

Appendix F: Frequency Stability

Test Result

Frequency Error VS. Voltage

Test Band	Test mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CatM1 Band66	QPSK/ 20MHz	LCH	TN	VL	0.25	0.00015	PASS
				VN	0.29	0.00017	PASS
				VH	0.3	0.00017	PASS
		MCH	TN	VL	0.01	0.00001	PASS
				VN	-0.04	-0.00002	PASS
				VH	0.34	0.00019	PASS
		HCH	TN	VL	0.3	0.00017	PASS
				VN	0.24	0.00014	PASS
				VH	-0.1	-0.00006	PASS
	16QAM/ 20MHz	LCH	TN	VL	0.06	0.00003	PASS
				VN	0.57	0.00033	PASS
				VH	0.61	0.00035	PASS
		MCH	TN	VL	-0.42	-0.00024	PASS
				VN	-0.48	-0.00028	PASS
				VH	-0.83	-0.00048	PASS
		HCH	TN	VL	0.26	0.00015	PASS
				VN	-0.3	-0.00017	PASS
				VH	0.99	0.00056	PASS

Frequency Error VS. Temperature

Test Band	Test mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CatM1 Band66	QPSK/ 20MHz	LCH	VN	-30	-0.68	-0.00040	PASS
				-20	-0.19	-0.00011	PASS
				-10	-1.01	-0.00059	PASS
				0	-1.38	-0.00080	PASS
				10	0.07	0.00004	PASS
				20	-0.06	-0.00003	PASS
				30	0.48	0.00028	PASS
				40	-0.01	-0.00001	PASS
				50	0.14	0.00008	PASS
		MCH	VN	-30	-0.98	-0.00056	PASS
				-20	-1.52	-0.00087	PASS
				-10	-0.66	-0.00038	PASS
				0	-1.12	-0.00064	PASS
				10	-0.36	-0.00021	PASS
				20	-1.78	-0.00102	PASS
				30	-0.66	-0.00038	PASS
				40	-0.31	-0.00018	PASS
				50	-0.36	-0.00021	PASS
		HCH	VN	-30	-1.41	-0.00080	PASS
				-20	-1.42	-0.00080	PASS
				-10	0.83	0.00047	PASS
				0	-0.33	-0.00019	PASS
				10	-0.57	-0.00032	PASS
				20	0.95	0.00054	PASS
				30	0.29	0.00016	PASS
				40	-0.36	-0.00020	PASS
				50	-1.21	-0.00068	PASS

Test Band	Test mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CatM1 Band66	16QAM/ 20MHz	LCH	VN	-30	-0.33	-0.00019	PASS
				-20	-0.34	-0.00020	PASS
				-10	0.87	0.00051	PASS
				0	-0.56	-0.00033	PASS
				10	0.86	0.00050	PASS
				20	0.69	0.00040	PASS
				30	0.74	0.00043	PASS
				40	-0.05	-0.00003	PASS
				50	0.16	0.00009	PASS
		MCH	VN	-30	0.98	0.00056	PASS
				-20	1.03	0.00059	PASS
				-10	-0.81	-0.00046	PASS
				0	-1.28	-0.00073	PASS
				10	-0.35	-0.00020	PASS
				20	1.23	0.00070	PASS
				30	1.31	0.00075	PASS
				40	1.03	0.00059	PASS
				50	1.75	0.00100	PASS
		HCH	VN	-30	-0.66	-0.00037	PASS
				-20	-0.65	-0.00037	PASS
				-10	-0.55	-0.00031	PASS
				0	1.95	0.00110	PASS
				10	0.97	0.00055	PASS
				20	-0.51	-0.00029	PASS
				30	-0.66	-0.00037	PASS
				40	0.56	0.00032	PASS
				50	-1.07	-0.00060	PASS

Note: Only record the worst test result.

- End of the Appendix -