

## 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	32.98	32.68	38.5	PASS
GSM850	190	3	33.16	32.86	38.5	PASS
GSM850	251	3	33.14	32.84	38.5	PASS
GSM1900	512	0	29.39	30.44	33	PASS
GSM1900	661	0	29.42	30.47	33	PASS
GSM1900	810	0	29.37	30.42	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	3	1	32.85	32.55	38.5	PASS
GPRS850	128	3	2	30.73	30.43	38.5	PASS
GPRS850	128	3	3	28.76	28.46	38.5	PASS
GPRS850	128	3	4	26.62	26.32	38.5	PASS
GPRS850	190	3	1	33.02	32.72	38.5	PASS
GPRS850	190	3	2	30.75	30.45	38.5	PASS
GPRS850	190	3	3	28.76	28.46	38.5	PASS
GPRS850	190	3	4	26.61	26.31	38.5	PASS
GPRS850	251	3	1	33.05	32.75	38.5	PASS
GPRS850	251	3	2	30.79	30.49	38.5	PASS
GPRS850	251	3	3	28.80	28.50	38.5	PASS
GPRS850	251	3	4	26.65	26.35	38.5	PASS
GPRS1900	512	0	1	29.38	30.43	33	PASS
GPRS1900	512	0	2	27.25	28.30	33	PASS
GPRS1900	512	0	3	25.69	26.74	33	PASS
GPRS1900	512	0	4	23.57	24.62	33	PASS
GPRS1900	661	0	1	29.33	30.38	33	PASS
GPRS1900	661	0	2	27.04	28.09	33	PASS
GPRS1900	661	0	3	25.46	26.51	33	PASS
GPRS1900	661	0	4	23.34	24.39	33	PASS
GPRS1900	810	0	1	29.33	30.38	33	PASS
GPRS1900	810	0	2	26.85	27.90	33	PASS
GPRS1900	810	0	3	25.28	26.33	33	PASS
GPRS1900	810	0	4	23.11	24.16	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	25.69	25.39	38.5	PASS
EGPRS850	128	8	2	25.61	25.31	38.5	PASS
EGPRS850	128	8	3	24.42	24.12	38.5	PASS
EGPRS850	128	8	4	22.11	21.81	38.5	PASS
EGPRS850	190	8	1	25.07	24.77	38.5	PASS
EGPRS850	190	8	2	25.15	24.85	38.5	PASS
EGPRS850	190	8	3	24.12	23.82	38.5	PASS
EGPRS850	190	8	4	21.80	21.50	38.5	PASS
EGPRS850	251	8	1	25.11	24.81	38.5	PASS
EGPRS850	251	8	2	25.17	24.87	38.5	PASS
EGPRS850	251	8	3	24.14	23.84	38.5	PASS
EGPRS850	251	8	4	21.86	21.56	38.5	PASS
EGPRS1900	512	2	1	24.82	25.87	33	PASS
EGPRS1900	512	2	2	24.73	25.78	33	PASS
EGPRS1900	512	2	3	23.79	24.84	33	PASS
EGPRS1900	512	2	4	21.21	22.26	33	PASS
EGPRS1900	661	2	1	25.91	26.96	33	PASS
EGPRS1900	661	2	2	25.89	26.94	33	PASS
EGPRS1900	661	2	3	24.72	25.77	33	PASS
EGPRS1900	661	2	4	22.30	23.35	33	PASS
EGPRS1900	810	2	1	25.43	26.48	33	PASS
EGPRS1900	810	2	2	25.46	26.51	33	PASS
EGPRS1900	810	2	3	24.04	25.09	33	PASS
EGPRS1900	810	2	4	21.54	22.59	33	PASS

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

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

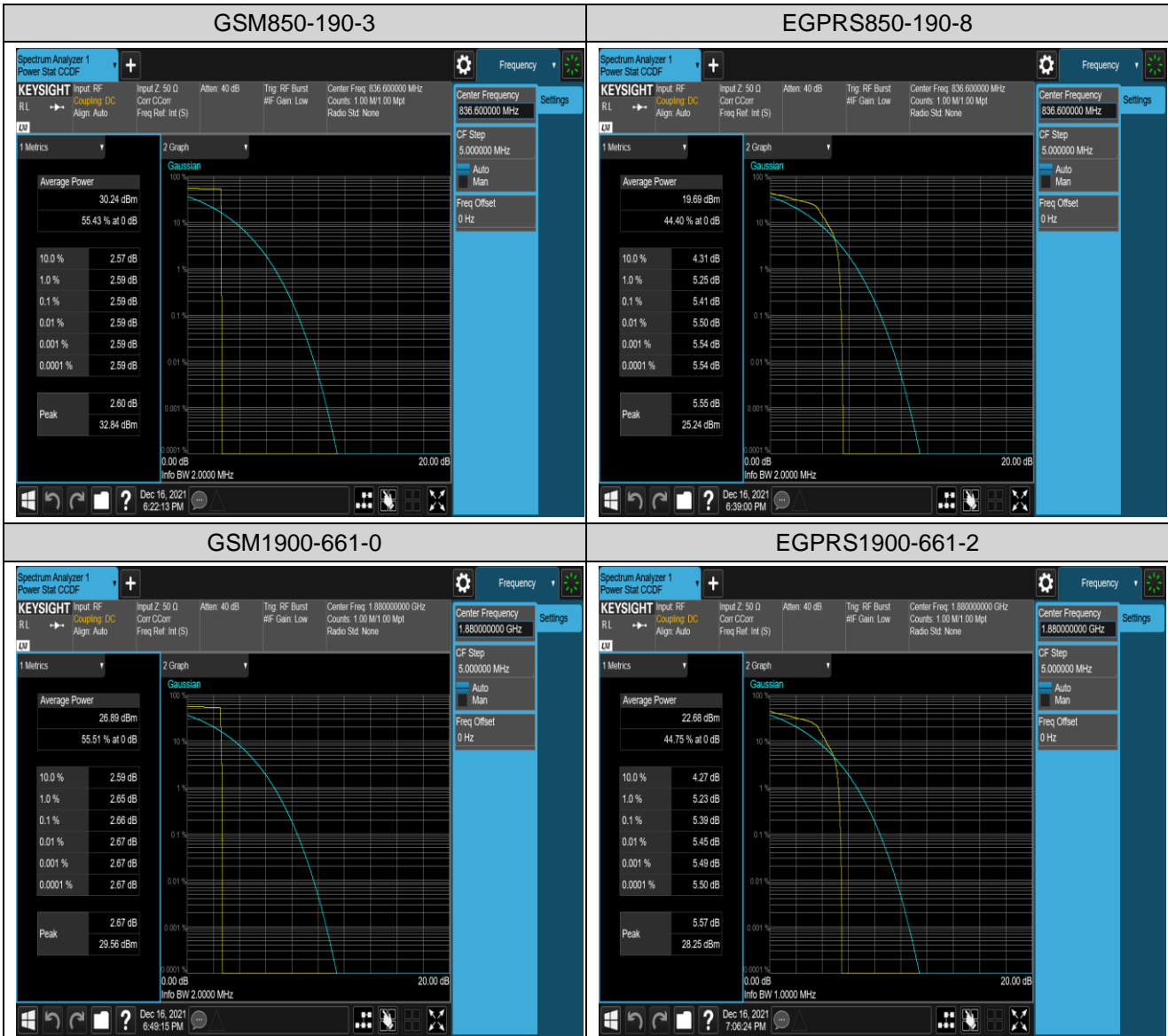
## Appendix B: Peak-to-Average Ratio(CCDF)

### Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	3	2.59	13	PASS
EGPRS850	190	8	5.41	13	PASS
GSM1900	661	0	2.66	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

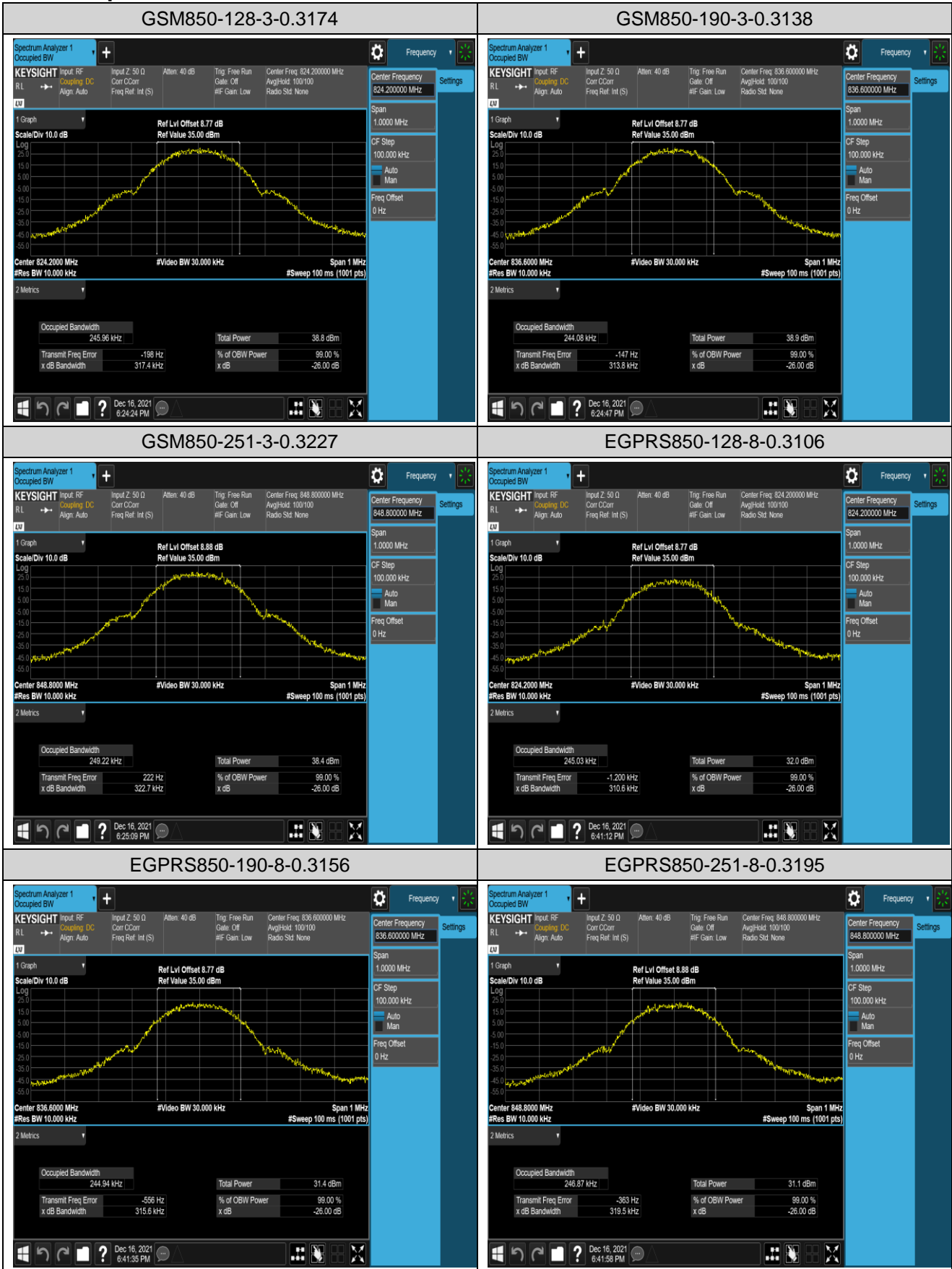


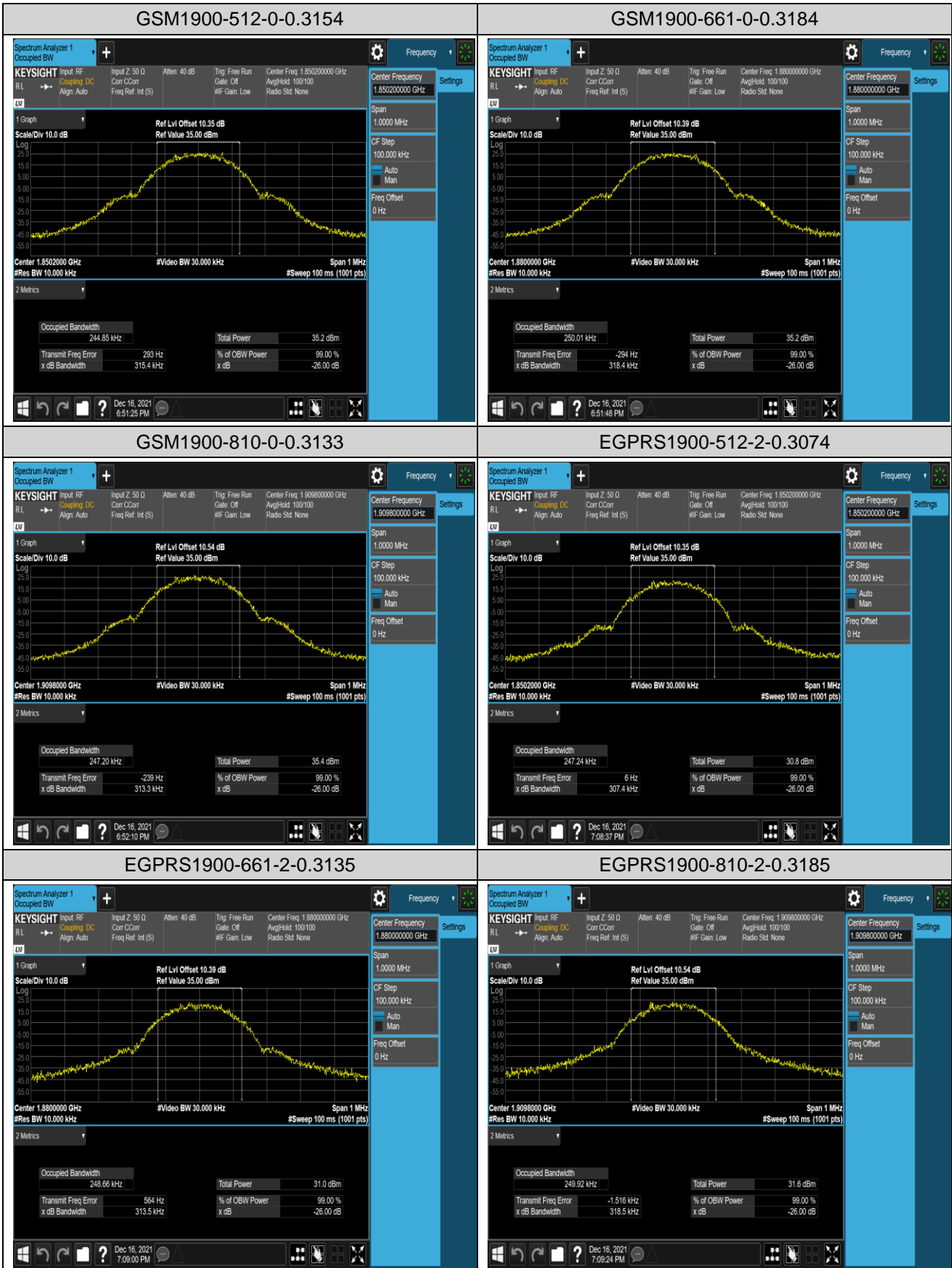
## Appendix C: 26dB Bandwidth and Occupied Bandwidth

### Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	3	0.24596	0.3174	---	PASS
GSM850	190	3	0.24408	0.3138	---	PASS
GSM850	251	3	0.24922	0.3227	---	PASS
EGPRS850	128	8	0.24503	0.3106	---	PASS
EGPRS850	190	8	0.24494	0.3156	---	PASS
EGPRS850	251	8	0.24687	0.3195	---	PASS
GSM1900	512	0	0.24485	0.3154	---	PASS
GSM1900	661	0	0.25001	0.3184	---	PASS
GSM1900	810	0	0.24720	0.3133	---	PASS
EGPRS1900	512	2	0.24724	0.3074	---	PASS
EGPRS1900	661	2	0.24866	0.3135	---	PASS
EGPRS1900	810	2	0.24992	0.3185	---	PASS

Test Graphs



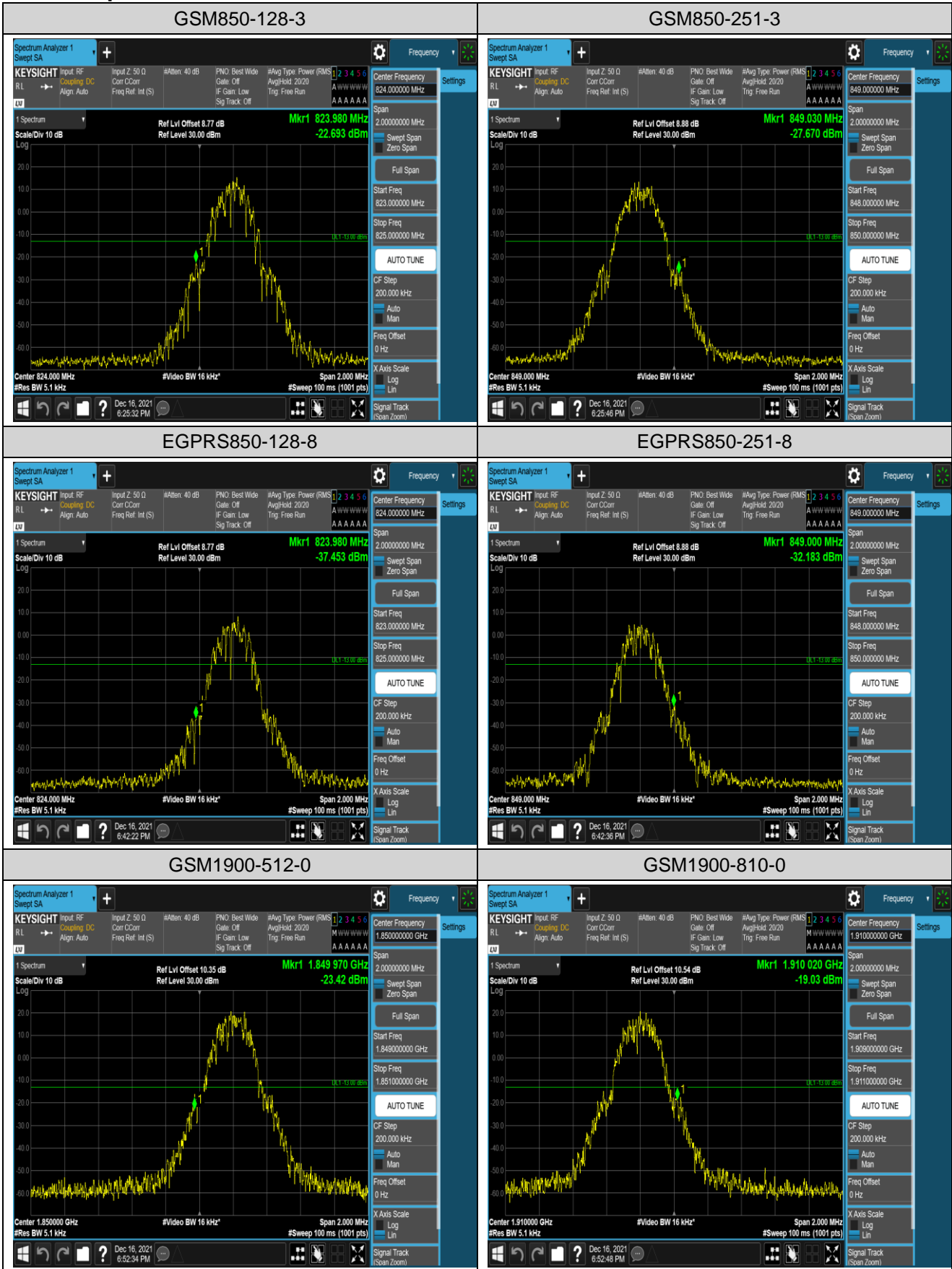


## Appendix D: Band Edge

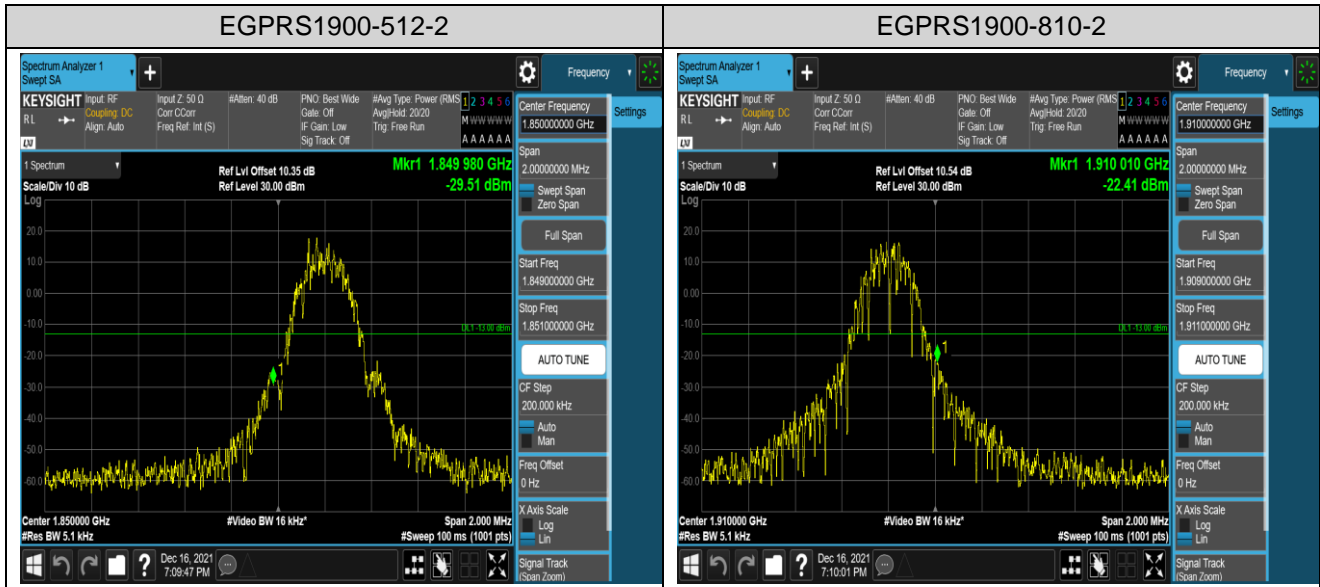
### Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	3	823.98	-22.69	-13	PASS
GSM850	251	3	849.03	-21.85	-13	PASS
EGPRS850	128	8	823.98	-32.01	-13	PASS
EGPRS850	251	8	849.00	-31.14	-13	PASS
GSM1900	512	0	1849.97	-16.08	-13	PASS
GSM1900	810	0	1910.02	-15.88	-13	PASS
EGPRS1900	512	2	1849.98	-24.34	-13	PASS
EGPRS1900	810	2	1910.01	-19.76	-13	PASS

Test Graphs







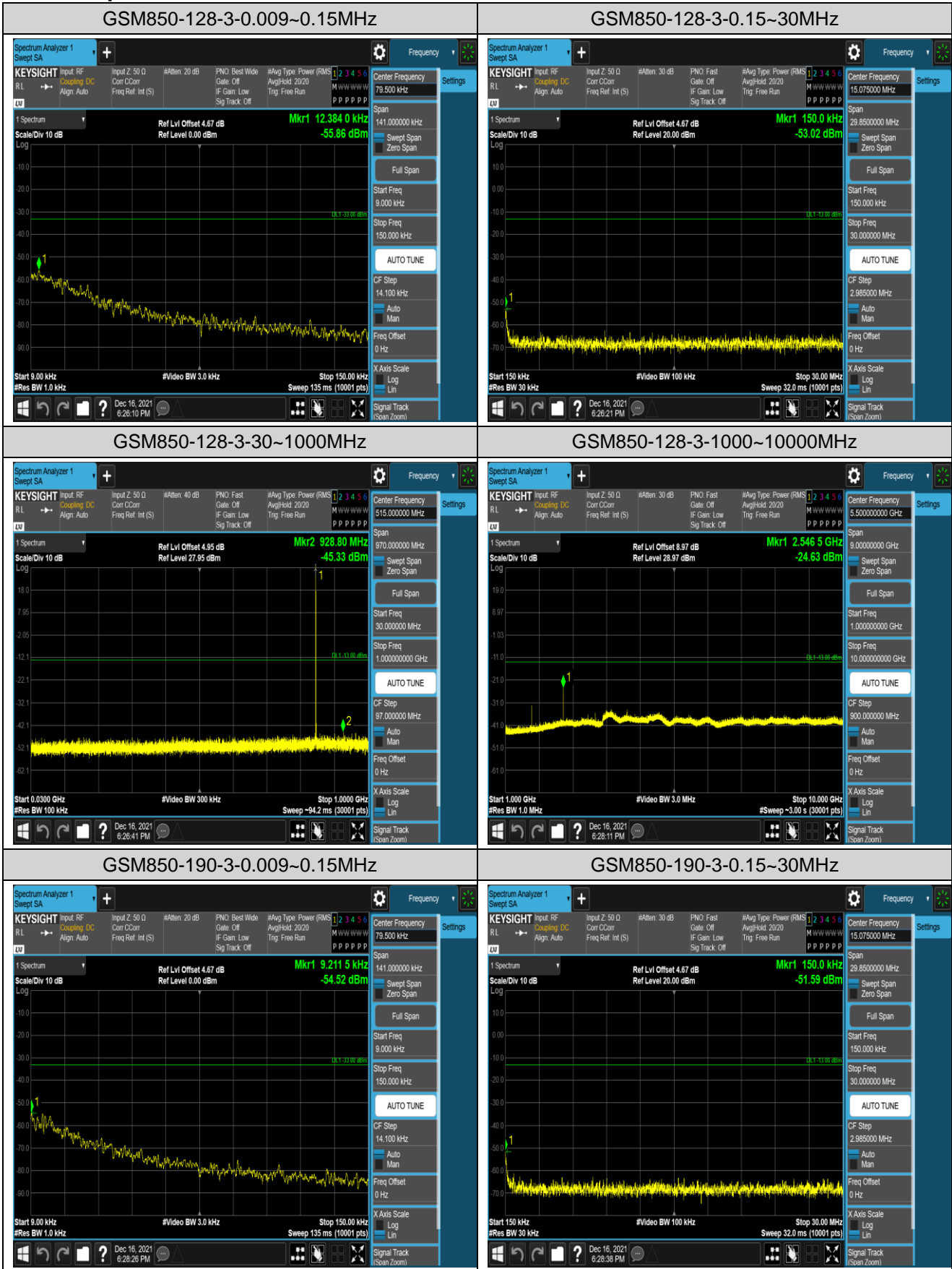
## Appendix E: Conducted Spurious Emission

### Test Result

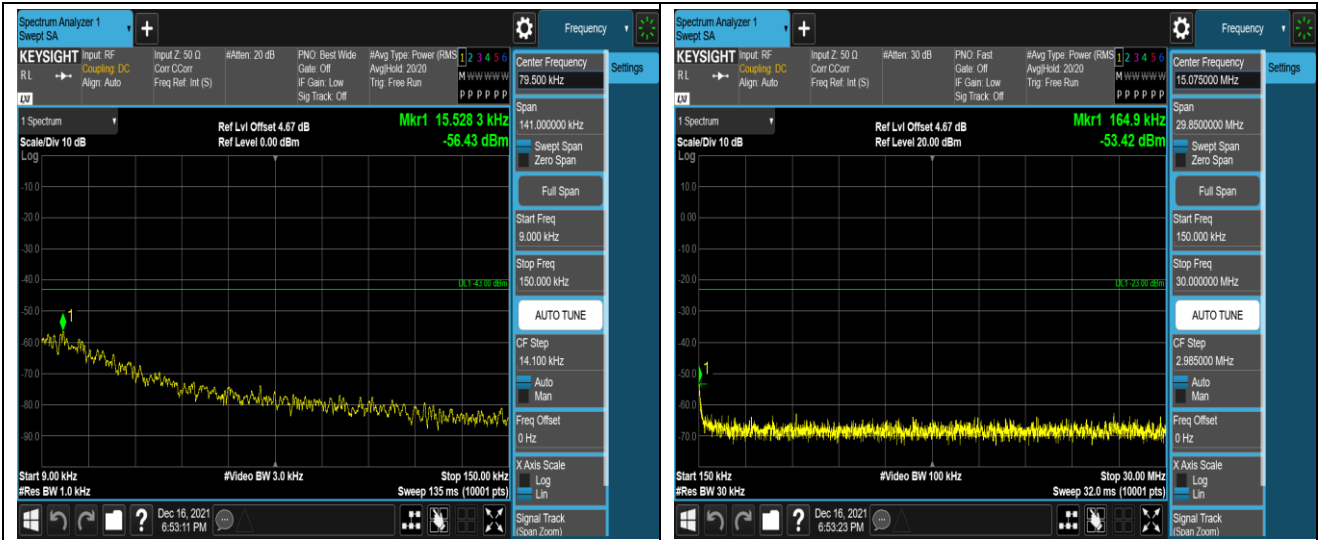
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	3	0.009~0.15MHz	0.01	-55.86	-33	PASS
GSM850	128	3	0.15~30MHz	0.15	-53.02	-13	PASS
GSM850	128	3	30~1000MHz	928.8	-45.33	-13	PASS
GSM850	128	3	1000~10000MHz	2546.5	-24.63	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-54.52	-33	PASS
GSM850	190	3	0.15~30MHz	0.15	-51.59	-13	PASS
GSM850	190	3	30~1000MHz	559.52	-44.93	-13	PASS
GSM850	190	3	1000~10000MHz	2546.5	-24.59	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.02	-55.99	-33	PASS
GSM850	251	3	0.15~30MHz	0.15	-52.57	-13	PASS
GSM850	251	3	30~1000MHz	479.47	-45.45	-13	PASS
GSM850	251	3	1000~10000MHz	2546.2	-24.84	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.02	-56.44	-43	PASS
GSM1900	512	0	0.15~30MHz	0.16	-53.42	-23	PASS
GSM1900	512	0	30~1000MHz	906.33	-46.98	-13	PASS
GSM1900	512	0	1000~18000MHz	5729.4	-32.38	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-56.96	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-53.14	-23	PASS
GSM1900	661	0	30~1000MHz	460	-46.53	-13	PASS
GSM1900	661	0	1000~18000MHz	5729.4	-31.27	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-57.09	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-54.27	-23	PASS
GSM1900	810	0	30~1000MHz	672.69	-46.98	-13	PASS
GSM1900	810	0	1000~18000MHz	5729.4	-32.8	-13	PASS

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

Test Graphs

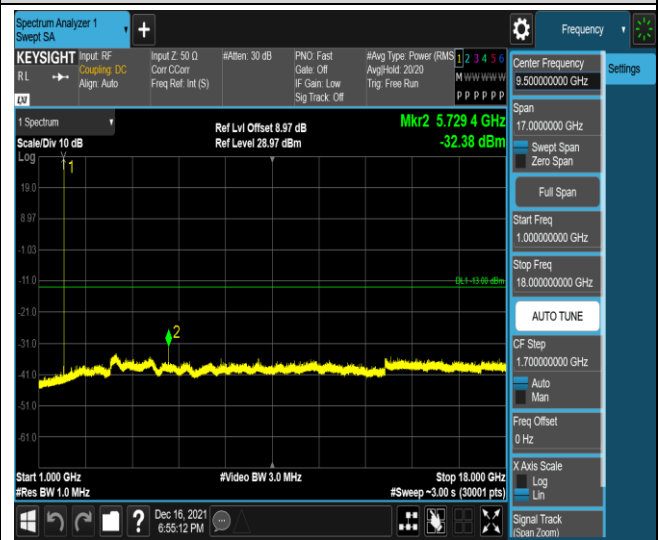






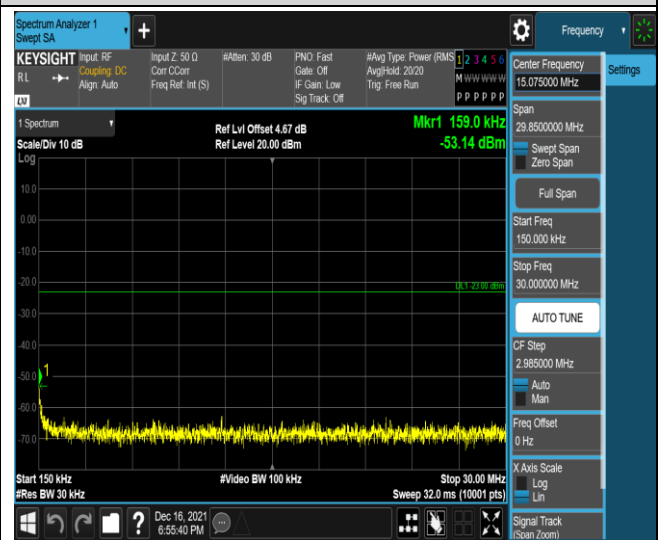
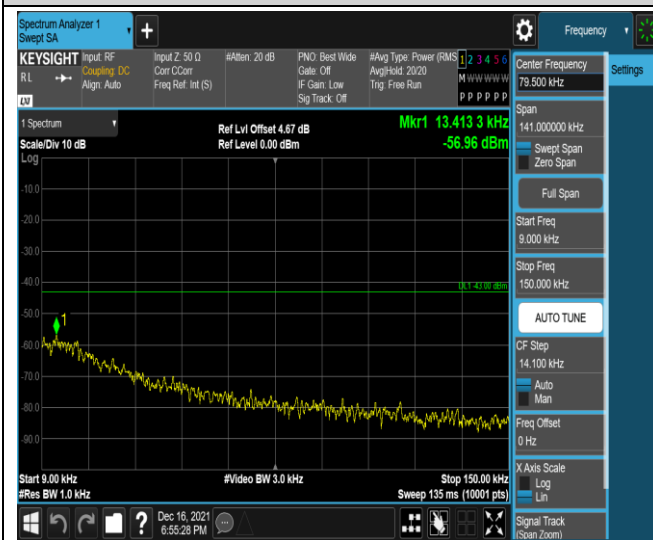
GSM1900-512-0-30~1000MHz

GSM1900-512-0-1000~18000MHz



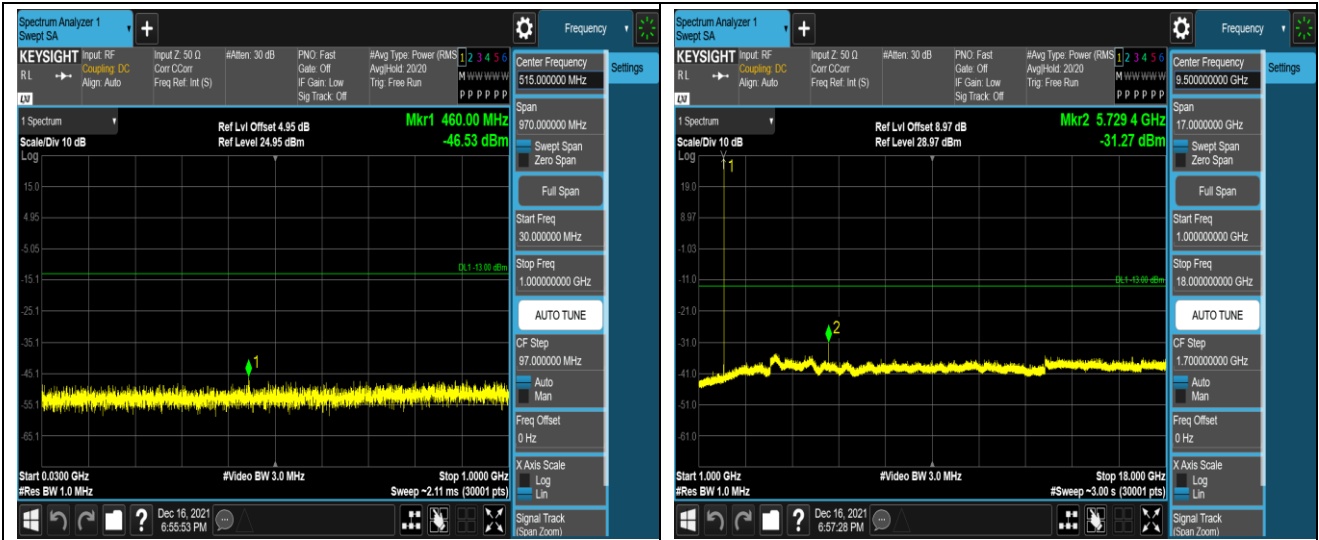
GSM1900-661-0-0.009~0.15MHz

GSM1900-661-0-0.15~30MHz



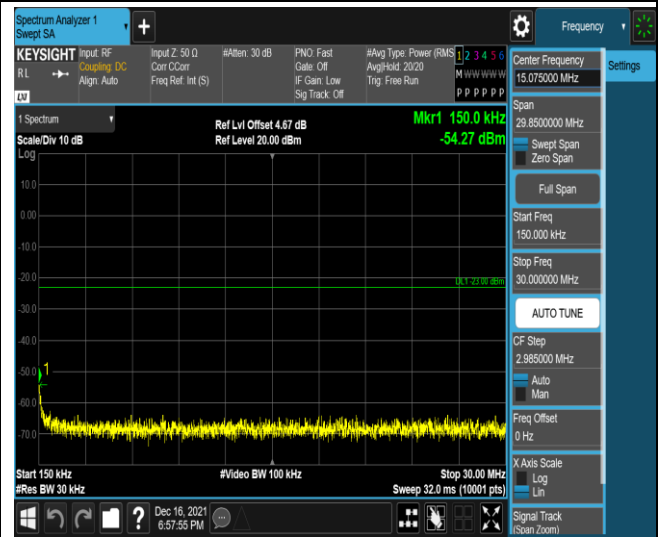
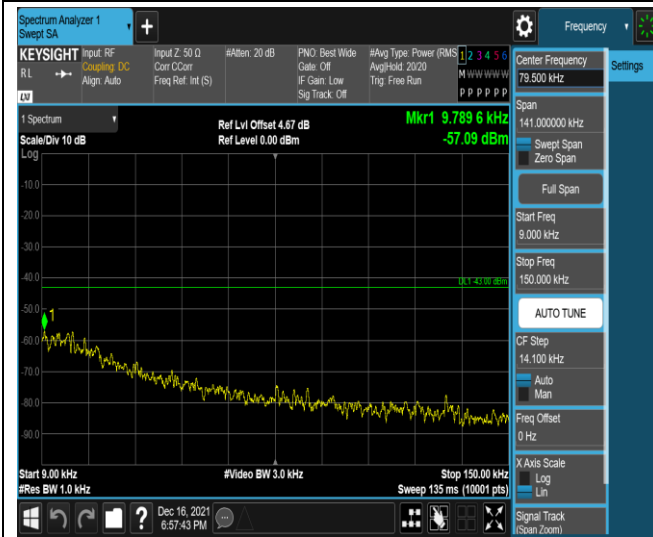
GSM1900-661-0-30~1000MHz

GSM1900-661-0-1000~18000MHz



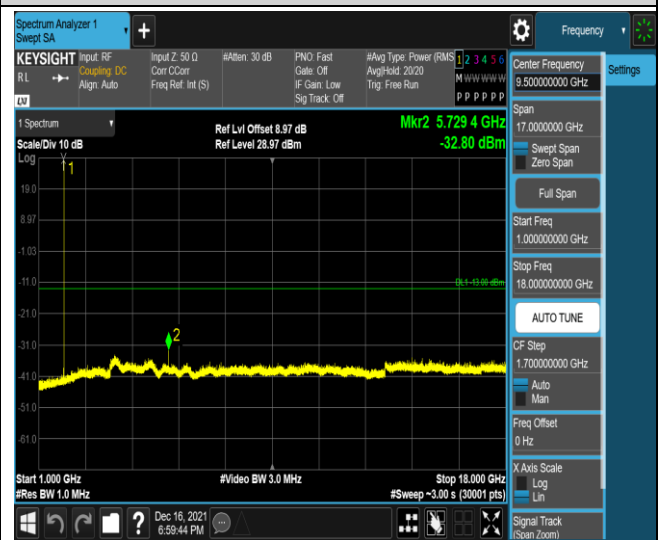
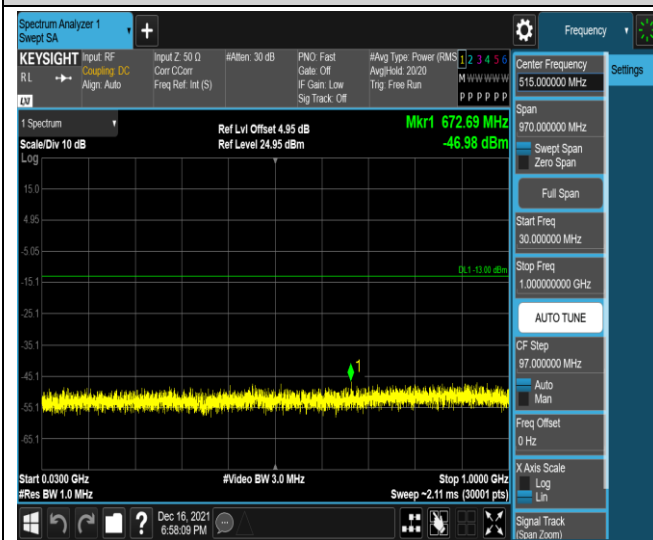
GSM1900-810-0-0.009~0.15MHz

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		
3.70	-30	3.42	0.004088	±2.5	Pass
	-20	-8.91	-0.010650		
	-10	-2.81	-0.003359		
	0	-5.07	-0.006060		
	10	-14.95	-0.017870		
	20	-9.85	-0.011774		
	30	-5.94	-0.007100		
	40	-12.30	-0.014702		
	50	-8.23	-0.009837		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-5.68	-0.006789	±2.5	Pass
	3.70	-6.23	-0.007447		
	4.20	-9.04	-0.010806		
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		
3.70	-30	4.75	0.005678	±2.5	Pass
	-20	5.62	0.006718		
	-10	8.14	0.009730		
	0	7.91	0.009455		
	10	6.78	0.008104		
	20	7.43	0.008881		
	30	4.10	0.004901		
	40	5.68	0.006789		
	50	9.43	0.011272		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	9.20	0.010997	±2.5	Pass
	3.70	7.10	0.008487		
	4.20	8.07	0.009646		
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		
3.70	-30	10.75	0.005718	Within authorized band for PCS 1900	Pass
	-20	9.46	0.005032		
	-10	12.37	0.006580		
	0	11.56	0.006149		
	10	1.42	0.000755		
	20	4.62	0.002457		
	30	8.17	0.004346		
	40	26.41	0.014048		
	50	20.50	0.010904		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	5.42	0.002883	Within authorized band for PCS 1900	Pass
	3.70	10.40	0.005532		
	4.20	12.75	0.006782		
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		
3.70	-30	20.08	0.010681	Within authorized band for PCS 1900	Pass
	-20	7.10	0.003777		
	-10	9.23	0.004910		
	0	-1.10	-0.000585		
	10	13.88	0.007383		
	20	13.43	0.007144		
	30	20.95	0.011144		
	40	6.33	0.003367		
	50	1.13	0.000601		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	17.92	0.009532	Within authorized band for PCS 1900	Pass
	3.70	14.04	0.007468		
	4.20	8.07	0.004293		
<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

