



Korea

TUV SUD Korea Ltd.  
29F, Two IFC, 10 Gukjegeumyung-ro,  
Yeongdeungpo-gu, Seoul, Korea 150-945  
Tel. : +82-2-3215-1174  
Fax. : +82-2-3215-1110

# Electro Magnetic Field Test Report

Report reference no: CP5A01093615

Issued Date: 2015-03-03

## Detail of Item(s) tested:

Applicant: Richway & Fuji Bio Inc.  
Address: 1314 South King Street, Suite 520 Honolulu, Hawaii 96814, USA  
Manufacturer: RICHWAY & LIFE Co., Ltd.  
11F, 108 Haan-ro (Sohadong, ACE Tower), Gwangmyeong-si,  
Gyeonggi-do, 423-798, REPUBLIC OF KOREA  
Product Name: HEATING PAD  
Model Name: BIOMAT MINI  
Serial Number: -

Standard applied: IEC 62233(ed. 1), EN62233:2008

Test result: PASS ☒ FAIL ☐

The Equipment Under Test (EUT) has been found to be in compliance with the applicable standard.

Tested by

Charles, Im / Engineer

Reviewed by

Brian, Cha / Project manager



## **<Table of Contents>**

- 1. Description of EUT**
- 2. Test regulations**
- 3. Test Condition and Test Method of EUT**
- 4. Test Equipment and Test Set Up of EUT**
- 5. Detailed Test Data and Test Results**
- 6. Photos**

The test results apply only to the tested sample(s) supplied by the applicant, and reproduction of this test results without a written acknowledgment of TÜV SÜD KOREA LABORATORY is not prohibited.

## 1. Description of the EUT

### 1.1 General

Applicant: Richway & Fuji Bio Inc.  
Test report no.: CPSA01093615  
Product name (EUT): HEATING PAD  
Model name: BIOMAT MINI  
Serial no.: -  
Date of receipt: 2014-12-23  
Test period: 2015-01-08

### 1.2 Product Rating

Rated voltage: AC 120 V  
Rated frequency: 60 Hz

### 1.3 Variant Models

None

### 1.4 Others

None

## 2. Test Regulations

Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure (IEC 62233(ed. 1) and EN 62233:2008)

## 3. Test Condition and Test Method of EUT

### 3.1 Test Condition

Spread out and laid on a sheet of thermal insulation.

### 3.2 Test Method

Measurements were made of the magnetic field strength Top/Around the EUT with the sensor at a perpendicular distance of 0 cm from the surface of the EUT.

The measurements were made using a time domain method as described in clause 5.5.2 of IEC 62233(ed. 1) and EN 62233:2008. In this the measurements from the three coils in the sensor are weighted by the transfer function defined in the standard, then subsequently squared before being summed and the square root of the sum being taken. The resulting measurement is then compared with the reference level in table B.2 of IEC 62233(ed. 1) and EN 62233:2008 to obtain a result as a percentage of the reference level.

## 4. Test Equipment and Test Set Up of EUT

### 4.1 Test Equipment

Model Name	Description	Manufacturer	Next Calibration date	Serial No.
ELT-400	Exposure Level Meter	Narda	2016-02-17	J-0006
2300/90.10	Magnetic Field Probe	Narda	2016-02-17	J-0016

### 4.2 Test Set Up of EUT

The EUT was set up as per normal use.  
Max Temperature setting, Continuous operation  
The power supply for the EUT was AC 120 V, 60 Hz, 100 W

## 5. Detailed Test Data and Description of Test Results

### 5.1.1 Detailed Test Data – Mat

Sensor location	Maximum Magnetic flux density, B(%)		
	Distance (cm)	B(%)	Limit (%)
Top	0	1.390	100
[B(%) = B(uT) / Reference level(uT) X 100]			

### 5.1.2 Detailed Test Data – Controller

Sensor location	Maximum Magnetic flux density, B(%)		
	Distance (cm)	B(%)	Limit (%)
Front	0	4.100	100
Rear	0	2.730	100
Left	0	6.193.	100
Right	0	1.904	100
Top	0	12.39	100
[B(%) = B(uT) / Reference level(uT) X 100]			

## 5.2 Description of Test Results

As defined in clause 6 of IEC 62233(ed. 1) and EN 62233:2008, the EUT is deemed to comply with the basic restriction for exposure to electric and magnetic fields in table B.1 of IEC 62233(ed.1) and EN 62233:2008 if the reference level in table B.2 is not exceeded.

Table B.1 and B.2 of EN 62233:2008 are referenced from European Council Recommendation 1999/519/EC.

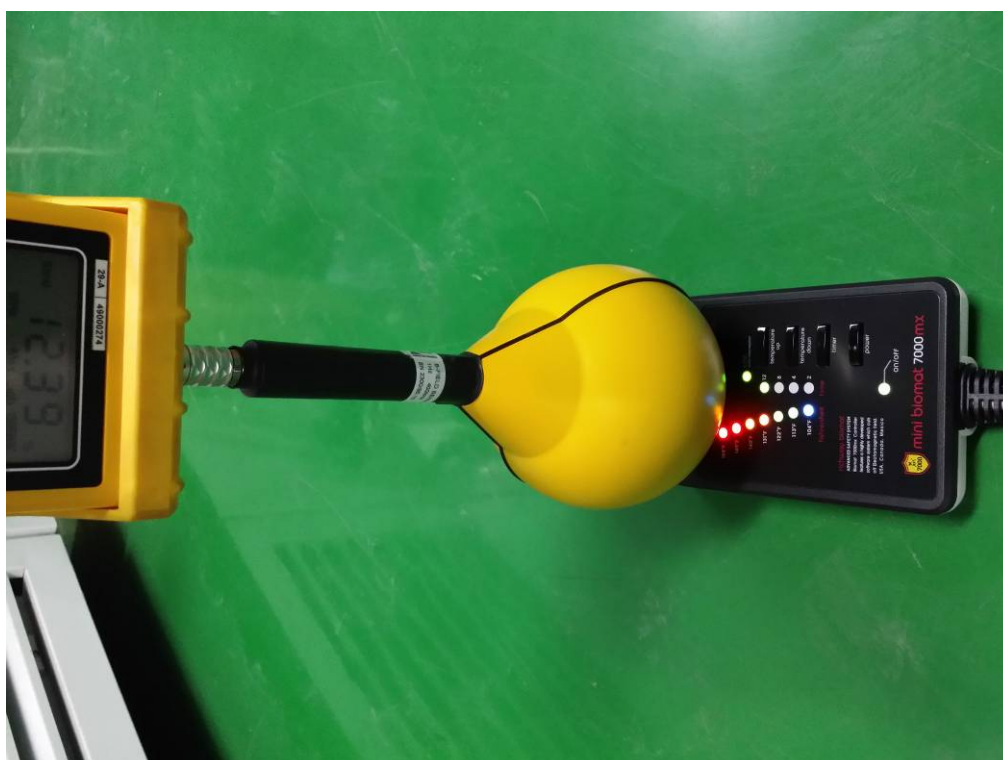
If a measured value exceeds the reference level, the coupling factor for the type of appliance can be taken into account to show compliance with the basic restriction. The measured value is multiplied by the coupling factor and if this new result does not exceed 100% of the reference level, the EUT is deemed to comply with the basic restriction.

The maximum electromagnetic field measured was 1.390 / 12.39 % of the reference level. The coupling factor for this type of appliance is Annex C, which when multiplied by the measured level gives a result of 0.1% of the reference level.

PASS

The measured electromagnetic fields of the EUT in the frequency range 10Hz to 400kHz comply with the basic restriction of Table B.1 of IEC 62233(ed.1) and EN 62233:2008, without being multiplied by the relevant coupling factor.

## 6. Photos



**-End of Test Report-**