

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	33.32	26	38.45	PASS
GSM850	190	5	33.38	26.06	38.45	PASS
GSM850	251	5	33.23	25.91	38.45	PASS
GSM1900	512	0	29.69	26.48	33.00	PASS
GSM1900	661	0	30.05	26.84	33.00	PASS
GSM1900	810	0	29.93	26.72	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.30	25.98	38.45	PASS
GPRS850	128	5	2	32.35	25.03	38.45	PASS
GPRS850	128	5	3	30.32	23	38.45	PASS
GPRS850	128	5	4	29.22	21.9	38.45	PASS
GPRS850	190	5	1	33.34	26.02	38.45	PASS
GPRS850	190	5	2	32.39	25.07	38.45	PASS
GPRS850	190	5	3	30.37	23.05	38.45	PASS
GPRS850	190	5	4	29.25	21.93	38.45	PASS
GPRS850	251	5	1	33.21	25.89	38.45	PASS
GPRS850	251	5	2	32.29	24.97	38.45	PASS
GPRS850	251	5	3	30.30	22.98	38.45	PASS
GPRS850	251	5	4	29.20	21.88	38.45	PASS
GPRS1900	512	0	1	29.70	26.49	33.00	PASS
GPRS1900	512	0	2	28.72	25.51	33.00	PASS
GPRS1900	512	0	3	26.64	23.43	33.00	PASS
GPRS1900	512	0	4	25.50	22.29	33.00	PASS
GPRS1900	661	0	1	30.02	26.81	33.00	PASS
GPRS1900	661	0	2	29.07	25.86	33.00	PASS
GPRS1900	661	0	3	27.06	23.85	33.00	PASS
GPRS1900	661	0	4	25.94	22.73	33.00	PASS
GPRS1900	810	0	1	29.90	26.69	33.00	PASS
GPRS1900	810	0	2	28.98	25.77	33.00	PASS
GPRS1900	810	0	3	27.05	23.84	33.00	PASS
GPRS1900	810	0	4	25.98	22.77	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.68	20.36	38.45	PASS
EGPRS850	128	8	2	26.51	19.19	38.45	PASS
EGPRS850	128	8	3	24.37	17.05	38.45	PASS
EGPRS850	128	8	4	23.23	15.91	38.45	PASS
EGPRS850	190	8	1	27.58	20.26	38.45	PASS
EGPRS850	190	8	2	26.40	19.08	38.45	PASS
EGPRS850	190	8	3	24.27	16.95	38.45	PASS
EGPRS850	190	8	4	23.13	15.81	38.45	PASS
EGPRS850	251	8	1	27.77	20.45	38.45	PASS
EGPRS850	251	8	2	26.59	19.27	38.45	PASS
EGPRS850	251	8	3	24.46	17.14	38.45	PASS
EGPRS850	251	8	4	23.32	16	38.45	PASS
EGPRS1900	512	2	1	25.79	22.58	33.00	PASS
EGPRS1900	512	2	2	24.53	21.32	33.00	PASS
EGPRS1900	512	2	3	22.19	18.98	33.00	PASS
EGPRS1900	512	2	4	20.56	17.35	33.00	PASS
EGPRS1900	661	2	1	25.93	22.72	33.00	PASS
EGPRS1900	661	2	2	24.64	21.43	33.00	PASS
EGPRS1900	661	2	3	22.29	19.08	33.00	PASS
EGPRS1900	661	2	4	20.70	17.49	33.00	PASS
EGPRS1900	810	2	1	26.16	22.95	33.00	PASS
EGPRS1900	810	2	2	24.85	21.64	33.00	PASS
EGPRS1900	810	2	3	22.53	19.32	33.00	PASS
EGPRS1900	810	2	4	20.91	17.7	33.00	PASS

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

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

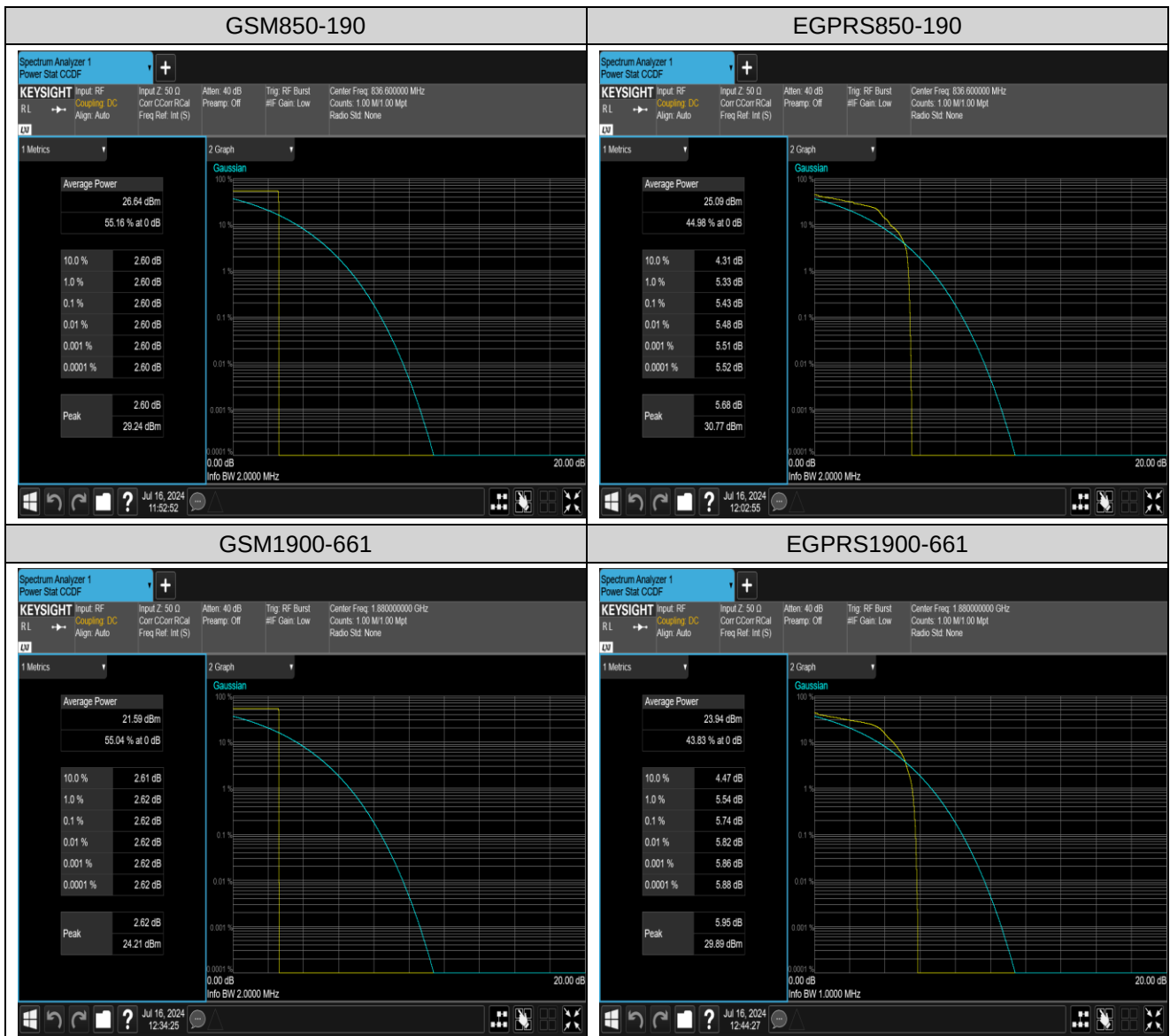
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.6	13	PASS
EGPRS850	190	8	5.43	13	PASS
GSM1900	661	0	2.62	13	PASS
EGPRS1900	661	2	5.74	13	PASS

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

Test Graphs

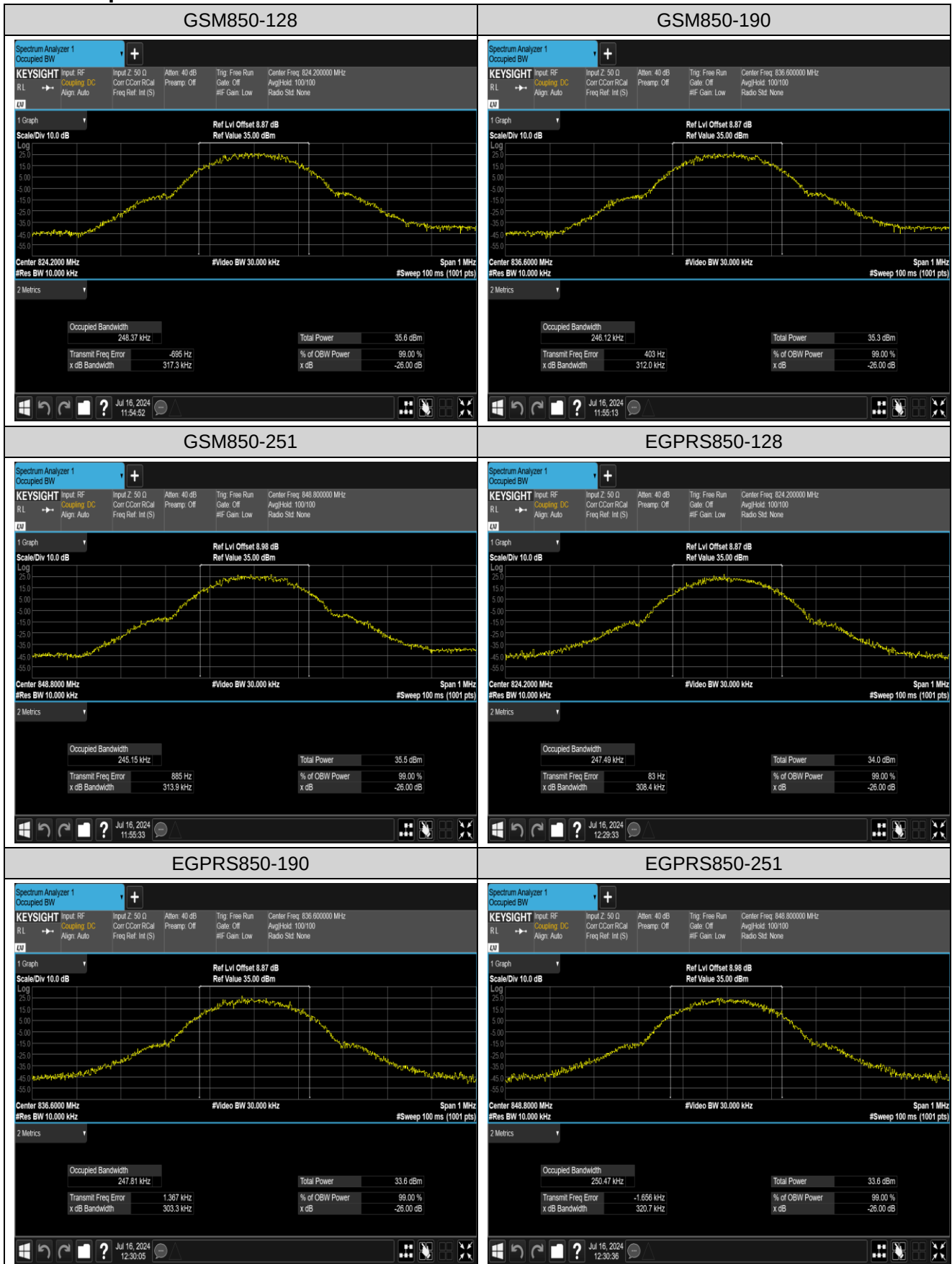


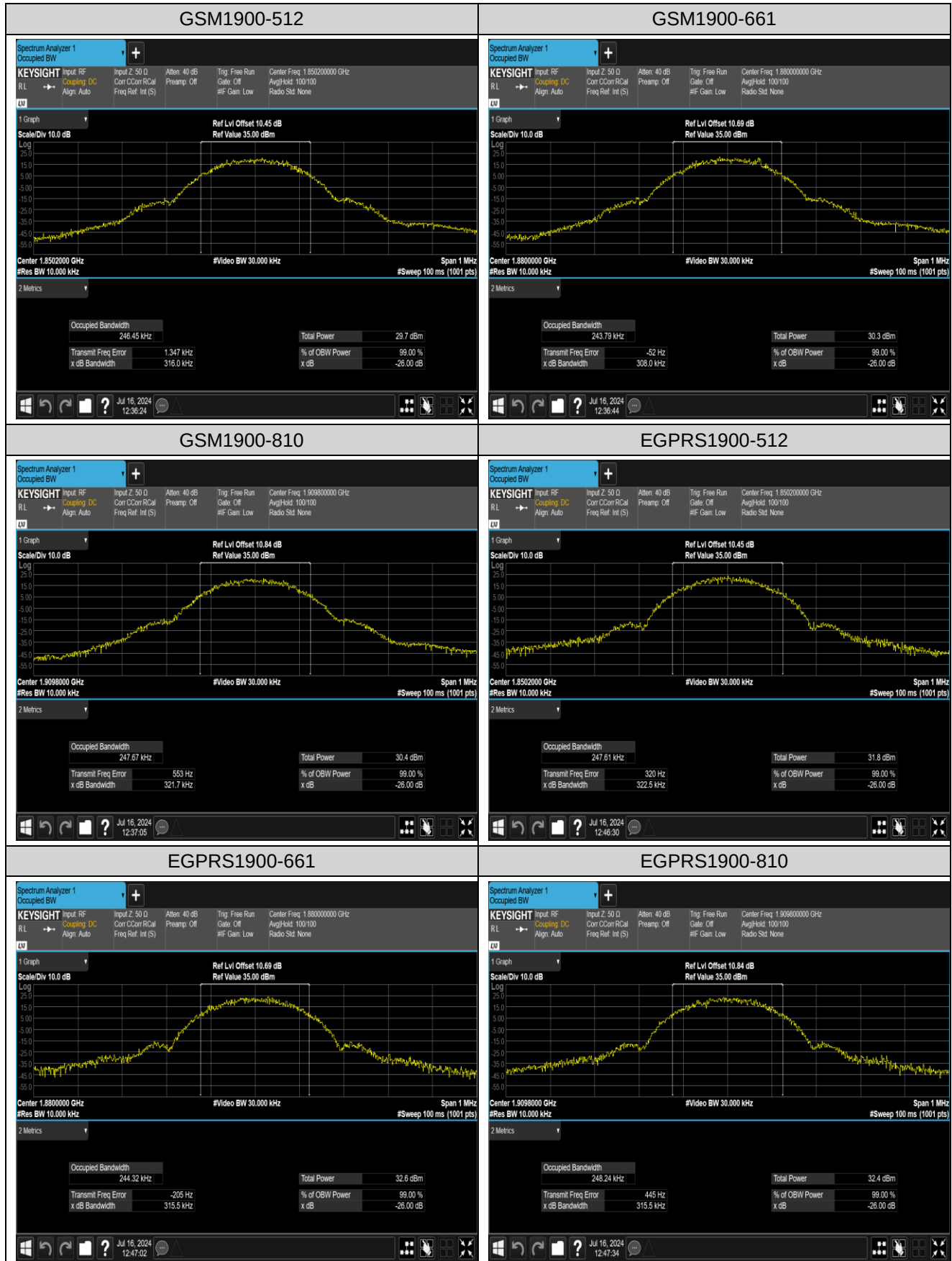
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24837	0.3173	---	PASS
GSM850	190	5	0.24612	0.3120	---	PASS
GSM850	251	5	0.24515	0.3139	---	PASS
EGPRS850	128	8	0.24749	0.3084	---	PASS
EGPRS850	190	8	0.24781	0.3033	---	PASS
EGPRS850	251	8	0.25047	0.3207	---	PASS
GSM1900	512	0	0.24645	0.3160	---	PASS
GSM1900	661	0	0.24379	0.3080	---	PASS
GSM1900	810	0	0.24767	0.3217	---	PASS
EGPRS1900	512	2	0.24761	0.3225	---	PASS
EGPRS1900	661	2	0.24432	0.3155	---	PASS
EGPRS1900	810	2	0.24824	0.3155	---	PASS

Test Graphs



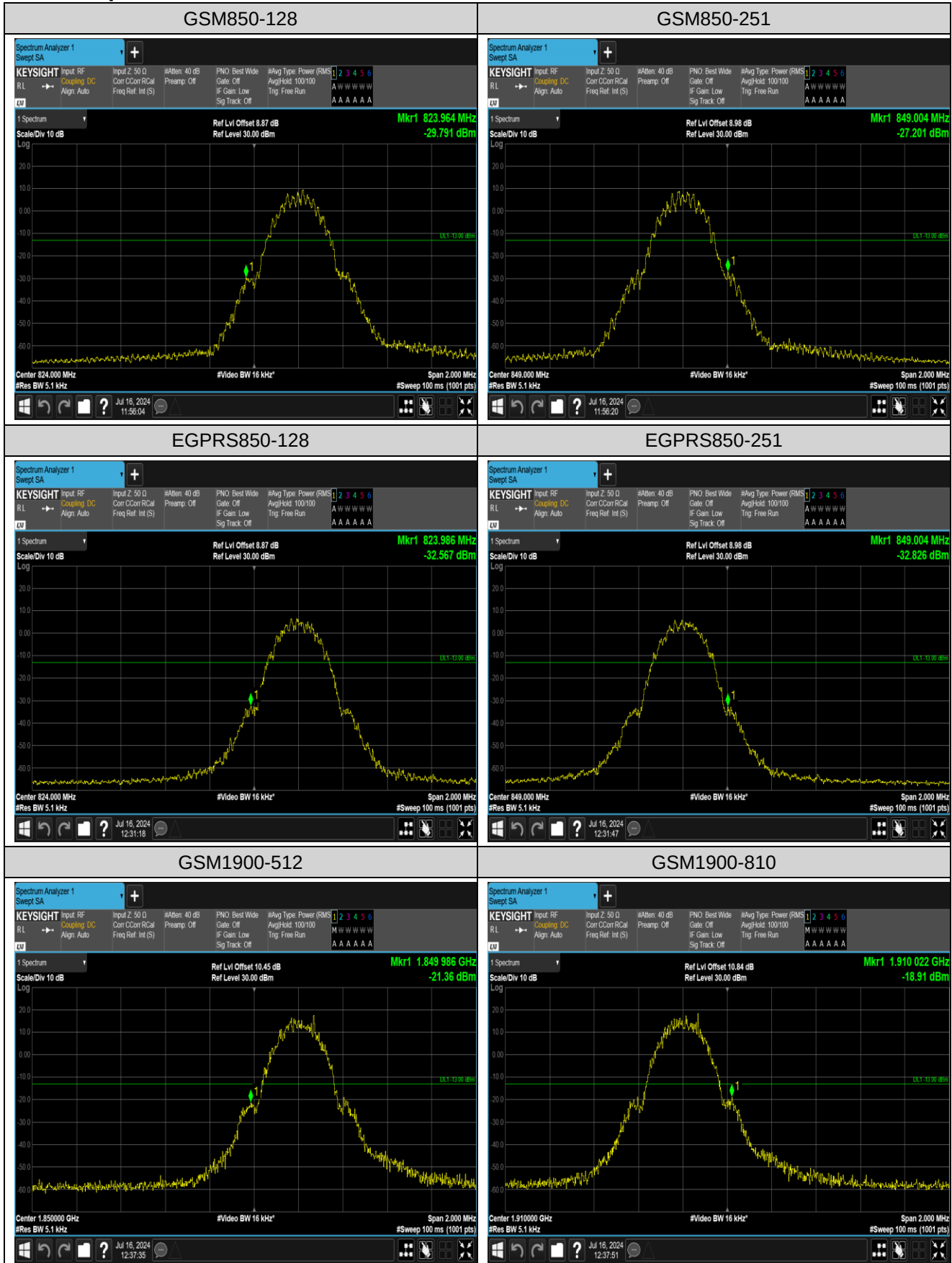


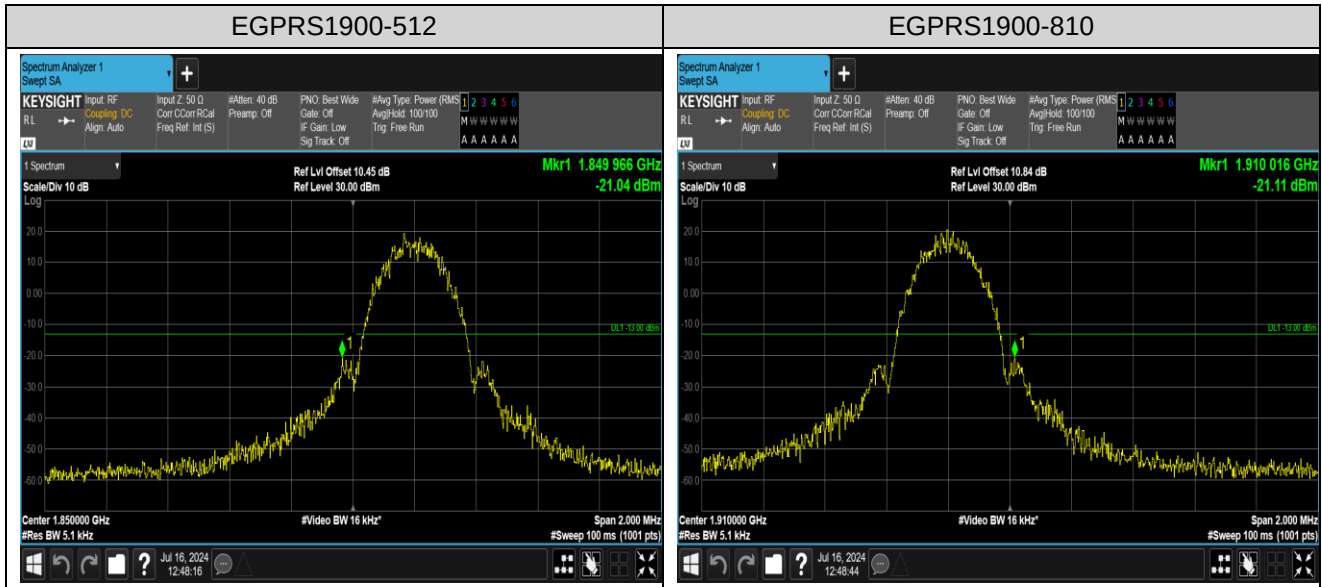
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.96	-29.79	-13	PASS
GSM850	251	5	849.00	-27.20	-13	PASS
EGPRS850	128	8	823.99	-32.57	-13	PASS
EGPRS850	251	8	849.00	-32.83	-13	PASS
GSM1900	512	0	1849.99	-21.36	-13	PASS
GSM1900	810	0	1910.02	-18.91	-13	PASS
EGPRS1900	512	2	1849.97	-21.04	-13	PASS
EGPRS1900	810	2	1910.02	-21.11	-13	PASS

Test Graphs





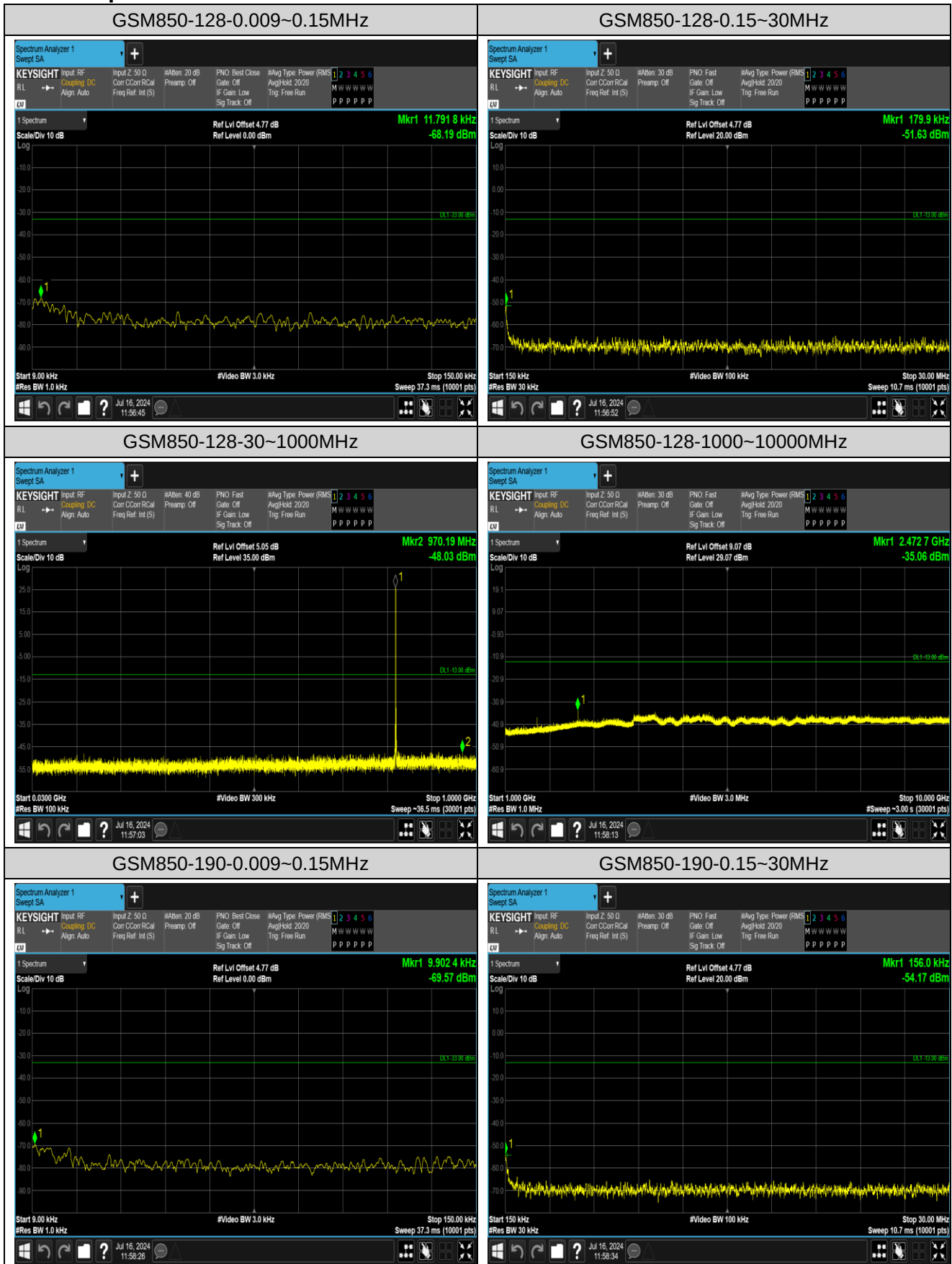
Appendix E: Conducted Spurious Emission

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	-68.19	-33	PASS
GSM850	128	5	0.15~30MHz	0.18	-51.64	-13	PASS
GSM850	128	5	30~1000MHz	970.19	-48.03	-13	PASS
GSM850	128	5	1000~10000MHz	2472.7	-35.06	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-69.57	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-54.17	-13	PASS
GSM850	190	5	30~1000MHz	989.52	-47.47	-13	PASS
GSM850	190	5	1000~10000MHz	3680.5	-34.76	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-68.69	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-51.89	-13	PASS
GSM850	251	5	30~1000MHz	476.39	-47.06	-13	PASS
GSM850	251	5	1000~10000MHz	2546.2	-34.12	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.03	-75.74	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-53.39	-23	PASS
GSM1900	512	0	30~1000MHz	884.09	-47.87	-13	PASS
GSM1900	512	0	1000~18000MHz	13882.6	-25.51	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.08	-74.26	-43	PASS
GSM1900	661	0	0.15~30MHz	0.18	-52.34	-23	PASS
GSM1900	661	0	30~1000MHz	859.96	-47.08	-13	PASS
GSM1900	661	0	1000~18000MHz	14256.03	-25.63	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.02	-75.26	-43	PASS
GSM1900	810	0	0.15~30MHz	0.16	-54.21	-23	PASS
GSM1900	810	0	30~1000MHz	805.84	-46.53	-13	PASS
GSM1900	810	0	1000~18000MHz	4009	-25.61	-13	PASS

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

Test Graphs

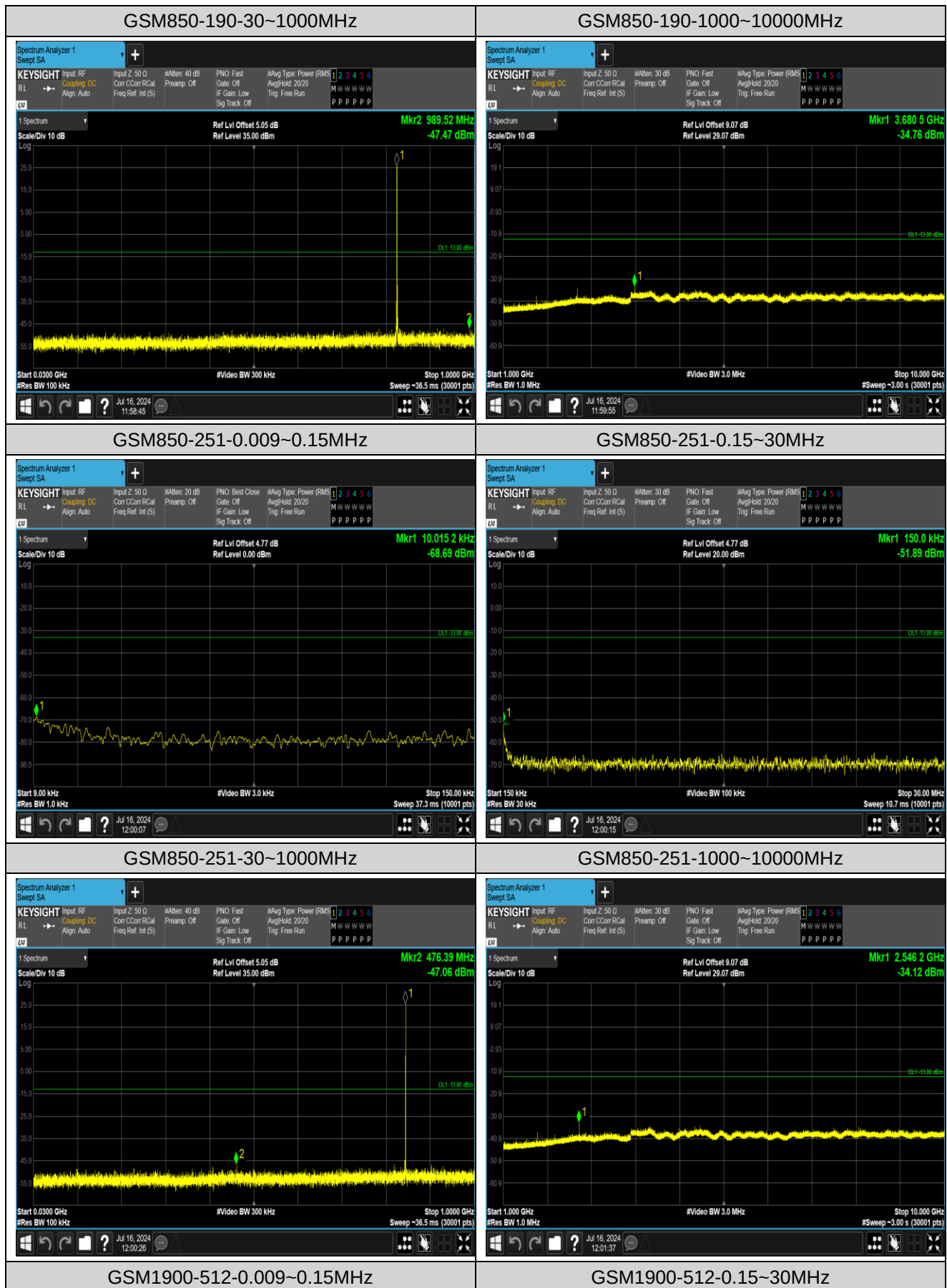


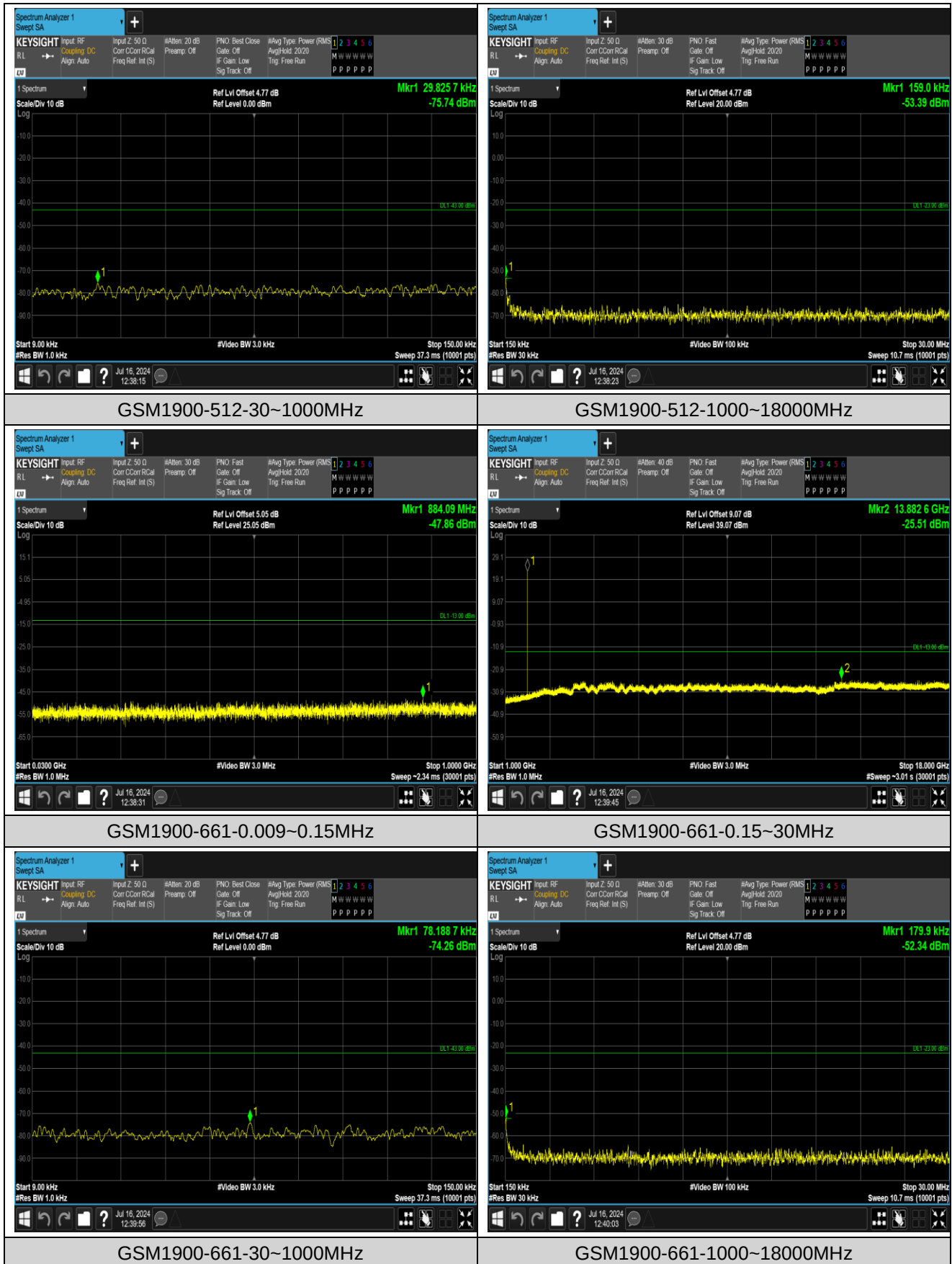
JianYan Testing Group Shenzhen Co., Ltd.

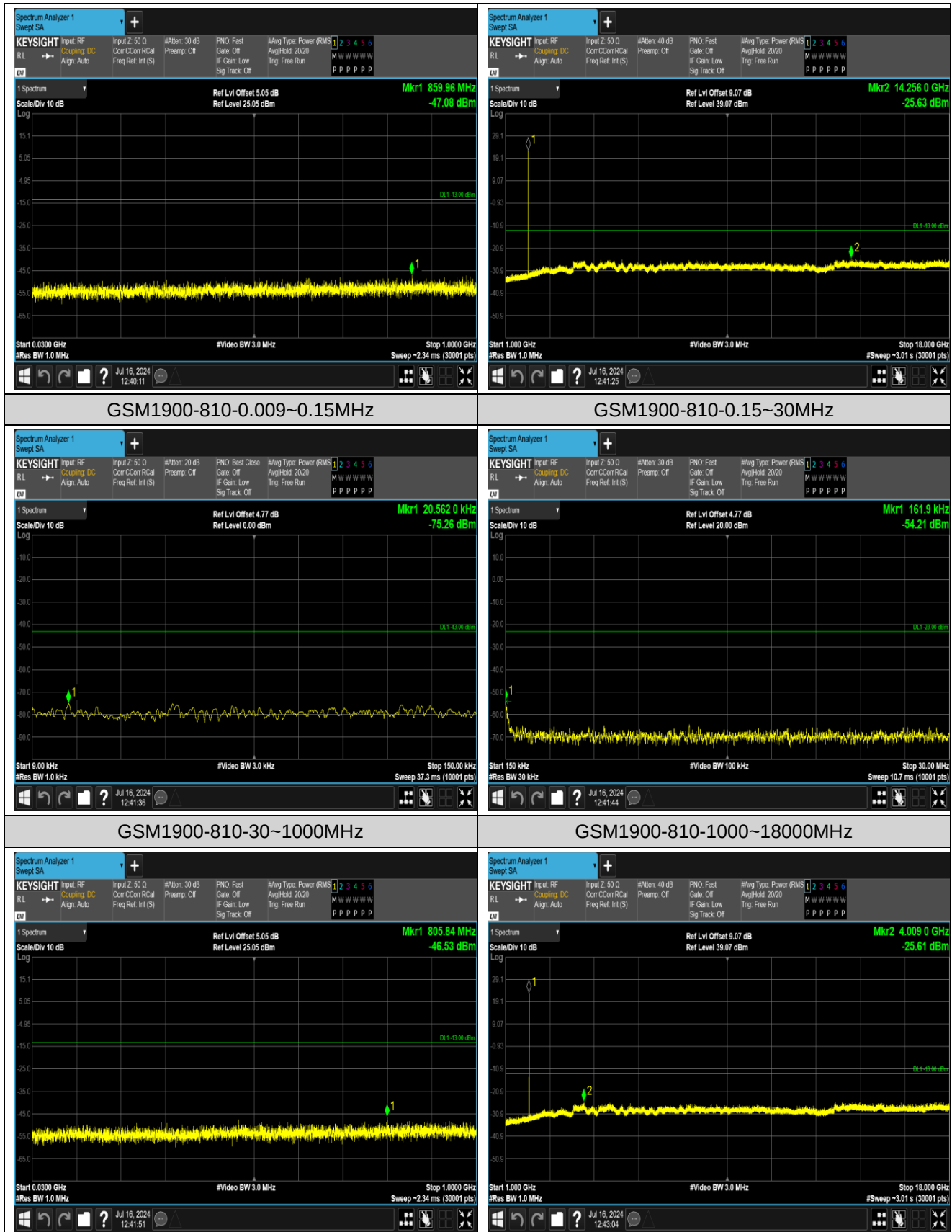
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Appendix F: Frequency Stability

Test Result

Reference Frequency: GSM850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	0.13	0.000155	±2.5	Pass
	-20	0.45	0.000538		
	-10	-1.10	-0.001315		
	0	-4.36	-0.005212		
	10	-0.39	-0.000466		
	20	1.55	0.001853		
	30	2.68	0.003203		
	40	2.36	0.002821		
	50	5.04	0.006024		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-4.94	-0.005905	±2.5	Pass
	3.87	-3.84	-0.004590		
	4.45	-2.65	-0.003168		
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	-1.94	-0.002319	±2.5	Pass
	-20	-1.16	-0.001387		
	-10	-0.97	-0.001159		
	0	-1.71	-0.002044		
	10	-1.36	-0.001626		
	20	3.03	0.003622		
	30	5.00	0.005977		
	40	1.23	0.001470		
	50	2.23	0.002666		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-1.32	-0.001578	±2.5	Pass
	3.87	2.00	0.002391		
	4.45	-6.33	-0.007566		
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 (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	8.85	0.004707	Within authorized band for PCS 1900	Pass
	-20	16.50	0.008777		
	-10	15.01	0.007984		
	0	15.63	0.008314		
	10	13.72	0.007298		
	20	15.76	0.008383		
	30	17.72	0.009426		
	40	25.05	0.013324		
	50	21.11	0.011229		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	7.26	0.003862	Within authorized band for PCS 1900	Pass
	3.87	3.42	0.001819		
	4.45	10.36	0.005511		
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	-3.78	-0.002011	Within authorized band for PCS 1900	Pass
	-20	-2.68	-0.001426		
	-10	-2.16	-0.001149		
	0	-0.68	-0.000362		
	10	1.58	0.000840		
	20	-3.33	-0.001771		
	30	-1.03	-0.000548		
	40	-5.94	-0.003160		
	50	6.10	0.003245		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-7.68	-0.004085	Within authorized band for PCS 1900	Pass
	3.87	-4.36	-0.002319		
	4.45	-8.78	-0.004670		
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

