

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	3	32.24	31.09	38.5	PASS
GSM850	190	3	32.39	31.24	38.5	PASS
GSM850	251	3	32.29	31.14	38.5	PASS
GSM1900	512	0	28.94	29.94	33	PASS
GSM1900	661	0	28.56	28.56	33	PASS
GSM1900	810	0	28.39	28.39	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	3	1	32.24	31.09	38.5	PASS
GPRS850	128	3	2	31.52	30.37	38.5	PASS
GPRS850	128	3	3	29.78	28.63	38.5	PASS
GPRS850	128	3	4	28.44	27.29	38.5	PASS
GPRS850	190	3	1	32.15	31	38.5	PASS
GPRS850	190	3	2	31.51	30.36	38.5	PASS
GPRS850	190	3	3	29.81	28.66	38.5	PASS
GPRS850	190	3	4	28.47	27.32	38.5	PASS
GPRS850	251	3	1	32.02	30.87	38.5	PASS
GPRS850	251	3	2	31.43	30.28	38.5	PASS
GPRS850	251	3	3	29.75	28.6	38.5	PASS
GPRS850	251	3	4	28.42	27.27	38.5	PASS
GPRS1900	512	0	1	29.57	30.57	33	PASS
GPRS1900	512	0	2	28.85	29.85	33	PASS
GPRS1900	512	0	3	27.21	28.21	33	PASS
GPRS1900	512	0	4	25.95	26.95	33	PASS
GPRS1900	661	0	1	29.06	30.06	33	PASS
GPRS1900	661	0	2	28.43	29.43	33	PASS
GPRS1900	661	0	3	26.73	27.73	33	PASS
GPRS1900	661	0	4	25.49	26.49	33	PASS
GPRS1900	810	0	1	28.87	29.87	33	PASS
GPRS1900	810	0	2	28.21	29.21	33	PASS
GPRS1900	810	0	3	26.52	27.52	33	PASS
GPRS1900	810	0	4	25.24	26.24	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.60	26.45	38.5	PASS
EGPRS850	128	8	2	26.29	25.14	38.5	PASS
EGPRS850	128	8	3	23.88	22.73	38.5	PASS
EGPRS850	128	8	4	22.65	21.5	38.5	PASS
EGPRS850	190	8	1	27.67	26.52	38.5	PASS
EGPRS850	190	8	2	26.45	25.3	38.5	PASS
EGPRS850	190	8	3	24.04	22.89	38.5	PASS
EGPRS850	190	8	4	22.78	21.63	38.5	PASS
EGPRS850	251	8	1	27.69	26.54	38.5	PASS
EGPRS850	251	8	2	26.55	25.4	38.5	PASS
EGPRS850	251	8	3	24.12	22.97	38.5	PASS
EGPRS850	251	8	4	22.93	21.78	38.5	PASS
EGPRS1900	512	2	1	27.41	28.41	33	PASS
EGPRS1900	512	2	2	26.09	27.09	33	PASS
EGPRS1900	512	2	3	23.67	24.67	33	PASS
EGPRS1900	512	2	4	22.43	23.43	33	PASS
EGPRS1900	661	2	1	27.03	28.03	33	PASS
EGPRS1900	661	2	2	25.68	26.68	33	PASS
EGPRS1900	661	2	3	23.38	24.38	33	PASS
EGPRS1900	661	2	4	22.10	23.1	33	PASS
EGPRS1900	810	2	1	26.42	27.42	33	PASS
EGPRS1900	810	2	2	25.13	26.13	33	PASS
EGPRS1900	810	2	3	22.86	23.86	33	PASS
EGPRS1900	810	2	4	21.60	22.6	33	PASS

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

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

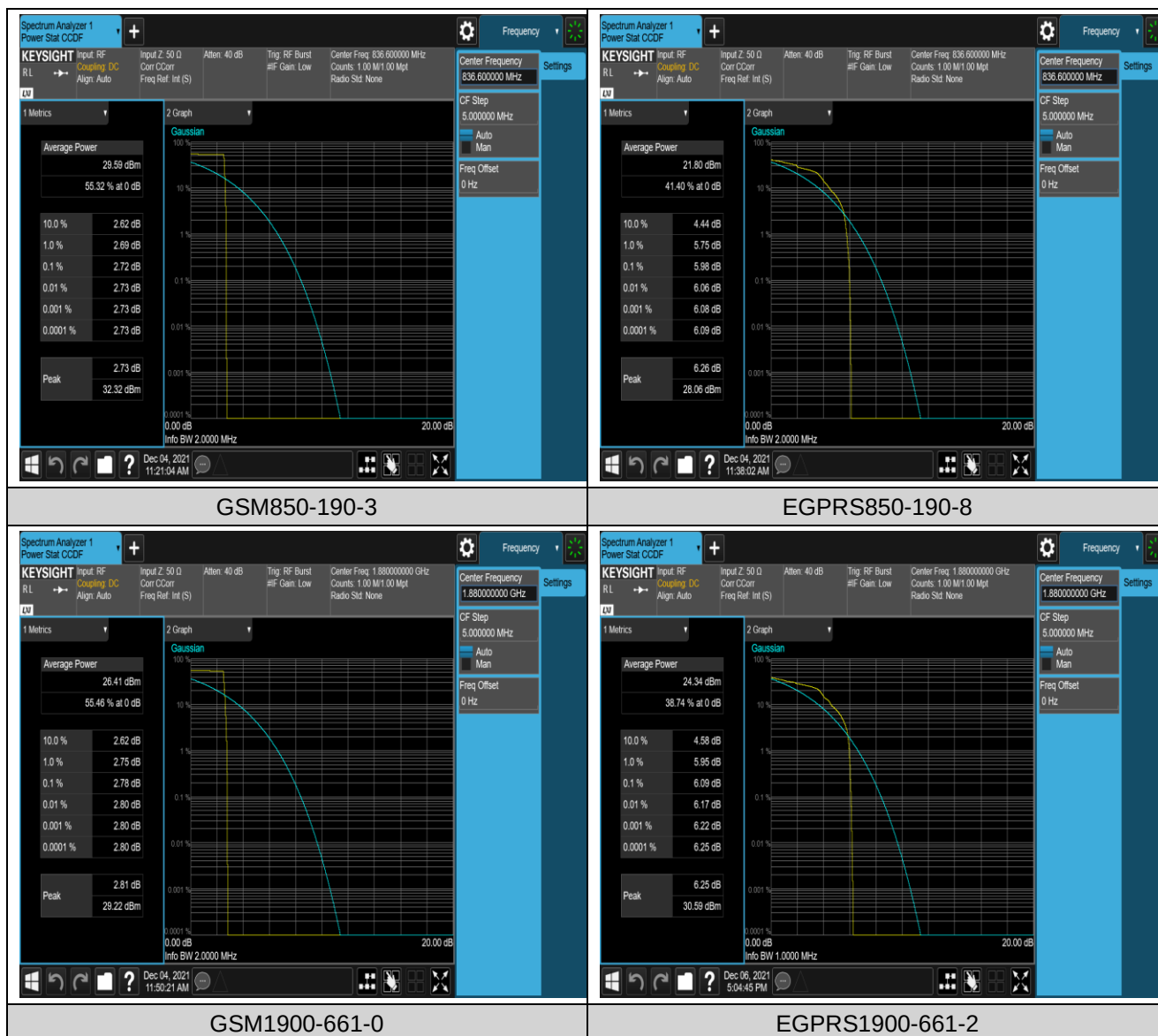
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	3	2.72	13	PASS
EGPRS850	190	8	5.98	13	PASS
GSM1900	661	0	2.78	13	PASS
EGPRS1900	661	2	6.09	13	PASS

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

Test Graphs

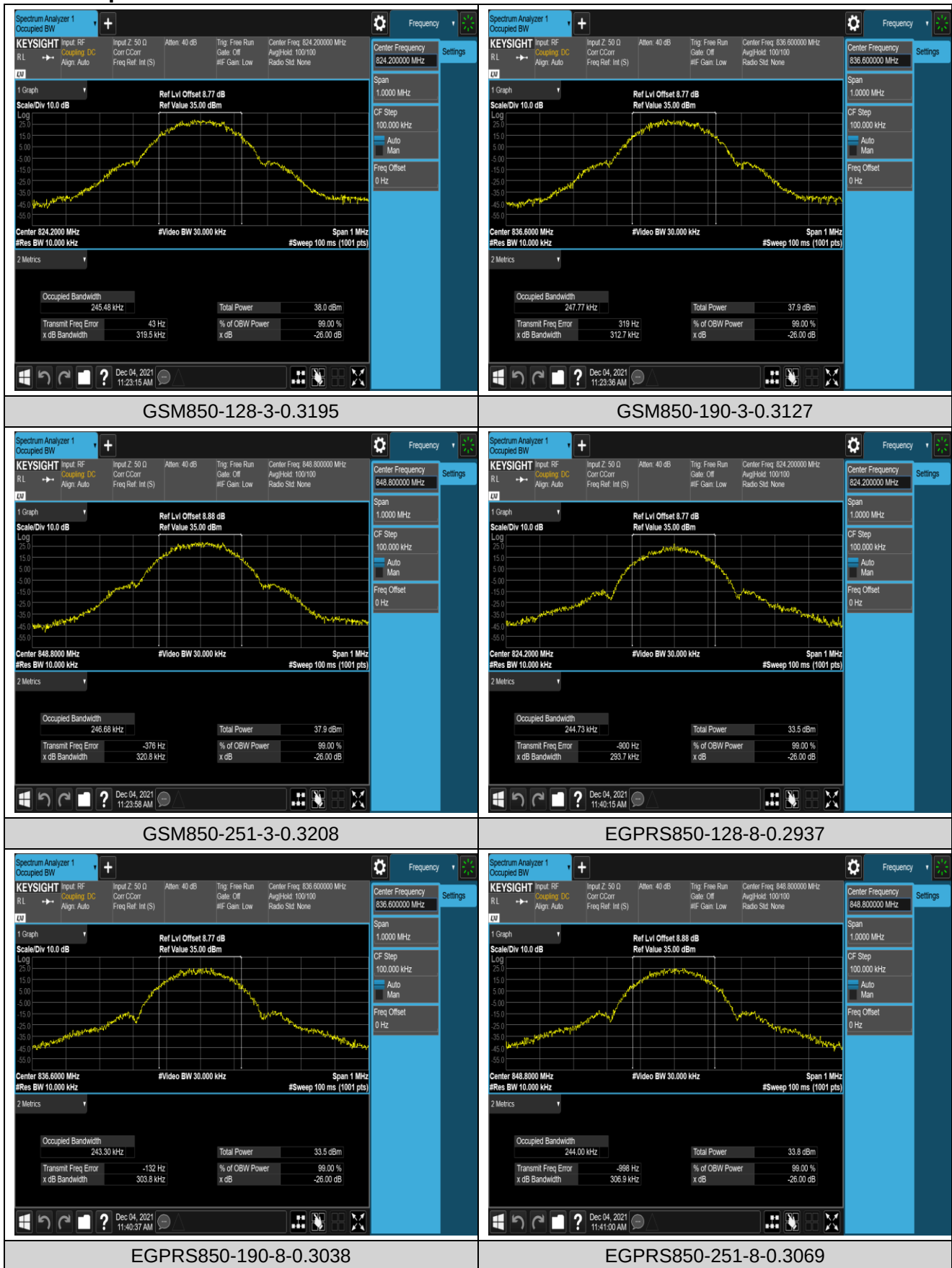


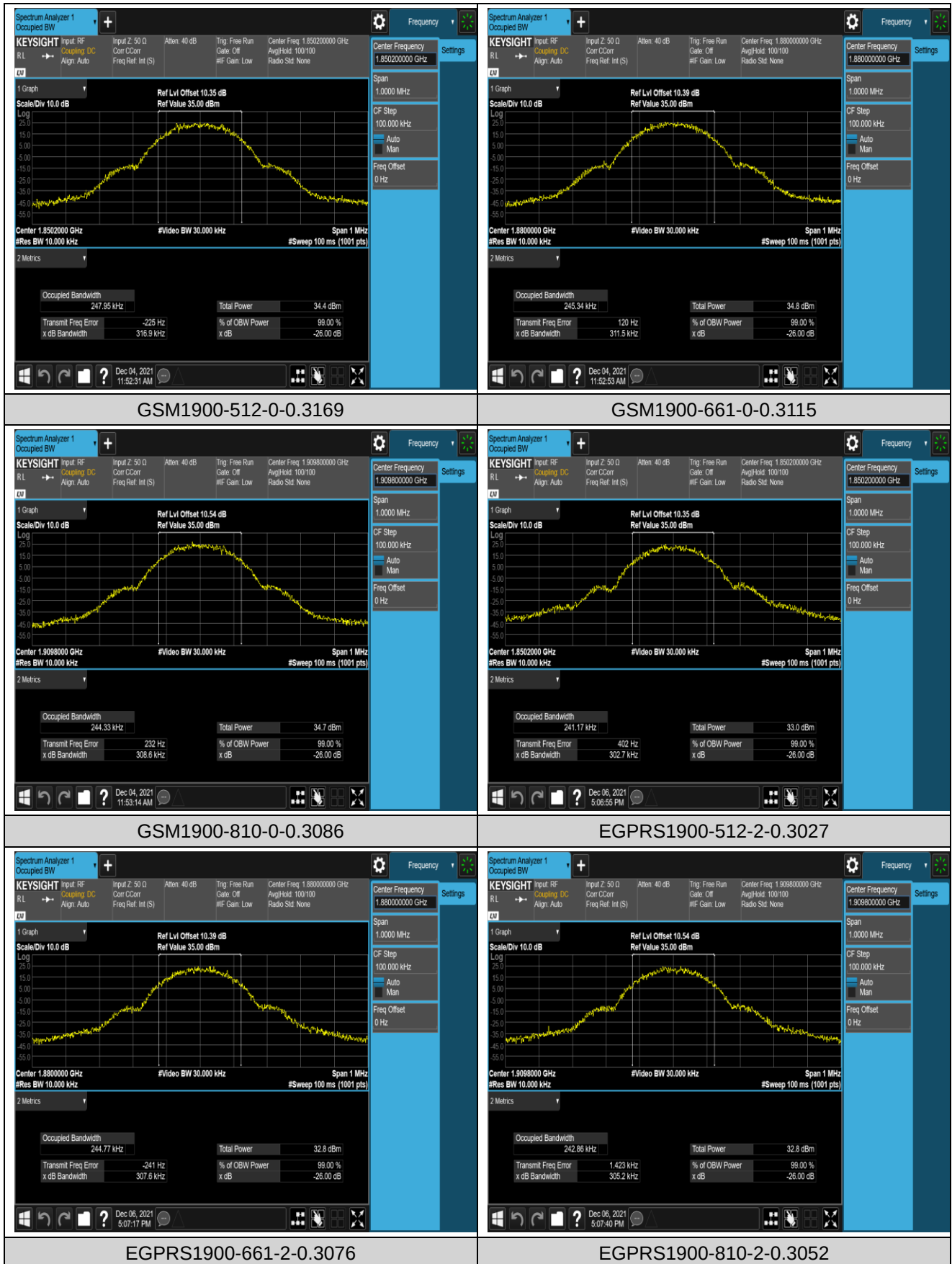
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	3	0.24548	0.3195	---	PASS
GSM850	190	3	0.24777	0.3127	---	PASS
GSM850	251	3	0.24668	0.3208	---	PASS
EGPRS850	128	8	0.24473	0.2937	---	PASS
EGPRS850	190	8	0.24330	0.3038	---	PASS
EGPRS850	251	8	0.24400	0.3069	---	PASS
GSM1900	512	0	0.24795	0.3169	---	PASS
GSM1900	661	0	0.24534	0.3115	---	PASS
GSM1900	810	0	0.24433	0.3086	---	PASS
EGPRS1900	512	2	0.24117	0.3027	---	PASS
EGPRS1900	661	2	0.24477	0.3076	---	PASS
EGPRS1900	810	2	0.24286	0.3052	---	PASS

Test Graphs



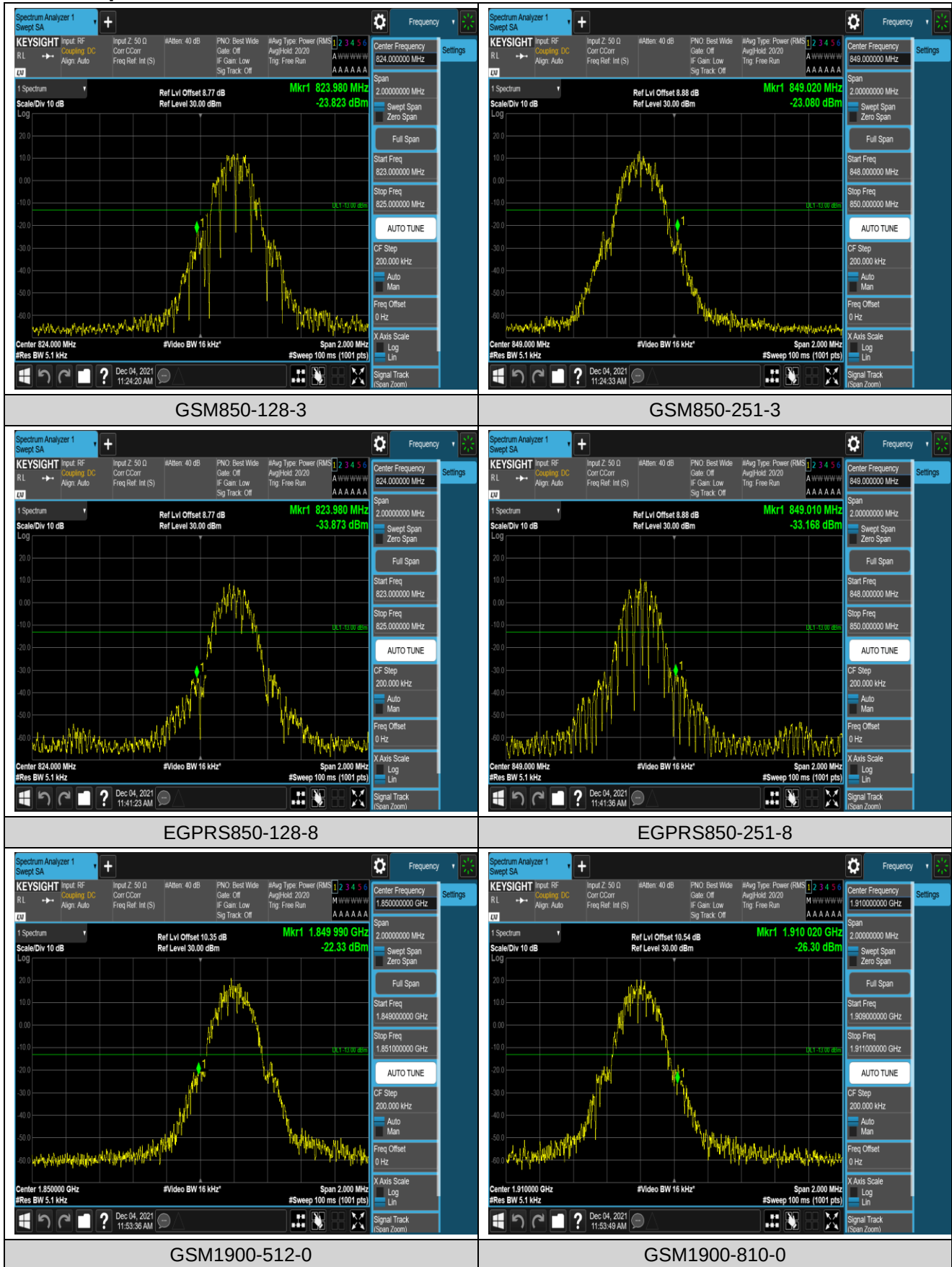


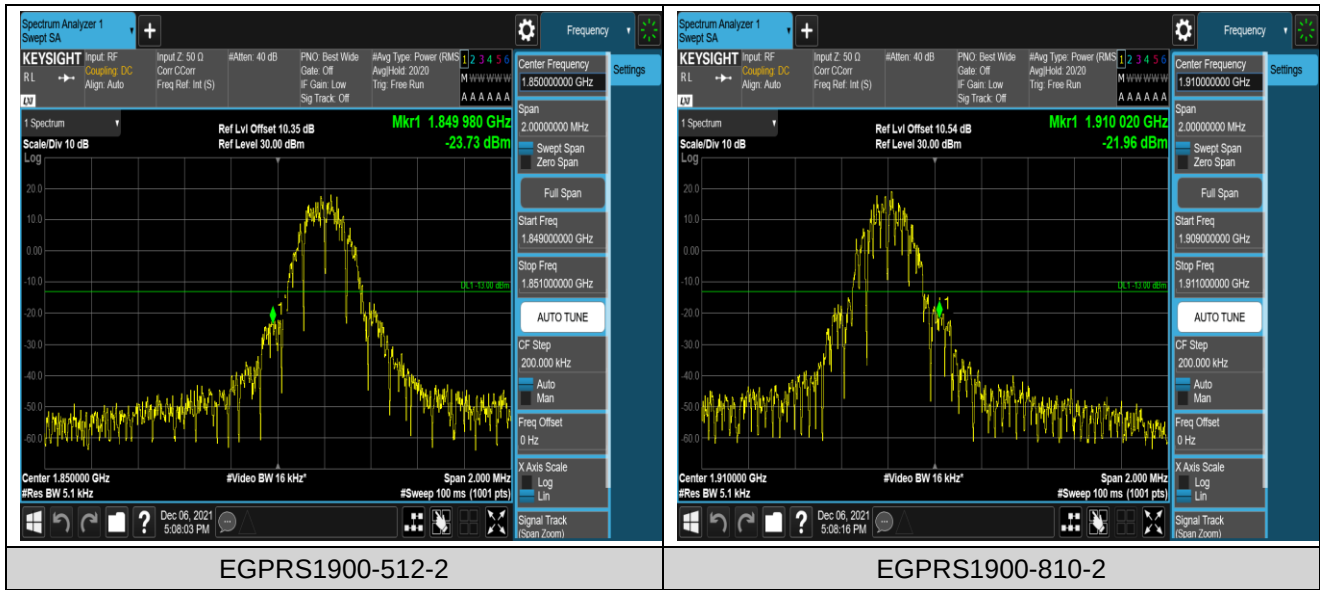
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	3	823.98	-21.97	-13	PASS
GSM850	251	3	849.02	-23.08	-13	PASS
EGPRS850	128	8	823.98	-33.43	-13	PASS
EGPRS850	251	8	849.01	-29.88	-13	PASS
GSM1900	512	0	1849.99	-18.67	-13	PASS
GSM1900	810	0	1910.02	-17.62	-13	PASS
EGPRS1900	512	2	1849.98	-21.67	-13	PASS
EGPRS1900	810	2	1910.02	-14.94	-13	PASS

Test Graphs





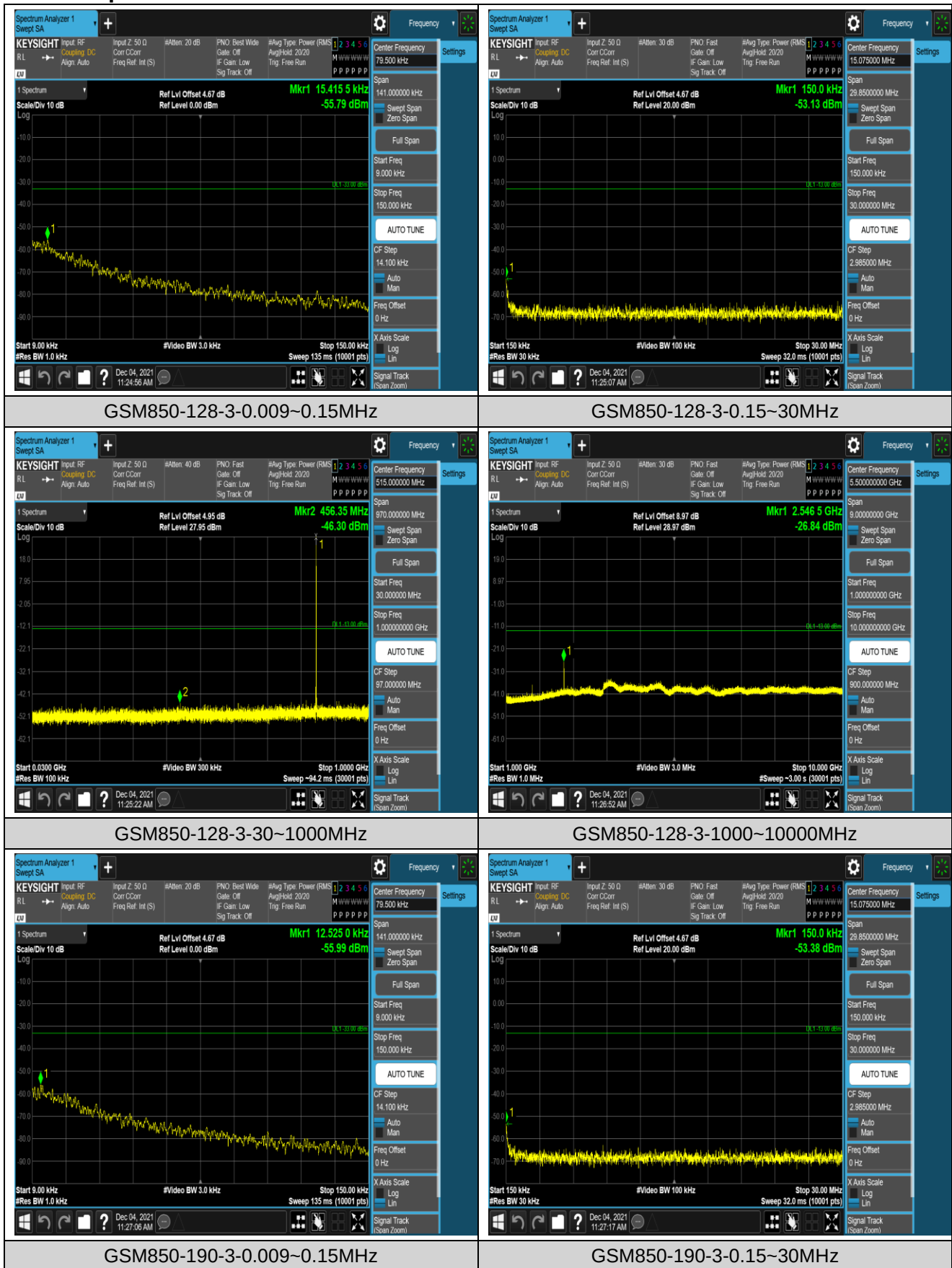
Appendix E: Conducted Spurious Emission

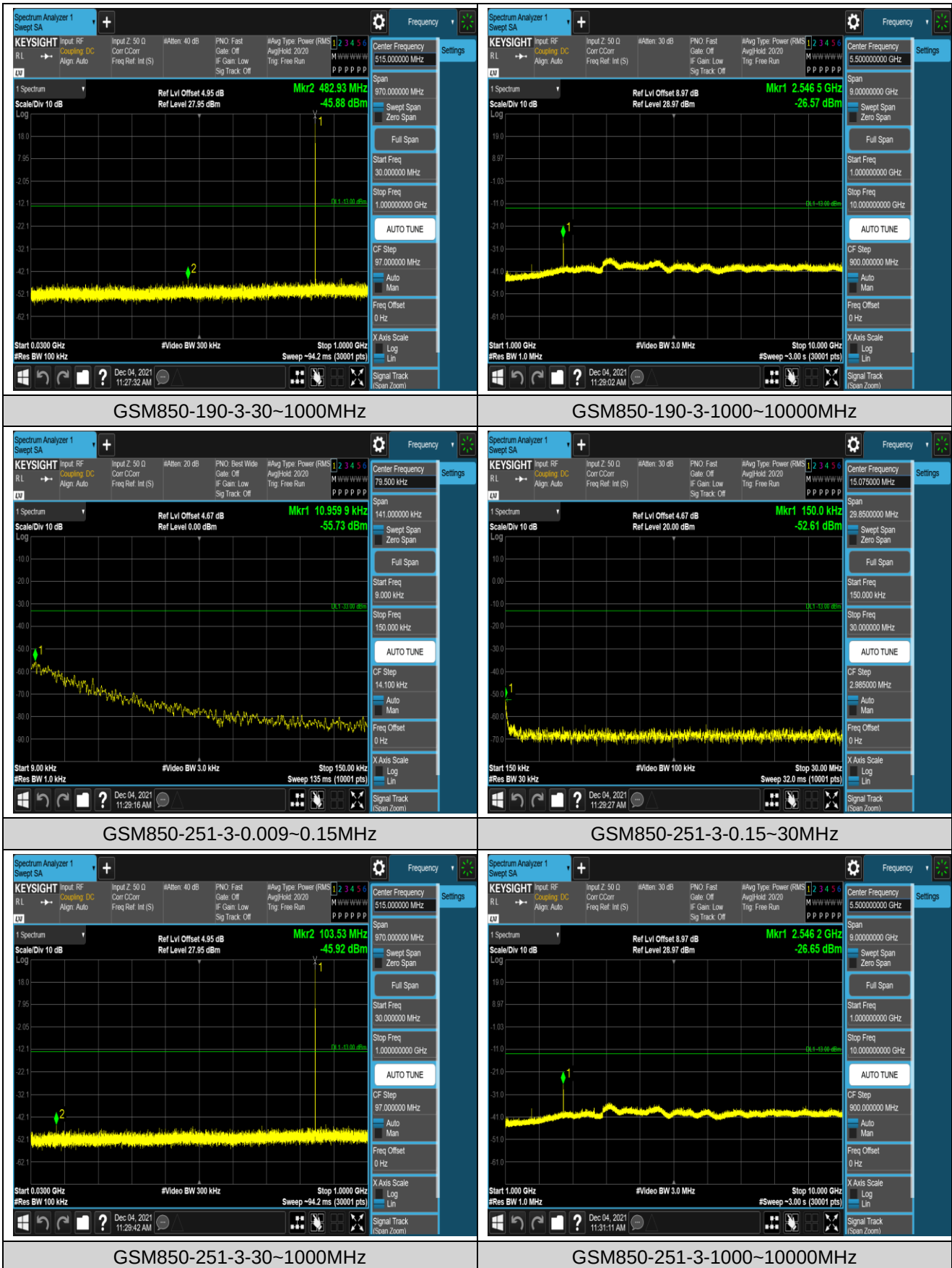
Test Result

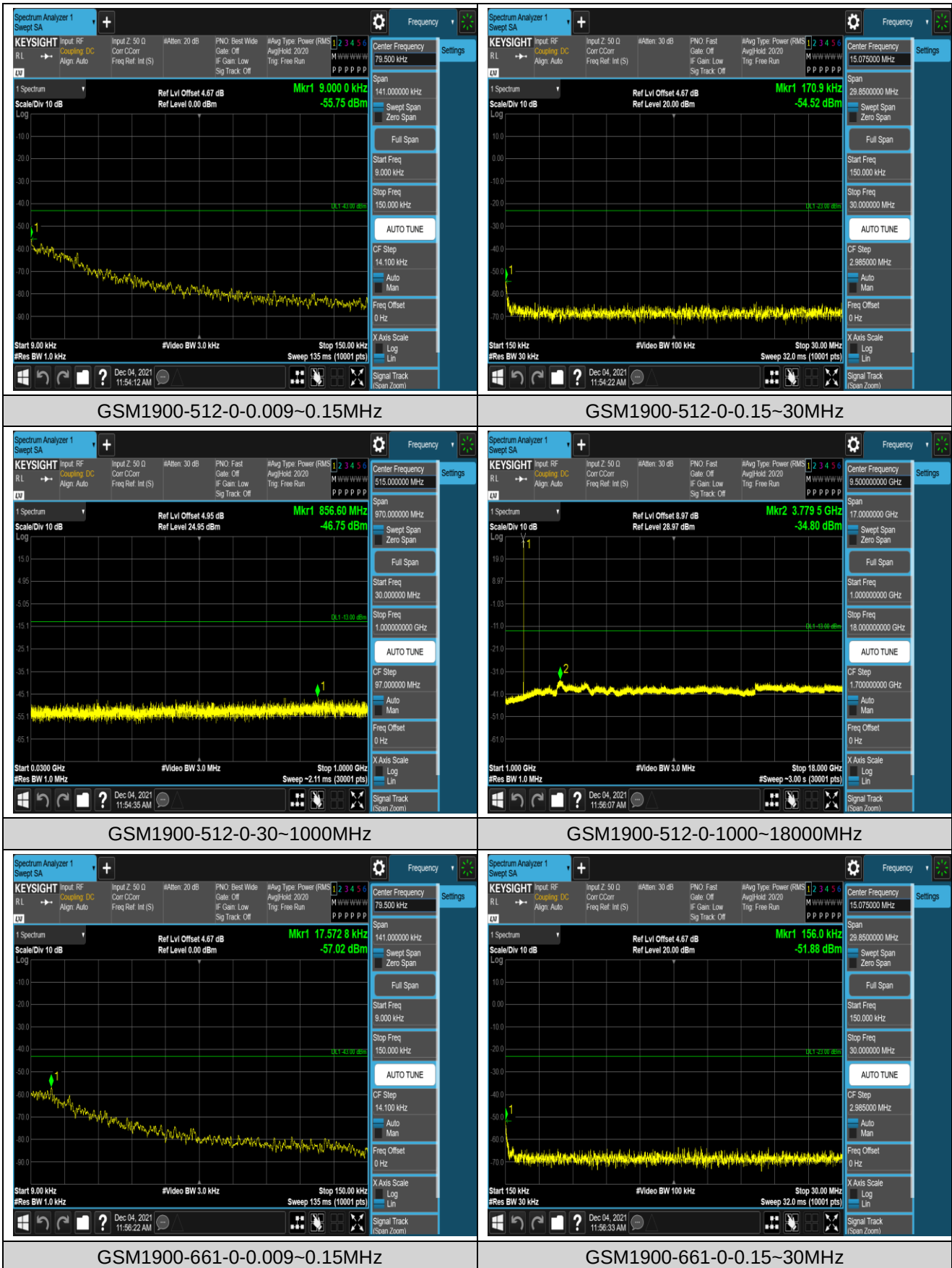
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	3	0.009~0.15MHz	0.02	-55.79	-33	PASS
GSM850	128	3	0.15~30MHz	0.15	-53.13	-13	PASS
GSM850	128	3	30~1000MHz	456.35	-46.3	-13	PASS
GSM850	128	3	1000~10000MHz	2546.5	-26.84	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-55.99	-33	PASS
GSM850	190	3	0.15~30MHz	0.15	-53.38	-13	PASS
GSM850	190	3	30~1000MHz	482.93	-45.88	-13	PASS
GSM850	190	3	1000~10000MHz	2546.5	-26.57	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.01	-55.74	-33	PASS
GSM850	251	3	0.15~30MHz	0.15	-52.61	-13	PASS
GSM850	251	3	30~1000MHz	103.53	-45.92	-13	PASS
GSM850	251	3	1000~10000MHz	2546.2	-26.65	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.75	-43	PASS
GSM1900	512	0	0.15~30MHz	0.17	-54.52	-23	PASS
GSM1900	512	0	30~1000MHz	856.6	-46.75	-13	PASS
GSM1900	512	0	1000~18000MHz	3779.5	-34.8	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.02	-57.02	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-51.88	-23	PASS
GSM1900	661	0	30~1000MHz	762.22	-46.55	-13	PASS
GSM1900	661	0	1000~18000MHz	3710.37	-34.35	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.02	-57.18	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-51.8	-23	PASS
GSM1900	810	0	30~1000MHz	871.99	-46.34	-13	PASS
GSM1900	810	0	1000~18000MHz	3784.03	-34.07	-13	PASS

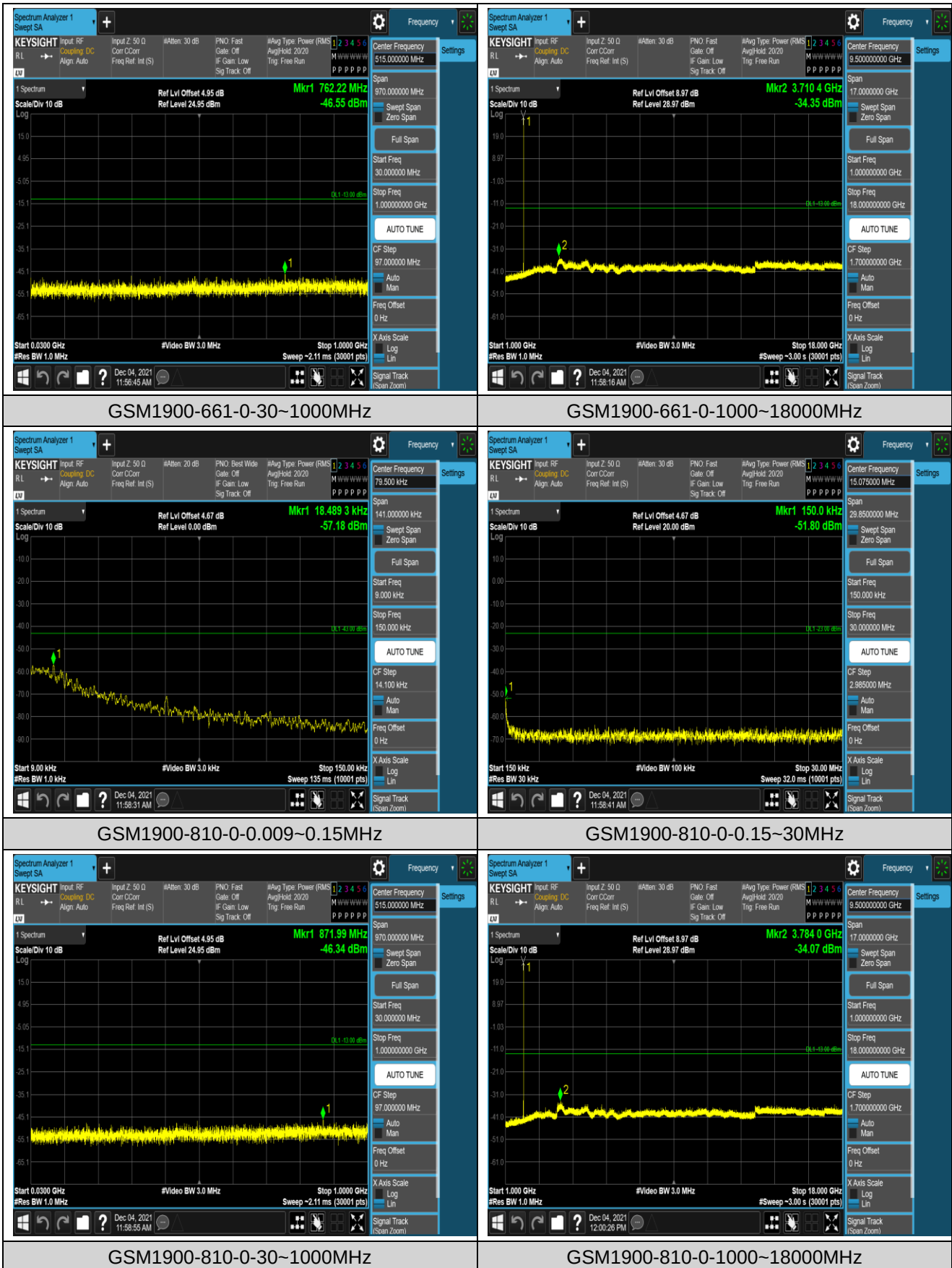
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.8	-30	13.79	0.016483	±2.5	Pass
	-20	12.95	0.015479		
	-10	10.20	0.012192		
	0	8.91	0.010650		
	10	9.14	0.010925		
	20	9.59	0.011463		
	30	12.98	0.015515		
	40	5.94	0.007100		
	50	11.14	0.013316		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	13.72	0.016400	±2.5	Pass
	3.85	8.17	0.009766		
	4.20	15.21	0.018181		
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		
3.80	-30	6.26	0.007483	±2.5	Pass
	-20	7.46	0.008917		
	-10	15.46	0.018480		
	0	13.30	0.015898		
	10	14.69	0.017559		
	20	13.40	0.016017		
	30	13.56	0.016208		
	40	16.27	0.019448		
	50	14.63	0.017487		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	10.11	0.012085	±2.5	Pass
	3.80	8.20	0.009802		
	4.20	4.71	0.005630		
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		
3.80	-30	47.33	0.025176	Within authorized band for PCS 1900	Pass
	-20	50.17	0.026686		
	-10	40.00	0.021277		
	0	37.65	0.020027		
	10	34.29	0.018239		
	20	24.92	0.013255		
	30	37.16	0.019766		
	40	34.03	0.018101		
	50	29.09	0.015473		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	14.27	0.007590	Within authorized band for PCS 1900	Pass
	3.80	11.62	0.006181		
	4.20	13.33	0.007090		
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		
3.80	-30	20.47	0.010888	Within authorized band for PCS 1900	Pass
	-20	25.80	0.013723		
	-10	37.71	0.020059		
	0	47.23	0.025122		
	10	44.85	0.023856		
	20	44.62	0.023734		
	30	34.90	0.018564		
	40	38.00	0.020213		
	50	40.03	0.021293		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.40	20.37	0.010835	Within authorized band for PCS 1900	Pass
	3.80	18.89	0.010048		
	4.20	23.63	0.012569		
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

