Shenzhen Huatongwei International Inspection Co., Ltd.
Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China
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RF EXPOSURE REPORT

Report Reference No. ..... :	**TRE1507005703**	R/C…….: 83723
FCC ID. ..... :	**2AFEE-E-B10**	
Applicant's name ..... :	**Nanjing Xijian Information Technology Co., Ltd.**	
Address.....:	Floor 3, Jinjvlong building,9 Gaohu Road, Jiangning District,Nanjing,China	
Manufacturer.....:	Nanjing Xijian Information Technology Co., Ltd.	
Address.....:	Floor 3, Jinjvlong building,9 Gaohu Road, Jiangning District,Nanjing,China.	
Test item description ..... :	**ECG Recorder**	
Trade Mark .....:	SnapECG	
Model/Type reference.....:	E-B10	
Listed Model(s) .....:	--	
Standard ..... :	**FCC Per 47 CFR 2.1093(d)**	
Date of receipt of test sample.....:	July 8, 2015	
Date of testing .....:	July 9, 2015 ~ July 28, 2015	
Date of issue… .....:	July 28, 2015	
Result..... ……..:	**PASS**	

Compiled by (position+printed name+signature)..:	File administrators Shayne Zhu	Shayne Zhu
Supervised by (position+printed name+signature)..:	Project Engineer Hans Hu	Hans Hu
Approved by (position+printed name+signature)..:	RF Manager Hans Hu	Hans Hu

Testing Laboratory Name ..... :	**Shenzhen Huatongwei International Inspection Co., Ltd**
Address.....:	Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China

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Contents

1. SUMMARY

1.1. Client Information

Applicant:	Nanjing Xijian Information Technology Co., Ltd.
Address:	Floor 3, Jinjvlong building,9 Gaohu Road, Jiangning District,Nanjing,China
Manufacturer:	Nanjing Xijian Information Technology Co., Ltd.
Address:	Floor 3, Jinjvlong building,9 Gaohu Road, Jiangning District,Nanjing,China

1.2. Product Description

Name of EUT	ECG Recorder
Trade Mark:	SnapECG
Model No.:	E-B10
Listed Model(s):	--
Power supply:	DC 3.7V From internal battery
Name of EUT	ECG Recorder
Bluetooth 3.0+EDR	
Version:	Supported BT3.0+EDR
Modulation:	GFSK, π/4DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79
Channel separation:	1MHz
Antenna type:	Internal Antenna
Antenna gain:	1.0 dBi
Bluetooth BT4.0+BLE	
Version:	Supported BT4.0+BLE
Modulation:	GFSK
Operation frequency:	2402MHz~2480MHz
Channel number:	40
Channel separation:	2MHz
Antenna type:	Internal Antenna
Antenna gain:	1.0dBi

Operation Frequency List:

BT3.0+EDR

Channel	Frequency (MHz)
0	**2402**
1	2403
⋮	⋮
39	**2441**
⋮	⋮
77	2479
78	**2480**

BT4.0+BLE

Channel	Frequency (MHz)
00	**2402**
02	2404
⋮	⋮
19	**2440**
⋮	⋮
38	2478
39	**2480**

Note:In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the above gray bottom.

1.3. EUT operation mode

The EUT has been tested under test mode condition. The Applicant provides software to control the EUT for staying in continous transmitting and receiving mode for testing.

1.4. EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

● - supplied by the manufacturer

○ - supplied by the lab

○	Power Cable	Length (m) :	/
		Shield :	/
		Detachable :	/
○	Multimeter	Manufacturer :	/
		Model No. :	/

1.5. Modifications

No modifications were implemented to meet testing criteria.

2. TEST ENVIRONMENT

2.1. Address of the test laboratory

Laboratory:Shenzhen Huatongwei International Inspection Co., Ltd.
Address: Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China
Phone: 86-755-26748019 Fax: 86-755-26748089

2.2. Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories, Date of Registration: February 28, 2015. Valid time is until February 27, 2018.

A2LA-Lab Cert. No. 2243.01

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is until Sept 30, 2015.

FCC-Registration No.: 662850

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 662850, Renewal date Jul. 01, 2012, valid time is until Jun. 01, 2015.

FCC-Registration No.: 317478

Shenzhen Huatongwei International Inspection Co., Ltd. (Gongming EMC Laboratory) has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 317478, Renewal date July 18, 2014, valid time is until July. 18, 2017.

IC-Registration No.: 5377A

The 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377A on Dec. 31, 2013, valid time is until Dec. 31, 2016.

IC-Registration No.: 5377B

The 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. (Gongming EMC Laboratory) has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377B on September 3, 2014, valid time is until September 3, 2017.

ACA

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

VCCI

The 3m Semi-anechoic chamber (12.2m×7.95m×6.7m) of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.:R-2484. Date of Registration: Dec. 20, 2012. Valid time is until Dec. 29, 2015.
Radiated disturbance above 1GHz measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-292. Date of Registration: Dec. 24, 2013. Valid time is until Dec. 23, 2016.
Main Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: C-2726. Date of Registration: Dec. 20, 2012. Valid time is until Dec. 19, 2015.
Telecommunication Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: T-1837. Date of Registration: May 07, 2013. Valid time is until May 06, 2016.

DNV

Shenzhen Huatongwei International Inspection Co., Ltd. has been found to comply with the requirements of DNV towards subcontractor of EMC and safety testing services in conjunction with the EMC and Low voltage Directives and in the voluntary field. The acceptance is based on a formal quality Audit and follow-ups according to relevant parts of ISO/IEC Guide 17025 (2005), in accordance with the requirements of the DNV Laboratory Quality Manual towards subcontractors. Valid time is until Aug. 24, 2016.

2.3. Environmental conditions

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

Temperature:	15~35°C
lative Humidity:	30~60 %
Air Pressure:	950~1050mba

2.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics;Part 1" and TR-100028-02 "Electromagnetic compatibilityand Radio spectrum Matters (ERM);Uncertainties in the measurementof mobile radio equipment characteristics;Part 2 " and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.57 dB	(1)
Transmitter power Radiated	2.20 dB	(1)
Conducted spurious emission 9KHz-40 GHz	1.60 dB	(1)
Radiated spurious emission 9KHz-40 GHz	2.20 dB	(1)
Conducted Emission 9KHz-30MHz	3.39 dB	(1)
Radiated Emission 30~1000MHz	4.24 dB	(1)
Radiated Emissio 1~18GHz	5.16 dB	(1)
Radiated Emissio 18-40GHz	5.54 dB	(1)
Occupied Bandwidth	---------	(1)

(1) This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

3. Method of measurement

3.1. Applicable Standard

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310,KDB447498 and §2.1093 RF exposure is required.

OET Bulletin 65 Supplement C [June 2001]: Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields

3.2. Limit

According to 447498 D01 General RF Exposure Guidance v05, exclusion threshold values at selected frequencies and distances table as following.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

3.3. TEST RESULS

Result=P* √ f/ D

P: Maximum Tune up power in mW
F: channel frequency in GHz
D: minimum test separation distance in mm

BT3.0+EDR

Mode	CH	Conducted power(dBm)	Tune up power (dBm)	Max Tune up power (dBm)	Max Tune up power (mW)	Result	Limit
GFSK	2402	-4.350	-4.5±1	-3.5	0.447	0.139	3.0
	2441	-4.734	-4.5±1	-3.5	0.447	0.140	3.0
	2480	-4.100	-4.5±1	-3.5	0.447	0.141	3.0
π/4DQPSK	2402	-4.255	-4.5±1	-3.5	0.447	0.139	3.0
	2441	-4.634	-4.5±1	-3.5	0.447	0.140	3.0
	2480	-3.994	-4.5±1	-3.5	0.447	0.141	3.0
8DPSK	2402	-5.169	-4.5±1	-3.5	0.447	0.139	3.0
	2441	-4.476	-4.5±1	-3.5	0.447	0.140	3.0
	2480	-3.955	-4.5±1	-3.5	0.447	0.141	3.0

BT4.0+BLE

Mode	CH	Conducted power(dBm)	Tune up power (dBm)	Max Tune up power (dBm)	Max Tune up power (mW)	Result	Limit
GFSK	2402	-5.40	-5.0±1	-4.0	0.398	0.123	3.0
	2440	-5.84	-5.0±1	-4.0	0.398	0.124	3.0
	2480	-5.38	-5.0±1	-4.0	0.398	0.125	3.0

4. Conclusion

So standalone SAR measurements are not required for both head and body.

.....End of Report.....

3.2. Limit

According to 447498 D01 General RF Exposure Guidance v05, exclusion threshold values at selected frequencies and distances table as following.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

3.3. RF Exposure

TEST RESULS

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)]

BT3.0+EDR

Mode	CH	Max output power(dBm)	Max output power(mW)	Test separation distances(mm)	Calculation Value	Threshold value
GFSK	2402	-4.350	0.37	5.0	0.11	3.0
	2441	-4.734	0.34	5.0	0.11	3.0
	2480	-4.100	0.39	5.0	0.12	3.0
π/4DQPSK	2402	-4.255	0.38	5.0	0.12	3.0
	2441	-4.634	0.34	5.0	0.11	3.0
	2480	-3.994	0.40	5.0	0.13	3.0
8DPSK	2402	-5.169	0.30	5.0	0.09	3.0
	2441	-4.476	0.36	5.0	0.11	3.0
	2480	-3.955	0.40	5.0	0.13	3.0

BT4.0+BLE

Mode	CH	Max output power(dBm)	Max output power(mW)	Test separation distances(mm)	Calculation Value	Threshold value
GFSK	2402	-5.40	0.29	5.0	0.09	3.0
	2440	-5.84	0.26	5.0	0.08	3.0
	2480	-5.38	0.29	5.0	0.09	3.0

4. Conclusion

So standalone SAR measurements are not required for both head and body.

.....End of Report.....