

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	33.15	28.50	38.5	PASS
GSM850	190	5	33.23	28.58	38.5	PASS
GSM850	251	5	33.21	28.56	38.5	PASS
GSM1900	512	0	30.11	28.61	33	PASS
GSM1900	661	0	29.95	28.45	33	PASS
GSM1900	810	0	29.89	28.39	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.14	28.49	38.5	PASS
GPRS850	128	5	2	31.12	26.47	38.5	PASS
GPRS850	128	5	3	29.46	24.81	38.5	PASS
GPRS850	128	5	4	27.08	22.43	38.5	PASS
GPRS850	190	5	1	33.19	28.54	38.5	PASS
GPRS850	190	5	2	31.12	26.47	38.5	PASS
GPRS850	190	5	3	29.47	24.82	38.5	PASS
GPRS850	190	5	4	27.14	22.49	38.5	PASS
GPRS850	251	5	1	33.18	28.53	38.5	PASS
GPRS850	251	5	2	31.09	26.44	38.5	PASS
GPRS850	251	5	3	29.42	24.77	38.5	PASS
GPRS850	251	5	4	27.08	22.43	38.5	PASS
GPRS1900	512	0	1	30.09	28.59	33	PASS
GPRS1900	512	0	2	28.08	26.58	33	PASS
GPRS1900	512	0	3	26.55	25.05	33	PASS
GPRS1900	512	0	4	24.50	23	33	PASS
GPRS1900	661	0	1	29.93	28.43	33	PASS
GPRS1900	661	0	2	27.89	26.39	33	PASS
GPRS1900	661	0	3	26.34	24.84	33	PASS
GPRS1900	661	0	4	24.27	22.77	33	PASS
GPRS1900	810	0	1	29.90	28.4	33	PASS
GPRS1900	810	0	2	27.86	26.36	33	PASS
GPRS1900	810	0	3	26.28	24.78	33	PASS
GPRS1900	810	0	4	24.17	22.67	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	26.31	21.66	38.5	PASS
EGPRS850	128	8	2	26.22	21.57	38.5	PASS
EGPRS850	128	8	3	25.04	20.39	38.5	PASS
EGPRS850	128	8	4	22.80	18.15	38.5	PASS
EGPRS850	190	8	1	26.67	22.02	38.5	PASS
EGPRS850	190	8	2	26.64	21.99	38.5	PASS
EGPRS850	190	8	3	25.54	20.89	38.5	PASS
EGPRS850	190	8	4	23.29	18.64	38.5	PASS
EGPRS850	251	8	1	26.15	21.5	38.5	PASS
EGPRS850	251	8	2	26.16	21.51	38.5	PASS
EGPRS850	251	8	3	24.97	20.32	38.5	PASS
EGPRS850	251	8	4	22.83	18.18	38.5	PASS
EGPRS1900	512	2	1	25.81	24.31	33	PASS
EGPRS1900	512	2	2	25.70	24.2	33	PASS
EGPRS1900	512	2	3	24.00	22.5	33	PASS
EGPRS1900	512	2	4	21.85	20.35	33	PASS
EGPRS1900	661	2	1	26.37	24.87	33	PASS
EGPRS1900	661	2	2	26.33	24.83	33	PASS
EGPRS1900	661	2	3	24.79	23.29	33	PASS
EGPRS1900	661	2	4	22.58	21.08	33	PASS
EGPRS1900	810	2	1	25.99	24.49	33	PASS
EGPRS1900	810	2	2	25.96	24.46	33	PASS
EGPRS1900	810	2	3	24.41	22.91	33	PASS
EGPRS1900	810	2	4	22.18	20.68	33	PASS

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

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

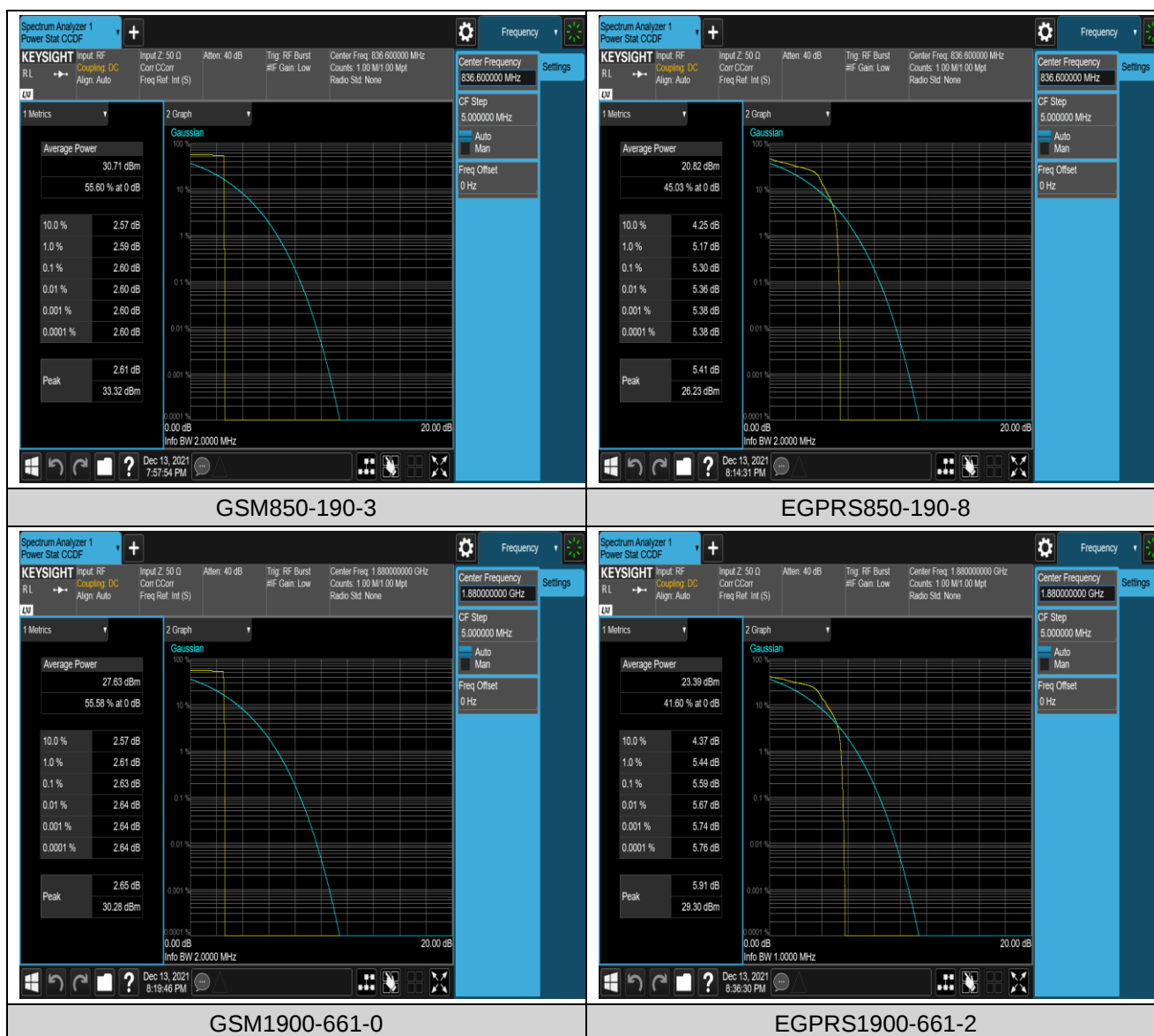
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.6	13	PASS
EGPRS850	190	8	5.3	13	PASS
GSM1900	661	0	2.63	13	PASS
EGPRS1900	661	2	5.59	13	PASS

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

Test Graphs

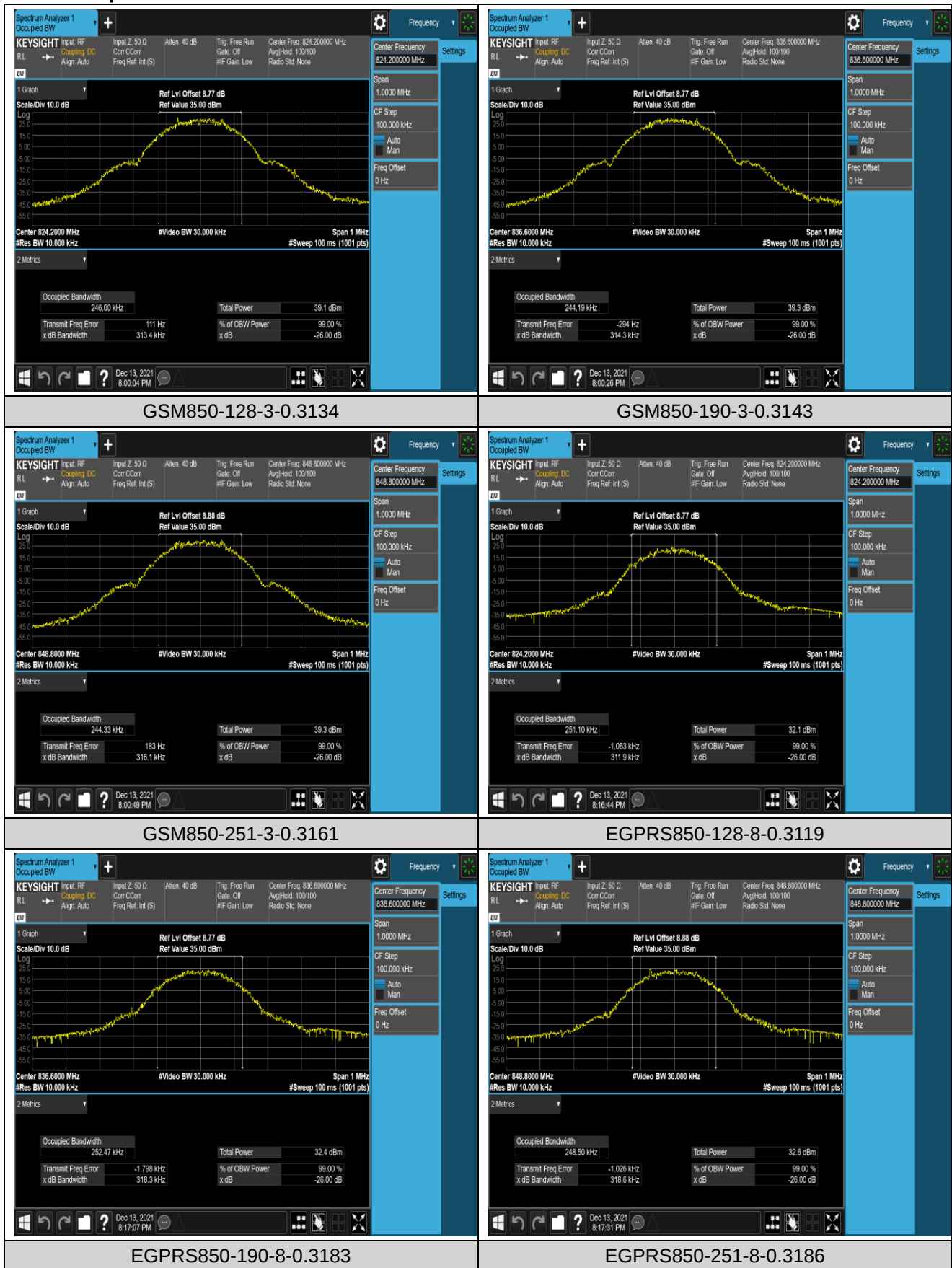


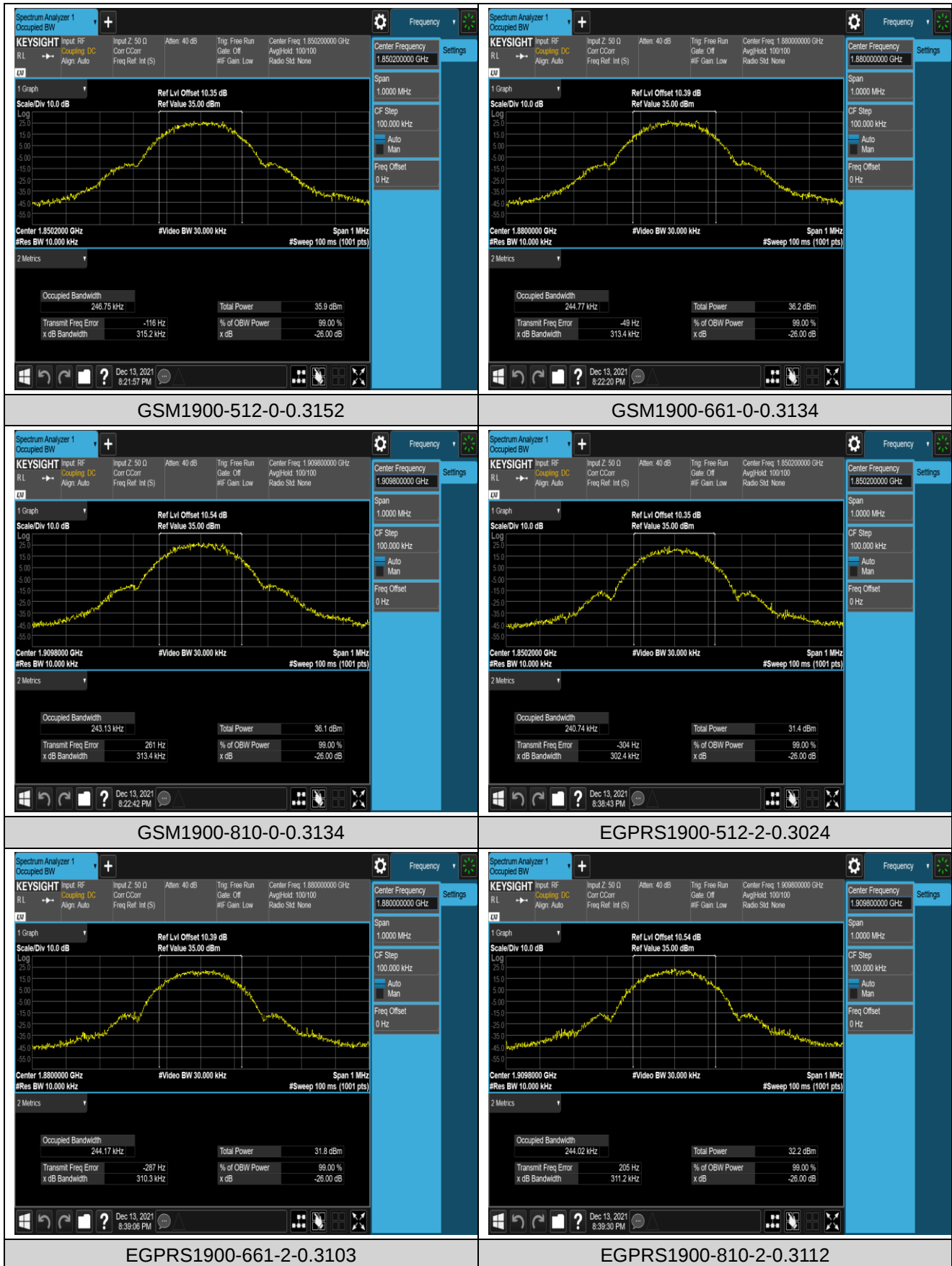
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24600	0.3134	---	PASS
GSM850	190	5	0.24419	0.3143	---	PASS
GSM850	251	5	0.24433	0.3161	---	PASS
EGPRS850	128	8	0.25110	0.3119	---	PASS
EGPRS850	190	8	0.25247	0.3183	---	PASS
EGPRS850	251	8	0.24850	0.3186	---	PASS
GSM1900	512	0	0.24675	0.3152	---	PASS
GSM1900	661	0	0.24477	0.3134	---	PASS
GSM1900	810	0	0.24313	0.3134	---	PASS
EGPRS1900	512	2	0.24074	0.3024	---	PASS
EGPRS1900	661	2	0.24417	0.3103	---	PASS
EGPRS1900	810	2	0.24402	0.3112	---	PASS

Test Graphs



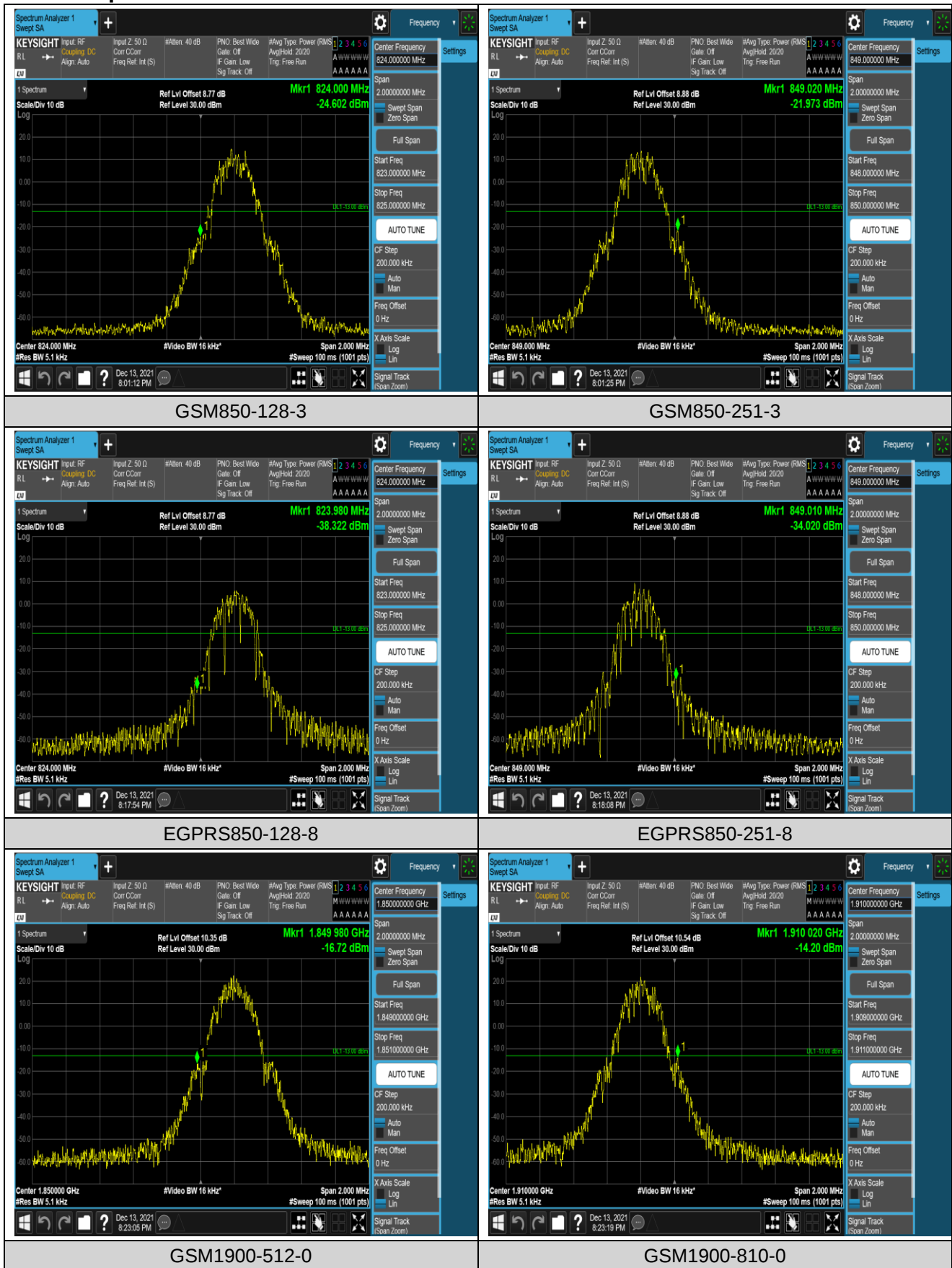


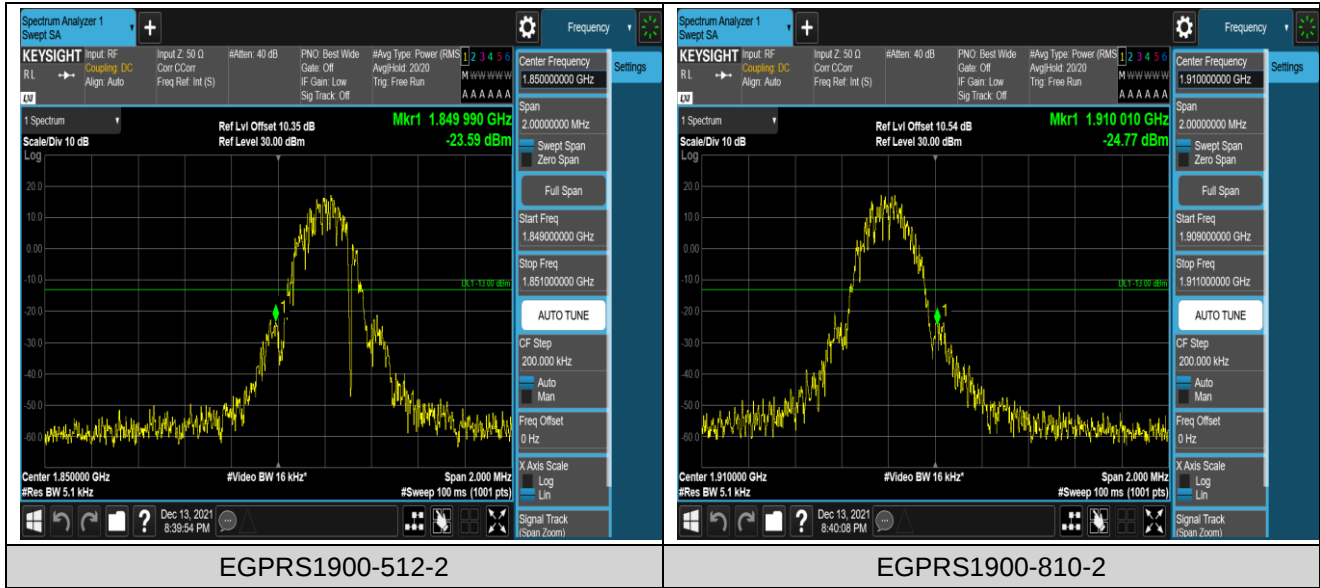
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-22.94	-13	PASS
GSM850	251	5	849.02	-21.32	-13	PASS
EGPRS850	128	8	823.98	-31.84	-13	PASS
EGPRS850	251	8	849.01	-28.90	-13	PASS
GSM1900	512	0	1849.98	-16.52	-13	PASS
GSM1900	810	0	1910.02	-14.20	-13	PASS
EGPRS1900	512	2	1849.99	-22.18	-13	PASS
EGPRS1900	810	2	1910.01	-20.15	-13	PASS

Test Graphs





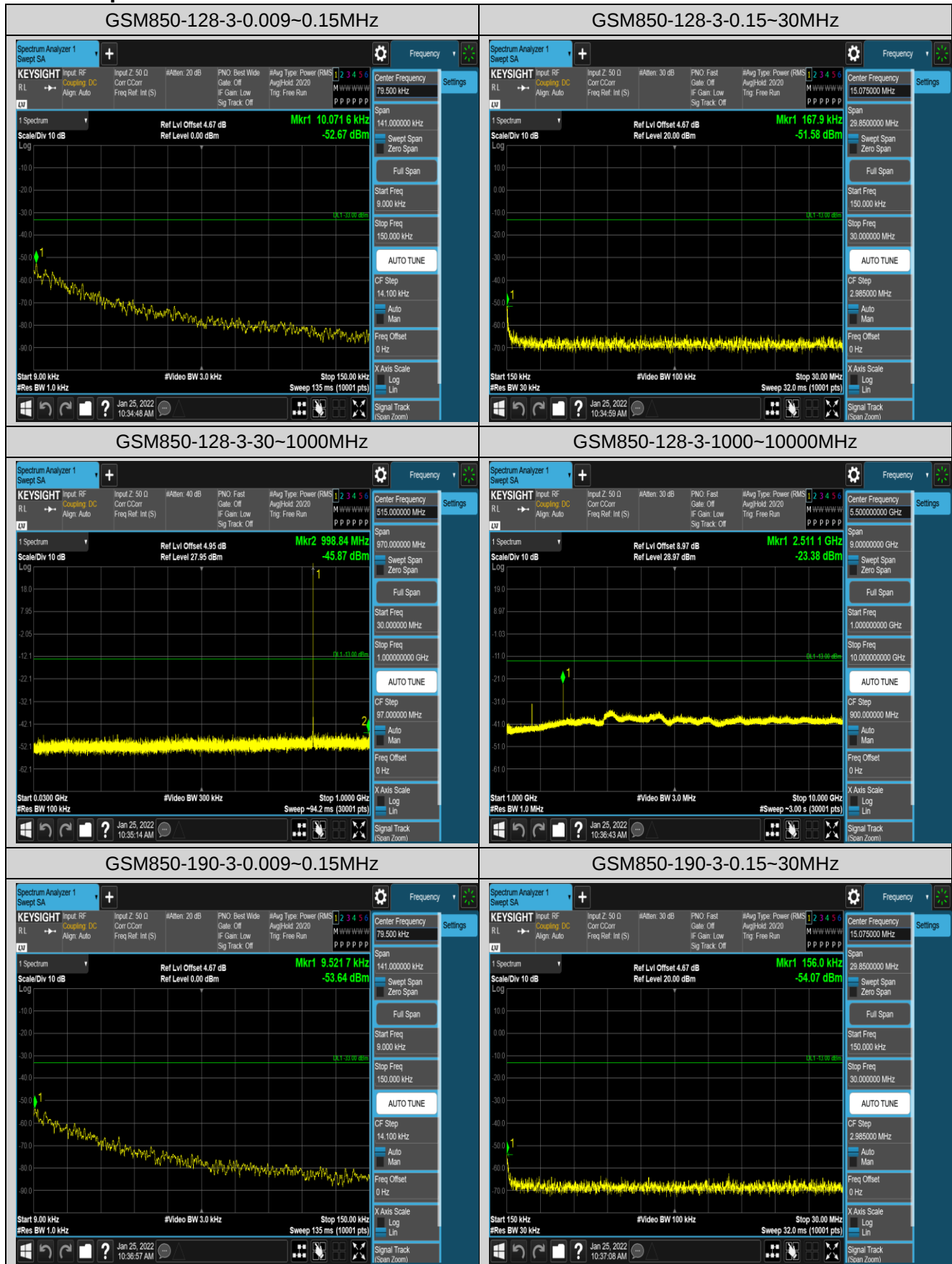
Appendix E: Conducted Spurious Emission

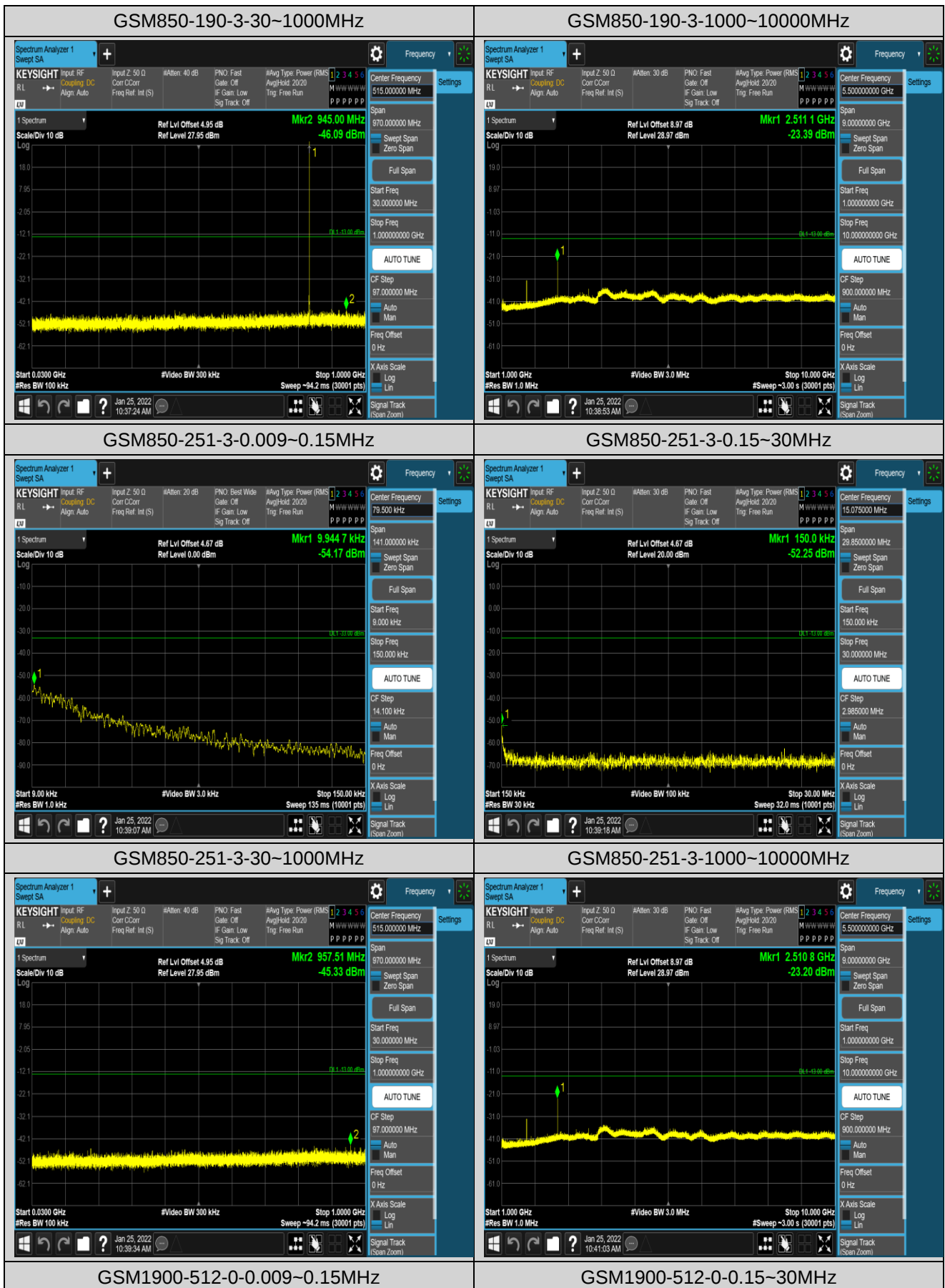
Test Result

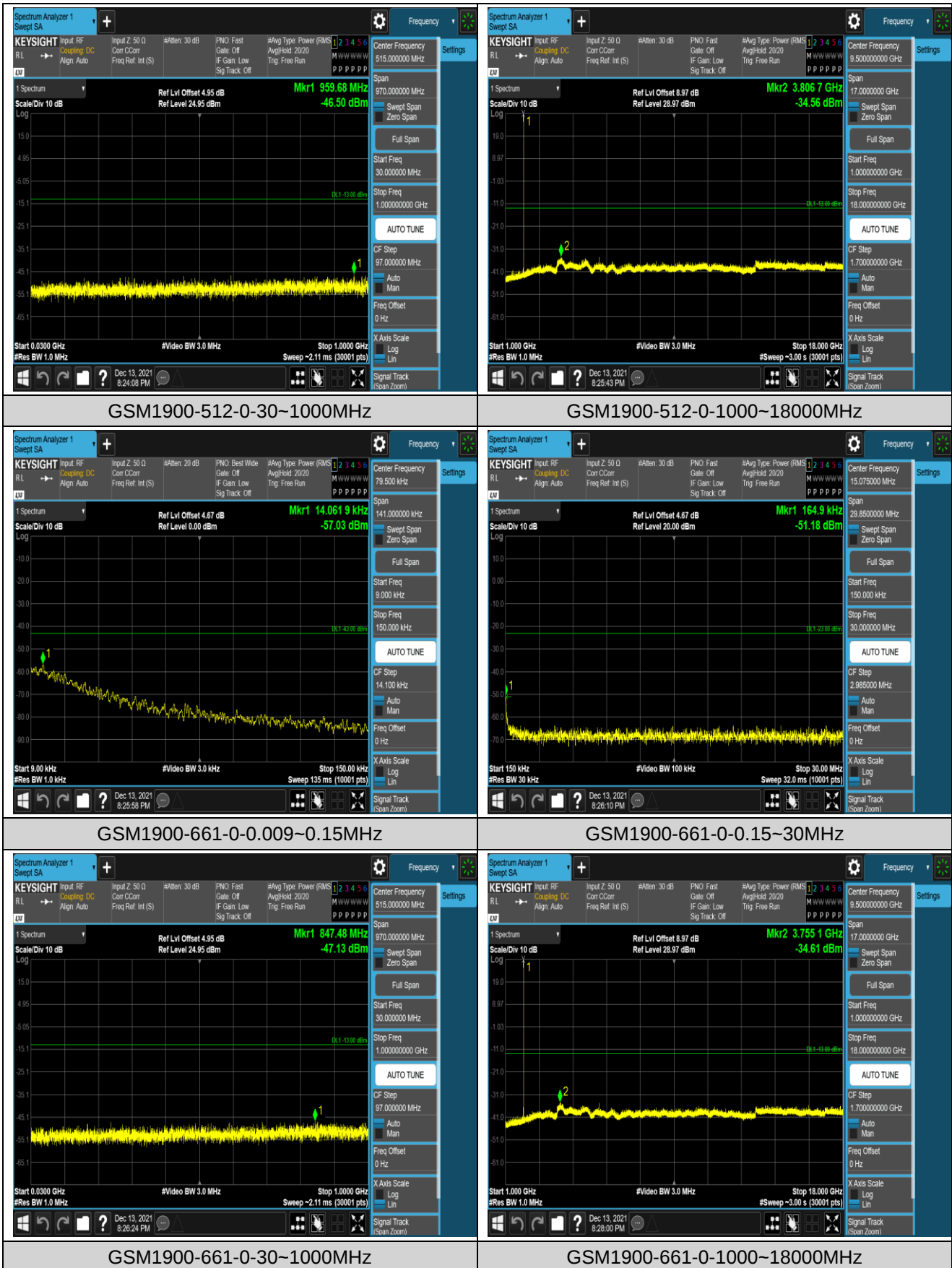
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-52.67	-33	PASS
GSM850	128	5	0.15~30MHz	0.17	-51.58	-13	PASS
GSM850	128	5	30~1000MHz	998.84	-45.87	-13	PASS
GSM850	128	5	1000~10000MHz	2511.1	-23.39	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-53.64	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-54.07	-13	PASS
GSM850	190	5	30~1000MHz	945	-46.09	-13	PASS
GSM850	190	5	1000~10000MHz	2511.1	-23.39	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.17	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-52.25	-13	PASS
GSM850	251	5	30~1000MHz	957.51	-45.33	-13	PASS
GSM850	251	5	1000~10000MHz	2510.8	-23.2	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.02	-57.45	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-50.48	-23	PASS
GSM1900	512	0	30~1000MHz	959.68	-46.5	-13	PASS
GSM1900	512	0	1000~18000MHz	3806.7	-34.56	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-57.03	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-51.18	-23	PASS
GSM1900	661	0	30~1000MHz	847.48	-47.13	-13	PASS
GSM1900	661	0	1000~18000MHz	3755.13	-34.61	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.38	-43	PASS
GSM1900	810	0	0.15~30MHz	0.17	-53.18	-23	PASS
GSM1900	810	0	30~1000MHz	866.01	-46.28	-13	PASS
GSM1900	810	0	1000~18000MHz	3836.17	-34.4	-13	PASS

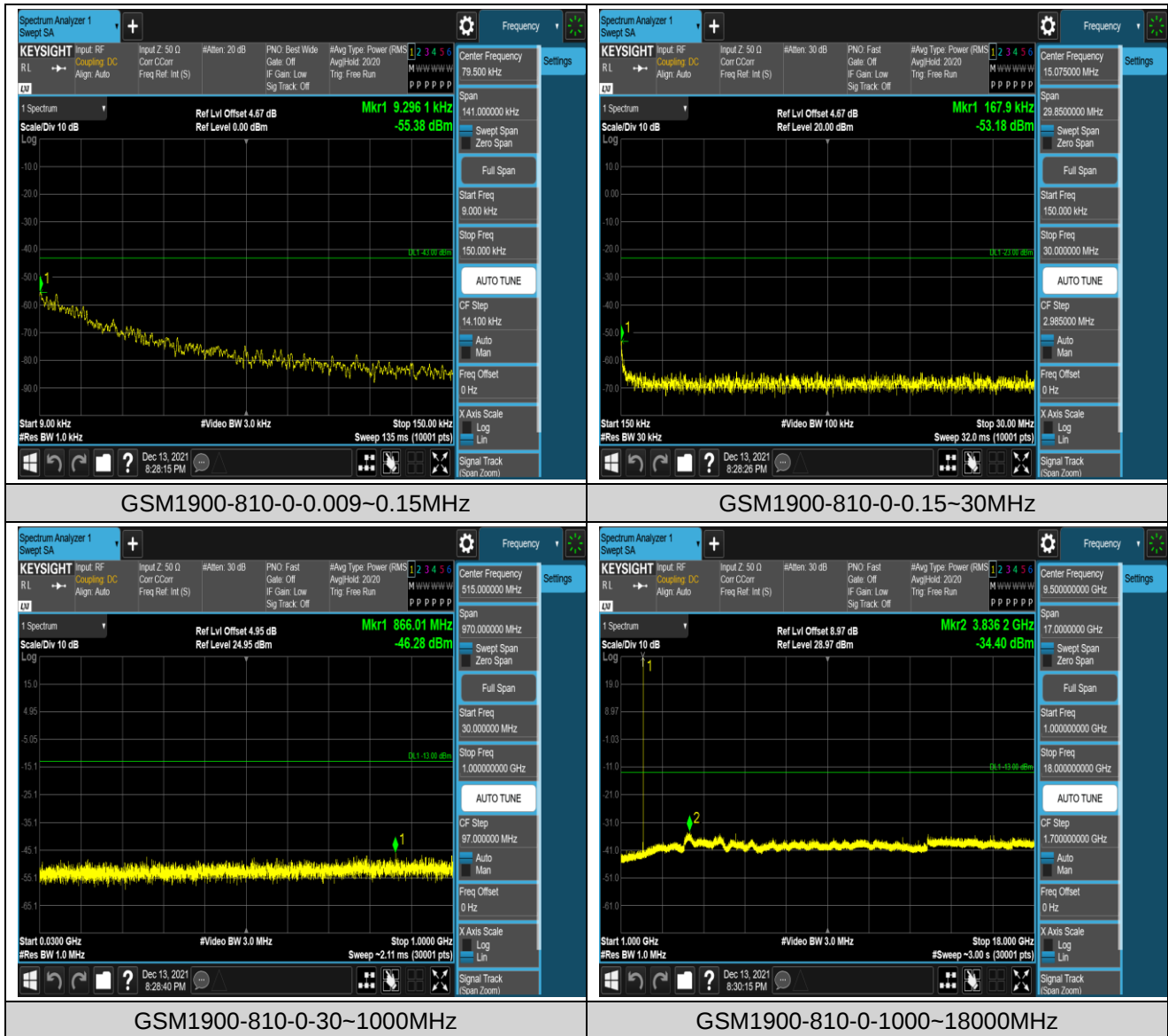
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs









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	6.94	0.008295	±2.5	Pass
	-20	0.42	0.000502		
	-10	4.10	0.004901		
	0	2.10	0.002510		
	10	1.65	0.001972		
	20	4.23	0.005056		

	30	6.04	0.007220		
	40	4.36	0.005212		
	50	1.81	0.002164		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	2.16	0.002582	±2.5	Pass
	3.85	9.65	0.011535		
	4.40	4.65	0.005558		
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	5.13	0.006132	±2.5	Pass
	-20	5.75	0.006873		
	-10	7.91	0.009455		
	0	6.81	0.008140		
	10	2.52	0.003012		
	20	7.01	0.008379		
	30	6.78	0.008104		
	40	7.07	0.008451		
	50	6.39	0.007638		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	5.68	0.006789	±2.5	Pass
	3.85	8.43	0.010077		
	4.40	-1.10	-0.001315		
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	6.39	0.003399	Within authorized band for PCS 1900	Pass
	-20	8.52	0.004532		
	-10	14.56	0.007745		
	0	18.08	0.009617		
	10	6.81	0.003622		
	20	-2.94	-0.001564		
	30	6.17	0.003282		
	40	16.18	0.008606		
	50	3.84	0.002043		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	14.82	0.007883	Within authorized band for PCS 1900	Pass
	3.85	10.72	0.005702		
	4.40	6.20	0.003298		
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	8.72	0.004638	Within authorized band for PCS 1900	Pass
	-20	11.75	0.006250		
	-10	14.33	0.007622		
	0	5.91	0.003144		
	10	8.52	0.004532		
	20	14.21	0.007559		
	30	-6.20	-0.003298		
	40	4.84	0.002574		
	50	7.94	0.004223		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	12.27	0.006527	Within authorized band for PCS 1900	Pass
	3.85	20.53	0.010920		
	4.40	1.90	0.001011		
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

