

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Channel	PCL	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GSM850	128	5	32.58	30.29	38.45	PASS
GSM850	190	5	32.80	30.51	38.45	PASS
GSM850	251	5	32.61	30.32	38.45	PASS
GSM1900	512	0	29.78	32.03	33.00	PASS
GSM1900	661	0	30.12	32.37	33.00	PASS
GSM1900	810	0	29.97	32.22	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.69	30.4	38.45	PASS
GPRS850	128	5	2	32.16	29.87	38.45	PASS
GPRS850	128	5	3	30.30	28.01	38.45	PASS
GPRS850	128	5	4	29.27	26.98	38.45	PASS
GPRS850	190	5	1	32.89	30.6	38.45	PASS
GPRS850	190	5	2	32.34	30.05	38.45	PASS
GPRS850	190	5	3	30.52	28.23	38.45	PASS
GPRS850	190	5	4	29.46	27.17	38.45	PASS
GPRS850	251	5	1	32.69	30.4	38.45	PASS
GPRS850	251	5	2	32.17	29.88	38.45	PASS
GPRS850	251	5	3	30.35	28.06	38.45	PASS
GPRS850	251	5	4	29.31	27.02	38.45	PASS
GPRS1900	512	0	1	29.81	32.06	33.00	PASS
GPRS1900	512	0	2	29.06	31.31	33.00	PASS
GPRS1900	512	0	3	27.19	29.44	33.00	PASS
GPRS1900	512	0	4	26.13	28.38	33.00	PASS
GPRS1900	661	0	1	30.11	32.36	33.00	PASS
GPRS1900	661	0	2	29.40	31.65	33.00	PASS
GPRS1900	661	0	3	27.65	29.9	33.00	PASS
GPRS1900	661	0	4	26.60	28.85	33.00	PASS
GPRS1900	810	0	1	29.98	32.23	33.00	PASS
GPRS1900	810	0	2	29.28	31.53	33.00	PASS
GPRS1900	810	0	3	27.57	29.82	33.00	PASS
GPRS1900	810	0	4	26.56	28.81	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	26.67	24.38	38.45	PASS
EGPRS850	128	8	2	25.29	23	38.45	PASS
EGPRS850	128	8	3	23.03	20.74	38.45	PASS
EGPRS850	128	8	4	21.43	19.14	38.45	PASS
EGPRS850	190	8	1	26.46	24.17	38.45	PASS
EGPRS850	190	8	2	25.07	22.78	38.45	PASS
EGPRS850	190	8	3	22.82	20.53	38.45	PASS
EGPRS850	190	8	4	21.19	18.9	38.45	PASS
EGPRS850	251	8	1	26.53	24.24	38.45	PASS
EGPRS850	251	8	2	25.13	22.84	38.45	PASS
EGPRS850	251	8	3	22.89	20.6	38.45	PASS
EGPRS850	251	8	4	21.48	19.19	38.45	PASS
EGPRS1900	512	2	1	24.84	27.09	33.00	PASS
EGPRS1900	512	2	2	23.58	25.83	33.00	PASS
EGPRS1900	512	2	3	21.30	23.55	33.00	PASS
EGPRS1900	512	2	4	19.95	22.2	33.00	PASS
EGPRS1900	661	2	1	25.13	27.38	33.00	PASS
EGPRS1900	661	2	2	23.90	26.15	33.00	PASS
EGPRS1900	661	2	3	21.69	23.94	33.00	PASS
EGPRS1900	661	2	4	20.26	22.51	33.00	PASS
EGPRS1900	810	2	1	25.22	27.47	33.00	PASS
EGPRS1900	810	2	2	24.01	26.26	33.00	PASS
EGPRS1900	810	2	3	21.73	23.98	33.00	PASS
EGPRS1900	810	2	4	20.37	22.62	33.00	PASS

Remark: EIRP (dBm) = Conducted power (dBm) + Antenna Gain (dBi). (For GSM1900)

ERP (dBm) = EIRP (dBm) - 2.15 (dB). (For GSM850)

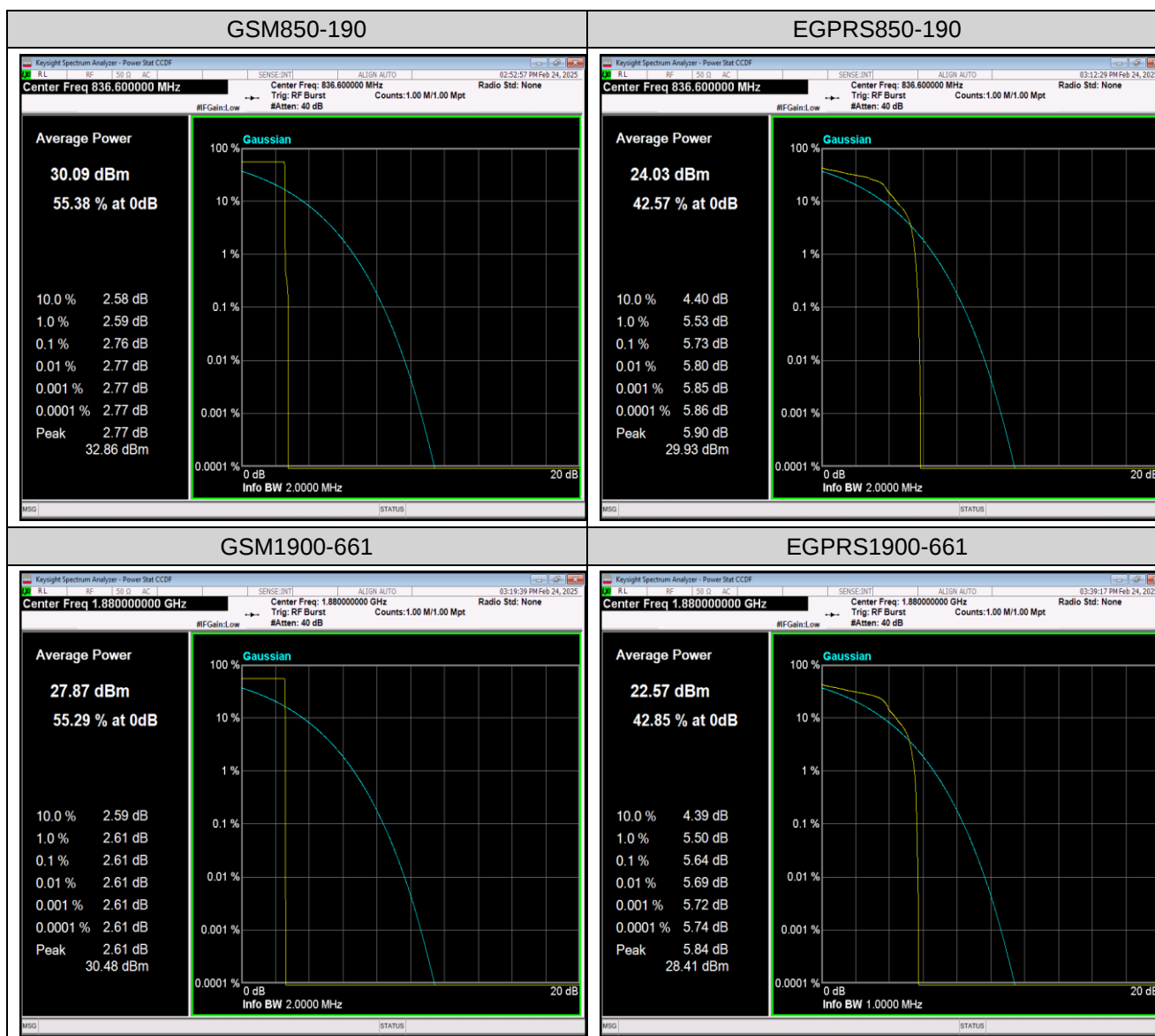
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.76	13	PASS
EGPRS850	190	8	5.73	13	PASS
GSM1900	661	0	2.61	13	PASS
EGPRS1900	661	2	5.64	13	PASS

Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs

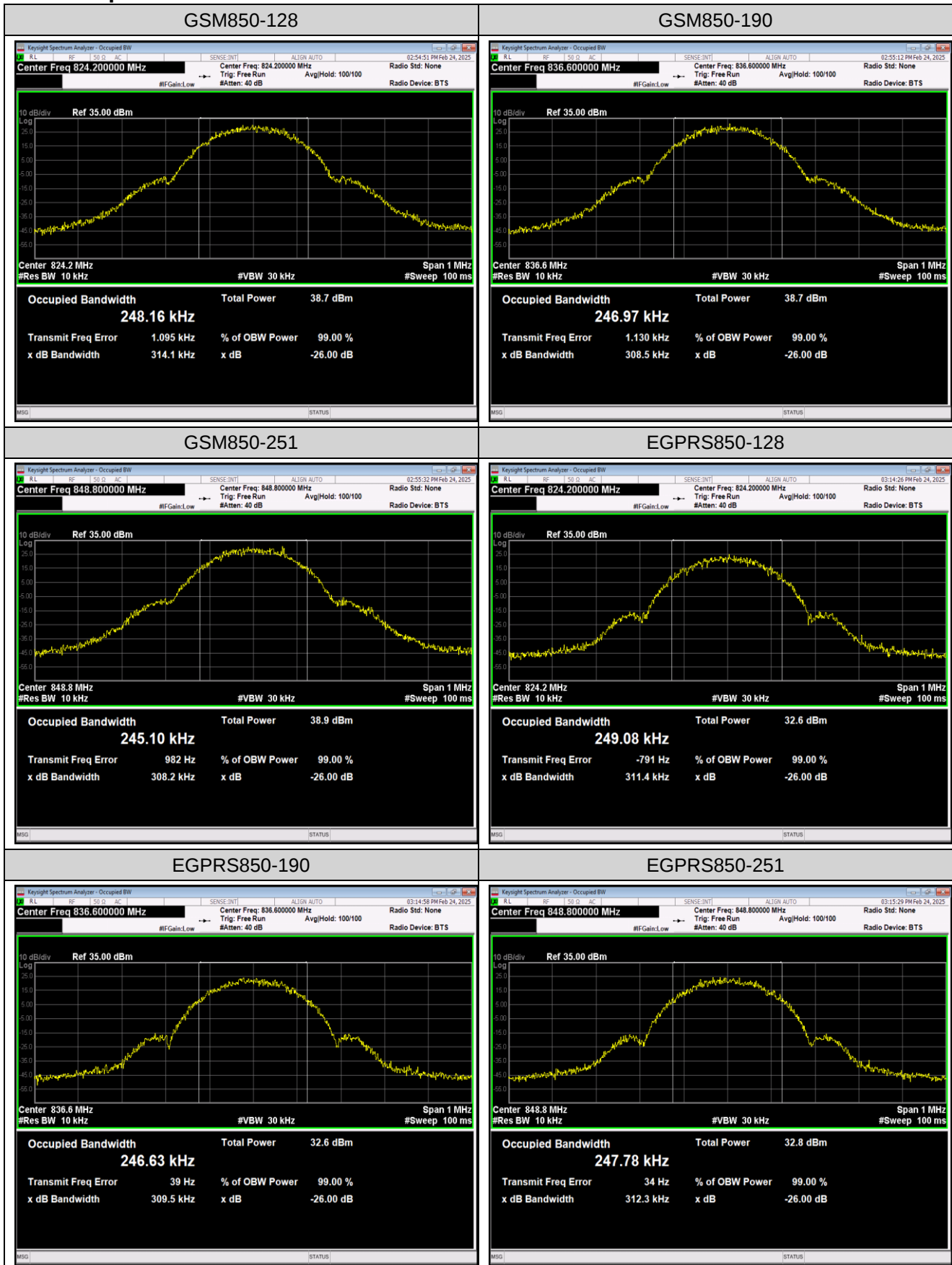


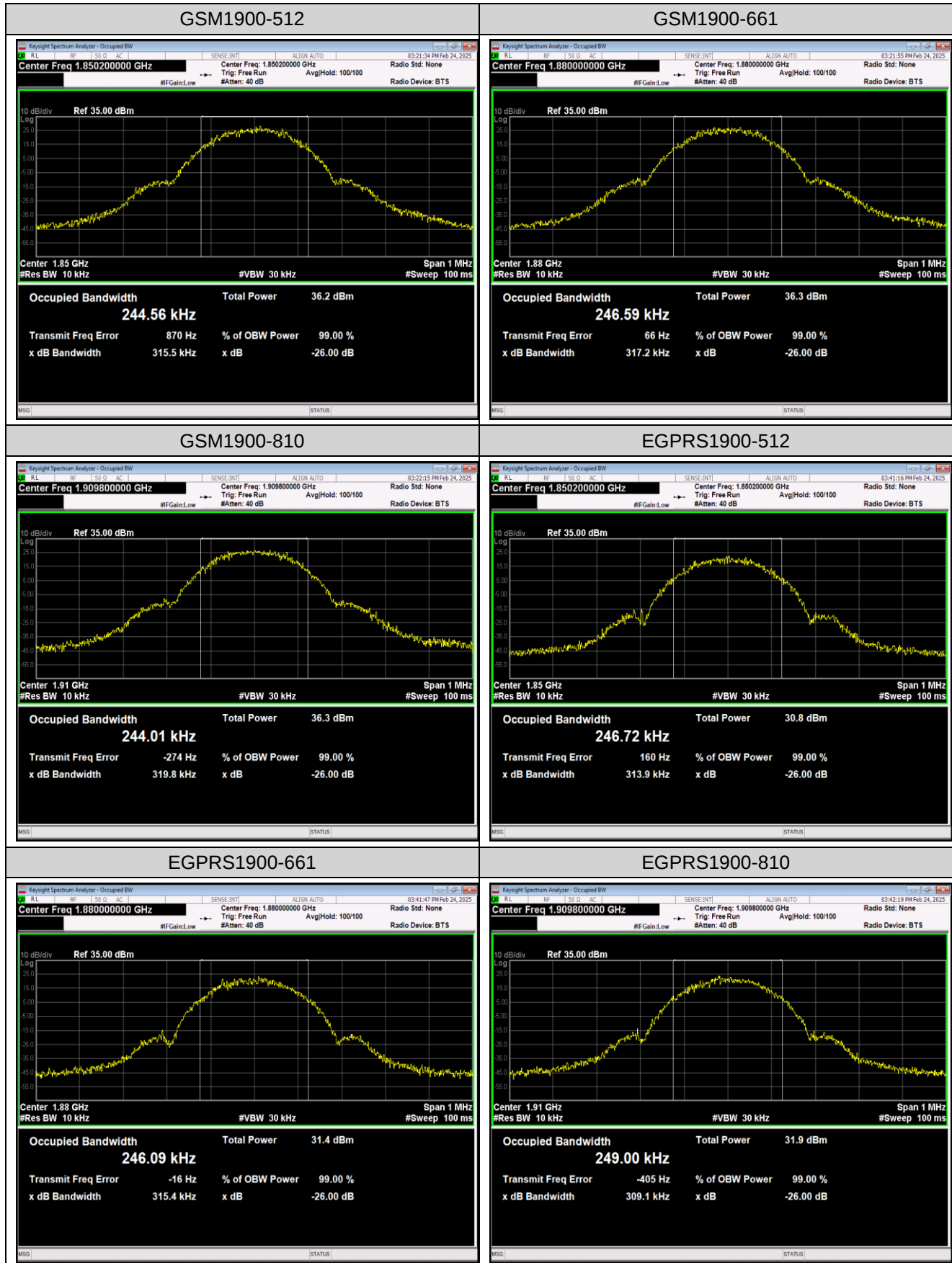
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24816	0.3141	---	PASS
GSM850	190	5	0.24697	0.3085	---	PASS
GSM850	251	5	0.24510	0.3082	---	PASS
EGPRS850	128	8	0.24908	0.3114	---	PASS
EGPRS850	190	8	0.24663	0.3095	---	PASS
EGPRS850	251	8	0.24778	0.3123	---	PASS
GSM1900	512	0	0.24456	0.3155	---	PASS
GSM1900	661	0	0.24659	0.3172	---	PASS
GSM1900	810	0	0.24401	0.3198	---	PASS
EGPRS1900	512	2	0.24672	0.3139	---	PASS
EGPRS1900	661	2	0.24609	0.3154	---	PASS
EGPRS1900	810	2	0.24900	0.3091	---	PASS

Test Graphs



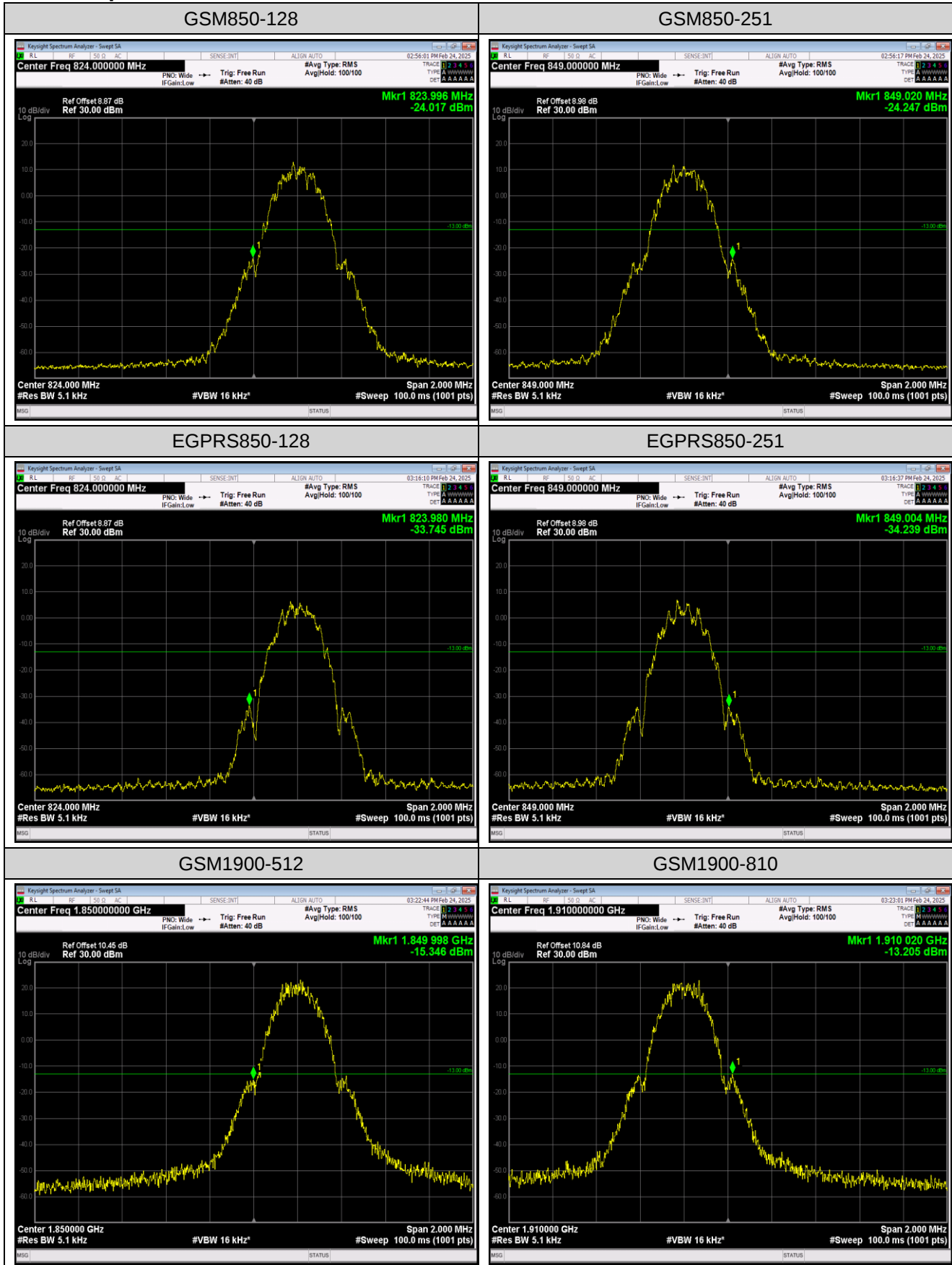


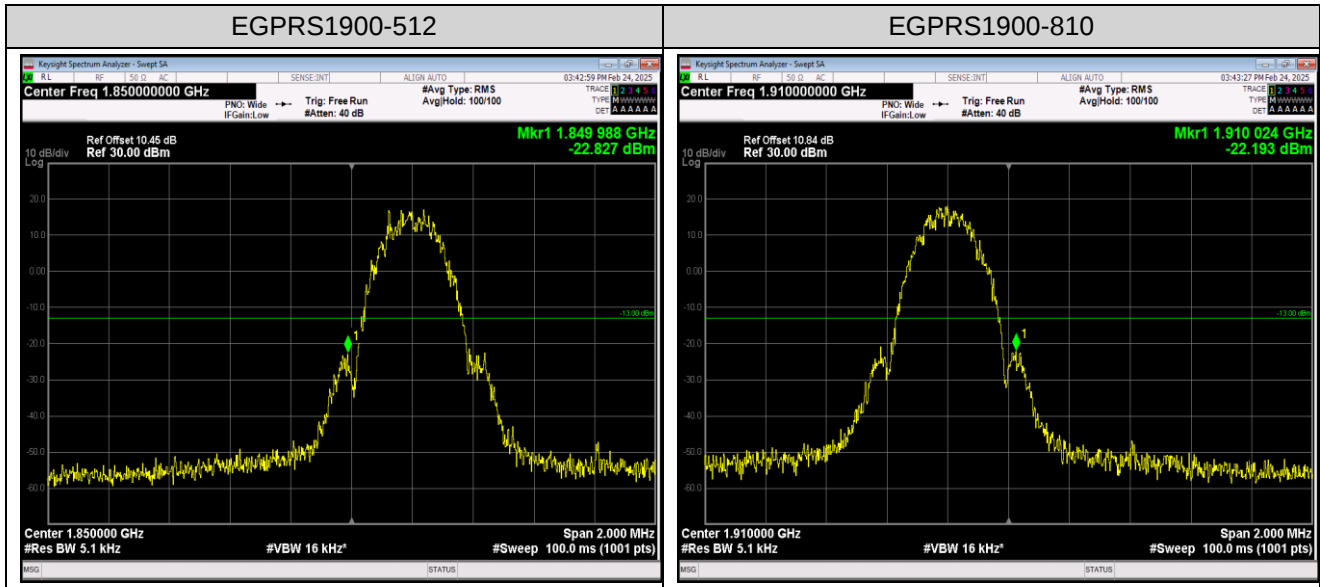
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-24.02	-13	PASS
GSM850	251	5	849.02	-24.25	-13	PASS
EGPRS850	128	8	823.98	-33.75	-13	PASS
EGPRS850	251	8	849.00	-34.24	-13	PASS
GSM1900	512	0	1850.00	-15.35	-13	PASS
GSM1900	810	0	1910.02	-13.21	-13	PASS
EGPRS1900	512	2	1849.99	-22.83	-13	PASS
EGPRS1900	810	2	1910.02	-22.19	-13	PASS

Test Graphs





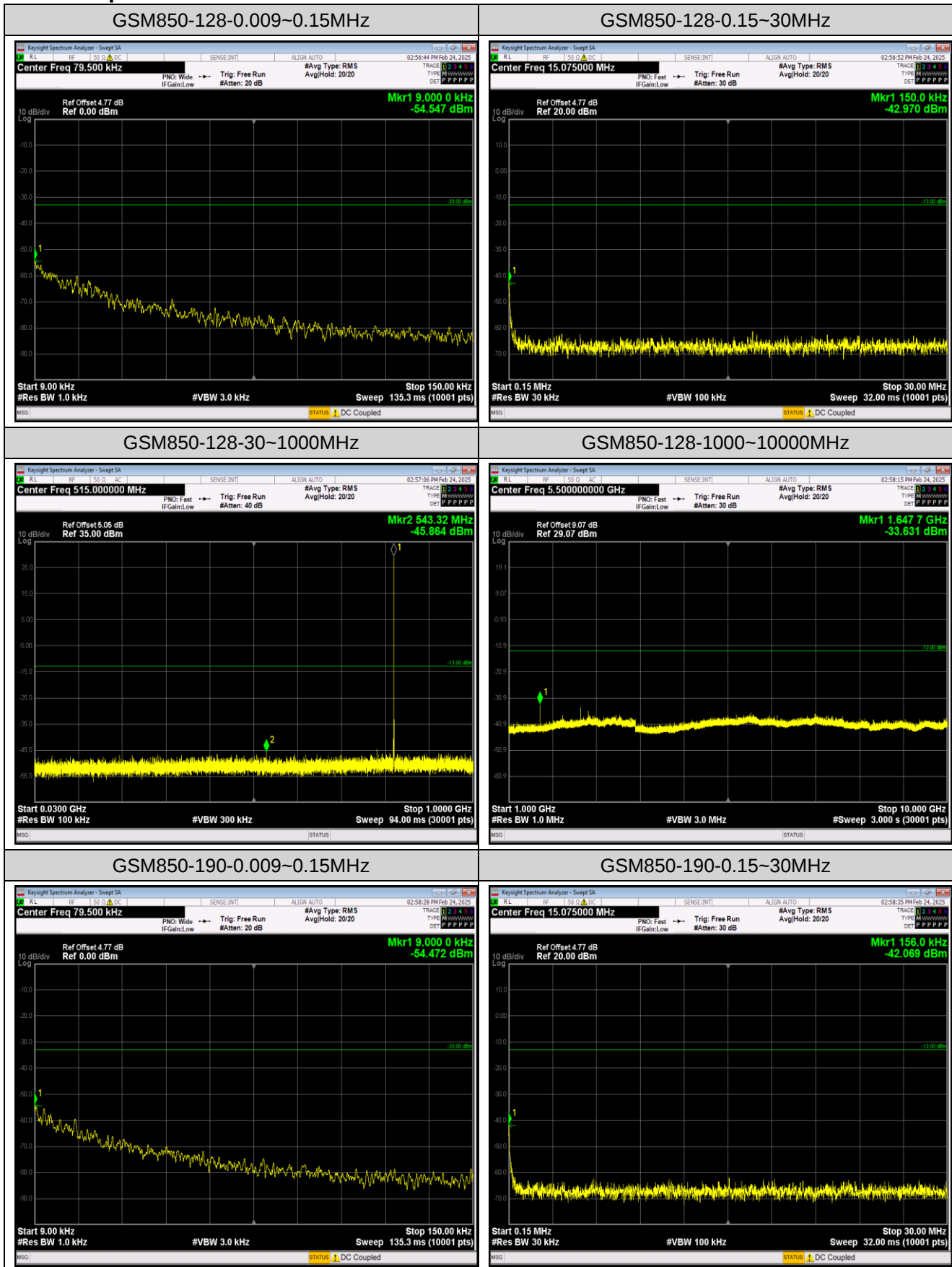
Appendix E: Conducted Spurious Emission

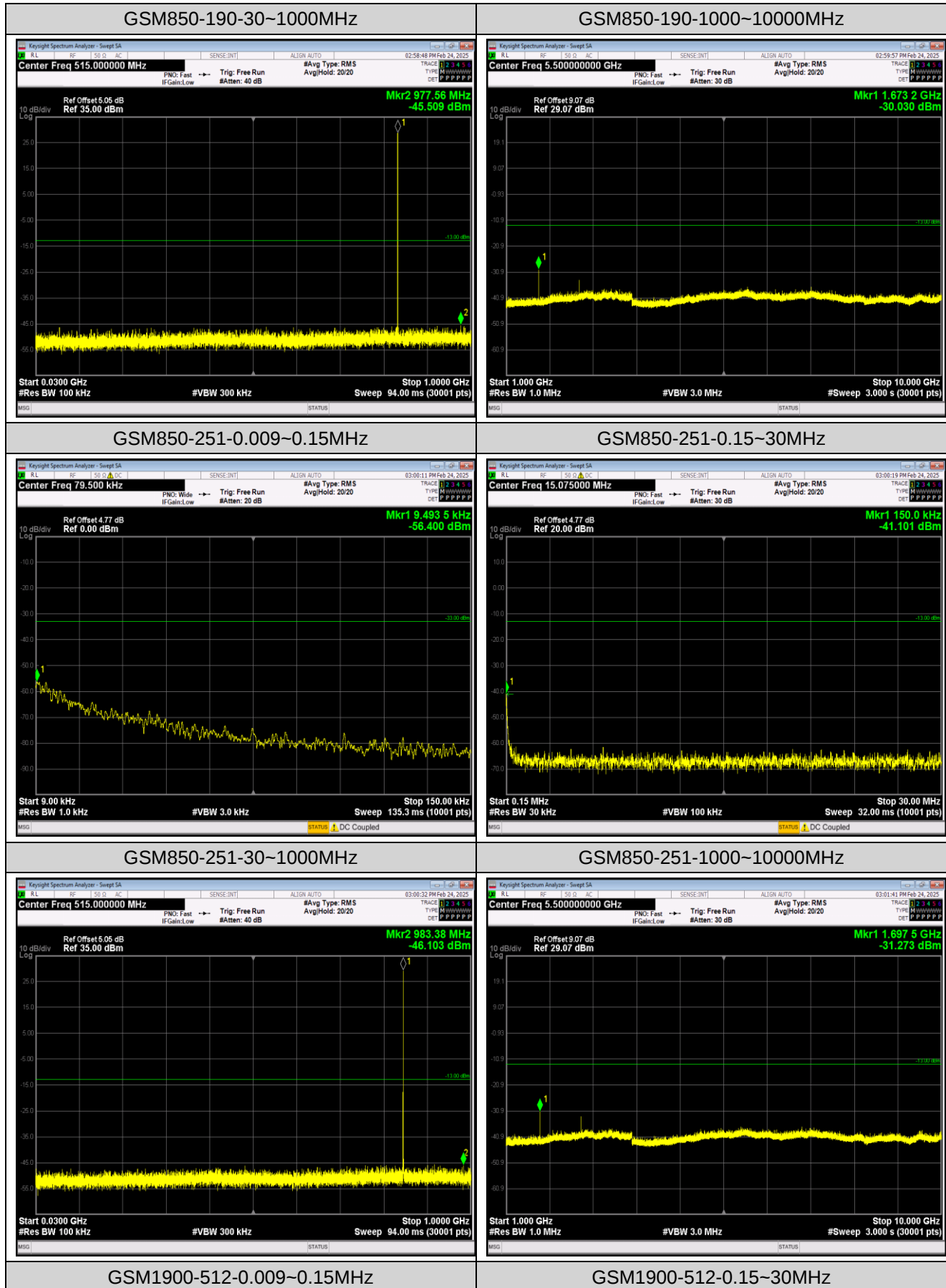
Test Result

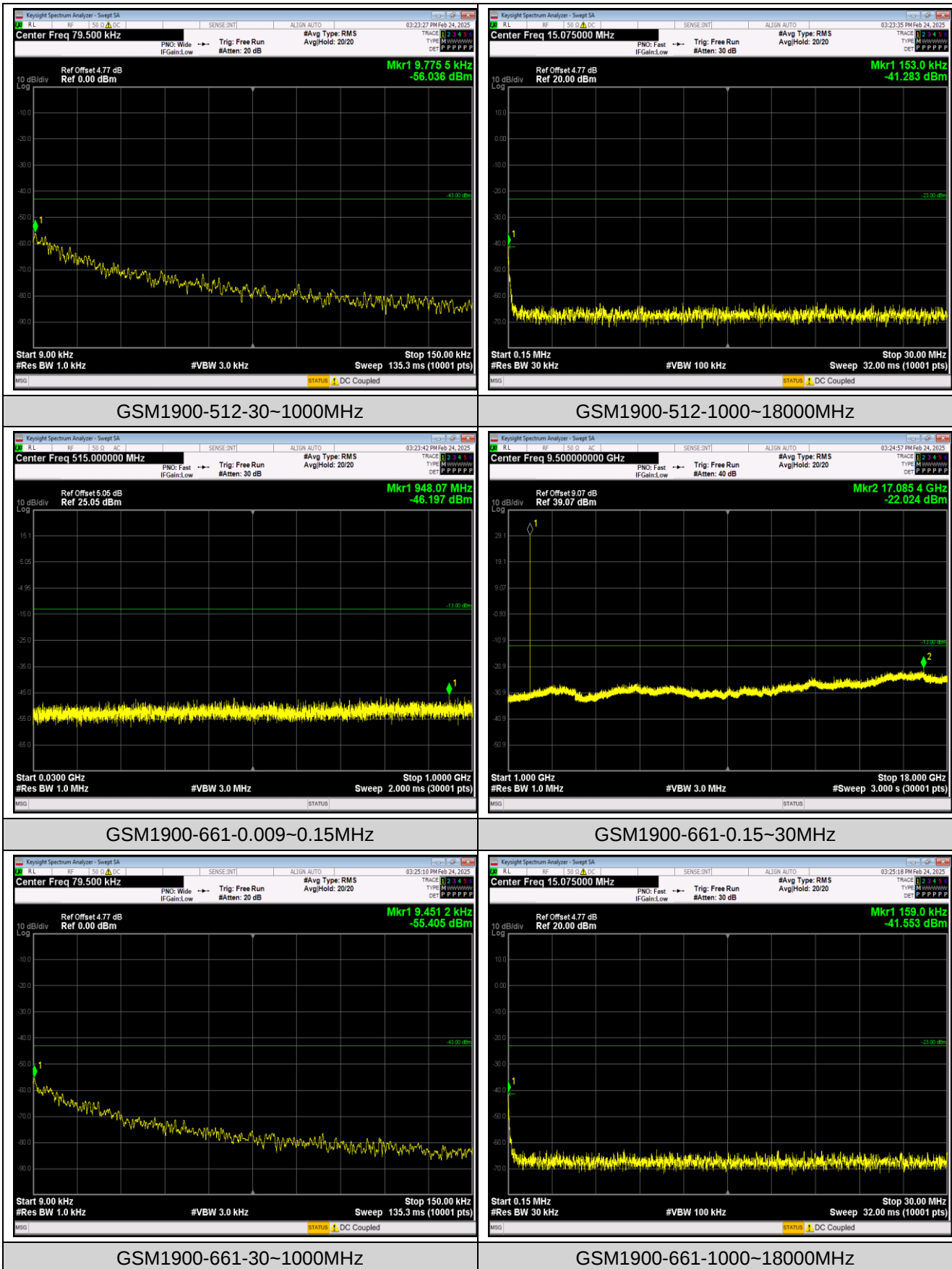
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-54.55	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-42.97	-13	PASS
GSM850	128	5	30~1000MHz	543.32	-45.86	-13	PASS
GSM850	128	5	1000~10000MHz	1647.7	-33.63	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-54.47	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-42.07	-13	PASS
GSM850	190	5	30~1000MHz	977.56	-45.51	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-30.03	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-56.4	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-41.1	-13	PASS
GSM850	251	5	30~1000MHz	983.38	-46.1	-13	PASS
GSM850	251	5	1000~10000MHz	1697.5	-31.27	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.04	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-41.28	-23	PASS
GSM1900	512	0	30~1000MHz	948.07	-46.2	-13	PASS
GSM1900	512	0	1000~18000MHz	17085.4	-22.02	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-55.41	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-41.55	-23	PASS
GSM1900	661	0	30~1000MHz	859.54	-45.45	-13	PASS
GSM1900	661	0	1000~18000MHz	16994.73	-22.48	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.8	-43	PASS
GSM1900	810	0	0.15~30MHz	0.16	-43.58	-23	PASS
GSM1900	810	0	30~1000MHz	835.04	-46.66	-13	PASS
GSM1900	810	0	1000~18000MHz	16203.1	-22.48	-13	PASS

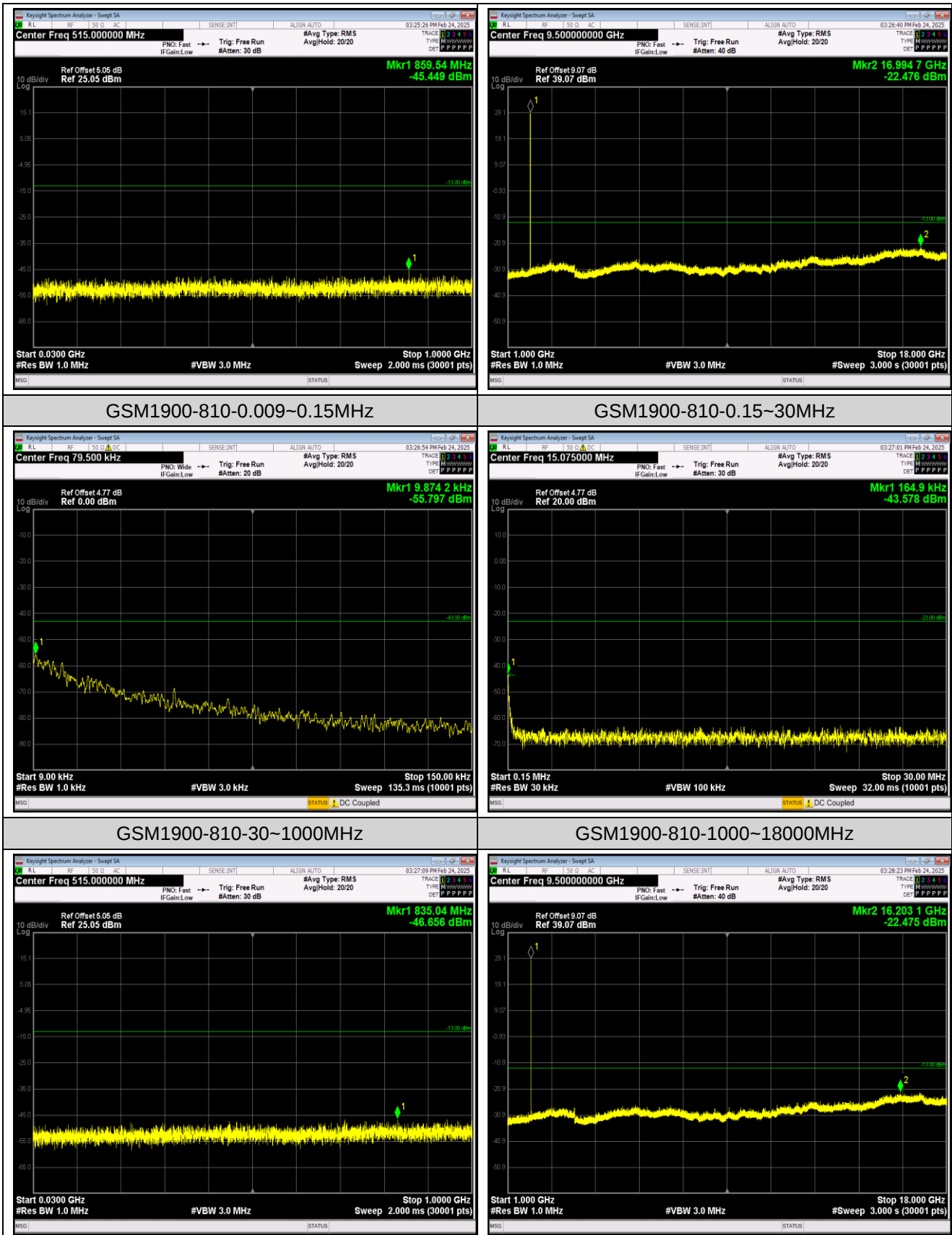
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs









Appendix F: Frequency Stability

Test Result

Reference Frequency: GSM850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	-9.59	-0.011463	±2.5	Pass
	-20	-12.33	-0.014738		
	-10	-7.88	-0.009419		
	0	-11.14	-0.013316		
	10	-9.20	-0.010997		
	20	-10.30	-0.012312		
	30	-9.23	-0.011033		
	40	-9.46	-0.011308		
	50	-8.36	-0.009993		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	-10.01	-0.011965	±2.5	Pass
	3.87	-11.49	-0.013734		
	4.45	-11.17	-0.013352		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: EGPRS850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	-4.00	-0.004781	±2.5	Pass
	-20	-1.74	-0.002080		
	-10	-5.46	-0.006526		
	0	-3.36	-0.004016		
	10	-8.94	-0.010686		
	20	-8.23	-0.009837		
	30	-11.07	-0.013232		
	40	-7.97	-0.009527		
	50	-7.46	-0.008917		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	-5.84	-0.006981	±2.5	Pass
	3.87	-6.75	-0.008068		
	4.45	-7.91	-0.009455		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: PCS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	-7.43	-0.003952	Within authorized band for PCS 1900	Pass
	-20	-11.14	-0.005926		
	-10	-5.68	-0.003021		
	0	-9.40	-0.005000		
	10	-6.39	-0.003399		
	20	-5.17	-0.002750		
	30	-6.65	-0.003537		
	40	-7.68	-0.004085		
	50	-10.94	-0.005819		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	-7.46	-0.003968	Within authorized band for PCS 1900	Pass
	3.87	-13.24	-0.007043		
	4.45	-1.68	-0.000894		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: EGPRS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	-16.05	-0.008537	Within authorized band for PCS 1900	Pass
	-20	-13.43	-0.007144		
	-10	-10.82	-0.005755		
	0	-15.17	-0.008069		
	10	-13.75	-0.007314		
	20	-20.21	-0.010750		
	30	-16.21	-0.008622		
	40	-13.50	-0.007181		
	50	-16.69	-0.008878		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	-13.24	-0.007043	Within authorized band for PCS 1900	Pass
	3.87	-10.91	-0.005803		
	4.45	-13.69	-0.007282		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Appendix G: Modulation Characteristics

Test Result

Band	Channel	Result	Verdict
GSM850	190	PASS	PASS
EGPRS850	190	PASS	PASS
GSM1900	661	PASS	PASS
EGPRS1900	661	PASS	PASS

Remark: All channel had been tested, but only the worst case data displayed in this report.

Test Graphs

