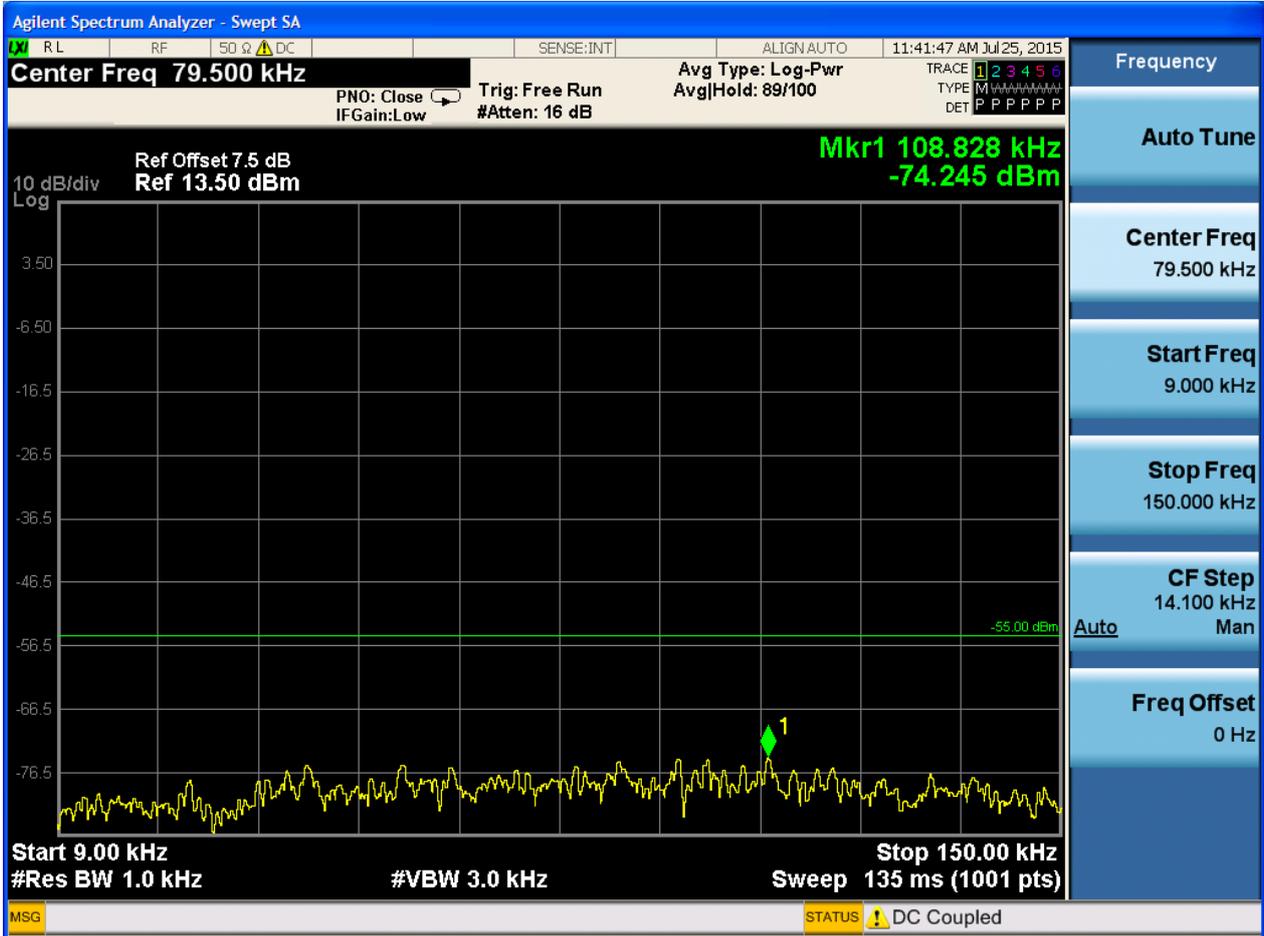




6.1.1.1.2.2 Test Channel = MCH

6.1.1.1.2.2.1 Test RB = RB1#0



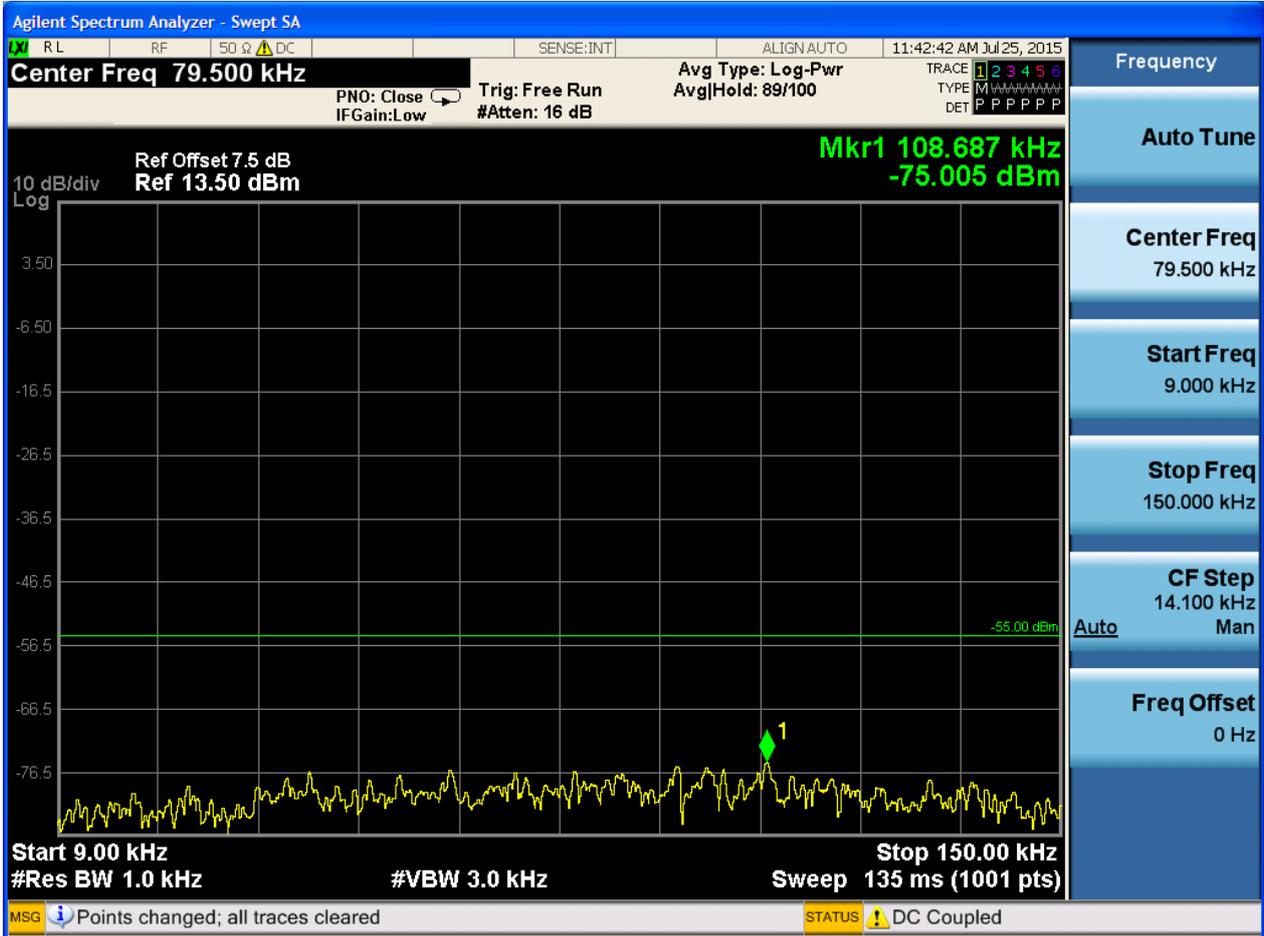




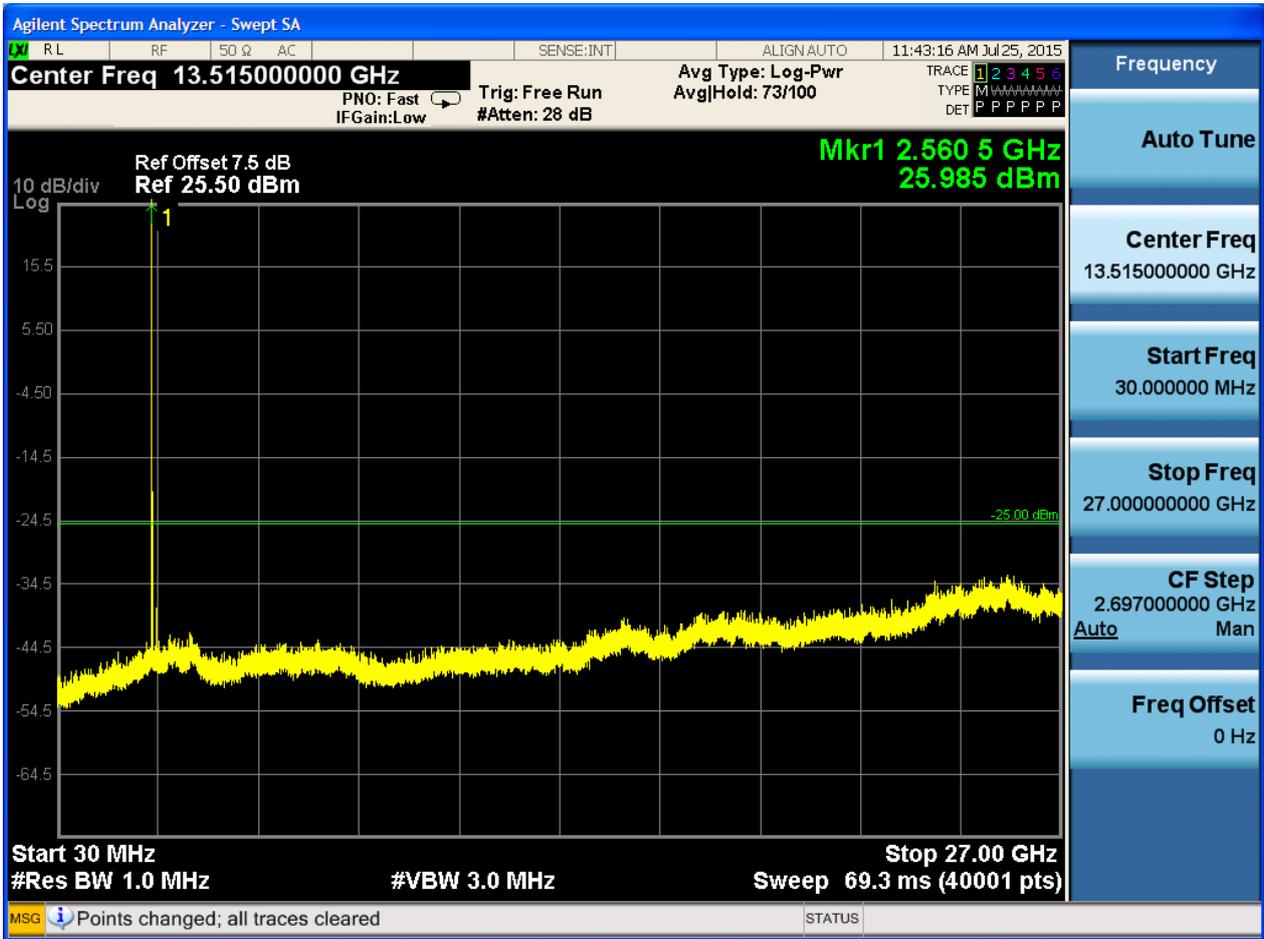


6.1.1.1.2.3 Test Channel = HCH

6.1.1.1.2.3.1 Test RB = RB1#0





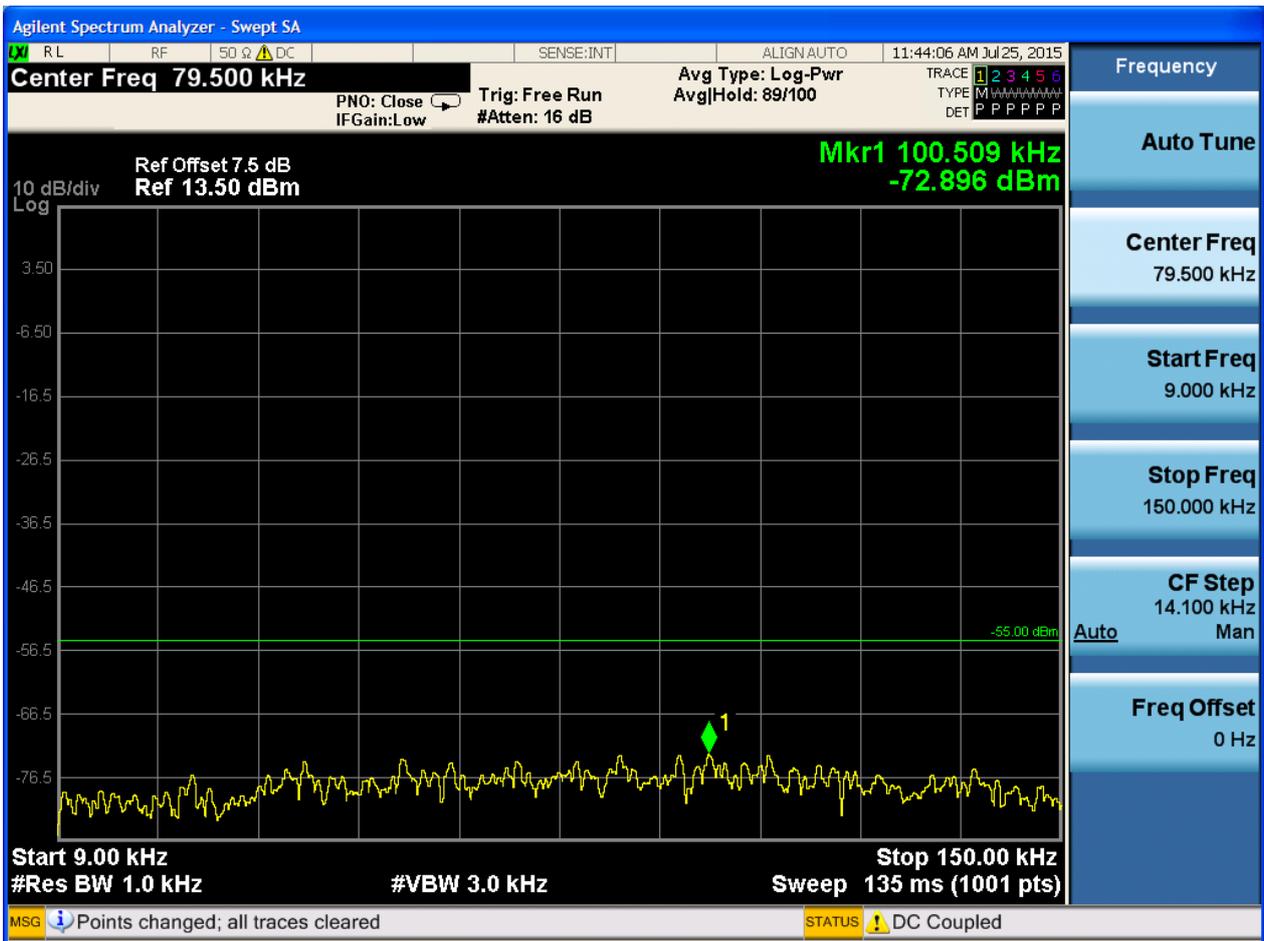


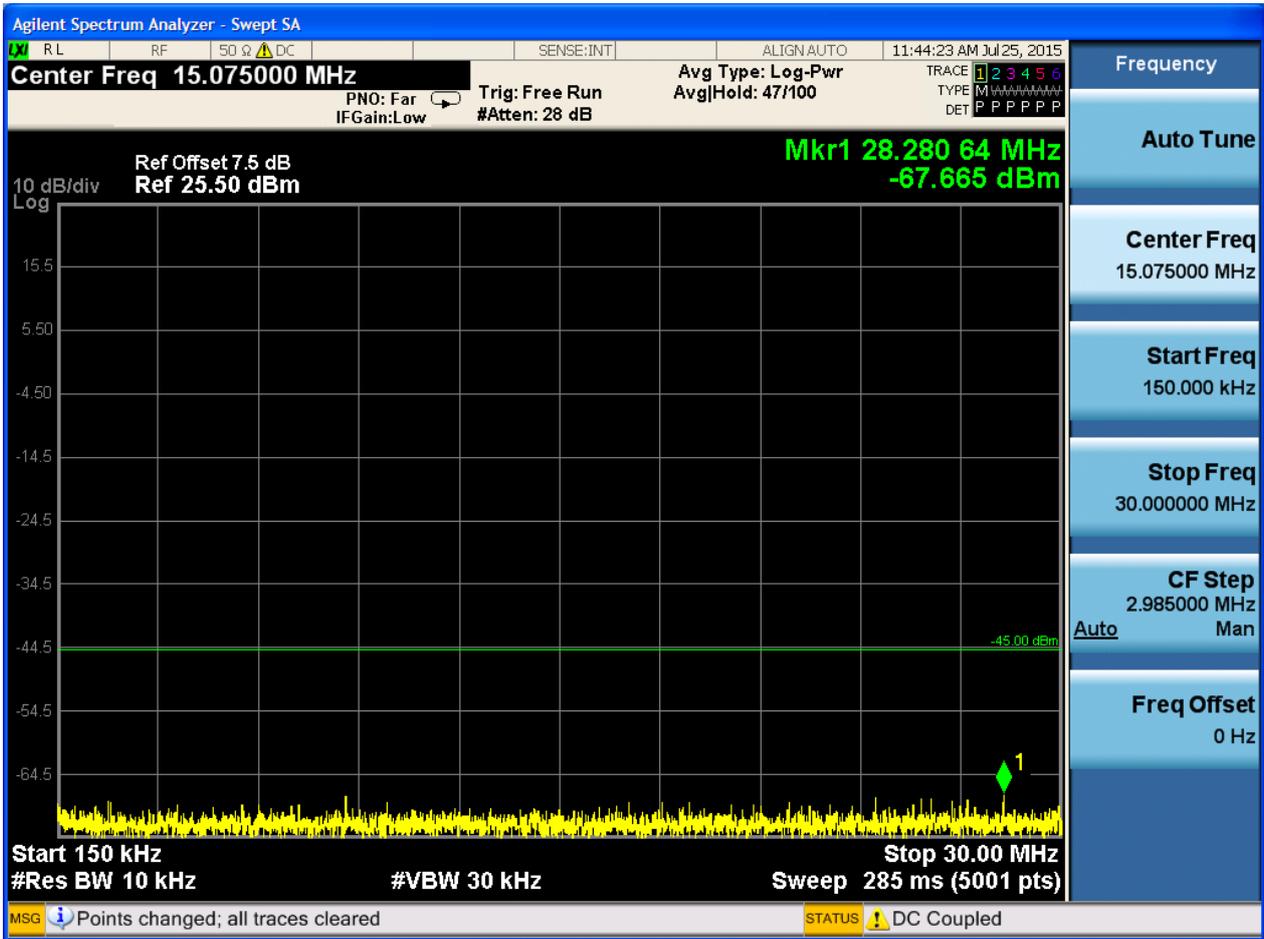


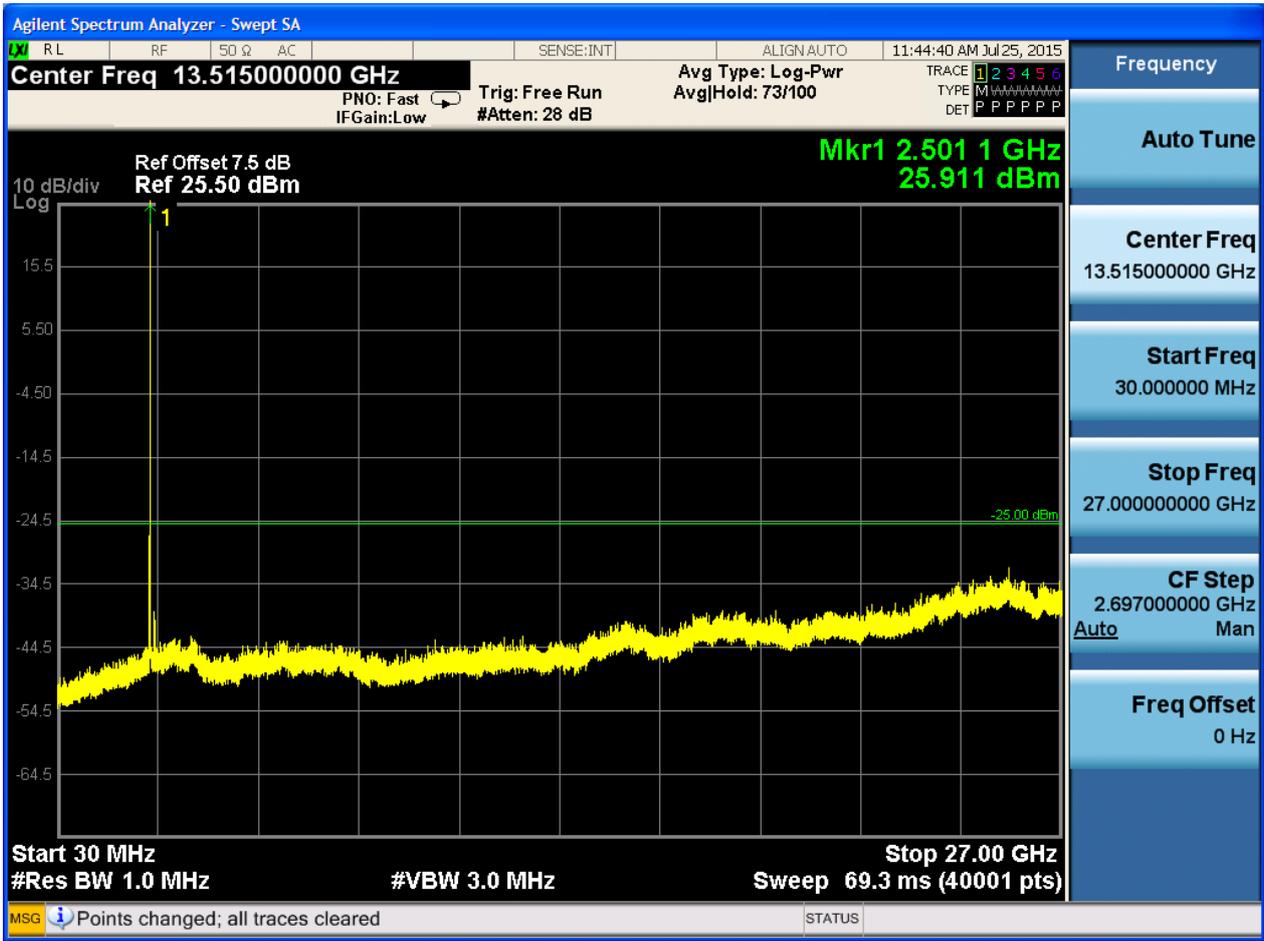
6.1.1.1.3 Test Bandwidth = 15

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0



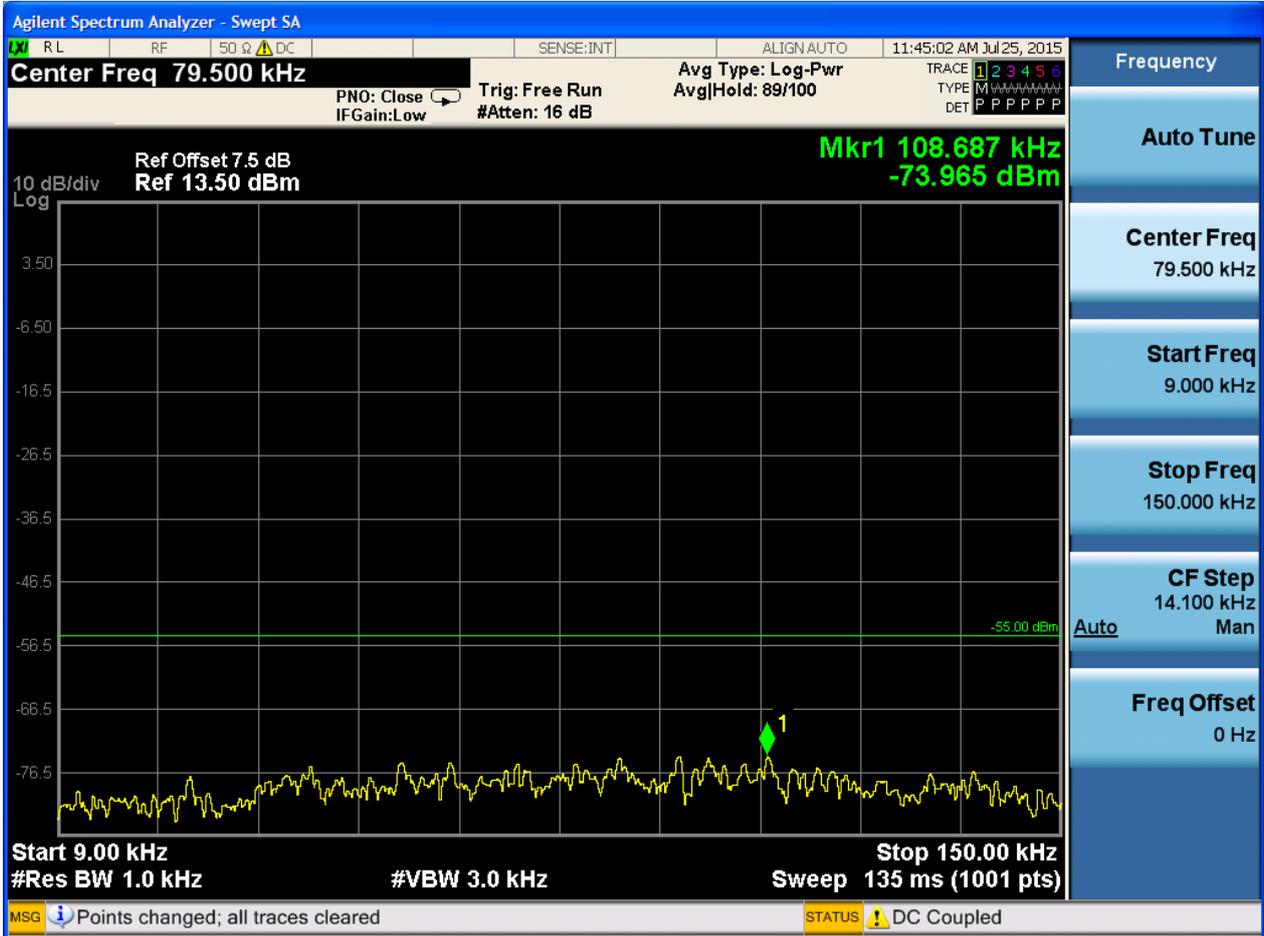


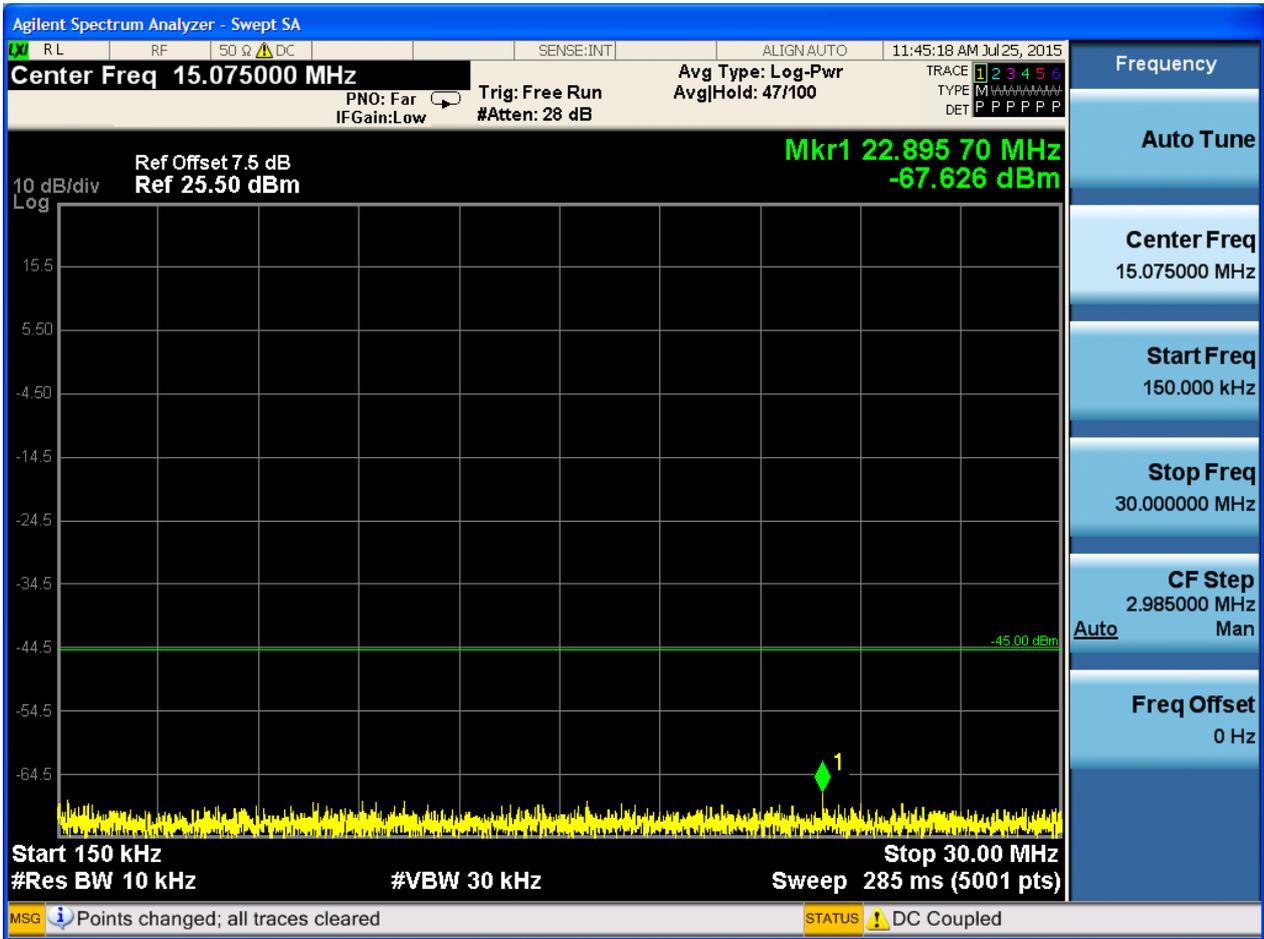




6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0









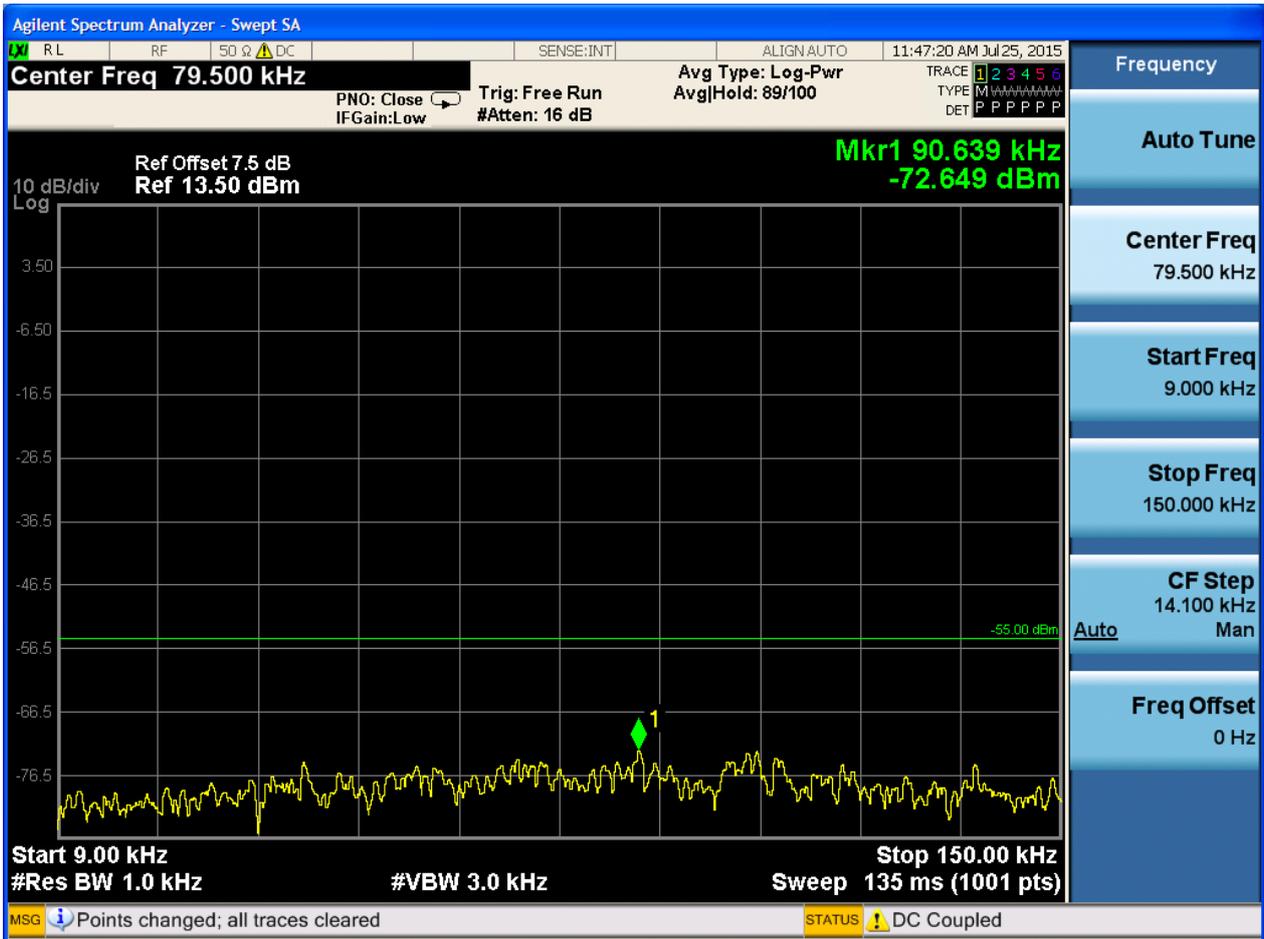


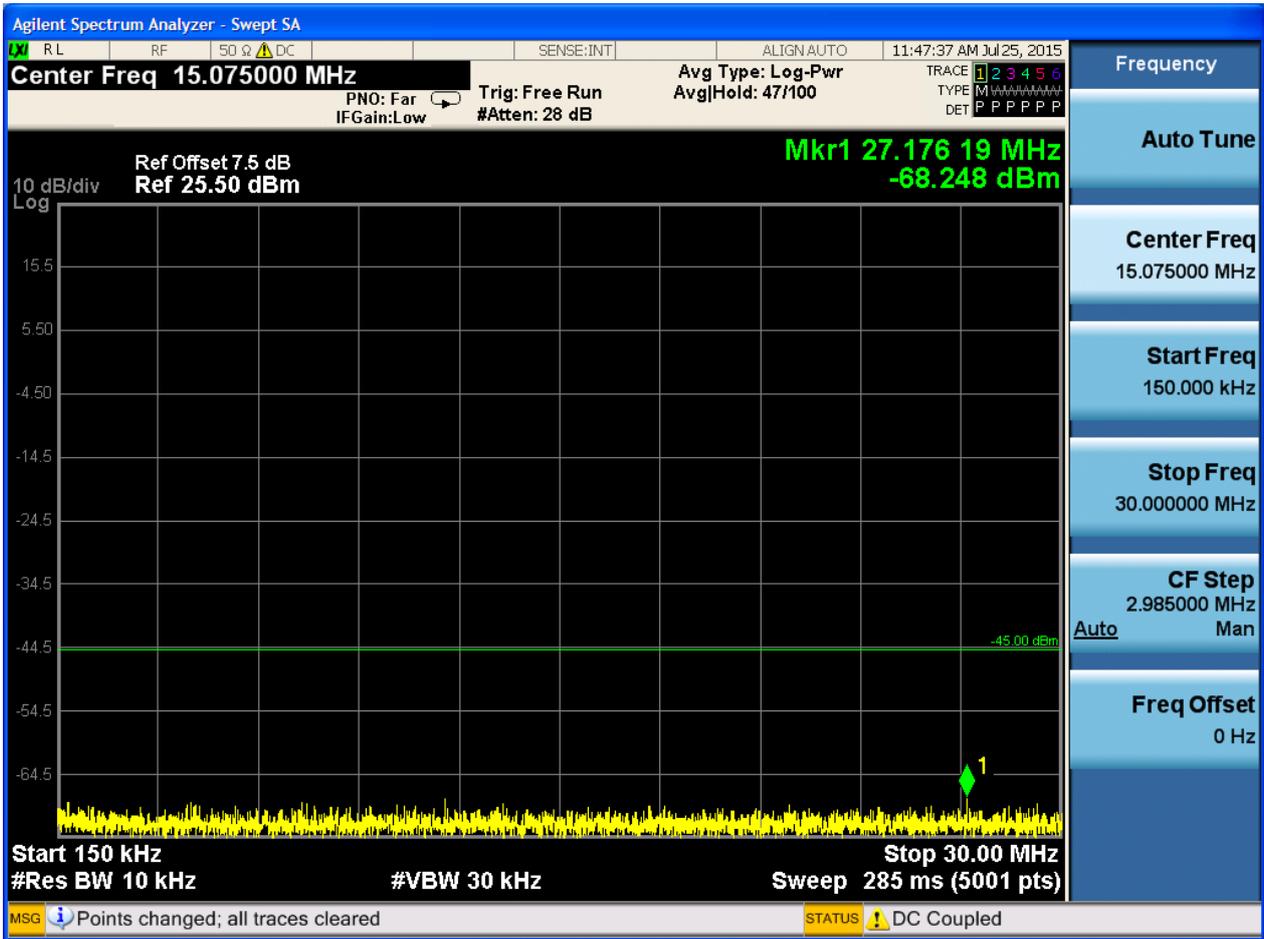


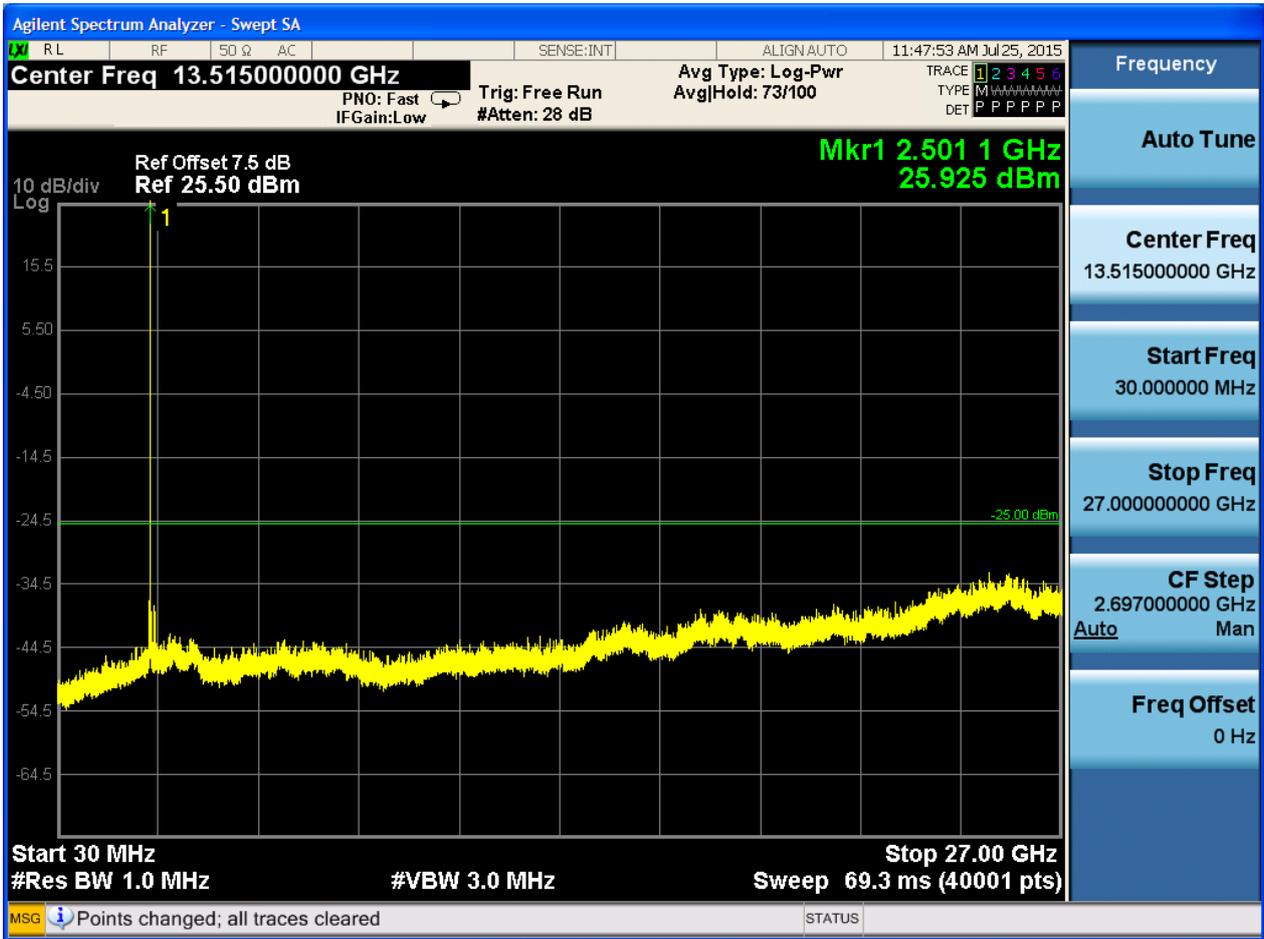
6.1.1.1.4 Test Bandwidth = 20

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0



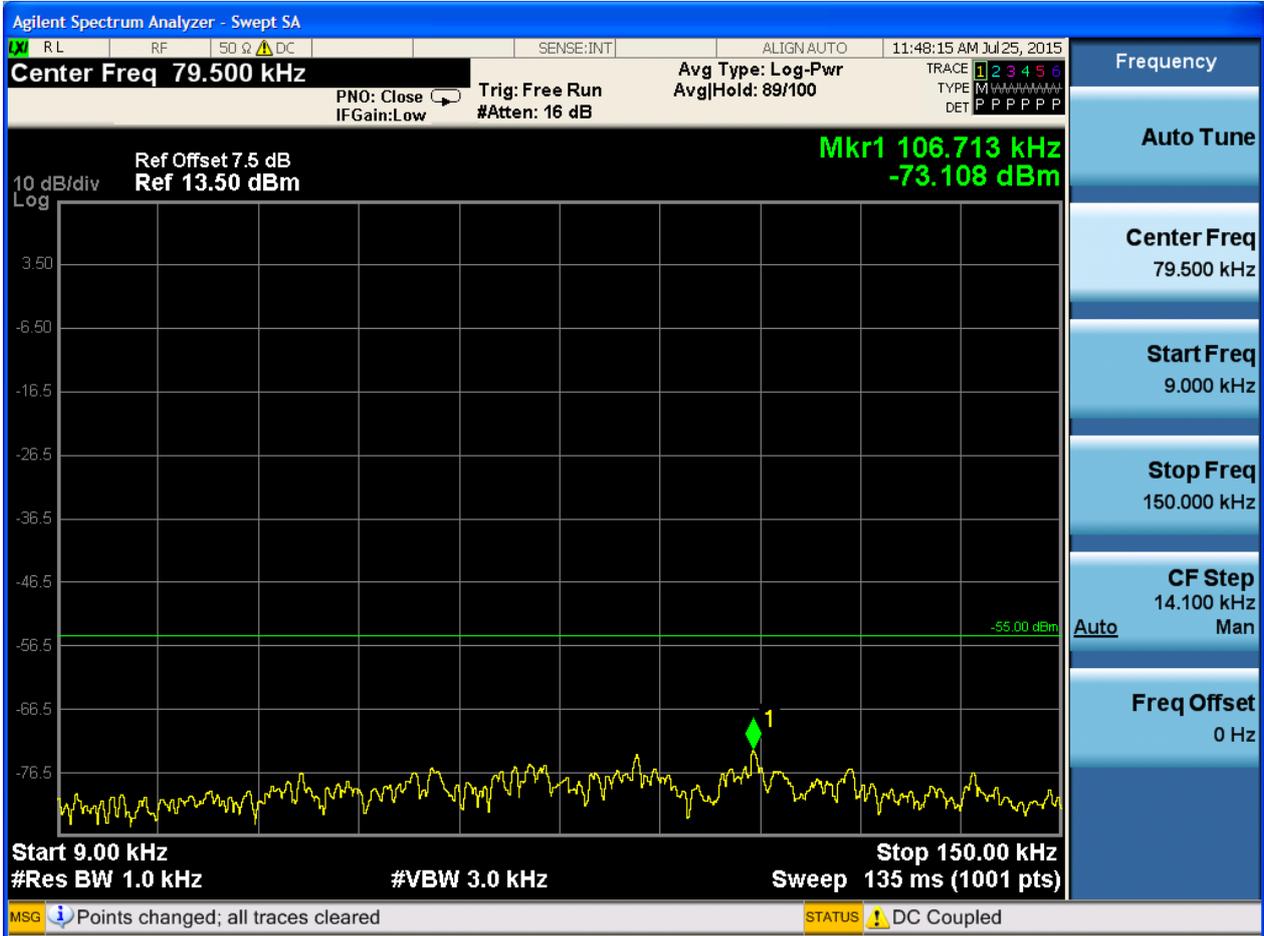




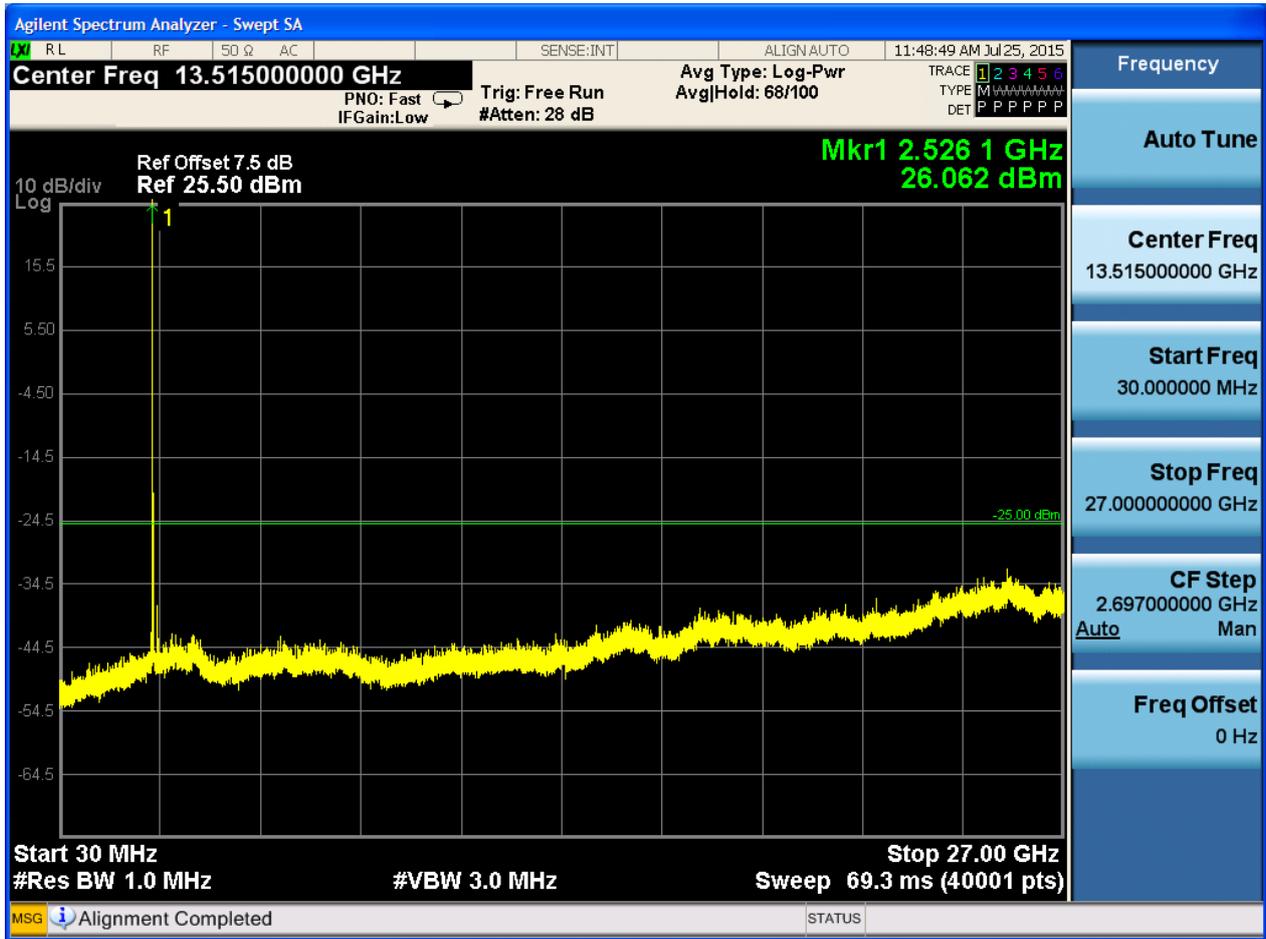


6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0



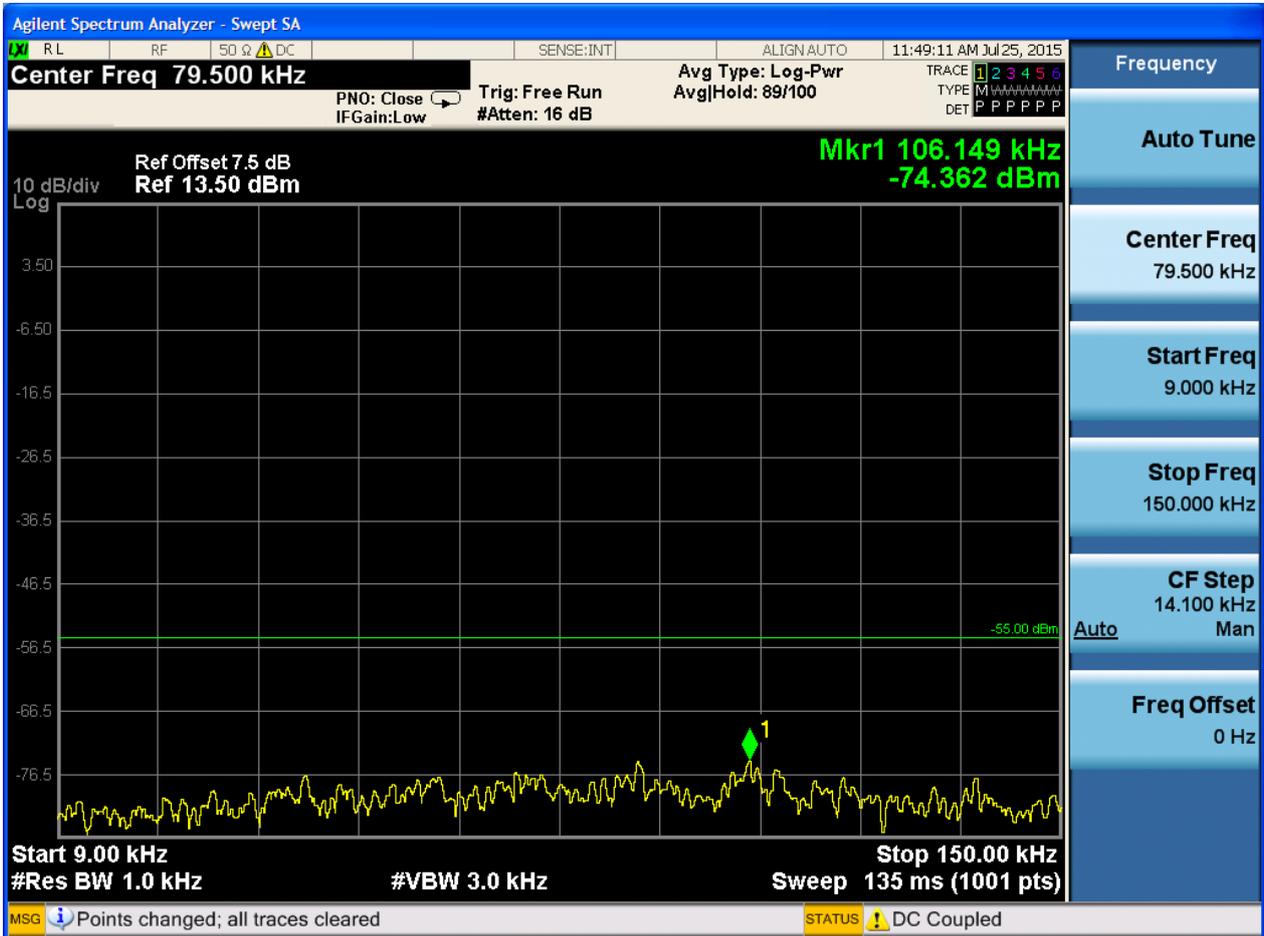


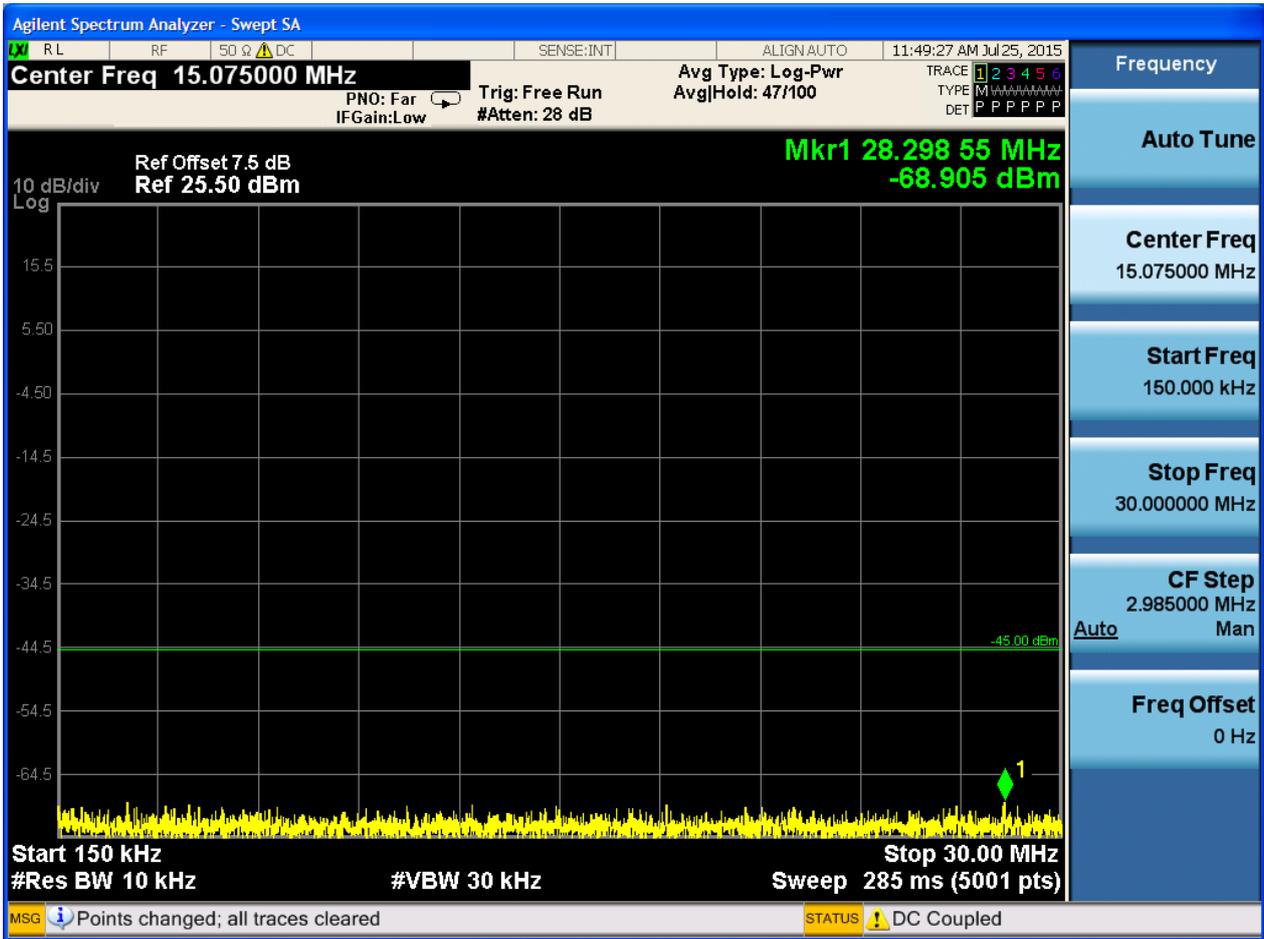


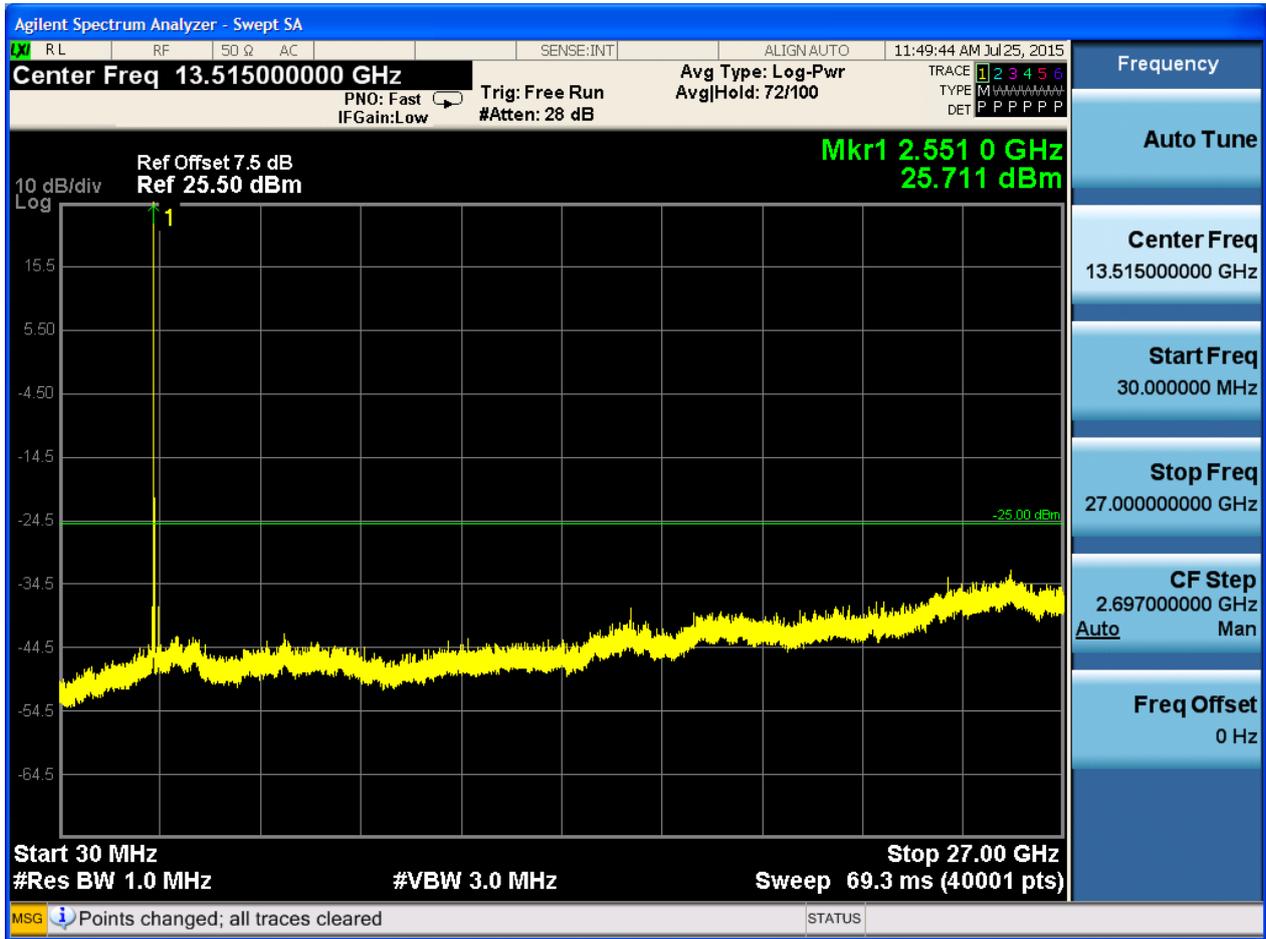


6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0







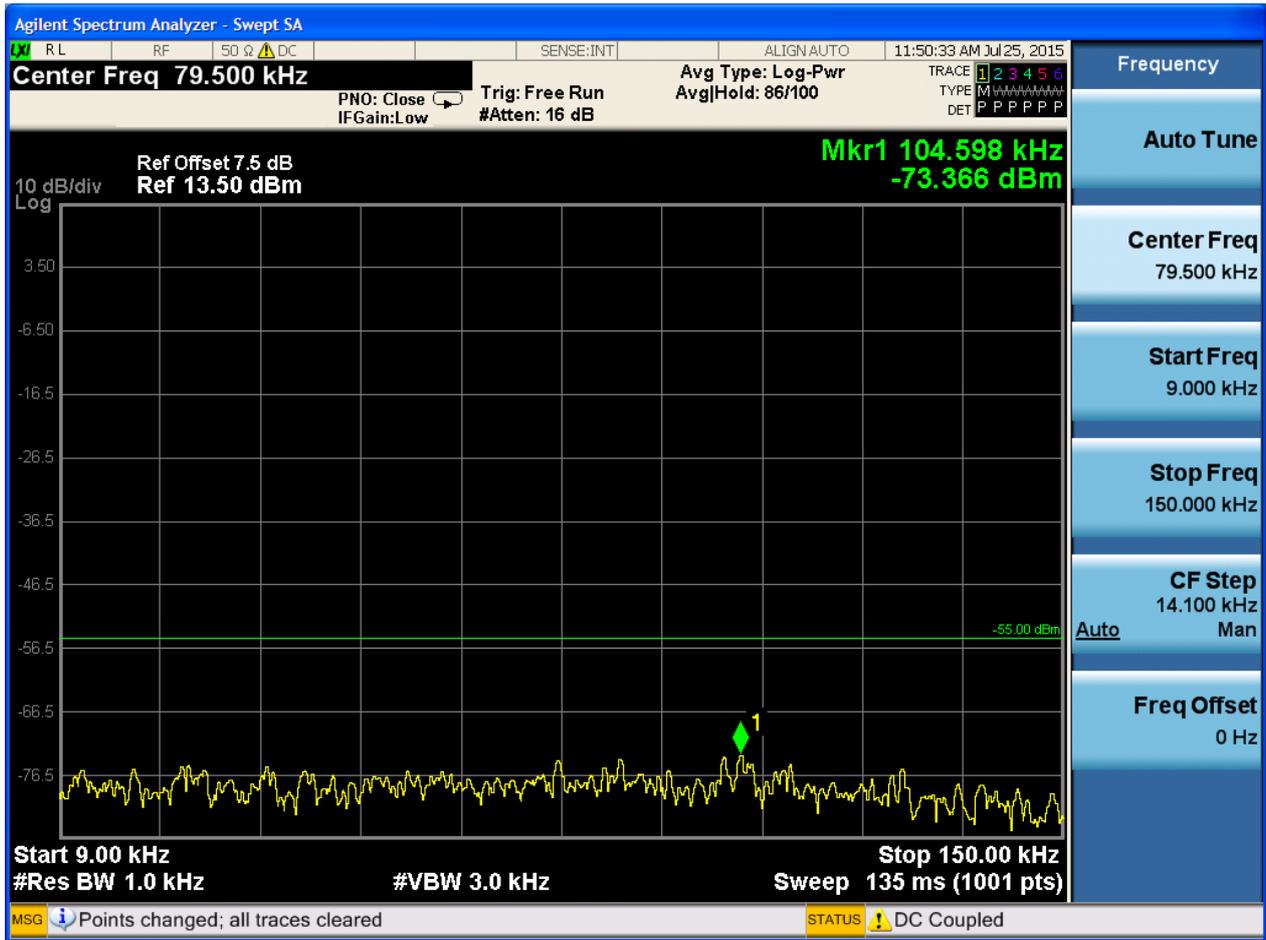


6.1.1.2 Test Mode = LTE/TM2

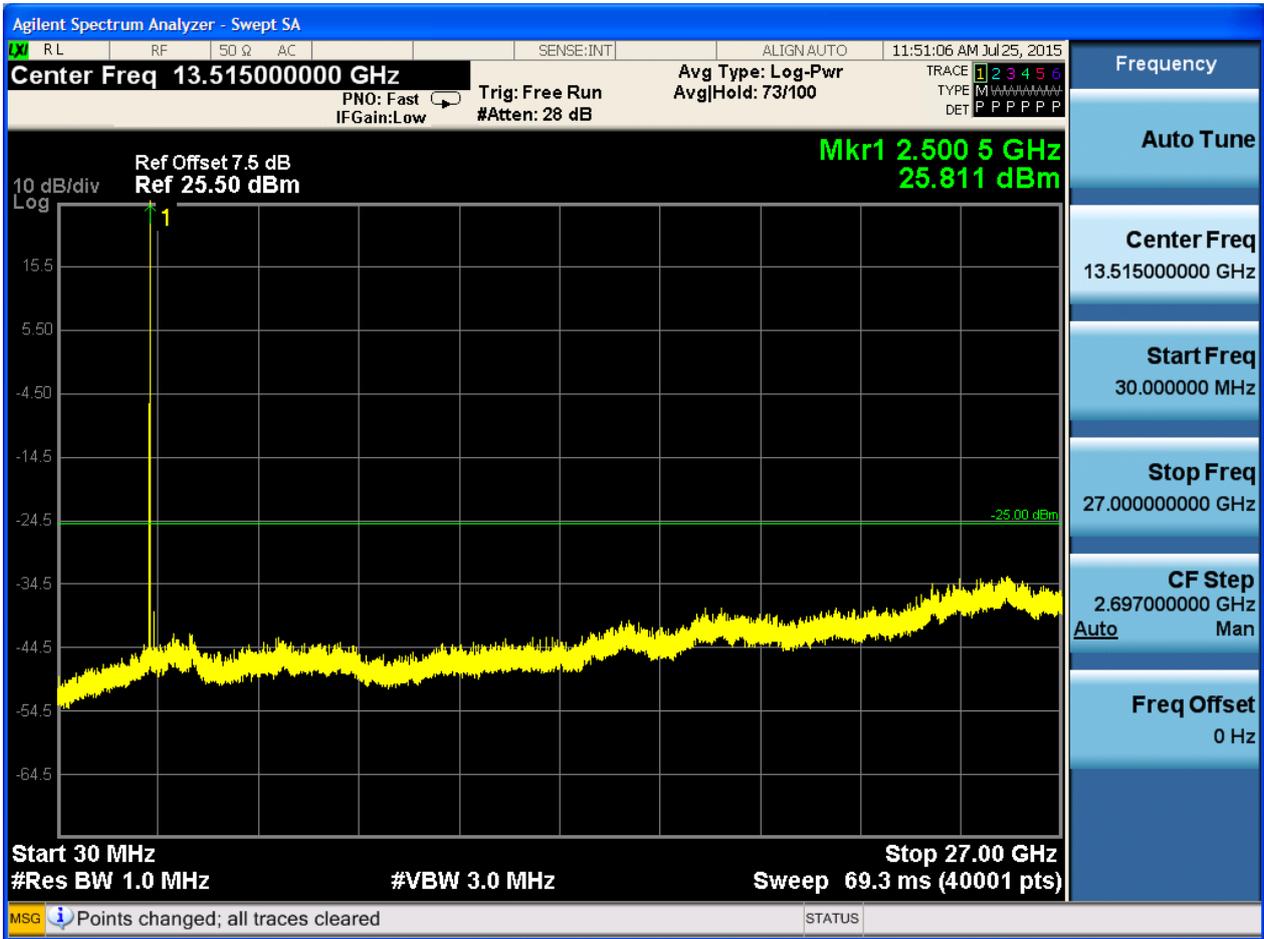
6.1.1.2.1 Test Bandwidth = 5

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0



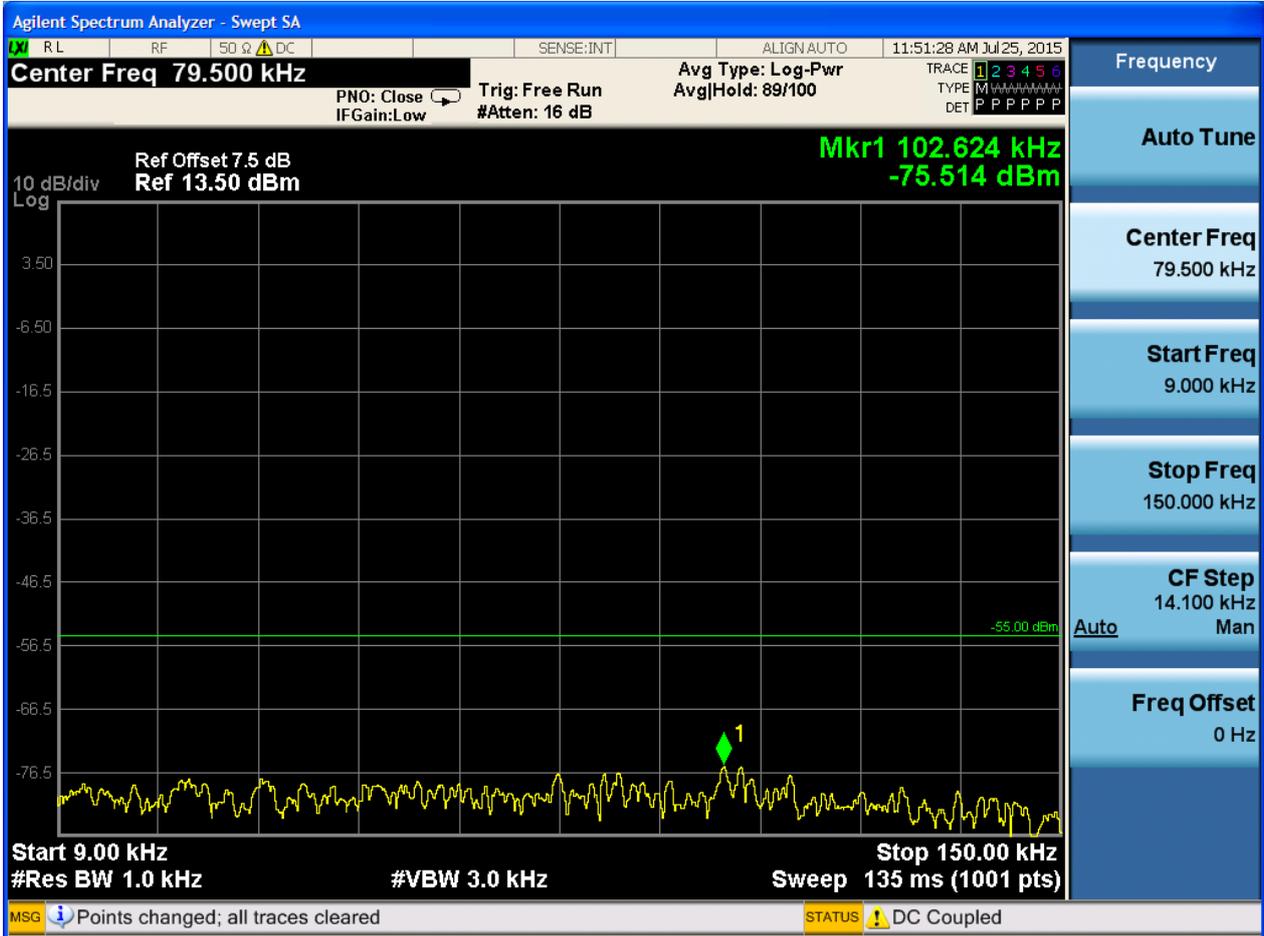


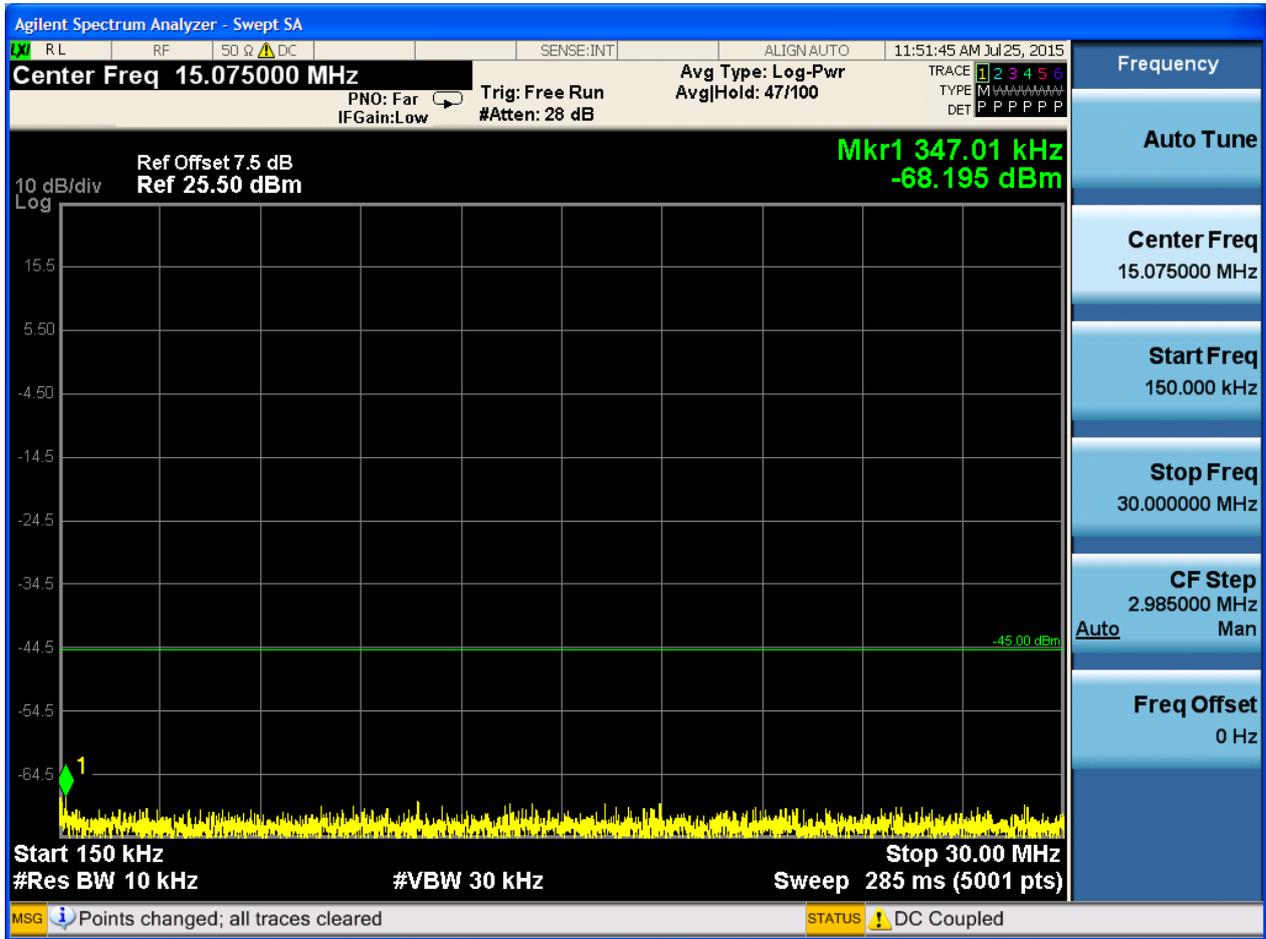


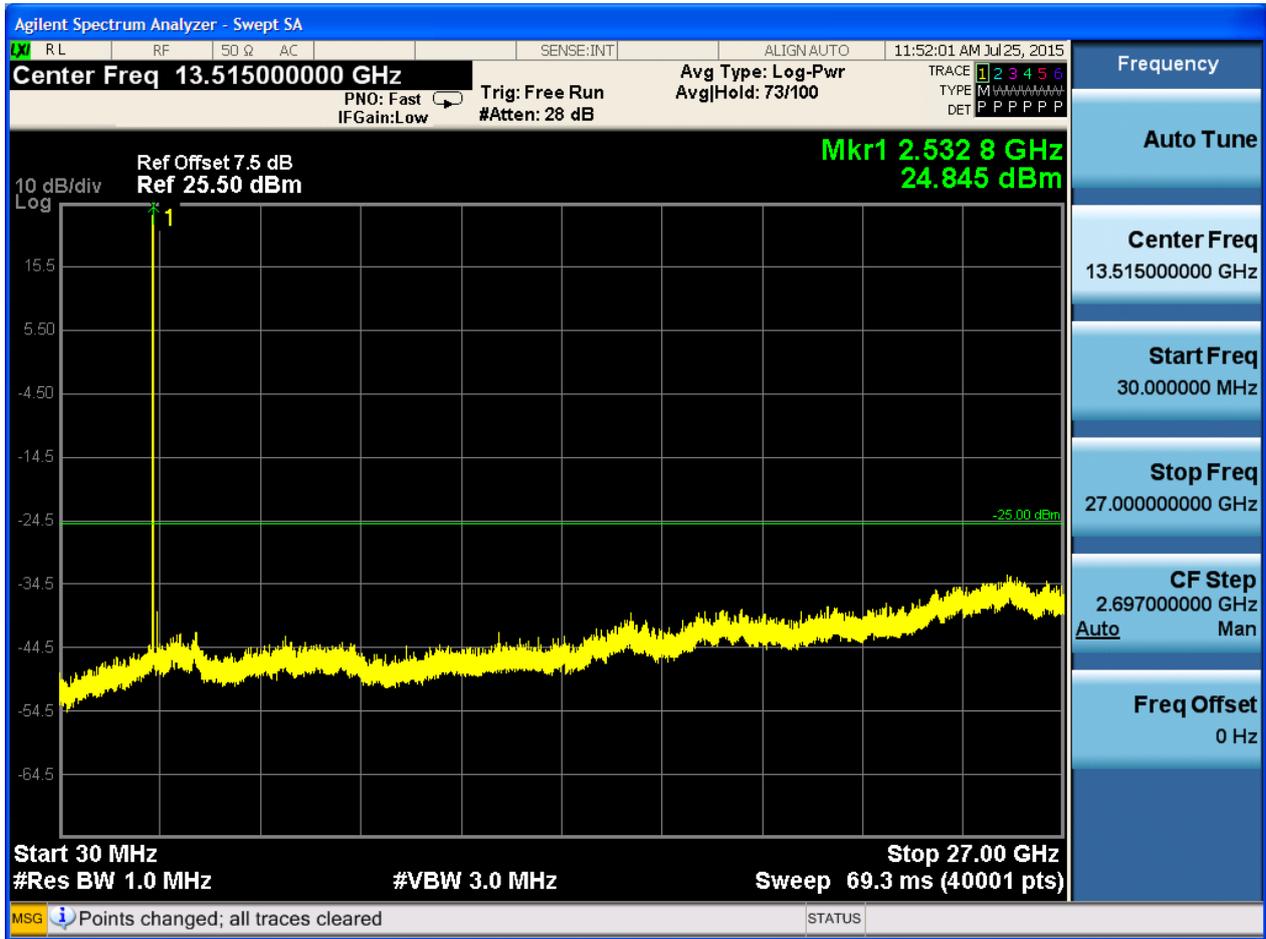


6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0



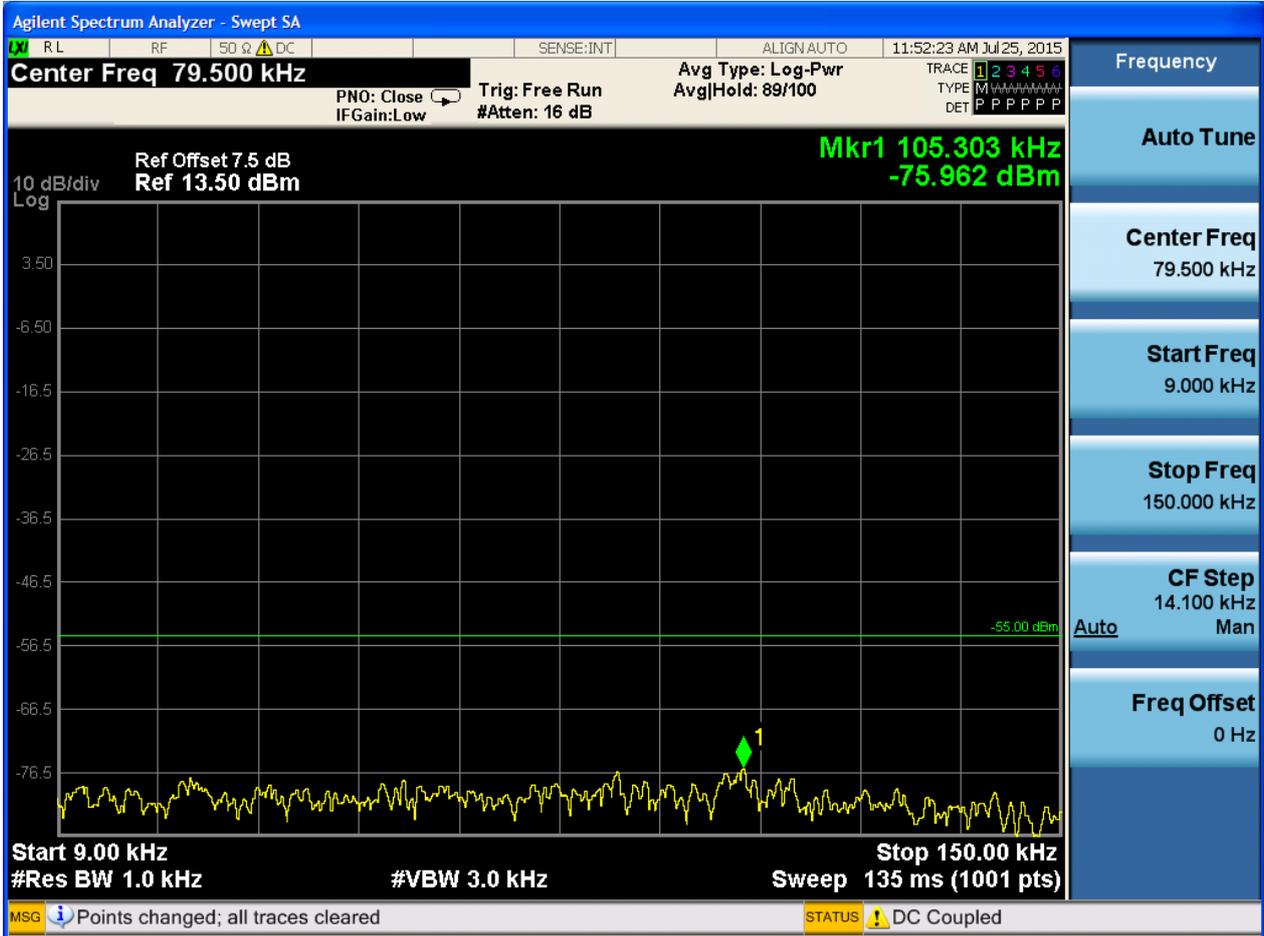


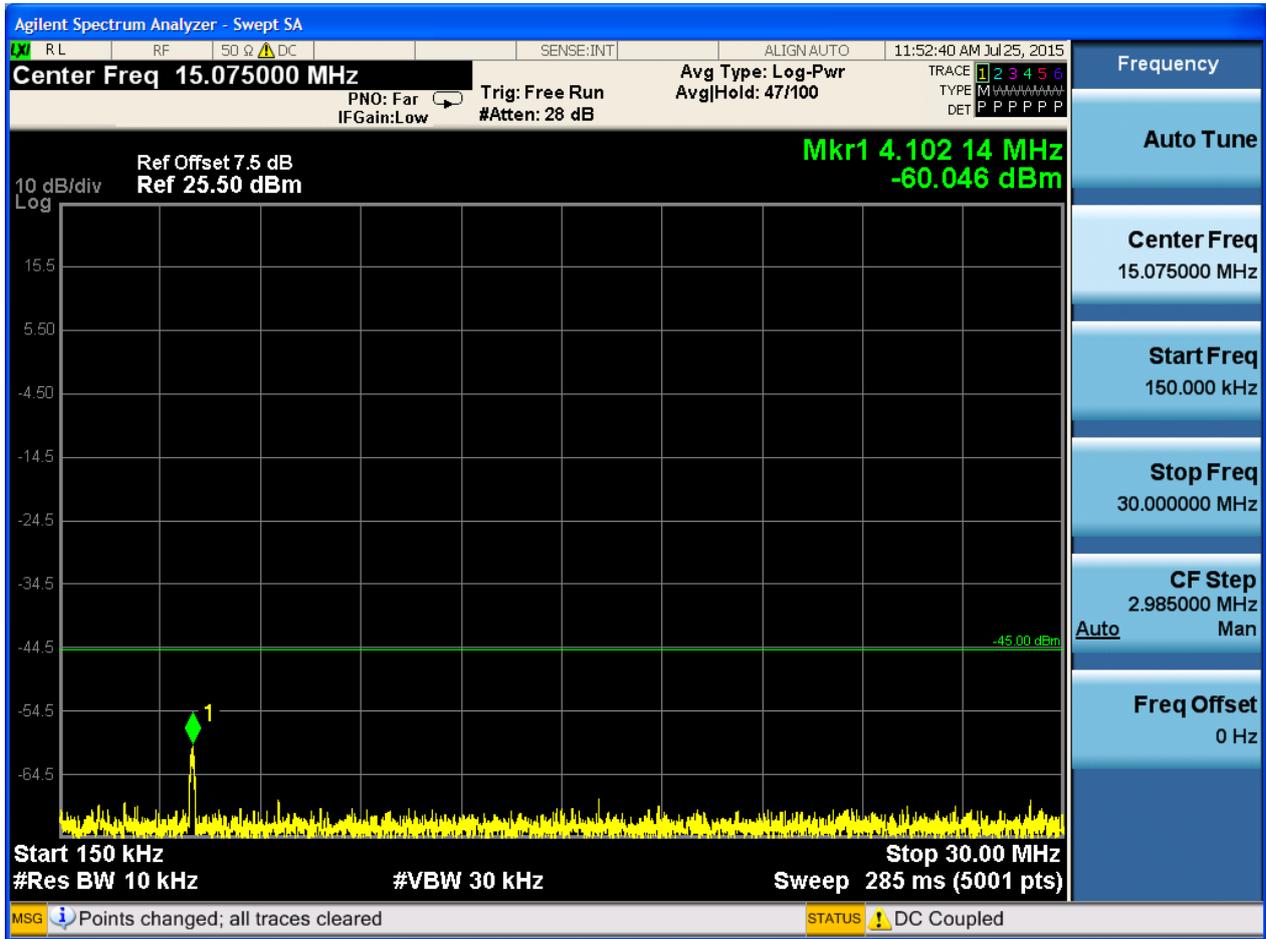


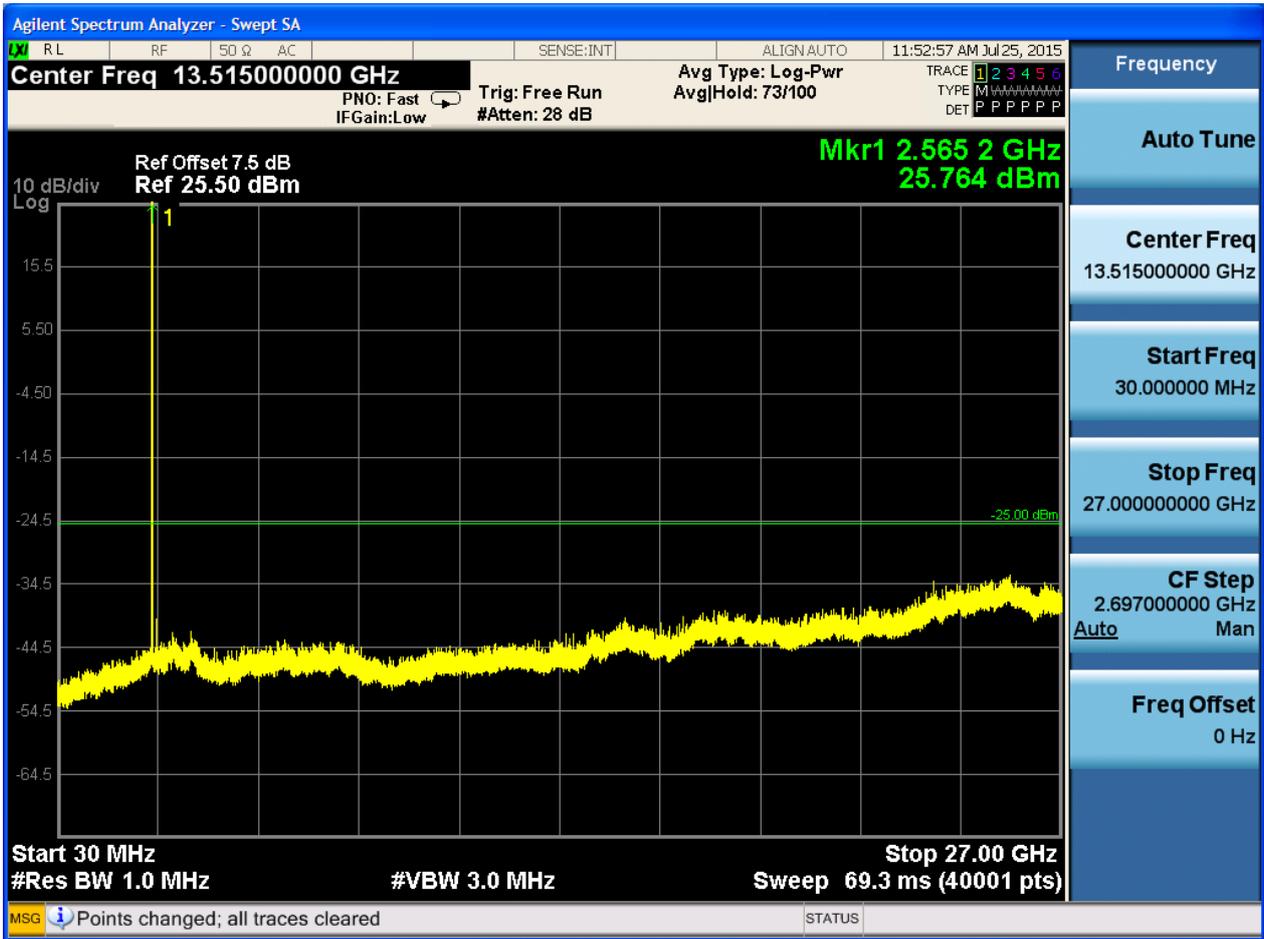


6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0





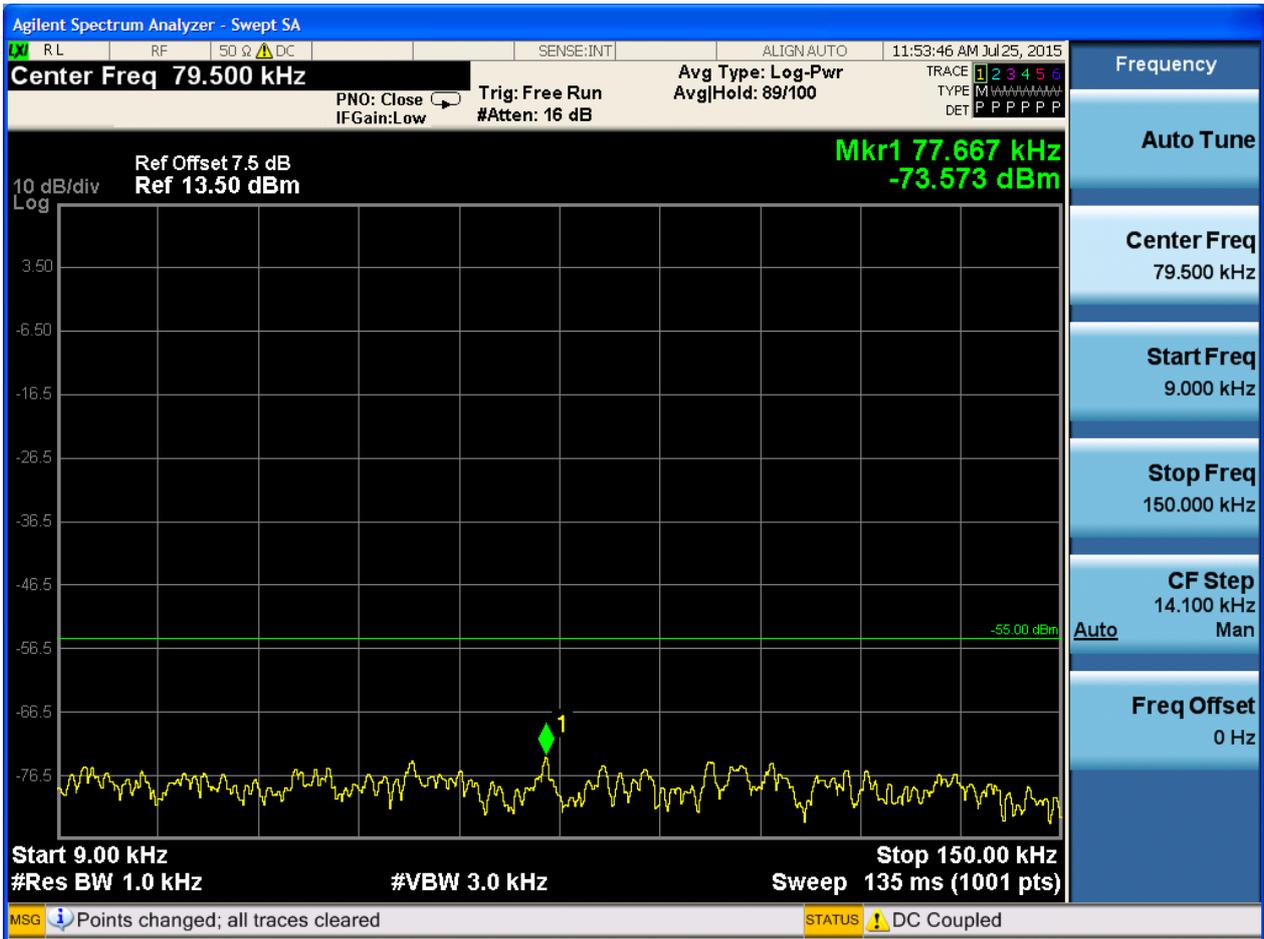




6.1.1.2.2 Test Bandwidth = 10

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







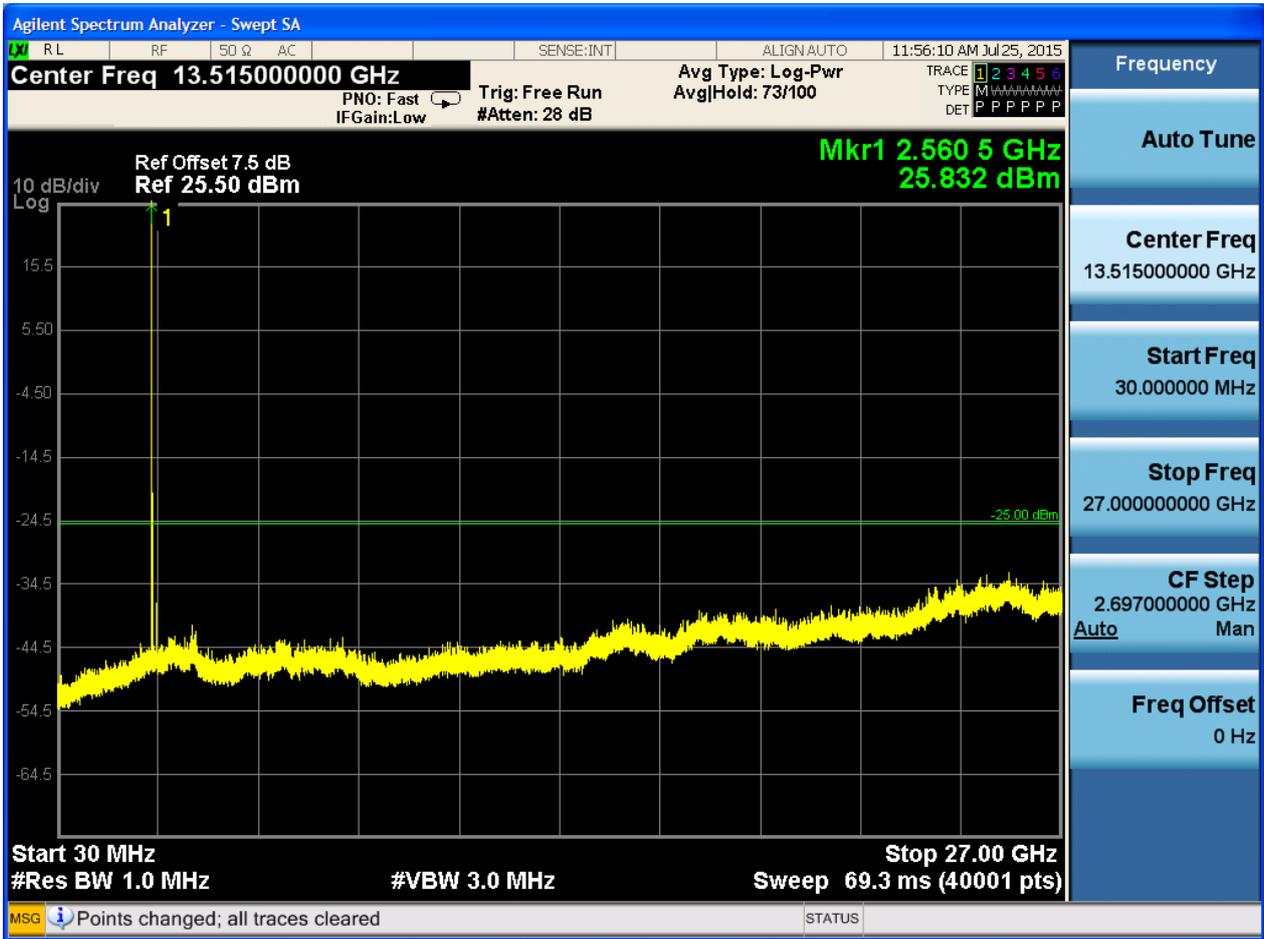


6.1.1.2.2.3 Test Channel = HCH

6.1.1.2.2.3.1 Test RB = RB1#0





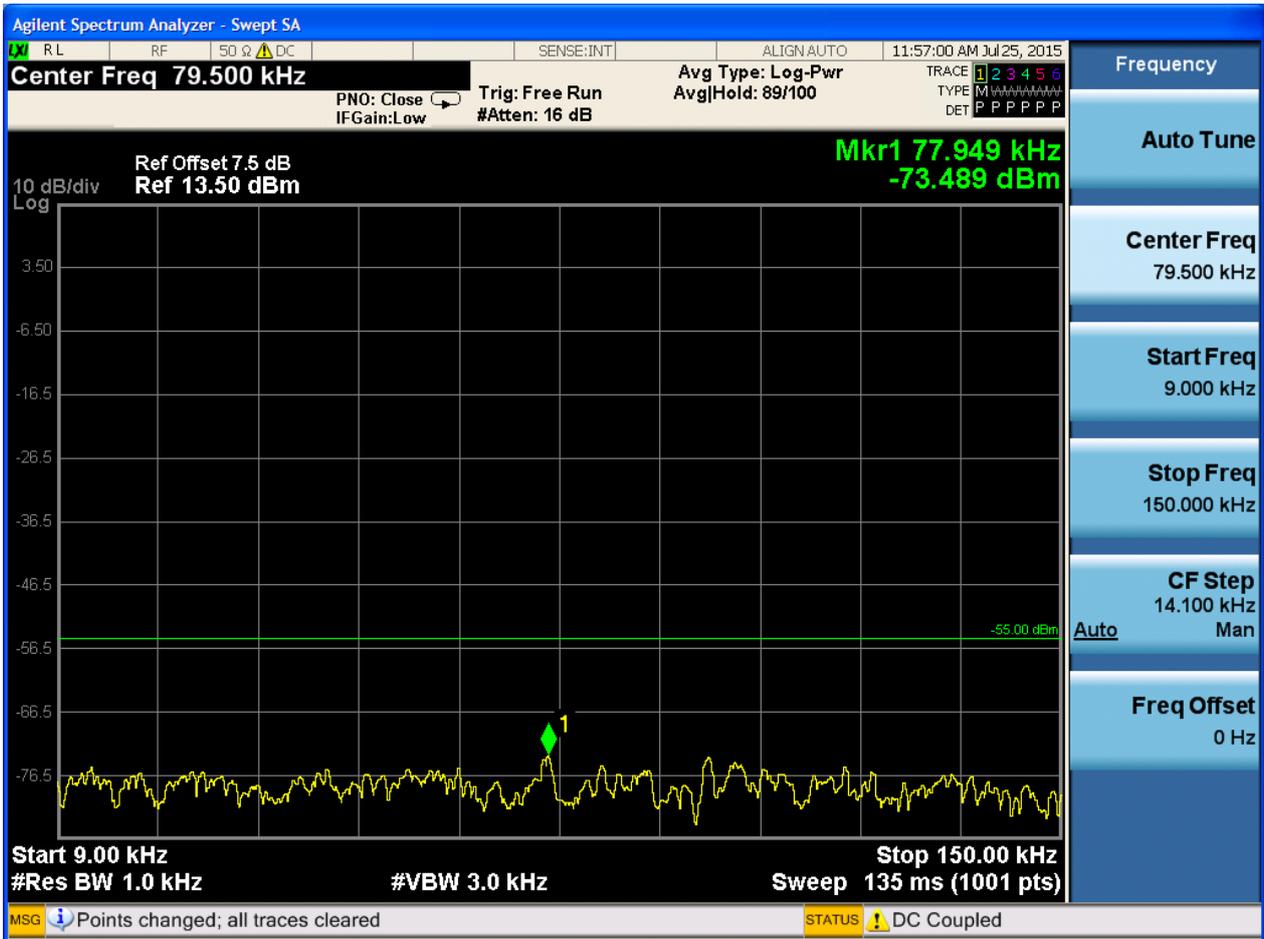


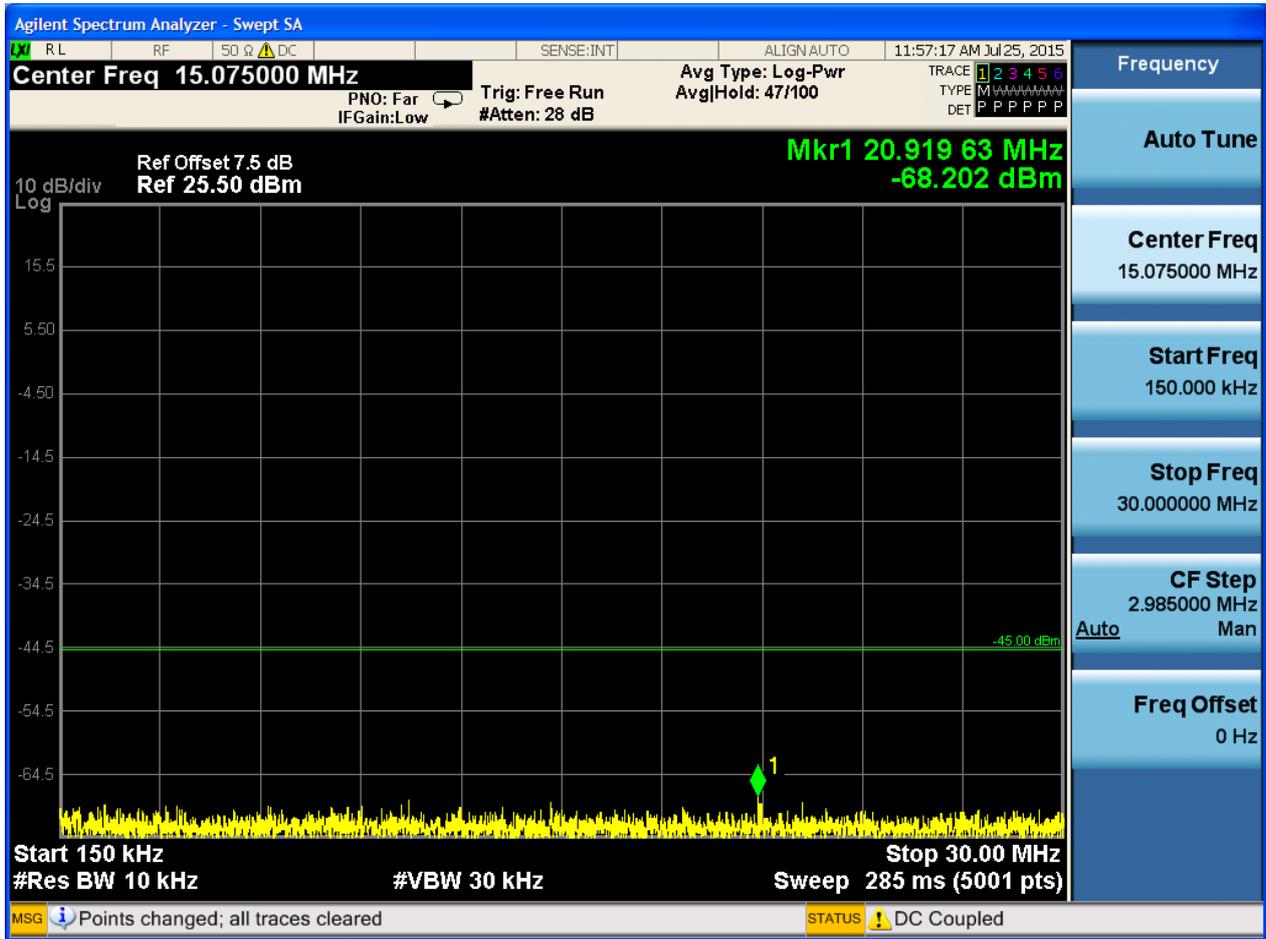


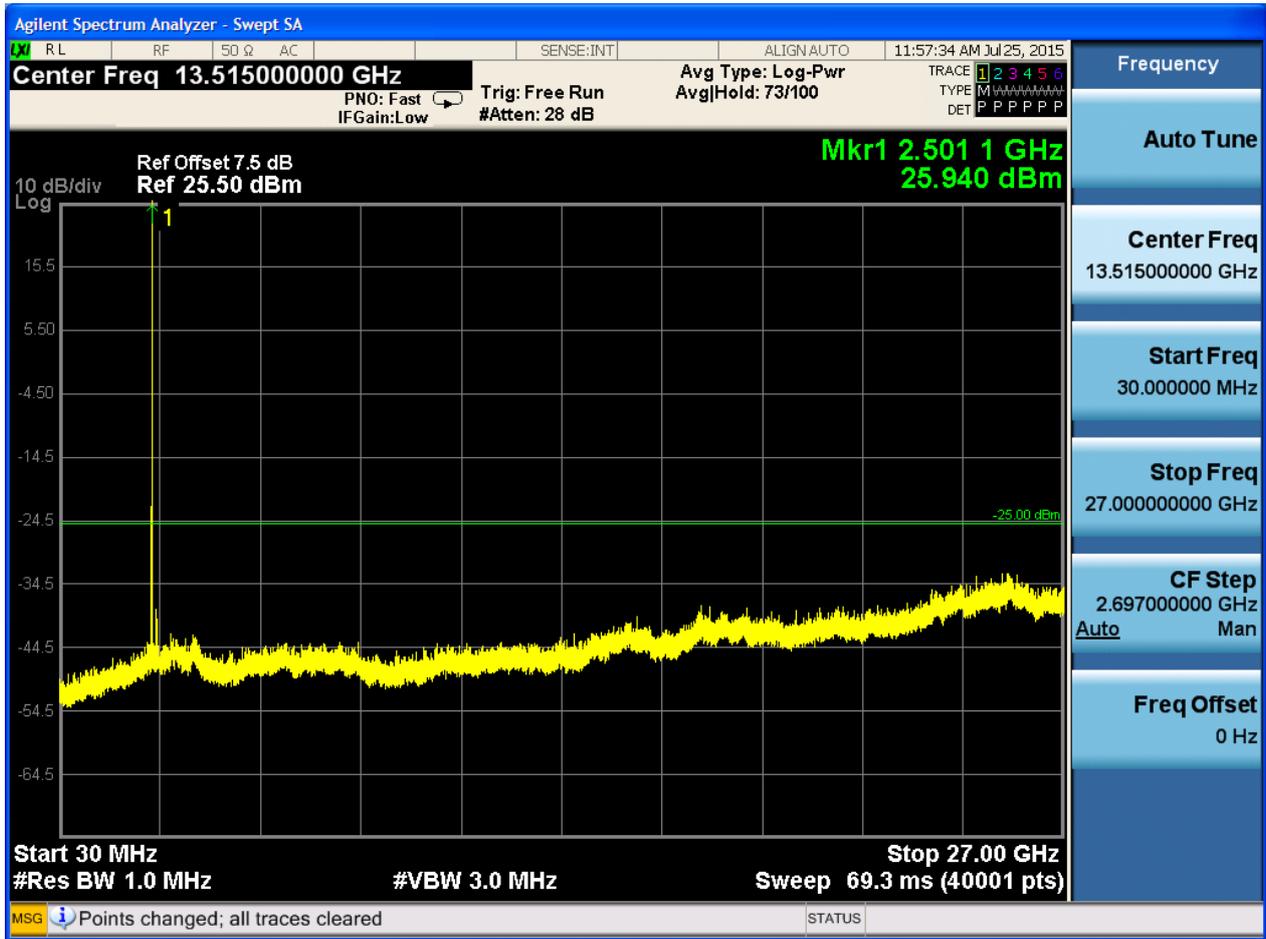
6.1.1.2.3 Test Bandwidth = 15

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0



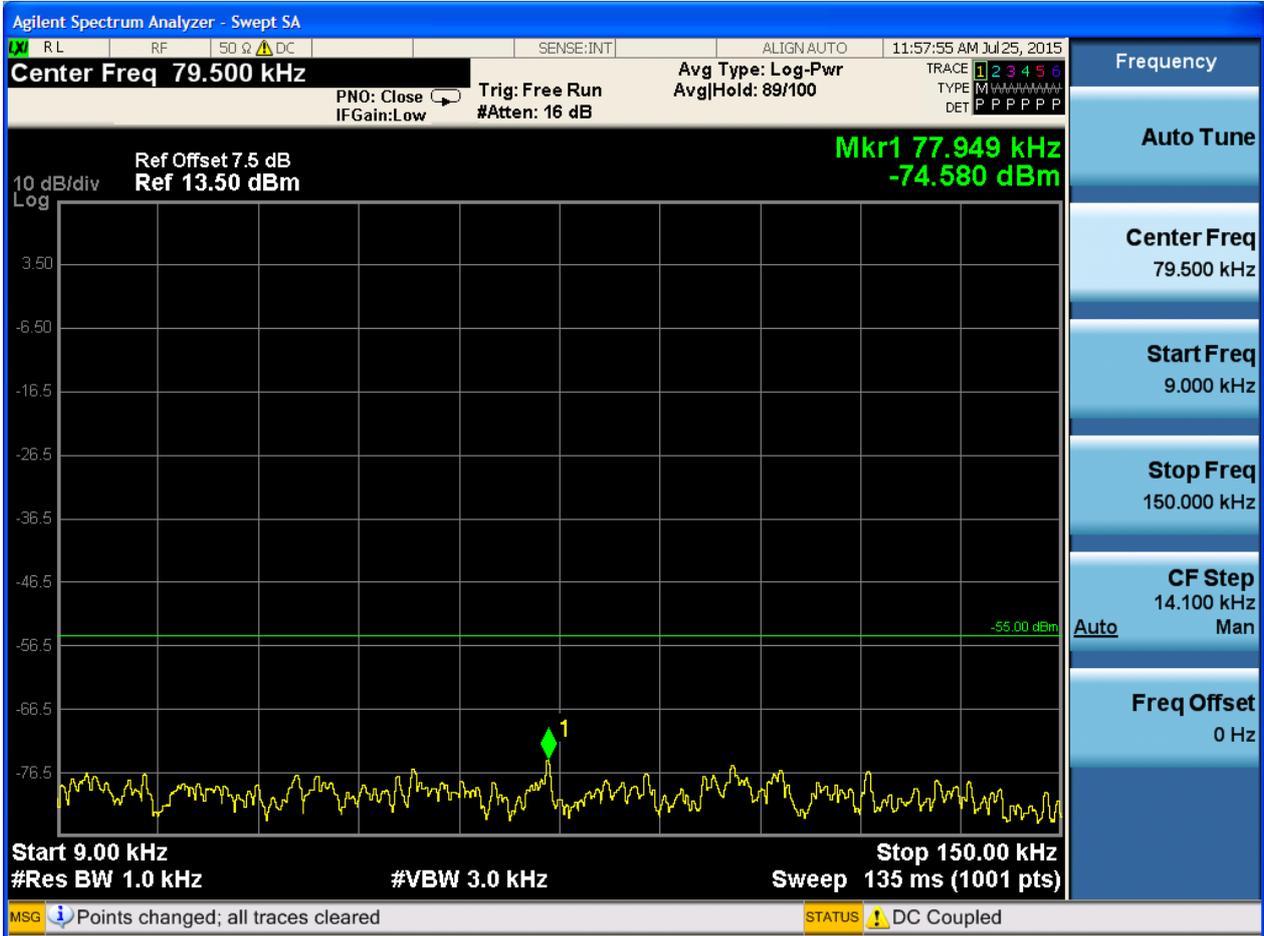




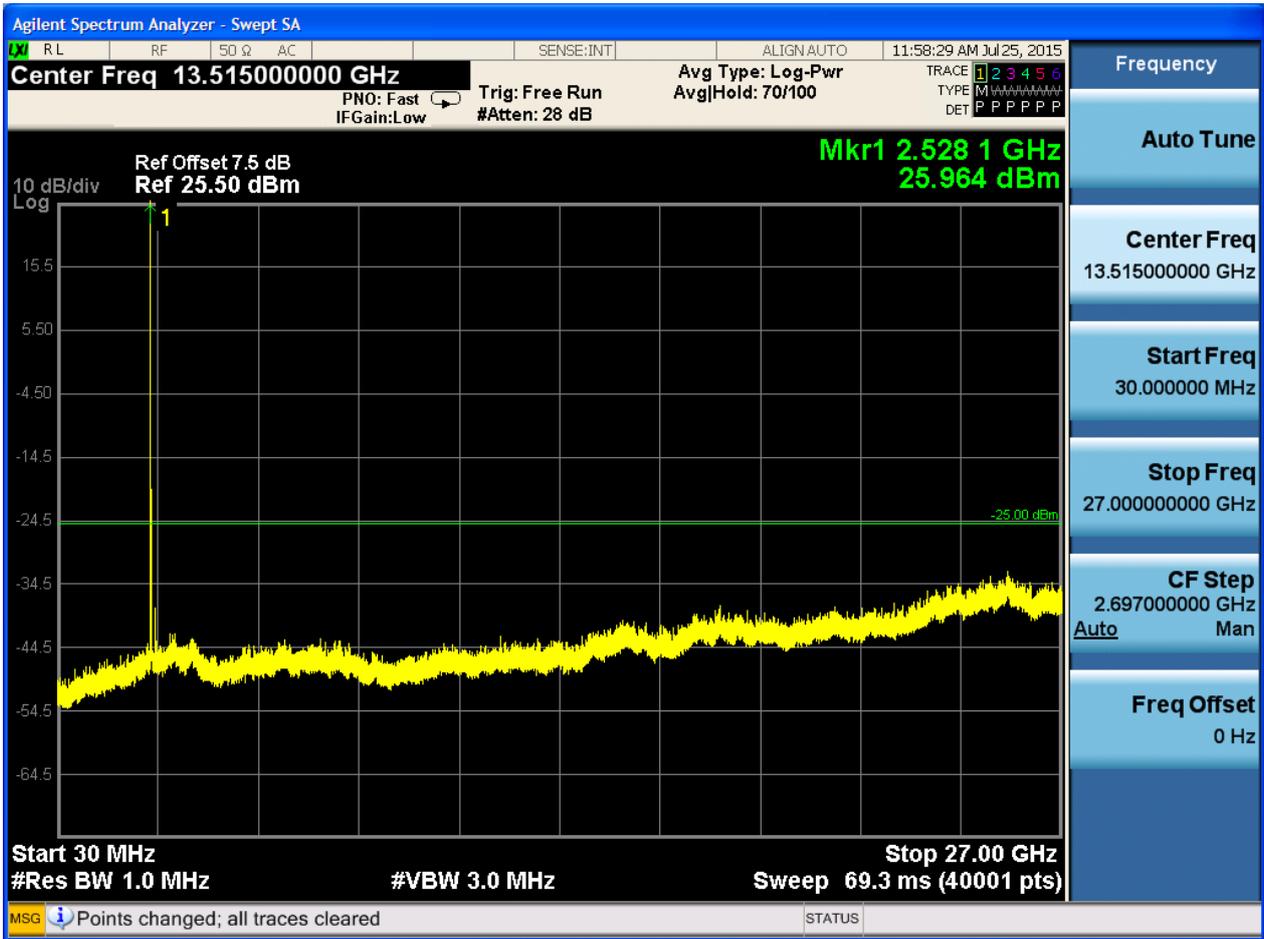


6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0



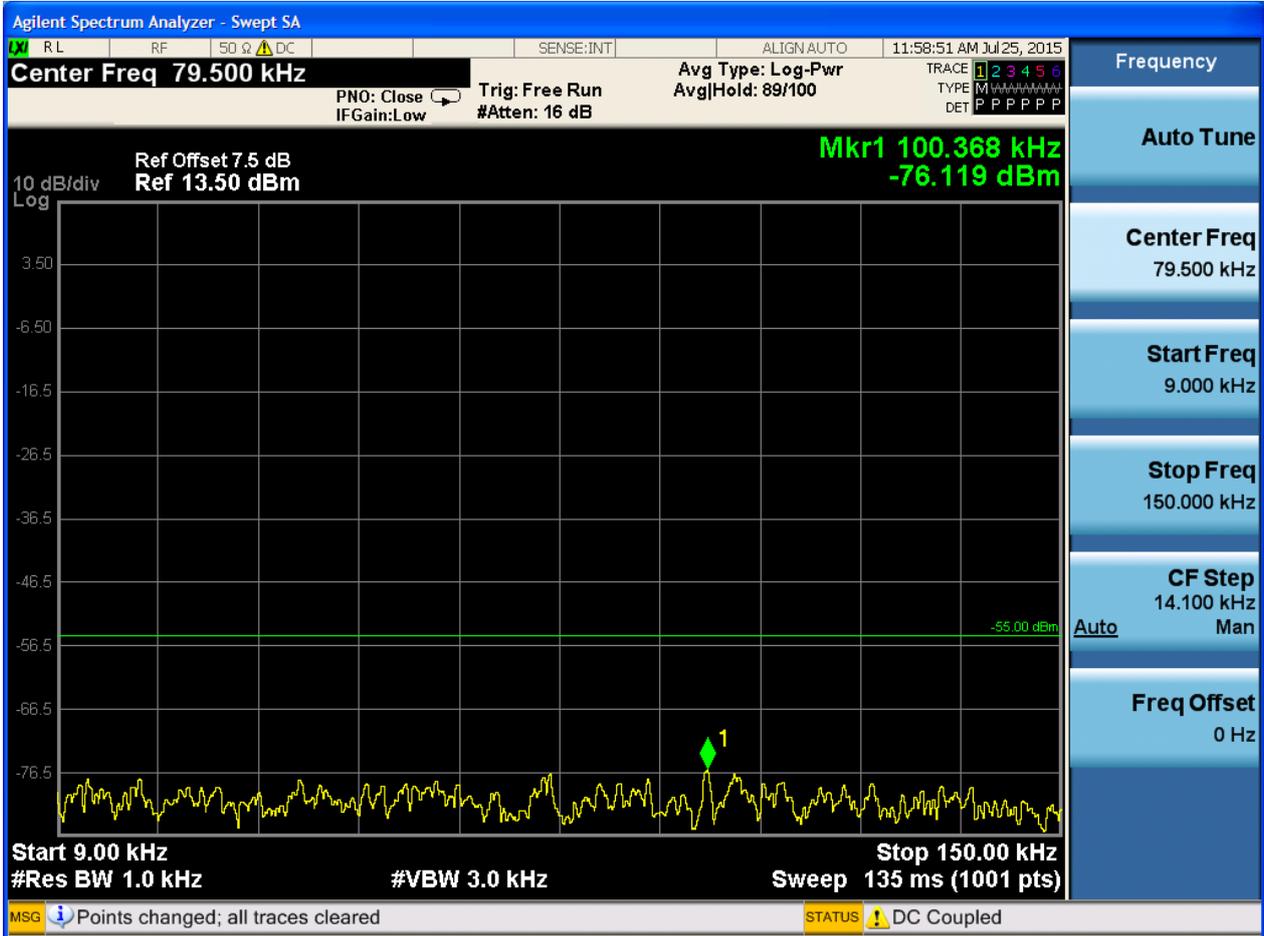






6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0





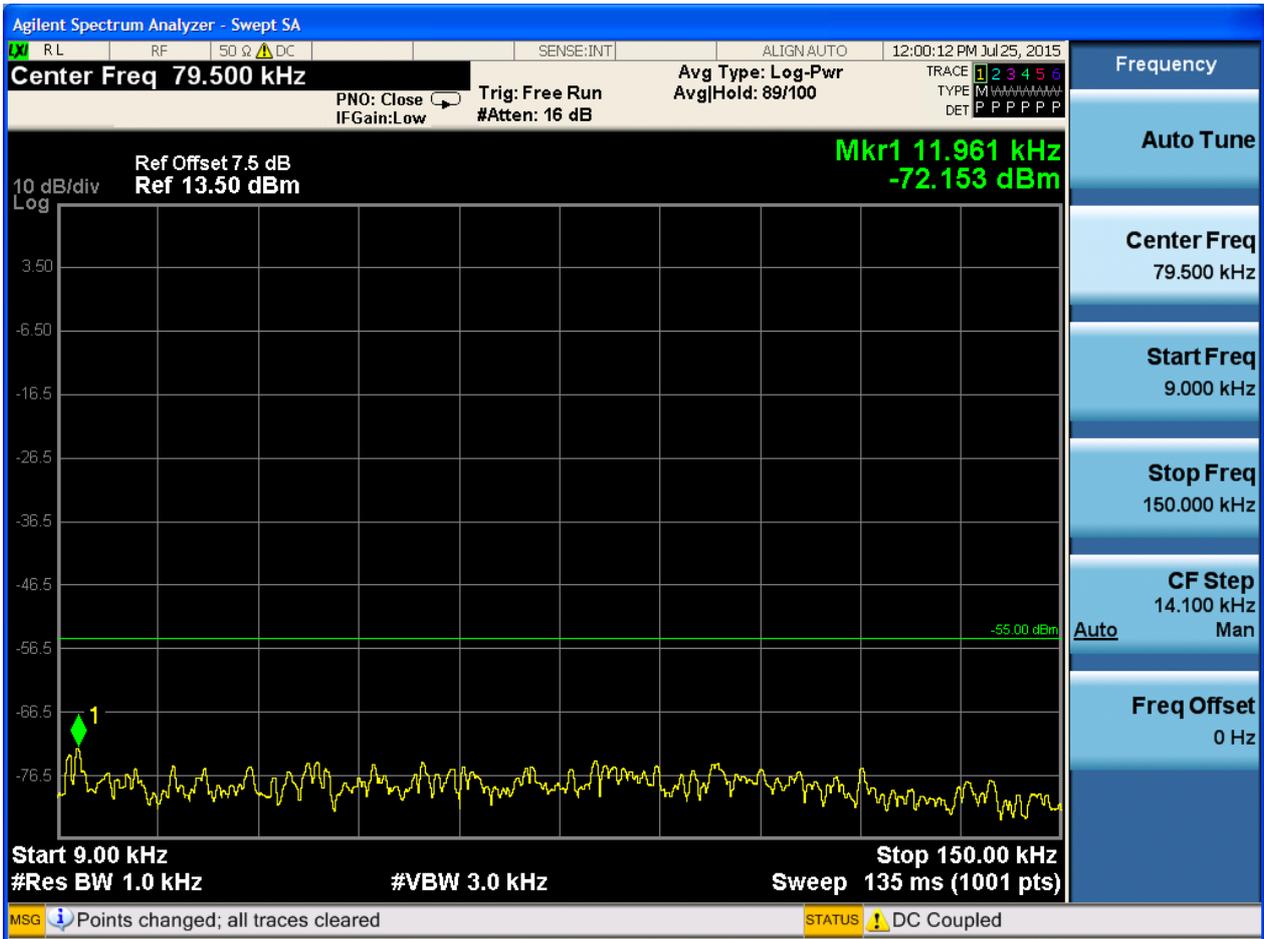


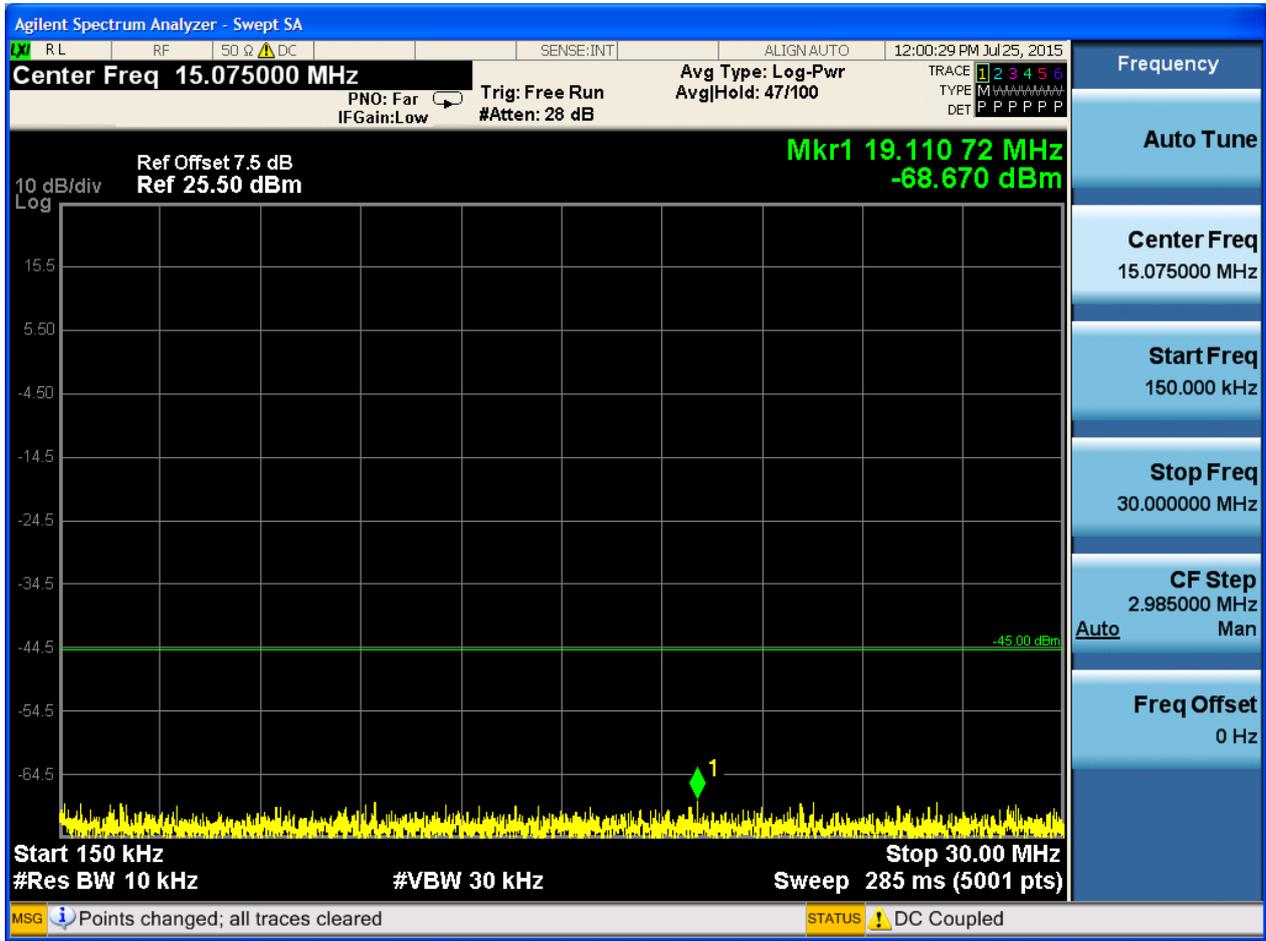


6.1.1.2.4 Test Bandwidth = 20

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0



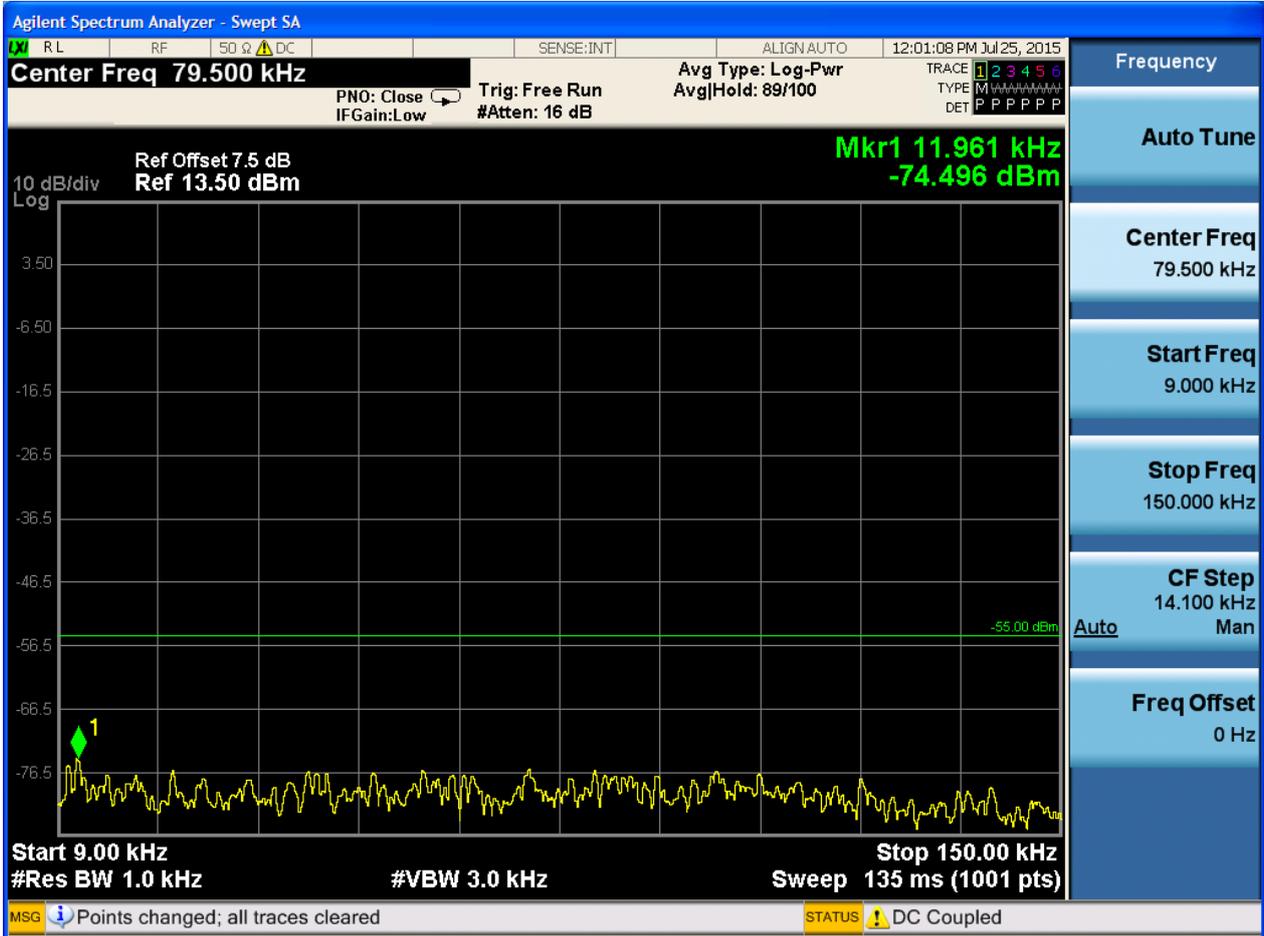






6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0





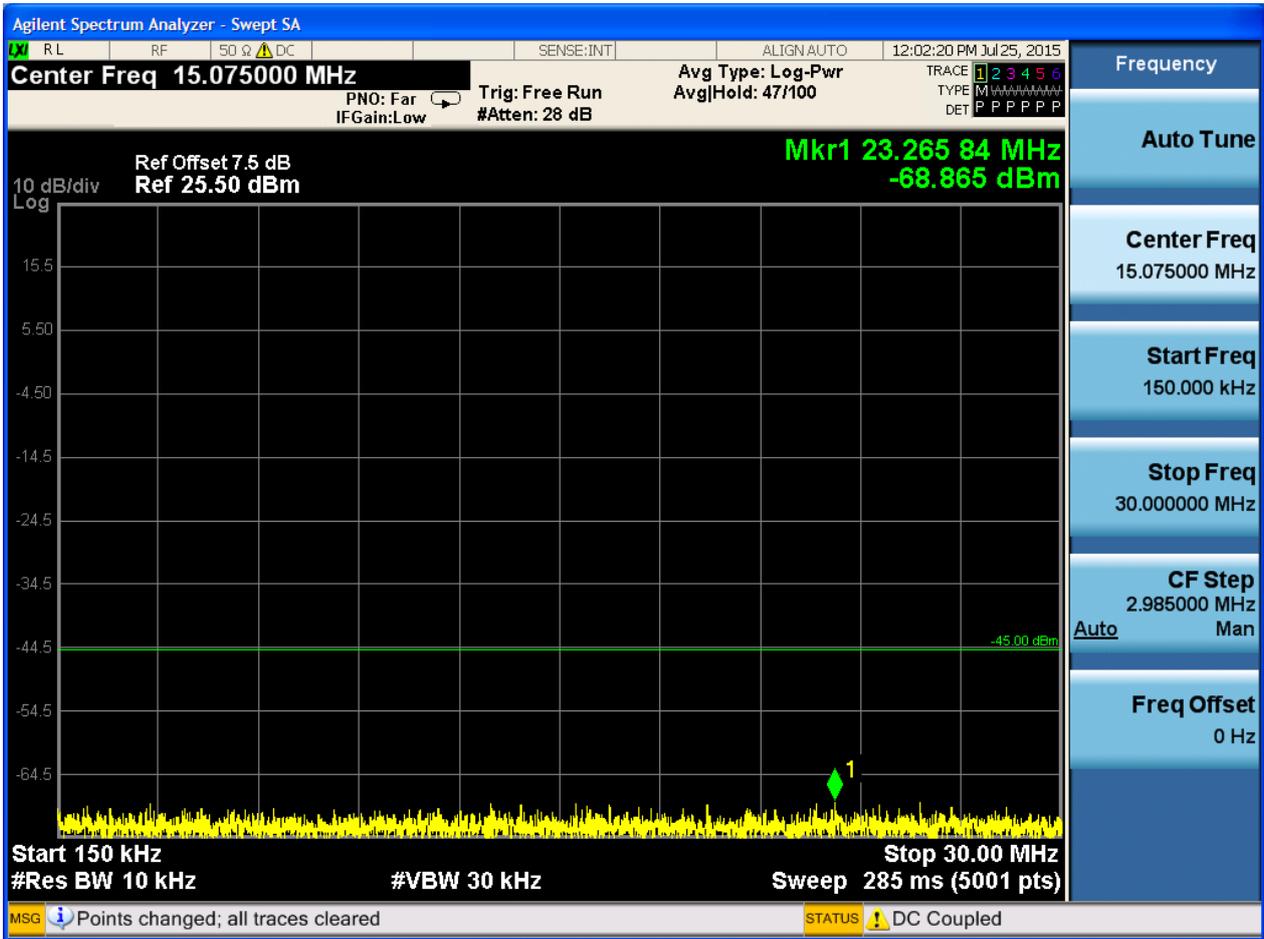




6.1.1.2.4.3 Test Channel = HCH

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

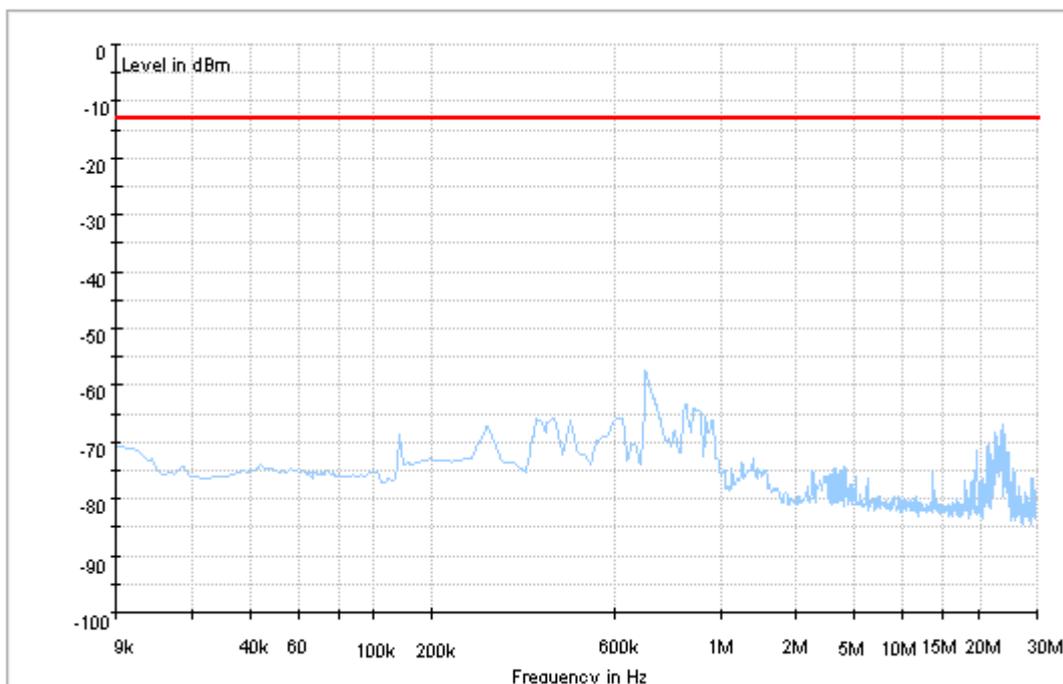
We tested all modes, but the data presented below is the worst case.

Part I - Test Plots

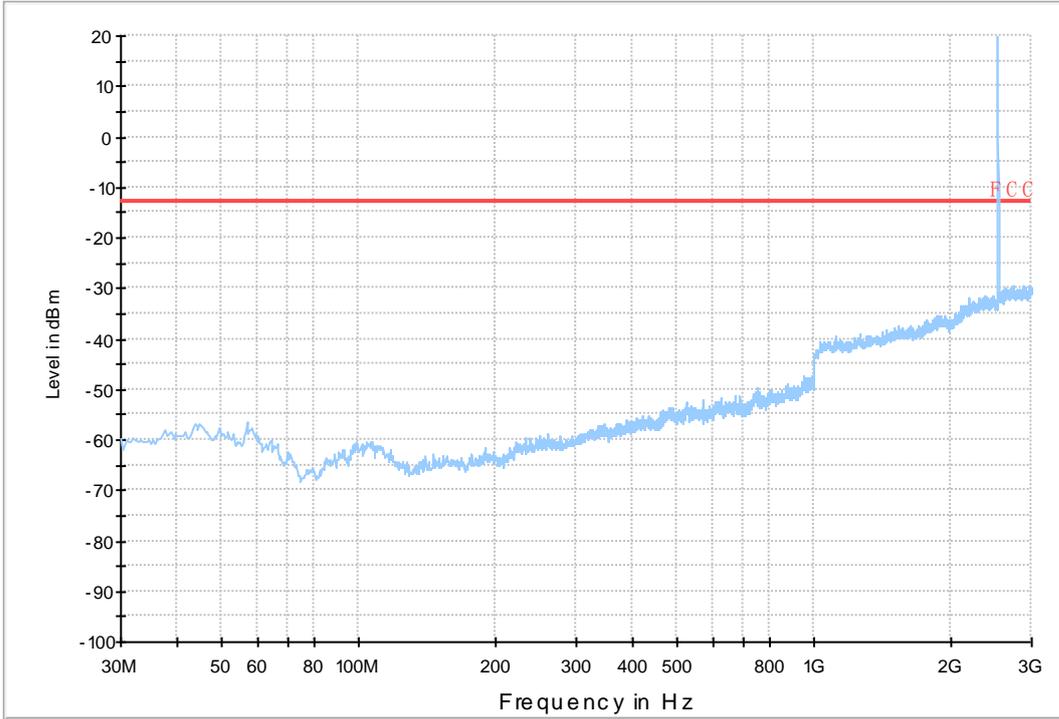
7.1 For LTE

7.1.1 Test Band = BAND7

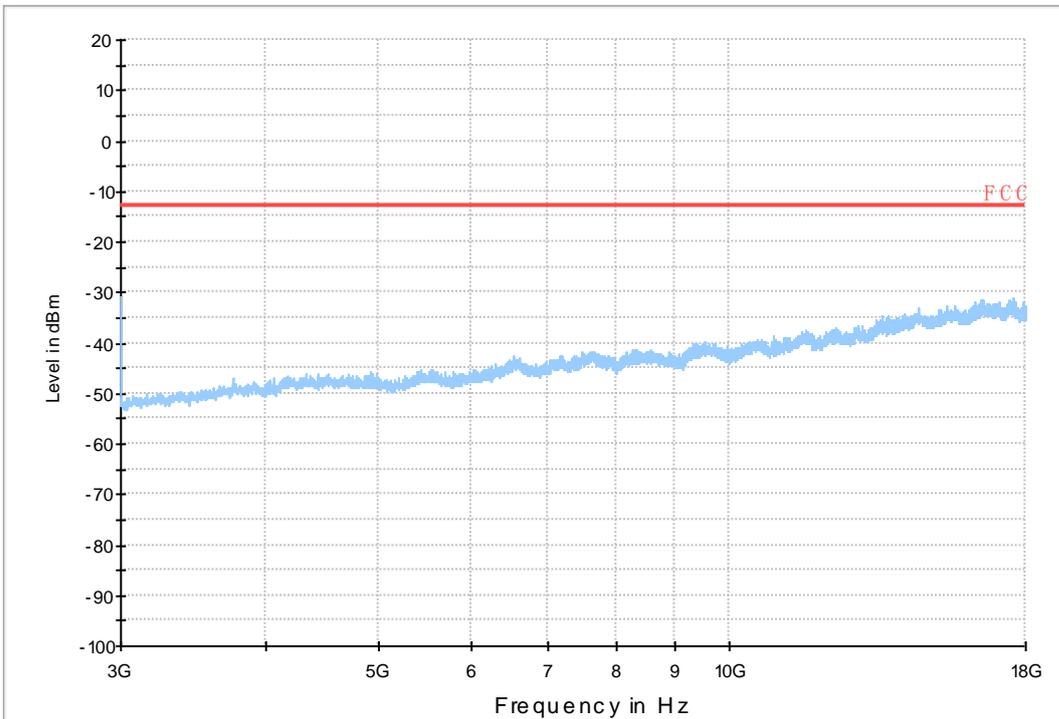
7.1.1.1 Test Bandwidth = 5

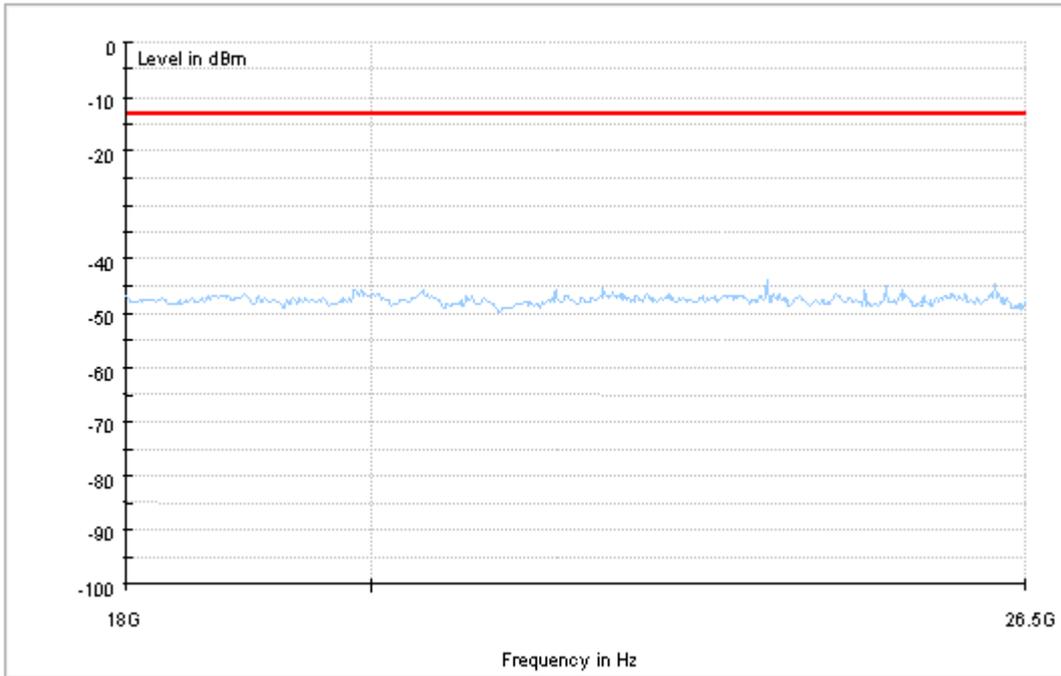


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_L

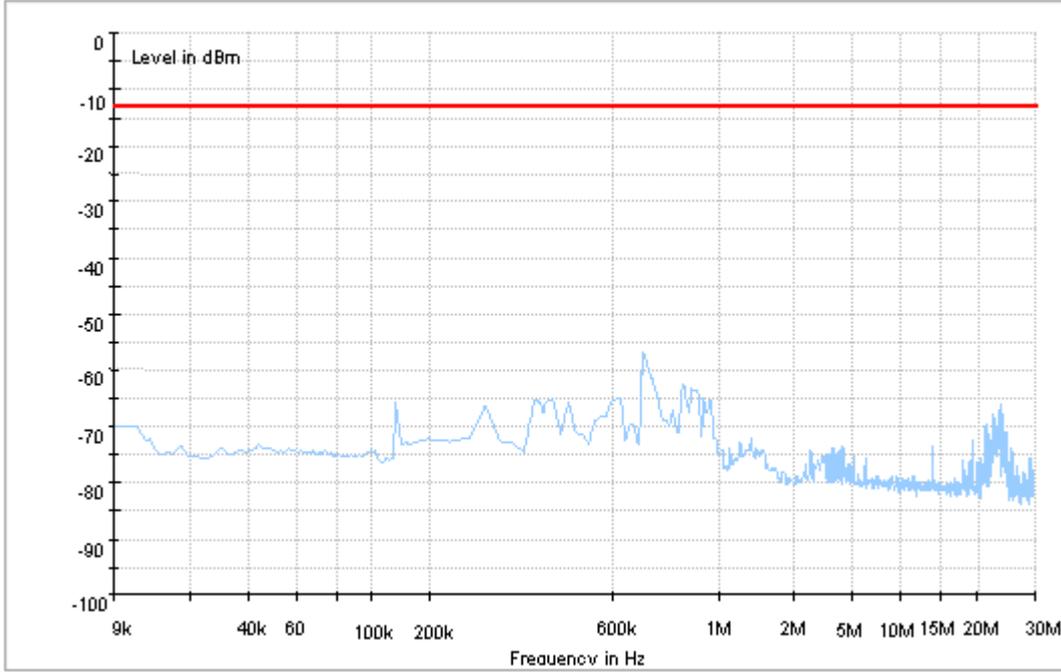


Copy of RSE-TX-DIRECTOR ABOVE 1.5G_H

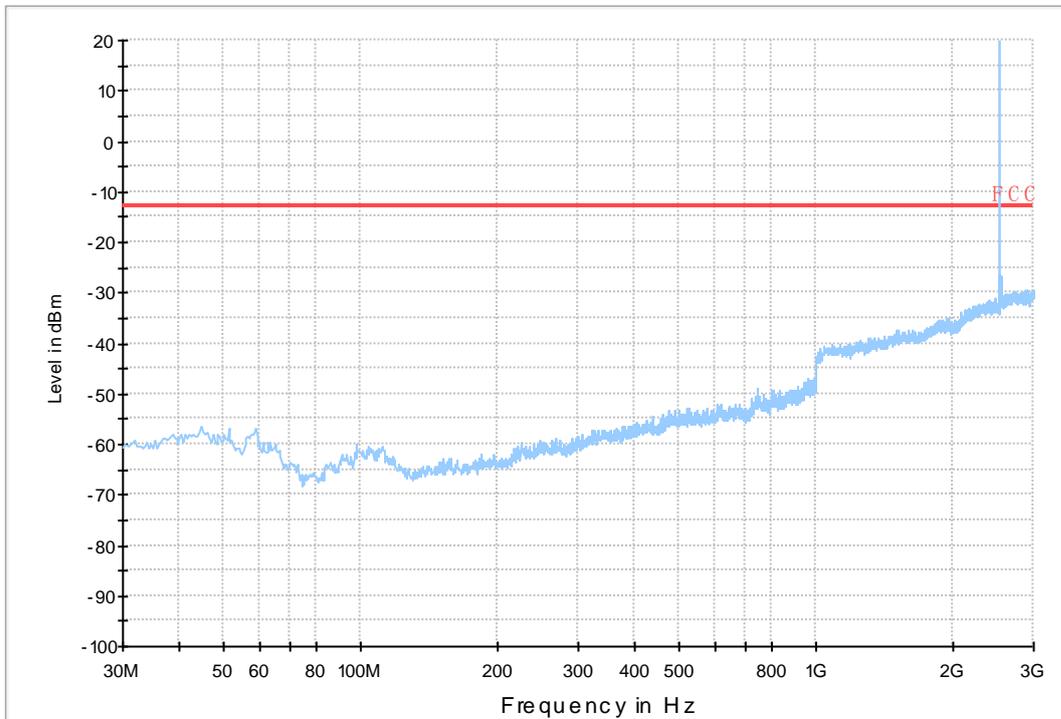




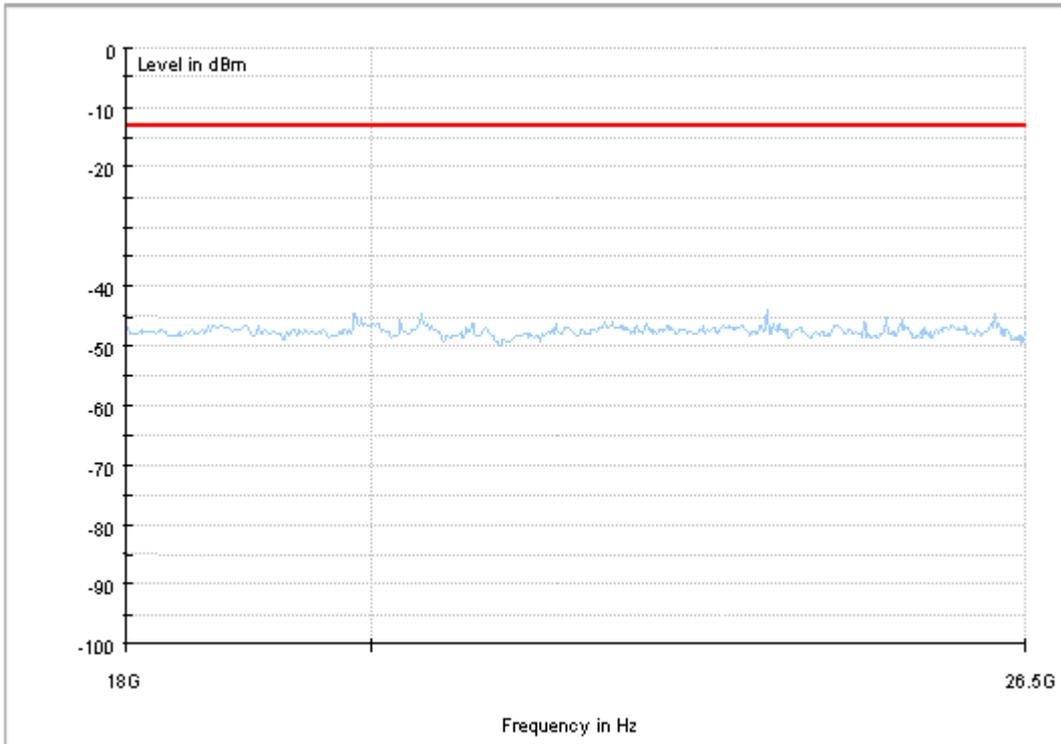
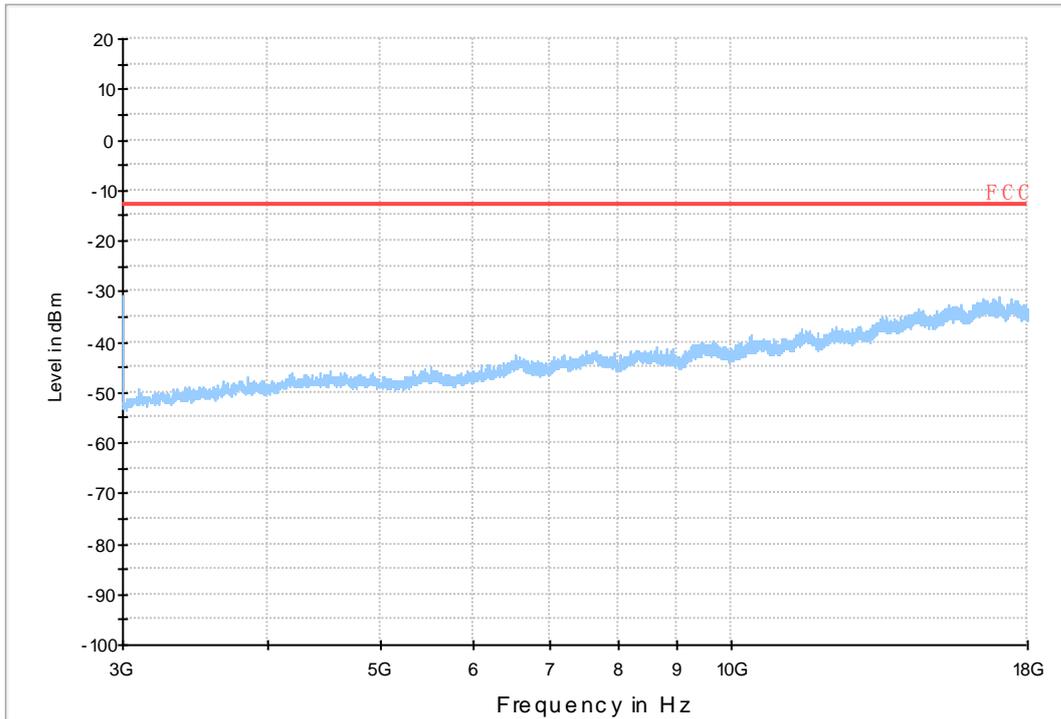
7.1.1.2 Test Bandwidth = 20



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

8.1.1 Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND7	LTE/TM1	5	LCH	TN	VL	3.08	0.00123	PASS
					VN	0.06	0.00002	PASS
					VH	1.04	0.00042	PASS
			MCH	TN	VL	-3.88	-0.00153	PASS
					VN	-2.47	-0.00097	PASS
					VH	-2.52	-0.00099	PASS
			HCH	TN	VL	1.72	0.00067	PASS
					VN	-0.92	-0.00036	PASS
					VH	2.33	0.00091	PASS
		10	LCH	TN	VL	-1.59	-0.00063	PASS
					VN	-1.86	-0.00074	PASS
					VH	-2.62	-0.00105	PASS
			MCH	TN	VL	-4.33	-0.00171	PASS
					VN	-4.39	-0.00173	PASS
					VH	-4.56	-0.0018	PASS
			HCH	TN	VL	-4.65	-0.00181	PASS
					VN	-3.16	-0.00123	PASS
					VH	-1.09	-0.00042	PASS
		15	LCH	TN	VL	-17.21	-0.00686	PASS
					VN	-26.72	-0.01066	PASS
					VH	-31.91	-0.01273	PASS
			MCH	TN	VL	-2.26	-0.00089	PASS
					VN	-1.9	-0.00075	PASS
					VH	-4.02	-0.00159	PASS
HCH	TN		VL	1.75	0.00068	PASS		
			VN	0.92	0.00036	PASS		
			VH	2.49	0.00097	PASS		
20	LCH	TN	VL	2.12	0.00084	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					VN	3.16	0.00126	PASS		
					VH	2.66	0.00106	PASS		
					MCH	TN	VL	-3.42	-0.00135	PASS
							VN	-4.85	-0.00191	PASS
					VH		VN	-2.83	-0.00112	PASS
							VH	-2.83	-0.00112	PASS
			HCH	TN	VL	-0.39	-0.00015	PASS		
					VN	1.02	0.0004	PASS		
					VH	1.59	0.00062	PASS		
					LCH	TN	VL	1.43	0.00057	PASS
							VN	1.77	0.00071	PASS
							VH	3.45	0.00138	PASS
	MCH	TN	VL	-4.22	-0.00166	PASS				
			VN	-2.12	-0.00084	PASS				
			VH	-1.46	-0.00058	PASS				
			HCH	TN	VL	2.63	0.00102	PASS		
					VN	1.73	0.00067	PASS		
					VH	2.82	0.0011	PASS		
	10	LCH	TN	VL	-3.25	-0.0013	PASS			
				VN	-3.88	-0.00155	PASS			
				VH	-2.25	-0.0009	PASS			
		MCH	TN	VL	-4.02	-0.00159	PASS			
				VN	-5.25	-0.00207	PASS			
				VH	-3.13	-0.00123	PASS			
		HCH	TN	VL	-2.95	-0.00115	PASS			
				VN	-3.42	-0.00133	PASS			
				VH	-2.99	-0.00117	PASS			
	15	LCH	TN	VL	4.98	0.00199	PASS			
				VN	-7.87	-0.00314	PASS			
				VH	-21.07	-0.0084	PASS			
		MCH	TN	VL	-1.67	-0.00066	PASS			
				VN	-2.39	-0.00094	PASS			
				VH	-2.73	-0.00108	PASS			
		HCH	TN	VL	4.33	0.00169	PASS			
				VN	3.46	0.00135	PASS			
				VH	3.6	0.0014	PASS			
	20	LCH	TN	VL	3.93	0.00157	PASS			
				VN	3.23	0.00129	PASS			
				VH	4.92	0.00196	PASS			
		MCH	TN	VL	-2.68	-0.00106	PASS			

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	-3.71	-0.00146	PASS
					VH	-2.05	-0.00081	PASS
			HCH	TN	VL	0.86	0.00034	PASS
					VN	0.4	0.00016	PASS
					VH	0.17	0.00007	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	3.16	0.00126	PASS
					-20	2.8	0.00112	PASS
					-10	2.57	0.00103	PASS
					0	1.39	0.00056	PASS
					10	1.7	0.00068	PASS
					20	0.56	0.00022	PASS
					30	0.57	0.00023	PASS
					40	1.93	0.00077	PASS
			50	1.04	0.00042	PASS		
			MCH	VN	-30	-2.95	-0.00116	PASS
					-20	-1.79	-0.00071	PASS
					-10	-2.06	-0.00081	PASS
					0	-3.49	-0.00138	PASS
					10	-0.51	-0.0002	PASS
					20	-4.65	-0.00183	PASS
					30	-3.89	-0.00153	PASS
					40	-5.09	-0.00201	PASS
			50	-3.52	-0.00139	PASS		
			HCH	VN	-30	-1.56	-0.00061	PASS
					-20	2.13	0.00083	PASS
					-10	-0.47	-0.00018	PASS
					0	1.89	0.00074	PASS
					10	0	0	PASS
					20	-1.02	-0.0004	PASS
					30	1.06	0.00041	PASS
					40	1.83	0.00071	PASS
			50	1.1	0.00043	PASS		
			10	LCH	VN	-30	-3.49	-0.00139

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
					-20	-1.96	-0.00078	PASS	
					-10	-1.72	-0.00069	PASS	
					0	-3.43	-0.00137	PASS	
					10	-2.83	-0.00113	PASS	
					20	-3.89	-0.00155	PASS	
					30	-1.79	-0.00071	PASS	
					40	-2.52	-0.00101	PASS	
					50	-4.03	-0.00161	PASS	
			MCH	VN	-30	-2.53	-0.001	PASS	
					-20	-2.95	-0.00116	PASS	
					-10	-2.27	-0.0009	PASS	
					0	-4.59	-0.00181	PASS	
					10	-3.53	-0.00139	PASS	
					20	-1.6	-0.00063	PASS	
					30	-2.95	-0.00116	PASS	
					40	-2.37	-0.00093	PASS	
			HCH	VN	-30	-2.19	-0.00085	PASS	
					-20	-1.29	-0.0005	PASS	
					-10	-2.49	-0.00097	PASS	
					0	-1.69	-0.00066	PASS	
					10	-2.68	-0.00104	PASS	
					20	-1.86	-0.00073	PASS	
					30	-1.03	-0.0004	PASS	
					40	-4.85	-0.00189	PASS	
			15	LCH	VN	-30	39.35	0.01569	PASS
						-20	26.85	0.01071	PASS
						-10	11.62	0.00463	PASS
						0	-0.86	-0.00034	PASS
		10				-13.92	-0.00555	PASS	
		20				-25.43	-0.01014	PASS	
		30				-32.14	-0.01282	PASS	
		40				-38.14	-0.01521	PASS	
		50		-37.04	-0.01477	PASS			
		MCH		VN	-30	-2.57	-0.00101	PASS	
					-20	-3.73	-0.00147	PASS	
					-10	-1.82	-0.00072	PASS	
			0		-1.75	-0.00069	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-3.73	-0.00147	PASS
					20	-2.46	-0.00097	PASS
					30	-2.23	-0.00088	PASS
					40	-4.11	-0.00162	PASS
					50	-4.68	-0.00185	PASS
			HCH	VN	-30	5.04	0.00197	PASS
					-20	3.52	0.00137	PASS
					-10	3.02	0.00118	PASS
					0	1.99	0.00078	PASS
					10	3.3	0.00129	PASS
					20	3.58	0.0014	PASS
					30	2.26	0.00088	PASS
			LCH	VN	40	3.28	0.00128	PASS
					50	1.9	0.00074	PASS
					-30	0.29	0.00012	PASS
					-20	2.25	0.0009	PASS
					-10	3.69	0.00147	PASS
					0	3.13	0.00125	PASS
		10			3.4	0.00135	PASS	
		MCH	VN	20	3.98	0.00159	PASS	
				30	6.17	0.00246	PASS	
				40	3.56	0.00142	PASS	
				50	3.03	0.00121	PASS	
				-30	-3.5	-0.00138	PASS	
				-20	-1.89	-0.00075	PASS	
				-10	-1.87	-0.00074	PASS	
				0	-2.2	-0.00087	PASS	
				10	-2.68	-0.00106	PASS	
				20	-1.26	-0.0005	PASS	
		HCH	VN	30	-1.37	-0.00054	PASS	
				40	-4.69	-0.00185	PASS	
				50	-3.08	-0.00121	PASS	
				-30	1.24	0.00048	PASS	
				-20	0.16	0.00006	PASS	
				-10	0.44	0.00017	PASS	
				0	-0.49	-0.00019	PASS	
		10	0.29	0.00011	PASS			
		20	-1.2	-0.00047	PASS			
		30	-0.86	-0.00034	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	-0.01	0	PASS
					50	0.5	0.0002	PASS
					-30	2.19	0.00088	PASS
					-20	3.49	0.00139	PASS
					-10	3.56	0.00142	PASS
					0	0.57	0.00023	PASS
					10	2.29	0.00092	PASS
					20	4.66	0.00186	PASS
					30	2.75	0.0011	PASS
					40	2.37	0.00095	PASS
			50	4.82	0.00193	PASS		
			MCH	VN	-30	-4.95	-0.00195	PASS
					-20	-0.82	-0.00032	PASS
					-10	-2.13	-0.00084	PASS
					0	-4.36	-0.00172	PASS
					10	-2.86	-0.00113	PASS
					20	-3.99	-0.00157	PASS
					30	-2.78	-0.0011	PASS
					40	-2.76	-0.00109	PASS
					50	-2.92	-0.00115	PASS
		HCH			VN	-30	-0.66	-0.00026
			-20	0.5		0.00019	PASS	
			-10	1.97		0.00077	PASS	
			0	-1.16		-0.00045	PASS	
			10	1.07		0.00042	PASS	
			20	2.3		0.0009	PASS	
			30	2.4		0.00093	PASS	
			40	0.6		0.00023	PASS	
			50	1.47		0.00057	PASS	
			10	LCH		VN	-30	-3.1
		-20			-2.45		-0.00098	PASS
		-10			-5.16		-0.00206	PASS
		0			-3.09		-0.00123	PASS
		10			-2.96		-0.00118	PASS
		20			-4.36		-0.00174	PASS
		30			-3.6		-0.00144	PASS
		40			-3.81		-0.00152	PASS
		50			-3.49		-0.00139	PASS
		MCH			VN		-30	-2.68

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	-2.36	-0.00093	PASS
					-10	-4.15	-0.00164	PASS
					0	-1.77	-0.0007	PASS
					10	-2.92	-0.00115	PASS
					20	-3.29	-0.0013	PASS
					30	-4.33	-0.00171	PASS
					40	-4.11	-0.00162	PASS
					50	-0.37	-0.00015	PASS
			HCH	VN	-30	-2.19	-0.00085	PASS
					-20	-3.48	-0.00136	PASS
					-10	-4.21	-0.00164	PASS
					0	-4.13	-0.00161	PASS
					10	-4.78	-0.00186	PASS
					20	-4.82	-0.00188	PASS
					30	-3.88	-0.00151	PASS
					40	-3.32	-0.00129	PASS
			LCH	VN	-30	78.36	0.03125	PASS
					-20	75.14	0.02997	PASS
					-10	63.63	0.02538	PASS
					0	55.23	0.02203	PASS
		10			42.97	0.01714	PASS	
		20			32.04	0.01278	PASS	
		30			21.11	0.00842	PASS	
		40			12.99	0.00518	PASS	
		MCH	VN	-30	-2.6	-0.00103	PASS	
				-20	-2.53	-0.001	PASS	
				-10	-2.65	-0.00105	PASS	
				0	-2.33	-0.00092	PASS	
				10	-2.22	-0.00088	PASS	
				20	-2.76	-0.00109	PASS	
				30	-3.98	-0.00157	PASS	
				40	-1.56	-0.00062	PASS	
		HCH	VN	50	-3.62	-0.00143	PASS	
				-30	1.13	0.00044	PASS	
				-20	2.7	0.00105	PASS	
				-10	2.85	0.00111	PASS	
					0	2.86	0.00112	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					10	0.19	0.00007	PASS		
					20	1.13	0.00044	PASS		
					30	2.55	0.001	PASS		
					40	2.89	0.00113	PASS		
					50	2.99	0.00117	PASS		
		20	LCH	VN	-30	1.54	0.00061	PASS		
					-20	1.4	0.00056	PASS		
					-10	4.39	0.00175	PASS		
					0	1.75	0.0007	PASS		
					10	2.6	0.00104	PASS		
					20	3.05	0.00122	PASS		
					30	0.83	0.00033	PASS		
					40	3.52	0.0014	PASS		
					50	1.6	0.00064	PASS		
					MCH	VN	-30	-4.88	-0.00193	PASS
							-20	-4.25	-0.00168	PASS
							-10	-3.38	-0.00133	PASS
							0	-1.6	-0.00063	PASS
							10	-3.28	-0.00129	PASS
							20	-2.07	-0.00082	PASS
							30	-0.92	-0.00036	PASS
							40	-3.16	-0.00125	PASS
							50	-4.69	-0.00185	PASS
			HCH	VN	-30	2.02	0.00079	PASS		
					-20	0.73	0.00029	PASS		
					-10	3.45	0.00135	PASS		
					0	1.97	0.00077	PASS		
					10	1.39	0.00054	PASS		
					20	-0.21	-0.00008	PASS		
					30	3.71	0.00145	PASS		
					40	2.15	0.00084	PASS		
					50	1.34	0.00052	PASS		

END