

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Channel	PCL	Conducted Power (dBm)	Antenna Gain (dBi)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GSM850	128	5	33.20	-3.8	27.25	38.45	PASS
GSM850	190	5	33.37	-3.8	27.42	38.45	PASS
GSM850	251	5	33.09	-3.8	27.14	38.45	PASS
GSM1900	512	0	29.78	-0.1	29.68	33.00	PASS
GSM1900	661	0	29.92	-0.1	29.82	33.00	PASS
GSM1900	810	0	29.34	-0.1	29.24	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	Antenna Gain (dBi)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.18	-3.8	27.23	38.45	PASS
GPRS850	128	5	2	32.44	-3.8	26.49	38.45	PASS
GPRS850	128	5	3	30.69	-3.8	24.74	38.45	PASS
GPRS850	128	5	4	29.59	-3.8	23.64	38.45	PASS
GPRS850	190	5	1	33.32	-3.8	27.37	38.45	PASS
GPRS850	190	5	2	32.58	-3.8	26.63	38.45	PASS
GPRS850	190	5	3	30.84	-3.8	24.89	38.45	PASS
GPRS850	190	5	4	29.75	-3.8	23.80	38.45	PASS
GPRS850	251	5	1	33.04	-3.8	27.09	38.45	PASS
GPRS850	251	5	2	32.32	-3.8	26.37	38.45	PASS
GPRS850	251	5	3	30.59	-3.8	24.64	38.45	PASS
GPRS850	251	5	4	29.52	-3.8	23.57	38.45	PASS
GPRS1900	512	0	1	29.87	-0.1	29.77	33.00	PASS
GPRS1900	512	0	2	29.09	-0.1	28.99	33.00	PASS
GPRS1900	512	0	3	27.29	-0.1	27.19	33.00	PASS
GPRS1900	512	0	4	26.19	-0.1	26.09	33.00	PASS
GPRS1900	661	0	1	30.01	-0.1	29.91	33.00	PASS
GPRS1900	661	0	2	29.27	-0.1	29.17	33.00	PASS
GPRS1900	661	0	3	27.53	-0.1	27.43	33.00	PASS
GPRS1900	661	0	4	26.48	-0.1	26.38	33.00	PASS
GPRS1900	810	0	1	29.48	-0.1	29.38	33.00	PASS
GPRS1900	810	0	2	28.80	-0.1	28.7	33.00	PASS
GPRS1900	810	0	3	27.13	-0.1	27.03	33.00	PASS
GPRS1900	810	0	4	26.12	-0.1	26.02	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	Antenna Gain (dBi)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.90	-3.8	21.95	38.45	PASS
EGPRS850	128	8	2	27.06	-3.8	21.11	38.45	PASS
EGPRS850	128	8	3	25.22	-3.8	19.27	38.45	PASS
EGPRS850	128	8	4	24.15	-3.8	18.20	38.45	PASS
EGPRS850	190	8	1	27.91	-3.8	21.96	38.45	PASS
EGPRS850	190	8	2	27.02	-3.8	21.07	38.45	PASS
EGPRS850	190	8	3	25.27	-3.8	19.32	38.45	PASS
EGPRS850	190	8	4	24.15	-3.8	18.20	38.45	PASS
EGPRS850	251	8	1	28.07	-3.8	22.12	38.45	PASS
EGPRS850	251	8	2	27.24	-3.8	21.29	38.45	PASS
EGPRS850	251	8	3	25.42	-3.8	19.47	38.45	PASS
EGPRS850	251	8	4	24.37	-3.8	18.42	38.45	PASS
EGPRS1900	512	2	1	26.56	-0.1	26.46	33.00	PASS
EGPRS1900	512	2	2	25.66	-0.1	25.56	33.00	PASS
EGPRS1900	512	2	3	23.76	-0.1	23.66	33.00	PASS
EGPRS1900	512	2	4	22.57	-0.1	22.47	33.00	PASS
EGPRS1900	661	2	1	26.81	-0.1	26.71	33.00	PASS
EGPRS1900	661	2	2	25.82	-0.1	25.72	33.00	PASS
EGPRS1900	661	2	3	23.89	-0.1	23.79	33.00	PASS
EGPRS1900	661	2	4	22.83	-0.1	22.73	33.00	PASS
EGPRS1900	810	2	1	26.56	-0.1	26.46	33.00	PASS
EGPRS1900	810	2	2	25.58	-0.1	25.48	33.00	PASS
EGPRS1900	810	2	3	23.60	-0.1	23.5	33.00	PASS
EGPRS1900	810	2	4	22.55	-0.1	22.45	33.00	PASS

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

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

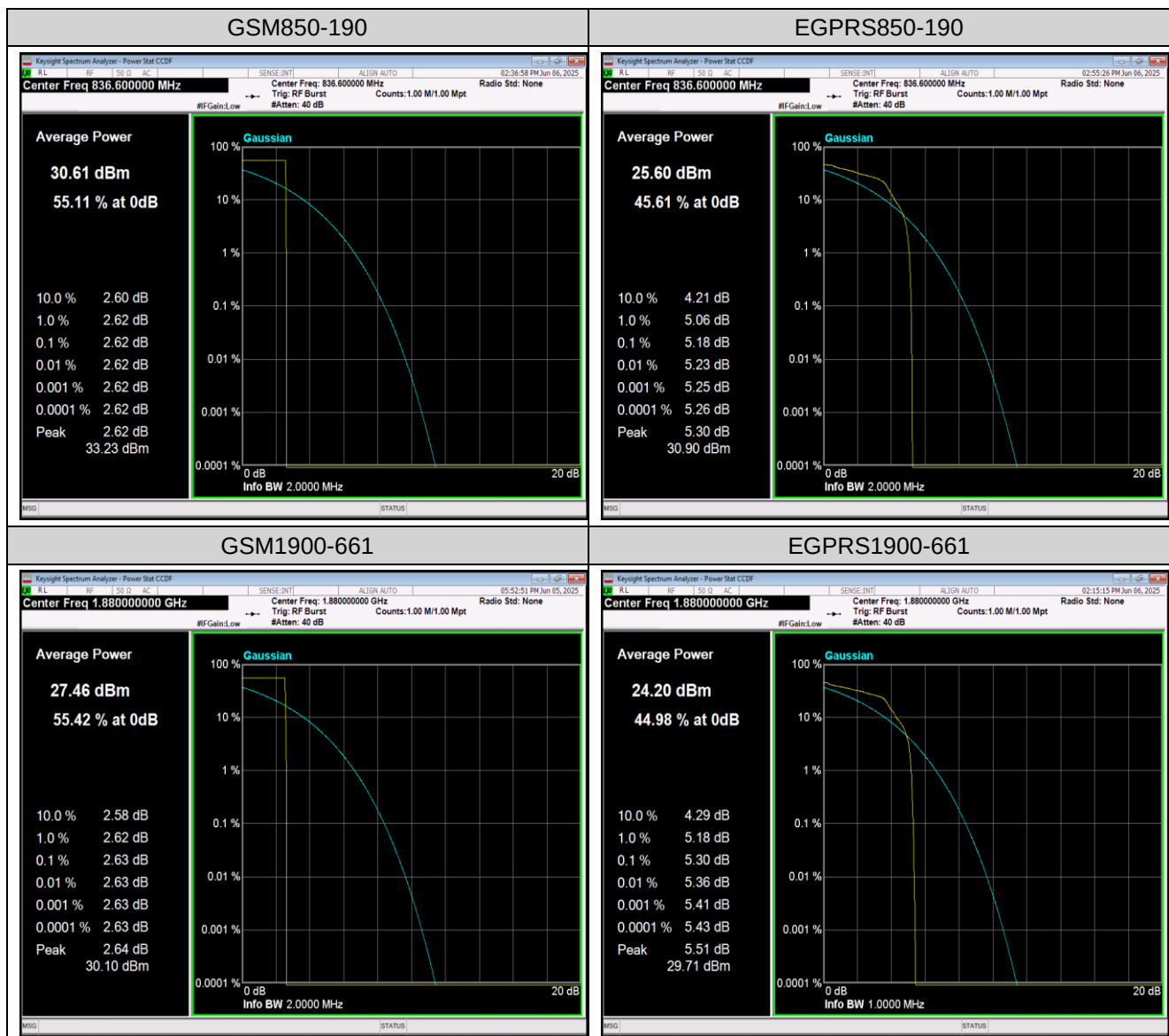
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.62	13	PASS
EGPRS850	190	8	5.18	13	PASS
GSM1900	661	0	2.63	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

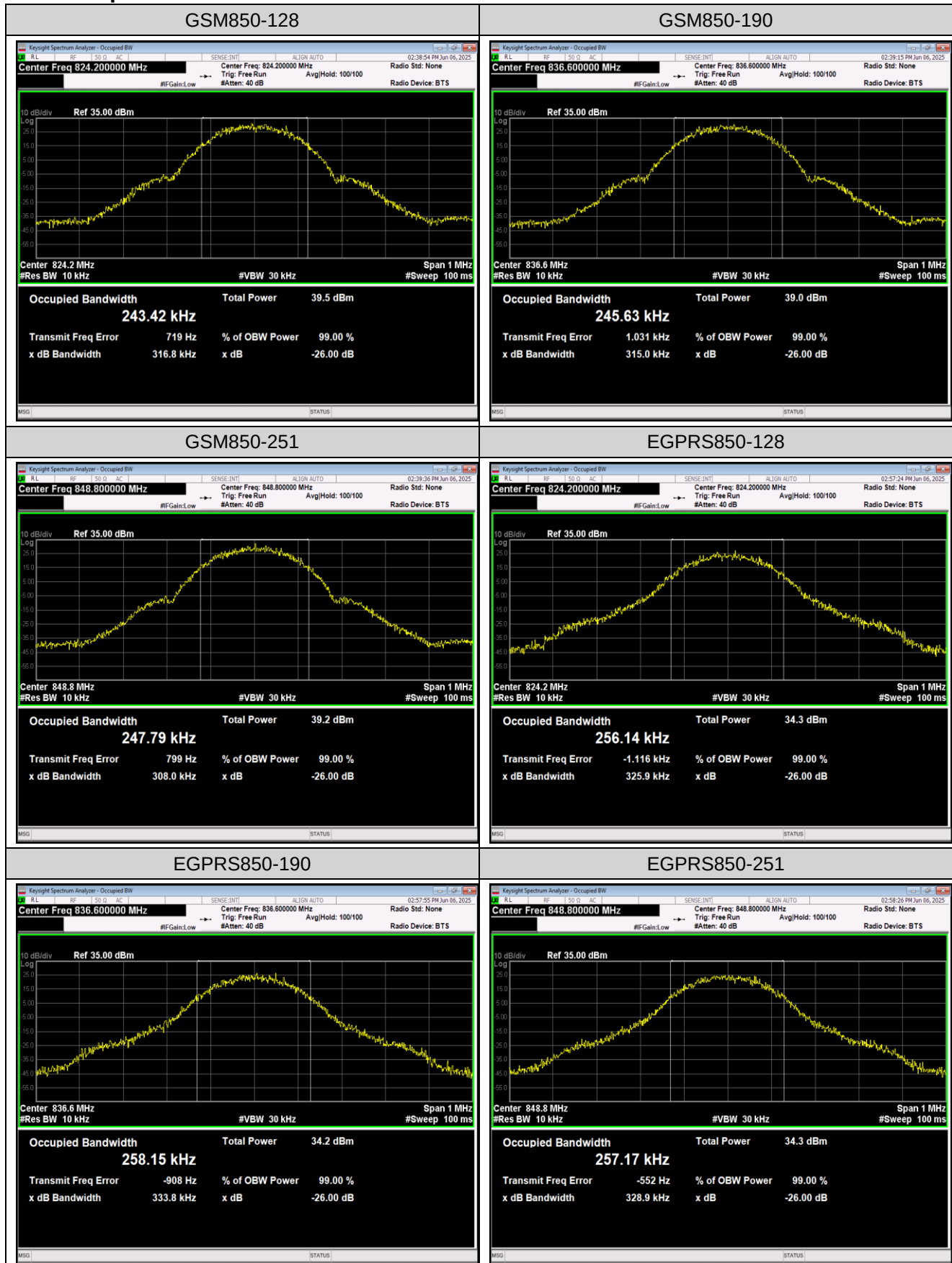


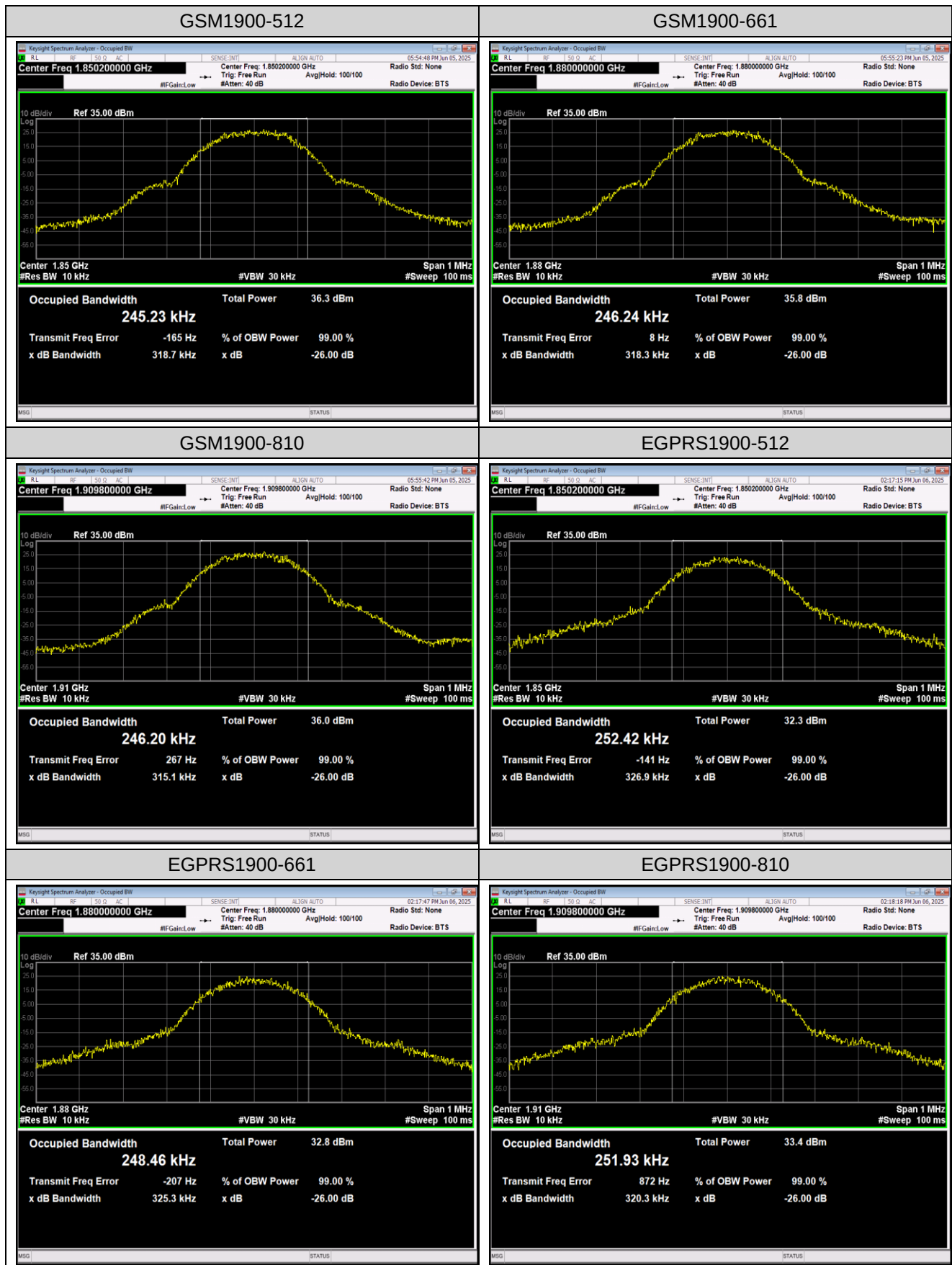
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24342	0.3168	---	PASS
GSM850	190	5	0.24563	0.3150	---	PASS
GSM850	251	5	0.24779	0.3080	---	PASS
EGPRS850	128	8	0.25614	0.3259	---	PASS
EGPRS850	190	8	0.25815	0.3338	---	PASS
EGPRS850	251	8	0.25717	0.3289	---	PASS
GSM1900	512	0	0.24523	0.3187	---	PASS
GSM1900	661	0	0.24624	0.3183	---	PASS
GSM1900	810	0	0.24620	0.3151	---	PASS
EGPRS1900	512	2	0.25242	0.3269	---	PASS
EGPRS1900	661	2	0.24846	0.3253	---	PASS
EGPRS1900	810	2	0.25193	0.3203	---	PASS

Test Graphs





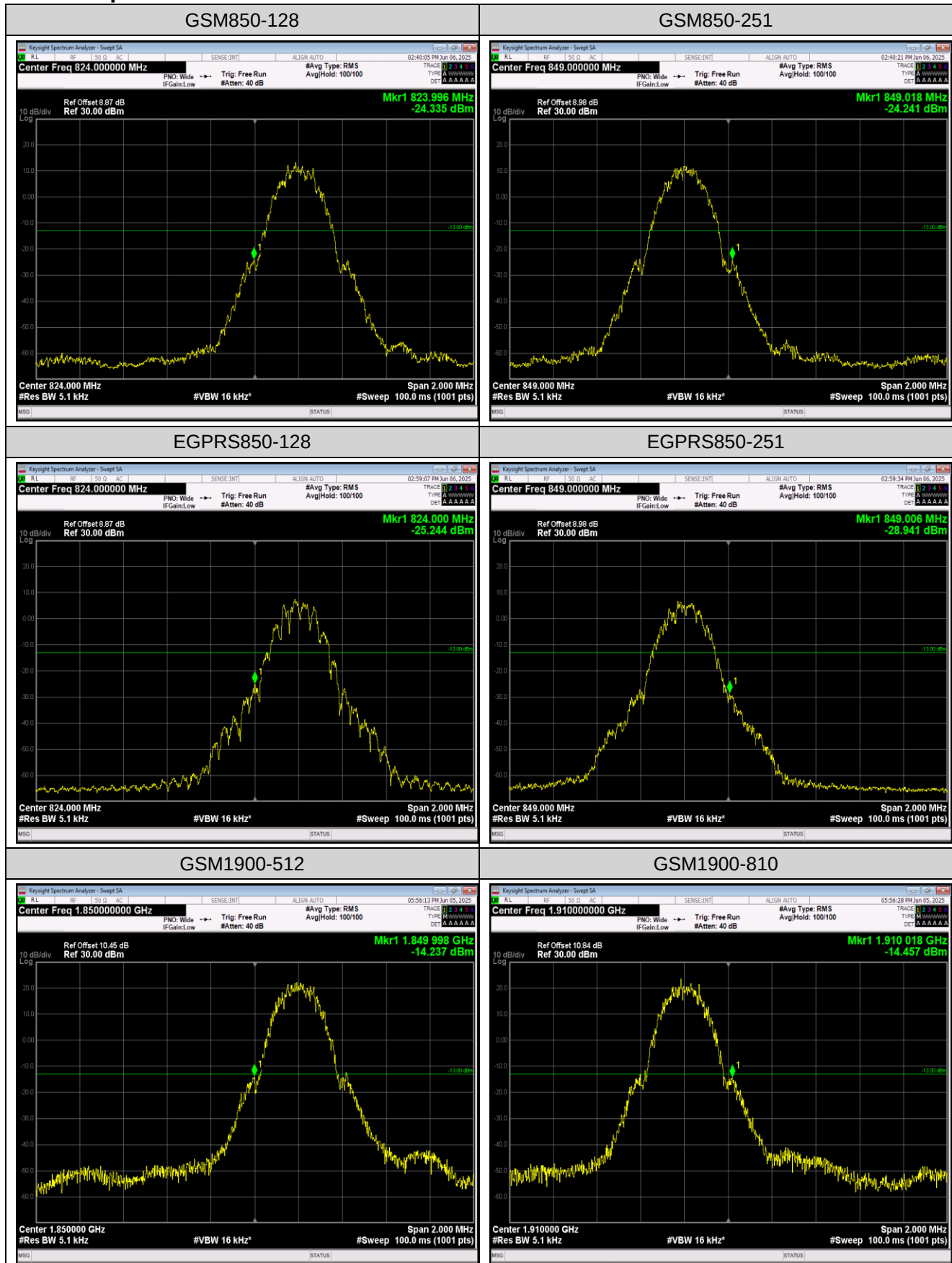
Appendix D: Band Edge

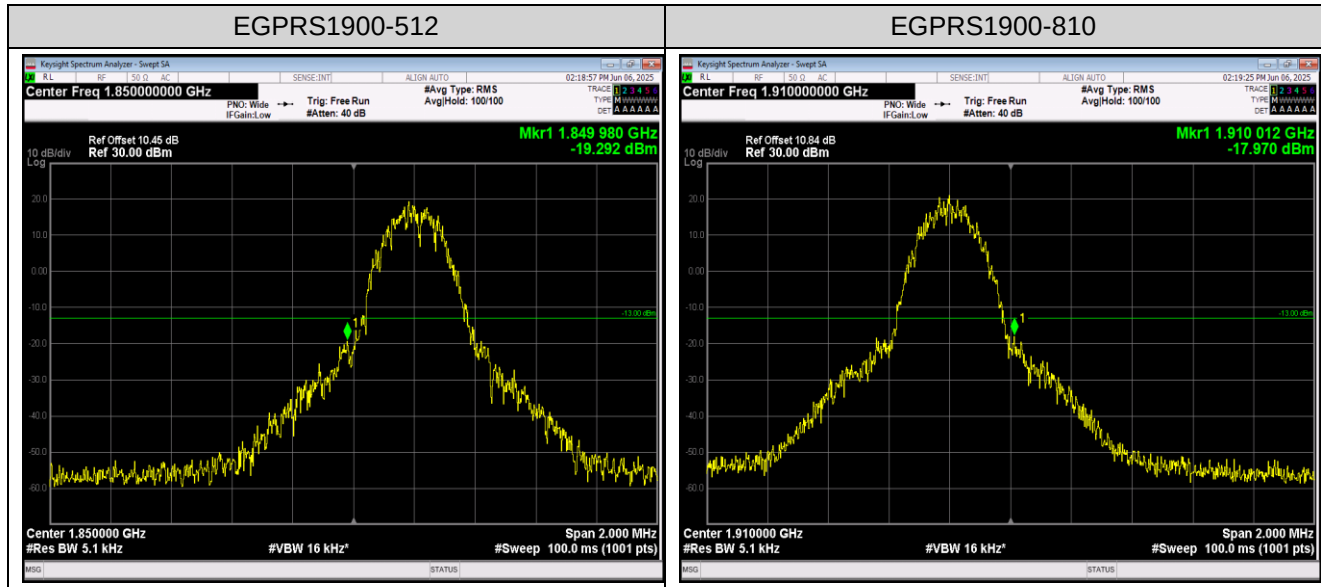
Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-24.33	-13	PASS
GSM850	251	5	849.02	-24.24	-13	PASS
EGPRS850	128	8	824.00	-25.24	-13	PASS
EGPRS850	251	8	849.01	-28.94	-13	PASS
GSM1900	512	0	1850.00	-14.24	-13	PASS
GSM1900	810	0	1910.02	-14.46	-13	PASS
EGPRS1900	512	2	1849.98	-19.29	-13	PASS
EGPRS1900	810	2	1910.01	-17.97	-13	PASS

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

Test Graphs





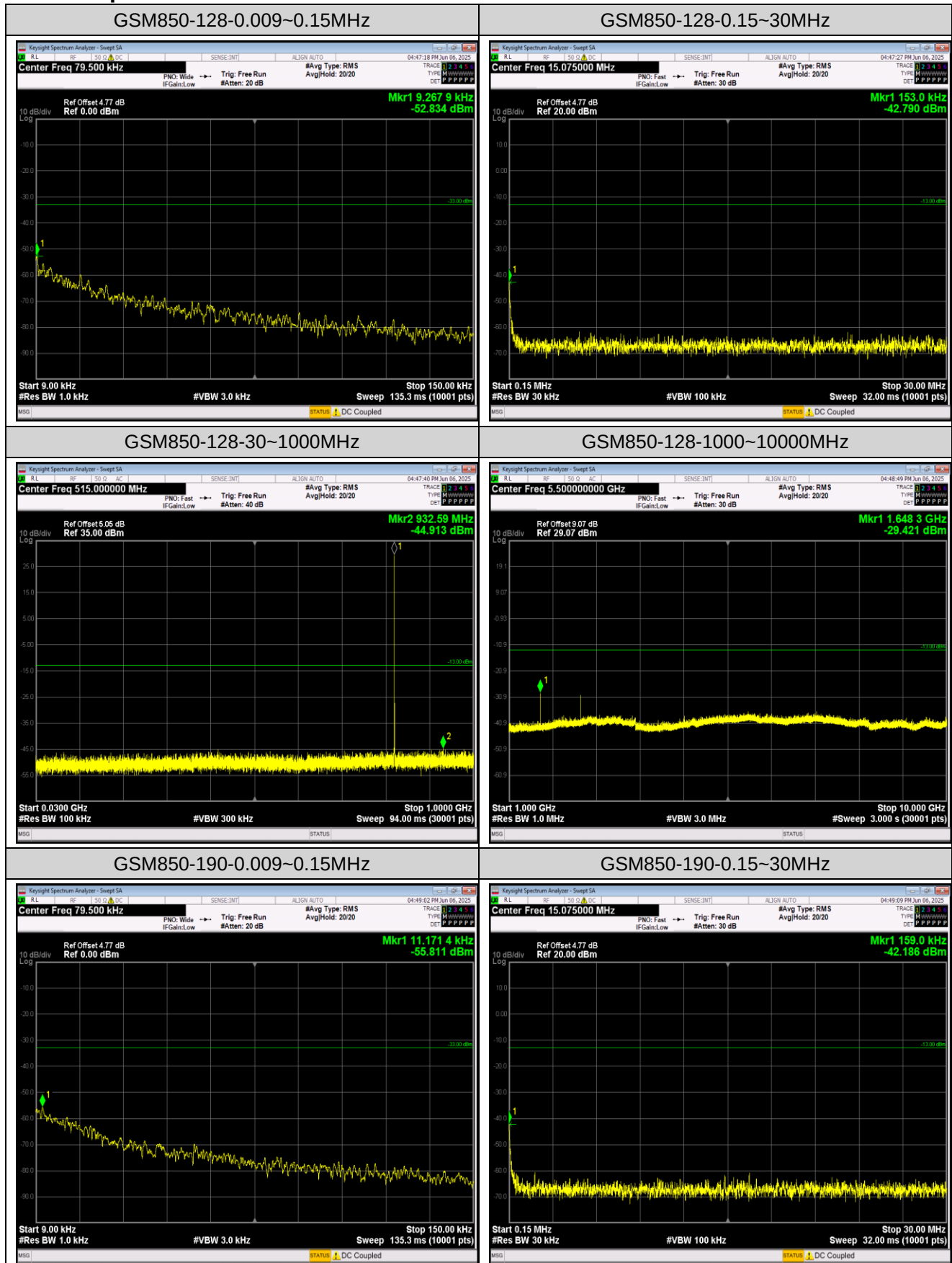
Appendix E: Conducted Spurious Emission

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	-52.83	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-42.79	-13	PASS
GSM850	128	5	30~1000MHz	932.59	-44.91	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-29.42	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.81	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-42.19	-13	PASS
GSM850	190	5	30~1000MHz	491.4	-45.24	-13	PASS
GSM850	190	5	1000~10000MHz	2510.2	-30.61	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-53.18	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-42.27	-13	PASS
GSM850	251	5	30~1000MHz	983.9	-44.2	-13	PASS
GSM850	251	5	1000~10000MHz	2546.2	-30.66	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-54.8	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-44.03	-23	PASS
GSM1900	512	0	30~1000MHz	990.07	-46.27	-13	PASS
GSM1900	512	0	1000~18000MHz	16964.7	-21.87	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-53.34	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-42.67	-23	PASS
GSM1900	661	0	30~1000MHz	807.33	-46.15	-13	PASS
GSM1900	661	0	1000~18000MHz	15657.97	-22.29	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-54.57	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-40.96	-23	PASS
GSM1900	810	0	30~1000MHz	798.6	-45.68	-13	PASS
GSM1900	810	0	1000~18000MHz	15736.17	-21.99	-13	PASS

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

Test Graphs

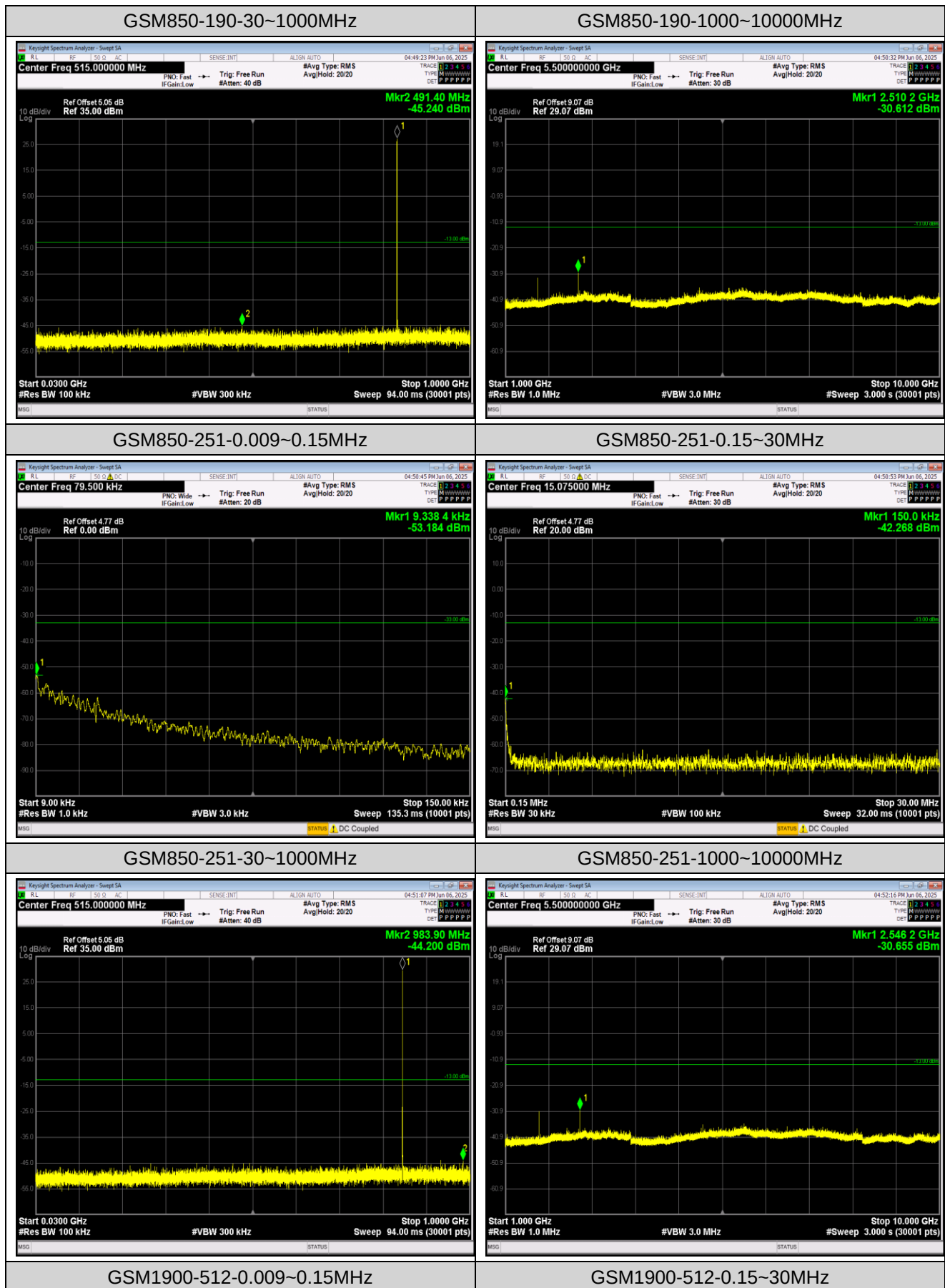


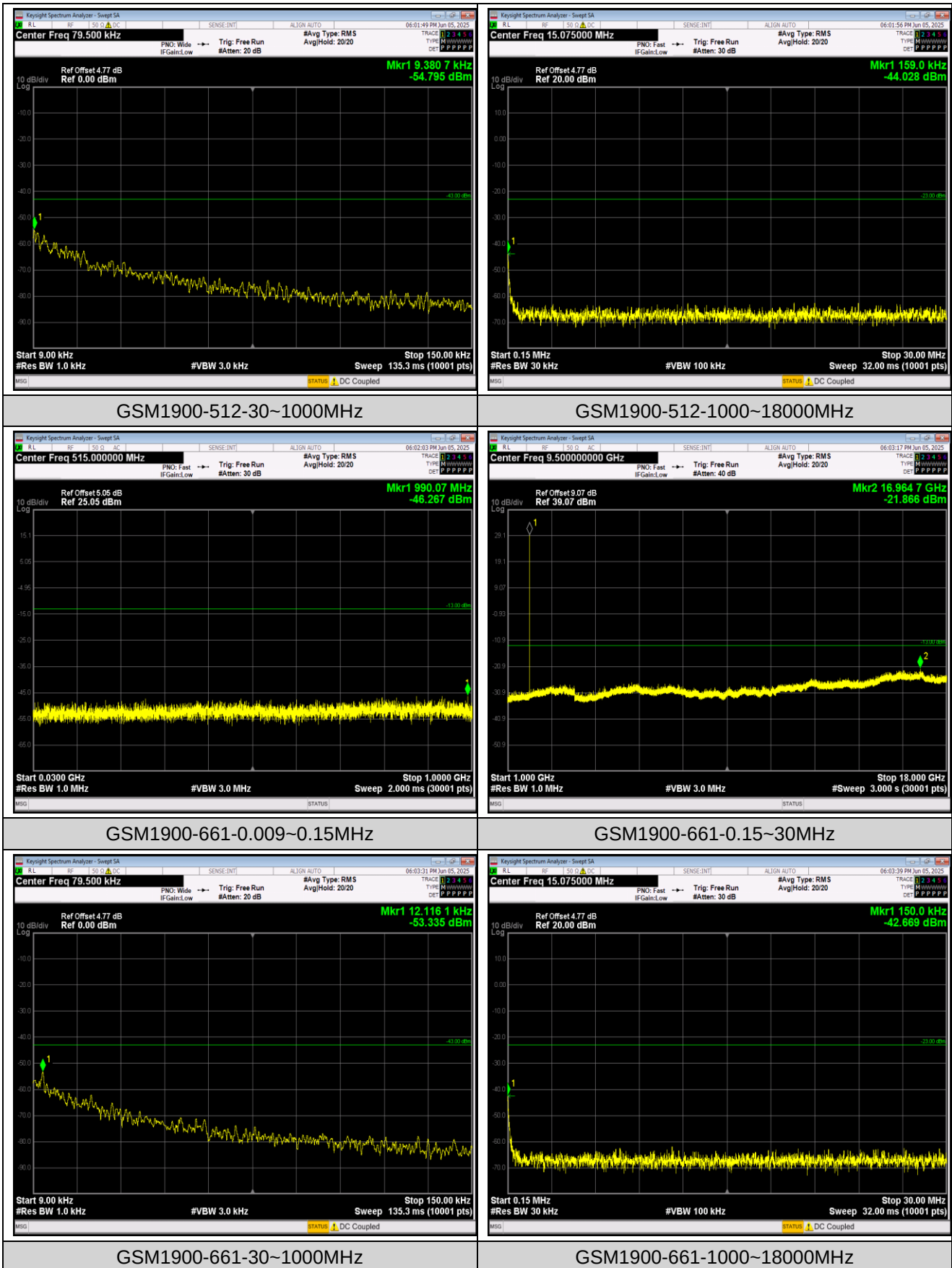
JianYan Testing Group Shenzhen Co., Ltd.

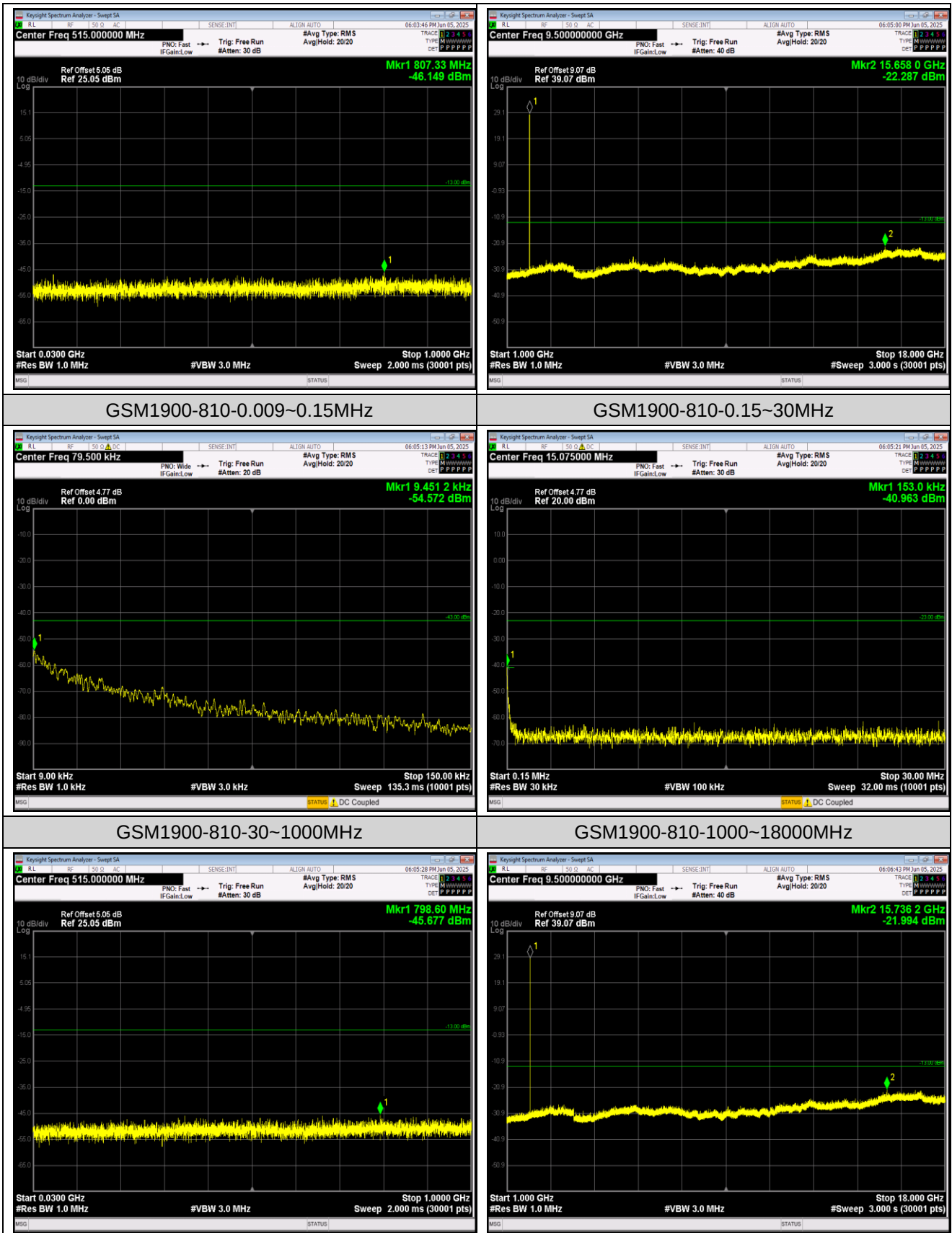
No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Project No.: JYTSZR2504112







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		
3.87	-30	-0.29	-0.000347	±2.5	Pass
	-20	-2.32	-0.002773		
	-10	0.84	0.001004		
	0	2.39	0.002857		
	10	-0.74	-0.000885		
	20	-3.87	-0.004626		
	30	-1.29	-0.001542		
	40	-1.61	-0.001924		
	50	-5.62	-0.006718		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-2.16	-0.002582	±2.5	Pass
	3.87	-3.29	-0.003933		
	4.45	-1.55	-0.001853		
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		
3.87	-30	-4.36	-0.005212	±2.5	Pass
	-20	-6.13	-0.007327		
	-10	-3.75	-0.004482		
	0	-2.03	-0.002426		
	10	-10.30	-0.012312		
	20	-3.10	-0.003705		
	30	-1.61	-0.001924		
	40	0.74	0.000885		
	50	1.07	0.001279		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-5.78	-0.006909	±2.5	Pass
	3.87	-4.58	-0.005475		
	4.45	-1.97	-0.002355		
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		
3.87	-30	-12.88	-0.006851	Within authorized band for PCS 1900	Pass
	-20	-10.30	-0.005479		
	-10	-4.62	-0.002457		
	0	-6.59	-0.003505		
	10	-3.03	-0.001612		
	20	5.26	0.002798		
	30	5.91	0.003144		
	40	-2.36	-0.001255		
	50	1.07	0.000569		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-3.75	-0.001995	Within authorized band for PCS 1900	Pass
	3.87	-4.10	-0.002181		
	4.45	-4.49	-0.002388		
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		
3.87	-30	2.81	0.001495	Within authorized band for PCS 1900	Pass
	-20	0.13	0.000069		
	-10	-1.29	-0.000686		
	0	-0.13	-0.000069		
	10	-3.91	-0.002080		
	20	8.88	0.004723		
	30	4.62	0.002457		
	40	5.97	0.003176		
	50	-1.49	-0.000793		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-0.36	-0.000191	Within authorized band for PCS 1900	Pass
	3.87	-2.20	-0.001170		
	4.45	1.74	0.000926		
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

