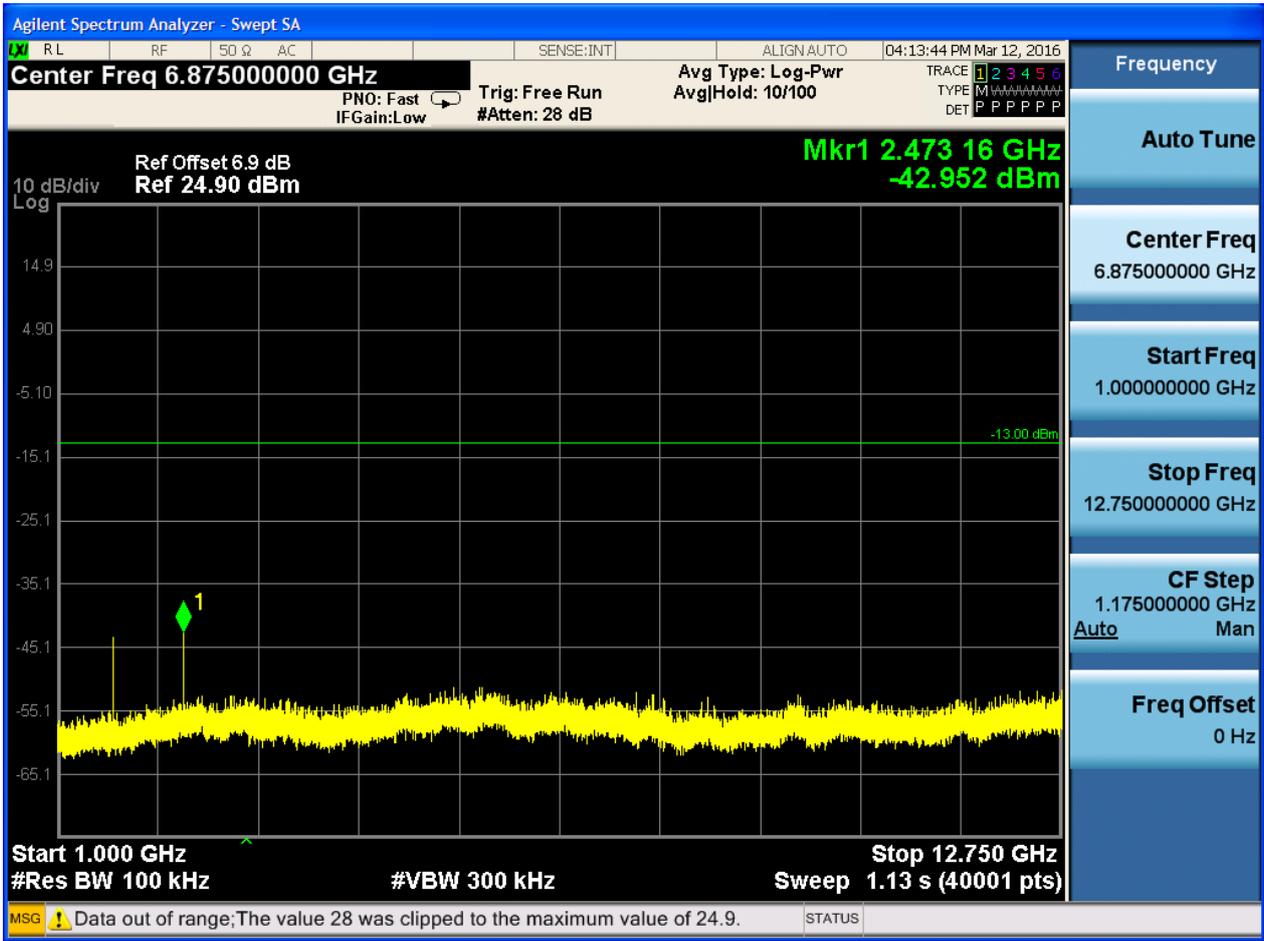
6.1.1.2.1 Test Bandwidth = 5

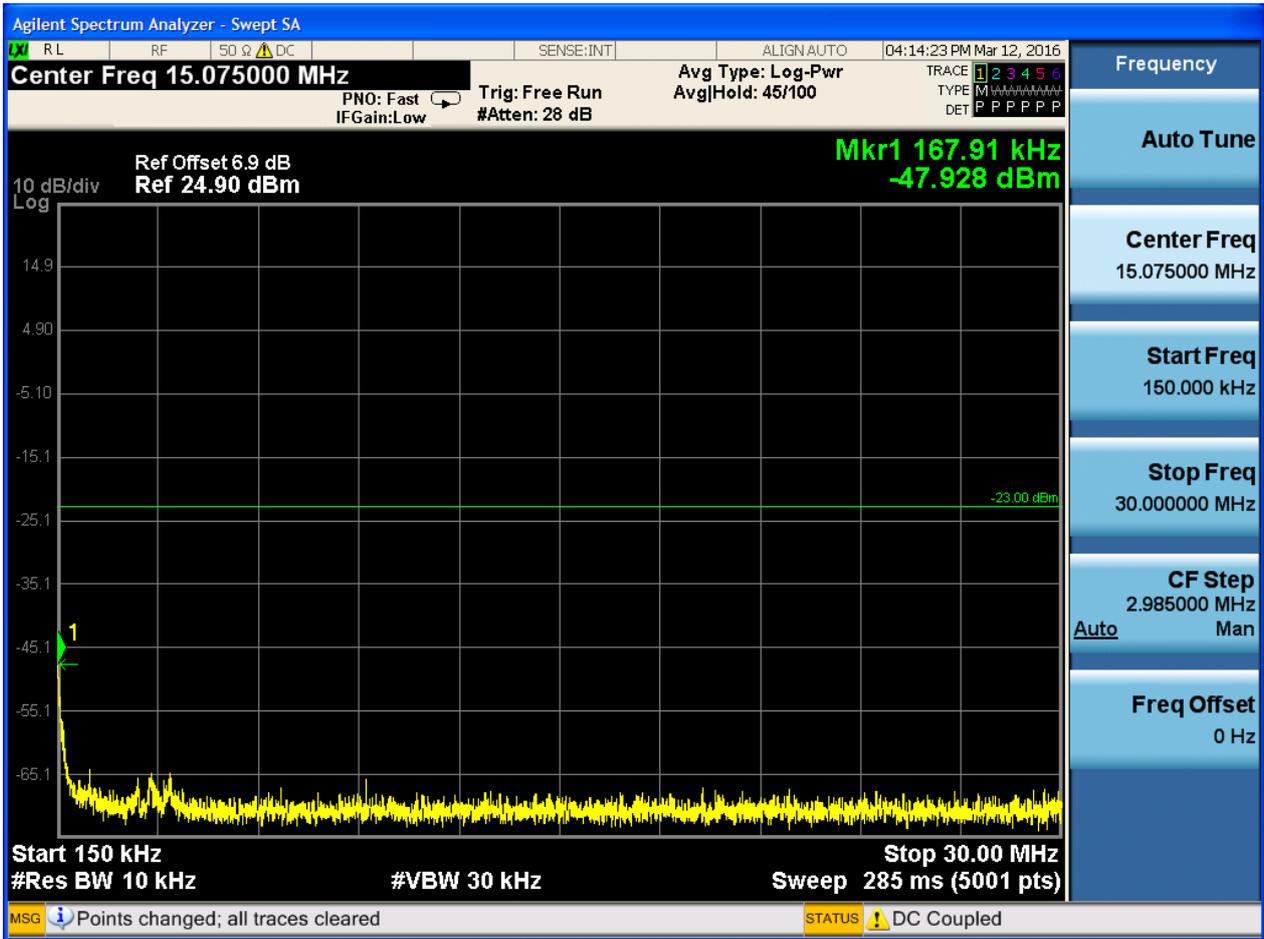
6.1.1.2.1.1 Test Channel = LCH

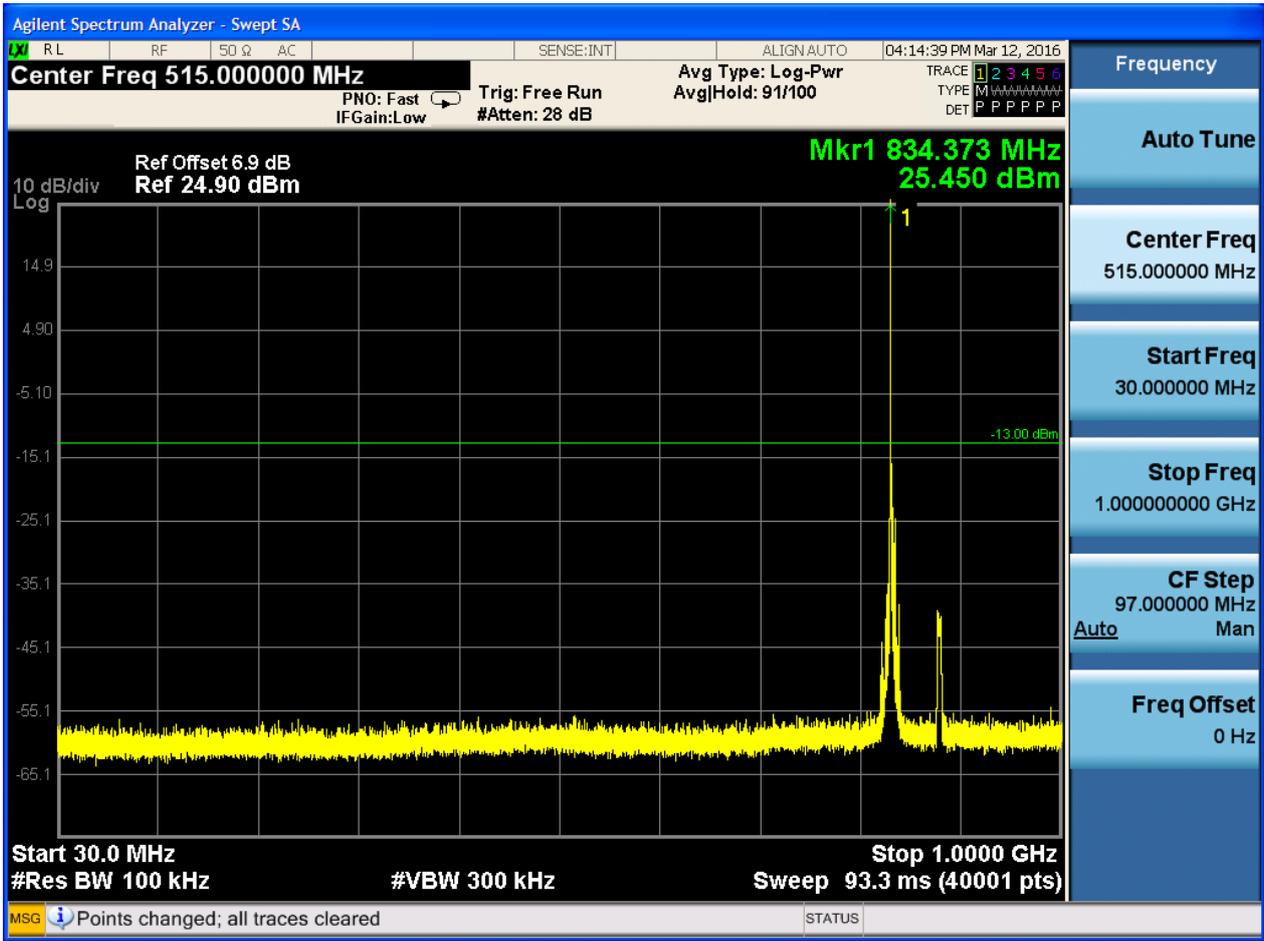
6.1.1.2.1.1.1 Test RB = RB1#0

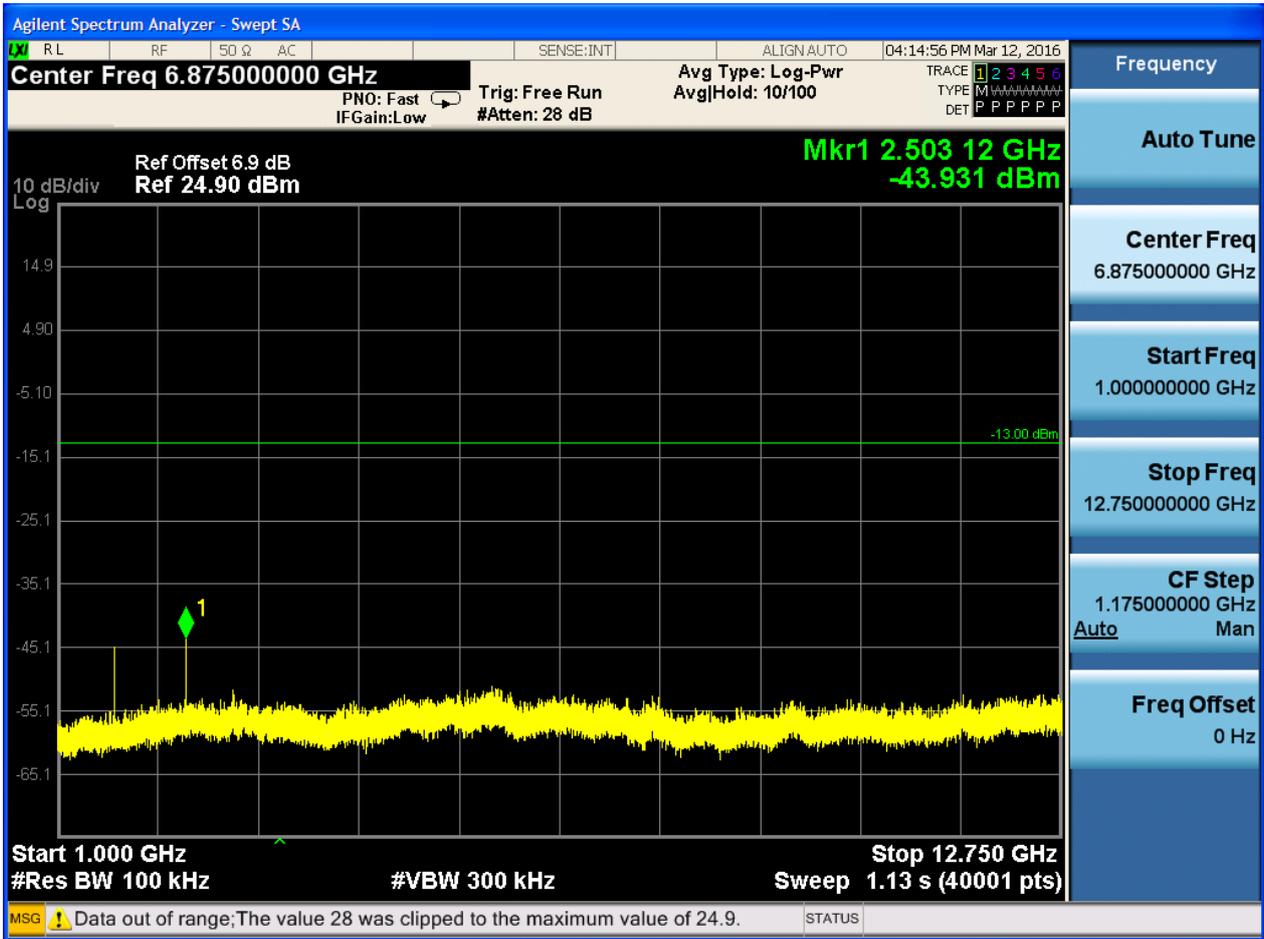








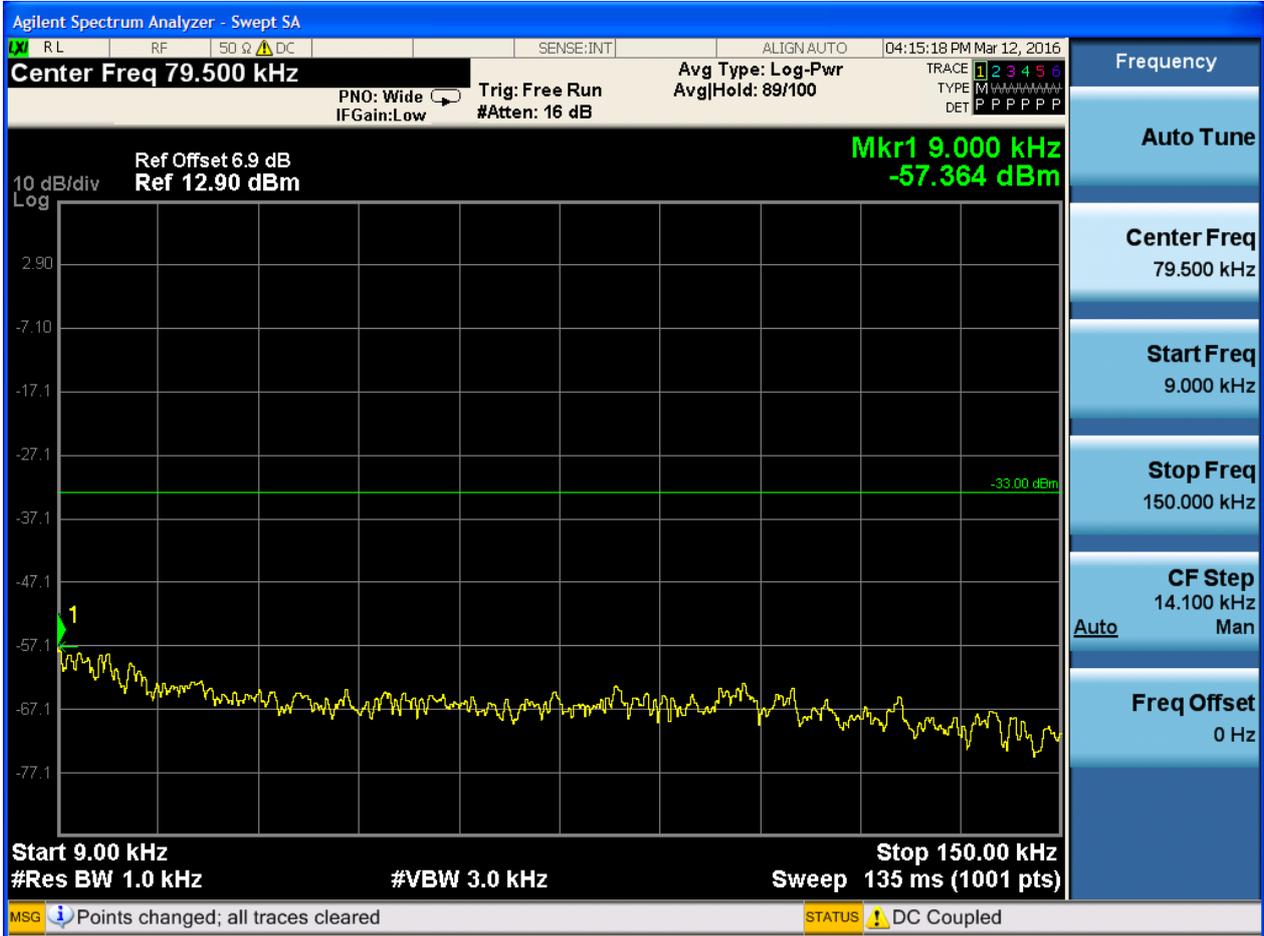


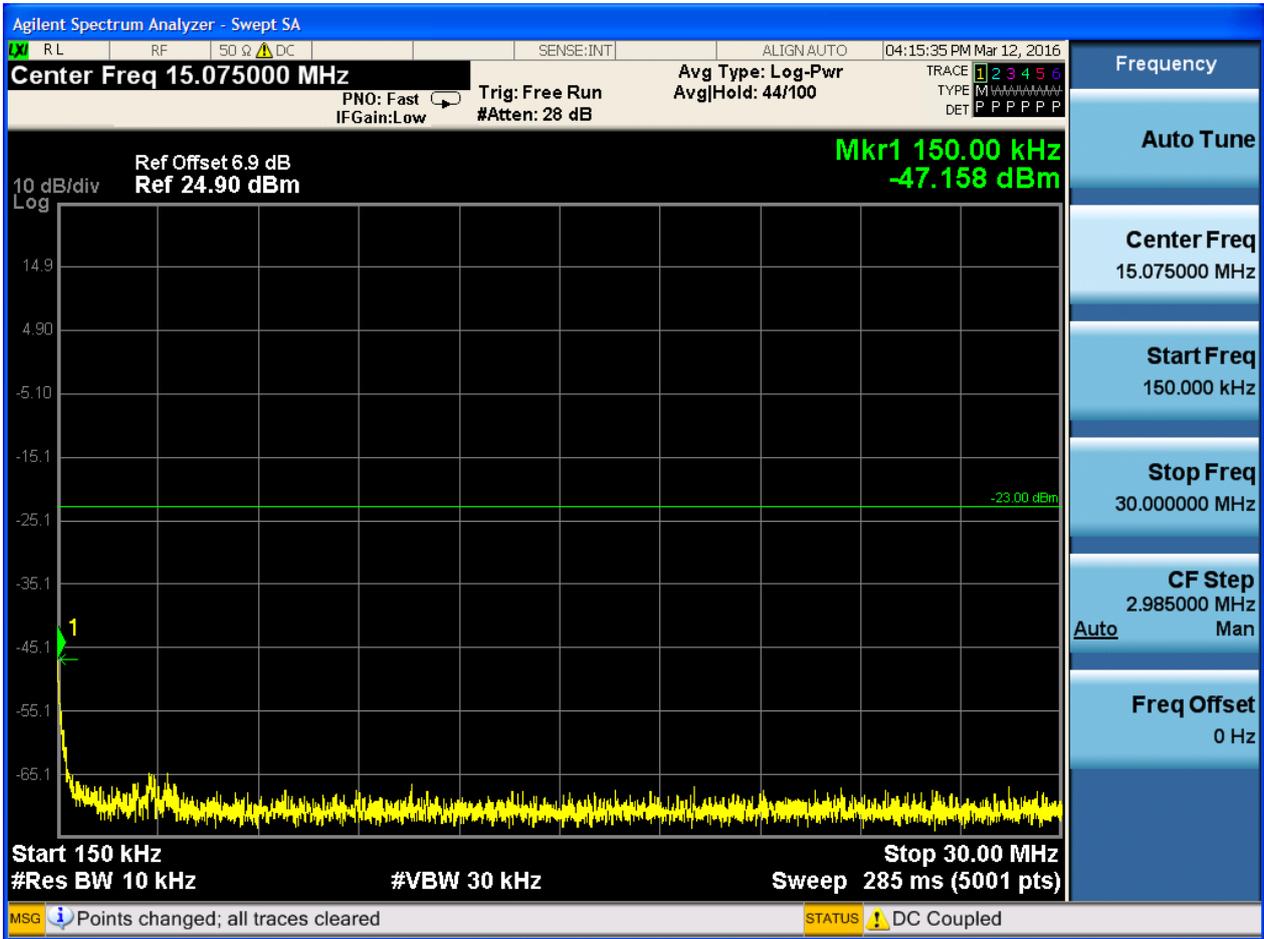


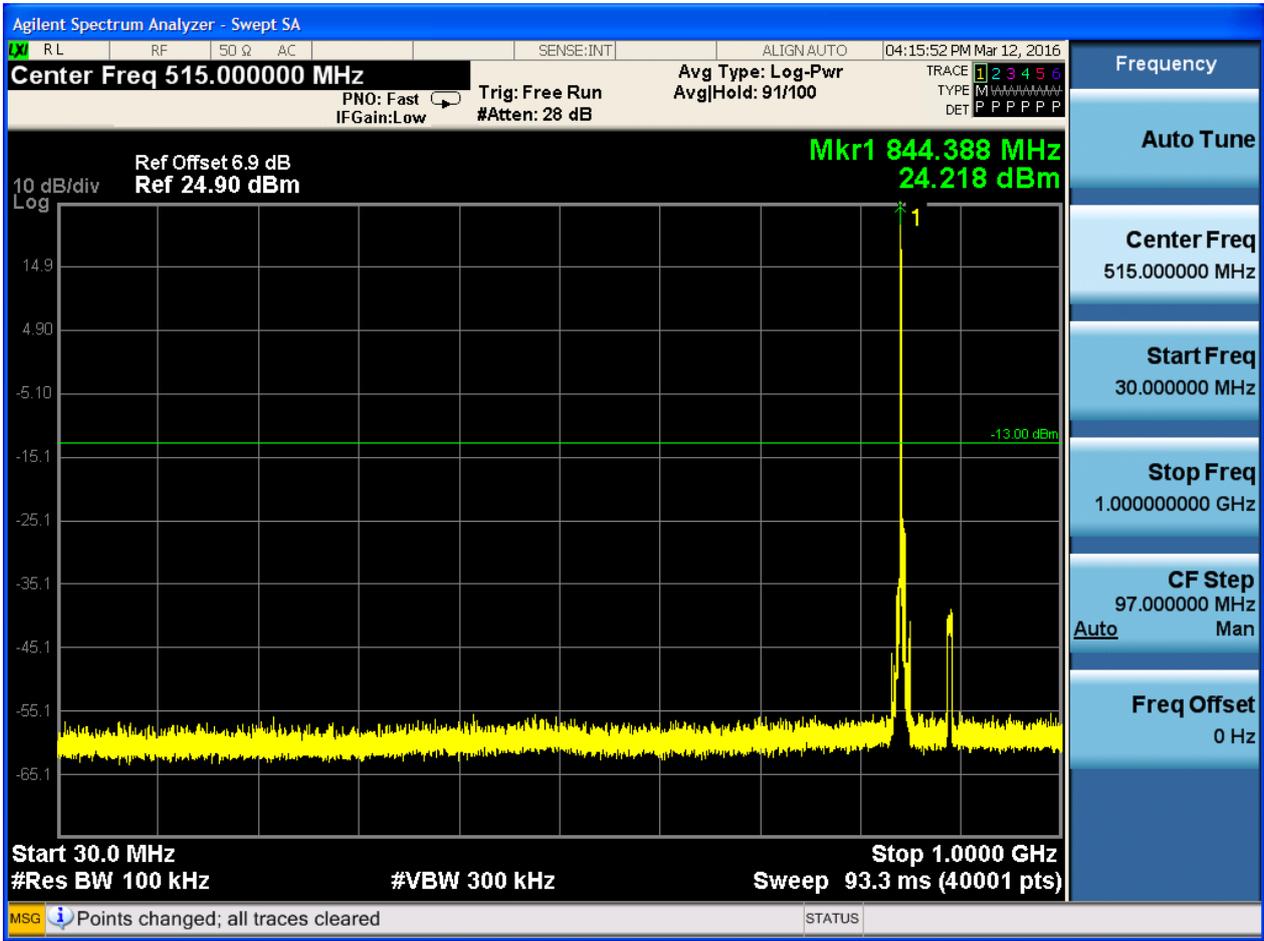


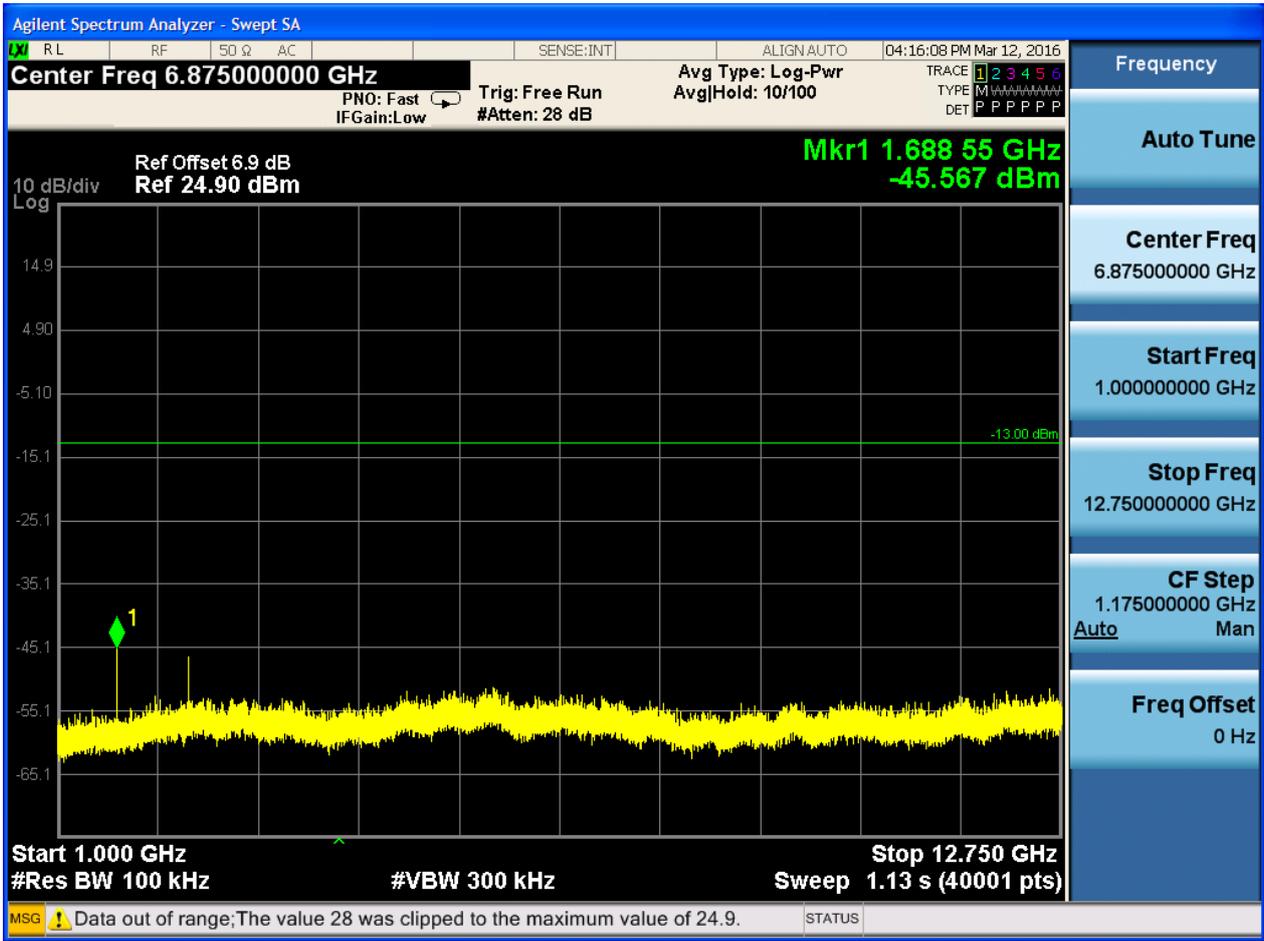
6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0







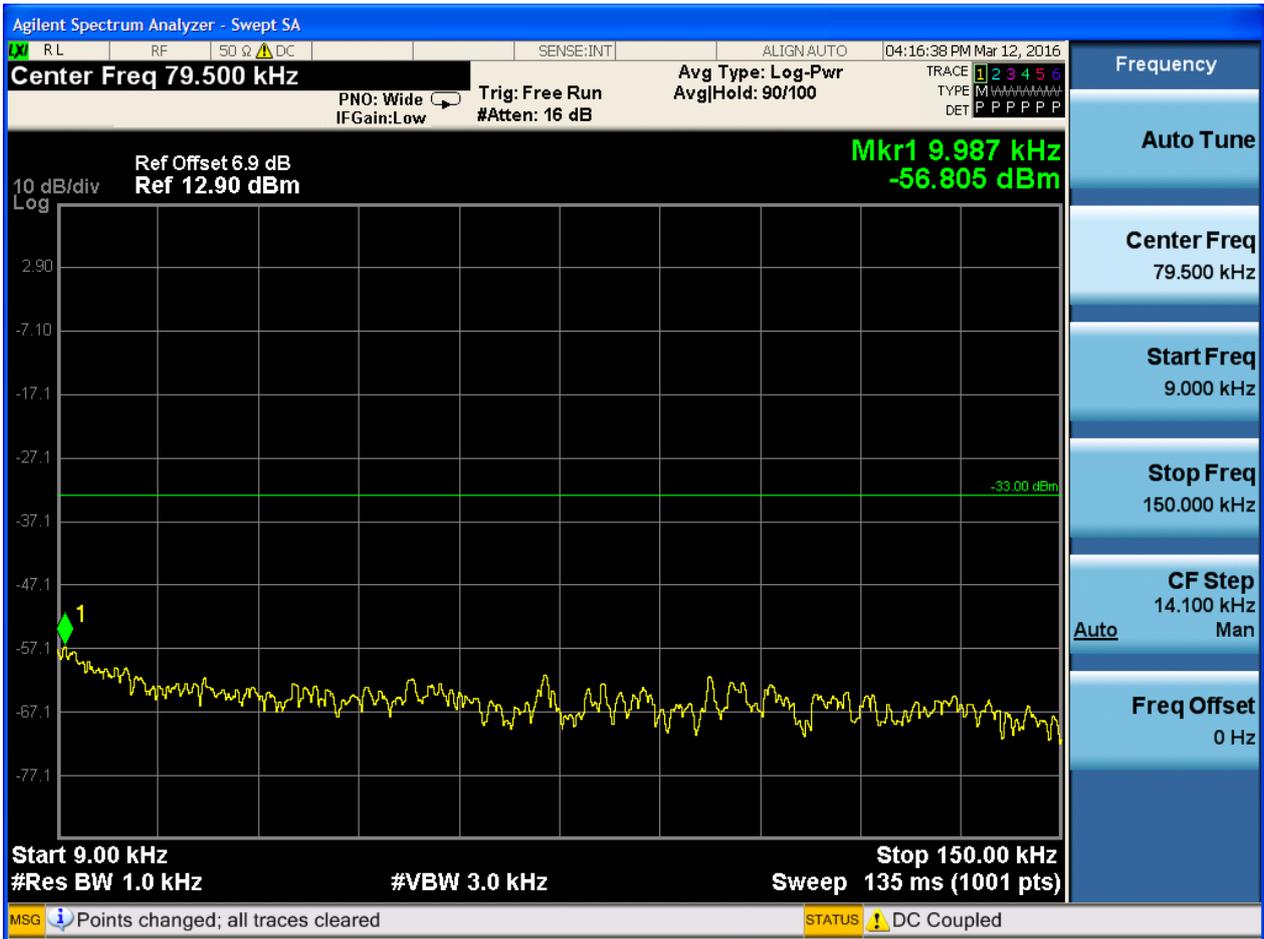




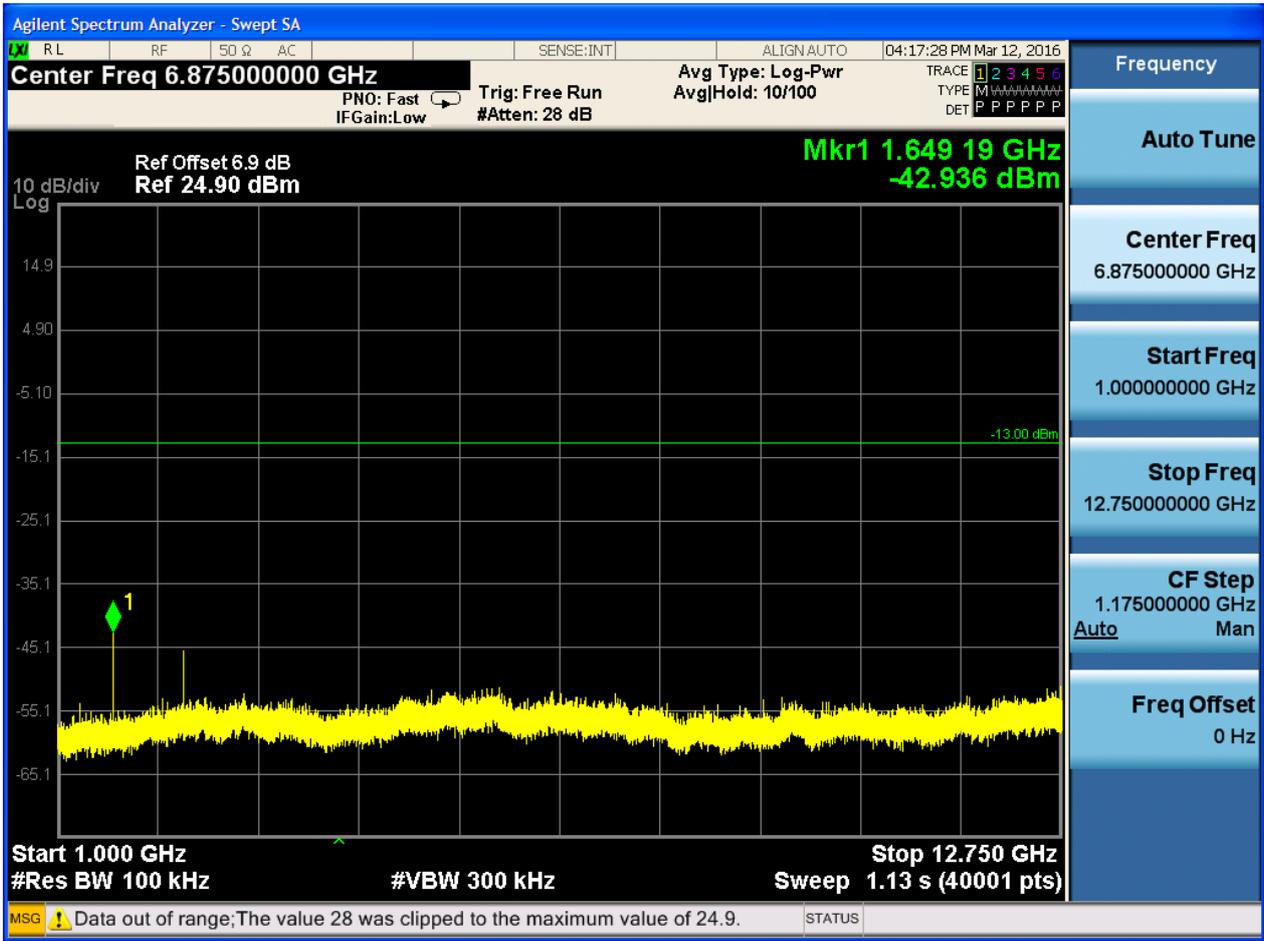
6.1.1.2.2 Test Bandwidth = 10

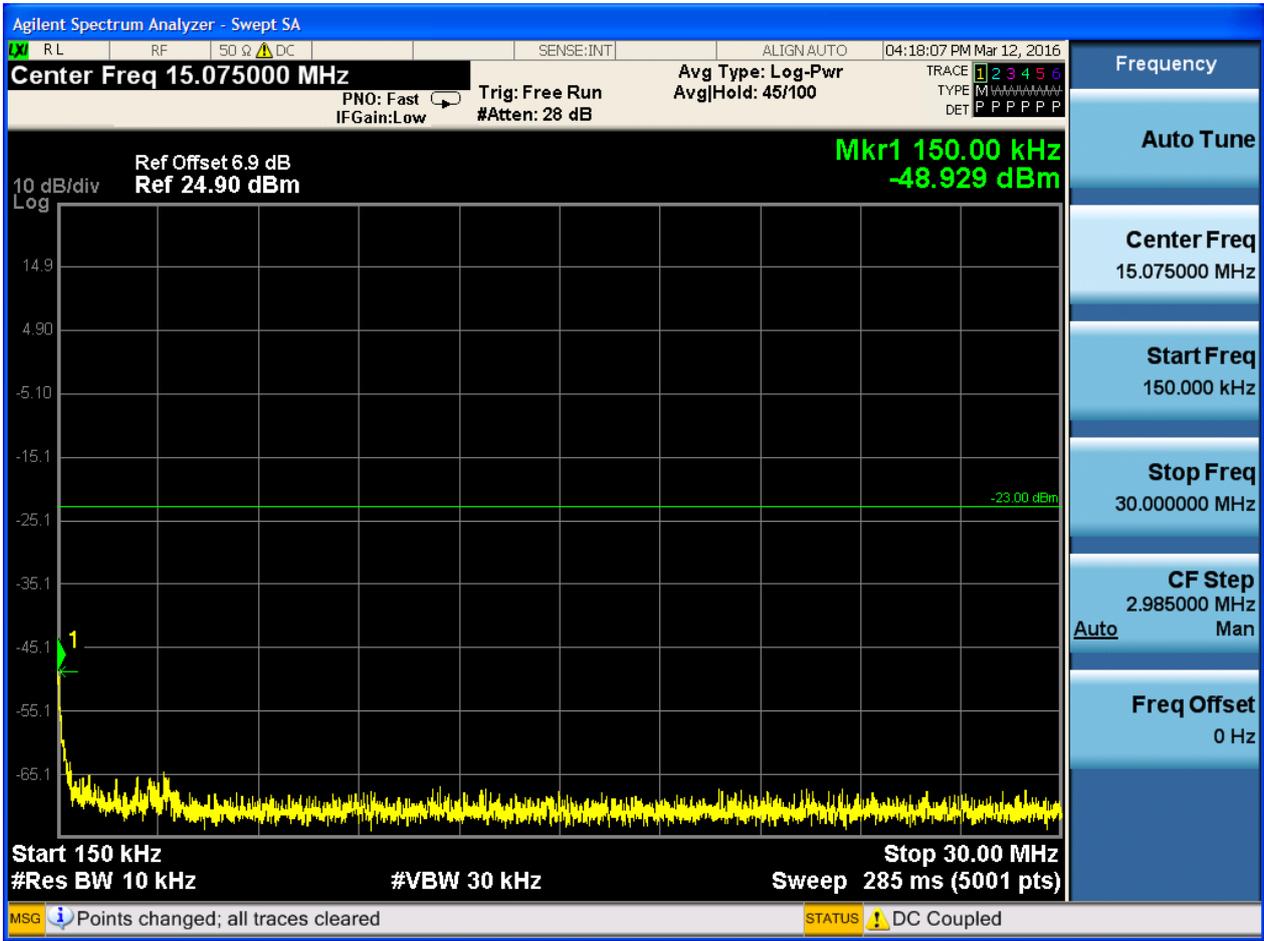
6.1.1.2.2.1 Test Channel = LCH

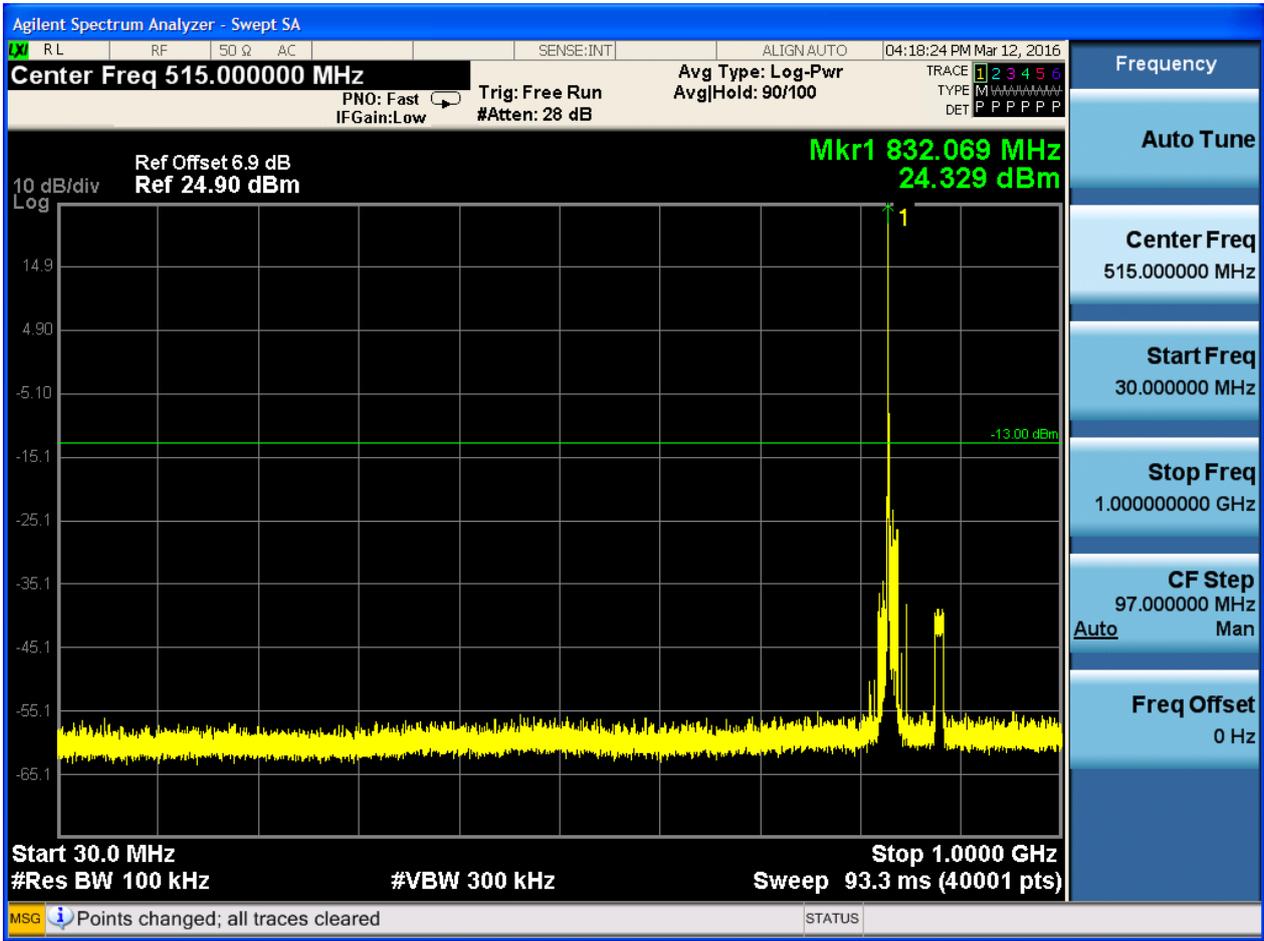
6.1.1.2.2.1.1 Test RB = RB1#0

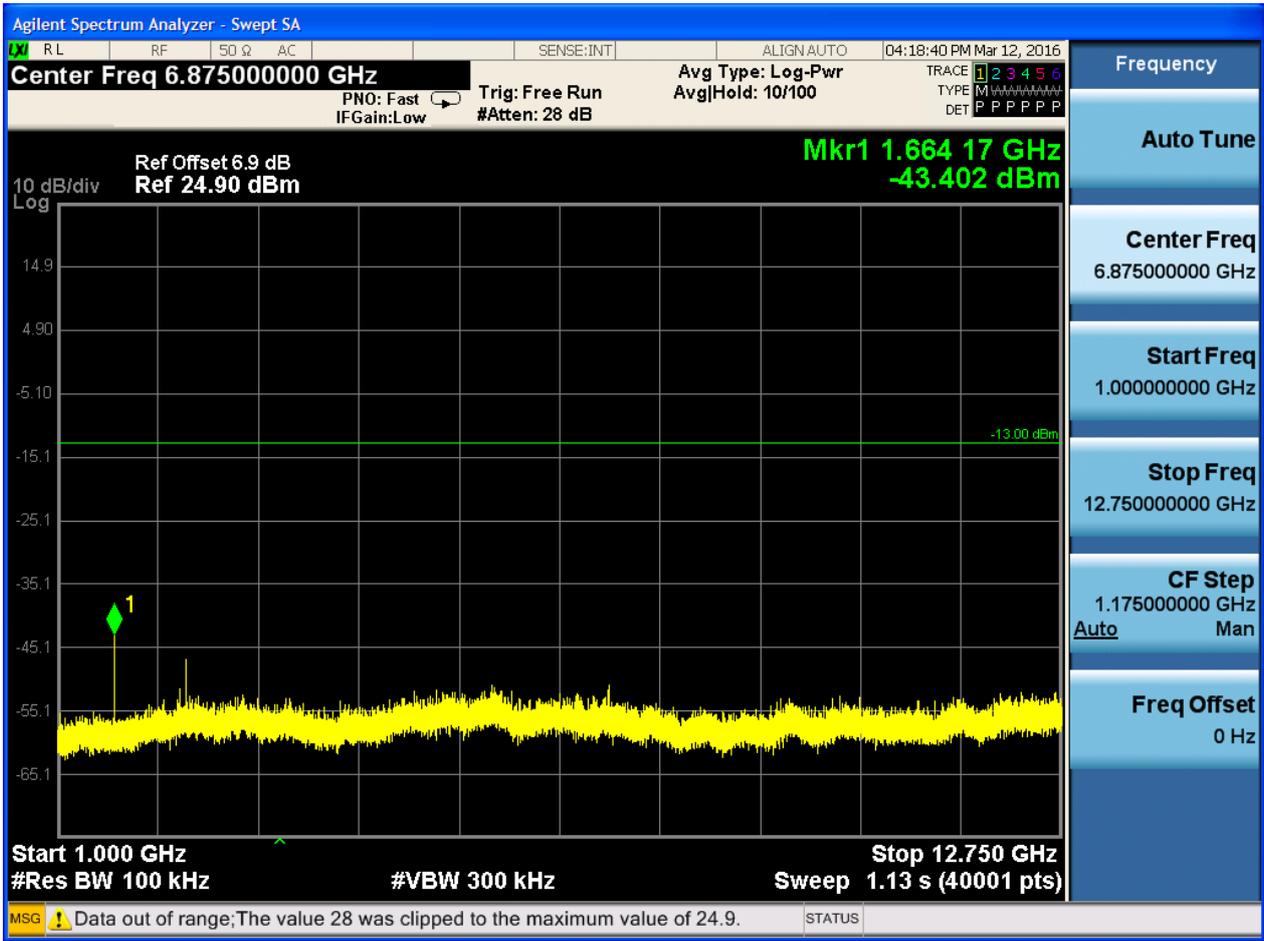








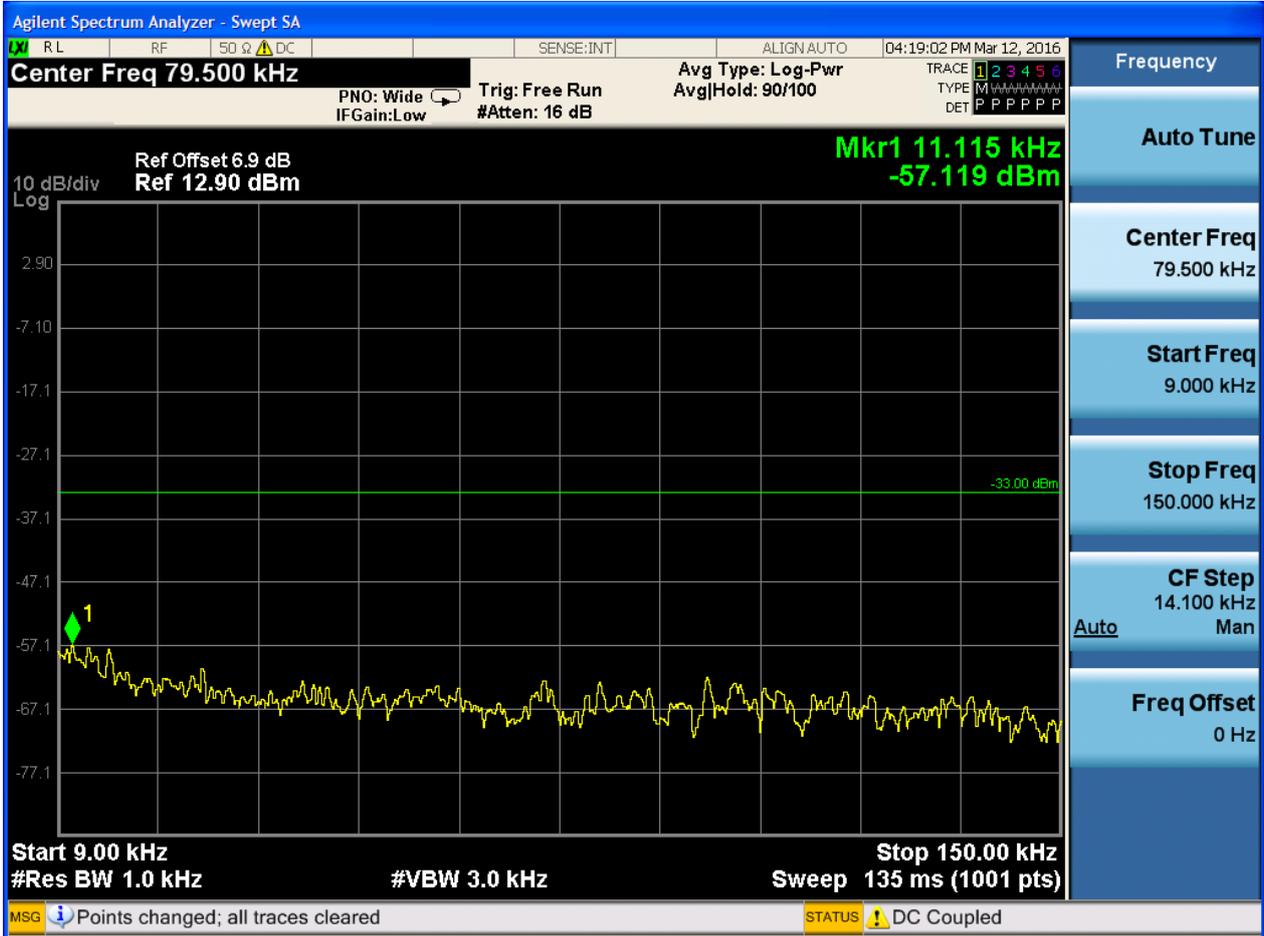


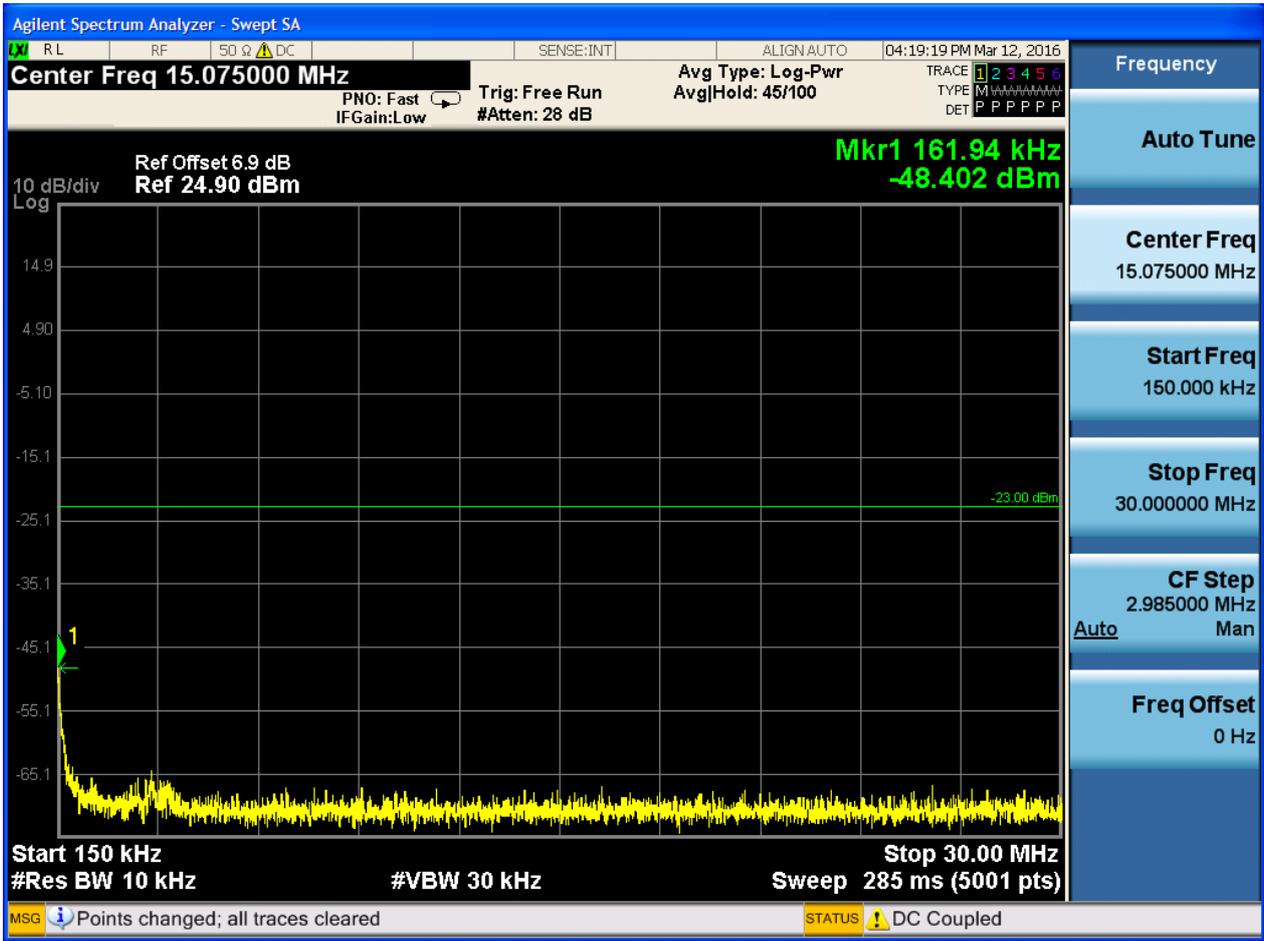


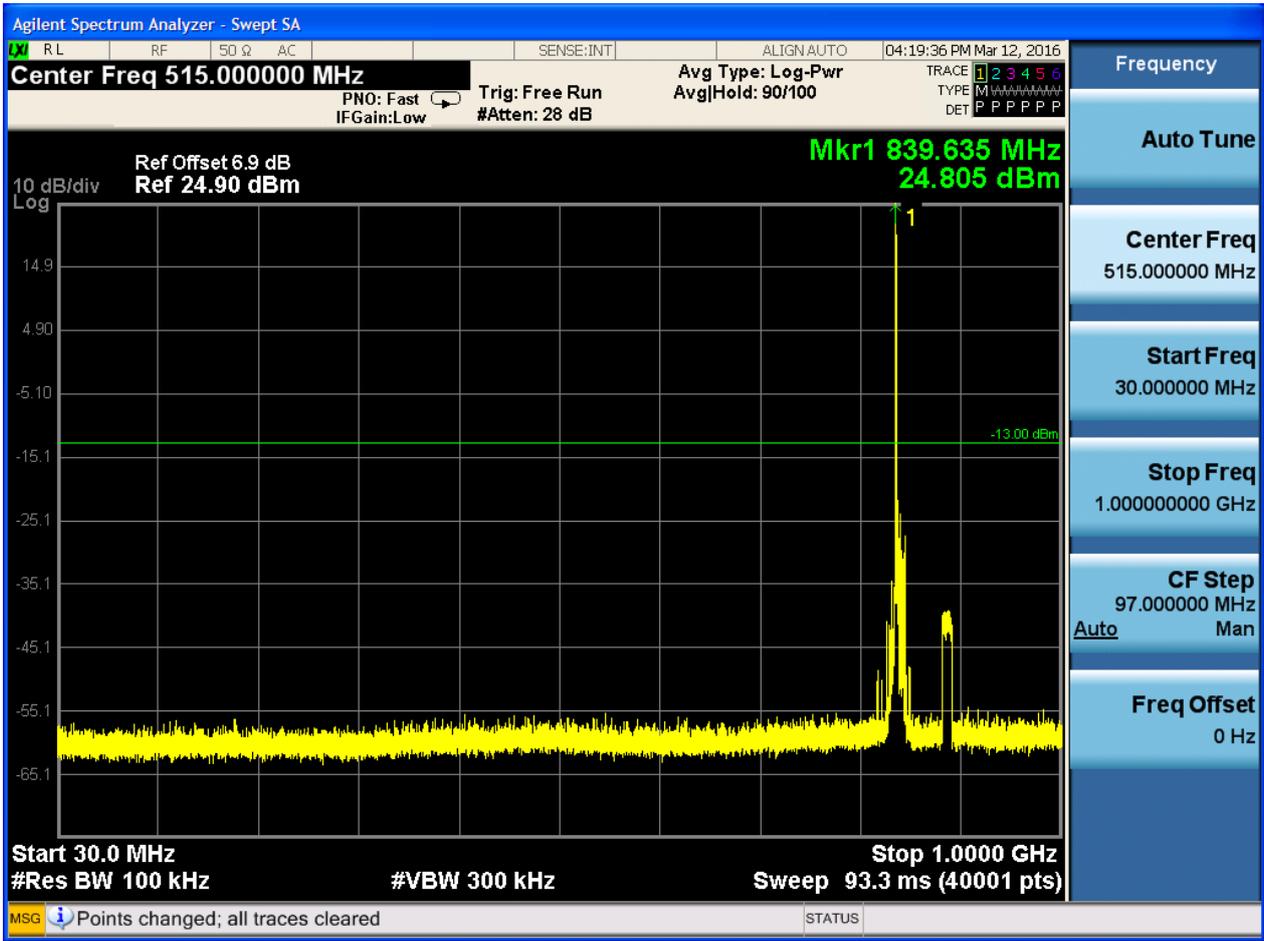


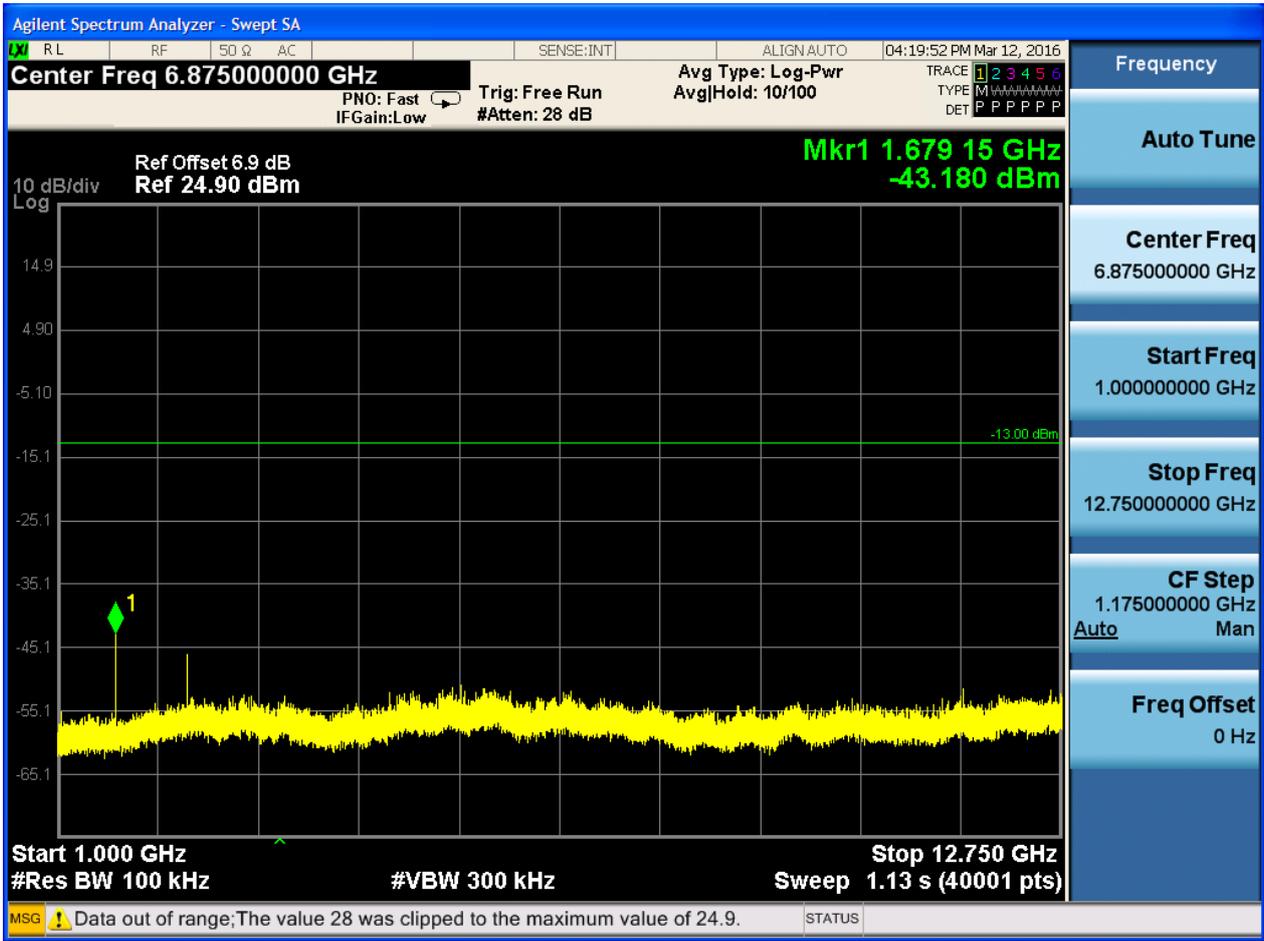
6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0











6.2 For LTE

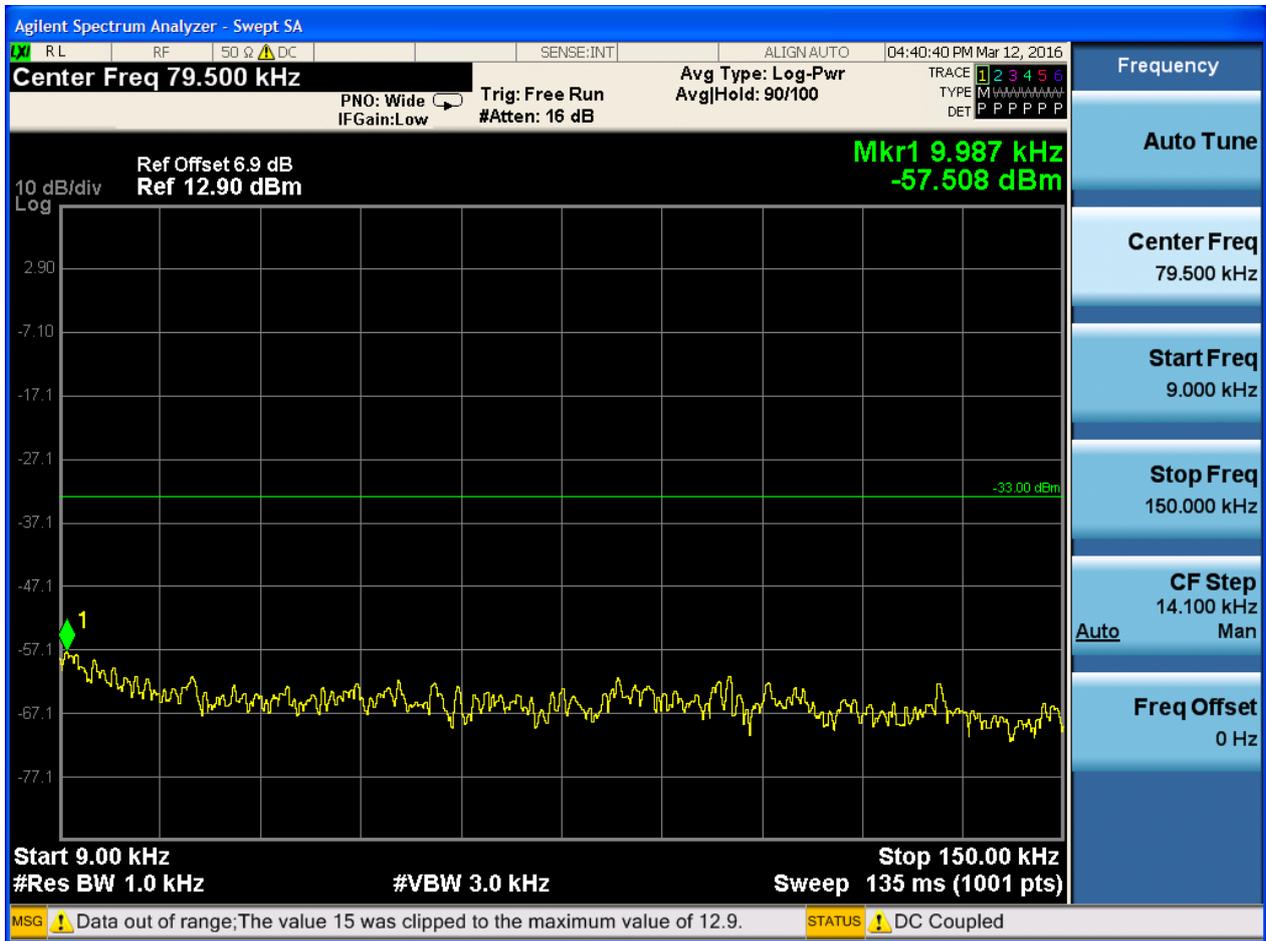
6.2.1 Test Band = BAND17

6.2.1.1 Test Mode = LTE/TM1

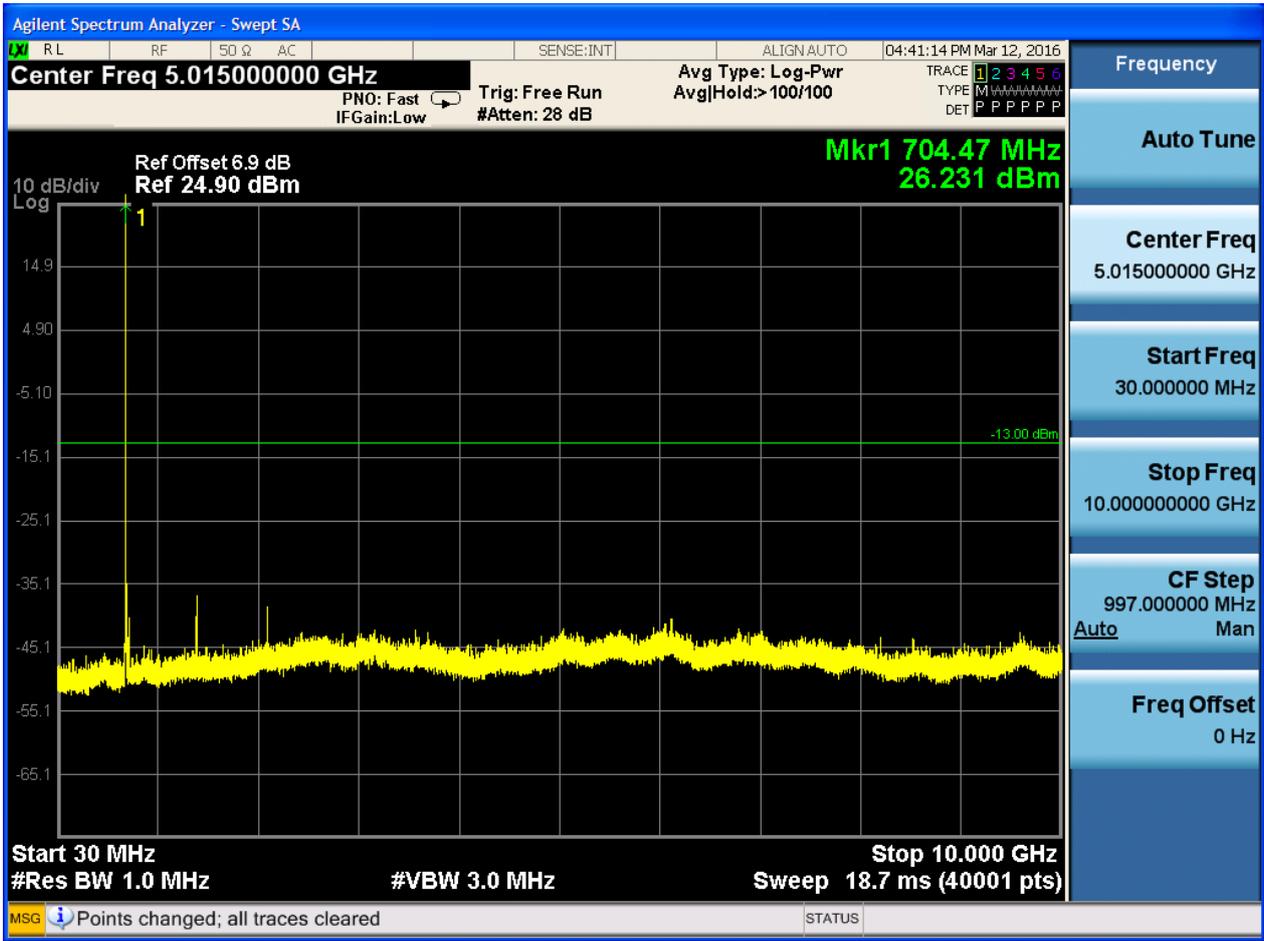
6.2.1.1.1 Test Bandwidth = 5

6.2.1.1.1.1 Test Channel = LCH

6.2.1.1.1.1.1 Test RB = RB1#0



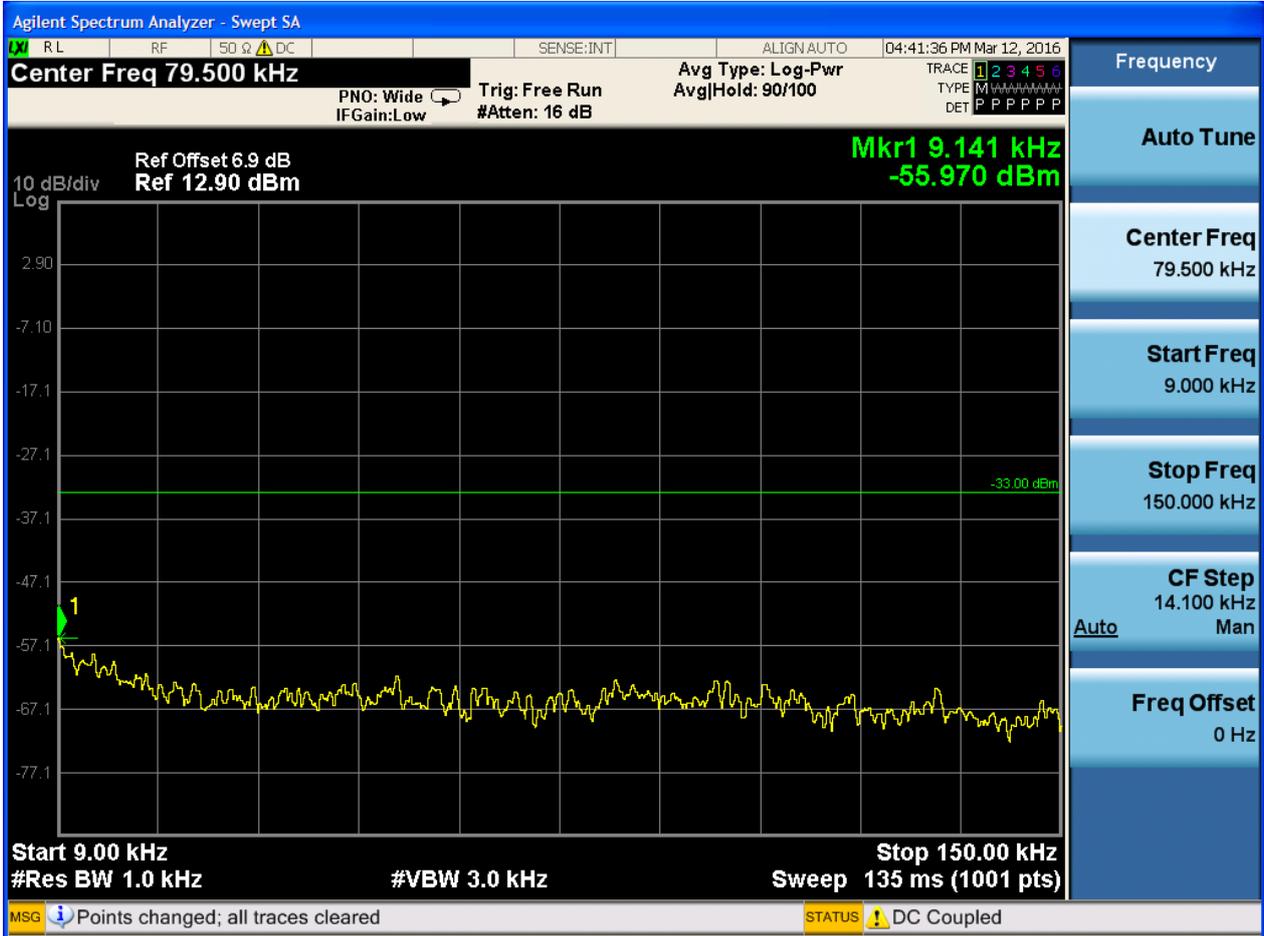




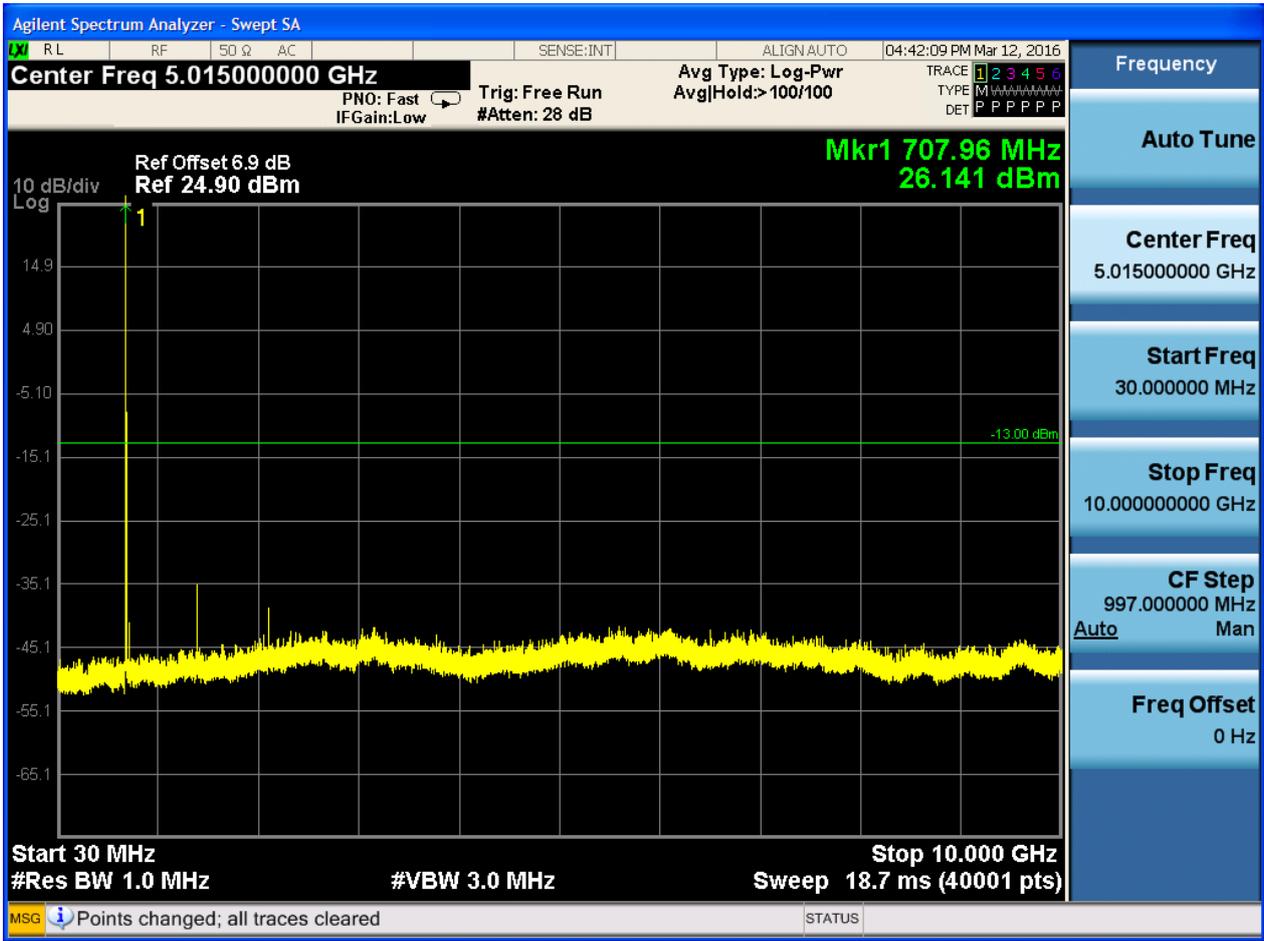


6.2.1.1.1.2 Test Channel = MCH

6.2.1.1.1.2.1 Test RB = RB1#0



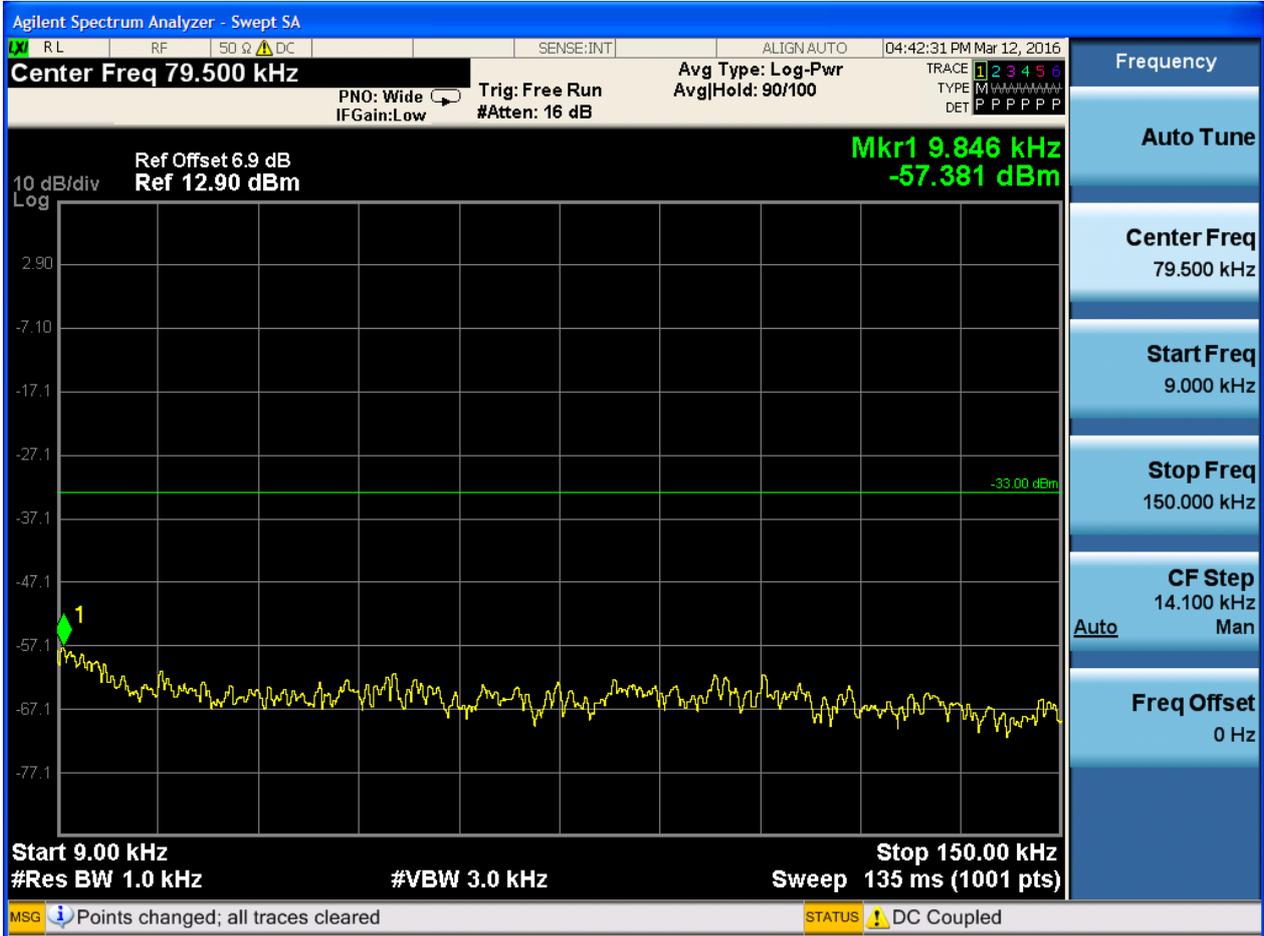




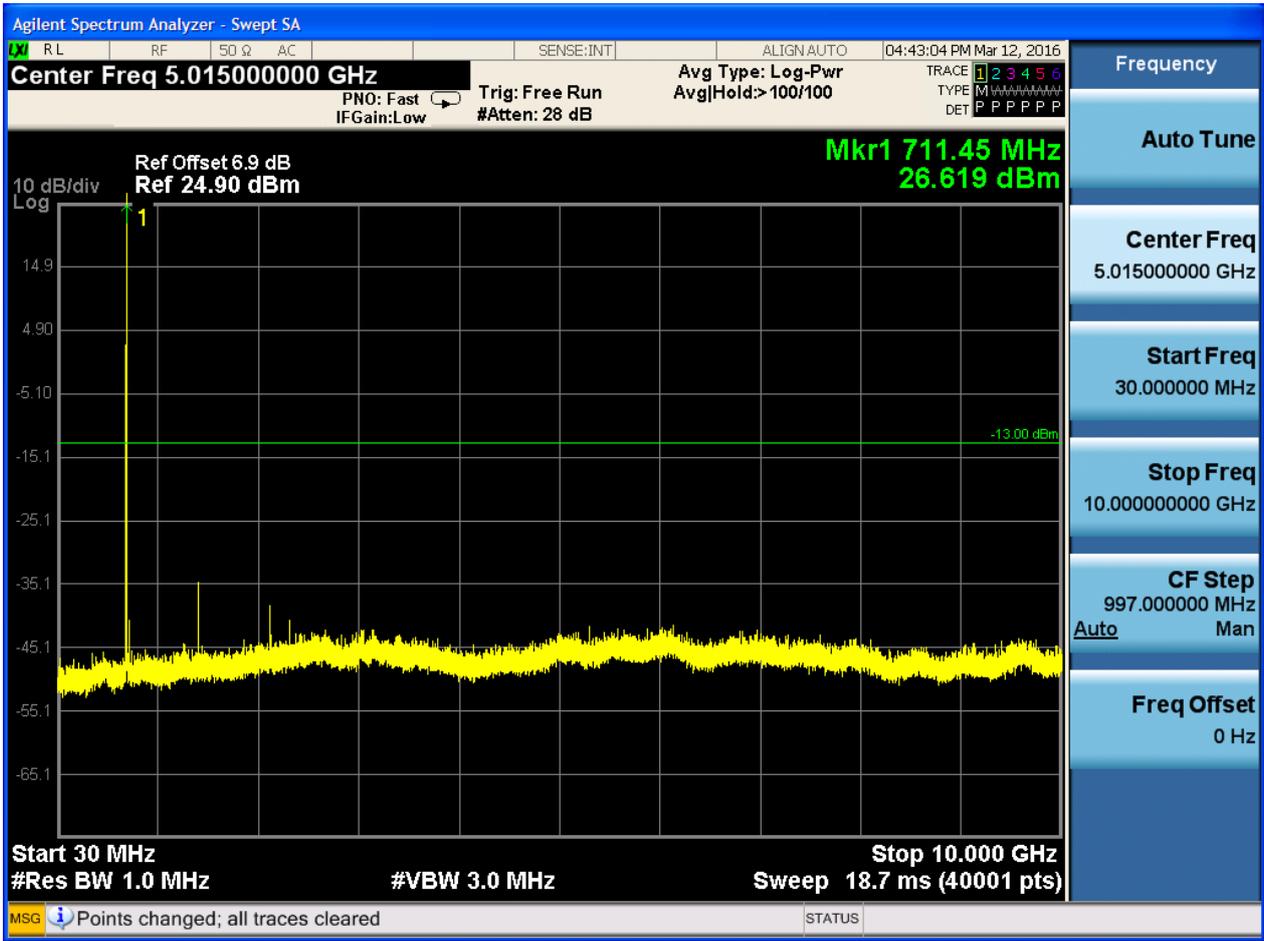


6.2.1.1.1.3 Test Channel = HCH

6.2.1.1.1.3.1 Test RB = RB1#0





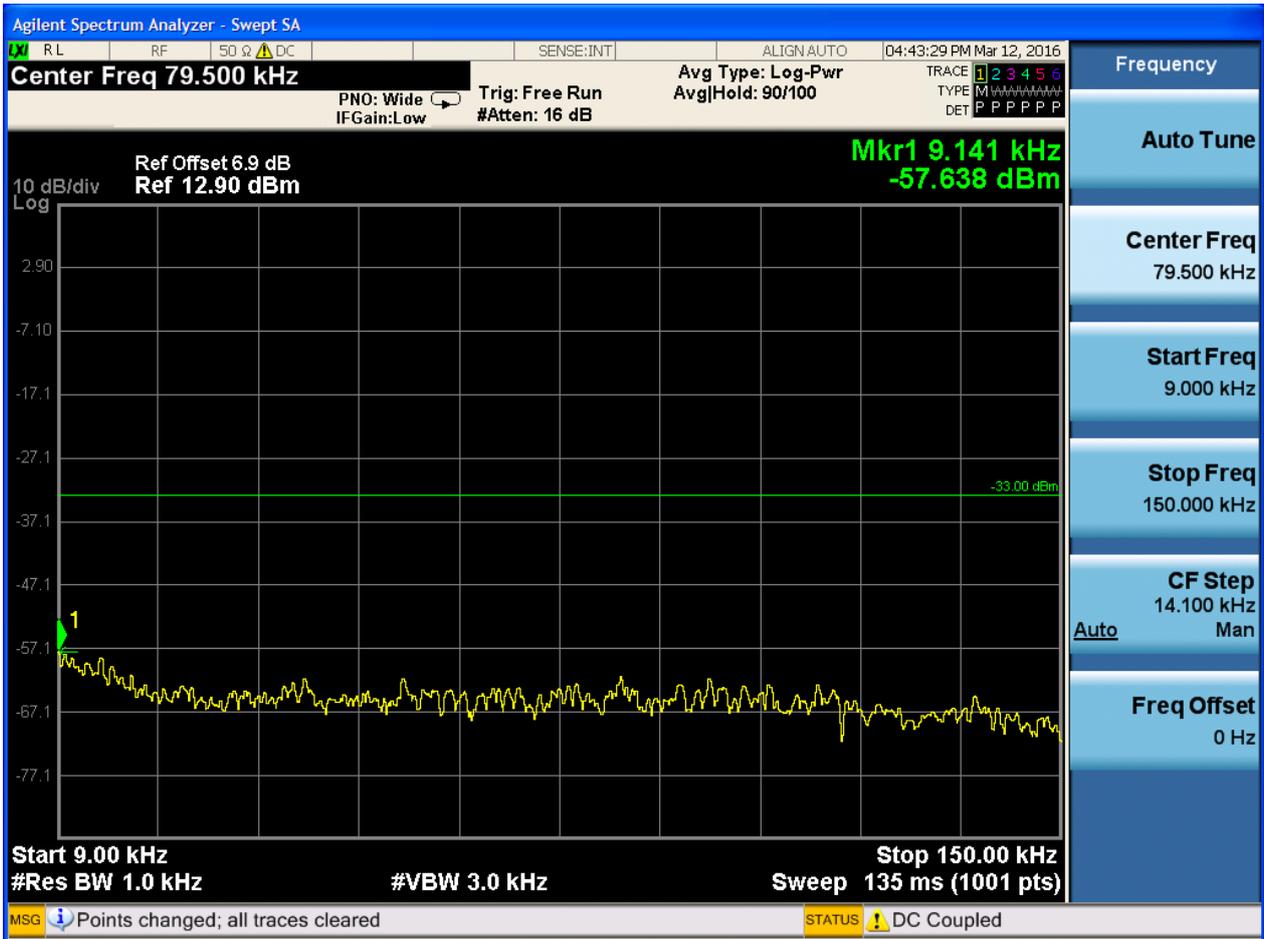


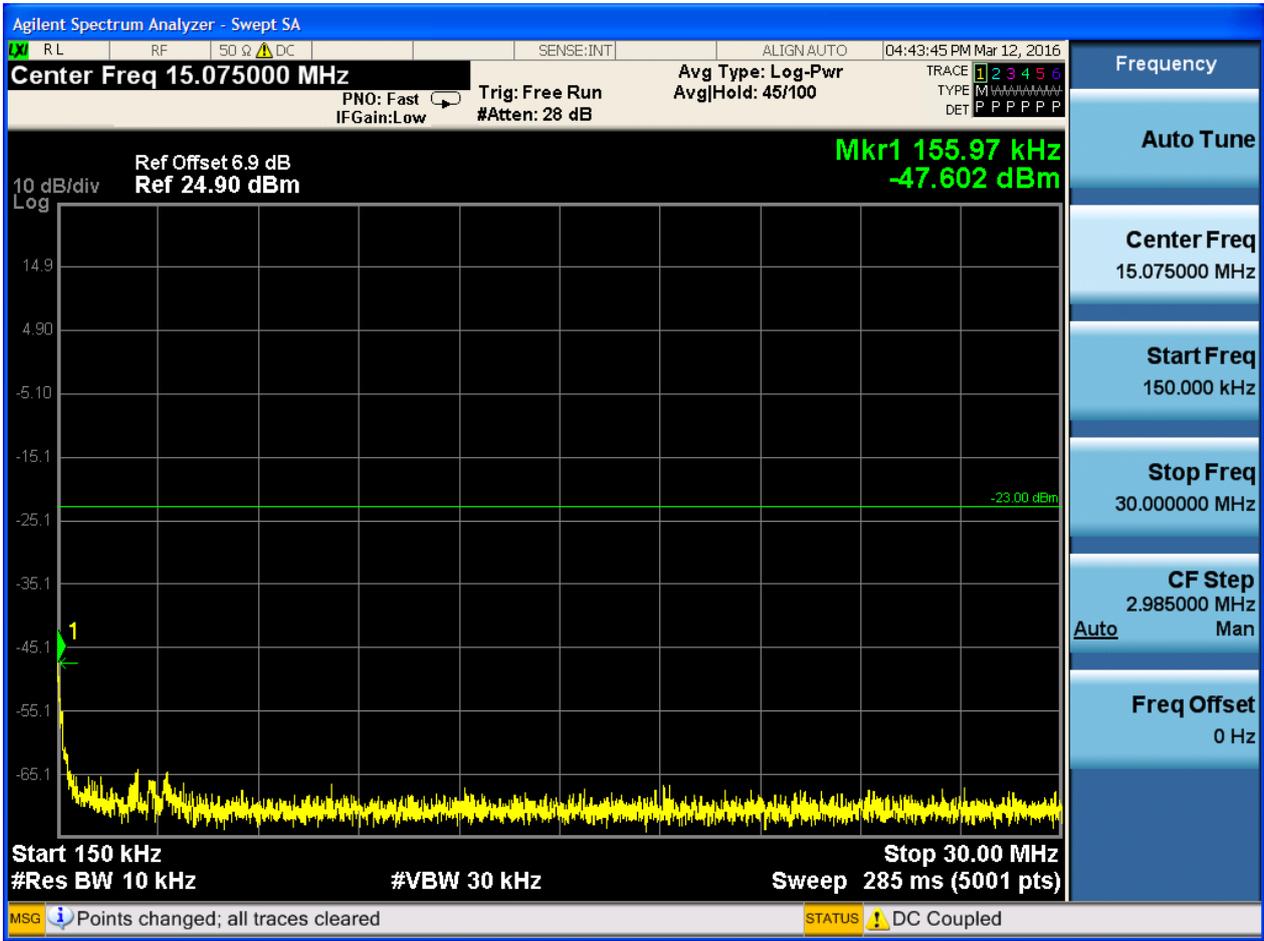


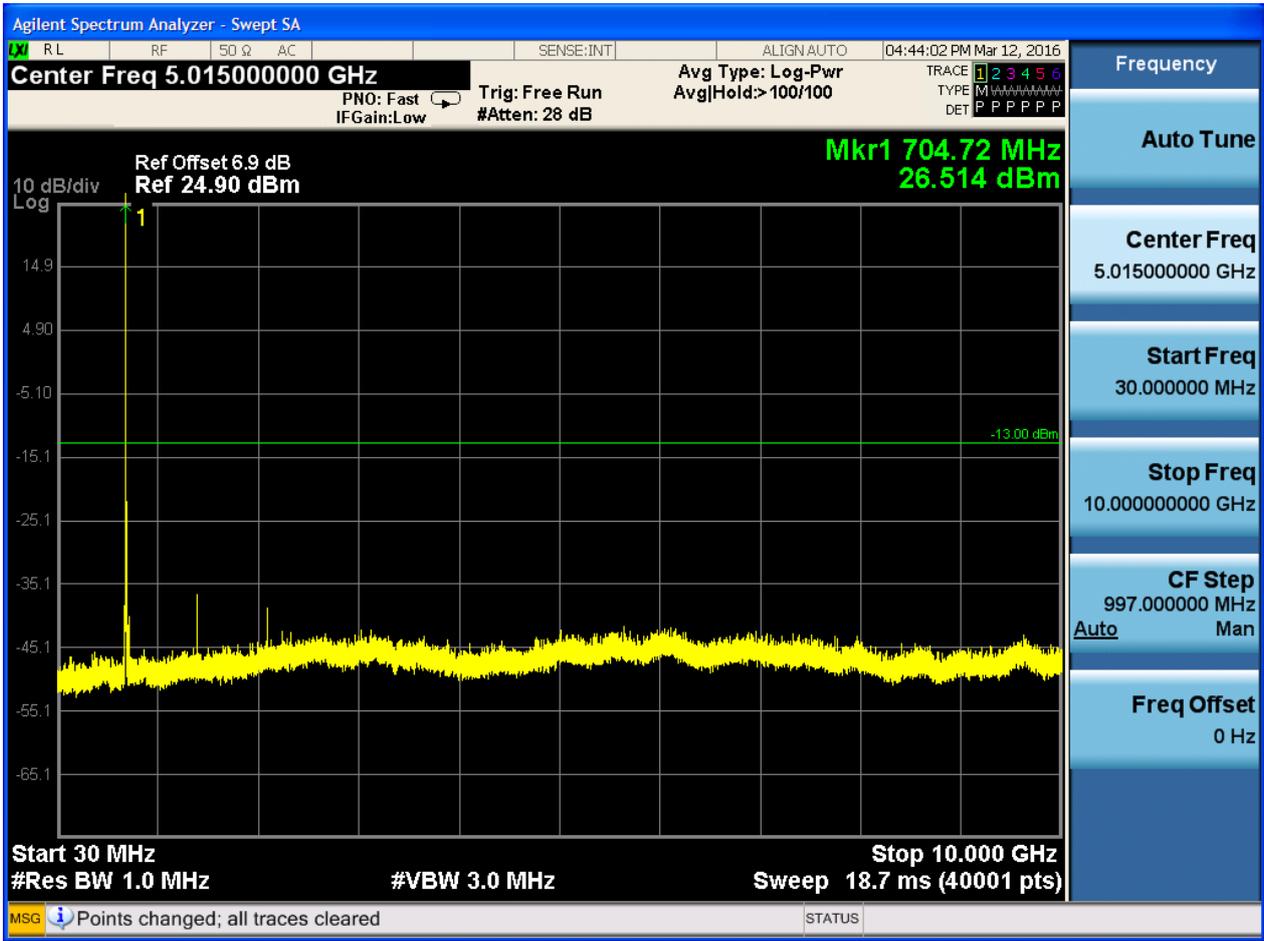
6.2.1.1.2 Test Bandwidth = 10

6.2.1.1.2.1 Test Channel = LCH

6.2.1.1.2.1.1 Test RB = RB1#0

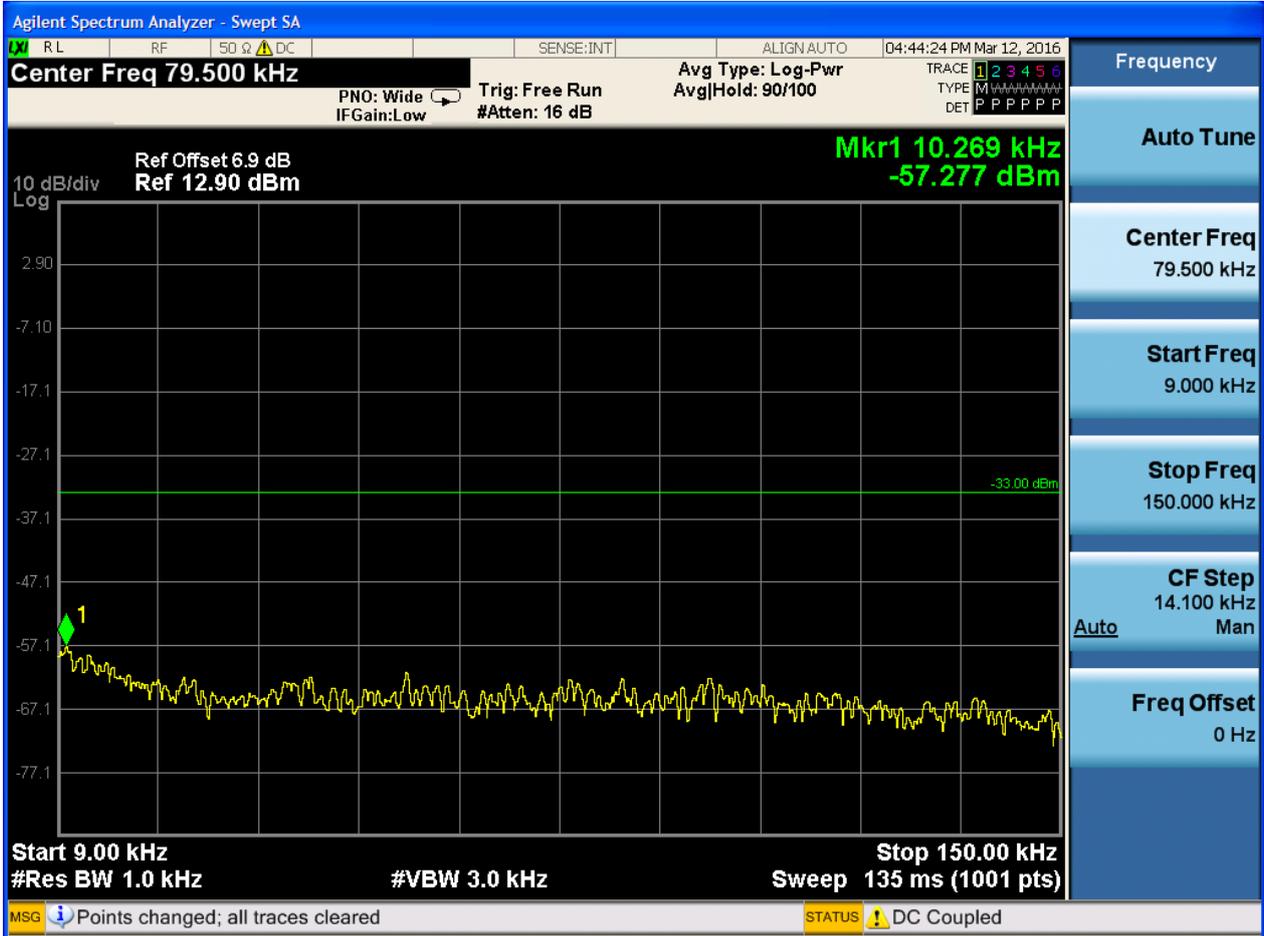


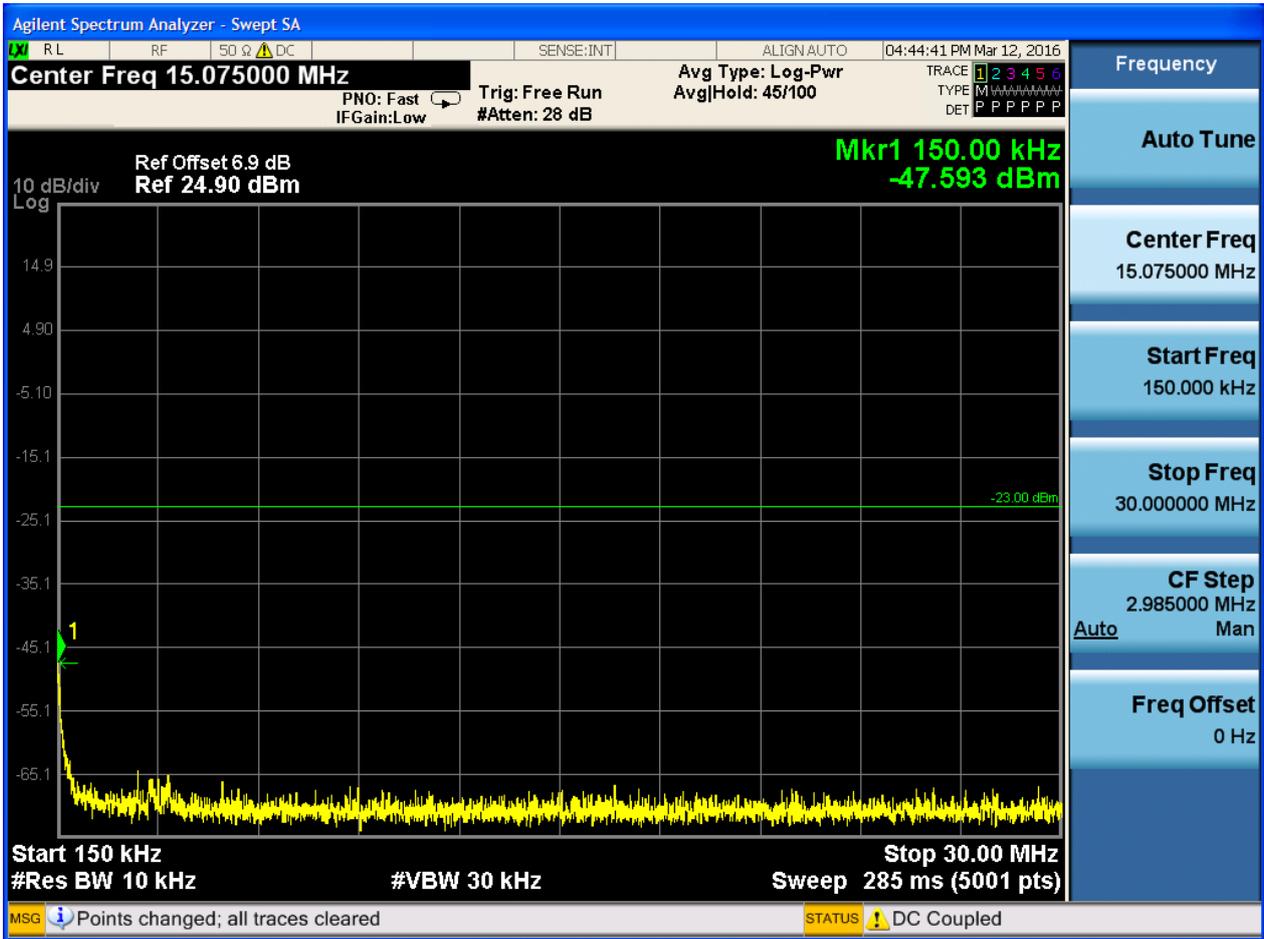


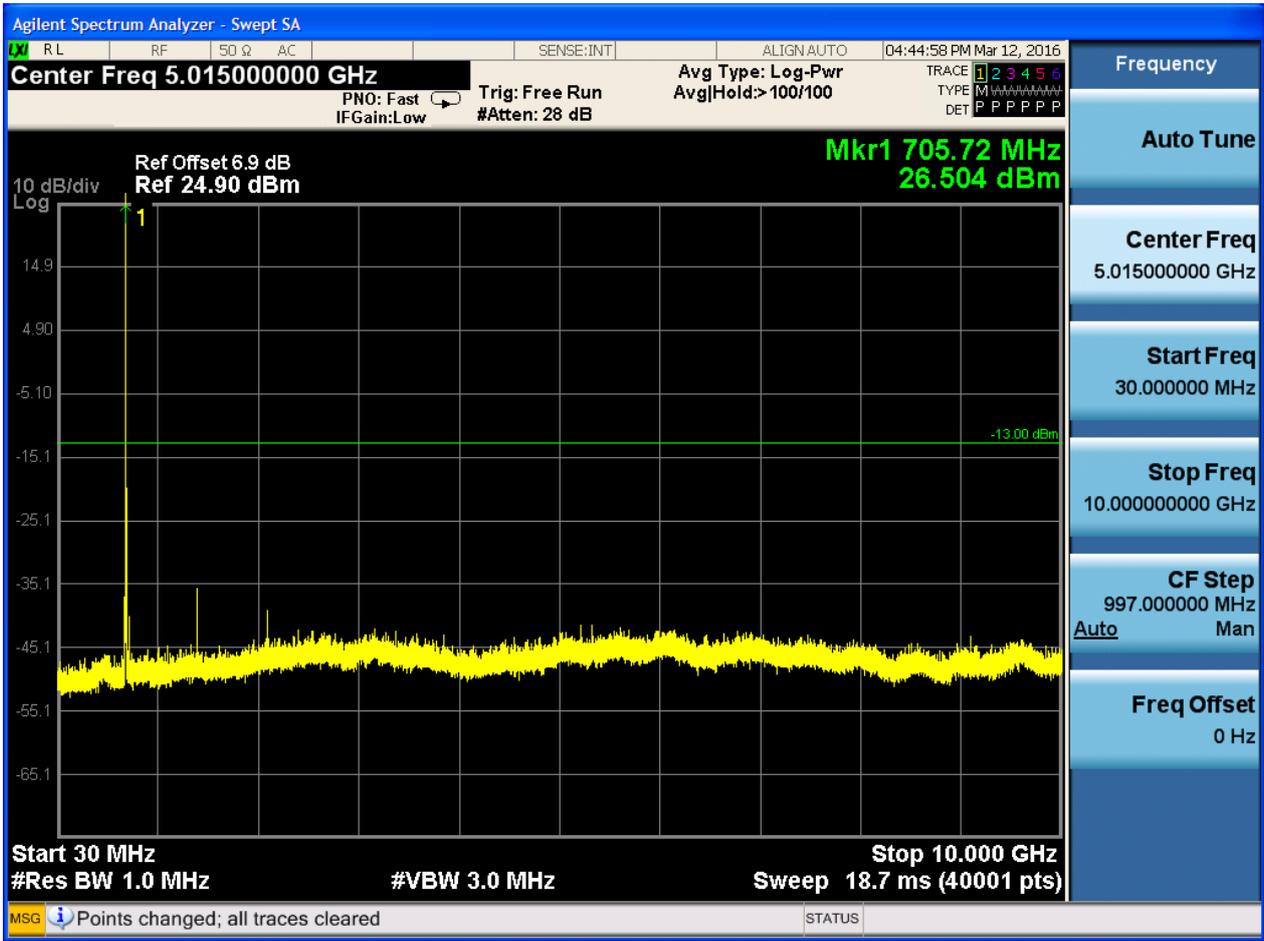


6.2.1.1.2.2 Test Channel = MCH

6.2.1.1.2.2.1 Test RB = RB1#0



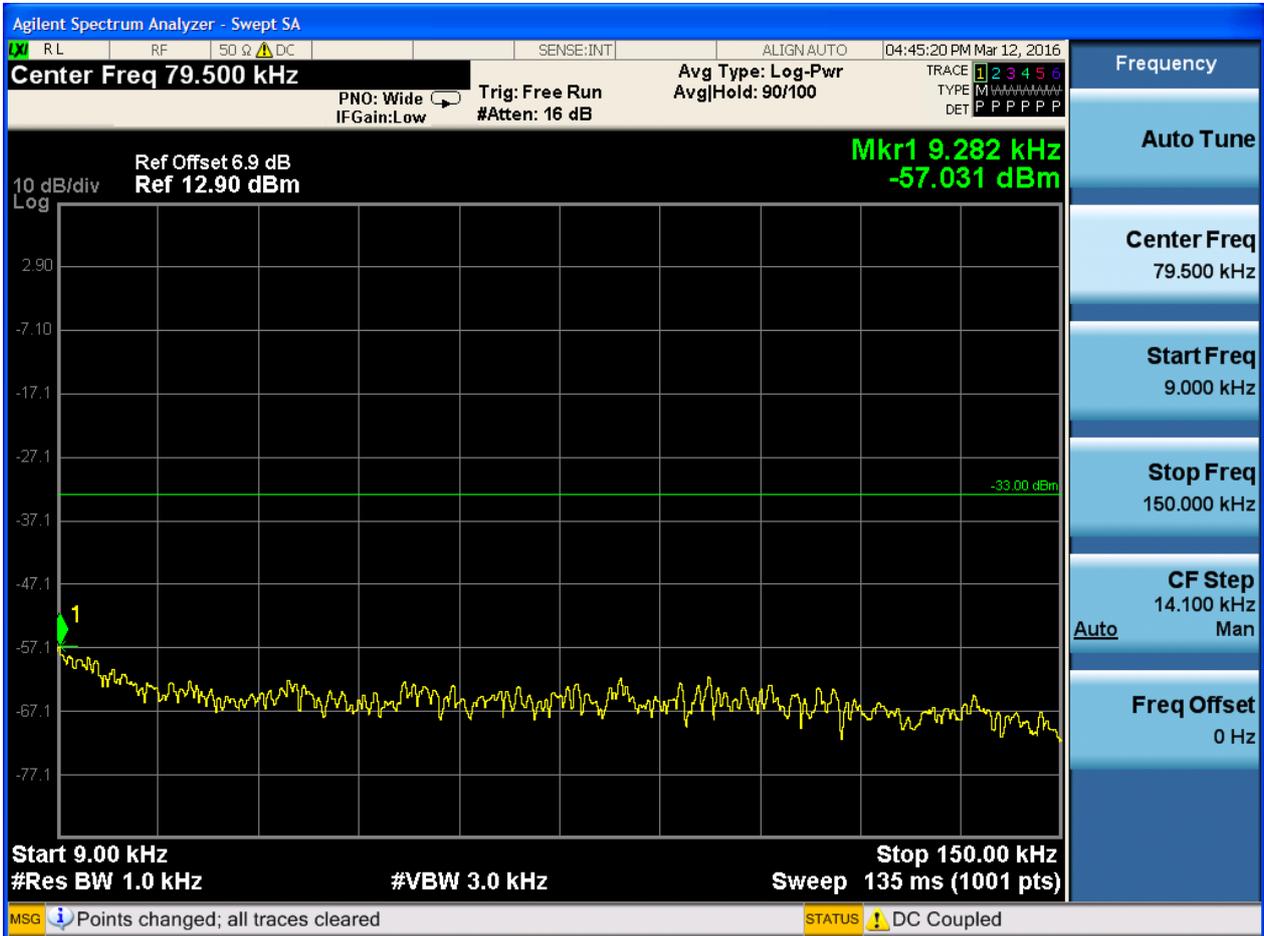




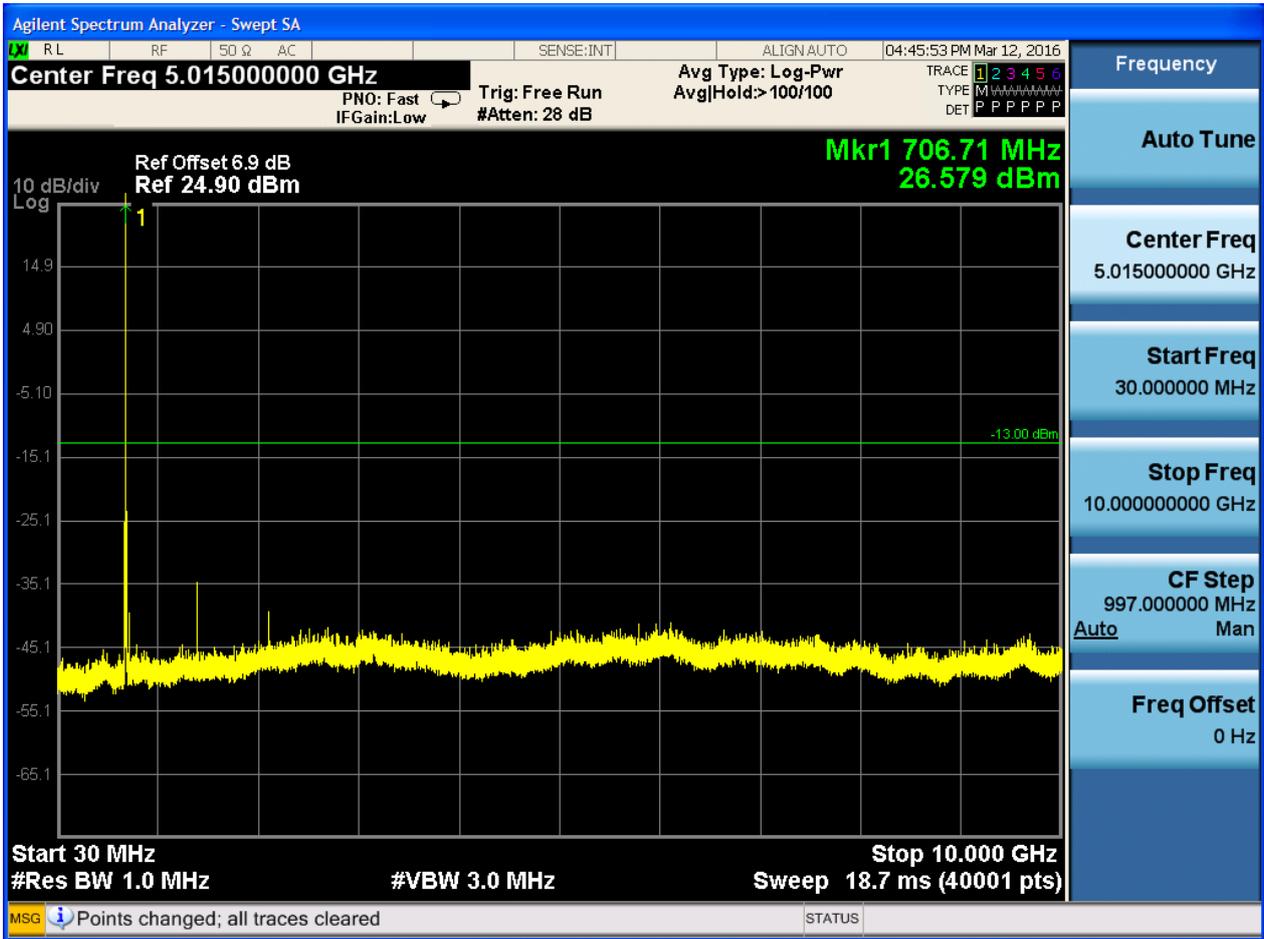


6.2.1.1.2.3 Test Channel = HCH

6.2.1.1.2.3.1 Test RB = RB1#0







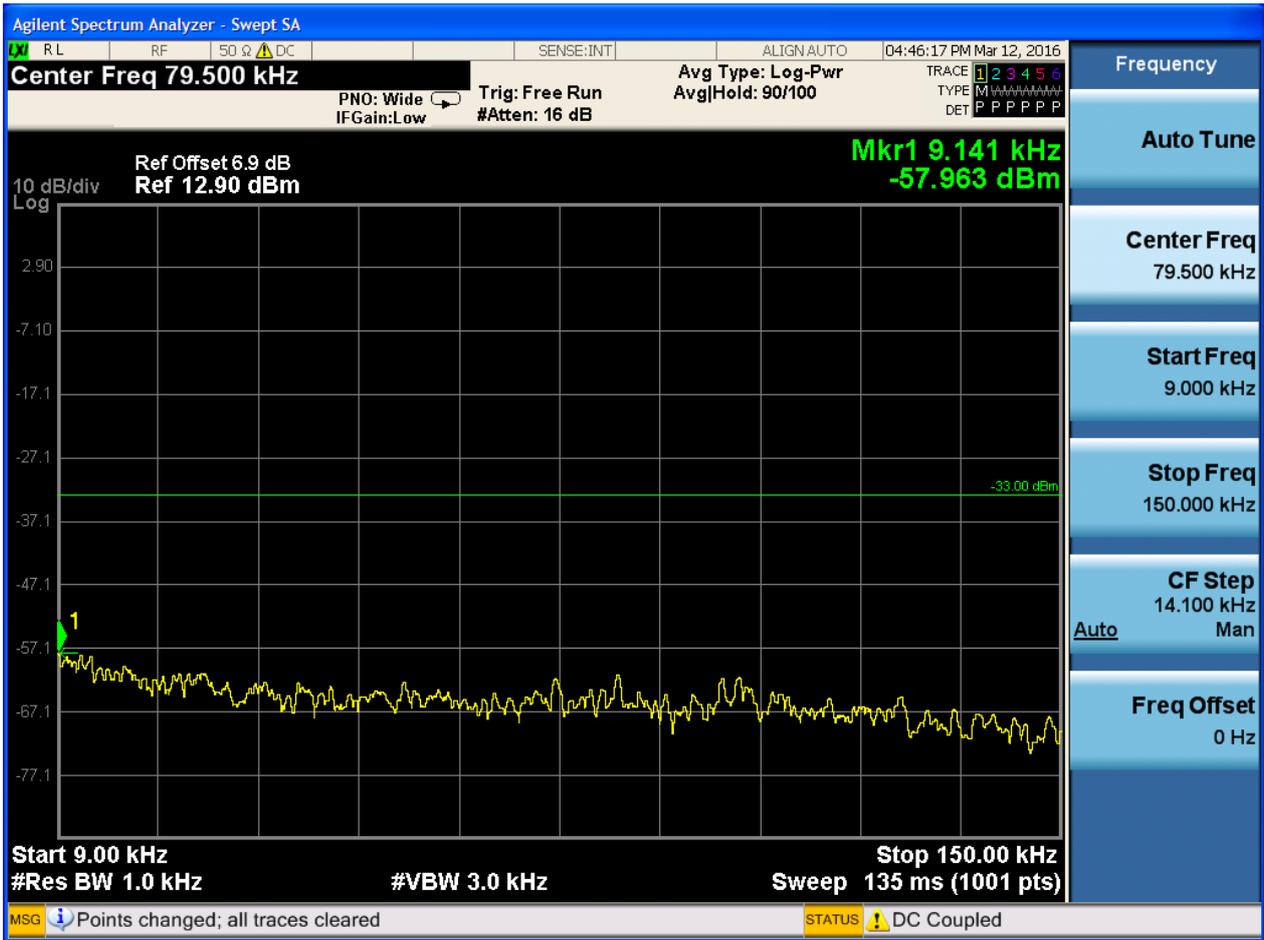


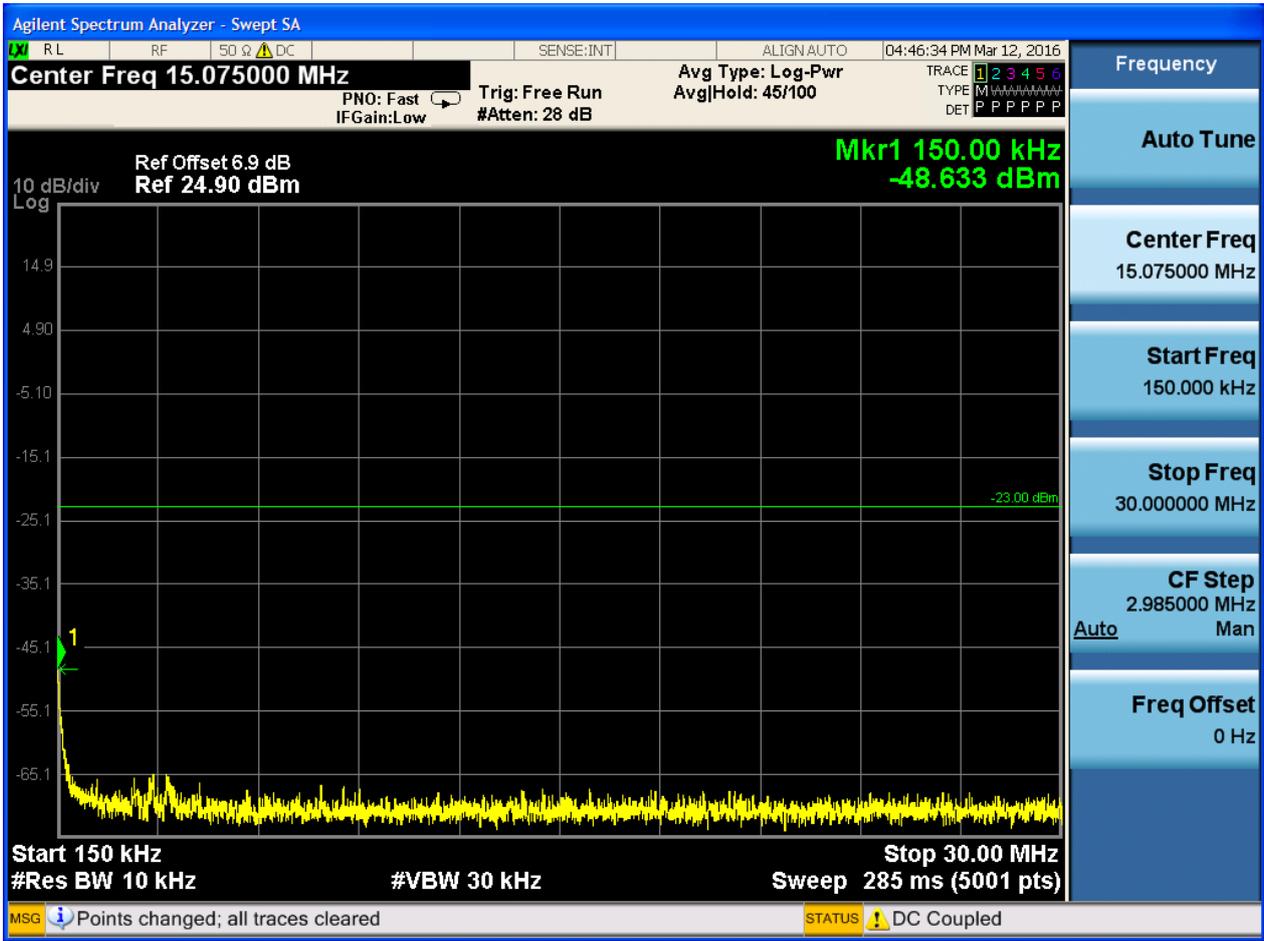
6.2.1.2 Test Mode = LTE/TM2

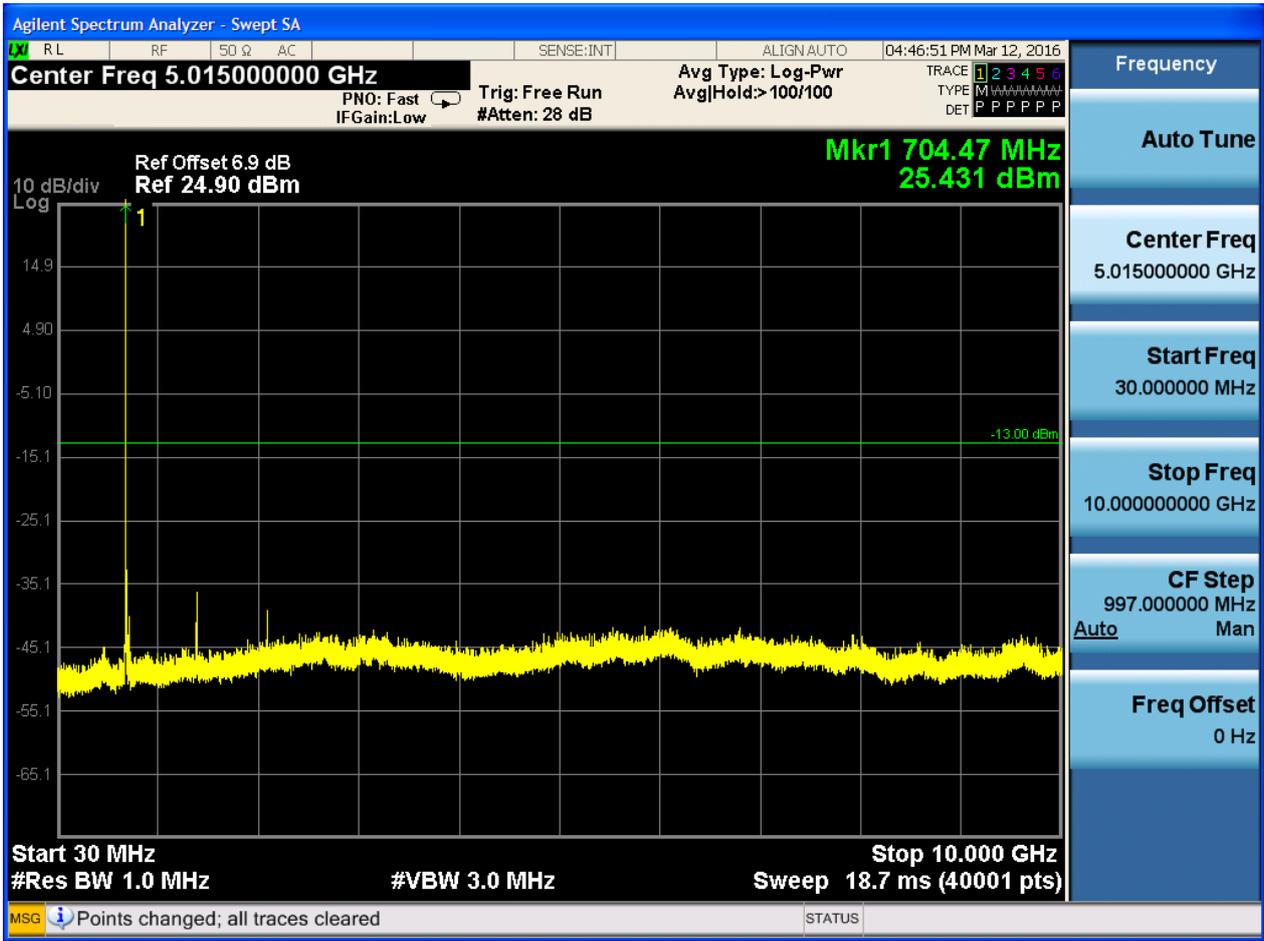
6.2.1.2.1 Test Bandwidth = 5

6.2.1.2.1.1 Test Channel = LCH

6.2.1.2.1.1.1 Test RB = RB1#0



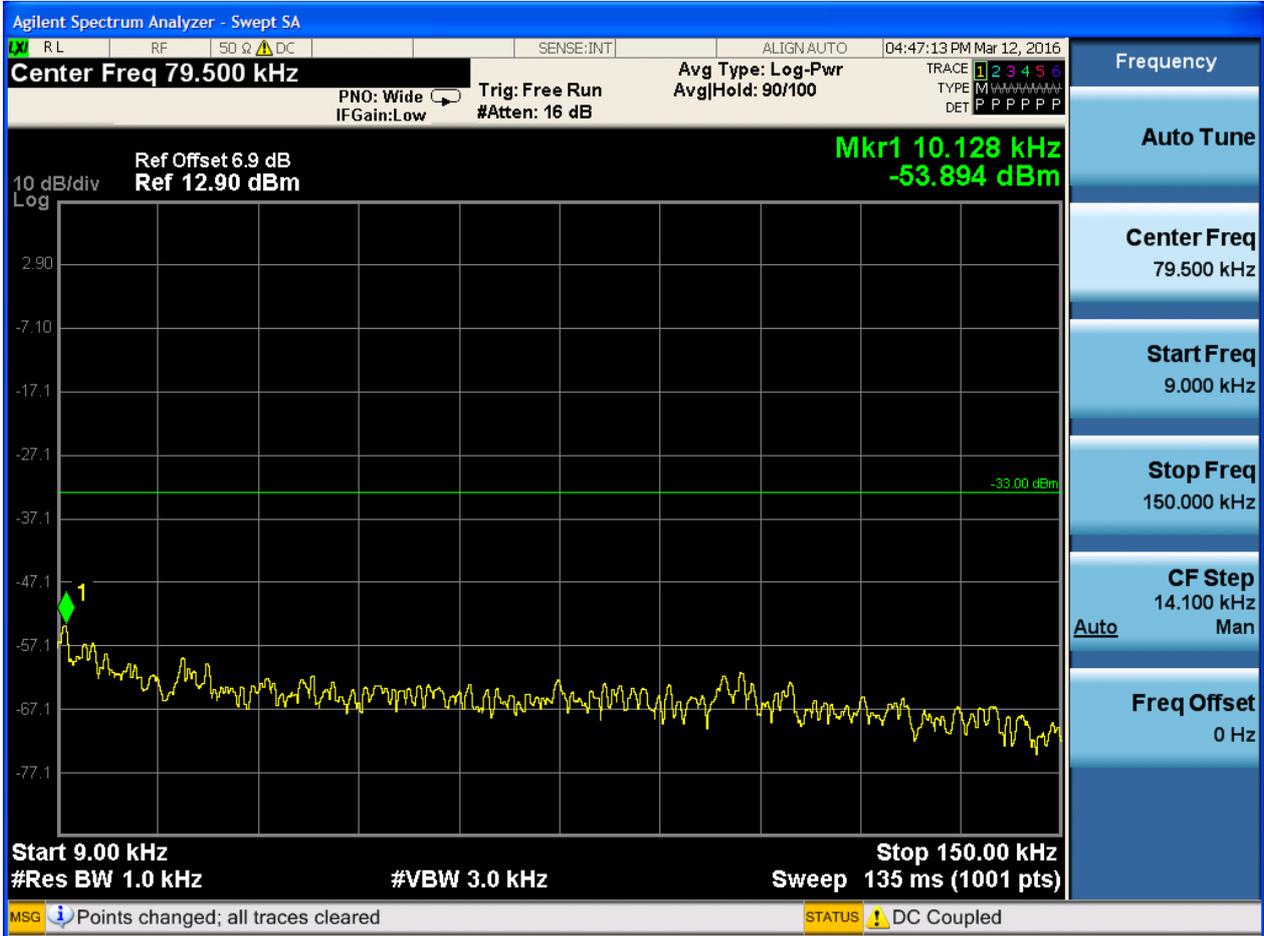


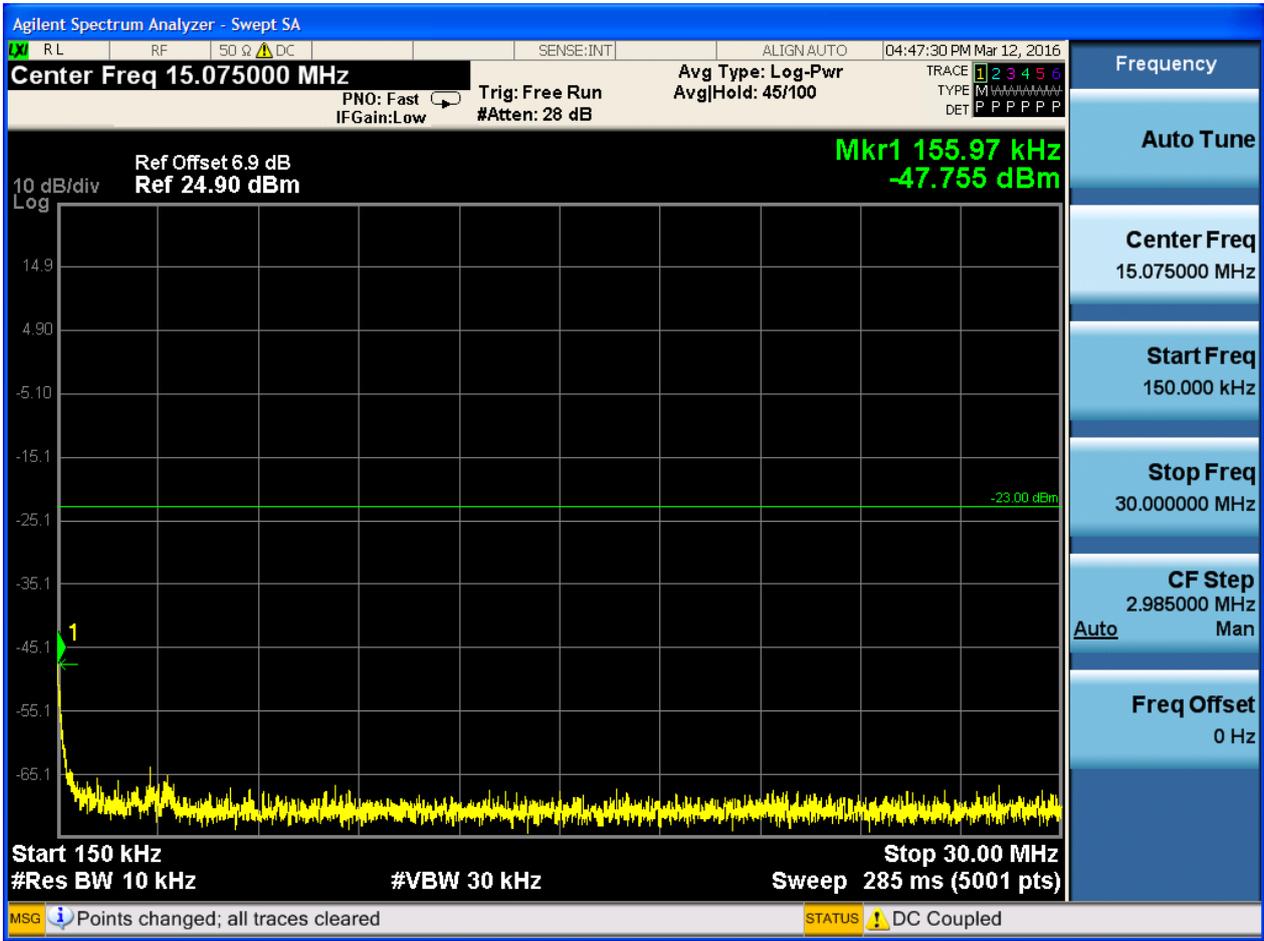


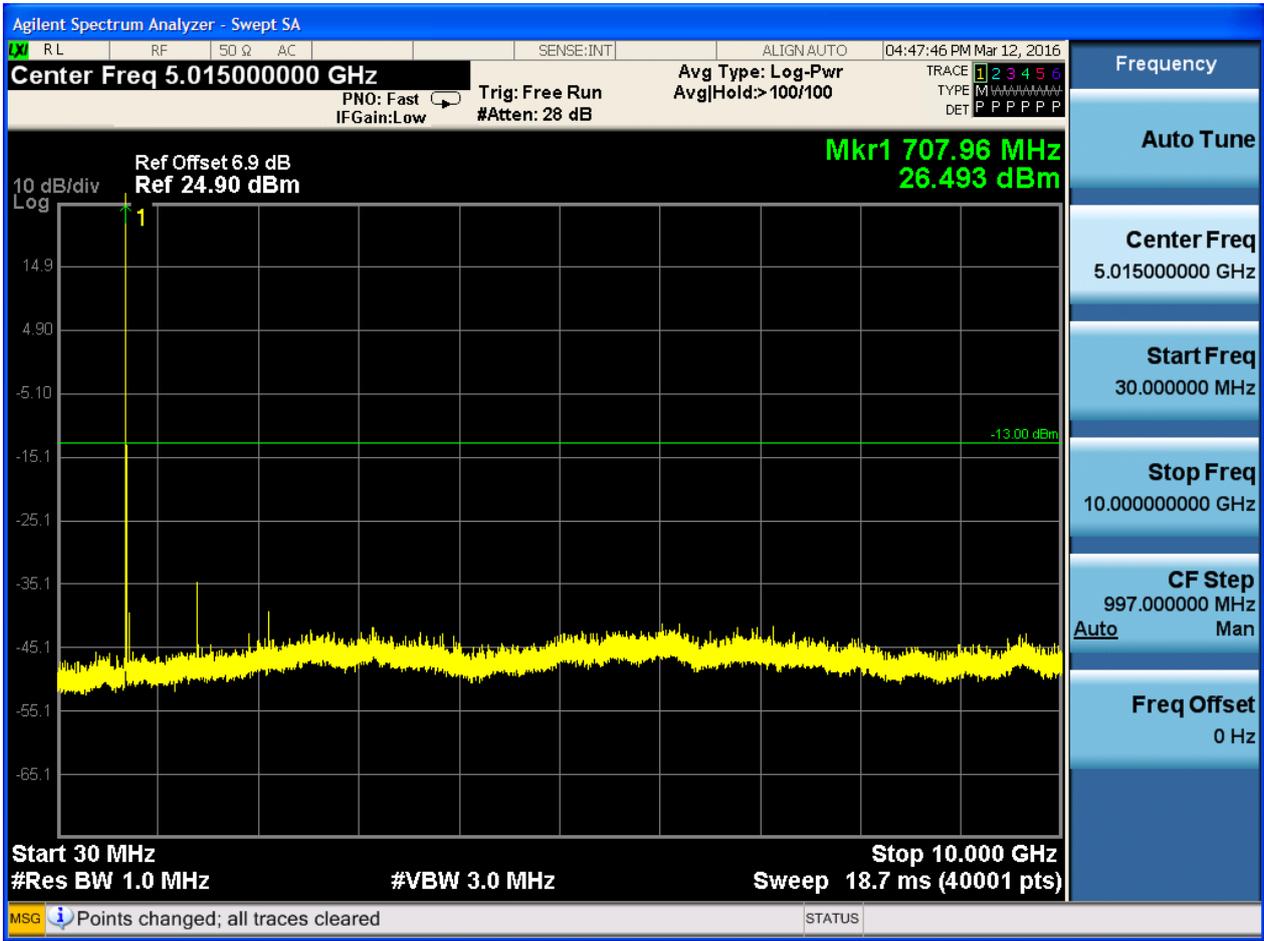


6.2.1.2.1.2 Test Channel = MCH

6.2.1.2.1.2.1 Test RB = RB1#0



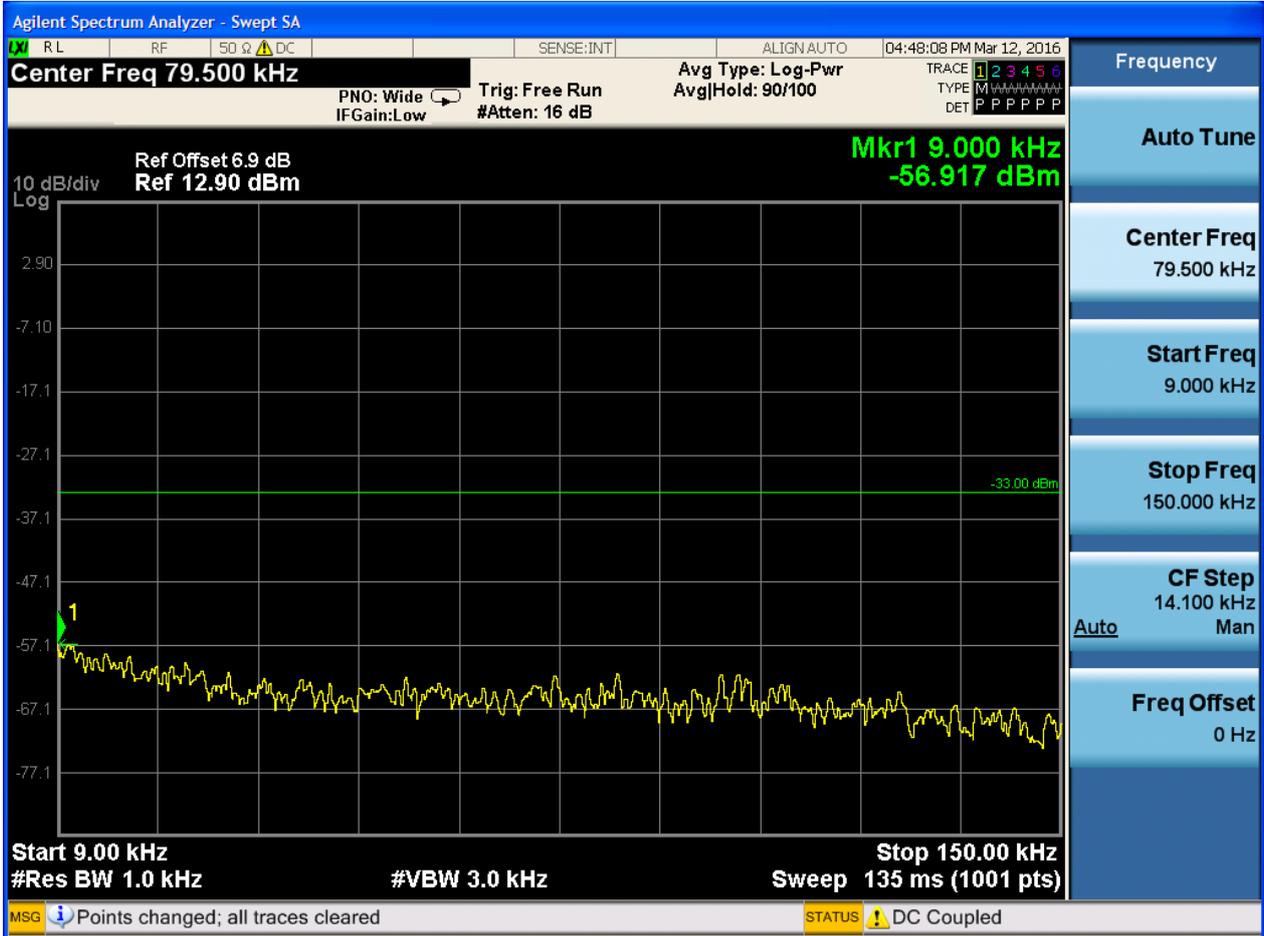


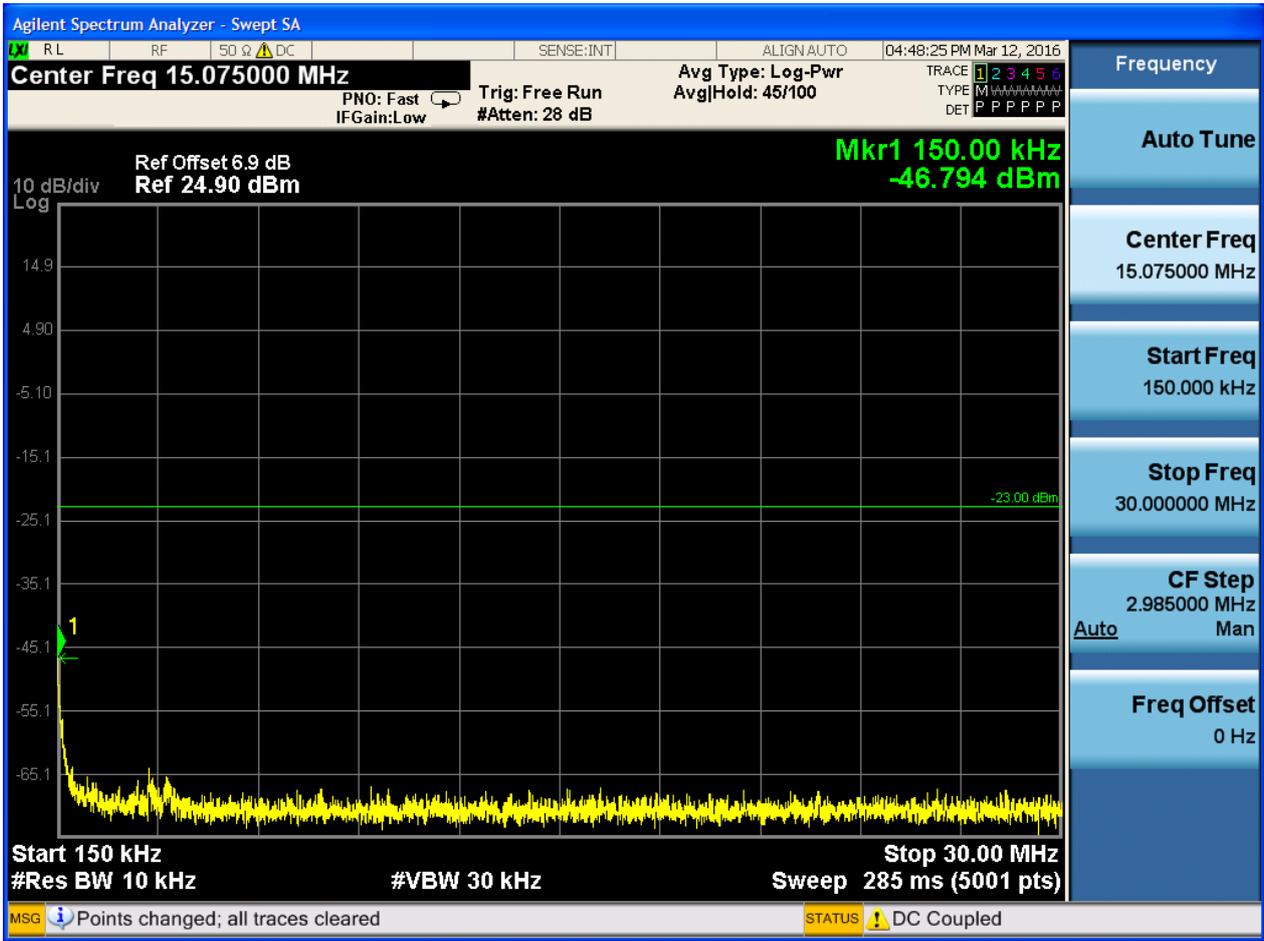


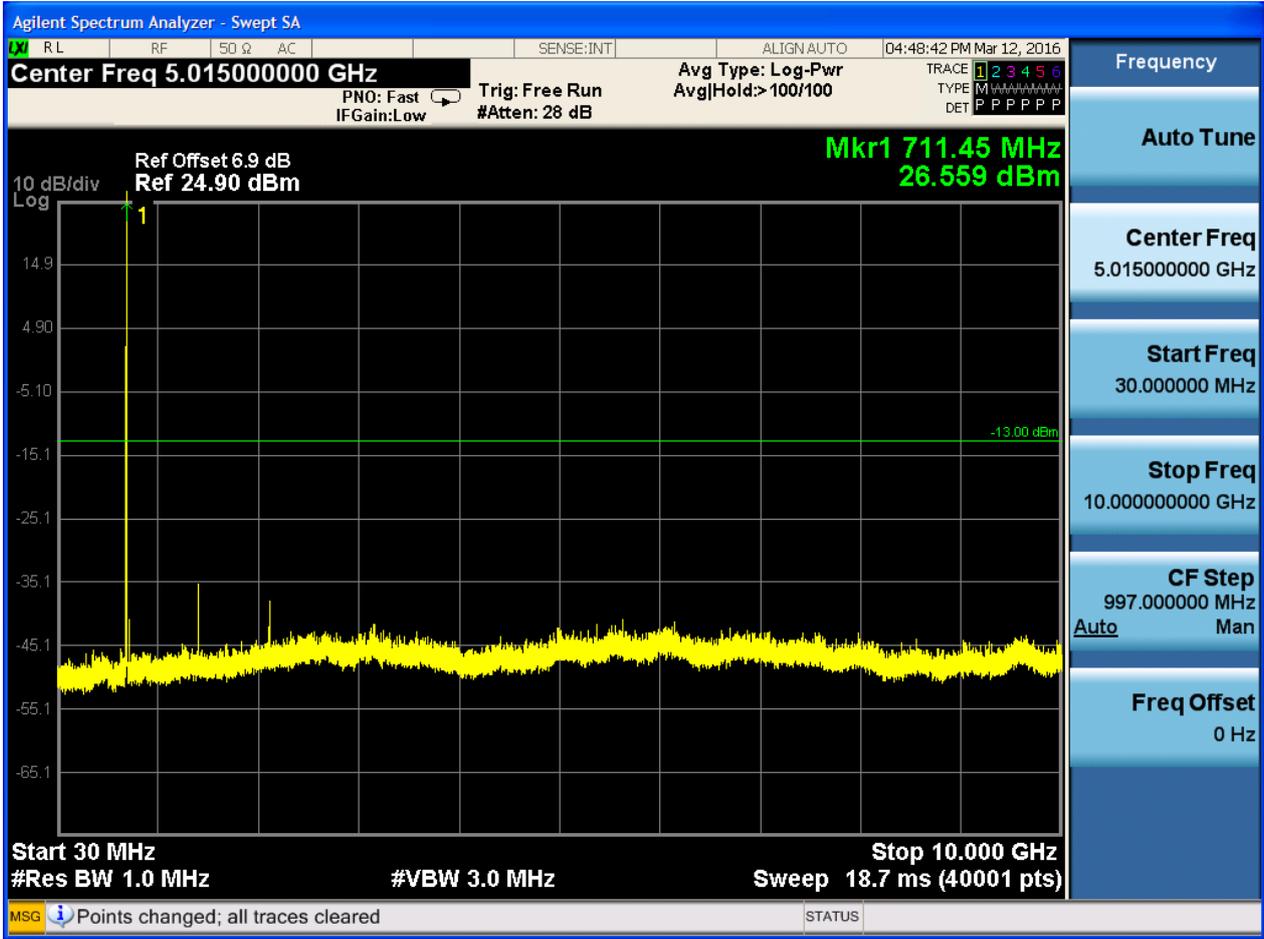


6.2.1.2.1.3 Test Channel = HCH

6.2.1.2.1.3.1 Test RB = RB1#0





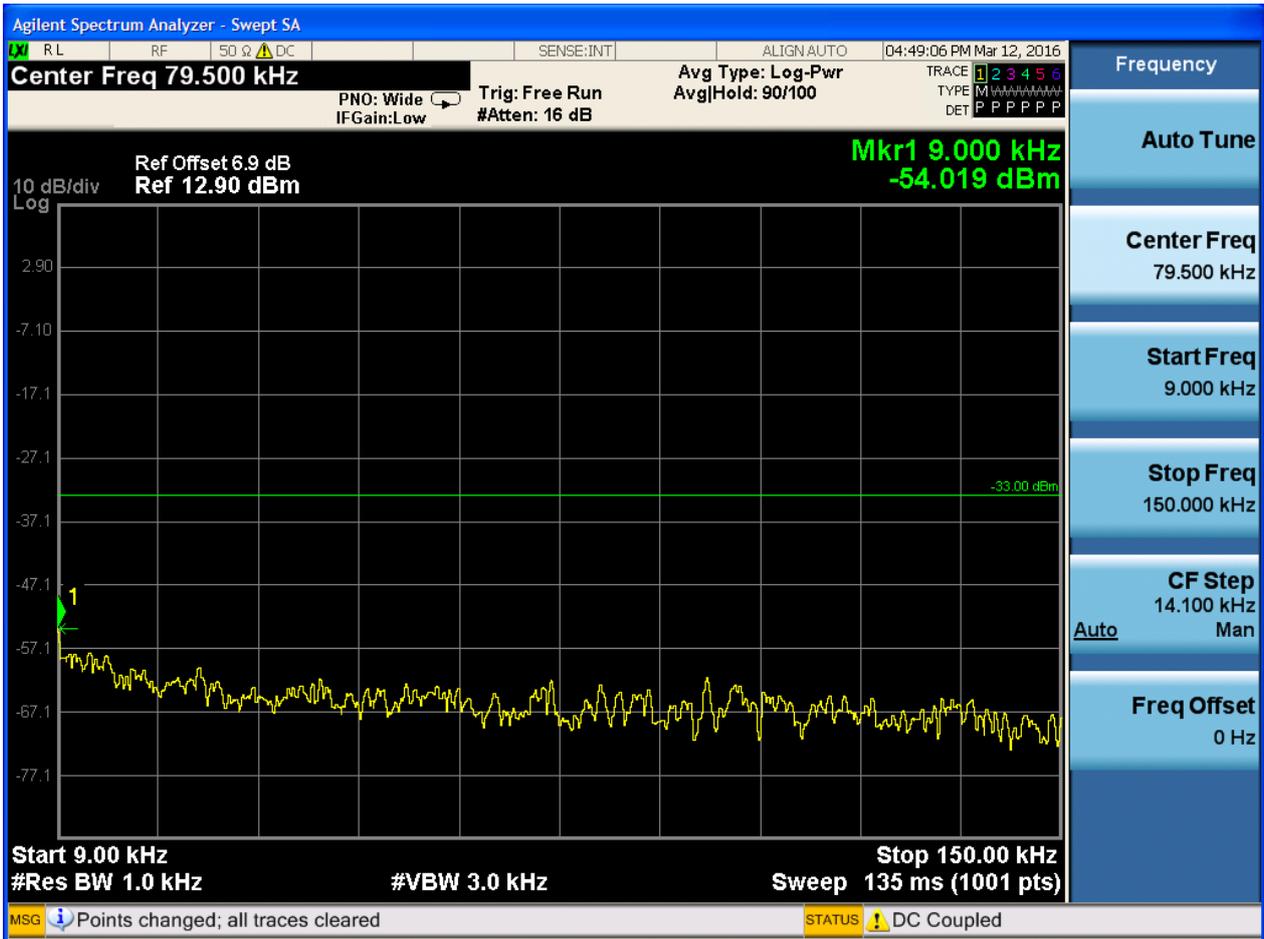


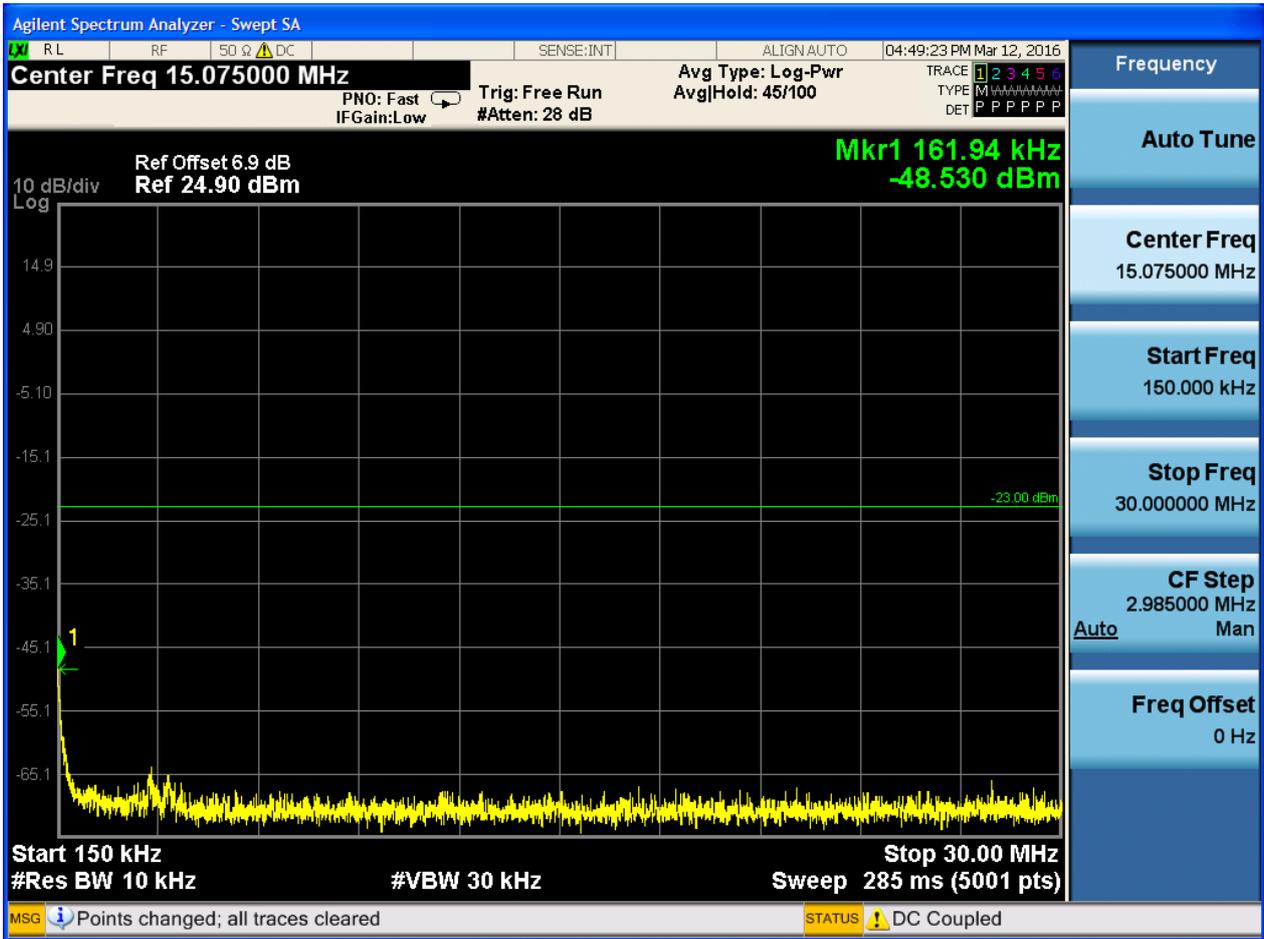


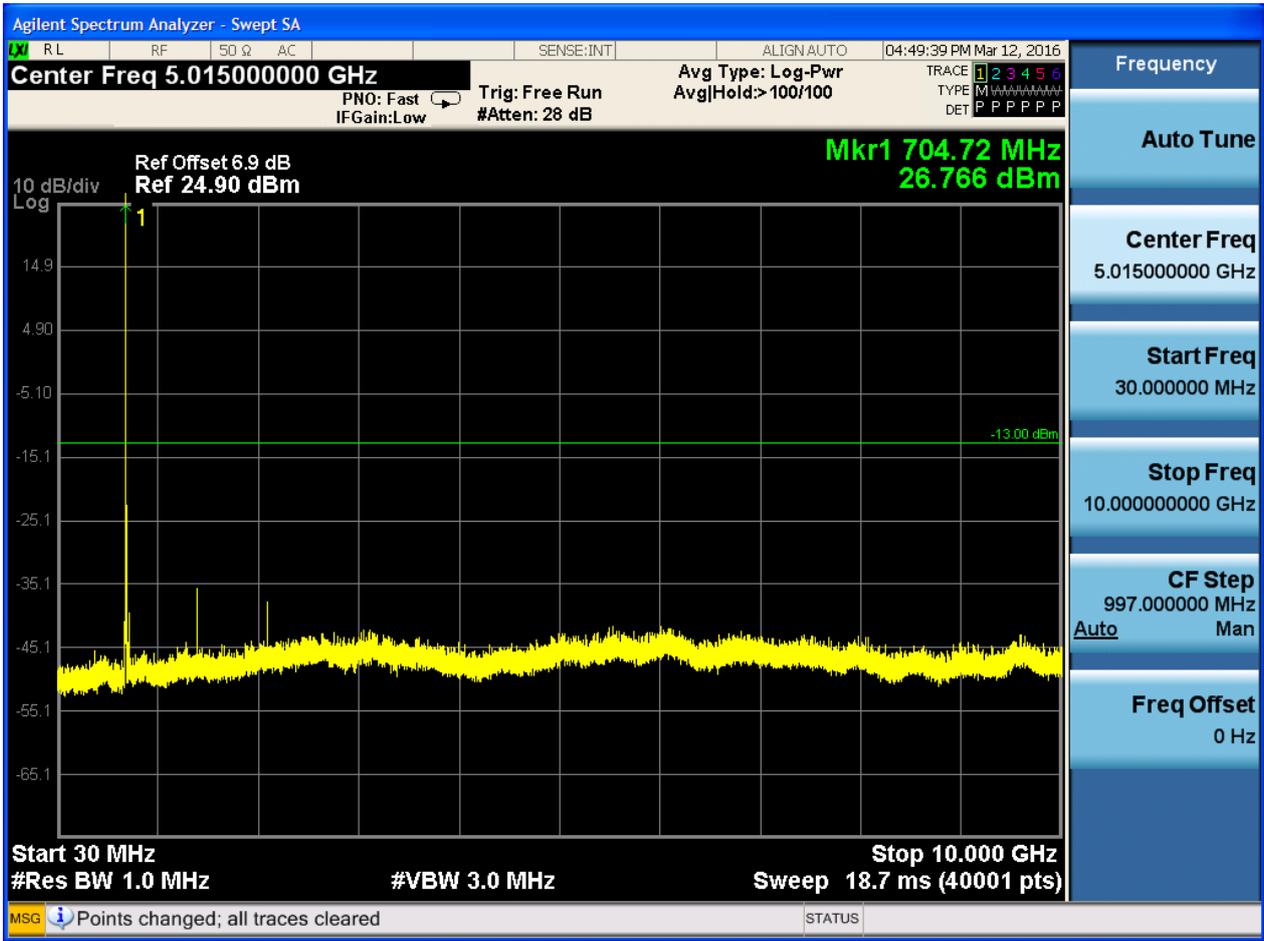
6.2.1.2.2 Test Bandwidth = 10

6.2.1.2.2.1 Test Channel = LCH

6.2.1.2.2.1.1 Test RB = RB1#0



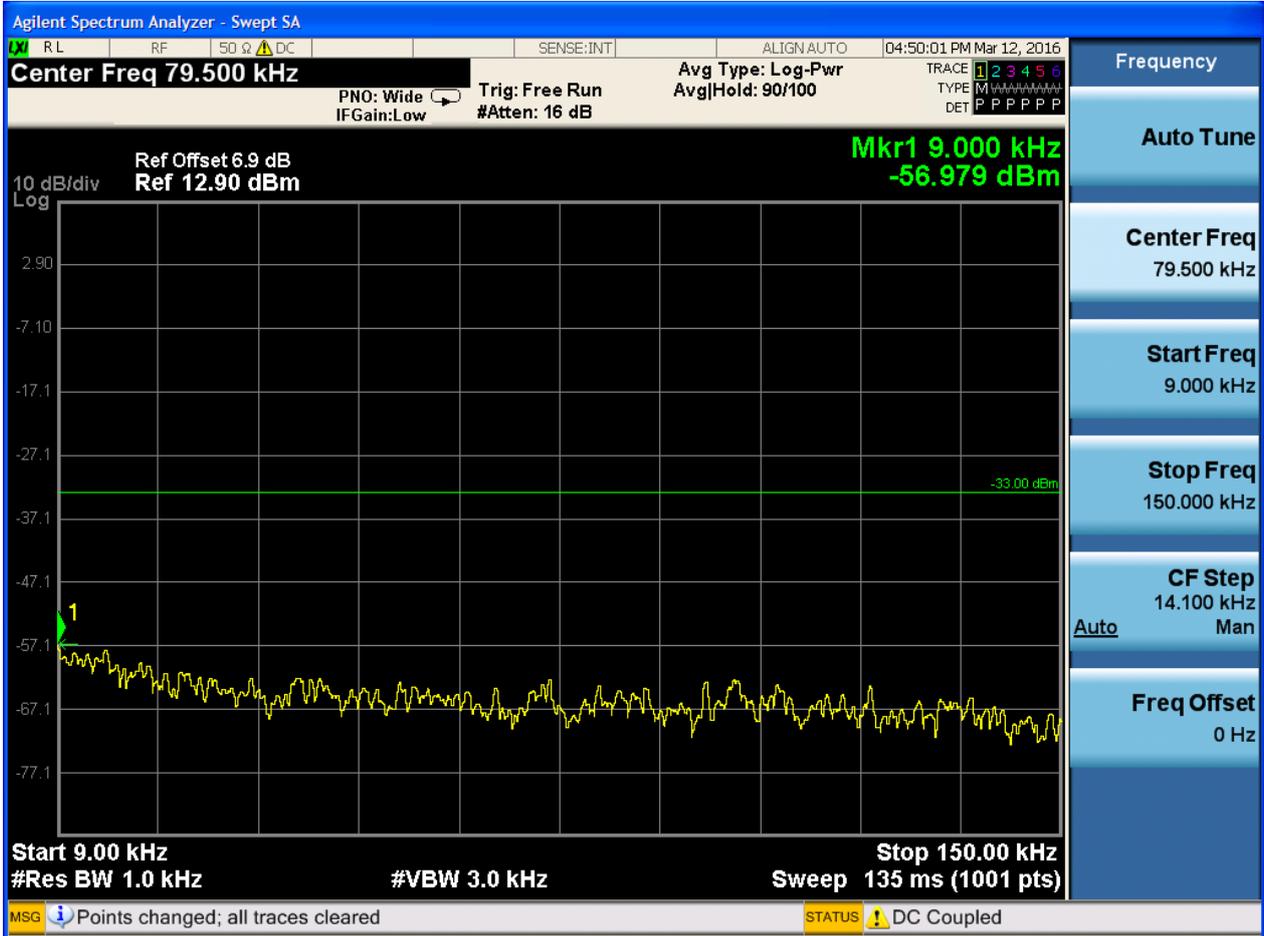




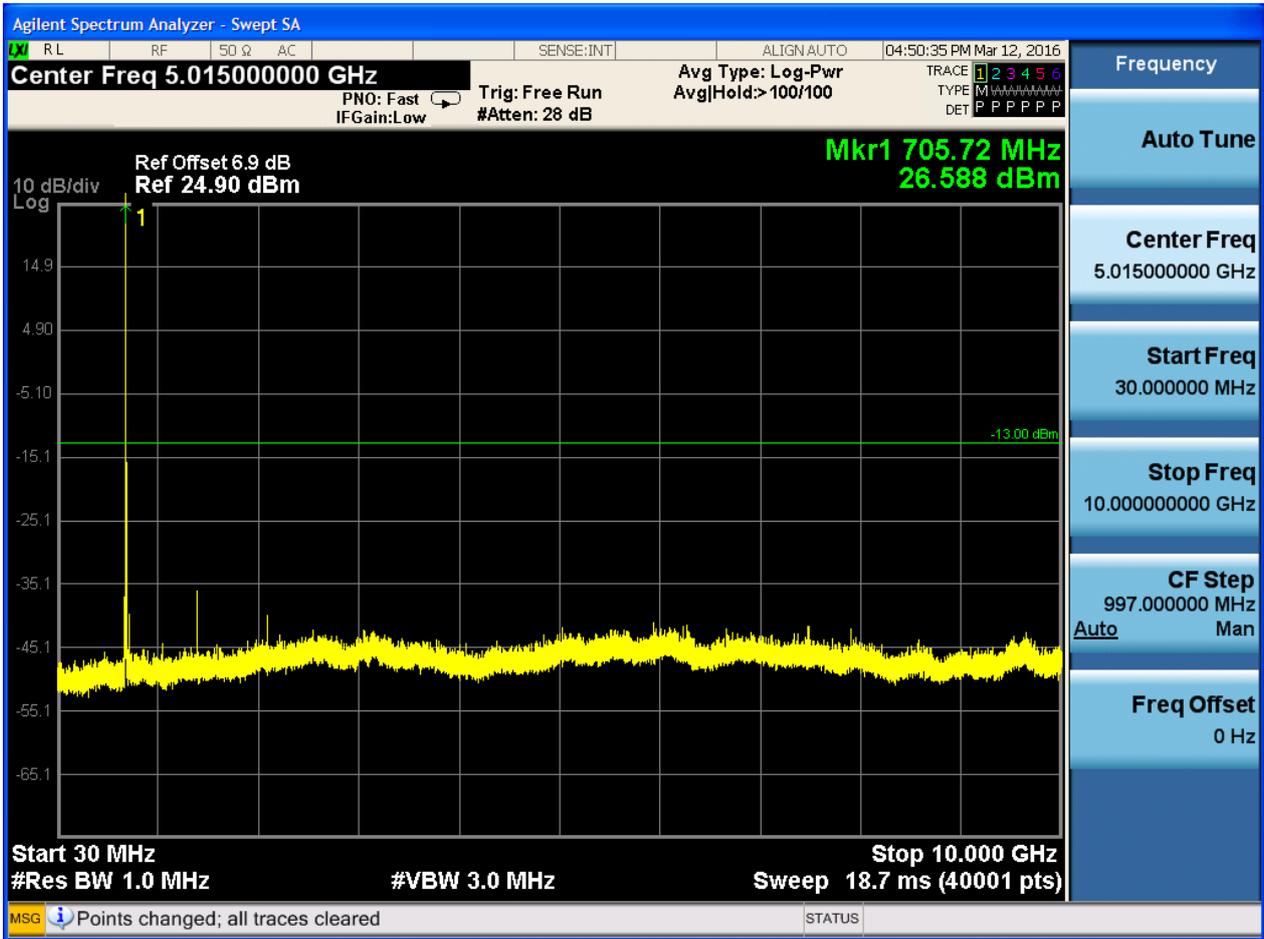


6.2.1.2.2.2 Test Channel = MCH

6.2.1.2.2.2.1 Test RB = RB1#0



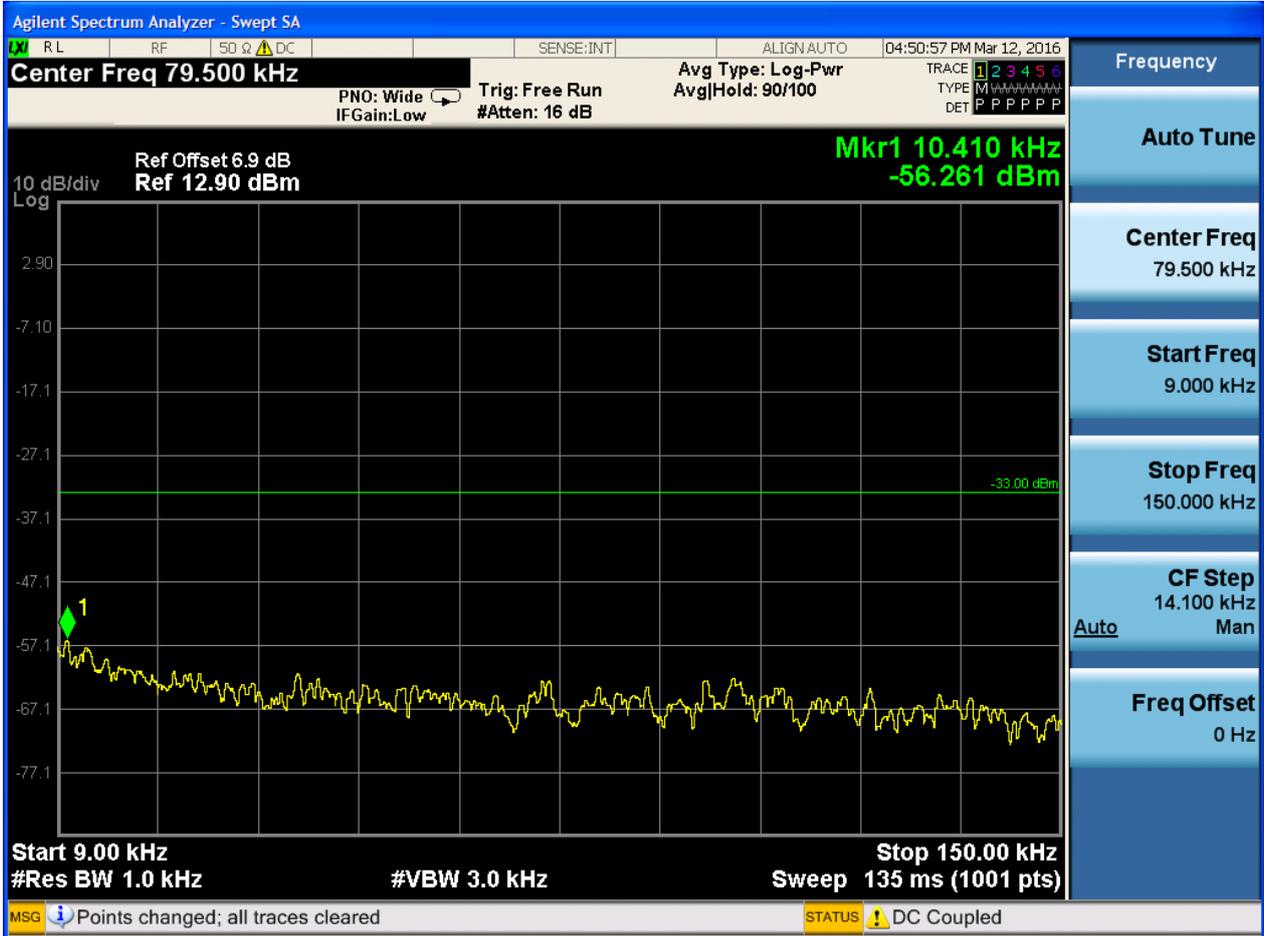


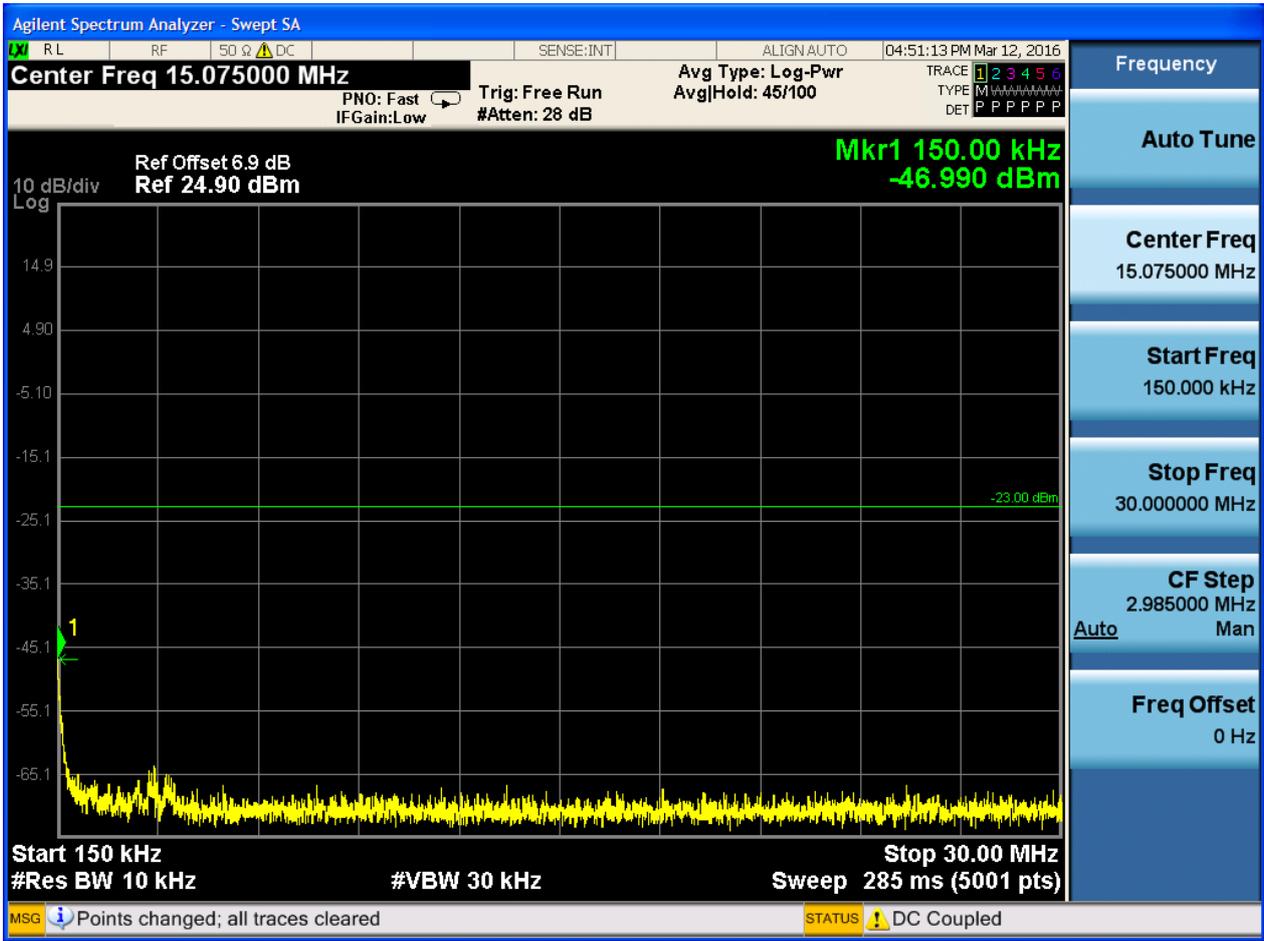


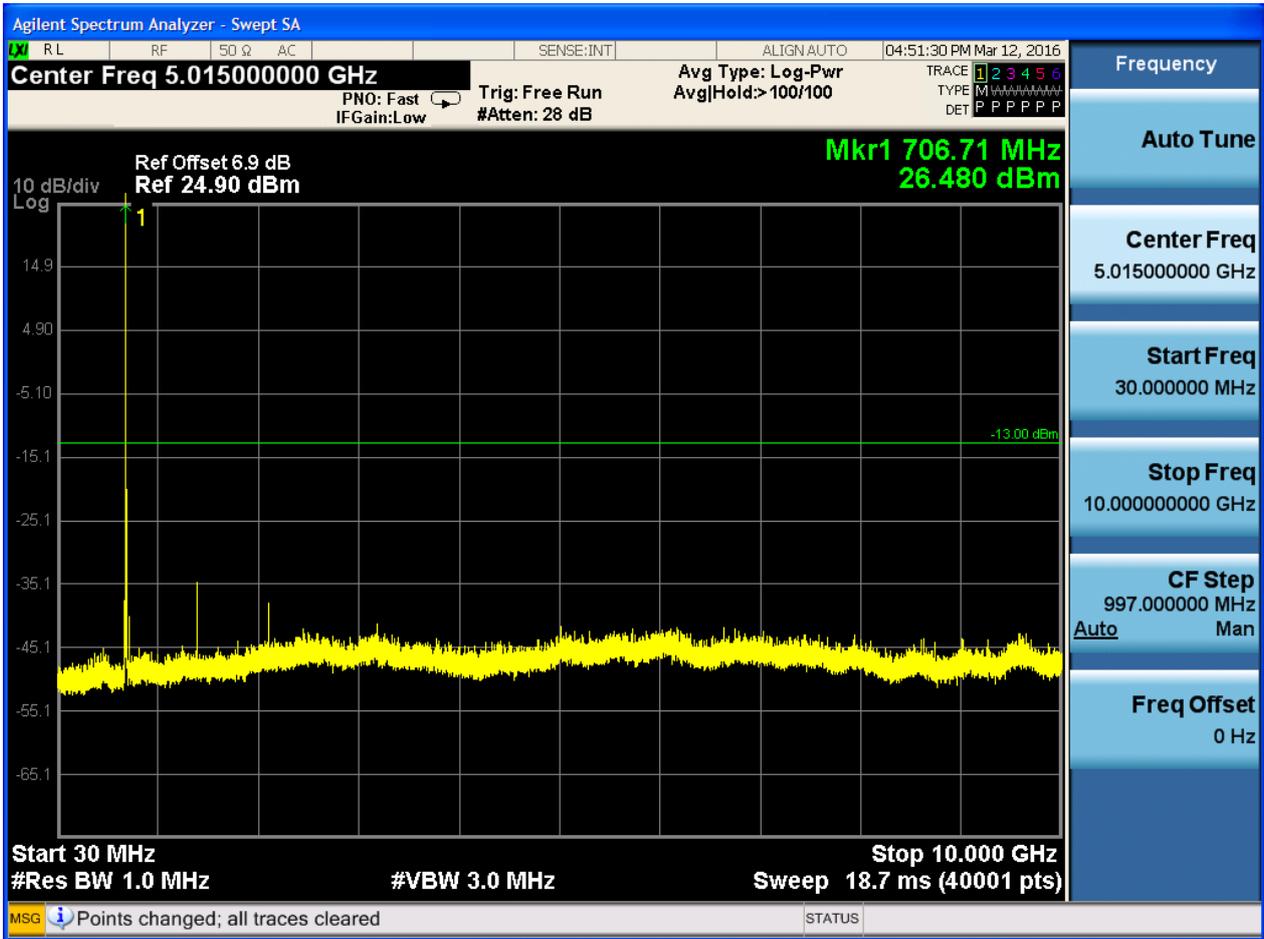


6.2.1.2.2.3 Test Channel = HCH

6.2.1.2.2.3.1 Test RB = RB1#0







7Appendix_G: Field Strength of Spurious Radiation

Note: We tested all modes, but the data presented below is the worst case.

9kHz~150kHz, VBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, VBW = 9kHz, VBW = 30k Hz, Detector: PK

30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

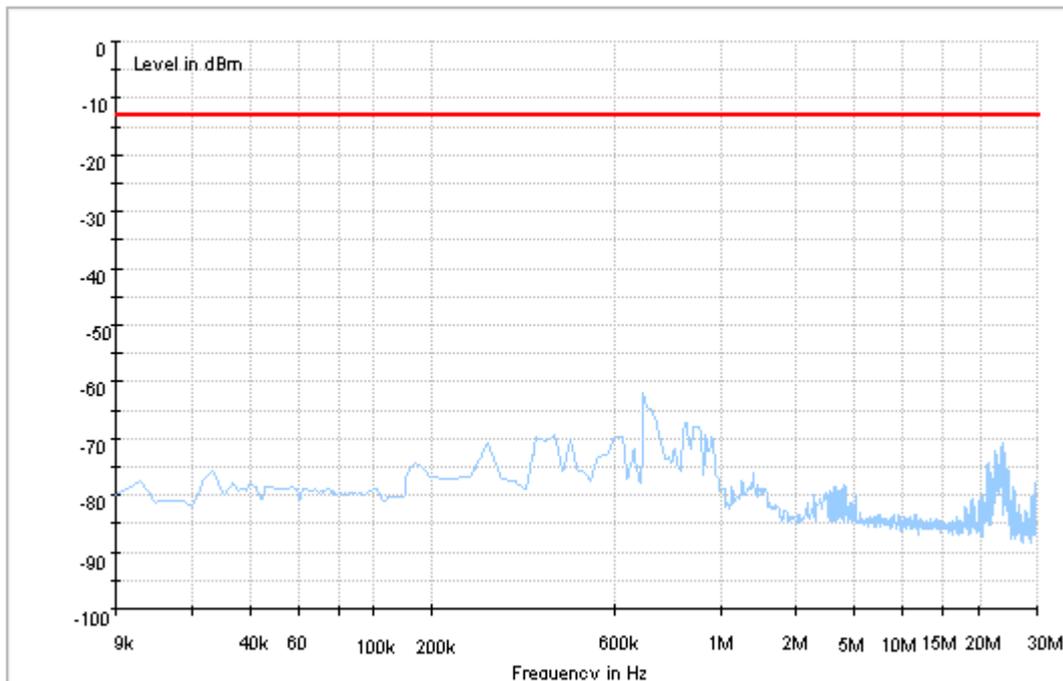
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

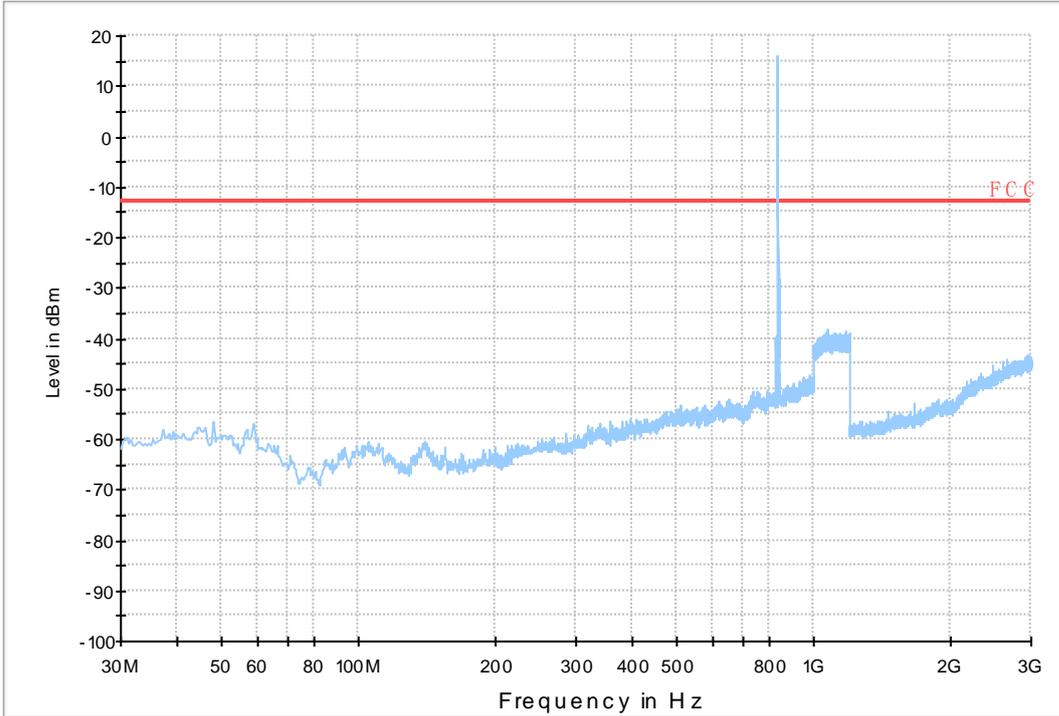
7.1 For LTE

7.1.1 Test Band = BAND5

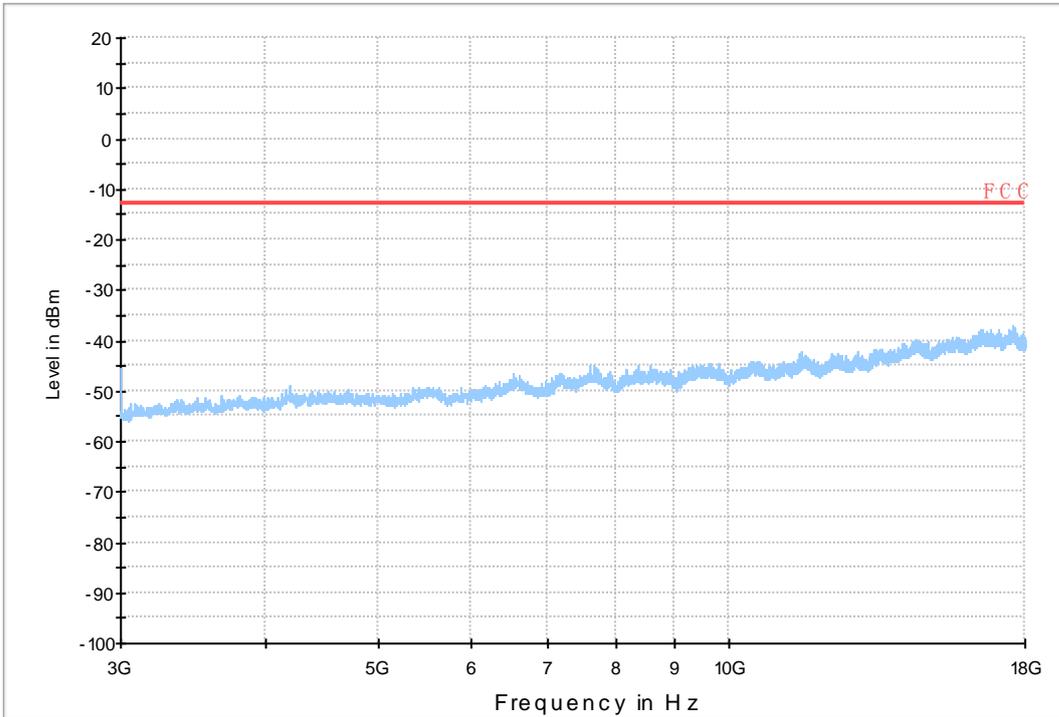
7.1.1.1 Test Bandwidth = 5



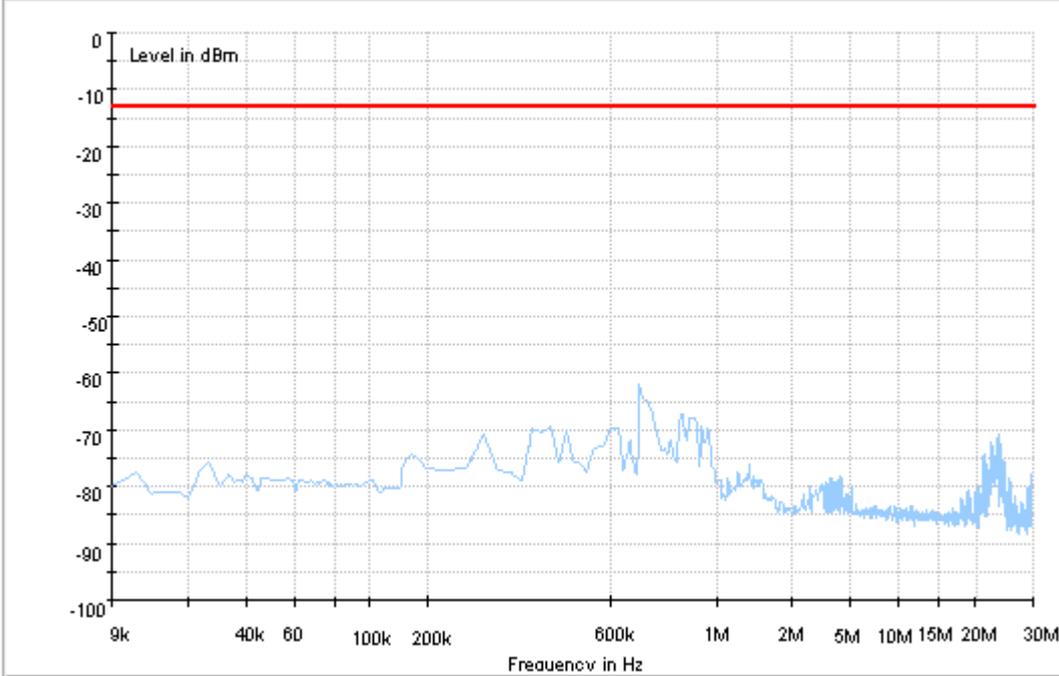
Copy of RSE-TX-DIRECTOR BELOW 1G_L



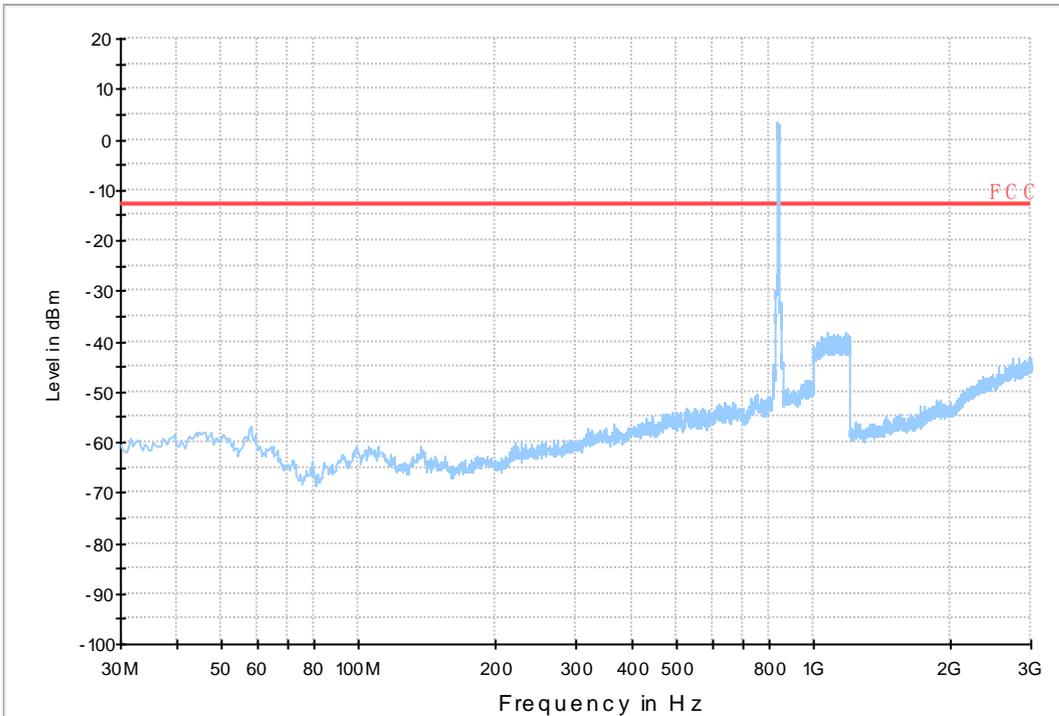
Copy of RSE-TX-DIRECTOR BELOW 1G_H



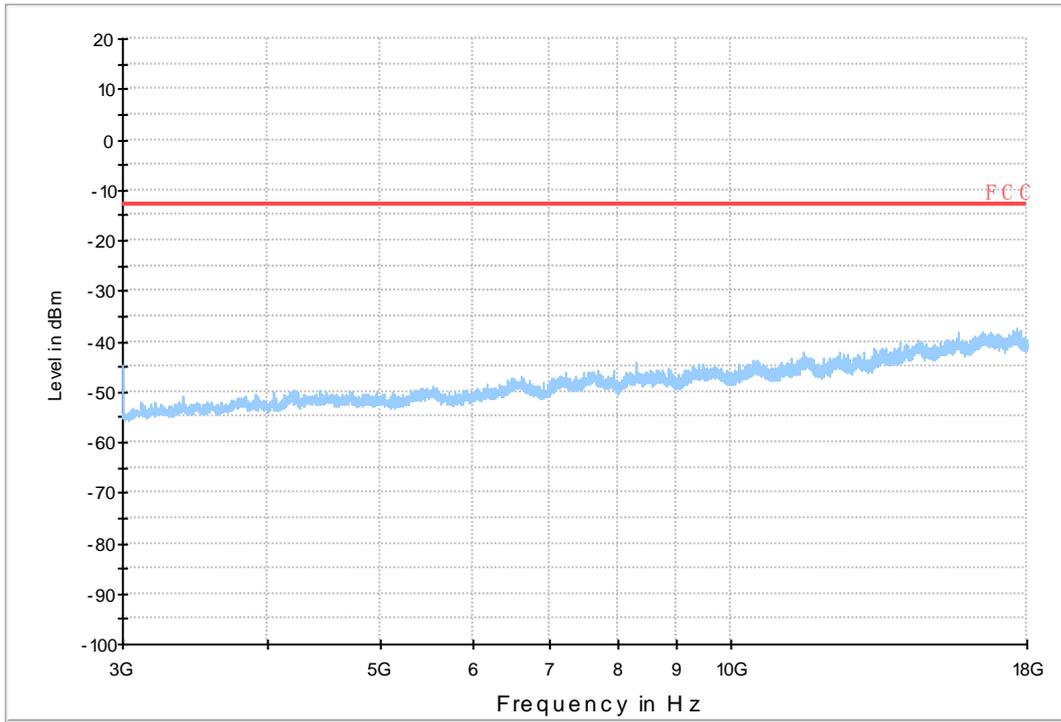
7.1.1.2 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G_L



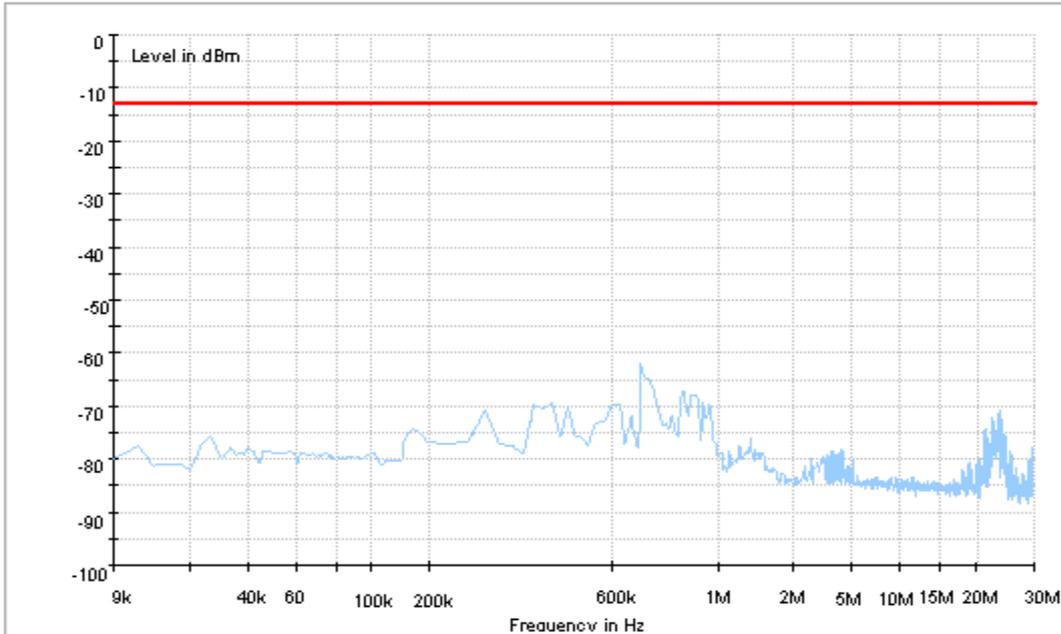
Copy of RSE-TX-DIRECTOR BELOW 1G_H



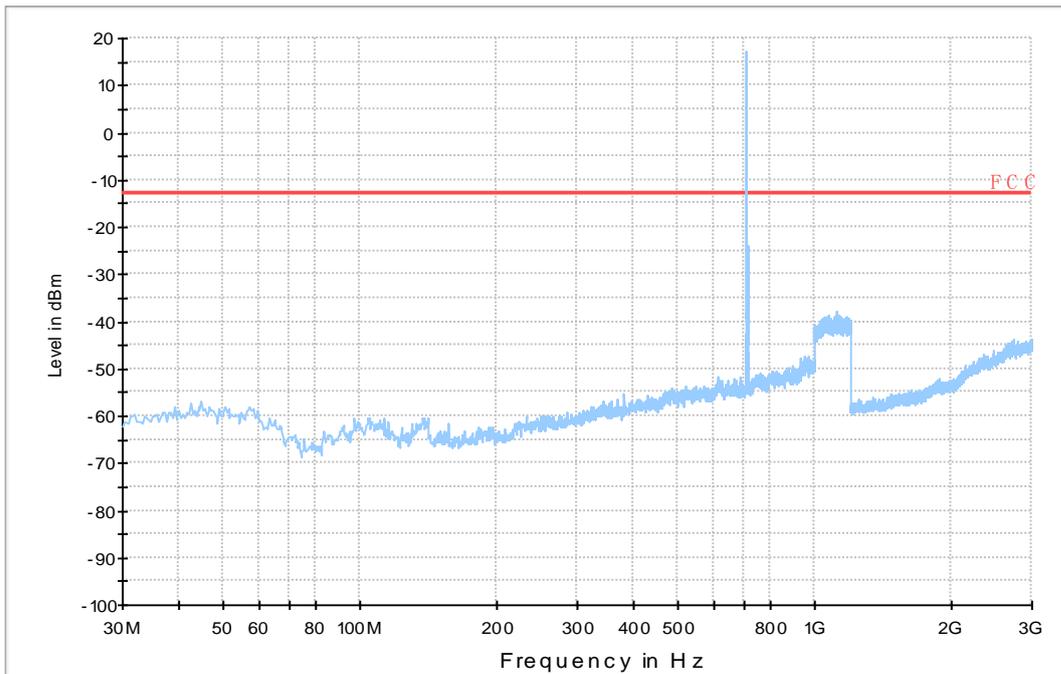
7.2 For LTE

7.2.1 Test Band = BAND17

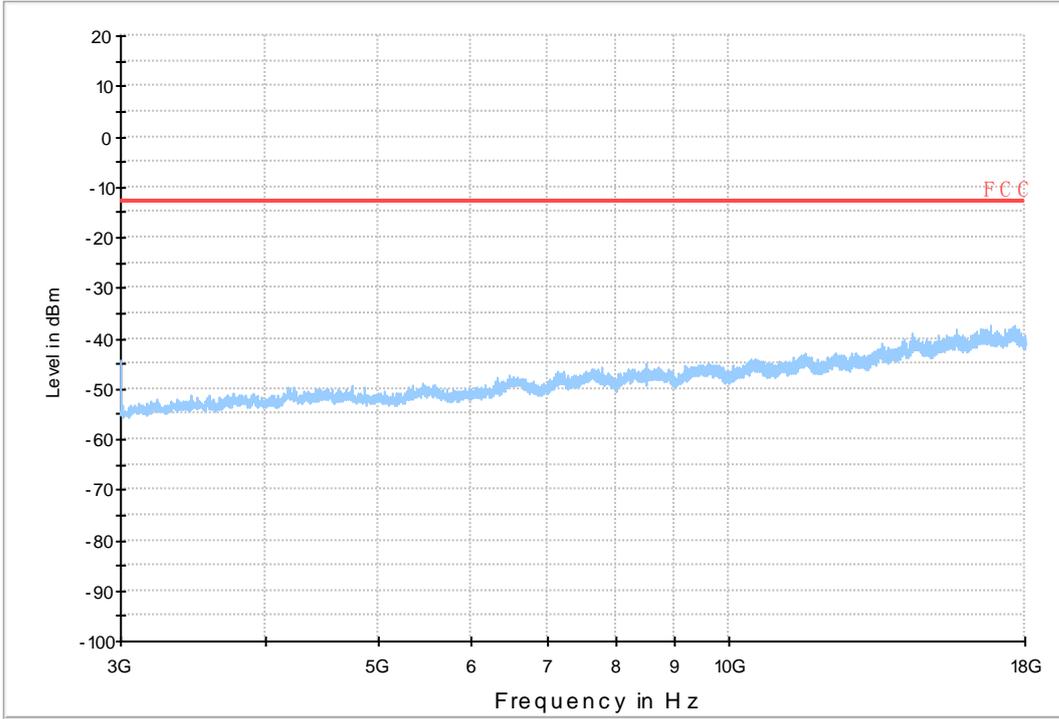
7.2.1.1 Test Bandwidth = 5



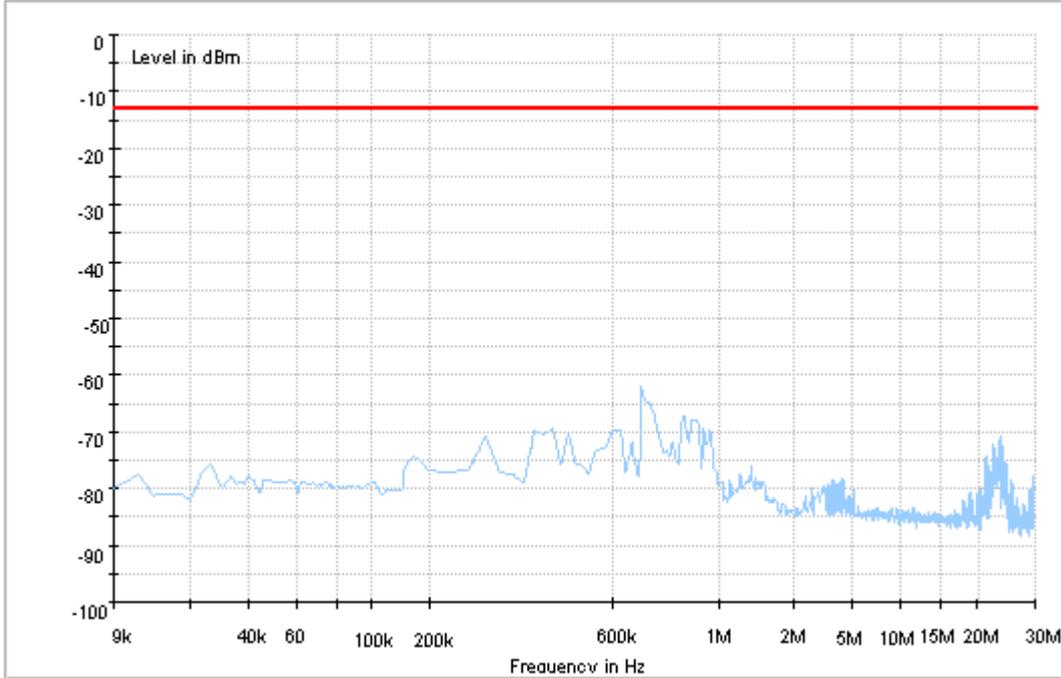
Copy of RSE-TX-DIRECTOR BELOW 1G_L



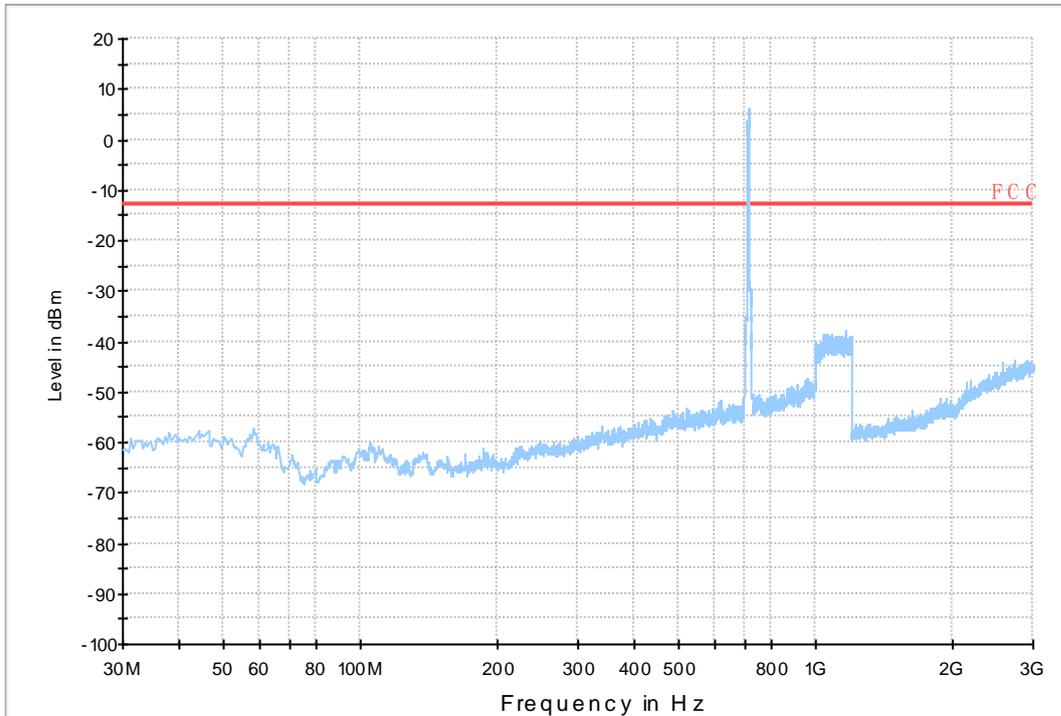
Copy of RSE-TX-DIRECTOR BELOW 1G_H



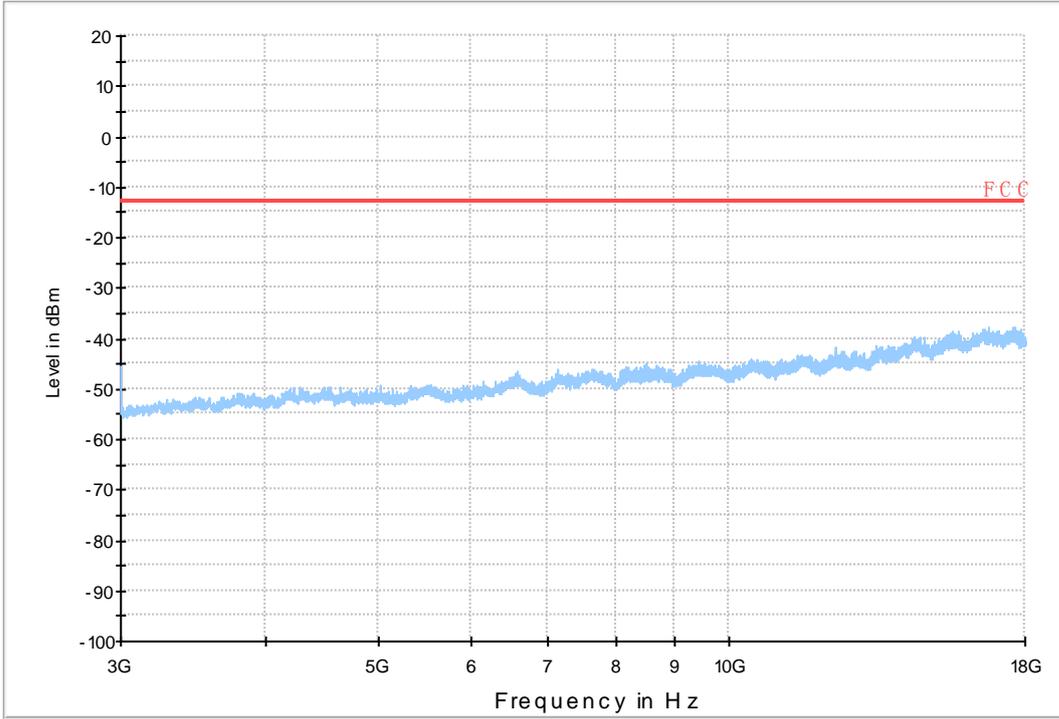
7.2.1.2 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G_L



Copy of RSE-TX-DIRECTOR BELOW 1G_H



8Appendix_H: Frequency Stability

8.1 For LTE B5

8.1.1 Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND5	LTE/TM1	5	LCH	TN	VL	-1.16	-0.0014	PASS
					VN	-1.40	-0.00169	PASS
					VH	-0.73	-0.00088	PASS
			MCH	TN	VL	0.29	0.00035	PASS
					VN	-0.74	-0.00088	PASS
					VH	-0.10	-0.00012	PASS
		HCH	TN	VL	-0.69	-0.00082	PASS	
				VN	0.27	0.00032	PASS	
				VH	-1.36	-0.00161	PASS	
		10	LCH	TN	VL	-1.16	-0.0014	PASS
					VN	-0.94	-0.00113	PASS
					VH	-1.33	-0.0016	PASS
	MCH		TN	VL	0.57	0.00068	PASS	
				VN	-0.97	-0.00116	PASS	
				VH	-1.49	-0.00178	PASS	
	HCH	TN	VL	-2.15	-0.00255	PASS		
			VN	-1.70	-0.00201	PASS		
			VH	0.07	0.00008	PASS		
	LTE/TM2	5	LCH	TN	VL	-1.32	-0.0016	PASS
					VN	-1.54	-0.00186	PASS
					VH	-2.68	-0.00324	PASS
			MCH	TN	VL	-0.07	-0.00008	PASS
					VN	-1.13	-0.00135	PASS
					VH	-2.00	-0.00239	PASS
HCH		TN	VL	-1.03	-0.00122	PASS		
			VN	1.47	0.00174	PASS		
			VH	-2.02	-0.00239	PASS		
10		LCH	TN	VL	-0.19	-0.00023	PASS	
				VN	-0.27	-0.00033	PASS	

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			MCH	TN	VH	-0.36	-0.00043	PASS
					VL	-1.60	-0.00191	PASS
					VN	-1.29	-0.00154	PASS
					VH	-0.21	-0.00025	PASS
			HCH	TN	VL	-2.69	-0.00319	PASS
					VN	2.66	0.00315	PASS
					VH	-2.60	-0.00308	PASS

8.1.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND5	LTE/TM1	5	LCH	VN	-30	2.27	0.00305	PASS
					-20	-0.11	0.00017	PASS
					-10	-5.96	-0.00691	PASS
					0	1.22	0.00178	PASS
					10	-0.54	-0.00035	PASS
					20	-1.18	-0.00113	PASS
					30	-8.66	-0.01018	PASS
					40	-2.34	-0.00253	PASS
			MCH	VN	-30	-1.68	-0.00171	PASS
					-20	-0.25	0	PASS
					-10	-1.55	-0.00155	PASS
					0	-3.14	-0.00345	PASS
					10	-0.11	0.00017	PASS
					20	-1.59	-0.0016	PASS
					30	-1.41	-0.00139	PASS
					40	-1.78	-0.00183	PASS
			HCH	VN	-30	1.39	0.00194	PASS
					-20	-23.42	-0.02737	PASS
					-10	-0.52	-0.00032	PASS
					0	16.43	0.01971	PASS
					10	2.07	0.00274	PASS
					20	-16.34	-0.019	PASS
					30	-7.87	-0.009	PASS
					40	-7.69	-0.00879	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		10	LCH	VN	50	-1.62	-0.00161	PASS
					-30	84.44	0.10216	PASS
					-20	-8.65	-0.01013	PASS
					-10	-68.06	-0.0818	PASS
					0	28.17	0.03428	PASS
					10	2.38	0.00317	PASS
					20	33.08	0.0402	PASS
					30	-43.22	-0.05183	PASS
					40	-18.39	-0.02188	PASS
			50	25.7	0.0313	PASS		
			MCH	VN	-30	0.05	0.00036	PASS
					-20	-0.45	-0.00024	PASS
					-10	55.41	0.06654	PASS
					0	56.61	0.06797	PASS
					10	173.49	0.2077	PASS
					20	39.05	0.04698	PASS
					30	0.19	0.00053	PASS
					40	215.93	0.25843	PASS
			50	0.04	0.00035	PASS		
			HCH	VN	-30	2.5	0.00326	PASS
					-20	4.07	0.00512	PASS
					-10	6.79	0.00834	PASS
					0	11.15	0.01351	PASS
					10	-2.64	-0.00283	PASS
	20	-21.65			-0.02535	PASS		
	30	-5.59			-0.00632	PASS		
	40	-61.88			-0.07302	PASS		
	50	7.82	0.00956	PASS				
	LTE/TM2	LCH	5	VN	-30	-3.21	-0.00358	PASS
					-20	-1.77	-0.00184	PASS
					-10	4.81	0.00612	PASS
					0	0.09	0.00041	PASS
					10	-2.73	-0.003	PASS
					20	-7.98	-0.00935	PASS
					30	8.15	0.01016	PASS
					40	-0.85	-0.00073	PASS
50					-0.19	0.00007	PASS	
MCH		VN	-30	0.35	0.00072	PASS		
			-20	-2.74	-0.00298	PASS		

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					-10	-1.14	-0.00106	PASS		
					0	-2.12	-0.00223	PASS		
					10	1.02	0.00152	PASS		
					20	-3.03	-0.00332	PASS		
					30	0.55	0.00096	PASS		
					40	-0.72	-0.00056	PASS		
					50	-3.41	-0.00378	PASS		
			HCH	VN	-30	7.4	0.00904	PASS		
					-20	3.7	0.00467	PASS		
					-10	-4.84	-0.00542	PASS		
					0	-0.26	-0.00001	PASS		
					10	-4.67	-0.00522	PASS		
					20	-0.18	0.00009	PASS		
					30	1.75	0.00237	PASS		
					40	-3.81	-0.0042	PASS		
		LCH	VN	-30	-19.26	-0.02293	PASS			
				-20	10.24	0.01265	PASS			
				-10	-29.08	-0.03478	PASS			
				0	10.85	0.01339	PASS			
				10	-13.77	-0.01631	PASS			
				20	-21.06	-0.0251	PASS			
				30	-4.43	-0.00504	PASS			
				40	36.13	0.04388	PASS			
				50	21.31	0.02601	PASS			
				MCH	VN	-30	-0.26	-0.00001	PASS	
						-20	-336.52	-0.402	PASS	
						-10	-0.44	-0.00023	PASS	
		0	-127.31			-0.15189	PASS			
		10	-199.01			-0.23761	PASS			
		20	46.81			0.05626	PASS			
		30	58.83			0.07063	PASS			
		40	-88.58			-0.10559	PASS			
		HCH	VN	50	-0.48	-0.00027	PASS			
				-30	3.53	0.00448	PASS			
				-20	-3.33	-0.00365	PASS			
				-10	1.27	0.0018	PASS			
				0	1.37	0.00192	PASS			
		10	-1.97	-0.00203	PASS					
		10					-30	-19.26	-0.02293	PASS
							-20	10.24	0.01265	PASS
							-10	-29.08	-0.03478	PASS
							0	10.85	0.01339	PASS
							10	-13.77	-0.01631	PASS
				LCH	VN	20	-21.06	-0.0251	PASS	
						30	-4.43	-0.00504	PASS	
40	36.13					0.04388	PASS			
50	21.31					0.02601	PASS			
MCH	VN					-30	-0.26	-0.00001	PASS	
						-20	-336.52	-0.402	PASS	
						-10	-0.44	-0.00023	PASS	
						0	-127.31	-0.15189	PASS	
				10	-199.01	-0.23761	PASS			
HCH	VN			20	46.81	0.05626	PASS			
		30	58.83	0.07063	PASS					
		40	-88.58	-0.10559	PASS					
		50	-0.48	-0.00027	PASS					
		-30	3.53	0.00448	PASS					



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					20	-2.27	-0.00239	PASS
					30	-6.02	-0.00683	PASS
					40	-0.42	-0.0002	PASS
					50	-1.01	-0.0009	PASS

8.2 For LTE B17

8.2.1 Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND17	LTE/TM1	5	LCH	TN	VL	-2.59	-0.00367	PASS
					VN	-3.60	-0.0051	PASS
					VH	-3.30	-0.00467	PASS
			MCH	TN	VL	-7.80	-0.01099	PASS
					VN	-7.11	-0.01001	PASS
					VH	-8.18	-0.01152	PASS
		HCH	TN	VL	-0.77	-0.00108	PASS	
				VN	-2.23	-0.00313	PASS	
				VH	-1.27	-0.00178	PASS	
		10	LCH	TN	VL	-1.97	-0.00278	PASS
					VN	-1.19	-0.00168	PASS
					VH	-1.56	-0.0022	PASS
	MCH		TN	VL	13.62	0.01918	PASS	
				VN	15.85	0.02232	PASS	
				VH	15.99	0.02252	PASS	
	HCH	TN	VL	0.89	0.00125	PASS		
			VN	0.13	0.00018	PASS		
			VH	1.77	0.00249	PASS		
	LTE/TM2	5	LCH	TN	VL	-3.05	-0.00432	PASS
					VN	-2.30	-0.00326	PASS
					VH	-2.55	-0.00361	PASS
			MCH	TN	VL	-8.28	-0.01166	PASS
					VN	-7.97	-0.01123	PASS
					VH	-6.05	-0.00852	PASS
HCH		TN	VL	-2.03	-0.00285	PASS		
			VN	-1.40	-0.00196	PASS		
			VH	-0.63	-0.00088	PASS		

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		10	LCH	TN	VL	-0.36	-0.00051	PASS
					VN	-0.16	-0.00023	PASS
					VH	-1.97	-0.00278	PASS
			MCH	TN	VL	12.59	0.01773	PASS
					VN	12.52	0.01763	PASS
					VH	11.90	0.01676	PASS
			HCH	TN	VL	2.39	0.00336	PASS
					VN	3.52	0.00495	PASS
					VH	2.12	0.00298	PASS

8.2.2 Frequency Error vs. Temperature:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND17	LTE/TM1	5	LCH	VN	-30	-2.58	-0.00334	PASS
					-20	0.57	0.00112	PASS
					-10	-1.59	-0.00194	PASS
					0	-2.58	-0.00334	PASS
					10	3.87	0.00579	PASS
					20	-0.35	-0.00018	PASS
					30	-4.76	-0.00643	PASS
					40	-2.41	-0.0031	PASS
			MCH	VN	50	-0.81	-0.00084	PASS
					-30	-1.24	-0.00144	PASS
					-20	-1.52	-0.00183	PASS
					-10	-1.37	-0.00162	PASS
					0	-1.07	-0.0012	PASS
					10	-1.01	-0.00111	PASS
					20	-4.06	-0.00541	PASS
					30	-3.57	-0.00472	PASS
			HCH	VN	40	-2.45	-0.00314	PASS
					50	-1.65	-0.00201	PASS
					-30	-1.44	-0.00171	PASS
					-20	-3.51	-0.00461	PASS
					-10	6.53	0.00946	PASS
					0	-1.81	-0.00223	PASS
					10	-3.03	-0.00394	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict					
		10	LCH	VN	20	-3.8	-0.00502	PASS					
					30	-0.04	0.00025	PASS					
					40	1.75	0.00276	PASS					
					50	-0.01	0.0003	PASS					
				10	LCH	VN	-30	-1.42	-0.00169	PASS			
							-20	-0.61	-0.00055	PASS			
							-10	-0.11	0.00016	PASS			
							0	-1.82	-0.00226	PASS			
					10		0.42	0.0009	PASS				
					20		-0.99	-0.00109	PASS				
					30		-2.2	-0.00279	PASS				
					40		0.62	0.00118	PASS				
		50			-3.18		-0.00417	PASS					
							10	MCH	VN	-30	-1.59	-0.00193	PASS
										-20	2.71	0.00413	PASS
										-10	0.08	0.00042	PASS
	0		0.95	0.00165		PASS							
	10		4.74	0.00699		PASS							
	20		-1.09	-0.00122		PASS							
	30		-0.85	-0.00089		PASS							
	40		0.72	0.00132		PASS							
	50	0.67	0.00125	PASS									
			10	HCH	VN	-30	-2.5	-0.00321	PASS				
						-20	-4.4	-0.00588	PASS				
						-10	-1.84	-0.00228	PASS				
						0	2.97	0.00449	PASS				
				10		5.1	0.00748	PASS					
				20		-0.02	0.00028	PASS					
				30		-2.62	-0.00337	PASS					
				40		-0.35	-0.00018	PASS					
	50	1.11	0.00187	PASS									
	LTE/TM2		5	LCH	VN	-30	-10.22	-0.01415	PASS				
-20						4.8	0.0071	PASS					
-10						2.95	0.00449	PASS					
0						0.14	0.00051	PASS					
10						0.18	0.00057	PASS					
20						0.31	0.00075	PASS					
30						1.47	0.00239	PASS					
40						1.08	0.00184	PASS					



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
					50	-2.02	-0.00255	PASS	
			MCH	VN	-30	1.08	0.00183	PASS	
					-20	-1.44	-0.00172	PASS	
					-10	-11.77	-0.01627	PASS	
					0	3.66	0.00547	PASS	
					10	2.45	0.00376	PASS	
					20	-10.22	-0.01408	PASS	
					30	4.38	0.00648	PASS	
					40	2.93	0.00444	PASS	
					50	-0.36	-0.0002	PASS	
			HCH	VN	-30	2.34	0.00359	PASS	
					-20	-8.32	-0.01135	PASS	
					-10	1.39	0.00226	PASS	
					0	-10.79	-0.01481	PASS	
					10	5.73	0.00834	PASS	
					20	2.55	0.00388	PASS	
					30	-0.22	0	PASS	
					40	3.78	0.00561	PASS	
					50	-1.22	-0.0014	PASS	
		10	LCH	VN	-30	2.98	0.00451	PASS	
					-20	-3.1	-0.00406	PASS	
					-10	-2.73	-0.00354	PASS	
					0	-0.82	-0.00085	PASS	
					10	0.36	0.00082	PASS	
					20	1.18	0.00197	PASS	
					30	-0.01	0.0003	PASS	
					40	-4.01	-0.00535	PASS	
					50	0.71	0.00131	PASS	
				MCH	VN	-30	-2.18	-0.00276	PASS
						-20	0.05	0.00038	PASS
						-10	-0.75	-0.00075	PASS
						0	2.64	0.00403	PASS
						10	1.88	0.00296	PASS
						20	2.47	0.00379	PASS
						30	2.95	0.00447	PASS
						40	-2.07	-0.00261	PASS
						50	-1.55	-0.00187	PASS
				HCH	VN	-30	-5.54	-0.00748	PASS
						-20	1.18	0.00197	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-10	-1.67	-0.00204	PASS
					0	1.51	0.00243	PASS
					10	0.42	0.0009	PASS
					20	-2.57	-0.0033	PASS
					30	-1.61	-0.00195	PASS
					40	-0.29	-0.0001	PASS
					50	-1.04	-0.00115	PASS

END