

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	32.62	29.35	38.45	PASS
GSM850	190	5	32.81	29.54	38.45	PASS
GSM850	251	5	32.92	29.65	38.45	PASS
GSM1900	512	0	29.90	31.56	33.00	PASS
GSM1900	661	0	29.81	31.47	33.00	PASS
GSM1900	810	0	29.71	31.37	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.62	29.35	38.45	PASS
GPRS850	128	5	2	31.84	28.57	38.45	PASS
GPRS850	128	5	3	29.89	26.62	38.45	PASS
GPRS850	128	5	4	28.62	25.35	38.45	PASS
GPRS850	190	5	1	32.77	29.5	38.45	PASS
GPRS850	190	5	2	32.07	28.8	38.45	PASS
GPRS850	190	5	3	30.11	26.84	38.45	PASS
GPRS850	190	5	4	28.88	25.61	38.45	PASS
GPRS850	251	5	1	32.90	29.63	38.45	PASS
GPRS850	251	5	2	32.18	28.91	38.45	PASS
GPRS850	251	5	3	30.26	26.99	38.45	PASS
GPRS850	251	5	4	28.98	25.71	38.45	PASS
GPRS1900	512	0	1	29.82	31.48	33.00	PASS
GPRS1900	512	0	2	29.04	30.7	33.00	PASS
GPRS1900	512	0	3	27.19	28.85	33.00	PASS
GPRS1900	512	0	4	26.00	27.66	33.00	PASS
GPRS1900	661	0	1	29.76	31.42	33.00	PASS
GPRS1900	661	0	2	28.97	30.63	33.00	PASS
GPRS1900	661	0	3	27.11	28.77	33.00	PASS
GPRS1900	661	0	4	25.98	27.64	33.00	PASS
GPRS1900	810	0	1	29.54	31.2	33.00	PASS
GPRS1900	810	0	2	28.84	30.5	33.00	PASS
GPRS1900	810	0	3	27.08	28.74	33.00	PASS
GPRS1900	810	0	4	25.95	27.61	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.96	24.69	38.45	PASS
EGPRS850	128	8	2	26.56	23.29	38.45	PASS
EGPRS850	128	8	3	24.26	20.99	38.45	PASS
EGPRS850	128	8	4	22.80	19.53	38.45	PASS
EGPRS850	190	8	1	28.31	25.04	38.45	PASS
EGPRS850	190	8	2	26.92	23.65	38.45	PASS
EGPRS850	190	8	3	24.56	21.29	38.45	PASS
EGPRS850	190	8	4	22.92	19.65	38.45	PASS
EGPRS850	251	8	1	28.46	25.19	38.45	PASS
EGPRS850	251	8	2	27.10	23.83	38.45	PASS
EGPRS850	251	8	3	24.72	21.45	38.45	PASS
EGPRS850	251	8	4	23.18	19.91	38.45	PASS
EGPRS1900	512	2	1	27.45	29.11	33.00	PASS
EGPRS1900	512	2	2	26.27	27.93	33.00	PASS
EGPRS1900	512	2	3	24.10	25.76	33.00	PASS
EGPRS1900	512	2	4	22.68	24.34	33.00	PASS
EGPRS1900	661	2	1	27.53	29.19	33.00	PASS
EGPRS1900	661	2	2	26.38	28.04	33.00	PASS
EGPRS1900	661	2	3	24.14	25.8	33.00	PASS
EGPRS1900	661	2	4	22.74	24.4	33.00	PASS
EGPRS1900	810	2	1	27.51	29.17	33.00	PASS
EGPRS1900	810	2	2	26.32	27.98	33.00	PASS
EGPRS1900	810	2	3	24.15	25.81	33.00	PASS
EGPRS1900	810	2	4	22.86	24.52	33.00	PASS

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

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

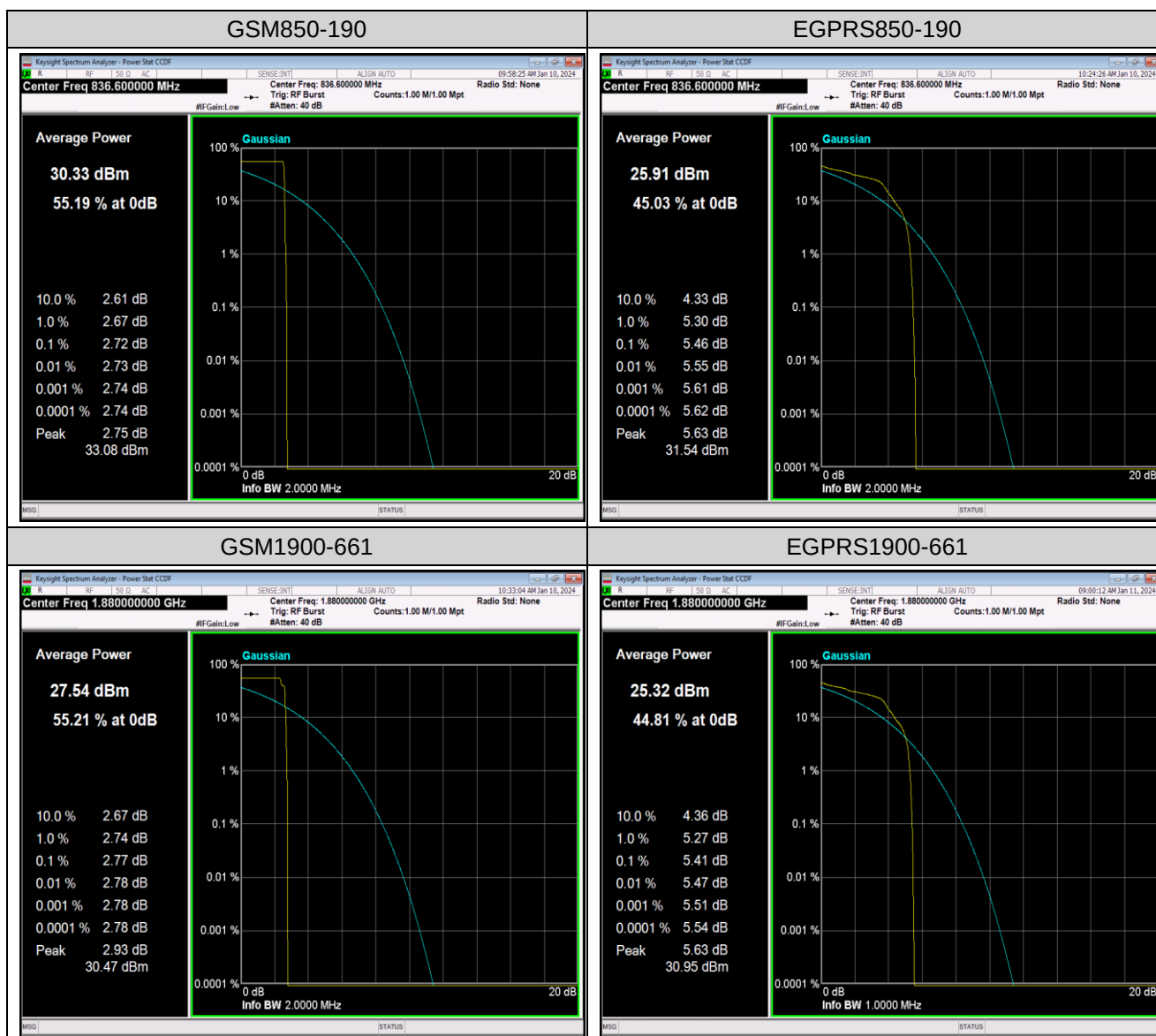
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.72	13	PASS
EGPRS850	190	8	5.46	13	PASS
GSM1900	661	0	2.77	13	PASS
EGPRS1900	661	2	5.41	13	PASS

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

Test Graphs



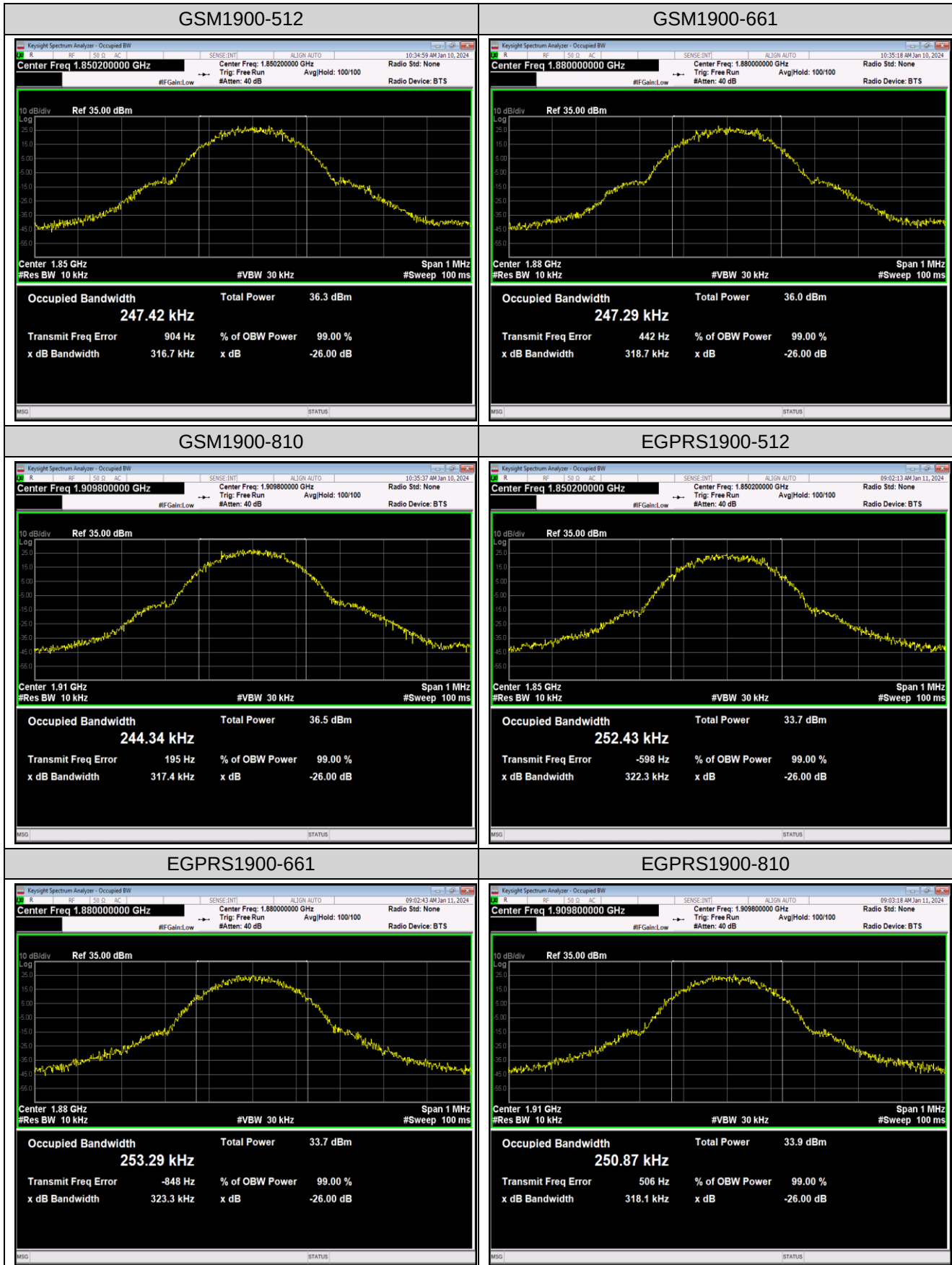
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24731	0.3175	---	PASS
GSM850	190	5	0.24639	0.3168	---	PASS
GSM850	251	5	0.24536	0.3117	---	PASS
EGPRS850	128	8	0.25124	0.3163	---	PASS
EGPRS850	190	8	0.25235	0.3169	---	PASS
EGPRS850	251	8	0.25018	0.3123	---	PASS
GSM1900	512	0	0.24742	0.3167	---	PASS
GSM1900	661	0	0.24729	0.3187	---	PASS
GSM1900	810	0	0.24434	0.3174	---	PASS
EGPRS1900	512	2	0.25243	0.3223	---	PASS
EGPRS1900	661	2	0.25329	0.3233	---	PASS
EGPRS1900	810	2	0.25087	0.3181	---	PASS

Test Graphs



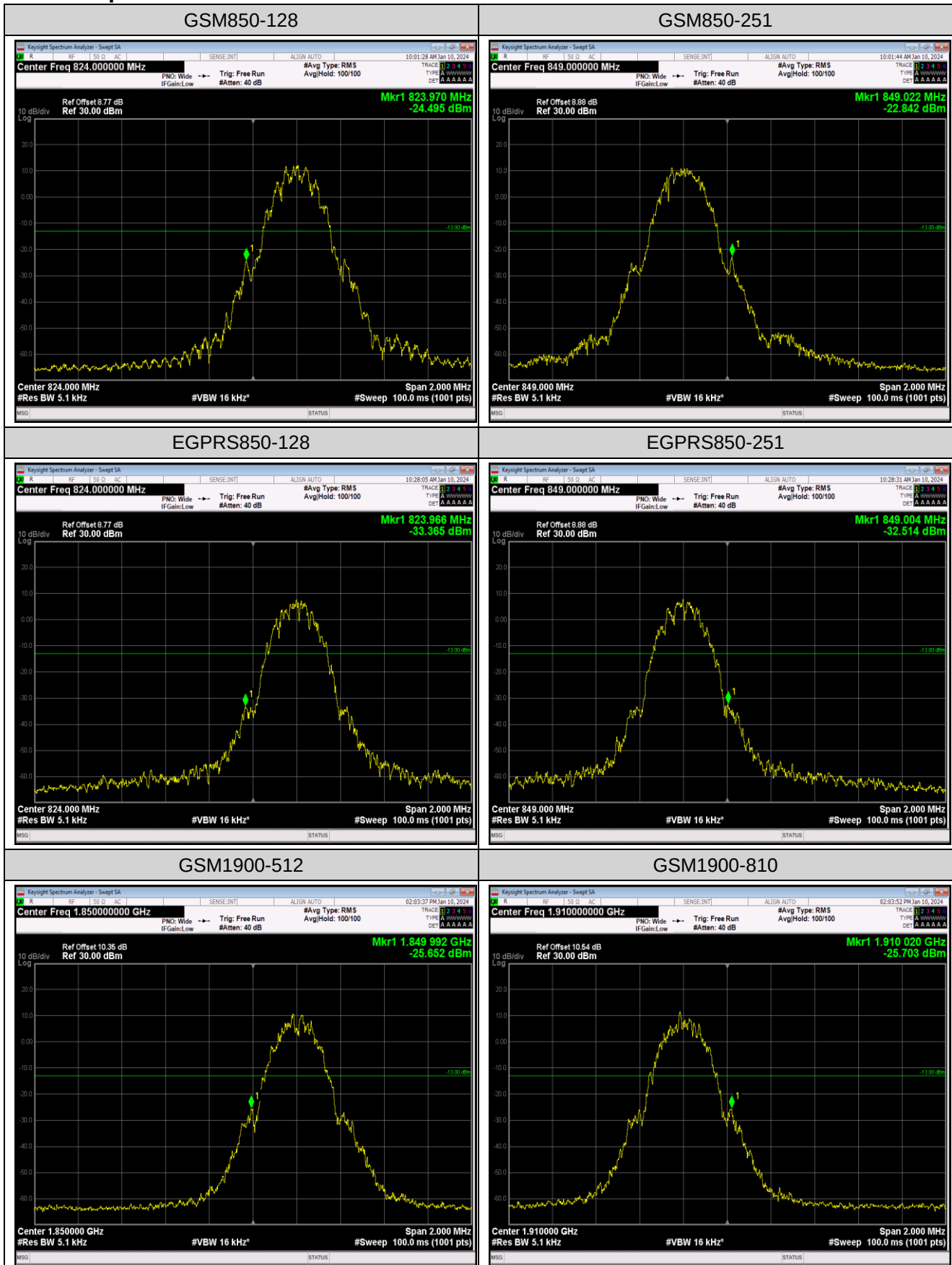


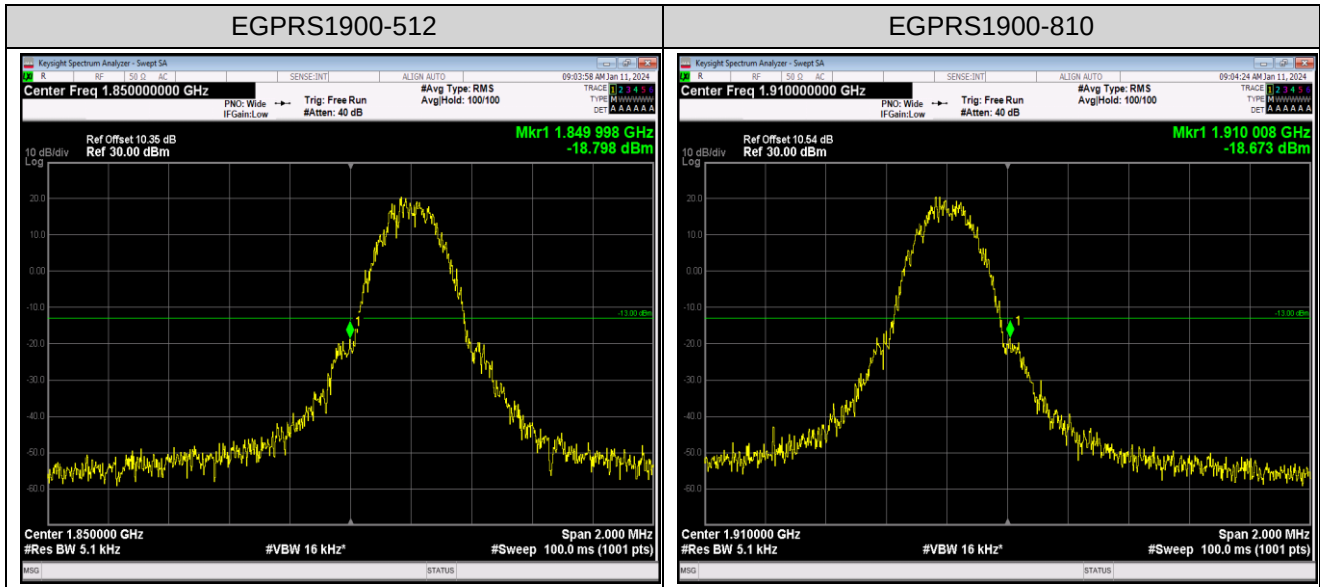
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.97	-24.49	-13	PASS
GSM850	251	5	849.02	-22.84	-13	PASS
EGPRS850	128	8	823.97	-33.37	-13	PASS
EGPRS850	251	8	849.00	-32.51	-13	PASS
GSM1900	512	0	1849.99	-25.65	-13	PASS
GSM1900	810	0	1910.02	-25.70	-13	PASS
EGPRS1900	512	2	1850.00	-18.80	-13	PASS
EGPRS1900	810	2	1910.01	-18.67	-13	PASS

Test Graphs





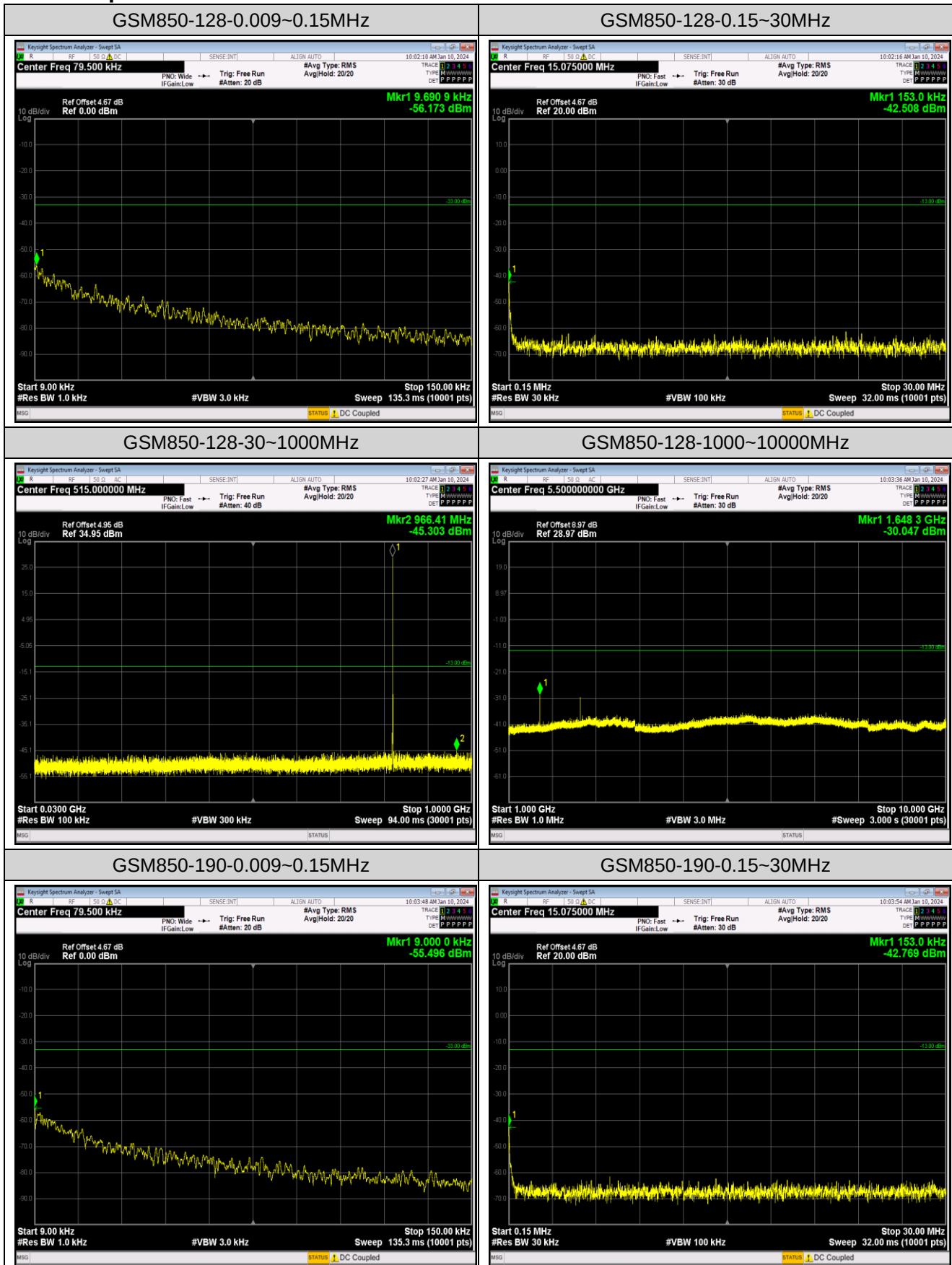
Appendix E: Conducted Spurious Emission

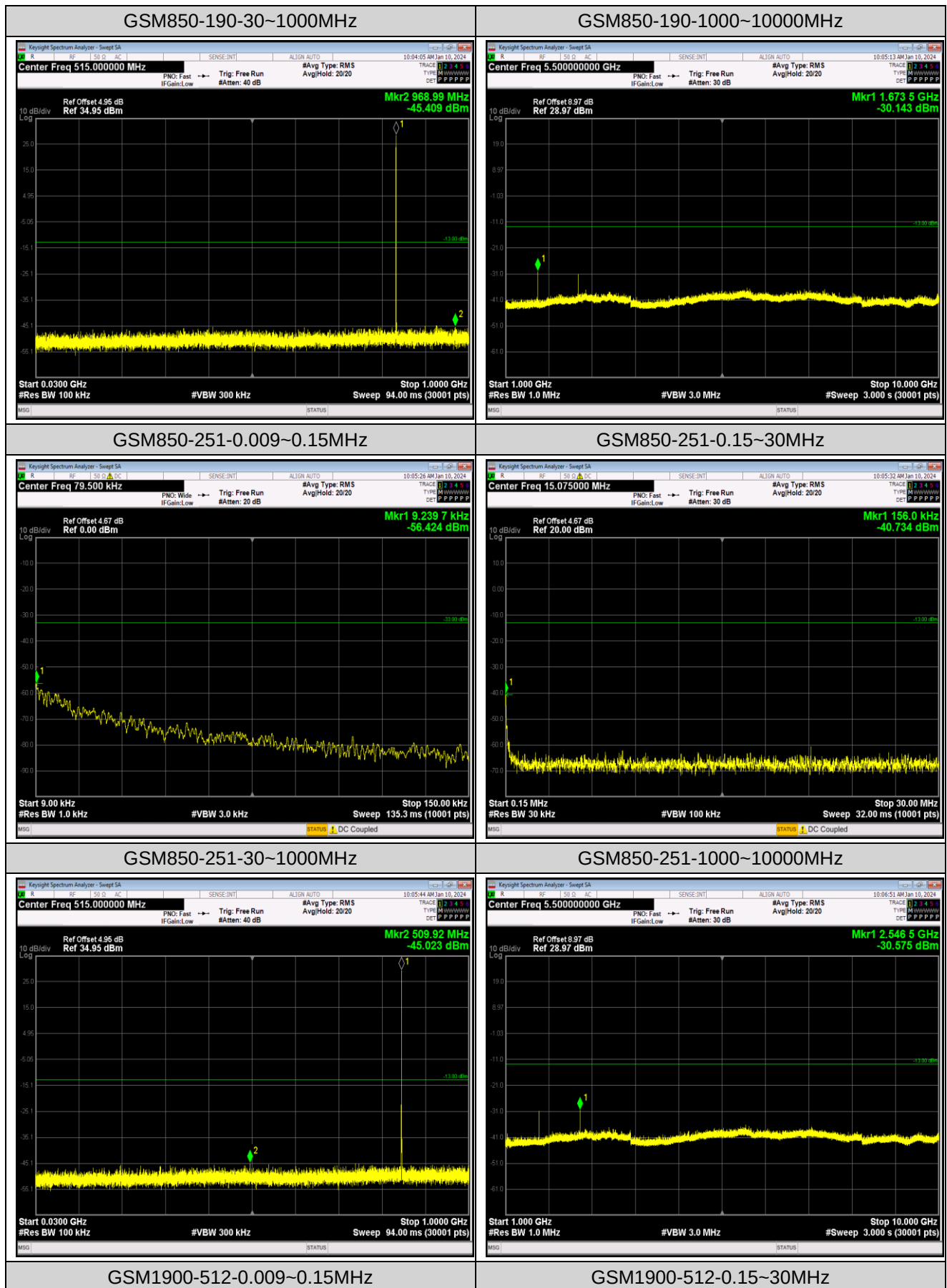
Test Result

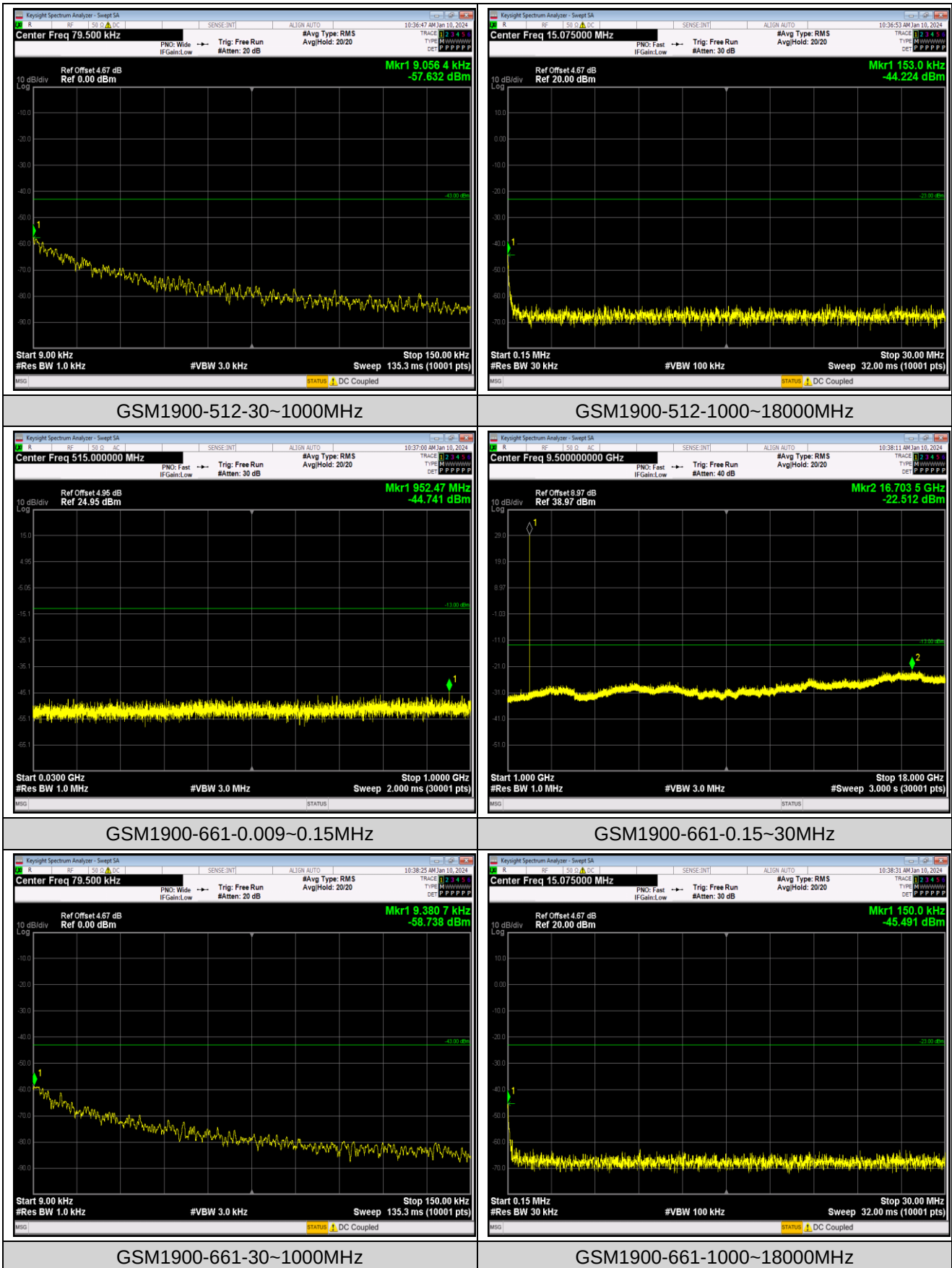
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-56.17	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-42.51	-13	PASS
GSM850	128	5	30~1000MHz	966.41	-45.3	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-30.05	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-55.5	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-42.77	-13	PASS
GSM850	190	5	30~1000MHz	968.99	-45.41	-13	PASS
GSM850	190	5	1000~10000MHz	1673.5	-30.14	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-56.42	-33	PASS
GSM850	251	5	0.15~30MHz	0.16	-40.73	-13	PASS
GSM850	251	5	30~1000MHz	509.92	-45.02	-13	PASS
GSM850	251	5	1000~10000MHz	2546.5	-30.58	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-57.63	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-44.22	-23	PASS
GSM1900	512	0	30~1000MHz	952.47	-44.74	-13	PASS
GSM1900	512	0	1000~18000MHz	16703.47	-22.51	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-58.74	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-45.49	-23	PASS
GSM1900	661	0	30~1000MHz	986.97	-45.62	-13	PASS
GSM1900	661	0	1000~18000MHz	16560.1	-21.93	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-57.73	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-43.31	-23	PASS
GSM1900	810	0	30~1000MHz	355.95	-45.61	-13	PASS
GSM1900	810	0	1000~18000MHz	16158.9	-22.46	-13	PASS

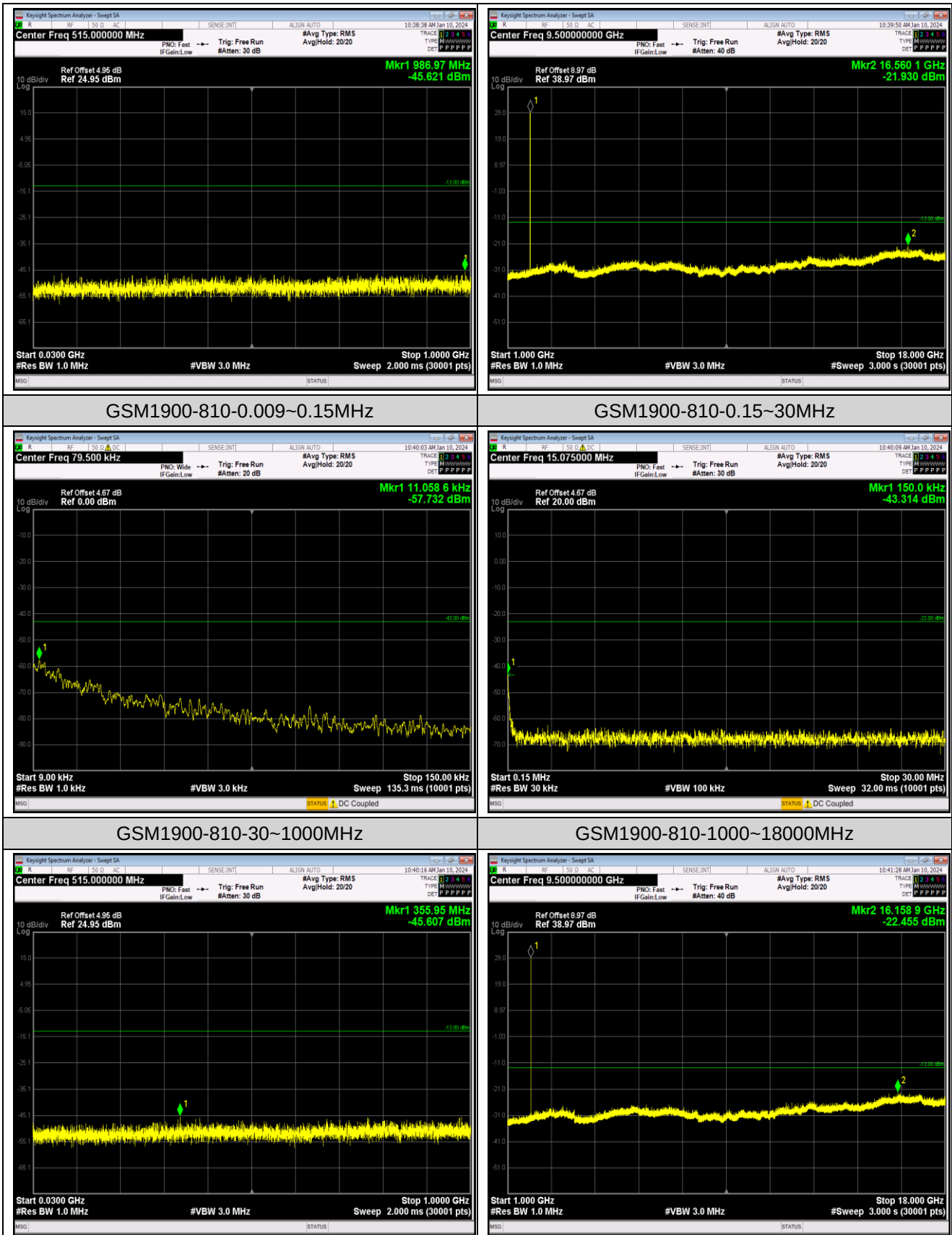
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report

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		
3.80	-30	13.85	0.016555	±2.5	Pass
	-20	12.82	0.015324		
	-10	11.36	0.013579		
	0	12.27	0.014667		
	10	9.75	0.011654		
	20	13.01	0.015551		
	30	14.88	0.017786		
	40	11.98	0.014320		
	50	13.95	0.016675		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	10.72	0.012814	±2.5	Pass
	3.80	15.92	0.019029		
	4.35	10.98	0.013125		
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	11.40	0.013627	±2.5	Pass
	-20	8.91	0.010650		
	-10	11.46	0.013698		
	0	12.04	0.014392		
	10	7.17	0.008570		
	20	15.69	0.018754		
	30	6.10	0.007291		
	40	3.68	0.004399		
	50	16.40	0.019603		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	10.88	0.013005	±2.5	Pass
	3.80	11.88	0.014200		
	4.35	12.17	0.014547		
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	2.45	0.001303	Within authorized band for PCS 1900	Pass
	-20	60.50	0.032181		
	-10	-1.29	-0.000686		
	0	55.31	0.029420		
	10	2.23	0.001186		
	20	55.73	0.029644		
	30	-0.16	-0.000085		
	40	41.55	0.022101		
	50	-1.65	-0.000878		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	1.78	0.000947	Within authorized band for PCS 1900	Pass
	3.80	70.22	0.037351		
	4.35	62.02	0.032989		
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	33.58	0.017862	Within authorized band for PCS 1900	Pass
	-20	19.44	0.010340		
	-10	19.63	0.010441		
	0	32.74	0.017415		
	10	27.31	0.014527		
	20	-4.52	-0.002404		
	30	-4.46	-0.002372		
	40	49.17	0.026154		
	50	12.72	0.006766		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	22.02	0.011713	Within authorized band for PCS 1900	Pass
	3.80	29.77	0.015835		
	4.35	23.44	0.012468		
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

