



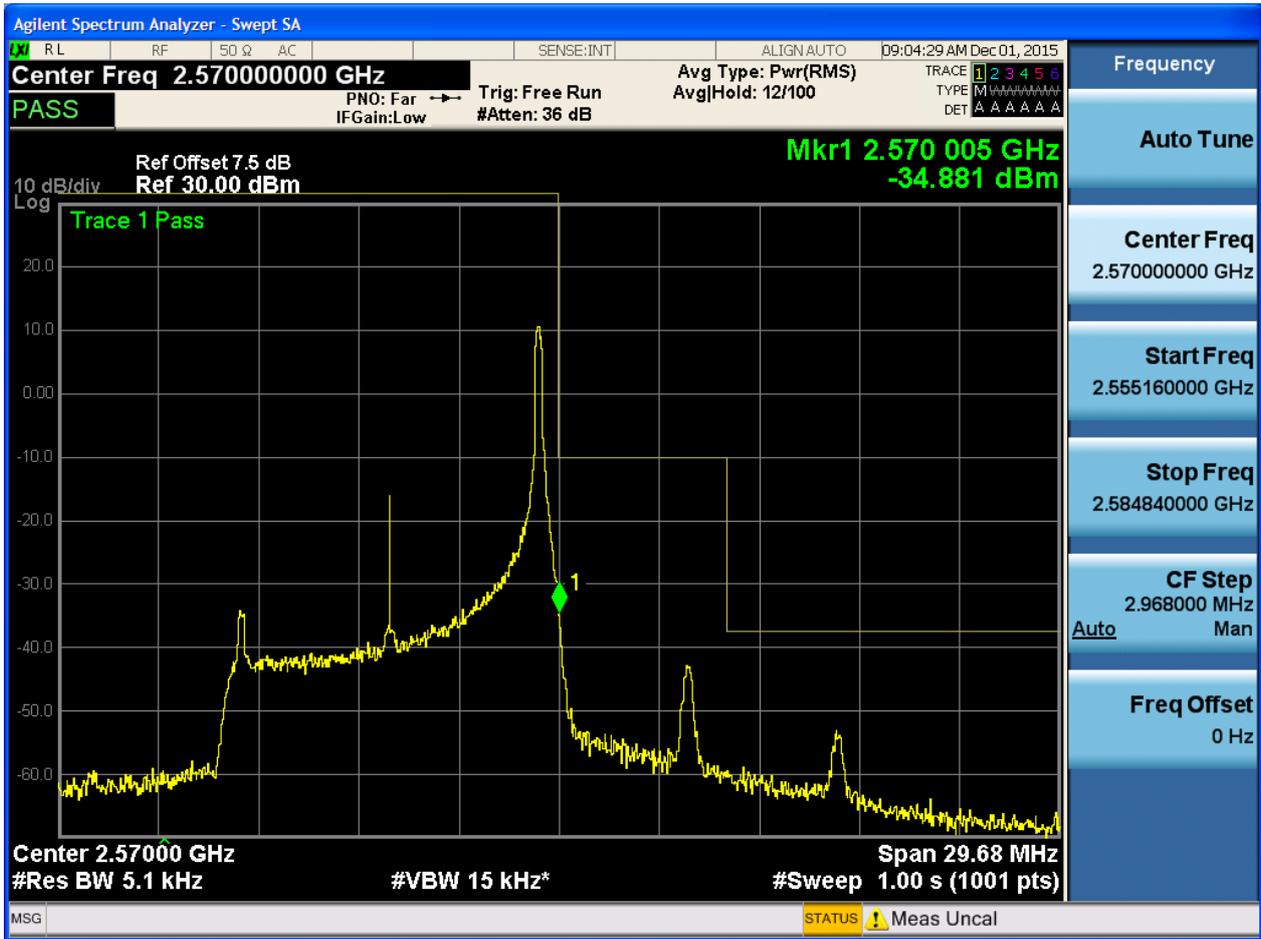
5.1.1.2.2.2 Test Channel = HCH

5.1.1.2.2.2.1 Test RB = RB1#0





5.1.1.2.2.2 Test RB = RB1#49





5.1.1.2.2.2.3 Test RB = RB25#13





5.1.1.2.2.2.4 Test RB = RB50#0

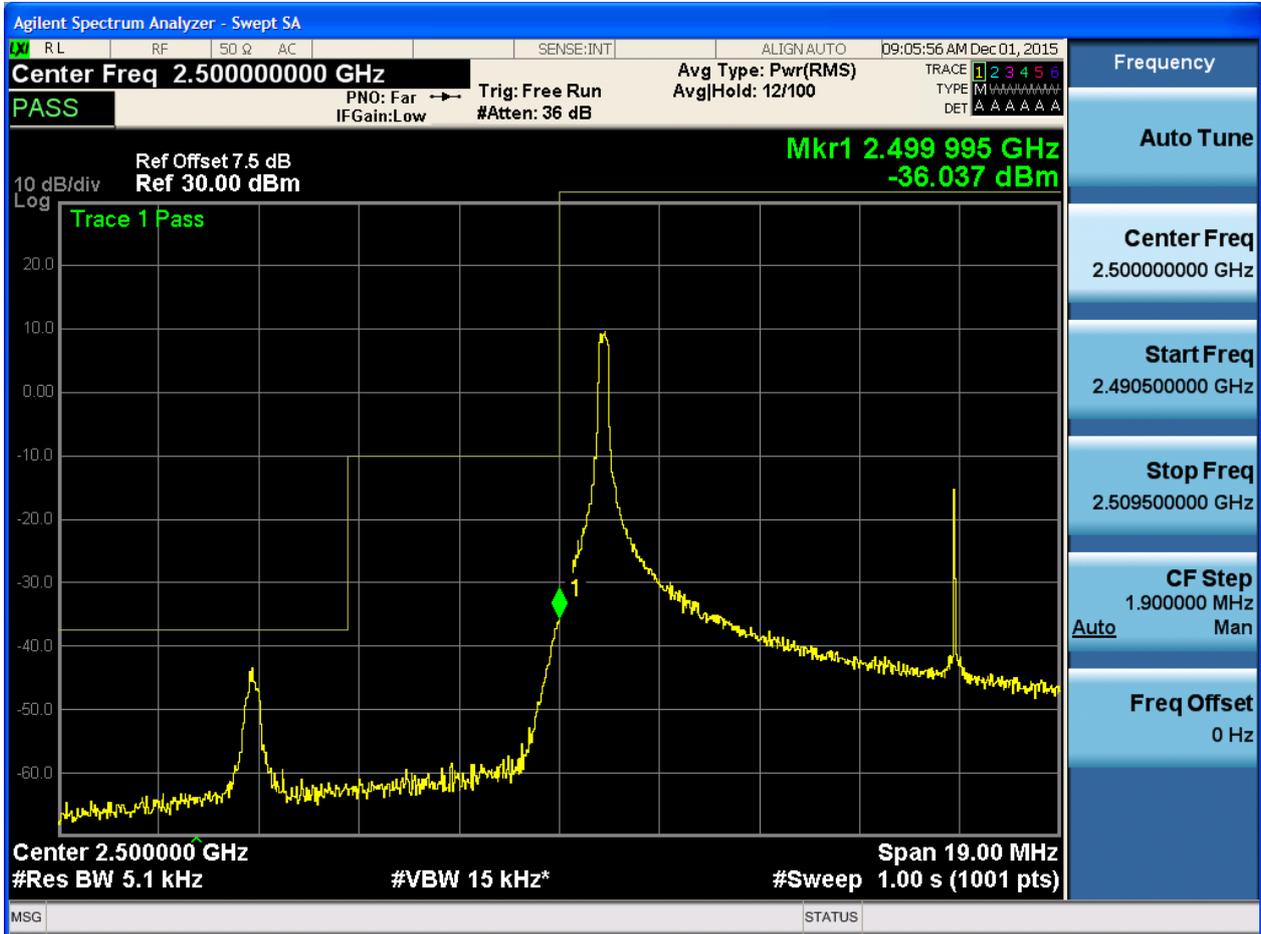




5.1.1.2.3 Test Bandwidth = 15

5.1.1.2.3.1 Test Channel = LCH

5.1.1.2.3.1.1 Test RB = RB1#0





5.1.1.2.3.1.2 Test RB = RB1#74





5.1.1.2.3.1.3 Test RB = RB36#18





5.1.1.2.3.1.4 Test RB = RB75#0





5.1.1.2.3.2.2 Test RB = RB1#74





5.1.1.2.3.2.3 Test RB = RB36#18





5.1.1.2.3.2.4 Test RB = RB75#0

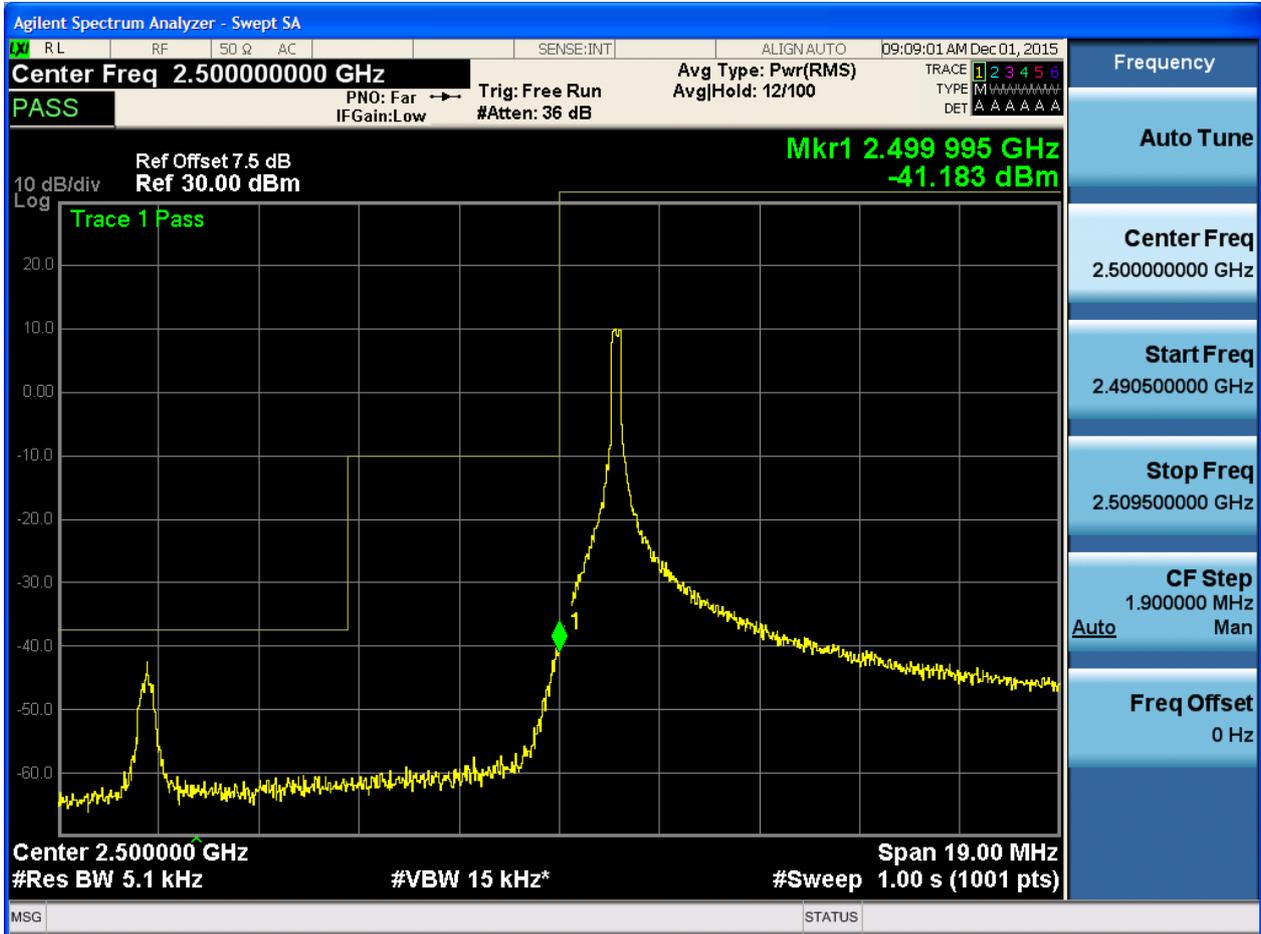




5.1.1.2.4 Test Bandwidth = 20

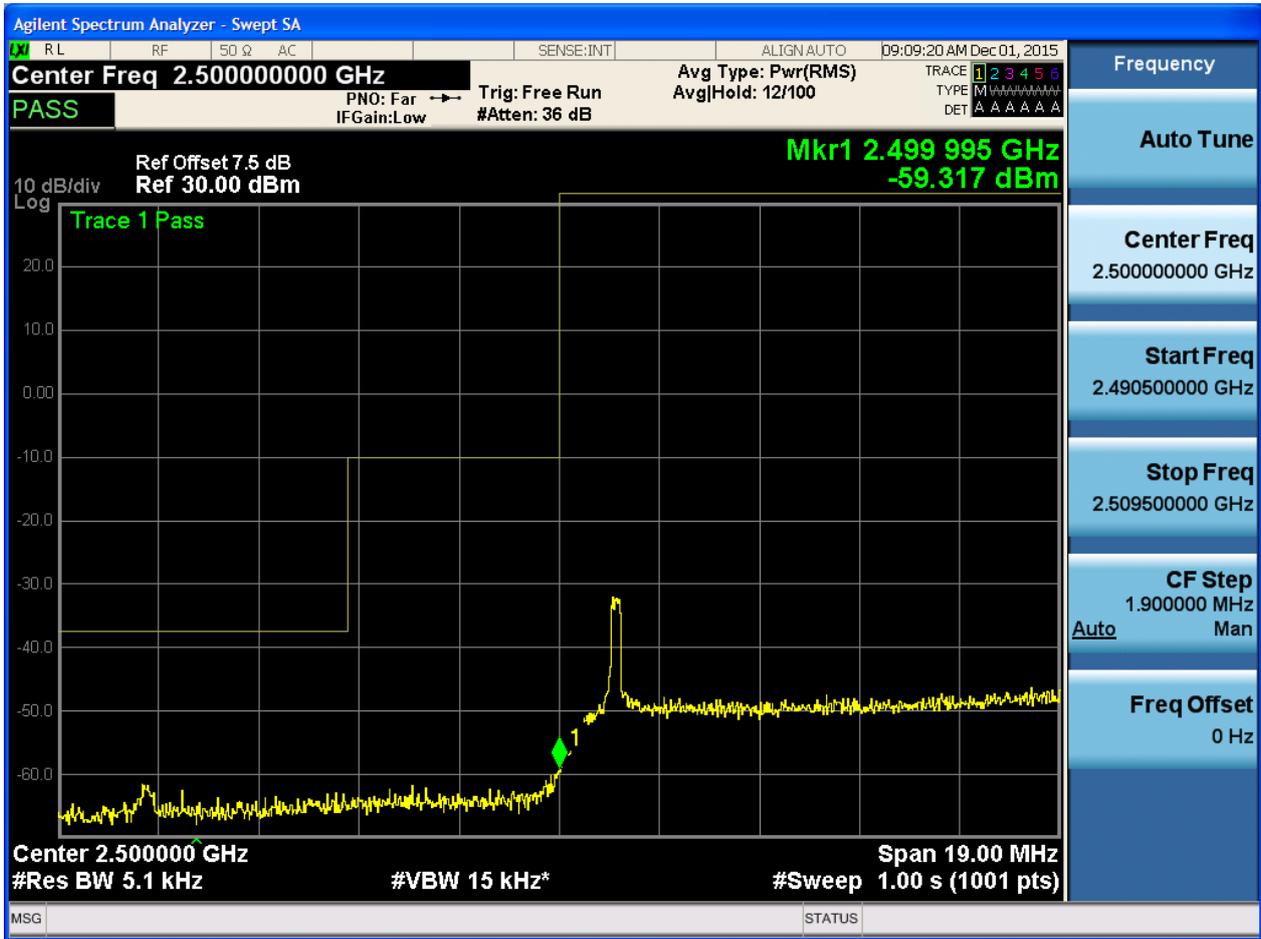
5.1.1.2.4.1 Test Channel = LCH

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

6.1 For LTE

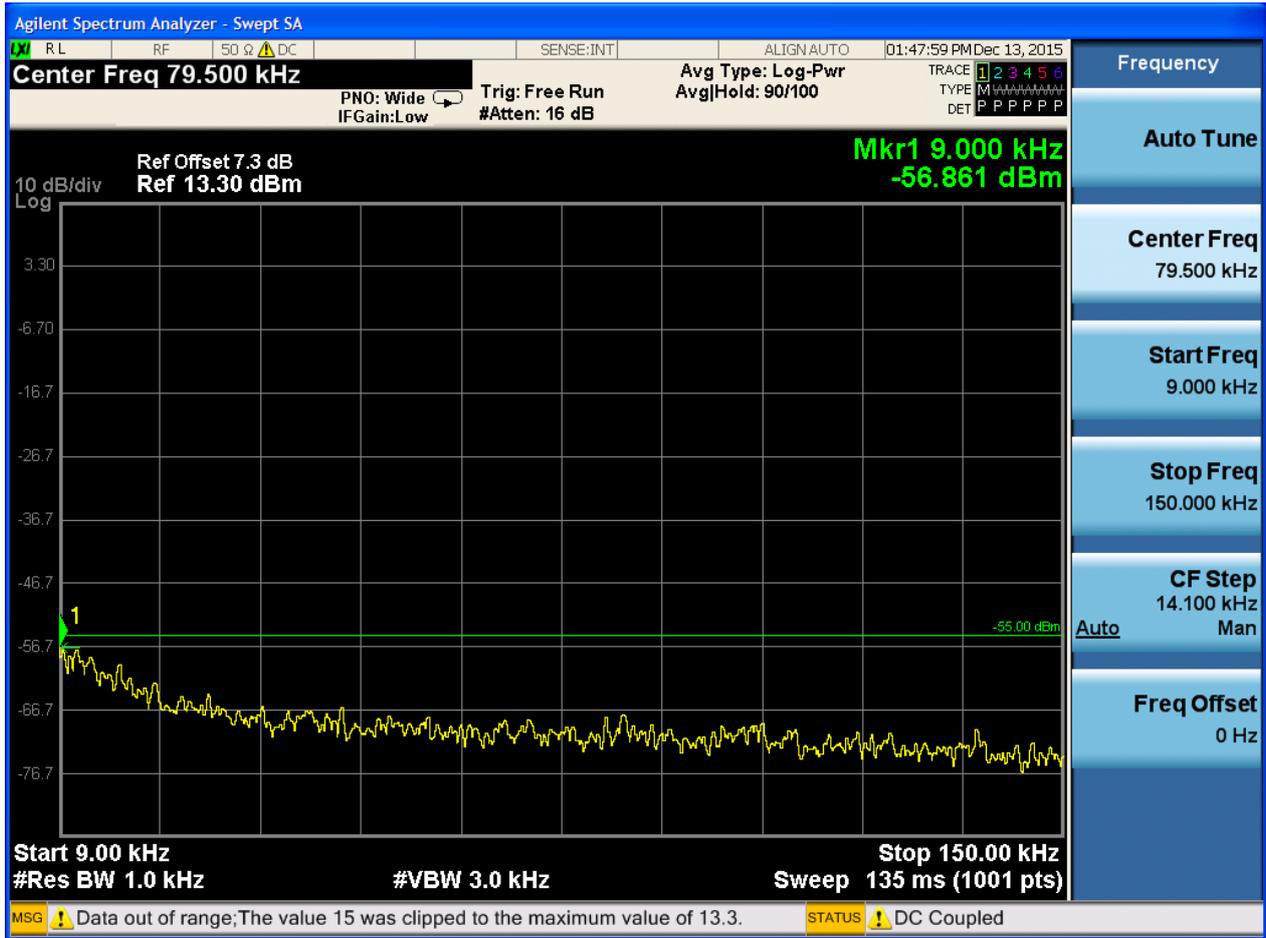
6.1.1 Test Band = BAND7

6.1.1.1 Test Mode = LTE/TM1

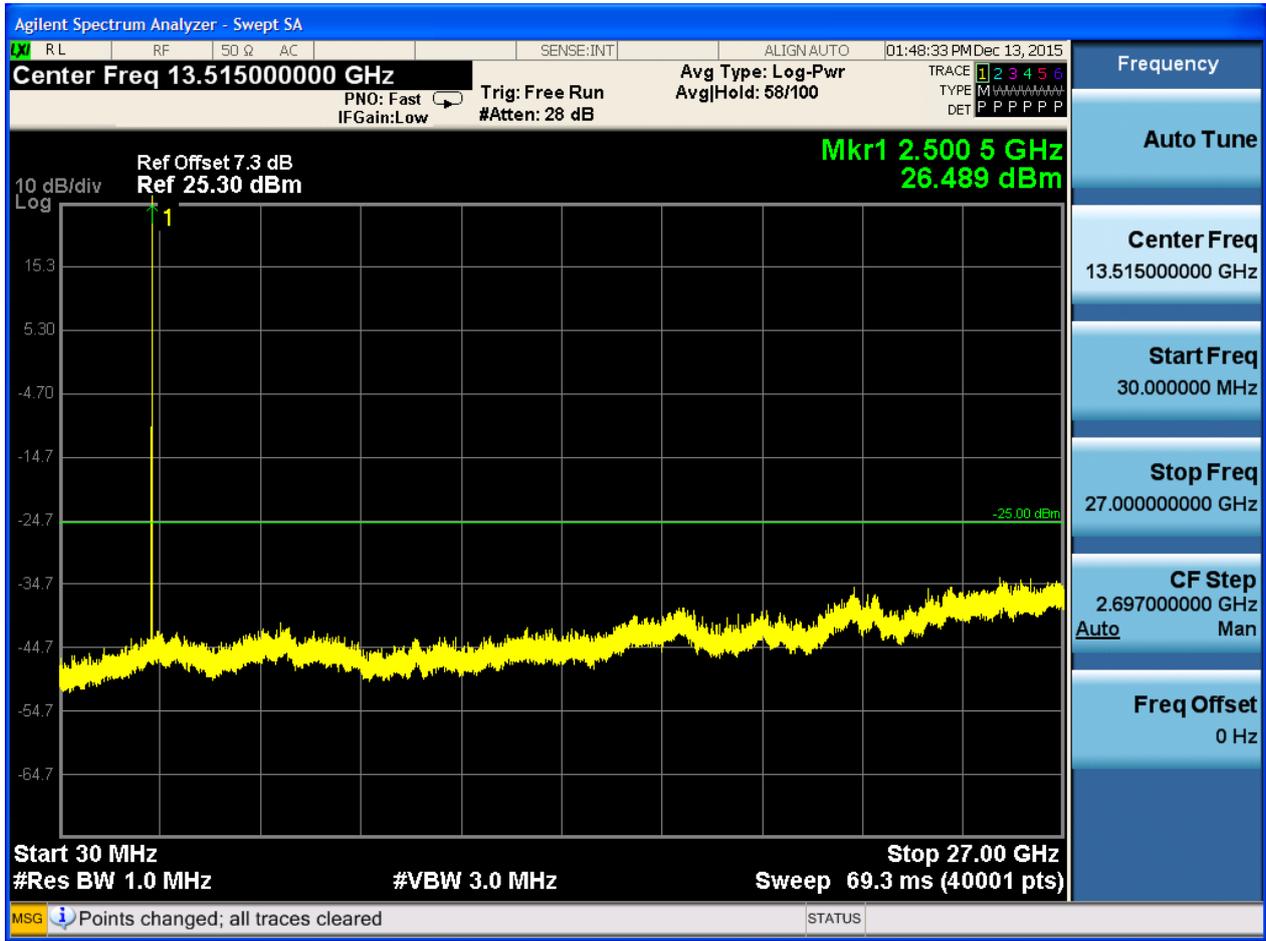
6.1.1.1.1 Test Bandwidth = 5

6.1.1.1.1.1 Test Channel = LCH

6.1.1.1.1.1.1 Test RB = RB1#0



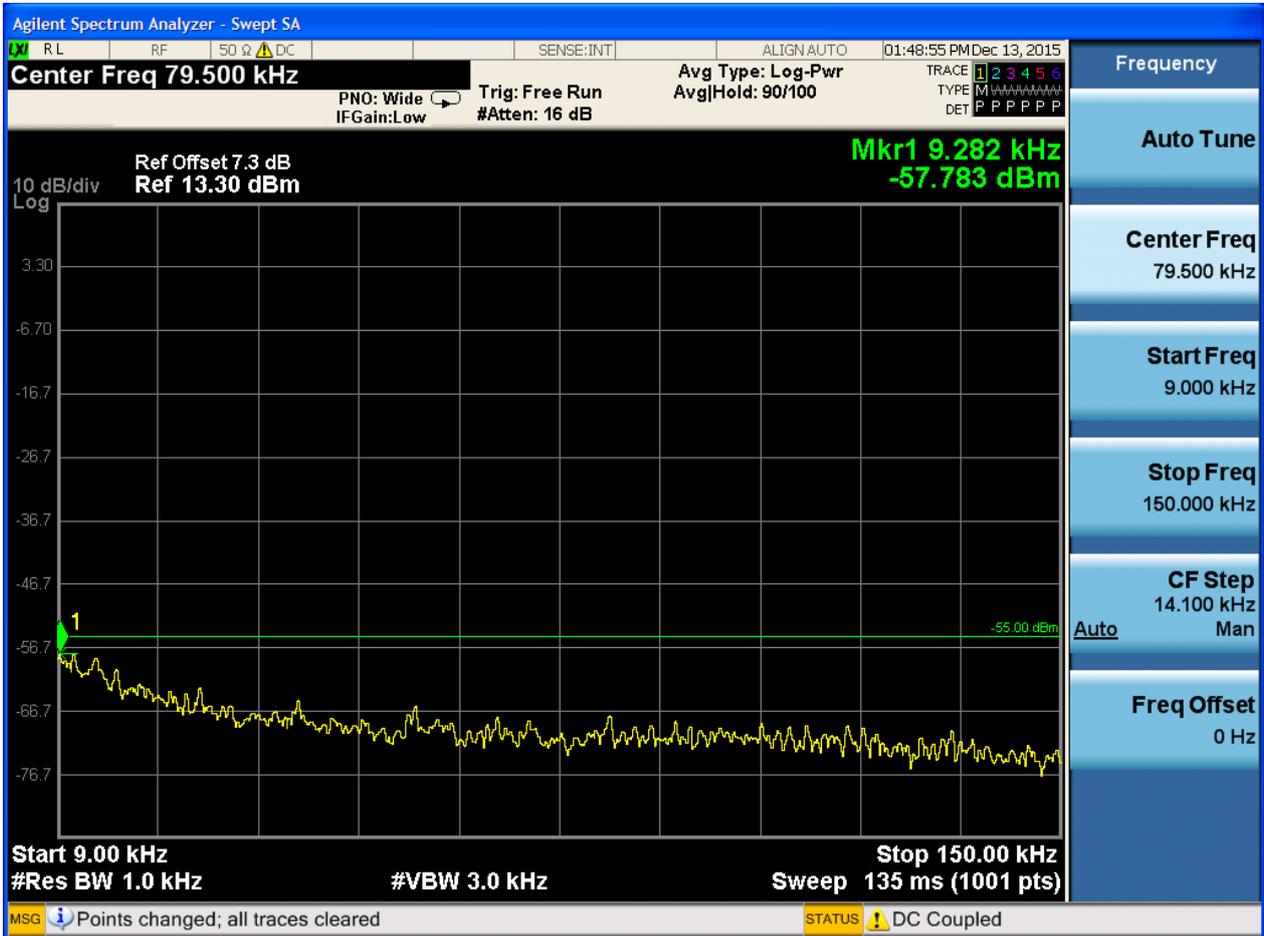


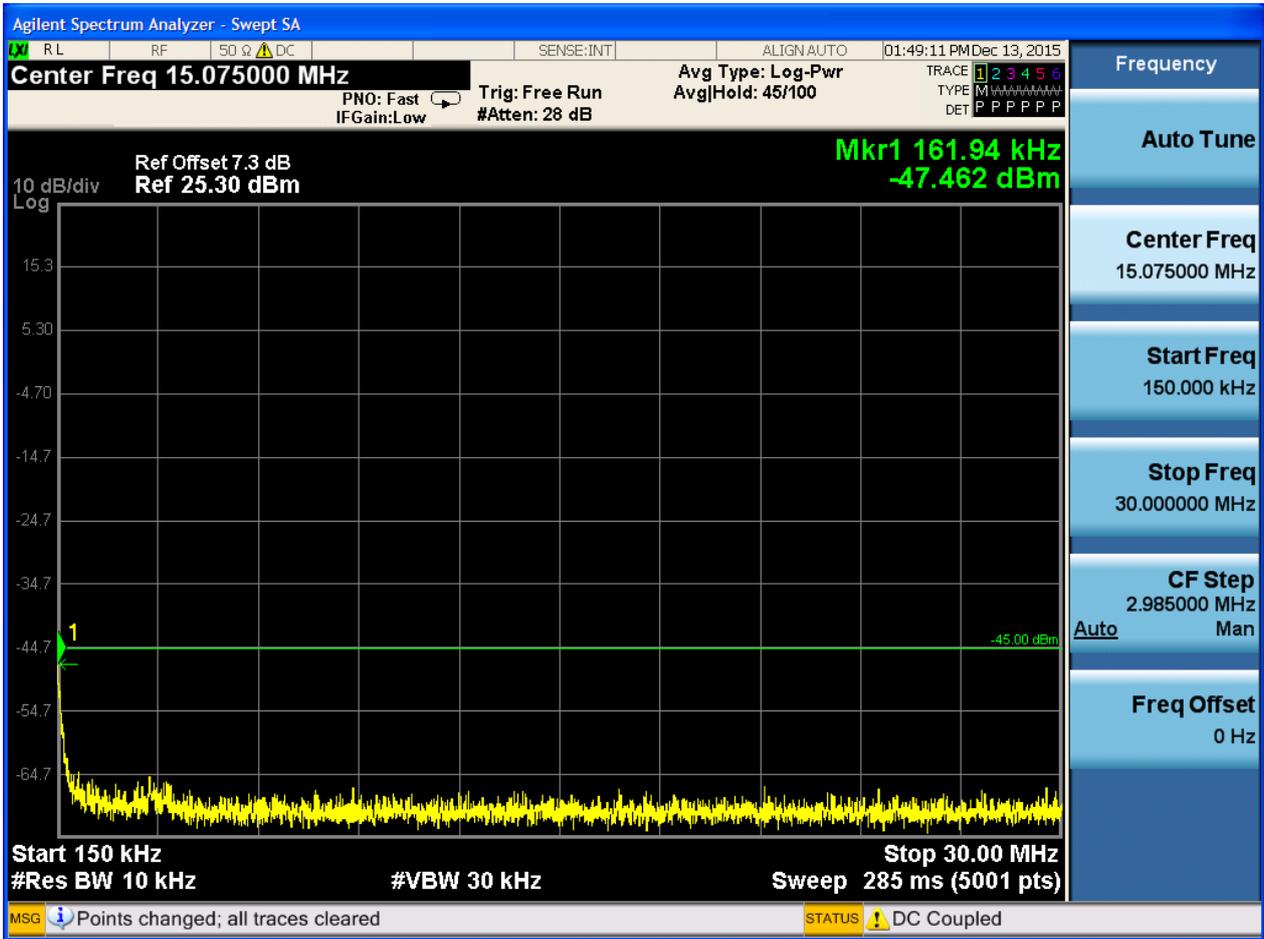


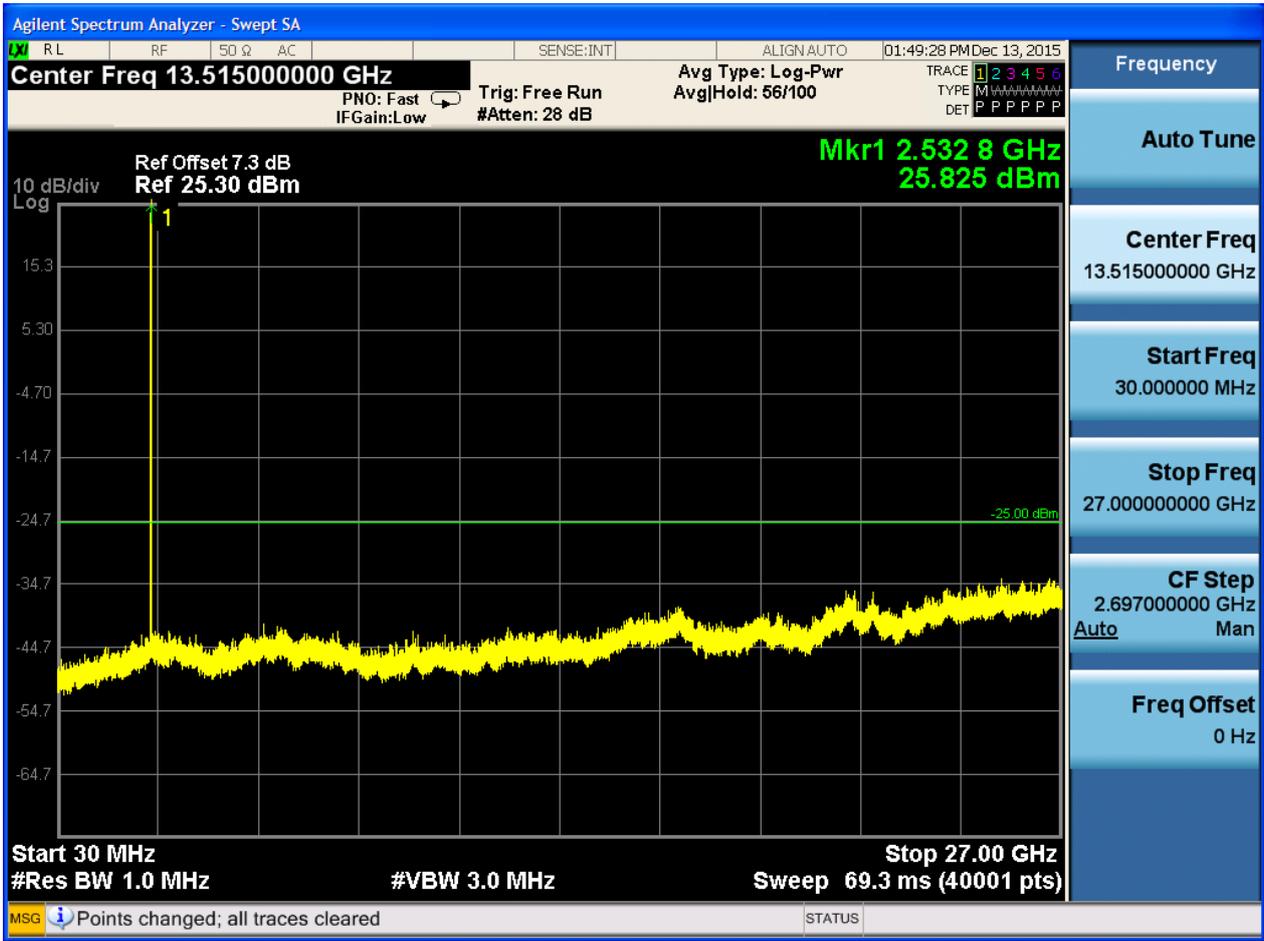


6.1.1.1.1.2 Test Channel = MCH

6.1.1.1.1.2.1 Test RB = RB1#0



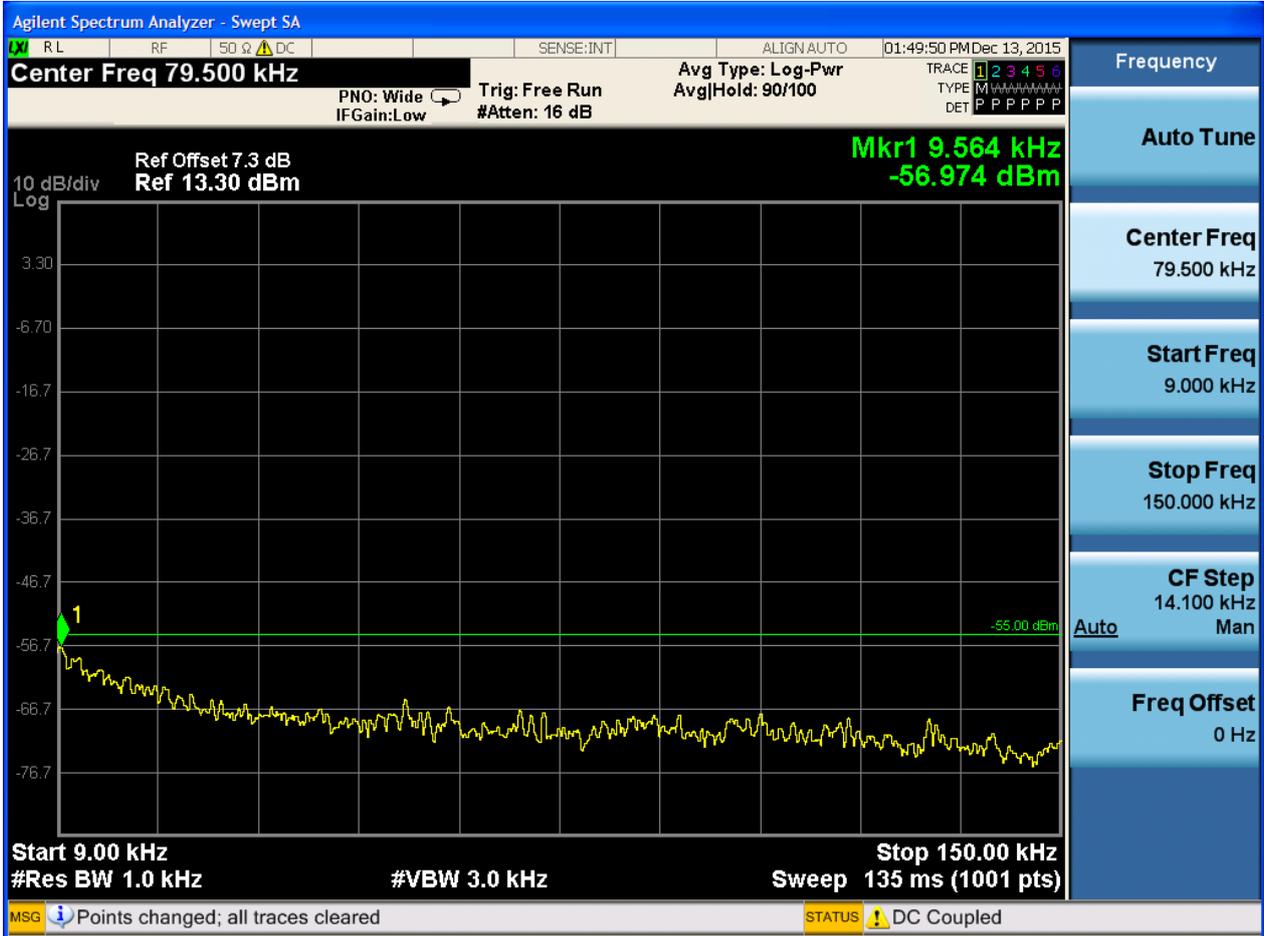


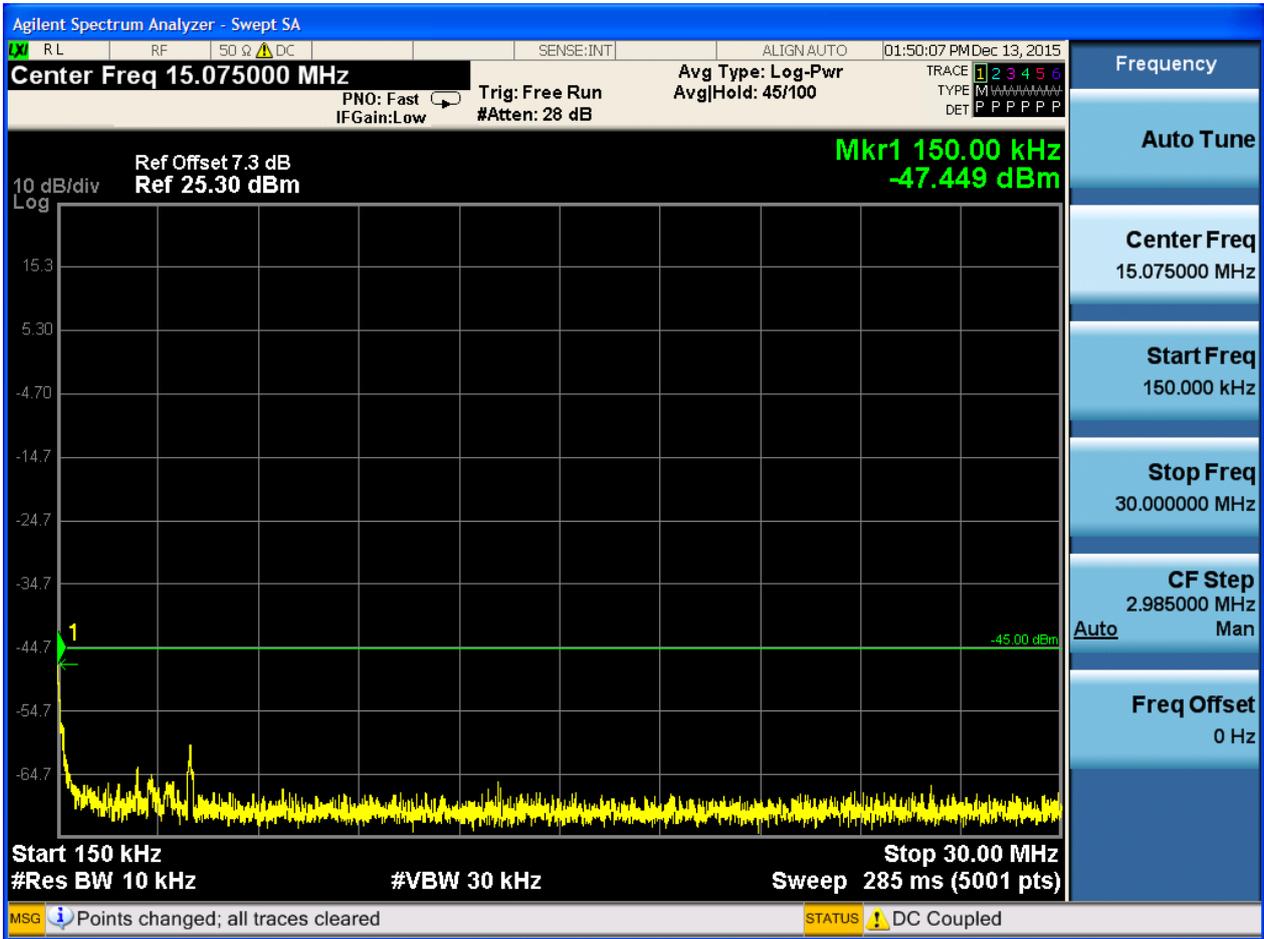


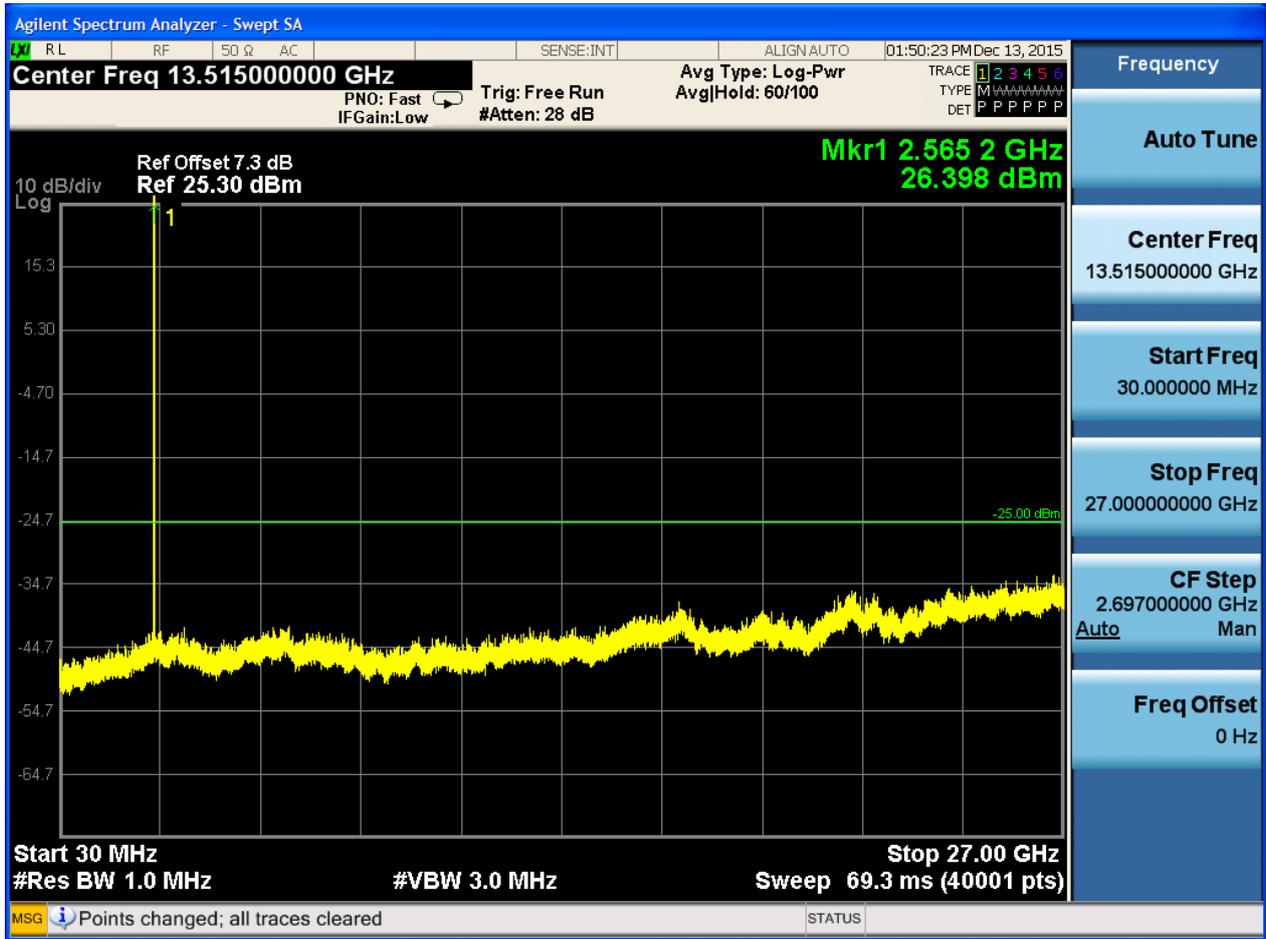


6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0





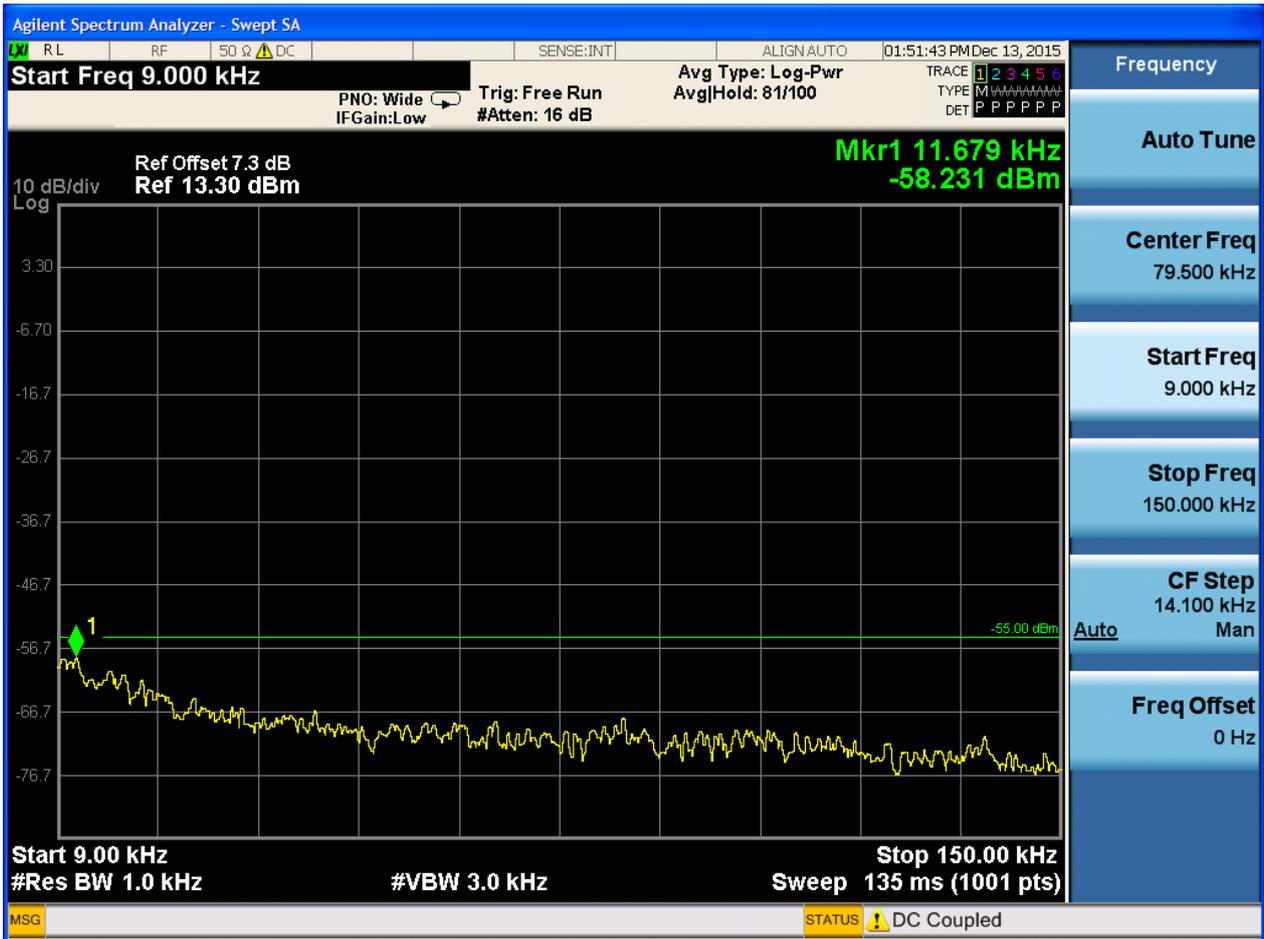


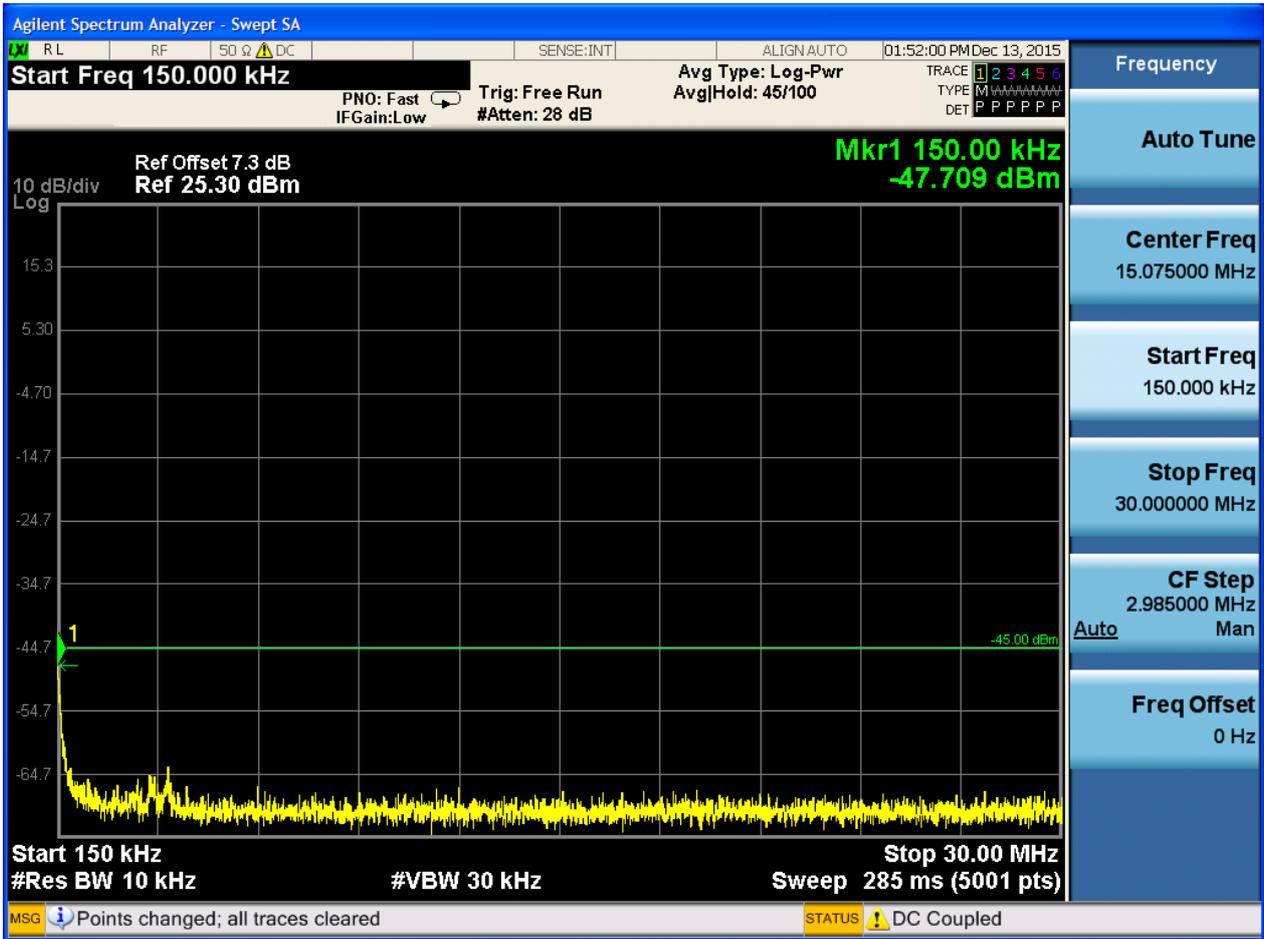


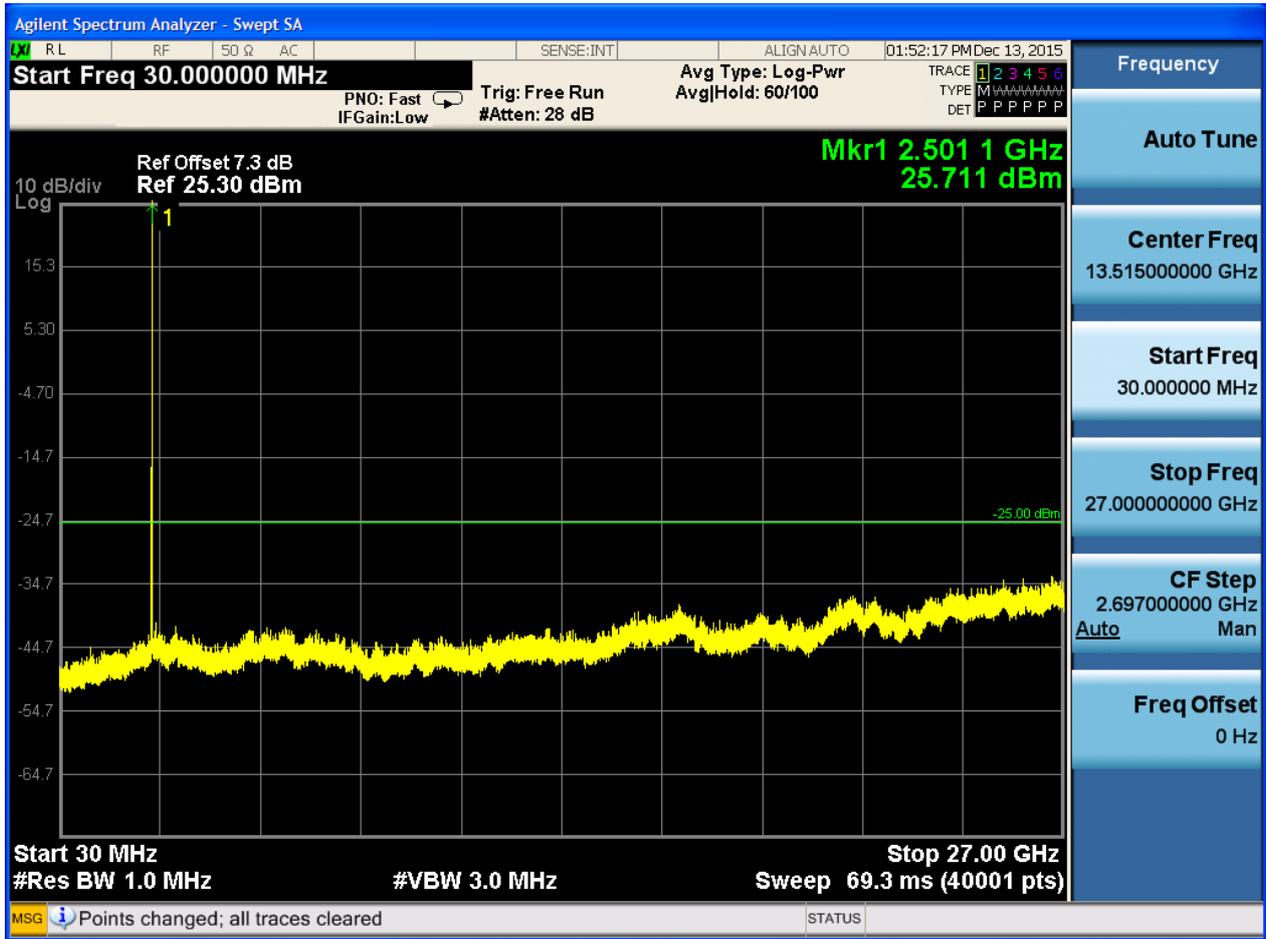
6.1.1.1.2 Test Bandwidth = 10

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0



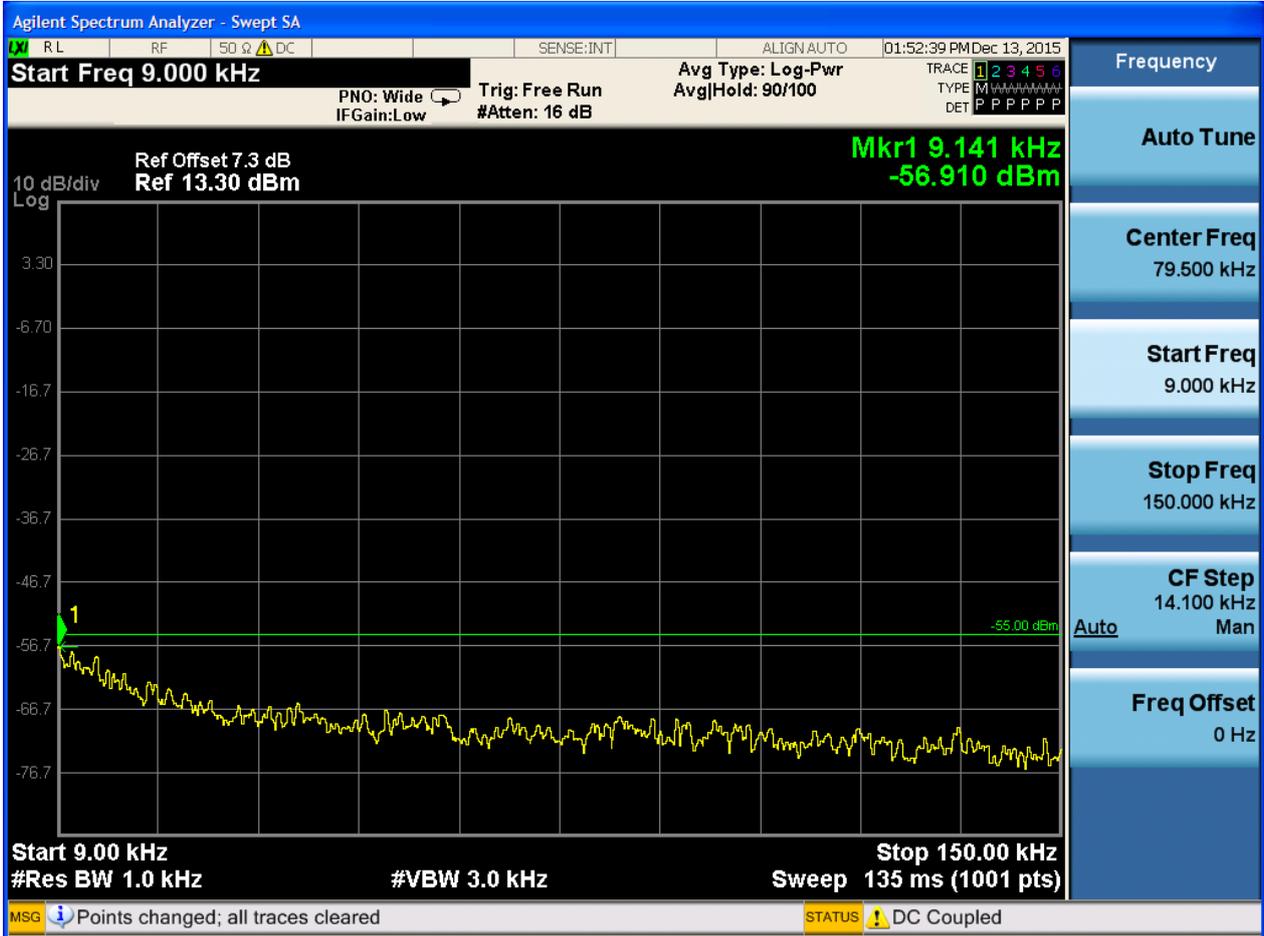


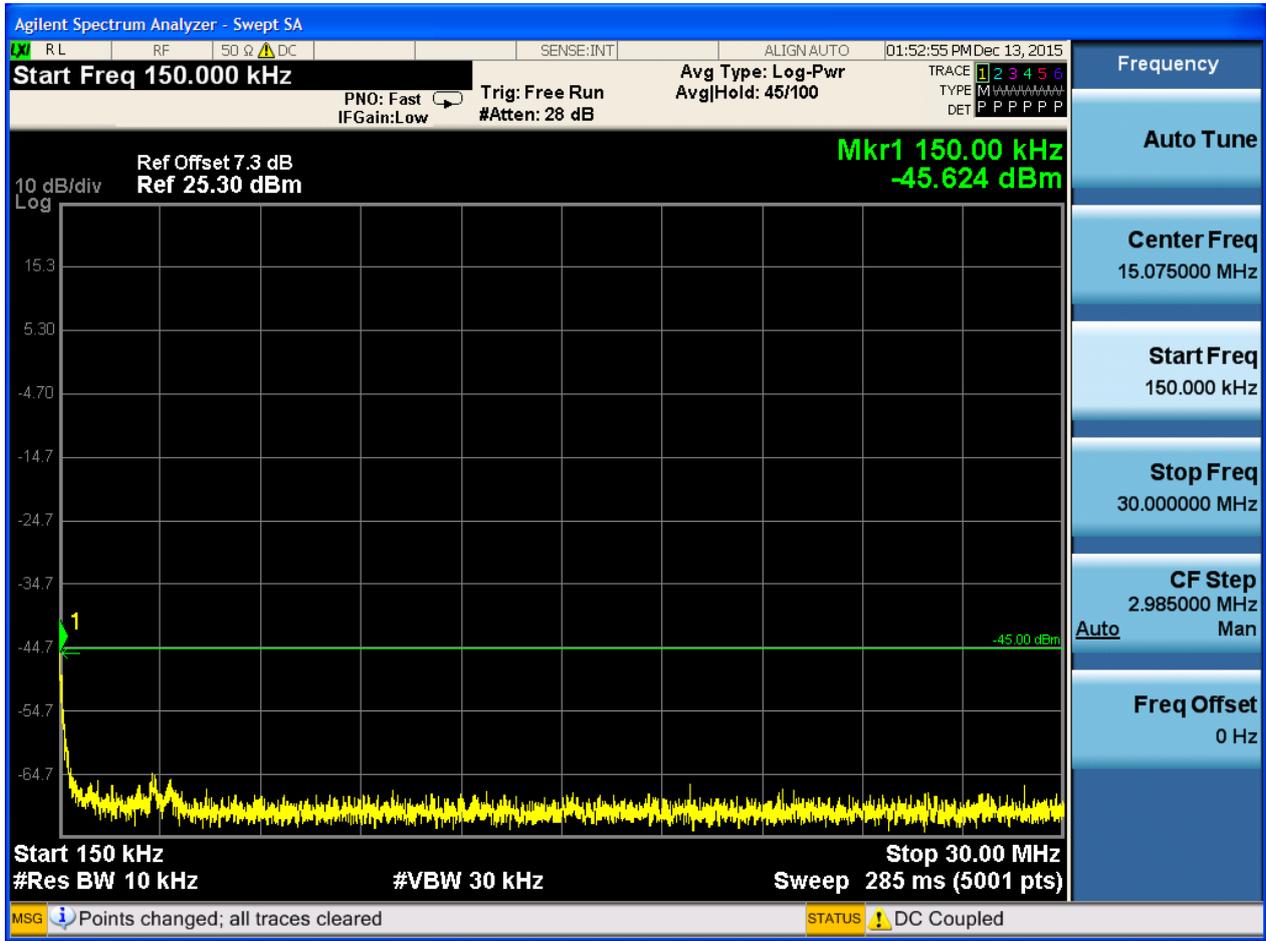


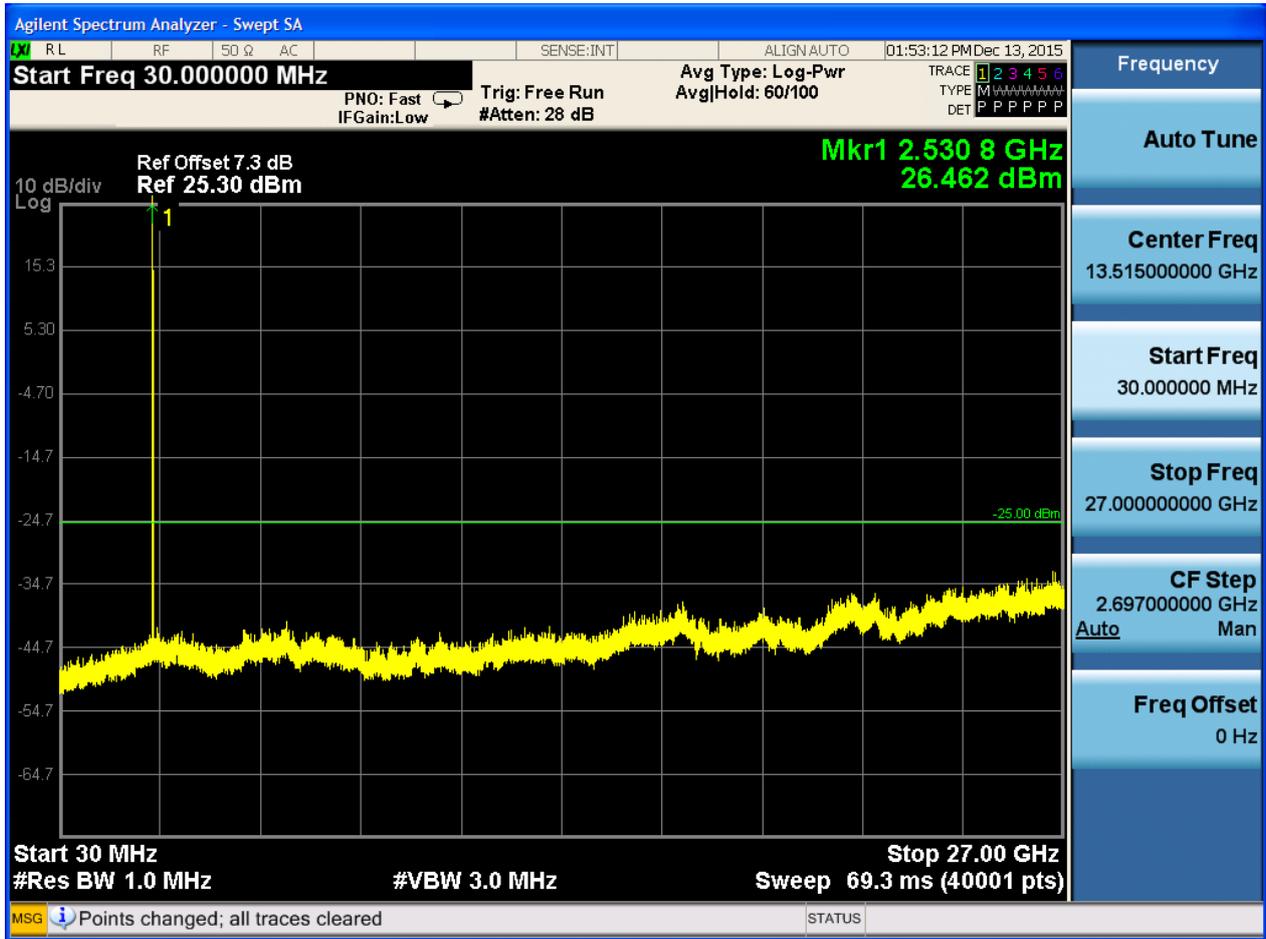


6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



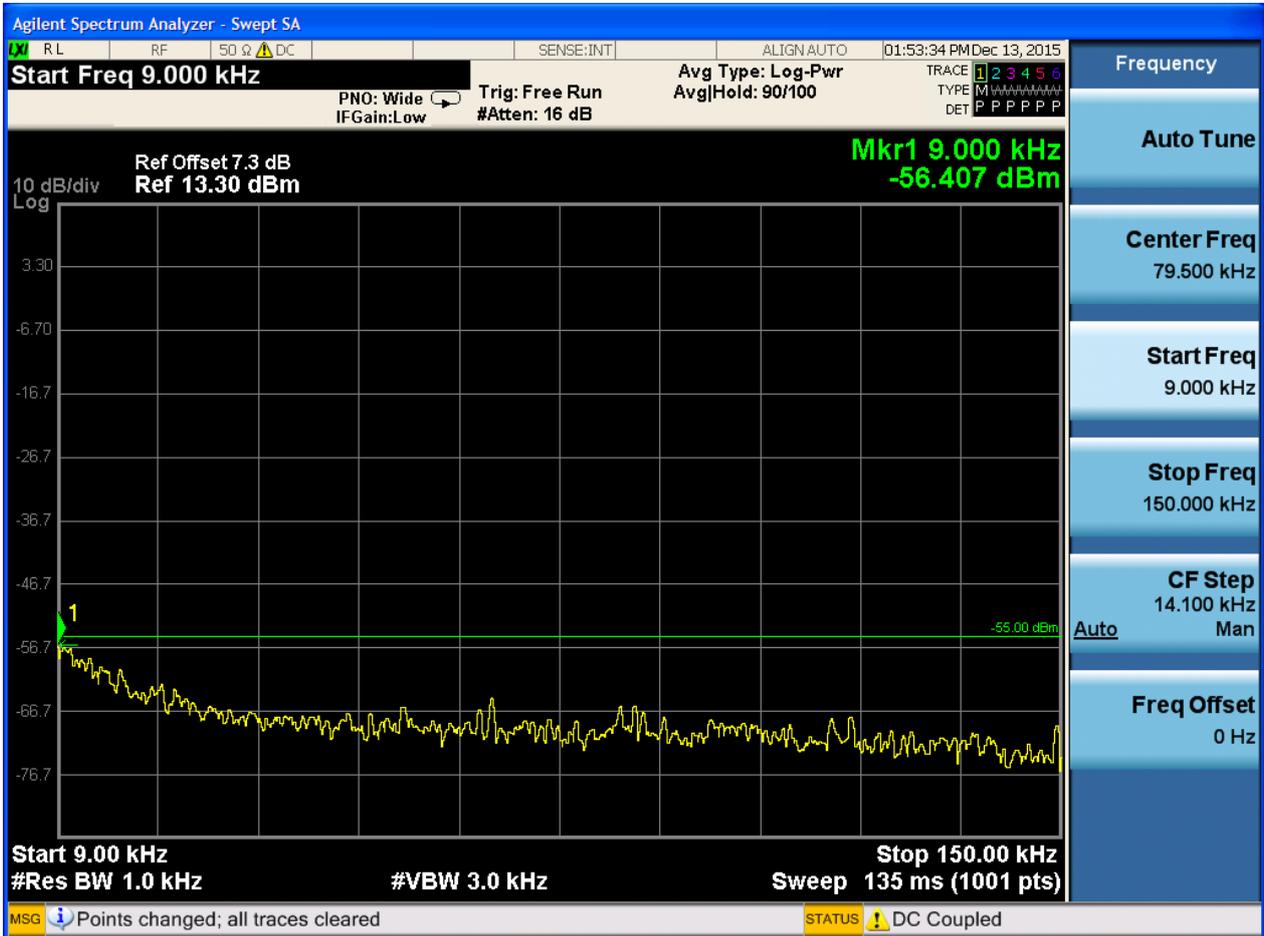


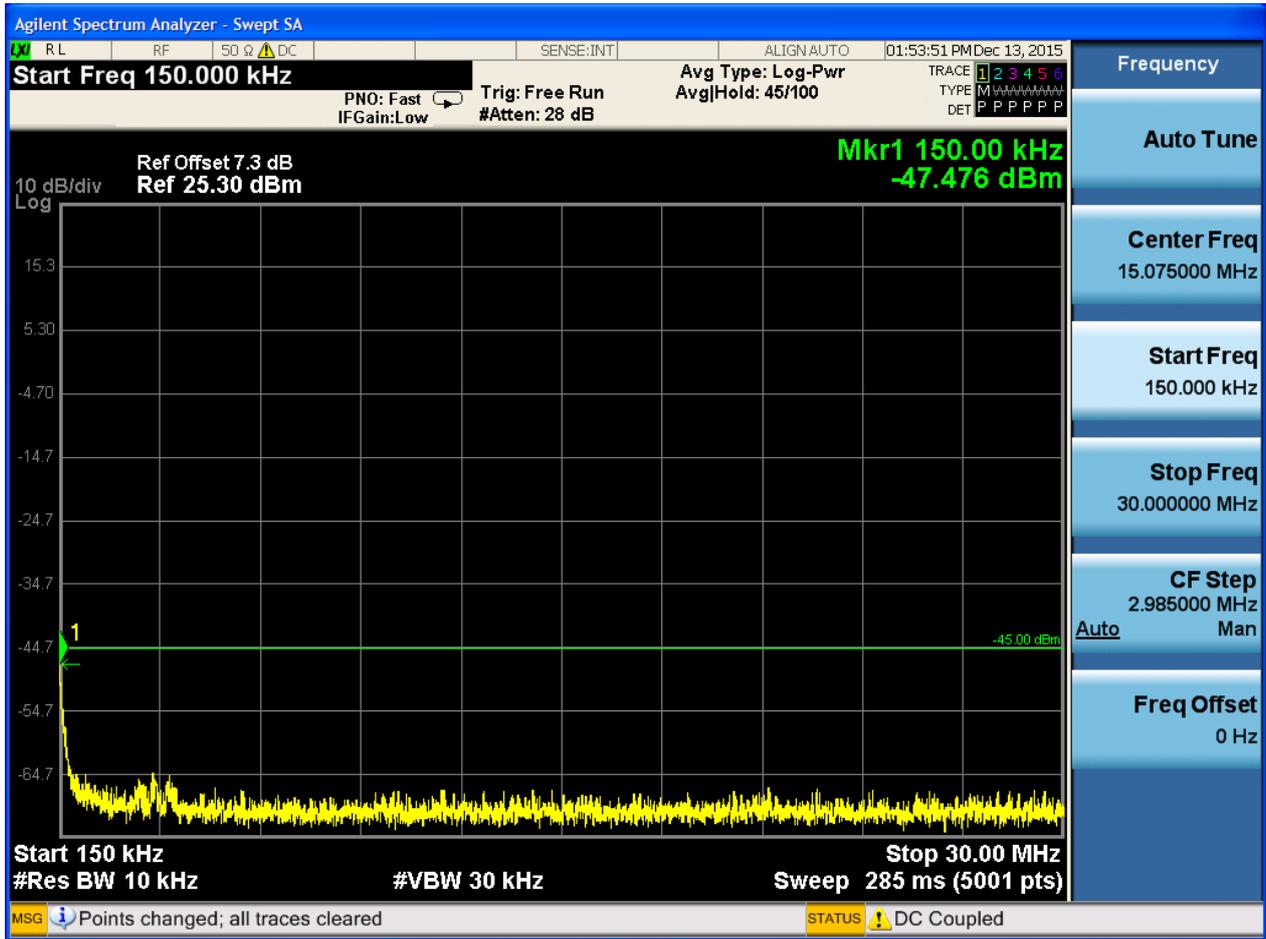




6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0





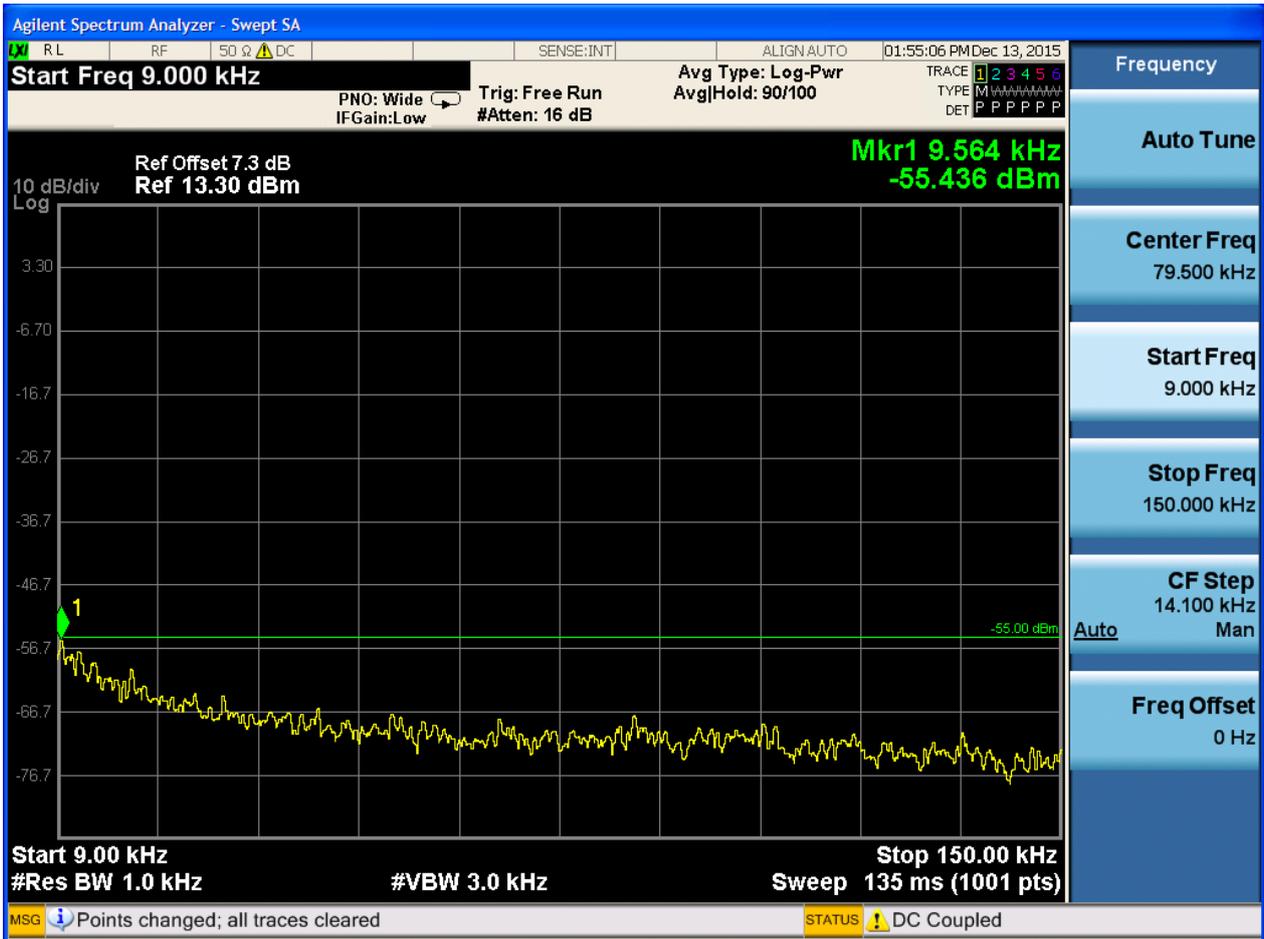


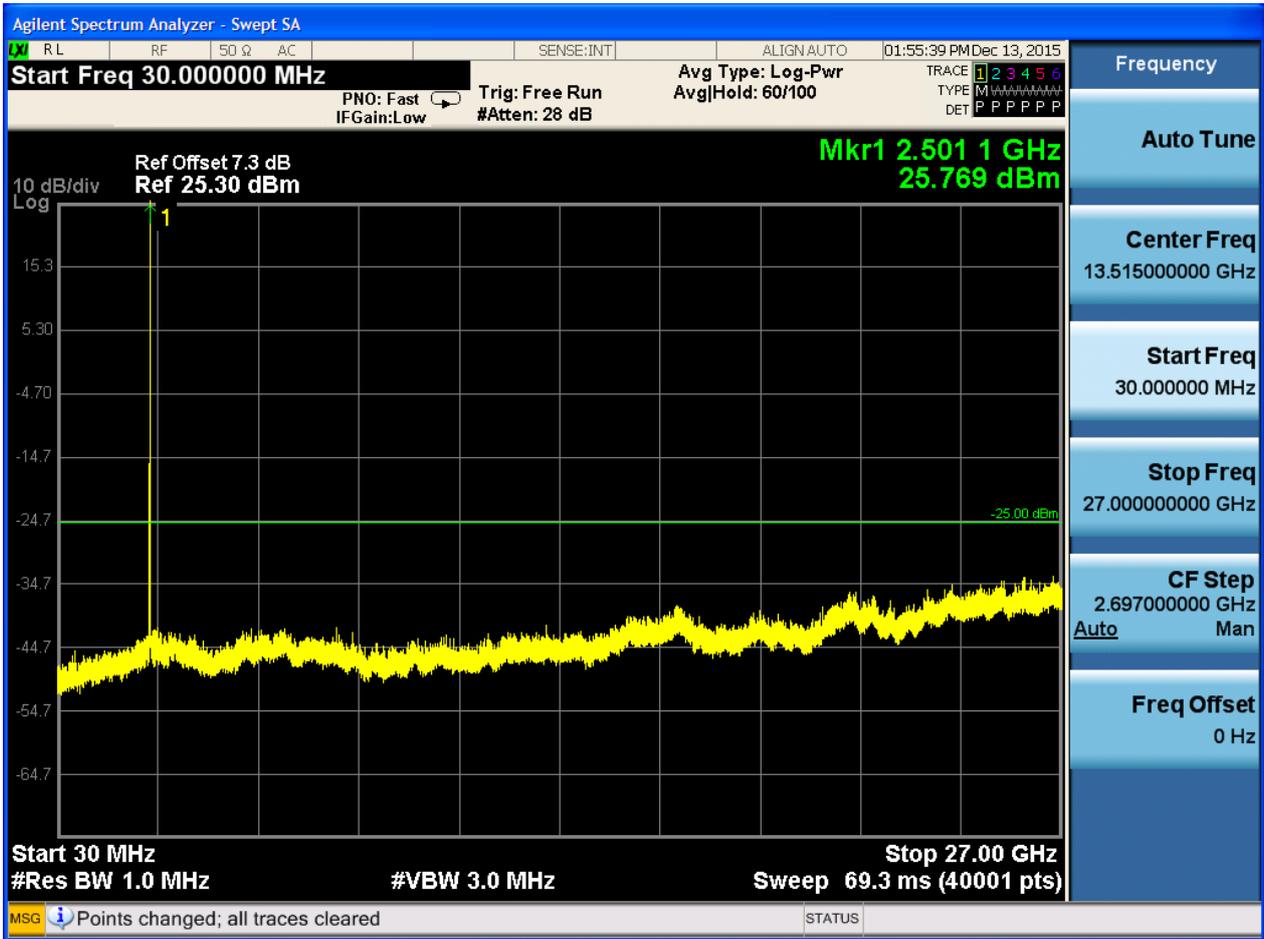


6.1.1.1.3 Test Bandwidth = 15

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0

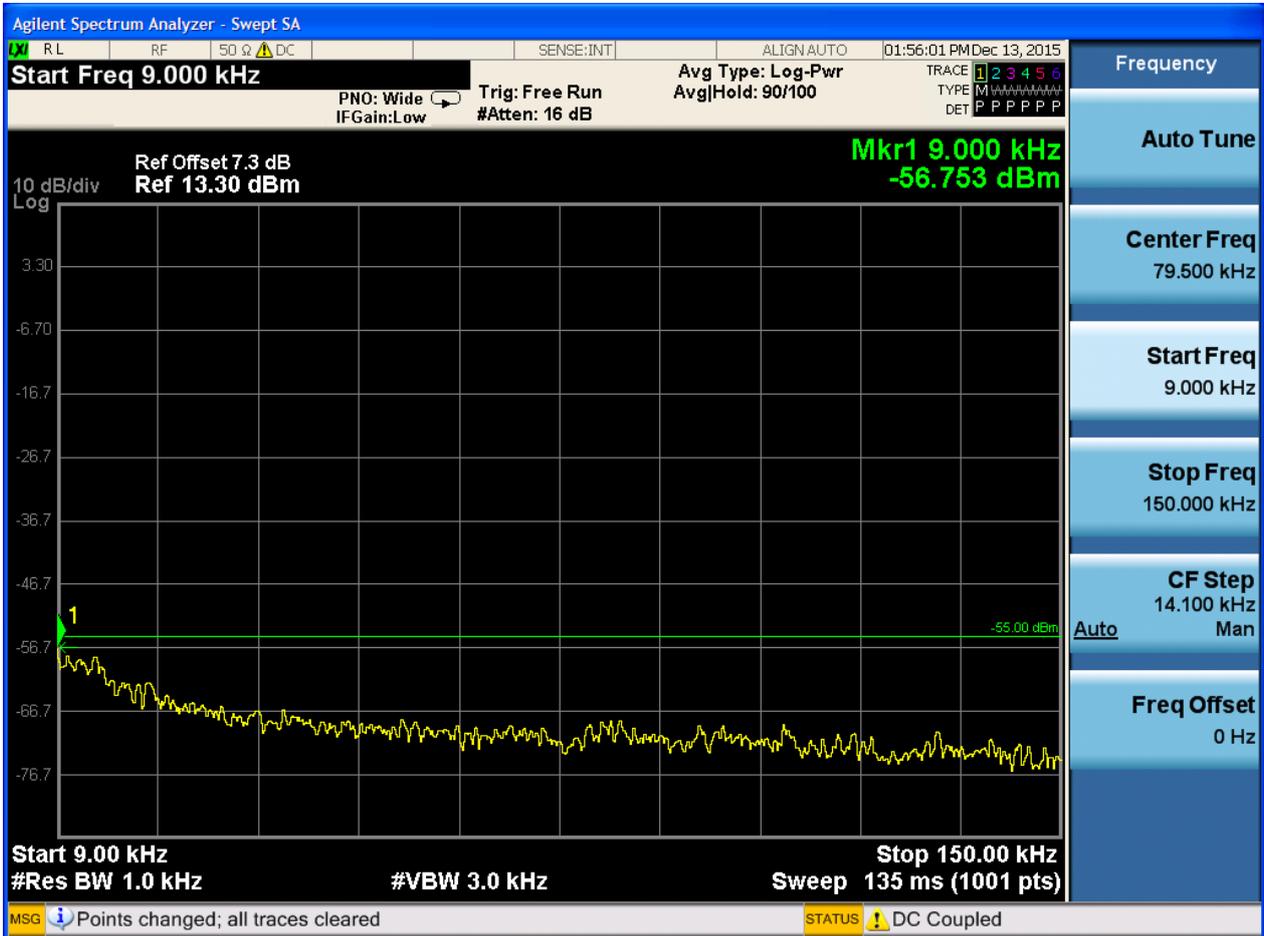




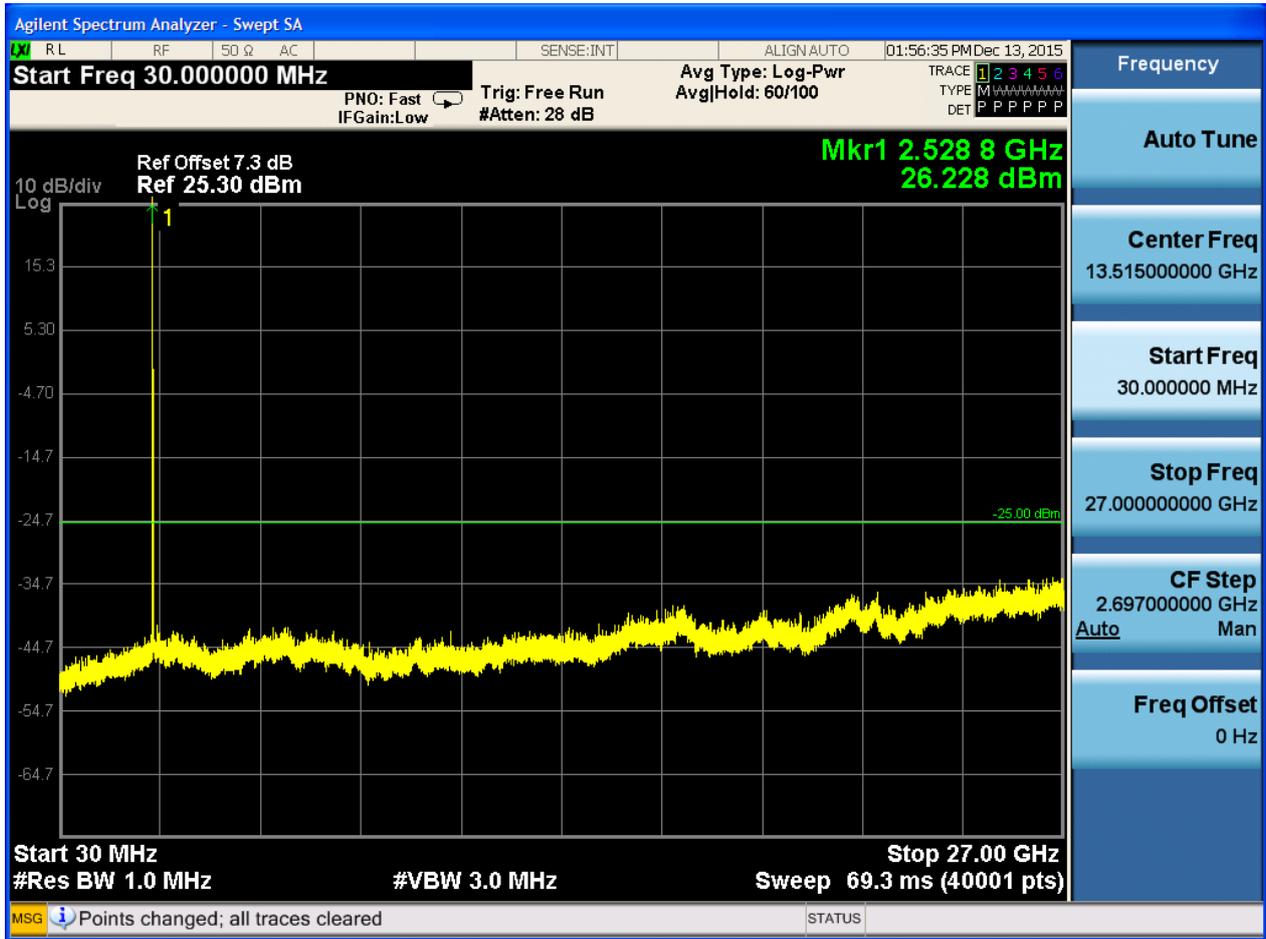


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0



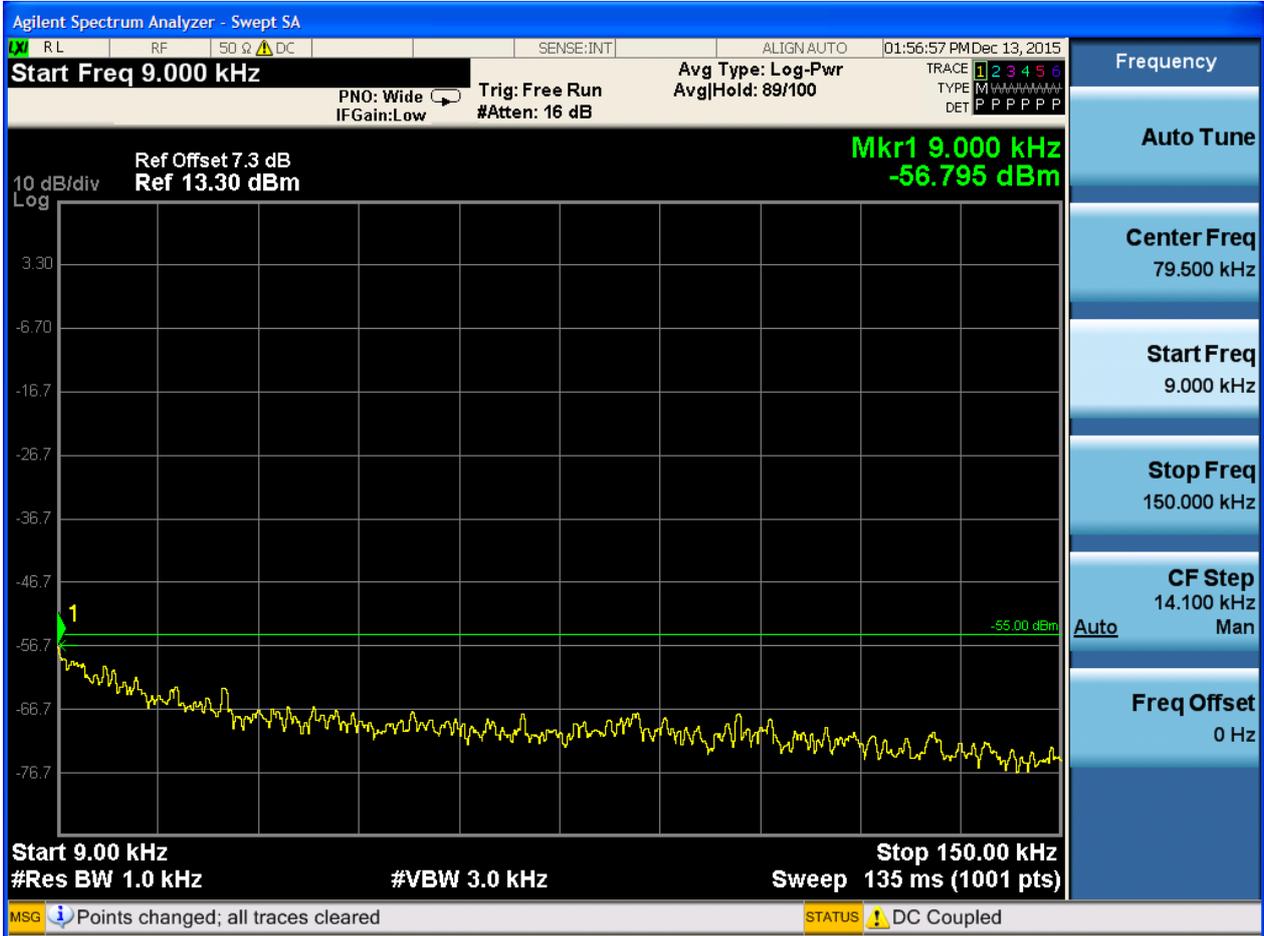




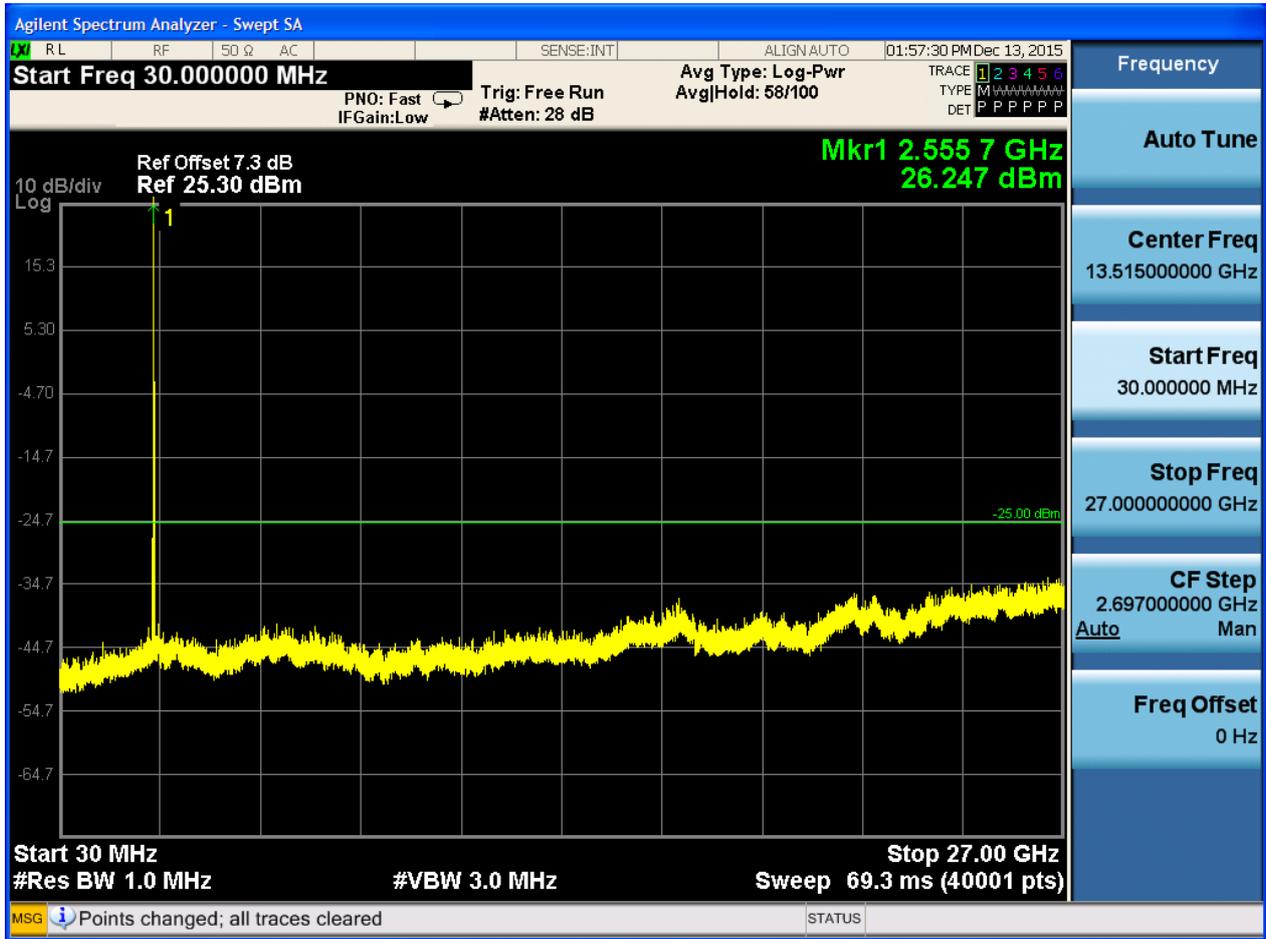


6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0





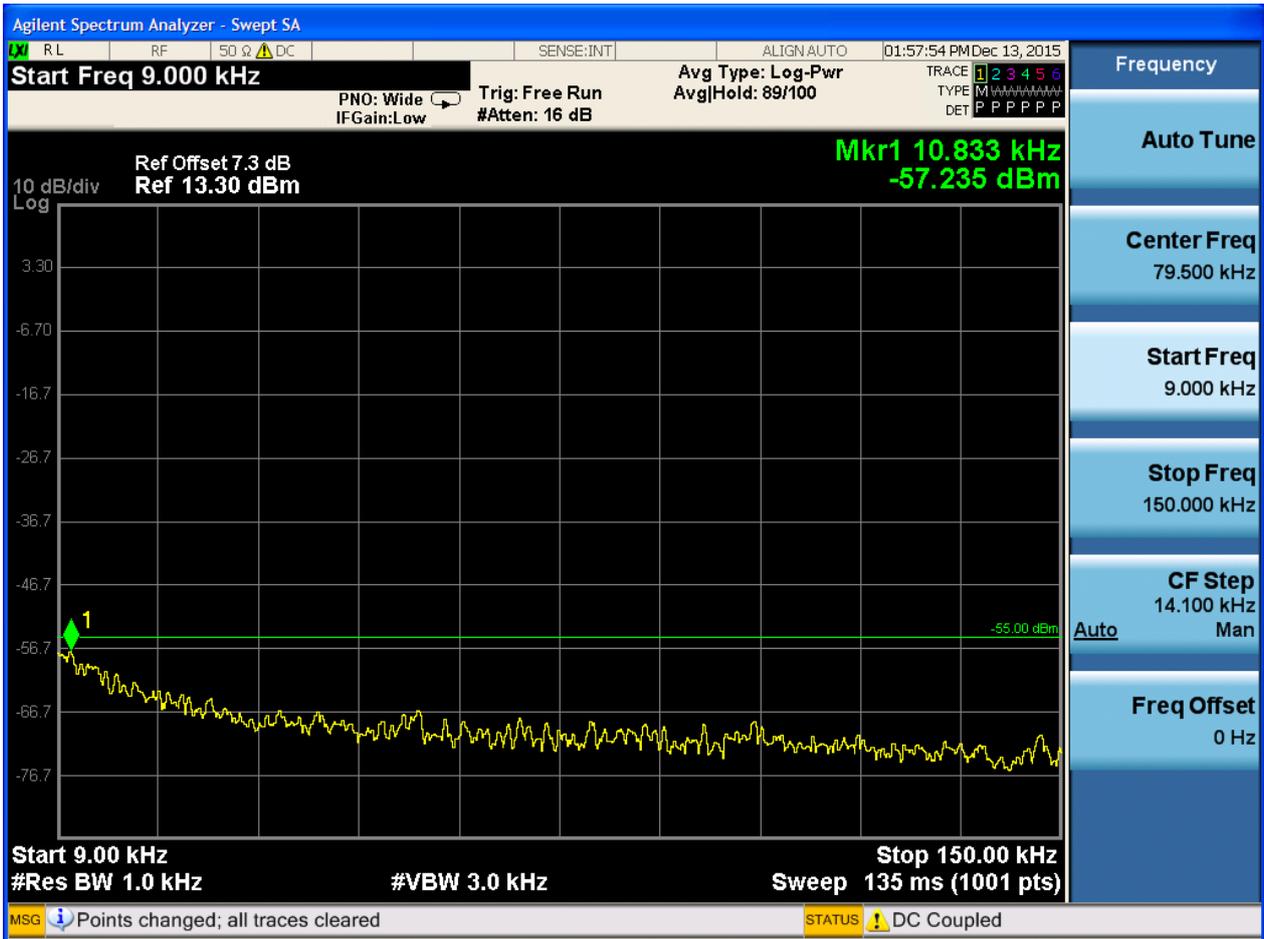




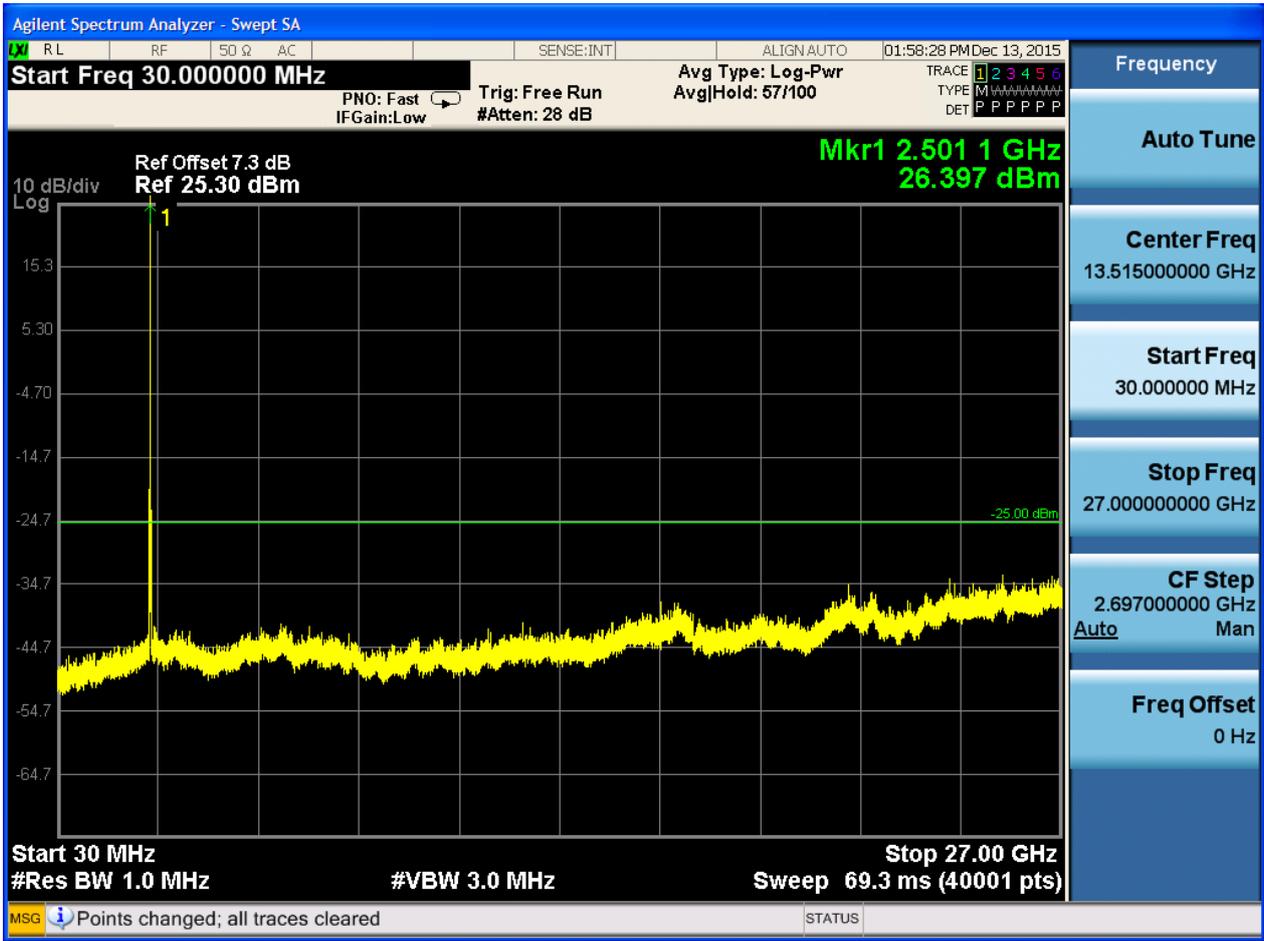
6.1.1.1.4 Test Bandwidth = 20

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0



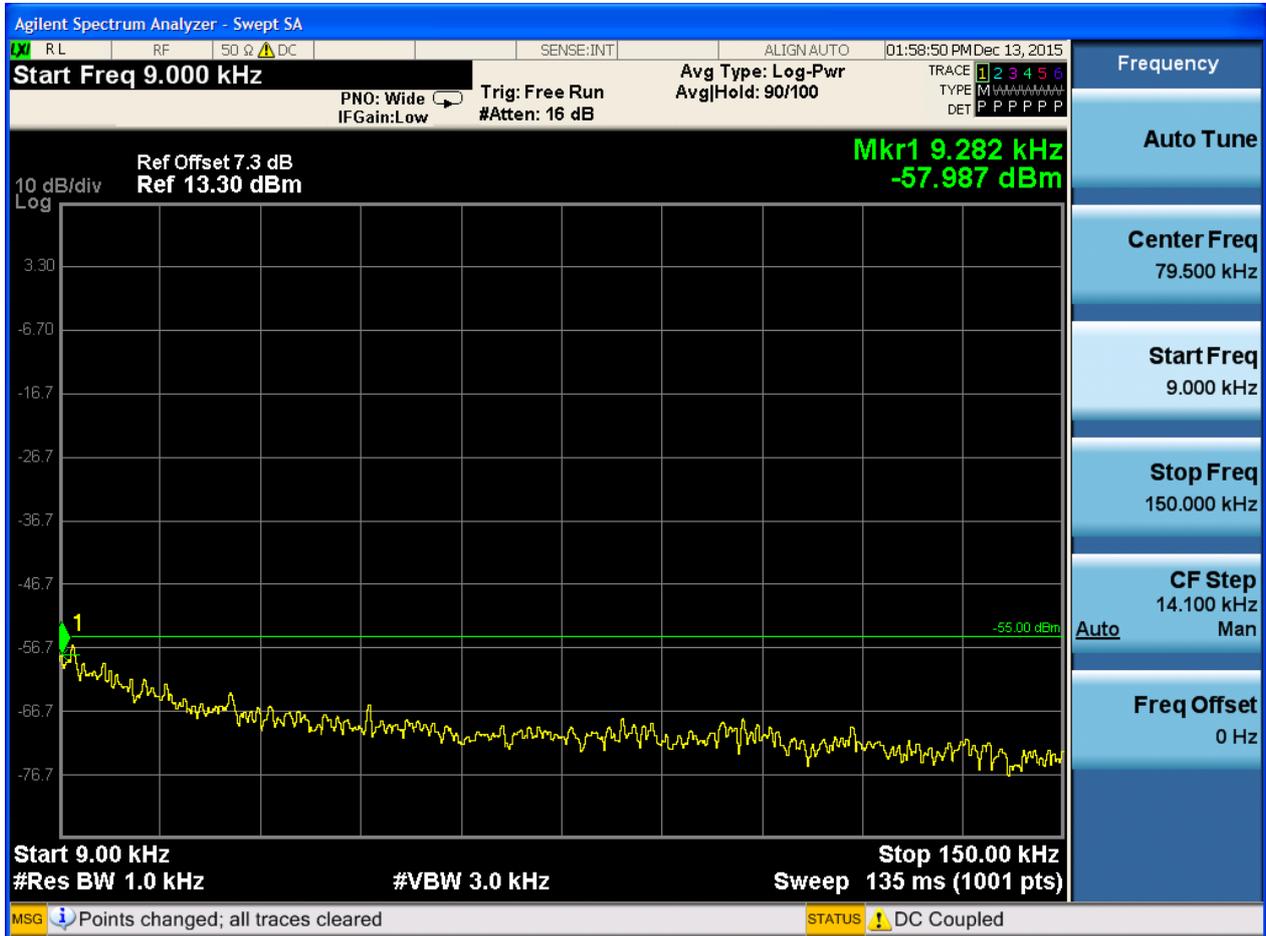


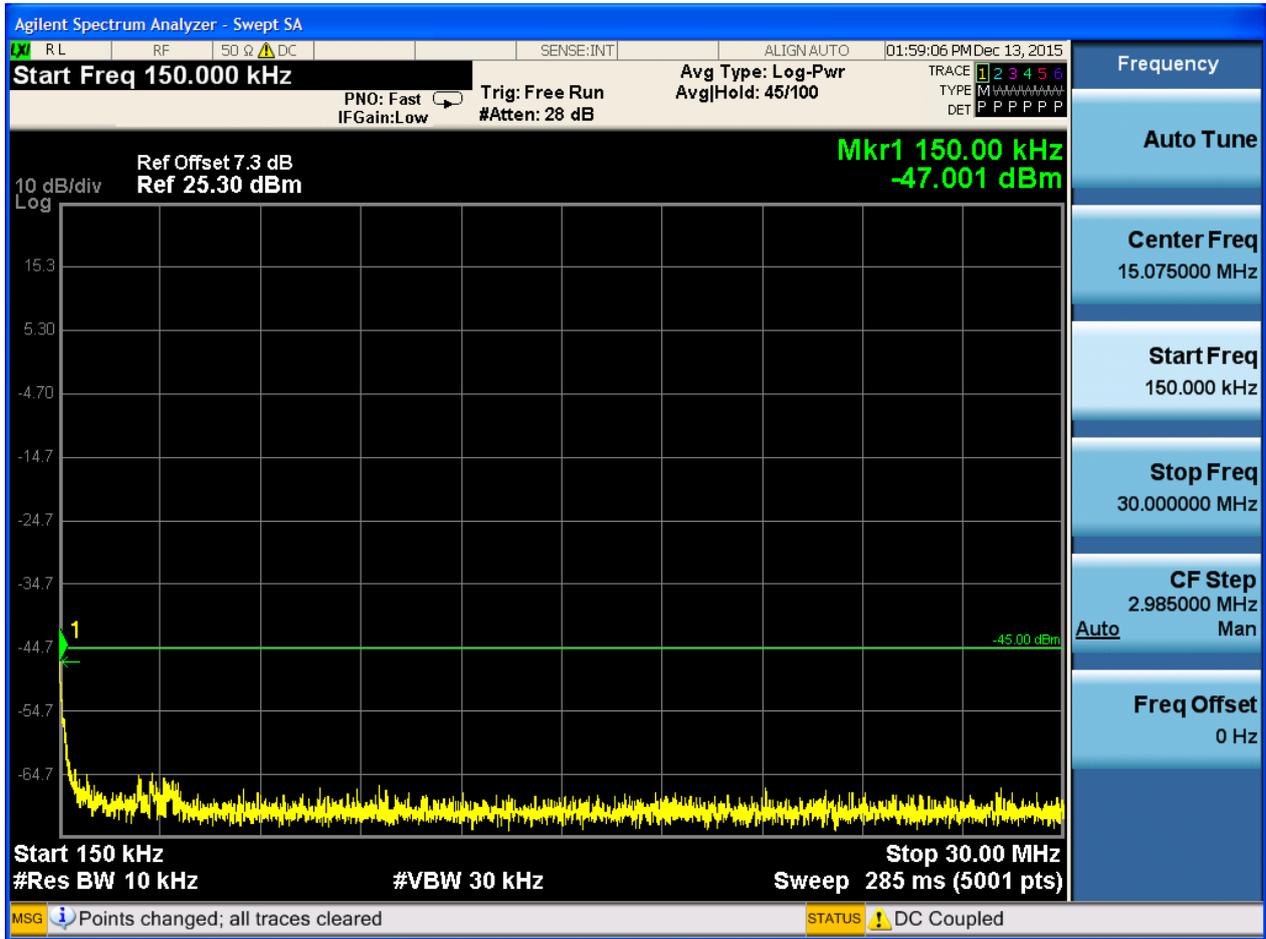


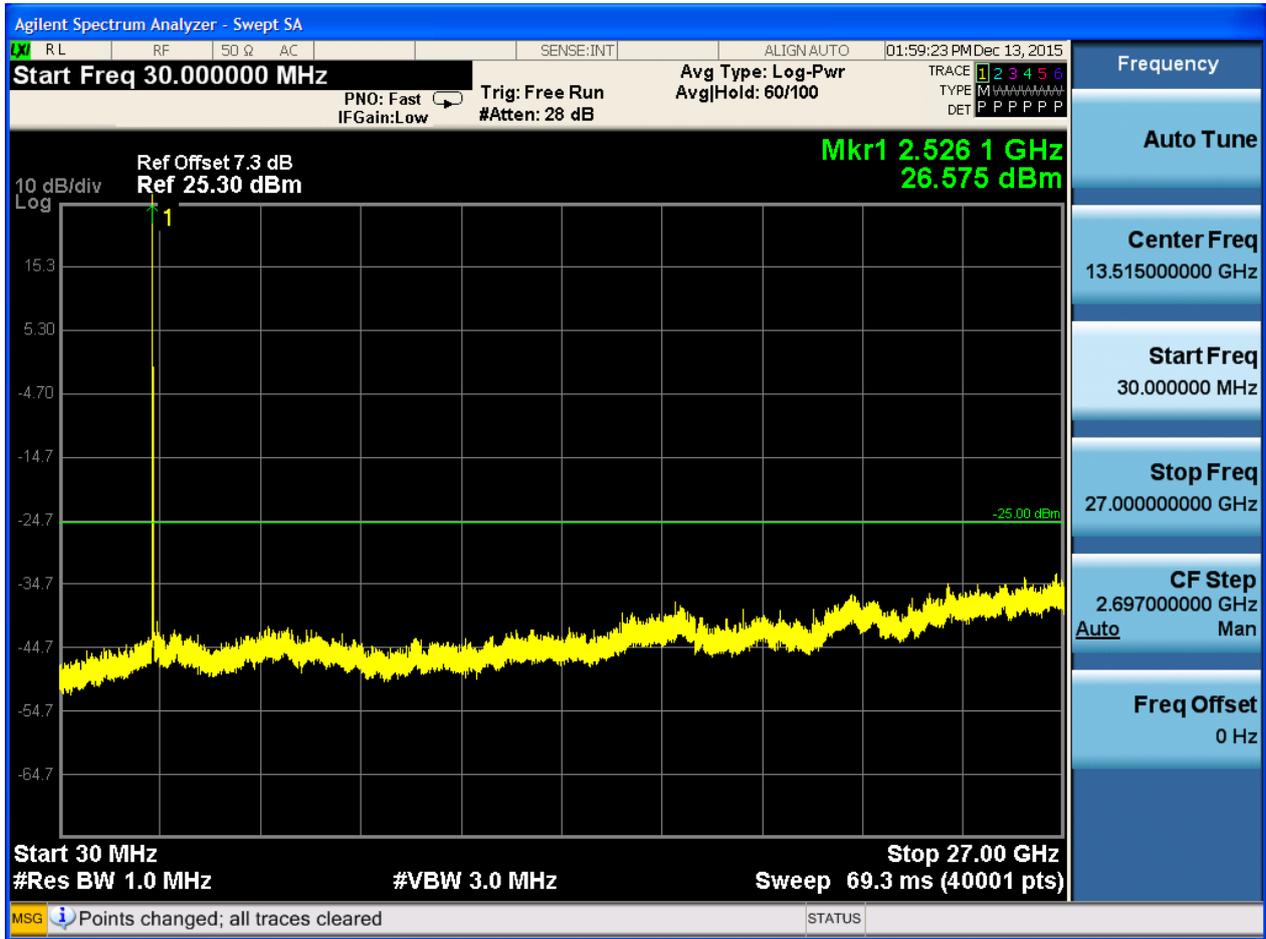


6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0



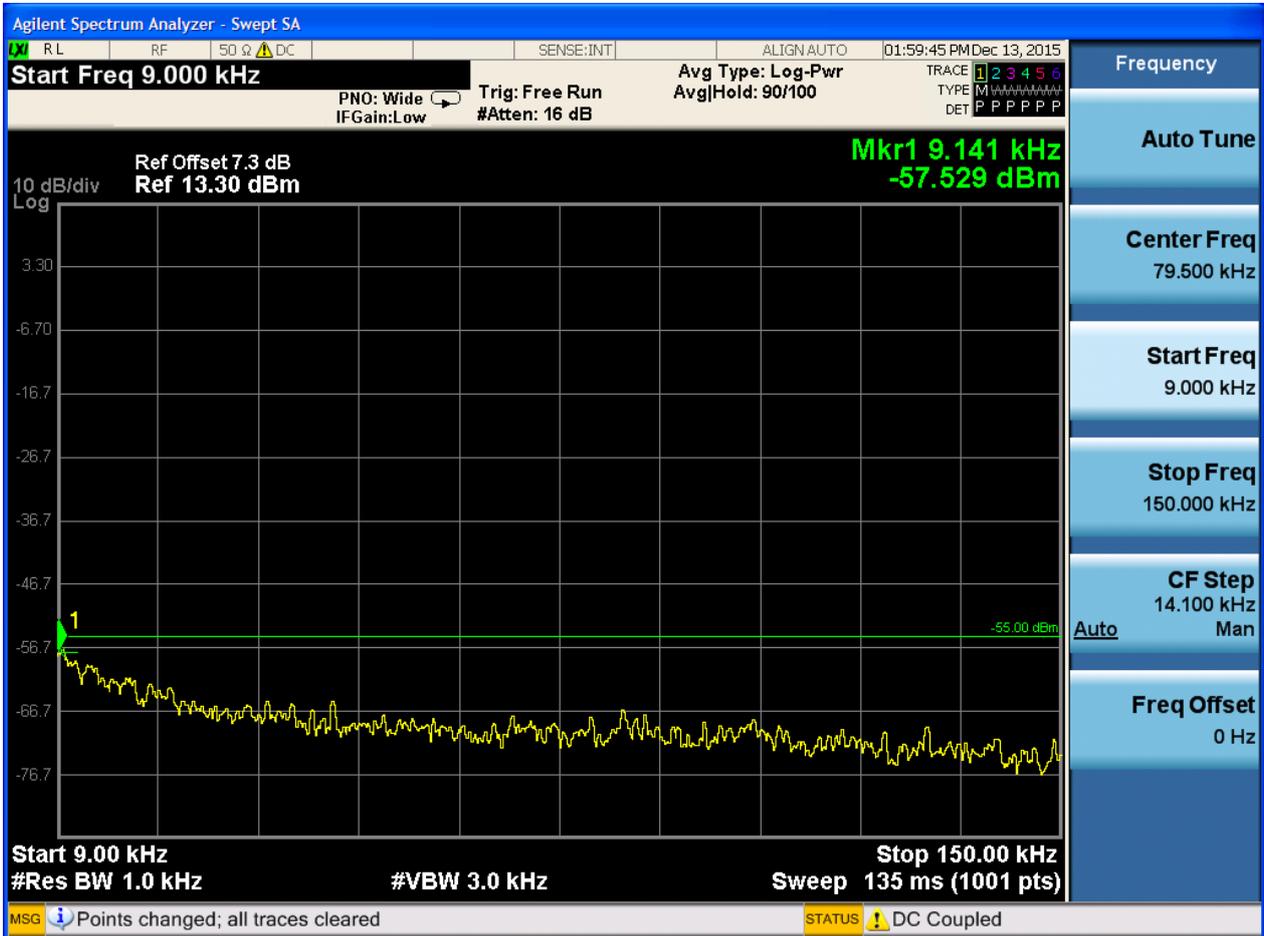






6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0







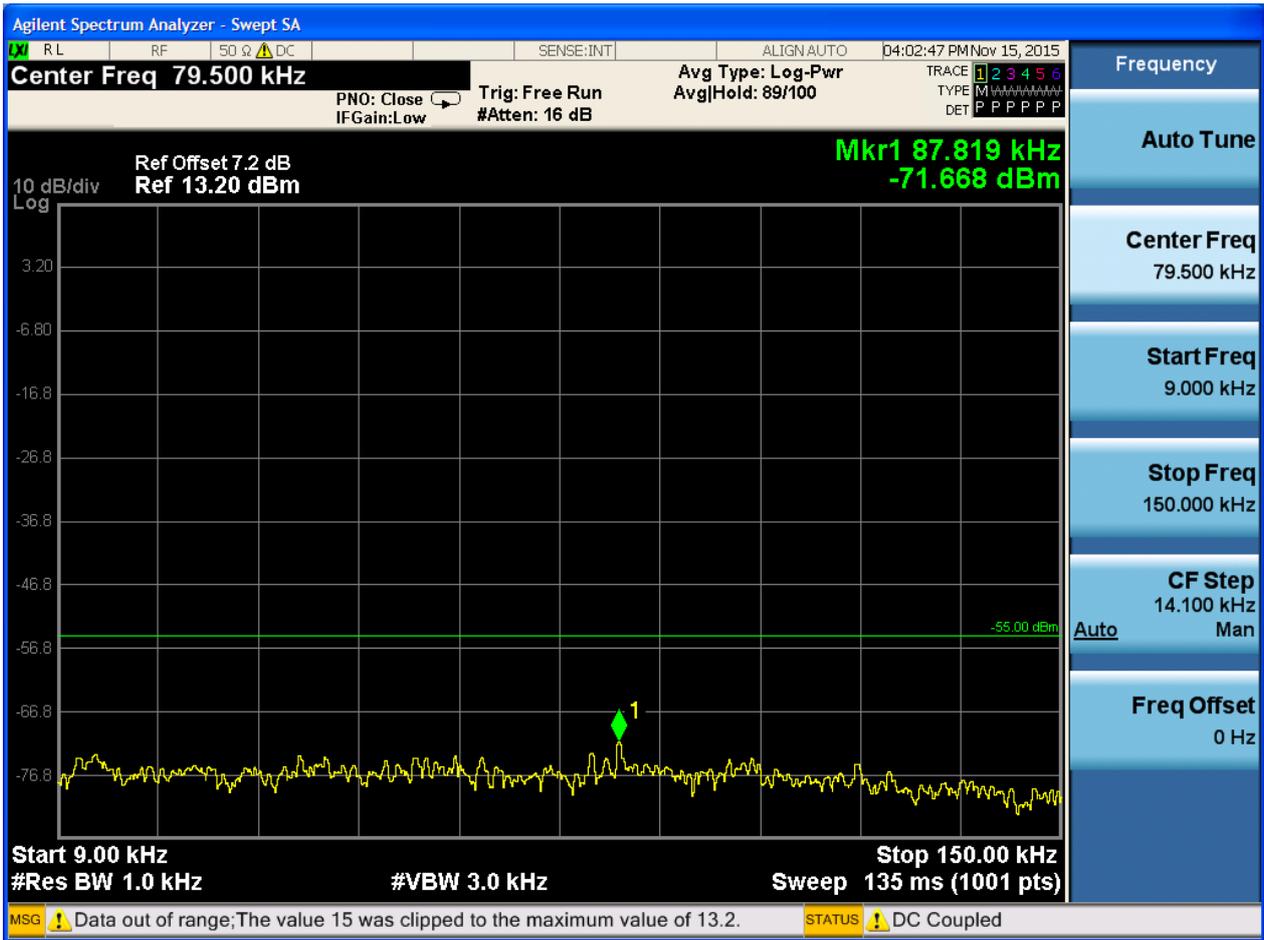


6.1.1.2 Test Mode = LTE/TM2

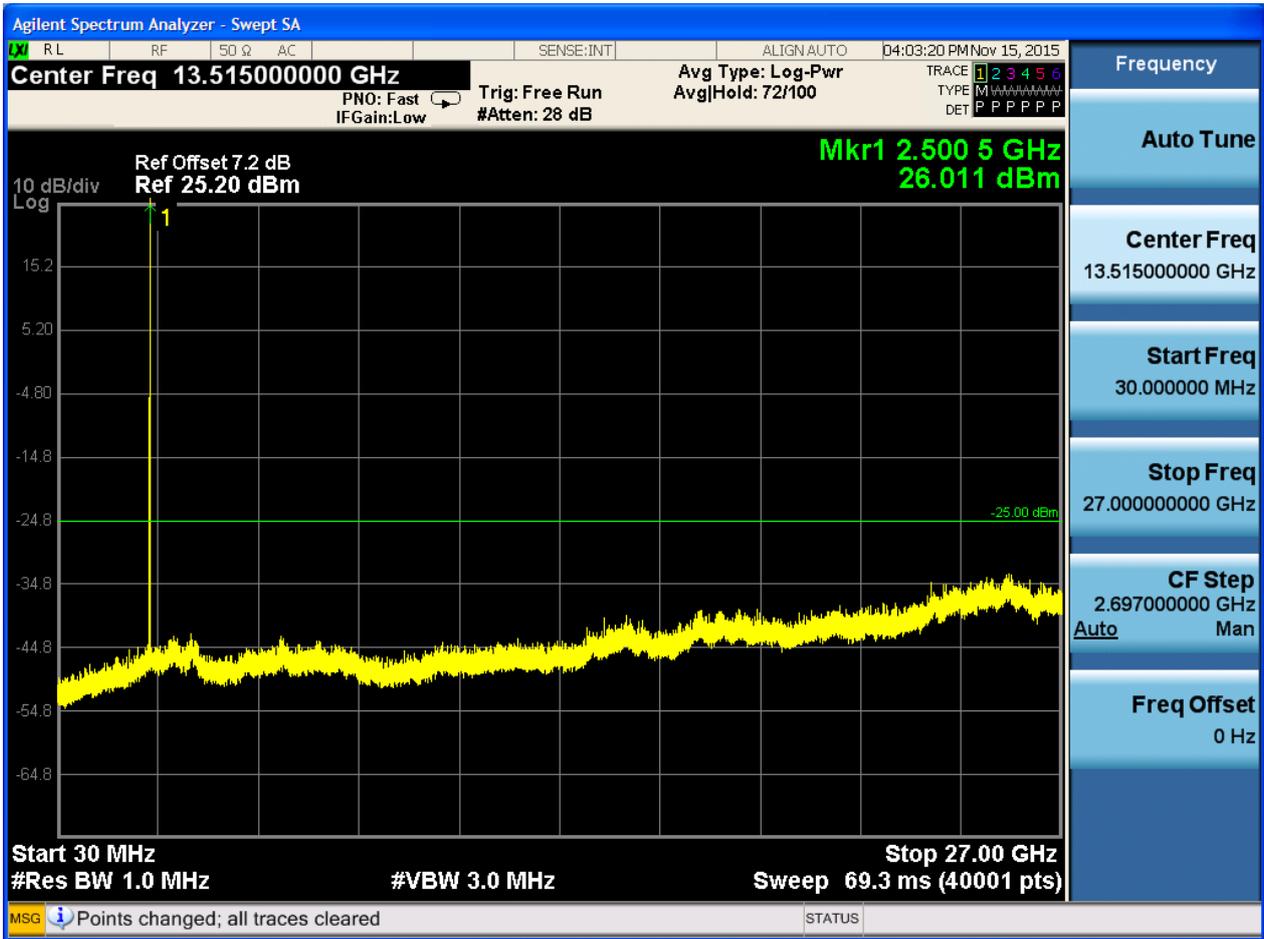
6.1.1.2.1 Test Bandwidth = 5

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0



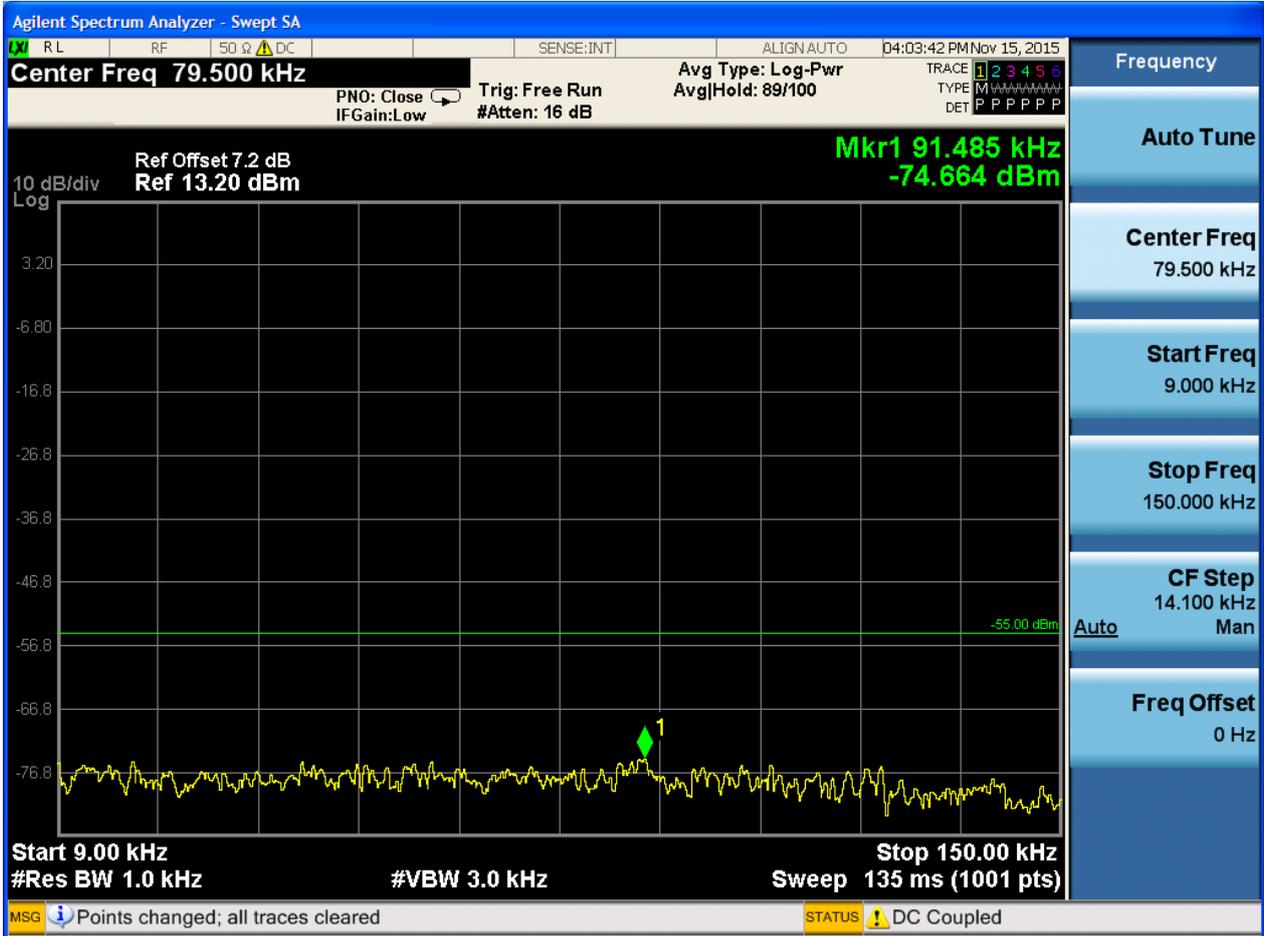


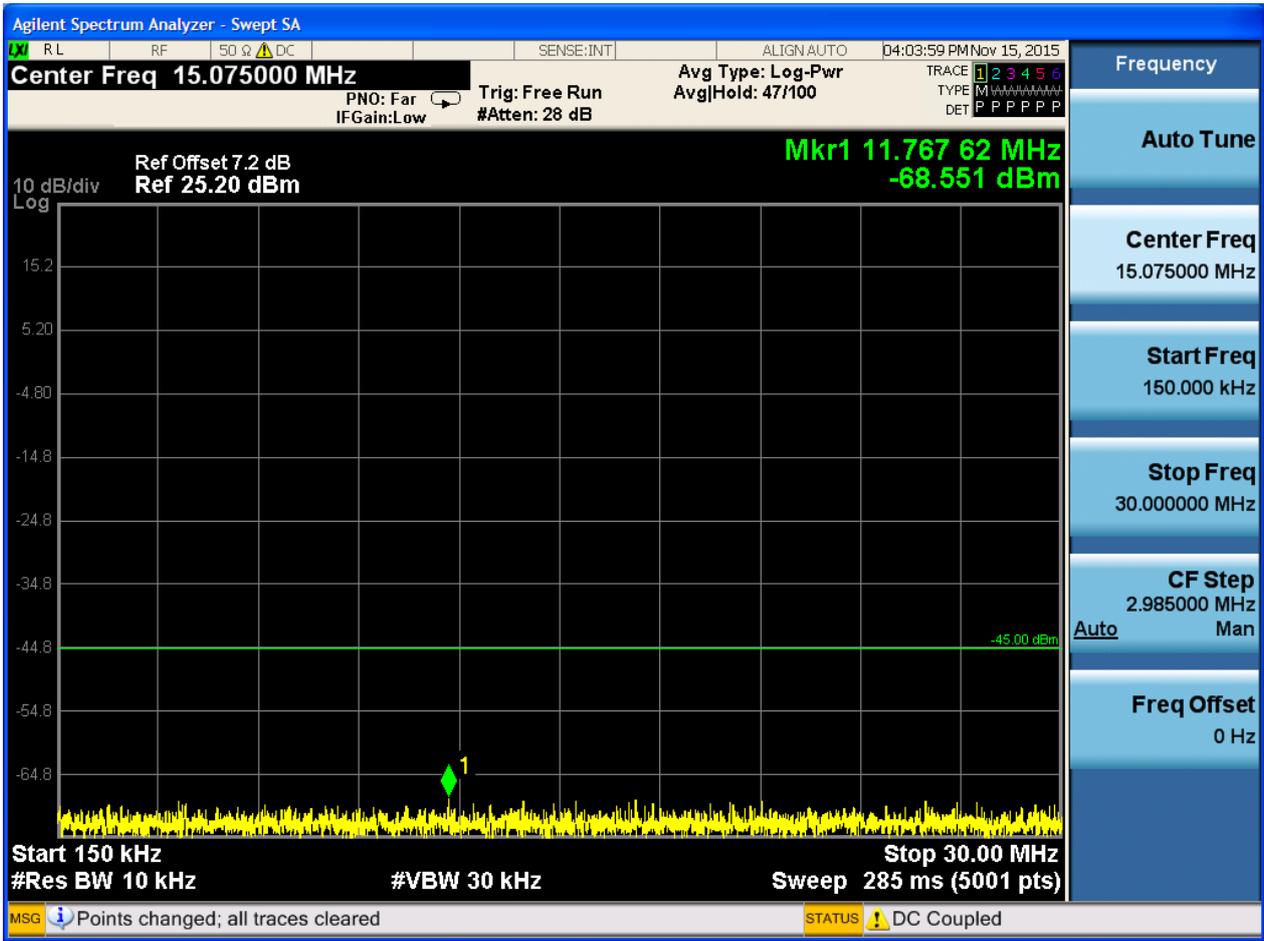


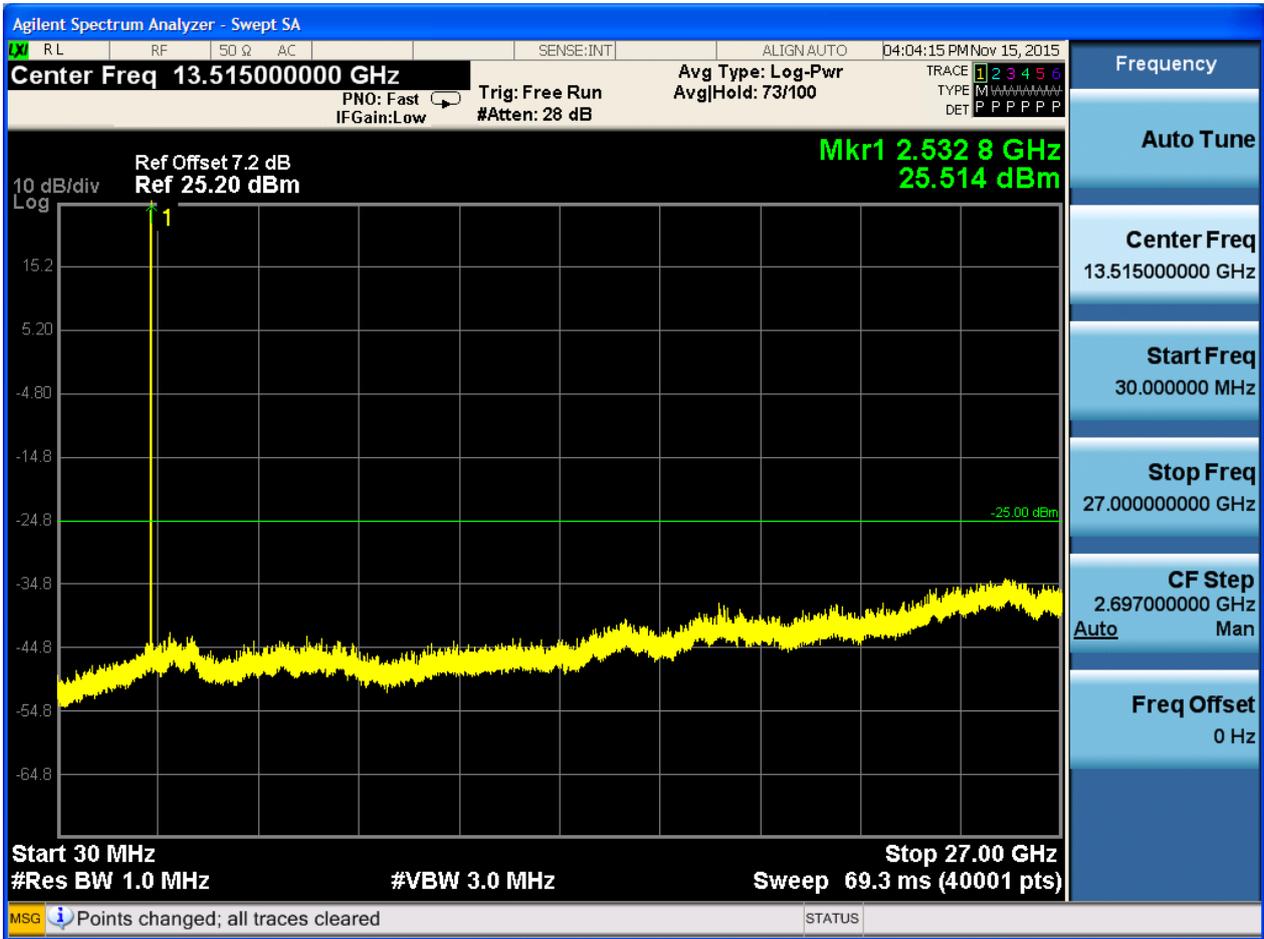


6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0



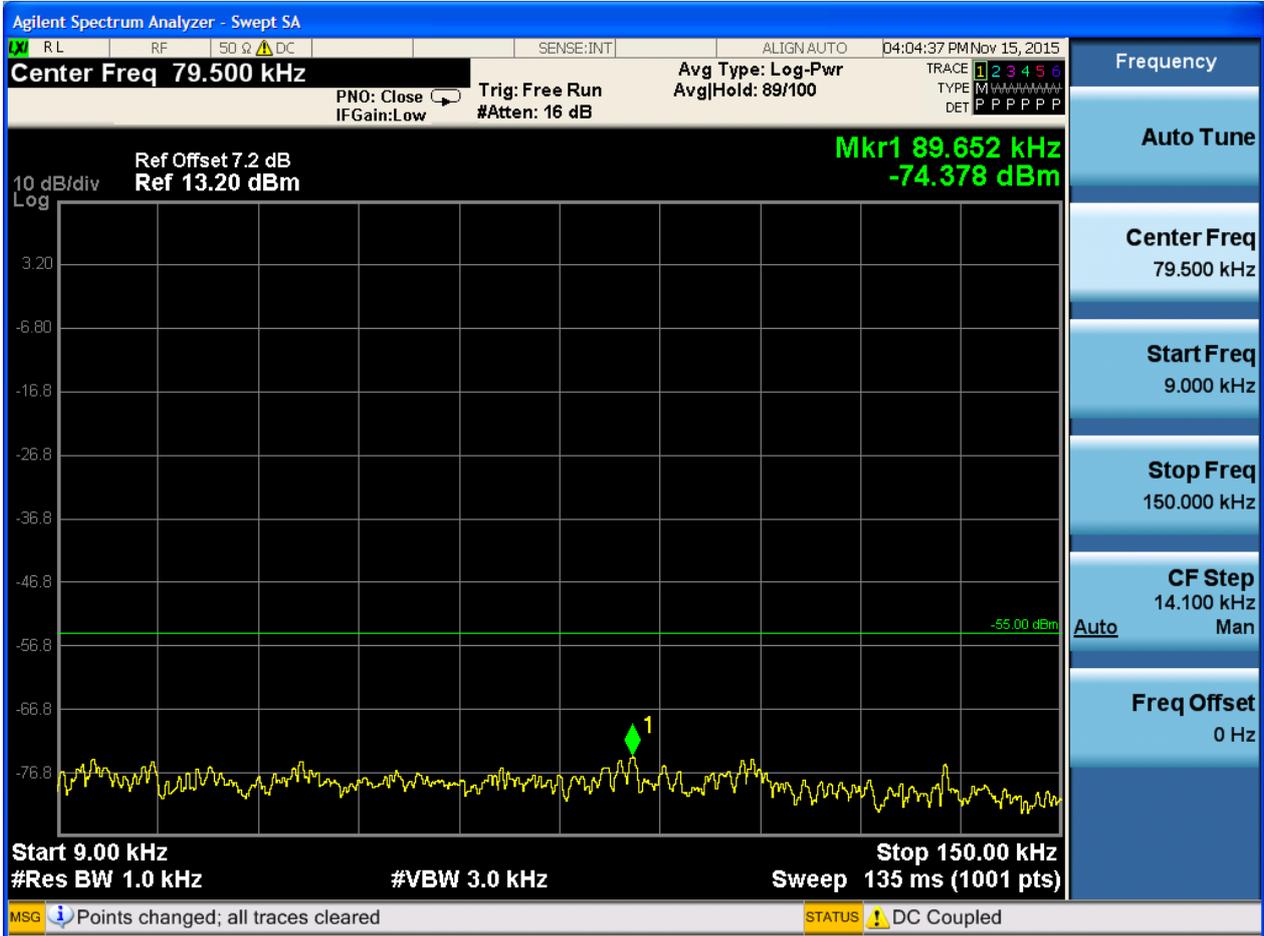


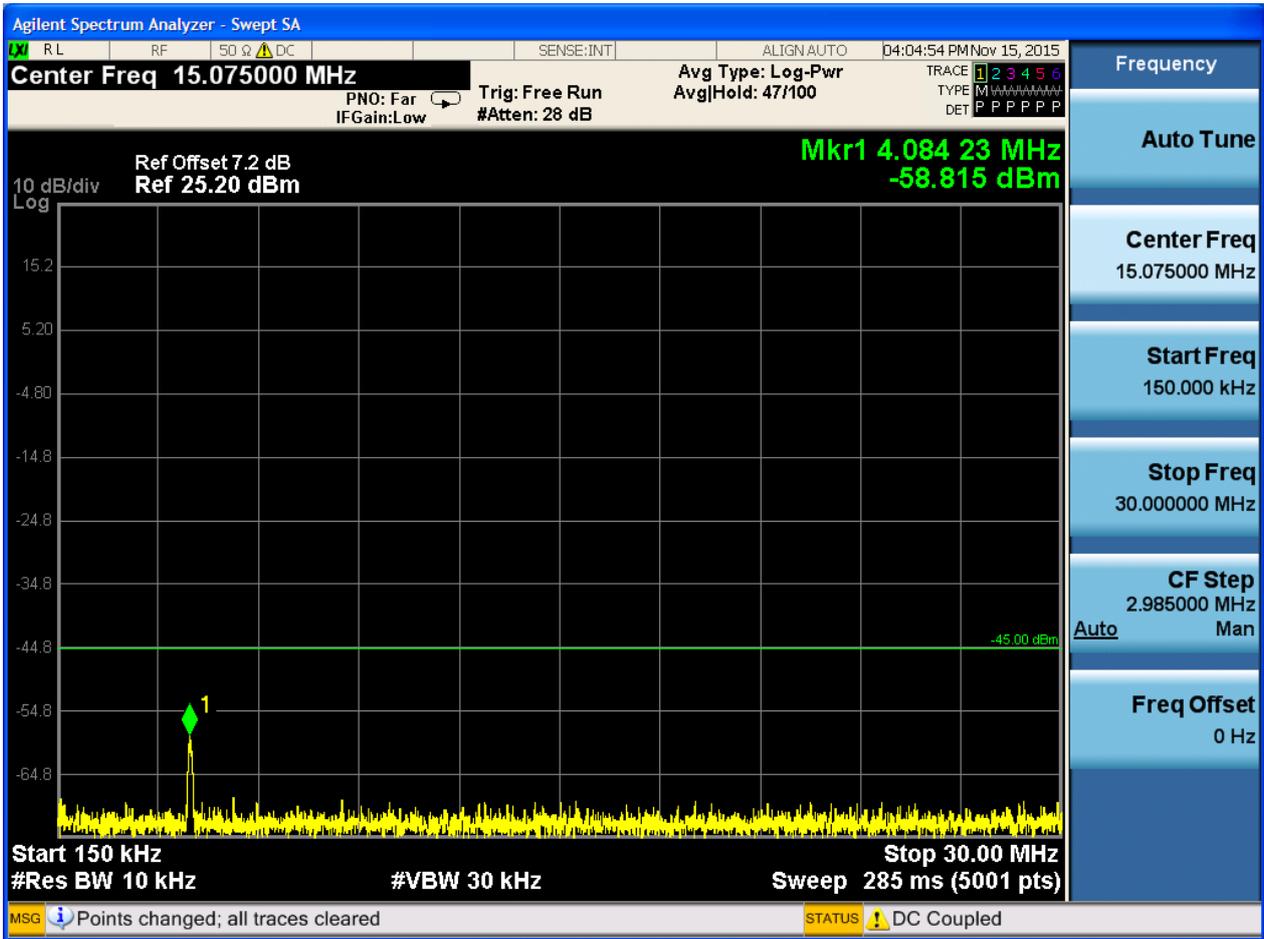


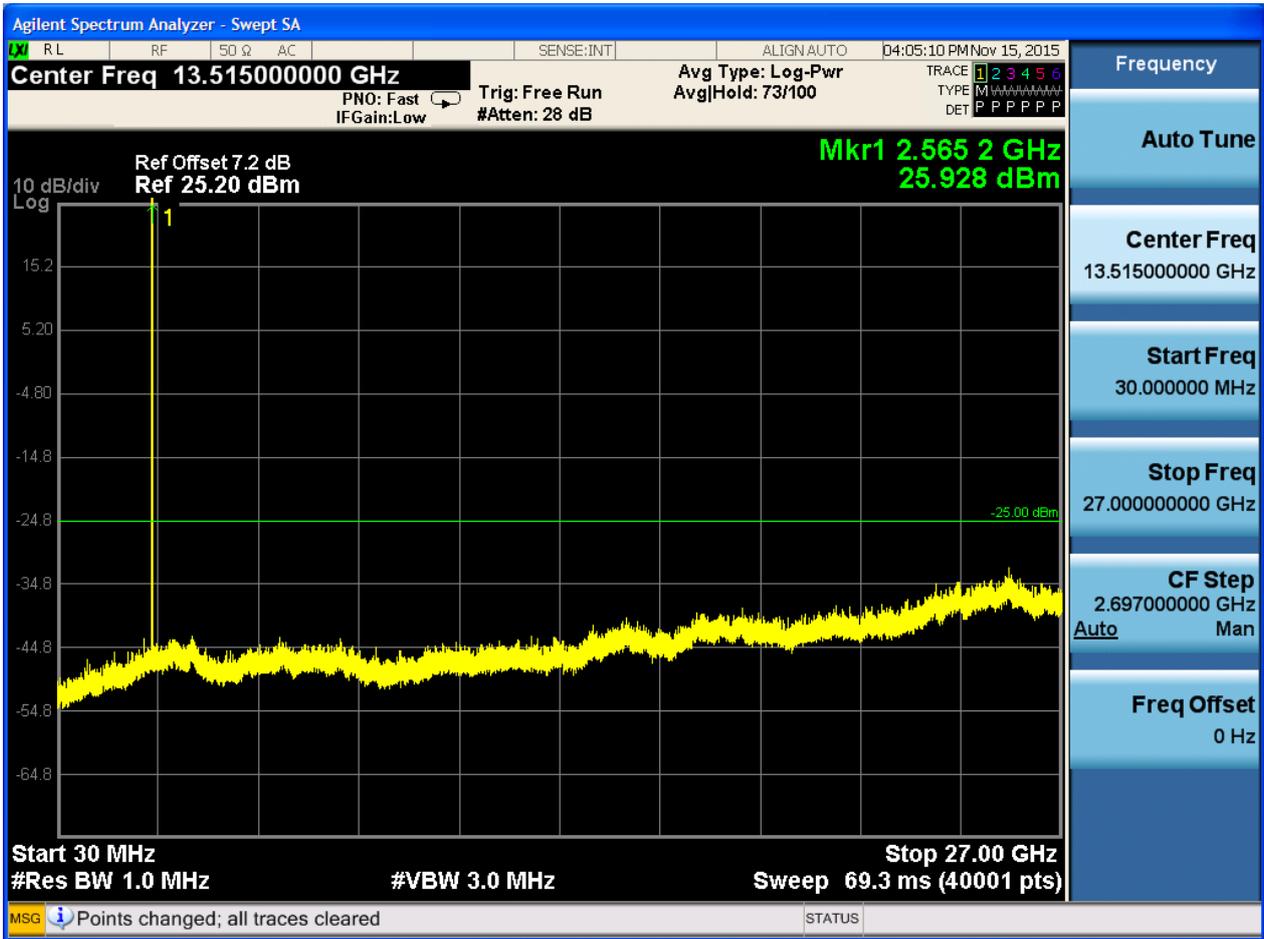


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0





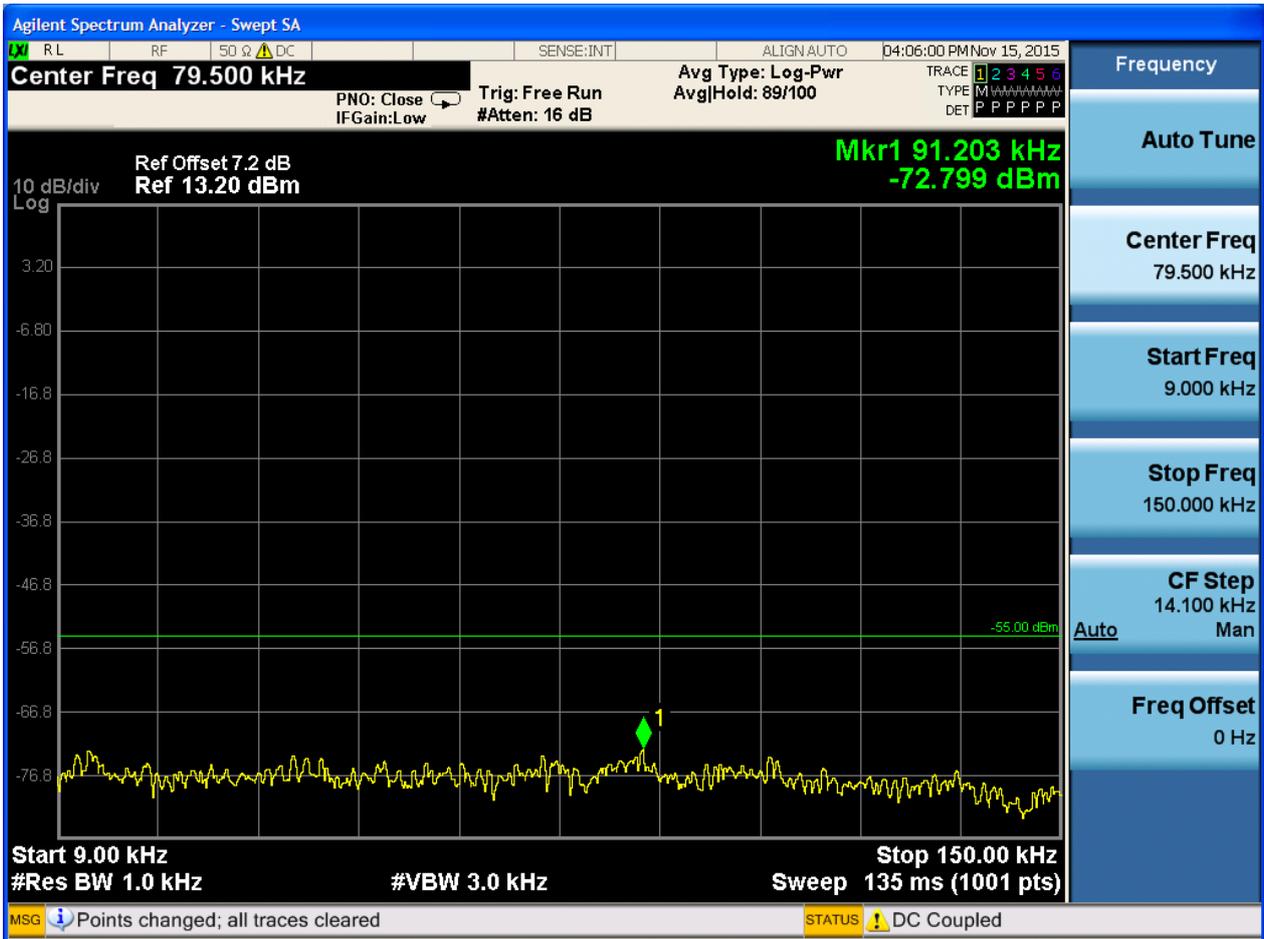




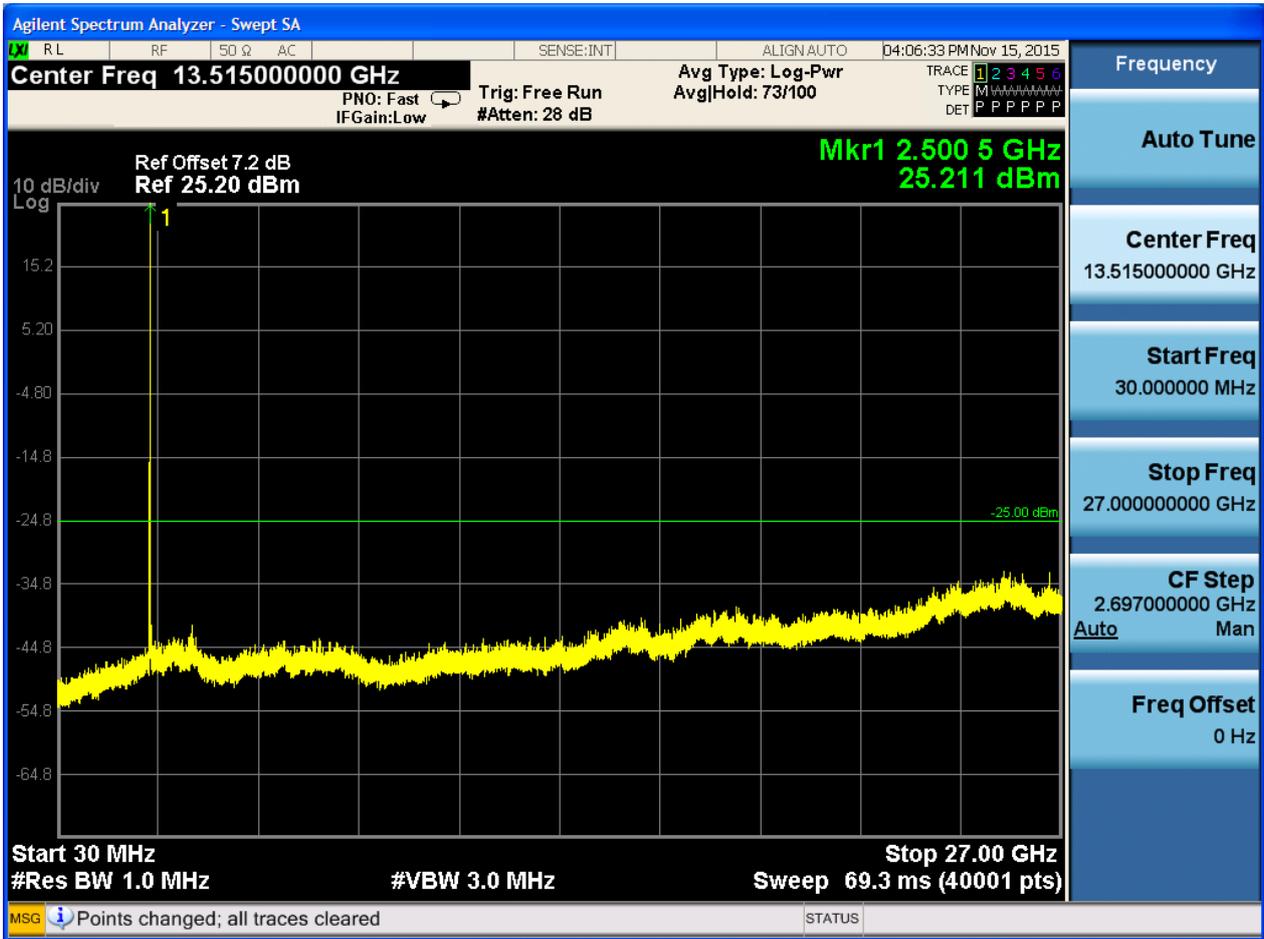
6.1.1.2.2 Test Bandwidth = 10

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



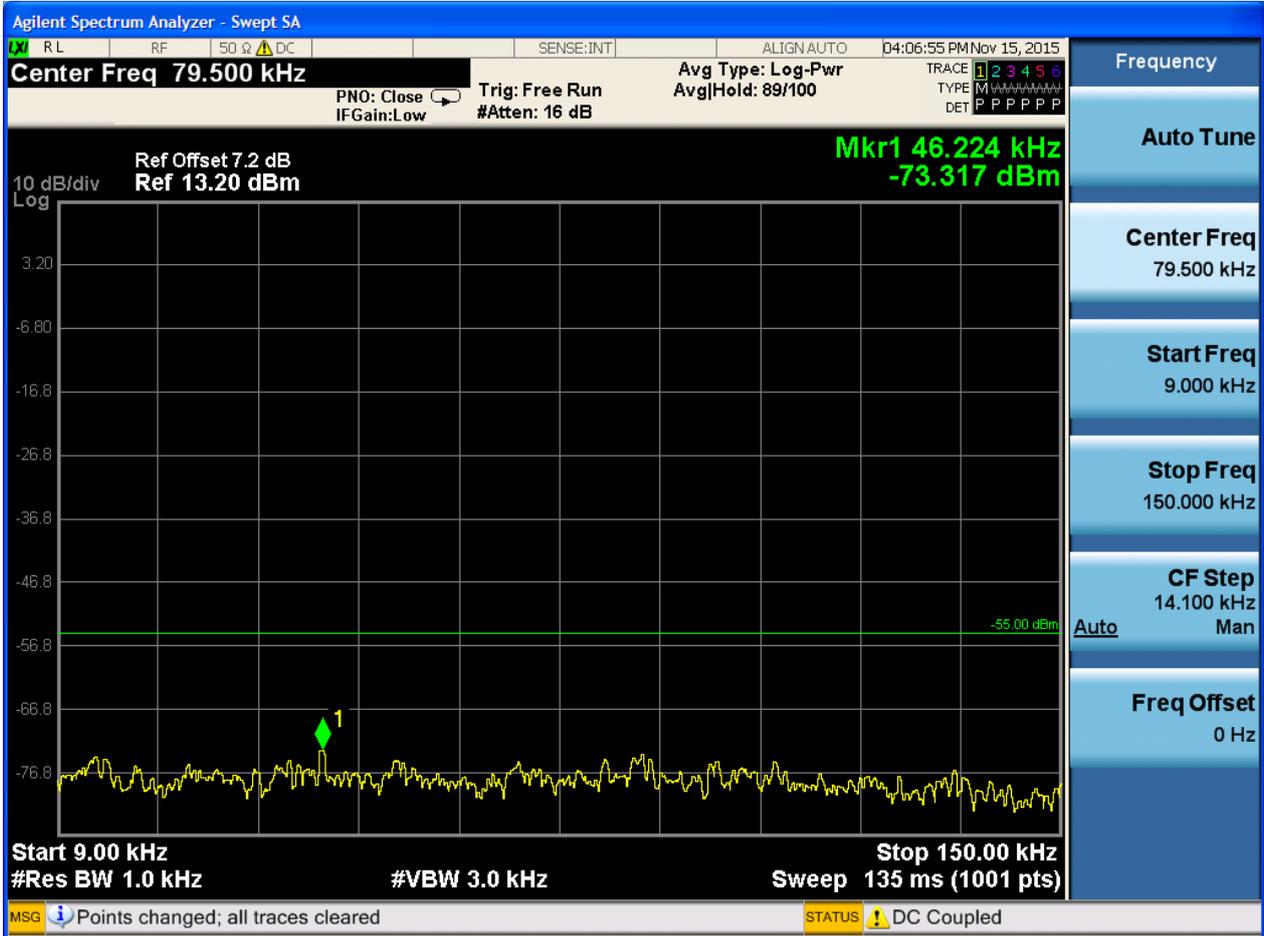


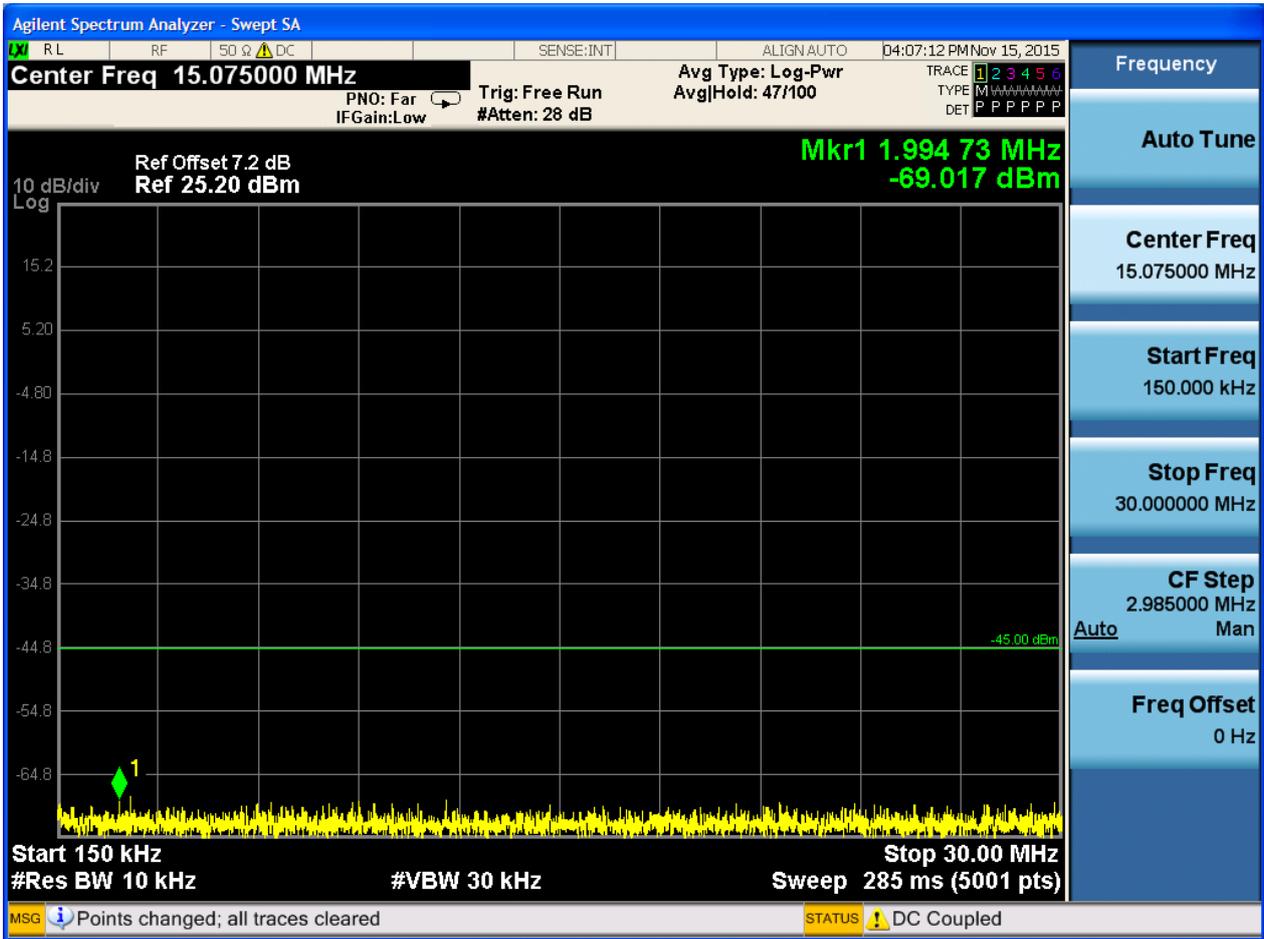




6.1.1.2.2.2 Test Channel = MCH

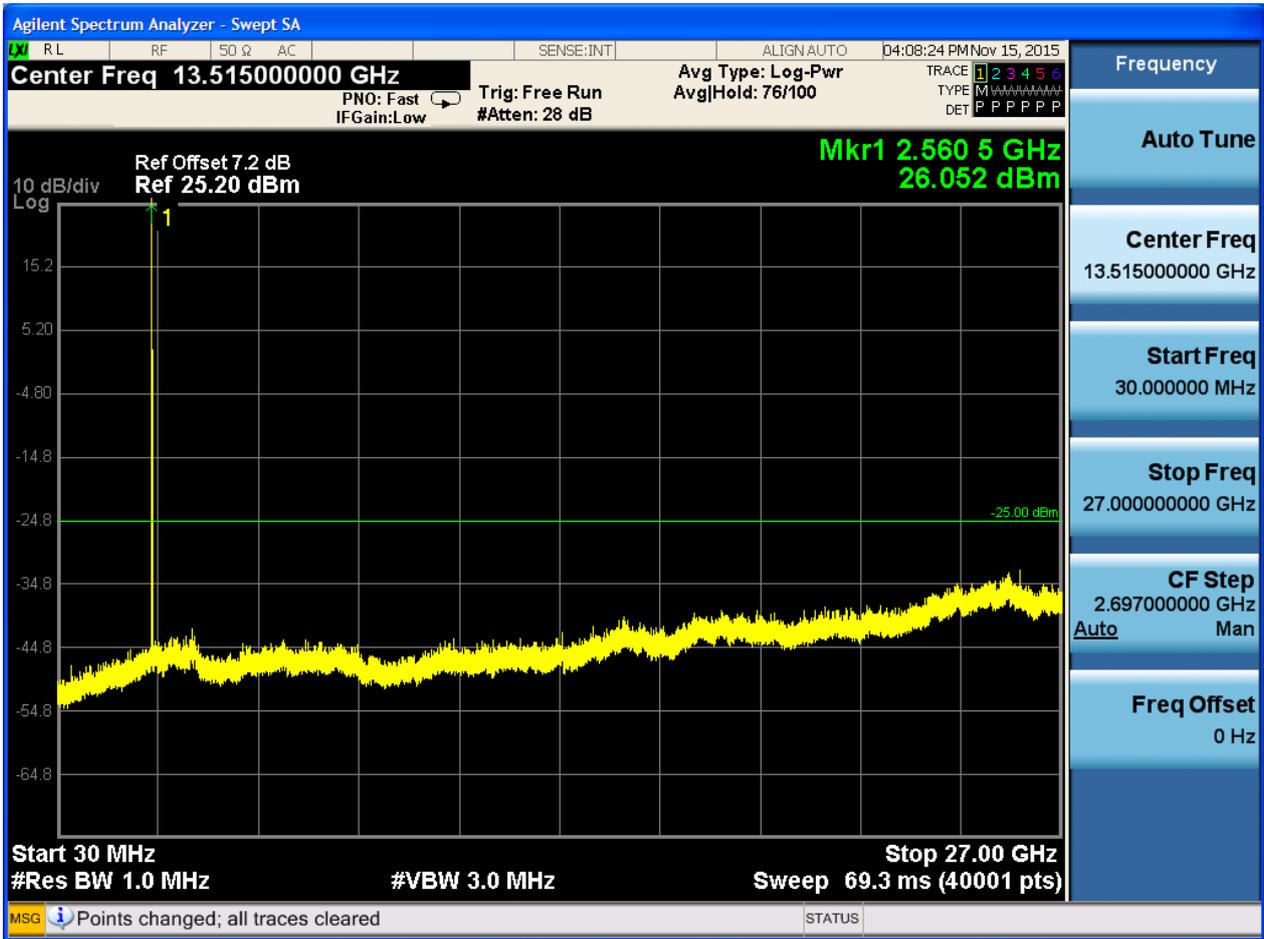
6.1.1.2.2.2.1 Test RB = RB1#0









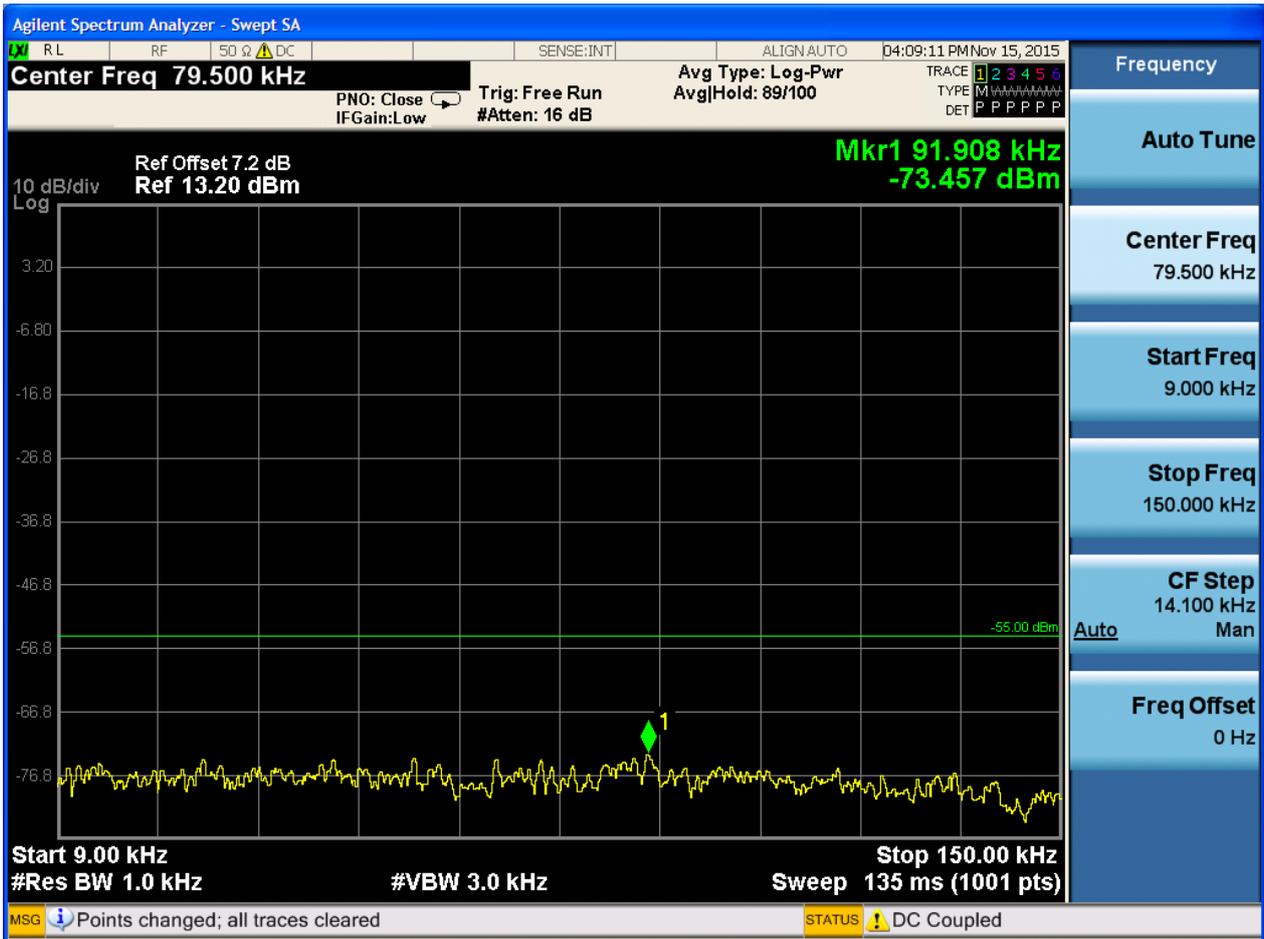




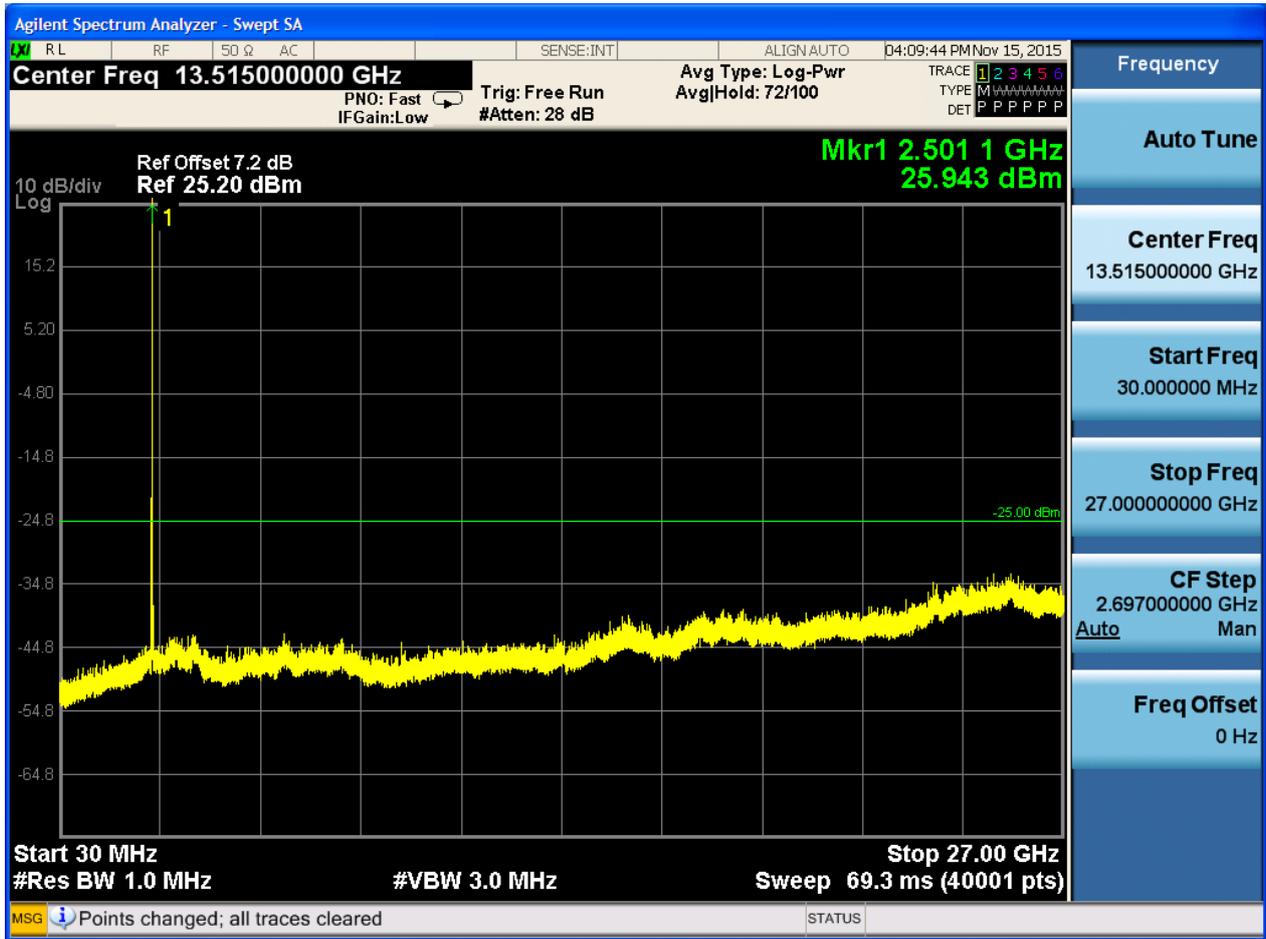
6.1.1.2.3 Test Bandwidth = 15

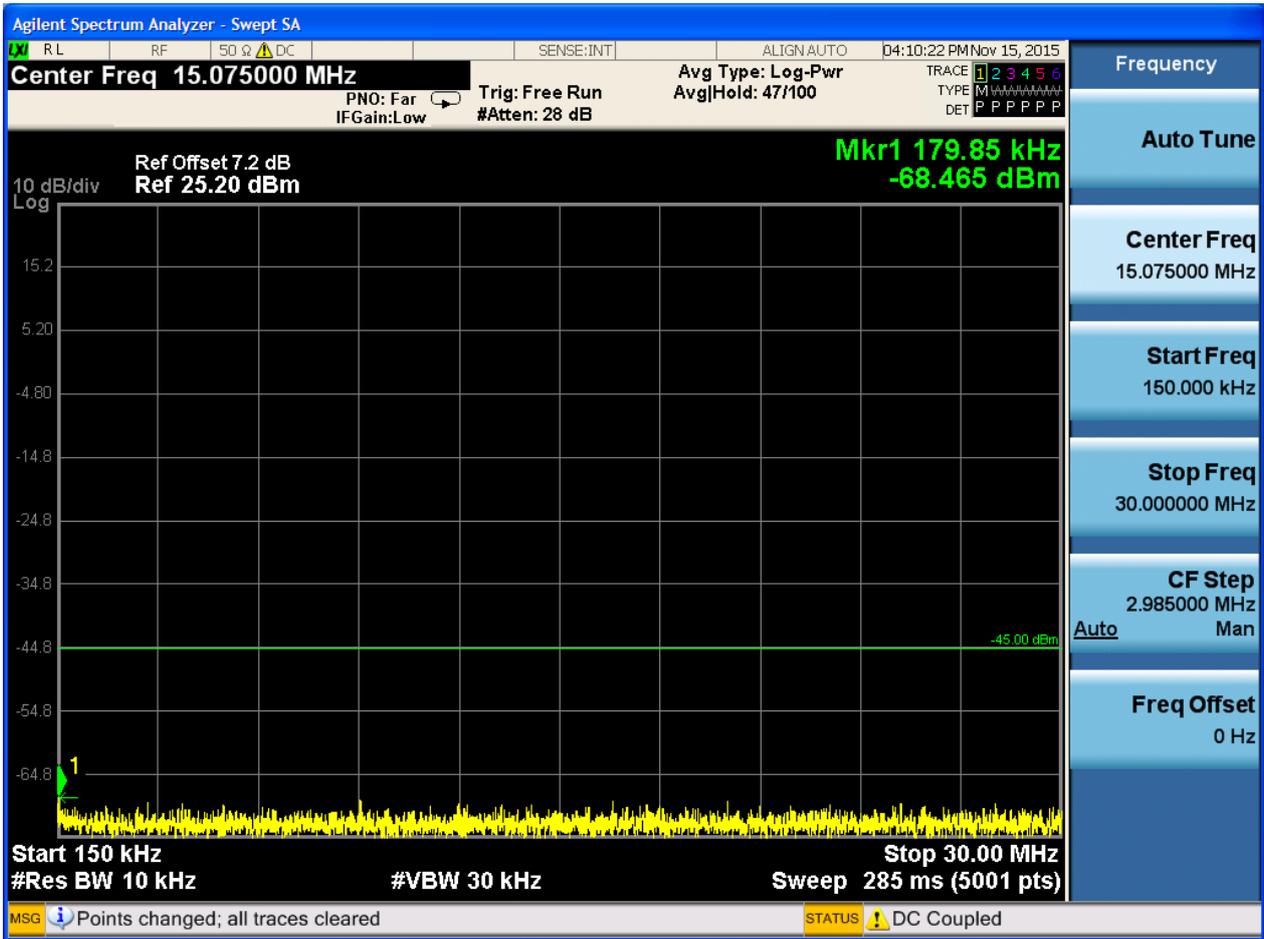
6.1.1.2.3.1 Test Channel = LCH

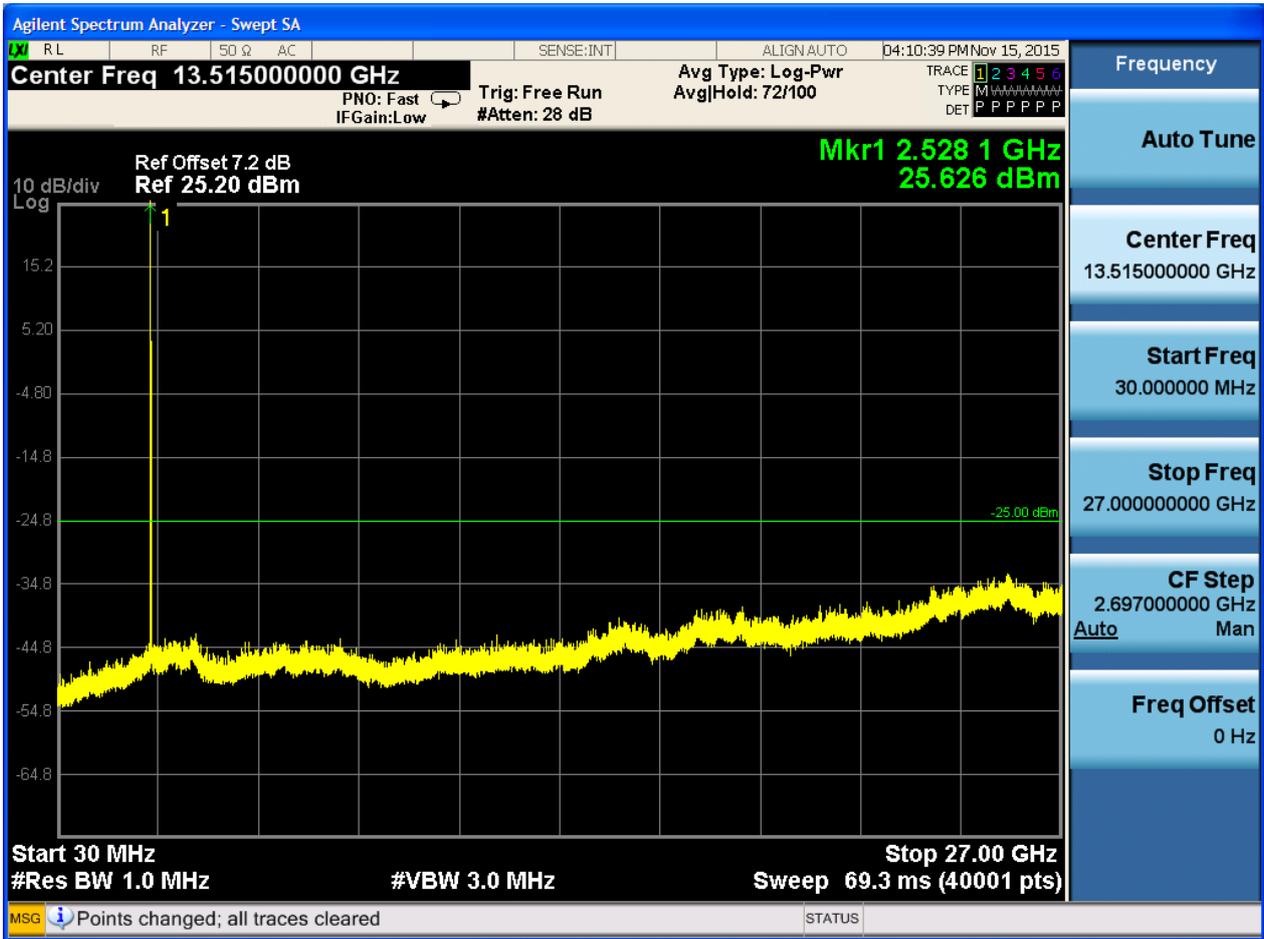
6.1.1.2.3.1.1 Test RB = RB1#0

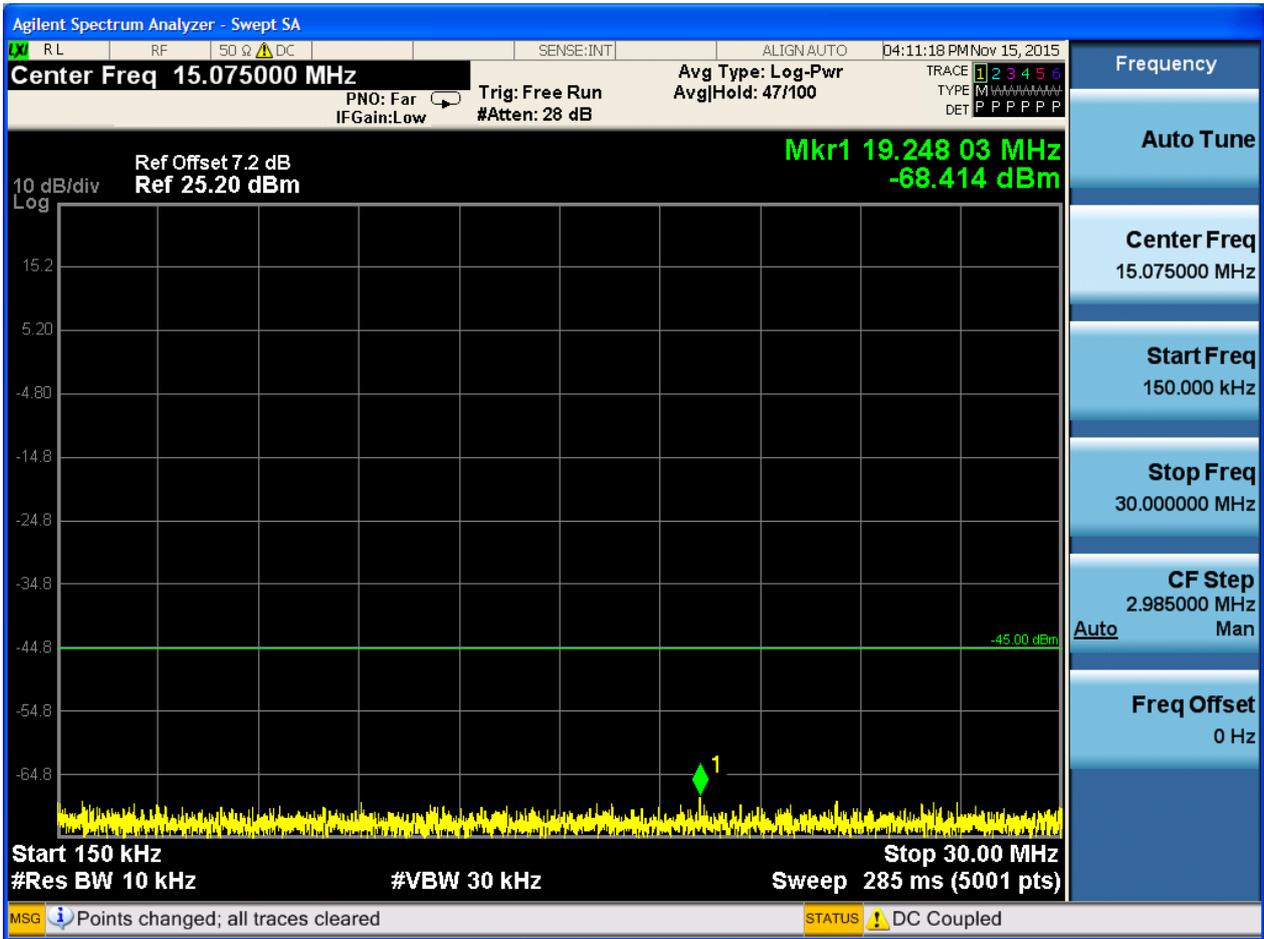


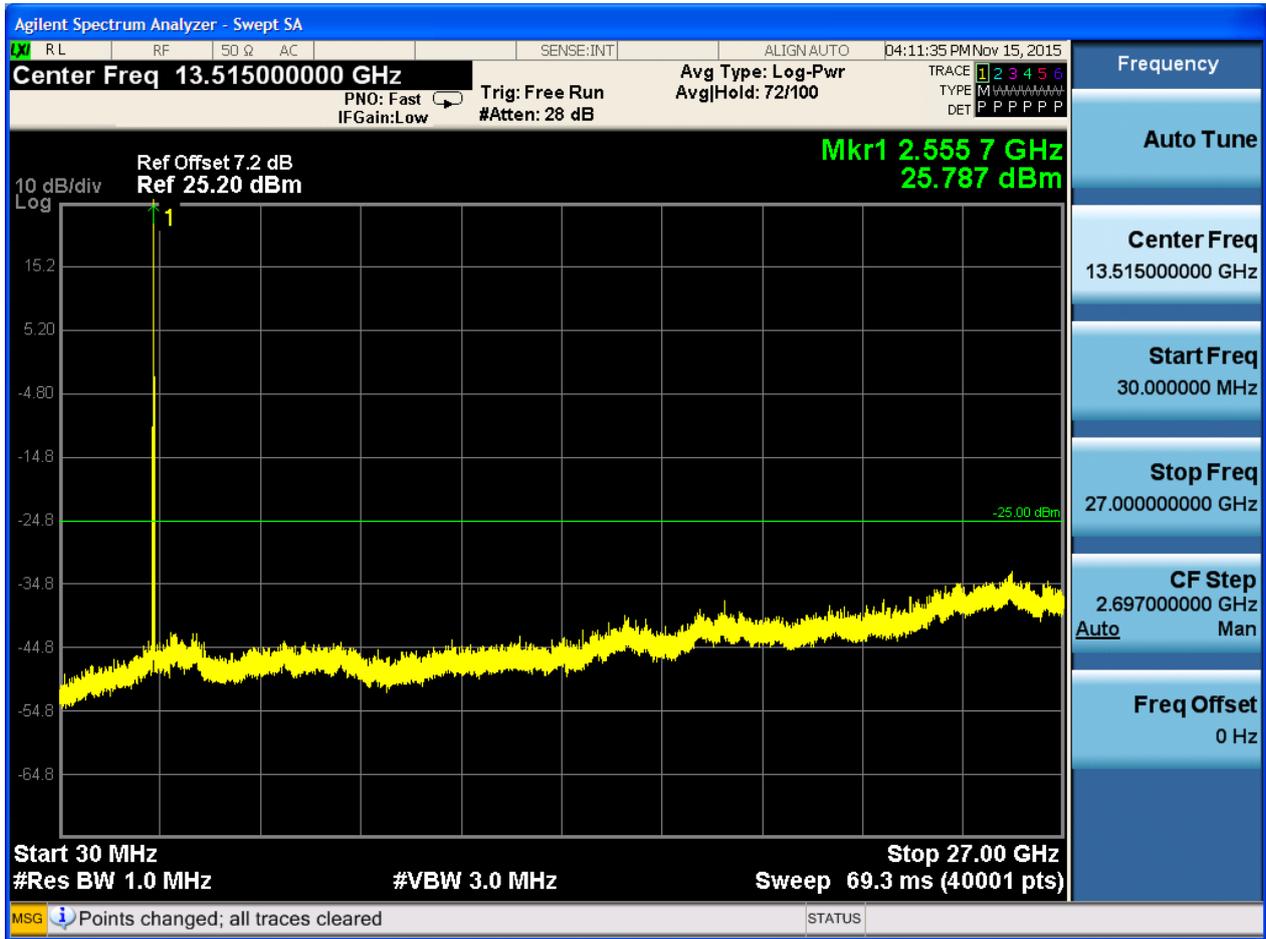










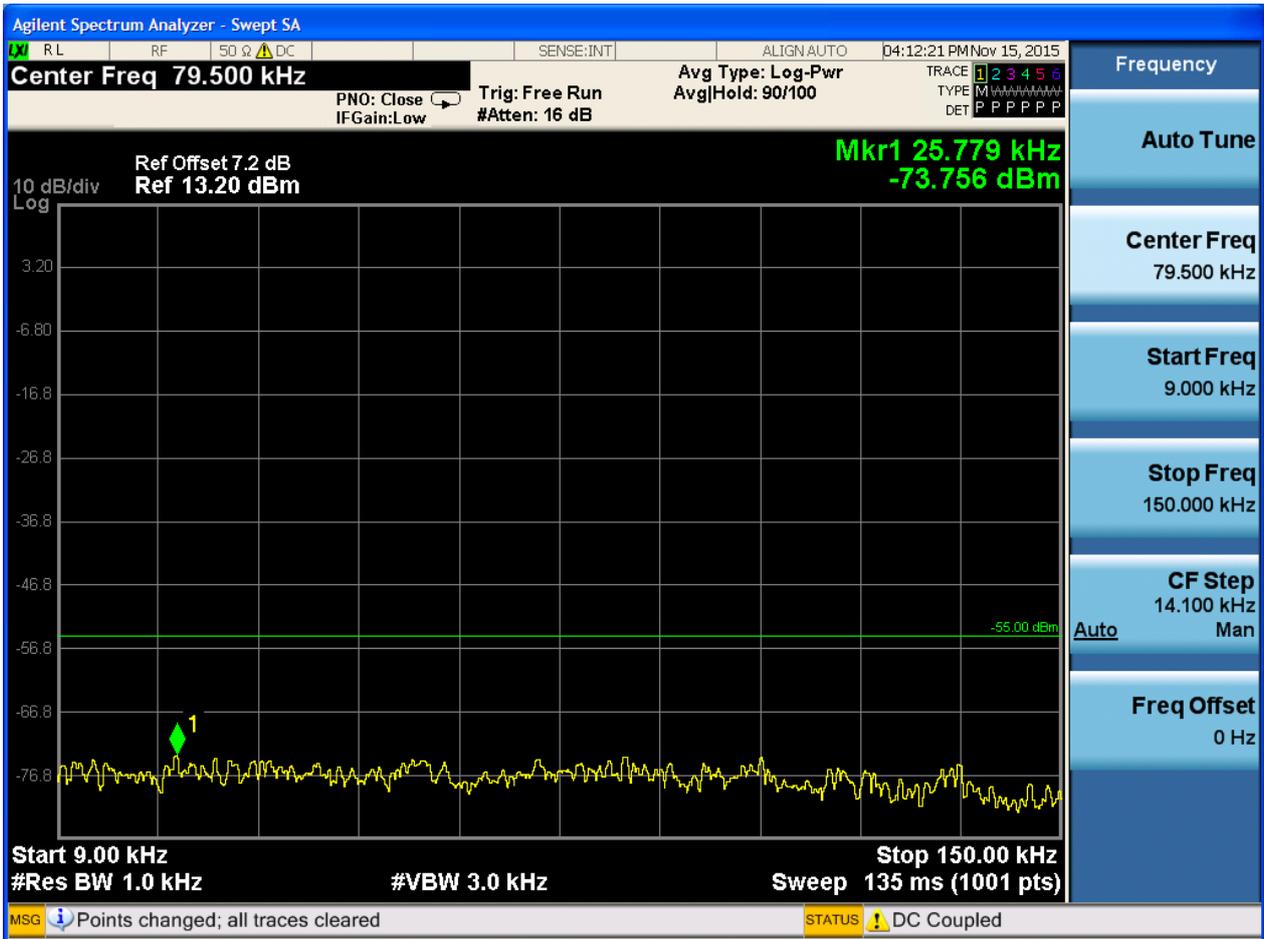


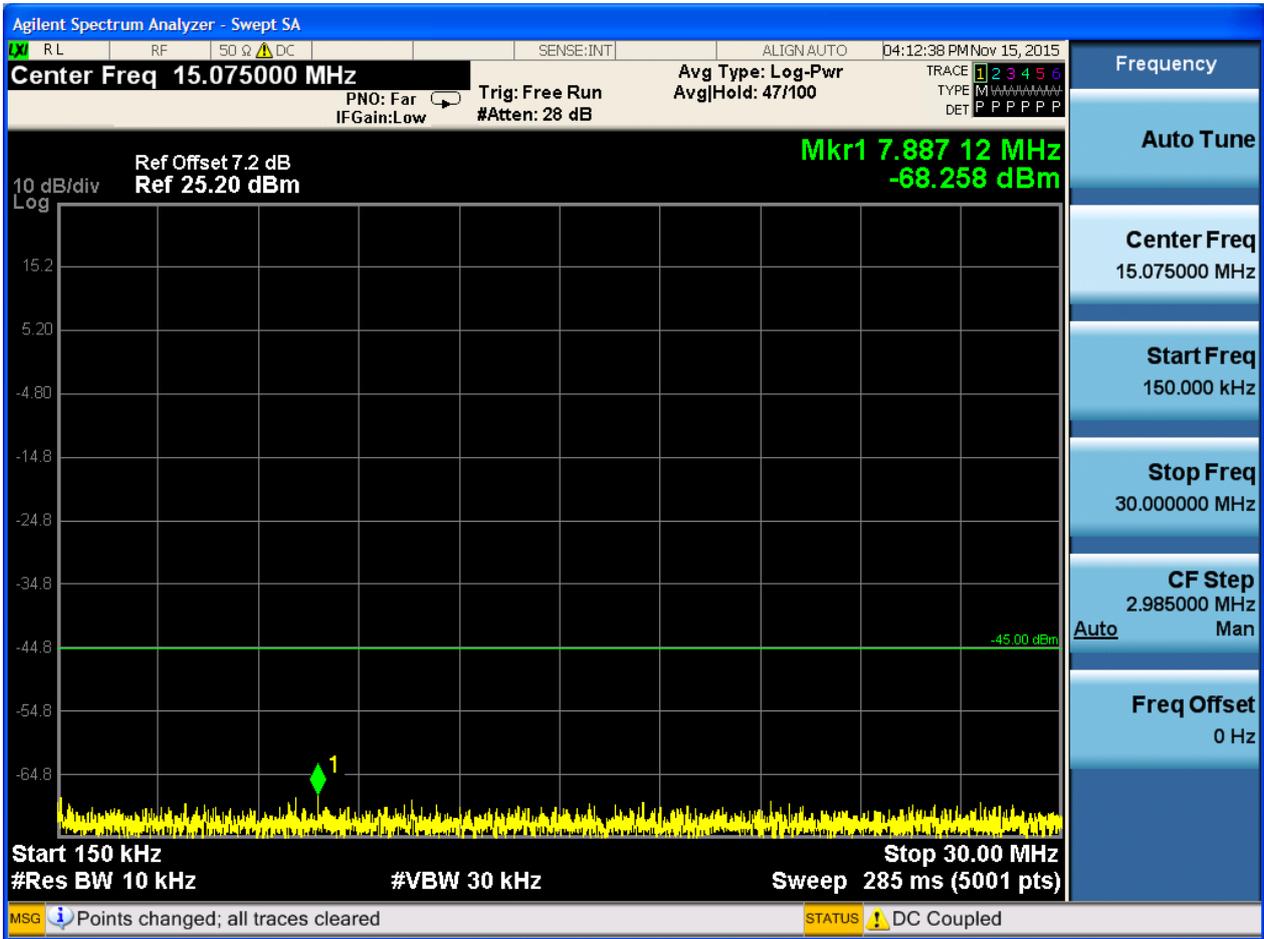


6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0



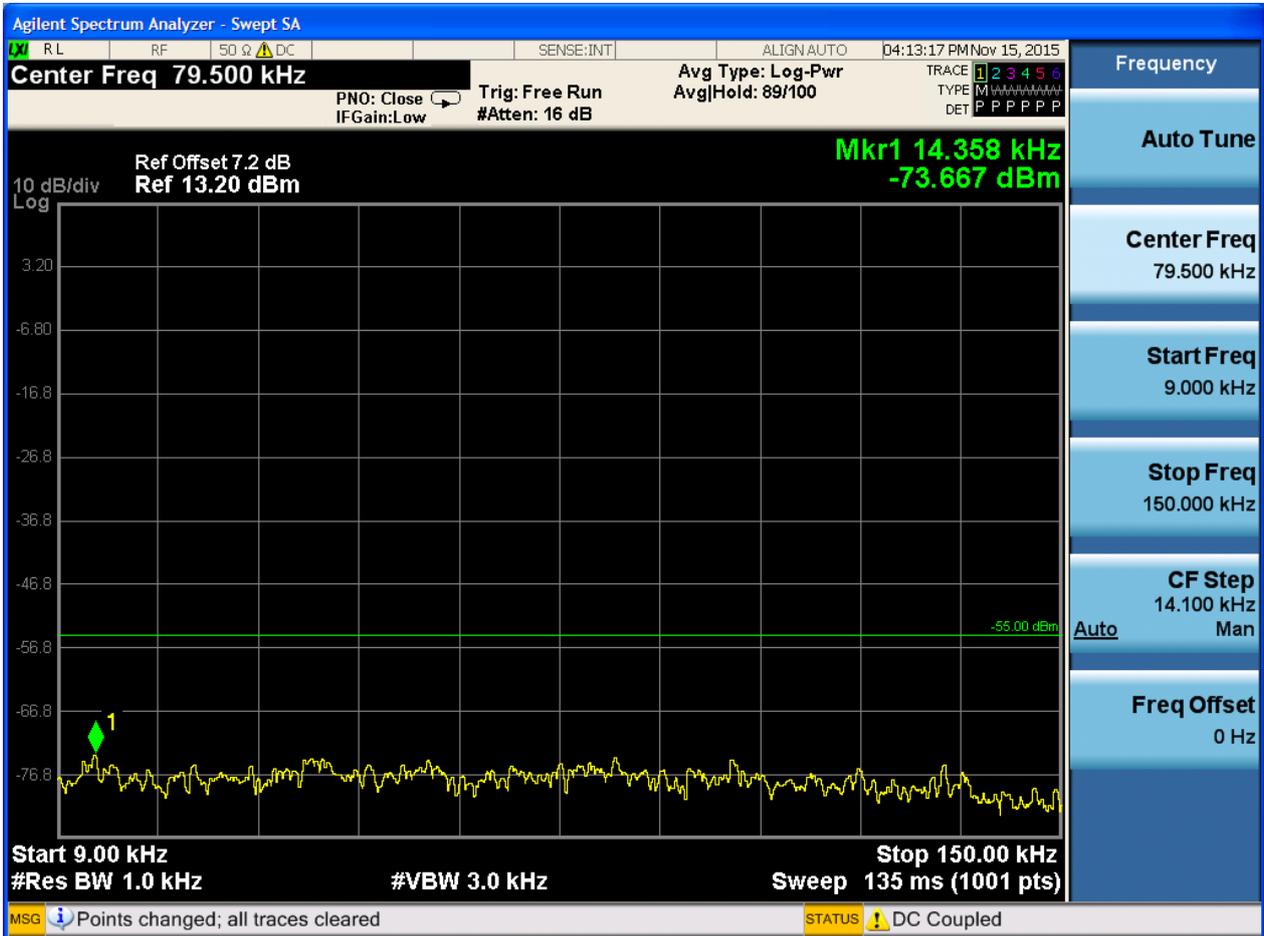






6.1.1.2.4.2 Test Channel = MCH

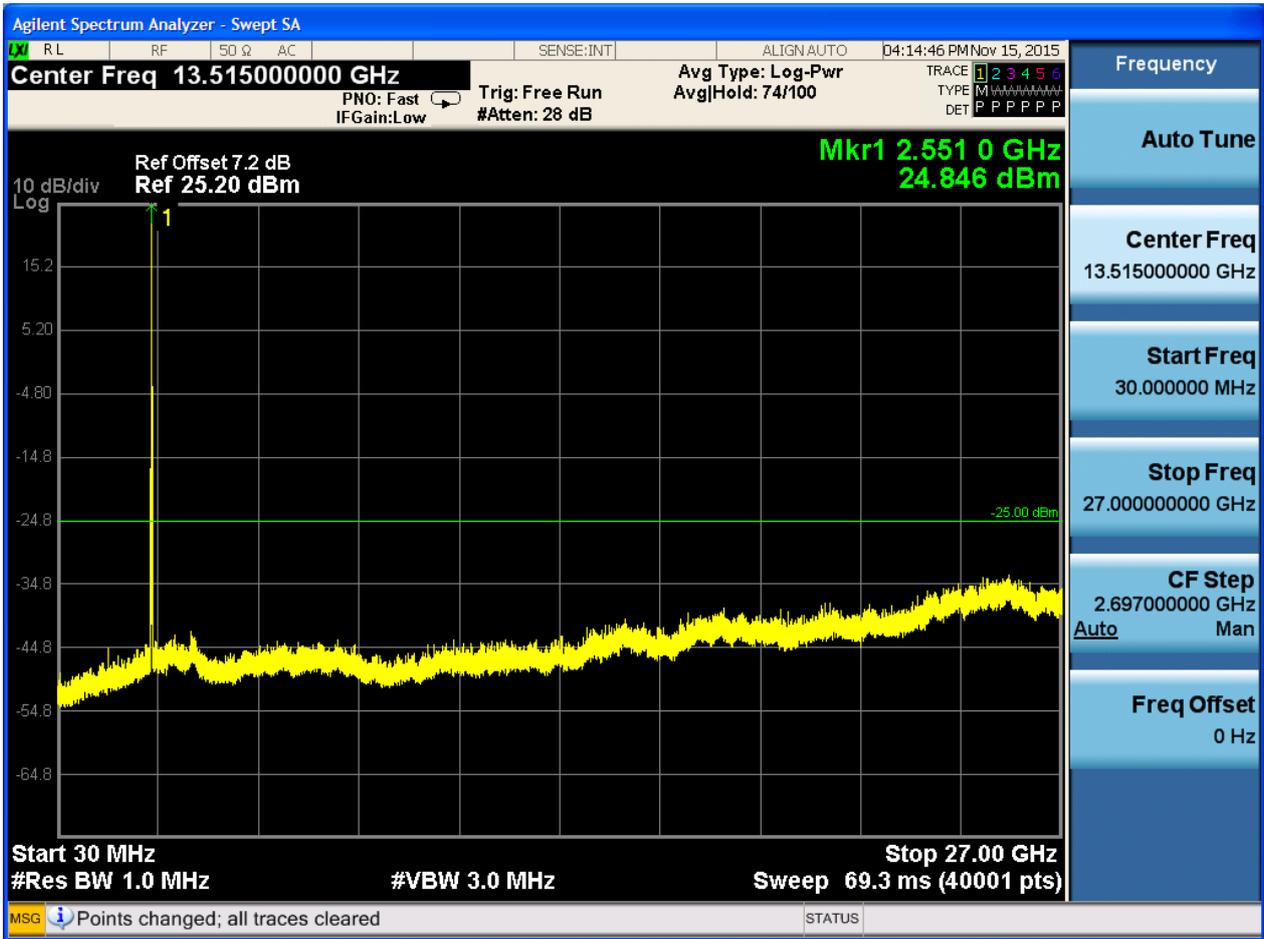
6.1.1.2.4.2.1 Test RB = RB1#0











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

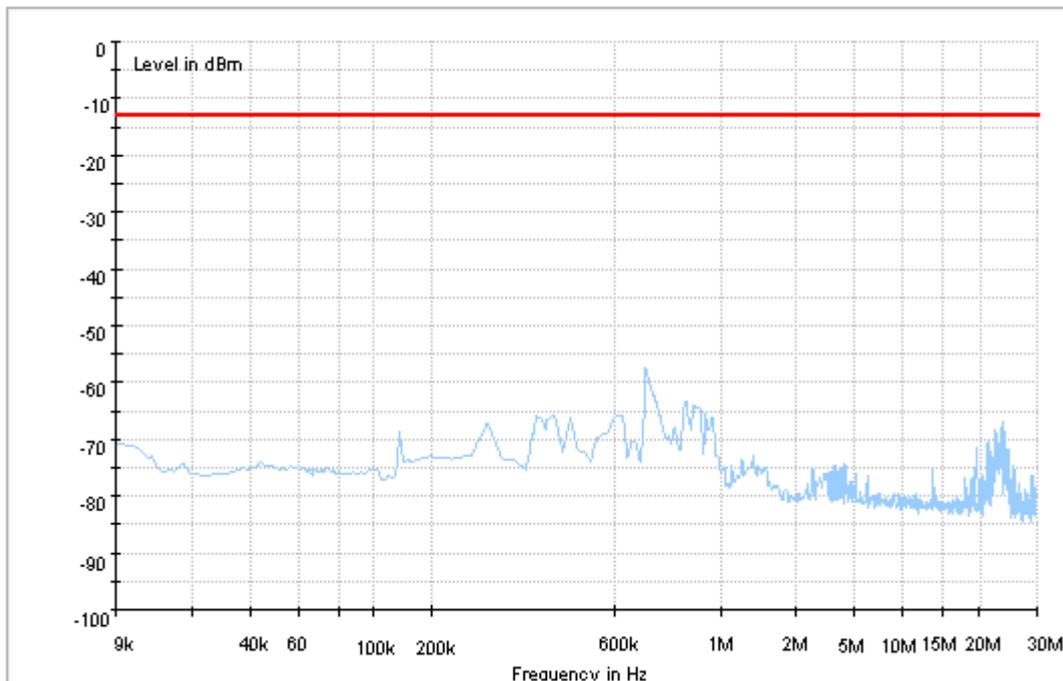
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

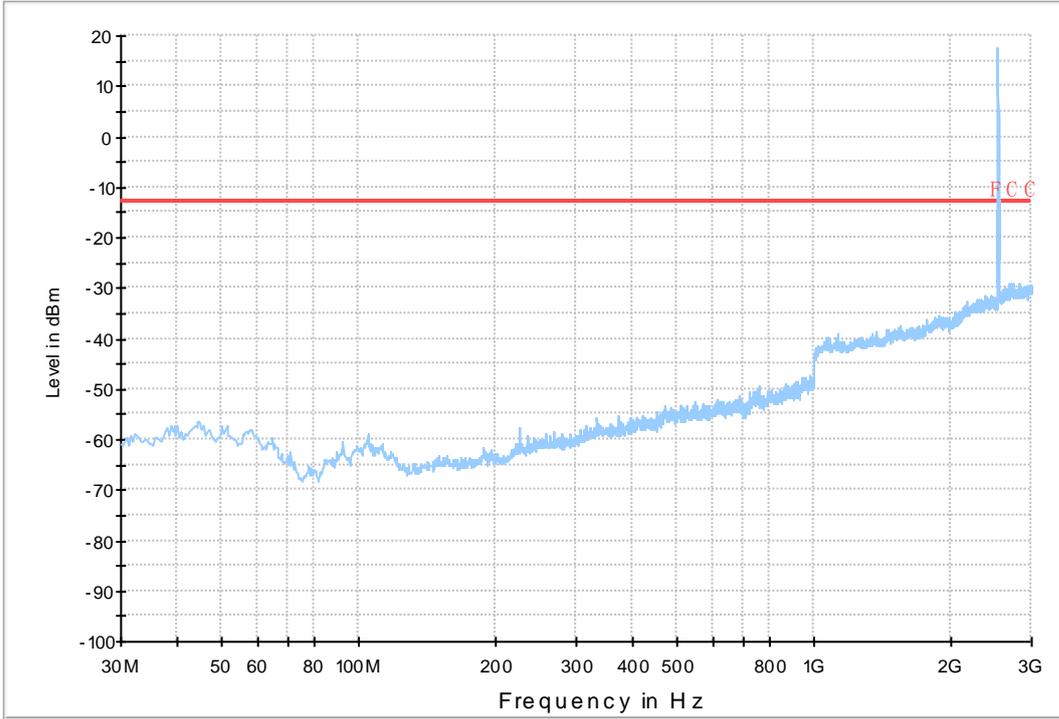
7.1 For LTE

7.1.1 Test Band = BAND7

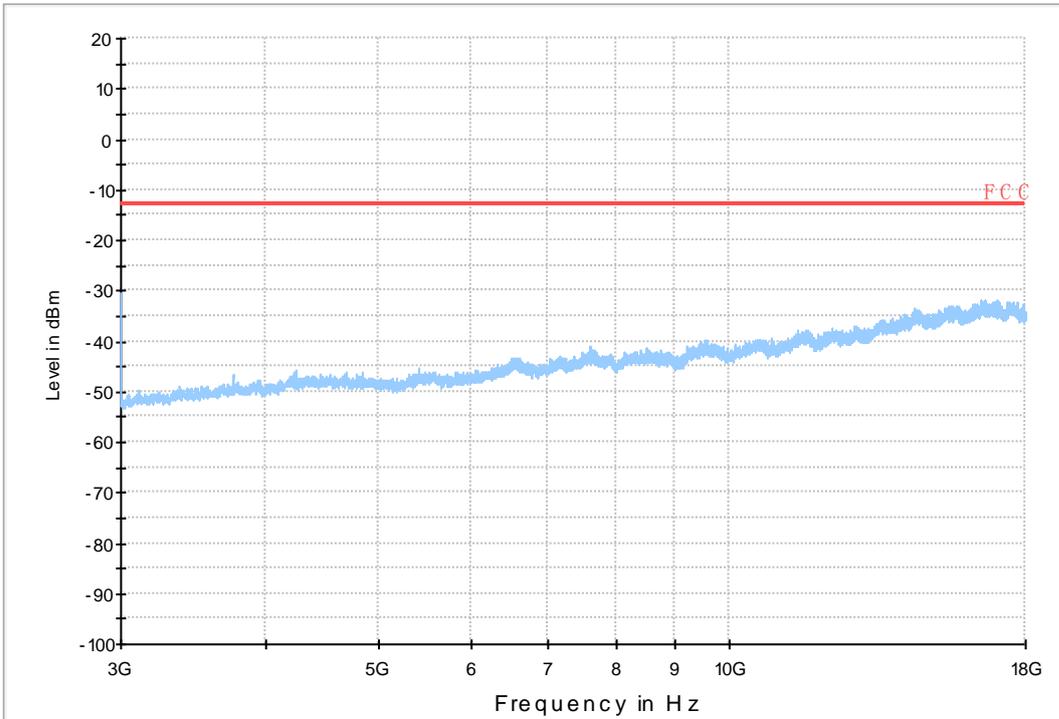
7.1.1.1 Test Bandwidth = 5

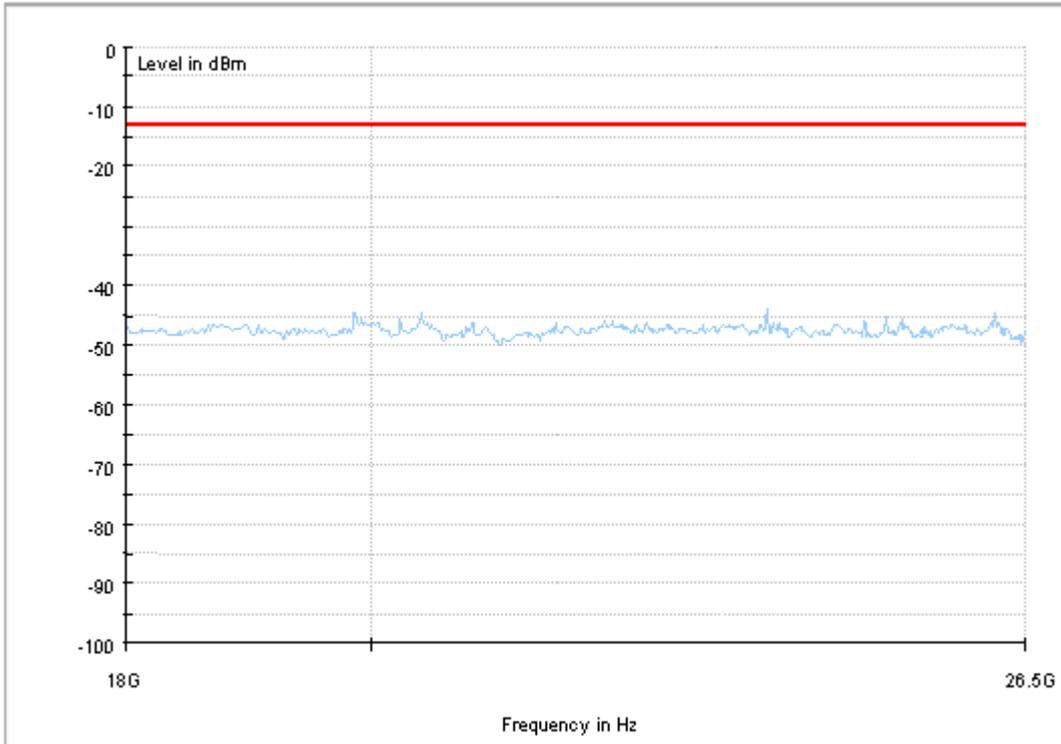


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_L

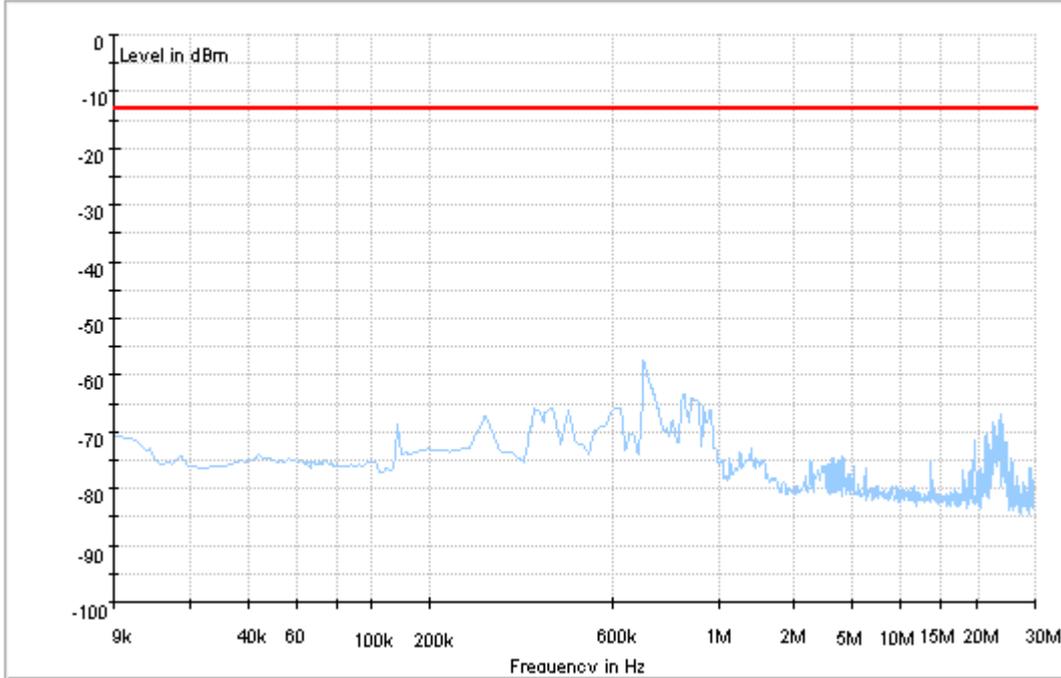


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_H

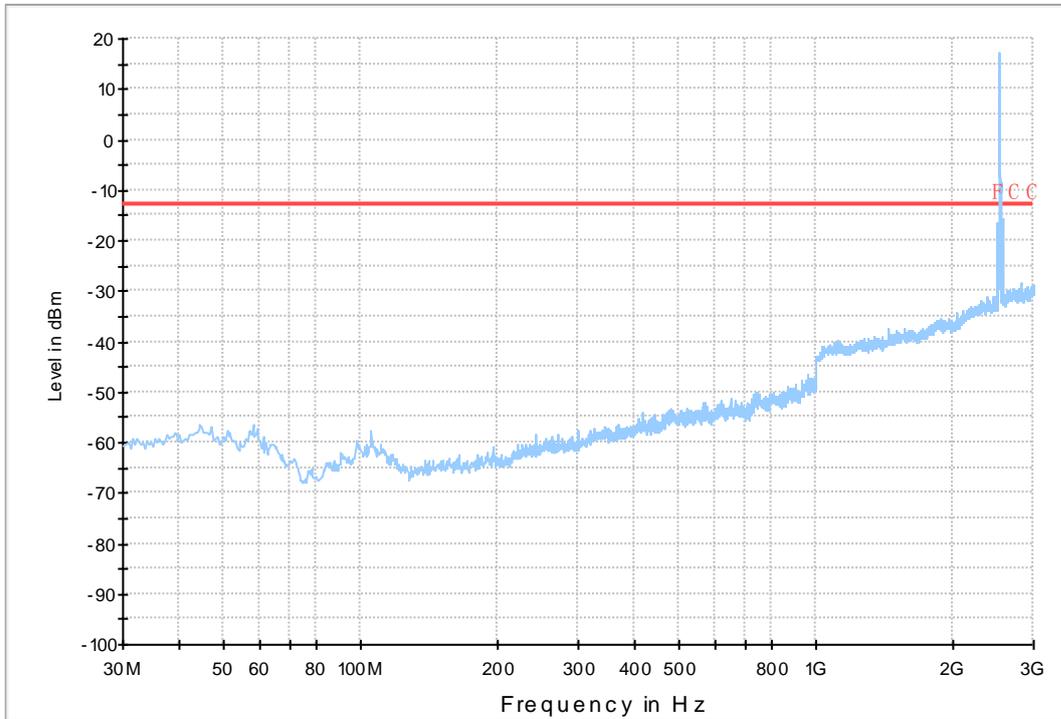




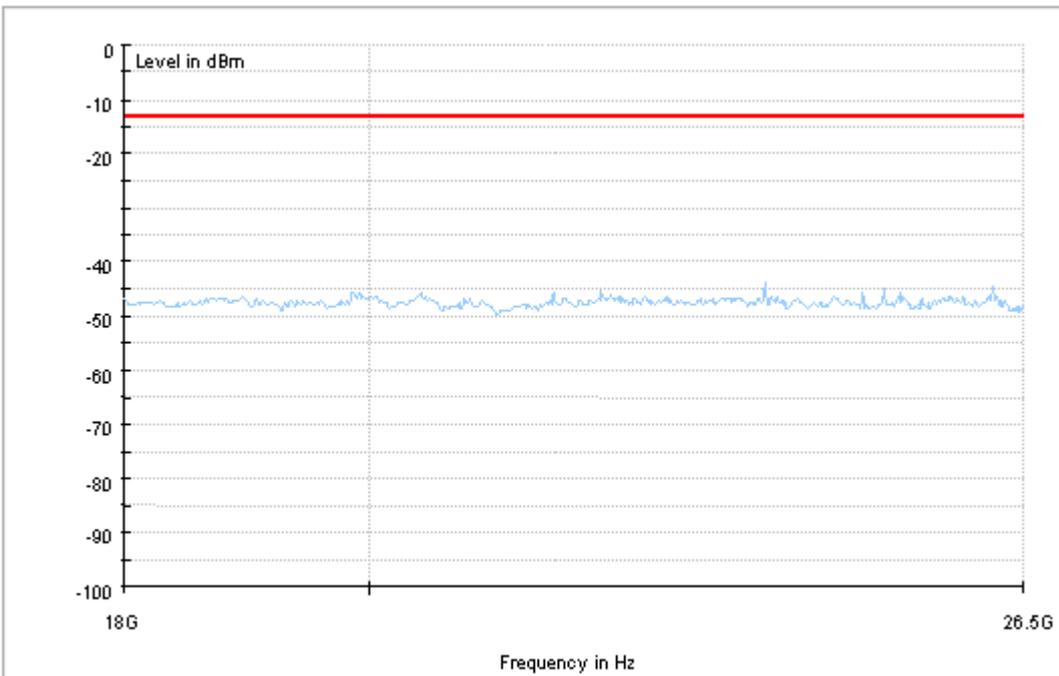
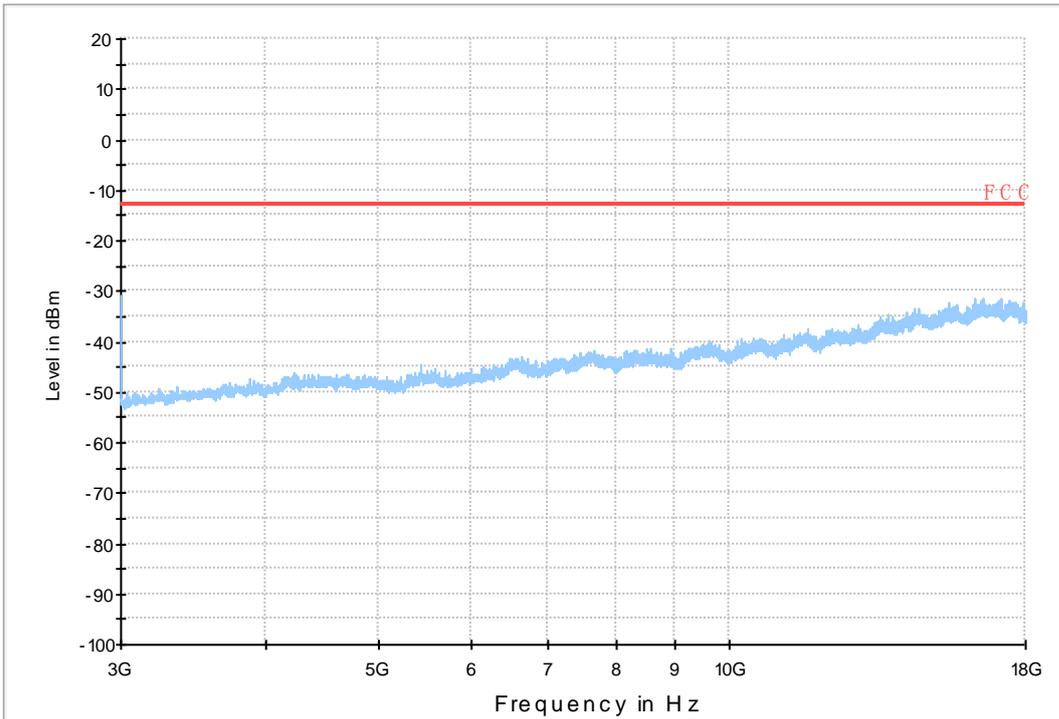
7.1.1.2 Test Bandwidth = 20



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

8.1.1 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	-5.39	-0.00215	PASS
					VN	-6.38	-0.00255	PASS
					VH	3.33	0.00133	PASS
			MCH	TN	VL	-1.56	-0.00062	PASS
					VN	0.1	0.00004	PASS
					VH	-2.96	-0.00117	PASS
			HCH	TN	VL	-8.55	-0.00333	PASS
					VN	1.79	0.0007	PASS
					VH	-3.99	-0.00155	PASS
		10	LCH	TN	VL	-4.61	-0.00184	PASS
					VN	-4.18	-0.00167	PASS
					VH	4.72	0.00188	PASS
			MCH	TN	VL	-7.35	-0.0029	PASS
					VN	0.94	0.00037	PASS
					VH	-5.44	-0.00215	PASS
			HCH	TN	VL	9.6	0.00374	PASS
					VN	-3.03	-0.00118	PASS
					VH	-3.93	-0.00153	PASS
		15	LCH	TN	VL	2.8	0.00112	PASS
					VN	-3.06	-0.00122	PASS
					VH	2.06	0.00082	PASS
			MCH	TN	VL	-2.69	-0.00106	PASS
					VN	-3.35	-0.00132	PASS
					VH	-5.39	-0.00213	PASS
			HCH	TN	VL	-0.54	-0.00021	PASS
					VN	0.92	0.00036	PASS
					VH	-1.1	-0.00043	PASS
		20	LCH	TN	VL	-0.43	-0.00017	PASS
					VN	0.96	0.00038	PASS
					VH	-0.16	-0.00006	PASS
			MCH	TN	VL	1.76	0.00069	PASS
					VN	4.32	0.0017	PASS
					VH	2.88	0.00114	PASS
			HCH	TN	VL	-1.24	-0.00048	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
	LTE/TM2				VN	-3.78	-0.00148	PASS	
					VH	-2.63	-0.00103	PASS	
		5	LCH	TN	VL	2.26	0.0009	PASS	
					VN	5.29	0.00211	PASS	
					VH	2.4	0.00096	PASS	
					VL	1.3	0.00051	PASS	
					VN	-0.14	-0.00006	PASS	
					VH	6.19	0.00244	PASS	
			MCH	TN	VL	-8.58	-0.00334	PASS	
					VN	-5.35	-0.00208	PASS	
					VH	2.53	0.00099	PASS	
					VL	-6.52	-0.0026	PASS	
					VN	0.29	0.00012	PASS	
					VH	-2.52	-0.00101	PASS	
		10	LCH	TN	VL	-5.61	-0.00221	PASS	
					VN	-10.2	-0.00402	PASS	
					VH	3.88	0.00153	PASS	
					VL	-3.22	-0.00126	PASS	
					VN	-5.15	-0.00201	PASS	
					VH	-1.9	-0.00074	PASS	
			MCH	TN	VL	-0.63	-0.00025	PASS	
					VN	3.02	0.0012	PASS	
					VH	-1.3	-0.00052	PASS	
					VL	-2.23	-0.00088	PASS	
					VN	-2.79	-0.0011	PASS	
					VH	-1.03	-0.00041	PASS	
		15	LCH	TN	VL	-2.22	-0.00087	PASS	
					VN	-1.07	-0.00042	PASS	
					VH	-5.04	-0.00197	PASS	
					VL	2.65	0.00106	PASS	
					VN	0.17	0.00007	PASS	
					VH	-4.33	-0.00173	PASS	
			MCH	TN	VL	5.06	0.002	PASS	
					VN	3.49	0.00138	PASS	
					VH	0.23	0.00009	PASS	
					VL	-1.73	-0.00068	PASS	
					VN	-2.95	-0.00115	PASS	
					VH	-2.05	-0.0008	PASS	
		20	LCH	TN					



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	0.03	0.00001	PASS
					-20	-3.55	-0.00142	PASS
					-10	3.09	0.00123	PASS
					0	-3.15	-0.00126	PASS
					10	-2.29	-0.00092	PASS
					20	4.61	0.00184	PASS
					30	-1.03	-0.00041	PASS
					40	-13.06	-0.00522	PASS
					50	-5.74	-0.00229	PASS
			MCH	VN	-30	-0.39	-0.00015	PASS
					-20	-9.41	-0.00371	PASS
					-10	-5.21	-0.00206	PASS
					0	1.92	0.00076	PASS
					10	-2.66	-0.00105	PASS
					20	-1.79	-0.00071	PASS
					30	-1.99	-0.00079	PASS
					40	3.62	0.00143	PASS
					50	-4.13	-0.00163	PASS
		HCH	VN	-30	-2.32	-0.0009	PASS	
				-20	-2.1	-0.00082	PASS	
				-10	2.5	0.00097	PASS	
				0	0.53	0.00021	PASS	
				10	-7.4	-0.00288	PASS	
				20	-5.87	-0.00229	PASS	
				30	-5.18	-0.00202	PASS	
				40	-1.79	-0.0007	PASS	
				50	-0.63	-0.00025	PASS	
		10	LCH	VN	-30	-5.28	-0.00211	PASS
					-20	-7.04	-0.00281	PASS
					-10	-0.3	-0.00012	PASS
					0	-5.15	-0.00206	PASS
					10	-8.17	-0.00326	PASS
					20	-1.46	-0.00058	PASS
					30	9.18	0.00366	PASS
					40	8.65	0.00345	PASS
					50	-5.14	-0.00205	PASS
MCH	VN			-30	-4.68	-0.00185	PASS	

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					-20	-4.13	-0.00163	PASS		
					-10	-4.05	-0.0016	PASS		
					0	-1.83	-0.00072	PASS		
					10	3.23	0.00127	PASS		
					20	-1.12	-0.00044	PASS		
					30	5.14	0.00203	PASS		
					40	3.83	0.00151	PASS		
					50	-2.52	-0.00099	PASS		
			HCH	VN	-30	-1.4	-0.00055	PASS		
					-20	-3.78	-0.00147	PASS		
					-10	-1.86	-0.00073	PASS		
					0	-2.53	-0.00099	PASS		
					10	2.45	0.00096	PASS		
					20	-4.11	-0.0016	PASS		
					30	-4.68	-0.00182	PASS		
					40	-1.14	-0.00044	PASS		
			LCH	VN	-30	-2.88	-0.00115	PASS		
					-20	4.38	0.00175	PASS		
					-10	6.69	0.00267	PASS		
					0	-3.46	-0.00138	PASS		
		10			1.83	0.00073	PASS			
		20			-1.67	-0.00067	PASS			
		30			0.1	0.00004	PASS			
		40			0.53	0.00021	PASS			
		MCH	VN	-30	-0.54	-0.00021	PASS			
				-20	0.44	0.00017	PASS			
				-10	-2.96	-0.00117	PASS			
				0	1.44	0.00057	PASS			
				10	0.8	0.00032	PASS			
				20	3.25	0.00128	PASS			
				30	0.24	0.00009	PASS			
				40	-3.15	-0.00124	PASS			
		HCH	VN	-30	-1.22	-0.00048	PASS			
				-20	4.25	0.00166	PASS			
				-10	-2.39	-0.00093	PASS			
				0	-3.25	-0.00127	PASS			
		15								

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					10	-0.01	0	PASS		
					20	-2.27	-0.00089	PASS		
					30	0.76	0.0003	PASS		
					40	-0.39	-0.00015	PASS		
					50	-3.5	-0.00137	PASS		
			LCH	VN	-30	1.07	0.00043	PASS		
					-20	0.37	0.00015	PASS		
					-10	0.41	0.00016	PASS		
					0	-0.67	-0.00027	PASS		
					10	-5.18	-0.00206	PASS		
		MCH	VN	20	-3.39	-0.00135	PASS			
				30	2.02	0.0008	PASS			
				40	1.73	0.00069	PASS			
				50	-6.02	-0.0024	PASS			
				-30	-2.93	-0.00116	PASS			
		HCH	VN	-20	-2.1	-0.00083	PASS			
				-10	1.06	0.00042	PASS			
				0	3.96	0.00156	PASS			
				10	2.23	0.00088	PASS			
				20	1.3	0.00051	PASS			
	20					30	-1.1	-0.00043	PASS	
						40	-0.4	-0.00016	PASS	
						50	3.96	0.00156	PASS	
						-30	-3.22	-0.00126	PASS	
						-20	-1.69	-0.00066	PASS	
		LCH	VN				-10	0.11	0.00004	PASS
							0	-1.42	-0.00055	PASS
							10	-1.19	-0.00046	PASS
							20	-2.35	-0.00092	PASS
							30	-3.65	-0.00143	PASS
	5					40	-0.19	-0.00007	PASS	
						50	-2.69	-0.00105	PASS	
						-30	4.09	0.00163	PASS	
						-20	-8.54	-0.00341	PASS	
						-10	0.96	0.00038	PASS	
						0	-0.19	-0.00008	PASS	
						10	1.57	0.00063	PASS	
	20	4.11	0.00164	PASS						
	LTE/TM2					30	-3.35	-0.00134	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	-1.14	-0.00046	PASS
					50	1.3	0.00052	PASS
			MCH	VN	-30	-0.66	-0.00026	PASS
					-20	-1.34	-0.00053	PASS
					-10	-0.54	-0.00021	PASS
					0	2.29	0.0009	PASS
					10	-5.21	-0.00206	PASS
					20	0.79	0.00031	PASS
					30	-6.59	-0.0026	PASS
					40	3.48	0.00137	PASS
					50	-5.64	-0.00222	PASS
					HCH	VN	-30	-4.15
			-20	-1.07			-0.00042	PASS
			-10	-1.95			-0.00076	PASS
			0	-9.83			-0.00383	PASS
			10	1.82			0.00071	PASS
			20	-7.55			-0.00294	PASS
			30	-4.22			-0.00164	PASS
			40	-3.71			-0.00144	PASS
			10	LCH	VN	-30	-5.52	-0.0022
		-20				3.28	0.00131	PASS
		-10				4.91	0.00196	PASS
		0				6.19	0.00247	PASS
		10				-2.55	-0.00102	PASS
		20				3.33	0.00133	PASS
		30				-2.98	-0.00119	PASS
		40				-9.54	-0.00381	PASS
		50				-7.97	-0.00318	PASS
		MCH				VN	-30	-1.77
				-20	-2.85		-0.00112	PASS
				-10	-0.67		-0.00026	PASS
				0	0.51		0.0002	PASS
				10	4.32		0.0017	PASS
				20	-7.65		-0.00302	PASS
				30	0.37		0.00015	PASS
				40	-1.47		-0.00058	PASS
		50		0.14	0.00006	PASS		
		HCH		VN	-30	-2.68	-0.00104	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	5.69	0.00222	PASS
					-10	1.04	0.00041	PASS
					0	1.16	0.00045	PASS
					10	-26.21	-0.01022	PASS
					20	-3.83	-0.00149	PASS
					30	-1.62	-0.00063	PASS
					40	-4.78	-0.00186	PASS
					50	0.96	0.00037	PASS
		15	LCH	VN	-30	4.06	0.00162	PASS
					-20	1.77	0.00071	PASS
					-10	-2.75	-0.0011	PASS
					0	-4.05	-0.00162	PASS
					10	1.32	0.00053	PASS
					20	-2.25	-0.0009	PASS
					30	-0.56	-0.00022	PASS
					40	1.14	0.00045	PASS
			MCH	VN	-30	0.97	0.00038	PASS
					-20	-1.04	-0.00041	PASS
					-10	-0.63	-0.00025	PASS
					0	-4.19	-0.00165	PASS
					10	0.01	0	PASS
					20	1.09	0.00043	PASS
					30	1.73	0.00068	PASS
					40	-0.79	-0.00031	PASS
			HCH	VN	-30	-2.32	-0.00091	PASS
					-20	-3.69	-0.00144	PASS
					-10	0.54	0.00021	PASS
					0	-2.2	-0.00086	PASS
					10	-1.87	-0.00073	PASS
					20	-1.62	-0.00063	PASS
					30	2.37	0.00092	PASS
					40	-3.02	-0.00118	PASS
		20	LCH	VN	-30	3.26	0.0013	PASS
					-20	1.77	0.00071	PASS
					-10	-1.57	-0.00063	PASS
					0	-0.47	-0.00019	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					10	1.49	0.00059	PASS		
					20	-2.17	-0.00086	PASS		
					30	-0.66	-0.00026	PASS		
					40	0.93	0.00037	PASS		
					50	-3.65	-0.00145	PASS		
			MCH	VN	-30	1.4	0.00055	PASS		
							-20	1.07	0.00042	PASS
							-10	2.88	0.00114	PASS
							0	6.57	0.00259	PASS
							10	-1.54	-0.00061	PASS
							20	0.31	0.00012	PASS
							30	1.2	0.00047	PASS
							40	-0.34	-0.00013	PASS
			HCH	VN	50	1.93	0.00076	PASS		
							-30	-2.26	-0.00088	PASS
							-20	-2.42	-0.00095	PASS
							-10	-1.4	-0.00055	PASS
							0	1.73	0.00068	PASS
							10	-1.89	-0.00074	PASS
							20	1.22	0.00048	PASS
							30	-1.26	-0.00049	PASS
					40	-1.43	-0.00056	PASS		
					50	-1.17	-0.00046	PASS		

END