

## 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	33.19	29.54	38.5	PASS
GSM850	190	5	33.11	29.46	38.5	PASS
GSM850	251	5	33.18	29.53	38.5	PASS
GSM1900	512	0	29.67	29.17	33	PASS
GSM1900	661	0	29.63	29.13	33	PASS
GSM1900	810	0	29.63	29.13	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	5	1	33.18	29.53	38.5	PASS
GPRS850	128	5	2	32.17	28.52	38.5	PASS
GPRS850	128	5	3	30.10	26.45	38.5	PASS
GPRS850	128	5	4	28.99	25.34	38.5	PASS
GPRS850	190	5	1	33.03	29.38	38.5	PASS
GPRS850	190	5	2	32.07	28.42	38.5	PASS
GPRS850	190	5	3	30.01	26.36	38.5	PASS
GPRS850	190	5	4	28.90	25.25	38.5	PASS
GPRS850	251	5	1	33.13	29.48	38.5	PASS
GPRS850	251	5	2	32.17	28.52	38.5	PASS
GPRS850	251	5	3	30.12	26.47	38.5	PASS
GPRS850	251	5	4	29.00	25.35	38.5	PASS
GPRS1900	512	0	1	29.67	29.17	33	PASS
GPRS1900	512	0	2	28.67	28.17	33	PASS
GPRS1900	512	0	3	26.63	26.13	33	PASS
GPRS1900	512	0	4	25.51	25.01	33	PASS
GPRS1900	661	0	1	29.62	29.12	33	PASS
GPRS1900	661	0	2	28.65	28.15	33	PASS
GPRS1900	661	0	3	26.62	26.12	33	PASS
GPRS1900	661	0	4	25.51	25.01	33	PASS
GPRS1900	810	0	1	29.61	29.11	33	PASS
GPRS1900	810	0	2	28.65	28.15	33	PASS
GPRS1900	810	0	3	26.65	26.15	33	PASS
GPRS1900	810	0	4	25.56	25.06	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	27.61	23.96	38.5	PASS
EGPRS850	128	8	2	26.44	22.79	38.5	PASS
EGPRS850	128	8	3	24.25	20.60	38.5	PASS
EGPRS850	128	8	4	22.86	19.21	38.5	PASS
EGPRS850	190	8	1	27.47	23.82	38.5	PASS
EGPRS850	190	8	2	26.29	22.64	38.5	PASS
EGPRS850	190	8	3	24.08	20.43	38.5	PASS
EGPRS850	190	8	4	22.75	19.10	38.5	PASS
EGPRS850	251	8	1	27.37	23.72	38.5	PASS
EGPRS850	251	8	2	26.22	22.57	38.5	PASS
EGPRS850	251	8	3	24.00	20.35	38.5	PASS
EGPRS850	251	8	4	22.65	19.00	38.5	PASS
EGPRS1900	512	2	1	26.39	25.89	33	PASS
EGPRS1900	512	2	2	25.41	24.91	33	PASS
EGPRS1900	512	2	3	23.49	22.99	33	PASS
EGPRS1900	512	2	4	22.59	22.09	33	PASS
EGPRS1900	661	2	1	25.88	25.38	33	PASS
EGPRS1900	661	2	2	24.92	24.42	33	PASS
EGPRS1900	661	2	3	23.07	22.57	33	PASS
EGPRS1900	661	2	4	22.09	21.59	33	PASS
EGPRS1900	810	2	1	25.75	25.25	33	PASS
EGPRS1900	810	2	2	24.84	24.34	33	PASS
EGPRS1900	810	2	3	23.01	22.51	33	PASS
EGPRS1900	810	2	4	22.05	21.55	33	PASS

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

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

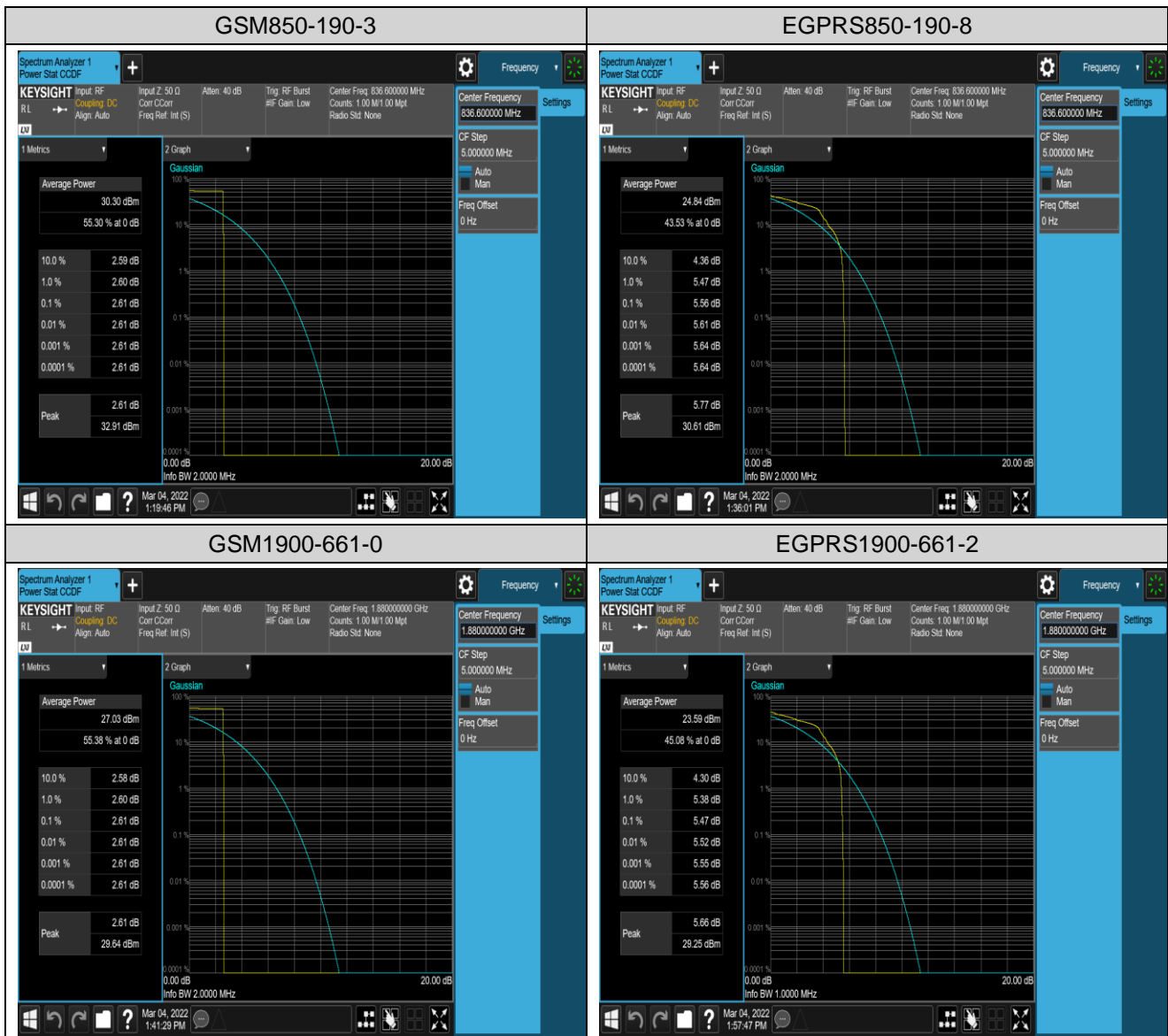
## Appendix B: Peak-to-Average Ratio(CCDF)

### Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	5	2.61	13	PASS
EGPRS850	190	8	5.56	13	PASS
GSM1900	661	0	2.61	13	PASS
EGPRS1900	661	2	5.47	13	PASS

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

### Test Graphs

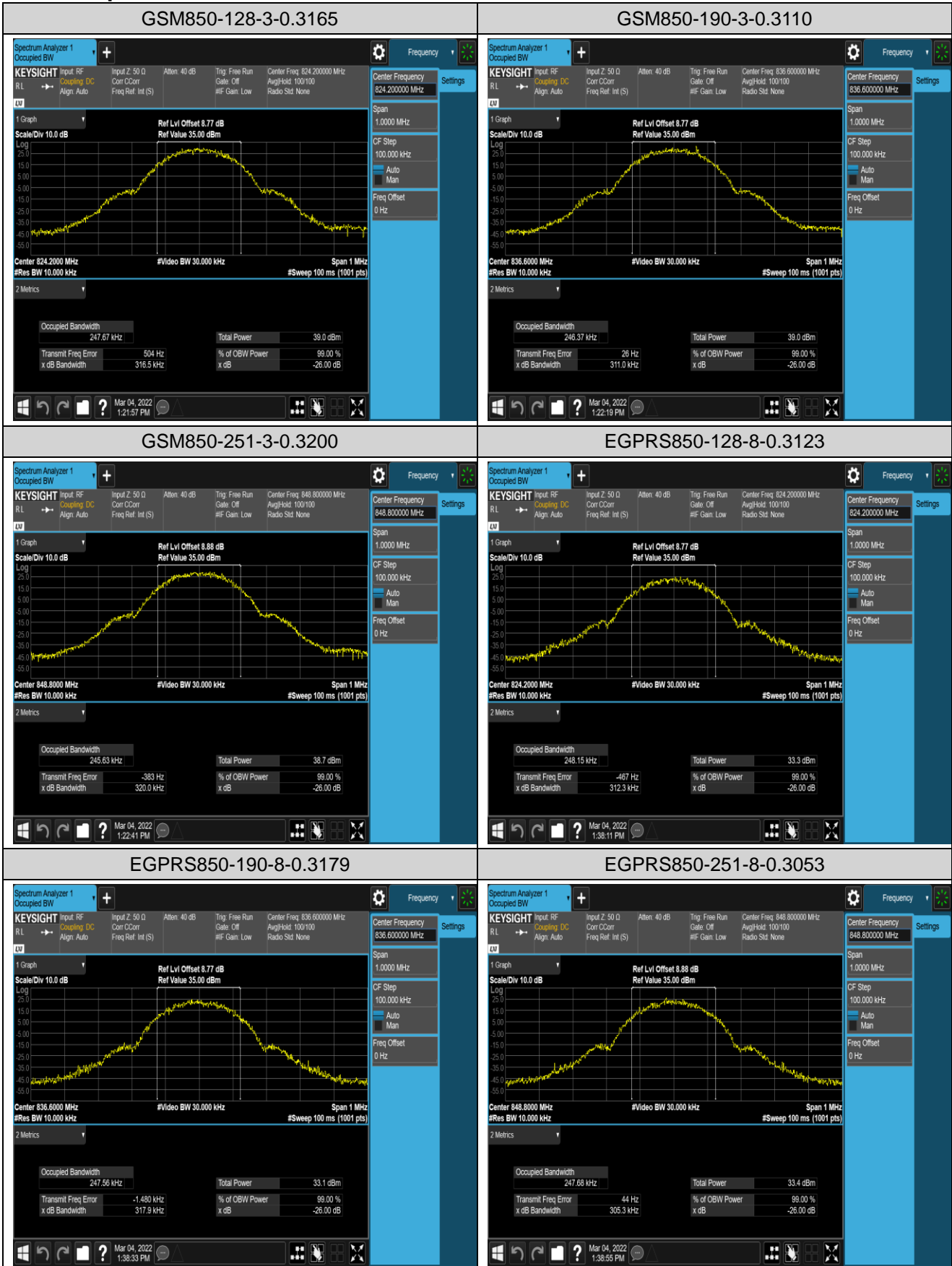


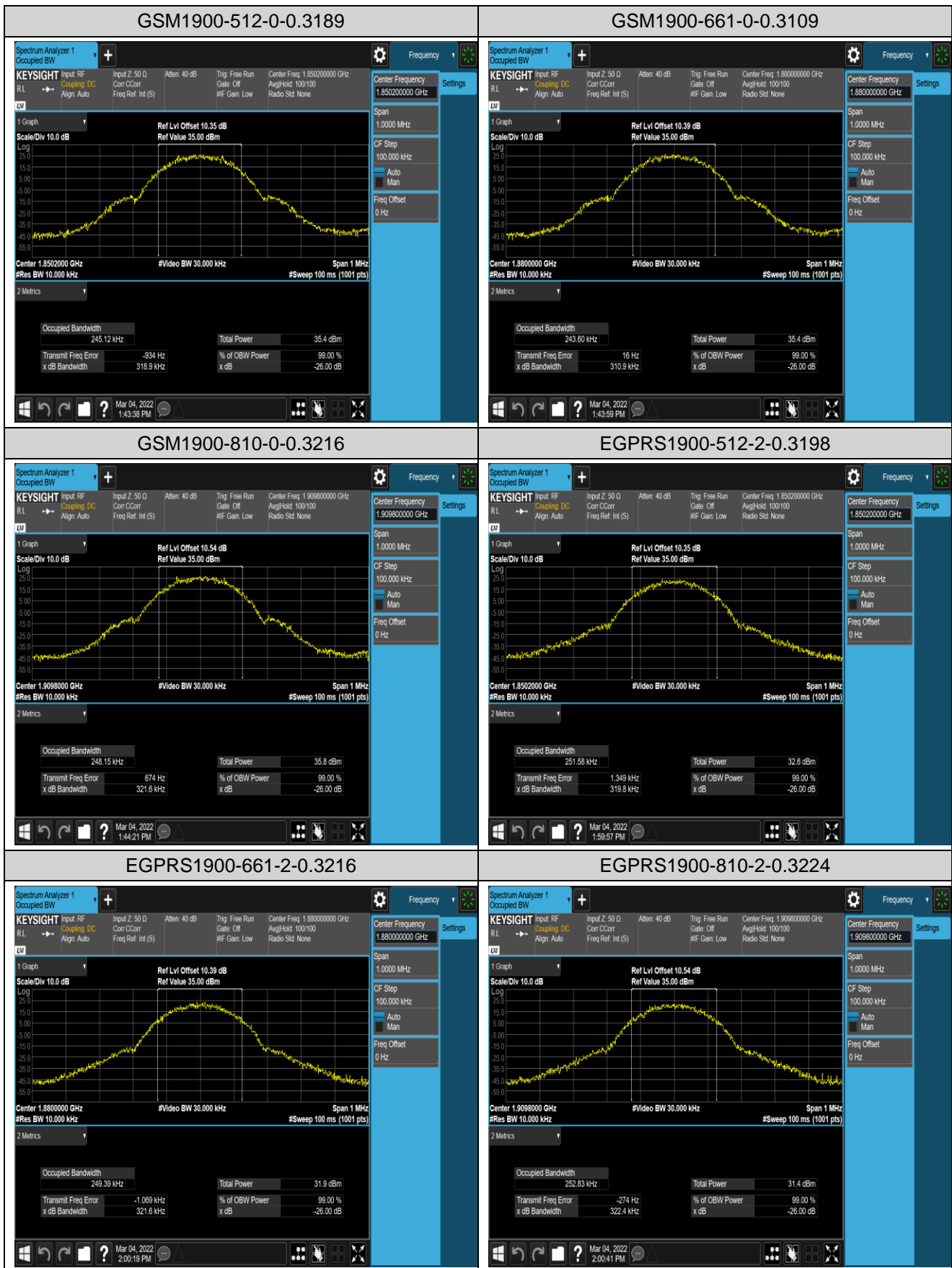
## Appendix C: 26dB Bandwidth and Occupied Bandwidth

### Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24767	0.3165	---	PASS
GSM850	190	5	0.24637	0.3110	---	PASS
GSM850	251	5	0.24563	0.3200	---	PASS
EGPRS850	128	8	0.24815	0.3123	---	PASS
EGPRS850	190	8	0.24756	0.3179	---	PASS
EGPRS850	251	8	0.24768	0.3053	---	PASS
GSM1900	512	0	0.24512	0.3189	---	PASS
GSM1900	661	0	0.24360	0.3109	---	PASS
GSM1900	810	0	0.24815	0.3216	---	PASS
EGPRS1900	512	2	0.25158	0.3198	---	PASS
EGPRS1900	661	2	0.24939	0.3216	---	PASS
EGPRS1900	810	2	0.25283	0.3224	---	PASS

Test Graphs



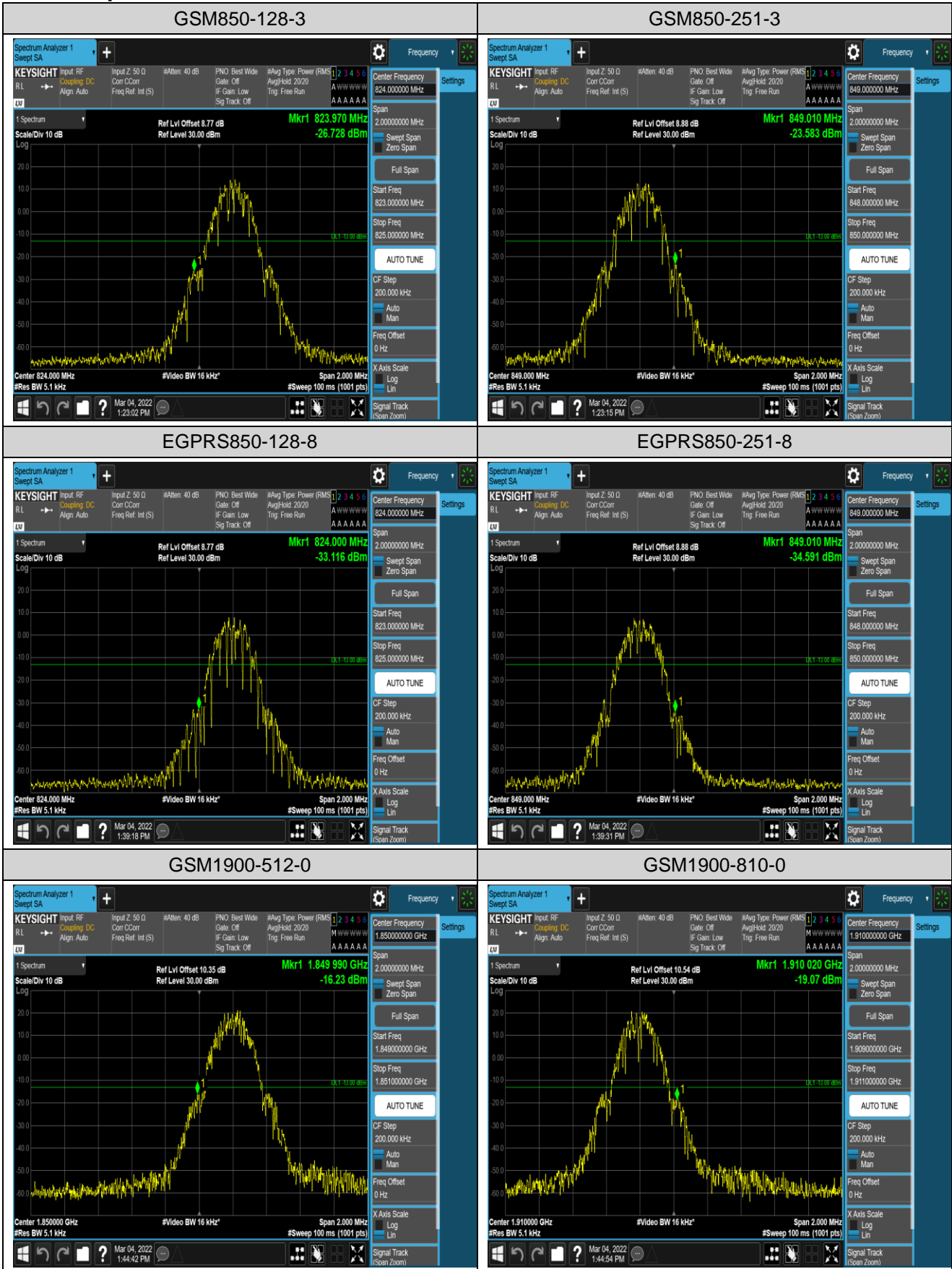


## Appendix D: Band Edge

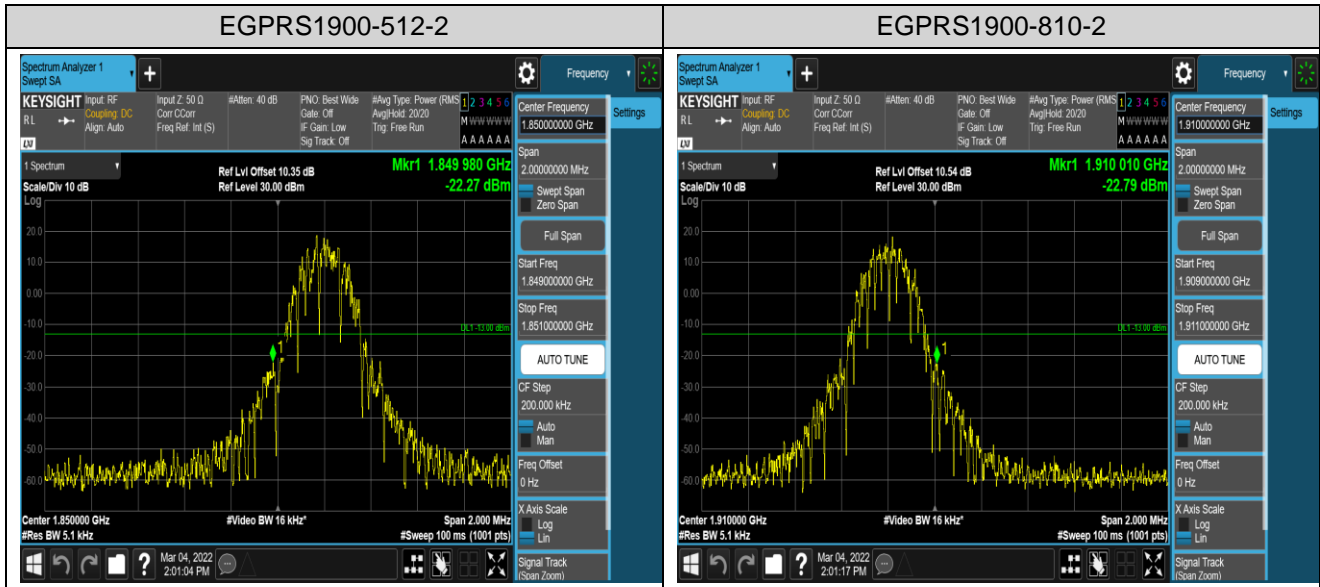
### Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.97	-26.728	-13	PASS
GSM850	251	5	849.01	-23.583	-13	PASS
EGPRS850	128	8	824.00	-31.116	-13	PASS
EGPRS850	251	8	849.01	-34.591	-13	PASS
GSM1900	512	0	1849.99	-16.23	-13	PASS
GSM1900	810	0	1910.02	-19.07	-13	PASS
EGPRS1900	512	2	1849.98	-22.27	-13	PASS
EGPRS1900	810	2	1910.01	-22.79	-13	PASS

Test Graphs







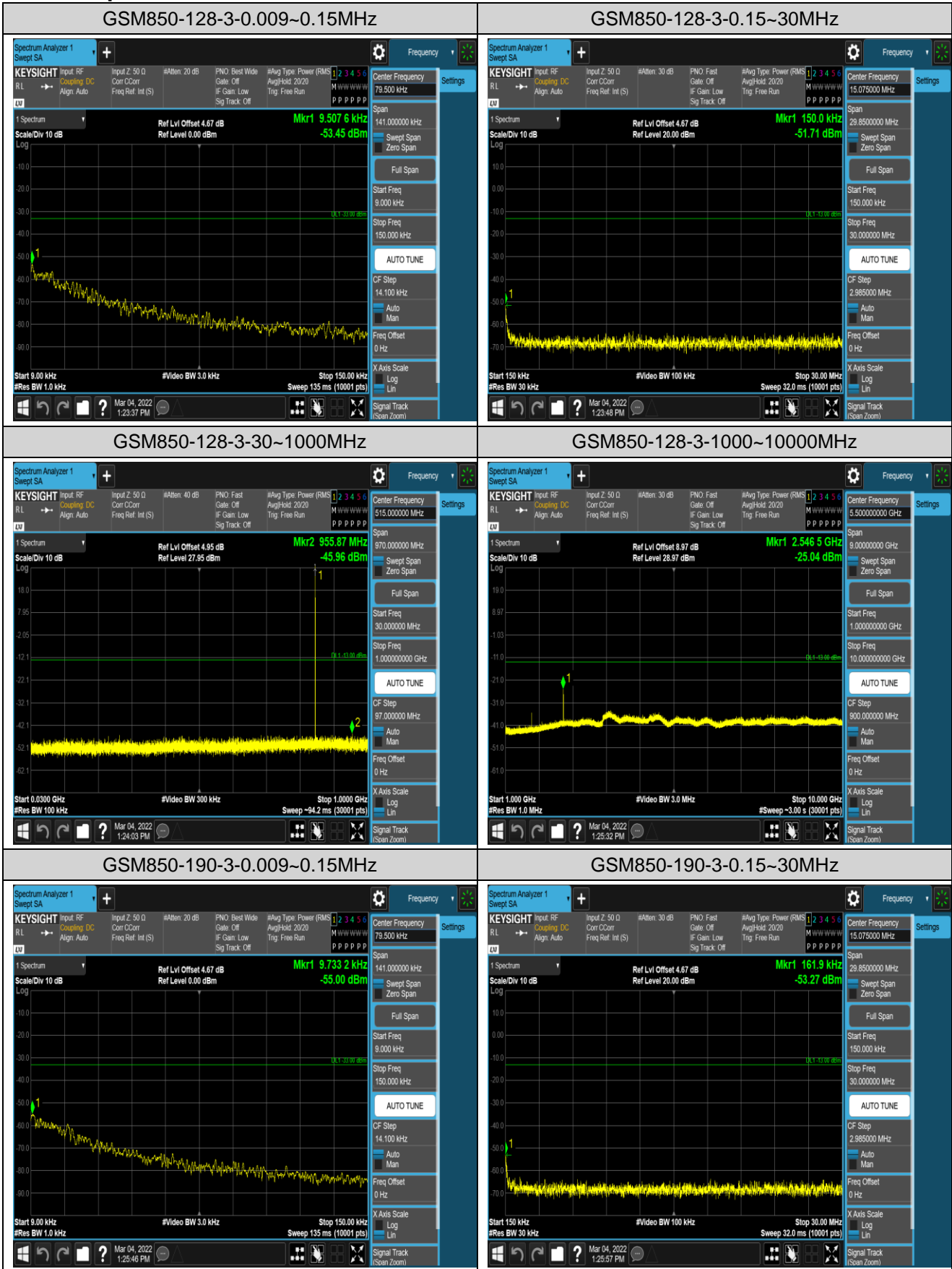
## Appendix E: Conducted Spurious Emission

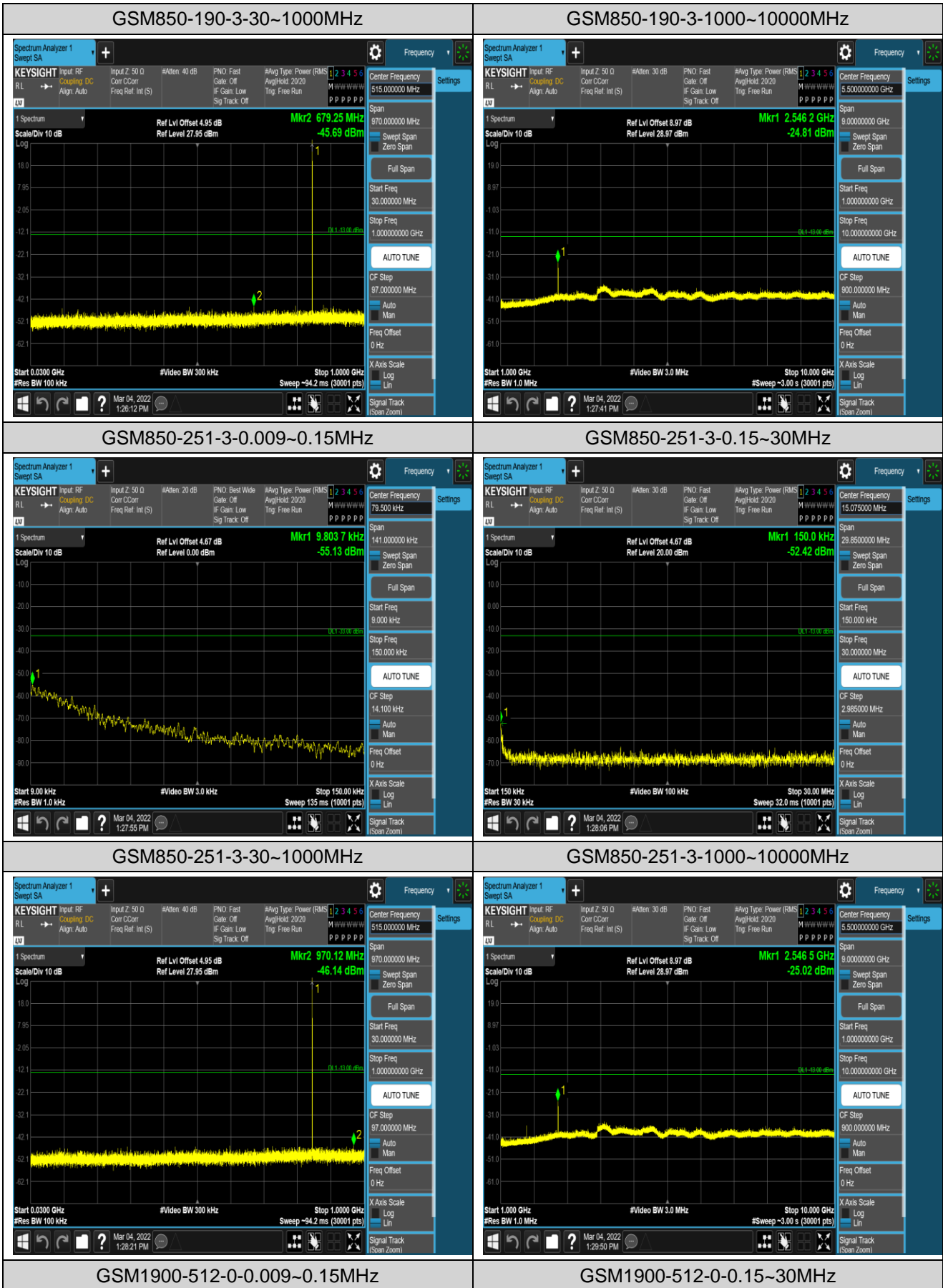
### Test Result

Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	3	0.009~0.15MHz	0.01	-53.45	-33	PASS
GSM850	128	3	0.15~30MHz	0.15	-51.71	-13	PASS
GSM850	128	3	30~1000MHz	955.87	-45.96	-13	PASS
GSM850	128	3	1000~10000MHz	2546.5	-25.04	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-55	-33	PASS
GSM850	190	3	0.15~30MHz	0.16	-53.27	-13	PASS
GSM850	190	3	30~1000MHz	679.25	-45.69	-13	PASS
GSM850	190	3	1000~10000MHz	2546.2	-24.81	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.01	-55.13	-33	PASS
GSM850	251	3	0.15~30MHz	0.15	-52.42	-13	PASS
GSM850	251	3	30~1000MHz	970.12	-46.14	-13	PASS
GSM850	251	3	1000~10000MHz	2546.5	-25.02	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.49	-43	PASS
GSM1900	512	0	0.15~30MHz	0.19	-53.69	-23	PASS
GSM1900	512	0	30~1000MHz	744.41	-47.22	-13	PASS
GSM1900	512	0	1000~18000MHz	3819.73	-33.98	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.02	-55.9	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-51.59	-23	PASS
GSM1900	661	0	30~1000MHz	940.28	-46.04	-13	PASS
GSM1900	661	0	1000~18000MHz	3819.73	-33.91	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.02	-56.8	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-50.89	-23	PASS
GSM1900	810	0	30~1000MHz	899.67	-45.88	-13	PASS
GSM1900	810	0	1000~18000MHz	3819.17	-34.37	-13	PASS

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

Test Graphs

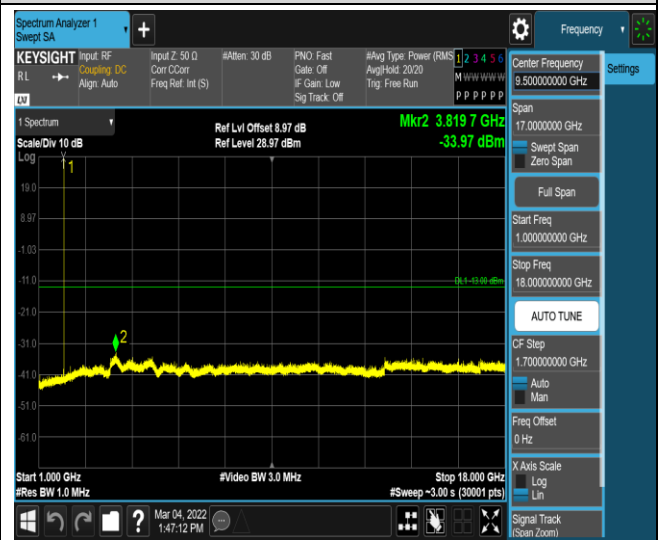
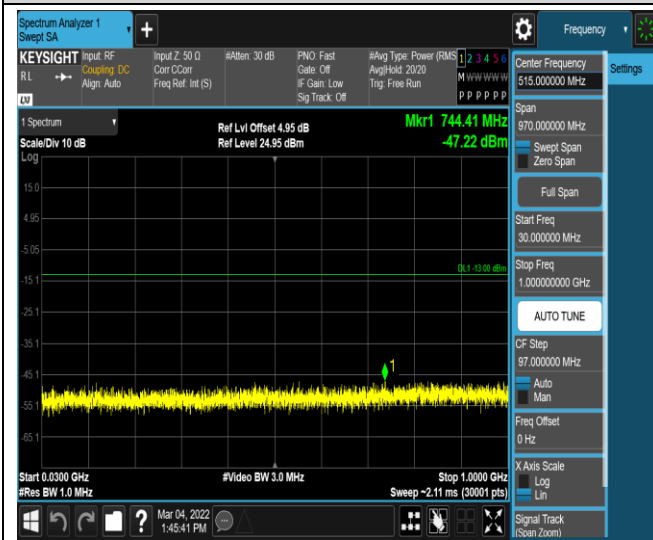






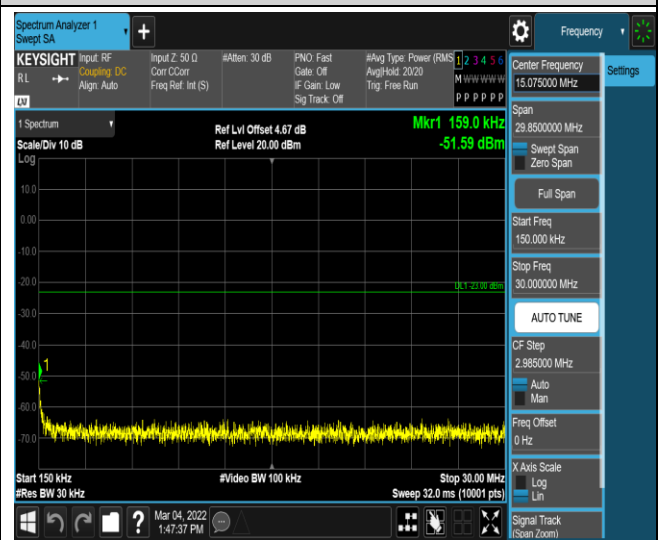
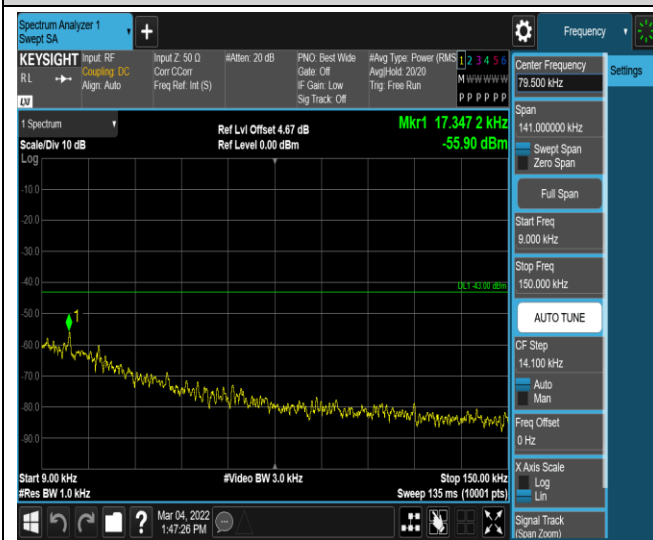
GSM1900-512-0-30~1000MHz

GSM1900-512-0-1000~18000MHz



GSM1900-661-0-0.009~0.15MHz

GSM1900-661-0-0.15~30MHz



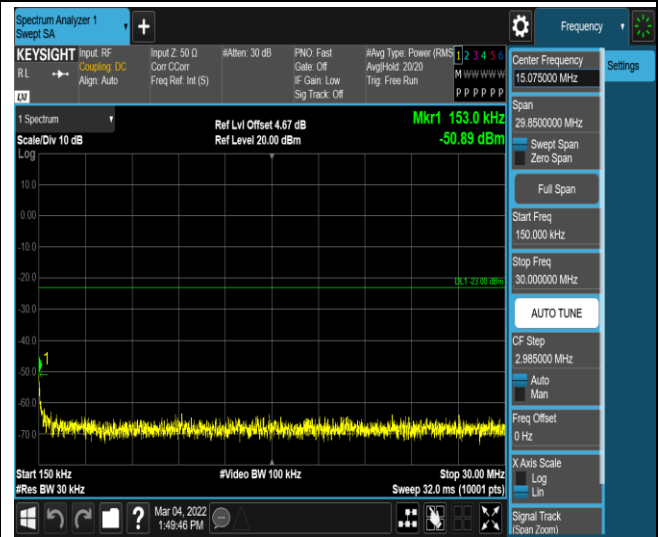
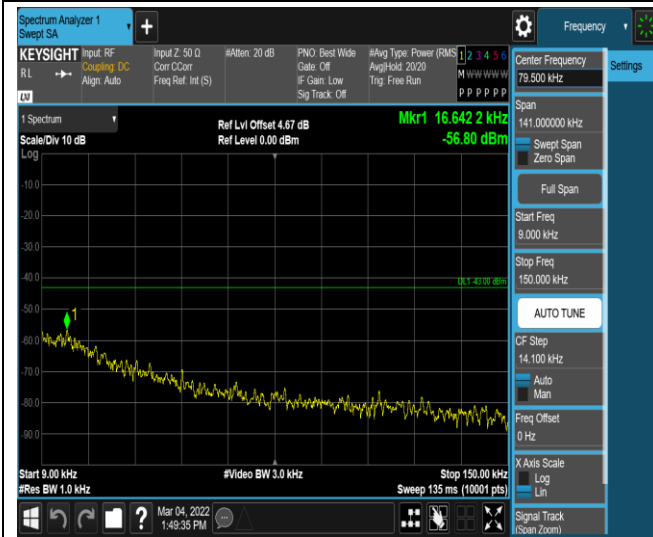
GSM1900-661-0-30~1000MHz

GSM1900-661-0-1000~18000MHz



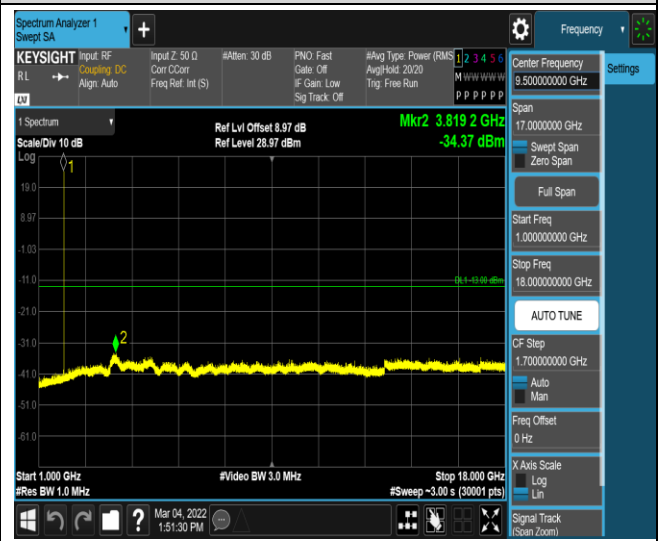
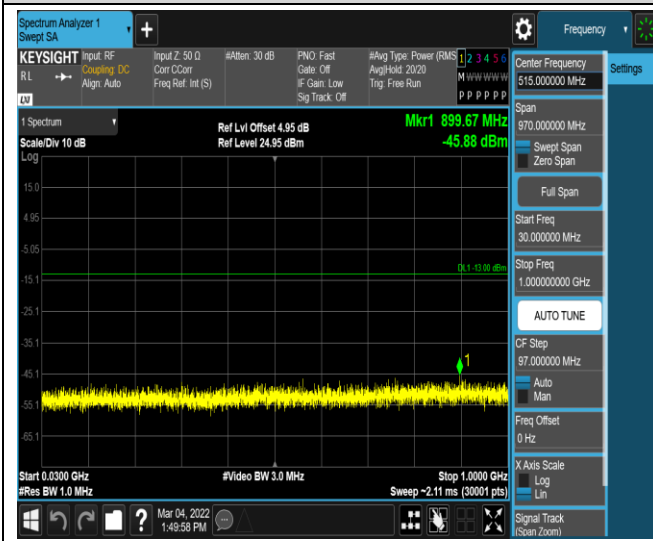
GSM1900-810-0-0.009~0.15MHz

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		
3.85	-30	-1.13	-0.001351	±2.5	Pass
	-20	-3.45	-0.004124		
	-10	0.48	0.000574		
	0	-2.39	-0.002857		
	10	-4.33	-0.005176		
	20	-2.84	-0.003395		
	30	-1.58	-0.001889		
	40	-4.75	-0.005678		
	50	-0.29	-0.000347		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-1.07	-0.001279	±2.5	Pass
	3.85	0.29	0.000347		
	4.43	-1.13	-0.001351		
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		
3.85	-30	-4.29	-0.005128	±2.5	Pass
	-20	-5.55	-0.006634		
	-10	4.36	0.005212		
	0	-1.71	-0.002044		
	10	-1.90	-0.002271		
	20	2.71	0.003239		
	30	-1.81	-0.002164		
	40	-0.71	-0.000849		
	50	0.26	0.000311		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-2.84	-0.003395	±2.5	Pass
	3.85	-4.46	-0.005331		
	4.43	-8.98	-0.010734		
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	27.18	0.014457	Within authorized band for PCS 1900	Pass
	-20	31.58	0.016798		
	-10	35.71	0.018995		
	0	27.99	0.014888		
	10	31.90	0.016968		
	20	29.90	0.015904		
	30	28.19	0.014995		
	40	34.29	0.018239		
	50	27.73	0.014750		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	29.19	0.015527	Within authorized band for PCS 1900	Pass
	3.85	31.96	0.017000		
	4.43	32.54	0.017309		
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	21.95	0.011676	Within authorized band for PCS 1900	Pass
	-20	24.25	0.012899		
	-10	43.26	0.023011		
	0	38.19	0.020314		
	10	42.10	0.022394		
	20	36.13	0.019218		
	30	36.03	0.019165		
	40	36.32	0.019319		
	50	31.16	0.016574		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	28.80	0.015319	Within authorized band for PCS 1900	Pass
	3.85	27.48	0.014617		
	4.43	20.50	0.010904		
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

