

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	33.16	27.21	38.5	PASS
GSM850	190	5	33.26	27.31	38.5	PASS
GSM850	251	5	33.12	27.17	38.5	PASS
GSM1900	512	0	29.76	29.86	33	PASS
GSM1900	661	0	29.57	29.67	33	PASS
GSM1900	810	0	29.50	29.6	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.18	27.23	38.5	PASS
GPRS850	128	5	2	32.16	26.21	38.5	PASS
GPRS850	128	5	3	30.10	24.15	38.5	PASS
GPRS850	128	5	4	28.99	23.04	38.5	PASS
GPRS850	190	5	1	33.17	27.22	38.5	PASS
GPRS850	190	5	2	32.22	26.27	38.5	PASS
GPRS850	190	5	3	30.16	24.21	38.5	PASS
GPRS850	190	5	4	29.04	23.09	38.5	PASS
GPRS850	251	5	1	33.01	27.06	38.5	PASS
GPRS850	251	5	2	32.05	26.10	38.5	PASS
GPRS850	251	5	3	29.98	24.03	38.5	PASS
GPRS850	251	5	4	28.85	22.90	38.5	PASS
GPRS1900	512	0	1	29.76	29.86	33	PASS
GPRS1900	512	0	2	28.78	28.88	33	PASS
GPRS1900	512	0	3	26.74	26.84	33	PASS
GPRS1900	512	0	4	25.61	25.71	33	PASS
GPRS1900	661	0	1	29.56	29.66	33	PASS
GPRS1900	661	0	2	28.63	28.73	33	PASS
GPRS1900	661	0	3	26.63	26.73	33	PASS
GPRS1900	661	0	4	25.52	25.62	33	PASS
GPRS1900	810	0	1	29.48	29.58	33	PASS
GPRS1900	810	0	2	28.58	28.68	33	PASS
GPRS1900	810	0	3	26.62	26.72	33	PASS
GPRS1900	810	0	4	25.55	25.65	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.10	21.15	38.5	PASS
EGPRS850	128	8	2	25.81	19.86	38.5	PASS
EGPRS850	128	8	3	23.46	17.51	38.5	PASS
EGPRS850	128	8	4	22.24	16.29	38.5	PASS
EGPRS850	190	8	1	27.09	21.14	38.5	PASS
EGPRS850	190	8	2	25.94	19.99	38.5	PASS
EGPRS850	190	8	3	23.63	17.68	38.5	PASS
EGPRS850	190	8	4	22.43	16.48	38.5	PASS
EGPRS850	251	8	1	26.96	21.01	38.5	PASS
EGPRS850	251	8	2	25.94	19.99	38.5	PASS
EGPRS850	251	8	3	23.62	17.67	38.5	PASS
EGPRS850	251	8	4	22.22	16.27	38.5	PASS
EGPRS1900	512	2	1	26.67	26.77	33	PASS
EGPRS1900	512	2	2	25.80	25.9	33	PASS
EGPRS1900	512	2	3	23.81	23.91	33	PASS
EGPRS1900	512	2	4	22.81	22.91	33	PASS
EGPRS1900	661	2	1	26.47	26.57	33	PASS
EGPRS1900	661	2	2	25.58	25.68	33	PASS
EGPRS1900	661	2	3	23.71	23.81	33	PASS
EGPRS1900	661	2	4	22.76	22.86	33	PASS
EGPRS1900	810	2	1	26.34	26.44	33	PASS
EGPRS1900	810	2	2	25.50	25.6	33	PASS
EGPRS1900	810	2	3	23.63	23.73	33	PASS
EGPRS1900	810	2	4	22.64	22.74	33	PASS

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

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

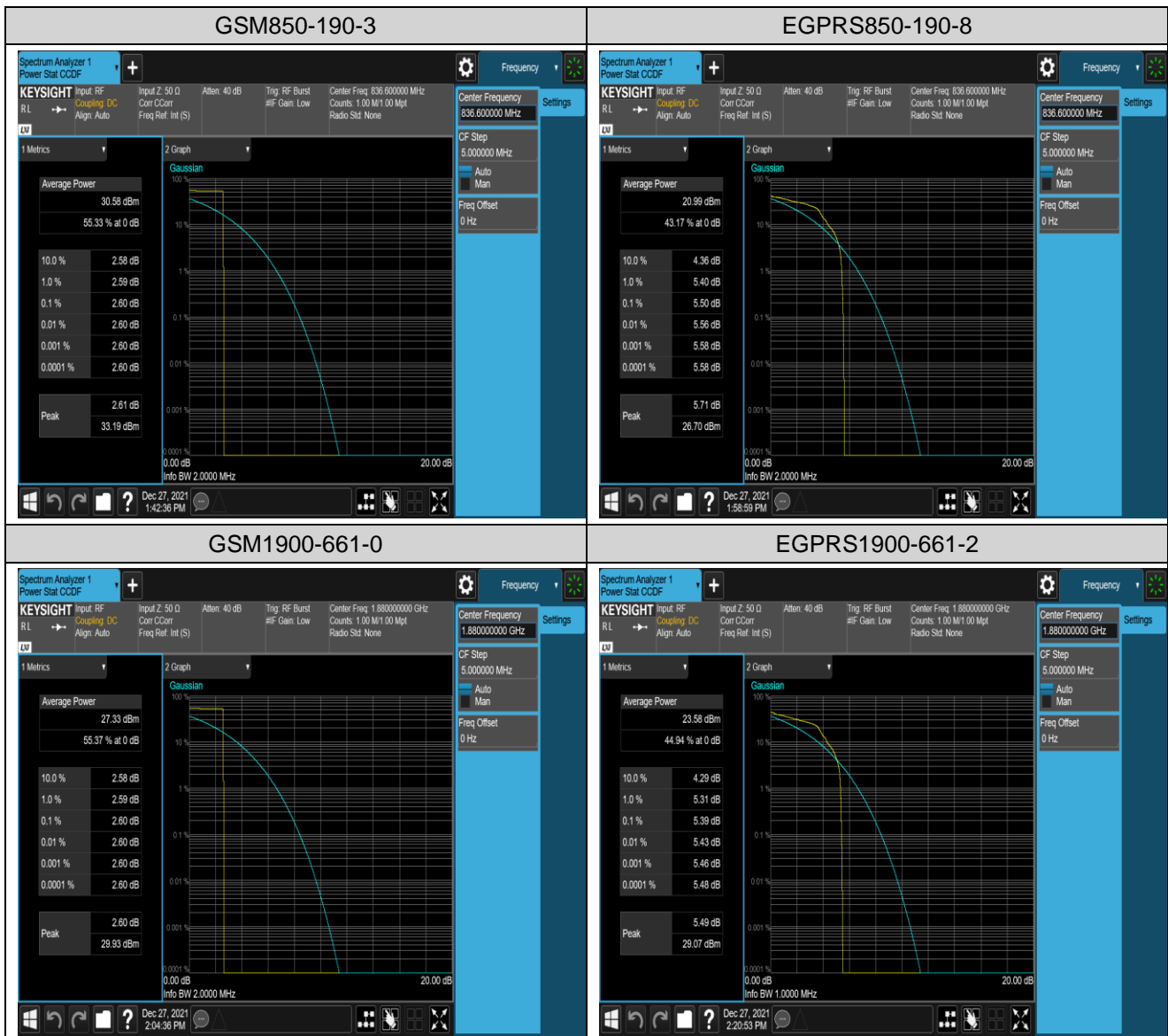
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	3	2.6	13	PASS
EGPRS850	190	8	5.5	13	PASS
GSM1900	661	0	2.6	13	PASS
EGPRS1900	661	2	5.39	13	PASS

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

Test Graphs

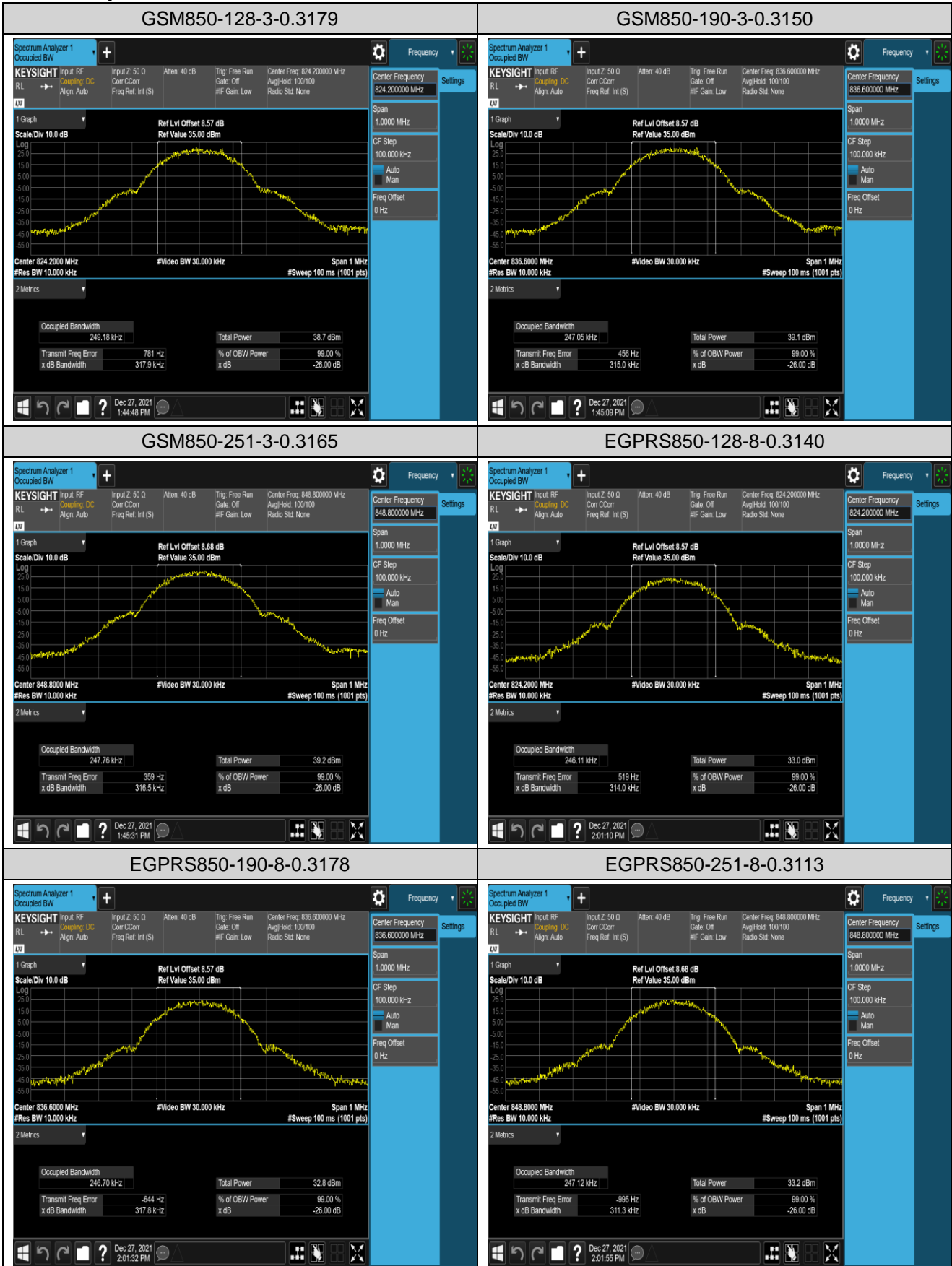


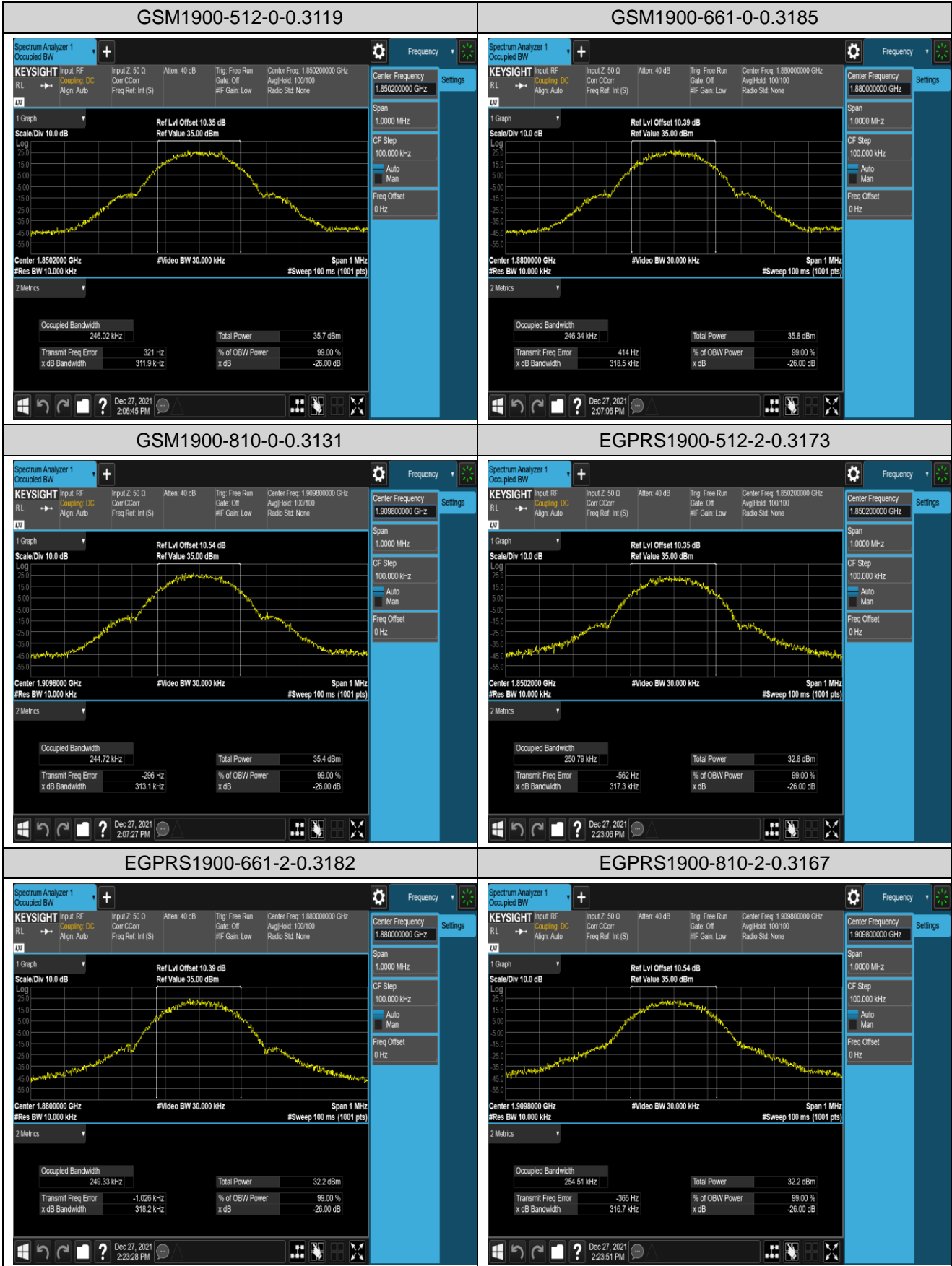
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	3	0.24918	0.3179	---	PASS
GSM850	190	3	0.24705	0.3150	---	PASS
GSM850	251	3	0.24776	0.3165	---	PASS
EGPRS850	128	8	0.24611	0.3140	---	PASS
EGPRS850	190	8	0.24670	0.3178	---	PASS
EGPRS850	251	8	0.24712	0.3113	---	PASS
GSM1900	512	0	0.24602	0.3119	---	PASS
GSM1900	661	0	0.24634	0.3185	---	PASS
GSM1900	810	0	0.24472	0.3131	---	PASS
EGPRS1900	512	2	0.25079	0.3173	---	PASS
EGPRS1900	661	2	0.24933	0.3182	---	PASS
EGPRS1900	810	2	0.25451	0.3167	---	PASS

Test Graphs

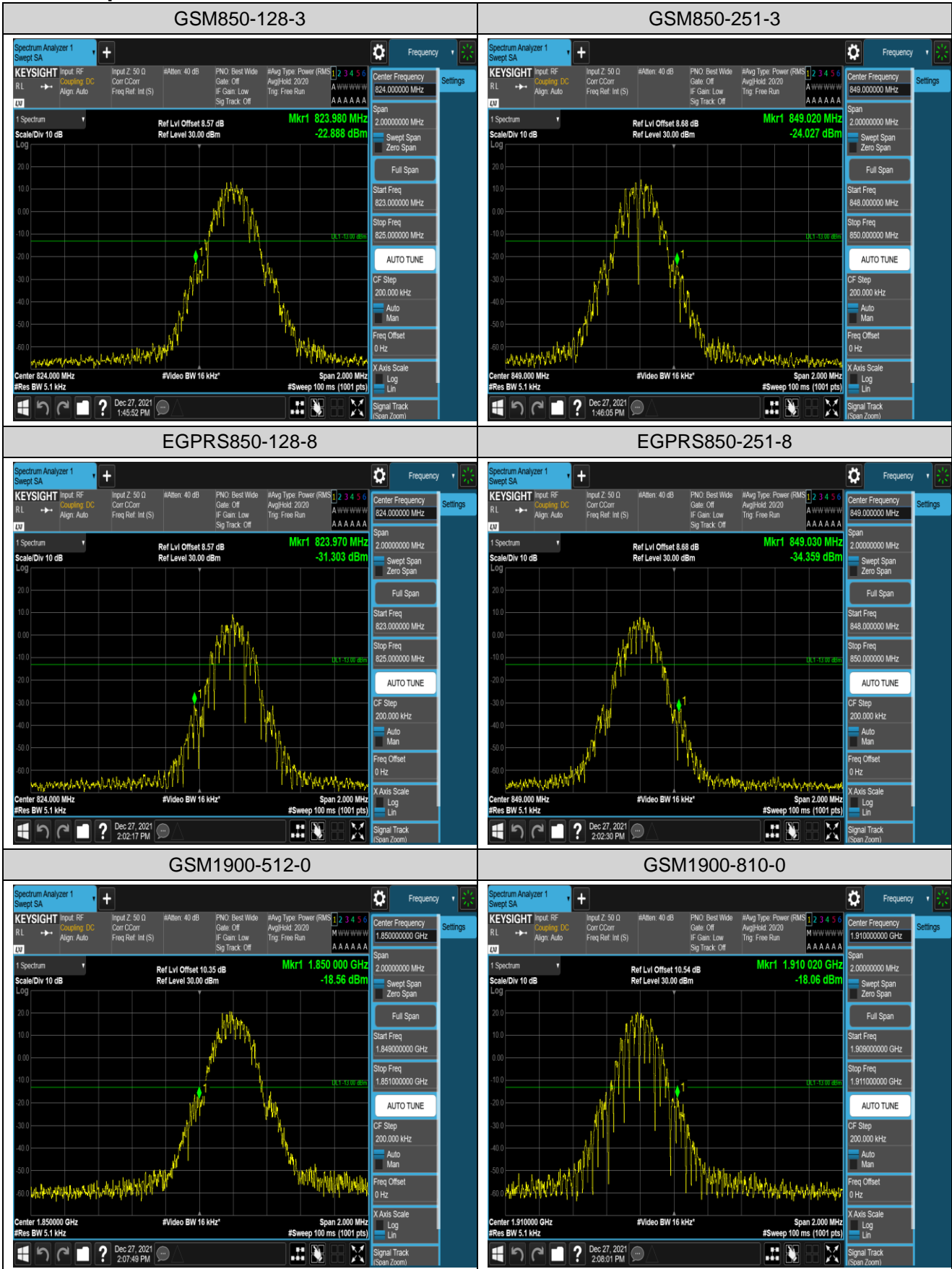


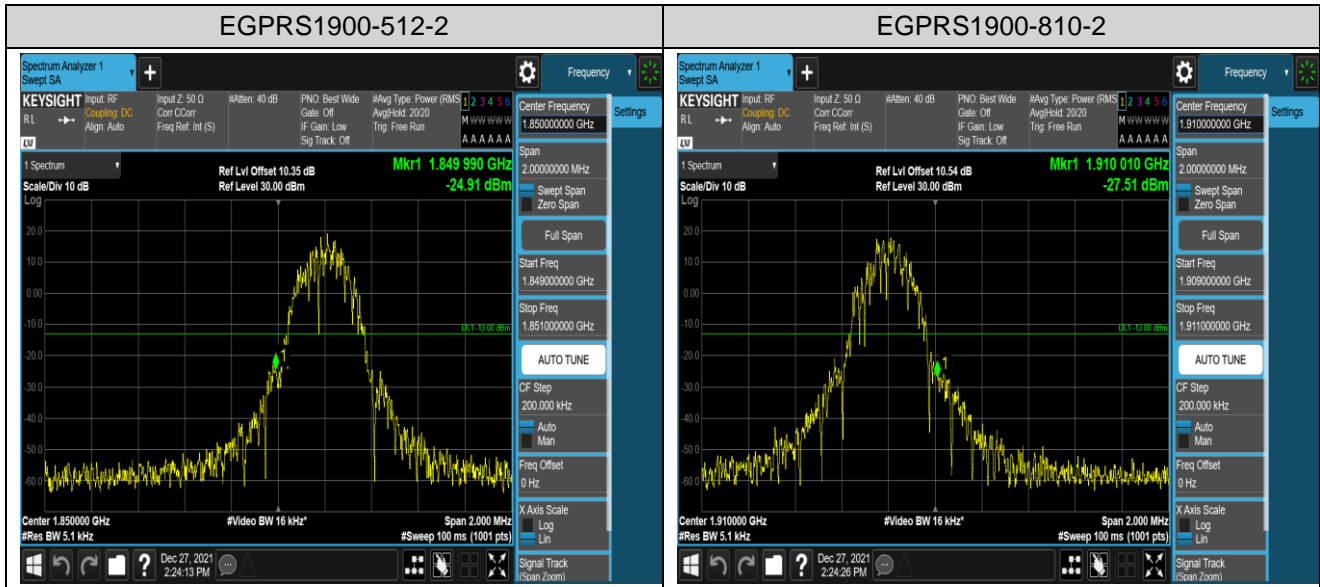


Appendix D: Band Edge**Test Result**

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	3	823.98	-22.888	-13	PASS
GSM850	251	3	849.02	-24.027	-13	PASS
EGPRS850	128	8	823.97	-31.303	-13	PASS
EGPRS850	251	8	849.03	-34.359	-13	PASS
GSM1900	512	0	1850.00	-18.56	-13	PASS
GSM1900	810	0	1910.02	-18.06	-13	PASS
EGPRS1900	512	2	1849.99	-24.91	-13	PASS
EGPRS1900	810	2	1910.01	-27.51	-13	PASS

Test Graphs





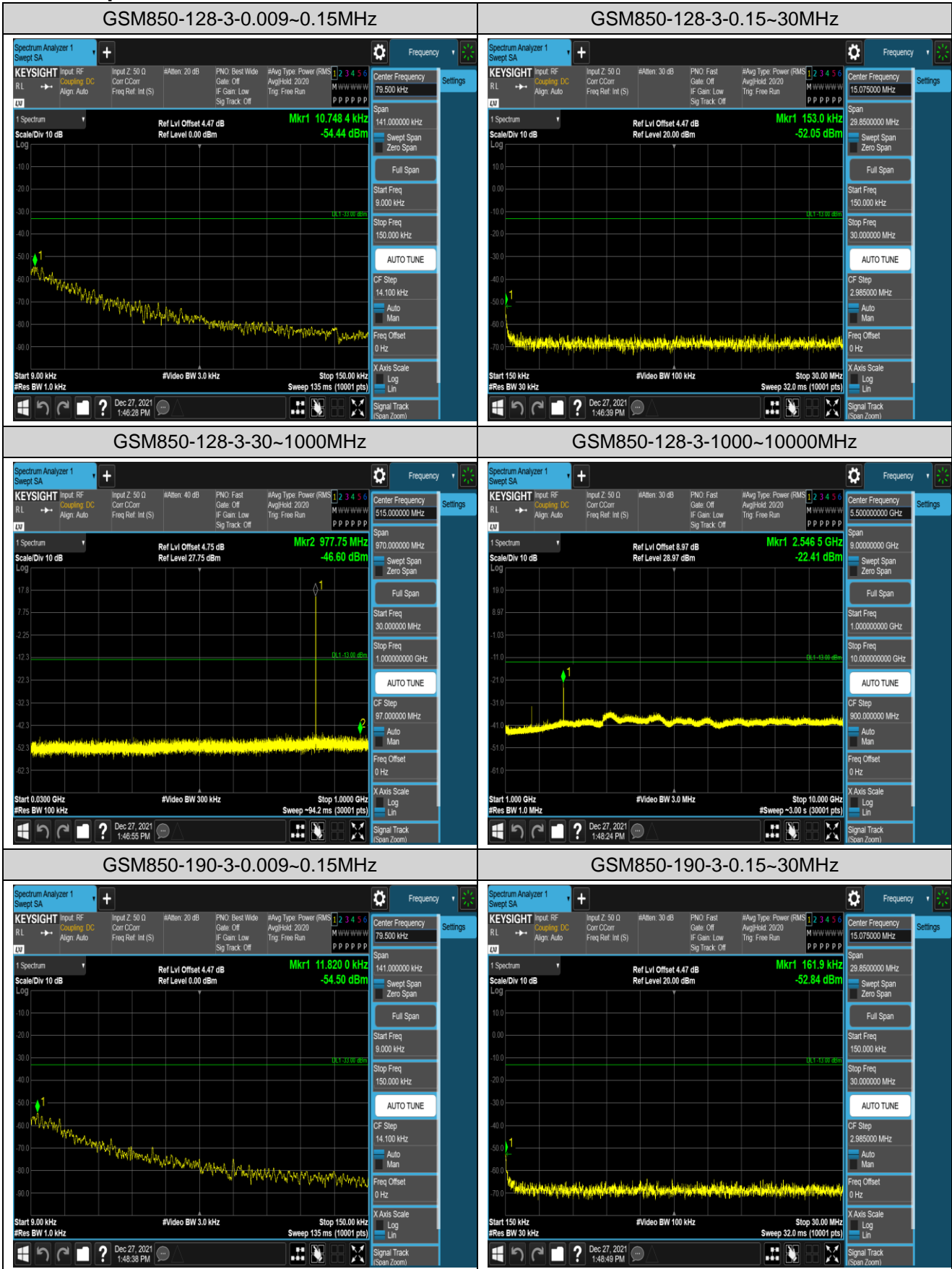
Appendix E: Conducted Spurious Emission

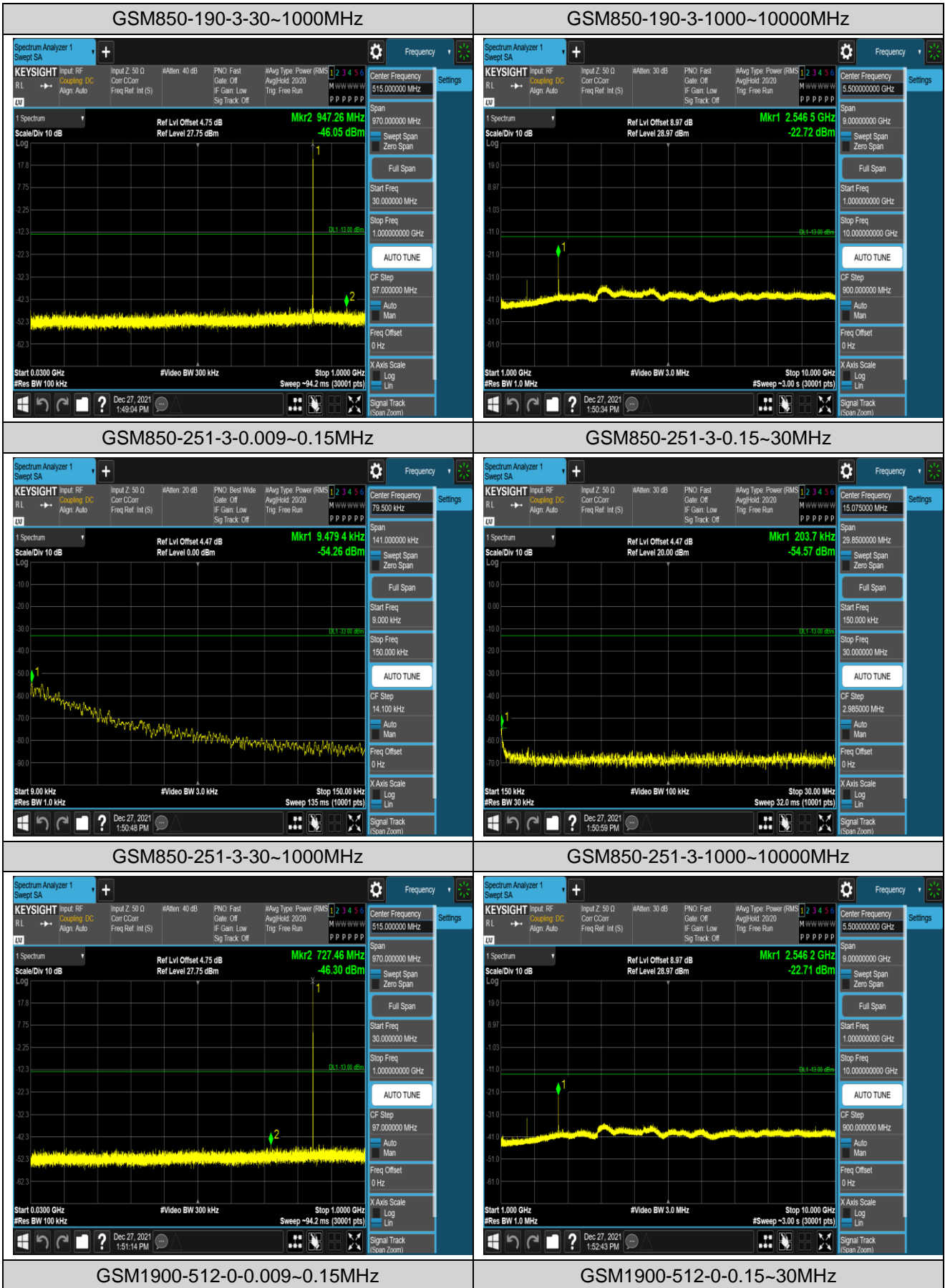
Test Result

Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	3	0.009~0.15MHz	0.01	-54.44	-33	PASS
GSM850	128	3	0.15~30MHz	0.15	-52.05	-13	PASS
GSM850	128	3	30~1000MHz	977.75	-46.6	-13	PASS
GSM850	128	3	1000~10000MHz	2546.5	-22.41	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-54.5	-33	PASS
GSM850	190	3	0.15~30MHz	0.16	-52.84	-13	PASS
GSM850	190	3	30~1000MHz	947.26	-46.05	-13	PASS
GSM850	190	3	1000~10000MHz	2546.5	-22.72	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.01	-54.26	-33	PASS
GSM850	251	3	0.15~30MHz	0.2	-54.57	-13	PASS
GSM850	251	3	30~1000MHz	727.46	-46.3	-13	PASS
GSM850	251	3	1000~10000MHz	2546.2	-22.71	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-56.74	-43	PASS
GSM1900	512	0	0.15~30MHz	0.17	-52.4	-23	PASS
GSM1900	512	0	30~1000MHz	887.42	-46.76	-13	PASS
GSM1900	512	0	1000~18000MHz	5197.87	-34.87	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-57.25	-43	PASS
GSM1900	661	0	0.15~30MHz	0.15	-54.21	-23	PASS
GSM1900	661	0	30~1000MHz	292.03	-47.26	-13	PASS
GSM1900	661	0	1000~18000MHz	3819.73	-34.09	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-55.02	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-52.67	-23	PASS
GSM1900	810	0	30~1000MHz	915.06	-46.83	-13	PASS
GSM1900	810	0	1000~18000MHz	3819.73	-33.78	-13	PASS

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

Test Graphs

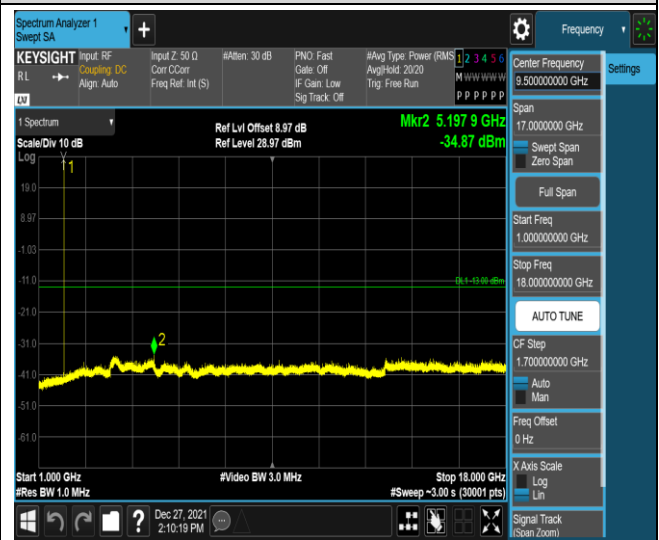






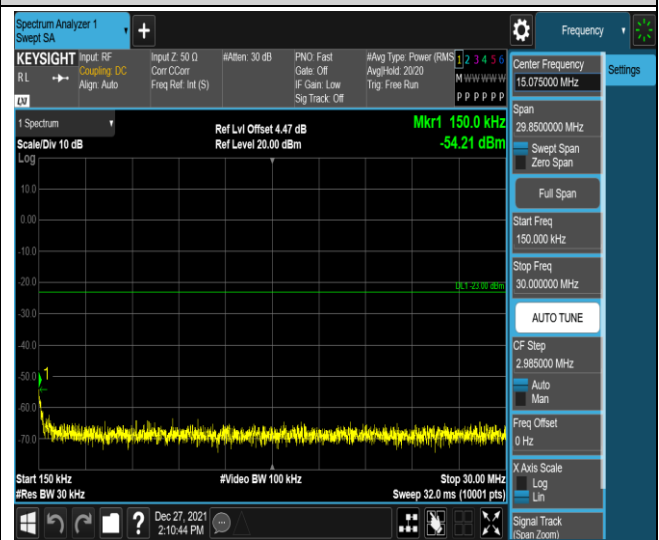
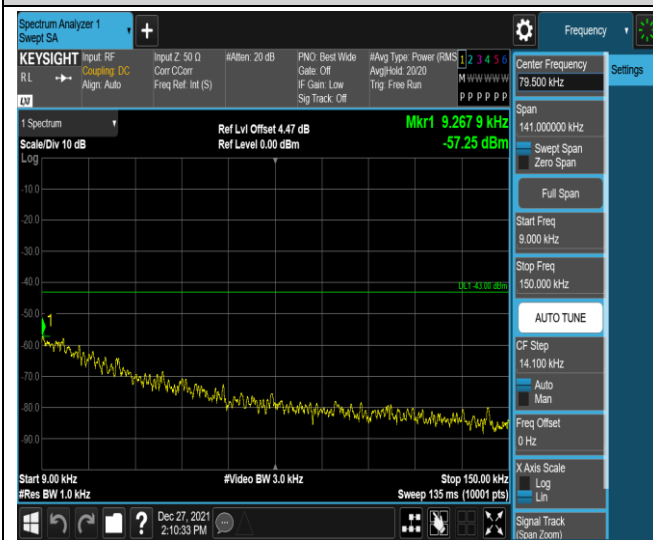
GSM1900-512-0-30~1000MHz

GSM1900-512-0-1000~18000MHz



GSM1900-661-0-0.009~0.15MHz

GSM1900-661-0-0.15~30MHz



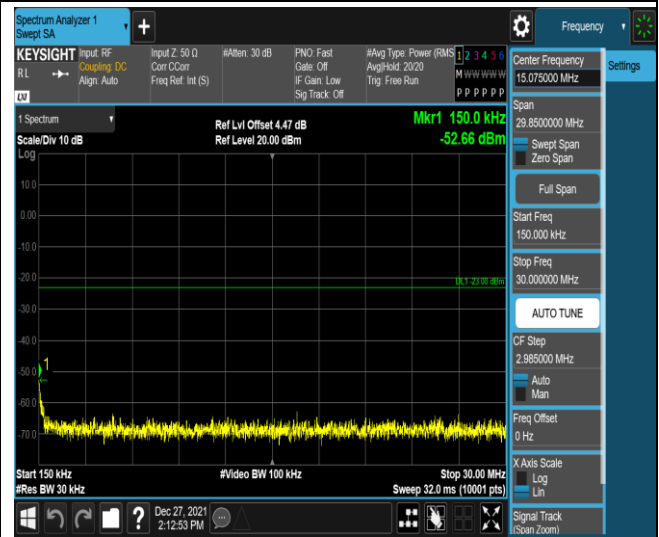
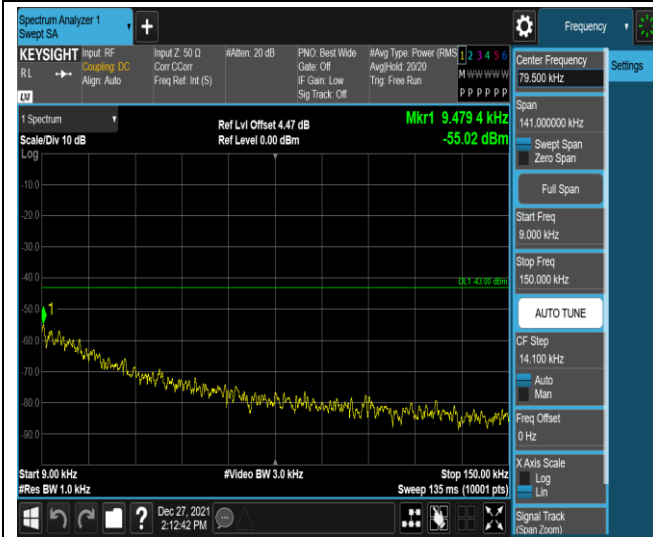
GSM1900-661-0-30~1000MHz

GSM1900-661-0-1000~18000MHz



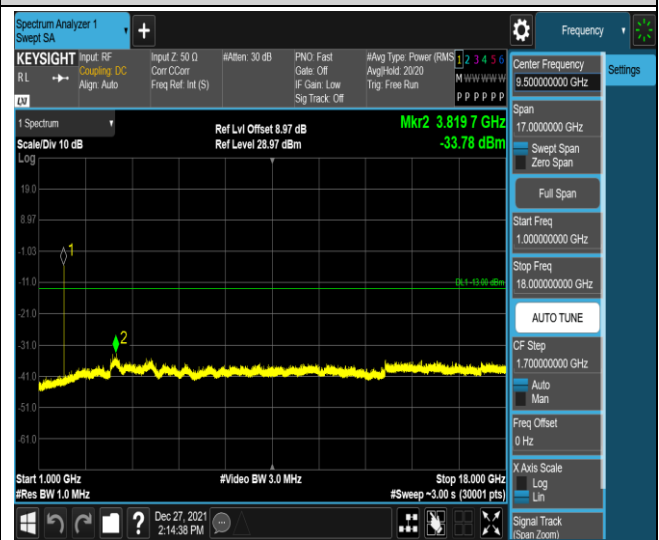
GSM1900-810-0-0.009~0.15MHz

GSM1900-810-0-0.15~30MHz



GSM1900-810-0-30~1000MHz

GSM1900-810-0-1000~18000MHz



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	-8.98	-0.010734	±2.5	Pass
	-20	-13.92	-0.016639		
	-10	-2.32	-0.002773		
	0	1.52	0.001817		
	10	12.33	0.014738		
	20	10.56	0.012623		
	30	12.11	0.014475		
	40	12.33	0.014738		
	50	8.88	0.010614		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-3.65	-0.004363	±2.5	Pass
	3.85	-1.55	-0.001853		
	4.40	-5.71	-0.006825		
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	-8.1	-0.009682	±2.5	Pass
	-20	-1.87	-0.002235		
	-10	-1.1	-0.001315		
	0	-1.49	-0.001781		
	10	-4.36	-0.005212		
	20	-8.36	-0.009993		
	30	-7.07	-0.008451		
	40	-3.71	-0.004435		
	50	-5.46	-0.006526		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-5.59	-0.006682	±2.5	Pass
	3.87	-2.78	-0.003323		
	4.45	-8.14	-0.00973		
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	31.58	0.016798	Within authorized band for PCS 1900	Pass
	-20	25.8	0.013723		
	-10	30.96	0.016468		
	0	29.7	0.015798		
	10	32.09	0.017069		
	20	36.74	0.019543		
	30	36.35	0.019335		
	40	28.73	0.015282		
	50	27.48	0.014617		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	27.41	0.01458	Within authorized band for PCS 1900	Pass
	3.87	29.38	0.015628		
	4.45	31.64	0.01683		
<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	21.95	0.011676	Within authorized band for PCS 1900	Pass
	-20	33.77	0.017963		
	-10	42.2	0.022447		
	0	39.42	0.020968		
	10	34.9	0.018564		
	20	37.06	0.019713		
	30	40.2	0.021383		
	40	35.39	0.018824		
	50	32.16	0.017106		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	24.67	0.013122	Within authorized band for PCS 1900	Pass
	3.87	26.64	0.01417		
	4.45	15.14	0.008053		
<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

