Application for FCC Certification
On behalf of

Jiaxing Shufude Electric Bed Co., Ltd.

Product Name: WIFI

Model No.: WIFI-Adjustable Bed

FCC ID: WKZSFD-WF

(MPE Calculation)

Prepared For : Jiaxing Shufude Electric Bed Co., Ltd.
East No. 07 Provincial Road, Tengyun Village,
Wangjiangjing Development Area, Jiaxing,
Zhejiang, China

Prepared By : Audix Technology (Shanghai) Co., Ltd.
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Report No. : ACI-F14193
Date of Test : Nov. 26, 2014
Date of Report : Nov. 27, 2014

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TEST REPORT FOR FCC CERTIFICATE

Applicant	:	Jiaxing Shufude Electric Bed Co., Ltd.
Manufacturer	:	Shenzhen Silicontra Technology Co., Ltd.

EUT Description : WIFI

(A) Model No. : WIFI-Adjustable Bed

(B) Power Supply : DC 5V (USB power)

Test Procedure Used:

FCC OET Bulletin 65 August 1997

The device described above is tested by Audix Technology (Shanghai) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC OET Bulletin 65.

The test results are contained in this test report and Audix Technology (Shanghai) Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. This report also shows that the EUT (M/N: Refer to Sec2.1), which was tested on Nov 26, 2014 is technically compliance with the FCC limits.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shanghai) Co., Ltd.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test : Nov 26, 2014 Date of Report : Nov 27, 2014

Producer : Alan He
ALAN HE / Assistant

Review : Sammy Chen
SAMMY CHEN / Deputy Manager

For and on behalf of
Audix Technology (Shanghai) Co., Ltd.

Signatory : Byron Kwo
Authorized Signature EMC BYRON KWO/Assistant General Manager

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test

Description	:	WIFI
Type of EUT		☑ Production ☐ Pre-product ☐ Pro-type
Model Number	:	WIFI-Adjustable Bed
Radio Tech	:	IEEE 802.11b/g/n (802.11n is 2.4GHz HT20 only)
Freq. Band	:	2412MHz ~ 2462MHz (Ch1-Ch11)
Tested Freq.	:	2412MHz (Ch1), 2437MHz (Ch6), 2462MHz (Ch11)
Modulation	:	DSSS for 802.11b OFDM for 802.11g/n
Antenna Gain	:	1.5 dBi
Applicant	:	Jiaxing Shufude Electric Bed Co., Ltd. East No. 07 Provincial Road, Tengyun Village, Wangjiangjing Development Area, Jiaxing, Zhejiang, China
Manufacturer	:	Shenzhen Silicontra Technology Co., Ltd. B1120-1122 yousong Technology Building, Longhuadonghuan Road, Baoan District, Shenzhen

1.2 Description of Test Facility

Site Description (Semi-Anechoic Chamber) : Sept. 17, 1998 file on Mar 16, 2012 Renewed
Federal Communications Commission
FCC Engineering Laboratory
7435 Oakland Mills Road
Columbia, MD 21046, USA

Name of Firm : Audix Technology (Shanghai) Co., Ltd.

Site Location : 3F 34 Bldg 680 Guiping Rd.,
Caohejing Hi-Tech Park,
Shanghai 200233, China

FCC registration Number : 91789

Accredited by NVLAP, Lab Code : 200371-0

1.3 Measurement Uncertainty

Output Power Expanded Uncertainty : U = ±1.56 dB

2 SUMMARY OF STANDARDS AND RESULTS

2.1 Applicable Standard

FCC OET Bulletin 65:1997

2.2 Specification Limits

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $|E|^2$, $|H|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f2)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/150	30
1500-100,000	--	--	1.0	30

f = frequency in MHz *Plane-wave equivalent power density

NOTE: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

The limit value 1.0mW/cm^2 is available for this EUT.

2.3 MPE Calculation Method

$$S = PG/(4 \pi R^2)$$

$$R = [PG/(4 \pi S)]^{0.5}$$

where: S = power density (in appropriate units, e.g. mW/ cm^2)
P = power input to the antenna (in appropriate units, e.g., mW)
(the measured power value see Report: F14192 Section 5.6)
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

2.4 Calculated Result

2.4.1 Radio Frequency Radiation Exposure Evaluation – 802.11b

Frequency	Peak Power	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(mW/cm^2)
2412	17.32	53.95	1.50	1.41	**0.015**	1.0
2437	17.05	50.70	1.50	1.41	**0.014**	1.0
2462	16.92	49.20	1.50	1.41	**0.014**	1.0

Separation distance R= 20cm.

Frequency	Peak Power	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(cm)
2412	17.32	53.95	1.50	1.41	1.0	**20**
2437	17.05	50.70	1.50	1.41	1.0	**20**
2462	16.92	49.20	1.50	1.41	1.0	**20**

The antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons.

2.4.2 Radio Frequency Radiation Exposure Evaluation – 802.11g

Frequency	Peak Power	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(mW/cm^2)
2412	17.53	56.62	1.50	1.41	**0.016**	1.0
2437	18.23	66.53	1.50	1.41	**0.019**	1.0
2462	17.07	50.93	1.50	1.41	**0.014**	1.0

Separation distance R= 20cm.

Frequency	Peak Power	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(cm)
2412	17.53	56.62	1.50	1.41	1.0	**20**
2437	18.23	66.53	1.50	1.41	1.0	**20**
2462	17.07	50.93	1.50	1.41	1.0	**20**

The antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons.

2.4.3 Radio Frequency Radiation Exposure Evaluation–802.11n

Frequency	Total Peak Power	Output Power to Antenna	Antenna Gain		Power Density	Limit
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(mW/cm^2)
2412	17.16	52.00	1.50	1.41	**0.015**	1.0
2437	16.91	49.09	1.50	1.41	**0.014**	1.0
2462	16.73	47.10	1.50	1.41	**0.013**	1.0

Separation distance R= 20cm.

Frequency	Total Peak Power	Output Power to Antenna	Antenna Gain		Limit	Distance
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm^2)	(cm)
2412	17.16	52.00	1.50	1.41	1.0	**20**
2437	16.91	49.09	1.50	1.41	1.0	**20**
2462	16.73	47.10	1.50	1.41	1.0	**20**

The antenna used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons.