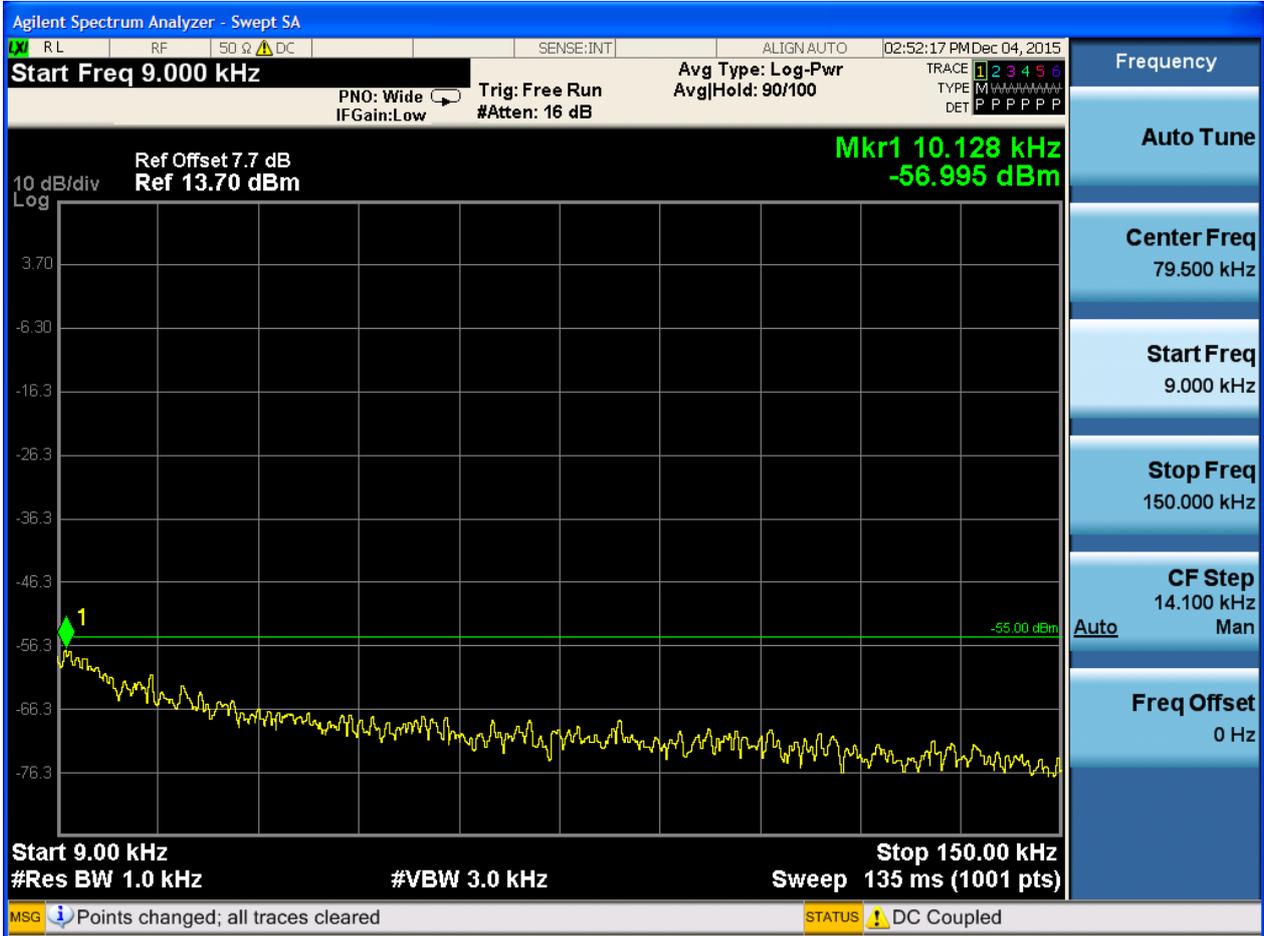
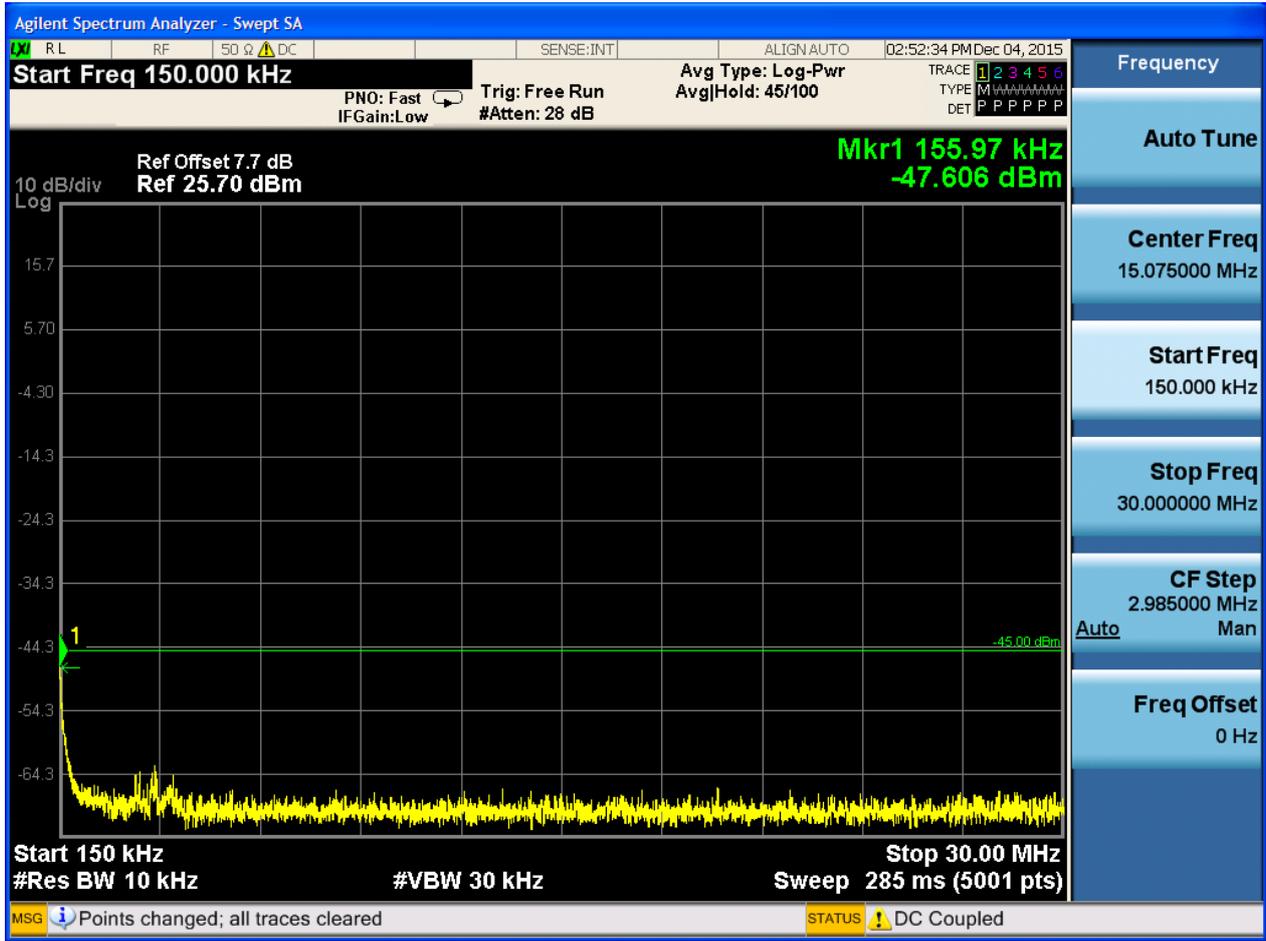


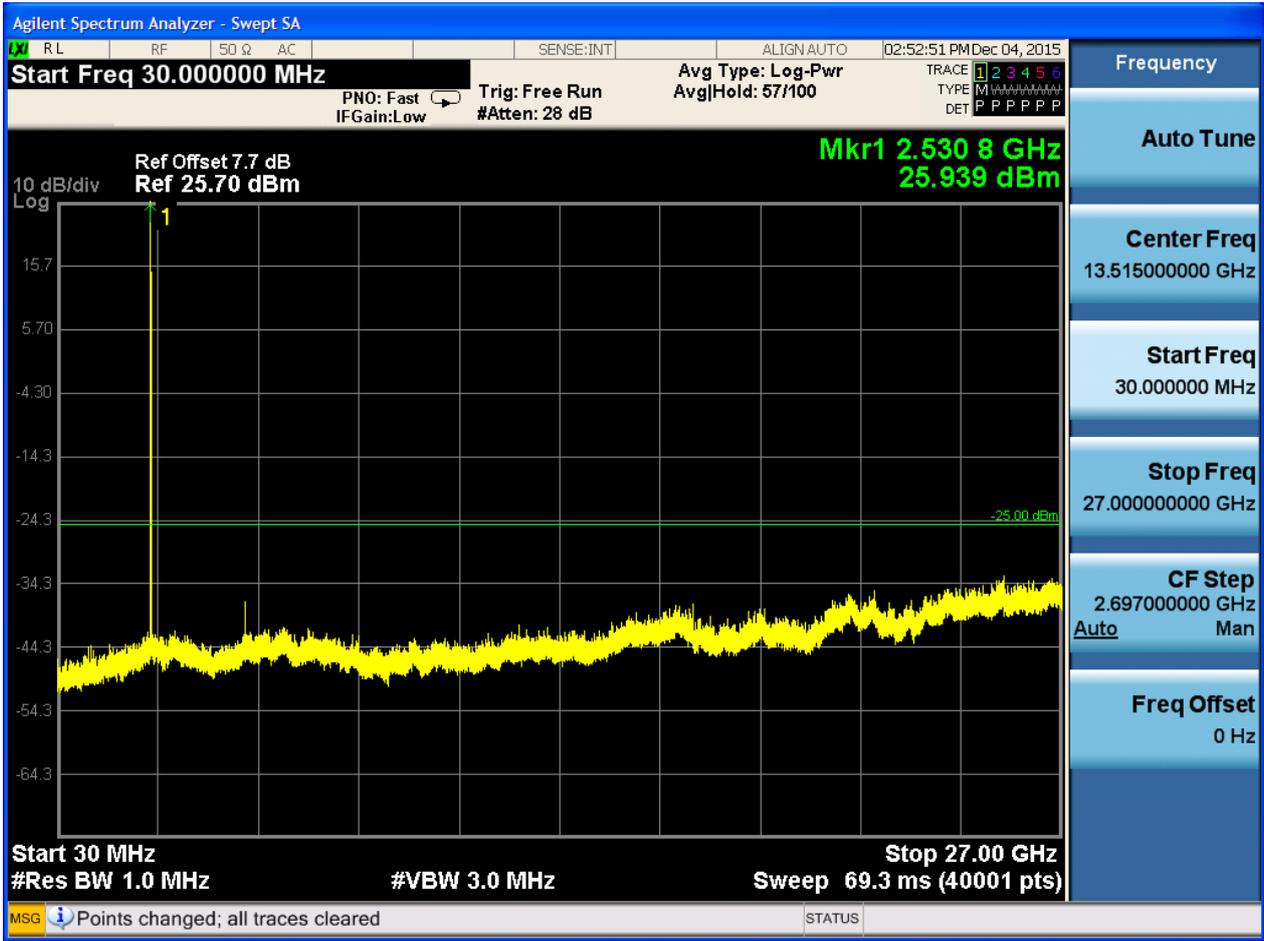


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



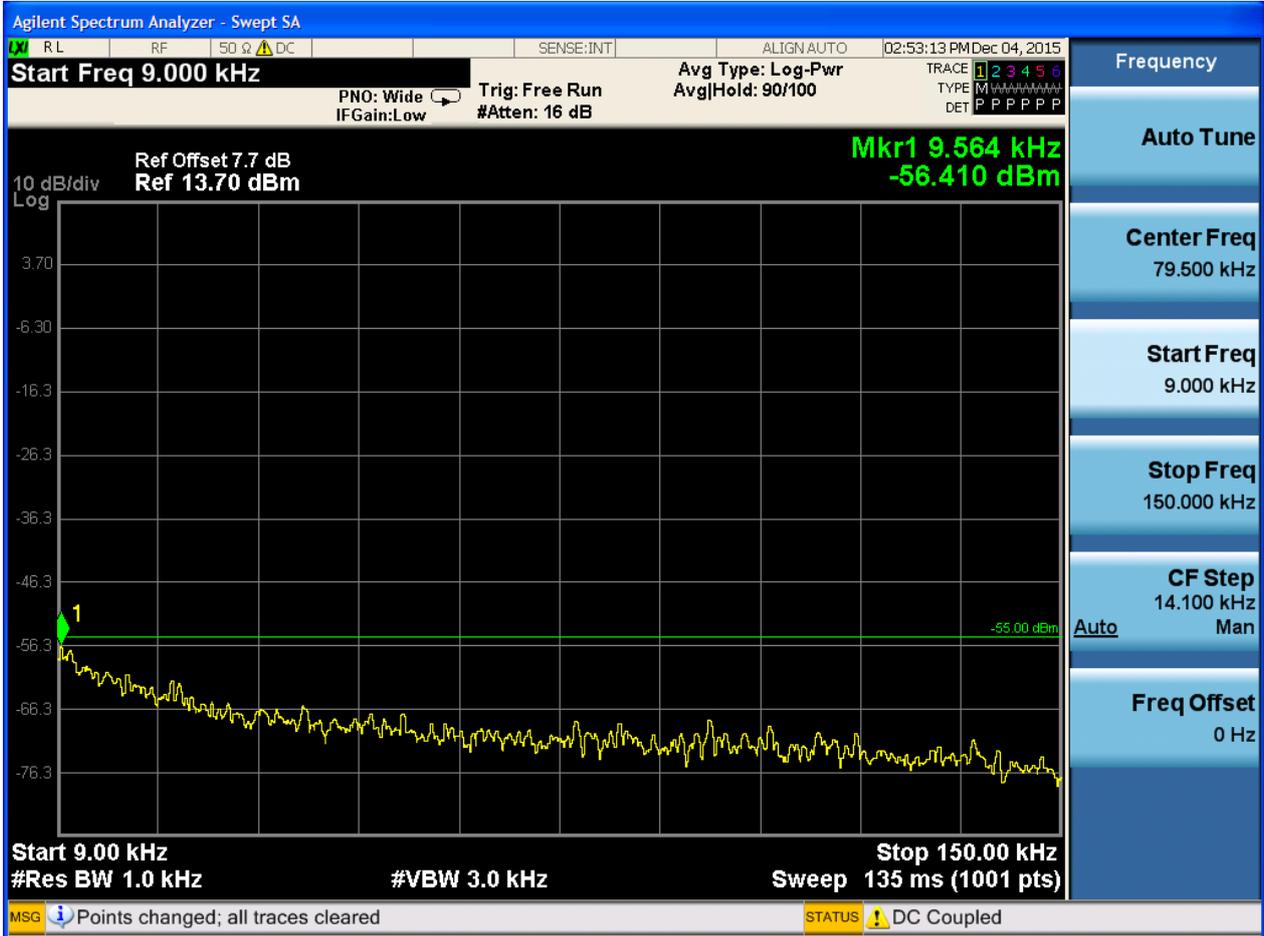


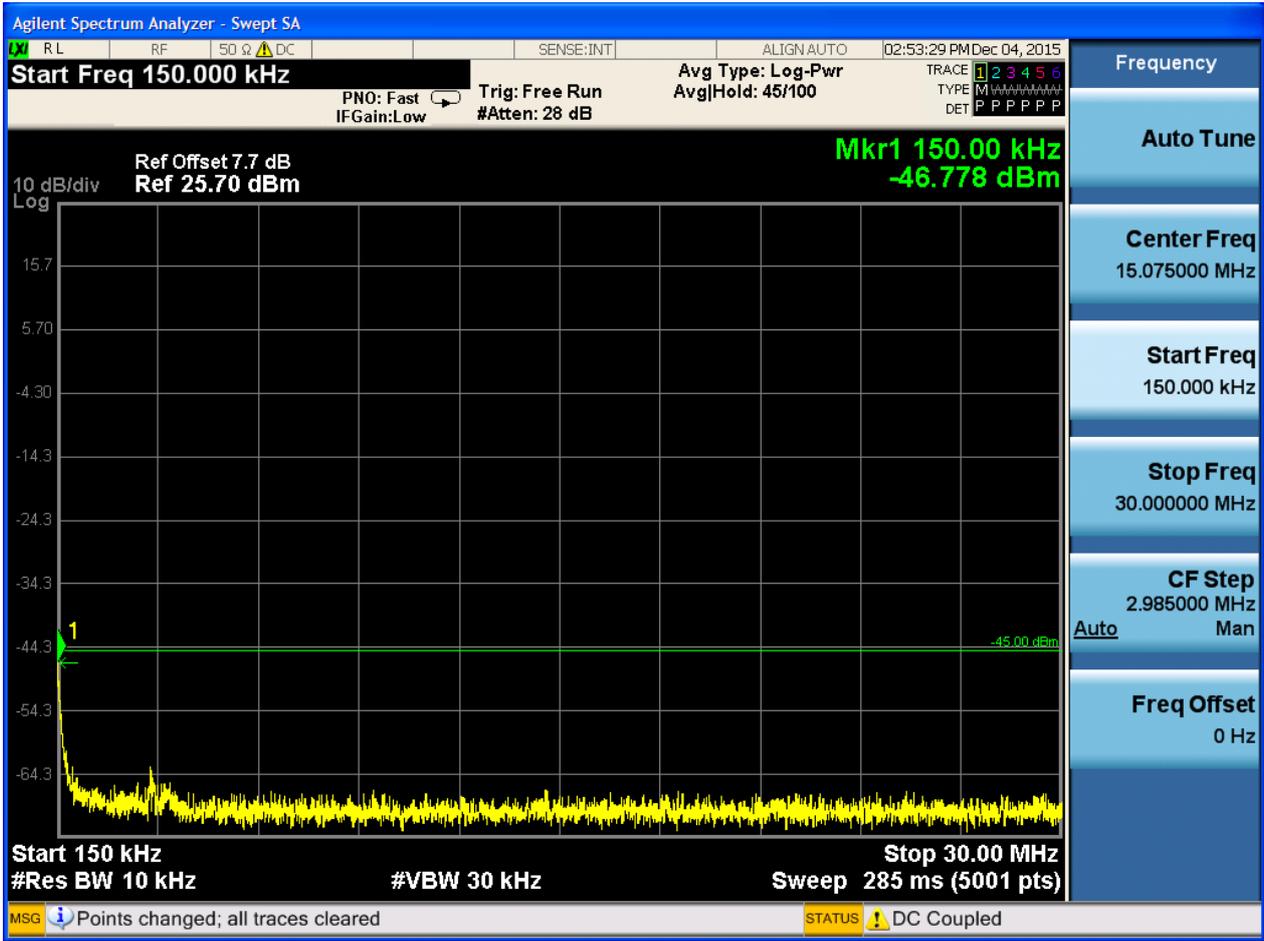


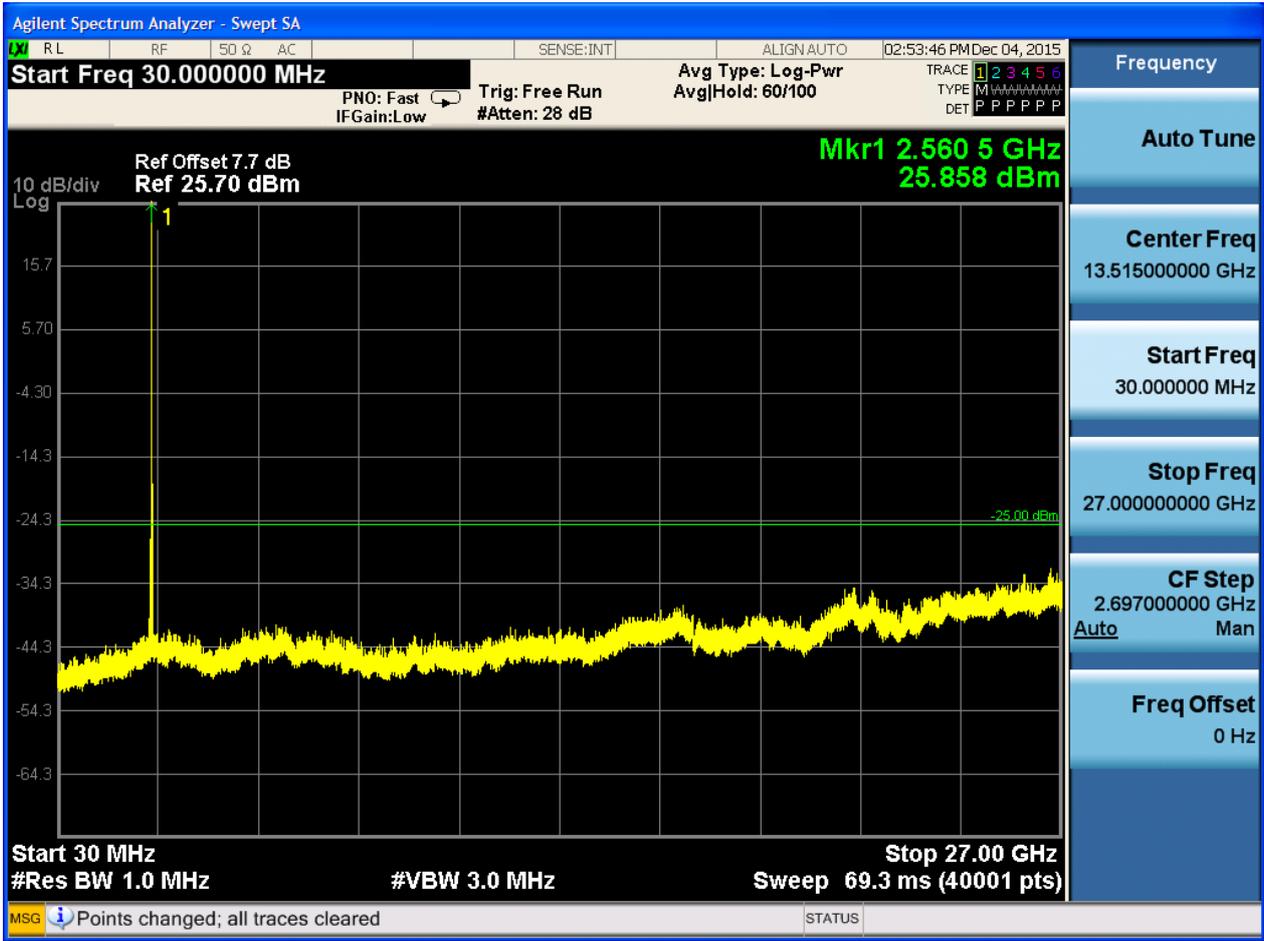


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0





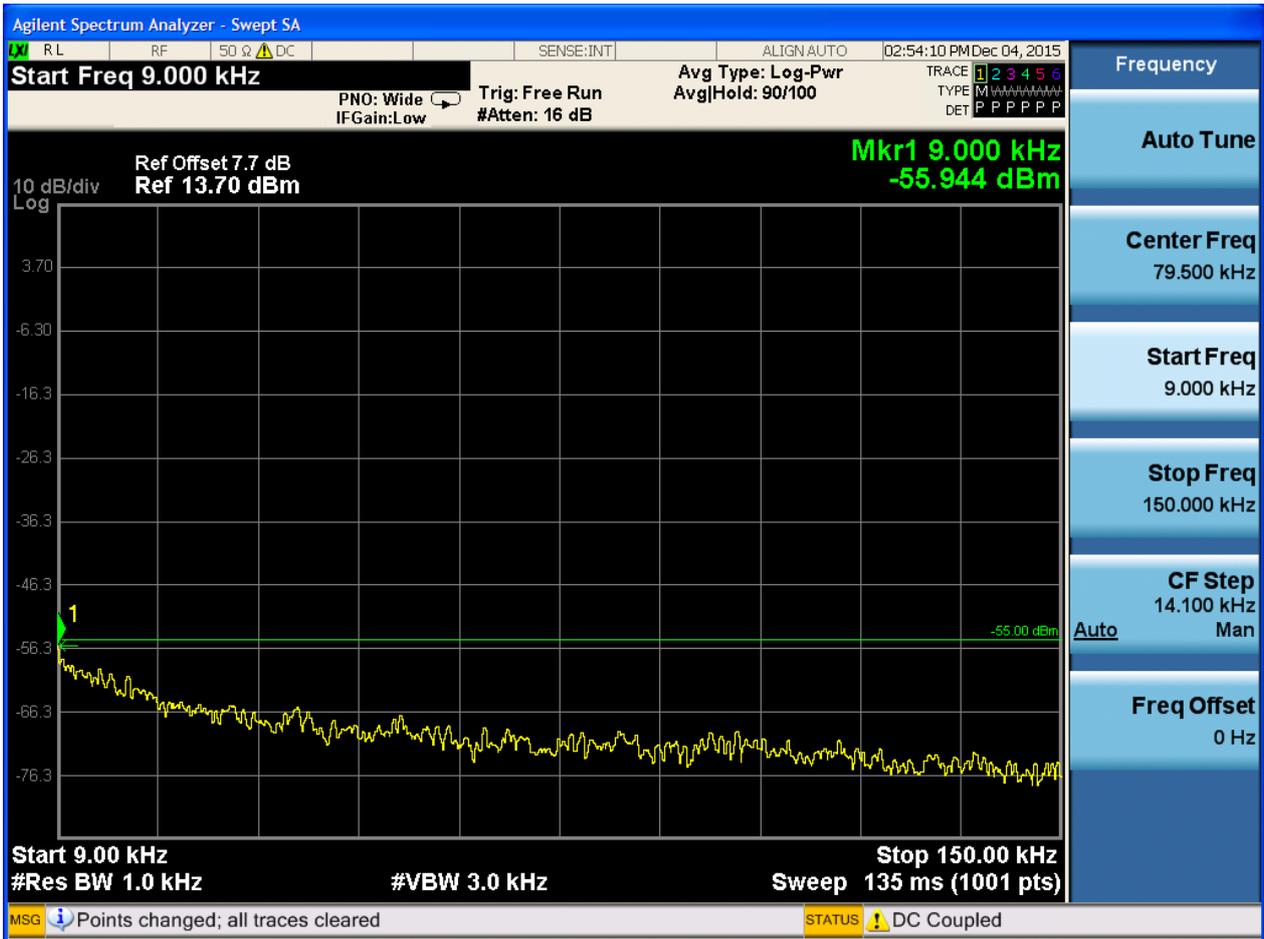


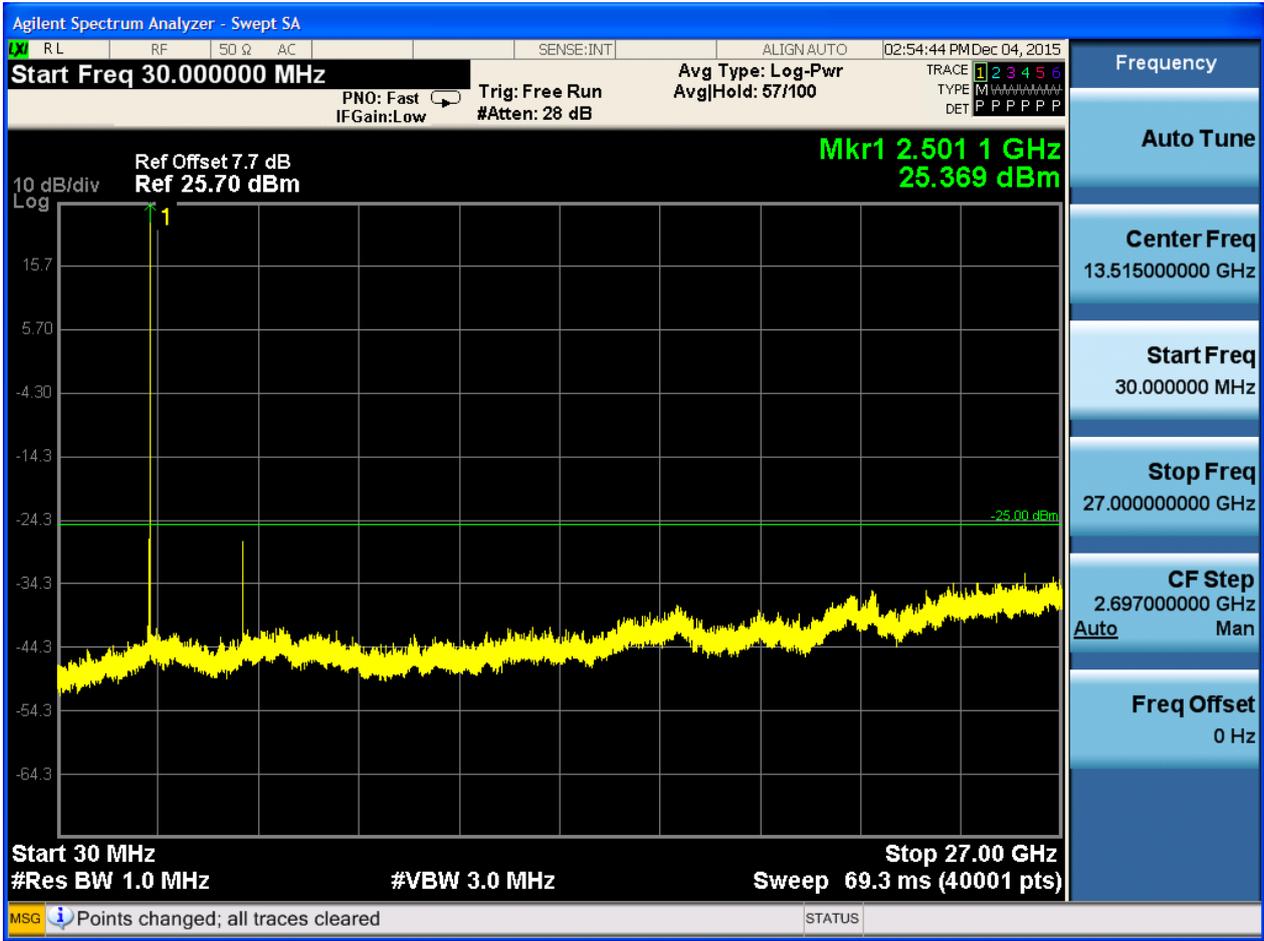


6.1.1.1.3 Test Bandwidth = 15

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0

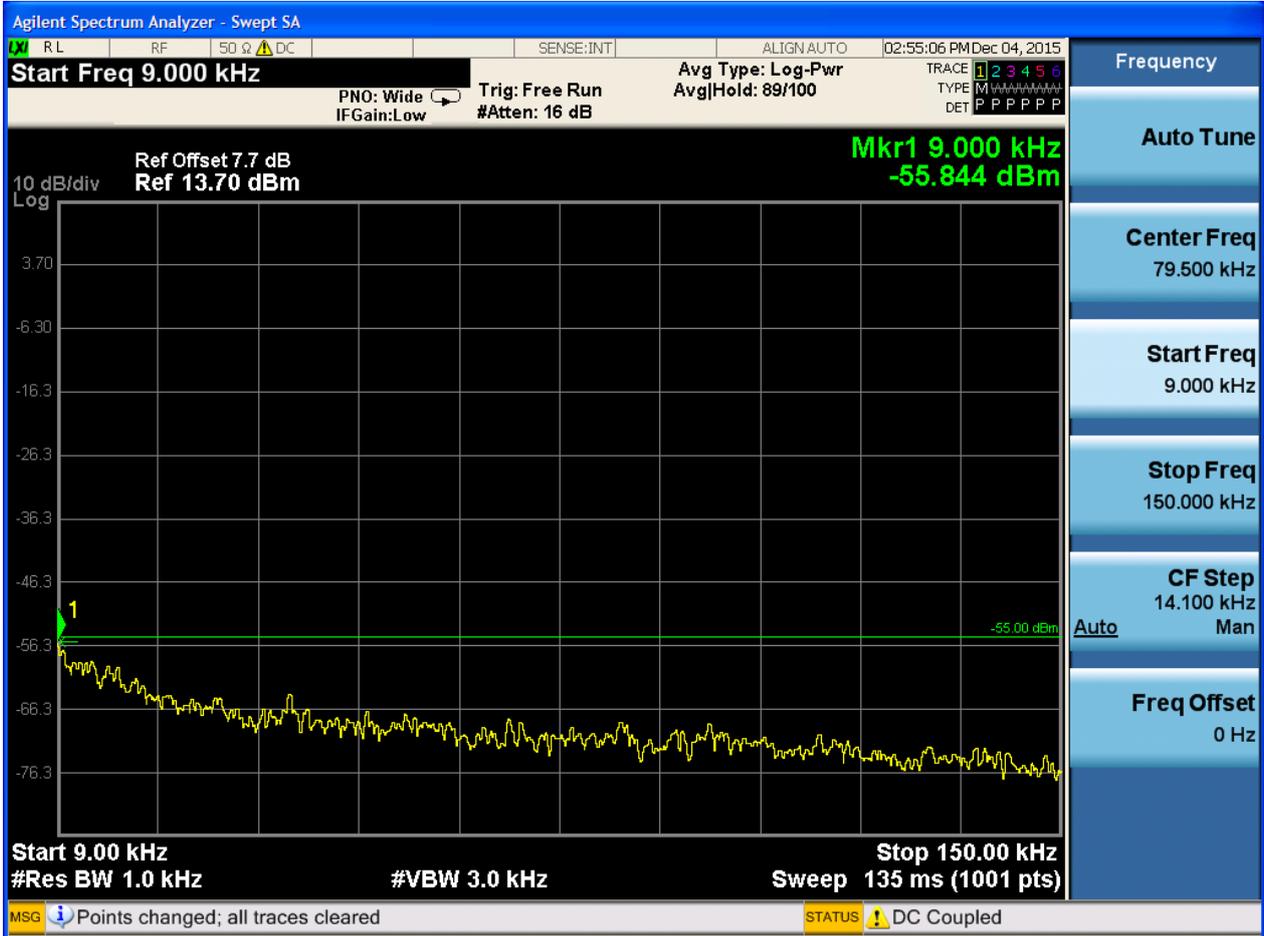


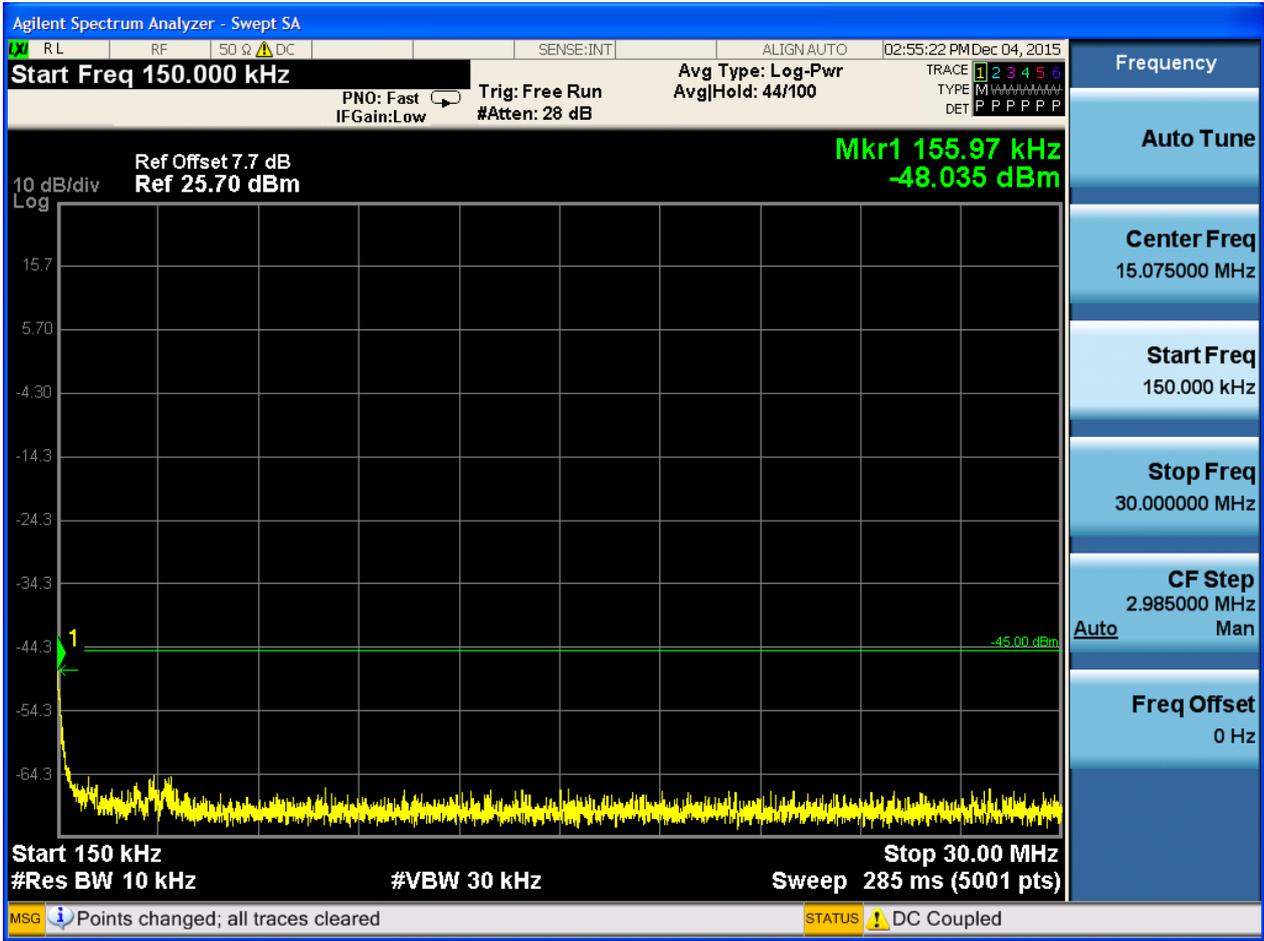


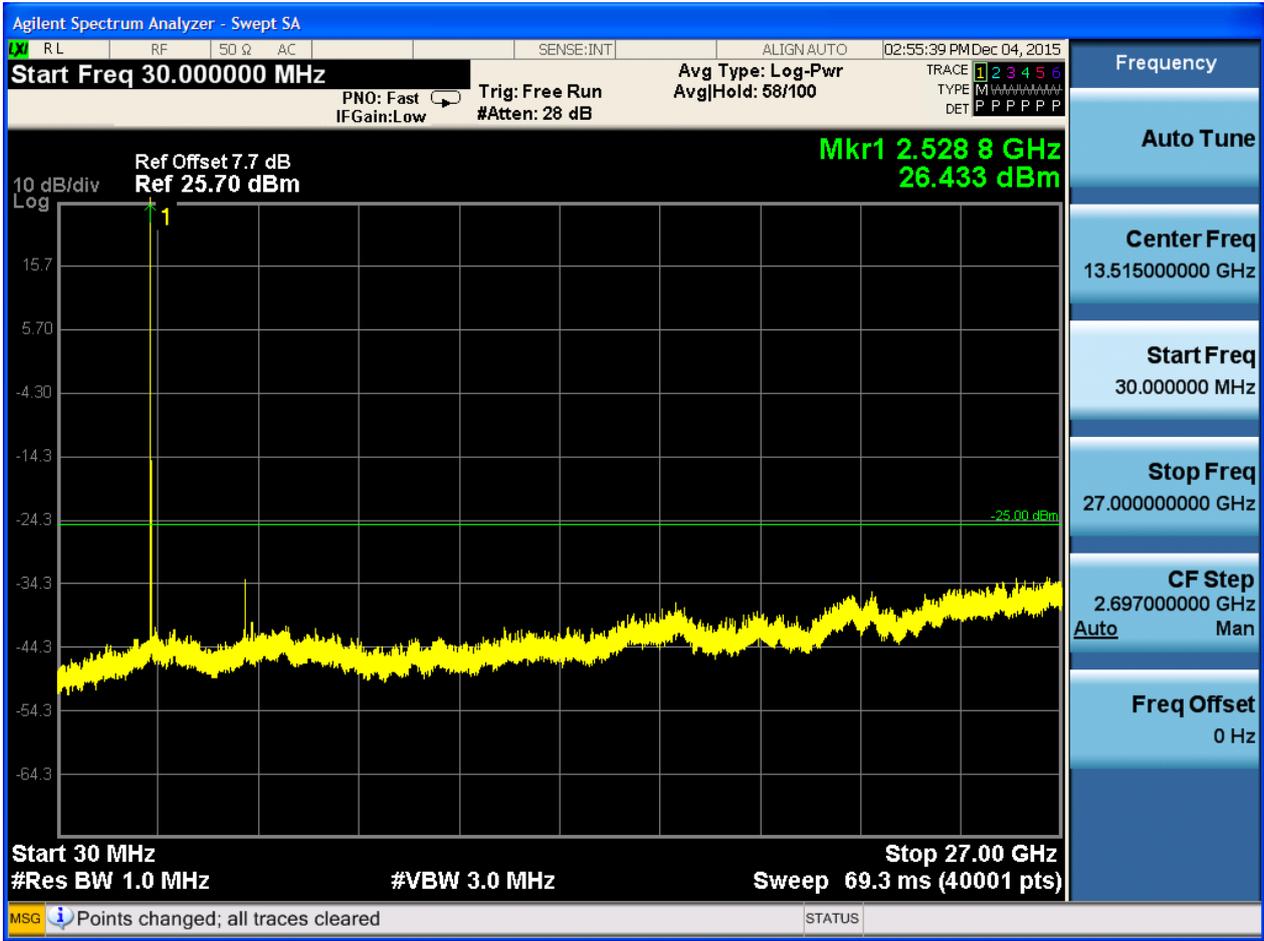


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0



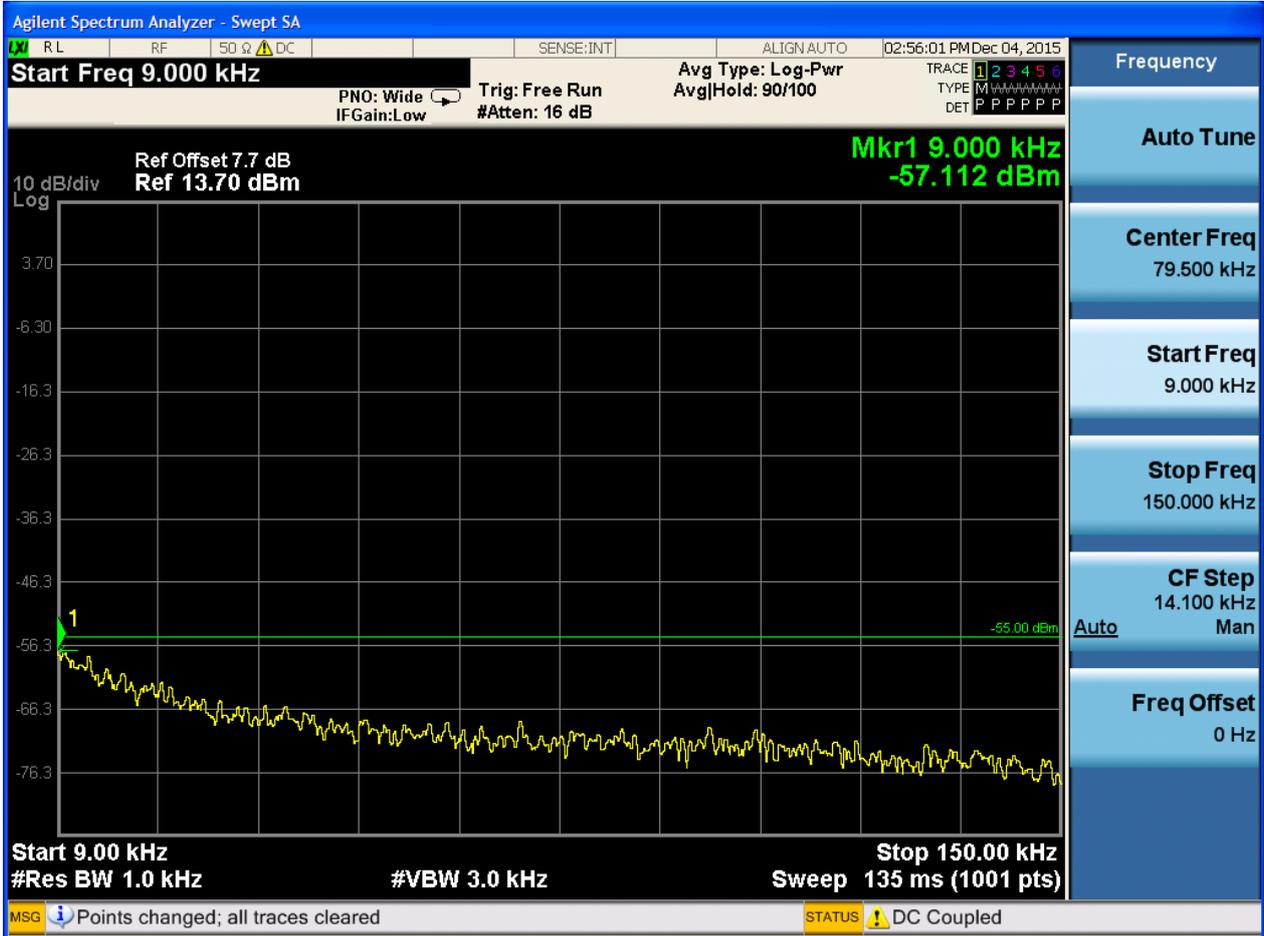


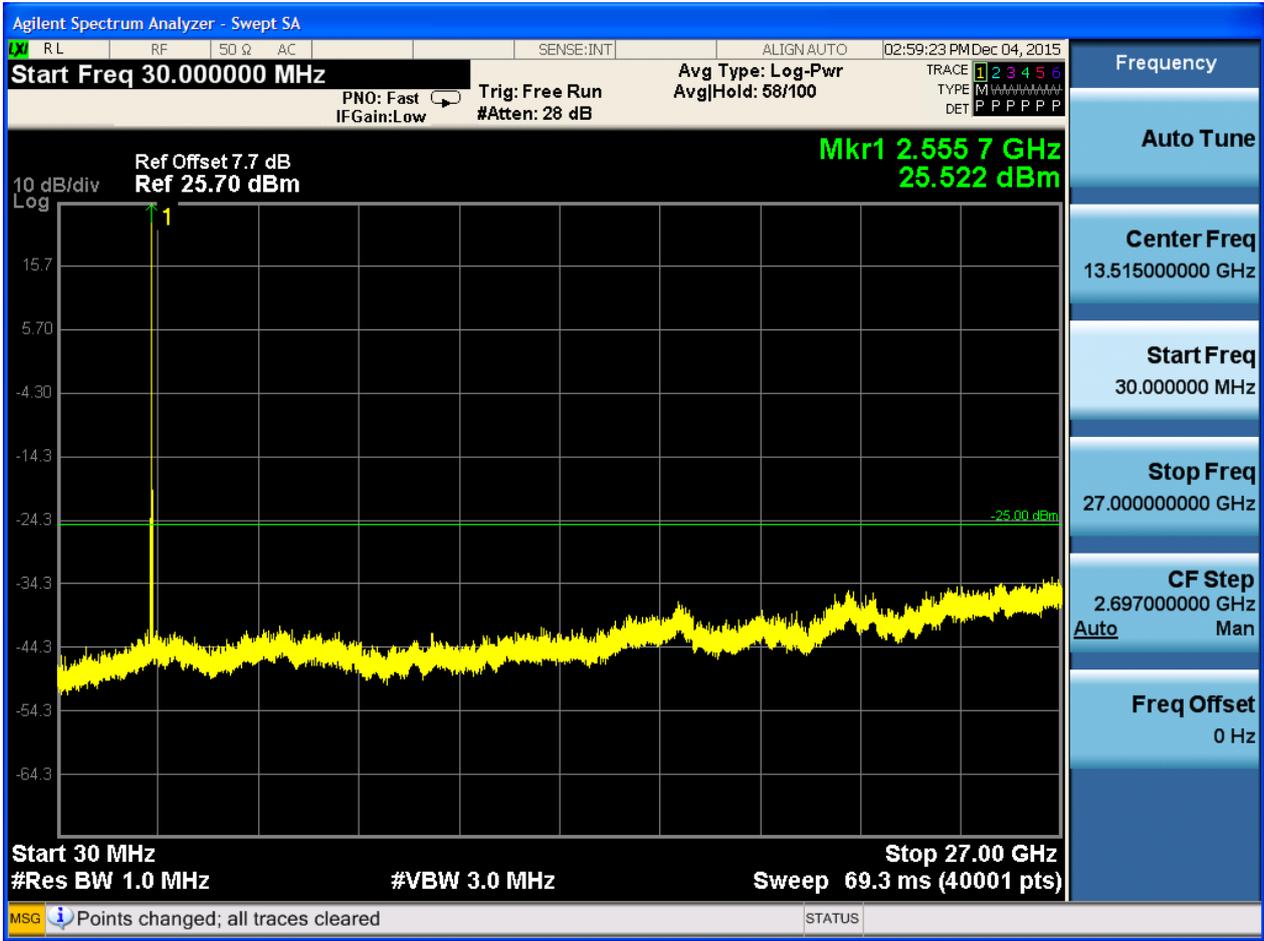




6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0





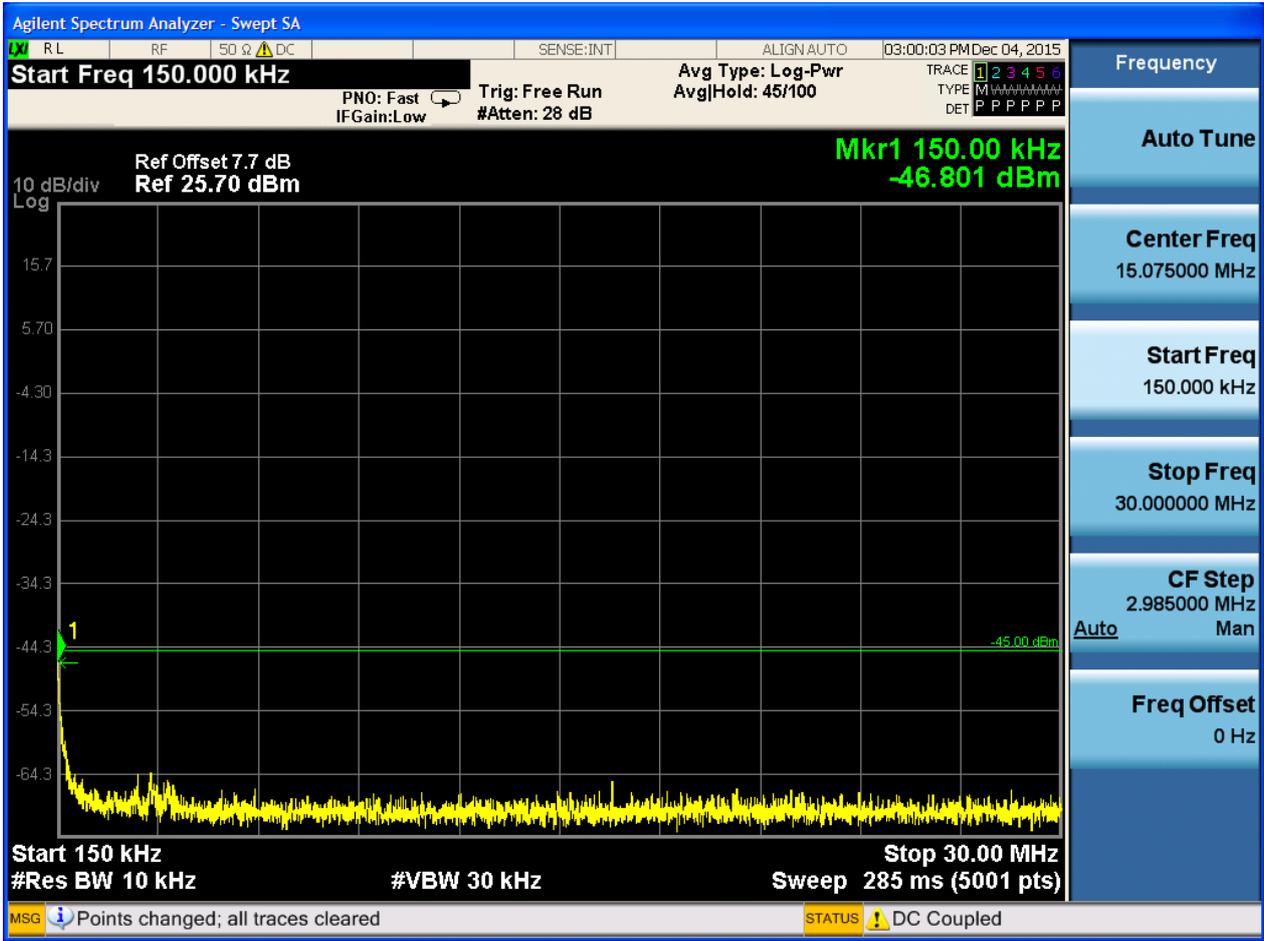


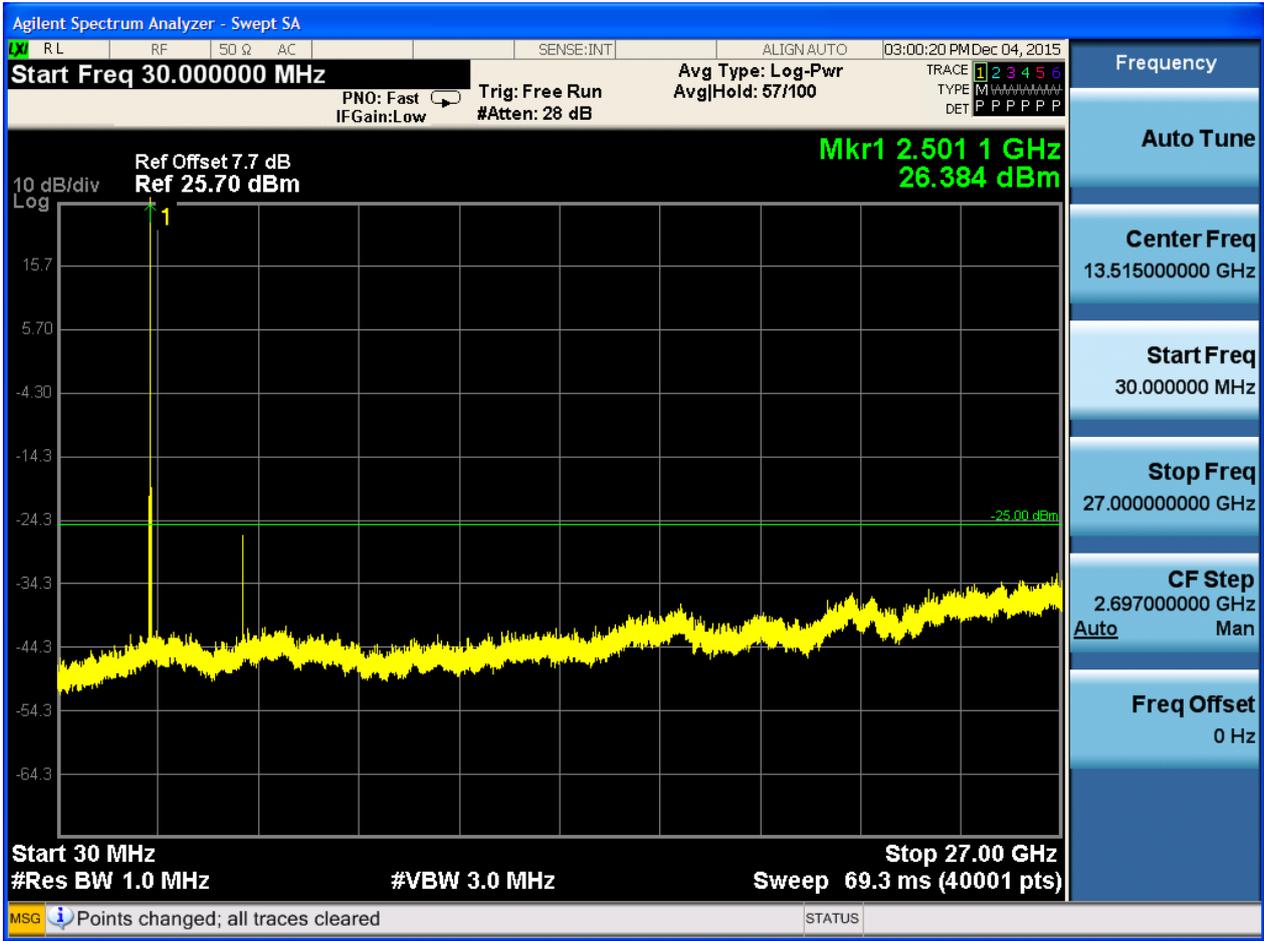
6.1.1.1.4 Test Bandwidth = 20

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0



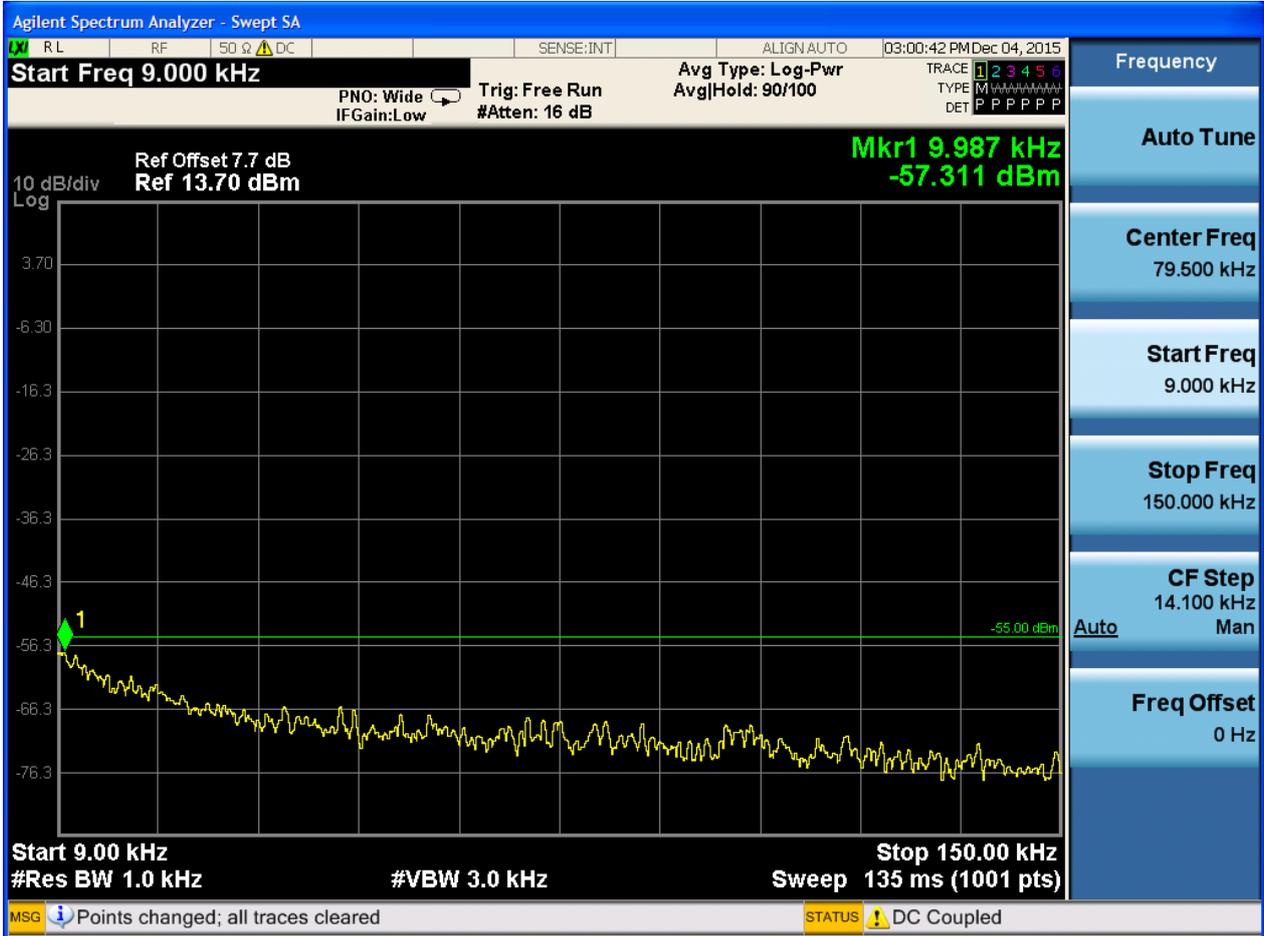


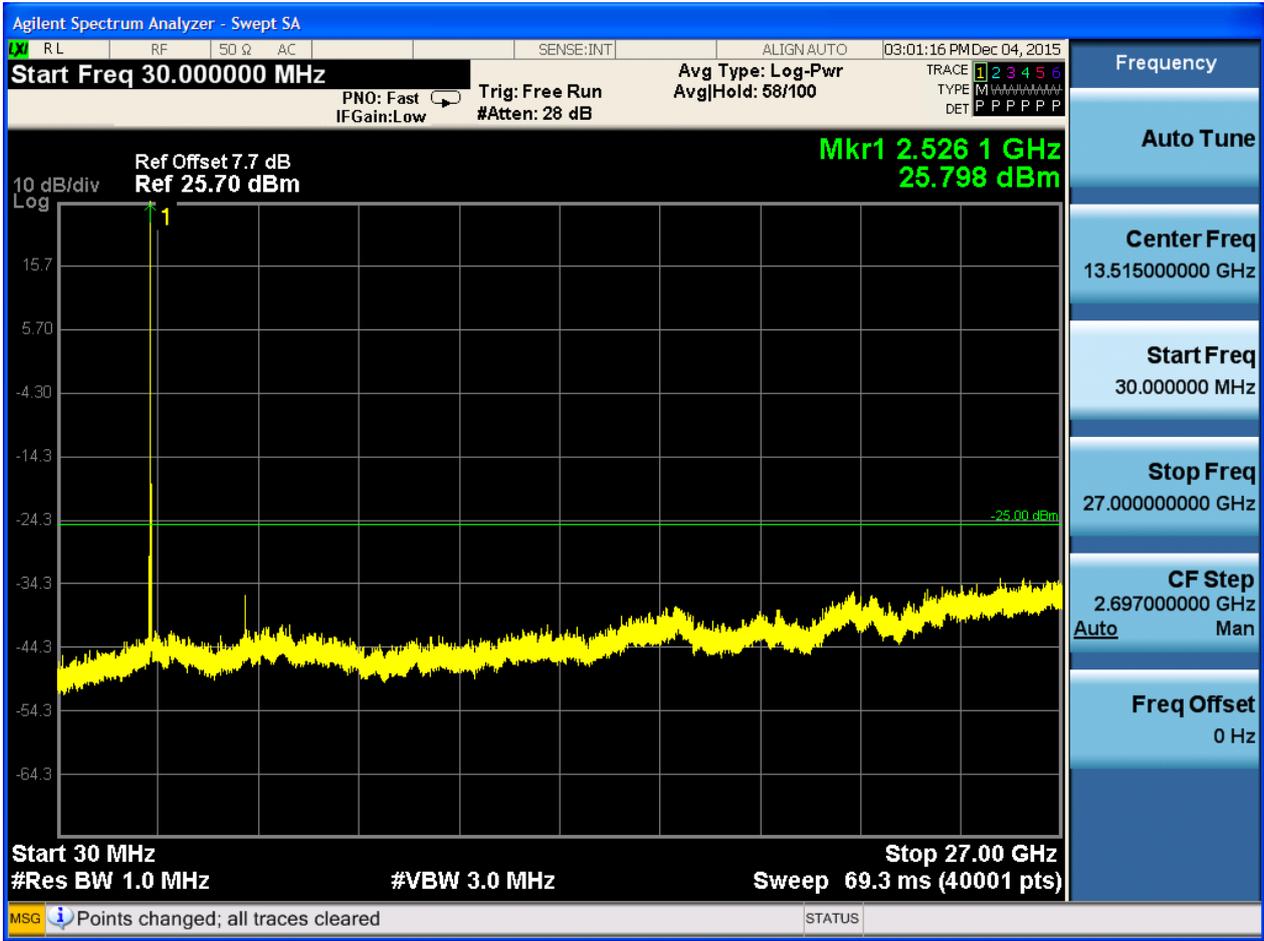




6.1.1.1.4.2 Test Channel = MCH

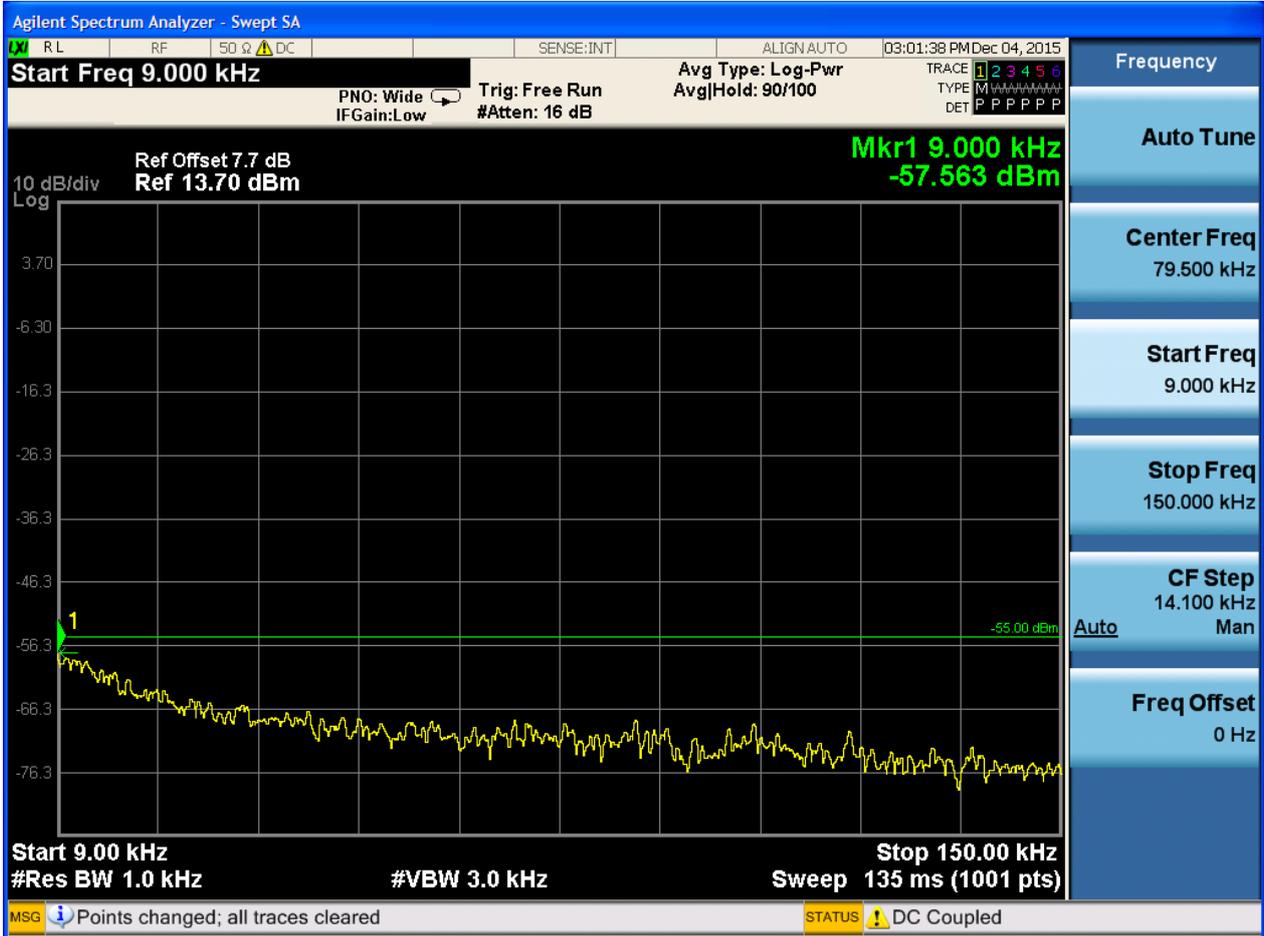
6.1.1.1.4.2.1 Test RB = RB1#0



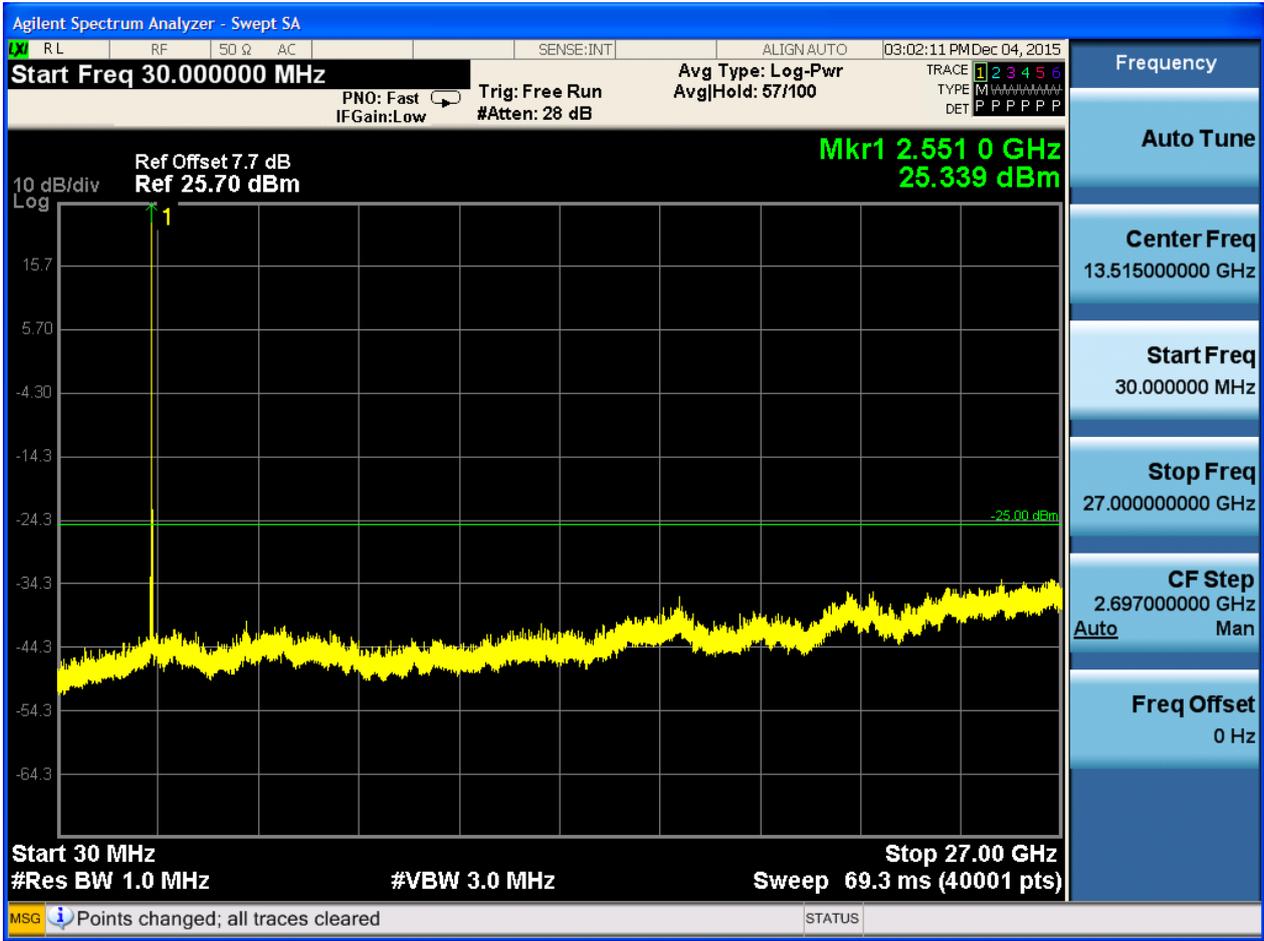


6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0







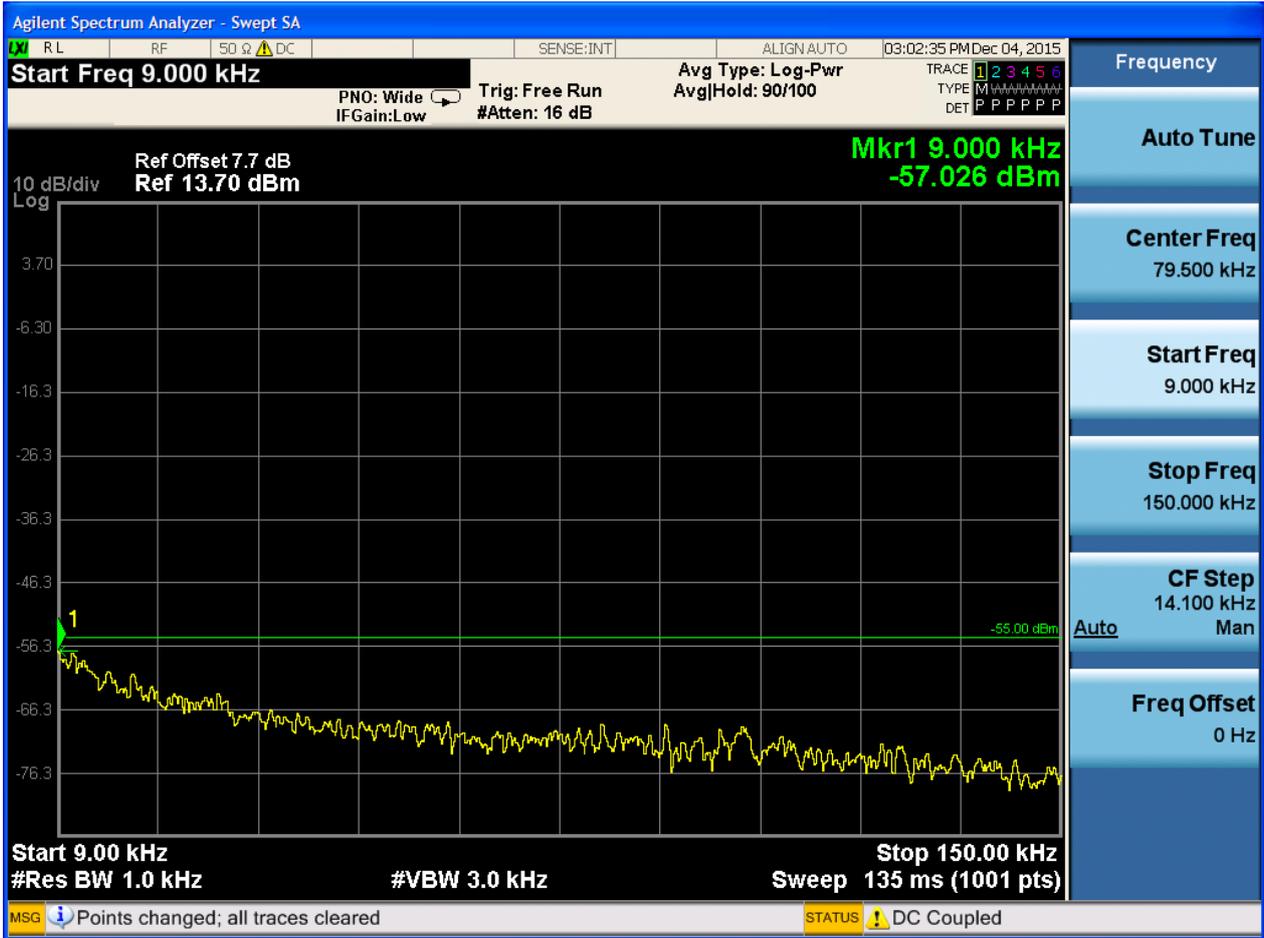


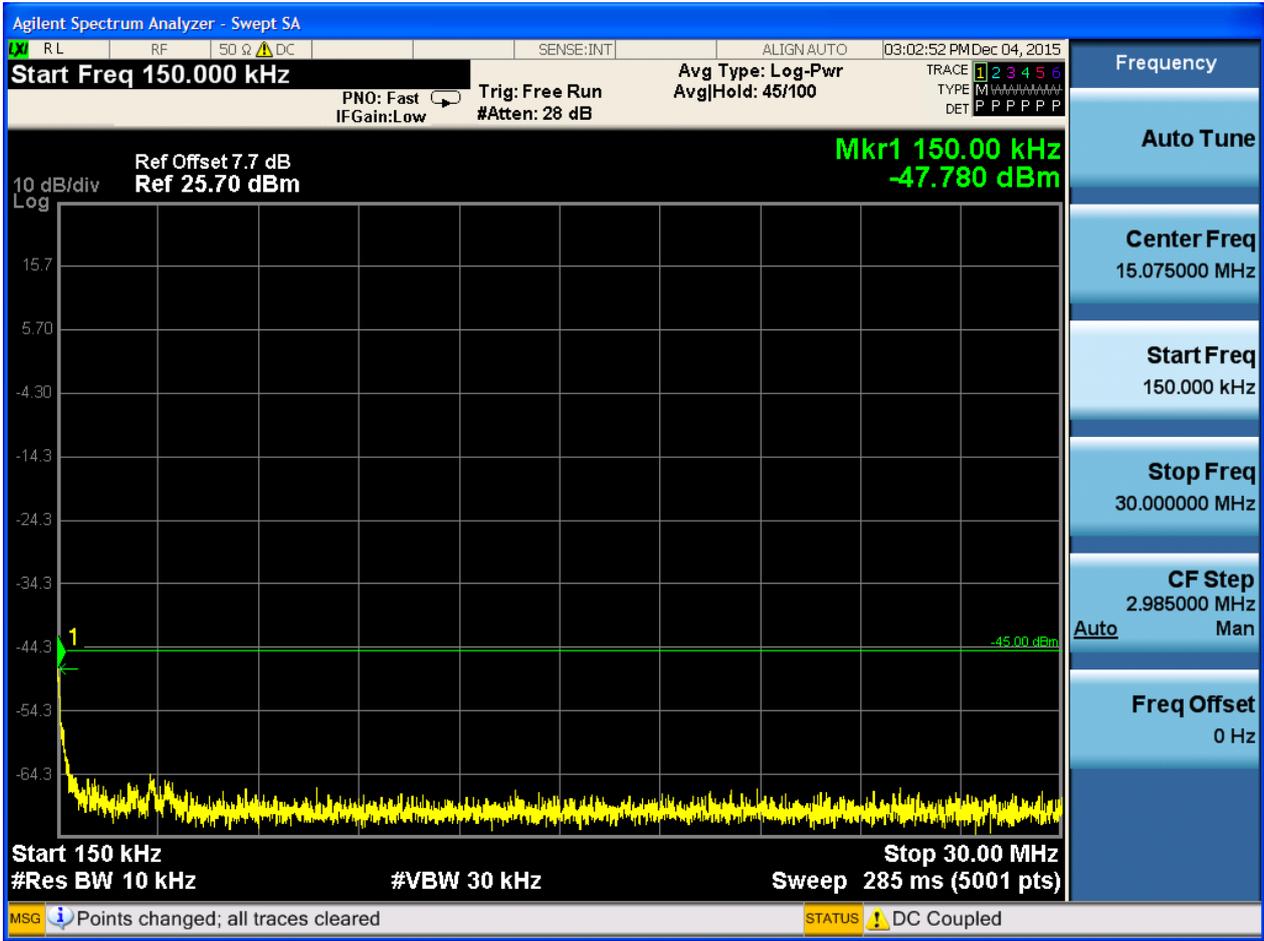
6.1.1.2 Test Mode = LTE/TM2

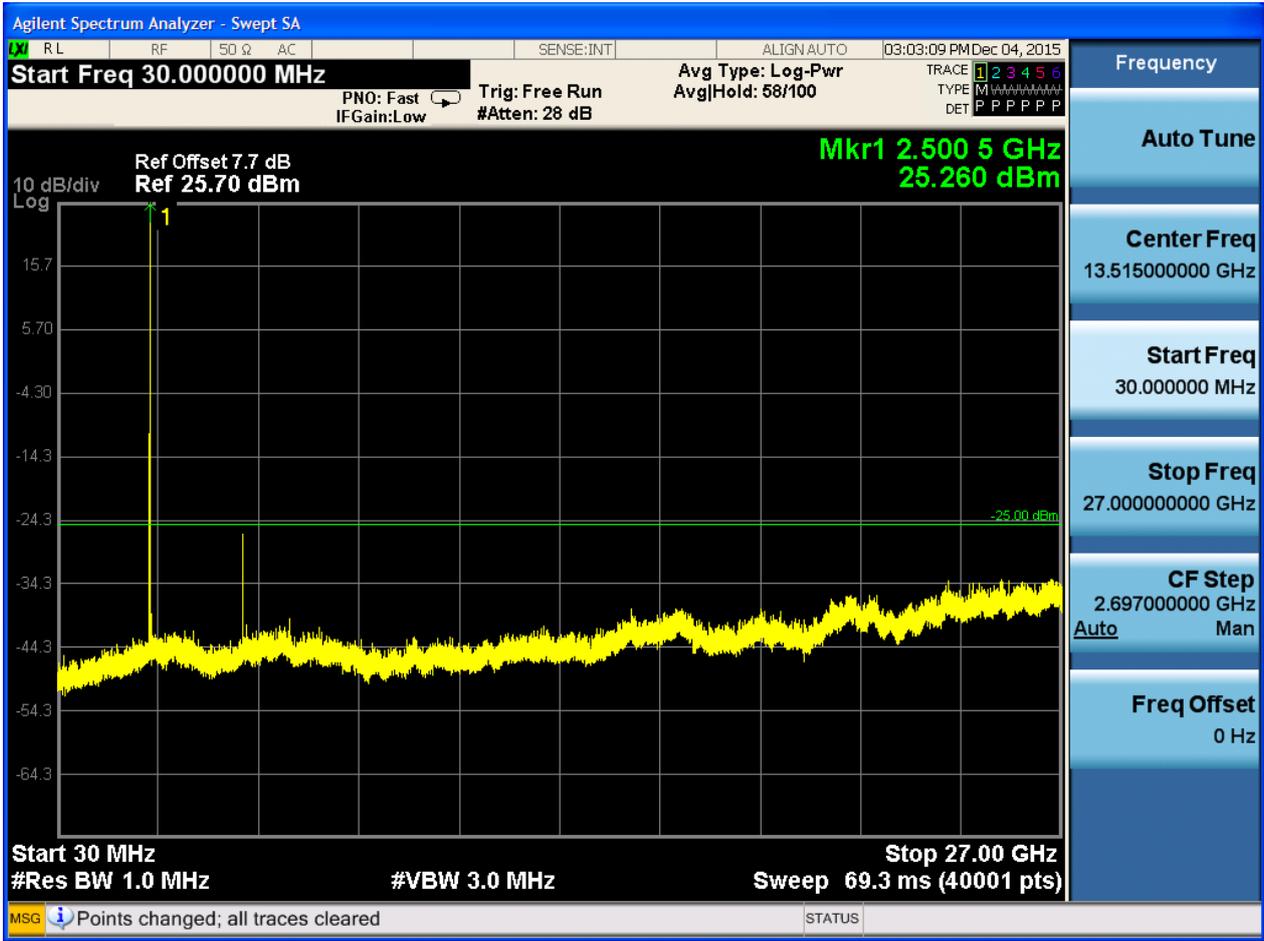
6.1.1.2.1 Test Bandwidth = 5

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0



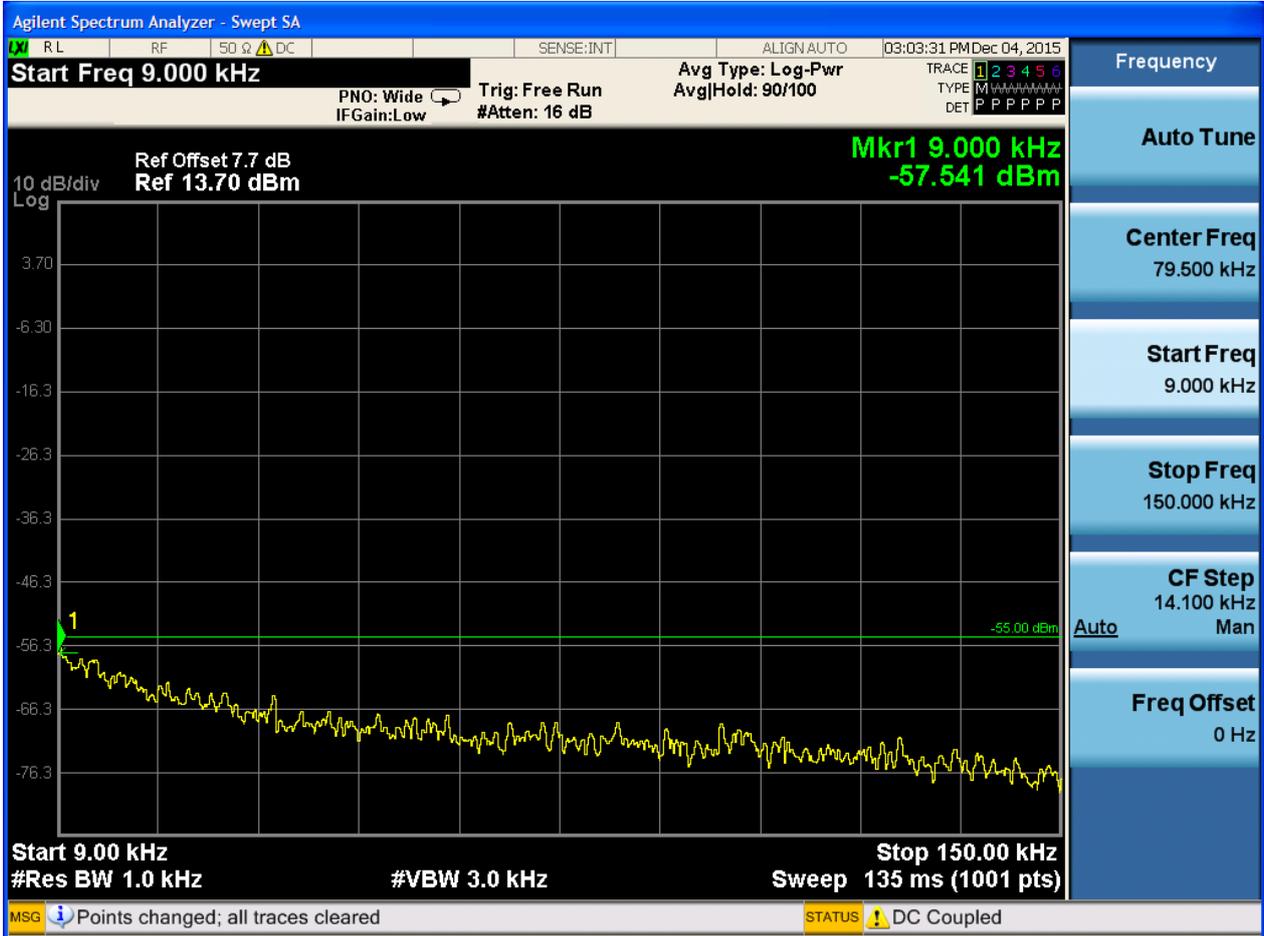


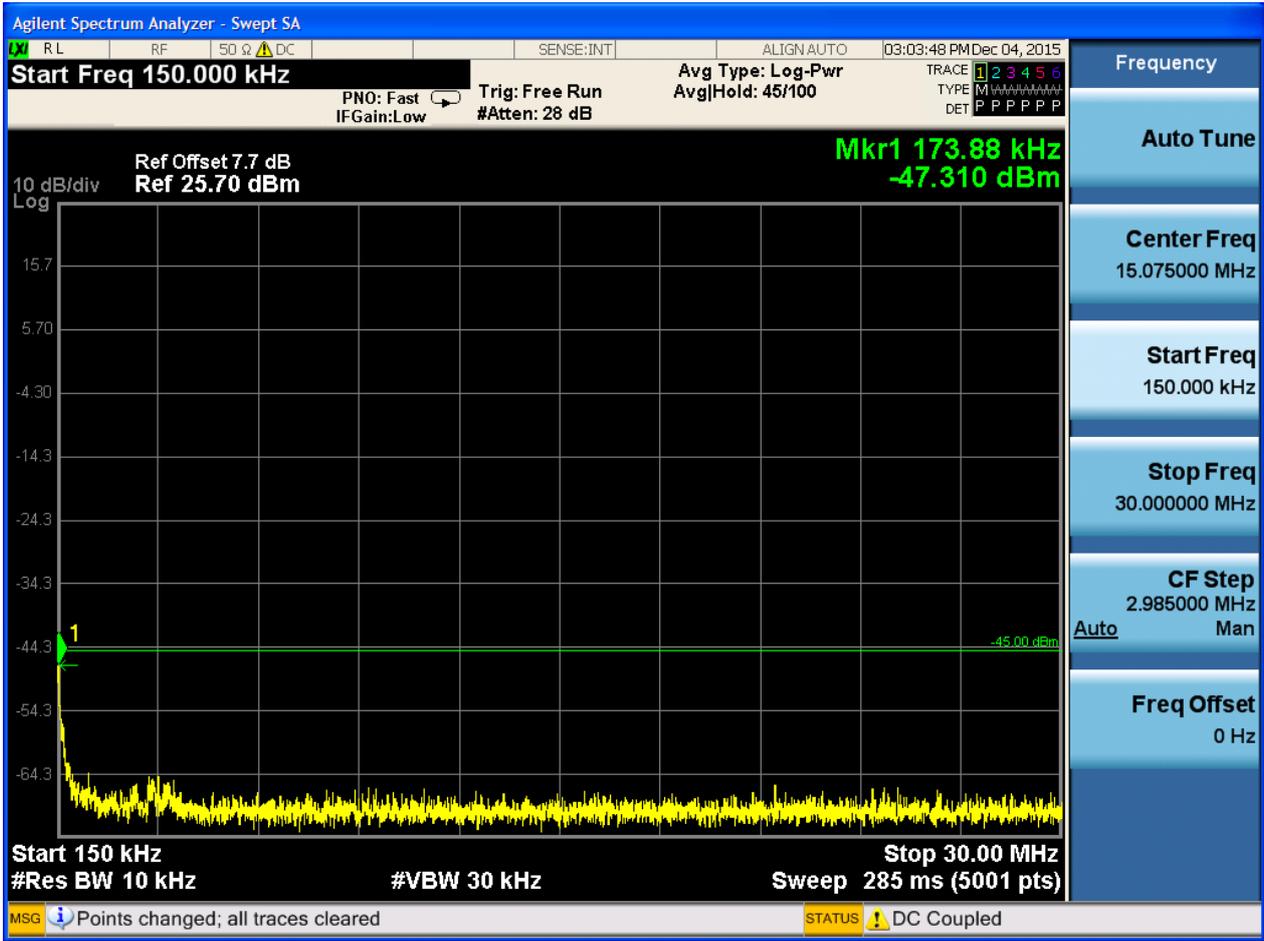


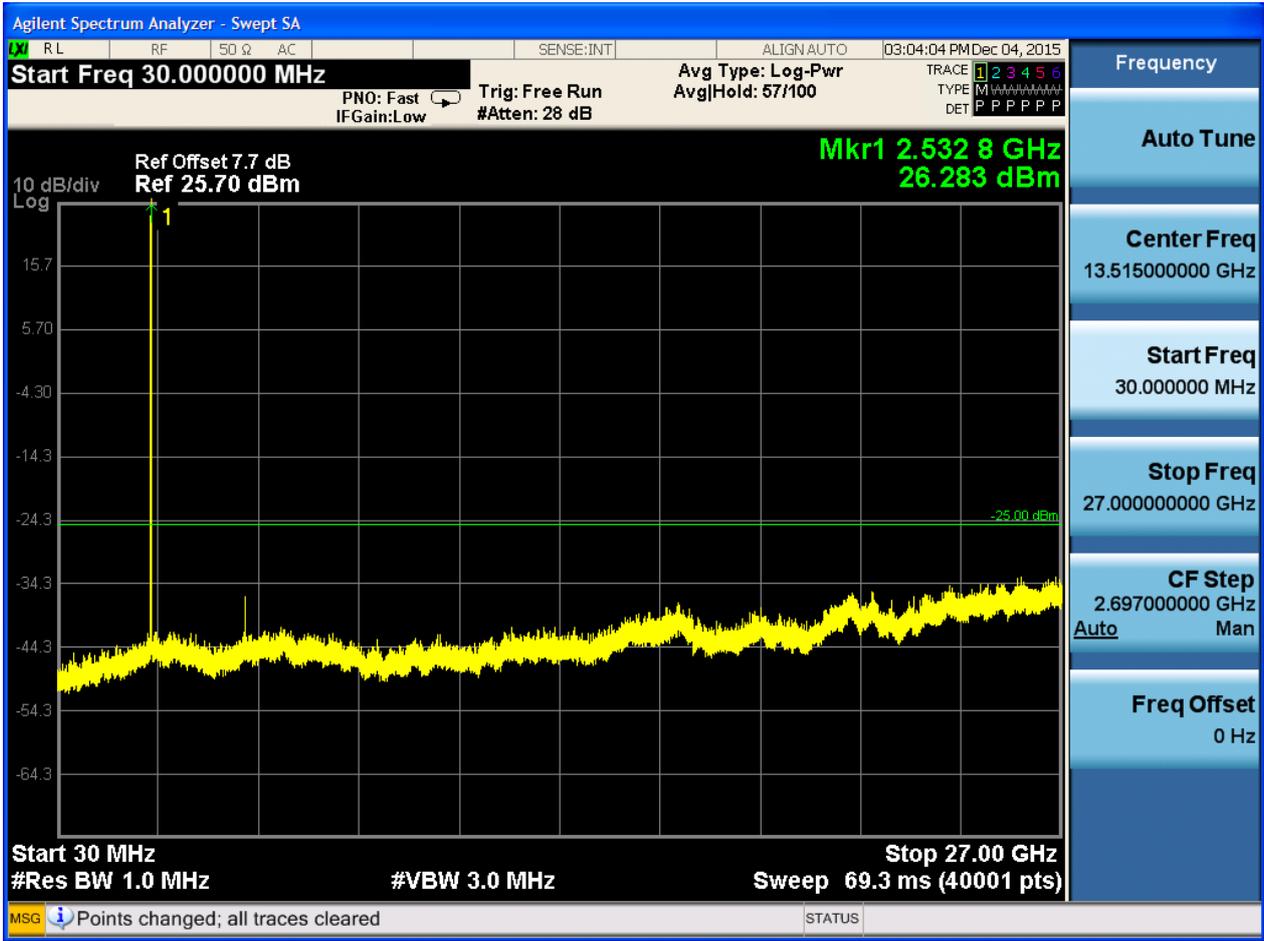


6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0



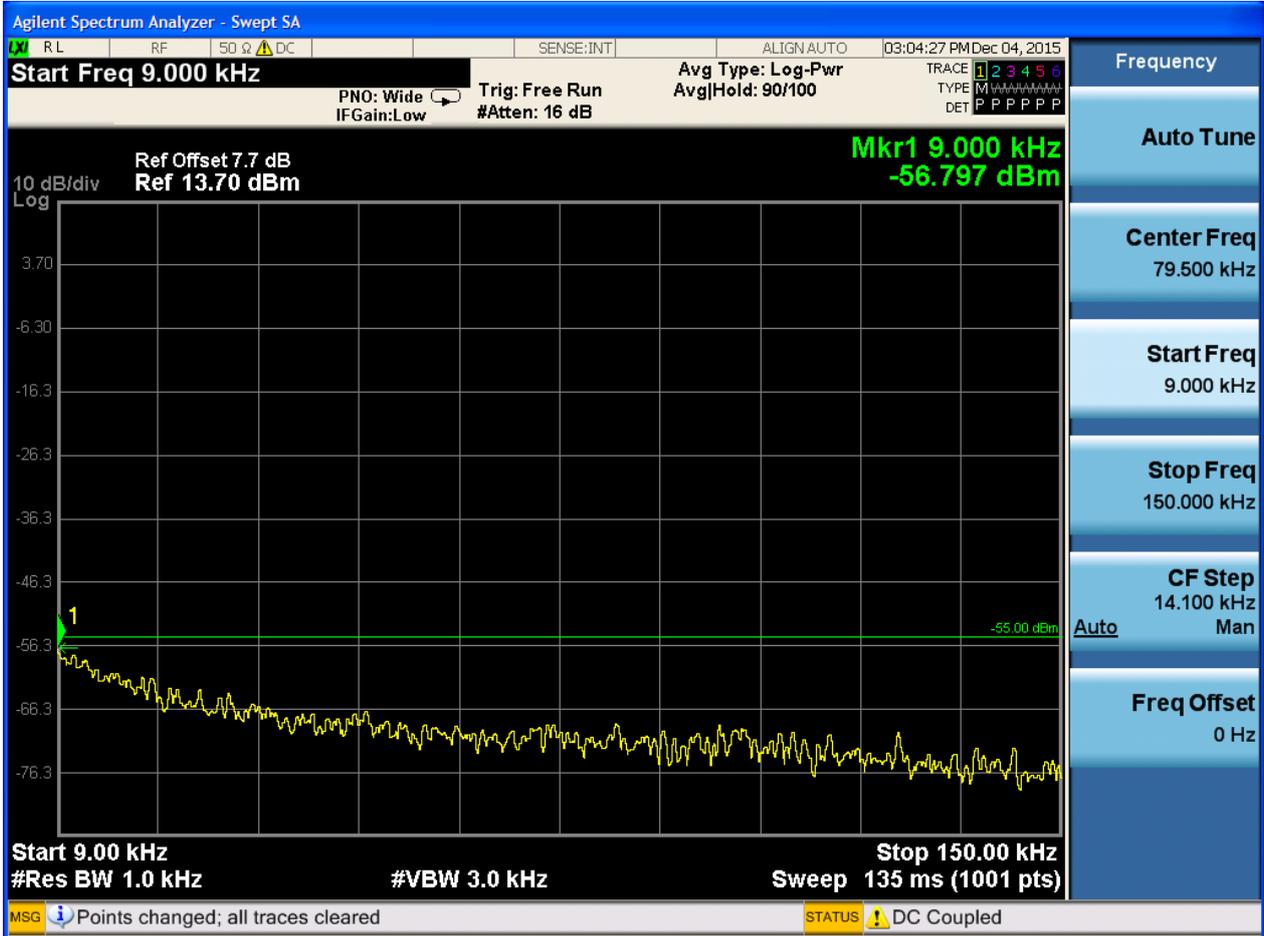


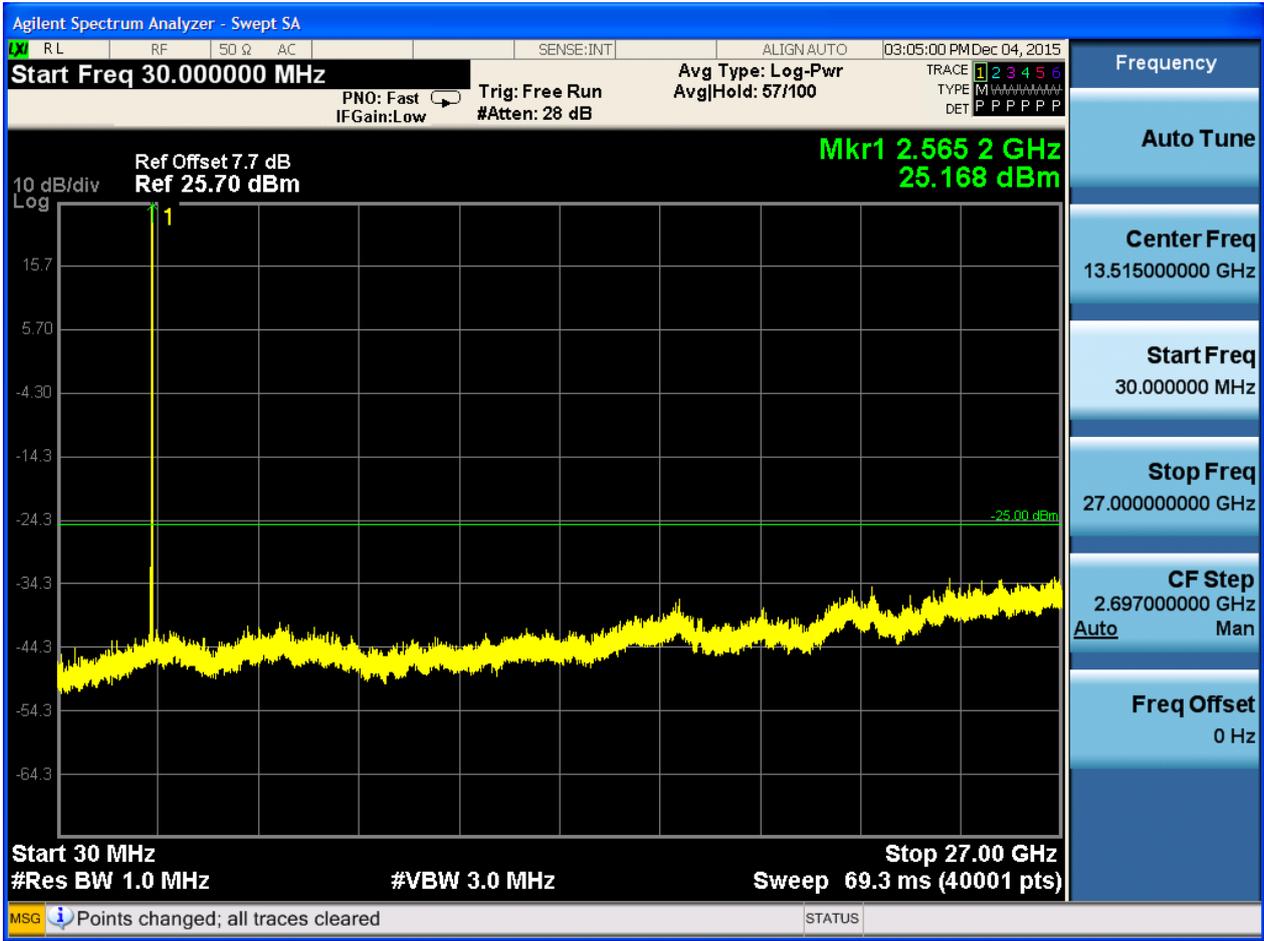




6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0



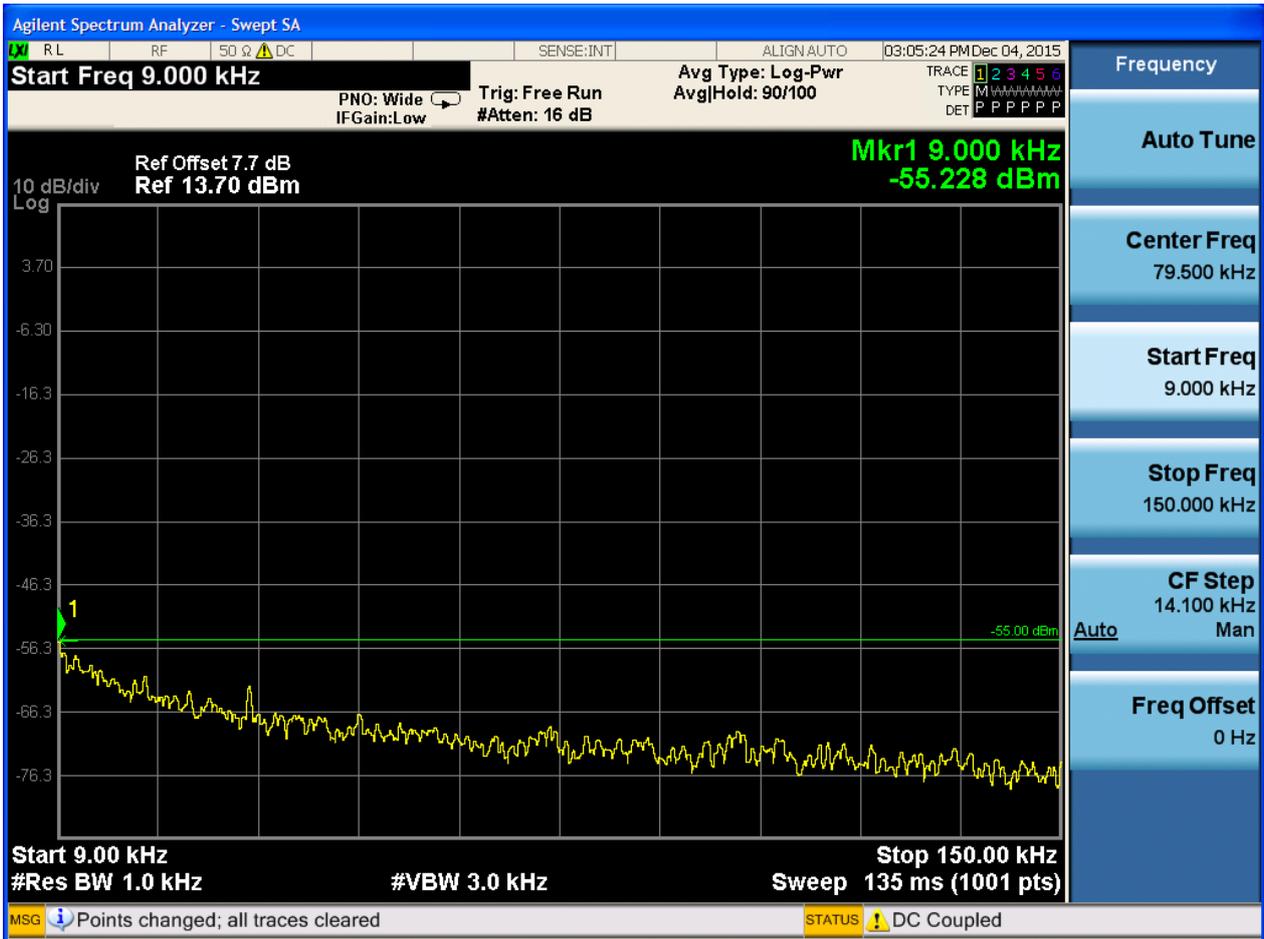


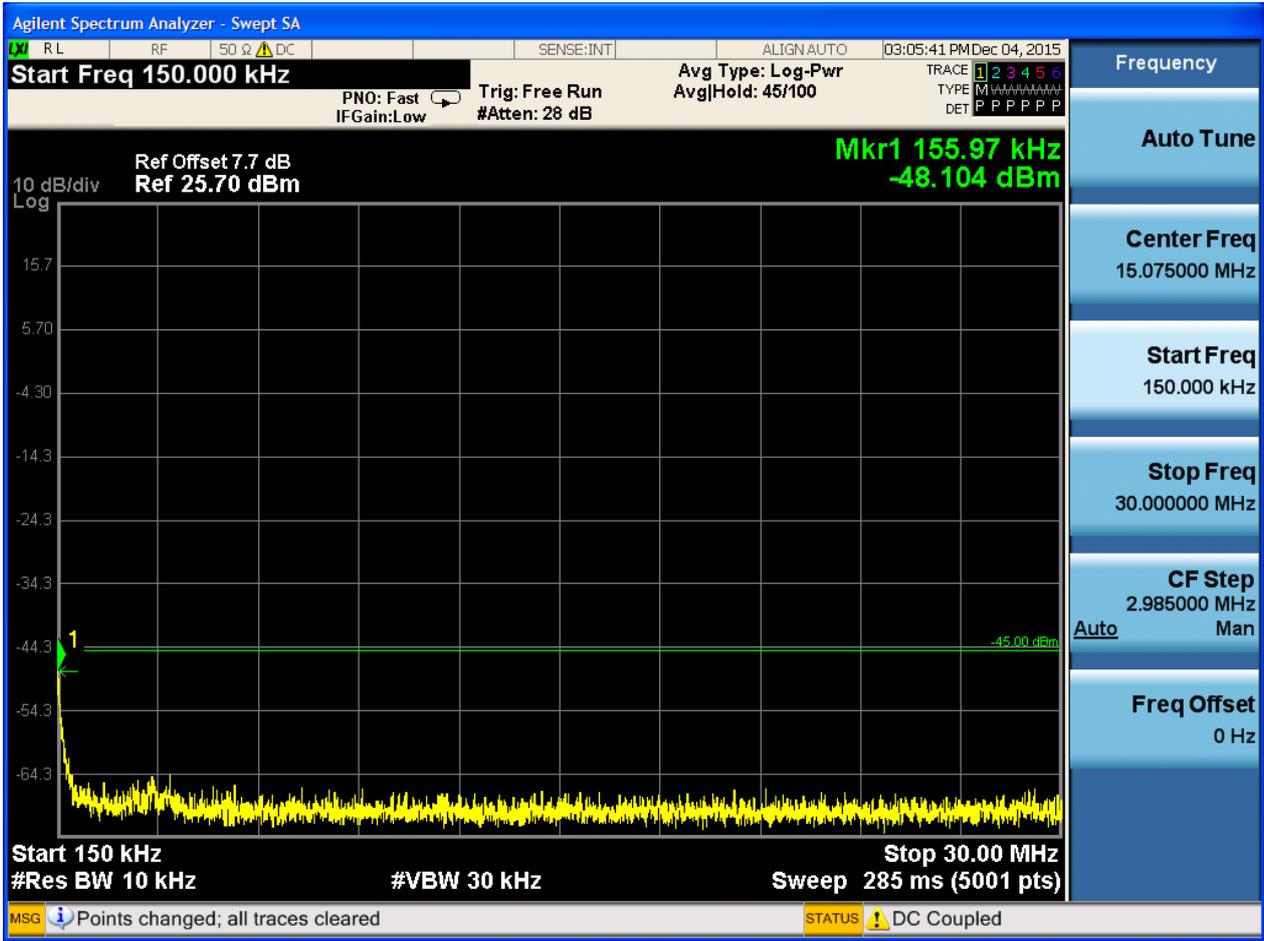


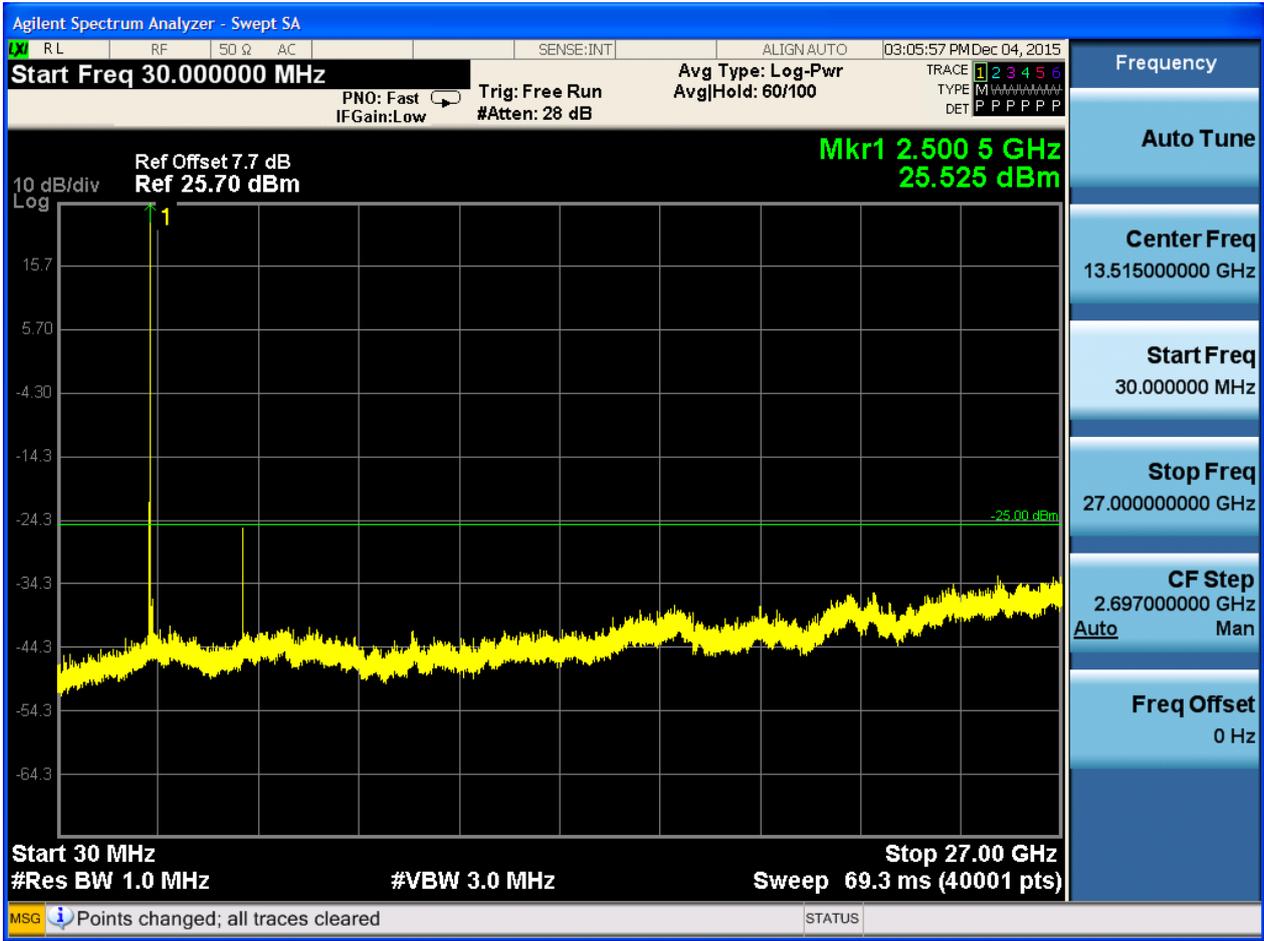
6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



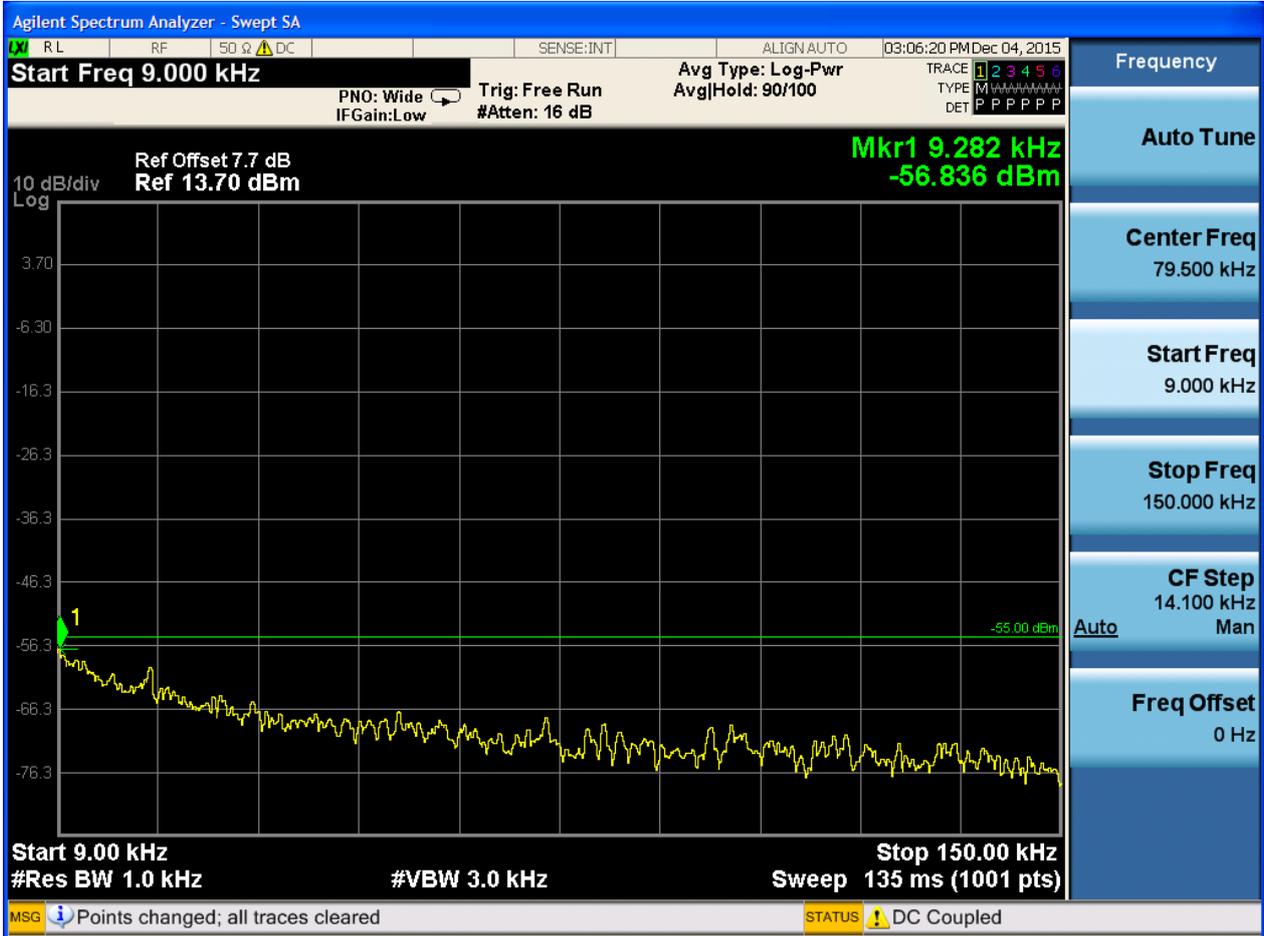


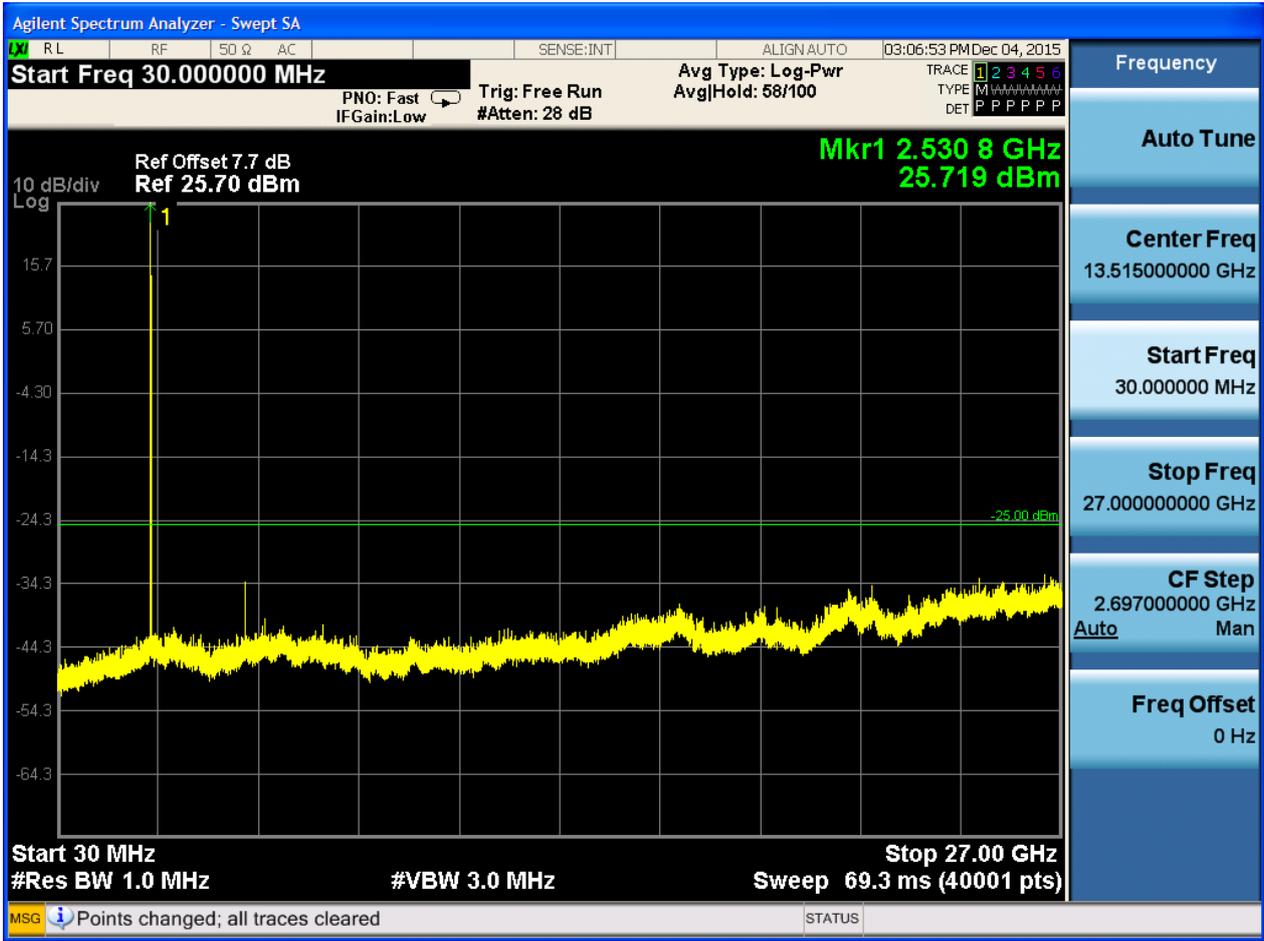




6.1.1.2.2.2 Test Channel = MCH

6.1.1.2.2.2.1 Test RB = RB1#0

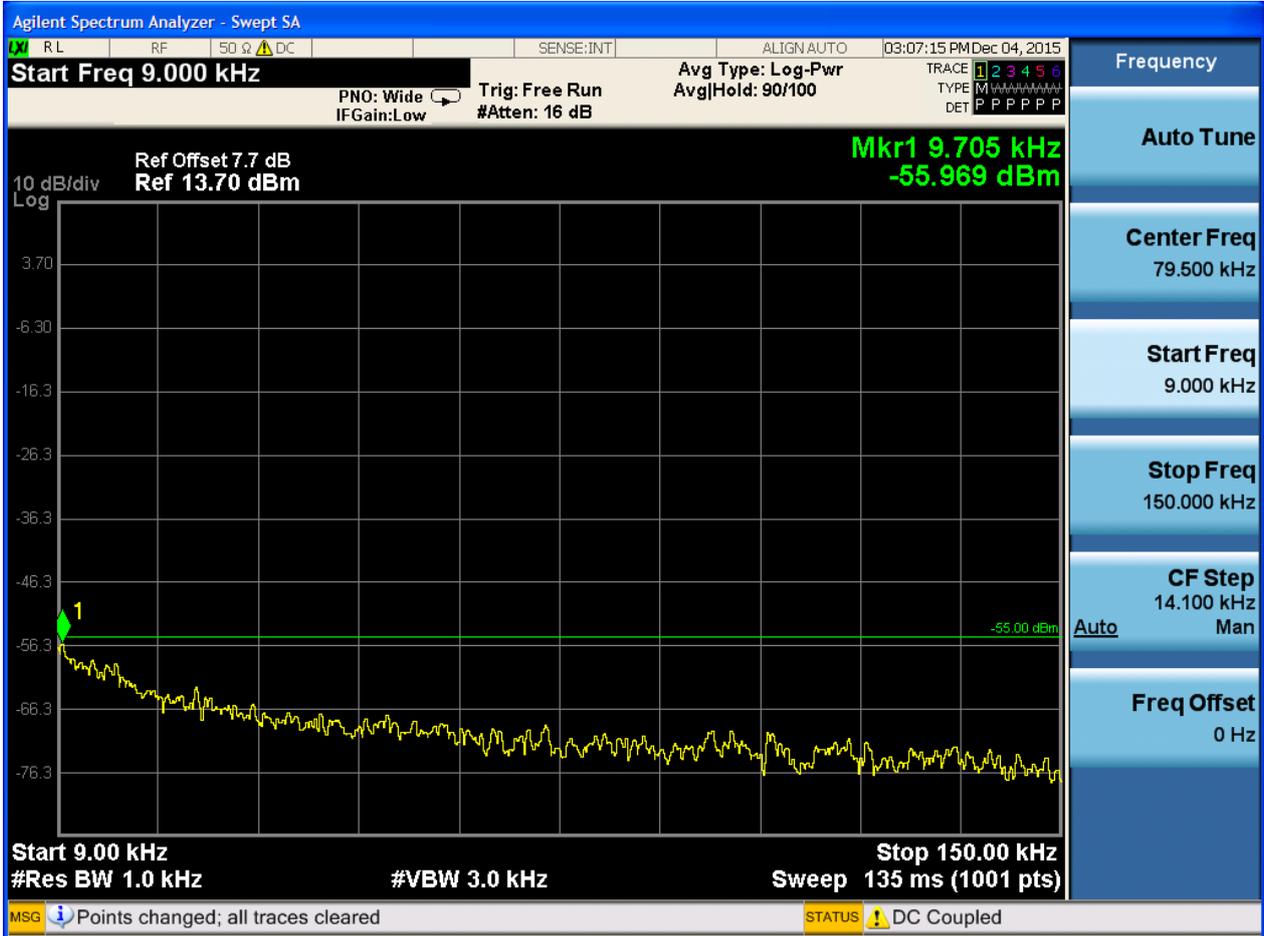


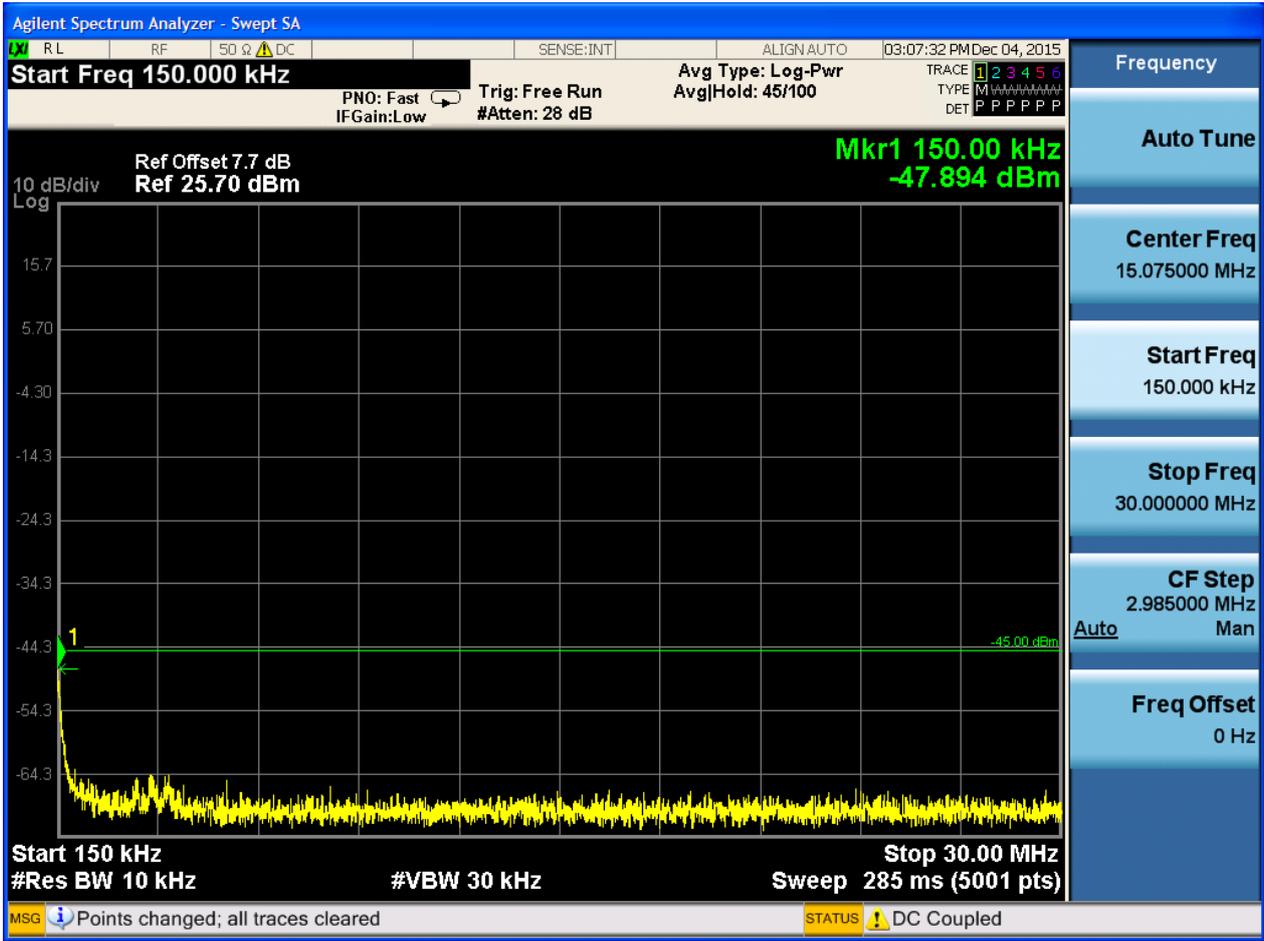


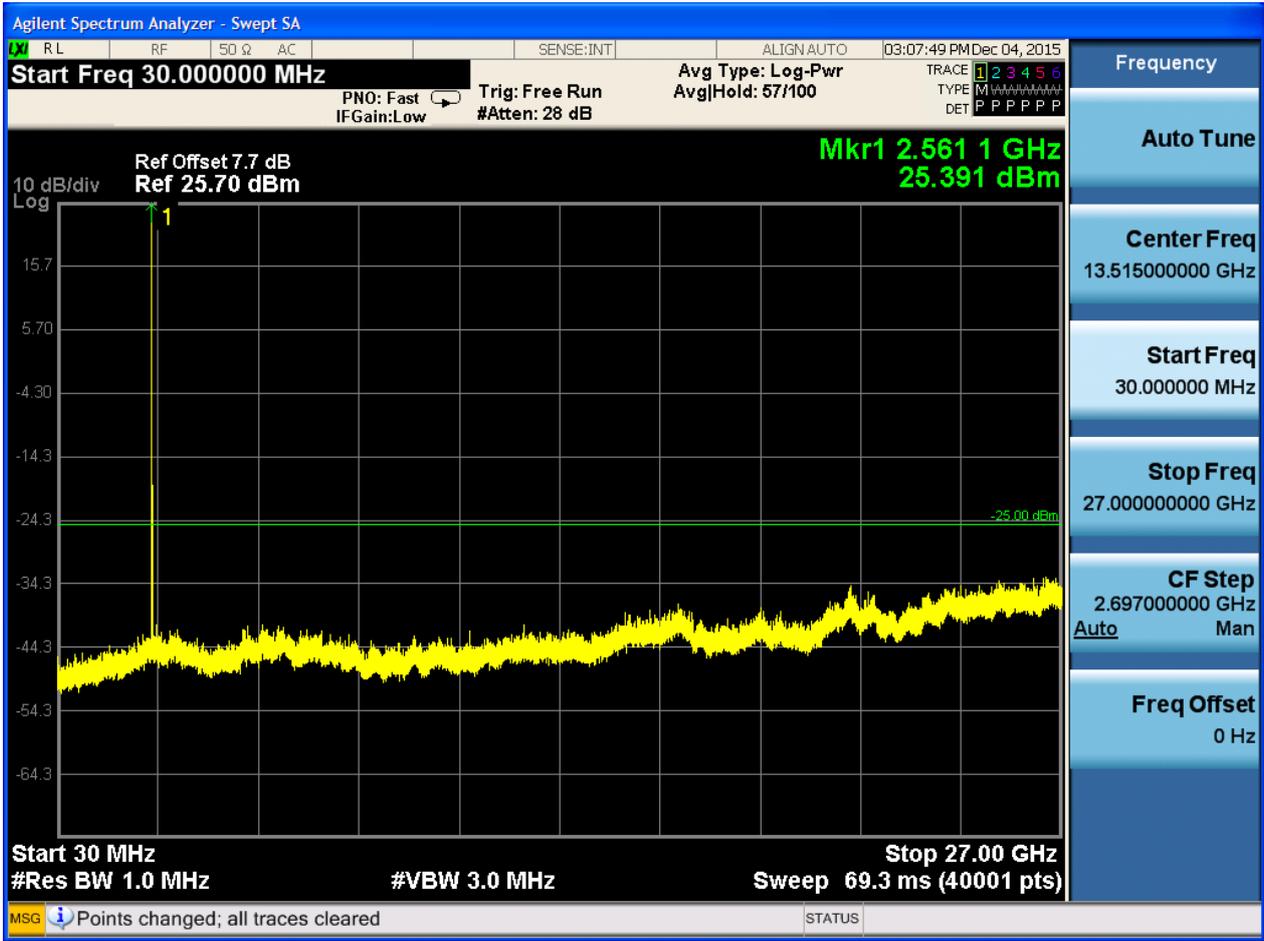


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0





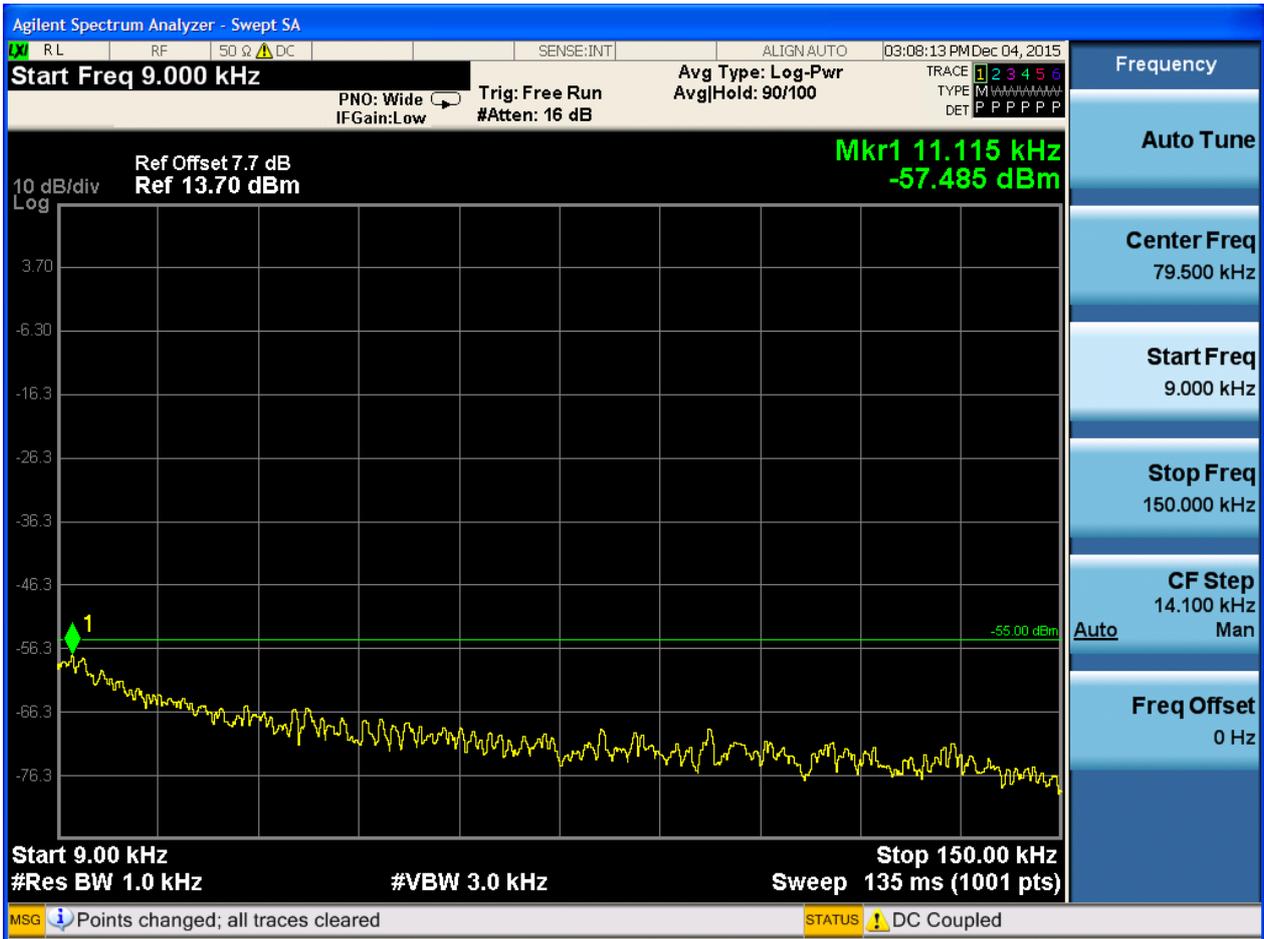


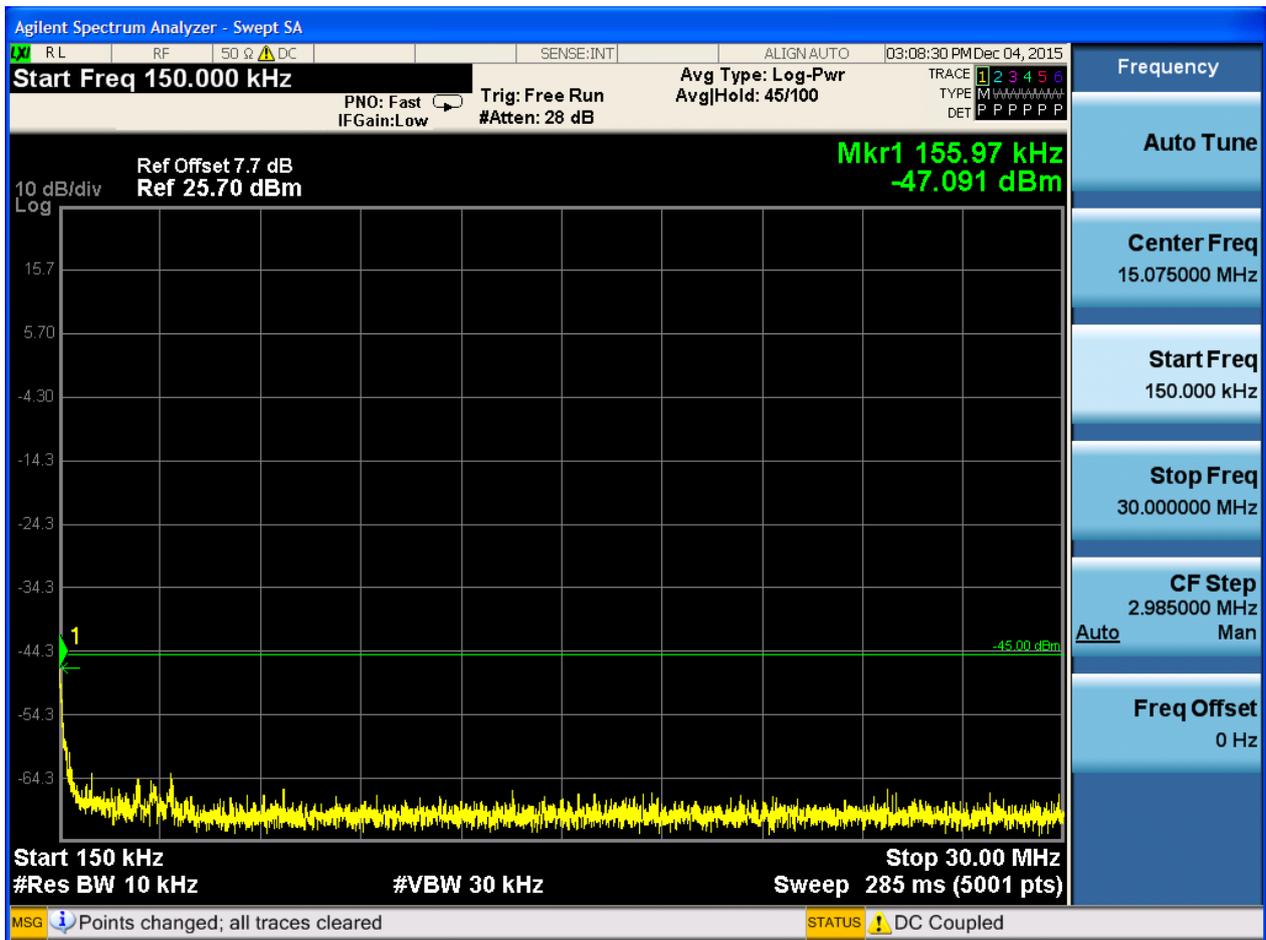


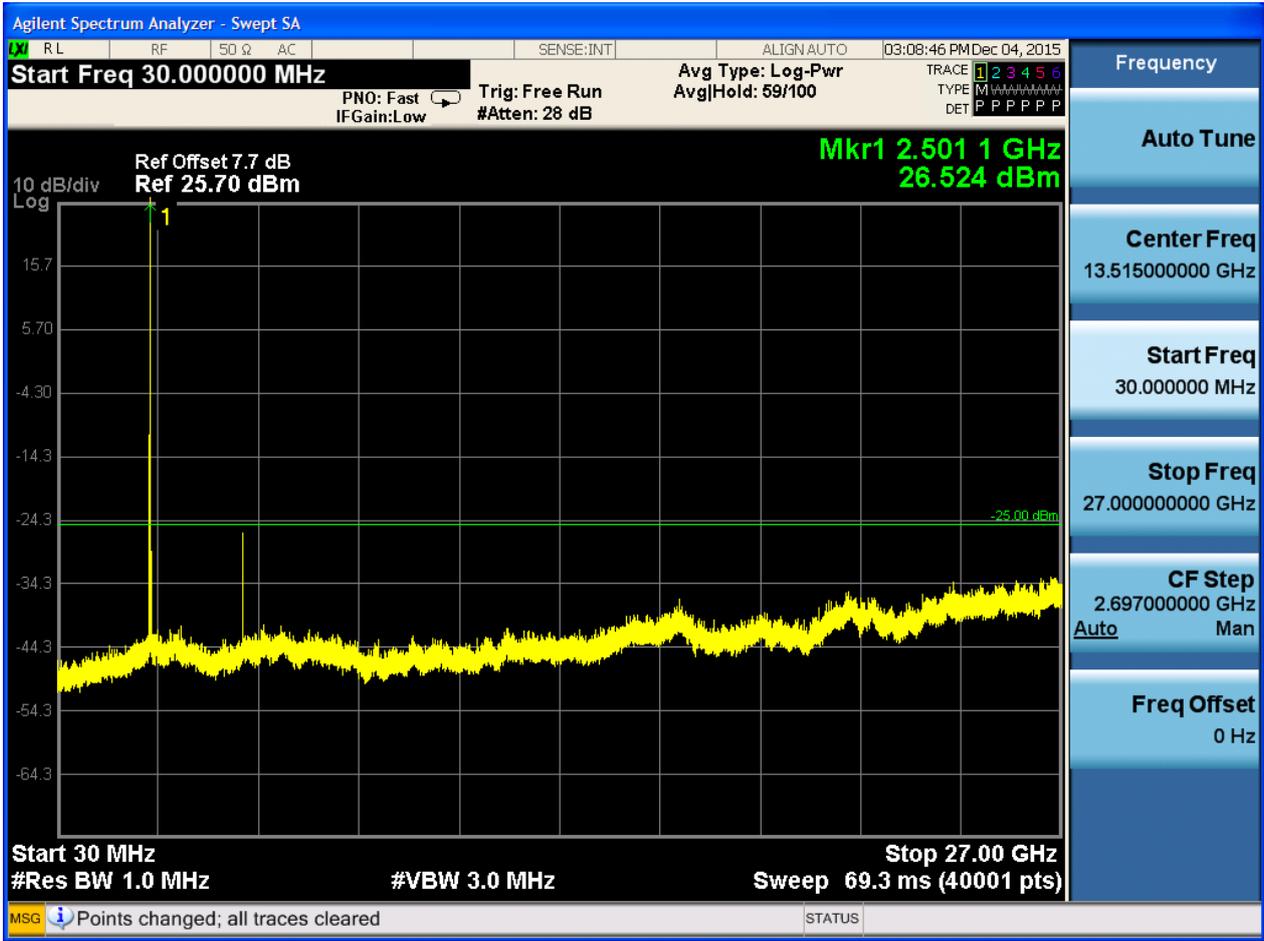
6.1.1.2.3 Test Bandwidth = 15

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0



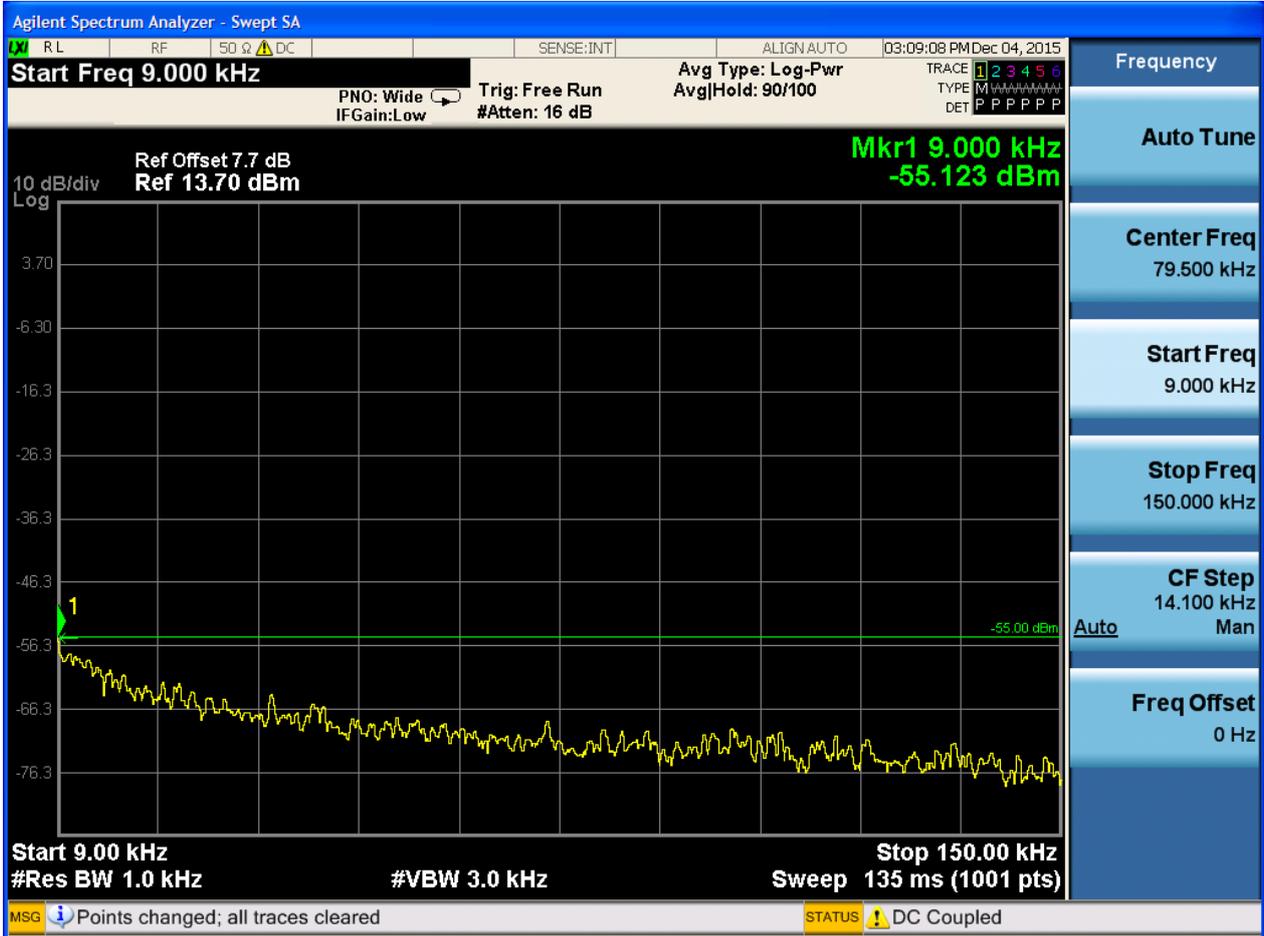


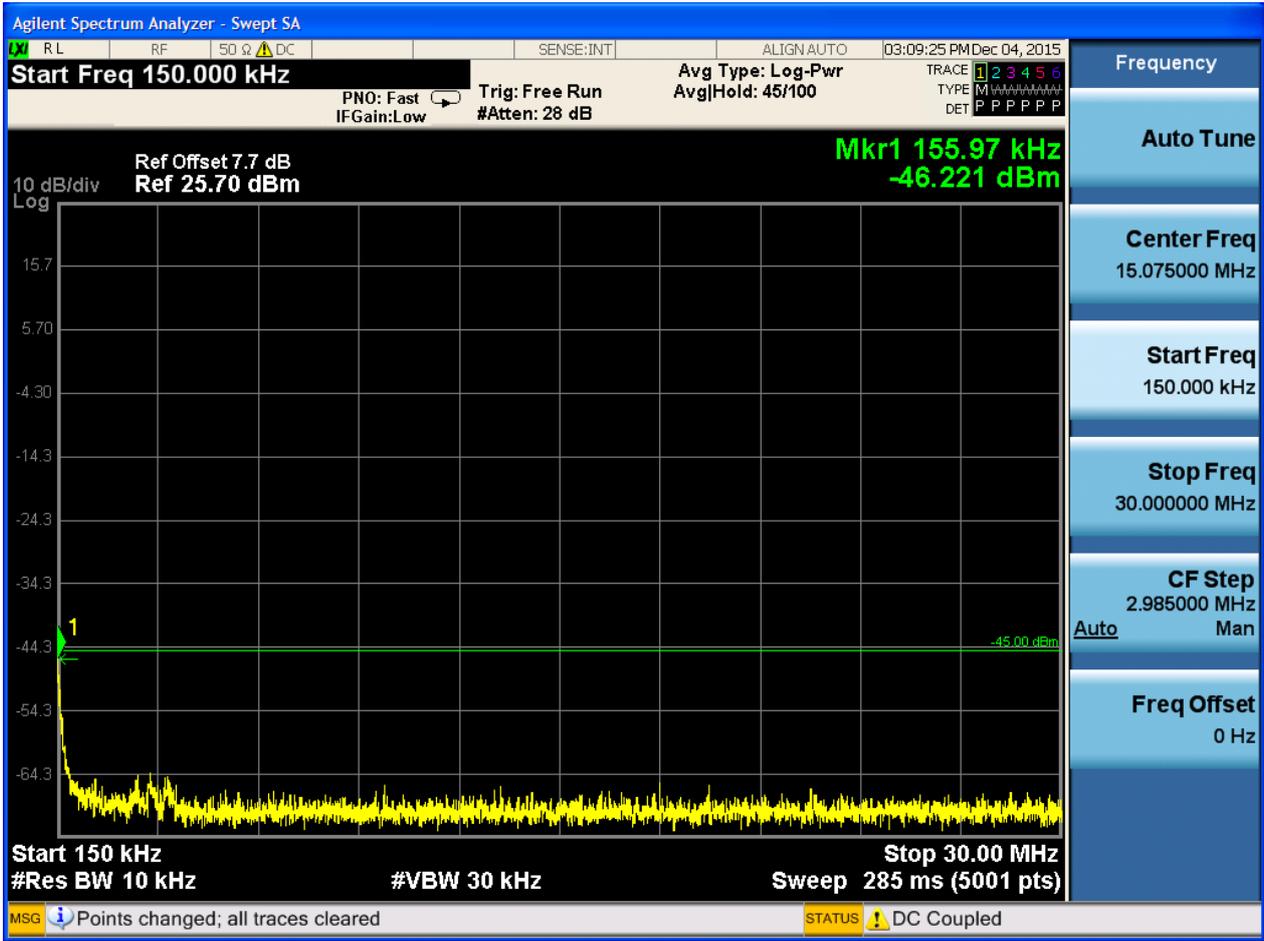


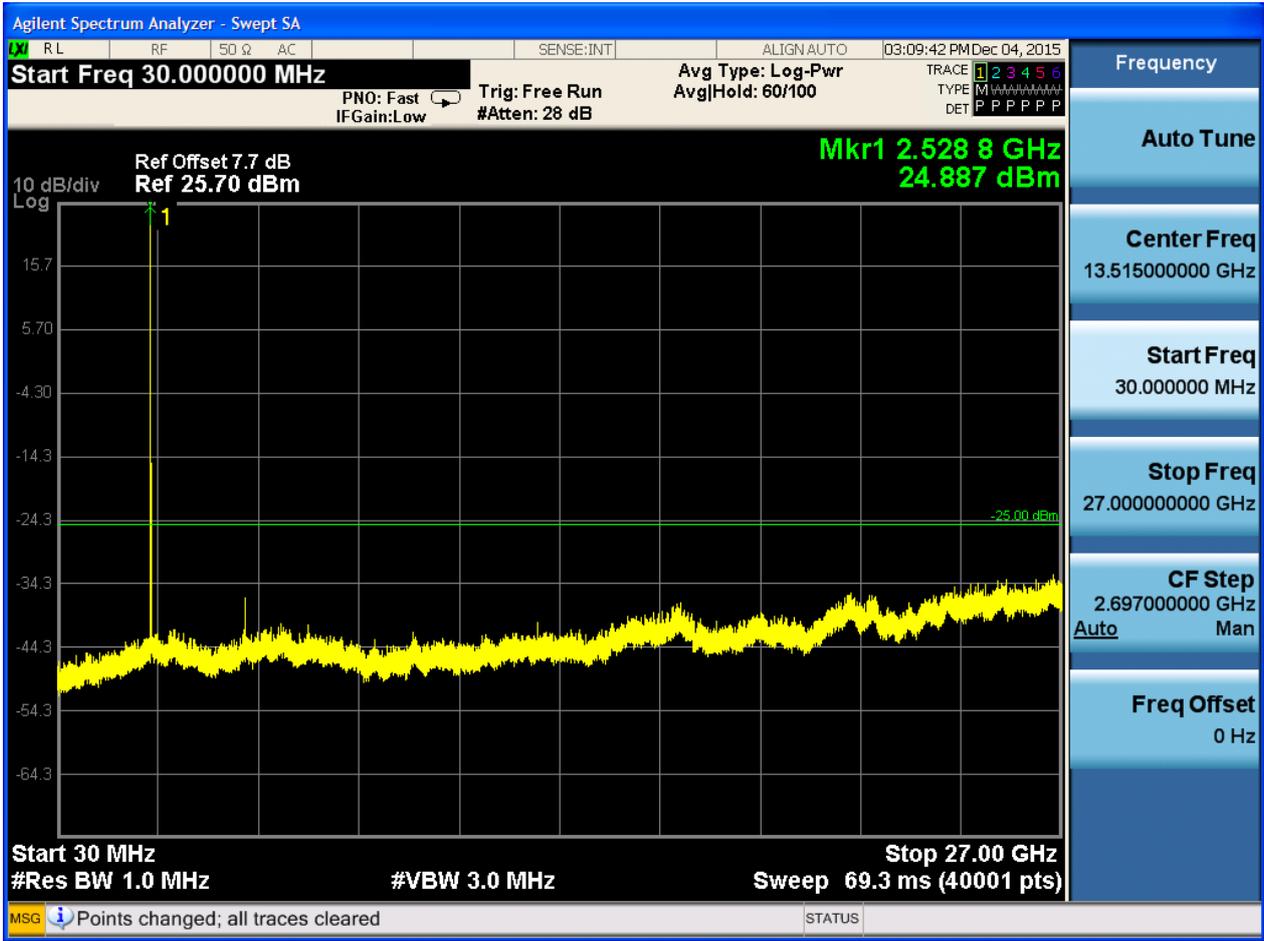


6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0



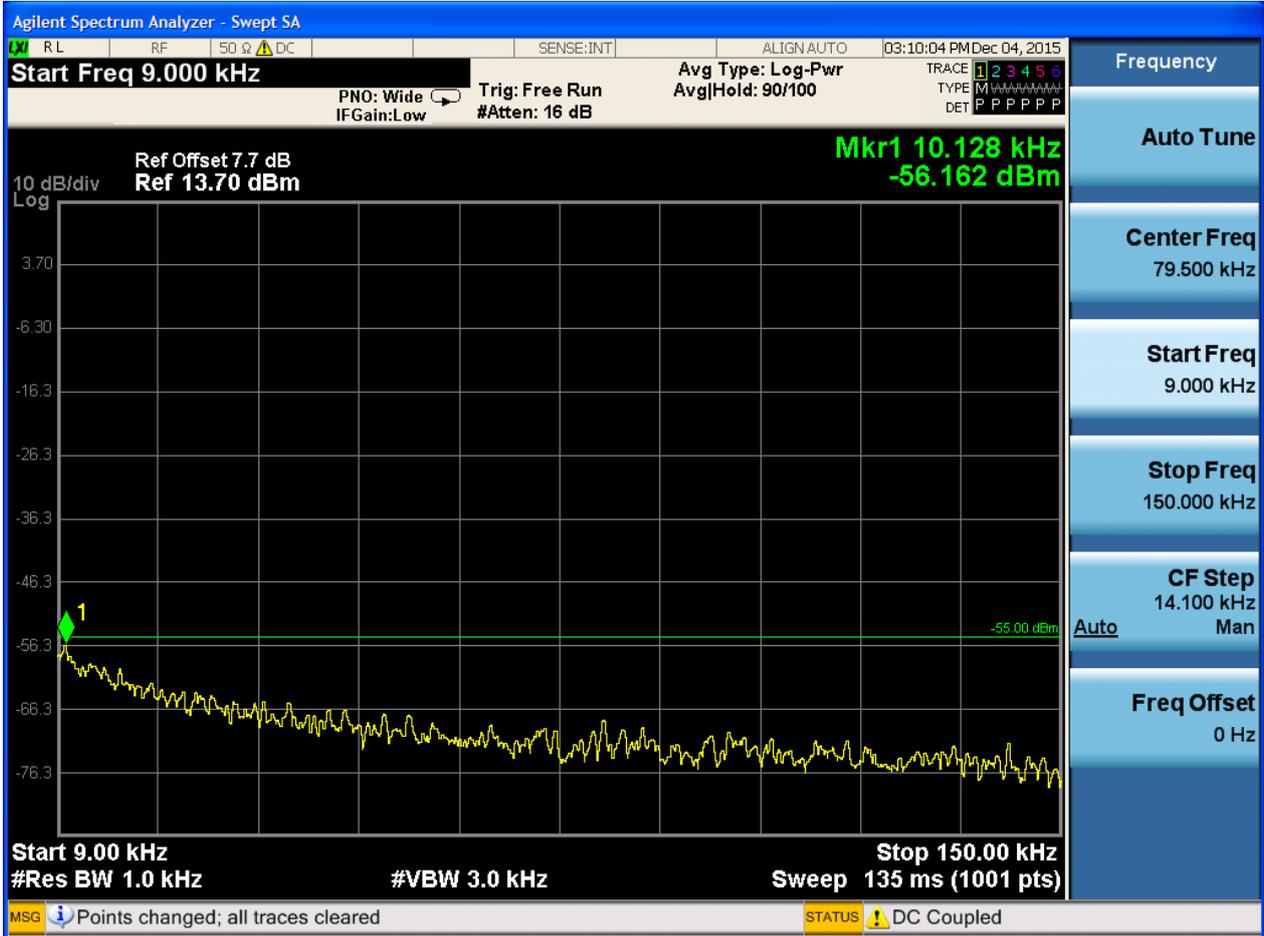


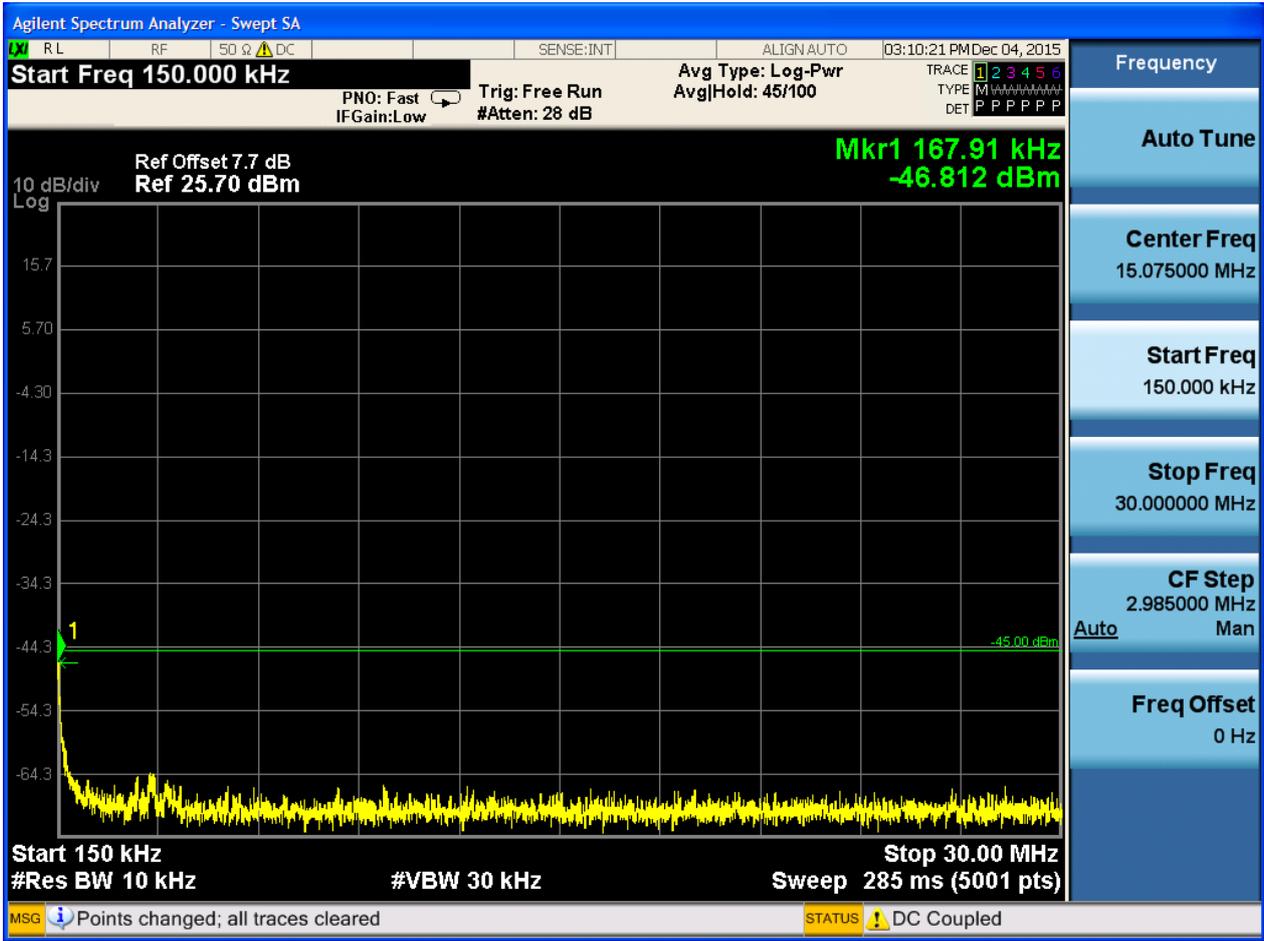


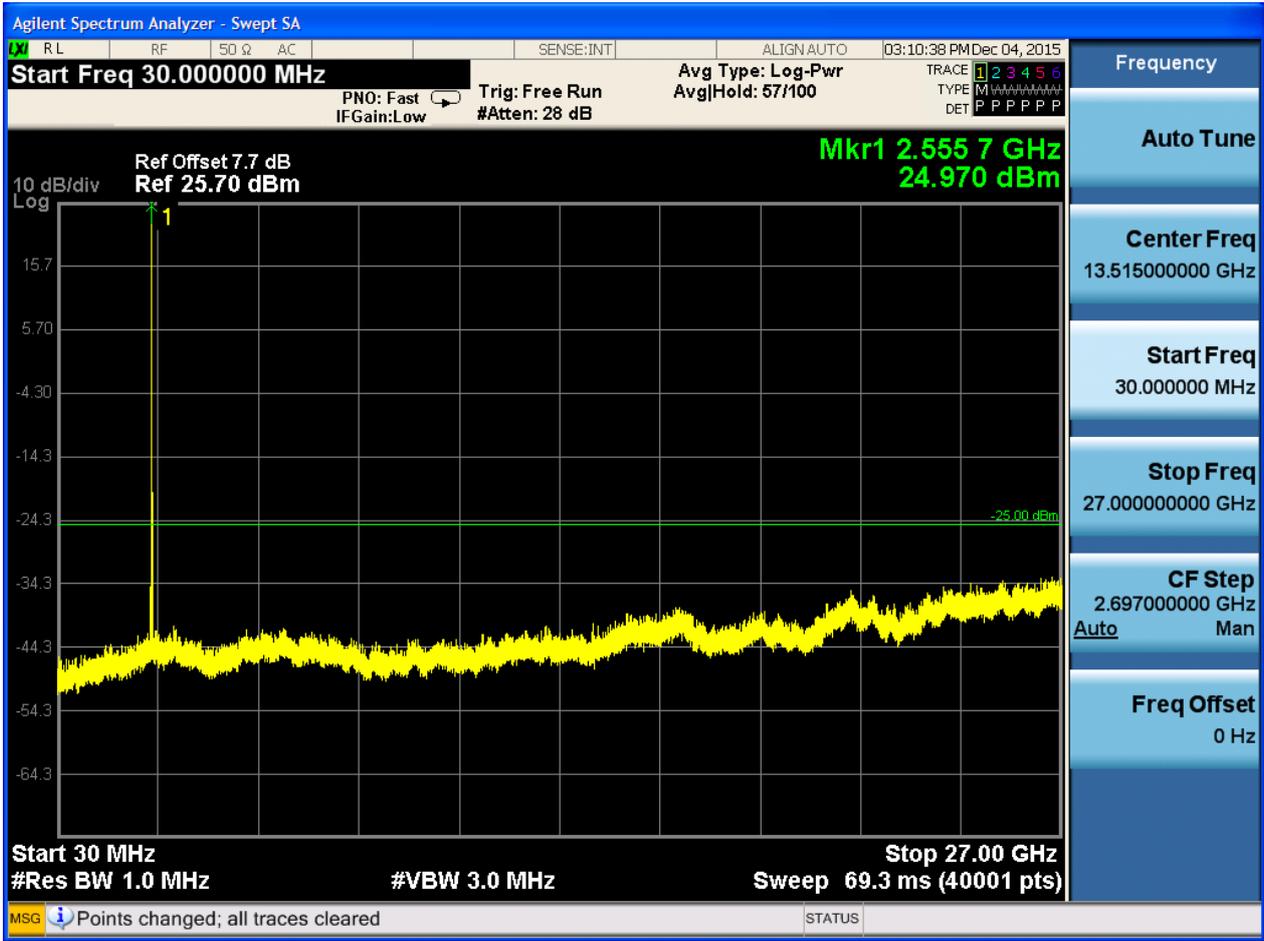


6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0







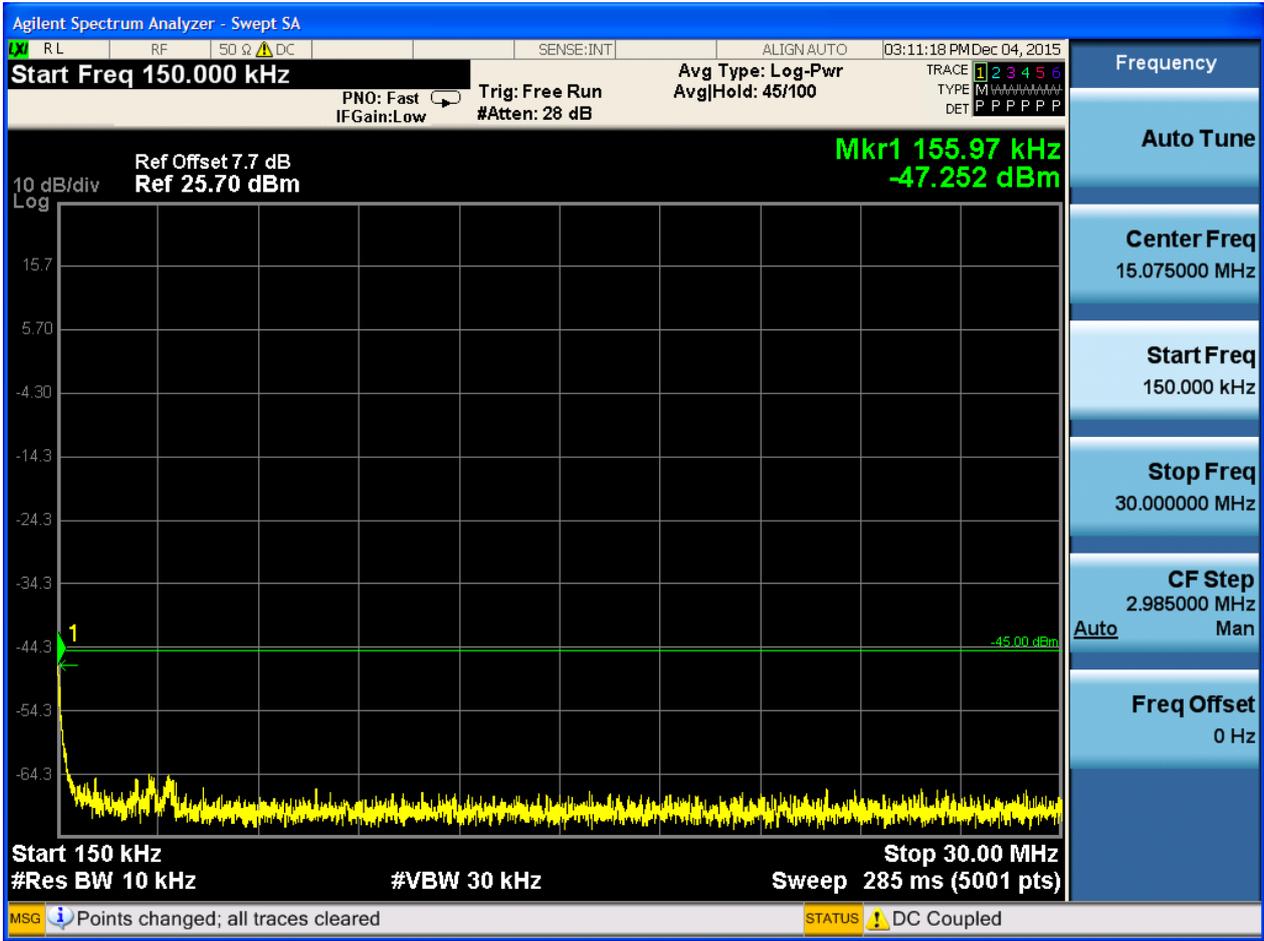


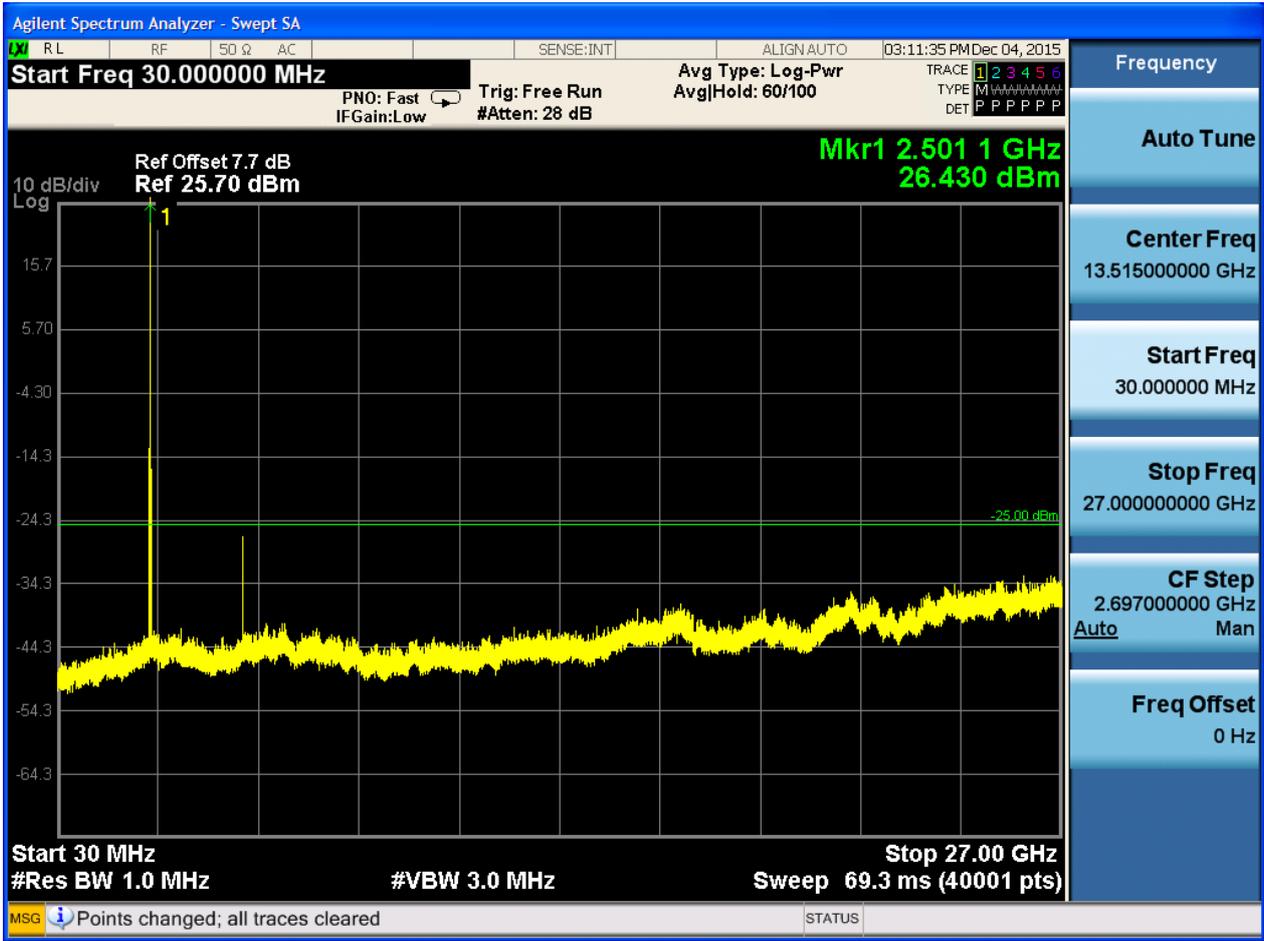
6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0



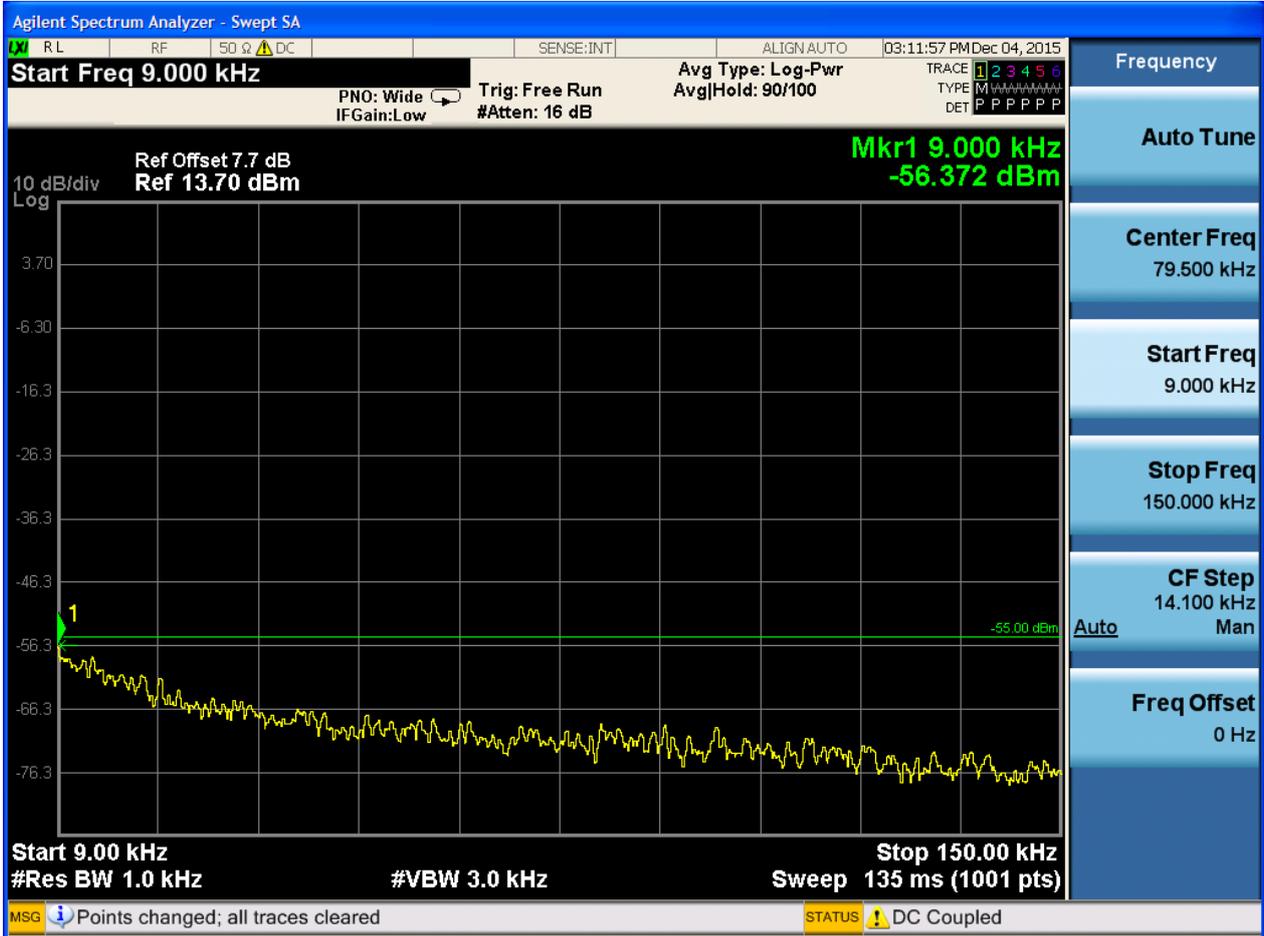


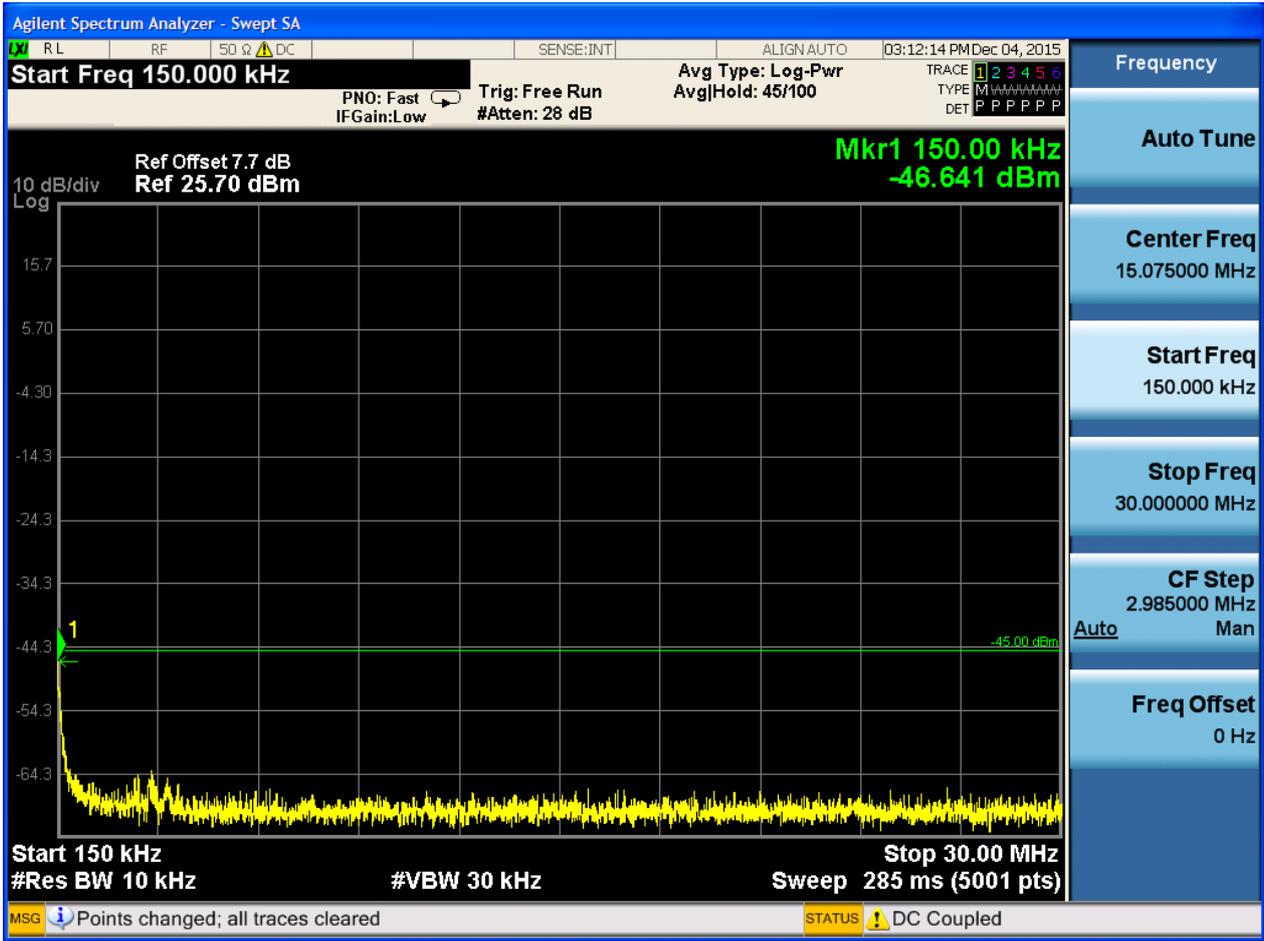




6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0



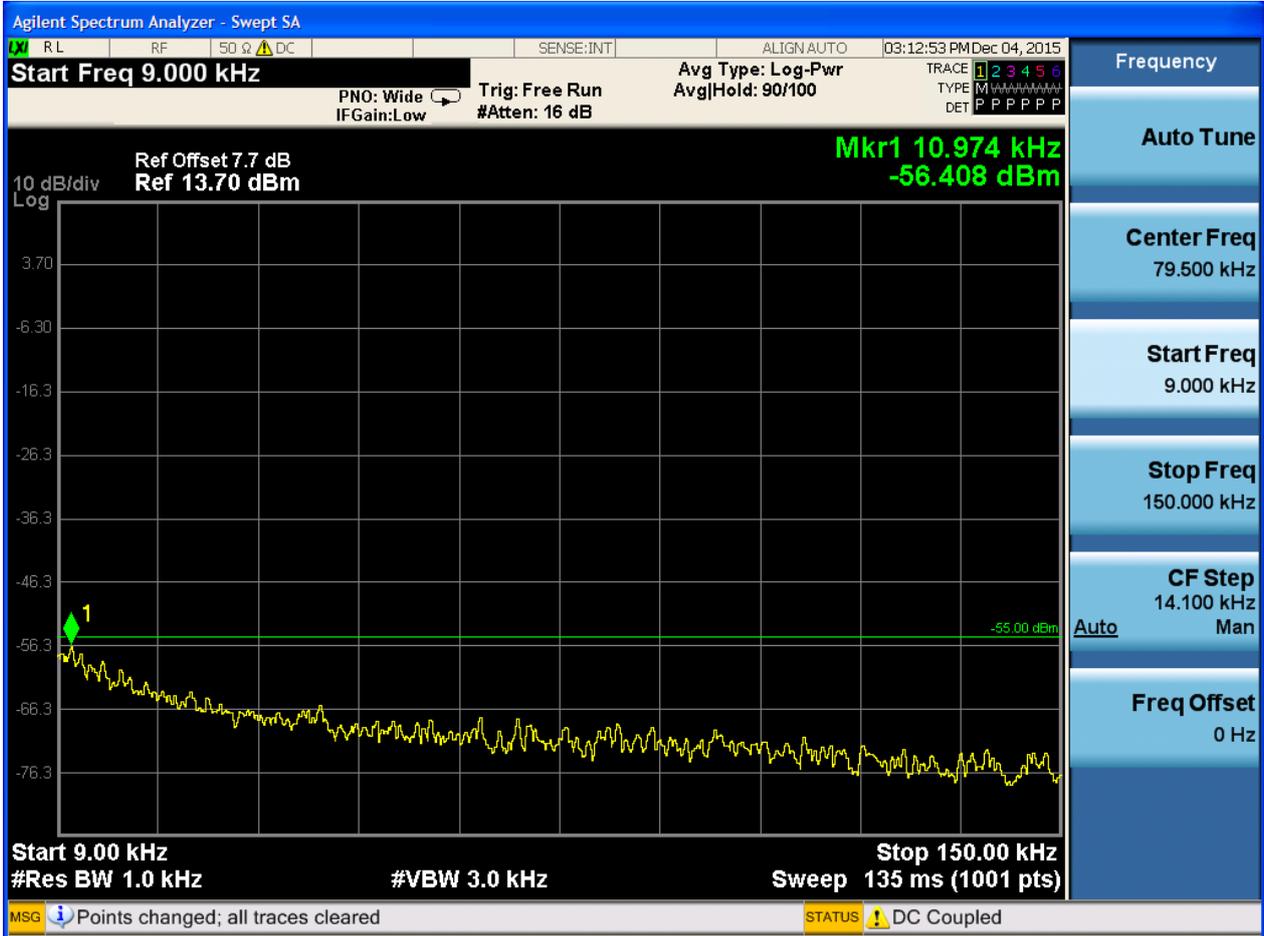


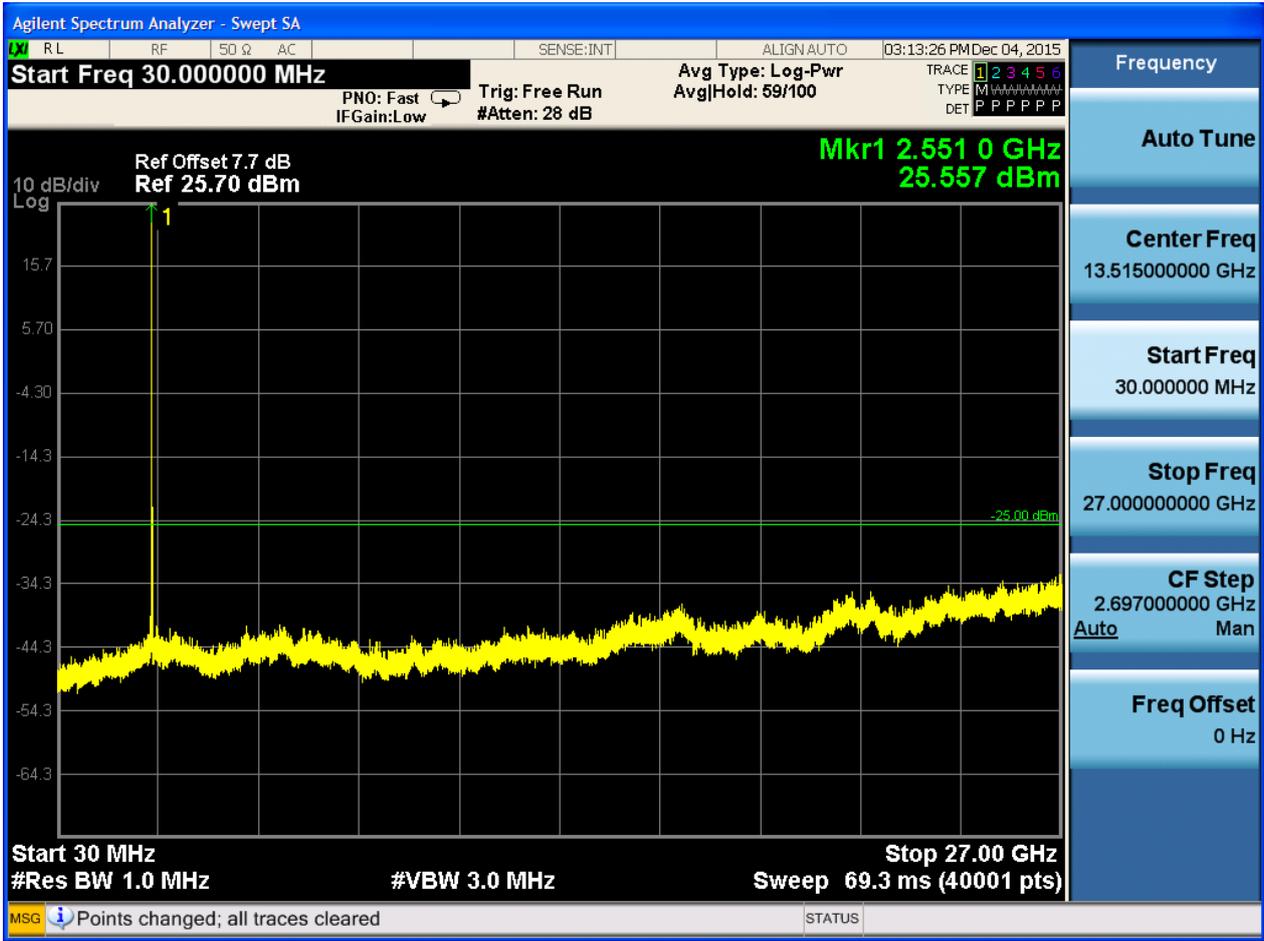




6.1.1.2.4.3 Test Channel = HCH

6.1.1.2.4.3.1 Test RB = RB1#0





7Appendix_G: Field Strength of Spurious Radiation

Note:

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

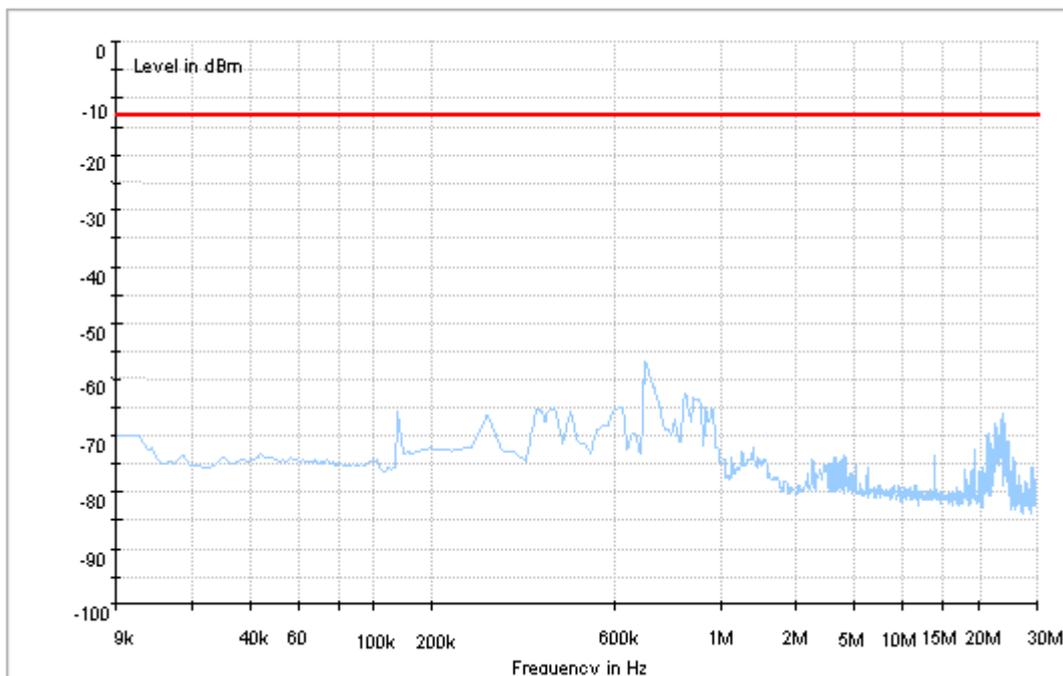
We tested all modes, but the data presented below is the worst case.

Part I - Test Plots

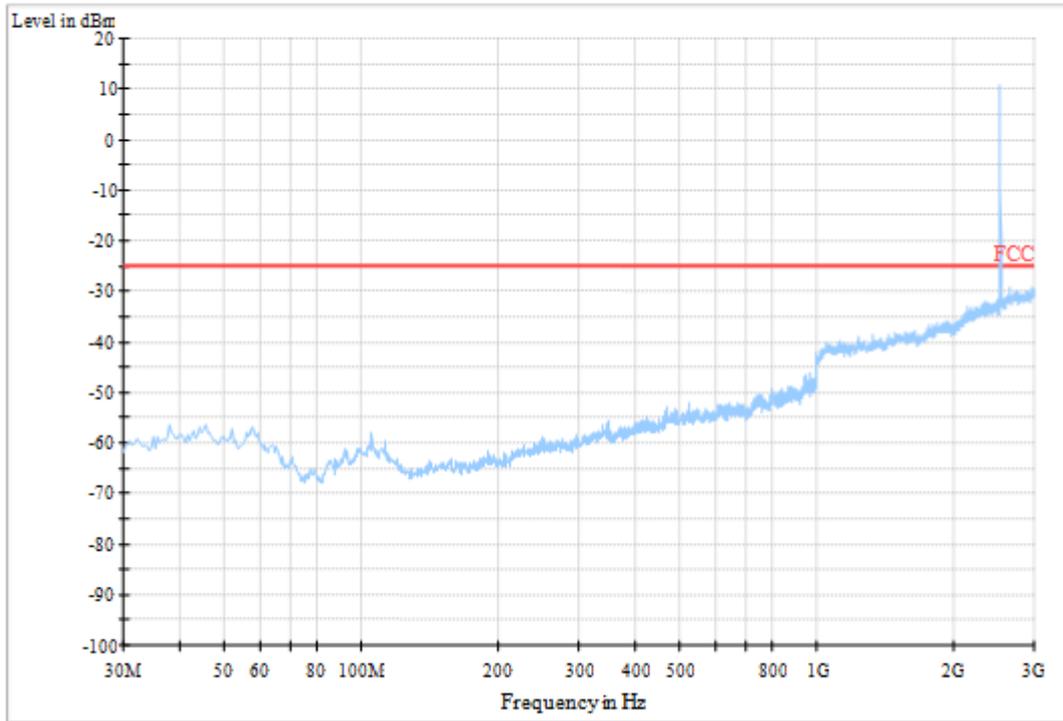
7.1 For LTE

7.1.1 Test Band = BAND7

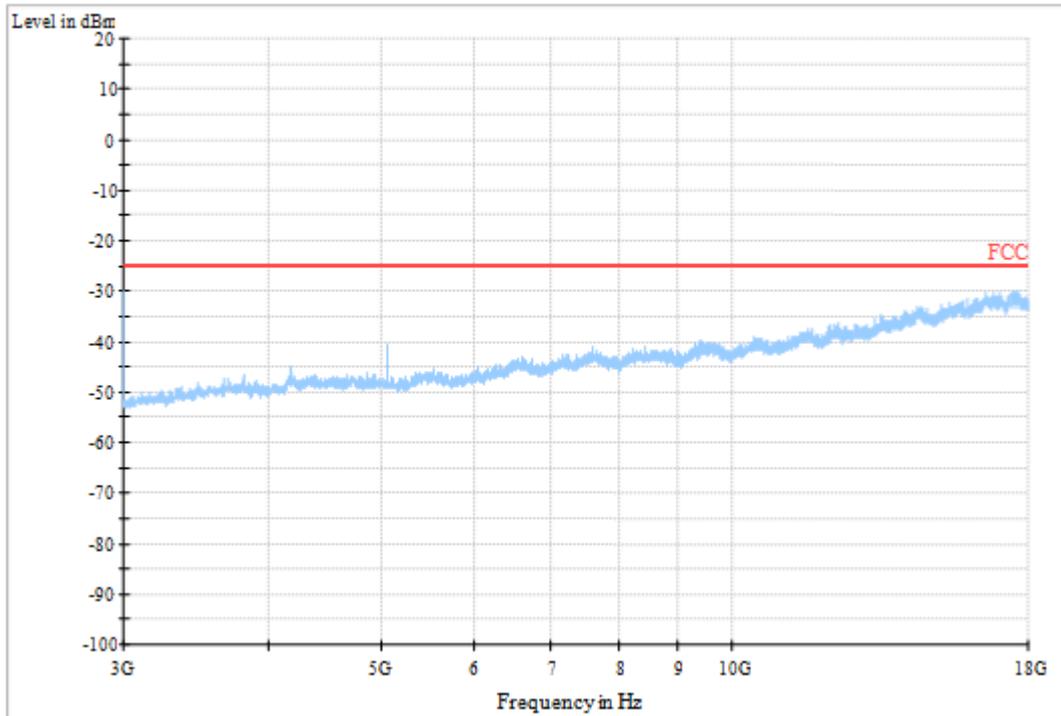
7.1.1.1 Test Bandwidth = 5

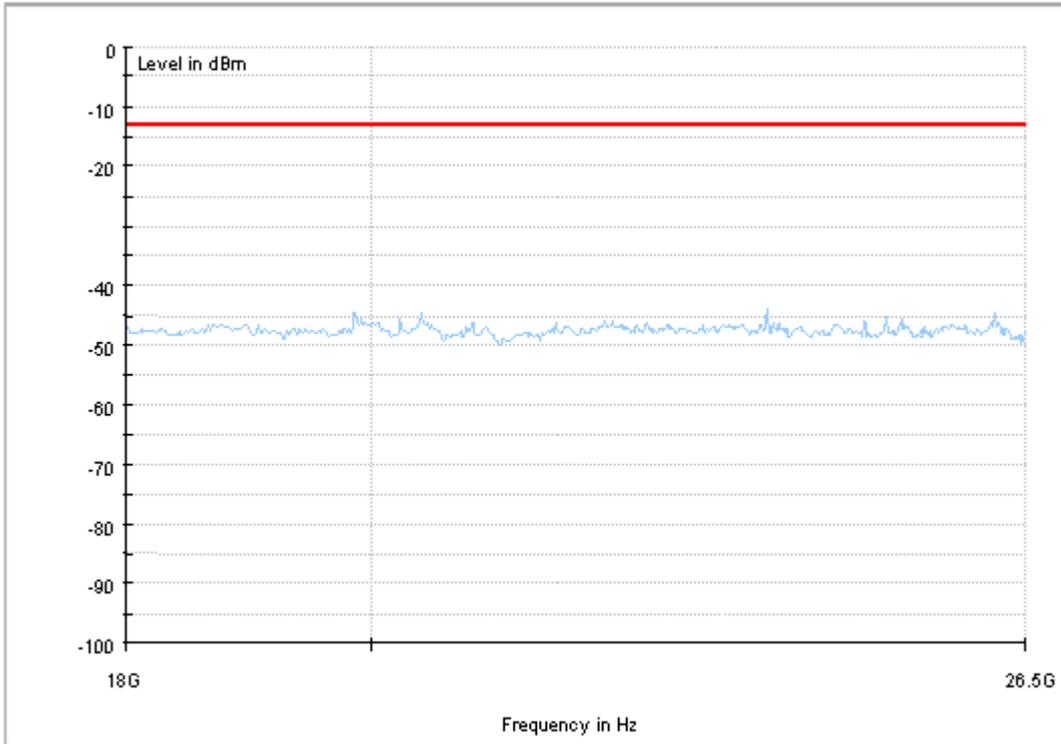


Copy of RSE-TX-DIRECTOR.ABOVE 1.5G_L

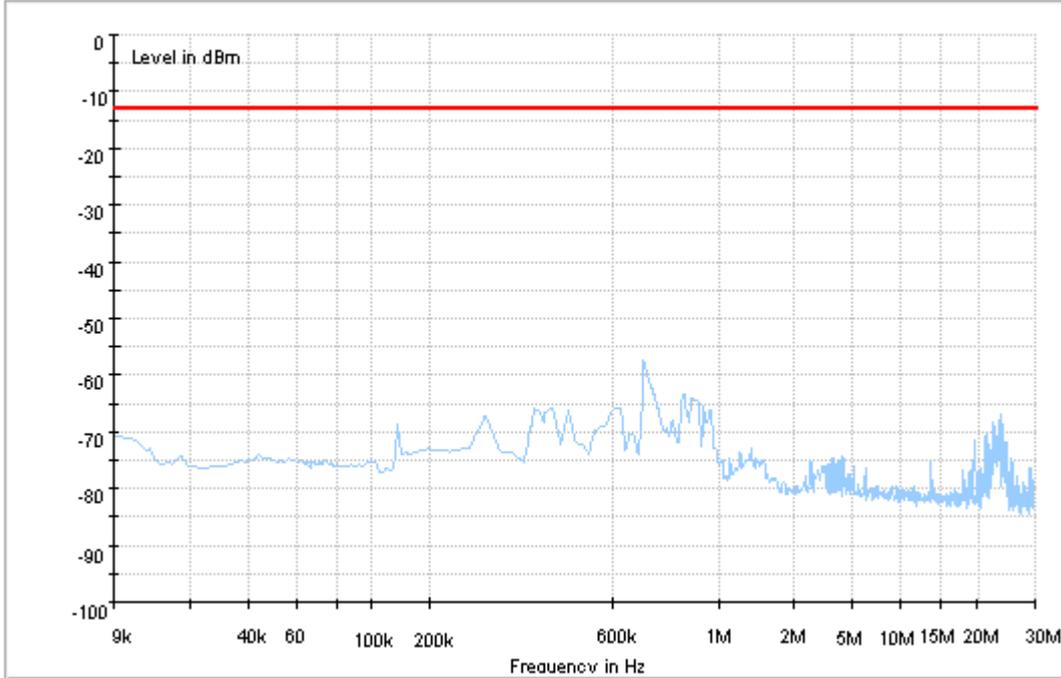


Copy of RSE-TX-DIRECTOR.ABOVE 1.5G_H

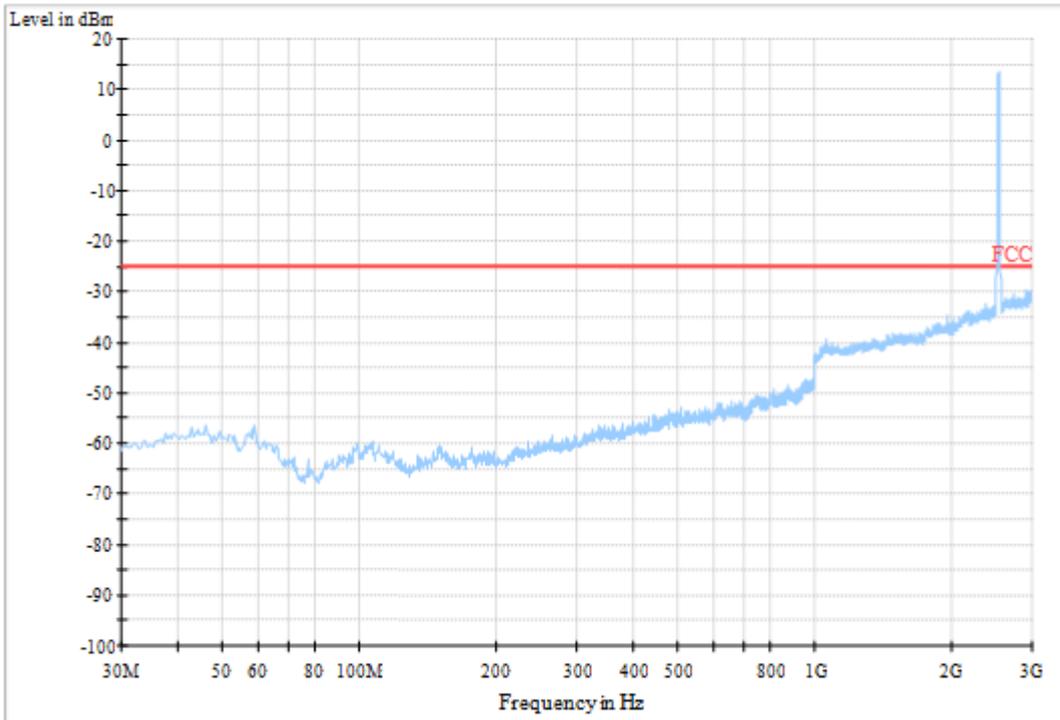




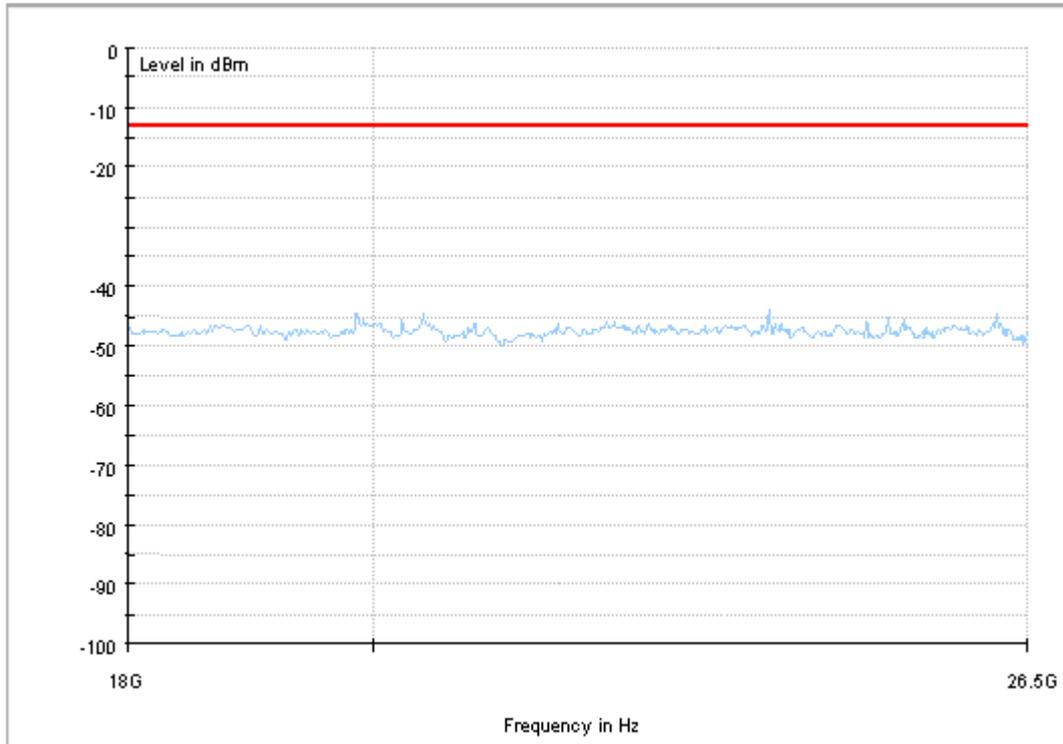
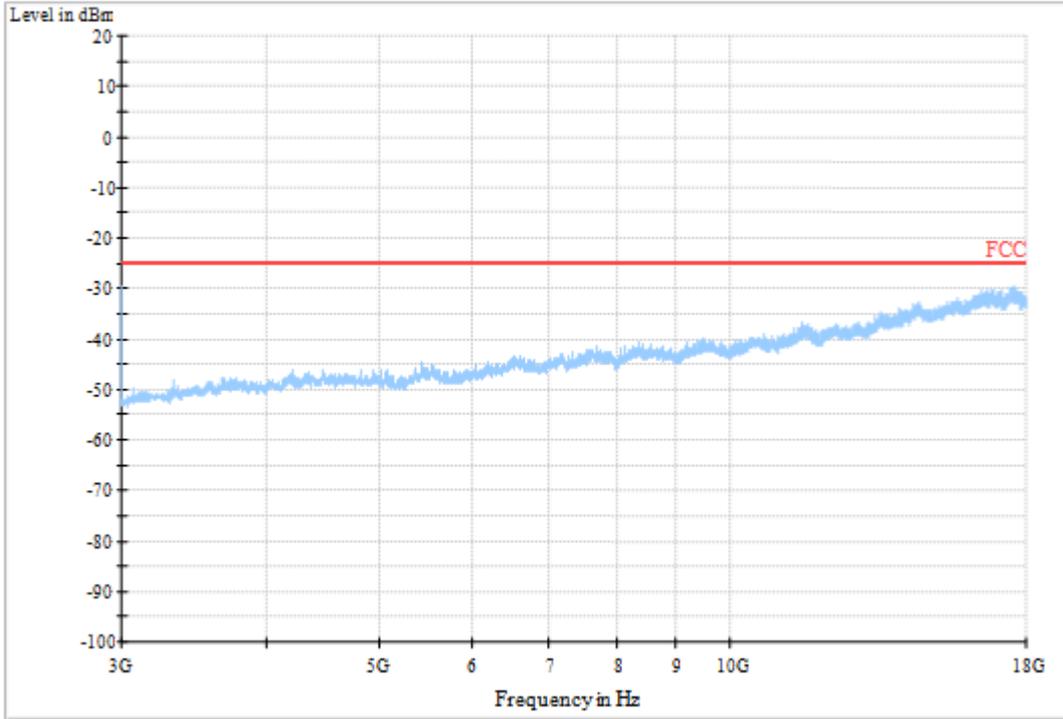
7.1.1.2 Test Bandwidth = 20



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	25.53	0.0102	PASS
					VN	-6.94	-0.00277	PASS
					VH	-13.82	-0.00552	PASS
			MCH	TN	VL	6.85	0.0027	PASS
					VN	9.06	0.00357	PASS
					VH	7.97	0.00314	PASS
			HCH	TN	VL	3.65	0.00142	PASS
					VN	5.62	0.00219	PASS
					VH	4.38	0.00171	PASS
		10	LCH	TN	VL	-1.5	-0.0006	PASS
					VN	-0.17	-0.00007	PASS
					VH	0.64	0.00026	PASS
			MCH	TN	VL	5.91	0.00233	PASS
					VN	7.14	0.00282	PASS
					VH	3.33	0.00131	PASS
			HCH	TN	VL	0.92	0.00036	PASS
					VN	2.23	0.00087	PASS
					VH	2.73	0.00106	PASS
		15	LCH	TN	VL	2.12	0.00085	PASS
					VN	8.85	0.00353	PASS
					VH	2.78	0.00111	PASS
			MCH	TN	VL	6.11	0.00241	PASS
					VN	4.11	0.00162	PASS
					VH	4.22	0.00166	PASS
HCH	TN		VL	4.56	0.00178	PASS		
			VN	6.88	0.00268	PASS		
			VH	6.05	0.00236	PASS		
20	LCH	TN	VL	5.61	0.00224	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
			MCH	TN	VN	9.97	0.00397	PASS	
					VH	5.49	0.00219	PASS	
					VL	2.86	0.00113	PASS	
					VN	1.32	0.00052	PASS	
					VH	2.12	0.00084	PASS	
					VL	-1.32	-0.00052	PASS	
			HCH	TN	VN	-1.19	-0.00046	PASS	
					VH	-1.13	-0.00044	PASS	
					VL	15.59	0.00623	PASS	
					VN	5.95	0.00238	PASS	
					VH	8.33	0.00333	PASS	
					VL	11.53	0.00455	PASS	
			5	MCH	TN	VN	11	0.00434	PASS
						VH	5.48	0.00216	PASS
	VL	6.85				0.00267	PASS		
	VN	5.91				0.0023	PASS		
	VH	4.51				0.00176	PASS		
	VL	5.39				0.00215	PASS		
	LCH	TN		VN	3.39	0.00135	PASS		
				VH	1.9	0.00076	PASS		
				VL	3.56	0.0014	PASS		
				VN	5.16	0.00204	PASS		
				VH	2.5	0.00099	PASS		
				VL	1.44	0.00056	PASS		
	10	MCH	TN	VN	4.68	0.00182	PASS		
				VH	4.12	0.00161	PASS		
				VL	6.05	0.00241	PASS		
				VN	2.53	0.00101	PASS		
				VH	-1.72	-0.00069	PASS		
				VL	8.65	0.00341	PASS		
		HCH	TN	VN	2.8	0.0011	PASS		
				VH	4.69	0.00185	PASS		
				VL	2.65	0.00103	PASS		
				VN	3.32	0.0013	PASS		
				VH	3.28	0.00128	PASS		
				VL	12.53	0.00499	PASS		
	15	LCH	TN	VN	6.34	0.00253	PASS		
				VH	0.62	0.00025	PASS		
				VL	6.49	0.00256	PASS		
		MCH	TN	VN					
				VH					
				VL					
20	LCH	TN	VN						
			VH						
			VL						
	MCH	TN	VN						
			VH						
			VL						

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	5.19	0.00205	PASS
					VH	3.85	0.00152	PASS
			HCH	TN	VL	-1.06	-0.00041	PASS
					VN	-1.33	-0.00052	PASS
					VH	-1.32	-0.00052	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	20.41	0.00816	PASS
					-20	-0.97	-0.00039	PASS
					-10	18.97	0.00758	PASS
					0	-15.39	-0.00615	PASS
					10	-5.08	-0.00203	PASS
					20	3.55	0.00142	PASS
					30	11.12	0.00444	PASS
					40	-4.59	-0.00183	PASS
			50	6.67	0.00267	PASS		
			MCH	VN	-30	8.64	0.00341	PASS
					-20	5.78	0.00228	PASS
					-10	5.79	0.00228	PASS
					0	4.38	0.00173	PASS
					10	5.04	0.00199	PASS
					20	3.98	0.00157	PASS
					30	3.4	0.00134	PASS
					40	3.78	0.00149	PASS
			HCH	VN	-30	2.66	0.00104	PASS
					-20	4.31	0.00168	PASS
					-10	1.56	0.00061	PASS
					0	0.49	0.00019	PASS
					10	3.23	0.00126	PASS
					20	2.2	0.00086	PASS
					30	1.96	0.00076	PASS
		40			1.52	0.00059	PASS	
		50	2.76	0.00107	PASS			
		10	LCH	VN	-30	-0.14	-0.00006	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
					-20	5.82	0.00232	PASS	
					-10	5.64	0.00225	PASS	
					0	3.55	0.00142	PASS	
					10	4.35	0.00174	PASS	
					20	3.71	0.00148	PASS	
					30	4.62	0.00184	PASS	
					40	6.27	0.0025	PASS	
					50	6.85	0.00273	PASS	
			MCH	VN	-30	3.38	0.00133	PASS	
					-20	1.93	0.00076	PASS	
					-10	7.3	0.00288	PASS	
					0	2.96	0.00117	PASS	
					10	1.46	0.00058	PASS	
					20	1.72	0.00068	PASS	
					30	2.32	0.00092	PASS	
					40	3.49	0.00138	PASS	
			HCH	VN	-30	3.39	0.00132	PASS	
					-20	3.09	0.0012	PASS	
					-10	2.95	0.00115	PASS	
					0	2.78	0.00108	PASS	
					10	1.44	0.00056	PASS	
					20	1.57	0.00061	PASS	
					30	3.23	0.00126	PASS	
					40	4.55	0.00177	PASS	
			15	LCH	VN	-30	3.79	0.00151	PASS
						-20	-1.16	-0.00046	PASS
						-10	11.62	0.00463	PASS
						0	3.25	0.0013	PASS
		10				18.68	0.00745	PASS	
		20				18.01	0.00718	PASS	
		30				11.99	0.00478	PASS	
		40				8.61	0.00343	PASS	
		50		6.74	0.00269	PASS			
		MCH		VN	-30	6.34	0.0025	PASS	
					-20	7.68	0.00303	PASS	
					-10	2.56	0.00101	PASS	
			0		3.36	0.00133	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					10	2.95	0.00116	PASS		
					20	2.78	0.0011	PASS		
					30	0.92	0.00036	PASS		
					40	5.05	0.00199	PASS		
					50	1.32	0.00052	PASS		
			HCH	VN	-30	2.92	0.00114	PASS		
					-20	4.26	0.00166	PASS		
					-10	3.38	0.00132	PASS		
					0	3.99	0.00156	PASS		
					10	4.35	0.0017	PASS		
					20	3.6	0.0014	PASS		
					30	3.81	0.00149	PASS		
					40	2.96	0.00116	PASS		
					50	1.66	0.00065	PASS		
					LCH	VN	-30	7.68	0.00306	PASS
							-20	-3.38	-0.00135	PASS
							-10	-2.66	-0.00106	PASS
							0	3.13	0.00125	PASS
		10	1.47	0.00059			PASS			
		20	10.17	0.00405			PASS			
		30	24.3	0.00968			PASS			
		40	13.48	0.00537			PASS			
		50	12.82	0.00511			PASS			
		MCH	VN	-30	3.32	0.00131	PASS			
				-20	2.22	0.00088	PASS			
				-10	2.52	0.00099	PASS			
				0	3.45	0.00136	PASS			
				10	4.19	0.00165	PASS			
				20	3.3	0.0013	PASS			
				30	1.57	0.00062	PASS			
				40	3.25	0.00128	PASS			
				50	1.22	0.00048	PASS			
		HCH	VN	-30	1.57	0.00061	PASS			
				-20	1.62	0.00063	PASS			
				-10	2.25	0.00088	PASS			
				0	1.95	0.00076	PASS			
10	2.09			0.00082	PASS					
20	2.66			0.00104	PASS					
30	2.02			0.00079	PASS					
20					-30	7.68	0.00306	PASS		
					-20	-3.38	-0.00135	PASS		
					-10	-2.66	-0.00106	PASS		
					0	3.13	0.00125	PASS		
					10	1.47	0.00059	PASS		
					20	10.17	0.00405	PASS		
					30	24.3	0.00968	PASS		
					40	13.48	0.00537	PASS		
					50	12.82	0.00511	PASS		
							-30	3.32	0.00131	PASS
							-20	2.22	0.00088	PASS
							-10	2.52	0.00099	PASS
							0	3.45	0.00136	PASS
							10	4.19	0.00165	PASS
							20	3.3	0.0013	PASS
							30	1.57	0.00062	PASS
							40	3.25	0.00128	PASS
							50	1.22	0.00048	PASS
					-30	1.57	0.00061	PASS		
					-20	1.62	0.00063	PASS		
					-10	2.25	0.00088	PASS		
					0	1.95	0.00076	PASS		
					10	2.09	0.00082	PASS		
					20	2.66	0.00104	PASS		
					30	2.02	0.00079	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2	5	LCH	VN	40	0.86	0.00034	PASS
					50	2.26	0.00088	PASS
					-30	0.66	0.00026	PASS
					-20	12.85	0.00513	PASS
					-10	-0.29	-0.00012	PASS
					0	0.21	0.00008	PASS
					10	10.29	0.00411	PASS
					20	14.1	0.00563	PASS
					30	-6.18	-0.00247	PASS
					40	2.4	0.00096	PASS
			50	14.48	0.00579	PASS		
			MCH	VN	-30	9.81	0.00387	PASS
					-20	9.34	0.00368	PASS
					-10	9.41	0.00371	PASS
					0	7.05	0.00278	PASS
					10	6.07	0.00239	PASS
					20	5.34	0.00211	PASS
					30	4.84	0.00191	PASS
					40	4.45	0.00176	PASS
					50	4.19	0.00165	PASS
		HCH			VN	-30	4.72	0.00184
			-20	4.49		0.00175	PASS	
			-10	1.03		0.0004	PASS	
			0	-0.86		-0.00033	PASS	
			10	-1.9		-0.00074	PASS	
			20	0.53		0.00021	PASS	
			30	2.3		0.0009	PASS	
			40	-2.02		-0.00079	PASS	
			50	0.37		0.00014	PASS	
			10	LCH		VN	-30	4.96
		-20			9.43		0.00376	PASS
		-10			6.77		0.0027	PASS
		0			7.34		0.00293	PASS
		10			5.69		0.00227	PASS
		20			7.37		0.00294	PASS
		30			5.74		0.00229	PASS
		40			4.18		0.00167	PASS
		50			3.99		0.00159	PASS
		MCH			VN		-30	3.68



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	4.59	0.00181	PASS
					-10	2.95	0.00116	PASS
					0	4.29	0.00169	PASS
					10	0.27	0.00011	PASS
					20	4.98	0.00196	PASS
					30	5.78	0.00228	PASS
					40	3.79	0.0015	PASS
					50	2.86	0.00113	PASS
			HCH	VN	-30	0.62	0.00024	PASS
					-20	0.54	0.00021	PASS
					-10	1.16	0.00045	PASS
					0	2.35	0.00092	PASS
					10	0.2	0.00008	PASS
					20	0.23	0.00009	PASS
					30	0.67	0.00026	PASS
					40	0.97	0.00038	PASS
			LCH	VN	-30	9.31	0.00371	PASS
					-20	3.25	0.0013	PASS
					-10	5.41	0.00216	PASS
					0	4.65	0.00185	PASS
		10			2.32	0.00093	PASS	
		20			0.54	0.00022	PASS	
		30			1.44	0.00057	PASS	
		40			3.63	0.00145	PASS	
		MCH	VN	-30	3.83	0.00151	PASS	
				-20	6.97	0.00275	PASS	
				-10	1.86	0.00073	PASS	
				0	3.73	0.00147	PASS	
				10	3.13	0.00123	PASS	
				20	2.13	0.00084	PASS	
				30	1.37	0.00054	PASS	
				40	2.07	0.00082	PASS	
		HCH	VN	-30	2.13	0.00083	PASS	
				-20	3.88	0.00151	PASS	
				-10	4.18	0.00163	PASS	
				0	2.82	0.0011	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					10	2.56	0.001	PASS		
					20	4.71	0.00184	PASS		
					30	6.21	0.00242	PASS		
					40	4.96	0.00194	PASS		
					50	4.51	0.00176	PASS		
		20	LCH	VN	-30	16.32	0.0065	PASS		
					-20	1.54	0.00061	PASS		
					-10	-0.56	-0.00022	PASS		
					0	3.06	0.00122	PASS		
					10	-11.44	-0.00456	PASS		
					20	11.6	0.00462	PASS		
					30	2.42	0.00096	PASS		
					40	-0.64	-0.00025	PASS		
					50	4.25	0.00169	PASS		
					MCH	VN	-30	6.62	0.00261	PASS
							-20	5.85	0.00231	PASS
							-10	2.82	0.00111	PASS
							0	2.89	0.00114	PASS
							10	3.23	0.00127	PASS
							20	2.23	0.00088	PASS
			30	4.06			0.0016	PASS		
			40	1.83			0.00072	PASS		
			HCH	VN	-30	0.13	0.00005	PASS		
					-20	-0.47	-0.00018	PASS		
					-10	-0.56	-0.00022	PASS		
					0	1.02	0.0004	PASS		
					10	1.36	0.00053	PASS		
					20	1.16	0.00045	PASS		
					30	0.34	0.00013	PASS		
					40	-0.09	-0.00004	PASS		
					50	1.66	0.00065	PASS		

END