

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	32.43	29	38.45	PASS
GSM850	190	5	32.42	28.99	38.45	PASS
GSM850	251	5	32.47	29.04	38.45	PASS
GSM1900	512	0	29.87	30.07	33.00	PASS
GSM1900	661	0	29.92	30.12	33.00	PASS
GSM1900	810	0	29.61	29.81	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.45	29.02	38.45	PASS
GPRS850	128	5	2	30.04	26.61	38.45	PASS
GPRS850	128	5	3	28.12	24.69	38.45	PASS
GPRS850	128	5	4	26.14	22.71	38.45	PASS
GPRS850	190	5	1	32.41	28.98	38.45	PASS
GPRS850	190	5	2	30.18	26.75	38.45	PASS
GPRS850	190	5	3	28.20	24.77	38.45	PASS
GPRS850	190	5	4	26.21	22.78	38.45	PASS
GPRS850	251	5	1	32.44	29.01	38.45	PASS
GPRS850	251	5	2	30.27	26.84	38.45	PASS
GPRS850	251	5	3	28.30	24.87	38.45	PASS
GPRS850	251	5	4	26.28	22.85	38.45	PASS
GPRS1900	512	0	1	29.96	30.16	33.00	PASS
GPRS1900	512	0	2	28.12	28.32	33.00	PASS
GPRS1900	512	0	3	26.54	26.74	33.00	PASS
GPRS1900	512	0	4	24.52	24.72	33.00	PASS
GPRS1900	661	0	1	30.02	30.22	33.00	PASS
GPRS1900	661	0	2	27.98	28.18	33.00	PASS
GPRS1900	661	0	3	26.45	26.65	33.00	PASS
GPRS1900	661	0	4	24.47	24.67	33.00	PASS
GPRS1900	810	0	1	29.75	29.95	33.00	PASS
GPRS1900	810	0	2	27.46	27.66	33.00	PASS
GPRS1900	810	0	3	25.92	26.12	33.00	PASS
GPRS1900	810	0	4	23.96	24.16	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.34	21.91	38.45	PASS
EGPRS850	128	8	2	24.27	20.84	38.45	PASS
EGPRS850	128	8	3	22.24	18.81	38.45	PASS
EGPRS850	128	8	4	20.25	16.82	38.45	PASS
EGPRS850	190	8	1	25.04	21.61	38.45	PASS
EGPRS850	190	8	2	24.05	20.62	38.45	PASS
EGPRS850	190	8	3	21.97	18.54	38.45	PASS
EGPRS850	190	8	4	19.97	16.54	38.45	PASS
EGPRS850	251	8	1	25.15	21.72	38.45	PASS
EGPRS850	251	8	2	24.13	20.7	38.45	PASS
EGPRS850	251	8	3	22.20	18.77	38.45	PASS
EGPRS850	251	8	4	20.13	16.7	38.45	PASS
EGPRS1900	512	2	1	26.28	26.48	33.00	PASS
EGPRS1900	512	2	2	24.91	25.11	33.00	PASS
EGPRS1900	512	2	3	22.55	22.75	33.00	PASS
EGPRS1900	512	2	4	19.83	20.03	33.00	PASS
EGPRS1900	661	2	1	26.68	26.88	33.00	PASS
EGPRS1900	661	2	2	25.26	25.46	33.00	PASS
EGPRS1900	661	2	3	23.11	23.31	33.00	PASS
EGPRS1900	661	2	4	20.64	20.84	33.00	PASS
EGPRS1900	810	2	1	25.80	26	33.00	PASS
EGPRS1900	810	2	2	24.37	24.57	33.00	PASS
EGPRS1900	810	2	3	22.24	22.44	33.00	PASS
EGPRS1900	810	2	4	19.76	19.96	33.00	PASS

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

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

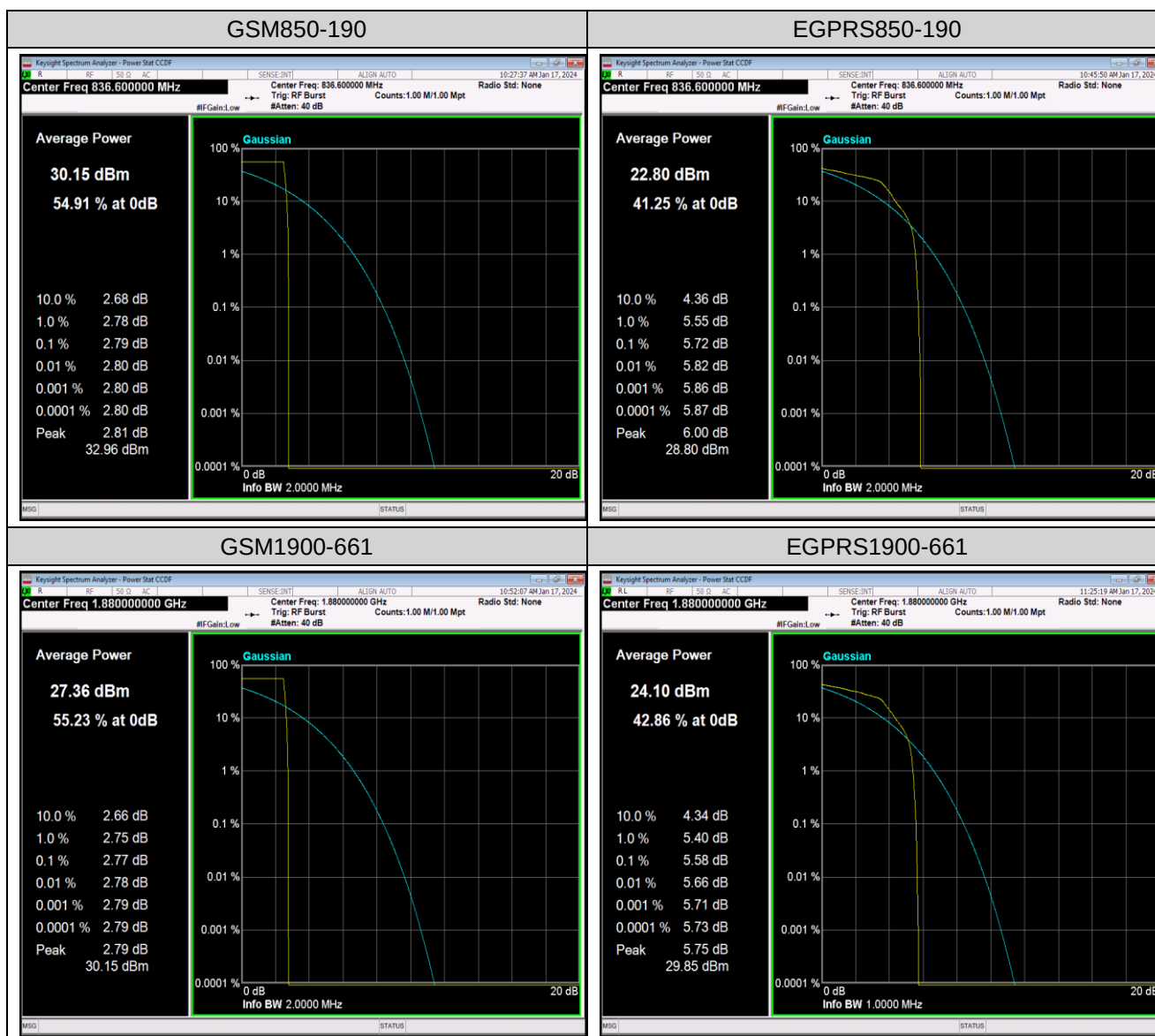
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.79	13	PASS
EGPRS850	190	8	5.72	13	PASS
GSM1900	661	0	2.77	13	PASS
EGPRS1900	661	2	5.58	13	PASS

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

Test Graphs

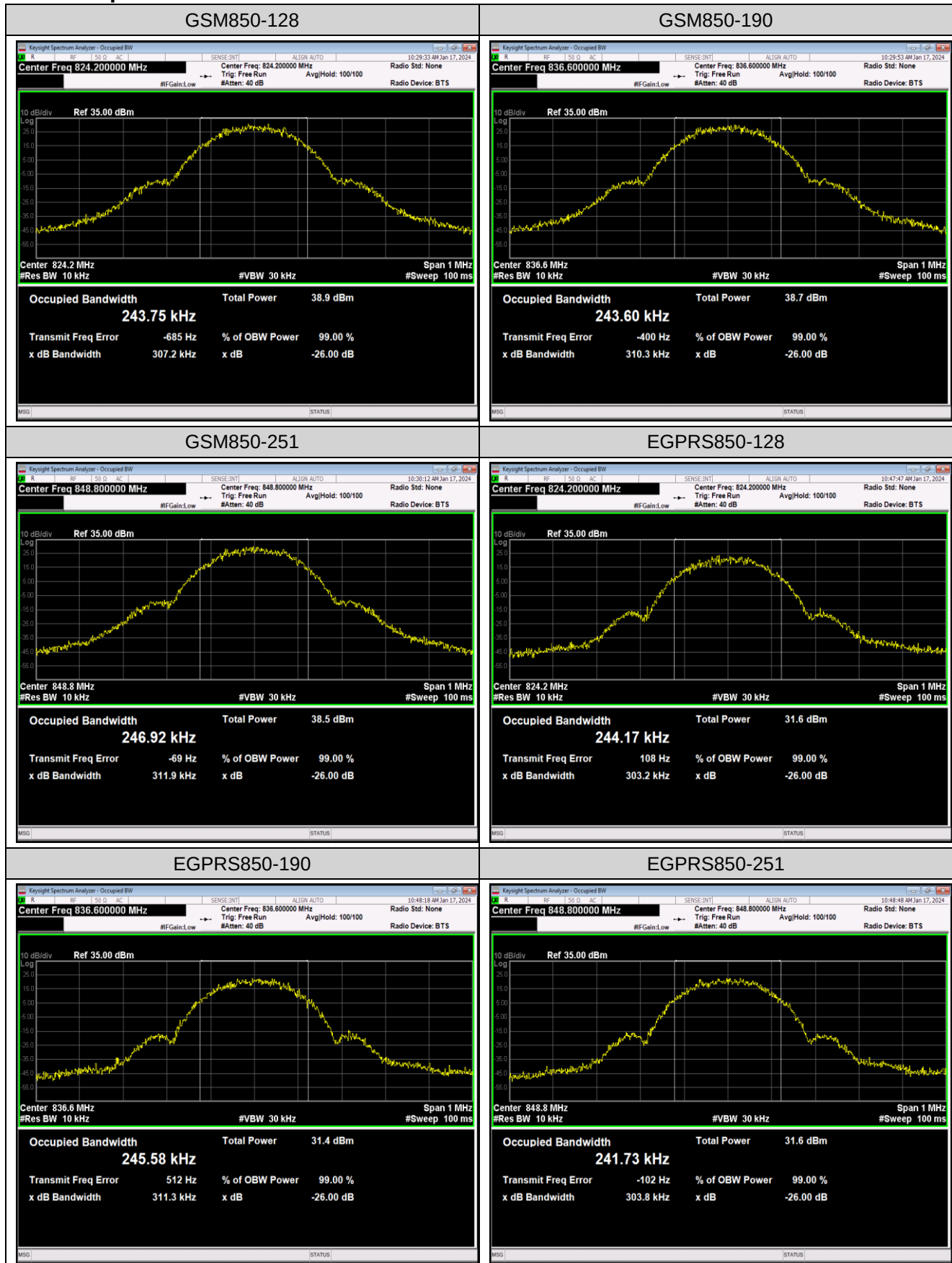


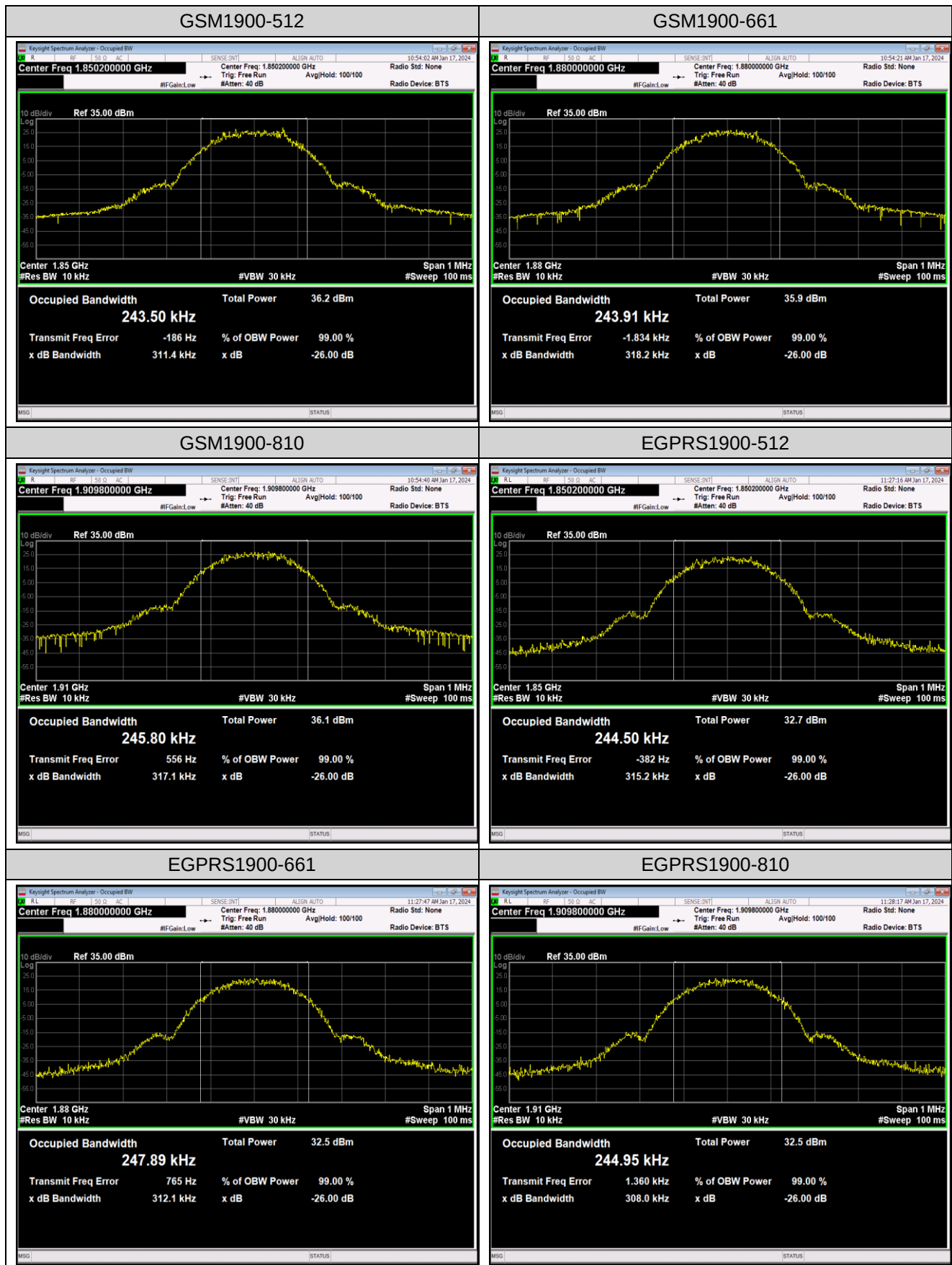
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24375	0.3072	---	PASS
GSM850	190	5	0.24360	0.3103	---	PASS
GSM850	251	5	0.24692	0.3119	---	PASS
EGPRS850	128	8	0.24417	0.3032	---	PASS
EGPRS850	190	8	0.24558	0.3113	---	PASS
EGPRS850	251	8	0.24173	0.3038	---	PASS
GSM1900	512	0	0.24350	0.3114	---	PASS
GSM1900	661	0	0.24391	0.3182	---	PASS
GSM1900	810	0	0.24580	0.3171	---	PASS
EGPRS1900	512	2	0.24450	0.3152	---	PASS
EGPRS1900	661	2	0.24789	0.3121	---	PASS
EGPRS1900	810	2	0.24495	0.3080	---	PASS

Test Graphs



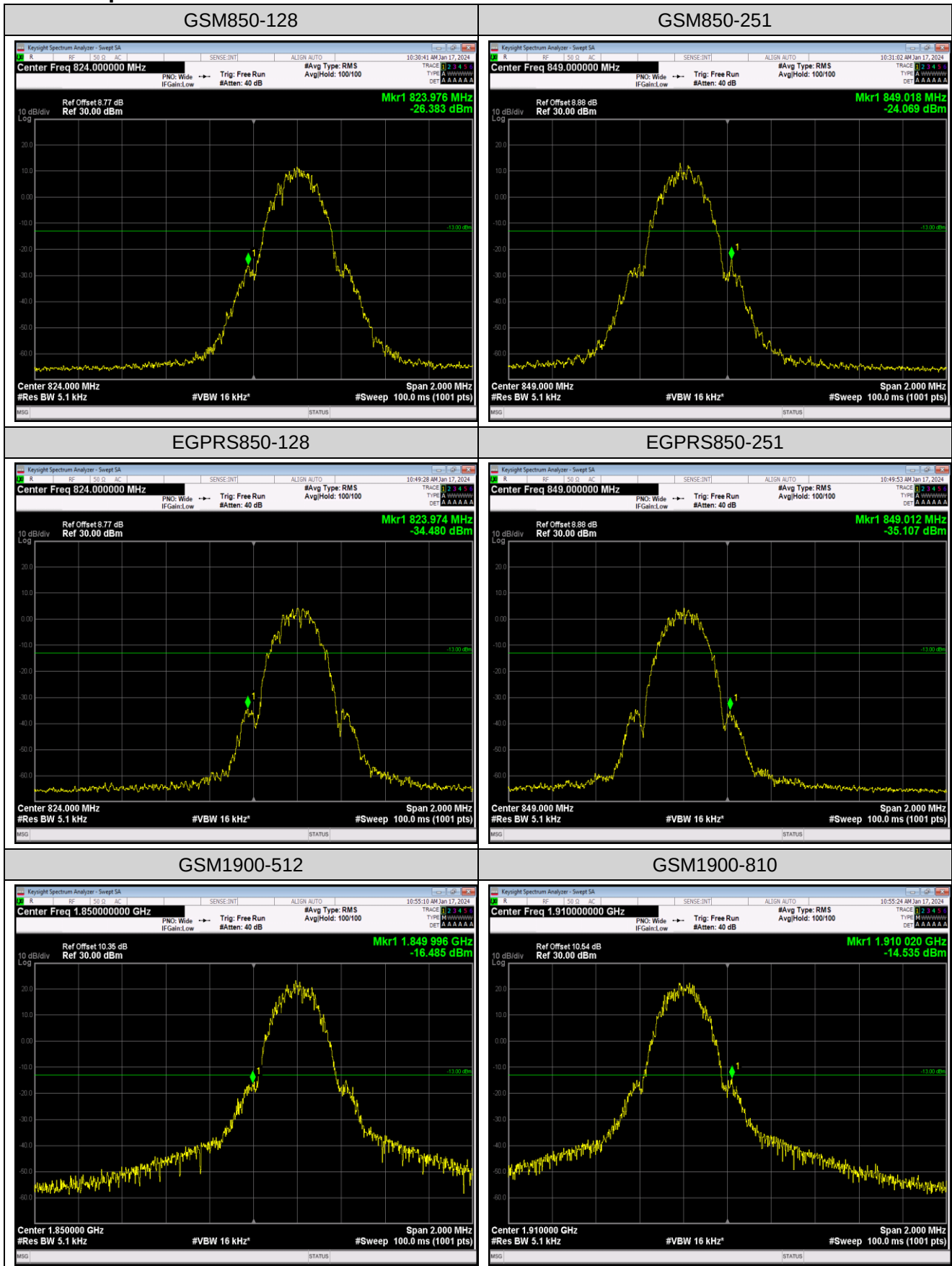


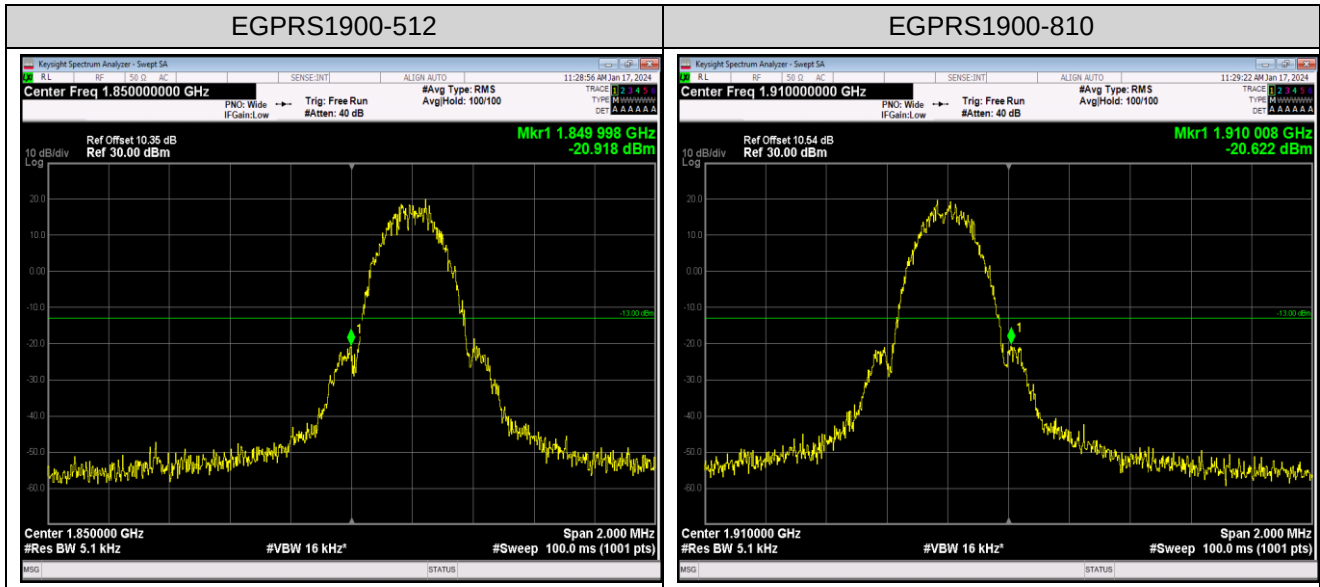
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-26.38	-13	PASS
GSM850	251	5	849.02	-24.07	-13	PASS
EGPRS850	128	8	823.97	-34.48	-13	PASS
EGPRS850	251	8	849.01	-35.11	-13	PASS
GSM1900	512	0	1850.00	-16.48	-13	PASS
GSM1900	810	0	1910.02	-14.53	-13	PASS
EGPRS1900	512	2	1850.00	-20.92	-13	PASS
EGPRS1900	810	2	1910.01	-20.62	-13	PASS

Test Graphs





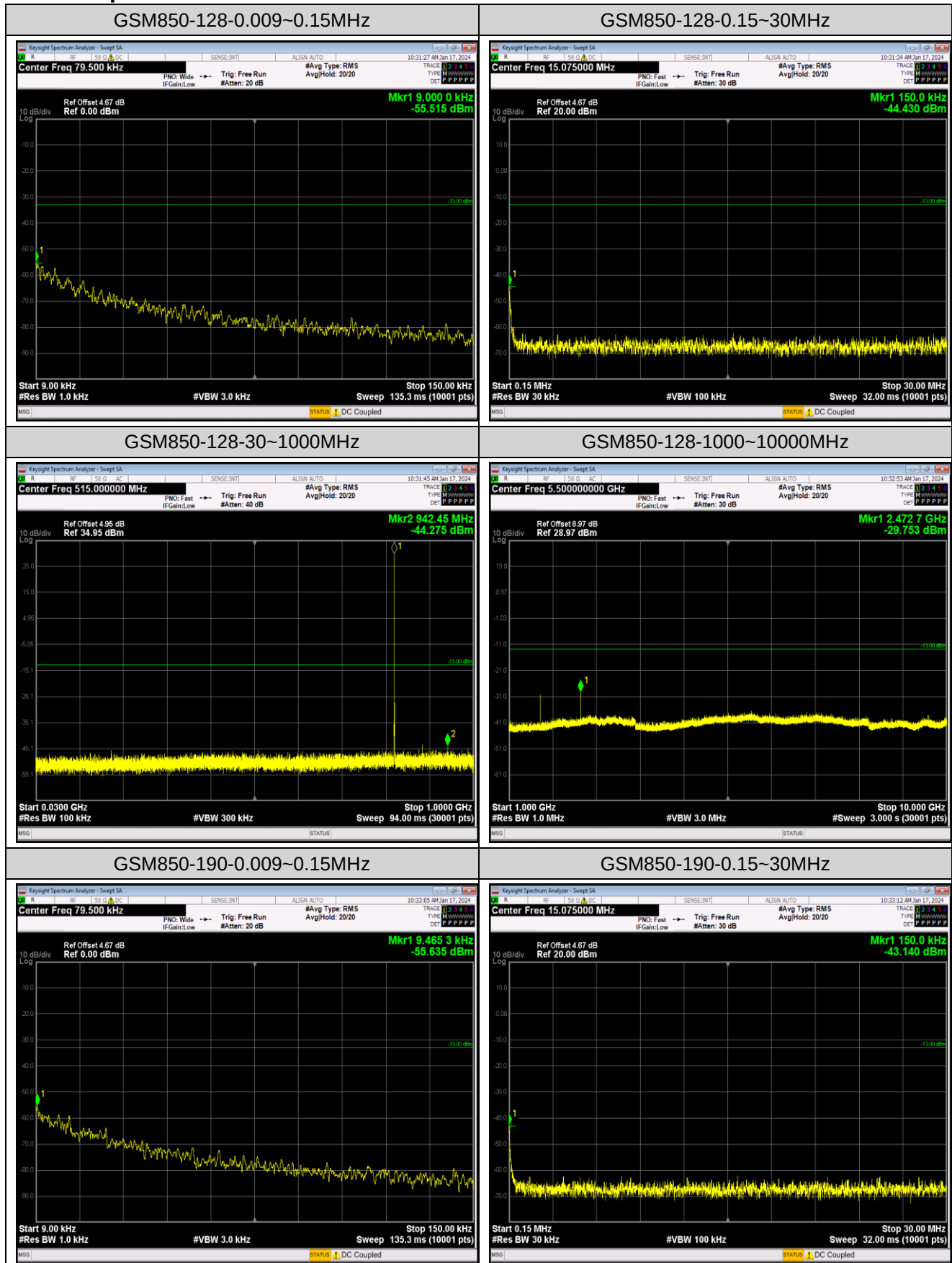
Appendix E: Conducted Spurious Emission

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	-55.52	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-44.43	-13	PASS
GSM850	128	5	30~1000MHz	942.45	-44.28	-13	PASS
GSM850	128	5	1000~10000MHz	2472.7	-29.75	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.64	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-43.14	-13	PASS
GSM850	190	5	30~1000MHz	524.7	-45.08	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-30.64	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-55.51	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-40.71	-13	PASS
GSM850	251	5	30~1000MHz	726.72	-44.84	-13	PASS
GSM850	251	5	1000~10000MHz	1697.5	-31.21	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.28	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-43.35	-23	PASS
GSM1900	512	0	30~1000MHz	922.21	-46.01	-13	PASS
GSM1900	512	0	1000~18000MHz	16999.27	-21.97	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-57.31	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-44.38	-23	PASS
GSM1900	661	0	30~1000MHz	807.46	-45.66	-13	PASS
GSM1900	661	0	1000~18000MHz	16999.83	-22.93	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.72	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-44.87	-23	PASS
GSM1900	810	0	30~1000MHz	814.79	-44.6	-13	PASS
GSM1900	810	0	1000~18000MHz	16165.7	-22.13	-13	PASS

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

Test Graphs

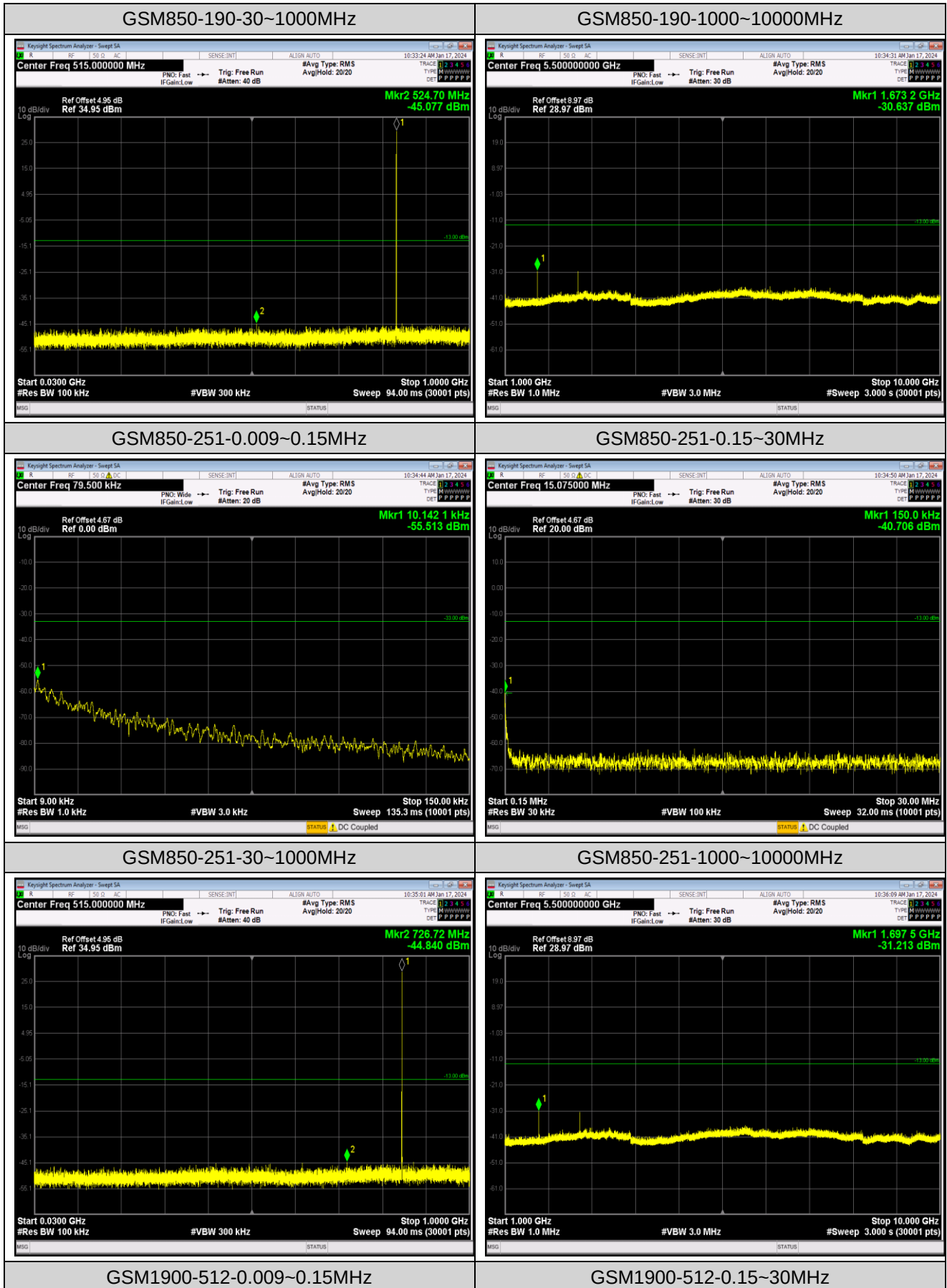


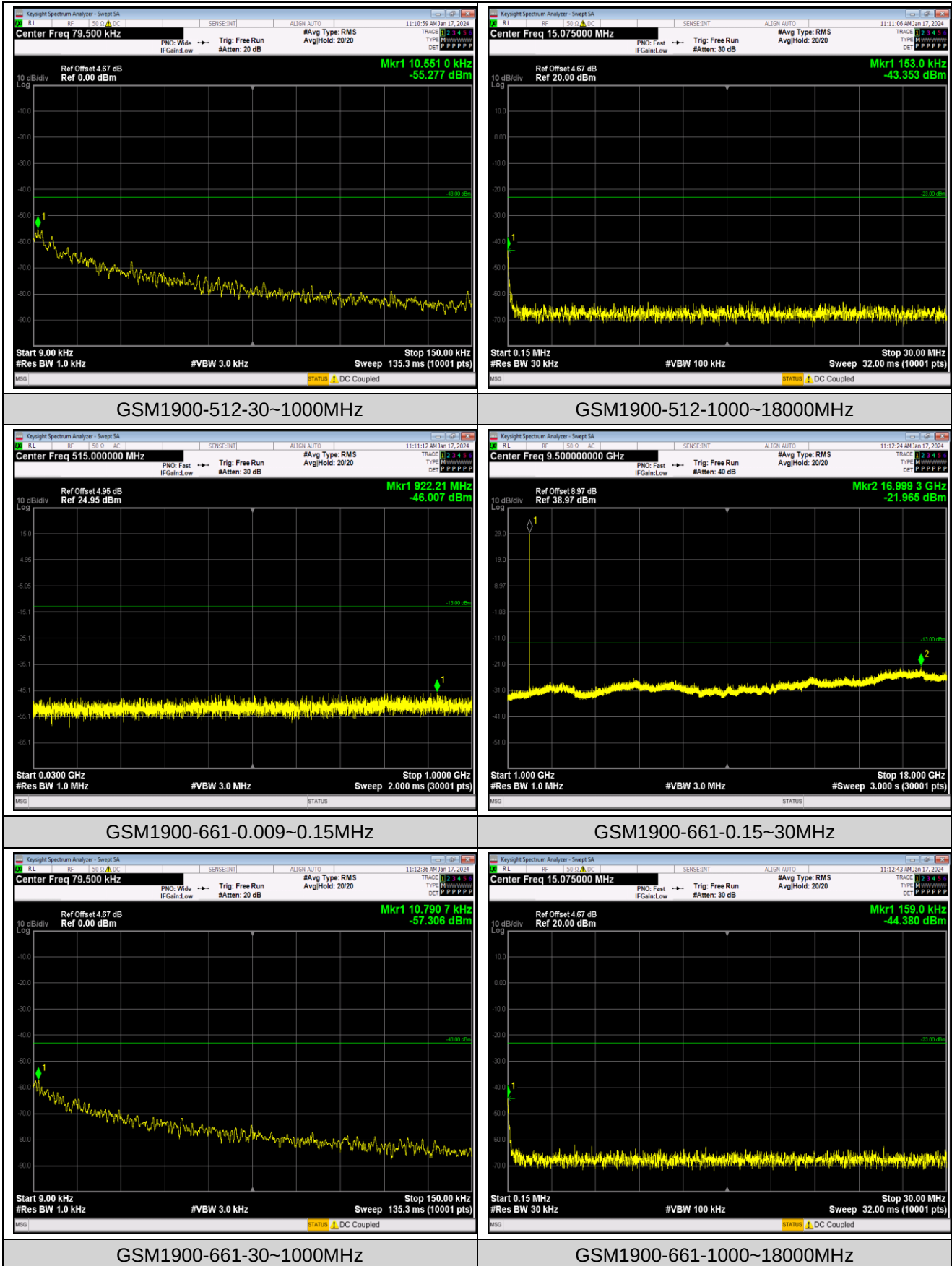
JianYan Testing Group Shenzhen Co., Ltd.

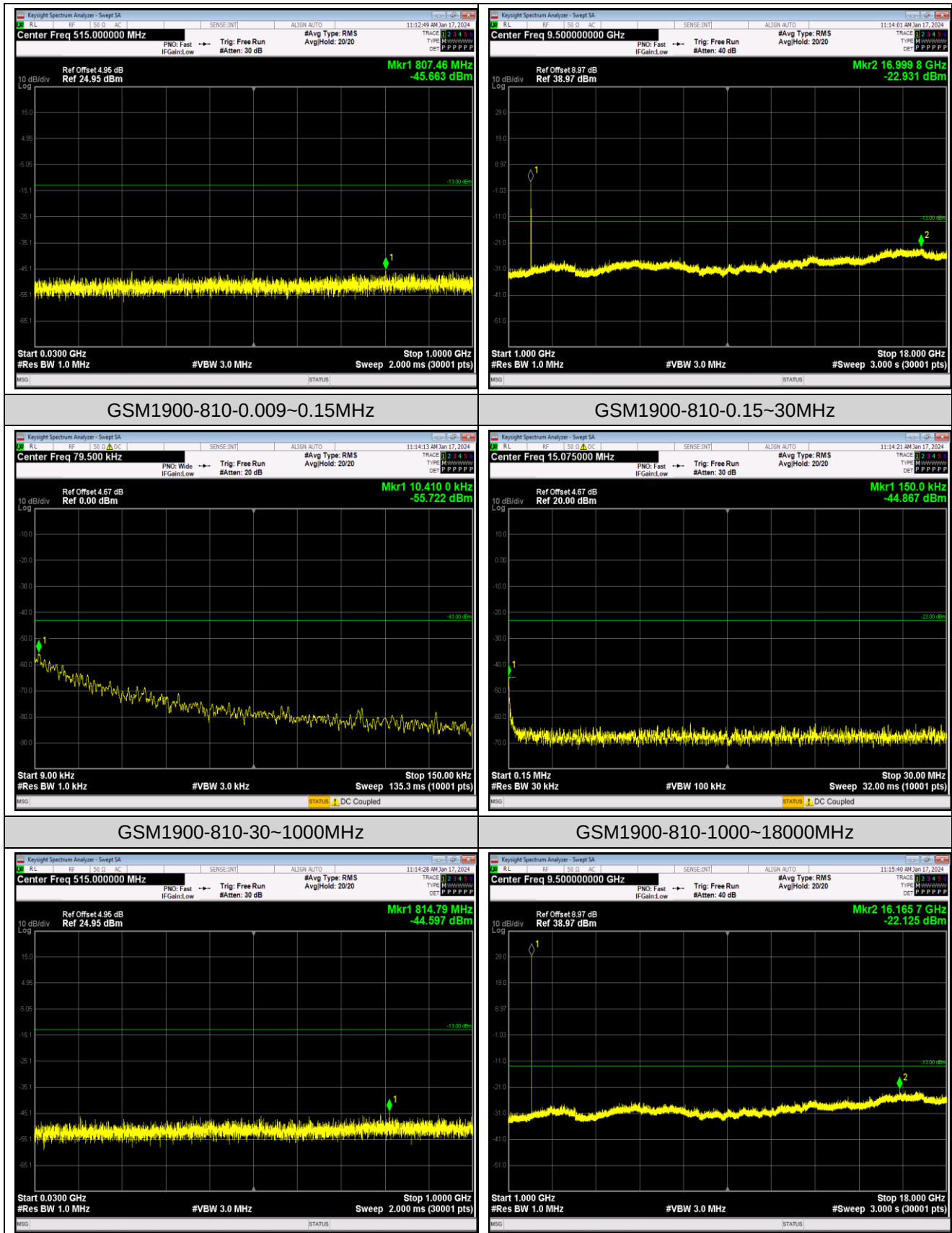
No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Project No.: JYTSZR2312031







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	5.33	0.006371	±2.5	Pass
	-20	3.39	0.004052		
	-10	8.23	0.009837		
	0	3.71	0.004435		
	10	8.85	0.010579		
	20	1.58	0.001889		
	30	4.91	0.005869		
	40	6.65	0.007949		
	50	7.01	0.008379		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	6.68	0.007985	±2.5	Pass
	3.70	0.45	0.000538		
	4.20	7.91	0.009455		
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	9.30	0.011116	±2.5	Pass
	-20	10.59	0.012658		
	-10	12.11	0.014475		
	0	10.88	0.013005		
	10	9.52	0.011379		
	20	8.01	0.009574		
	30	9.81	0.011726		
	40	9.17	0.010961		
	50	10.56	0.012623		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	8.81	0.010531	±2.5	Pass
	3.70	11.17	0.013352		
	4.20	12.56	0.015013		
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		
3.70	-30	-1.68	-0.000894	Within authorized band for PCS 1900	Pass
	-20	-4.94	-0.002628		
	-10	-12.20	-0.006489		
	0	-11.17	-0.005941		
	10	-15.24	-0.008106		
	20	-11.49	-0.006112		
	30	-6.07	-0.003229		
	40	-5.29	-0.002814		
	50	-5.97	-0.003176		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-2.45	-0.001303	Within authorized band for PCS 1900	Pass
	3.70	-21.11	-0.011229		
	4.20	-3.91	-0.002080		
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	10.94	0.005819	Within authorized band for PCS 1900	Pass
	-20	21.41	0.011388		
	-10	20.40	0.010851		
	0	2.71	0.001441		
	10	5.00	0.002660		
	20	7.33	0.003899		
	30	13.53	0.007197		
	40	13.08	0.006957		
	50	-5.07	-0.002697		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	8.94	0.004755	Within authorized band for PCS 1900	Pass
	3.70	12.88	0.006851		
	4.20	8.56	0.004553		
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

