

# **47 CFR PART 15 SUBPART B**

# **TEST REPORT**

of

#### W PhoneWatch

Model Name:

WP1203

Brand Name:

Kempler & Strauss

Report No.: FCC ID:

SH09110046E01 xzwwphonewatch



## Shenzhen Electronic Product QualityTesting Center Morlab Laboratory

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## 1 TEST CERTIFICATION

Equipment under Test: W PhoneWatch

Brand Name: Kempler & Strauss

Model Name: WP1203

FCC ID: XZWWPHONEWATCH

Applicant: Vento North America LLC

6190 Cornerstone Ct. St. 200, San Diego, California, USA

Manufacturer: GSUN(Shanghai) Communication Technology Co., Ltd.

Minhang District, Shanghai XinJian east road - NO.58, Room

2710.

Test Standards: 47 CFR Part 15 Subpart B

Test Date(s): Jan 11,2010 - Jan 25, 2010

Test Result: PASS

## \* We Hereby Certify That:

The equipment under test was tested by Shenzhen Electronic Product Quality Testing Center Morlab Laboratory. The test data, data evaluation, test procedures and equipment configurations shown in this report were made in accordance with the requirement of related FCC rules.

The test results of this report only apply for the tested sample equipment identified above. The test report shall be invalid without all the signatures of the test engineer, the reviewer and the approver.

Tested by: Huang yun long Dated: 2010.2.8

Huangyunlong

Reviewed by: Zhang Jun 2 Zhang Zhang

Approved by: Su Feng System Certific Dated: 2012.7.7



## 2 GENERAL INFORMATION

## 2.1 EUT Description

EUT Type ...... W PhoneWatch

 Model Name
 WP1203

 Serial No
 (n.a)

 IMEI
 (n.a)

Hardware Version ...... W100B\_PCB\_MB\_VC0

Software Version ...... W100B MZ SAM V25 091110

Frequency Range ...... GSM 850MHz:

Tx: 824.20 - 848.80MHz (at intervals of 200kHz);

Rx: 869.20 - 893.80MHz (at intervals of 200kHz)

GSM 1900MHz:

Tx: 1850.20 - 1909.80MHz (at intervals of 200kHz);

Rx: 1930.20 - 1989.80MHz (at intervals of 200kHz)

Modulation Type.....: GMSK
Power Supply .....: Battery

Brand name: (n.a)
Mode Name.: (n.a)
Capacitance: 400mAh
Rated voltage: 3.7V
Charge limited: 4.2V

Manufacturer: TJD Information Co., Ltd.

No.181, Tengfeng Rd, 2nd Industry Zone, Fenghuang Village, Bao An District,

Shenzhen, China

Ancillary Equipments ...... AC Adapter (Charger for Battery)

Brand name: (n.a) Mode Name.: (n.a)

Manufacturer: TJD Information Co., Ltd.

No.181, Tengfeng Rd, 2nd Industry Zone, Fenghuang Village, Bao An District,

Shenzhen, China

Note 1: The EUT is a model of GSM 850/1900. Bluetooth mobile phone watch.

Note 2: The normal configuration for the EUT is the MS associated with ancillary equipments e.g. the Battery +EUT, the USB of EUT just for data transmission.

e.g. the Battery +EU1, the USB of EU1 just for data transmission.

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



## 2.2 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
	(10-1-05 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

## 2.3 Facilities and Accreditations

#### 2.3.1 Facilities

Shenzhen Electronic Product Quality Testing Center Morlab Laboratory is a testing organization accredited by China National Accreditation Service for Laboratories (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

All measurement facilities used to collect the measurement data are located at Electronic Testing Building, Shahe Road, Xili, Nanshan District, Shenzhen 518055 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.

### 2.3.2 Test Environment Conditions

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

Temperature (°C):	20 - 25
Relative Humidity (%):	40 - 60
Atmospheric Pressure (kPa):	96



## 3 TEST CONDITIONS SETTING

#### 3.1 Test Mode

- 1. The test modes of the EUT are showed as below:
  - a) The first test mode (GSM)

The EUT configuration of the emission tests is <u>EUT + Battery+earphone</u>

During the measurement, the lithium battery was installed into the EUT, and the earphone was connected to the EUT.A communication link was established between the EUT and a System Simulator (SS).

b) The second test mode (Bluetooth)

The EUT configuration of the emission test is <u>EUT + Battery</u>

In this test mode ,a Bluetooth link was established between the EUT and a System Simulator(SS); date was transmitted between EUT and System Simulator (SS), and maintained during the measurement.

c) The second test mode (EUT +PC)

The EUT configuration of the emission to

The EUT configuration of the emission test is <u>EUT + Battery+USB+PC</u> In this test mode ,date was transmitted between EUT and PC by USB. and maintained during the measurement.

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

NOTE: In the Radiated Emission, the worst cases are operated at GSM 850 the first test mode

NOTE: In the Conducted Emission, the EUT have a statement that it does not support EUT+AC adapter. So the Conductd Emission test mode is EUT+USB+PC. Please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

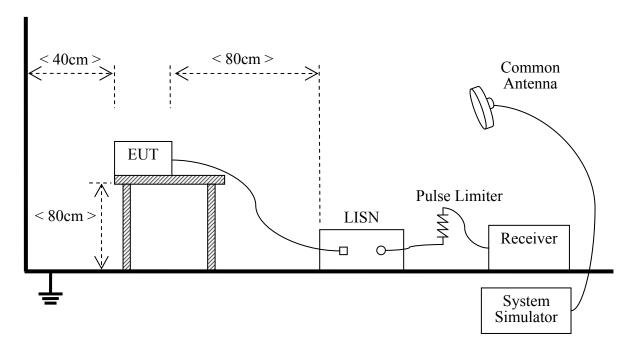




# 3.2 Test Setup and Equipments List

## 3.2.1 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:

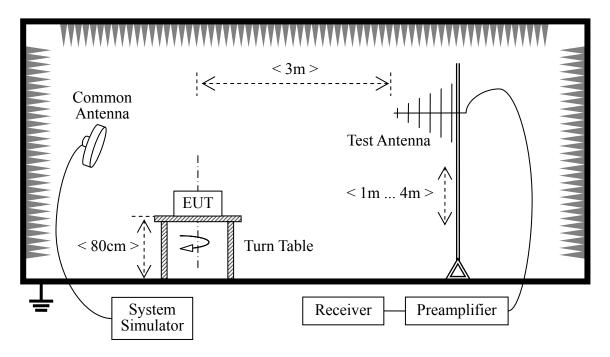
Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
Receiver	Rohde&Sch	ESCI3	100666	2009.10	1year
	warz				
LISN	Rohde&Sch	ENV216	812744	2009.10	1year
	warz				
System Simulator	Rohde&Sch	CMU200	105571	2009.10	1year
	warz				
Personal Computer	Lenovo	(n.a.)	(n.a.)	(n.a.)	(n.a.)





## 3.2.2 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. The Common Antenna is used for the call between the EUT and the System Simulator (SS).

## **D.** Equipments List:

Description	Manufacturer	Model	Serial No.	Cal.	Cal. Due
				Date	
Receiver	Rohde&Sch	ESCI3	100666	2009.10	1year
	warz				
Full-Anechoic	Albatross	9m*6m*6m	(n.a.)	2009.10	1 year
Chamber					
Test Antenna - Bi-Log	Rohde&Sch	HL562	100385	2009.10	1year
	warz				
System Simulator	Rohde&Sch	CMU200	105571	2009.10	1year
	warz				
Service Simulator	Anritsu	MT8852A	6K00002788	2009.10	1year
Personal Computer	Lenovo	(n.a.)	(n.a.)	(n.a.)	(n.a.)



# **47 CFR PART 15B REQUIREMENTS**

#### 4 Conducted Emission

## 4.1 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  $50\mu H/50\Omega$  line impedance stabilization network (LISN).

Eraguanay ranga (MHz)	Conducted Limit (dBµV)			
Frequency range (MHz)	Quai-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.

## **4.2 Test Description**

See section 3.2.1 of this report.

#### 4.3 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.

#### **4.3.1.1 Test Mode**

The EUT configuration of the emission tests is  $\underline{EUT + USB + PC}$ 





# A. Test Verdict Recorded for Suspicious Points:

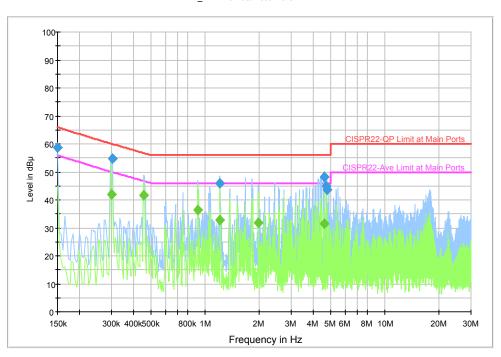
Frequency (MHz)	QuasiPeak (dB µ V)	Bandwidt h (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB $\mu$ V)	Comment
1.064156	46.6	9.000	N	9.7	9.4	56.0	PASS
4.418550	46.5	9.000	N	9.9	9.5	56.0	PASS
4.556606	44.8	9.000	N	9.9	11.2	56.0	PASS
4.578994	34.3	9.000	N	9.9	21.7	56.0	PASS
4.690931	36.7	9.000	N	9.9	19.3	56.0	PASS
4.717050	48.1	9.000	N	9.9	7.9	56.0	PASS
0.150000	58.7	9.000	L1	9.5	7.3	66.0	PASS
0.302981	54.7	9.000	L1	9.7	5.3	60.0	PASS
1.202212	45.9	9.000	L1	9.7	10.1	56.0	PASS
4.564069	48.4	9.000	L1	9.9	7.6	56.0	PASS
4.702125	45.0	9.000	L1	9.9	11.0	56.0	PASS
4.724512	43.4	9.000	L1	9.9	12.6	56.0	PASS

Frequency (MHz)	Average (dB $\mu$ V)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dB µ V)	Comment
0.452231	35.7	9.000	N	9.7	11.1	46.8	PASS
1.060425	34.3	9.000	N	9.7	11.7	46.0	PASS
1.978312	34.3	9.000	N	9.7	11.7	46.0	PASS
4.101394	28.1	9.000	N	9.9	17.9	46.0	PASS
4.556606	31.8	9.000	N	9.9	14.2	46.0	PASS
4.717050	34.2	9.000	N	9.9	11.8	46.0	PASS
0.299250	42.0	9.000	L1	9.7	8.0	50.0	PASS
0.452231	41.6	9.000	L1	9.7	5.2	46.8	PASS
0.903712	36.4	9.000	L1	9.7	9.6	46.0	PASS
1.202212	32.8	9.000	L1	9.7	13.2	46.0	PASS
1.959656	31.9	9.000	L1	9.7	14.1	46.0	PASS
4.567800	31.5	9.000	L1	9.9	14.5	46.0	PASS



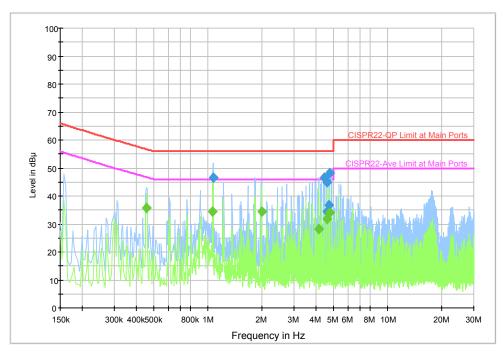
# **B.** Test Plot:





(Plot: L Phase)

EMI\_ENV216 Auto Test-N CISPR22



(Plot: N Phase)



# **47 CFR PART 15B REQUIREMENTS**

## **5** Radiated Emission

## **5.1 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 (MIIa)	Field S	trength
Frequency range (MHz)	$\mu V/m$	dBμV/m
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above 960	500	54.0

#### 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.

## **5.2 Test Description**

See section 3.2.2 of this report.

#### 5.3 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.

#### **5.3.1.1** test mode

The EUT configuration of the emission tests is EUT + Battery+earphone



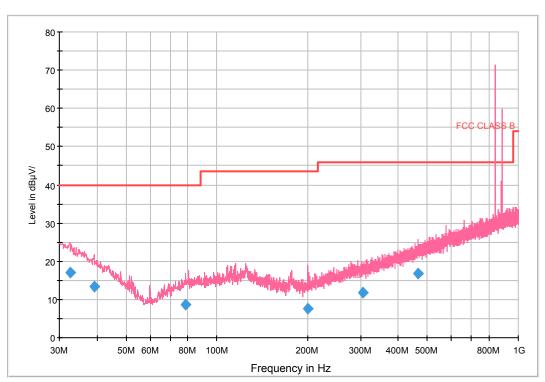


# A. Test Verdict Recorded:

Na	©Enaguer av (MII-)	Measured En	nission Level (dBµV)	Limit (dDV)	Margin	Vandiat	
No.	@Frequency (MHz)	QP	Polarity	Limit (dBµV)	(dB)	Verdict	
1	32.546250	17.1	V	40.0	22.9	PASS	
2	39.093750	13.4	V	40.0	26.6	PASS	
3	78.742500	8.6	V	40.0	31.4	PASS	
4	200.962500	7.6	V	40.0	32.4	PASS	
5	304.995000	11.7	V	47.0	35.3	PASS	
6	465.408750	16.8	V	47.0	30.2	PASS	
7	32.425000	17.3	Н	40.0	22.7	PASS	
8	60.070000	5.9	Н	40.0	34.1	PASS	
9	126.515000	11.3	Н	40.0	28.7	PASS	
10	288.141250	11.2	Н	47.0	35.8	PASS	
11	467.106250	16.8	Н	47.0	30.2	PASS	
12	569.077500	19.4	Н	47.0	27.6	PASS	

# **B.** Test Plot:

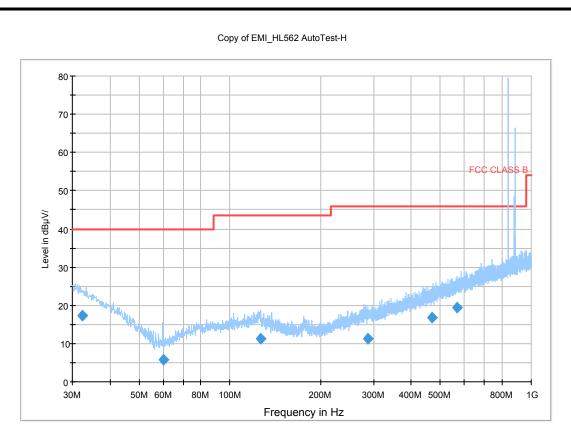
Copy of EMI\_HL562 AutoTest-H



(Plot: Test Antenna Vertical)







(Plot: Test Antenna Horizontal)

\*\* END OF REPORT \*\*