

GSM BandX Test Data

Company: : Shenzhen Jimi IoT Co., Ltd.

EUT : LTE CAT1 ASSET GNSS TRACKER

Model Number : LL301, LL301L, LL301E

FCC ID : 2AMLFJM-LL301L



Appendix A: Power Output Data

Test Result

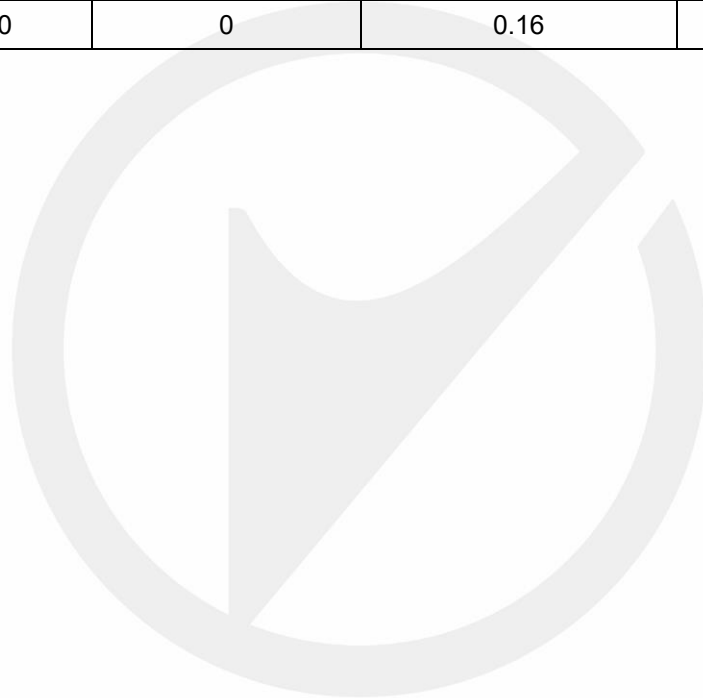
Band	Channel	PCL	Slot	Power(dBm)	Limit(dBm)	Verdict
GPRS850	128	3	1	32.08	38.5	PASS
GPRS850	128	3	2	30.01	38.5	PASS
GPRS850	128	3	3	27.89	38.5	PASS
GPRS850	128	3	4	25.90	38.5	PASS
GPRS850	190	3	1	32.15	38.5	PASS
GPRS850	190	3	2	30.09	38.5	PASS
GPRS850	190	3	3	28.13	38.5	PASS
GPRS850	190	3	4	25.93	38.5	PASS
GPRS850	251	3	1	32.37	38.5	PASS
GPRS850	251	3	2	30.26	38.5	PASS
GPRS850	251	3	3	28.30	38.5	PASS
GPRS850	251	3	4	26.06	38.5	PASS
GPRS1900	512	0	1	28.57	33	PASS
GPRS1900	512	0	2	26.05	33	PASS
GPRS1900	512	0	3	24.07	33	PASS
GPRS1900	512	0	4	21.98	33	PASS
GPRS1900	661	0	1	28.88	33	PASS
GPRS1900	661	0	2	26.60	33	PASS
GPRS1900	661	0	3	24.54	33	PASS
GPRS1900	661	0	4	22.63	33	PASS
GPRS1900	810	0	1	28.97	33	PASS
GPRS1900	810	0	2	27.06	33	PASS
GPRS1900	810	0	3	24.80	33	PASS
GPRS1900	810	0	4	22.78	33	PASS

Band	Channel	PCL	Slot	Power(dBm)	Limit(dBm)	Verdict
@FCC_EGPRS_Effective_Isotropic_radiated_power@						
BandName	Channel	PCL	TestSlot	Result	Limit	Verdict

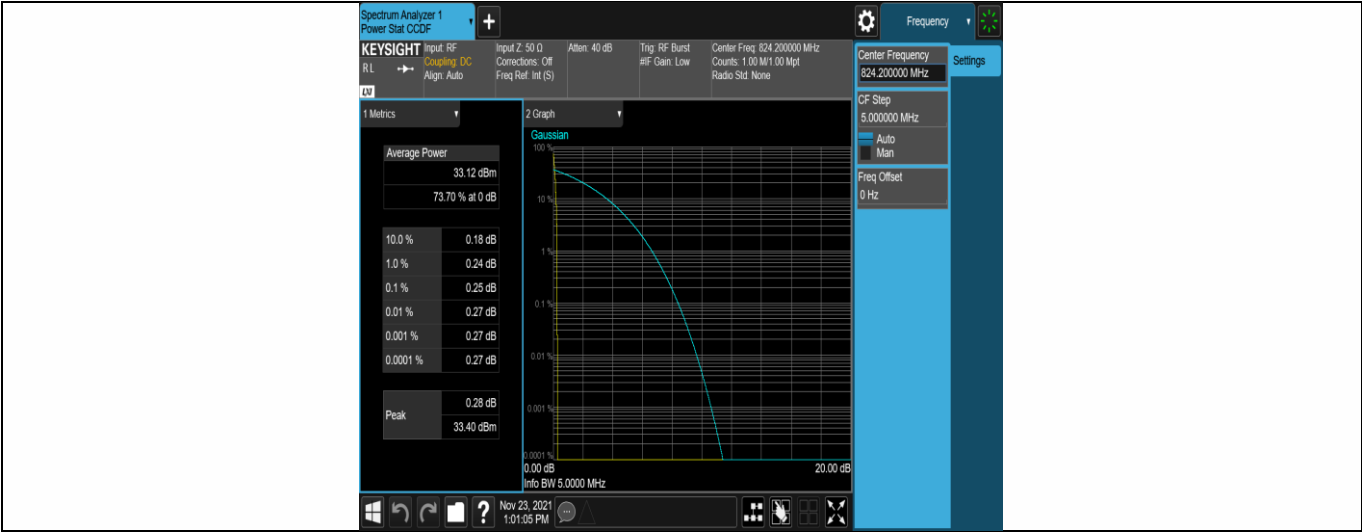
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

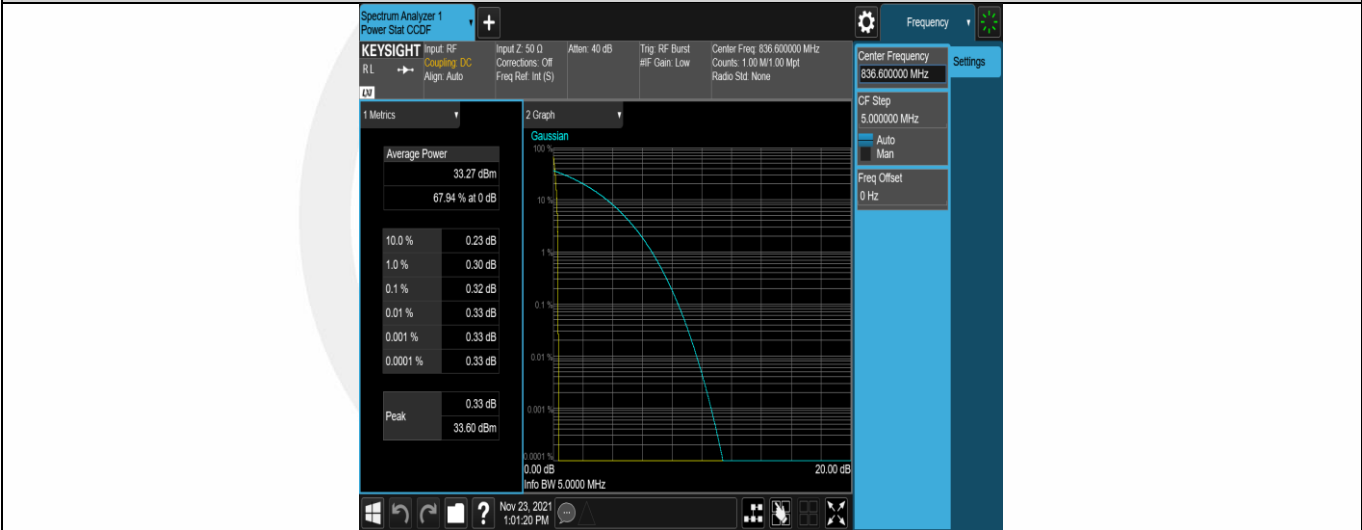
Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GPRS850	128	3	0.25	13	PASS
GPRS850	190	3	0.32	13	PASS
GPRS850	251	3	0.36	13	PASS
GPRS1900	512	0	0.25	13	PASS
GPRS1900	661	0	0.2	13	PASS
GPRS1900	810	0	0.16	13	PASS



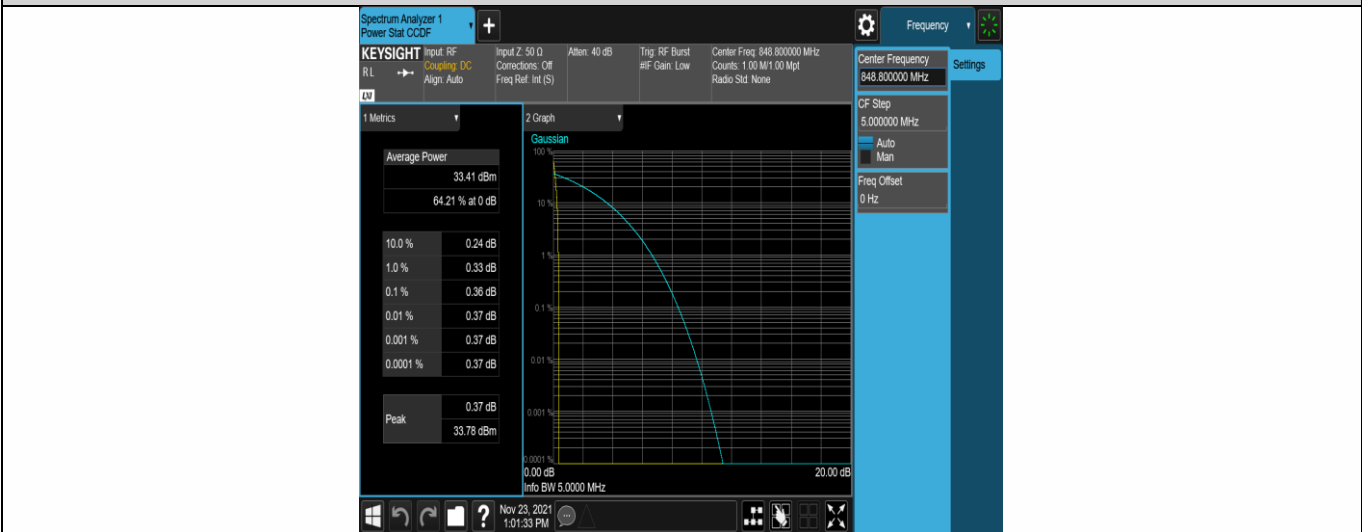
Test Graphs



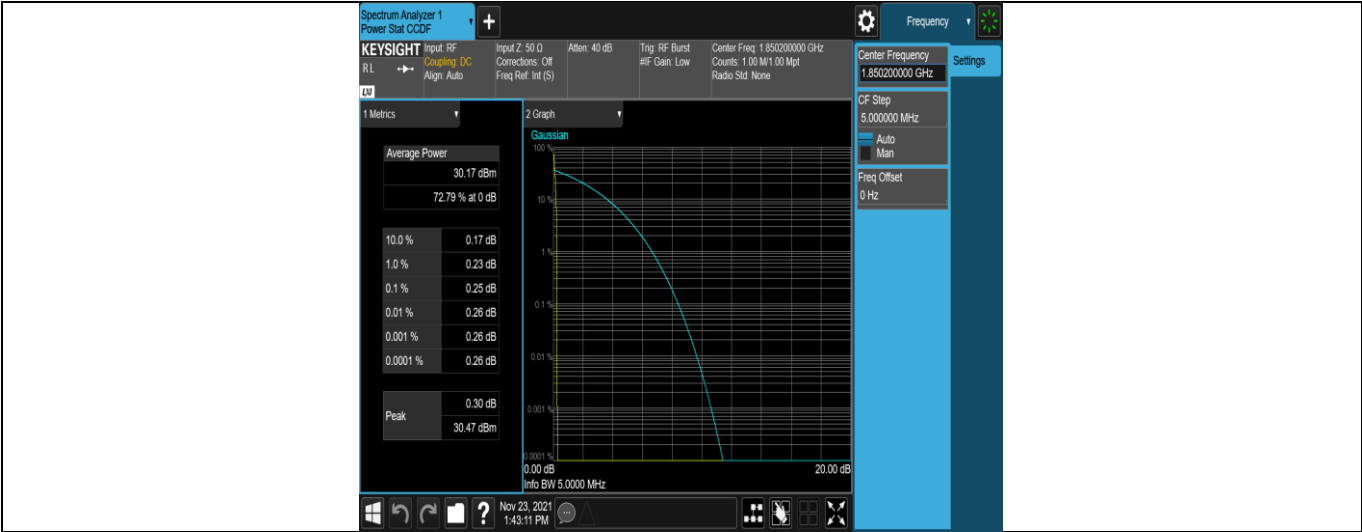
GPRS850-128-3



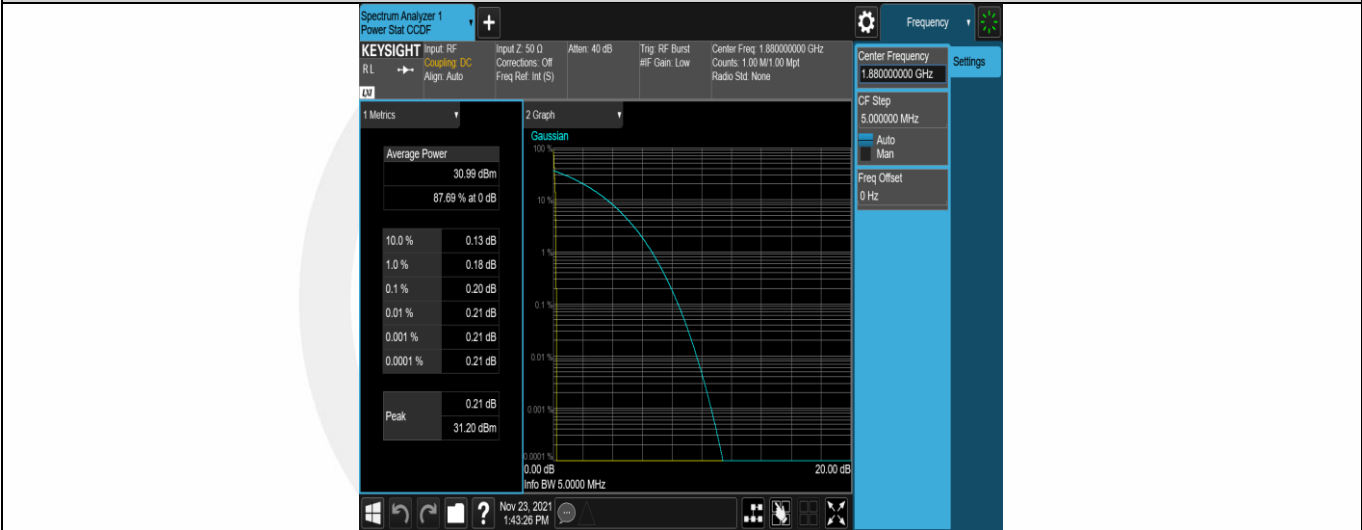
GPRS850-190-3



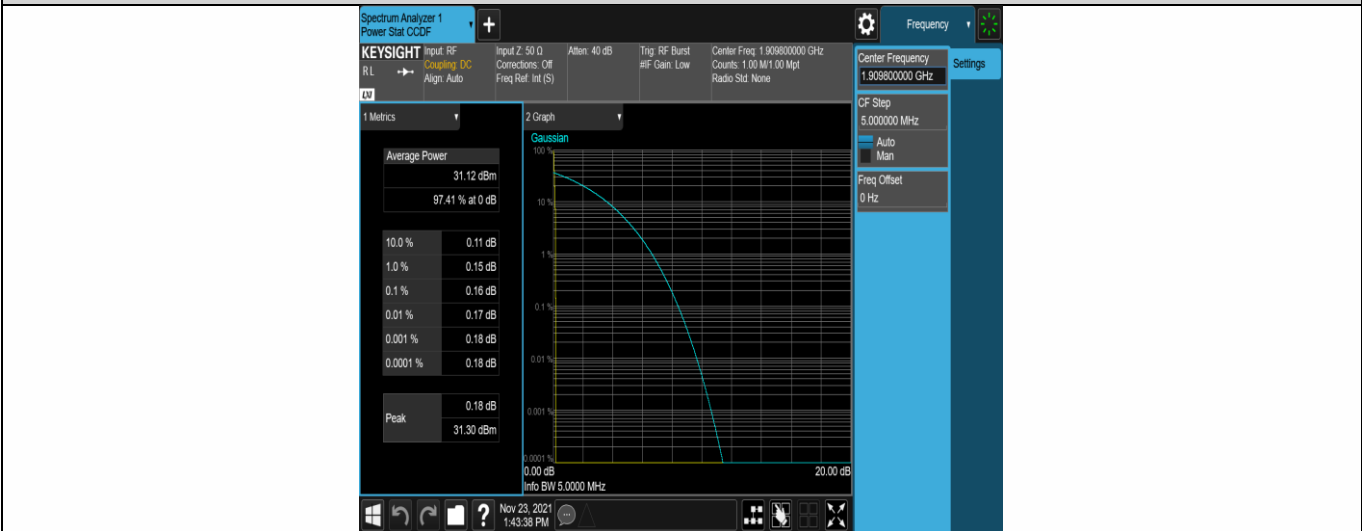
GPRS850-251-3



GPRS1900-512-0



GPRS1900-661-0



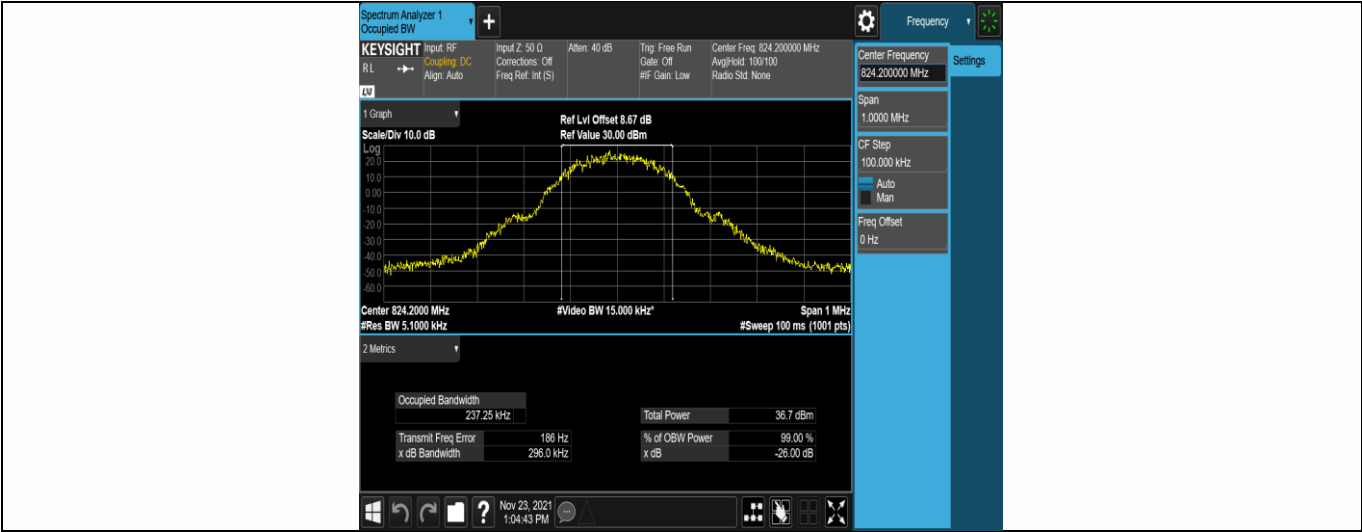
GPRS1900-810-0

Appendix C: 26dB Bandwidth and Occupied Bandwidth

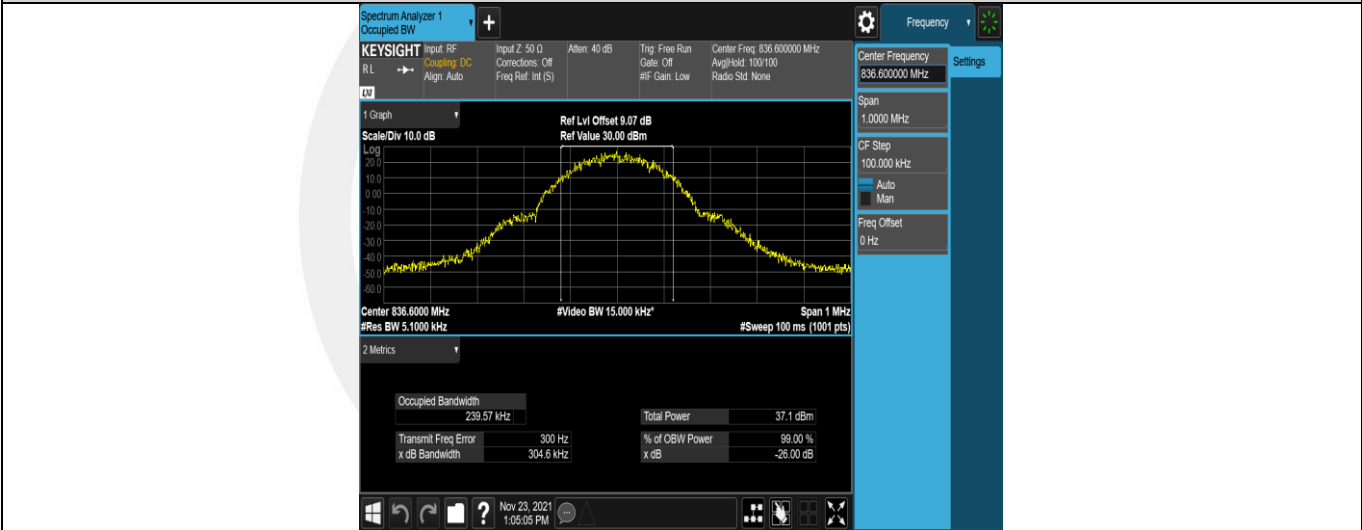
Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GPRS850	128	3	0.23725	0.2960	---	PASS
GPRS850	190	3	0.23957	0.3046	---	PASS
GPRS850	251	3	0.23600	0.3079	---	PASS
GPRS1900	512	0	0.23702	0.3024	---	PASS
GPRS1900	661	0	0.23654	0.3022	---	PASS
GPRS1900	810	0	0.24047	0.2993	---	PASS

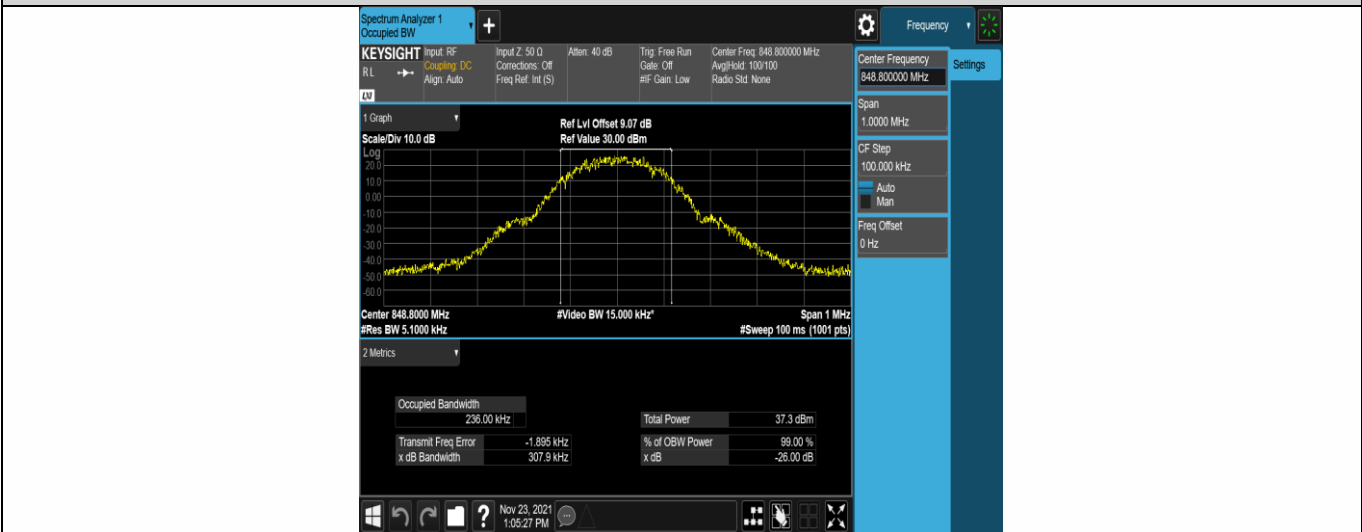
Test Graphs



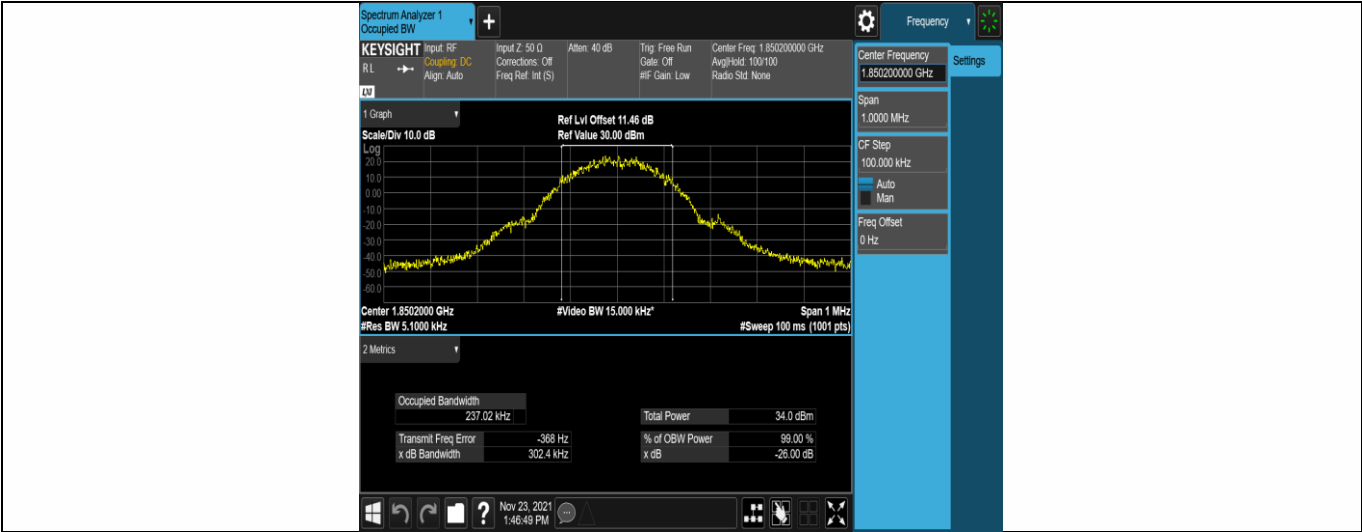
GPRS850-128-3-0.2960



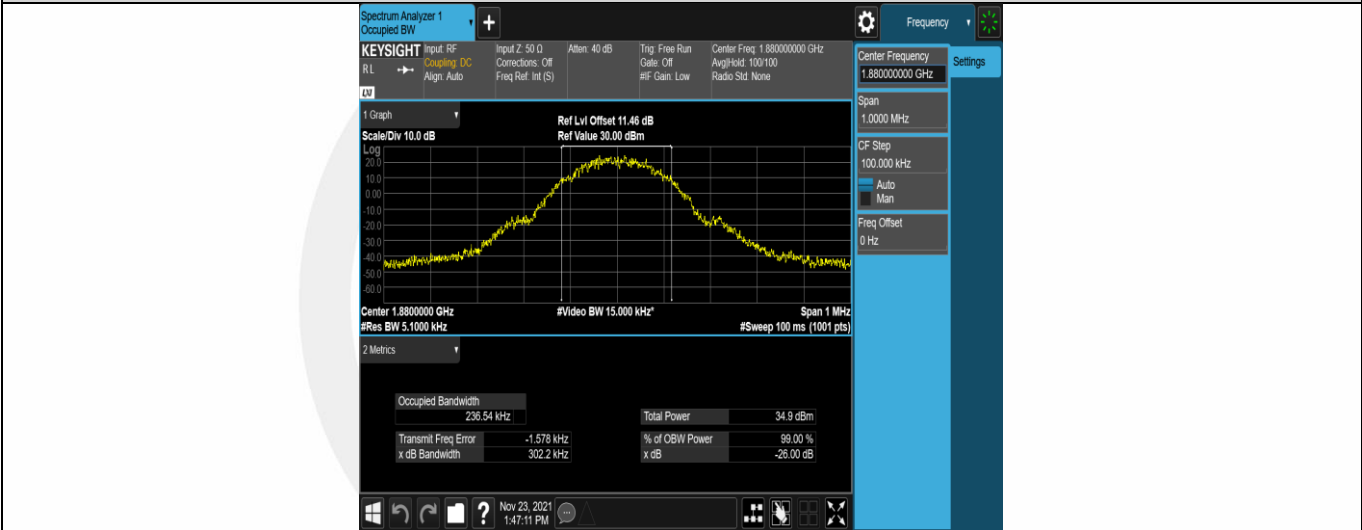
GPRS850-190-3-0.3046



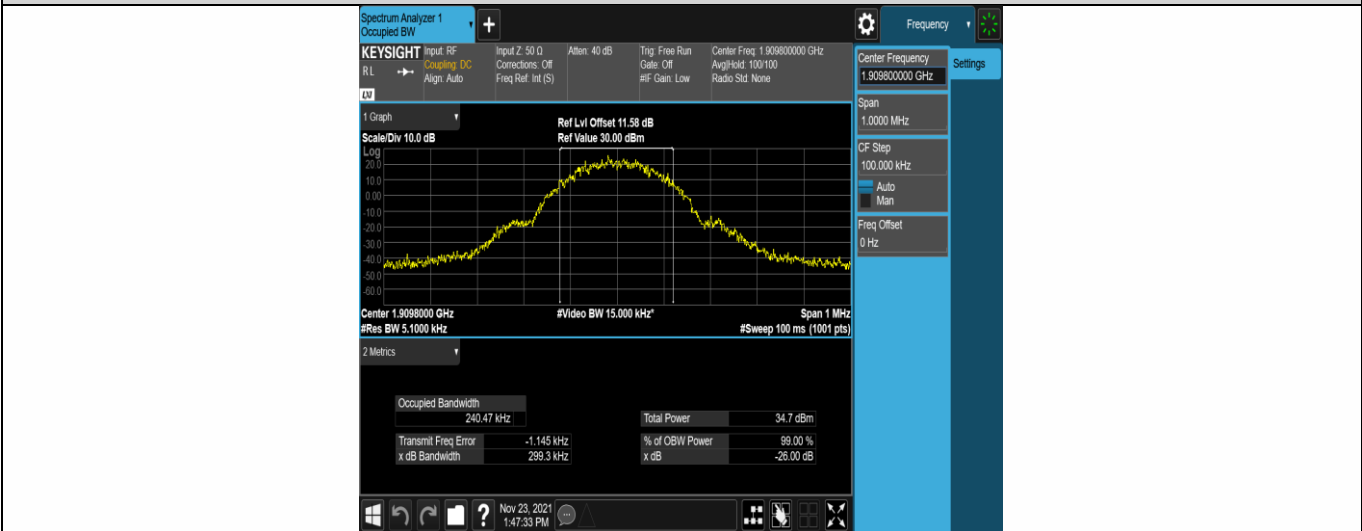
GPRS850-251-3-0.3079



GPRS1900-512-0-0.3024



GPRS1900-661-0-0.3022



GPRS1900-810-0-0.2993

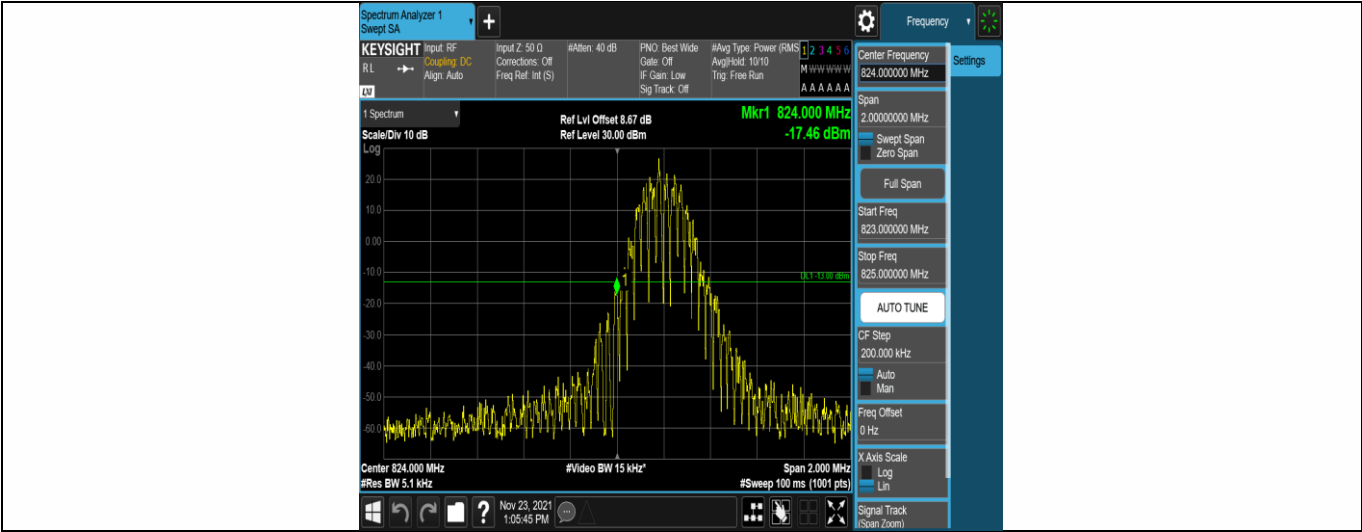
Appendix D: Band Edge

Test Result

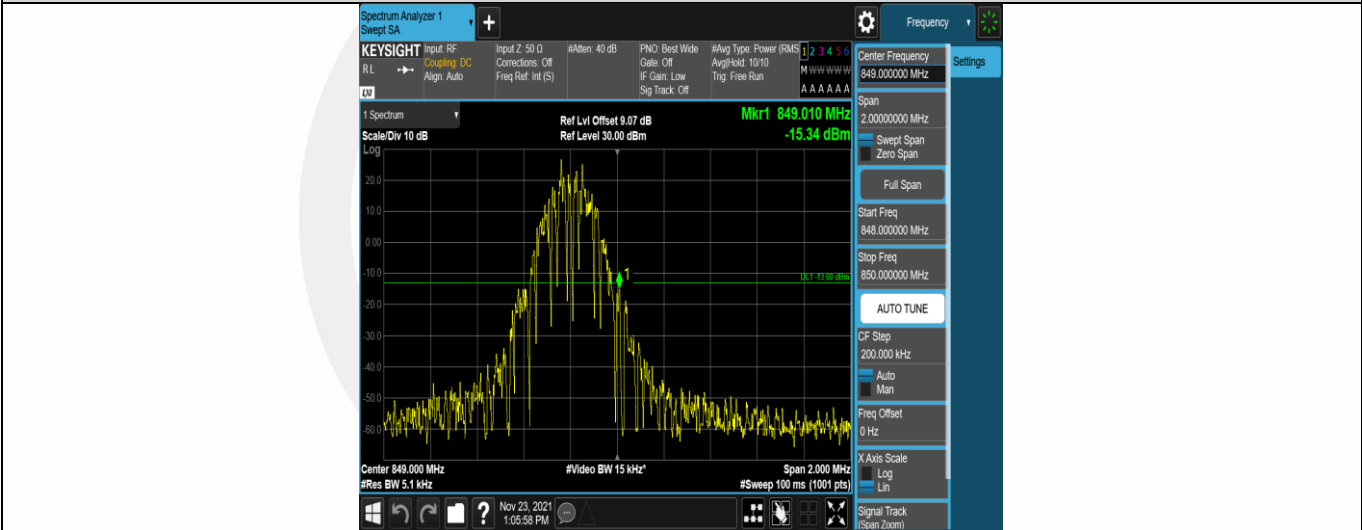
Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GPRS850	128	3	824.00	-13.83	-13	PASS
GPRS850	251	3	849.01	-13.27	-13	PASS
GPRS1900	512	0	1849.99	-18.89	-13	PASS
GPRS1900	810	0	1910.01	-15.44	-13	PASS



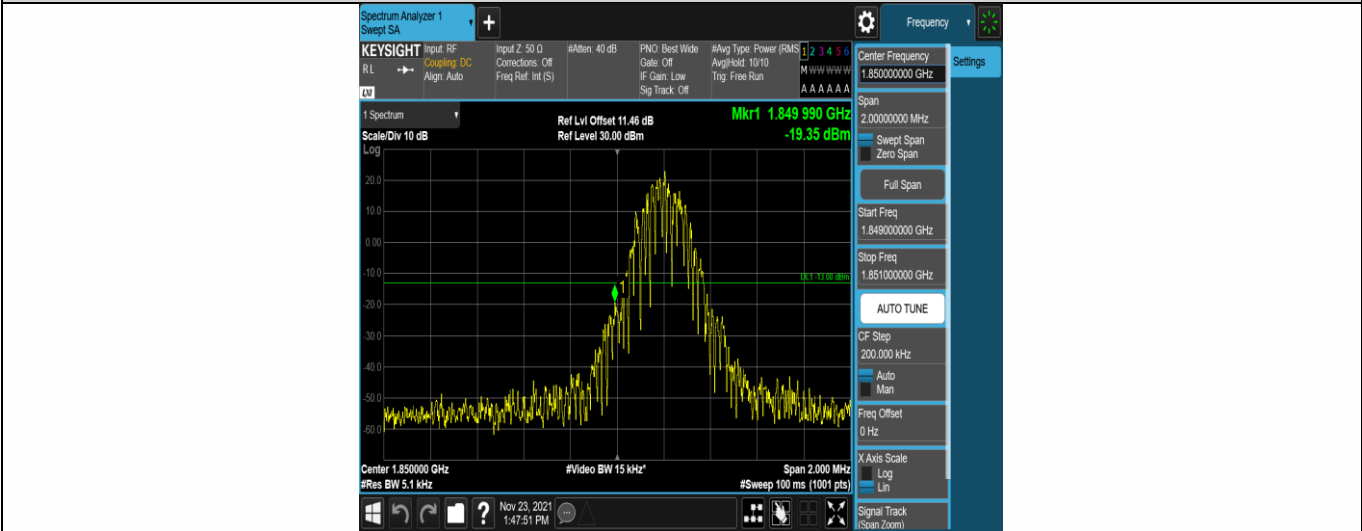
Test Graphs



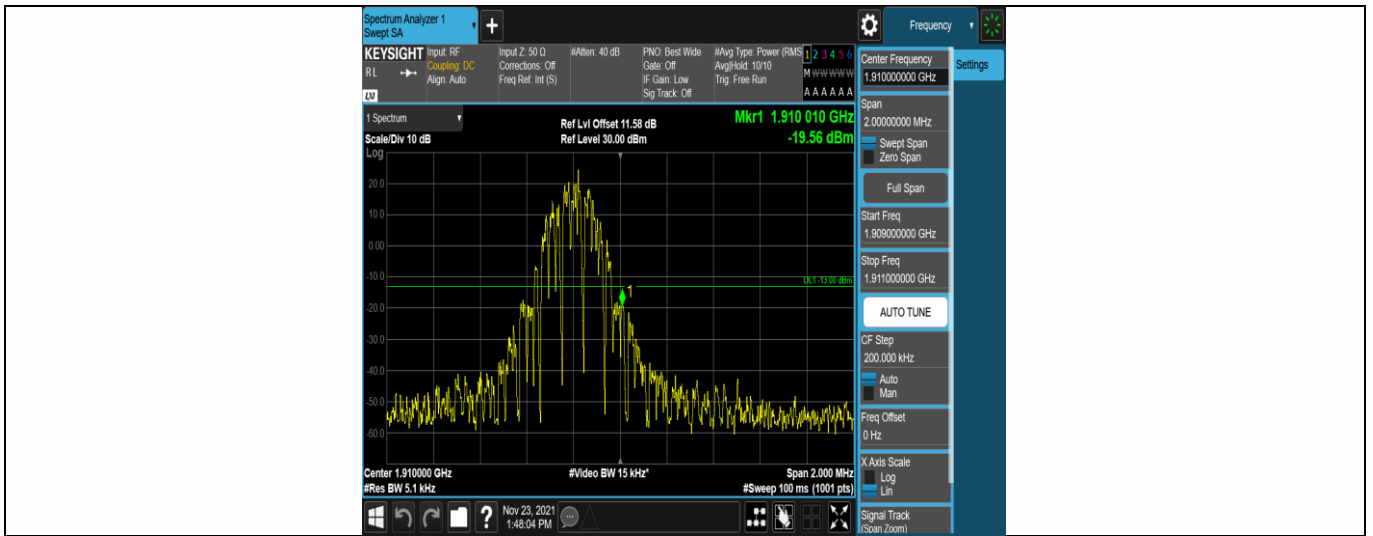
GPRS850-128-3



GPRS850-251-3



GPRS1900-512-0



GPRS1900-810-0



Appendix E: Conducted Spurious Emission

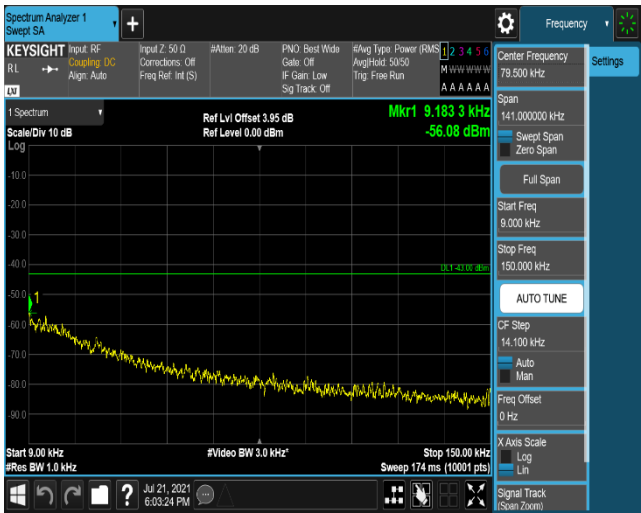
Test Result

Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GPRS850	128	3	0.009~0.15MHz	0.02	-58.29	-43	PASS
GPRS850	128	3	0.15~30MHz	0.16	-59.66	-33	PASS
GPRS850	128	3	30~1000MHz	211.58	-35.77	-23	PASS
GPRS850	128	3	1000~3000MHz	2128.67	-34.49	-13	PASS
GPRS850	128	3	3000~10000MHz z	3395.03	-38.11	-13	PASS
GPRS850	190	3	0.009~0.15MHz	0.01	-50.49	-43	PASS
GPRS850	190	3	0.15~30MHz	0.15	-51.14	-33	PASS
GPRS850	190	3	30~1000MHz	186.01	-36.2	-23	PASS
GPRS850	190	3	1000~3000MHz	2108	-34.47	-13	PASS
GPRS850	190	3	3000~10000MHz z	3821.57	-40.36	-13	PASS
GPRS850	251	3	0.009~0.15MHz	0.02	-58.88	-43	PASS
GPRS850	251	3	0.15~30MHz	0.15	-59.8	-33	PASS
GPRS850	251	3	30~1000MHz	198.81	-35.99	-23	PASS
GPRS850	251	3	1000~3000MHz	2146.2	-34.5	-13	PASS
GPRS850	251	3	3000~10000MHz z	3395.03	-37.81	-13	PASS
GPRS1900	512	0	0.009~0.15MHz	0.02	-59.4	-43	PASS
GPRS1900	512	0	0.15~30MHz	0.15	-59.73	-33	PASS
GPRS1900	512	0	30~1000MHz	189.63	-33.84	-23	PASS
GPRS1900	512	0	1000~3000MHz	2109.33	-36.25	-13	PASS
GPRS1900	512	0	3000~18000MHz z	3819	-39.79	-13	PASS
GPRS1900	661	0	0.009~0.15MHz	0.01	-57.26	-43	PASS
GPRS1900	661	0	0.15~30MHz	0.16	-59.49	-33	PASS
GPRS1900	661	0	30~1000MHz	194.29	-35.78	-23	PASS
GPRS1900	661	0	1000~3000MHz	2117.33	-36.27	-13	PASS
GPRS1900	661	0	3000~18000MHz z	3824.5	-40.47	-13	PASS
GPRS1900	810	0	0.009~0.15MHz	0.01	-59.73	-43	PASS

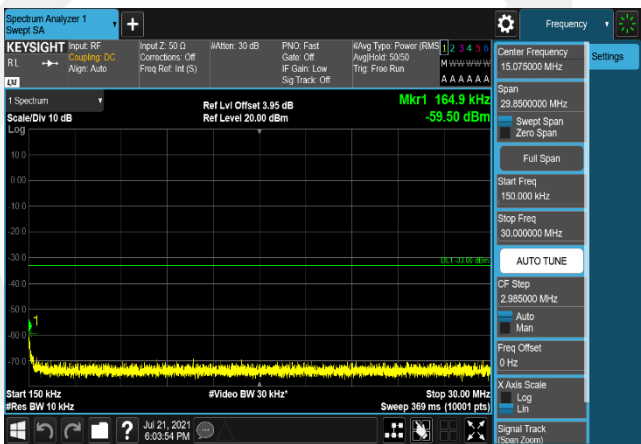
GPRS1900	810	0	0.15~30MHz	0.16	-59.86	-33	PASS
GPRS1900	810	0	30~1000MHz	176.92	-35.71	-23	PASS
GPRS1900	810	0	1000~3000MHz	2143	-36.11	-13	PASS
GPRS1900	810	0	3000~18000MHz z	3843.5	-40.47	-13	PASS



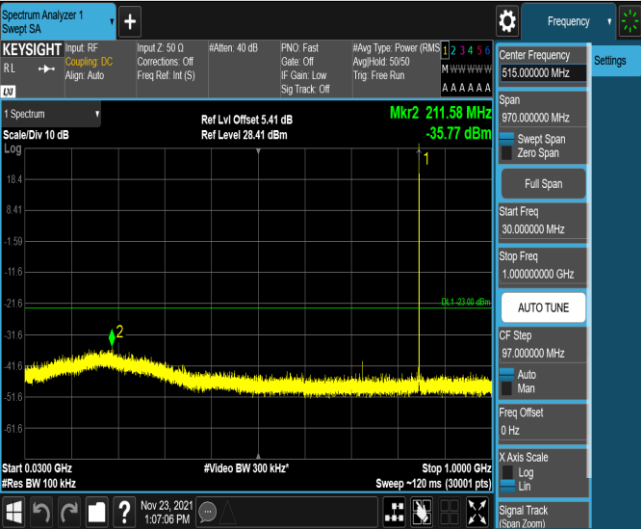
Test Graphs



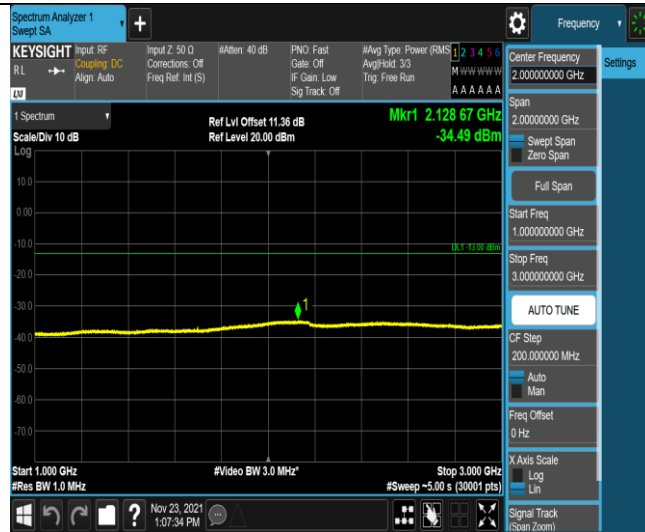
GPRS850-128-3-0.009~0.15MHz



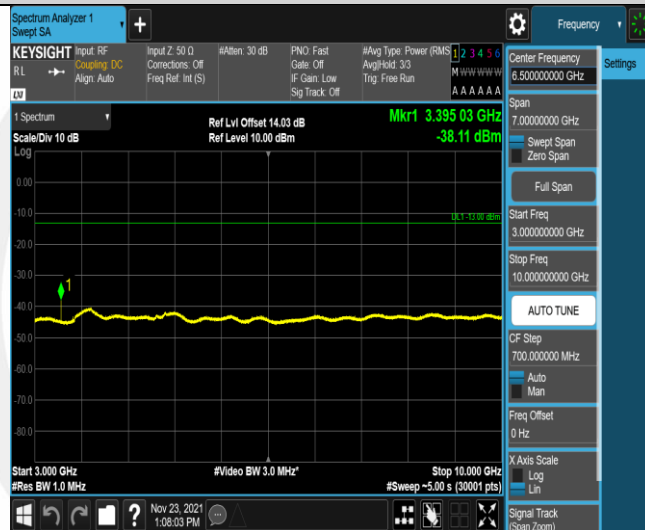
GPRS850-128-3-0.15~30MHz



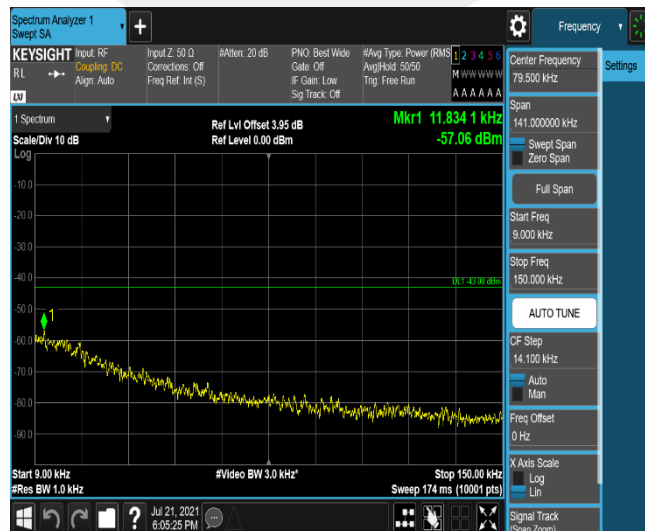
GPRS850-128-3-30~100MHz



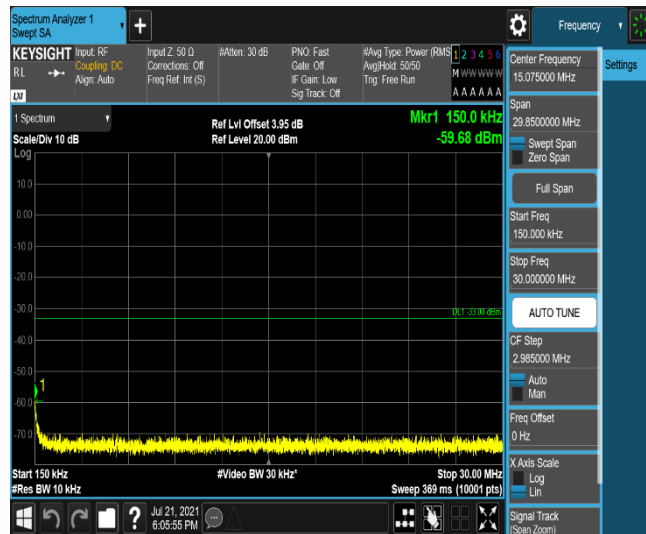
GPRS850-128-3-1000~3000MHz



GPRS850-128-3-3000~10000MHz



GPRS850-190-3-0.009~0.15MHz



GPRS850-190-3-0.15~30MHz



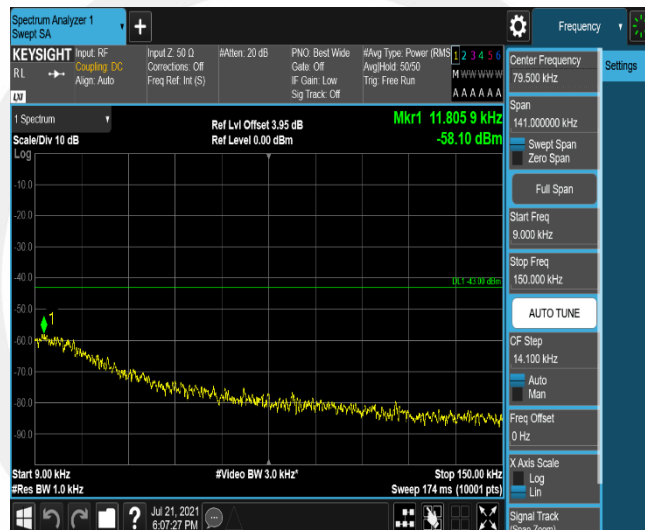
GPRS850-190-3-30~1000MHz



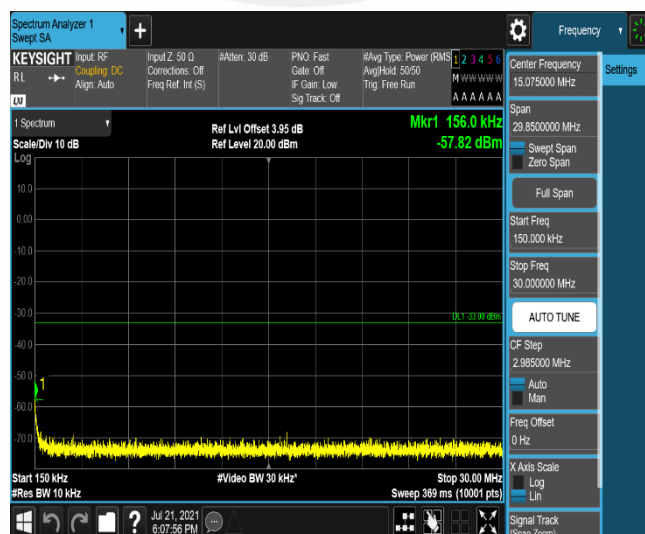
GPRS850-190-3-1000~3000MHz



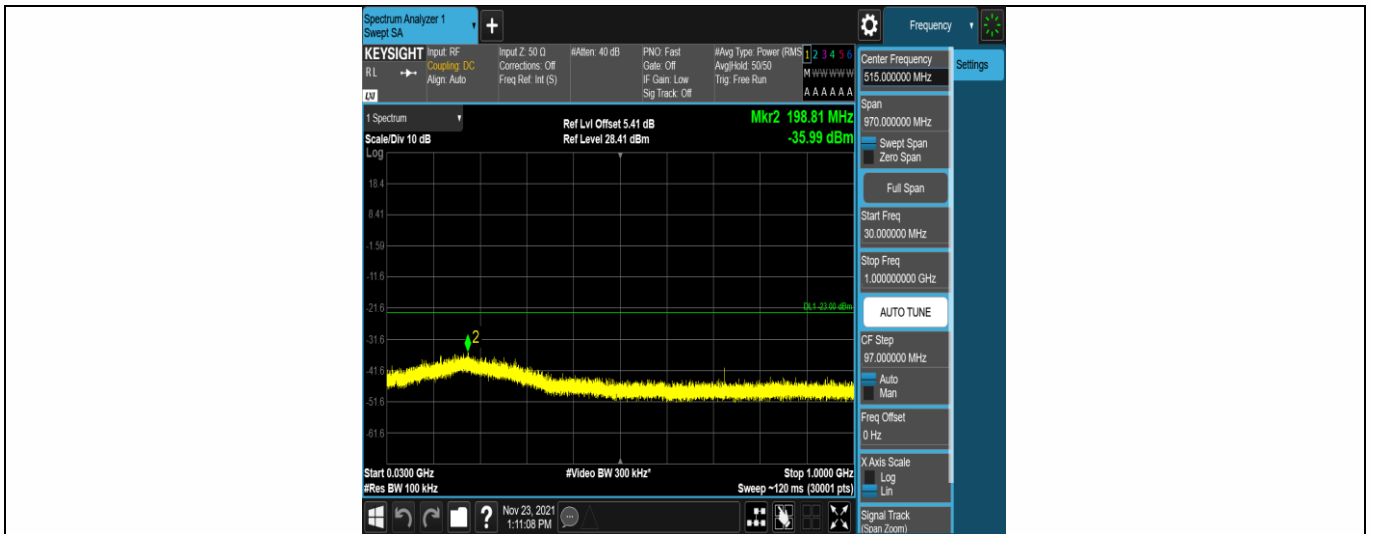
GPRS850-190-3-3000~10000MHz



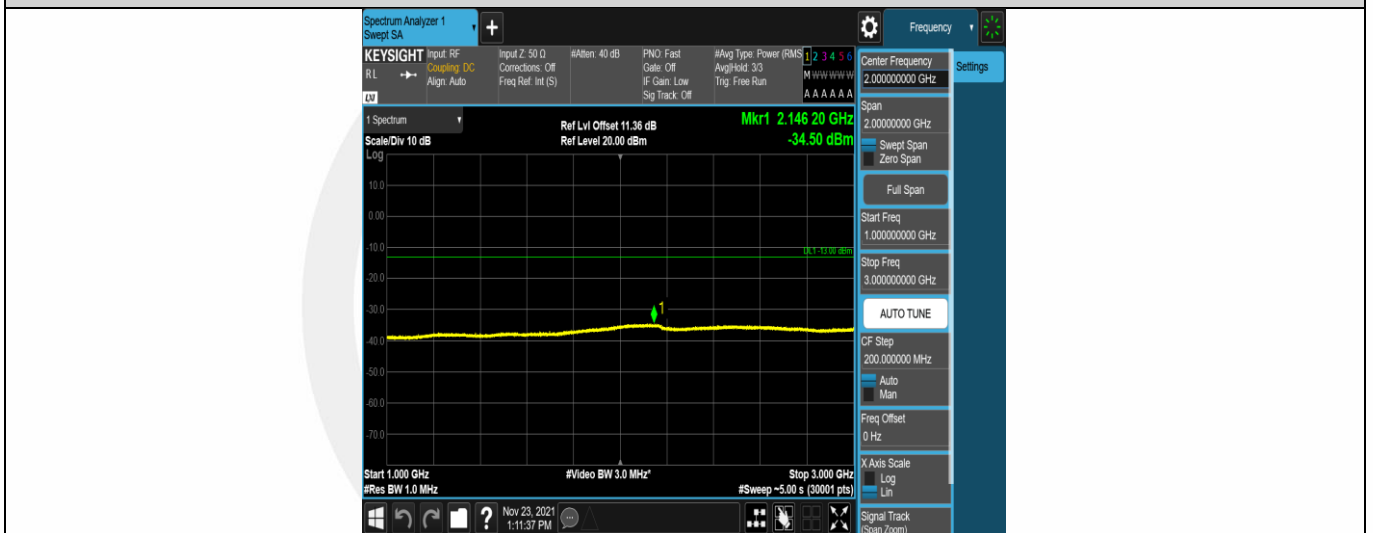
GPRS850-251-3-0.009~0.15MHz



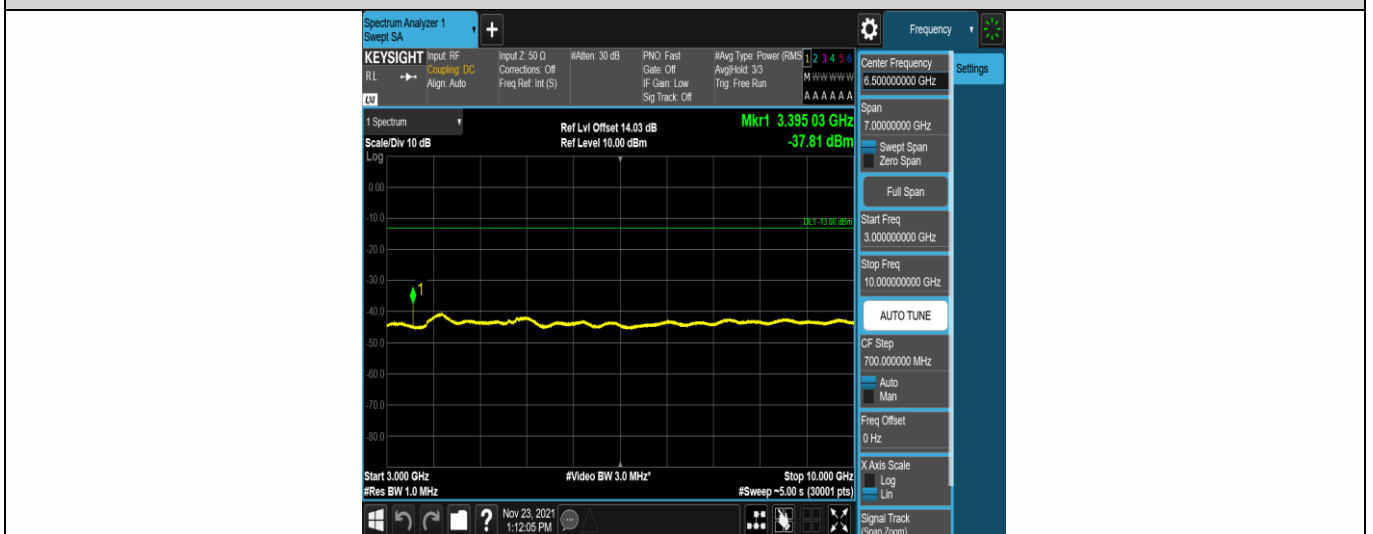
GPRS850-251-3-0.15~30MHz



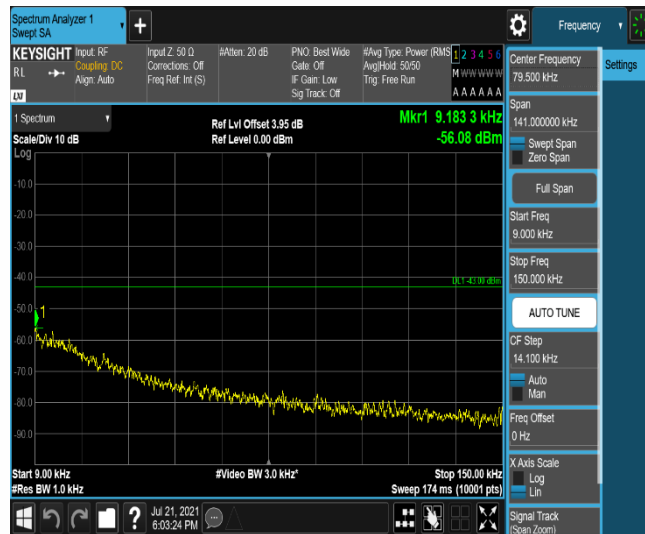
GPRS850-251-3-30~1000MHz



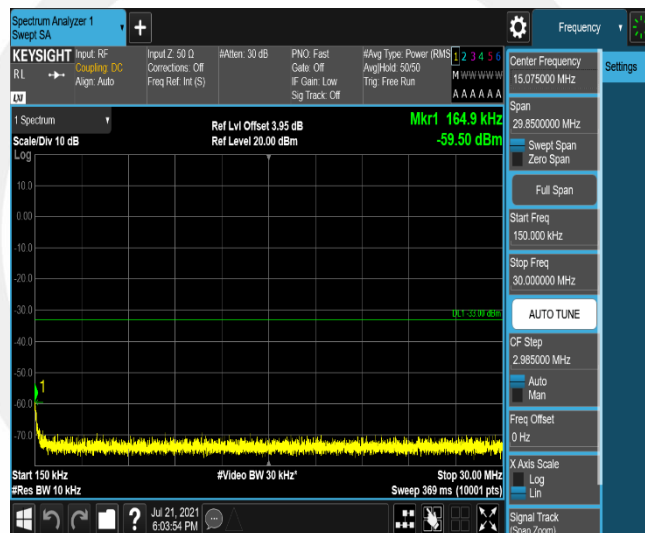
GPRS850-251-3-1000~3000MHz



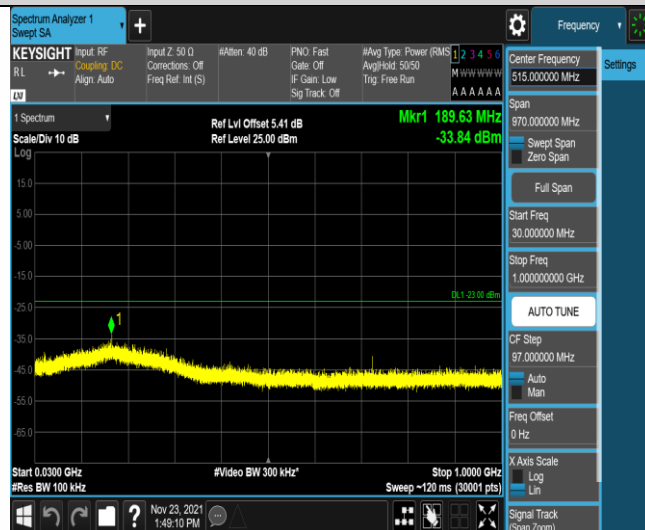
GPRS850-251-3-3000~10000MHz



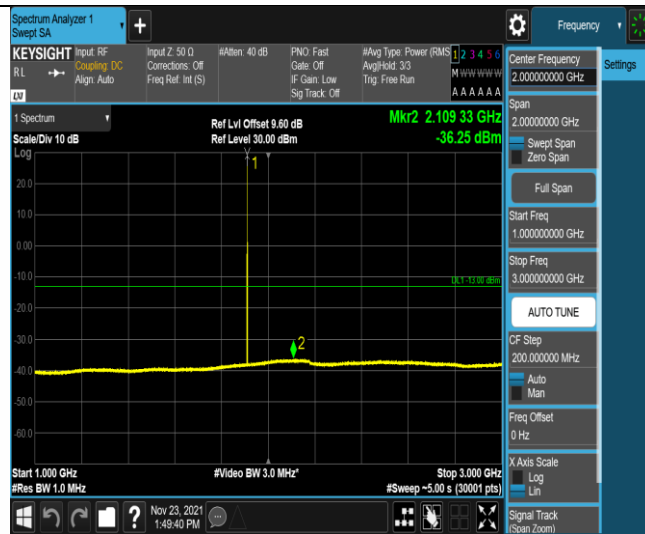
GPRS1900-512-0-0.009~0.15MHz



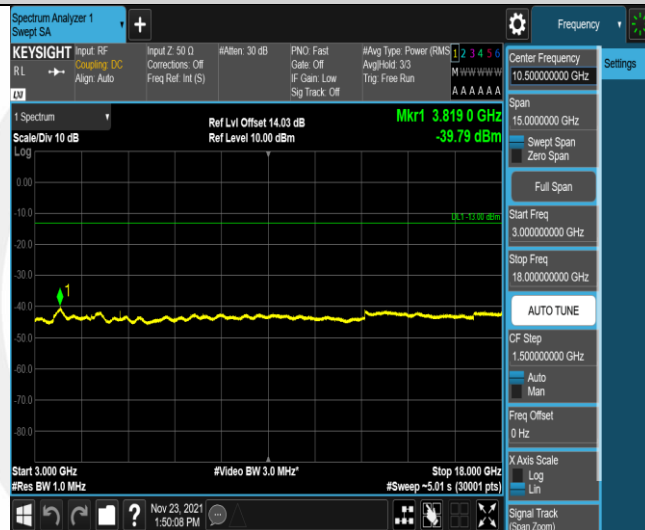
GPRS1900-512-0-0.15~30MHz



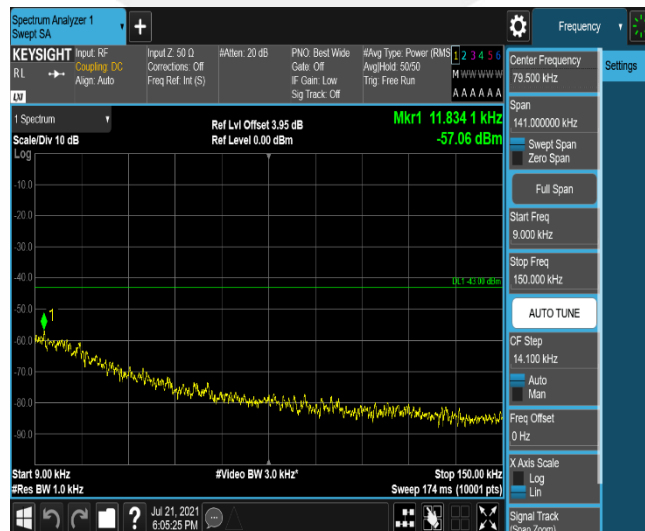
GPRS1900-512-0-30~1000MHz



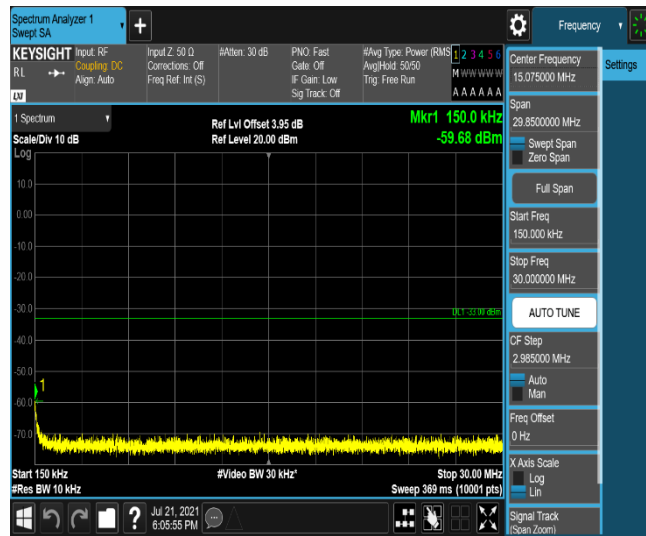
GPRS1900-512-0-1000~3000MHz



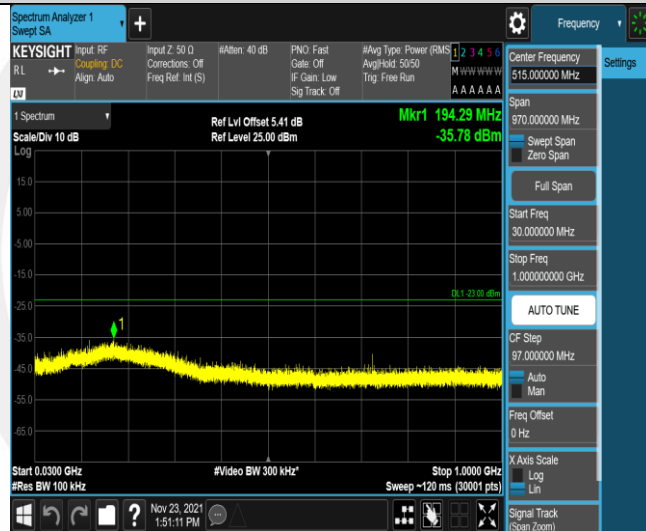
GPRS1900-512-0-3000~18000MHz



GPRS1900-661-0-0.009~0.15MHz



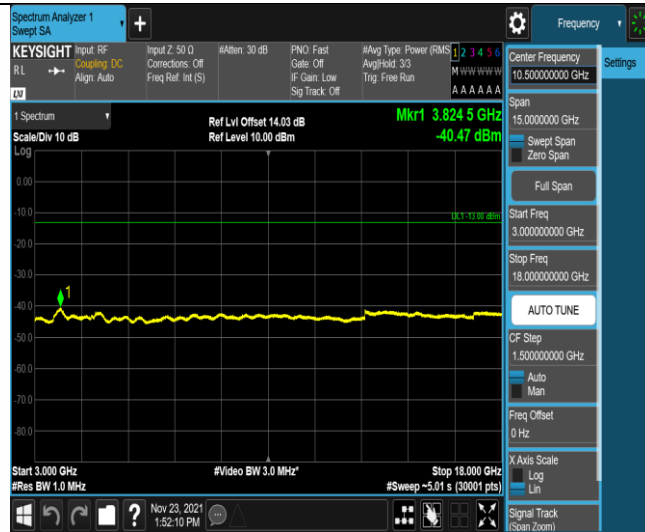
GPRS1900-661-0-0.15~30MHz



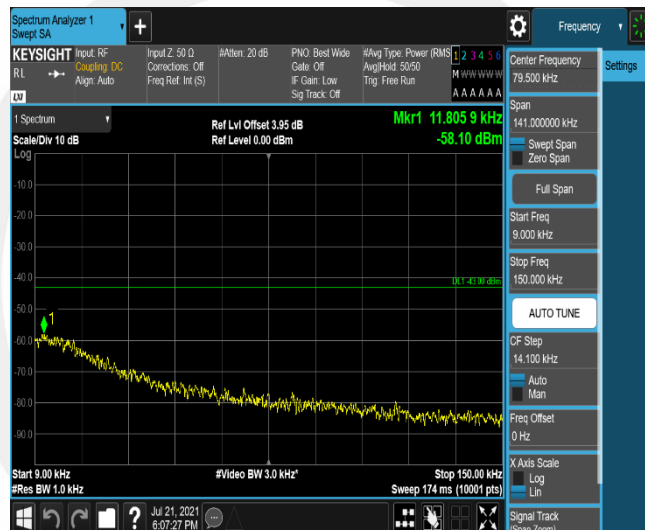
GPRS1900-661-0-30~1000MHz



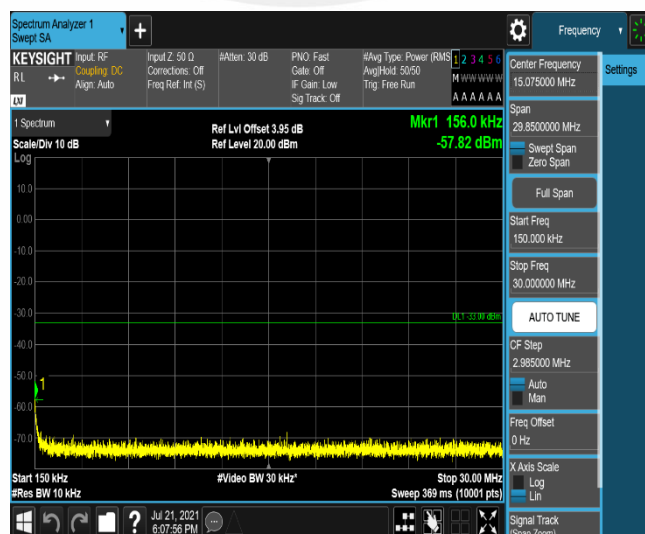
GPRS1900-661-0-1000~3000MHz



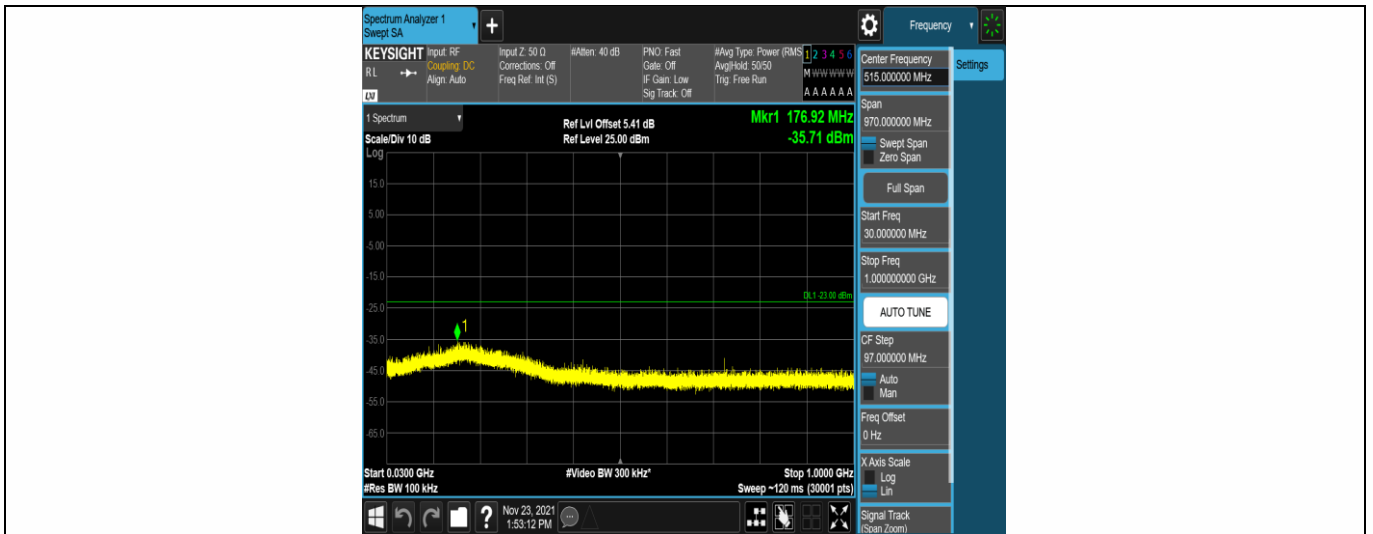
GPRS1900-661-0-3000~18000MHz



GPRS1900-810-0-0.009~0.15MHz



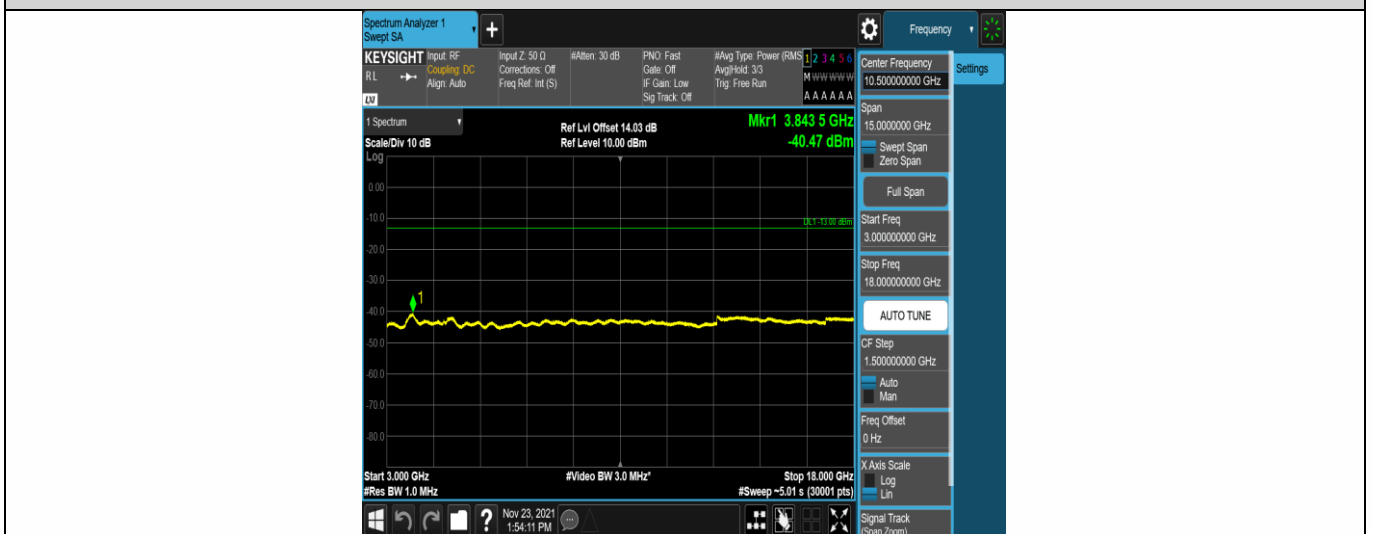
GPRS1900-810-0-0.15~30MHz



GPRS1900-810-0-30~1000MHz



GPRS1900-810-0-1000~3000MHz



GPRS1900-810-0-3000~18000MHz



Appendix F: Frequency Stability

Test Result

Voltage								
Band	Channel	PCL	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GPRS850	128	3	VL	NT	4.23	0.005132	±2.5	PASS
GPRS850	128	3	VN	NT	7.07	0.008578	±2.5	PASS
GPRS850	128	3	VH	NT	5.59	0.006782	±2.5	PASS
GPRS850	190	3	VL	NT	6.36	0.007602	±2.5	PASS
GPRS850	190	3	VN	NT	7.23	0.008642	±2.5	PASS
GPRS850	190	3	VH	NT	4.81	0.005749	±2.5	PASS
GPRS850	251	3	VL	NT	4.88	0.005749	±2.5	PASS
GPRS850	251	3	VN	NT	3.84	0.004524	±2.5	PASS
GPRS850	251	3	VH	NT	3.91	0.004607	±2.5	PASS
GPRS1900	512	0	VL	NT	-10.04	-0.005426	±2.5	PASS
GPRS1900	512	0	VN	NT	-5.94	-0.003210	±2.5	PASS
GPRS1900	512	0	VH	NT	-9.56	-0.005167	±2.5	PASS
GPRS1900	661	0	VL	NT	-9.46	-0.005032	±2.5	PASS
GPRS1900	661	0	VN	NT	-10.75	-0.005718	±2.5	PASS
GPRS1900	661	0	VH	NT	-10.27	-0.005463	±2.5	PASS
GPRS1900	810	0	VL	NT	-11.88	-0.006221	±2.5	PASS
GPRS1900	810	0	VN	NT	-10.04	-0.005257	±2.5	PASS
GPRS1900	810	0	VH	NT	-8.20	-0.004294	±2.5	PASS

Temperature								
Band	Channel	PCL	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GPRS850	128	3	NV	-30	4.81	0.005836	±2.5	PASS
GPRS850	128	3	NV	-20	5.88	0.007134	±2.5	PASS
GPRS850	128	3	NV	-10	5.81	0.007049	±2.5	PASS
GPRS850	128	3	NV	0	3.75	0.004550	±2.5	PASS
GPRS850	128	3	NV	10	3.42	0.004149	±2.5	PASS
GPRS850	128	3	NV	20	4.13	0.005011	±2.5	PASS
GPRS850	128	3	NV	30	4.62	0.005605	±2.5	PASS
GPRS850	128	3	NV	40	3.00	0.003640	±2.5	PASS

GPRS850	128	3	NV	50	5.78	0.007013	±2.5	PASS
GPRS850	190	3	NV	-30	6.10	0.007291	±2.5	PASS
GPRS850	190	3	NV	-20	4.88	0.005833	±2.5	PASS
GPRS850	190	3	NV	-10	4.42	0.005283	±2.5	PASS
GPRS850	190	3	NV	0	4.68	0.005594	±2.5	PASS
GPRS850	190	3	NV	10	4.91	0.005869	±2.5	PASS
GPRS850	190	3	NV	20	7.62	0.009108	±2.5	PASS
GPRS850	190	3	NV	30	6.17	0.007375	±2.5	PASS
GPRS850	190	3	NV	40	4.13	0.004937	±2.5	PASS
GPRS850	190	3	NV	50	5.68	0.006789	±2.5	PASS
GPRS850	251	3	NV	-30	3.84	0.004524	±2.5	PASS
GPRS850	251	3	NV	-20	3.75	0.004418	±2.5	PASS
GPRS850	251	3	NV	-10	3.13	0.003688	±2.5	PASS
GPRS850	251	3	NV	0	3.42	0.004029	±2.5	PASS
GPRS850	251	3	NV	10	4.23	0.004984	±2.5	PASS
GPRS850	251	3	NV	20	5.13	0.006044	±2.5	PASS
GPRS850	251	3	NV	30	3.97	0.004677	±2.5	PASS
GPRS850	251	3	NV	40	3.94	0.004642	±2.5	PASS
GPRS850	251	3	NV	50	3.71	0.004371	±2.5	PASS
GPRS1900	512	0	NV	-30	-8.72	-0.004713	±2.5	PASS
GPRS1900	512	0	NV	-20	-9.59	-0.005183	±2.5	PASS
GPRS1900	512	0	NV	-10	-9.85	-0.005324	±2.5	PASS
GPRS1900	512	0	NV	0	-12.88	-0.006961	±2.5	PASS
GPRS1900	512	0	NV	10	-8.49	-0.004589	±2.5	PASS
GPRS1900	512	0	NV	20	-11.66	-0.006302	±2.5	PASS
GPRS1900	512	0	NV	30	-10.59	-0.005724	±2.5	PASS
GPRS1900	512	0	NV	40	-10.59	-0.005724	±2.5	PASS
GPRS1900	512	0	NV	50	-9.78	-0.005286	±2.5	PASS
GPRS1900	661	0	NV	-30	-10.30	-0.005479	±2.5	PASS
GPRS1900	661	0	NV	-20	-12.01	-0.006388	±2.5	PASS
GPRS1900	661	0	NV	-10	-8.91	-0.004739	±2.5	PASS
GPRS1900	661	0	NV	0	-11.30	-0.006011	±2.5	PASS
GPRS1900	661	0	NV	10	-10.33	-0.005495	±2.5	PASS
GPRS1900	661	0	NV	20	-10.91	-0.005803	±2.5	PASS
GPRS1900	661	0	NV	30	-12.43	-0.006612	±2.5	PASS
GPRS1900	661	0	NV	40	-15.21	-0.008090	±2.5	PASS

GPRS1900	661	0	NV	50	-7.75	-0.004122	±2.5	PASS
GPRS1900	810	0	NV	-30	-9.72	-0.005090	±2.5	PASS
GPRS1900	810	0	NV	-20	-8.49	-0.004445	±2.5	PASS
GPRS1900	810	0	NV	-10	-8.91	-0.004665	±2.5	PASS
GPRS1900	810	0	NV	0	-8.49	-0.004445	±2.5	PASS
GPRS1900	810	0	NV	10	-11.69	-0.006121	±2.5	PASS
GPRS1900	810	0	NV	20	-8.33	-0.004362	±2.5	PASS
GPRS1900	810	0	NV	30	-10.82	-0.005666	±2.5	PASS
GPRS1900	810	0	NV	40	-12.30	-0.006440	±2.5	PASS
GPRS1900	810	0	NV	50	-11.20	-0.005864	±2.5	PASS

