Appendix Test Data for GSM (Conducted Measurement)

Product Name: Mini cell phone

Trade Mark: /

Test Model: BM10

FCC ID: 2BNQC-BM10

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

Appendix A: RF output power

Test Result

Band	UL Frequency (MHz)	Mode	Peak Power(dBm)	Average Power(dBm)	PAR(dB)	PAR Limit(dB)	AntGain (dBi)	ERP (dBm)	Power Limit(dBm)	Conclusion
850	824.2	GSM	33.12	32.86	0.26	13	0.3	31.01	38.45	Pass
850	836.6	GSM	32.86	32.65	0.21	13	0.3	30.80	38.45	Pass
850	848.8	GSM	32.57	32.33	0.24	13	0.3	30.48	38.45	Pass

Band	UL Frequency (MHz)	Mode	Peak Power(dBm)	Average Power(dBm)	PAR(dB)	PAR Limit(dB)	AntGain (dBi)	EIRP (dBm)	Power Limit(dBm)	Conclusion
1900	1850.2	GSM	31.05	30.54	0.51	13	0.9	31.44	33	Pass
1900	1880	GSM	31.22	30.87	0.35	13	0.9	31.77	33	Pass
1900	1909.8	GSM	30.96	30.64	0.32	13	0.9	31.54	33	Pass

Appendix B: Occupied bandwidth

Test Result

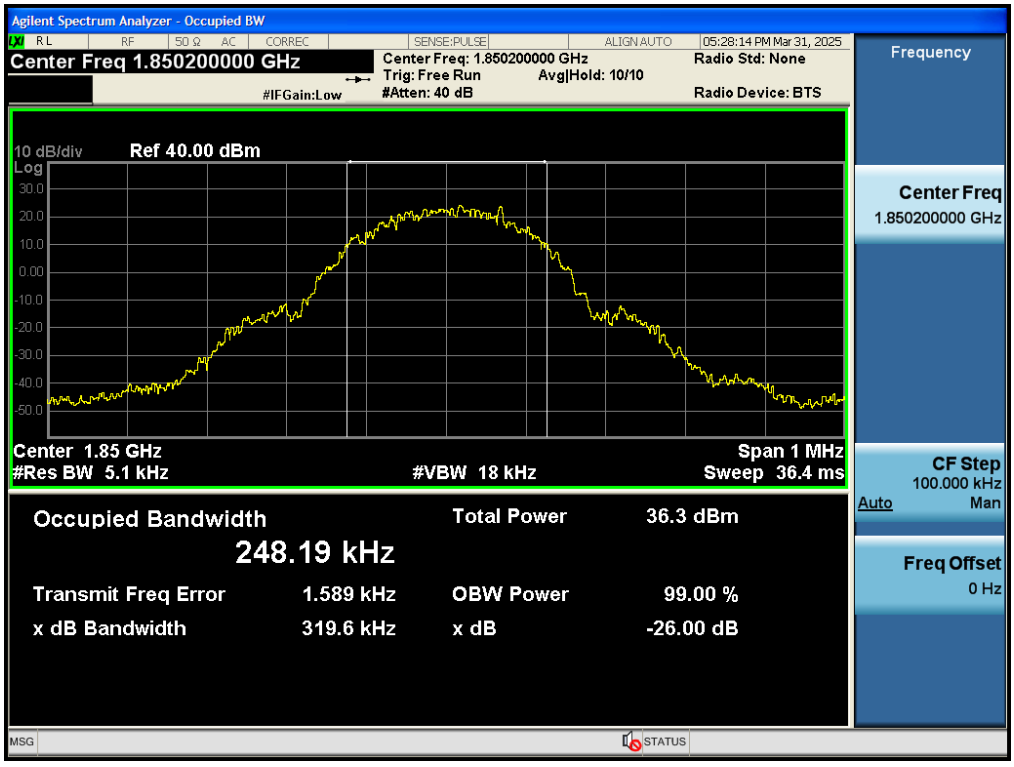
Band	UL Frequency (MHz)	Mode	Occupied Bandwidth (MHz)	Emission Bandwidth (MHz)	Limit
850	824.2	GSM	0.250	0.320	No limit
850	836.6	GSM	0.243	0.309	No limit
850	848.8	GSM	0.249	0.314	No limit
1900	1850.2	GSM	0.248	0.320	No limit
1900	1880	GSM	0.244	0.303	No limit
1900	1909.8	GSM	0.244	0.315	No limit

Test Graphs

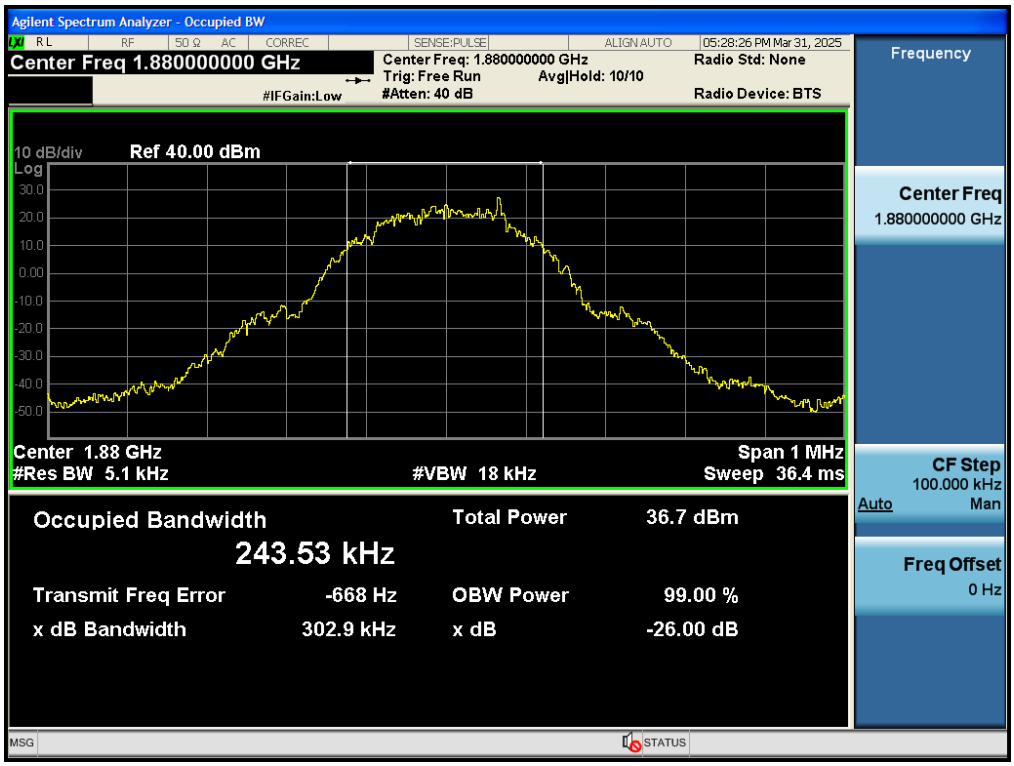
Test_Graph_band850_824.2MHz_GSM_OBW&EBW

Test_Graph_band850_836.6MHz_GSM_OBW&EBW

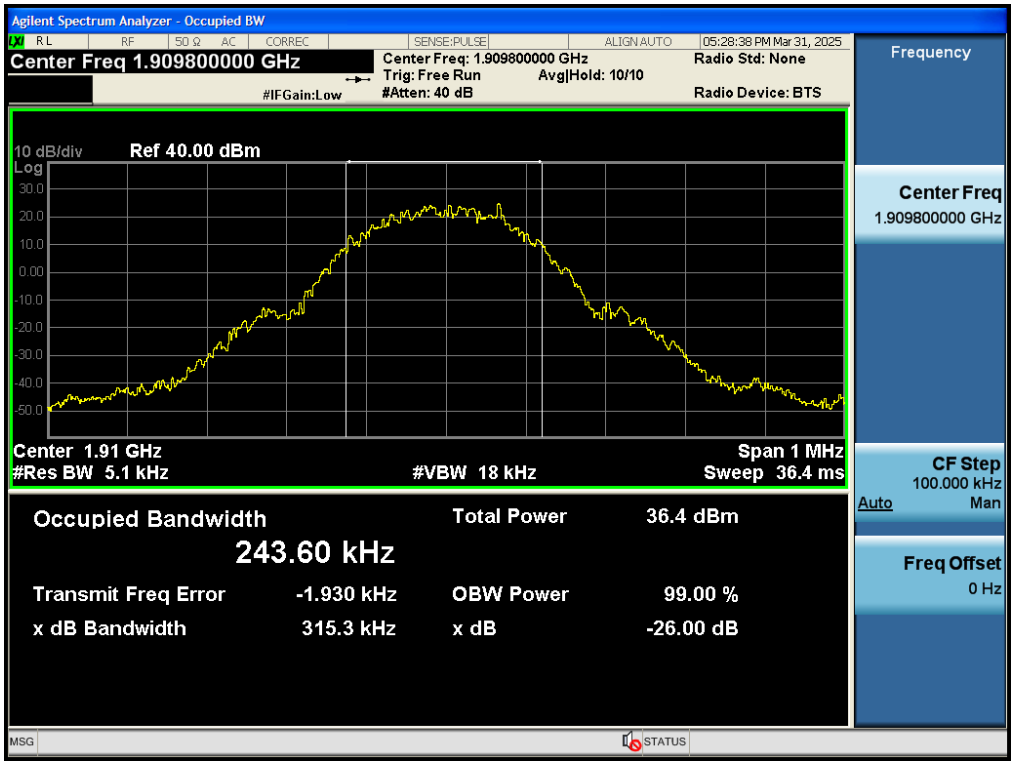
Test_Graph_band850_848.8MHz_GSM_OBW&EBW



Test_Graph_band1900_1850.2MHz_GSM_OBW&EBW



Test_Graph_band1900_1880MHz_GSM_OBW&EBW



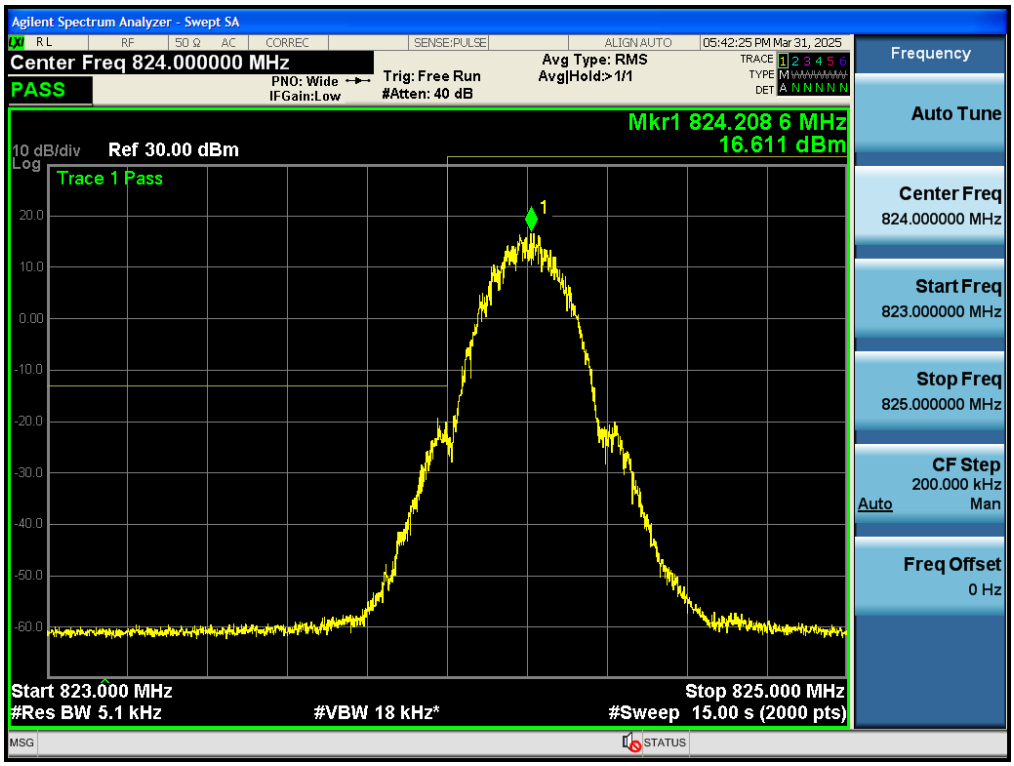
Test_Graph_band1900_1909.8MHz_GSM_OBW&EBW

Appendix C: Band edge emissions

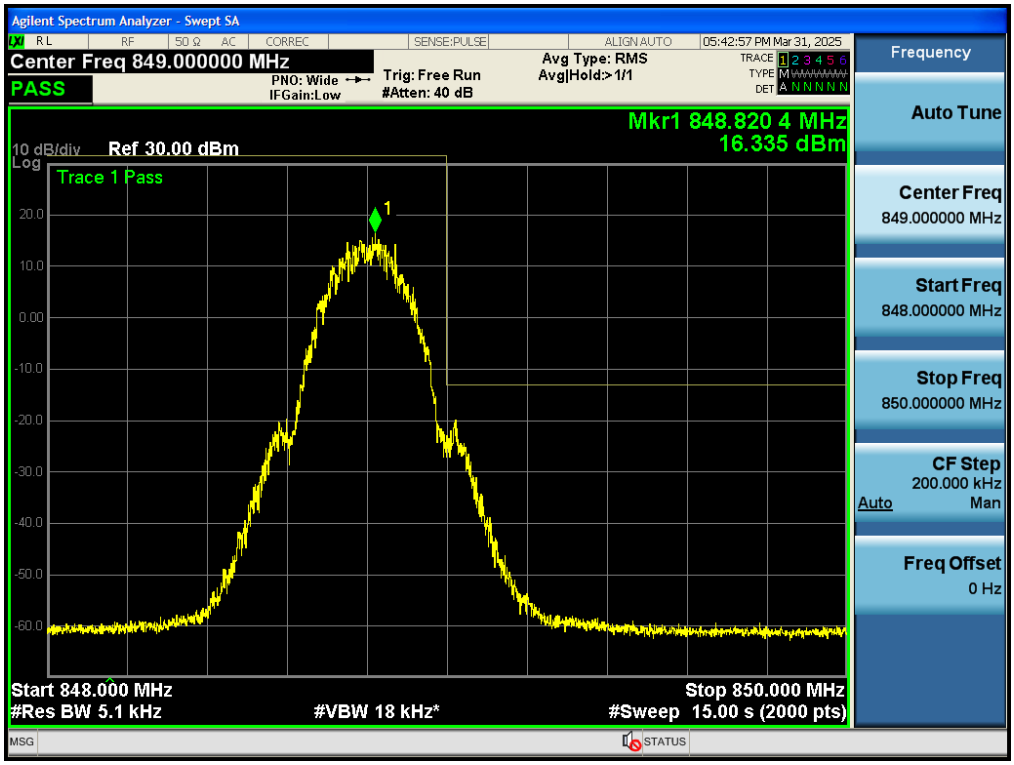
Test Result

Band	UL Frequency (MHz)	Mode	Conclusion
850	824.2	GSM	Pass
850	848.8	GSM	Pass
1900	1850.2	GSM	Pass
1900	1909.8	GSM	Pass

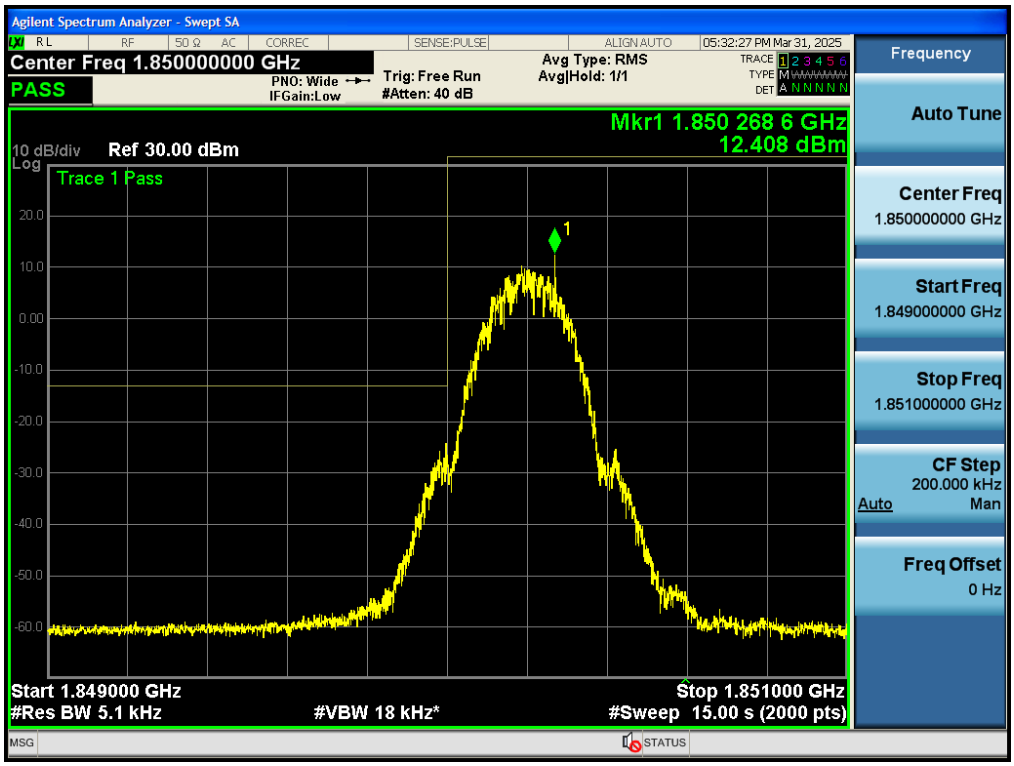
Test Graphs



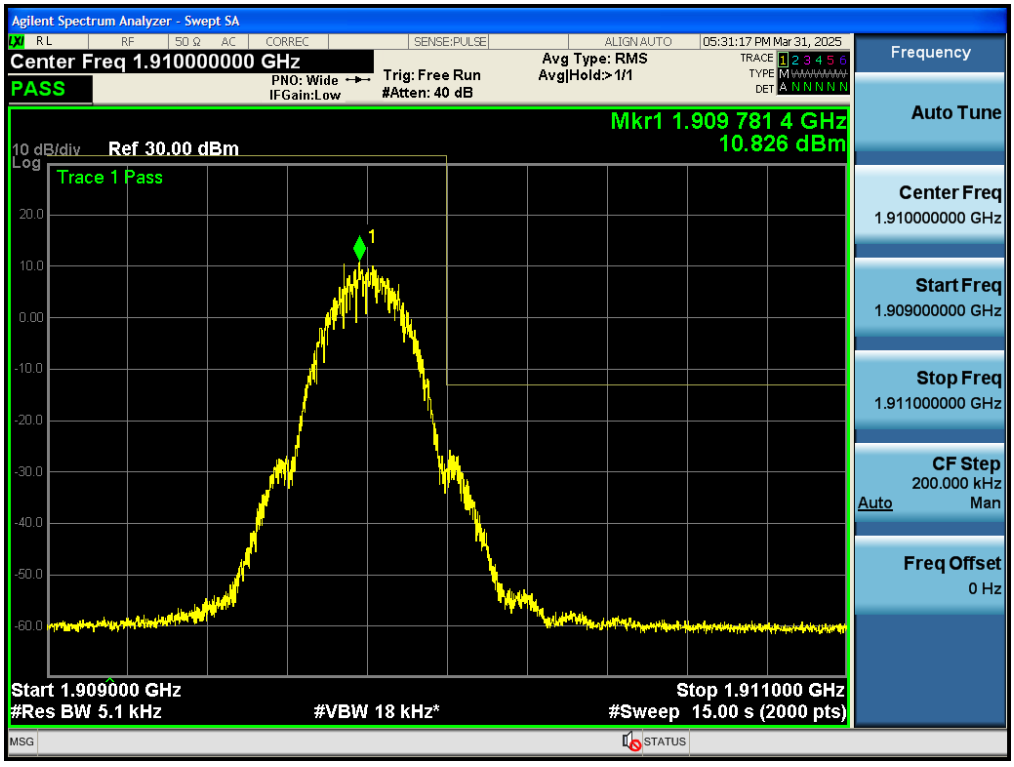
Test_Graph_band850_824.2MHz_GSM_Band edge



Test_Graph_band850_848.8MHz_GSM_Band edge



Test_Graph_band1900_1850.2MHz_GSM_Band edge



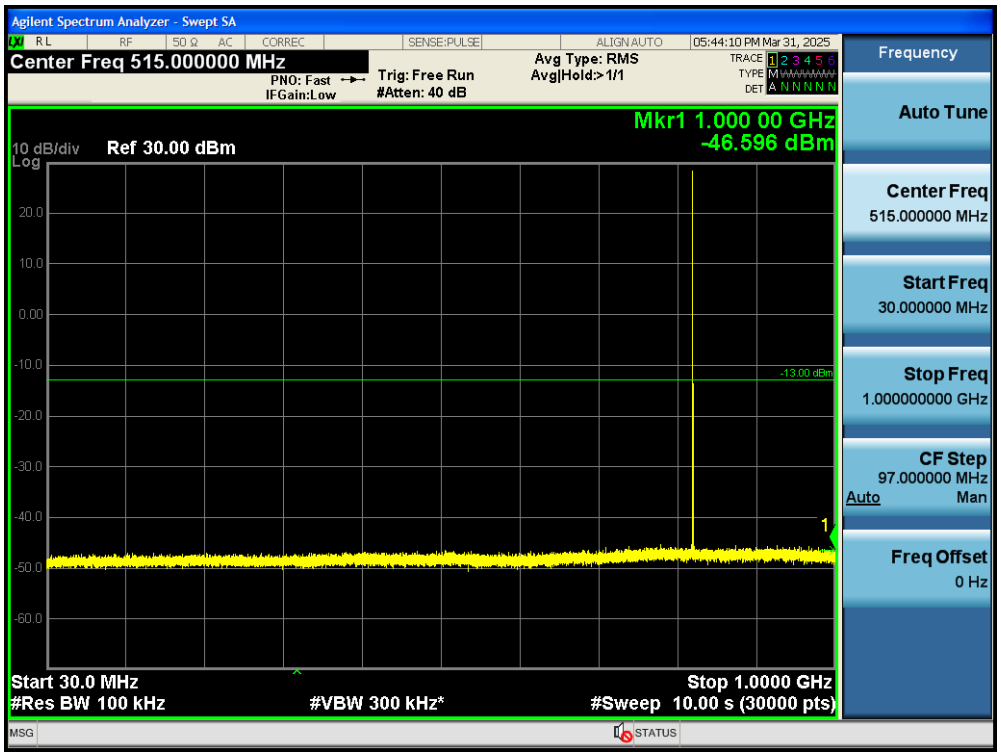
Test_Graph_band1900_1909.8MHz_GSM_Band edge

Appendix D: Unwanted spurious emissions at antenna terminals

Test Result

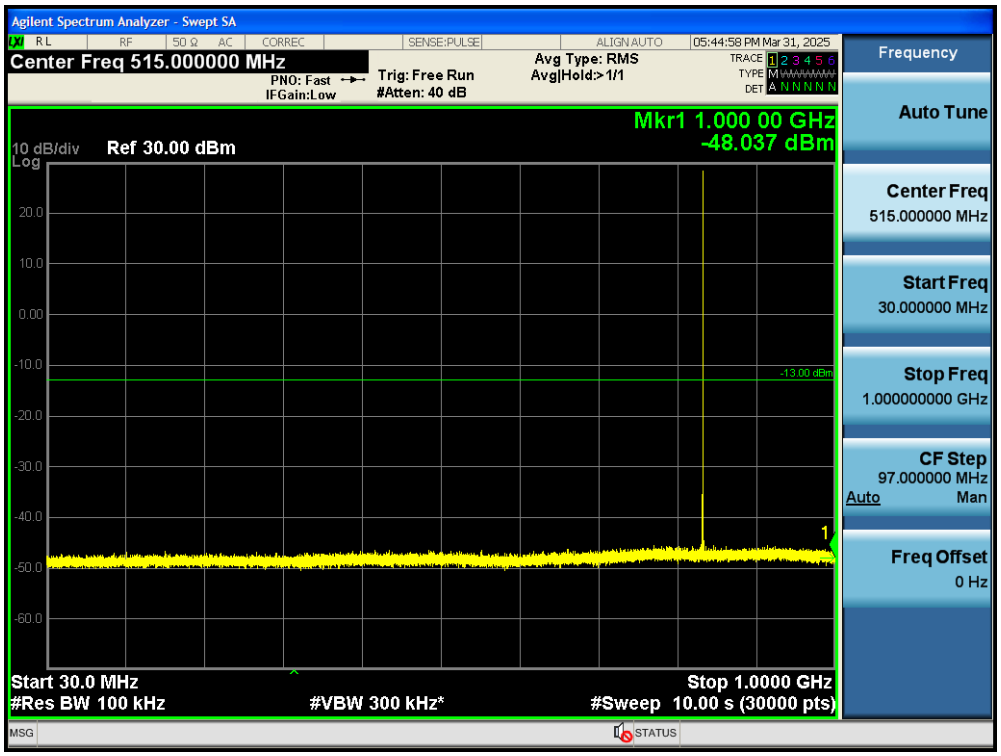
Band	UL Frequency (MHz)	Mode	Conclusion
850	824.2	GSM	Pass
850	836.6	GSM	Pass
850	848.8	GSM	Pass
1900	1850.2	GSM	Pass
1900	1880	GSM	Pass
1900	1909.8	GSM	Pass

Test Graphs



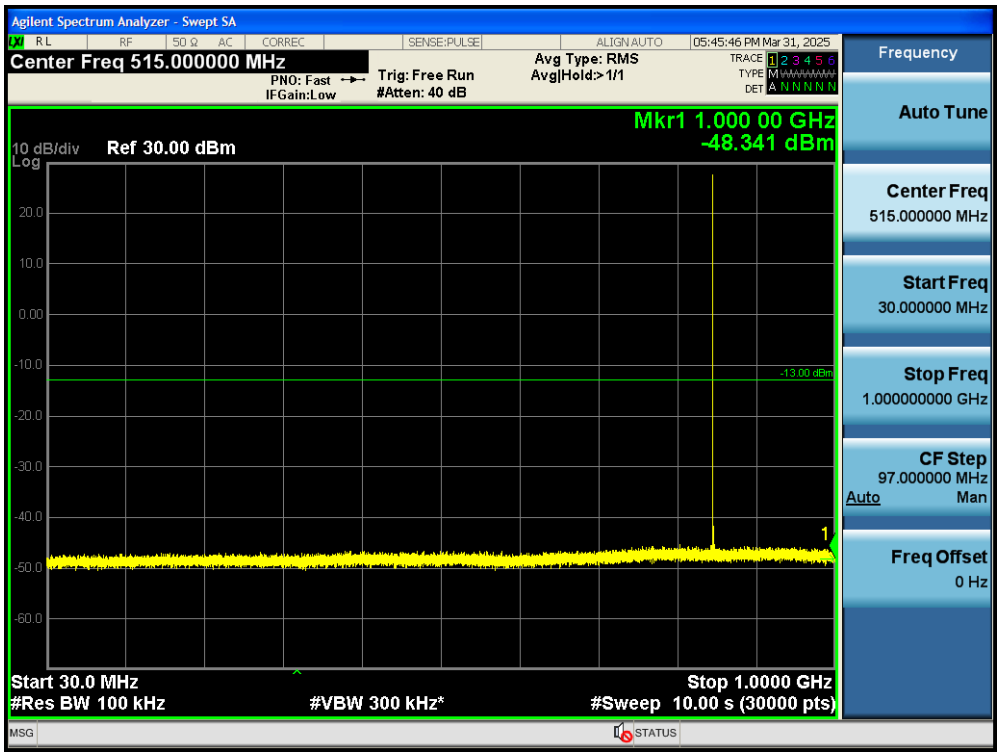
Test_Graph_band850_824.2MHz_GSM_30M_1G_TX

Test_Graph_band850_824.2MHz_GSM_1G_10G_TX

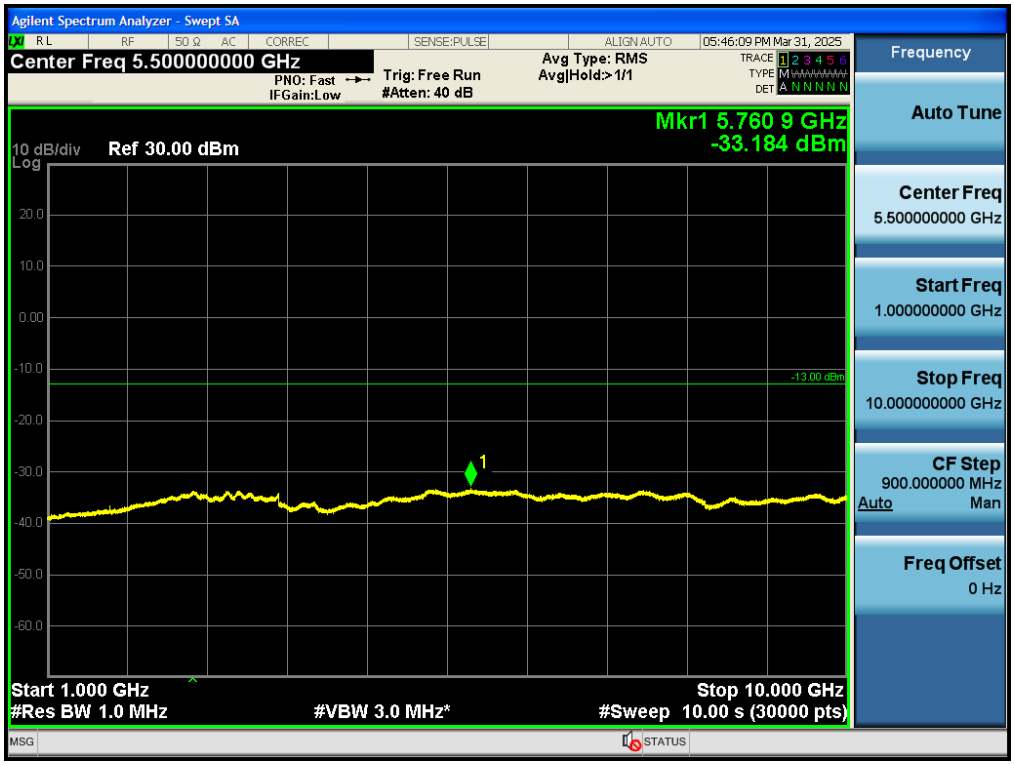


Test_Graph_band850_836.6MHz_GSM_30M_1G_TX

Test_Graph_band850_836.6MHz_GSM_1G_10G_TX



Test_Graph_band850_848.8MHz_GSM_30M_1G_TX



Test_Graph_band850_848.8MHz_GSM_1G_10G_TX

Test_Graph_band1900_1850.2MHz_GSM_30M_1G_TX

Test_Graph_band1900_1850.2MHz_GSM_1G_10G_TX

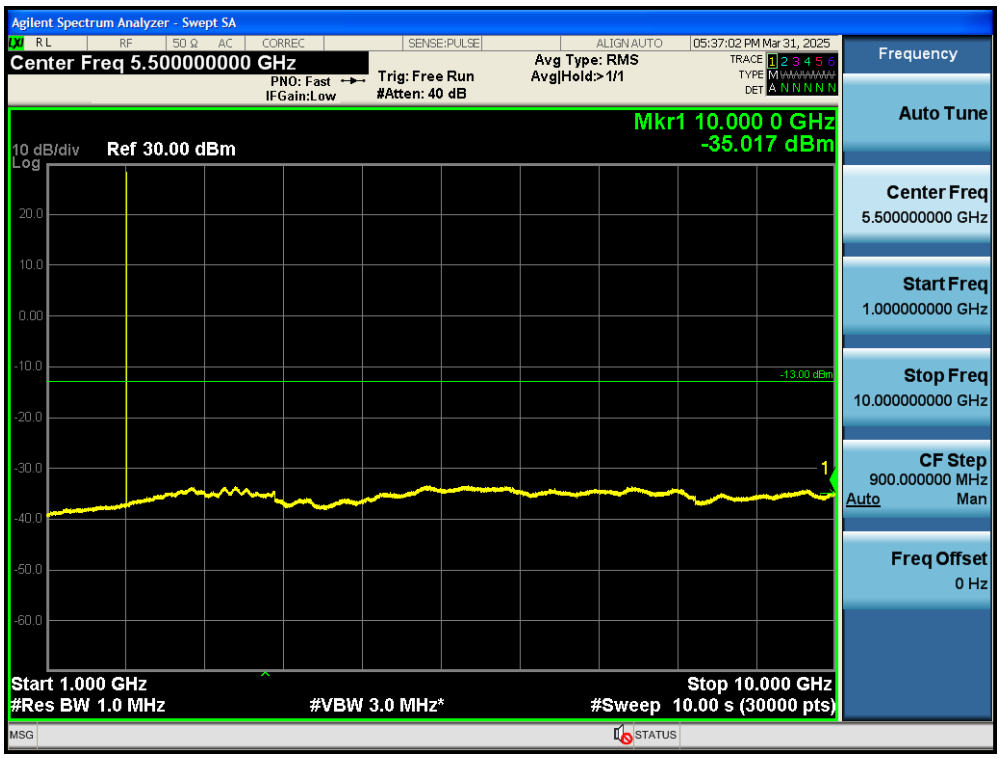
Test_Graph_band1900_1850.2MHz_GSM_10G_20G_TX

Test_Graph_band1900_1880MHz_GSM_30M_1G_TX

Test_Graph_band1900_1880MHz_GSM_1G_10G_TX

Test_Graph_band1900_1880MHz_GSM_10G_20G_TX

Test_Graph_band1900_1909.8MHz_GSM_30M_1G_TX



Test_Graph_band1900_1909.8MHz_GSM_1G_10G_TX

Test_Graph_band1900_1909.8MHz_GSM_10G_20G_TX

Appendix E: Frequency stability

Test Result

Test Conditions		GSM Band 850/ Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	GSM	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0061	PASS
40	Normal Voltage	0.0069	
30	Normal Voltage	0.0076	
20(Ref.)	Normal Voltage	0.0049	
10	Normal Voltage	0.0068	
0	Normal Voltage	0.0079	
-10	Normal Voltage	0.0057	
-20	Normal Voltage	0.0083	
-30	Normal Voltage	0.0075	
20	Maximum Voltage	0.0053	
20	Normal Voltage	0.0057	
20	Battery End Point	0.0071	

Test Conditions		GSM Band 1900/ Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	GSM	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0060	PASS
40	Normal Voltage	0.0068	
30	Normal Voltage	0.0073	
20(Ref.)	Normal Voltage	0.0054	
10	Normal Voltage	0.0068	
0	Normal Voltage	0.0075	
-10	Normal Voltage	0.0057	
-20	Normal Voltage	0.0076	
-30	Normal Voltage	0.0070	
20	Maximum Voltage	0.0053	
20	Normal Voltage	0.0061	
20	Battery End Point	0.0068	