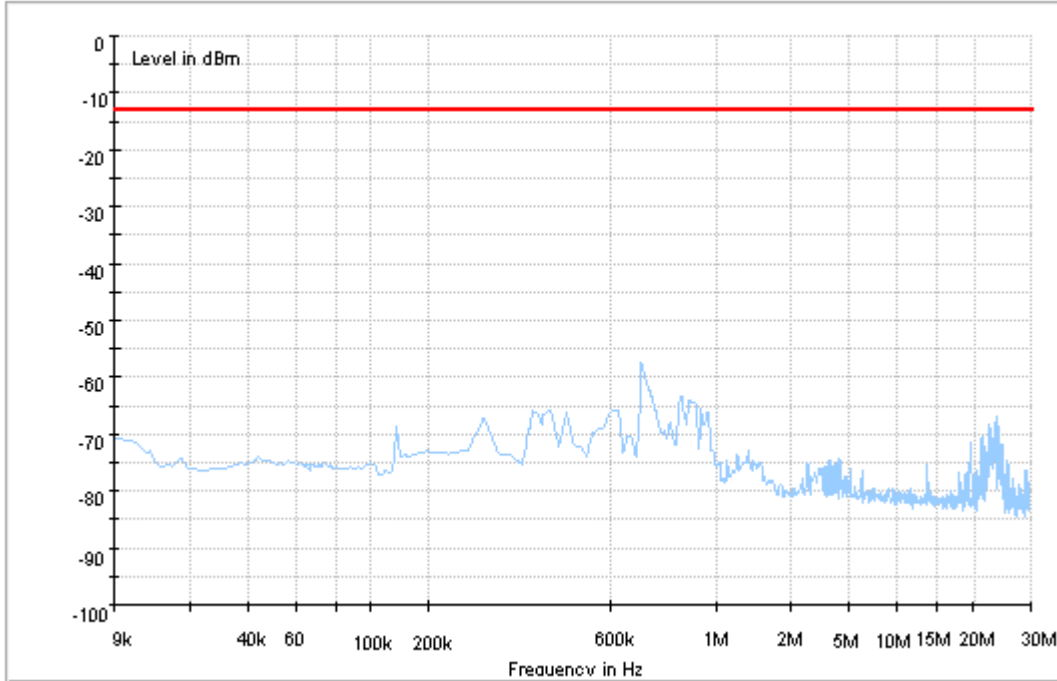
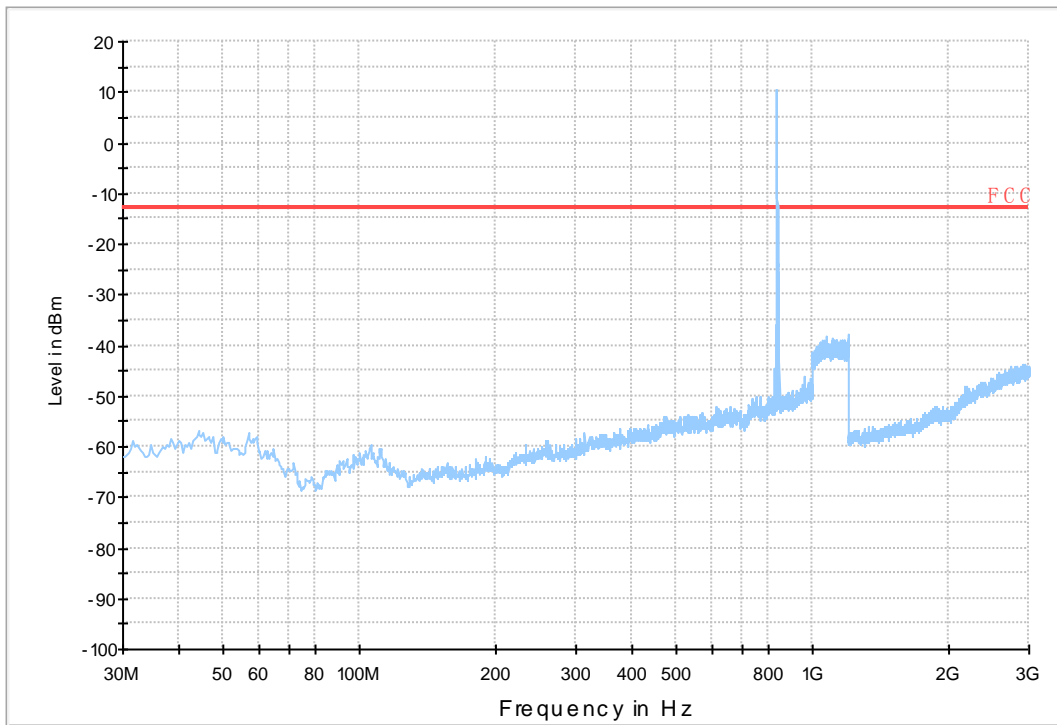


7.1.2 Test Band = BAND5_Ant2

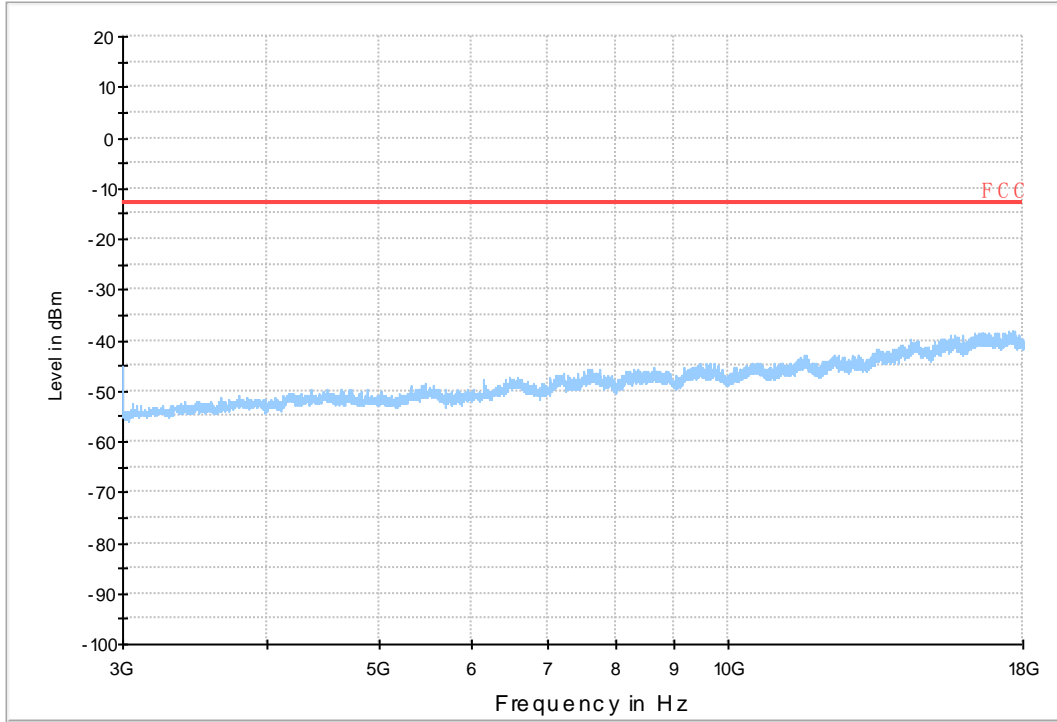
7.1.2.1 Test Bandwidth = 1.4



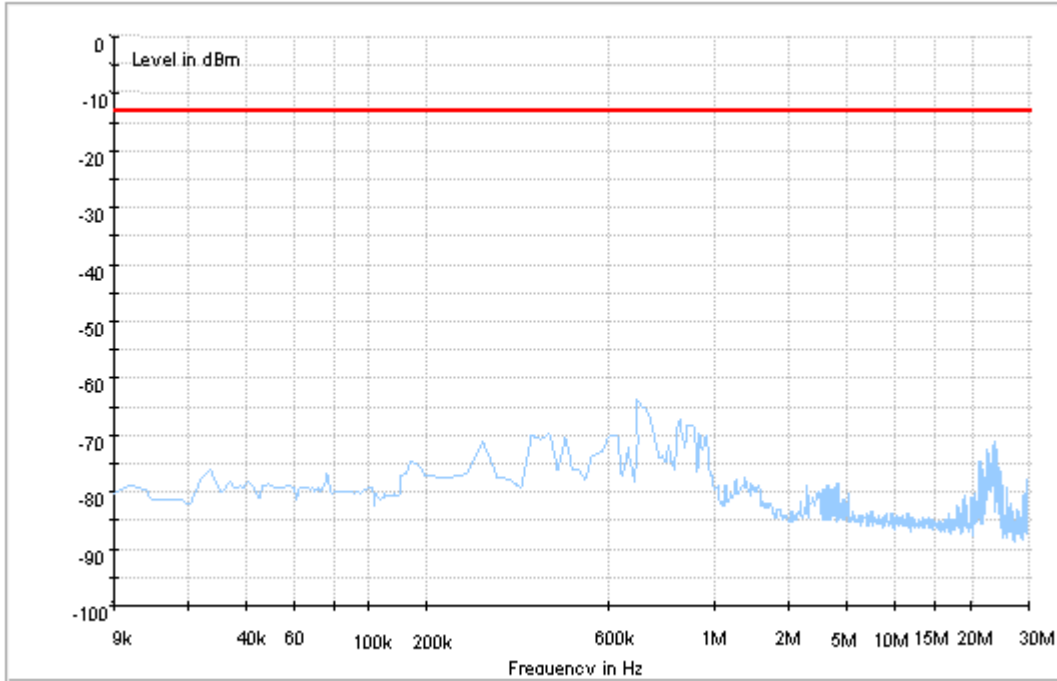
Copy of RSE-TX-DIRECTOR BELOW 1G_L



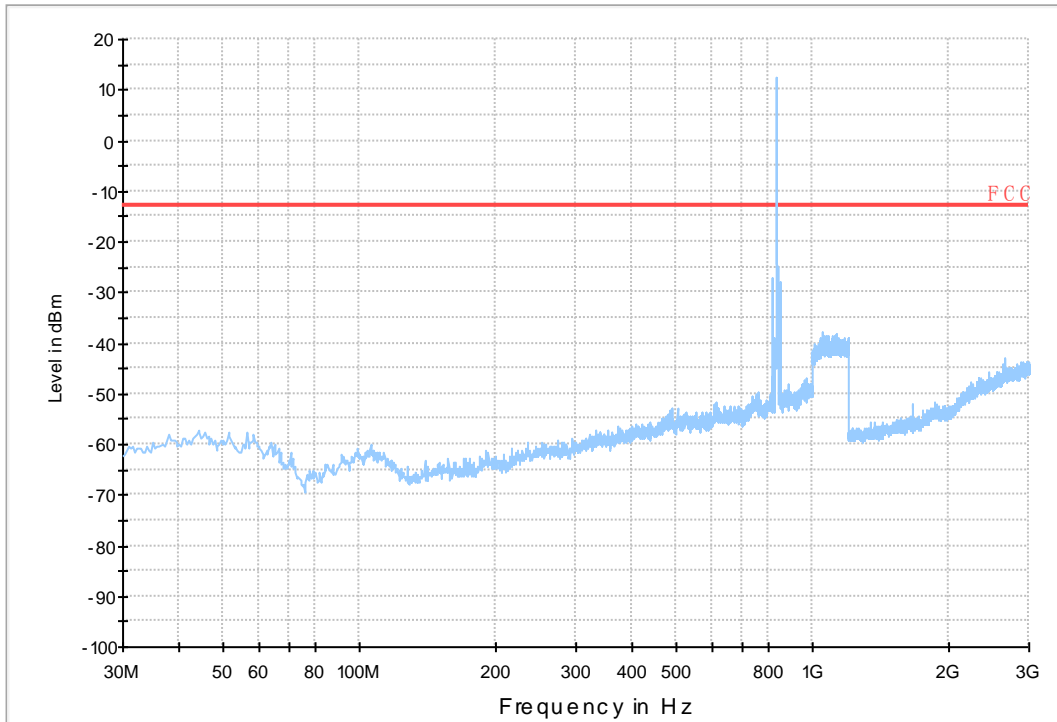
Copy of RSE-TX-DIRECTOR BELOW 1G_H



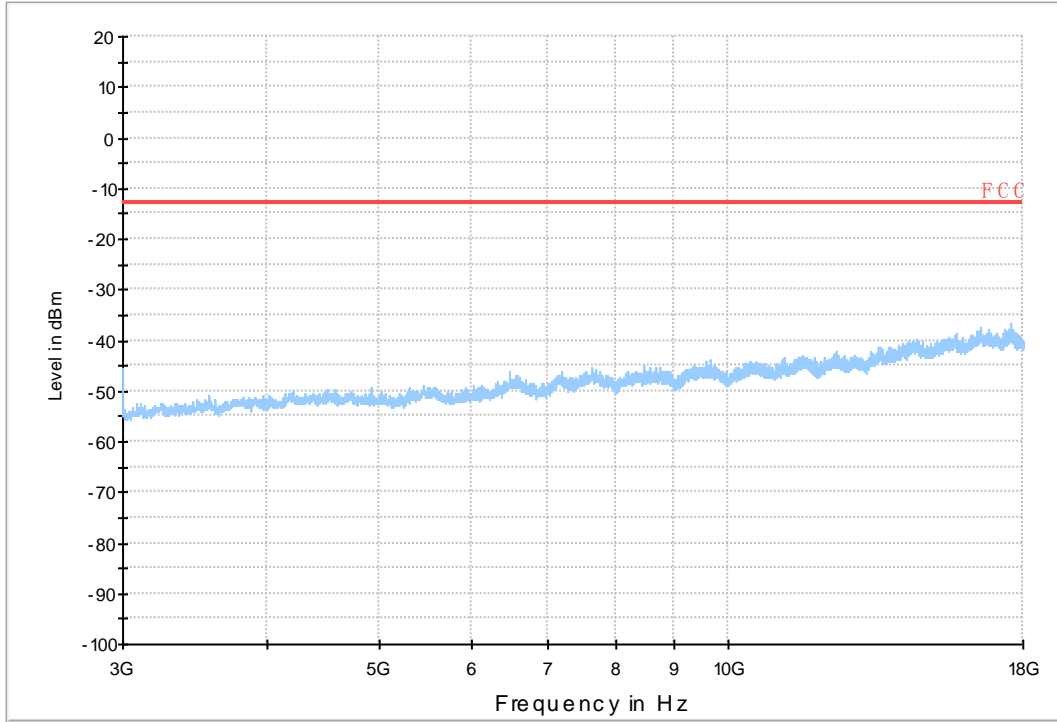
7.1.2.2 Test Bandwidth = 10



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	18.05	0.02189	PASS
					VN	4.05	0.00491	PASS
					VH	-9.37	-0.01136	PASS
			MCH	TN	VL	6.35	0.00759	PASS
					VN	-10.34	-0.01236	PASS
					VH	3.23	0.00386	PASS
			HCH	TN	VL	-1.34	-0.00158	PASS
					VN	0.13	0.00015	PASS
					VH	-14.68	-0.01731	PASS
		3	LCH	TN	VL	-26.39	-0.03197	PASS
					VN	-6.92	-0.00838	PASS
					VH	-12.8	-0.01551	PASS
			MCH	TN	VL	2.63	0.00314	PASS
					VN	0.21	0.00025	PASS
					VH	-6.24	-0.00746	PASS
			HCH	TN	VL	1.7	0.00201	PASS
					VN	-6.68	-0.00788	PASS
					VH	2.4	0.00283	PASS
		5	LCH	TN	VL	-1.49	-0.0018	PASS
					VN	-3.09	-0.00374	PASS
					VH	-6.81	-0.00824	PASS
			MCH	TN	VL	-2.9	-0.00347	PASS
					VN	-3.22	-0.00385	PASS
					VH	-3.2	-0.00383	PASS
			HCH	TN	VL	-1.67	-0.00197	PASS
					VN	0.76	0.0009	PASS
					VH	-1.97	-0.00233	PASS
10	LCH	TN	VL	-2.78	-0.00335	PASS		

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					VN	8.67	0.01046	PASS		
					VH	0.04	0.00005	PASS		
					MCH	TN	VL	147.07	0.17582	PASS
							VN	-54.65	-0.06533	PASS
					VH	65.73	0.07858	PASS		
					HCH	TN	VL	0.36	0.00043	PASS
			VN	3.25			0.00385	PASS		
			VH	-1.75			-0.00207	PASS		
			LTE/TM2	1.4	LCH	TN	VL	-3.02	-0.00366	PASS
							VN	10.11	0.01226	PASS
							VH	-5.68	-0.00689	PASS
							MCH	TN	VL	-0.29
	VN	6.41							0.00766	PASS
	VH	-12.33							-0.01474	PASS
	HCH	TN					VL	2.93	0.00345	PASS
							VN	-2.43	-0.00286	PASS
							VH	1.4	0.00165	PASS
					LCH	TN	VL	7.7	0.00933	PASS
							VN	-4.25	-0.00515	PASS
							VH	7.52	0.00911	PASS
	MCH	TN			VL	-2.56	-0.00306	PASS		
					VN	-0.49	-0.00059	PASS		
					VH	-2.69	-0.00322	PASS		
					HCH	TN	VL	-0.13	-0.00015	PASS
							VN	0.4	0.00047	PASS
							VH	-2.16	-0.00255	PASS
	5	LCH	TN	VL	-14.75	-0.01785	PASS			
				VN	3.2	0.00387	PASS			
				VH	-12.99	-0.01572	PASS			
		MCH	TN	VL	-1.22	-0.00146	PASS			
				VN	-1.44	-0.00172	PASS			
				VH	-0.44	-0.00053	PASS			
		HCH	TN	VL	-2.19	-0.00259	PASS			
				VN	-1.46	-0.00172	PASS			
				VH	-1	-0.00118	PASS			
	10	LCH	TN	VL	-4.56	-0.0055	PASS			
				VN	3	0.00362	PASS			
				VH	-8.18	-0.00987	PASS			
		MCH	TN	VL	-54.77	-0.06548	PASS			

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	45.09	0.0539	PASS
					VH	-43.37	-0.05185	PASS
			HCH	TN	VL	0.67	0.00079	PASS
					VN	3.78	0.00448	PASS
					VH	0.57	0.00068	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	4.96	0.00601	PASS
					-20	81.9	0.09931	PASS
					-10	-0.56	-0.00068	PASS
					0	-17.04	-0.02066	PASS
					10	-2.6	-0.00315	PASS
					20	-13.96	-0.01693	PASS
					30	3.32	0.00403	PASS
					40	13.05	0.01582	PASS
					50	7.74	0.00939	PASS
			MCH	VN	-30	-0.01	-0.00001	PASS
					-20	-3.32	-0.00397	PASS
					-10	-7.68	-0.00918	PASS
					0	-5.45	-0.00652	PASS
					10	23.86	0.02852	PASS
					20	-3.12	-0.00373	PASS
					30	-9.04	-0.01081	PASS
					40	-5.29	-0.00632	PASS
					50	1.62	0.00194	PASS
			HCH	VN	-30	-2.99	-0.00352	PASS
					-20	-3.02	-0.00356	PASS
					-10	-1.37	-0.00161	PASS
					0	-4.98	-0.00587	PASS
					10	4.06	0.00479	PASS
					20	-4.59	-0.00541	PASS
		30			0.79	0.00093	PASS	
		40			-2.52	-0.00297	PASS	
		50			-3.12	-0.00368	PASS	
3	LCH	VN	-30	-14.63	-0.01772	PASS		

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict				
		5			-20	2.89	0.0035	PASS				
					-10	13	0.01575	PASS				
					0	1.8	0.00218	PASS				
					10	1.03	0.00125	PASS				
					20	4.94	0.00598	PASS				
					30	-2.35	-0.00285	PASS				
					40	7.82	0.00947	PASS				
					50	4.22	0.00511	PASS				
			MCH	VN	-30	-2.66	-0.00318	PASS				
					-20	-0.77	-0.00092	PASS				
					-10	2.17	0.00259	PASS				
					0	0.64	0.00077	PASS				
					10	0.07	0.00008	PASS				
					20	-3.72	-0.00445	PASS				
					30	-1.89	-0.00226	PASS				
					40	-3.45	-0.00412	PASS				
			HCH	VN	-30	0.66	0.00078	PASS				
					-20	-2.03	-0.0024	PASS				
					-10	-2.42	-0.00286	PASS				
					0	0	0	PASS				
					10	1.57	0.00185	PASS				
					20	-4.39	-0.00518	PASS				
					30	-1.27	-0.0015	PASS				
					40	-11.03	-0.01301	PASS				
			5			LCH	VN	-30	-1.19	-0.00144	PASS	
								-20	-2.85	-0.00345	PASS	
								-10	-7.31	-0.00884	PASS	
								0	2.47	0.00299	PASS	
		10						-1.36	-0.00165	PASS		
		20						2.56	0.0031	PASS		
		30						-2.52	-0.00305	PASS		
		40						1.77	0.00214	PASS		
		50						-8.71	-0.01054	PASS		
		MCH						VN	-30	0.34	0.00041	PASS
									-20	-2.1	-0.00251	PASS
									-10	1.37	0.00164	PASS
			0	-2.52	-0.00301	PASS						



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					10	-1.34	-0.0016	PASS
					20	-0.66	-0.00079	PASS
					30	-2.1	-0.00251	PASS
					40	-2.19	-0.00262	PASS
					50	-2.03	-0.00243	PASS
			HCH	VN	-30	5.84	0.0069	PASS
					-20	0.76	0.0009	PASS
					-10	-16.88	-0.01994	PASS
					0	-10.4	-0.01229	PASS
					10	-3.65	-0.00431	PASS
					20	2.73	0.00323	PASS
					30	0.2	0.00024	PASS
					40	5.42	0.0064	PASS
					50	1.1	0.0013	PASS
					LCH	VN	-30	-7.18
			-20	-2.83			-0.00341	PASS
			-10	-10.26			-0.01238	PASS
			0	0.63			0.00076	PASS
			10	0.31			0.00037	PASS
			20	0.14			0.00017	PASS
		30	1.62	0.00195			PASS	
		40	-5.41	-0.00653			PASS	
		50	19.9	0.024			PASS	
		MCH	VN	-30			-46.26	-0.0553
				-20	94.14	0.11254	PASS	
				-10	-0.72	-0.00086	PASS	
				0	8.97	0.01072	PASS	
				10	-92.18	-0.1102	PASS	
				20	107.07	0.128	PASS	
				30	-96.39	-0.11523	PASS	
				40	49.18	0.05879	PASS	
				50	81.1	0.09695	PASS	
				HCH	VN	-30	-4.85	-0.00575
		-20	-1.37			-0.00162	PASS	
		-10	-1.65			-0.00195	PASS	
		0	-0.27			-0.00032	PASS	
		10	2.16			0.00256	PASS	
		20	0.83			0.00098	PASS	
		30	-3.88			-0.0046	PASS	
				10			-30	-7.18
-20	-2.83						-0.00341	PASS
-10	-10.26						-0.01238	PASS
0	0.63						0.00076	PASS
10	0.31						0.00037	PASS
LCH	VN				20	0.14	0.00017	PASS
					30	1.62	0.00195	PASS
					40	-5.41	-0.00653	PASS
					50	19.9	0.024	PASS
					-30	-46.26	-0.0553	PASS
		-20	94.14		0.11254	PASS		
		-10	-0.72		-0.00086	PASS		
		0	8.97		0.01072	PASS		
		10	-92.18		-0.1102	PASS		
		20	107.07		0.128	PASS		
MCH	VN	30	-96.39		-0.11523	PASS		
		40	49.18		0.05879	PASS		
		50	81.1		0.09695	PASS		
		-30	-4.85		-0.00575	PASS		
		-20	-1.37		-0.00162	PASS		
		-10	-1.65	-0.00195	PASS			
		0	-0.27	-0.00032	PASS			
		10	2.16	0.00256	PASS			
		20	0.83	0.00098	PASS			
		30	-3.88	-0.0046	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2	1.4	LCH	VN	40	0.94	0.00111	PASS
					50	-2.52	-0.00299	PASS
					-30	-5.98	-0.00725	PASS
					-20	-3.43	-0.00416	PASS
					-10	18.7	0.02267	PASS
					0	-10.99	-0.01333	PASS
					10	-10.46	-0.01268	PASS
					20	8.44	0.01023	PASS
					30	11.56	0.01402	PASS
					40	-6.47	-0.00785	PASS
			50	-9.13	-0.01107	PASS		
			MCH	VN	-30	-7.12	-0.00851	PASS
					-20	-0.09	-0.00011	PASS
					-10	-22.07	-0.02638	PASS
					0	-19.78	-0.02365	PASS
					10	-0.34	-0.00041	PASS
					20	-2.42	-0.00289	PASS
					30	-7.12	-0.00851	PASS
		40			-4.23	-0.00506	PASS	
		HCH	VN	50	-7.97	-0.00953	PASS	
				-30	-6.69	-0.00789	PASS	
				-20	6.11	0.0072	PASS	
				-10	1.57	0.00185	PASS	
				0	3.91	0.00461	PASS	
				10	-5.52	-0.00651	PASS	
				20	5.78	0.00681	PASS	
				30	-3.53	-0.00416	PASS	
		3	LCH	VN	40	-3.86	-0.00455	PASS
					50	5.02	0.00592	PASS
					-30	4.98	0.00603	PASS
					-20	21.3	0.0258	PASS
					-10	10.09	0.01222	PASS
0	18.53				0.02245	PASS		
10	-4.73				-0.00573	PASS		
20	-3.46				-0.00419	PASS		
30	-9.68				-0.01173	PASS		
40	-5.64		-0.00683	PASS				
50	-3.72	-0.00451	PASS					
MCH	VN	-30	-5.22	-0.00624	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					10	-0.6	-0.00071	PASS			
					20	-2.26	-0.00267	PASS			
					30	2.35	0.00278	PASS			
					40	-1.4	-0.00165	PASS			
					50	-0.63	-0.00074	PASS			
					10	LCH	VN	-30	-1.56	-0.00188	PASS
								-20	-0.76	-0.00092	PASS
								-10	-2.79	-0.00337	PASS
								0	10.5	0.01267	PASS
								10	-3.78	-0.00456	PASS
		20	9.01	0.01087				PASS			
		30	3	0.00362				PASS			
		40	1.02	0.00123				PASS			
		50	-8.11	-0.00978				PASS			
		10	MCH	VN				-30	11.66	0.01394	PASS
								-20	-47.48	-0.05676	PASS
								-10	54.5	0.06515	PASS
					0	-108.75	-0.13001	PASS			
					10	-53.09	-0.06347	PASS			
					20	237.58	0.28402	PASS			
					30	63.04	0.07536	PASS			
					40	56.99	0.06813	PASS			
		10	HCH	VN	50	-57.69	-0.06897	PASS			
					-30	-2.75	-0.00326	PASS			
					-20	-0.5	-0.00059	PASS			
					-10	-1.03	-0.00122	PASS			
					0	-0.19	-0.00023	PASS			
					10	-4.48	-0.00531	PASS			
					20	-0.92	-0.00109	PASS			
					30	1.46	0.00173	PASS			
					40	-0.7	-0.00083	PASS			
		50	-3.88	-0.0046	PASS						

END