

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	32.16	23.01	38.45	PASS
GSM850	190	5	32.27	23.12	38.45	PASS
GSM850	251	5	33.29	24.14	38.45	PASS
GSM1900	512	0	29.01	27.01	33.00	PASS
GSM1900	661	0	28.75	26.75	33.00	PASS
GSM1900	810	0	28.47	26.47	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.14	22.99	38.45	PASS
GPRS850	128	5	2	32.61	23.46	38.45	PASS
GPRS850	128	5	3	30.37	21.22	38.45	PASS
GPRS850	128	5	4	30.21	21.06	38.45	PASS
GPRS850	190	5	1	32.23	23.08	38.45	PASS
GPRS850	190	5	2	32.37	23.22	38.45	PASS
GPRS850	190	5	3	30.14	20.99	38.45	PASS
GPRS850	190	5	4	29.97	20.82	38.45	PASS
GPRS850	251	5	1	33.22	24.07	38.45	PASS
GPRS850	251	5	2	32.09	22.94	38.45	PASS
GPRS850	251	5	3	29.83	20.68	38.45	PASS
GPRS850	251	5	4	29.69	20.54	38.45	PASS
GPRS1900	512	0	1	29.08	27.08	33.00	PASS
GPRS1900	512	0	2	28.45	26.45	33.00	PASS
GPRS1900	512	0	3	26.84	24.84	33.00	PASS
GPRS1900	512	0	4	26.64	24.64	33.00	PASS
GPRS1900	661	0	1	28.78	26.78	33.00	PASS
GPRS1900	661	0	2	28.25	26.25	33.00	PASS
GPRS1900	661	0	3	26.74	24.74	33.00	PASS
GPRS1900	661	0	4	26.58	24.58	33.00	PASS
GPRS1900	810	0	1	28.47	26.47	33.00	PASS
GPRS1900	810	0	2	27.99	25.99	33.00	PASS
GPRS1900	810	0	3	26.58	24.58	33.00	PASS
GPRS1900	810	0	4	26.48	24.48	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	26.70	17.55	38.45	PASS
EGPRS850	128	8	2	25.54	16.39	38.45	PASS
EGPRS850	128	8	3	23.39	14.24	38.45	PASS
EGPRS850	128	8	4	22.00	12.85	38.45	PASS
EGPRS850	190	8	1	26.35	17.2	38.45	PASS
EGPRS850	190	8	2	25.30	16.15	38.45	PASS
EGPRS850	190	8	3	23.10	13.95	38.45	PASS
EGPRS850	190	8	4	21.74	12.59	38.45	PASS
EGPRS850	251	8	1	26.50	17.35	38.45	PASS
EGPRS850	251	8	2	25.33	16.18	38.45	PASS
EGPRS850	251	8	3	23.12	13.97	38.45	PASS
EGPRS850	251	8	4	21.66	12.51	38.45	PASS
EGPRS1900	512	2	1	24.70	22.7	33.00	PASS
EGPRS1900	512	2	2	23.56	21.56	33.00	PASS
EGPRS1900	512	2	3	21.46	19.46	33.00	PASS
EGPRS1900	512	2	4	20.06	18.06	33.00	PASS
EGPRS1900	661	2	1	24.92	22.92	33.00	PASS
EGPRS1900	661	2	2	23.80	21.8	33.00	PASS
EGPRS1900	661	2	3	21.68	19.68	33.00	PASS
EGPRS1900	661	2	4	20.26	18.26	33.00	PASS
EGPRS1900	810	2	1	25.59	23.59	33.00	PASS
EGPRS1900	810	2	2	24.52	22.52	33.00	PASS
EGPRS1900	810	2	3	22.37	20.37	33.00	PASS
EGPRS1900	810	2	4	20.94	18.94	33.00	PASS

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

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

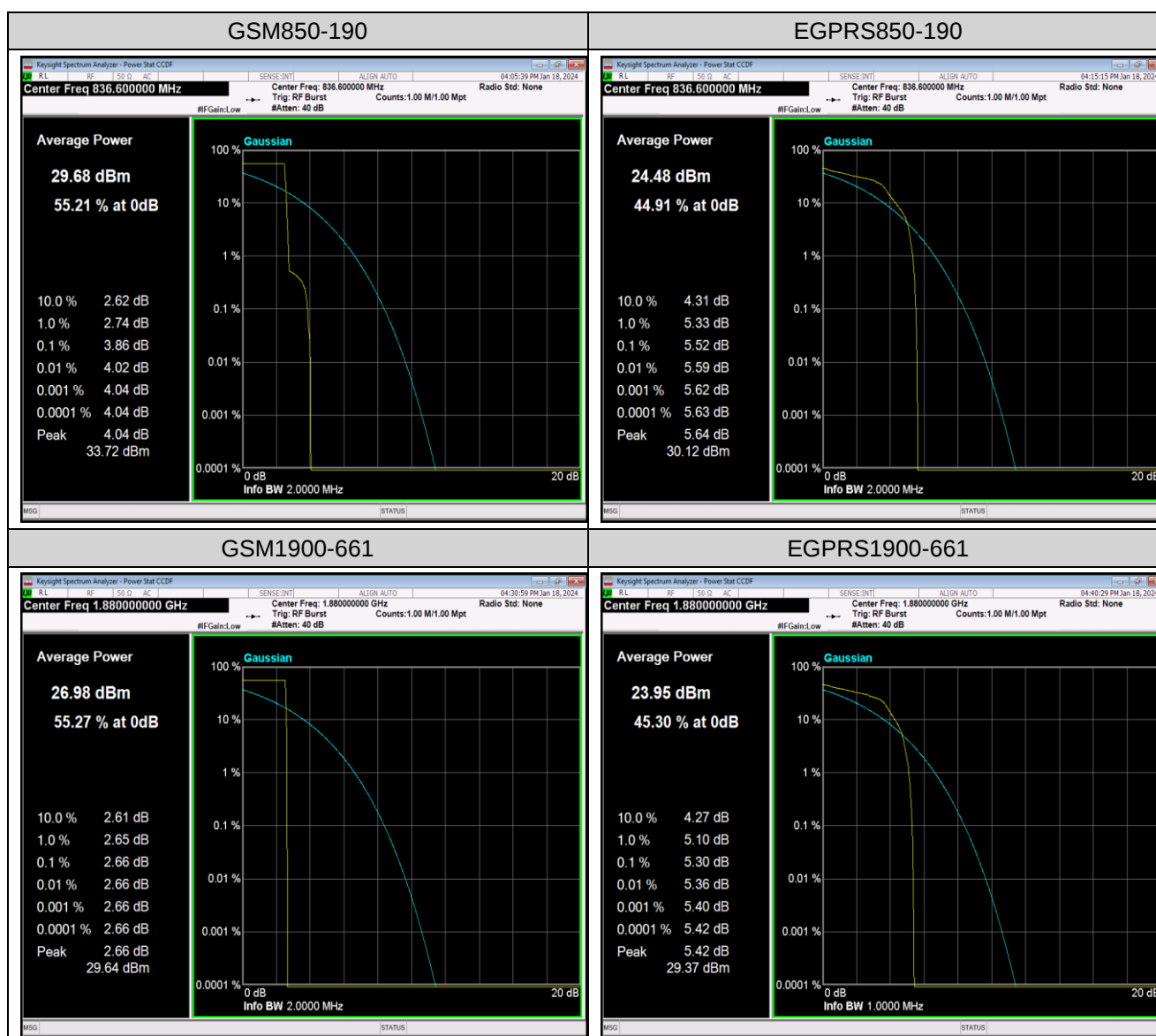
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	3.86	13	PASS
EGPRS850	190	8	5.52	13	PASS
GSM1900	661	0	2.66	13	PASS
EGPRS1900	661	2	5.3	13	PASS

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

Test Graphs

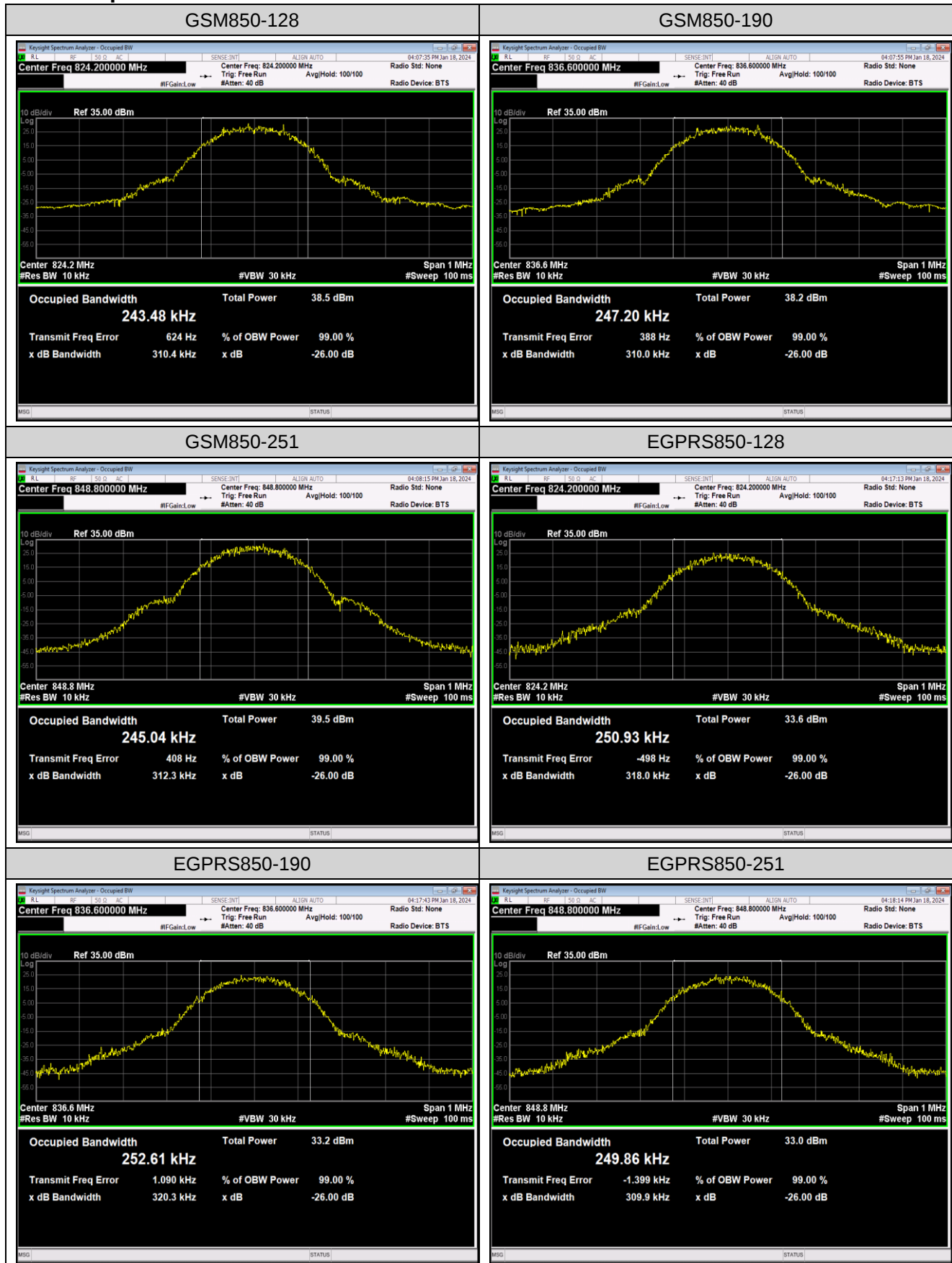


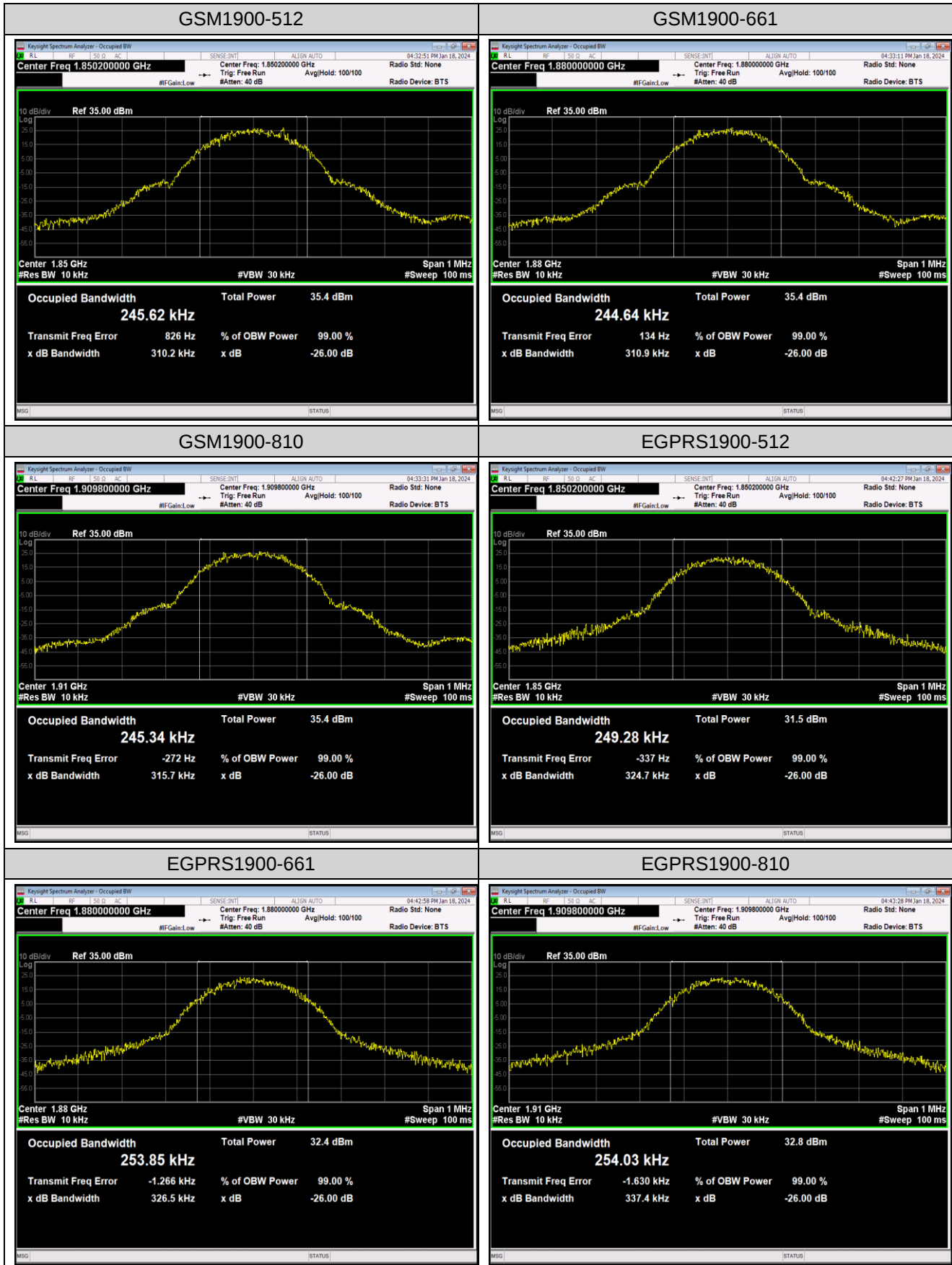
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24348	0.3104	---	PASS
GSM850	190	5	0.24720	0.3100	---	PASS
GSM850	251	5	0.24504	0.3123	---	PASS
EGPRS850	128	8	0.25093	0.3180	---	PASS
EGPRS850	190	8	0.25261	0.3203	---	PASS
EGPRS850	251	8	0.24986	0.3099	---	PASS
GSM1900	512	0	0.24562	0.3102	---	PASS
GSM1900	661	0	0.24464	0.3109	---	PASS
GSM1900	810	0	0.24534	0.3157	---	PASS
EGPRS1900	512	2	0.24928	0.3247	---	PASS
EGPRS1900	661	2	0.25385	0.3265	---	PASS
EGPRS1900	810	2	0.25403	0.3374	---	PASS

Test Graphs



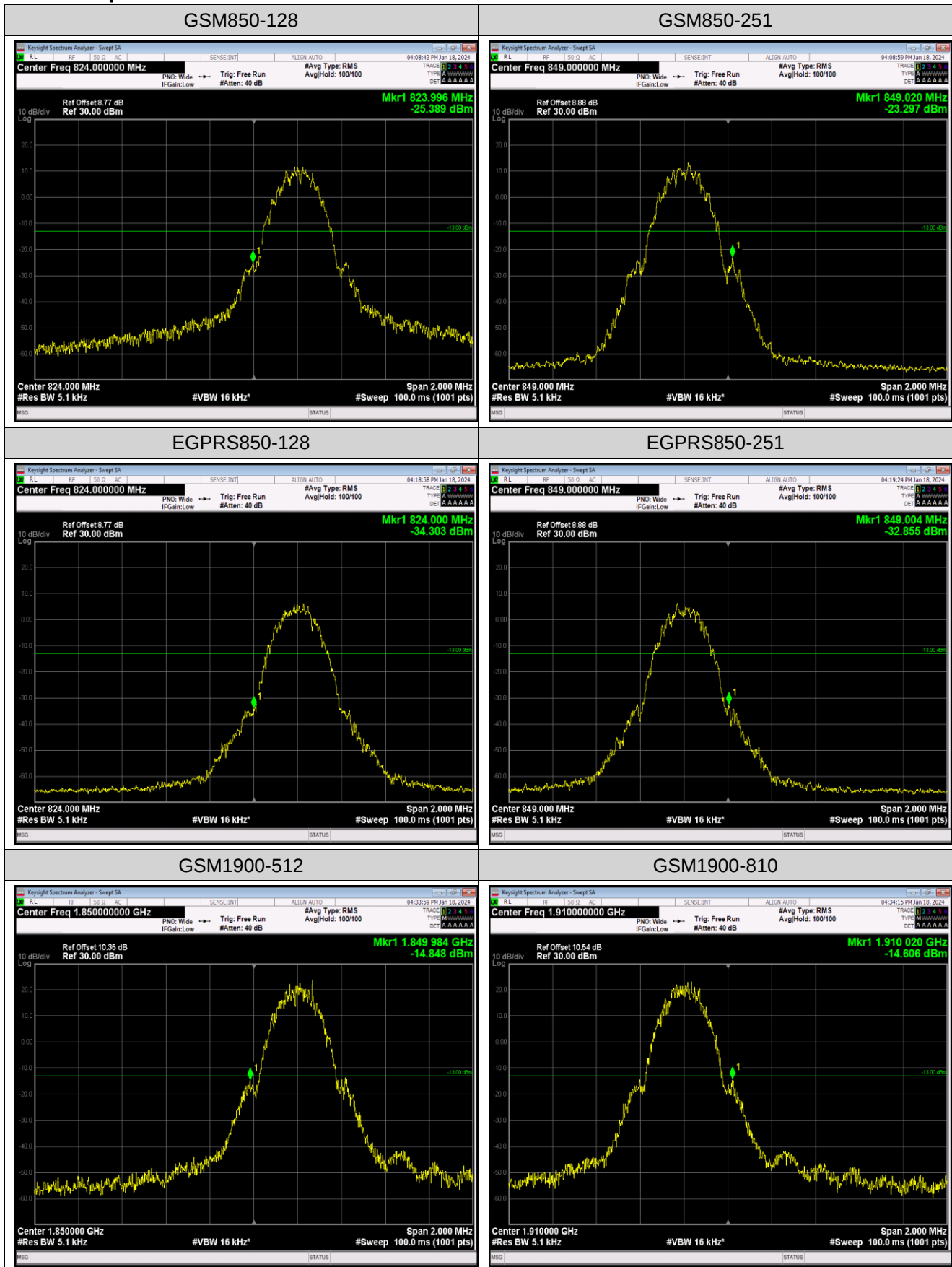


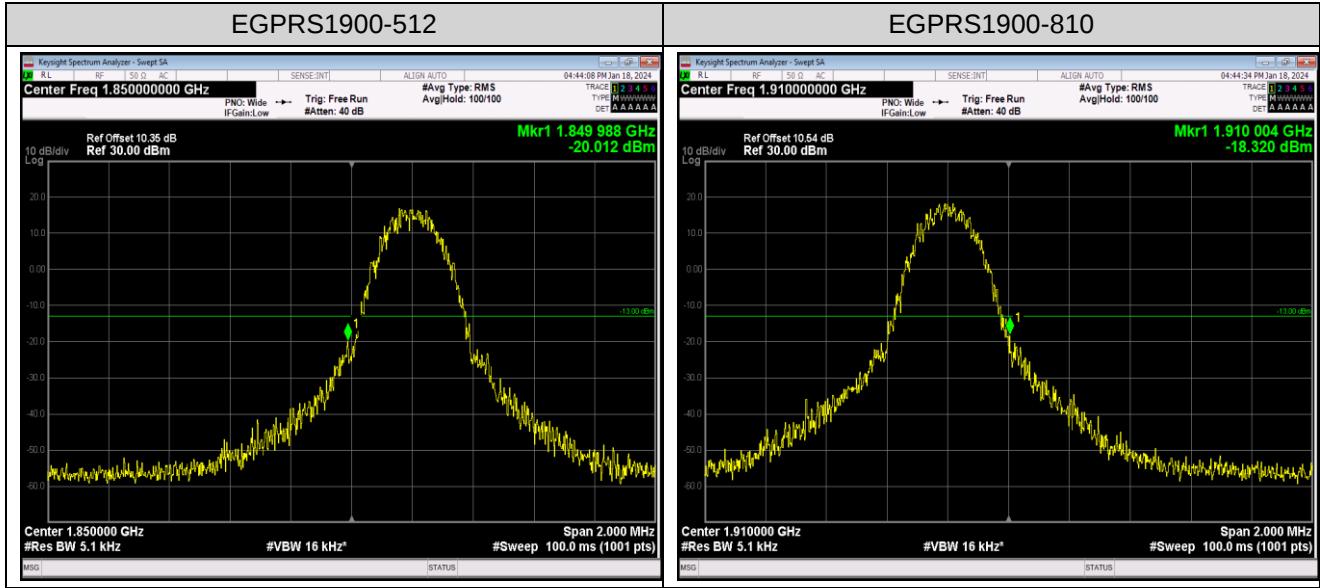
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-25.39	-13	PASS
GSM850	251	5	849.02	-23.30	-13	PASS
EGPRS850	128	8	824.00	-34.30	-13	PASS
EGPRS850	251	8	849.00	-32.86	-13	PASS
GSM1900	512	0	1849.98	-14.85	-13	PASS
GSM1900	810	0	1910.02	-14.61	-13	PASS
EGPRS1900	512	2	1849.99	-20.01	-13	PASS
EGPRS1900	810	2	1910.00	-18.32	-13	PASS

Test Graphs





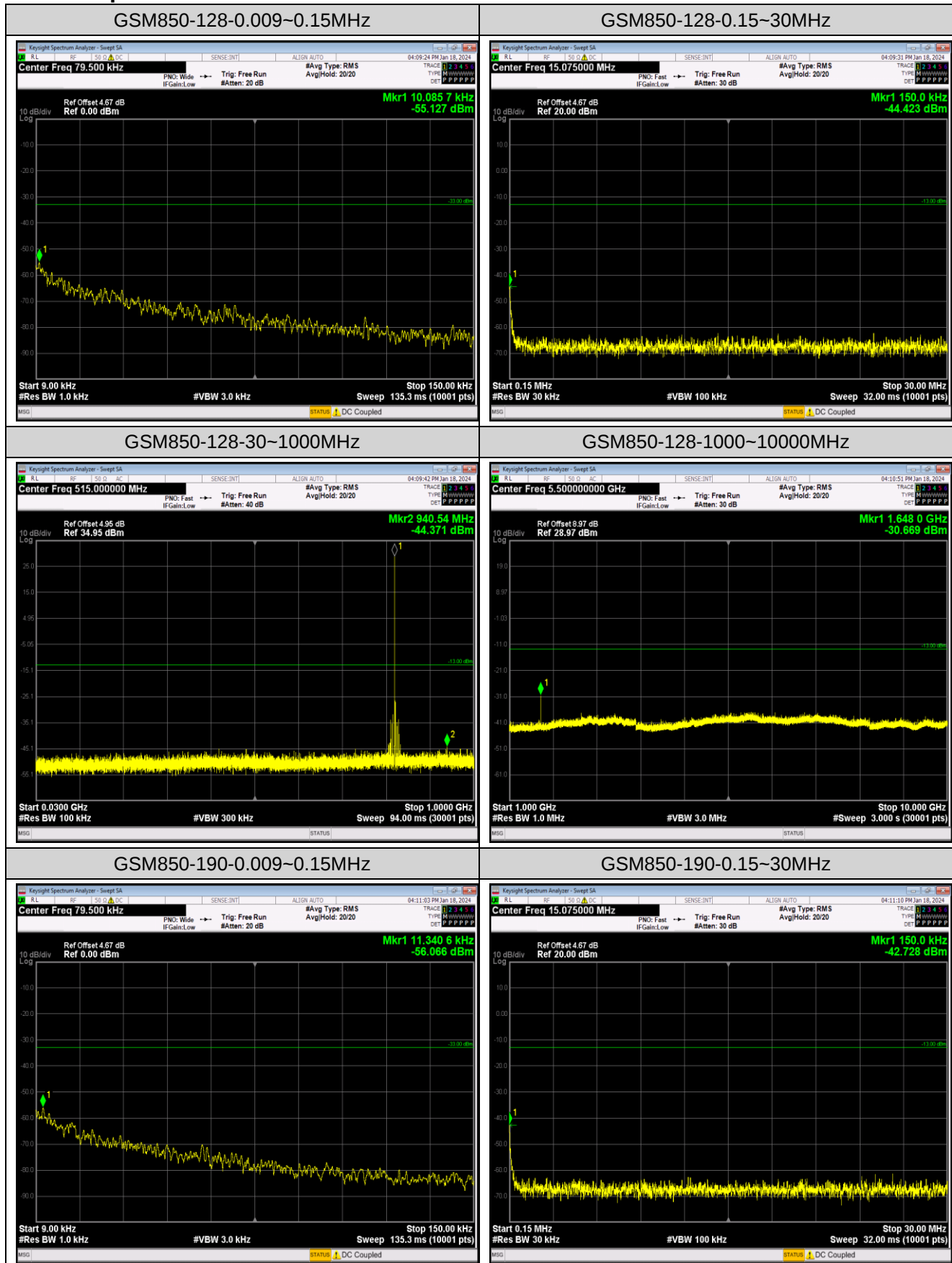
Appendix E: Conducted Spurious Emission

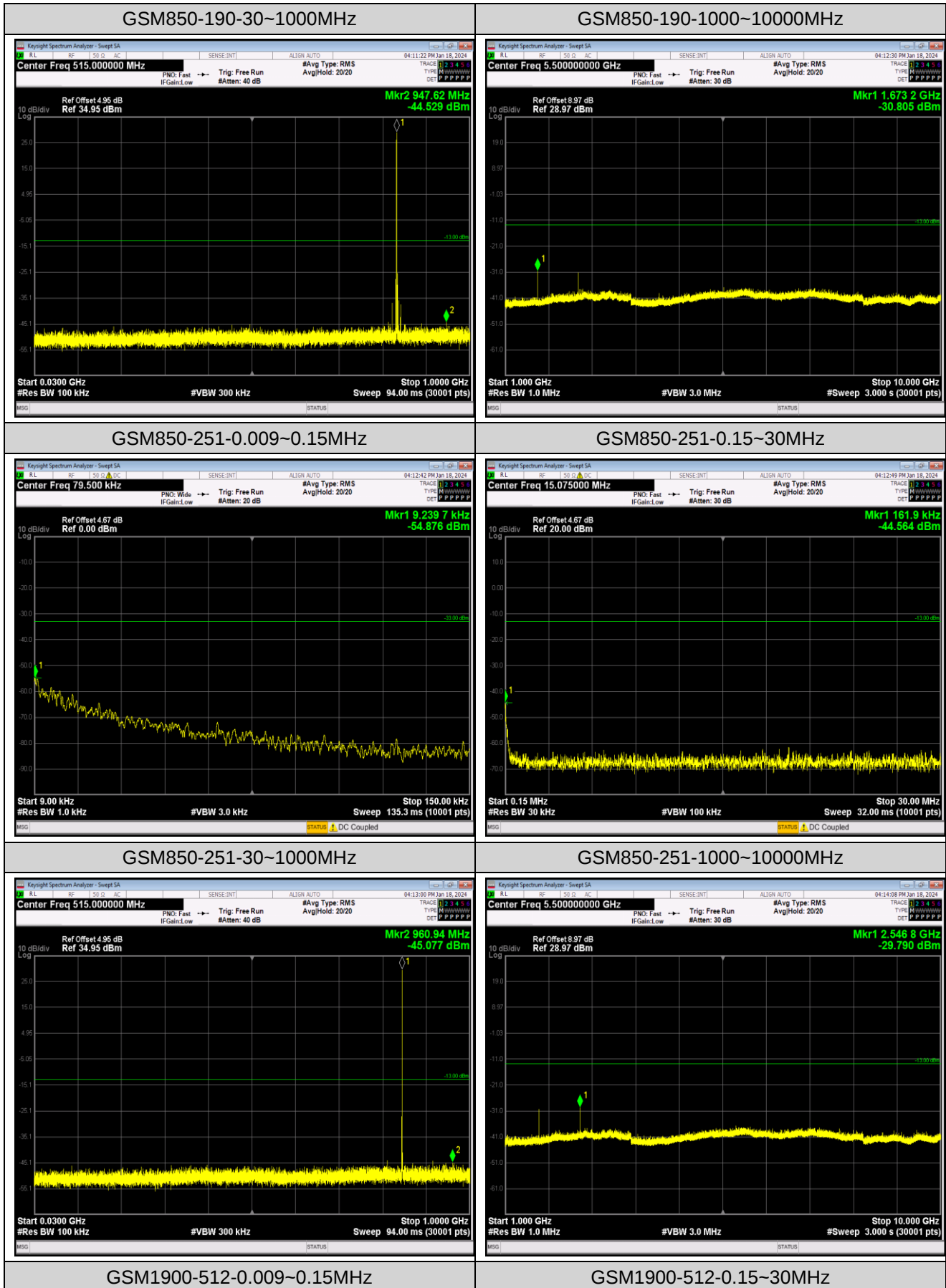
Test Result

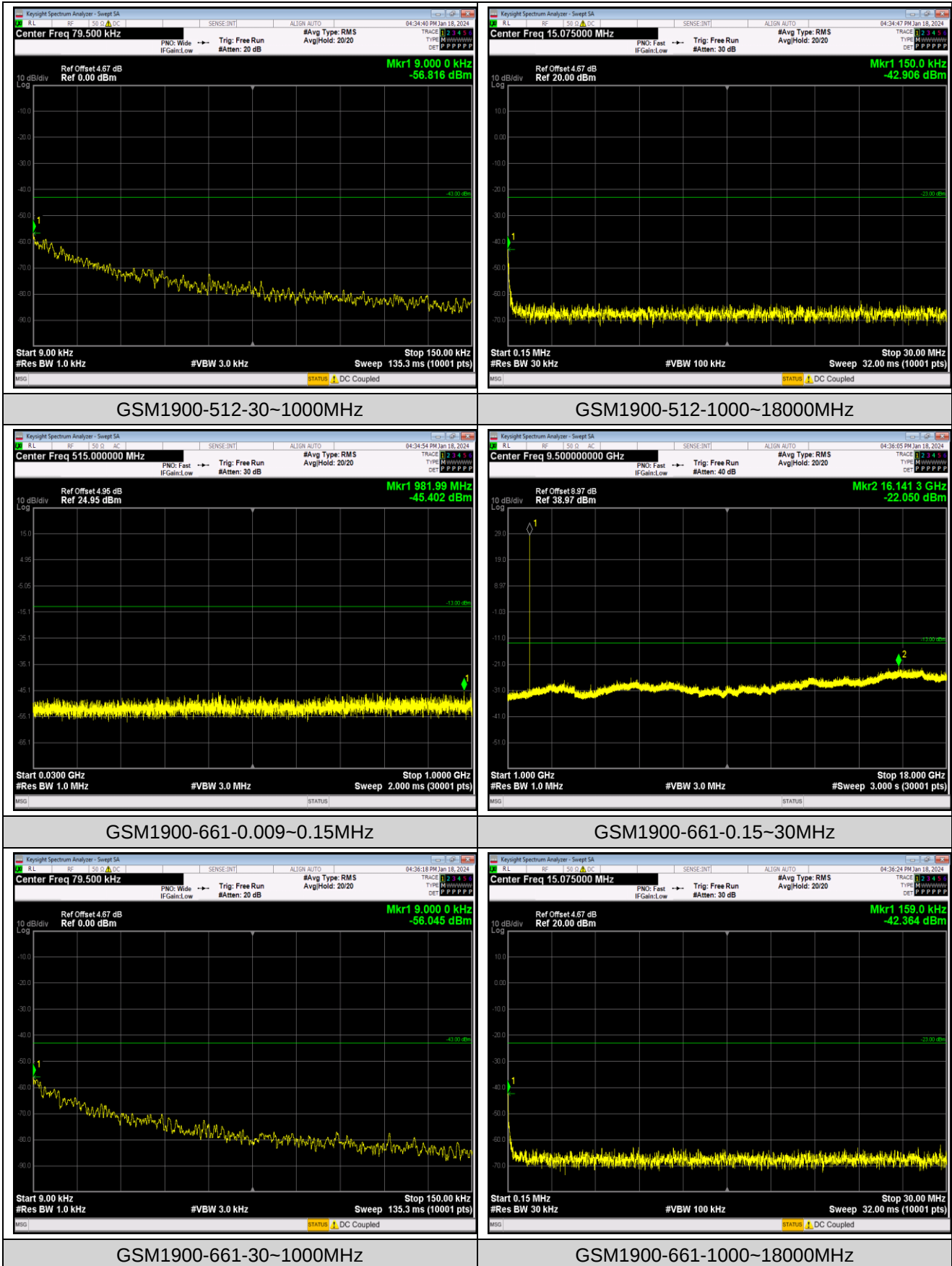
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-55.13	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-44.42	-13	PASS
GSM850	128	5	30~1000MHz	940.54	-44.37	-13	PASS
GSM850	128	5	1000~10000MHz	1648	-30.67	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-56.07	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-42.73	-13	PASS
GSM850	190	5	30~1000MHz	947.62	-44.53	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-30.81	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.88	-33	PASS
GSM850	251	5	0.15~30MHz	0.16	-44.56	-13	PASS
GSM850	251	5	30~1000MHz	960.94	-45.08	-13	PASS
GSM850	251	5	1000~10000MHz	2546.8	-29.79	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.82	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-42.91	-23	PASS
GSM1900	512	0	30~1000MHz	981.99	-45.4	-13	PASS
GSM1900	512	0	1000~18000MHz	16141.33	-22.05	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-56.05	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-42.36	-23	PASS
GSM1900	661	0	30~1000MHz	844.67	-46.2	-13	PASS
GSM1900	661	0	1000~18000MHz	16973.77	-22.29	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.02	-43	PASS
GSM1900	810	0	0.15~30MHz	0.16	-45.3	-23	PASS
GSM1900	810	0	30~1000MHz	862.32	-45.22	-13	PASS
GSM1900	810	0	1000~18000MHz	16972.63	-22.42	-13	PASS

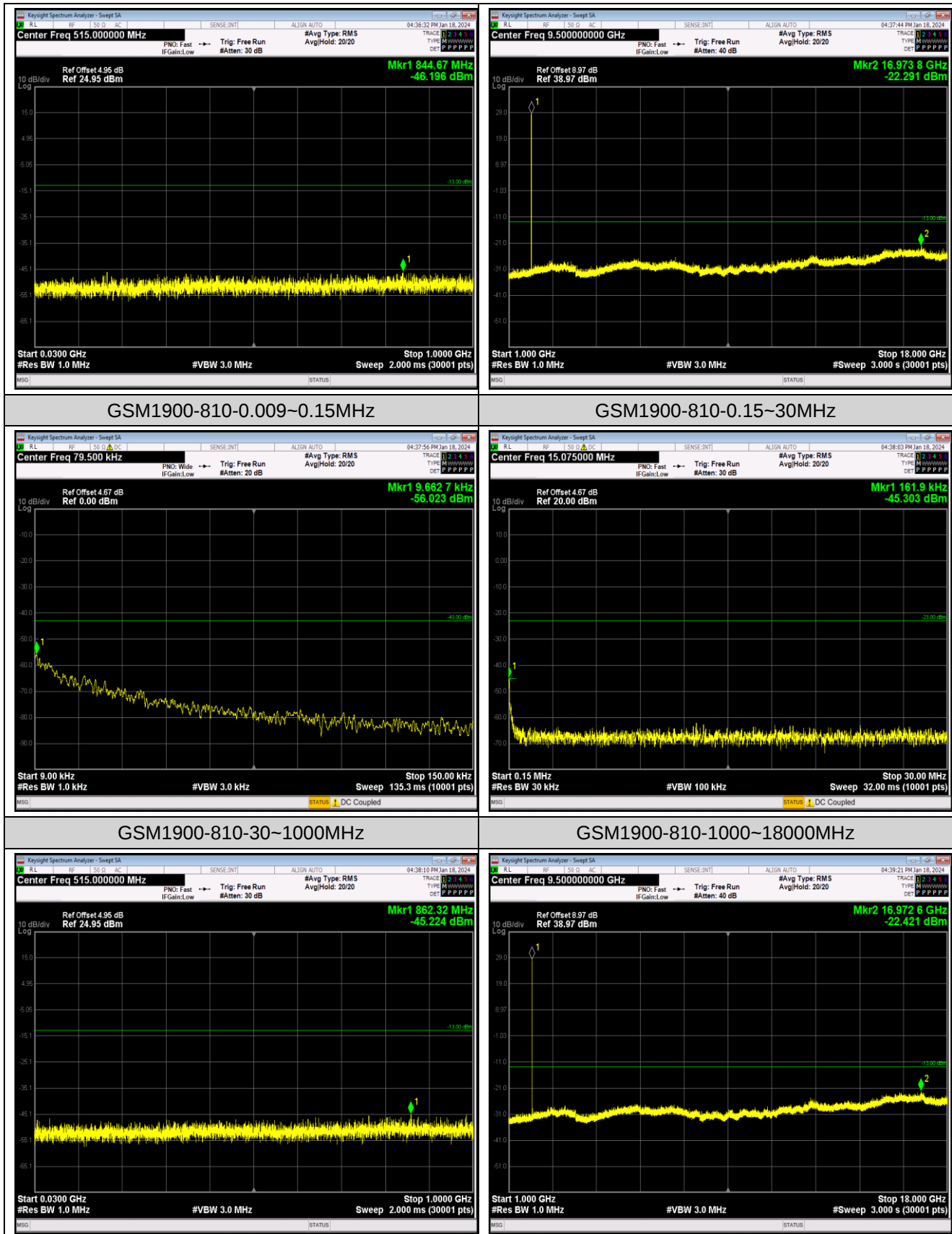
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.91	-30	2.62	0.003132	±2.5	Pass
	-20	4.26	0.005092		
	-10	1.13	0.001351		
	0	3.87	0.004626		
	10	1.45	0.001733		
	20	4.52	0.005403		
	30	4.49	0.005367		
	40	1.16	0.001387		
	50	0.45	0.000538		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	3.07	0.003670	±2.5	Pass
	3.91	2.78	0.003323		
	4.50	4.55	0.005439		
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		
3.91	-30	-5.71	-0.006825	±2.5	Pass
	-20	-4.91	-0.005869		
	-10	-2.03	-0.002426		
	0	-4.29	-0.005128		
	10	1.19	0.001422		
	20	1.16	0.001387		
	30	3.68	0.004399		
	40	0.58	0.000693		
	50	2.62	0.003132		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-3.13	-0.003741	±2.5	Pass
	3.91	-2.65	-0.003168		
	4.50	-3.55	-0.004243		
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		
3.91	-30	-13.20	-0.007021	Within authorized band for PCS 1900	Pass
	-20	-15.34	-0.008160		
	-10	-16.85	-0.008963		
	0	-8.33	-0.004431		
	10	-19.08	-0.010149		
	20	-9.56	-0.005085		
	30	-9.69	-0.005154		
	40	-12.07	-0.006420		
	50	-21.28	-0.011319		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-13.14	-0.006989	Within authorized band for PCS 1900	Pass
	3.91	-17.92	-0.009532		
	4.50	-14.66	-0.007798		
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 (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.91	-30	-29.22	-0.015543	Within authorized band for PCS 1900	Pass
	-20	-31.06	-0.016521		
	-10	-29.99	-0.015952		
	0	-30.35	-0.016144		
	10	-29.32	-0.015596		
	20	-26.99	-0.014356		
	30	-24.86	-0.013223		
	40	-32.74	-0.017415		
	50	-26.31	-0.013995		
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
	3.91	-29.90	-0.015904		
	4.50	-30.77	-0.016367		
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

