

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	33.91	29.66	38.5	PASS
GSM850	190	3	33.74	29.49	38.5	PASS
GSM850	251	3	33.77	29.52	38.5	PASS
GSM1900	512	0	30.00	28.3	33	PASS
GSM1900	661	0	29.94	28.24	33	PASS
GSM1900	810	0	29.90	28.2	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	3	1	33.91	29.66	38.5	PASS
GPRS850	128	3	2	31.76	27.51	38.5	PASS
GPRS850	128	3	3	29.90	25.65	38.5	PASS
GPRS850	128	3	4	27.62	23.37	38.5	PASS
GPRS850	190	3	1	33.67	29.42	38.5	PASS
GPRS850	190	3	2	31.57	27.32	38.5	PASS
GPRS850	190	3	3	29.74	25.49	38.5	PASS
GPRS850	190	3	4	27.47	23.22	38.5	PASS
GPRS850	251	3	1	33.74	29.49	38.5	PASS
GPRS850	251	3	2	31.65	27.4	38.5	PASS
GPRS850	251	3	3	29.80	25.55	38.5	PASS
GPRS850	251	3	4	27.54	23.29	38.5	PASS
GPRS1900	512	0	1	29.93	28.23	33	PASS
GPRS1900	512	0	2	27.75	26.05	33	PASS
GPRS1900	512	0	3	26.11	24.41	33	PASS
GPRS1900	512	0	4	23.82	22.12	33	PASS
GPRS1900	661	0	1	29.92	28.22	33	PASS
GPRS1900	661	0	2	27.63	25.93	33	PASS
GPRS1900	661	0	3	25.97	24.27	33	PASS
GPRS1900	661	0	4	23.68	21.98	33	PASS
GPRS1900	810	0	1	29.88	28.18	33	PASS
GPRS1900	810	0	2	27.36	25.66	33	PASS
GPRS1900	810	0	3	25.70	24	33	PASS
GPRS1900	810	0	4	23.42	21.72	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
EGPRS850	128	8	1	26.12	21.87	38.5	PASS
EGPRS850	128	8	2	26.00	21.75	38.5	PASS
EGPRS850	128	8	3	24.78	20.53	38.5	PASS
EGPRS850	128	8	4	22.39	18.14	38.5	PASS
EGPRS850	190	8	1	26.33	22.08	38.5	PASS
EGPRS850	190	8	2	26.47	22.22	38.5	PASS
EGPRS850	190	8	3	25.18	20.93	38.5	PASS
EGPRS850	190	8	4	22.79	18.54	38.5	PASS
EGPRS850	251	8	1	26.26	22.01	38.5	PASS
EGPRS850	251	8	2	26.35	22.1	38.5	PASS
EGPRS850	251	8	3	25.10	20.85	38.5	PASS
EGPRS850	251	8	4	22.70	18.45	38.5	PASS
EGPRS1900	512	2	1	25.99	24.29	33	PASS
EGPRS1900	512	2	2	25.78	24.08	33	PASS
EGPRS1900	512	2	3	24.08	22.38	33	PASS
EGPRS1900	512	2	4	21.27	19.57	33	PASS
EGPRS1900	661	2	1	26.02	24.32	33	PASS
EGPRS1900	661	2	2	26.06	24.36	33	PASS
EGPRS1900	661	2	3	24.27	22.57	33	PASS
EGPRS1900	661	2	4	21.58	19.88	33	PASS
EGPRS1900	810	2	1	25.41	23.71	33	PASS
EGPRS1900	810	2	2	25.48	23.78	33	PASS
EGPRS1900	810	2	3	23.72	22.02	33	PASS
EGPRS1900	810	2	4	21.01	19.31	33	PASS

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

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

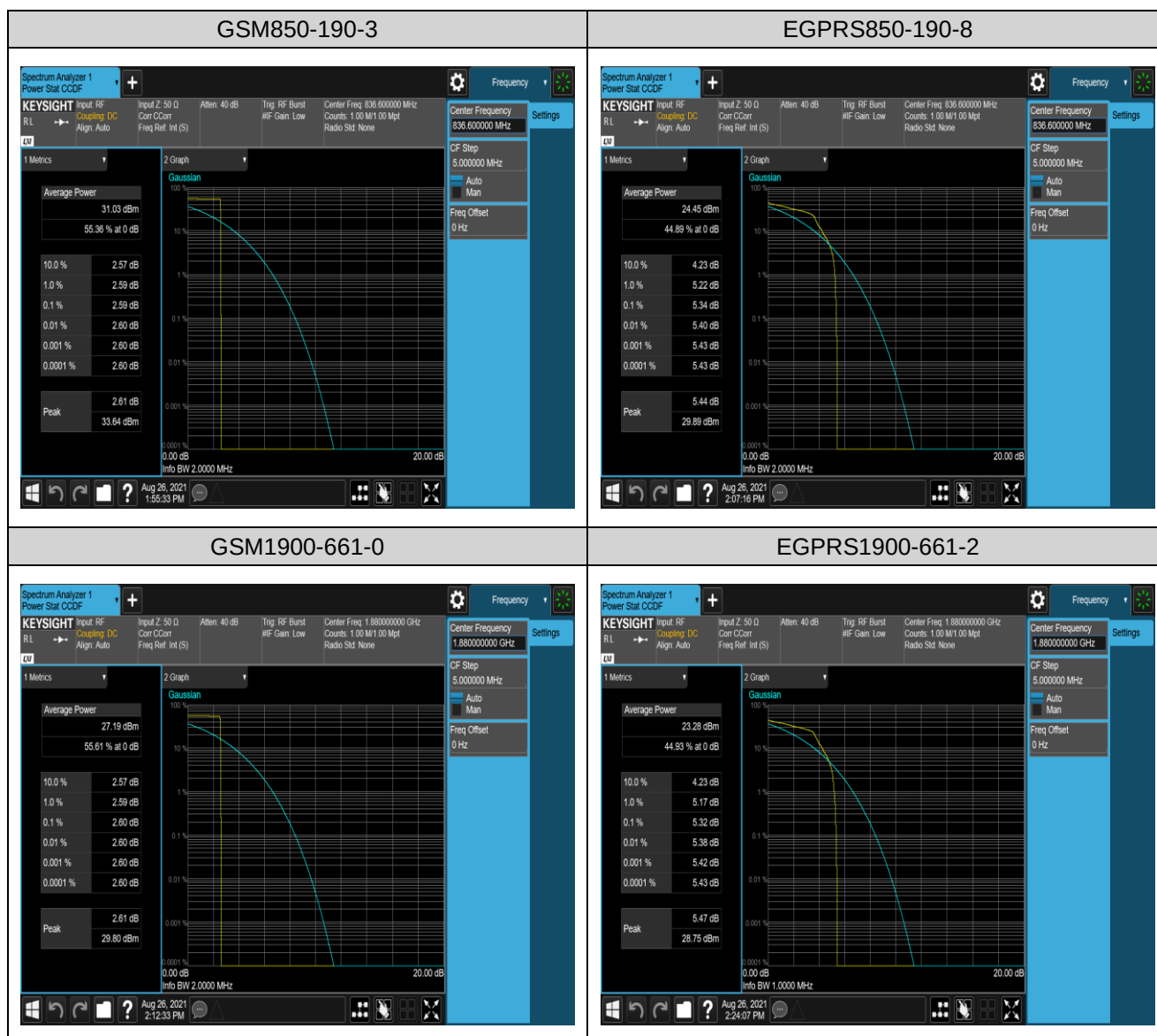
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	3	2.59	13	PASS
EGPRS850	190	8	5.34	13	PASS
GSM1900	661	0	2.6	13	PASS
EGPRS1900	661	2	5.32	13	PASS

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

Test Graphs



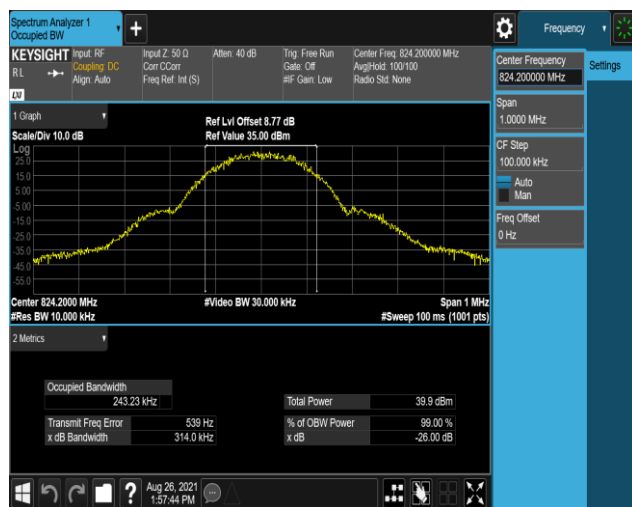
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

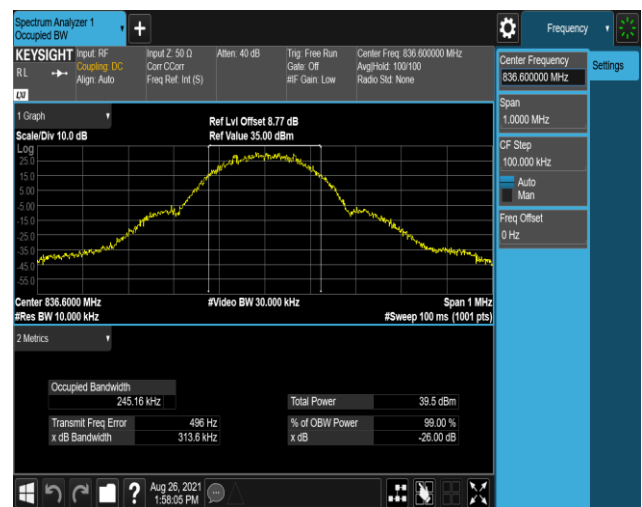
Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	3	0.24323	0.3140	---	PASS
GSM850	190	3	0.24516	0.3136	---	PASS
GSM850	251	3	0.24641	0.3185	---	PASS
EGPRS850	128	8	0.24373	0.3097	---	PASS
EGPRS850	190	8	0.25065	0.3158	---	PASS
EGPRS850	251	8	0.24614	0.3130	---	PASS
GSM1900	512	0	0.24491	0.3241	---	PASS
GSM1900	661	0	0.24699	0.3095	---	PASS
GSM1900	810	0	0.24440	0.3093	---	PASS
EGPRS1900	512	2	0.25048	0.3136	---	PASS
EGPRS1900	661	2	0.24899	0.3096	---	PASS
EGPRS1900	810	2	0.25093	0.3183	---	PASS

Test Graphs

GSM850-128-3-0.3140



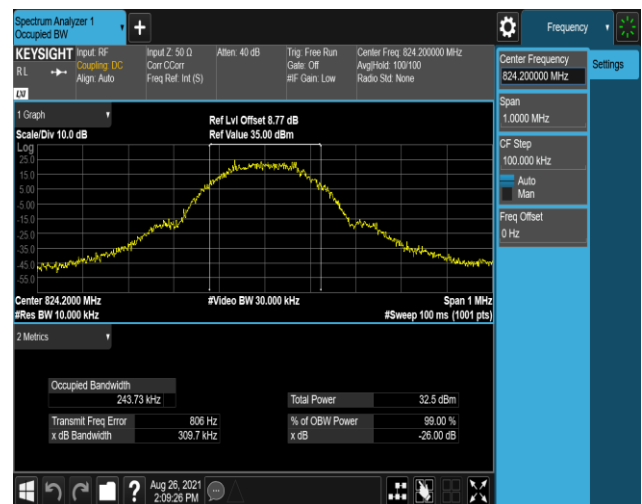
GSM850-190-3-0.3136



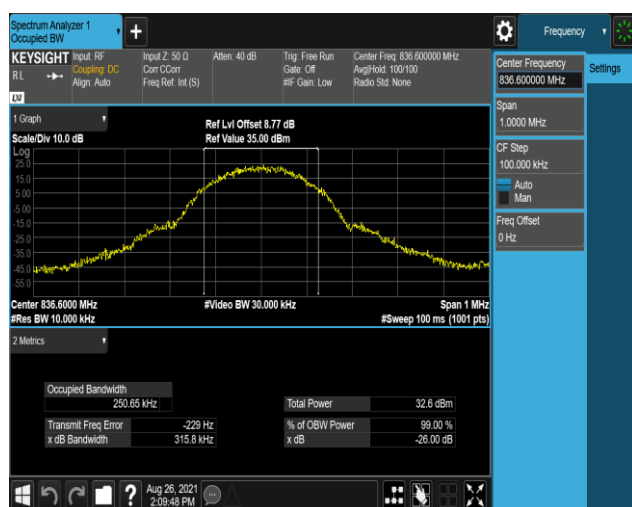
GSM850-251-3-0.3185



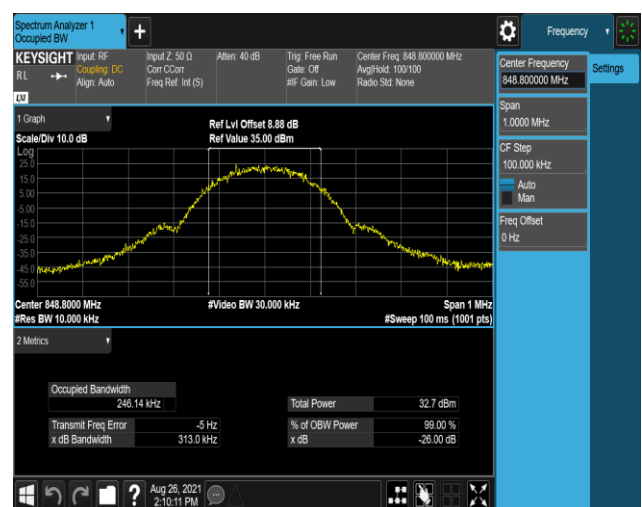
EGPRS850-128-8-0.3097



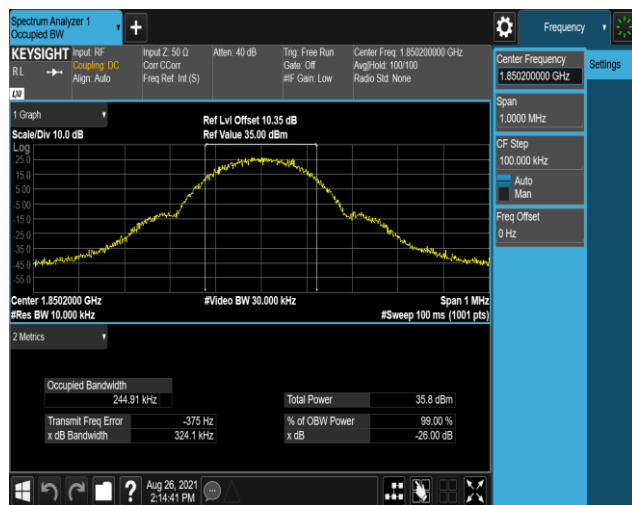
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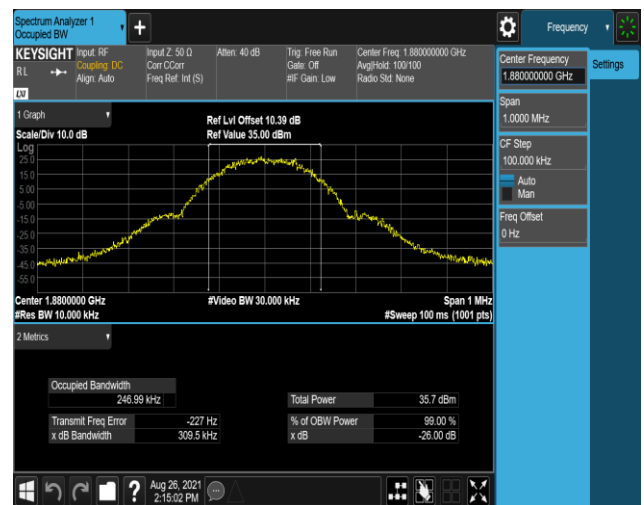
EGPRS850-251-8-0.3130



GSM1900-512-0-0.3241



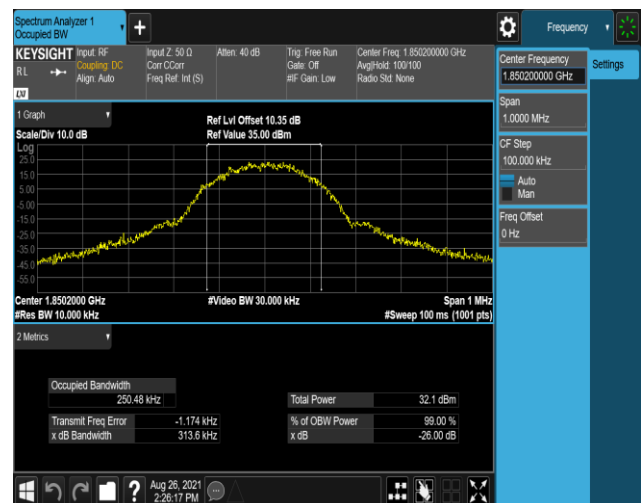
GSM1900-661-0-0.3095



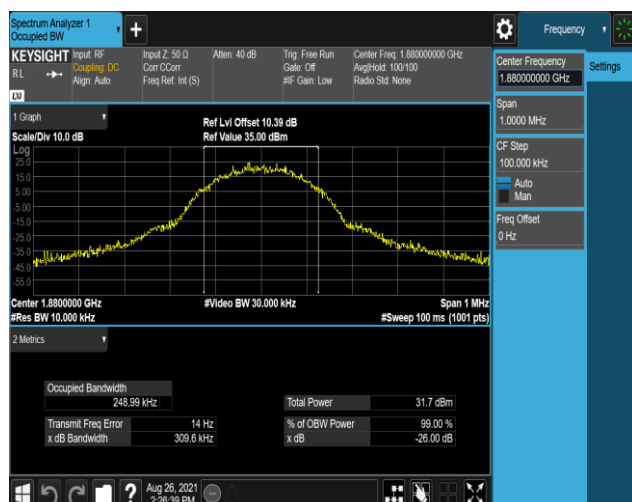
GSM1900-810-0-0.3093



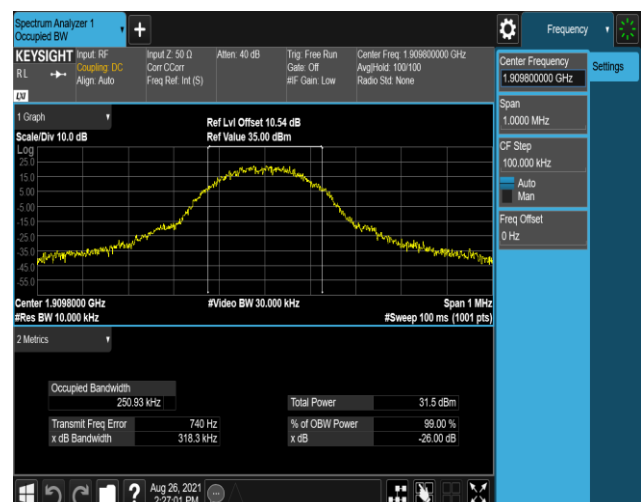
EGPRS1900-512-2-0.3136



EGPRS1900-661-2-0.3096



EGPRS1900-810-2-0.3183



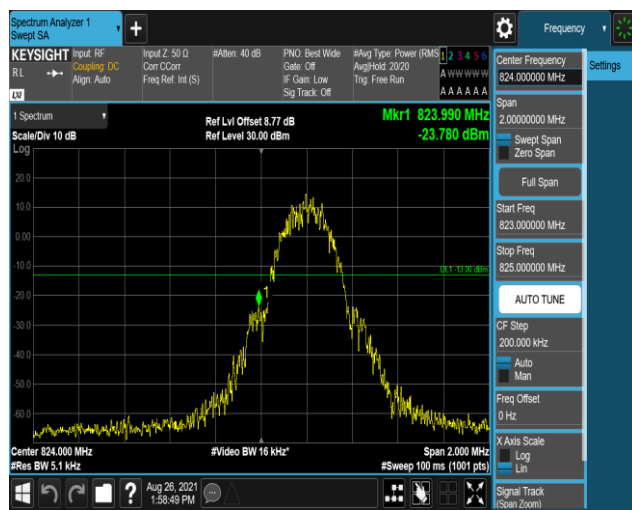
Appendix D: Band Edge

Test Result

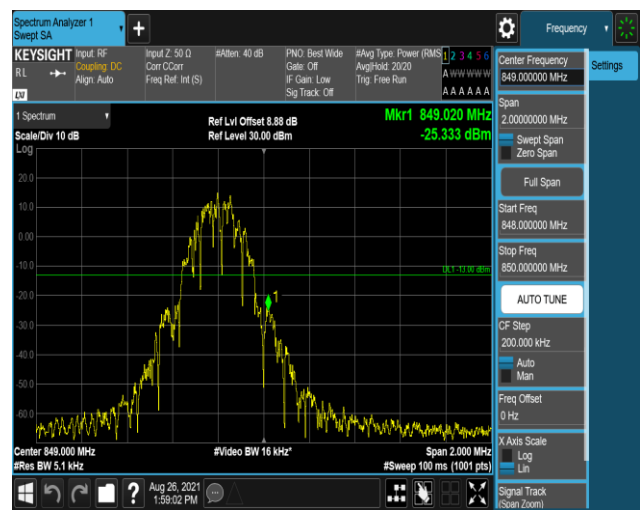
Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	3	823.99	-22.04	-13	PASS
GSM850	251	3	849.02	-23.20	-13	PASS
EGPRS850	128	8	823.98	-34.97	-13	PASS
EGPRS850	251	8	849.01	-35.64	-13	PASS
GSM1900	512	0	1849.98	-16.36	-13	PASS
GSM1900	810	0	1910.02	-14.70	-13	PASS
EGPRS1900	512	2	1849.98	-23.29	-13	PASS
EGPRS1900	810	2	1910.01	-21.58	-13	PASS

Test Graphs

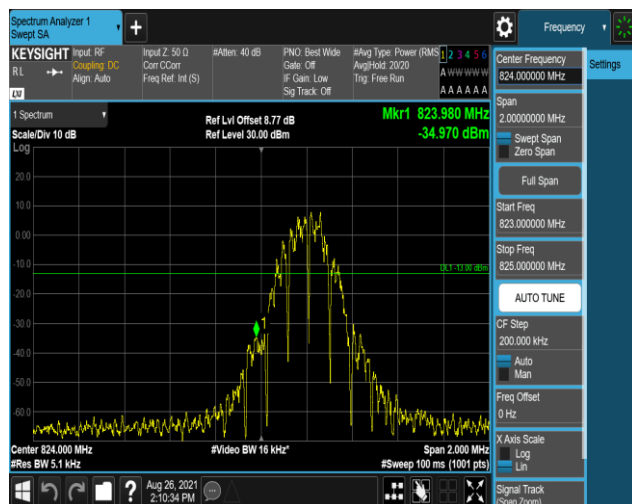
GSM850-128-3



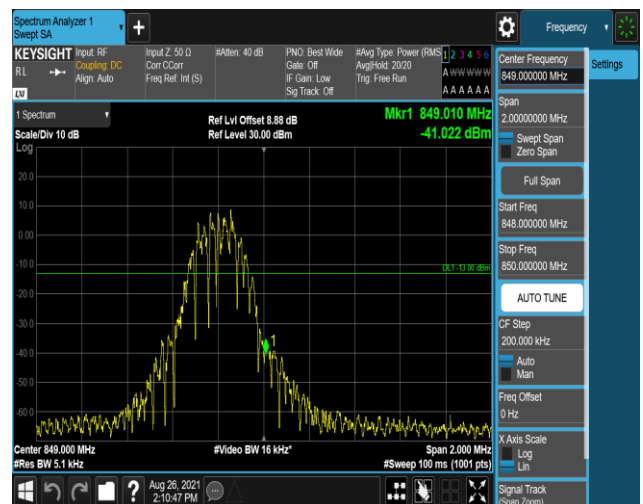
GSM850-251-3



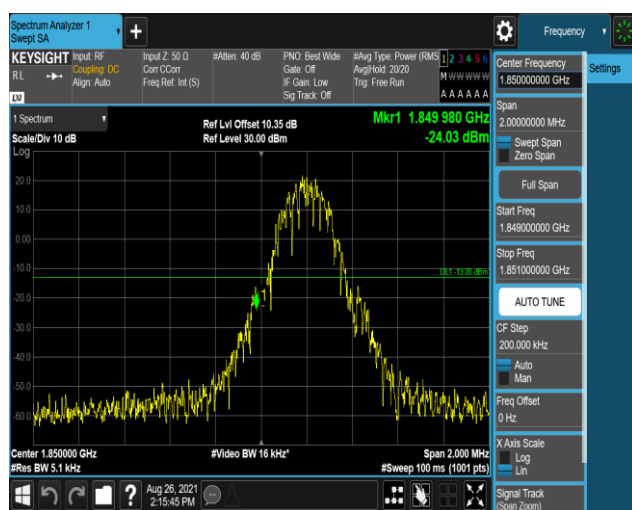
EGPRS850-128-8



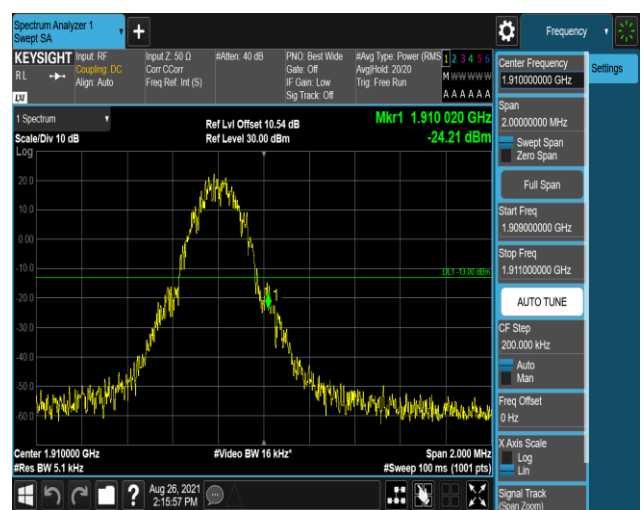
EGPRS850-251-8



GSM1900-512-0



GSM1900-810-0

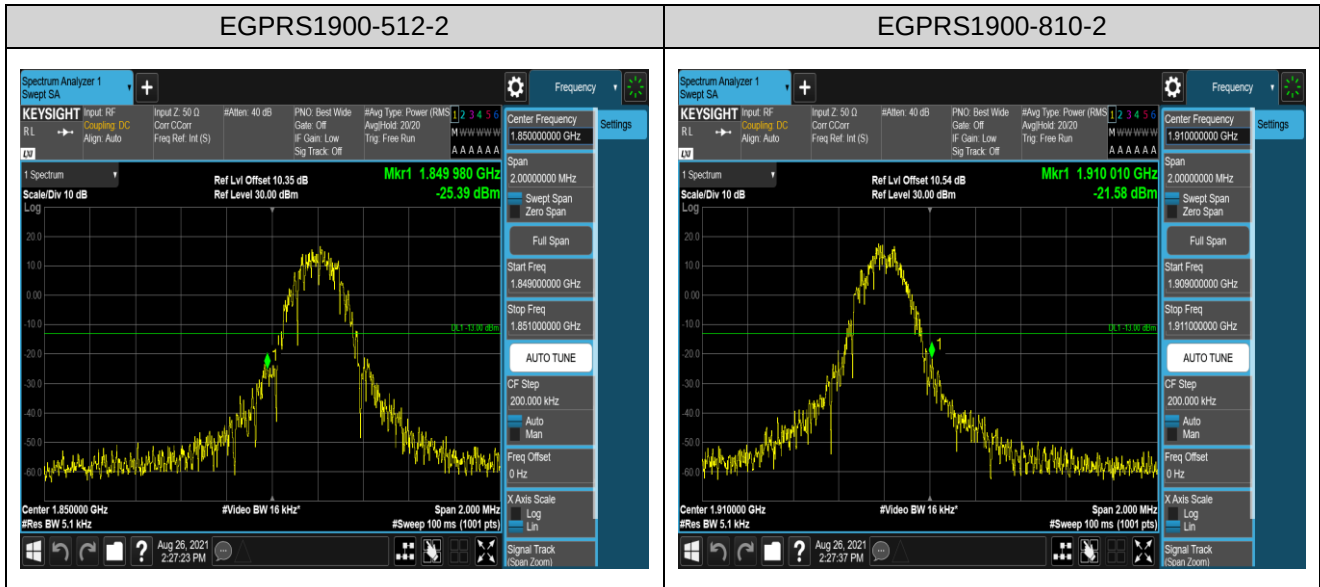


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Project No.: JYTSZE2108048



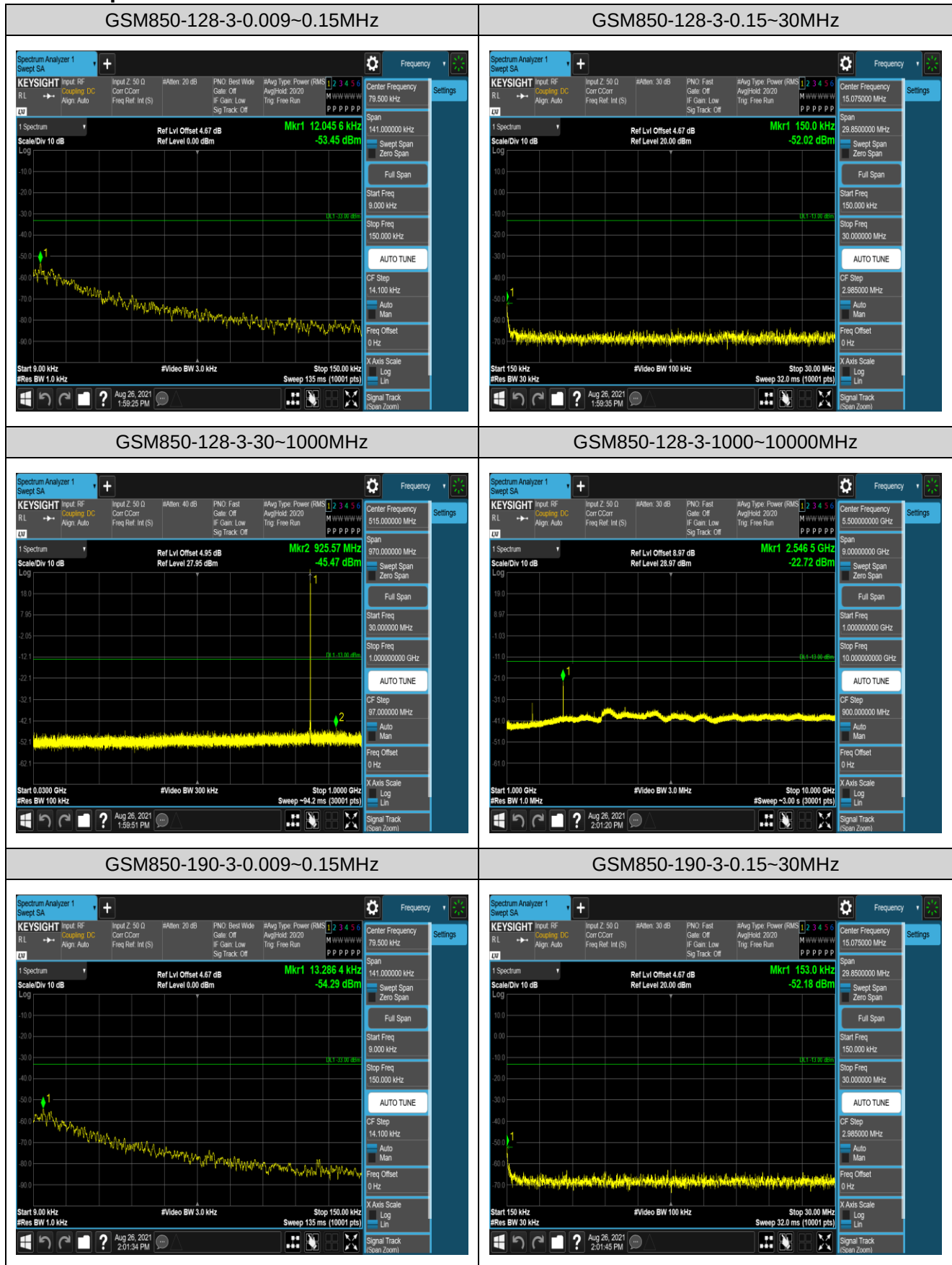
Appendix E: Conducted Spurious Emission

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	-52.02	-13	PASS
GSM850	128	3	30~1000MHz	925.57	-45.47	-13	PASS
GSM850	128	3	1000~10000MHz	2546.5	-22.72	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-54.29	-33	PASS
GSM850	190	3	0.15~30MHz	0.15	-52.18	-13	PASS
GSM850	190	3	30~1000MHz	724	-44.71	-13	PASS
GSM850	190	3	1000~10000MHz	2546.5	-22.78	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.01	-53.21	-33	PASS
GSM850	251	3	0.15~30MHz	0.15	-52.99	-13	PASS
GSM850	251	3	30~1000MHz	569.64	-46.18	-13	PASS
GSM850	251	3	1000~10000MHz	2546.2	-22.65	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.92	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-52.27	-23	PASS
GSM1900	512	0	30~1000MHz	747.96	-45.86	-13	PASS
GSM1900	512	0	1000~18000MHz	3827.67	-34.91	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.02	-56.42	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-50.85	-23	PASS
GSM1900	661	0	30~1000MHz	883.89	-45.83	-13	PASS
GSM1900	661	0	1000~18000MHz	3751.17	-34.86	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-56.87	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-51.37	-23	PASS
GSM1900	810	0	30~1000MHz	854.56	-46.63	-13	PASS
GSM1900	810	0	1000~18000MHz	3740.4	-34.41	-13	PASS

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

Test Graphs



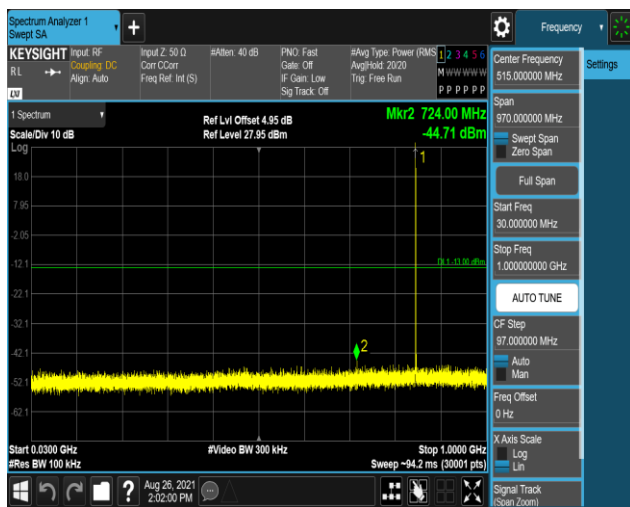
JianYan Testing Group Shenzhen Co., Ltd.

No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

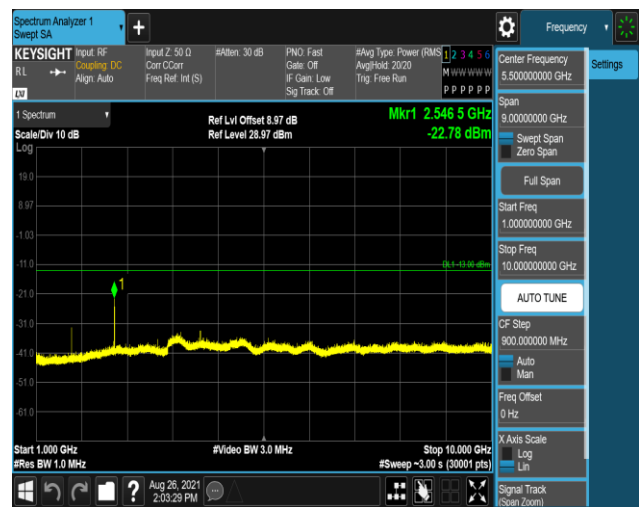
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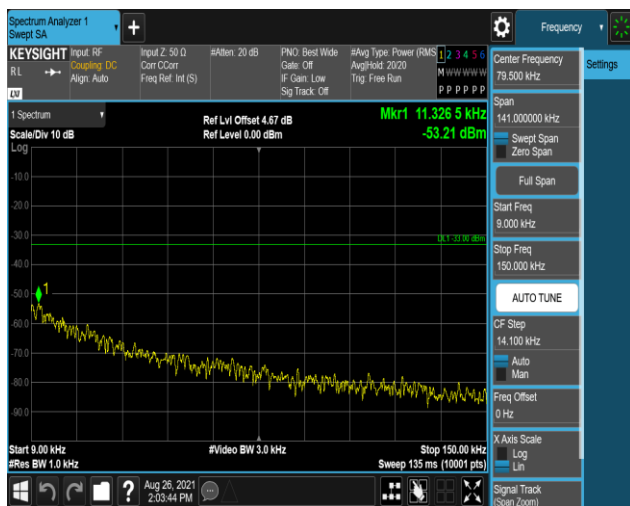
GSM850-190-3-30~1000MHz



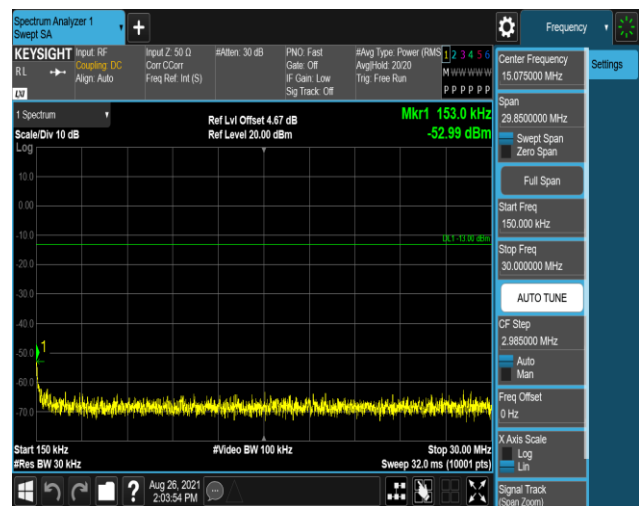
GSM850-190-3-1000~10000MHz



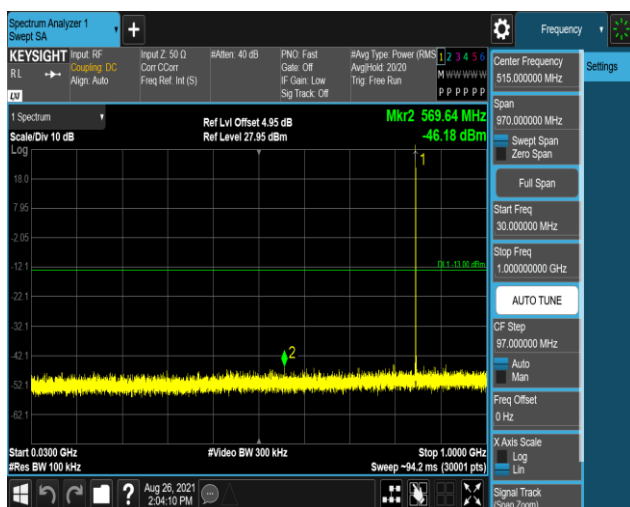
GSM850-251-3-0.009~0.15MHz



GSM850-251-3-0.15~30MHz



GSM850-251-3-30~1000MHz



GSM850-251-3-1000~10000MHz

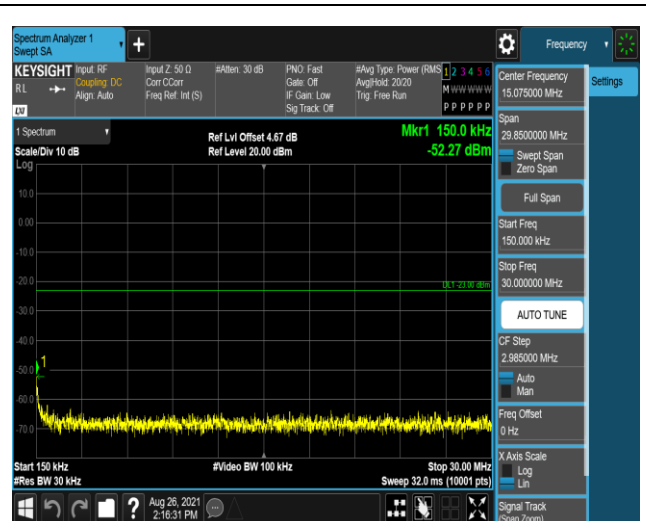
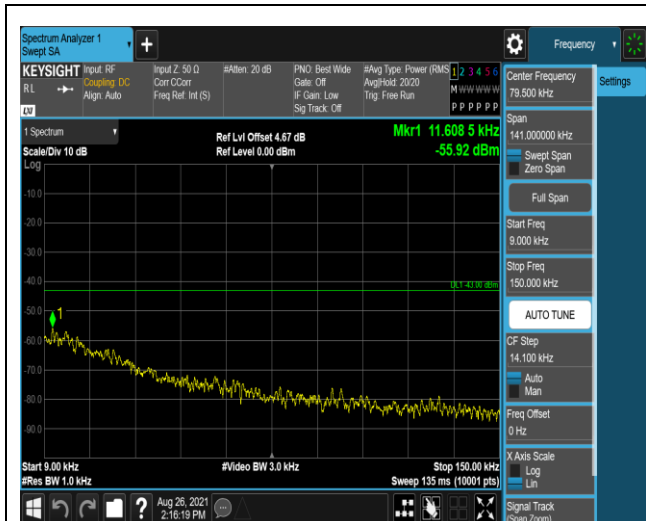


GSM1900-512-0-0.009~0.15MHz

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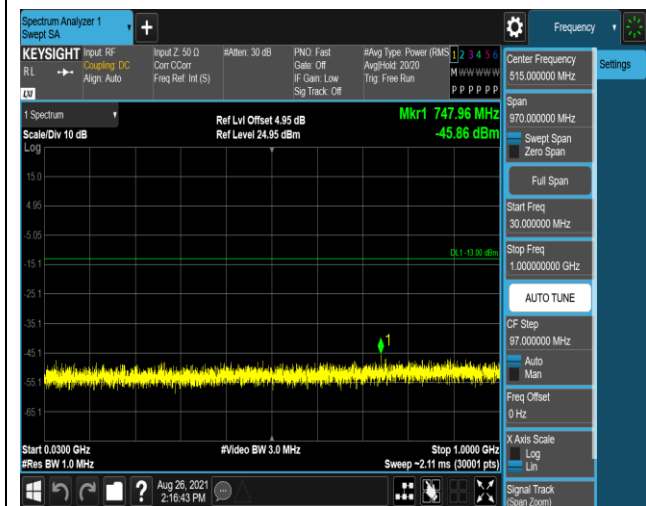
GSM1900-512-0-0.15~30MHz

Project No.: JYTSZE2108048



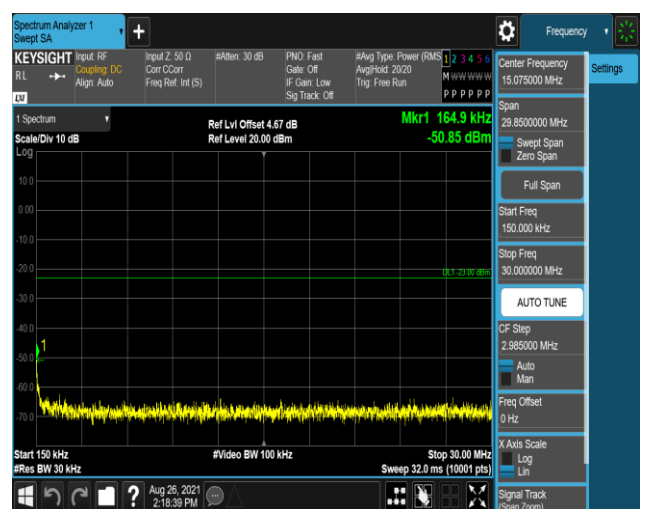
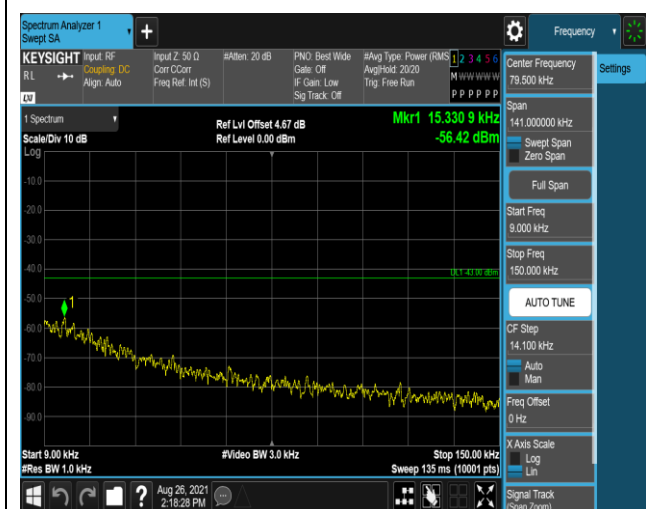
GSM1900-512-0-30~1000MHz

GSM1900-512-0-1000~18000MHz



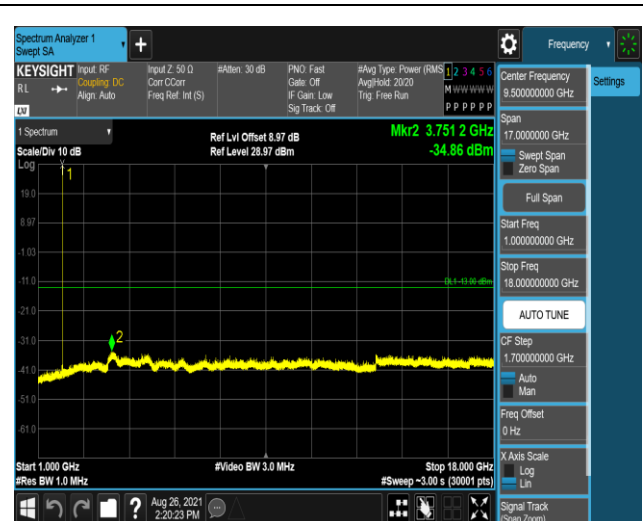
GSM1900-661-0-0.009~0.15MHz

GSM1900-661-0-0.15~30MHz



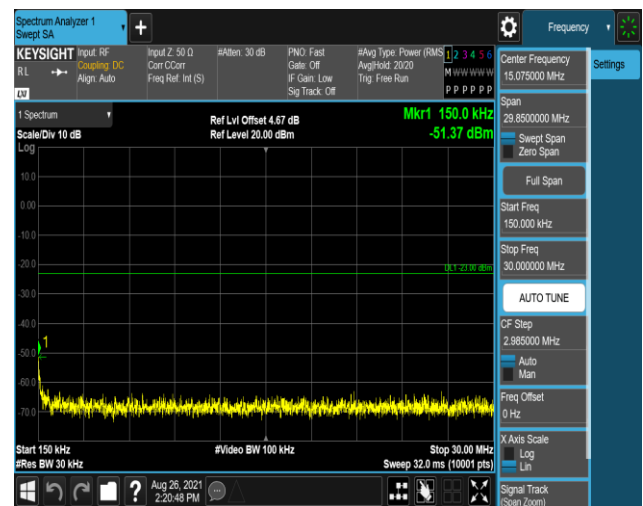
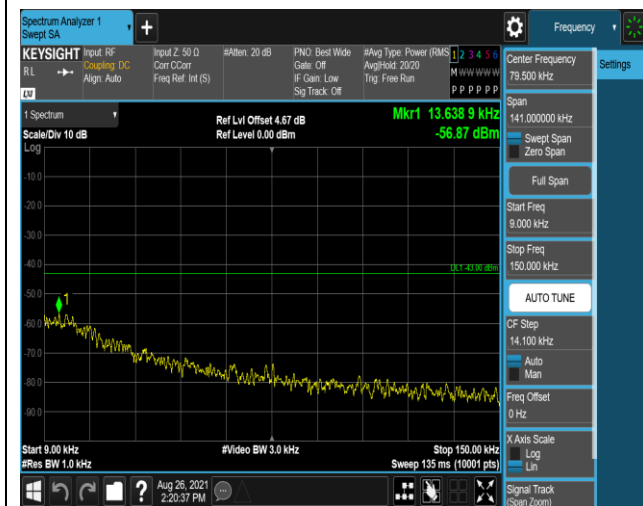
GSM1900-661-0-30~1000MHz

GSM1900-661-0-1000~18000MHz



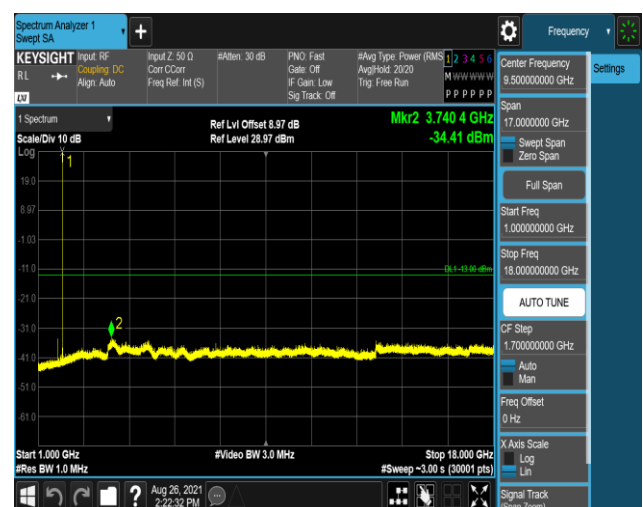
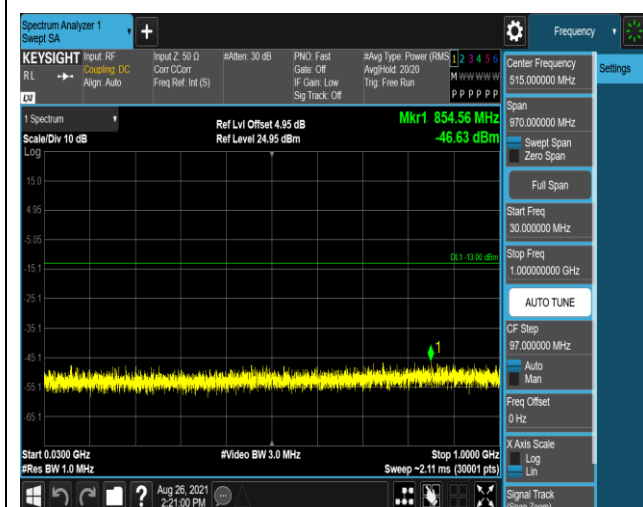
GSM1900-810-0-0.009~0.15MHz

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	5.07	0.006060	±2.5	Pass
	-20	5.10	0.006096		
	-10	4.78	0.005714		
	0	2.62	0.003132		
	10	5.26	0.006287		
	20	2.71	0.003239		
	30	1.74	0.002080		
	40	7.94	0.009491		
	50	10.72	0.012814		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	5.97	0.007136	±2.5	Pass
	3.70	7.20	0.008606		
	4.20	7.65	0.009144		
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		
3.70	-30	6.78	0.008104	±2.5	Pass
	-20	5.29	0.006323		
	-10	7.43	0.008881		
	0	4.88	0.005833		
	10	2.94	0.003514		
	20	5.26	0.006287		
	30	4.52	0.005403		
	40	6.04	0.007220		
	50	8.43	0.010077		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	9.36	0.011188	±2.5	Pass
	3.70	2.16	0.002582		
	4.20	11.33	0.013543		
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		
3.70	-30	8.20	0.004362	Within authorized band for PCS 1900	Pass
	-20	0.55	0.000293		
	-10	12.59	0.006697		
	0	6.42	0.003415		
	10	7.62	0.004053		
	20	13.85	0.007367		
	30	19.15	0.010186		
	40	14.21	0.007559		
	50	12.91	0.006867		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	4.33	0.002303	Within authorized band for PCS 1900	Pass
	3.70	1.03	0.000548		
	4.20	11.04	0.005872		
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		
3.70	-30	-2.03	-0.001080	Within authorized band for PCS 1900	Pass
	-20	-0.06	-0.000032		
	-10	11.17	0.005941		
	0	3.49	0.001856		
	10	-1.32	-0.000702		
	20	-7.49	-0.003984		
	30	-6.26	-0.003330		
	40	9.78	0.005202		
	50	12.14	0.006457		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-10.17	-0.005410	Within authorized band for PCS 1900	Pass
	3.70	-3.07	-0.001633		
	4.20	-1.84	-0.000979		
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

