

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	33.51	28.51	38.45	PASS
GSM850	190	5	33.57	28.57	38.45	PASS
GSM850	251	5	33.39	28.39	38.45	PASS
GSM1900	512	0	29.96	30.26	33.00	PASS
GSM1900	661	0	30.22	30.52	33.00	PASS
GSM1900	810	0	29.86	30.16	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.52	28.52	38.45	PASS
GPRS850	128	5	2	31.56	26.56	38.45	PASS
GPRS850	128	5	3	29.67	24.67	38.45	PASS
GPRS850	128	5	4	27.54	22.54	38.45	PASS
GPRS850	190	5	1	33.56	28.56	38.45	PASS
GPRS850	190	5	2	31.45	26.45	38.45	PASS
GPRS850	190	5	3	29.59	24.59	38.45	PASS
GPRS850	190	5	4	27.42	22.42	38.45	PASS
GPRS850	251	5	1	33.39	28.39	38.45	PASS
GPRS850	251	5	2	31.25	26.25	38.45	PASS
GPRS850	251	5	3	29.35	24.35	38.45	PASS
GPRS850	251	5	4	27.17	22.17	38.45	PASS
GPRS1900	512	0	1	30.02	30.32	33.00	PASS
GPRS1900	512	0	2	28.11	28.41	33.00	PASS
GPRS1900	512	0	3	26.65	26.95	33.00	PASS
GPRS1900	512	0	4	24.53	24.83	33.00	PASS
GPRS1900	661	0	1	30.19	30.49	33.00	PASS
GPRS1900	661	0	2	28.10	28.4	33.00	PASS
GPRS1900	661	0	3	26.68	26.98	33.00	PASS
GPRS1900	661	0	4	24.55	24.85	33.00	PASS
GPRS1900	810	0	1	29.85	30.15	33.00	PASS
GPRS1900	810	0	2	27.59	27.89	33.00	PASS
GPRS1900	810	0	3	26.19	26.49	33.00	PASS
GPRS1900	810	0	4	24.15	24.45	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.77	20.77	38.45	PASS
EGPRS850	128	8	2	24.51	19.51	38.45	PASS
EGPRS850	128	8	3	22.43	17.43	38.45	PASS
EGPRS850	128	8	4	20.02	15.02	38.45	PASS
EGPRS850	190	8	1	25.88	20.88	38.45	PASS
EGPRS850	190	8	2	24.80	19.8	38.45	PASS
EGPRS850	190	8	3	22.68	17.68	38.45	PASS
EGPRS850	190	8	4	20.29	15.29	38.45	PASS
EGPRS850	251	8	1	25.49	20.49	38.45	PASS
EGPRS850	251	8	2	24.42	19.42	38.45	PASS
EGPRS850	251	8	3	22.27	17.27	38.45	PASS
EGPRS850	251	8	4	19.99	14.99	38.45	PASS
EGPRS1900	512	2	1	27.01	27.31	33.00	PASS
EGPRS1900	512	2	2	25.54	25.84	33.00	PASS
EGPRS1900	512	2	3	24.00	24.3	33.00	PASS
EGPRS1900	512	2	4	21.91	22.21	33.00	PASS
EGPRS1900	661	2	1	27.14	27.44	33.00	PASS
EGPRS1900	661	2	2	25.69	25.99	33.00	PASS
EGPRS1900	661	2	3	24.20	24.5	33.00	PASS
EGPRS1900	661	2	4	22.00	22.3	33.00	PASS
EGPRS1900	810	2	1	26.72	27.02	33.00	PASS
EGPRS1900	810	2	2	25.32	25.62	33.00	PASS
EGPRS1900	810	2	3	23.75	24.05	33.00	PASS
EGPRS1900	810	2	4	21.83	22.13	33.00	PASS

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

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

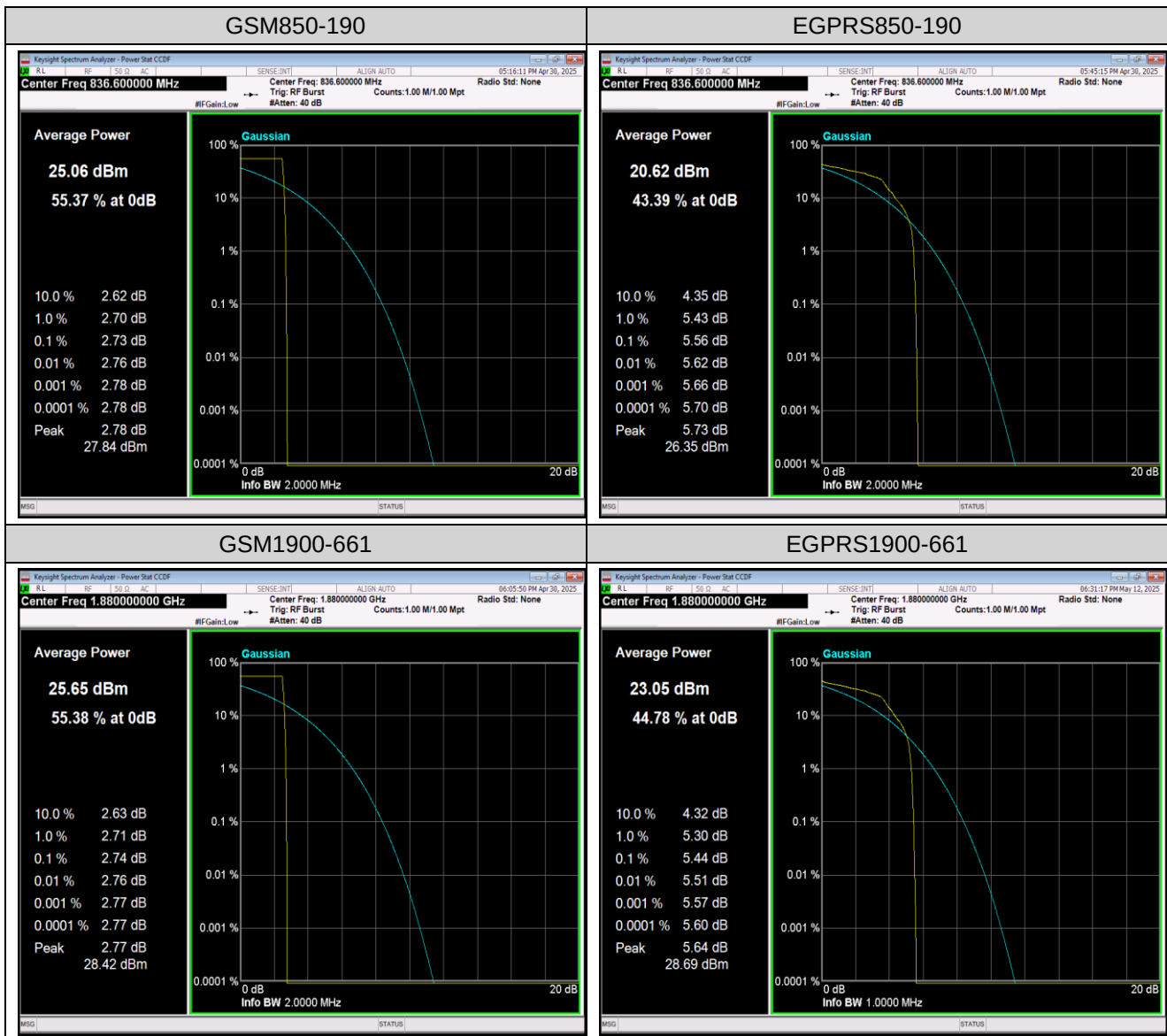
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.73	13	PASS
EGPRS850	190	8	5.56	13	PASS
GSM1900	661	0	2.74	13	PASS
EGPRS1900	661	2	5.44	13	PASS

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

Test Graphs

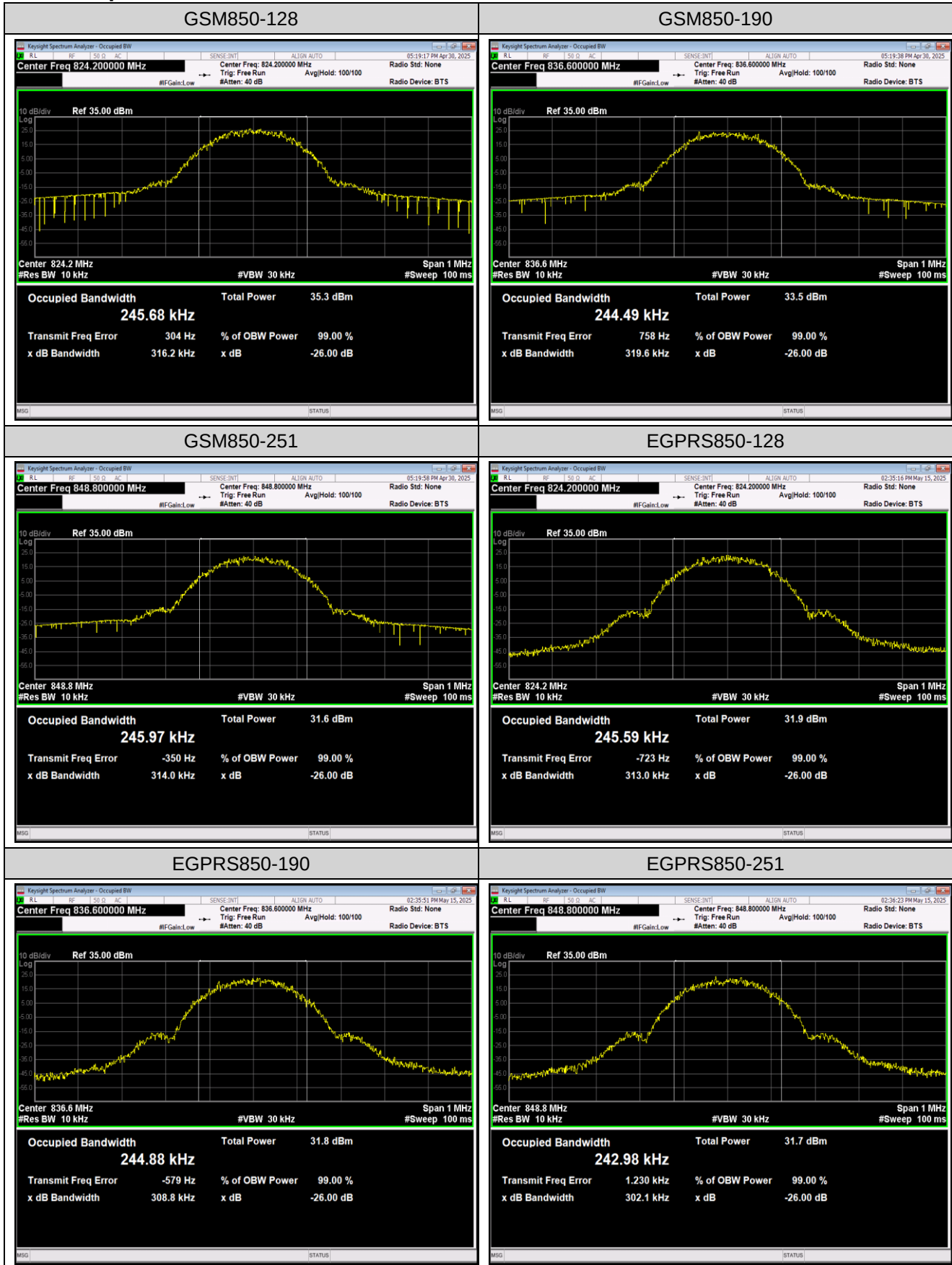


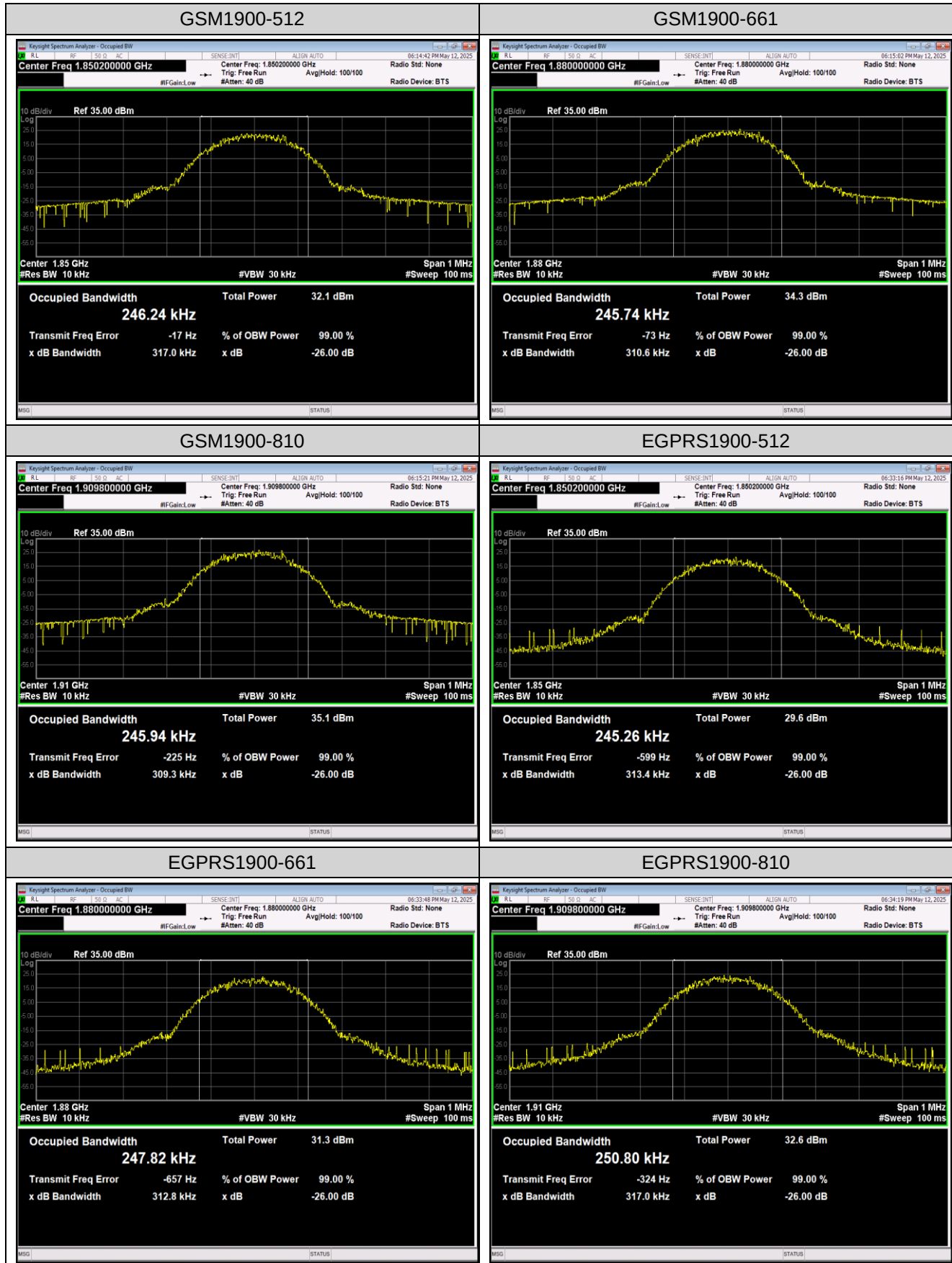
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24568	0.3162	---	PASS
GSM850	190	5	0.24449	0.3196	---	PASS
GSM850	251	5	0.24597	0.3140	---	PASS
EGPRS850	128	8	0.24559	0.3130	---	PASS
EGPRS850	190	8	0.24488	0.3088	---	PASS
EGPRS850	251	8	0.24298	0.3021	---	PASS
GSM1900	512	0	0.24624	0.3170	---	PASS
GSM1900	661	0	0.24574	0.3106	---	PASS
GSM1900	810	0	0.24594	0.3093	---	PASS
EGPRS1900	512	2	0.24526	0.3134	---	PASS
EGPRS1900	661	2	0.24782	0.3128	---	PASS
EGPRS1900	810	2	0.25080	0.3170	---	PASS

Test Graphs



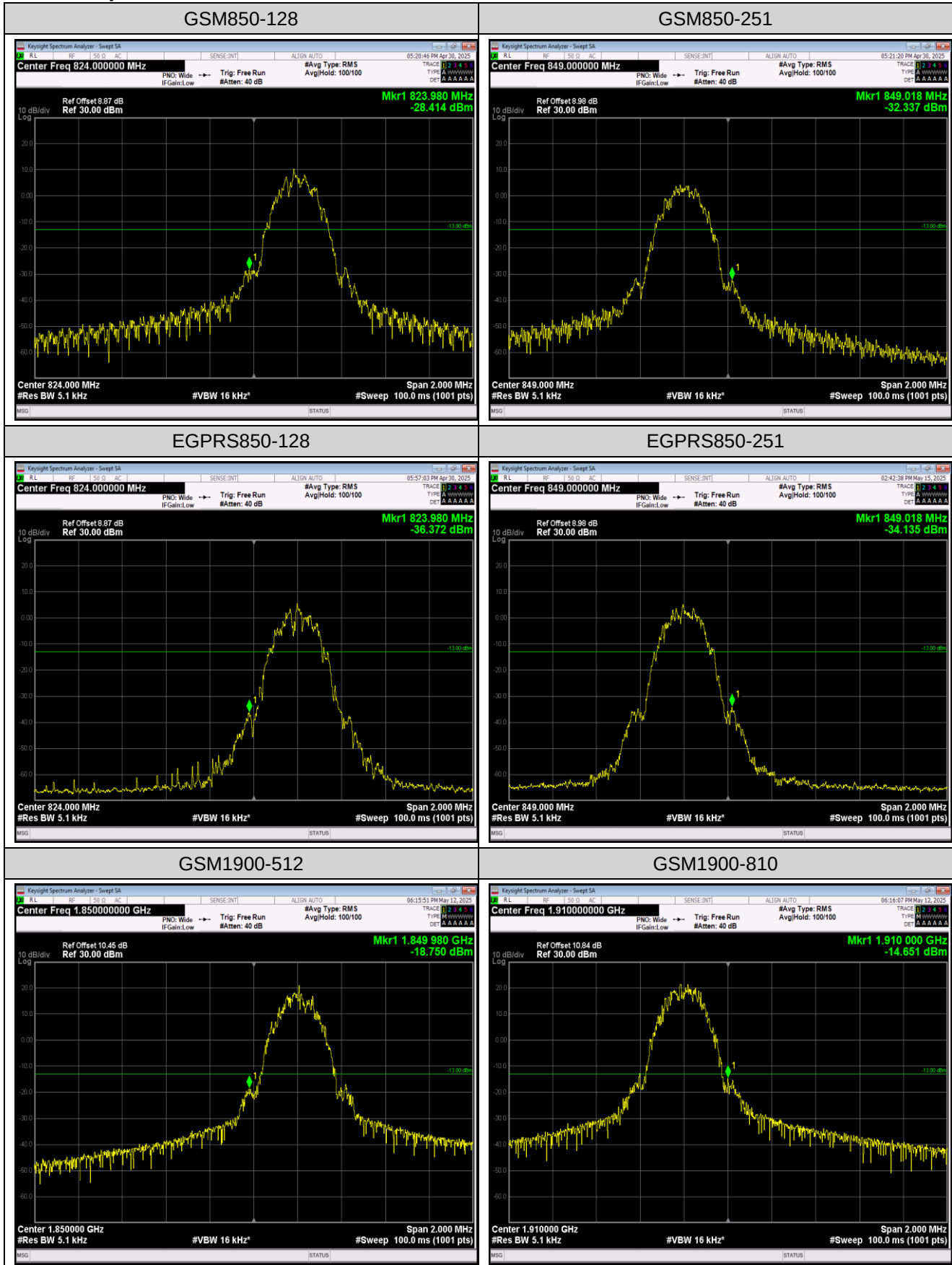


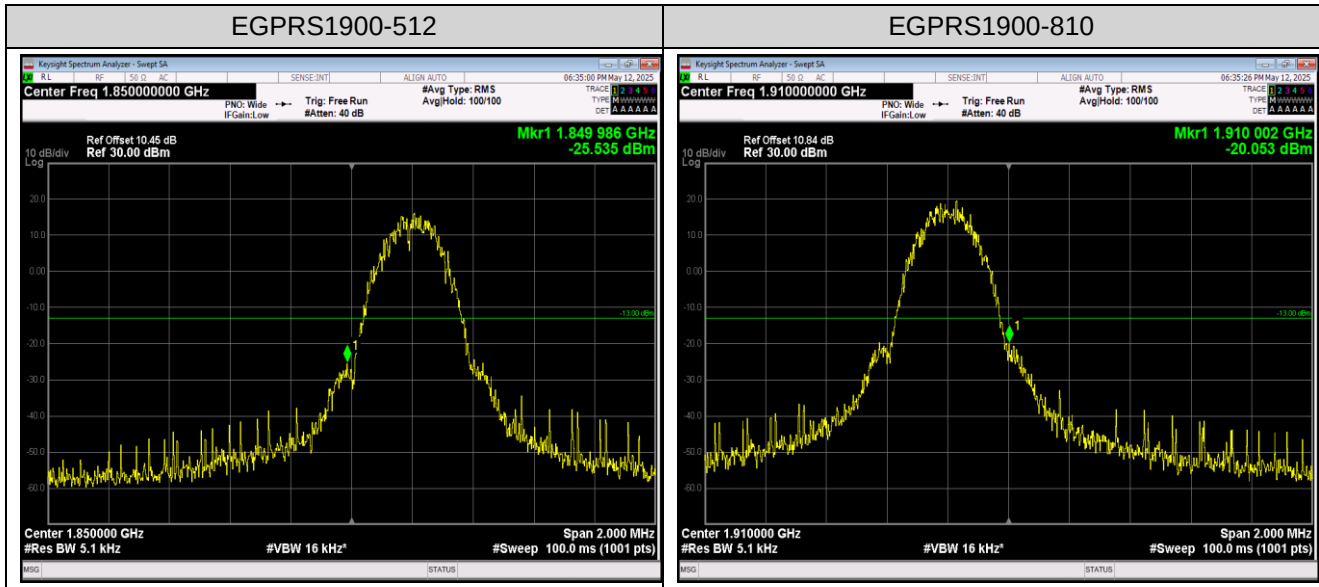
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-28.41	-13	PASS
GSM850	251	5	849.02	-32.34	-13	PASS
EGPRS850	128	8	823.99	-36.37	-13	PASS
EGPRS850	251	8	849.02	-34.14	-13	PASS
GSM1900	512	0	1849.98	-18.75	-13	PASS
GSM1900	810	0	1910.00	-14.65	-13	PASS
EGPRS1900	512	2	1849.99	-25.53	-13	PASS
EGPRS1900	810	2	1910.00	-20.05	-13	PASS

Test Graphs





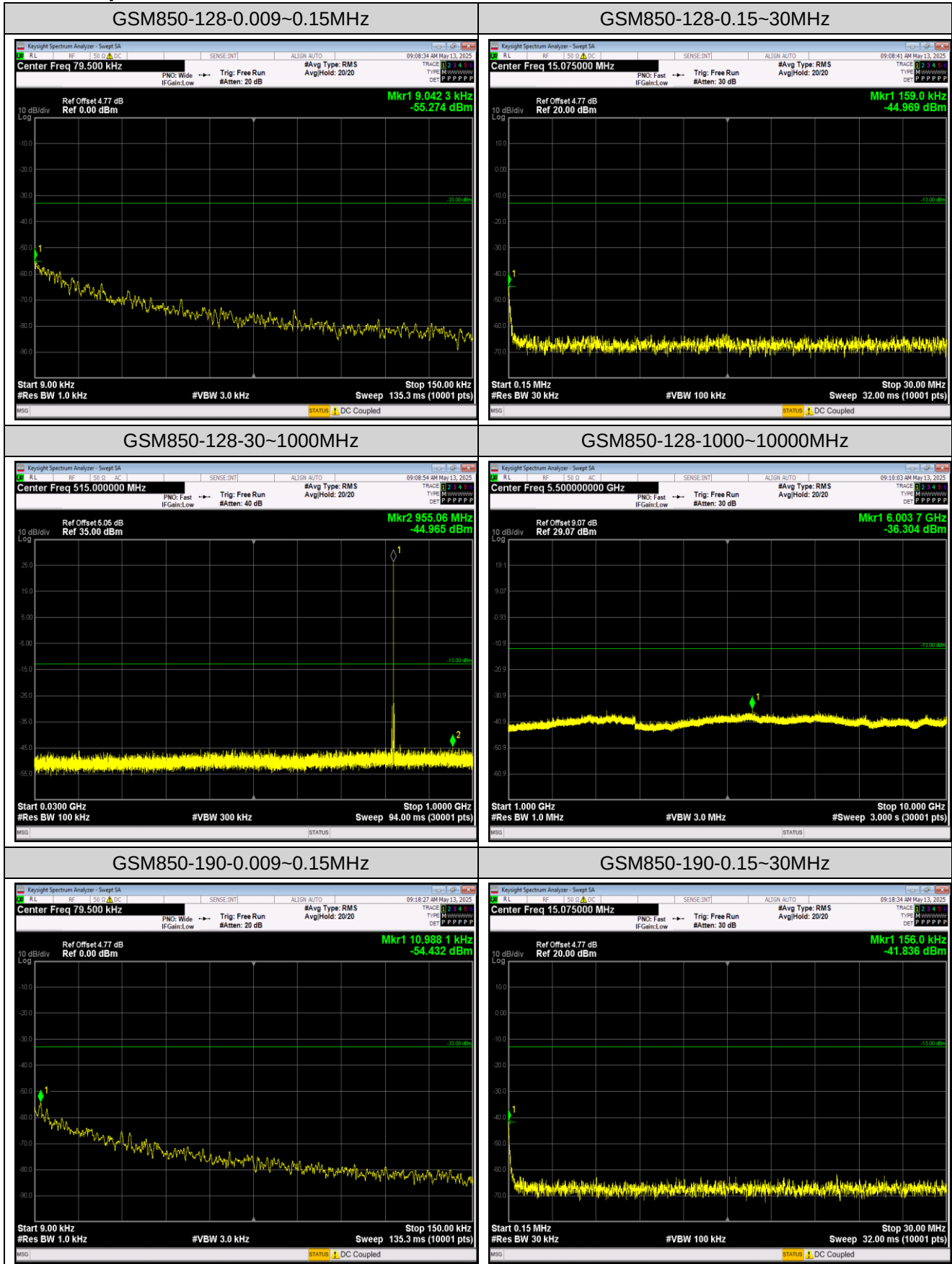
Appendix E: Conducted Spurious Emission

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	-55.27	-33	PASS
GSM850	128	5	0.15~30MHz	0.16	-44.97	-13	PASS
GSM850	128	5	30~1000MHz	955.06	-44.97	-13	PASS
GSM850	128	5	1000~10000MHz	6003.7	-36.3	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-54.43	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-41.84	-13	PASS
GSM850	190	5	30~1000MHz	941.35	-44.83	-13	PASS
GSM850	190	5	1000~10000MHz	2508.4	-15.5	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-56.16	-33	PASS
GSM850	251	5	0.15~30MHz	0.17	-42.43	-13	PASS
GSM850	251	5	30~1000MHz	414.96	-44.97	-13	PASS
GSM850	251	5	1000~10000MHz	2544.1	-14.32	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.92	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-41.31	-23	PASS
GSM1900	512	0	30~1000MHz	847.58	-44.44	-13	PASS
GSM1900	512	0	1000~18000MHz	16130.57	-21.83	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-55.16	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-41.8	-23	PASS
GSM1900	661	0	30~1000MHz	948.14	-45.78	-13	PASS
GSM1900	661	0	1000~18000MHz	16127.73	-22.52	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.34	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-43.34	-23	PASS
GSM1900	810	0	30~1000MHz	829.77	-42.24	-13	PASS
GSM1900	810	0	1000~18000MHz	16141.9	-22.21	-13	PASS

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

Test Graphs

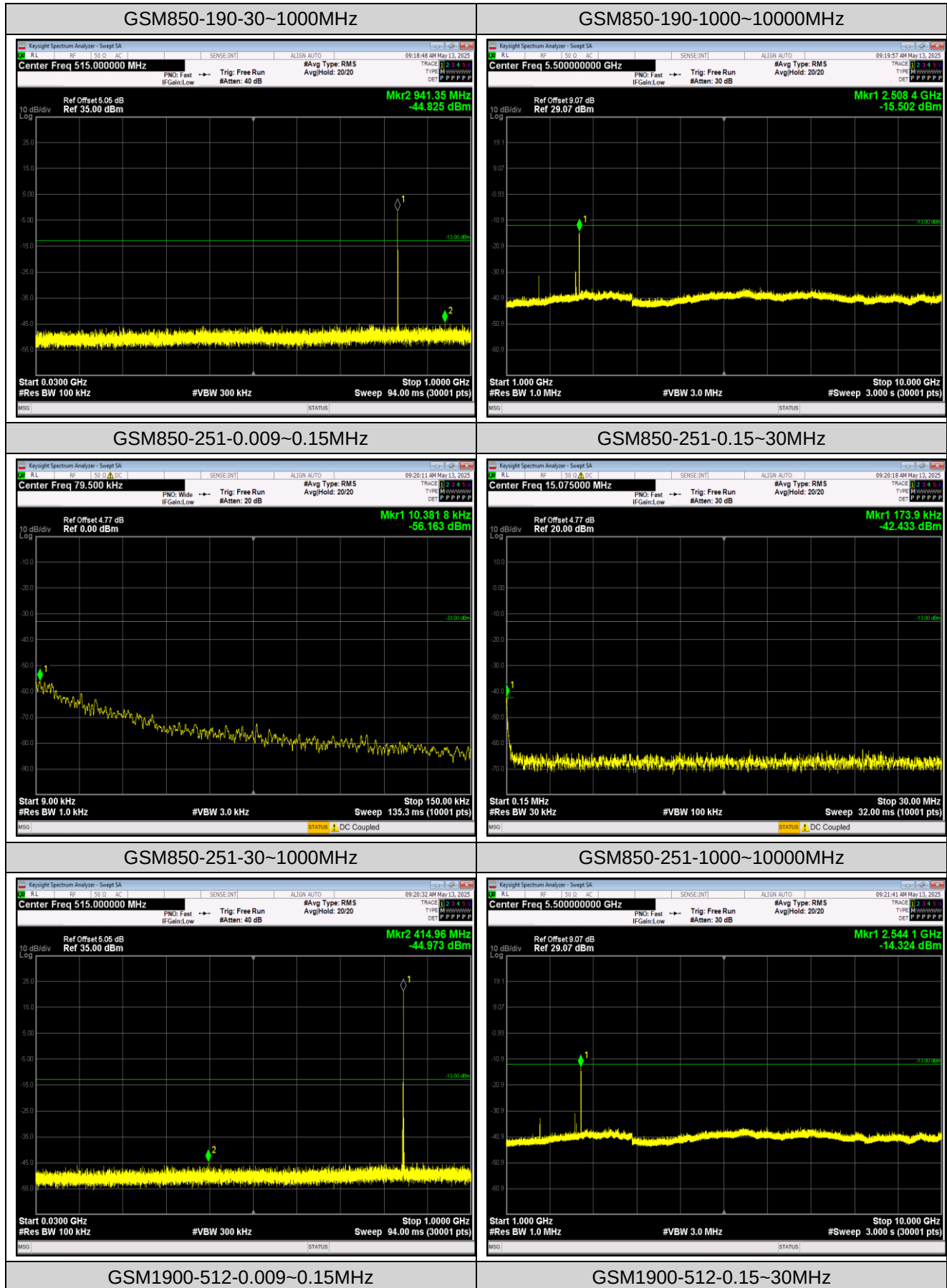


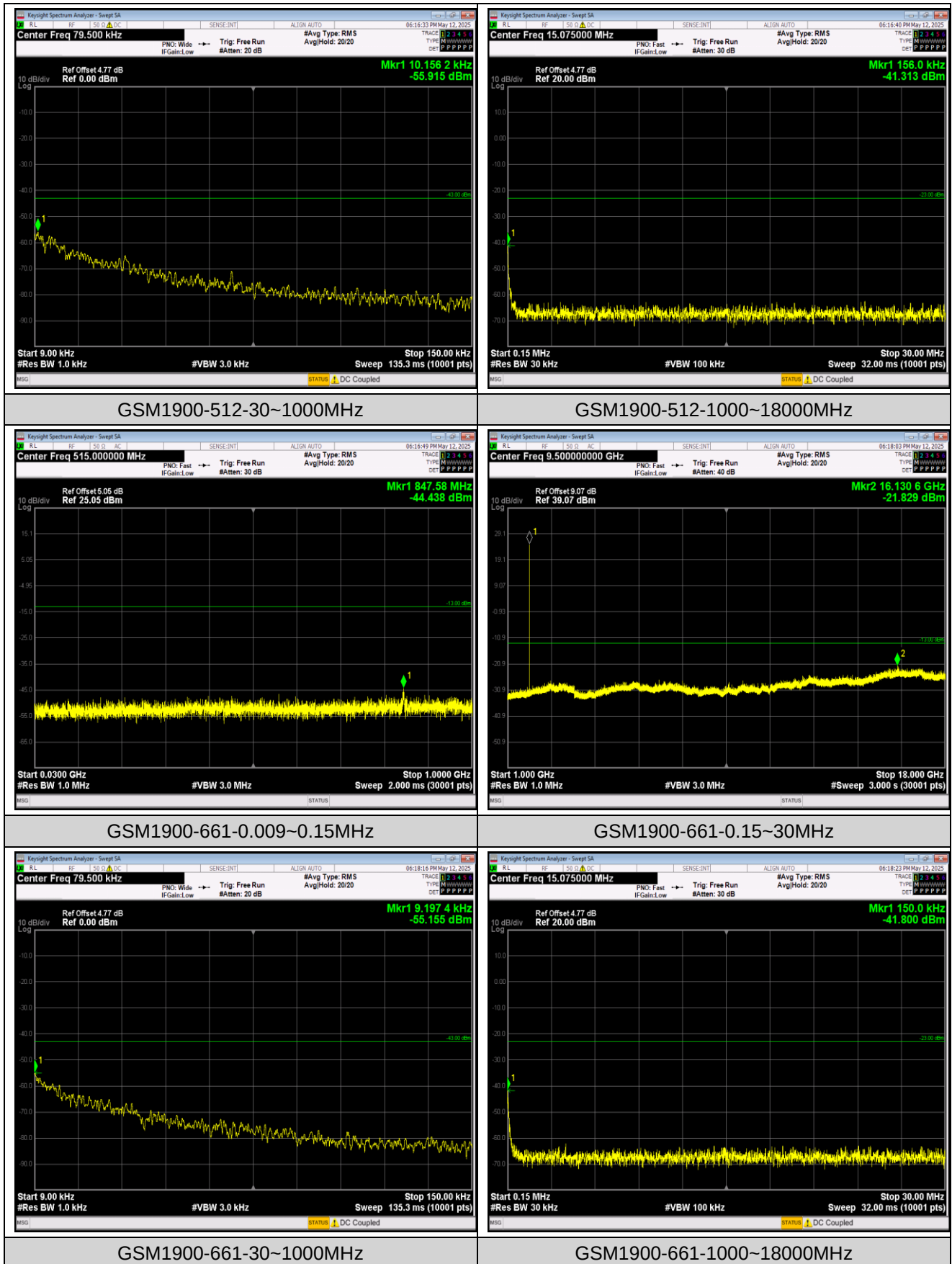
JianYan Testing Group Shenzhen Co., Ltd.

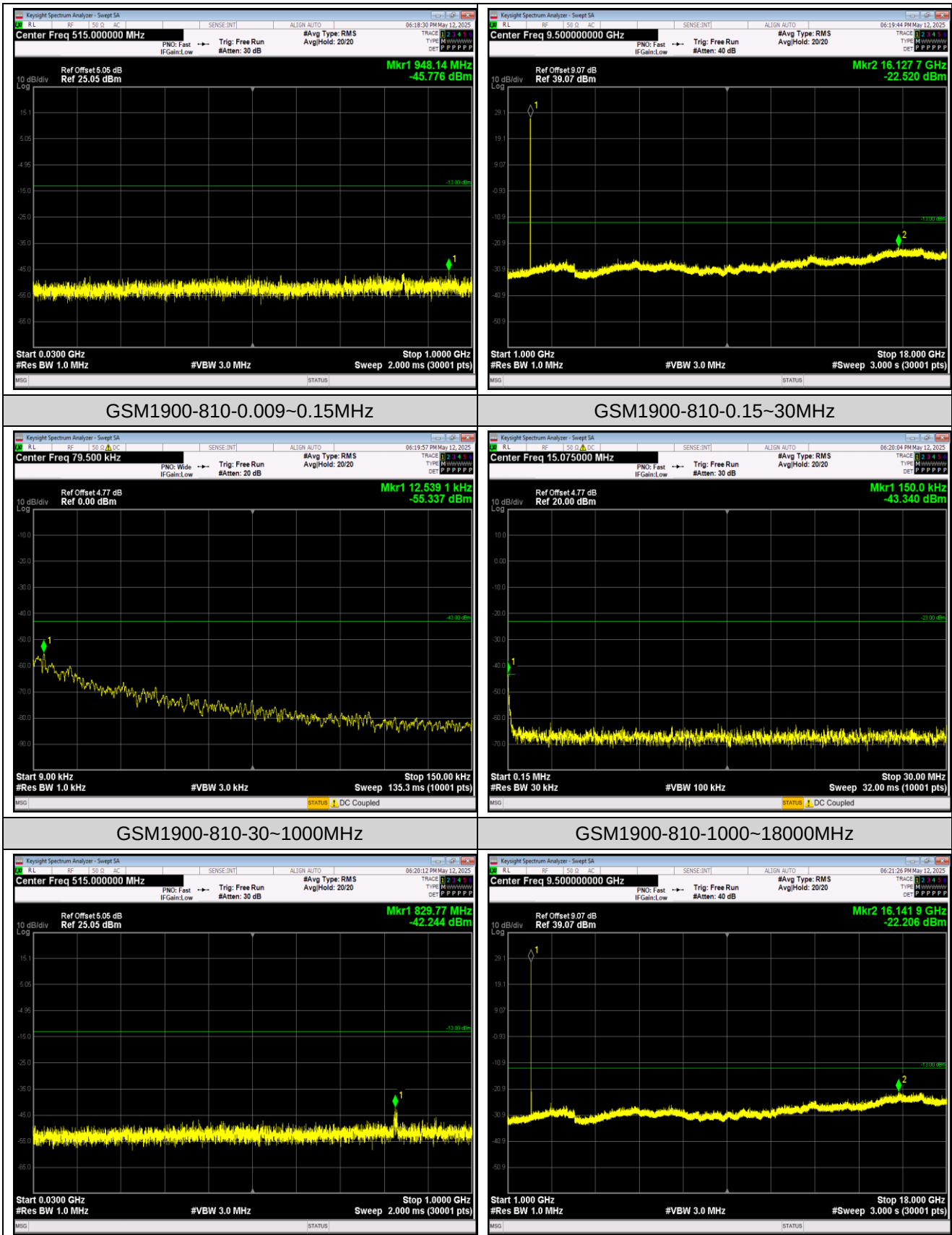
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Appendix F: Frequency Stability

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	-15.82	-0.018910	±2.5	Pass
	-20	-21.92	-0.026201		
	-10	-20.40	-0.024384		
	0	-9.01	-0.010770		
	10	-18.53	-0.022149		
	20	-8.14	-0.009730		
	30	-15.69	-0.018754		
	40	-15.14	-0.018097		
	50	-7.23	-0.008642		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	-17.08	-0.020416	±2.5	Pass
	3.70	-15.34	-0.018336		
	4.25	-7.36	-0.008798		
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		
3.70	-30	-3.81	-0.004554	±2.5	Pass
	-20	-8.33	-0.009957		
	-10	-12.62	-0.015085		
	0	-9.65	-0.011535		
	10	3.68	0.004399		
	20	0.36	0.000430		
	30	-6.07	-0.007256		
	40	-6.62	-0.007913		
	50	-4.23	-0.005056		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	2.87	0.003431	±2.5	Pass
	3.70	3.65	0.004363		
	4.25	-5.52	-0.006598		
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	-20.63	-0.010973	Within authorized band for PCS 1900	Pass
	-20	11.88	0.006319		
	-10	-21.86	-0.011628		
	0	-14.50	-0.007713		
	10	-8.68	-0.004617		
	20	-25.47	-0.013548		
	30	-10.04	-0.005340		
	40	-12.40	-0.006596		
	50	-8.65	-0.004601		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	-5.97	-0.003176	Within authorized band for PCS 1900	Pass
	3.70	-11.49	-0.006112		
	4.25	-4.07	-0.002165		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.70	-30	-27.41	-0.014580	Within authorized band for PCS 1900	Pass
	-20	-12.11	-0.006441		
	-10	-35.68	-0.018979		
	0	-8.20	-0.004362		
	10	-11.36	-0.006043		
	20	-7.85	-0.004176		
	30	-2.00	-0.001064		
	40	-3.58	-0.001904		
	50	5.36	0.002851		
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
	3.70	-17.24	-0.009170		
	4.25	-4.39	-0.002335		
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

