



5.3.6.2.2.4 Test RB = RB50#0

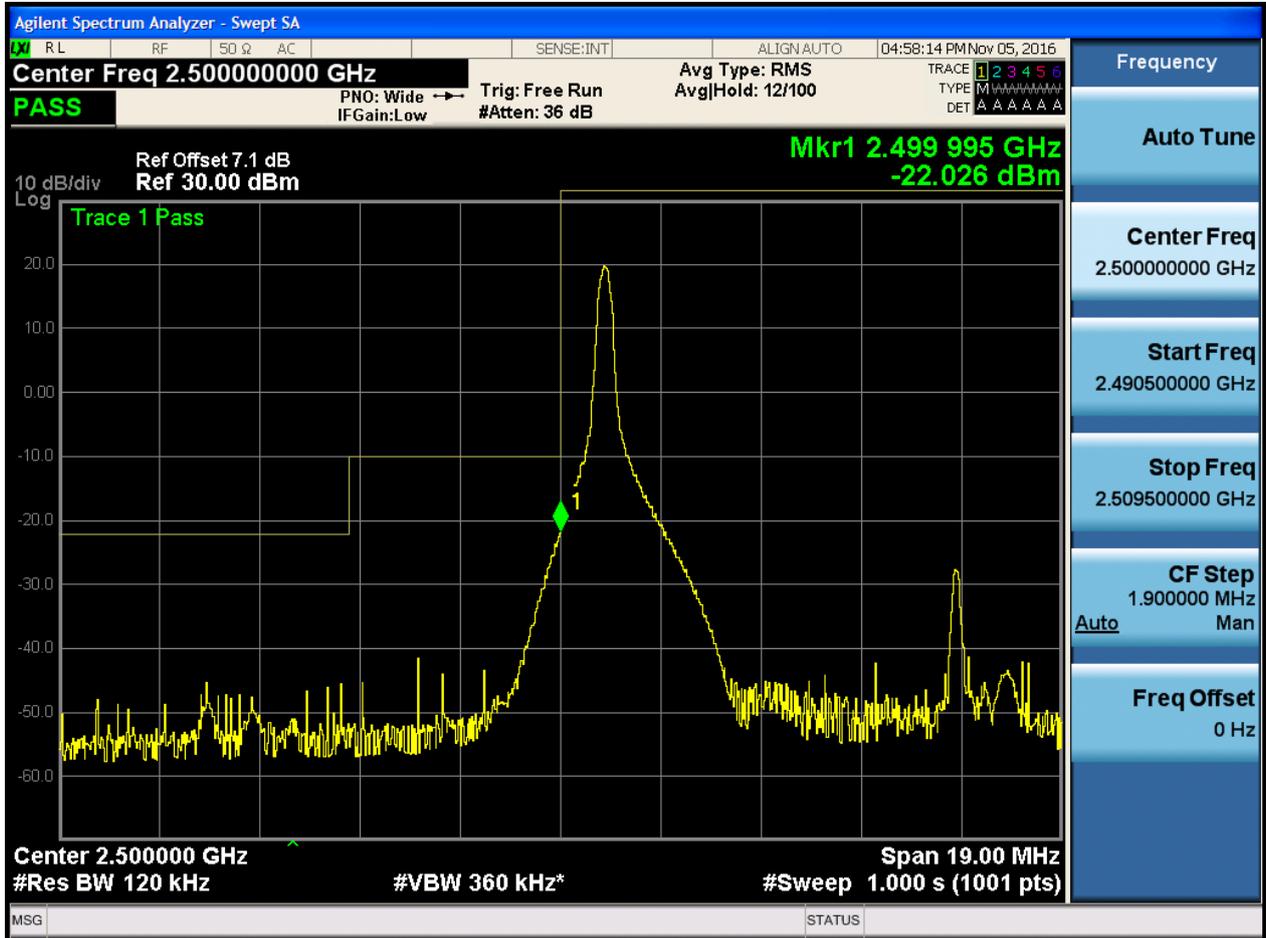




5.3.6.2.3 Test Bandwidth = 15

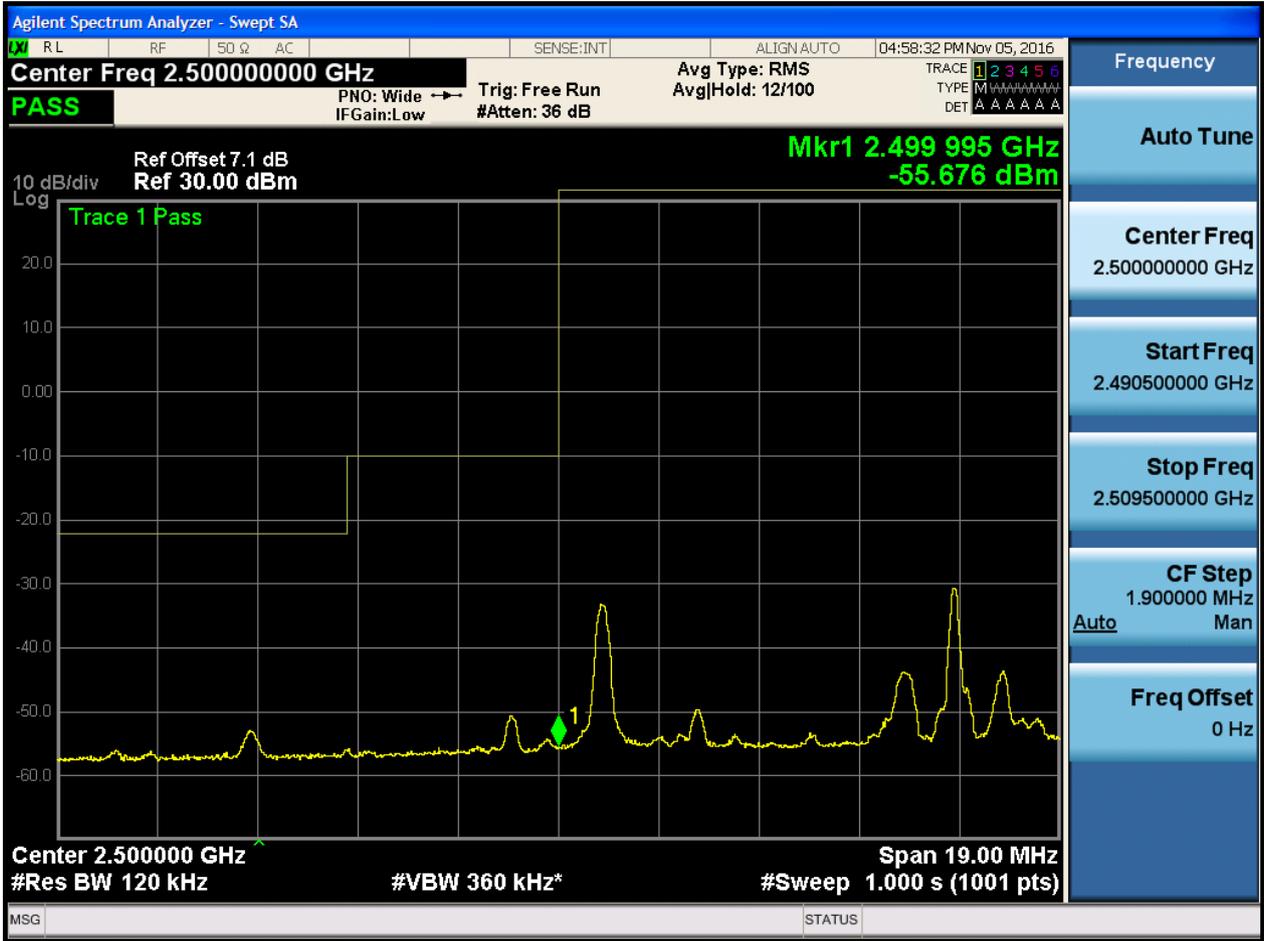
5.3.6.2.3.1 Test Channel = LCH

5.3.6.2.3.1.1 Test RB = RB1#0





5.3.6.2.3.1.2 Test RB = RB1#74





5.3.6.2.3.1.3 Test RB = RB36#18





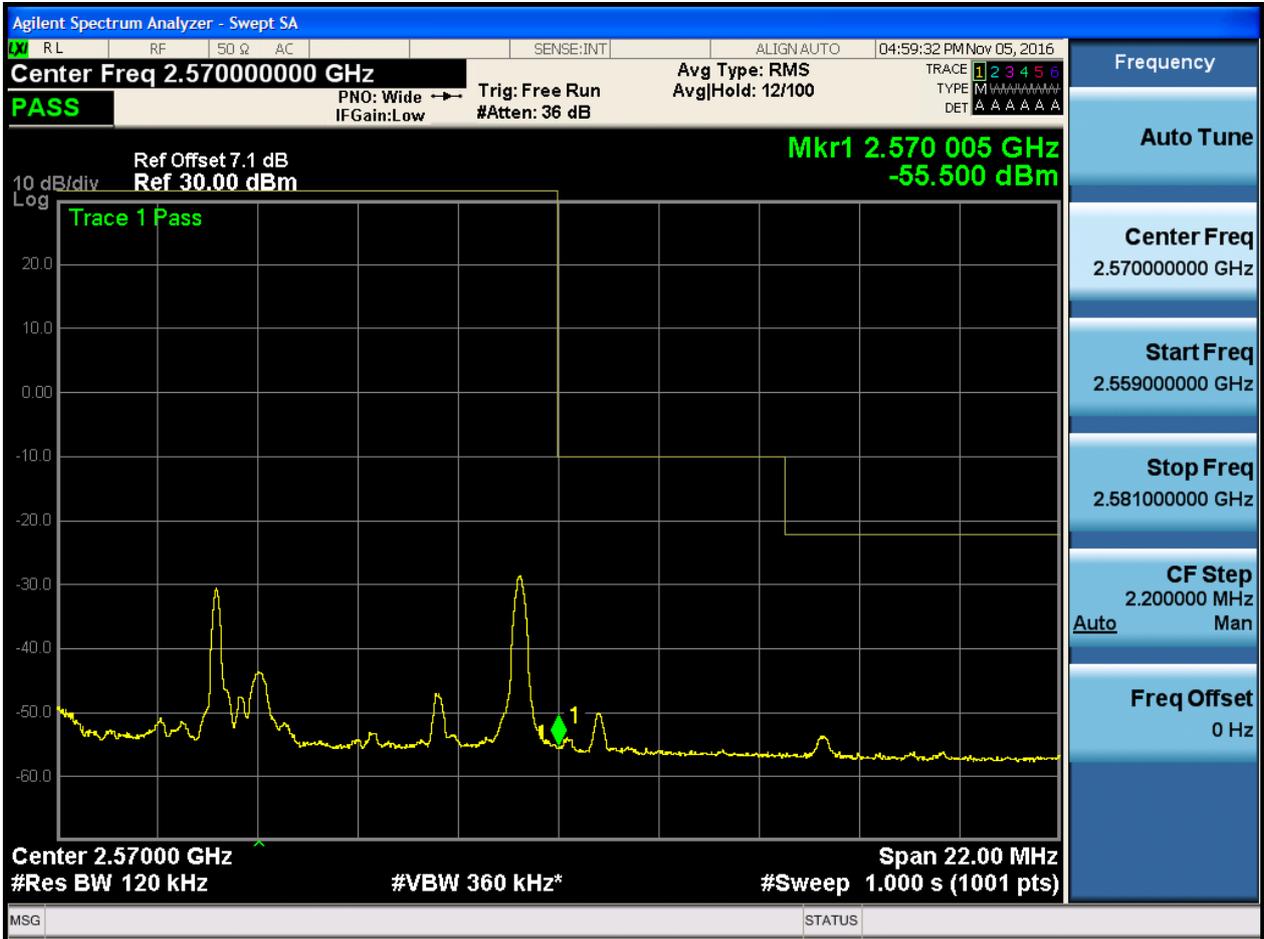
5.3.6.2.3.1.4 Test RB = RB75#0





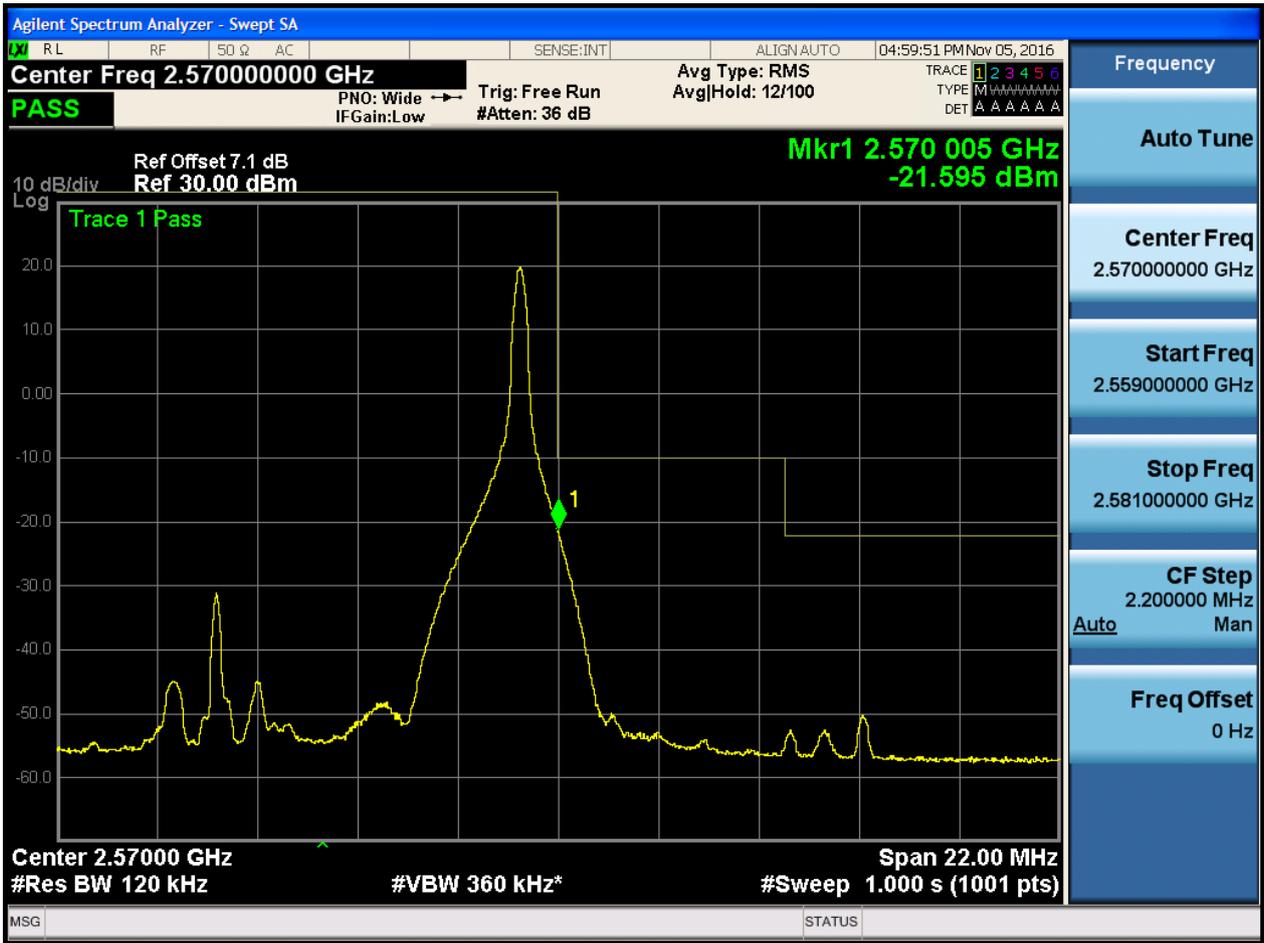
5.3.6.2.3.2 Test Channel = HCH

5.3.6.2.3.2.1 Test RB = RB1#0





5.3.6.2.3.2.2 Test RB = RB1#74





5.3.6.2.3.2.3 Test RB = RB36#18





5.3.6.2.3.2.4 Test RB = RB75#0

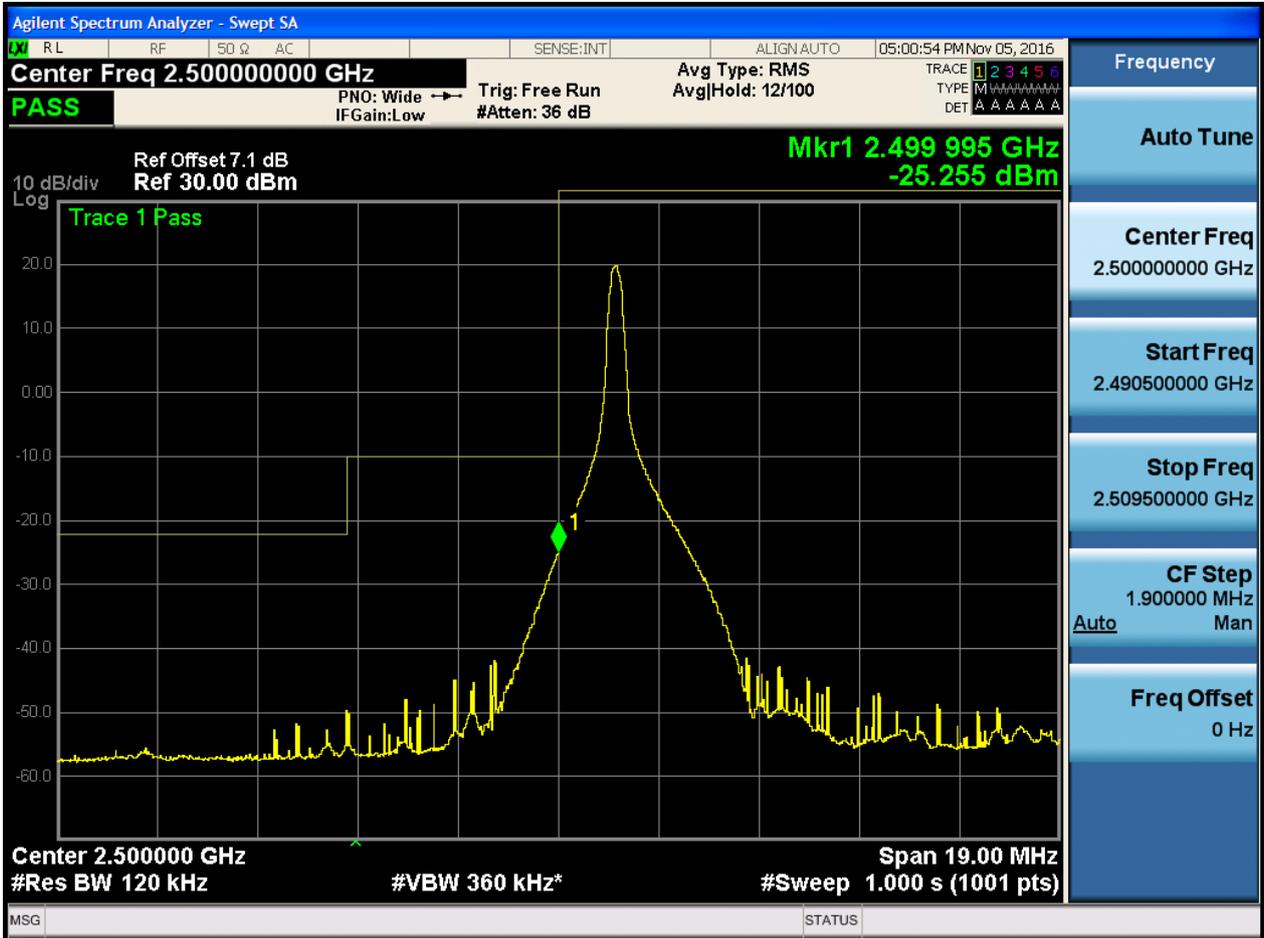




5.3.6.2.4 Test Bandwidth = 20

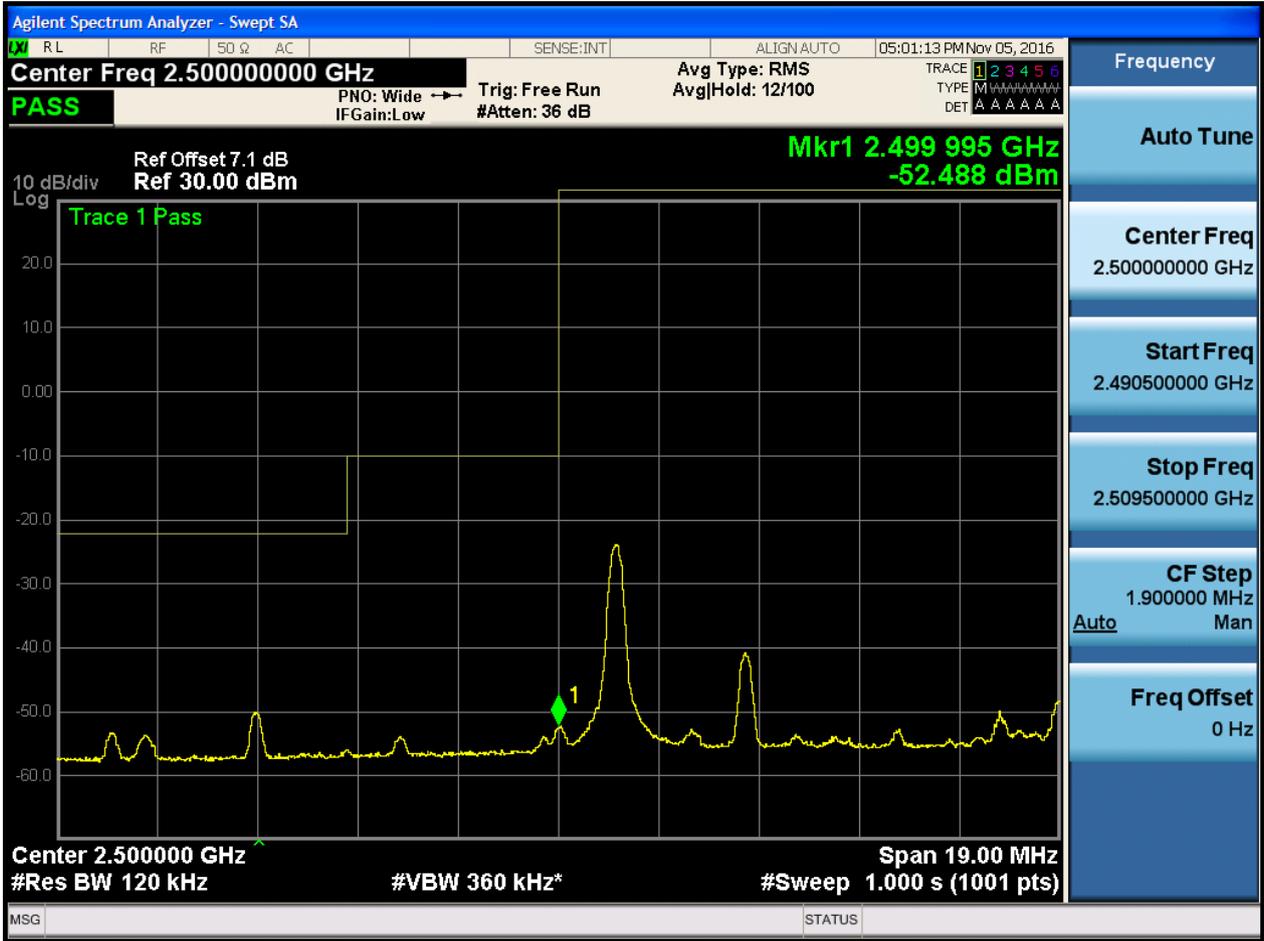
5.3.6.2.4.1 Test Channel = LCH

5.3.6.2.4.1.1 Test RB = RB1#0



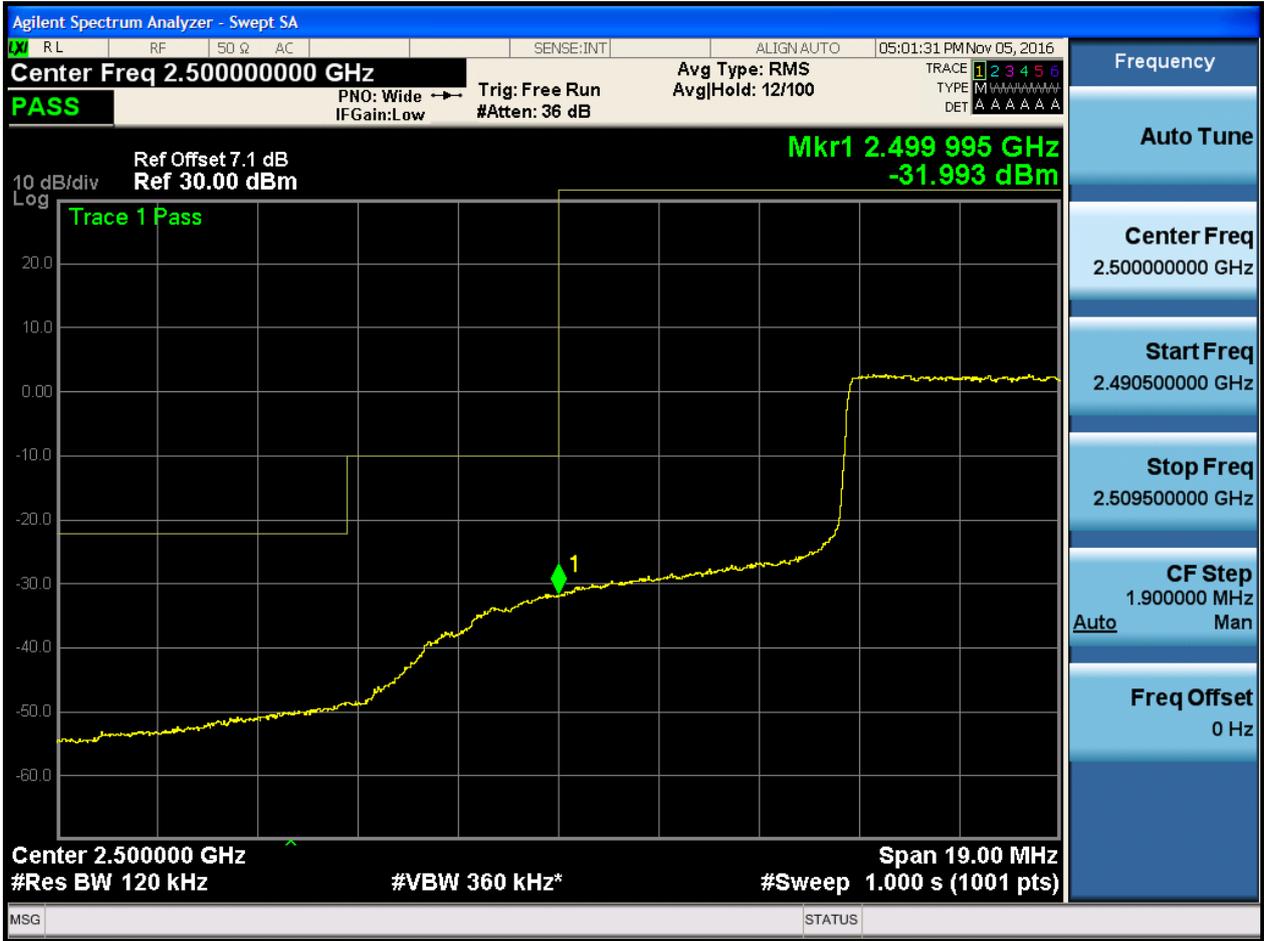


5.3.6.2.4.1.2 Test RB = RB1#99



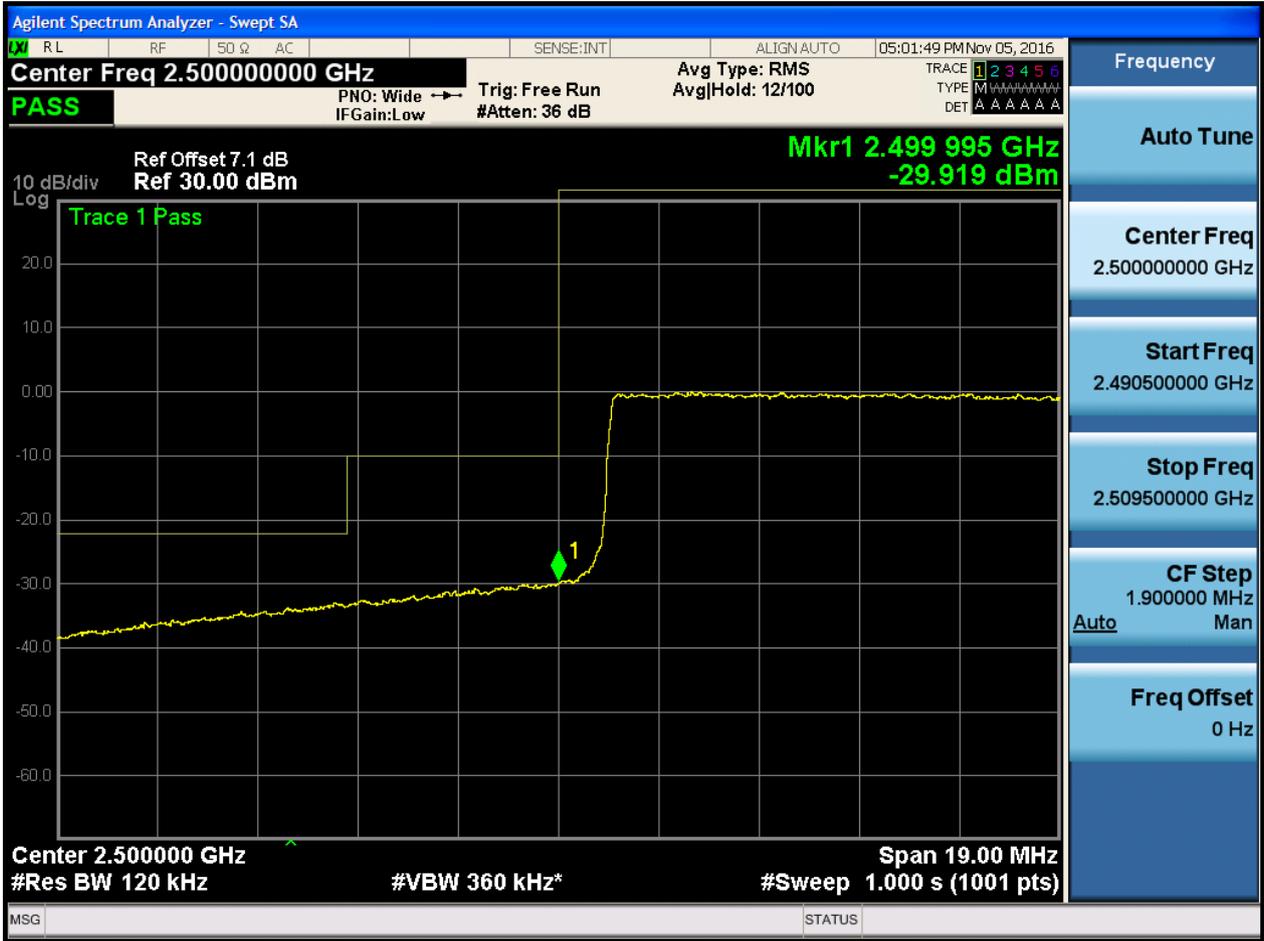


5.3.6.2.4.1.3 Test RB = RB50#25





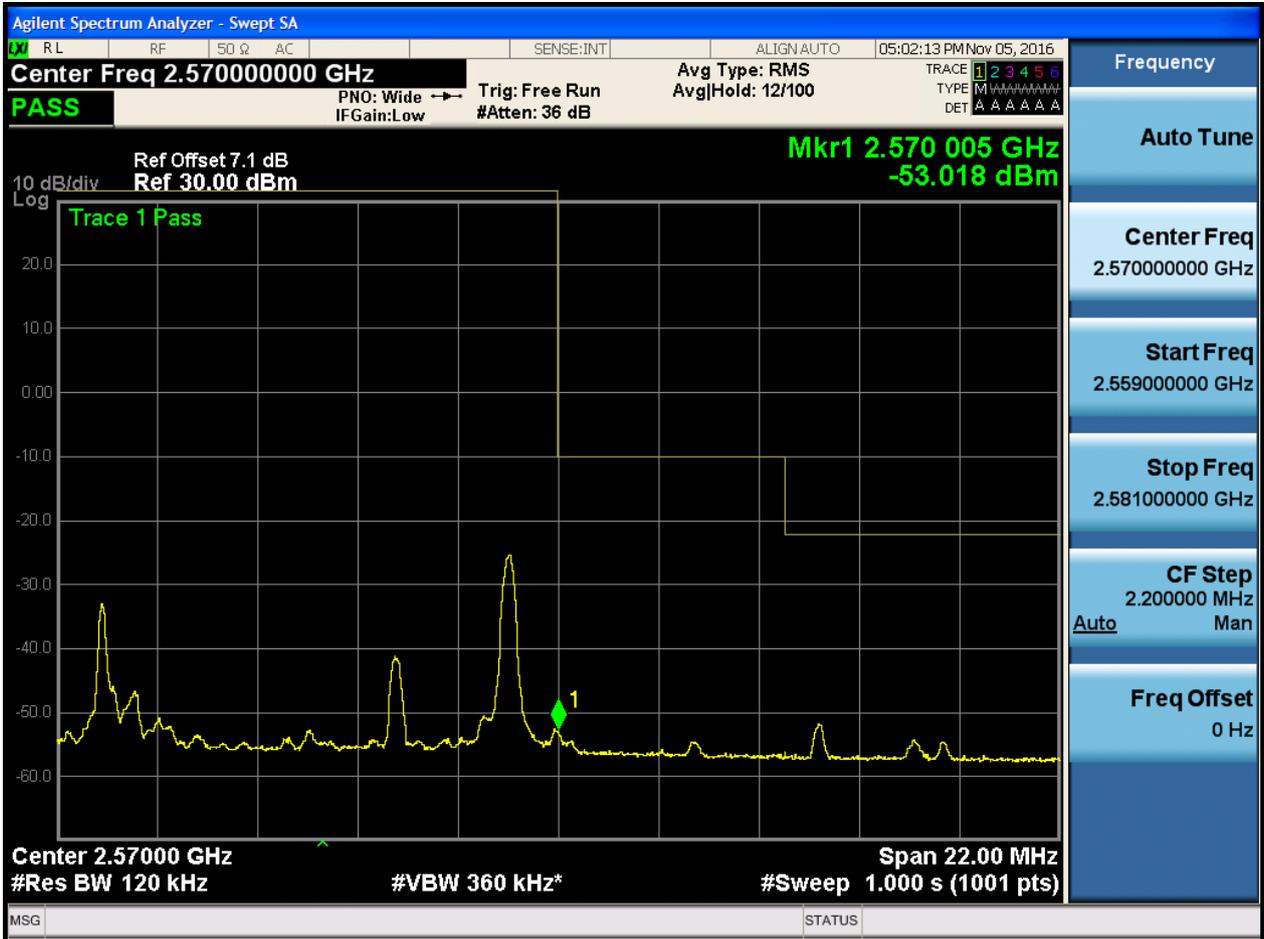
5.3.6.2.4.1.4 Test RB = RB100#0





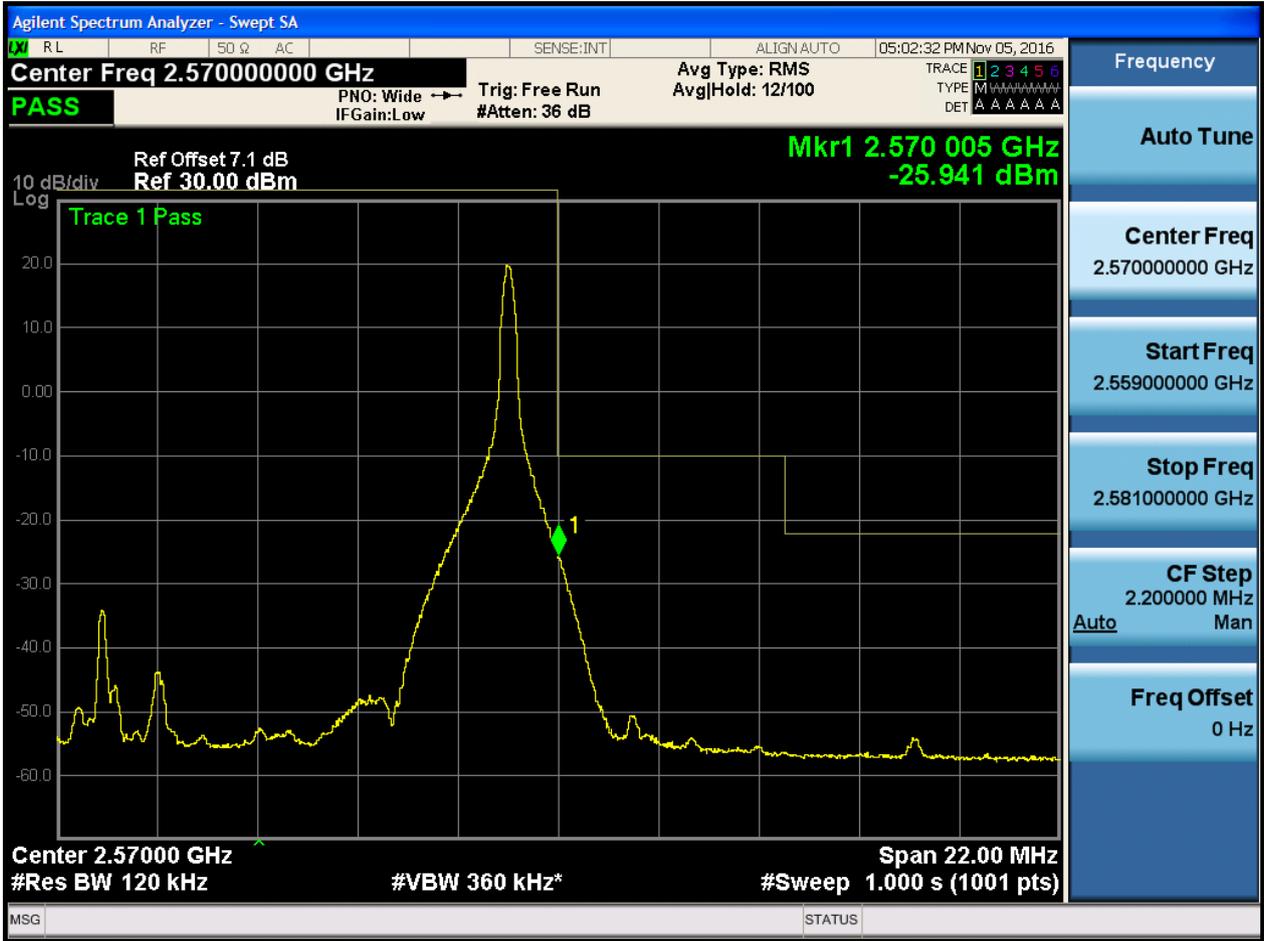
5.3.6.2.4.2 Test Channel = HCH

5.3.6.2.4.2.1 Test RB = RB1#0





5.3.6.2.4.2.2 Test RB = RB1#99





5.3.6.2.4.2.3 Test RB = RB50#25





5.3.6.2.4.2.4 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

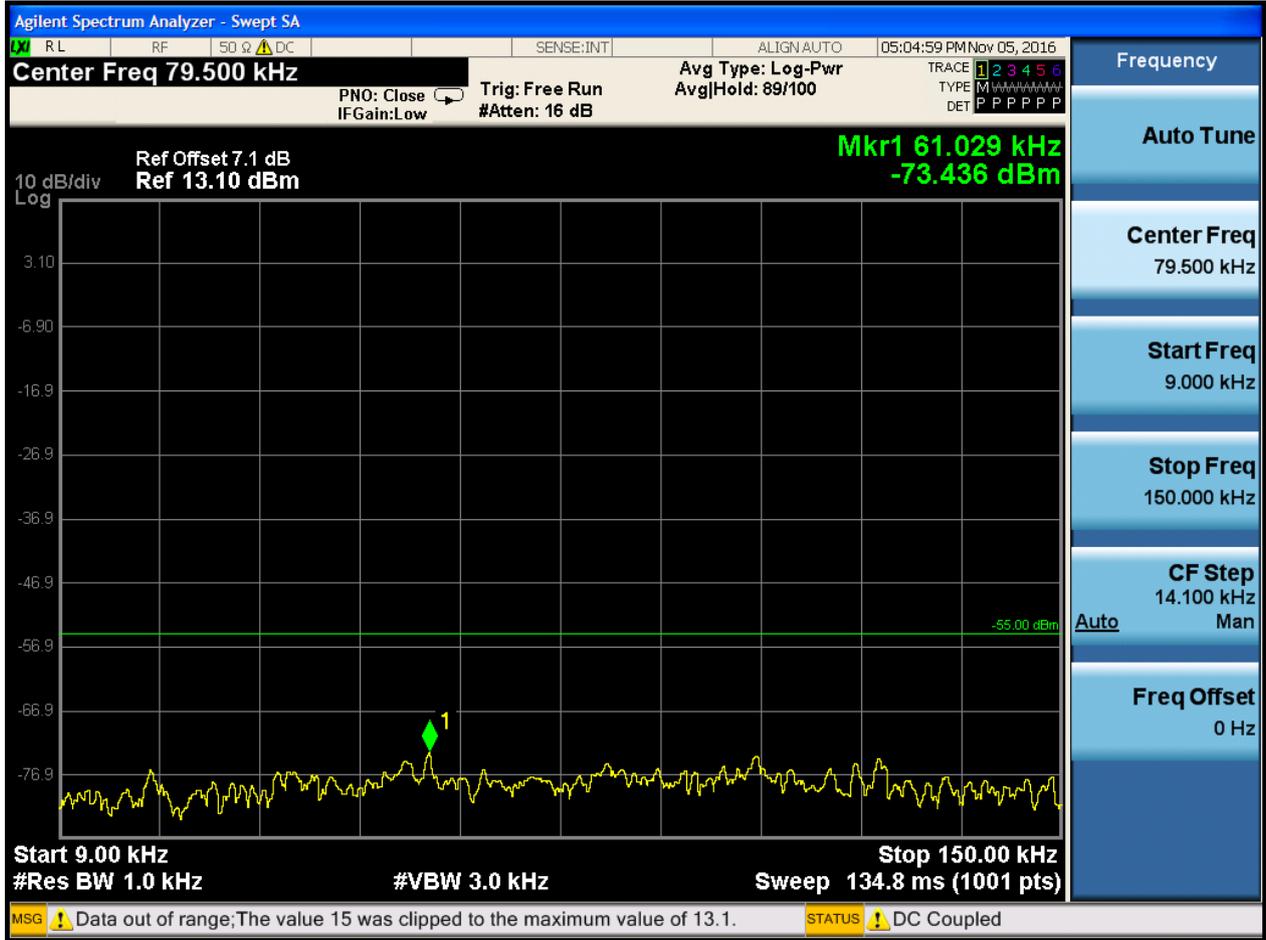
6.1.1 Test Band = BAND7

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

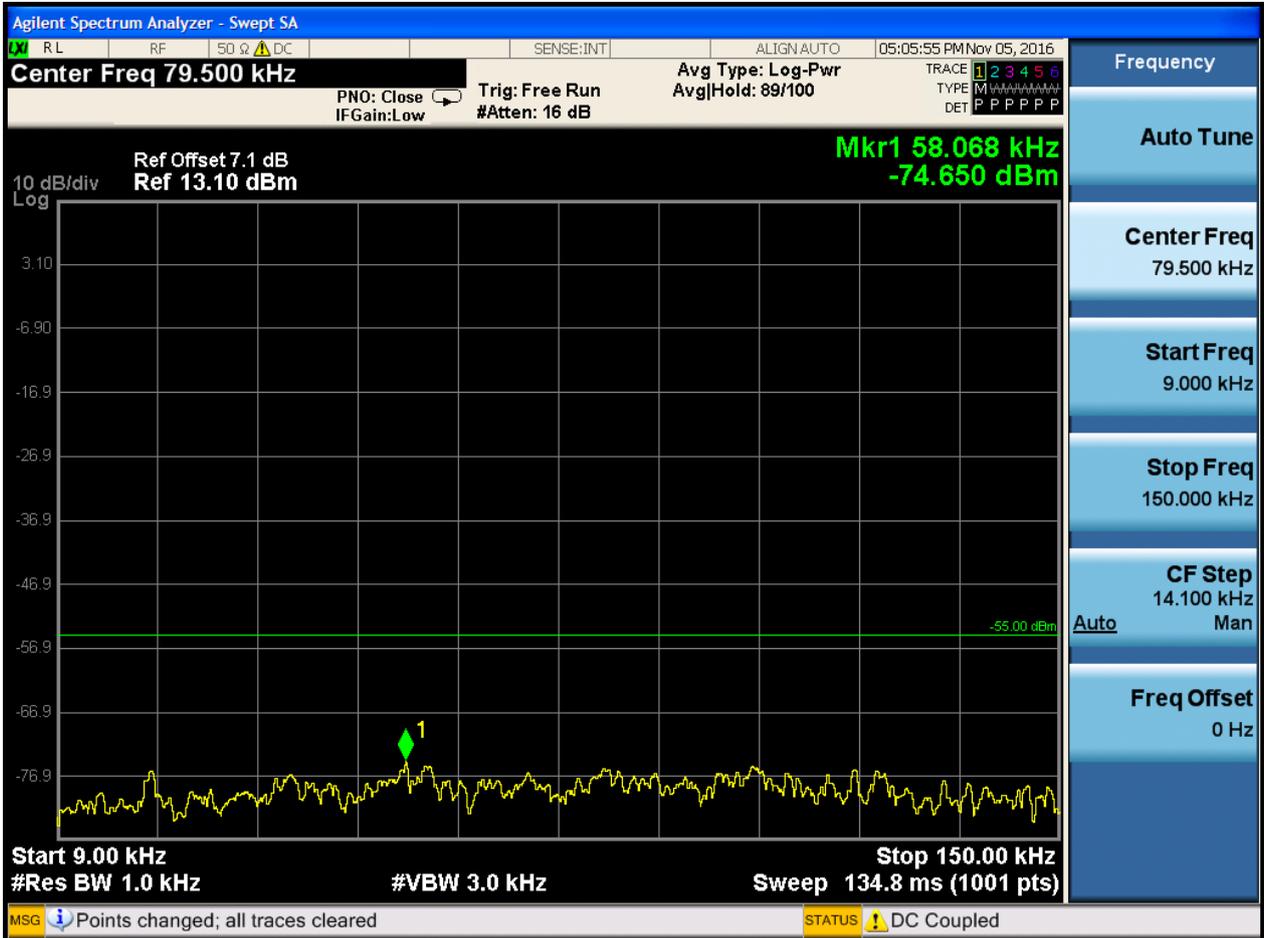
6.1.1.1.1.1.1 Test RB = RB1#0

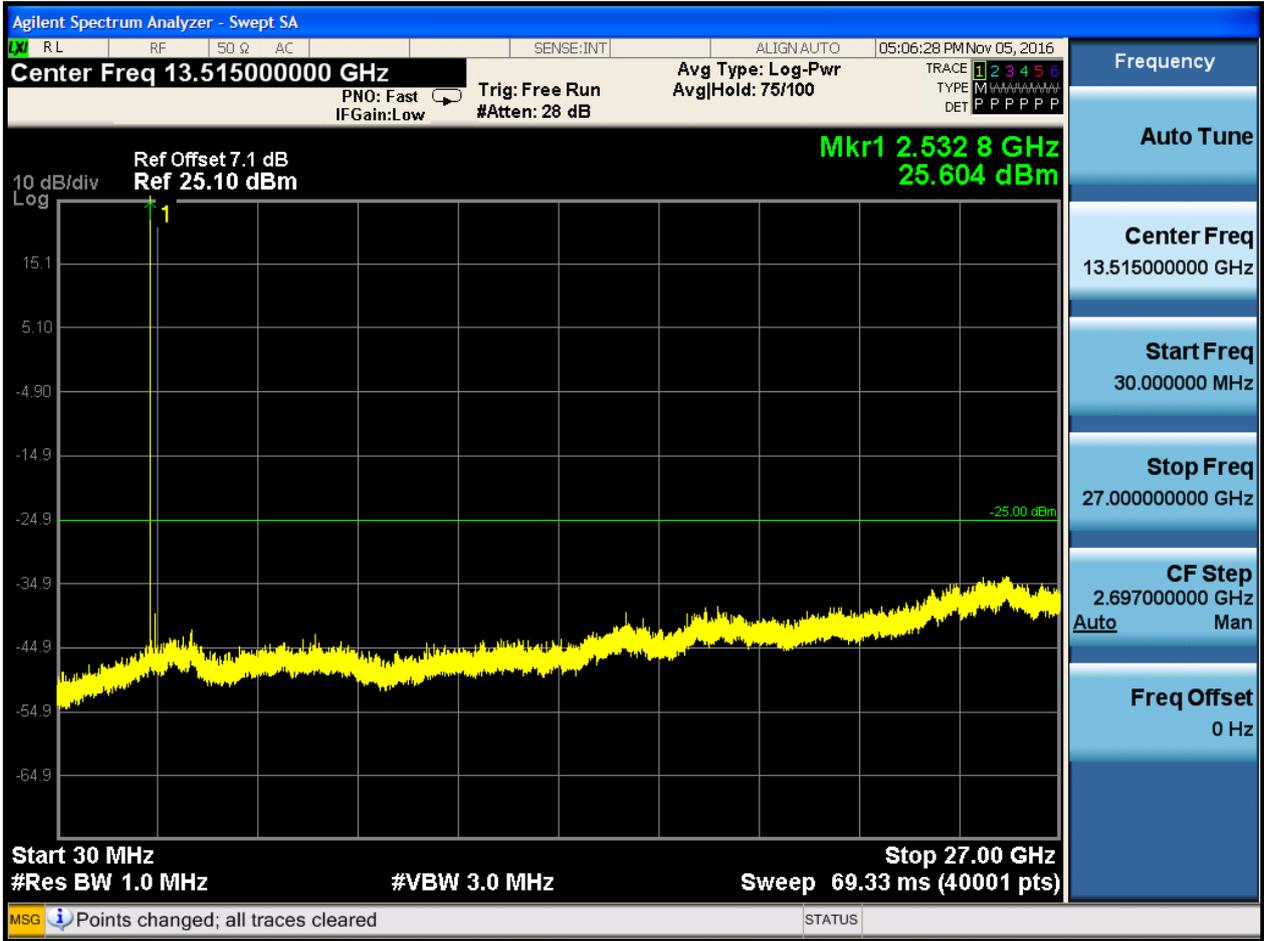




6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0

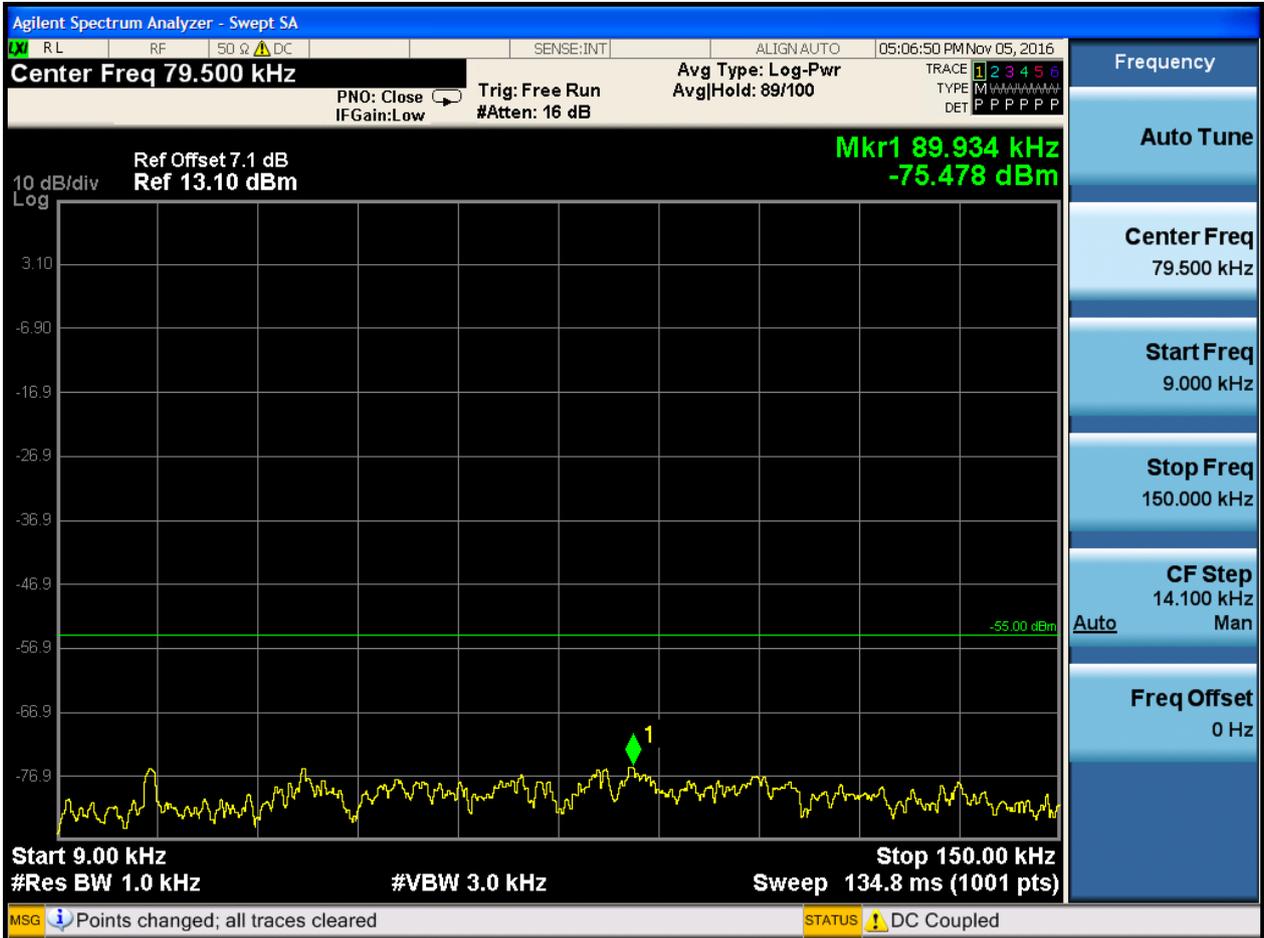






6.1.1.1.1.3 Test Channel = HCH

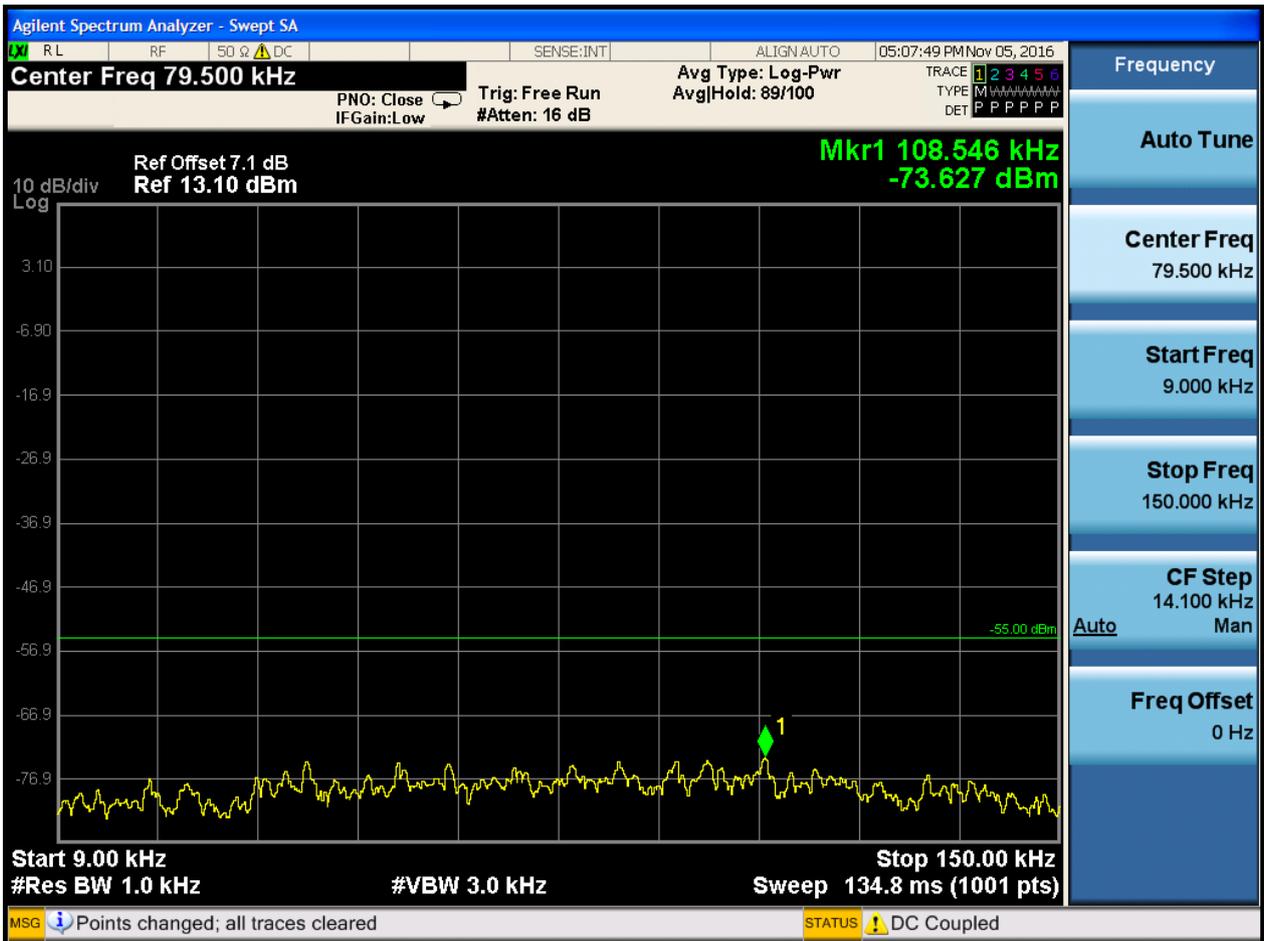
6.1.1.1.1.3.1 Test RB = RB1#0

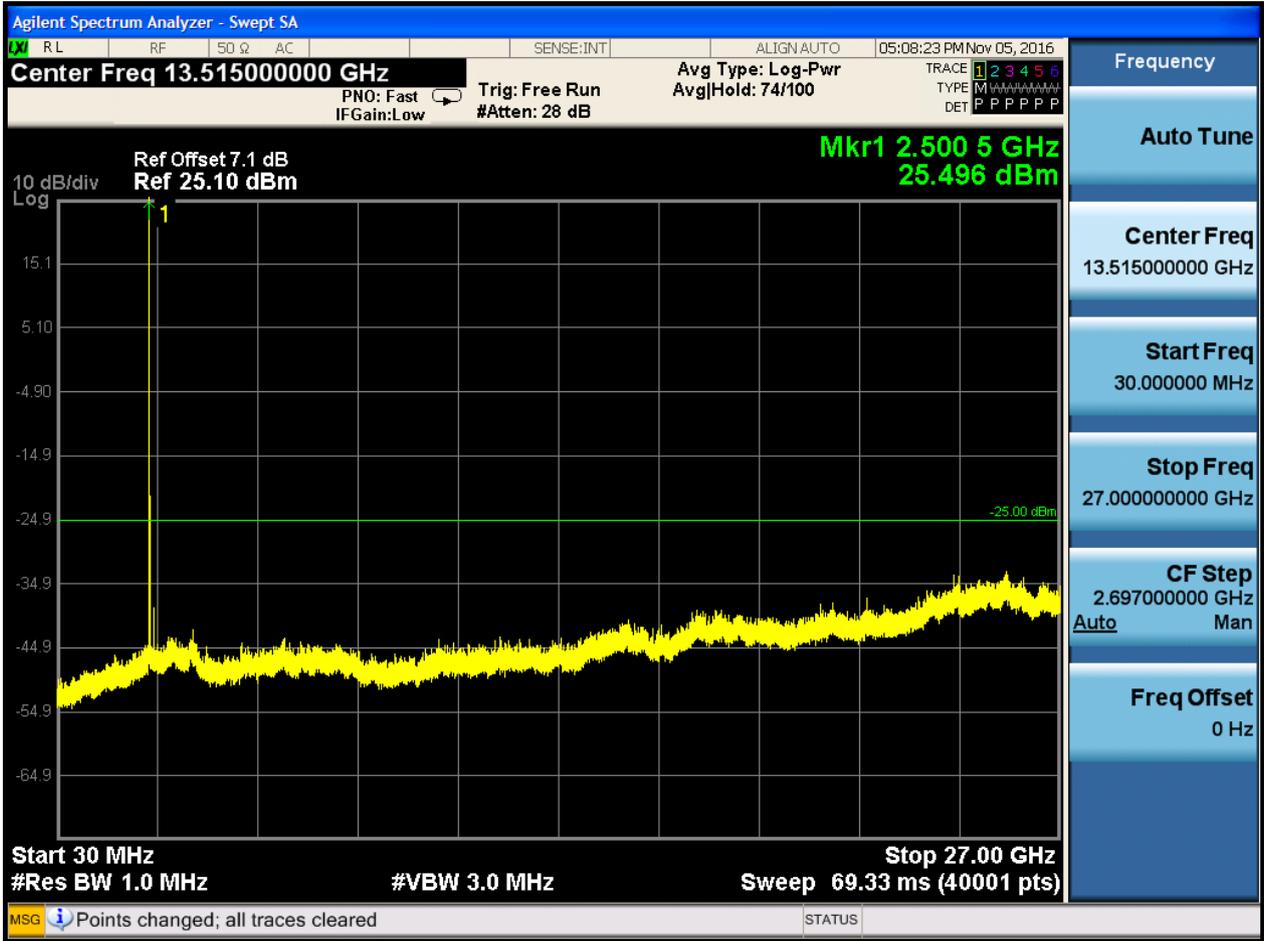


6.1.1.1.2 Test Bandwidth = 10

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0

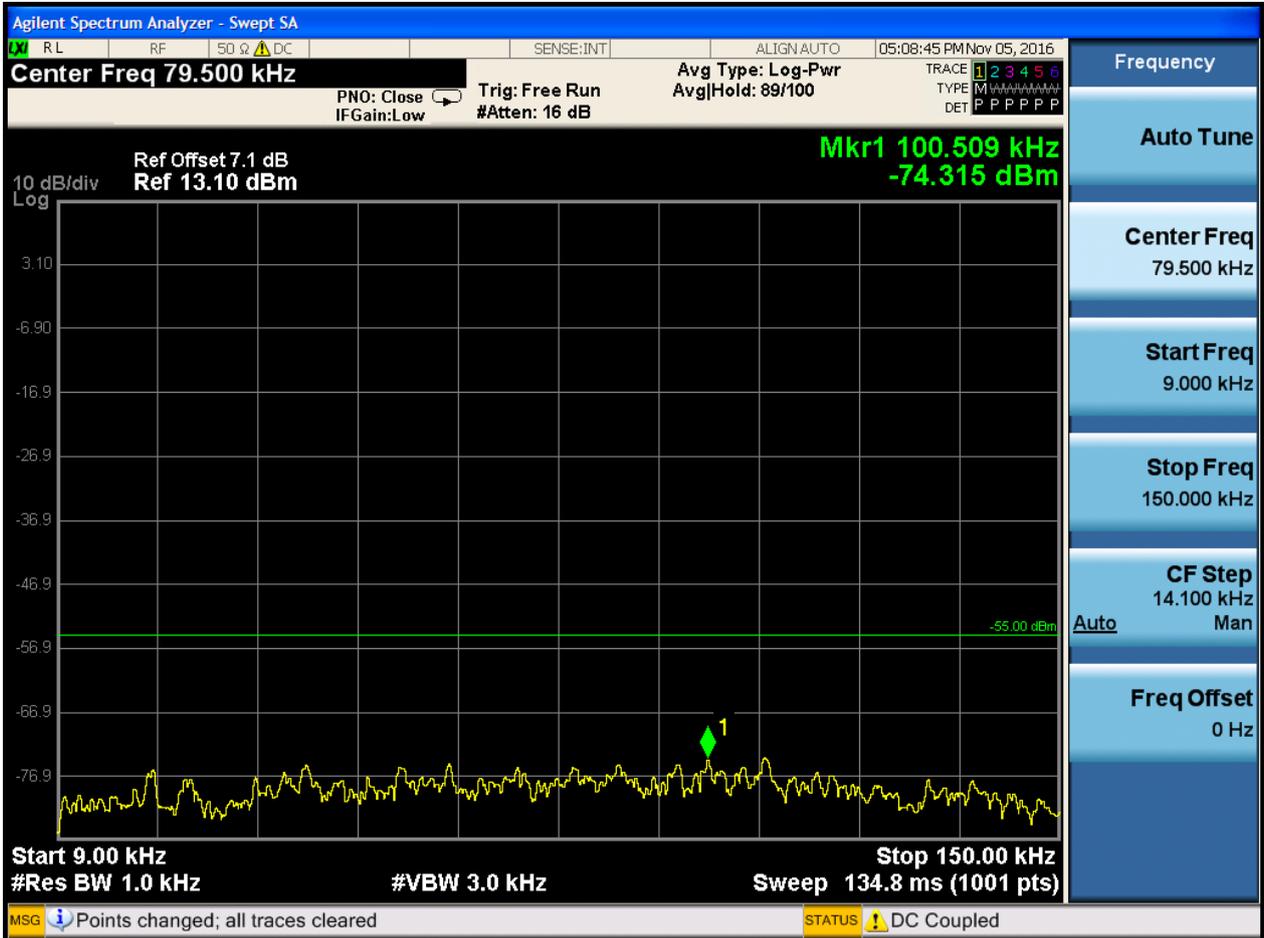






6.1.1.1.2.2 Test Channel = MCH

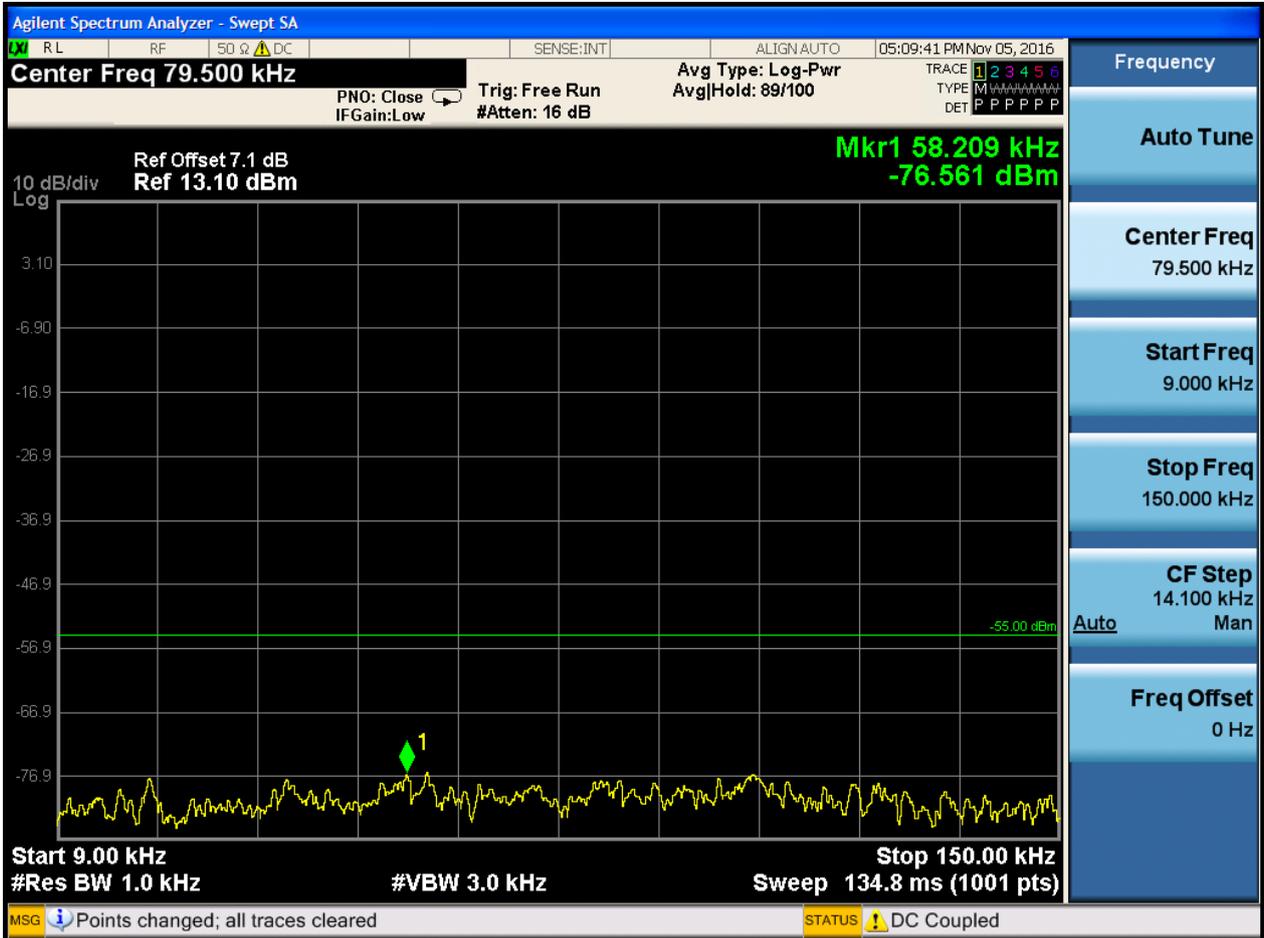
6.1.1.1.2.2.1 Test RB = RB1#0





6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0

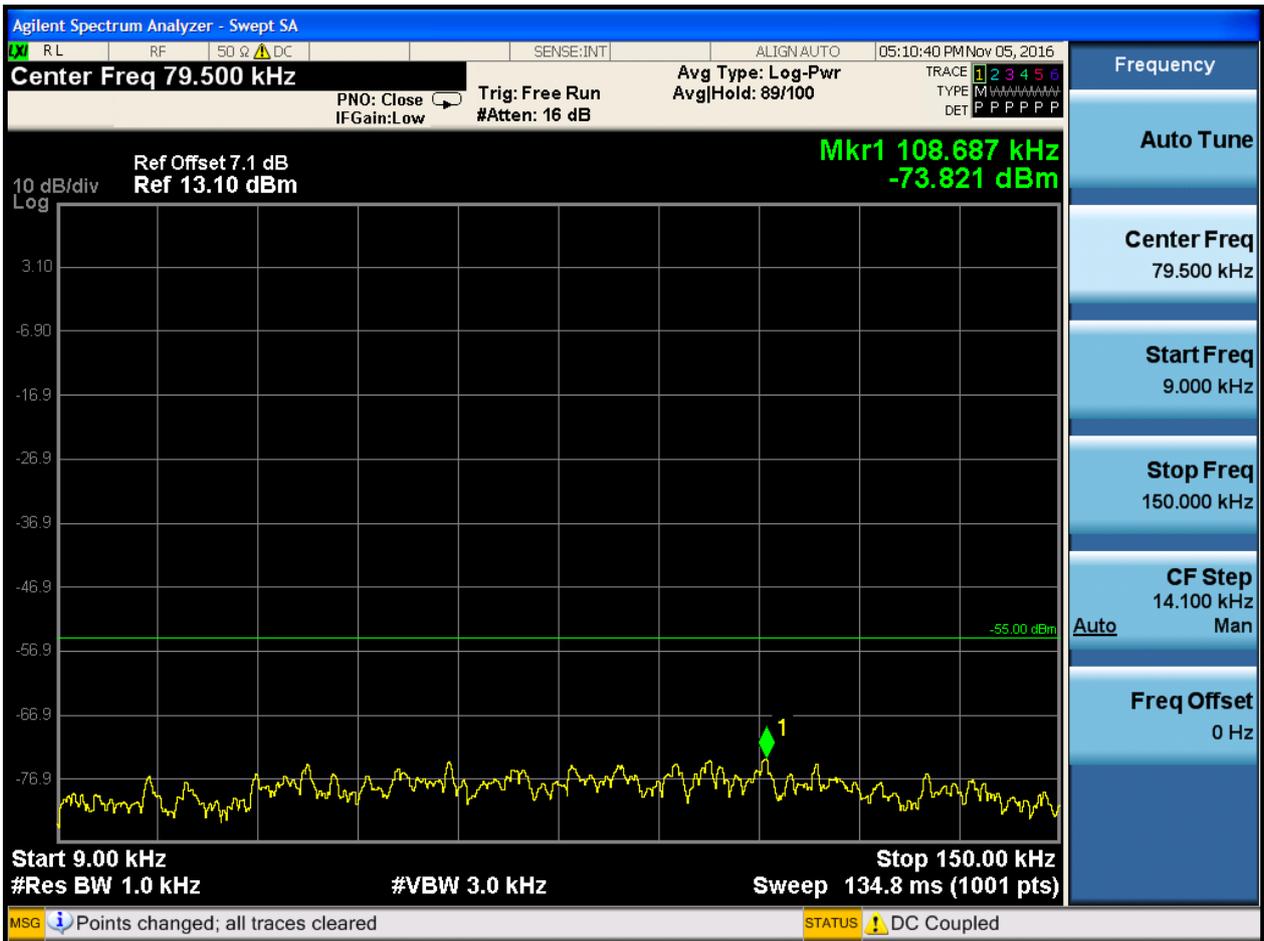




6.1.1.1.3 Test Bandwidth = 15

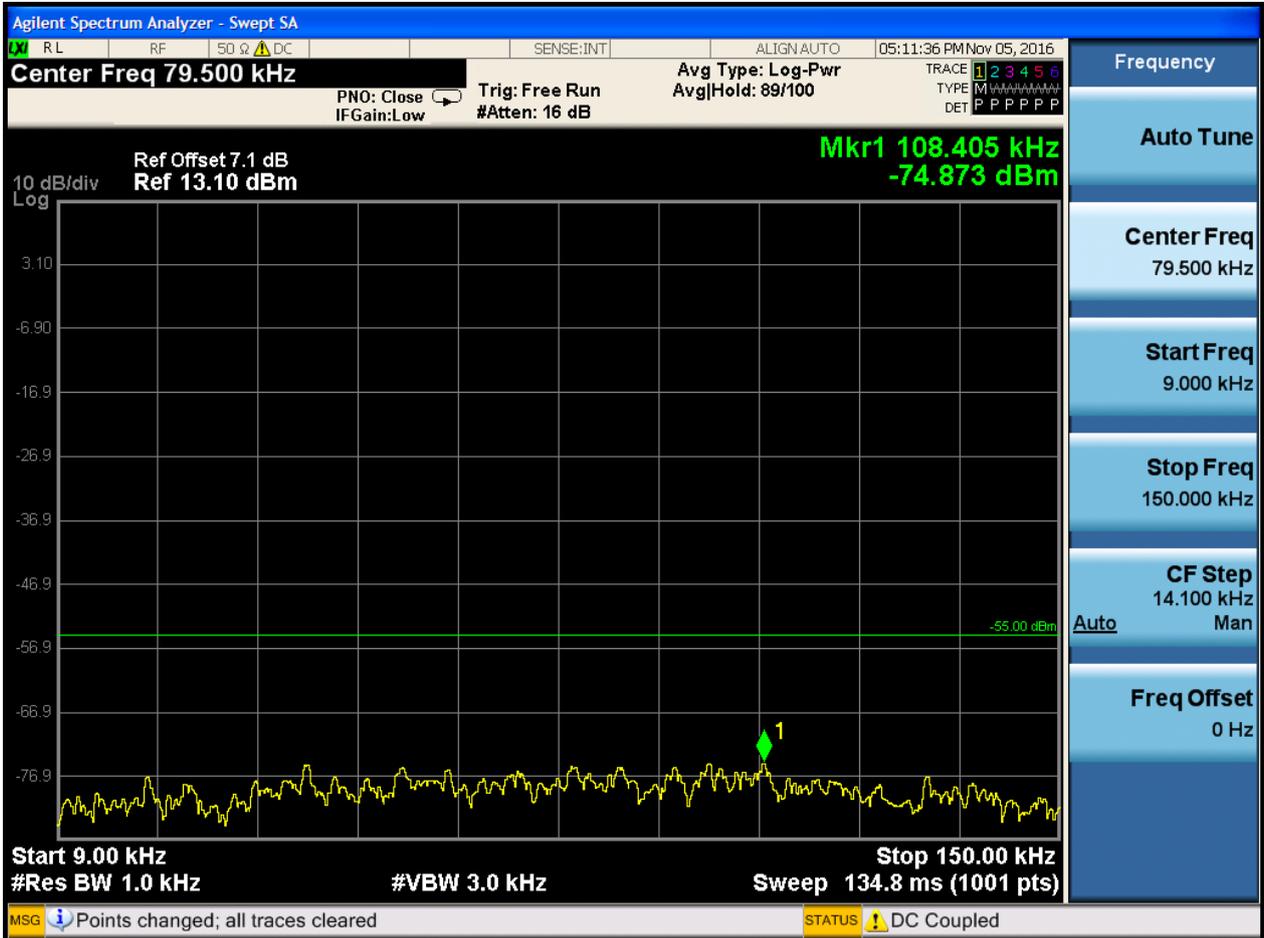
6.1.1.1.3.1 Test Channel = LCH

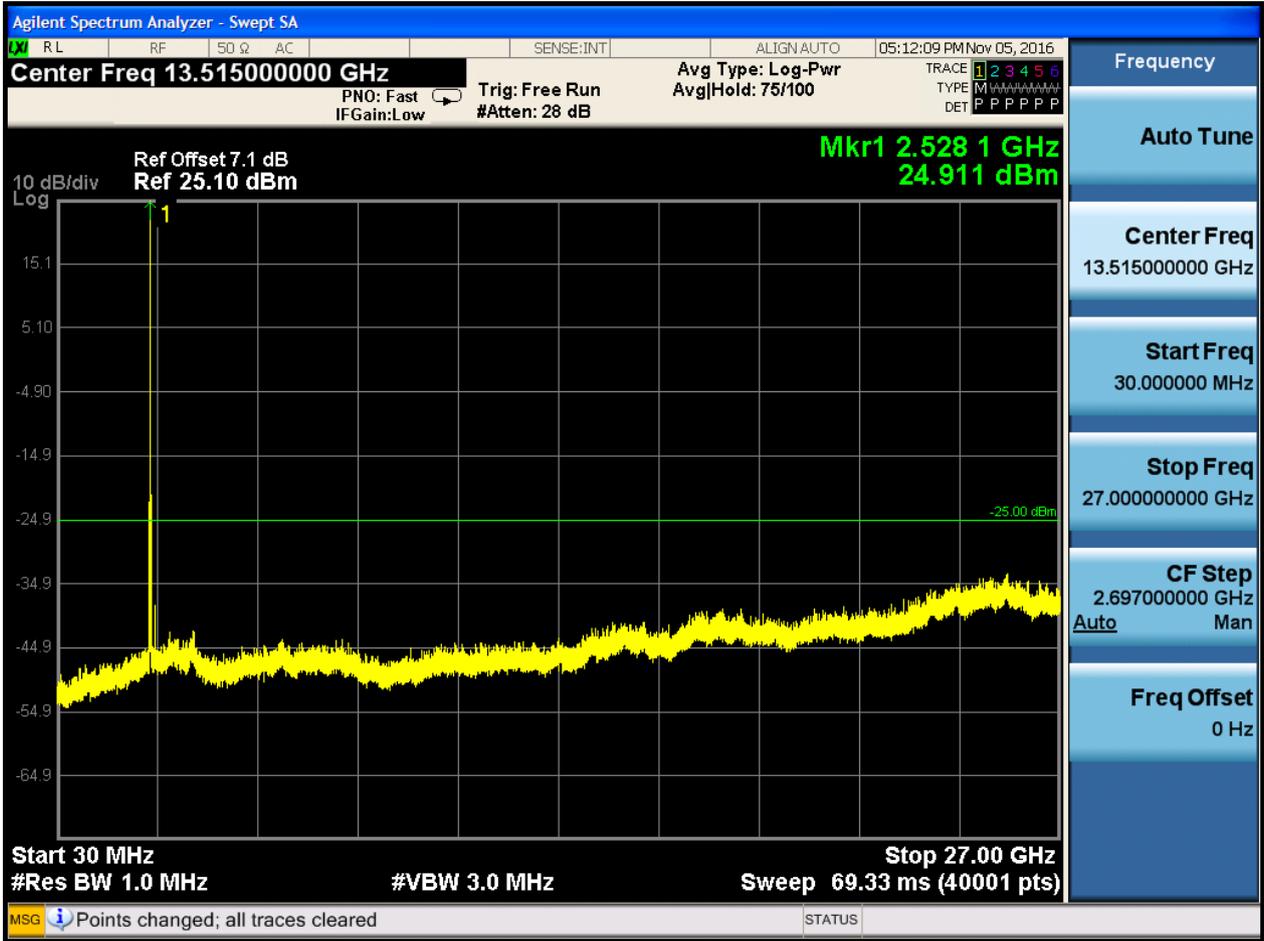
6.1.1.1.3.1.1 Test RB = RB1#0



6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0

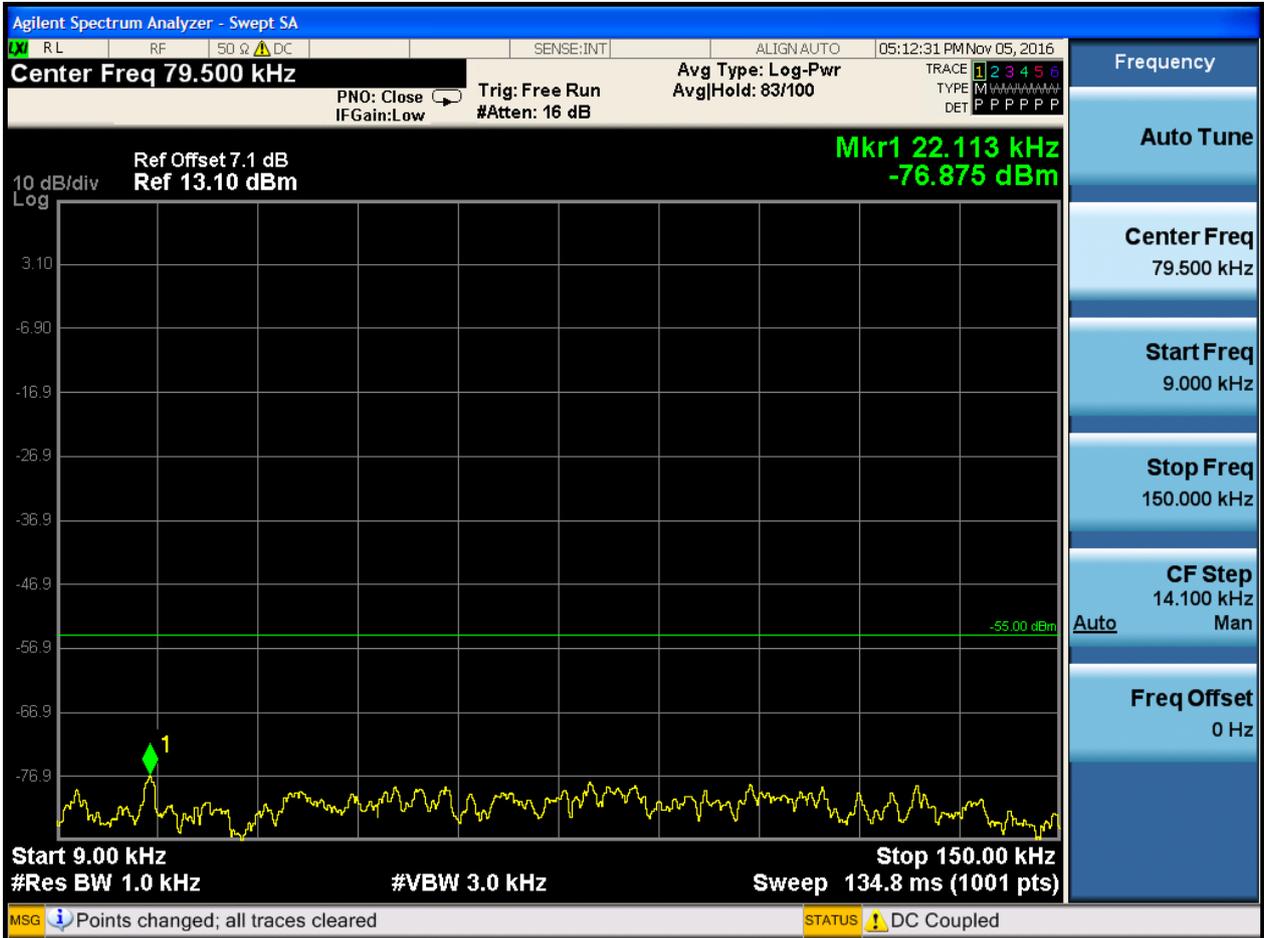






6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0



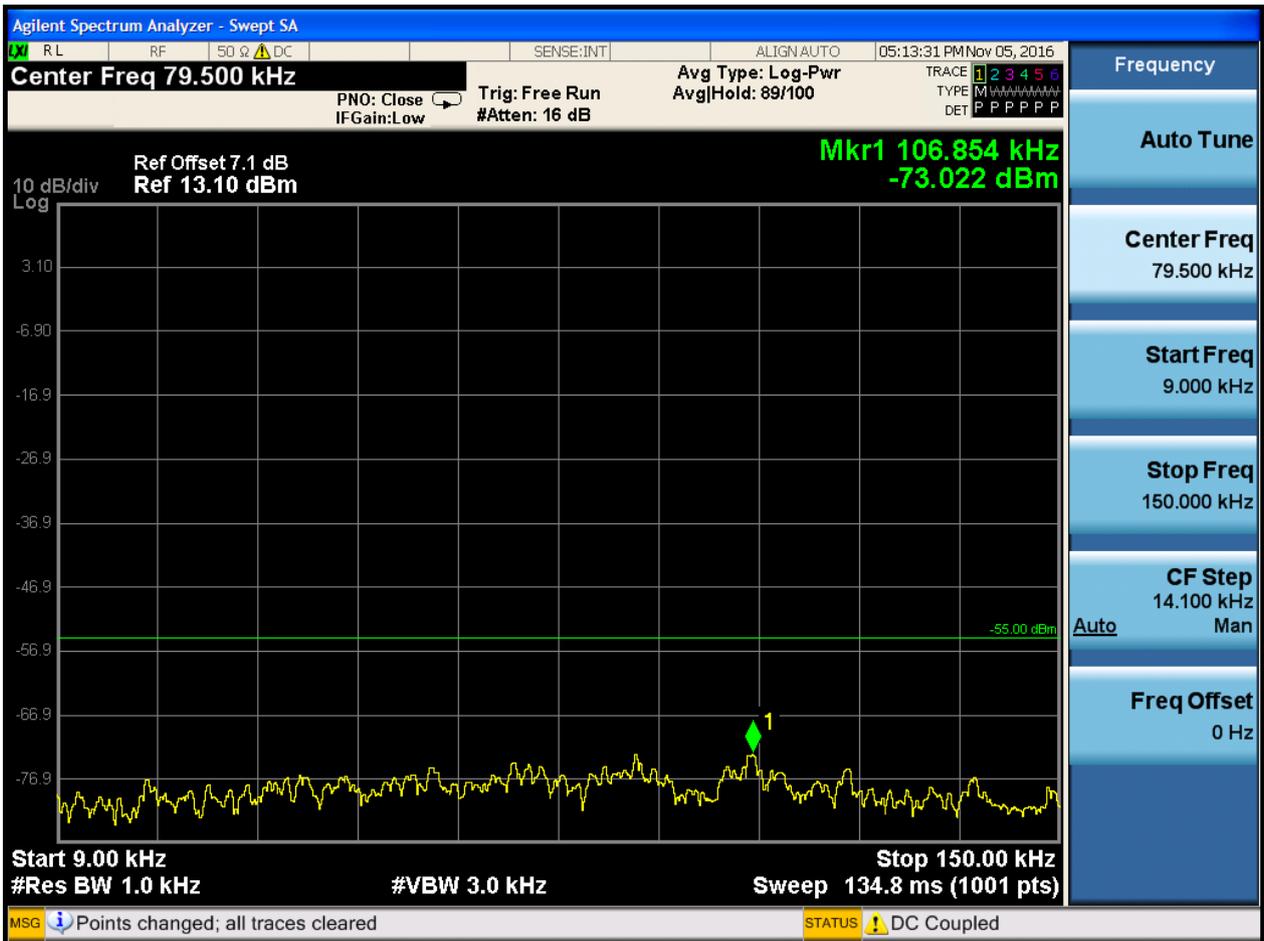




6.1.1.1.4 Test Bandwidth = 20

6.1.1.1.4.1 Test Channel = LCH

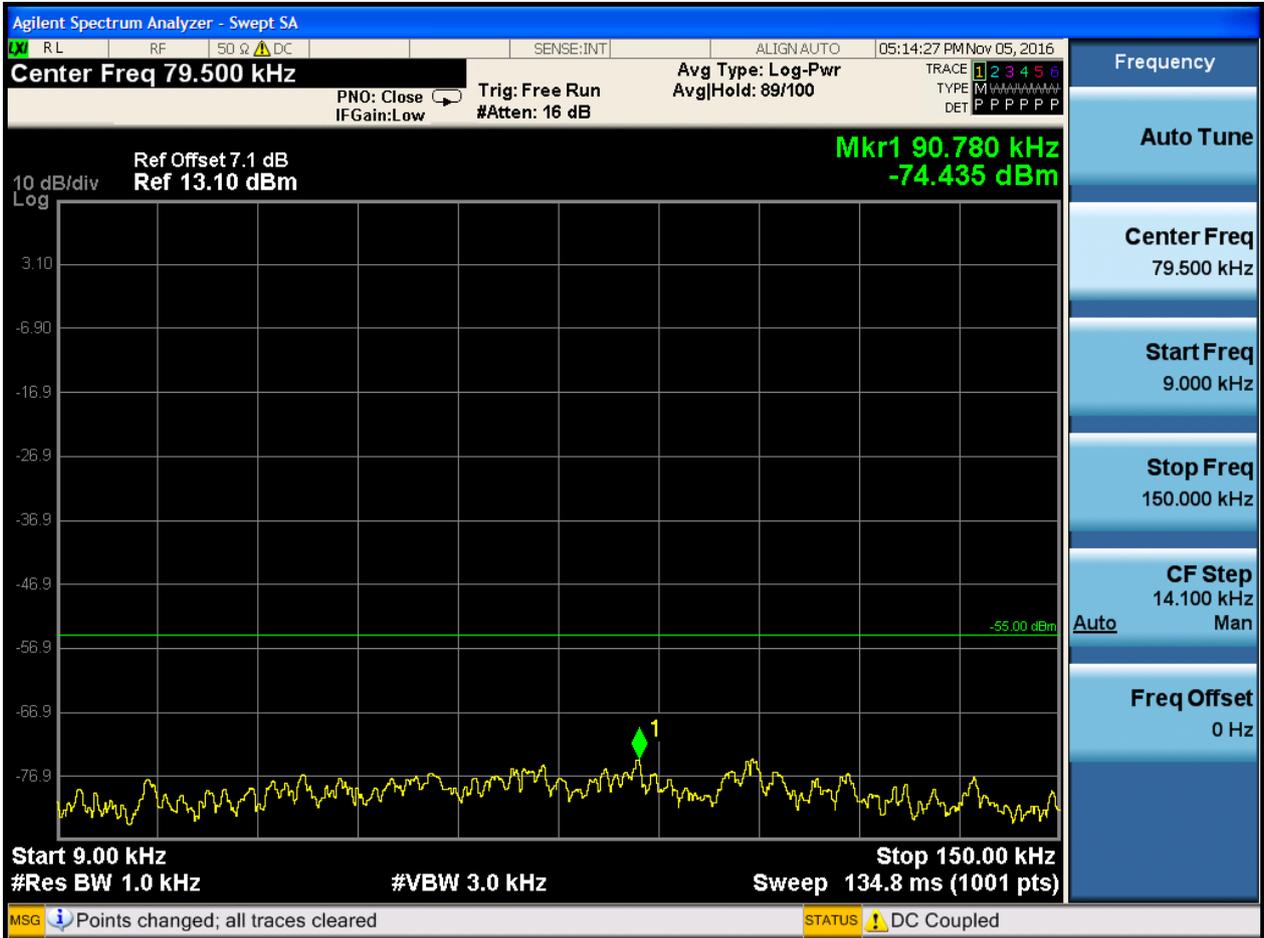
6.1.1.1.4.1.1 Test RB = RB1#0

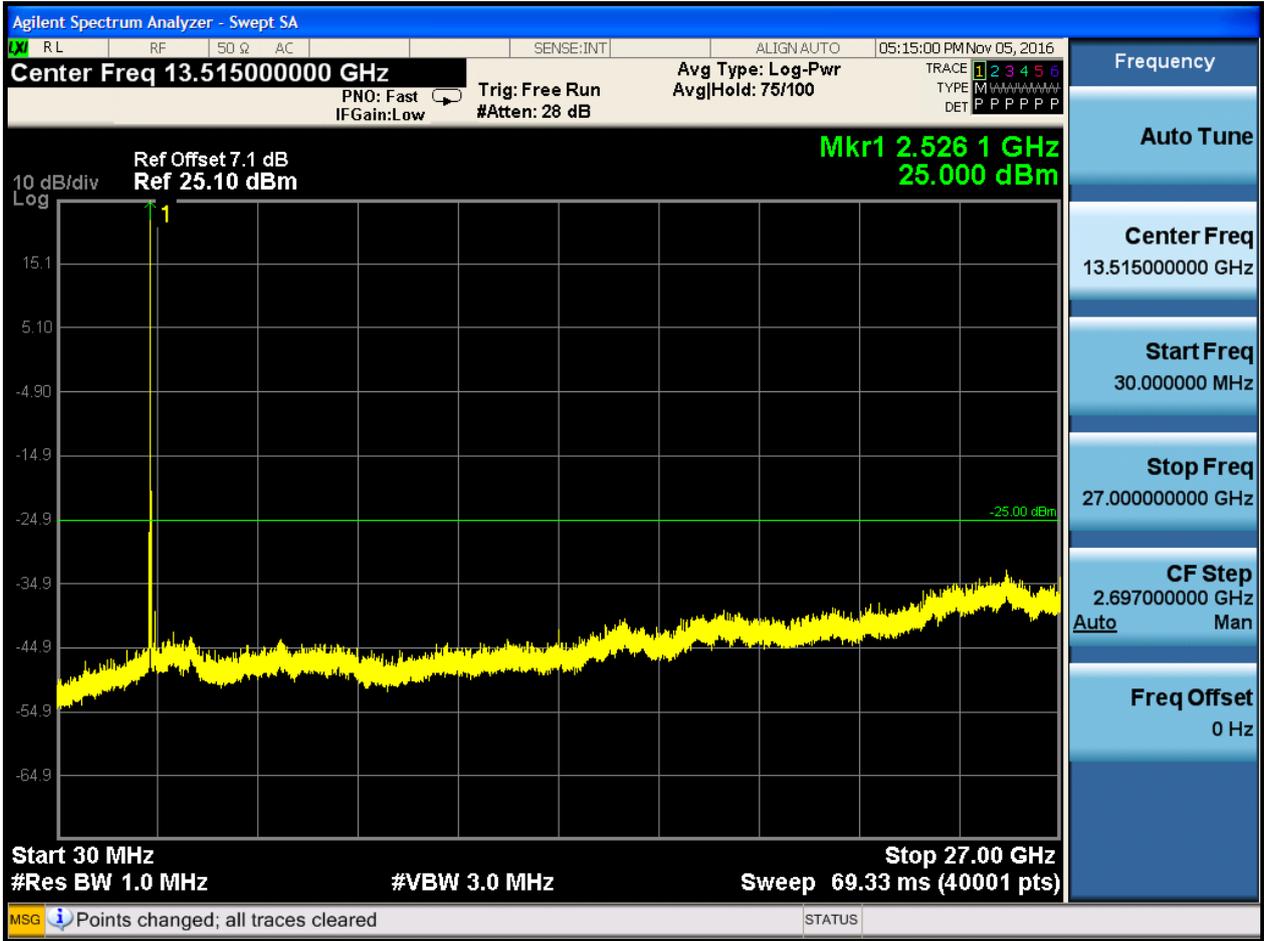




6.1.1.1.4.2 Test Channel = MCH

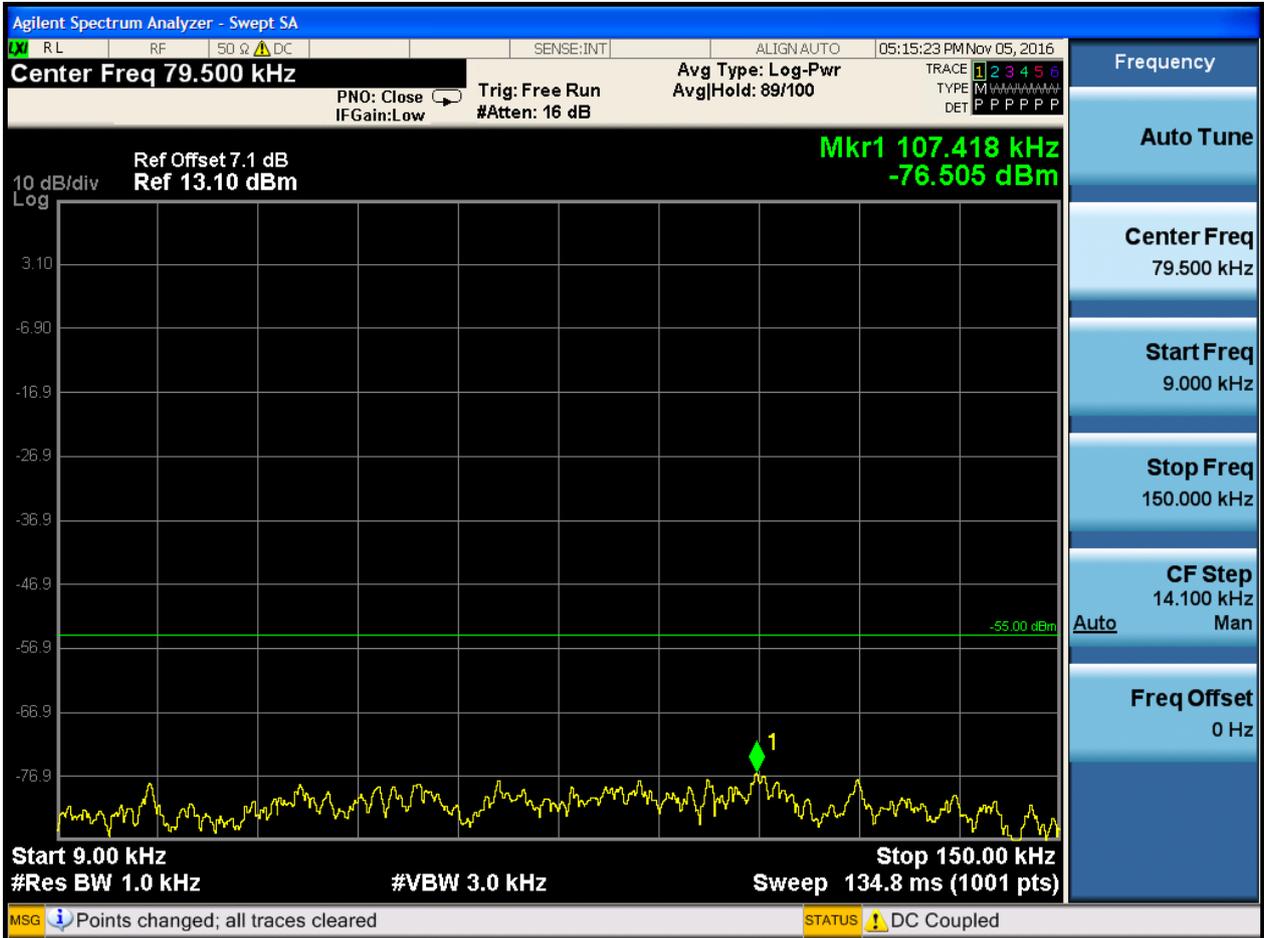
6.1.1.1.4.2.1 Test RB = RB1#0





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

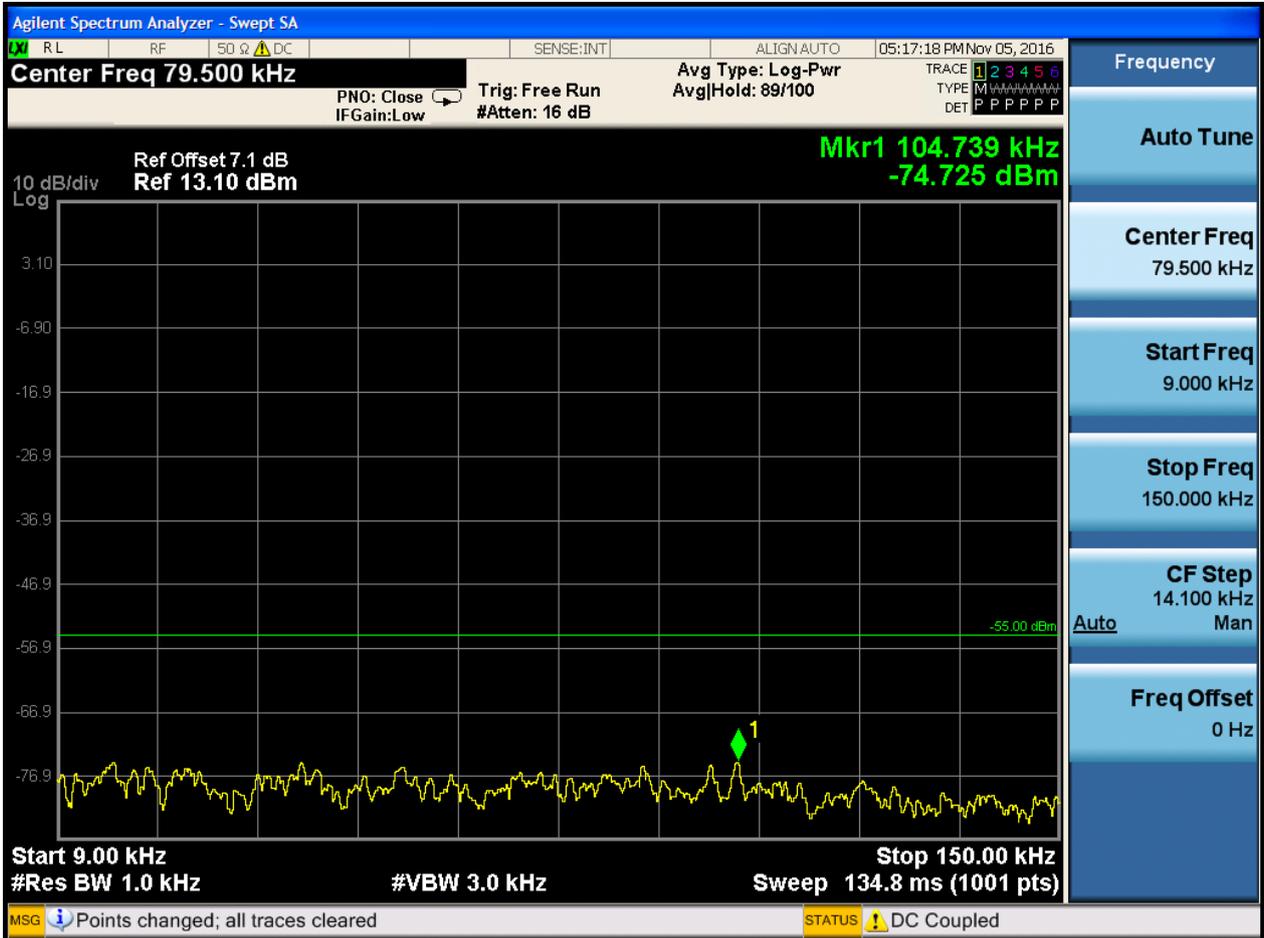
6.1.1.2.1.1.1 Test RB = RB1#0





6.1.1.2.1.2 Test Channel = MCH

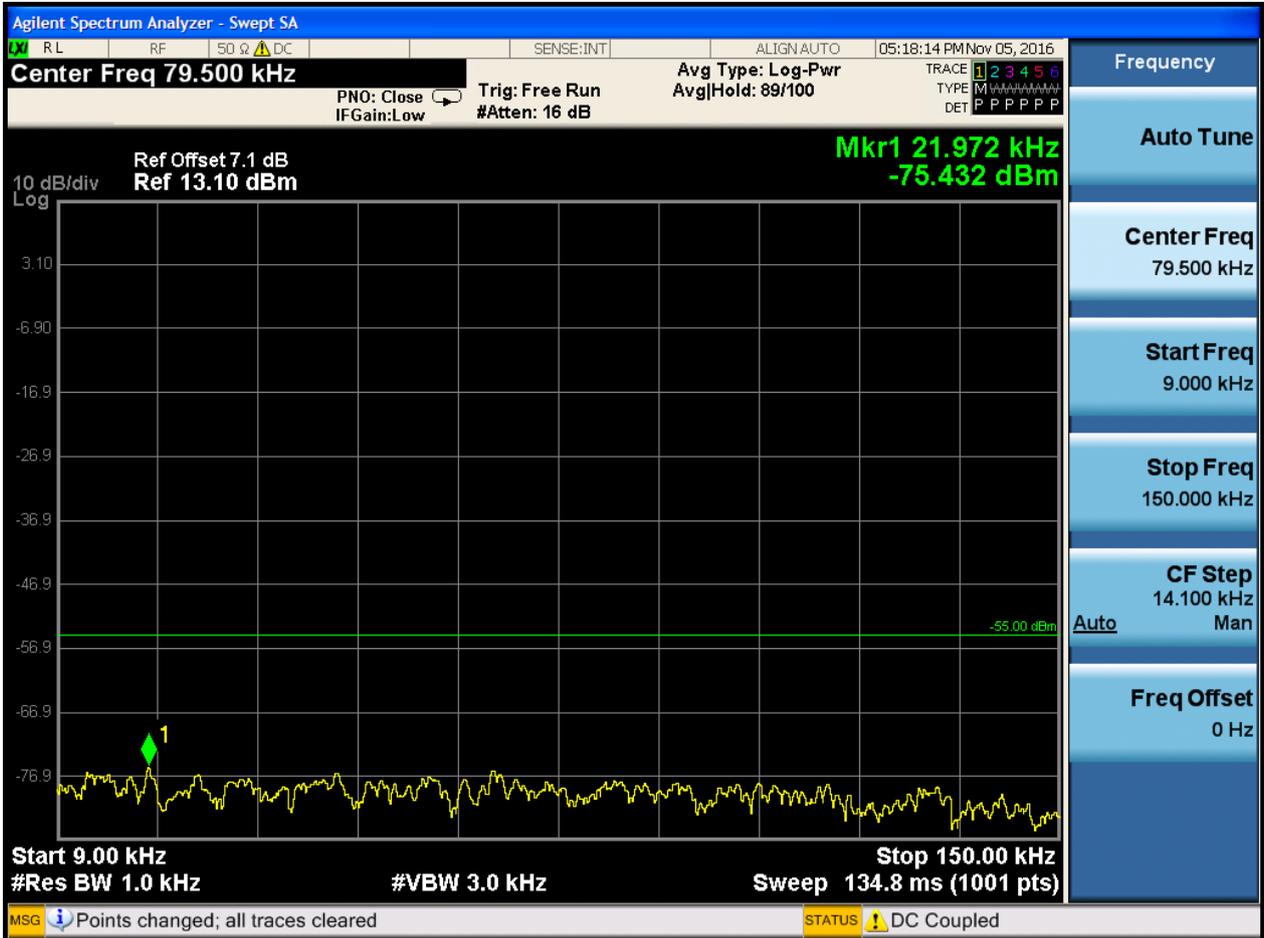
6.1.1.2.1.2.1 Test RB = RB1#0

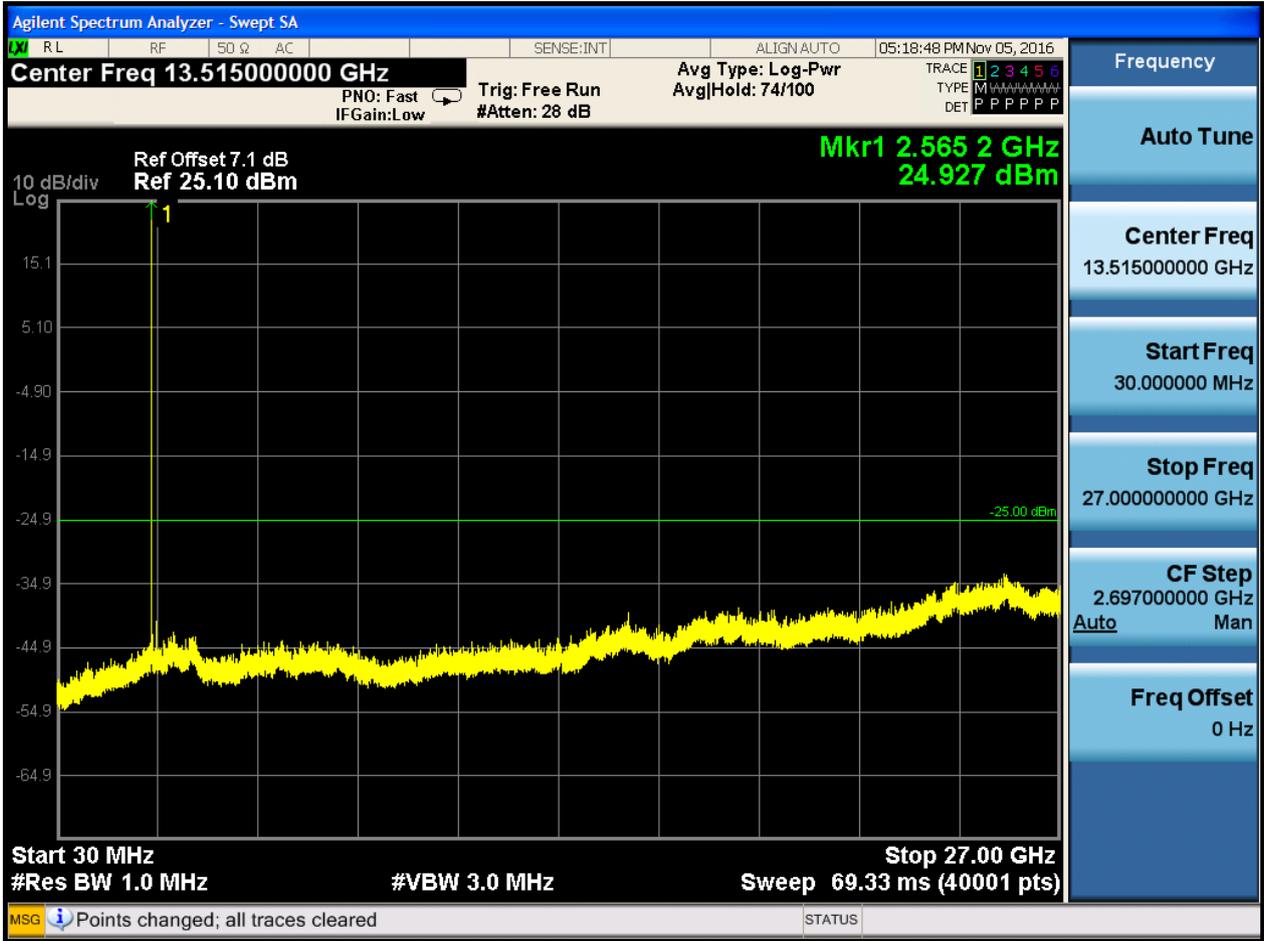




6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0



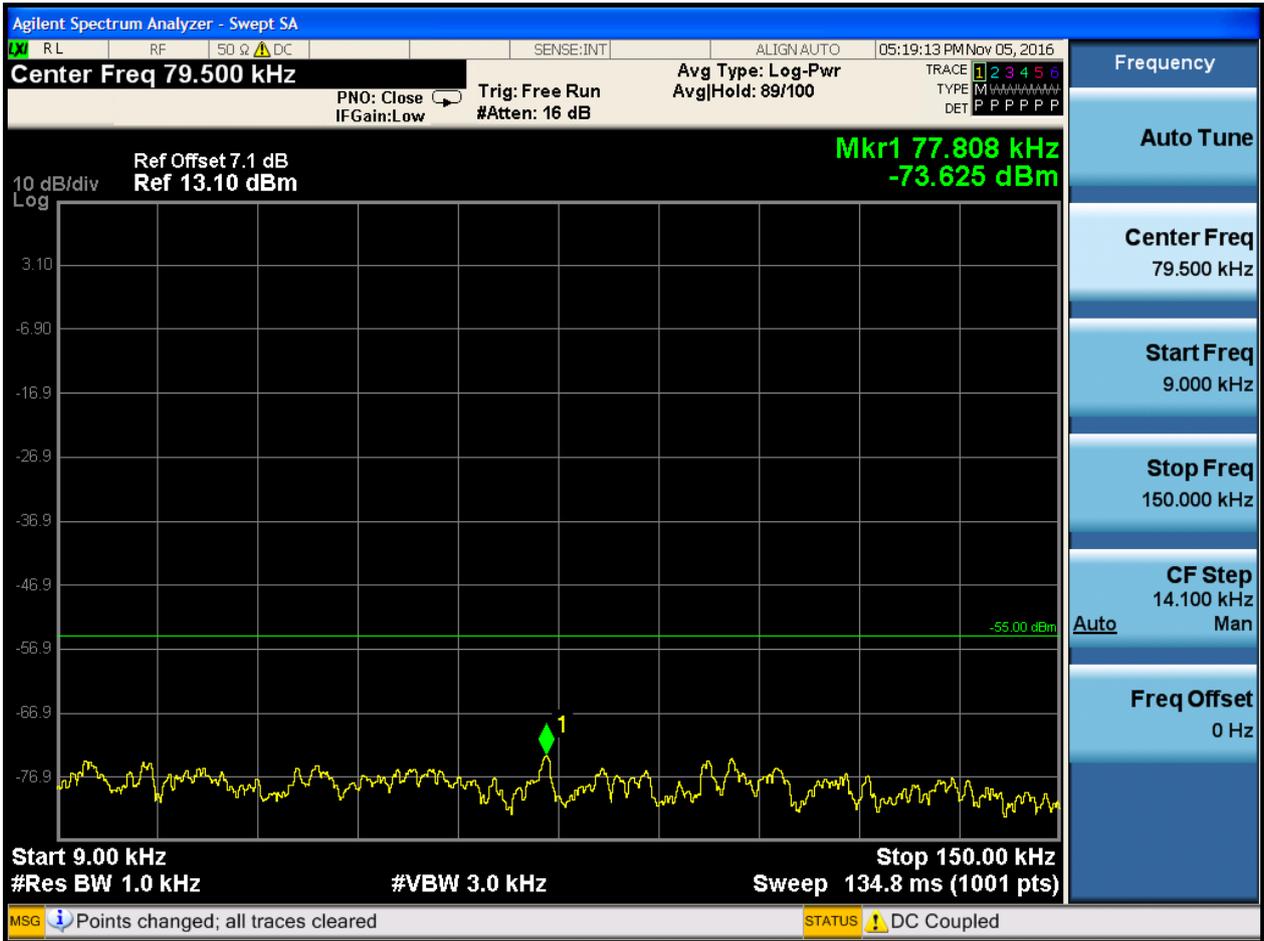




6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0

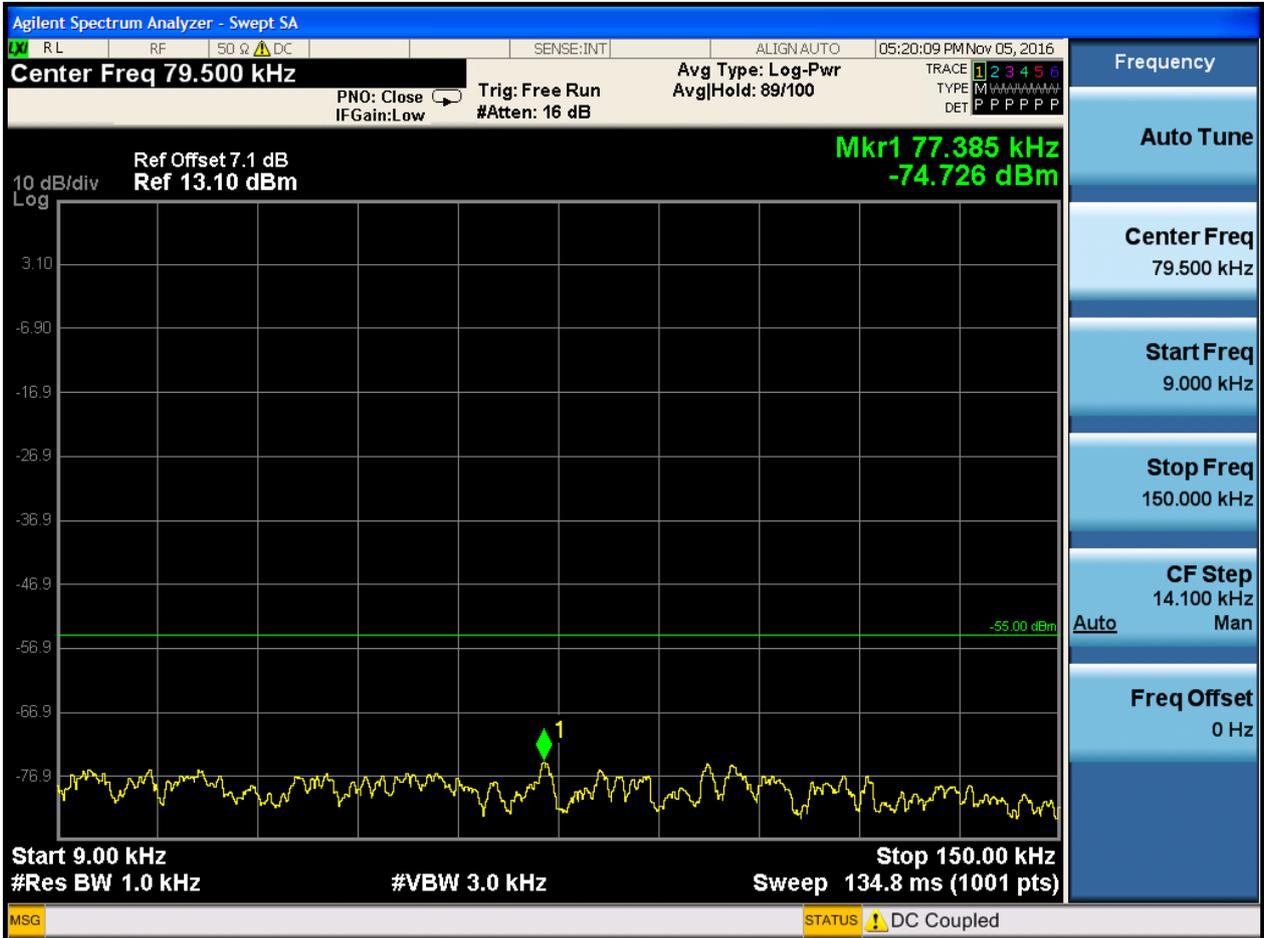


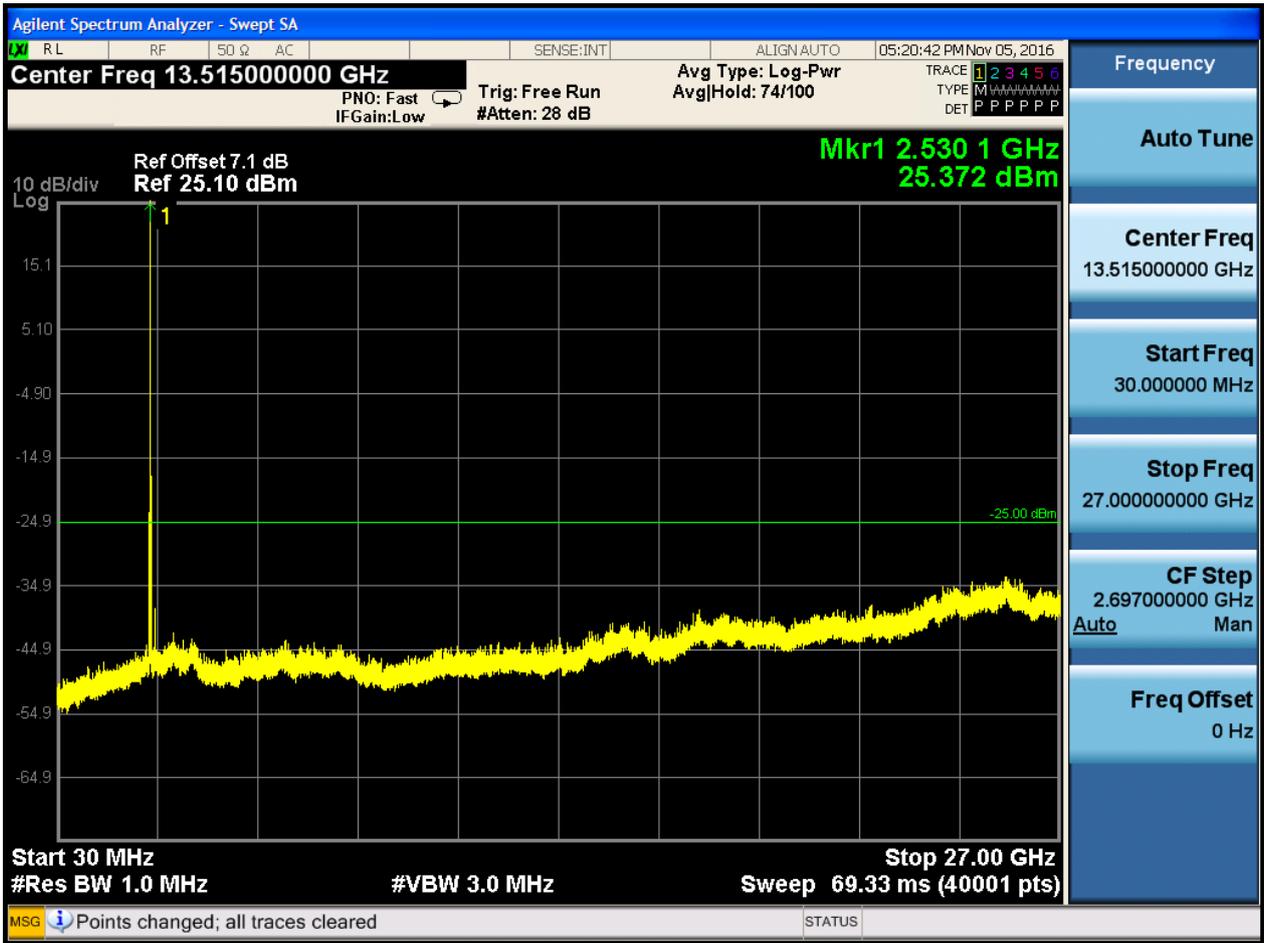




6.1.1.2.2.2 Test Channel = MCH

6.1.1.2.2.2.1 Test RB = RB1#0



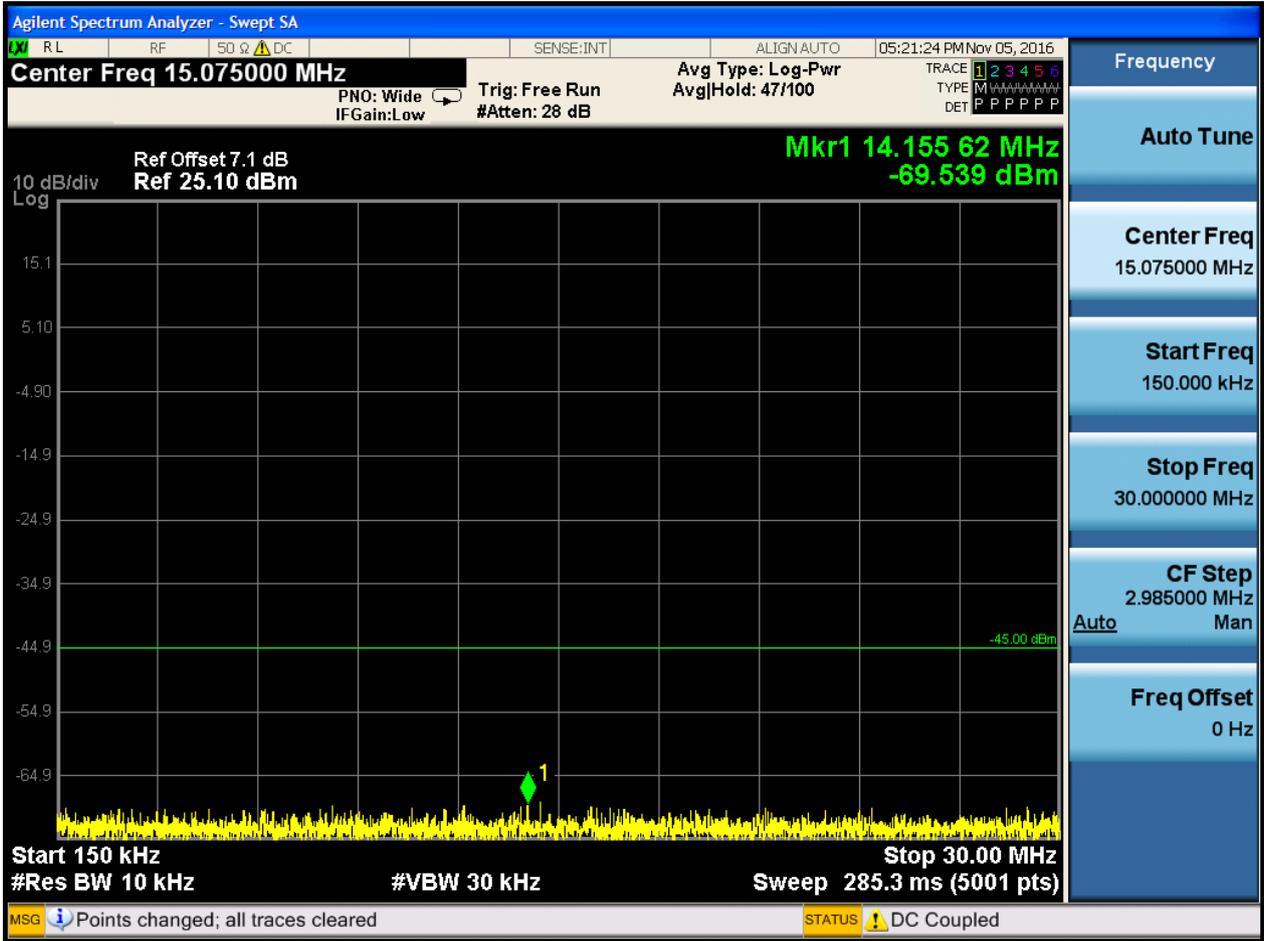




6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0



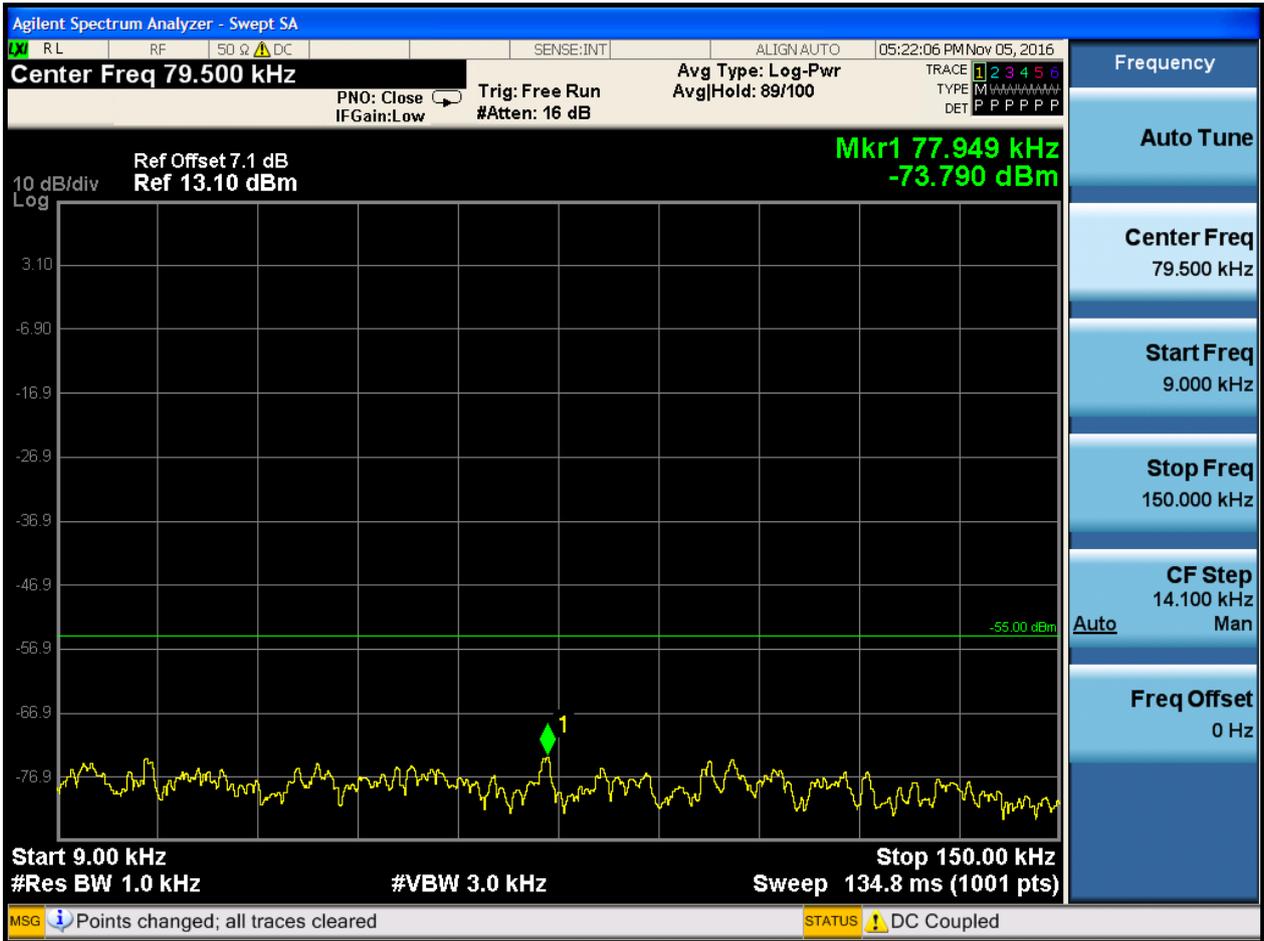




6.1.1.2.3 Test Bandwidth = 15

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0



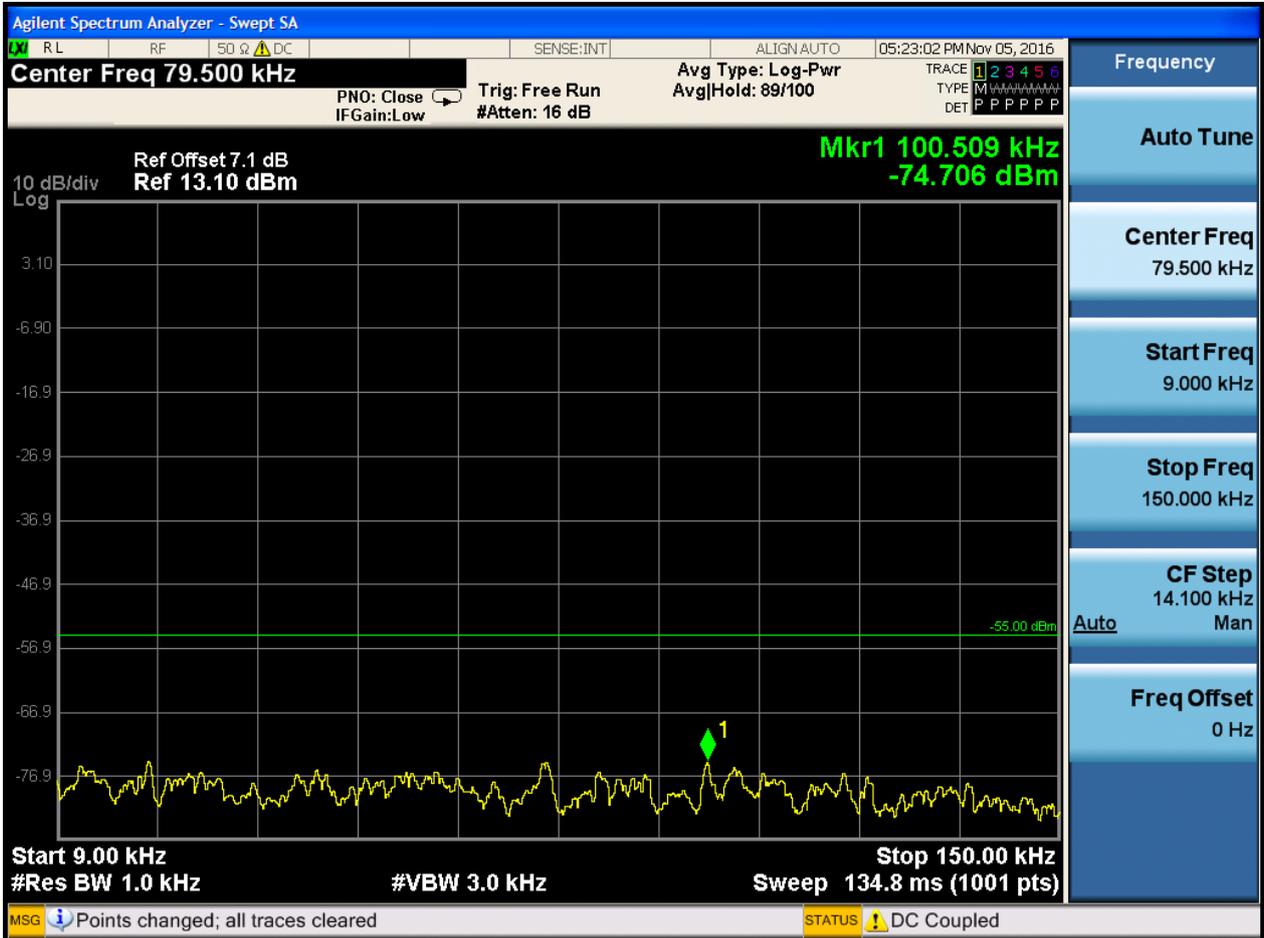






6.1.1.2.3.2 Test Channel = MCH

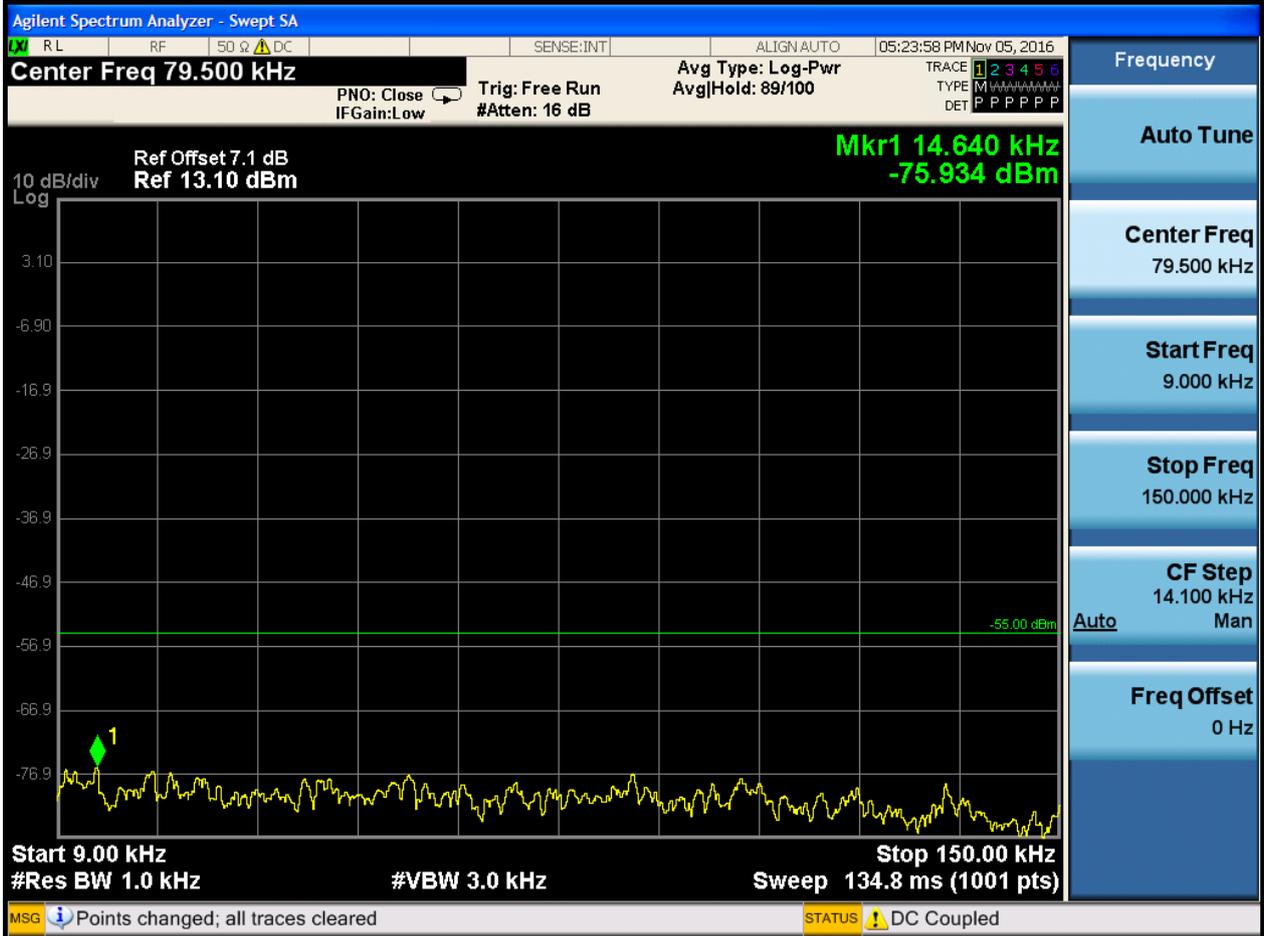
6.1.1.2.3.2.1 Test RB = RB1#0





6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0

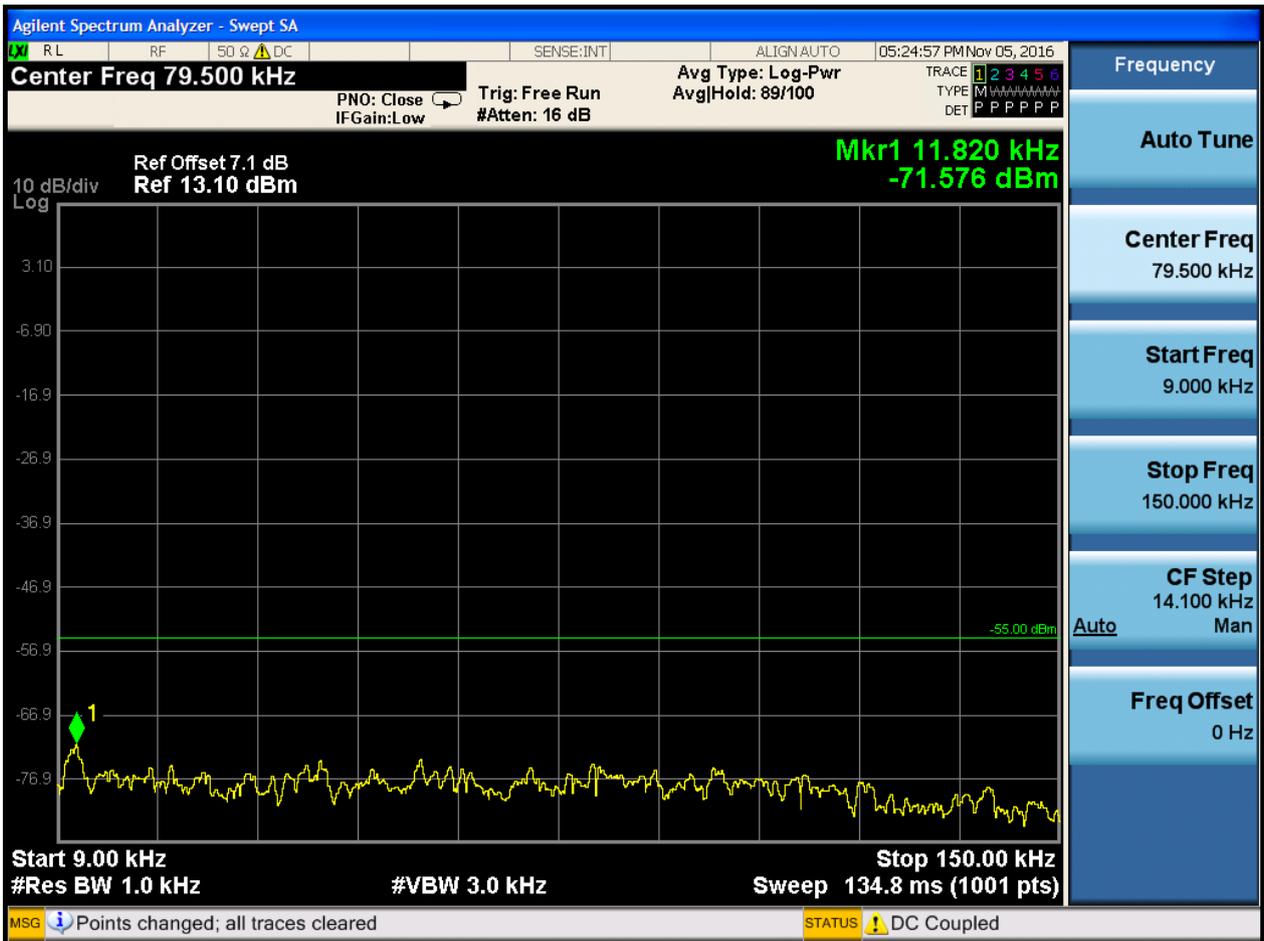




6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

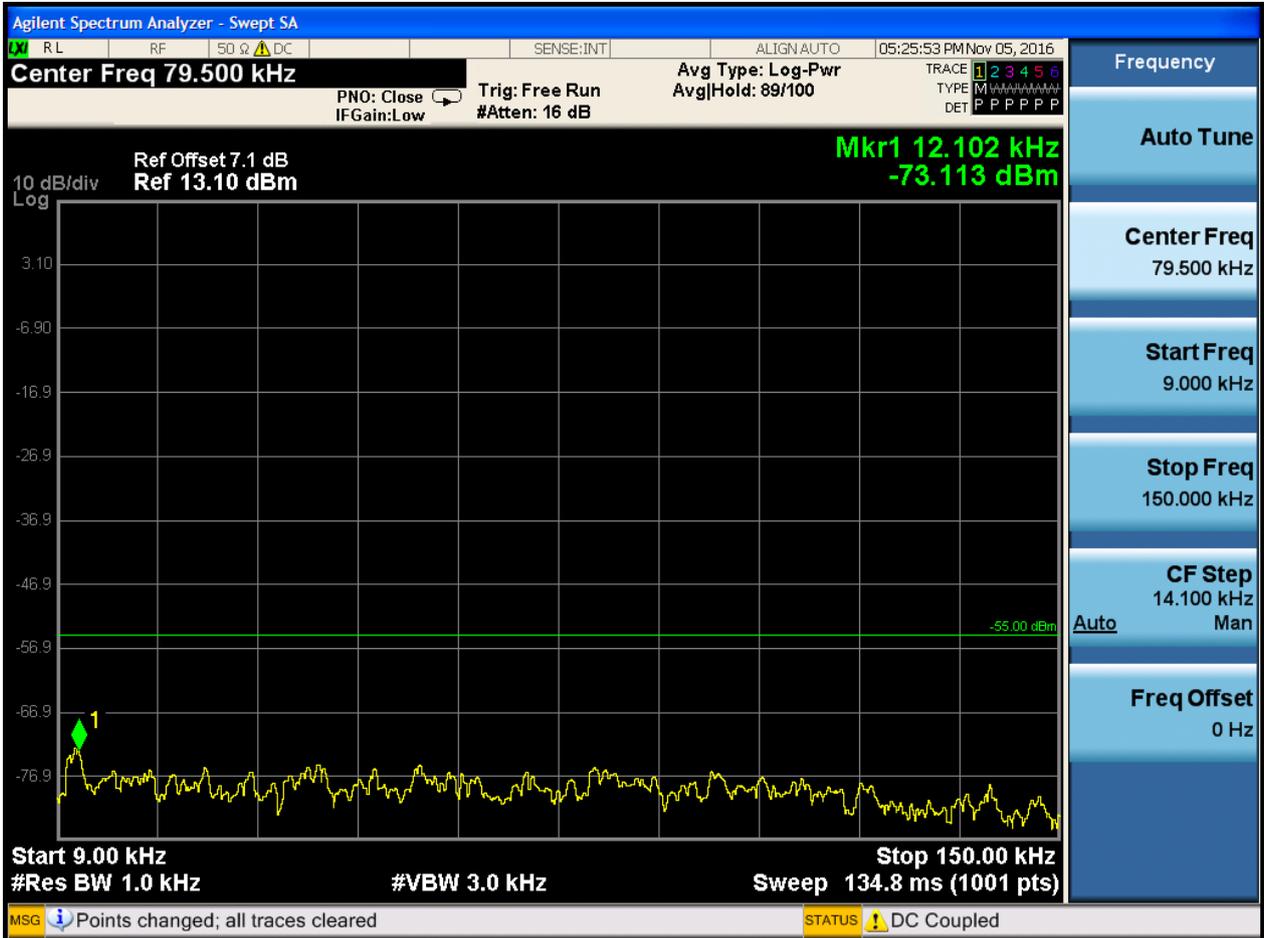
6.1.1.2.4.1.1 Test RB = RB1#0

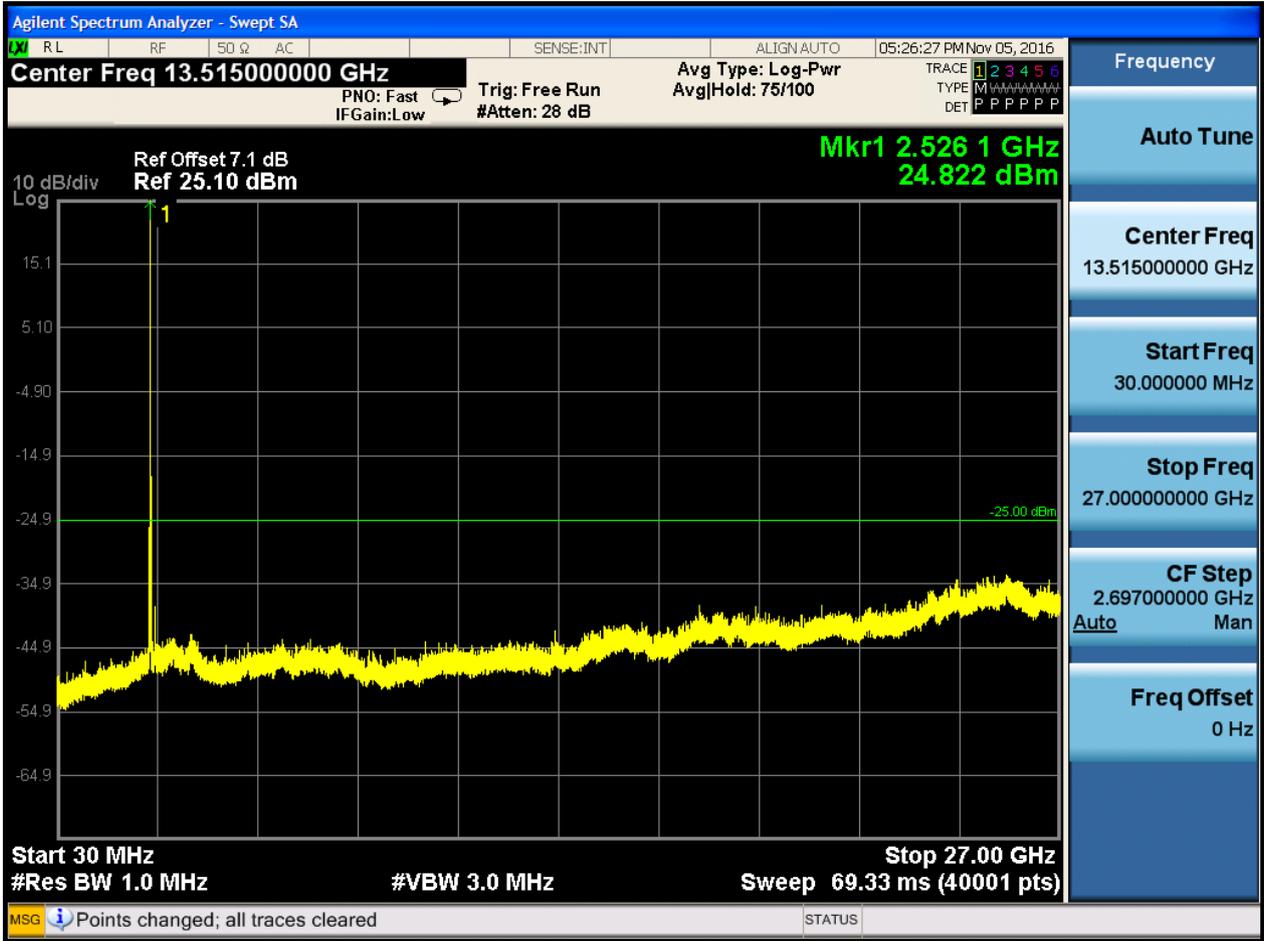




6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0

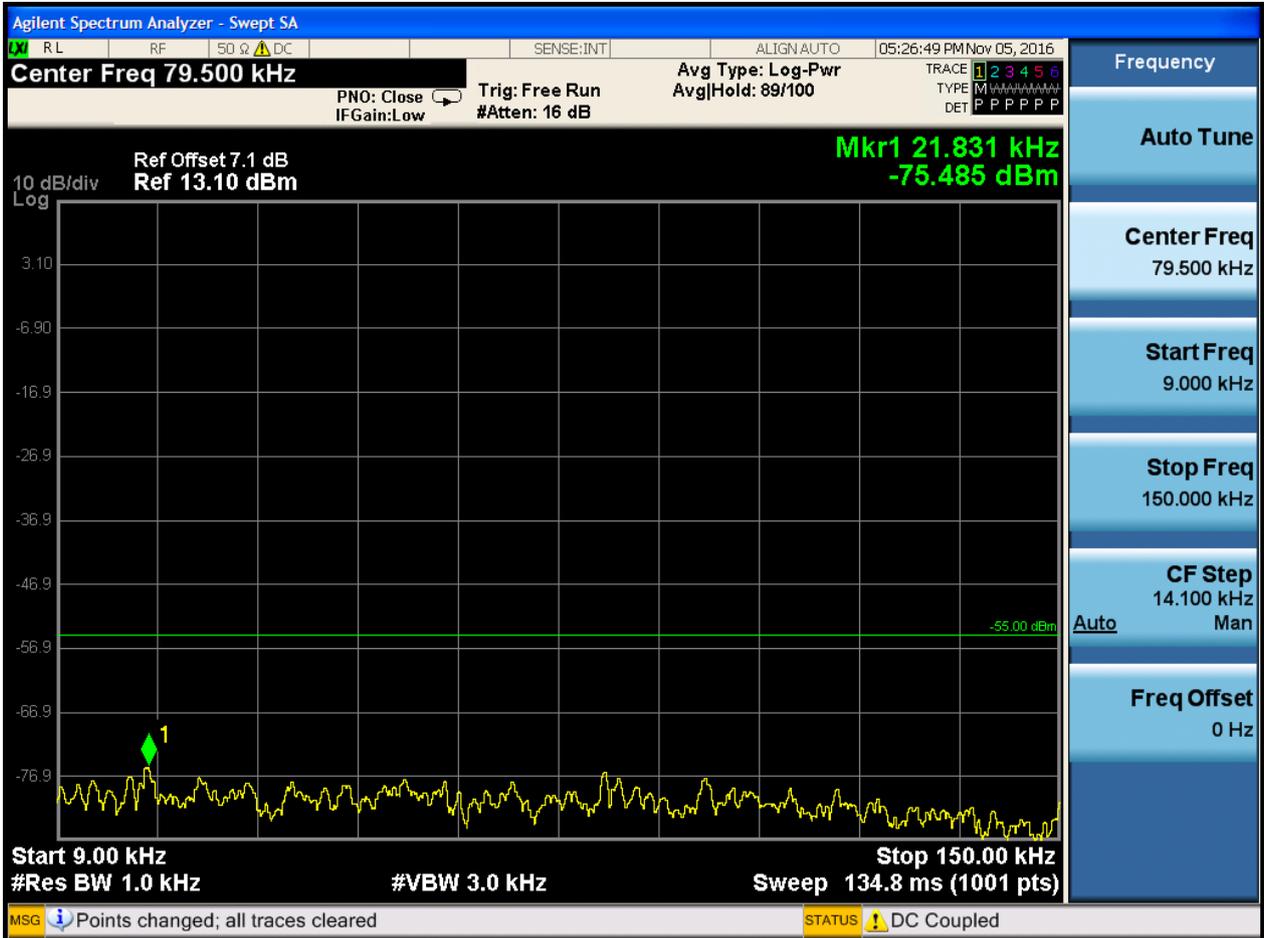


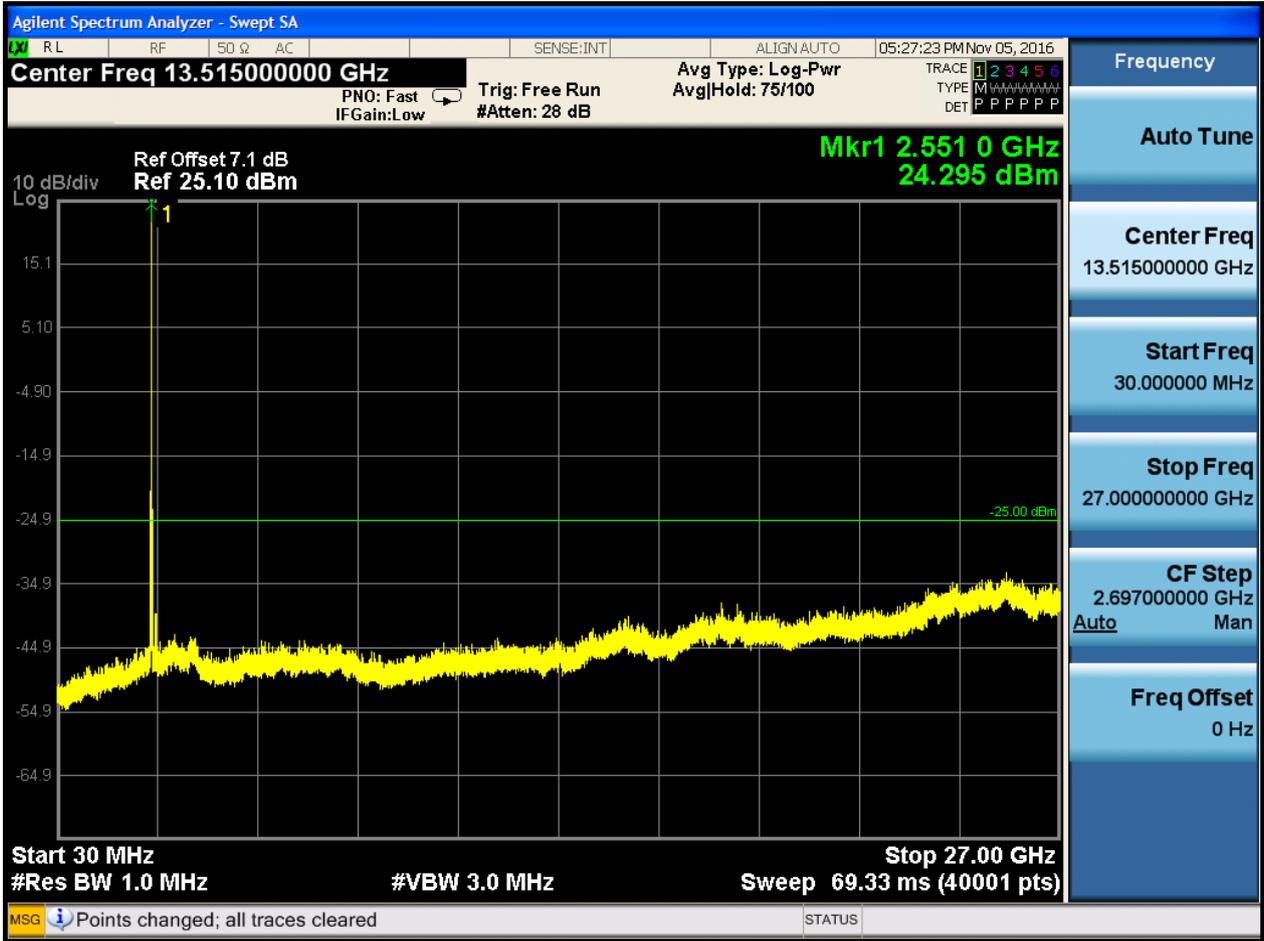




6.1.1.2.4.3 Test Channel = HCH

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

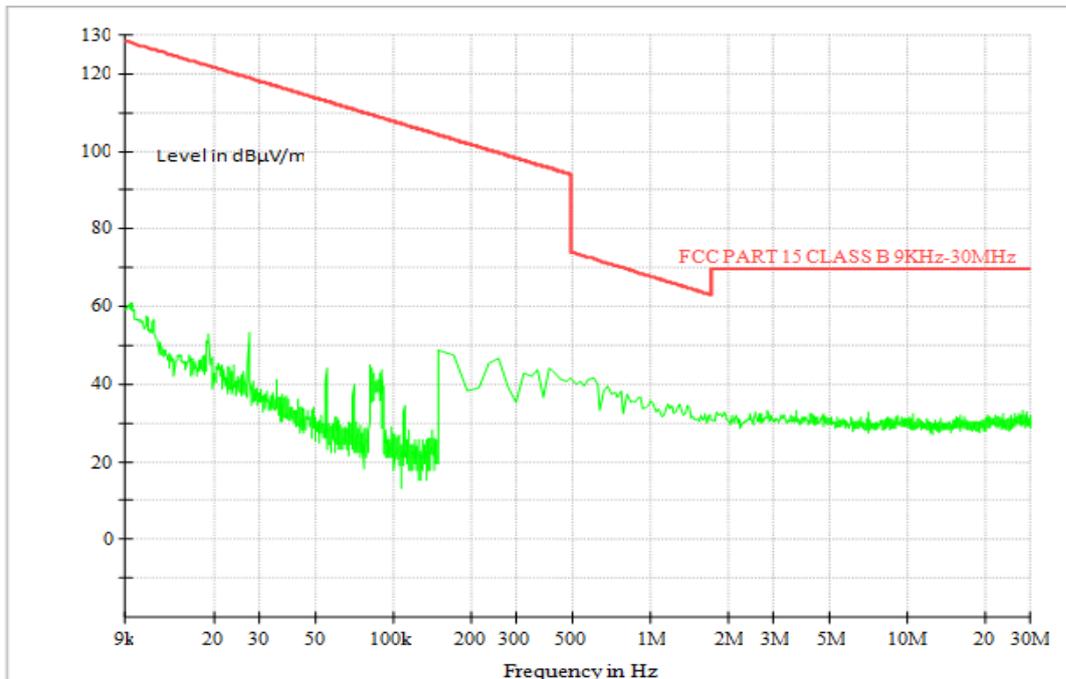
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

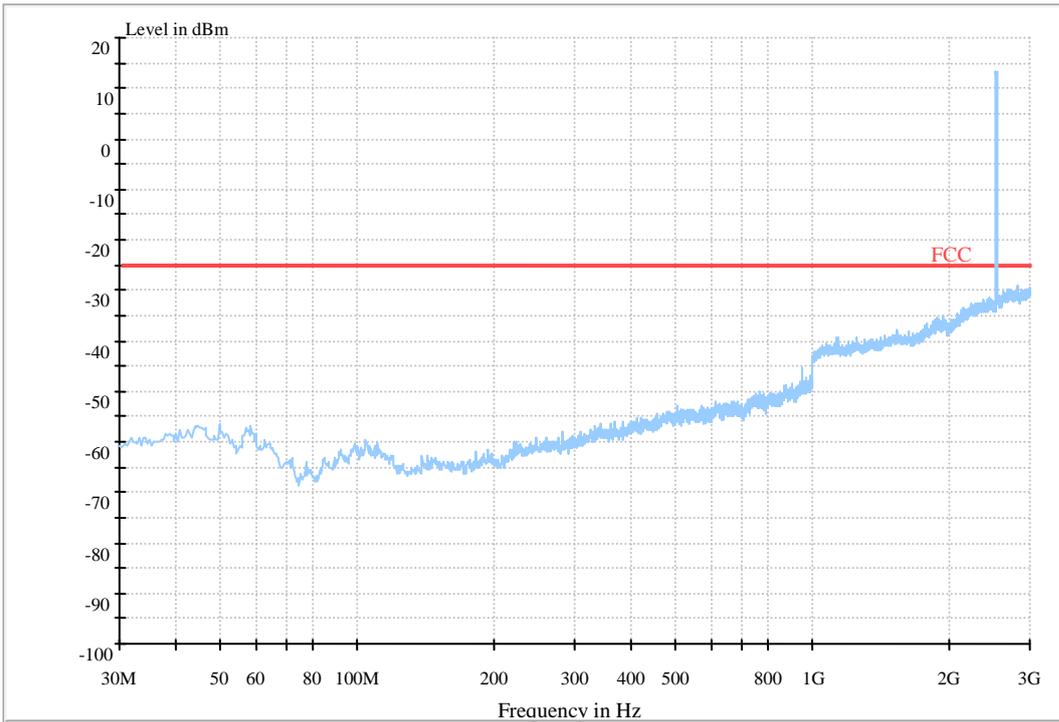
7.1 For LTE

7.1.1 Test Band = BAND7

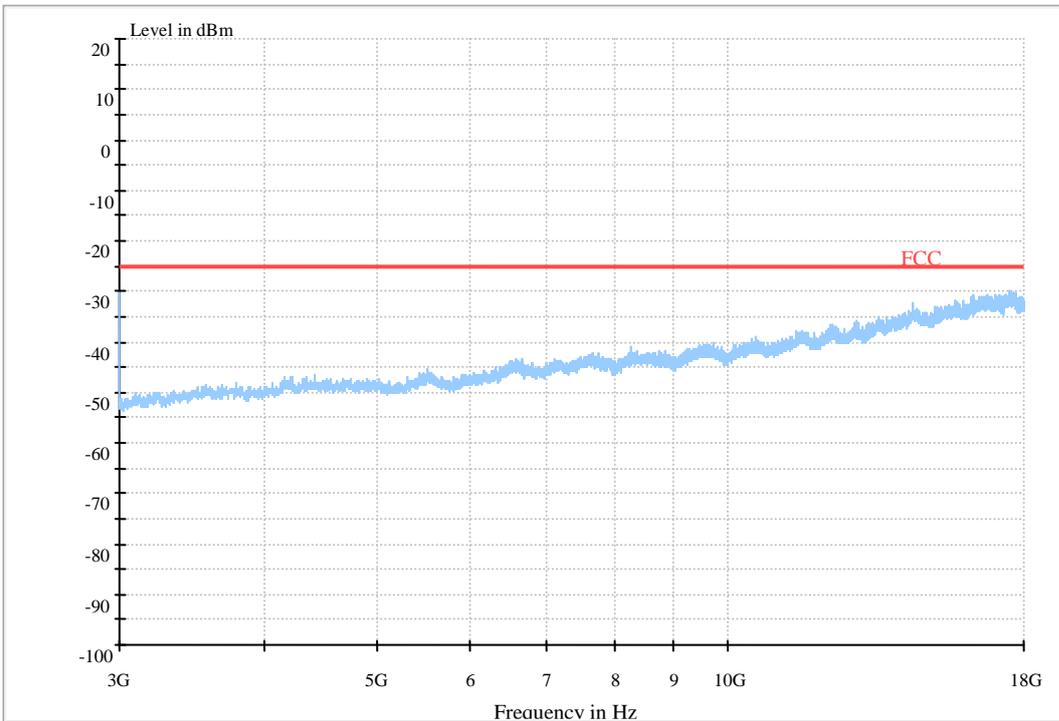
7.1.1.1 Test Bandwidth = 5

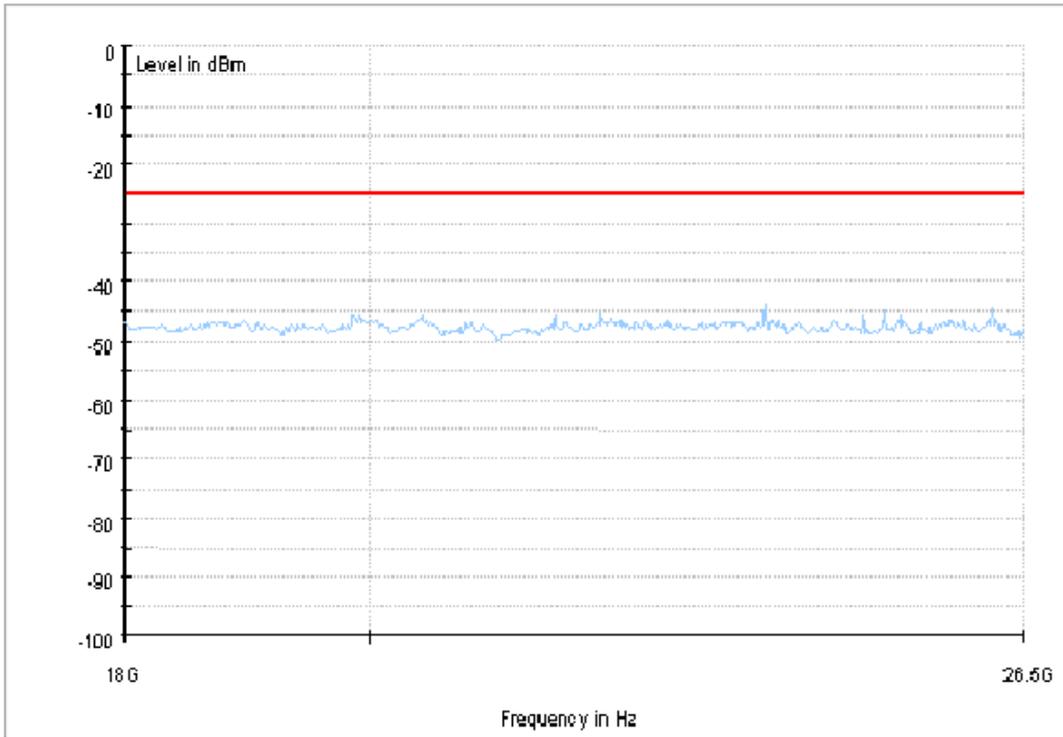


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_L

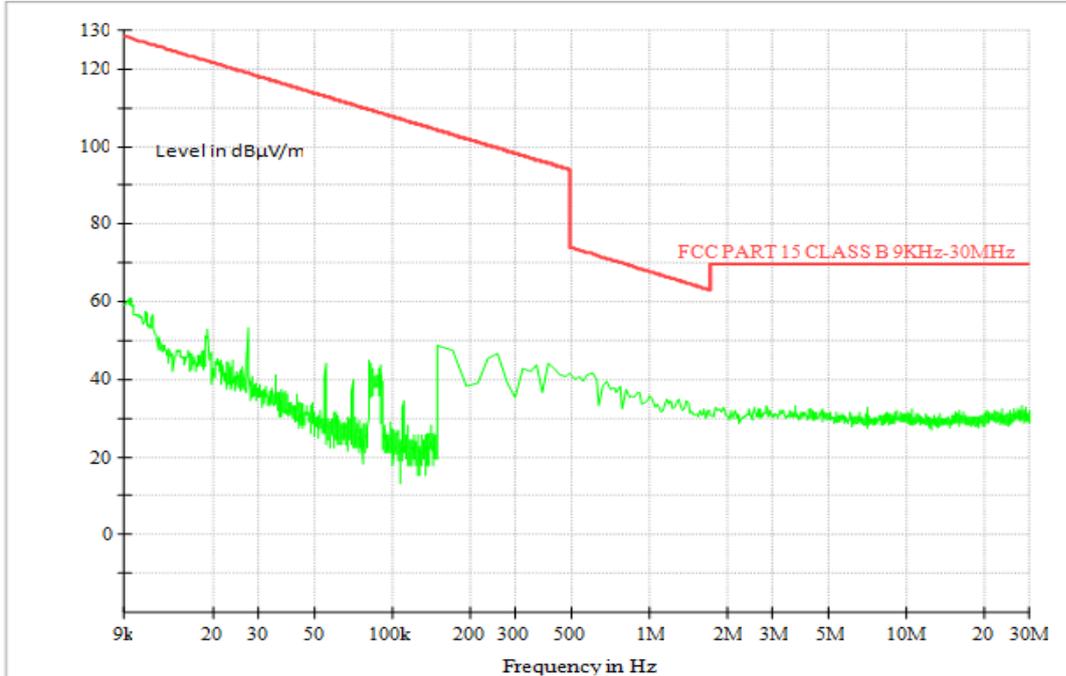


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_H

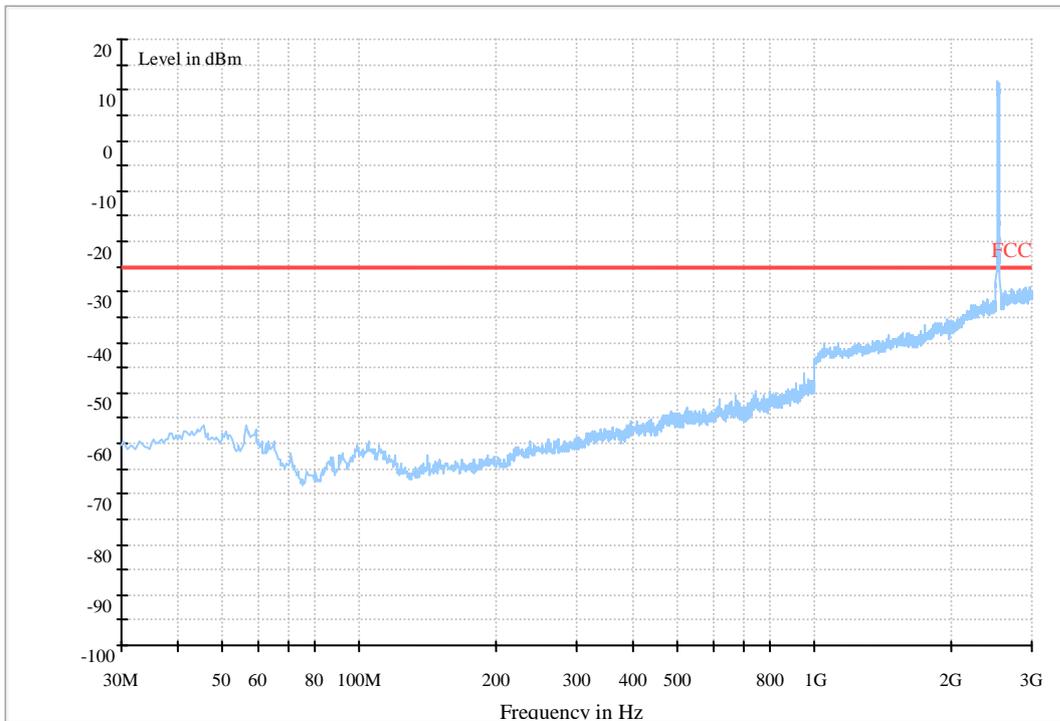




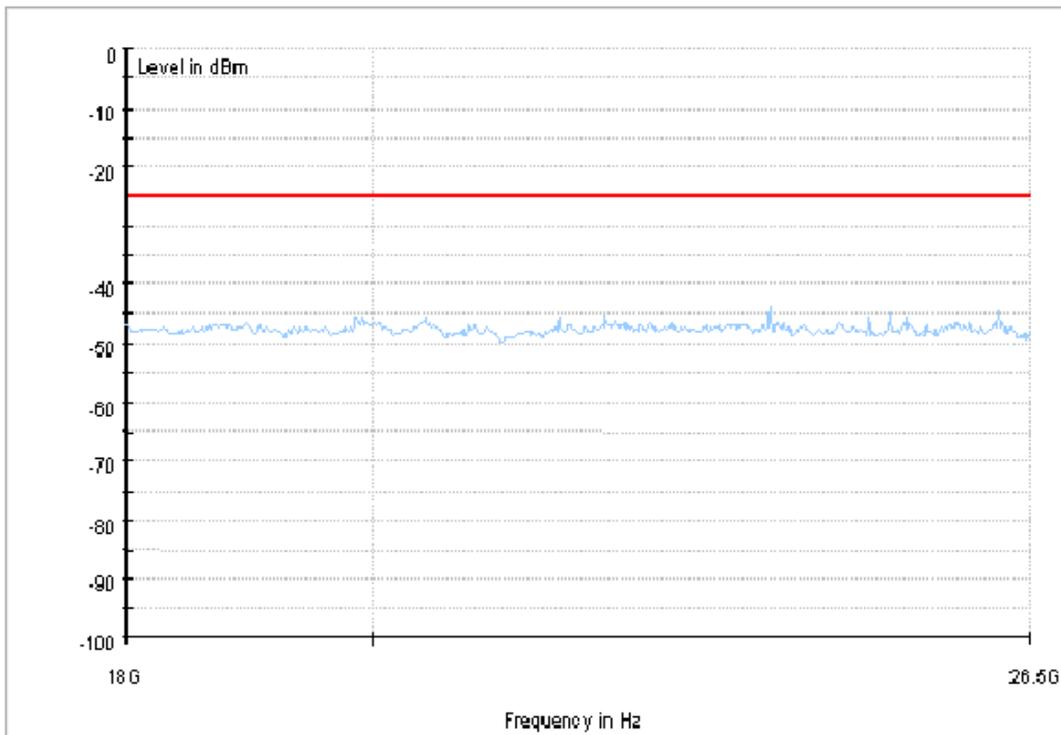
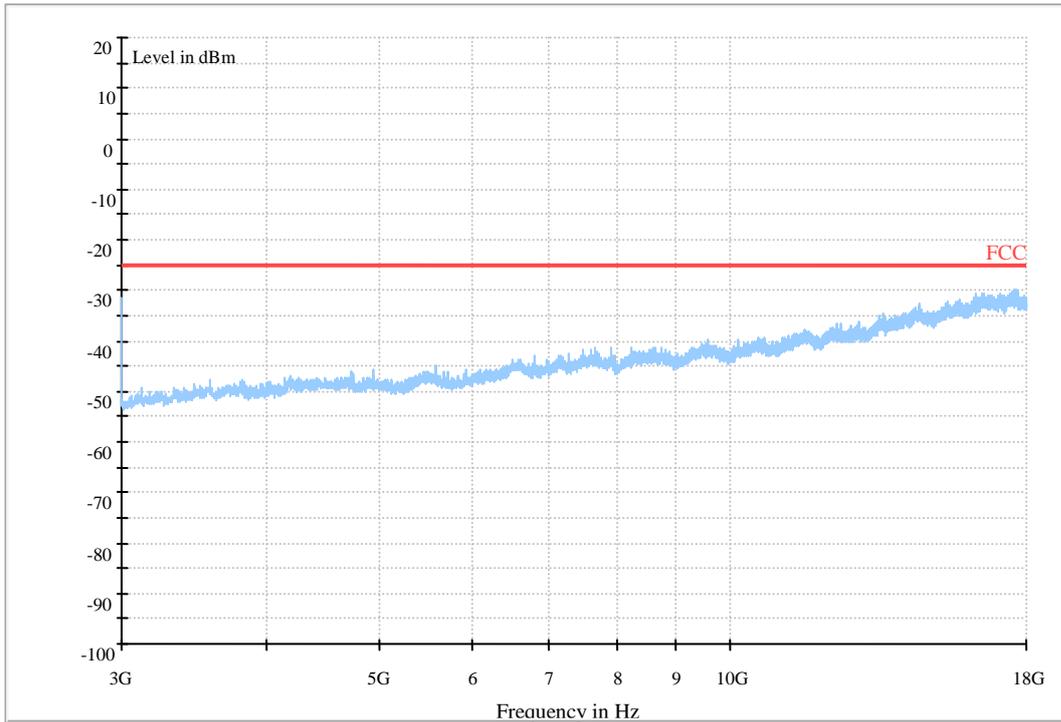
7.1.1.2 Test Bandwidth = 20



Copy of RSE-TX-DIRECTOR ABOVE 1.5G_L



Copy of RSE-TX-DIRECTOR ABOVE 1.5G_H



8Appendix_H: Frequency Stability

8.1 For LTE

8.1.1Frequency 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	-18.59	-0.00743	PASS
					VN	-9.58	-0.00383	PASS
					VH	-17.09	-0.00683	PASS
			MCH	TN	VL	-3.69	-0.00145	PASS
					VN	-12.52	-0.00494	PASS
					VH	18.14	0.00715	PASS
			HCH	TN	VL	13.37	0.00521	PASS
					VN	-7.73	-0.00301	PASS
					VH	-13.01	-0.00507	PASS
		10	LCH	TN	VL	-12.41	-0.00496	PASS
					VN	-19.84	-0.00792	PASS
					VH	-9.97	-0.00398	PASS
			MCH	TN	VL	-11.98	-0.00473	PASS
					VN	12.24	0.00483	PASS
					VH	-10.02	-0.00395	PASS
			HCH	TN	VL	14.23	0.00555	PASS
					VN	11.41	0.00445	PASS
					VH	-3.37	-0.00131	PASS
		15	LCH	TN	VL	-10.16	-0.00405	PASS
					VN	-7.78	-0.00310	PASS
					VH	9.64	0.00385	PASS
			MCH	TN	VL	-1.74	-0.00068	PASS
					VN	-9.00	-0.00355	PASS
					VH	7.54	0.00298	PASS
			HCH	TN	VL	0.87	0.00034	PASS
					VN	17.42	0.00680	PASS
					VH	-7.09	-0.00277	PASS
20	LCH	TN	VL	19.65	0.00783	PASS		
			VN	-7.16	-0.00285	PASS		
			VH	-18.92	-0.00754	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
			MCH	TN	VL	1.92	0.00076	PASS	
					VN	1.79	0.00071	PASS	
					VH	-8.25	-0.00326	PASS	
			HCH	TN	VL	-0.12	-0.00005	PASS	
					VN	-1.29	-0.00051	PASS	
					VH	-1.21	-0.00047	PASS	
	LTE/TM2	5	LCH	TN	VL	5.14	0.00206	PASS	
					VN	10.00	0.00399	PASS	
					VH	17.52	0.00700	PASS	
			MCH	TN	VL	-14.75	-0.00582	PASS	
					VN	13.24	0.00522	PASS	
					VH	-16.63	-0.00656	PASS	
			HCH	TN	VL	6.75	0.00263	PASS	
					VN	17.37	0.00677	PASS	
					VH	5.89	0.00230	PASS	
			10	LCH	TN	VL	16.89	0.00674	PASS
						VN	13.70	0.00547	PASS
						VH	5.22	0.00208	PASS
		MCH		TN	VL	-10.59	-0.00418	PASS	
					VN	-13.06	-0.00515	PASS	
					VH	11.03	0.00435	PASS	
		HCH	TN	VL	9.11	0.00355	PASS		
				VN	18.93	0.00738	PASS		
				VH	-15.28	-0.00596	PASS		
		15	LCH	TN	VL	13.10	0.00522	PASS	
					VN	2.63	0.00105	PASS	
					VH	-8.29	-0.00331	PASS	
			MCH	TN	VL	-15.08	-0.00595	PASS	
					VN	13.89	0.00548	PASS	
					VH	0.86	0.00034	PASS	
	HCH		TN	VL	-0.79	-0.00031	PASS		
				VN	-0.96	-0.00038	PASS		
				VH	4.94	0.00193	PASS		
	20	LCH	TN	VL	13.54	0.00540	PASS		
				VN	10.57	0.00421	PASS		
				VH	1.81	0.00072	PASS		
		MCH	TN	VL	-10.59	-0.00418	PASS		
				VN	-2.97	-0.00117	PASS		
				VH	7.82	0.00309	PASS		
	HCH	TN	VL	9.39	0.00367	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	2.47	0.00097	PASS
					VH	-6.26	-0.00244	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	-19.88	-0.00794	PASS
					-20	-4.22	-0.00168	PASS
					-10	-7.54	-0.00301	PASS
					0	17.29	0.00691	PASS
					10	-16.06	-0.00642	PASS
					20	19.15	0.00765	PASS
					30	2.85	0.00114	PASS
					40	-1.67	-0.00067	PASS
					50	-17.65	-0.00705	PASS
			MCH	VN	-30	7.76	0.00306	PASS
					-20	-15.84	-0.00625	PASS
					-10	1.94	0.00077	PASS
					0	-6.94	-0.00274	PASS
					10	10.48	0.00413	PASS
					20	1.54	0.00061	PASS
		30			14.30	0.00564	PASS	
		40			-12.79	-0.00505	PASS	
		50			7.93	0.00313	PASS	
		HCH	VN	-30	-14.25	-0.00555	PASS	
				-20	3.89	0.00151	PASS	
				-10	-10.74	-0.00418	PASS	
				0	7.91	0.00308	PASS	
				10	14.30	0.00557	PASS	
				20	-13.75	-0.00536	PASS	
				30	1.10	0.00043	PASS	
				40	-2.10	-0.00082	PASS	
				50	4.64	0.00181	PASS	
		10	LCH	VN	-30	19.66	0.00785	PASS
					-20	4.71	0.00188	PASS
					-10	13.86	0.00553	PASS
0	19.71				0.00787	PASS		
10	10.69				0.00427	PASS		
20	4.77				0.00191	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					30	-12.37	-0.00494	PASS
					40	-5.20	-0.00207	PASS
					50	12.19	0.00487	PASS
			MCH	VN	-30	12.08	0.00476	PASS
					-20	-19.22	-0.00758	PASS
					-10	18.15	0.00716	PASS
					0	6.86	0.00270	PASS
					10	-9.82	-0.00388	PASS
					20	-9.88	-0.00390	PASS
					30	0.02	0.00001	PASS
					40	12.40	0.00489	PASS
					50	-19.37	-0.00764	PASS
			HCH	VN	-30	15.96	0.00622	PASS
					-20	19.14	0.00746	PASS
					-10	8.64	0.00337	PASS
					0	-9.98	-0.00389	PASS
					10	1.04	0.00041	PASS
					20	-0.04	-0.00001	PASS
					30	-7.00	-0.00273	PASS
			40	-1.94	-0.00076	PASS		
			50	-14.92	-0.00582	PASS		
		15	LCH	VN	-30	-15.24	-0.00608	PASS
					-20	12.25	0.00489	PASS
					-10	-19.08	-0.00761	PASS
					0	-18.08	-0.00721	PASS
					10	5.63	0.00224	PASS
					20	11.48	0.00458	PASS
					30	7.15	0.00285	PASS
					40	-11.01	-0.00439	PASS
					50	-7.75	-0.00309	PASS
			MCH	VN	-30	13.78	0.00544	PASS
					-20	-18.49	-0.00730	PASS
					-10	3.73	0.00147	PASS
					0	18.95	0.00748	PASS
					10	-1.74	-0.00069	PASS
					20	-11.92	-0.00470	PASS
					30	5.58	0.00220	PASS
					40	15.15	0.00598	PASS
			50	-1.49	-0.00059	PASS		
			HCH	VN	-30	-12.45	-0.00486	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					20	-19.53	-0.00780	PASS
					30	-1.31	-0.00052	PASS
					40	-1.56	-0.00062	PASS
					50	7.11	0.00284	PASS
			MCH	VN	-30	-13.40	-0.00528	PASS
					-20	0.83	0.00033	PASS
					-10	-15.62	-0.00616	PASS
					0	-19.62	-0.00774	PASS
					10	-12.33	-0.00486	PASS
					20	5.73	0.00226	PASS
					30	-3.90	-0.00154	PASS
					40	-7.22	-0.00285	PASS
			HCH	VN	50	-3.13	-0.00124	PASS
					-30	-1.67	-0.00065	PASS
					-20	7.66	0.00298	PASS
					-10	10.11	0.00394	PASS
					0	-16.19	-0.00630	PASS
					10	2.09	0.00081	PASS
					20	-17.14	-0.00668	PASS
					30	19.43	0.00757	PASS
		10	LCH	VN	40	3.76	0.00146	PASS
					50	14.65	0.00570	PASS
					-30	0.43	0.00017	PASS
					-20	-14.01	-0.00559	PASS
					-10	-7.05	-0.00281	PASS
					0	-17.31	-0.00691	PASS
					10	18.00	0.00718	PASS
					20	-7.57	-0.00302	PASS
					30	-0.52	-0.00021	PASS
					40	13.55	0.00541	PASS
		MCH	VN	50	3.06	0.00122	PASS	
				-30	9.24	0.00364	PASS	
				-20	-9.04	-0.00357	PASS	
				-10	6.12	0.00241	PASS	
				0	8.80	0.00347	PASS	
				10	-6.16	-0.00243	PASS	
				20	16.95	0.00669	PASS	
				30	11.10	0.00438	PASS	
		40	-18.34	-0.00723	PASS			
		50	4.58	0.00180	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	-8.89	-0.00346	PASS
					-20	0.85	0.00033	PASS
					-10	-7.94	-0.00310	PASS
					0	8.34	0.00325	PASS
					10	-1.96	-0.00076	PASS
					20	18.73	0.00730	PASS
					30	-15.94	-0.00622	PASS
					40	-18.59	-0.00725	PASS
					50	2.75	0.00107	PASS
		15	LCH	VN	-30	4.13	0.00165	PASS
					-20	12.13	0.00484	PASS
					-10	-10.04	-0.00400	PASS
					0	15.55	0.00620	PASS
					10	15.71	0.00627	PASS
					20	-12.72	-0.00507	PASS
					30	-14.81	-0.00591	PASS
					40	19.16	0.00764	PASS
					50	-13.01	-0.00519	PASS
			MCH	VN	-30	-14.37	-0.00567	PASS
					-20	-9.13	-0.00360	PASS
					-10	7.38	0.00291	PASS
					0	-13.58	-0.00536	PASS
					10	-19.52	-0.00770	PASS
					20	5.84	0.00230	PASS
					30	-0.35	-0.00014	PASS
					40	-15.01	-0.00592	PASS
					50	-2.13	-0.00084	PASS
		HCH	VN	-30	0.11	0.00004	PASS	
				-20	12.17	0.00475	PASS	
				-10	5.92	0.00231	PASS	
				0	9.23	0.00360	PASS	
				10	18.19	0.00710	PASS	
				20	19.25	0.00751	PASS	
				30	1.76	0.00069	PASS	
				40	-10.65	-0.00416	PASS	
				50	14.52	0.00567	PASS	
		20	LCH	VN	-30	-15.65	-0.00623	PASS
					-20	16.49	0.00657	PASS
					-10	9.51	0.00379	PASS
					0	-17.95	-0.00715	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					10	0.77	0.00031	PASS		
					20	-10.58	-0.00422	PASS		
					30	14.48	0.00577	PASS		
					40	14.87	0.00593	PASS		
					50	12.44	0.00496	PASS		
			MCH	VN	-30	10.58	0.00417	PASS		
							-20	1.65	0.00065	PASS
							-10	-4.98	-0.00196	PASS
							0	-11.01	-0.00434	PASS
							10	-8.88	-0.00350	PASS
							20	-0.50	-0.00020	PASS
							30	14.50	0.00572	PASS
							40	-18.01	-0.00711	PASS
			HCH	VN	50	19.94	0.00787	PASS		
							-30	8.27	0.00323	PASS
							-20	14.82	0.00579	PASS
							-10	-2.27	-0.00089	PASS
							0	-16.25	-0.00635	PASS
							10	-11.97	-0.00468	PASS
							20	-6.95	-0.00272	PASS
							30	-0.52	-0.00020	PASS
					40	-9.78	-0.00382	PASS		
					50	-9.51	-0.00371	PASS		

END