

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	33.02	25.66	38.45	PASS
GSM850	190	5	32.97	25.61	38.45	PASS
GSM850	251	5	32.39	25.03	38.45	PASS
GSM1900	512	0	29.61	27.83	33.00	PASS
GSM1900	661	0	29.68	27.9	33.00	PASS
GSM1900	810	0	29.49	27.71	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.96	25.6	38.45	PASS
GPRS850	128	5	2	32.12	24.76	38.45	PASS
GPRS850	128	5	3	30.10	22.74	38.45	PASS
GPRS850	128	5	4	28.92	21.56	38.45	PASS
GPRS850	190	5	1	32.96	25.6	38.45	PASS
GPRS850	190	5	2	31.98	24.62	38.45	PASS
GPRS850	190	5	3	30.08	22.72	38.45	PASS
GPRS850	190	5	4	28.85	21.49	38.45	PASS
GPRS850	251	5	1	32.34	24.98	38.45	PASS
GPRS850	251	5	2	31.50	24.14	38.45	PASS
GPRS850	251	5	3	29.71	22.35	38.45	PASS
GPRS850	251	5	4	28.46	21.1	38.45	PASS
GPRS1900	512	0	1	29.59	27.81	33.00	PASS
GPRS1900	512	0	2	28.83	27.05	33.00	PASS
GPRS1900	512	0	3	27.05	25.27	33.00	PASS
GPRS1900	512	0	4	25.88	24.1	33.00	PASS
GPRS1900	661	0	1	29.68	27.9	33.00	PASS
GPRS1900	661	0	2	28.94	27.16	33.00	PASS
GPRS1900	661	0	3	27.15	25.37	33.00	PASS
GPRS1900	661	0	4	25.96	24.18	33.00	PASS
GPRS1900	810	0	1	29.51	27.73	33.00	PASS
GPRS1900	810	0	2	28.70	26.92	33.00	PASS
GPRS1900	810	0	3	26.86	25.08	33.00	PASS
GPRS1900	810	0	4	25.62	23.84	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.33	19.97	38.45	PASS
EGPRS850	128	8	2	27.26	19.9	38.45	PASS
EGPRS850	128	8	3	27.16	19.8	38.45	PASS
EGPRS850	128	8	4	27.08	19.72	38.45	PASS
EGPRS850	190	8	1	27.18	19.82	38.45	PASS
EGPRS850	190	8	2	27.12	19.76	38.45	PASS
EGPRS850	190	8	3	27.03	19.67	38.45	PASS
EGPRS850	190	8	4	26.92	19.56	38.45	PASS
EGPRS850	251	8	1	26.70	19.34	38.45	PASS
EGPRS850	251	8	2	26.64	19.28	38.45	PASS
EGPRS850	251	8	3	26.58	19.22	38.45	PASS
EGPRS850	251	8	4	26.46	19.1	38.45	PASS
EGPRS1900	512	2	1	26.16	24.38	33.00	PASS
EGPRS1900	512	2	2	26.10	24.32	33.00	PASS
EGPRS1900	512	2	3	26.05	24.27	33.00	PASS
EGPRS1900	512	2	4	25.97	24.19	33.00	PASS
EGPRS1900	661	2	1	26.24	24.46	33.00	PASS
EGPRS1900	661	2	2	26.19	24.41	33.00	PASS
EGPRS1900	661	2	3	26.11	24.33	33.00	PASS
EGPRS1900	661	2	4	25.98	24.2	33.00	PASS
EGPRS1900	810	2	1	25.91	24.13	33.00	PASS
EGPRS1900	810	2	2	25.85	24.07	33.00	PASS
EGPRS1900	810	2	3	25.76	23.98	33.00	PASS
EGPRS1900	810	2	4	25.69	23.91	33.00	PASS

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

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

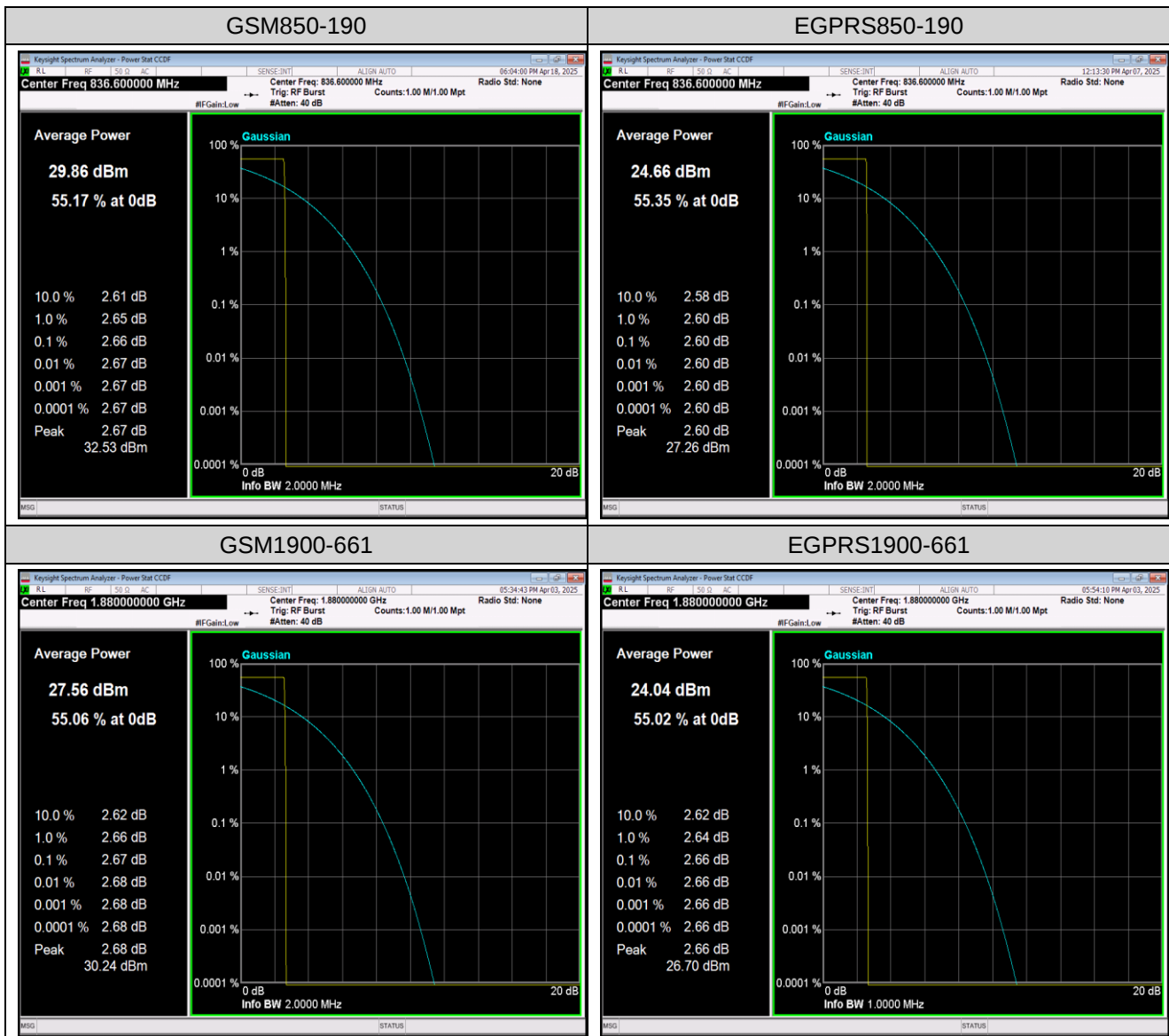
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.66	13	PASS
EGPRS850	190	8	2.6	13	PASS
GSM1900	661	0	2.67	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

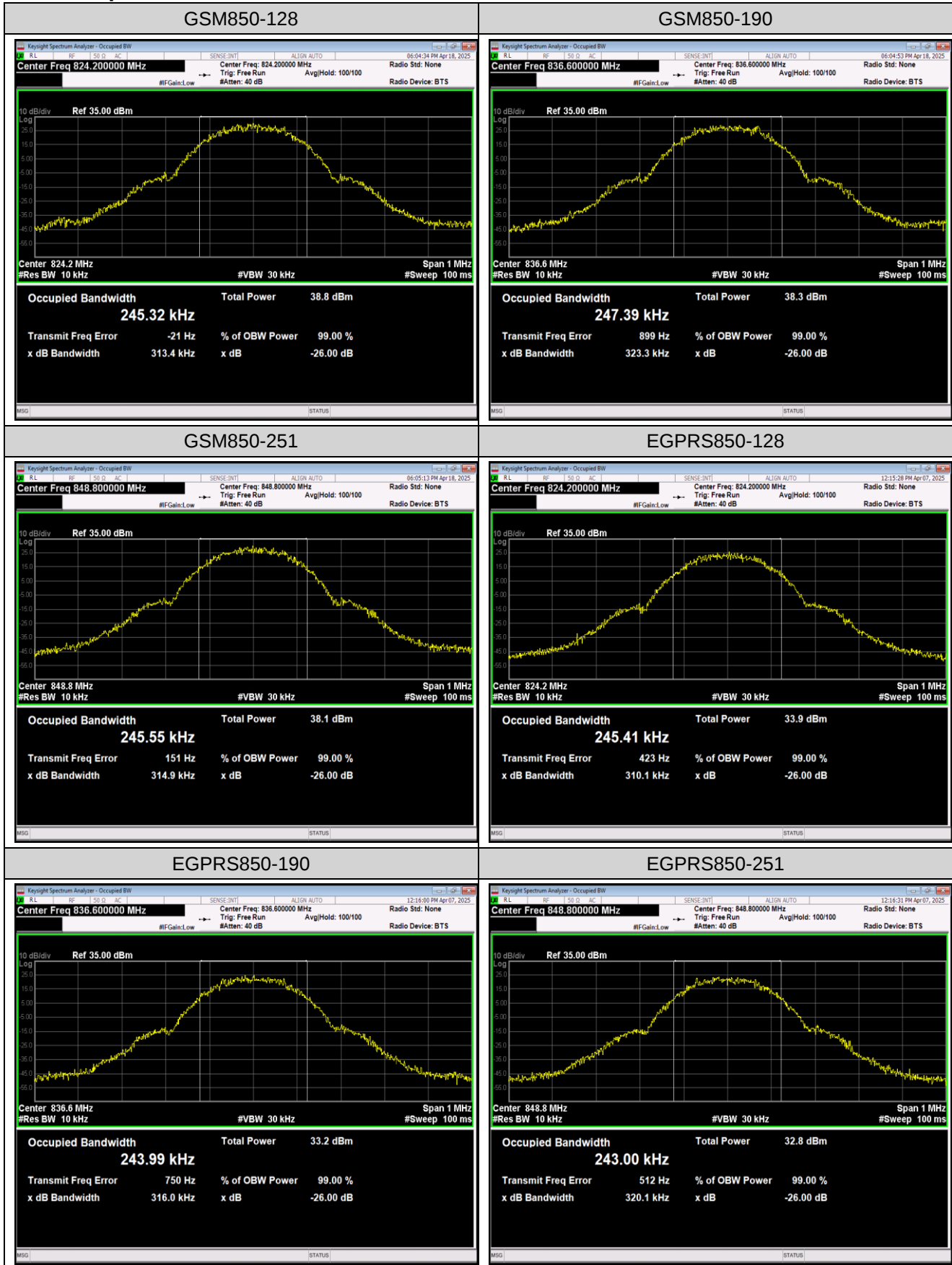


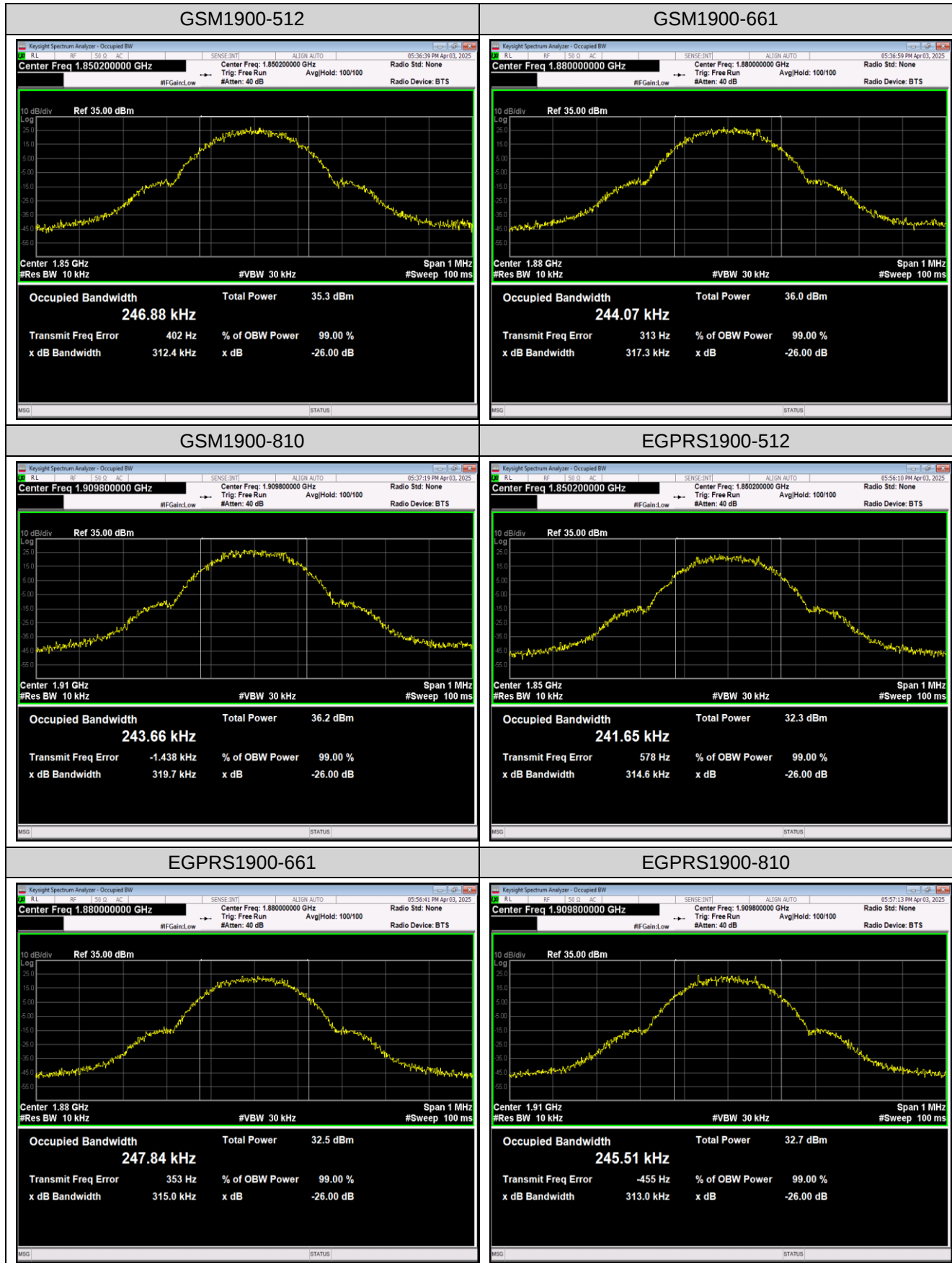
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24532	0.3134	---	PASS
GSM850	190	5	0.24739	0.3233	---	PASS
GSM850	251	5	0.24555	0.3149	---	PASS
EGPRS850	128	8	0.24541	0.3101	---	PASS
EGPRS850	190	8	0.24399	0.3160	---	PASS
EGPRS850	251	8	0.24300	0.3201	---	PASS
GSM1900	512	0	0.24688	0.3124	---	PASS
GSM1900	661	0	0.24407	0.3173	---	PASS
GSM1900	810	0	0.24366	0.3197	---	PASS
EGPRS1900	512	2	0.24165	0.3146	---	PASS
EGPRS1900	661	2	0.24784	0.3150	---	PASS
EGPRS1900	810	2	0.24551	0.3130	---	PASS

Test Graphs



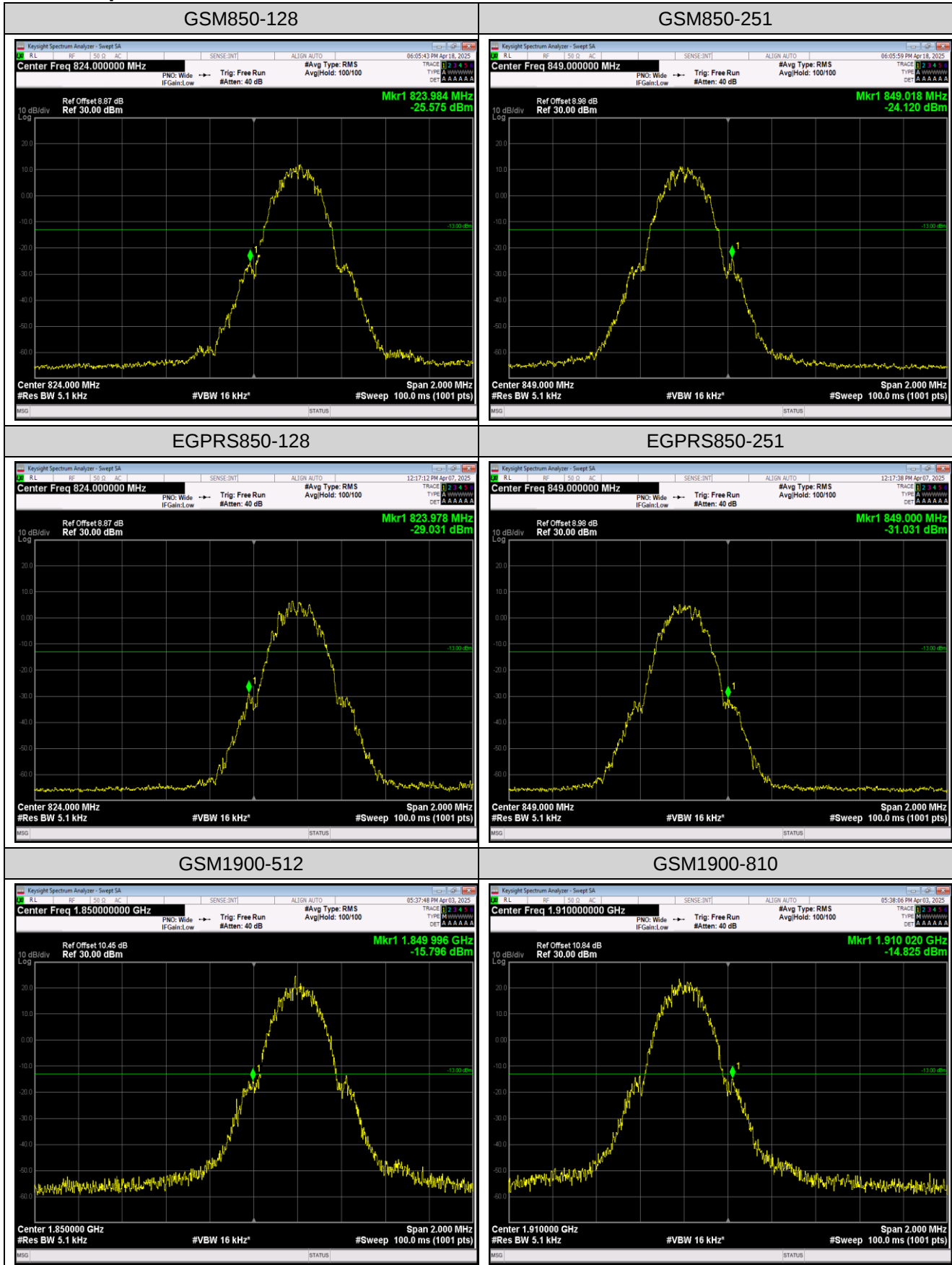


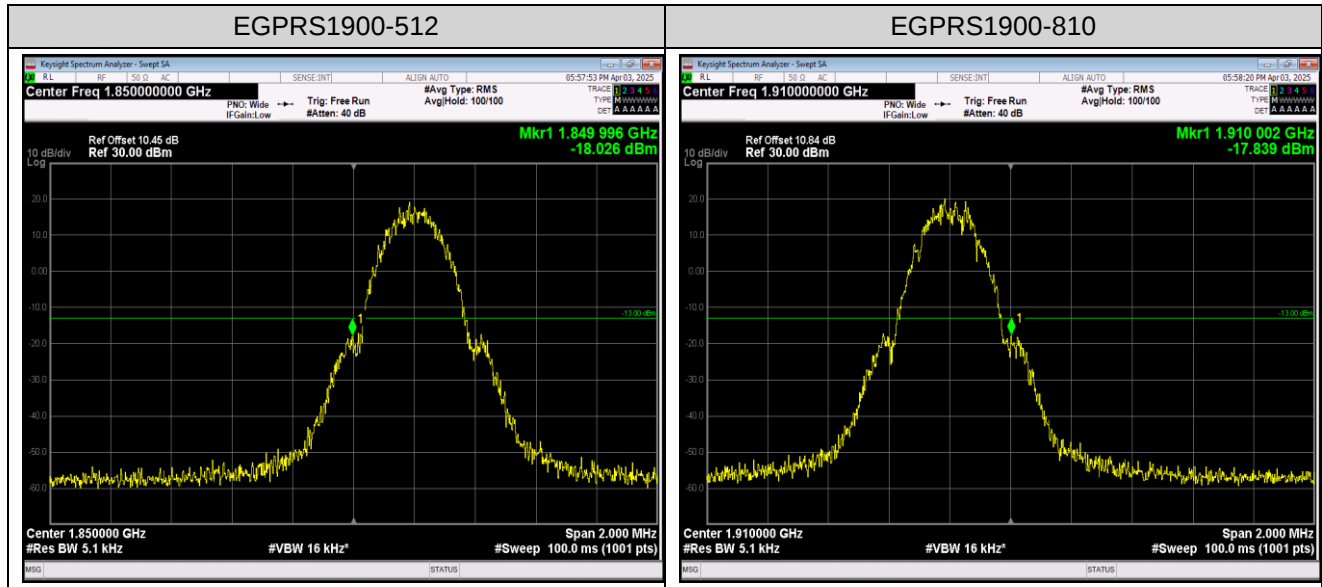
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-25.57	-13	PASS
GSM850	251	5	849.02	-24.12	-13	PASS
EGPRS850	128	8	823.98	-29.03	-13	PASS
EGPRS850	251	8	849.00	-31.03	-13	PASS
GSM1900	512	0	1850.00	-15.80	-13	PASS
GSM1900	810	0	1910.02	-14.83	-13	PASS
EGPRS1900	512	2	1850.00	-18.03	-13	PASS
EGPRS1900	810	2	1910.00	-17.84	-13	PASS

Test Graphs





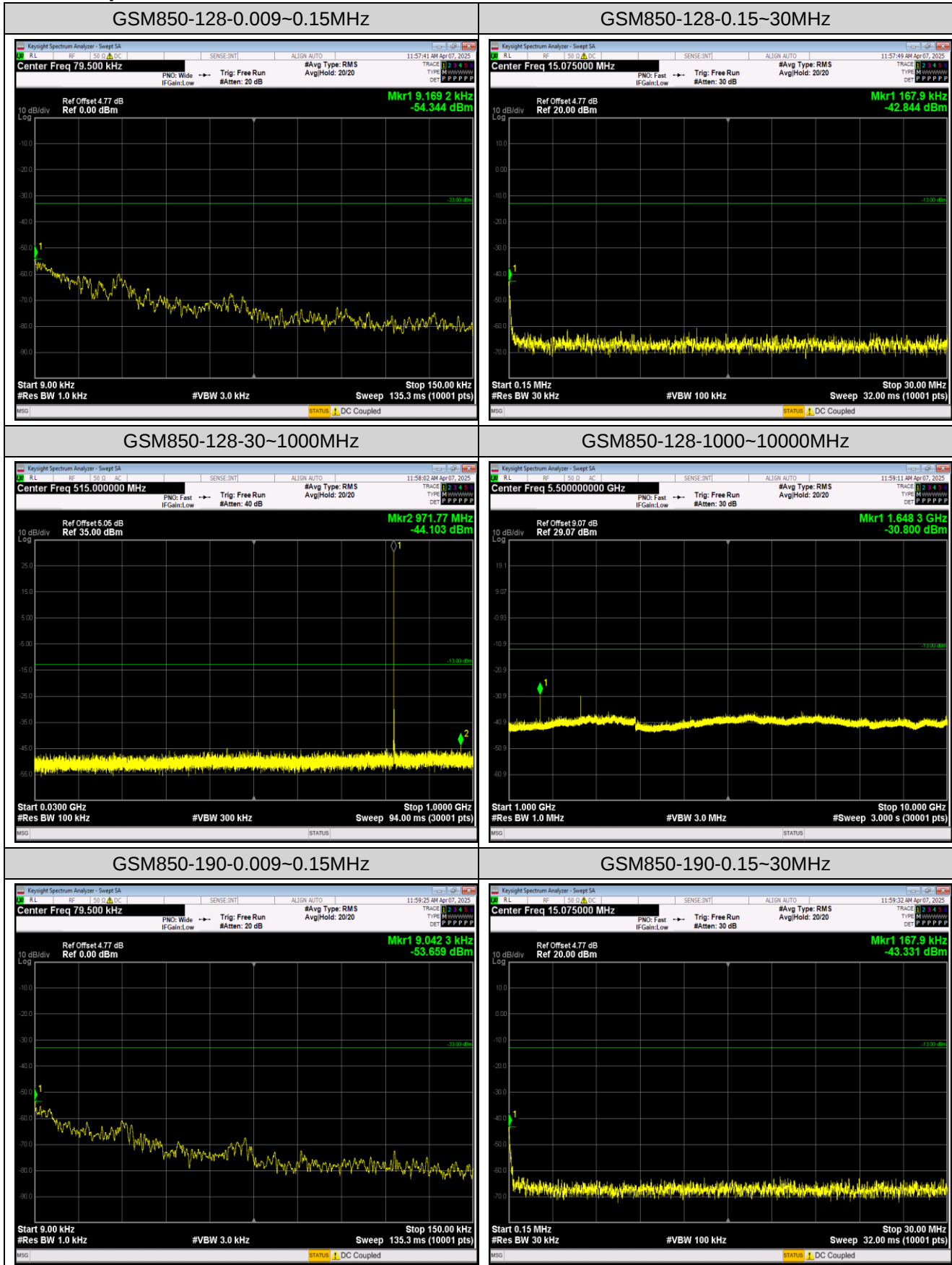
Appendix E: Conducted Spurious Emission

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	-54.34	-33	PASS
GSM850	128	5	0.15~30MHz	0.17	-42.84	-13	PASS
GSM850	128	5	30~1000MHz	971.77	-44.1	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-30.8	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-53.66	-33	PASS
GSM850	190	5	0.15~30MHz	0.17	-43.33	-13	PASS
GSM850	190	5	30~1000MHz	716.08	-45.31	-13	PASS
GSM850	190	5	1000~10000MHz	2509.9	-31.24	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-53.56	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-41.68	-13	PASS
GSM850	251	5	30~1000MHz	720.09	-44.81	-13	PASS
GSM850	251	5	1000~10000MHz	1697.8	-32.03	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.17	-43	PASS
GSM1900	512	0	0.15~30MHz	0.18	-43.22	-23	PASS
GSM1900	512	0	30~1000MHz	685.07	-46.68	-13	PASS
GSM1900	512	0	1000~18000MHz	16244.47	-22.51	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-55.69	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-42.44	-23	PASS
GSM1900	661	0	30~1000MHz	803.41	-45.62	-13	PASS
GSM1900	661	0	1000~18000MHz	16342.5	-22.03	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.54	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-40.99	-23	PASS
GSM1900	810	0	30~1000MHz	802.48	-45.38	-13	PASS
GSM1900	810	0	1000~18000MHz	16957.9	-22.27	-13	PASS

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

Test Graphs

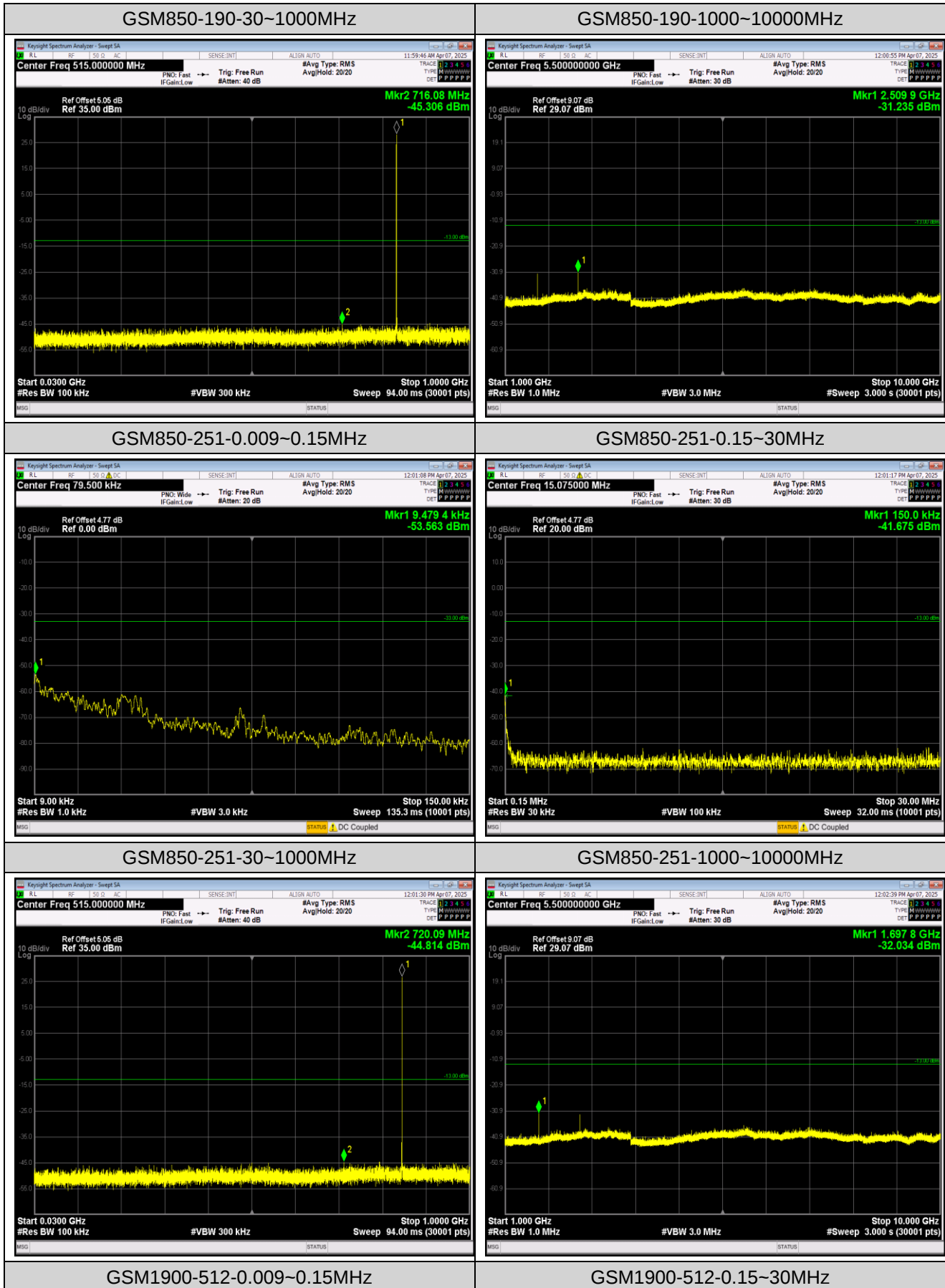


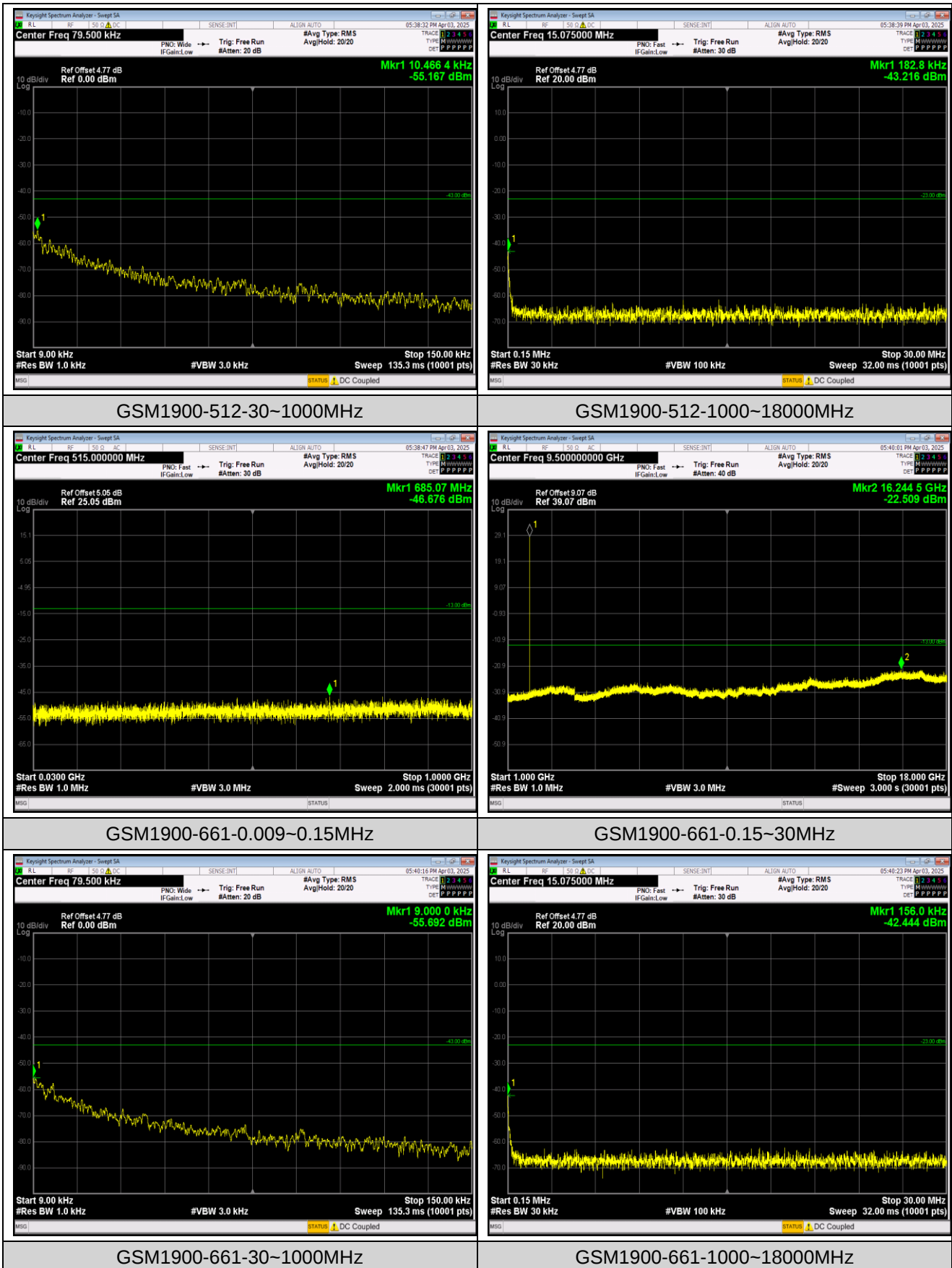
JianYan Testing Group Shenzhen Co., Ltd.

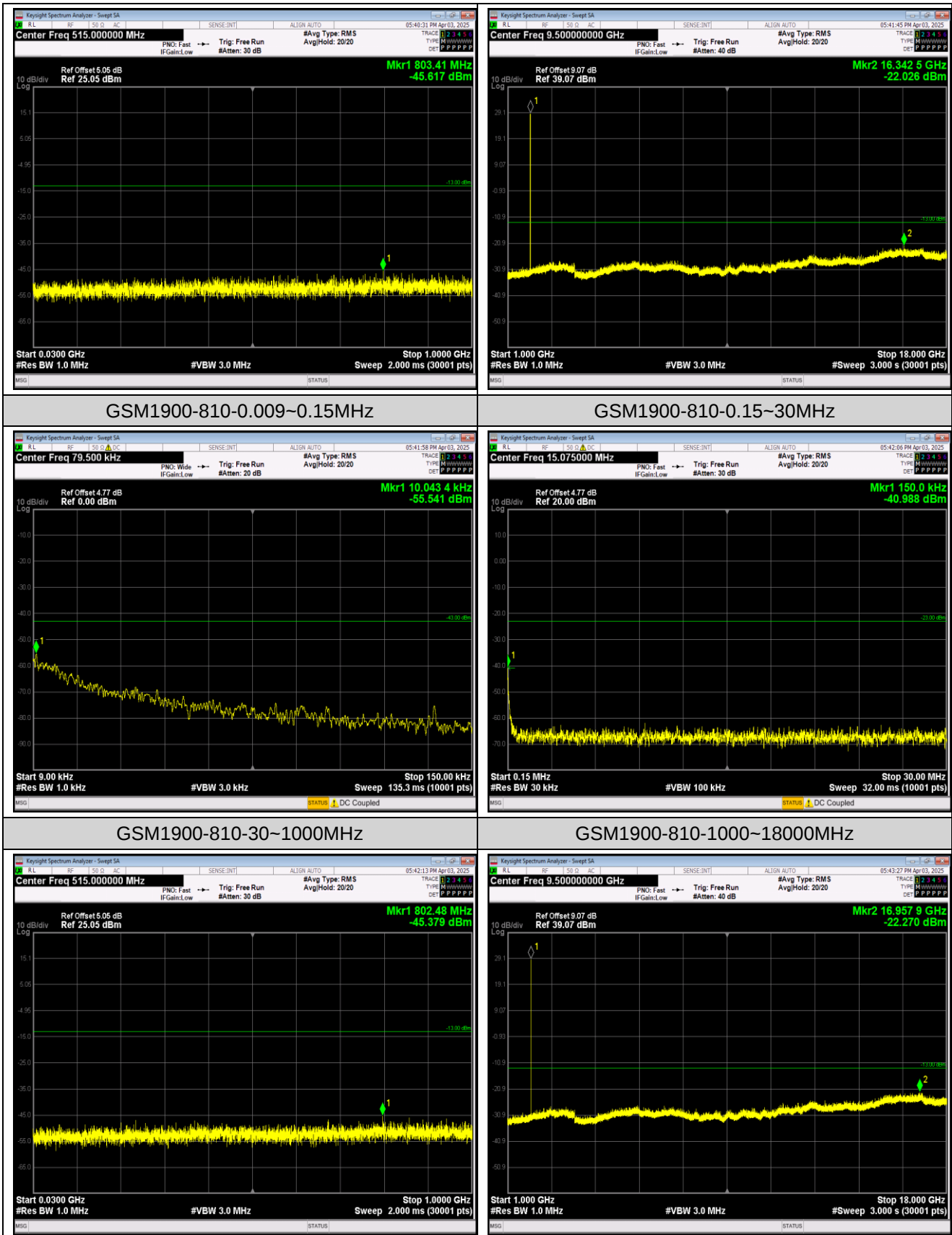
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Appendix F: Frequency Stability

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	-14.82	-0.017715	±2.5	Pass
	-20	-9.23	-0.011033		
	-10	-9.81	-0.011726		
	0	-11.36	-0.013579		
	10	-9.10	-0.010877		
	20	-12.07	-0.014427		
	30	-10.69	-0.012778		
	40	-8.81	-0.010531		
	50	-9.23	-0.011033		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-9.20	-0.010997	±2.5	Pass
	3.92	-9.85	-0.011774		
	4.53	-10.69	-0.012778		
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	-5.75	-0.006873	±2.5	Pass
	-20	-3.03	-0.003622		
	-10	-5.36	-0.006407		
	0	-0.16	-0.000191		
	10	5.52	0.006598		
	20	8.10	0.009682		
	30	8.98	0.010734		
	40	7.49	0.008953		
	50	7.10	0.008487		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-2.71	-0.003239	±2.5	Pass
	3.92	-3.10	-0.003705		
	4.53	-6.33	-0.007566		
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		
3.92	-30	-28.25	-0.015027	Within authorized band for PCS 1900	Pass
	-20	-20.44	-0.010872		
	-10	-19.15	-0.010186		
	0	-10.91	-0.005803		
	10	-11.53	-0.006133		
	20	-13.53	-0.007197		
	30	-25.93	-0.013793		
	40	-14.04	-0.007468		
	50	-11.33	-0.006027		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-23.05	-0.012261	Within authorized band for PCS 1900	Pass
	3.92	-18.31	-0.009739		
	4.53	-17.82	-0.009479		
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	-2.29	-0.001218	Within authorized band for PCS 1900	Pass
	-20	1.94	0.001032		
	-10	-0.61	-0.000324		
	0	-0.06	-0.000032		
	10	12.30	0.006543		
	20	14.95	0.007952		
	30	15.53	0.008261		
	40	12.56	0.006681		
	50	10.98	0.005840		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-2.26	-0.001202	Within authorized band for PCS 1900	Pass
	3.92	0.16	0.000085		
	4.53	-4.91	-0.002612		
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

