

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	32.67	24.53	38.45	PASS
GSM850	190	5	32.83	24.69	38.45	PASS
GSM850	251	5	32.90	24.76	38.45	PASS
GSM1900	512	0	29.37	25.57	33.00	PASS
GSM1900	661	0	29.58	25.78	33.00	PASS
GSM1900	810	0	29.47	25.67	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	32.72	24.58	38.45	PASS
GPRS850	128	5	2	31.71	23.57	38.45	PASS
GPRS850	128	5	3	29.71	21.57	38.45	PASS
GPRS850	128	5	4	28.38	20.24	38.45	PASS
GPRS850	190	5	1	32.88	24.74	38.45	PASS
GPRS850	190	5	2	31.84	23.7	38.45	PASS
GPRS850	190	5	3	29.84	21.7	38.45	PASS
GPRS850	190	5	4	28.53	20.39	38.45	PASS
GPRS850	251	5	1	32.96	24.82	38.45	PASS
GPRS850	251	5	2	31.93	23.79	38.45	PASS
GPRS850	251	5	3	29.90	21.76	38.45	PASS
GPRS850	251	5	4	28.62	20.48	38.45	PASS
GPRS1900	512	0	1	29.26	25.46	33.00	PASS
GPRS1900	512	0	2	28.11	24.31	33.00	PASS
GPRS1900	512	0	3	26.03	22.23	33.00	PASS
GPRS1900	512	0	4	24.77	20.97	33.00	PASS
GPRS1900	661	0	1	29.45	25.65	33.00	PASS
GPRS1900	661	0	2	28.33	24.53	33.00	PASS
GPRS1900	661	0	3	26.21	22.41	33.00	PASS
GPRS1900	661	0	4	24.98	21.18	33.00	PASS
GPRS1900	810	0	1	29.30	25.5	33.00	PASS
GPRS1900	810	0	2	28.16	24.36	33.00	PASS
GPRS1900	810	0	3	26.06	22.26	33.00	PASS
GPRS1900	810	0	4	24.81	21.01	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.51	19.37	38.45	PASS
EGPRS850	128	8	2	25.86	17.72	38.45	PASS
EGPRS850	128	8	3	23.10	14.96	38.45	PASS
EGPRS850	128	8	4	21.24	13.1	38.45	PASS
EGPRS850	190	8	1	27.53	19.39	38.45	PASS
EGPRS850	190	8	2	25.96	17.82	38.45	PASS
EGPRS850	190	8	3	23.40	15.26	38.45	PASS
EGPRS850	190	8	4	21.36	13.22	38.45	PASS
EGPRS850	251	8	1	27.65	19.51	38.45	PASS
EGPRS850	251	8	2	26.03	17.89	38.45	PASS
EGPRS850	251	8	3	23.58	15.44	38.45	PASS
EGPRS850	251	8	4	21.52	13.38	38.45	PASS
EGPRS1900	512	2	1	26.57	22.77	33.00	PASS
EGPRS1900	512	2	2	25.36	21.56	33.00	PASS
EGPRS1900	512	2	3	23.22	19.42	33.00	PASS
EGPRS1900	512	2	4	21.90	18.1	33.00	PASS
EGPRS1900	661	2	1	26.80	23	33.00	PASS
EGPRS1900	661	2	2	25.59	21.79	33.00	PASS
EGPRS1900	661	2	3	23.50	19.7	33.00	PASS
EGPRS1900	661	2	4	22.21	18.41	33.00	PASS
EGPRS1900	810	2	1	26.78	22.98	33.00	PASS
EGPRS1900	810	2	2	25.50	21.7	33.00	PASS
EGPRS1900	810	2	3	23.39	19.59	33.00	PASS
EGPRS1900	810	2	4	22.04	18.24	33.00	PASS

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

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

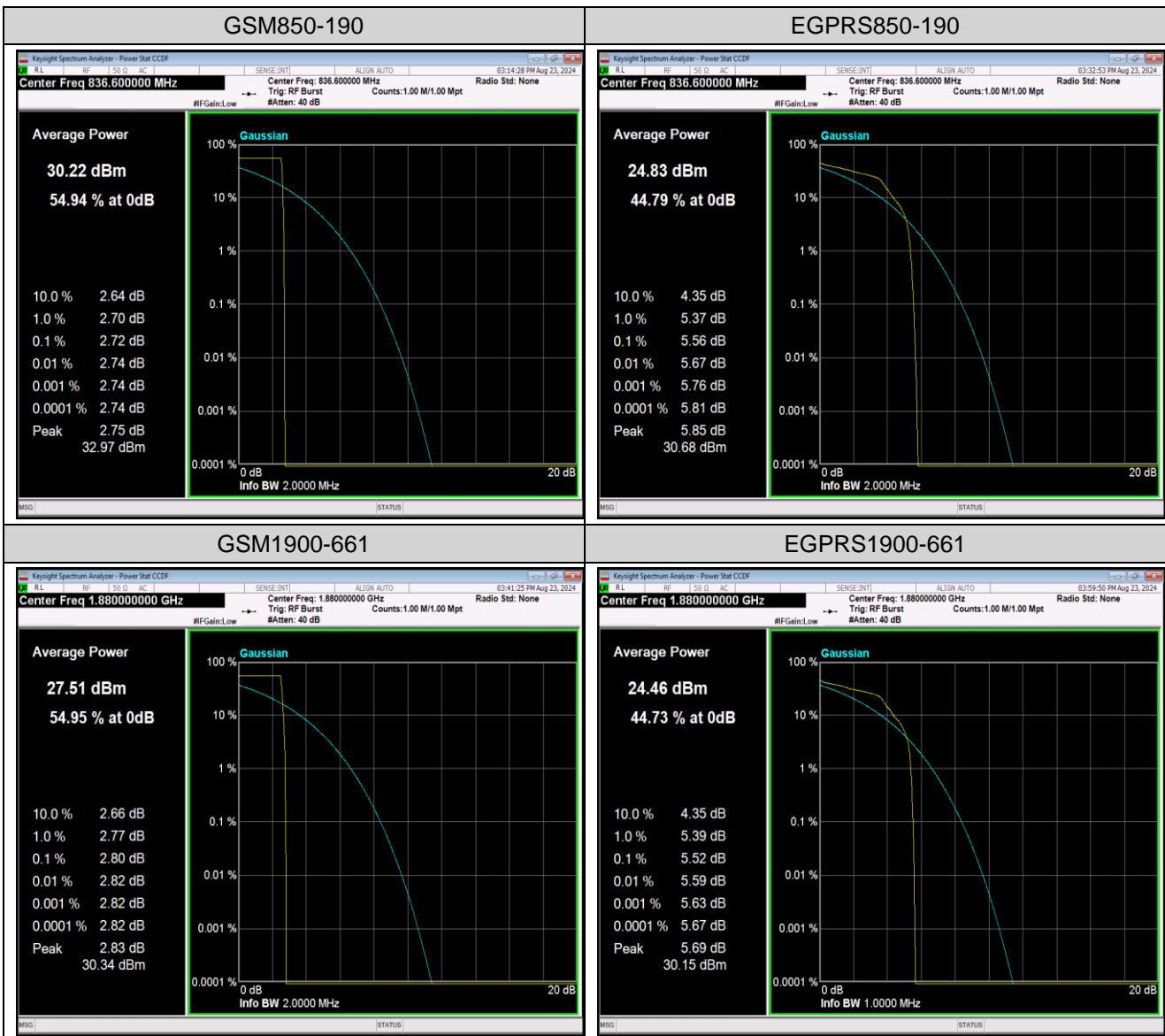
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.72	13	PASS
EGPRS850	190	8	5.56	13	PASS
GSM1900	661	0	2.8	13	PASS
EGPRS1900	661	2	5.52	13	PASS

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

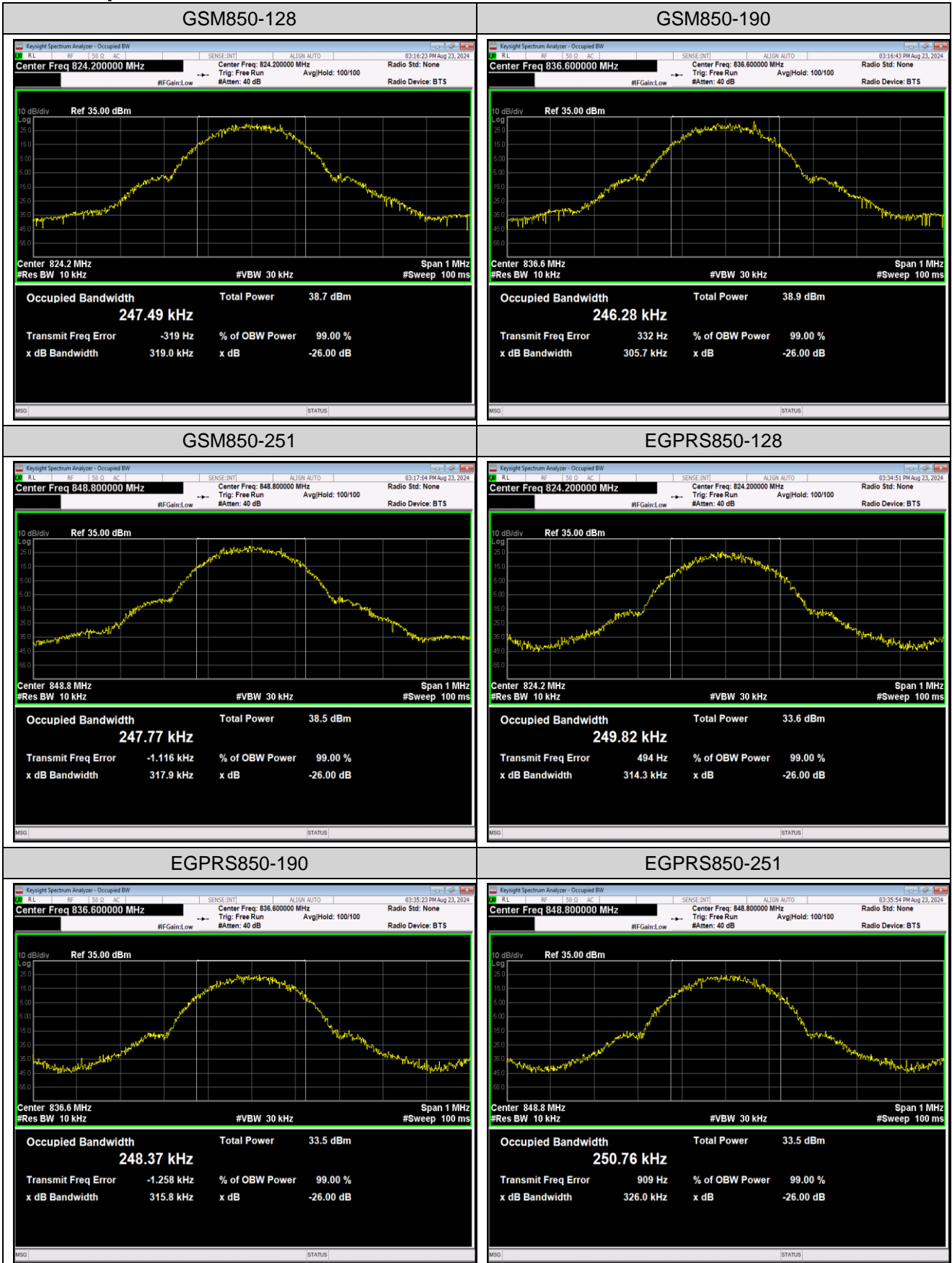
Test Graphs

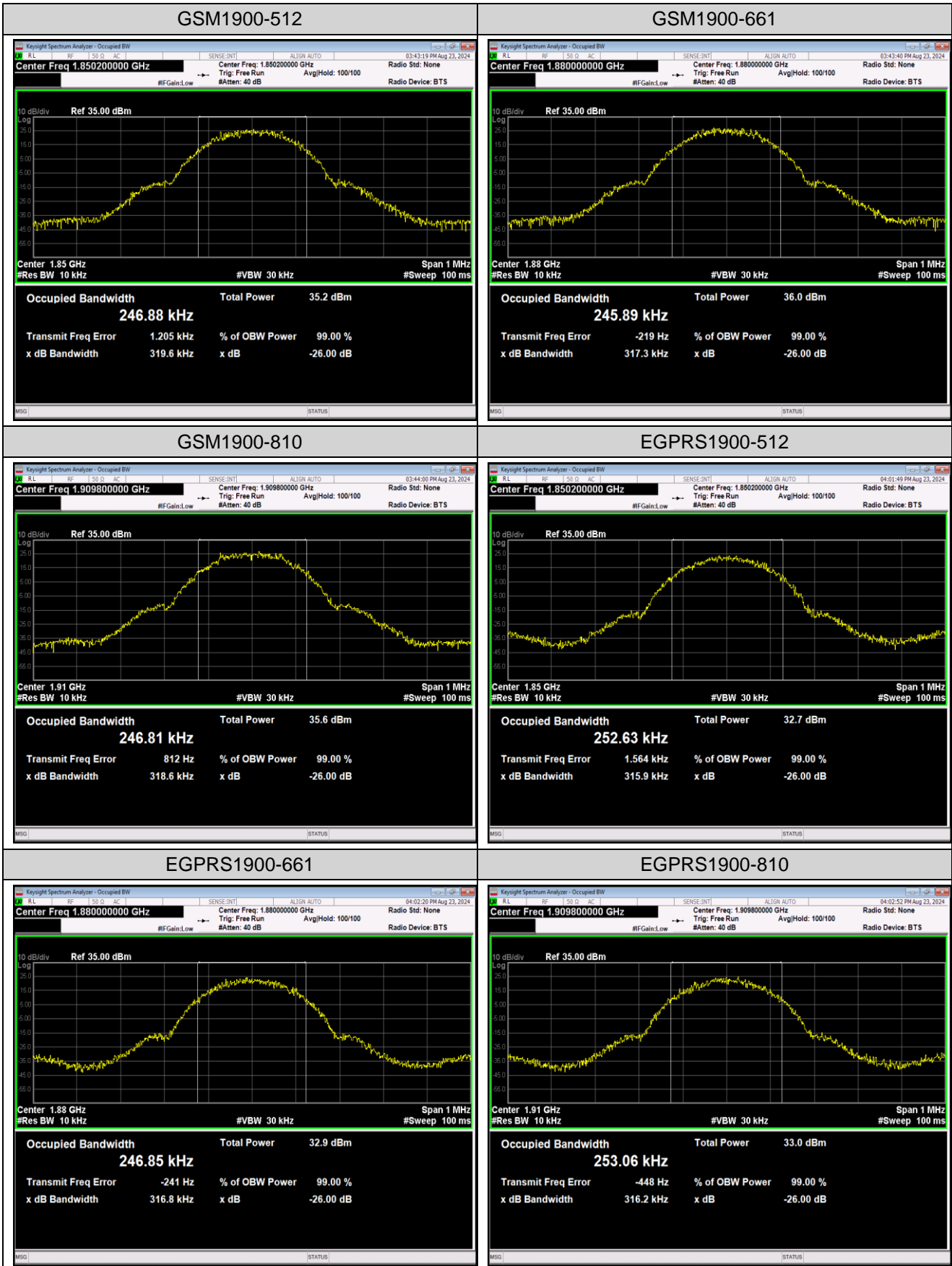


Appendix C: 26dB Bandwidth and Occupied Bandwidth**Test Result**

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24749	0.3190	---	PASS
GSM850	190	5	0.24628	0.3057	---	PASS
GSM850	251	5	0.24777	0.3179	---	PASS
EGPRS850	128	8	0.24982	0.3143	---	PASS
EGPRS850	190	8	0.24837	0.3158	---	PASS
EGPRS850	251	8	0.25076	0.3260	---	PASS
GSM1900	512	0	0.24688	0.3196	---	PASS
GSM1900	661	0	0.24589	0.3173	---	PASS
GSM1900	810	0	0.24681	0.3186	---	PASS
EGPRS1900	512	2	0.25263	0.3159	---	PASS
EGPRS1900	661	2	0.24685	0.3168	---	PASS
EGPRS1900	810	2	0.25306	0.3162	---	PASS

Test Graphs

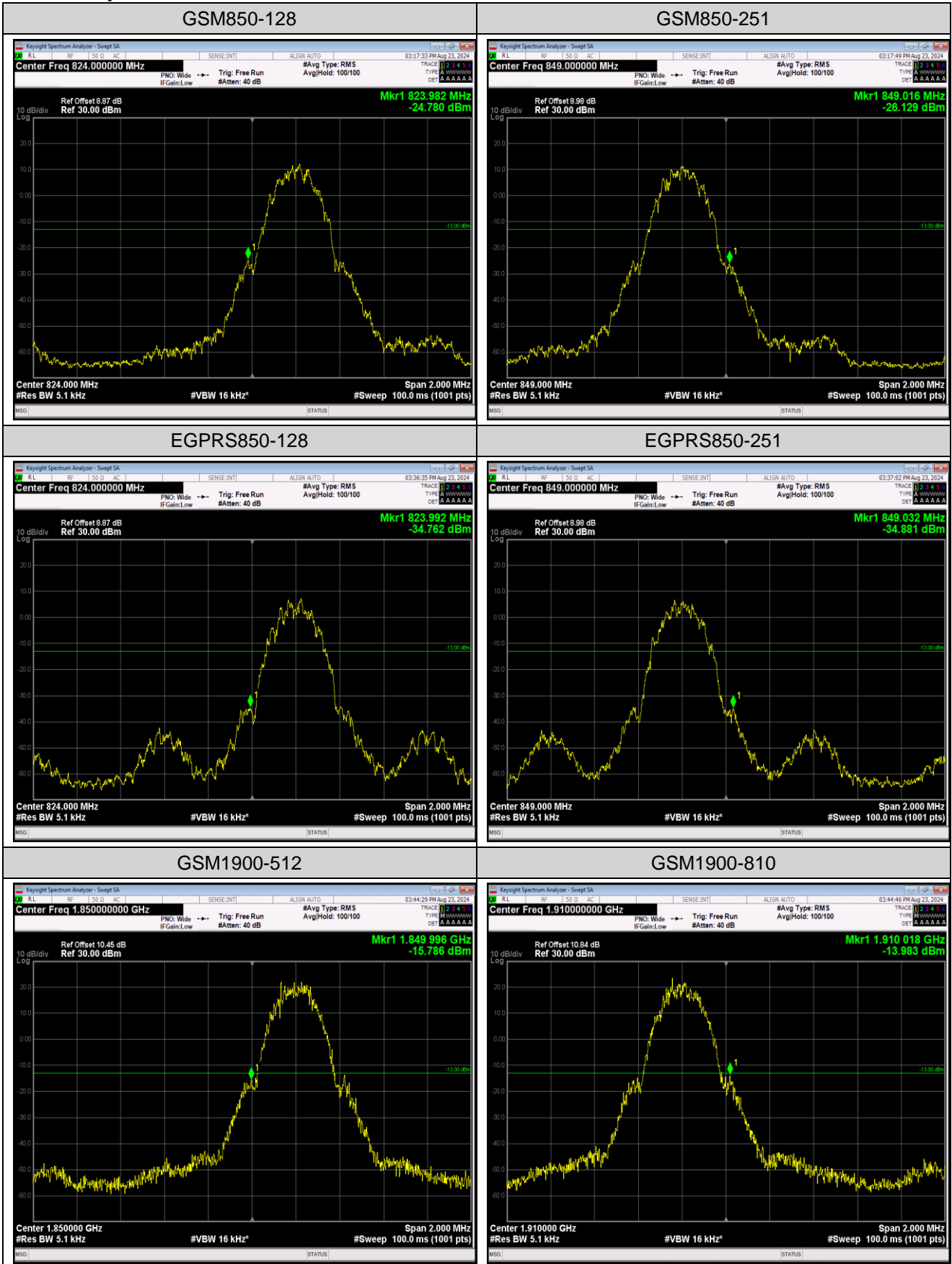


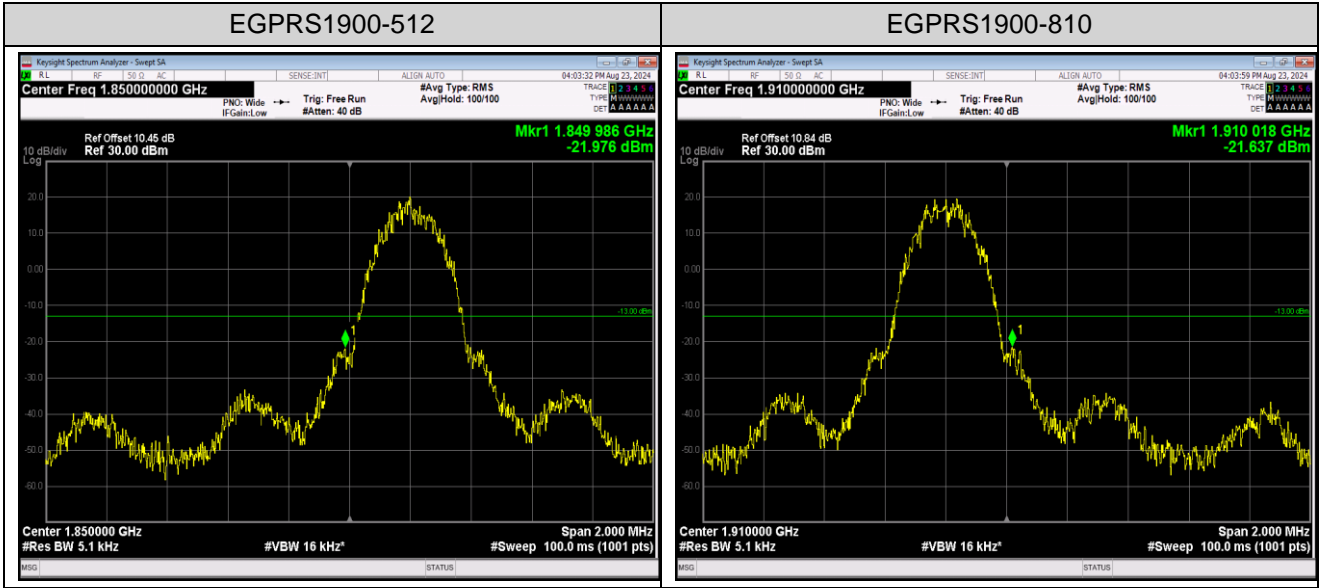


Appendix D: Band Edge**Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.98	-24.78	-13	PASS
GSM850	251	5	849.02	-26.13	-13	PASS
EGPRS850	128	8	823.99	-34.76	-13	PASS
EGPRS850	251	8	849.03	-34.88	-13	PASS
GSM1900	512	0	1850.00	-15.79	-13	PASS
GSM1900	810	0	1910.02	-13.98	-13	PASS
EGPRS1900	512	2	1849.99	-21.98	-13	PASS
EGPRS1900	810	2	1910.02	-21.64	-13	PASS

Test Graphs





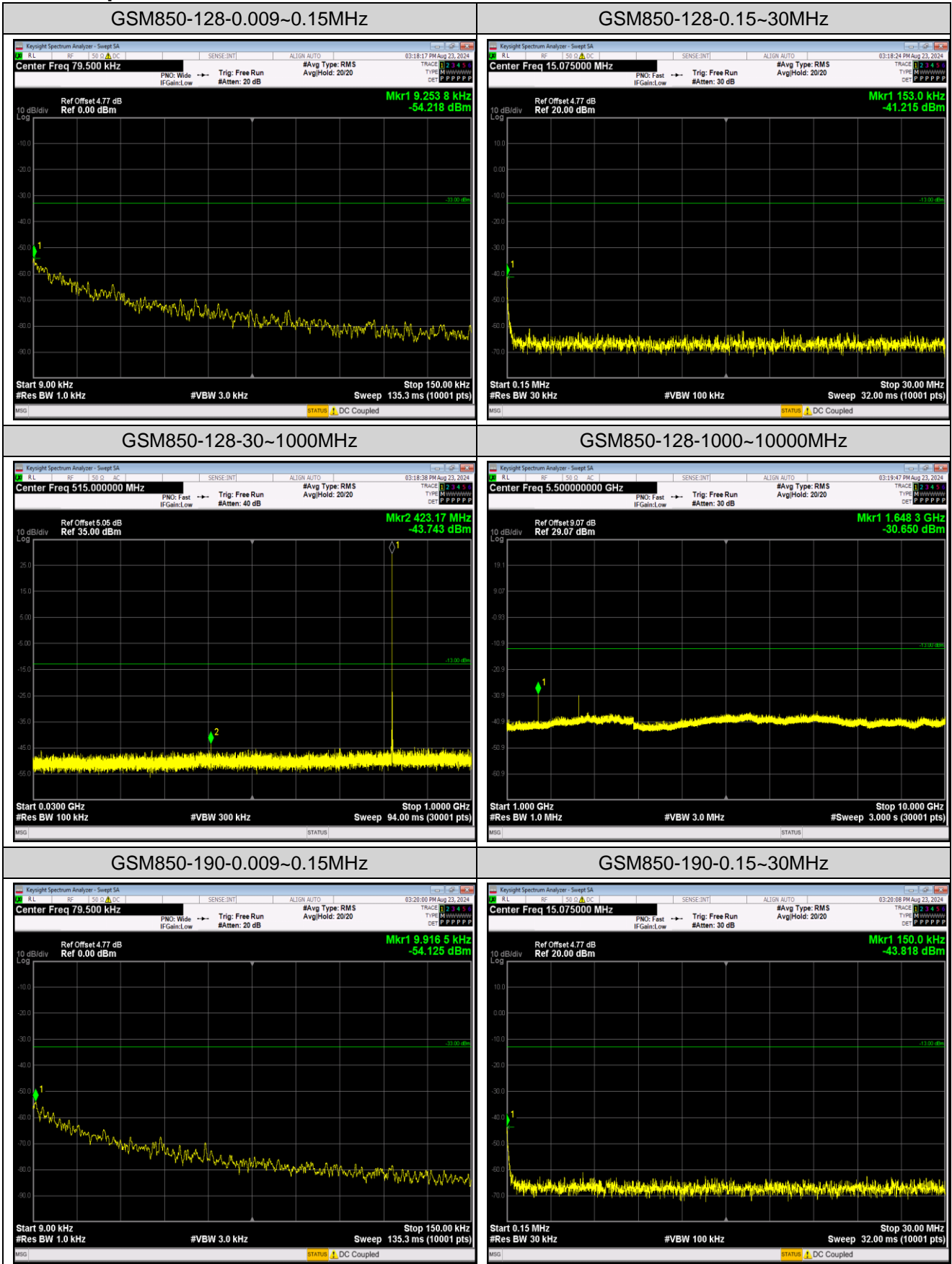
Appendix E: Conducted Spurious Emission

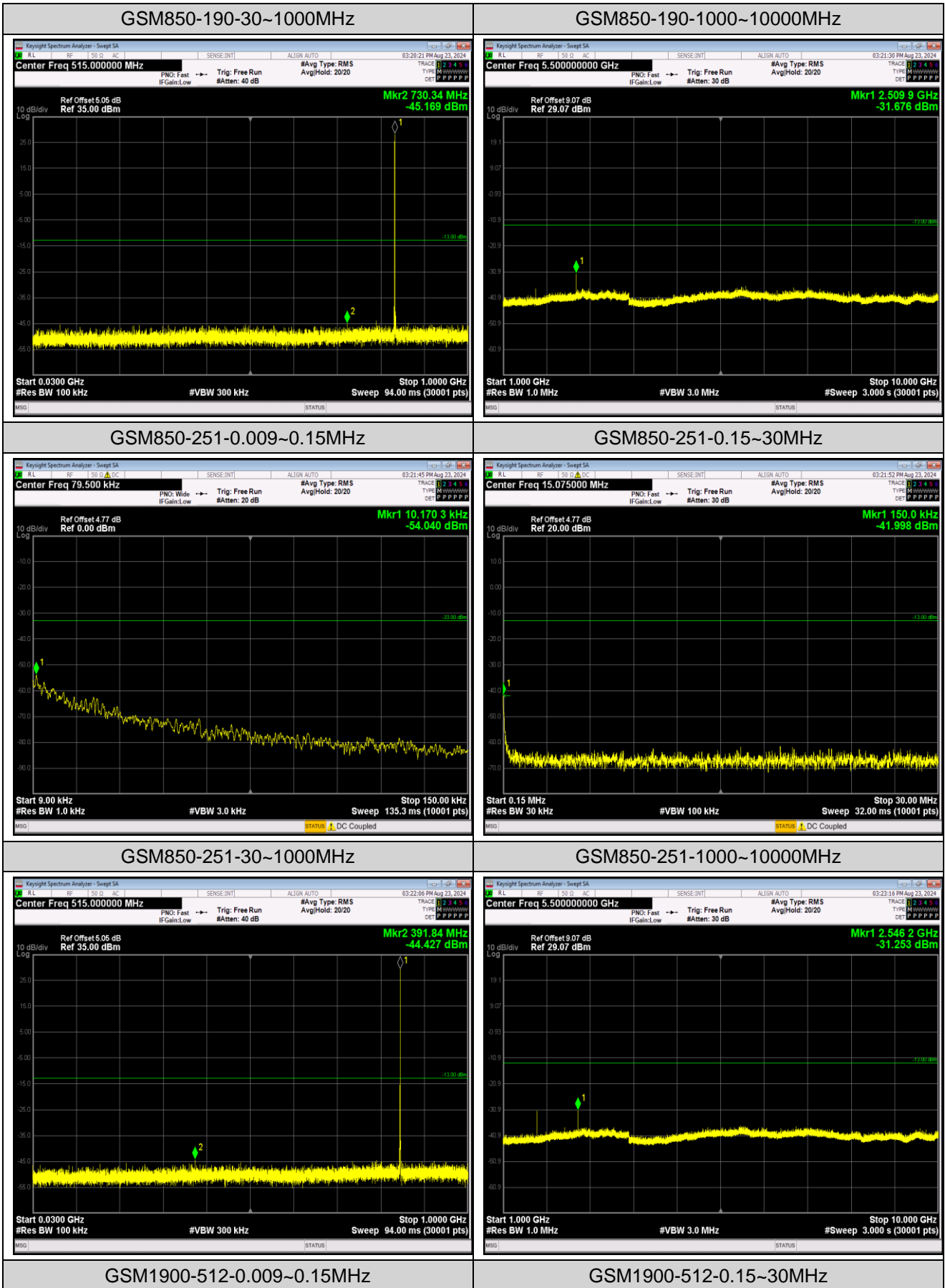
Test Result

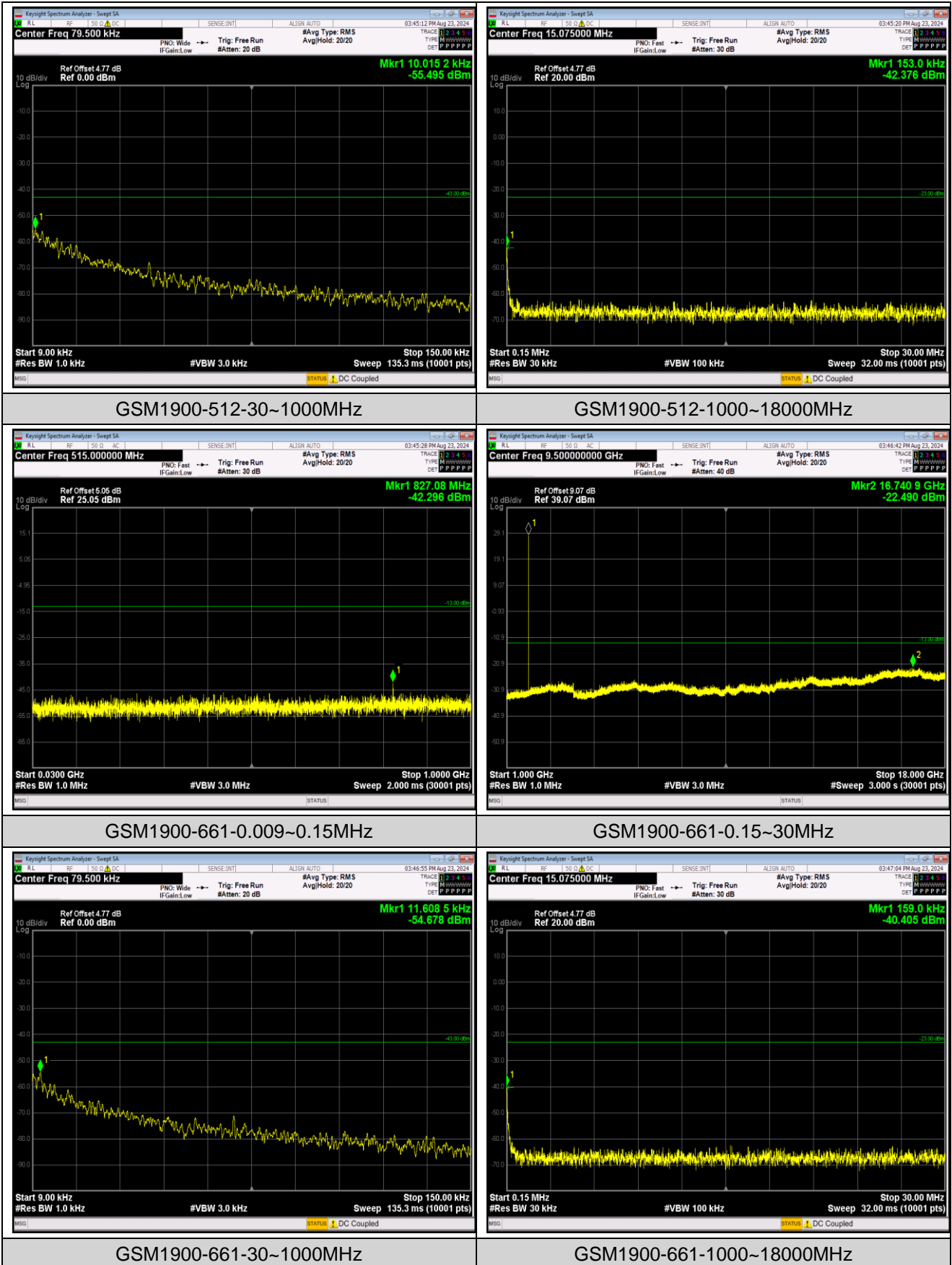
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-54.22	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-41.22	-13	PASS
GSM850	128	5	30~1000MHz	423.17	-43.74	-13	PASS
GSM850	128	5	1000~10000MHz	1648.3	-30.65	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-54.13	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-43.82	-13	PASS
GSM850	190	5	30~1000MHz	730.34	-45.17	-13	PASS
GSM850	190	5	1000~10000MHz	2509.9	-31.68	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-54.04	-33	PASS
GSM850	251	5	0.15~30MHz	0.15	-42	-13	PASS
GSM850	251	5	30~1000MHz	391.84	-44.43	-13	PASS
GSM850	251	5	1000~10000MHz	2546.2	-31.25	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.5	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-42.38	-23	PASS
GSM1900	512	0	30~1000MHz	827.08	-42.3	-13	PASS
GSM1900	512	0	1000~18000MHz	16740.87	-22.49	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-54.68	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-40.41	-23	PASS
GSM1900	661	0	30~1000MHz	955.06	-45.13	-13	PASS
GSM1900	661	0	1000~18000MHz	16473.97	-21.25	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.62	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-41.83	-23	PASS
GSM1900	810	0	30~1000MHz	847.32	-45.6	-13	PASS
GSM1900	810	0	1000~18000MHz	16106.77	-21.88	-13	PASS

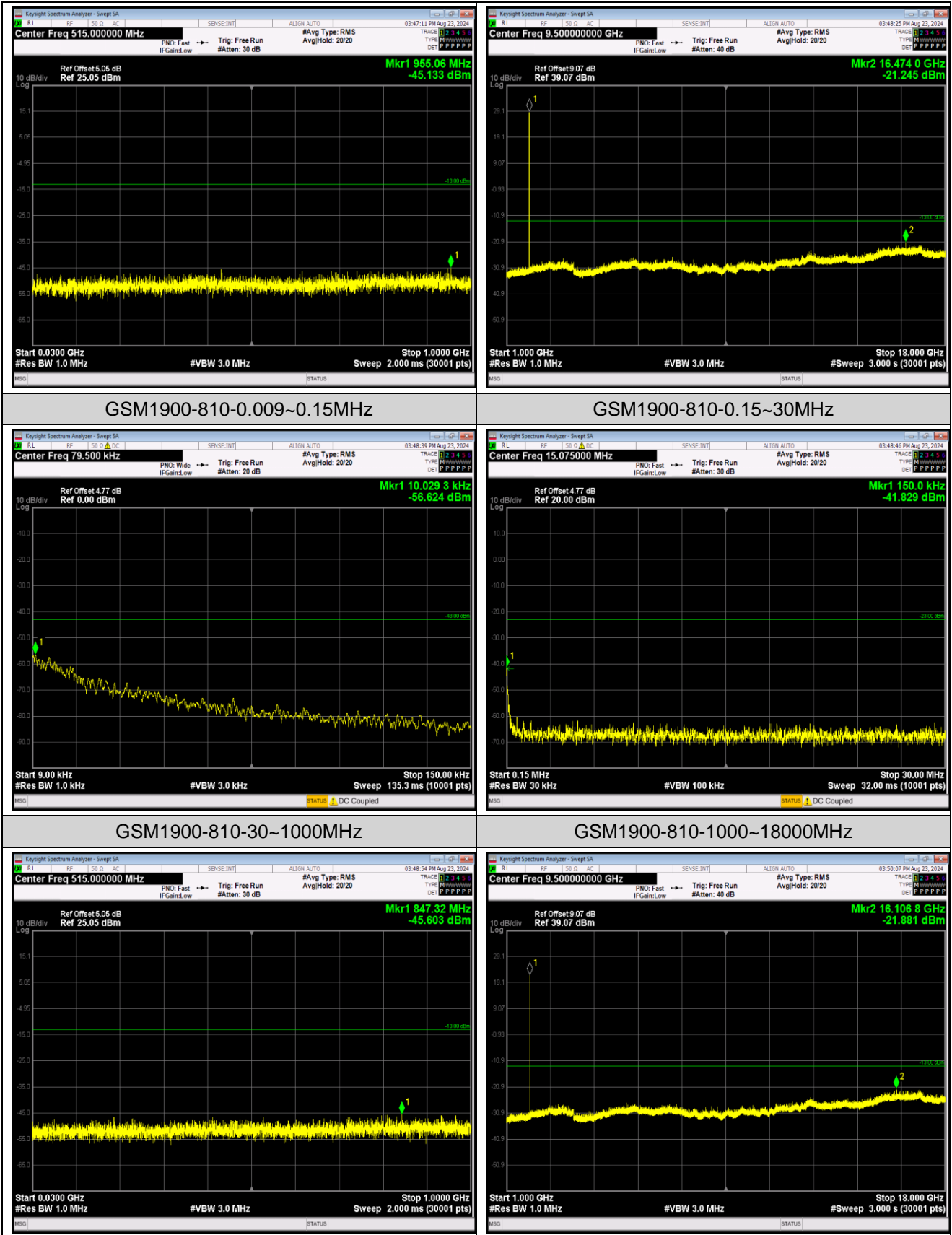
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

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	9.72	0.011618	±2.5	Pass
	-20	11.17	0.013352		
	-10	11.62	0.013890		
	0	6.72	0.008033		
	10	12.11	0.014475		
	20	6.72	0.008033		
	30	13.14	0.015706		
	40	8.88	0.010614		
	50	10.17	0.012156		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	10.30	0.012312	±2.5	Pass
	3.85	7.17	0.008570		
	4.40	11.62	0.013890		
<i>Remark: All channel had been tested, but only the worst case data displayed in this report.</i>					

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	5.62	0.006718	±2.5	Pass
	-20	9.75	0.011654		
	-10	7.68	0.009180		
	0	7.88	0.009419		
	10	14.43	0.017248		
	20	17.95	0.021456		
	30	15.01	0.017942		
	40	17.50	0.020918		
	50	17.53	0.020954		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	7.85	0.009383	±2.5	Pass
	3.85	7.91	0.009455		
	4.40	8.36	0.009993		
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	19.34	0.010287	Within authorized band for PCS 1900	Pass
	-20	18.31	0.009739		
	-10	15.88	0.008447		
	0	13.17	0.007005		
	10	19.73	0.010495		
	20	12.95	0.006888		
	30	12.27	0.006527		
	40	11.98	0.006372		
	50	20.76	0.011043		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	19.57	0.010410	Within authorized band for PCS 1900	Pass
	3.85	21.47	0.011420		
	4.40	20.60	0.010957		
<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	23.08	0.012277	Within authorized band for PCS 1900	Pass
	-20	22.86	0.012160		
	-10	20.76	0.011043		
	0	19.18	0.010202		
	10	25.86	0.013755		
	20	31.70	0.016862		
	30	32.48	0.017277		
	40	28.35	0.015080		
	50	35.16	0.018702		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.00	23.21	0.012346	Within authorized band for PCS 1900	Pass
	3.85	27.73	0.014750		
	4.40	25.31	0.013463		
<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

