

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	32.60	29.61	38.5	PASS
GSM850	190	5	32.71	29.72	38.5	PASS
GSM850	251	5	32.65	29.66	38.5	PASS
GSM1900	512	0	30.28	30.99	33	PASS
GSM1900	661	0	30.24	30.95	33	PASS
GSM1900	810	0	30.21	30.92	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.35	30.36	38.5	PASS
GPRS850	128	5	2	32.26	29.27	38.5	PASS
GPRS850	128	5	3	30.12	27.13	38.5	PASS
GPRS850	128	5	4	28.96	25.97	38.5	PASS
GPRS850	190	5	1	33.16	30.17	38.5	PASS
GPRS850	190	5	2	32.11	29.12	38.5	PASS
GPRS850	190	5	3	30.00	27.01	38.5	PASS
GPRS850	190	5	4	28.84	25.85	38.5	PASS
GPRS850	251	5	1	33.14	30.15	38.5	PASS
GPRS850	251	5	2	32.10	29.11	38.5	PASS
GPRS850	251	5	3	30.00	27.01	38.5	PASS
GPRS850	251	5	4	28.84	25.85	38.5	PASS
GPRS1900	512	0	1	30.26	30.97	33	PASS
GPRS1900	512	0	2	29.19	29.9	33	PASS
GPRS1900	512	0	3	27.05	27.76	33	PASS
GPRS1900	512	0	4	26.00	26.71	33	PASS
GPRS1900	661	0	1	30.17	30.88	33	PASS
GPRS1900	661	0	2	29.11	29.82	33	PASS
GPRS1900	661	0	3	26.93	27.64	33	PASS
GPRS1900	661	0	4	25.86	26.57	33	PASS
GPRS1900	810	0	1	30.15	30.86	33	PASS
GPRS1900	810	0	2	29.10	29.81	33	PASS
GPRS1900	810	0	3	26.94	27.65	33	PASS
GPRS1900	810	0	4	25.86	26.57	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	29.01	26.02	38.5	PASS
EGPRS850	128	8	2	28.14	25.15	38.5	PASS
EGPRS850	128	8	3	26.27	23.28	38.5	PASS
EGPRS850	128	8	4	25.31	22.32	38.5	PASS
EGPRS850	190	8	1	28.95	25.96	38.5	PASS
EGPRS850	190	8	2	28.12	25.13	38.5	PASS
EGPRS850	190	8	3	26.23	23.24	38.5	PASS
EGPRS850	190	8	4	25.21	22.22	38.5	PASS
EGPRS850	251	8	1	29.00	26.01	38.5	PASS
EGPRS850	251	8	2	28.16	25.17	38.5	PASS
EGPRS850	251	8	3	26.24	23.25	38.5	PASS
EGPRS850	251	8	4	25.27	22.28	38.5	PASS
EGPRS1900	512	2	1	30.24	30.95	33	PASS
EGPRS1900	512	2	2	29.83	30.54	33	PASS
EGPRS1900	512	2	3	28.67	29.38	33	PASS
EGPRS1900	512	2	4	27.78	28.49	33	PASS
EGPRS1900	661	2	1	30.17	30.88	33	PASS
EGPRS1900	661	2	2	29.89	30.6	33	PASS
EGPRS1900	661	2	3	28.74	29.45	33	PASS
EGPRS1900	661	2	4	27.92	28.63	33	PASS
EGPRS1900	810	2	1	29.90	30.61	33	PASS
EGPRS1900	810	2	2	29.59	30.3	33	PASS
EGPRS1900	810	2	3	28.42	29.13	33	PASS
EGPRS1900	810	2	4	27.58	28.29	33	PASS

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

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

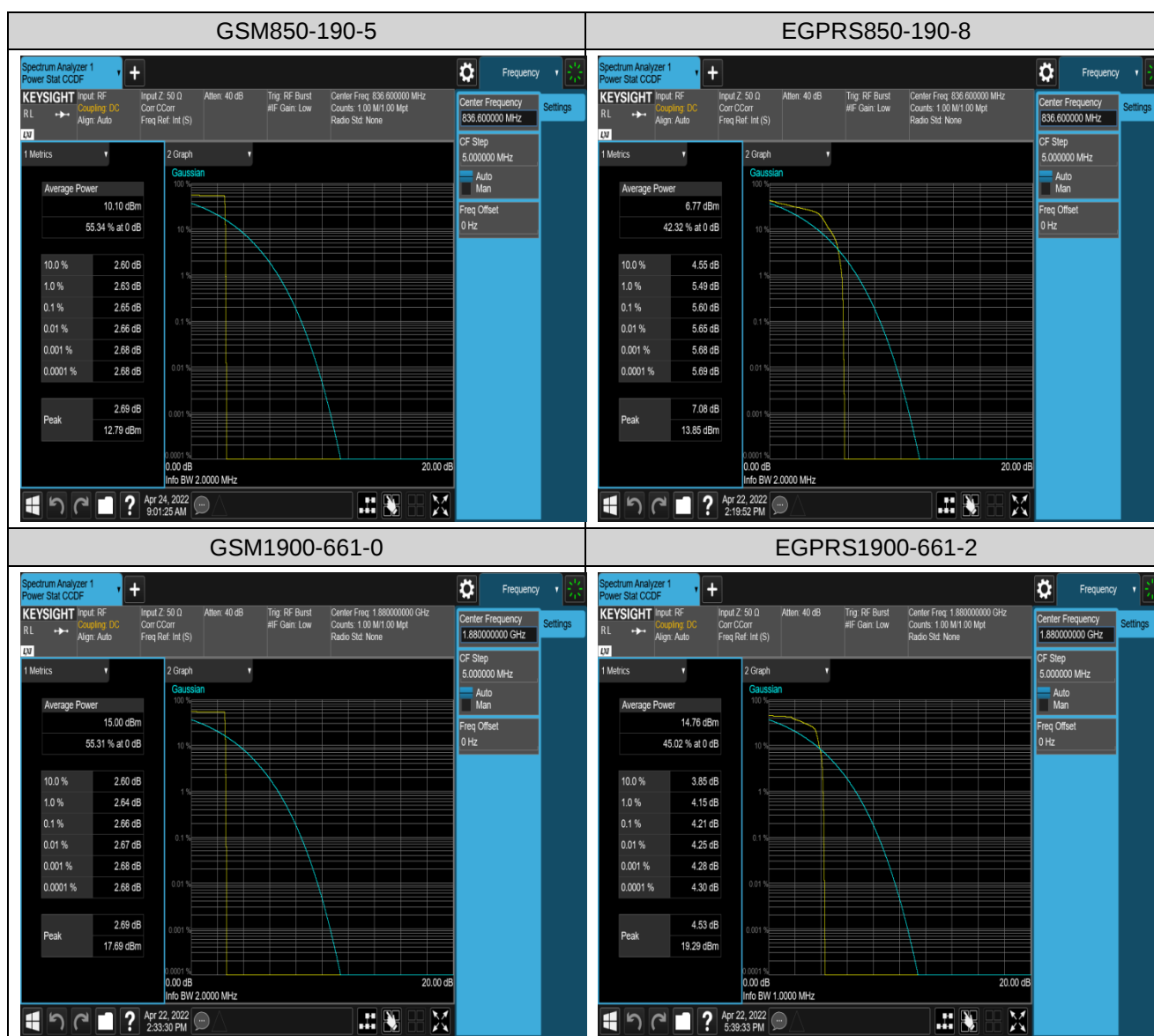
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.65	13	PASS
EGPRS850	190	8	5.6	13	PASS
GSM1900	661	0	2.66	13	PASS
EGPRS1900	661	2	4.21	13	PASS

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

Test Graphs

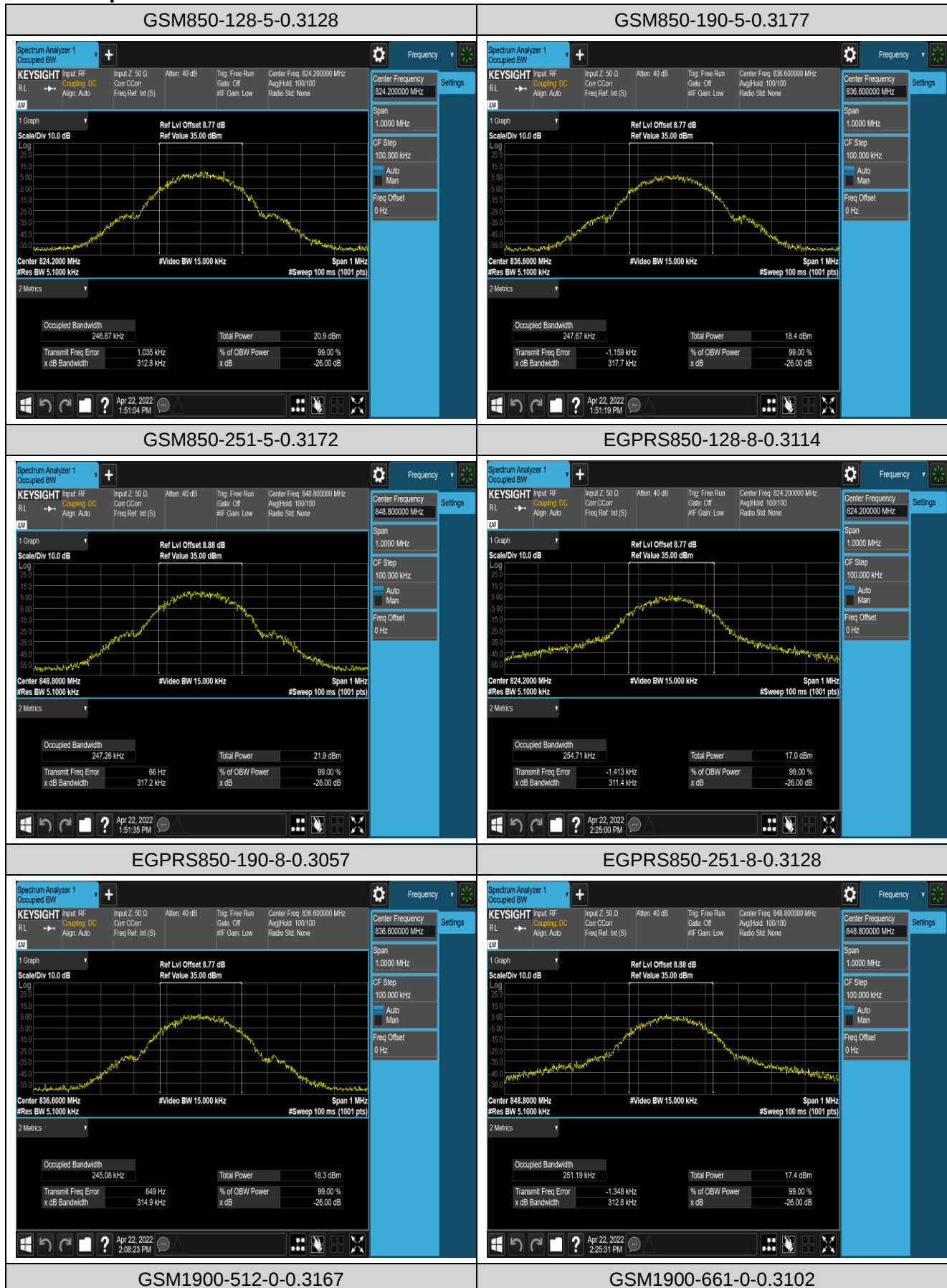


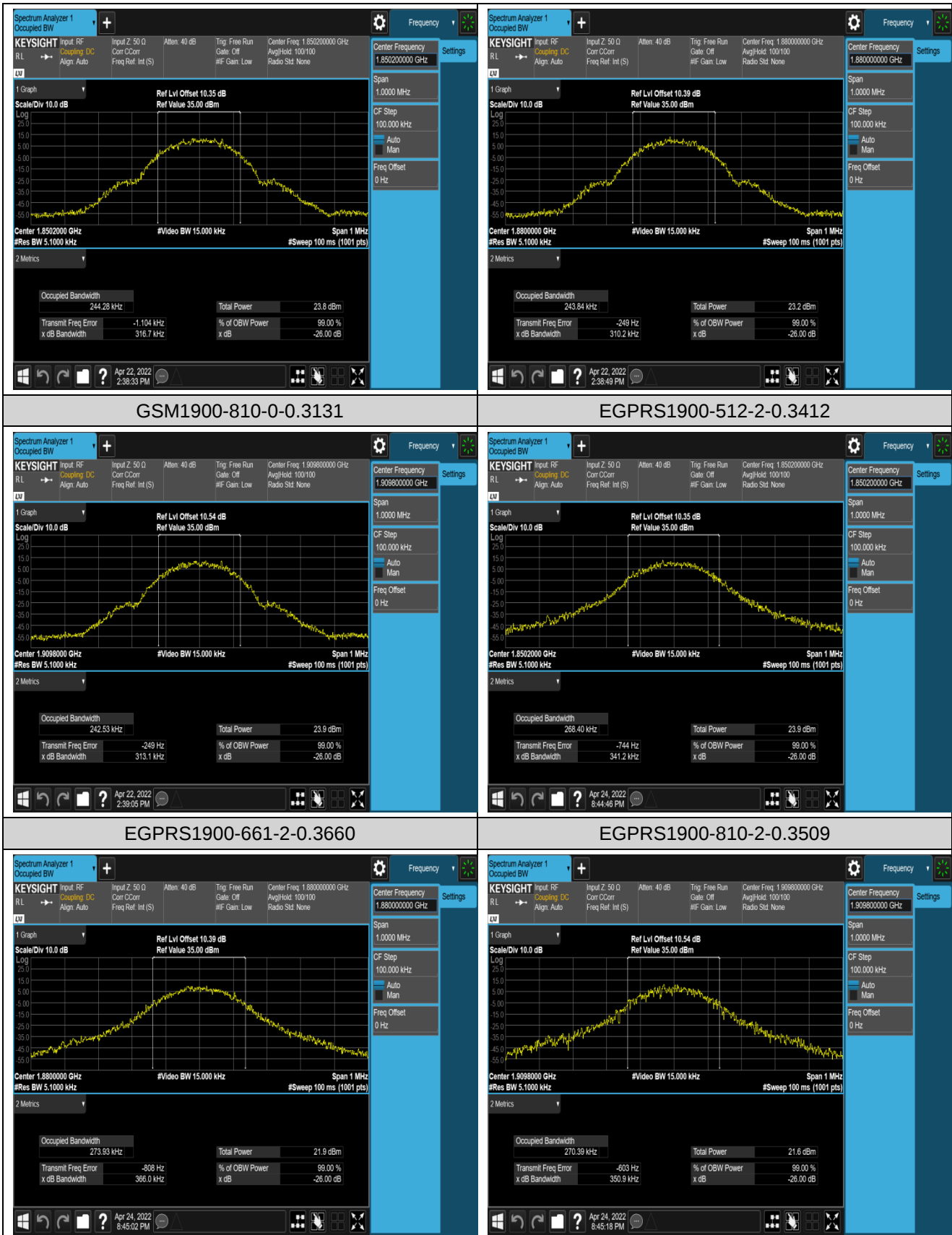
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24687	0.3128	---	PASS
GSM850	190	5	0.24767	0.3177	---	PASS
GSM850	251	5	0.24726	0.3172	---	PASS
EGPRS850	128	8	0.25471	0.3114	---	PASS
EGPRS850	190	8	0.25159	0.3057	---	PASS
EGPRS850	251	8	0.25119	0.3128	---	PASS
GSM1900	512	0	0.24428	0.3167	---	PASS
GSM1900	661	0	0.24384	0.3102	---	PASS
GSM1900	810	0	0.24253	0.3131	---	PASS
EGPRS1900	512	2	0.26840	0.3412	---	PASS
EGPRS1900	661	2	0.27393	0.3660	---	PASS
EGPRS1900	810	2	0.27039	0.3509	---	PASS

Test Graphs



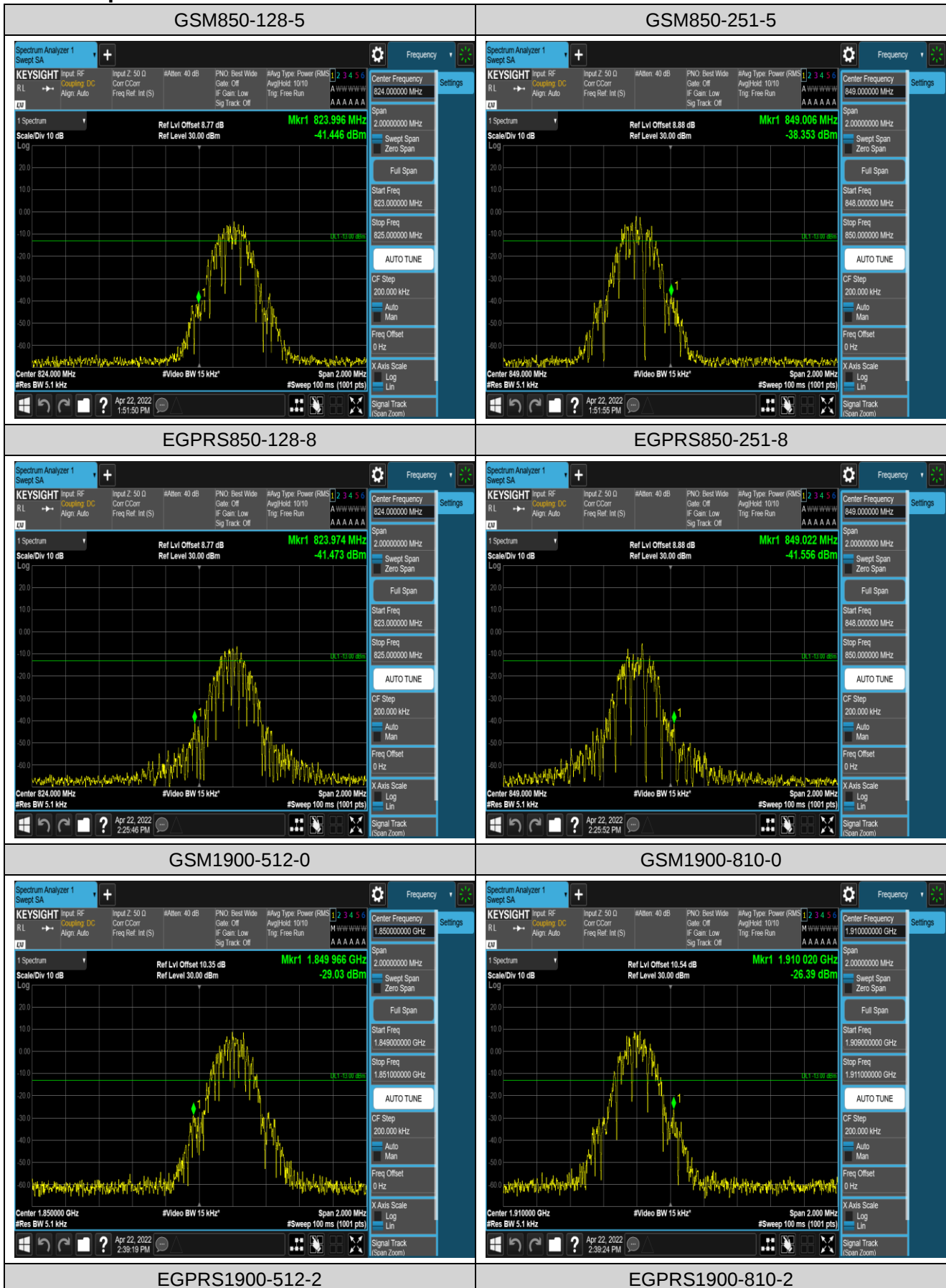


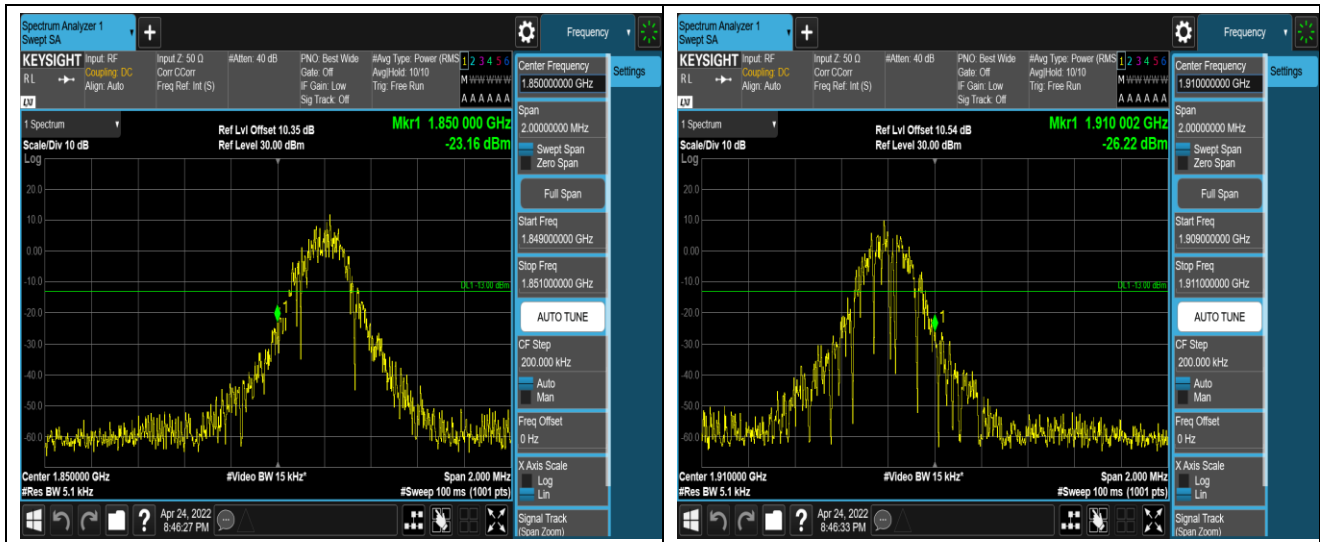
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-41.45	-13	PASS
GSM850	251	5	849.01	-38.35	-13	PASS
EGPRS850	128	8	823.97	-41.47	-13	PASS
EGPRS850	251	8	849.02	-41.56	-13	PASS
GSM1900	512	0	1849.97	-29.03	-13	PASS
GSM1900	810	0	1910.02	-26.39	-13	PASS
EGPRS1900	512	2	1850.00	-23.16	-13	PASS
EGPRS1900	810	2	1910.00	-26.22	-13	PASS

Test Graphs





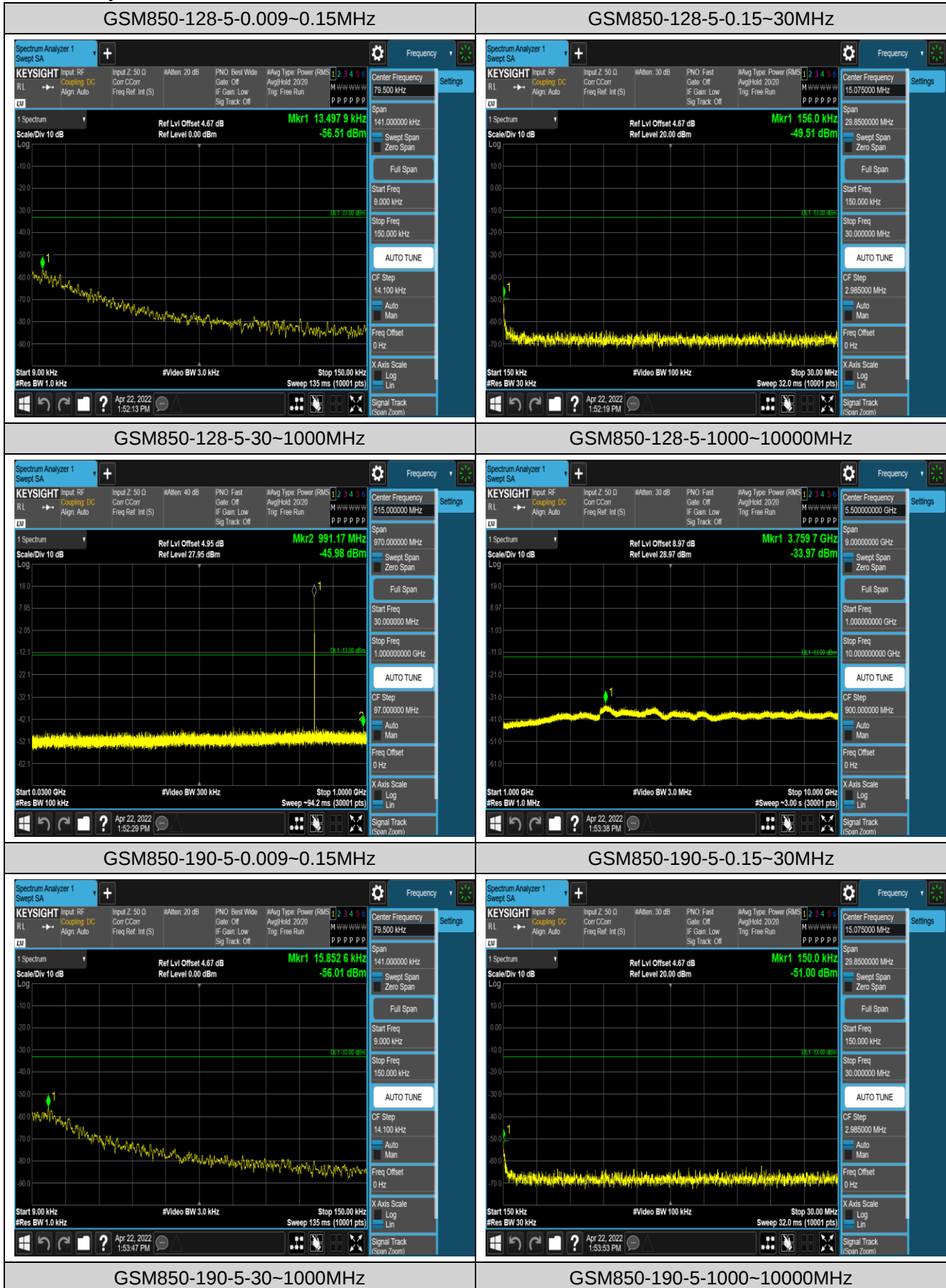
Appendix E: Conducted Spurious Emission

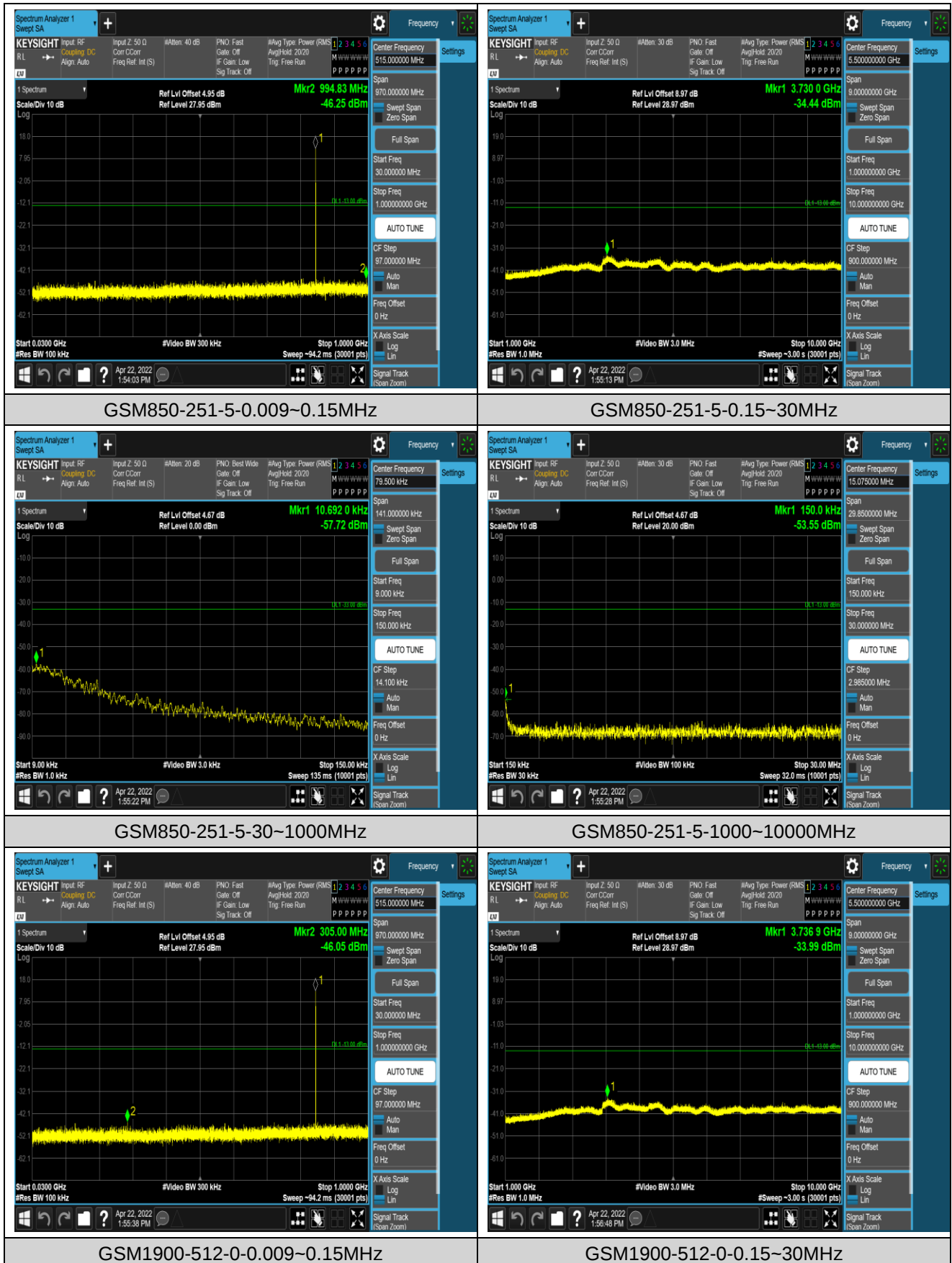
Test Result

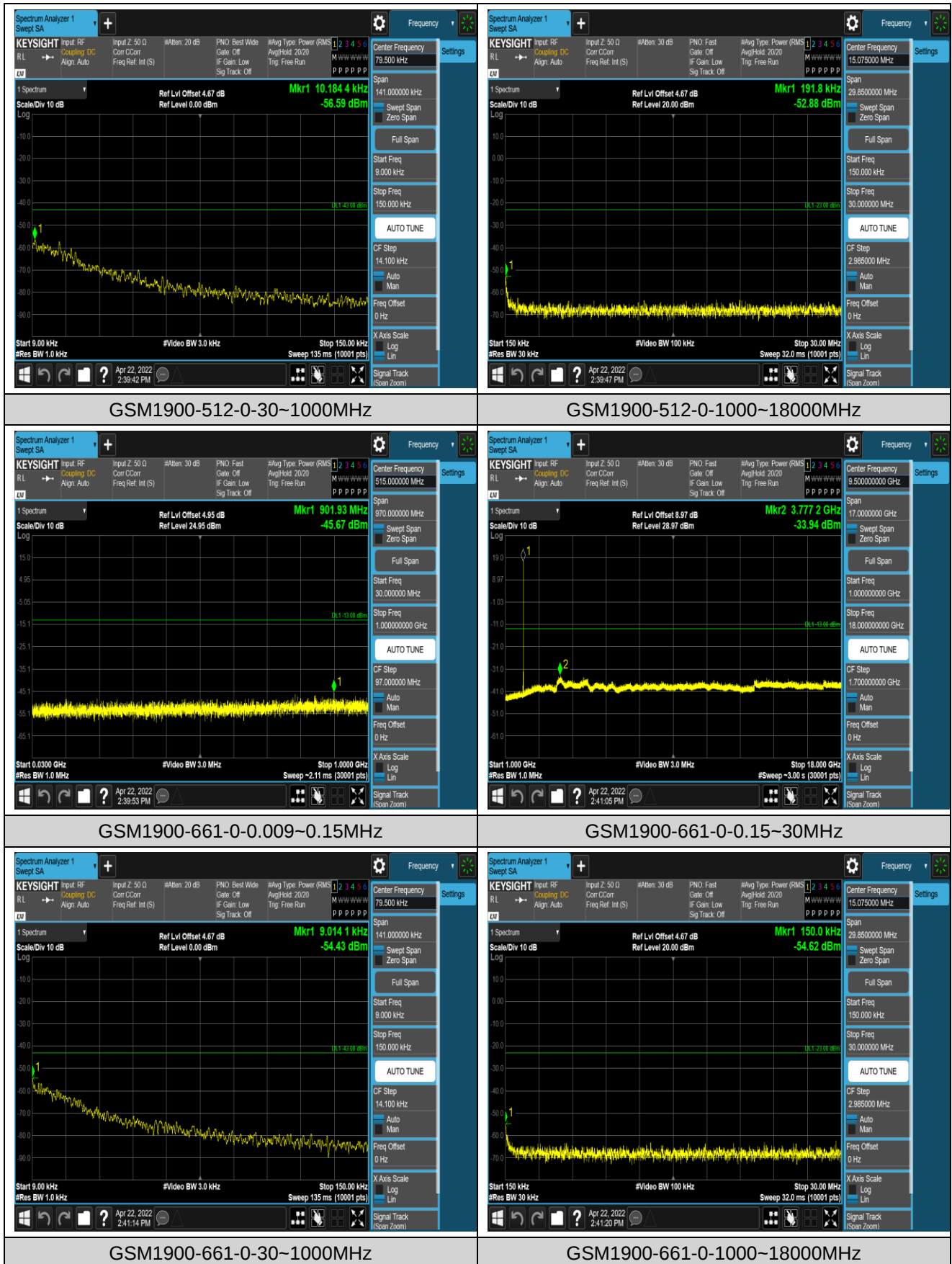
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-56.51	-33	PASS
GSM850	128	5	0.15~30MHz	0.16	-49.51	-13	PASS
GSM850	128	5	30~1000MHz	991.17	-45.98	-13	PASS
GSM850	128	5	1000~10000MHz	3759.7	-33.97	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.02	-56.01	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-51	-13	PASS
GSM850	190	5	30~1000MHz	994.83	-46.25	-13	PASS
GSM850	190	5	1000~10000MHz	3730	-34.44	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-57.72	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-53.55	-13	PASS
GSM850	251	5	30~1000MHz	305	-46.05	-13	PASS
GSM850	251	5	1000~10000MHz	3736.9	-33.99	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.59	-43	PASS
GSM1900	512	0	0.15~30MHz	0.19	-52.88	-23	PASS
GSM1900	512	0	30~1000MHz	901.93	-45.67	-13	PASS
GSM1900	512	0	1000~18000MHz	3777.23	-33.94	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-54.43	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-54.62	-23	PASS
GSM1900	661	0	30~1000MHz	823.72	-47.18	-13	PASS
GSM1900	661	0	1000~18000MHz	3737	-34.53	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.62	-43	PASS
GSM1900	810	0	0.15~30MHz	0.16	-54.02	-23	PASS
GSM1900	810	0	30~1000MHz	882.89	-47.09	-13	PASS
GSM1900	810	0	1000~18000MHz	3870.17	-33.86	-13	PASS

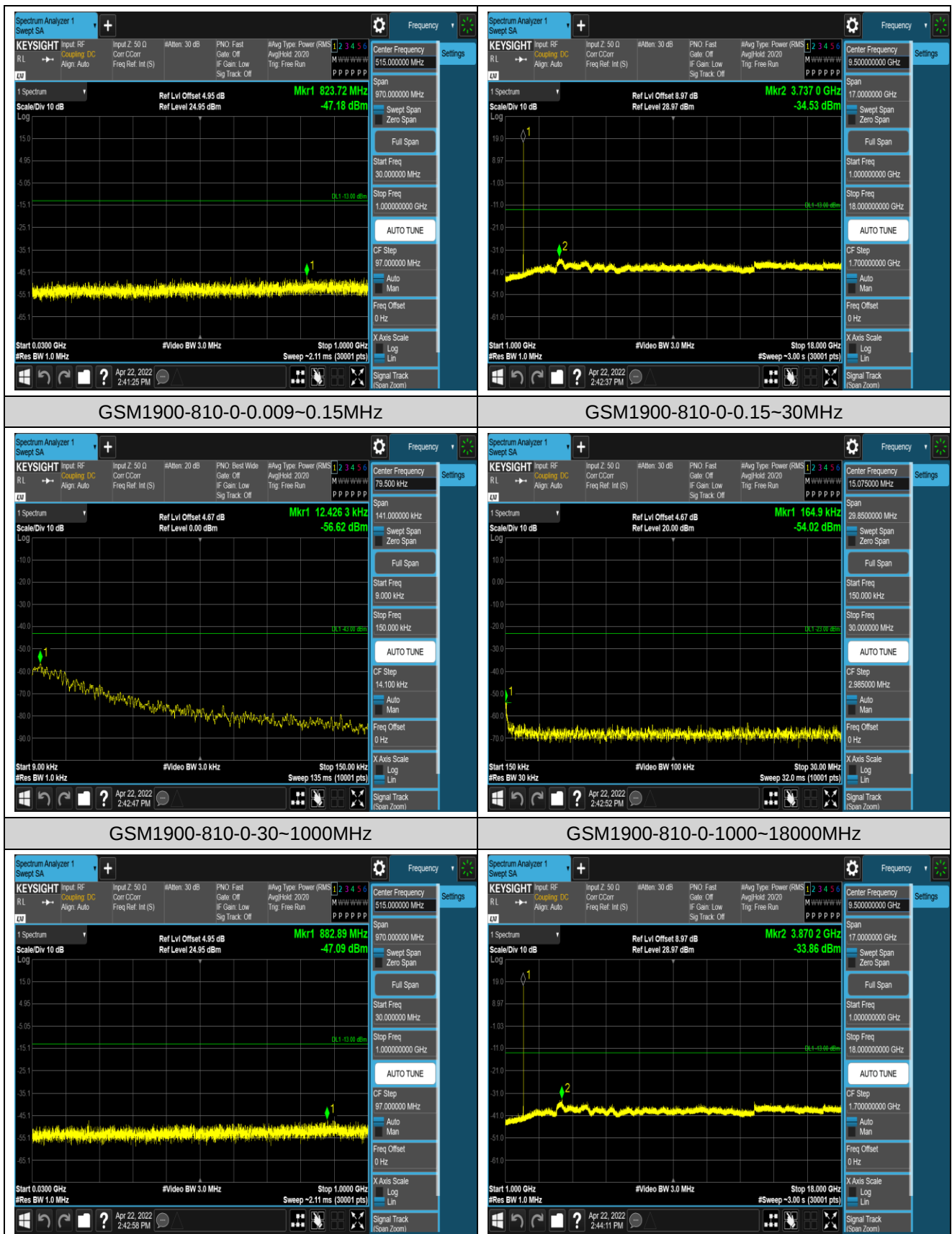
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.80	-30	5.26	0.006287	±2.5	Pass
	-20	7.04	0.008415		
	-10	-0.77	-0.000920		
	0	4.16	0.004973		
	10	13.27	0.015862		
	20	2.32	0.002773		
	30	-2.87	-0.003431		
	40	4.36	0.005212		
	50	11.59	0.013854		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	7.49	0.008953	±2.5	Pass
	3.80	4.94	0.005905		
	4.35	3.39	0.004052		
Remark: All channels 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		
3.80	-30	0.48	0.000574	±2.5	Pass
	-20	-5.20	-0.006216		
	-10	5.29	0.006323		
	0	3.52	0.004208		
	10	3.62	0.004327		
	20	2.07	0.002474		
	30	2.13	0.002546		
	40	3.00	0.003586		
	50	-1.65	-0.001972		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	7.17	0.008570	±2.5	Pass
	3.80	1.16	0.001387		
	4.35	4.26	0.005092		
Remark: All channels 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 (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	10.30	0.005479	Within authorized band for PCS 1900	Pass
	-20	12.40	0.006596		
	-10	-17.18	-0.009138		
	0	9.75	0.005186		
	10	-11.85	-0.006303		
	20	-11.59	-0.006165		
	30	29.93	0.015920		
	40	-1.32	-0.000702		
	50	-4.26	-0.002266		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	9.94	0.005287	Within authorized band for PCS 1900	Pass
	3.80	15.37	0.008176		
	4.35	8.56	0.004553		
Remark: All channels 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		
3.80	-30	10.14	0.005394	Within authorized band for PCS 1900	Pass
	-20	14.27	0.007590		
	-10	42.33	0.022516		
	0	36.22	0.019266		
	10	33.58	0.017862		
	20	34.48	0.018340		
	30	36.74	0.019543		
	40	29.93	0.015920		
	50	24.89	0.013239		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	16.34	0.008691	Within authorized band for PCS 1900	Pass
	3.80	22.54	0.011989		
	4.35	11.66	0.006202		
Remark: All channels 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

