

S

T

S

L

A

B



RADIO TEST REPORT

Report No: STS1609183W01

Issued for

Digicom Trading (PVT) Limited

Room No.302, 3rd floor, the forum, Clifton, Karachi, Pakistan

Product Name:	Mobile Phone
Brand Name:	QMobile
Test Model Name:	E500i Music
Series Model:	N/A
Test Standard:	ETSI EN 301 511 V12.1.1 (2015-06)
	ETSI TS 151 010-1 V12.2.0 (2014-11)

Any reproduction of this document must be done in full. No single part of this document may be reproduced without permission from STS, All Test Data Presented in this report is only applicable to presented Test sample.

Shenzhen STS Test Services Co., Ltd.
1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road,
Fuyong Street, Bao'an District, Shenzhen, Guangdong, China
TEL: +86-755 3688 6288 FAX: +86-755 3688 6277 E-mail: sts@stsapp.com





TEST REPORT CERTIFICATION

Applicant's name: Digicom Trading (PVT) Limited

Address: Room No.302, 3rd floor, the forum, Clifton, Karachi, Pakistan

Manufacturer's Name: HK YBHS ELECTROIC DIGITAL TECHNOLOGY CO.,LIMITED

Address: 2th Floor, Block C, Academy Of Aerospace Technology Building,
Keji South 10th Rd, Hi-tech Park, Nanshan District, Shenzhen,
China

Product description

Product name: Mobile Phone

Trademark: QMobile

Model and/or type reference : E500i Music

Series Model.....: N/A

Standards: ETSI EN 301 511 V12.1.1 (2015-06)
ETSI TS 151 010-1 V12.2.0 (2014-11)

This device described above has been tested by STS, and the test results show that the equipment under test (EUT) is in compliance with the 1999/5/EC R&TTE Directive Art.3.2 requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of STS, this document may be altered or revised by STS, personal only, and shall be noted in the revision of the document.

Date of Test

Date (s) of performance of tests: 23 Sep. 2016 ~ 29 Sep. 2016

Date of Issue.....: 30 Sep. 2016


Test Result.....: **Pass**

Testing Engineer : 

(Tony Liu)

Technical Manager : 

(Vita Li)

Authorized Signatory : 

(Bovey Yang)





TABLE OF CONTENTS

1. TESTING LABORATORY	5
1.1 LOCATION	5
1.2 TEST ITEM	6
1.3 REFERENCE DOCUMENTS AND TEST STANDARDS	7
1.4 ADDITIONAL INFORMATION	7
1.5 ABBREVIATIONS USED FOR THE TEST RESULT LIST	7
2. TECHNICAL TEST	8
2.1 SUMMARY OF TEST RESULTS	8
2.2 TEST ENVIRONMENT	8
2.3 MEASUREMENT AND TEST SETUP	9
2.4 TEST EQUIPMENT UTILISED	10
3. TEST RESULTS	11
3.1 RESULT SUMMARY	11
3.2 TESTS UNDER NORMAL AND EXTREME TEST CONDITIONS	11
3.3 TRANSMITTING OUTPUT POWER RESULTS LIST	14
APPENDIX I: RSE TEST DATA	15
APPENDIX II: PICS/PIXIT INFORMATION OF THE EUT	19



Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	30 Sep. 2016	STS1609183W01	ALL	Initial Issue

Note: **Format version** of the report -V01





1. TESTING LABORATORY

1.1 LOCATION

Company Name:	Shenzhen STS Test Services Co., Ltd.
Address:	1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	+86-755 3688 6288
Fax:	+86-755 3688 6277
Registration No. :	CNAS Registration No.: L7649; FCC Registration No.: 842334; IC Registration No.: 12108A-1





1.2 TEST ITEM

Identification of the Equipment under Test

Product Name	Mobile Phone
Brand Name	QMobile
Model Name	E500i Music
Series Model	N/A
Model Variation Description	N/A
Frequency Bands	GSM 900: 880 ~ 915 MHz(TX) 925 ~ 960 MHz (RX) GSM 1800: 1710 ~ 1785 MHz(TX) 1805 ~ 1880 MHz(RX)
Modulation Mode	GMSK for GSM/GPRS
SIM Card	SIM 1 and SIM 2 is a chipset unit and tested as single chipset,SIM 1 is used to tested
Power Class	GSM900: 4, GSM1800: 1
Power Class	GPRS: 12
Adapter	Power supply and ADP(rating): Input: AC 100-240V, 150mA, 50/60Hz Output: DC5.0V, 500mA
Battery	Battery(rating): Rated Voltage: 3.7V Charge Limit: 4.2V Capacity: 1000mAh
Antenna Type	PIFA
Antenna Gain	GSM 900/GSM 1800: 1 dBi
Hardware version number	K38-MB-V1.1
Software version number	QMobile_E500i Music_20160920_V1.08



1.3 REFERENCE DOCUMENTS AND TEST STANDARDS

Document	Description	Version
3GPP TS 51.010-1	Digital cellular telecommunications system (Phase 2+); Mobile Station (MS) conformance specification; Part 1: Conformance specification (3GPP TS 51.010-1 version 12.2.0 Release 12)	V12.2.0 (2014-11)
3GPP TS 51.010-2	Digital cellular telecommunications system (Phase 2+); Mobile Station (MS) conformance specification; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification (3GPP TS 51.010-2 version 13.1.0 Release 13)	V13.1.0 (2016-08)
EN 301 511	Global System for Mobile communications (GSM); Harmonised EN for mobile stations in the GSM 900 and GSM 1800 bands covering essential requirements under article 3.2 of the R&TTE directive (1999/5/EC)	V12.1.1 (2015-06)

1.4 ADDITIONAL INFORMATION

None

1.5 ABBREVIATIONS USED FOR THE TEST RESULT LIST

Pass	EUT passed this test standard limit
Fail	EUT failed this test standard limit
Inc.	EUT did not pass and did not fail this test case, therefore the verdict "Inconclusive"



2. TECHNICAL TEST

2.1 SUMMARY OF TEST RESULTS

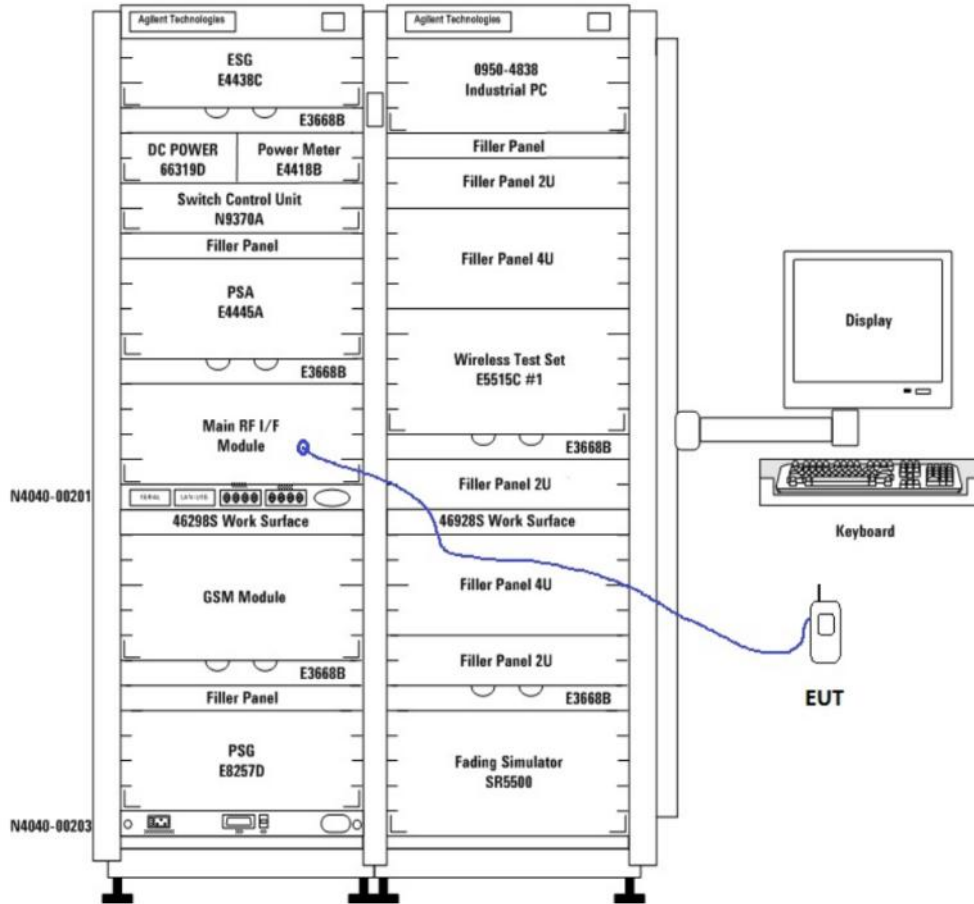
No deviations from the requirements were ascertained in the course of the test performed.	<input checked="" type="checkbox"/>
The deviations from the requirements as shown in clause 3 were ascertained in the course of the test performed.	<input type="checkbox"/>

2.2 TEST ENVIRONMENT

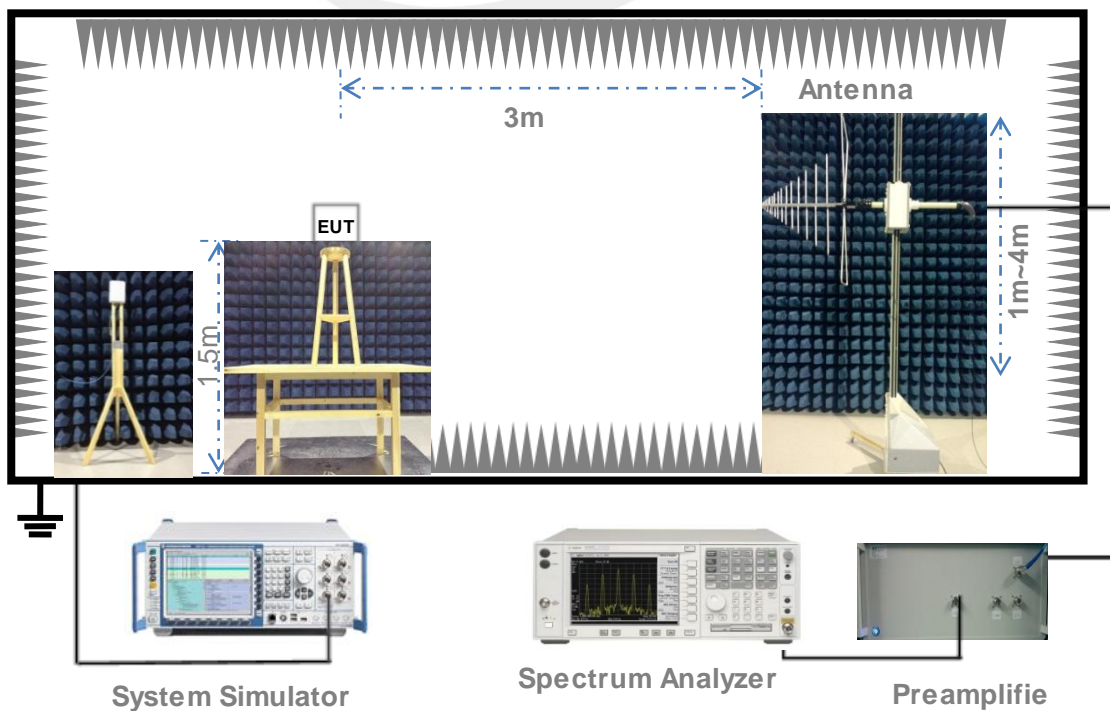
Temperature:	15 ... 35 °C
Relative humidity content:	Up to 75 %
Details of power supply:	230 V AC
- Extreme test conditions:	Operating voltage of the mobile
	$V_{nom} = 3.7 \text{ V DC}$
	$V_{min} = 3.3 \text{ V DC}$
	$V_{max} = 4.2 \text{ V DC}$
- Extreme temperature:	-10°C / 55°C
Other parameter:	None

2.3 MEASUREMENT AND TEST SETUP

2.3.1 Conducted Test Setup



2.3.2 Radiated Test Setup





2.4 TEST EQUIPMENT UTILISED

EQUIPMENT LIST

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Data	Calibration Due
Temperature& humidity test chamber	GZGONGWEN	GDS-250	080821	2015.10.25	2016.10.24
Fading simulator	Spirent	TAS4500 FLEX	TAS4500-1243	2015.10.25	2016.10.24
DC Power Source	Zhaoxin	RXN-605D	20140807176	N.C.R	N.C.R
Spectrum Analyzer	Agilent	E4407B	MY50140340	2015.10.25	2016.10.24
Signal Generator	Agilent	N5182A	MY46240556	2015.11.18	2016.11.17
Signal Generator	R&S	SME500i Music0A	104221	2015.10.25	2016.10.24
PreAmplifier	Agilent	8449B	60538	2015.10.25	2016.10.24
Bilog Antenna	TESEQ	CBL6111D	34678	2015.11.25	2016.11.24
Horn Antenna	Schwarzbeck	BBHA 9120D	9120D-1343	2016.03.06	2017.03.05
Universal Radio communication tester	R&S	CMU200	112012	2015.10.25	2016.10.24
Temperature& humidity test chamber	GZGONGWEN	GDS-250	080821	2015.10.25	2016.10.24
Spectrum Analyzer	Agilent	N9020A	MY49100060	2015.11.18	2016.11.17
AC Power Source	APC	KDF-11010G	F214050035	N.C.R	N.C.R
6dB Attenuator	Mini-Circuits	NAT-6-2W	15542-1	N.C.R	N.C.R
Wireless Communications Test Set	R&S	CMW 500	133884	2016.09.07	2017.09.06
8960 System Simulator	Agilent	5515C	MY50260493	2016.09.07	2017.09.06
Power Sersor	R&S	NRP-Z11	101919	2015.10.25	2016.10.24
Band Reject filter(1920-1980MHz)	COM-MW	ZBSF-1920-1980	0092	2015.10.25	2016.10.24
Band Reject filter(880-915MHz)	COM-MW	ZBSF-C897.5-35	707	2015.10.25	2016.10.24
Band Reject filter(1710-1785MHz)	COM-MW	ZBSF-C1747.5-75	708	2015.10.25	2016.10.24
Band Reject filter(1850-1910MHz)	COM-MW	ZBSF-C1880-60	709	2015.10.25	2016.10.24
Band Reject filter(2500-2570MHz)	COM-MW	ZBSF-C2535-70	710	2015.10.25	2016.10.24
Highpass Filter	WHKX7.0/18G-8SS	Wainwright	18	2015.10.25	2016.10.24



3. TEST RESULTS

3.1 RESULT SUMMARY

	900	1800
Band Verdict		
Pass	54	54
Fail	0	0
Inconclusive	0	0
Total	54	54
Total Pertinent Test Cases Performed		108

3.2 TESTS UNDER NORMAL AND EXTREME TEST CONDITIONS

3GPP TS 51.010-1 Item	EN Reference	TEST DESCRIPTION	GSM 900	GSM 1800	900/1800 required	Verdict GSM 900	Verdict GSM 1800
12.1.1	4.2.12	Conducted spurious emissions - MS allocated a channel	A	A	All	Pass	Pass
		Voltage High	A	A	All	Pass	Pass
		Voltage Low	A	A	All	Pass	Pass
12.1.2	4.2.13	Conducted spurious emissions - MS in idle mode	A	A	All	Pass	Pass
		Voltage High	A	A	All	Pass	Pass
		Voltage Low	A	A	All	Pass	Pass
12.2.1	4.2.16	Radiated spurious emissions - MS allocated a channel	A	A	All	Pass	Pass
		Voltage High	A	A	All	Pass	Pass
		Voltage Low	A	A	All	Pass	Pass
12.2.2	4.2.17	Radiated spurious emissions - MS in idle mode	A	A	All	Pass	Pass
		Voltage High	A	A	All	Pass	Pass
		Voltage Low	A	A	All	Pass	Pass
13.1	4.2.1	Transmitter – Frequency error and phase error	A	A	All	Pass	Pass
		Temperature High, Voltage High	A	A	All	Pass	Pass
		Temperature High, Voltage Low	A	A	All	Pass	Pass
		Temperature Low, Voltage High	A	A	All	Pass	Pass
		Temperature Low, Voltage Low	A	A	All	Pass	Pass
		Vibration (X axis)	A	A	All	Pass	Pass
		Vibration (Y axis)	A	A	All	Pass	Pass
		Vibration (Z axis)	A	A	All	Pass	Pass
13.2	4.2.2	Transmitter – Frequency error under multipath and interference conditions	A	A	All	Pass	Pass
		Temperature High, Voltage High	A	A	All	Pass	Pass



		Temperature High, Voltage Low	A	A	All	Pass	Pass
		Temperature Low, Voltage High	A	A	All	Pass	Pass
		Temperature Low, Voltage Low	A	A	All	Pass	Pass
13.3	4.2.5	Transmitter output power and burst timing	A	A	All	Pass	Pass
		Temperature High, Voltage High	A	A	All	Pass	Pass
		Temperature High, Voltage Low	A	A	All	Pass	Pass
		Temperature Low, Voltage High	A	A	All	Pass	Pass
		Temperature Low, Voltage Low	A	A	All	Pass	Pass
13.4	4.2.6	Transmitter - Output RF spectrum	A	A	All	Pass	Pass
		Temperature High, Voltage High	A	A	All	Pass	Pass
		Temperature High, Voltage Low	A	A	All	Pass	Pass
		Temperature Low, Voltage High	A	A	All	Pass	Pass
		Temperature Low, Voltage Low	A	A	All	Pass	Pass
13.16.1	4.2.4	Frequency error and phase error in GPRS multislot configuration	A	A	All	Pass	Pass
		Temperature High, Voltage High	A	A	All	Pass	Pass
		Temperature High, Voltage Low	A	A	All	Pass	Pass
		Temperature Low, Voltage High	A	A	All	Pass	Pass
		Temperature Low, Voltage Low	A	A	All	Pass	Pass
		Vibration (X axis)	A	A	All	Pass	Pass
		Vibration (Y axis)	A	A	All	Pass	Pass
		Vibration (Z axis)	A	A	All	Pass	Pass
13.16.2	4.2.10	Transmitter output power in GPRS Multislot configuration	A	A	All	Pass	Pass
		Temperature High, Voltage High	A	A	All	Pass	Pass
		Temperature High, Voltage Low	A	A	All	Pass	Pass
		Temperature Low, Voltage High	A	A	All	Pass	Pass
		Temperature Low, Voltage Low	A	A	All	Pass	Pass
13.16.3	4.2.11	Output RF spectrum in GPRS multislot configuration	A	A	All	Pass	Pass
		Temperature High, Voltage High	A	A	All	Pass	Pass
		Temperature High, Voltage Low	A	A	All	Pass	Pass
		Temperature Low, Voltage High	A	A	All	Pass	Pass
		Temperature Low, Voltage Low	A	A	All	Pass	Pass
13.17.1	4.2.22	Frequency error and Modulation Accuracy in EGPRS Configuration	--	--	--	--	--
		Temperature High, Voltage High	--	--	--	--	--
		Temperature High, Voltage Low	--	--	--	--	--
		Temperature Low, Voltage High	--	--	--	--	--



		Temperature Low, Voltage Low	--	--	--	--	--
		Vibration	--	--	--	--	--
13.17.2	4.2.23	Frequency error under multipath and Interference conditions in EGPRS Configuration	--	--	--	--	--
		Temperature High, Voltage High	--	--	--	--	--
		Temperature High, Voltage Low	--	--	--	--	--
		Temperature Low, Voltage High	--	--	--	--	--
		Temperature Low, Voltage Low	--	--	--	--	--
13.17.3	4.2.24	EGPRS Transmitter output power	--	--	--	--	--
		Temperature High, Voltage High	--	--	--	--	--
		Temperature High, Voltage Low	--	--	--	--	--
		Temperature Low, Voltage High	--	--	--	--	--
		Temperature Low, Voltage Low	--	--	--	--	--
13.17.4	4.2.25	Output RF spectrum in EGPRS configuration	--	--	--	--	--
		Temperature High, Voltage High	--	--	--	--	--
		Temperature High, Voltage Low	--	--	--	--	--
		Temperature Low, Voltage High	--	--	--	--	--
		Temperature Low, Voltage Low	--	--	--	--	--
14.7.1	4.2.20	Receiver Blocking and spurious response – speech channels	A	A	All	Pass	Pass
14.18.5	4.2.26	Blocking and spurious response in EGPRS configuration	--	--	--	--	--



3.3 TRANSMITTING OUTPUT POWER RESULTS LIST

Worst mode

Output Power (dBm)						
Band	GSM 900			DCS 1800		
Channel	975	60	124	512	698	885
Frequency (MHz)	880.2	902.0	914.8	1701.2	1747.4	1784.8
GSM(GMSK, 1-Slot)	32.34	32.58	32.97	29.71	30.03	30.43
GPRS (GMSK, 1-Slot)	32.25	32.57	32.88	29.83	30.01	30.48
GPRS (GMSK, 2-Slot)	31.29	31.60	31.89	28.90	29.07	29.48
GPRS (GMSK, 3-Slot)	29.90	30.20	30.55	27.59	27.69	28.12
GPRS (GMSK, 4-Slot)	29.40	29.70	30.13	27.13	27.27	27.62

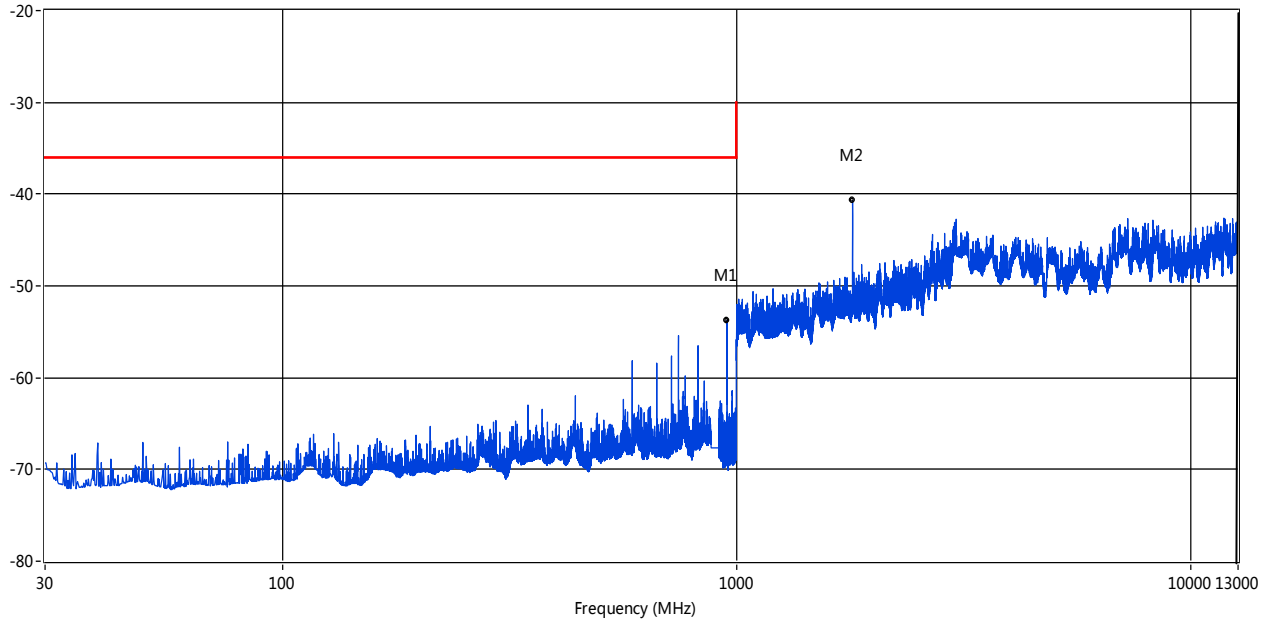


APPENDIX I: RSE TEST DATA

GSM900-Radiated Spurious Emission: Worst Mode

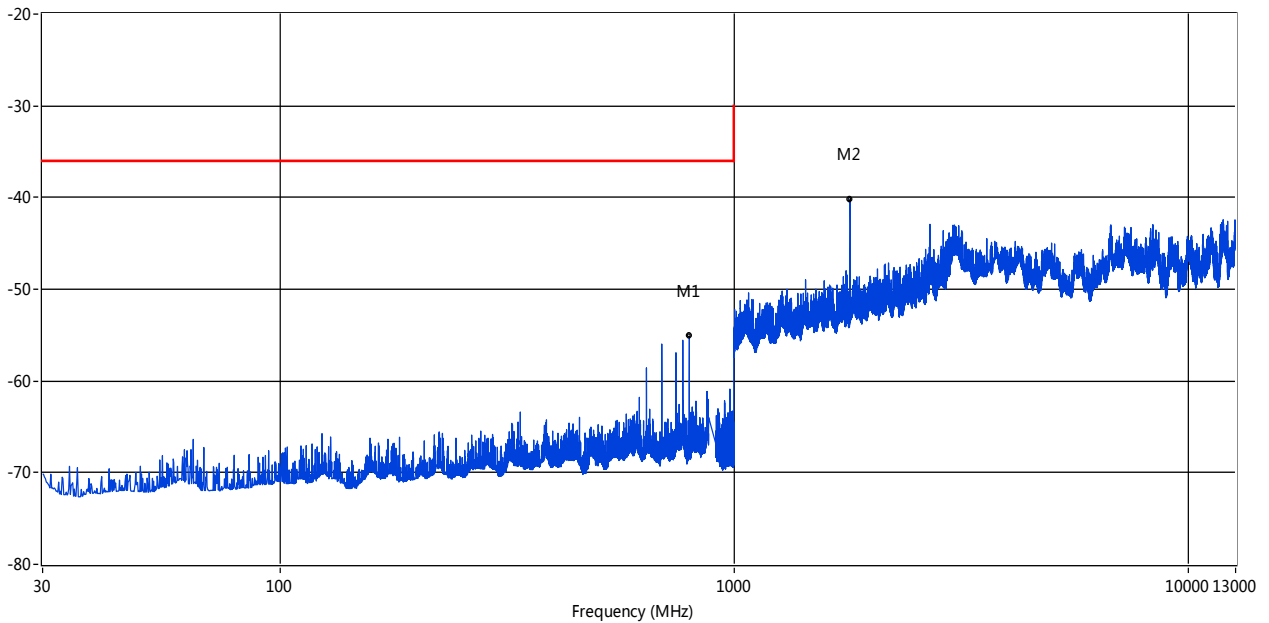
Traffic Mode, Normal Voltage Horizontal

EN_RSE_301 511_900_30-12.75GHz



Traffic Mode, Normal Voltage Vertical

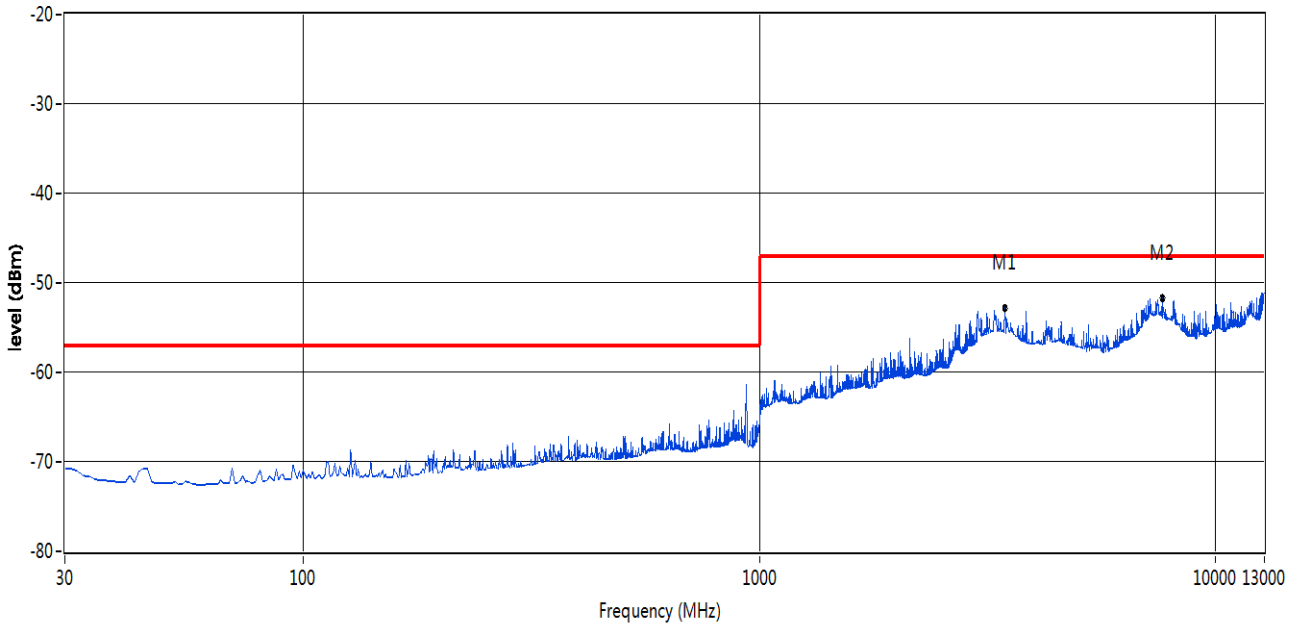
EN_RSE_301 511_900_30-12.75GHz





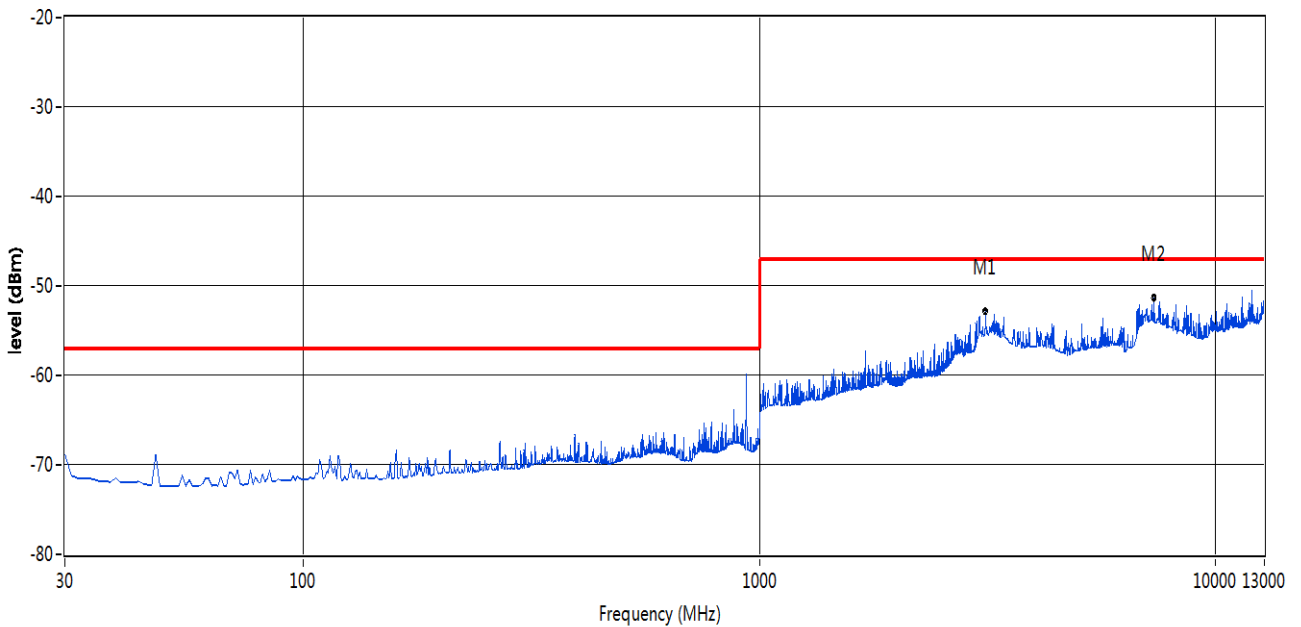
Idle Mode, Normal Voltage Horizontal

EN_RSE_301 511_900_30-12.75G-IDLE



Idle Mode, Normal Voltage Vertical

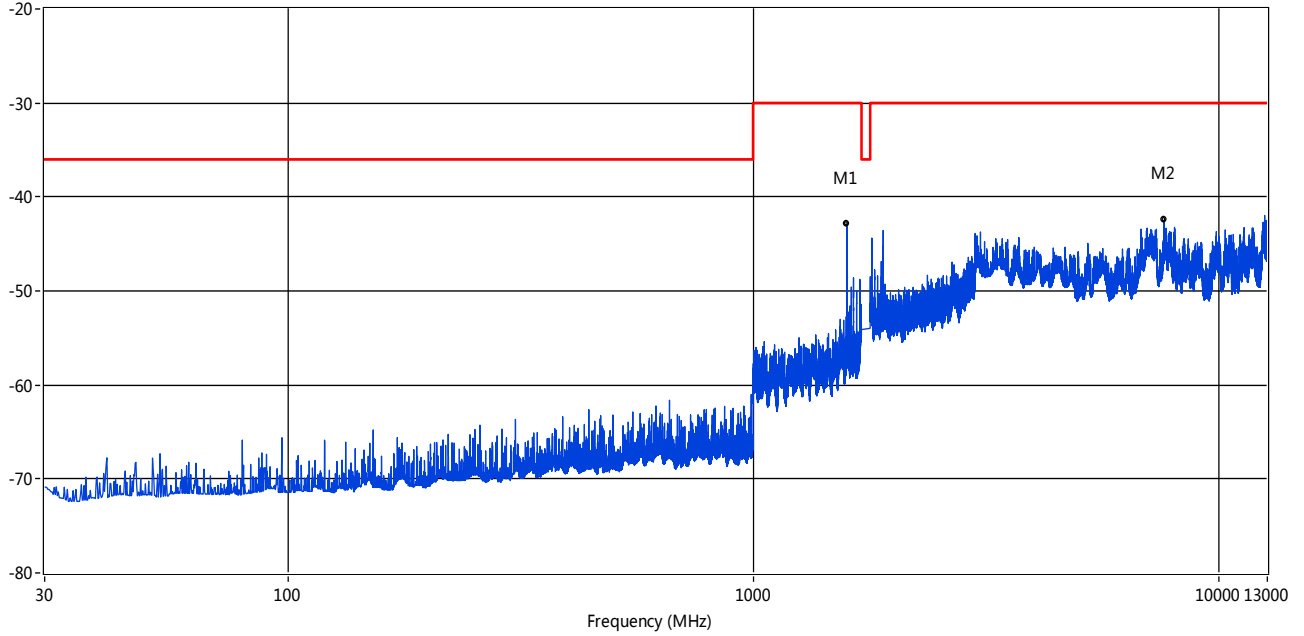
EN_RSE_301 511_900_30-12.75G-IDLE





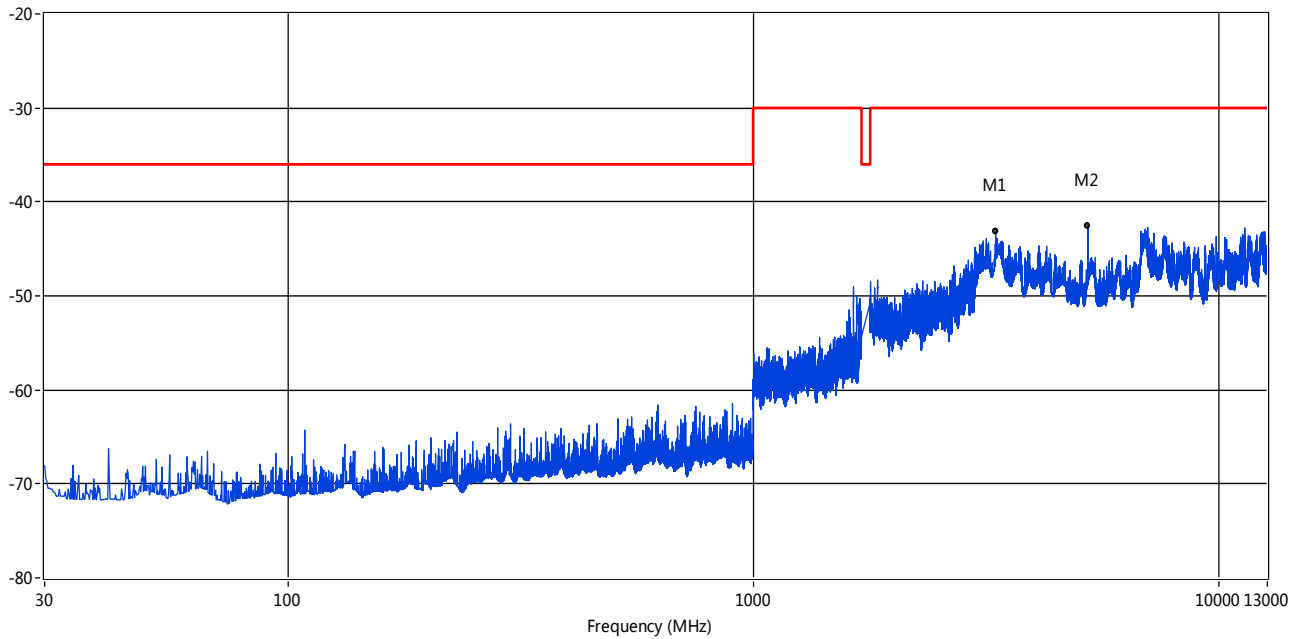
GSM1800-Radiated Spurious Emission: Worst Mode Traffic Mode, Normal Voltage Horizontal

EN_RSE_301 511_1800_30-12.75G



Traffic Mode, Normal Voltage Vertical

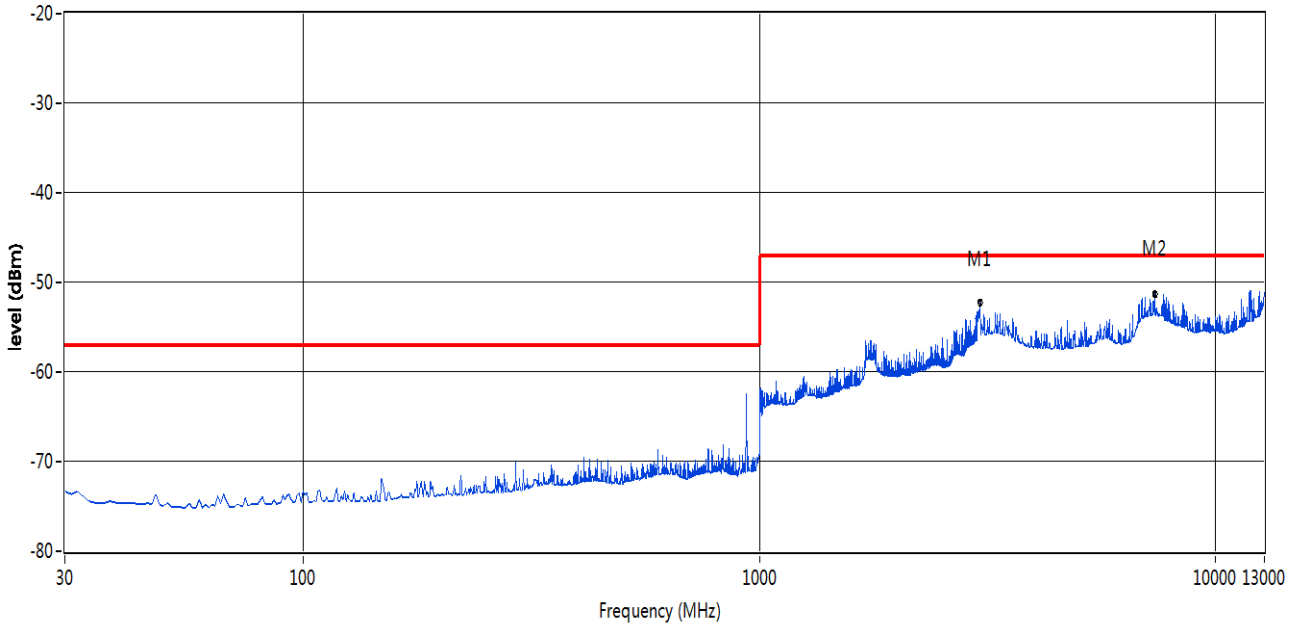
EN_RSE_301 511_1800_30-12.75G





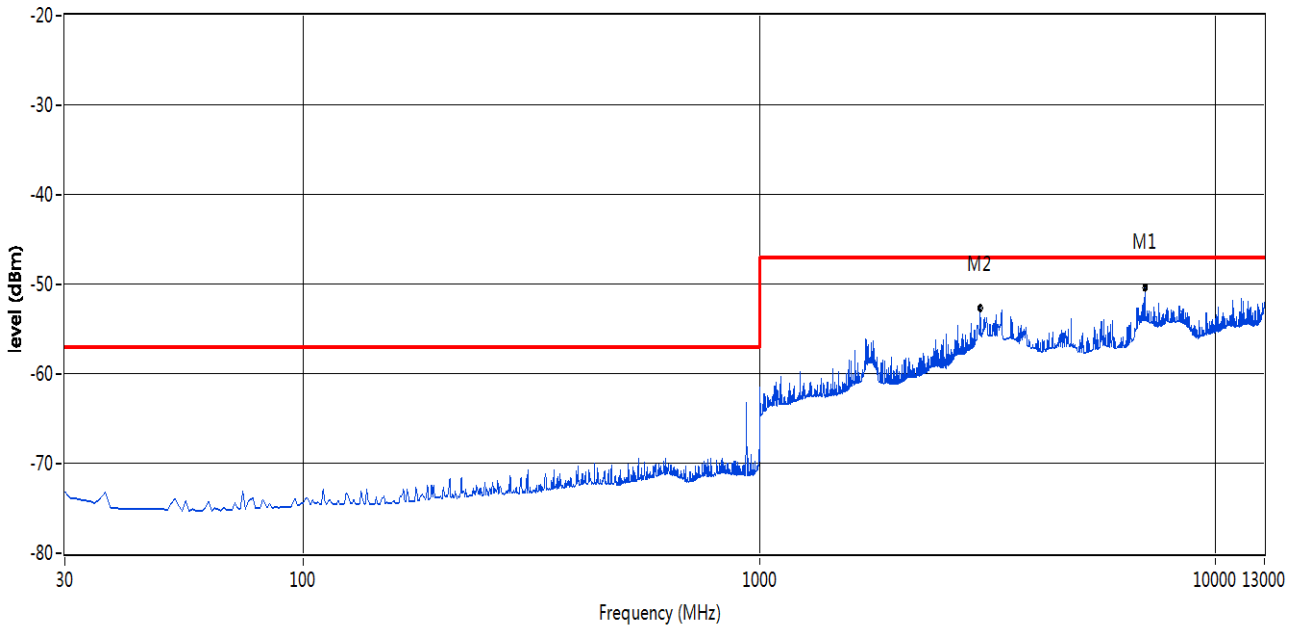
Idle Mode, Normal Voltage Horizontal

EN_RSE_301 511_1800_30-12.75G-IDLE



Idle Mode, Normal Voltage Vertical

EN_RSE_301 511_1800_30-12.75G-IDLE



APPENDIX II: PICS/PIXIT INFORMATION OF THE EUT

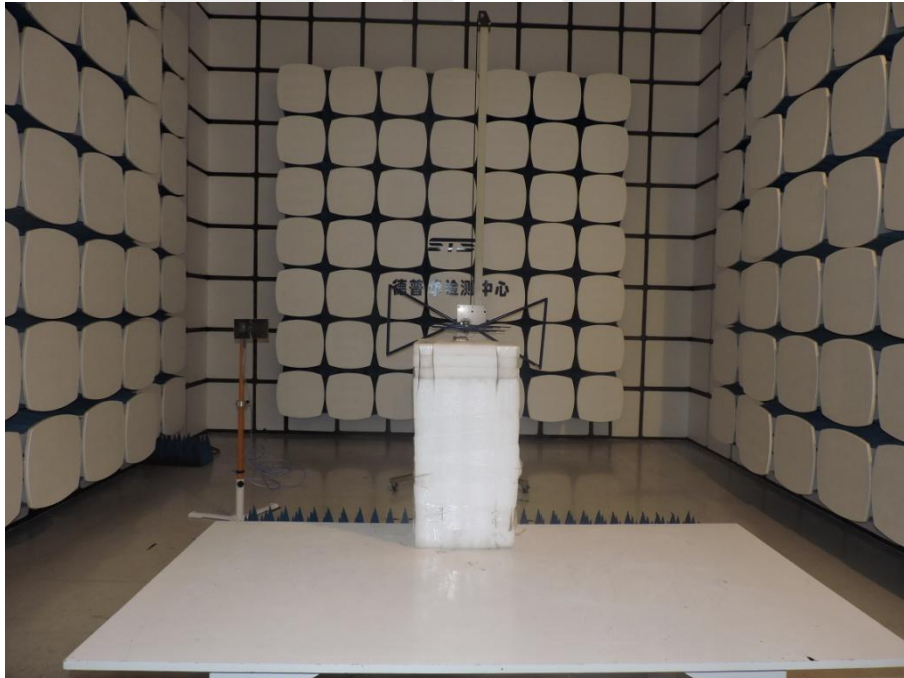
TABLE A.1: TYPE OF MOBILE STATION (RE. ETSI EN301 511 Annex A)

Item	Type of Mobile Station	Support	Mnemonic
1	HSCSD Multislot MS	N	Type_HSCSD_Multislot
2	R-GSM MS	N	Type_R-GSM
3	Support of GPRS Multislot class on the uplink	Y	Type_GPRS_Multislot_uplink
4	EGPRS	N	Type_EGPRS
5	EGPRS capable of 8PSK in Uplink, of all Multislot classes	N	Type_EGPRS_8PSK_uplink

TABLE A.2: ADDITIONAL INFORMATION (Re. ETSI EN301 511 Annex A)

Item	Additional Information	Support	Mnemonic
1	Telephony.	Y	TSPC_Serv_TS11
2	Permanent Antenna Connector.	N	TSPC_AddInfo_PermAntenna

Measurement Photos



※※※※※END OF THE REPORT※※※※※