

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	33.03	26.5	38.45	PASS
GSM850	190	5	33.19	26.66	38.45	PASS
GSM850	251	5	33.16	26.63	38.45	PASS
GSM1900	512	0	29.70	27.01	33.00	PASS
GSM1900	661	0	29.80	27.11	33.00	PASS
GSM1900	810	0	29.44	26.75	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.04	26.51	38.45	PASS
GPRS850	128	5	2	31.03	24.5	38.45	PASS
GPRS850	128	5	3	29.09	22.56	38.45	PASS
GPRS850	128	5	4	27.04	20.51	38.45	PASS
GPRS850	190	5	1	33.19	26.66	38.45	PASS
GPRS850	190	5	2	31.20	24.67	38.45	PASS
GPRS850	190	5	3	29.26	22.73	38.45	PASS
GPRS850	190	5	4	27.20	20.67	38.45	PASS
GPRS850	251	5	1	33.16	26.63	38.45	PASS
GPRS850	251	5	2	31.19	24.66	38.45	PASS
GPRS850	251	5	3	29.28	22.75	38.45	PASS
GPRS850	251	5	4	27.24	20.71	38.45	PASS
GPRS1900	512	0	1	29.72	27.03	33.00	PASS
GPRS1900	512	0	2	27.73	25.04	33.00	PASS
GPRS1900	512	0	3	25.94	23.25	33.00	PASS
GPRS1900	512	0	4	23.89	21.2	33.00	PASS
GPRS1900	661	0	1	29.85	27.16	33.00	PASS
GPRS1900	661	0	2	27.62	24.93	33.00	PASS
GPRS1900	661	0	3	25.93	23.24	33.00	PASS
GPRS1900	661	0	4	23.89	21.2	33.00	PASS
GPRS1900	810	0	1	29.49	26.8	33.00	PASS
GPRS1900	810	0	2	27.17	24.48	33.00	PASS
GPRS1900	810	0	3	25.60	22.91	33.00	PASS
GPRS1900	810	0	4	23.62	20.93	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	26.54	20.01	38.45	PASS
EGPRS850	128	8	2	25.63	19.1	38.45	PASS
EGPRS850	128	8	3	23.53	17	38.45	PASS
EGPRS850	128	8	4	21.14	14.61	38.45	PASS
EGPRS850	190	8	1	26.59	20.06	38.45	PASS
EGPRS850	190	8	2	25.70	19.17	38.45	PASS
EGPRS850	190	8	3	23.59	17.06	38.45	PASS
EGPRS850	190	8	4	21.17	14.64	38.45	PASS
EGPRS850	251	8	1	26.68	20.15	38.45	PASS
EGPRS850	251	8	2	25.73	19.2	38.45	PASS
EGPRS850	251	8	3	23.64	17.11	38.45	PASS
EGPRS850	251	8	4	21.24	14.71	38.45	PASS
EGPRS1900	512	2	1	26.39	23.7	33.00	PASS
EGPRS1900	512	2	2	24.71	22.02	33.00	PASS
EGPRS1900	512	2	3	22.77	20.08	33.00	PASS
EGPRS1900	512	2	4	20.03	17.34	33.00	PASS
EGPRS1900	661	2	1	26.66	23.97	33.00	PASS
EGPRS1900	661	2	2	25.05	22.36	33.00	PASS
EGPRS1900	661	2	3	23.10	20.41	33.00	PASS
EGPRS1900	661	2	4	20.60	17.91	33.00	PASS
EGPRS1900	810	2	1	26.39	23.7	33.00	PASS
EGPRS1900	810	2	2	24.66	21.97	33.00	PASS
EGPRS1900	810	2	3	22.64	19.95	33.00	PASS
EGPRS1900	810	2	4	20.06	17.37	33.00	PASS

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

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

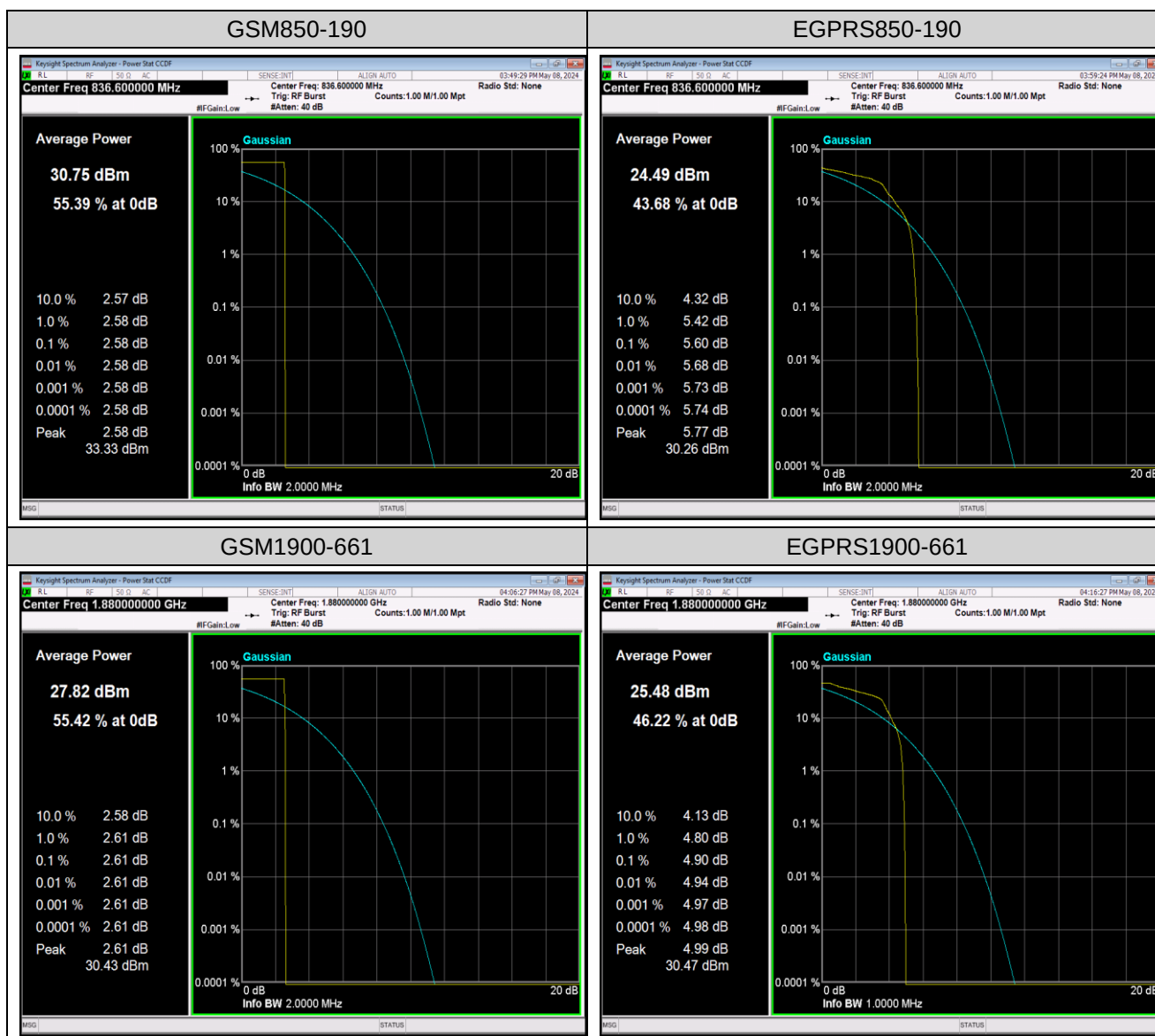
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.58	13	PASS
EGPRS850	190	8	5.6	13	PASS
GSM1900	661	0	2.61	13	PASS
EGPRS1900	661	2	4.9	13	PASS

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

Test Graphs

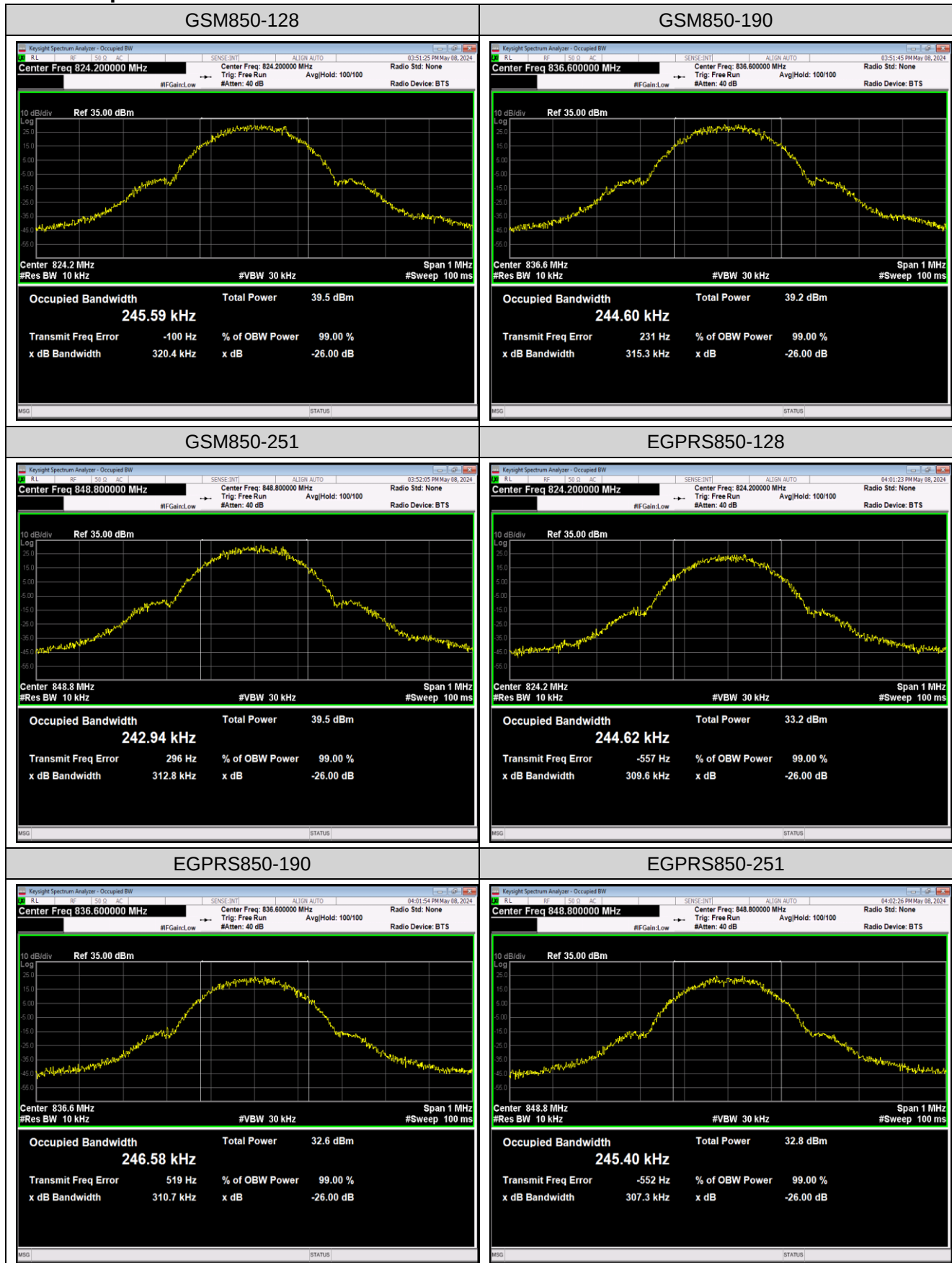


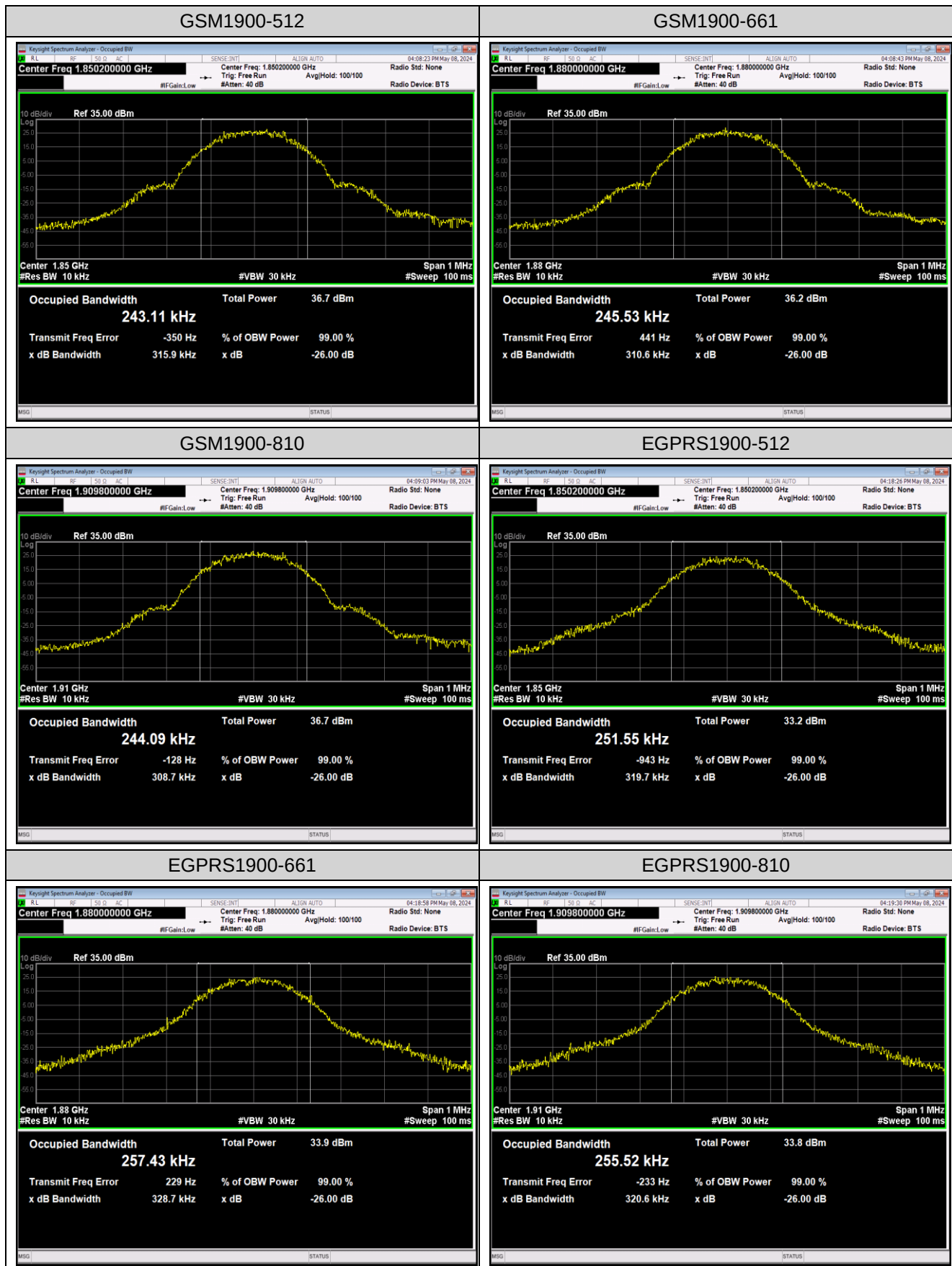
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24559	0.3204	---	PASS
GSM850	190	5	0.24460	0.3153	---	PASS
GSM850	251	5	0.24294	0.3128	---	PASS
EGPRS850	128	8	0.24462	0.3096	---	PASS
EGPRS850	190	8	0.24658	0.3107	---	PASS
EGPRS850	251	8	0.24540	0.3073	---	PASS
GSM1900	512	0	0.24311	0.3159	---	PASS
GSM1900	661	0	0.24553	0.3106	---	PASS
GSM1900	810	0	0.24409	0.3087	---	PASS
EGPRS1900	512	2	0.25155	0.3197	---	PASS
EGPRS1900	661	2	0.25743	0.3287	---	PASS
EGPRS1900	810	2	0.25552	0.3206	---	PASS

Test Graphs



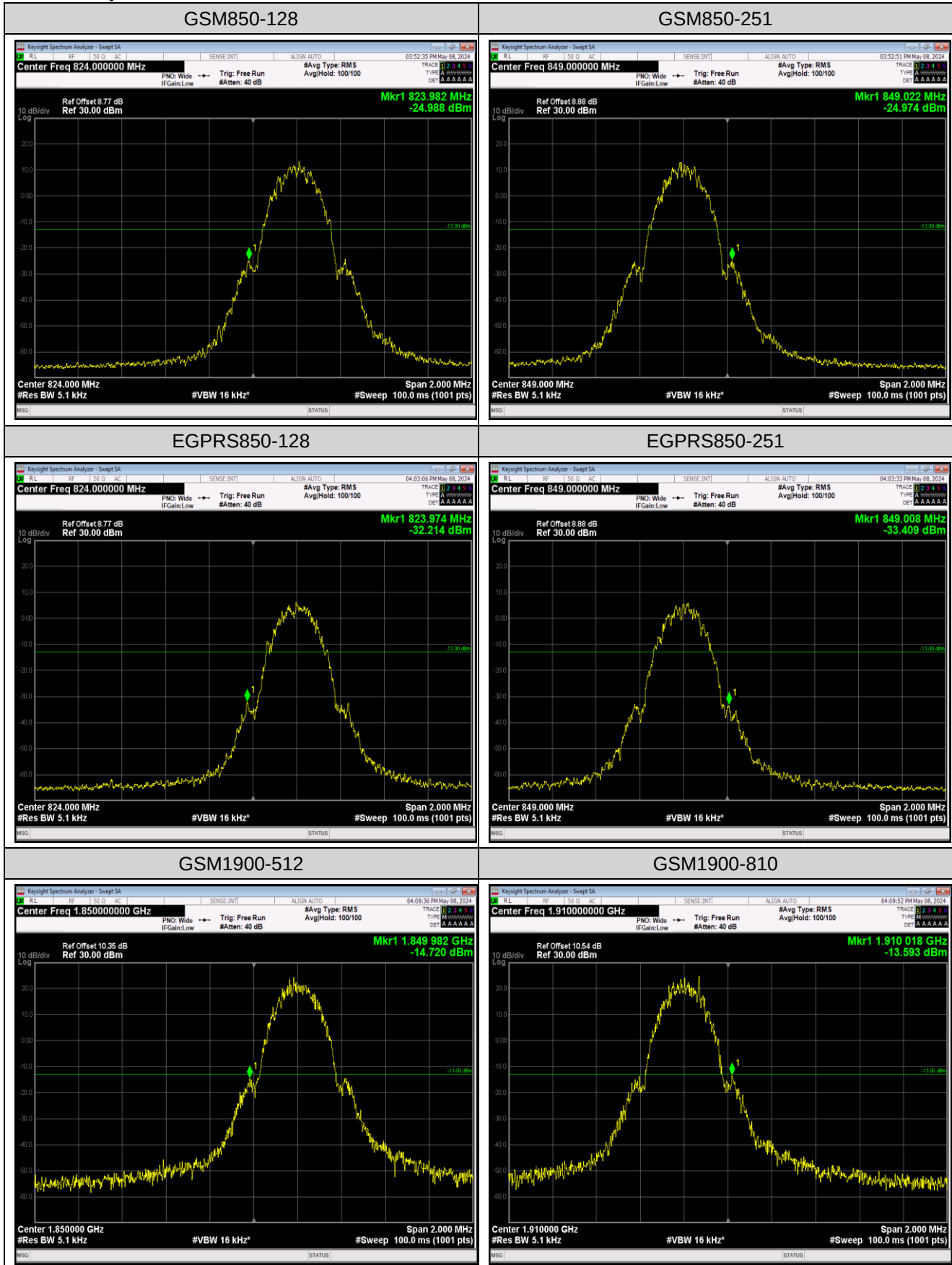


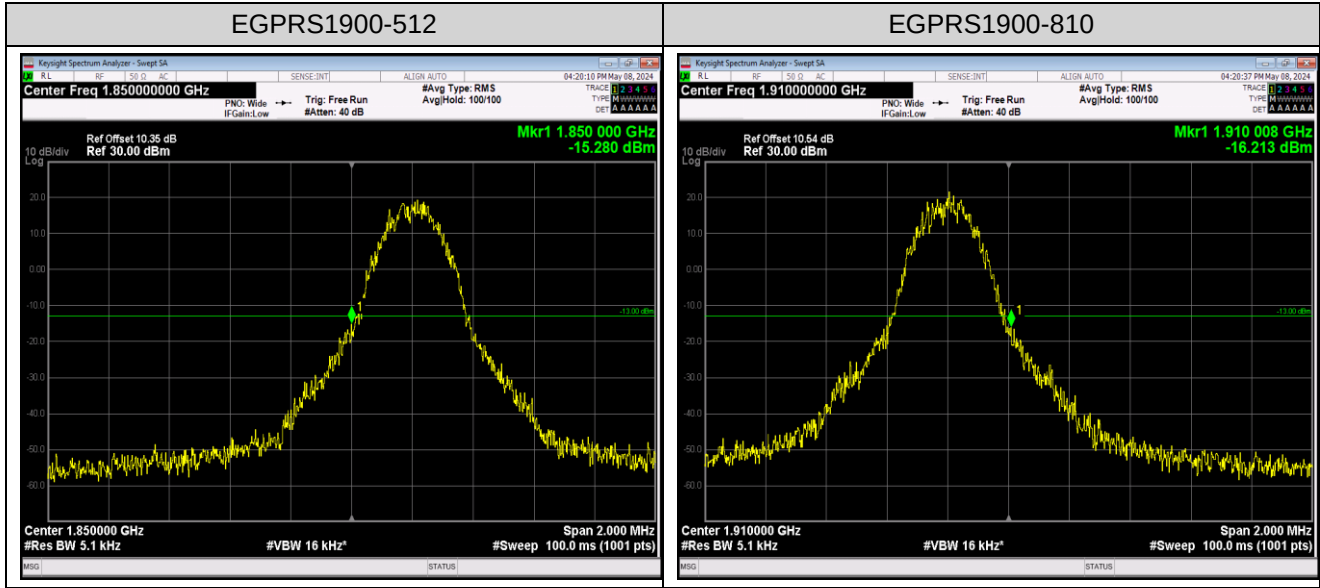
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-24.99	-13	PASS
GSM850	251	5	849.02	-24.97	-13	PASS
EGPRS850	128	8	823.97	-32.21	-13	PASS
EGPRS850	251	8	849.01	-33.41	-13	PASS
GSM1900	512	0	1849.98	-14.72	-13	PASS
GSM1900	810	0	1910.02	-13.59	-13	PASS
EGPRS1900	512	2	1850.00	-15.28	-13	PASS
EGPRS1900	810	2	1910.01	-16.21	-13	PASS

Test Graphs





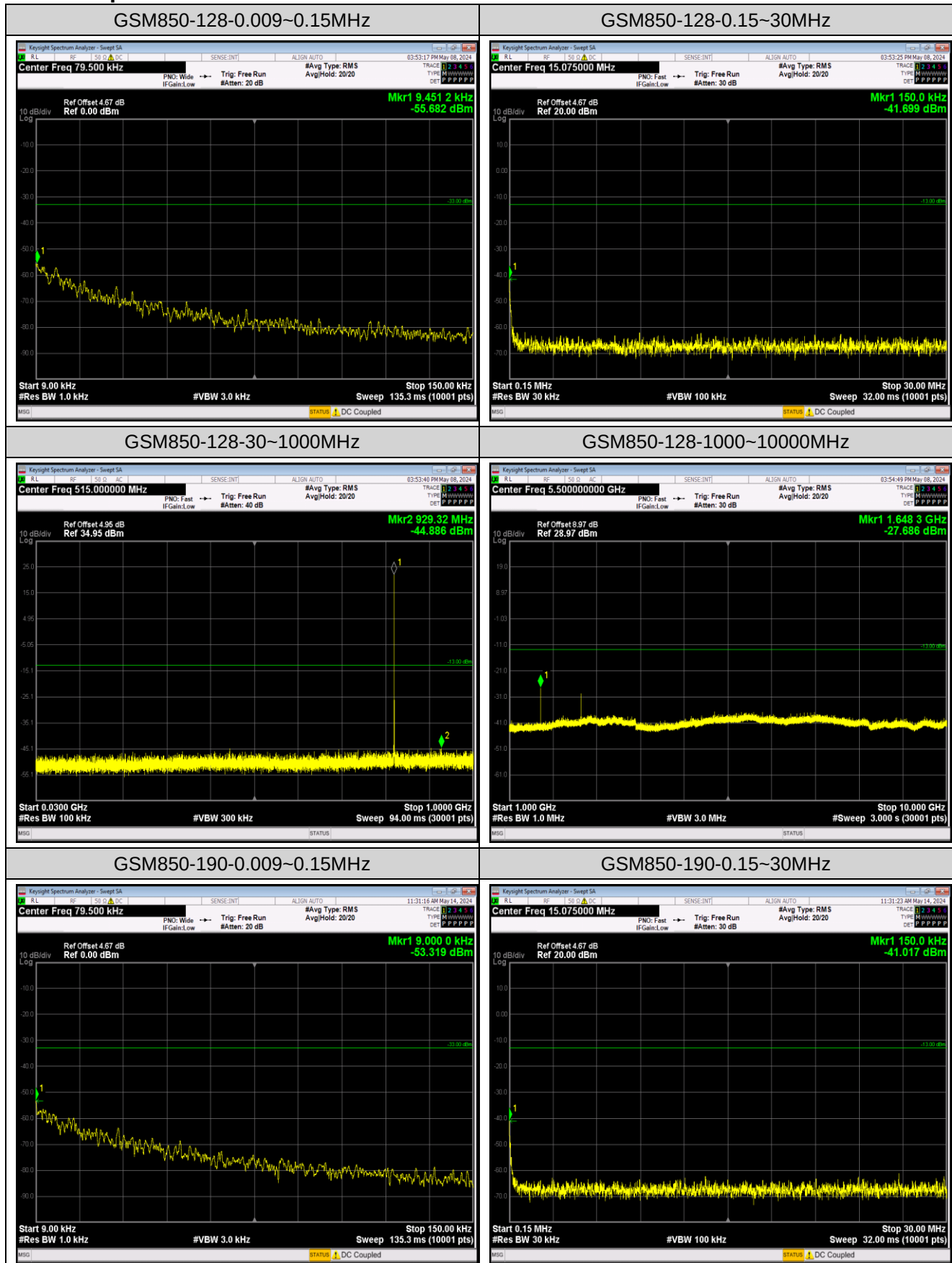
Appendix E: Conducted Spurious Emission

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	-55.68	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-41.7	-13	PASS
GSM850	128	5	30~1000MHz	929.32	-44.89	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-27.69	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-53.32	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-41.02	-13	PASS
GSM850	190	5	30~1000MHz	735.19	-45.3	-13	PASS
GSM850	190	5	1000~10000MHz	1672.9	-31.93	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.87	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-42.59	-13	PASS
GSM850	251	5	30~1000MHz	732.31	-45.24	-13	PASS
GSM850	251	5	1000~10000MHz	1697.5	-29.34	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-58.07	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-43.28	-23	PASS
GSM1900	512	0	30~1000MHz	883.66	-45.49	-13	PASS
GSM1900	512	0	1000~18000MHz	16985.67	-21.64	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-58.12	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-42.47	-23	PASS
GSM1900	661	0	30~1000MHz	939.73	-45.47	-13	PASS
GSM1900	661	0	1000~18000MHz	16979.43	-22.38	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-53.62	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-41.53	-23	PASS
GSM1900	810	0	30~1000MHz	404.97	-45.12	-13	PASS
GSM1900	810	0	1000~18000MHz	17002.1	-22.47	-13	PASS

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

Test Graphs

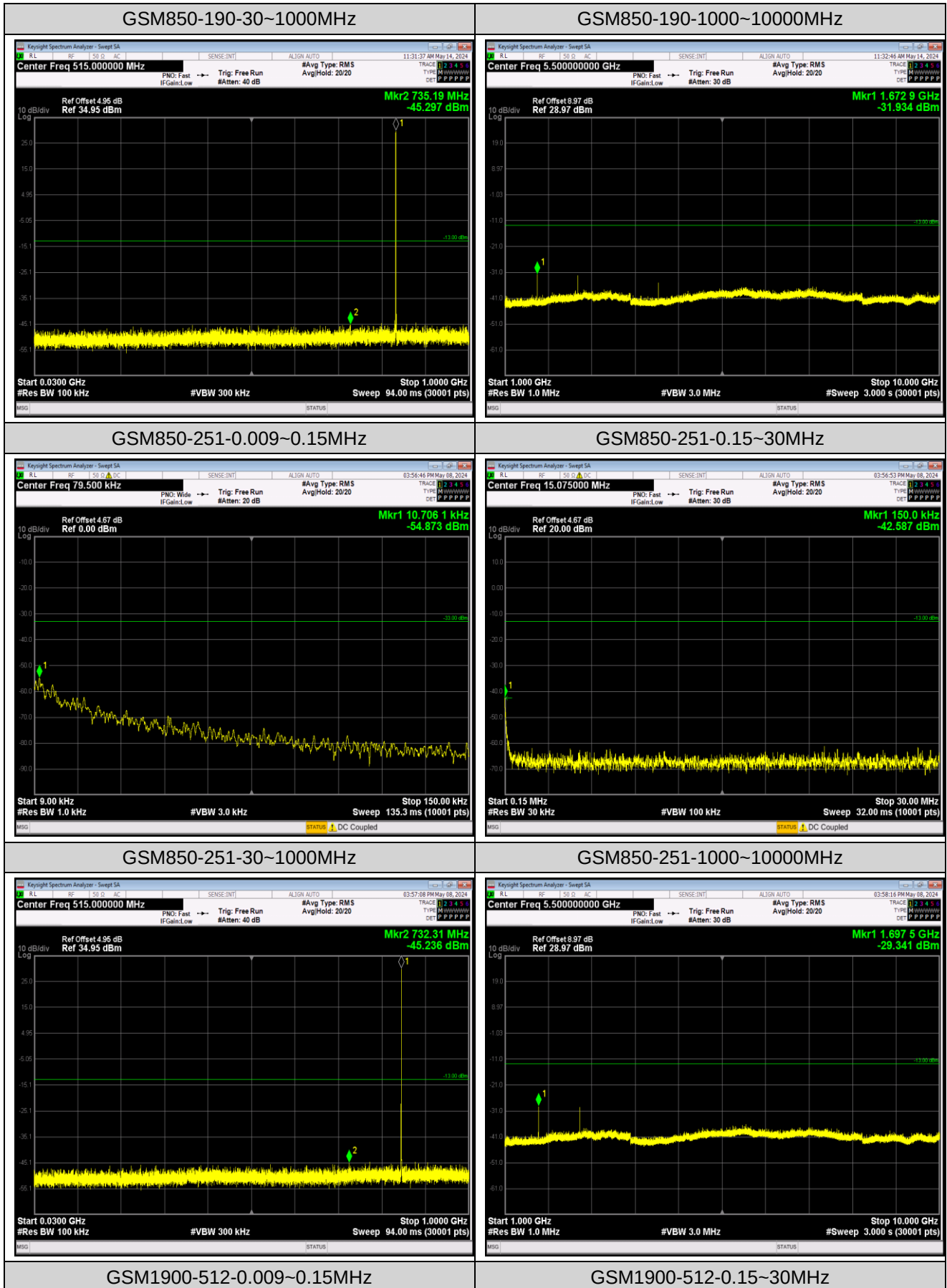


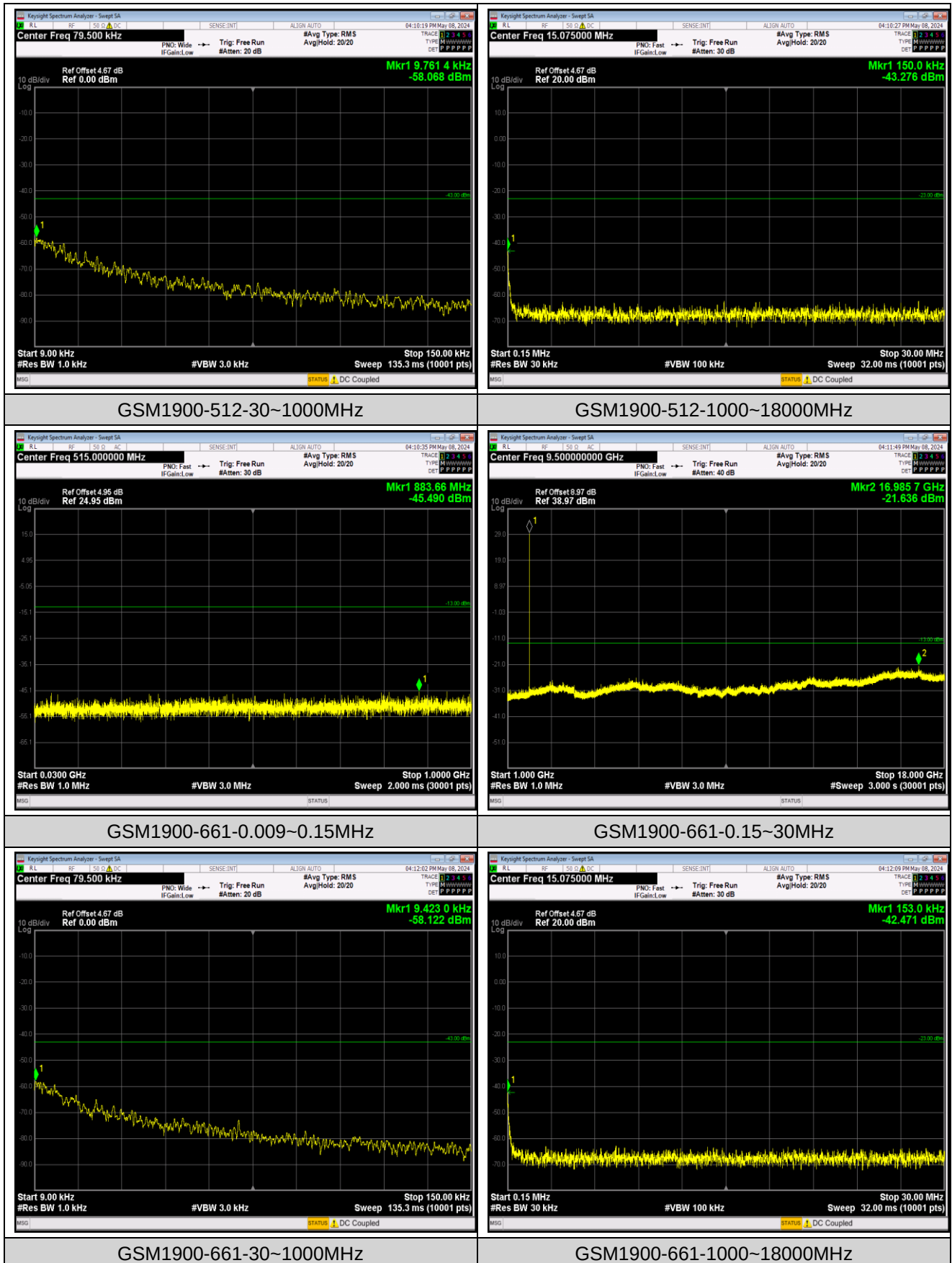
JianYan Testing Group Shenzhen Co., Ltd.

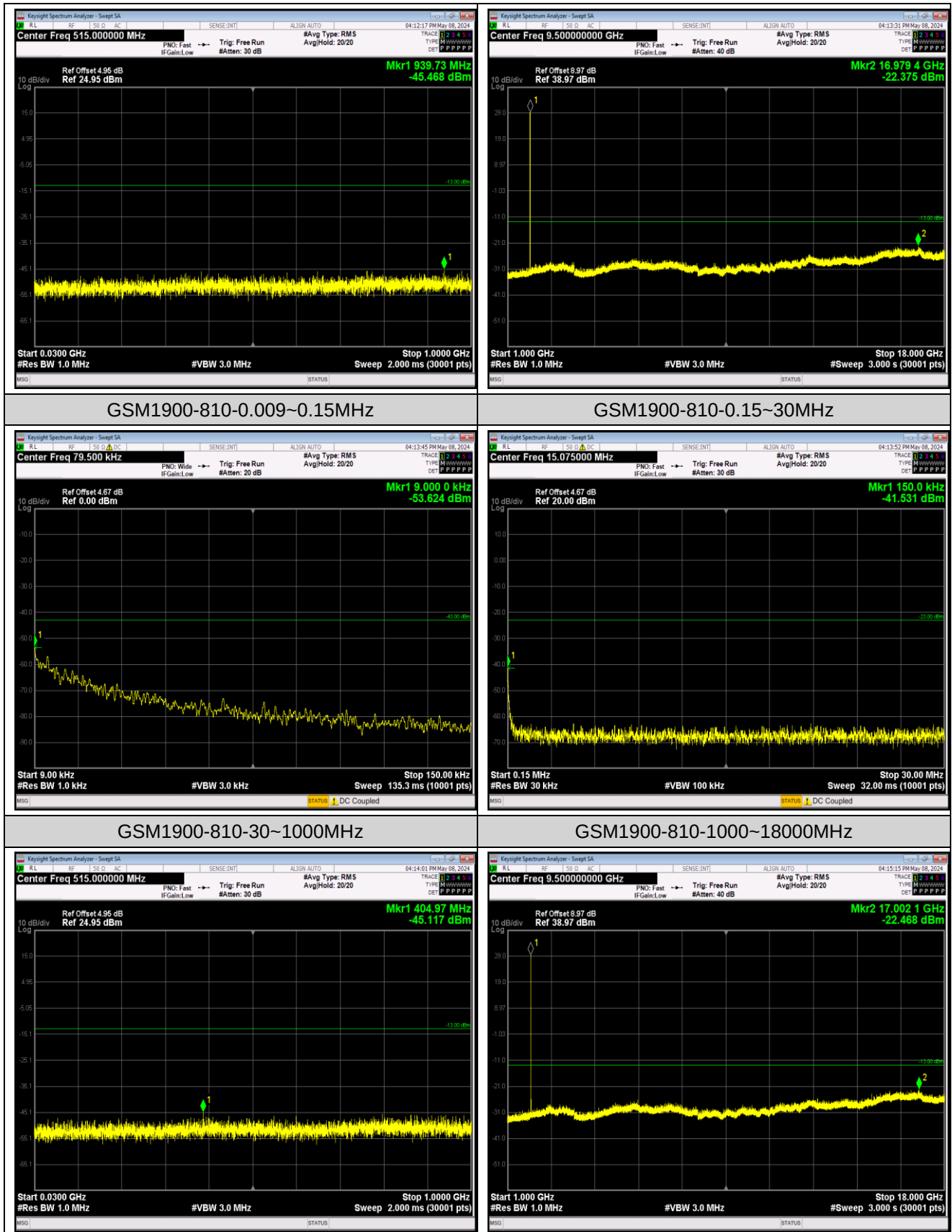
No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

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

Project No.: JYTSZR2404049







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	7.65	0.009144	±2.5	Pass
	-20	5.68	0.006789		
	-10	2.55	0.003048		
	0	4.16	0.004973		
	10	8.88	0.010614		
	20	8.78	0.010495		
	30	5.91	0.007064		
	40	11.27	0.013471		
	50	9.94	0.011881		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	6.81	0.008140	±2.5	Pass
	3.85	7.36	0.008798		
	4.40	4.46	0.005331		
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	5.39	0.006443	±2.5	Pass
	-20	0.19	0.000227		
	-10	2.94	0.003514		
	0	-1.07	-0.001279		
	10	-1.78	-0.002128		
	20	-0.77	-0.000920		
	30	-3.62	-0.004327		
	40	0.61	0.000729		
	50	-4.46	-0.005331		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	-1.39	-0.001661	±2.5	Pass
	3.85	-6.42	-0.007674		
	4.40	2.32	0.002773		
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		
3.85	-30	-3.23	-0.001718	Within authorized band for PCS 1900	Pass
	-20	-5.81	-0.003090		
	-10	-4.75	-0.002527		
	0	-9.14	-0.004862		
	10	-1.26	-0.000670		
	20	1.32	0.000702		
	30	-5.62	-0.002989		
	40	-1.87	-0.000995		
	50	-4.81	-0.002559		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	6.88	0.003660	Within authorized band for PCS 1900	Pass
	3.85	-11.88	-0.006319		
	4.40	-3.16	-0.001681		
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	-11.59	-0.006165	Within authorized band for PCS 1900	Pass
	-20	-20.95	-0.011144		
	-10	-22.21	-0.011814		
	0	-16.05	-0.008537		
	10	-25.12	-0.013362		
	20	-17.18	-0.009138		
	30	-22.37	-0.011899		
	40	-13.72	-0.007298		
	50	-24.05	-0.012793		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	-30.25	-0.016090	Within authorized band for PCS 1900	Pass
	3.85	-19.82	-0.010543		
	4.40	-18.89	-0.010048		
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

