

# **FCC TEST REPORT**

Issued to

Teleepoch Limited

For

### Mobile phone

Model Name: Wi920; WI920E/MAX

Trade Name: PUBLIC/UMX Brand Name: PUBLIC/UMX

FCC ID: U46-MAX

47 CFR Part 15 Subpart B Standard:

Test date: September 5, 2011 – September 15, 2011

September 16, 2011 Issue date:

Shenzhen Morlab chnology Co., Ltd.

Date

**IEEE 1725** 







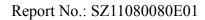






Reg. No.

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1.0	September 16, 2011	First edition	
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### 1. GENERAL INFORMATION

## 1.1 EUT Description

EUT Type ...... Mobile phone

Serial No..... (n.a, marked #1 by test site)

Hardware Version...... WI920 V1.2

Software Version ...... N/A

Applicant..... Teleepoch Limited

5A, B1 Building, Digital Tech Zone, High-Tech Park(south), Nanshan

district, Shenzhen, Guangdong Province, China

Manufacturer..... Teleepoch Limited

5A, B1 Building, Digital Tech Zone, High-Tech Park(south), Nanshan

district, Shenzhen, Guangdong Province, China

Modulation Type ...... QPSK

Power Supply ..... Battery

Brand Name: CHI HANG

Model No.: N/A

Serial No.: (n.a. marked #1 by test site)

Capacitance: 1450mAh Rated Voltage: 3.7V Charge Limit: 4.2V

Ancillary Equipment 1 ..... AC Adapter (Charger for Battery)

Brand Name: N/A

Model Name: A26-501000

Serial No.: (n.a. marked #1 by test site)
Rated Input: ~ 100-240V, 0.2A, 50/60Hz

Rated Output: DC5 V = 1000 mA

*Note 1:* The EUT is a Mobile Phone, it supports AWS 1700MHz, CDMA 800MHz and 1900MHz bands, CDMA 1X, EVDO, ISM 2.4GHz Bluetooth module and WIFI module.

*Note 2:* The EUT is equipped with a T-Flash card slot; equipped with a special port which can be connected to the ancillary equipments supplied by the manufacturer e.g. the AC Adapter and the USB Adapter Cable.

*Note 3:* For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



### 1.2 Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart B:

No.	Identity	Document Title
1	47 CFR Part 15	Radio Frequency Devices
	(10-1-09 Edition)	

Test detailed items/section required by FCC rules and results are as below:

No.	Section	Description	Result
1	15.107	Conducted Emission	PASS
2	15.109	Radiated Emission	PASS

NOTE: The tests were performed according to the method of measurements prescribed in ANSI C63.4 2003.



### 1.3 Facilities and Accreditations

#### 1.3.1 Facilities

Shenzhen Morlab Communications Technology Co., Ltd. Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L3572.

All measurement facilities used to collect the measurement data are located at 3/F, Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen, 518055 P. R. China. The test site is constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22; the FCC registration number is 741109.

#### 1.3.2 Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15 - 35
Relative Humidity (%):	30 -60
Atmospheric Pressure (kPa):	86-106

# 1.3.3 Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

Uncertainty of Conducted Emission:	±1.8dB
Uncertainty of Radiated Emission:	±3.1dB



### 2. TEST CONDITIONS SETTING

### 2.1 Test Mode

(1) The first test mode (Idle)

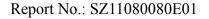
The EUT configuration of the emission tests is <u>EUT + Battery + Charger</u>. During the test, The EUT was synchronized to the BCCH, listening to the CCCH and able to respond to paging message. Periodic location updating was disabled.

(2) The second test mode (USB)

The EUT configuration of the emission tests is <u>TransFlash Card + EUT + Battery + PC.</u>

In this test mode, the EUT with a TransFlash Card embedded is connected with a PC via a special USB cable supplied by applicant. During the measurement, a communication link was established between the EUT and a System Simulator (SS), simultaneity, the data is transmitting between the PC and the TransFlash Card of the EUT.

NOTE: All test modes are performed, only the worst cases are recorded in this report.

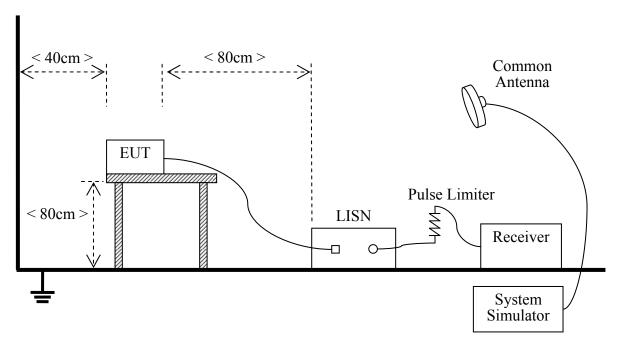




# 2.2 Test Setup and Equipments List

### 2.2.1 Conducted Emission

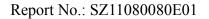
### A. Test Setup:



The EUT is placed on a 0.8m high insulating table, which stands on the grounded conducting floor, and keeps 0.4m away from the grounded conducting wall. The EUT is connected to the power mains through a LISN which provides  $50\Omega/50\mu H$  of coupling impedance for the measuring instrument. The Common Antenna is used for the call between the EUT and the System Simulator (SS). A Pulse Limiter is used to protect the measuring instrument. The factors of the whole test system are calibrated to correct the reading.

### **B.** Equipments List:

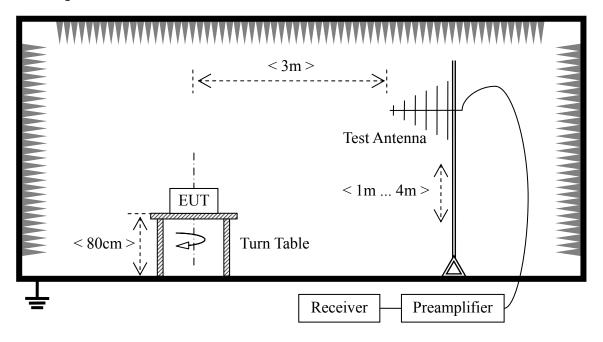
Description	Manufacturer	Model	Serial No.	Cal. Date
Receiver	Agilent	E7405A	US44210471	2011.05
LISN	Schwarzbeck	NSLK 8127	812744	2011.05
Pulse Limiter (20dB)	Schwarzbeck	VTSD 9561-D	9391	(n.a.)
System Simulator	Agilent	E5515C	GB43130131	2011.05
Personal Computer	IBM	IBM_T20	(n.a)	(n.a.)
Bluetooth-Headset	Nokia	HS-36W	(n.a.)	(n.a.)
T-Flash Card	SanDisk	256MB	(n.a.)	(n.a.)





### 2.2.2 Radiated Emission

# C. Test Setup:



The test is performed in a 3m Semi-Anechoic Chamber; the antenna factor, cable loss and so on of the site (factors) is calculated to correct the reading. The EUT is placed on a 0.8m high insulating Turn Table, and keeps 3m away from the Test Antenna, which is mounted on a variable-height antenna master tower.

# D. Equipments List:

Description	Manufacturer	Model	Serial No.	Cal.
				Date
Receiver	Agilent	E7405A	US44210471	2011.05
Semi-Anechoic	Albatross	9m*6m*6m	(n.a.)	2011.05
Chamber				
Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	9163-274	2011.05
Test Antenna - Horn	Schwarzbeck	BBHA 9120C	9120C-384	2011.05
Personal Computer	IBM	IBM_T20	(n.a)	(n.a.)
Bluetooth-Headset	Nokia	HS-36W	(n.a.)	(n.a.)
T-Flash Card	SanDisk	256MB	(n.a.)	(n.a.)



# 3. 47 CFR PART 15B REQUIREMENTS

### 3.1 Conducted Emission

### 3.1.1 Requirement

According to FCC section 15.107, the radio frequency voltage that is conducted back onto the AC power line on any frequency within the band 150kHz to 30MHz shall not exceed the limits in the following table, as measured using a  $50\mu\text{H}/50\Omega$  line impedance stabilization network (LISN).

Eraguanay ranga (MHz)	Conducted Limit (dBµV)		
Frequency range (MHz)	Quasi-peak	Average	
0.15 - 0.50	66 to 56	56 to 46	
0.50 - 5	56	46	
5 - 30	60	50	

#### NOTE:

- a) The limit subjects to the Class B digital device.
- b) The lower limit shall apply at the band edges.
- c) The limit decreases linearly with the logarithm of the frequency in the range 0.15 0.50MHz.

### 3.1.2 Test Description

See section 2.2.1 of this report.

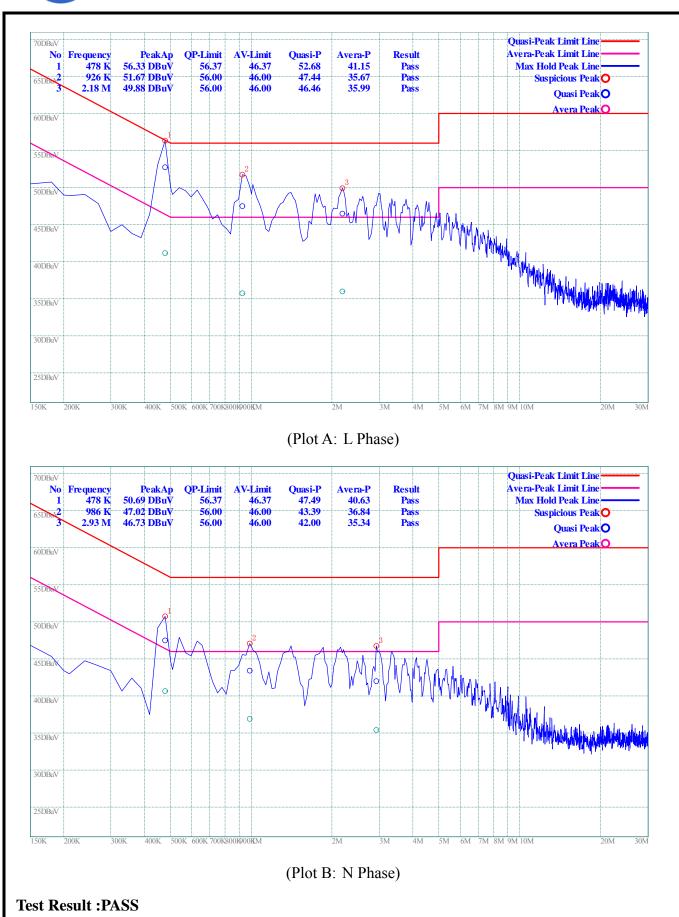
#### 3.1.3 Test Result

The maximum conducted interference is searched using Peak (PK), Quasi-peak (QP) and Average (AV) detectors; the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. All test modes are considered, refer to recorded points and plots below.

#### **3.1.3.1** Test Mode

### A. Test Plot and Suspicious Points:







### 3.2 Radiated Emission

# 3.2.1 Requirement

According to FCC section 15.109, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Eraguanay ranga (MHz)	Field Strength		
Frequency range (MHz)	$\mu V/m$	dBμV/m	
30 - 88	100	40	
88 - 216	150	43.5	
216 - 960	200	46	
Above 960	500	54	

NOTE:

- a) Field Strength ( $dB\mu V/m$ ) = 20\*log[Field Strength ( $\mu V/m$ )].
- b) In the emission tables above, the tighter limit applies at the band edges.

### 3.2.2 Test Description

See section 2.2.2 of this report.

#### 3.2.3 Test Result

The maximum radiated emission is searched using PK, QP and AV detectors; the emission levels more than the limits, and that have narrow margins from the limits will be re-measured with AV and QP detectors. Both the vertical and the horizontal polarizations of the Test Antenna are considered to perform the tests. All test modes are considered, refer to recorded points and plots below.

#### **3.2.3.1** Test Mode

### A. Test Plots and Suspicious Points:





