

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	33.51	24.94	38.45	PASS
GSM850	190	5	33.51	24.94	38.45	PASS
GSM850	251	5	33.27	24.7	38.45	PASS
GSM1900	512	0	30.05	28.95	33.00	PASS
GSM1900	661	0	30.38	29.28	33.00	PASS
GSM1900	810	0	30.25	29.15	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.49	24.92	38.45	PASS
GPRS850	128	5	2	32.68	24.11	38.45	PASS
GPRS850	128	5	3	30.83	22.26	38.45	PASS
GPRS850	128	5	4	29.67	21.1	38.45	PASS
GPRS850	190	5	1	33.48	24.91	38.45	PASS
GPRS850	190	5	2	32.68	24.11	38.45	PASS
GPRS850	190	5	3	30.84	22.27	38.45	PASS
GPRS850	190	5	4	29.72	21.15	38.45	PASS
GPRS850	251	5	1	33.24	24.67	38.45	PASS
GPRS850	251	5	2	32.47	23.9	38.45	PASS
GPRS850	251	5	3	30.68	22.11	38.45	PASS
GPRS850	251	5	4	29.58	21.01	38.45	PASS
GPRS1900	512	0	1	30.05	28.95	33.00	PASS
GPRS1900	512	0	2	29.00	27.9	33.00	PASS
GPRS1900	512	0	3	26.82	25.72	33.00	PASS
GPRS1900	512	0	4	25.58	24.48	33.00	PASS
GPRS1900	661	0	1	30.37	29.27	33.00	PASS
GPRS1900	661	0	2	29.36	28.26	33.00	PASS
GPRS1900	661	0	3	27.21	26.11	33.00	PASS
GPRS1900	661	0	4	26.04	24.94	33.00	PASS
GPRS1900	810	0	1	30.23	29.13	33.00	PASS
GPRS1900	810	0	2	29.28	28.18	33.00	PASS
GPRS1900	810	0	3	27.28	26.18	33.00	PASS
GPRS1900	810	0	4	26.16	25.06	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.66	19.09	38.45	PASS
EGPRS850	128	8	2	26.63	18.06	38.45	PASS
EGPRS850	128	8	3	24.44	15.87	38.45	PASS
EGPRS850	128	8	4	23.07	14.5	38.45	PASS
EGPRS850	190	8	1	27.69	19.12	38.45	PASS
EGPRS850	190	8	2	26.63	18.06	38.45	PASS
EGPRS850	190	8	3	24.43	15.86	38.45	PASS
EGPRS850	190	8	4	23.10	14.53	38.45	PASS
EGPRS850	251	8	1	27.83	19.26	38.45	PASS
EGPRS850	251	8	2	26.76	18.19	38.45	PASS
EGPRS850	251	8	3	24.61	16.04	38.45	PASS
EGPRS850	251	8	4	23.24	14.67	38.45	PASS
EGPRS1900	512	2	1	24.89	23.79	33.00	PASS
EGPRS1900	512	2	2	23.63	22.53	33.00	PASS
EGPRS1900	512	2	3	21.50	20.4	33.00	PASS
EGPRS1900	512	2	4	20.18	19.08	33.00	PASS
EGPRS1900	661	2	1	25.35	24.25	33.00	PASS
EGPRS1900	661	2	2	24.12	23.02	33.00	PASS
EGPRS1900	661	2	3	21.99	20.89	33.00	PASS
EGPRS1900	661	2	4	20.63	19.53	33.00	PASS
EGPRS1900	810	2	1	25.60	24.5	33.00	PASS
EGPRS1900	810	2	2	24.36	23.26	33.00	PASS
EGPRS1900	810	2	3	22.19	21.09	33.00	PASS
EGPRS1900	810	2	4	20.89	19.79	33.00	PASS

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

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

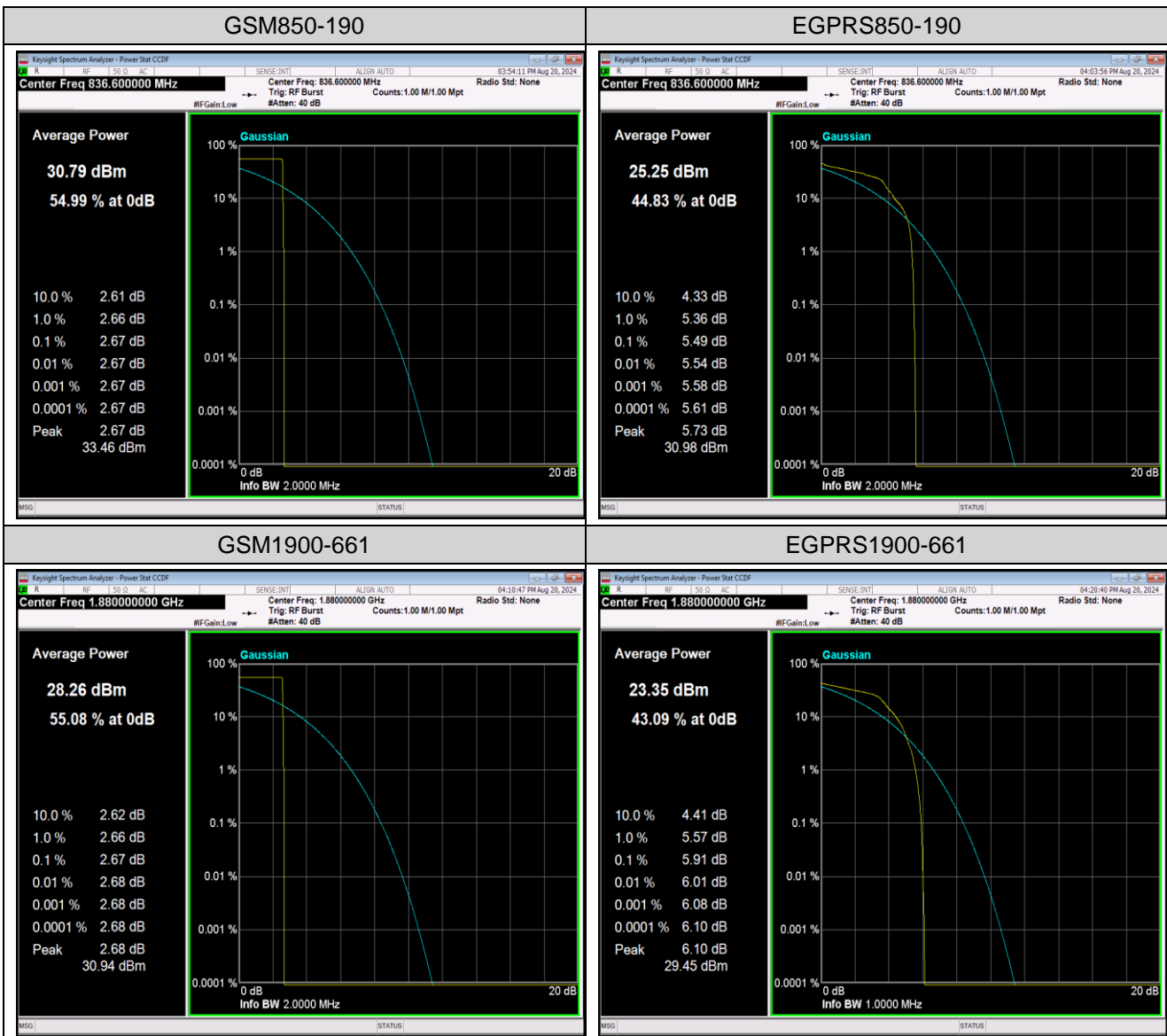
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.67	13	PASS
EGPRS850	190	8	5.49	13	PASS
GSM1900	661	0	2.67	13	PASS
EGPRS1900	661	2	5.91	13	PASS

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

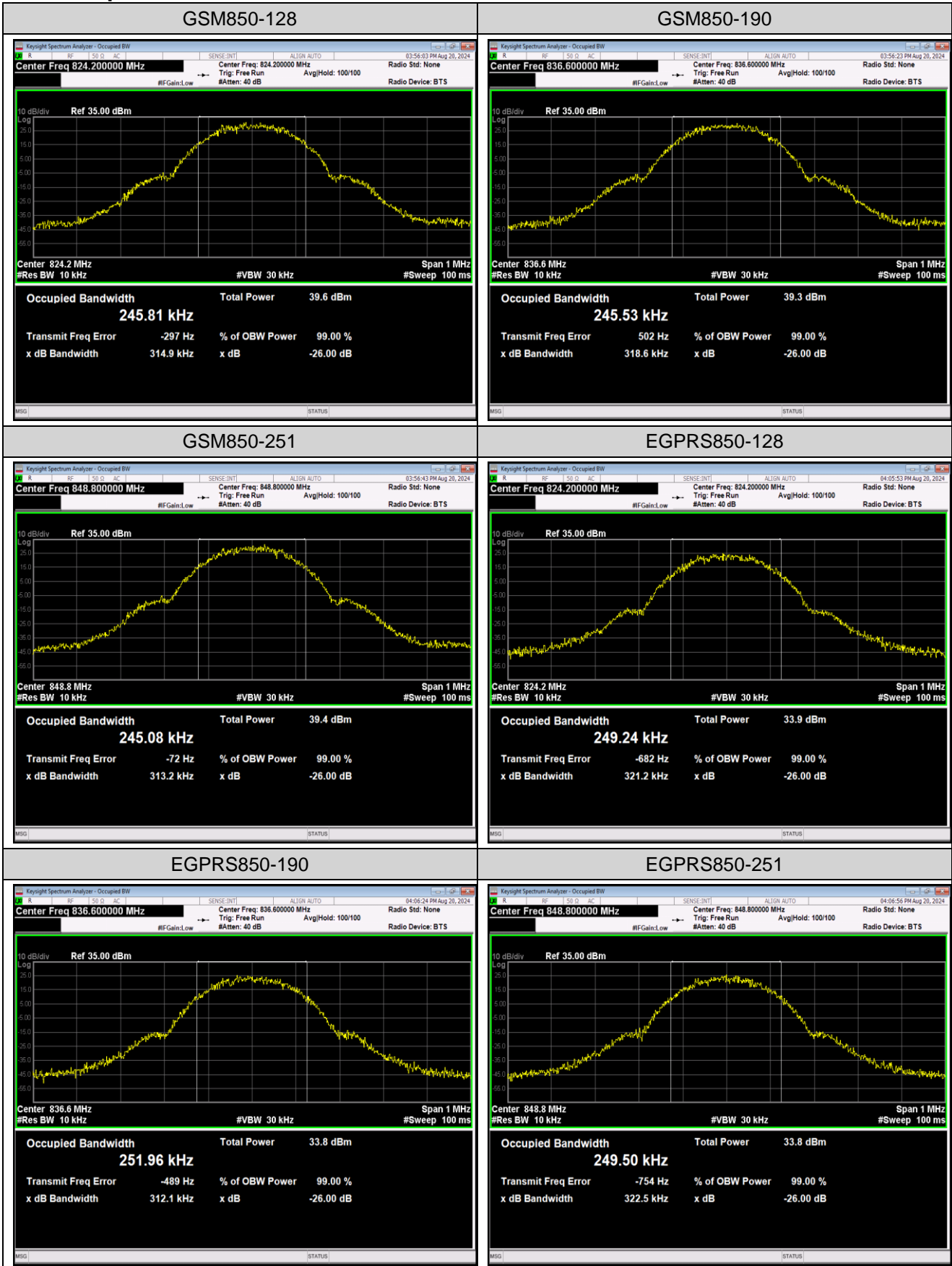
Test Graphs



Appendix C: 26dB Bandwidth and Occupied Bandwidth**Test Result**

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24581	0.3149	---	PASS
GSM850	190	5	0.24553	0.3186	---	PASS
GSM850	251	5	0.24508	0.3132	---	PASS
EGPRS850	128	8	0.24924	0.3212	---	PASS
EGPRS850	190	8	0.25196	0.3121	---	PASS
EGPRS850	251	8	0.24950	0.3225	---	PASS
GSM1900	512	0	0.24691	0.3086	---	PASS
GSM1900	661	0	0.24706	0.3192	---	PASS
GSM1900	810	0	0.24492	0.3067	---	PASS
EGPRS1900	512	2	0.24809	0.3169	---	PASS
EGPRS1900	661	2	0.25121	0.3188	---	PASS
EGPRS1900	810	2	0.24824	0.3129	---	PASS

Test Graphs

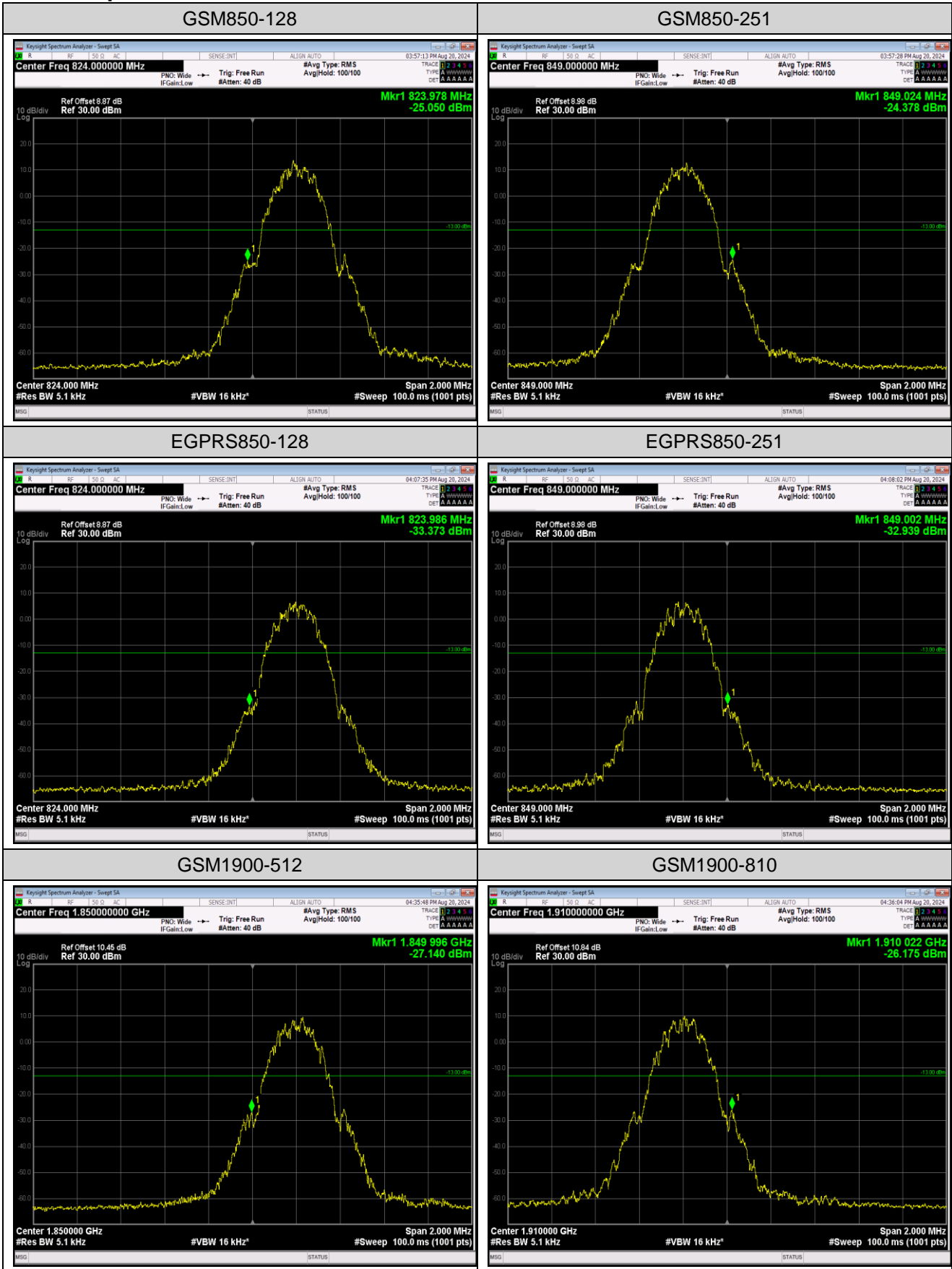


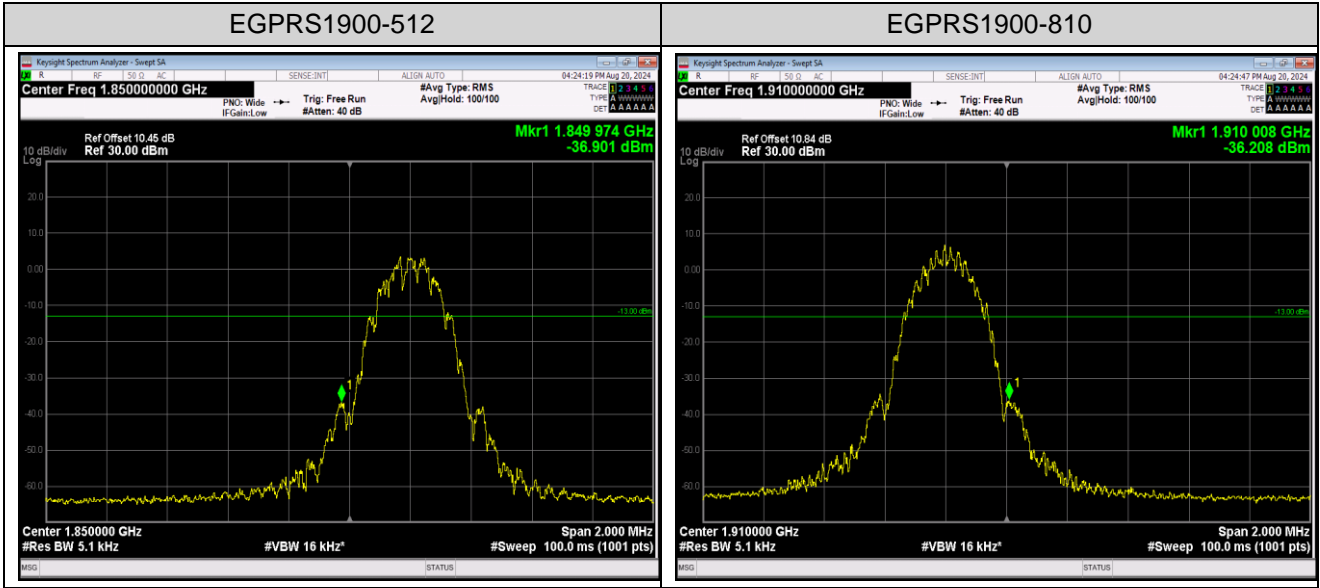


Appendix D: Band Edge**Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-25.05	-13	PASS
GSM850	251	5	849.02	-24.38	-13	PASS
EGPRS850	128	8	823.99	-33.37	-13	PASS
EGPRS850	251	8	849.00	-32.94	-13	PASS
GSM1900	512	0	1850.00	-27.14	-13	PASS
GSM1900	810	0	1910.02	-26.18	-13	PASS
EGPRS1900	512	2	1849.97	-36.90	-13	PASS
EGPRS1900	810	2	1910.01	-36.21	-13	PASS

Test Graphs





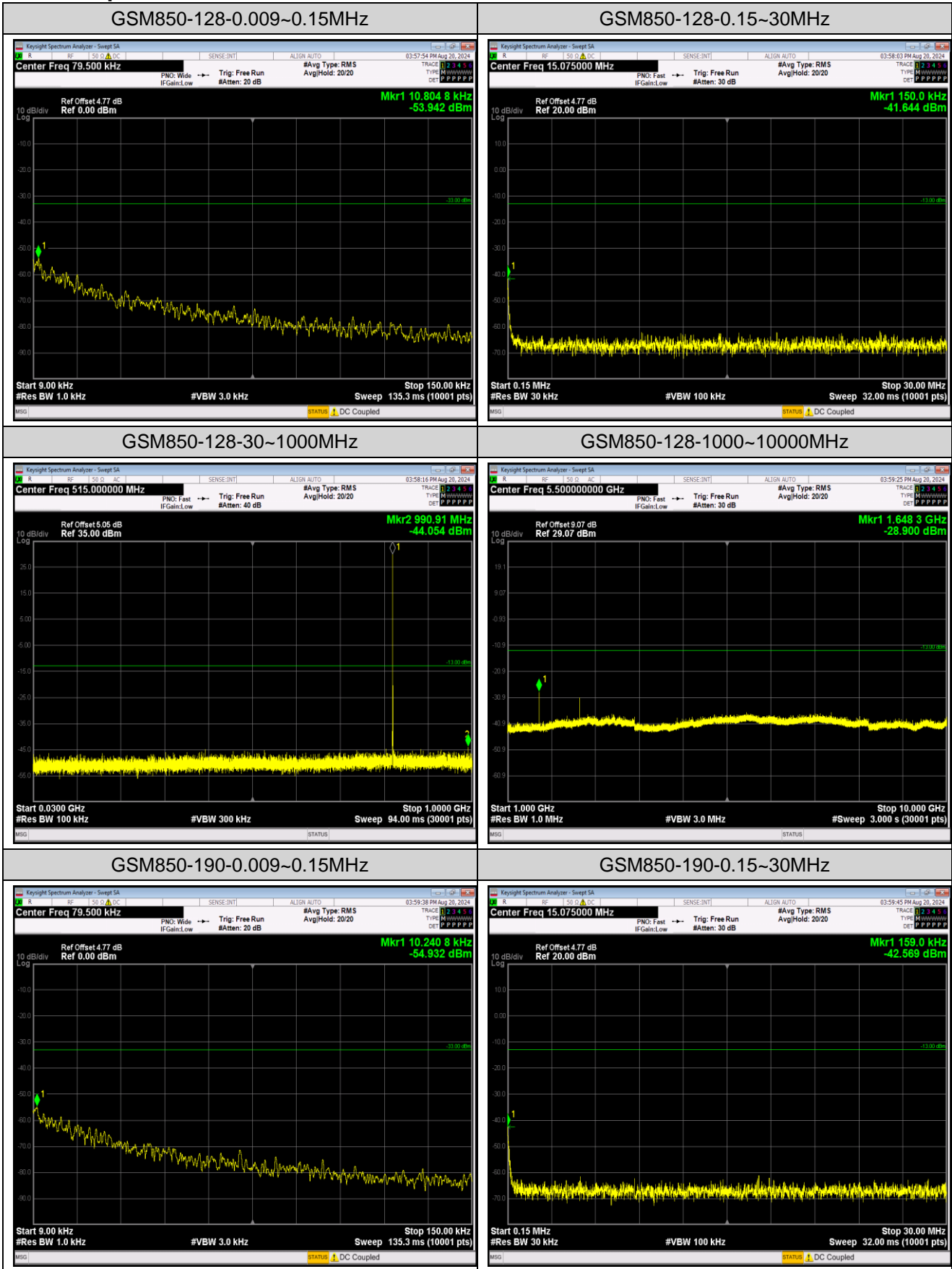
Appendix E: Conducted Spurious Emission

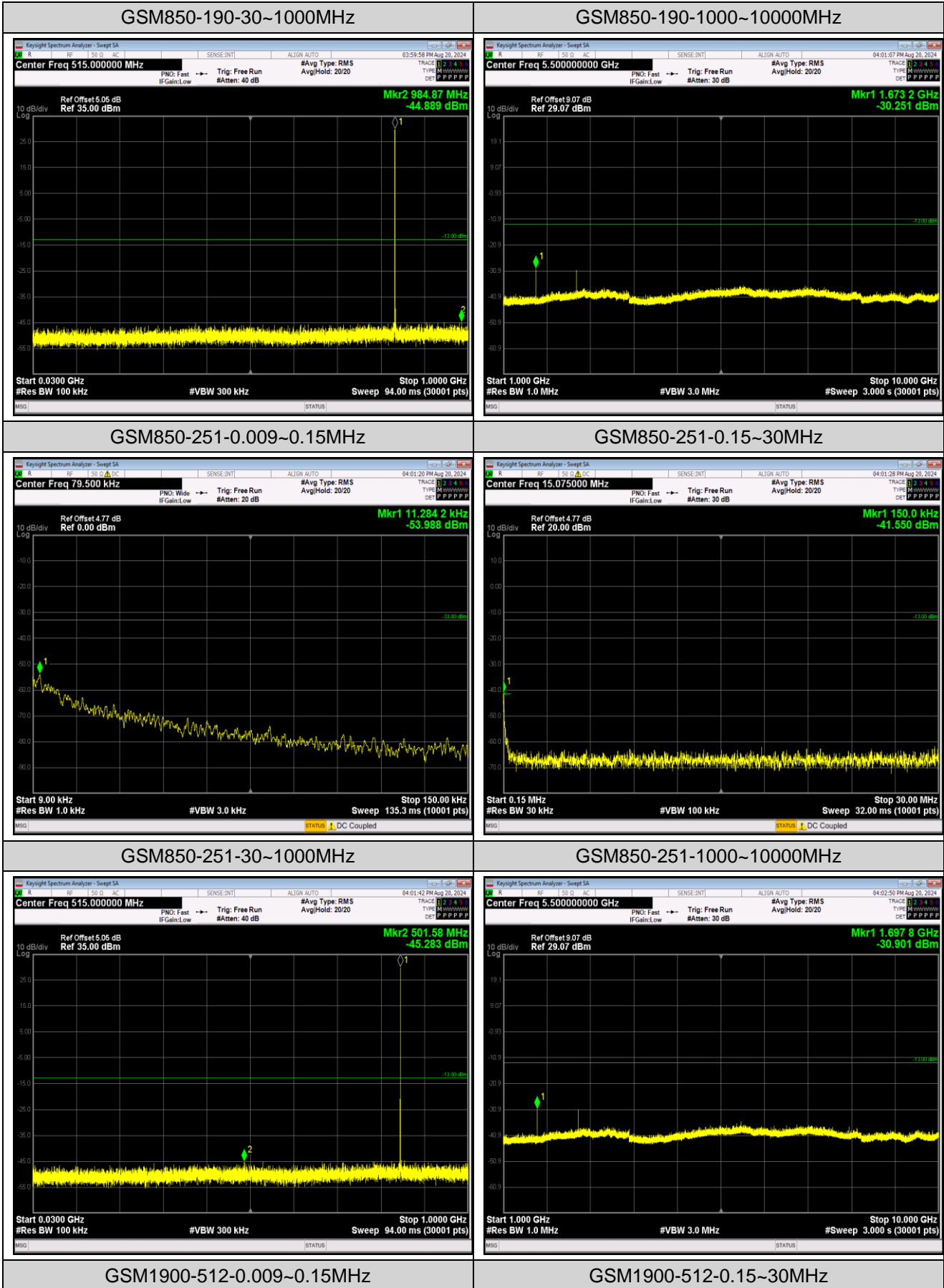
Test Result

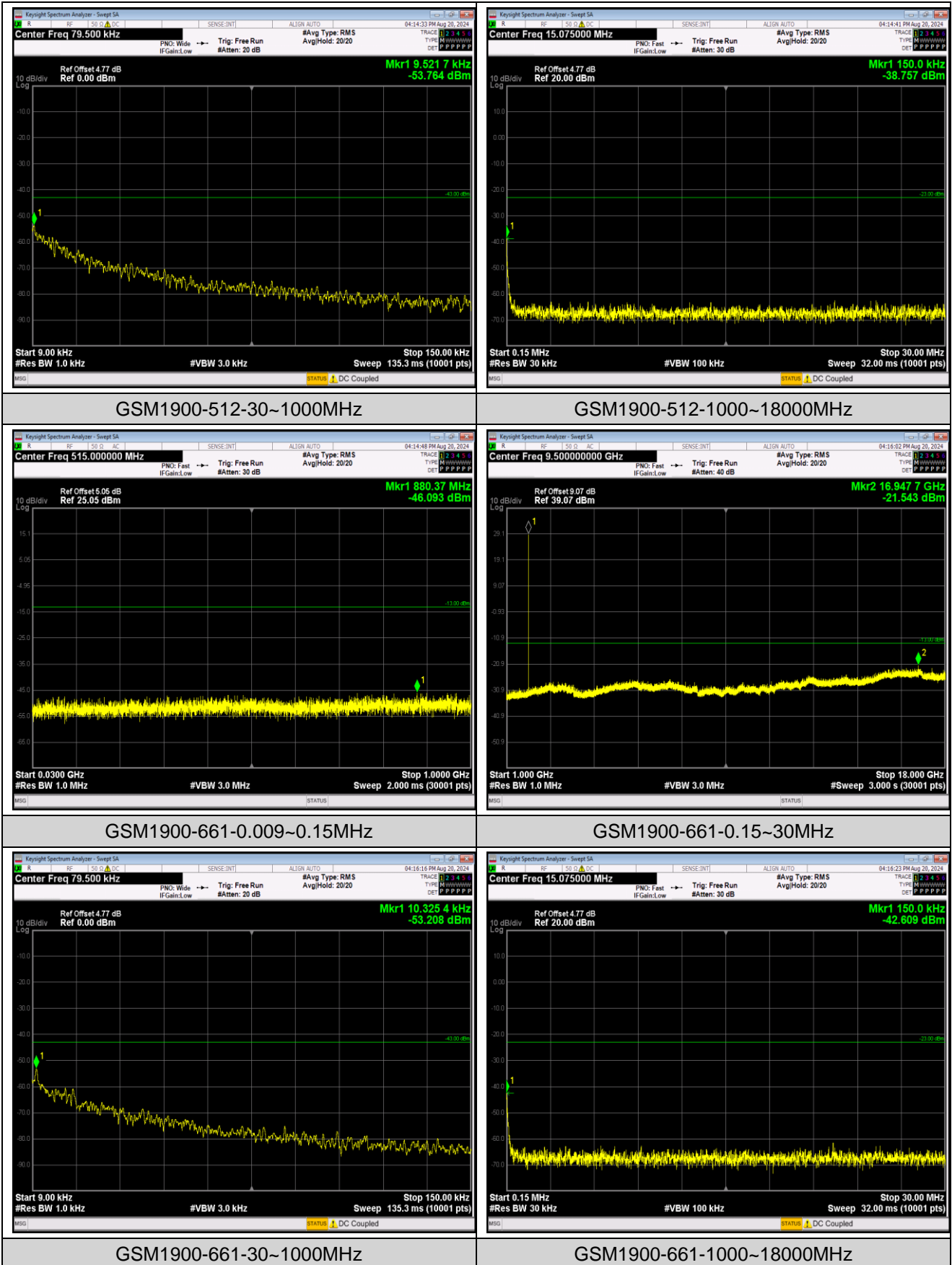
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-53.94	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-41.64	-13	PASS
GSM850	128	5	30~1000MHz	990.91	-44.05	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-28.9	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-54.93	-33	PASS
GSM850	190	5	0.15~30MHz	0.16	-42.57	-13	PASS
GSM850	190	5	30~1000MHz	984.87	-44.89	-13	PASS
GSM850	190	5	1000~10000MHz	1673.2	-30.25	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-53.99	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-41.55	-13	PASS
GSM850	251	5	30~1000MHz	501.58	-45.28	-13	PASS
GSM850	251	5	1000~10000MHz	1697.8	-30.9	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-53.76	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-38.76	-23	PASS
GSM1900	512	0	30~1000MHz	880.37	-46.09	-13	PASS
GSM1900	512	0	1000~18000MHz	16947.7	-21.54	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-53.21	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-42.61	-23	PASS
GSM1900	661	0	30~1000MHz	774.99	-45.57	-13	PASS
GSM1900	661	0	1000~18000MHz	16203.67	-22.09	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-53.17	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-43.13	-23	PASS
GSM1900	810	0	30~1000MHz	791.74	-45.21	-13	PASS
GSM1900	810	0	1000~18000MHz	16204.8	-22.34	-13	PASS

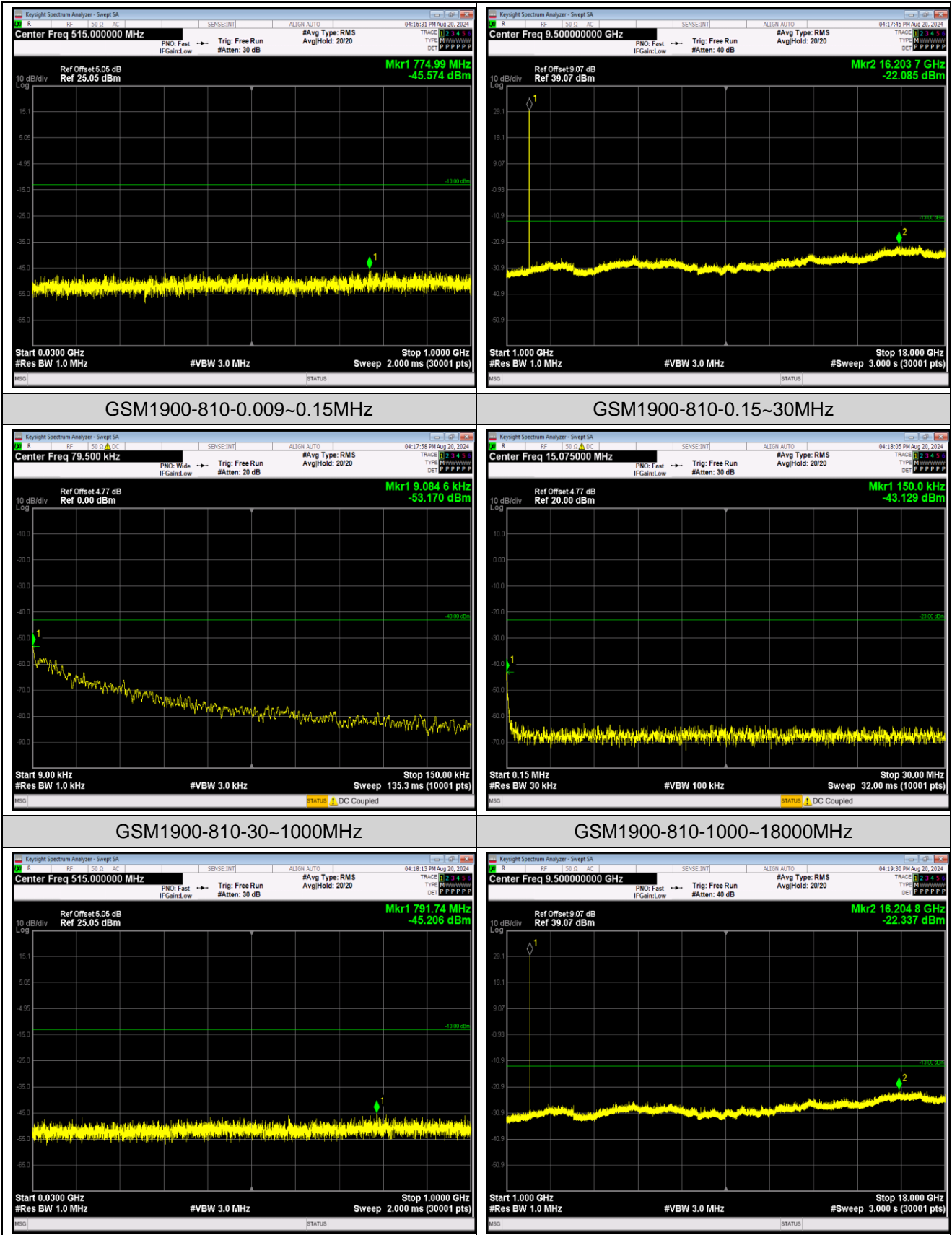
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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		
3.87	-30	-8.68	-0.010375	±2.5	Pass
	-20	-5.97	-0.007136		
	-10	-3.91	-0.004674		
	0	-4.49	-0.005367		
	10	-5.42	-0.006479		
	20	-0.13	-0.000155		
	30	3.58	0.004279		
	40	-1.52	-0.001817		
	50	-4.10	-0.004901		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-7.33	-0.008762	±2.5	Pass
	3.87	-9.20	-0.010997		
	4.45	-7.88	-0.009419		
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		
3.87	-30	-2.39	-0.002857	±2.5	Pass
	-20	-4.39	-0.005247		
	-10	1.10	0.001315		
	0	3.75	0.004482		
	10	2.65	0.003168		
	20	2.78	0.003323		
	30	4.75	0.005678		
	40	6.07	0.007256		
	50	0.06	0.000072		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-1.55	-0.001853	±2.5	Pass
	3.87	0.65	0.000777		
	4.45	-2.10	-0.002510		
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		
3.87	-30	-18.50	-0.009840	Within authorized band for PCS 1900	Pass
	-20	-15.79	-0.008399		
	-10	-20.63	-0.010973		
	0	-16.76	-0.008915		
	10	-17.69	-0.009410		
	20	-20.70	-0.011011		
	30	-14.75	-0.007846		
	40	-12.62	-0.006713		
	50	-8.88	-0.004723		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-17.89	-0.009516	Within authorized band for PCS 1900	Pass
	3.87	-19.44	-0.010340		
	4.45	-16.98	-0.009032		
<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		
3.87	-30	-10.91	-0.005803	Within authorized band for PCS 1900	Pass
	-20	-13.14	-0.006989		
	-10	-11.49	-0.006112		
	0	-5.84	-0.003106		
	10	-8.81	-0.004686		
	20	-8.36	-0.004447		
	30	-10.30	-0.005479		
	40	-9.94	-0.005287		
	50	-4.00	-0.002128		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-2.32	-0.001234	Within authorized band for PCS 1900	Pass
	3.87	-9.72	-0.005170		
	4.45	-11.69	-0.006218		
<i>Remark: All channel had been tested, but only the worst case data displayed in this report.</i>					

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

