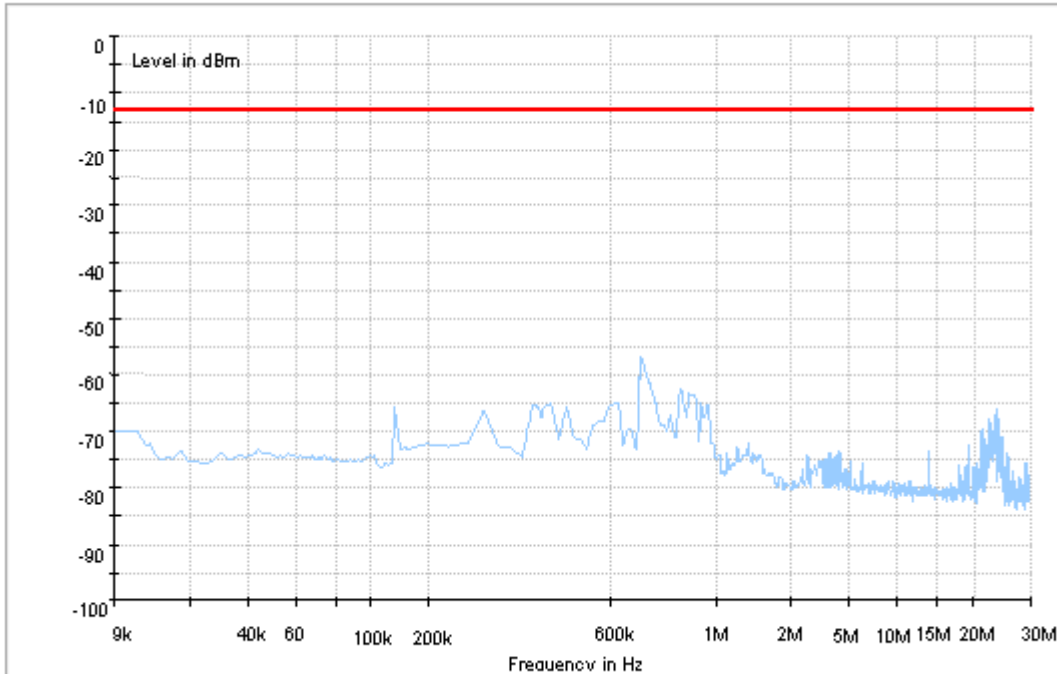
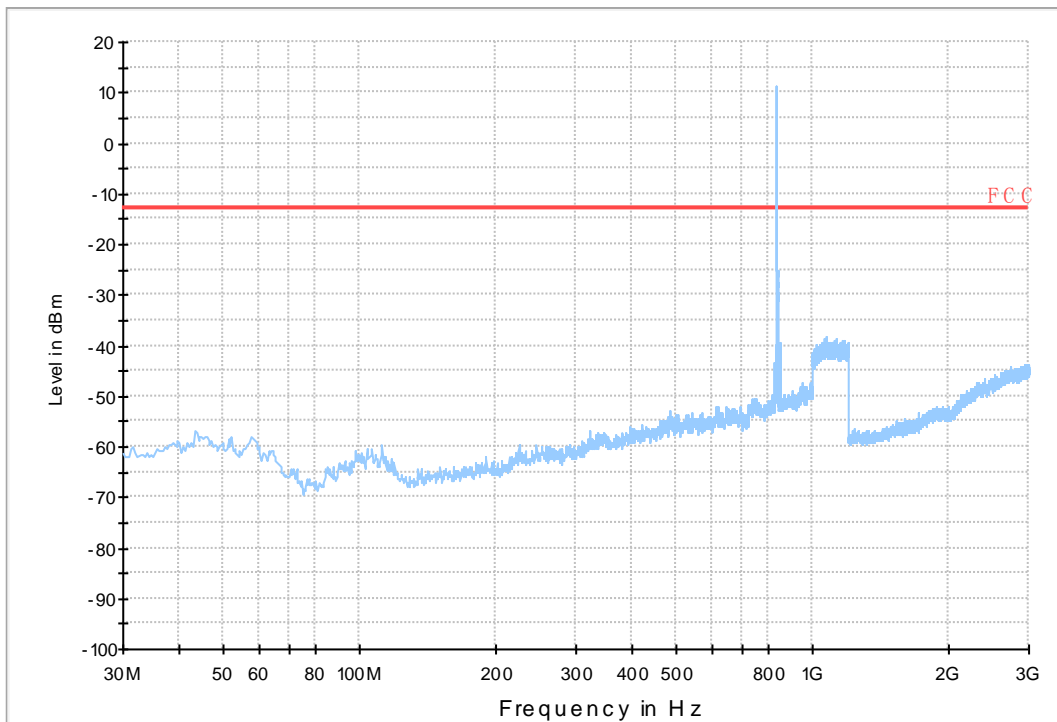


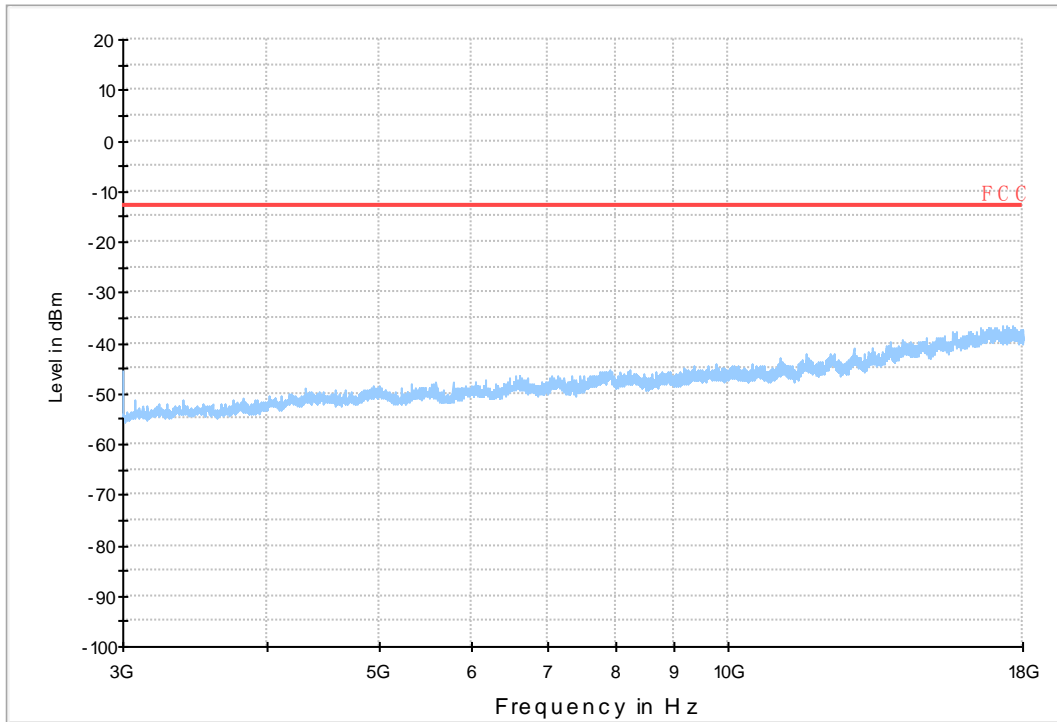
7.1.1.2 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G_L

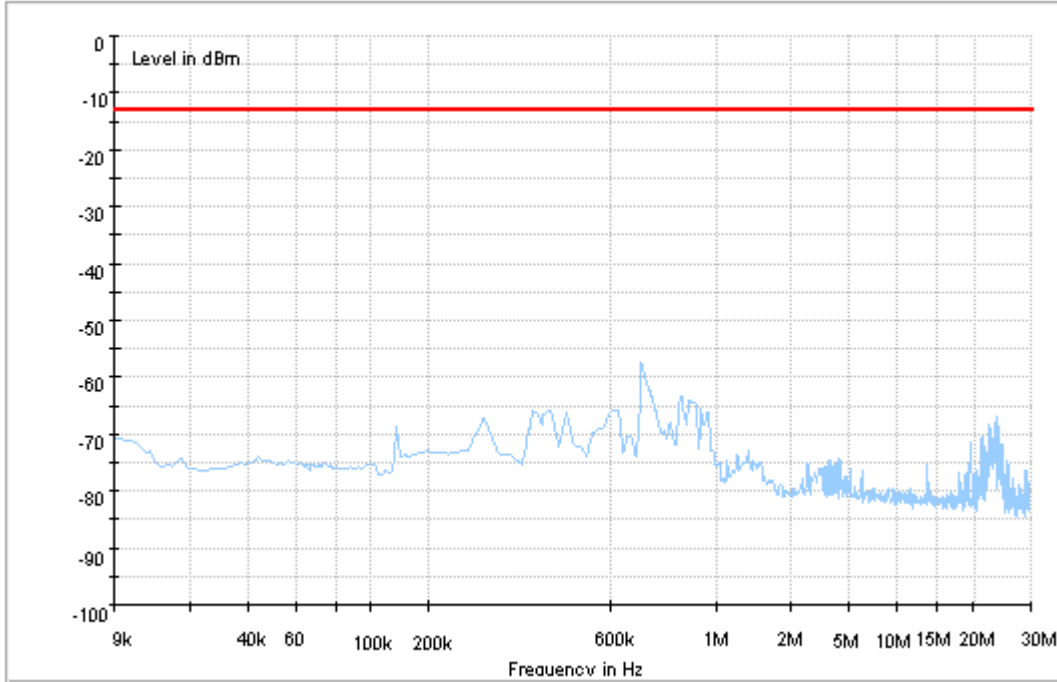


Copy of RSE-TX-DIRECTOR BELOW 1G_H

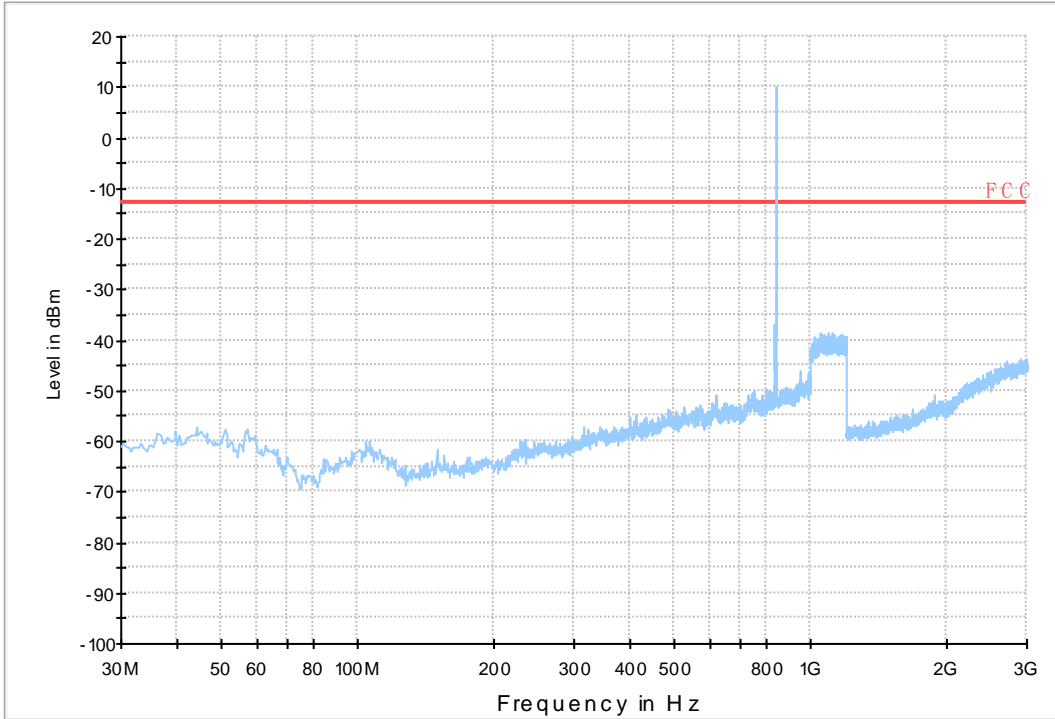


7.1.2 Test Band = BAND5_ANT2

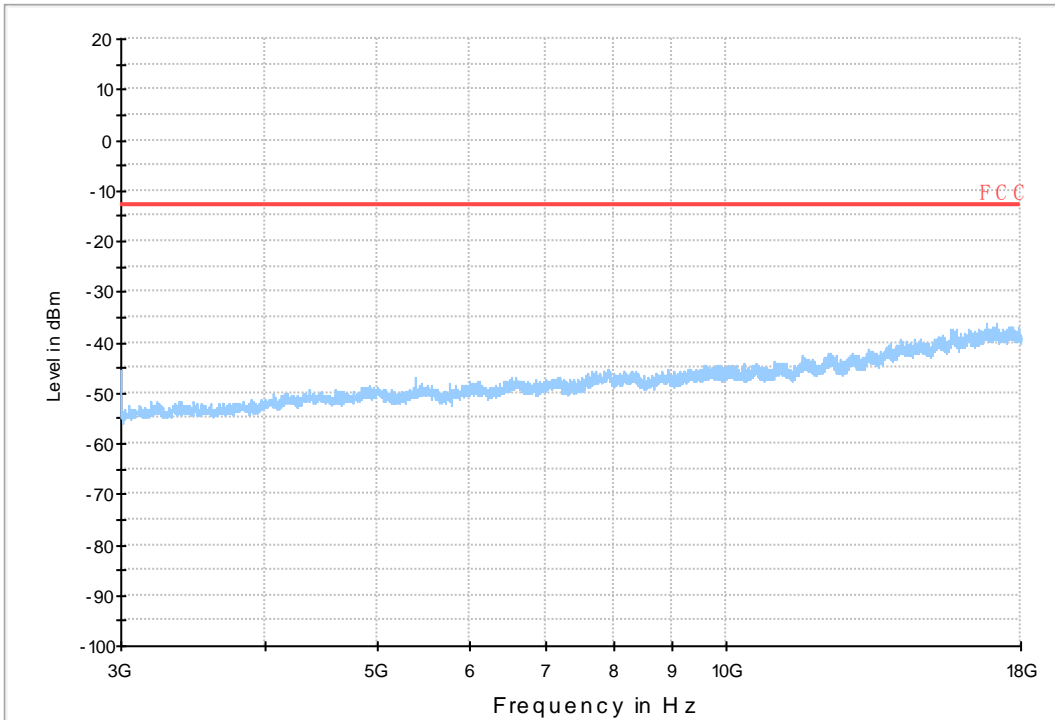
7.1.2.1 Test Bandwidth = 1.4



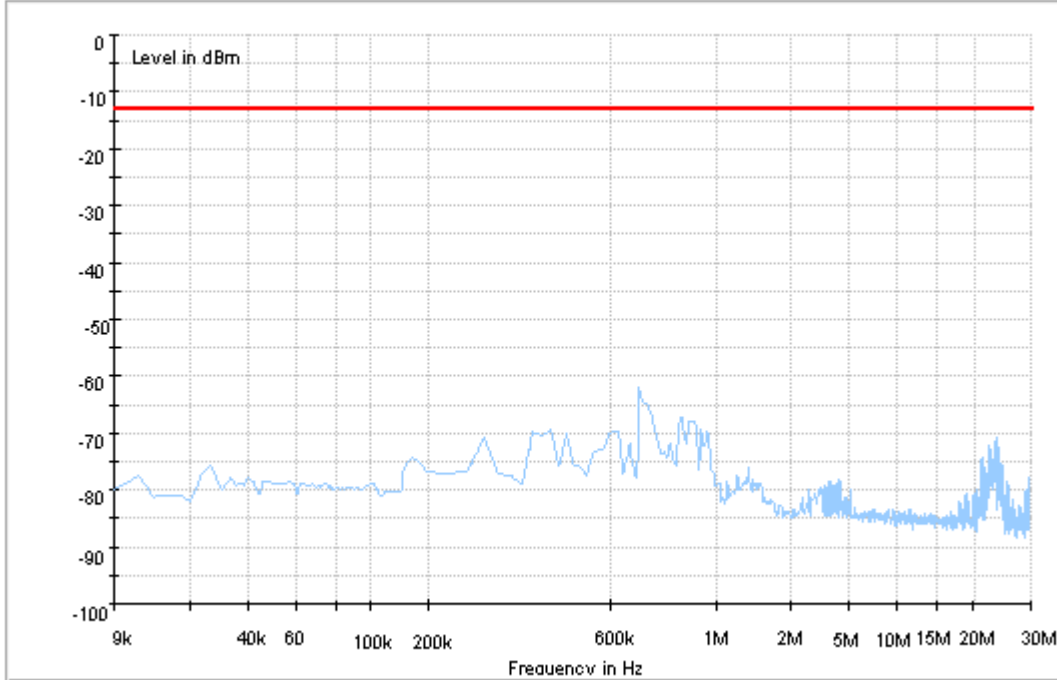
Copy of RSE-TX-DIRECTOR BELOW 1G_L



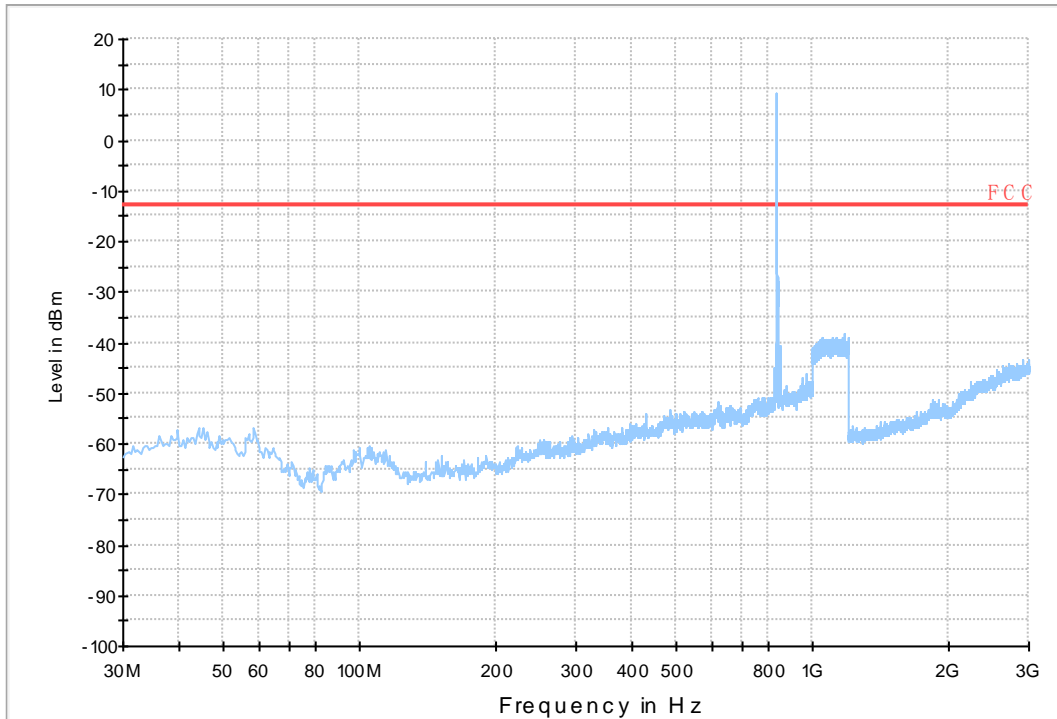
Copy of RSE-TX-DIRECTOR BELOW 1G_H



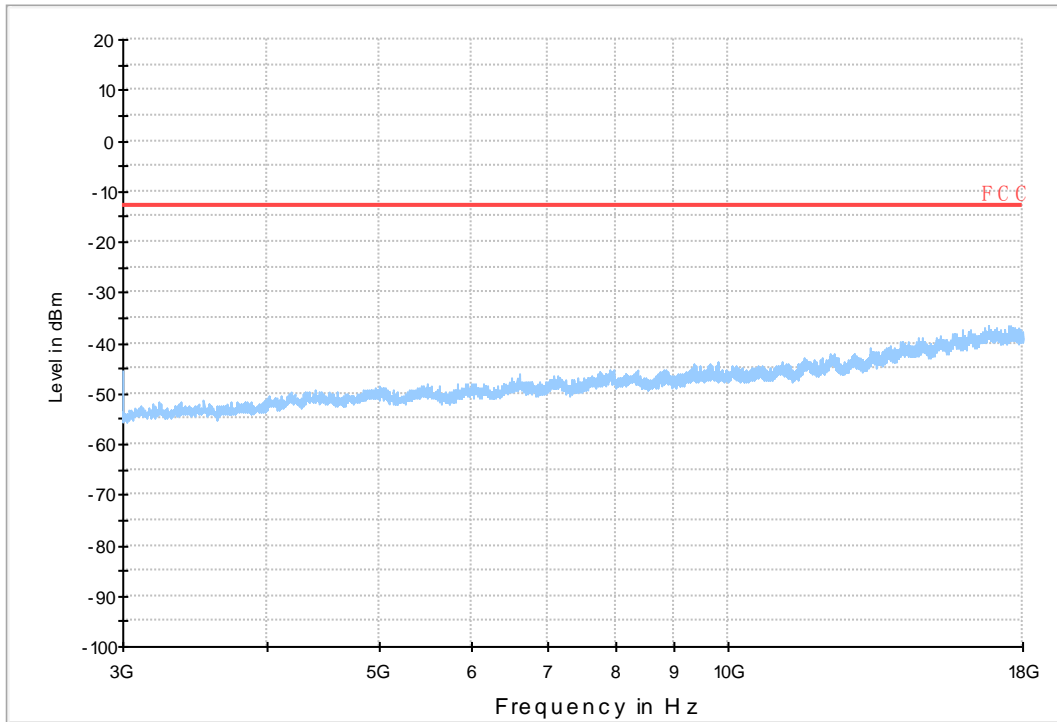
7.1.2.2 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G_L



Copy of 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
BAND5	LTE/TM1	1.4	LCH	TN	VL	-0.69	-0.00084	PASS
					VN	0.17	0.00021	PASS
					VH	-1.47	-0.00178	PASS
			MCH	TN	VL	-21.53	-0.02574	PASS
					VN	-1.56	-0.00186	PASS
					VH	-3.81	-0.00455	PASS
			HCH	TN	VL	0.43	0.00051	PASS
					VN	-5.28	-0.00622	PASS
					VH	1.92	0.00226	PASS
		3	LCH	TN	VL	0.1	0.00012	PASS
					VN	0.36	0.00044	PASS
					VH	0.82	0.00099	PASS
			MCH	TN	VL	-1.23	-0.00147	PASS
					VN	-1.02	-0.00122	PASS
					VH	-1.1	-0.00132	PASS
			HCH	TN	VL	-1.75	-0.00206	PASS
					VN	-4.61	-0.00544	PASS
					VH	-1.53	-0.00181	PASS
		5	LCH	TN	VL	-9.07	-0.01097	PASS
					VN	-10.56	-0.01278	PASS
					VH	-3.09	-0.00374	PASS
			MCH	TN	VL	-4.41	-0.00527	PASS
					VN	-9.63	-0.01151	PASS
					VH	-47.51	-0.0568	PASS
			HCH	TN	VL	0.39	0.00046	PASS
					VN	-3.73	-0.00441	PASS
					VH	1.03	0.00122	PASS
		10	LCH	TN	VL	13.19	0.01591	PASS
					VN	-2.62	-0.00316	PASS
					VH	-0.21	-0.00025	PASS
				MCH	TN	VL	18.44	0.02204

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					VN	-8	-0.00956	PASS			
					VH	11.22	0.01341	PASS			
					HCH	TN	VL	0.23	0.00027	PASS	
							VN	1.02	0.00121	PASS	
					VH	-0.19	-0.00023	PASS			
			LCH	TN	VL	1.04	0.00126	PASS			
					VN	-0.66	-0.0008	PASS			
					VH	0.6	0.00073	PASS			
			MCH	TN	VL	-3.71	-0.00444	PASS			
					VN	-16.62	-0.01987	PASS			
	VH	-6.77			-0.00809	PASS					
	HCH	TN	VL	-4.82	-0.00568	PASS					
			VN	1.44	0.0017	PASS					
			VH	-2.4	-0.00283	PASS					
	1.4	LCH	TN	VL	0.39	0.00047	PASS				
				VN	0.74	0.0009	PASS				
				VH	0	0	PASS				
		MCH	TN	VL	1.23	0.00147	PASS				
				VN	2.95	0.00353	PASS				
				VH	8.05	0.00962	PASS				
		HCH	TN	VL	-0.76	-0.0009	PASS				
				VN	-5.31	-0.00627	PASS				
				VH	-1.73	-0.00204	PASS				
	3	LCH	TN	VL	-9.48	-0.01147	PASS				
				VN	-6.67	-0.00807	PASS				
				VH	-4.01	-0.00485	PASS				
		MCH	TN	VL	-38.37	-0.04587	PASS				
				VN	-17.91	-0.02141	PASS				
				VH	-0.2	-0.00024	PASS				
		HCH	TN	VL	-0.43	-0.00051	PASS				
				VN	0.31	0.00037	PASS				
				VH	0.24	0.00028	PASS				
	5	LCH	TN	VL	4.61	0.00556	PASS				
				VN	4.92	0.00593	PASS				
				VH	8.77	0.01058	PASS				
		MCH	TN	VL	7.57	0.00905	PASS				
				VN	-0.89	-0.00106	PASS				
				VH	13.03	0.01558	PASS				
		HCH	TN	VL	-0.72	-0.00085	PASS				
				VN							
				VH							
	LTE/TM2					VN	-8	-0.00956	PASS		
VH						11.22	0.01341	PASS			
HCH						TN	VL	0.23	0.00027	PASS	
							VN	1.02	0.00121	PASS	
VH						-0.19	-0.00023	PASS			
LCH						TN	VL	1.04	0.00126	PASS	
							VN	-0.66	-0.0008	PASS	
							VH	0.6	0.00073	PASS	
MCH						TN	VL	-3.71	-0.00444	PASS	
							VN	-16.62	-0.01987	PASS	
							VH	-6.77	-0.00809	PASS	
HCH						TN	VL	-4.82	-0.00568	PASS	
							VN	1.44	0.0017	PASS	
							VH	-2.4	-0.00283	PASS	
10						LCH	TN	VL	0.39	0.00047	PASS
								VN	0.74	0.0009	PASS
								VH	0	0	PASS
						MCH	TN	VL	1.23	0.00147	PASS
	VN	2.95	0.00353	PASS							
	VH	8.05	0.00962	PASS							
	HCH	TN	VL	-0.76	-0.0009	PASS					
			VN	-5.31	-0.00627	PASS					
			VH	-1.73	-0.00204	PASS					
3	LCH	TN	VL	-9.48	-0.01147	PASS					
			VN	-6.67	-0.00807	PASS					
			VH	-4.01	-0.00485	PASS					
	MCH	TN	VL	-38.37	-0.04587	PASS					
			VN	-17.91	-0.02141	PASS					
			VH	-0.2	-0.00024	PASS					
	HCH	TN	VL	-0.43	-0.00051	PASS					
			VN	0.31	0.00037	PASS					
			VH	0.24	0.00028	PASS					
5	LCH	TN	VL	4.61	0.00556	PASS					
			VN	4.92	0.00593	PASS					
			VH	8.77	0.01058	PASS					
	MCH	TN	VL	7.57	0.00905	PASS					
			VN	-0.89	-0.00106	PASS					
			VH	13.03	0.01558	PASS					
	HCH	TN	VL	-0.72	-0.00085	PASS					
			VN								
			VH								

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	2.09	0.00248	PASS
					VH	1.04	0.00123	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
BAND5	LTE/TM1	1.4	LCH	VN	-30	-0.33	-0.0004	PASS
					-20	-0.47	-0.00057	PASS
					-10	-0.54	-0.00065	PASS
					0	-0.09	-0.00011	PASS
					10	-0.2	-0.00024	PASS
					20	-0.23	-0.00028	PASS
					30	-0.23	-0.00028	PASS
					40	0.19	0.00023	PASS
					50	-0.29	-0.00035	PASS
			MCH	VN	-30	-10.09	-0.01206	PASS
					-20	-3.22	-0.00385	PASS
					-10	-15.95	-0.01907	PASS
					0	-12.35	-0.01476	PASS
					10	-4.36	-0.00521	PASS
					20	5.04	0.00603	PASS
					30	13.88	0.01659	PASS
					40	-3.05	-0.00365	PASS
					50	16.16	0.01932	PASS
		HCH	VN	-30	-18.58	-0.0219	PASS	
				-20	14.86	0.01752	PASS	
				-10	-5.94	-0.007	PASS	
				0	15.56	0.01834	PASS	
				10	-4.62	-0.00545	PASS	
				20	4.39	0.00518	PASS	
				30	-22.13	-0.02609	PASS	
				40	10.27	0.01211	PASS	
				50	7.24	0.00853	PASS	
		3	LCH	VN	-30	-0.1	-0.00012	PASS
-20	7.78				0.00942	PASS		
-10	-0.19				-0.00023	PASS		
0	0.72				0.00087	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
		5			10	0.83	0.00101	PASS	
					20	0.56	0.00068	PASS	
					30	0.03	0.00004	PASS	
					40	0.07	0.00008	PASS	
					50	0.51	0.00062	PASS	
			MCH	VN	-30	5.81	0.00695	PASS	
					-20	-5.65	-0.00675	PASS	
					-10	-3.33	-0.00398	PASS	
					0	4.23	0.00506	PASS	
					10	-3.78	-0.00452	PASS	
					20	-29.91	-0.03576	PASS	
					30	-0.31	-0.00037	PASS	
					40	-0.84	-0.001	PASS	
					50	-6.34	-0.00758	PASS	
			HCH	VN	-30	0.96	0.00113	PASS	
					-20	1	0.00118	PASS	
					-10	0.53	0.00063	PASS	
					0	1.27	0.0015	PASS	
					10	-1.6	-0.00189	PASS	
					20	-3.69	-0.00435	PASS	
					30	-1.09	-0.00129	PASS	
					40	-7.11	-0.00839	PASS	
			LCH	VN	50	-1.97	-0.00232	PASS	
					-30	-3.39	-0.0041	PASS	
		-20			-5.62	-0.0068	PASS		
		-10			-7.95	-0.00962	PASS		
		0			2.95	0.00357	PASS		
		10			5.54	0.0067	PASS		
		20			0.86	0.00104	PASS		
		30			-1.43	-0.00173	PASS		
		40			6.07	0.00734	PASS		
		50			2.22	0.00269	PASS		
		MCH			VN	-30	0.34	0.00041	PASS
						-20	-0.26	-0.00031	PASS
			-10	0.01		0.00001	PASS		
			0	24.93		0.0298	PASS		
10	-37.71		-0.04508	PASS					
20	0.07		0.00008	PASS					
30	-0.03		-0.00004	PASS					

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					40	0.13	0.00016	PASS		
					50	24.28	0.02903	PASS		
			HCH	VN	-30	-0.92	-0.00109	PASS		
					-20	-1.33	-0.00157	PASS		
					-10	-1.67	-0.00197	PASS		
					0	0.83	0.00098	PASS		
					10	-0.84	-0.00099	PASS		
					20	-2.76	-0.00326	PASS		
					30	-1.42	-0.00168	PASS		
					40	-1.16	-0.00137	PASS		
		50	1.16	0.00137	PASS					
					LCH	VN	-30	10.49	0.01265	PASS
							-20	-1.8	-0.00217	PASS
							-10	-14.26	-0.0172	PASS
							0	16.89	0.02037	PASS
							10	8.83	0.01065	PASS
							20	5.28	0.00637	PASS
							30	-2.68	-0.00323	PASS
							40	4.96	0.00598	PASS
							50	-0.56	-0.00068	PASS
										MCH
		-20	12.43	0.01486	PASS					
		-10	7.5	0.00897	PASS					
		0	-1.9	-0.00227	PASS					
		10	-6.32	-0.00756	PASS					
		20	14.16	0.01693	PASS					
		30	-5.85	-0.00699	PASS					
		40	-12.62	-0.01509	PASS					
		50	-0.04	-0.00005	PASS					
					HCH	VN				
							-20	-1	-0.00118	PASS
							-10	0.84	0.001	PASS
							0	2.88	0.00341	PASS
							10	3.25	0.00385	PASS
							20	-2.63	-0.00312	PASS
							30	1.14	0.00135	PASS
							40	0.01	0.00001	PASS
		50	0.01	0.00001	PASS					
		LTE/TM2	1.4	LCH	VN	-30	-1.04	-0.00126	PASS	

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
		3			-20	-0.8	-0.00097	PASS	
					-10	-1.39	-0.00169	PASS	
					0	-0.7	-0.00085	PASS	
					10	-1.62	-0.00196	PASS	
					20	0.14	0.00017	PASS	
					30	-0.03	-0.00004	PASS	
					40	-1	-0.00121	PASS	
					50	-0.6	-0.00073	PASS	
			MCH	VN	-30	-1.02	-0.00122	PASS	
					-20	-8.23	-0.00984	PASS	
					-10	9.38	0.01121	PASS	
					0	-17.12	-0.02047	PASS	
					10	-11.97	-0.01431	PASS	
					20	2.36	0.00282	PASS	
					30	18.01	0.02153	PASS	
					40	-8.87	-0.0106	PASS	
			HCH	VN	-30	-8.08	-0.00952	PASS	
					-20	-4.82	-0.00568	PASS	
					-10	23.45	0.02764	PASS	
					0	7.7	0.00908	PASS	
					10	-10.91	-0.01286	PASS	
					20	-2.26	-0.00266	PASS	
					30	13.95	0.01644	PASS	
					40	10.91	0.01286	PASS	
			3	LCH	VN	-30	0.17	0.00021	PASS
						-20	0.27	0.00033	PASS
						-10	0.49	0.00059	PASS
						0	0.09	0.00011	PASS
		10				0.57	0.00069	PASS	
		20				0.23	0.00028	PASS	
		30				0.36	0.00044	PASS	
		40				-0.14	-0.00017	PASS	
		50		-0.51	-0.00062	PASS			
		MCH		VN	-30	-4.63	-0.00553	PASS	
					-20	-0.86	-0.00103	PASS	
					-10	1.76	0.0021	PASS	
			0		3.52	0.00421	PASS		

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict							
					10	5.39	0.00644	PASS							
					20	-3.16	-0.00378	PASS							
					30	-3.33	-0.00398	PASS							
					40	4.45	0.00532	PASS							
					50	-4.02	-0.00481	PASS							
			HCH	VN				-30	1.39	0.00164	PASS				
								-20	3.06	0.00361	PASS				
								-10	-0.97	-0.00114	PASS				
								0	7.54	0.0089	PASS				
								10	2.63	0.0031	PASS				
						LCH	VN				20	1.13	0.00133	PASS	
											30	5.45	0.00643	PASS	
											40	-1.95	-0.0023	PASS	
											50	-0.5	-0.00059	PASS	
											-30	2.32	0.00281	PASS	
			MCH	VN						-20	4.71	0.0057	PASS		
										-10	1.5	0.00181	PASS		
										0	-2.55	-0.00309	PASS		
										10	-7.07	-0.00855	PASS		
										20	-5.31	-0.00642	PASS		
		HCH					VN					30	-0.2	-0.00024	PASS
												40	-2.69	-0.00325	PASS
												50	3.68	0.00445	PASS
												-30	5.69	0.0068	PASS
												-20	35.13	0.042	PASS
				5						-10	17.58	0.02102	PASS		
										0	21.99	0.02629	PASS		
										10	42.09	0.05032	PASS		
										20	63.64	0.07608	PASS		
										30	39.88	0.04767	PASS		
												40	25.86	0.03091	PASS
												50	-0.57	-0.00068	PASS
												-30	-0.24	-0.00028	PASS
												-20	-0.37	-0.00044	PASS
												-10	-0.21	-0.00025	PASS
										0	0.86	0.00102	PASS		
										10	0.67	0.00079	PASS		
										20	-0.27	-0.00032	PASS		
										30	-2.12	-0.0025	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
					40	0.6	0.00071	PASS	
					50	-0.67	-0.00079	PASS	
		10	LCH	VN	-30	-14.13	-0.01704	PASS	
					-20	13.66	0.01648	PASS	
					-10	-5.04	-0.00608	PASS	
					0	-11.69	-0.0141	PASS	
					10	-4.61	-0.00556	PASS	
					20	3.93	0.00474	PASS	
					30	-0.92	-0.00111	PASS	
					40	-5.36	-0.00647	PASS	
					50	0.01	0.00001	PASS	
						MCH	VN	-30	12.77
			-20	12.13	0.0145			PASS	
			-10	25.86	0.03091			PASS	
			0	5.58	0.00667			PASS	
			10	20.73	0.02478			PASS	
			20	12.07	0.01443			PASS	
			30	-4.59	-0.00549			PASS	
			40	16.48	0.0197			PASS	
				HCH	VN	50	4.95	0.00592	PASS
			-30			-0.6	-0.00071	PASS	
			-20			0.53	0.00063	PASS	
			-10			1.1	0.0013	PASS	
			0			0	0	PASS	
			10			-0.11	-0.00013	PASS	
			20			-1.14	-0.00135	PASS	
			30			-0.21	-0.00025	PASS	
			40	-2	-0.00237	PASS			
						50	-3.16	-0.00374	PASS

END