

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	34.02	30.05	38.45	PASS
GPRS850	128	5	2	33.26	29.29	38.45	PASS
GPRS850	128	5	3	31.47	27.5	38.45	PASS
GPRS850	128	5	4	30.49	26.52	38.45	PASS
GPRS850	190	5	1	34.21	30.24	38.45	PASS
GPRS850	190	5	2	33.50	29.53	38.45	PASS
GPRS850	190	5	3	31.72	27.75	38.45	PASS
GPRS850	190	5	4	30.75	26.78	38.45	PASS
GPRS850	251	5	1	34.17	30.2	38.45	PASS
GPRS850	251	5	2	33.32	29.35	38.45	PASS
GPRS850	251	5	3	31.51	27.54	38.45	PASS
GPRS850	251	5	4	30.54	26.57	38.45	PASS
GPRS1900	512	0	1	30.30	30.53	33.00	PASS
GPRS1900	512	0	2	29.53	29.76	33.00	PASS
GPRS1900	512	0	3	27.86	28.09	33.00	PASS
GPRS1900	512	0	4	26.86	27.09	33.00	PASS
GPRS1900	661	0	1	30.63	30.86	33.00	PASS
GPRS1900	661	0	2	29.85	30.08	33.00	PASS
GPRS1900	661	0	3	28.16	28.39	33.00	PASS
GPRS1900	661	0	4	27.15	27.38	33.00	PASS
GPRS1900	810	0	1	30.22	30.45	33.00	PASS
GPRS1900	810	0	2	29.47	29.7	33.00	PASS
GPRS1900	810	0	3	27.79	28.02	33.00	PASS
GPRS1900	810	0	4	26.74	26.97	33.00	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	28.42	24.45	38.45	PASS
EGPRS850	128	8	2	27.47	23.5	38.45	PASS
EGPRS850	128	8	3	25.49	21.52	38.45	PASS
EGPRS850	128	8	4	24.35	20.38	38.45	PASS
EGPRS850	190	8	1	28.60	24.63	38.45	PASS
EGPRS850	190	8	2	27.58	23.61	38.45	PASS

EGPRS850	190	8	3	25.68	21.71	38.45	PASS
EGPRS850	190	8	4	24.51	20.54	38.45	PASS
EGPRS850	251	8	1	28.30	24.33	38.45	PASS
EGPRS850	251	8	2	27.27	23.3	38.45	PASS
EGPRS850	251	8	3	25.31	21.34	38.45	PASS
EGPRS850	251	8	4	24.21	20.24	38.45	PASS
EGPRS1900	512	2	1	25.54	25.77	33.00	PASS
EGPRS1900	512	2	2	24.44	24.67	33.00	PASS
EGPRS1900	512	2	3	22.31	22.54	33.00	PASS
EGPRS1900	512	2	4	21.06	21.29	33.00	PASS
EGPRS1900	661	2	1	25.94	26.17	33.00	PASS
EGPRS1900	661	2	2	24.89	25.12	33.00	PASS
EGPRS1900	661	2	3	22.71	22.94	33.00	PASS
EGPRS1900	661	2	4	21.53	21.76	33.00	PASS
EGPRS1900	810	2	1	25.83	26.06	33.00	PASS
EGPRS1900	810	2	2	24.77	25	33.00	PASS
EGPRS1900	810	2	3	22.65	22.88	33.00	PASS
EGPRS1900	810	2	4	21.45	21.68	33.00	PASS

Remark: $EIRP (dBm) = \text{Conducted power (dBm)} + \text{Antenna Gain (dBi)}$. (For GSM1900)

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

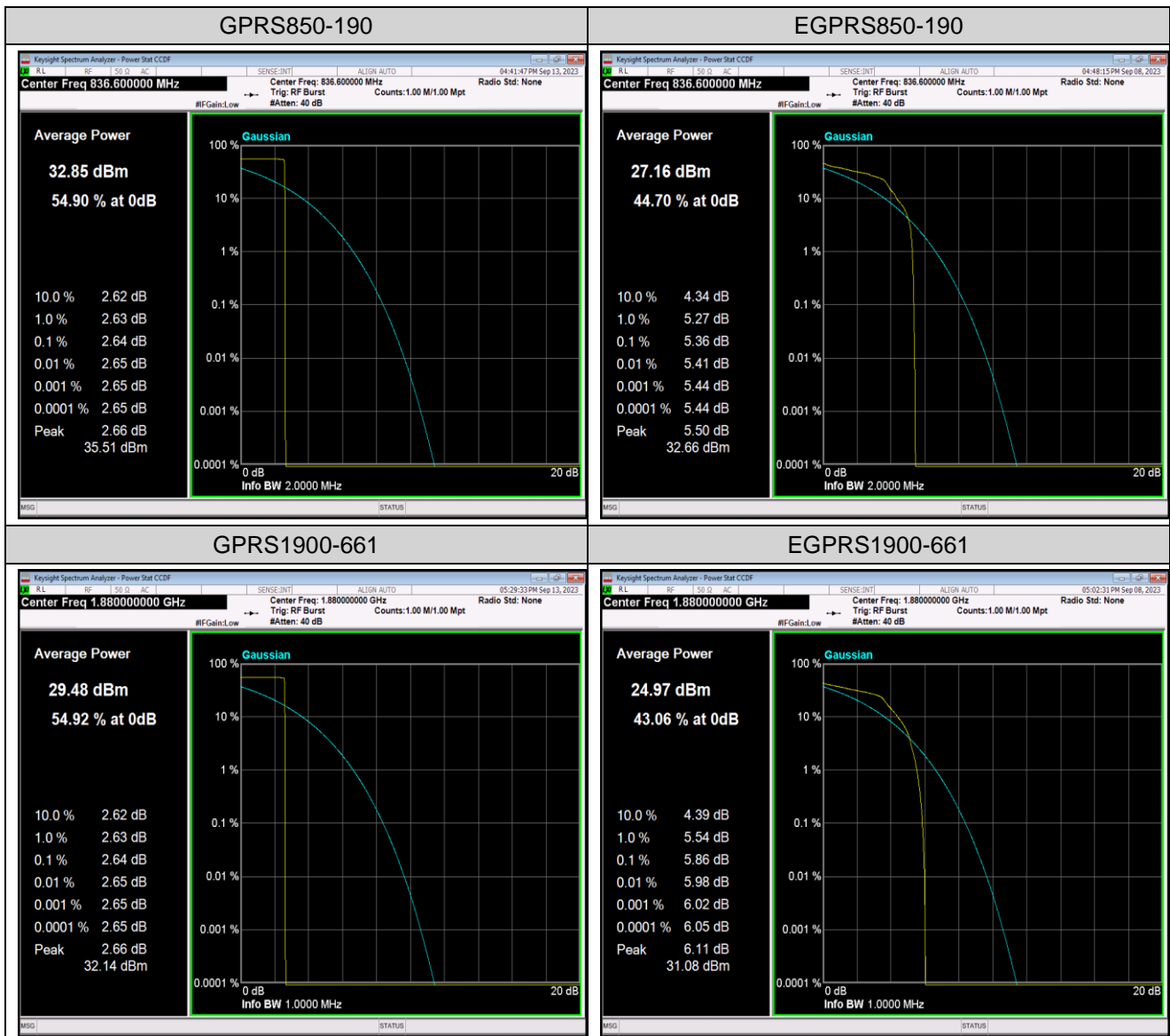
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GPRS850	190	5	2.64	13	PASS
EGPRS850	190	8	5.36	13	PASS
GPRS1900	661	0	2.64	13	PASS
EGPRS1900	661	2	5.86	13	PASS

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

Test Graphs

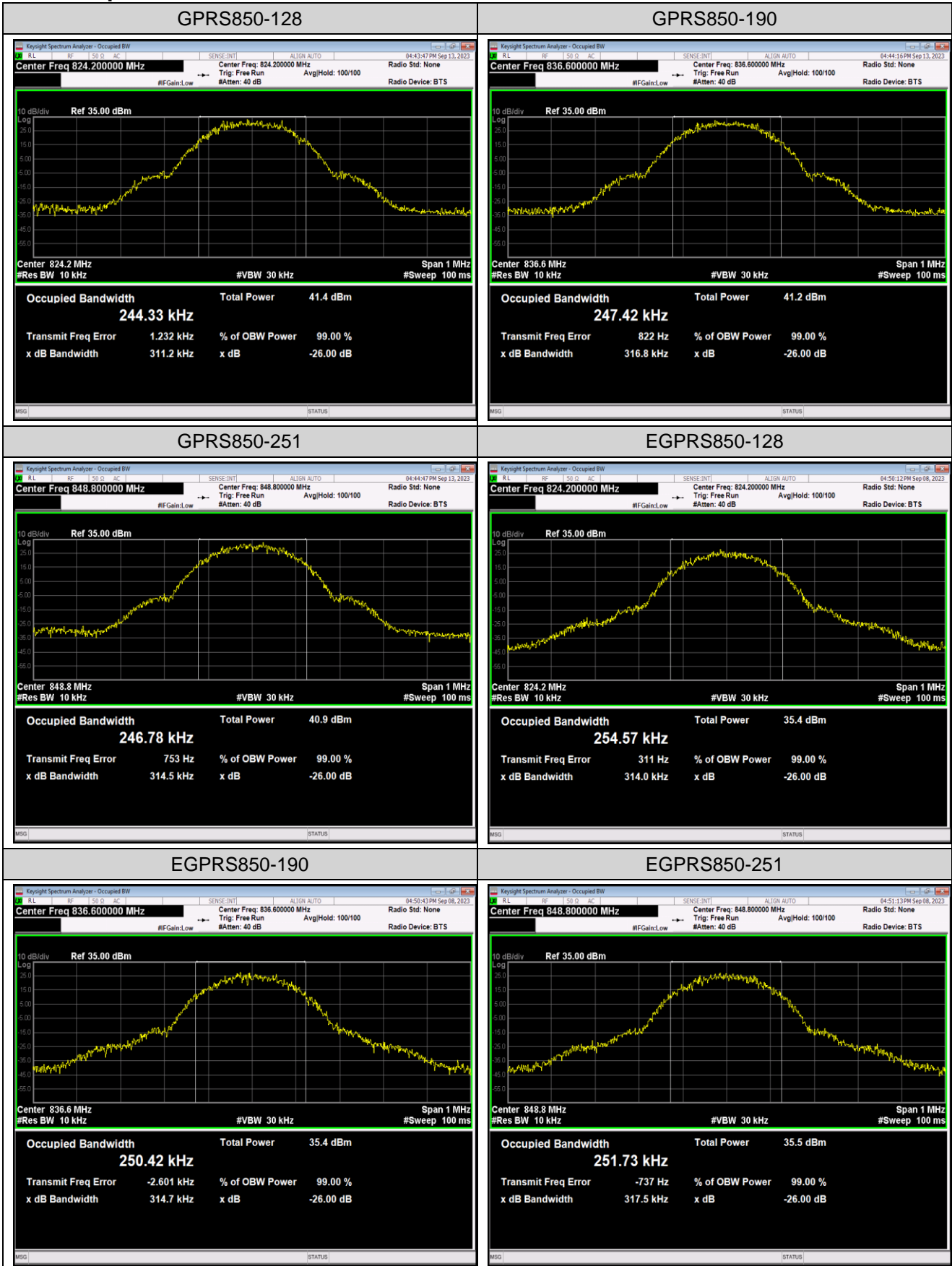


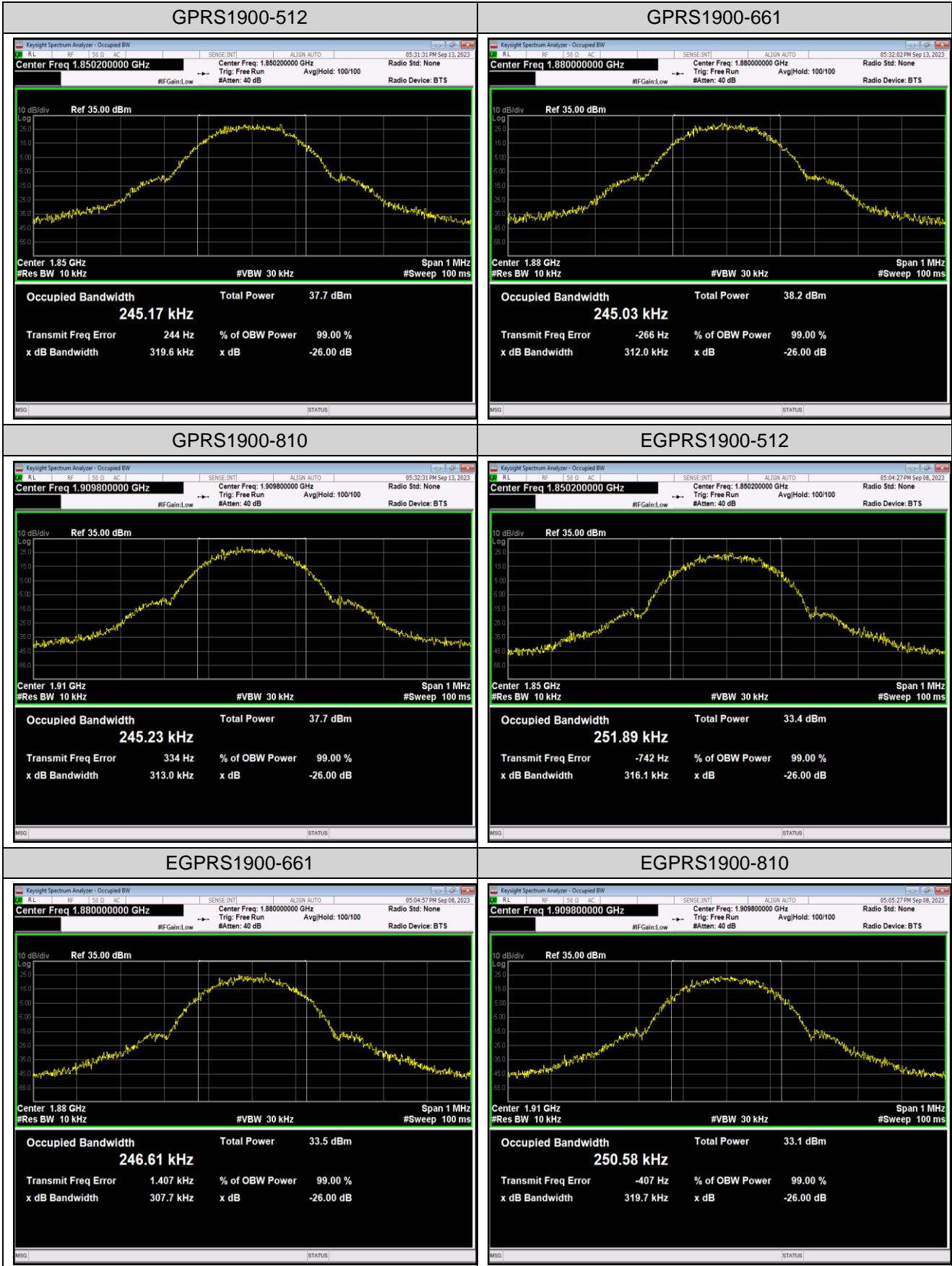
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GPRS850	128	5	0.24433	0.3112	---	PASS
GPRS850	190	5	0.24742	0.3168	---	PASS
GPRS850	251	5	0.24678	0.3145	---	PASS
EGPRS850	128	8	0.25457	0.3140	---	PASS
EGPRS850	190	8	0.25042	0.3147	---	PASS
EGPRS850	251	8	0.25173	0.3175	---	PASS
GPRS1900	512	0	0.24517	0.3196	---	PASS
GPRS1900	661	0	0.24503	0.3120	---	PASS
GPRS1900	810	0	0.24523	0.3130	---	PASS
EGPRS1900	512	2	0.25189	0.3161	---	PASS
EGPRS1900	661	2	0.24661	0.3077	---	PASS
EGPRS1900	810	2	0.25058	0.3197	---	PASS

Test Graphs

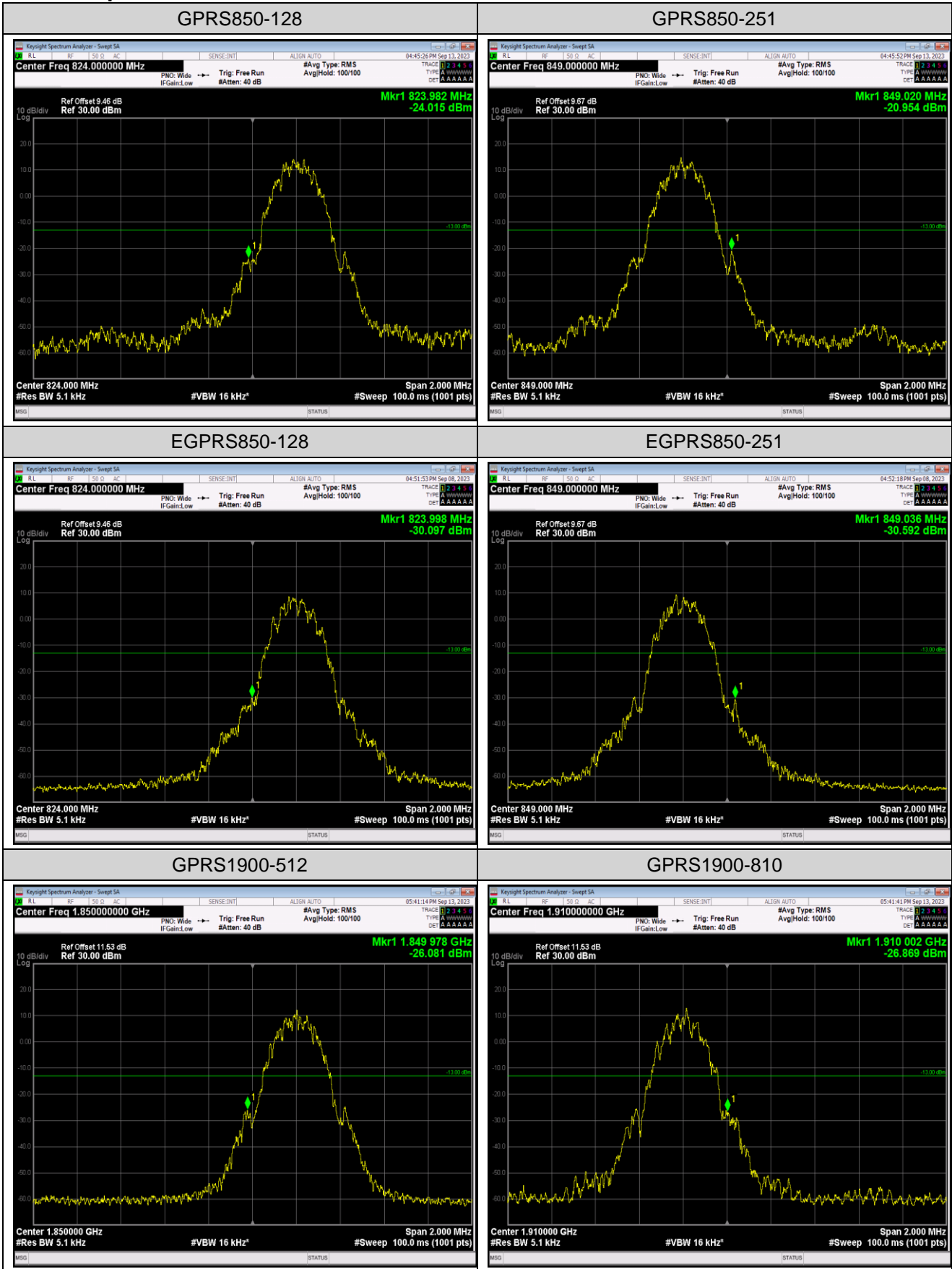


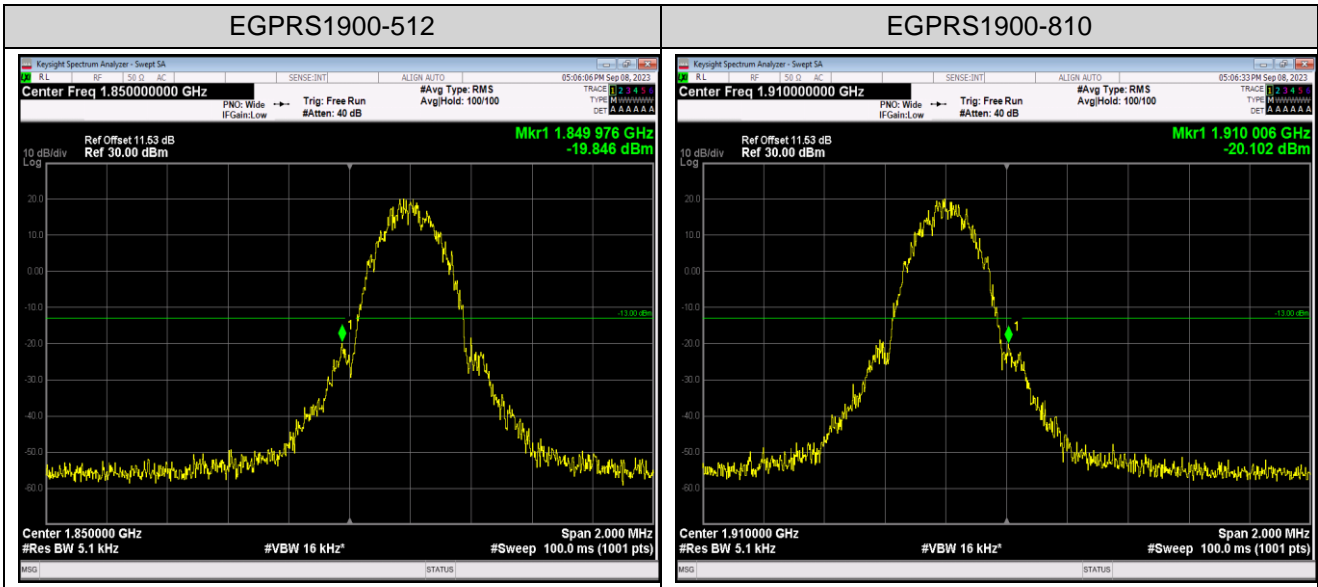


Appendix D: Band Edge**Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GPRS850	128	5	823.98	-24.02	-13	PASS
GPRS850	251	5	849.02	-20.95	-13	PASS
EGPRS850	128	8	824.00	-30.10	-13	PASS
EGPRS850	251	8	849.04	-30.59	-13	PASS
GPRS1900	512	0	1849.98	-26.08	-13	PASS
GPRS1900	810	0	1910.00	-26.87	-13	PASS
EGPRS1900	512	2	1849.98	-19.85	-13	PASS
EGPRS1900	810	2	1910.01	-20.10	-13	PASS

Test Graphs





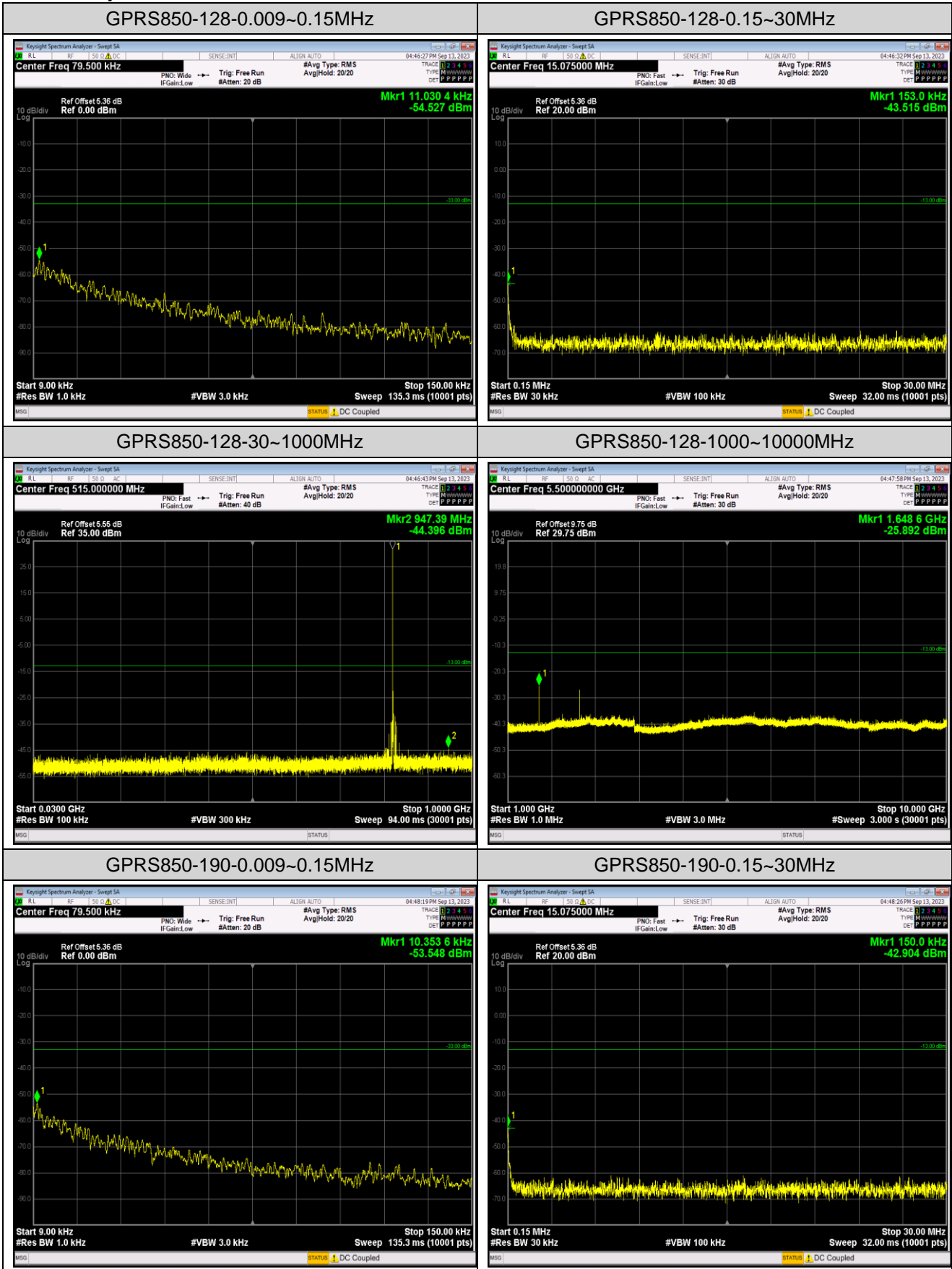
Appendix E: Conducted Spurious Emission

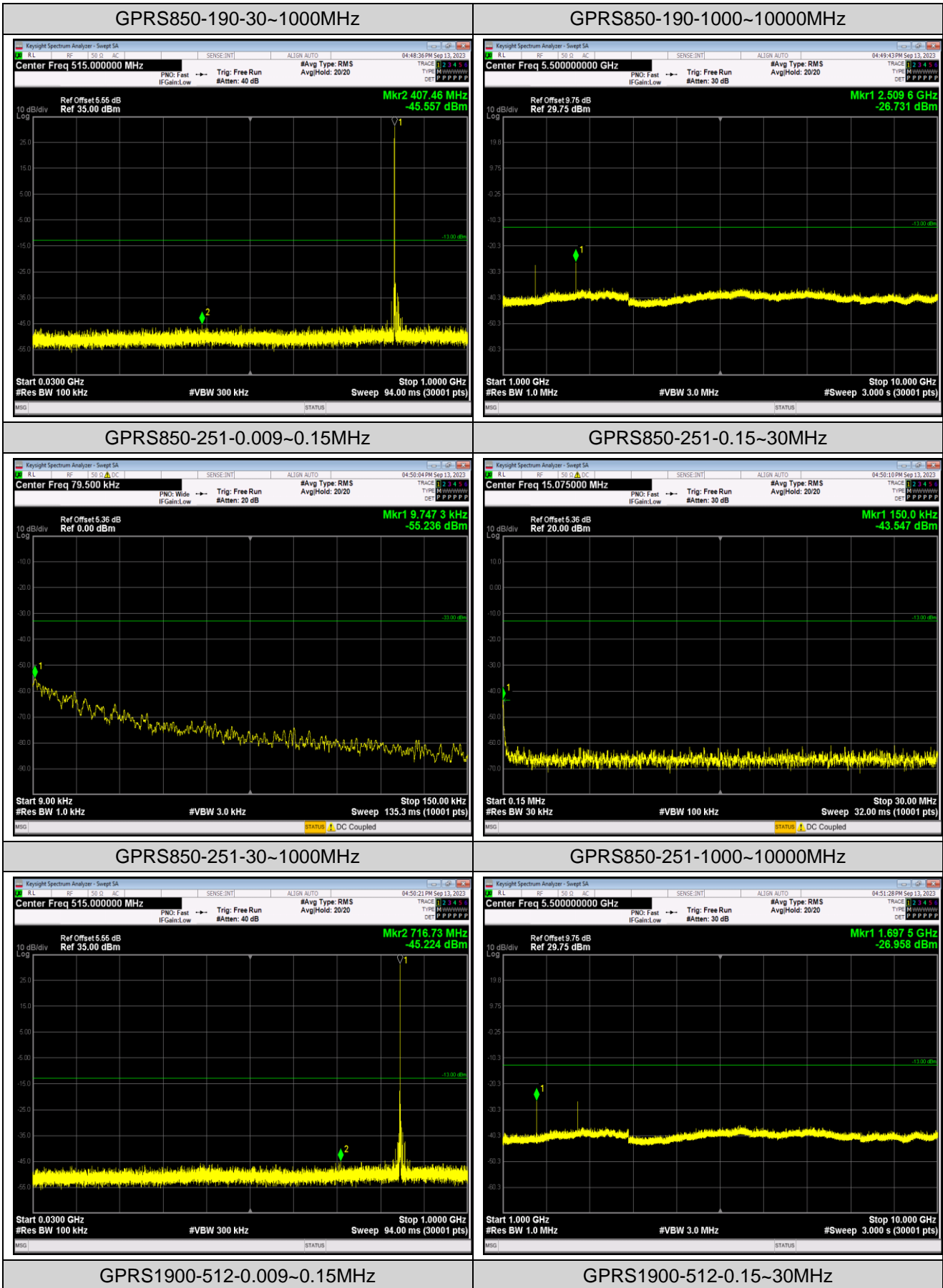
Test Result

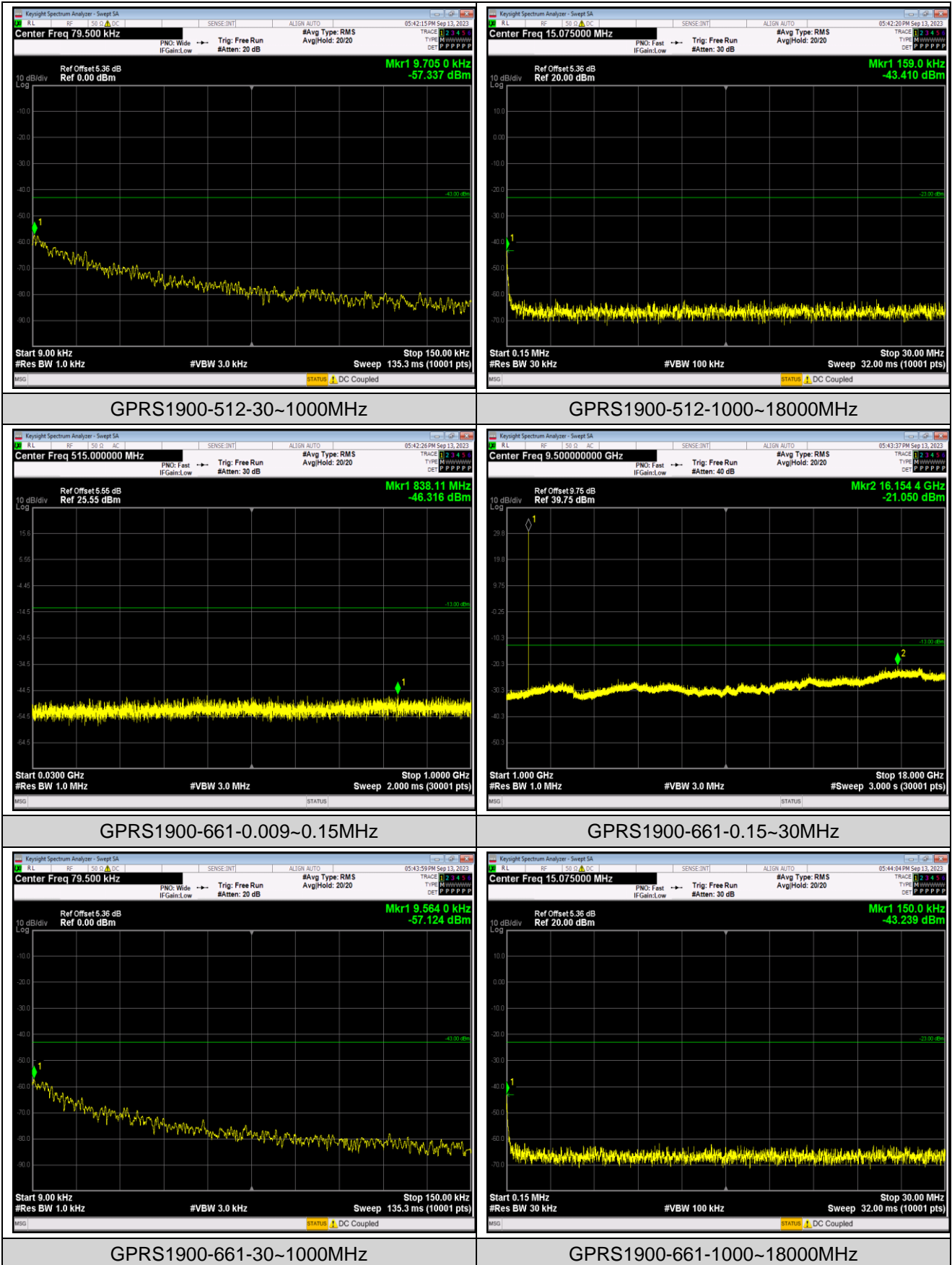
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GPRS850	128	5	0.009~0.15MHz	0.01	-54.53	-33	PASS
GPRS850	128	5	0.15~30MHz	0.15	-43.52	-13	PASS
GPRS850	128	5	30~1000MHz	947.39	-44.4	-13	PASS
GPRS850	128	5	1000~10000MHz	1648.6	-25.89	-13	PASS
GPRS850	190	5	0.009~0.15MHz	0.01	-53.55	-33	PASS
GPRS850	190	5	0.15~30MHz	0.15	-42.9	-13	PASS
GPRS850	190	5	30~1000MHz	407.46	-45.56	-13	PASS
GPRS850	190	5	1000~10000MHz	2509.6	-26.73	-13	PASS
GPRS850	251	5	0.009~0.15MHz	0.01	-55.24	-33	PASS
GPRS850	251	5	0.15~30MHz	0.15	-43.55	-13	PASS
GPRS850	251	5	30~1000MHz	716.73	-45.22	-13	PASS
GPRS850	251	5	1000~10000MHz	1697.5	-26.96	-13	PASS
GPRS1900	512	0	0.009~0.15MHz	0.01	-57.34	-43	PASS
GPRS1900	512	0	0.15~30MHz	0.16	-43.41	-23	PASS
GPRS1900	512	0	30~1000MHz	838.11	-46.32	-13	PASS
GPRS1900	512	0	1000~18000MHz	16154.37	-21.05	-13	PASS
GPRS1900	661	0	0.009~0.15MHz	0.01	-57.12	-43	PASS
GPRS1900	661	0	0.15~30MHz	0.15	-43.24	-23	PASS
GPRS1900	661	0	30~1000MHz	888.03	-45.83	-13	PASS
GPRS1900	661	0	1000~18000MHz	16320.97	-21.23	-13	PASS
GPRS1900	810	0	0.009~0.15MHz	0.01	-55.33	-43	PASS
GPRS1900	810	0	0.15~30MHz	0.16	-45.36	-23	PASS
GPRS1900	810	0	30~1000MHz	448.59	-45.87	-13	PASS
GPRS1900	810	0	1000~18000MHz	16398.03	-21.18	-13	PASS

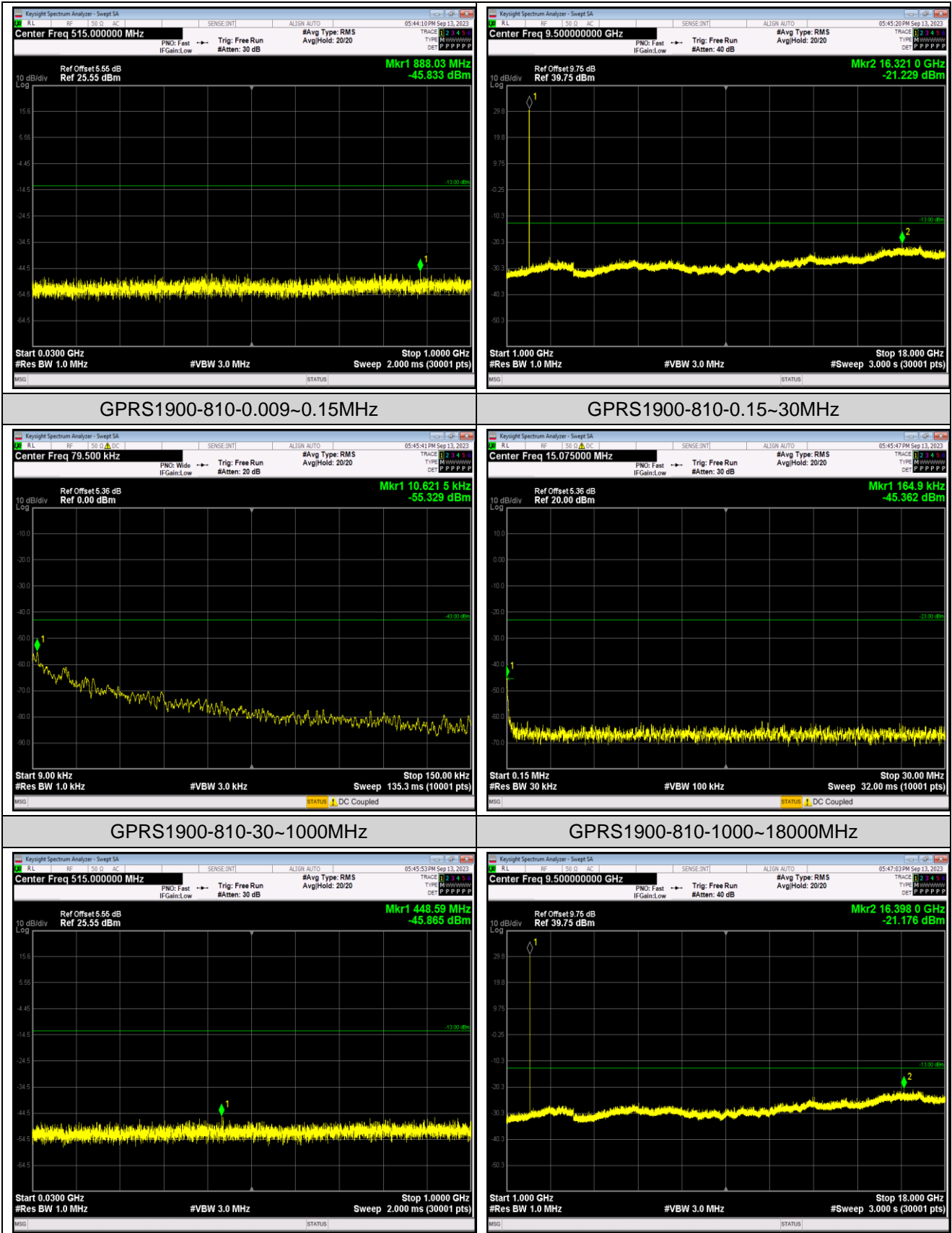
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs









Appendix F: Frequency Stability

Test Result

Reference Frequency: EGPRS850 Middle channel=190 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	-0.39	-0.000466	±2.5	Pass
	-20	1.90	0.002271		
	-10	-2.03	-0.002426		
	0	0.87	0.001040		
	10	0.13	0.000155		
	20	5.55	0.006634		
	30	3.84	0.004590		
	40	7.72	0.009228		
	50	5.81	0.006945		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	0.71	0.000849	±2.5	Pass
	3.80	2.55	0.003048		
	4.40	0.90	0.001076		
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	13.72	0.007298	Within authorized band for PCS 1900	Pass
	-20	15.69	0.008346		
	-10	11.43	0.006080		
	0	7.72	0.004106		
	10	10.85	0.005771		
	20	24.31	0.012931		
	30	19.89	0.010580		
	40	24.86	0.013223		
	50	21.28	0.011319		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	11.40	0.006064	Within authorized band for PCS 1900	Pass
	3.80	10.62	0.005649		
	4.40	11.66	0.006202		
<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
GPRS850	190	PASS	PASS
EGPRS850	190	PASS	PASS
GPRS1900	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

