

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	33.02	31.37	38.45	PASS
GSM850	190	5	33.07	31.42	38.45	PASS
GSM850	251	5	33.10	31.45	38.45	PASS
GSM1900	512	0	29.98	30.48	33.00	PASS
GSM1900	661	0	29.76	30.26	33.00	PASS
GSM1900	810	0	29.76	30.26	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.05	31.4	38.45	PASS
GPRS850	128	5	2	32.83	31.18	38.45	PASS
GPRS850	128	5	3	31.92	30.27	38.45	PASS
GPRS850	128	5	4	30.04	28.39	38.45	PASS
GPRS850	190	5	1	33.08	31.43	38.45	PASS
GPRS850	190	5	2	32.86	31.21	38.45	PASS
GPRS850	190	5	3	31.97	30.32	38.45	PASS
GPRS850	190	5	4	30.13	28.48	38.45	PASS
GPRS850	251	5	1	33.08	31.43	38.45	PASS
GPRS850	251	5	2	32.86	31.21	38.45	PASS
GPRS850	251	5	3	31.96	30.31	38.45	PASS
GPRS850	251	5	4	30.07	28.42	38.45	PASS
GPRS1900	512	0	1	29.97	30.47	33.00	PASS
GPRS1900	512	0	2	29.69	30.19	33.00	PASS
GPRS1900	512	0	3	28.72	29.22	33.00	PASS
GPRS1900	512	0	4	26.82	27.32	33.00	PASS
GPRS1900	661	0	1	29.76	30.26	33.00	PASS
GPRS1900	661	0	2	29.43	29.93	33.00	PASS
GPRS1900	661	0	3	28.48	28.98	33.00	PASS
GPRS1900	661	0	4	26.51	27.01	33.00	PASS
GPRS1900	810	0	1	29.76	30.26	33.00	PASS
GPRS1900	810	0	2	29.39	29.89	33.00	PASS
GPRS1900	810	0	3	28.46	28.96	33.00	PASS
GPRS1900	810	0	4	26.43	26.93	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	28.48	26.83	38.45	PASS
EGPRS850	128	8	2	26.45	24.8	38.45	PASS
EGPRS850	128	8	3	24.40	22.75	38.45	PASS
EGPRS850	128	8	4	21.35	19.7	38.45	PASS
EGPRS850	190	8	1	28.59	26.94	38.45	PASS
EGPRS850	190	8	2	26.69	25.04	38.45	PASS
EGPRS850	190	8	3	24.58	22.93	38.45	PASS
EGPRS850	190	8	4	21.78	20.13	38.45	PASS
EGPRS850	251	8	1	27.67	26.02	38.45	PASS
EGPRS850	251	8	2	26.13	24.48	38.45	PASS
EGPRS850	251	8	3	23.38	21.73	38.45	PASS
EGPRS850	251	8	4	21.27	19.62	38.45	PASS
EGPRS1900	512	2	1	27.92	28.42	33.00	PASS
EGPRS1900	512	2	2	26.19	26.69	33.00	PASS
EGPRS1900	512	2	3	24.04	24.54	33.00	PASS
EGPRS1900	512	2	4	21.62	22.12	33.00	PASS
EGPRS1900	661	2	1	27.76	28.26	33.00	PASS
EGPRS1900	661	2	2	25.98	26.48	33.00	PASS
EGPRS1900	661	2	3	23.79	24.29	33.00	PASS
EGPRS1900	661	2	4	21.41	21.91	33.00	PASS
EGPRS1900	810	2	1	28.31	28.81	33.00	PASS
EGPRS1900	810	2	2	26.44	26.94	33.00	PASS
EGPRS1900	810	2	3	24.33	24.83	33.00	PASS
EGPRS1900	810	2	4	21.91	22.41	33.00	PASS

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

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

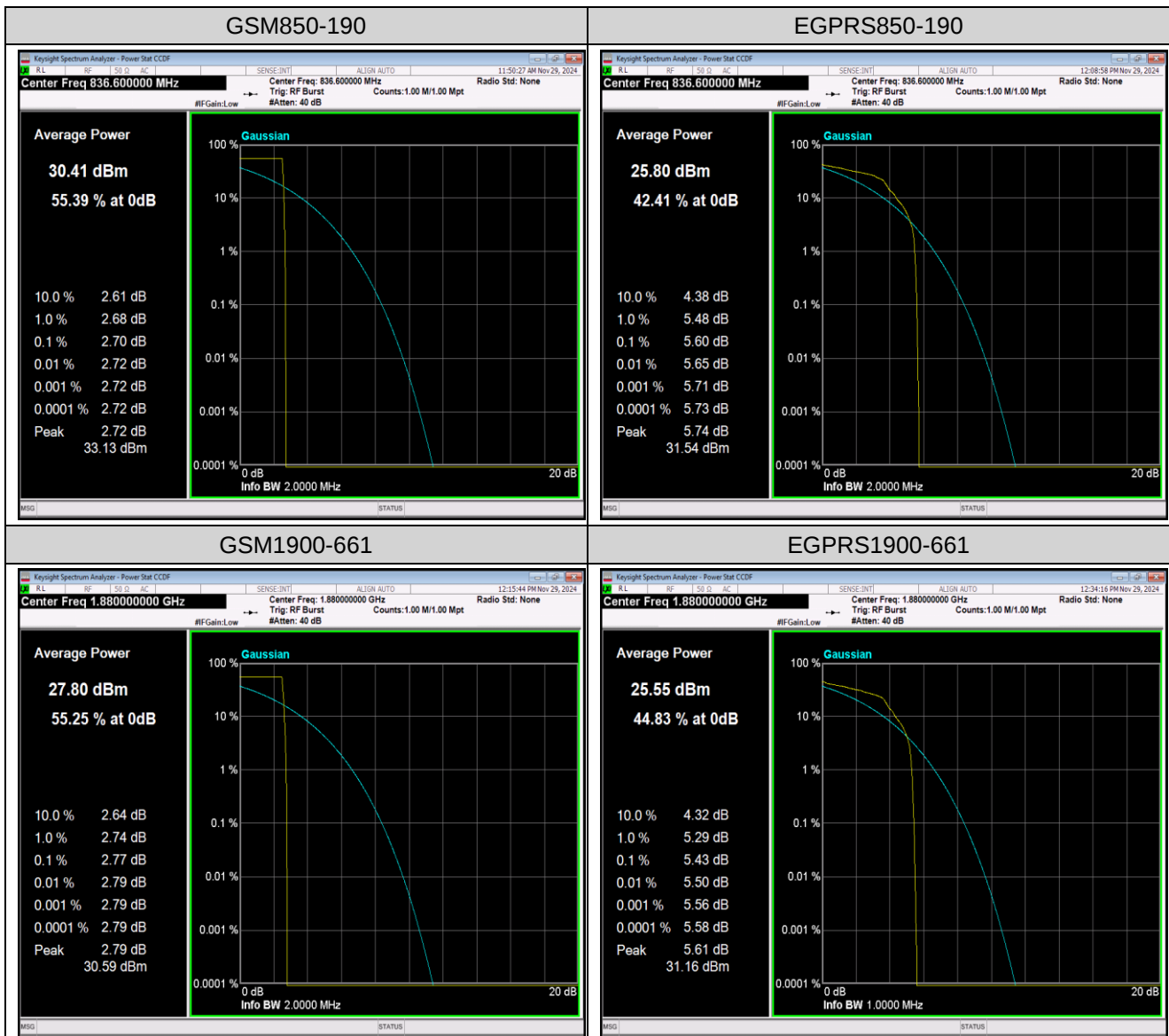
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.7	13	PASS
EGPRS850	190	8	5.6	13	PASS
GSM1900	661	0	2.77	13	PASS
EGPRS1900	661	2	5.43	13	PASS

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

Test Graphs

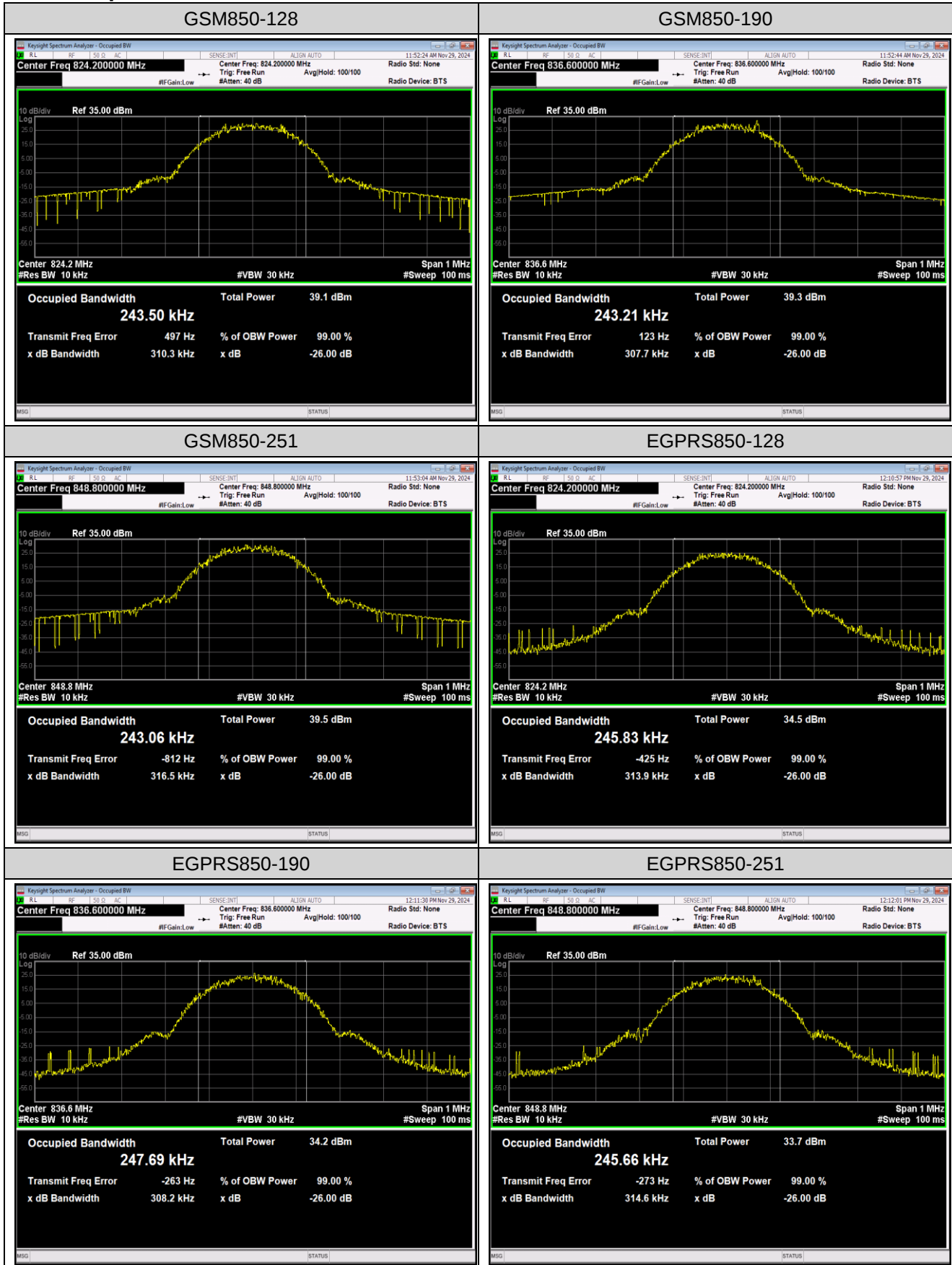


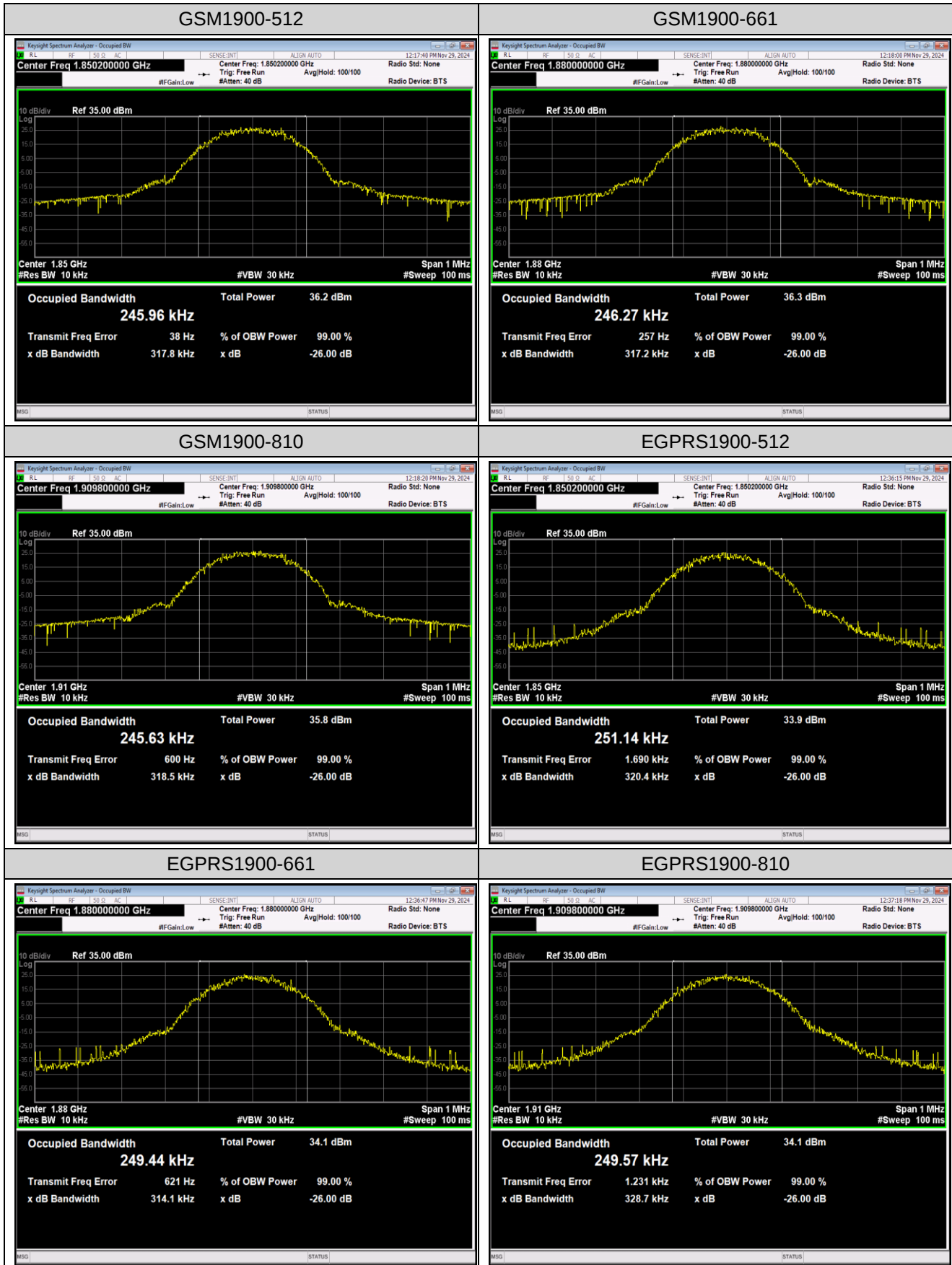
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24350	0.3103	---	PASS
GSM850	190	5	0.24321	0.3077	---	PASS
GSM850	251	5	0.24306	0.3165	---	PASS
EGPRS850	128	8	0.24583	0.3139	---	PASS
EGPRS850	190	8	0.24769	0.3082	---	PASS
EGPRS850	251	8	0.24566	0.3146	---	PASS
GSM1900	512	0	0.24596	0.3178	---	PASS
GSM1900	661	0	0.24627	0.3172	---	PASS
GSM1900	810	0	0.24563	0.3185	---	PASS
EGPRS1900	512	2	0.25114	0.3204	---	PASS
EGPRS1900	661	2	0.24944	0.3141	---	PASS
EGPRS1900	810	2	0.24957	0.3287	---	PASS

Test Graphs



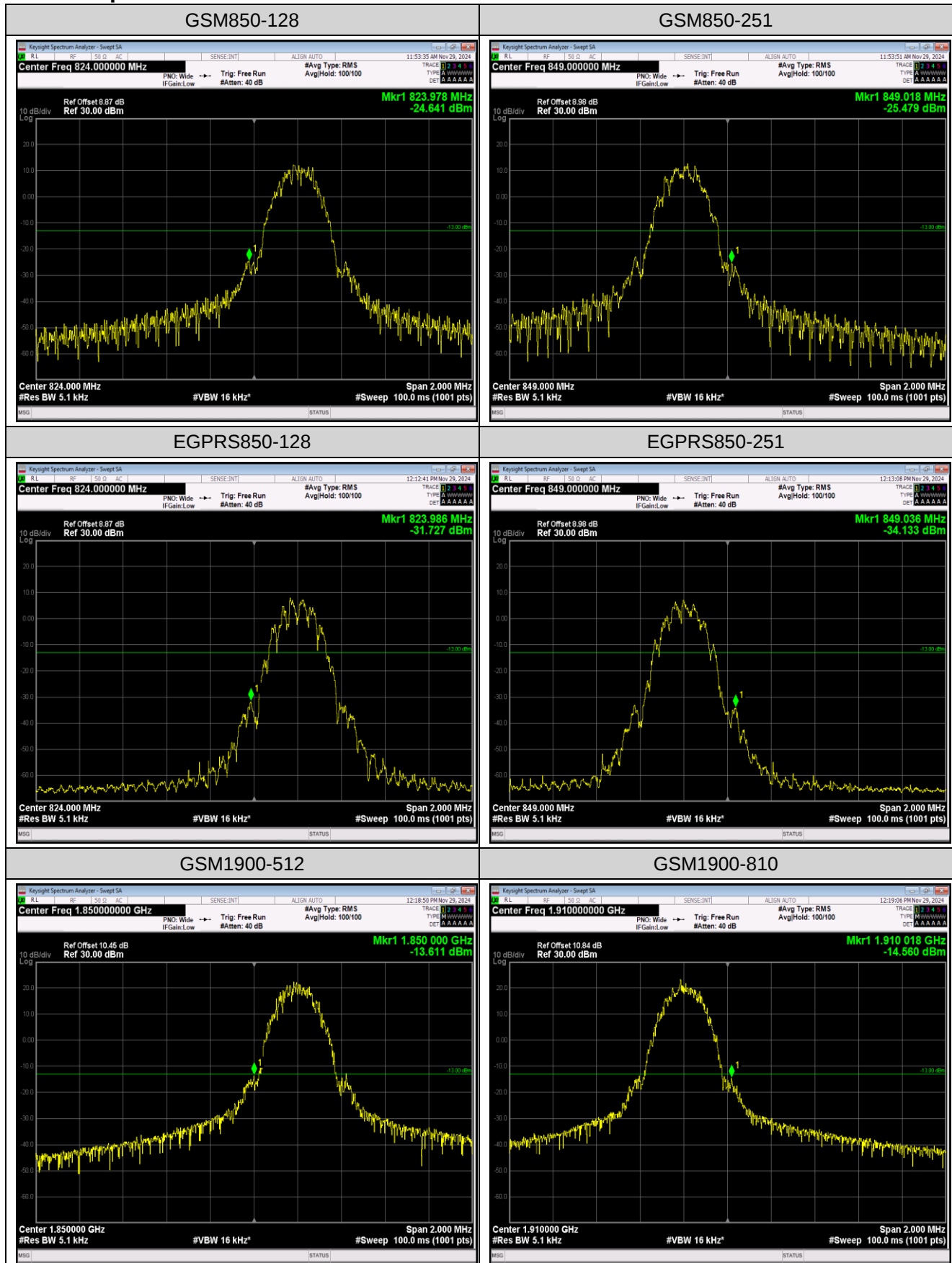


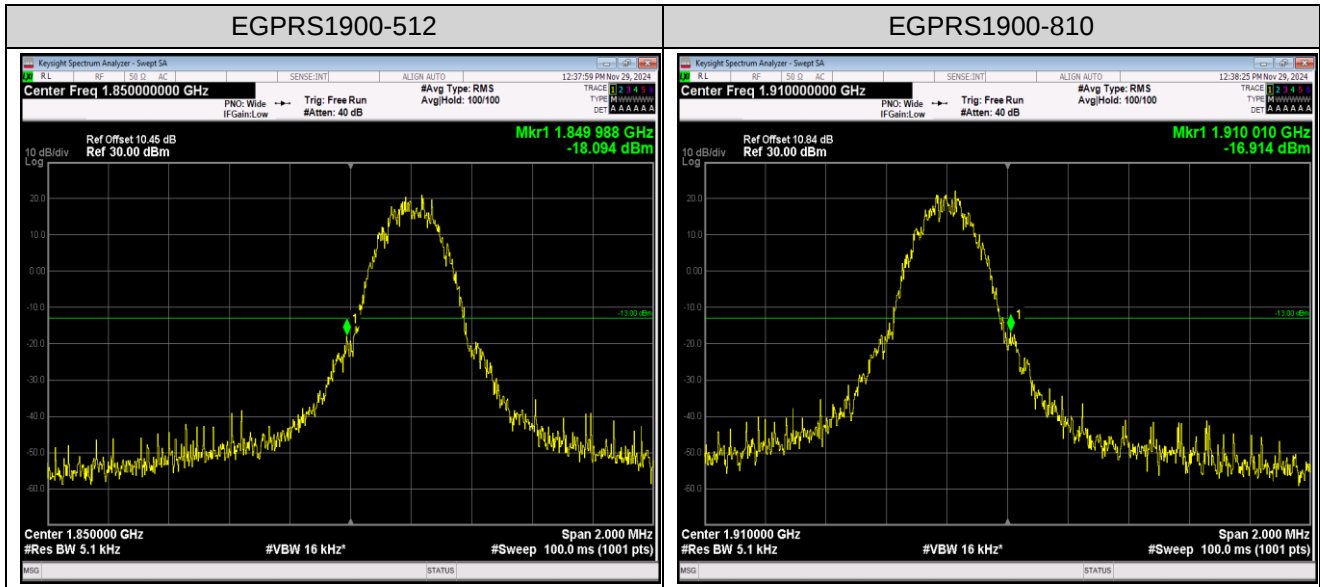
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-24.64	-13	PASS
GSM850	251	5	849.02	-25.48	-13	PASS
EGPRS850	128	8	823.99	-31.73	-13	PASS
EGPRS850	251	8	849.04	-34.13	-13	PASS
GSM1900	512	0	1850.00	-13.61	-13	PASS
GSM1900	810	0	1910.02	-14.56	-13	PASS
EGPRS1900	512	2	1849.99	-18.09	-13	PASS
EGPRS1900	810	2	1910.01	-16.91	-13	PASS

Test Graphs





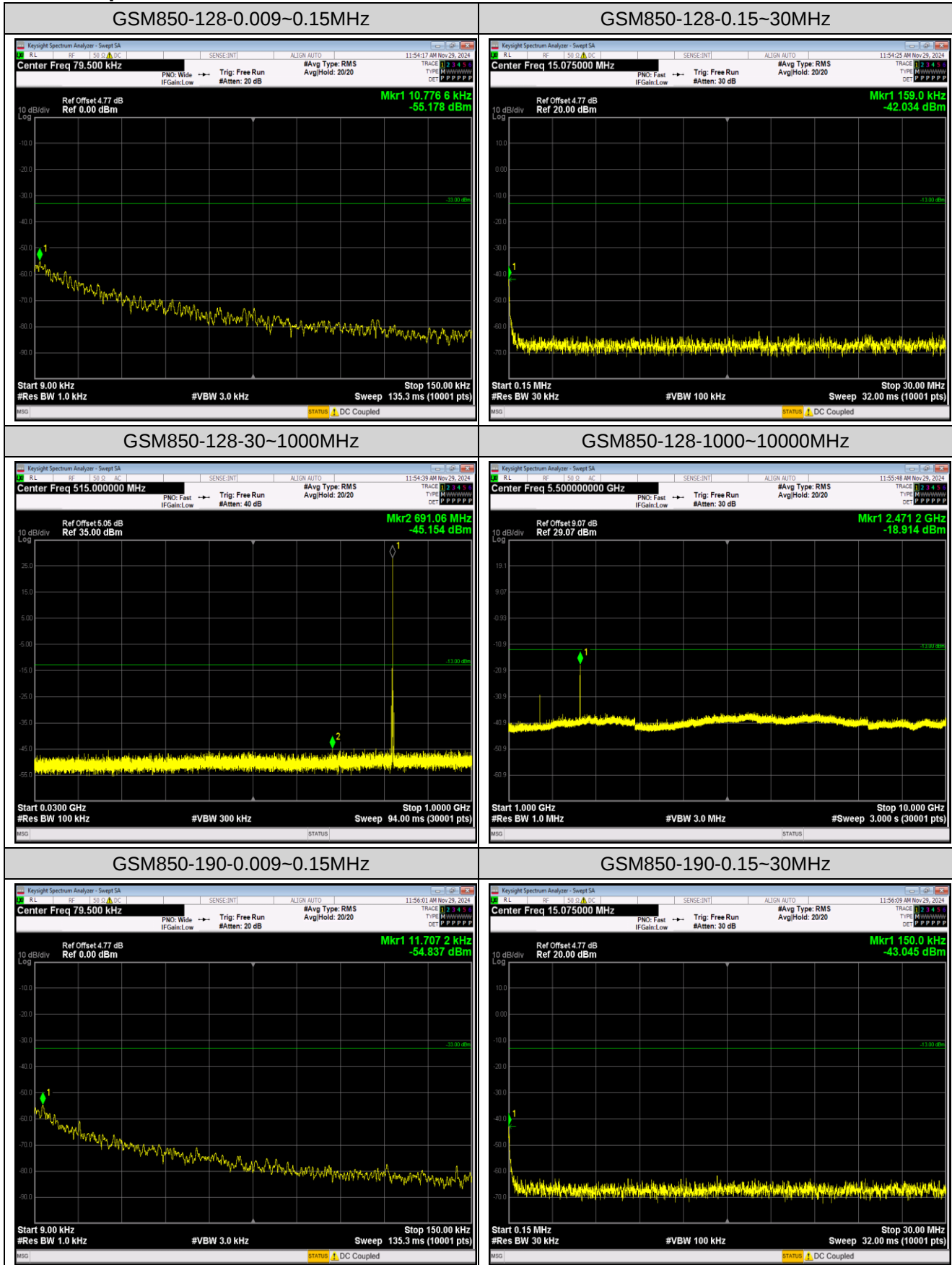
Appendix E: Conducted Spurious Emission

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	-55.18	-33	PASS
GSM850	128	5	0.15~30MHz	0.16	-42.03	-13	PASS
GSM850	128	5	30~1000MHz	691.06	-45.15	-13	PASS
GSM850	128	5	1000~10000MHz	2471.2	-18.91	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-54.84	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-43.05	-13	PASS
GSM850	190	5	30~1000MHz	727.04	-45.57	-13	PASS
GSM850	190	5	1000~10000MHz	2506.9	-19.05	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.62	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-42.25	-13	PASS
GSM850	251	5	30~1000MHz	994.83	-44.99	-13	PASS
GSM850	251	5	1000~10000MHz	2545.6	-15.66	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.62	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-43.99	-23	PASS
GSM1900	512	0	30~1000MHz	854.31	-44.96	-13	PASS
GSM1900	512	0	1000~18000MHz	17031	-21.91	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-53.97	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-40.78	-23	PASS
GSM1900	661	0	30~1000MHz	981.28	-45.58	-13	PASS
GSM1900	661	0	1000~18000MHz	16846.83	-22.17	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.1	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-41.47	-23	PASS
GSM1900	810	0	30~1000MHz	434.62	-45.34	-13	PASS
GSM1900	810	0	1000~18000MHz	17005.5	-22.3	-13	PASS

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

Test Graphs

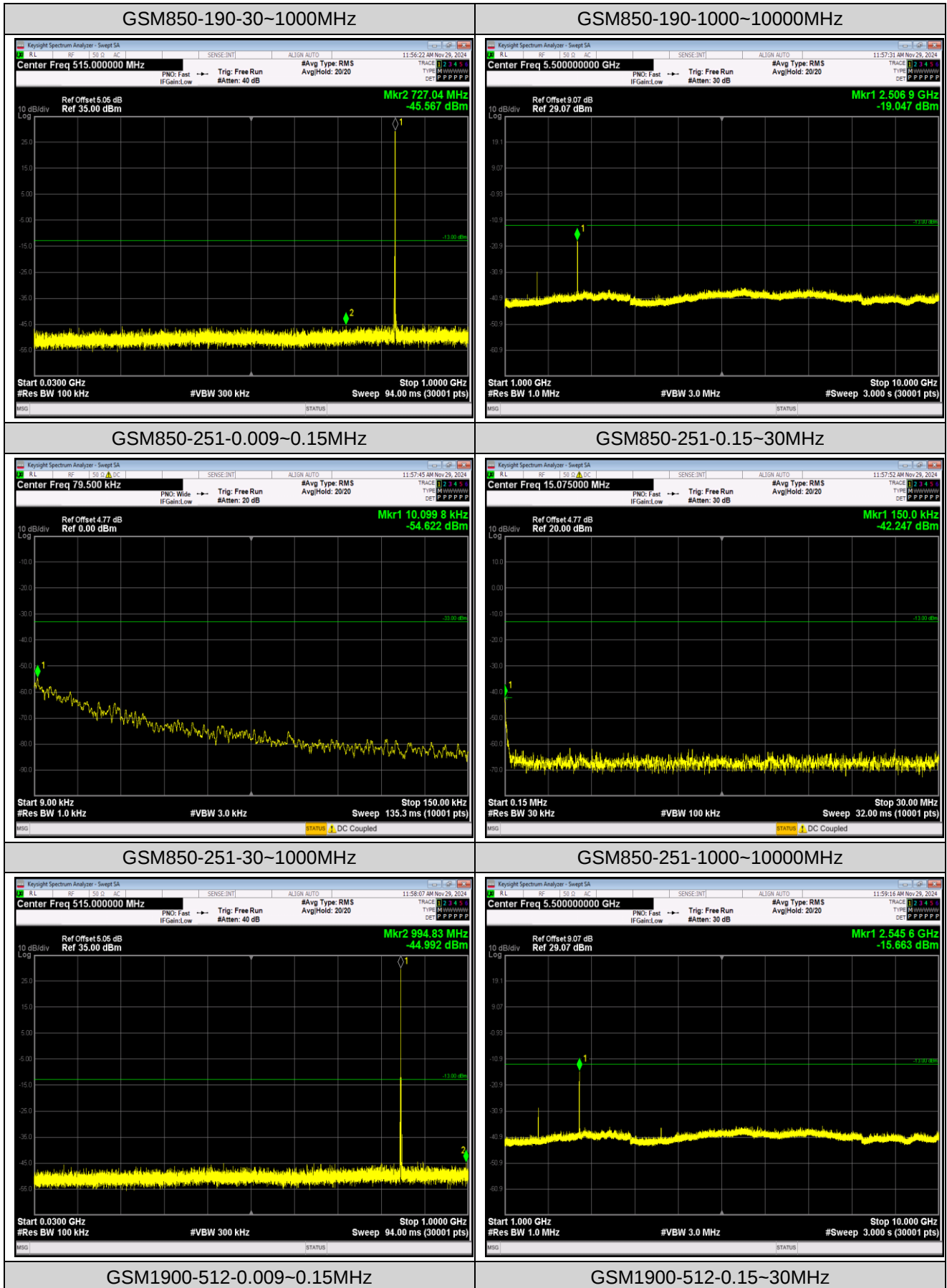


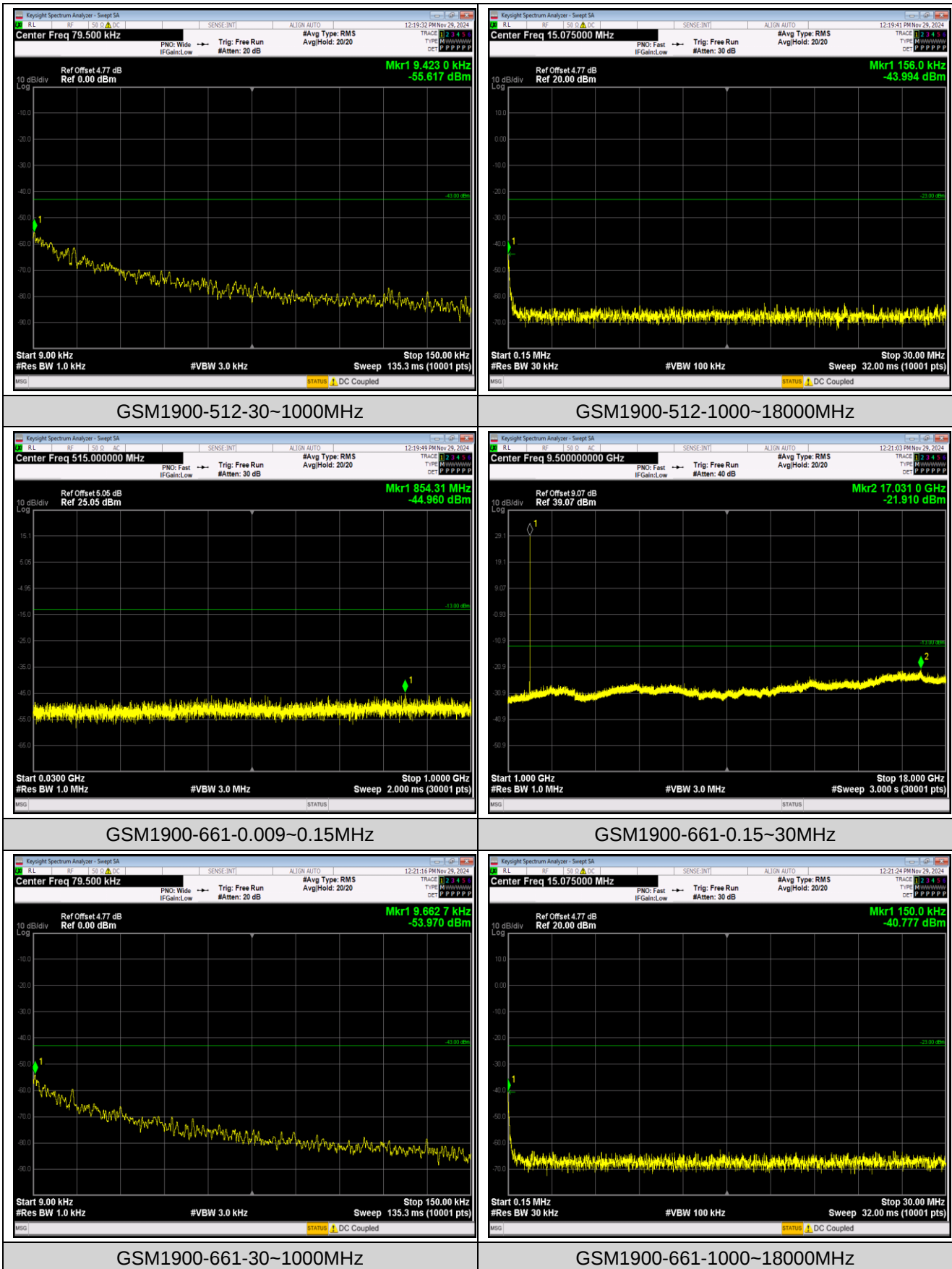
JianYan Testing Group Shenzhen Co., Ltd.

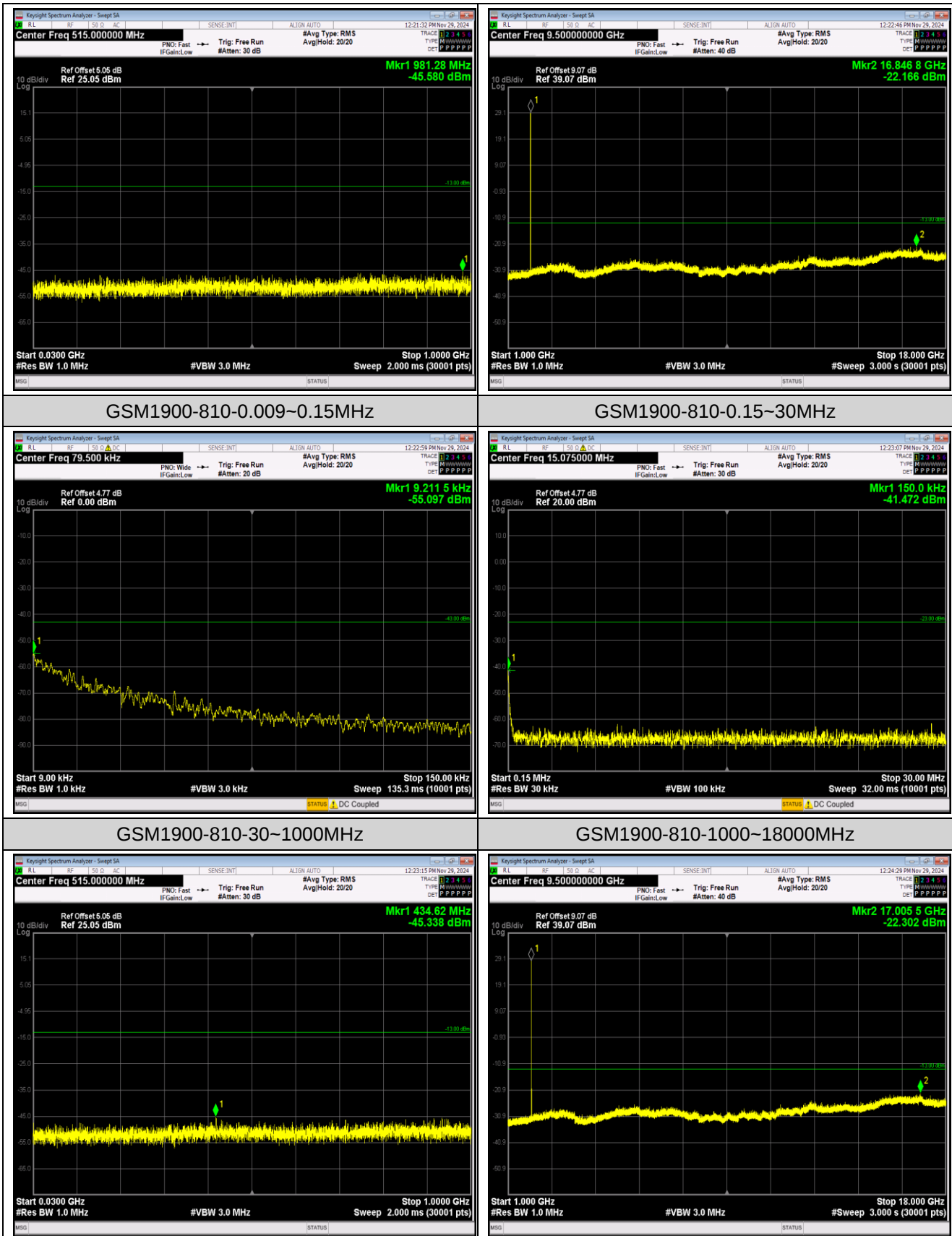
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Appendix F: Frequency Stability

Test Result

Reference Frequency: GSM850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	-7.39	-0.008833	±2.5	Pass
	-20	-12.40	-0.014822		
	-10	9.20	0.010997		
	0	-2.58	-0.003084		
	10	-5.36	-0.006407		
	20	-0.58	-0.000693		
	30	0.42	0.000502		
	40	-11.49	-0.013734		
	50	2.39	0.002857		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	1.97	0.002355	±2.5	Pass
	3.70	8.01	0.009574		
	4.20	2.58	0.003084		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	3.87	0.004626	±2.5	Pass
	-20	3.75	0.004482		
	-10	2.97	0.003550		
	0	-6.52	-0.007793		
	10	-3.65	-0.004363		
	20	4.10	0.004901		
	30	-0.42	-0.000502		
	40	0.39	0.000466		
	50	3.42	0.004088		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	-0.61	-0.000729	±2.5	Pass
	3.70	3.75	0.004482		
	4.20	-2.97	-0.003550		
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		
3.70	-30	-37.87	-0.020144	Within authorized band for PCS 1900	Pass
	-20	15.08	0.008021		
	-10	6.72	0.003574		
	0	2.00	0.001064		
	10	-14.37	-0.007644		
	20	0.45	0.000239		
	30	-4.91	-0.002612		
	40	7.20	0.003830		
	50	-11.43	-0.006080		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	5.00	0.002660	Within authorized band for PCS 1900	Pass
	3.70	5.75	0.003059		
	4.20	6.39	0.003399		
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		
3.70	-30	-1.58	-0.000840	Within authorized band for PCS 1900	Pass
	-20	2.97	0.001580		
	-10	3.97	0.002112		
	0	7.26	0.003862		
	10	-20.82	-0.011074		
	20	-10.82	-0.005755		
	30	-2.45	-0.001303		
	40	-11.53	-0.006133		
	50	7.49	0.003984		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	-16.50	-0.008777	Within authorized band for PCS 1900	Pass
	3.70	-7.30	-0.003883		
	4.20	-27.48	-0.014617		
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

