

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	32.95	30.29	38.45	PASS
GSM850	190	5	32.91	30.25	38.45	PASS
GSM850	251	5	32.96	30.3	38.45	PASS
GSM1900	512	0	29.79	30	33.00	PASS
GSM1900	661	0	30.11	30.32	33.00	PASS
GSM1900	810	0	30.10	30.31	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.90	30.24	38.45	PASS
GPRS850	128	5	2	30.91	28.25	38.45	PASS
GPRS850	128	5	3	28.92	26.26	38.45	PASS
GPRS850	128	5	4	26.78	24.12	38.45	PASS
GPRS850	190	5	1	32.95	30.29	38.45	PASS
GPRS850	190	5	2	30.79	28.13	38.45	PASS
GPRS850	190	5	3	28.82	26.16	38.45	PASS
GPRS850	190	5	4	26.71	24.05	38.45	PASS
GPRS850	251	5	1	33.01	30.35	38.45	PASS
GPRS850	251	5	2	30.76	28.1	38.45	PASS
GPRS850	251	5	3	28.79	26.13	38.45	PASS
GPRS850	251	5	4	26.60	23.94	38.45	PASS
GPRS1900	512	0	1	29.79	30	33.00	PASS
GPRS1900	512	0	2	27.62	27.83	33.00	PASS
GPRS1900	512	0	3	25.90	26.11	33.00	PASS
GPRS1900	512	0	4	23.82	24.03	33.00	PASS
GPRS1900	661	0	1	30.08	30.29	33.00	PASS
GPRS1900	661	0	2	27.73	27.94	33.00	PASS
GPRS1900	661	0	3	26.06	26.27	33.00	PASS
GPRS1900	661	0	4	23.90	24.11	33.00	PASS
GPRS1900	810	0	1	30.18	30.39	33.00	PASS
GPRS1900	810	0	2	27.40	27.61	33.00	PASS
GPRS1900	810	0	3	25.68	25.89	33.00	PASS
GPRS1900	810	0	4	23.60	23.81	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.77	23.11	38.45	PASS
EGPRS850	128	8	2	24.42	21.76	38.45	PASS
EGPRS850	128	8	3	22.10	19.44	38.45	PASS
EGPRS850	128	8	4	20.03	17.37	38.45	PASS
EGPRS850	190	8	1	26.05	23.39	38.45	PASS
EGPRS850	190	8	2	24.70	22.04	38.45	PASS
EGPRS850	190	8	3	22.40	19.74	38.45	PASS
EGPRS850	190	8	4	20.38	17.72	38.45	PASS
EGPRS850	251	8	1	25.90	23.24	38.45	PASS
EGPRS850	251	8	2	24.53	21.87	38.45	PASS
EGPRS850	251	8	3	22.24	19.58	38.45	PASS
EGPRS850	251	8	4	20.17	17.51	38.45	PASS
EGPRS1900	512	2	1	25.57	25.78	33.00	PASS
EGPRS1900	512	2	2	24.22	24.43	33.00	PASS
EGPRS1900	512	2	3	21.83	22.04	33.00	PASS
EGPRS1900	512	2	4	19.61	19.82	33.00	PASS
EGPRS1900	661	2	1	25.54	25.75	33.00	PASS
EGPRS1900	661	2	2	24.32	24.53	33.00	PASS
EGPRS1900	661	2	3	21.92	22.13	33.00	PASS
EGPRS1900	661	2	4	19.77	19.98	33.00	PASS
EGPRS1900	810	2	1	25.25	25.46	33.00	PASS
EGPRS1900	810	2	2	23.95	24.16	33.00	PASS
EGPRS1900	810	2	3	21.65	21.86	33.00	PASS
EGPRS1900	810	2	4	19.37	19.58	33.00	PASS

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

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

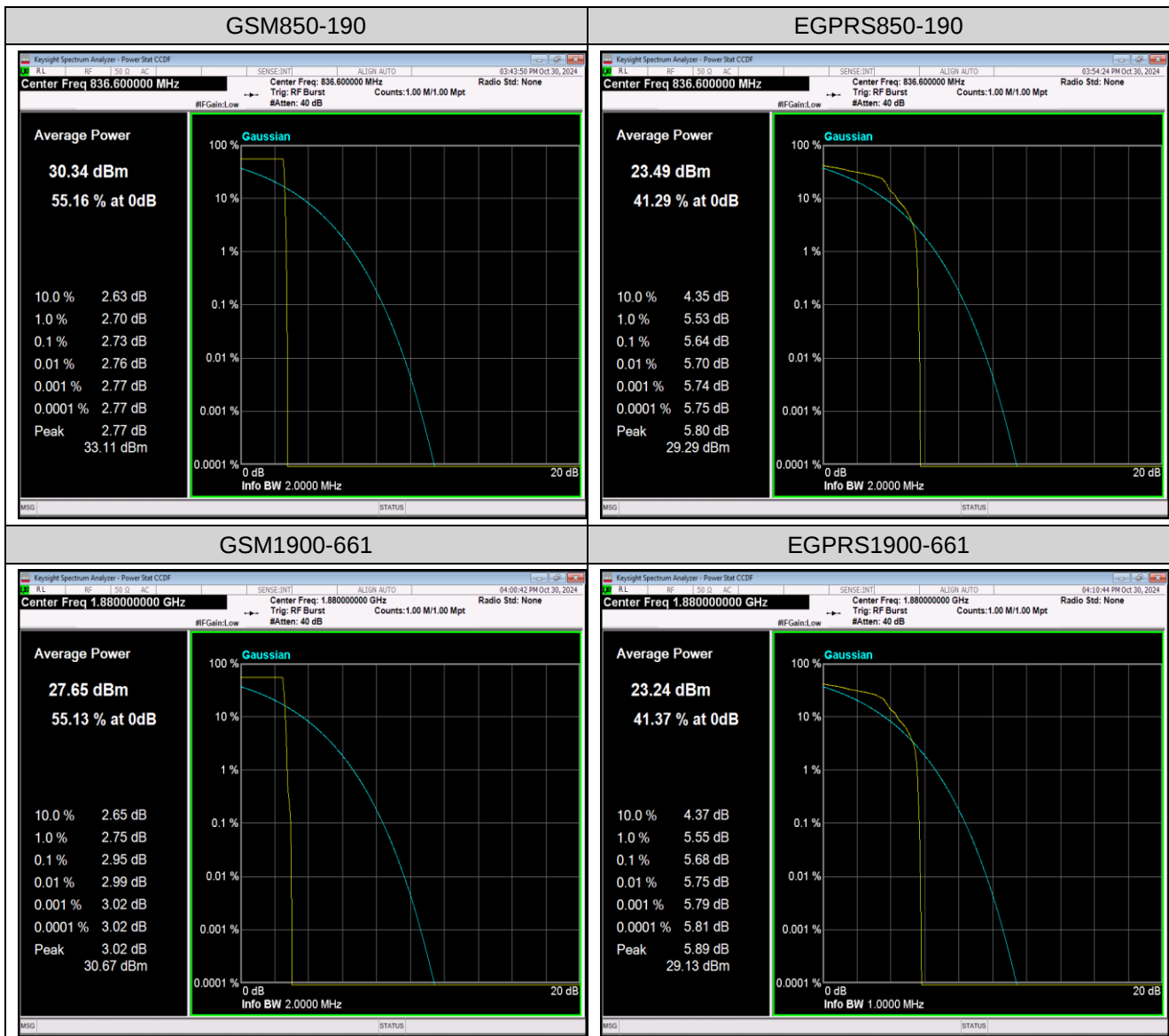
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.73	13	PASS
EGPRS850	190	8	5.64	13	PASS
GSM1900	661	0	2.95	13	PASS
EGPRS1900	661	2	5.68	13	PASS

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

Test Graphs

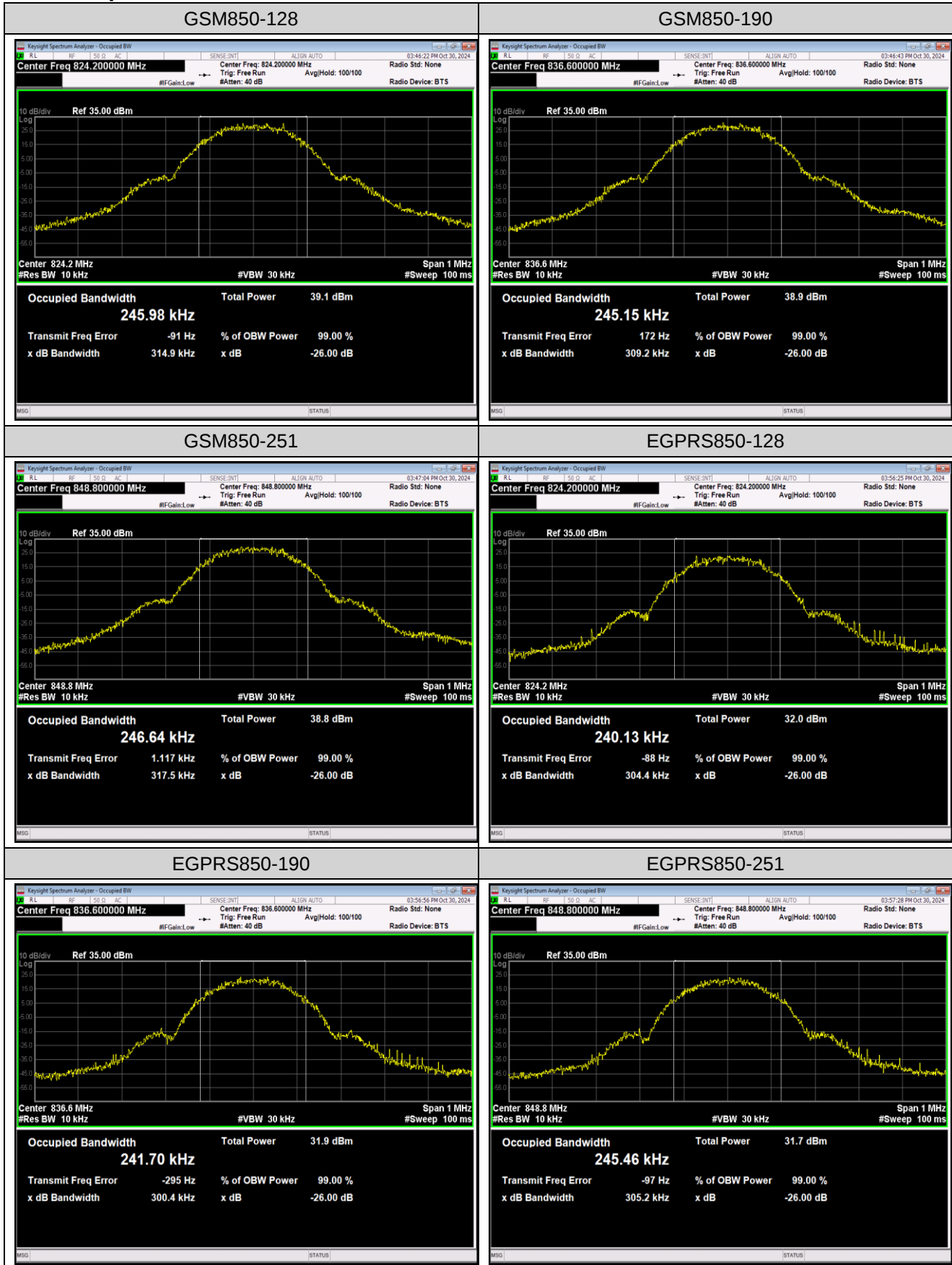


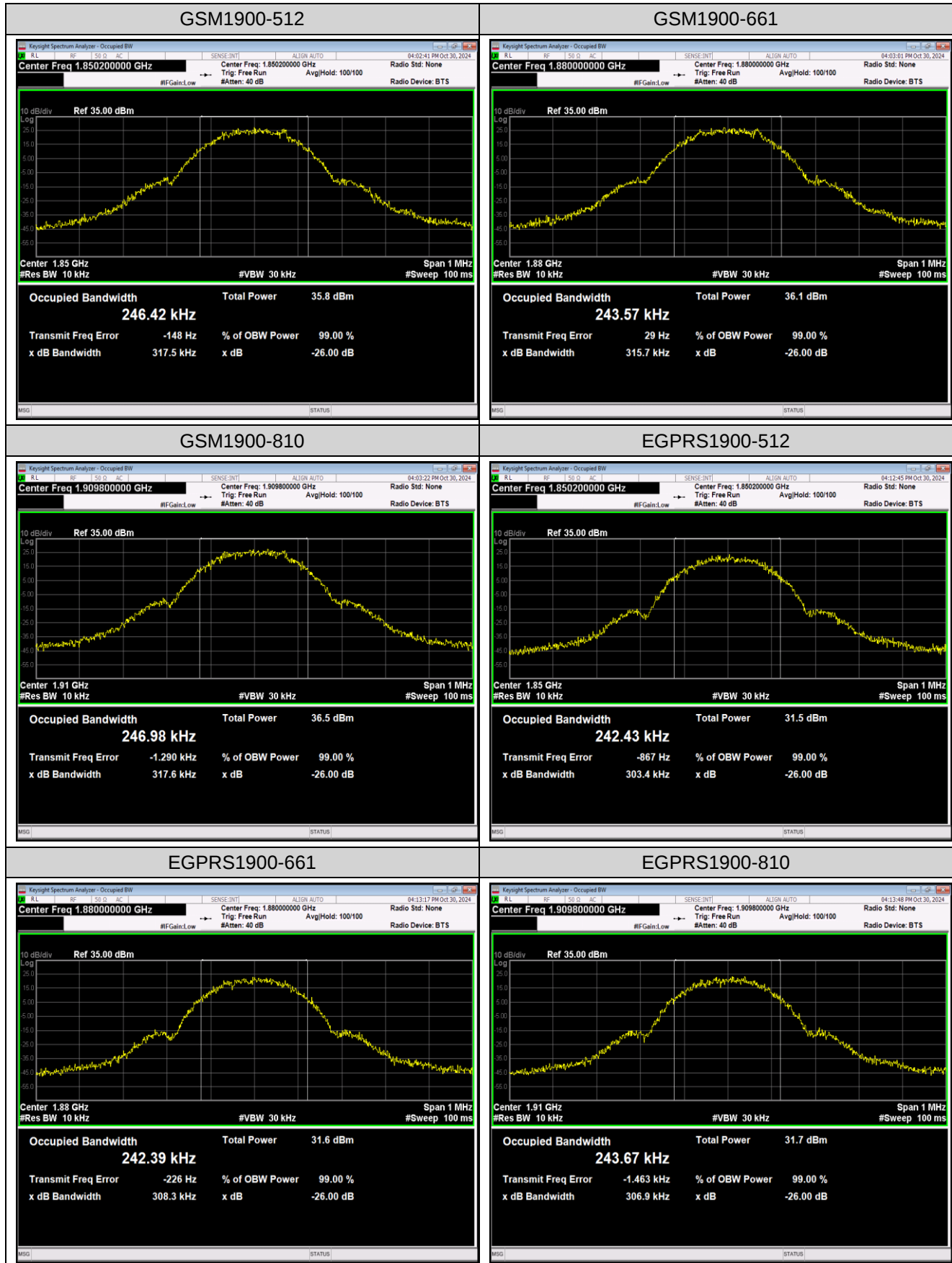
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24598	0.3149	---	PASS
GSM850	190	5	0.24515	0.3092	---	PASS
GSM850	251	5	0.24664	0.3175	---	PASS
EGPRS850	128	8	0.24013	0.3044	---	PASS
EGPRS850	190	8	0.24170	0.3004	---	PASS
EGPRS850	251	8	0.24546	0.3052	---	PASS
GSM1900	512	0	0.24642	0.3175	---	PASS
GSM1900	661	0	0.24357	0.3157	---	PASS
GSM1900	810	0	0.24698	0.3176	---	PASS
EGPRS1900	512	2	0.24243	0.3034	---	PASS
EGPRS1900	661	2	0.24239	0.3083	---	PASS
EGPRS1900	810	2	0.24367	0.3069	---	PASS

Test Graphs



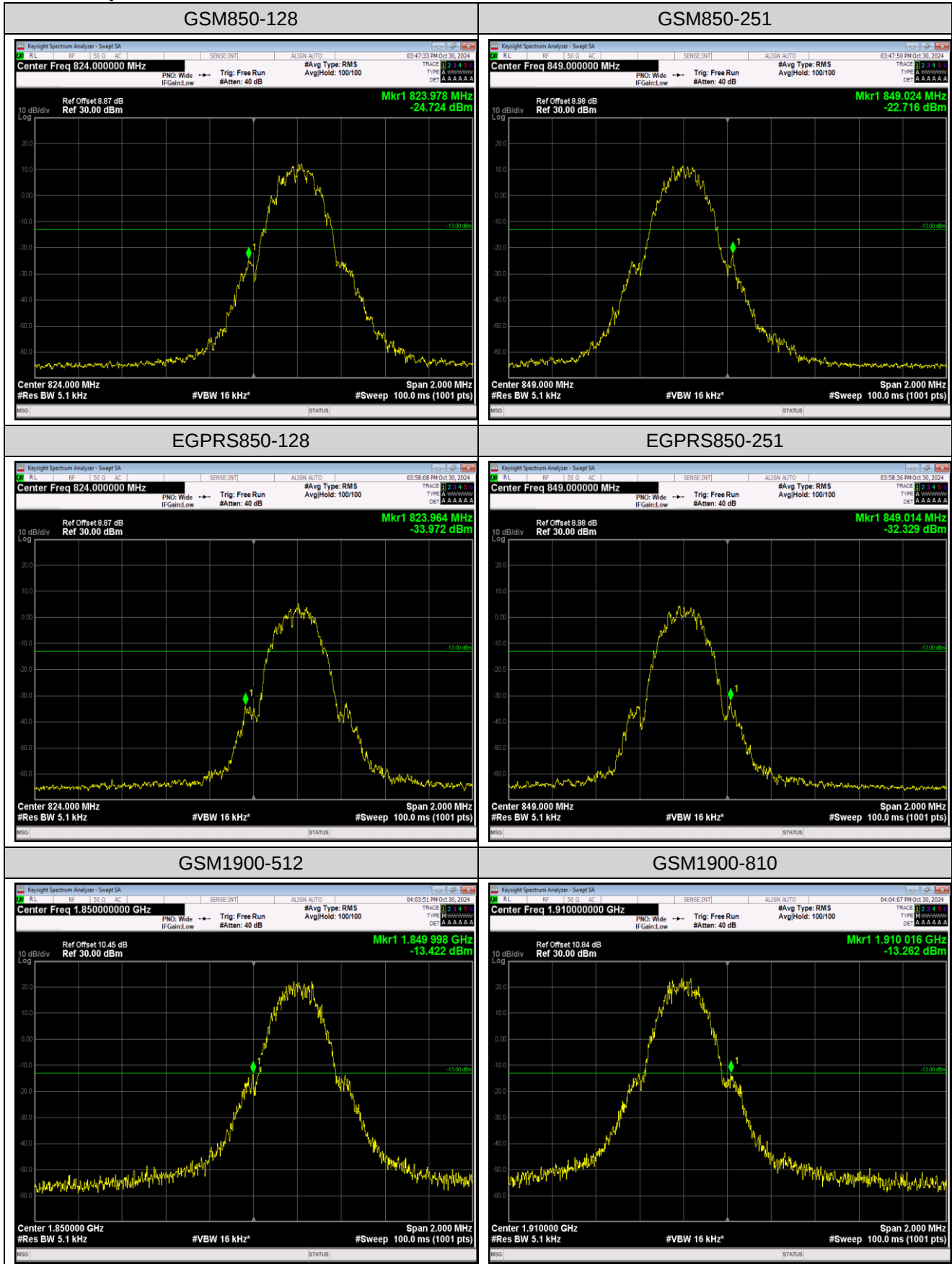


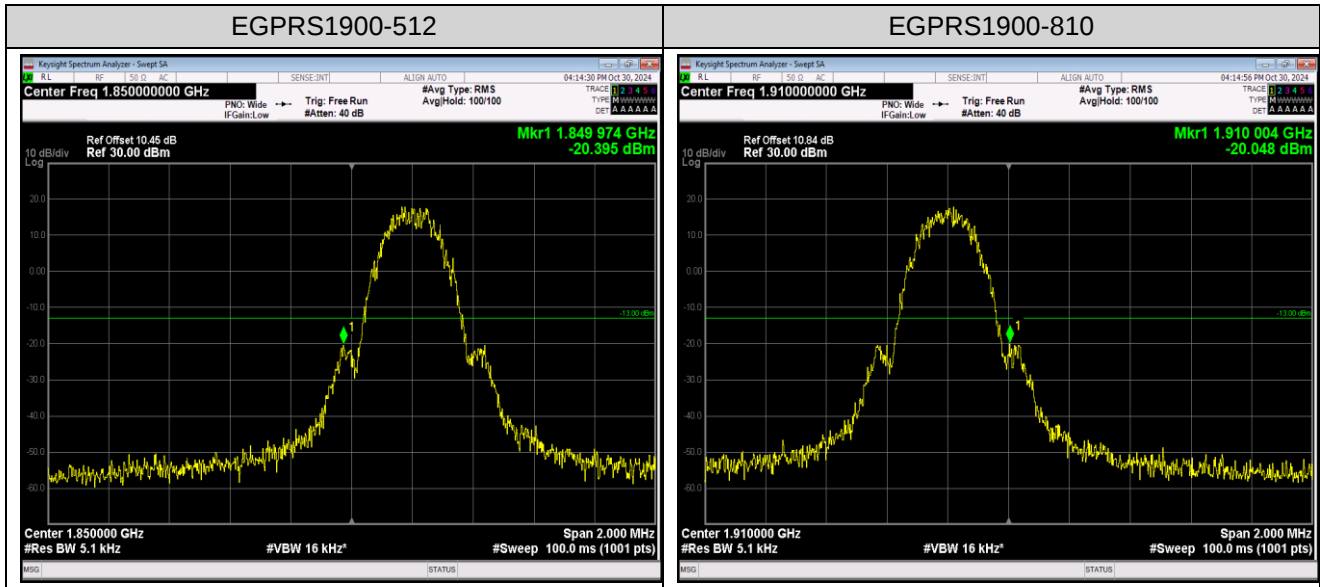
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-24.72	-13	PASS
GSM850	251	5	849.02	-22.72	-13	PASS
EGPRS850	128	8	823.96	-33.97	-13	PASS
EGPRS850	251	8	849.01	-32.33	-13	PASS
GSM1900	512	0	1850.00	-13.42	-13	PASS
GSM1900	810	0	1910.02	-13.26	-13	PASS
EGPRS1900	512	2	1849.97	-20.40	-13	PASS
EGPRS1900	810	2	1910.00	-20.05	-13	PASS

Test Graphs





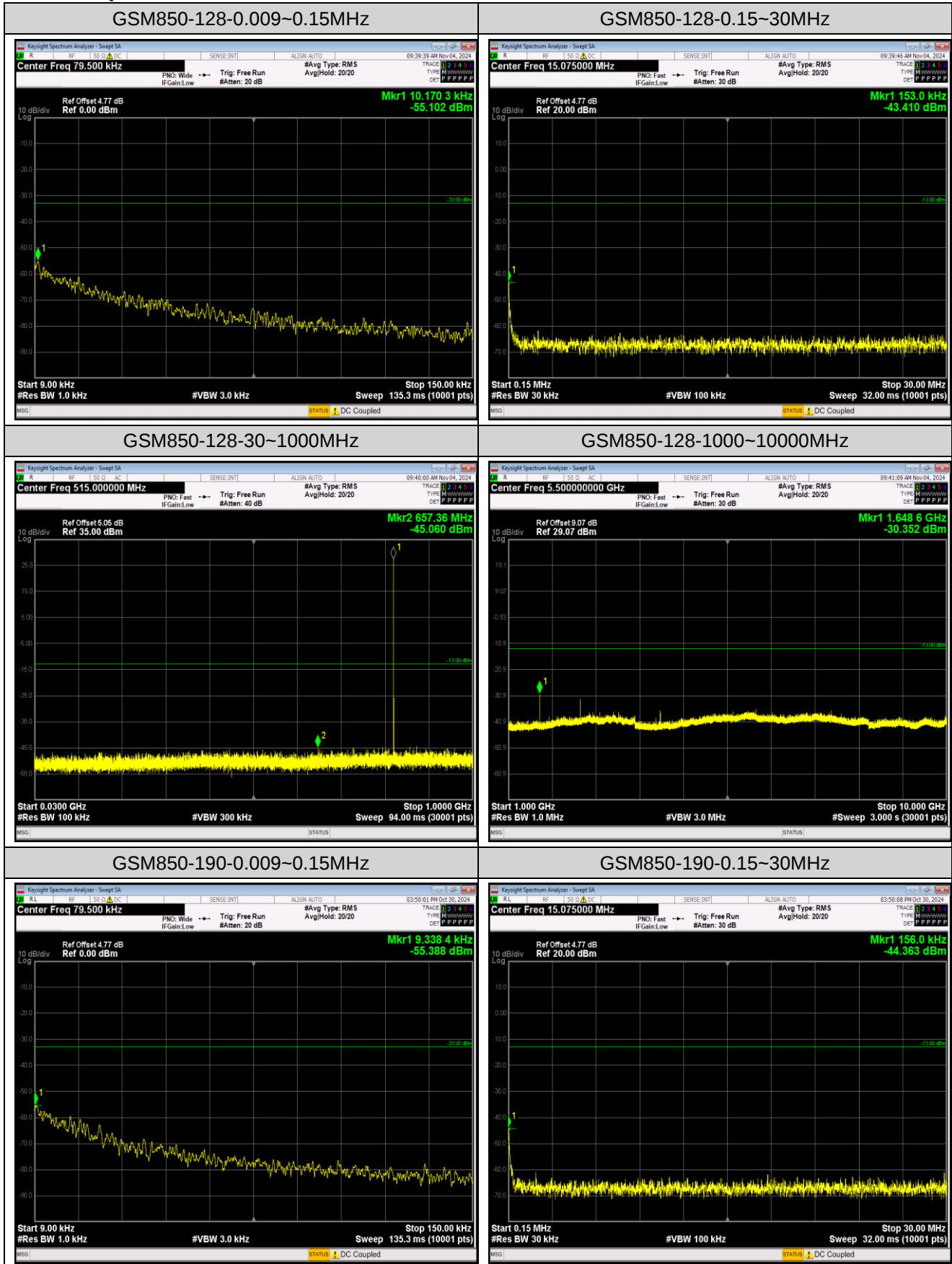
Appendix E: Conducted Spurious Emission

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	-55.1	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-43.41	-13	PASS
GSM850	128	5	30~1000MHz	657.36	-45.06	-13	PASS
GSM850	128	5	1000~10000MHz	1648.6	-30.35	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.39	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-44.36	-13	PASS
GSM850	190	5	30~1000MHz	423.82	-44.64	-13	PASS
GSM850	190	5	1000~10000MHz	1673.5	-31.38	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-56.55	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-43.54	-13	PASS
GSM850	251	5	30~1000MHz	676.38	-44.89	-13	PASS
GSM850	251	5	1000~10000MHz	1697.5	-31.51	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.13	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-42.16	-23	PASS
GSM1900	512	0	30~1000MHz	763.03	-45.62	-13	PASS
GSM1900	512	0	1000~18000MHz	16845.13	-22.05	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-57.43	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-42.21	-23	PASS
GSM1900	661	0	30~1000MHz	763.35	-45.11	-13	PASS
GSM1900	661	0	1000~18000MHz	17065	-22.1	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.77	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-42.18	-23	PASS
GSM1900	810	0	30~1000MHz	944.61	-45.74	-13	PASS
GSM1900	810	0	1000~18000MHz	16789.03	-22.06	-13	PASS

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

Test Graphs

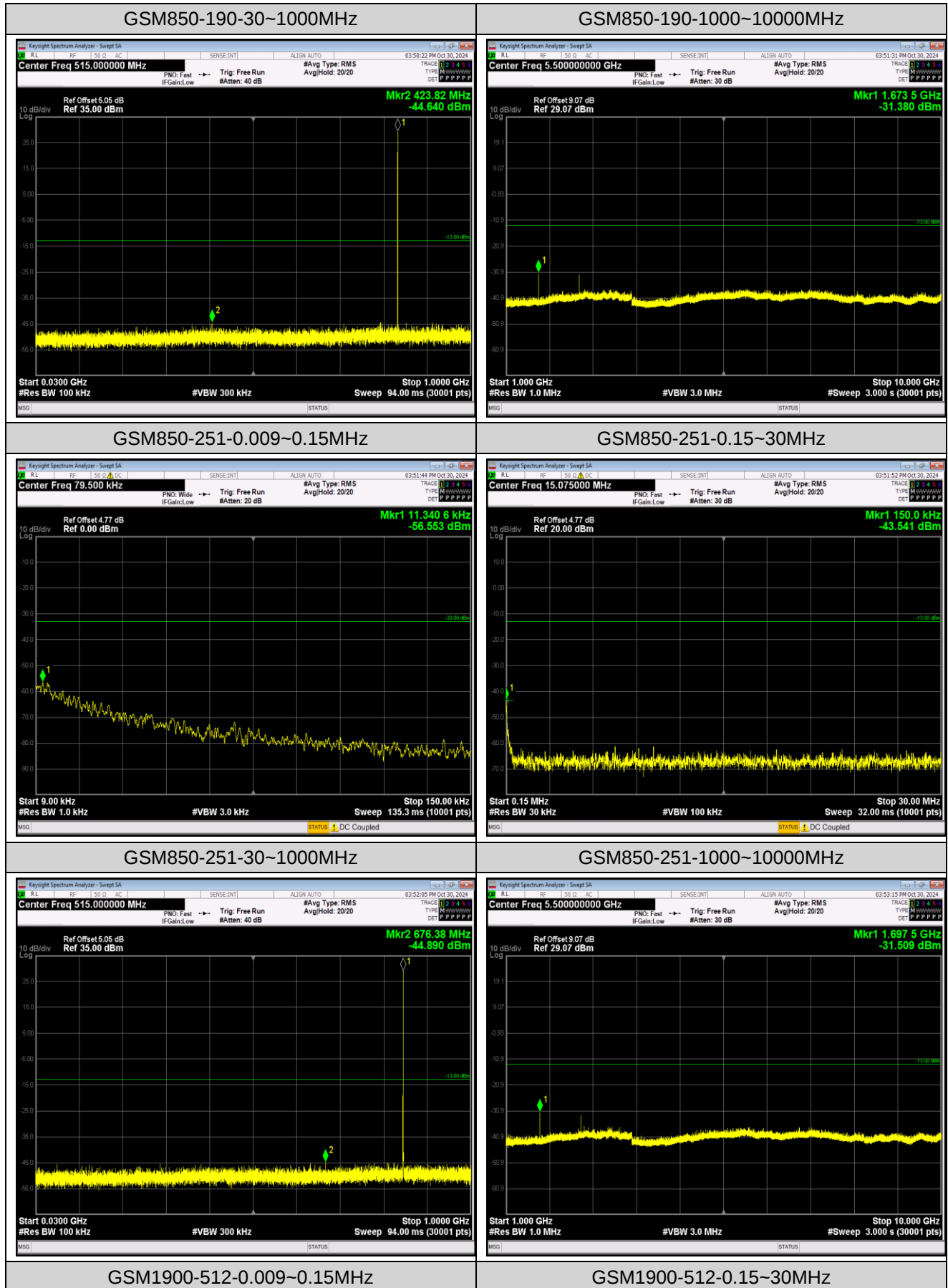


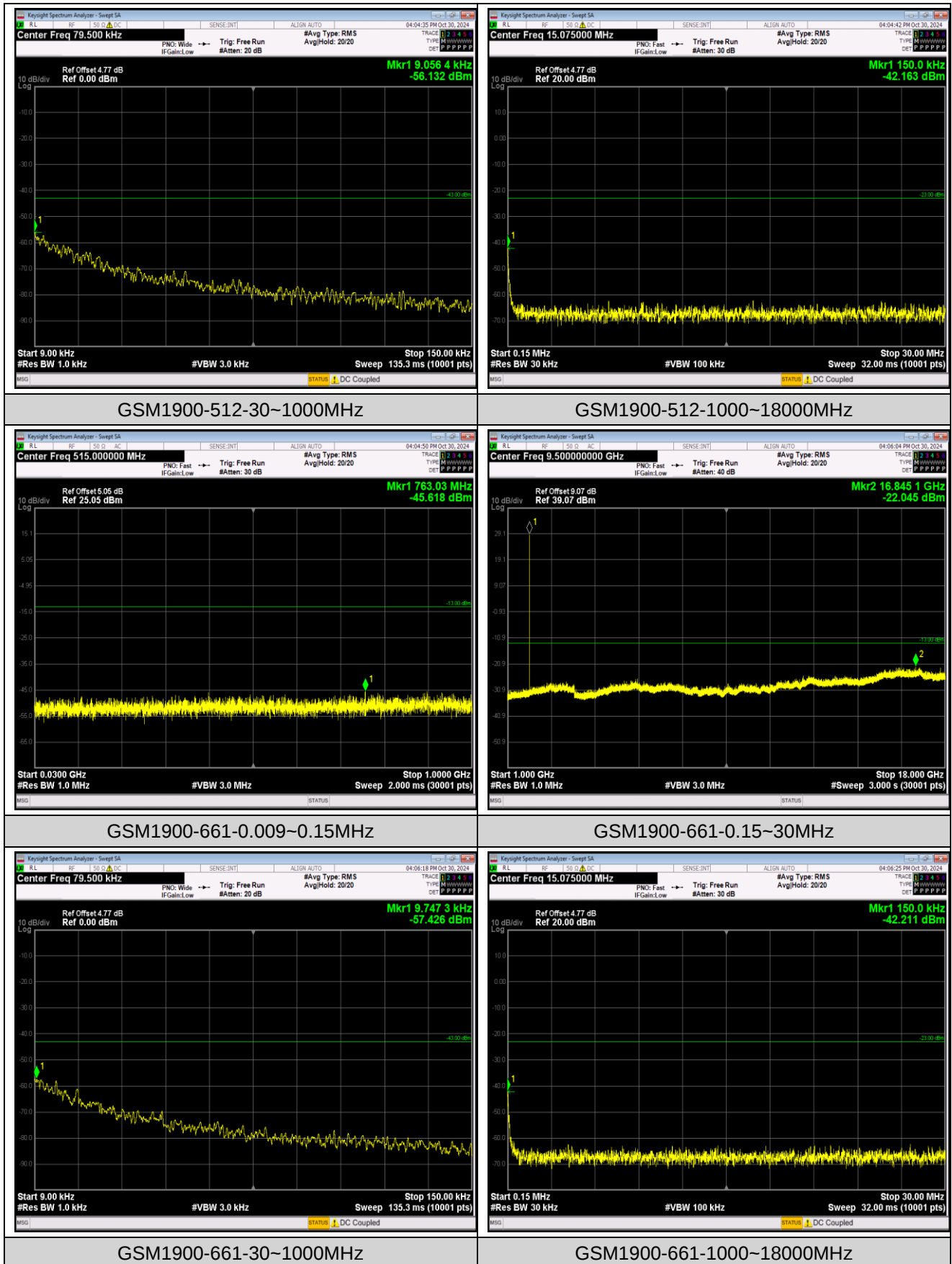
JianYan Testing Group Shenzhen Co., Ltd.

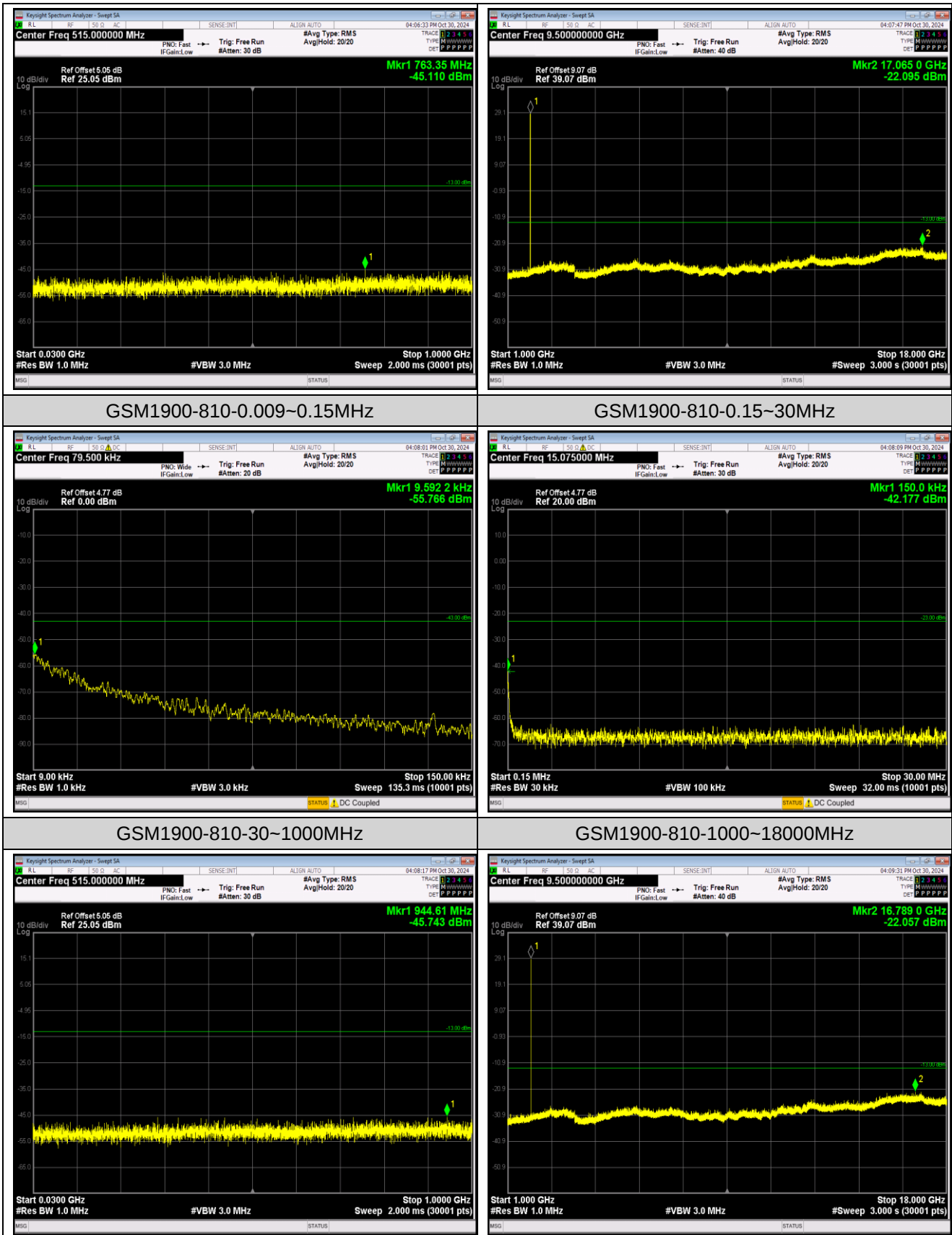
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Appendix F: Frequency Stability

Test Result

Reference Frequency: GSM850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	10.88	0.013005	±2.5	Pass
	-20	6.33	0.007566		
	-10	15.17	0.018133		
	0	9.40	0.011236		
	10	4.88	0.005833		
	20	8.46	0.010112		
	30	0.52	0.000622		
	40	-1.90	-0.002271		
	50	6.39	0.007638		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	8.01	0.009574	±2.5	Pass
	3.80	13.46	0.016089		
	4.40	8.07	0.009646		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	15.50	0.018527	±2.5	Pass
	-20	13.82	0.016519		
	-10	14.11	0.016866		
	0	11.07	0.013232		
	10	16.30	0.019484		
	20	9.98	0.011929		
	30	10.59	0.012658		
	40	12.72	0.015204		
	50	13.27	0.015862		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	12.59	0.015049	±2.5	Pass
	3.80	12.59	0.015049		
	4.40	13.95	0.016675		
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		
3.80	-30	15.40	0.008191	Within authorized band for PCS 1900	Pass
	-20	-7.43	-0.003952		
	-10	9.01	0.004793		
	0	7.43	0.003952		
	10	24.05	0.012793		
	20	6.52	0.003468		
	30	9.94	0.005287		
	40	-4.23	-0.002250		
	50	15.72	0.008362		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-17.76	-0.009447	Within authorized band for PCS 1900	Pass
	3.80	-4.26	-0.002266		
	4.40	18.82	0.010011		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	13.56	0.007213	Within authorized band for PCS 1900	Pass
	-20	13.24	0.007043		
	-10	12.33	0.006559		
	0	20.57	0.010941		
	10	25.57	0.013601		
	20	5.78	0.003074		
	30	5.04	0.002681		
	40	-1.03	-0.000548		
	50	9.52	0.005064		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	19.73	0.010495	Within authorized band for PCS 1900	Pass
	3.85	11.78	0.006266		
	4.40	21.18	0.011266		
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

