

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	32.76	24.59	38.45	PASS
GSM850	190	5	33.30	25.13	38.45	PASS
GSM850	251	5	33.31	25.14	38.45	PASS
GSM1900	512	0	29.74	27.87	33.00	PASS
GSM1900	661	0	30.16	28.29	33.00	PASS
GSM1900	810	0	30.32	28.45	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.74	24.57	38.45	PASS
GPRS850	128	5	2	31.47	23.3	38.45	PASS
GPRS850	128	5	3	29.20	21.03	38.45	PASS
GPRS850	128	5	4	27.75	19.58	38.45	PASS
GPRS850	190	5	1	33.24	25.07	38.45	PASS
GPRS850	190	5	2	32.04	23.87	38.45	PASS
GPRS850	190	5	3	29.81	21.64	38.45	PASS
GPRS850	190	5	4	28.39	20.22	38.45	PASS
GPRS850	251	5	1	33.27	25.1	38.45	PASS
GPRS850	251	5	2	32.08	23.91	38.45	PASS
GPRS850	251	5	3	29.85	21.68	38.45	PASS
GPRS850	251	5	4	28.42	20.25	38.45	PASS
GPRS1900	512	0	1	29.81	27.94	33.00	PASS
GPRS1900	512	0	2	28.73	26.86	33.00	PASS
GPRS1900	512	0	3	26.69	24.82	33.00	PASS
GPRS1900	512	0	4	25.34	23.47	33.00	PASS
GPRS1900	661	0	1	30.21	28.34	33.00	PASS
GPRS1900	661	0	2	29.22	27.35	33.00	PASS
GPRS1900	661	0	3	27.18	25.31	33.00	PASS
GPRS1900	661	0	4	25.84	23.97	33.00	PASS
GPRS1900	810	0	1	30.37	28.5	33.00	PASS
GPRS1900	810	0	2	29.43	27.56	33.00	PASS
GPRS1900	810	0	3	27.43	25.56	33.00	PASS
GPRS1900	810	0	4	26.10	24.23	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.55	19.38	38.45	PASS
EGPRS850	128	8	2	26.29	18.12	38.45	PASS
EGPRS850	128	8	3	24.14	15.97	38.45	PASS
EGPRS850	128	8	4	22.81	14.64	38.45	PASS
EGPRS850	190	8	1	27.93	19.76	38.45	PASS
EGPRS850	190	8	2	26.70	18.53	38.45	PASS
EGPRS850	190	8	3	24.57	16.4	38.45	PASS
EGPRS850	190	8	4	23.26	15.09	38.45	PASS
EGPRS850	251	8	1	27.97	19.8	38.45	PASS
EGPRS850	251	8	2	26.72	18.55	38.45	PASS
EGPRS850	251	8	3	24.62	16.45	38.45	PASS
EGPRS850	251	8	4	23.34	15.17	38.45	PASS
EGPRS1900	512	2	1	26.38	24.51	33.00	PASS
EGPRS1900	512	2	2	25.23	23.36	33.00	PASS
EGPRS1900	512	2	3	23.00	21.13	33.00	PASS
EGPRS1900	512	2	4	21.70	19.83	33.00	PASS
EGPRS1900	661	2	1	26.71	24.84	33.00	PASS
EGPRS1900	661	2	2	25.54	23.67	33.00	PASS
EGPRS1900	661	2	3	23.33	21.46	33.00	PASS
EGPRS1900	661	2	4	22.10	20.23	33.00	PASS
EGPRS1900	810	2	1	26.56	24.69	33.00	PASS
EGPRS1900	810	2	2	25.43	23.56	33.00	PASS
EGPRS1900	810	2	3	23.24	21.37	33.00	PASS
EGPRS1900	810	2	4	22.00	20.13	33.00	PASS

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

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

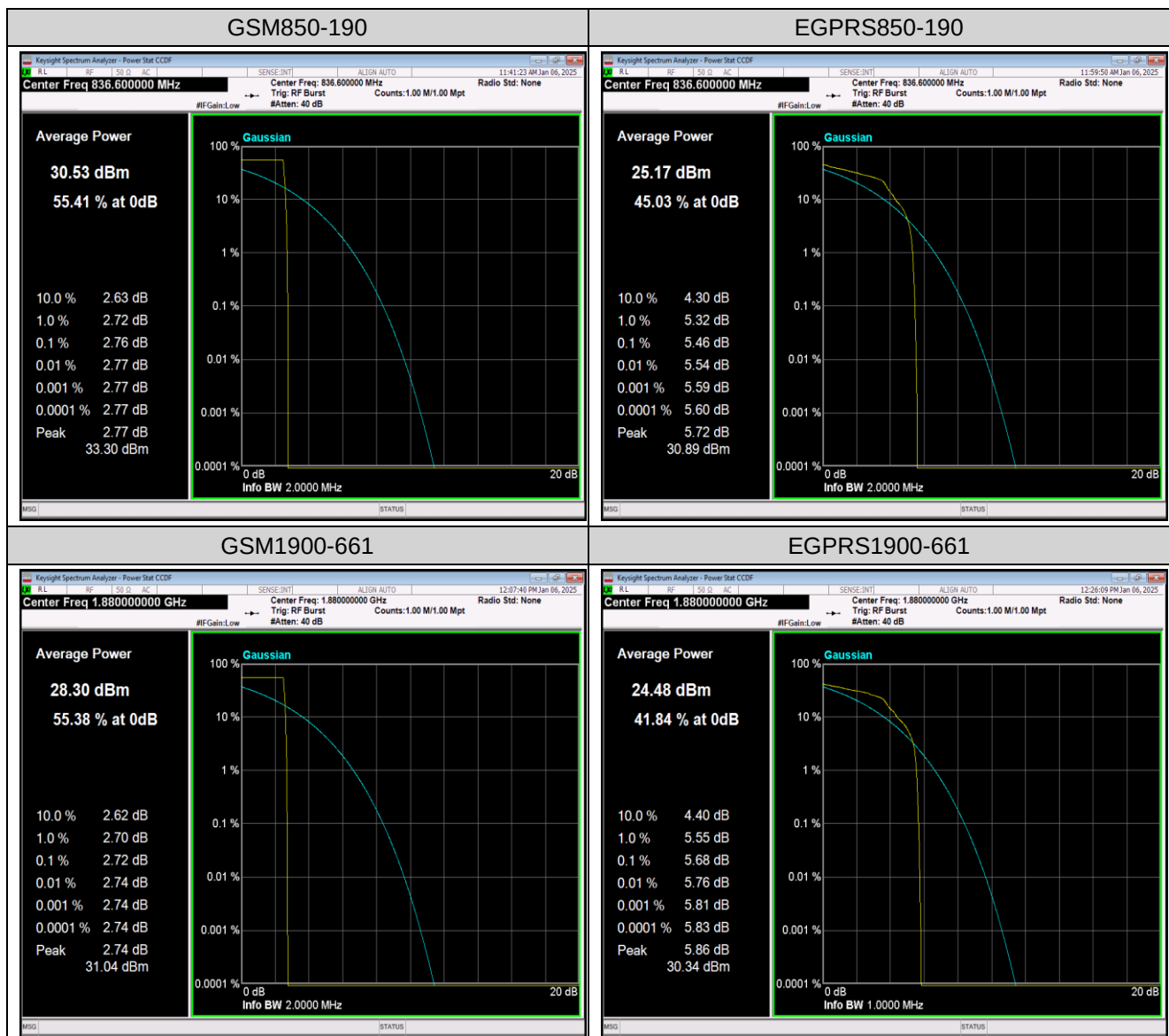
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.76	13	PASS
EGPRS850	190	8	5.46	13	PASS
GSM1900	661	0	2.72	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

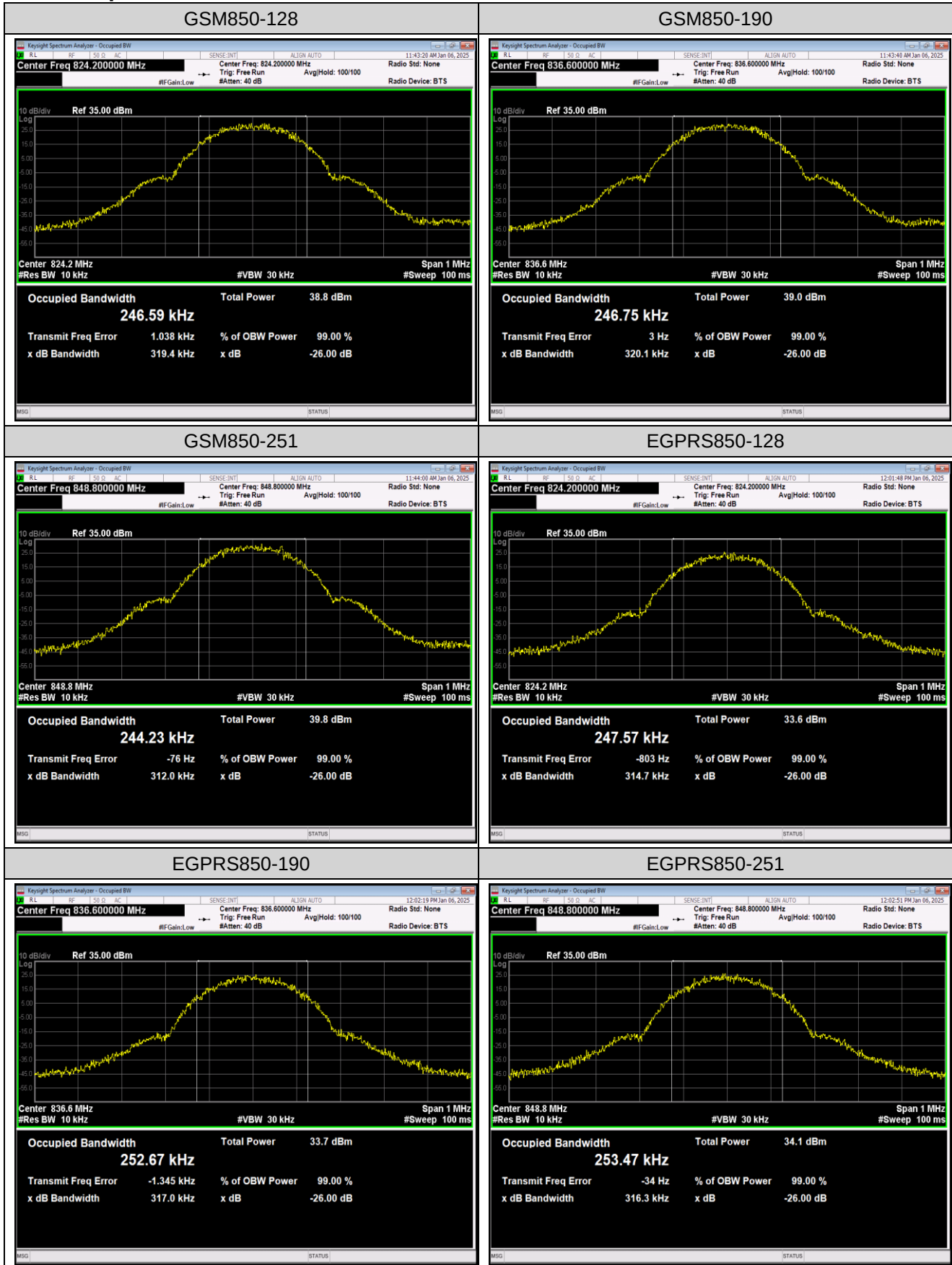


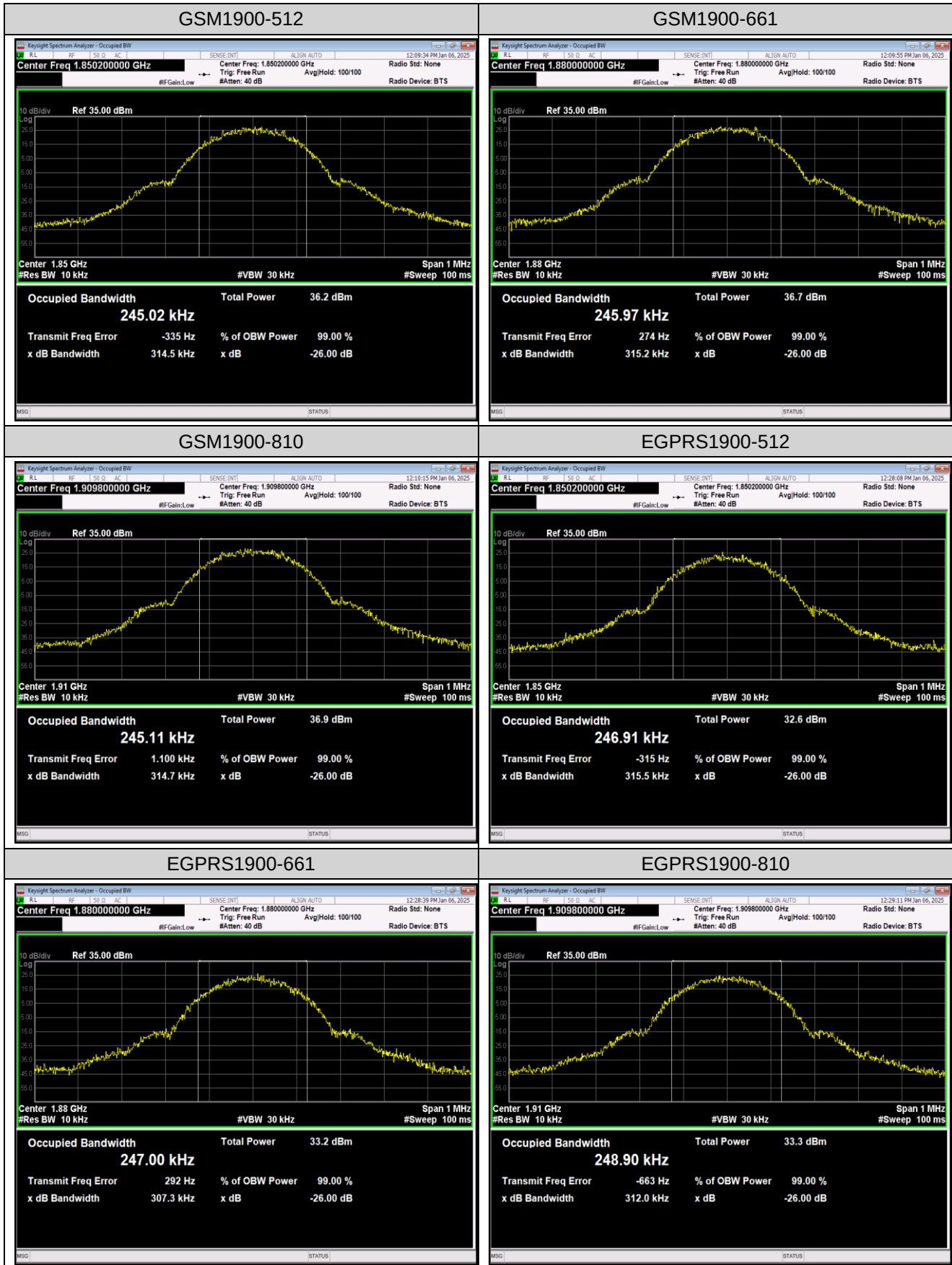
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24659	0.3194	---	PASS
GSM850	190	5	0.24675	0.3201	---	PASS
GSM850	251	5	0.24423	0.3120	---	PASS
EGPRS850	128	8	0.24757	0.3147	---	PASS
EGPRS850	190	8	0.25267	0.3170	---	PASS
EGPRS850	251	8	0.25347	0.3163	---	PASS
GSM1900	512	0	0.24502	0.3145	---	PASS
GSM1900	661	0	0.24597	0.3152	---	PASS
GSM1900	810	0	0.24511	0.3147	---	PASS
EGPRS1900	512	2	0.24691	0.3155	---	PASS
EGPRS1900	661	2	0.24700	0.3073	---	PASS
EGPRS1900	810	2	0.24890	0.3120	---	PASS

Test Graphs



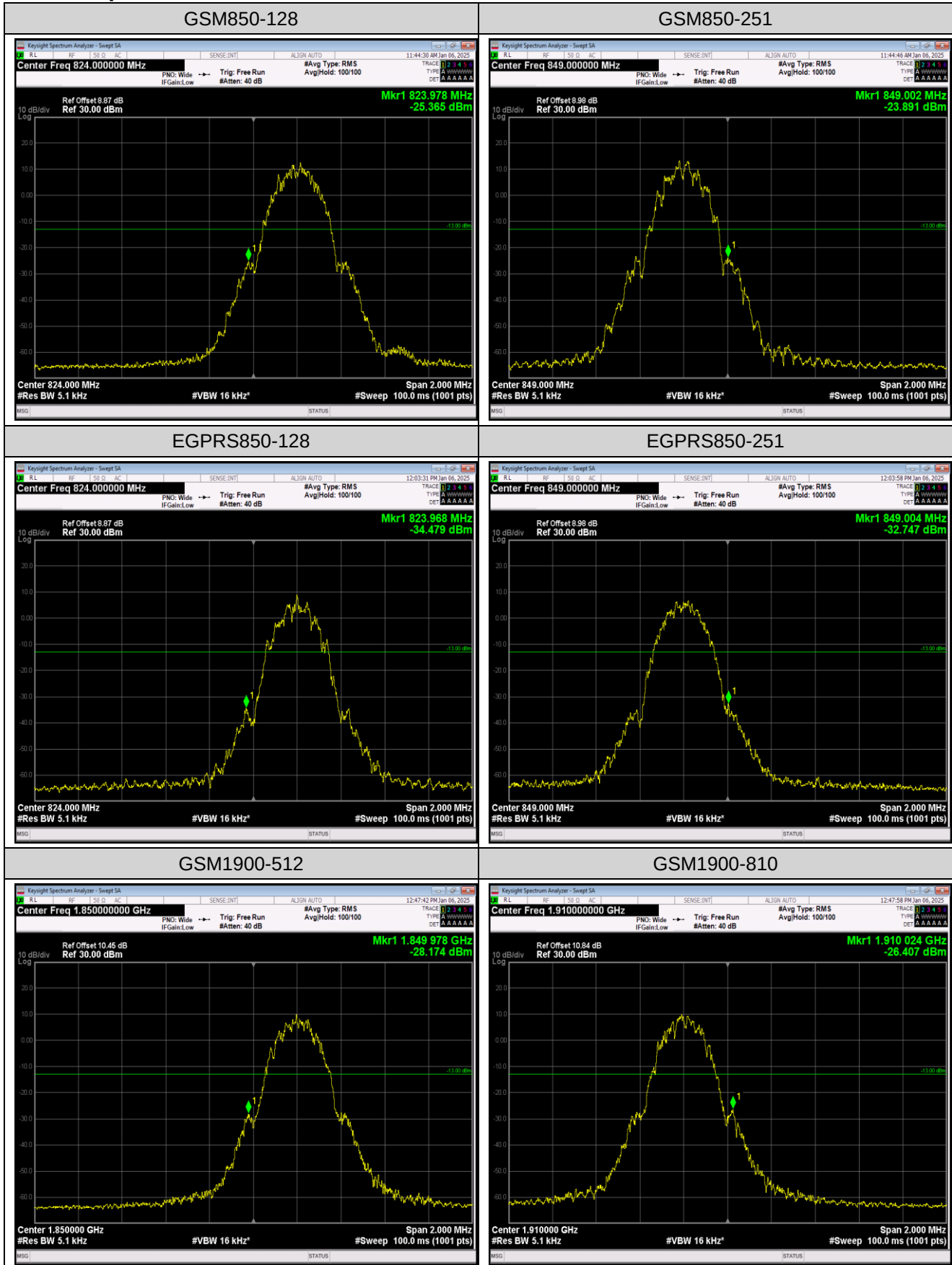


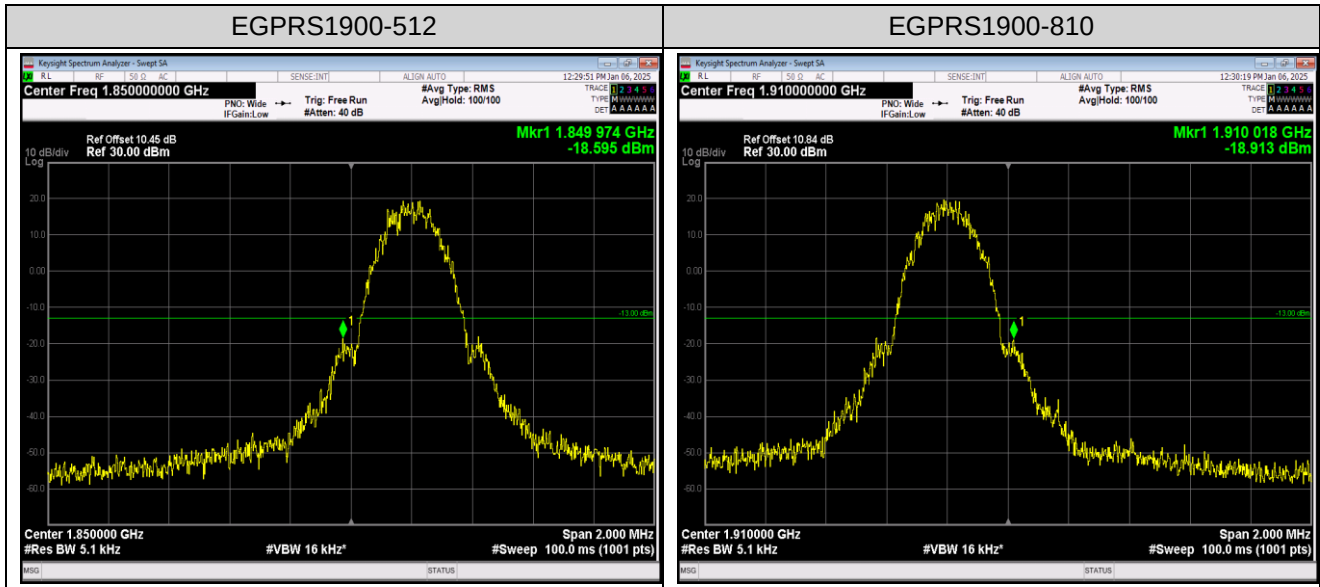
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-25.36	-13	PASS
GSM850	251	5	849.00	-23.89	-13	PASS
EGPRS850	128	8	823.97	-34.48	-13	PASS
EGPRS850	251	8	849.00	-32.75	-13	PASS
GSM1900	512	0	1849.98	-28.17	-13	PASS
GSM1900	810	0	1910.02	-26.41	-13	PASS
EGPRS1900	512	2	1849.97	-18.59	-13	PASS
EGPRS1900	810	2	1910.02	-18.91	-13	PASS

Test Graphs





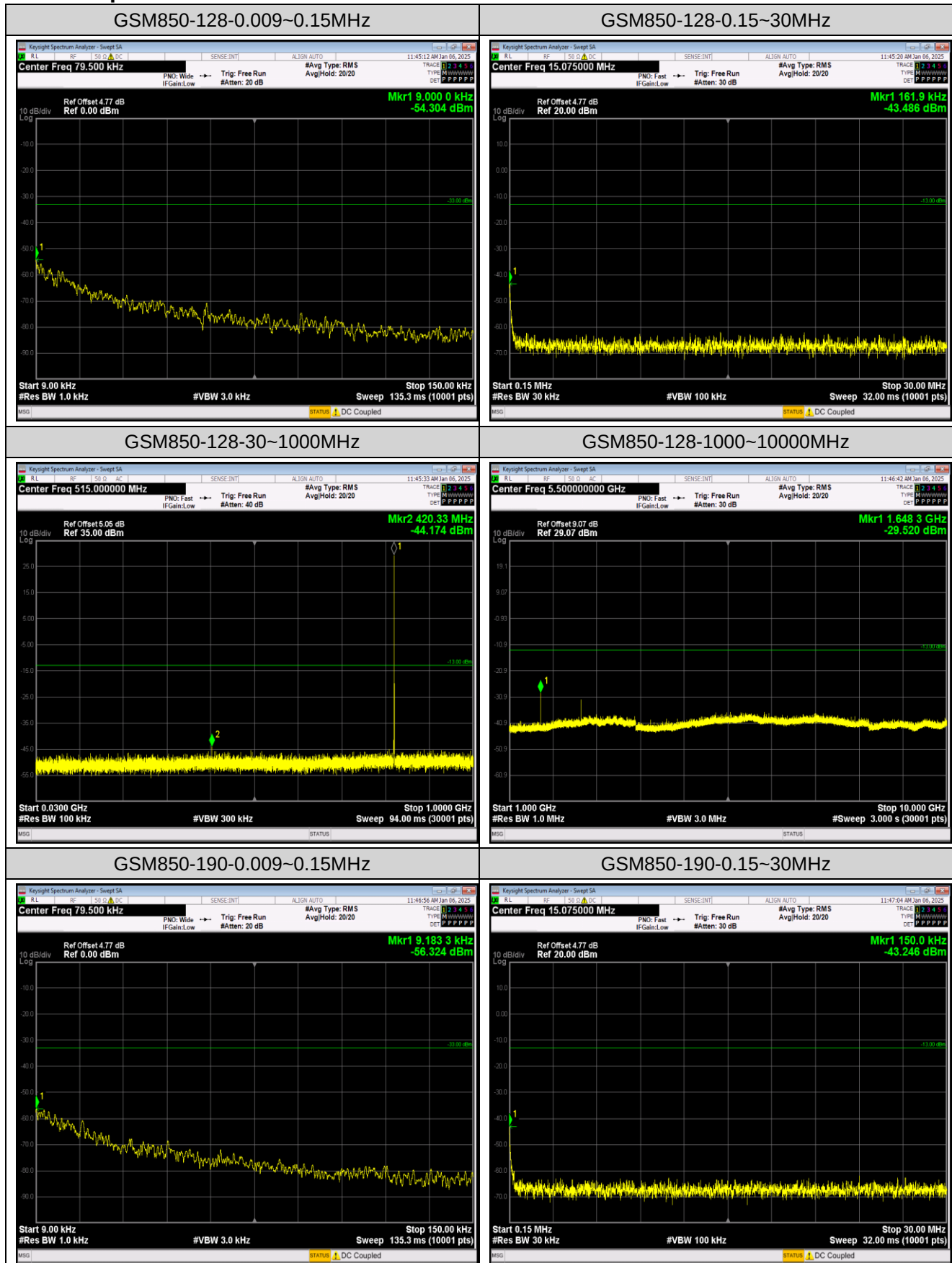
Appendix E: Conducted Spurious Emission

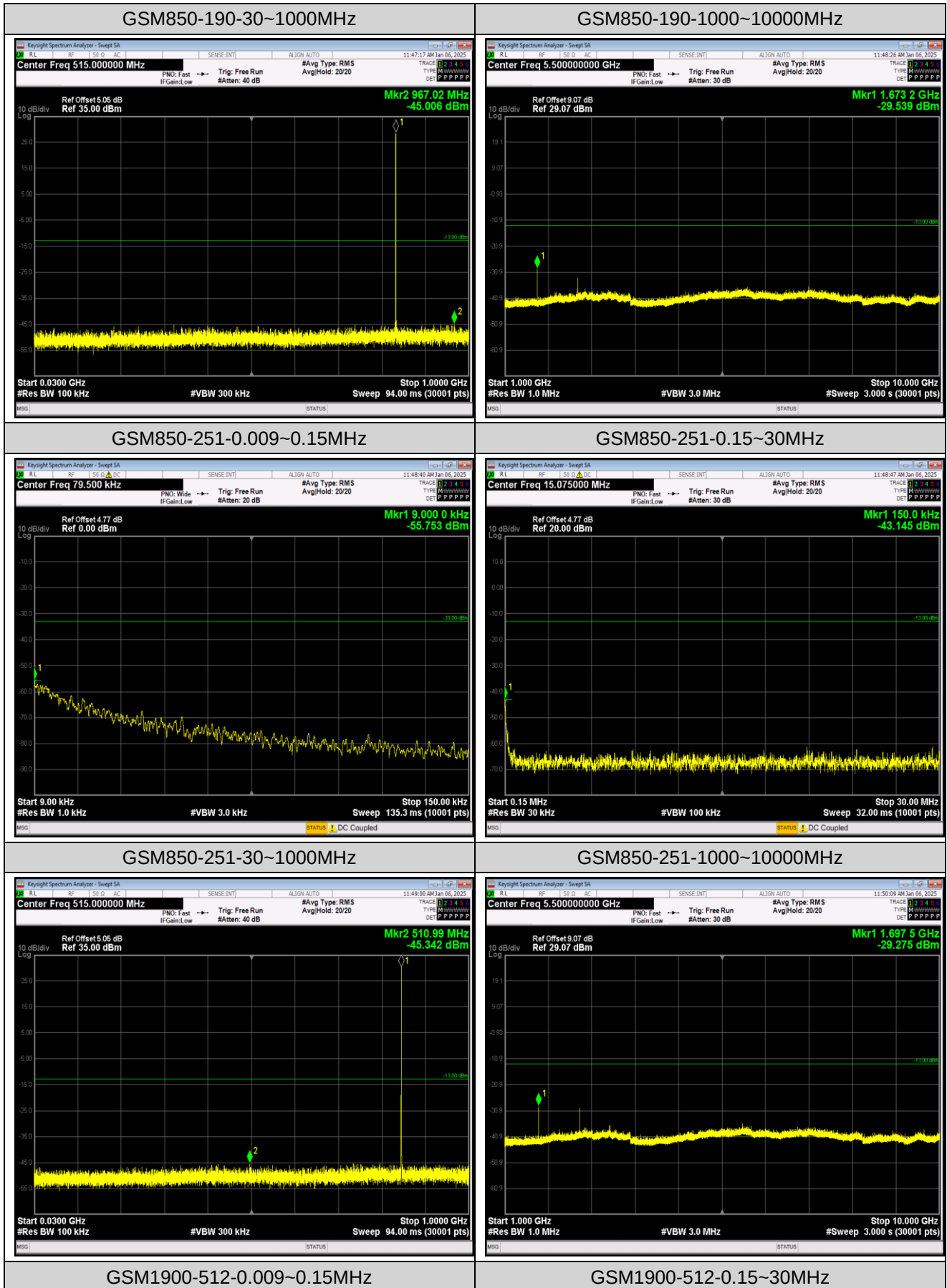
Test Result

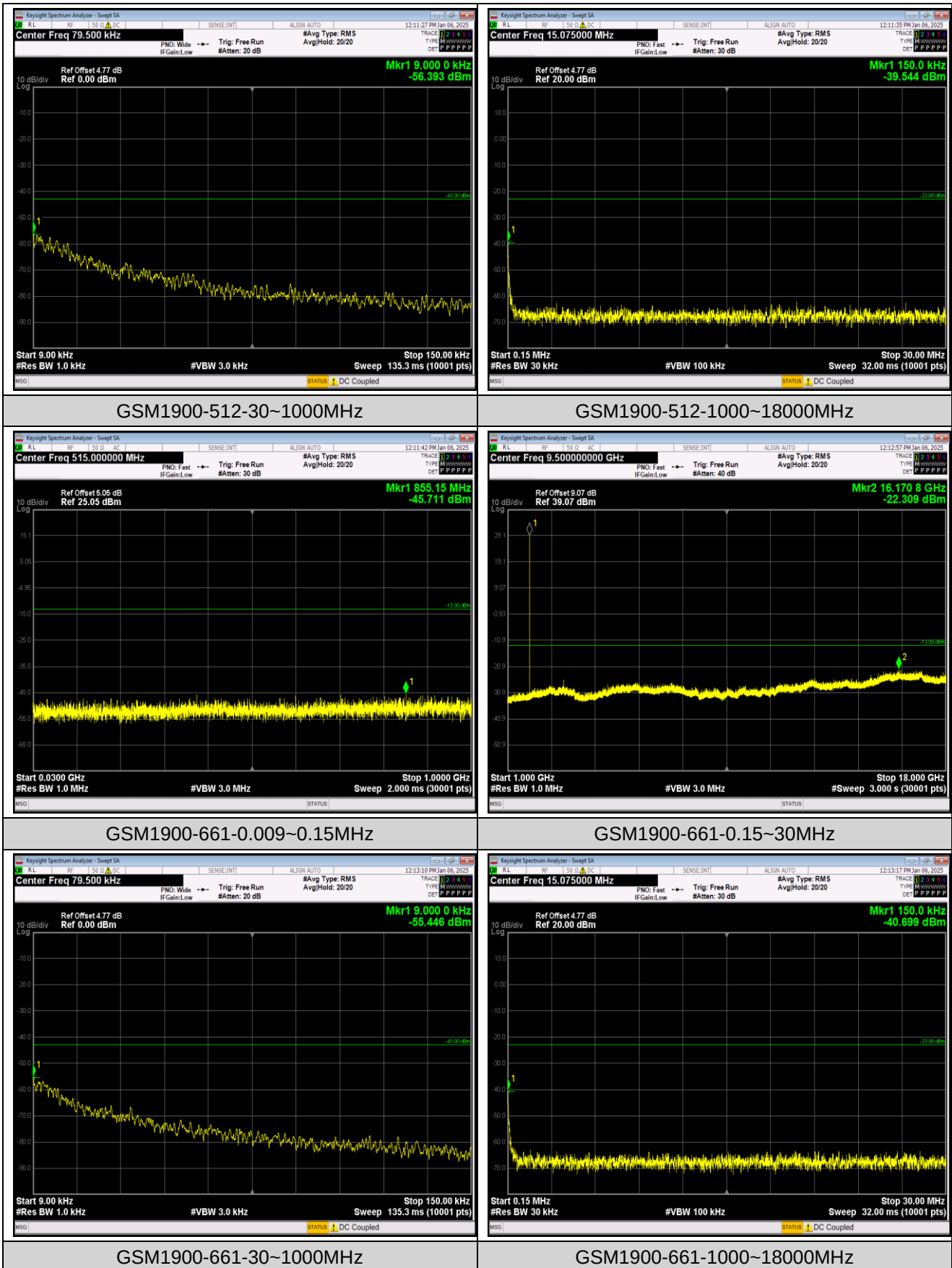
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-54.3	-33	PASS
GSM850	128	5	0.15~30MHz	0.16	-43.49	-13	PASS
GSM850	128	5	30~1000MHz	420.33	-44.17	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-29.52	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-56.32	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-43.25	-13	PASS
GSM850	190	5	30~1000MHz	967.02	-45.01	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-29.54	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-55.75	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-43.15	-13	PASS
GSM850	251	5	30~1000MHz	510.99	-45.34	-13	PASS
GSM850	251	5	1000~10000MHz	1697.5	-29.28	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.39	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-39.54	-23	PASS
GSM1900	512	0	30~1000MHz	855.15	-45.71	-13	PASS
GSM1900	512	0	1000~18000MHz	16170.8	-22.31	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-55.45	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-40.7	-23	PASS
GSM1900	661	0	30~1000MHz	958.26	-45.73	-13	PASS
GSM1900	661	0	1000~18000MHz	16217.83	-21.84	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.55	-43	PASS
GSM1900	810	0	0.15~30MHz	0.16	-44.49	-23	PASS
GSM1900	810	0	30~1000MHz	967.89	-45.12	-13	PASS
GSM1900	810	0	1000~18000MHz	16851.93	-21.61	-13	PASS

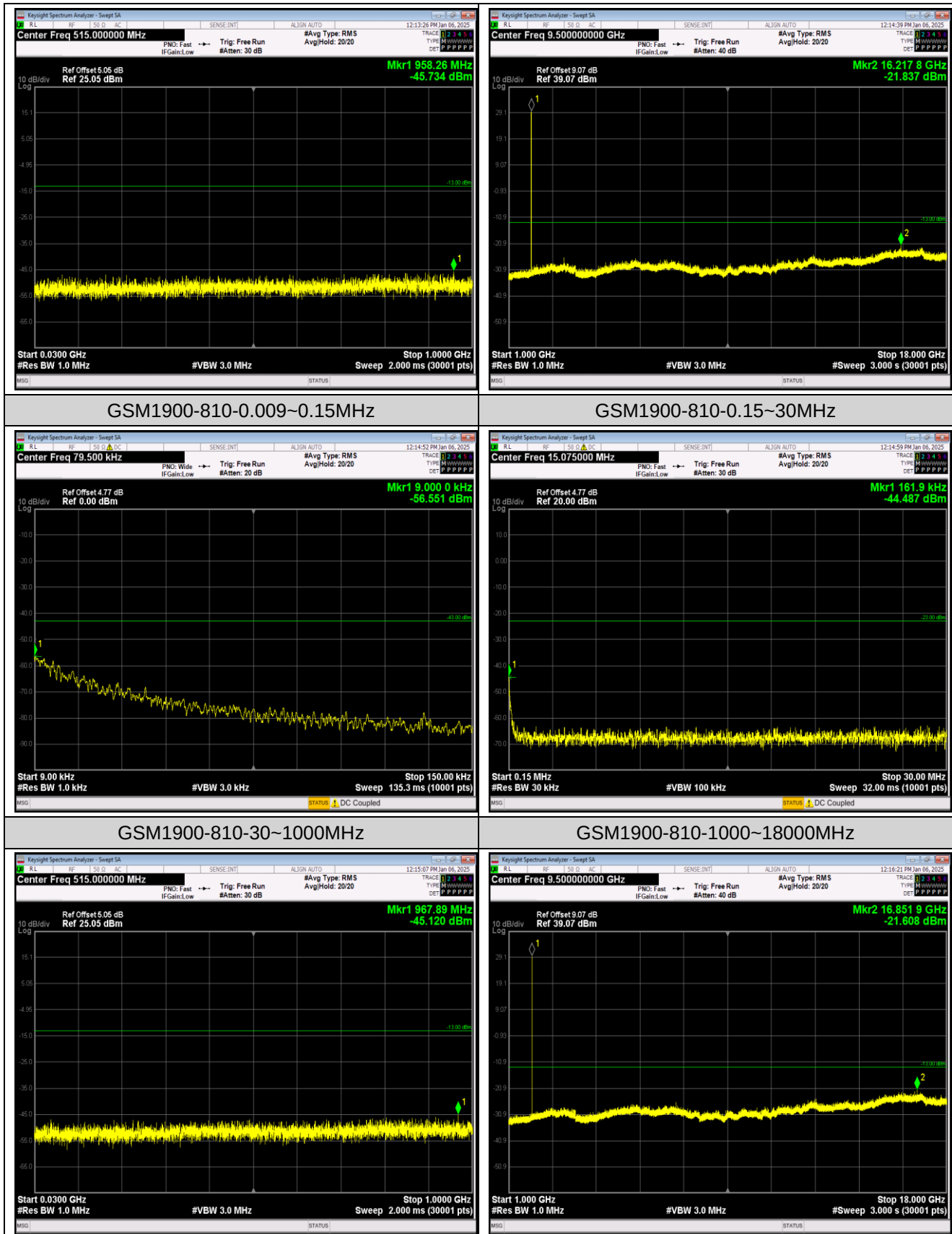
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs









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		
3.91	-30	-5.39	-0.006443	±2.5	Pass
	-20	-4.71	-0.005630		
	-10	-2.68	-0.003203		
	0	-18.98	-0.022687		
	10	-10.40	-0.012431		
	20	6.07	0.007256		
	30	7.65	0.009144		
	40	6.52	0.007793		
	50	3.68	0.004399		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-4.29	-0.005128	±2.5	Pass
	3.91	-8.27	-0.009885		
	4.50	-10.56	-0.012623		
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		
3.91	-30	-2.71	-0.003239	±2.5	Pass
	-20	-8.30	-0.009921		
	-10	-3.62	-0.004327		
	0	-8.04	-0.009610		
	10	1.45	0.001733		
	20	4.94	0.005905		
	30	3.78	0.004518		
	40	4.04	0.004829		
	50	4.04	0.004829		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-2.23	-0.002666	±2.5	Pass
	3.91	-0.45	-0.000538		
	4.50	-0.71	-0.000849		
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		
3.91	-30	-1.42	-0.000755	Within authorized band for PCS 1900	Pass
	-20	-0.68	-0.000362		
	-10	1.78	0.000947		
	0	-7.65	-0.004069		
	10	-6.88	-0.003660		
	20	20.31	0.010803		
	30	12.66	0.006734		
	40	16.14	0.008585		
	50	16.50	0.008777		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-2.58	-0.001372	Within authorized band for PCS 1900	Pass
	3.91	1.84	0.000979		
	4.50	-8.33	-0.004431		
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		
3.91	-30	-7.78	-0.004138	Within authorized band for PCS 1900	Pass
	-20	-7.26	-0.003862		
	-10	-2.16	-0.001149		
	0	-10.20	-0.005426		
	10	-5.88	-0.003128		
	20	6.33	0.003367		
	30	8.75	0.004654		
	40	3.81	0.002027		
	50	1.10	0.000585		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-5.65	-0.003005	Within authorized band for PCS 1900	Pass
	3.91	-0.26	-0.000138		
	4.50	-4.33	-0.002303		
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

