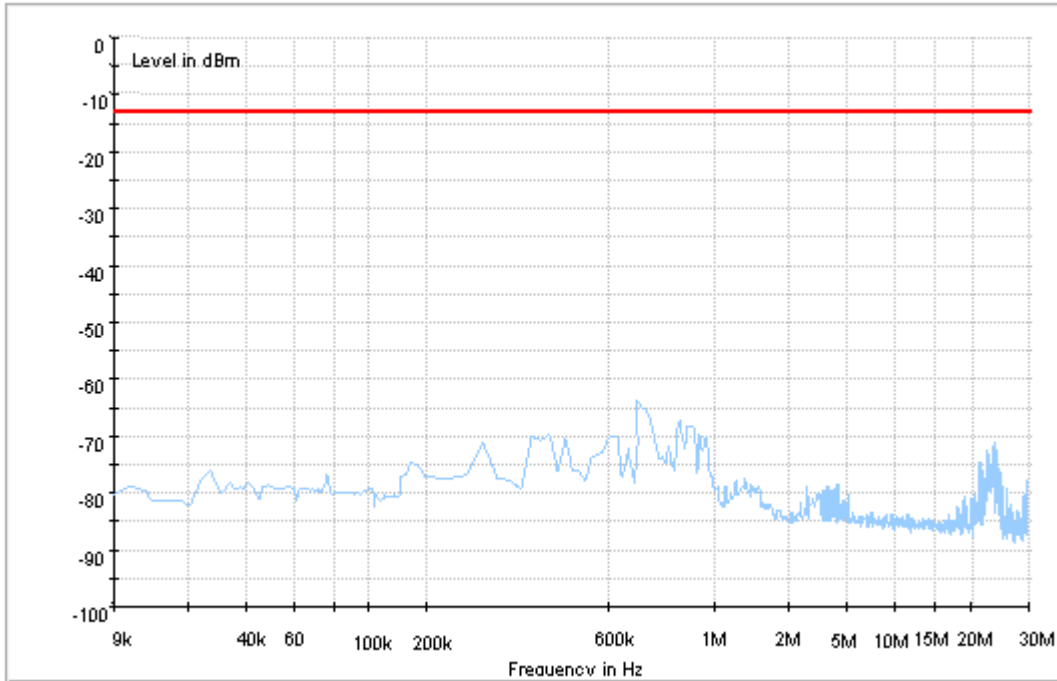
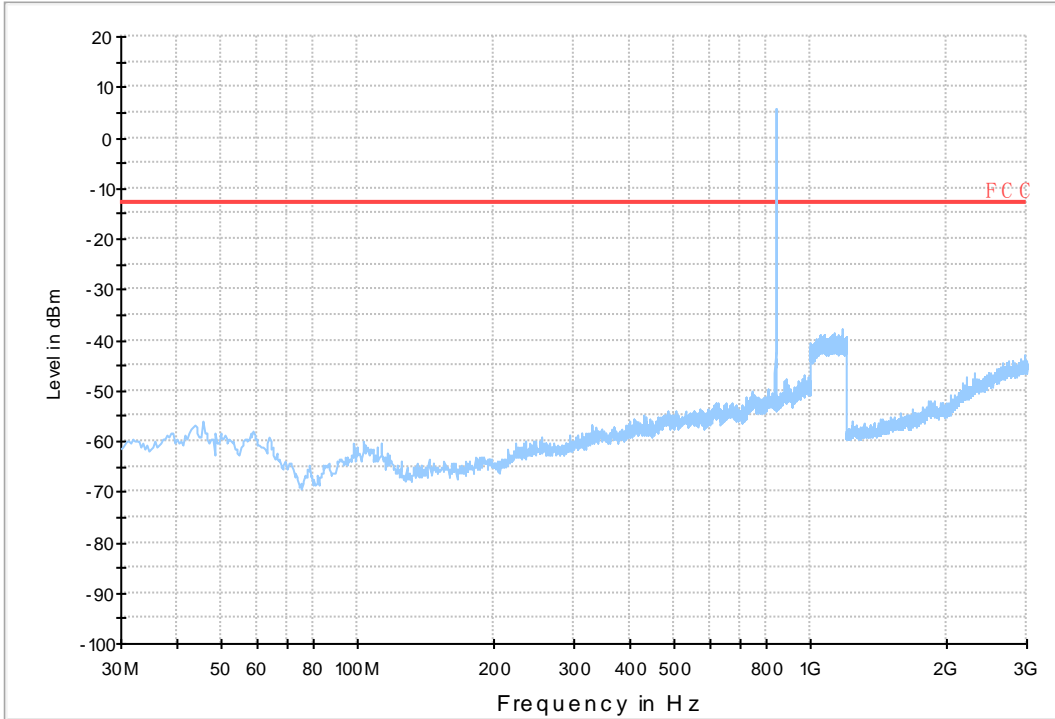


### 7.2.1 Test Band = BAND5\_ANT2

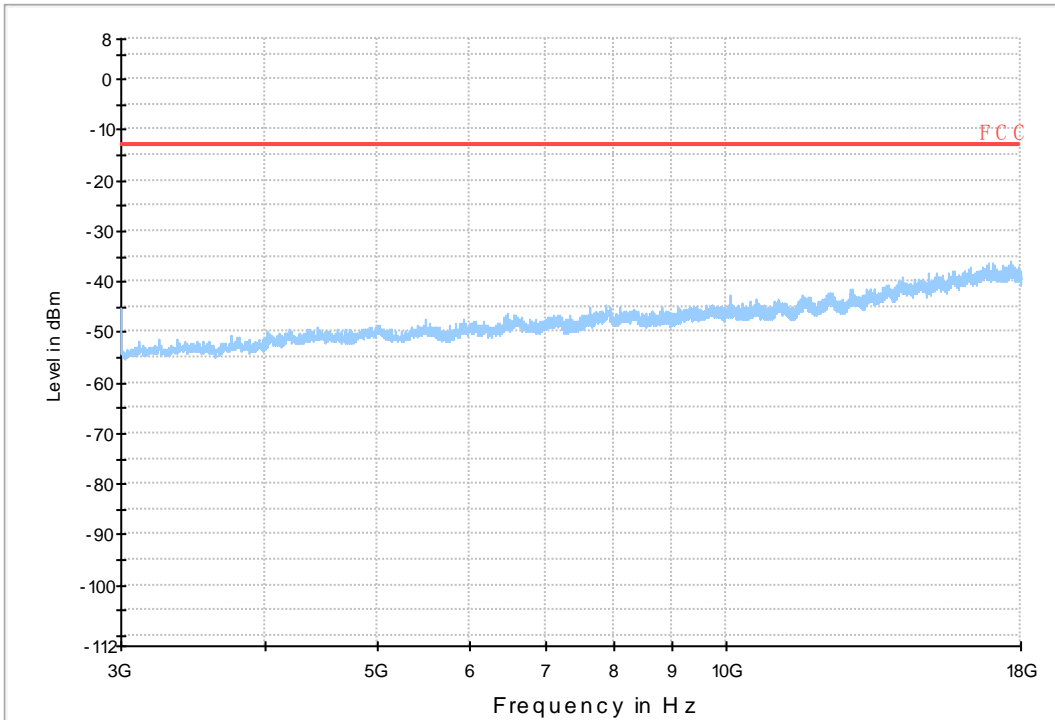
#### 7.2.1.1 Test Bandwidth = 1.4



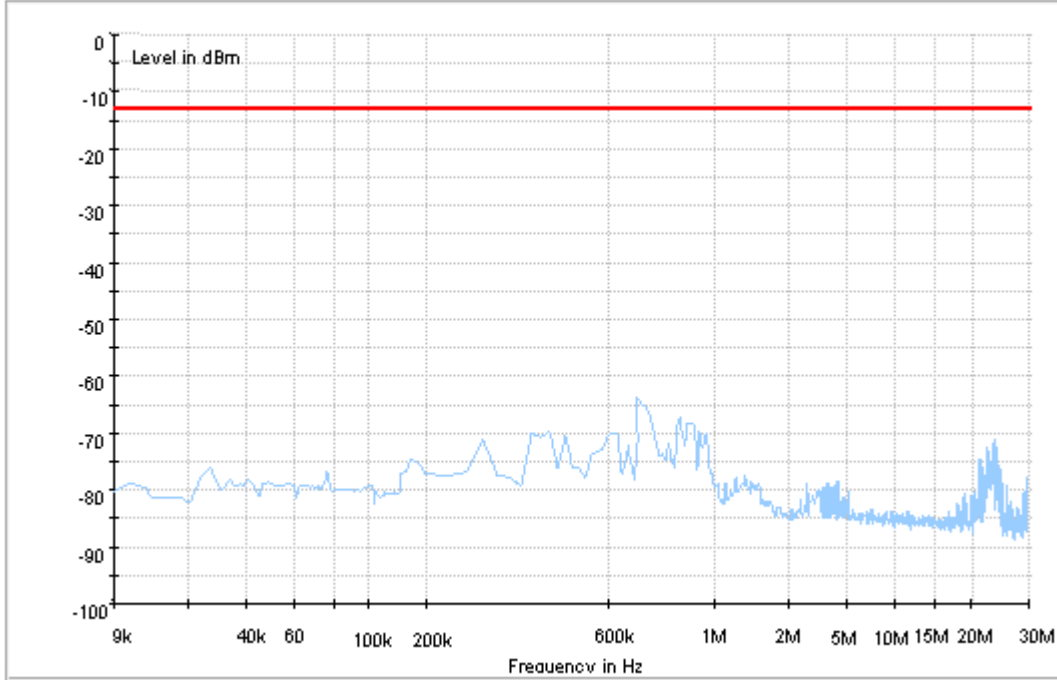
Copy of RSE-TX-DIRECTOR BELOW 1G\_L



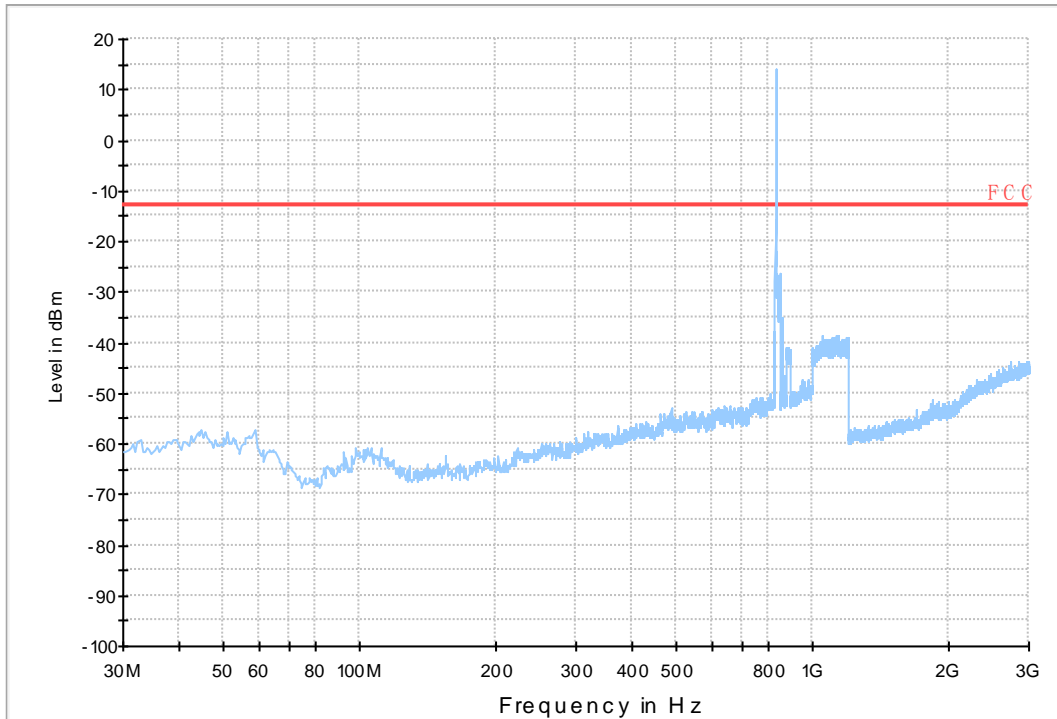
Copy of RSE-TX-DIRECTOR BELOW 1G\_H



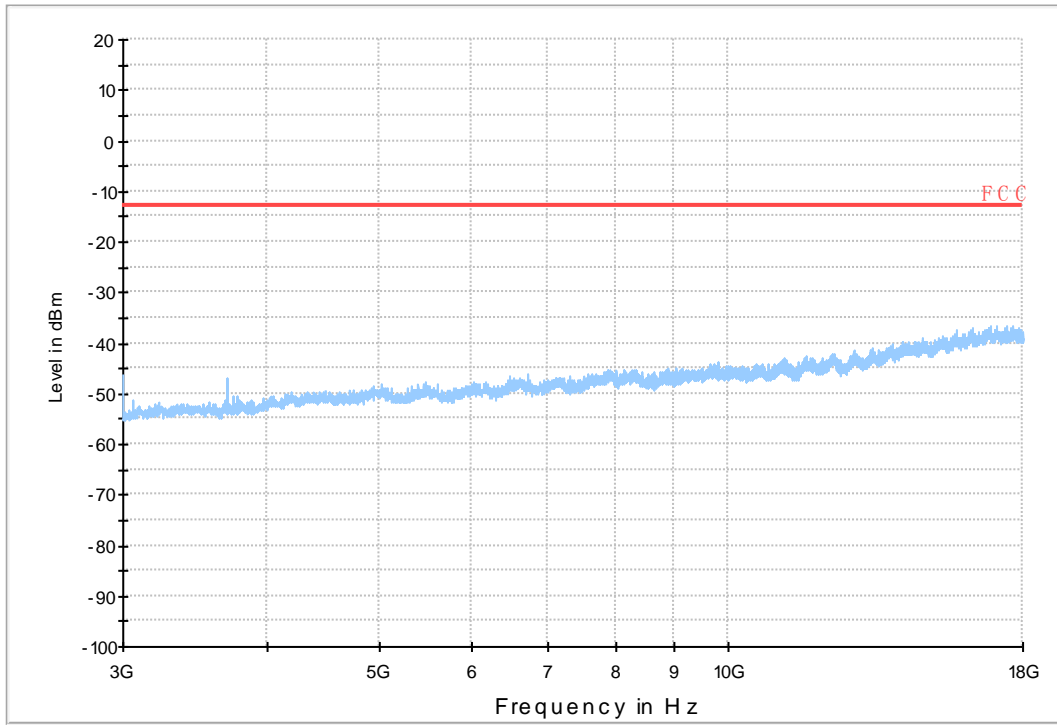
### 7.2.1.2 Test Bandwidth = 10



Copy of RSE-TX-DIRECTOR BELOW 1G\_L



Copy of RSE-TX-DIRECTOR BELOW 1G\_H



## 8Appendix\_H: Frequency Stability

### 8.1 For LTE

#### 8.1.1Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND5	LTE/TM1	1.4	LCH	TN	VL	0.36	0.00044	PASS
					VN	-1.77	-0.00215	PASS
					VH	-1.26	-0.00153	PASS
			MCH	TN	VL	-3.78	-0.00452	PASS
					VN	4.61	0.00551	PASS
					VH	3.35	0.004	PASS
			HCH	TN	VL	7.84	0.00924	PASS
					VN	0.69	0.00081	PASS
					VH	-3.62	-0.00427	PASS
		3	LCH	TN	VL	0.62	0.00075	PASS
					VN	2.43	0.00294	PASS
					VH	19.11	0.02315	PASS
			MCH	TN	VL	1.87	0.00224	PASS
					VN	-0.36	-0.00043	PASS
					VH	0.40	0.00048	PASS
			HCH	TN	VL	1.32	0.00156	PASS
					VN	0.70	0.00083	PASS
					VH	1.53	0.00181	PASS
		5	LCH	TN	VL	12.56	0.0152	PASS
					VN	0.01	0.00001	PASS
					VH	-3.50	-0.00423	PASS
			MCH	TN	VL	0.00	0	PASS
					VN	15.95	0.01907	PASS
					VH	22.27	0.02662	PASS
			HCH	TN	VL	5.18	0.00612	PASS
					VN	7.24	0.00855	PASS
					VH	3.29	0.00389	PASS
10	LCH	TN	VL	5.44	0.00656	PASS		



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					VN	-7.55	-0.00911	PASS			
					VH	2.19	0.00264	PASS			
					MCH	TN	VL	3.06	0.00366	PASS	
							VN	43.72	0.05227	PASS	
					HCH	TN	VH	7.65	0.00915	PASS	
							VL	-0.09	-0.00011	PASS	
			LCH	TN	1.4	VN	-0.19	-0.00023	PASS		
						VH	-0.36	-0.00043	PASS		
						VL	3.09	0.00375	PASS		
						VN	3.00	0.00364	PASS		
						MCH	TN	VH	2.95	0.00358	PASS
								VL	-2.06	-0.00246	PASS
	HCH	TN	3	VN	-1.67	-0.002	PASS				
				VH	-15.01	-0.01794	PASS				
				VL	2.35	0.00277	PASS				
				VN	12.60	0.01485	PASS				
				MCH	TN	VH	4.09	0.00482	PASS		
						VL	0.29	0.00035	PASS		
	LCH	TN	5	VN	1.97	0.00239	PASS				
				VH	-5.62	-0.00681	PASS				
				VL	-4.01	-0.00479	PASS				
				VN	2.49	0.00298	PASS				
				MCH	TN	VH	-1.72	-0.00206	PASS		
						VL	0.16	0.00019	PASS		
	HCH	TN	10	VN	1.03	0.00122	PASS				
				VH	-1.93	-0.00228	PASS				
				VL	12.56	0.0152	PASS				
				VN	4.02	0.00486	PASS				
				MCH	TN	VH	2.98	0.00361	PASS		
						VL	-20.06	-0.02398	PASS		
	LCH	TN		VN	-5.91	-0.00707	PASS				
				VH	4.21	0.00503	PASS				
				VL	-0.11	-0.00013	PASS				
				VN	-0.89	-0.00105	PASS				
				MCH	TN	VH	-1.60	-0.00189	PASS		
						VL	-2.26	-0.00273	PASS		
	HCH	TN		VN	8.64	0.01042	PASS				
				VH	-8.61	-0.01039	PASS				
				VL	3.89	0.00465	PASS				



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	-18.37	-0.02196	PASS
					VH	-2.17	-0.00259	PASS
			HCH	TN	VL	-1.82	-0.00216	PASS
					VN	-1.24	-0.00147	PASS
					VH	-1.14	-0.00135	PASS

## 8.1.2 Frequency Error vs. Temperature:

Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND5	-30	LTE/TM1	1.4	LCH	VN	0.44	0.00053	PASS
				MCH	VN	7.04	0.00842	PASS
				HCH	VN	4.61	0.00543	PASS
			3	LCH	VN	11.34	0.01374	PASS
				MCH	VN	-0.74	-0.00088	PASS
				HCH	VN	0.47	0.00055	PASS
			5	LCH	VN	7.17	0.00868	PASS
				MCH	VN	-7.61	-0.0091	PASS
				HCH	VN	-2.03	-0.0024	PASS
			10	LCH	VN	16.47	0.01987	PASS
				MCH	VN	-17.81	-0.02129	PASS
				HCH	VN	0.84	0.001	PASS
	-20	LTE/TM2	1.4	LCH	VN	-0.96	-0.00116	PASS
				MCH	VN	24.42	0.02919	PASS
				HCH	VN	-0.97	-0.00114	PASS
			3	LCH	VN	3.48	0.00422	PASS
				MCH	VN	2.27	0.00271	PASS
				HCH	VN	-0.87	-0.00103	PASS
			5	LCH	VN	26.51	0.03208	PASS
				MCH	VN	-46.26	-0.0553	PASS
				HCH	VN	-2.60	-0.00307	PASS
			10	LCH	VN	16.22	0.01957	PASS
				MCH	VN	3.72	0.00445	PASS
				HCH	VN	-2.16	-0.00256	PASS
-20	LTE/TM1	1.4	LCH	VN	-0.97	-0.00118	PASS	
			MCH	VN	11.83	0.01414	PASS	
			HCH	VN	6.37	0.00751	PASS	
		3	LCH	VN	0.54	0.00065	PASS	



Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
		LTE/TM2		MCH	VN	3.63	0.00434	PASS	
				HCH	VN	1.62	0.00191	PASS	
			5	LCH	VN	0.46	0.00056	PASS	
				MCH	VN	-28.04	-0.03352	PASS	
				HCH	VN	9.63	0.01138	PASS	
				10	LCH	VN	12.46	0.01503	PASS
			MCH		VN	-32.93	-0.03937	PASS	
			HCH		VN	1.09	0.00129	PASS	
			LTE/TM2	1.4	LCH	VN	5.65	0.00685	PASS
					MCH	VN	-19.87	-0.02375	PASS
					HCH	VN	-24.52	-0.0289	PASS
				3	LCH	VN	-5.35	-0.00648	PASS
		MCH			VN	-0.56	-0.00067	PASS	
		HCH			VN	6.77	0.00799	PASS	
		5		LCH	VN	-0.44	-0.00053	PASS	
				MCH	VN	-12.42	-0.01485	PASS	
				HCH	VN	1.82	0.00215	PASS	
		10		LCH	VN	-5.22	-0.0063	PASS	
				MCH	VN	-35.26	-0.04215	PASS	
				HCH	VN	1.12	0.00133	PASS	
		LTE/TM1	1.4	LCH	VN	-0.59	-0.00072	PASS	
				MCH	VN	7.87	0.00941	PASS	
				HCH	VN	9.18	0.01082	PASS	
				3	LCH	VN	2.49	0.00302	PASS
					MCH	VN	1.29	0.00154	PASS
					HCH	VN	1.27	0.0015	PASS
				5	LCH	VN	-0.07	-0.00008	PASS
					MCH	VN	4.41	0.00527	PASS
					HCH	VN	1.33	0.00157	PASS
			10	LCH	VN	-26.95	-0.03251	PASS	
				MCH	VN	1.39	0.00166	PASS	
				HCH	VN	0.11	0.00013	PASS	
			LTE/TM2	1.4	LCH	VN	0.87	0.00105	PASS
					MCH	VN	-13.19	-0.01577	PASS
					HCH	VN	-9.58	-0.01129	PASS
				3	LCH	VN	-1.49	-0.0018	PASS
					MCH	VN	-0.76	-0.00091	PASS
					HCH	VN	4.41	0.0052	PASS
		5		LCH	VN	-8.43	-0.0102	PASS	





Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
	0	LTE/TM1		MCH	VN	28.21	0.03372	PASS	
				HCH	VN	0.10	0.00012	PASS	
			10	LCH	VN	-1.54	-0.00186	PASS	
				MCH	VN	1.79	0.00214	PASS	
				HCH	VN	0.34	0.0004	PASS	
			1.4	LCH	VN	1.00	0.00121	PASS	
				MCH	VN	0.47	0.00056	PASS	
				HCH	VN	23.16	0.0273	PASS	
			3	LCH	VN	2.02	0.00245	PASS	
		MCH		VN	2.43	0.0029	PASS		
		HCH		VN	-0.30	-0.00035	PASS		
		5	LCH	VN	-0.40	-0.00048	PASS		
			MCH	VN	0.04	0.00005	PASS		
			HCH	VN	2.93	0.00346	PASS		
		10	LCH	VN	1.50	0.00181	PASS		
			MCH	VN	0.54	0.00065	PASS		
			HCH	VN	1.47	0.00174	PASS		
		LTE/TM2	1.4	LCH	VN	1.09	0.00132	PASS	
	MCH			VN	-13.46	-0.01609	PASS		
	HCH			VN	1.34	0.00158	PASS		
	3		LCH	VN	-3.95	-0.00478	PASS		
			MCH	VN	-1.40	-0.00167	PASS		
			HCH	VN	-0.99	-0.00117	PASS		
	5		LCH	VN	0.41	0.0005	PASS		
			MCH	VN	8.27	0.00989	PASS		
			HCH	VN	0.51	0.0006	PASS		
	10		LCH	VN	20.59	0.02484	PASS		
			MCH	VN	-7.20	-0.00861	PASS		
			HCH	VN	5.88	0.00697	PASS		
	10		LTE/TM1	1.4	LCH	VN	0.31	0.00038	PASS
					MCH	VN	4.96	0.00593	PASS
					HCH	VN	-3.46	-0.00408	PASS
		3		LCH	VN	7.85	0.00951	PASS	
				MCH	VN	-1.93	-0.00231	PASS	
				HCH	VN	-0.33	-0.00039	PASS	
		5		LCH	VN	10.46	0.01266	PASS	
MCH				VN	-10.73	-0.01283	PASS		
HCH				VN	-0.72	-0.00085	PASS		
10		LCH	VN	19.63	0.02368	PASS			



Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
	20	LTE/TM2		MCH	VN	0.30	0.00036	PASS	
				HCH	VN	-3.08	-0.00365	PASS	
			1.4	LCH	VN	0.49	0.00059	PASS	
				MCH	VN	-7.40	-0.00885	PASS	
			3	HCH	VN	5.08	0.00599	PASS	
				LCH	VN	-6.14	-0.00744	PASS	
		5	MCH	VN	1.52	0.00182	PASS		
			HCH	VN	-4.73	-0.00558	PASS		
			LCH	VN	-2.20	-0.00266	PASS		
		10	MCH	VN	-14.88	-0.01779	PASS		
			HCH	VN	1.63	0.00193	PASS		
			LCH	VN	18.98	0.0229	PASS		
		20	LTE/TM1	1.4	LCH	VN	-0.72	-0.00087	PASS
					MCH	VN	-11.12	-0.01329	PASS
					HCH	VN	8.85	0.01043	PASS
				3	LCH	VN	-12.37	-0.01498	PASS
					MCH	VN	2.65	0.00317	PASS
				5	HCH	VN	2.39	0.00282	PASS
	LCH				VN	6.55	0.00792	PASS	
	10			MCH	VN	-32.11	-0.03839	PASS	
				HCH	VN	0.39	0.00046	PASS	
				LCH	VN	-4.59	-0.00554	PASS	
	LTE/TM2			1.4	LCH	VN	2.82	0.00342	PASS
					MCH	VN	10.40	0.01243	PASS
			HCH		VN	-2.13	-0.00251	PASS	
			3	LCH	VN	-22.77	-0.02758	PASS	
				MCH	VN	-1.95	-0.00233	PASS	
			5	HCH	VN	-1.82	-0.00215	PASS	
				LCH	VN	4.92	0.00595	PASS	
			10	MCH	VN	0.73	0.00087	PASS	
		HCH		VN	-1.03	-0.00122	PASS		
	LCH	VN		-0.13	-0.00016	PASS			
	30	LTE/TM1	1.4	MCH	VN	-9.43	-0.01127	PASS	
				HCH	VN	-3.71	-0.0044	PASS	
				LCH	VN	-13.82	-0.01676	PASS	



Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
	40	LTE/TM1	1.4	MCH	VN	7.20	0.00861	PASS	
				HCH	VN	-1.92	-0.00226	PASS	
				LCH	VN	7.40	0.00896	PASS	
			3	MCH	VN	-1.85	-0.00221	PASS	
				HCH	VN	-2.43	-0.00287	PASS	
				LCH	VN	-0.21	-0.00025	PASS	
			5	MCH	VN	0.43	0.00051	PASS	
				HCH	VN	2.40	0.00284	PASS	
				LCH	VN	5.78	0.00697	PASS	
			10	MCH	VN	4.92	0.00588	PASS	
				HCH	VN	0.51	0.0006	PASS	
				LCH	VN	1.16	0.00141	PASS	
			LTE/TM2	1.4	MCH	VN	-2.00	-0.00239	PASS
					HCH	VN	-0.36	-0.00042	PASS
					LCH	VN	-0.04	-0.00005	PASS
				3	MCH	VN	3.05	0.00365	PASS
					HCH	VN	-1.27	-0.0015	PASS
					LCH	VN	5.72	0.00692	PASS
		5		MCH	VN	0.20	0.00024	PASS	
				HCH	VN	-1.27	-0.0015	PASS	
				LCH	VN	-9.54	-0.01151	PASS	
		10		MCH	VN	12.86	0.01537	PASS	
				HCH	VN	3.25	0.00385	PASS	
				LCH	VN	-4.76	-0.00577	PASS	
		LTE/TM1		1.4	MCH	VN	-3.05	-0.00365	PASS
					HCH	VN	3.13	0.00369	PASS
					LCH	VN	-9.03	-0.01094	PASS
				3	MCH	VN	-0.87	-0.00104	PASS
					HCH	VN	5.28	0.00623	PASS
					LCH	VN	4.15	0.00502	PASS
			5	MCH	VN	-16.85	-0.02014	PASS	
				HCH	VN	-1.52	-0.0018	PASS	
				LCH	VN	-12.15	-0.01466	PASS	
			10	MCH	VN	-1.59	-0.0019	PASS	
				HCH	VN	-1.65	-0.00195	PASS	
				LCH	VN	-0.21	-0.00025	PASS	
LTE/TM2	1.4		MCH	VN	-1.26	-0.00151	PASS		
			HCH	VN	10.34	0.01219	PASS		
			LCH	VN	-2.47	-0.00299	PASS		
	3		LCH	VN	-2.47	-0.00299	PASS		



Test Band	Test Temp.	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
			5	MCH	VN	0.53	0.00063	PASS		
				HCH	VN	-1.92	-0.00227	PASS		
				LCH	VN	-0.26	-0.00031	PASS		
				MCH	VN	-4.28	-0.00512	PASS		
				HCH	VN	-0.86	-0.00102	PASS		
				LCH	VN	15.05	0.01815	PASS		
			10	MCH	VN	-1.69	-0.00202	PASS		
				HCH	VN	-0.19	-0.00023	PASS		
				LCH	VN	0.92	0.00112	PASS		
			50	LTE/TM1	1.4	MCH	VN	13.19	0.01577	PASS
						HCH	VN	-7.07	-0.00833	PASS
						LCH	VN	0.11	0.00013	PASS
					3	MCH	VN	-0.51	-0.00061	PASS
						HCH	VN	0.82	0.00097	PASS
						LCH	VN	16.72	0.02023	PASS
	5	MCH			VN	17.98	0.02149	PASS		
		HCH			VN	0.34	0.0004	PASS		
		LCH			VN	-14.36	-0.01732	PASS		
	10	MCH			VN	-12.63	-0.0151	PASS		
		HCH			VN	1.97	0.00233	PASS		
		LCH			VN	-10.14	-0.0123	PASS		
	50	LTE/TM2			1.4	MCH	VN	12.90	0.01542	PASS
						HCH	VN	-2.52	-0.00297	PASS
						LCH	VN	8.15	0.00987	PASS
			3	MCH	VN	-1.52	-0.00182	PASS		
				HCH	VN	-1.80	-0.00212	PASS		
				LCH	VN	-0.74	-0.0009	PASS		
			5	MCH	VN	-22.32	-0.02668	PASS		
				HCH	VN	0.60	0.00071	PASS		
				LCH	VN	-13.07	-0.01577	PASS		
10			MCH	VN	-14.55	-0.01739	PASS			
			HCH	VN	-0.99	-0.00117	PASS			
			LCH	VN	-0.99	-0.00117	PASS			

END