

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	3	33.80	32.45	38.5	PASS
GSM850	190	3	34.03	32.68	38.5	PASS
GSM850	251	3	33.81	32.46	38.5	PASS
GSM1900	512	0	30.41	31.91	33	PASS
GSM1900	661	0	30.13	31.63	33	PASS
GSM1900	810	0	30.46	31.96	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	3	1	33.86	32.51	38.5	PASS
GPRS850	128	3	2	33.04	31.69	38.5	PASS
GPRS850	128	3	3	30.94	29.59	38.5	PASS
GPRS850	128	3	4	29.61	28.26	38.5	PASS
GPRS850	190	3	1	34.00	32.65	38.5	PASS
GPRS850	190	3	2	33.22	31.87	38.5	PASS
GPRS850	190	3	3	31.15	29.80	38.5	PASS
GPRS850	190	3	4	29.81	28.46	38.5	PASS
GPRS850	251	3	1	33.77	32.42	38.5	PASS
GPRS850	251	3	2	32.99	31.64	38.5	PASS
GPRS850	251	3	3	30.88	29.53	38.5	PASS
GPRS850	251	3	4	29.52	28.17	38.5	PASS
GPRS1900	512	0	1	30.41	31.91	33	PASS
GPRS1900	512	0	2	29.53	31.03	33	PASS
GPRS1900	512	0	3	27.51	29.01	33	PASS
GPRS1900	512	0	4	26.25	27.75	33	PASS
GPRS1900	661	0	1	30.08	31.58	33	PASS
GPRS1900	661	0	2	29.27	30.77	33	PASS
GPRS1900	661	0	3	27.25	28.75	33	PASS
GPRS1900	661	0	4	25.99	27.49	33	PASS
GPRS1900	810	0	1	30.41	31.91	33	PASS
GPRS1900	810	0	2	29.66	31.16	33	PASS
GPRS1900	810	0	3	27.69	29.19	33	PASS
GPRS1900	810	0	4	26.46	27.96	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.79	26.44	38.45	PASS
EGPRS850	128	8	2	27.72	26.37	38.45	PASS
EGPRS850	128	8	3	27.67	26.32	38.45	PASS
EGPRS850	128	8	4	27.60	26.25	38.45	PASS
EGPRS850	190	8	1	27.53	26.18	38.45	PASS
EGPRS850	190	8	2	27.51	26.16	38.45	PASS
EGPRS850	190	8	3	27.45	26.10	38.45	PASS
EGPRS850	190	8	4	27.38	26.03	38.45	PASS
EGPRS850	251	8	1	26.99	25.64	38.45	PASS
EGPRS850	251	8	2	26.97	25.62	38.45	PASS
EGPRS850	251	8	3	26.91	25.56	38.45	PASS
EGPRS850	251	8	4	26.84	25.49	38.45	PASS
EGPRS1900	512	2	1	22.35	23.85	33.00	PASS
EGPRS1900	512	2	2	22.23	23.73	33.00	PASS
EGPRS1900	512	2	3	22.10	23.60	33.00	PASS
EGPRS1900	512	2	4	21.97	23.47	33.00	PASS
EGPRS1900	661	2	1	23.27	24.77	33.00	PASS
EGPRS1900	661	2	2	23.19	24.69	33.00	PASS
EGPRS1900	661	2	3	23.08	24.58	33.00	PASS
EGPRS1900	661	2	4	22.97	24.47	33.00	PASS
EGPRS1900	810	2	1	23.47	24.97	33.00	PASS
EGPRS1900	810	2	2	23.41	24.91	33.00	PASS
EGPRS1900	810	2	3	23.32	24.82	33.00	PASS
EGPRS1900	810	2	4	23.23	24.73	33.00	PASS

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

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

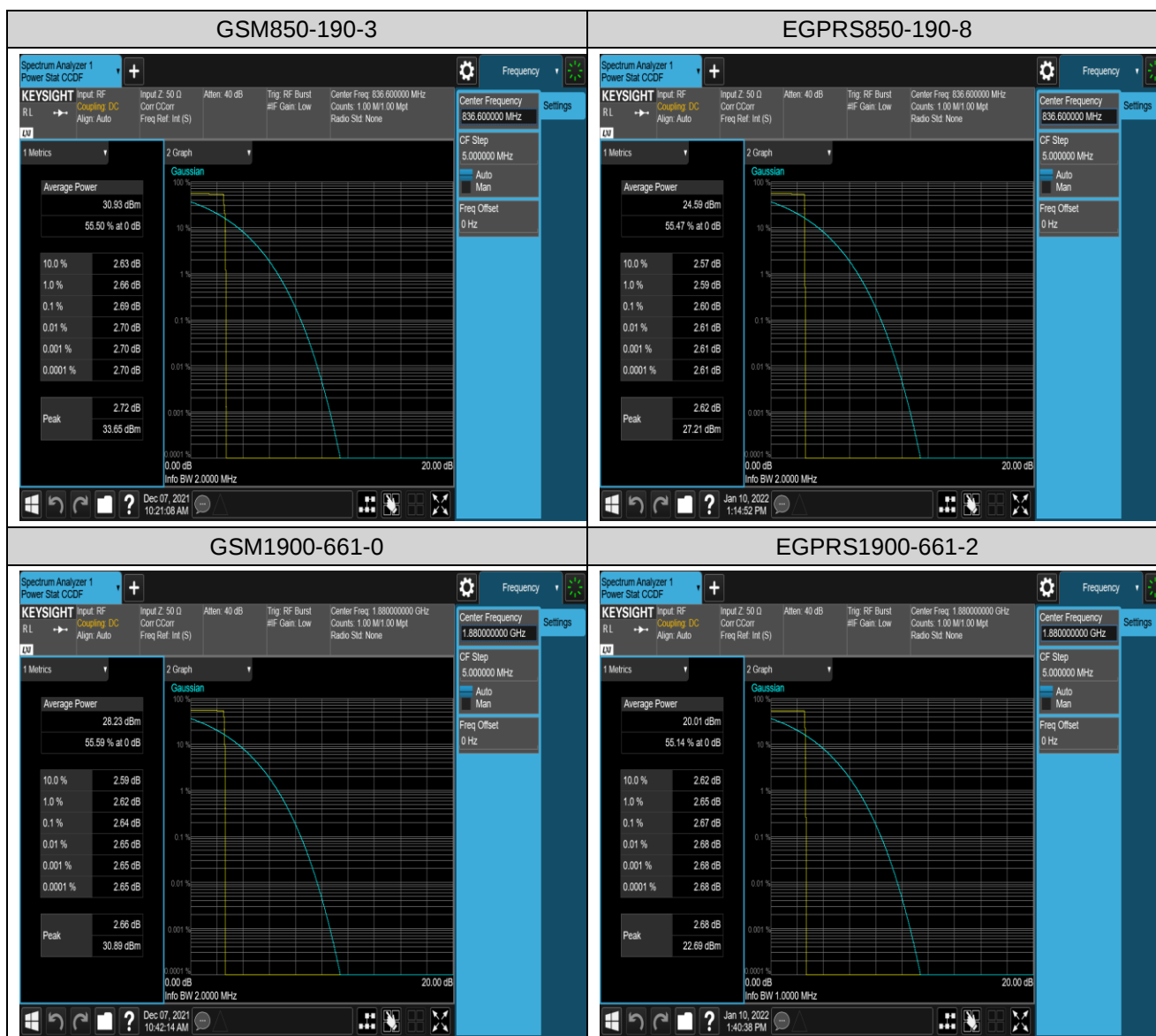
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	3	2.69	13	PASS
EGPRS850	190	8	2.6	13	PASS
GSM1900	661	0	2.64	13	PASS
EGPRS1900	661	2	2.67	13	PASS

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

Test Graphs

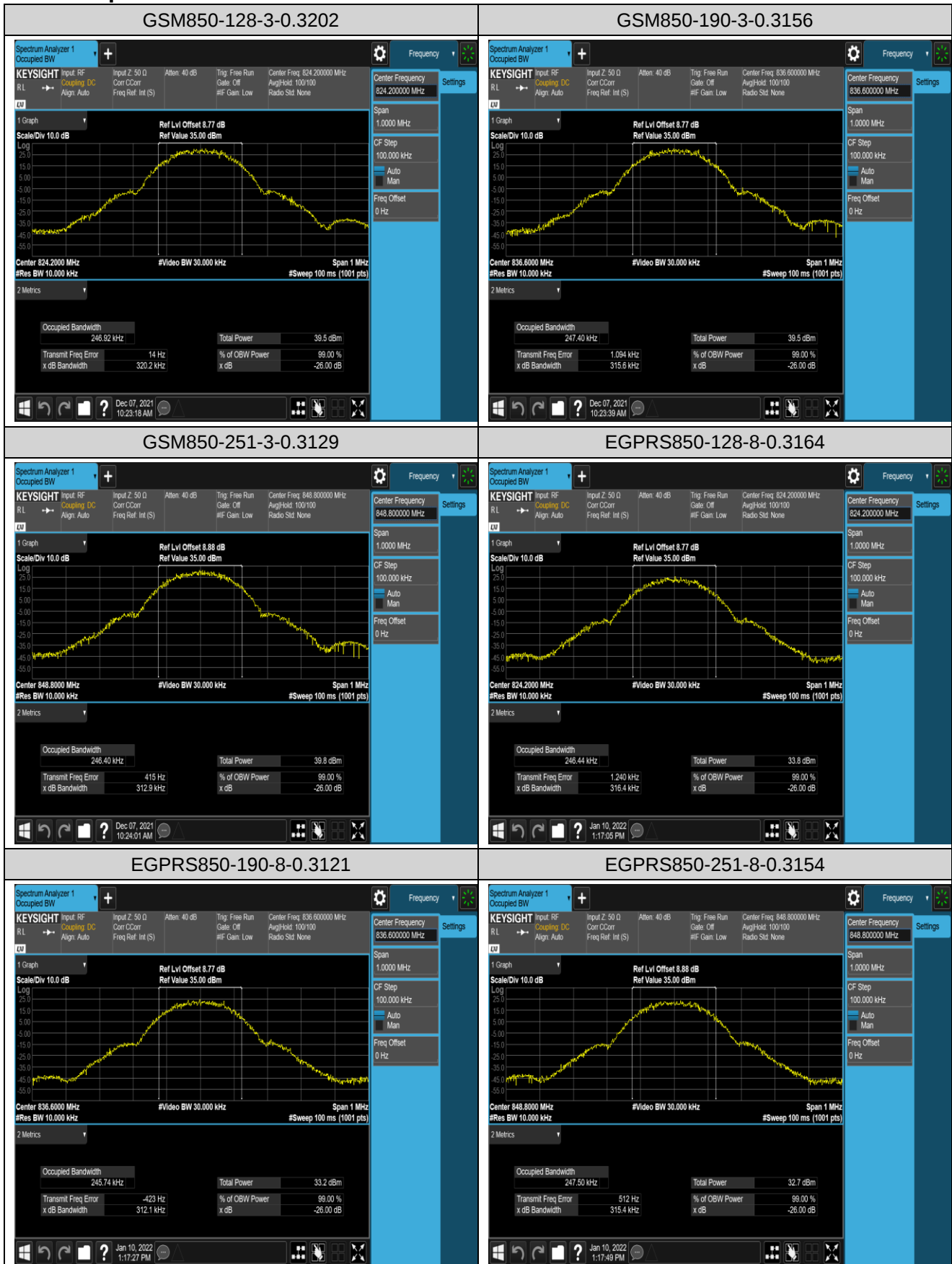


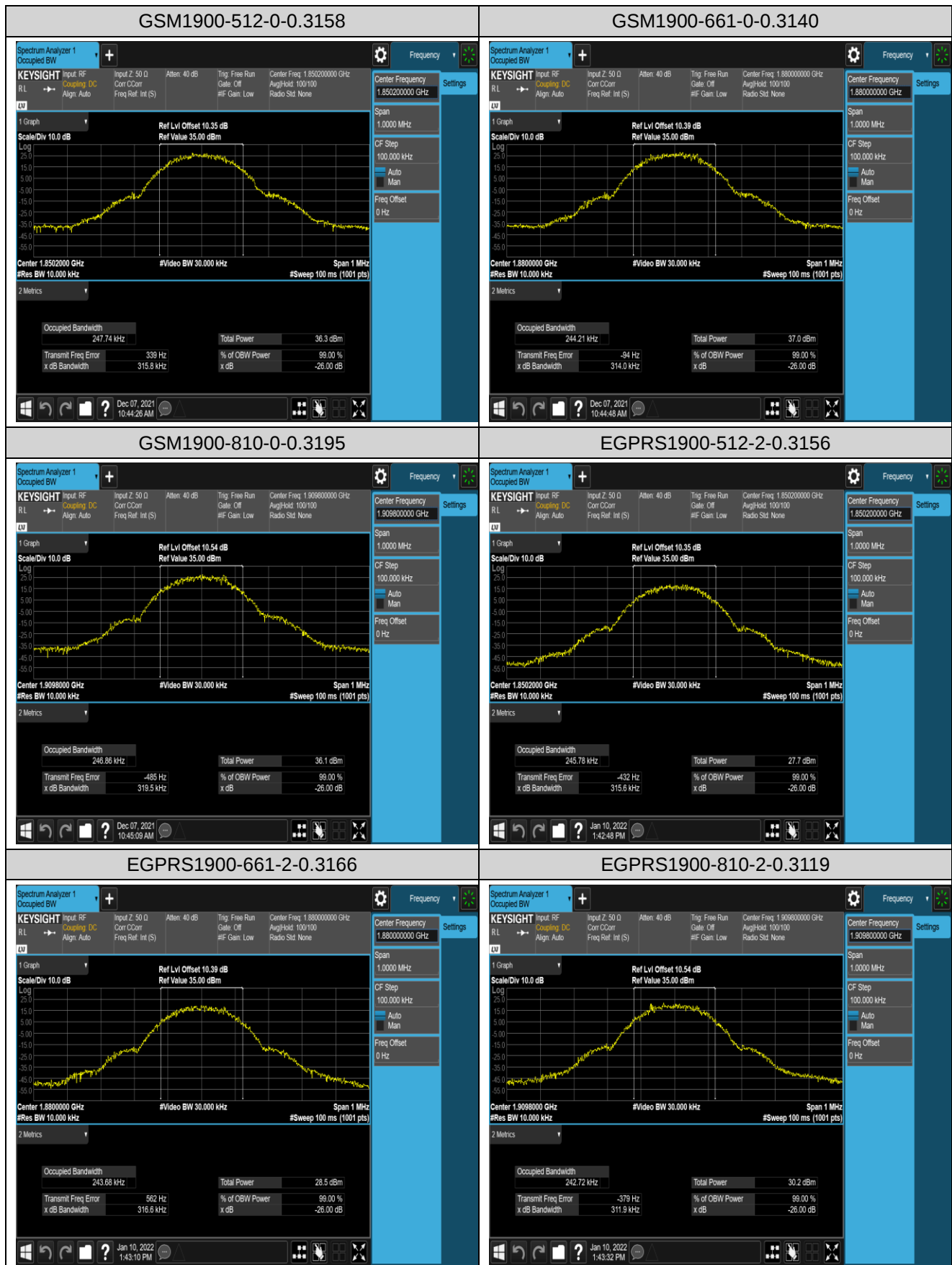
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	3	0.24692	0.3202	---	PASS
GSM850	190	3	0.24740	0.3156	---	PASS
GSM850	251	3	0.24640	0.3129	---	PASS
EGPRS850	128	8	0.24644	0.3164	---	PASS
EGPRS850	190	8	0.24574	0.3121	---	PASS
EGPRS850	251	8	0.24750	0.3154	---	PASS
GSM1900	512	0	0.24774	0.3158	---	PASS
GSM1900	661	0	0.24421	0.3140	---	PASS
GSM1900	810	0	0.24686	0.3195	---	PASS
EGPRS1900	512	2	0.24578	0.3156	---	PASS
EGPRS1900	661	2	0.24368	0.3166	---	PASS
EGPRS1900	810	2	0.24272	0.3119	---	PASS

Test Graphs



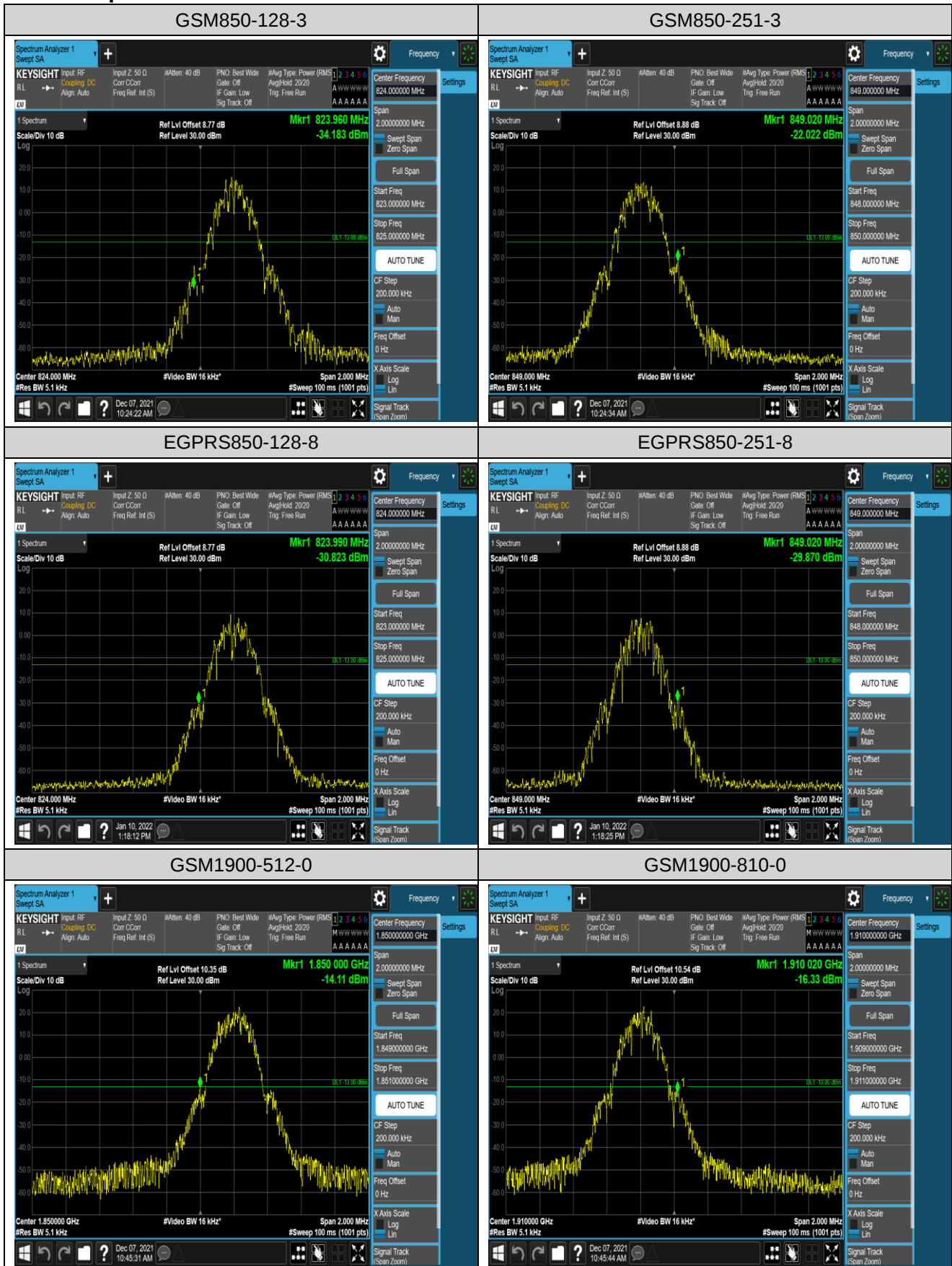


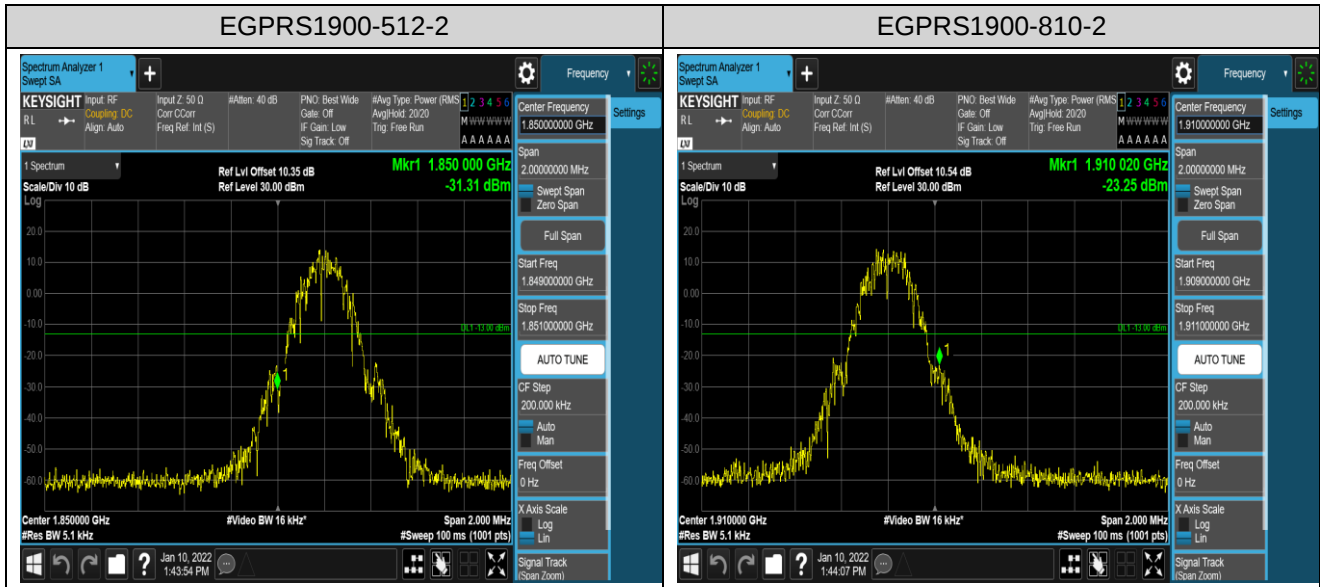
Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	3	823.96	-34.18	-13	PASS
GSM850	251	3	849.02	-22.02	-13	PASS
EGPRS850	128	8	823.99	-30.82	-13	PASS
EGPRS850	251	8	849.02	-29.87	-13	PASS
GSM1900	512	0	1850.00	-14.11	-13	PASS
GSM1900	810	0	1910.02	-16.33	-13	PASS
EGPRS1900	512	2	1850.00	-31.31	-13	PASS
EGPRS1900	810	2	1910.02	-23.25	-13	PASS

Test Graphs





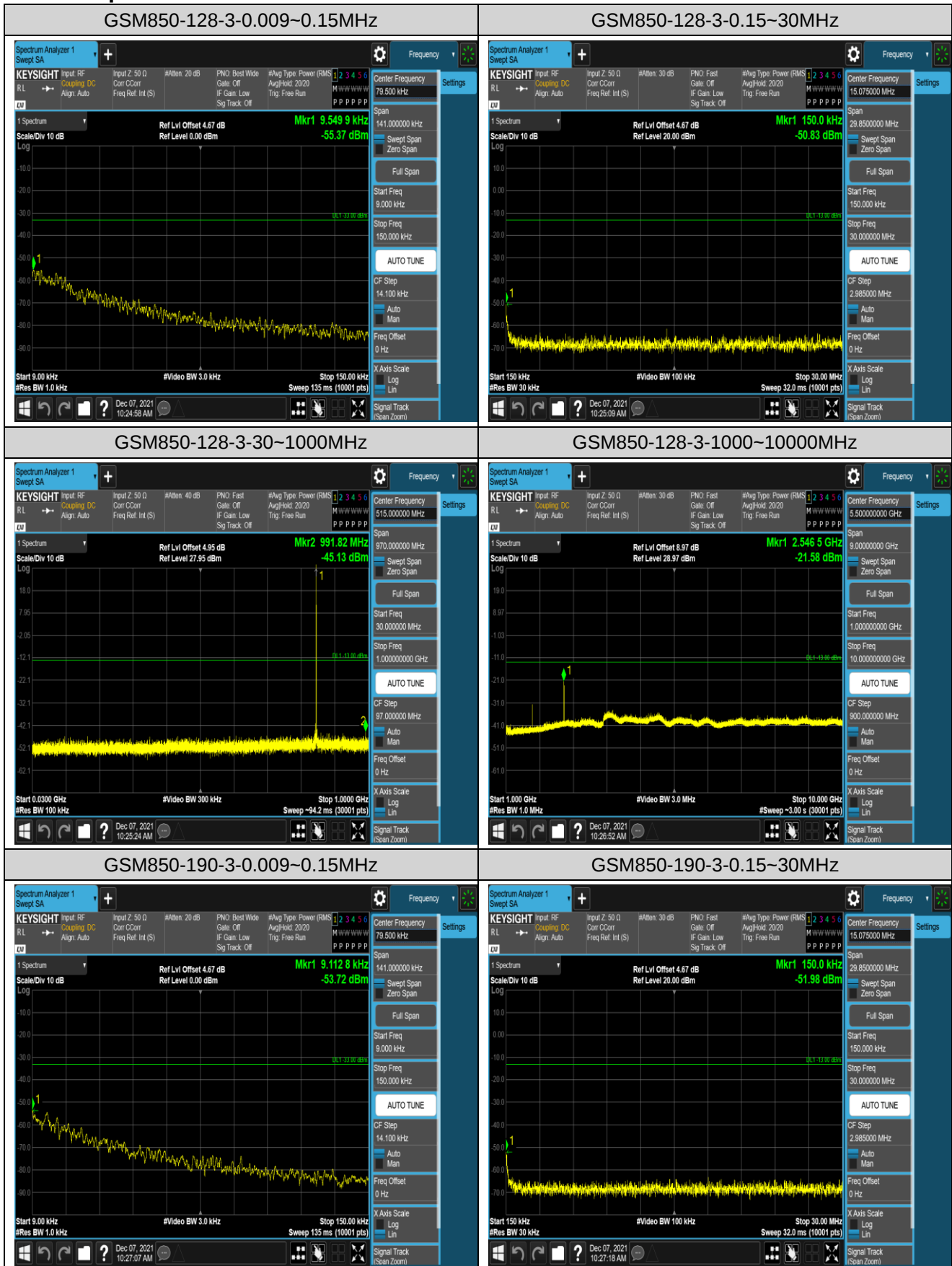
Appendix E: Conducted Spurious Emission

Test Result

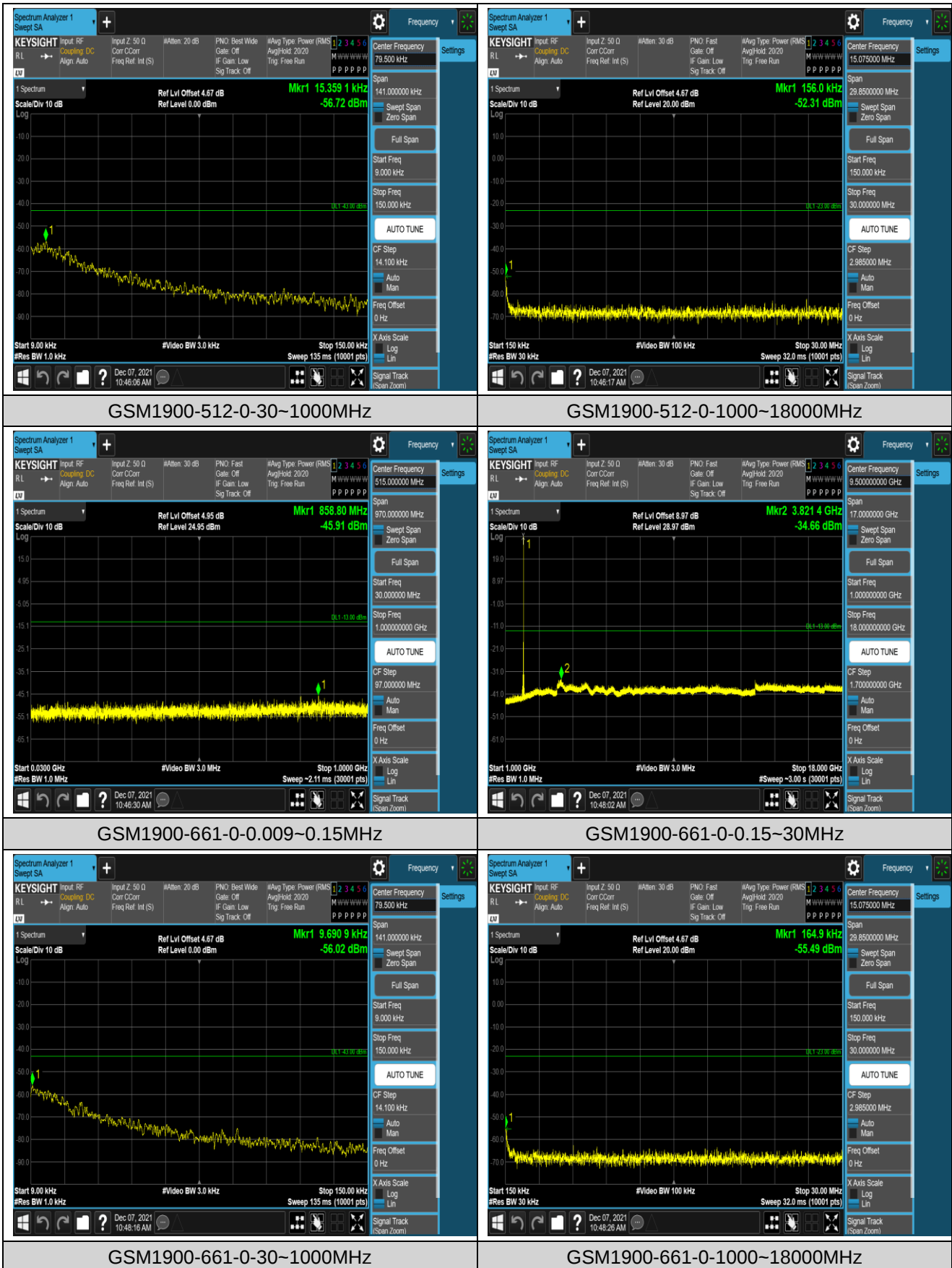
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	3	0.009~0.15MHz	0.01	-55.37	-33	PASS
GSM850	128	3	0.15~30MHz	0.15	-50.83	-13	PASS
GSM850	128	3	30~1000MHz	991.82	-45.13	-13	PASS
GSM850	128	3	1000~10000MHz	2546.5	-21.58	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-53.72	-33	PASS
GSM850	190	3	0.15~30MHz	0.15	-51.98	-13	PASS
GSM850	190	3	30~1000MHz	720.93	-45.47	-13	PASS
GSM850	190	3	1000~10000MHz	2546.5	-21.57	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.01	-53.68	-33	PASS
GSM850	251	3	0.15~30MHz	0.16	-53.77	-13	PASS
GSM850	251	3	30~1000MHz	987.26	-46.23	-13	PASS
GSM850	251	3	1000~10000MHz	2546.5	-21.6	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.02	-56.72	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-52.31	-23	PASS
GSM1900	512	0	30~1000MHz	858.8	-45.91	-13	PASS
GSM1900	512	0	1000~18000MHz	3821.43	-34.66	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-56.02	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-55.49	-23	PASS
GSM1900	661	0	30~1000MHz	898.31	-46.72	-13	PASS
GSM1900	661	0	1000~18000MHz	13667.83	-34.96	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.64	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-53.47	-23	PASS
GSM1900	810	0	30~1000MHz	809.33	-45.87	-13	PASS
GSM1900	810	0	1000~18000MHz	3854.3	-34.93	-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		
3.80	-30	22.86	0.027325	±2.5	Pass
	-20	23.25	0.027791		
	-10	20.34	0.024313		
	0	24.44	0.029213		
	10	24.34	0.029094		
	20	23.92	0.028592		
	30	20.99	0.025090		
	40	23.96	0.028640		
	50	22.96	0.027444		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	23.21	0.027743	±2.5	Pass
	3.80	18.82	0.022496		
	4.35	24.47	0.029249		
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		
3.80	-30	13.04	0.015587	±2.5	Pass
	-20	13.33	0.015934		
	-10	11.27	0.013471		
	0	11.85	0.014164		
	10	10.07	0.012037		
	20	11.46	0.013698		
	30	11.56	0.013818		
	40	10.43	0.012467		
	50	11.56	0.013818		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	9.91	0.011846	±2.5	Pass
	3.80	11.56	0.013818		
	4.35	12.72	0.015204		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	124.24	0.066085	Within authorized band for PCS 1900	Pass
	-20	118.52	0.063043		
	-10	116.94	0.062202		
	0	120.23	0.063952		
	10	114.26	0.060777		
	20	117.81	0.062665		
	30	119.39	0.063505		
	40	113.61	0.060431		
	50	116.33	0.061878		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	123.72	0.065809	Within authorized band for PCS 1900	Pass
	3.80	106.90	0.056862		
	4.35	123.14	0.065500		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.80	-30	108.35	0.057633	Within authorized band for PCS 1900	Pass
	-20	106.35	0.056569		
	-10	122.91	0.065378		
	0	118.07	0.062803		
	10	118.75	0.063165		
	20	115.78	0.061585		
	30	114.71	0.061016		
	40	117.59	0.062548		
	50	113.00	0.060106		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	103.02	0.054798	Within authorized band for PCS 1900	Pass
	3.80	104.70	0.055691		
	4.35	103.96	0.055298		
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

