

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	32.65	25.29	38.45	PASS
GSM850	190	5	33.00	25.64	38.45	PASS
GSM850	251	5	32.43	25.07	38.45	PASS
GSM1900	512	0	29.37	27.59	33.00	PASS
GSM1900	661	0	29.44	27.66	33.00	PASS
GSM1900	810	0	29.29	27.51	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.64	25.28	38.45	PASS
GPRS850	128	5	2	31.78	24.42	38.45	PASS
GPRS850	128	5	3	29.92	22.56	38.45	PASS
GPRS850	128	5	4	28.77	21.41	38.45	PASS
GPRS850	190	5	1	33.00	25.64	38.45	PASS
GPRS850	190	5	2	32.12	24.76	38.45	PASS
GPRS850	190	5	3	30.31	22.95	38.45	PASS
GPRS850	190	5	4	29.08	21.72	38.45	PASS
GPRS850	251	5	1	32.44	25.08	38.45	PASS
GPRS850	251	5	2	31.72	24.36	38.45	PASS
GPRS850	251	5	3	29.94	22.58	38.45	PASS
GPRS850	251	5	4	28.72	21.36	38.45	PASS
GPRS1900	512	0	1	29.38	27.6	33.00	PASS
GPRS1900	512	0	2	28.63	26.85	33.00	PASS
GPRS1900	512	0	3	26.86	25.08	33.00	PASS
GPRS1900	512	0	4	25.66	23.88	33.00	PASS
GPRS1900	661	0	1	29.48	27.7	33.00	PASS
GPRS1900	661	0	2	28.73	26.95	33.00	PASS
GPRS1900	661	0	3	26.96	25.18	33.00	PASS
GPRS1900	661	0	4	25.77	23.99	33.00	PASS
GPRS1900	810	0	1	29.34	27.56	33.00	PASS
GPRS1900	810	0	2	28.55	26.77	33.00	PASS
GPRS1900	810	0	3	26.73	24.95	33.00	PASS
GPRS1900	810	0	4	25.49	23.71	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.05	19.69	38.45	PASS
EGPRS850	128	8	2	26.99	19.63	38.45	PASS
EGPRS850	128	8	3	26.94	19.58	38.45	PASS
EGPRS850	128	8	4	26.85	19.49	38.45	PASS
EGPRS850	190	8	1	27.35	19.99	38.45	PASS
EGPRS850	190	8	2	27.29	19.93	38.45	PASS
EGPRS850	190	8	3	27.20	19.84	38.45	PASS
EGPRS850	190	8	4	27.09	19.73	38.45	PASS
EGPRS850	251	8	1	26.93	19.57	38.45	PASS
EGPRS850	251	8	2	26.87	19.51	38.45	PASS
EGPRS850	251	8	3	26.79	19.43	38.45	PASS
EGPRS850	251	8	4	26.69	19.33	38.45	PASS
EGPRS1900	512	2	1	25.94	24.16	33.00	PASS
EGPRS1900	512	2	2	25.89	24.11	33.00	PASS
EGPRS1900	512	2	3	25.81	24.03	33.00	PASS
EGPRS1900	512	2	4	25.69	23.91	33.00	PASS
EGPRS1900	661	2	1	26.02	24.24	33.00	PASS
EGPRS1900	661	2	2	25.98	24.2	33.00	PASS
EGPRS1900	661	2	3	25.93	24.15	33.00	PASS
EGPRS1900	661	2	4	25.84	24.06	33.00	PASS
EGPRS1900	810	2	1	25.79	24.01	33.00	PASS
EGPRS1900	810	2	2	25.73	23.95	33.00	PASS
EGPRS1900	810	2	3	25.67	23.89	33.00	PASS
EGPRS1900	810	2	4	25.53	23.75	33.00	PASS

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

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

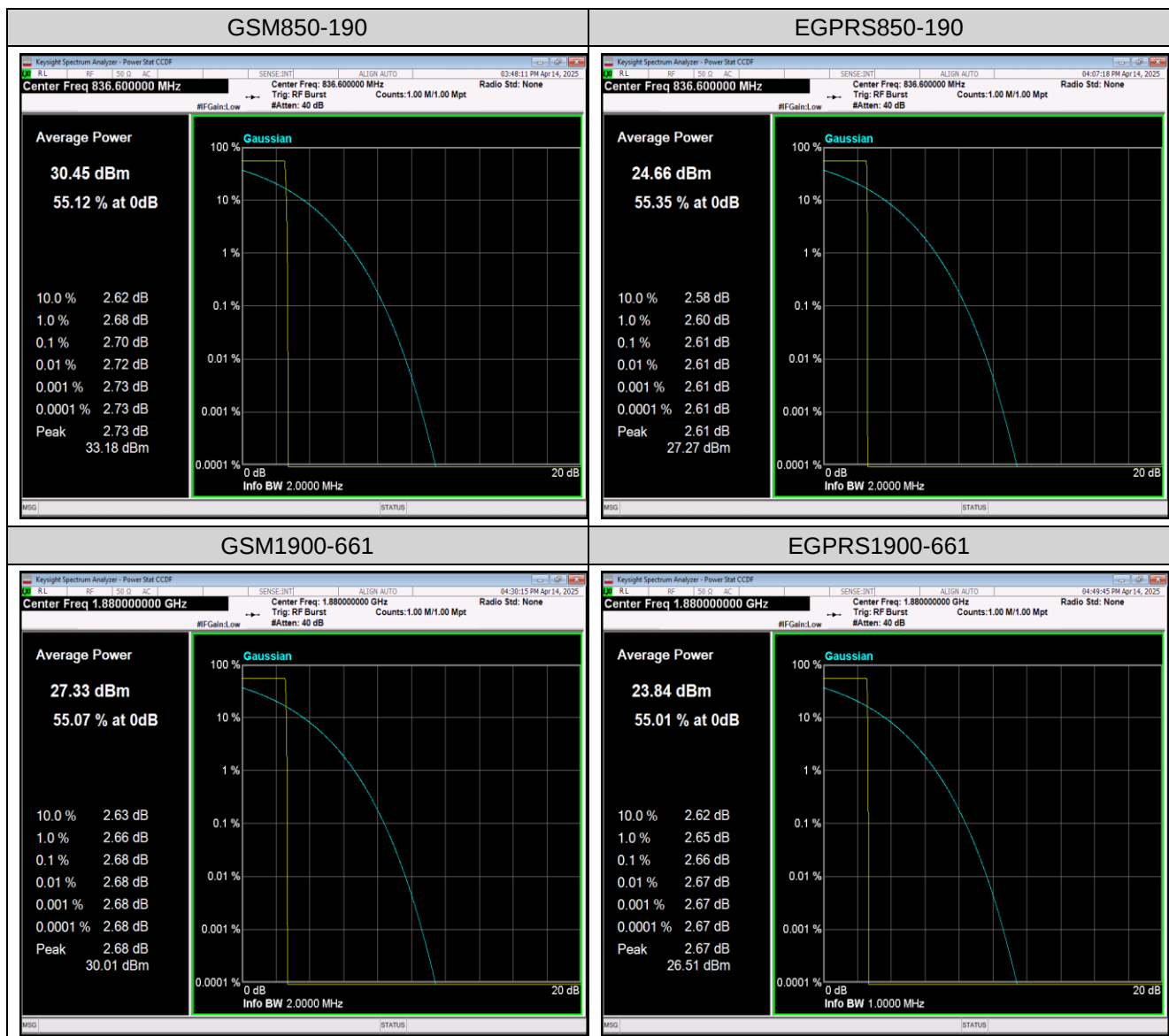
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.7	13	PASS
EGPRS850	190	8	2.61	13	PASS
GSM1900	661	0	2.68	13	PASS
EGPRS1900	661	2	2.66	13	PASS

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

Test Graphs

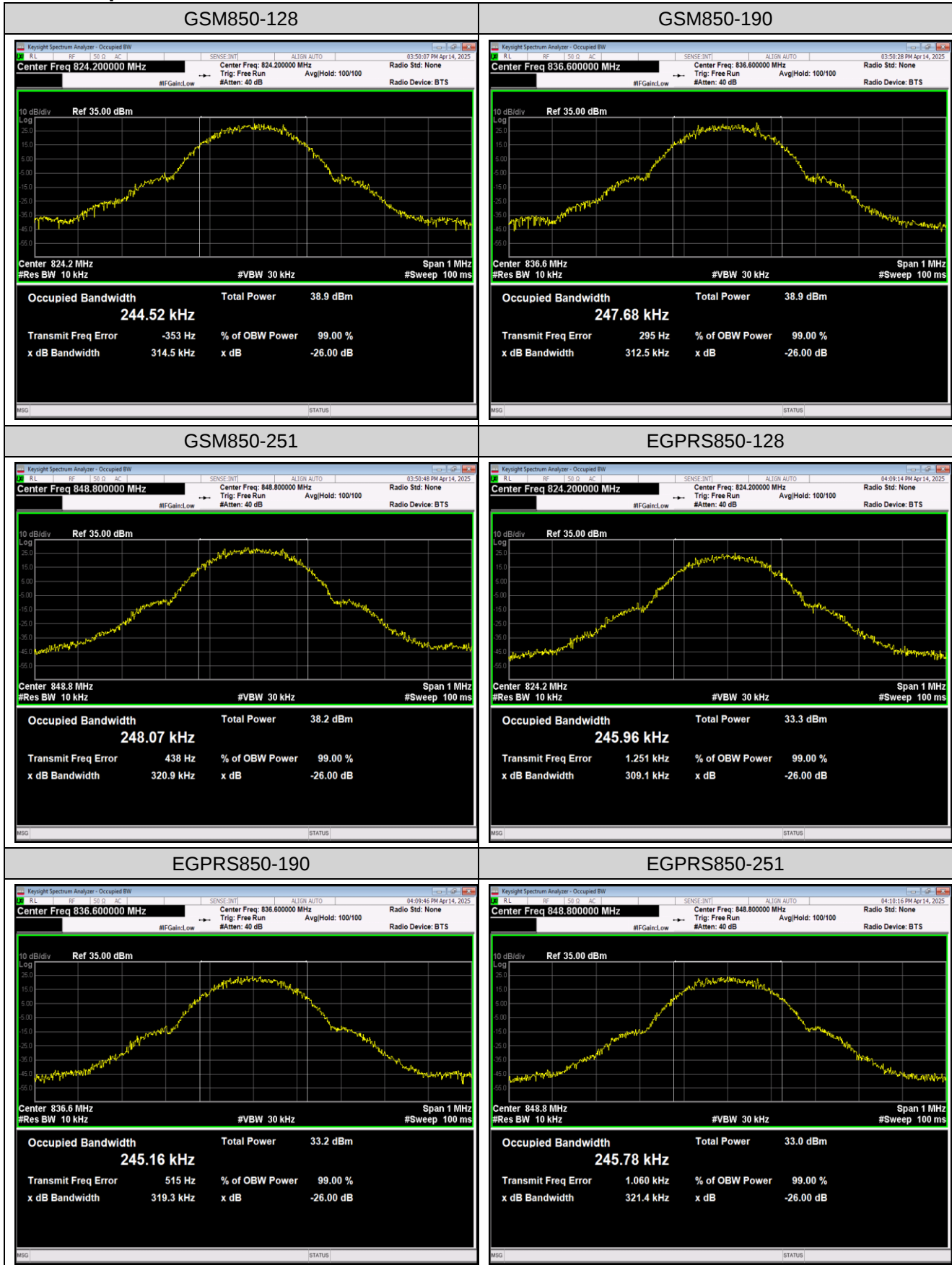


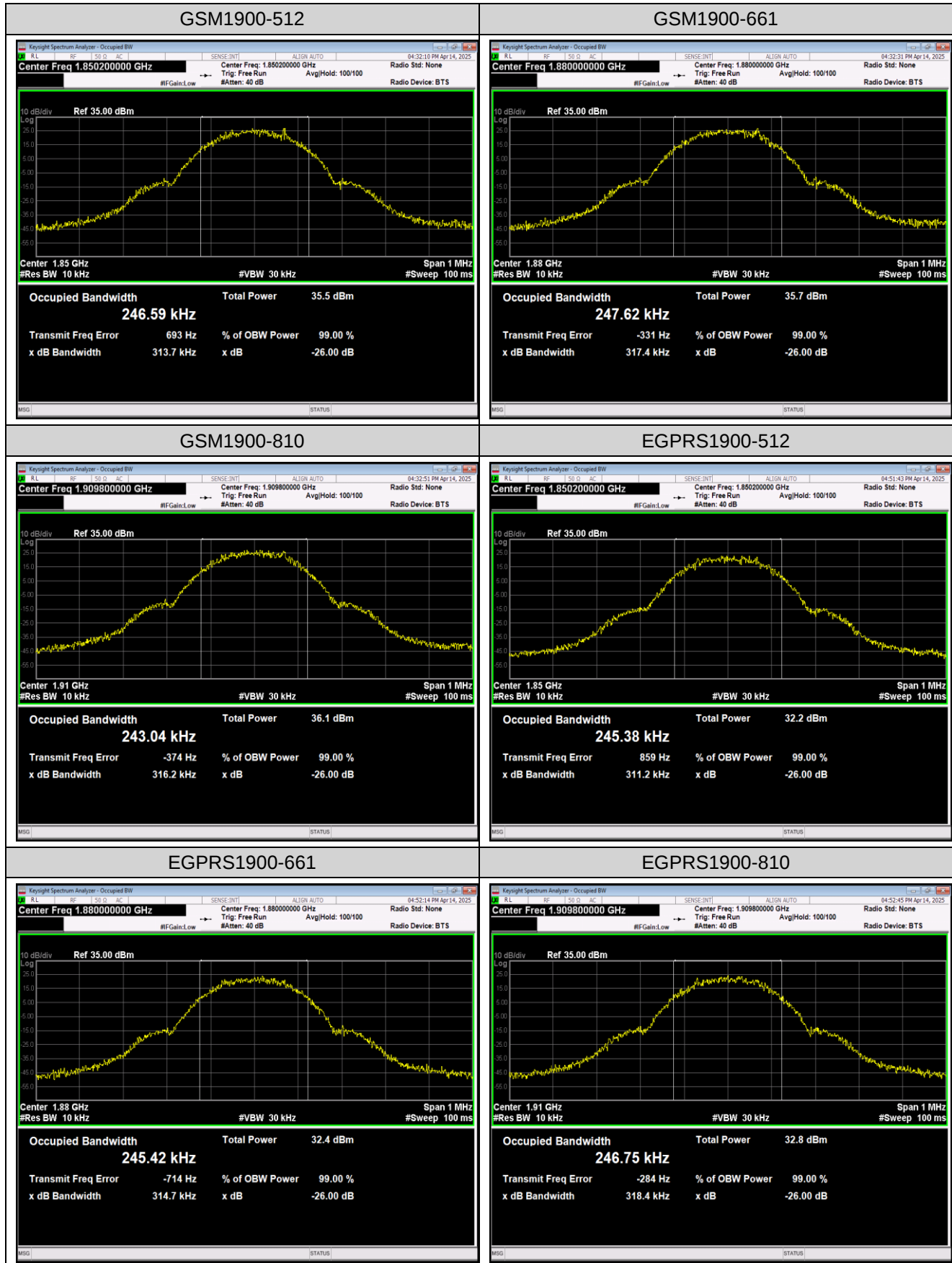
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24452	0.3145	---	PASS
GSM850	190	5	0.24768	0.3125	---	PASS
GSM850	251	5	0.24807	0.3209	---	PASS
EGPRS850	128	8	0.24596	0.3091	---	PASS
EGPRS850	190	8	0.24516	0.3193	---	PASS
EGPRS850	251	8	0.24578	0.3214	---	PASS
GSM1900	512	0	0.24659	0.3137	---	PASS
GSM1900	661	0	0.24762	0.3174	---	PASS
GSM1900	810	0	0.24304	0.3162	---	PASS
EGPRS1900	512	2	0.24538	0.3112	---	PASS
EGPRS1900	661	2	0.24542	0.3147	---	PASS
EGPRS1900	810	2	0.24675	0.3184	---	PASS

Test Graphs



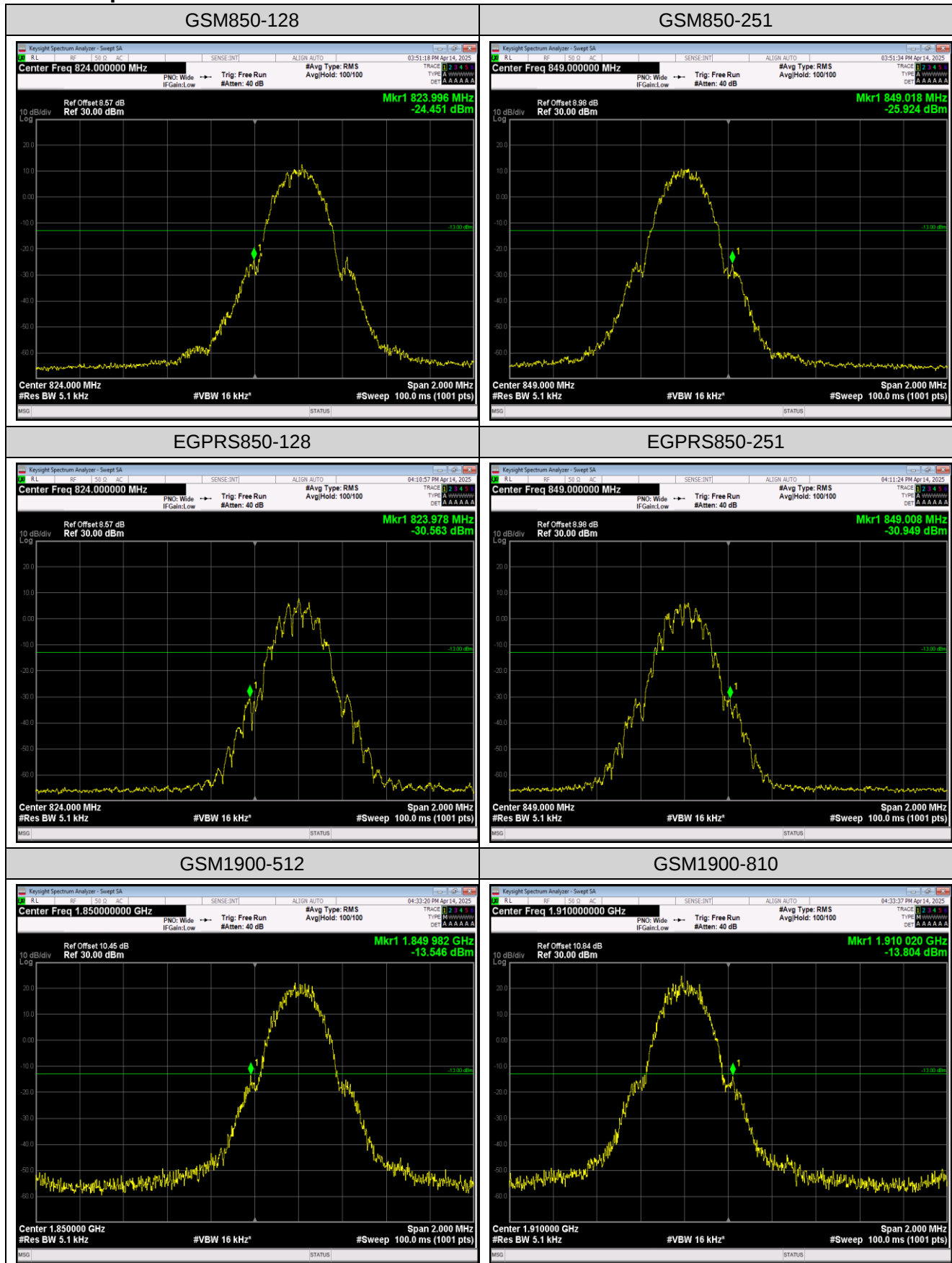


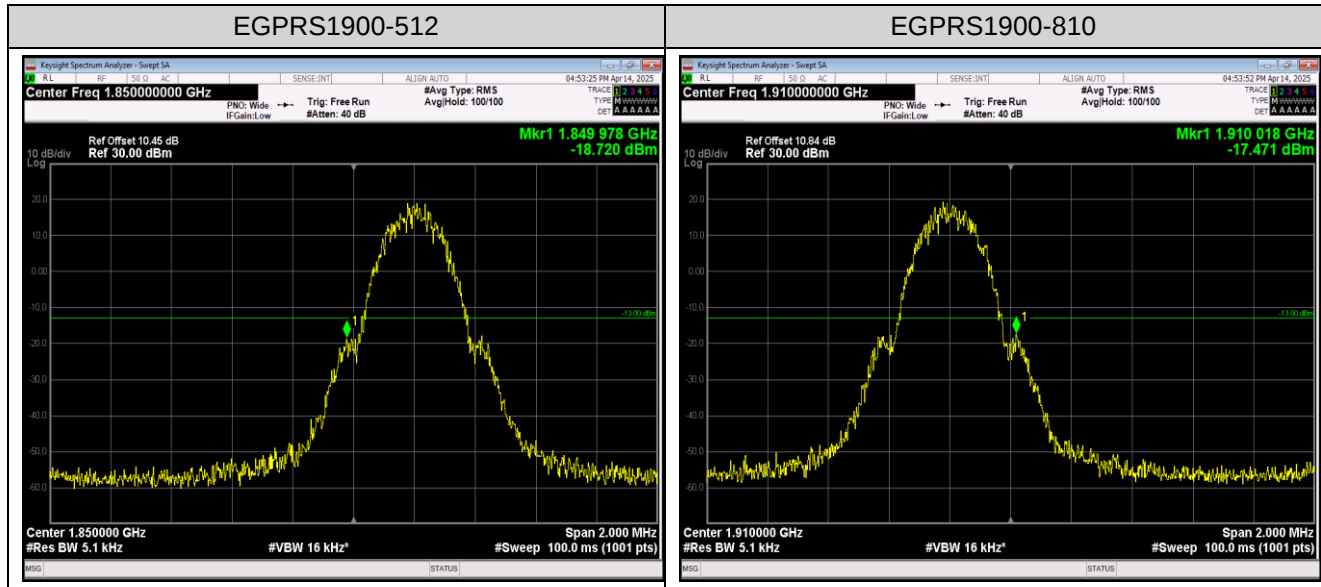
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-24.45	-13	PASS
GSM850	251	5	849.02	-25.92	-13	PASS
EGPRS850	128	8	823.98	-30.56	-13	PASS
EGPRS850	251	8	849.01	-30.95	-13	PASS
GSM1900	512	0	1849.98	-13.55	-13	PASS
GSM1900	810	0	1910.02	-13.80	-13	PASS
EGPRS1900	512	2	1849.98	-18.72	-13	PASS
EGPRS1900	810	2	1910.02	-17.47	-13	PASS

Test Graphs





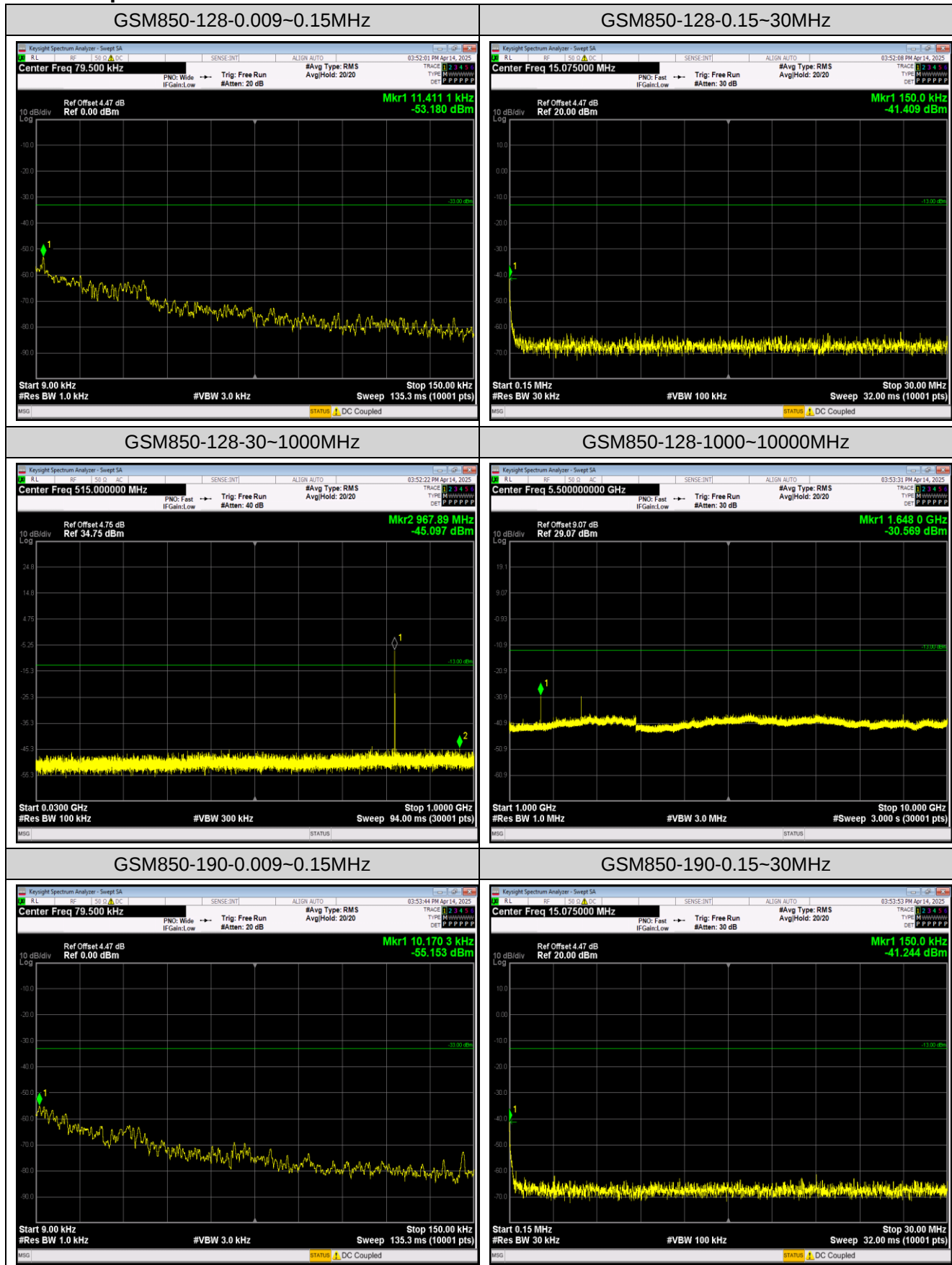
Appendix E: Conducted Spurious Emission

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	-53.18	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-41.41	-13	PASS
GSM850	128	5	30~1000MHz	967.89	-45.1	-13	PASS
GSM850	128	5	1000~10000MHz	1648	-30.57	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.15	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-41.24	-13	PASS
GSM850	190	5	30~1000MHz	723.16	-44.69	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-32.07	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.51	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-43.12	-13	PASS
GSM850	251	5	30~1000MHz	573.39	-45.26	-13	PASS
GSM850	251	5	1000~10000MHz	1697.5	-31.93	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-54.12	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-40.4	-23	PASS
GSM1900	512	0	30~1000MHz	921.11	-44.77	-13	PASS
GSM1900	512	0	1000~18000MHz	16740.3	-22.41	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-53.59	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-40.84	-23	PASS
GSM1900	661	0	30~1000MHz	766.59	-45.81	-13	PASS
GSM1900	661	0	1000~18000MHz	17014.57	-21.33	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.14	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-44.44	-23	PASS
GSM1900	810	0	30~1000MHz	876.1	-45.42	-13	PASS
GSM1900	810	0	1000~18000MHz	15794.53	-22.37	-13	PASS

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

Test Graphs

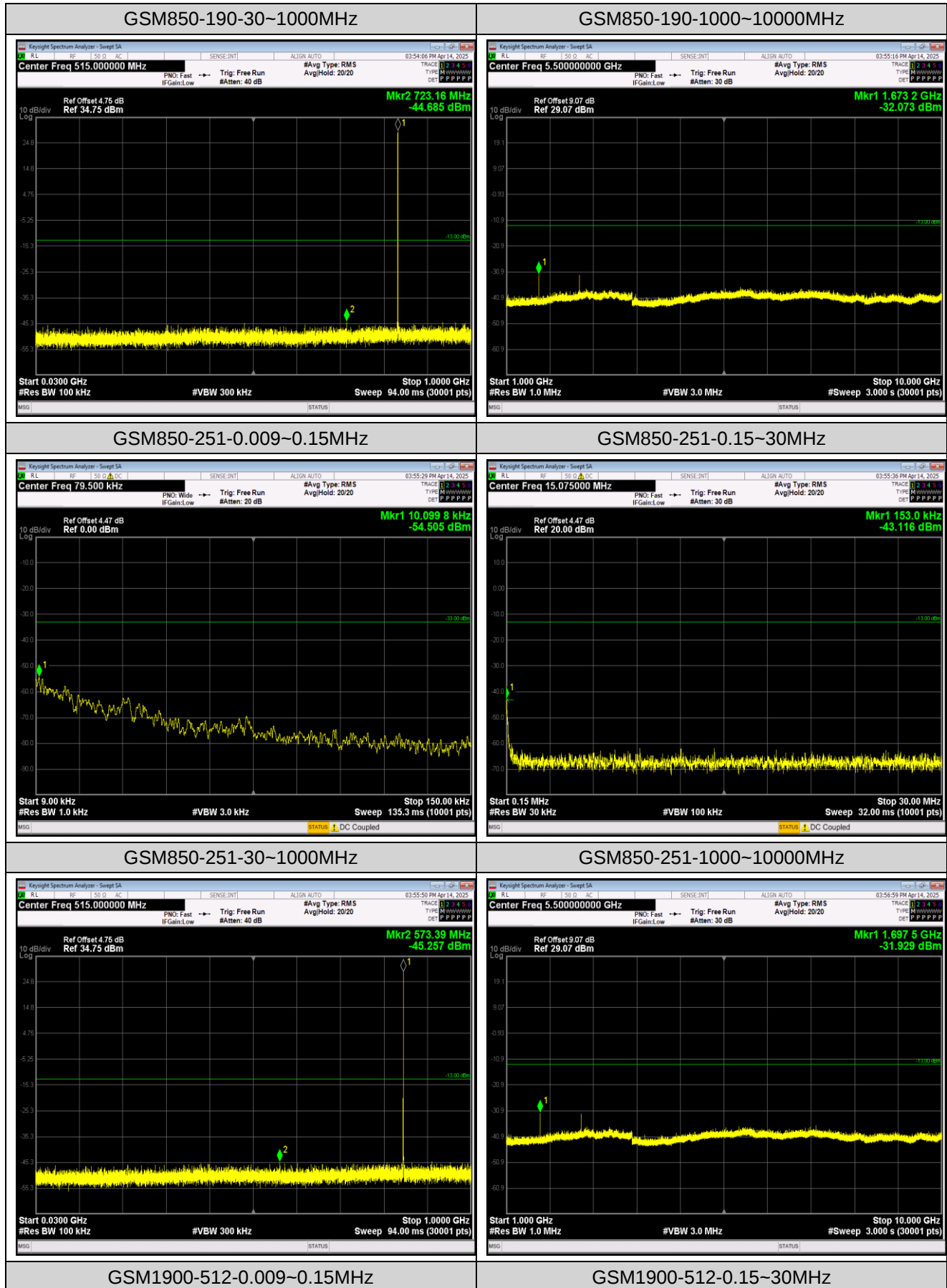


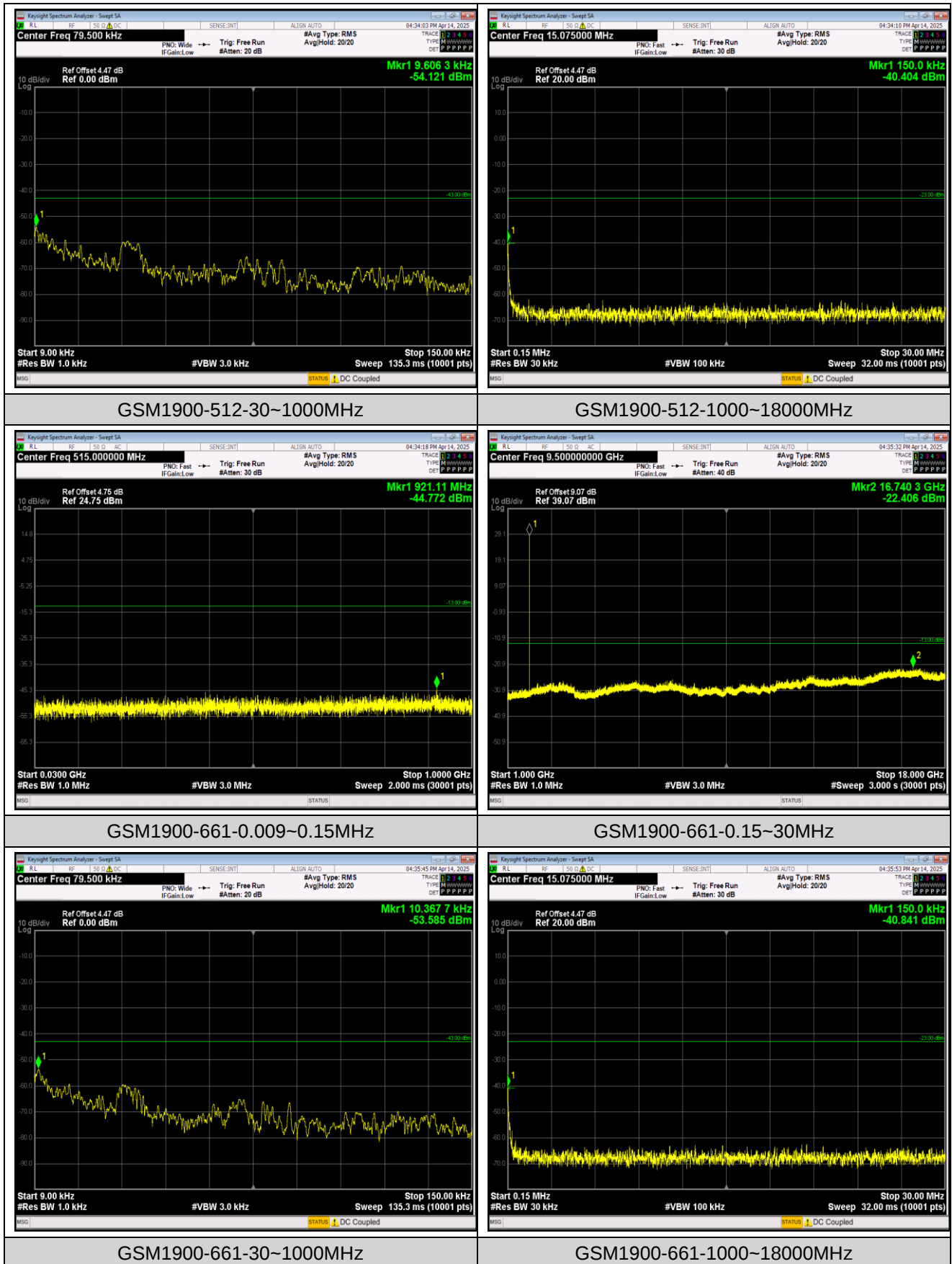
JianYan Testing Group Shenzhen Co., Ltd.

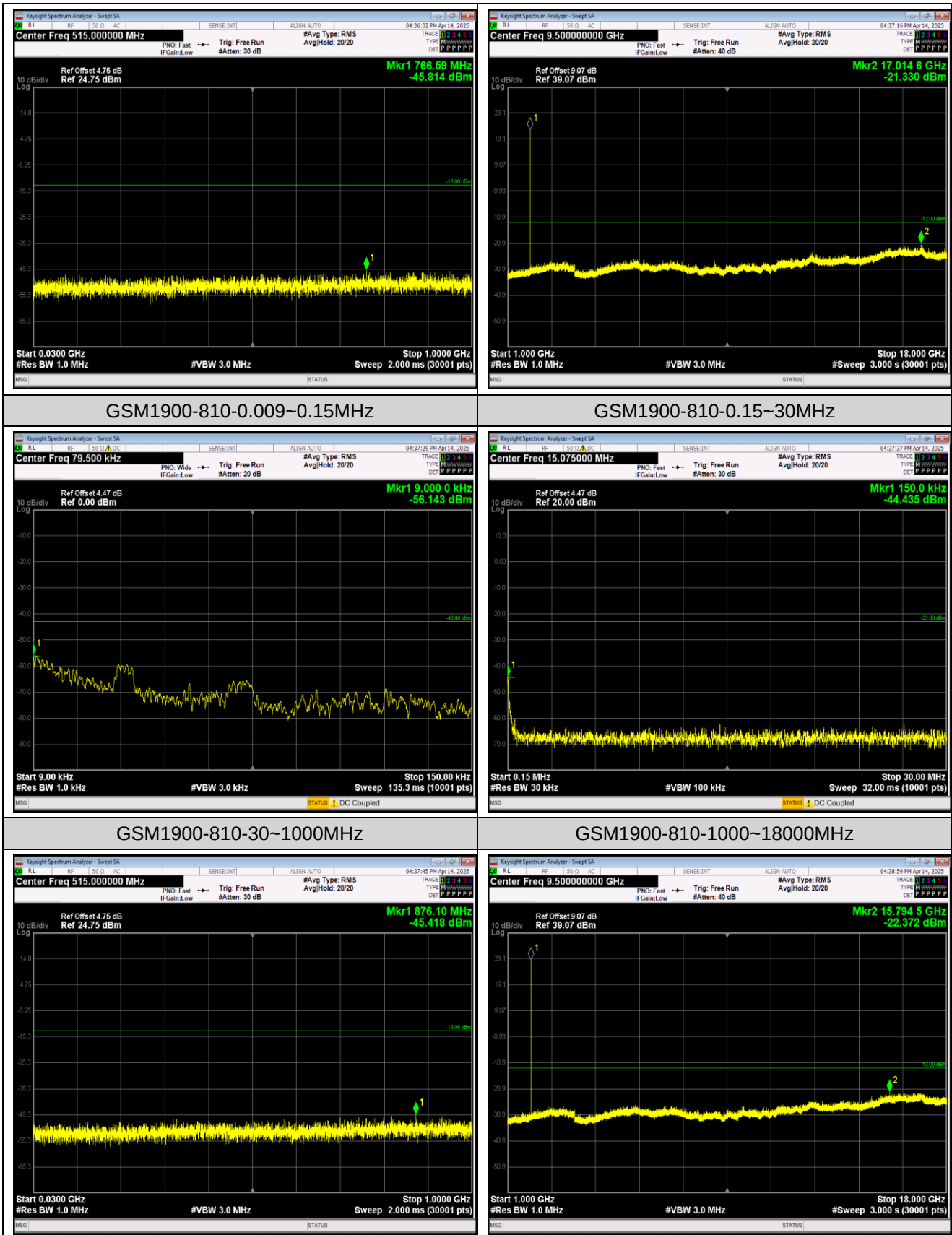
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Appendix F: Frequency Stability

Test Result

Reference Frequency: GSM850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.92	-30	-6.26	-0.007483	±2.5	Pass
	-20	-10.49	-0.012539		
	-10	-5.13	-0.006132		
	0	-9.33	-0.011152		
	10	-7.30	-0.008726		
	20	-4.16	-0.004973		
	30	-7.04	-0.008415		
	40	-6.52	-0.007793		
	50	-3.97	-0.004745		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-9.23	-0.011033	±2.5	Pass
	3.92	-10.14	-0.012120		
	4.53	-6.49	-0.007758		
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		
3.92	-30	-3.75	-0.004482	±2.5	Pass
	-20	-0.42	-0.000502		
	-10	-2.94	-0.003514		
	0	-4.55	-0.005439		
	10	-0.61	-0.000729		
	20	3.52	0.004208		
	30	2.81	0.003359		
	40	6.17	0.007375		
	50	6.62	0.007913		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	0.68	0.000813	±2.5	Pass
	3.92	-3.94	-0.004710		
	4.53	-2.00	-0.002391		
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		
3.92	-30	-15.56	-0.008277	Within authorized band for PCS 1900	Pass
	-20	-14.30	-0.007606		
	-10	-3.20	-0.001702		
	0	-2.23	-0.001186		
	10	-4.13	-0.002197		
	20	-9.30	-0.004947		
	30	0.90	0.000479		
	40	-3.07	-0.001633		
	50	-2.58	-0.001372		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	0.13	0.000069	Within authorized band for PCS 1900	Pass
	3.92	-7.91	-0.004207		
	4.53	-5.59	-0.002973		
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		
3.92	-30	-3.42	-0.001819	Within authorized band for PCS 1900	Pass
	-20	-9.85	-0.005239		
	-10	-4.55	-0.002420		
	0	-1.65	-0.000878		
	10	-0.06	-0.000032		
	20	11.17	0.005941		
	30	6.13	0.003261		
	40	5.10	0.002713		
	50	-0.71	-0.000378		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	3.23	0.001718	Within authorized band for PCS 1900	Pass
	3.92	0.87	0.000463		
	4.53	-2.68	-0.001426		
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

