

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	33.17	33.68	38.45	PASS
GSM850	190	5	33.52	34.03	38.45	PASS
GSM850	251	5	33.62	34.13	38.45	PASS
GSM1900	512	0	29.21	31.66	33.00	PASS
GSM1900	661	0	28.98	31.43	33.00	PASS
GSM1900	810	0	28.99	31.44	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.24	33.75	38.45	PASS
GPRS850	128	5	2	31.14	31.65	38.45	PASS
GPRS850	128	5	3	29.16	29.67	38.45	PASS
GPRS850	128	5	4	26.95	27.46	38.45	PASS
GPRS850	190	5	1	33.53	34.04	38.45	PASS
GPRS850	190	5	2	31.32	31.83	38.45	PASS
GPRS850	190	5	3	29.37	29.88	38.45	PASS
GPRS850	190	5	4	27.19	27.7	38.45	PASS
GPRS850	251	5	1	33.62	34.13	38.45	PASS
GPRS850	251	5	2	31.32	31.83	38.45	PASS
GPRS850	251	5	3	29.39	29.9	38.45	PASS
GPRS850	251	5	4	27.20	27.71	38.45	PASS
GPRS1900	512	0	1	29.15	31.6	33.00	PASS
GPRS1900	512	0	2	26.74	29.19	33.00	PASS
GPRS1900	512	0	3	25.09	27.54	33.00	PASS
GPRS1900	512	0	4	23.07	25.52	33.00	PASS
GPRS1900	661	0	1	28.99	31.44	33.00	PASS
GPRS1900	661	0	2	26.58	29.03	33.00	PASS
GPRS1900	661	0	3	24.94	27.39	33.00	PASS
GPRS1900	661	0	4	22.92	25.37	33.00	PASS
GPRS1900	810	0	1	29.00	31.45	33.00	PASS
GPRS1900	810	0	2	26.41	28.86	33.00	PASS
GPRS1900	810	0	3	24.75	27.2	33.00	PASS
GPRS1900	810	0	4	22.73	25.18	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.79	26.3	38.45	PASS
EGPRS850	128	8	2	24.73	25.24	38.45	PASS
EGPRS850	128	8	3	22.27	22.78	38.45	PASS
EGPRS850	128	8	4	20.00	20.51	38.45	PASS
EGPRS850	190	8	1	25.75	26.26	38.45	PASS
EGPRS850	190	8	2	24.76	25.27	38.45	PASS
EGPRS850	190	8	3	22.43	22.94	38.45	PASS
EGPRS850	190	8	4	20.20	20.71	38.45	PASS
EGPRS850	251	8	1	25.87	26.38	38.45	PASS
EGPRS850	251	8	2	24.86	25.37	38.45	PASS
EGPRS850	251	8	3	22.47	22.98	38.45	PASS
EGPRS850	251	8	4	20.24	20.75	38.45	PASS
EGPRS1900	512	2	1	24.44	26.89	33.00	PASS
EGPRS1900	512	2	2	22.96	25.41	33.00	PASS
EGPRS1900	512	2	3	20.65	23.1	33.00	PASS
EGPRS1900	512	2	4	18.23	20.68	33.00	PASS
EGPRS1900	661	2	1	25.38	27.83	33.00	PASS
EGPRS1900	661	2	2	24.13	26.58	33.00	PASS
EGPRS1900	661	2	3	21.95	24.4	33.00	PASS
EGPRS1900	661	2	4	19.48	21.93	33.00	PASS
EGPRS1900	810	2	1	25.51	27.96	33.00	PASS
EGPRS1900	810	2	2	24.13	26.58	33.00	PASS
EGPRS1900	810	2	3	21.86	24.31	33.00	PASS
EGPRS1900	810	2	4	19.00	21.45	33.00	PASS

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

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

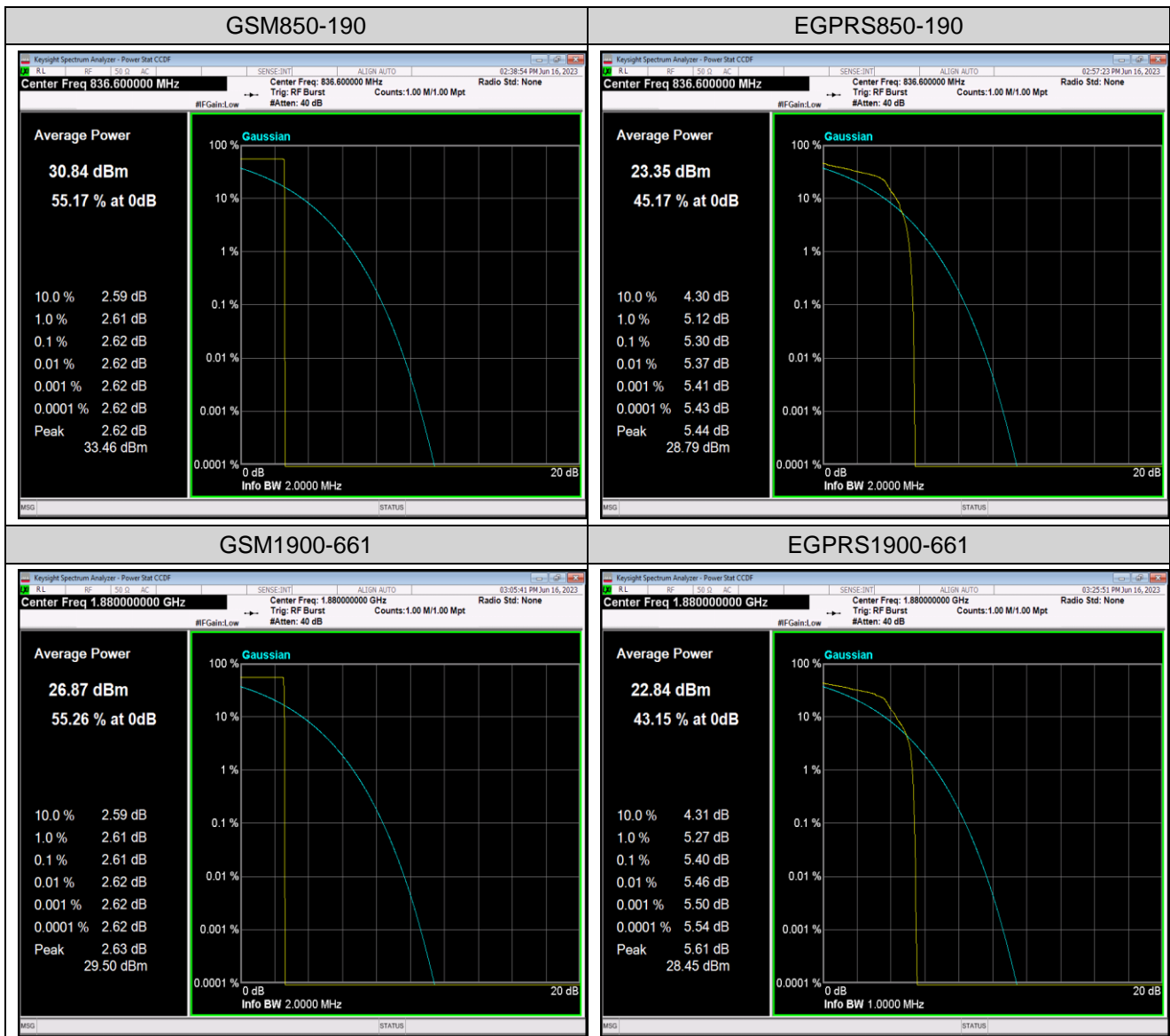
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.62	13	PASS
EGPRS850	190	8	5.3	13	PASS
GSM1900	661	0	2.61	13	PASS
EGPRS1900	661	2	5.4	13	PASS

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

Test Graphs

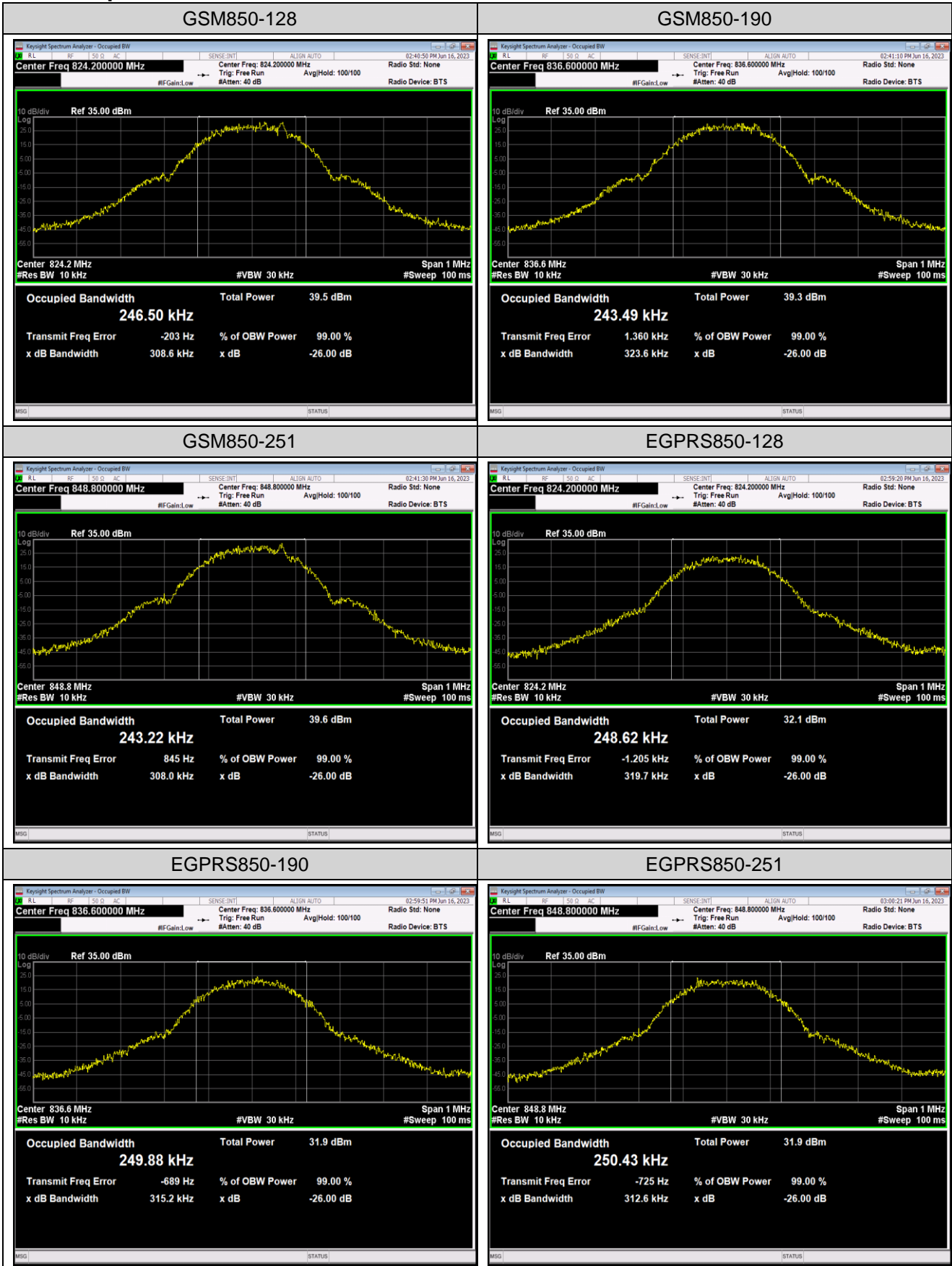


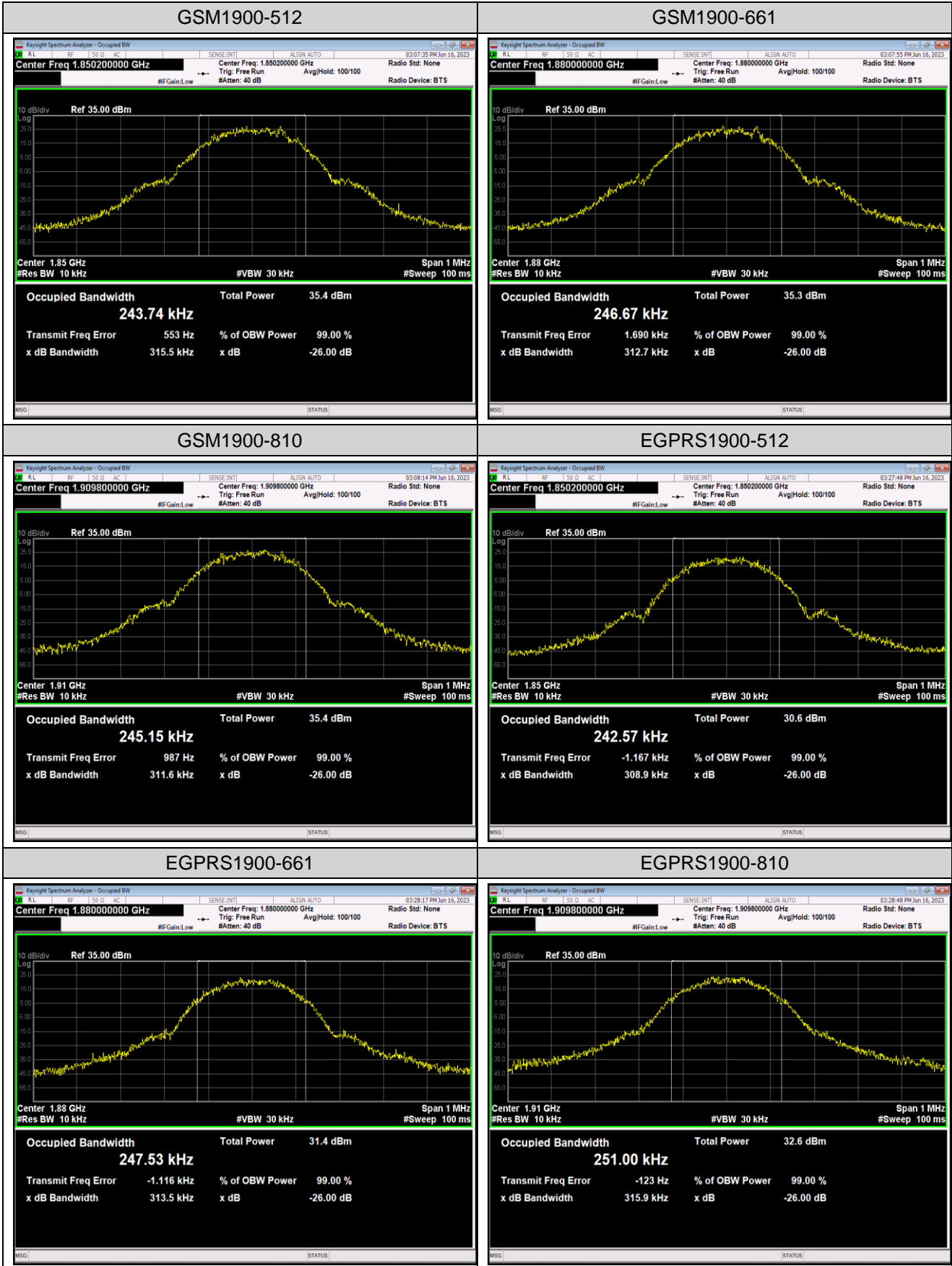
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24650	0.3086	---	PASS
GSM850	190	5	0.24349	0.3236	---	PASS
GSM850	251	5	0.24322	0.3080	---	PASS
EGPRS850	128	8	0.24862	0.3197	---	PASS
EGPRS850	190	8	0.24988	0.3152	---	PASS
EGPRS850	251	8	0.25043	0.3126	---	PASS
GSM1900	512	0	0.24374	0.3155	---	PASS
GSM1900	661	0	0.24667	0.3127	---	PASS
GSM1900	810	0	0.24515	0.3116	---	PASS
EGPRS1900	512	2	0.24257	0.3089	---	PASS
EGPRS1900	661	2	0.24753	0.3135	---	PASS
EGPRS1900	810	2	0.25100	0.3159	---	PASS

Test Graphs

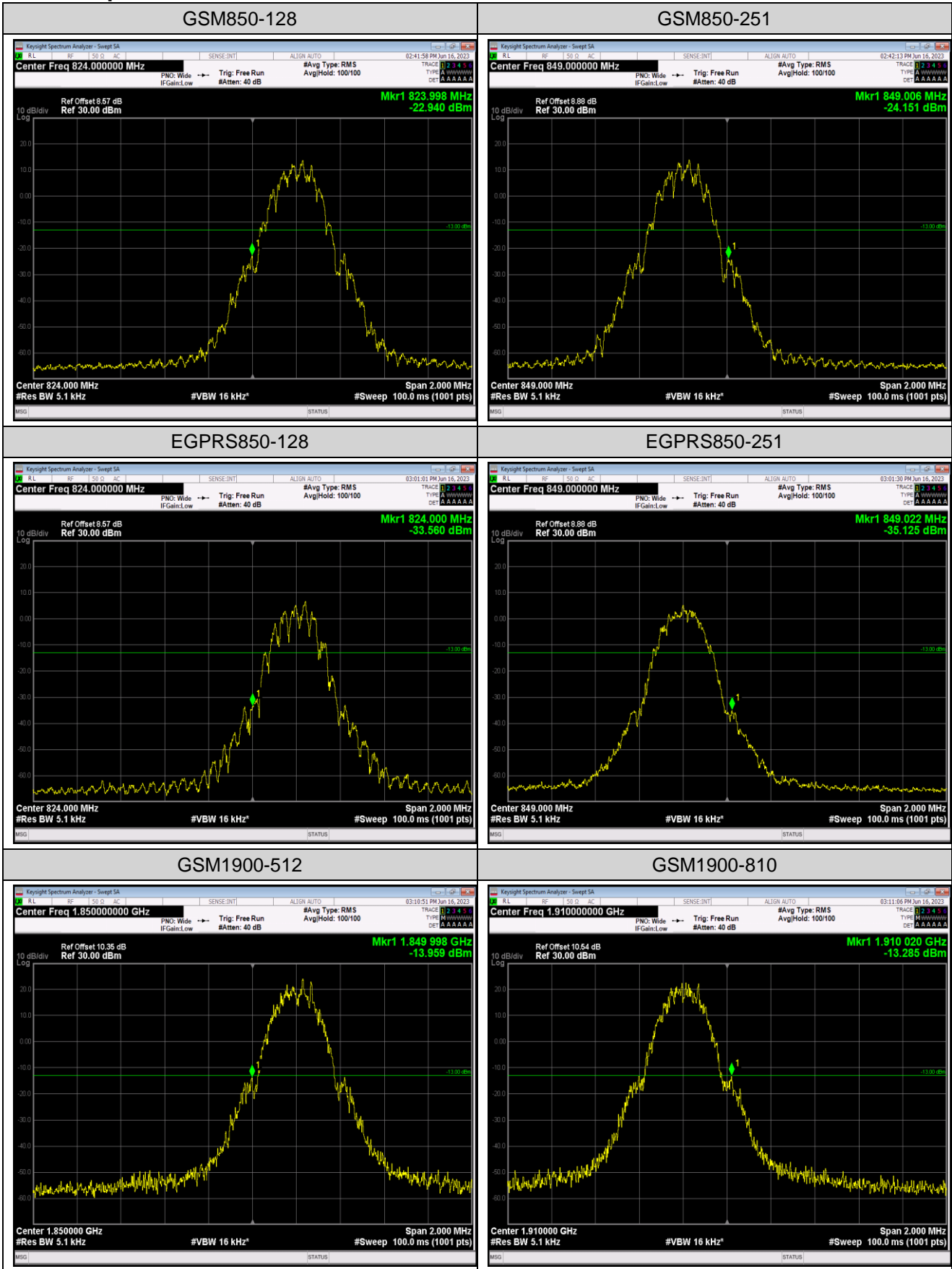


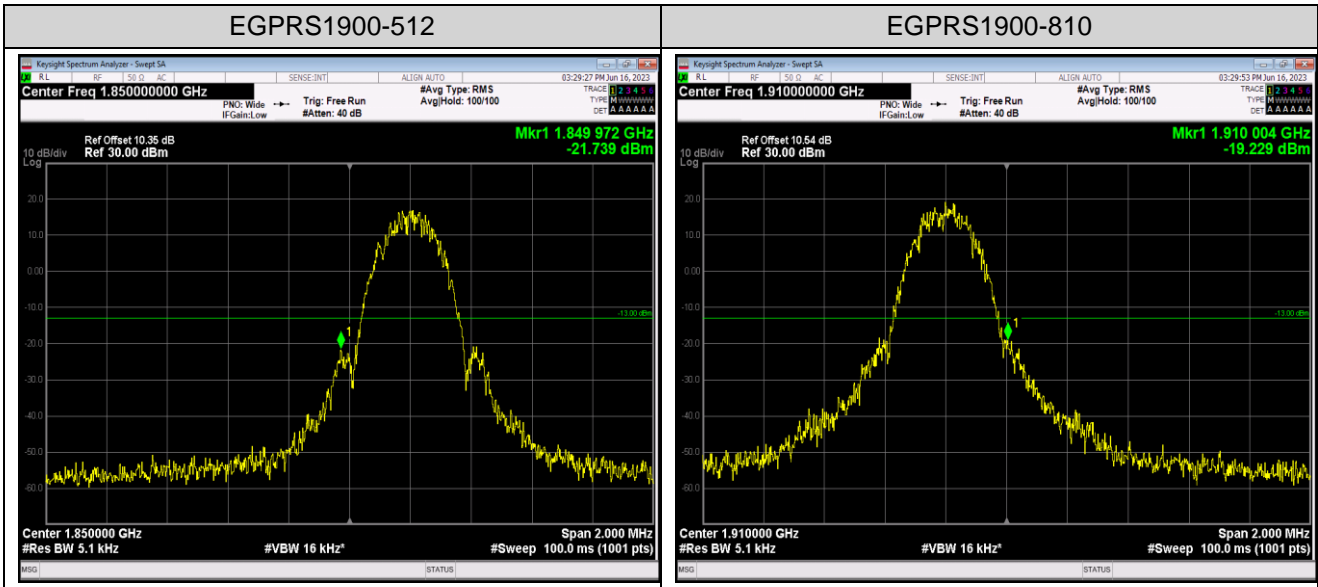


Appendix D: Band Edge**Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-22.94	-13	PASS
GSM850	251	5	849.01	-24.15	-13	PASS
EGPRS850	128	8	824.00	-33.56	-13	PASS
EGPRS850	251	8	849.02	-35.12	-13	PASS
GSM1900	512	0	1850.00	-13.96	-13	PASS
GSM1900	810	0	1910.02	-13.29	-13	PASS
EGPRS1900	512	2	1849.97	-21.74	-13	PASS
EGPRS1900	810	2	1910.00	-19.23	-13	PASS

Test Graphs





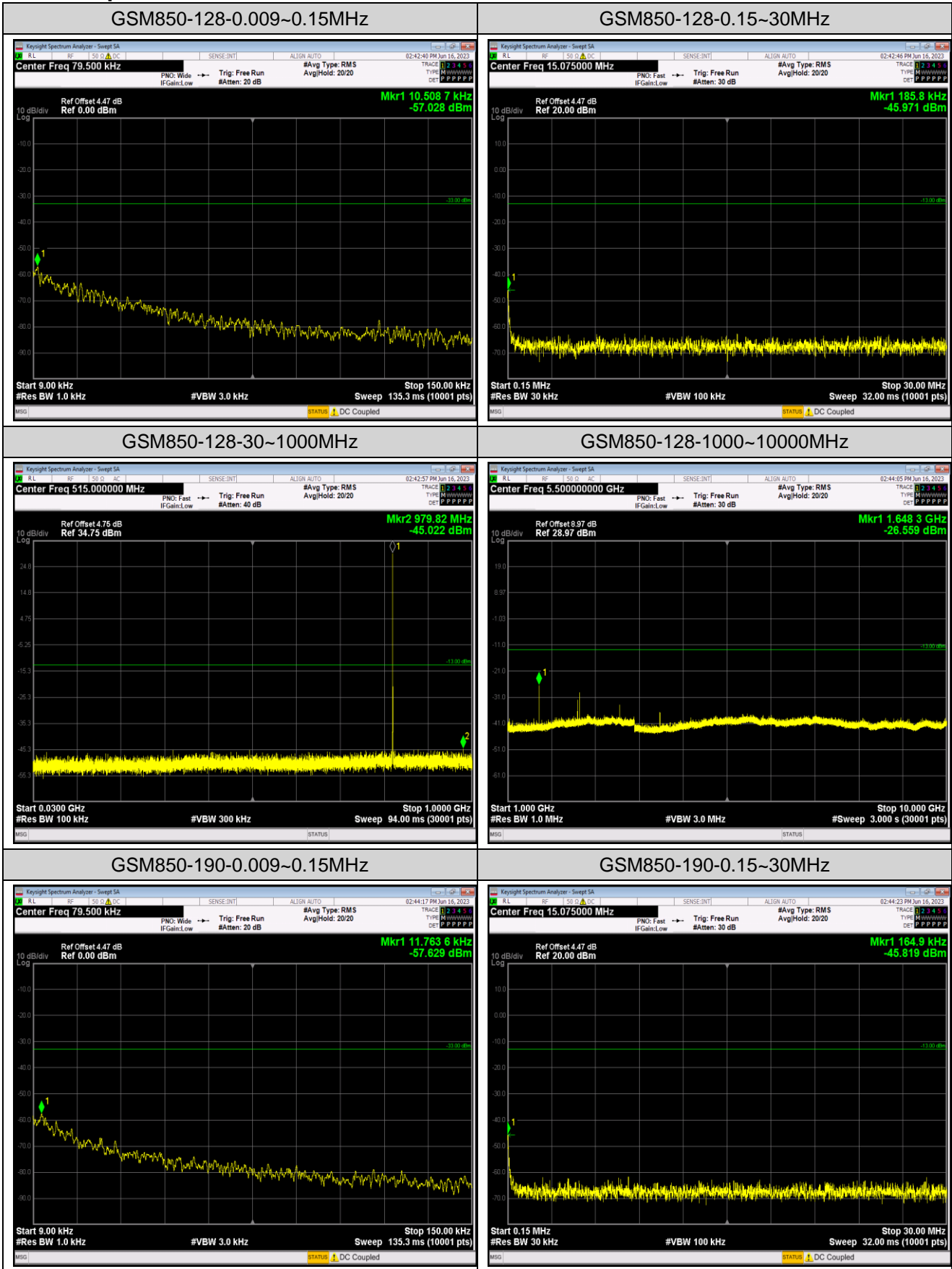
Appendix E: Conducted Spurious Emission

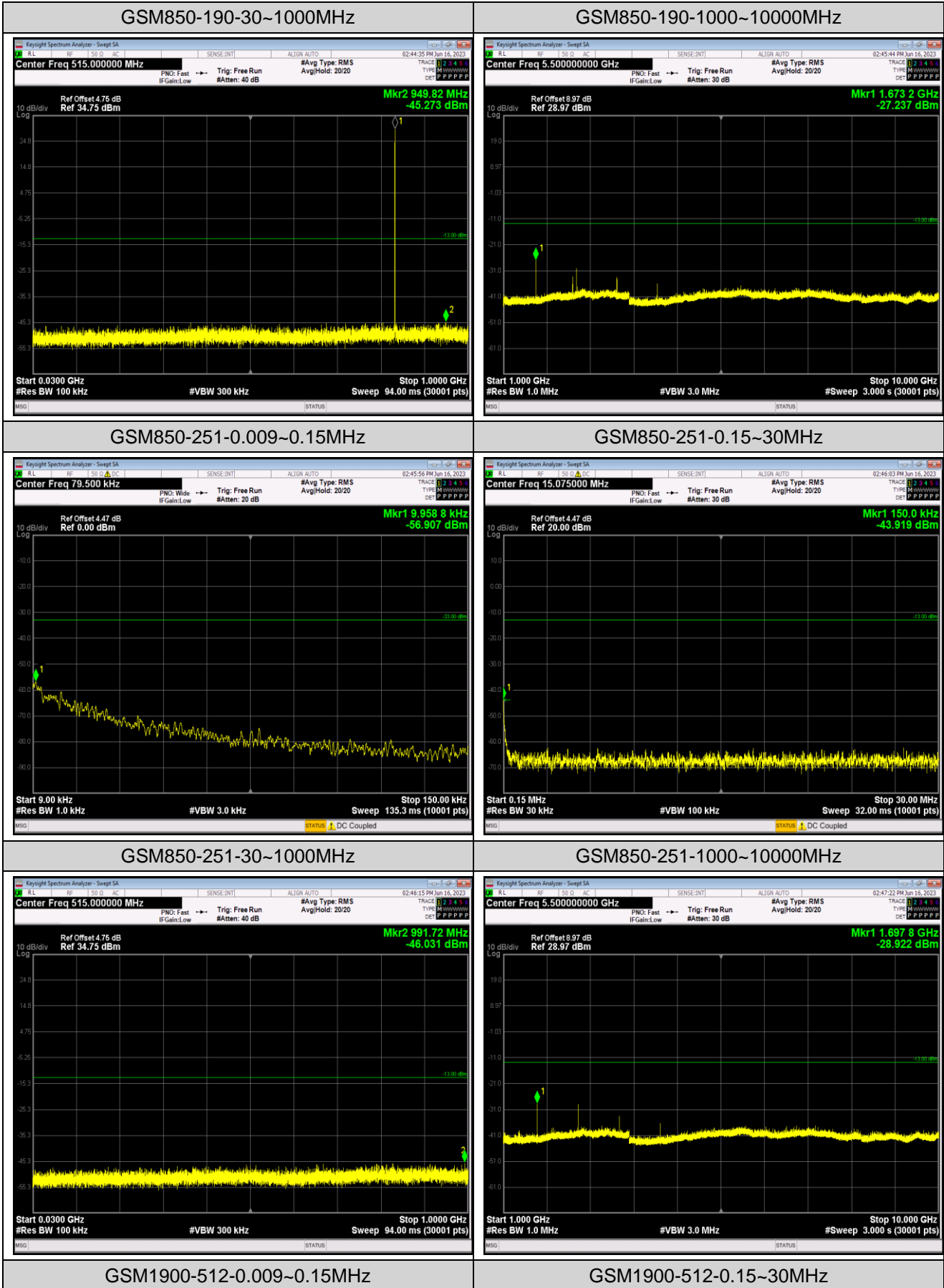
Test Result

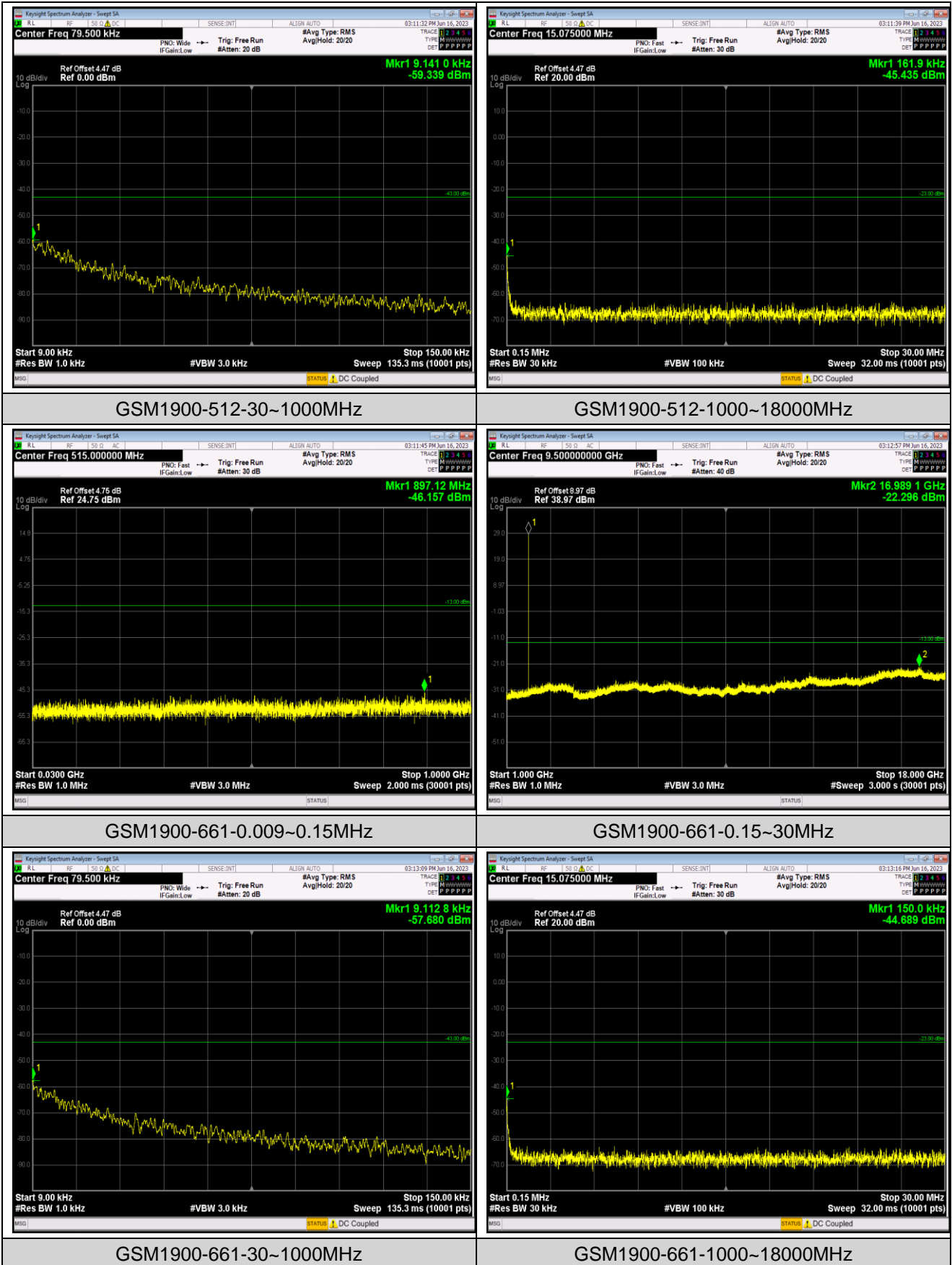
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-57.03	-33	PASS
GSM850	128	5	0.15~30MHz	0.19	-45.97	-13	PASS
GSM850	128	5	30~1000MHz	979.82	-45.02	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-26.56	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-57.63	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-45.82	-13	PASS
GSM850	190	5	30~1000MHz	949.82	-45.27	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-27.24	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-56.91	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-43.92	-13	PASS
GSM850	251	5	30~1000MHz	991.72	-46.03	-13	PASS
GSM850	251	5	1000~10000MHz	1697.8	-28.92	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-59.34	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-45.44	-23	PASS
GSM1900	512	0	30~1000MHz	897.12	-46.16	-13	PASS
GSM1900	512	0	1000~18000MHz	16989.07	-22.3	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-57.68	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-44.69	-23	PASS
GSM1900	661	0	30~1000MHz	746.41	-46.33	-13	PASS
GSM1900	661	0	1000~18000MHz	17033.83	-22.4	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-58.76	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-45.41	-23	PASS
GSM1900	810	0	30~1000MHz	282.56	-46.17	-13	PASS
GSM1900	810	0	1000~18000MHz	16080.13	-21.97	-13	PASS

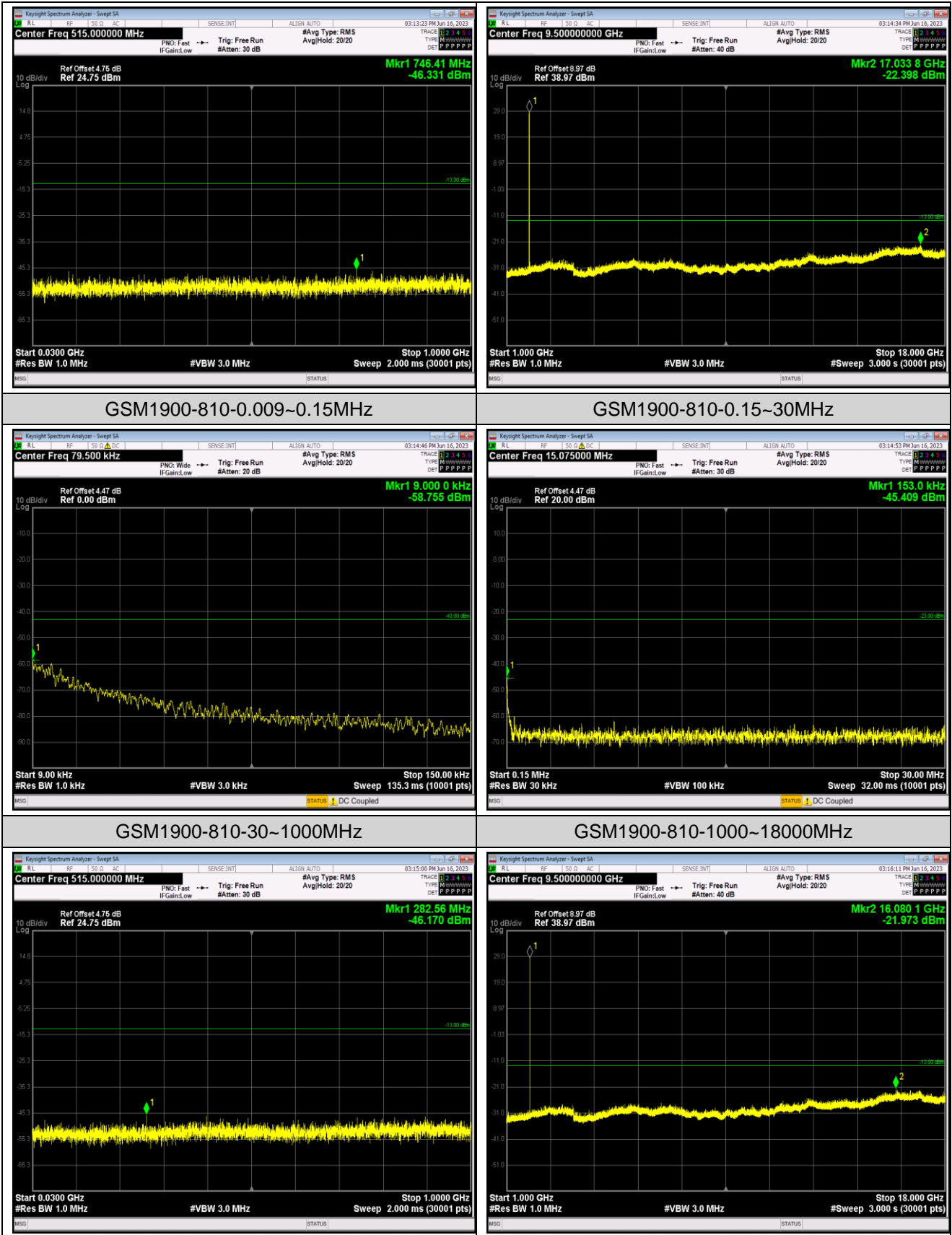
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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	-19.27	-0.023034	±2.5	Pass
	-20	-17.27	-0.020643		
	-10	-15.79	-0.018874		
	0	-18.11	-0.021647		
	10	-18.27	-0.021838		
	20	-16.95	-0.020261		
	30	-19.82	-0.023691		
	40	-16.76	-0.020033		
	50	-23.02	-0.027516		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.23	-15.69	-0.018754	±2.5	Pass
	3.80	-14.63	-0.017487		
	4.37	-14.40	-0.017213		
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		
3.8	-30	9.75	0.011654	±2.5	Pass
	-20	8.49	0.010148		
	-10	8.27	0.009885		
	0	17.40	0.020798		
	10	14.43	0.017248		
	20	10.01	0.011965		
	30	11.14	0.013316		
	40	15.69	0.018754		
	50	15.82	0.018910		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.23	14.24	0.017021	±2.5	Pass
	3.80	10.72	0.012814		
	4.37	12.66	0.015133		
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		
3.8	-30	-1.78	-0.000947	Within authorized band for PCS 1900	Pass
	-20	-0.65	-0.000346		
	-10	-0.29	-0.000154		
	0	0.58	0.000309		
	10	-1.36	-0.000723		
	20	-3.03	-0.001612		
	30	-10.11	-0.005378		
	40	-6.13	-0.003261		
	50	-5.91	-0.003144		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.23	-13.46	-0.007160	Within authorized band for PCS 1900	Pass
	3.80	-9.85	-0.005239		
	4.37	-11.36	-0.006043		
<i>Remark: All channel had been tested, but only the worst case data displayed in this report.</i>					

Reference Frequency: EGPRS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.8	-30	4.29	0.002282	Within authorized band for PCS 1900	Pass
	-20	10.01	0.005324		
	-10	-4.55	-0.002420		
	0	2.36	0.001255		
	10	6.84	0.003638		
	20	3.75	0.001995		
	30	2.03	0.001080		
	40	3.29	0.001750		
	50	3.94	0.002096		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.23	-0.90	-0.000479	Within authorized band for PCS 1900	Pass
	3.80	-2.52	-0.001340		
	4.37	5.23	0.002782		
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

