

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	32.12	30.32	38.5	PASS
GSM850	190	5	32.27	30.47	38.5	PASS
GSM850	251	5	32.27	30.47	38.5	PASS
GSM1900	512	0	29.02	29.78	33	PASS
GSM1900	661	0	29.00	29.76	33	PASS
GSM1900	810	0	29.07	29.83	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.14	30.34	38.5	PASS
GPRS850	128	5	2	30.29	28.49	38.5	PASS
GPRS850	128	5	3	28.49	26.69	38.5	PASS
GPRS850	128	5	4	26.52	24.72	38.5	PASS
GPRS850	190	5	1	32.25	30.45	38.5	PASS
GPRS850	190	5	2	30.27	28.47	38.5	PASS
GPRS850	190	5	3	28.43	26.63	38.5	PASS
GPRS850	190	5	4	26.48	24.68	38.5	PASS
GPRS850	251	5	1	32.24	30.44	38.5	PASS
GPRS850	251	5	2	30.17	28.37	38.5	PASS
GPRS850	251	5	3	28.36	26.56	38.5	PASS
GPRS850	251	5	4	26.38	24.58	38.5	PASS
GPRS1900	512	0	1	28.96	29.72	33	PASS
GPRS1900	512	0	2	27.03	27.79	33	PASS
GPRS1900	512	0	3	25.44	26.2	33	PASS
GPRS1900	512	0	4	23.48	24.24	33	PASS
GPRS1900	661	0	1	28.95	29.71	33	PASS
GPRS1900	661	0	2	26.82	27.58	33	PASS
GPRS1900	661	0	3	25.25	26.01	33	PASS
GPRS1900	661	0	4	23.26	24.02	33	PASS
GPRS1900	810	0	1	28.72	29.48	33	PASS
GPRS1900	810	0	2	26.26	27.02	33	PASS
GPRS1900	810	0	3	24.71	25.47	33	PASS
GPRS1900	810	0	4	22.76	23.52	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.23	23.43	38.5	PASS
EGPRS850	128	8	2	24.79	22.99	38.5	PASS
EGPRS850	128	8	3	23.71	21.91	38.5	PASS
EGPRS850	128	8	4	21.02	19.22	38.5	PASS
EGPRS850	190	8	1	24.84	23.04	38.5	PASS
EGPRS850	190	8	2	24.61	22.81	38.5	PASS
EGPRS850	190	8	3	23.52	21.72	38.5	PASS
EGPRS850	190	8	4	21.10	19.30	38.5	PASS
EGPRS850	251	8	1	24.51	22.71	38.5	PASS
EGPRS850	251	8	2	24.37	22.57	38.5	PASS
EGPRS850	251	8	3	23.32	21.52	38.5	PASS
EGPRS850	251	8	4	20.79	18.99	38.5	PASS
EGPRS1900	512	2	1	24.63	25.39	33	PASS
EGPRS1900	512	2	2	24.24	25	33	PASS
EGPRS1900	512	2	3	22.50	23.26	33	PASS
EGPRS1900	512	2	4	20.26	21.02	33	PASS
EGPRS1900	661	2	1	24.23	24.99	33	PASS
EGPRS1900	661	2	2	24.06	24.82	33	PASS
EGPRS1900	661	2	3	22.49	23.25	33	PASS
EGPRS1900	661	2	4	20.20	20.96	33	PASS
EGPRS1900	810	2	1	23.66	24.42	33	PASS
EGPRS1900	810	2	2	23.56	24.32	33	PASS
EGPRS1900	810	2	3	22.08	22.84	33	PASS
EGPRS1900	810	2	4	19.76	20.52	33	PASS

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

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

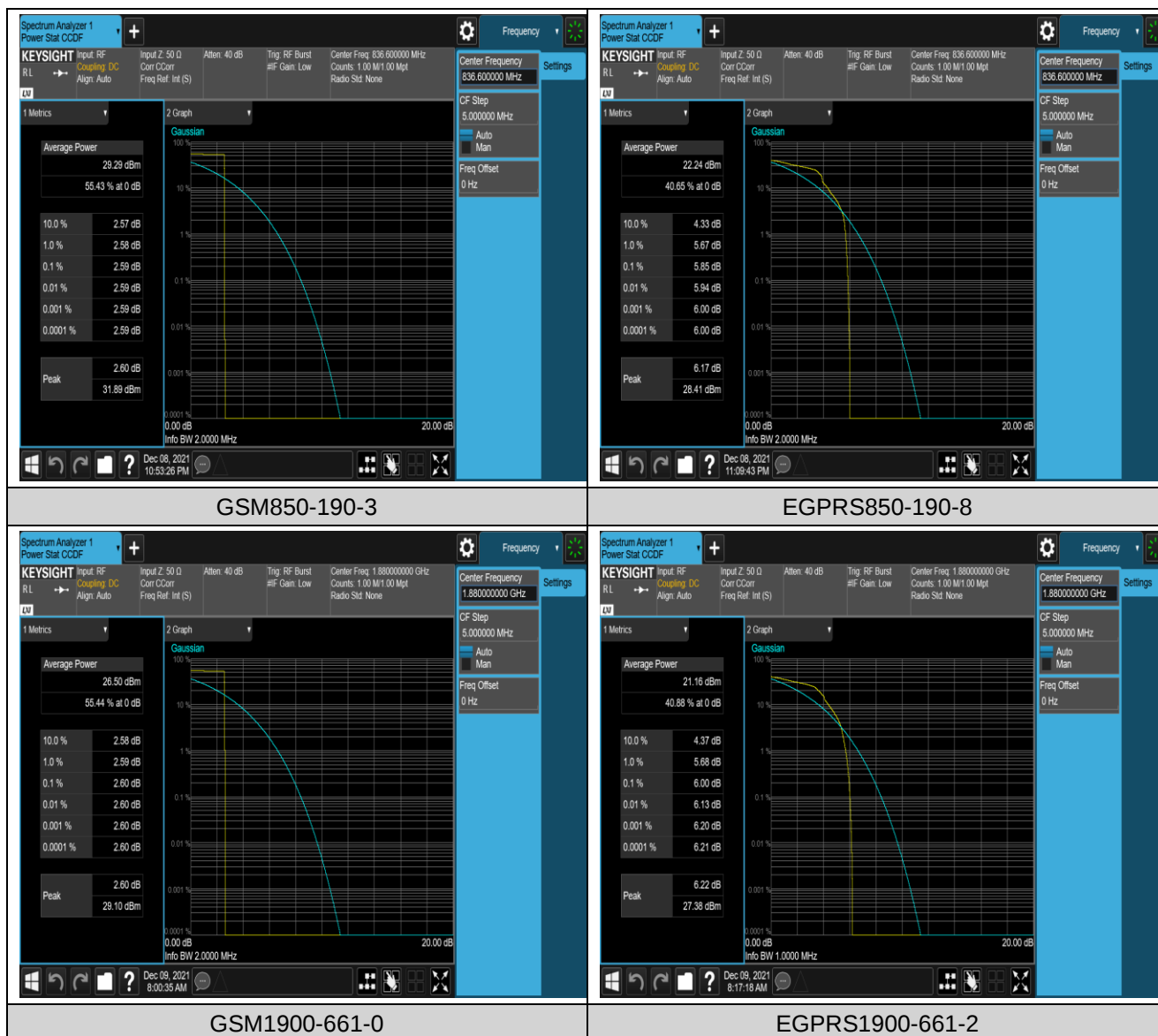
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.59	13	PASS
EGPRS850	190	8	5.85	13	PASS
GSM1900	661	0	2.6	13	PASS
EGPRS1900	661	2	6	13	PASS

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

Test Graphs

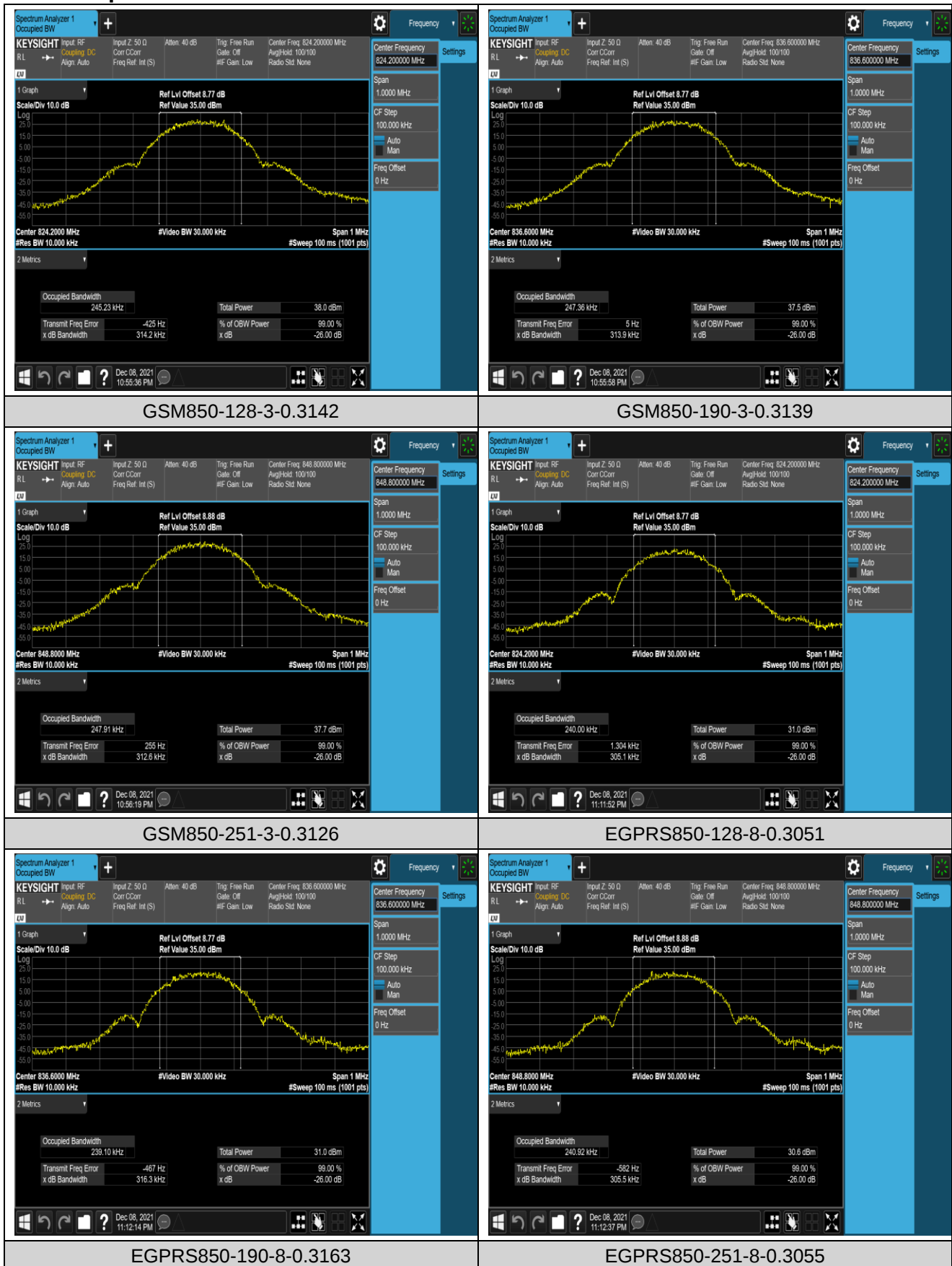


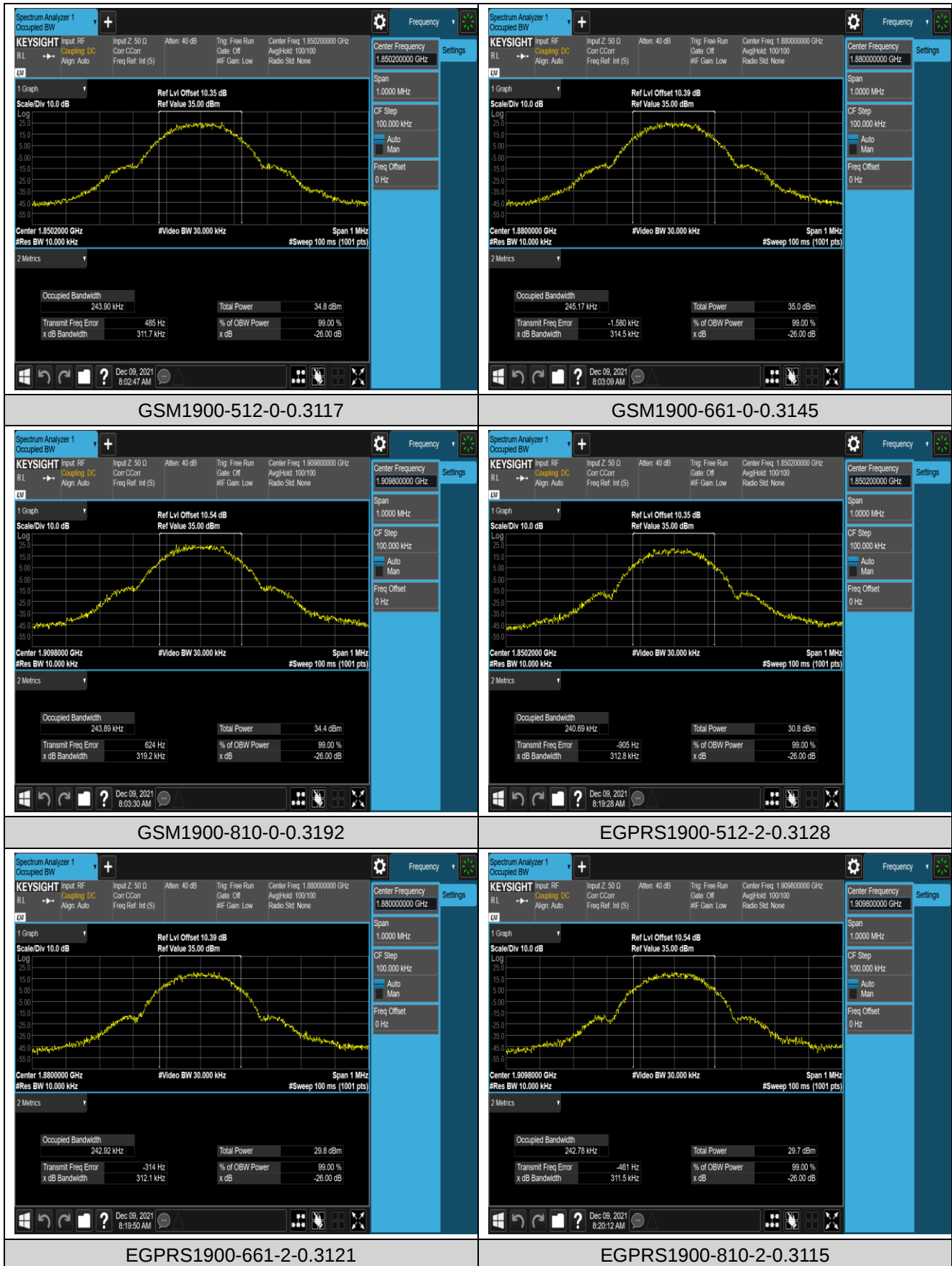
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24523	0.3142	---	PASS
GSM850	190	5	0.24736	0.3139	---	PASS
GSM850	251	5	0.24791	0.3126	---	PASS
EGPRS850	128	8	0.24000	0.3051	---	PASS
EGPRS850	190	8	0.23910	0.3163	---	PASS
EGPRS850	251	8	0.24092	0.3055	---	PASS
GSM1900	512	0	0.24390	0.3117	---	PASS
GSM1900	661	0	0.24517	0.3145	---	PASS
GSM1900	810	0	0.24389	0.3192	---	PASS
EGPRS1900	512	2	0.24069	0.3128	---	PASS
EGPRS1900	661	2	0.24292	0.3121	---	PASS
EGPRS1900	810	2	0.24278	0.3115	---	PASS

Test Graphs



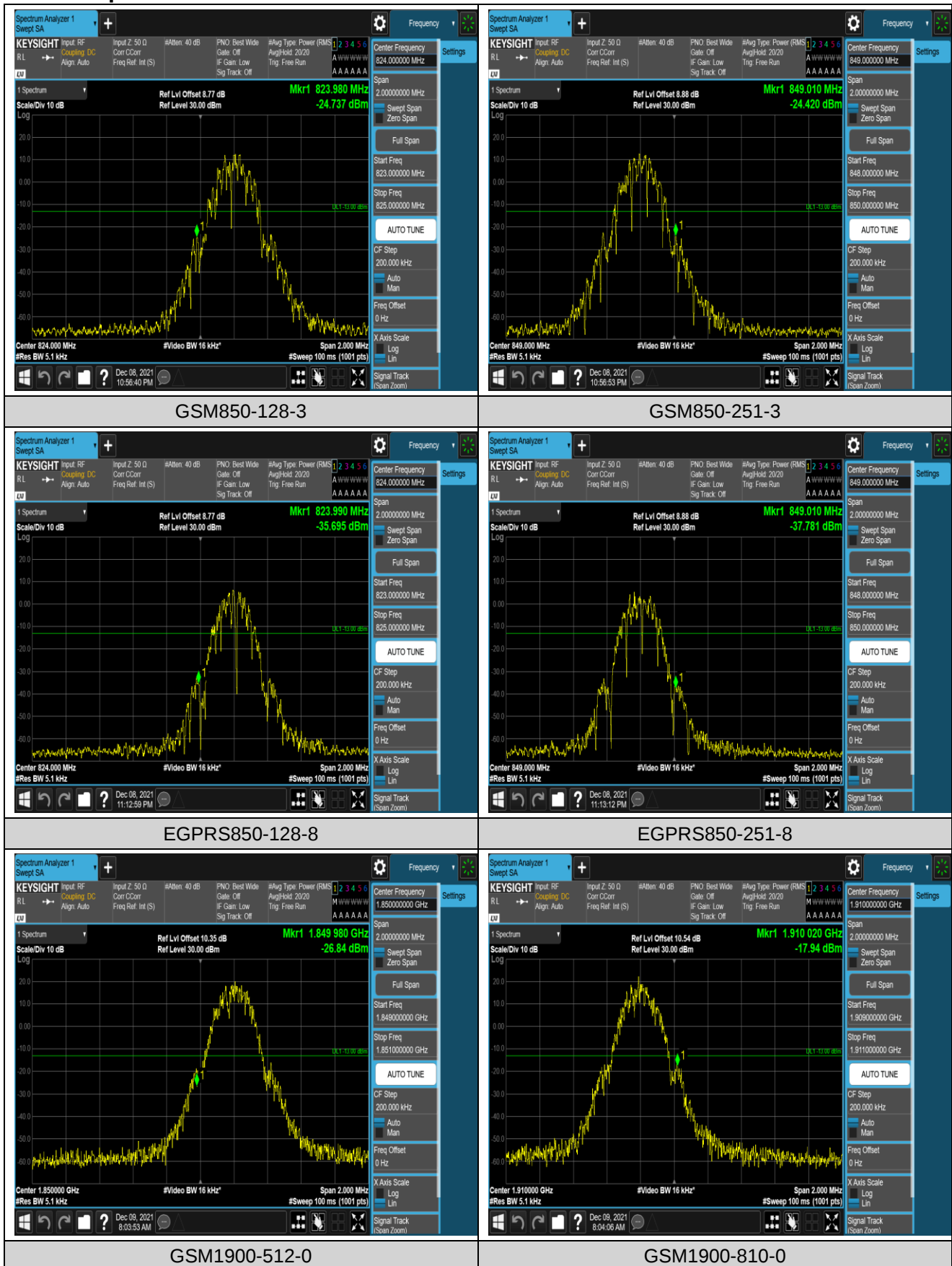


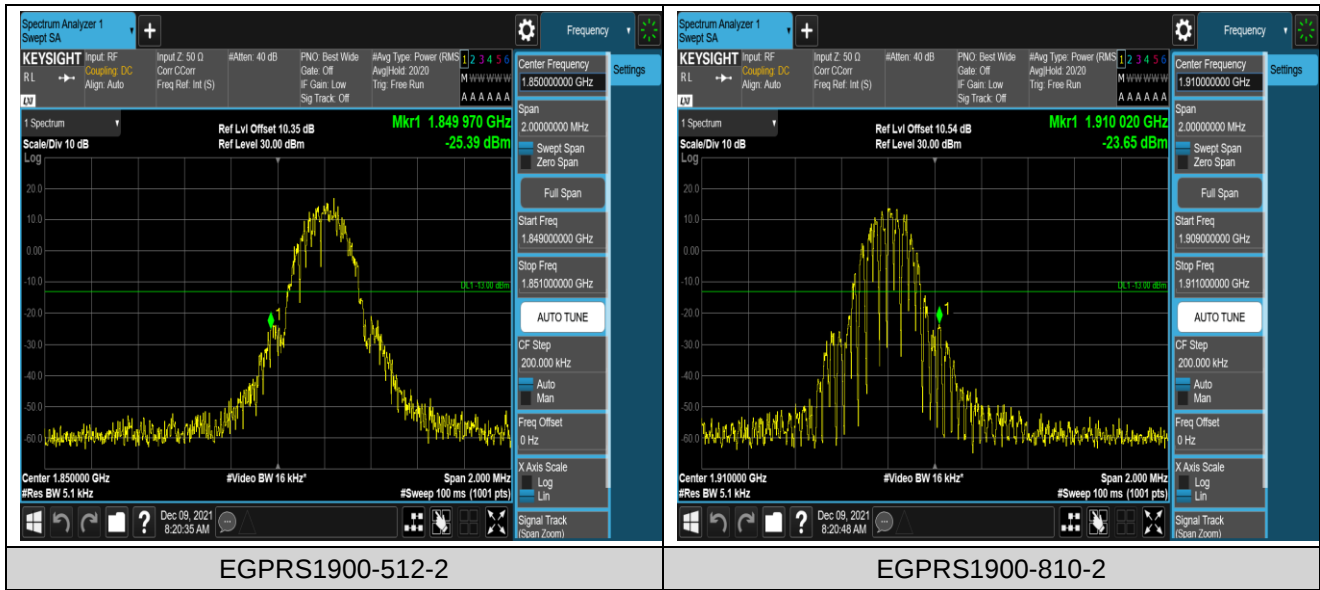
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-24.74	-13	PASS
GSM850	251	5	849.01	-24.29	-13	PASS
EGPRS850	128	8	823.99	-32.00	-13	PASS
EGPRS850	251	8	849.01	-32.59	-13	PASS
GSM1900	512	0	1849.98	-18.80	-13	PASS
GSM1900	810	0	1910.02	-15.21	-13	PASS
EGPRS1900	512	2	1849.97	-21.60	-13	PASS
EGPRS1900	810	2	1910.02	-23.65	-13	PASS

Test Graphs





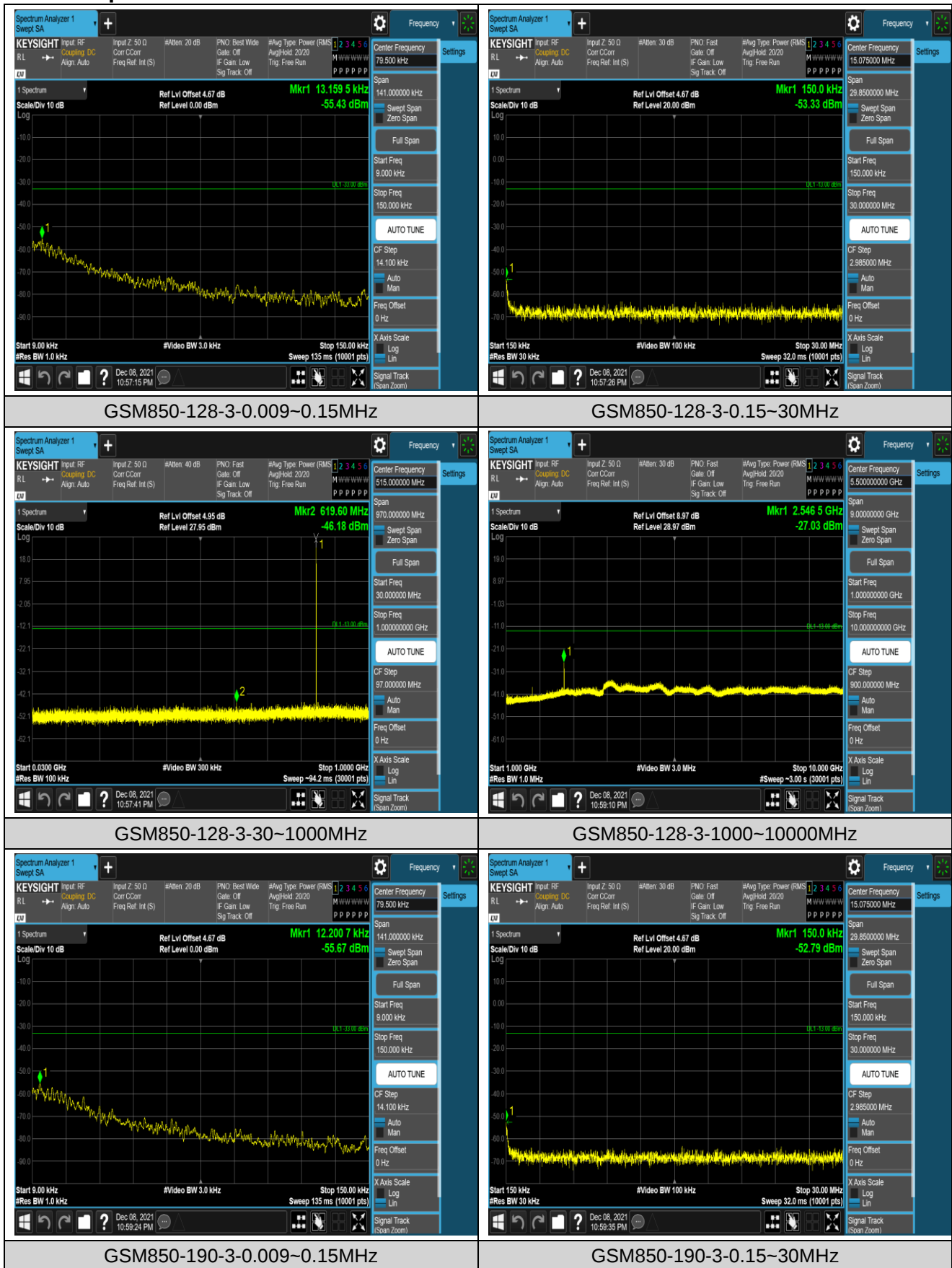
Appendix E: Conducted Spurious Emission

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	-55.43	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-53.33	-13	PASS
GSM850	128	5	30~1000MHz	619.6	-46.18	-13	PASS
GSM850	128	5	1000~10000MHz	2546.5	-27.03	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.67	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-52.79	-13	PASS
GSM850	190	5	30~1000MHz	979.08	-45.42	-13	PASS
GSM850	190	5	1000~10000MHz	2546.5	-27.74	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-53.76	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-52.4	-13	PASS
GSM850	251	5	30~1000MHz	949.66	-46.59	-13	PASS
GSM850	251	5	1000~10000MHz	2546.2	-27.59	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.61	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-51.85	-23	PASS
GSM1900	512	0	30~1000MHz	920.27	-46.94	-13	PASS
GSM1900	512	0	1000~18000MHz	3841.27	-34.6	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-57.19	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-53.3	-23	PASS
GSM1900	661	0	30~1000MHz	920.65	-46.01	-13	PASS
GSM1900	661	0	1000~18000MHz	3822.57	-34.76	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-57.2	-43	PASS
GSM1900	810	0	0.15~30MHz	0.16	-53.12	-23	PASS
GSM1900	810	0	30~1000MHz	929.45	-46.45	-13	PASS
GSM1900	810	0	1000~18000MHz	3819.73	-34.76	-13	PASS

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

Test Graphs

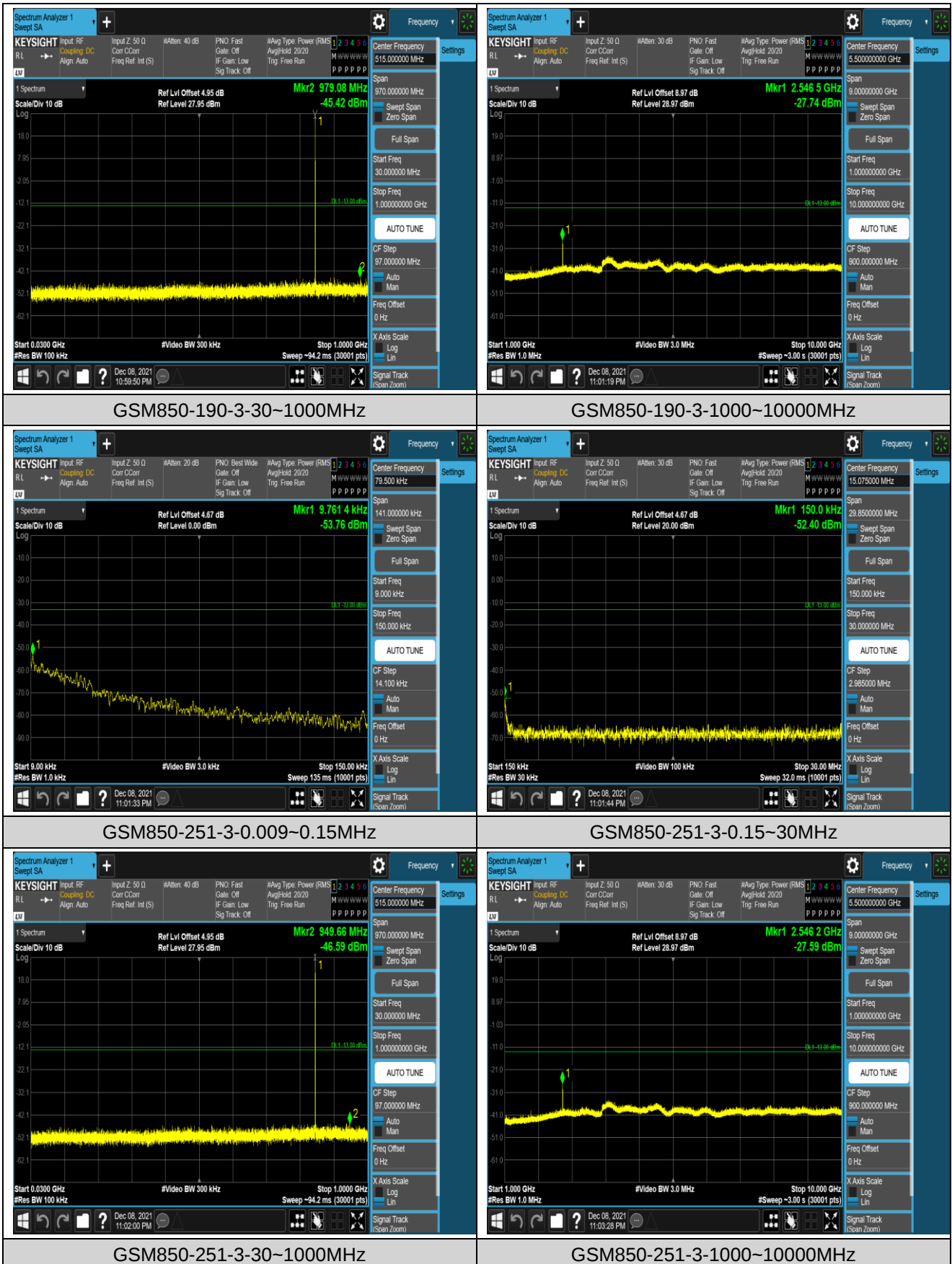


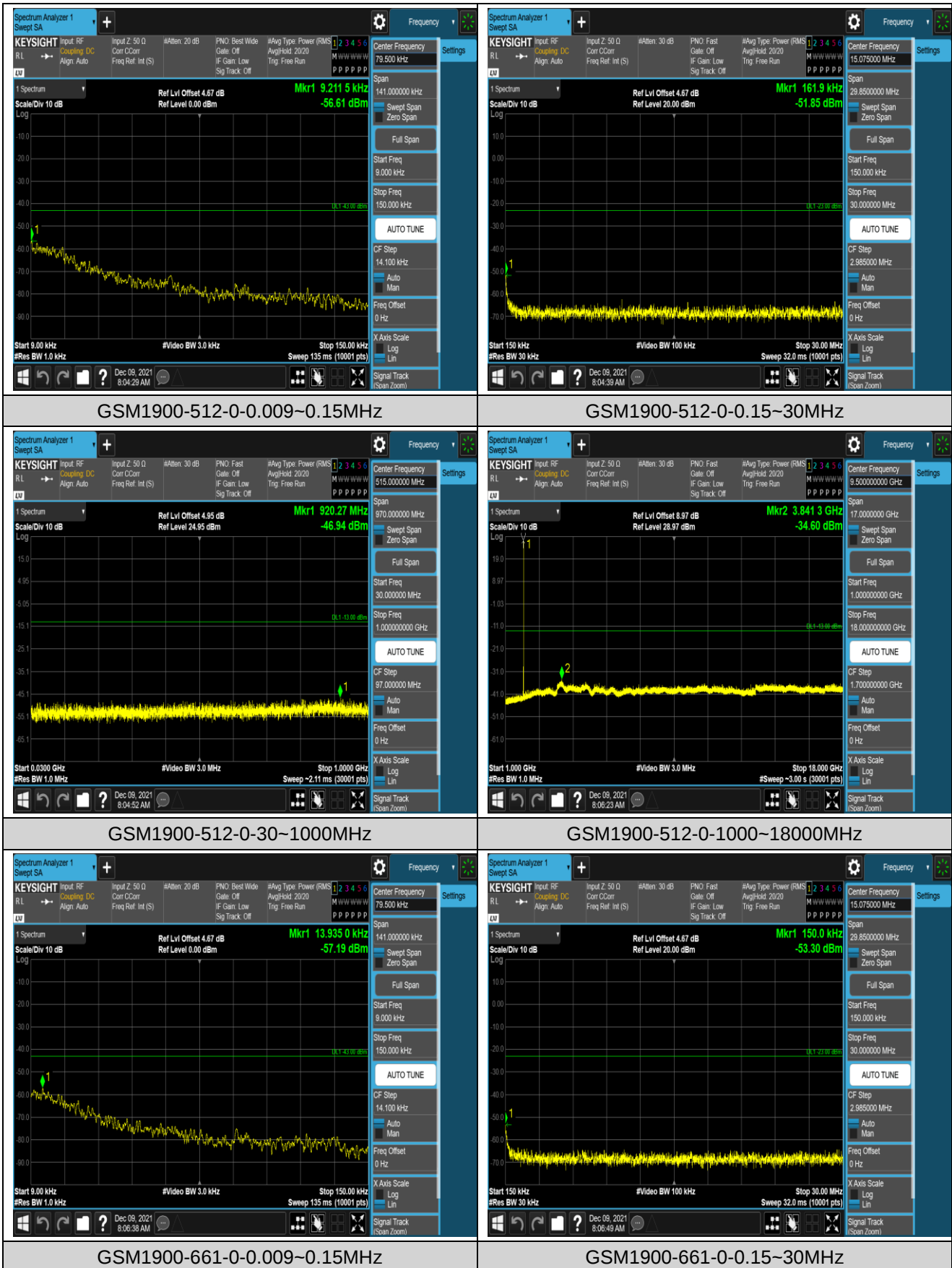
JianYan Testing Group Shenzhen Co., Ltd.

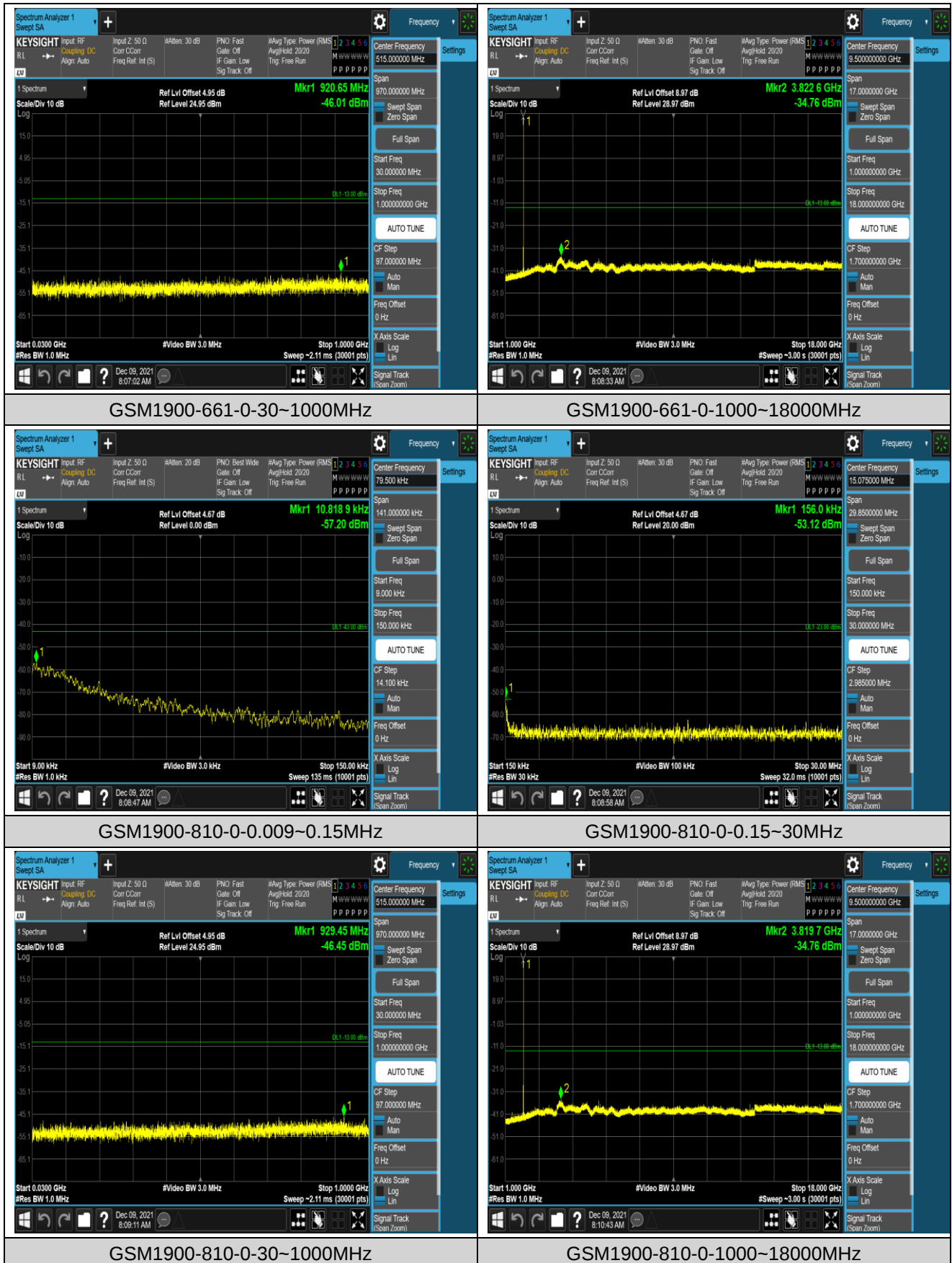
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Appendix F: Frequency Stability

Test Result

Reference Frequency: GSM850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.85	-30	-0.61	-0.000729	±2.5	Pass
	-20	1.16	0.001387		
	-10	1.81	0.002164		
	0	-3.29	-0.003933		
	10	-1.87	-0.002235		
	20	-6.49	-0.007758		
	30	-0.87	-0.001040		
	40	6.81	0.008140		
	50	-3.26	-0.003897		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-1.29	-0.001542	±2.5	Pass
	3.85	-1.39	-0.001661		
	4.40	-1.49	-0.001781		
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		
3.85	-30	11.82	0.014129	±2.5	Pass
	-20	14.56	0.017404		
	-10	11.14	0.013316		
	0	10.94	0.013077		
	10	13.72	0.016400		
	20	12.14	0.014511		
	30	17.92	0.021420		
	40	4.46	0.005331		
	50	4.52	0.005403		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	9.46	0.011308	±2.5	Pass
	3.85	10.53	0.012587		
	4.40	12.20	0.014583		
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		
3.85	-30	2.20	0.001170	Within authorized band for PCS 1900	Pass
	-20	10.36	0.005511		
	-10	4.42	0.002351		
	0	-0.84	-0.000447		
	10	-8.04	-0.004277		
	20	1.07	0.000569		
	30	3.81	0.002027		
	40	7.88	0.004191		
	50	7.14	0.003798		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	4.07	0.002165	Within authorized band for PCS 1900	Pass
	3.85	1.26	0.000670		
	4.40	1.29	0.000686		
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		
3.85	-30	-6.42	-0.003415	Within authorized band for PCS 1900	Pass
	-20	-1.65	-0.000878		
	-10	-9.07	-0.004824		
	0	-3.71	-0.001973		
	10	-0.16	-0.000085		
	20	-7.94	-0.004223		
	30	-4.20	-0.002234		
	40	-3.94	-0.002096		
	50	2.71	0.001441		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	4.49	0.002388	Within authorized band for PCS 1900	Pass
	3.85	-2.16	-0.001149		
	4.40	-0.45	-0.000239		
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

