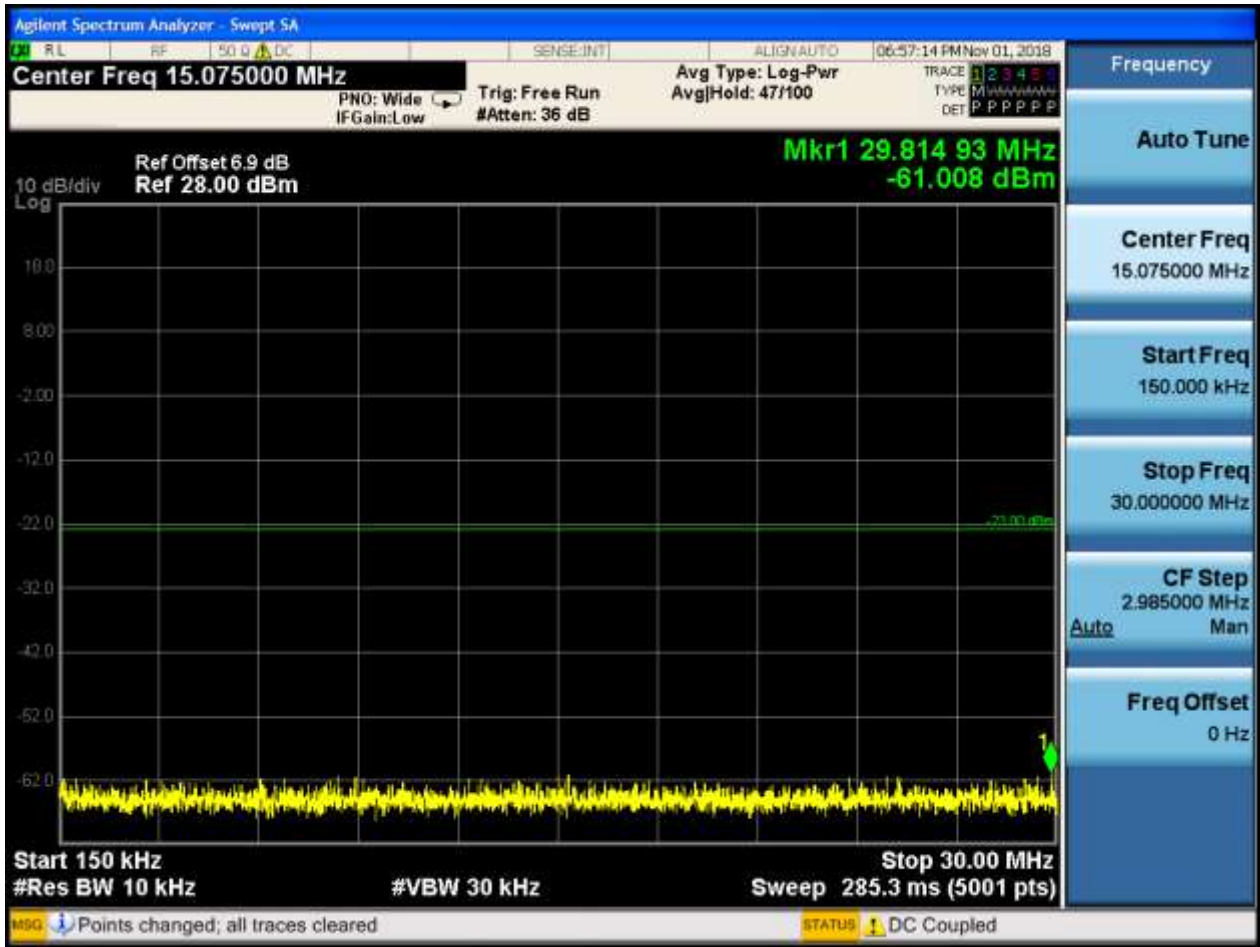




6.1.1.1.1.3 Test Channel = HCH

6.1.1.1.1.3.1 Test RB = RB1#0







6.1.1.1.2 Test Bandwidth = 3

6.1.1.1.2.1 Test Channel = LCH

6.1.1.1.2.1.1 Test RB = RB1#0



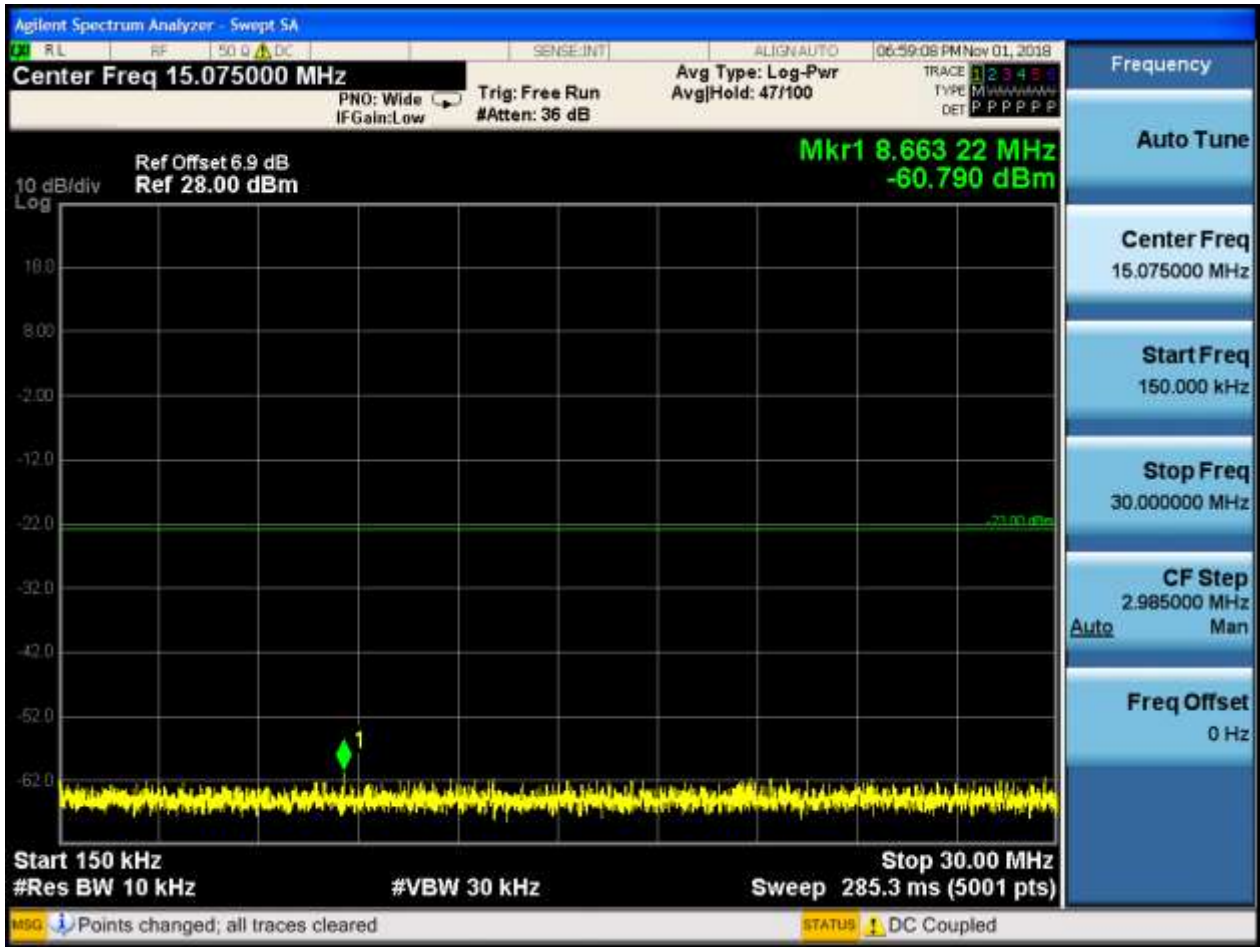




6.1.1.1.2.2 Test Channel = MCH

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



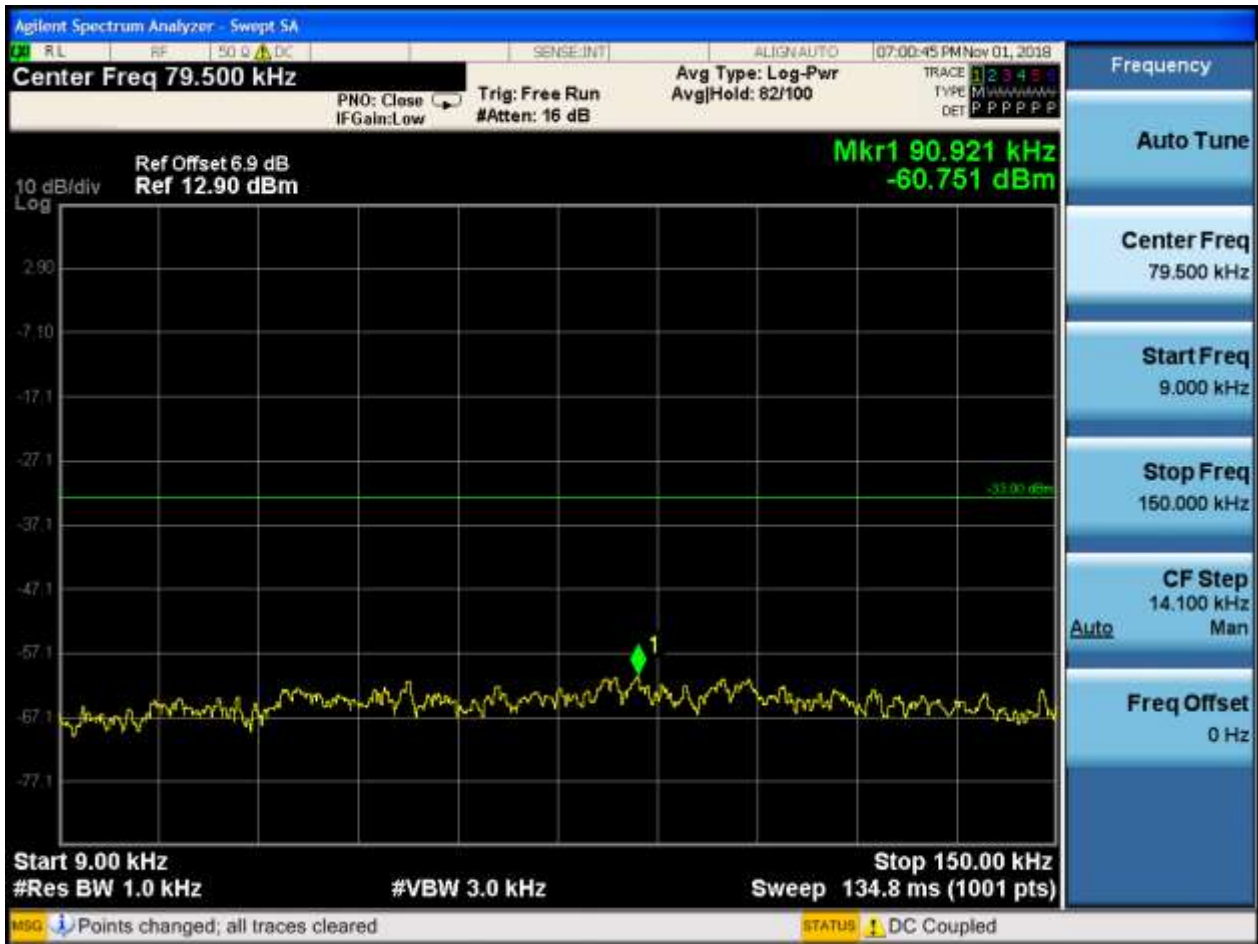


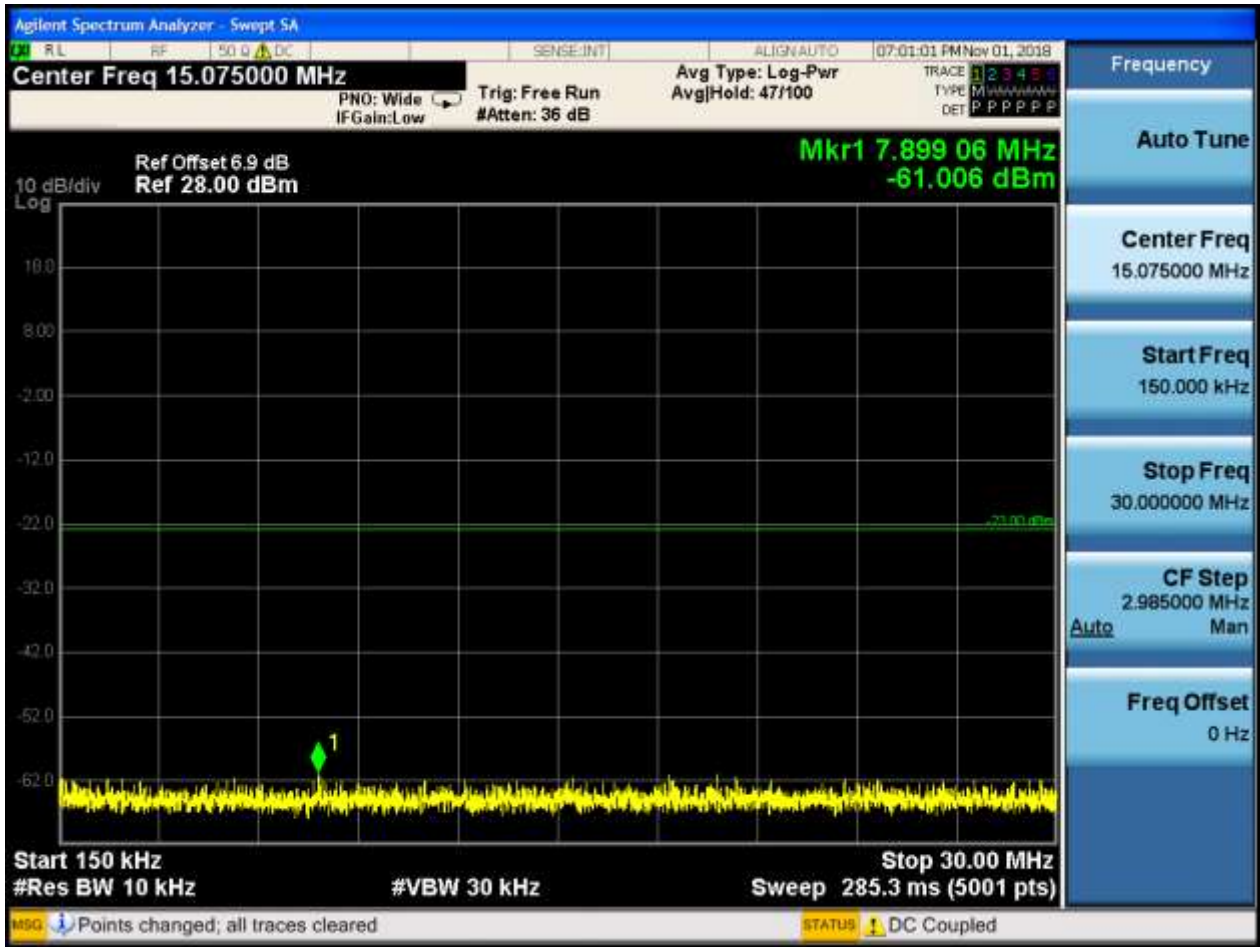


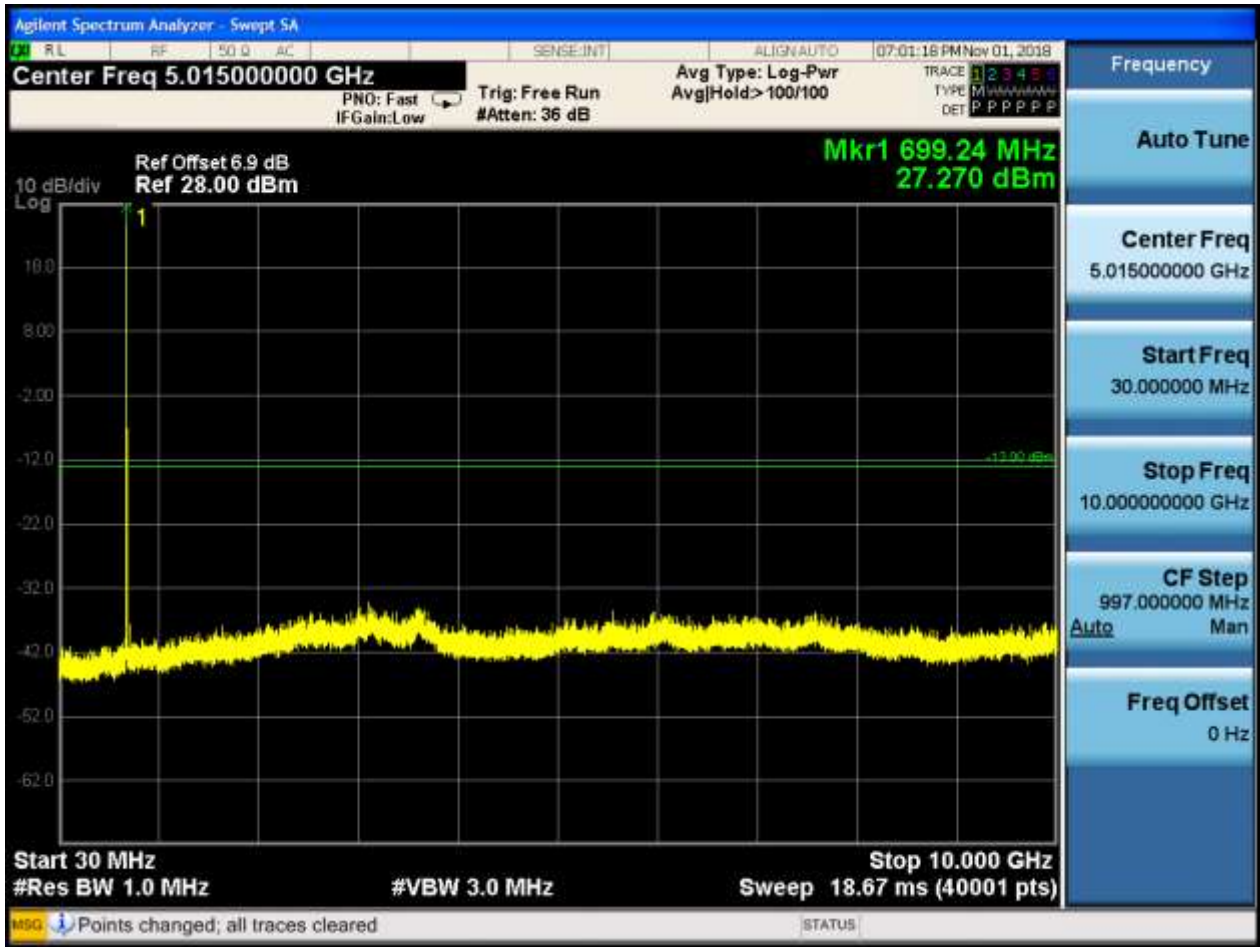
6.1.1.1.3 Test Bandwidth = 5

6.1.1.1.3.1 Test Channel = LCH

6.1.1.1.3.1.1 Test RB = RB1#0





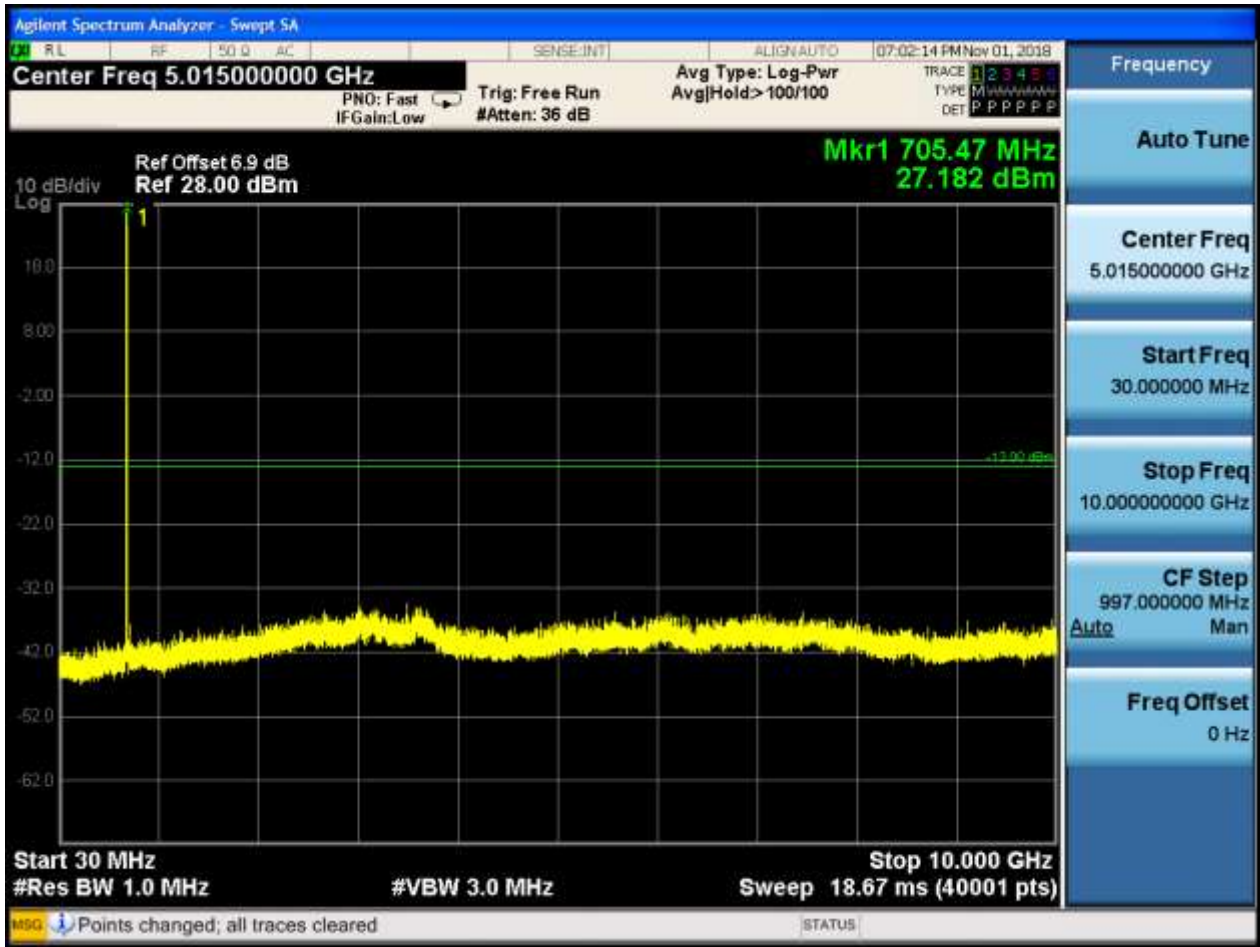


6.1.1.1.3.2 Test Channel = MCH

6.1.1.1.3.2.1 Test RB = RB1#0



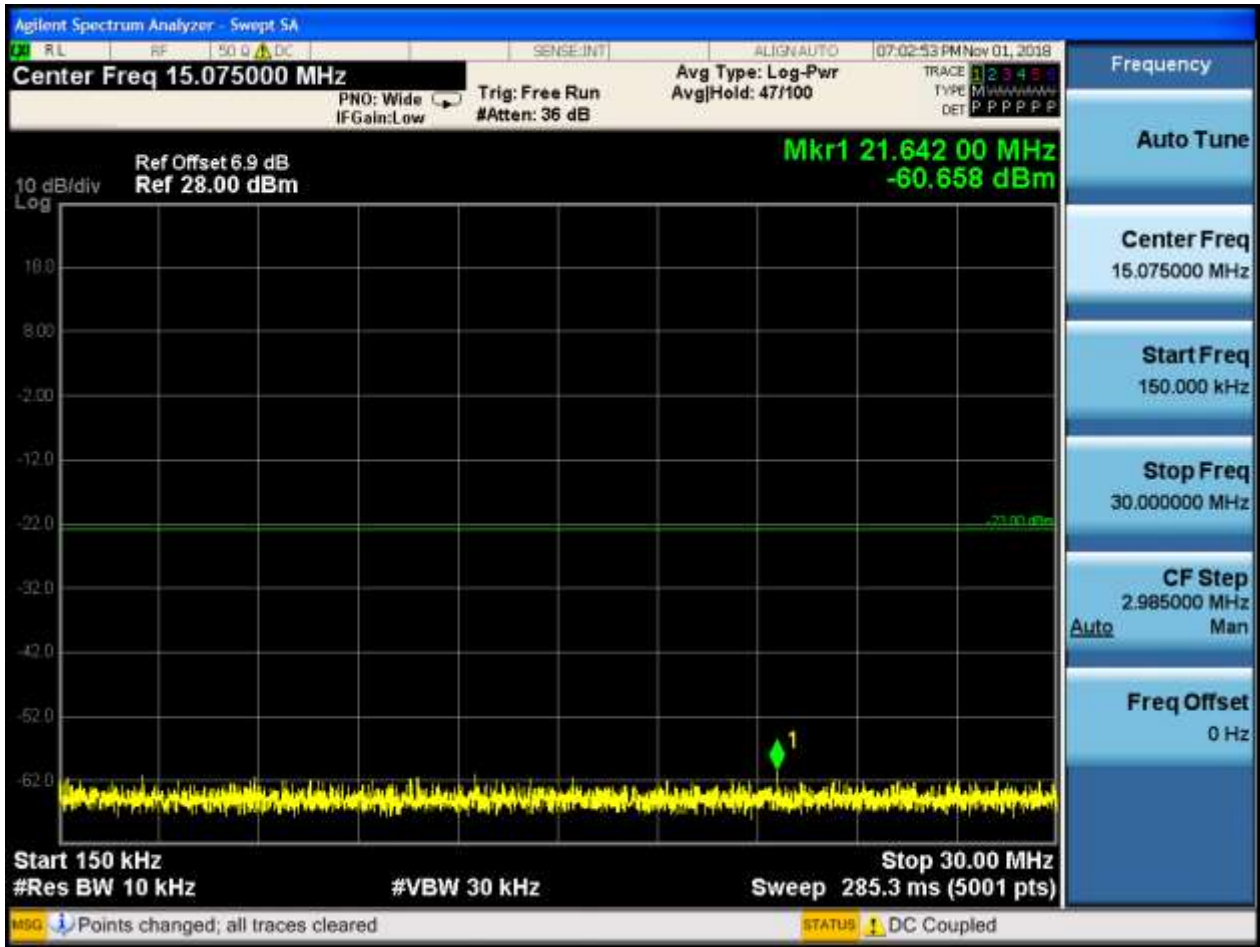


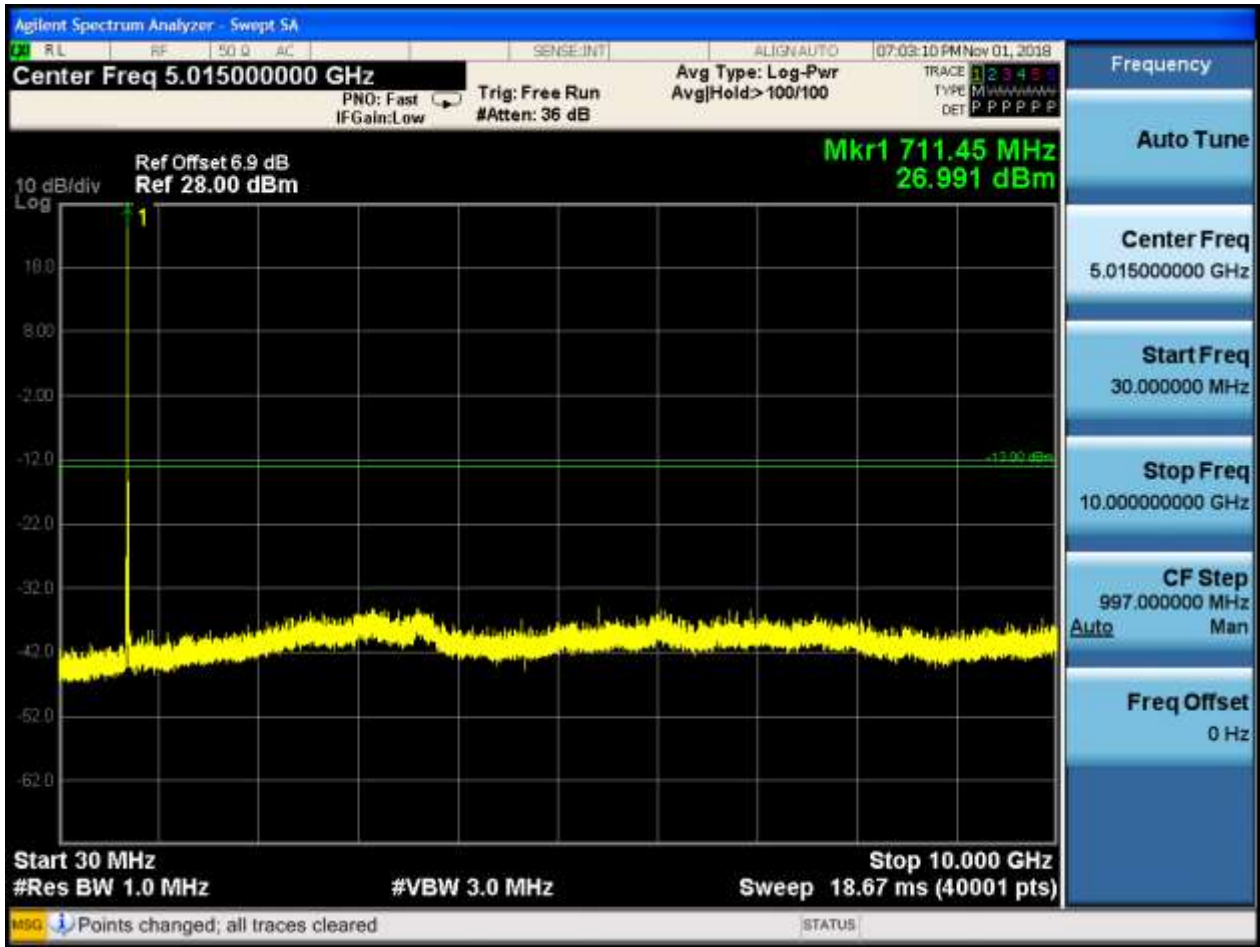


6.1.1.1.3.3 Test Channel = HCH

6.1.1.1.3.3.1 Test RB = RB1#0





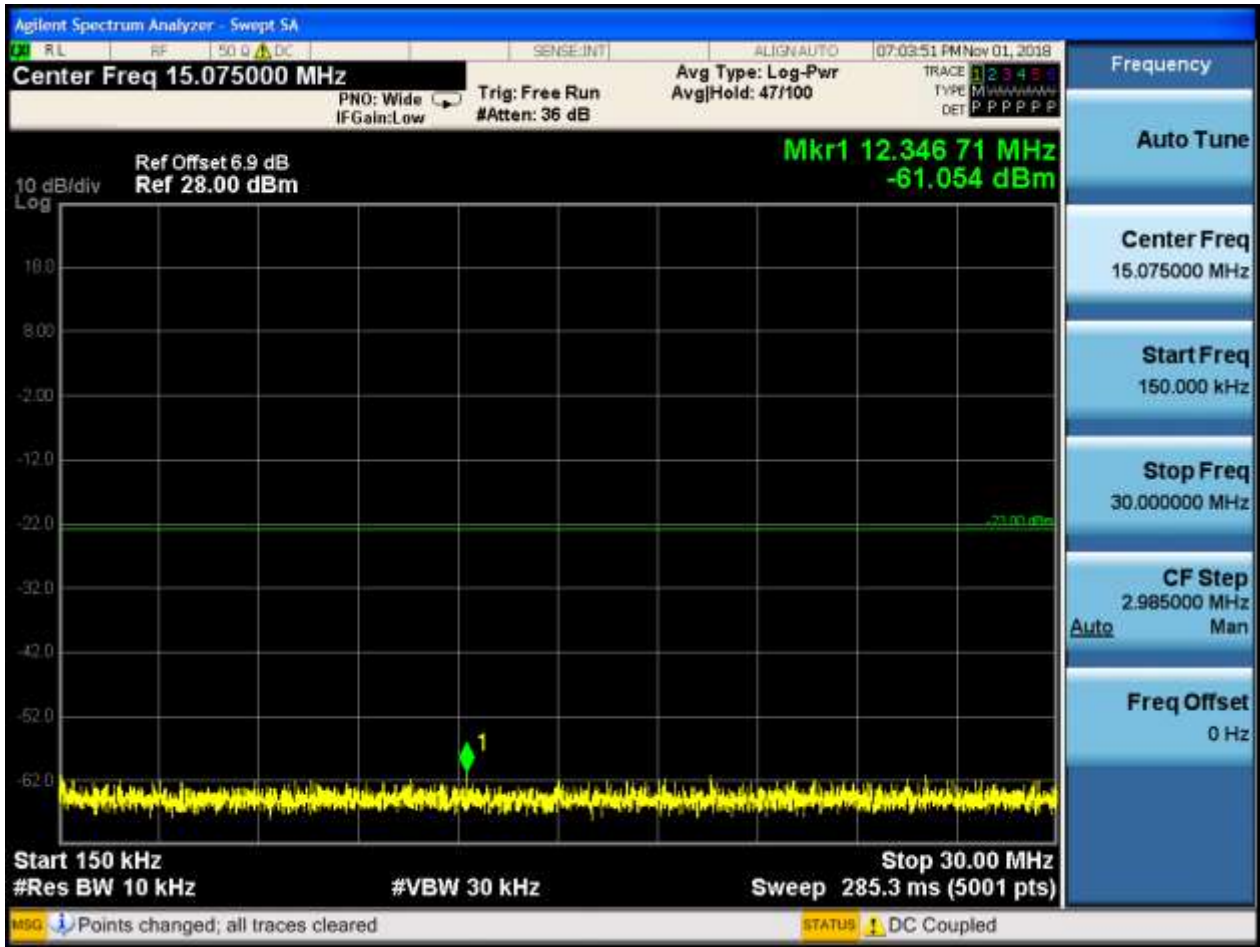


6.1.1.1.4 Test Bandwidth = 10

6.1.1.1.4.1 Test Channel = LCH

6.1.1.1.4.1.1 Test RB = RB1#0

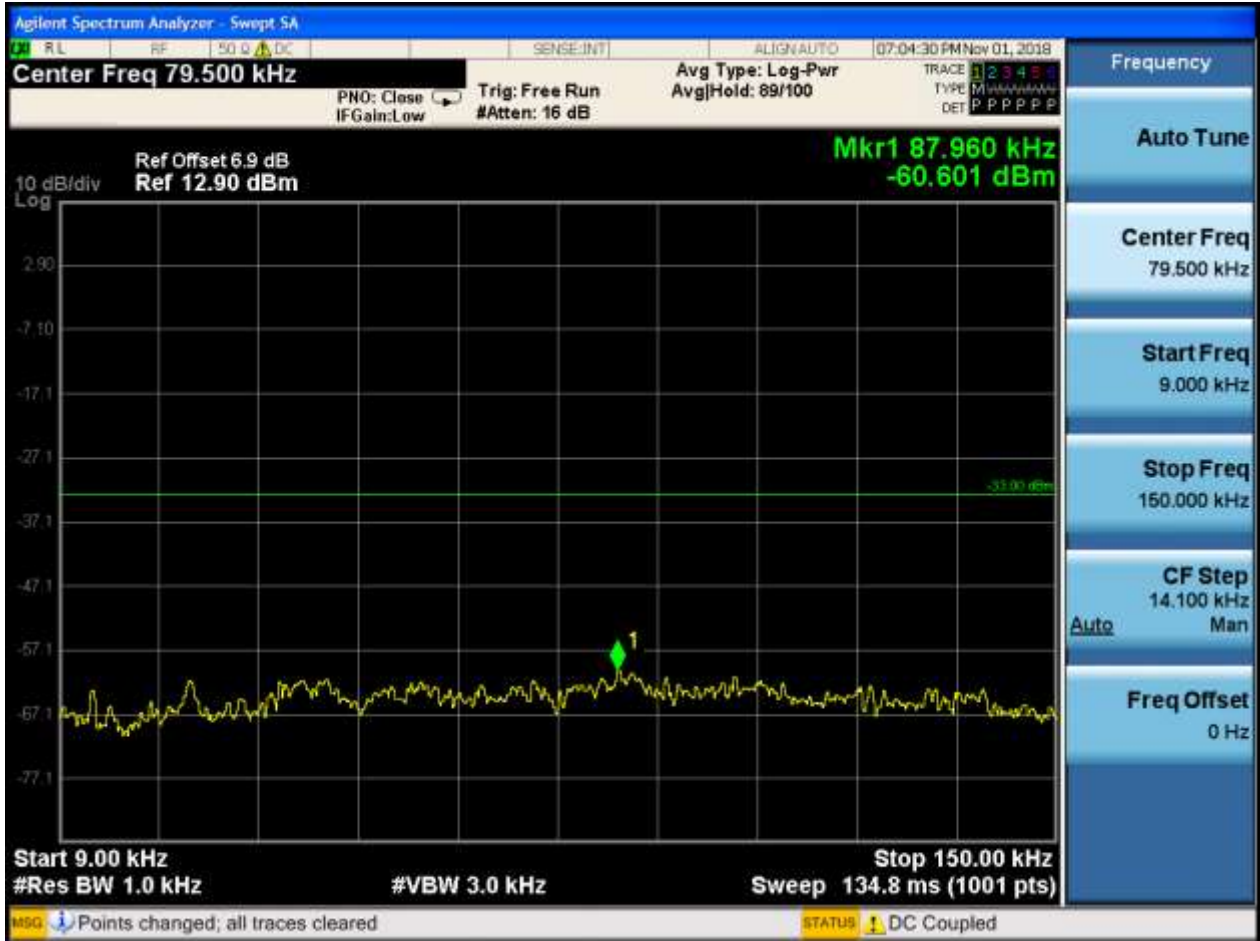


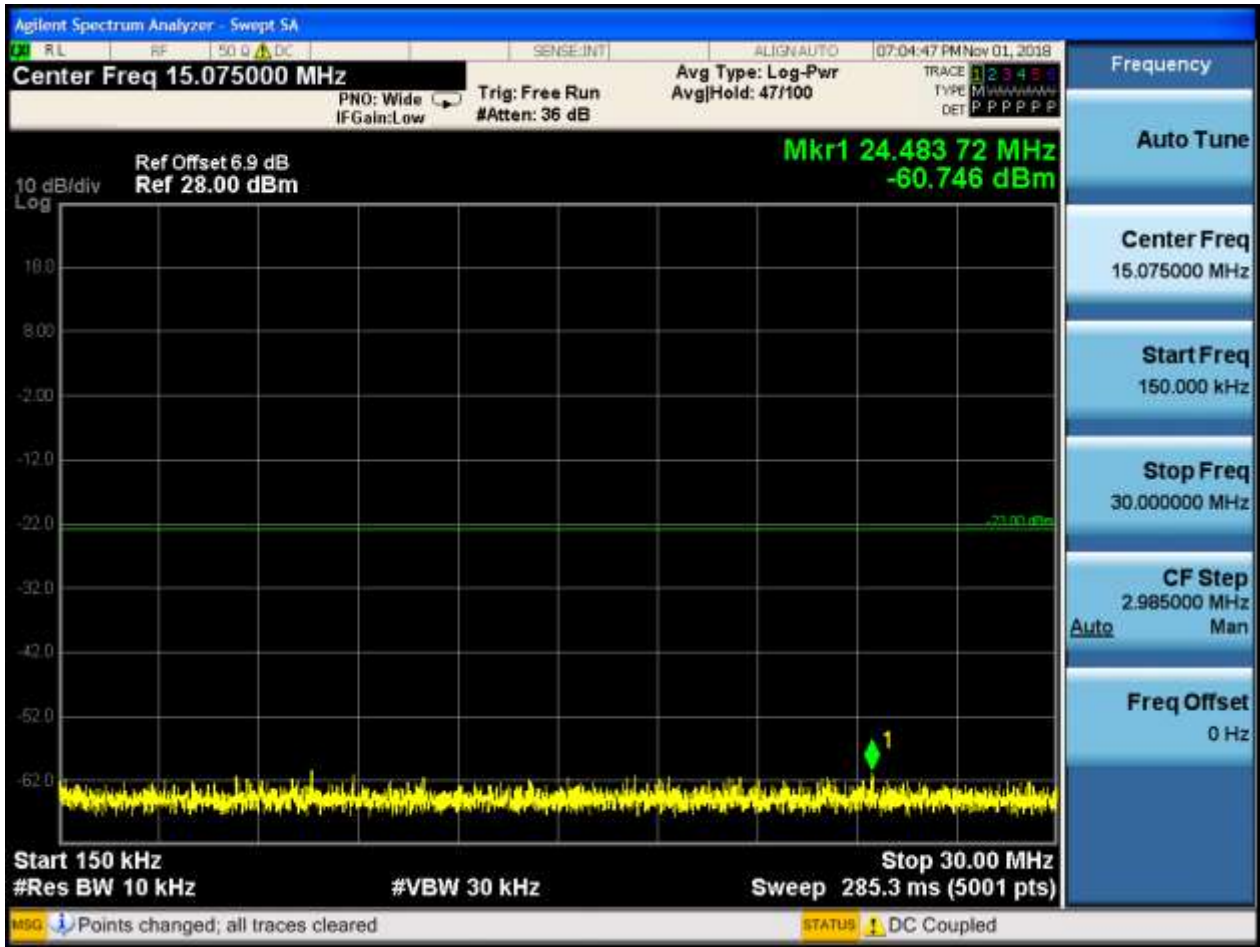




6.1.1.1.4.2 Test Channel = MCH

6.1.1.1.4.2.1 Test RB = RB1#0



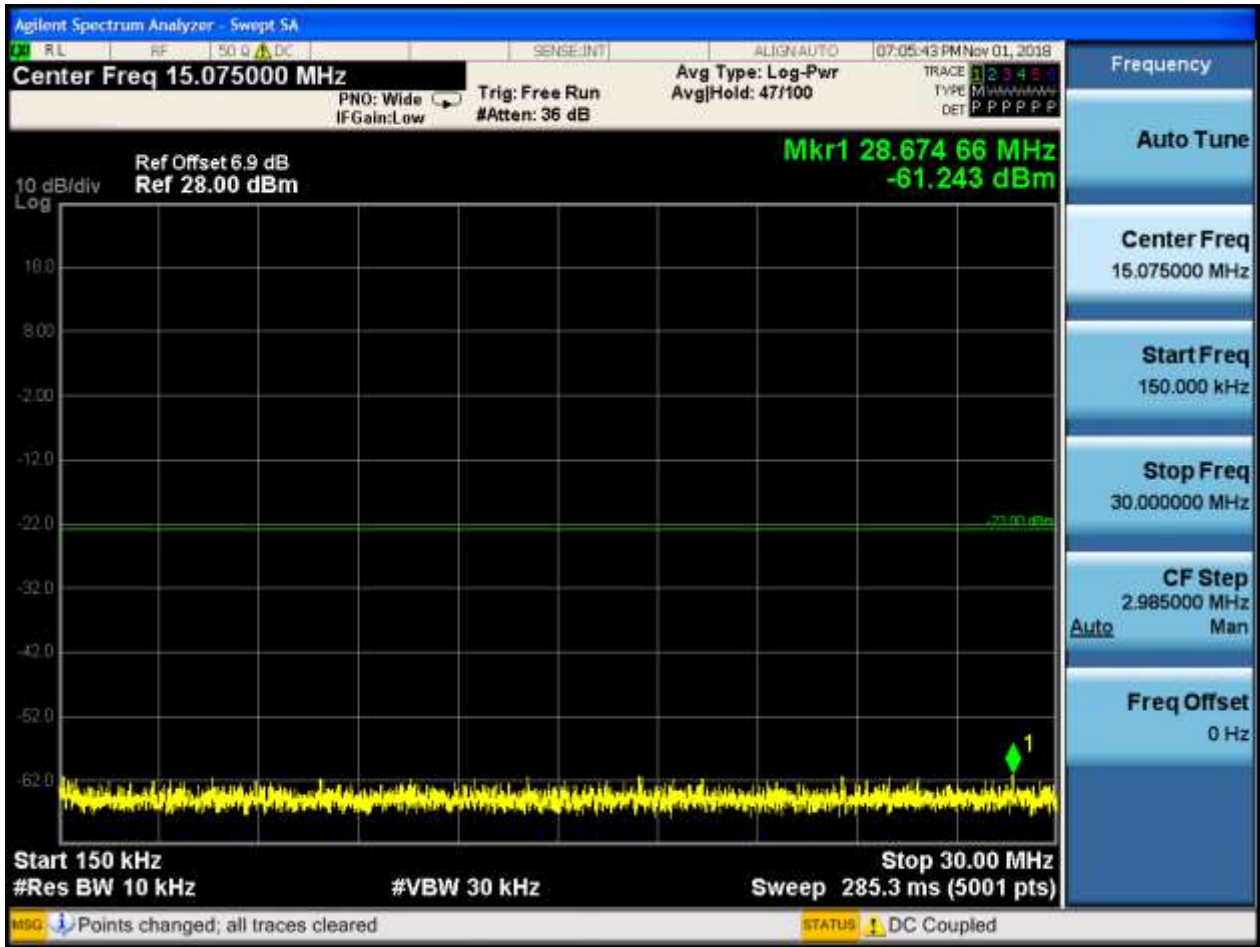


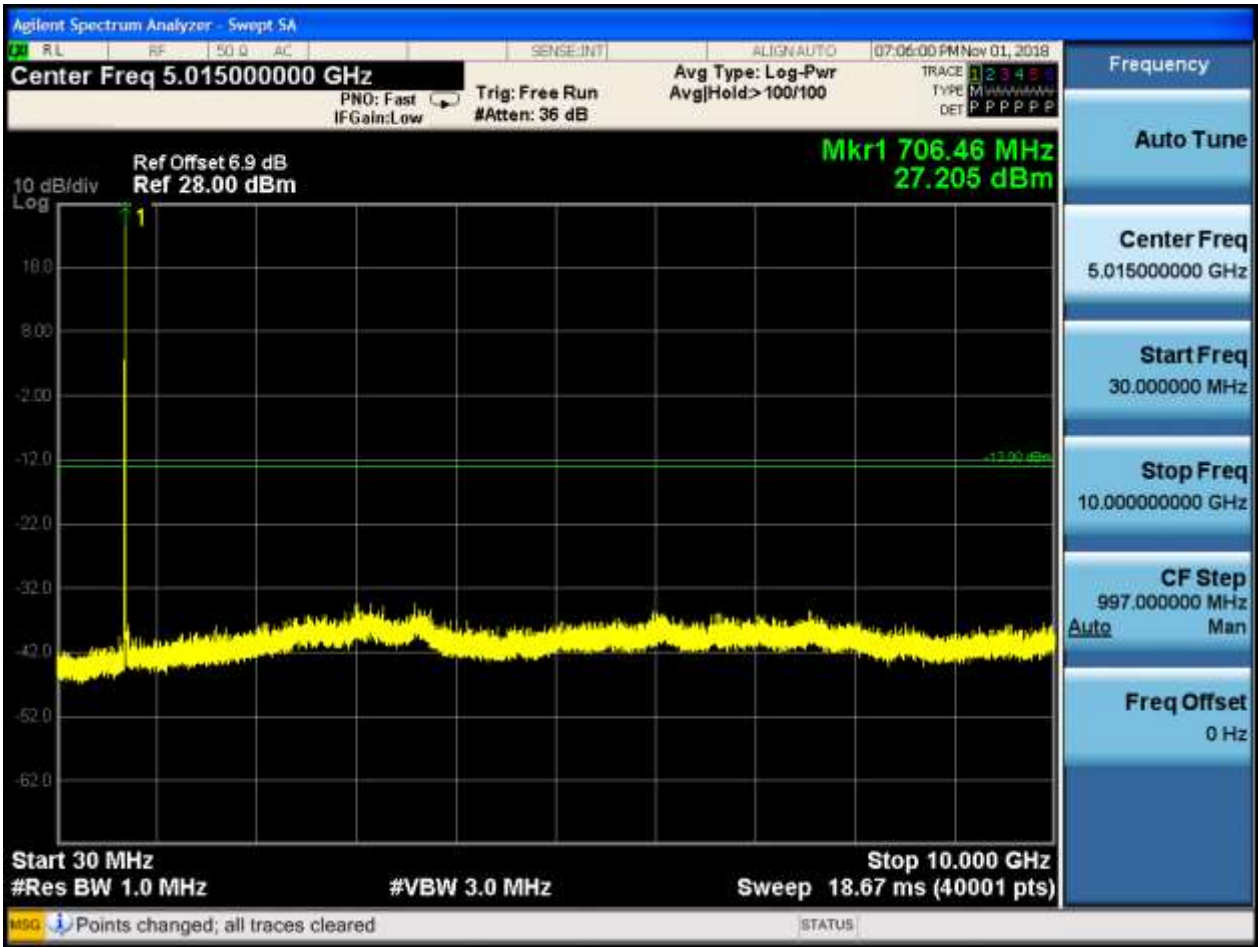


6.1.1.1.4.3 Test Channel = HCH

6.1.1.1.4.3.1 Test RB = RB1#0









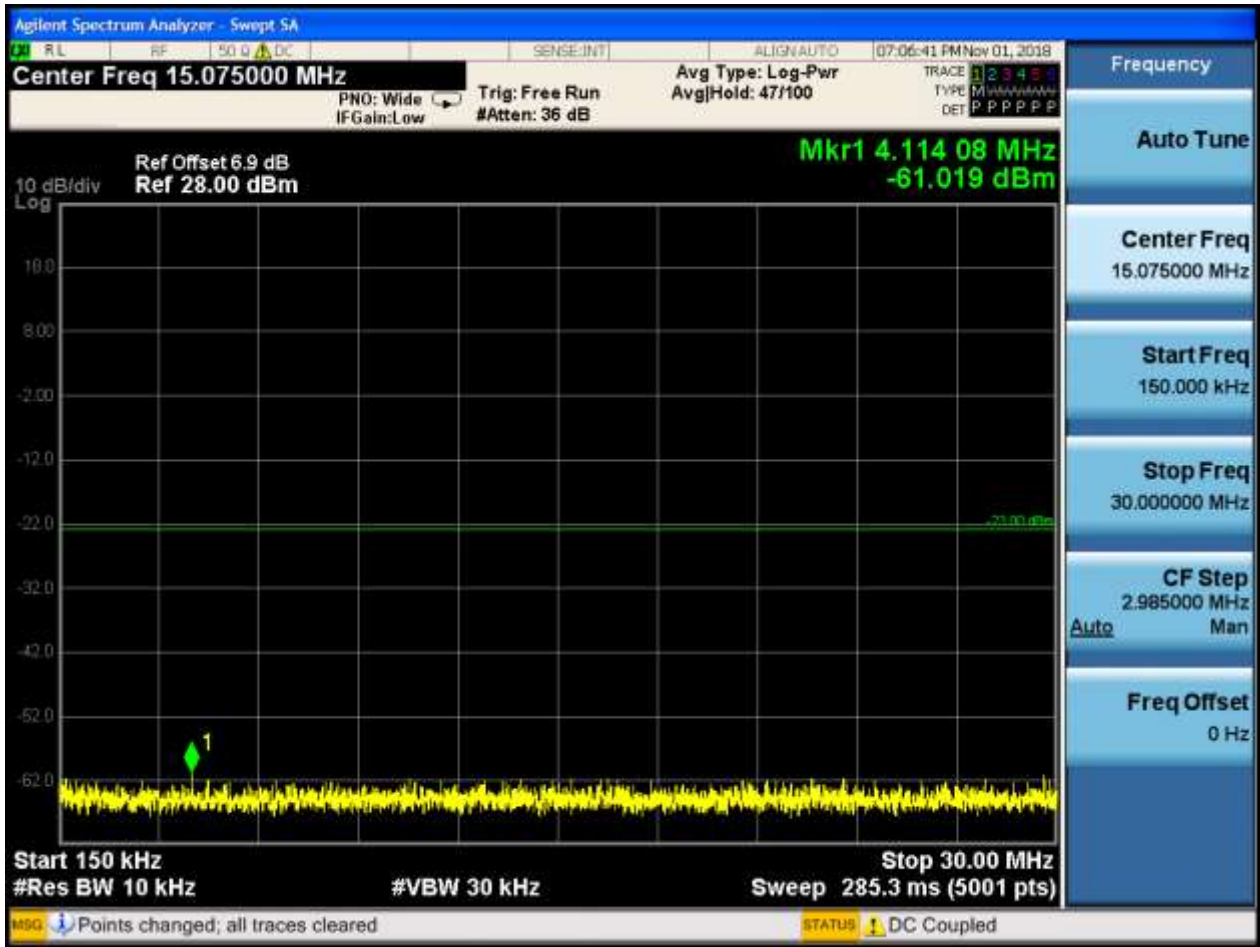
6.1.1.2 Test Mode = LTE/TM2

6.1.1.2.1 Test Bandwidth = 1.4

6.1.1.2.1.1 Test Channel = LCH

6.1.1.2.1.1.1 Test RB = RB1#0



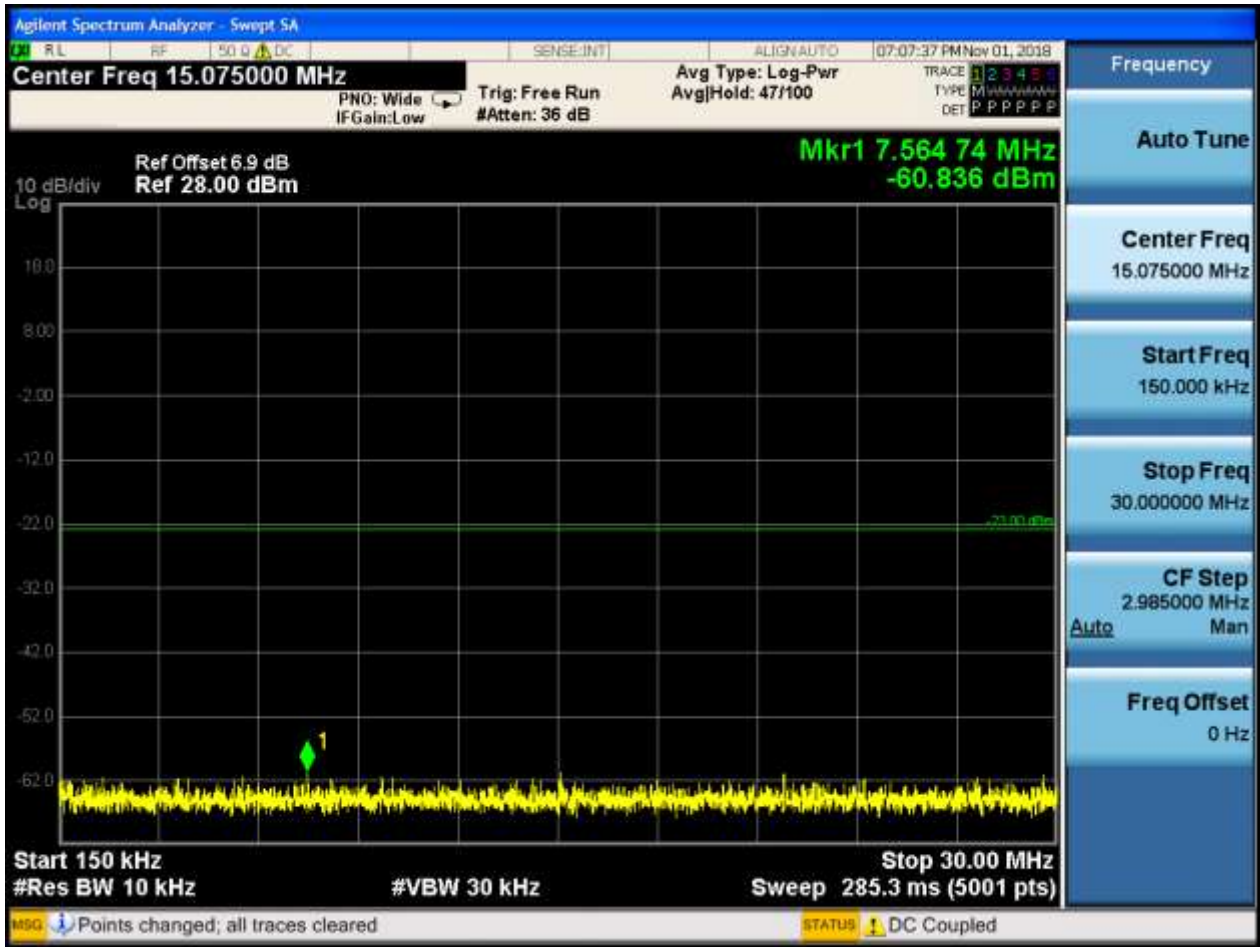




6.1.1.2.1.2 Test Channel = MCH

6.1.1.2.1.2.1 Test RB = RB1#0

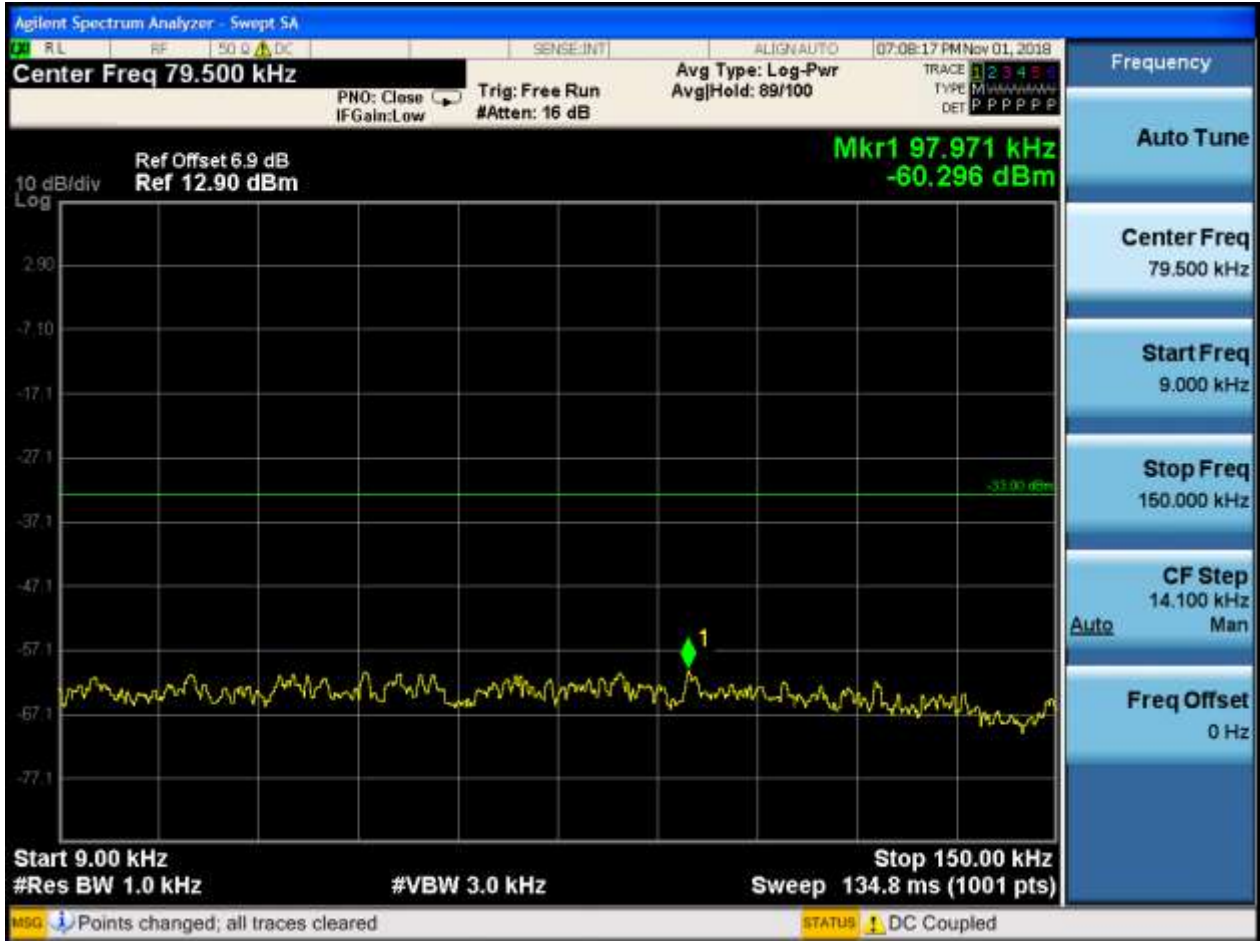






6.1.1.2.1.3 Test Channel = HCH

6.1.1.2.1.3.1 Test RB = RB1#0







6.1.1.2.2 Test Bandwidth = 3

6.1.1.2.2.1 Test Channel = LCH

6.1.1.2.2.1.1 Test RB = RB1#0



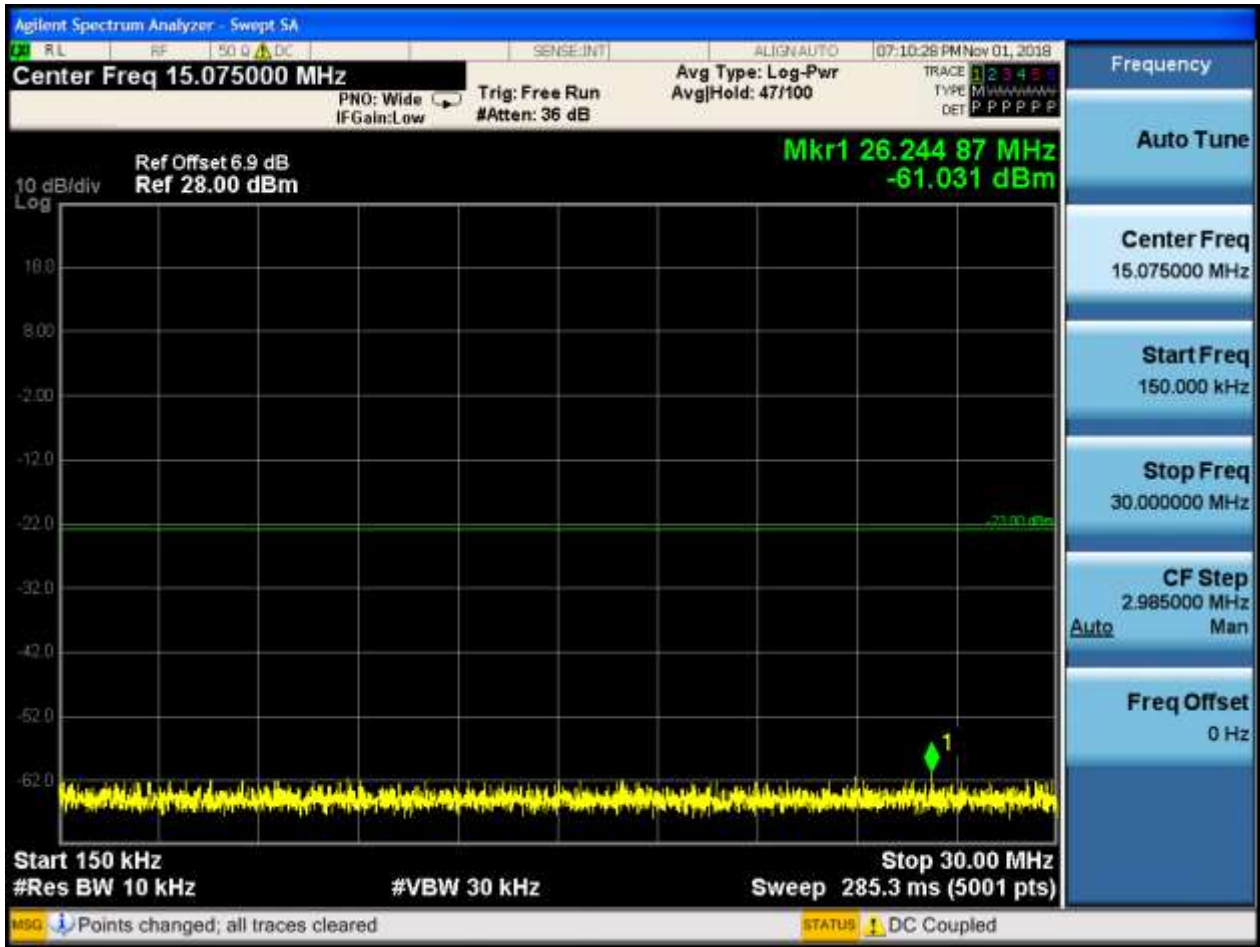




6.1.1.2.2.2 Test Channel = MCH

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



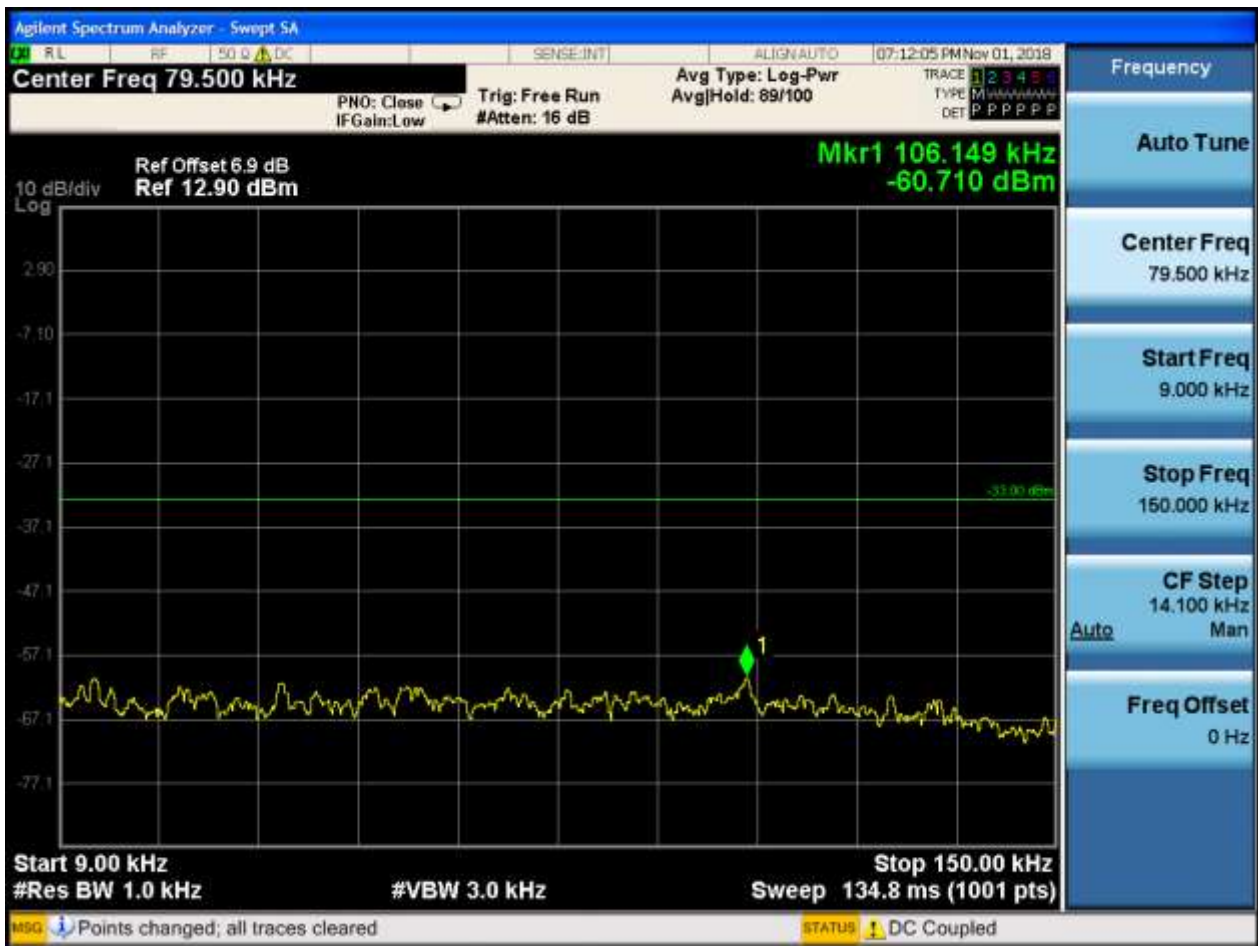




6.1.1.2.3 Test Bandwidth = 5

6.1.1.2.3.1 Test Channel = LCH

6.1.1.2.3.1.1 Test RB = RB1#0

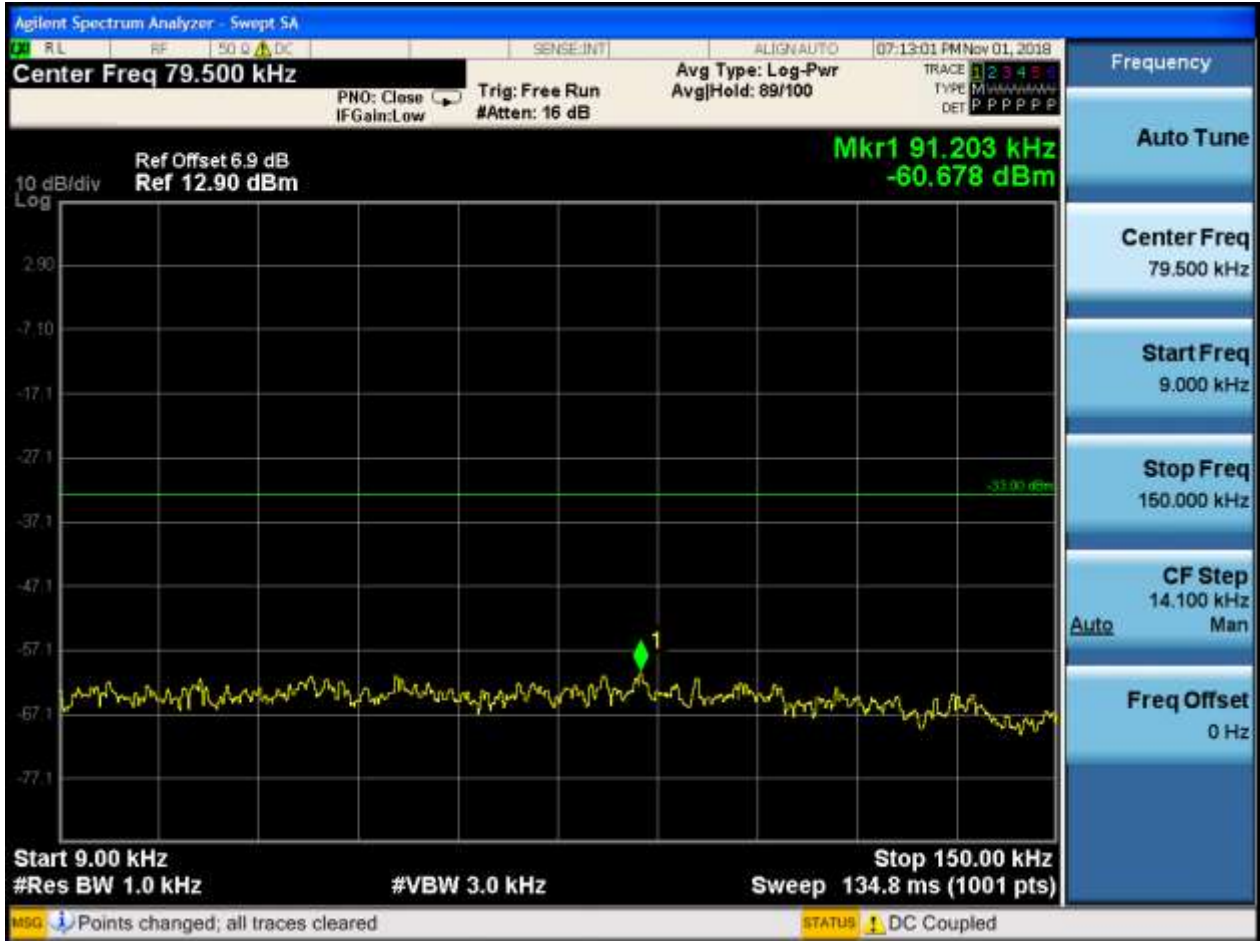






6.1.1.2.3.2 Test Channel = MCH

6.1.1.2.3.2.1 Test RB = RB1#0



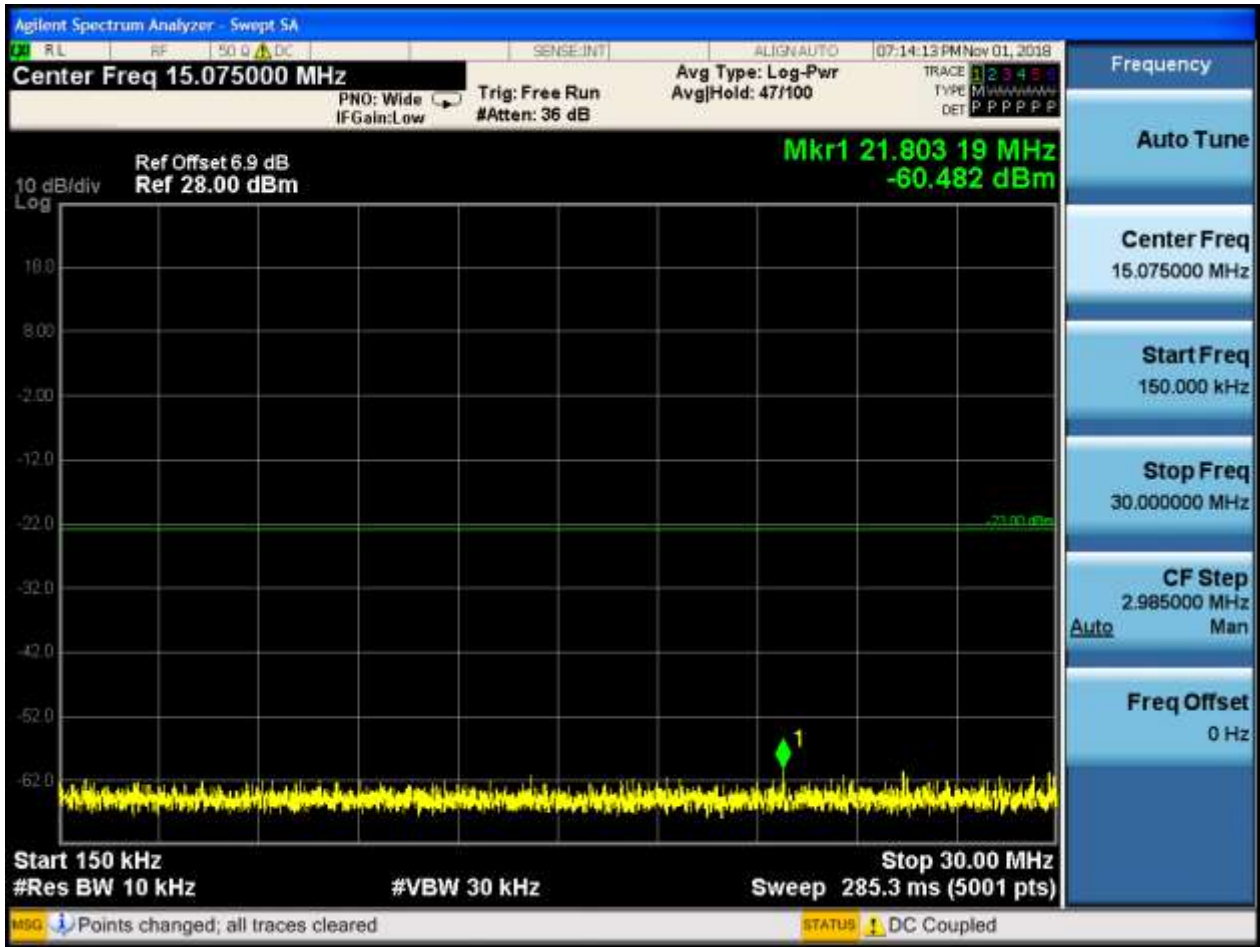


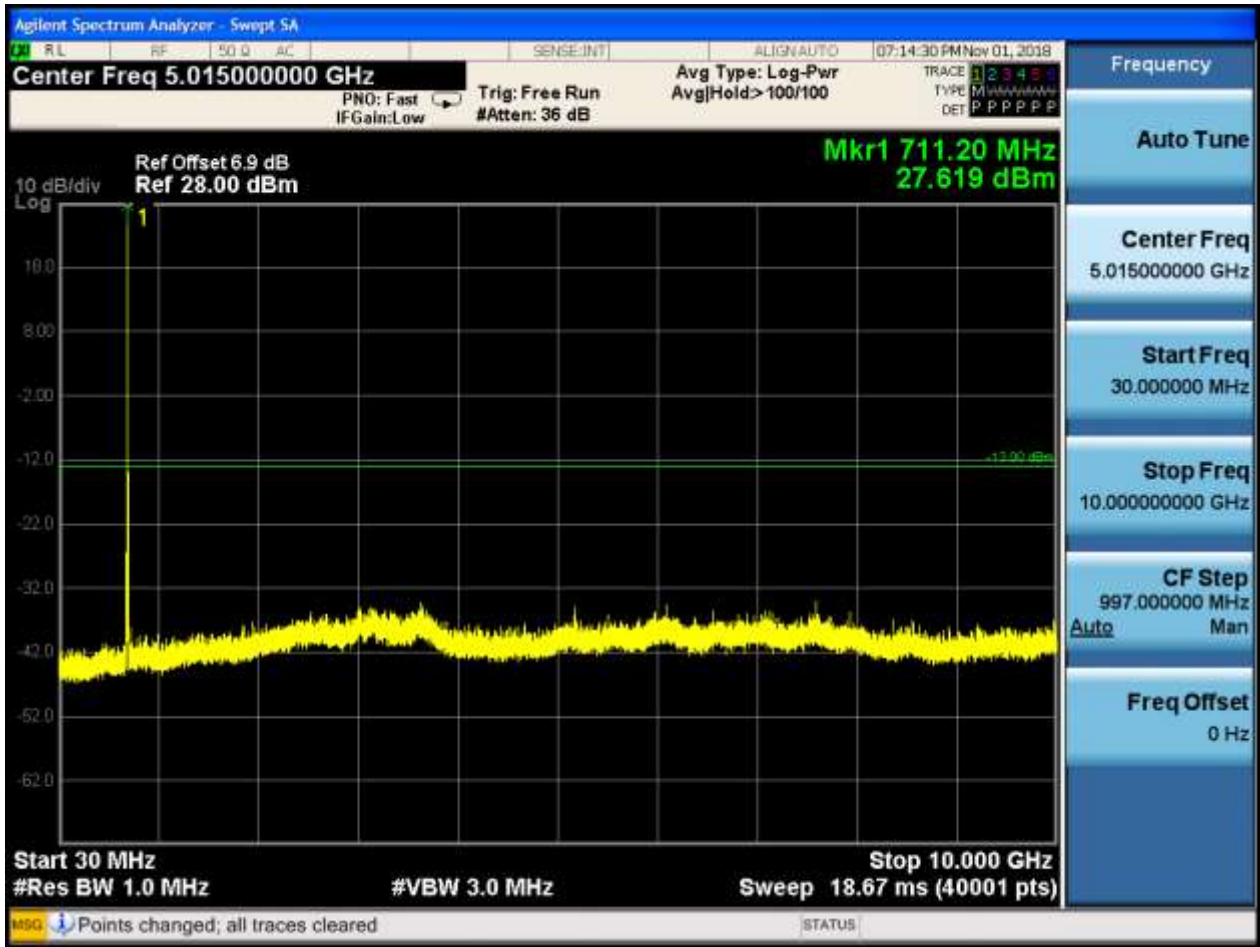


6.1.1.2.3.3 Test Channel = HCH

6.1.1.2.3.3.1 Test RB = RB1#0







6.1.1.2.4 Test Bandwidth = 10

6.1.1.2.4.1 Test Channel = LCH

6.1.1.2.4.1.1 Test RB = RB1#0

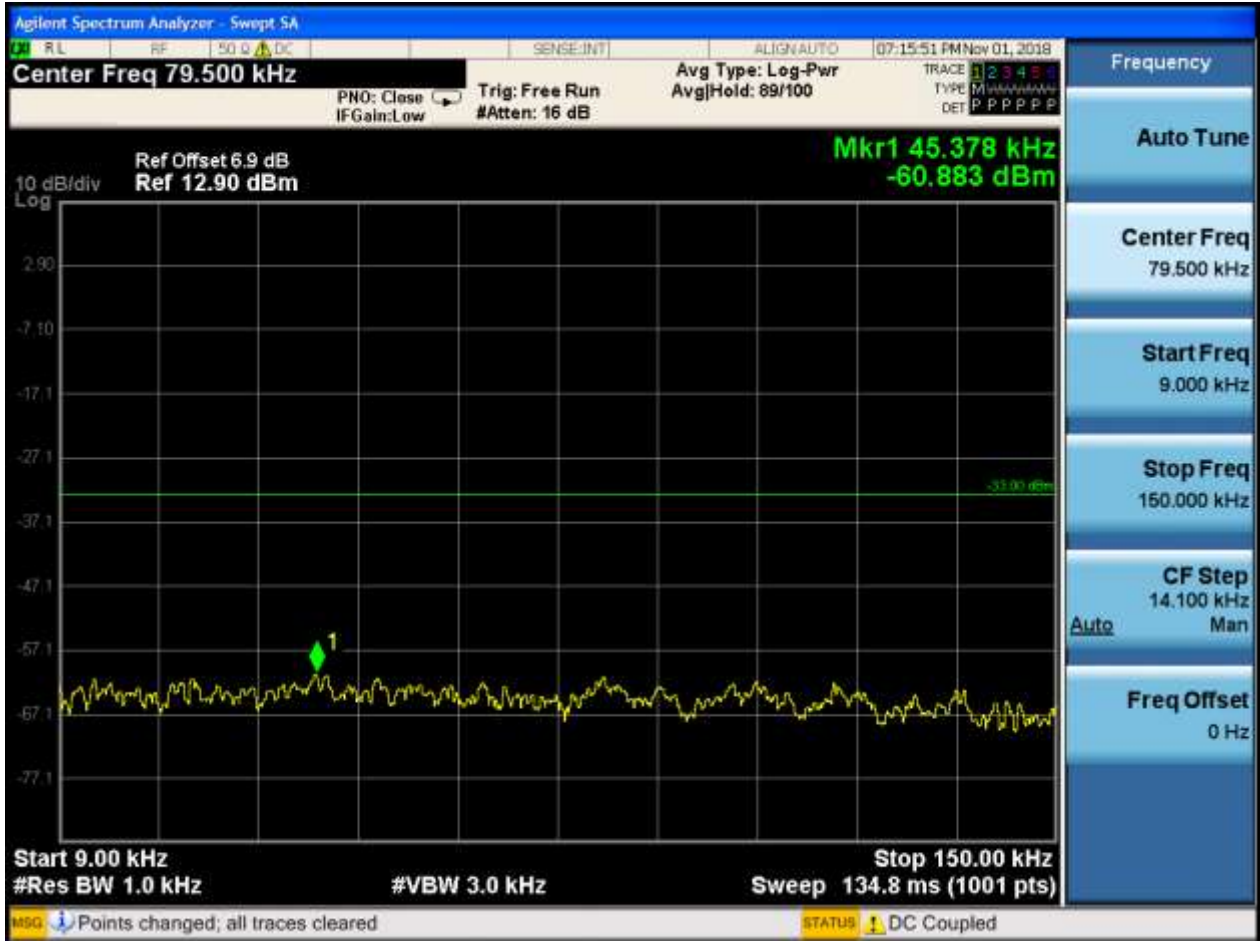






6.1.1.2.4.2 Test Channel = MCH

6.1.1.2.4.2.1 Test RB = RB1#0

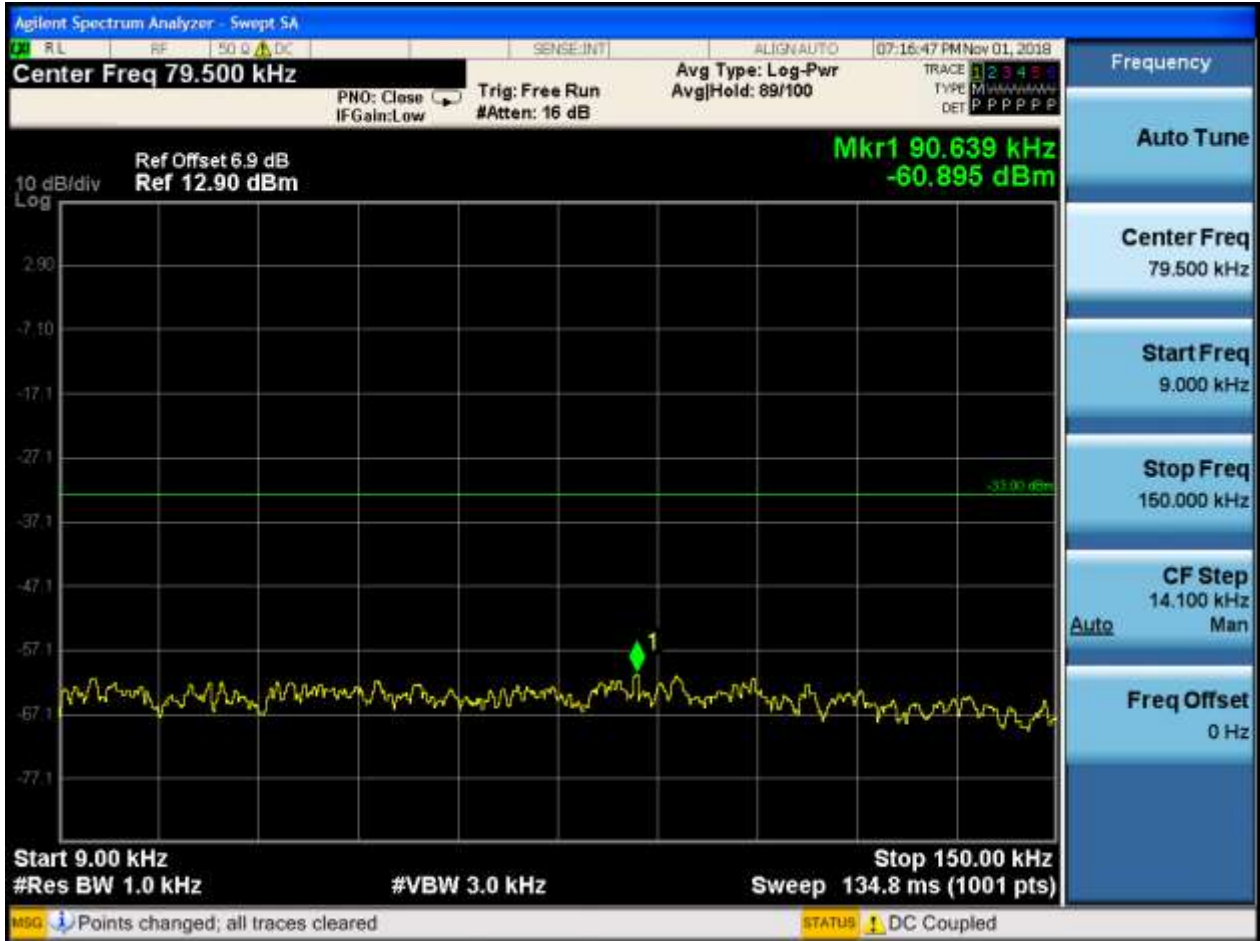




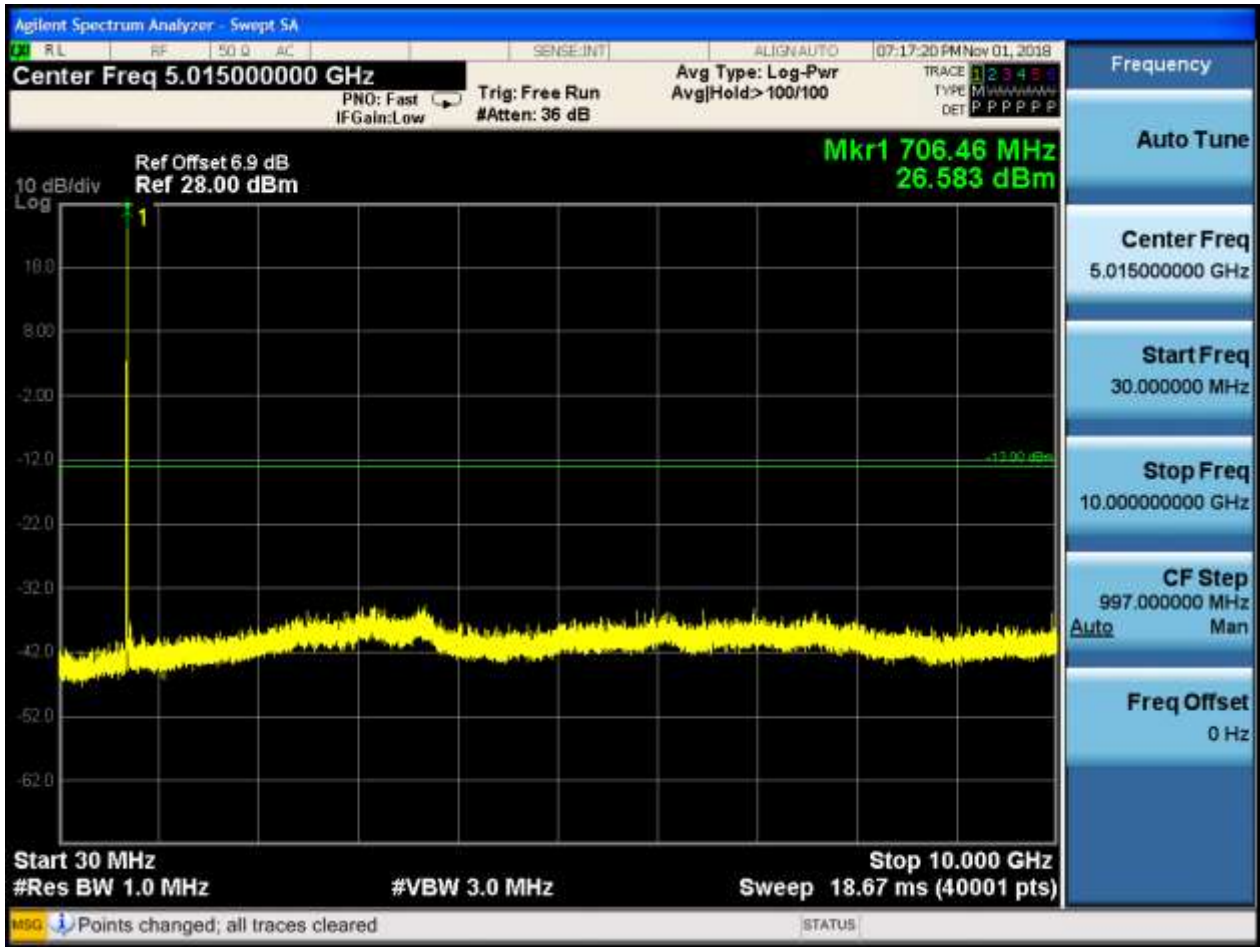


6.1.1.2.4.3 Test Channel = HCH

6.1.1.2.4.3.1 Test RB = RB1#0









7Appendix_G: Field Strength of Spurious Radiation

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

9kHz~150kHz, RBW = 200Hz, VBW = 600 Hz, Detector: PK

150kHz~30MHz, RBW = 9kHz, VBW = 30k Hz, Detector: PK

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

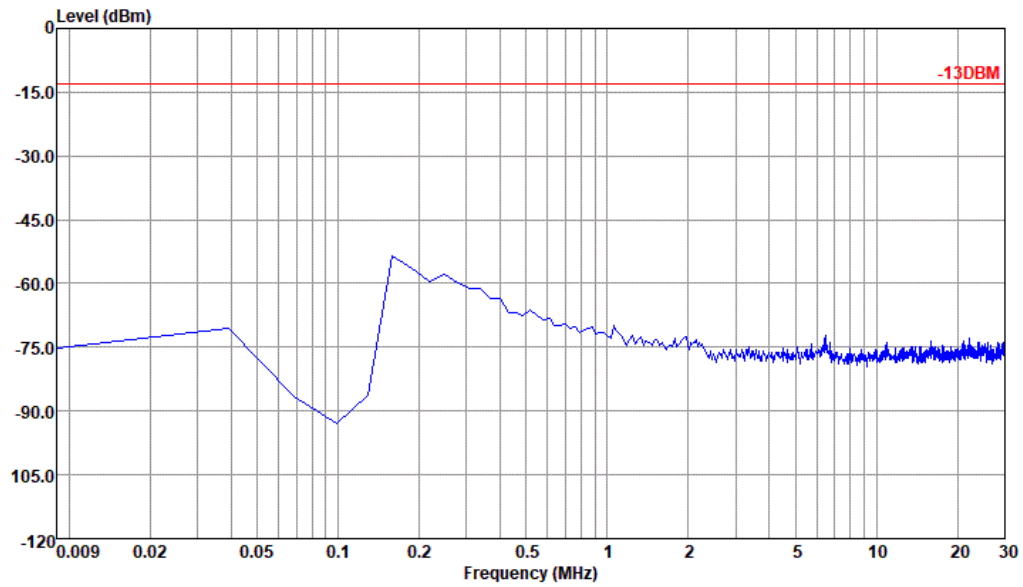
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

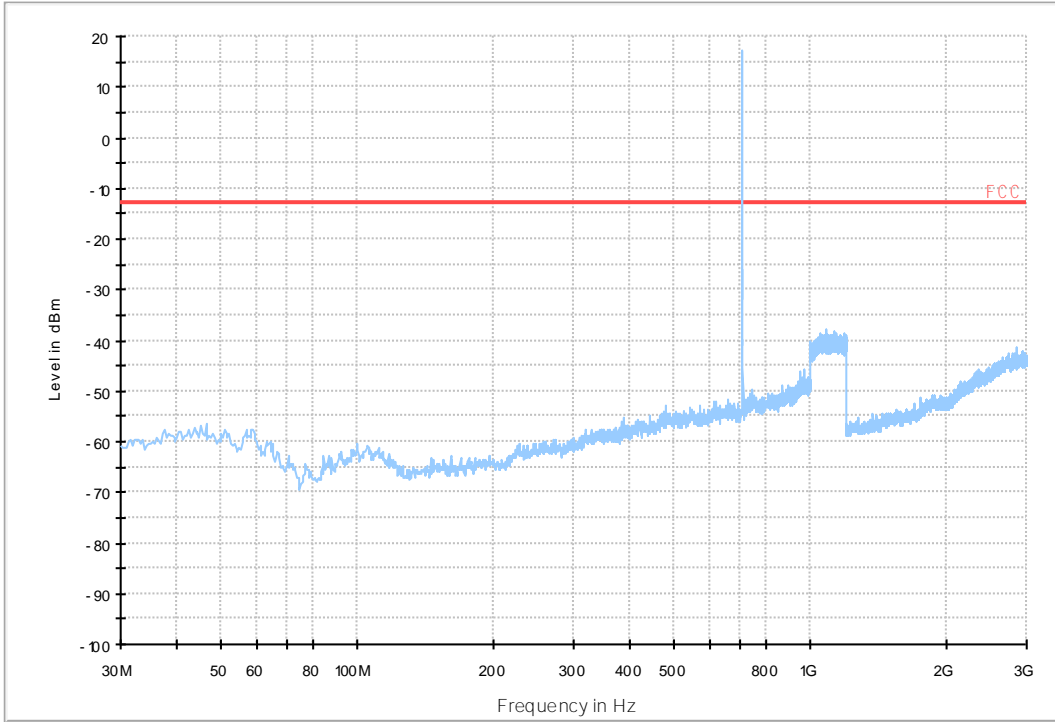
7.1 For LTE

7.1.1 Test Band = BAND12

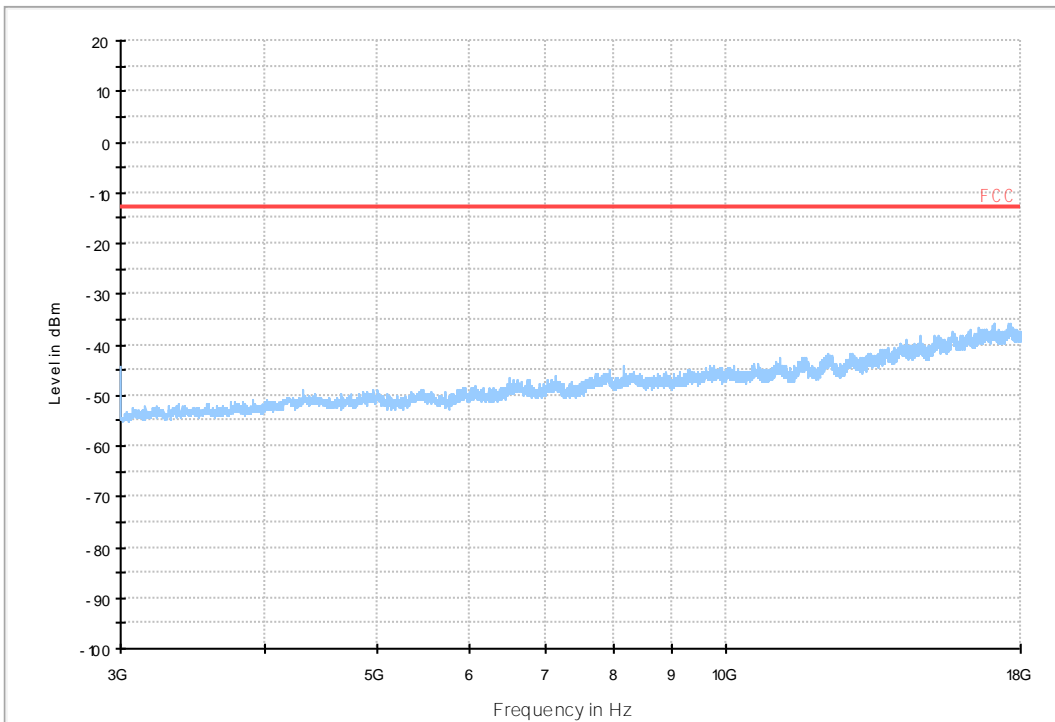
7.1.1.1 Test Bandwidth = 1.4



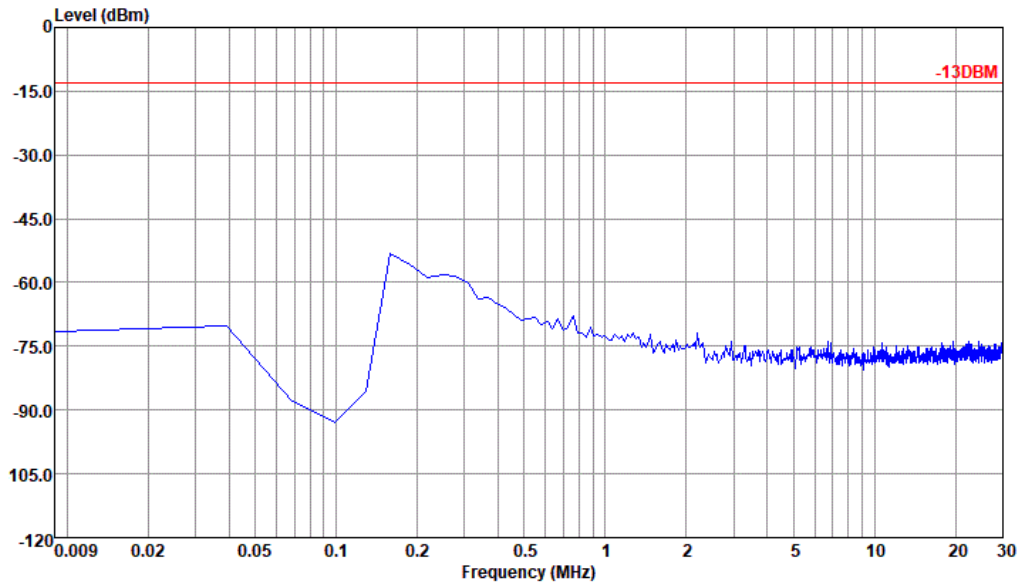
LTE FDD RSE-TX-DIRECTOR BELOW 1G_L



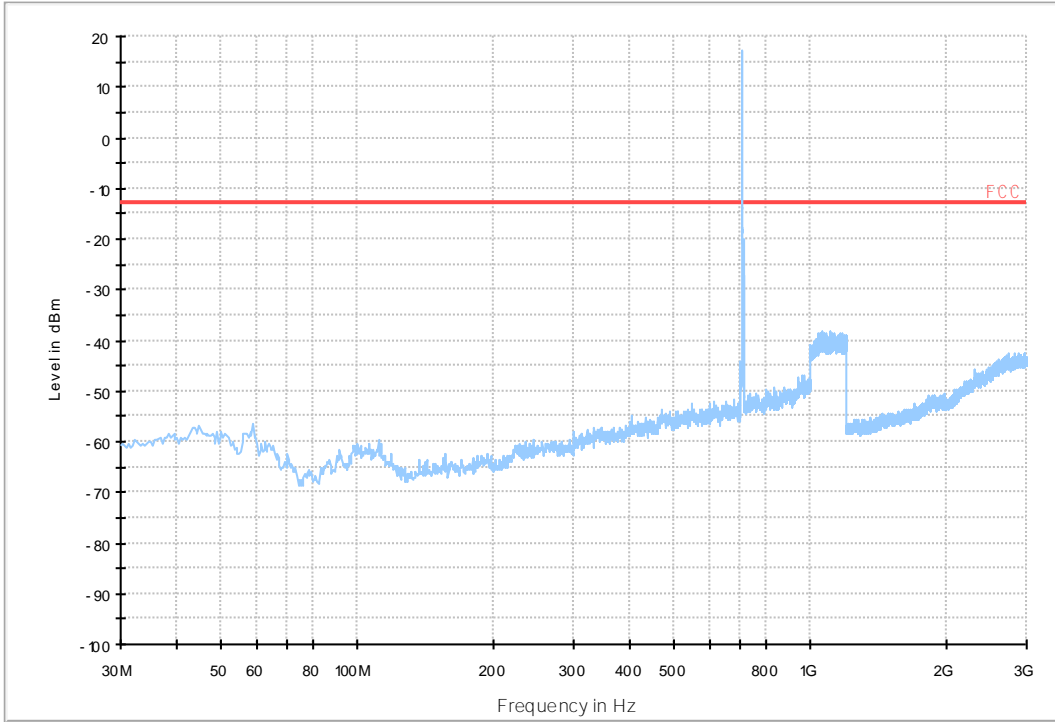
LTE FDD RSE-TX-DIRECTOR BELOW 1G_H



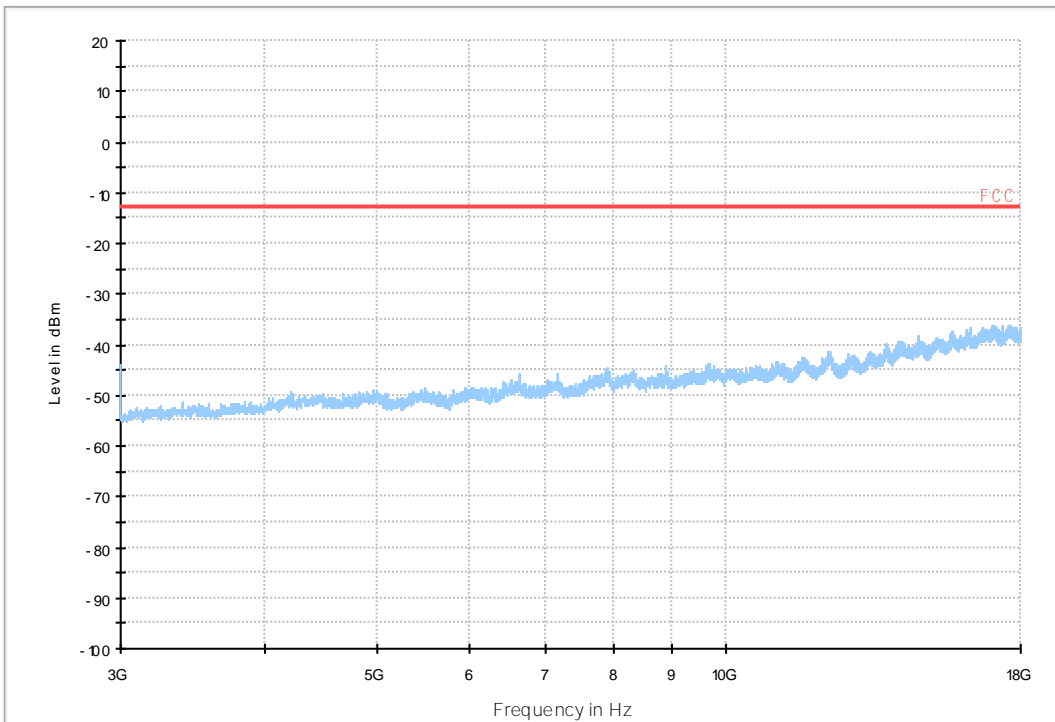
7.1.1.2 Test Bandwidth = 5



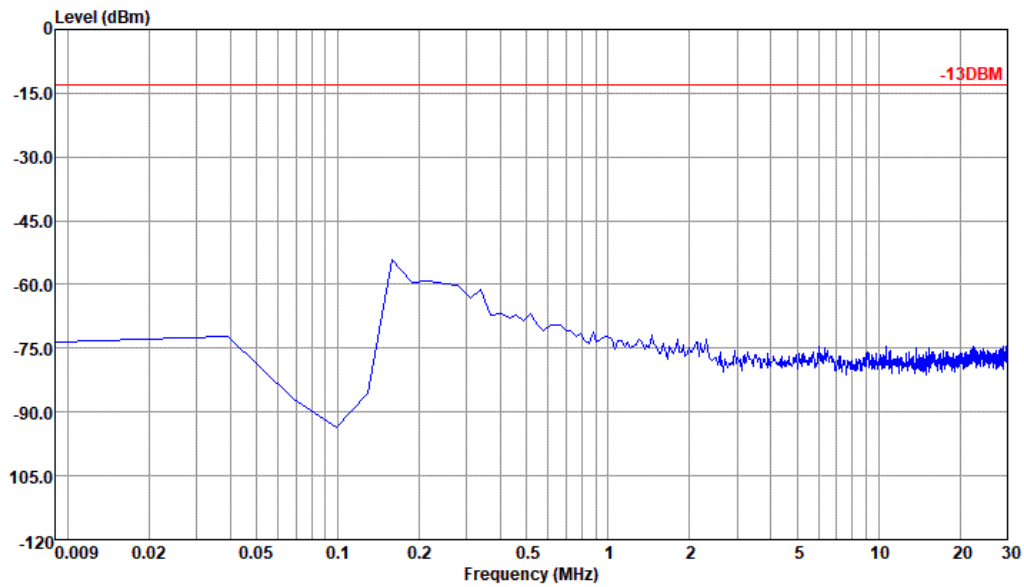
LTE FDD RSE-TX-DIRECTOR BELOW 1G_L



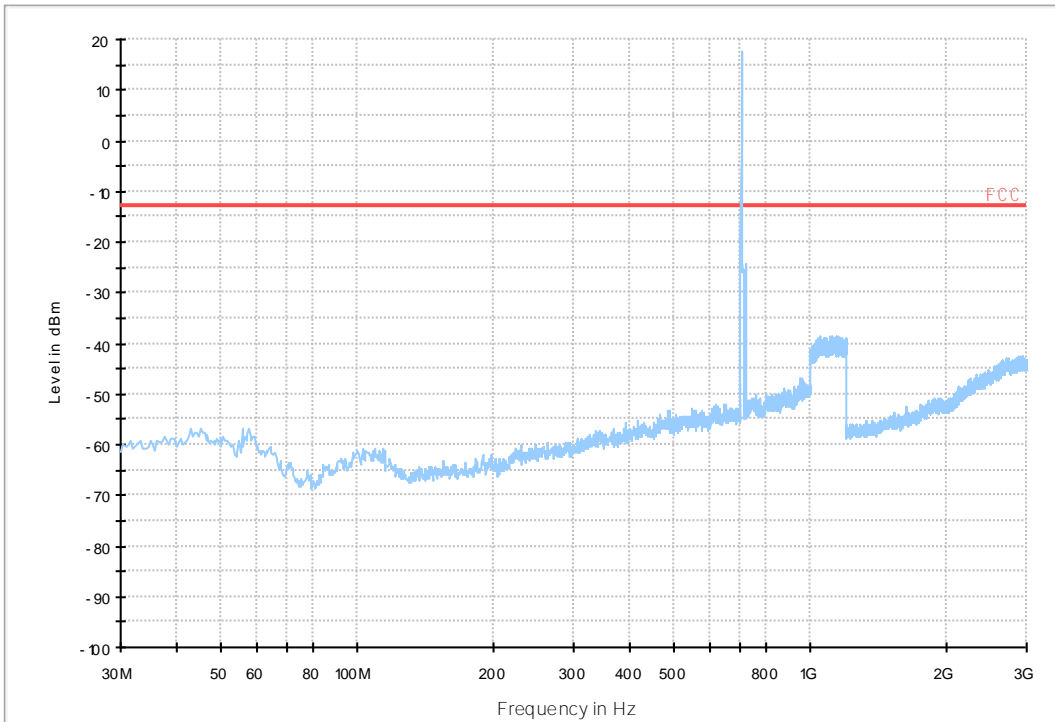
LTE FDD RSE-TX-DIRECTOR BELOW 1G_H



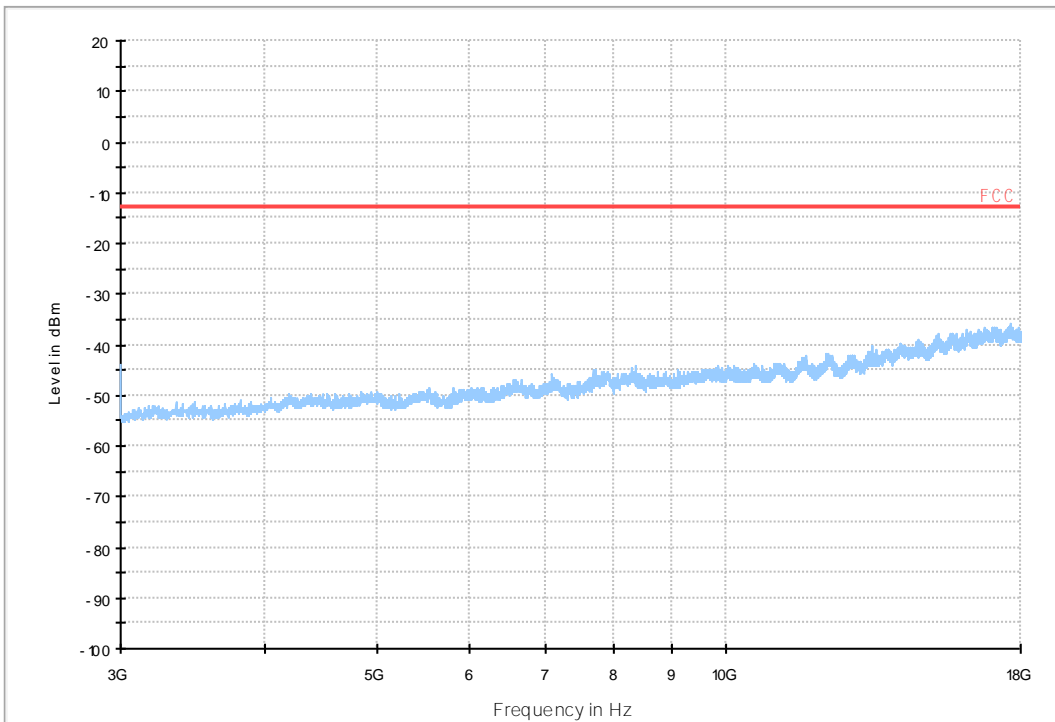
7.1.1.3 Test Bandwidth = 10



LTE FDD RSE-TX-DIRECTOR BELOW 1G_L



LTE FDD RSE-TX-DIRECTOR BELOW 1G_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
BAND12	LTE/TM1	1.4	LCH	TN	VL	-0.46	-0.00066	PASS
					VN	-7.08	-0.01012	PASS
					VH	5.39	0.0077	PASS
			MCH	TN	VL	-10.06	-0.01422	PASS
					VN	4.01	0.00567	PASS
					VH	-12.07	-0.01706	PASS
			HCH	TN	VL	-9.34	-0.01306	PASS
					VN	-8.81	-0.01232	PASS
					VH	0.5	0.0007	PASS
		3	LCH	TN	VL	8.68	0.01239	PASS
					VN	0.01	0.00001	PASS
					VH	-2.57	-0.00367	PASS
			MCH	TN	VL	-8.5	-0.01201	PASS
					VN	-0.29	-0.00041	PASS
					VH	-0.07	-0.0001	PASS
			HCH	TN	VL	-1.49	-0.00209	PASS
					VN	-0.14	-0.0002	PASS
					VH	-4.73	-0.00662	PASS
		5	LCH	TN	VL	-7.08	-0.01009	PASS
					VN	-2.05	-0.00292	PASS
					VH	1.76	0.00251	PASS
			MCH	TN	VL	2.33	0.00329	PASS
					VN	-0.79	-0.00112	PASS
					VH	-1.77	-0.0025	PASS
			HCH	TN	VL	1.95	0.00273	PASS
					VN	-5.46	-0.00765	PASS
					VH	4.51	0.00632	PASS
		10	LCH	TN	VL	-0.19	-0.00027	PASS
					VN	-0.4	-0.00057	PASS
					VH	0.83	0.00118	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
	LTE/TM2	1.4	MCH	TN	VL	-2.69	-0.0038	PASS		
					VN	-1.4	-0.00198	PASS		
					VH	-4.43	-0.00626	PASS		
			HCH	TN	VL	5.54	0.00779	PASS		
					VN	3.78	0.00532	PASS		
					VH	3.45	0.00485	PASS		
		3	LCH	TN	VL	-0.49	-0.0007	PASS		
					VN	4.68	0.00669	PASS		
					VH	-0.01	-0.00001	PASS		
			MCH	TN	VL	-15.21	-0.0215	PASS		
					VN	4.41	0.00623	PASS		
					VH	-9.2	-0.013	PASS		
			HCH	TN	VL	-10.2	-0.01426	PASS		
					VN	-0.64	-0.00089	PASS		
					VH	-16.02	-0.0224	PASS		
		5	LCH	TN	VL	-0.46	-0.00066	PASS		
					VN	-6.41	-0.00915	PASS		
					VH	-5.75	-0.00821	PASS		
			MCH	TN	VL	4.16	0.00588	PASS		
					VN	9.38	0.01326	PASS		
					VH	0.01	0.00001	PASS		
			HCH	TN	VL	-1.22	-0.00171	PASS		
					VN	-3.22	-0.00451	PASS		
					VH	6.31	0.00883	PASS		
		10	LCH	TN	VL	0.8	0.00114	PASS		
					VN	1.02	0.00145	PASS		
					VH	-6.18	-0.00881	PASS		
			MCH	TN	VL	-4.86	-0.00687	PASS		
					VN	1.76	0.00249	PASS		
					VH	4.25	0.00601	PASS		
			HCH	TN	VL	5.18	0.00726	PASS		
					VN	4.95	0.00694	PASS		
					VH	-3.68	-0.00516	PASS		
				10	LCH	TN	VL	-0.04	-0.00006	PASS
							VN	-0.21	-0.0003	PASS
					MCH	TN	VH	0.5	0.00071	PASS
							VL	-0.99	-0.0014	PASS
							VN	-0.04	-0.00006	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VH	0.26	0.00037	PASS
			HCH	TN	VL	1.56	0.00219	PASS
					VN	-0.87	-0.00122	PASS
					VH	-0.53	-0.00075	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
BAND12	LTE/TM1	1.4	LCH	VN	-30	-2.17	-0.0031	PASS
					-20	-13.53	-0.01934	PASS
					-10	-5.97	-0.00853	PASS
					0	-1.04	-0.00149	PASS
					10	-8.65	-0.01236	PASS
					20	-2.52	-0.0036	PASS
					30	18.54	0.0265	PASS
					40	-4.06	-0.0058	PASS
					50	-7.5	-0.01072	PASS
			MCH	VN	-30	-3.86	-0.00546	PASS
					-20	3.91	0.00553	PASS
					-10	-1.02	-0.00144	PASS
					0	-3.86	-0.00546	PASS
					10	-4.75	-0.00671	PASS
					20	-2.69	-0.0038	PASS
					30	-8.15	-0.01152	PASS
					40	-0.9	-0.00127	PASS
					50	13.5	0.01908	PASS
		HCH	VN	-30	0.26	0.00036	PASS	
				-20	-7.27	-0.01016	PASS	
				-10	4.02	0.00562	PASS	
				0	1.63	0.00228	PASS	
				10	-0.77	-0.00108	PASS	
				20	8.27	0.01156	PASS	
				30	3.83	0.00535	PASS	
				40	-27.85	-0.03893	PASS	
				50	-6.42	-0.00898	PASS	
		3	LCH	VN	-30	-1.86	-0.00266	PASS
					-20	-7.57	-0.01081	PASS
					-10	0.06	0.00009	PASS
					0	2.57	0.00367	PASS
					10	3.22	0.0046	PASS
					20	3.53	0.00504	PASS
					30	-2.33	-0.00333	PASS
					40	3.98	0.00568	PASS
					50	-1.96	-0.0028	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			MCH	VN	-30	1.63	0.0023	PASS
					-20	2.93	0.00414	PASS
					-10	4.72	0.00667	PASS
					0	-0.84	-0.00119	PASS
					10	2.62	0.0037	PASS
					20	0.63	0.00089	PASS
					30	-1.9	-0.00269	PASS
					40	-1.76	-0.00249	PASS
					50	-5.74	-0.00811	PASS
			HCH	VN	-30	-0.93	-0.0013	PASS
					-20	-1.67	-0.00234	PASS
					-10	-6.21	-0.00869	PASS
					0	6.57	0.0092	PASS
					10	-0.29	-0.00041	PASS
					20	3.29	0.0046	PASS
					30	1.42	0.00199	PASS
					40	4.56	0.00638	PASS
					50	-0.83	-0.00116	PASS
		5	LCH	VN	-30	-2.62	-0.00373	PASS
					-20	-0.24	-0.00034	PASS
					-10	-0.5	-0.00071	PASS
					0	-0.36	-0.00051	PASS
					10	-5.91	-0.00842	PASS
					20	-3.52	-0.00502	PASS
					30	1.04	0.00148	PASS
					40	2.03	0.00289	PASS
					50	3.78	0.00539	PASS
			MCH	VN	-30	1.49	0.00211	PASS
					-20	5.16	0.00729	PASS
					-10	1.2	0.0017	PASS
					0	4.76	0.00673	PASS
					10	0.01	0.00001	PASS
					20	4.16	0.00588	PASS
					30	1.72	0.00243	PASS
					40	-0.16	-0.00023	PASS
					50	-3.79	-0.00536	PASS
		HCH	VN	-30	1.44	0.00202	PASS	
				-20	0.82	0.00115	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					-10	1.19	0.00167	PASS			
					0	1.63	0.00228	PASS			
					10	-0.69	-0.00097	PASS			
					20	-6.28	-0.0088	PASS			
					30	1.65	0.00231	PASS			
					40	-4.56	-0.00639	PASS			
					50	-1.24	-0.00174	PASS			
			LCH	VN				-30	-1.2	-0.0017	PASS
								-20	-1.03	-0.00146	PASS
								-10	-0.63	-0.00089	PASS
								0	-0.23	-0.00033	PASS
								10	1.34	0.0019	PASS
								20	0.34	0.00048	PASS
								30	-0.33	-0.00047	PASS
								40	0.1	0.00014	PASS
		MCH	VN				50	0.62	0.00088	PASS	
							-30	-3.05	-0.00431	PASS	
							-20	-1.66	-0.00235	PASS	
							-10	-6.88	-0.00972	PASS	
							0	-1.02	-0.00144	PASS	
							10	-0.84	-0.00119	PASS	
							20	-0.62	-0.00088	PASS	
							30	-2.89	-0.00408	PASS	
		HCH	VN				40	0.01	0.00001	PASS	
							50	-2.53	-0.00358	PASS	
							-30	0.54	0.00076	PASS	
							-20	-1.72	-0.00242	PASS	
							-10	-1.42	-0.002	PASS	
							0	-0.93	-0.00131	PASS	
							10	1.63	0.00229	PASS	
	20						0.26	0.00037	PASS		
	LCH	VN	1.4			30	-0.29	-0.00041	PASS		
						40	-1.3	-0.00183	PASS		
						50	-4.82	-0.00678	PASS		
						-30	4.63	0.00662	PASS		
	LTE/TM2					-20	14.25	0.02037	PASS		
						-10	-10	-0.01429	PASS		
						0	5.39	0.0077	PASS		

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
					10	-4.45	-0.00636	PASS	
					20	8.33	0.01191	PASS	
					30	17.22	0.02461	PASS	
					40	5.25	0.0075	PASS	
					50	0.6	0.00086	PASS	
			MCH	VN	-30	10.9	0.01541	PASS	
					-20	5.14	0.00727	PASS	
					-10	20.26	0.02864	PASS	
					0	-5.62	-0.00794	PASS	
					10	0.11	0.00016	PASS	
					20	14.78	0.02089	PASS	
					30	-5.02	-0.0071	PASS	
					40	12.76	0.01804	PASS	
					50	-2.4	-0.00339	PASS	
					HCH	VN	-30	-17.41	-0.02434
			-20	0.82			0.00115	PASS	
			-10	1.23			0.00172	PASS	
			0	3.6			0.00503	PASS	
			10	-9.24			-0.01292	PASS	
			20	19.33			0.02702	PASS	
			30	2.85			0.00398	PASS	
			40	3.59			0.00502	PASS	
			3	LCH	VN	50	14.2	0.01985	PASS
						-30	5.97	0.00852	PASS
						-20	7.11	0.01015	PASS
						-10	4.55	0.0065	PASS
						0	0.41	0.00059	PASS
						10	3.49	0.00498	PASS
						20	-1.42	-0.00203	PASS
						30	-1.19	-0.0017	PASS
MCH	VN	40		5.05	0.00721	PASS			
		50		2.73	0.0039	PASS			
		-30		1.07	0.00151	PASS			
		-20		-0.03	-0.00004	PASS			
		-10		9.41	0.0133	PASS			
		0		2.43	0.00343	PASS			
		10		2.62	0.0037	PASS			
20	5.44	0.00769	PASS						



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					30	0.8	0.00113	PASS
					40	0.34	0.00048	PASS
					50	-1.72	-0.00243	PASS
			HCH	VN	-30	-4.46	-0.00624	PASS
					-20	9.48	0.01327	PASS
					-10	2.29	0.00321	PASS
					0	9.81	0.01373	PASS
					10	1.93	0.0027	PASS
					20	-7.93	-0.0111	PASS
					30	-3.72	-0.00521	PASS
					40	-5.87	-0.00822	PASS
					50	-2.35	-0.00329	PASS
		5	LCH	VN	-30	-1.97	-0.00281	PASS
					-20	2.27	0.00324	PASS
					-10	-5.09	-0.00726	PASS
					0	1.4	0.002	PASS
					10	2.85	0.00406	PASS
					20	-4.98	-0.0071	PASS
					30	0.4	0.00057	PASS
					40	3.4	0.00485	PASS
					50	-2.39	-0.00341	PASS
			MCH	VN	-30	-0.93	-0.00131	PASS
					-20	-3.12	-0.00441	PASS
					-10	4.81	0.0068	PASS
					0	1	0.00141	PASS
					10	3.86	0.00546	PASS
					20	-3.88	-0.00548	PASS
					30	3.12	0.00441	PASS
					40	5.16	0.00729	PASS
					50	-1.14	-0.00161	PASS
		HCH	VN	-30	3.99	0.00559	PASS	
				-20	-4.21	-0.0059	PASS	
-10	4.36			0.00611	PASS			
0	2.7			0.00378	PASS			
10	-4.13			-0.00579	PASS			
20	0.69			0.00097	PASS			
30	-0.66			-0.00093	PASS			
40	-3.63			-0.00509	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					50	-1.62	-0.00227	PASS
		10	LCH	VN	-30	-0.46	-0.00065	PASS
					-20	0.29	0.00041	PASS
					-10	0.14	0.0002	PASS
					0	1.02	0.00145	PASS
					10	0.21	0.0003	PASS
					20	0.62	0.00088	PASS
					30	0.21	0.0003	PASS
					40	3.96	0.00562	PASS
					50	0.3	0.00043	PASS
			MCH	VN	-30	-2	-0.00283	PASS
					-20	-2.56	-0.00362	PASS
					-10	0.01	0.00001	PASS
					0	0.04	0.00006	PASS
					10	-2.29	-0.00324	PASS
					20	0.76	0.00107	PASS
					30	0.29	0.00041	PASS
					40	-0.13	-0.00018	PASS
					50	0.03	0.00004	PASS
			HCH	VN	-30	-0.94	-0.00132	PASS
					-20	0.11	0.00015	PASS
					-10	0.07	0.0001	PASS
					0	-0.69	-0.00097	PASS
					10	-2.1	-0.00295	PASS
					20	0.17	0.00024	PASS
		30			0.09	0.00013	PASS	
		40			-1.17	-0.00165	PASS	
		50	-0.33	-0.00046	PASS			

END