

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	33.56	31.57	38.5	PASS
GSM850	190	3	33.63	31.64	38.5	PASS
GSM850	251	3	33.73	31.74	38.5	PASS
GSM1900	512	0	29.84	30.19	33	PASS
GSM1900	661	0	29.85	30.2	33	PASS
GSM1900	810	0	30.24	30.59	33	PASS

Band	Channel	PCL	Slot	Conducted Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
GPRS850	128	3	1	33.56	31.57	38.5	PASS
GPRS850	128	3	2	32.88	30.89	38.5	PASS
GPRS850	128	3	3	31.03	29.04	38.5	PASS
GPRS850	128	3	4	29.74	27.75	38.5	PASS
GPRS850	190	3	1	33.58	31.59	38.5	PASS
GPRS850	190	3	2	32.96	30.97	38.5	PASS
GPRS850	190	3	3	31.15	29.16	38.5	PASS
GPRS850	190	3	4	29.87	27.88	38.5	PASS
GPRS850	251	3	1	33.72	31.73	38.5	PASS
GPRS850	251	3	2	33.11	31.12	38.5	PASS
GPRS850	251	3	3	31.36	29.37	38.5	PASS
GPRS850	251	3	4	30.08	28.09	38.5	PASS
GPRS1900	512	0	1	29.83	30.18	33	PASS
GPRS1900	512	0	2	28.97	29.32	33	PASS
GPRS1900	512	0	3	26.80	27.15	33	PASS
GPRS1900	512	0	4	25.55	25.9	33	PASS
GPRS1900	661	0	1	29.84	30.19	33	PASS
GPRS1900	661	0	2	29.05	29.4	33	PASS
GPRS1900	661	0	3	26.97	27.32	33	PASS
GPRS1900	661	0	4	25.73	26.08	33	PASS
GPRS1900	810	0	1	30.22	30.57	33	PASS
GPRS1900	810	0	2	29.67	30.02	33	PASS
GPRS1900	810	0	3	27.99	28.34	33	PASS
GPRS1900	810	0	4	26.79	27.14	33	PASS

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

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

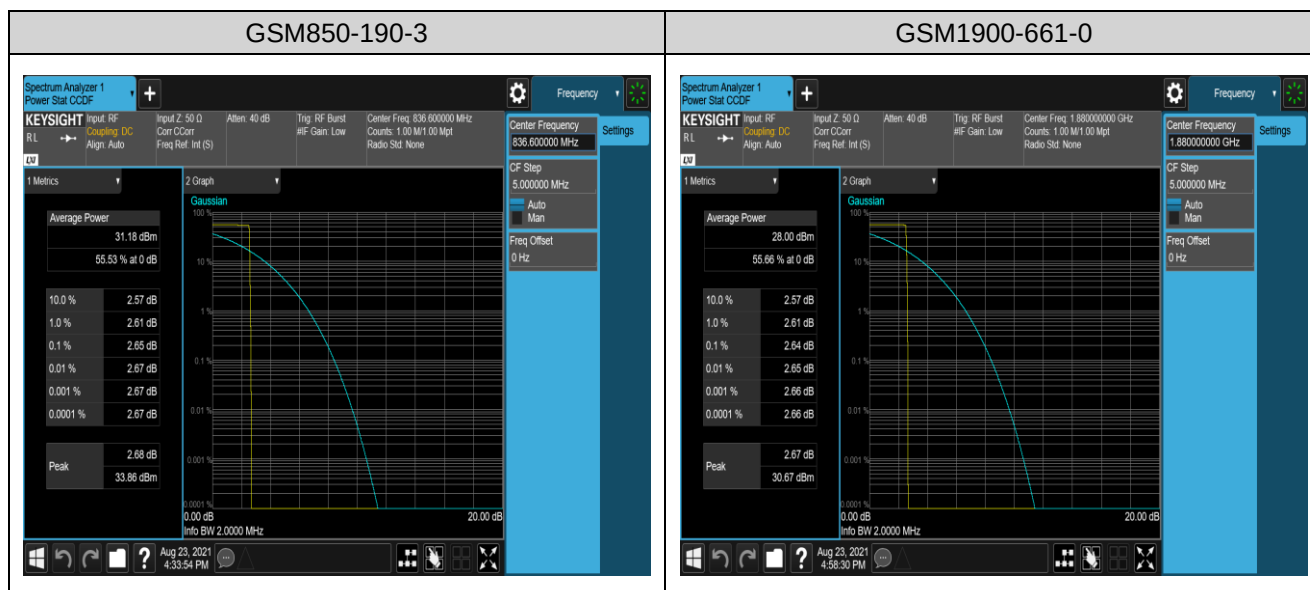
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	190	3	2.65	13	PASS
GSM1900	661	0	2.64	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	0.24713	0.3112	---	PASS
GSM850	190	3	0.24837	0.3196	---	PASS
GSM850	251	3	0.24596	0.3118	---	PASS
GSM1900	512	0	0.24768	0.3191	---	PASS
GSM1900	661	0	0.24769	0.3151	---	PASS
GSM1900	810	0	0.24513	0.3215	---	PASS

Test Graphs

GSM850-128-3-0.3112



GSM850-190-3-0.3196



GSM850-251-3-0.3118



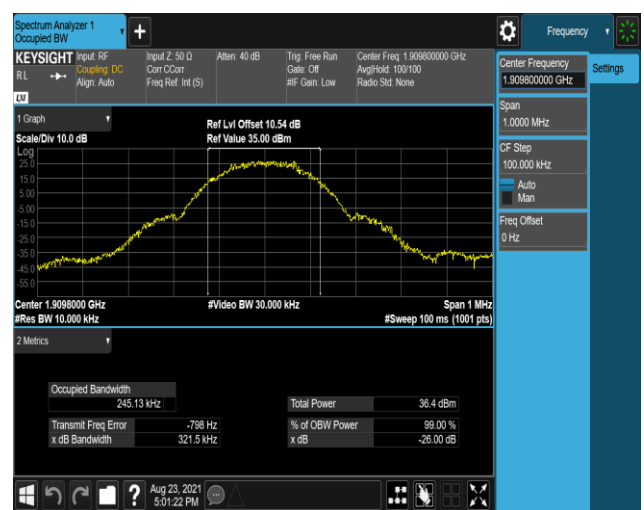
GSM1900-512-0-0.3191



GSM1900-661-0-0.3151



GSM1900-810-0-0.3215

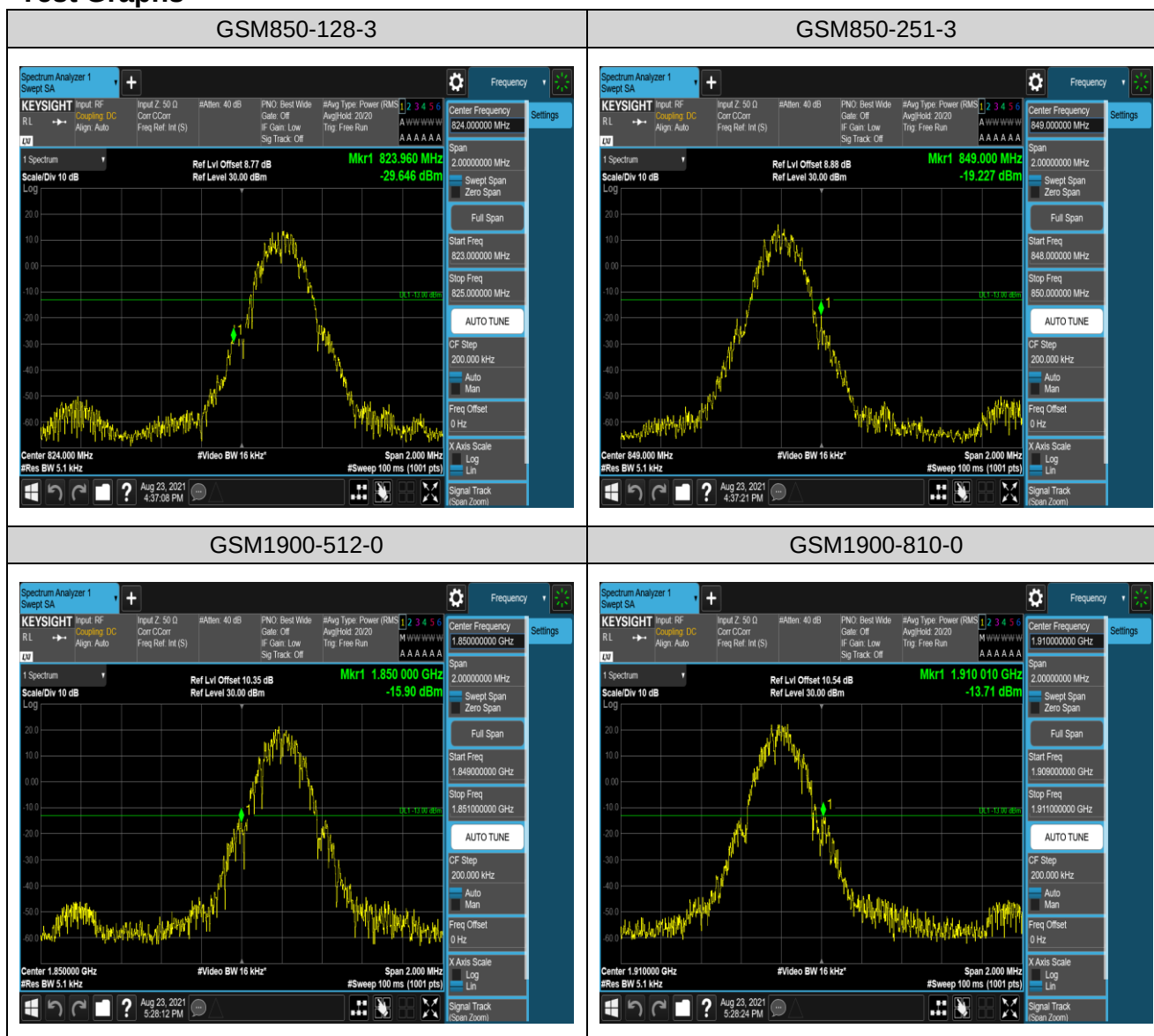


Appendix D: Band Edge

Test Result

Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	3	823.96	-22.86	-13	PASS
GSM850	251	3	849.00	-19.23	-13	PASS
GSM1900	512	0	1850.00	-14.21	-13	PASS
GSM1900	810	0	1910.01	-13.71	-13	PASS

Test Graphs



Appendix E: Conducted Spurious Emission

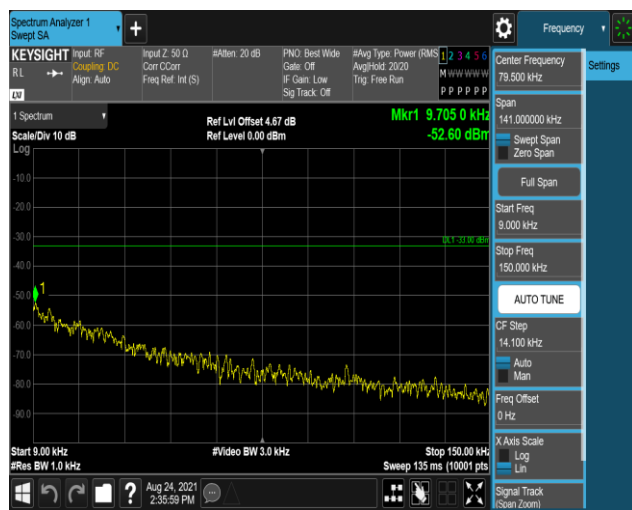
Test Result

Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	3	0.009~0.15MHz	0.01	-52.6	-33	PASS
GSM850	128	3	0.15~30MHz	0.17	-51.93	-13	PASS
GSM850	128	3	30~1000MHz	932.13	-46.47	-13	PASS
GSM850	128	3	1000~10000MHz	2511.7	-25.82	-13	PASS
GSM850	190	3	0.009~0.15MHz	0.01	-53.77	-33	PASS
GSM850	190	3	0.15~30MHz	0.15	-54.21	-13	PASS
GSM850	190	3	30~1000MHz	981.86	-46.56	-13	PASS
GSM850	190	3	1000~10000MHz	2546.2	-22.05	-13	PASS
GSM850	251	3	0.009~0.15MHz	0.01	-53.4	-33	PASS
GSM850	251	3	0.15~30MHz	0.15	-53.38	-13	PASS
GSM850	251	3	30~1000MHz	741.5	-45.91	-13	PASS
GSM850	251	3	1000~10000MHz	2546.2	-22.06	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-55.52	-43	PASS
GSM1900	512	0	0.15~30MHz	0.18	-52.67	-23	PASS
GSM1900	512	0	30~1000MHz	865.27	-47.05	-13	PASS
GSM1900	512	0	1000~18000MHz	3755.13	-34.64	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-56.78	-43	PASS
GSM1900	661	0	0.15~30MHz	0.18	-50.7	-23	PASS
GSM1900	661	0	30~1000MHz	757.69	-46.63	-13	PASS
GSM1900	661	0	1000~18000MHz	3763.63	-34.1	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-54.71	-43	PASS
GSM1900	810	0	0.15~30MHz	0.16	-51.97	-23	PASS
GSM1900	810	0	30~1000MHz	755.04	-45.6	-13	PASS
GSM1900	810	0	1000~18000MHz	3768.73	-34.7	-13	PASS

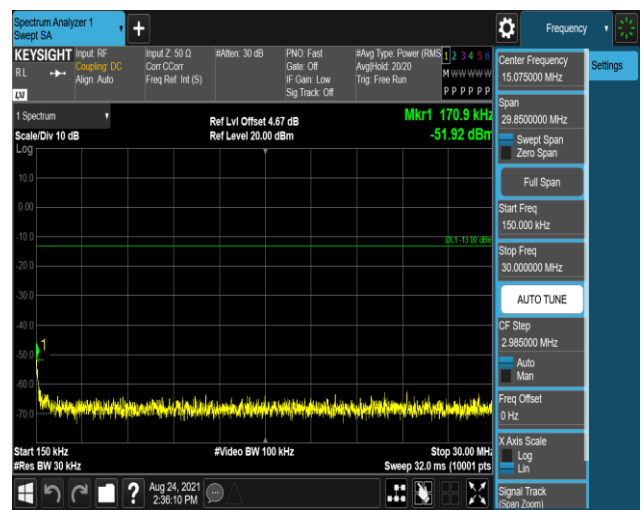
Remark: All channel and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs

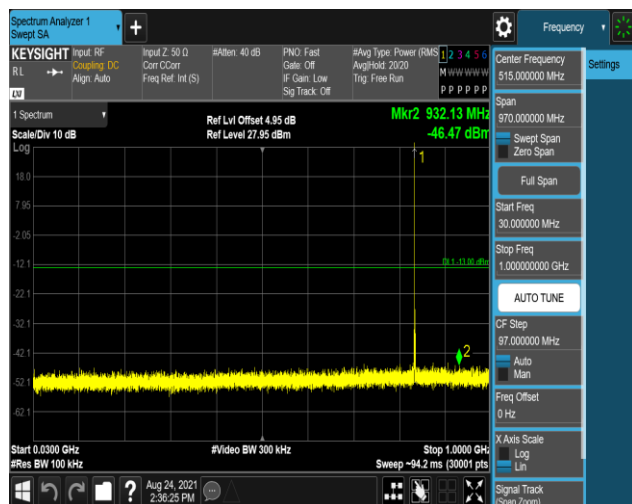
GSM850-128-3-0.009~0.15MHz



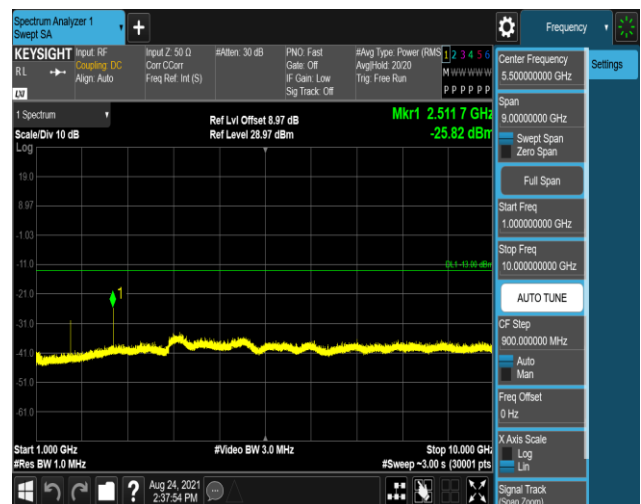
GSM850-128-3-0.15~30MHz



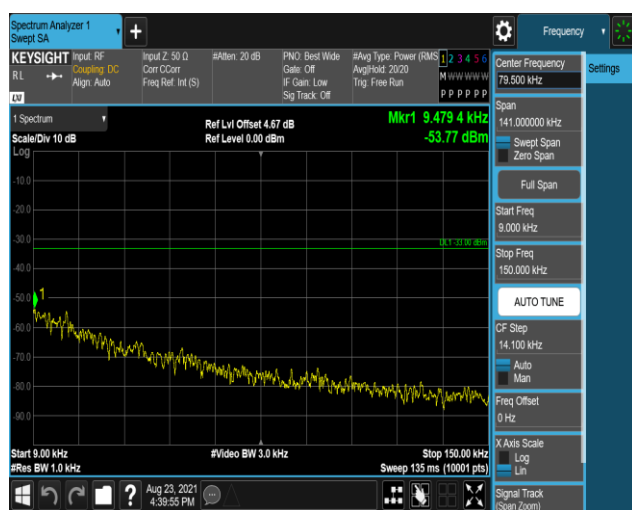
GSM850-128-3-30~1000MHz



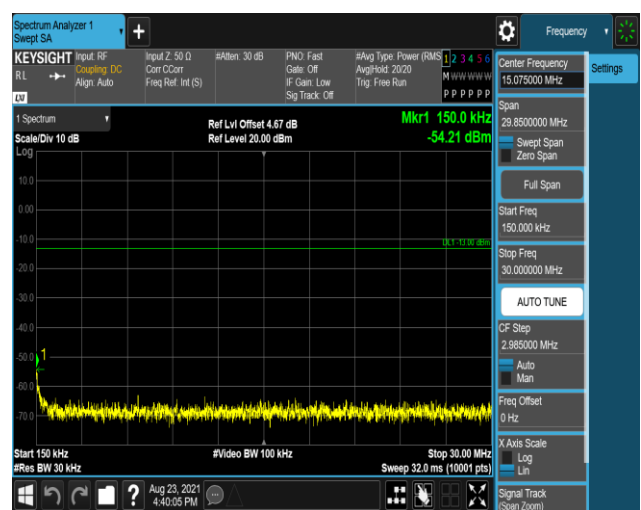
GSM850-128-3-1000~10000MHz



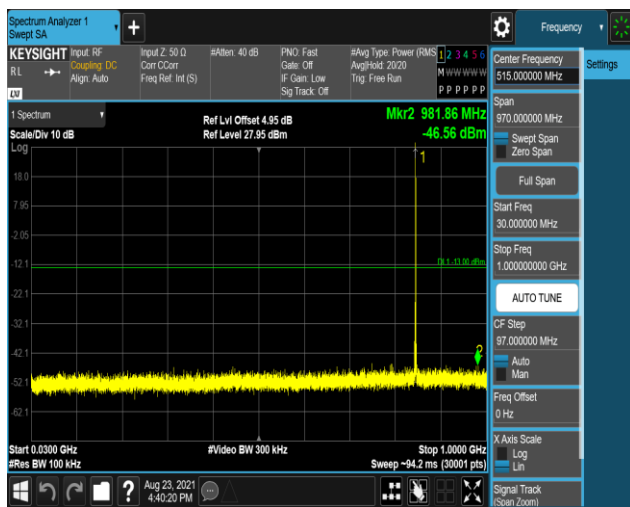
GSM850-190-3-0.009~0.15MHz



GSM850-190-3-0.15~30MHz



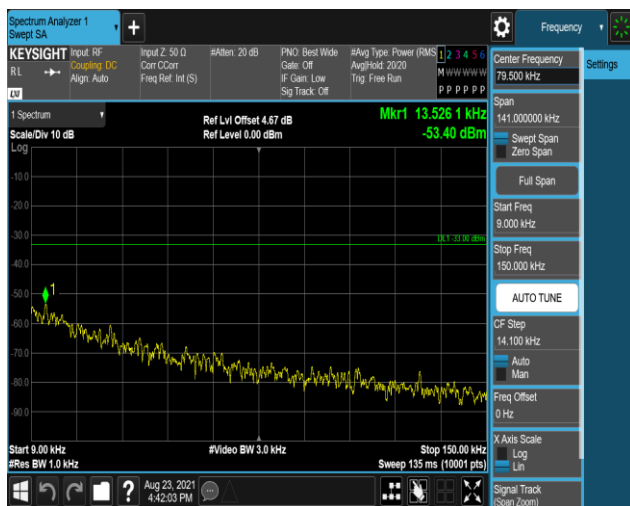
GSM850-190-3-30~1000MHz



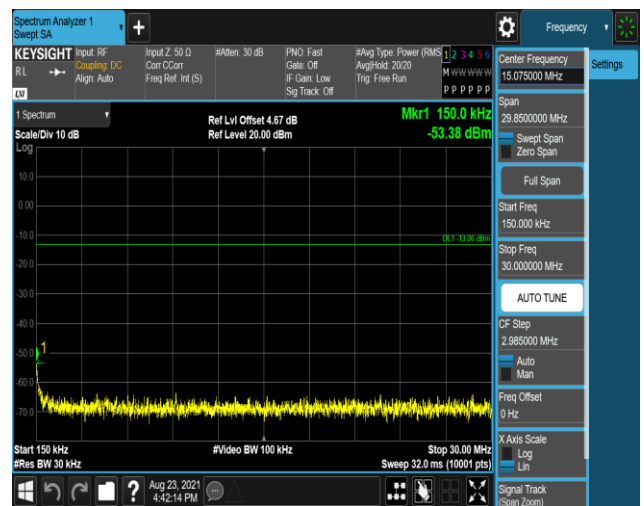
GSM850-190-3-1000~10000MHz



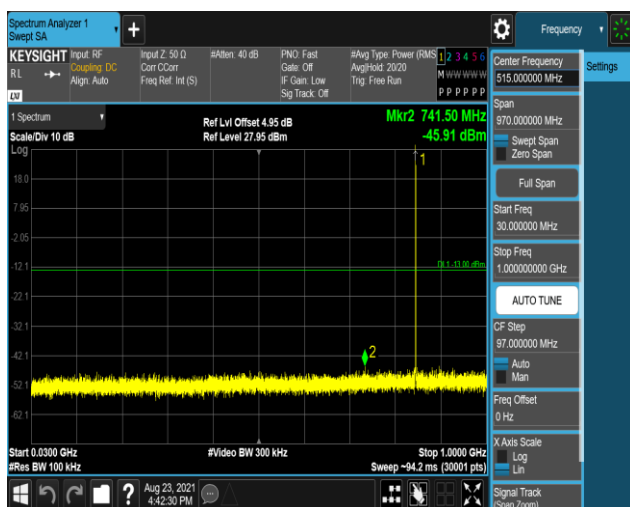
GSM850-251-3-0.009~0.15MHz



GSM850-251-3-0.15~30MHz



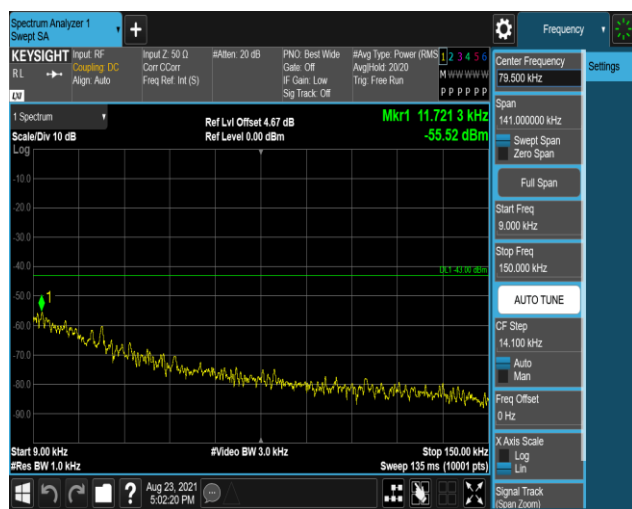
GSM850-251-3-30~1000MHz



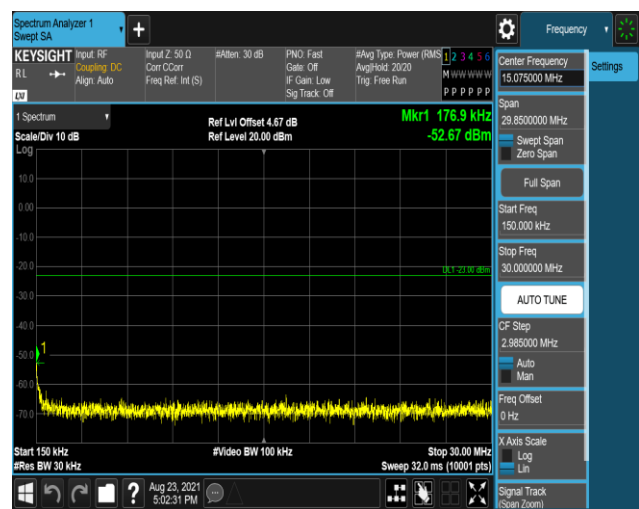
GSM850-251-3-1000~10000MHz



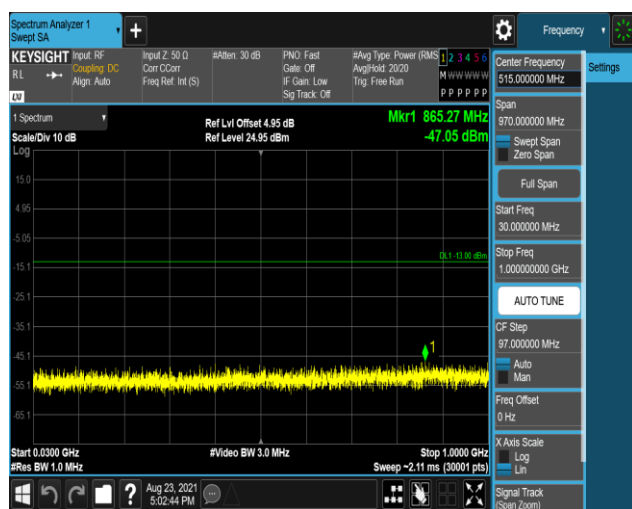
GSM1900-512-0-0.009~0.15MHz



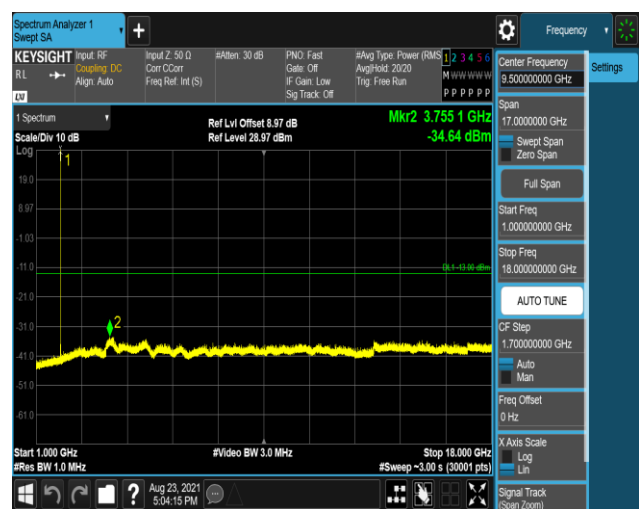
GSM1900-512-0-0.15~30MHz



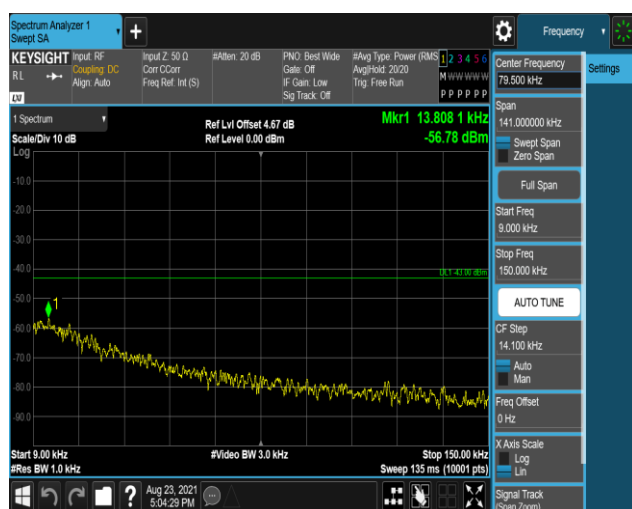
GSM1900-512-0-30~1000MHz



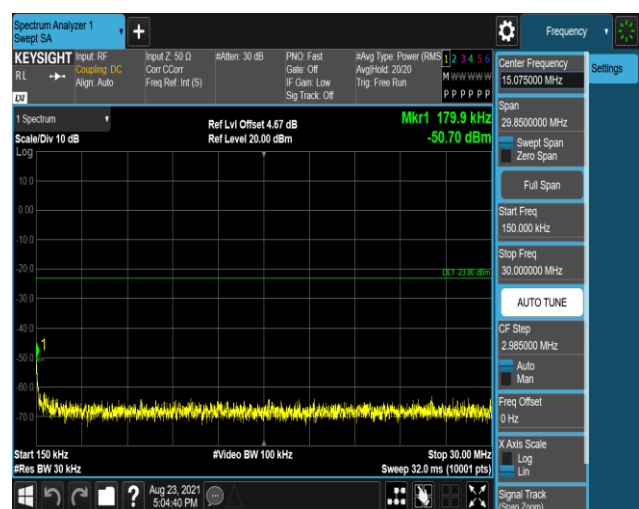
GSM1900-512-0-1000~18000MHz



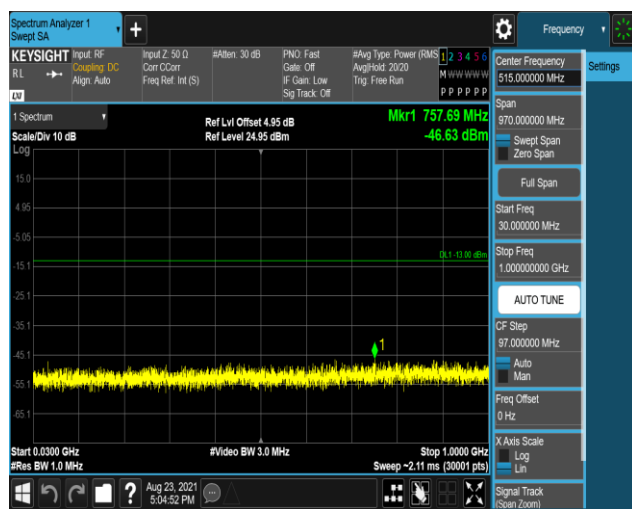
GSM1900-661-0-0.009~0.15MHz



GSM1900-661-0-0.15~30MHz



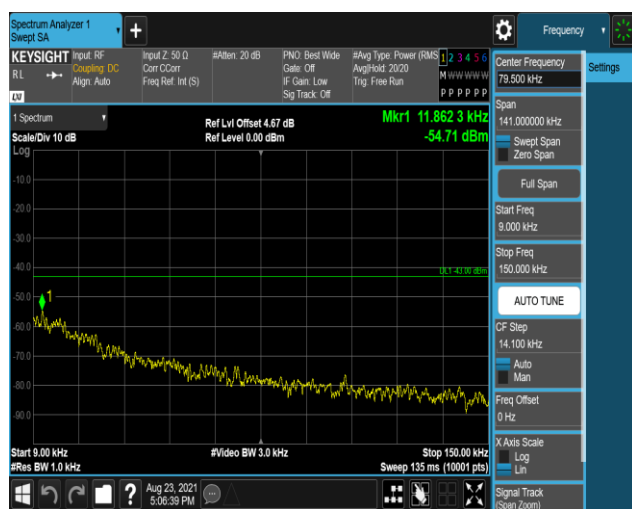
GSM1900-661-0-30~1000MHz



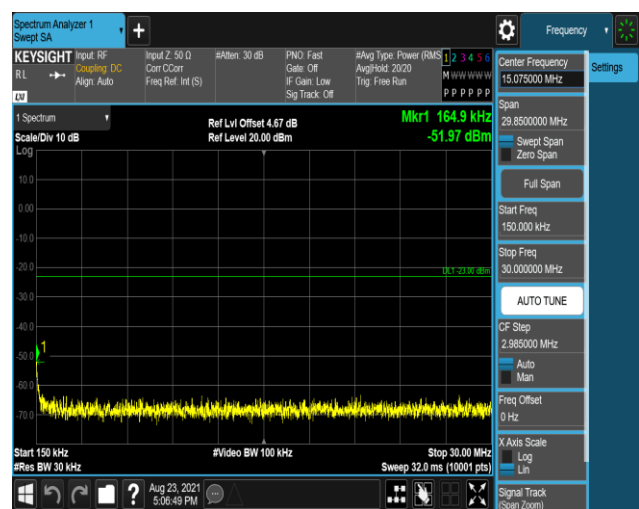
GSM1900-661-0-1000~18000MHz



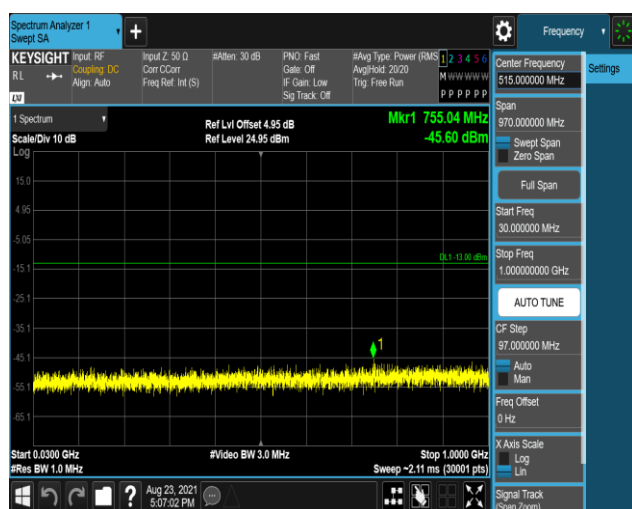
GSM1900-810-0-0.009~0.15MHz



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	-0.45	-0.000538	±2.5	Pass
	-20	0.84	0.001004		
	-10	-0.74	-0.000885		
	0	-0.39	-0.000466		
	10	1.97	0.002355		
	20	-0.23	-0.000275		
	30	-2.32	-0.002773		
	40	0.61	0.000729		
	50	0.10	0.000120		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	1.23	0.001470	±2.5	Pass
	3.80	2.87	0.003431		
	4.35	-0.19	-0.000227		
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	8.88	0.004723	Within authorized band for PCS 1900	Pass
	-20	11.20	0.005957		
	-10	9.98	0.005309		
	0	4.46	0.002372		
	10	10.20	0.005426		
	20	0.74	0.000394		
	30	6.20	0.003298		
	40	15.46	0.008223		
	50	7.33	0.003899		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	10.14	0.005394	Within authorized band for PCS 1900	Pass
	3.80	12.72	0.006766		
	4.35	9.52	0.005064		
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
GSM1900	661	PASS	PASS

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

Test Graphs

