



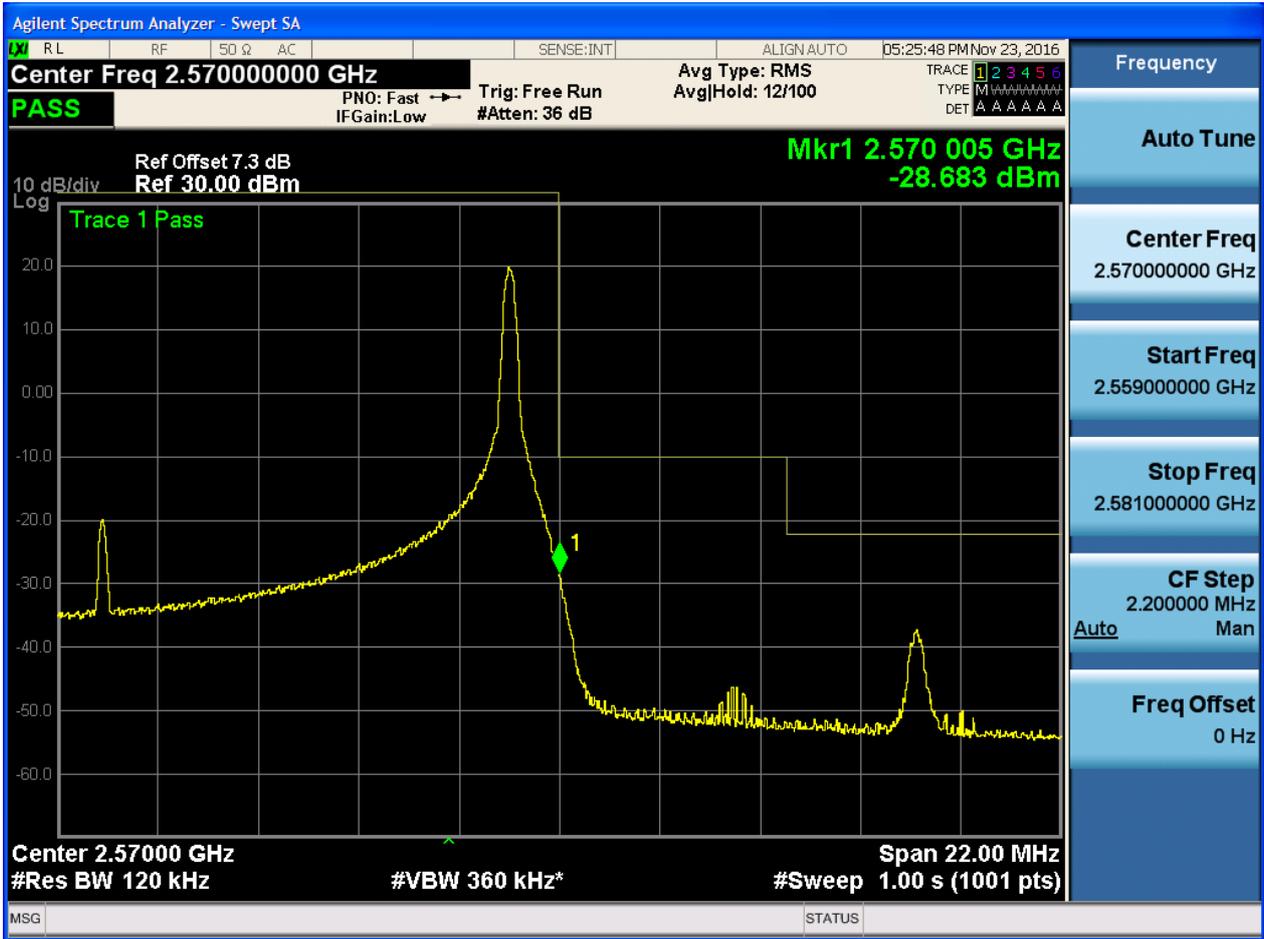
5.1.1.2.4.2 Test Channel = HCH

5.1.1.2.4.2.1 Test RB = RB1#0





5.1.1.2.4.2.2 Test RB = RB1#99





5.1.1.2.4.2.3 Test RB = RB50#25





5.1.1.2.4.2.4 Test RB = RB100#0





6Appendix_F: Spurious Emission at Antenna Terminal

NOTE: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of $< RBW/2$ so that narrowband signals are not lost between frequency bins. As to the present test item, the "Measurement Points = $k * (Span / RBW)$ " with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB.

Part I - Test Plots

6.1 For LTE

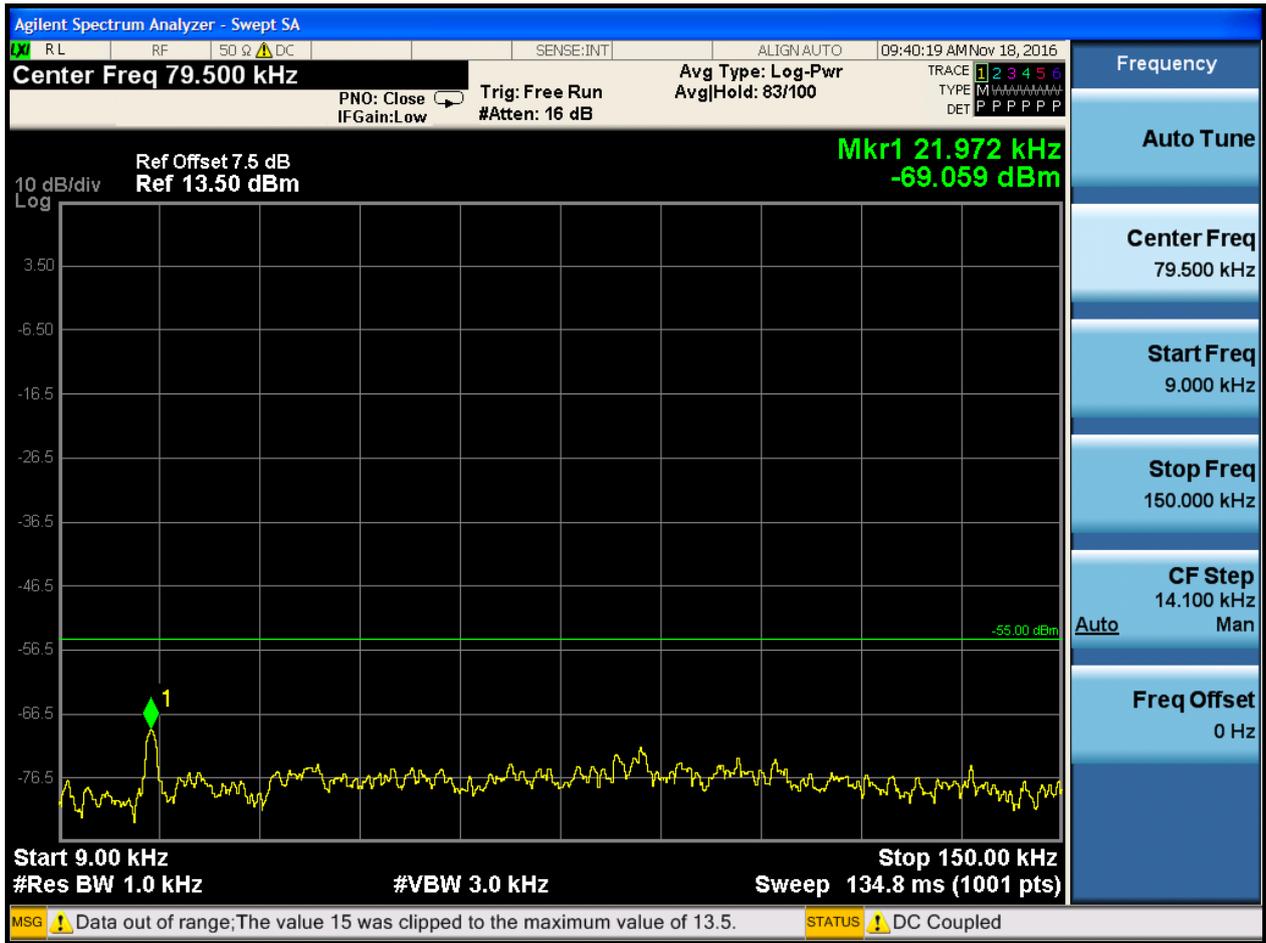
6.1.1 Test Band = BAND7

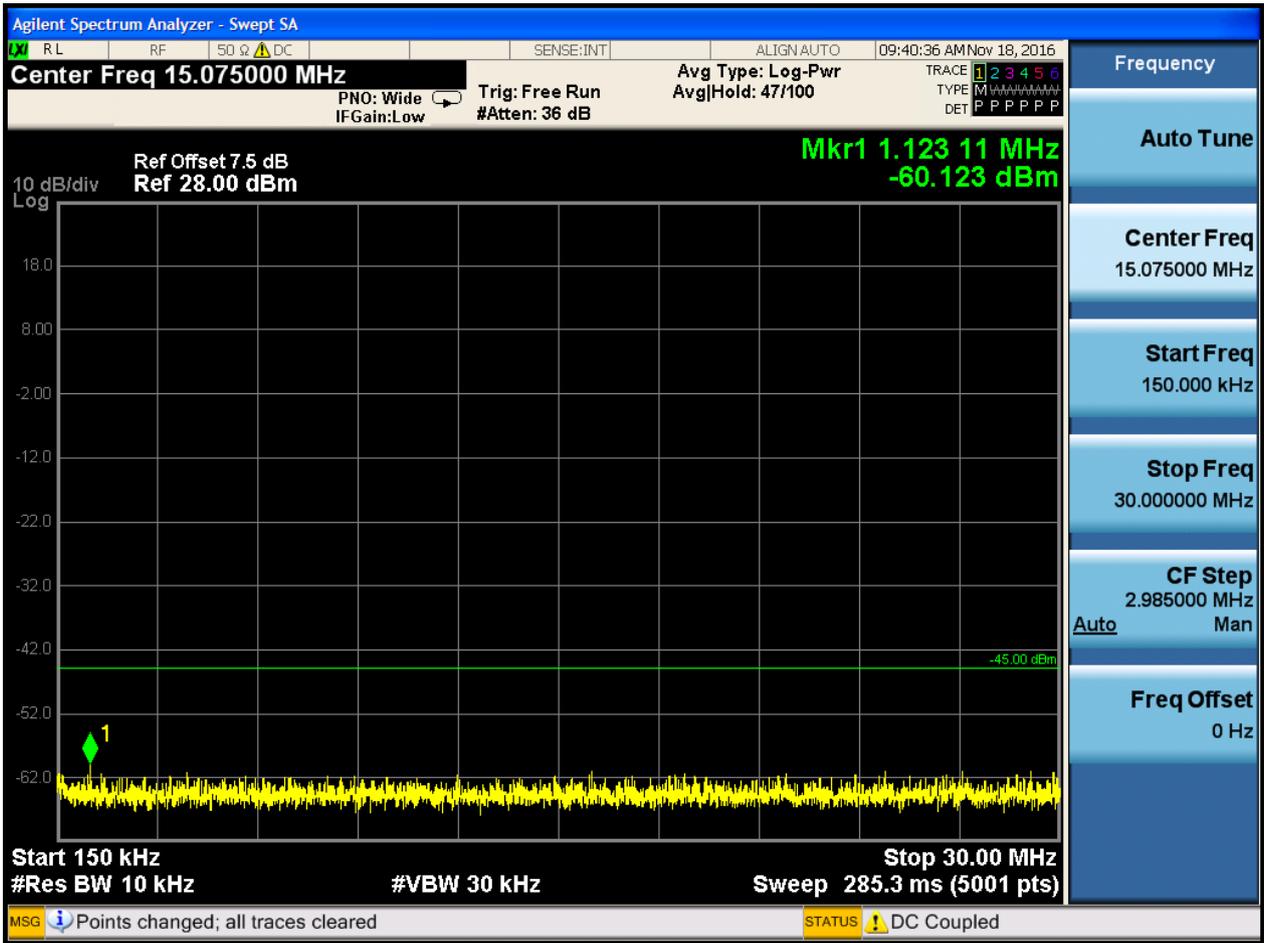
6.1.1.1 Test Mode = LTE/TM1

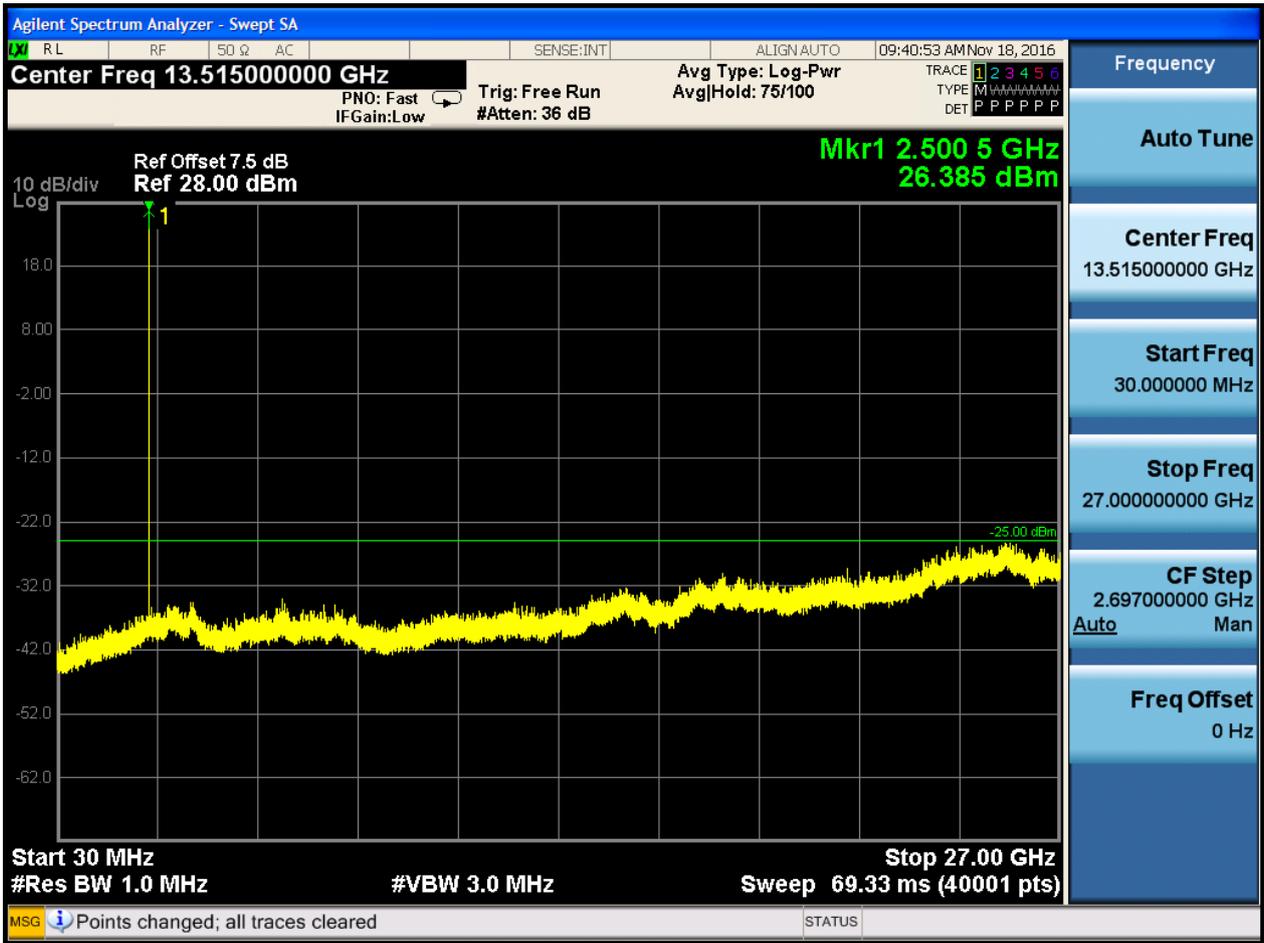
6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



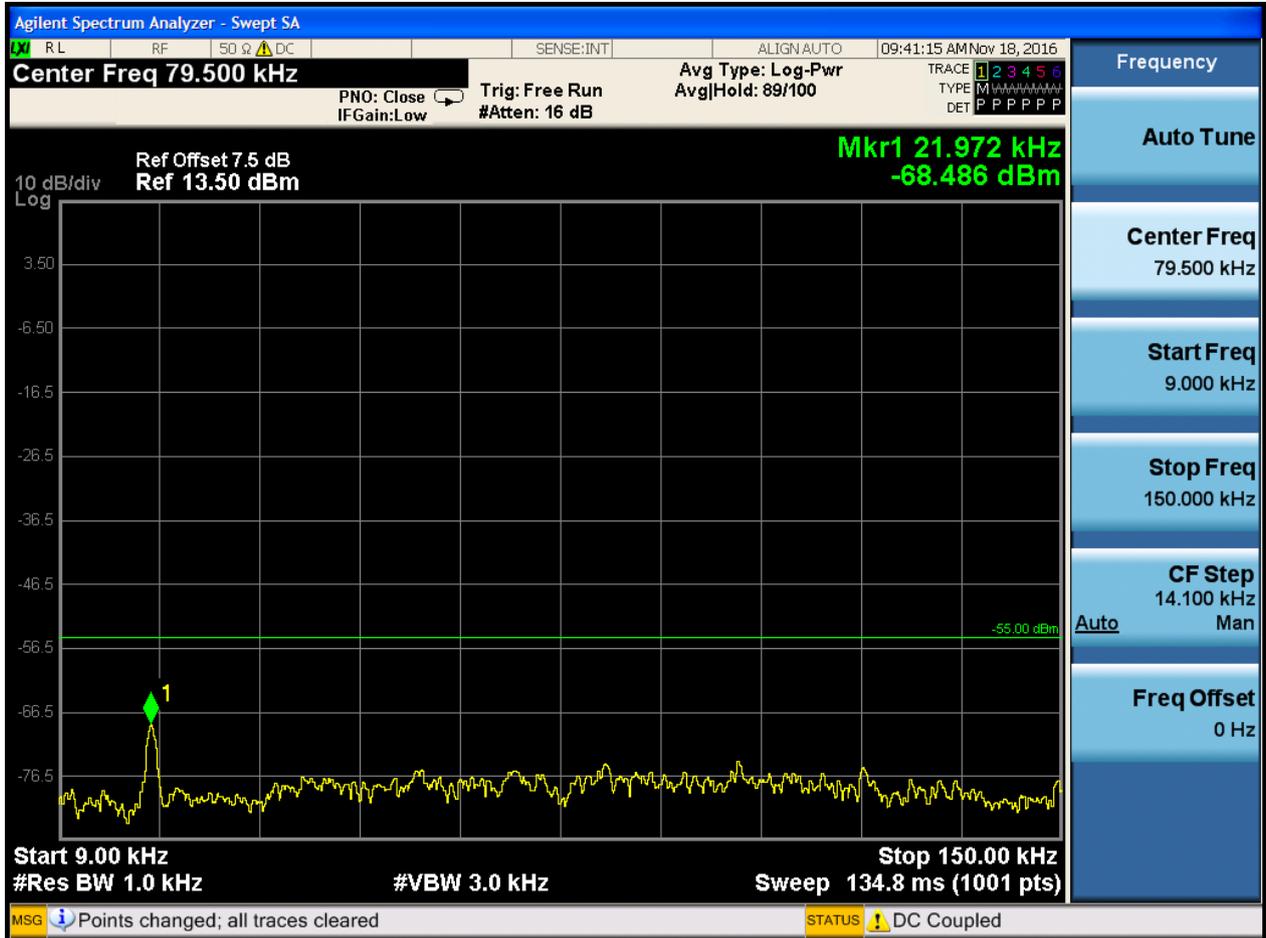


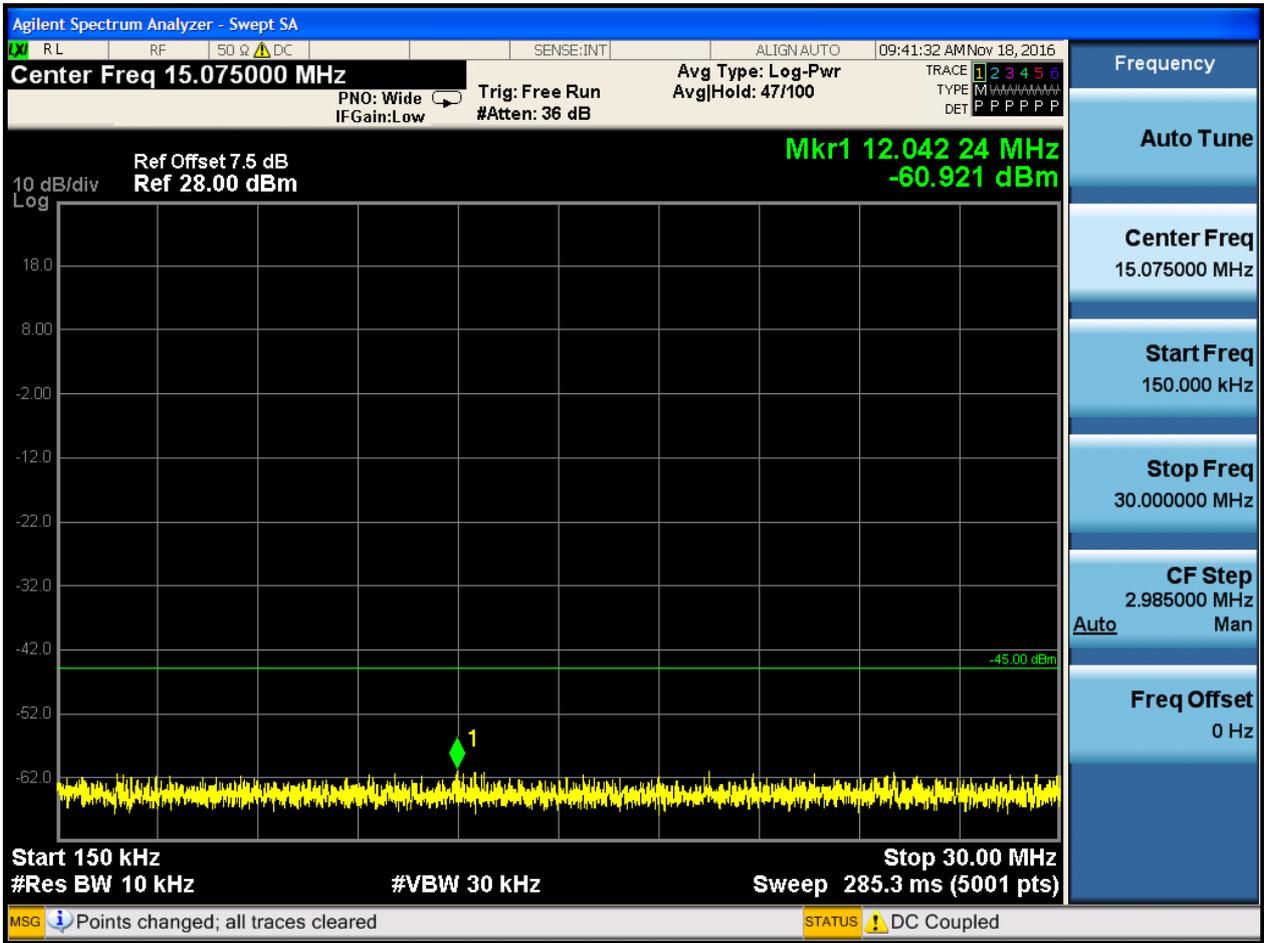


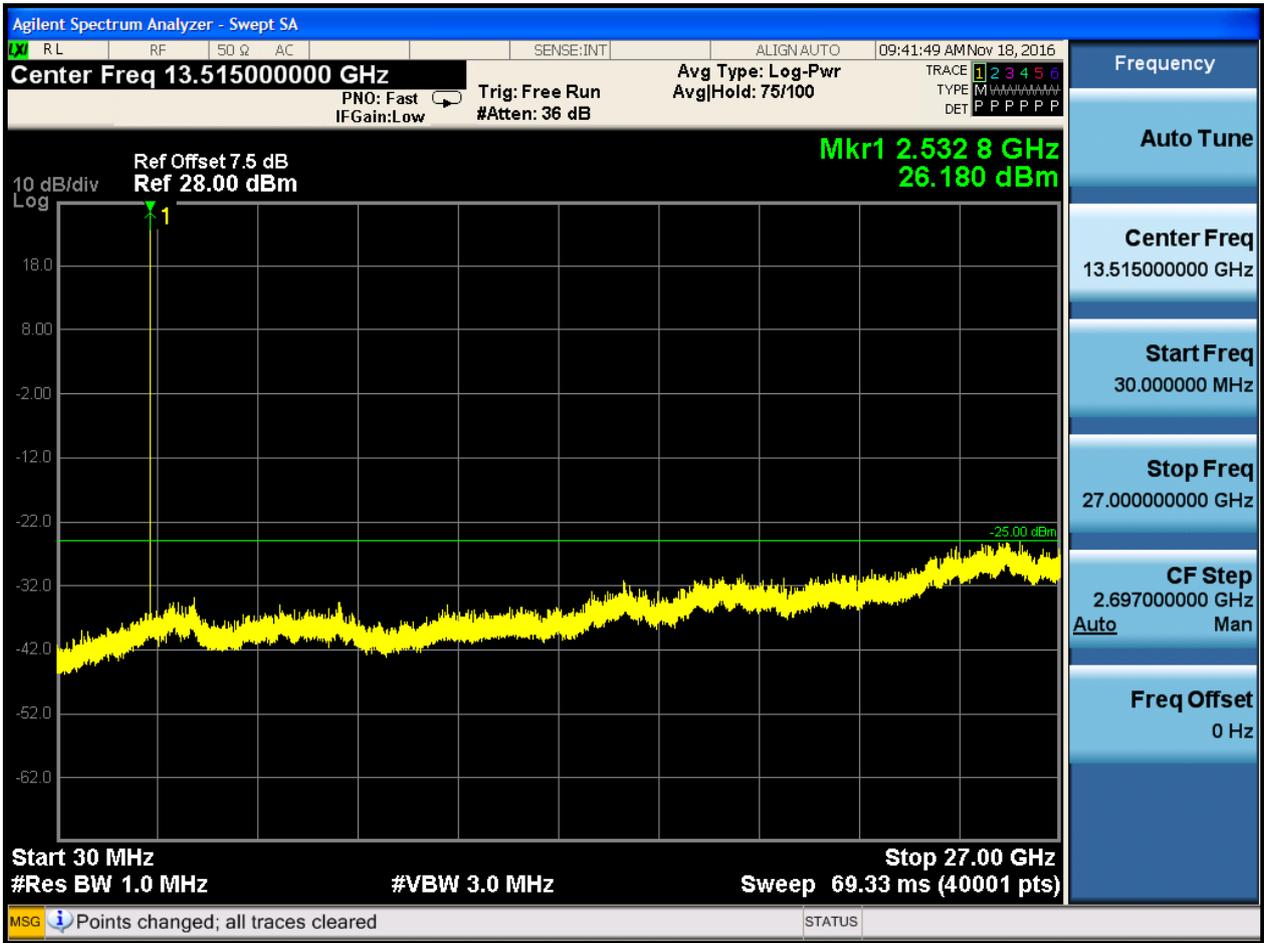


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0



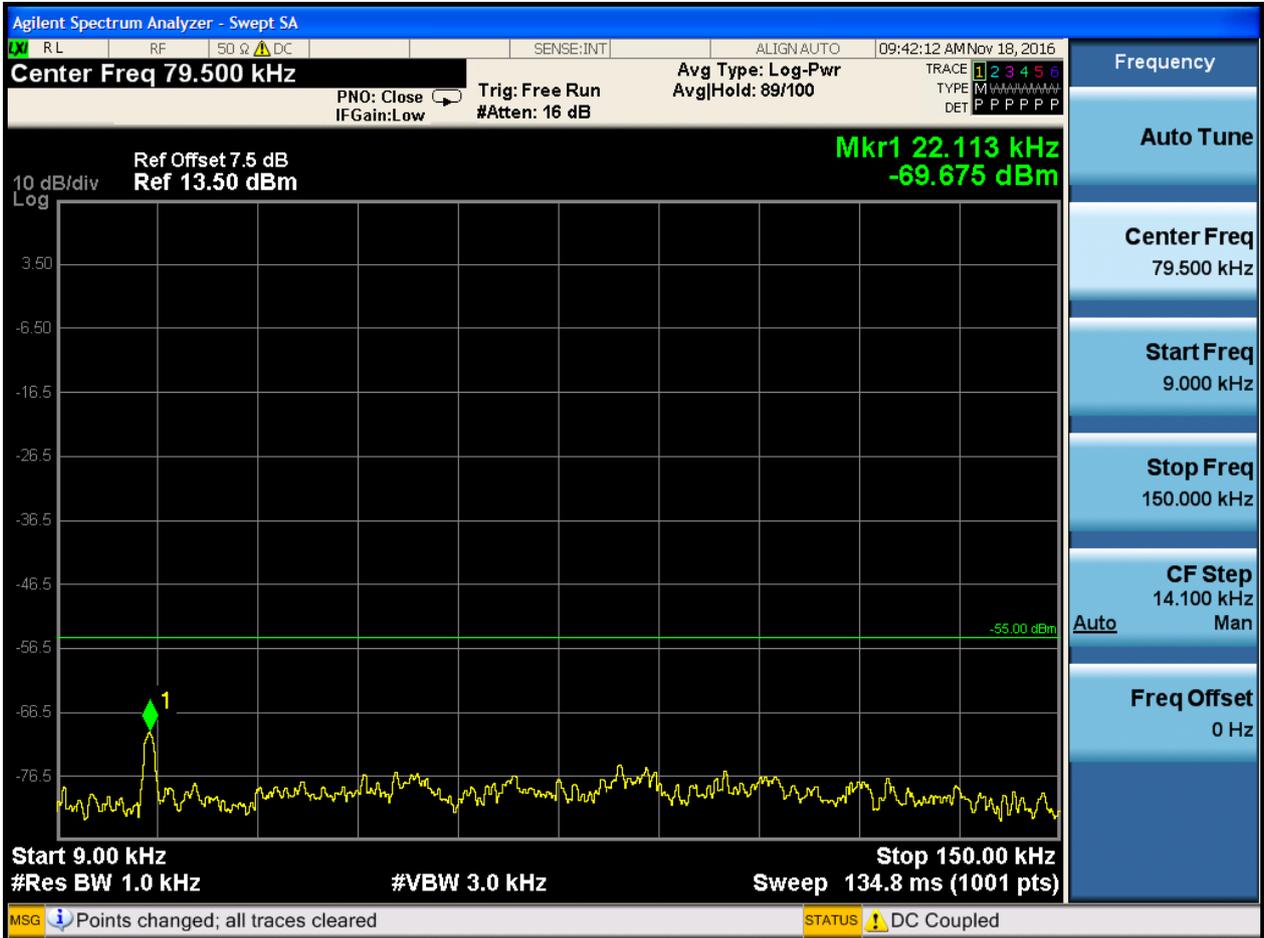






6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0

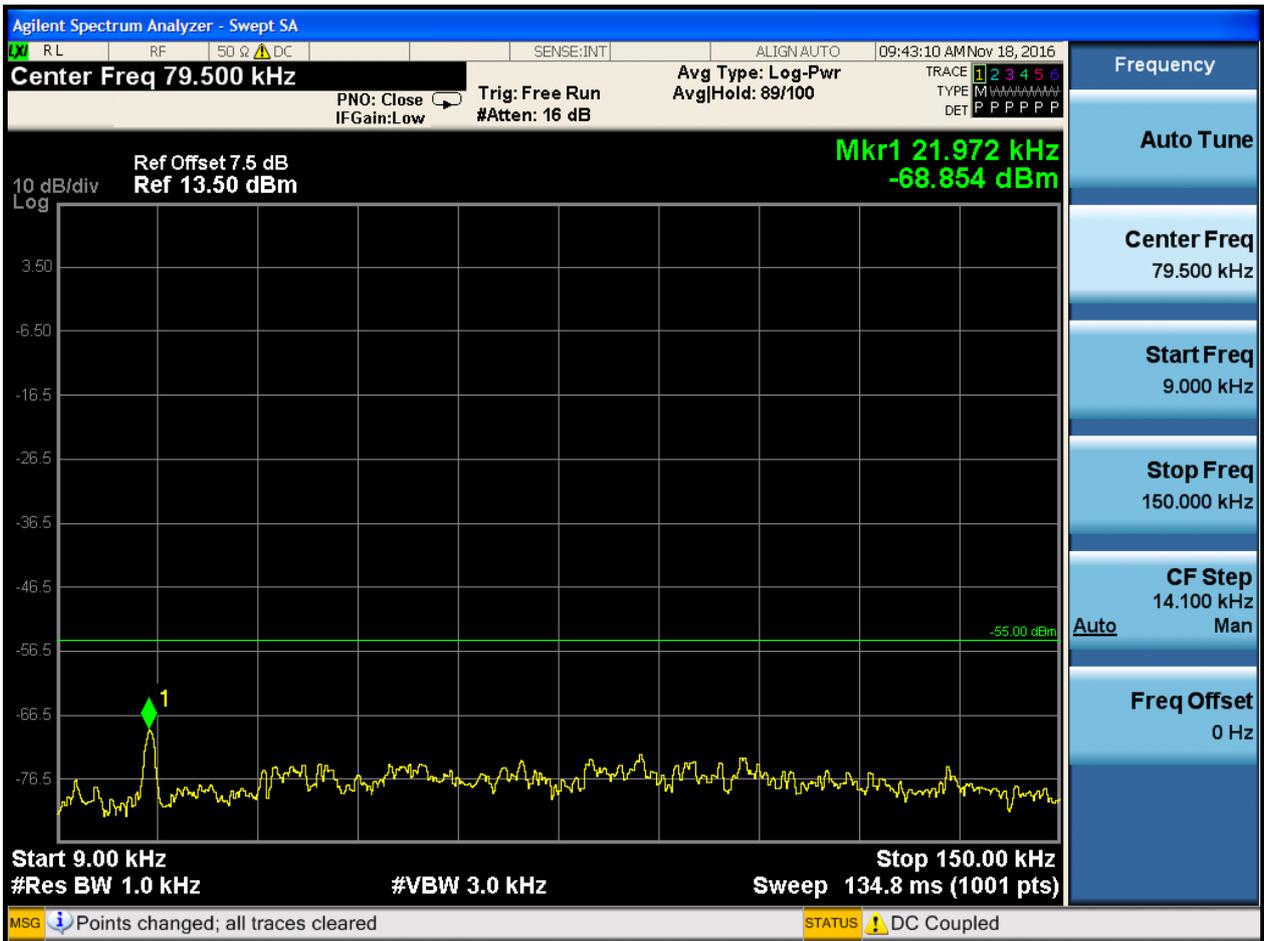


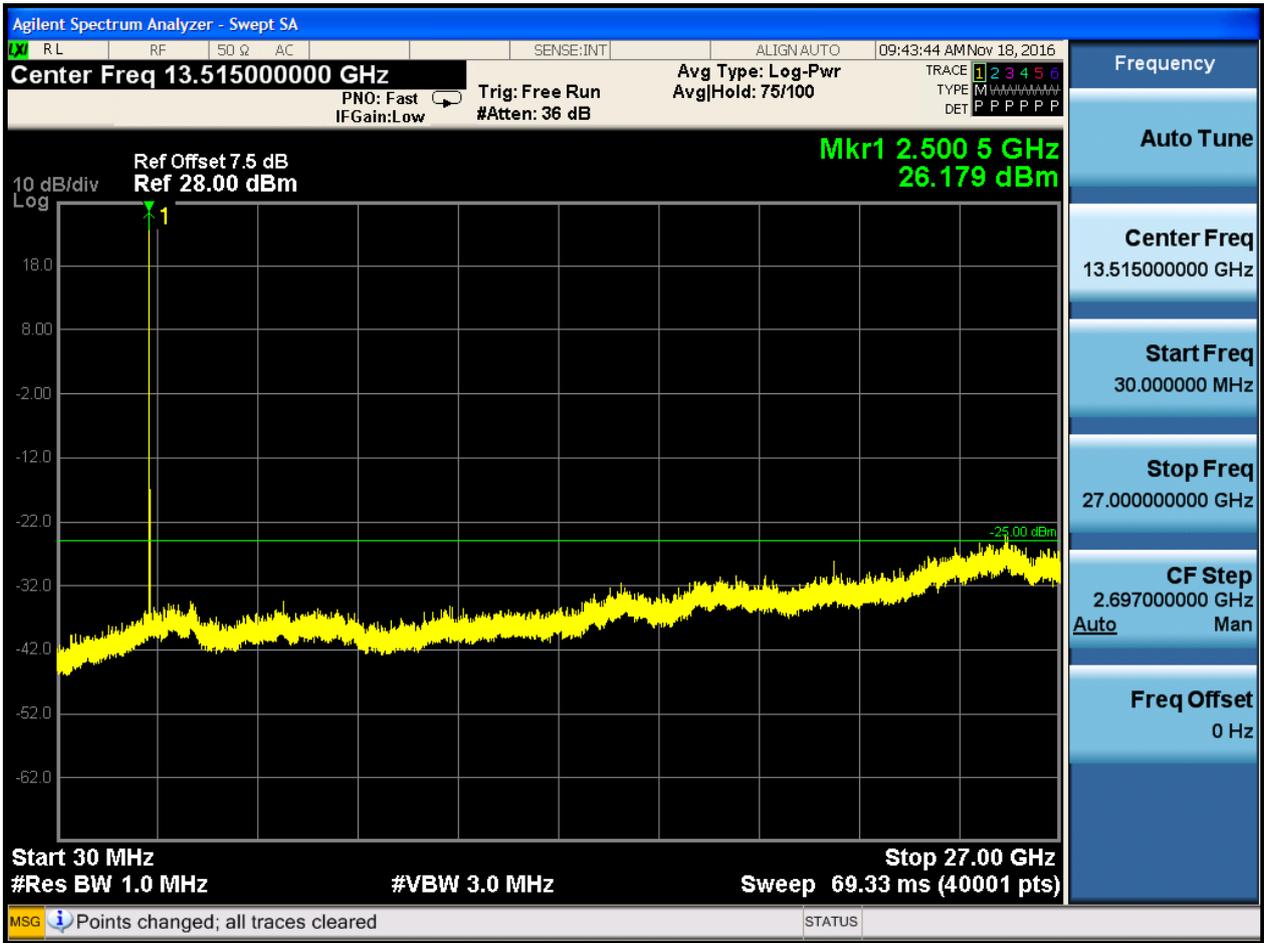


6.1.1.1.2 Test Bandwidth = 10

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0



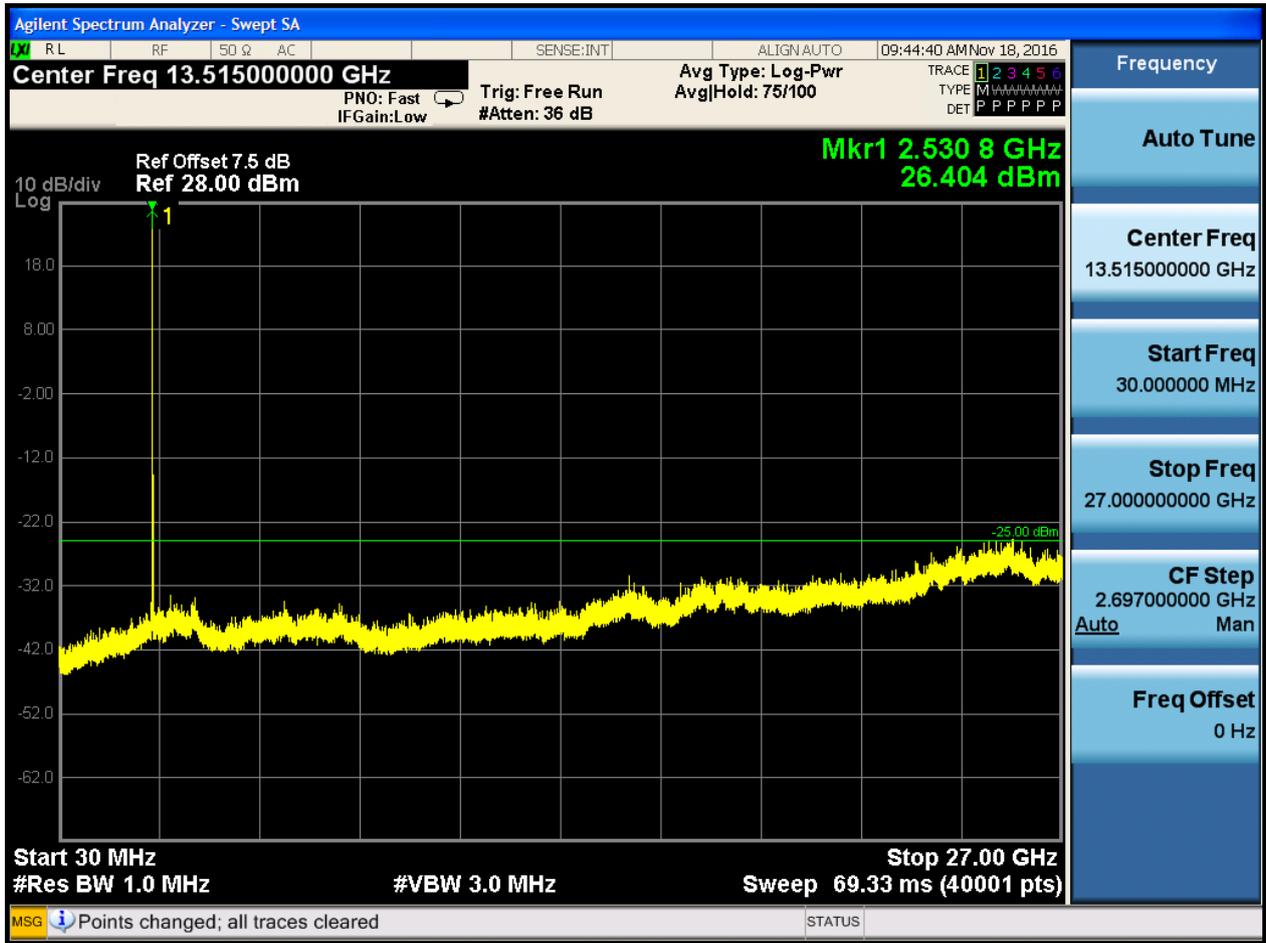




6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0

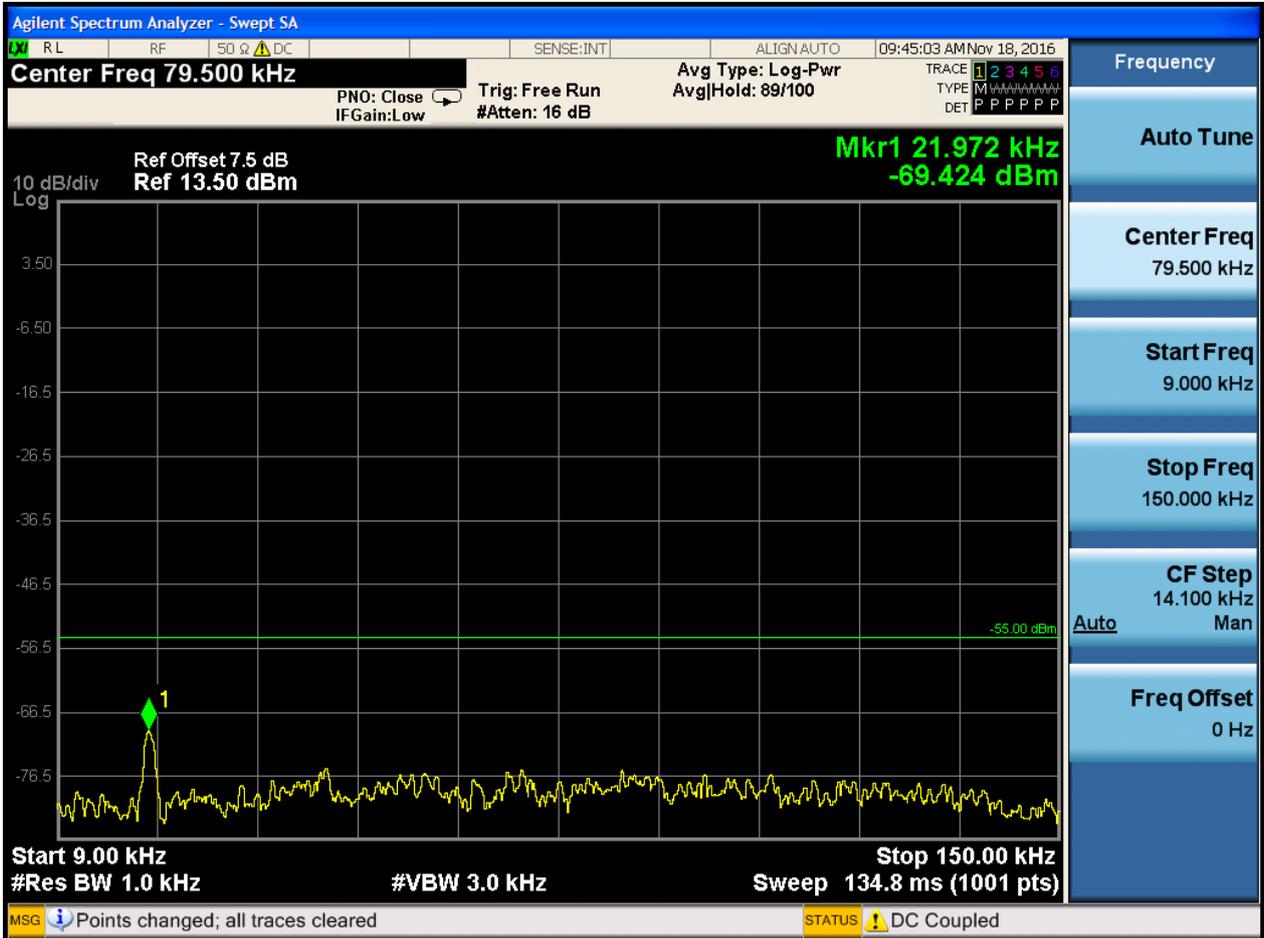


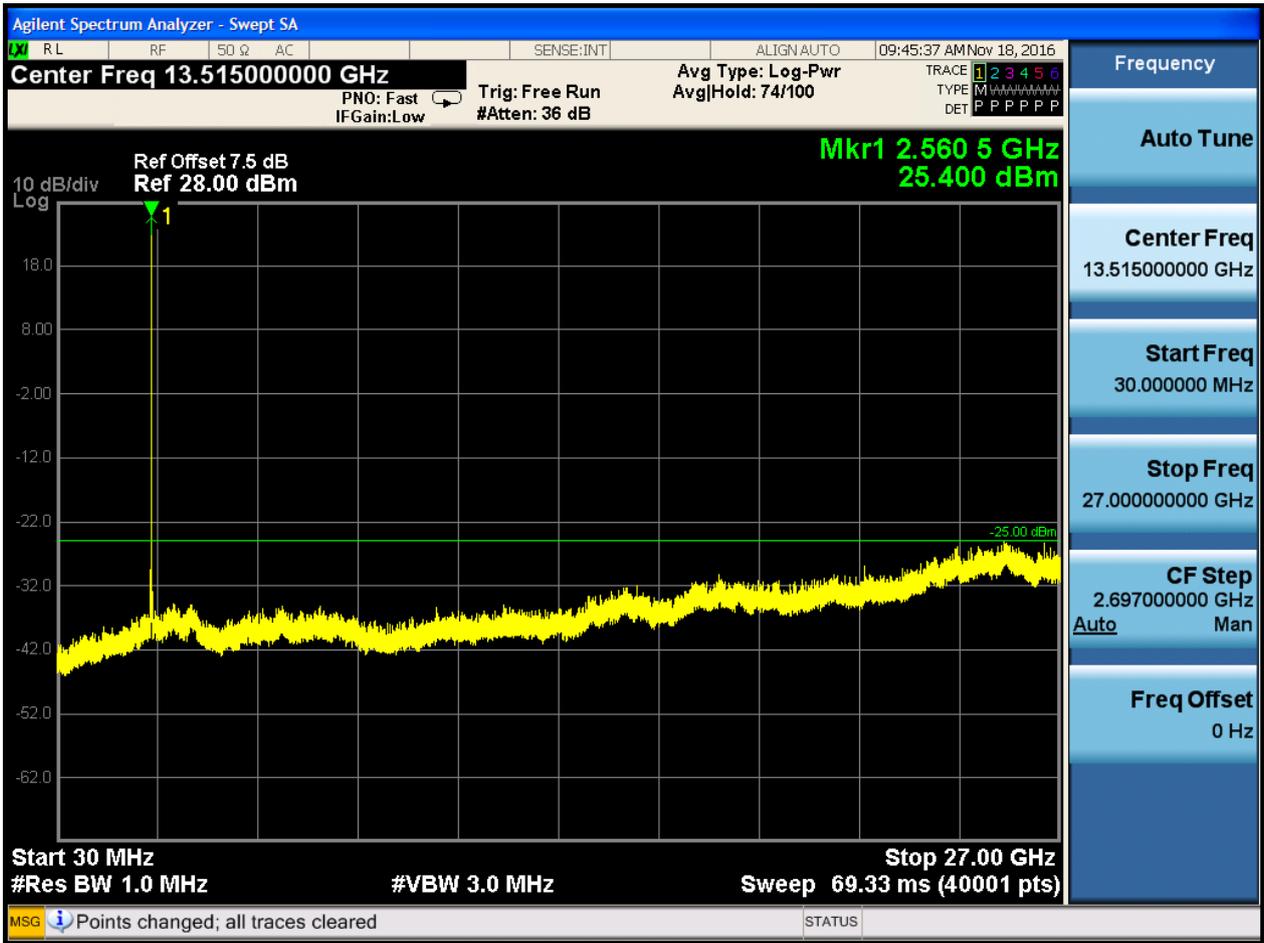




6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0





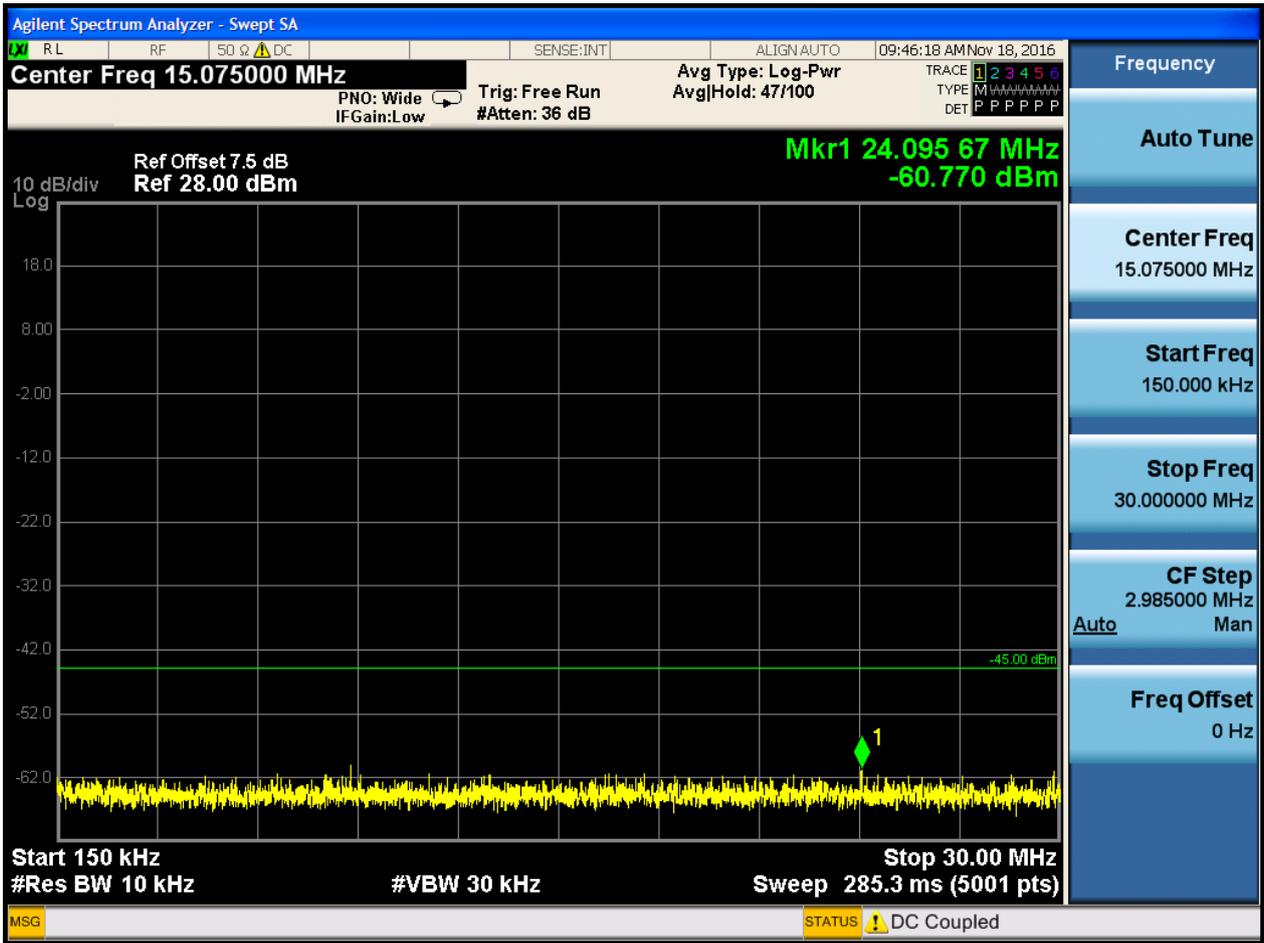


6.1.1.1.3 Test Bandwidth = 15

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0



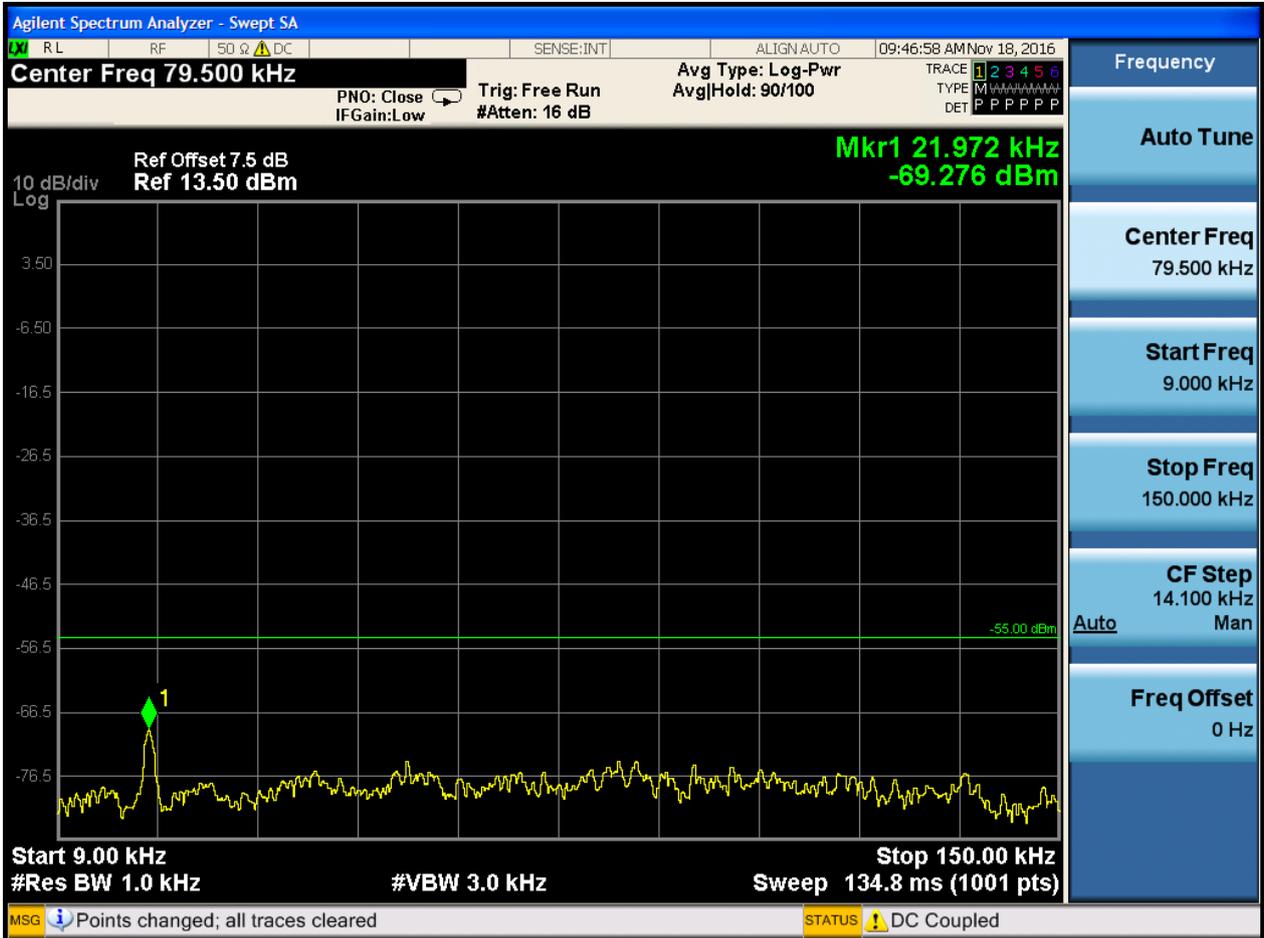


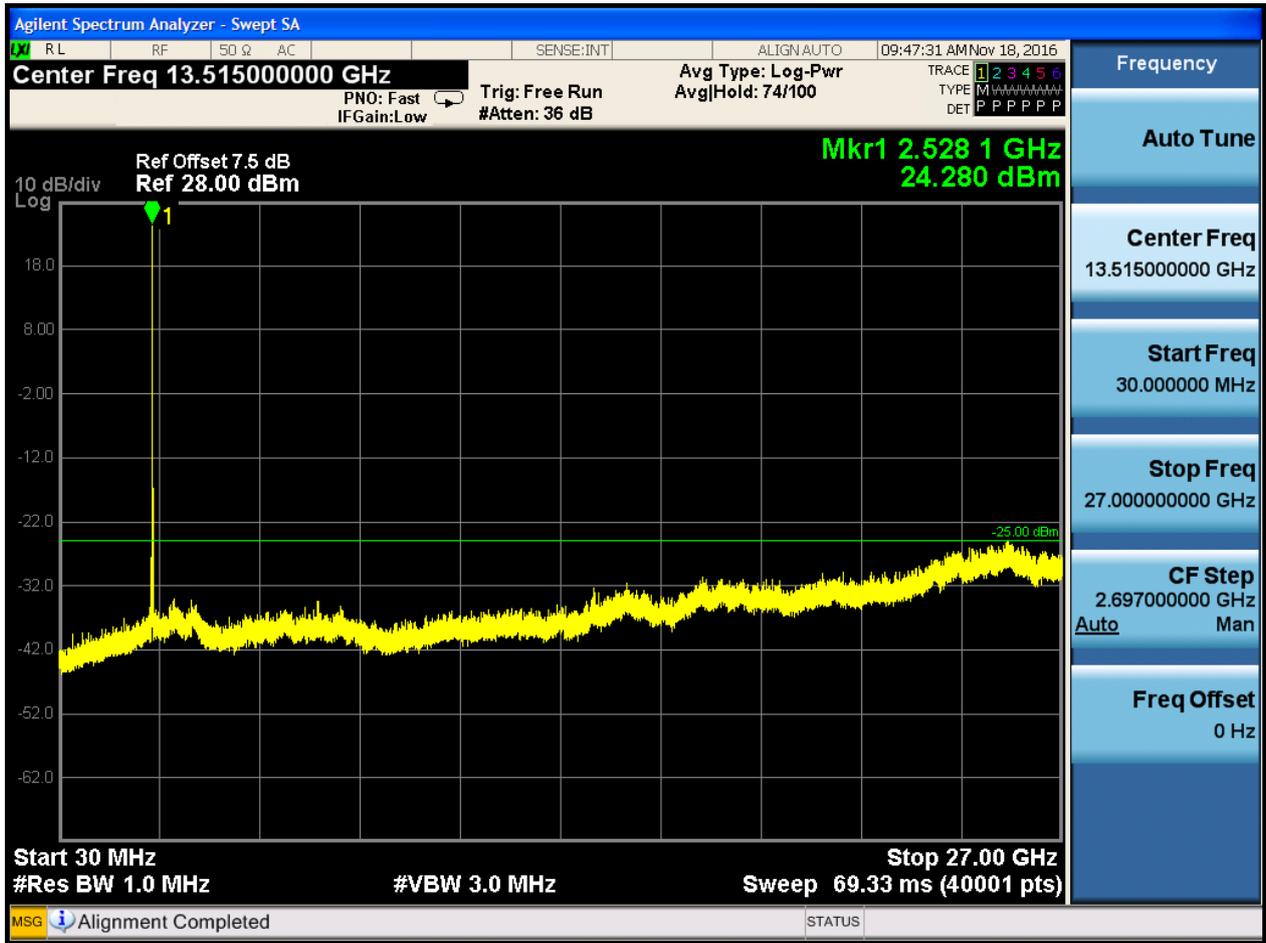




6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0

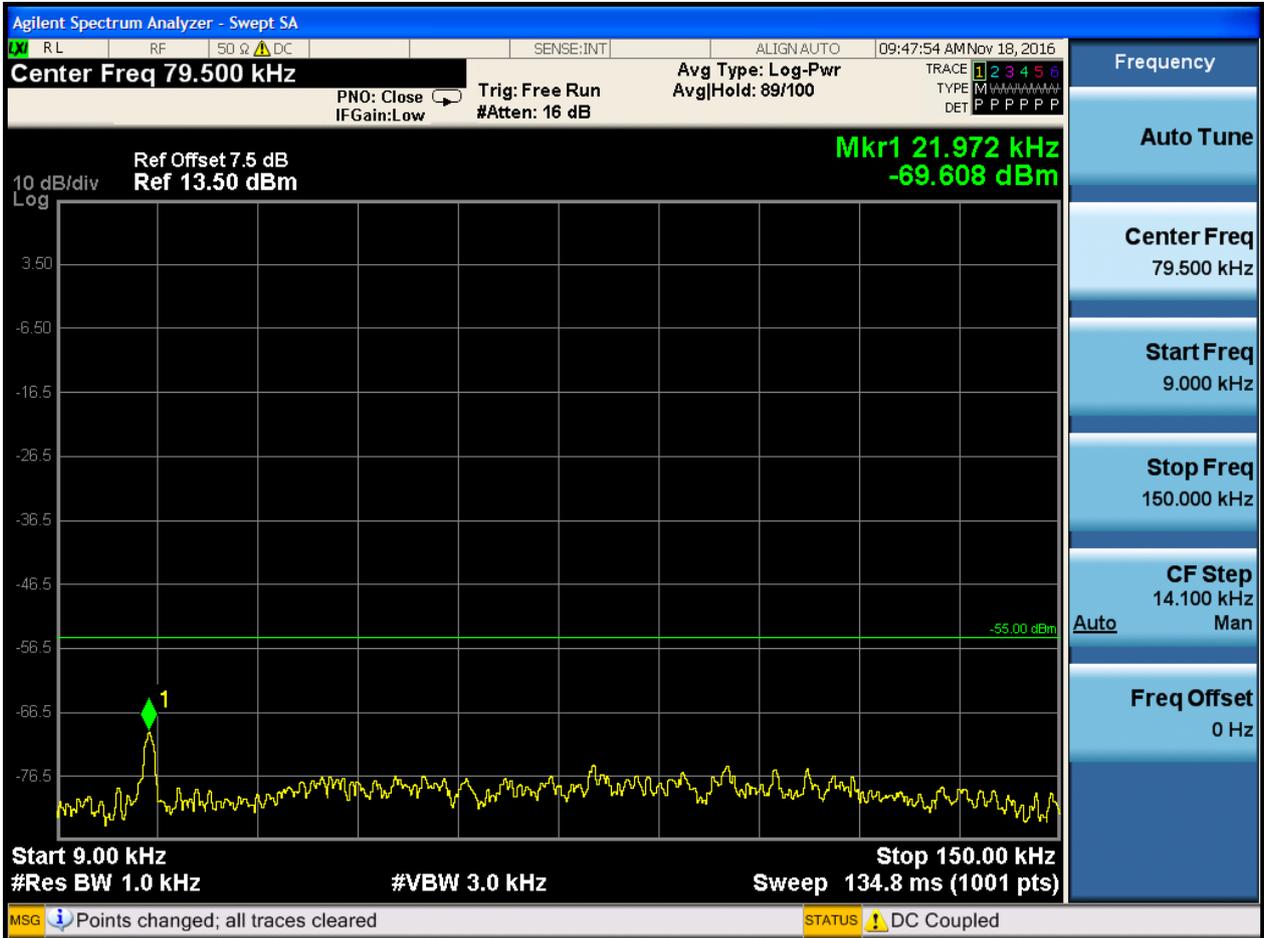


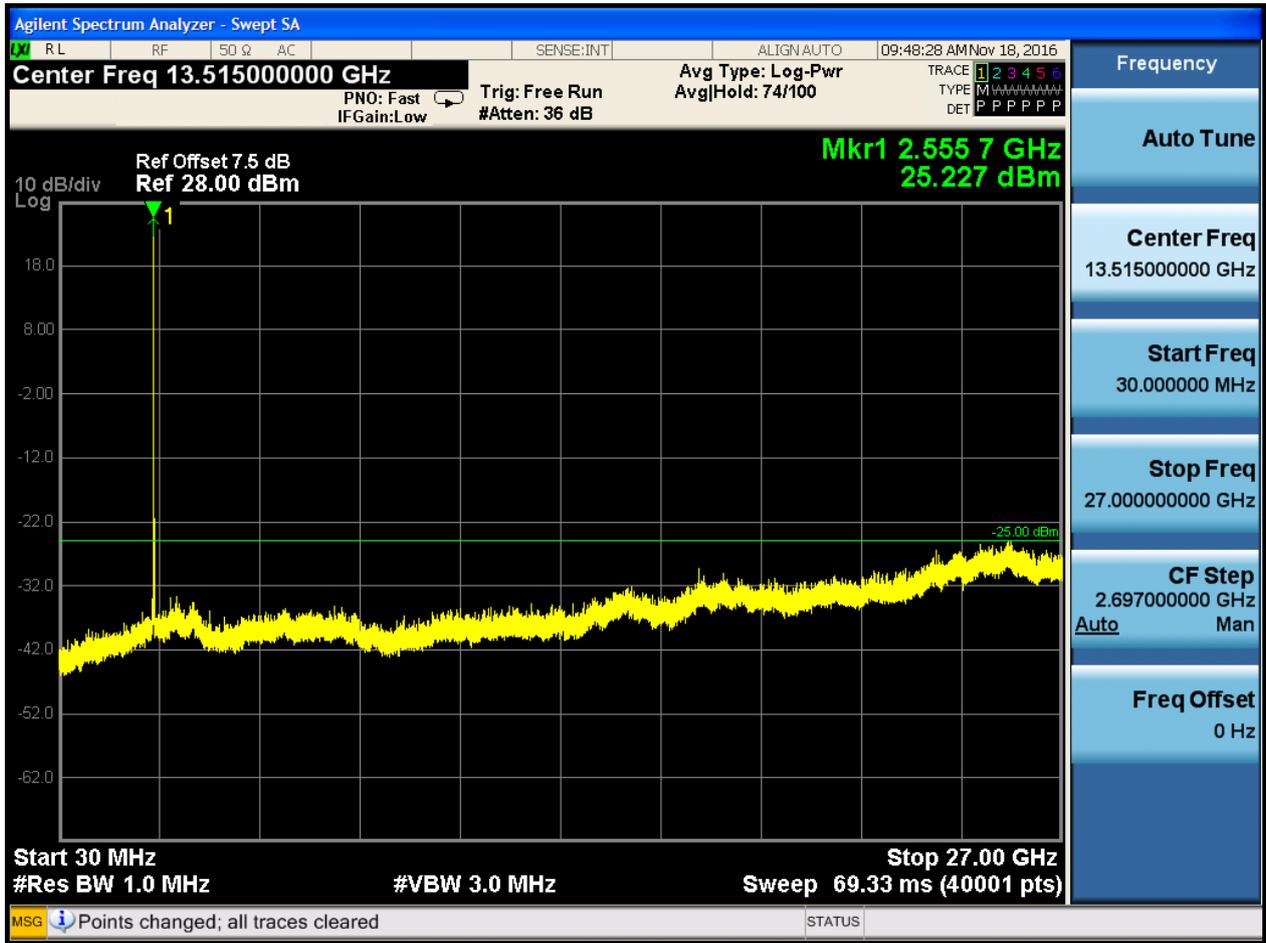




6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0



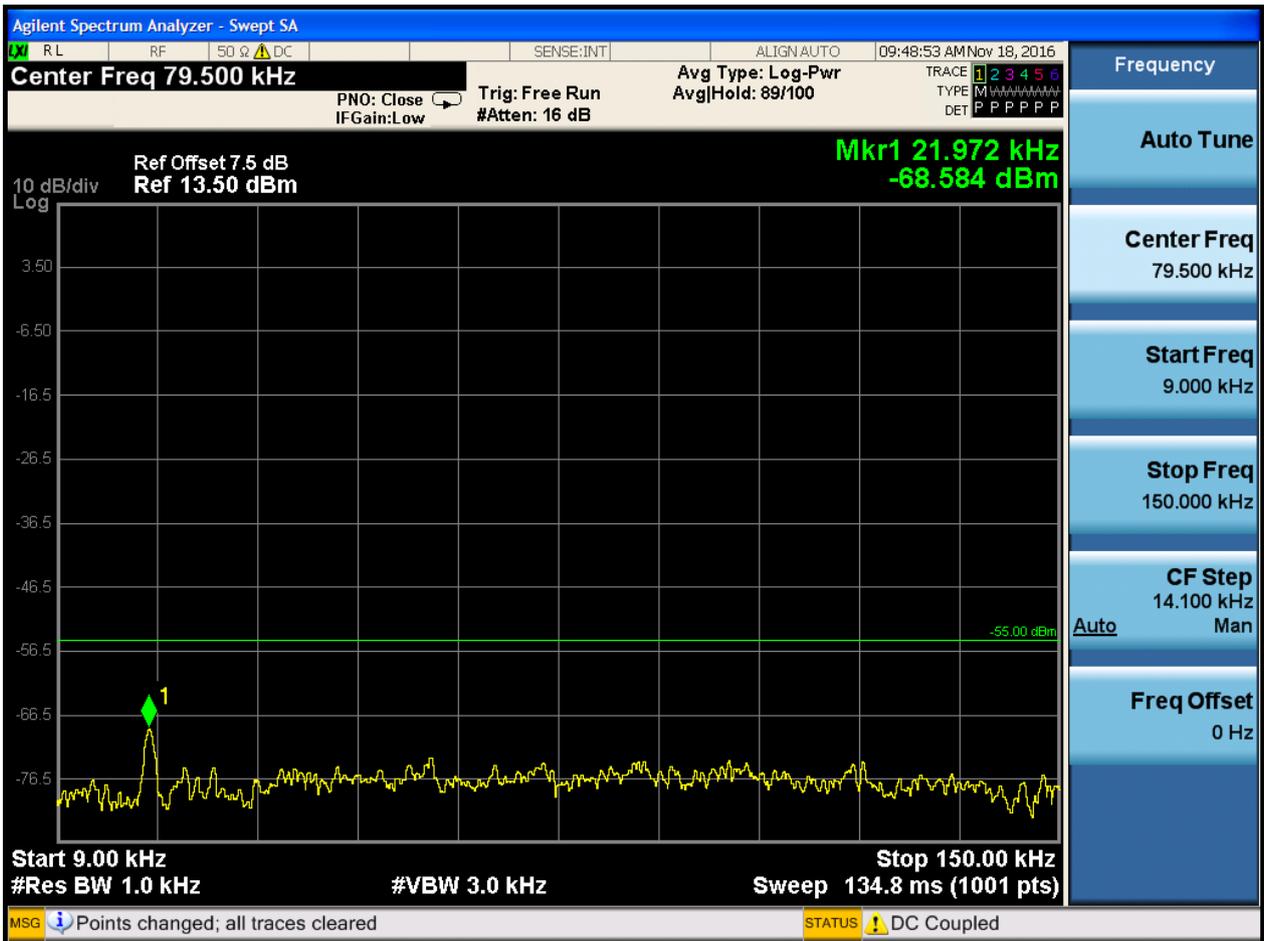


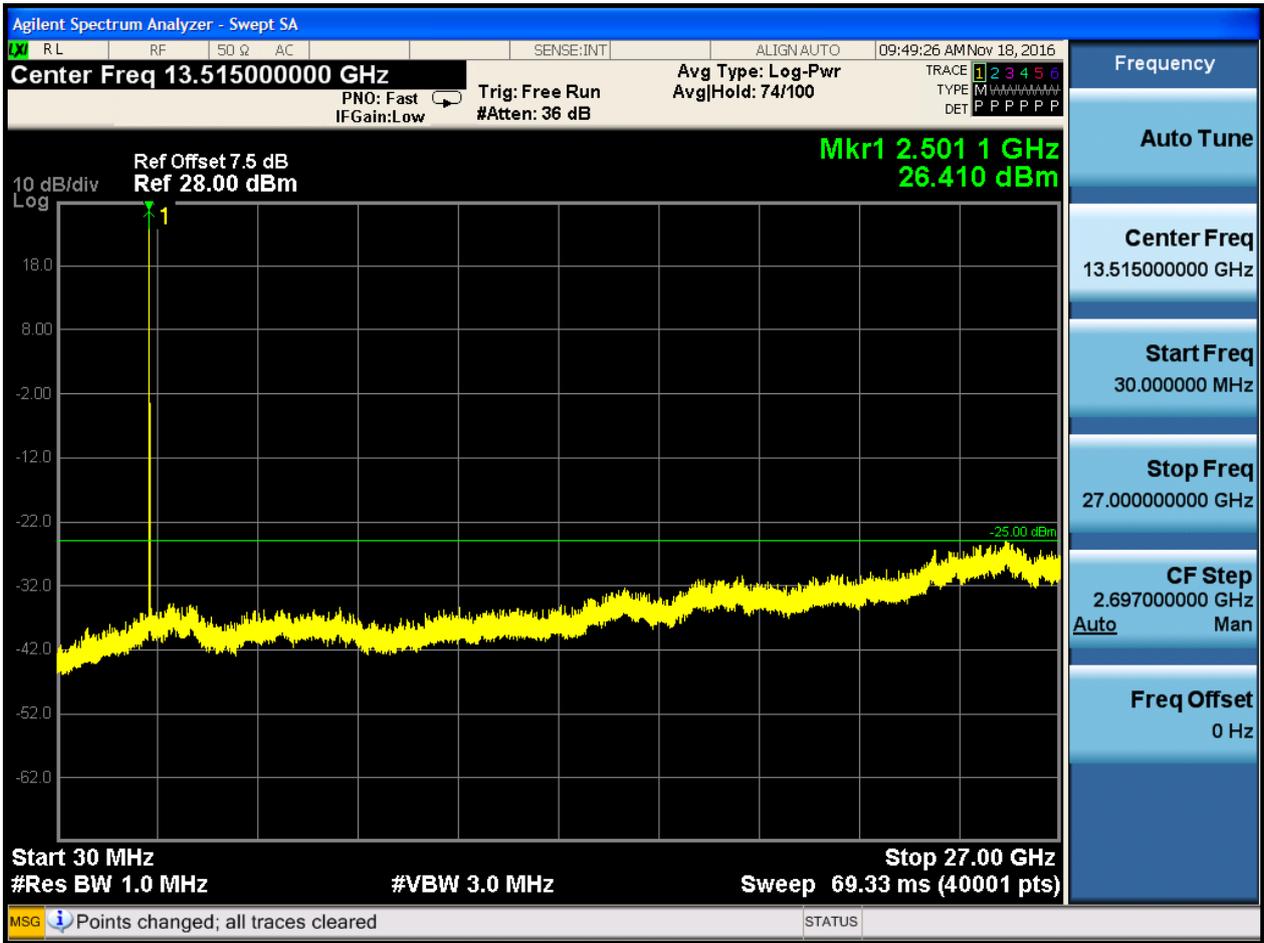


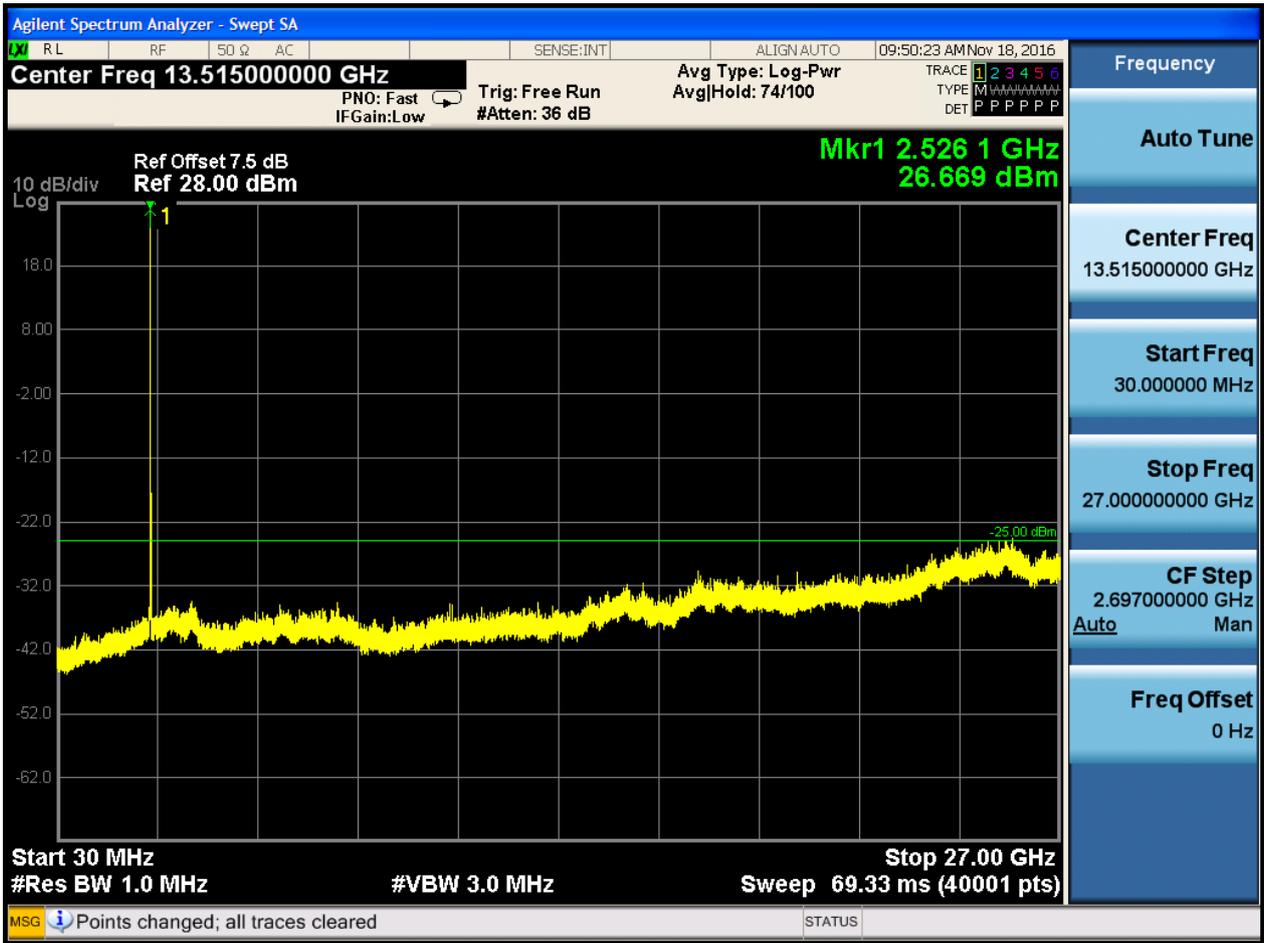
6.1.1.1.4 Test Bandwidth = 20

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0



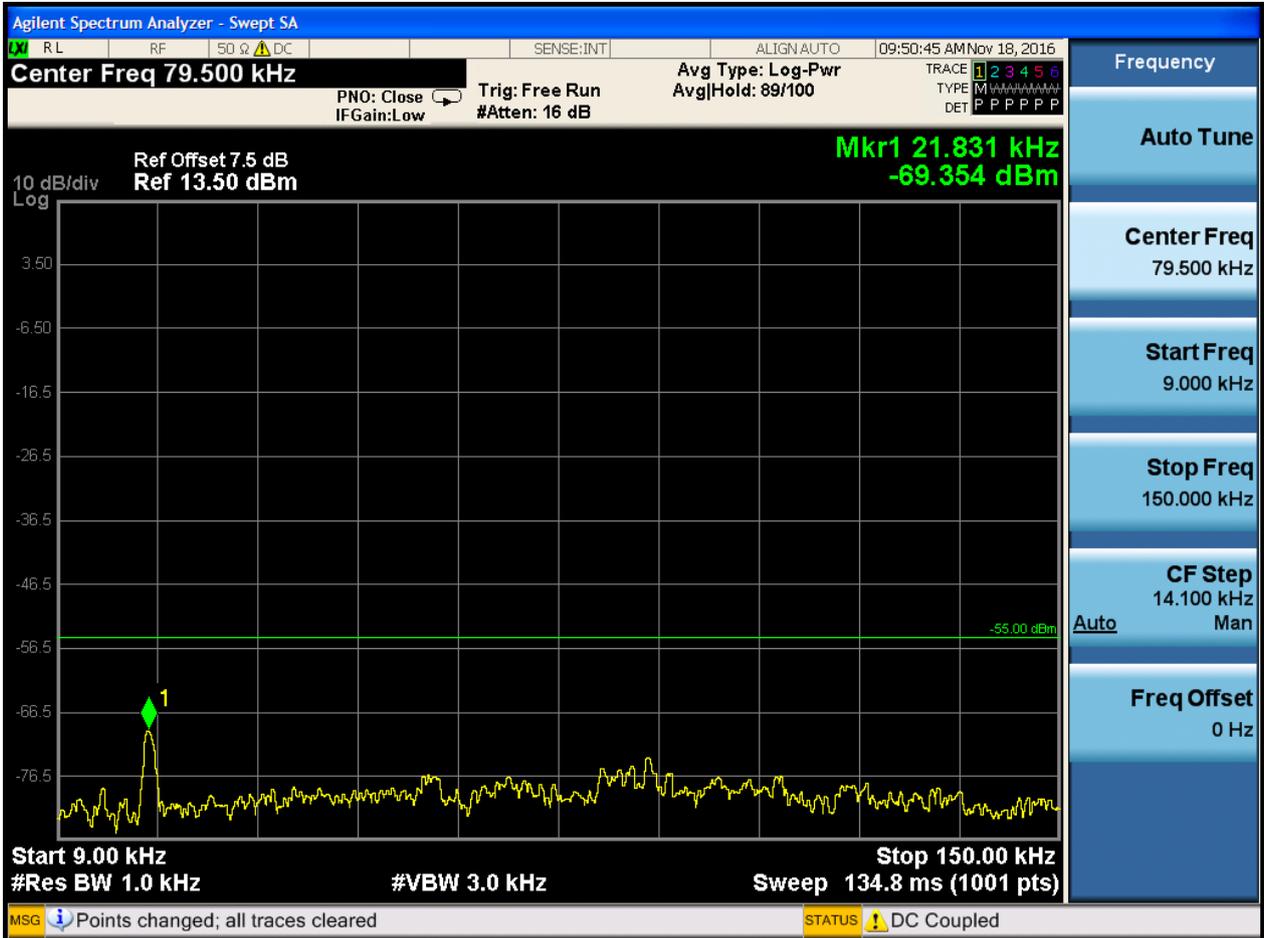






6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0



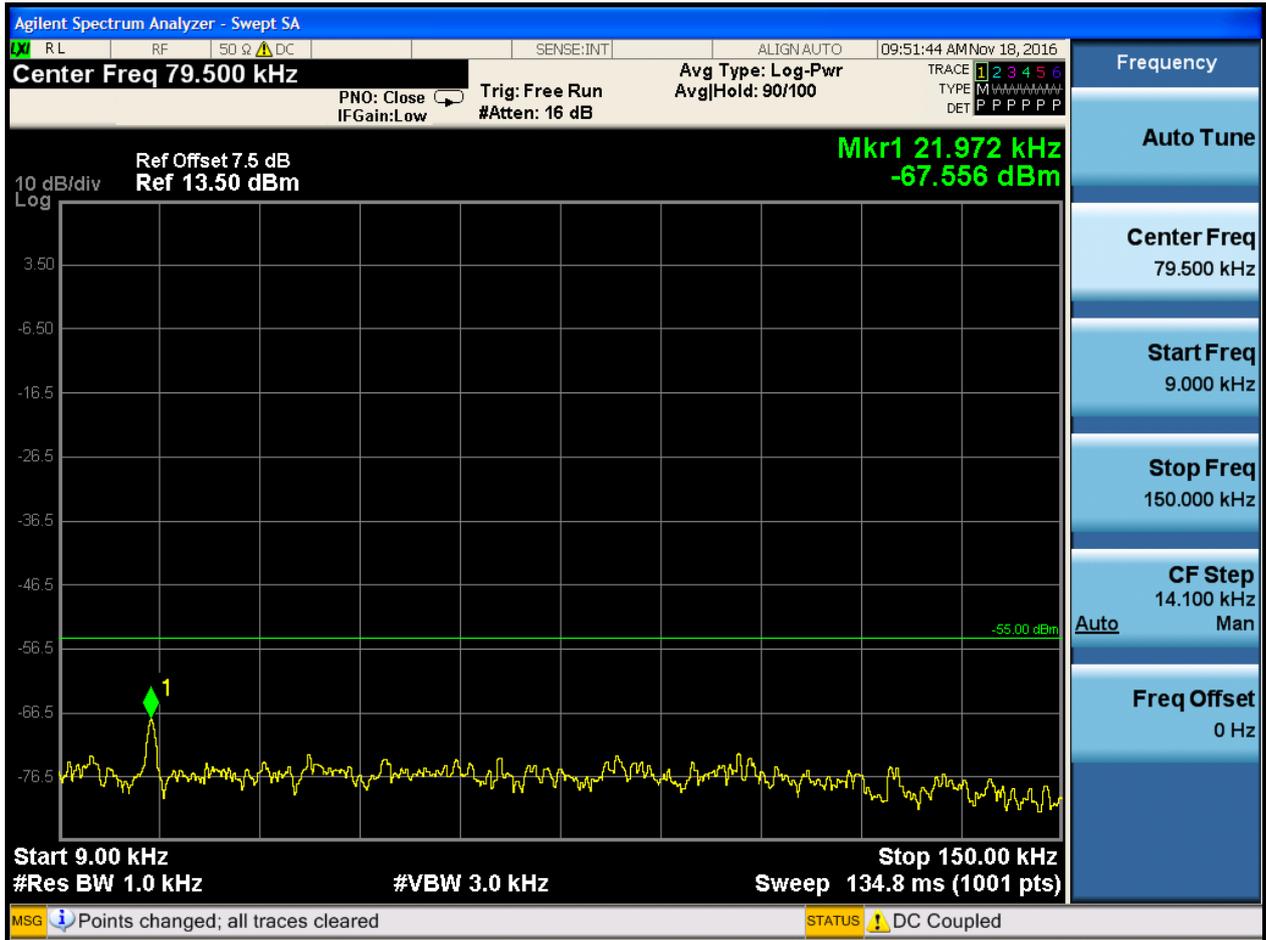


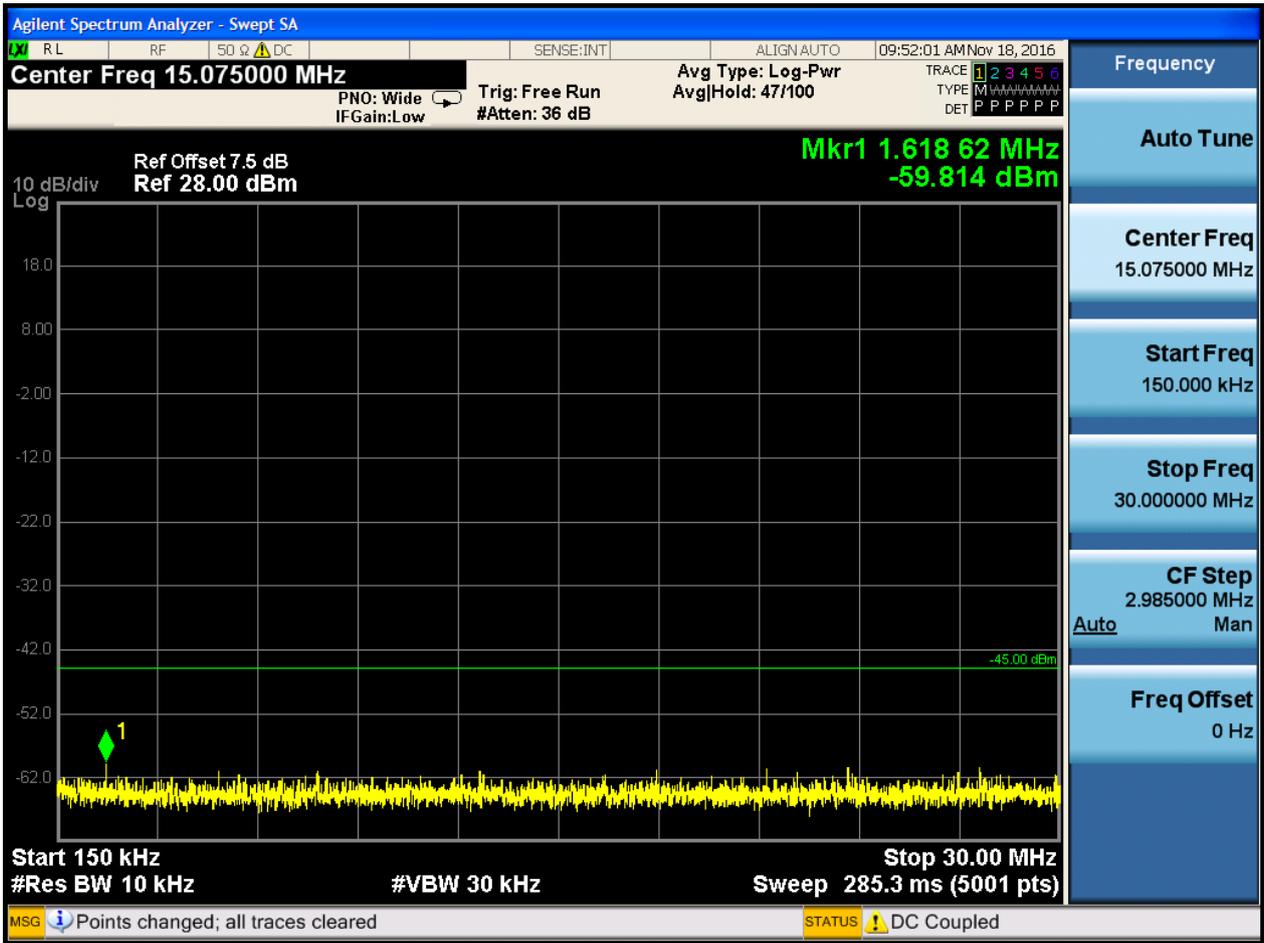
6.1.1.2 Test Mode = LTE/TM2

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



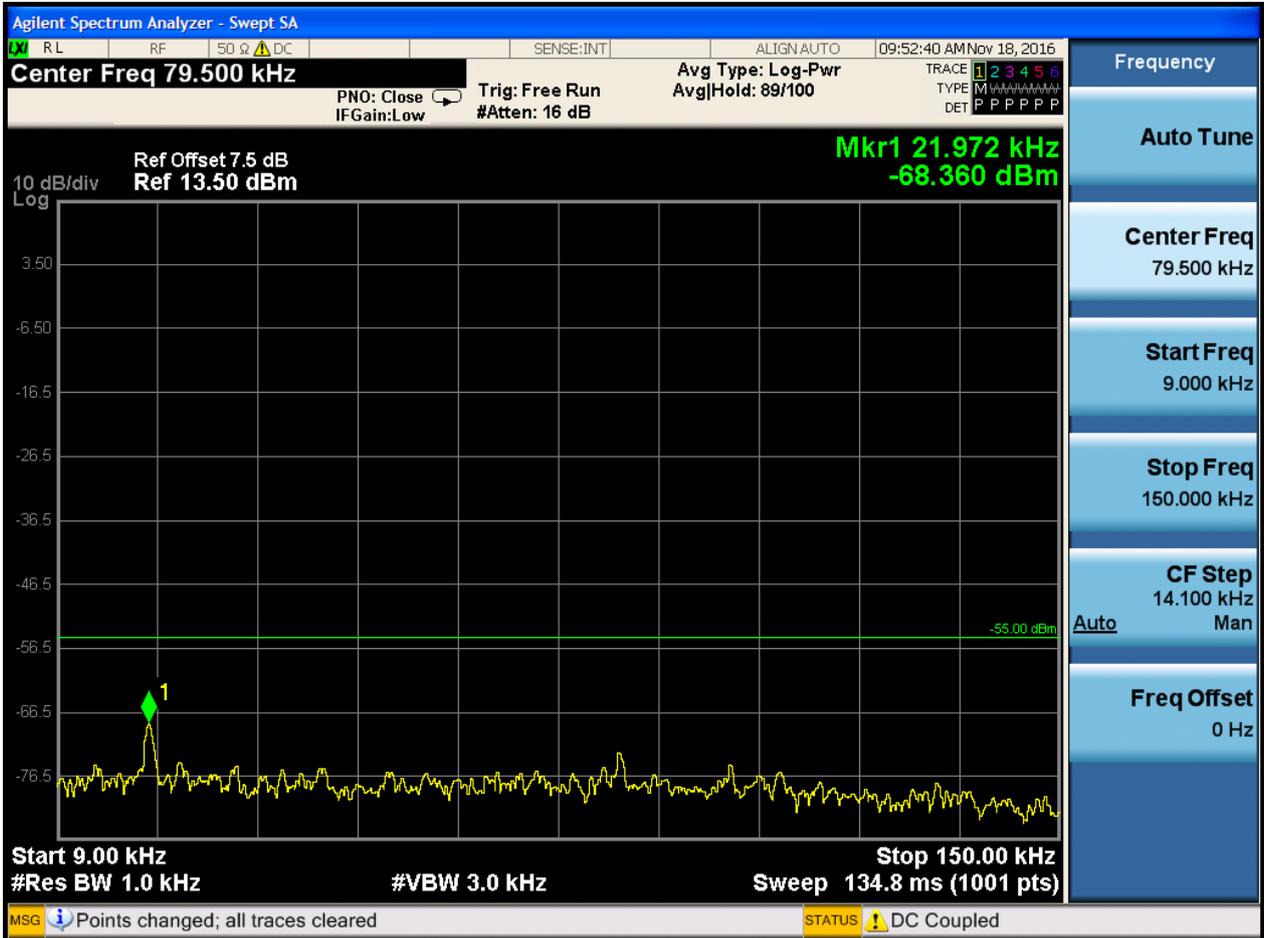




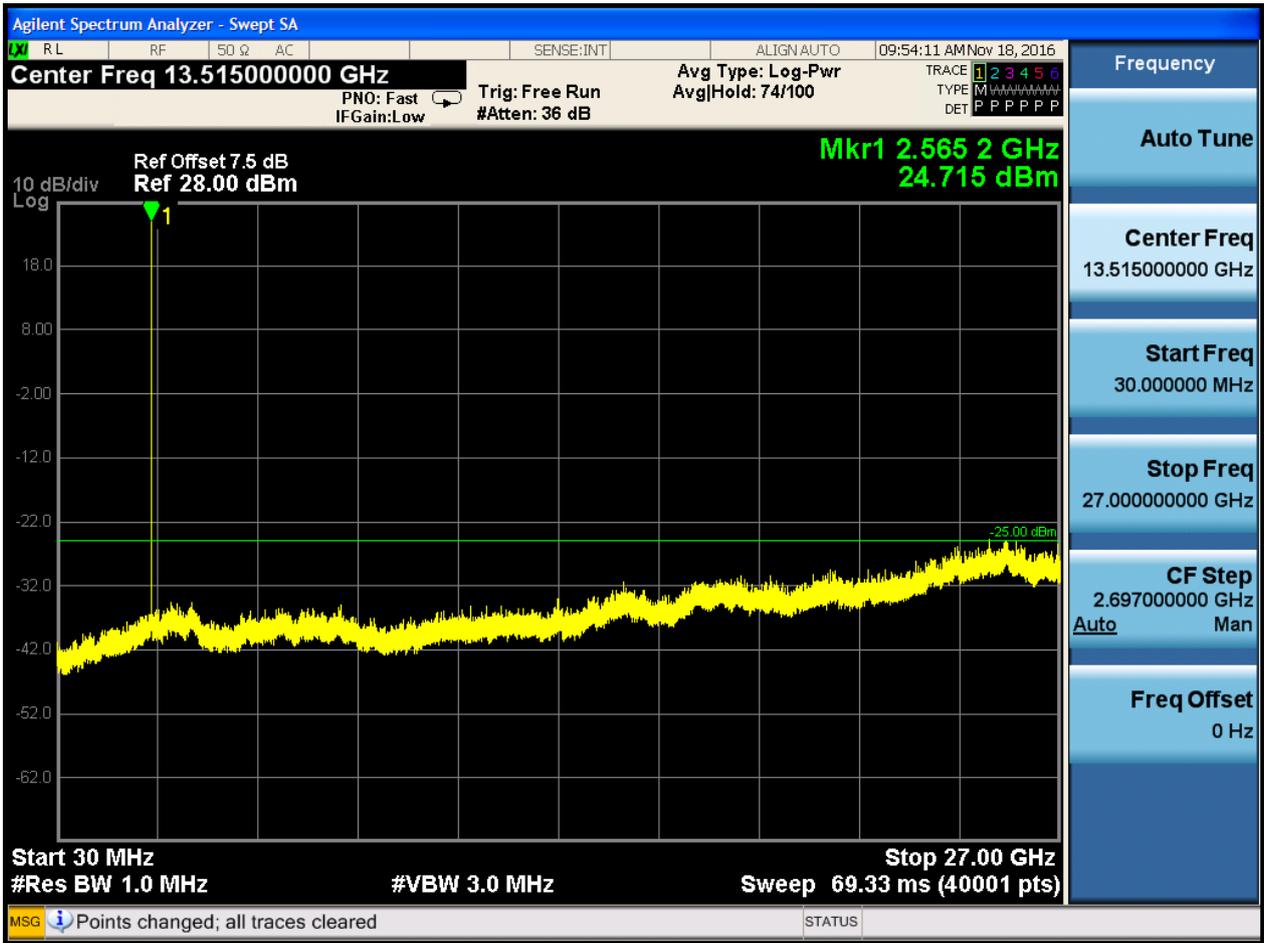


6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0





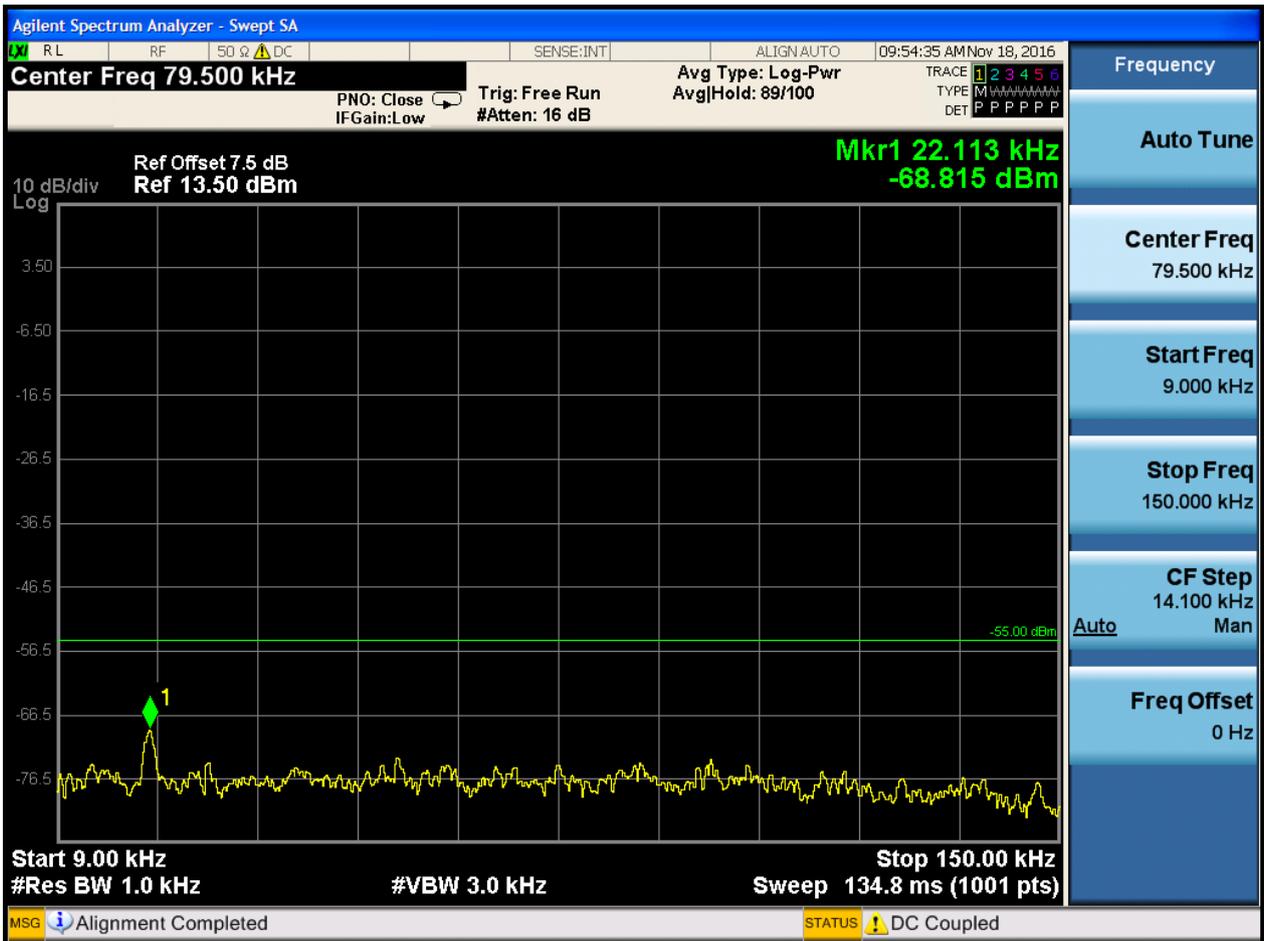


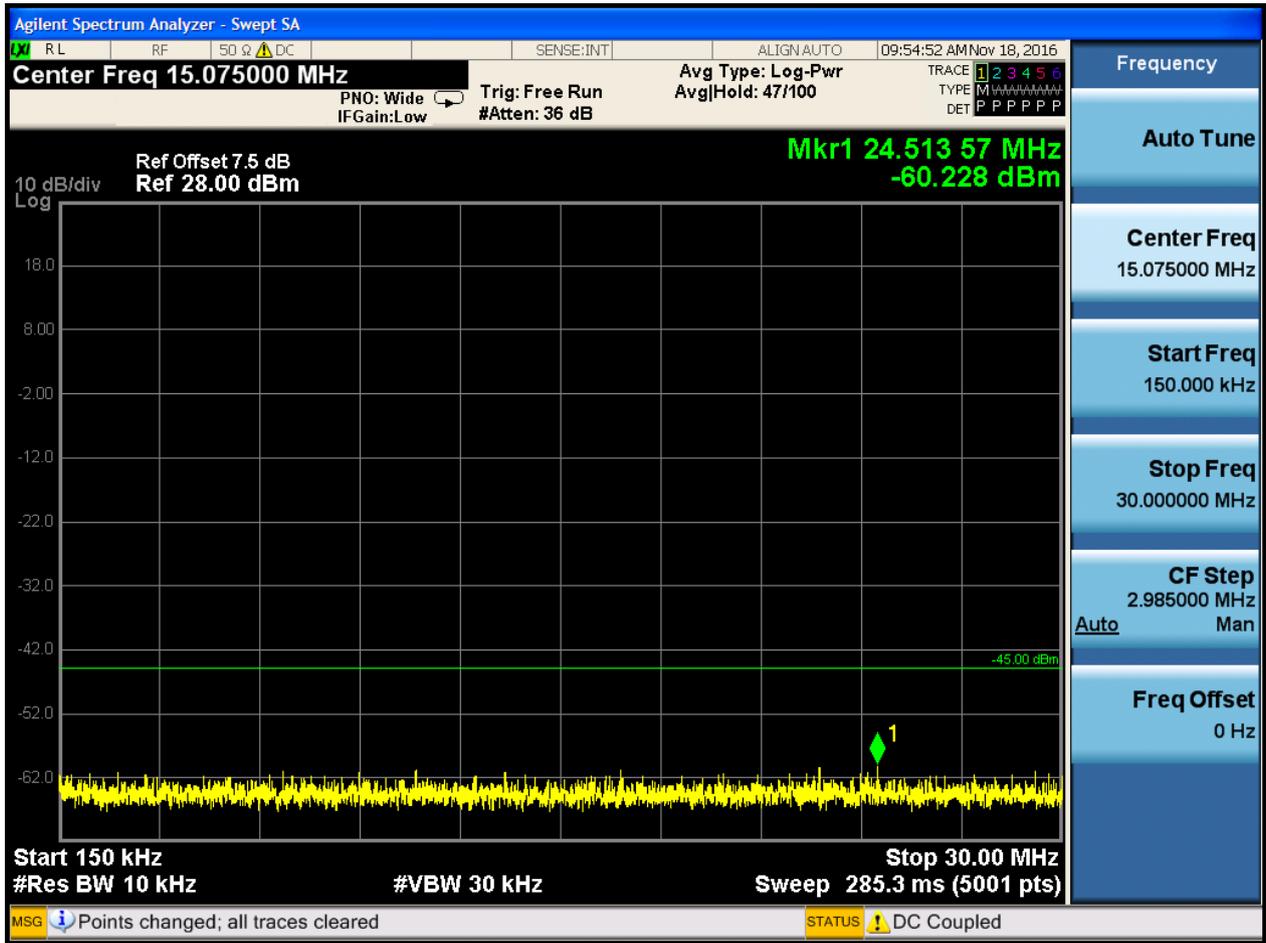


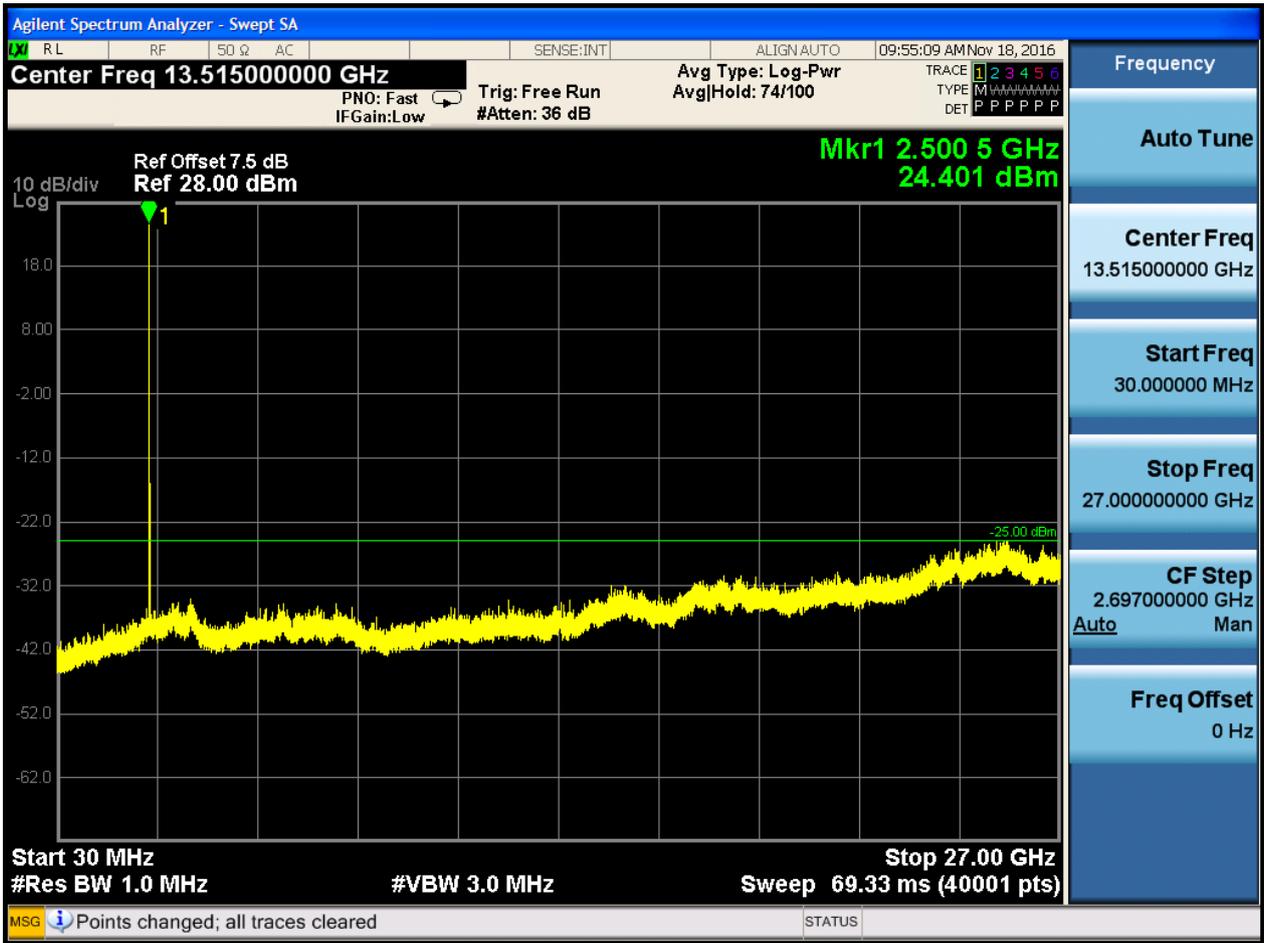
6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



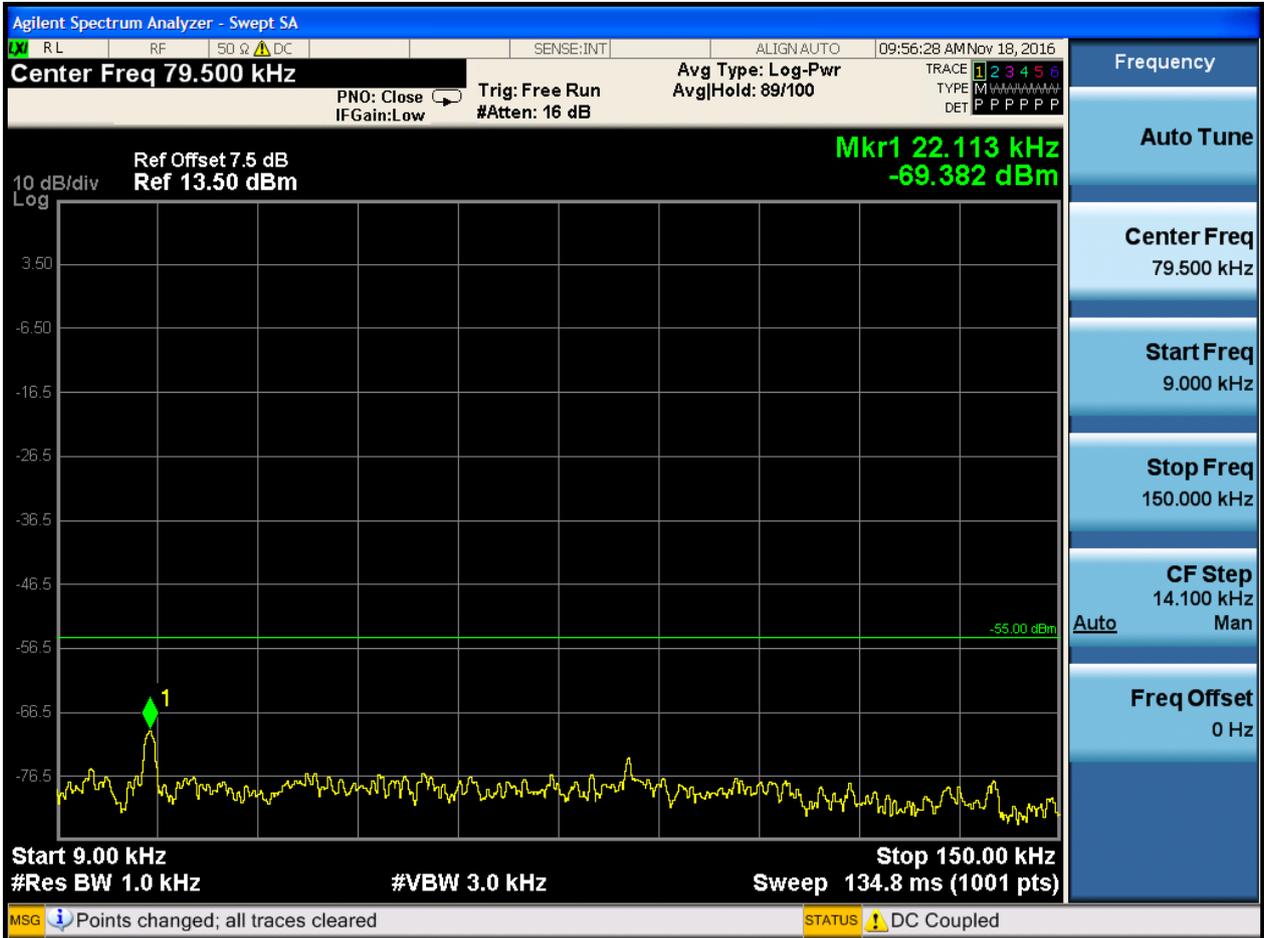






6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0





6.1.1.2.3 Test Bandwidth = 15

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0

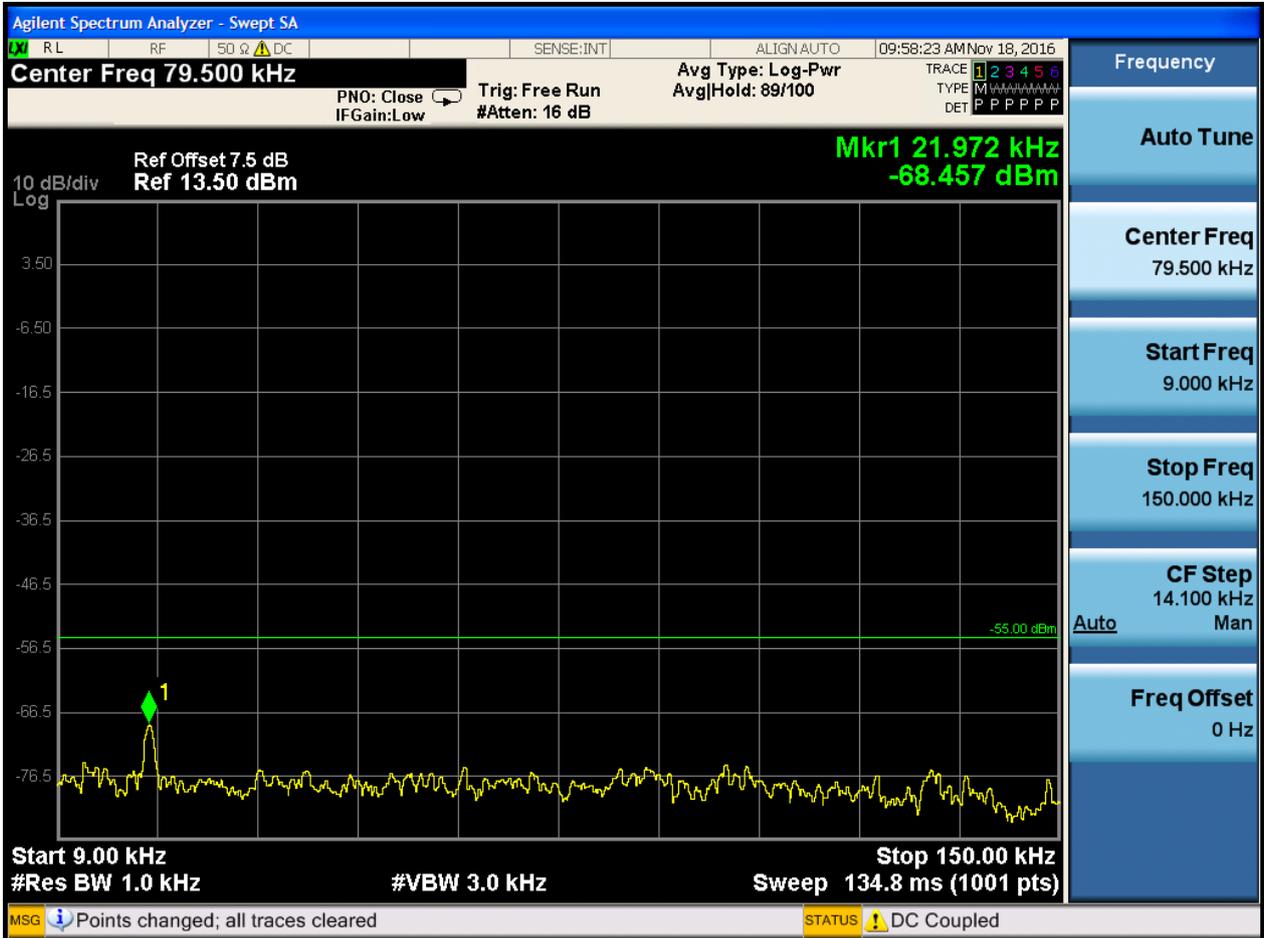


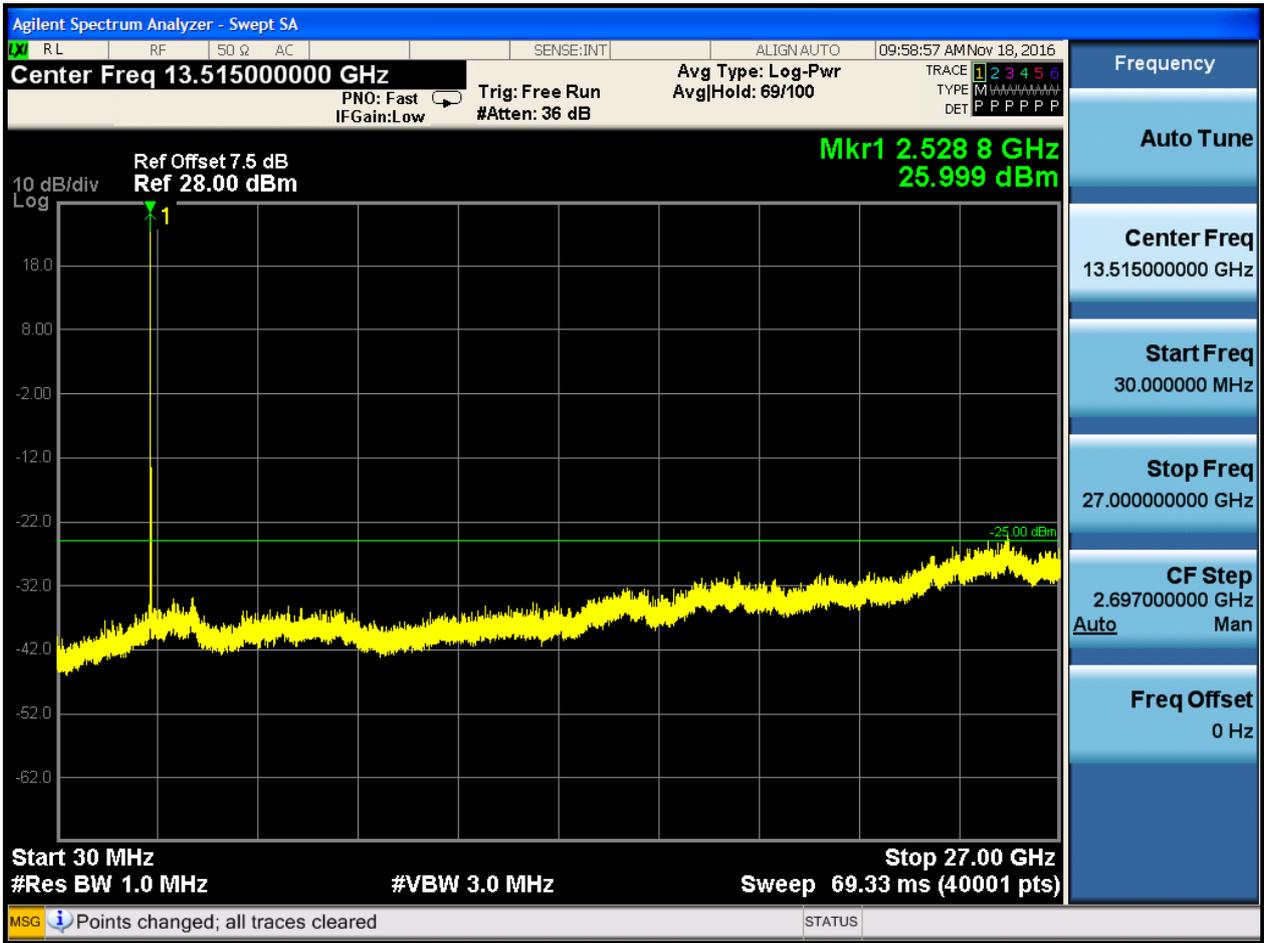




6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0

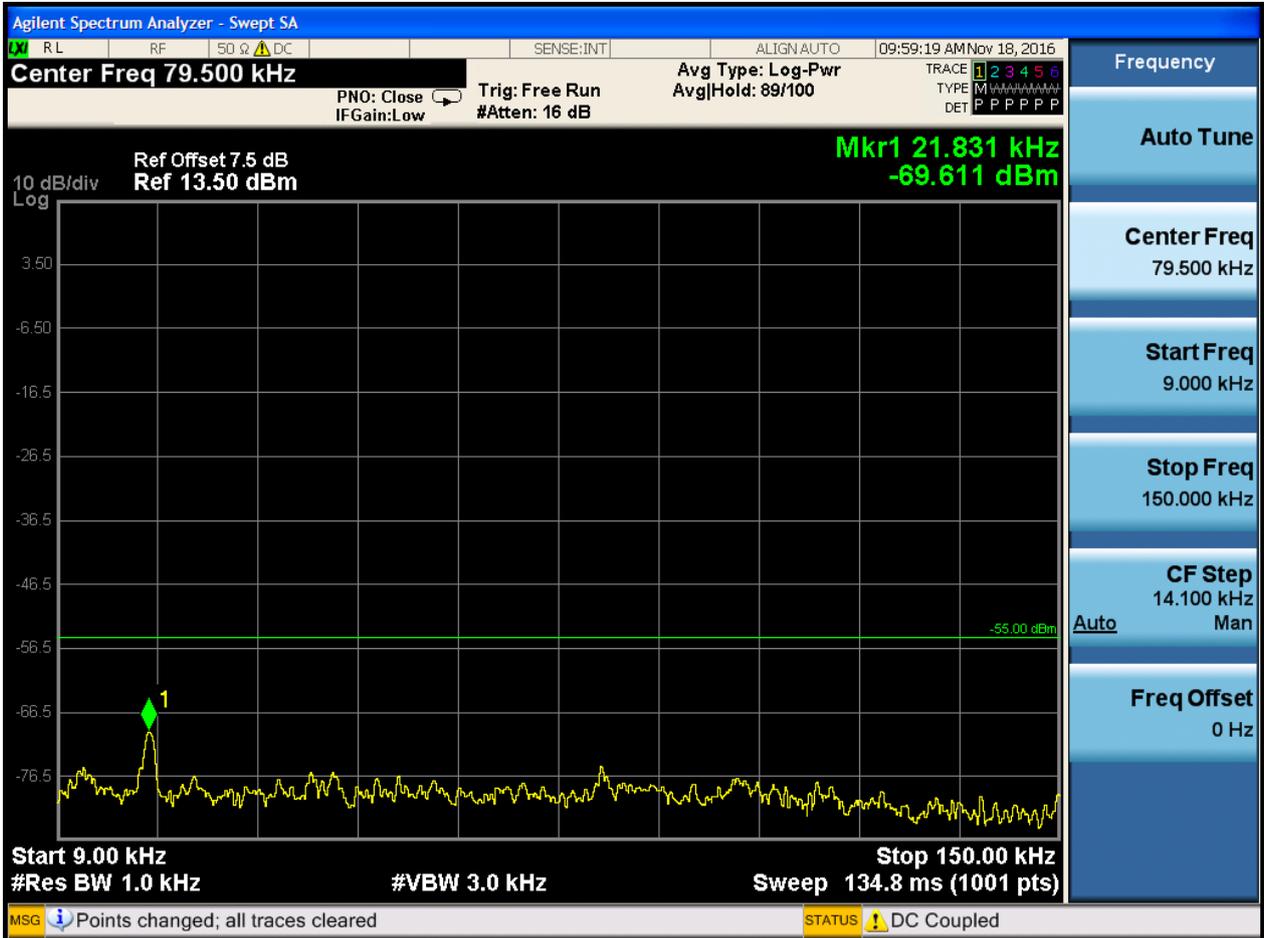


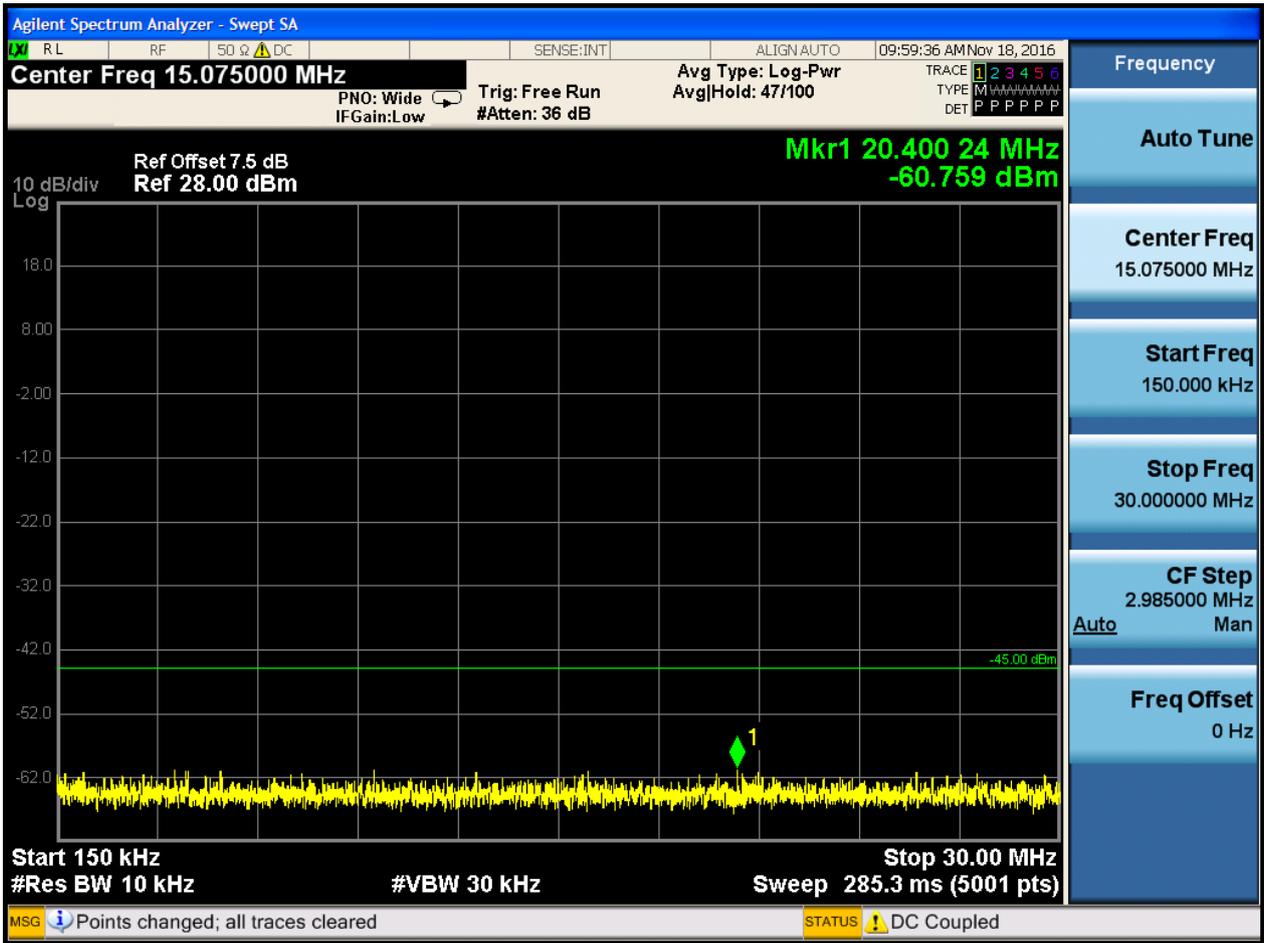


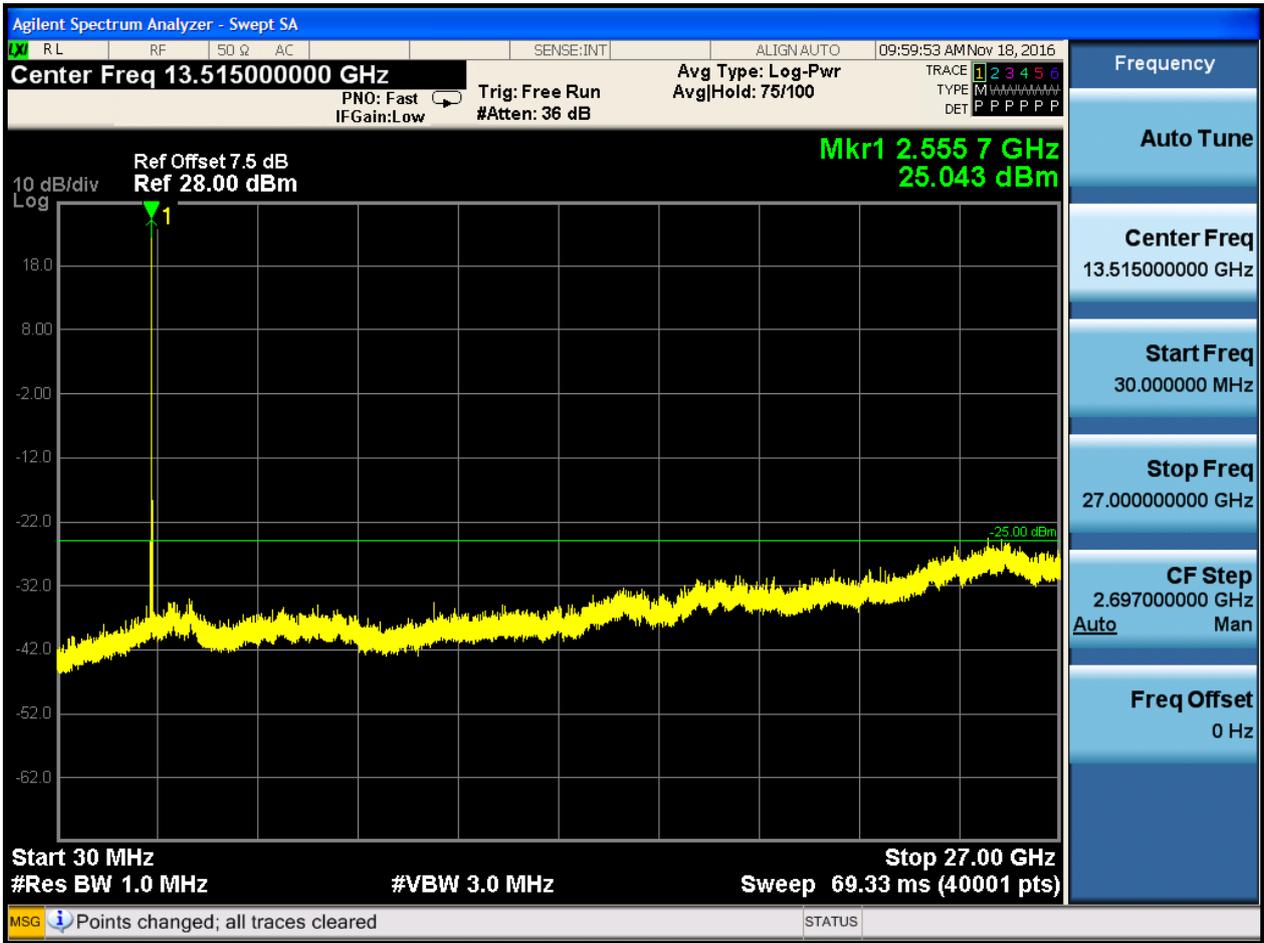


6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0





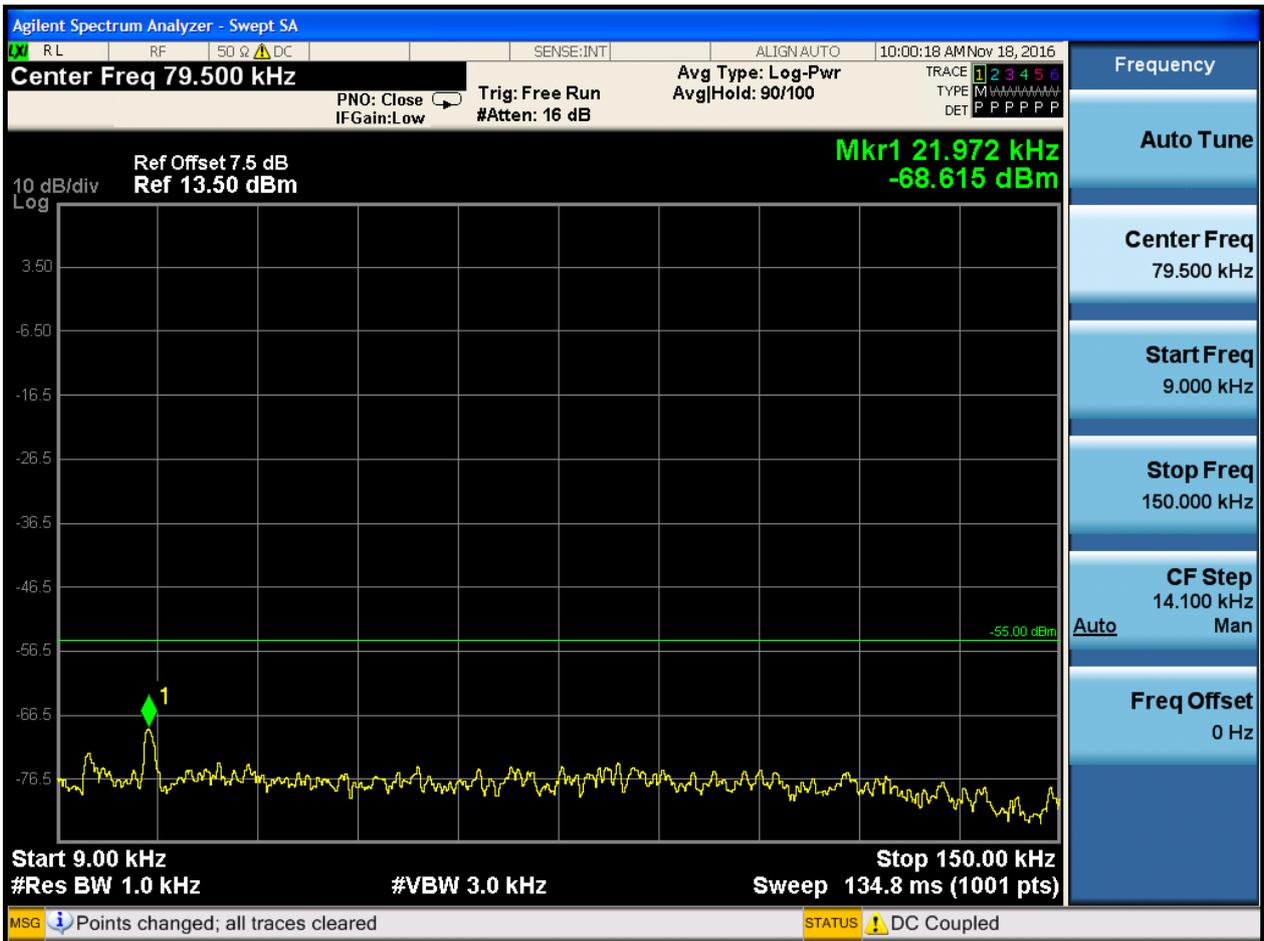




6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

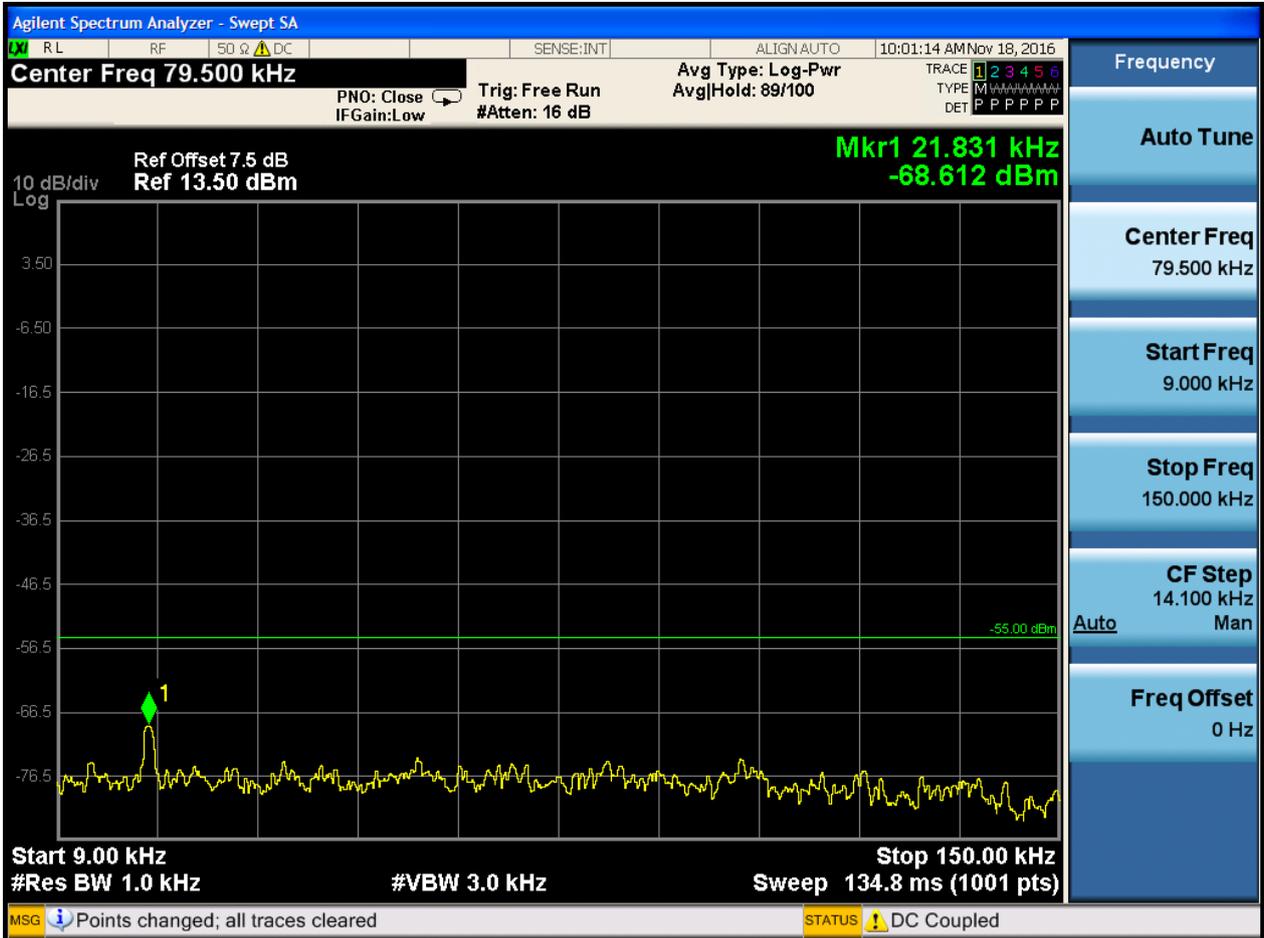
6.1.1.2.4.1.1 Test RB = RB1#0

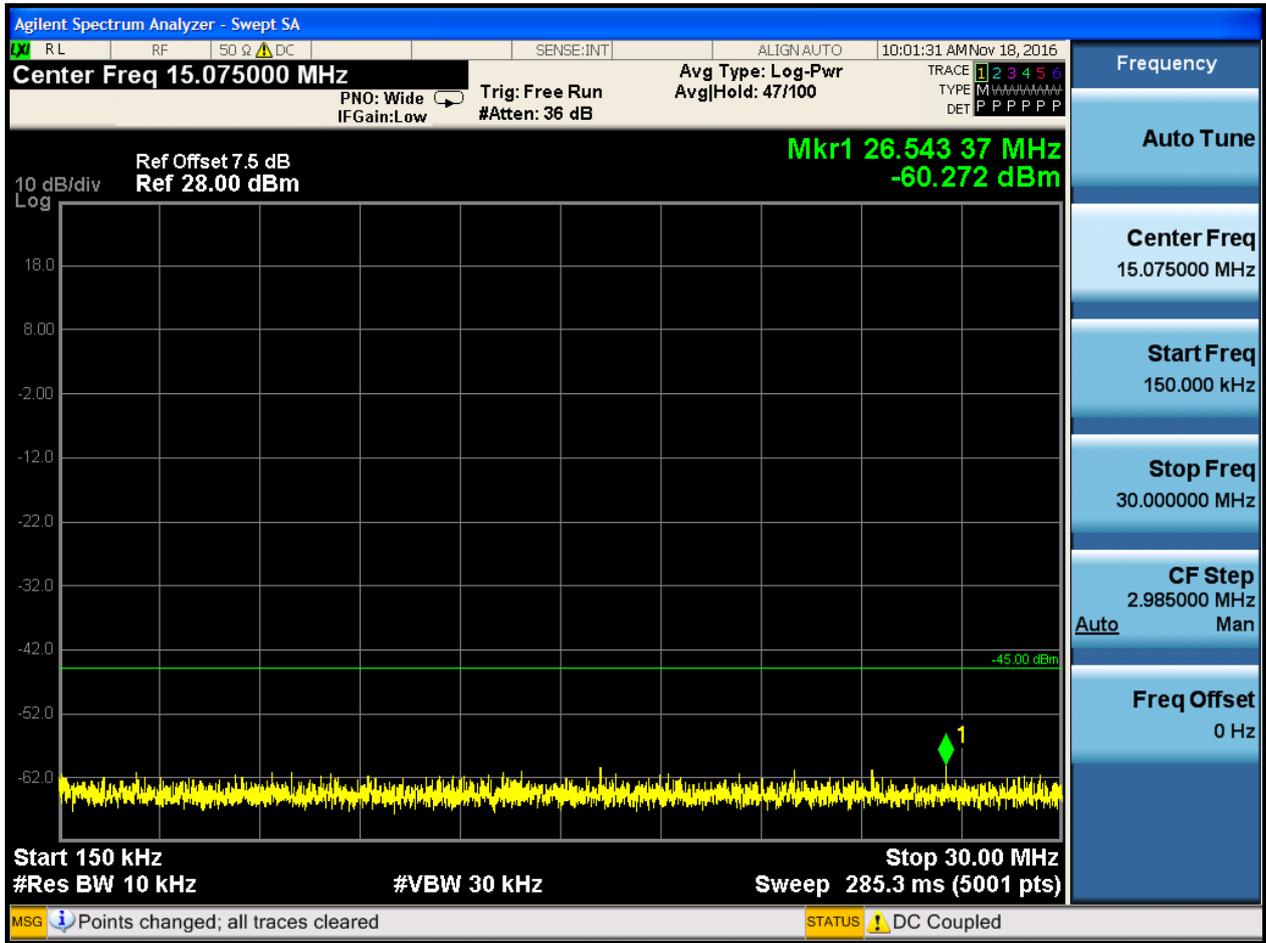


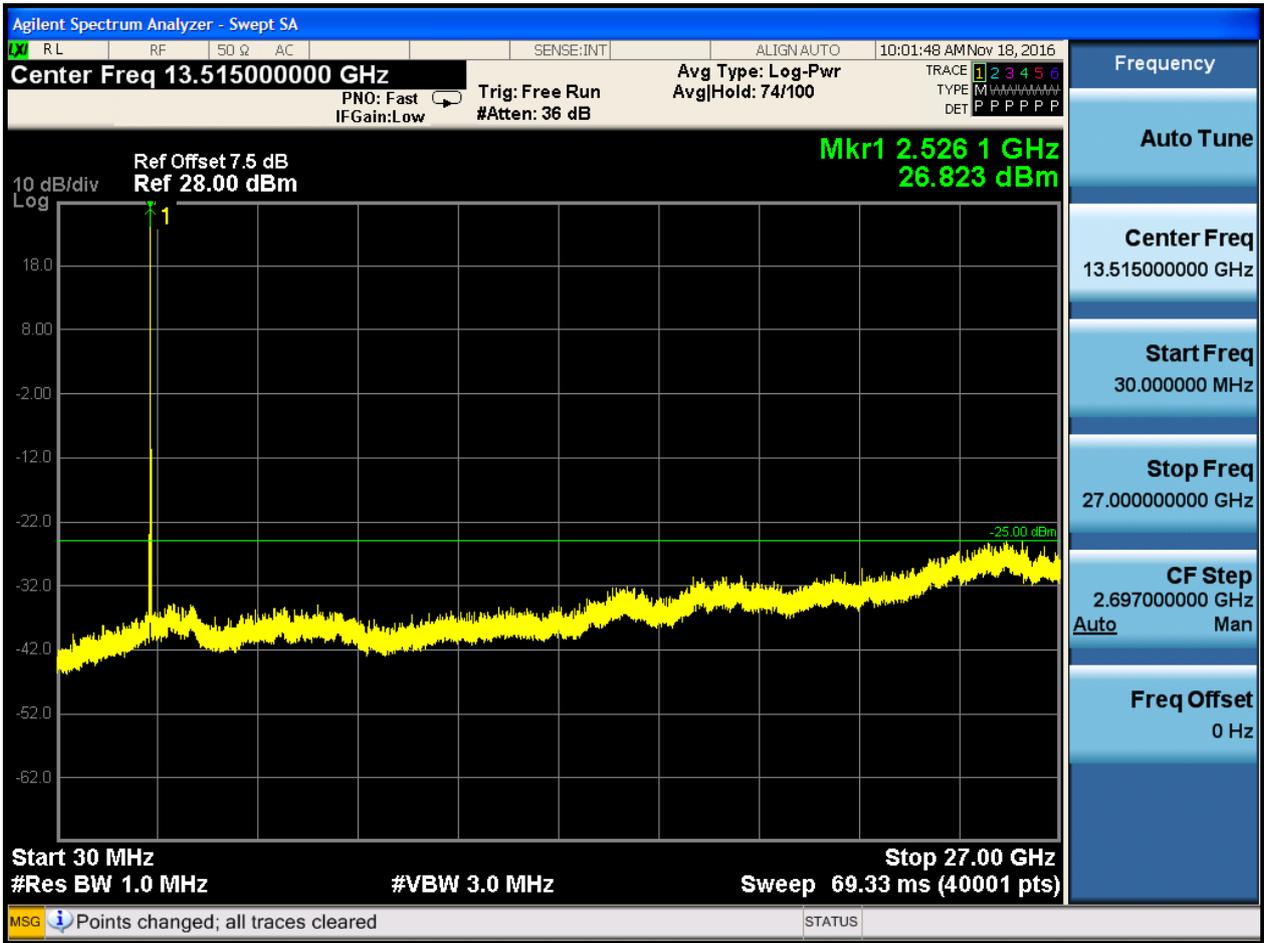


6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0



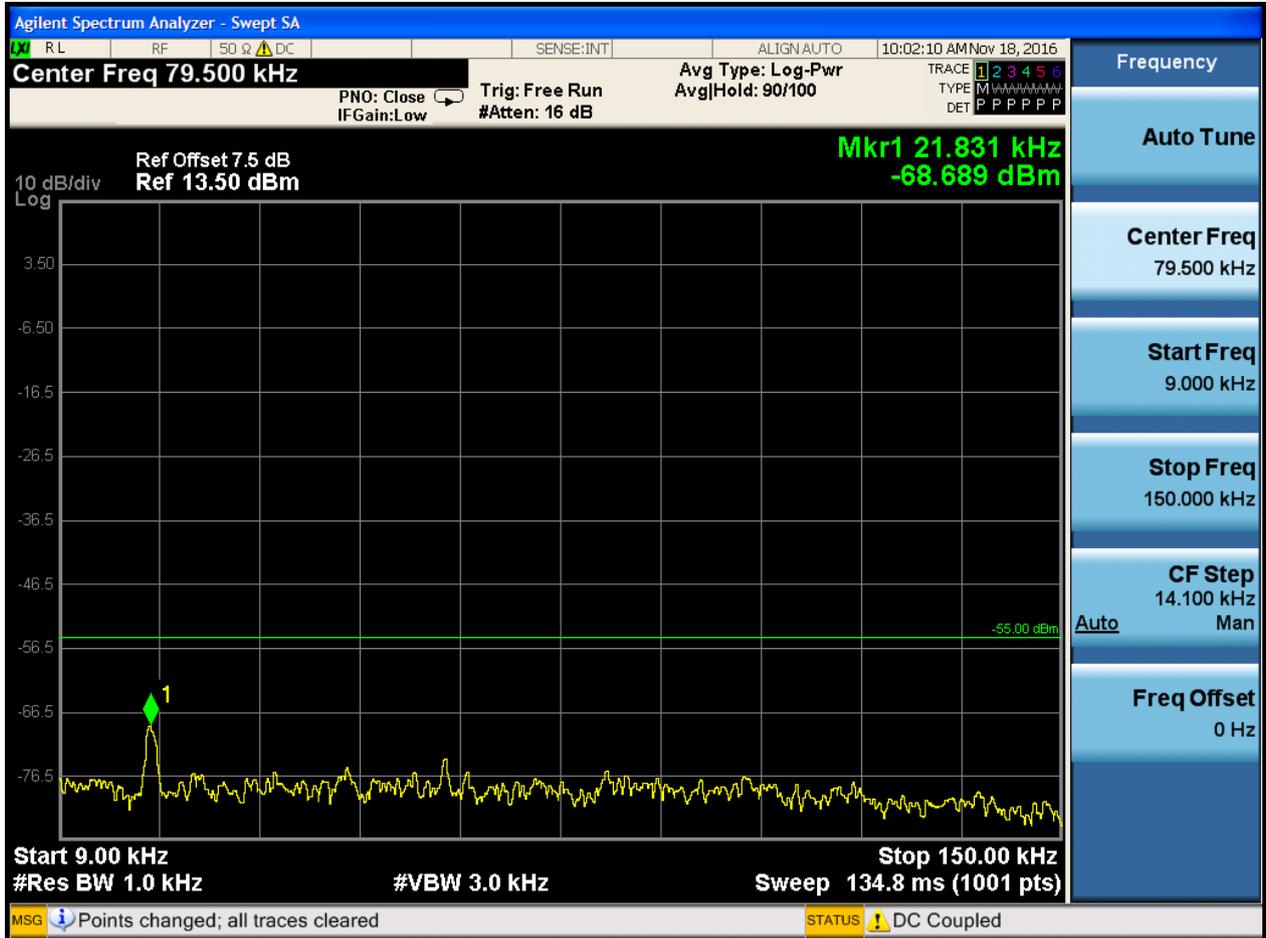


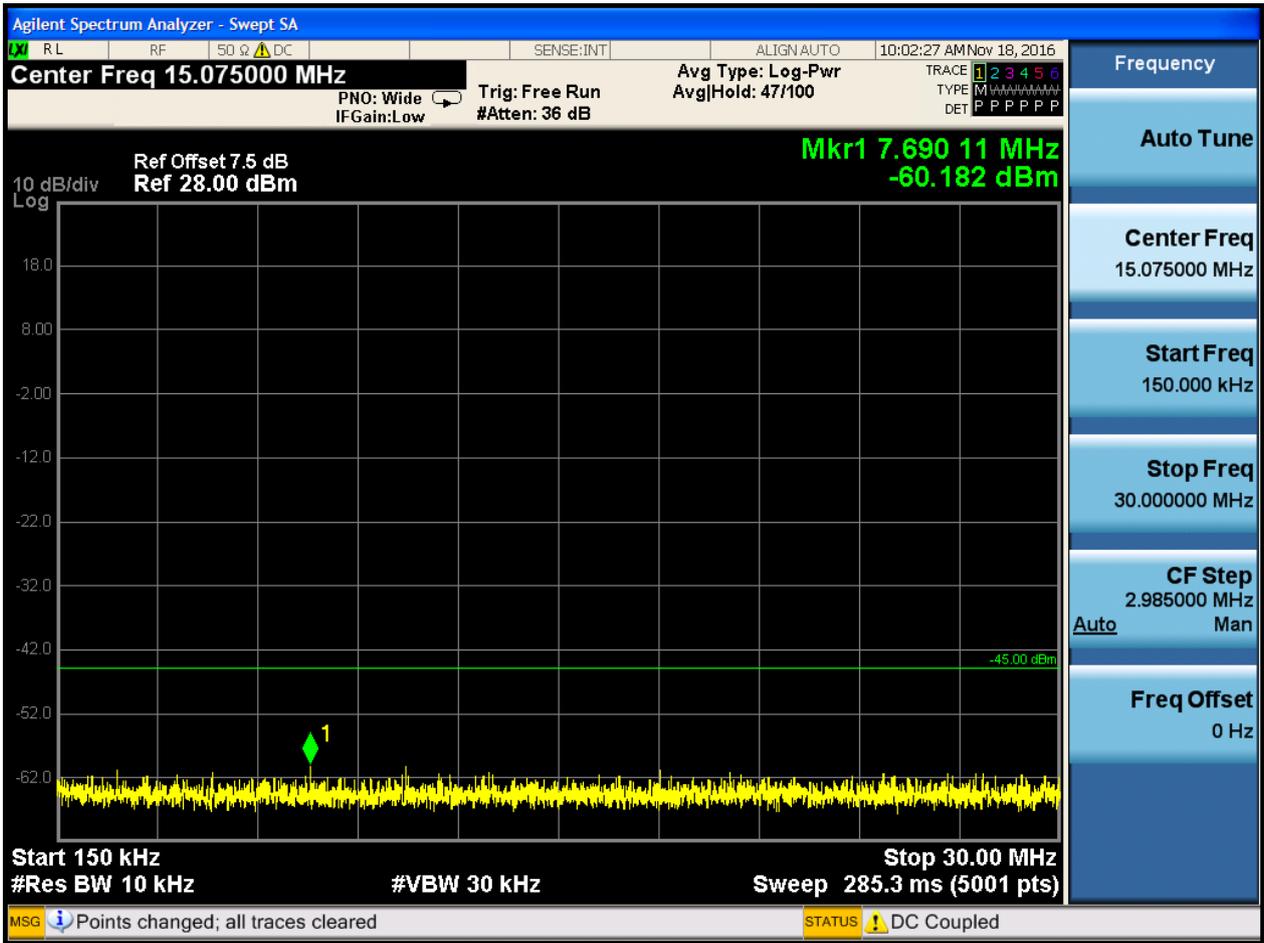


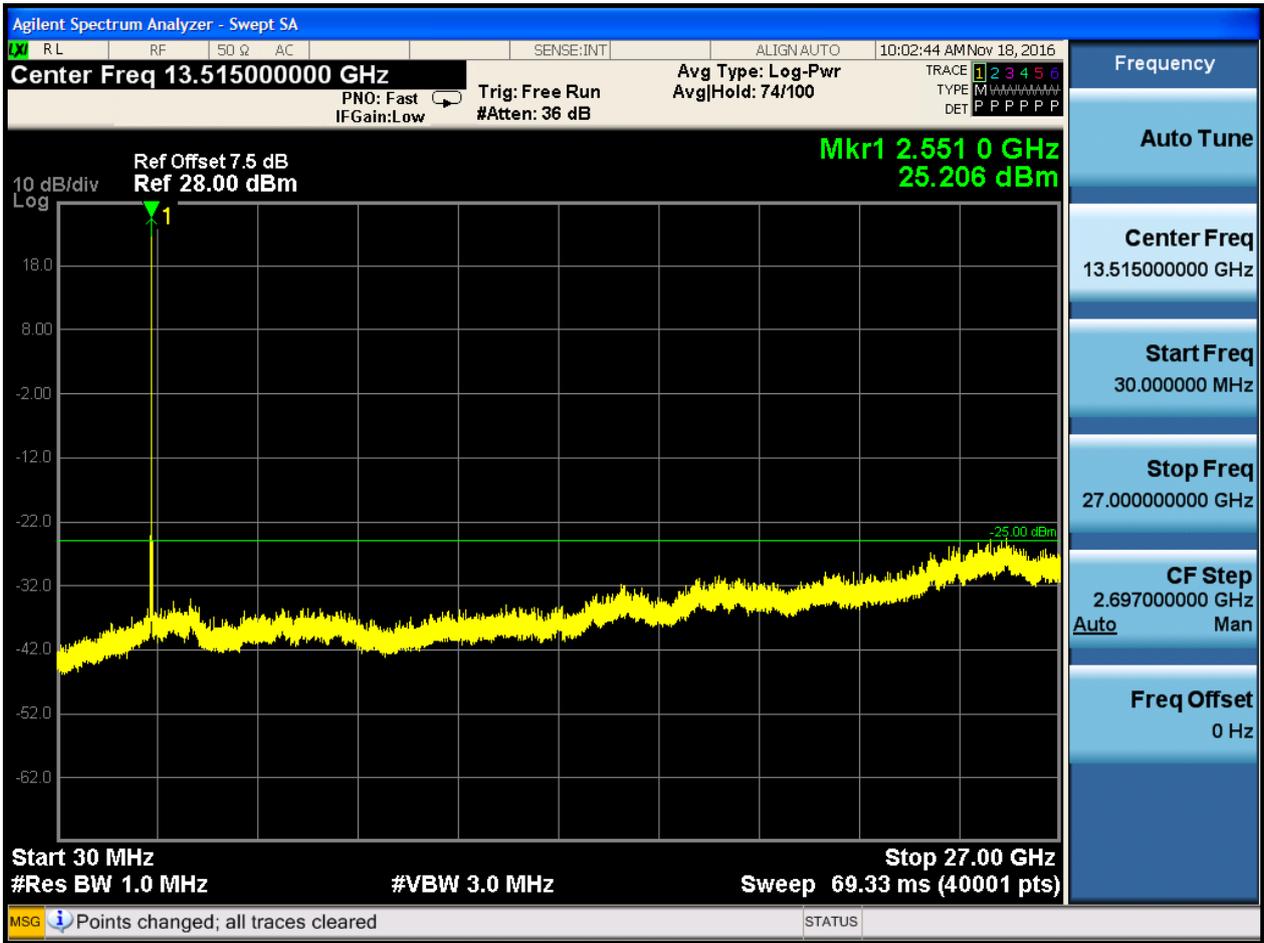


6.1.1.2.4.3 Test Channel = HCH

6.1.1.2.4.3.1 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

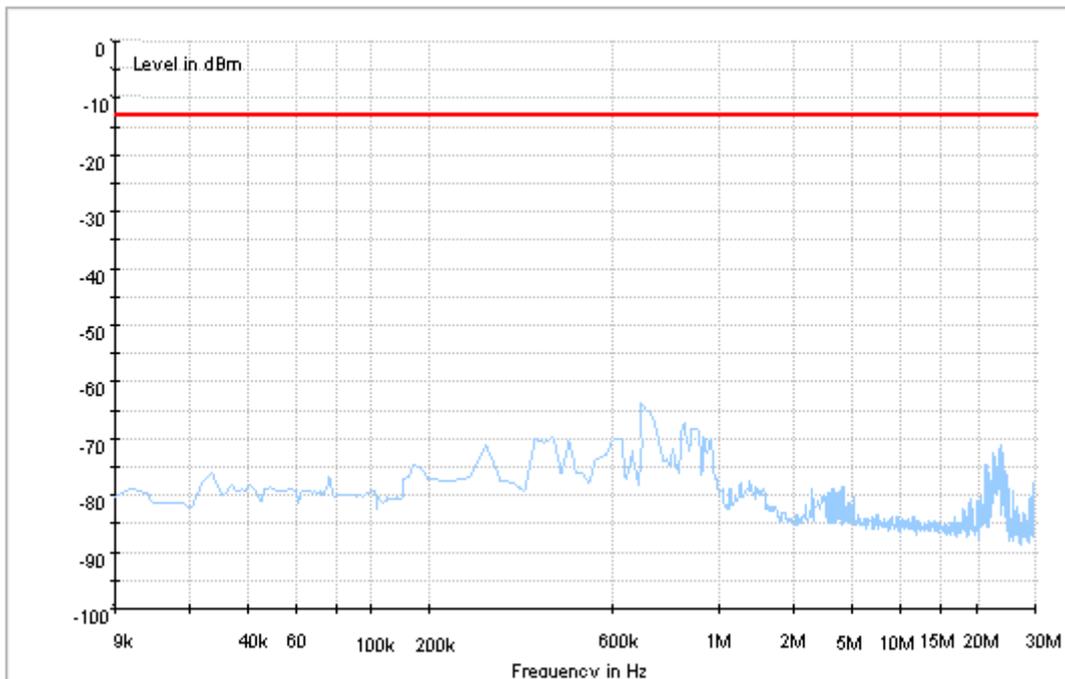
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

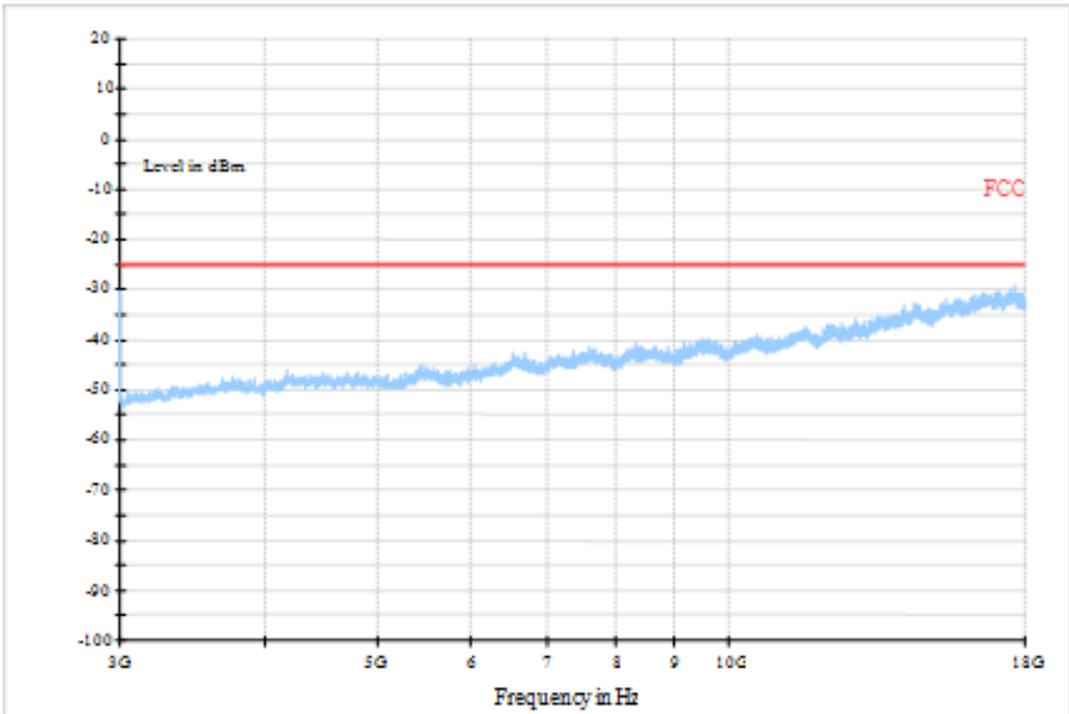
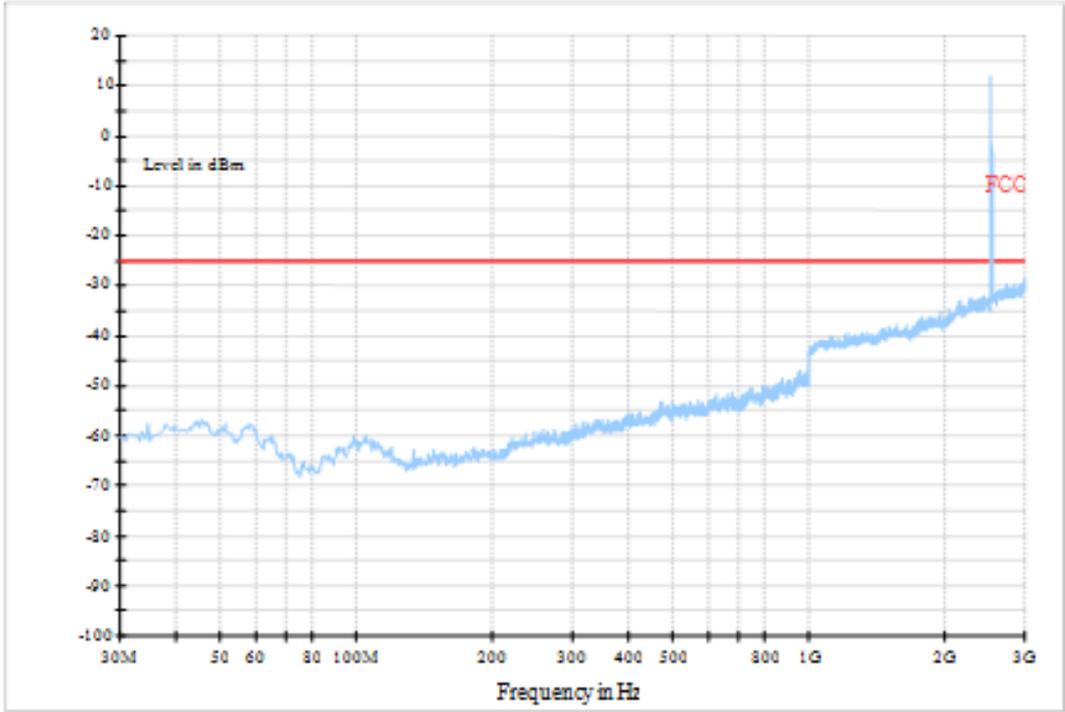
Part I - Test Plots

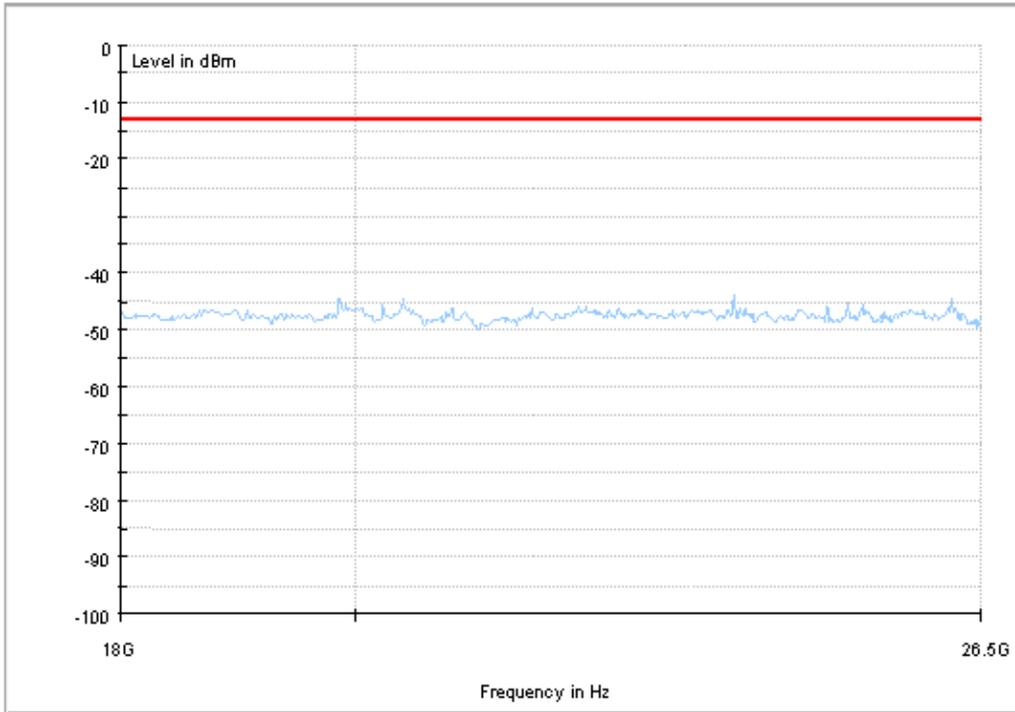
7.1 For LTE

7.1.1 Test Band = BAND7_Ant1

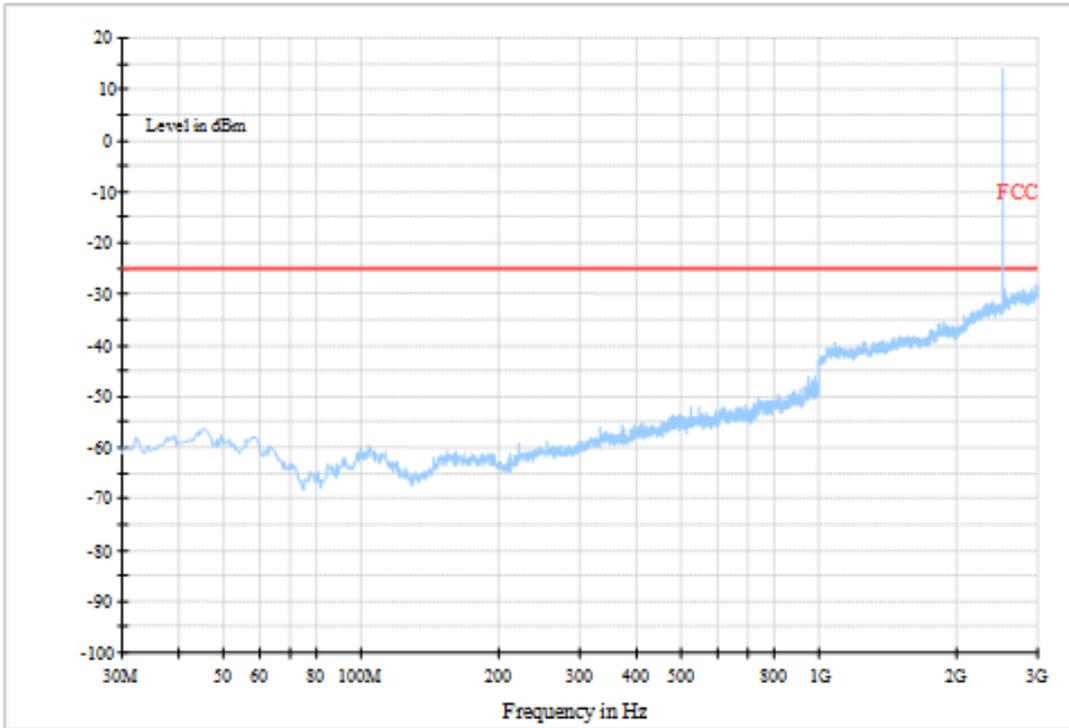
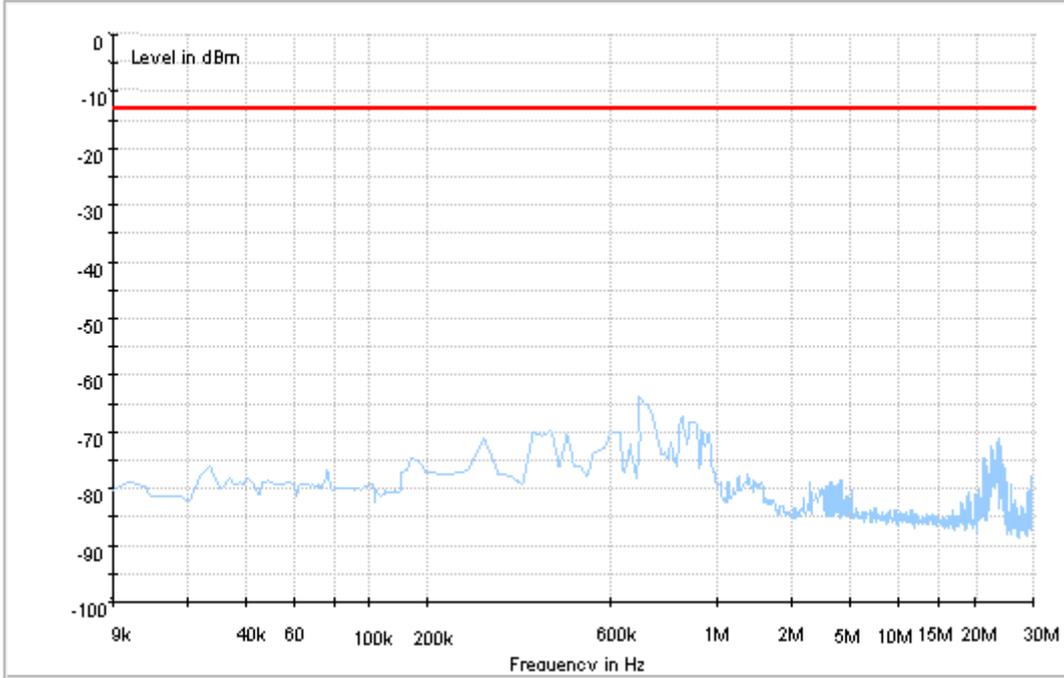
7.1.1.1 Test Bandwidth = 5

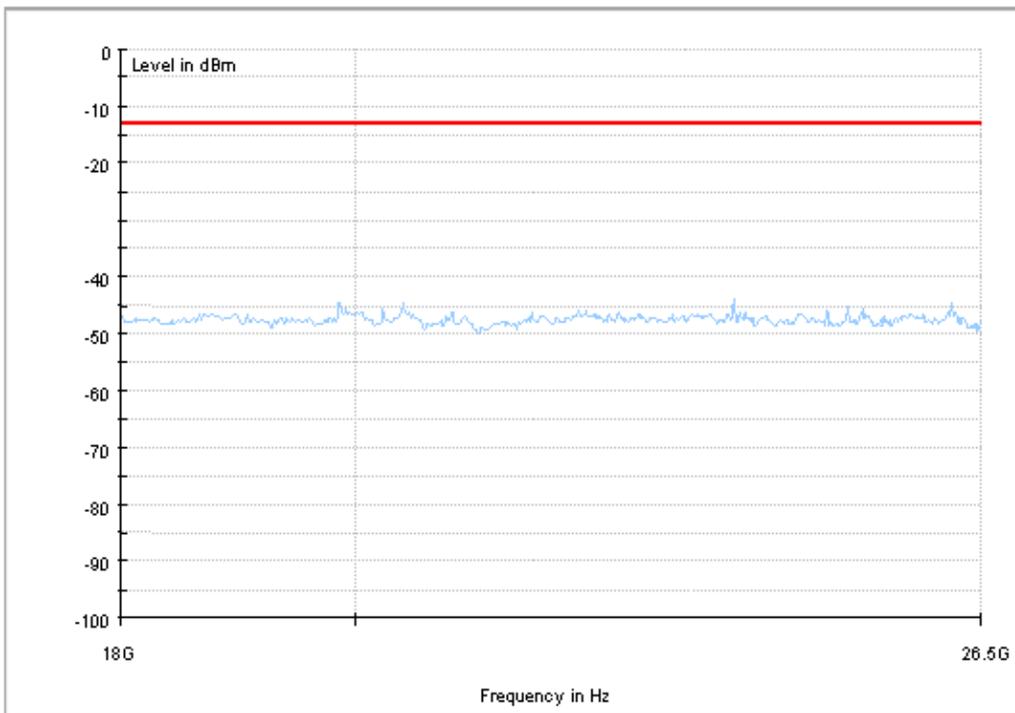
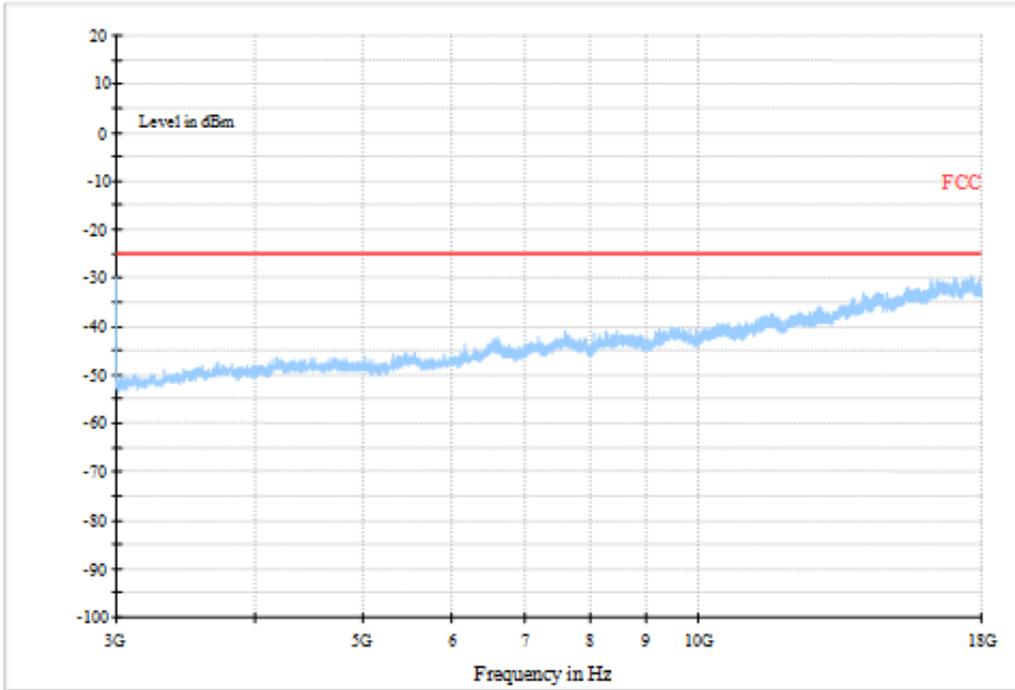






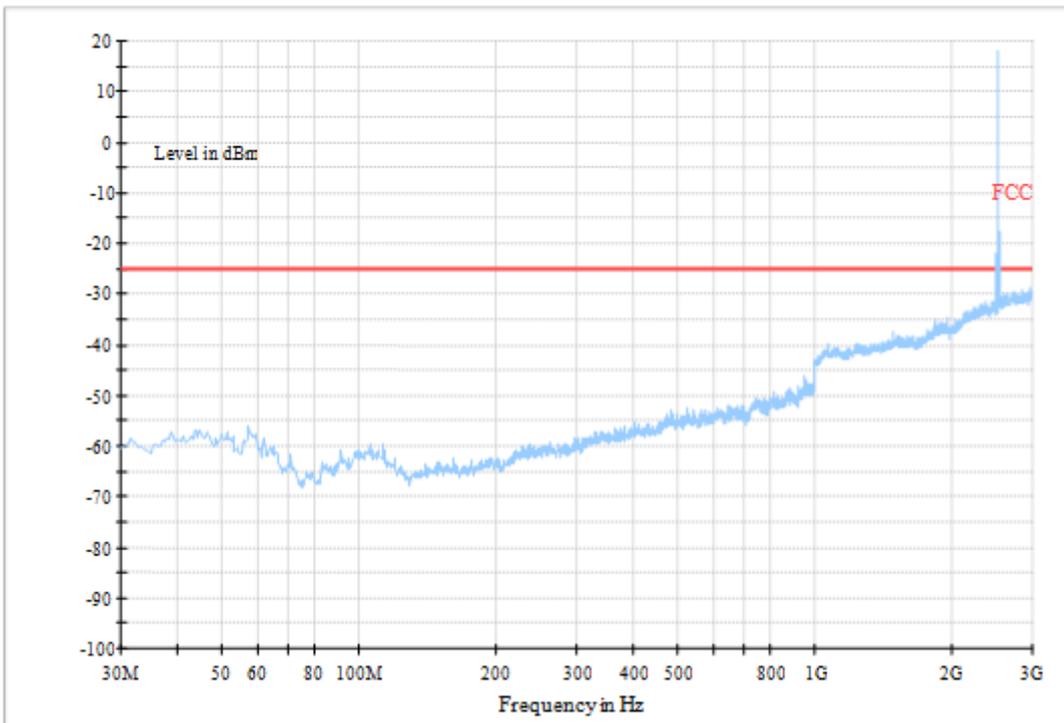
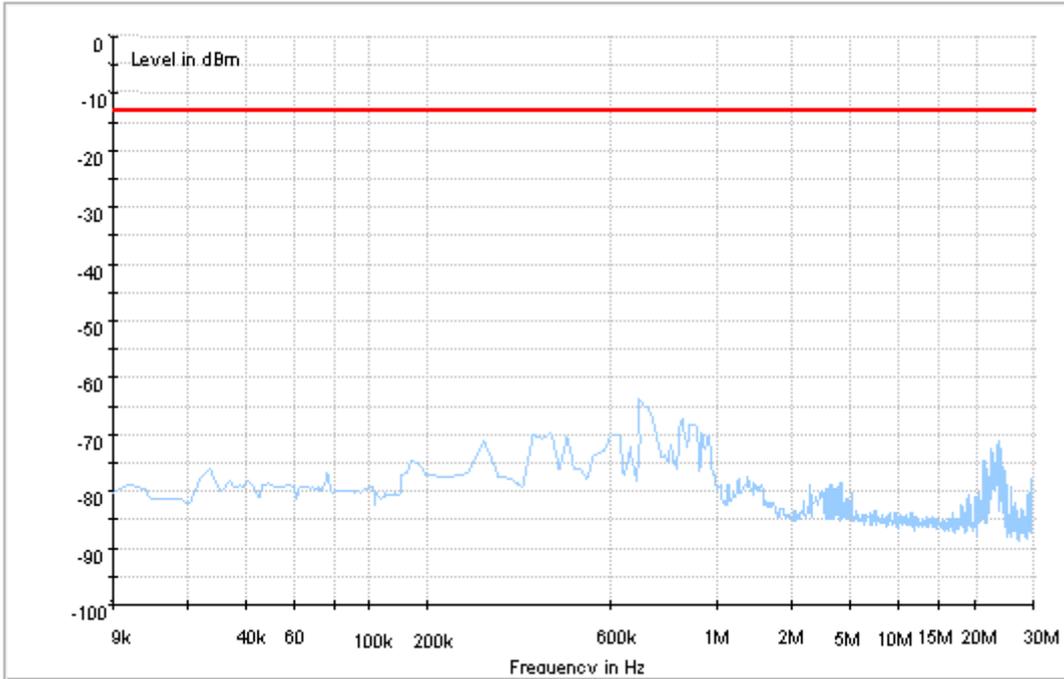
7.1.1.2 Test Bandwidth = 20

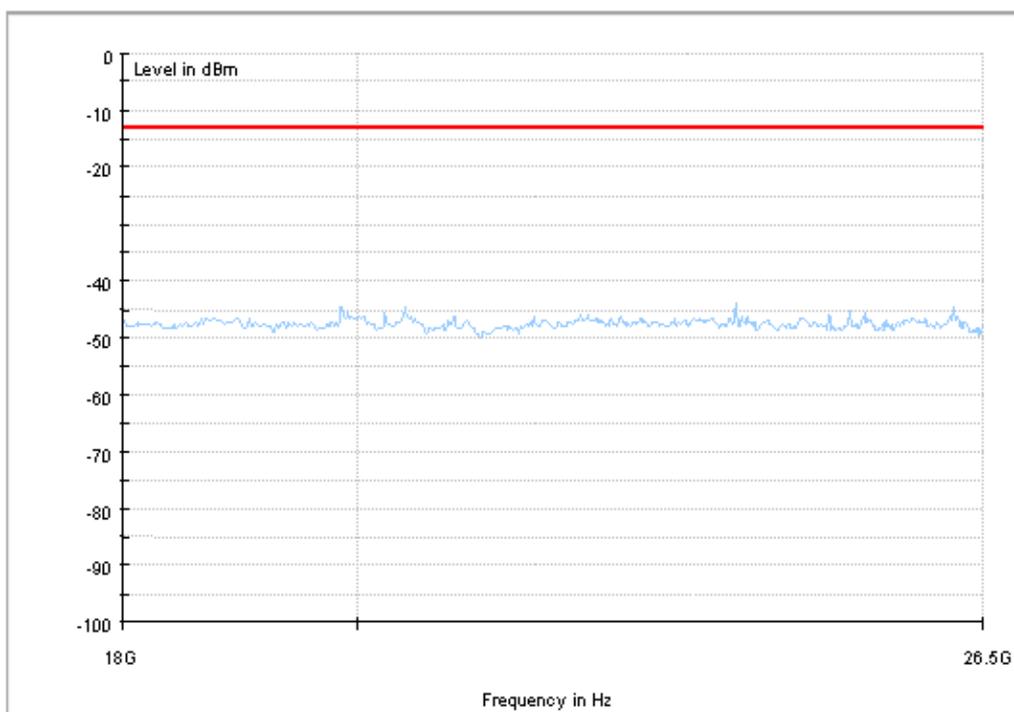
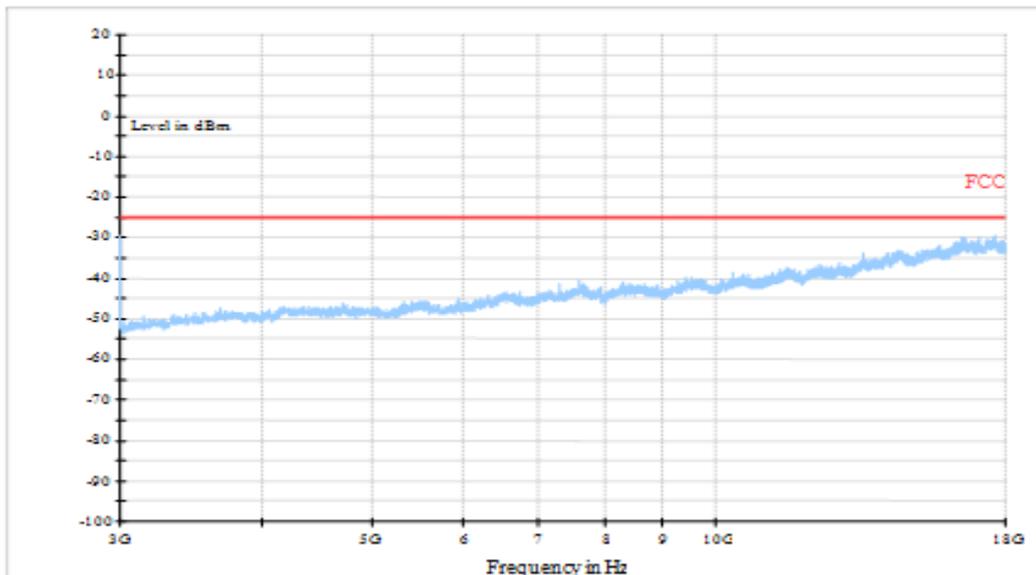




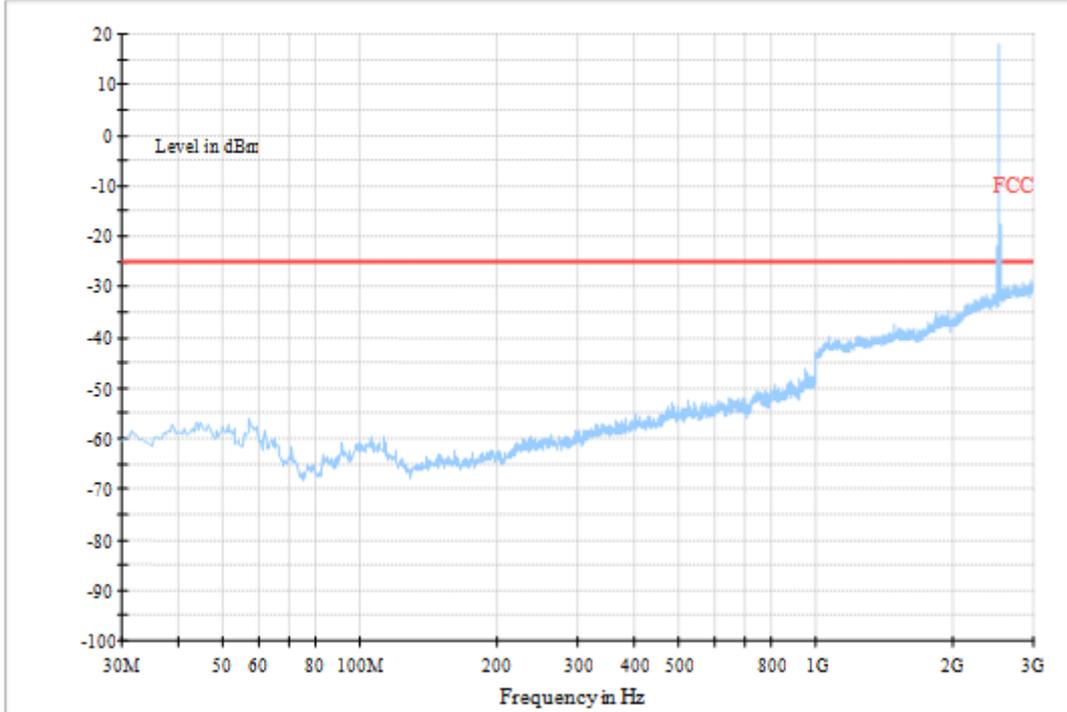
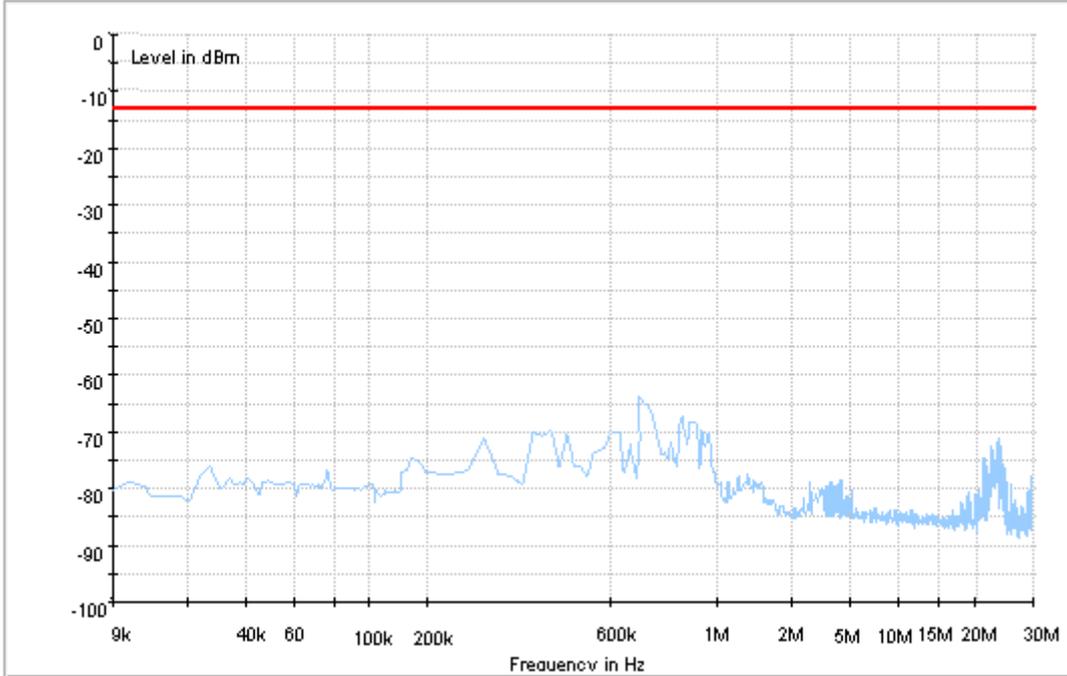
7.1.2 Test Band = BAND7_Ant2

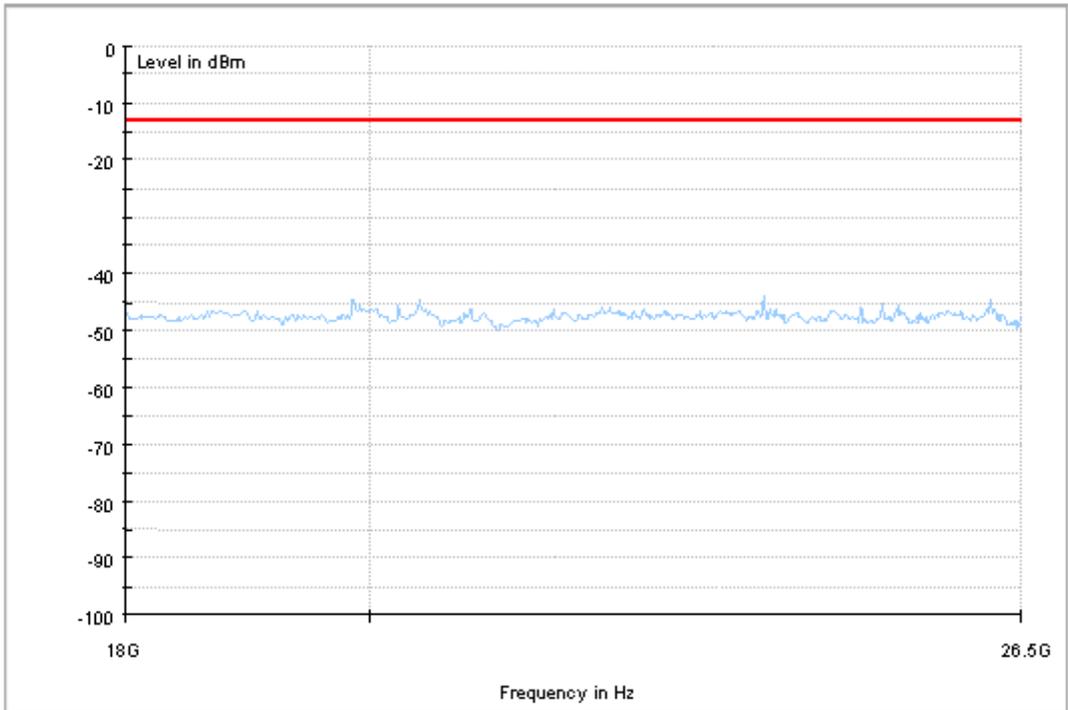
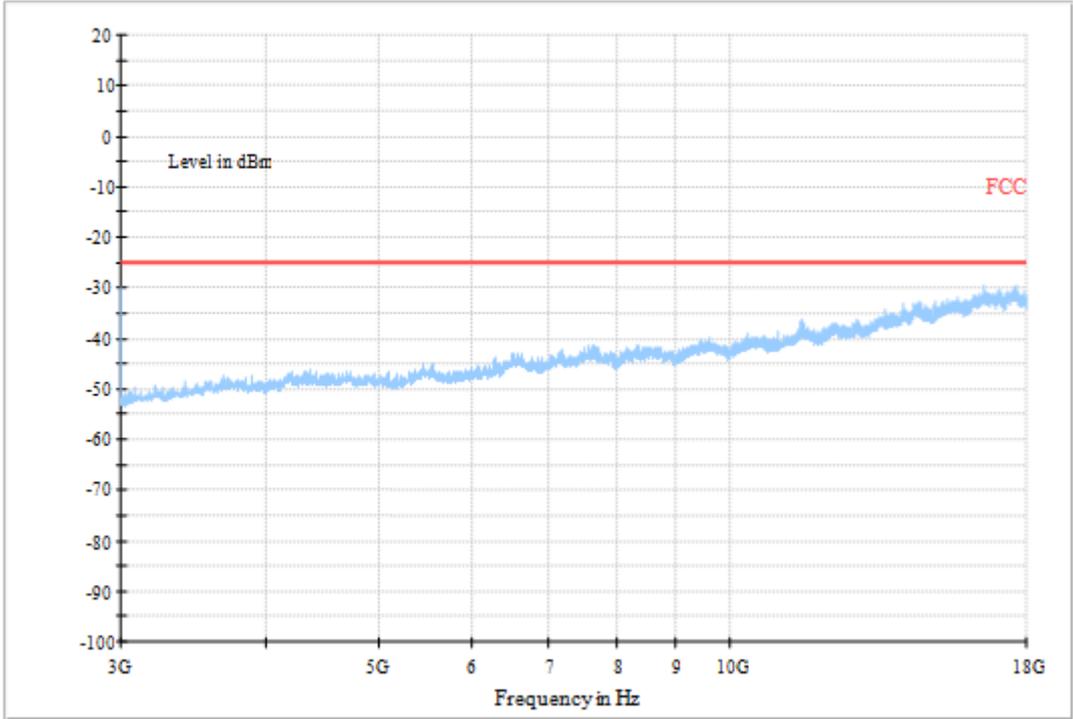
7.1.2.1 Test Bandwidth = 5





7.1.2.2 Test Bandwidth = 20





8Appendix_H: Frequency Stability

8.1 For LTE

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
BAND7	LTE/TM1	5	LCH	TN	VL	-3.00	-0.0012	PASS
					VN	-4.52	-0.00181	PASS
					VH	-3.75	-0.0015	PASS
			MCH	TN	VL	2.15	0.00085	PASS
					VN	-4.13	-0.00163	PASS
					VH	-1.06	-0.00042	PASS
			HCH	TN	VL	-5.71	-0.00222	PASS
					VN	-5.81	-0.00226	PASS
					VH	-6.61	-0.00257	PASS
		10	LCH	TN	VL	4.28	0.00171	PASS
					VN	-1.42	-0.00057	PASS
					VH	0.83	0.00033	PASS
			MCH	TN	VL	3.49	0.00138	PASS
					VN	-5.65	-0.00223	PASS
					VH	-3.15	-0.00124	PASS
			HCH	TN	VL	-7.18	-0.0028	PASS
					VN	-3.02	-0.00118	PASS
					VH	-7.05	-0.00275	PASS
		15	LCH	TN	VL	5.28	0.00211	PASS
					VN	-18.78	-0.00749	PASS
					VH	3.65	0.00146	PASS
			MCH	TN	VL	0.29	0.00011	PASS
					VN	-3.16	-0.00125	PASS
					VH	-7.93	-0.00313	PASS
			HCH	TN	VL	-5.09	-0.00199	PASS
					VN	-4.59	-0.00179	PASS
					VH	-5.81	-0.00227	PASS
		20	LCH	TN	VL	2.70	0.00108	PASS
					VN	-2.92	-0.00116	PASS
			MCH	TN	VH	-3.15	-0.00125	PASS
					VL	-3.25	-0.00128	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					VN	-1.53	-0.0006	PASS		
					VH	-3.06	-0.00121	PASS		
					HCH	TN	VL	-6.58	-0.00257	PASS
							VN	-6.27	-0.00245	PASS
					VH	-4.96	-0.00194	PASS		
			LCH	TN	VL	-4.09	-0.00163	PASS		
					VN	-37.06	-0.01481	PASS		
					VH	-2.66	-0.00106	PASS		
					MCH	TN	VL	-0.21	-0.00008	PASS
							VN	-1.79	-0.00071	PASS
	VH	0.04	0.00002	PASS						
	HCH	TN	VL	-0.57	-0.00022	PASS				
			VN	-5.97	-0.00233	PASS				
			VH	-6.61	-0.00257	PASS				
			LCH	TN	VL	5.09	0.00203	PASS		
					VN	2.69	0.00107	PASS		
	VH	-1.59			-0.00063	PASS				
	MCH	TN	VL	-0.16	-0.00006	PASS				
			VN	-0.03	-0.00001	PASS				
			VH	-1.73	-0.00068	PASS				
			HCH	TN	VL	-2.36	-0.00092	PASS		
					VN	-1.42	-0.00055	PASS		
	VH	-3.53			-0.00138	PASS				
	LCH	TN	VL	1.30	0.00052	PASS				
			VN	0.92	0.00037	PASS				
			VH	1.03	0.00041	PASS				
			MCH	TN	VL	1.17	0.00046	PASS		
					VN	-1.27	-0.0005	PASS		
					VH	-2.45	-0.00097	PASS		
	HCH	TN	VL	-4.76	-0.00186	PASS				
			VN	-5.06	-0.00197	PASS				
			VH	-4.03	-0.00157	PASS				
	20	LCH	TN	VL	-0.41	-0.00016	PASS			
				VN	0.46	0.00018	PASS			
				VH	-1.46	-0.00058	PASS			
		MCH	TN	VL	-1.07	-0.00042	PASS			
				VN	-2.17	-0.00086	PASS			
				VH	-2.26	-0.00089	PASS			
		HCH	TN	VL	-2.73	-0.00107	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	-6.21	-0.00243	PASS
					VH	-2.29	-0.00089	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
BAND7	LTE/TM1	5	LCH	VN	-30	-0.7	-0.00283	PASS
					-20	-1.74	-0.00336	PASS
					-10	0.82	-0.00234	PASS
					0	-1.23	-0.00314	PASS
					10	-8.97	-0.00636	PASS
					20	-4.41	-0.00438	PASS
					30	-3.19	-0.00389	PASS
					40	-1.29	-0.00314	PASS
					50	2.56	-0.0016	PASS
			MCH	VN	-30	-2.05	-0.00343	PASS
					-20	-3.72	-0.00409	PASS
					-10	-4.28	-0.00431	PASS
					0	-4.73	-0.00449	PASS
					10	-2.39	-0.00357	PASS
					20	-0.73	-0.00291	PASS
					30	-2.02	-0.00342	PASS
					40	-2.27	-0.00352	PASS
					50	-5.29	-0.00471	PASS
			HCH	VN	-30	-5.91	-0.00493	PASS
					-20	-3	-0.00379	PASS
					-10	-4.72	-0.00446	PASS
					0	-7.9	-0.0057	PASS
					10	-1.2	-0.00309	PASS
					20	-6.42	-0.00512	PASS
		30			-5.16	-0.00463	PASS	
		40			-5.03	-0.00458	PASS	
		50			-3.69	-0.00406	PASS	
		10	LCH	VN	-30	-15.86	-0.00895	PASS
					-20	-16.28	-0.00912	PASS
					-10	-21.87	-0.01135	PASS
					0	-56.38	-0.02513	PASS
					10	-16.11	-0.00905	PASS
					20	-4.18	-0.00429	PASS
					30	-9.44	-0.00639	PASS
					40	-13.43	-0.00798	PASS
					50	-27.41	-0.01356	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			MCH	VN	-30	-3.05	-0.00383	PASS
					-20	-2.33	-0.00354	PASS
					-10	-2.52	-0.00362	PASS
					0	-2.15	-0.00347	PASS
					10	-2.92	-0.00377	PASS
					20	-4.13	-0.00425	PASS
					30	-1.26	-0.00312	PASS
					40	-1.34	-0.00315	PASS
					50	-0.51	-0.00282	PASS
			HCH	VN	-30	-5.02	-0.00458	PASS
					-20	-2.5	-0.0036	PASS
					-10	0.13	-0.00257	PASS
					0	-3.02	-0.0038	PASS
					10	-4.21	-0.00427	PASS
					20	0.83	-0.0023	PASS
					30	-1.33	-0.00314	PASS
					40	-3.92	-0.00415	PASS
					50	-3.92	-0.00415	PASS
		15	LCH	VN	-30	-18.3	-0.00992	PASS
					-20	-31.49	-0.01518	PASS
					-10	-21.44	-0.01117	PASS
					0	-24.29	-0.01231	PASS
					10	-10.89	-0.00696	PASS
					20	-18.37	-0.00995	PASS
					30	-21.71	-0.01128	PASS
					40	-17.51	-0.0096	PASS
					50	-15.52	-0.00881	PASS
			MCH	VN	-30	-3.1	-0.00385	PASS
					-20	-3.83	-0.00413	PASS
					-10	-3.76	-0.00411	PASS
					0	-2.99	-0.0038	PASS
					10	-1.57	-0.00324	PASS
					20	-4.73	-0.00449	PASS
					30	-3.15	-0.00386	PASS
					40	-4.66	-0.00446	PASS
					50	-1.62	-0.00326	PASS
		HCH	VN	-30	-4.79	-0.00449	PASS	
				-20	-3.99	-0.00418	PASS	
				-10	-1.37	-0.00316	PASS	

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					0	-1.92	-0.00337	PASS
					10	-0.03	-0.00264	PASS
					20	-4.48	-0.00437	PASS
					30	-2.52	-0.00361	PASS
					40	-3.55	-0.00401	PASS
					50	-4.56	-0.0044	PASS
					-30	-4.93	-0.00458	PASS
					-20	-4.12	-0.00426	PASS
					-10	-7.64	-0.00566	PASS
					0	-12.83	-0.00773	PASS
		10	-4.59	-0.00445	PASS			
		20	-1.59	-0.00325	PASS			
		30	-5.84	-0.00495	PASS			
		40	-2.62	-0.00366	PASS			
		50	-0.91	-0.00298	PASS			
		-30	-1.43	-0.00319	PASS			
		-20	-1.97	-0.0034	PASS			
		-10	-1.16	-0.00308	PASS			
		0	-3.2	-0.00388	PASS			
		10	-4.31	-0.00432	PASS			
	20	-1.56	-0.00324	PASS				
	30	-2.72	-0.0037	PASS				
	40	-2.55	-0.00363	PASS				
	50	-4.36	-0.00434	PASS				
	-30	-2.75	-0.0037	PASS				
	-20	-3.7	-0.00407	PASS				
	-10	-1.72	-0.0033	PASS				
	0	-3.38	-0.00394	PASS				
	10	-1.4	-0.00317	PASS				
	20	-5.16	-0.00464	PASS				
	30	-2.65	-0.00366	PASS				
	40	-3.42	-0.00396	PASS				
	50	-4.32	-0.00431	PASS				
LTE/TM2	5	LCH	VN	-30	-6.48	-0.00521	PASS	
				-20	-10.1	-0.0067	PASS	
				-10	-2.1	-0.00342	PASS	
				0	-5.65	-0.00489	PASS	
				10	-2.67	-0.0037	PASS	
				20	1	-0.00222	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
					30	-2.54	-0.00361	PASS	
					40	-2.01	-0.00343	PASS	
					50	-4.34	-0.00438	PASS	
			MCH	VN	-30	-2.73	-0.00372	PASS	
					-20	-3.08	-0.00384	PASS	
					-10	-1.9	-0.00337	PASS	
					0	0.72	-0.00234	PASS	
					10	-4.05	-0.00422	PASS	
					20	1.22	-0.00214	PASS	
					30	-2.4	-0.00357	PASS	
					40	0.33	-0.00249	PASS	
					50	-3.46	-0.00399	PASS	
					HCH	VN	-30	-0.29	-0.00274
			-20	-0.3			-0.00274	PASS	
			-10	0.23			-0.00253	PASS	
			0	-2.72			-0.00368	PASS	
			10	-2.12			-0.00345	PASS	
			20	-4.31			-0.0043	PASS	
			30	-5.51			-0.00477	PASS	
			40	-2.72			-0.00368	PASS	
		10		LCH	VN	-30	0.94	-0.00225	PASS
						-20	9.06	0.001	PASS
						-10	2.4	-0.00166	PASS
						0	2.78	-0.00151	PASS
						10	1.17	-0.00215	PASS
						20	-0.41	-0.00278	PASS
						30	-4.22	-0.0043	PASS
						40	-2.1	-0.00346	PASS
						50	0.67	-0.00235	PASS
						MCH	VN	-30	-2.29
		-20	-0.67	-0.00289	PASS				
		-10	-3.23	-0.0039	PASS				
		0	-5.06	-0.00462	PASS				
		10	-1.9	-0.00337	PASS				
		20	-2.86	-0.00375	PASS				
		30	-0.91	-0.00298	PASS				
		40	-2.87	-0.00375	PASS				
		50	-2.42	-0.00358	PASS				

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
			HCH	VN	-30	-0.87	-0.00291	PASS	
					-20	-3.15	-0.00386	PASS	
					-10	-3.92	-0.00415	PASS	
					0	-4.66	-0.00444	PASS	
					10	-3.06	-0.00382	PASS	
					20	-3.88	-0.00414	PASS	
					30	-2.1	-0.00344	PASS	
					40	-1.96	-0.00339	PASS	
					50	-0.84	-0.00294	PASS	
				LCH	VN	-30	6.54	-0.00297	PASS
						-20	3.08	-0.00139	PASS
						-10	0.49	-0.00243	PASS
						0	0.14	-0.00256	PASS
						10	-0.7	-0.0029	PASS
						20	0.6	-0.00238	PASS
						30	-2.23	-0.00351	PASS
						40	-2.56	-0.00364	PASS
						50	-3.42	-0.00398	PASS
		MCH		VN	-30	-2.23	-0.0035	PASS	
					-20	-3.22	-0.00389	PASS	
					-10	-0.69	-0.00289	PASS	
					0	-3.98	-0.00419	PASS	
					10	-2.69	-0.00368	PASS	
					20	-3.55	-0.00402	PASS	
					30	-2.92	-0.00377	PASS	
					40	-6.44	-0.00516	PASS	
					50	-4.99	-0.00459	PASS	
		HCH	VN	-30	0.65	-0.00237	PASS		
				-20	-1.47	-0.0032	PASS		
				-10	-3.53	-0.004	PASS		
				0	-2	-0.0034	PASS		
				10	-2.96	-0.00378	PASS		
				20	-2.22	-0.00349	PASS		
				30	-2.62	-0.00365	PASS		
				40	-2.46	-0.00358	PASS		
				50	-3.65	-0.00405	PASS		
		20	LCH	VN	-30	-8.7	-0.00609	PASS	
					-20	-6.59	-0.00525	PASS	
					-10	-7.84	-0.00574	PASS	

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					0	-3.94	-0.00417	PASS		
					10	-7.81	-0.00571	PASS		
					20	-5.33	-0.00477	PASS		
					30	-3.4	-0.00398	PASS		
					40	-7.58	-0.00564	PASS		
					50	-3.13	-0.00387	PASS		
			MCH	VN	-30	-4.46	-0.00438	PASS		
							-20	-1.87	-0.00336	PASS
							-10	-2.49	-0.0036	PASS
							0	-1.19	-0.00309	PASS
							10	-4.52	-0.00441	PASS
							20	-3.91	-0.00416	PASS
							30	-2.21	-0.0035	PASS
							40	-1.34	-0.00314	PASS
			HCH	VN	50	-0.67	-0.00289	PASS		
							-30	-2.57	-0.00362	PASS
							-20	-1.65	-0.00326	PASS
							-10	-1.59	-0.00323	PASS
							0	-2.62	-0.00367	PASS
							10	-5.18	-0.00432	PASS
							20	-0.98	-0.004	PASS
							30	-2.73	-0.00373	PASS
					40	-2.43	-0.00347	PASS		
					50	-2.7	-0.00364	PASS		

END