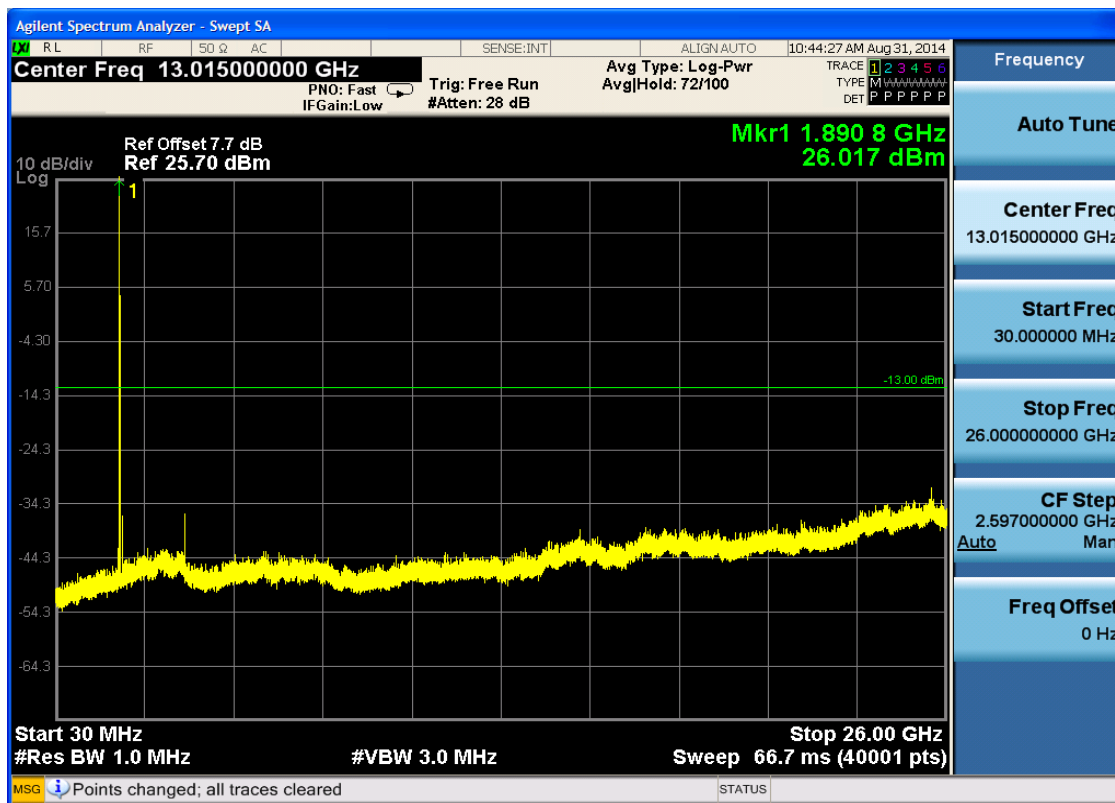




7Appendix_G: Field Strength of Spurious Radiation

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

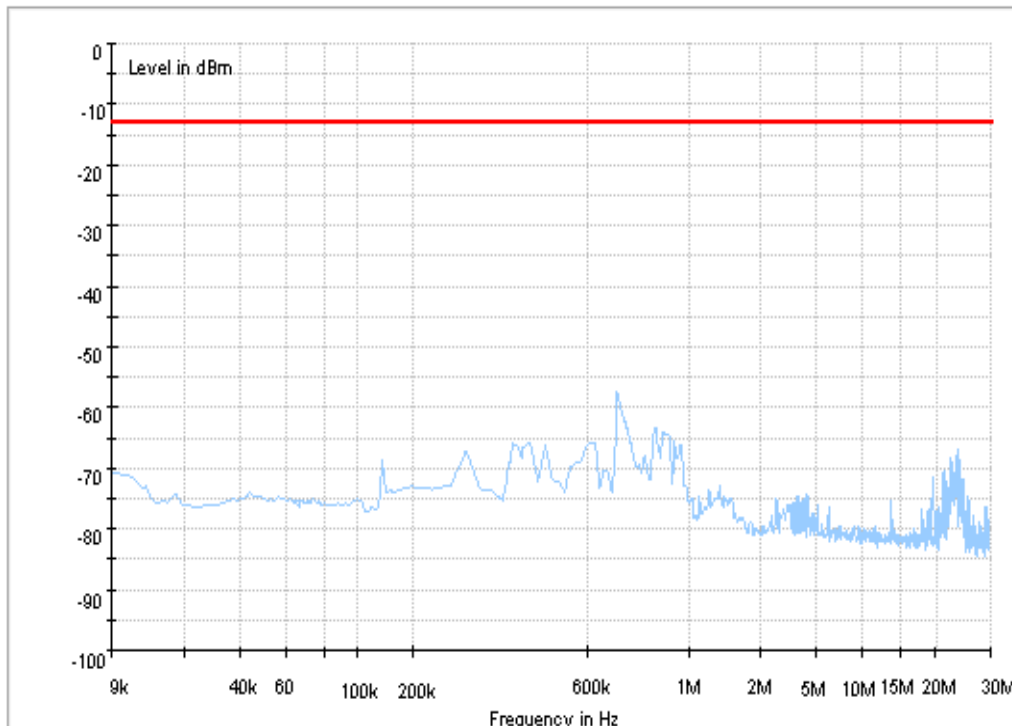
Above 1GHz, RBW = 1 MHz, VBW = 3 MHz. Detector: PK

Part I - Test Plots

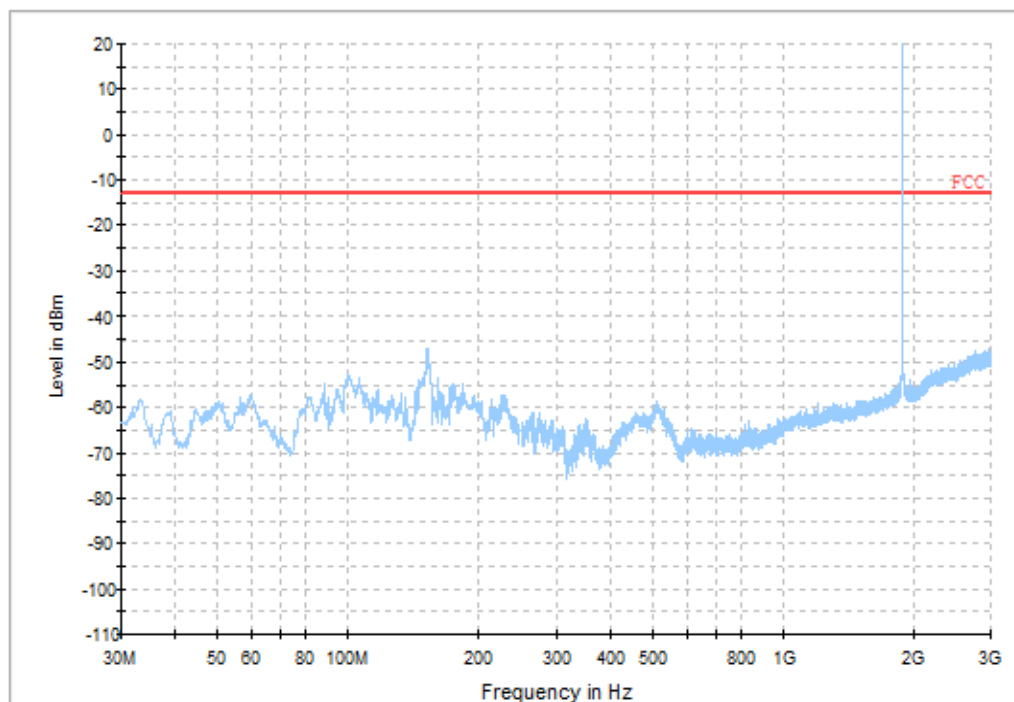
7.1 For LTE

7.1.1 Test Band = BAND2

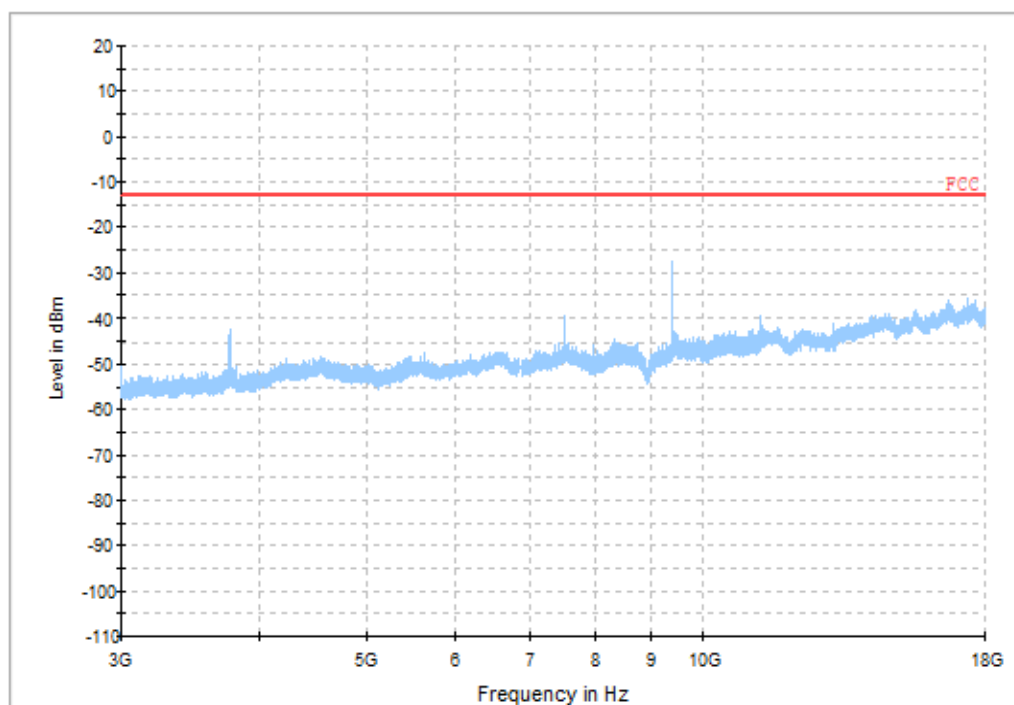
7.1.1.1 Test Bandwidth = 1.4

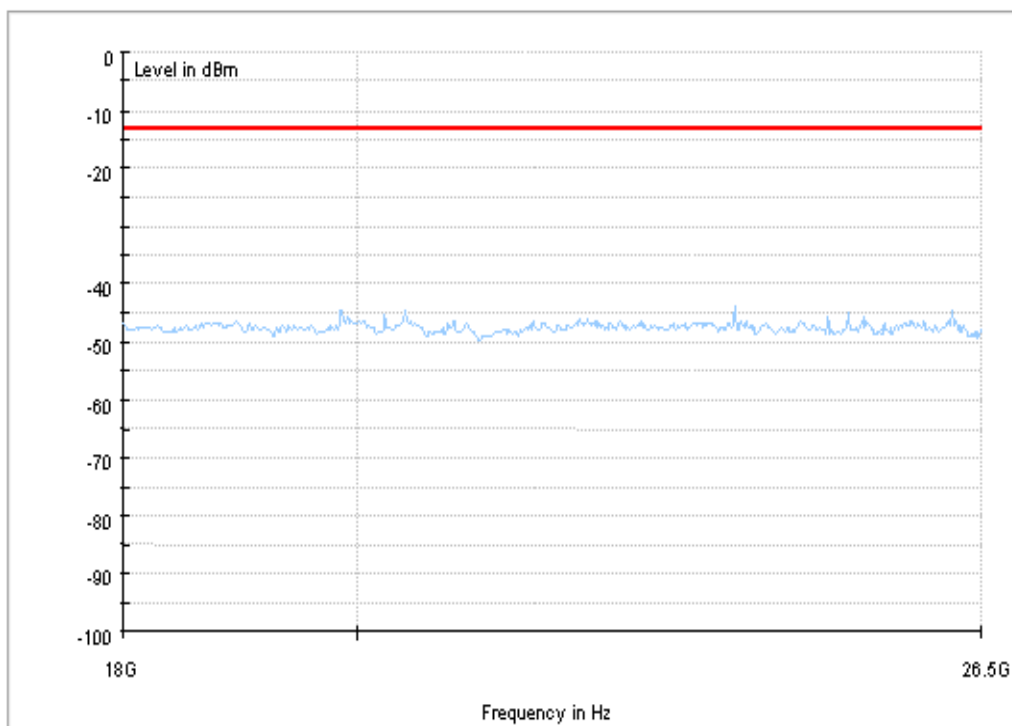


Copy of FCC PART24 LTE Band 2_L

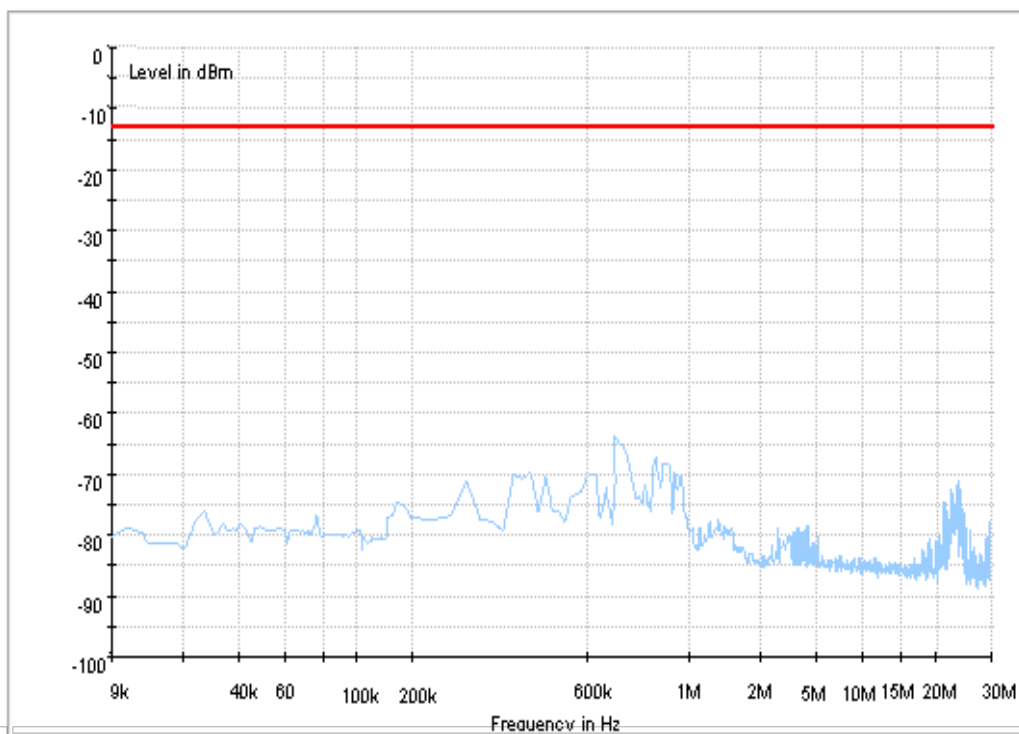


Copy of FCC PART24 LTE Band 2_H

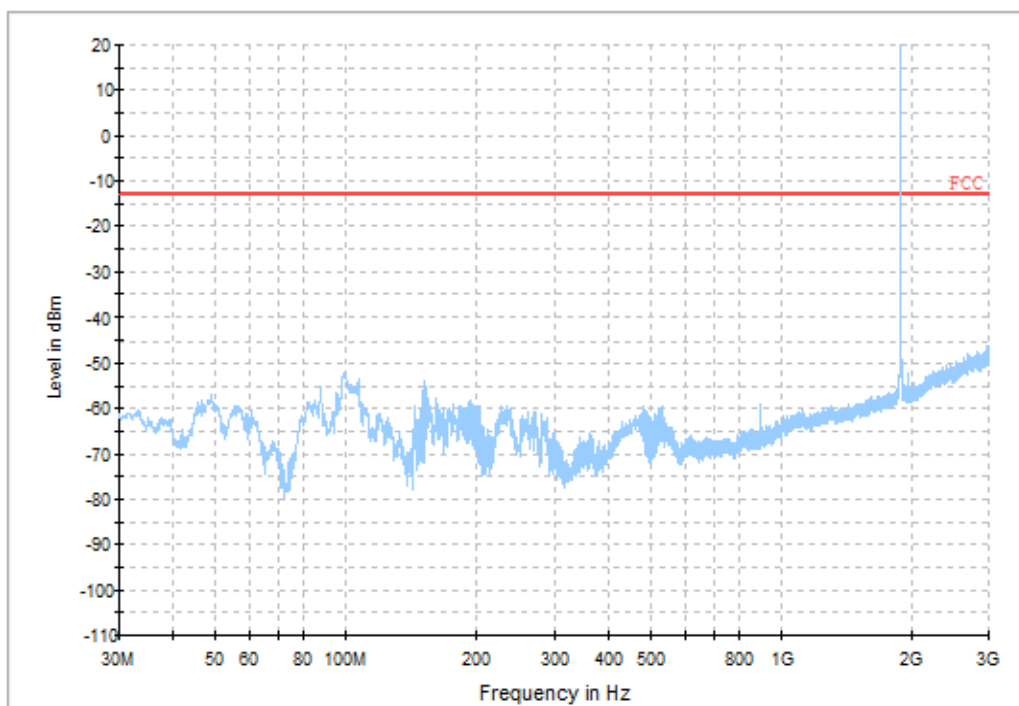




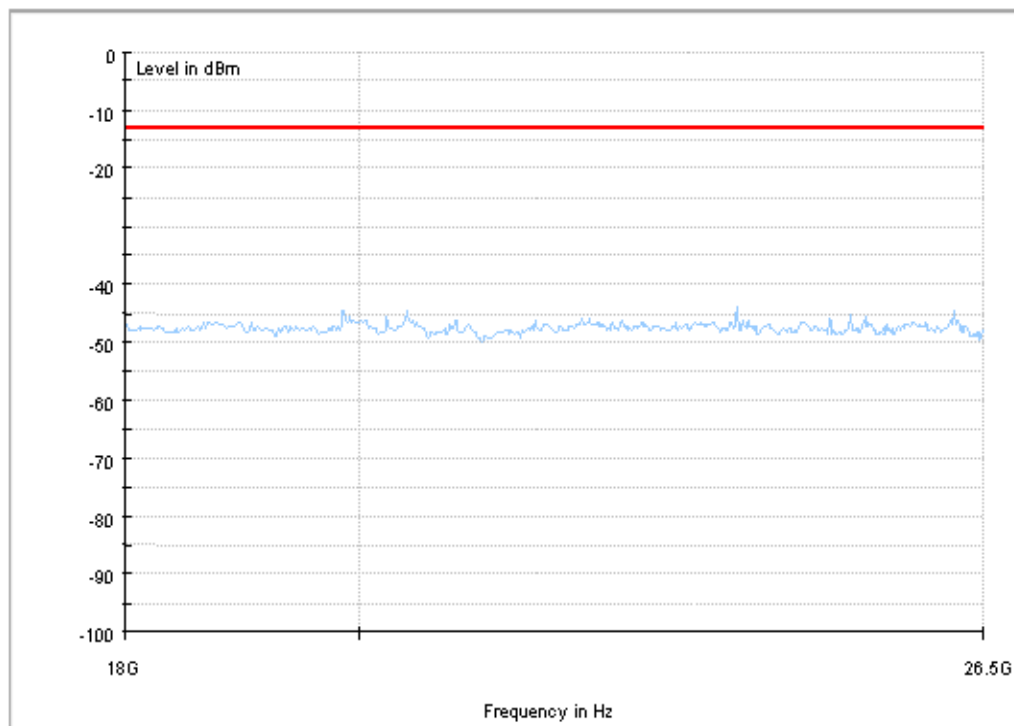
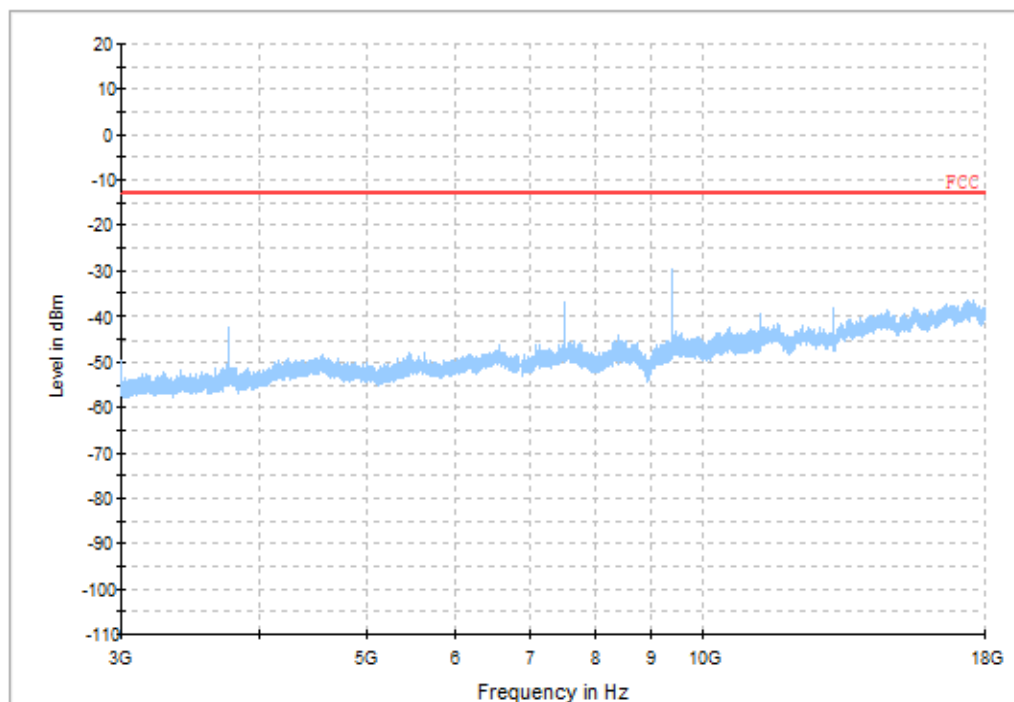
7.1.1.2 Test Bandwidth = 5



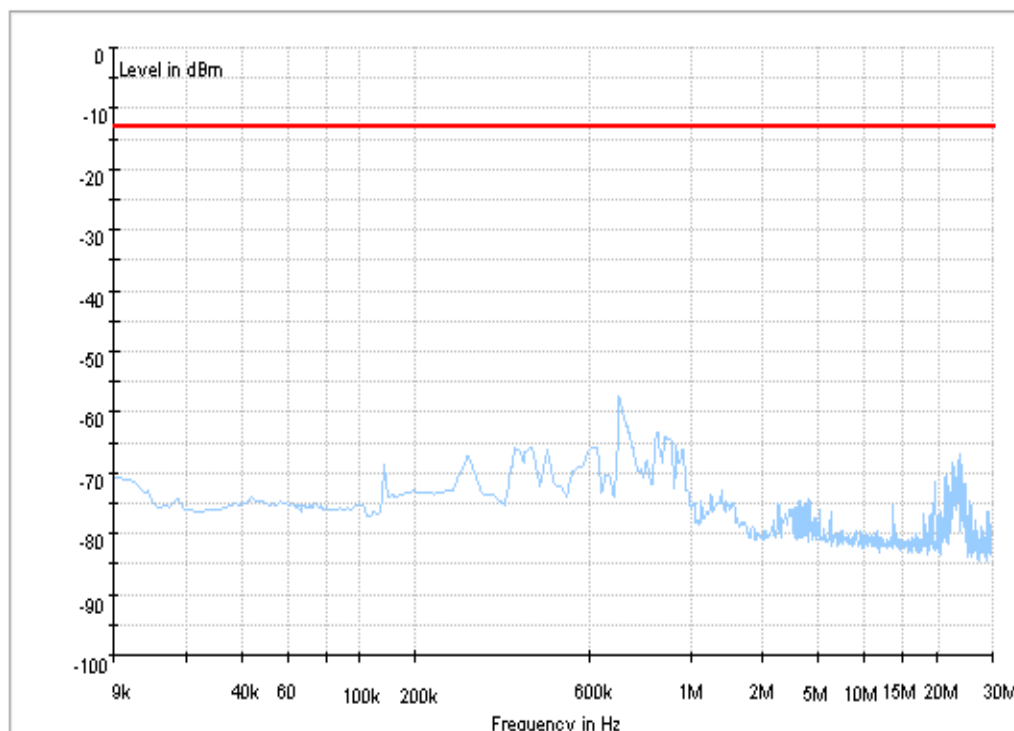
Copy of FCC PART24 LTE Band 2_L



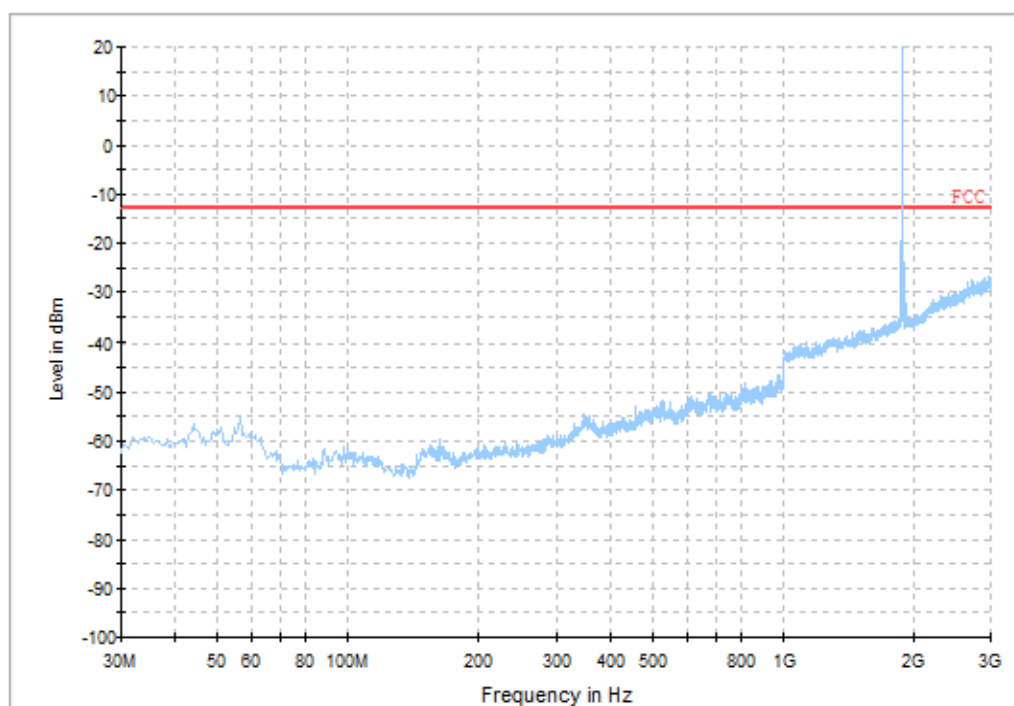
Copy of FCC PART24 LTE Band 2_H



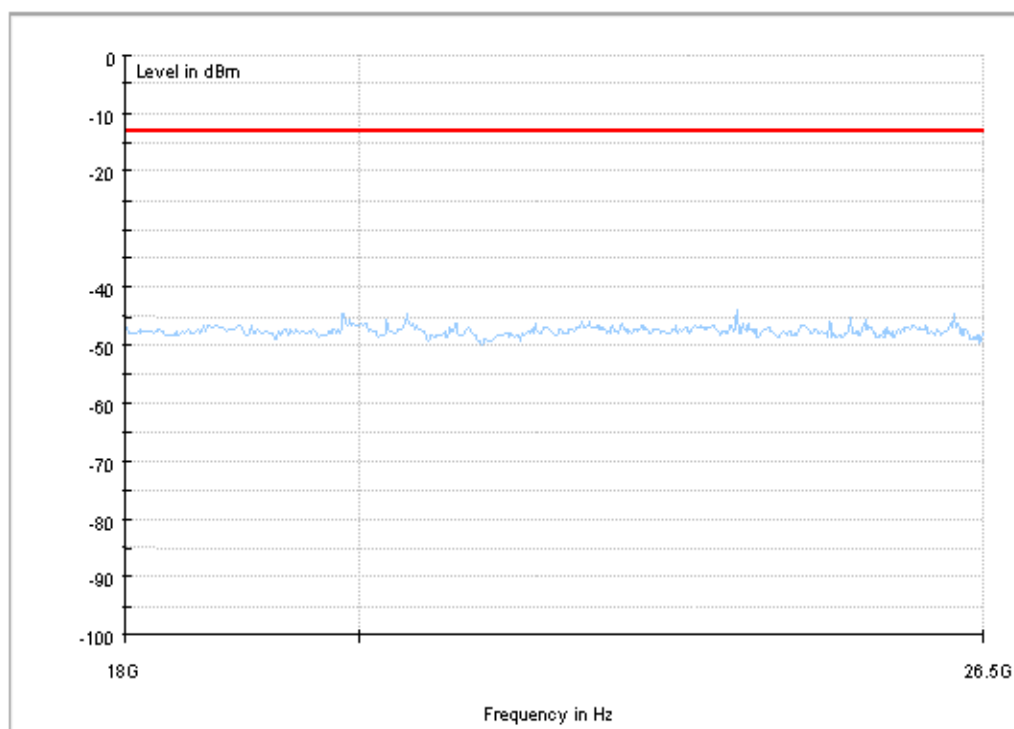
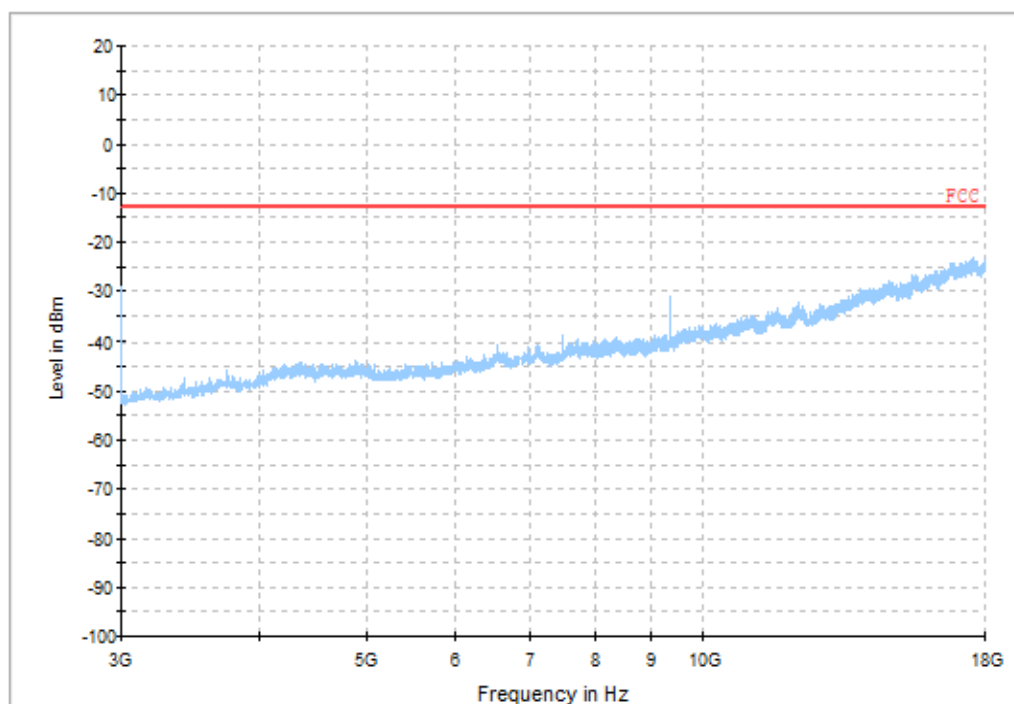
7.1.1.3 Test Bandwidth = 20



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
BAND2	LTE/TM1	1.4	LCH	TN	VL	-5.42	-0.00293	PASS
					VN	-4.86	-0.00263	PASS
					VH	-0.2	-0.00011	PASS
			MCH	TN	VL	-16.58	-0.00882	PASS
					VN	-7.84	-0.00417	PASS
					VH	-6.17	-0.00328	PASS
			HCH	TN	VL	-5.82	-0.00305	PASS
					VN	-2.43	-0.00127	PASS
					VH	-2.37	-0.00124	PASS
		3	LCH	TN	VL	0.6	0.00032	PASS
					VN	-10.86	-0.00587	PASS
					VH	-1.27	-0.00069	PASS
			MCH	TN	VL	-14.45	-0.00769	PASS
					VN	0.4	0.00021	PASS
					VH	-9.17	-0.00488	PASS
			HCH	TN	VL	-12.35	-0.00647	PASS
					VN	-1.96	-0.00103	PASS
					VH	-4.15	-0.00217	PASS
		5	LCH	TN	VL	-2.39	-0.00129	PASS
					VN	5.98	0.00323	PASS
					VH	-4.15	-0.00224	PASS
			MCH	TN	VL	1.49	0.00079	PASS
					VN	-6.75	-0.00359	PASS
					VH	-12.03	-0.0064	PASS
			HCH	TN	VL	-14.31	-0.0075	PASS
					VN	3.69	0.00193	PASS
					VH	-10.36	-0.00543	PASS
		10	LCH	TN	VL	-8.78	-0.00473	PASS
					VN	-11.56	-0.00623	PASS
					VH	5.34	0.00288	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2		MCH	TN	VL	3.49	0.00186	PASS
					VN	-9.98	-0.00531	PASS
					VH	-4.11	-0.00219	PASS
			HCH	TN	VL	-6.97	-0.00366	PASS
					VN	3.39	0.00178	PASS
					VH	-7.94	-0.00417	PASS
		15	LCH	TN	VL	-4.28	-0.0023	PASS
					VN	-5.56	-0.00299	PASS
					VH	-8.55	-0.0046	PASS
			MCH	TN	VL	-0.59	-0.00031	PASS
					VN	-17.4	-0.00926	PASS
					VH	-8.58	-0.00456	PASS
			HCH	TN	VL	-5.99	-0.00315	PASS
					VN	1.7	0.00089	PASS
					VH	0.96	0.0005	PASS
		20	LCH	TN	VL	-0.53	-0.00028	PASS
					VN	-2.26	-0.00122	PASS
					VH	2.73	0.00147	PASS
			MCH	TN	VL	0.11	0.00006	PASS
					VN	-9.44	-0.00502	PASS
					VH	-3.99	-0.00212	PASS
			HCH	TN	VL	-5.49	-0.00289	PASS
					VN	-6.59	-0.00347	PASS
					VH	-2.98	-0.00157	PASS
		1.4	LCH	TN	VL	6.58	0.00356	PASS
					VN	-6.02	-0.00325	PASS
					VH	2.56	0.00138	PASS
			MCH	TN	VL	-5.99	-0.00319	PASS
					VN	-12.57	-0.00669	PASS
					VH	-10.49	-0.00558	PASS
			HCH	TN	VL	-2.95	-0.00155	PASS
					VN	-0.14	-0.00007	PASS
					VH	-1.42	-0.00074	PASS
		3	LCH	TN	VL	-12.72	-0.00687	PASS
					VN	-11.76	-0.00635	PASS
					VH	-13.18	-0.00712	PASS
			MCH	TN	VL	-11.47	-0.0061	PASS
					VN	-2.3	-0.00122	PASS
					VH	-13.89	-0.00739	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			HCH	TN	VL	-2.39	-0.00125	PASS
					VN	-15.51	-0.00813	PASS
					VH	2.39	0.00125	PASS
			LCH	TN	VL	-9.13	-0.00493	PASS
					VN	-6.04	-0.00326	PASS
					VH	-5.74	-0.0031	PASS
			MCH	TN	VL	-12.65	-0.00673	PASS
					VN	-12	-0.00638	PASS
					VH	2.06	0.0011	PASS
			HCH	TN	VL	-3.5	-0.00183	PASS
					VN	-9.11	-0.00478	PASS
					VH	-6.94	-0.00364	PASS
			LCH	TN	VL	-8.31	-0.00448	PASS
					VN	6.59	0.00355	PASS
					VH	8.48	0.00457	PASS
			MCH	TN	VL	-7.18	-0.00382	PASS
					VN	-9.37	-0.00498	PASS
					VH	-0.13	-0.00007	PASS
			HCH	TN	VL	4.65	0.00244	PASS
					VN	6.38	0.00335	PASS
					VH	-2	-0.00105	PASS
			LCH	TN	VL	-14.08	-0.00758	PASS
					VN	-7.57	-0.00408	PASS
					VH	-4.45	-0.0024	PASS
			MCH	TN	VL	-19.66	-0.01046	PASS
					VN	-1	-0.00053	PASS
					VH	-10.81	-0.00575	PASS
			HCH	TN	VL	-14	-0.00736	PASS
					VN	-1.04	-0.00055	PASS
					VH	-15.59	-0.00819	PASS
			LCH	TN	VL	-6.9	-0.00371	PASS
					VN	-10.14	-0.00545	PASS
					VH	-14.26	-0.00767	PASS
			MCH	TN	VL	-22.56	-0.012	PASS
					VN	-13.46	-0.00716	PASS
					VH	-25.72	-0.01368	PASS
			HCH	TN	VL	-5.28	-0.00278	PASS
					VN	-22.2	-0.01168	PASS
					VH	-16.12	-0.00848	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
BAND2	LTE/TM1	1.4	LCH	VN	-30	-1.33	-0.00072	PASS
					-20	-9.27	-0.00501	PASS
					-10	-0.36	-0.00019	PASS
					0	9.63	0.0052	PASS
					10	8.21	0.00444	PASS
					20	4.35	0.00235	PASS
					30	1.1	0.00059	PASS
					40	1.34	0.00072	PASS
					50	1.32	0.00071	PASS
			MCH	VN	-30	-10.71	-0.0057	PASS
					-20	-9.37	-0.00498	PASS
					-10	-11.47	-0.0061	PASS
					0	-1.69	-0.0009	PASS
					10	0.13	0.00007	PASS
					20	-1.07	-0.00057	PASS
					30	-8.67	-0.00461	PASS
					40	-14.06	-0.00748	PASS
					50	-0.83	-0.00044	PASS
			HCH	VN	-30	4.48	0.00235	PASS
					-20	-2.27	-0.00119	PASS
					-10	6.62	0.00347	PASS
					0	-13.25	-0.00694	PASS
					10	-14.59	-0.00764	PASS
					20	-9.08	-0.00476	PASS
					30	-5.71	-0.00299	PASS
					40	1.26	0.00066	PASS
					50	-3.72	-0.00195	PASS
		3	LCH	VN	-30	-6.39	-0.00345	PASS
					-20	2.75	0.00149	PASS
					-10	-9.06	-0.00489	PASS
					0	-1.93	-0.00104	PASS
					10	-6.65	-0.00359	PASS
					20	-6.98	-0.00377	PASS
					30	-4.82	-0.0026	PASS
					40	-13.82	-0.00746	PASS
					50	-1.65	-0.00089	PASS
			MCH	VN	-30	-15.58	-0.00829	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	-1.53	-0.00081	PASS
					-10	-12.85	-0.00684	PASS
					0	-12.9	-0.00686	PASS
					10	-2.29	-0.00122	PASS
					20	-10.66	-0.00567	PASS
					30	-12.5	-0.00665	PASS
					40	0.53	0.00028	PASS
					50	-8.53	-0.00454	PASS
			HCH	VN	-30	6.57	0.00344	PASS
					-20	-7.37	-0.00386	PASS
					-10	3.32	0.00174	PASS
					0	-5.16	-0.0027	PASS
					10	1.37	0.00072	PASS
					20	-8.61	-0.00451	PASS
					30	-1.76	-0.00092	PASS
					40	-14.38	-0.00753	PASS
					50	-3.63	-0.0019	PASS
		5	LCH	VN	-30	-10.31	-0.00557	PASS
					-20	5.38	0.0029	PASS
					-10	-5.24	-0.00283	PASS
					0	2.78	0.0015	PASS
					10	8.48	0.00458	PASS
					20	3.89	0.0021	PASS
					30	3.1	0.00167	PASS
					40	0.6	0.00032	PASS
					50	-2.82	-0.00152	PASS
			MCH	VN	-30	-8.08	-0.0043	PASS
					-20	-11.32	-0.00602	PASS
					-10	-15.92	-0.00847	PASS
					0	-6.41	-0.00341	PASS
					10	-1.2	-0.00064	PASS
					20	-0.06	-0.00003	PASS
					30	-4.46	-0.00237	PASS
					40	-11.52	-0.00613	PASS
					50	-14.48	-0.0077	PASS
			HCH	VN	-30	-8.64	-0.00453	PASS
					-20	-6.51	-0.00341	PASS
					-10	2.98	0.00156	PASS
					0	-1.34	-0.0007	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-8.91	-0.00467	PASS
					20	-5.62	-0.00295	PASS
					30	-1.59	-0.00083	PASS
					40	-12.19	-0.00639	PASS
					50	4.72	0.00247	PASS
		10	LCH	VN	-30	-5.39	-0.00291	PASS
					-20	-14.09	-0.0076	PASS
					-10	5.48	0.00295	PASS
					0	-2.88	-0.00155	PASS
					10	-5.54	-0.00299	PASS
					20	2.35	0.00127	PASS
					30	-3.28	-0.00177	PASS
					40	-8.01	-0.00432	PASS
					50	-12.29	-0.00663	PASS
			MCH	VN	-30	-3.32	-0.00177	PASS
					-20	-10.6	-0.00564	PASS
					-10	-15.86	-0.00844	PASS
					0	-6.54	-0.00348	PASS
					10	0.63	0.00034	PASS
					20	-0.77	-0.00041	PASS
					30	-0.64	-0.00034	PASS
					40	0.39	0.00021	PASS
					50	0.76	0.0004	PASS
			HCH	VN	-30	-5.87	-0.00308	PASS
					-20	3.08	0.00162	PASS
					-10	-4.35	-0.00228	PASS
					0	-8.58	-0.0045	PASS
					10	0.34	0.00018	PASS
					20	9.23	0.00485	PASS
					30	1.3	0.00068	PASS
					40	-4.58	-0.0024	PASS
					50	-7.4	-0.00388	PASS
		15	LCH	VN	-30	-7.67	-0.00413	PASS
					-20	-12.03	-0.00648	PASS
					-10	-4.01	-0.00216	PASS
					0	-1.26	-0.00068	PASS
					10	-1.26	-0.00068	PASS
					20	0.14	0.00008	PASS
					30	-11.47	-0.00617	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	-7.55	-0.00406	PASS
					50	-15.41	-0.0083	PASS
			MCH	VN	-30	-5.88	-0.00313	PASS
					-20	-15.99	-0.00851	PASS
					-10	-0.3	-0.00016	PASS
					0	-5.31	-0.00282	PASS
					10	-14.62	-0.00778	PASS
					20	1.52	0.00081	PASS
					30	-9.86	-0.00524	PASS
					40	-10.19	-0.00542	PASS
					50	-9.73	-0.00518	PASS
			HCH	VN	-30	-3.53	-0.00186	PASS
					-20	-10.5	-0.00552	PASS
					-10	-10.04	-0.00528	PASS
					0	4.52	0.00238	PASS
					10	-6.28	-0.0033	PASS
					20	-12.15	-0.00639	PASS
					30	4.06	0.00213	PASS
					40	-11.49	-0.00604	PASS
					50	4.63	0.00243	PASS
		20	LCH	VN	-30	-1.29	-0.00069	PASS
					-20	1.14	0.00061	PASS
					-10	-0.01	-0.00001	PASS
					0	-0.56	-0.0003	PASS
					10	-5.28	-0.00284	PASS
					20	-3.45	-0.00185	PASS
					30	-1.86	-0.001	PASS
					40	-1.97	-0.00106	PASS
					50	4.78	0.00257	PASS
			MCH	VN	-30	-4.94	-0.00263	PASS
					-20	-2.85	-0.00152	PASS
					-10	-4.33	-0.0023	PASS
					0	-3.08	-0.00164	PASS
					10	-1.79	-0.00095	PASS
					20	-13.09	-0.00696	PASS
					30	-8.31	-0.00442	PASS
					40	-3.52	-0.00187	PASS
					50	-3.18	-0.00169	PASS
			HCH	VN	-30	-12.86	-0.00677	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	-12.96	-0.00682	PASS
					-10	-8.25	-0.00434	PASS
					0	-13.2	-0.00695	PASS
					10	-4.92	-0.00259	PASS
					20	-1.33	-0.0007	PASS
					30	-8.58	-0.00452	PASS
					40	-9.16	-0.00482	PASS
					50	-12.75	-0.00671	PASS
	LTE/TM2	1.4	LCH	VN	-30	-8.27	-0.00447	PASS
					-20	1.95	0.00105	PASS
					-10	-8.1	-0.00438	PASS
					0	5.24	0.00283	PASS
					10	-5.65	-0.00305	PASS
					20	6.85	0.0037	PASS
					30	-5.55	-0.003	PASS
					40	-0.04	-0.00002	PASS
					50	8.48	0.00458	PASS
			MCH	VN	-30	-3.46	-0.00184	PASS
					-20	-0.03	-0.00002	PASS
					-10	-13.73	-0.0073	PASS
					0	-7.31	-0.00389	PASS
					10	-8.1	-0.00431	PASS
					20	-2.52	-0.00134	PASS
					30	0.17	0.00009	PASS
					40	1.9	0.00101	PASS
					50	3.15	0.00168	PASS
			HCH	VN	-30	-5.52	-0.00289	PASS
					-20	-11.1	-0.00581	PASS
					-10	-7.17	-0.00376	PASS
					0	6.79	0.00356	PASS
					10	1.34	0.0007	PASS
					20	-8	-0.00419	PASS
					30	-13.53	-0.00709	PASS
					40	-0.67	-0.00035	PASS
					50	2	0.00105	PASS
		3	LCH	VN	-30	-16.48	-0.0089	PASS
					-20	-9.63	-0.0052	PASS
					-10	-8.04	-0.00434	PASS
					0	-4.28	-0.00231	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-1.67	-0.0009	PASS
					20	-8.84	-0.00477	PASS
					30	-13.2	-0.00713	PASS
					40	-9.31	-0.00503	PASS
					50	2.27	0.00123	PASS
			MCH	VN	-30	-3.79	-0.00202	PASS
					-20	-6.94	-0.00369	PASS
					-10	-3.28	-0.00174	PASS
					0	-13.76	-0.00732	PASS
					10	-6.98	-0.00371	PASS
					20	-12.19	-0.00648	PASS
					30	-11.84	-0.0063	PASS
					40	-11.17	-0.00594	PASS
					50	-7.31	-0.00389	PASS
			HCH	VN	-30	-10.99	-0.00576	PASS
					-20	-12.95	-0.00679	PASS
					-10	2.2	0.00115	PASS
					0	-3.83	-0.00201	PASS
					10	-8.97	-0.0047	PASS
					20	-13.86	-0.00726	PASS
					30	-13.2	-0.00692	PASS
					40	-10.34	-0.00542	PASS
					50	2.5	0.00131	PASS
		5	LCH	VN	-30	7.55	0.00408	PASS
					-20	6.14	0.00331	PASS
					-10	-0.31	-0.00017	PASS
					0	-7.12	-0.00384	PASS
					10	-9.84	-0.00531	PASS
					20	-2.9	-0.00157	PASS
					30	0.09	0.00005	PASS
					40	-2.68	-0.00145	PASS
					50	-2.68	-0.00145	PASS
			MCH	VN	-30	-10.67	-0.00568	PASS
					-20	-13.07	-0.00695	PASS
					-10	-14.95	-0.00795	PASS
					0	-19.05	-0.01013	PASS
					10	-21.01	-0.01118	PASS
					20	-21.97	-0.01169	PASS
					30	-22.52	-0.01198	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					40	-16.77	-0.00892	PASS
					50	-14.03	-0.00746	PASS
			HCH	VN	-30	-11.46	-0.00601	PASS
					-20	-10.1	-0.00529	PASS
					-10	3.66	0.00192	PASS
					0	-2.65	-0.00139	PASS
					10	-10.86	-0.00569	PASS
					20	-16.71	-0.00876	PASS
					30	2.92	0.00153	PASS
					40	1.4	0.00073	PASS
					50	-7.54	-0.00395	PASS
		10	LCH	VN	-30	-11.42	-0.00616	PASS
					-20	0.77	0.00042	PASS
					-10	-7.14	-0.00385	PASS
					0	8.4	0.00453	PASS
					10	0.9	0.00049	PASS
					20	-11.76	-0.00634	PASS
					30	0.93	0.0005	PASS
					40	-6.88	-0.00371	PASS
					50	-6.05	-0.00326	PASS
			MCH	VN	-30	-6.51	-0.00346	PASS
					-20	-7.72	-0.00411	PASS
					-10	-12.93	-0.00688	PASS
					0	-2.92	-0.00155	PASS
					10	1.75	0.00093	PASS
					20	-16.78	-0.00893	PASS
					30	-16.26	-0.00865	PASS
					40	-14.18	-0.00754	PASS
					50	-15.44	-0.00821	PASS
			HCH	VN	-30	-5.29	-0.00278	PASS
					-20	4.05	0.00213	PASS
					-10	8.37	0.00439	PASS
					0	3.76	0.00197	PASS
					10	-0.5	-0.00026	PASS
					20	-7.38	-0.00387	PASS
					30	0.07	0.00004	PASS
					40	5.68	0.00298	PASS
					50	-4.45	-0.00234	PASS
		15	LCH	VN	-30	1.06	0.00057	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					-20	-14.52	-0.00782	PASS
					-10	-8.07	-0.00434	PASS
					0	1.56	0.00084	PASS
					10	-9.57	-0.00515	PASS
					20	-18.5	-0.00996	PASS
					30	-1.66	-0.00089	PASS
					40	-9.03	-0.00486	PASS
					50	-17.62	-0.00949	PASS
			MCH	VN	-30	-9.24	-0.00491	PASS
					-20	0.99	0.00053	PASS
					-10	-6.31	-0.00336	PASS
					0	-11.69	-0.00622	PASS
					10	-1.29	-0.00069	PASS
					20	-2.8	-0.00149	PASS
					30	-14.06	-0.00748	PASS
					40	-14.13	-0.00752	PASS
					50	-0.34	-0.00018	PASS
			HCH	VN	-30	-4.86	-0.00255	PASS
					-20	-13.39	-0.00704	PASS
					-10	-3.65	-0.00192	PASS
					0	-18.02	-0.00947	PASS
					10	-1.92	-0.00101	PASS
					20	-5.29	-0.00278	PASS
					30	-0.62	-0.00033	PASS
					40	-14.42	-0.00758	PASS
					50	6.31	0.00332	PASS
		20	LCH	VN	-30	-14.46	-0.00777	PASS
					-20	-17.22	-0.00926	PASS
					-10	-4.46	-0.0024	PASS
					0	-0.44	-0.00024	PASS
					10	-2.49	-0.00134	PASS
					20	-8.17	-0.00439	PASS
					30	-13.78	-0.00741	PASS
					40	-12.43	-0.00668	PASS
					50	1.52	0.00082	PASS
			MCH	VN	-30	-25.53	-0.01358	PASS
					-20	-13.1	-0.00697	PASS
					-10	-9.47	-0.00504	PASS
					0	-6.58	-0.0035	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-11.4	-0.00606	PASS
					20	-20.69	-0.01101	PASS
					30	-22.19	-0.0118	PASS
					40	-8.08	-0.0043	PASS
					50	-8.71	-0.00463	PASS
			HCH	VN	-30	-11.26	-0.00593	PASS
					-20	-15.03	-0.00791	PASS
					-10	-20	-0.01053	PASS
					0	-11.36	-0.00598	PASS
					10	-22.92	-0.01206	PASS
					20	-10.6	-0.00558	PASS
					30	-11.74	-0.00618	PASS
					40	-12.02	-0.00633	PASS
					50	-12.9	-0.00679	PASS

END