

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	32.10	27.72	38.45	PASS
GSM850	190	5	31.97	27.59	38.45	PASS
GSM850	251	5	31.96	27.58	38.45	PASS
GSM1900	512	0	28.00	29.03	33.00	PASS
GSM1900	661	0	28.11	29.14	33.00	PASS
GSM1900	810	0	28.00	29.03	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.12	27.74	38.45	PASS
GPRS850	128	5	2	30.58	26.2	38.45	PASS
GPRS850	128	5	3	28.50	24.12	38.45	PASS
GPRS850	128	5	4	27.45	23.07	38.45	PASS
GPRS850	190	5	1	31.96	27.58	38.45	PASS
GPRS850	190	5	2	30.40	26.02	38.45	PASS
GPRS850	190	5	3	28.29	23.91	38.45	PASS
GPRS850	190	5	4	27.24	22.86	38.45	PASS
GPRS850	251	5	1	31.96	27.58	38.45	PASS
GPRS850	251	5	2	30.40	26.02	38.45	PASS
GPRS850	251	5	3	28.30	23.92	38.45	PASS
GPRS850	251	5	4	27.24	22.86	38.45	PASS
GPRS1900	512	0	1	27.86	28.89	33.00	PASS
GPRS1900	512	0	2	26.16	27.19	33.00	PASS
GPRS1900	512	0	3	23.95	24.98	33.00	PASS
GPRS1900	512	0	4	22.79	23.82	33.00	PASS
GPRS1900	661	0	1	27.90	28.93	33.00	PASS
GPRS1900	661	0	2	26.20	27.23	33.00	PASS
GPRS1900	661	0	3	23.98	25.01	33.00	PASS
GPRS1900	661	0	4	22.83	23.86	33.00	PASS
GPRS1900	810	0	1	27.83	28.86	33.00	PASS
GPRS1900	810	0	2	26.12	27.15	33.00	PASS
GPRS1900	810	0	3	23.84	24.87	33.00	PASS
GPRS1900	810	0	4	22.66	23.69	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	26.03	21.65	38.45	PASS
EGPRS850	128	8	2	23.86	19.48	38.45	PASS
EGPRS850	128	8	3	21.53	17.15	38.45	PASS
EGPRS850	128	8	4	20.51	16.13	38.45	PASS
EGPRS850	190	8	1	26.11	21.73	38.45	PASS
EGPRS850	190	8	2	23.87	19.49	38.45	PASS
EGPRS850	190	8	3	21.58	17.2	38.45	PASS
EGPRS850	190	8	4	20.45	16.07	38.45	PASS
EGPRS850	251	8	1	26.03	21.65	38.45	PASS
EGPRS850	251	8	2	23.84	19.46	38.45	PASS
EGPRS850	251	8	3	21.59	17.21	38.45	PASS
EGPRS850	251	8	4	20.42	16.04	38.45	PASS
EGPRS1900	512	2	1	23.47	24.5	33.00	PASS
EGPRS1900	512	2	2	21.33	22.36	33.00	PASS
EGPRS1900	512	2	3	19.08	20.11	33.00	PASS
EGPRS1900	512	2	4	17.79	18.82	33.00	PASS
EGPRS1900	661	2	1	23.95	24.98	33.00	PASS
EGPRS1900	661	2	2	21.84	22.87	33.00	PASS
EGPRS1900	661	2	3	19.59	20.62	33.00	PASS
EGPRS1900	661	2	4	18.31	19.34	33.00	PASS
EGPRS1900	810	2	1	24.22	25.25	33.00	PASS
EGPRS1900	810	2	2	22.13	23.16	33.00	PASS
EGPRS1900	810	2	3	19.90	20.93	33.00	PASS
EGPRS1900	810	2	4	18.62	19.65	33.00	PASS

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

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

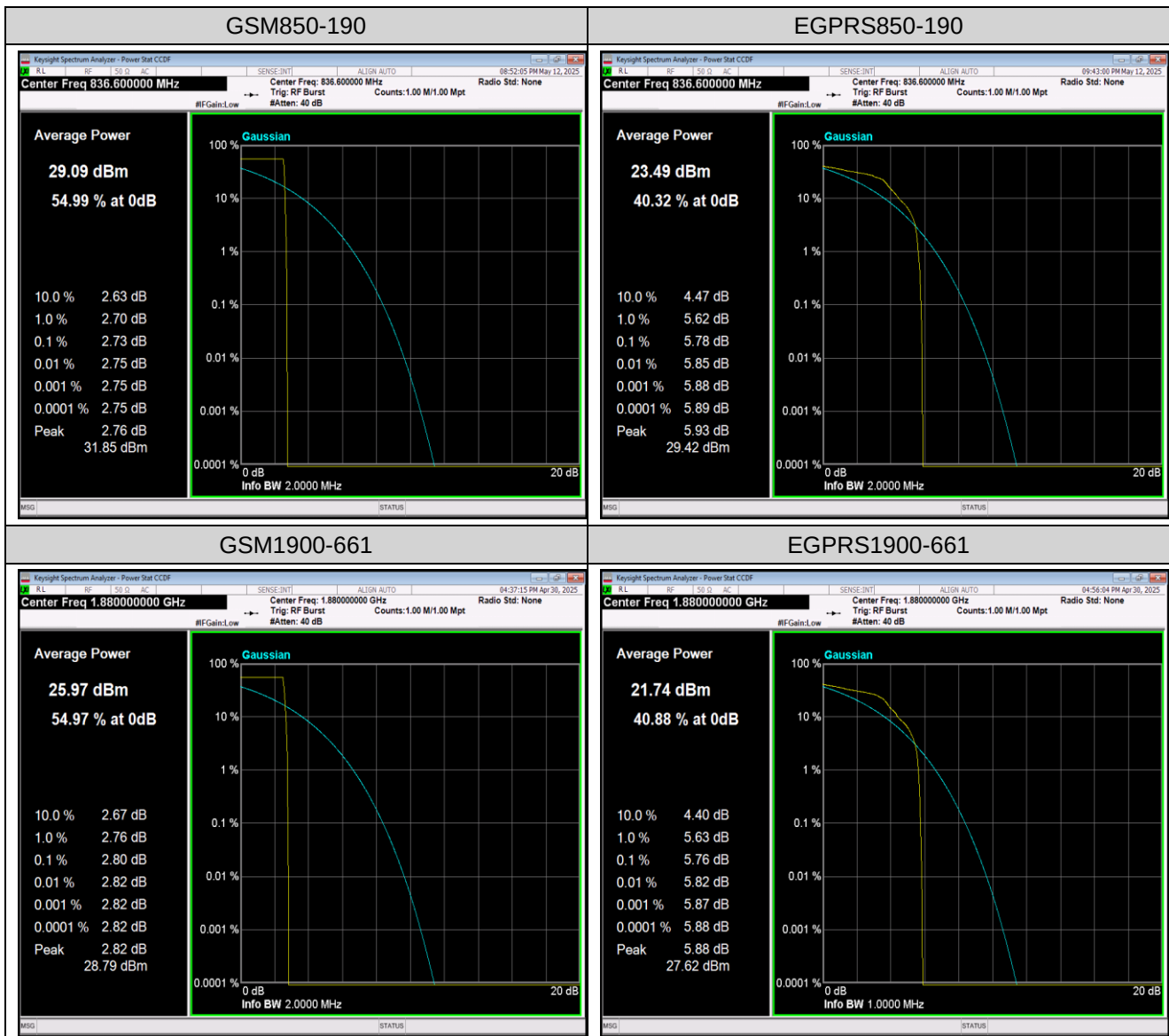
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.73	13	PASS
EGPRS850	190	8	5.78	13	PASS
GSM1900	661	0	2.8	13	PASS
EGPRS1900	661	2	5.76	13	PASS

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

Test Graphs

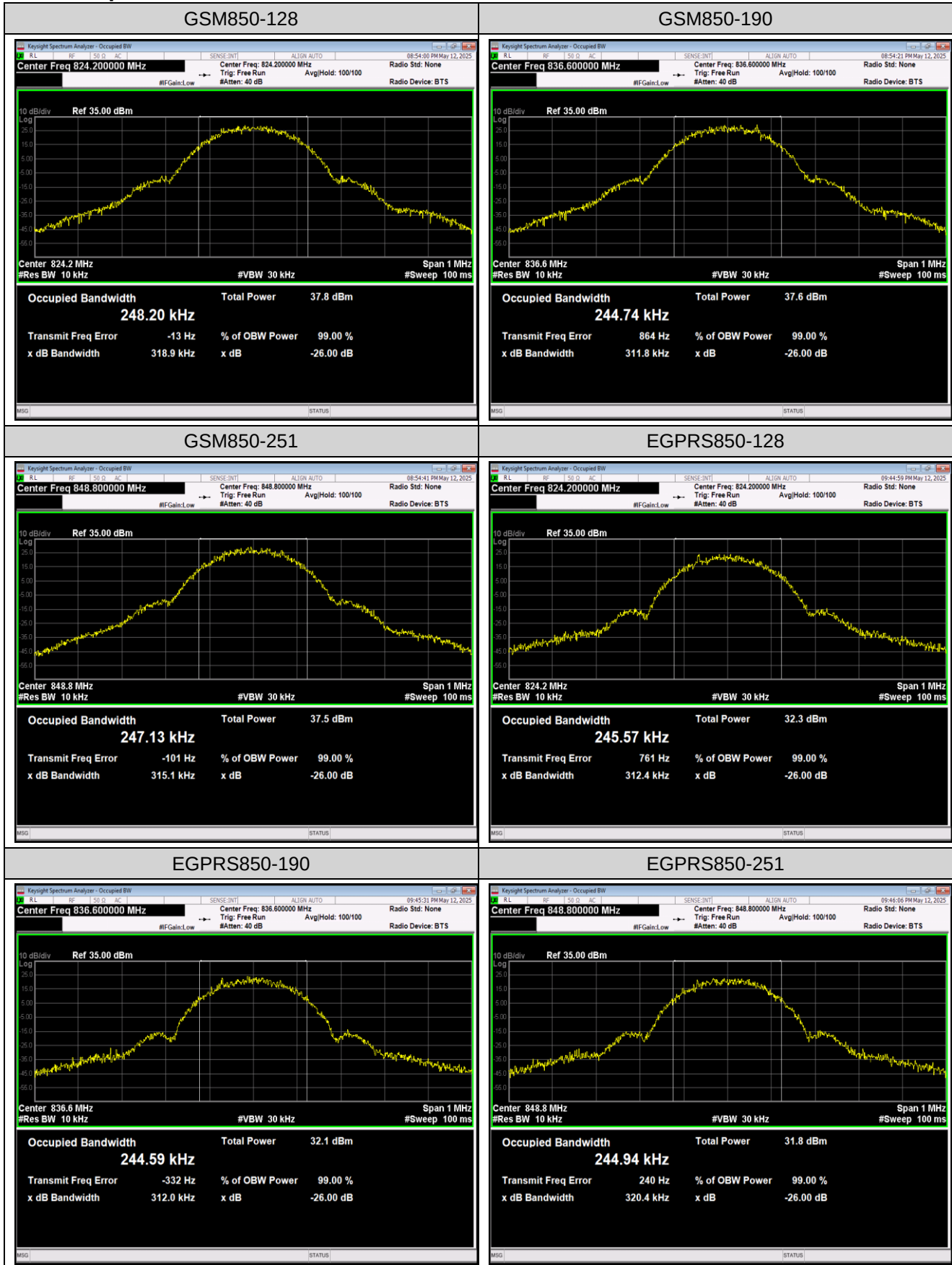


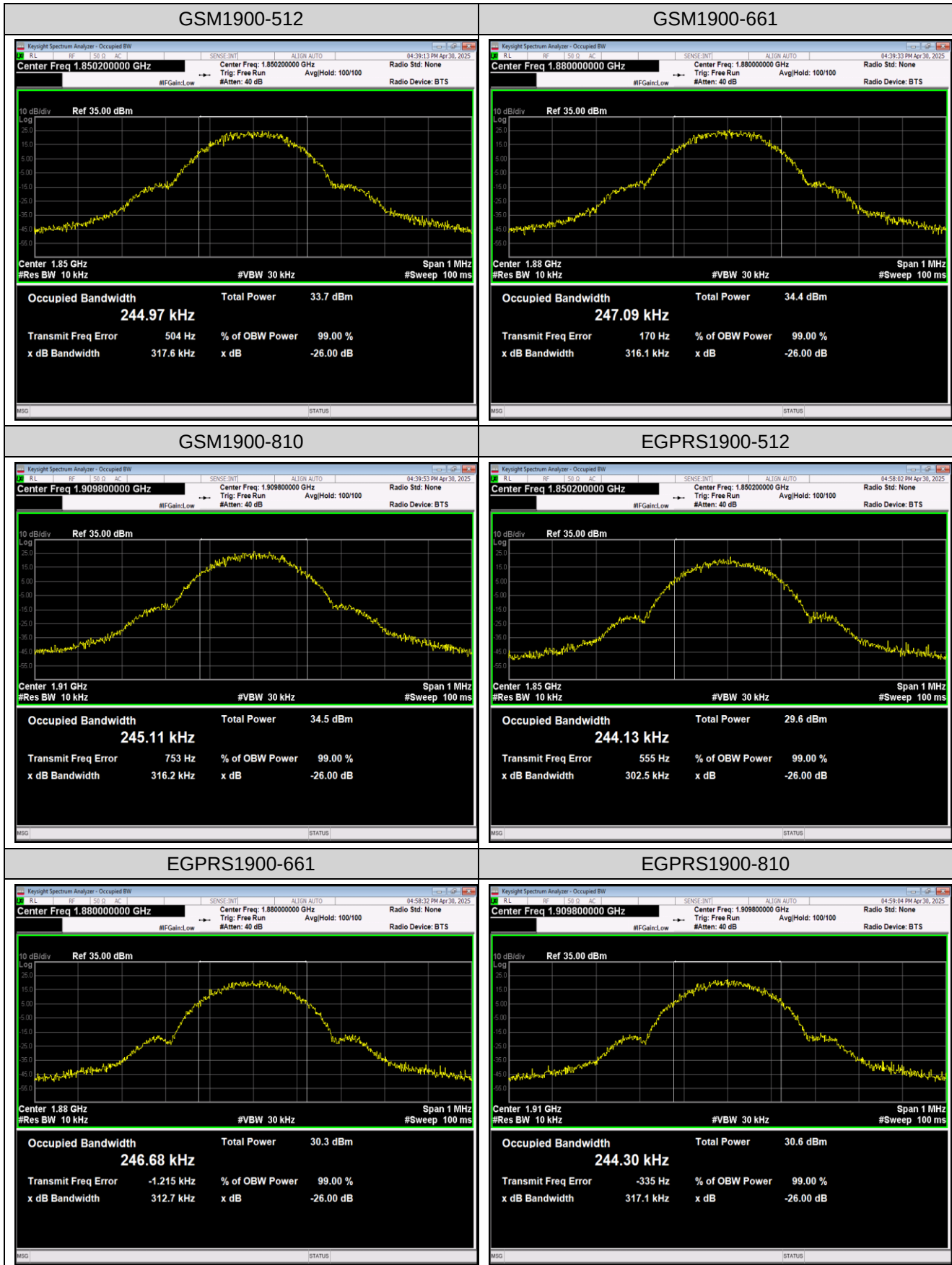
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24820	0.3189	---	PASS
GSM850	190	5	0.24474	0.3118	---	PASS
GSM850	251	5	0.24713	0.3151	---	PASS
EGPRS850	128	8	0.24557	0.3124	---	PASS
EGPRS850	190	8	0.24459	0.3120	---	PASS
EGPRS850	251	8	0.24494	0.3204	---	PASS
GSM1900	512	0	0.24497	0.3176	---	PASS
GSM1900	661	0	0.24709	0.3161	---	PASS
GSM1900	810	0	0.24511	0.3162	---	PASS
EGPRS1900	512	2	0.24413	0.3025	---	PASS
EGPRS1900	661	2	0.24668	0.3127	---	PASS
EGPRS1900	810	2	0.24430	0.3171	---	PASS

Test Graphs



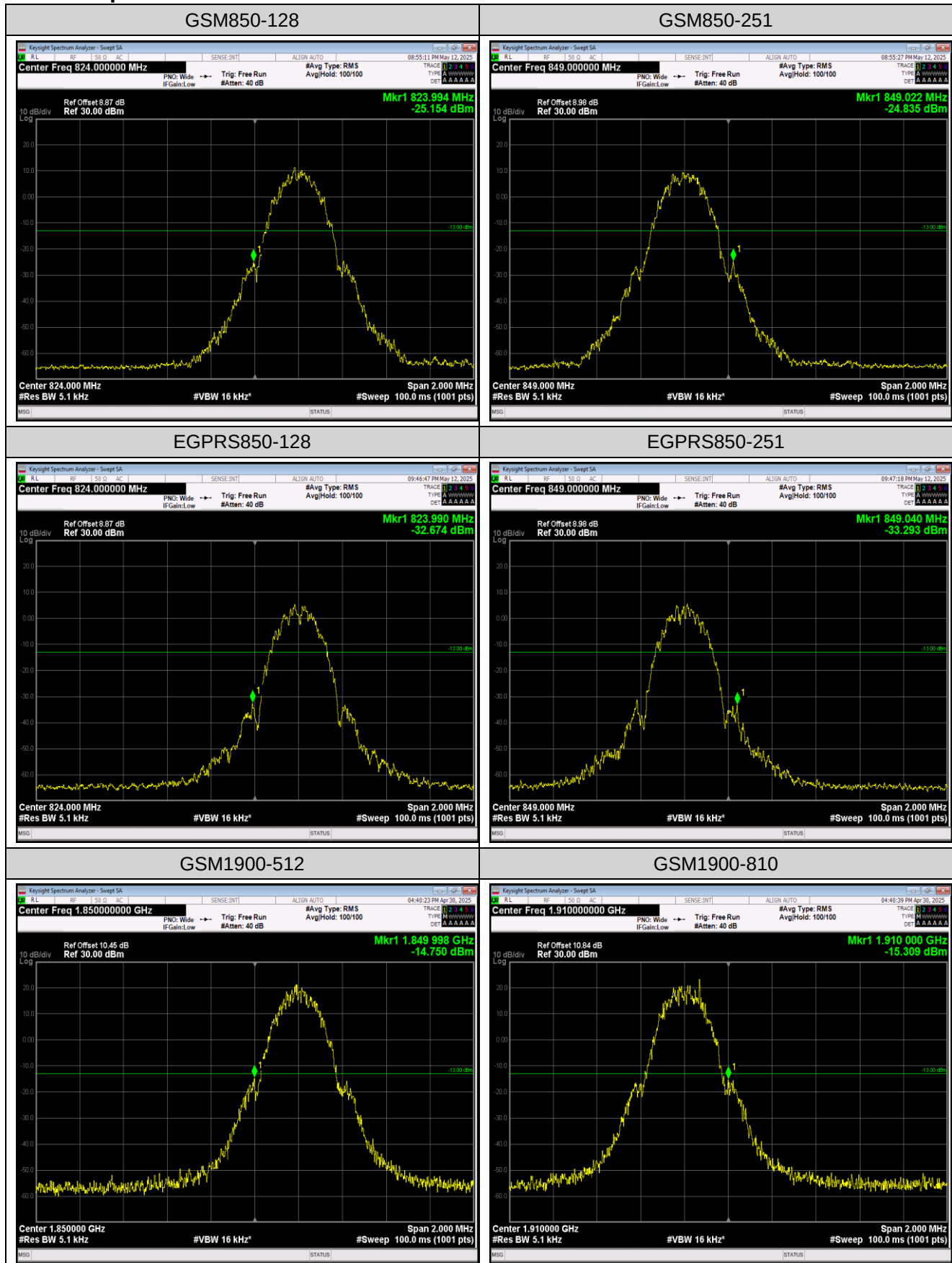


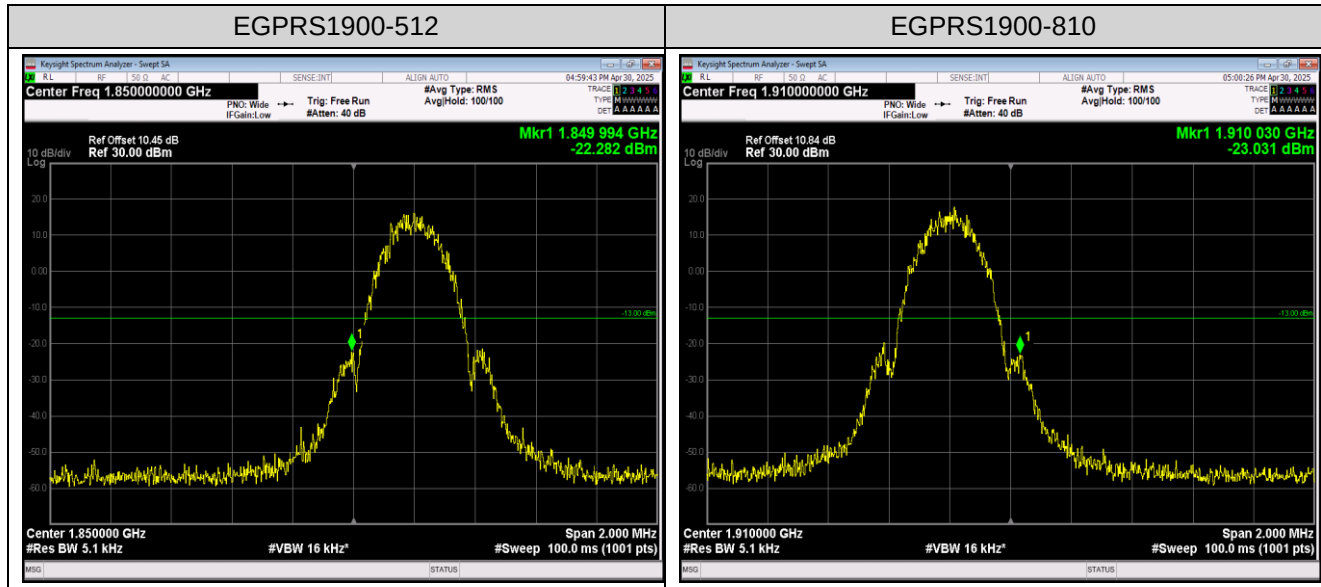
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.99	-25.15	-13	PASS
GSM850	251	5	849.02	-24.83	-13	PASS
EGPRS850	128	8	823.99	-32.67	-13	PASS
EGPRS850	251	8	849.04	-33.29	-13	PASS
GSM1900	512	0	1850.00	-14.75	-13	PASS
GSM1900	810	0	1910.00	-15.31	-13	PASS
EGPRS1900	512	2	1849.99	-22.28	-13	PASS
EGPRS1900	810	2	1910.03	-23.03	-13	PASS

Test Graphs





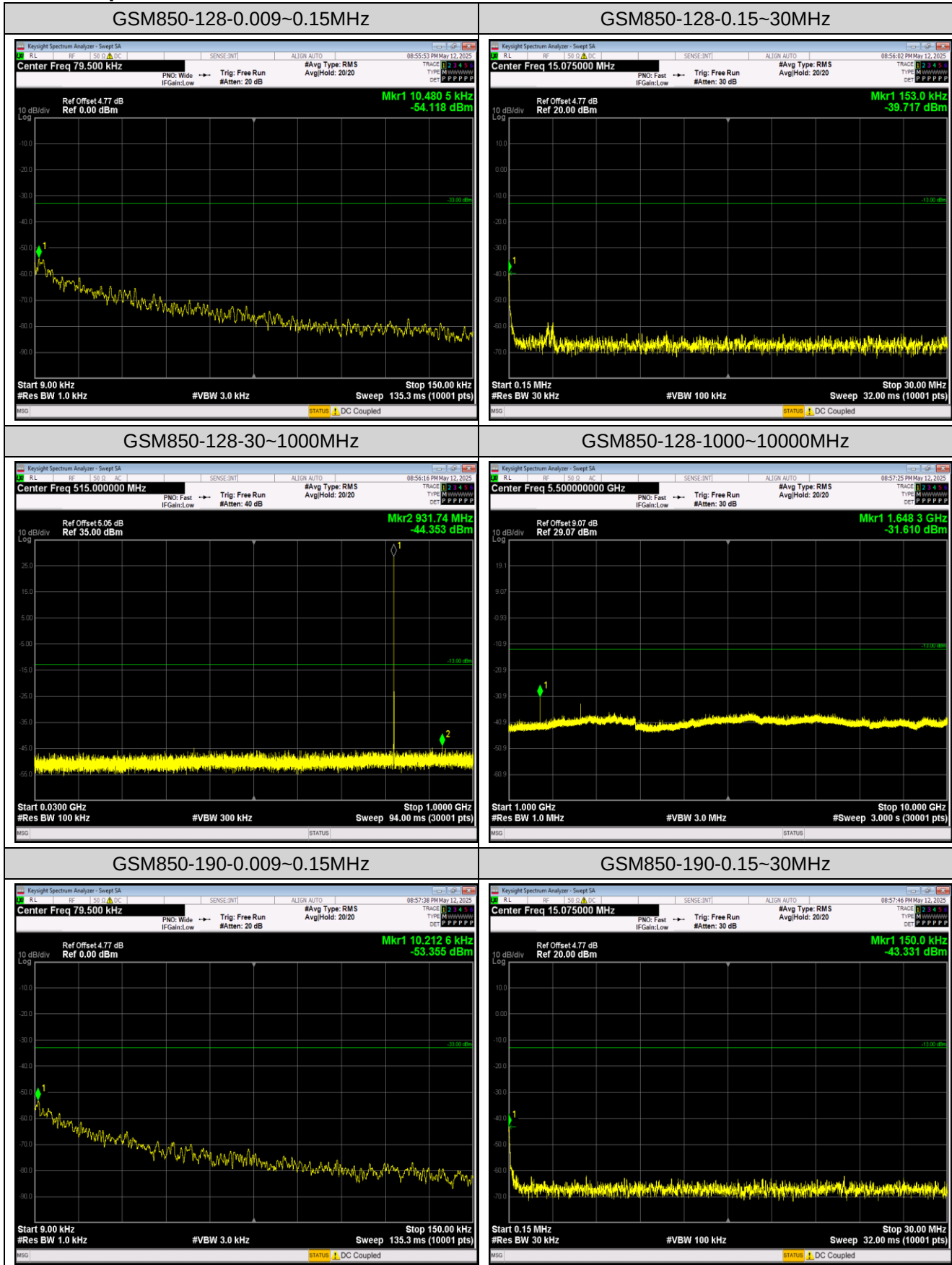
Appendix E: Conducted Spurious Emission

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	-54.12	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-39.72	-13	PASS
GSM850	128	5	30~1000MHz	931.74	-44.35	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-31.61	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-53.36	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-43.33	-13	PASS
GSM850	190	5	30~1000MHz	950.98	-44.45	-13	PASS
GSM850	190	5	1000~10000MHz	1673.5	-31.98	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.05	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-41.55	-13	PASS
GSM850	251	5	30~1000MHz	667.65	-44.86	-13	PASS
GSM850	251	5	1000~10000MHz	1697.5	-32.76	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.49	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-42.59	-23	PASS
GSM1900	512	0	30~1000MHz	858.48	-45.85	-13	PASS
GSM1900	512	0	1000~18000MHz	16618.47	-22.34	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-55.26	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-43.18	-23	PASS
GSM1900	661	0	30~1000MHz	830.12	-45.74	-13	PASS
GSM1900	661	0	1000~18000MHz	17017.4	-22.05	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-54.69	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-39.91	-23	PASS
GSM1900	810	0	30~1000MHz	957.61	-46.43	-13	PASS
GSM1900	810	0	1000~18000MHz	17033.27	-22.12	-13	PASS

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

Test Graphs

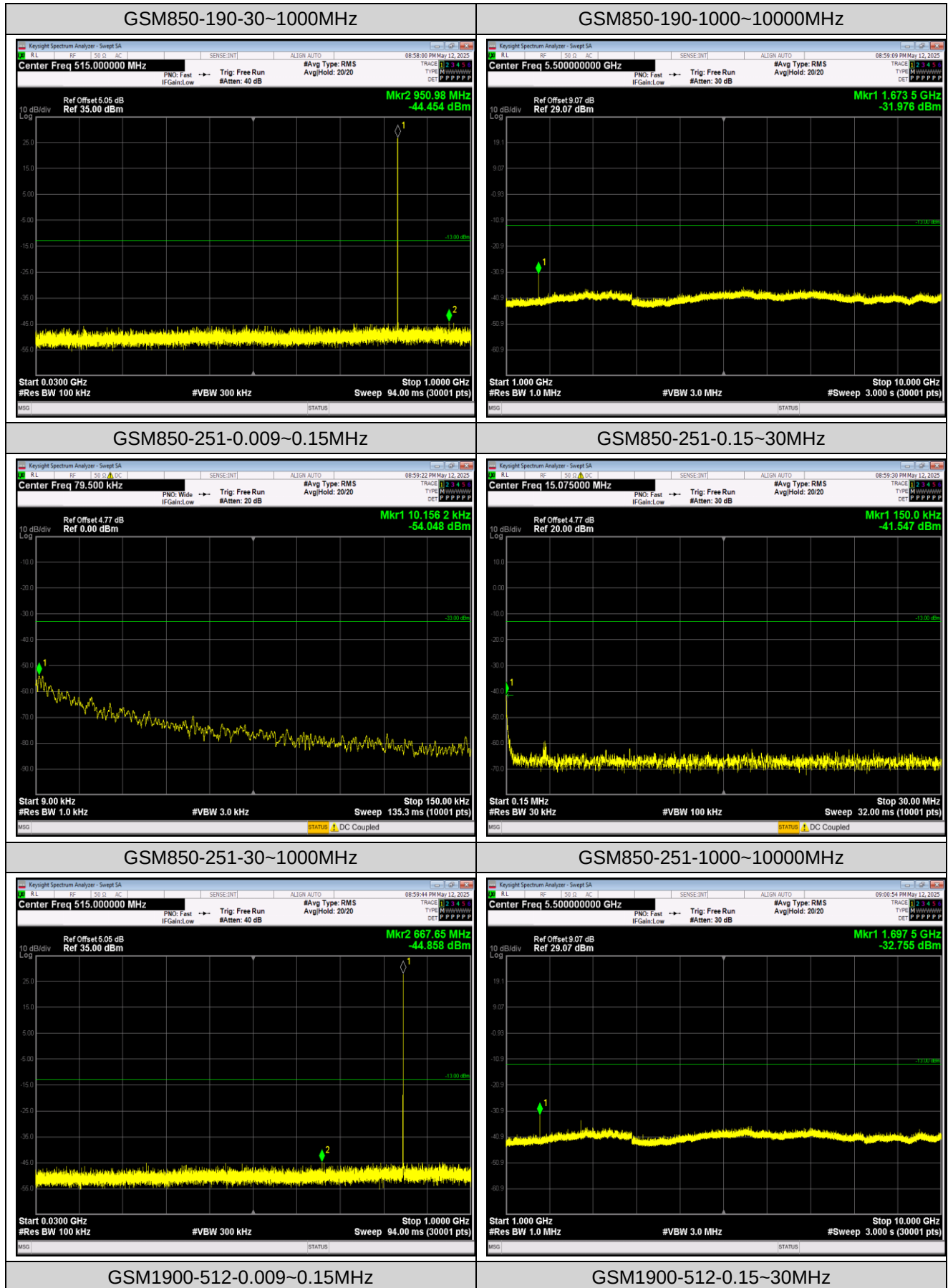


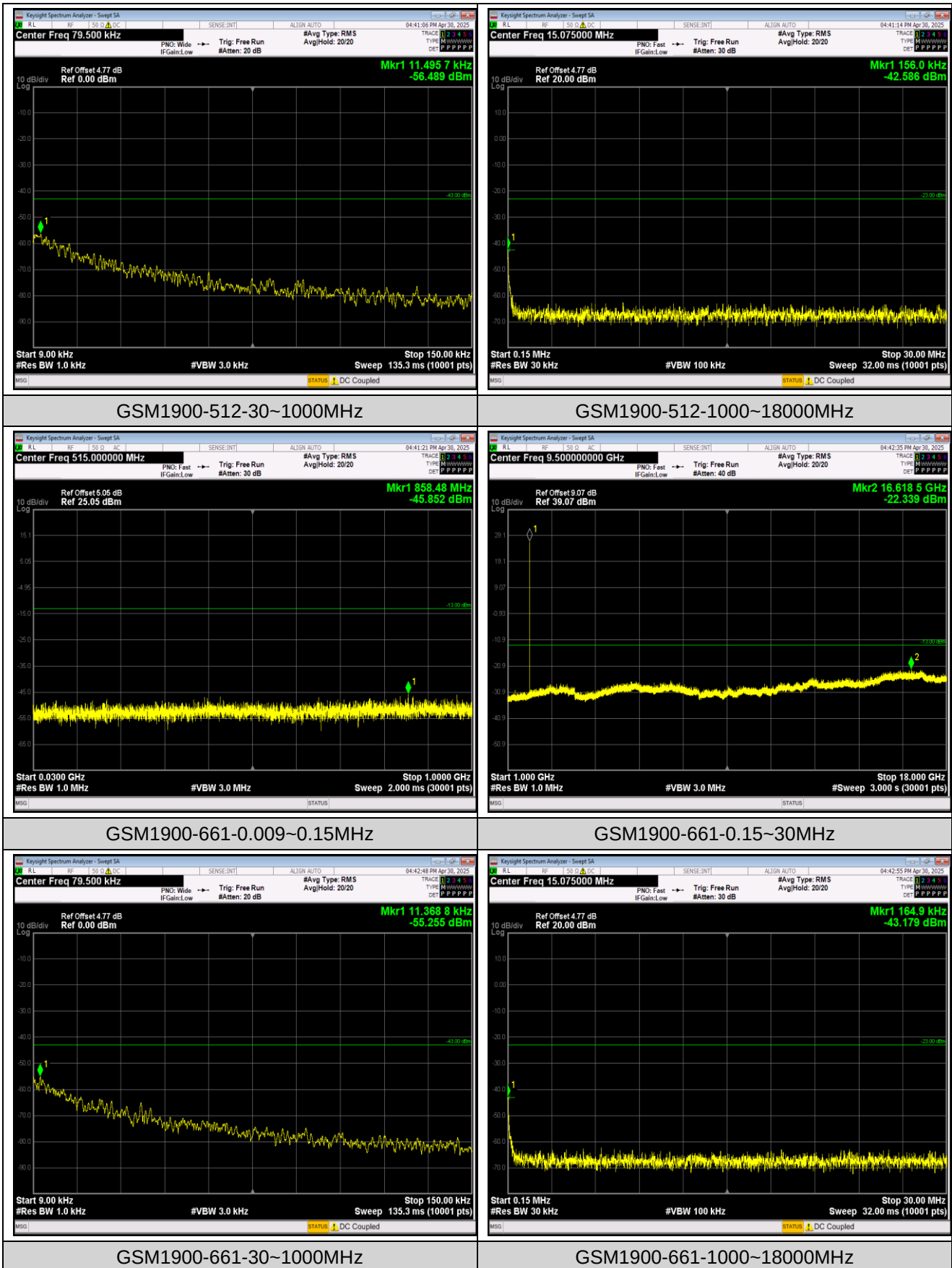
JianYan Testing Group Shenzhen Co., Ltd.

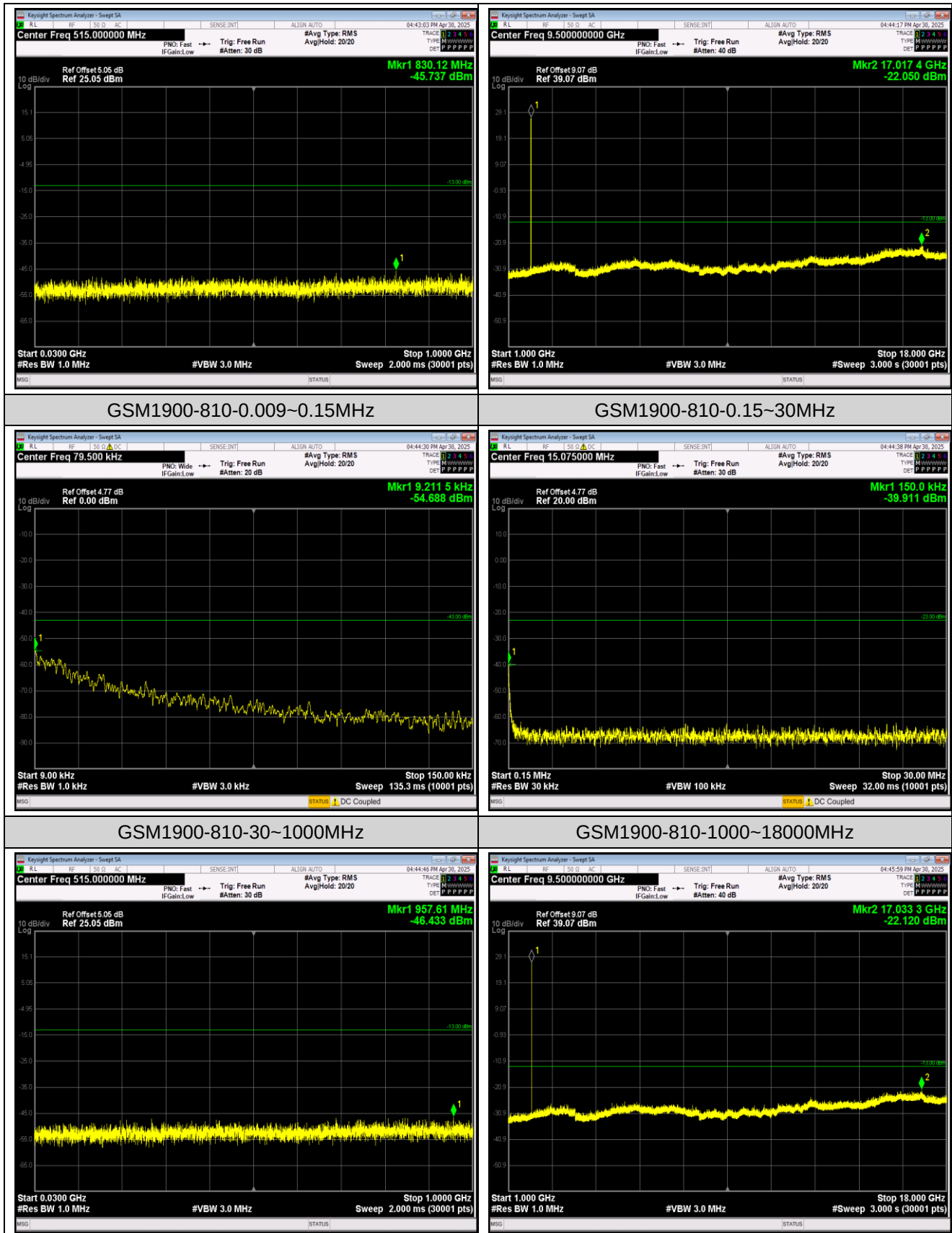
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Appendix F: Frequency Stability

Test Result

Reference Frequency: GSM850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.85	-30	4.26	0.005092	±2.5	Pass
	-20	24.83	0.029680		
	-10	4.88	0.005833		
	0	20.15	0.024086		
	10	4.46	0.005331		
	20	15.30	0.018288		
	30	17.47	0.020882		
	40	2.29	0.002737		
	50	24.80	0.029644		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	4.62	0.005522	±2.5	Pass
	3.85	18.50	0.022113		
	4.42	21.79	0.026046		
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	7.30	0.008726	±2.5	Pass
	-20	5.36	0.006407		
	-10	5.17	0.006180		
	0	7.33	0.008762		
	10	9.04	0.010806		
	20	5.81	0.006945		
	30	19.37	0.023153		
	40	4.26	0.005092		
	50	7.26	0.008678		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	8.88	0.010614	±2.5	Pass
	3.85	9.65	0.011535		
	4.42	7.36	0.008798		
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		
3.85	-30	-4.81	-0.002559	Within authorized band for PCS 1900	Pass
	-20	48.40	0.025745		
	-10	-1.42	-0.000755		
	0	53.66	0.028543		
	10	-3.29	-0.001750		
	20	53.47	0.028441		
	30	1.26	0.000670		
	40	57.53	0.030601		
	50	7.43	0.003952		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	-4.29	-0.002282	Within authorized band for PCS 1900	Pass
	3.85	36.45	0.019388		
	4.42	43.33	0.023048		
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		
3.85	-30	30.90	0.016436	Within authorized band for PCS 1900	Pass
	-20	20.82	0.011074		
	-10	18.63	0.009910		
	0	20.86	0.011096		
	10	3.20	0.001702		
	20	2.32	0.001234		
	30	39.03	0.020761		
	40	6.23	0.003314		
	50	36.10	0.019202		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.30	17.43	0.009271	Within authorized band for PCS 1900	Pass
	3.85	29.38	0.015628		
	4.42	18.24	0.009702		
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

