

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	34.05	31.32	38.45	PASS
GSM850	190	5	33.89	31.16	38.45	PASS
GSM850	251	5	33.76	31.03	38.45	PASS
GSM1900	512	0	31.10	30.06	33.00	PASS
GSM1900	661	0	31.22	30.18	33.00	PASS
GSM1900	810	0	30.88	29.84	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	34.06	31.33	38.45	PASS
GPRS850	128	5	2	31.86	29.13	38.45	PASS
GPRS850	128	5	3	29.95	27.22	38.45	PASS
GPRS850	128	5	4	27.82	25.09	38.45	PASS
GPRS850	190	5	1	33.90	31.17	38.45	PASS
GPRS850	190	5	2	31.59	28.86	38.45	PASS
GPRS850	190	5	3	29.66	26.93	38.45	PASS
GPRS850	190	5	4	27.53	24.8	38.45	PASS
GPRS850	251	5	1	33.66	30.93	38.45	PASS
GPRS850	251	5	2	31.41	28.68	38.45	PASS
GPRS850	251	5	3	29.58	26.85	38.45	PASS
GPRS850	251	5	4	27.45	24.72	38.45	PASS
GPRS1900	512	0	1	30.99	29.95	33.00	PASS
GPRS1900	512	0	2	28.66	27.62	33.00	PASS
GPRS1900	512	0	3	26.99	25.95	33.00	PASS
GPRS1900	512	0	4	24.90	23.86	33.00	PASS
GPRS1900	661	0	1	31.21	30.17	33.00	PASS
GPRS1900	661	0	2	28.63	27.59	33.00	PASS
GPRS1900	661	0	3	26.95	25.91	33.00	PASS
GPRS1900	661	0	4	24.84	23.8	33.00	PASS
GPRS1900	810	0	1	30.85	29.81	33.00	PASS
GPRS1900	810	0	2	28.37	27.33	33.00	PASS
GPRS1900	810	0	3	26.67	25.63	33.00	PASS
GPRS1900	810	0	4	24.54	23.5	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	26.78	24.05	38.45	PASS
EGPRS850	128	8	2	25.25	22.52	38.45	PASS
EGPRS850	128	8	3	22.94	20.21	38.45	PASS
EGPRS850	128	8	4	20.26	17.53	38.45	PASS
EGPRS850	190	8	1	27.07	24.34	38.45	PASS
EGPRS850	190	8	2	25.51	22.78	38.45	PASS
EGPRS850	190	8	3	23.19	20.46	38.45	PASS
EGPRS850	190	8	4	20.53	17.8	38.45	PASS
EGPRS850	251	8	1	26.92	24.19	38.45	PASS
EGPRS850	251	8	2	25.29	22.56	38.45	PASS
EGPRS850	251	8	3	23.03	20.3	38.45	PASS
EGPRS850	251	8	4	20.38	17.65	38.45	PASS
EGPRS1900	512	2	1	26.76	25.72	33.00	PASS
EGPRS1900	512	2	2	25.02	23.98	33.00	PASS
EGPRS1900	512	2	3	22.33	21.29	33.00	PASS
EGPRS1900	512	2	4	19.33	18.29	33.00	PASS
EGPRS1900	661	2	1	27.01	25.97	33.00	PASS
EGPRS1900	661	2	2	25.32	24.28	33.00	PASS
EGPRS1900	661	2	3	22.64	21.6	33.00	PASS
EGPRS1900	661	2	4	19.93	18.89	33.00	PASS
EGPRS1900	810	2	1	26.37	25.33	33.00	PASS
EGPRS1900	810	2	2	24.65	23.61	33.00	PASS
EGPRS1900	810	2	3	21.85	20.81	33.00	PASS
EGPRS1900	810	2	4	19.44	18.4	33.00	PASS

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

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

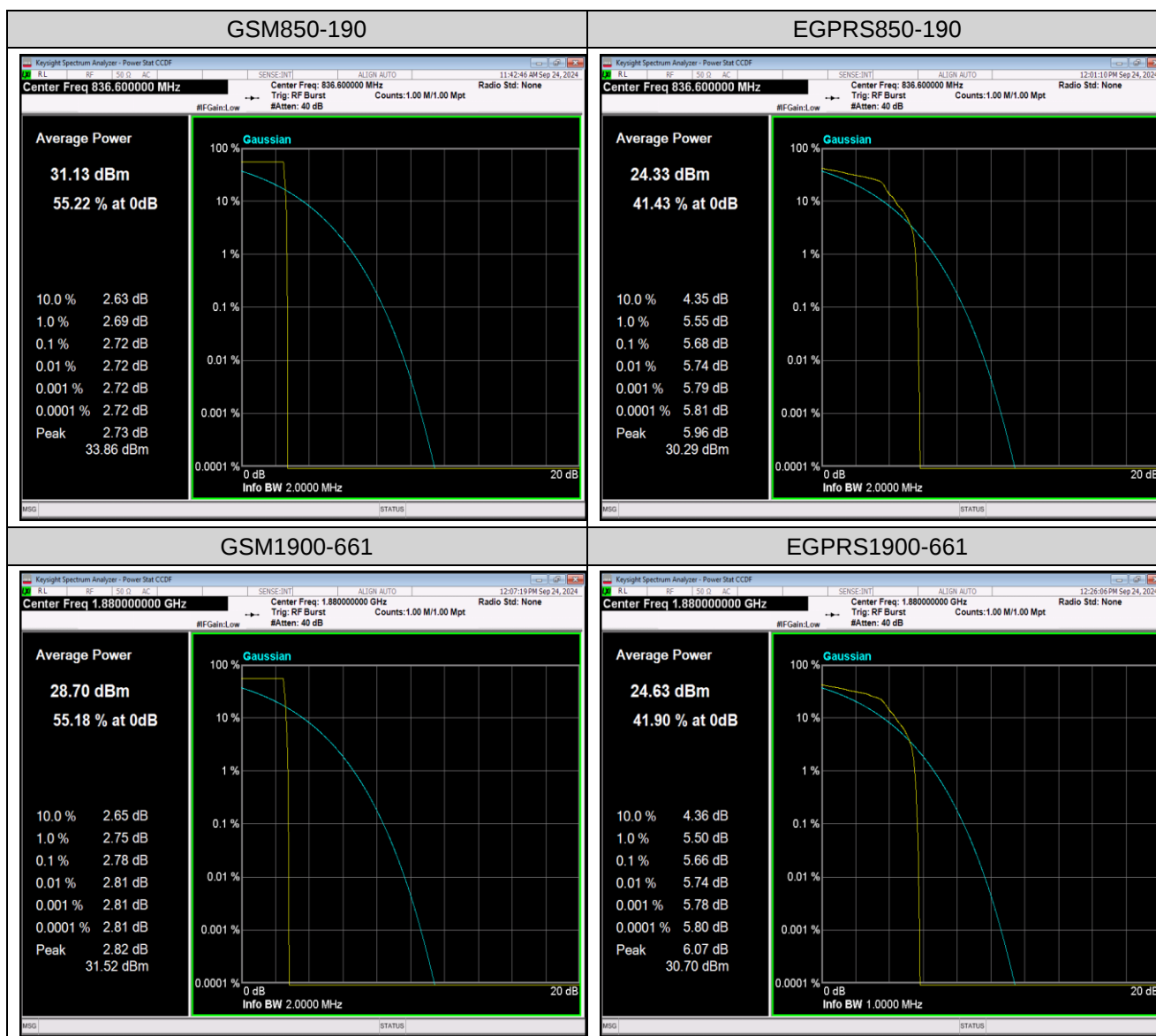
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.72	13	PASS
EGPRS850	190	8	5.68	13	PASS
GSM1900	661	0	2.78	13	PASS
EGPRS1900	661	2	5.66	13	PASS

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

Test Graphs

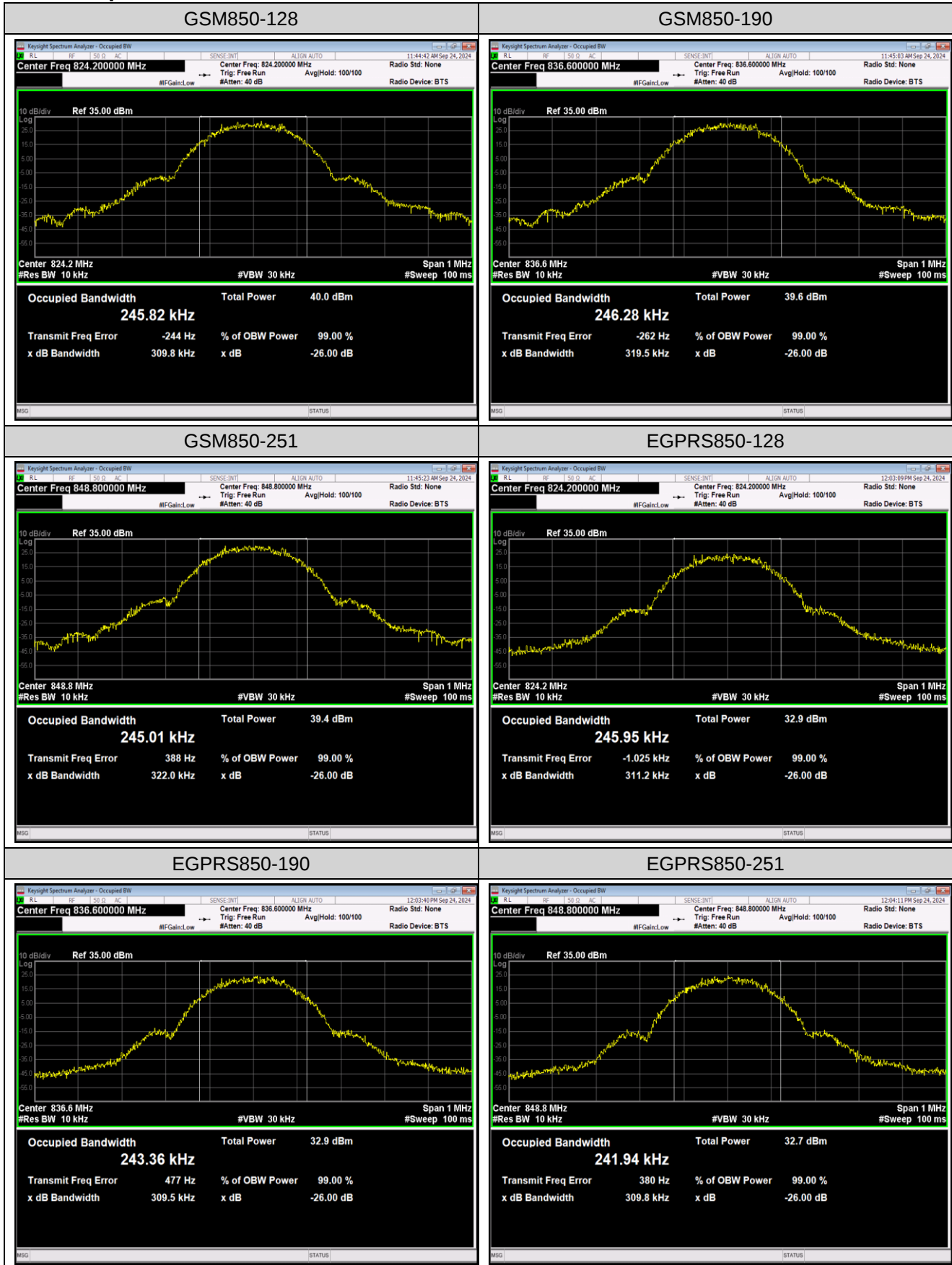


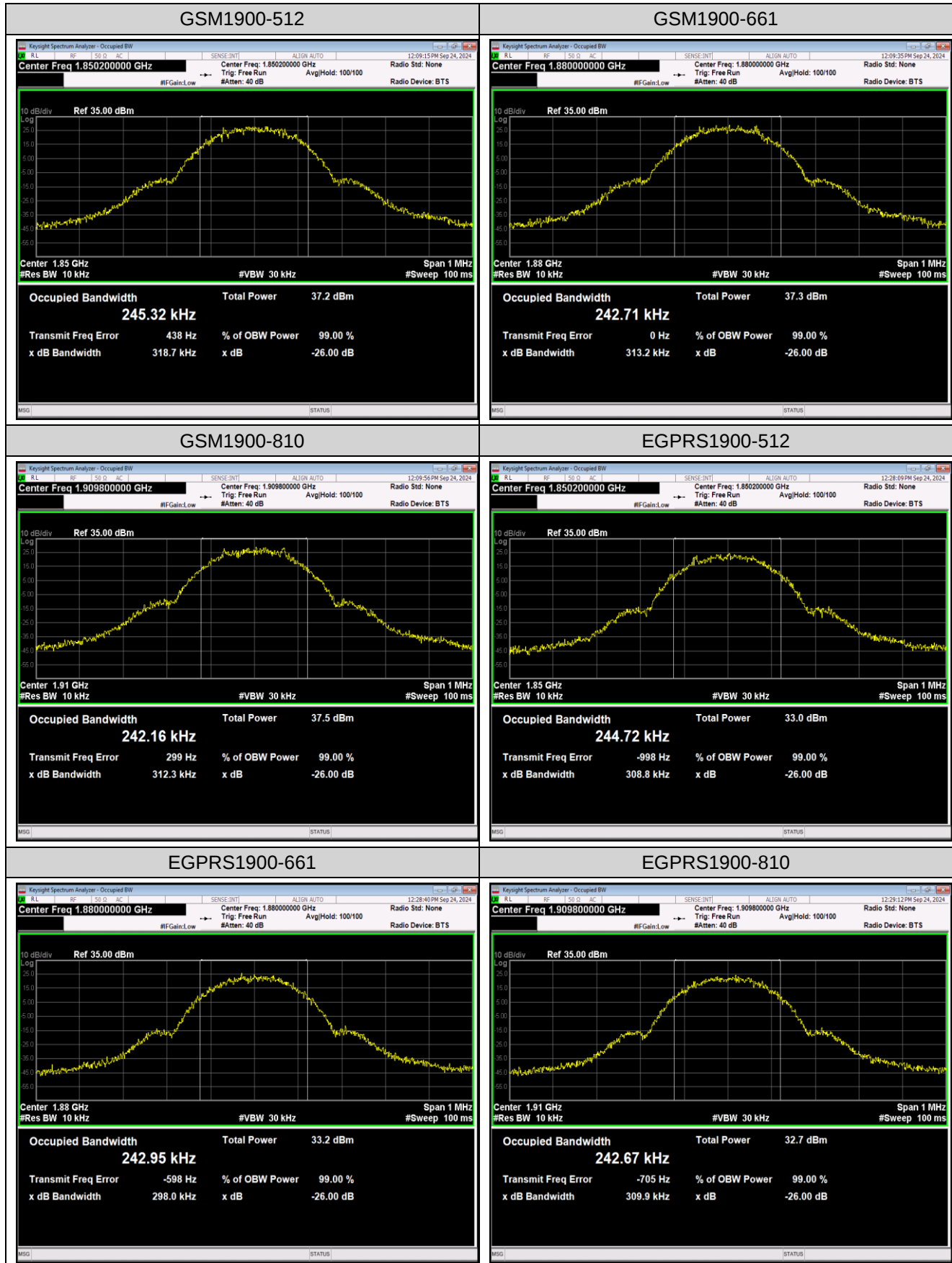
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24582	0.3098	---	PASS
GSM850	190	5	0.24628	0.3195	---	PASS
GSM850	251	5	0.24501	0.3220	---	PASS
EGPRS850	128	8	0.24595	0.3112	---	PASS
EGPRS850	190	8	0.24336	0.3095	---	PASS
EGPRS850	251	8	0.24194	0.3098	---	PASS
GSM1900	512	0	0.24532	0.3187	---	PASS
GSM1900	661	0	0.24271	0.3132	---	PASS
GSM1900	810	0	0.24216	0.3123	---	PASS
EGPRS1900	512	2	0.24472	0.3088	---	PASS
EGPRS1900	661	2	0.24295	0.2980	---	PASS
EGPRS1900	810	2	0.24267	0.3099	---	PASS

Test Graphs



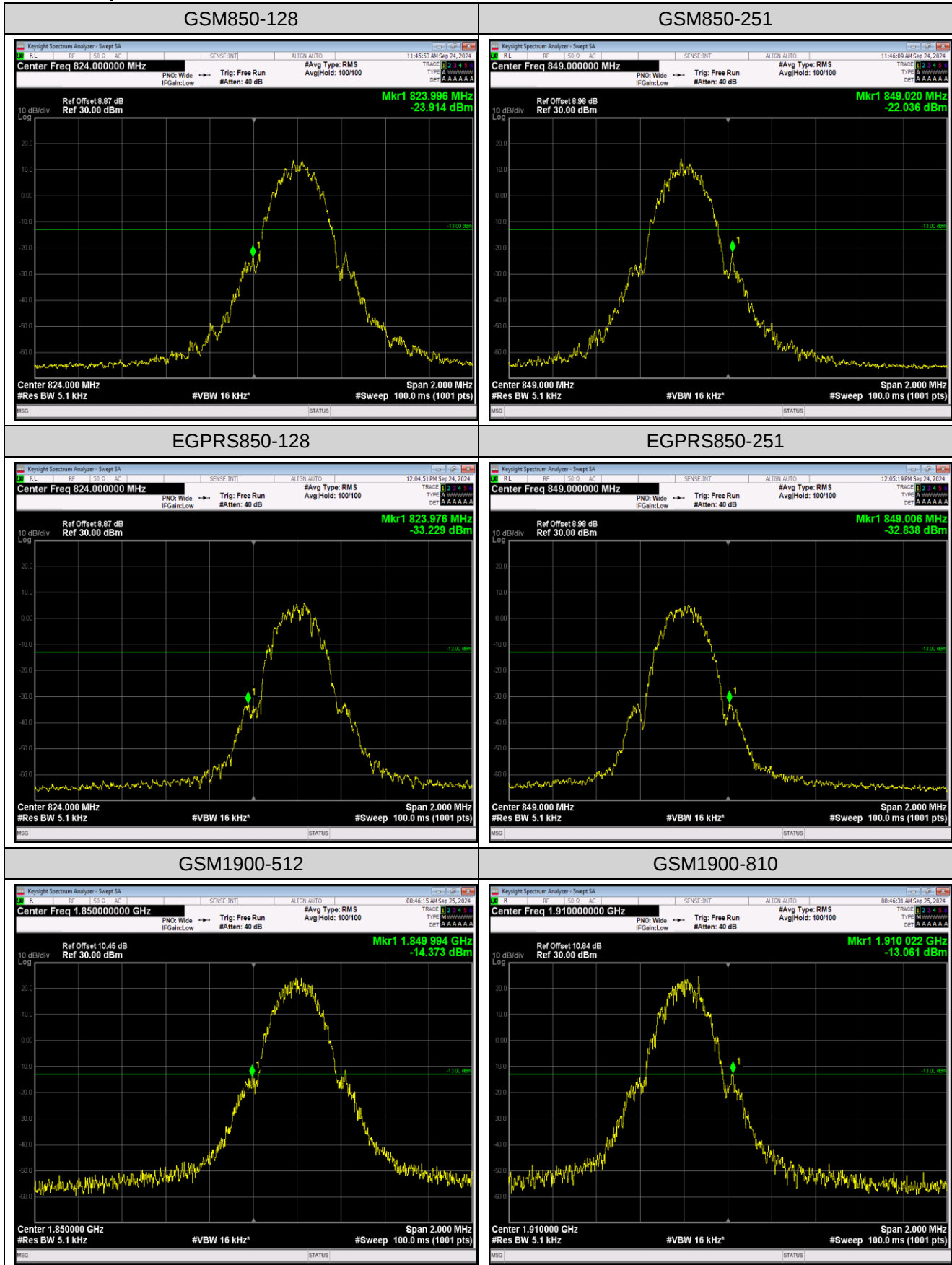


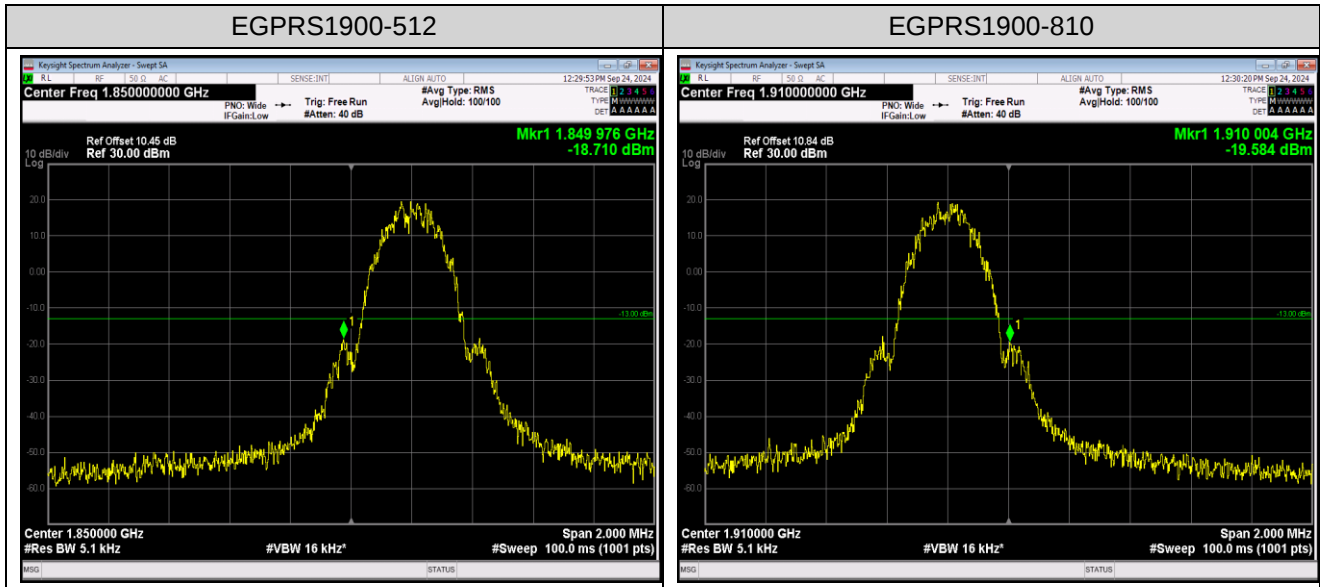
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-23.91	-13	PASS
GSM850	251	5	849.02	-22.04	-13	PASS
EGPRS850	128	8	823.98	-33.23	-13	PASS
EGPRS850	251	8	849.01	-32.84	-13	PASS
GSM1900	512	0	1849.99	-14.37	-13	PASS
GSM1900	810	0	1910.02	-13.06	-13	PASS
EGPRS1900	512	2	1849.98	-18.71	-13	PASS
EGPRS1900	810	2	1910.00	-19.58	-13	PASS

Test Graphs





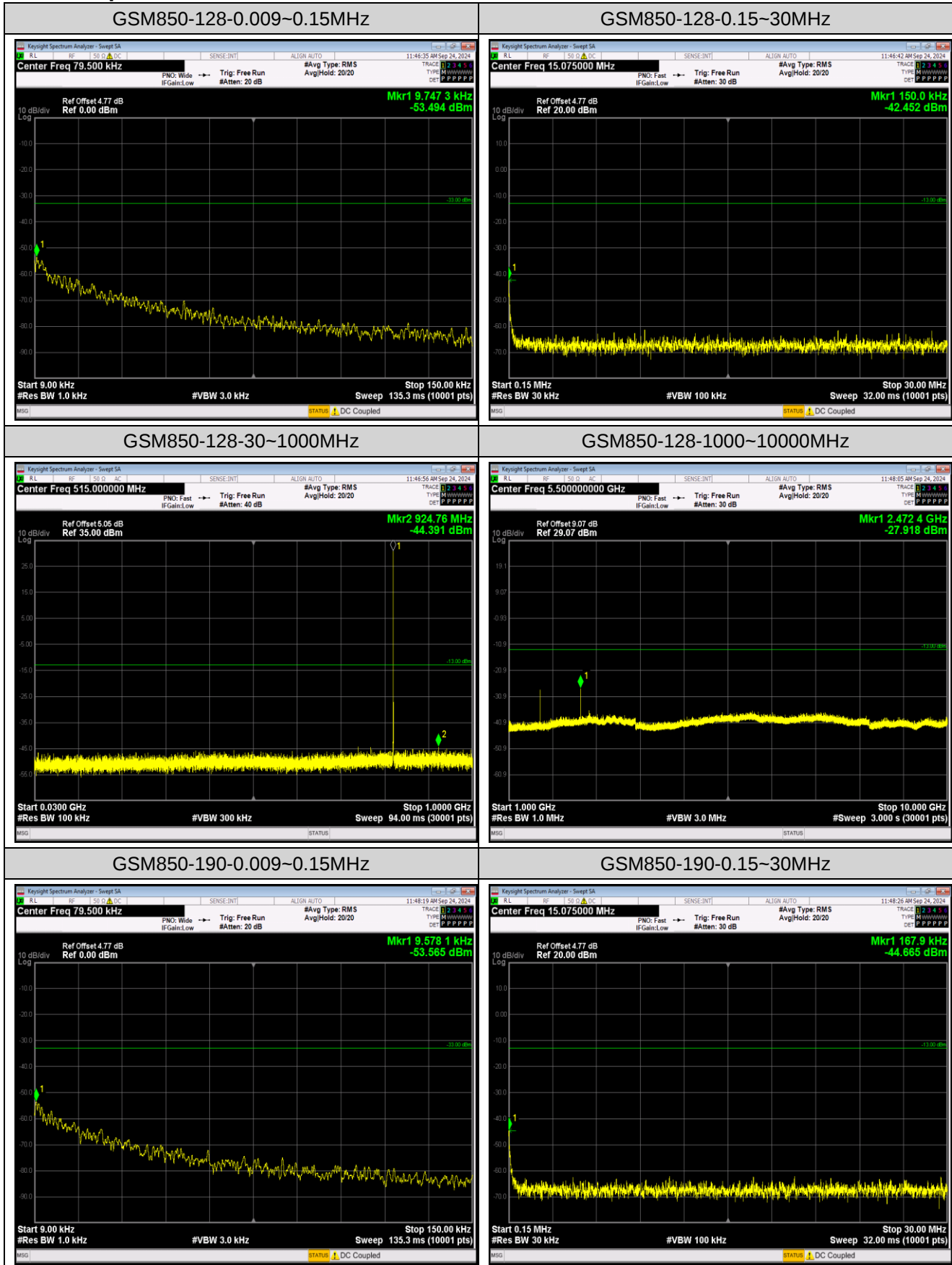
Appendix E: Conducted Spurious Emission

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	-53.49	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-42.45	-13	PASS
GSM850	128	5	30~1000MHz	924.76	-44.39	-13	PASS
GSM850	128	5	1000~10000MHz	2472.4	-27.92	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-53.57	-33	PASS
GSM850	190	5	0.15~30MHz	0.17	-44.67	-13	PASS
GSM850	190	5	30~1000MHz	981.34	-44.98	-13	PASS
GSM850	190	5	1000~10000MHz	2509.6	-29.43	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-53.42	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-42.67	-13	PASS
GSM850	251	5	30~1000MHz	524.38	-45.14	-13	PASS
GSM850	251	5	1000~10000MHz	2546.2	-30.56	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.25	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-44.05	-23	PASS
GSM1900	512	0	30~1000MHz	697.17	-45.85	-13	PASS
GSM1900	512	0	1000~18000MHz	16173.63	-21.9	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-55.82	-43	PASS
GSM1900	661	0	0.15~30MHz	0.17	-43.97	-23	PASS
GSM1900	661	0	30~1000MHz	932.94	-44.98	-13	PASS
GSM1900	661	0	1000~18000MHz	17034.4	-21.98	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.01	-43	PASS
GSM1900	810	0	0.15~30MHz	0.16	-40.84	-23	PASS
GSM1900	810	0	30~1000MHz	912.18	-45.5	-13	PASS
GSM1900	810	0	1000~18000MHz	16969.23	-21.86	-13	PASS

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

Test Graphs

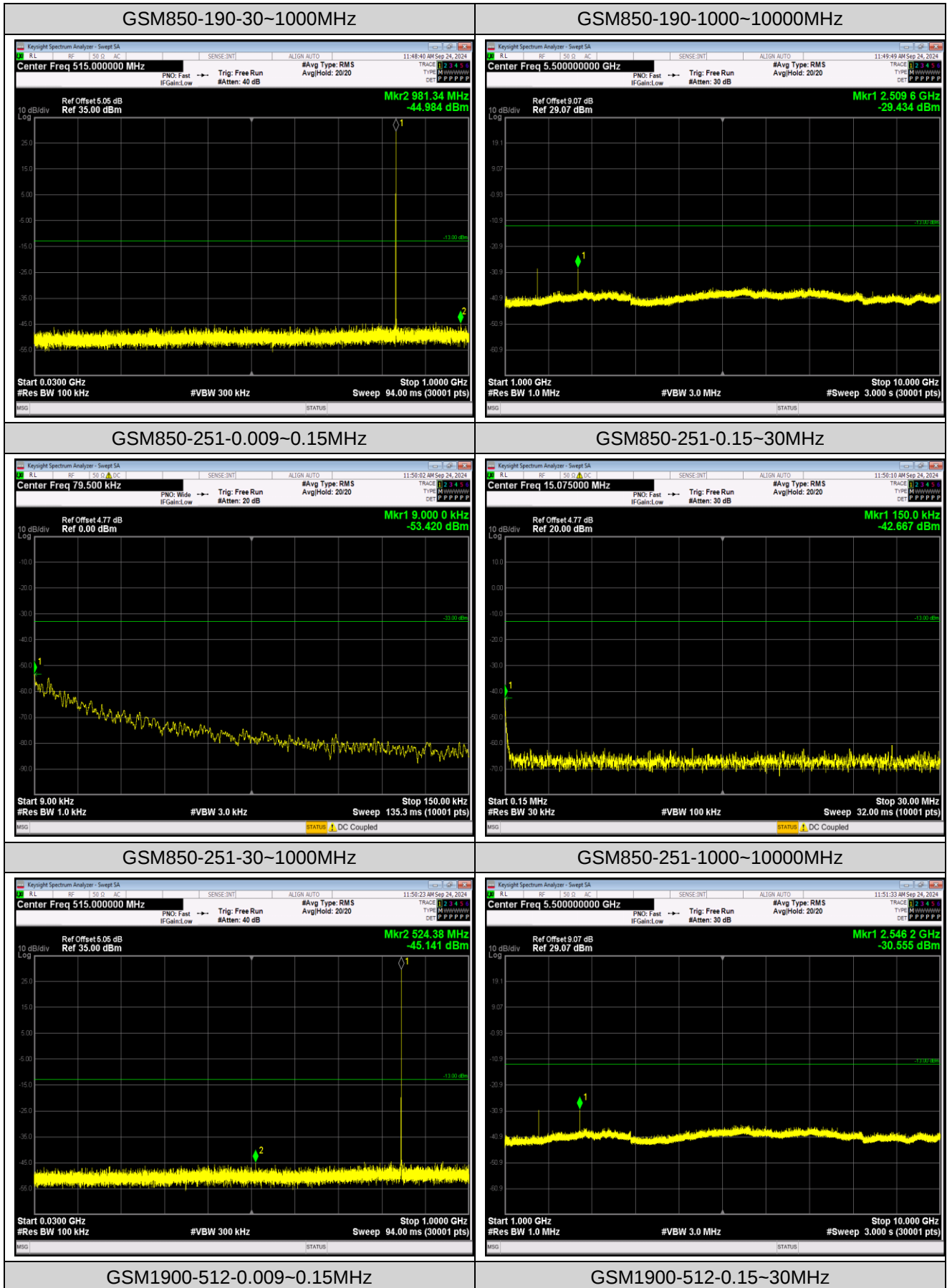


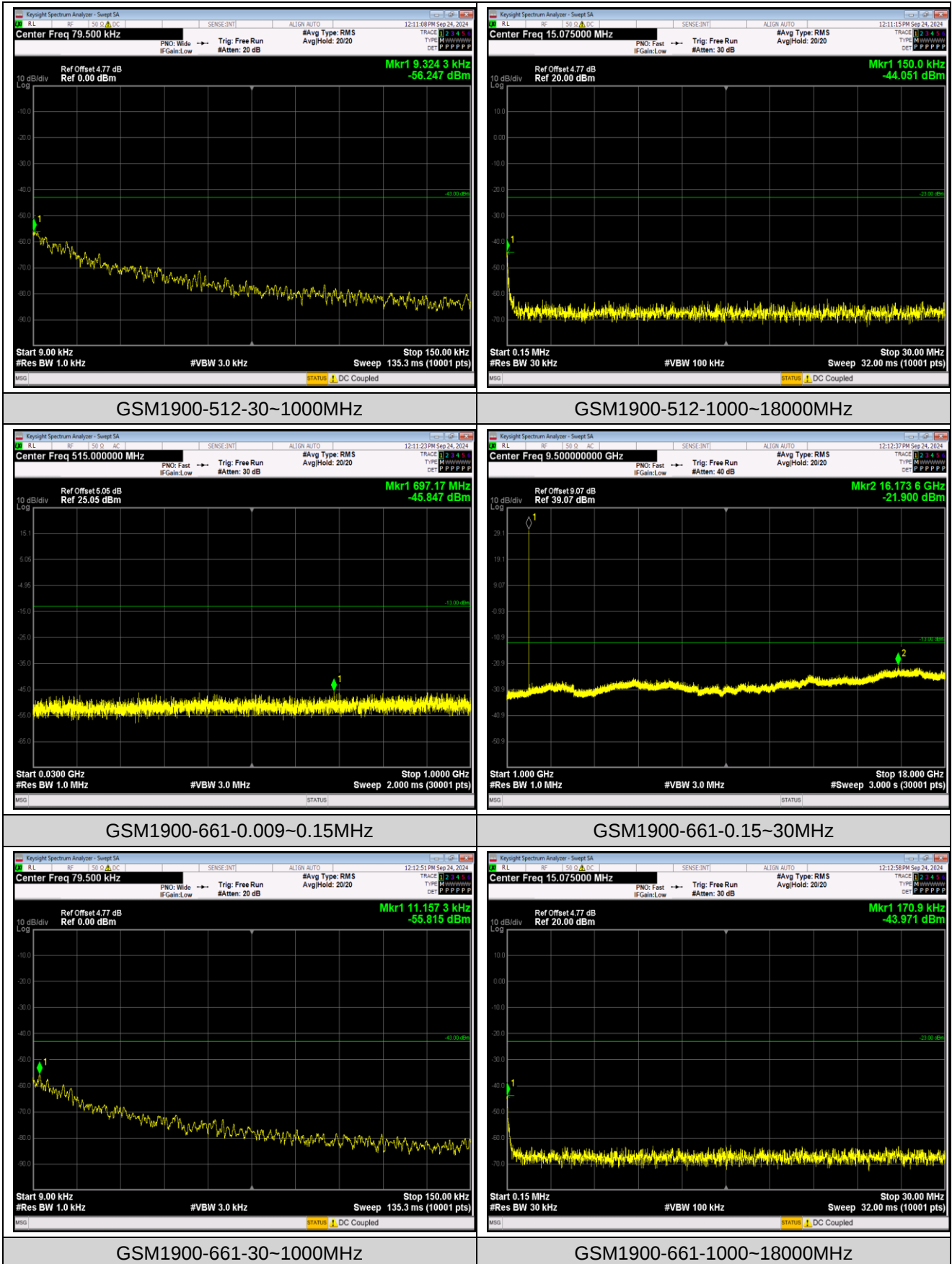
JianYan Testing Group Shenzhen Co., Ltd.

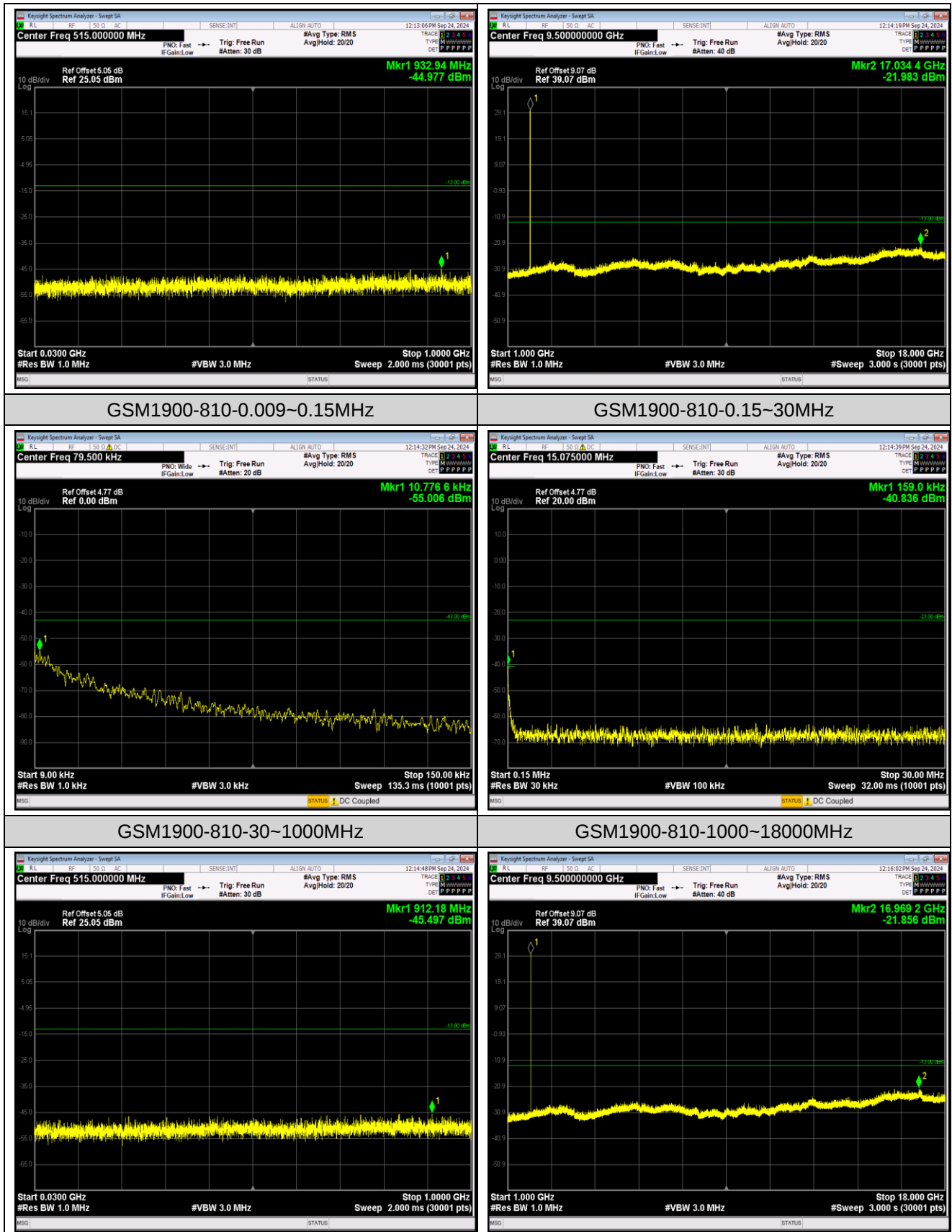
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Appendix F: Frequency Stability

Test Result

Reference Frequency: GSM850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.85	-30	-1.32	-0.001578	±2.5	Pass
	-20	7.55	0.009025		
	-10	2.45	0.002929		
	0	0.19	0.000227		
	10	2.68	0.003203		
	20	3.42	0.004088		
	30	3.78	0.004518		
	40	7.46	0.008917		
	50	3.20	0.003825		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	3.45	0.004124	±2.5	Pass
	3.85	6.68	0.007985		
	4.40	0.26	0.000311		
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		
3.85	-30	11.33	0.013543	±2.5	Pass
	-20	8.78	0.010495		
	-10	8.27	0.009885		
	0	8.20	0.009802		
	10	8.88	0.010614		
	20	4.65	0.005558		
	30	7.23	0.008642		
	40	6.72	0.008033		
	50	5.00	0.005977		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	5.17	0.006180	±2.5	Pass
	3.85	6.88	0.008224		
	4.40	9.85	0.011774		
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	3.78	0.002011	Within authorized band for PCS 1900	Pass
	-20	0.36	0.000191		
	-10	1.71	0.000910		
	0	2.26	0.001202		
	10	5.91	0.003144		
	20	5.46	0.002904		
	30	-4.58	-0.002436		
	40	2.78	0.001479		
	50	13.92	0.007404		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	2.65	0.001410	Within authorized band for PCS 1900	Pass
	3.85	-3.49	-0.001856		
	4.40	-3.26	-0.001734		
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		
3.85	-30	14.04	0.007468	Within authorized band for PCS 1900	Pass
	-20	14.33	0.007622		
	-10	14.30	0.007606		
	0	9.56	0.005085		
	10	7.10	0.003777		
	20	1.55	0.000824		
	30	13.17	0.007005		
	40	2.81	0.001495		
	50	7.07	0.003761		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	3.62	0.001926	Within authorized band for PCS 1900	Pass
	3.85	10.14	0.005394		
	4.40	8.46	0.004500		
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

