

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	33.43	30.15	38.45	PASS
GSM850	190	5	34.29	31.01	38.45	PASS
GSM850	251	5	32.83	29.55	38.45	PASS
GSM1900	512	0	30.54	31.41	33.00	PASS
GSM1900	661	0	30.43	31.3	33.00	PASS
GSM1900	810	0	30.25	31.12	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.36	30.08	38.45	PASS
GPRS850	128	5	2	32.43	29.15	38.45	PASS
GPRS850	128	5	3	30.81	27.53	38.45	PASS
GPRS850	128	5	4	30.08	26.8	38.45	PASS
GPRS850	190	5	1	34.38	31.1	38.45	PASS
GPRS850	190	5	2	33.31	30.03	38.45	PASS
GPRS850	190	5	3	31.57	28.29	38.45	PASS
GPRS850	190	5	4	30.88	27.6	38.45	PASS
GPRS850	251	5	1	32.95	29.67	38.45	PASS
GPRS850	251	5	2	31.55	28.27	38.45	PASS
GPRS850	251	5	3	29.86	26.58	38.45	PASS
GPRS850	251	5	4	30.13	25.85	38.45	PASS
GPRS1900	512	0	1	30.46	31.33	33.00	PASS
GPRS1900	512	0	2	29.48	30.35	33.00	PASS
GPRS1900	512	0	3	27.77	28.64	33.00	PASS
GPRS1900	512	0	4	26.97	27.84	33.00	PASS
GPRS1900	661	0	1	30.34	31.21	33.00	PASS
GPRS1900	661	0	2	29.39	30.26	33.00	PASS
GPRS1900	661	0	3	27.67	28.54	33.00	PASS
GPRS1900	661	0	4	26.90	27.77	33.00	PASS
GPRS1900	810	0	1	30.20	31.07	33.00	PASS
GPRS1900	810	0	2	29.31	30.18	33.00	PASS
GPRS1900	810	0	3	27.65	28.52	33.00	PASS
GPRS1900	810	0	4	26.88	27.75	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.65	22.37	38.45	PASS
EGPRS850	128	8	2	24.55	21.27	38.45	PASS
EGPRS850	128	8	3	22.41	19.13	38.45	PASS
EGPRS850	128	8	4	21.31	18.03	38.45	PASS
EGPRS850	190	8	1	25.76	22.48	38.45	PASS
EGPRS850	190	8	2	24.73	21.45	38.45	PASS
EGPRS850	190	8	3	22.55	19.27	38.45	PASS
EGPRS850	190	8	4	21.42	18.14	38.45	PASS
EGPRS850	251	8	1	25.88	22.6	38.45	PASS
EGPRS850	251	8	2	24.81	21.53	38.45	PASS
EGPRS850	251	8	3	22.73	19.45	38.45	PASS
EGPRS850	251	8	4	21.51	18.23	38.45	PASS
EGPRS1900	512	2	1	23.81	24.68	33.00	PASS
EGPRS1900	512	2	2	22.66	23.53	33.00	PASS
EGPRS1900	512	2	3	20.50	21.37	33.00	PASS
EGPRS1900	512	2	4	19.31	20.18	33.00	PASS
EGPRS1900	661	2	1	24.01	24.88	33.00	PASS
EGPRS1900	661	2	2	22.86	23.73	33.00	PASS
EGPRS1900	661	2	3	20.77	21.64	33.00	PASS
EGPRS1900	661	2	4	19.51	20.38	33.00	PASS
EGPRS1900	810	2	1	23.79	24.66	33.00	PASS
EGPRS1900	810	2	2	22.72	23.59	33.00	PASS
EGPRS1900	810	2	3	20.61	21.48	33.00	PASS
EGPRS1900	810	2	4	19.40	20.27	33.00	PASS

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

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

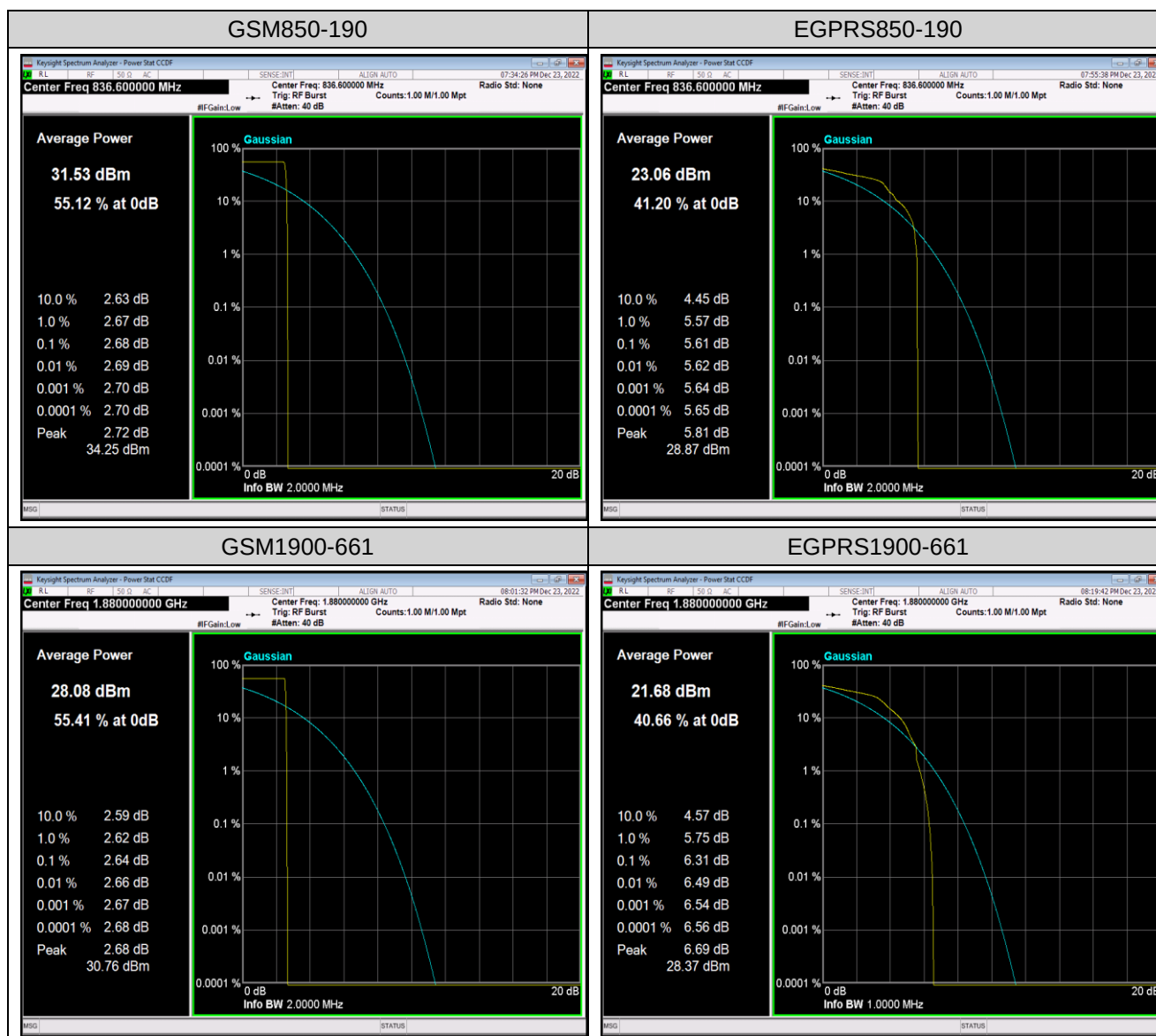
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.68	13	PASS
EGPRS850	190	8	5.61	13	PASS
GSM1900	661	0	2.64	13	PASS
EGPRS1900	661	2	6.31	13	PASS

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

Test Graphs

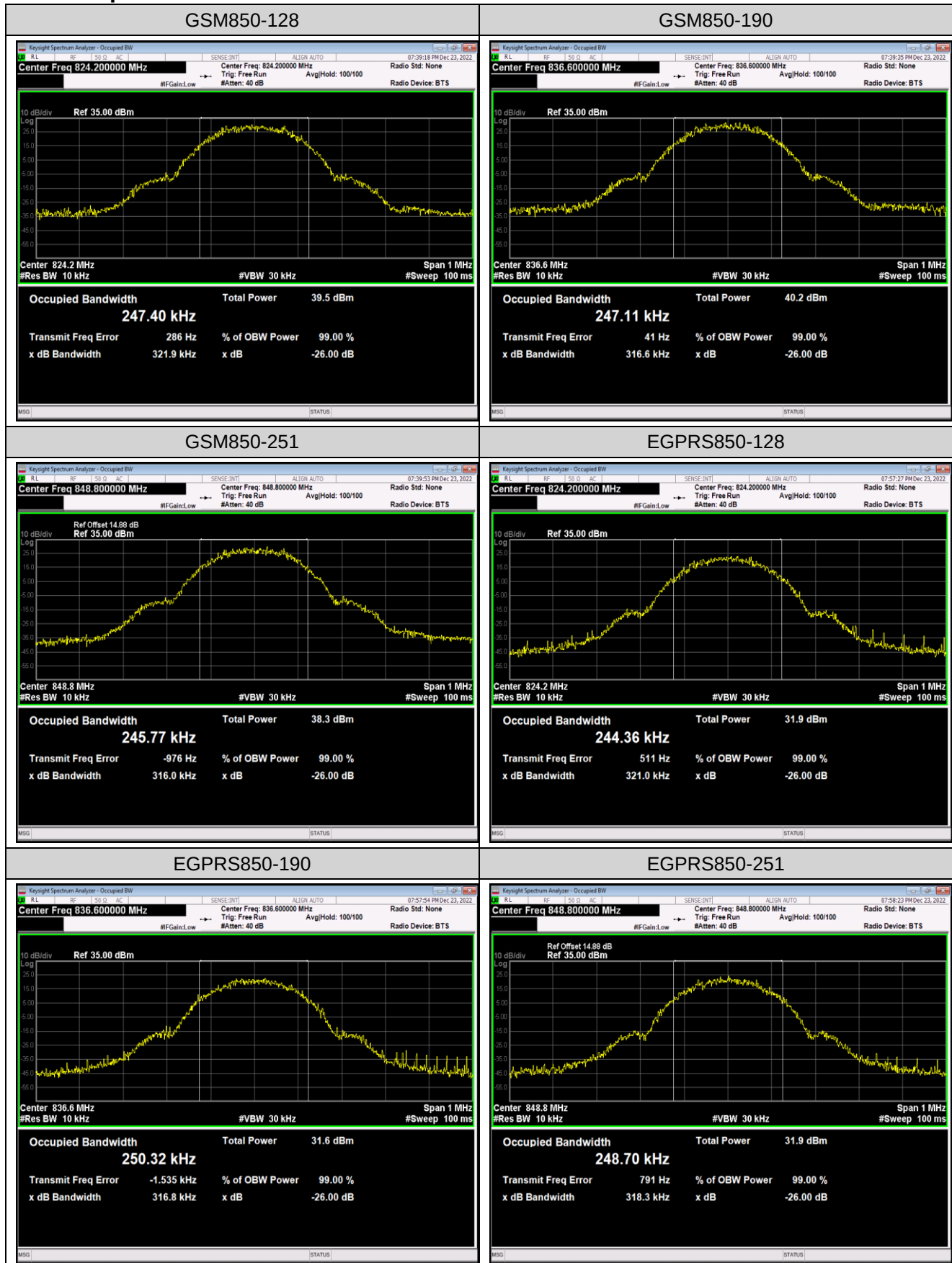


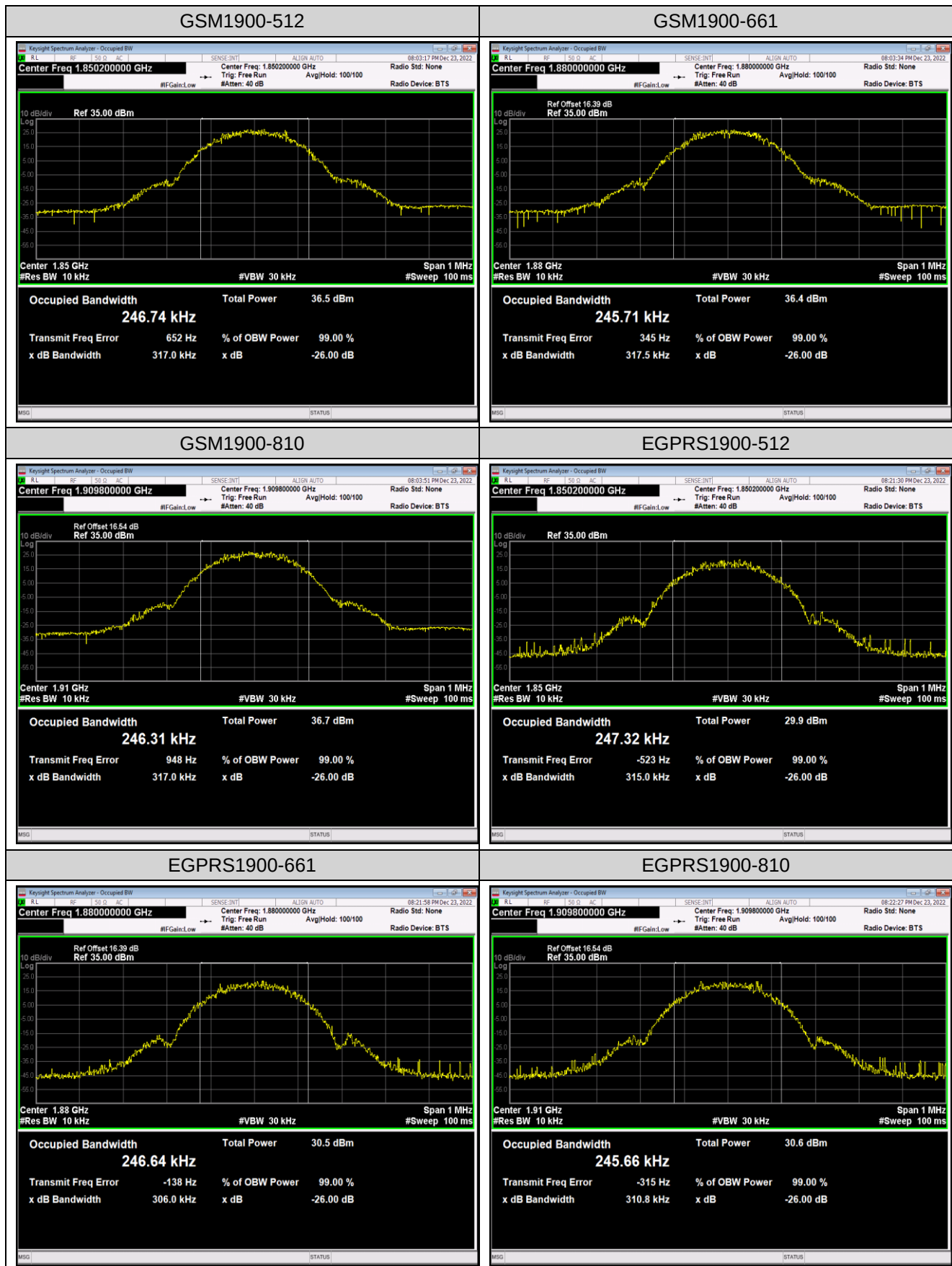
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24740	0.3219	---	PASS
GSM850	190	5	0.24711	0.3166	---	PASS
GSM850	251	5	0.24577	0.3160	---	PASS
EGPRS850	128	8	0.24436	0.3210	---	PASS
EGPRS850	190	8	0.25032	0.3168	---	PASS
EGPRS850	251	8	0.24870	0.3183	---	PASS
GSM1900	512	0	0.24674	0.3170	---	PASS
GSM1900	661	0	0.24571	0.3175	---	PASS
GSM1900	810	0	0.24631	0.3170	---	PASS
EGPRS1900	512	2	0.24732	0.3150	---	PASS
EGPRS1900	661	2	0.24664	0.3060	---	PASS
EGPRS1900	810	2	0.24566	0.3108	---	PASS

Test Graphs



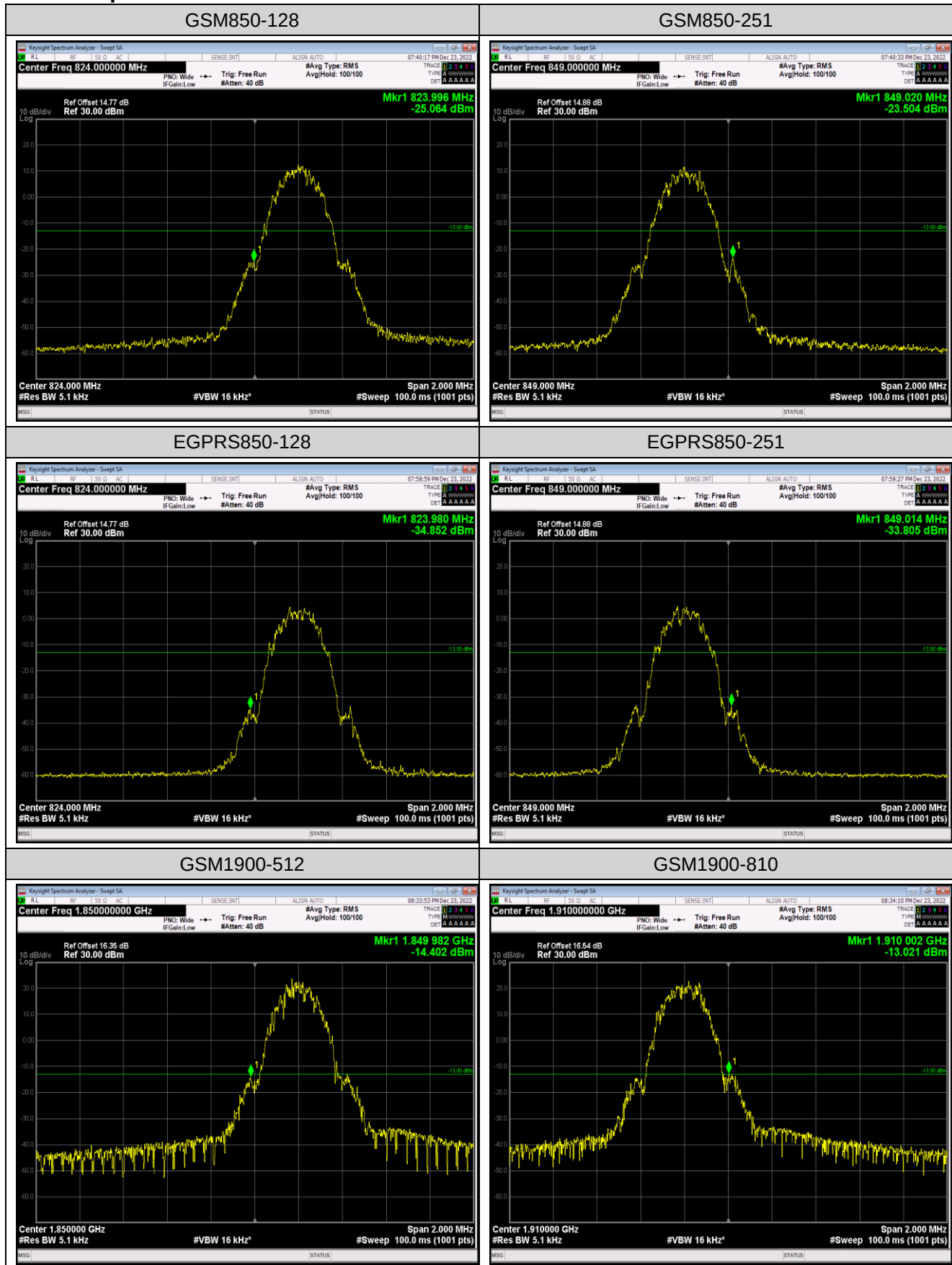


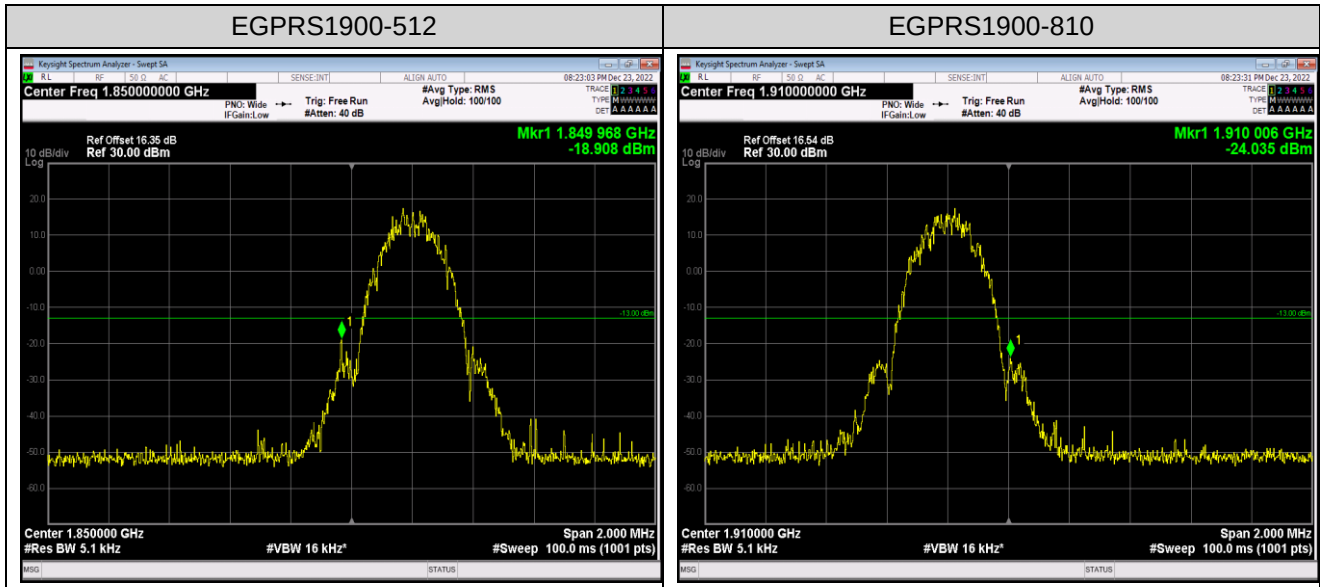
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-25.06	-13	PASS
GSM850	251	5	849.02	-23.50	-13	PASS
EGPRS850	128	8	823.98	-34.85	-13	PASS
EGPRS850	251	8	849.01	-33.81	-13	PASS
GSM1900	512	0	1849.98	-14.40	-13	PASS
GSM1900	810	0	1910.00	-13.02	-13	PASS
EGPRS1900	512	2	1849.97	-18.91	-13	PASS
EGPRS1900	810	2	1910.01	-24.03	-13	PASS

Test Graphs





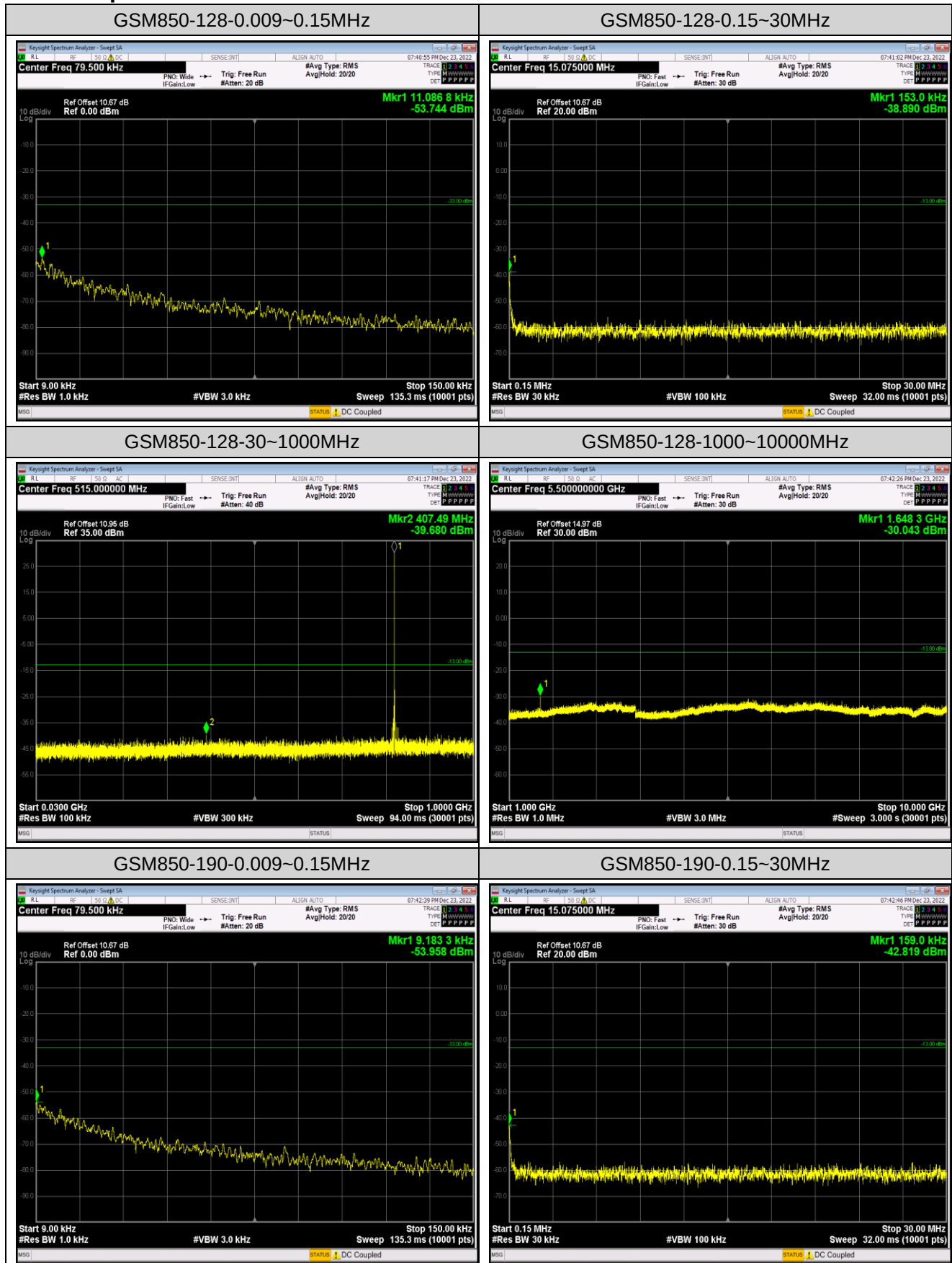
Appendix E: Conducted Spurious Emission

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	-53.74	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-38.89	-13	PASS
GSM850	128	5	30~1000MHz	407.49	-39.68	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-30.04	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-53.96	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-42.82	-13	PASS
GSM850	190	5	30~1000MHz	997.77	-39.85	-13	PASS
GSM850	190	5	1000~10000MHz	2509.6	-29.68	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-52.65	-33	PASS
GSM850	251	5	0.15~30MHz	0.17	-40.68	-13	PASS
GSM850	251	5	30~1000MHz	953.7	-40.21	-13	PASS
GSM850	251	5	1000~10000MHz	5945.2	-30.88	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-53.63	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-39.04	-23	PASS
GSM1900	512	0	30~1000MHz	680.58	-39.46	-13	PASS
GSM1900	512	0	1000~18000MHz	17492.83	-26.42	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-53.48	-43	PASS
GSM1900	661	0	0.15~30MHz	0.18	-43.64	-23	PASS
GSM1900	661	0	30~1000MHz	443.58	-40.79	-13	PASS
GSM1900	661	0	1000~18000MHz	16765.23	-25.68	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-53.7	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-41.07	-23	PASS
GSM1900	810	0	30~1000MHz	787.57	-40.01	-13	PASS
GSM1900	810	0	1000~18000MHz	16395.2	-26.16	-13	PASS

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

Test Graphs

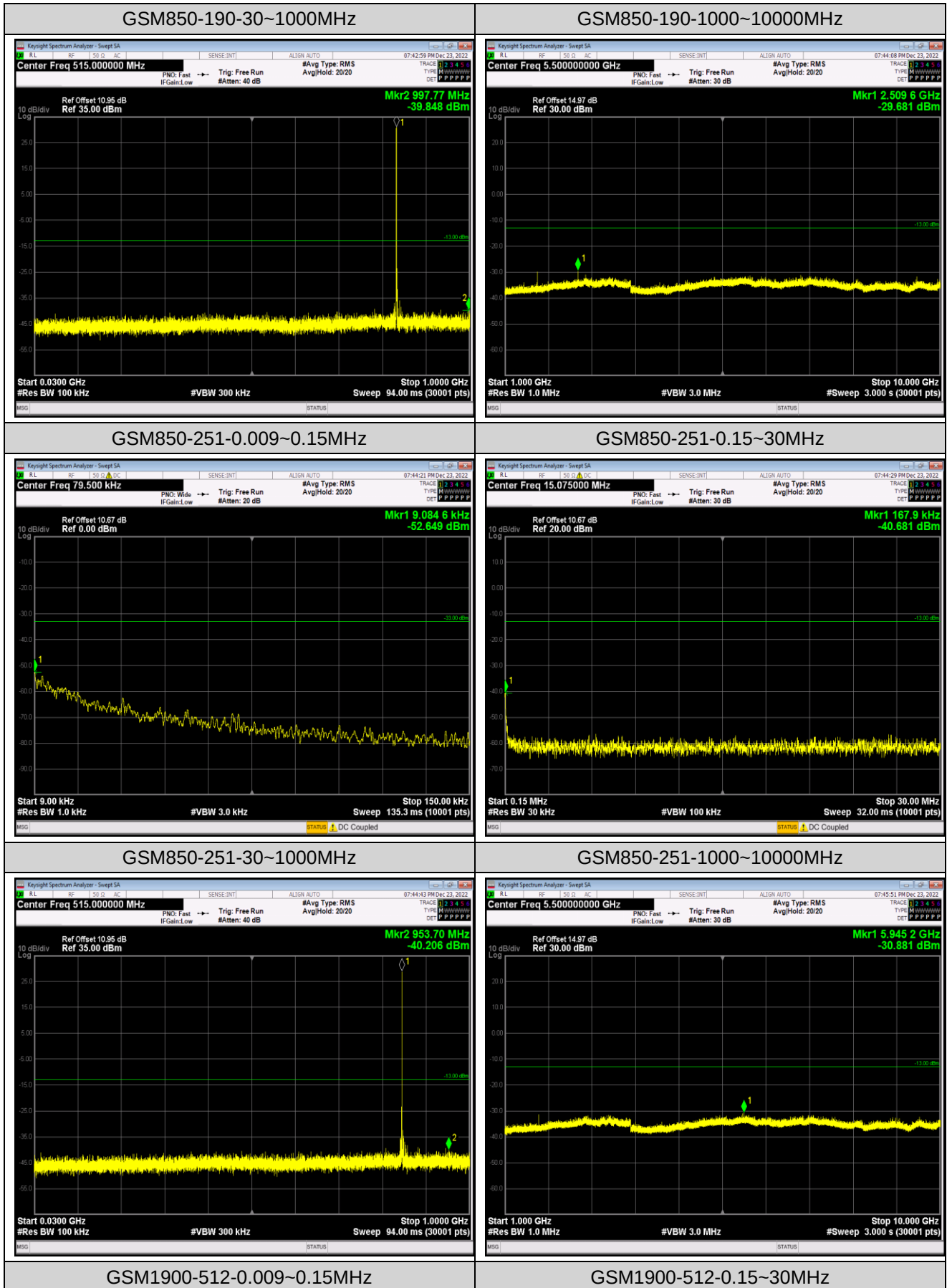


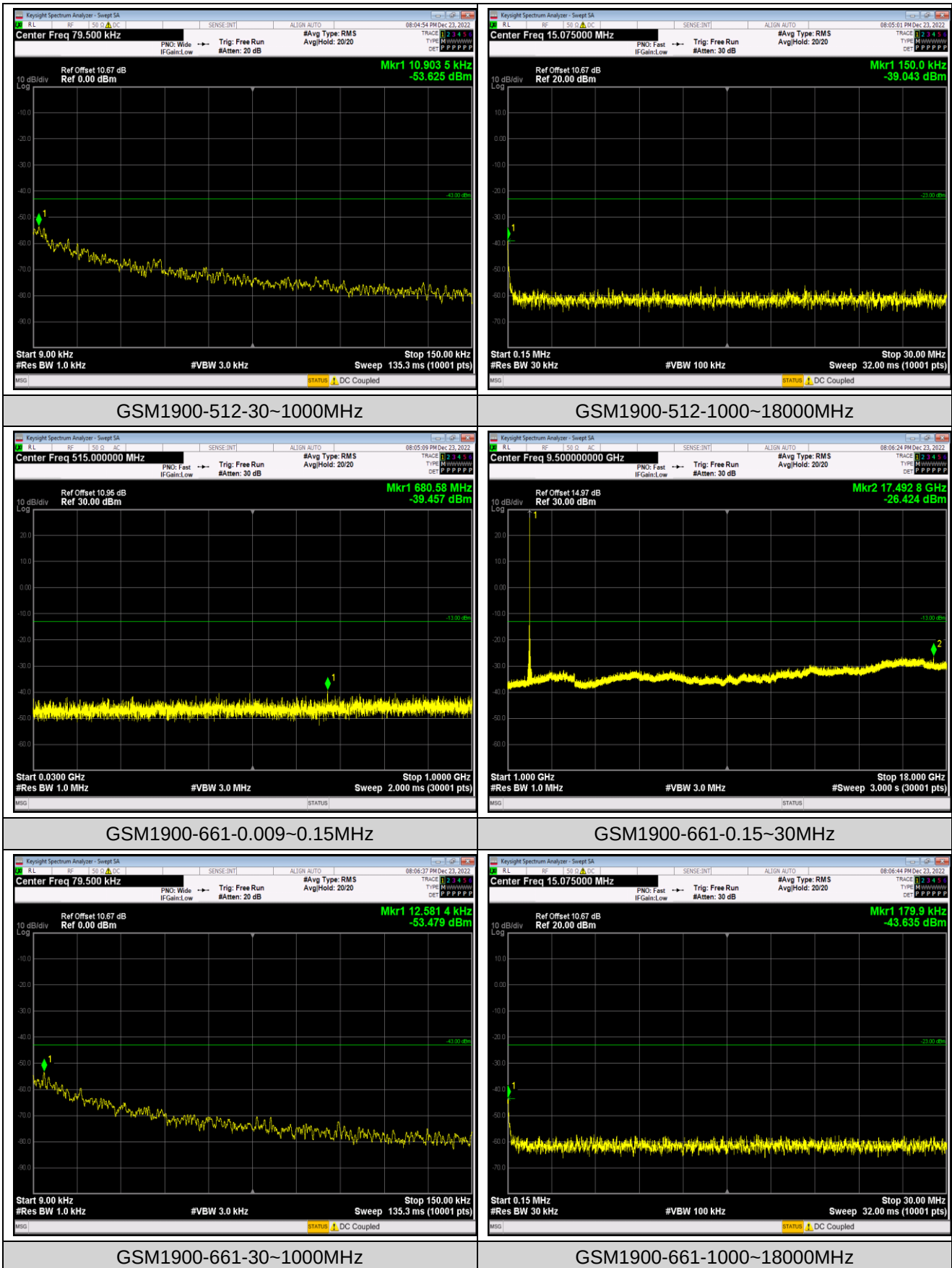
JianYan Testing Group Shenzhen Co., Ltd.

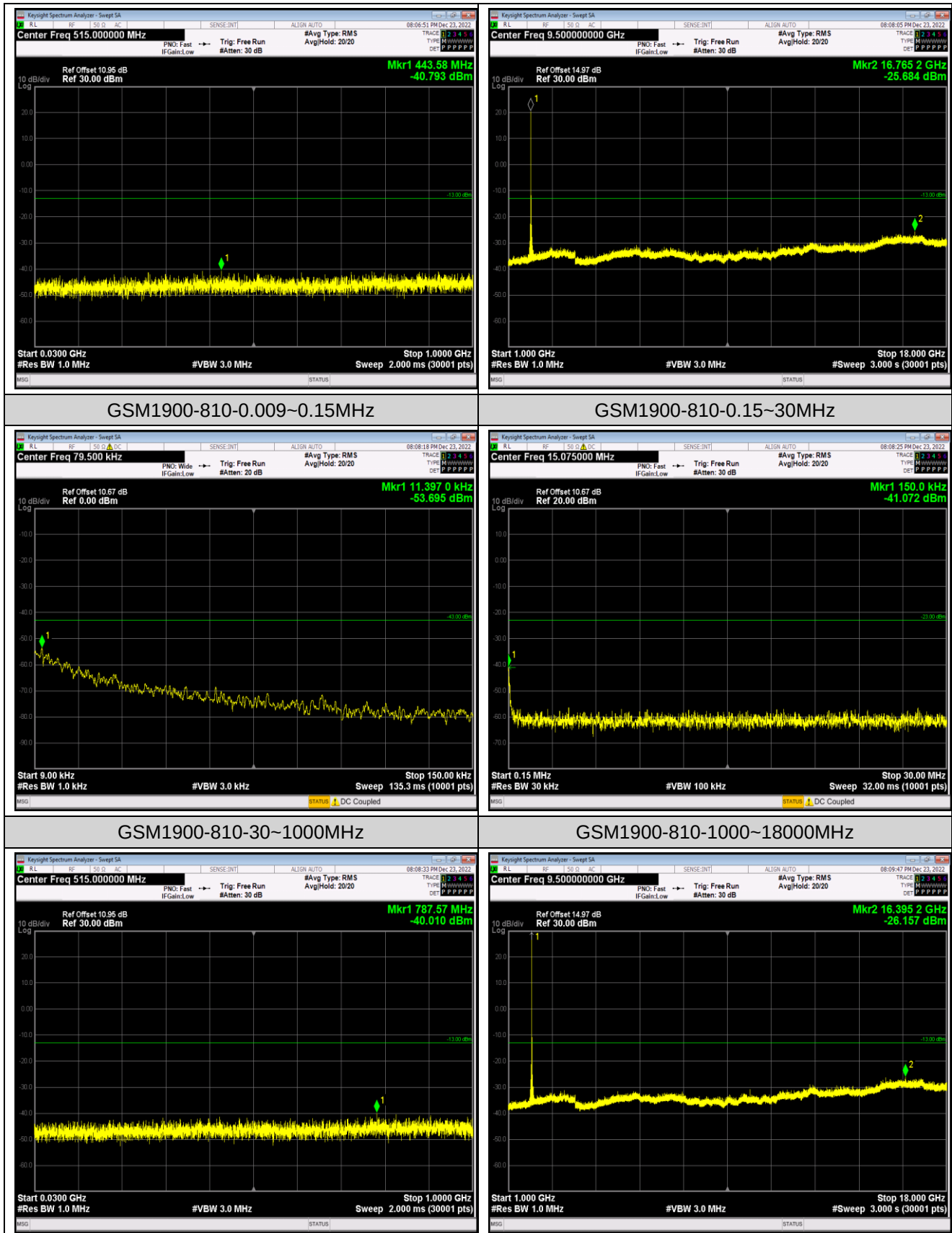
No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

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

Project No.: JYTSZR2212046







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		
3.80	-30	8.88	0.010614	±2.5	Pass
	-20	4.33	0.005176		
	-10	6.97	0.008331		
	0	6.04	0.007220		
	10	7.43	0.008881		
	20	3.75	0.004482		
	30	5.39	0.006443		
	40	1.10	0.001315		
	50	-0.10	-0.000120		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	7.81	0.009335	±2.5	Pass
	3.80	3.68	0.004399		
	4.35	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		
3.80	-30	6.46	0.007722	±2.5	Pass
	-20	3.16	0.003777		
	-10	3.55	0.004243		
	0	5.84	0.006981		
	10	11.04	0.013196		
	20	7.01	0.008379		
	30	10.85	0.012969		
	40	10.94	0.013077		
	50	11.91	0.014236		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	6.10	0.007291	±2.5	Pass
	3.80	3.97	0.004745		
	4.35	7.68	0.009180		
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		
3.80	-30	35.29	0.018771	Within authorized band for PCS 1900	Pass
	-20	38.84	0.020660		
	-10	37.65	0.020027		
	0	23.60	0.012553		
	10	29.02	0.015436		
	20	23.92	0.012723		
	30	33.42	0.017777		
	40	30.15	0.016037		
	50	34.58	0.018394		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	24.47	0.013016	Within authorized band for PCS 1900	Pass
	3.80	24.47	0.013016		
	4.35	35.32	0.018787		
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		
3.80	-30	18.85	0.010027	Within authorized band for PCS 1900	Pass
	-20	17.79	0.009463		
	-10	13.88	0.007383		
	0	11.30	0.006011		
	10	27.80	0.014787		
	20	14.92	0.007936		
	30	26.22	0.013947		
	40	36.97	0.019665		
	50	26.02	0.013840		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	22.76	0.012106	Within authorized band for PCS 1900	Pass
	3.80	14.95	0.007952		
	4.35	15.37	0.008176		
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

