FCC GSM Test Data

General Description of EUT	
Product Name:	S1 Napoli
Test Model:	S1 Napoli
Sample ID:	202207-0016-3-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50%
Test Voltage:	DC 3.7V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202305-0096-31	

Appendix A: Conducted Output Power Data

Test Result

Band	Channel	PCL	Conducted Power (dBm)	Limit(dBm)	Verdict
GSM850	128	5	33.76	38.45	PASS
GSM850	190	5	33.65	38.45	PASS
GSM850	251	5	33.63	38.45	PASS
GSM1900	512	0	30.04	33.00	PASS
GSM1900	661	0	29.79	33.00	PASS
GSM1900	810	0	29.58	33.00	PASS

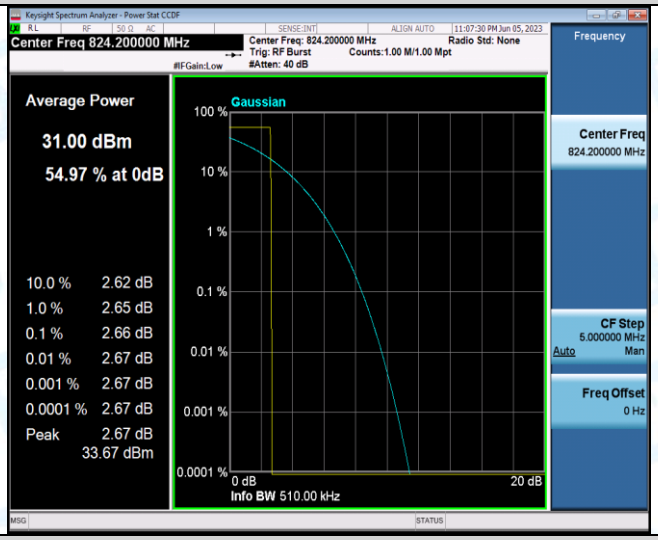
Appendix B: Peak-to-Average Ratio(CCDF)

Test Result

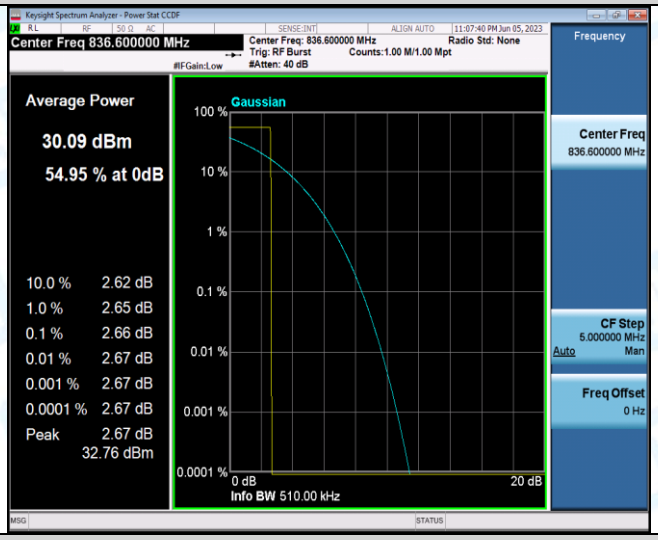
Band	Channel	PCL	Result(dB)	Limit(dB)	Verdict
GSM850	128	5	2.66	13	PASS
GSM850	190	5	2.66	13	PASS
GSM850	251	5	2.66	13	PASS
GSM1900	512	0	2.67	13	PASS
GSM1900	661	0	2.68	13	PASS
GSM1900	810	0	2.68	13	PASS

Test Graphs

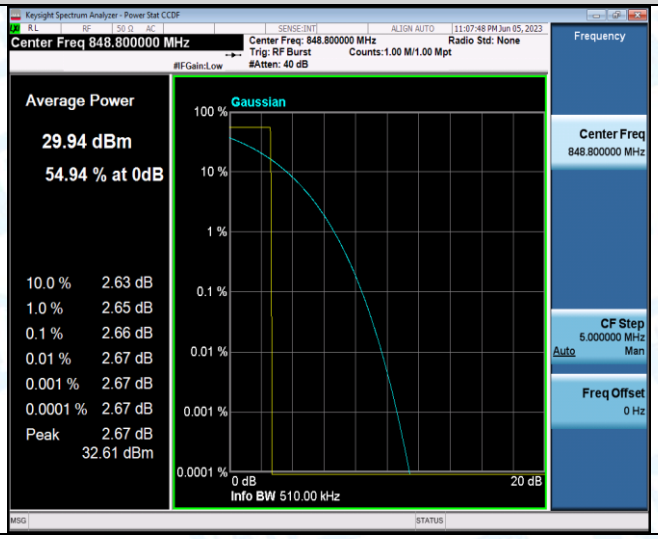
GSM850-128



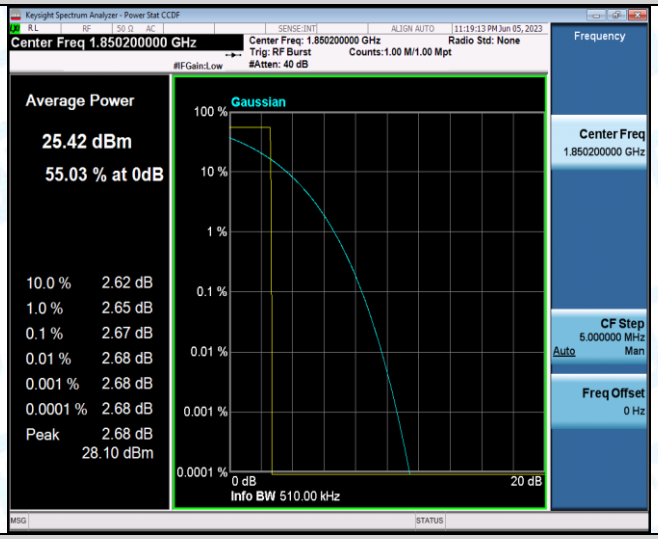
GSM850-190



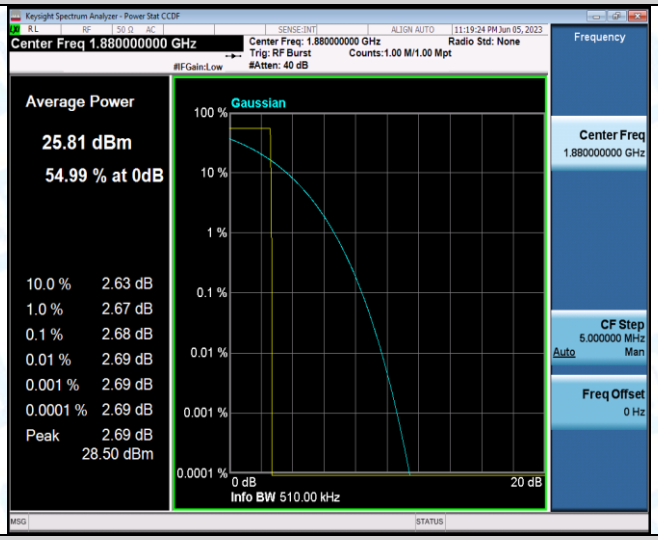
GSM850-251



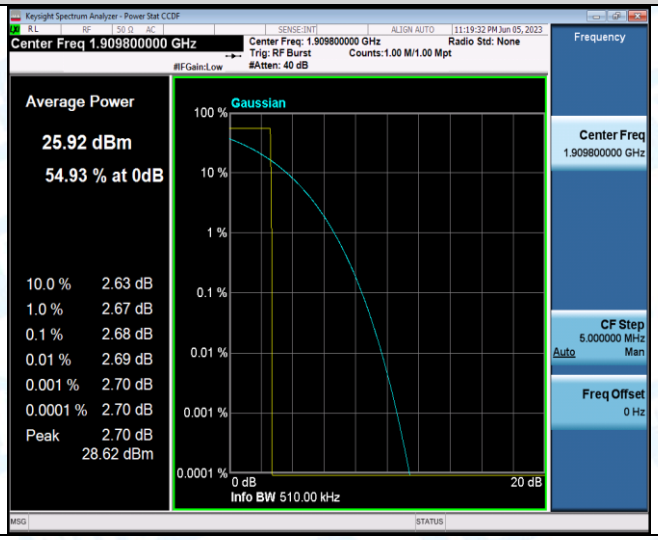
GSM1900-512



GSM1900-661



GSM1900-810



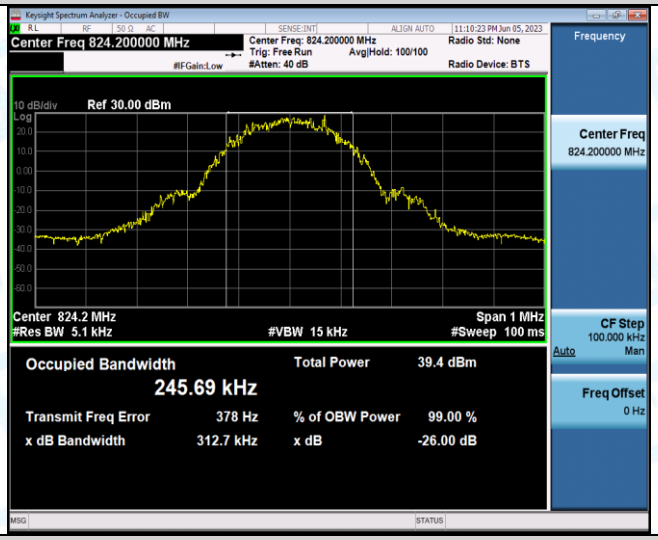
Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Channel	PCL	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
GSM850	128	5	0.24569	0.3127	---	PASS
GSM850	190	5	0.24876	0.3144	---	PASS
GSM850	251	5	0.24496	0.3084	---	PASS
GSM1900	512	0	0.24679	0.3159	---	PASS
GSM1900	661	0	0.24428	0.3108	---	PASS
GSM1900	810	0	0.24420	0.3114	---	PASS

Test Graphs

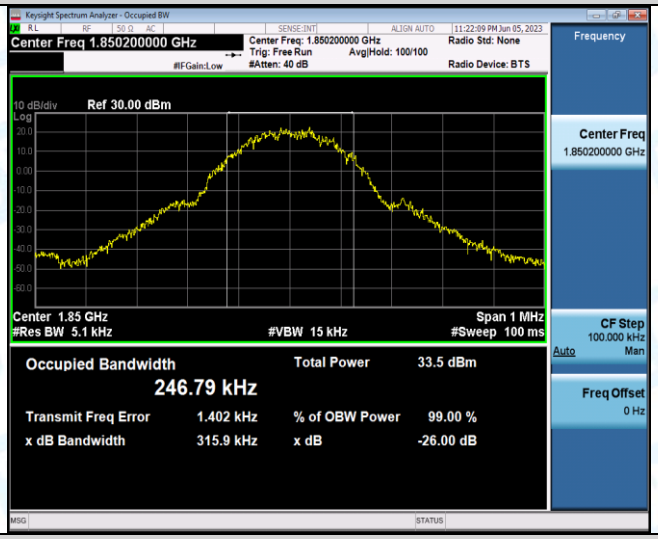
GSM850-128



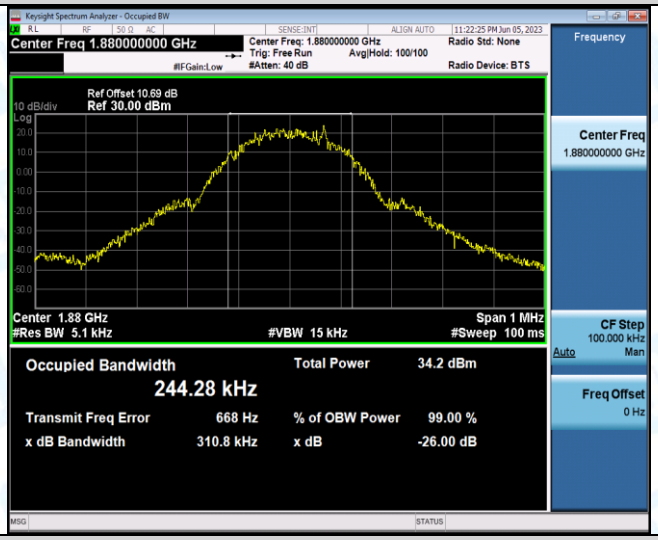
GSM850-190

GSM850-251

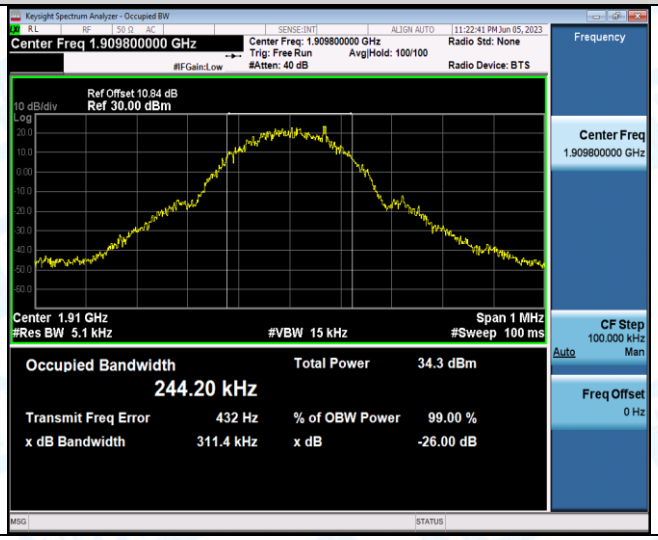
GSM1900-512



GSM1900-661



GSM1900-810



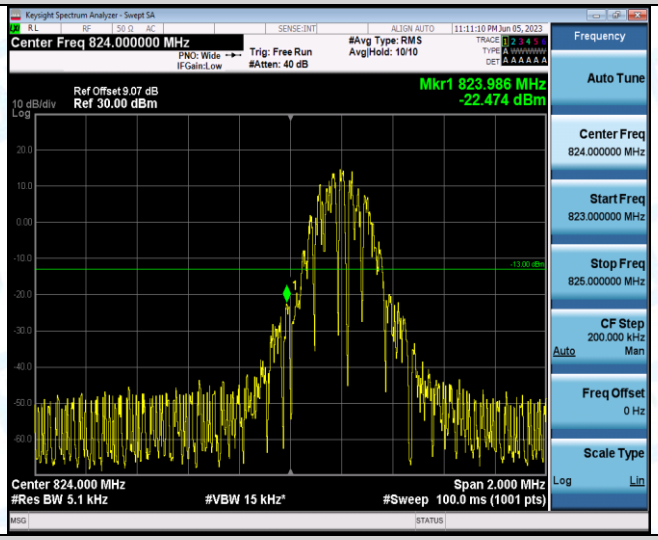
Appendix D: Band Edge

Test Result

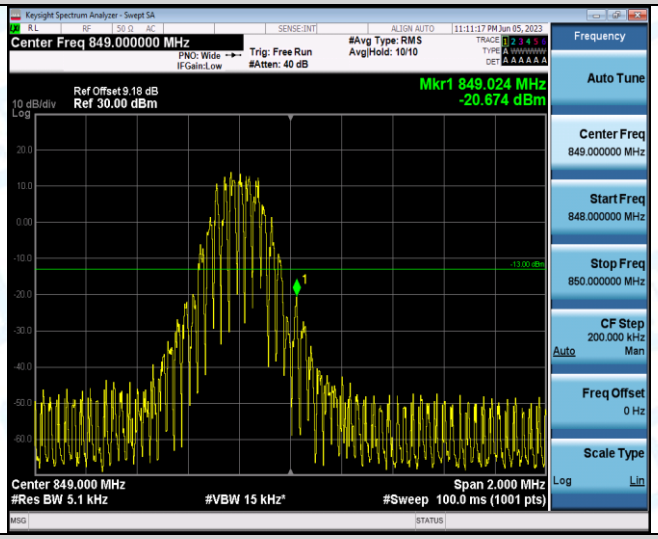
Band	Channel	PCL	Freq (MHz)	Result (dBm)	Limit(dBm)	Verdict
GSM850	128	5	823.99	-22.47	-13	PASS
GSM850	251	5	849.02	-20.67	-13	PASS
GSM1900	512	0	1849.97	-27.20	-13	PASS
GSM1900	810	0	1910.02	-25.25	-13	PASS

Test Graphs

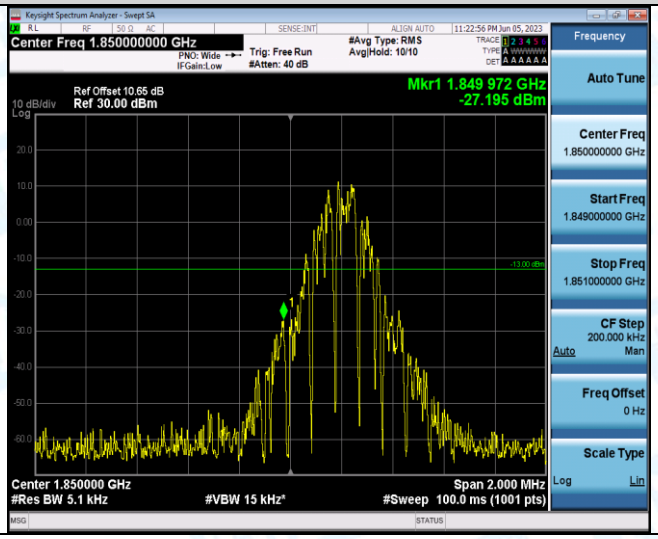
GSM850-128



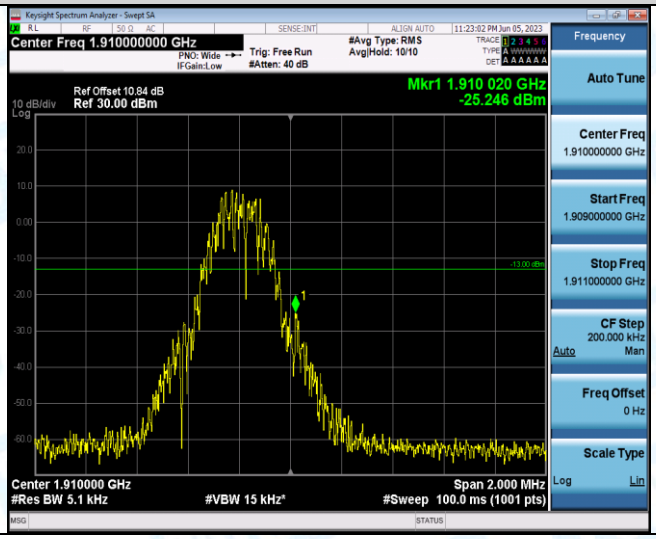
GSM850-251



GSM1900-512



GSM1900-810


Keysight Spectrum Analyzer - Swept SA
Center Freq 1.910000000 GHz
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold: 10/10
11:23:02 PM Jun 05, 2023
Ref Offset 10.84 dB
10 dB/div
Ref 30.00 dBm
Mkr1 1.910 020 GHz
-25.246 dBm
Center 1.910000 GHz
#Res BW 5.1 kHz
#VBW 15 kHz*
Span 2.000 MHz
#Sweep 100.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
1.910000000 GHz
Start Freq
1.909000000 GHz
Stop Freq
1.911000000 GHz
CF Step
200.000 kHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

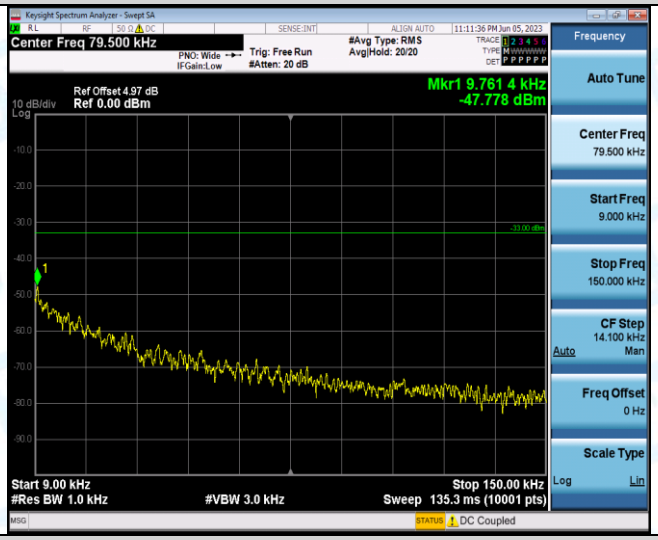
Appendix E: Conducted Spurious Emission

Test Result

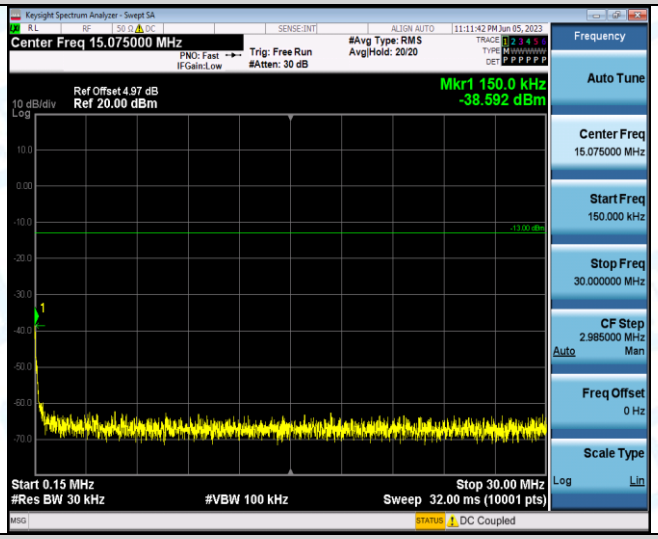
Band	Channel	PCL	Frequency Range(MHz)	Max.Freq. (MHz)	Result (dBm)	Limit (dBm)	Verdict
GSM850	128	5	0.009~0.15MHz	0.01	-47.78	-33	PASS
GSM850	128	5	0.15~30MHz	0.15	-38.59	-13	PASS
GSM850	128	5	30~1000MHz	935.85	-44.48	-13	PASS
GSM850	128	5	1000~10000MHz	1697.8	-32.06	-13	PASS
GSM850	190	5	0.009~0.15MHz	0.01	-49.27	-33	PASS
GSM850	190	5	0.15~30MHz	0.15	-39.06	-13	PASS
GSM850	190	5	30~1000MHz	949.72	-44.41	-13	PASS
GSM850	190	5	1000~10000MHz	2546.5	-32.25	-13	PASS
GSM850	251	5	0.009~0.15MHz	0.01	-50.11	-33	PASS
GSM850	251	5	0.15~30MHz	0.16	-39.35	-13	PASS
GSM850	251	5	30~1000MHz	635.28	-44.27	-13	PASS
GSM850	251	5	1000~10000MHz	2545.9	-32.25	-13	PASS
GSM1900	512	0	0.009~0.15MHz	0.01	-48.43	-43	PASS
GSM1900	512	0	0.15~30MHz	0.15	-37.79	-23	PASS
GSM1900	512	0	30~1000MHz	930	-45.06	-13	PASS
GSM1900	512	0	1000~18000MHz	17734.8	-15.99	-13	PASS
GSM1900	661	0	0.009~0.15MHz	0.01	-48.64	-43	PASS
GSM1900	661	0	0.15~30MHz	0.16	-40.07	-23	PASS
GSM1900	661	0	30~1000MHz	836.13	-44.64	-13	PASS
GSM1900	661	0	1000~18000MHz	17733.1	-15.75	-13	PASS
GSM1900	810	0	0.009~0.15MHz	0.01	-50.49	-43	PASS
GSM1900	810	0	0.15~30MHz	0.15	-39.16	-23	PASS
GSM1900	810	0	30~1000MHz	775.67	-45.81	-13	PASS
GSM1900	810	0	1000~18000MHz	17733.1	-15.2	-13	PASS

Test Graphs

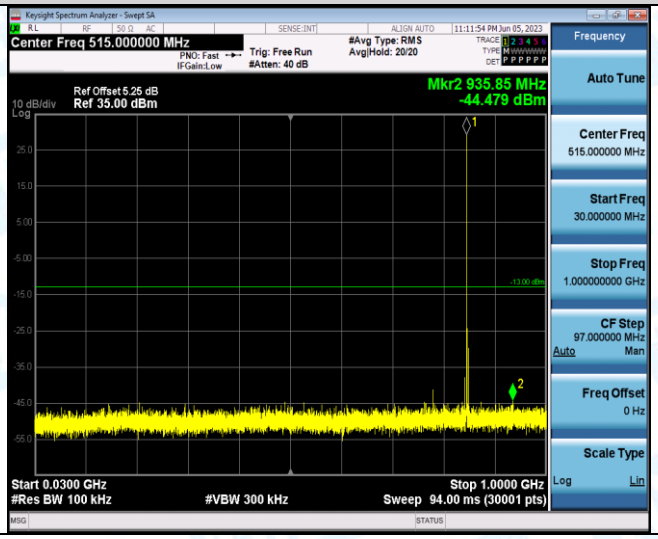
GSM850-128-0.009~0.15MHz



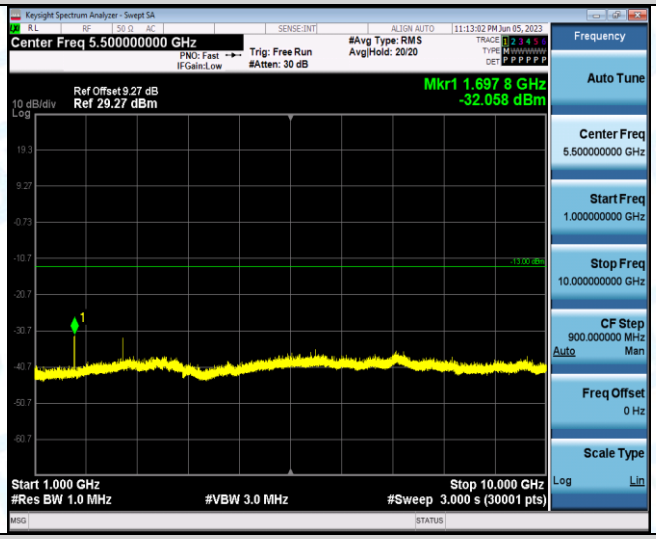
GSM850-128-0.15~30MHz



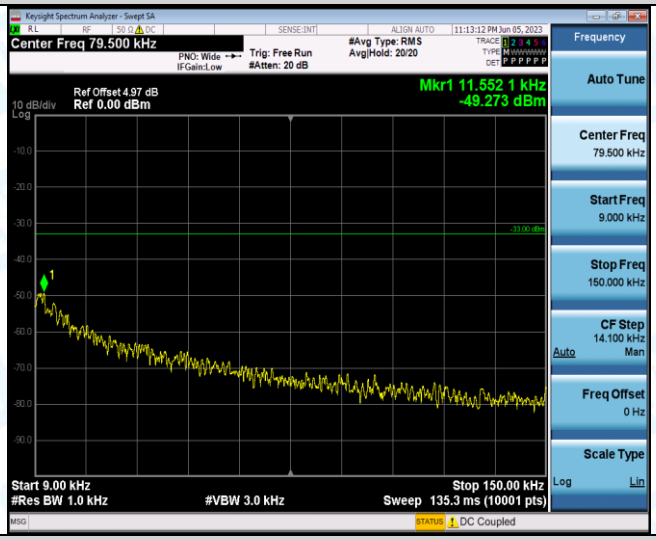
GSM850-128-30~1000MHz



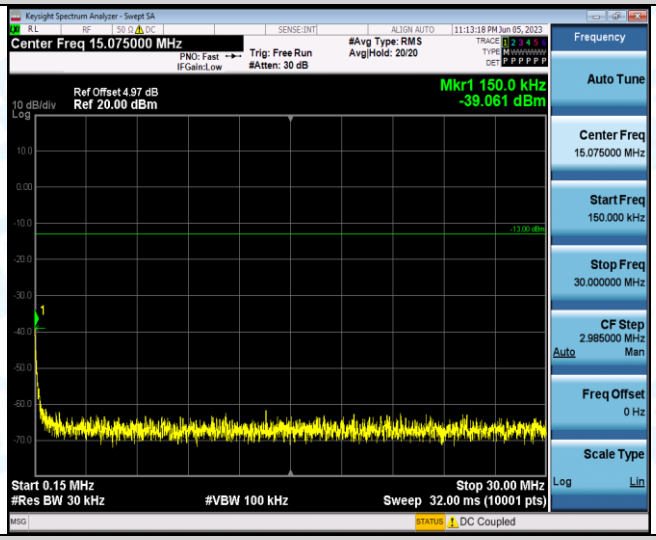
GSM850-128-1000~10000MHz



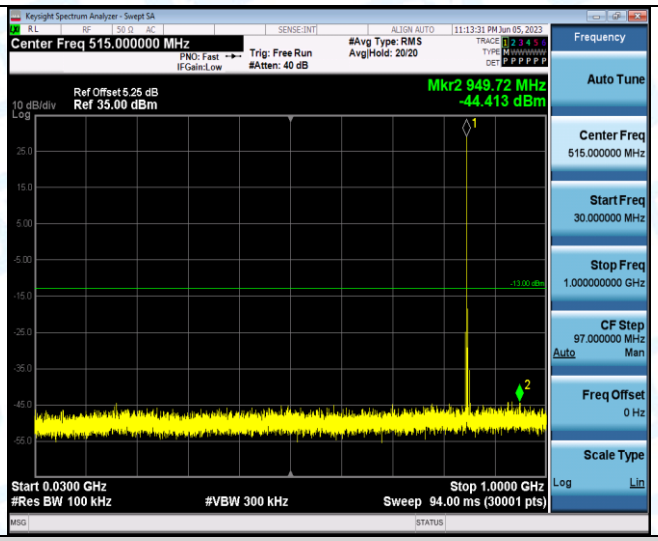
GSM850-190-0.009~0.15MHz



GSM850-190-0.15~30MHz

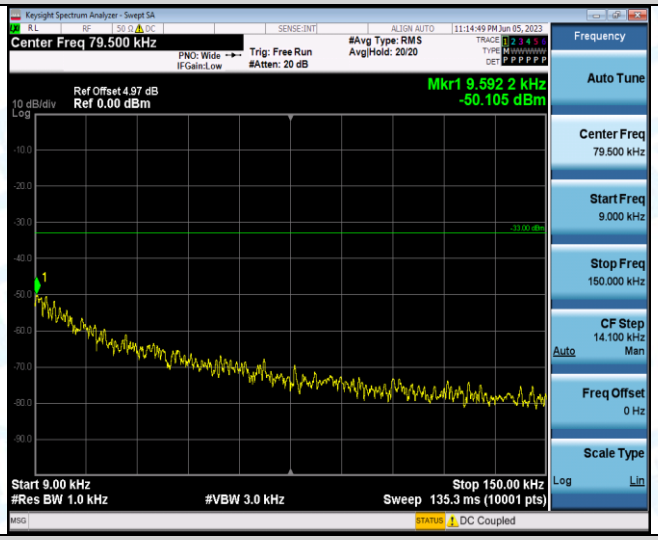


GSM850-190-30~1000MHz

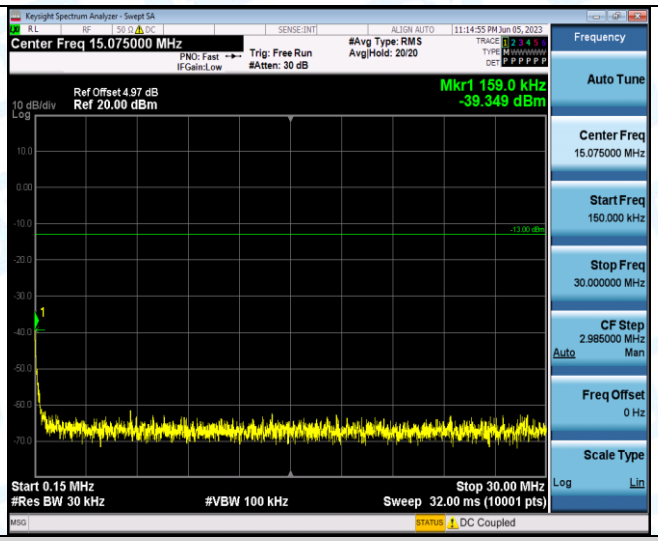


GSM850-190-1000~10000MHz

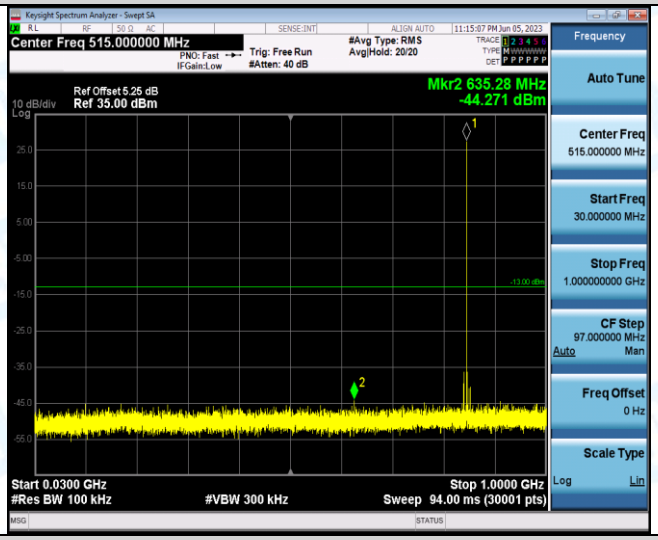
GSM850-251-0.009~0.15MHz



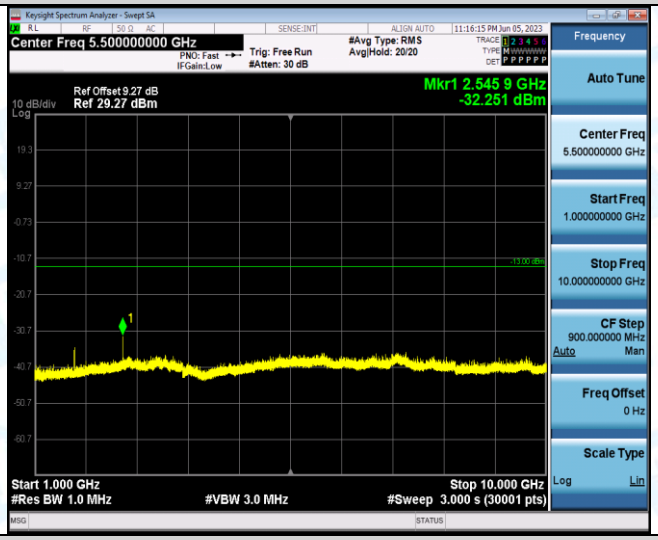
GSM850-251-0.15~30MHz



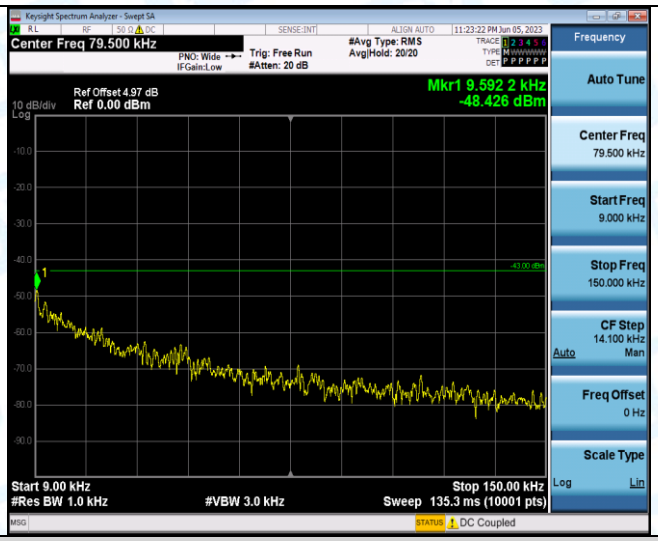
GSM850-251-30~1000MHz



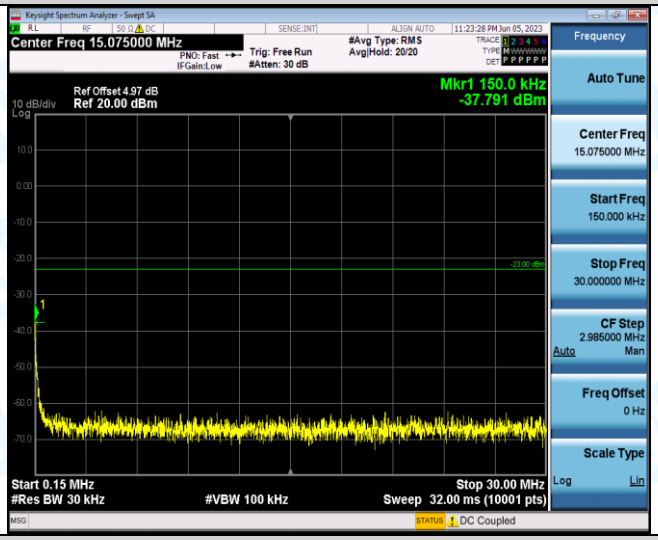
GSM850-251-1000~10000MHz



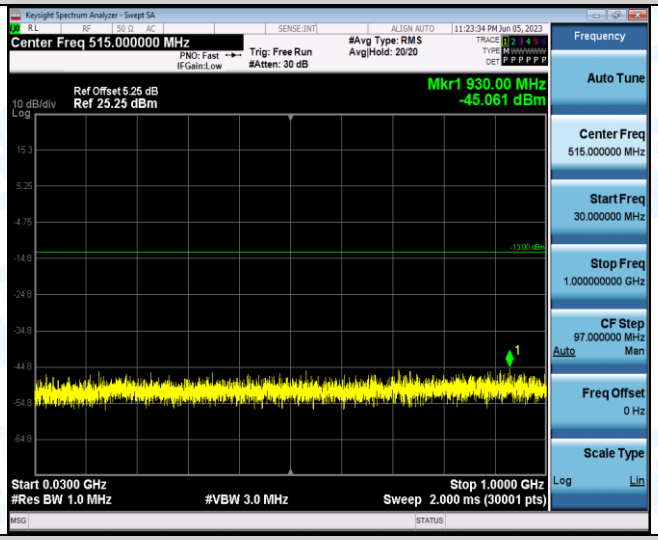
GSM1900-512-0.009~0.15MHz



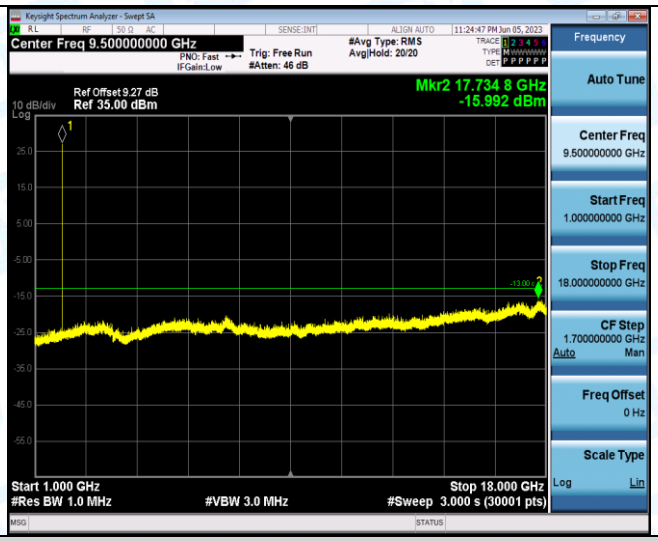
GSM1900-512-0.15~30MHz



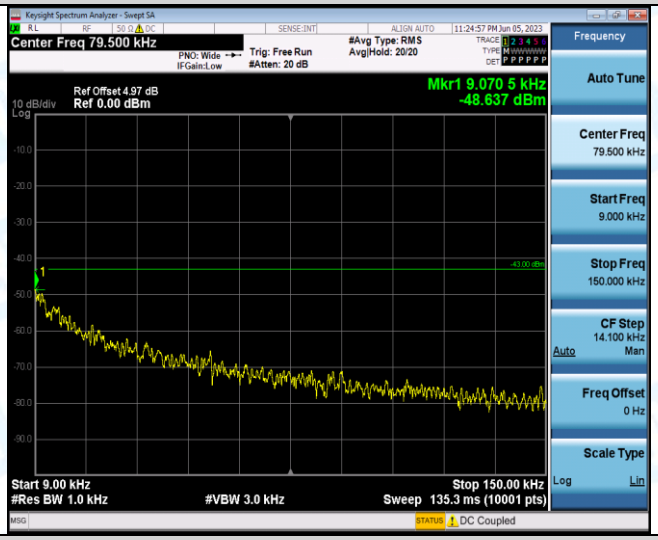
GSM1900-512-30~1000MHz



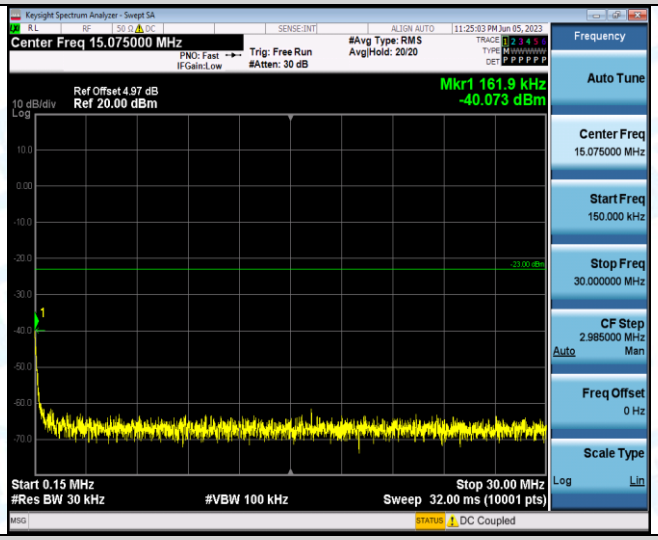
GSM1900-512-1000~18000MHz



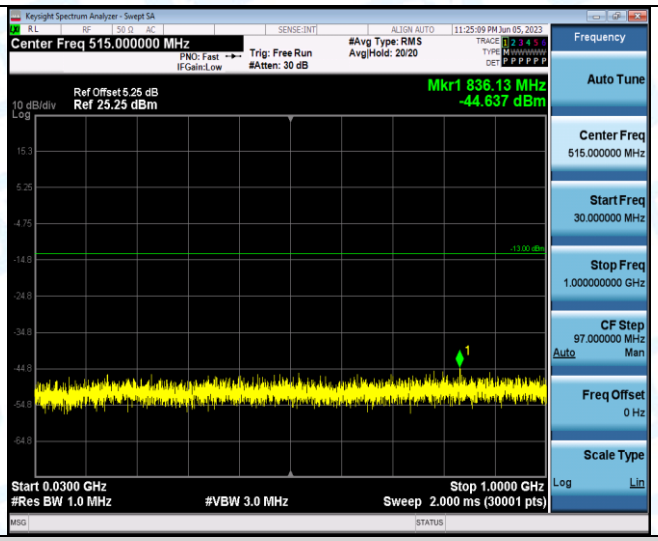
GSM1900-661-0.009~0.15MHz



GSM1900-661-0.15~30MHz

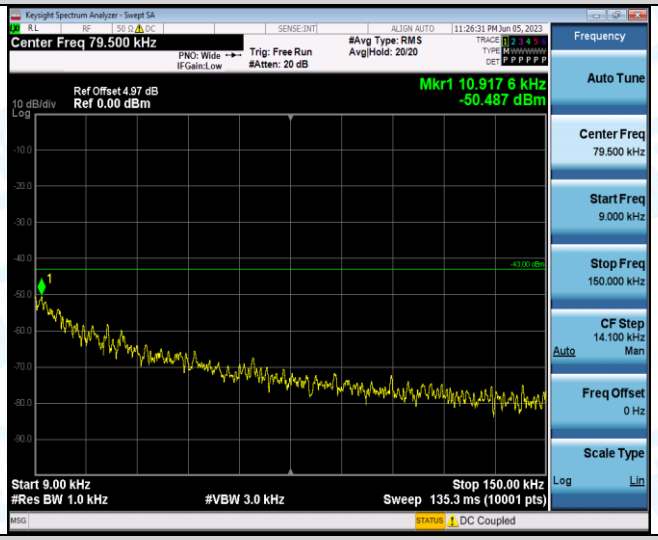


GSM1900-661-30~1000MHz

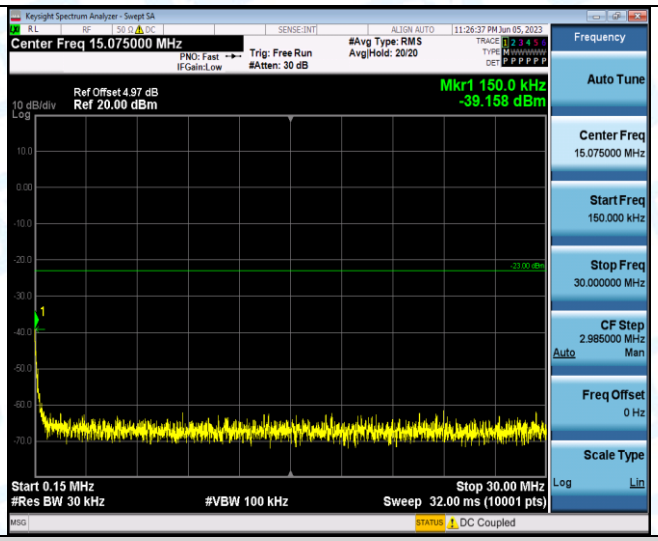


GSM1900-661-1000~18000MHz

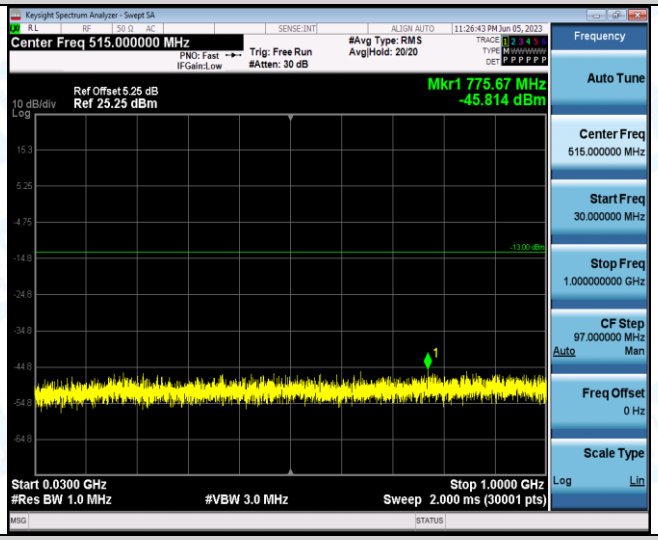
GSM1900-810-0.009~0.15MHz



GSM1900-810-0.15~30MHz



GSM1900-810-30~1000MHz



GSM1900-810-1000~18000MHz

Appendix F: Frequency Stability

Test Result

Voltage								
Band	Channel	PCL	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	5	VL	NT	20.44	0.024800	±2.5	PASS
GSM850	128	5	VN	NT	16.40	0.019898	±2.5	PASS
GSM850	128	5	VH	NT	10.36	0.012570	±2.5	PASS
GSM850	190	5	VL	NT	11.17	0.013352	±2.5	PASS
GSM850	190	5	VN	NT	5.62	0.006718	±2.5	PASS
GSM850	190	5	VH	NT	7.55	0.009025	±2.5	PASS
GSM850	251	5	VL	NT	11.66	0.013737	±2.5	PASS
GSM850	251	5	VN	NT	16.59	0.019545	±2.5	PASS
GSM850	251	5	VH	NT	13.62	0.016046	±2.5	PASS
GSM1900	512	0	VL	NT	22.54	0.012182	±2.5	PASS
GSM1900	512	0	VN	NT	22.60	0.012215	±2.5	PASS
GSM1900	512	0	VH	NT	25.09	0.013561	±2.5	PASS
GSM1900	661	0	VL	NT	25.44	0.013532	±2.5	PASS
GSM1900	661	0	VN	NT	19.24	0.010234	±2.5	PASS
GSM1900	661	0	VH	NT	48.49	0.025793	±2.5	PASS
GSM1900	810	0	VL	NT	19.86	0.010399	±2.5	PASS
GSM1900	810	0	VN	NT	24.18	0.012661	±2.5	PASS
GSM1900	810	0	VH	NT	15.11	0.007912	±2.5	PASS

Temperature								
Band	Channel	PCL	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	128	5	NV	-30	11.14	0.013516	±2.5	PASS
GSM850	128	5	NV	-20	13.50	0.016380	±2.5	PASS
GSM850	128	5	NV	-10	17.34	0.021039	±2.5	PASS
GSM850	128	5	NV	0	17.50	0.021233	±2.5	PASS
GSM850	128	5	NV	10	13.66	0.016574	±2.5	PASS
GSM850	128	5	NV	20	2.32	0.002815	±2.5	PASS
GSM850	128	5	NV	30	8.36	0.010143	±2.5	PASS
GSM850	128	5	NV	40	18.37	0.022288	±2.5	PASS

GSM850	128	5	NV	50	7.88	0.009561	±2.5	PASS
GSM850	190	5	NV	-30	12.37	0.014786	±2.5	PASS
GSM850	190	5	NV	-20	9.65	0.011535	±2.5	PASS
GSM850	190	5	NV	-10	9.72	0.011618	±2.5	PASS
GSM850	190	5	NV	0	17.92	0.021420	±2.5	PASS
GSM850	190	5	NV	10	11.56	0.013818	±2.5	PASS
GSM850	190	5	NV	20	16.30	0.019484	±2.5	PASS
GSM850	190	5	NV	30	13.69	0.016364	±2.5	PASS
GSM850	190	5	NV	40	13.30	0.015898	±2.5	PASS
GSM850	190	5	NV	50	18.56	0.022185	±2.5	PASS
GSM850	251	5	NV	-30	10.53	0.012406	±2.5	PASS
GSM850	251	5	NV	-20	9.81	0.011557	±2.5	PASS
GSM850	251	5	NV	-10	14.21	0.016741	±2.5	PASS
GSM850	251	5	NV	0	14.69	0.017307	±2.5	PASS
GSM850	251	5	NV	10	11.46	0.013501	±2.5	PASS
GSM850	251	5	NV	20	13.56	0.015975	±2.5	PASS
GSM850	251	5	NV	30	12.04	0.014185	±2.5	PASS
GSM850	251	5	NV	40	10.78	0.012700	±2.5	PASS
GSM850	251	5	NV	50	10.14	0.011946	±2.5	PASS
GSM1900	512	0	NV	-30	17.24	0.009318	±2.5	PASS
GSM1900	512	0	NV	-20	13.30	0.007188	±2.5	PASS
GSM1900	512	0	NV	-10	15.46	0.008356	±2.5	PASS
GSM1900	512	0	NV	0	12.37	0.006686	±2.5	PASS
GSM1900	512	0	NV	10	8.23	0.004448	±2.5	PASS
GSM1900	512	0	NV	20	15.21	0.008221	±2.5	PASS
GSM1900	512	0	NV	30	13.17	0.007118	±2.5	PASS
GSM1900	512	0	NV	40	10.46	0.005653	±2.5	PASS
GSM1900	512	0	NV	50	17.72	0.009577	±2.5	PASS
GSM1900	661	0	NV	-30	33.35	0.017739	±2.5	PASS
GSM1900	661	0	NV	-20	16.40	0.008723	±2.5	PASS
GSM1900	661	0	NV	-10	19.82	0.010543	±2.5	PASS
GSM1900	661	0	NV	0	19.21	0.010218	±2.5	PASS
GSM1900	661	0	NV	10	16.27	0.008654	±2.5	PASS
GSM1900	661	0	NV	20	11.91	0.006335	±2.5	PASS
GSM1900	661	0	NV	30	13.66	0.007266	±2.5	PASS
GSM1900	661	0	NV	40	21.47	0.011420	±2.5	PASS

GSM1900	661	0	NV	50	13.08	0.006957	±2.5	PASS
GSM1900	810	0	NV	-30	13.17	0.006896	±2.5	PASS
GSM1900	810	0	NV	-20	11.78	0.006168	±2.5	PASS
GSM1900	810	0	NV	-10	36.71	0.019222	±2.5	PASS
GSM1900	810	0	NV	0	13.08	0.006849	±2.5	PASS
GSM1900	810	0	NV	10	33.06	0.017311	±2.5	PASS
GSM1900	810	0	NV	20	32.93	0.017243	±2.5	PASS
GSM1900	810	0	NV	30	32.06	0.016787	±2.5	PASS
GSM1900	810	0	NV	40	27.93	0.014625	±2.5	PASS
GSM1900	810	0	NV	50	26.22	0.013729	±2.5	PASS