

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	33.18	24.13	38.45	PASS
GSM850	190	5	33.23	24.18	38.45	PASS
GSM850	251	5	33.10	24.05	38.45	PASS
GSM1900	512	0	29.57	28.07	33.00	PASS
GSM1900	661	0	29.55	28.05	33.00	PASS
GSM1900	810	0	29.61	28.11	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.20	24.15	38.45	PASS
GPRS850	128	5	2	31.20	22.15	38.45	PASS
GPRS850	128	5	3	29.40	20.35	38.45	PASS
GPRS850	128	5	4	27.40	18.35	38.45	PASS
GPRS850	190	5	1	33.24	24.19	38.45	PASS
GPRS850	190	5	2	31.23	22.18	38.45	PASS
GPRS850	190	5	3	29.41	20.36	38.45	PASS
GPRS850	190	5	4	27.41	18.36	38.45	PASS
GPRS850	251	5	1	33.11	24.06	38.45	PASS
GPRS850	251	5	2	31.09	22.04	38.45	PASS
GPRS850	251	5	3	29.27	20.22	38.45	PASS
GPRS850	251	5	4	27.27	18.22	38.45	PASS
GPRS1900	512	0	1	29.53	28.03	33.00	PASS
GPRS1900	512	0	2	27.42	25.92	33.00	PASS
GPRS1900	512	0	3	25.92	24.42	33.00	PASS
GPRS1900	512	0	4	23.91	22.41	33.00	PASS
GPRS1900	661	0	1	29.51	28.01	33.00	PASS
GPRS1900	661	0	2	27.40	25.9	33.00	PASS
GPRS1900	661	0	3	25.88	24.38	33.00	PASS
GPRS1900	661	0	4	23.86	22.36	33.00	PASS
GPRS1900	810	0	1	29.59	28.09	33.00	PASS
GPRS1900	810	0	2	27.14	25.64	33.00	PASS
GPRS1900	810	0	3	25.64	24.14	33.00	PASS
GPRS1900	810	0	4	23.69	22.19	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.73	16.68	38.45	PASS
EGPRS850	128	8	2	24.53	15.48	38.45	PASS
EGPRS850	128	8	3	22.59	13.54	38.45	PASS
EGPRS850	128	8	4	20.18	11.13	38.45	PASS
EGPRS850	190	8	1	25.98	16.93	38.45	PASS
EGPRS850	190	8	2	24.81	15.76	38.45	PASS
EGPRS850	190	8	3	22.87	13.82	38.45	PASS
EGPRS850	190	8	4	20.66	11.61	38.45	PASS
EGPRS850	251	8	1	25.70	16.65	38.45	PASS
EGPRS850	251	8	2	24.49	15.44	38.45	PASS
EGPRS850	251	8	3	22.48	13.43	38.45	PASS
EGPRS850	251	8	4	20.32	11.27	38.45	PASS
EGPRS1900	512	2	1	25.04	23.54	33.00	PASS
EGPRS1900	512	2	2	23.04	21.54	33.00	PASS
EGPRS1900	512	2	3	21.23	19.73	33.00	PASS
EGPRS1900	512	2	4	19.02	17.52	33.00	PASS
EGPRS1900	661	2	1	25.67	24.17	33.00	PASS
EGPRS1900	661	2	2	23.74	22.24	33.00	PASS
EGPRS1900	661	2	3	21.96	20.46	33.00	PASS
EGPRS1900	661	2	4	19.96	18.46	33.00	PASS
EGPRS1900	810	2	1	25.47	23.97	33.00	PASS
EGPRS1900	810	2	2	23.46	21.96	33.00	PASS
EGPRS1900	810	2	3	21.81	20.31	33.00	PASS
EGPRS1900	810	2	4	20.04	18.54	33.00	PASS

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

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

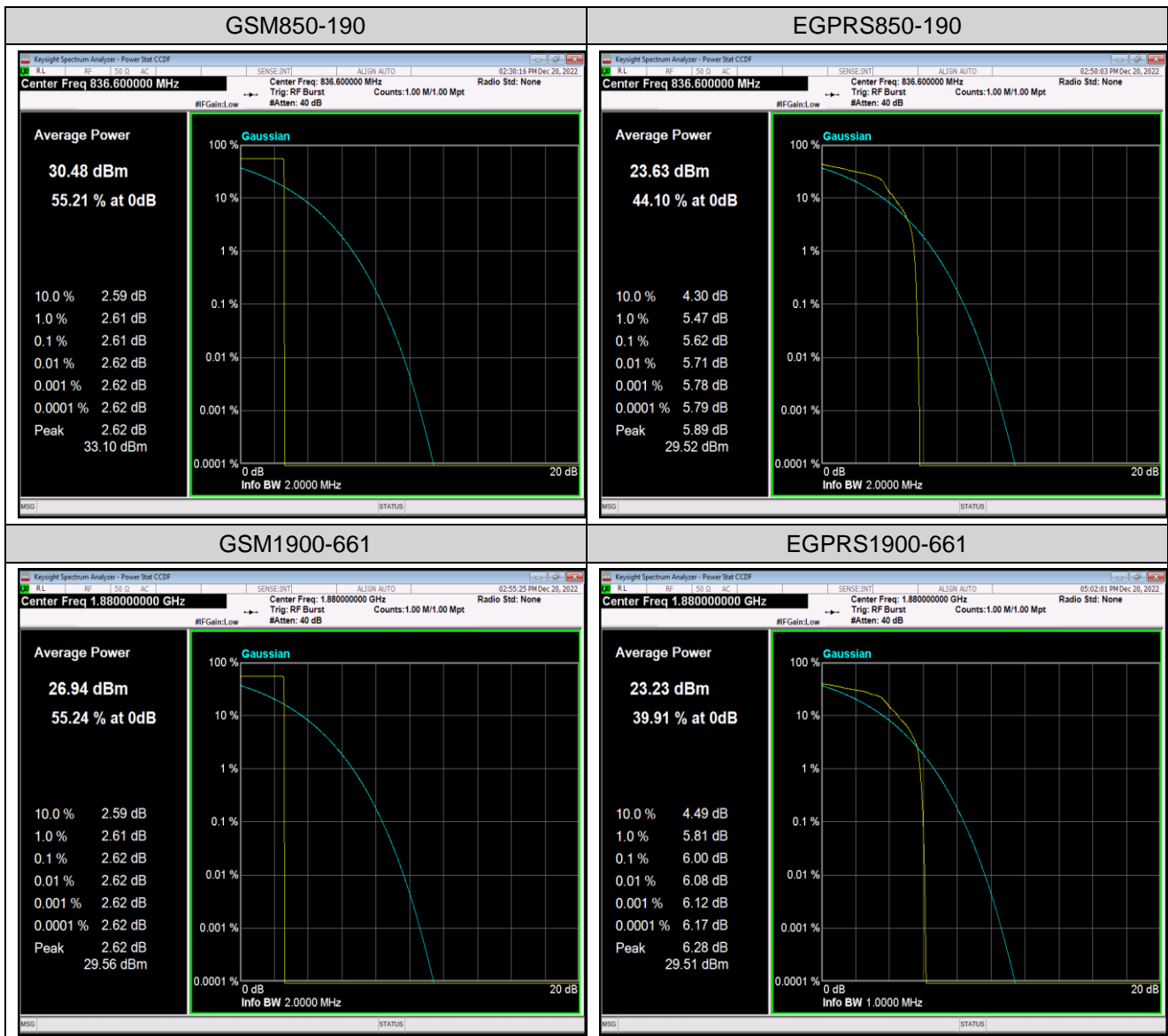
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.61	13	PASS
EGPRS850	190	8	5.62	13	PASS
GSM1900	661	0	2.62	13	PASS
EGPRS1900	661	2	6	13	PASS

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

Test Graphs

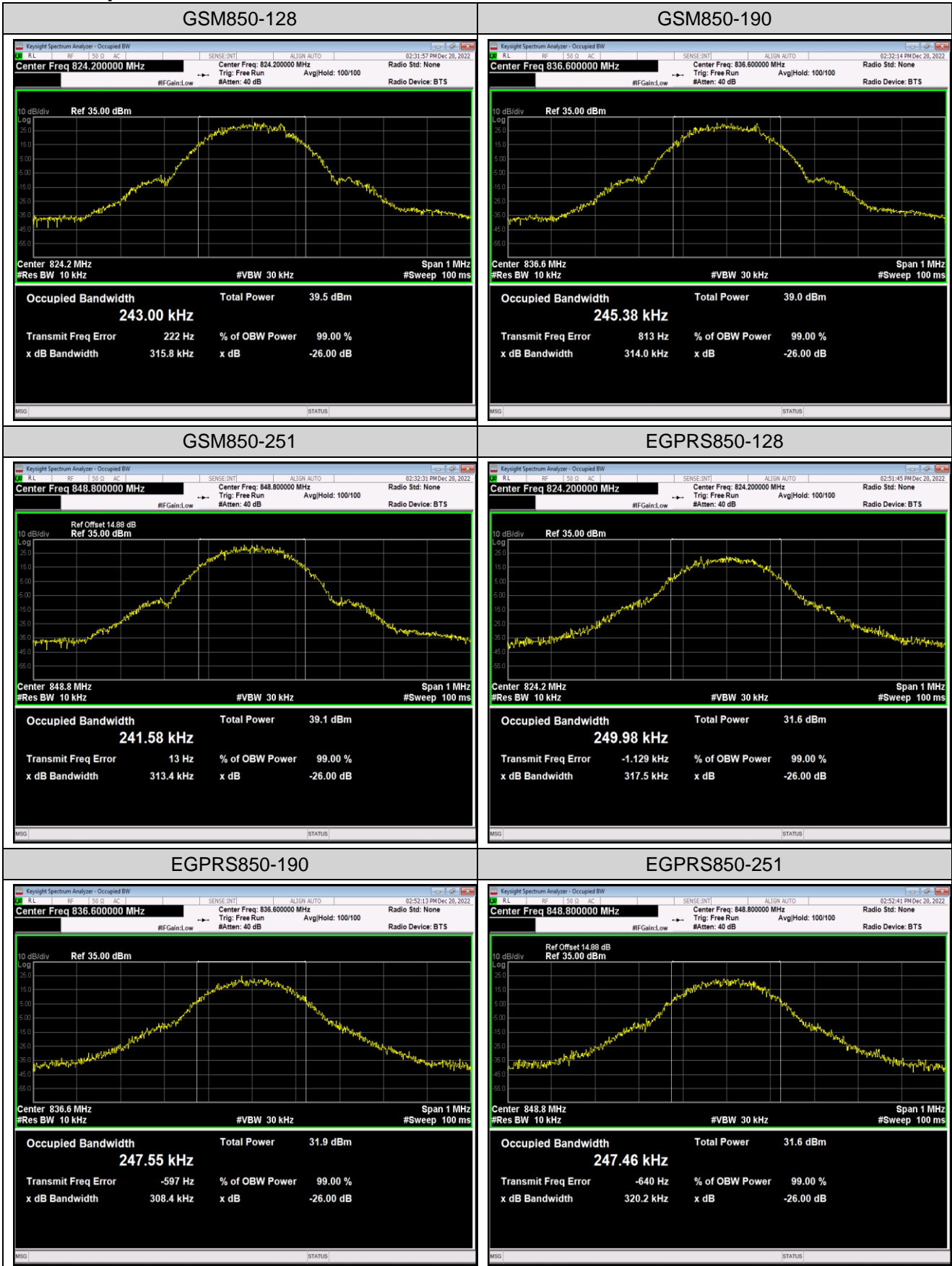


Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24300	0.3158	---	PASS
GSM850	190	5	0.24538	0.3140	---	PASS
GSM850	251	5	0.24158	0.3134	---	PASS
EGPRS850	128	8	0.24998	0.3175	---	PASS
EGPRS850	190	8	0.24755	0.3084	---	PASS
EGPRS850	251	8	0.24746	0.3202	---	PASS
GSM1900	512	0	0.24222	0.3121	---	PASS
GSM1900	661	0	0.24483	0.3084	---	PASS
GSM1900	810	0	0.24232	0.3114	---	PASS
EGPRS1900	512	2	0.23930	0.3024	---	PASS
EGPRS1900	661	2	0.24056	0.2967	---	PASS
EGPRS1900	810	2	0.23919	0.2995	---	PASS

Test Graphs

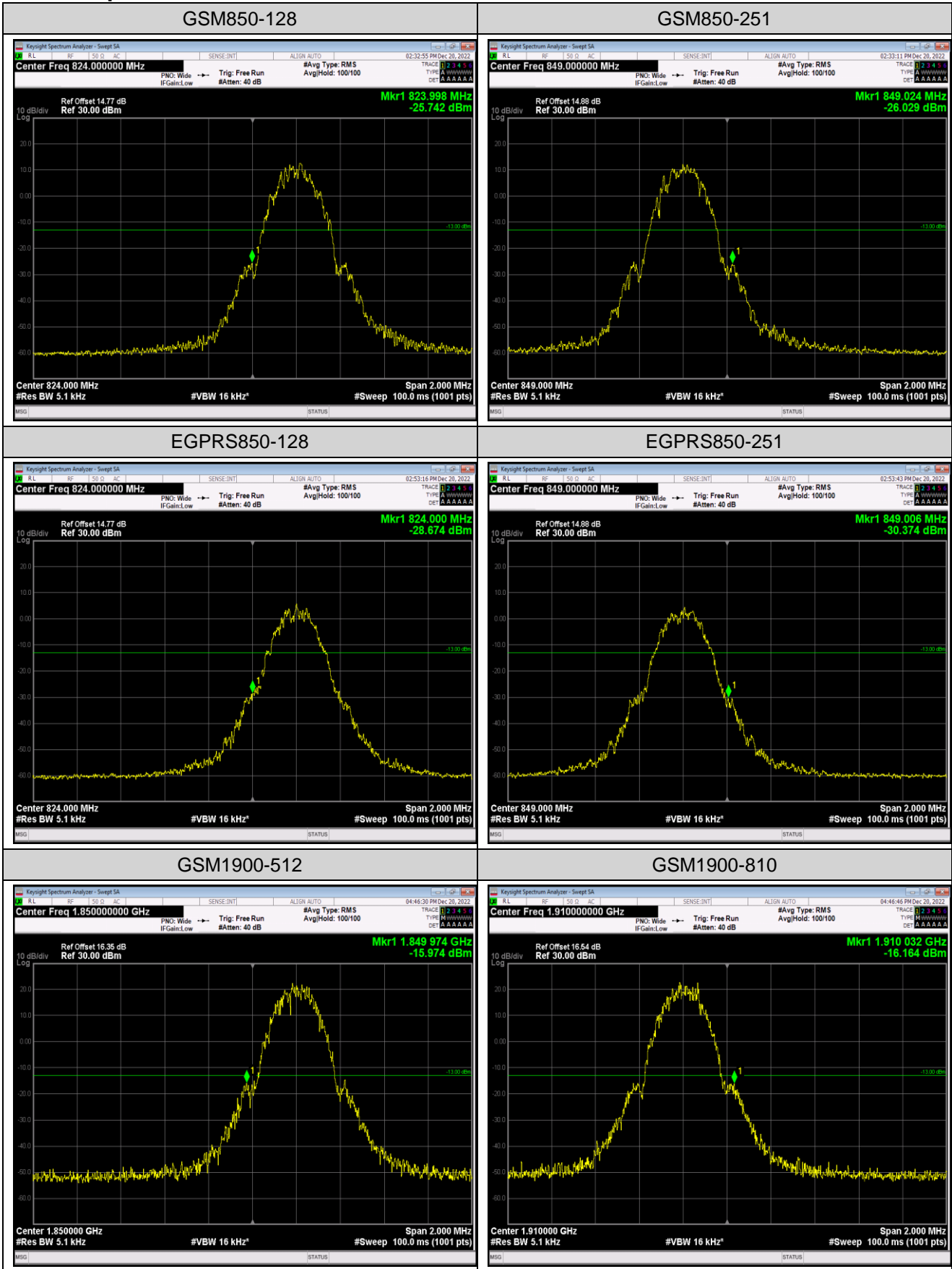


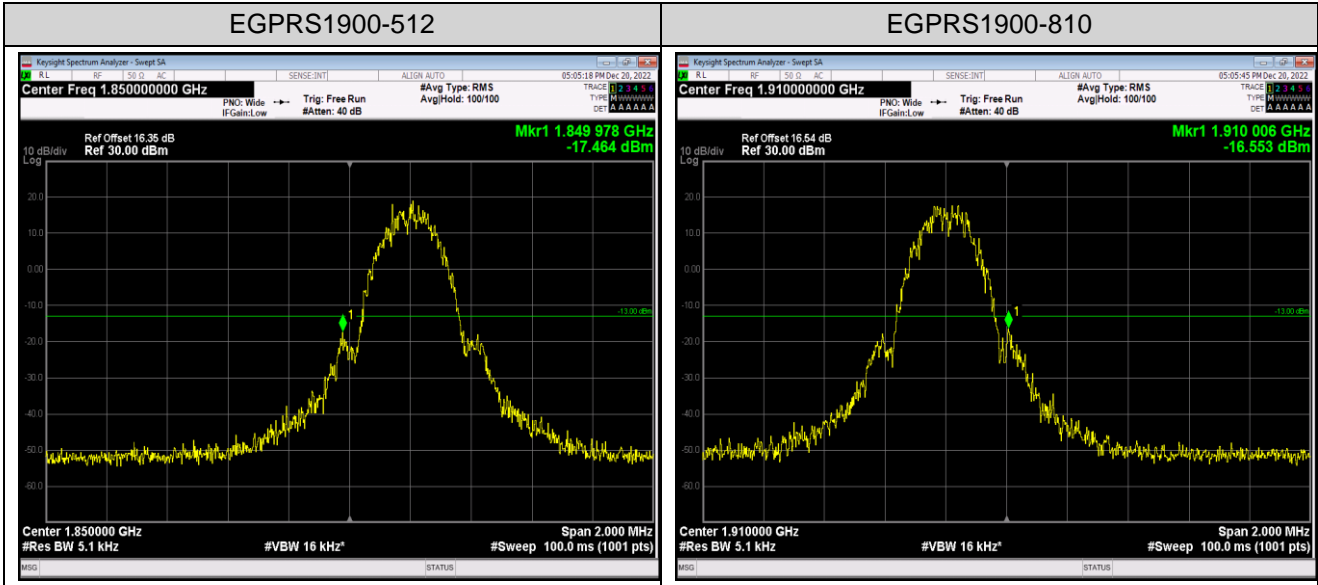


Appendix D: Band Edge**Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	824.00	-25.74	-13	PASS
GSM850	251	5	849.02	-26.03	-13	PASS
EGPRS850	128	8	824.00	-28.67	-13	PASS
EGPRS850	251	8	849.01	-30.37	-13	PASS
GSM1900	512	0	1849.97	-15.97	-13	PASS
GSM1900	810	0	1910.03	-16.16	-13	PASS
EGPRS1900	512	2	1849.98	-17.46	-13	PASS
EGPRS1900	810	2	1910.01	-16.55	-13	PASS

Test Graphs





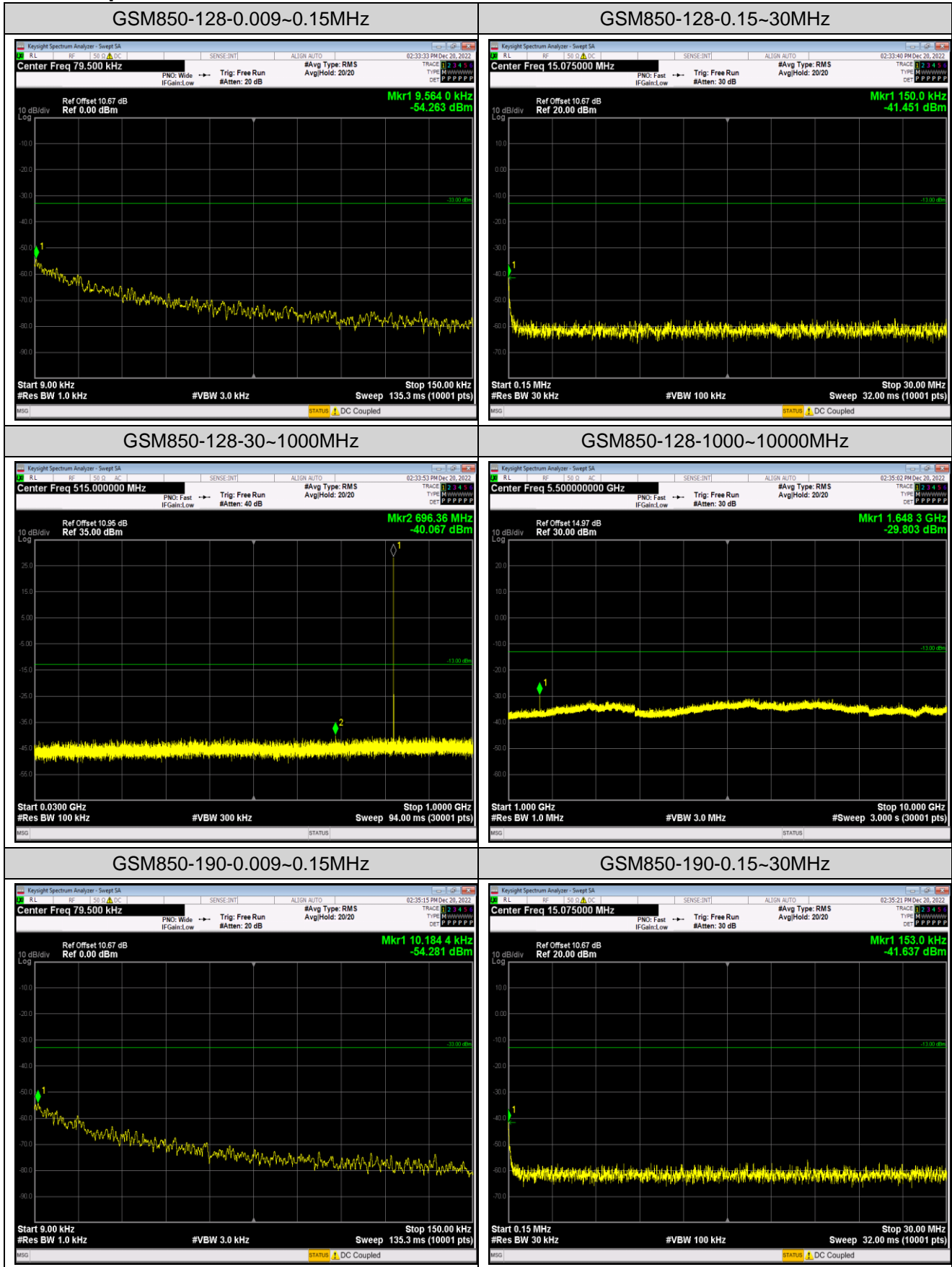
Appendix E: Conducted Spurious Emission

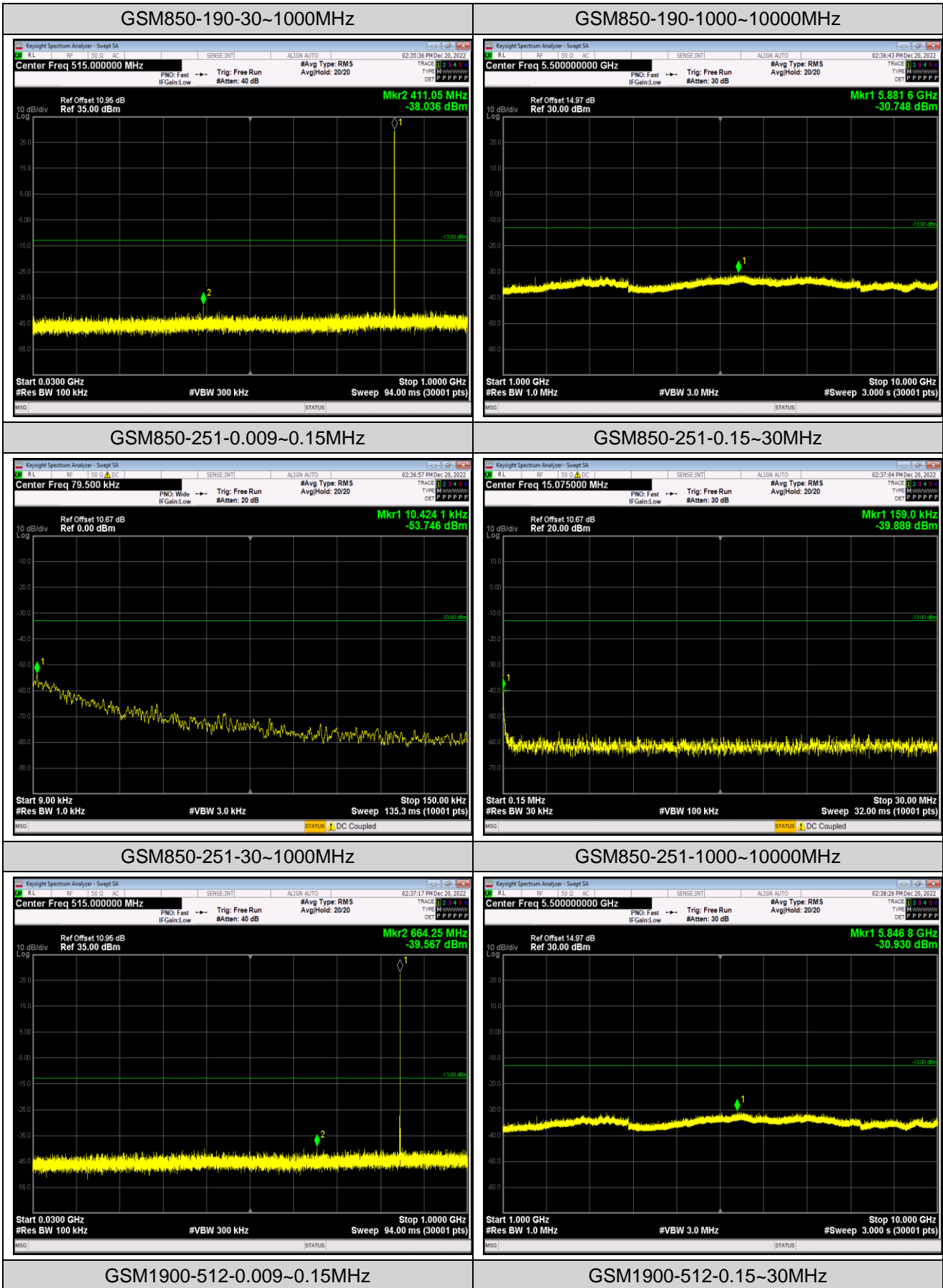
Test Result

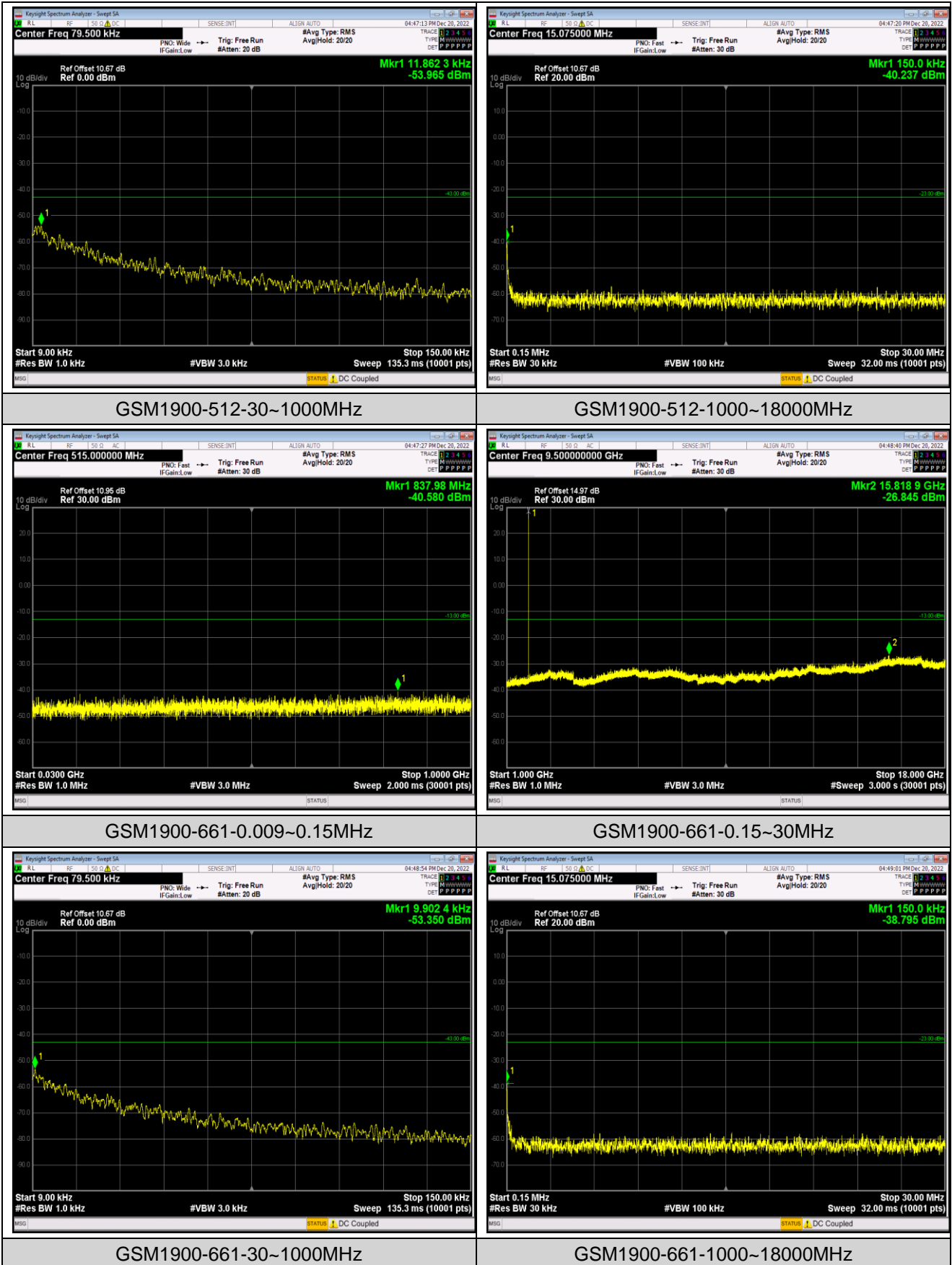
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-54.26	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-41.45	-13	PASS
GSM850	128	5	30~1000MHz	696.36	-40.07	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-29.8	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-54.28	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-41.64	-13	PASS
GSM850	190	5	30~1000MHz	411.05	-38.04	-13	PASS
GSM850	190	5	1000~10000MHz	5881.6	-30.75	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-53.75	-33	PASS
GSM850	251	5	0.15~30MHz	0.16	-39.89	-13	PASS
GSM850	251	5	30~1000MHz	664.25	-39.57	-13	PASS
GSM850	251	5	1000~10000MHz	5846.8	-30.93	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-53.97	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-40.24	-23	PASS
GSM1900	512	0	30~1000MHz	837.98	-40.58	-13	PASS
GSM1900	512	0	1000~18000MHz	15818.9	-26.85	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-53.35	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-38.8	-23	PASS
GSM1900	661	0	30~1000MHz	540.83	-40.86	-13	PASS
GSM1900	661	0	1000~18000MHz	16171.93	-26.51	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-54.7	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-42.56	-23	PASS
GSM1900	810	0	30~1000MHz	776.84	-40.26	-13	PASS
GSM1900	810	0	1000~18000MHz	16989.07	-26.81	-13	PASS

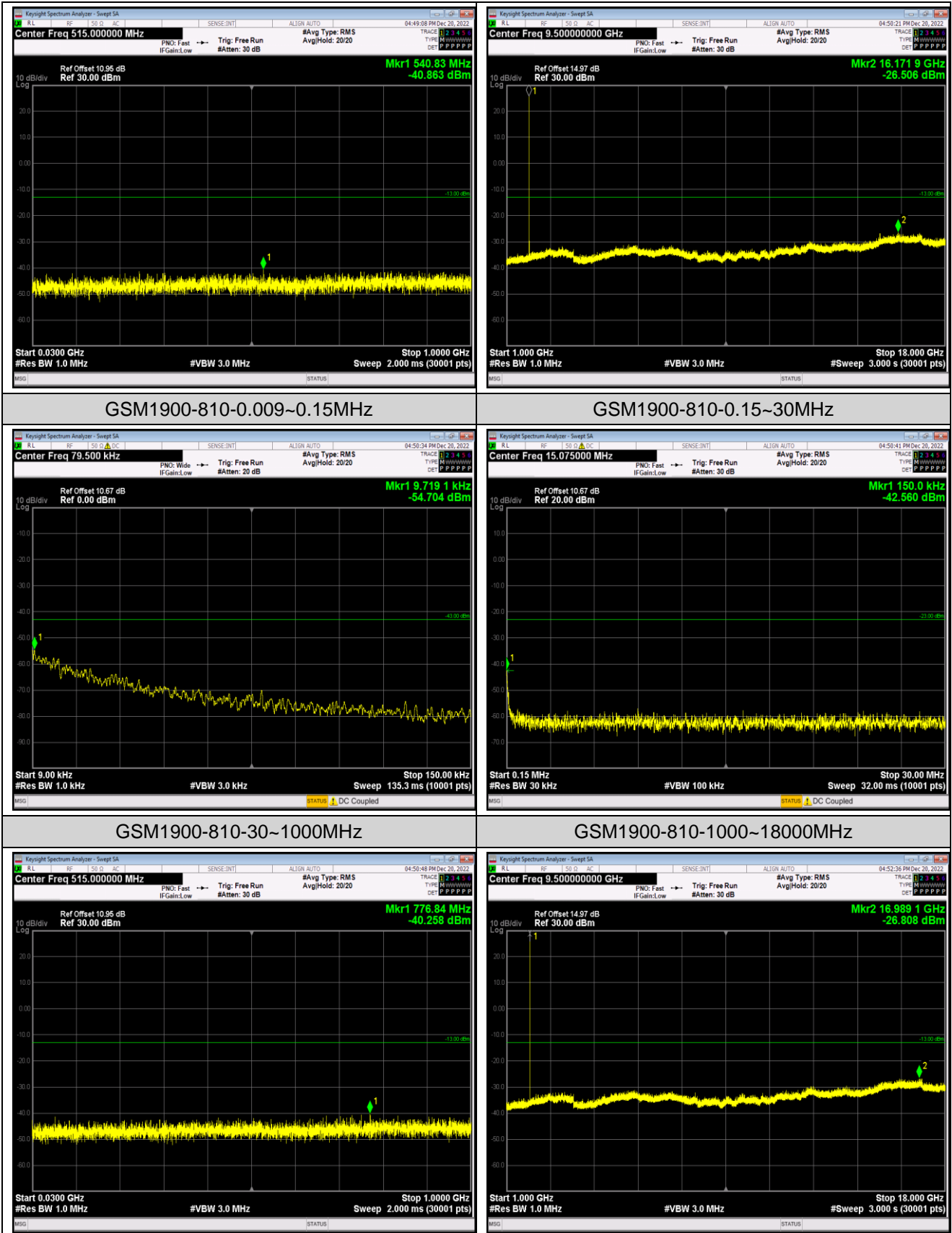
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.85	-30	5.46	0.006526	±2.5	Pass
	-20	-1.68	-0.002008		
	-10	1.29	0.001542		
	0	4.29	0.005128		
	10	0.58	0.000693		
	20	3.20	0.003825		
	30	3.10	0.003705		
	40	4.23	0.005056		
	50	2.97	0.003550		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	0.58	0.000693	±2.5	Pass
	3.85	-2.62	-0.003132		
	4.40	3.52	0.004208		
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		
3.85	-30	-13.37	-0.015981	±2.5	Pass
	-20	-15.37	-0.018372		
	-10	-10.72	-0.012814		
	0	-16.30	-0.019484		
	10	-12.66	-0.015133		
	20	-10.56	-0.012623		
	30	-15.85	-0.018946		
	40	-11.27	-0.013471		
	50	-11.40	-0.013627		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-12.07	-0.014427	±2.5	Pass
	3.85	-18.11	-0.021647		
	4.40	-15.24	-0.018217		
<i>Remark: All channel had been tested, but only the worst case data displayed in this report.</i>					

Reference Frequency: PCS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.85	-30	-1.10	-0.000585	Within authorized band for PCS 1900	Pass
	-20	-2.10	-0.001117		
	-10	3.75	0.001995		
	0	9.23	0.004910		
	10	1.74	0.000926		
	20	-11.62	-0.006181		
	30	-2.29	-0.001218		
	40	0.06	0.000032		
	50	6.36	0.003383		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-2.87	-0.001527	Within authorized band for PCS 1900	Pass
	3.85	2.29	0.001218		
	4.40	3.20	0.001702		
<i>Remark: All channel had been tested, but only the worst case data displayed in this report.</i>					

Reference Frequency: EGPRS1900 Middle channel=661 Frequency=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.85	-30	15.01	0.007984	Within authorized band for PCS 1900	Pass
	-20	12.01	0.006388		
	-10	15.95	0.008484		
	0	10.88	0.005787		
	10	-5.10	-0.002713		
	20	0.23	0.000122		
	30	-3.42	-0.001819		
	40	1.71	0.000910		
	50	-1.16	-0.000617		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	11.56	0.006149	Within authorized band for PCS 1900	Pass
	3.85	8.78	0.004670		
	4.40	8.36	0.004447		
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

