

Appendix F: Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	VL	NT	7.49	0.009088	±2.5	PASS
GSM850	128	VN	NT	8.39	0.010180	±2.5	PASS
GSM850	128	VH	NT	6.72	0.008153	±2.5	PASS
GSM850	190	VL	NT	8.56	0.010232	±2.5	PASS
GSM850	190	VN	NT	6.13	0.007327	±2.5	PASS
GSM850	190	VH	NT	6.94	0.008295	±2.5	PASS
GSM850	251	VL	NT	7.36	0.008671	±2.5	PASS
GSM850	251	VN	NT	8.59	0.010120	±2.5	PASS
GSM850	251	VH	NT	5.23	0.006162	±2.5	PASS
GPRS850	128	VL	NT	3.13	0.003798	±2.5	PASS
GPRS850	128	VN	NT	5.42	0.006576	±2.5	PASS
GPRS850	128	VH	NT	3.00	0.003640	±2.5	PASS
GPRS850	190	VL	NT	4.42	0.005283	±2.5	PASS
GPRS850	190	VN	NT	6.26	0.007483	±2.5	PASS
GPRS850	190	VH	NT	4.46	0.005331	±2.5	PASS
GPRS850	251	VL	NT	3.94	0.004642	±2.5	PASS
GPRS850	251	VN	NT	5.04	0.005938	±2.5	PASS
GPRS850	251	VH	NT	6.46	0.007611	±2.5	PASS
GSM1900	512	VL	NT	19.27	0.010415	±2.5	PASS
GSM1900	512	VN	NT	24.28	0.013123	±2.5	PASS
GSM1900	512	VH	NT	24.89	0.013453	±2.5	PASS
GSM1900	661	VL	NT	18.02	0.009585	±2.5	PASS
GSM1900	661	VN	NT	14.17	0.007537	±2.5	PASS
GSM1900	661	VH	NT	20.18	0.010734	±2.5	PASS
GSM1900	810	VL	NT	16.82	0.008807	±2.5	PASS
GSM1900	810	VN	NT	18.98	0.009938	±2.5	PASS
GSM1900	810	VH	NT	19.69	0.010310	±2.5	PASS
GPRS1900	512	VL	NT	19.57	0.010577	±2.5	PASS
GPRS1900	512	VN	NT	21.15	0.011431	±2.5	PASS
GPRS1900	512	VH	NT	18.89	0.010210	±2.5	PASS
GPRS1900	661	VL	NT	12.30	0.006543	±2.5	PASS
GPRS1900	661	VN	NT	19.37	0.010303	±2.5	PASS
GPRS1900	661	VH	NT	15.50	0.008245	±2.5	PASS
GPRS1900	810	VL	NT	18.40	0.009635	±2.5	PASS

GPRS1900	810	VN	NT	17.60	0.009216	±2.5	PASS
GPRS1900	810	VH	NT	17.34	0.009079	±2.5	PASS

Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	NV	-30	5.26	0.006382	±2.5	PASS
GSM850	128	NV	-20	6.01	0.007292	±2.5	PASS
GSM850	128	NV	-10	5.84	0.007086	±2.5	PASS
GSM850	128	NV	0	7.20	0.008736	±2.5	PASS
GSM850	128	NV	10	6.17	0.007486	±2.5	PASS
GSM850	128	NV	20	6.91	0.008384	±2.5	PASS
GSM850	128	NV	30	4.42	0.005363	±2.5	PASS
GSM850	128	NV	40	6.30	0.007644	±2.5	PASS
GSM850	128	NV	50	8.46	0.010264	±2.5	PASS
GSM850	190	NV	-30	6.88	0.008224	±2.5	PASS
GSM850	190	NV	-20	6.10	0.007291	±2.5	PASS
GSM850	190	NV	-10	5.62	0.006718	±2.5	PASS
GSM850	190	NV	0	6.78	0.008104	±2.5	PASS
GSM850	190	NV	10	6.81	0.008140	±2.5	PASS
GSM850	190	NV	20	6.65	0.007949	±2.5	PASS
GSM850	190	NV	30	5.71	0.006825	±2.5	PASS
GSM850	190	NV	40	4.84	0.005785	±2.5	PASS
GSM850	190	NV	50	7.23	0.008642	±2.5	PASS
GSM850	251	NV	-30	6.17	0.007269	±2.5	PASS
GSM850	251	NV	-20	5.94	0.006998	±2.5	PASS
GSM850	251	NV	-10	5.29	0.006232	±2.5	PASS
GSM850	251	NV	0	5.97	0.007033	±2.5	PASS
GSM850	251	NV	10	3.91	0.004607	±2.5	PASS
GSM850	251	NV	20	5.97	0.007033	±2.5	PASS
GSM850	251	NV	30	6.17	0.007269	±2.5	PASS
GSM850	251	NV	40	5.04	0.005938	±2.5	PASS
GSM850	251	NV	50	6.30	0.007422	±2.5	PASS
GPRS850	128	NV	-30	2.49	0.003021	±2.5	PASS
GPRS850	128	NV	-20	8.36	0.010143	±2.5	PASS
GPRS850	128	NV	-10	9.46	0.011478	±2.5	PASS
GPRS850	128	NV	0	6.55	0.007947	±2.5	PASS
GPRS850	128	NV	10	8.36	0.010143	±2.5	PASS
GPRS850	128	NV	20	11.20	0.013589	±2.5	PASS
GPRS850	128	NV	30	11.72	0.014220	±2.5	PASS

GPRS850	128	NV	40	9.94	0.012060	±2.5	PASS
GPRS850	128	NV	50	13.04	0.015821	±2.5	PASS
GPRS850	190	NV	-30	4.13	0.004937	±2.5	PASS
GPRS850	190	NV	-20	5.59	0.006682	±2.5	PASS
GPRS850	190	NV	-10	2.39	0.002857	±2.5	PASS
GPRS850	190	NV	0	5.26	0.006287	±2.5	PASS
GPRS850	190	NV	10	3.84	0.004590	±2.5	PASS
GPRS850	190	NV	20	4.26	0.005092	±2.5	PASS
GPRS850	190	NV	30	-16.30	-0.019484	±2.5	PASS
GPRS850	190	NV	40	9.49	0.011344	±2.5	PASS
GPRS850	190	NV	50	9.91	0.011846	±2.5	PASS
GPRS850	251	NV	-30	3.33	0.003923	±2.5	PASS
GPRS850	251	NV	-20	5.36	0.006315	±2.5	PASS
GPRS850	251	NV	-10	0.00	0.000000	±2.5	PASS
GPRS850	251	NV	0	5.33	0.006279	±2.5	PASS
GPRS850	251	NV	10	1.45	0.001708	±2.5	PASS
GPRS850	251	NV	20	1.94	0.002286	±2.5	PASS
GPRS850	251	NV	30	2.03	0.002392	±2.5	PASS
GPRS850	251	NV	40	3.20	0.003770	±2.5	PASS
GPRS850	251	NV	50	3.68	0.004336	±2.5	PASS
GSM1900	512	NV	-30	20.76	0.011220	±2.5	PASS
GSM1900	512	NV	-20	22.54	0.012182	±2.5	PASS
GSM1900	512	NV	-10	27.83	0.015042	±2.5	PASS
GSM1900	512	NV	0	22.21	0.012004	±2.5	PASS
GSM1900	512	NV	10	18.66	0.010085	±2.5	PASS
GSM1900	512	NV	20	19.02	0.010280	±2.5	PASS
GSM1900	512	NV	30	24.09	0.013020	±2.5	PASS
GSM1900	512	NV	40	20.21	0.010923	±2.5	PASS
GSM1900	512	NV	50	20.89	0.011291	±2.5	PASS
GSM1900	661	NV	-30	19.40	0.010319	±2.5	PASS
GSM1900	661	NV	-20	17.31	0.009207	±2.5	PASS
GSM1900	661	NV	-10	14.14	0.007521	±2.5	PASS
GSM1900	661	NV	0	21.05	0.011197	±2.5	PASS
GSM1900	661	NV	10	16.72	0.008894	±2.5	PASS
GSM1900	661	NV	20	21.50	0.011436	±2.5	PASS
GSM1900	661	NV	30	16.79	0.008931	±2.5	PASS
GSM1900	661	NV	40	21.44	0.011404	±2.5	PASS
GSM1900	661	NV	50	18.92	0.010064	±2.5	PASS
GSM1900	810	NV	-30	23.08	0.012085	±2.5	PASS
GSM1900	810	NV	-20	19.02	0.009959	±2.5	PASS

GSM1900	810	NV	-10	20.44	0.010703	±2.5	PASS
GSM1900	810	NV	0	19.24	0.010074	±2.5	PASS
GSM1900	810	NV	10	19.24	0.010074	±2.5	PASS
GSM1900	810	NV	20	18.34	0.009603	±2.5	PASS
GSM1900	810	NV	30	23.34	0.012221	±2.5	PASS
GSM1900	810	NV	40	18.56	0.009718	±2.5	PASS
GSM1900	810	NV	50	21.60	0.011310	±2.5	PASS
GPRS1900	512	NV	-30	18.24	0.009858	±2.5	PASS
GPRS1900	512	NV	-20	15.53	0.008394	±2.5	PASS
GPRS1900	512	NV	-10	17.66	0.009545	±2.5	PASS
GPRS1900	512	NV	0	22.50	0.012161	±2.5	PASS
GPRS1900	512	NV	10	28.57	0.015442	±2.5	PASS
GPRS1900	512	NV	20	25.22	0.013631	±2.5	PASS
GPRS1900	512	NV	30	19.15	0.010350	±2.5	PASS
GPRS1900	512	NV	40	27.70	0.014971	±2.5	PASS
GPRS1900	512	NV	50	22.54	0.012182	±2.5	PASS
GPRS1900	661	NV	-30	14.33	0.007622	±2.5	PASS
GPRS1900	661	NV	-20	14.11	0.007505	±2.5	PASS
GPRS1900	661	NV	-10	27.38	0.014564	±2.5	PASS
GPRS1900	661	NV	0	21.34	0.011351	±2.5	PASS
GPRS1900	661	NV	10	17.14	0.009117	±2.5	PASS
GPRS1900	661	NV	20	21.15	0.011250	±2.5	PASS
GPRS1900	661	NV	30	18.05	0.009601	±2.5	PASS
GPRS1900	661	NV	40	20.86	0.011096	±2.5	PASS
GPRS1900	661	NV	50	19.34	0.010287	±2.5	PASS
GPRS1900	810	NV	-30	17.66	0.009247	±2.5	PASS
GPRS1900	810	NV	-20	18.95	0.009923	±2.5	PASS
GPRS1900	810	NV	-10	21.05	0.011022	±2.5	PASS
GPRS1900	810	NV	0	22.79	0.011933	±2.5	PASS
GPRS1900	810	NV	10	22.05	0.011546	±2.5	PASS
GPRS1900	810	NV	20	21.70	0.011362	±2.5	PASS
GPRS1900	810	NV	30	7.88	0.004126	±2.5	PASS
GPRS1900	810	NV	40	24.44	0.012797	±2.5	PASS
GPRS1900	810	NV	50	20.92	0.010954	±2.5	PASS

Appendix G: Modulation Characteristics

Test Result

Band	Channel	Result	Verdict
GSM850	128	PASS	PASS
GSM850	190	PASS	PASS
GSM850	251	PASS	PASS
GPRS850	128	PASS	PASS
GPRS850	190	PASS	PASS
GPRS850	251	PASS	PASS
GSM1900	512	PASS	PASS
GSM1900	661	PASS	PASS
GSM1900	810	PASS	PASS
GPRS1900	512	PASS	PASS
GPRS1900	661	PASS	PASS
GPRS1900	810	PASS	PASS

Test Graphs









