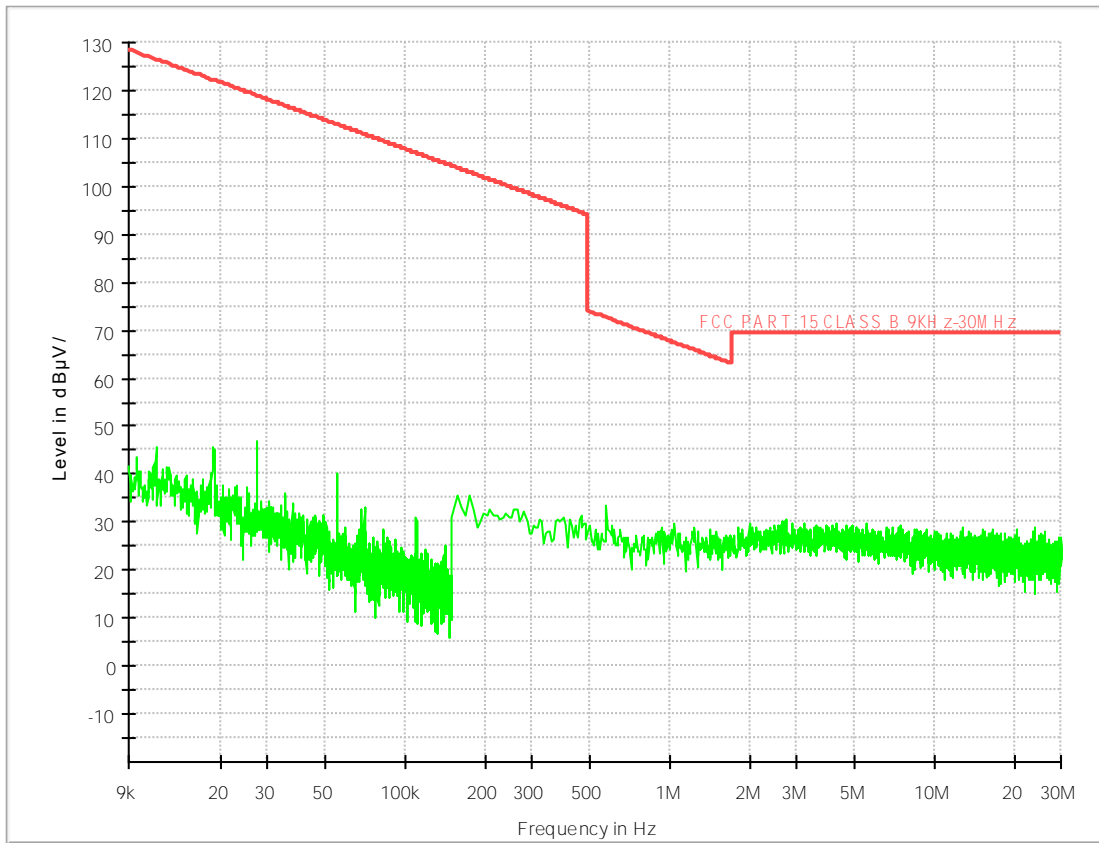


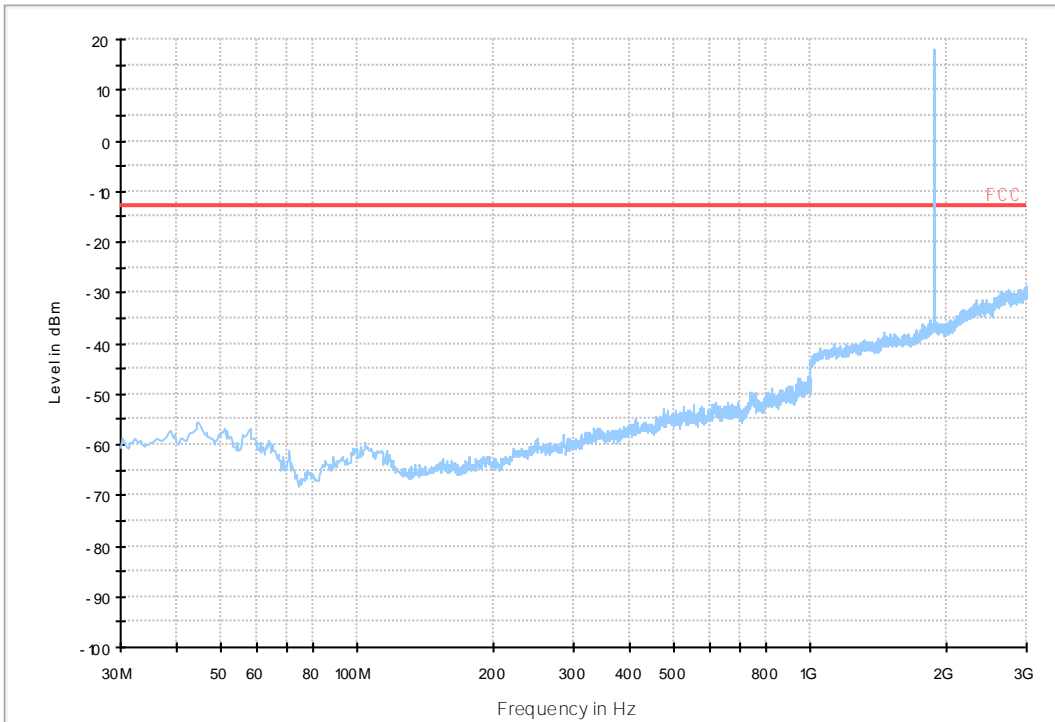
7.1.2 Test Band = BAND2_ANT2

7.1.2.1 Test Bandwidth = 1.4

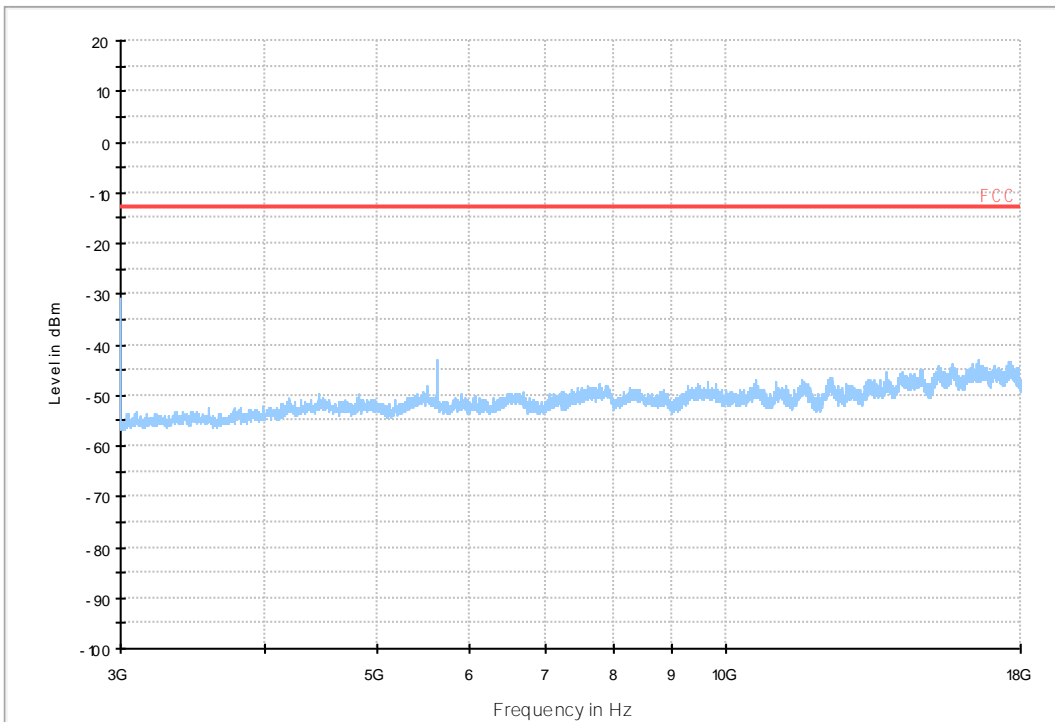




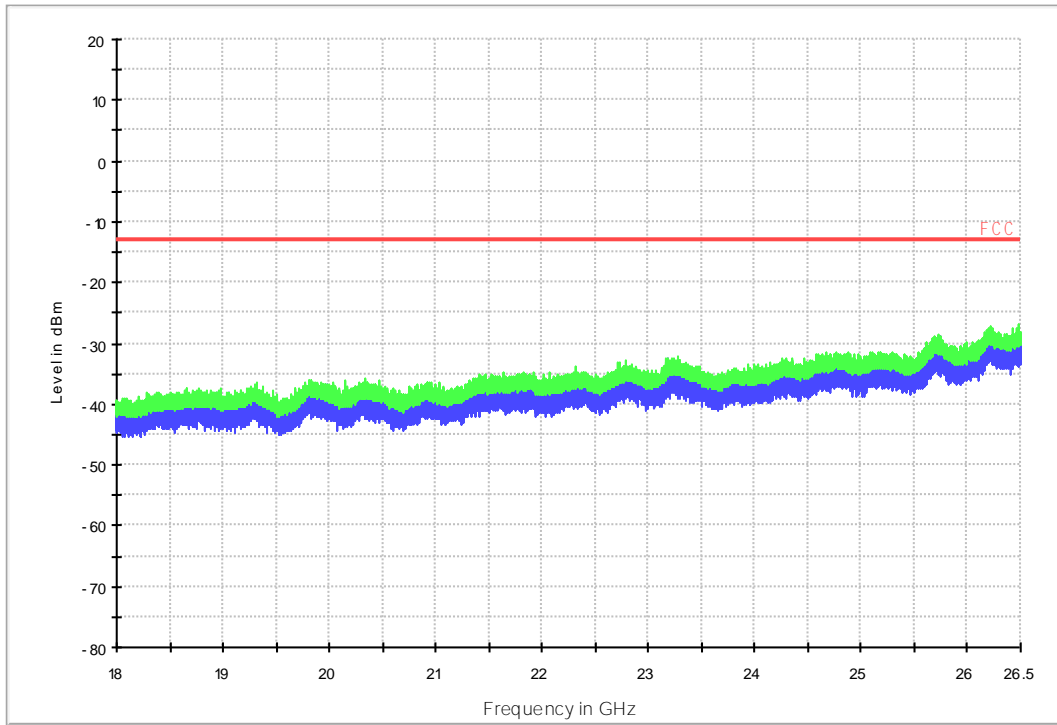
LTE FDD RSE-TX-DIRECTOR ABOVE 1.5G_L



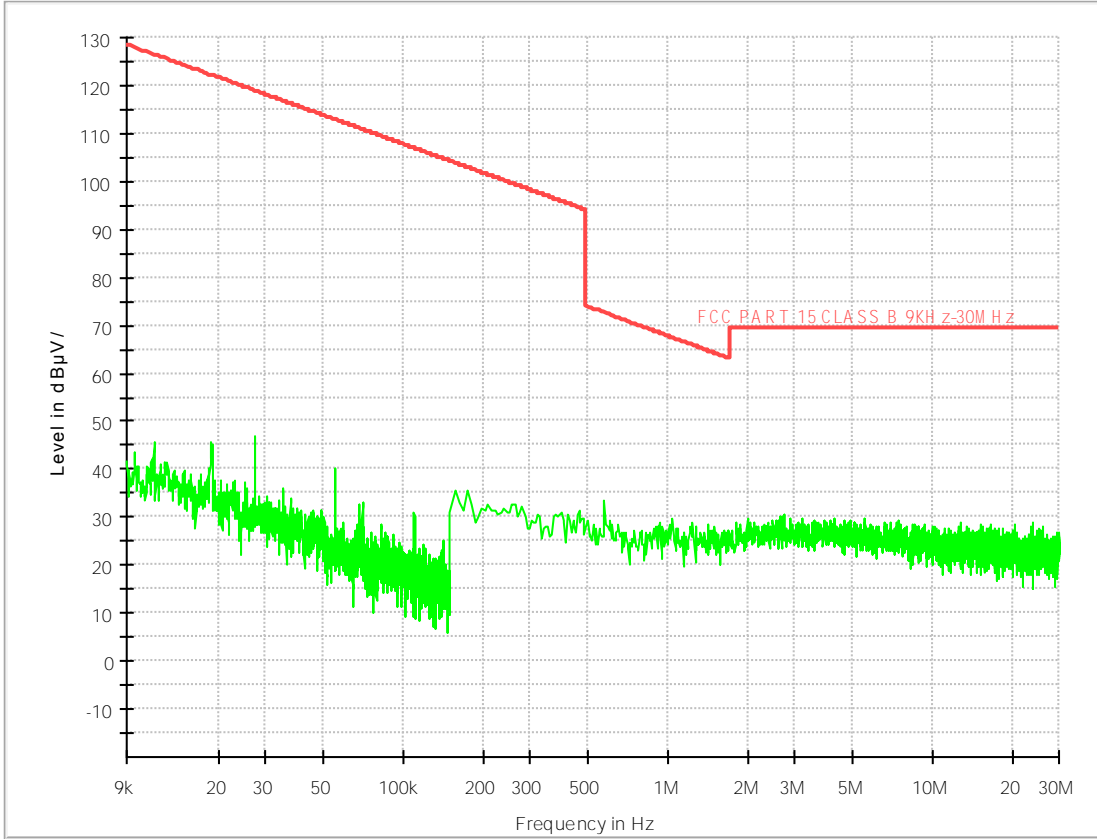
LTE FDD RSE-TX-DIRECTOR ABOVE 1.5G_H



18G~26.5G RSE-TX-DIRECT OR ABOVE 1.5G PK

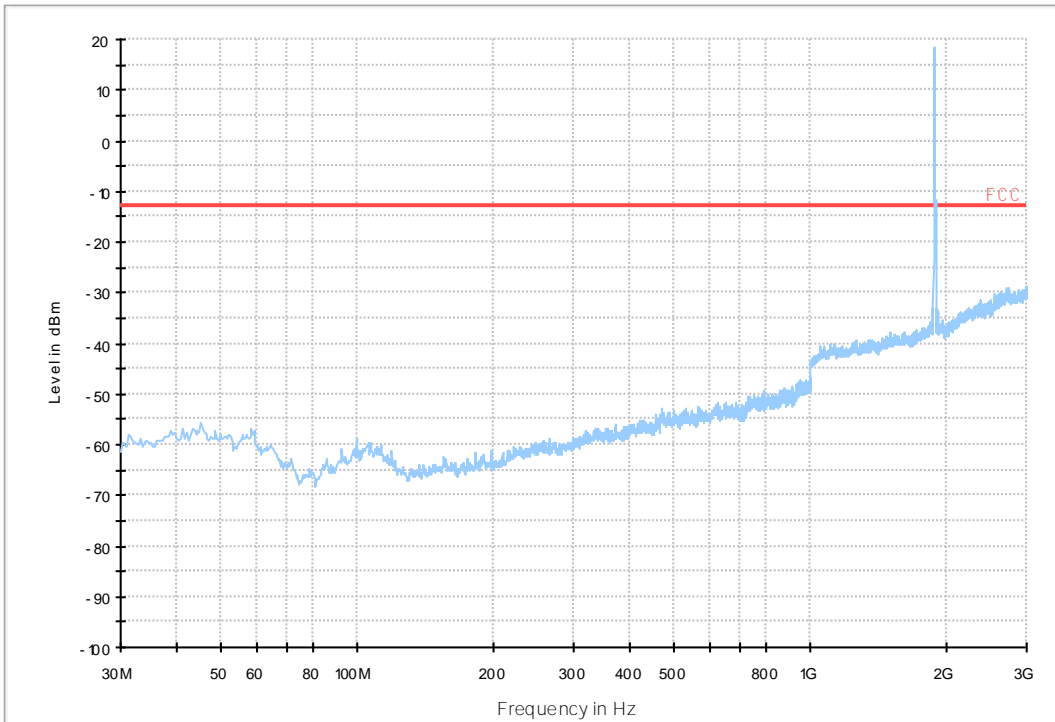


7.1.2.2 Test Bandwidth = 20

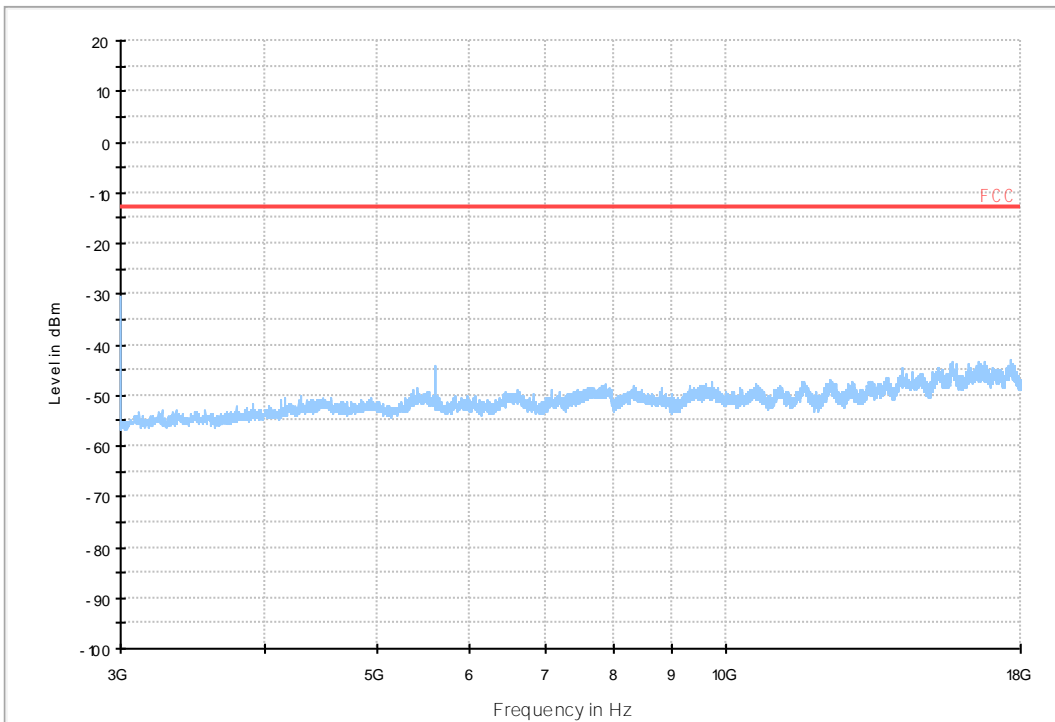




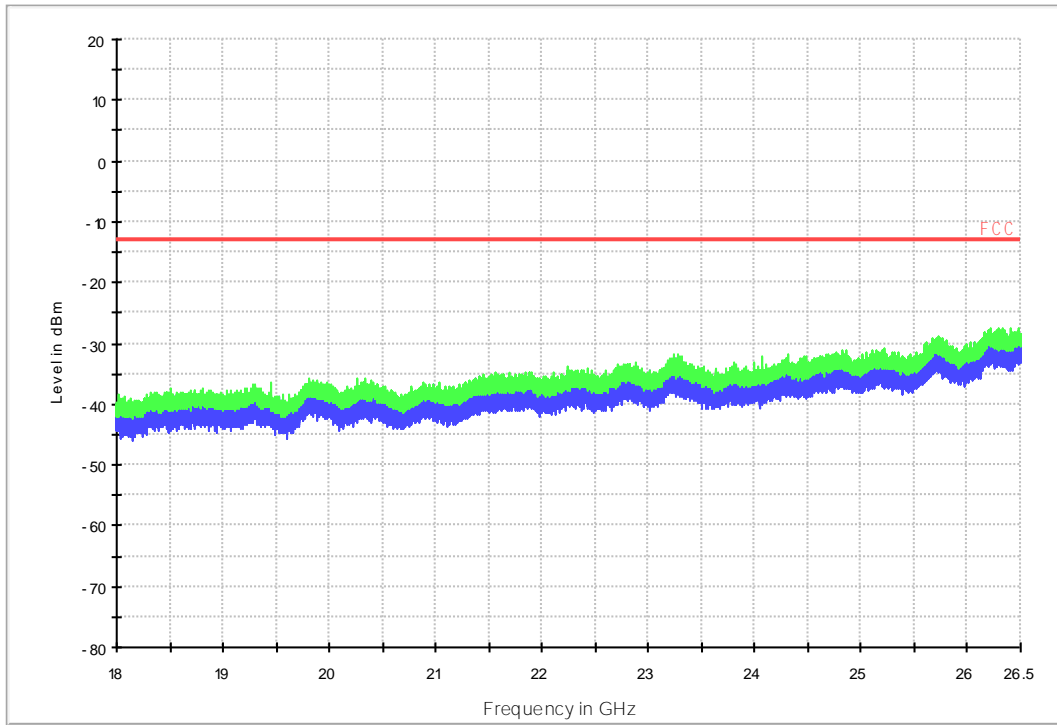
LTE FDD RSE-TX-DIRECTOR ABOVE 1.5G_L



LTE FDD RSE-TX-DIRECTOR ABOVE 1.5G_H



18G~26.5G R SE-TX-DIRECT OR ABOVE 1.5G PK



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
BAND2	LTE/TM1	1.4	LCH	TN	VL	-2.93	-0.00158	PASS
					VN	-7.07	-0.00382	PASS
					VH	-39.64	-0.02142	PASS
			MCH	TN	VL	8.51	0.00453	PASS
					VN	2.47	0.00131	PASS
					VH	-28.85	-0.01535	PASS
			HCH	TN	VL	17.15	0.00898	PASS
					VN	-8.11	-0.00425	PASS
					VH	-1.77	-0.00093	PASS
		3	LCH	TN	VL	-7.84	-0.00423	PASS
					VN	-7.28	-0.00393	PASS
					VH	-10.84	-0.00585	PASS
			MCH	TN	VL	1.16	0.00062	PASS
					VN	-3.28	-0.00174	PASS
					VH	13.70	0.00729	PASS
			HCH	TN	VL	1.02	0.00053	PASS
					VN	-8.20	-0.0043	PASS
					VH	-1.24	-0.00065	PASS
		5	LCH	TN	VL	-3.92	-0.00212	PASS
					VN	-4.12	-0.00222	PASS
					VH	-4.03	-0.00218	PASS
			MCH	TN	VL	0.43	0.00023	PASS
					VN	9.31	0.00495	PASS
					VH	5.26	0.0028	PASS
			HCH	TN	VL	-5.95	-0.00312	PASS
					VN	-2.20	-0.00115	PASS
					VH	-3.03	-0.00159	PASS
		10	LCH	TN	VL	-0.56	-0.0003	PASS
					VN	-2.16	-0.00116	PASS
					VH	0.26	0.00014	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2	15	MCH	TN	VL	-5.85	-0.00311	PASS
					VN	-7.64	-0.00406	PASS
					VH	-5.85	-0.00311	PASS
			HCH	TN	VL	-2.10	-0.0011	PASS
					VN	-1.04	-0.00055	PASS
					VH	-1.53	-0.0008	PASS
			LCH	TN	VL	-3.42	-0.00184	PASS
					VN	-3.82	-0.00206	PASS
					VH	-5.49	-0.00296	PASS
			MCH	TN	VL	-5.81	-0.00309	PASS
					VN	-6.51	-0.00346	PASS
					VH	-7.07	-0.00376	PASS
		HCH	TN	VL	-11.63	-0.00611	PASS	
				VN	-10.60	-0.00557	PASS	
				VH	-12.93	-0.0068	PASS	
		20	LCH	TN	VL	-6.02	-0.00324	PASS
					VN	-4.72	-0.00254	PASS
					VH	-3.28	-0.00176	PASS
			MCH	TN	VL	-2.72	-0.00145	PASS
					VN	-3.81	-0.00203	PASS
					VH	-3.20	-0.0017	PASS
			HCH	TN	VL	2.92	0.00154	PASS
					VN	4.84	0.00255	PASS
					VH	2.73	0.00144	PASS
		1.4	LCH	TN	VL	-11.99	-0.00648	PASS
					VN	-2.92	-0.00158	PASS
					VH	-23.42	-0.01265	PASS
			MCH	TN	VL	-35.23	-0.01874	PASS
					VN	1.76	0.00094	PASS
					VH	9.16	0.00487	PASS
			HCH	TN	VL	-24.53	-0.01285	PASS
					VN	-4.16	-0.00218	PASS
					VH	-0.97	-0.00051	PASS
		3	LCH	TN	VL	-5.98	-0.00323	PASS
					VN	-2.63	-0.00142	PASS
					VH	-0.16	-0.00009	PASS
			MCH	TN	VL	-17.27	-0.00919	PASS
					VN	1.14	0.00061	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
			HCH	TN	VH	-3.96	-0.00211	PASS	
					VL	1.13	0.00059	PASS	
					VN	-2.56	-0.00134	PASS	
					VH	-1.00	-0.00052	PASS	
		5	LCH	TN	VL	0.30	0.00016	PASS	
					VN	-4.79	-0.00259	PASS	
					VH	-4.82	-0.0026	PASS	
			MCH	TN	VL	4.26	0.00227	PASS	
					VN	3.95	0.0021	PASS	
					VH	6.58	0.0035	PASS	
			HCH	TN	VL	-1.60	-0.00084	PASS	
					VN	-2.26	-0.00118	PASS	
					VH	-2.95	-0.00155	PASS	
			10	LCH	TN	VL	0.79	0.00043	PASS
						VN	-4.53	-0.00244	PASS
						VH	1.32	0.00071	PASS
		MCH		TN	VL	-2.65	-0.00141	PASS	
					VN	-0.57	-0.0003	PASS	
					VH	-0.86	-0.00046	PASS	
		HCH		TN	VL	-1.77	-0.00093	PASS	
					VN	-1.42	-0.00075	PASS	
					VH	-2.13	-0.00112	PASS	
		15		LCH	TN	VL	-2.80	-0.00151	PASS
						VN	0.23	0.00012	PASS
						VH	-4.52	-0.00243	PASS
			MCH	TN	VL	-4.55	-0.00242	PASS	
					VN	-4.16	-0.00221	PASS	
					VH	-6.44	-0.00343	PASS	
			HCH	TN	VL	-13.52	-0.00711	PASS	
					VN	-13.00	-0.00683	PASS	
					VH	-12.77	-0.00671	PASS	
		20	LCH	TN	VL	-0.94	-0.00051	PASS	
					VN	-0.80	-0.00043	PASS	
					VH	-0.90	-0.00048	PASS	
			MCH	TN	VL	-3.69	-0.00196	PASS	
					VN	-3.22	-0.00171	PASS	
					VH	-3.08	-0.00164	PASS	
			HCH	TN	VL	1.20	0.00063	PASS	



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	-2.09	-0.0011	PASS
					VH	0.46	0.00024	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
BAND2	LTE/TM1	1.4	LCH	VN	-30	-5.94	-0.00321	PASS
					-20	-15.84	-0.00856	PASS
					-10	-7.65	-0.00413	PASS
					0	-3.76	-0.00203	PASS
					10	-9.68	-0.00523	PASS
					20	-2.98	-0.00161	PASS
					30	-15.62	-0.00844	PASS
					40	-15.09	-0.00815	PASS
			MCH	VN	-30	-4.92	-0.00262	PASS
					-20	58.85	0.0313	PASS
					-10	-12.10	-0.00644	PASS
					0	-10.37	-0.00552	PASS
					10	-6.15	-0.00327	PASS
					20	8.04	0.00428	PASS
					30	2.65	0.00141	PASS
					40	-29.53	-0.01571	PASS
			HCH	VN	-30	-3.66	-0.00192	PASS
					-20	-24.66	-0.01292	PASS
					-10	8.64	0.00453	PASS
					0	20.13	0.01054	PASS
					10	-2.10	-0.0011	PASS
					20	3.28	0.00172	PASS
					30	-0.74	-0.00039	PASS
					40	-1.79	-0.00094	PASS
		3	LCH	VN	-30	0.72	0.00039	PASS
					-20	-5.44	-0.00294	PASS
					-10	-1.92	-0.00104	PASS
					0	-11.19	-0.00604	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict			
					10	-0.43	-0.00023	PASS			
					20	-0.11	-0.00006	PASS			
					30	-11.66	-0.0063	PASS			
					40	-1.17	-0.00063	PASS			
					50	-1.60	-0.00086	PASS			
			MCH	VN	-30	-5.09	-0.00271	PASS			
					-20	-3.35	-0.00178	PASS			
					-10	-5.15	-0.00274	PASS			
					0	-2.93	-0.00156	PASS			
					10	-0.17	-0.00009	PASS			
					20	-1.12	-0.0006	PASS			
					30	-6.02	-0.0032	PASS			
					40	-8.88	-0.00472	PASS			
					50	-2.22	-0.00118	PASS			
					HCH	VN	-30	-4.68	-0.00245	PASS	
			-20	0.56			0.00029	PASS			
			-10	-7.94			-0.00416	PASS			
			0	-10.20			-0.00534	PASS			
			10	0.04			0.00002	PASS			
			20	-12.03			-0.0063	PASS			
			30	-1.79			-0.00094	PASS			
			40	-5.72			-0.003	PASS			
			5			LCH	VN	-30	-3.72	-0.00201	PASS
								-20	-3.85	-0.00208	PASS
								-10	-13.59	-0.00734	PASS
								0	-2.37	-0.00128	PASS
								10	-5.16	-0.00279	PASS
								20	-4.29	-0.00232	PASS
								30	-9.81	-0.0053	PASS
								40	-2.30	-0.00124	PASS
50	-7.32	-0.00395				PASS					
MCH	VN	-30				2.93	0.00156	PASS			
		-20				2.99	0.00159	PASS			
		-10				1.82	0.00097	PASS			
		0				5.09	0.00271	PASS			
		10				3.72	0.00198	PASS			
		20				1.96	0.00104	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					30	1.57	0.00084	PASS		
					40	3.18	0.00169	PASS		
					50	-3.63	-0.00193	PASS		
					HCH	VN	-30	-2.92	-0.00153	PASS
							-20	-3.78	-0.00198	PASS
			-10	-8.64			-0.00453	PASS		
			0	-2.43			-0.00127	PASS		
			10	-10.71			-0.00561	PASS		
			20	-1.59	-0.00083	PASS				
			30	-3.79	-0.00199	PASS				
			40	-2.60	-0.00136	PASS				
			50	-5.31	-0.00278	PASS				
			10	LCH	VN	-30	-3.32	-0.00179	PASS	
						-20	-1.17	-0.00063	PASS	
						-10	-1.40	-0.00075	PASS	
		0				0.31	0.00017	PASS		
		10				0.16	0.00009	PASS		
		20		-1.99	-0.00107	PASS				
		30		-2.36	-0.00127	PASS				
		40		-1.54	-0.00083	PASS				
		50		-1.23	-0.00066	PASS				
		MCH		VN	-30	-2.09	-0.00111	PASS		
					-20	-1.53	-0.00081	PASS		
					-10	-3.18	-0.00169	PASS		
					0	-0.49	-0.00026	PASS		
					10	0.06	0.00003	PASS		
		20		-1.36	-0.00072	PASS				
		30	-1.44	-0.00077	PASS					
		40	-0.63	-0.00034	PASS					
		50	-4.92	-0.00262	PASS					
		HCH	VN	-30	-0.69	-0.00036	PASS			
				-20	-0.76	-0.0004	PASS			
				-10	-2.89	-0.00152	PASS			
				0	-1.32	-0.00069	PASS			
				10	-3.50	-0.00184	PASS			
		20	-3.00	-0.00157	PASS					
		30	-1.39	-0.00073	PASS					
		40	-1.07	-0.00056	PASS					



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					50	-3.79	-0.00199	PASS
		15	LCH	VN	-30	-6.21	-0.00334	PASS
					-20	-0.24	-0.00013	PASS
					-10	-2.59	-0.00139	PASS
					0	-3.93	-0.00212	PASS
					10	-3.30	-0.00178	PASS
					20	-2.66	-0.00143	PASS
					30	-3.72	-0.002	PASS
					40	-6.61	-0.00356	PASS
					50	-3.18	-0.00171	PASS
			MCH	VN	-30	-2.49	-0.00132	PASS
					-20	0.97	0.00052	PASS
					-10	-0.67	-0.00036	PASS
					0	-2.02	-0.00107	PASS
					10	-1.06	-0.00056	PASS
					20	-2.06	-0.0011	PASS
					30	-2.42	-0.00129	PASS
					40	-1.76	-0.00094	PASS
			50	-1.66	-0.00088	PASS		
			HCH	VN	-30	-1.42	-0.00075	PASS
					-20	-6.17	-0.00324	PASS
					-10	-1.89	-0.00099	PASS
					0	-4.63	-0.00243	PASS
					10	-3.72	-0.00196	PASS
					20	-2.80	-0.00147	PASS
		30			-4.26	-0.00224	PASS	
		40			-4.81	-0.00253	PASS	
		50	-5.05	-0.00265	PASS			
		20	LCH	VN	-30	-4.28	-0.0023	PASS
					-20	-6.07	-0.00326	PASS
					-10	-5.72	-0.00308	PASS
					0	-4.84	-0.0026	PASS
					10	-6.12	-0.00329	PASS
					20	-3.82	-0.00205	PASS
					30	-5.01	-0.00269	PASS
					40	-5.85	-0.00315	PASS
					50	-0.37	-0.0002	PASS
			MCH	VN	-30	-2.47	-0.00131	PASS



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict	
					-20	-2.27	-0.00121	PASS	
					-10	-1.03	-0.00055	PASS	
					0	0.09	0.00005	PASS	
					10	-5.05	-0.00269	PASS	
					20	-3.00	-0.0016	PASS	
					30	-2.33	-0.00124	PASS	
					40	-1.59	-0.00085	PASS	
					50	-3.93	-0.00209	PASS	
			HCH	VN	-30	-3.05	-0.00161	PASS	
					-20	-1.14	-0.0006	PASS	
					-10	-2.42	-0.00127	PASS	
					0	-3.39	-0.00178	PASS	
					10	-1.53	-0.00081	PASS	
					20	-1.40	-0.00074	PASS	
					30	-3.60	-0.00189	PASS	
					40	-4.22	-0.00222	PASS	
			LCH	VN	-30	-58.97	-0.03186	PASS	
					-20	-2.57	-0.00139	PASS	
					-10	-29.64	-0.01602	PASS	
					0	-2.65	-0.00143	PASS	
	10	-5.78			-0.00312	PASS			
	20	-13.50			-0.00729	PASS			
	30	-7.98			-0.00431	PASS			
	40	-7.60			-0.00411	PASS			
	MCH	VN	-30	-12.35	-0.00657	PASS			
			-20	-9.33	-0.00496	PASS			
			-10	-33.16	-0.01764	PASS			
			0	10.51	0.00559	PASS			
			10	-5.65	-0.00301	PASS			
			20	-22.62	-0.01203	PASS			
			30	1.10	0.00059	PASS			
			40	-8.07	-0.00429	PASS			
	HCH	VN	-30	-7.64	-0.004	PASS			
			-20	-8.27	-0.00433	PASS			
			-10	-3.92	-0.00205	PASS			



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					0	1.43	0.00075	PASS		
					10	-12.27	-0.00643	PASS		
					20	-36.85	-0.0193	PASS		
					30	-8.58	-0.00449	PASS		
					40	-14.32	-0.0075	PASS		
					50	1.22	0.00064	PASS		
		3	LCH	VN	-30	-8.17	-0.00441	PASS		
					-20	1.56	0.00084	PASS		
					-10	-5.61	-0.00303	PASS		
					0	0.99	0.00053	PASS		
					10	-4.76	-0.00257	PASS		
					20	-2.16	-0.00117	PASS		
					30	-6.17	-0.00333	PASS		
					40	-1.82	-0.00098	PASS		
					50	-12.62	-0.00682	PASS		
					MCH	VN	-30	-14.71	-0.00782	PASS
							-20	-13.02	-0.00693	PASS
							-10	-17.18	-0.00914	PASS
							0	-15.69	-0.00835	PASS
							10	-14.18	-0.00754	PASS
							20	-17.09	-0.00909	PASS
							30	-14.15	-0.00753	PASS
							40	-19.10	-0.01016	PASS
					HCH	VN	-30	-4.11	-0.00215	PASS
		-20	1.95	0.00102			PASS			
		-10	1.26	0.00066			PASS			
		0	-5.44	-0.00285			PASS			
		10	-1.10	-0.00058			PASS			
		20	-6.79	-0.00356			PASS			
		30	-0.23	-0.00012			PASS			
		40	-7.21	-0.00378			PASS			
		5	LCH	VN	50	-2.49	-0.0013	PASS		
					-30	-0.56	-0.0003	PASS		
-20	-7.51				-0.00405	PASS				
-10	-5.59				-0.00302	PASS				
0	-9.76				-0.00527	PASS				
10	-14.51				-0.00783	PASS				



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		10			20	-4.22	-0.00228	PASS
					30	-6.15	-0.00332	PASS
					40	-6.65	-0.00359	PASS
					50	-12.19	-0.00658	PASS
			MCH	VN	-30	-10.41	-0.00554	PASS
					-20	-10.76	-0.00572	PASS
					-10	-8.58	-0.00456	PASS
					0	-8.55	-0.00455	PASS
					10	-10.17	-0.00541	PASS
					20	-9.88	-0.00526	PASS
					30	-6.82	-0.00363	PASS
					40	-11.96	-0.00636	PASS
			HCH	VN	50	-6.08	-0.00323	PASS
					-30	-2.27	-0.00119	PASS
					-20	-10.53	-0.00552	PASS
					-10	-3.32	-0.00174	PASS
					0	-16.95	-0.00889	PASS
					10	-2.75	-0.00144	PASS
					20	-9.70	-0.00509	PASS
					30	-4.16	-0.00218	PASS
			LCH	VN	40	-2.33	-0.00122	PASS
					50	-10.76	-0.00564	PASS
					-30	-0.59	-0.00032	PASS
					-20	1.87	0.00101	PASS
					-10	-0.59	-0.00032	PASS
					0	-1.89	-0.00102	PASS
					10	-2.83	-0.00153	PASS
					20	-1.10	-0.00059	PASS
					30	-2.33	-0.00126	PASS
					40	-2.23	-0.0012	PASS
					50	-2.52	-0.00136	PASS
					MCH	VN	-30	-3.08
-20	-3.23	-0.00172	PASS					
-10	-3.55	-0.00189	PASS					
0	-3.68	-0.00196	PASS					
10	-0.84	-0.00045	PASS					
20	-3.22	-0.00171	PASS					
30	-3.95	-0.0021	PASS					



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict		
					40	-4.51	-0.0024	PASS		
					50	-3.33	-0.00177	PASS		
			HCH	VN	-30	-0.20	-0.0001	PASS		
					-20	0.53	0.00028	PASS		
					-10	-1.09	-0.00057	PASS		
					0	-0.69	-0.00036	PASS		
					10	-0.51	-0.00027	PASS		
					20	-1.83	-0.00096	PASS		
					30	-1.57	-0.00082	PASS		
					40	-0.83	-0.00044	PASS		
		50	-2.72	-0.00143	PASS					
					LCH	VN	-30	-0.94	-0.00051	PASS
							-20	-3.56	-0.00192	PASS
							-10	0.00	-0.00153	PASS
							0	-6.42	-0.00346	PASS
							10	-2.26	-0.00122	PASS
							20	-3.40	-0.00183	PASS
							30	-2.40	-0.00129	PASS
							40	-2.53	-0.00136	PASS
							50	-4.78	-0.00257	PASS
										MCH
		-20	-2.00	-0.00106	PASS					
		-10	-2.10	-0.00112	PASS					
		0	-2.89	-0.00154	PASS					
		10	-2.03	-0.00108	PASS					
		20	-1.42	-0.00076	PASS					
		30	-0.62	-0.00033	PASS					
		40	-1.83	-0.00097	PASS					
		50	-1.85	-0.00098	PASS					
					HCH	VN				
							-20	10.77	0.00566	PASS
							-10	13.13	0.0069	PASS
							0	9.51	0.005	PASS
							10	11.93	0.00627	PASS
							20	11.77	0.00619	PASS
							30	12.59	0.00662	PASS
							40	10.07	0.00529	PASS
		50	12.07	0.00634	PASS					



Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Volt.	Test Temp .	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		20	LCH	VN	-30	-0.76	-0.00041	PASS
					-20	-2.05	-0.0011	PASS
					-10	-3.48	-0.00187	PASS
					0	-2.96	-0.00159	PASS
					10	-1.96	-0.00105	PASS
					20	-1.23	-0.00066	PASS
					30	0.87	0.00047	PASS
					40	-3.28	-0.00176	PASS
					50	-4.31	-0.00232	PASS
			MCH	VN	-30	-1.24	-0.00066	PASS
					-20	-1.40	-0.00074	PASS
					-10	-2.60	-0.00138	PASS
					0	-3.49	-0.00186	PASS
					10	-2.88	-0.00153	PASS
					20	-2.95	-0.00157	PASS
					30	-2.35	-0.00125	PASS
					40	-0.49	-0.00026	PASS
					50	-0.53	-0.00028	PASS
			HCH	VN	-30	-2.68	-0.00141	PASS
					-20	-3.03	-0.00159	PASS
					-10	-3.56	-0.00187	PASS
					0	-2.15	-0.00113	PASS
					10	-4.53	-0.00238	PASS
					20	-4.15	-0.00218	PASS
					30	-1.32	-0.00069	PASS
					40	-2.70	-0.00142	PASS
					50	-2.50	-0.00132	PASS

END