

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	31.66	23.54	38.45	PASS
GSM850	190	5	31.60	23.48	38.45	PASS
GSM850	251	5	31.51	23.39	38.45	PASS
GSM1900	512	0	26.57	24.47	33.00	PASS
GSM1900	661	0	26.23	24.13	33.00	PASS
GSM1900	810	0	25.80	23.7	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	31.66	23.54	38.45	PASS
GPRS850	128	5	2	30.91	22.79	38.45	PASS
GPRS850	128	5	3	29.10	20.98	38.45	PASS
GPRS850	128	5	4	27.94	19.82	38.45	PASS
GPRS850	190	5	1	31.57	23.45	38.45	PASS
GPRS850	190	5	2	30.83	22.71	38.45	PASS
GPRS850	190	5	3	29.07	20.95	38.45	PASS
GPRS850	190	5	4	27.95	19.83	38.45	PASS
GPRS850	251	5	1	31.48	23.36	38.45	PASS
GPRS850	251	5	2	30.75	22.63	38.45	PASS
GPRS850	251	5	3	28.99	20.87	38.45	PASS
GPRS850	251	5	4	27.89	19.77	38.45	PASS
GPRS1900	512	0	1	26.64	24.54	33.00	PASS
GPRS1900	512	0	2	25.87	23.77	33.00	PASS
GPRS1900	512	0	3	24.13	22.03	33.00	PASS
GPRS1900	512	0	4	22.98	20.88	33.00	PASS
GPRS1900	661	0	1	26.30	24.2	33.00	PASS
GPRS1900	661	0	2	25.61	23.51	33.00	PASS
GPRS1900	661	0	3	23.94	21.84	33.00	PASS
GPRS1900	661	0	4	22.85	20.75	33.00	PASS
GPRS1900	810	0	1	25.88	23.78	33.00	PASS
GPRS1900	810	0	2	25.19	23.09	33.00	PASS
GPRS1900	810	0	3	23.56	21.46	33.00	PASS
GPRS1900	810	0	4	22.51	20.41	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.01	16.89	38.45	PASS
EGPRS850	128	8	2	23.90	15.78	38.45	PASS
EGPRS850	128	8	3	21.82	13.7	38.45	PASS
EGPRS850	128	8	4	20.57	12.45	38.45	PASS
EGPRS850	190	8	1	25.12	17	38.45	PASS
EGPRS850	190	8	2	24.06	15.94	38.45	PASS
EGPRS850	190	8	3	21.92	13.8	38.45	PASS
EGPRS850	190	8	4	20.70	12.58	38.45	PASS
EGPRS850	251	8	1	25.11	16.99	38.45	PASS
EGPRS850	251	8	2	24.02	15.9	38.45	PASS
EGPRS850	251	8	3	21.94	13.82	38.45	PASS
EGPRS850	251	8	4	20.66	12.54	38.45	PASS
EGPRS1900	512	2	1	21.95	19.85	33.00	PASS
EGPRS1900	512	2	2	20.97	18.87	33.00	PASS
EGPRS1900	512	2	3	19.09	16.99	33.00	PASS
EGPRS1900	512	2	4	17.99	15.89	33.00	PASS
EGPRS1900	661	2	1	21.94	19.84	33.00	PASS
EGPRS1900	661	2	2	21.10	19	33.00	PASS
EGPRS1900	661	2	3	19.22	17.12	33.00	PASS
EGPRS1900	661	2	4	18.08	15.98	33.00	PASS
EGPRS1900	810	2	1	21.97	19.87	33.00	PASS
EGPRS1900	810	2	2	21.12	19.02	33.00	PASS
EGPRS1900	810	2	3	19.29	17.19	33.00	PASS
EGPRS1900	810	2	4	18.15	16.05	33.00	PASS

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

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

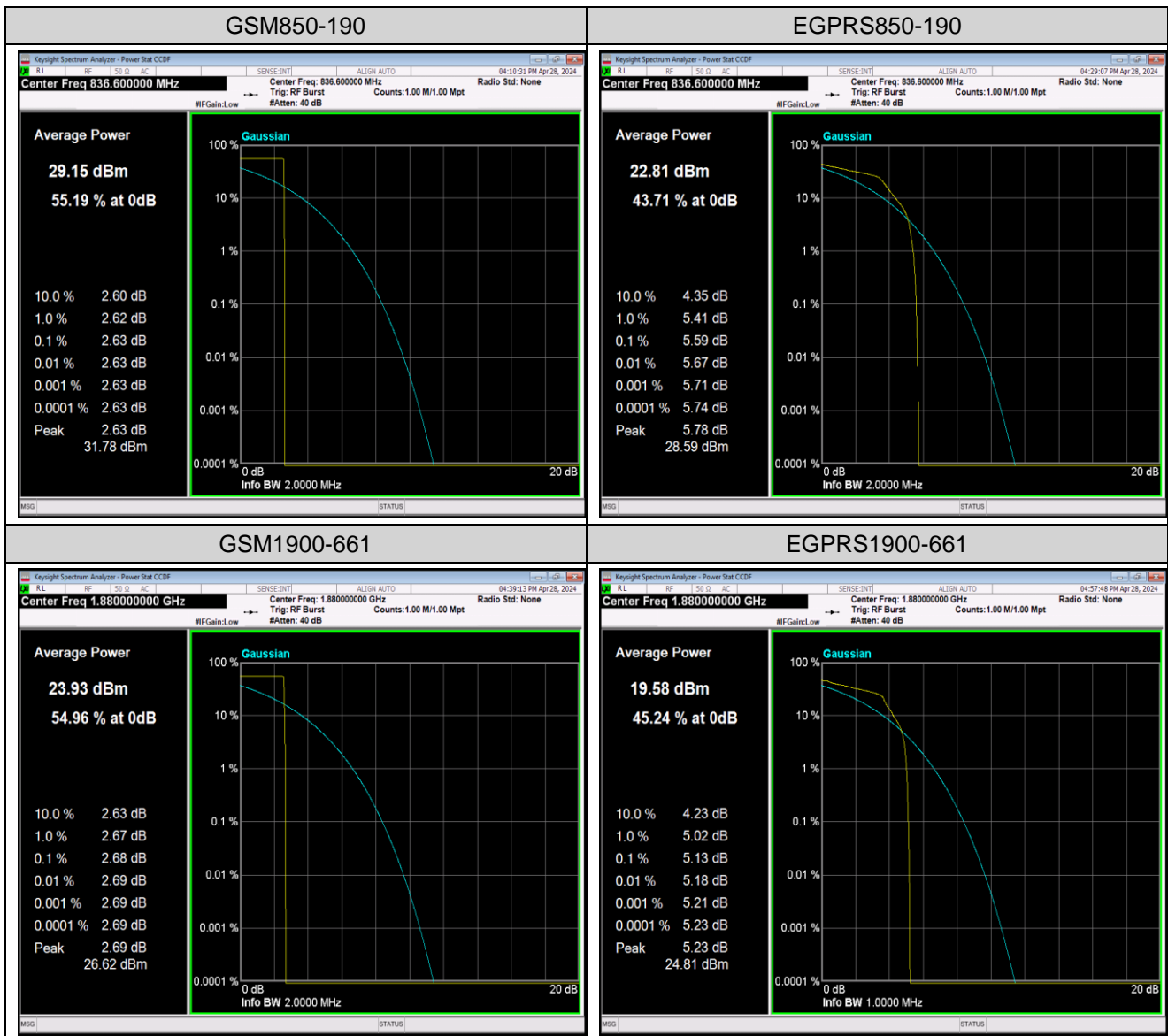
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.63	13	PASS
EGPRS850	190	8	5.59	13	PASS
GSM1900	661	0	2.68	13	PASS
EGPRS1900	661	2	5.13	13	PASS

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

Test Graphs

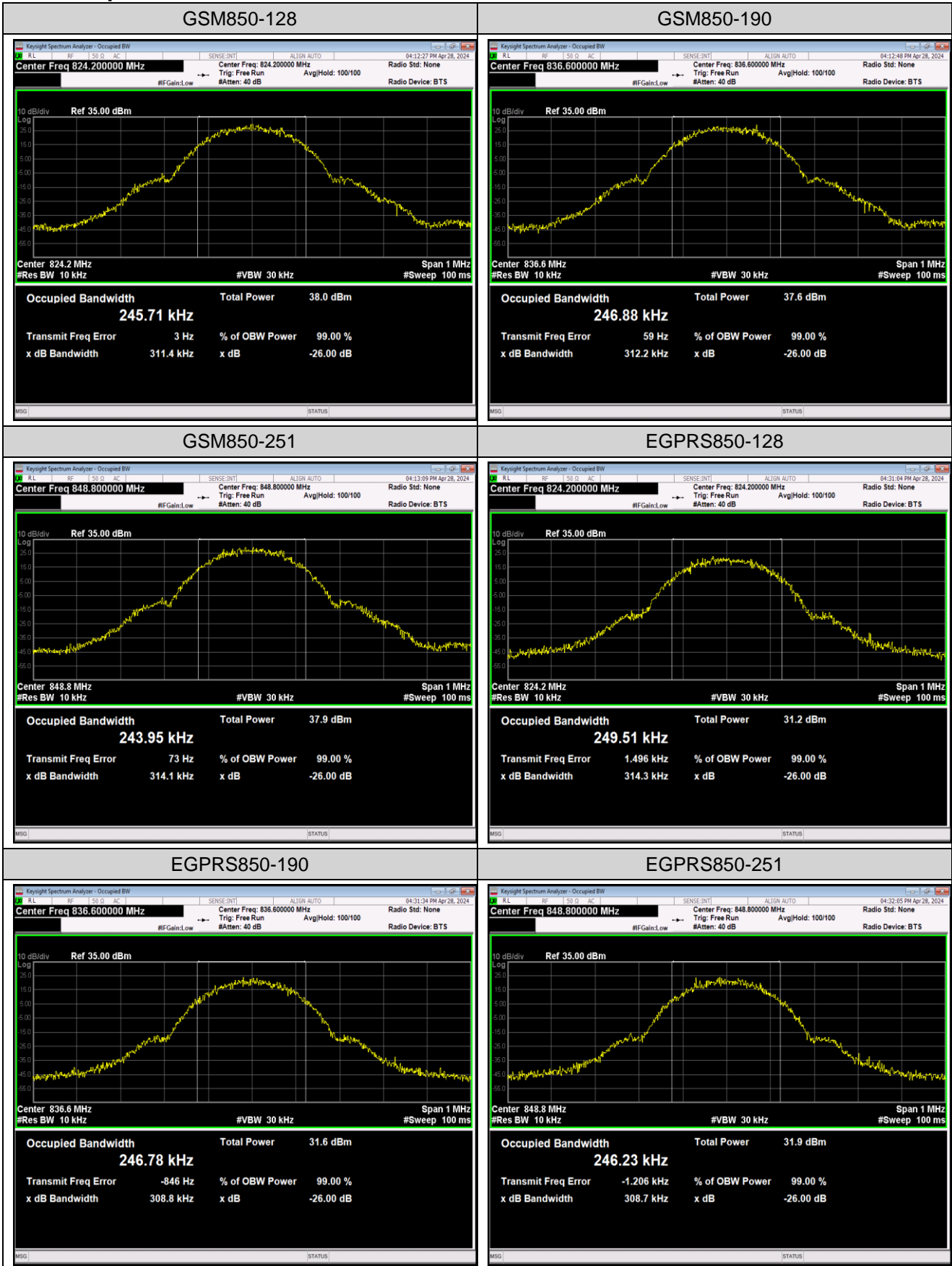


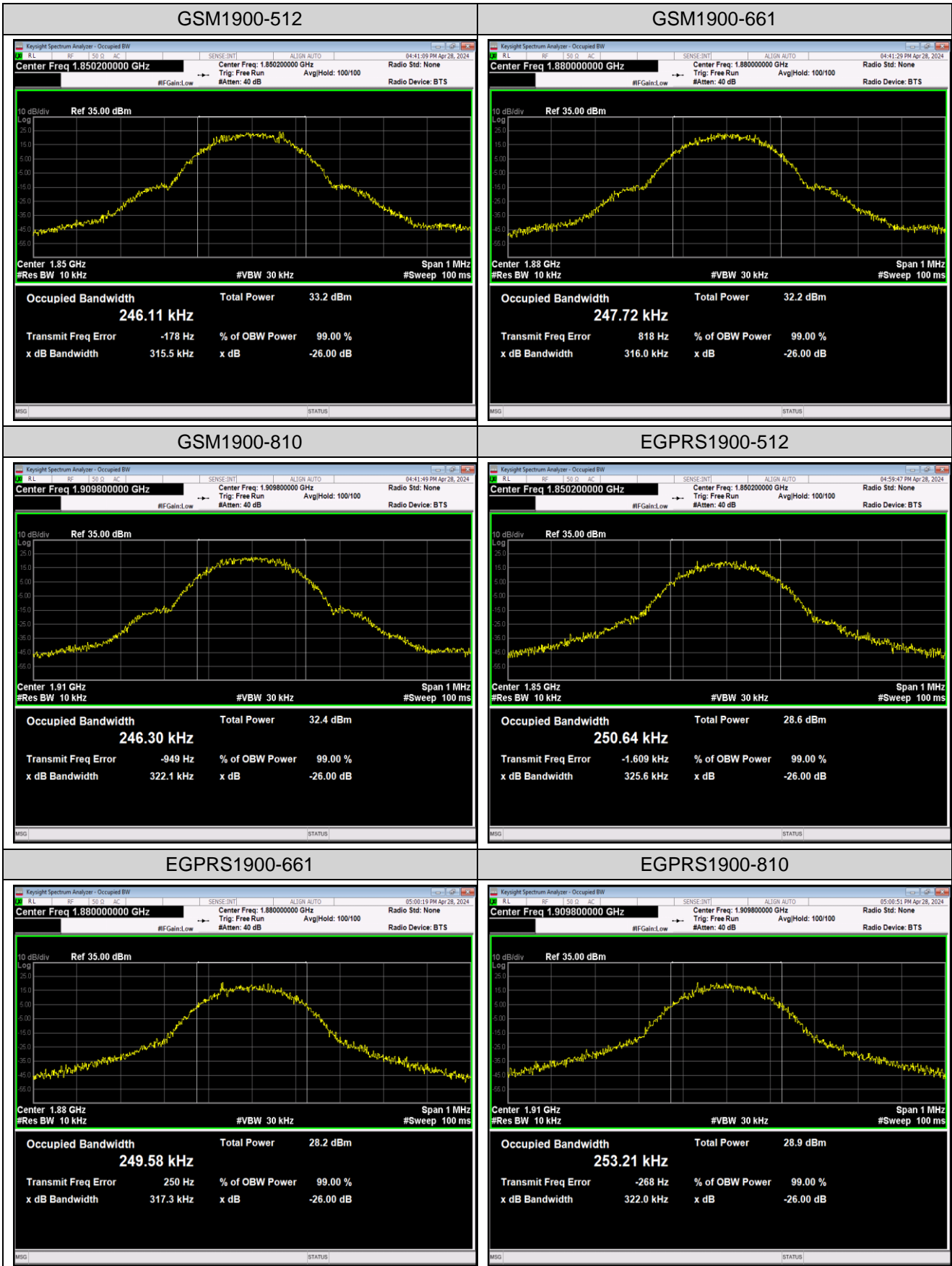
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24571	0.3114	---	PASS
GSM850	190	5	0.24688	0.3122	---	PASS
GSM850	251	5	0.24395	0.3141	---	PASS
EGPRS850	128	8	0.24951	0.3143	---	PASS
EGPRS850	190	8	0.24678	0.3088	---	PASS
EGPRS850	251	8	0.24623	0.3087	---	PASS
GSM1900	512	0	0.24611	0.3155	---	PASS
GSM1900	661	0	0.24772	0.3160	---	PASS
GSM1900	810	0	0.24630	0.3221	---	PASS
EGPRS1900	512	2	0.25064	0.3256	---	PASS
EGPRS1900	661	2	0.24958	0.3173	---	PASS
EGPRS1900	810	2	0.25321	0.3220	---	PASS

Test Graphs



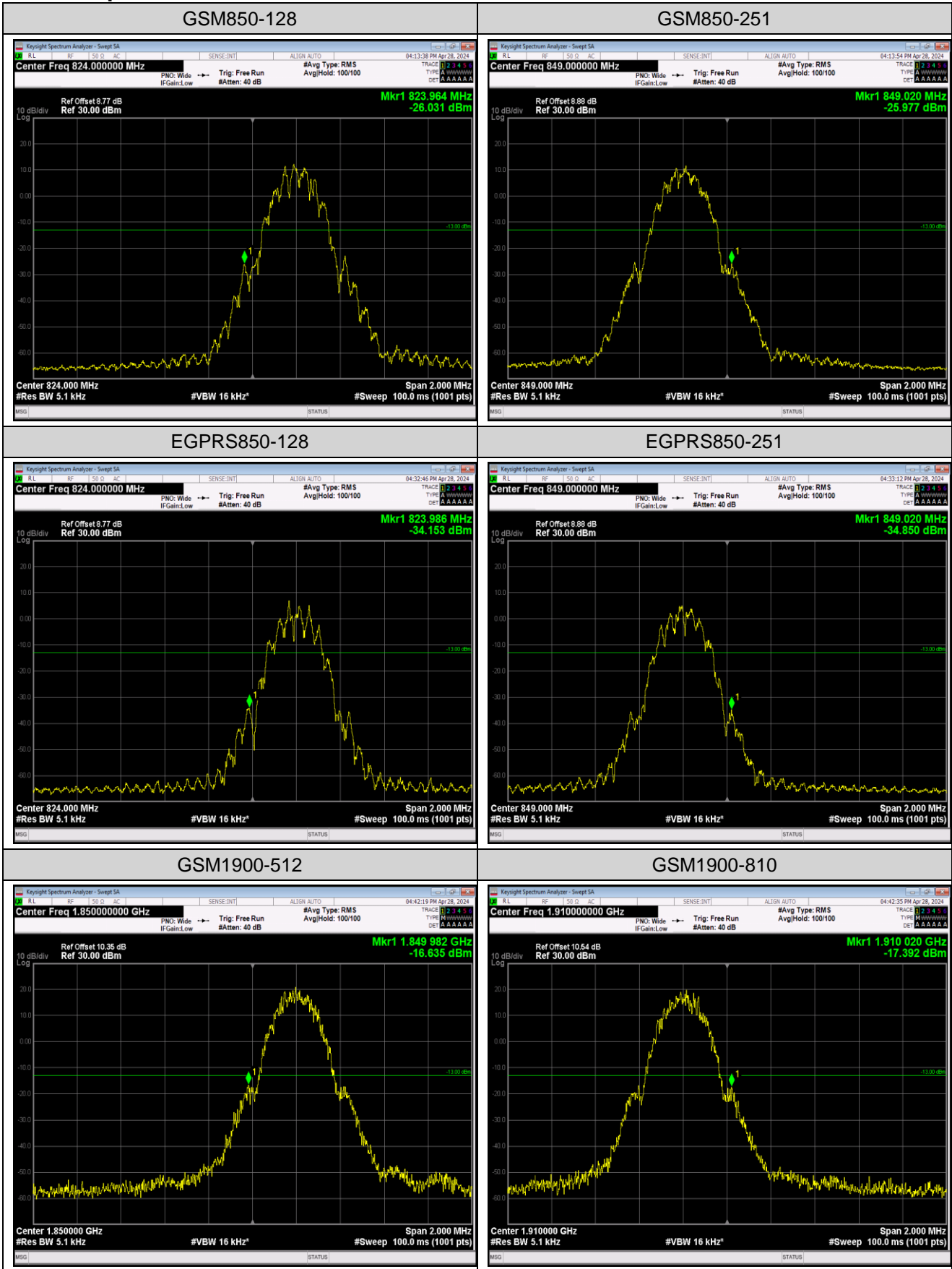


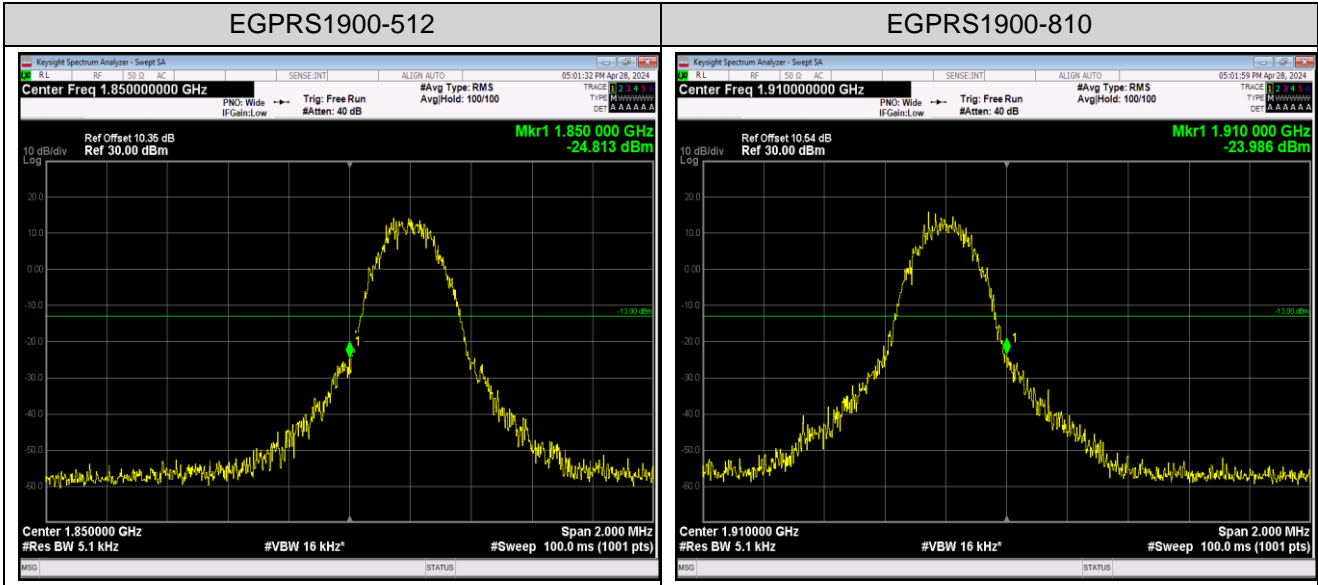
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.96	-26.03	-13	PASS
GSM850	251	5	849.02	-25.98	-13	PASS
EGPRS850	128	8	823.99	-34.15	-13	PASS
EGPRS850	251	8	849.02	-34.85	-13	PASS
GSM1900	512	0	1849.98	-16.64	-13	PASS
GSM1900	810	0	1910.02	-17.39	-13	PASS
EGPRS1900	512	2	1850.00	-24.81	-13	PASS
EGPRS1900	810	2	1910.00	-23.99	-13	PASS

Test Graphs





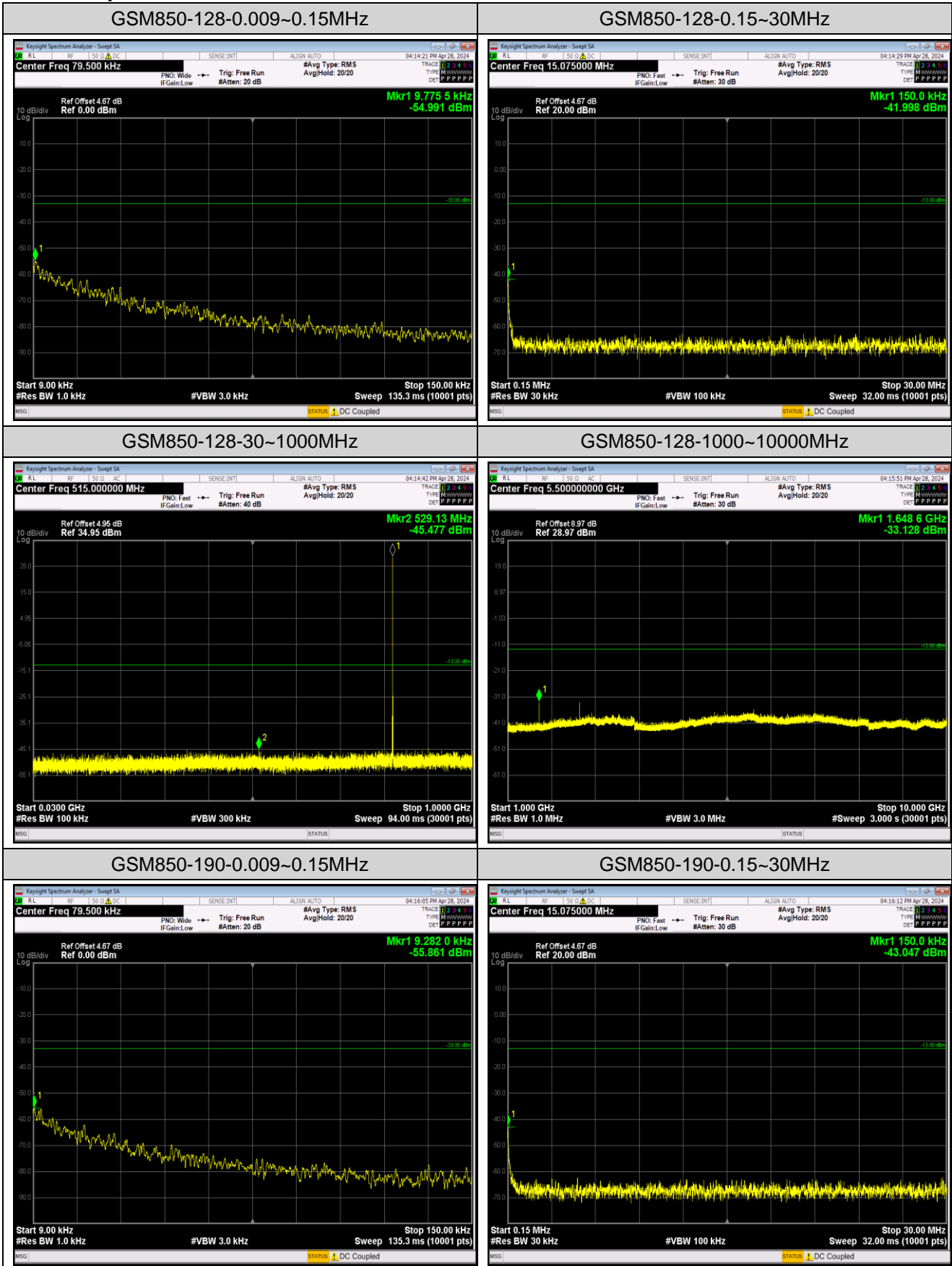
Appendix E: Conducted Spurious Emission

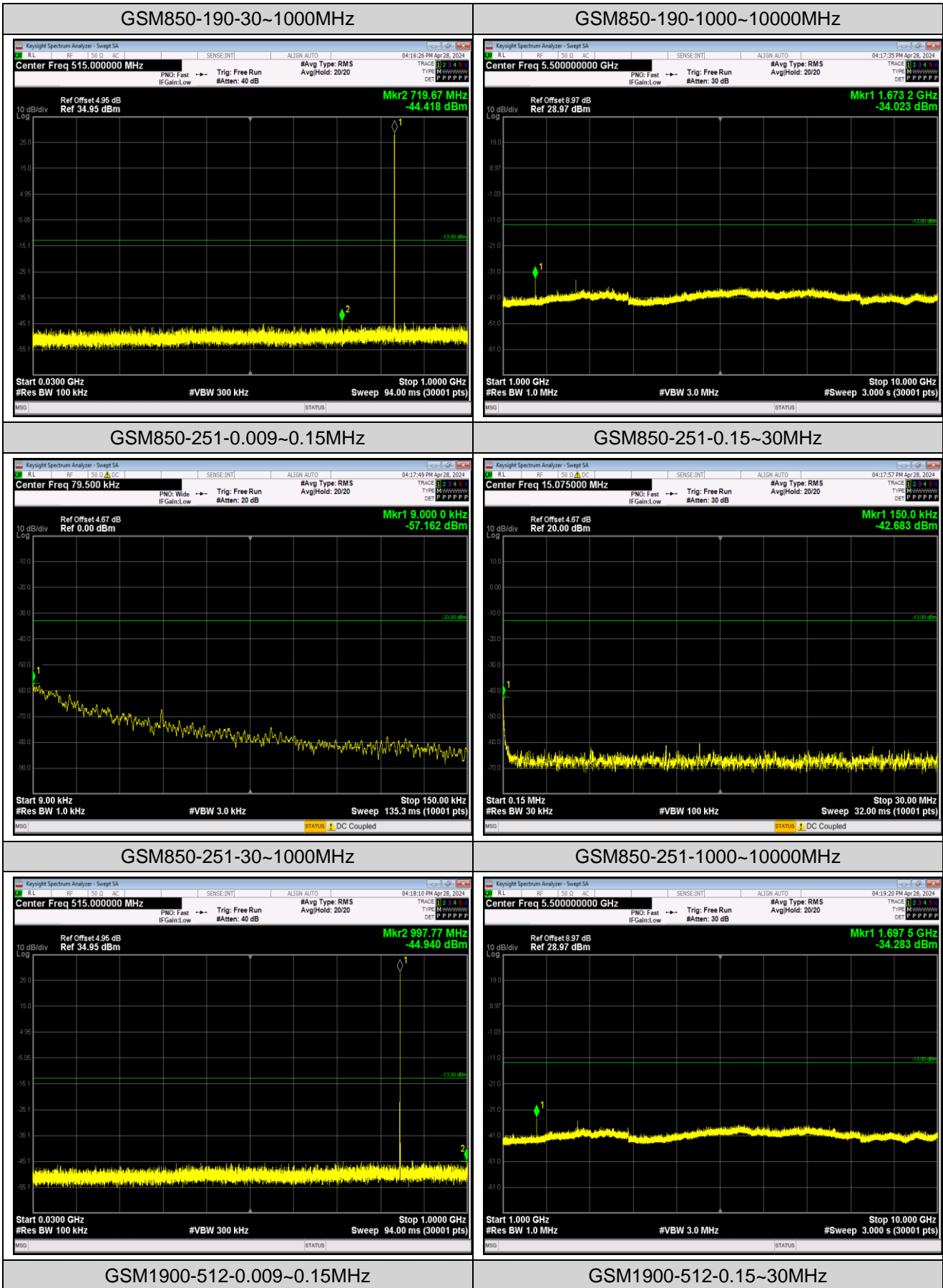
Test Result

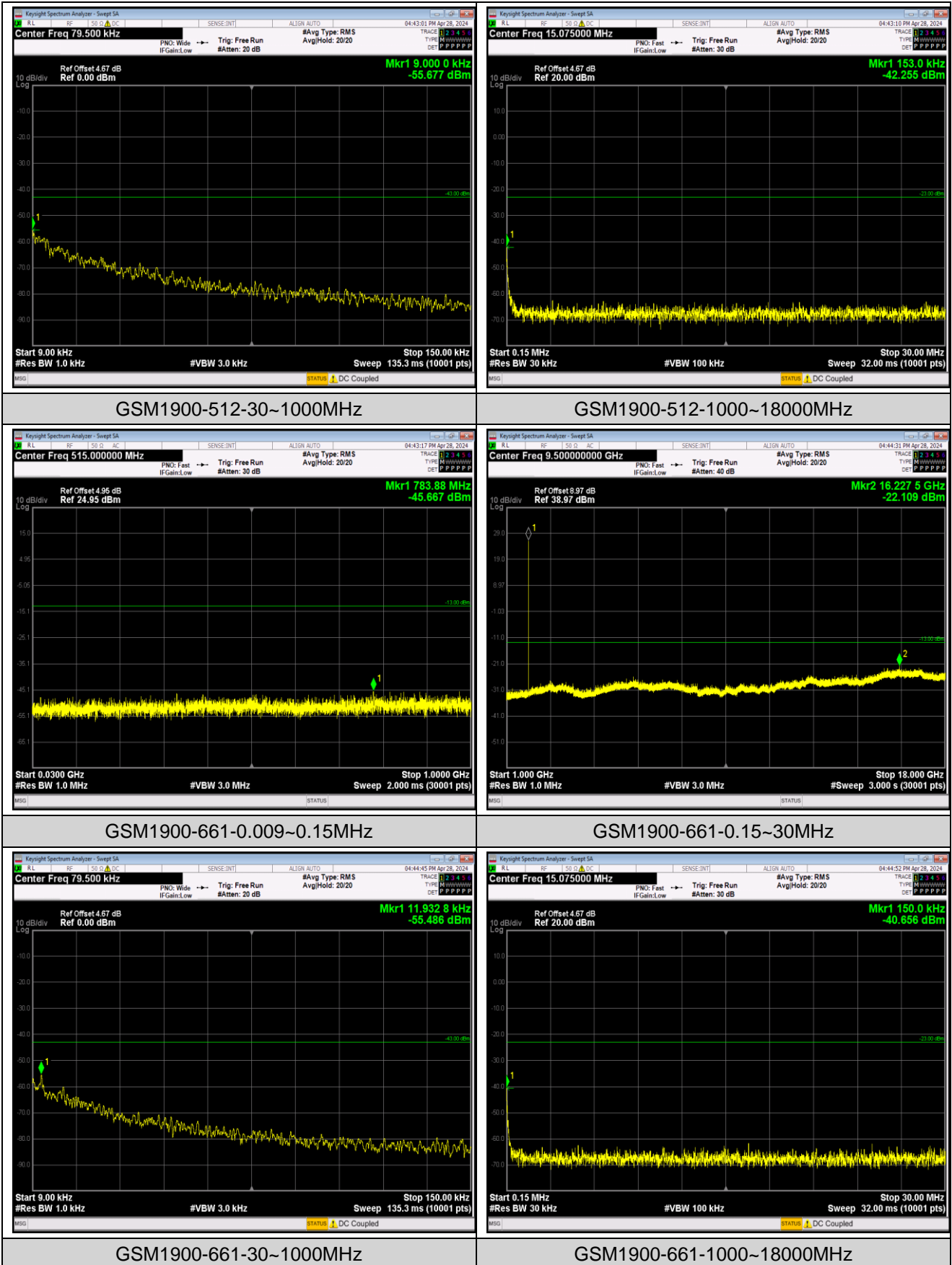
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-54.99	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-42	-13	PASS
GSM850	128	5	30~1000MHz	529.13	-45.48	-13	PASS
GSM850	128	5	1000~10000MHz	1648.6	-33.13	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.86	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-43.05	-13	PASS
GSM850	190	5	30~1000MHz	719.67	-44.42	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-34.02	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-57.16	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-42.68	-13	PASS
GSM850	251	5	30~1000MHz	997.77	-44.94	-13	PASS
GSM850	251	5	1000~10000MHz	1697.5	-34.28	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.68	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-42.26	-23	PASS
GSM1900	512	0	30~1000MHz	783.88	-45.67	-13	PASS
GSM1900	512	0	1000~18000MHz	16227.47	-22.11	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-55.49	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-40.66	-23	PASS
GSM1900	661	0	30~1000MHz	804.9	-45.4	-13	PASS
GSM1900	661	0	1000~18000MHz	16997	-22.23	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.53	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-44.83	-23	PASS
GSM1900	810	0	30~1000MHz	806.81	-45.71	-13	PASS
GSM1900	810	0	1000~18000MHz	16594.1	-22.51	-13	PASS

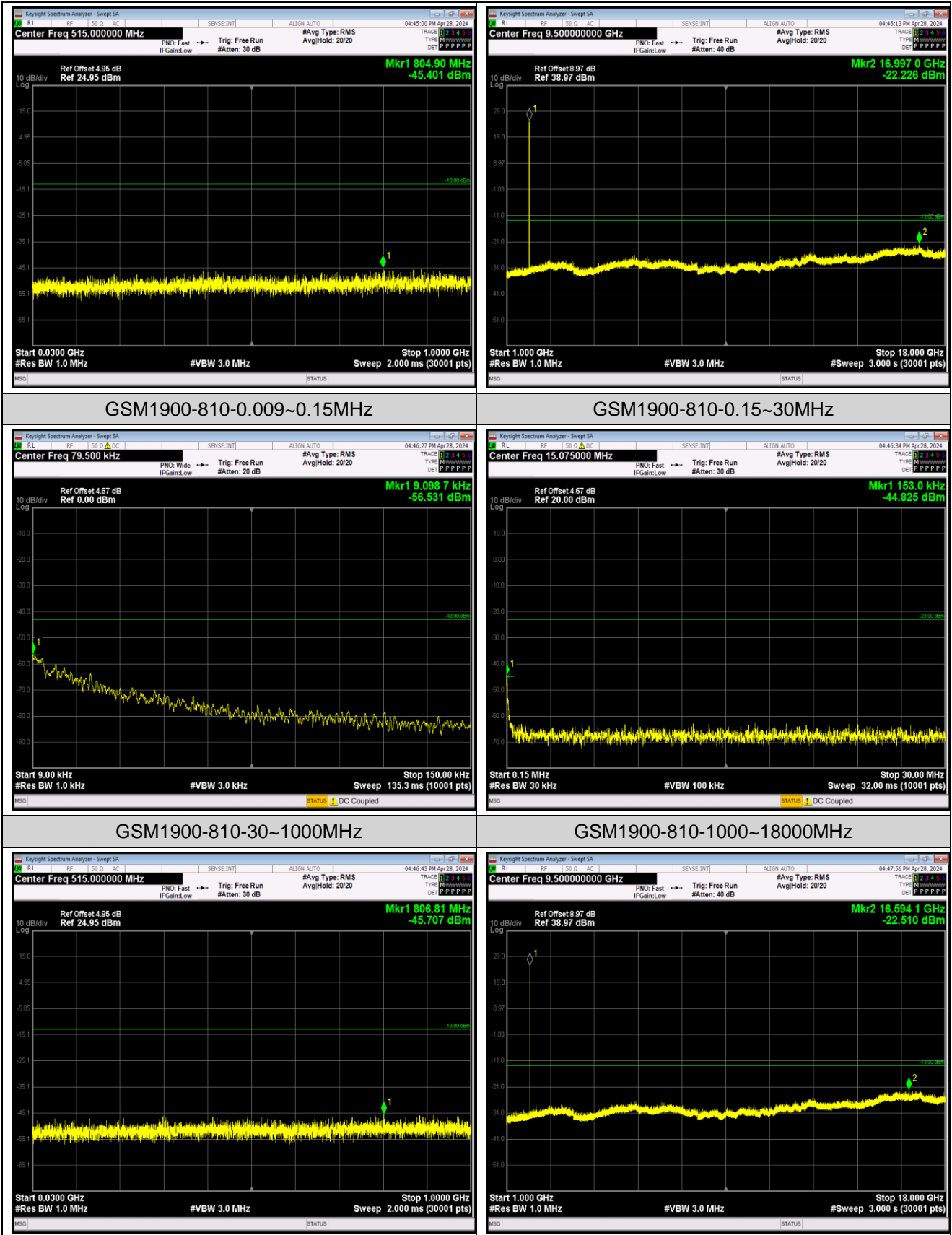
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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	-10.72	-0.012814	±2.5	Pass
	-20	-7.04	-0.008415		
	-10	-7.43	-0.008881		
	0	-9.56	-0.011427		
	10	-8.30	-0.009921		
	20	-13.30	-0.015898		
	30	-7.49	-0.008953		
	40	-6.94	-0.008295		
	50	-9.10	-0.010877		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-8.36	-0.009993	±2.5	Pass
	3.85	-8.68	-0.010375		
	4.40	-9.69	-0.011583		
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		
3.85	-30	-4.94	-0.005905	±2.5	Pass
	-20	-6.36	-0.007602		
	-10	-4.39	-0.005247		
	0	-3.87	-0.004626		
	10	-7.20	-0.008606		
	20	-7.07	-0.008451		
	30	-3.65	-0.004363		
	40	-0.48	-0.000574		
	50	-4.13	-0.004937		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-5.78	-0.006909	±2.5	Pass
	3.85	-5.71	-0.006825		
	4.40	-5.46	-0.006526		
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		
3.85	-30	-7.04	-0.003745	Within authorized band for PCS 1900	Pass
	-20	-4.88	-0.002596		
	-10	-2.84	-0.001511		
	0	-14.01	-0.007452		
	10	-16.01	-0.008516		
	20	-8.98	-0.004777		
	30	-11.59	-0.006165		
	40	-2.07	-0.001101		
	50	-4.97	-0.002644		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-3.29	-0.001750	Within authorized band for PCS 1900	Pass
	3.85	-11.49	-0.006112		
	4.40	-18.44	-0.009809		
<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		
3.85	-30	-21.63	-0.011505	Within authorized band for PCS 1900	Pass
	-20	-26.28	-0.013979		
	-10	-20.73	-0.011027		
	0	-22.60	-0.012021		
	10	-17.69	-0.009410		
	20	-13.59	-0.007229		
	30	-9.94	-0.005287		
	40	-16.40	-0.008723		
	50	-6.65	-0.003537		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-24.50	-0.013032	Within authorized band for PCS 1900	Pass
	3.85	-22.79	-0.012122		
	4.40	-23.31	-0.012399		
<i>Remark: All channel had been tested, but only the worst case data displayed in this report.</i>					

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

