

8.3 For LTE

8.3.1 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
BAND4	LTE/TM1	1.4	LCH	TN	VL	-7.37	-0.00433	PASS
					VN	-1.02	-0.0016	PASS
					VH	0.77	0.00345	PASS
			MCH	TN	VL	0.10	0.00006	PASS
					VN	-0.89	-0.00051	PASS
					VH	-0.76	-0.00044	PASS
			HCH	TN	VL	-0.59	-0.00034	PASS
					VN	-1.65	-0.00094	PASS
					VH	-0.94	-0.00054	PASS
		3	LCH	TN	VL	-7.37	-0.00431	PASS
					VN	-1.02	-0.0006	PASS
					VH	0.77	0.00045	PASS
			MCH	TN	VL	0.93	0.00054	PASS
					VN	-0.29	-0.00017	PASS
					VH	-2.85	-0.00165	PASS
			HCH	TN	VL	1.97	0.00112	PASS
					VN	-1.19	-0.00068	PASS
					VH	4.26	0.00243	PASS
		5	LCH	TN	VL	5.51	0.00322	PASS
					VN	-2.92	-0.00171	PASS
					VH	-3.48	-0.00203	PASS
			MCH	TN	VL	7.07	0.00408	PASS
					VN	1.02	0.00059	PASS
					VH	1.00	0.00046	PASS
			HCH	TN	VL	-0.30	-0.00017	PASS
					VN	-1.79	-0.00102	PASS
					VH	-2.66	-0.00152	PASS
		10	LCH	TN	VL	-1.57	-0.00092	PASS
					VN	1.67	0.00097	PASS
					VH	-3.02	-0.00176	PASS
			MCH	TN	VL	1.23	0.00071	PASS
					VN	1.80	0.00104	PASS
					VH	5.14	0.00297	PASS
			HCH	TN	VL	2.66	0.00152	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		15	LCH	TN	VN	-4.35	-0.00249	PASS
					VH	1.27	0.00073	PASS
					VL	0.29	0.00017	PASS
			MCH	TN	VN	4.76	0.00277	PASS
					VH	-1.29	-0.00075	PASS
					VL	2.05	0.00118	PASS
		20	HCH	TN	VN	4.21	0.00243	PASS
					VH	6.21	0.00358	PASS
					VL	3.71	0.00212	PASS
			LCH	TN	VN	6.42	0.00367	PASS
					VH	6.25	0.00358	PASS
					VL	1.40	0.00081	PASS
		1.4	MCH	TN	VN	-1.37	-0.0008	PASS
					VH	3.33	0.00194	PASS
					VL	6.71	0.00387	PASS
			HCH	TN	VN	4.61	0.00266	PASS
					VH	2.05	0.00118	PASS
					VL	-0.30	-0.00017	PASS
	LTE/TM2	3	LCH	TN	VN	-0.72	-0.00041	PASS
					VH	-3.42	-0.00196	PASS
					VL	-1.36	-0.00079	PASS
			MCH	TN	VN	-1.20	-0.0007	PASS
					VH	0.37	0.00022	PASS
					VL	-0.30	-0.00017	PASS
		5	HCH	TN	VN	0.44	0.00025	PASS
					VH	0.99	0.00057	PASS
					VL	-3.08	-0.00176	PASS
			LCH	TN	VN	-2.16	-0.00123	PASS
					VH	-2.27	-0.00129	PASS
					VL	5.41	0.00316	PASS
		3	MCH	TN	VN	1.60	0.00093	PASS
					VH	3.12	0.00182	PASS
					VL	-2.90	-0.00167	PASS
			HCH	TN	VN	-1.80	-0.00104	PASS
					VH	1.39	0.0008	PASS
					VL	2.50	0.00143	PASS
		5	LCH	TN	VN	2.16	0.00123	PASS
					VH	4.03	0.0023	PASS
		5	LCH	TN	VL	2.12	0.00124	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					VN	0.77	0.00045	PASS
					VH	2.06	0.0012	PASS
			MCH	TN	VL	-1.12	-0.00065	PASS
					VN	-2.26	-0.0013	PASS
			HCH	TN	VH	-0.94	-0.00054	PASS
					VL	1.06	0.0006	PASS
					VN	-2.03	-0.00116	PASS
					VH	-3.75	-0.00214	PASS
		10	LCH	TN	VL	-0.57	-0.00033	PASS
					VN	-1.56	-0.00091	PASS
					VH	0.47	0.00027	PASS
			MCH	TN	VL	-4.46	-0.00257	PASS
					VN	-4.69	-0.00271	PASS
					VH	2.59	0.00149	PASS
			HCH	TN	VL	1.96	0.00112	PASS
					VN	2.42	0.00138	PASS
					VH	2.05	0.00117	PASS
		15	LCH	TN	VL	1.22	0.00071	PASS
					VN	-0.50	-0.00029	PASS
					VH	1.93	0.00112	PASS
			MCH	TN	VL	0.93	0.00054	PASS
					VN	5.71	0.0033	PASS
					VH	2.29	0.00132	PASS
			HCH	TN	VL	4.26	0.00244	PASS
					VN	3.69	0.00211	PASS
					VH	-1.92	-0.0011	PASS
		20	LCH	TN	VL	2.43	0.00141	PASS
					VN	-0.54	-0.00031	PASS
					VH	1.73	0.00101	PASS
			MCH	TN	VL	0.59	0.00034	PASS
					VN	4.89	0.00282	PASS
					VH	0.87	0.0005	PASS
			HCH	TN	VL	0.36	0.00021	PASS
					VN	-2.33	-0.00134	PASS
					VH	-1.14	-0.00065	PASS

8.3.2Frequency Error vs. Voltage:

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
BAND4	LTE/TM1	1.4	LCH	VN	-30	-1.63	-0.00095	PASS
					-20	0.67	0.00039	PASS
					-10	-0.17	-0.0001	PASS
					0	-1.24	-0.00072	PASS
					10	0.23	0.00013	PASS
					20	-1.04	-0.00061	PASS
					30	-1.57	-0.00092	PASS
					40	-0.39	-0.00023	PASS
					50	-0.99	-0.00058	PASS
			MCH	VN	-30	-2.39	-0.00138	PASS
					-20	-2.59	-0.00149	PASS
					-10	-3.95	-0.00228	PASS
					0	-0.39	-0.00023	PASS
					10	1.39	0.0008	PASS
					20	-1.43	-0.00083	PASS
					30	-0.74	-0.00043	PASS
					40	2.49	0.00144	PASS
					50	0.46	0.00027	PASS
			HCH	VN	-30	-2.76	-0.00157	PASS
					-20	-2.57	-0.00146	PASS
					-10	-3.86	-0.0022	PASS
					0	-3.52	-0.00201	PASS
					10	-3.83	-0.00218	PASS
					20	-4.56	-0.0026	PASS
					30	-0.37	-0.00021	PASS
					40	-1.16	-0.00066	PASS
					50	-2.73	-0.00156	PASS
		3	LCH	VN	-30	-0.86	-0.0005	PASS
					-20	0.94	0.00055	PASS
					-10	-1.16	-0.00068	PASS
					0	-3.95	-0.00231	PASS
					10	2.59	0.00151	PASS
					20	-4.35	-0.00254	PASS
					30	3.43	0.002	PASS
					40	-1.66	-0.00097	PASS
					50	1.03	0.0006	PASS
			MCH	VN	-30	0.49	0.00028	PASS
					-20	-0.41	-0.00024	PASS
					-10	4.11	0.00237	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					0	0.86	0.0005	PASS
					10	-0.93	-0.00054	PASS
					20	0.26	0.00015	PASS
					30	1.60	0.00092	PASS
					40	-1.00	-0.00058	PASS
					50	-2.75	-0.00159	PASS
			HCH	VN	-30	2.10	0.0012	PASS
					-20	-0.26	-0.00015	PASS
					-10	-1.69	-0.00096	PASS
					0	3.92	0.00224	PASS
					10	0.86	0.00049	PASS
					20	1.17	0.00067	PASS
					30	-0.41	-0.00023	PASS
					40	-0.72	-0.00041	PASS
					50	-4.98	-0.00284	PASS
		5	LCH	VN	-30	0.51	0.0003	PASS
					-20	-2.22	-0.0013	PASS
					-10	-1.24	-0.00072	PASS
					0	1.23	0.00072	PASS
					10	-1.76	-0.00103	PASS
					20	-1.00	-0.00058	PASS
					30	0.39	0.00023	PASS
					40	1.39	0.00081	PASS
					50	-3.38	-0.00197	PASS
			MCH	VN	-30	1.66	0.00096	PASS
					-20	3.75	0.00216	PASS
					-10	-1.20	-0.00069	PASS
					0	-3.42	-0.00197	PASS
					10	-2.62	-0.00151	PASS
					20	1.14	0.00066	PASS
					30	4.85	0.0028	PASS
					40	-0.63	-0.00036	PASS
					50	2.68	0.00155	PASS
			HCH	VN	-30	-0.24	-0.00014	PASS
					-20	-2.72	-0.00155	PASS
					-10	-2.59	-0.00148	PASS
					0	2.29	0.00131	PASS
					10	2.65	0.00151	PASS
					20	4.12	0.00235	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					30	1.13	0.00064	PASS
					40	-0.83	-0.00047	PASS
					50	0.74	0.00042	PASS
		10	LCH	VN	-30	-1.27	-0.00074	PASS
					-20	-0.62	-0.00036	PASS
					-10	-5.52	-0.00322	PASS
					0	-0.66	-0.00038	PASS
					10	-1.39	-0.00081	PASS
					20	-0.90	-0.00052	PASS
					30	0.89	0.00052	PASS
					40	-4.31	-0.00251	PASS
					50	0.17	0.0001	PASS
			MCH	VN	-30	4.02	0.00232	PASS
					-20	4.51	0.0026	PASS
					-10	2.83	0.00163	PASS
					0	-1.12	-0.00065	PASS
					10	-7.30	-0.00421	PASS
					20	4.03	0.00233	PASS
					30	6.07	0.0035	PASS
					40	2.70	0.00156	PASS
					50	4.48	0.00259	PASS
			HCH	VN	-30	-0.37	-0.00021	PASS
					-20	6.75	0.00386	PASS
					-10	1.46	0.00083	PASS
					0	1.46	0.00083	PASS
					10	-3.58	-0.00205	PASS
					20	1.52	0.00087	PASS
					30	1.75	0.001	PASS
					40	-0.09	-0.00005	PASS
					50	3.19	0.00182	PASS
		15	LCH	VN	-30	-1.13	-0.00066	PASS
					-20	-0.86	-0.0005	PASS
					-10	-2.23	-0.0013	PASS
					0	0.89	0.00052	PASS
					10	-0.62	-0.00036	PASS
					20	-0.06	-0.00003	PASS
					30	1.67	0.00097	PASS
					40	2.09	0.00122	PASS
					50	2.05	0.00119	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			MCH	VN	-30	5.62	0.00324	PASS
					-20	4.95	0.00286	PASS
					-10	8.47	0.00489	PASS
					0	-0.31	-0.00018	PASS
					10	6.97	0.00402	PASS
					20	2.52	0.00145	PASS
					30	-2.52	-0.00145	PASS
					40	-2.13	-0.00123	PASS
					50	2.05	0.00118	PASS
			HCH	VN	-30	0.90	0.00052	PASS
					-20	1.87	0.00107	PASS
					-10	3.00	0.00172	PASS
					0	6.12	0.0035	PASS
					10	5.56	0.00318	PASS
					20	2.89	0.00165	PASS
					30	9.63	0.00551	PASS
					40	7.10	0.00406	PASS
					50	7.25	0.00415	PASS
		20	LCH	VN	-30	-1.26	-0.00073	PASS
					-20	1.65	0.00096	PASS
					-10	-0.16	-0.00009	PASS
					0	2.10	0.00122	PASS
					10	1.65	0.00096	PASS
					20	0.69	0.0004	PASS
					30	0.46	0.00027	PASS
					40	-0.54	-0.00031	PASS
					50	2.73	0.00159	PASS
			MCH	VN	-30	5.26	0.00304	PASS
					-20	4.16	0.0024	PASS
					-10	5.22	0.00301	PASS
					0	7.20	0.00416	PASS
					10	-0.57	-0.00033	PASS
					20	5.81	0.00335	PASS
					30	6.62	0.00382	PASS
					40	0.07	0.00004	PASS
					50	4.36	0.00252	PASS
			HCH	VN	-30	2.60	0.00149	PASS
					-20	-1.69	-0.00097	PASS
					-10	-1.00	-0.00057	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
	LTE/TM2	1.4			0	2.47	0.00142	PASS
					10	1.36	0.00078	PASS
					20	-1.02	-0.00058	PASS
					30	-1.14	-0.00065	PASS
					40	-1.16	-0.00066	PASS
					50	-2.09	-0.0012	PASS
			LCH	VN	-30	-0.03	-0.00002	PASS
					-20	-0.72	-0.00042	PASS
					-10	-1.17	-0.00068	PASS
					0	-2.36	-0.00138	PASS
					10	-1.19	-0.0007	PASS
					20	-1.46	-0.00085	PASS
					30	-0.99	-0.00058	PASS
					40	-1.37	-0.0008	PASS
					50	0.26	0.00015	PASS
			MCH	VN	-30	2.47	0.00143	PASS
					-20	2.55	0.00147	PASS
					-10	-1.59	-0.00092	PASS
					0	-0.44	-0.00025	PASS
					10	-0.29	-0.00017	PASS
					20	-2.89	-0.00167	PASS
					30	-0.30	-0.00017	PASS
					40	-1.42	-0.00082	PASS
					50	0.77	0.00044	PASS
			HCH	VN	-30	0.37	0.00021	PASS
					-20	-1.75	-0.001	PASS
					-10	-0.56	-0.00032	PASS
					0	0.14	0.00008	PASS
					10	0.96	0.00055	PASS
					20	-3.62	-0.00206	PASS
					30	-2.57	-0.00146	PASS
					40	0.31	0.00018	PASS
					50	-2.96	-0.00169	PASS
		3	LCH	VN	-30	0.83	0.00048	PASS
					-20	-2.13	-0.00124	PASS
					-10	-3.60	-0.0021	PASS
					0	2.46	0.00144	PASS
					10	-2.05	-0.0012	PASS
					20	2.16	0.00126	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					30	3.78	0.00221	PASS
					40	-0.04	-0.00002	PASS
					50	0.40	0.00023	PASS
			MCH	VN	-30	3.58	0.00207	PASS
					-20	4.82	0.00278	PASS
					-10	2.32	0.00134	PASS
					0	2.27	0.00131	PASS
					10	7.57	0.00437	PASS
					20	-1.03	-0.00059	PASS
					30	2.12	0.00122	PASS
					40	1.93	0.00111	PASS
					50	-0.67	-0.00039	PASS
			HCH	VN	-30	0.92	0.00052	PASS
					-20	0.77	0.00044	PASS
					-10	0.96	0.00055	PASS
					0	-1.40	-0.0008	PASS
					10	-1.67	-0.00095	PASS
					20	-0.29	-0.00017	PASS
					30	-1.00	-0.00057	PASS
					40	-3.00	-0.00171	PASS
					50	0.57	0.00033	PASS
		5	LCH	VN	-30	1.73	0.00101	PASS
					-20	-4.38	-0.00256	PASS
					-10	-3.29	-0.00192	PASS
					0	-0.14	-0.00008	PASS
					10	-1.03	-0.0006	PASS
					20	1.20	0.0007	PASS
					30	-1.83	-0.00107	PASS
					40	0.82	0.00048	PASS
					50	2.22	0.0013	PASS
			MCH	VN	-30	7.90	0.00456	PASS
					-20	-7.74	-0.00447	PASS
					-10	3.79	0.00219	PASS
					0	1.92	0.00111	PASS
					10	-0.79	-0.00046	PASS
					20	-0.29	-0.00017	PASS
					30	-1.09	-0.00063	PASS
					40	0.19	0.00011	PASS
					50	6.67	0.00385	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			HCH	VN	-30	-0.66	-0.00038	PASS
					-20	-1.10	-0.00063	PASS
					-10	-1.54	-0.00088	PASS
					0	-2.25	-0.00128	PASS
					10	-3.53	-0.00201	PASS
					20	1.16	0.00066	PASS
					30	-2.82	-0.00161	PASS
					40	-0.92	-0.00052	PASS
					50	2.32	0.00132	PASS
		10	LCH	VN	-30	1.47	0.00086	PASS
					-20	2.23	0.0013	PASS
					-10	2.96	0.00173	PASS
					0	2.16	0.00126	PASS
					10	-3.19	-0.00186	PASS
					20	-4.62	-0.00269	PASS
					30	3.12	0.00182	PASS
					40	-1.30	-0.00076	PASS
					50	3.10	0.00181	PASS
			MCH	VN	-30	2.69	0.00155	PASS
					-20	3.72	0.00215	PASS
					-10	-0.74	-0.00043	PASS
					0	4.79	0.00276	PASS
					10	1.75	0.00101	PASS
					20	5.29	0.00305	PASS
					30	1.63	0.00094	PASS
					40	3.81	0.0022	PASS
					50	3.63	0.0021	PASS
			HCH	VN	-30	5.46	0.00312	PASS
					-20	-2.02	-0.00115	PASS
					-10	-0.41	-0.00023	PASS
					0	0.77	0.00044	PASS
					10	2.27	0.0013	PASS
					20	2.89	0.00165	PASS
					30	1.57	0.0009	PASS
					40	2.43	0.00139	PASS
					50	-0.49	-0.00028	PASS
		15	LCH	VN	-30	-1.82	-0.00106	PASS
					-20	1.76	0.00102	PASS
					-10	0.79	0.00046	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		20			0	-2.29	-0.00133	PASS
					10	6.62	0.00385	PASS
					20	3.22	0.00187	PASS
					30	-0.64	-0.00037	PASS
					40	-2.65	-0.00154	PASS
					50	-3.33	-0.00194	PASS
			MCH	VN	-30	6.21	0.00358	PASS
					-20	4.75	0.00274	PASS
					-10	1.66	0.00096	PASS
					0	-0.01	-0.00001	PASS
					10	4.65	0.00268	PASS
					20	0.13	0.00008	PASS
					30	1.92	0.00111	PASS
					40	-0.06	-0.00003	PASS
					50	6.29	0.00363	PASS
			HCH	VN	-30	8.81	0.00504	PASS
					-20	3.62	0.00207	PASS
					-10	5.21	0.00298	PASS
					0	5.29	0.00303	PASS
					10	3.05	0.00175	PASS
					20	7.14	0.00409	PASS
					30	7.34	0.0042	PASS
					40	9.76	0.00559	PASS
					50	2.83	0.00162	PASS
			LCH	VN	-30	4.76	0.00277	PASS
					-20	-4.05	-0.00235	PASS
					-10	2.45	0.00142	PASS
					0	3.32	0.00193	PASS
					10	-1.57	-0.00091	PASS
					20	0.13	0.00008	PASS
					30	0.92	0.00053	PASS
					40	2.23	0.0013	PASS
					50	-0.34	-0.0002	PASS
			MCH	VN	-30	2.49	0.00144	PASS
					-20	3.88	0.00224	PASS
					-10	2.09	0.00121	PASS
					0	1.63	0.00094	PASS
					10	1.50	0.00087	PASS
					20	2.47	0.00143	PASS

Test Band	Test Mode	Test Bandwidth (MHz)	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
					30	4.11	0.00237	PASS
					40	3.71	0.00214	PASS
					50	1.29	0.00074	PASS
			HCH	VN	-30	5.11	0.00293	PASS
					-20	2.15	0.00123	PASS
					-10	-3.35	-0.00192	PASS
					0	-0.44	-0.00025	PASS
					10	-1.27	-0.00073	PASS
					20	-0.36	-0.00021	PASS
					30	-0.87	-0.0005	PASS
					40	-2.42	-0.00139	PASS
					50	-6.28	-0.0036	PASS

END