



5.1.1.2.3.2.4 Test RB = RB75#0

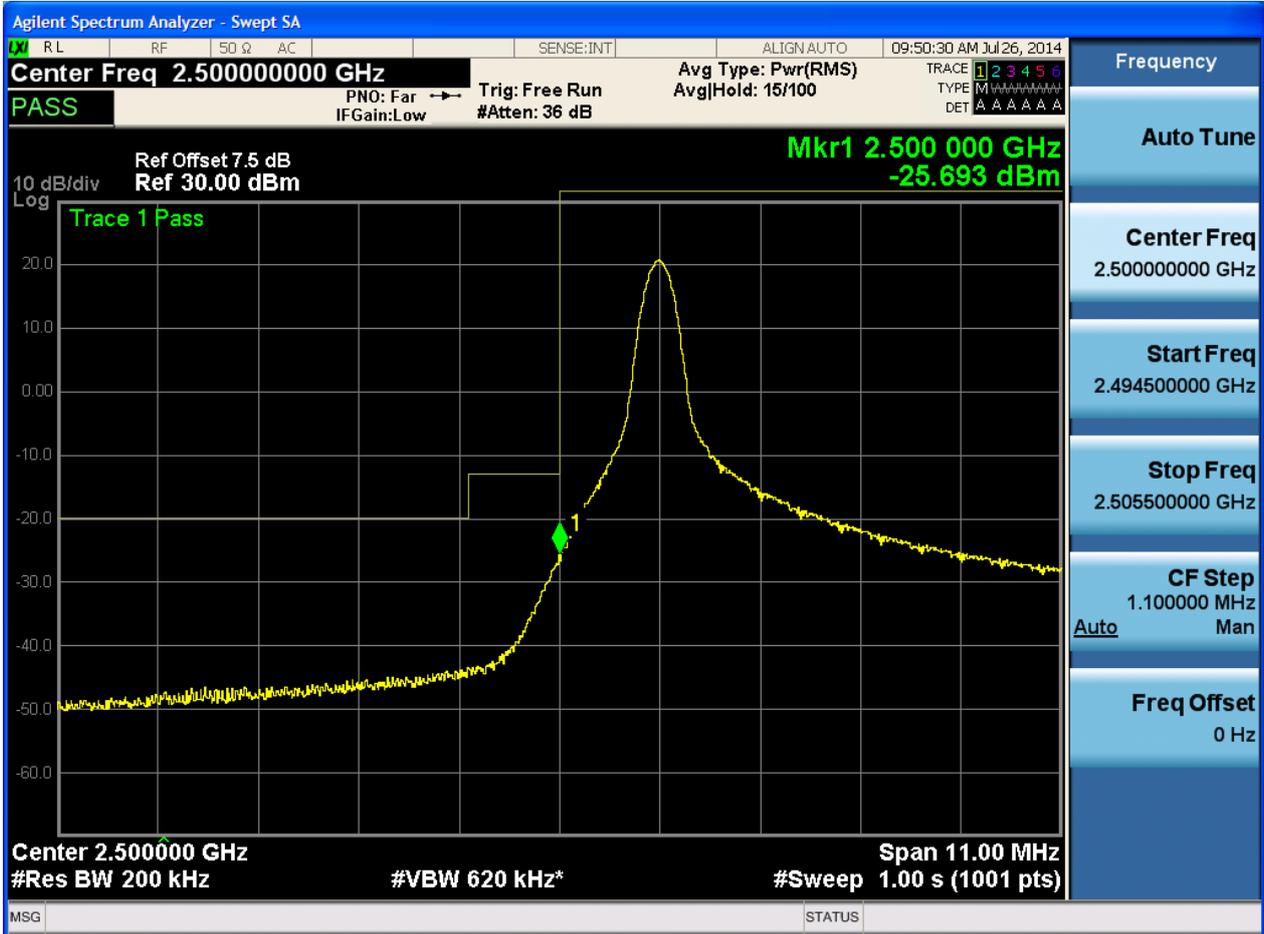




5.1.1.2.4 Test Bandwidth = 20

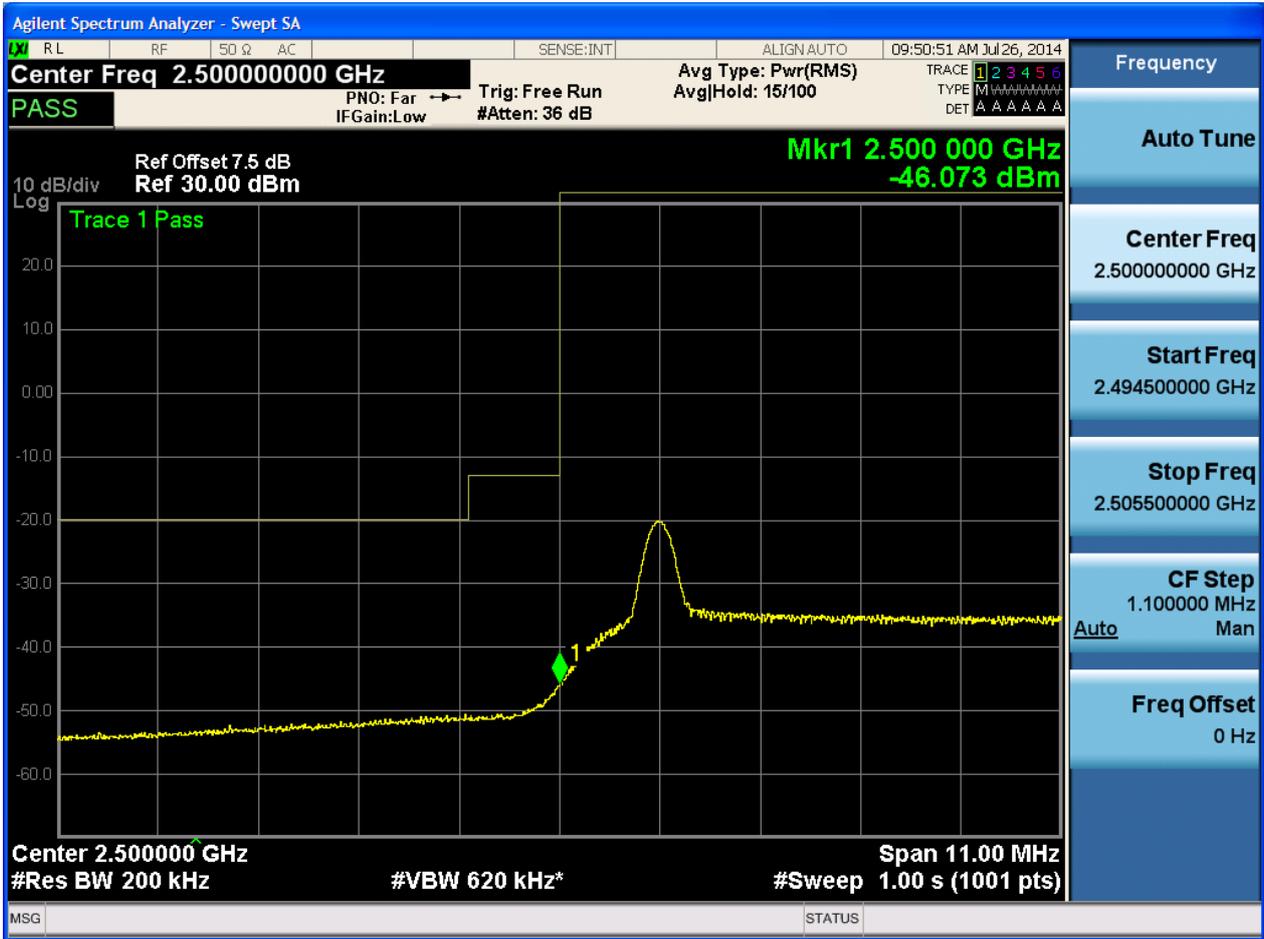
5.1.1.2.4.1 Test Channel = LCH

5.1.1.2.4.1.1 Test RB = RB1#0





5.1.1.2.4.1.2 Test RB = RB1#99



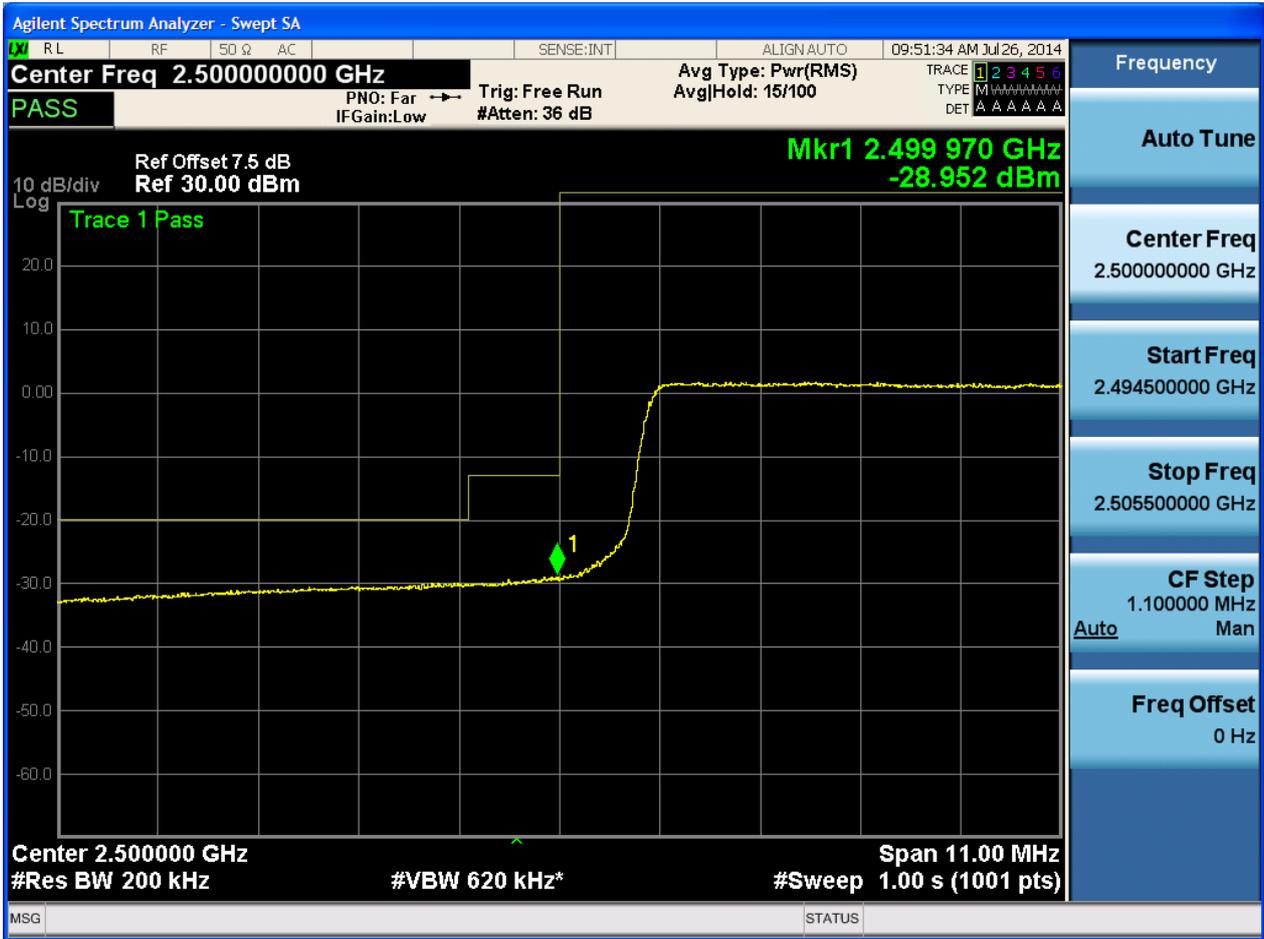


5.1.1.2.4.1.3 Test RB = RB50#25





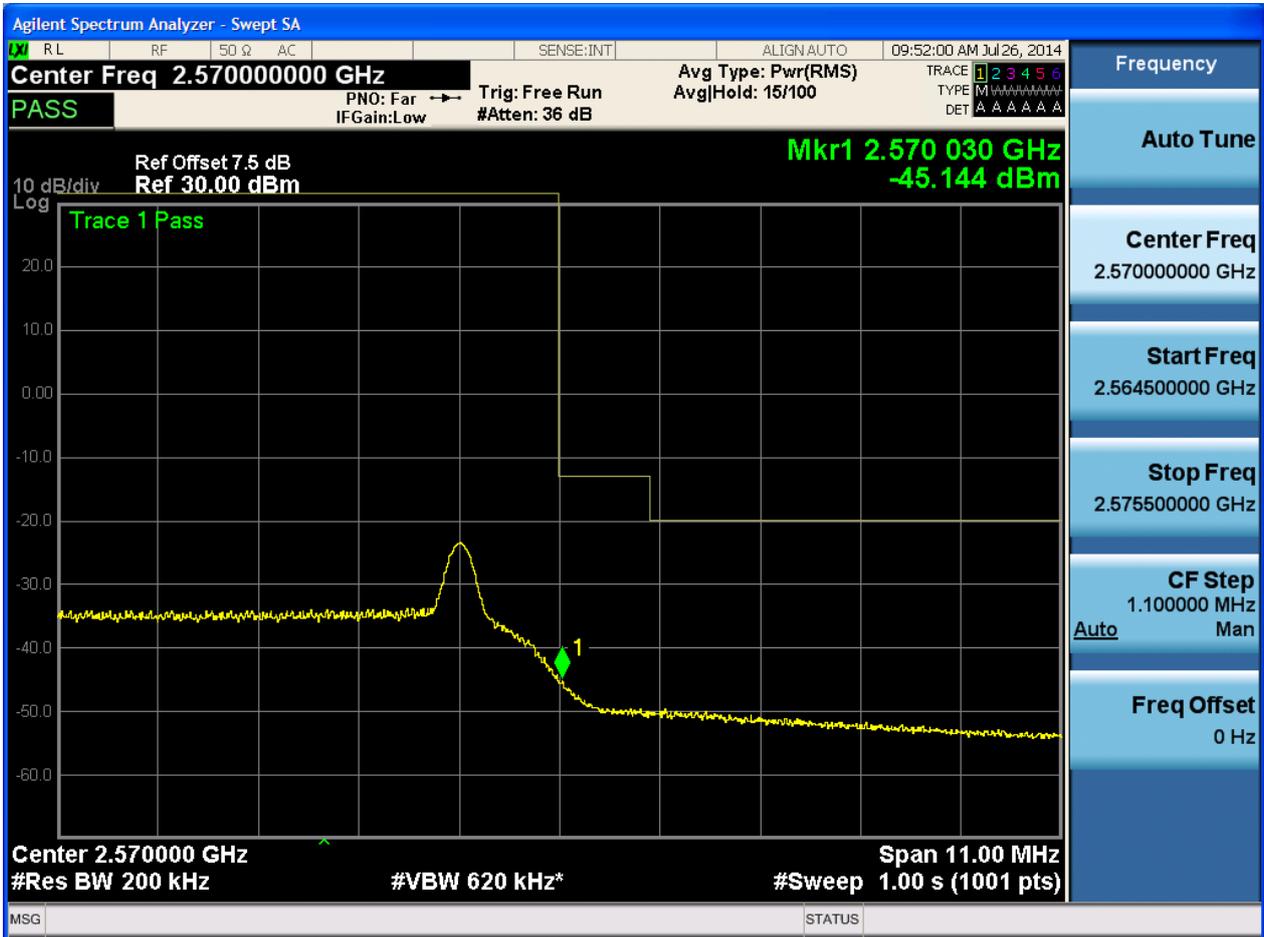
5.1.1.2.4.1.4 Test RB = RB100#0





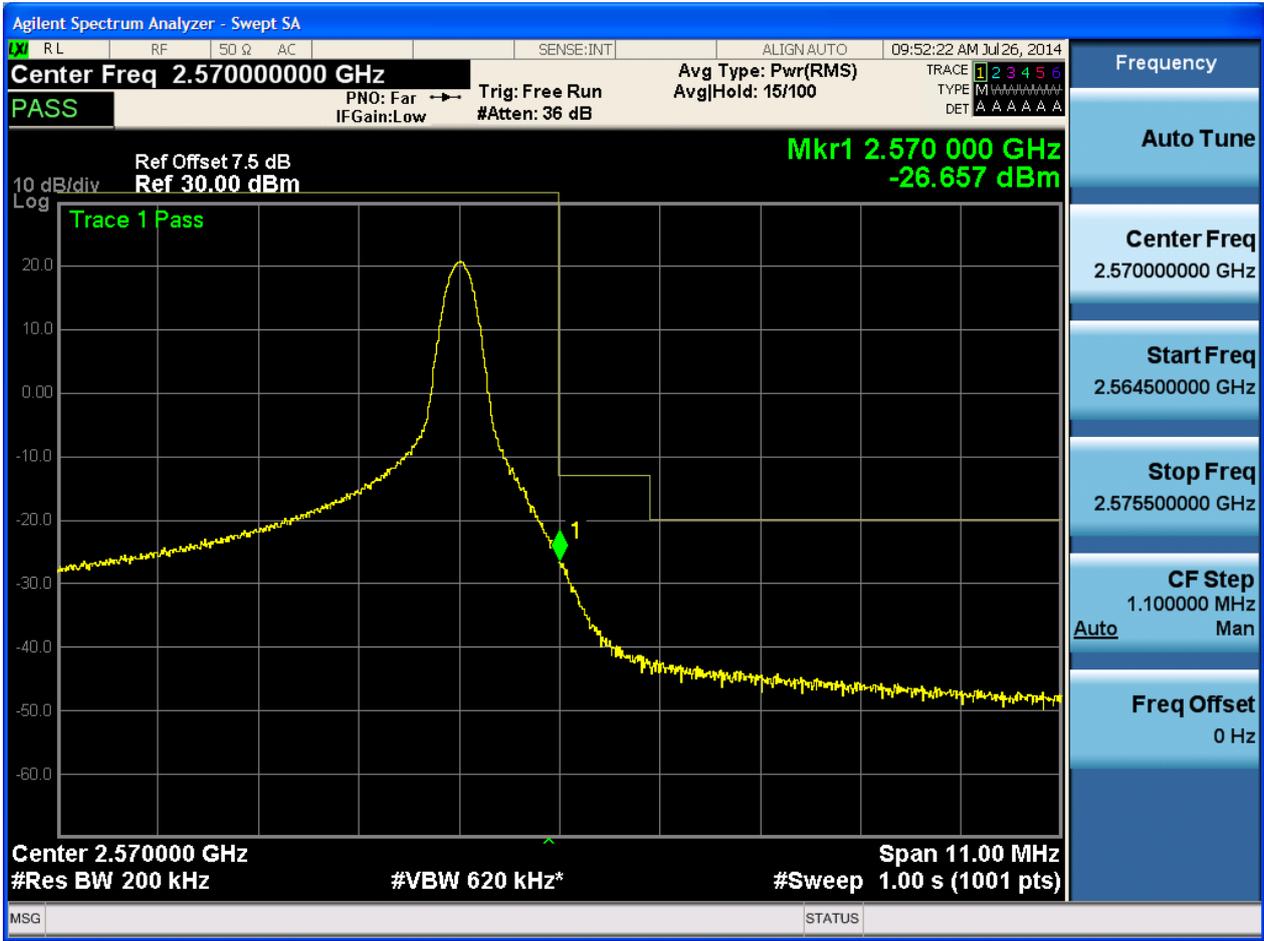
5.1.1.2.4.2 Test Channel = HCH

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

6.3.4 Test Band = BAND7

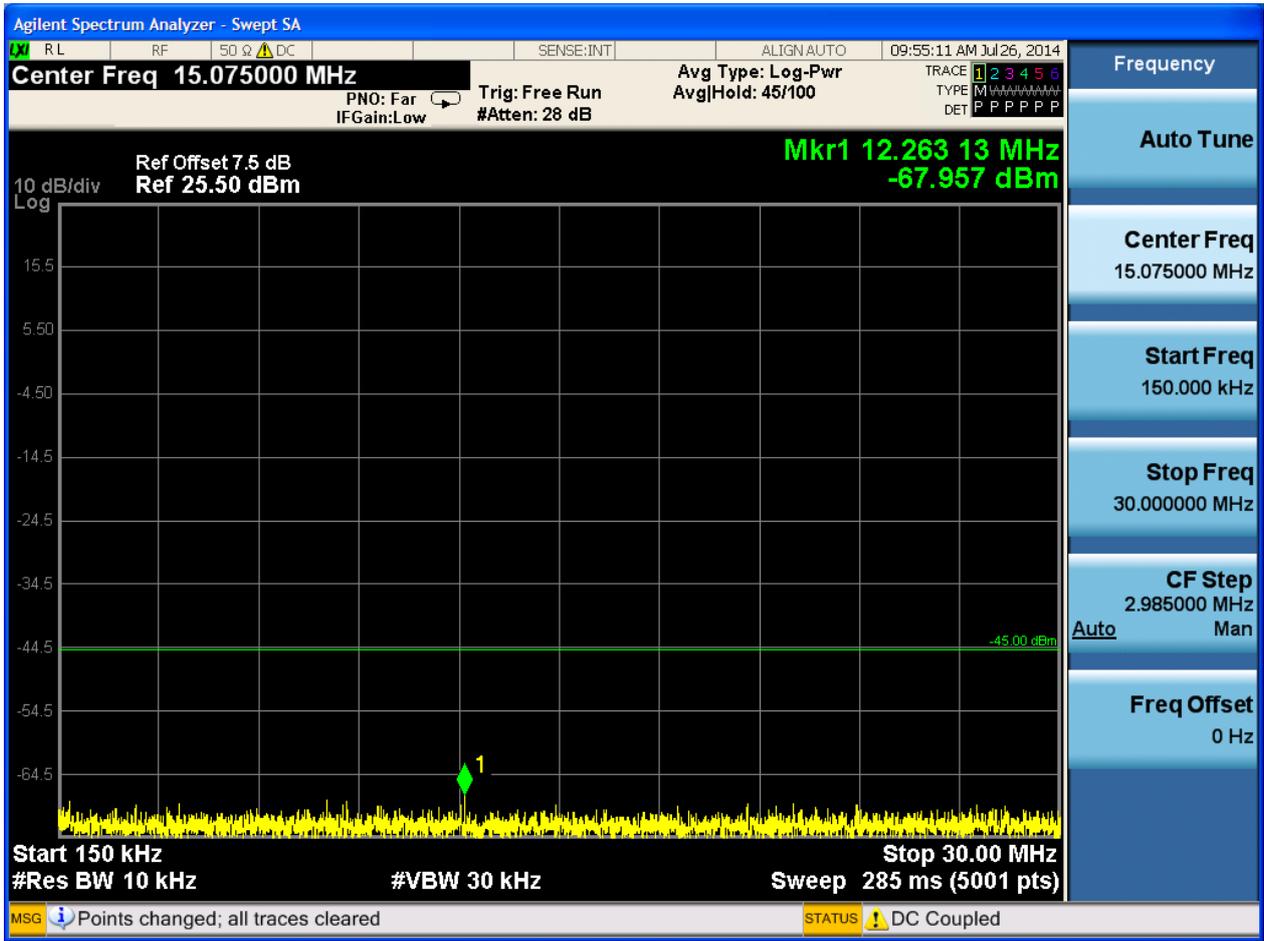
6.3.4.1 Test Mode = LTE/TM1

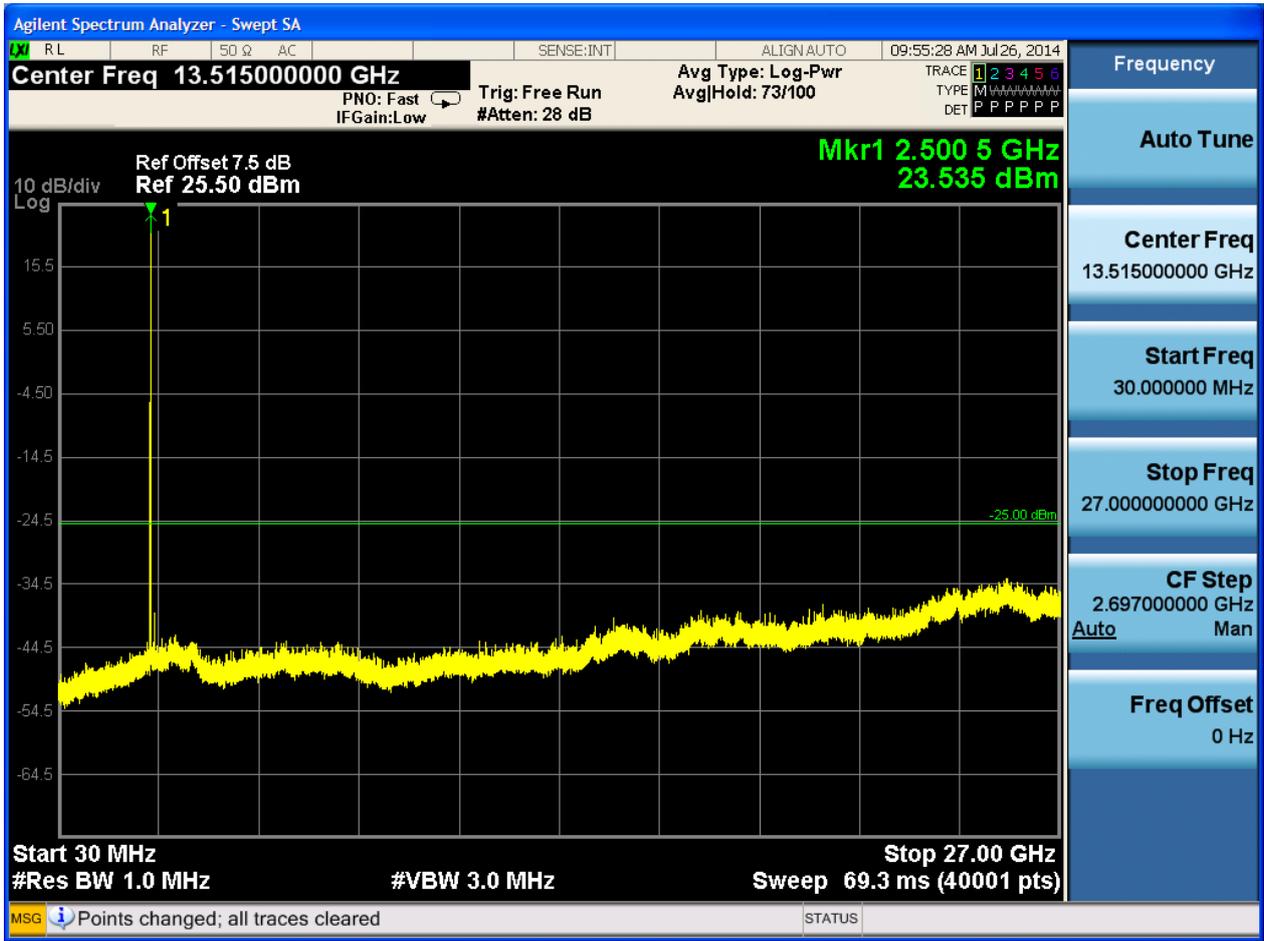
6.3.4.1.1 Test Bandwidth = 5

6.3.4.1.1.1 Test Channel = LCH

6.3.4.1.1.1.1 Test RB = RB1#0





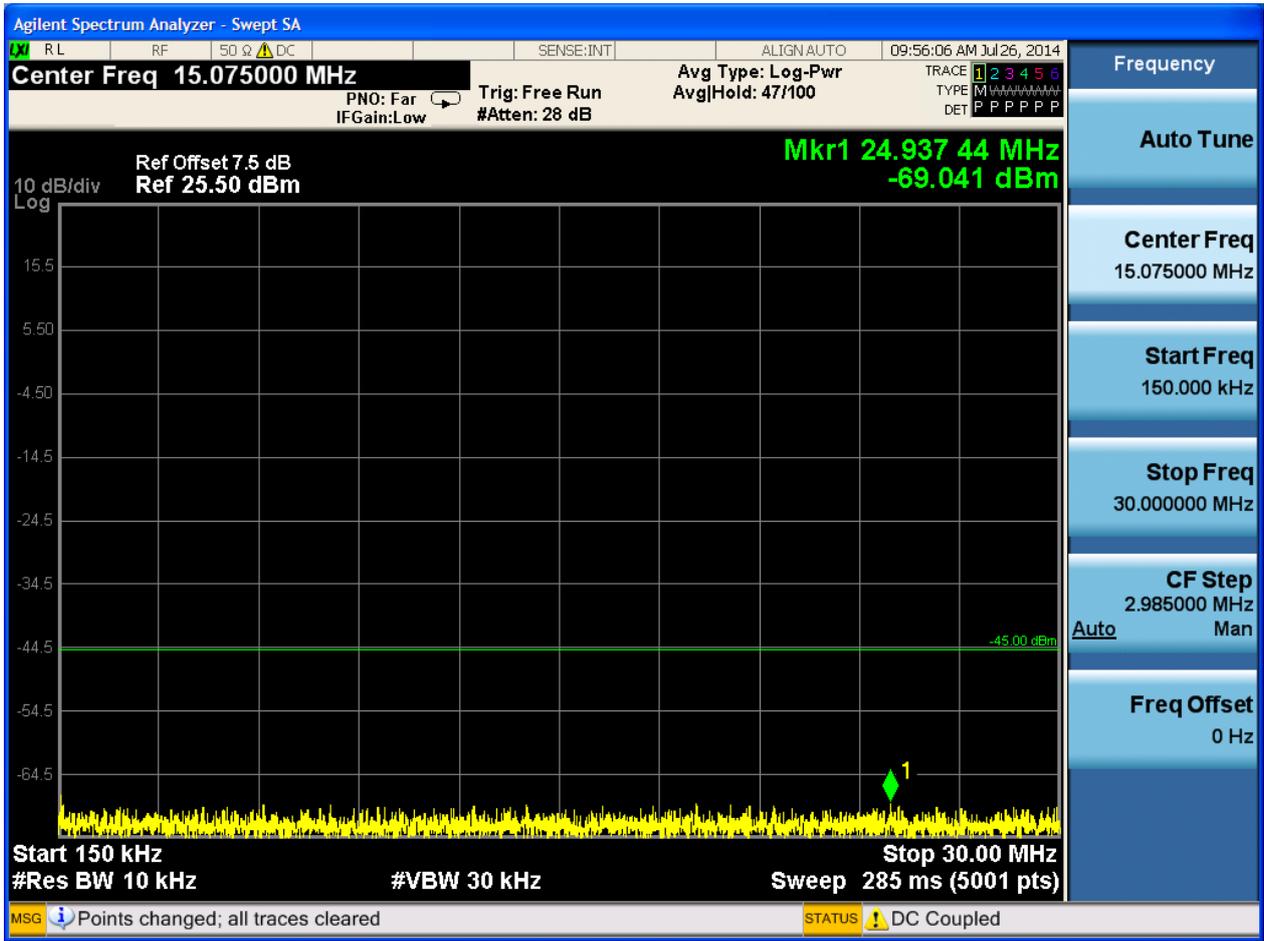


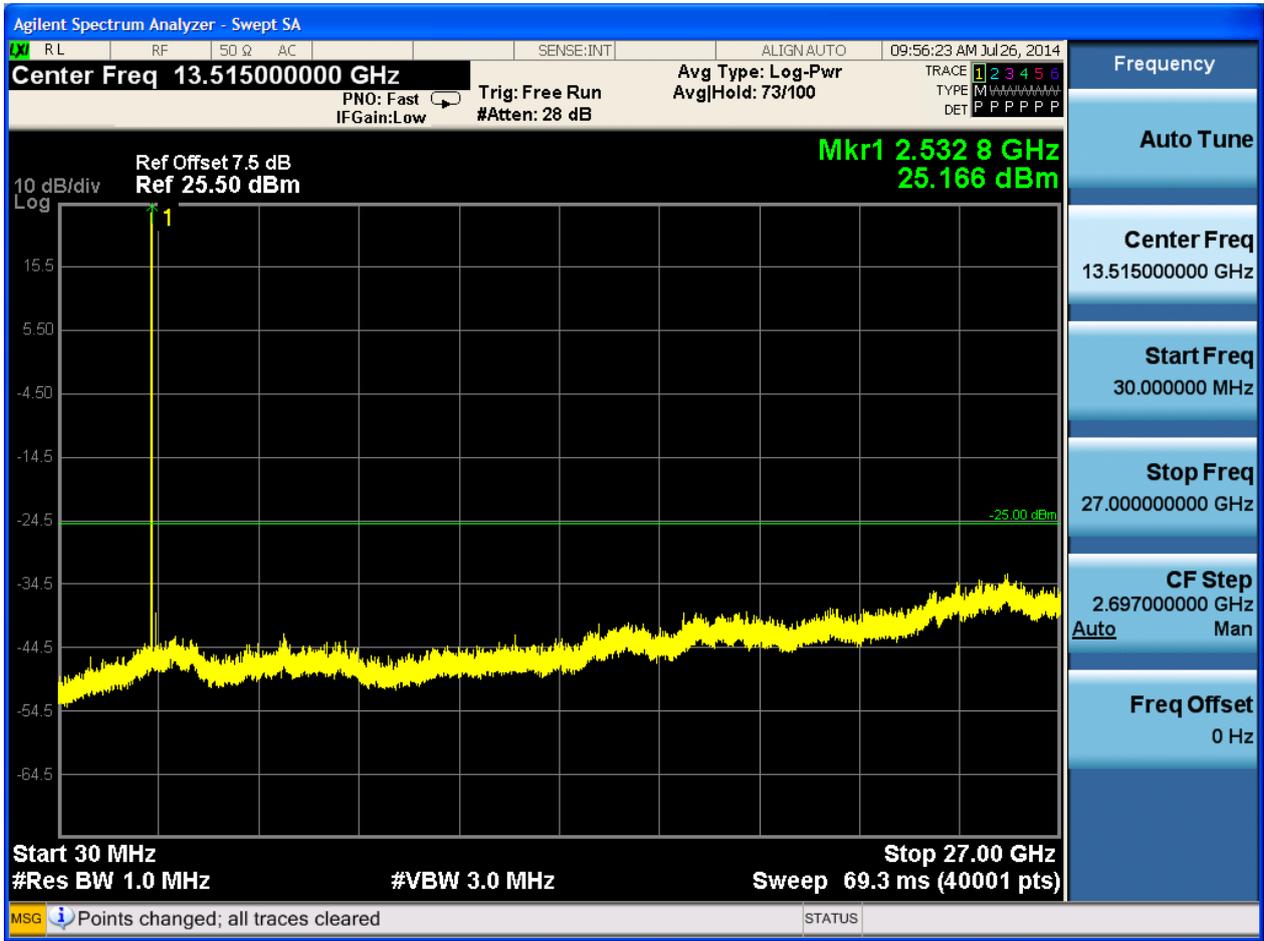


6.3.4.1.1.2 Test Channel = MCH

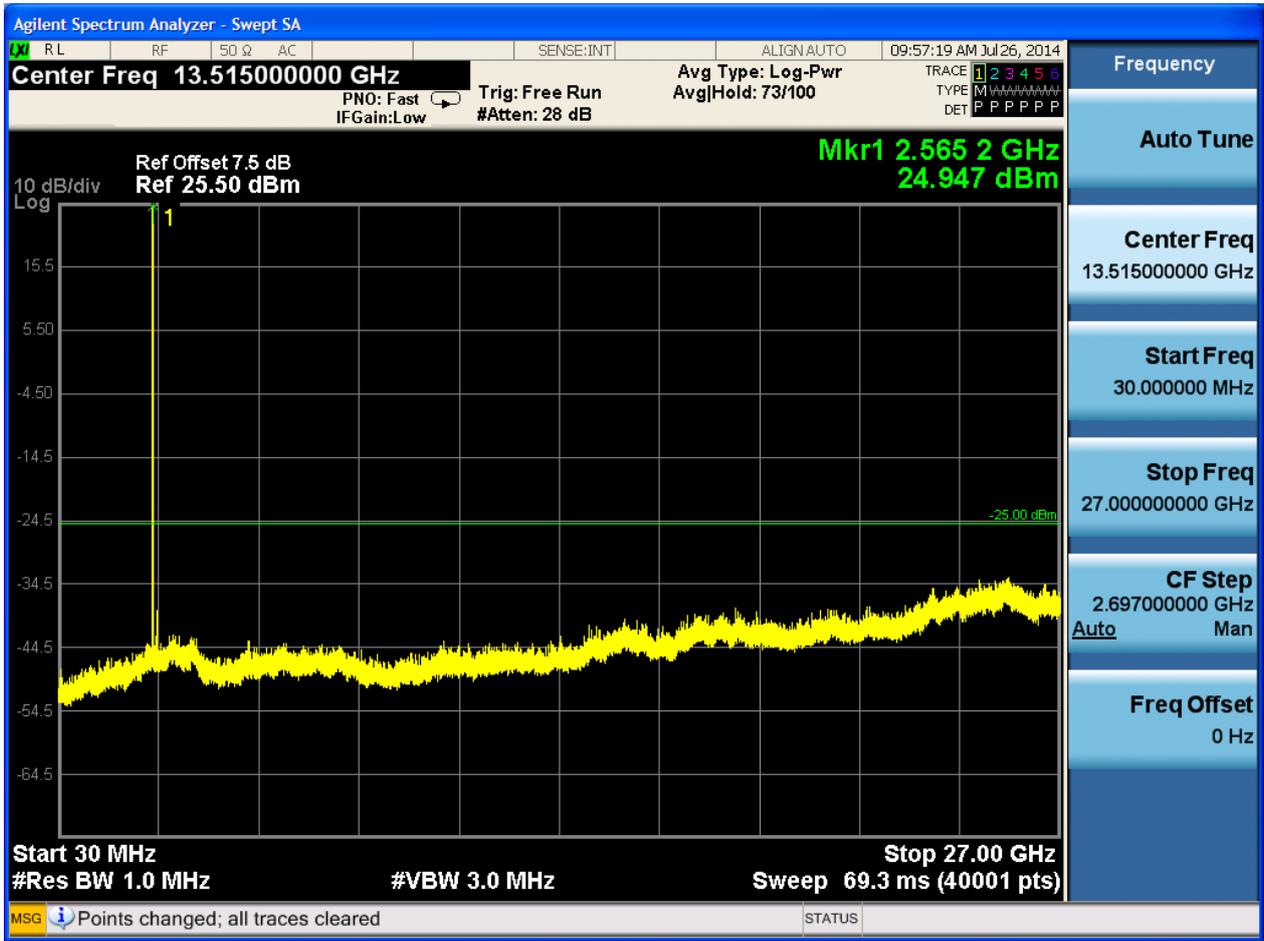
6.3.4.1.1.2.1 Test RB = RB1#0











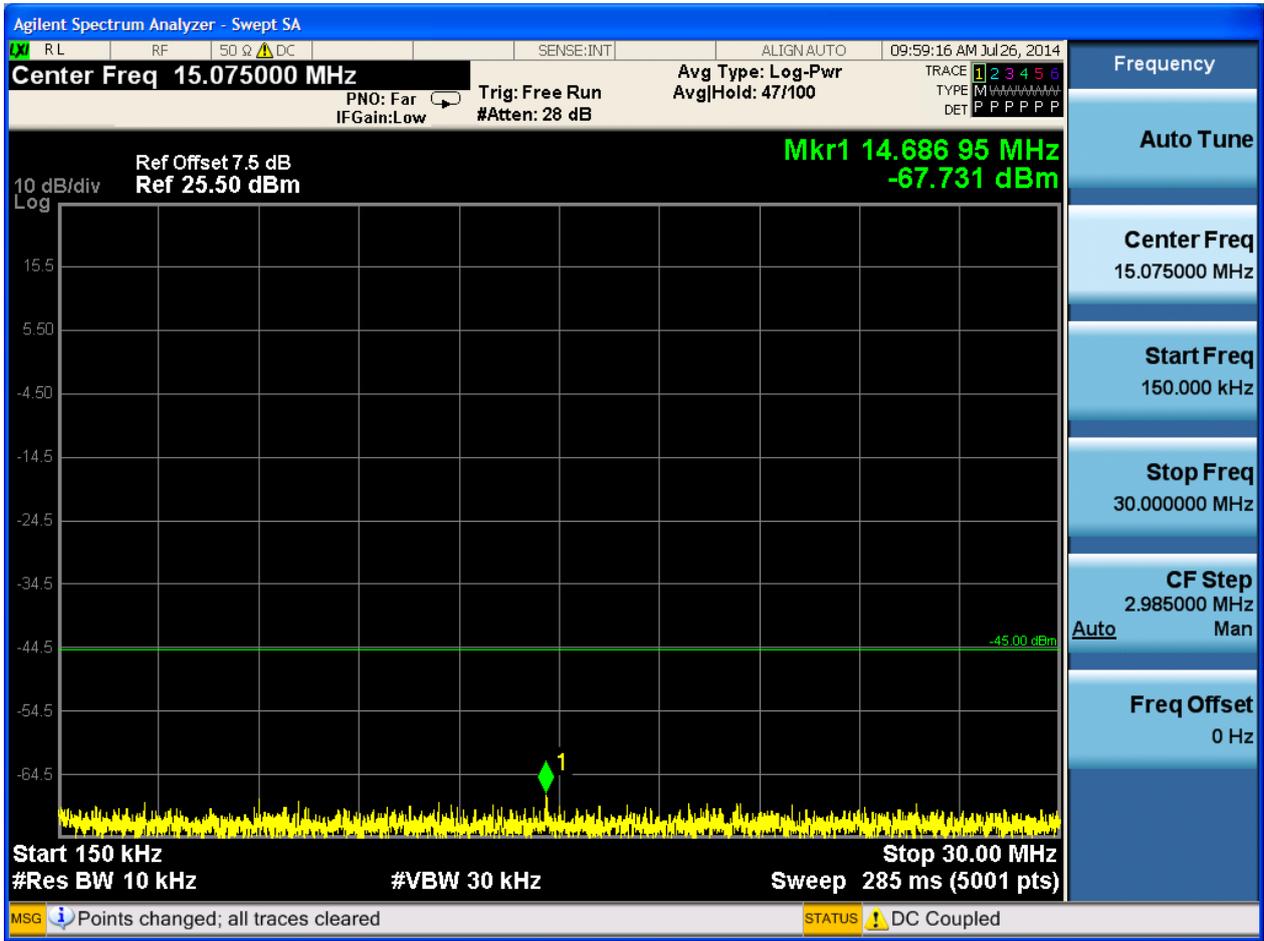


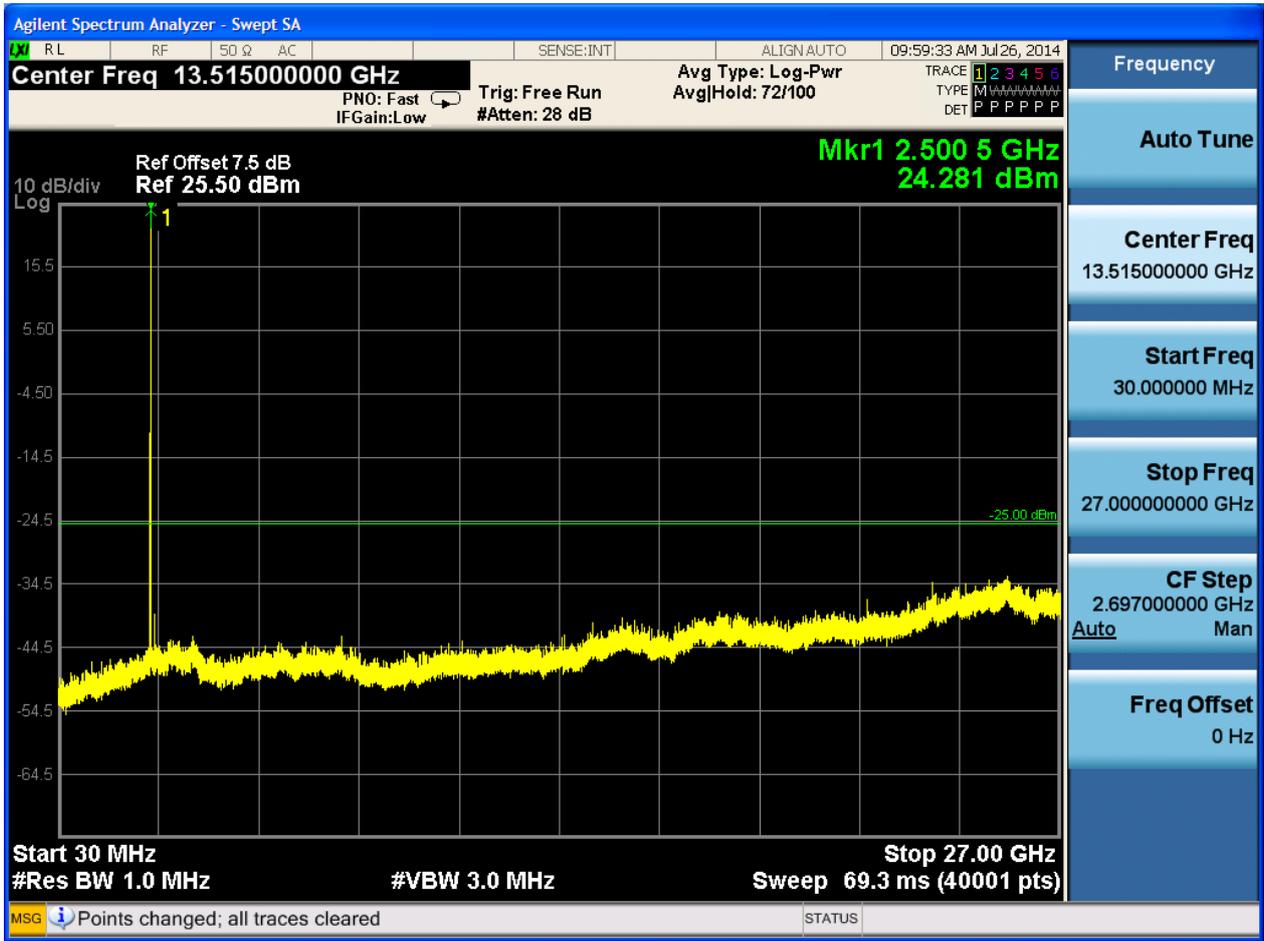
6.3.4.1.2 Test Bandwidth = 10

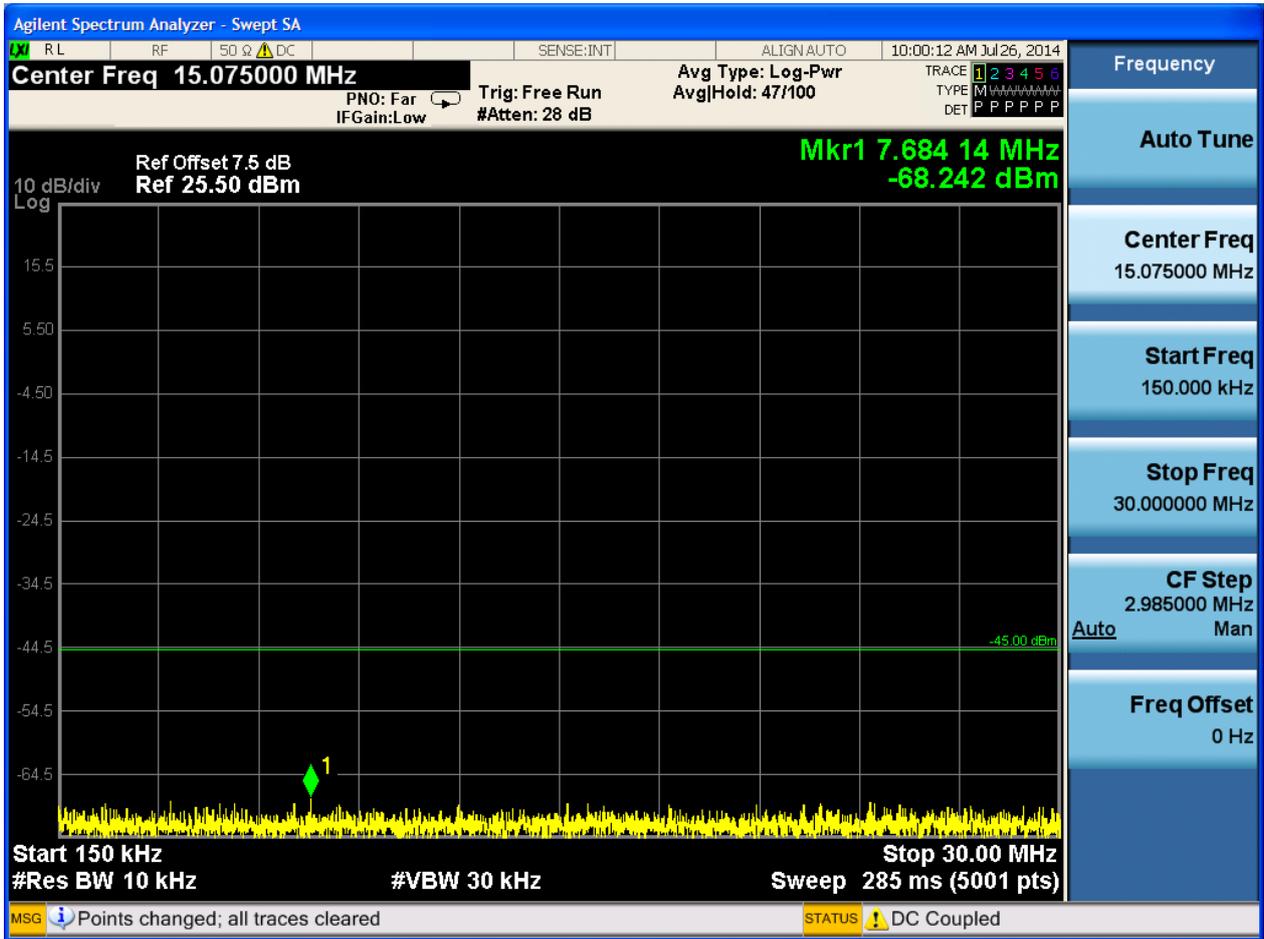
6.3.4.1.2.1 Test Channel = LCH

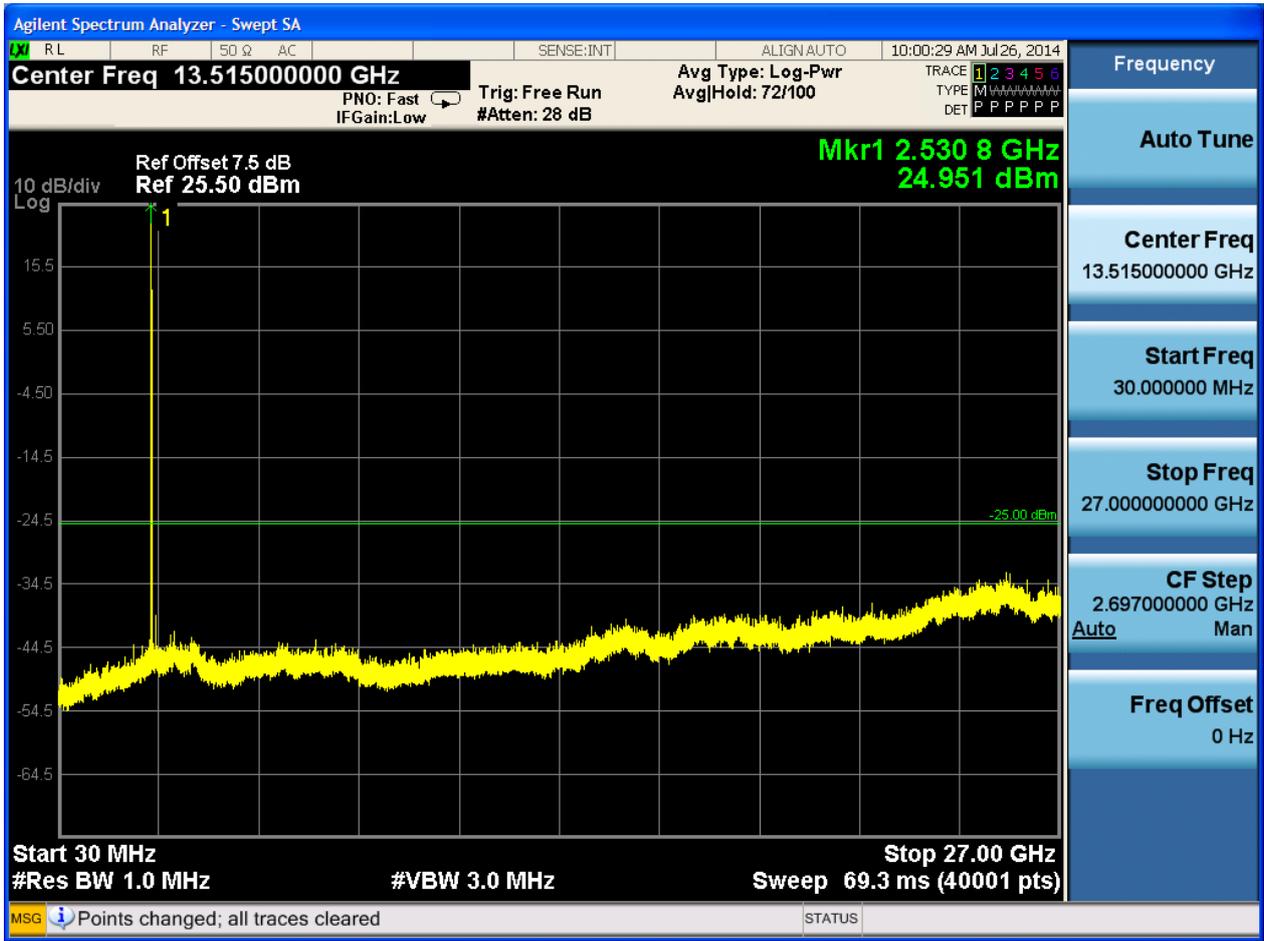
6.3.4.1.2.1.1 Test RB = RB1#0

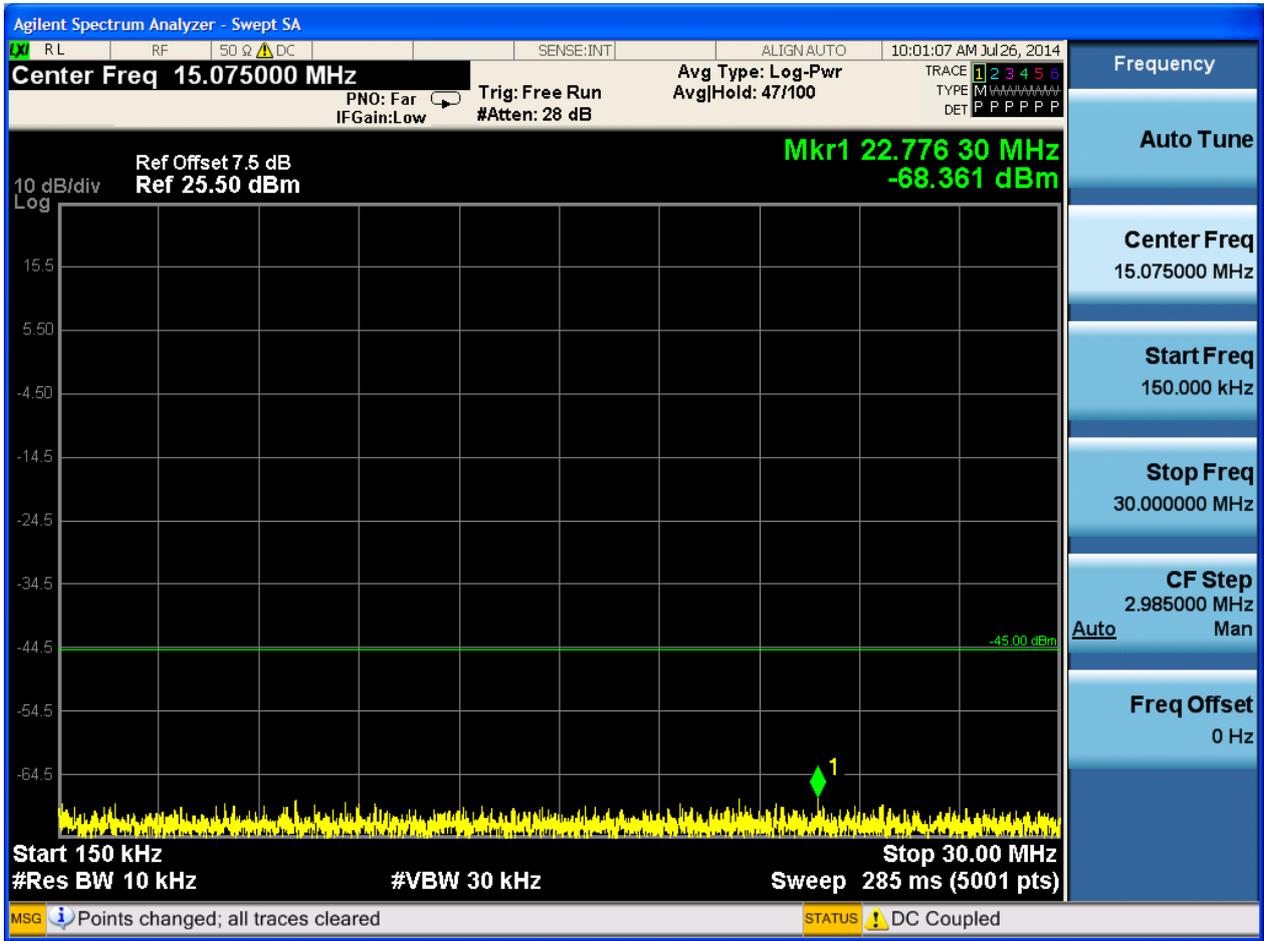


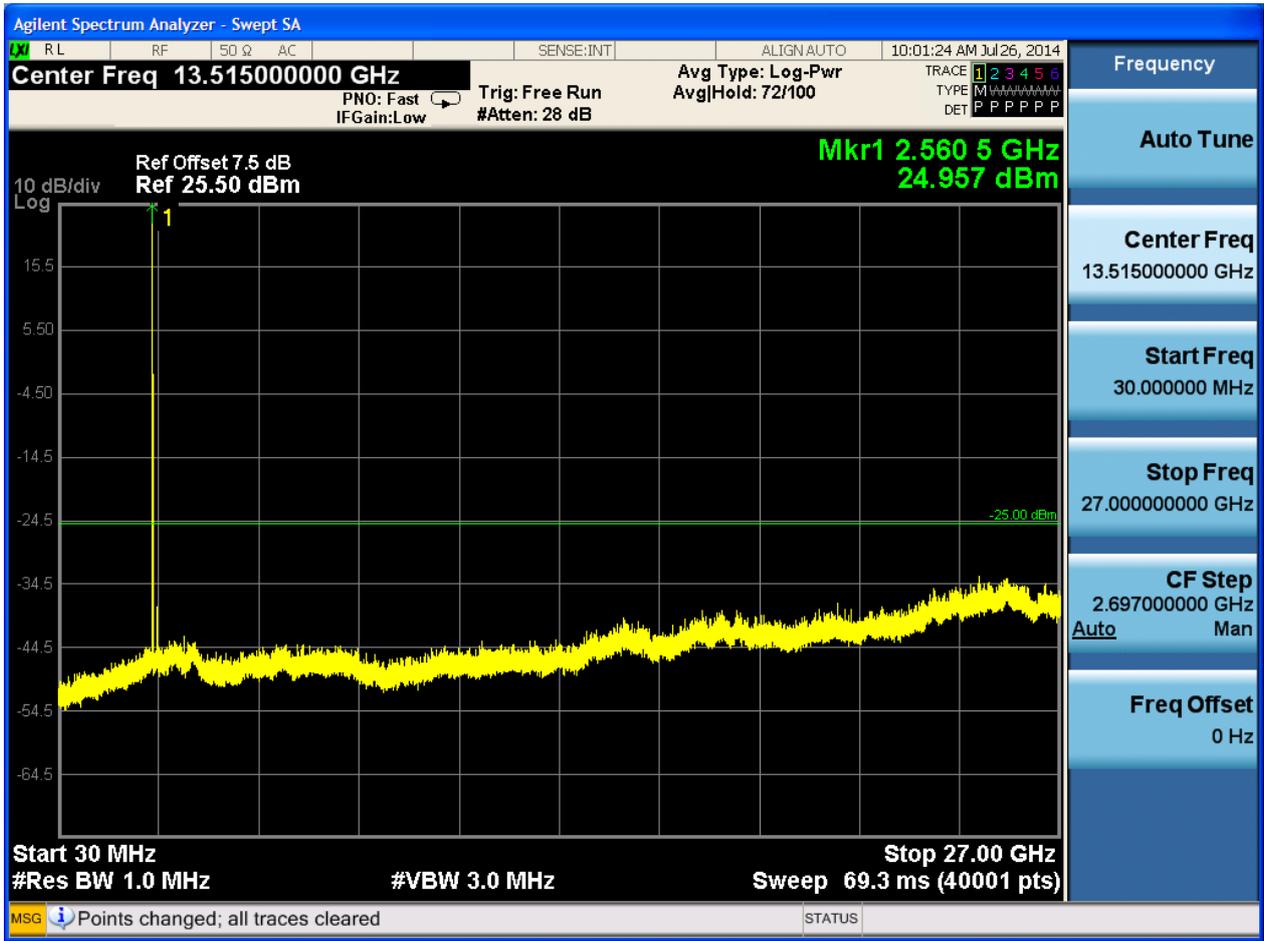










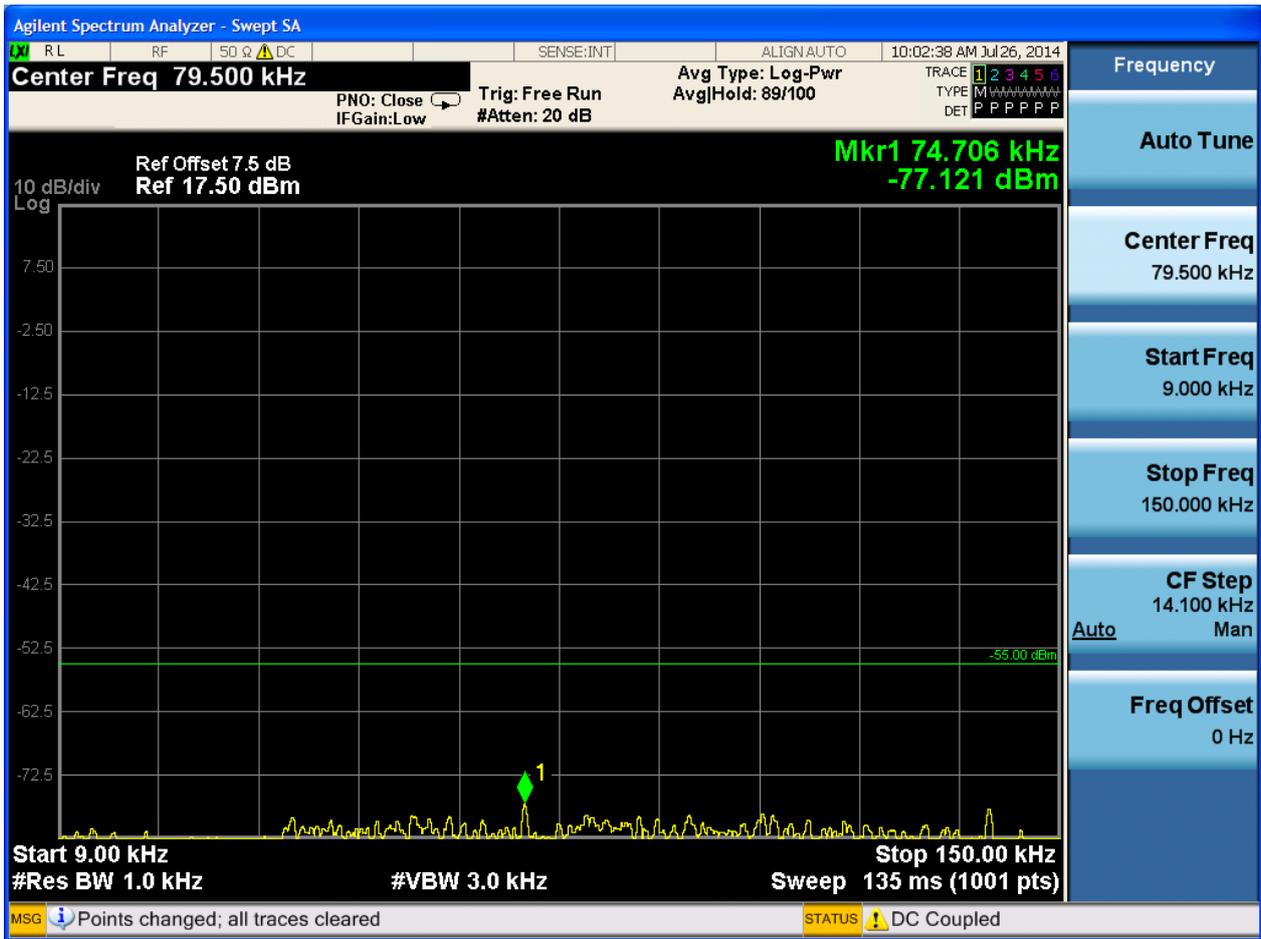


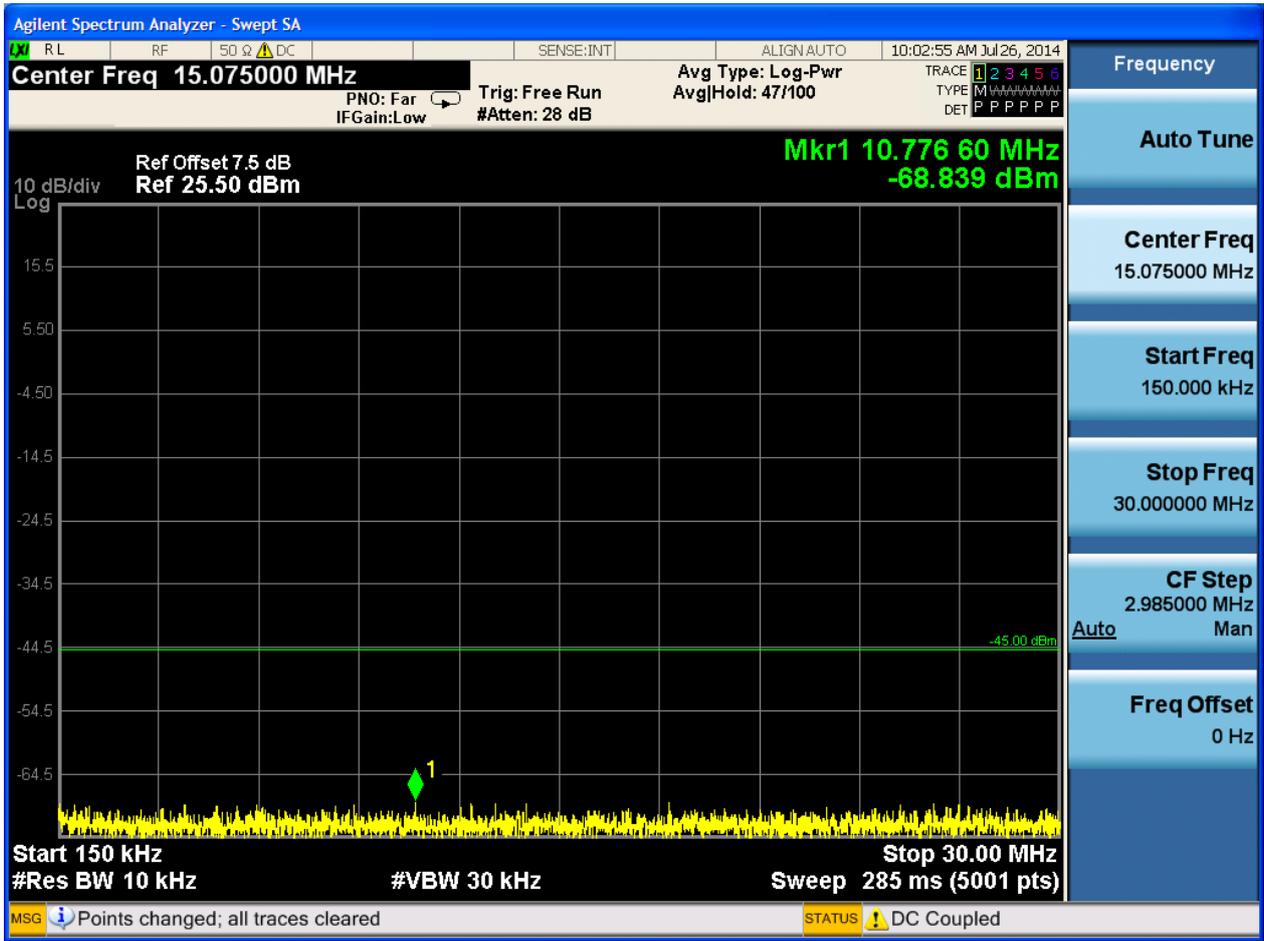


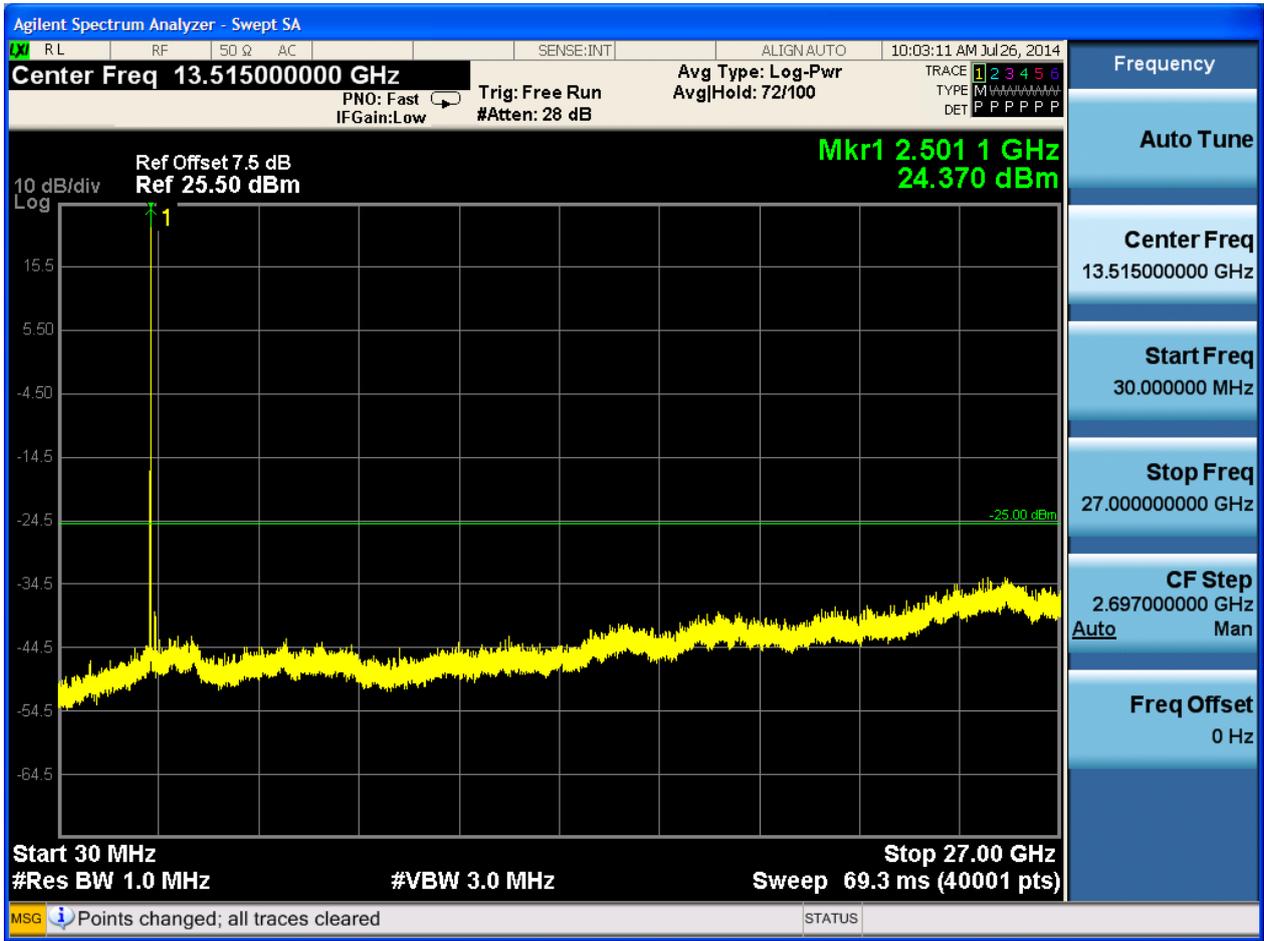
6.3.4.1.3 Test Bandwidth = 15

6.3.4.1.3.1 Test Channel = LCH

6.3.4.1.3.1.1 Test RB = RB1#0



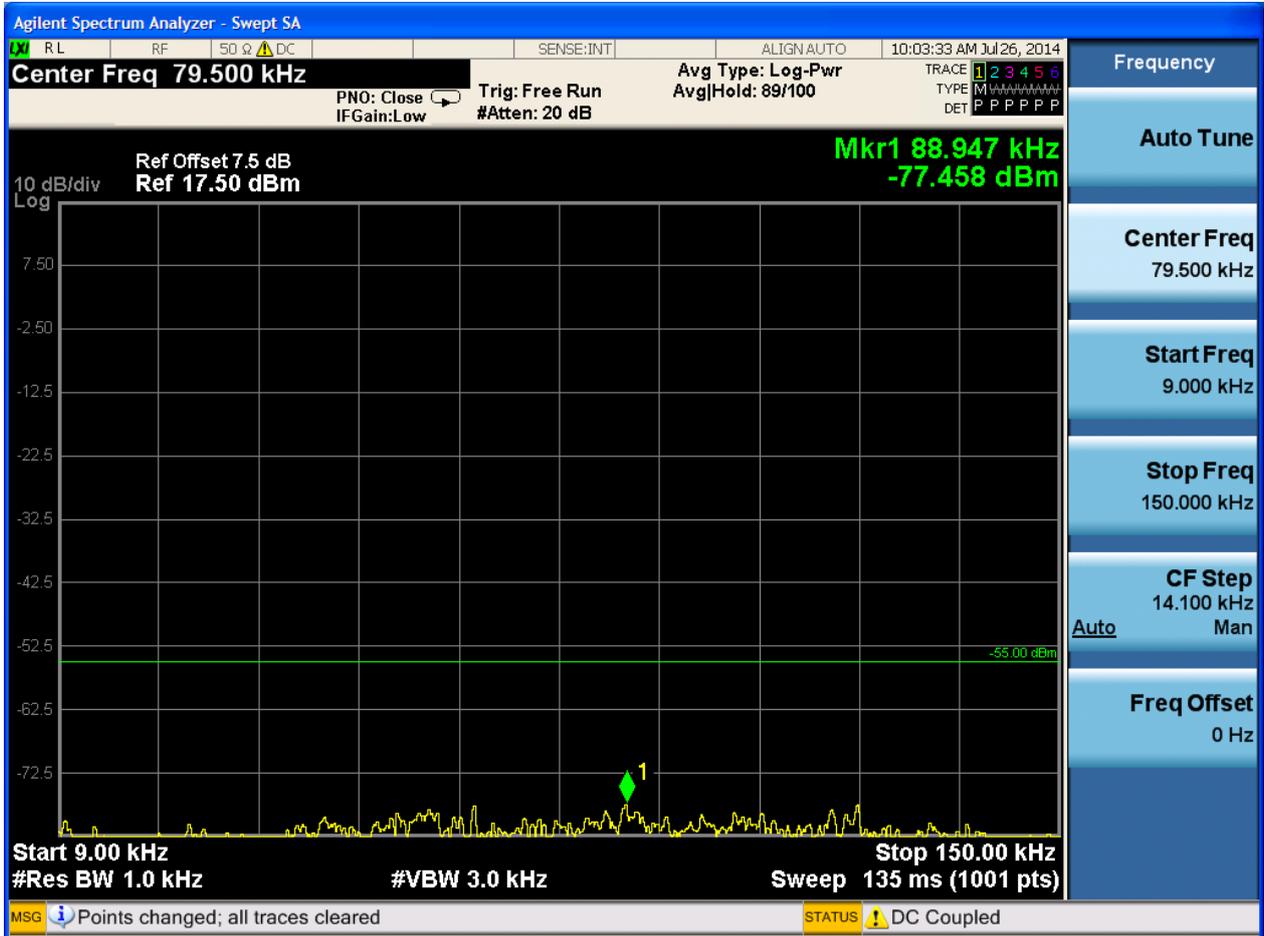


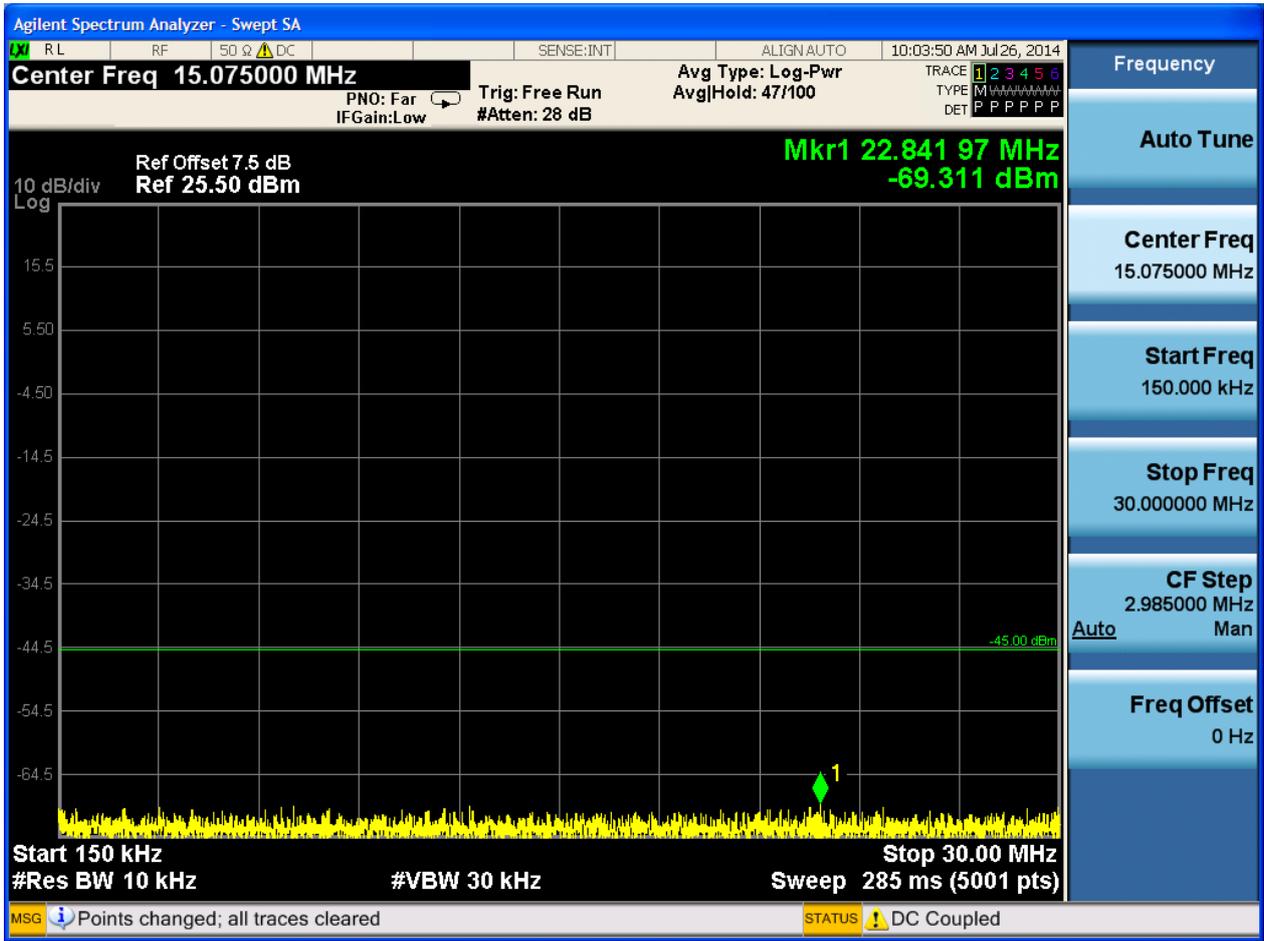


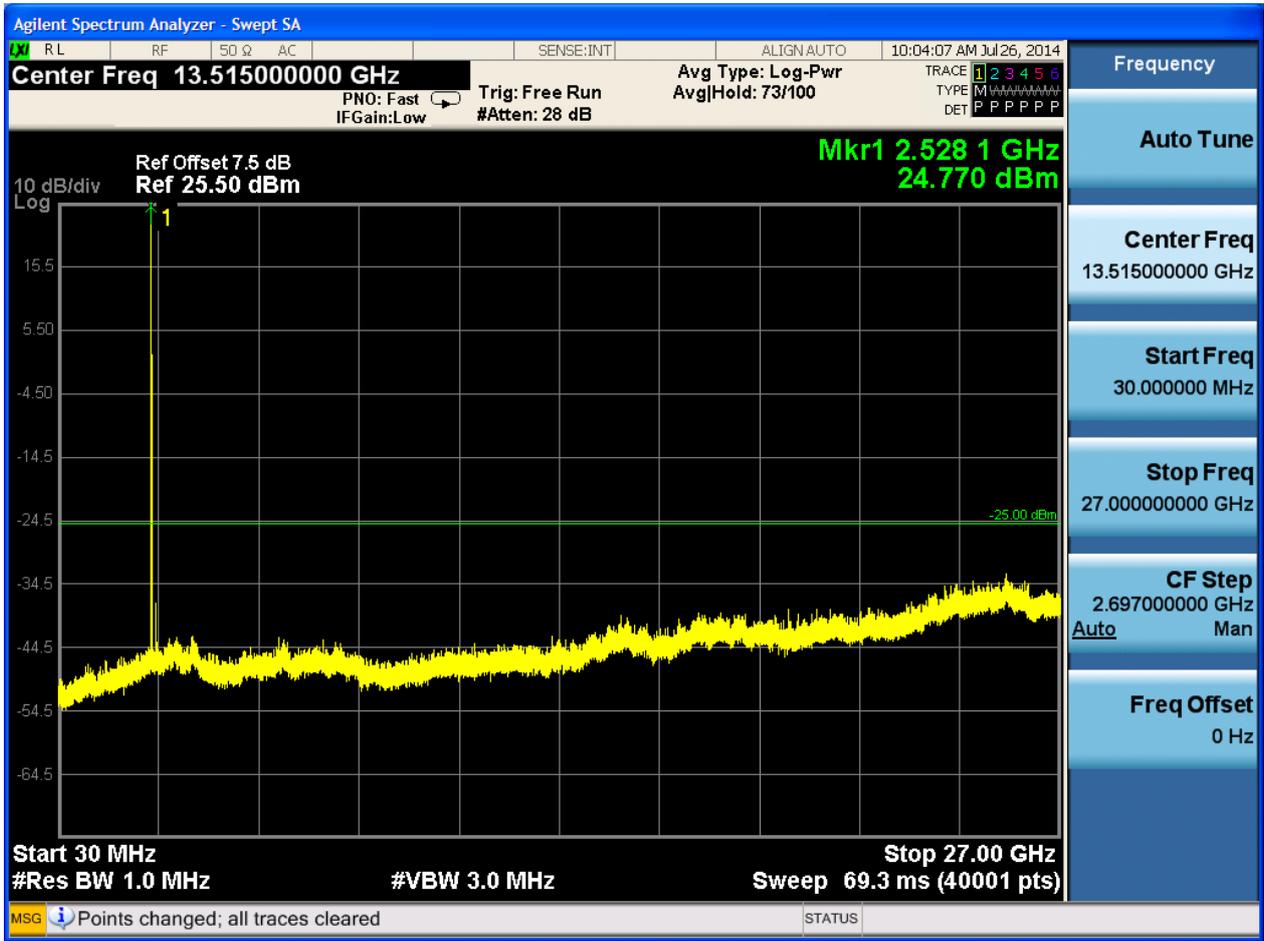


6.3.4.1.3.2 Test Channel = MCH

6.3.4.1.3.2.1 Test RB = RB1#0



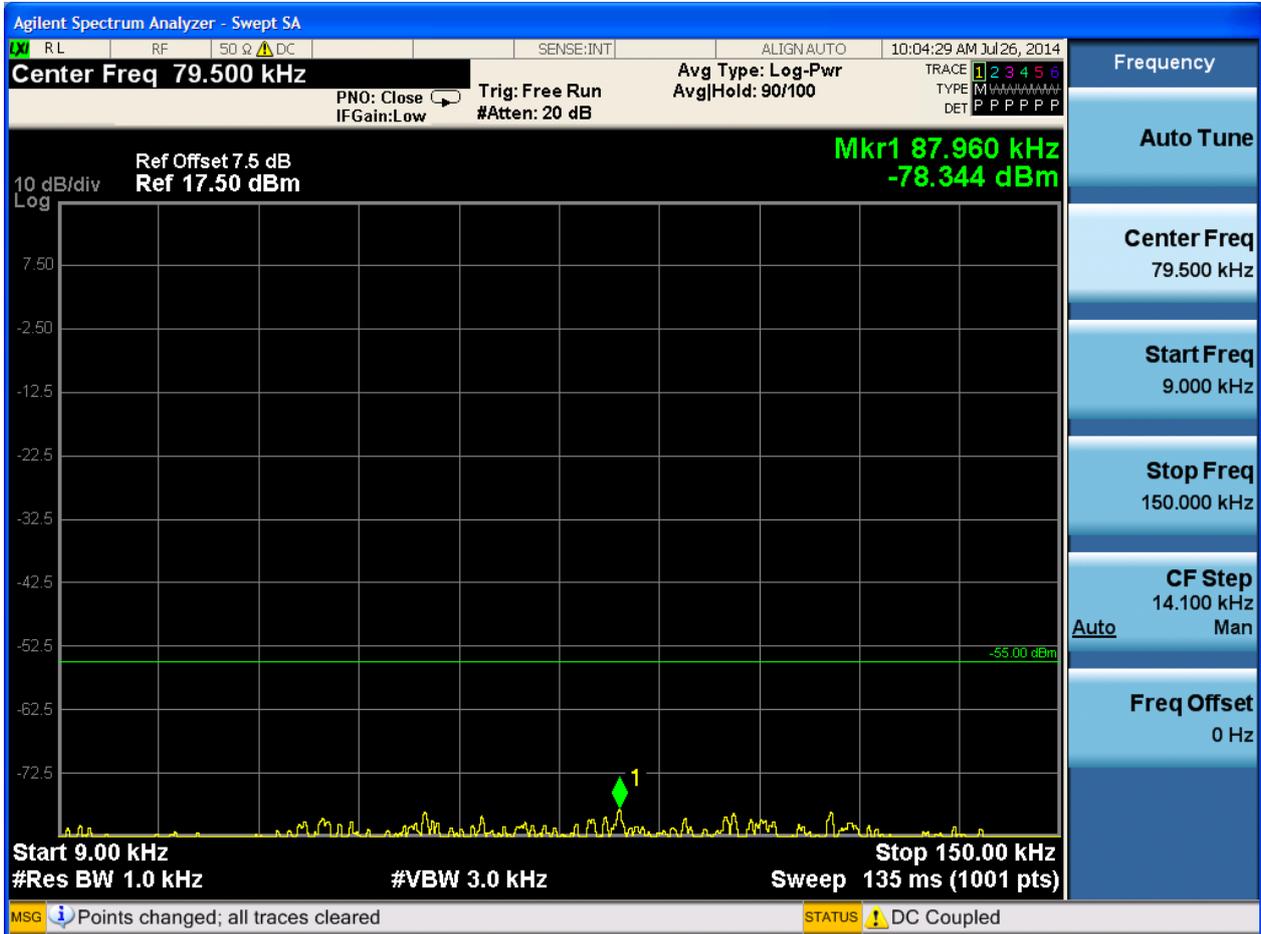


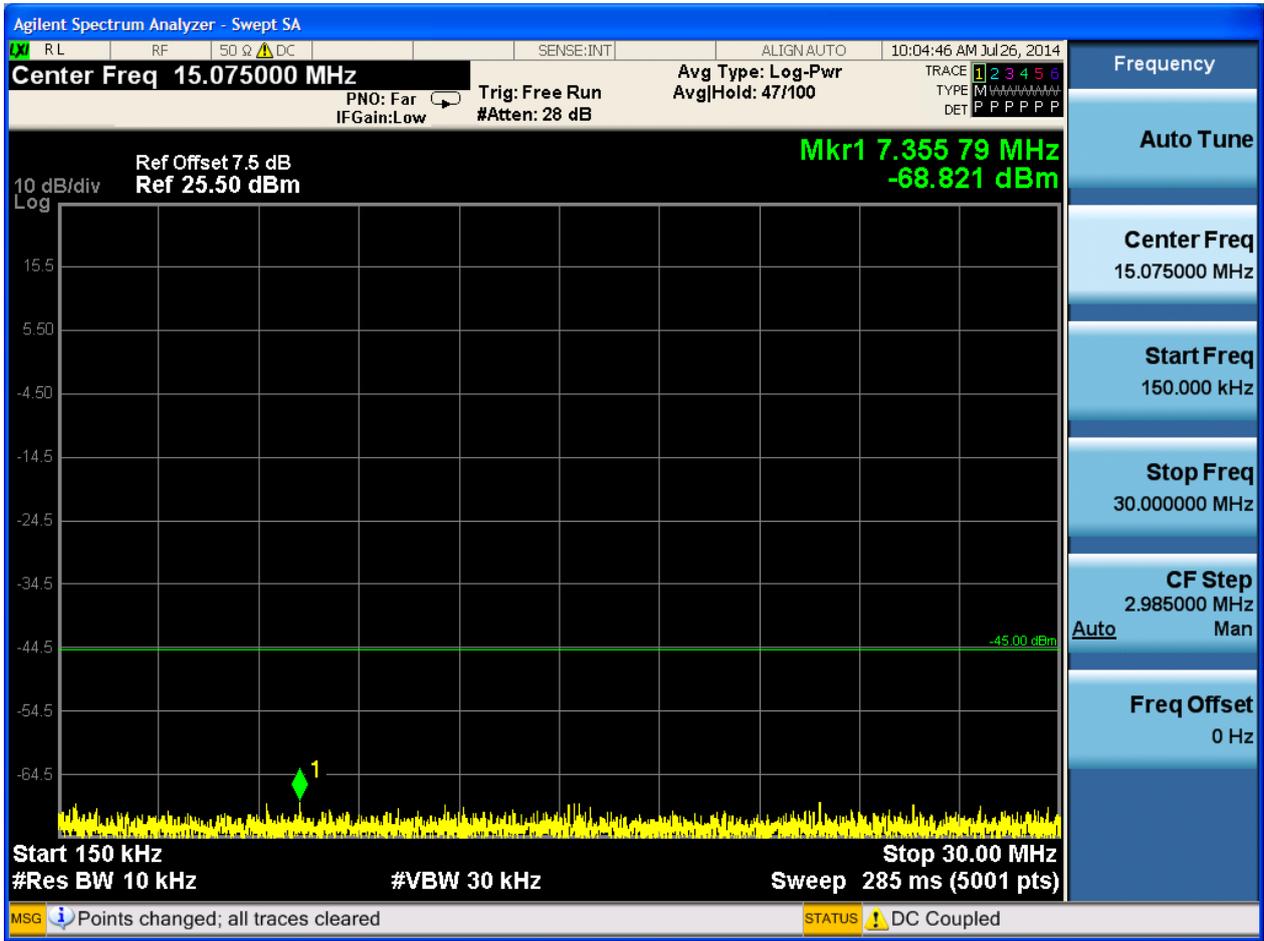


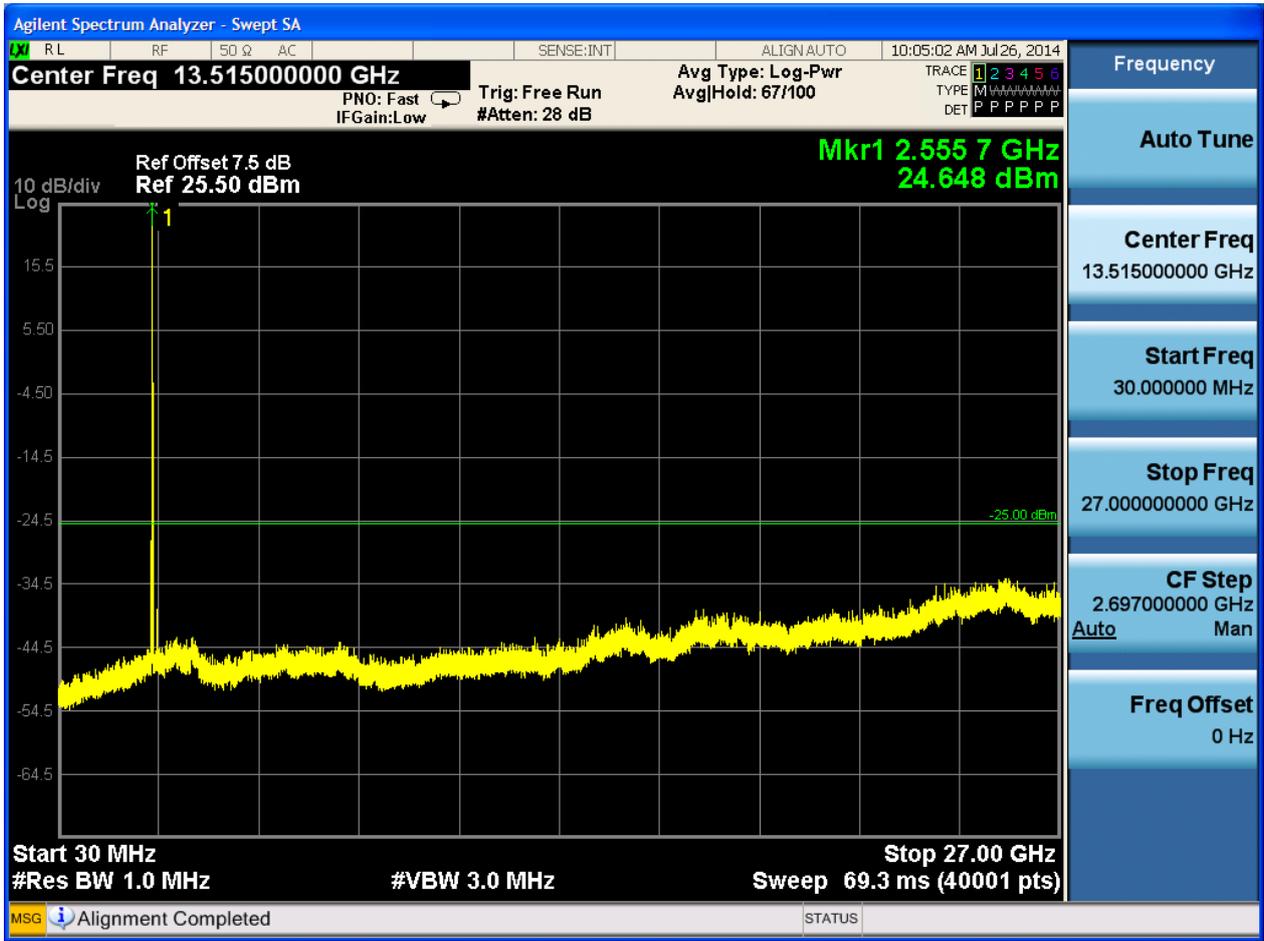


6.3.4.1.3.3 Test Channel = HCH

6.3.4.1.3.3.1 Test RB = RB1#0









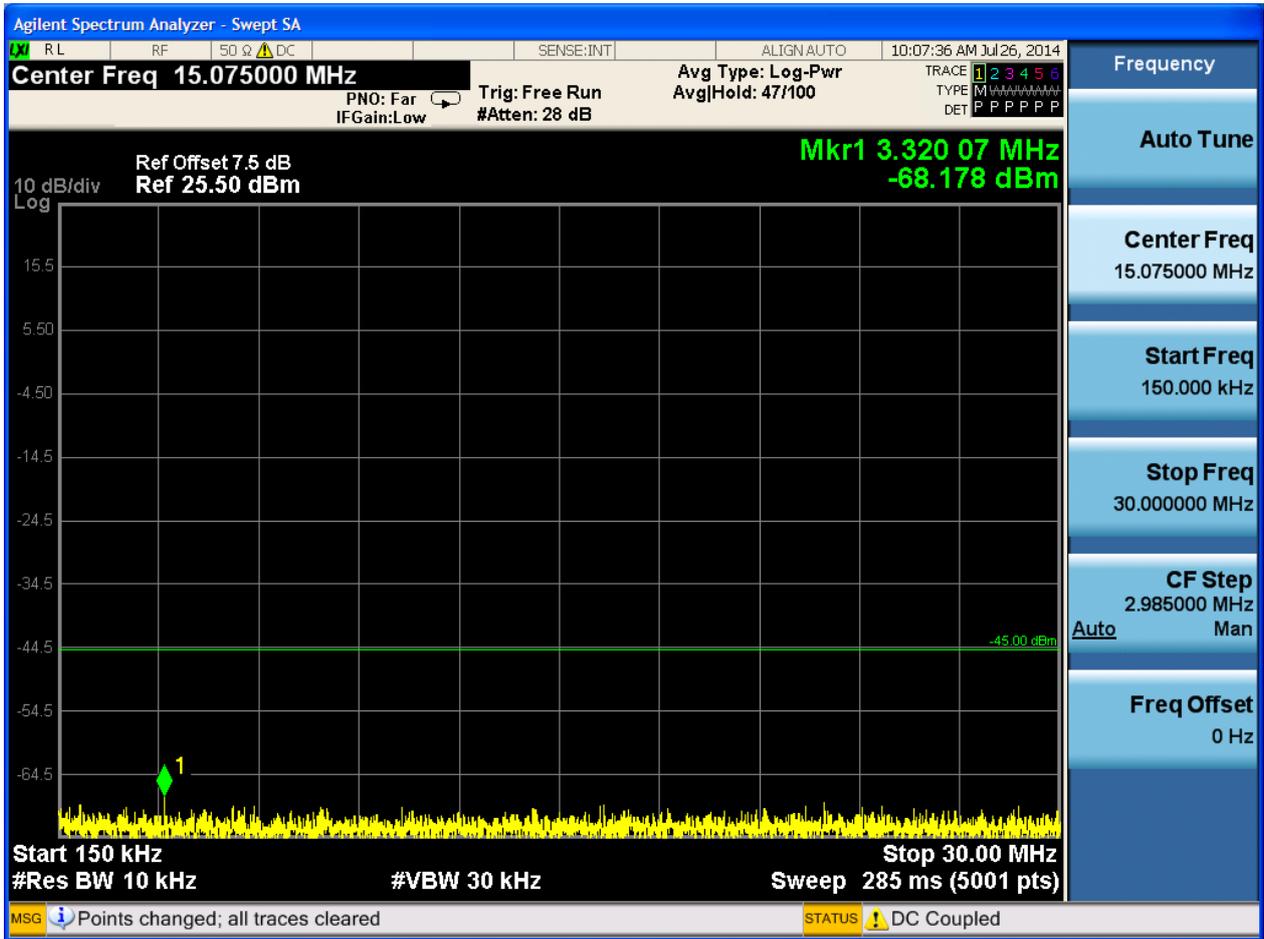
6.3.4.1.4 Test Bandwidth = 20

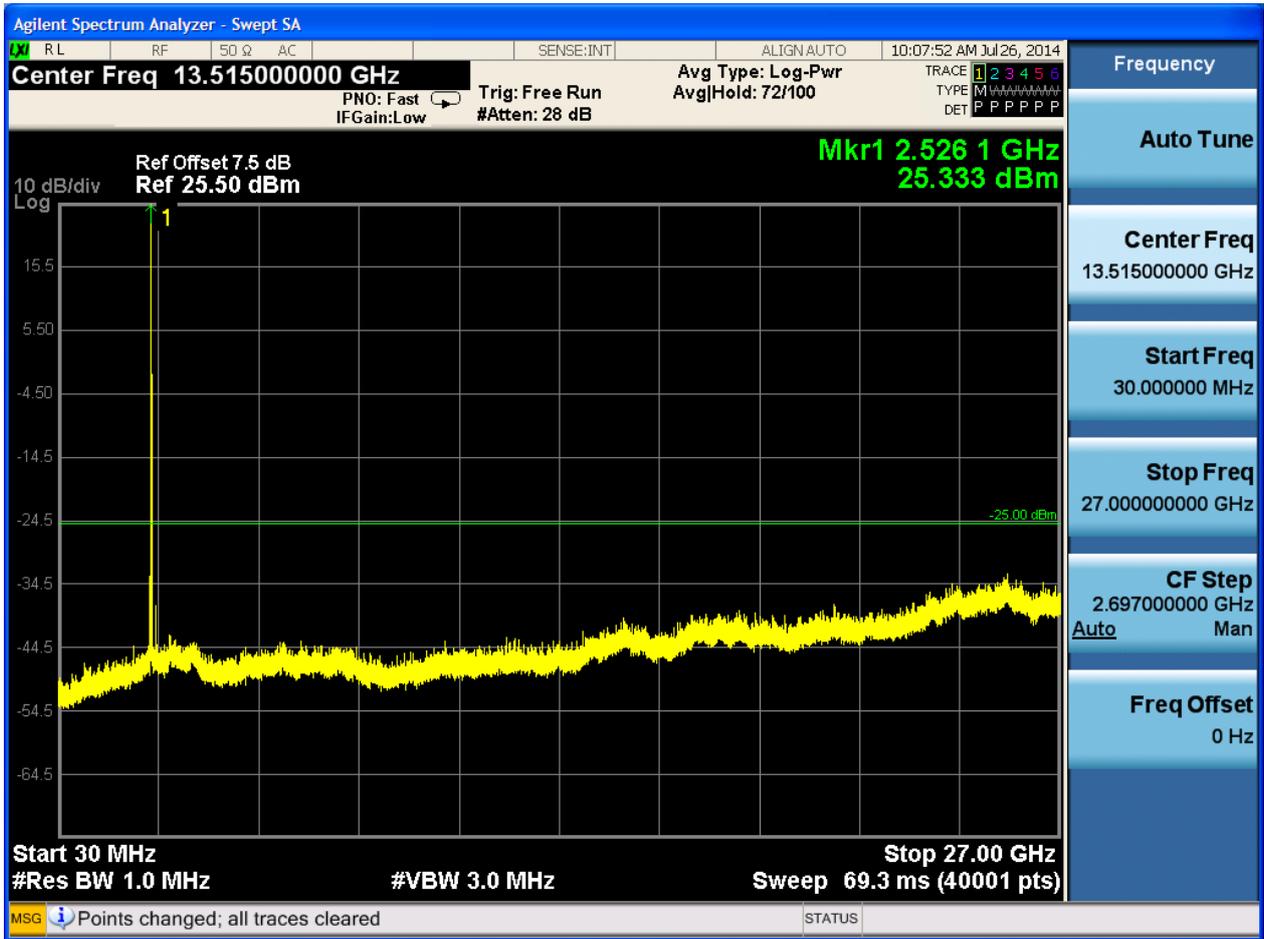
6.3.4.1.4.1 Test Channel = LCH

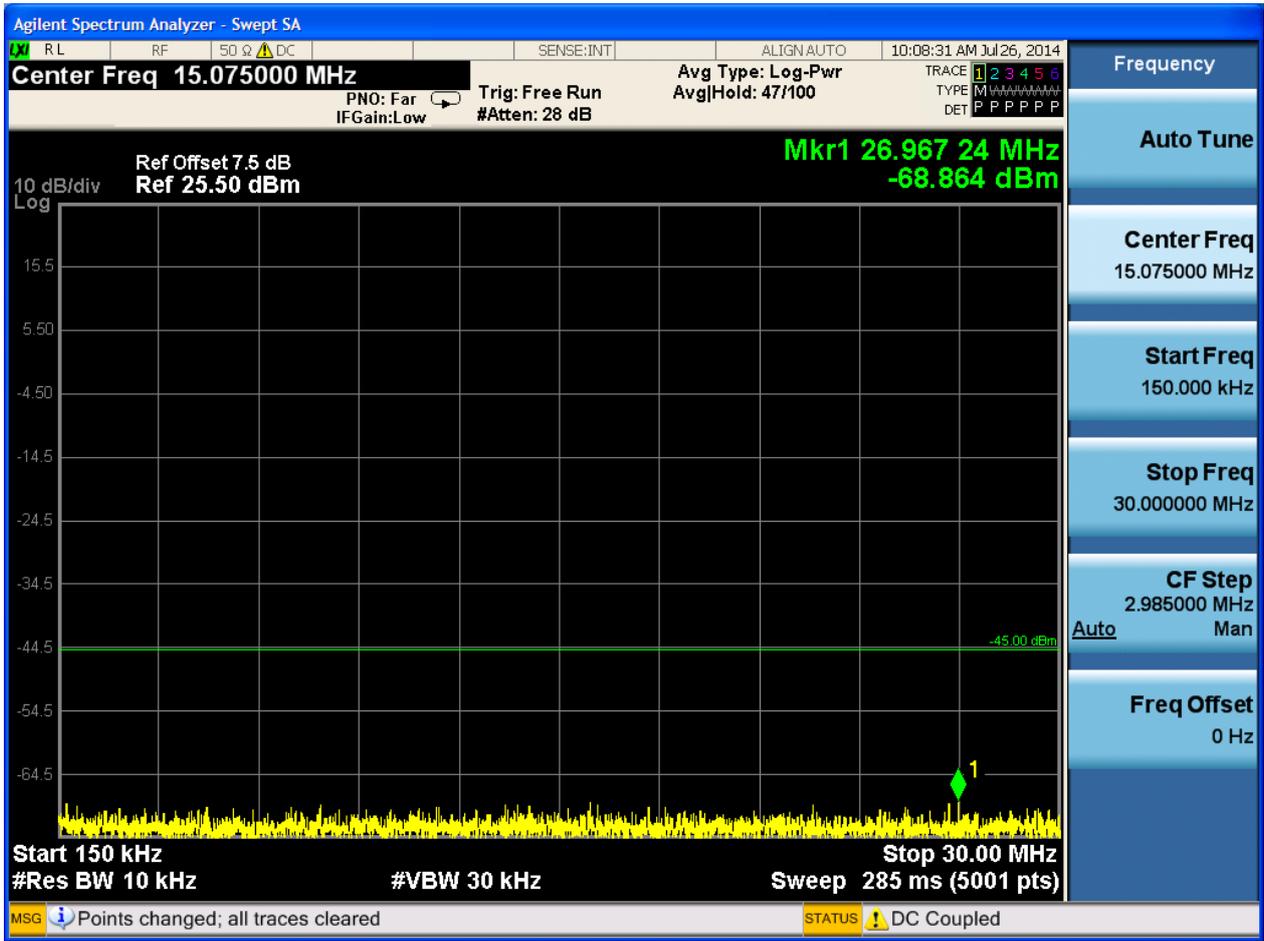
6.3.4.1.4.1.1 Test RB = RB1#0

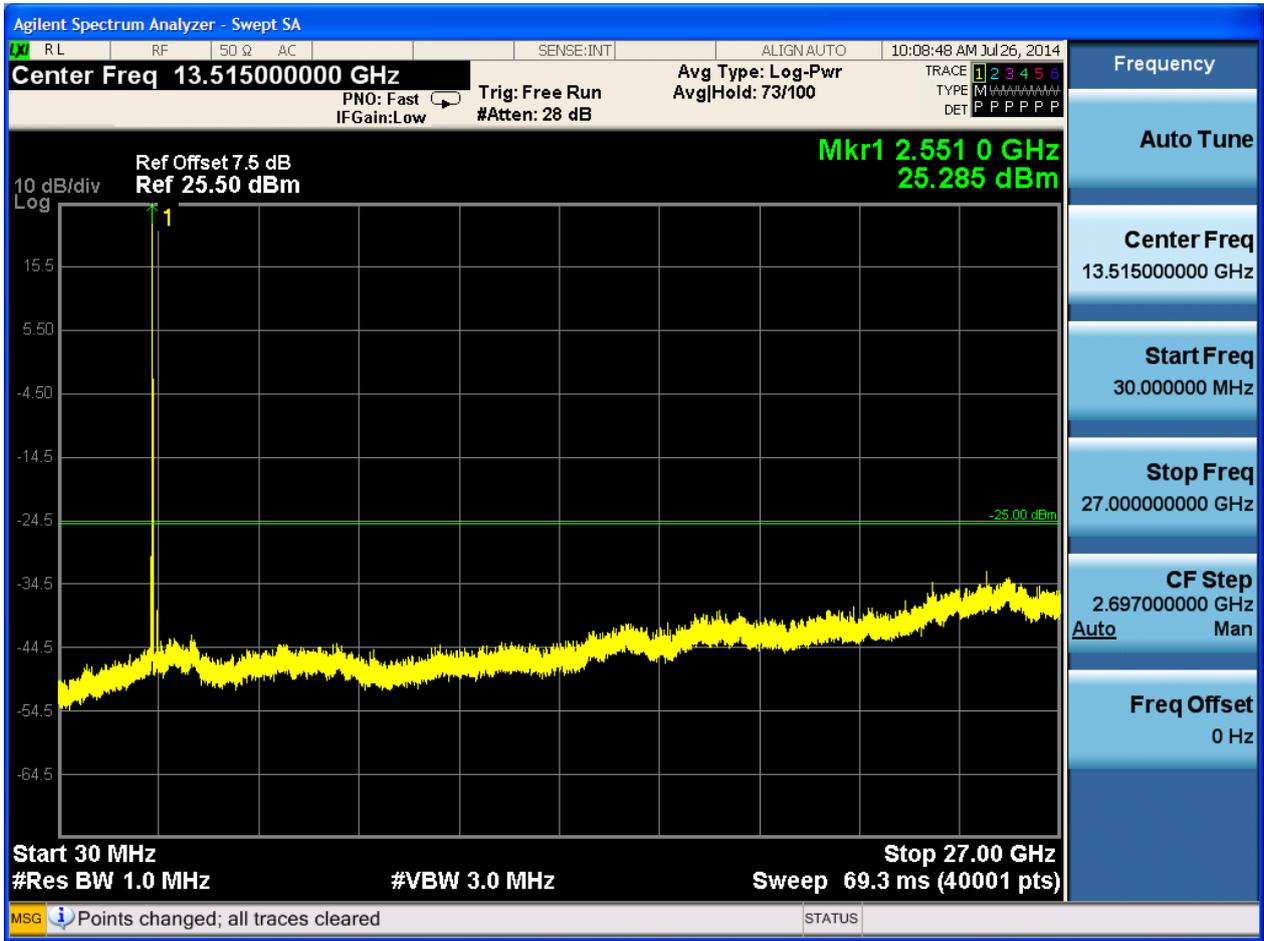












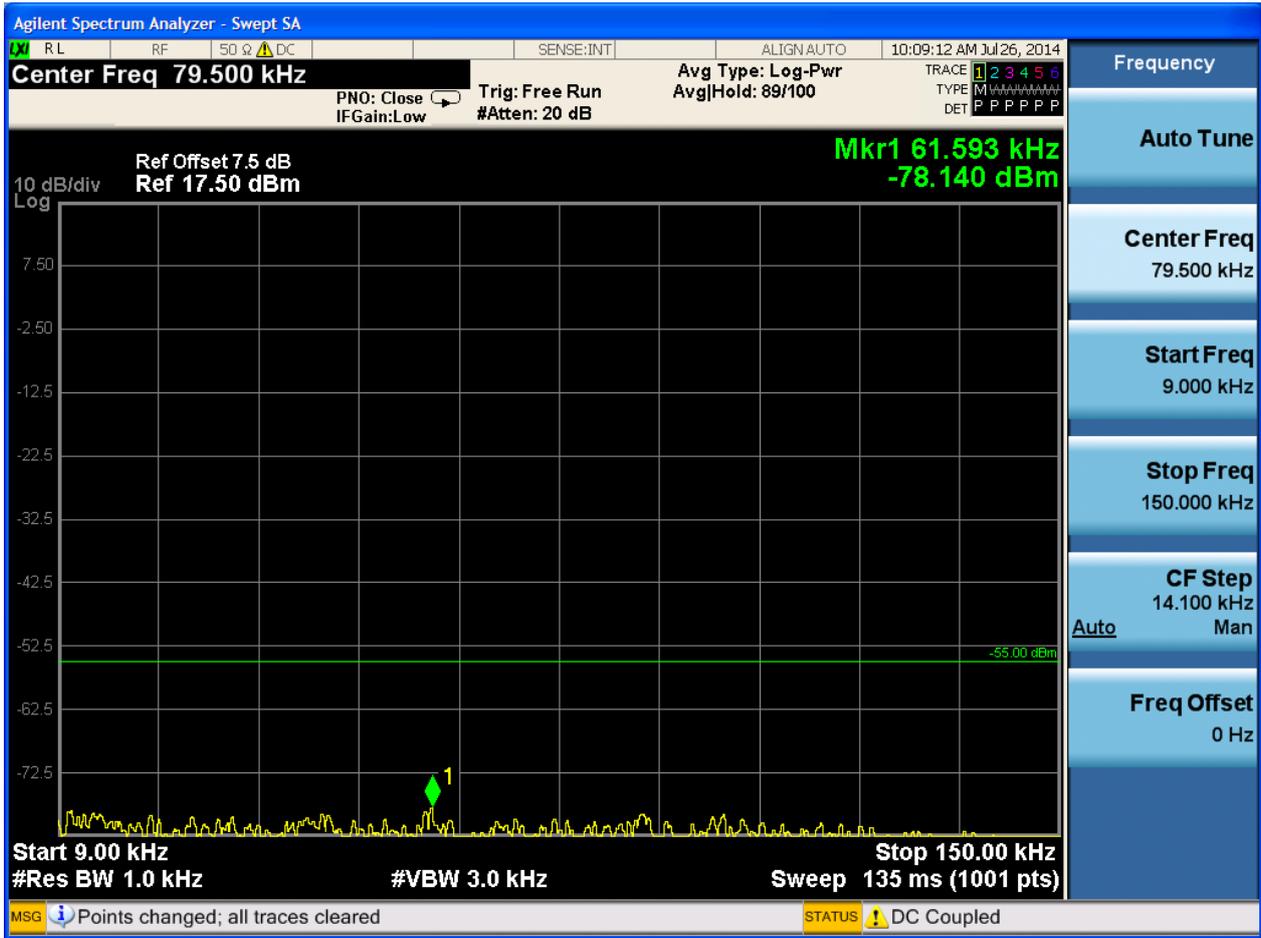


6.3.4.2 Test Mode = LTE/TM2

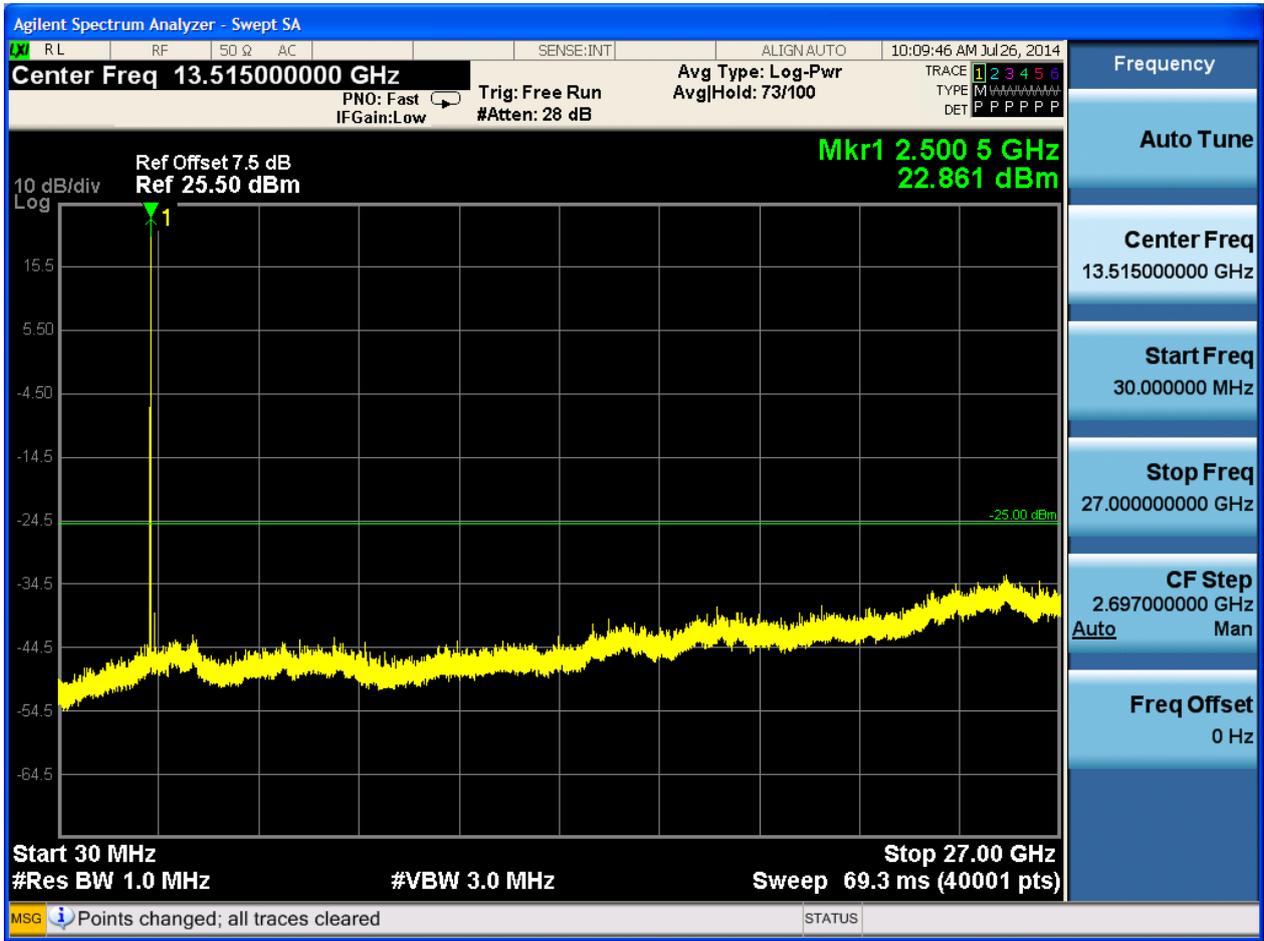
6.3.4.2.1 Test Bandwidth = 5

6.3.4.2.1.1 Test Channel = LCH

6.3.4.2.1.1.1 Test RB = RB1#0





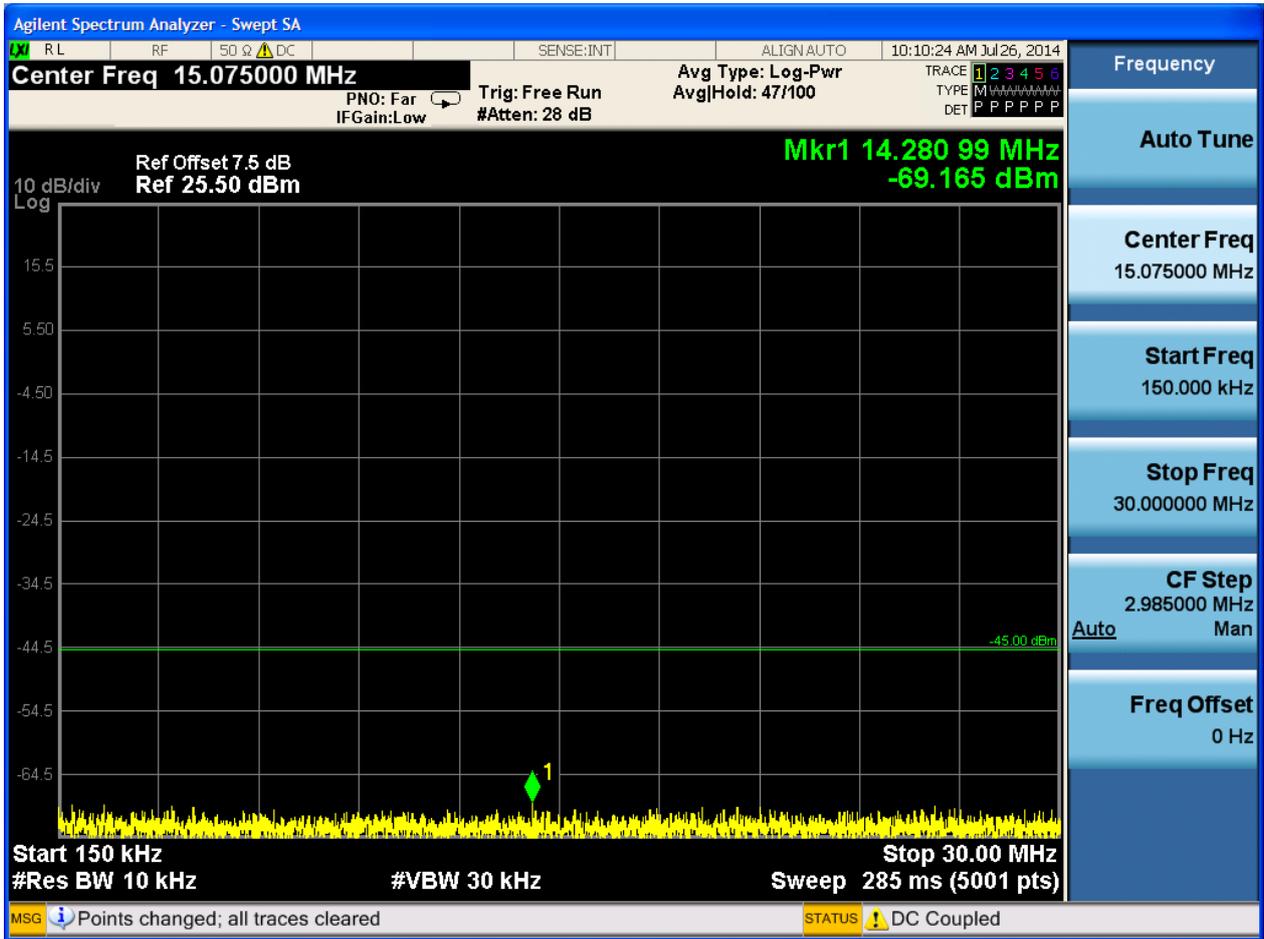


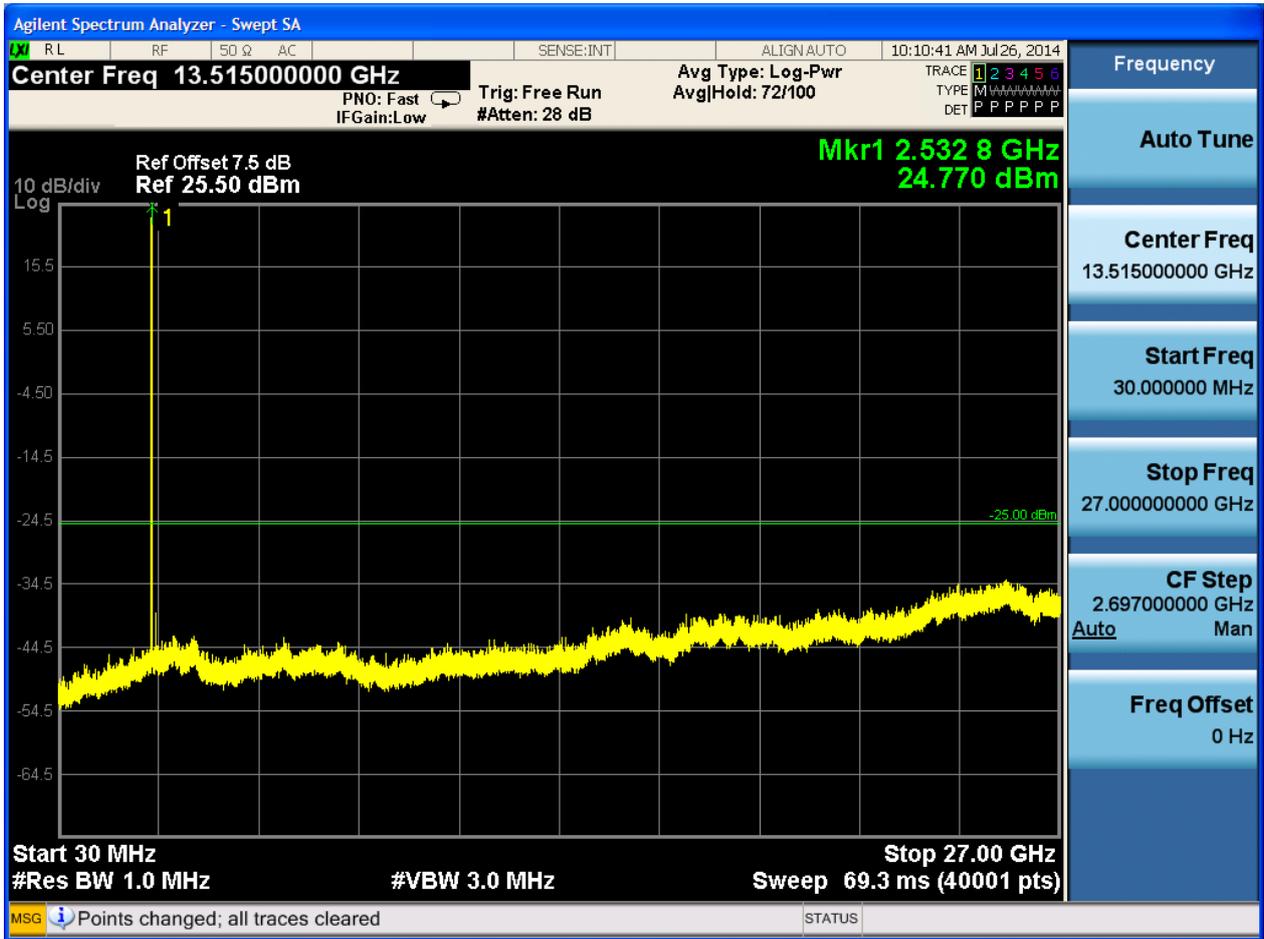


6.3.4.2.1.2 Test Channel = MCH

6.3.4.2.1.2.1 Test RB = RB1#0







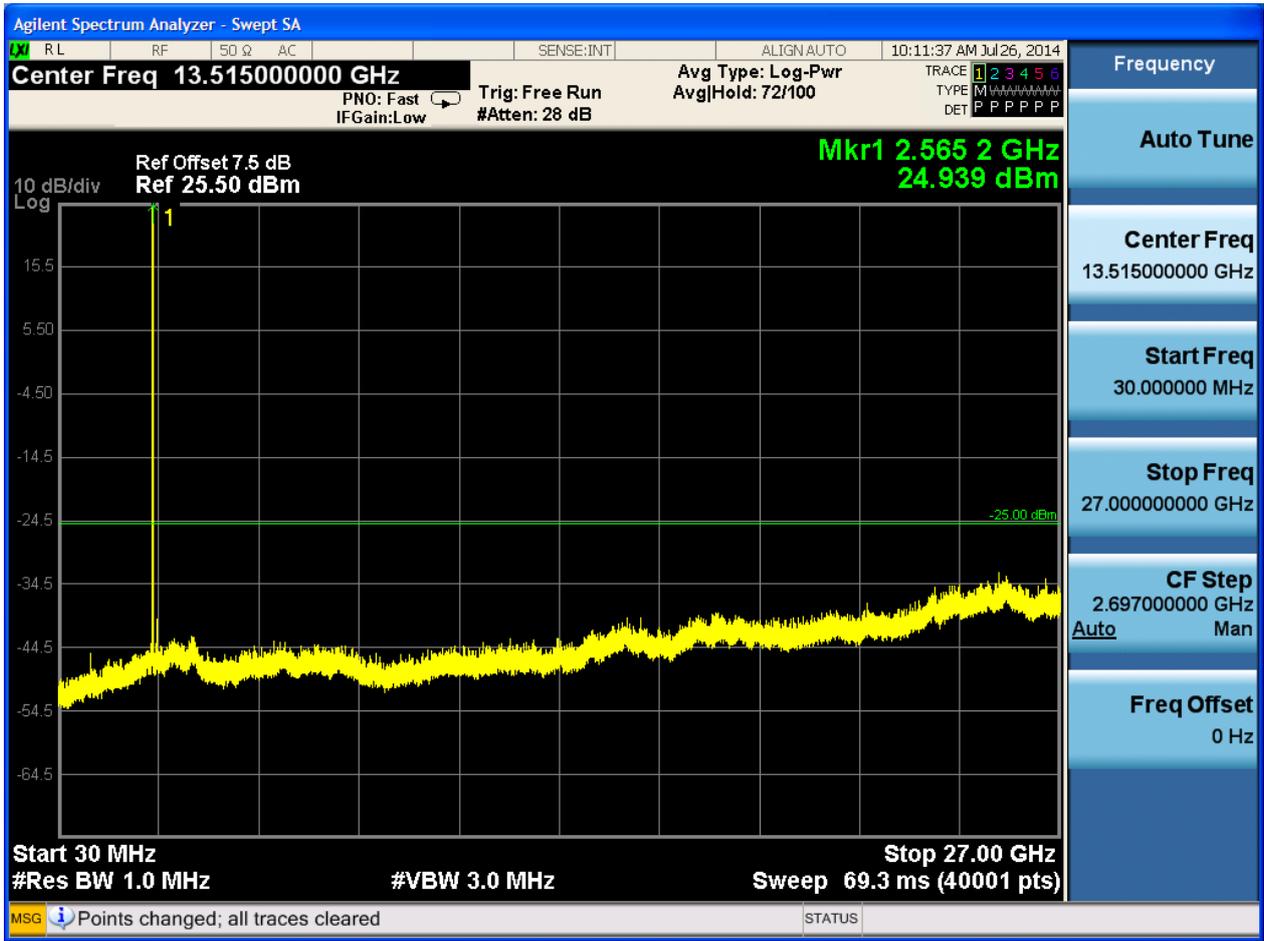


6.3.4.2.1.3 Test Channel = HCH

6.3.4.2.1.3.1 Test RB = RB1#0









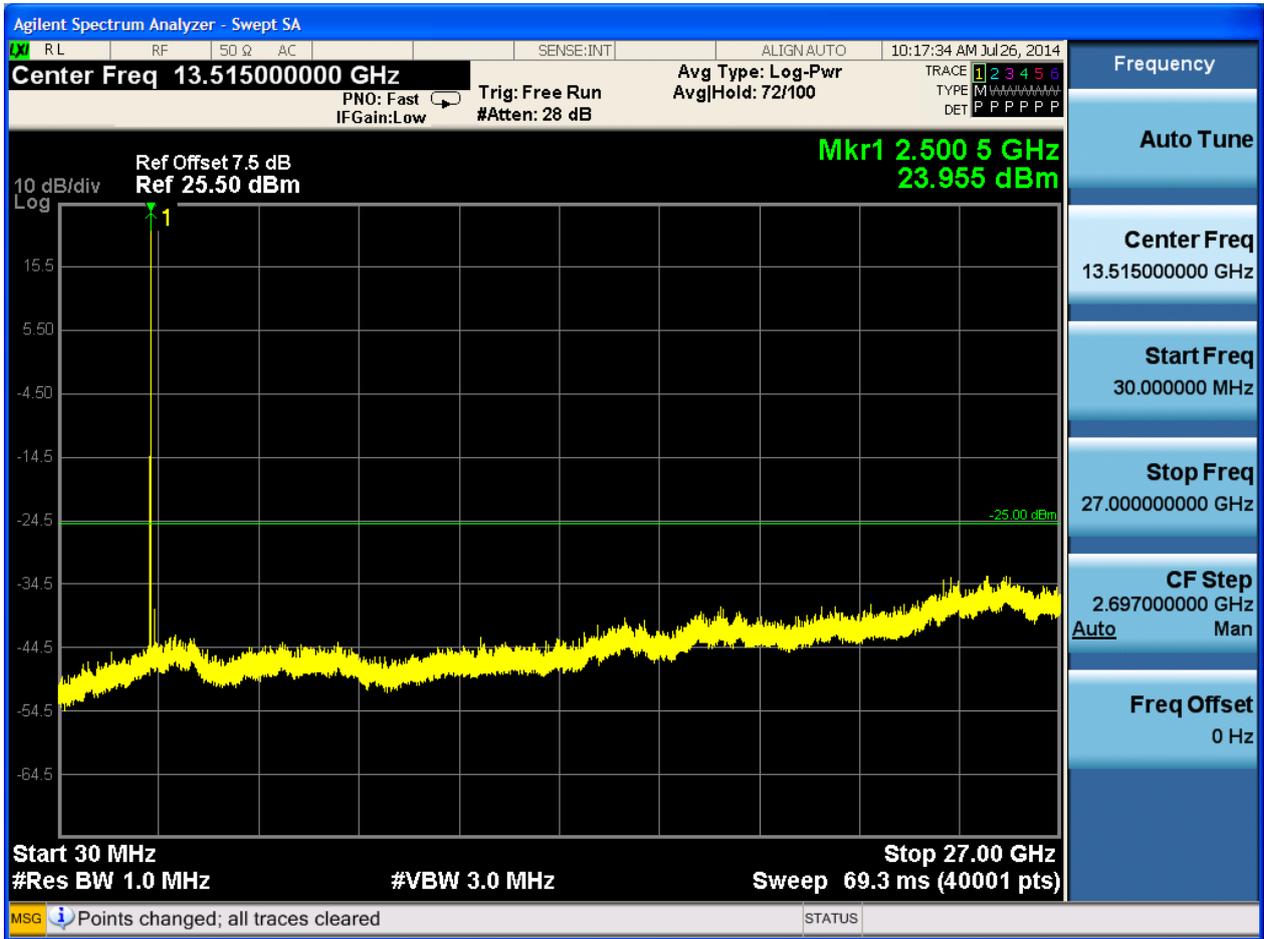
6.3.4.2.2 Test Bandwidth = 10

6.3.4.2.2.1 Test Channel = LCH

6.3.4.2.2.1.1 Test RB = RB1#0



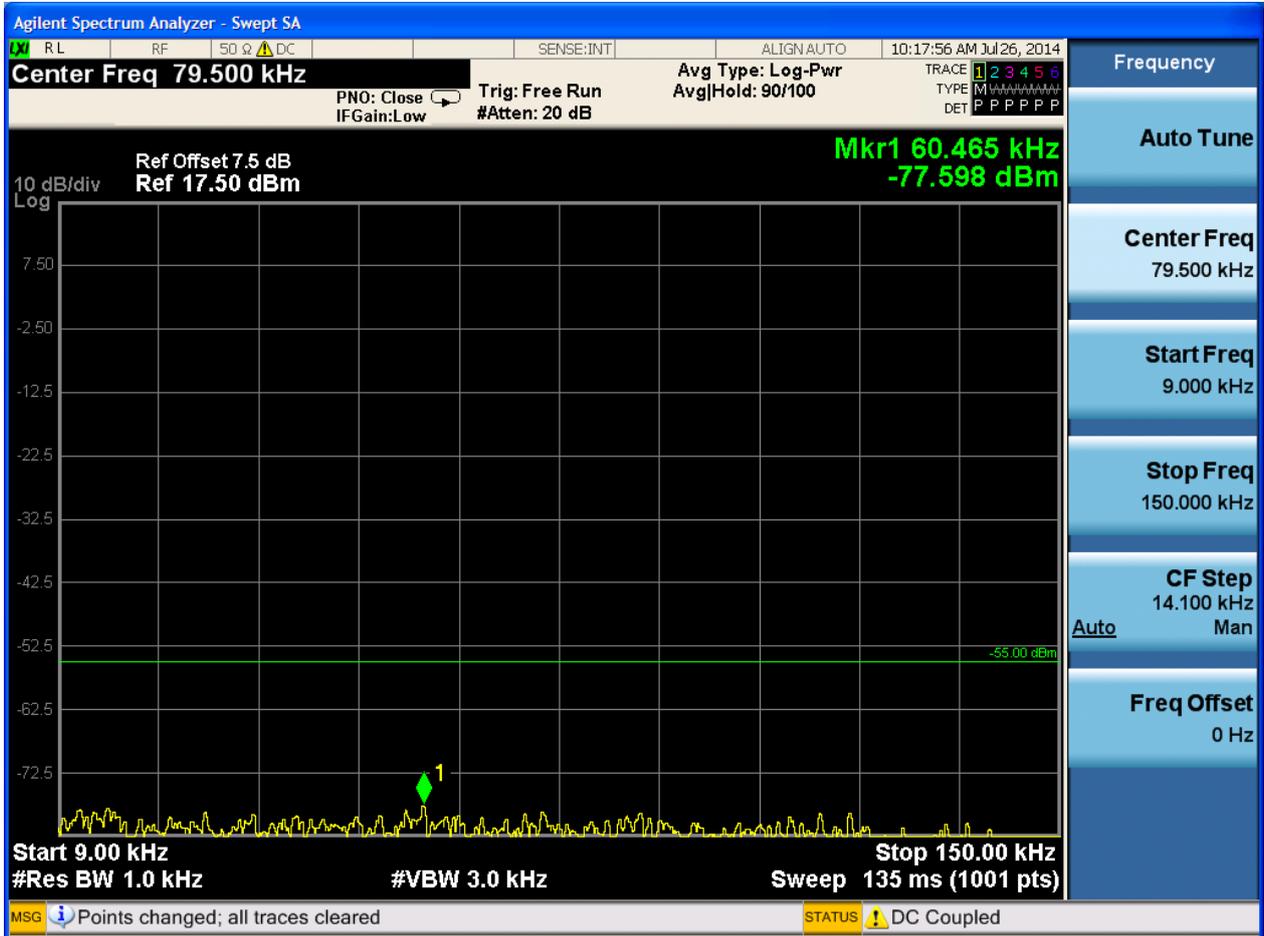




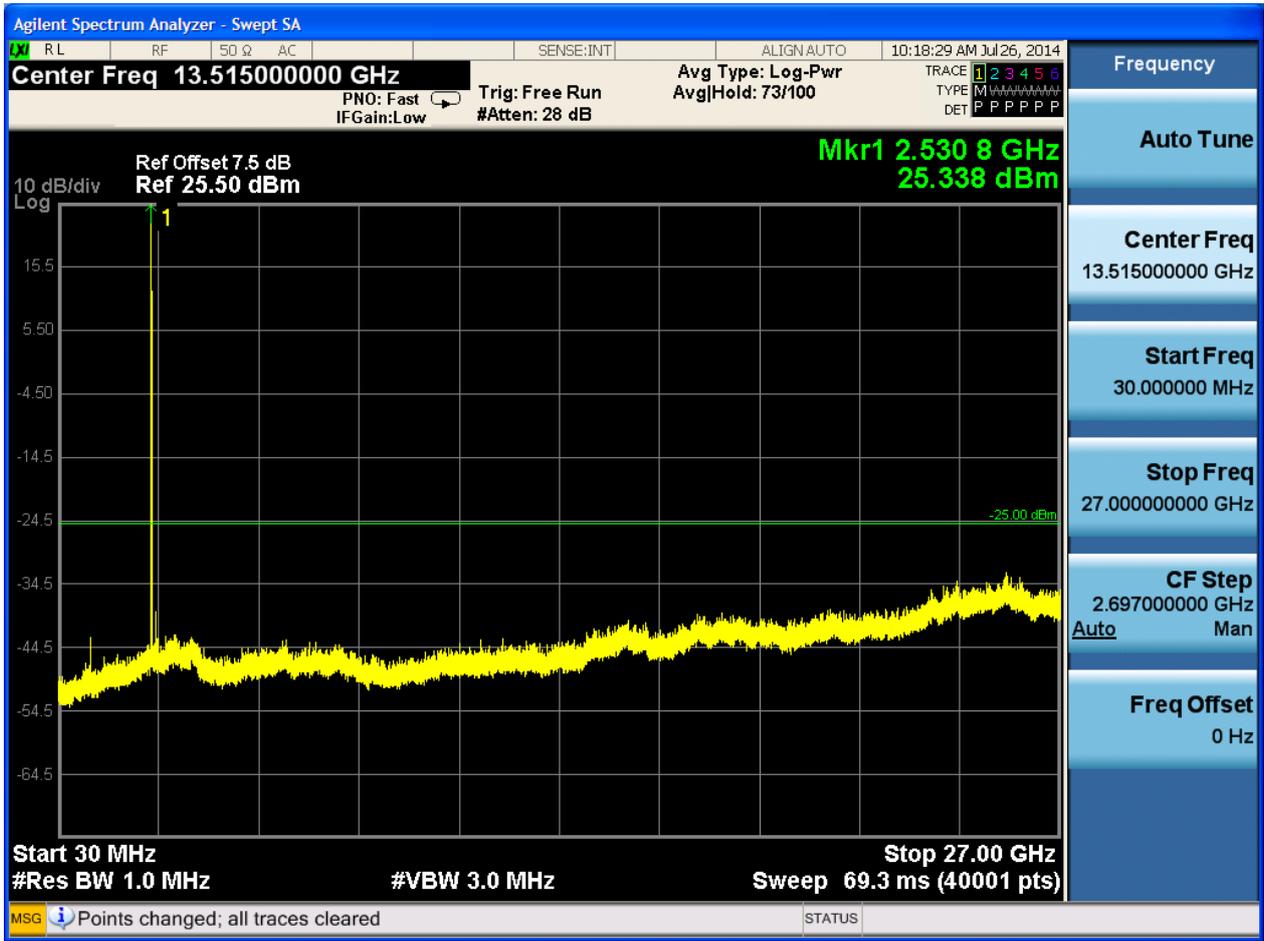


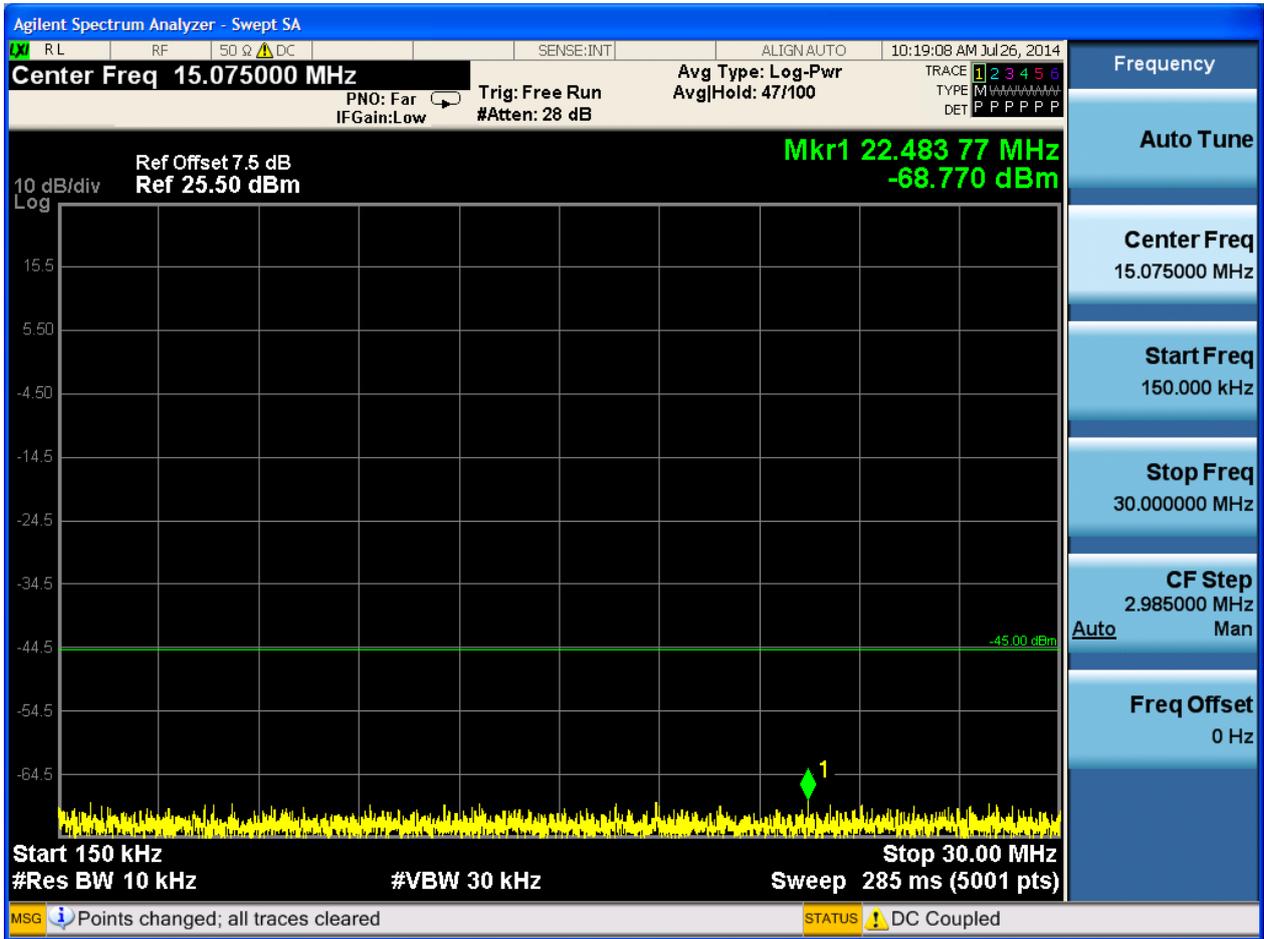
6.3.4.2.2 Test Channel = MCH

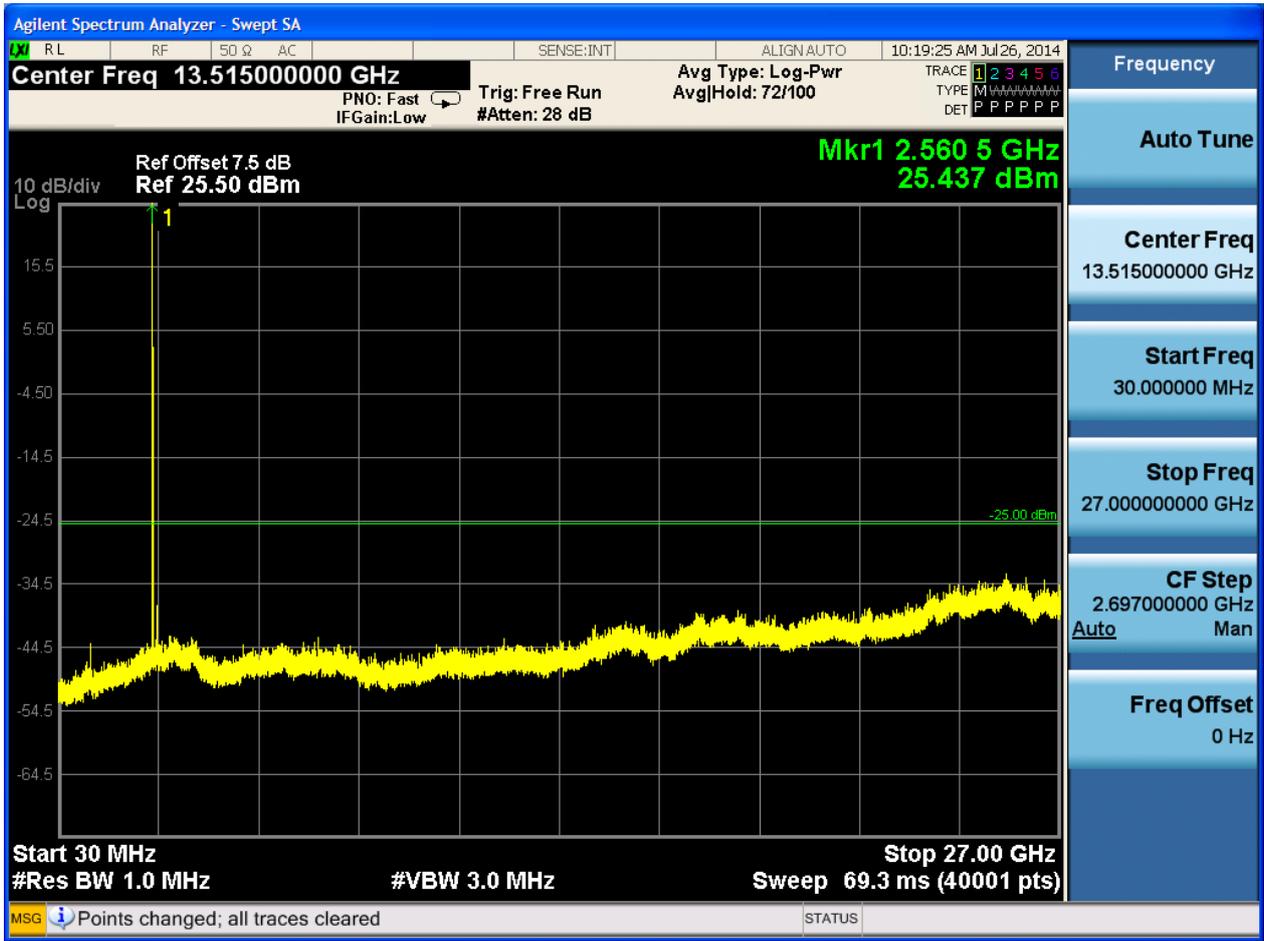
6.3.4.2.2.1 Test RB = RB1#0









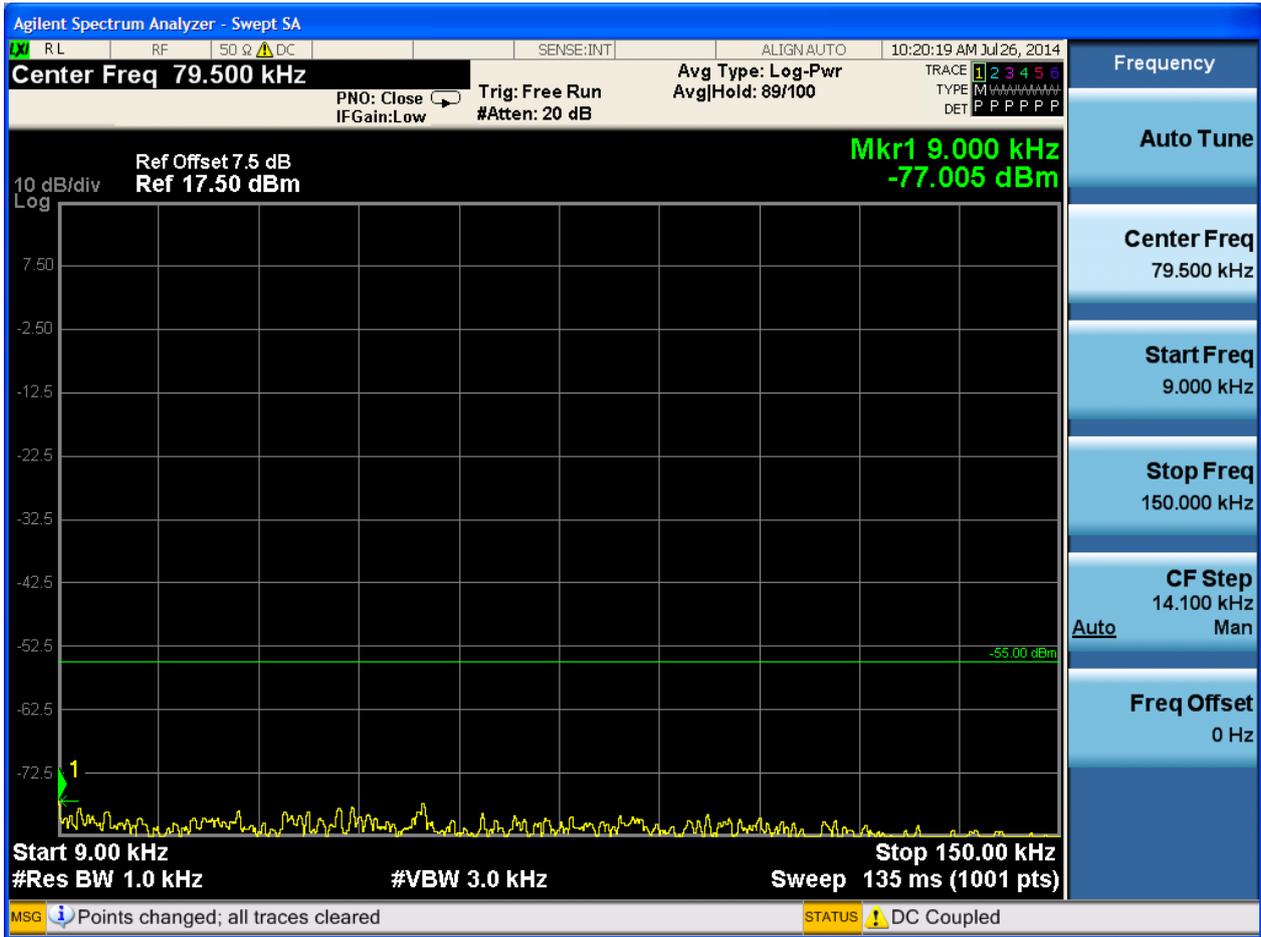


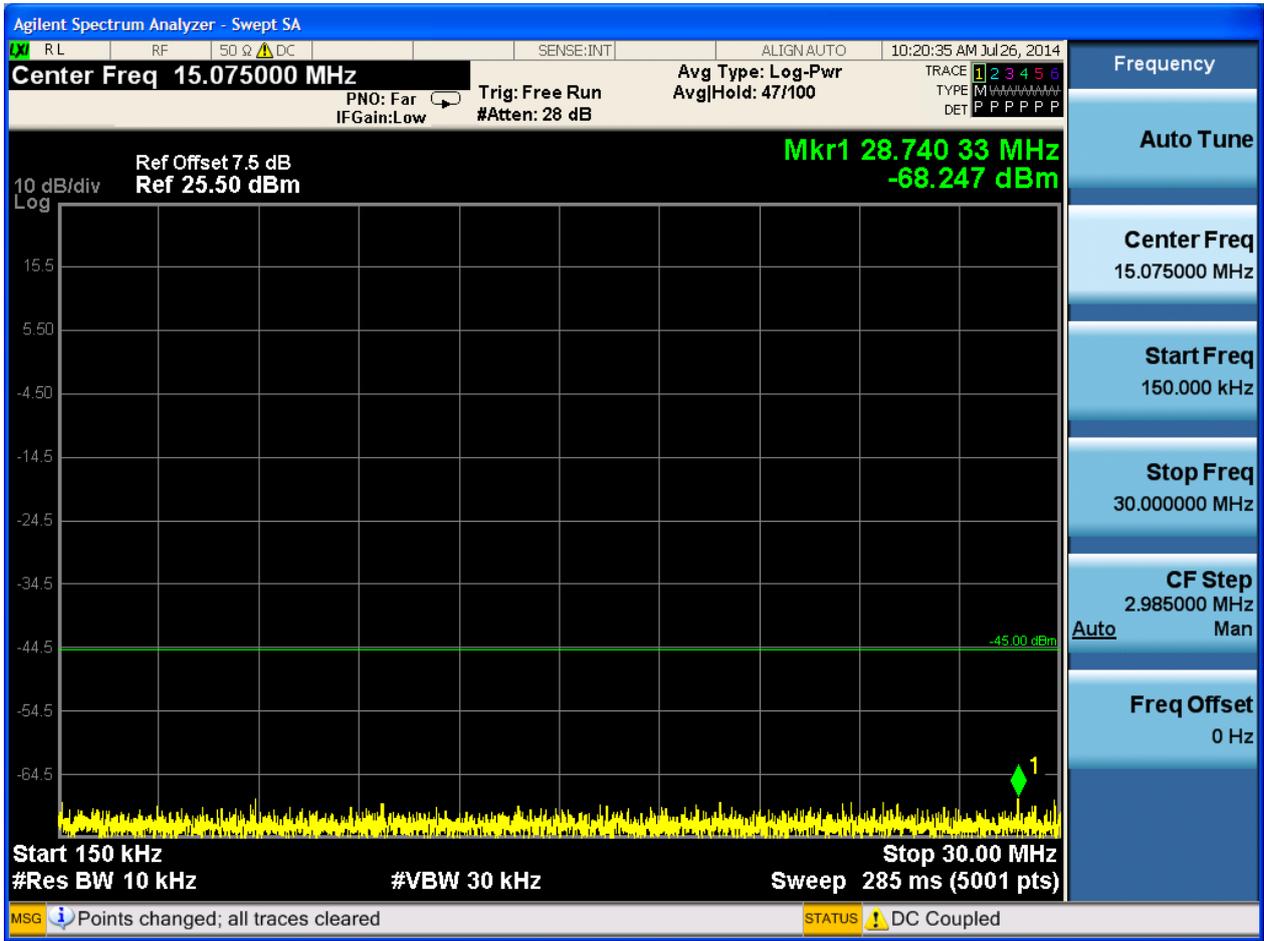


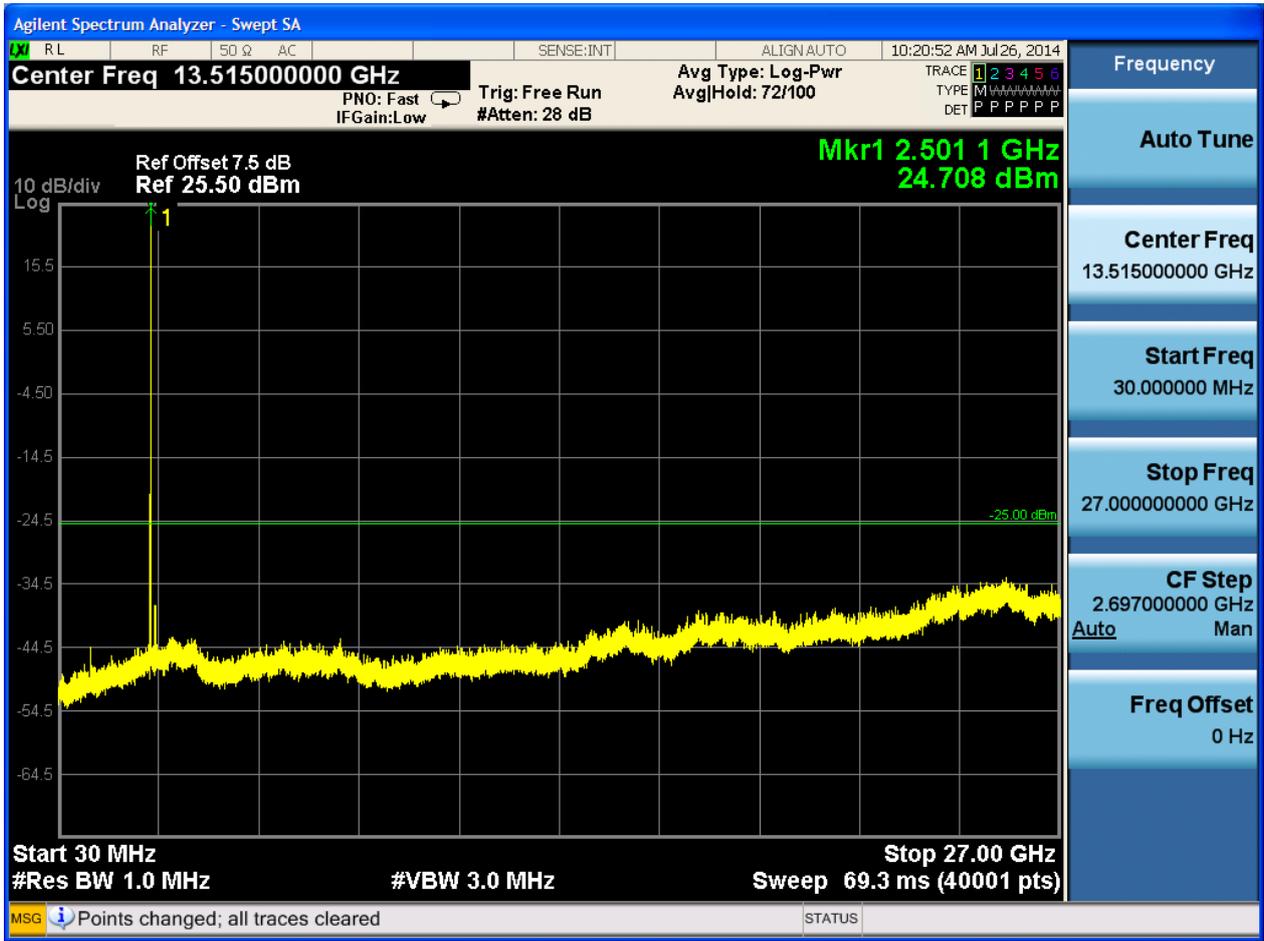
6.3.4.2.3 Test Bandwidth = 15

6.3.4.2.3.1 Test Channel = LCH

6.3.4.2.3.1.1 Test RB = RB1#0









6.3.4.2.3.2 Test Channel = MCH

6.3.4.2.3.2.1 Test RB = RB1#0



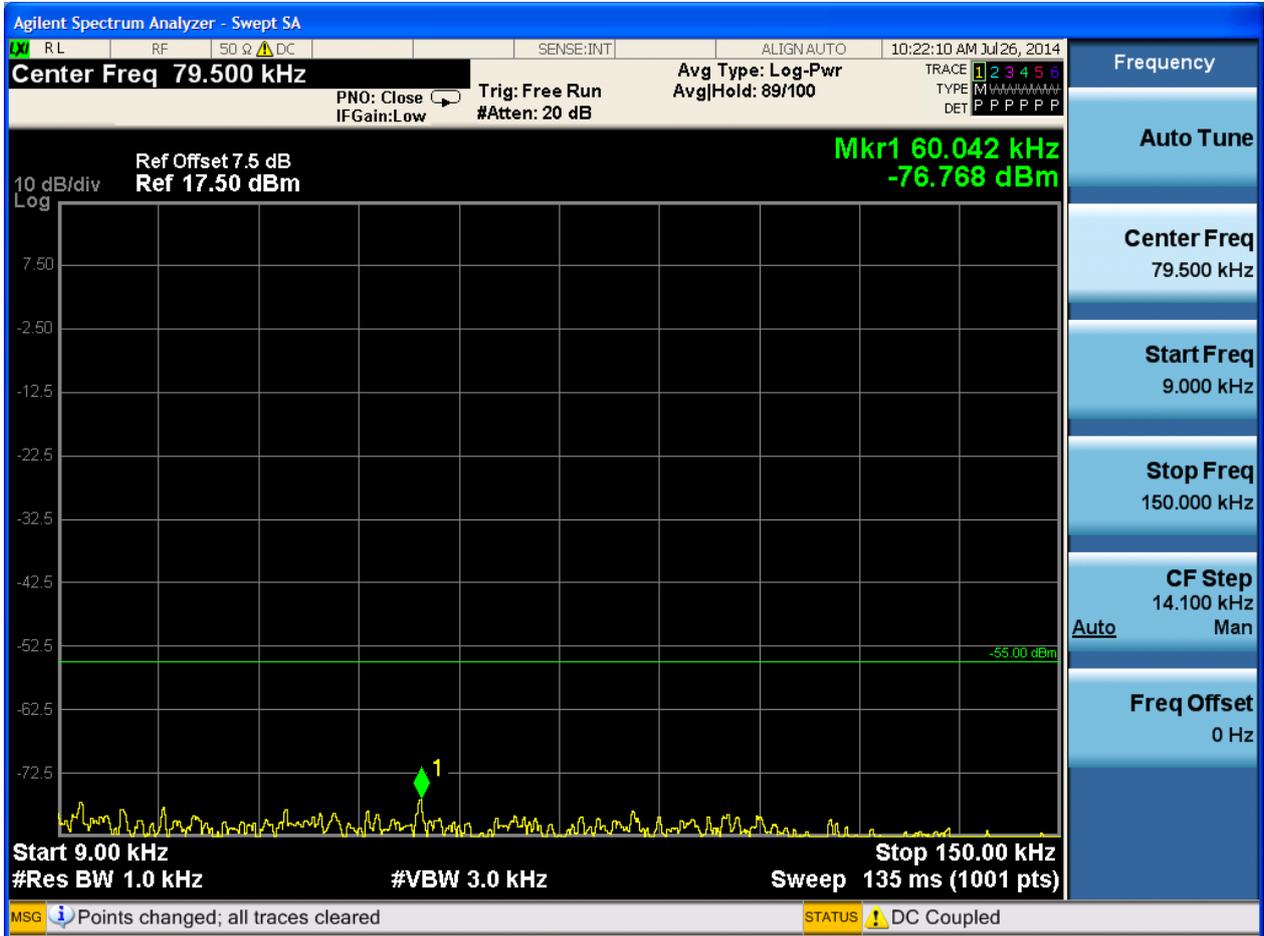


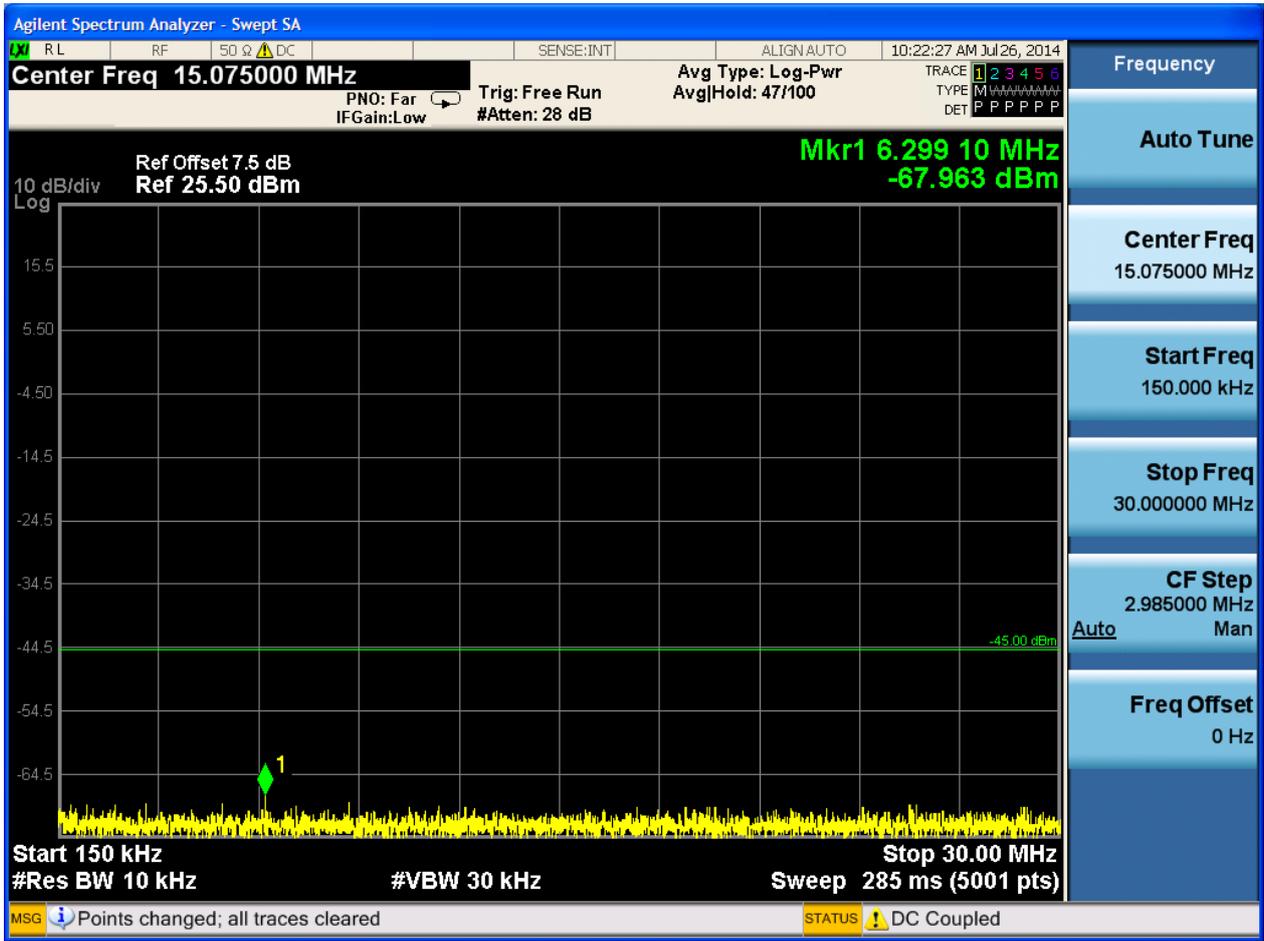


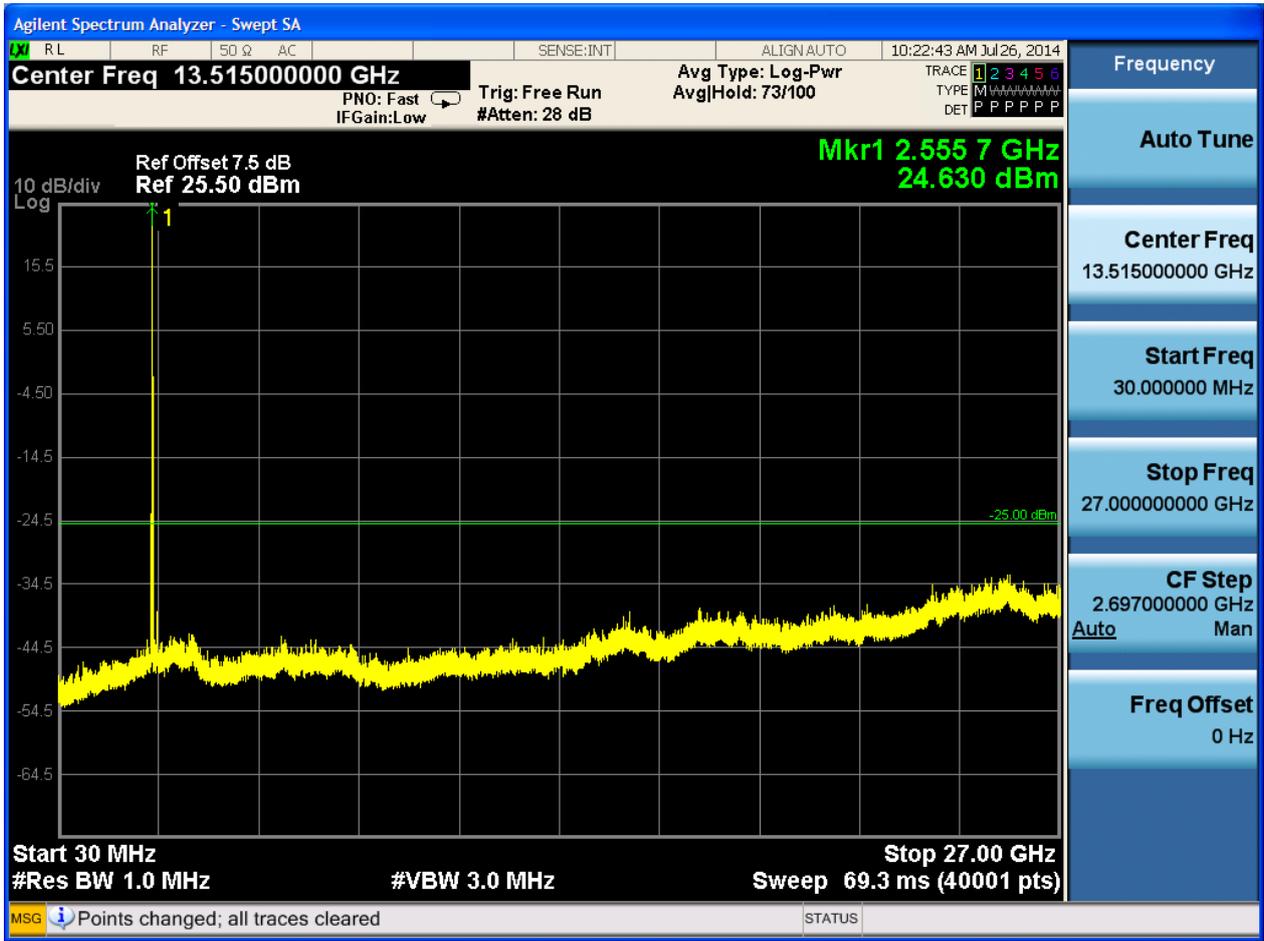


6.3.4.2.3.3 Test Channel = HCH

6.3.4.2.3.3.1 Test RB = RB1#0





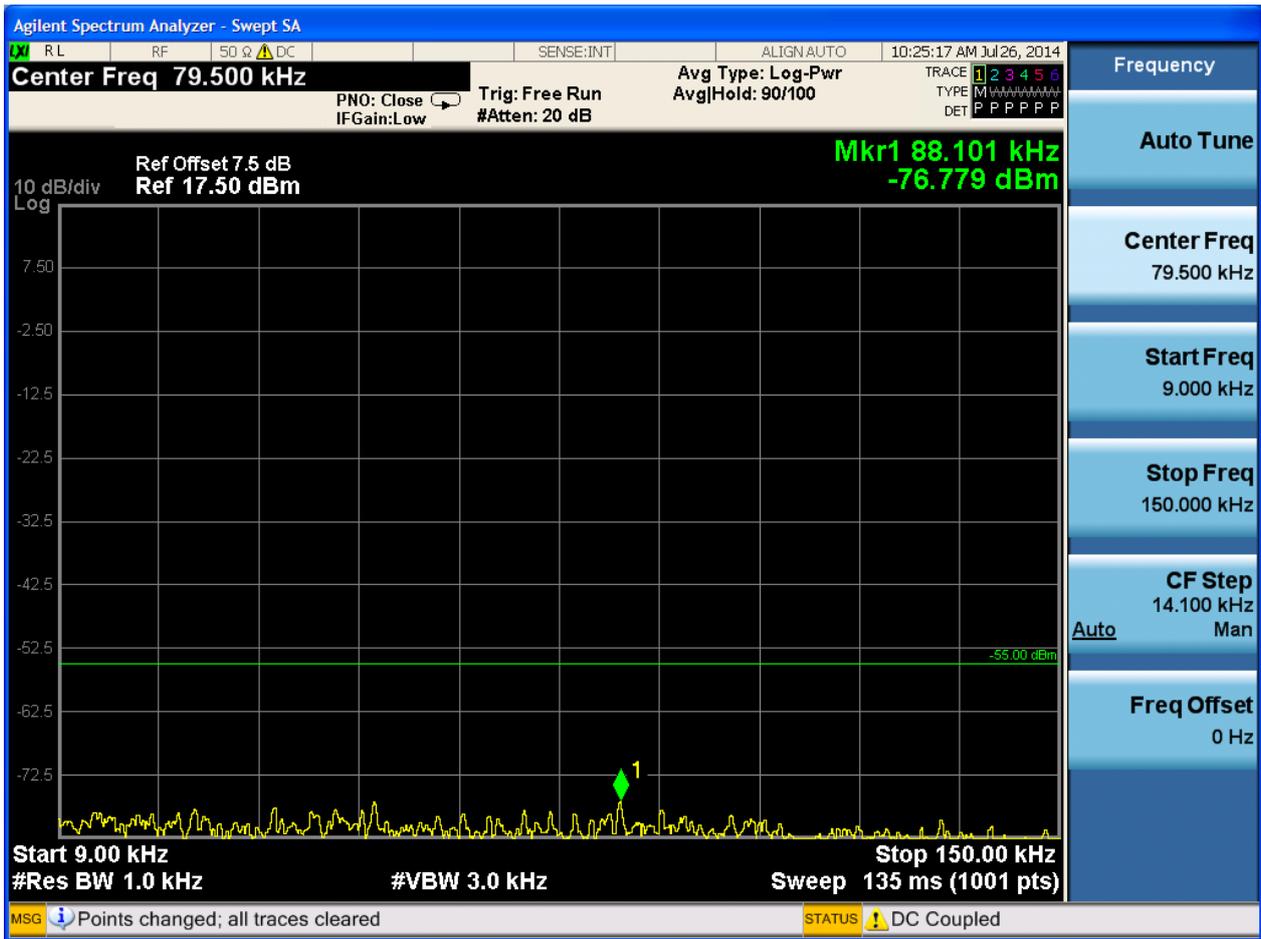


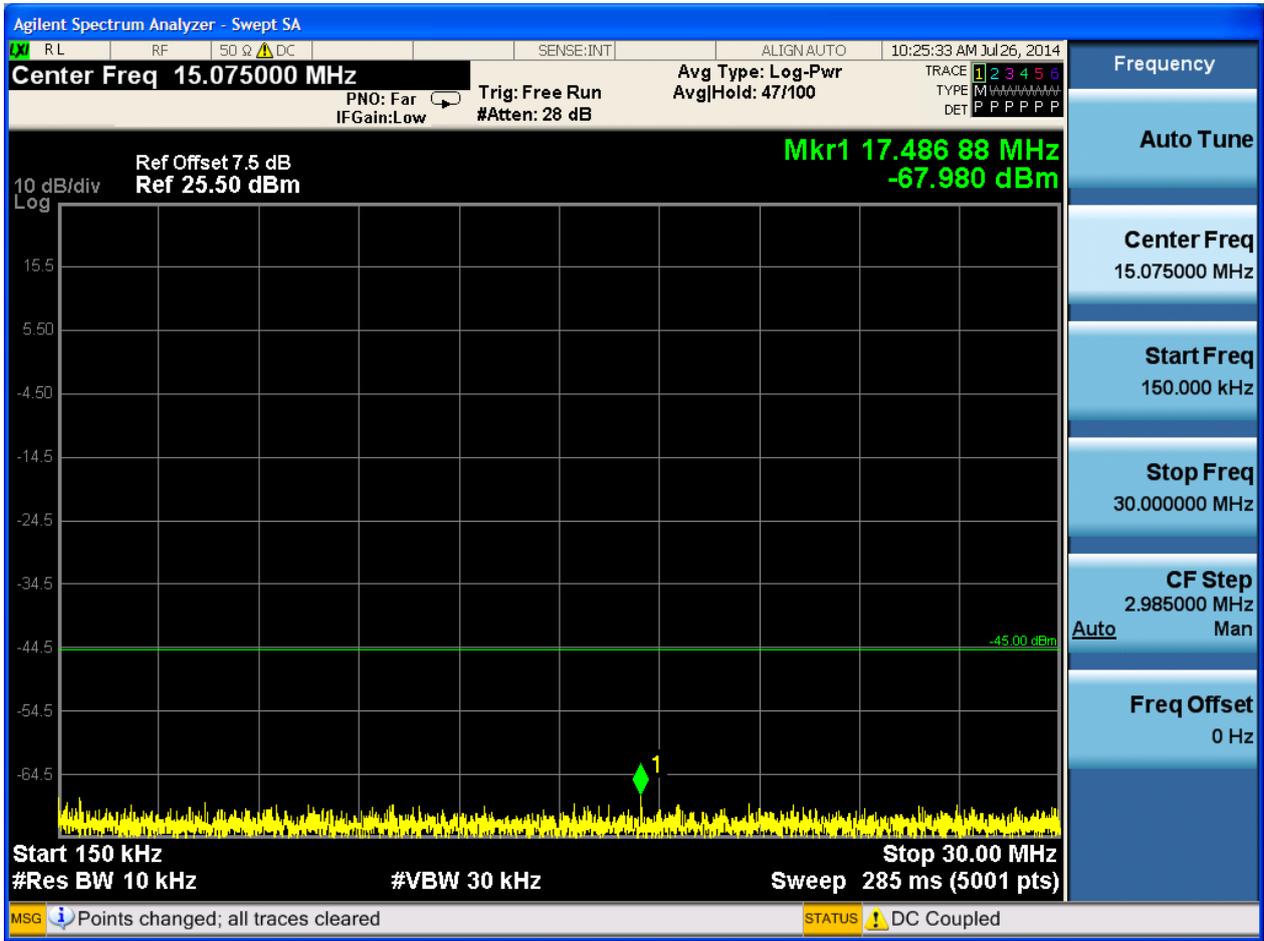


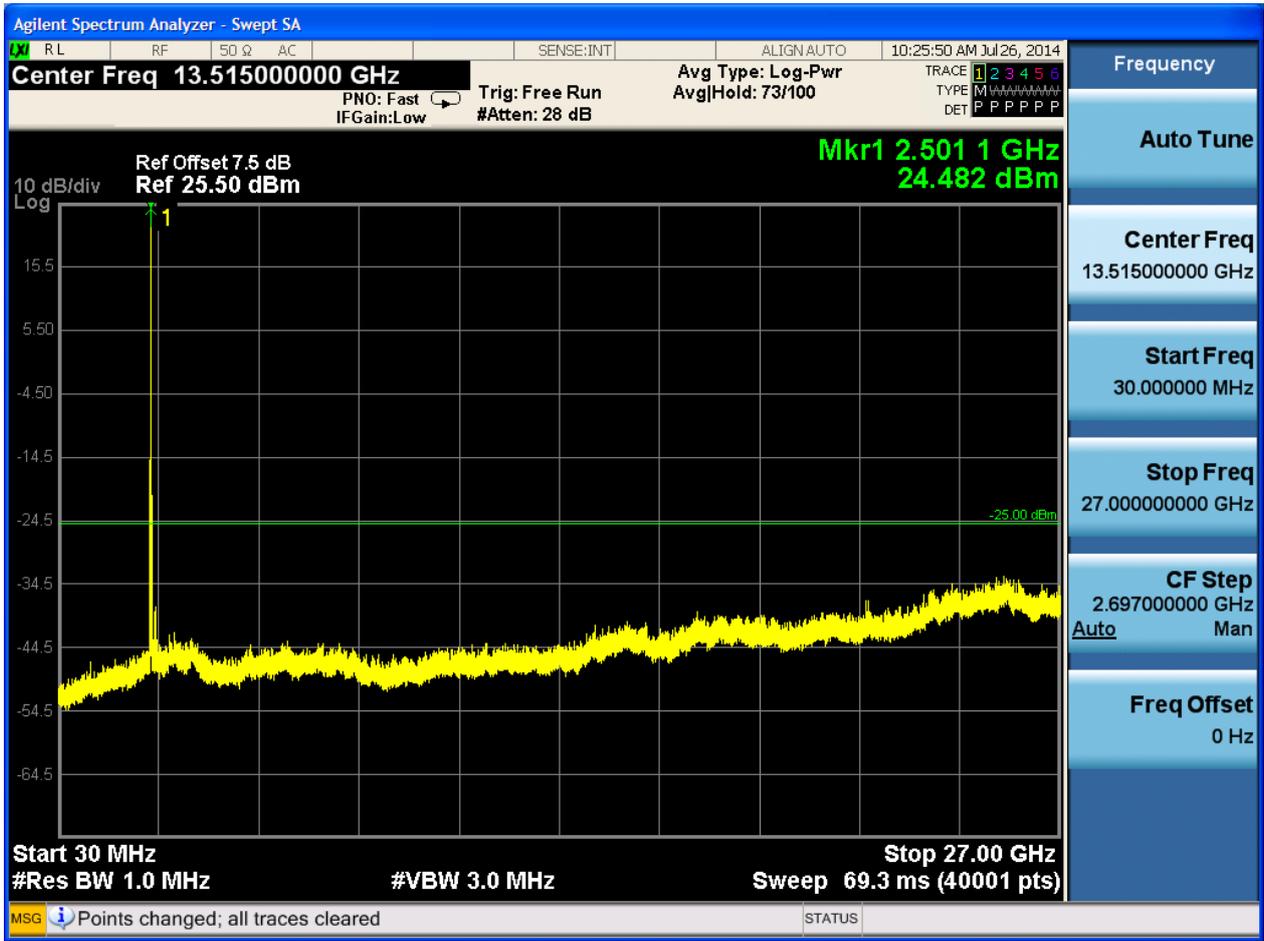
6.3.4.2.4 Test Bandwidth = 20

6.3.4.2.4.1 Test Channel = LCH

6.3.4.2.4.1.1 Test RB = RB1#0







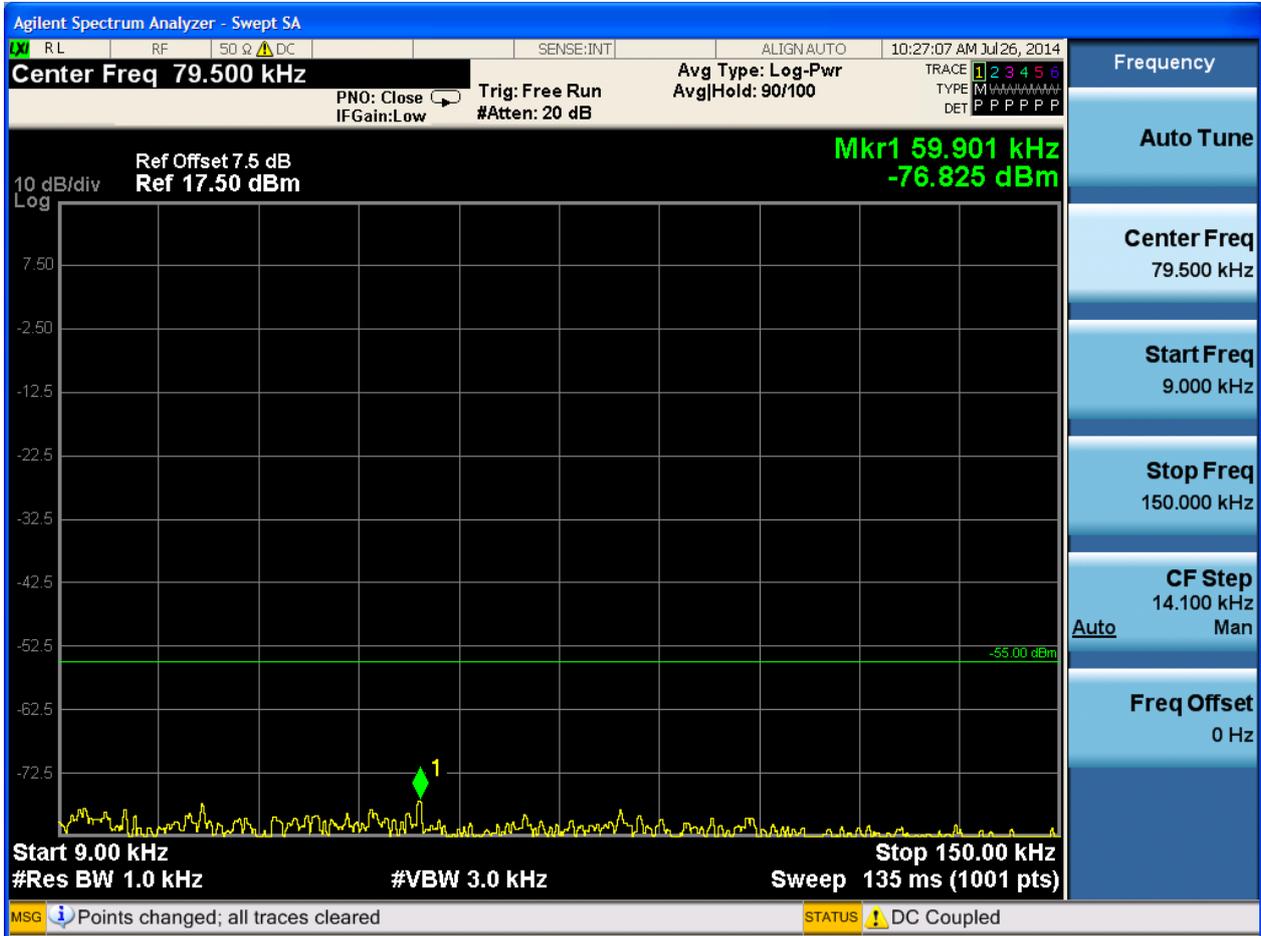


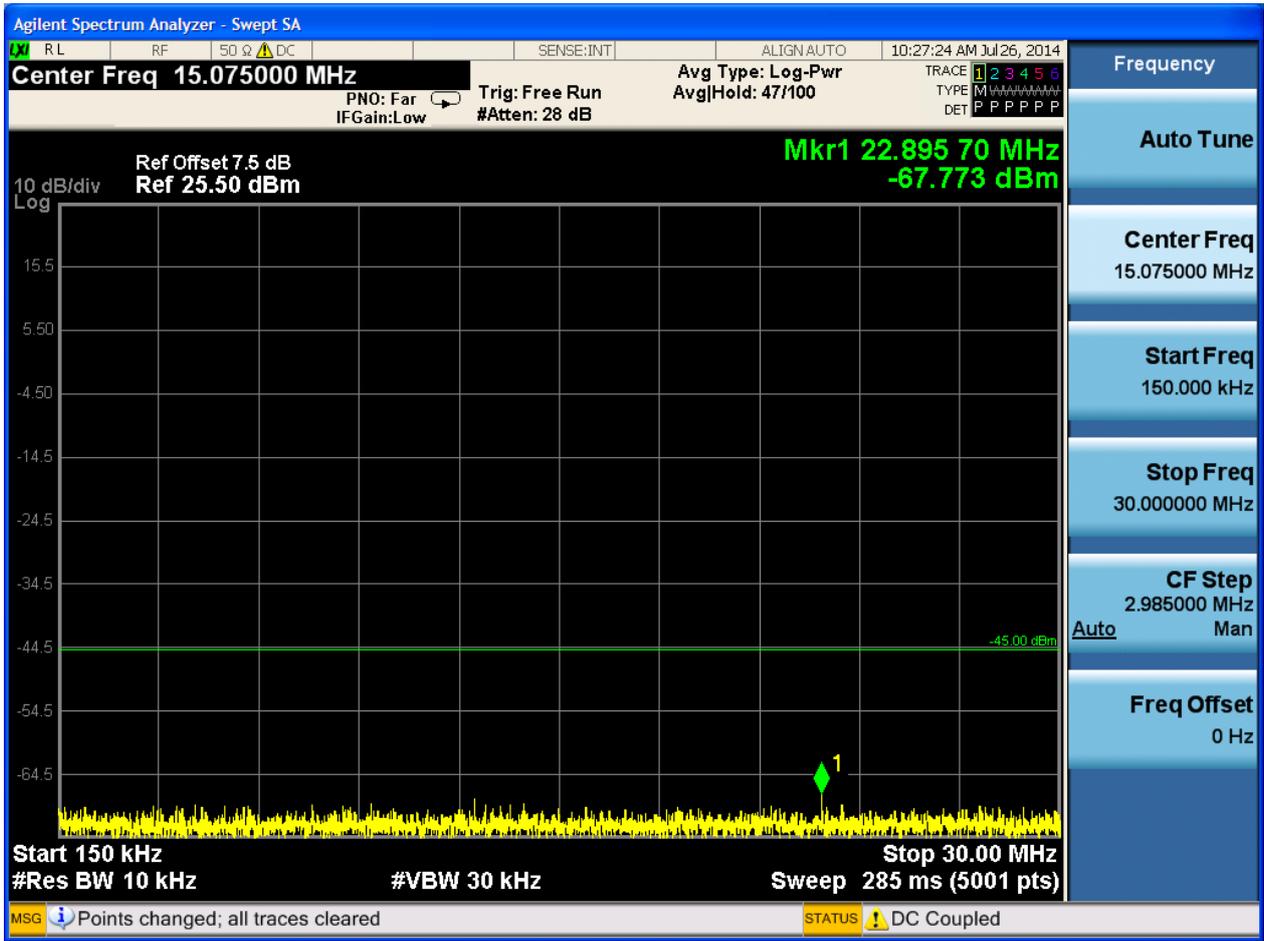




6.3.4.2.4.3 Test Channel = HCH

6.3.4.2.4.3.1 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

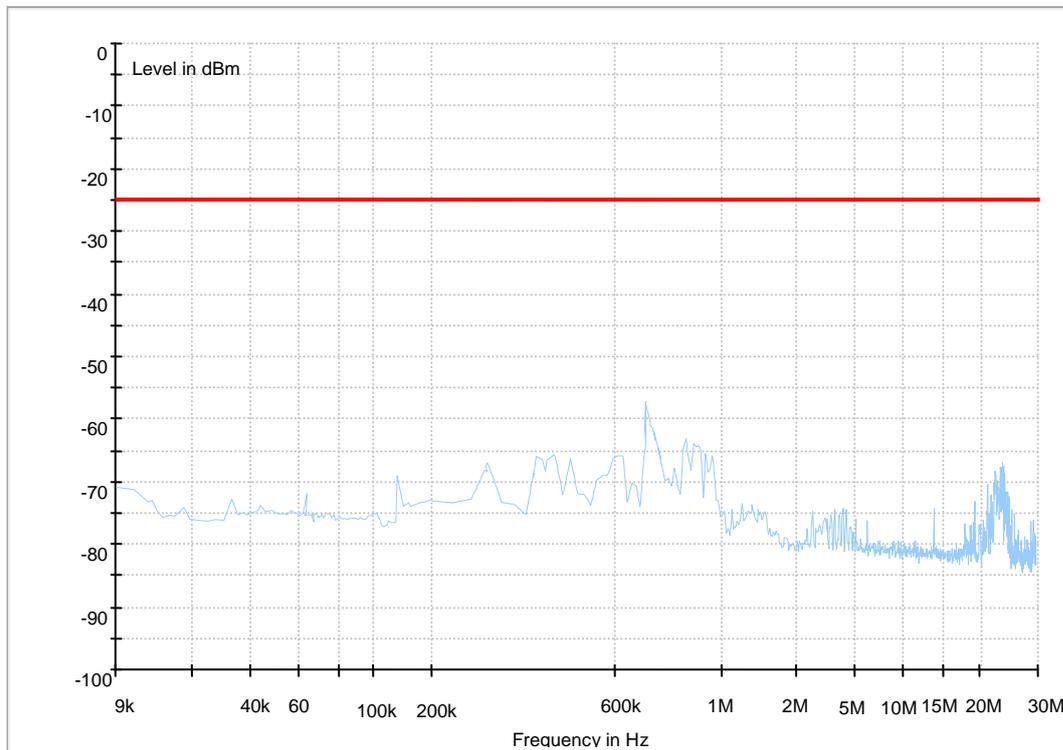
30MHz~1GHz, RBW = 100 kHz, VBW = 300 kHz. Detector: PK

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

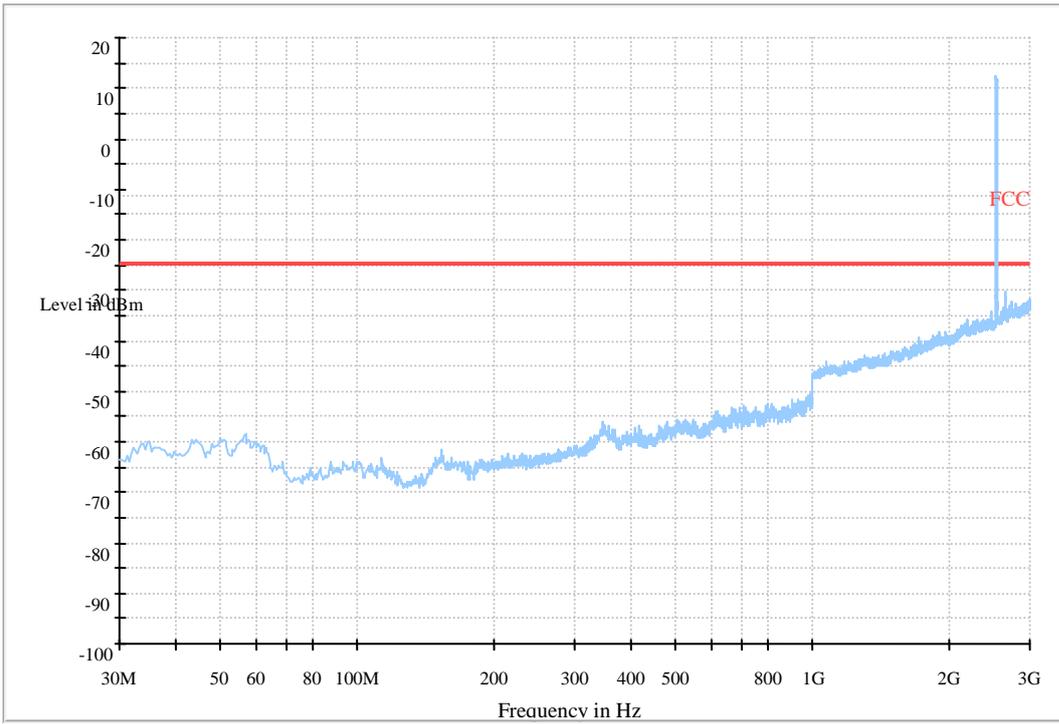
Part I - Test Plots

7.3.4 Test Band = BAND7

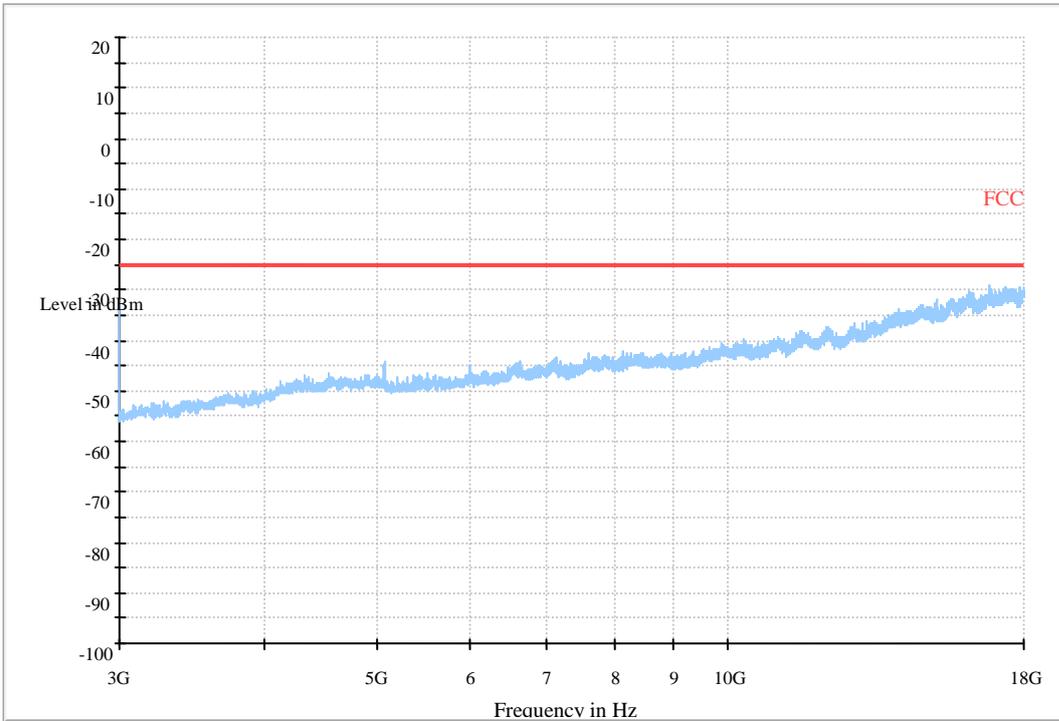
7.3.4.1 Test Bandwidth = 5

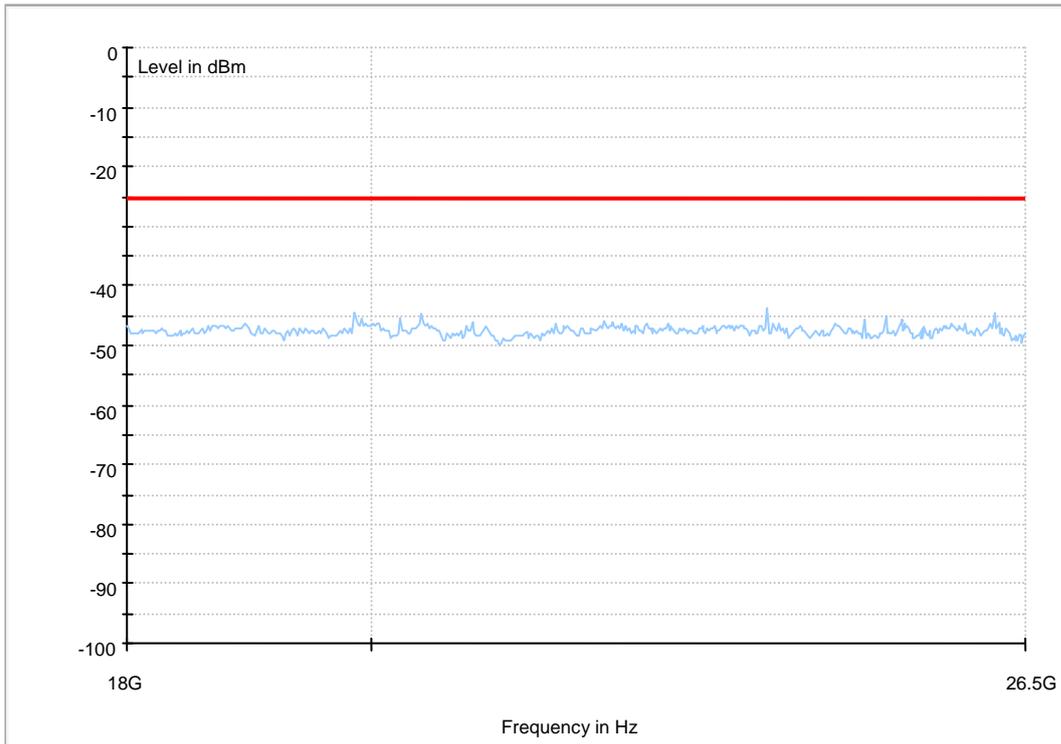


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_L

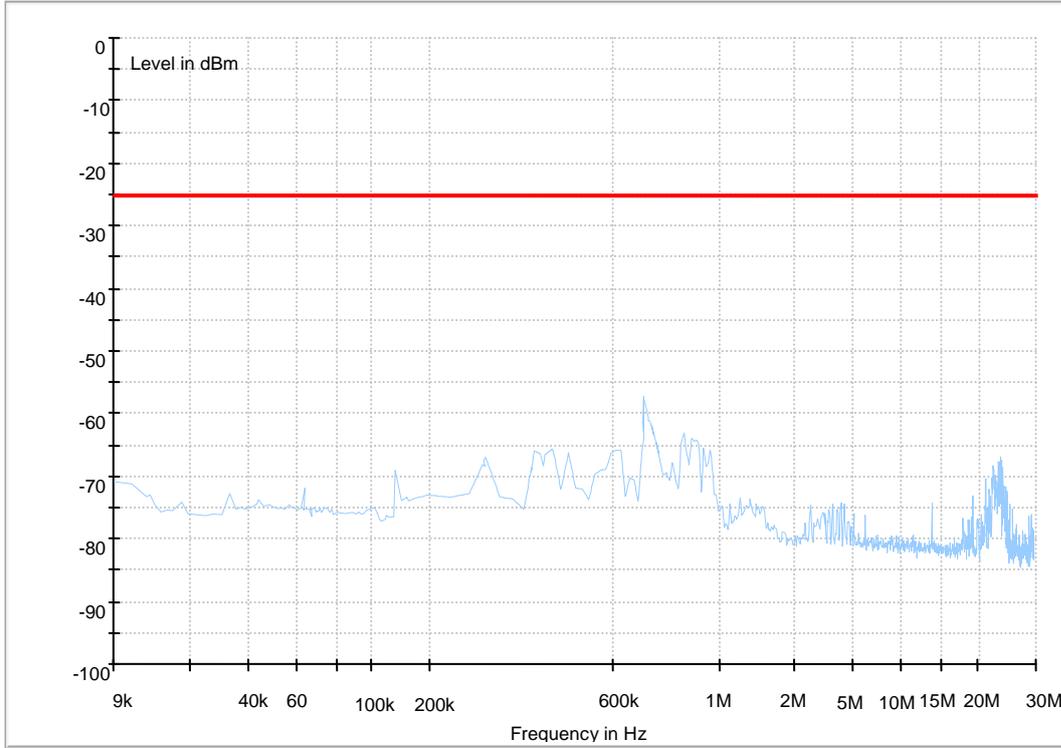


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_H

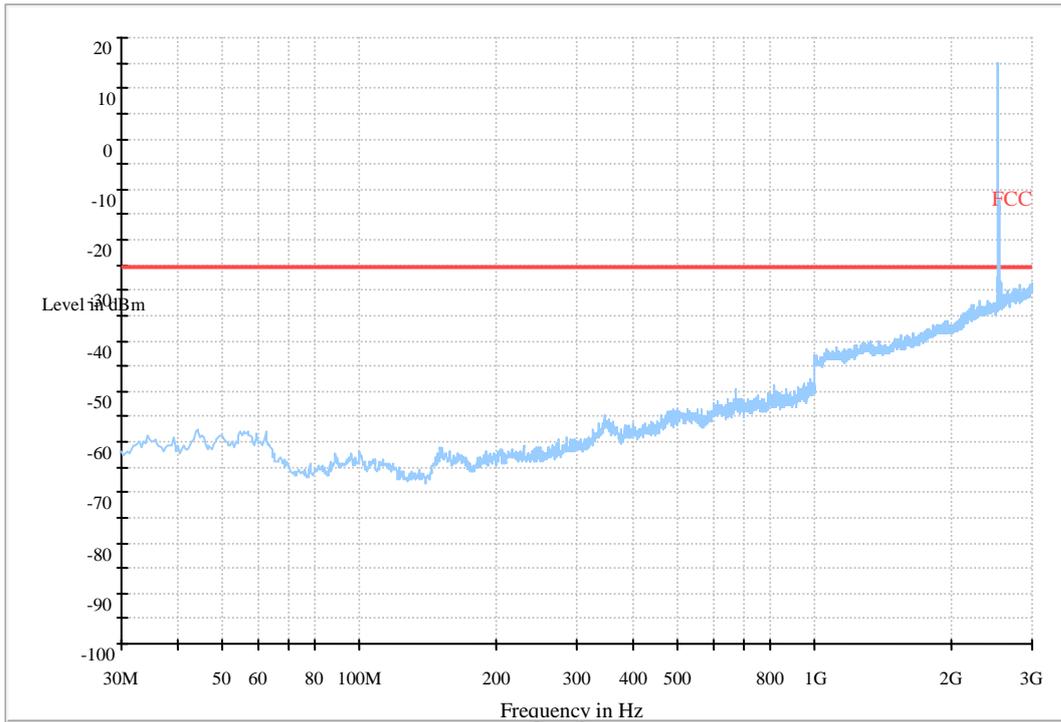




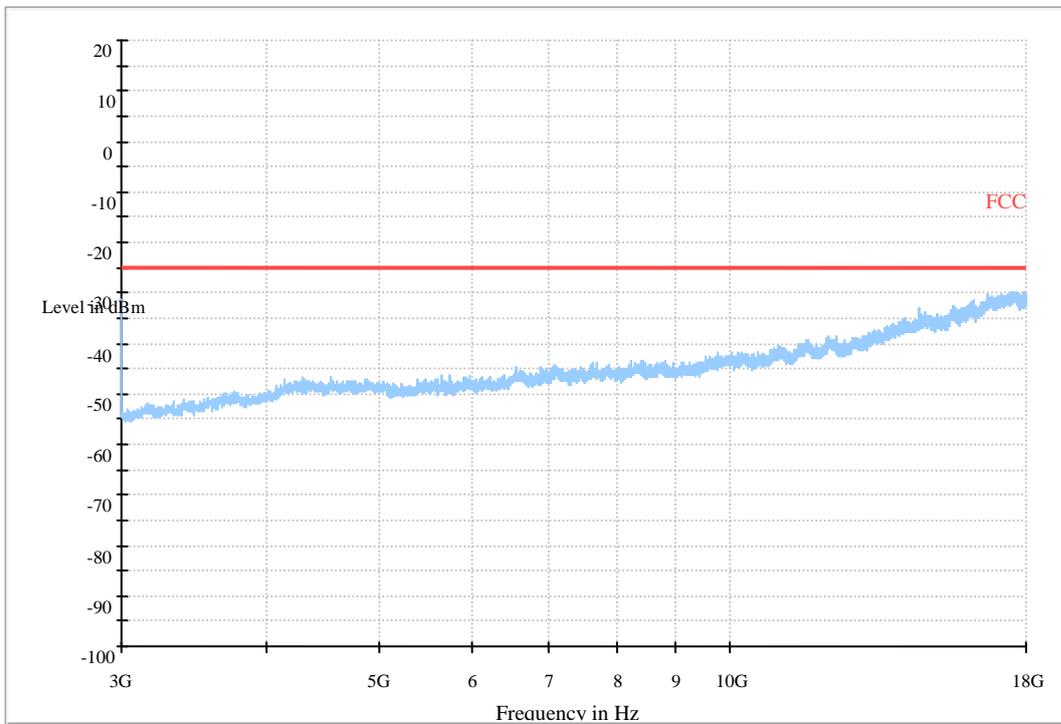
7.3.4.2 Test Bandwidth = 20

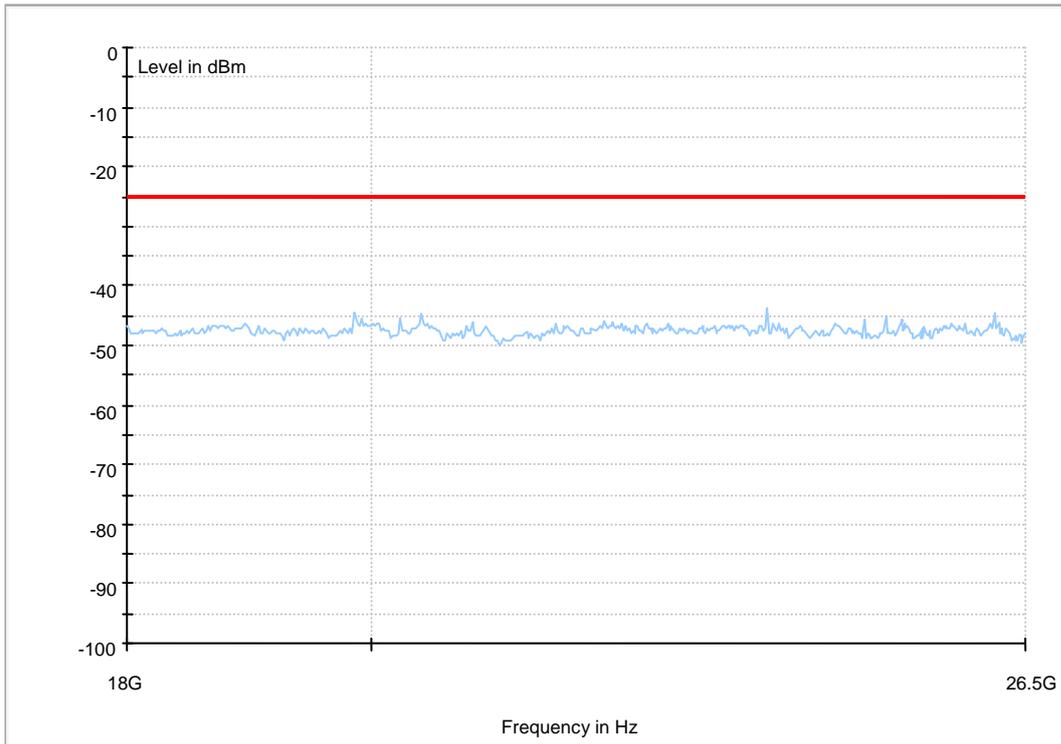


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_L



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	1.1	0.00044	PASS
					VN	2.66	0.00106	PASS
					VH	2.88	0.00115	PASS
			MCH	TN	VL	2.45	0.00097	PASS
					VN	0.31	0.00012	PASS
					VH	1.44	0.00057	PASS
			HCH	TN	VL	-3.12	-0.00122	PASS
					VN	1.69	0.00066	PASS
					VH	0.43	0.00017	PASS
		10	LCH	TN	VL	2.22	0.00089	PASS
					VN	-0.63	-0.00025	PASS
					VH	-0.82	-0.00033	PASS
			MCH	TN	VL	3.4	0.00134	PASS
					VN	-0.69	-0.00027	PASS
					VH	-0.27	-0.00011	PASS
			HCH	TN	VL	3.65	0.00142	PASS
					VN	-1.93	-0.00075	PASS
					VH	2.86	0.00112	PASS
		15	LCH	TN	VL	2.6	0.00104	PASS
					VN	2.03	0.00081	PASS
					VH	-2.69	-0.00107	PASS
			MCH	TN	VL	3.28	0.00129	PASS
					VN	2.73	0.00108	PASS
					VH	-4.26	-0.00168	PASS
HCH	TN		VL	-0.79	-0.00031	PASS		
			VN	1.66	0.00065	PASS		
			VH	2.17	0.00085	PASS		
20	LCH	TN	VL	6.69	0.00267	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	2.75	0.0011	PASS
					VH	6.84	0.00273	PASS
					VL	-2.07	-0.00082	PASS
					VN	-2.8	-0.0011	PASS
					VH	0.27	0.00011	PASS
					VL	6.87	0.00268	PASS
			HCH	TN	VN	5.48	0.00214	PASS
					VH	-3.49	-0.00136	PASS
					VL	-6.14	-0.00245	PASS
					VN	0.2	0.00008	PASS
					VH	4.88	0.00195	PASS
					VL	-4.22	-0.00166	PASS
			MCH	TN	VN	-0.44	-0.00017	PASS
					VH	3.98	0.00157	PASS
	VL	-1.9			-0.00074	PASS		
	VN	-6.62			-0.00258	PASS		
	VH	-0.37			-0.00014	PASS		
	VL	-1.75			-0.0007	PASS		
	HCH	TN	VN	-1.5	-0.0006	PASS		
			VH	-0.13	-0.00005	PASS		
			VL	1.3	0.00051	PASS		
			VN	1.07	0.00042	PASS		
			VH	1.3	0.00051	PASS		
			VL	-0.49	-0.00019	PASS		
	MCH	TN	VN	-0.86	-0.00034	PASS		
			VH	-1.63	-0.00064	PASS		
			VL	0.29	0.00012	PASS		
			VN	2.02	0.00081	PASS		
			VH	-3.88	-0.00155	PASS		
			VL	-3.55	-0.0014	PASS		
	MCH	TN	VN	-2.09	-0.00082	PASS		
			VH	-0.1	-0.00004	PASS		
			VL	-1.2	-0.00047	PASS		
			VN	-1.73	-0.00068	PASS		
			VH	2.36	0.00092	PASS		
			VL	-1.96	-0.00078	PASS		
	HCH	TN	VN	-8.58	-0.00342	PASS		
			VH	7.02	0.0028	PASS		
			VL	-2	-0.00079	PASS		
			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	-6.42	-0.00253	PASS
					VH	-5.16	-0.00204	PASS
			HCH	TN	VL	-8.77	-0.00343	PASS
					VN	-1.99	-0.00078	PASS
					VH	6.08	0.00237	PASS

8.1.2 Frequency Error vs. Temperature:

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	VN	-30	-15.68	-0.00627	PASS
					-20	2.83	0.00113	PASS
					-10	11.49	0.00459	PASS
					0	-0.2	-0.00008	PASS
					10	0.77	0.00031	PASS
					20	2.55	0.00102	PASS
					30	-4.22	-0.00169	PASS
					40	9.01	0.0036	PASS
			50	-8.57	-0.00342	PASS		
			MCH	VN	-30	-13.79	-0.00544	PASS
					-20	3.96	0.00156	PASS
					-10	-3.13	-0.00123	PASS
					0	-12.23	-0.00482	PASS
					10	-12.13	-0.00479	PASS
					20	-12.9	-0.00509	PASS
					30	5.54	0.00219	PASS
					40	-6.49	-0.00256	PASS
			50	-16.72	-0.0066	PASS		
			HCH	VN	-30	-15.55	-0.00606	PASS
					-20	-1.52	-0.00059	PASS
					-10	9.67	0.00377	PASS
					0	7.8	0.00304	PASS
					10	-2.37	-0.00092	PASS
					20	-8.6	-0.00335	PASS
		30			-13.55	-0.00528	PASS	
		40			-5.31	-0.00207	PASS	
		50	-3.45	-0.00134	PASS			
		10	LCH	VN	-30	-6.15	-0.00246	PASS
					-20	4.15	0.00166	PASS
					-10	10.17	0.00406	PASS
					0	-3.28	-0.00131	PASS
					10	5.95	0.00238	PASS
					20	11.87	0.00474	PASS
					30	0.64	0.00026	PASS
					40	6.44	0.00257	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			MCH	VN	50	7.71	0.00308	PASS
					-30	-9.68	-0.00382	PASS
					-20	-0.1	-0.00004	PASS
					-10	-20.71	-0.00817	PASS
					0	-4.45	-0.00176	PASS
					10	-4.84	-0.00191	PASS
					20	-0.69	-0.00027	PASS
					30	11.63	0.00459	PASS
					40	5.74	0.00226	PASS
			50	7.64	0.00301	PASS		
			HCH	VN	-30	-0.66	-0.00026	PASS
					-20	-12.13	-0.00473	PASS
					-10	-8.51	-0.00332	PASS
					0	5.94	0.00232	PASS
					10	-9.51	-0.00371	PASS
					20	-4.79	-0.00187	PASS
					30	-4.91	-0.00191	PASS
					40	-9.08	-0.00354	PASS
		50			-7.7	-0.003	PASS	
		15	LCH	VN	-30	-12.53	-0.005	PASS
					-20	-16.91	-0.00674	PASS
					-10	-13.2	-0.00526	PASS
					0	-8.17	-0.00326	PASS
					10	-12.47	-0.00497	PASS
					20	-15.18	-0.00605	PASS
					30	-2.35	-0.00094	PASS
					40	-16.47	-0.00657	PASS
					50	-2.02	-0.00081	PASS
			MCH	VN	-30	-3.45	-0.00136	PASS
					-20	6.31	0.00249	PASS
					-10	0.87	0.00034	PASS
					0	-9.16	-0.00361	PASS
					10	6.49	0.00256	PASS
					20	-7.95	-0.00314	PASS
					30	-1.3	-0.00051	PASS
					40	-1.9	-0.00075	PASS
					50	-2.09	-0.00082	PASS
		HCH	VN	-30	-18.37	-0.00717	PASS	
				-20	-11.14	-0.00435	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict							
					-10	-5.16	-0.00201	PASS							
					0	2.9	0.00113	PASS							
					10	-7.97	-0.00311	PASS							
					20	-2.35	-0.00092	PASS							
					30	-2.39	-0.00093	PASS							
					40	3.91	0.00153	PASS							
					50	12.47	0.00487	PASS							
					LCH	VN				-30	-17.37	-0.00692	PASS		
										-20	-9.44	-0.00376	PASS		
										-10	-0.93	-0.00037	PASS		
										0	-5.95	-0.00237	PASS		
										10	9.91	0.00395	PASS		
										20	-3.93	-0.00157	PASS		
										30	5.25	0.00209	PASS		
										40	-8.51	-0.00339	PASS		
		50	6.51	0.00259						PASS					
		MCH	VN									-30	0.74	0.00029	PASS
												-20	2.86	0.00113	PASS
												-10	-9	-0.00355	PASS
												0	-7.31	-0.00288	PASS
												10	6.28	0.00248	PASS
												20	-5.65	-0.00223	PASS
					30	-2.09	-0.00082	PASS							
					40	6.82	0.00269	PASS							
		HCH	VN				50	-10.06	-0.00397	PASS					
							-30	-3.76	-0.00147	PASS					
							-20	-13.69	-0.00535	PASS					
							-10	-17.17	-0.00671	PASS					
							0	-5.69	-0.00222	PASS					
							10	-16.68	-0.00652	PASS					
							20	-3.32	-0.0013	PASS					
							30	-4.69	-0.00183	PASS					
		LCH	VN	5			40	-10.14	-0.00396	PASS					
							50	-12.25	-0.00479	PASS					
							-30	-12.59	-0.00503	PASS					
							-20	-1.52	-0.00061	PASS					
							-10	-10.91	-0.00436	PASS					
							0	-11.66	-0.00466	PASS					
							10	-14.65	-0.00585	PASS					



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict							
					20	-2.88	-0.00115	PASS							
					30	-8.24	-0.00329	PASS							
					40	-9.28	-0.00371	PASS							
					50	5.64	0.00225	PASS							
			MCH	VN				-30	-10.49	-0.00414	PASS				
								-20	-1.85	-0.00073	PASS				
								-10	-18.88	-0.00745	PASS				
								0	-10.24	-0.00404	PASS				
								10	-1.92	-0.00076	PASS				
								20	4.73	0.00187	PASS				
								30	-4.66	-0.00184	PASS				
								40	-10.81	-0.00426	PASS				
			HCH	VN				50	-20.6	-0.00813	PASS				
								-30	-18.3	-0.00713	PASS				
								-20	3.25	0.00127	PASS				
								-10	-8.65	-0.00337	PASS				
								0	-10.53	-0.0041	PASS				
								10	-11.23	-0.00437	PASS				
								20	2.19	0.00085	PASS				
								30	-0.53	-0.00021	PASS				
		10					40	-1.27	-0.00049	PASS					
							50	-0.82	-0.00032	PASS					
							LCH	VN				-30	-12.66	-0.00505	PASS
												-20	-3.65	-0.00146	PASS
												-10	-13.63	-0.00544	PASS
												0	-0.49	-0.0002	PASS
												10	-6.32	-0.00252	PASS
												20	-4.81	-0.00192	PASS
												30	-2.53	-0.00101	PASS
												40	-14.09	-0.00562	PASS
		MCH	VN				50	-13.98	-0.00558	PASS					
							-30	-8.97	-0.00354	PASS					
							-20	-8.91	-0.00351	PASS					
							-10	-2.78	-0.0011	PASS					
							0	-3.46	-0.00136	PASS					
							10	-0.79	-0.00031	PASS					
							20	-14.58	-0.00575	PASS					
							30	2.65	0.00105	PASS					
							40	-2.75	-0.00108	PASS					



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
			HCH	VN	50	-0.16	-0.00006	PASS			
					-30	-1.73	-0.00067	PASS			
					-20	-2.89	-0.00113	PASS			
					-10	1.03	0.0004	PASS			
					0	-19.9	-0.00776	PASS			
					10	-8.68	-0.00338	PASS			
					20	-6.22	-0.00242	PASS			
					30	3.83	0.00149	PASS			
					40	8.57	0.00334	PASS			
					50	1.2	0.00047	PASS			
		15	LCH	VN			-30	-9.71	-0.00387	PASS	
							-20	-12.93	-0.00516	PASS	
							-10	-15.28	-0.00609	PASS	
							0	-20.99	-0.00837	PASS	
							10	-6.67	-0.00266	PASS	
							20	-3.59	-0.00143	PASS	
							30	6.95	0.00277	PASS	
							40	-4.65	-0.00185	PASS	
			50	2.75	0.0011	PASS					
			MCH	VN				-30	-6.94	-0.00274	PASS
								-20	-6.97	-0.00275	PASS
								-10	-10.47	-0.00413	PASS
								0	-3.25	-0.00128	PASS
								10	1.66	0.00065	PASS
								20	0.93	0.00037	PASS
								30	-5.24	-0.00207	PASS
								40	-1.75	-0.00069	PASS
			50	-4.06	-0.0016	PASS					
		HCH	VN				-30	-5.91	-0.00231	PASS	
							-20	0.53	0.00021	PASS	
							-10	-8.27	-0.00323	PASS	
							0	5.98	0.00233	PASS	
							10	-0.3	-0.00012	PASS	
							20	-4.65	-0.00181	PASS	
							30	6.59	0.00257	PASS	
							40	-1.12	-0.00044	PASS	
		50	1.3	0.00051	PASS						
		20	LCH	VN			-30	-13.26	-0.00528	PASS	
							-20	-9.94	-0.00396	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-10	-12.83	-0.00511	PASS
					0	-11.2	-0.00446	PASS
					10	-11.17	-0.00445	PASS
					20	-5.24	-0.00209	PASS
					30	-7.65	-0.00305	PASS
					40	-1.26	-0.0005	PASS
					50	-9.13	-0.00364	PASS
			MCH	VN	-30	-9.23	-0.00364	PASS
					-20	-1.27	-0.0005	PASS
					-10	7.28	0.00287	PASS
					0	4.15	0.00164	PASS
					10	-4.53	-0.00179	PASS
					20	0.94	0.00037	PASS
					30	9.56	0.00377	PASS
			HCH	VN	40	1.53	0.0006	PASS
					50	7.07	0.00279	PASS
					-30	-10.1	-0.00395	PASS
					-20	-14.16	-0.00553	PASS
					-10	-13.03	-0.00509	PASS
					0	-2.27	-0.00089	PASS
					10	-10.47	-0.00409	PASS
					20	-6.65	-0.0026	PASS
			30	4.28	0.00167	PASS		
			40	0.13	0.00005	PASS		
			50	-13.35	-0.00521	PASS		

END