

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Channel	PCL	Conducted Power(dBm)	ERP/EIRP(dBm)	Limit(dBm)	Verdict
GSM850	128	5	32.44	24.91	38.45	PASS
GSM850	190	5	32.45	24.92	38.45	PASS
GSM850	251	5	32.45	24.92	38.45	PASS
GSM1900	512	0	29.32	27.25	33.00	PASS
GSM1900	661	0	29.47	27.4	33.00	PASS
GSM1900	810	0	29.44	27.37	33.00	PASS

Band	Channel	PCL	Up Slot Num	Conducted Power (dBm)	ERP/EIRP(dBm)	Limit(dBm)	Verdict
GPRS850	128	5	1	32.43	24.9	38.45	PASS
GPRS850	128	5	2	31.70	24.17	38.45	PASS
GPRS850	128	5	3	29.94	22.41	38.45	PASS
GPRS850	128	5	4	28.83	21.3	38.45	PASS
GPRS850	190	5	1	32.38	24.85	38.45	PASS
GPRS850	190	5	2	31.68	24.15	38.45	PASS
GPRS850	190	5	3	29.94	22.41	38.45	PASS
GPRS850	190	5	4	28.85	21.32	38.45	PASS
GPRS850	251	5	1	32.37	24.84	38.45	PASS
GPRS850	251	5	2	31.68	24.15	38.45	PASS
GPRS850	251	5	3	29.93	22.4	38.45	PASS
GPRS850	251	5	4	28.86	21.33	38.45	PASS
GPRS1900	512	0	1	29.31	27.24	33.00	PASS
GPRS1900	512	0	2	28.53	26.46	33.00	PASS
GPRS1900	512	0	3	26.72	24.65	33.00	PASS
GPRS1900	512	0	4	25.58	23.51	33.00	PASS
GPRS1900	661	0	1	29.39	27.32	33.00	PASS
GPRS1900	661	0	2	28.71	26.64	33.00	PASS
GPRS1900	661	0	3	26.99	24.92	33.00	PASS
GPRS1900	661	0	4	25.86	23.79	33.00	PASS
GPRS1900	810	0	1	29.34	27.27	33.00	PASS
GPRS1900	810	0	2	28.69	26.62	33.00	PASS
GPRS1900	810	0	3	27.04	24.97	33.00	PASS
GPRS1900	810	0	4	25.97	23.9	33.00	PASS

Band	Channel	PCL	Up Slot Num	Power(dBm)	ERP/EIRP (dBm)	Limit(dBm)	Verdict
EGPRS850	128	8	1	26.82	19.29	38.45	PASS
EGPRS850	128	8	2	25.74	18.21	38.45	PASS
EGPRS850	128	8	3	23.65	16.12	38.45	PASS
EGPRS850	128	8	4	22.41	14.88	38.45	PASS
EGPRS850	190	8	1	26.55	19.02	38.45	PASS
EGPRS850	190	8	2	25.51	17.98	38.45	PASS
EGPRS850	190	8	3	23.43	15.9	38.45	PASS
EGPRS850	190	8	4	22.19	14.66	38.45	PASS
EGPRS850	251	8	1	26.59	19.06	38.45	PASS
EGPRS850	251	8	2	25.56	18.03	38.45	PASS
EGPRS850	251	8	3	23.49	15.96	38.45	PASS
EGPRS850	251	8	4	22.28	14.75	38.45	PASS
EGPRS1900	512	2	1	24.90	21.74	33.00	PASS
EGPRS1900	512	2	2	23.98	22.83	33.00	PASS
EGPRS1900	512	2	3	22.14	21.91	33.00	PASS
EGPRS1900	512	2	4	21.03	20.07	33.00	PASS
EGPRS1900	661	2	1	24.57	18.96	33.00	PASS
EGPRS1900	661	2	2	23.76	22.5	33.00	PASS
EGPRS1900	661	2	3	21.87	21.69	33.00	PASS
EGPRS1900	661	2	4	20.82	19.8	33.00	PASS
EGPRS1900	810	2	1	24.31	18.75	33.00	PASS
EGPRS1900	810	2	2	23.49	22.24	33.00	PASS
EGPRS1900	810	2	3	21.62	21.42	33.00	PASS
EGPRS1900	810	2	4	20.57	19.55	33.00	PASS

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

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

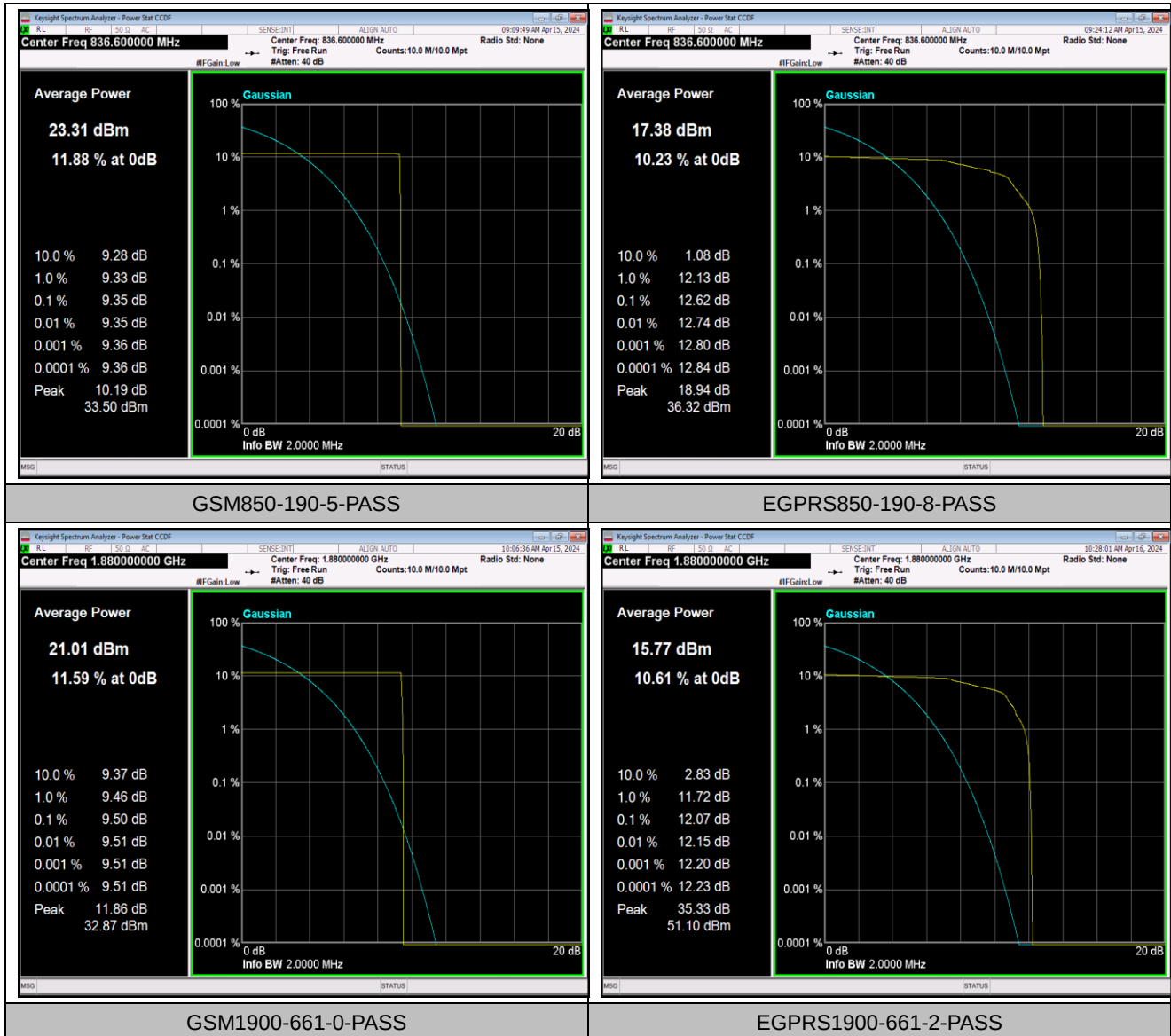
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	Result(dB)	Limit(dB)	Verdict
GSM850	190	9.35	13	PASS
EGPRS850	190	12.62	13	PASS
GSM1900	661	9.50	13	PASS
EGPRS1900	661	12.07	13	PASS

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

Test Graphs

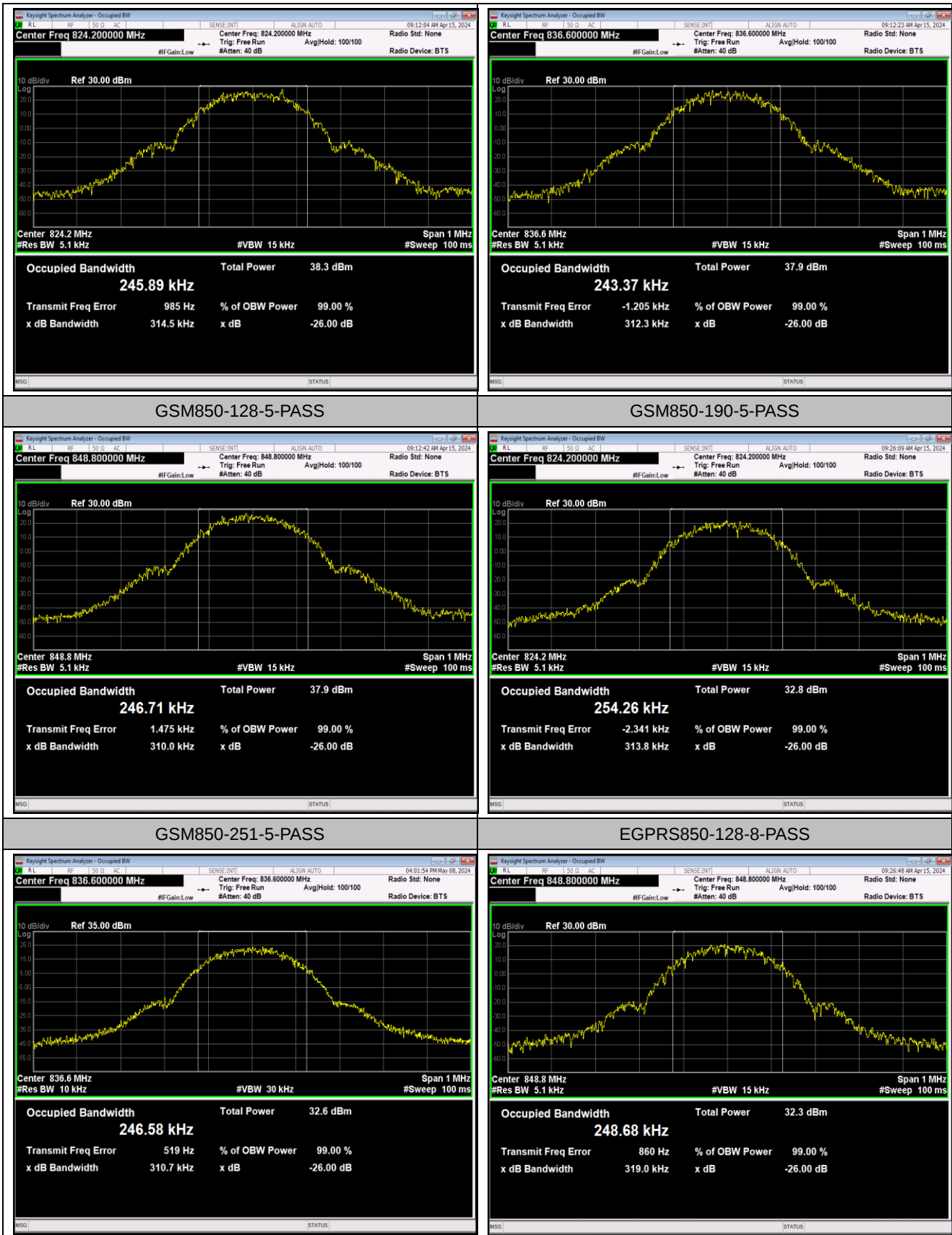


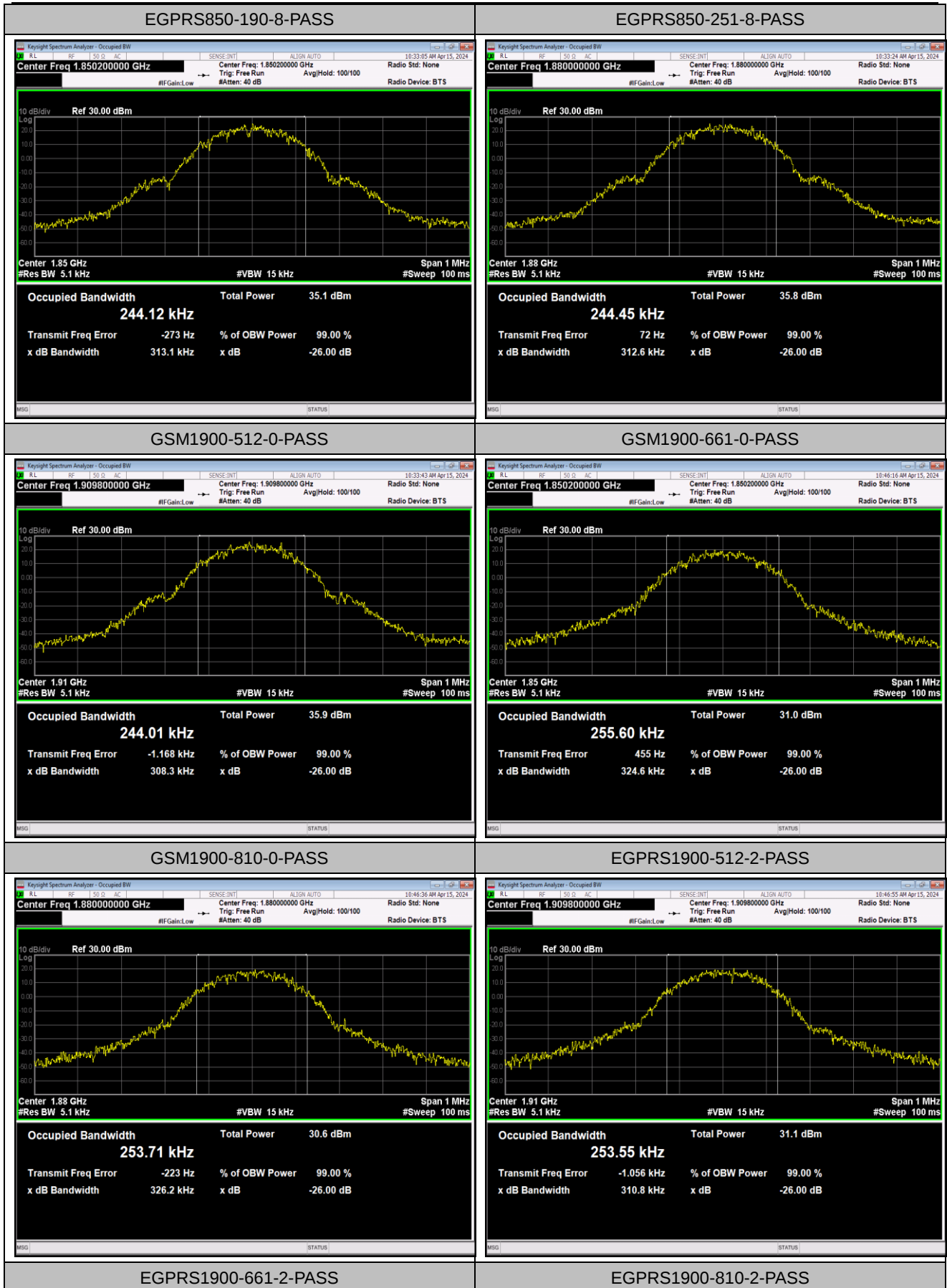
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	0.24589	0.3145	---	PASS
GSM850	190	0.24337	0.3123	---	PASS
GSM850	251	0.24671	0.3100	---	PASS
EGPRS850	128	0.25426	0.3138	---	PASS
EGPRS850	190	0.24455	0.3162	---	PASS
EGPRS850	251	0.24658	0.3107	---	PASS
GSM1900	512	0.24412	0.3131	---	PASS
GSM1900	661	0.24445	0.3126	---	PASS
GSM1900	810	0.24401	0.3083	---	PASS
EGPRS1900	512	0.25560	0.3246	---	PASS
EGPRS1900	661	0.25371	0.3262	---	PASS
EGPRS1900	810	0.25355	0.3108	---	PASS

Test Graphs



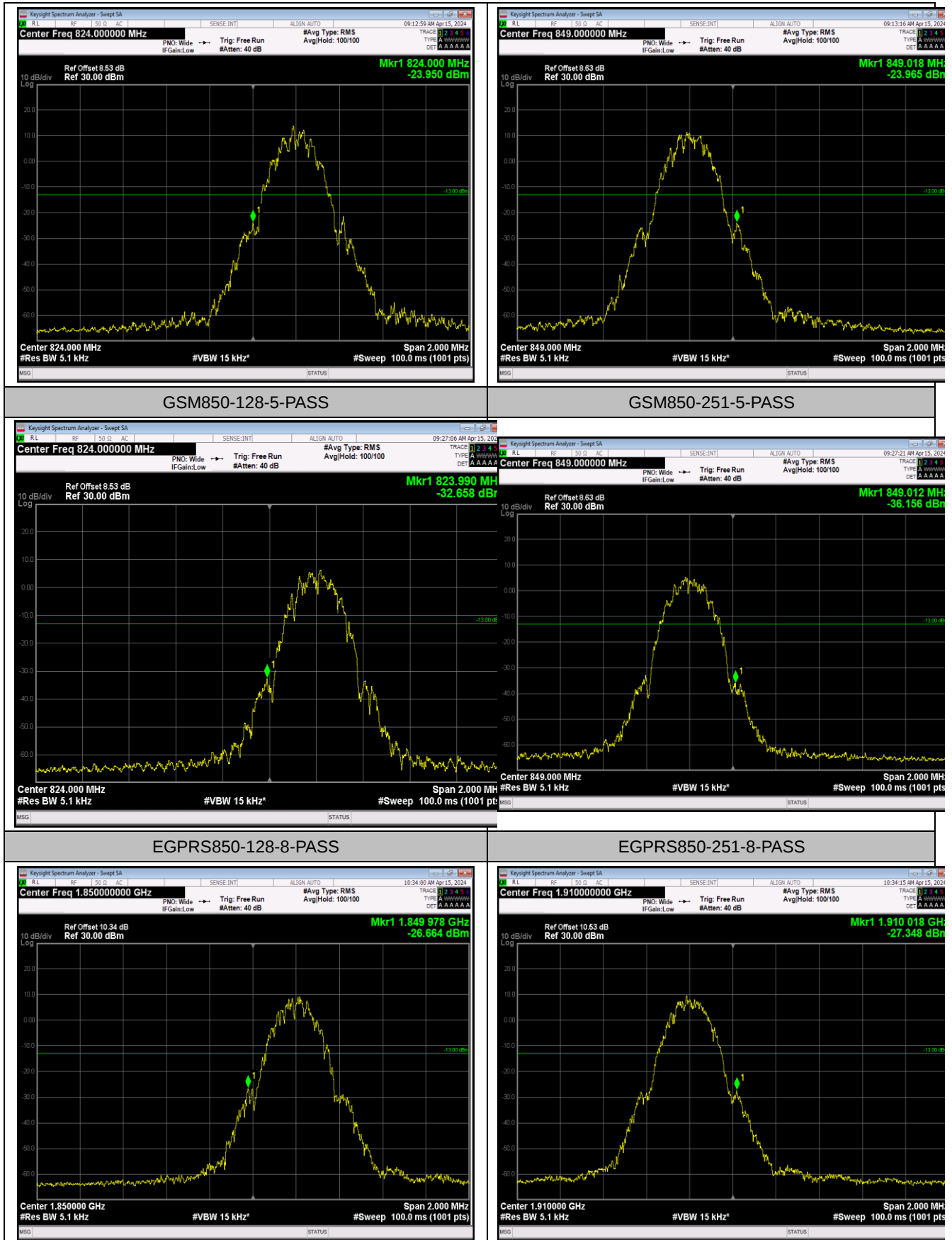


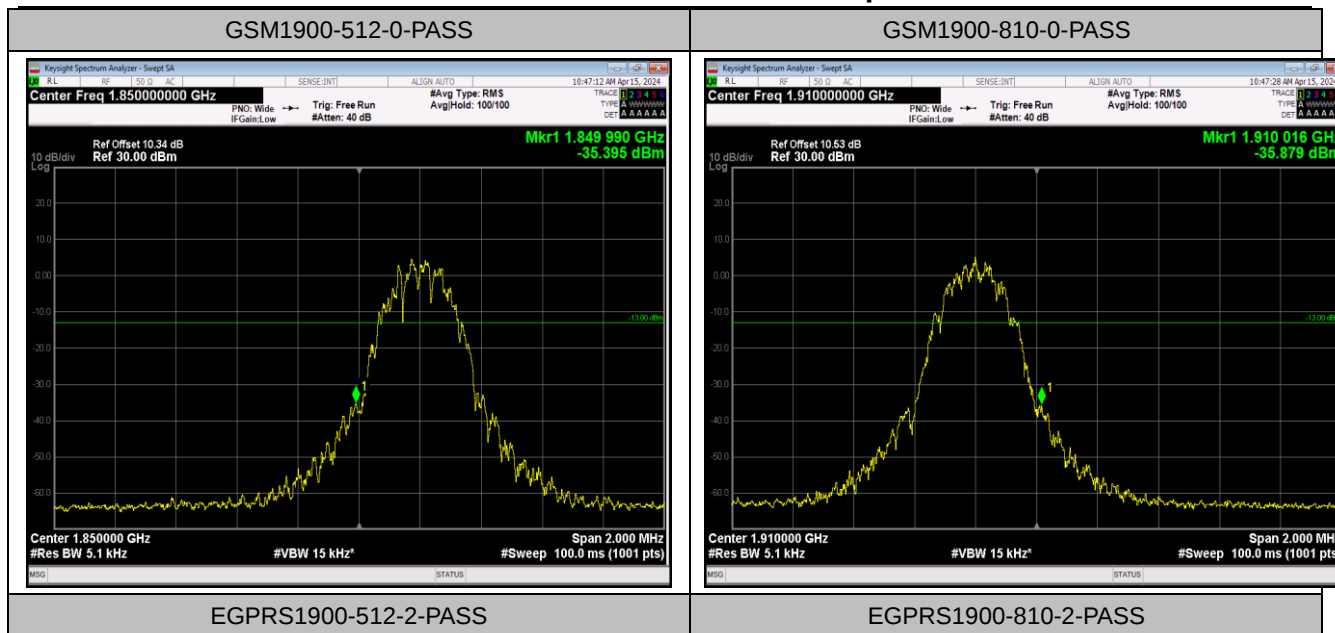
Appendix D: Band Edge

Test Result

Band	Channel	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	824.00	-23.95	-13	PASS
GSM850	251	849.02	-23.97	-13	PASS
EGPRS850	128	823.99	-32.66	-13	PASS
EGPRS850	251	849.01	-36.16	-13	PASS
GSM1900	512	1849.98	-26.66	-13	PASS
GSM1900	810	1910.02	-27.35	-13	PASS
EGPRS1900	512	1849.99	-35.39	-13	PASS
EGPRS1900	810	1910.02	-35.88	-13	PASS

Test Graphs





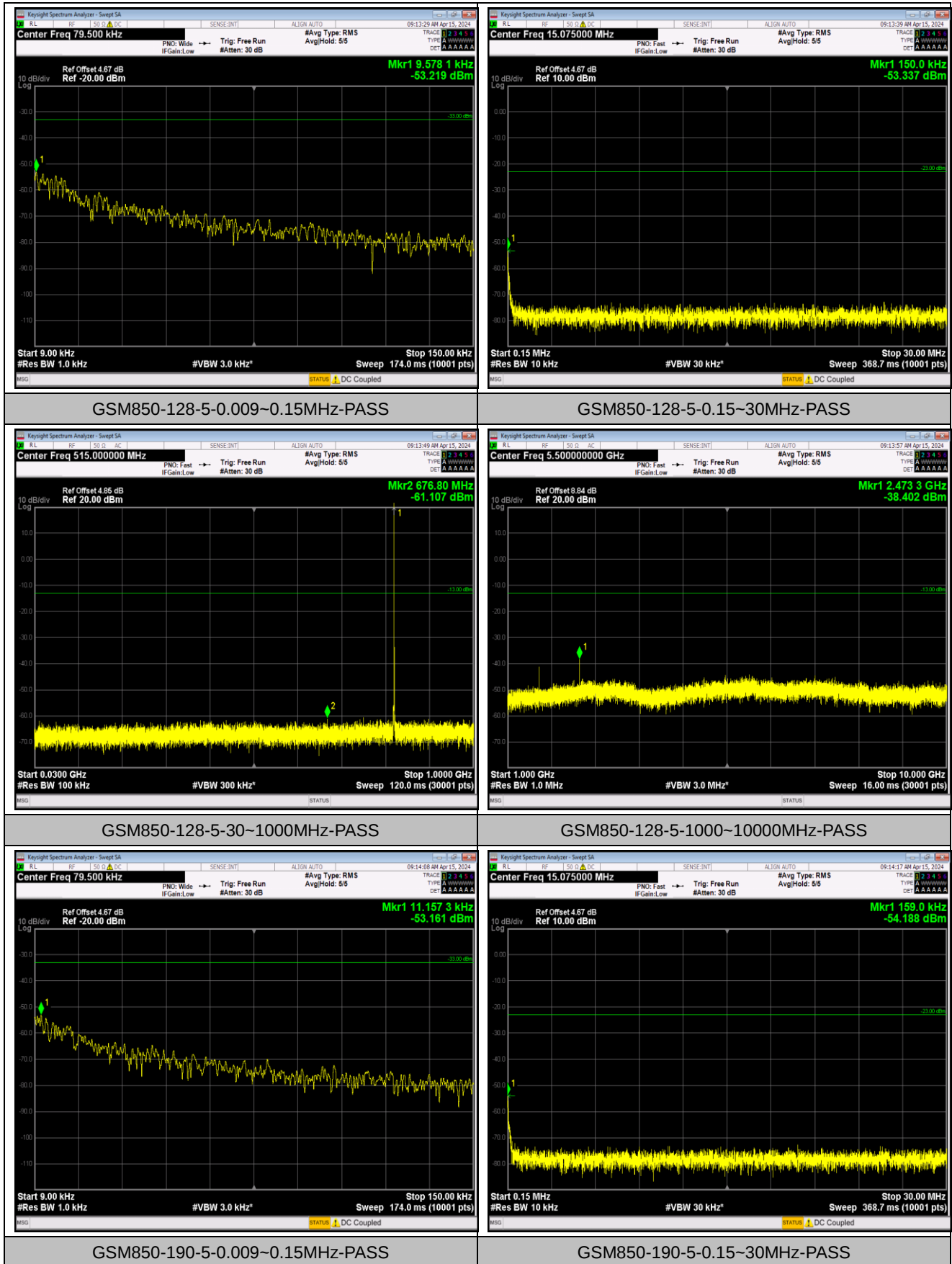
Appendix E: Conducted Spurious Emission

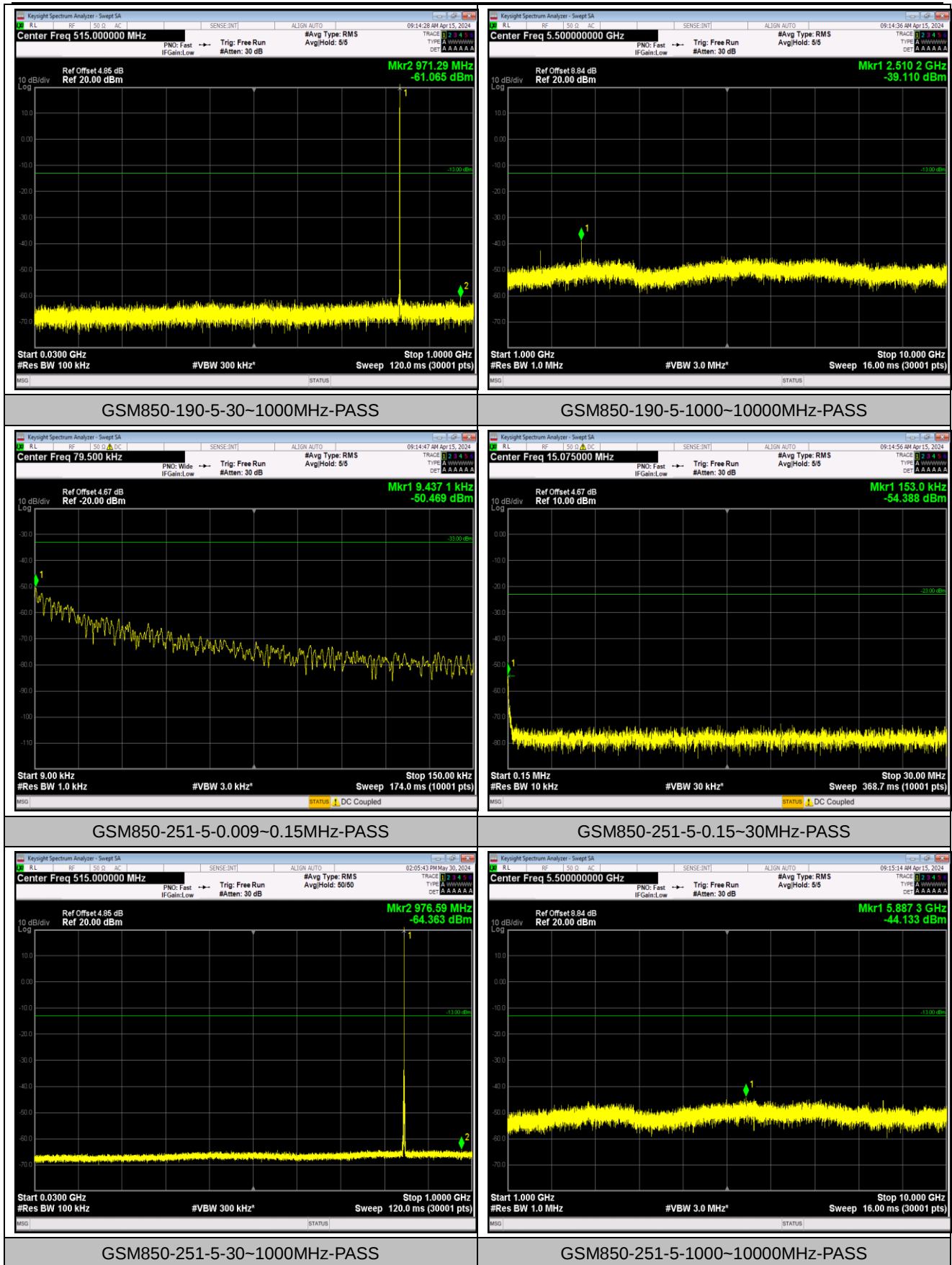
Test Result

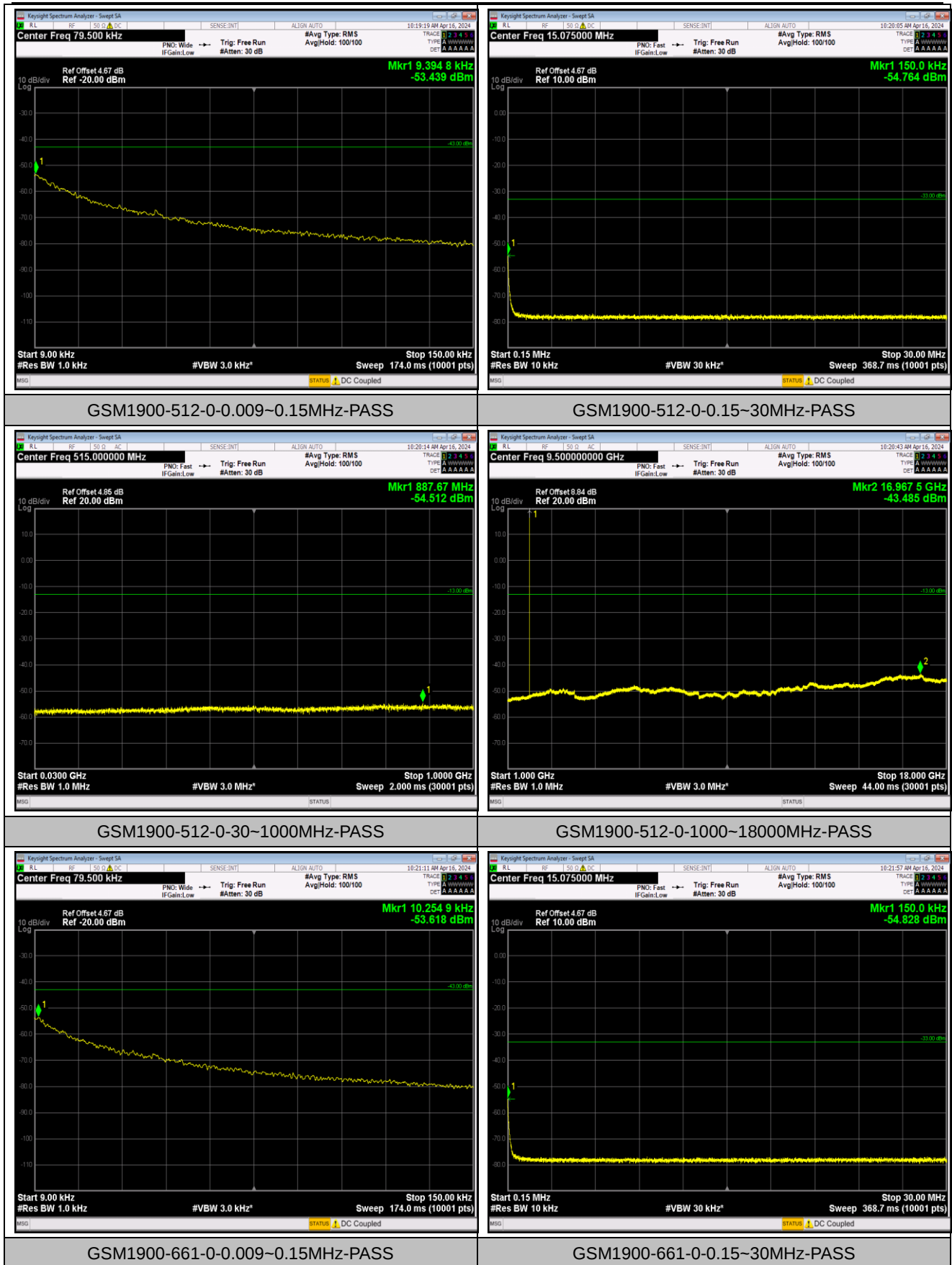
Band	Channel	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	0.009~0.15MHz	0.01	-53.22	-33	PASS
GSM850	128	0.15~30MHz	0.15	-53.34	-23	PASS
GSM850	128	30~1000MHz	676.8	-61.11	-13	PASS
GSM850	128	1000~10000MHz	2473.3	-38.4	-13	PASS
GSM850	190	0.009~0.15MHz	0.01	-53.16	-33	PASS
GSM850	190	0.15~30MHz	0.16	-54.19	-23	PASS
GSM850	190	30~1000MHz	971.29	-61.07	-13	PASS
GSM850	190	1000~10000MHz	2510.2	-39.11	-13	PASS
GSM850	251	0.009~0.15MHz	0.01	-50.47	-33	PASS
GSM850	251	0.15~30MHz	0.15	-54.39	-23	PASS
GSM850	251	30~1000MHz	747.7	-60.92	-13	PASS
GSM850	251	1000~10000MHz	5887.3	-44.13	-13	PASS
GSM1900	512	0.009~0.15MHz	0.01	-53.44	-43	PASS
GSM1900	512	0.15~30MHz	0.15	-54.76	-33	PASS
GSM1900	512	30~1000MHz	887.67	-54.51	-13	PASS
GSM1900	512	1000~18000MHz	16967.53	-43.49	-13	PASS
GSM1900	661	0.009~0.15MHz	0.01	-53.62	-43	PASS
GSM1900	661	0.15~30MHz	0.15	-54.83	-33	PASS
GSM1900	661	30~1000MHz	906.62	-54.67	-13	PASS
GSM1900	661	1000~18000MHz	17004.37	-43.47	-13	PASS
GSM1900	810	0.009~0.15MHz	0.01	-53.18	-43	PASS
GSM1900	810	0.15~30MHz	0.15	-55.26	-33	PASS
GSM1900	810	30~1000MHz	874.64	-54.89	-13	PASS
GSM1900	810	1000~18000MHz	17006.07	-42.99	-13	PASS

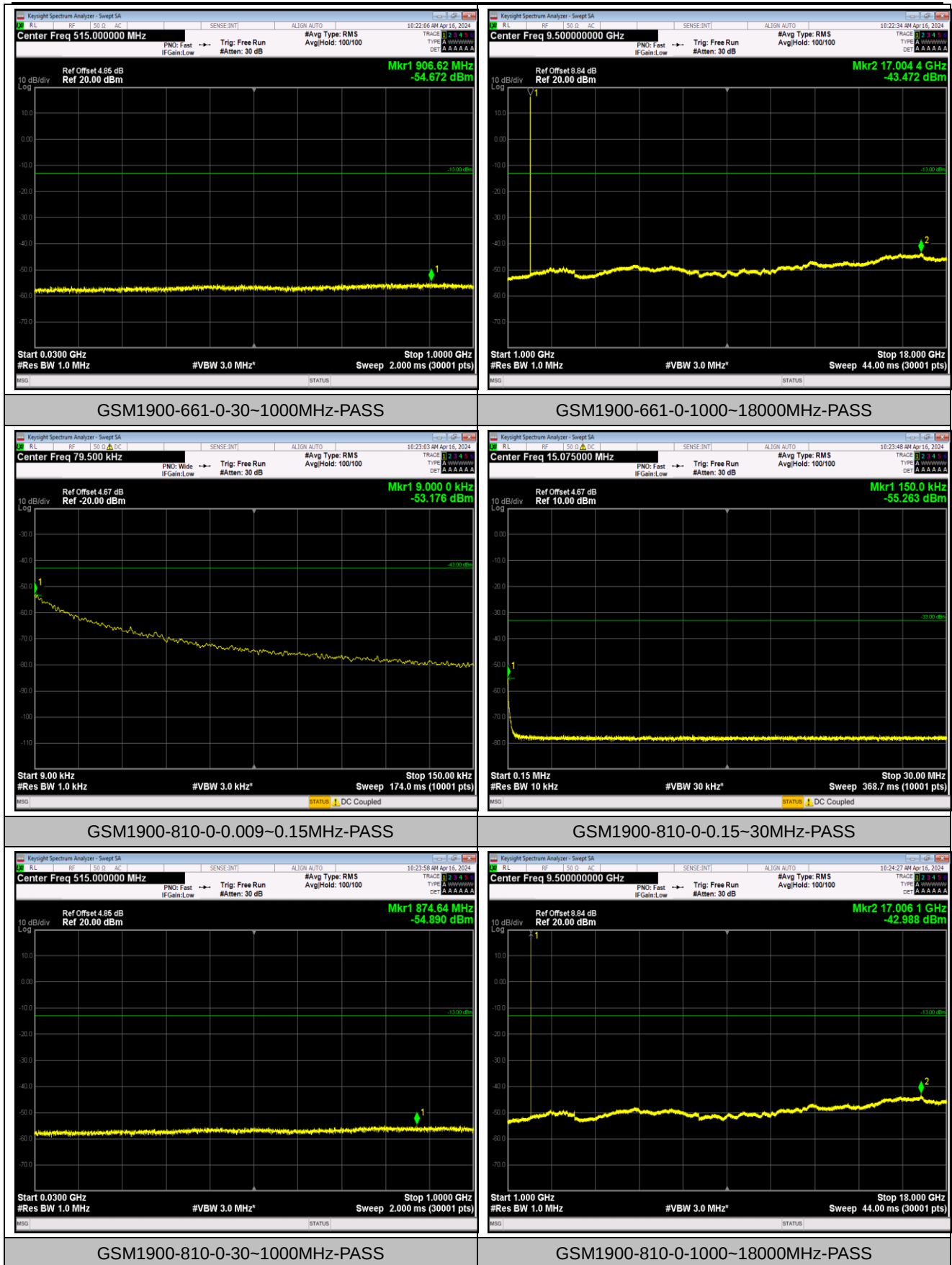
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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	-16.89	-0.020189	±2.5	Pass
	-20	-16.47	-0.019687		
	-10	-13.14	-0.015706		
	0	-10.56	-0.012623		
	10	-11.59	-0.013854		
	20	-7.88	-0.009419		
	30	-10.14	-0.012120		
	40	-14.43	-0.017248		
	50	-10.07	-0.012037		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-19.60	-0.023428	±2.5	Pass
	3.85	-10.17	-0.012156		
	4.40	-10.43	-0.012467		
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	-5.10	-0.006096	±2.5	Pass
	-20	-5.36	-0.006407		
	-10	-12.04	-0.014392		
	0	-7.10	-0.008487		
	10	-11.43	-0.013662		
	20	-12.30	-0.014702		
	30	-9.59	-0.011463		
	40	-8.01	-0.009574		
	50	-5.26	-0.006287		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-6.23	-0.007447	±2.5	Pass
	3.85	-7.85	-0.009383		
	4.40	-6.42	-0.007674		
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		
3.85	-30	-11.07	-0.005888	Within authorized band for PCS 1900	Pass
	-20	0.03	0.000016		
	-10	5.52	0.002936		
	0	2.42	0.001287		
	10	-12.66	-0.006734		
	20	-6.26	-0.003330		
	30	-4.71	-0.002505		
	40	-9.98	-0.005309		
	50	-4.52	-0.002404		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-10.72	-0.005702	Within authorized band for PCS 1900	Pass
	3.85	-4.62	-0.002457		
	4.40	-10.46	-0.005564		
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		
3.85	-30	-25.15	-0.013593	Within authorized band for PCS 1900	Pass
	-20	-19.11	-0.010329		
	-10	-22.73	-0.012285		
	0	-25.02	-0.013523		
	10	-17.47	-0.009442		
	20	-14.40	-0.007783		
	30	-14.72	-0.007956		
	40	-25.86	-0.013977		
	50	-32.83	-0.017744		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.45	-24.02	-0.012982	Within authorized band for PCS 1900	Pass
	3.85	-23.44	-0.012669		
	4.40	-26.28	-0.014204		
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

