FCC TEST REPORT

On Behalf of

Shenzhen Leadfar Industry Co., Ltd.

Rechargeable Heated Insoles

Model No.: LY-FFE08-P

Additional model No.: Please refer to page 15

Prepared for	:	Shenzhen Leadfar Industry Co., Ltd.
Address	:	No.73 ShaTian North Road, ShaTian, KengZi, PingShan, ShenZhen, China 518122
Prepared by	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Address	:	1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue, Bao'an District, Shenzhen, Guangdong, China
Tel	:	(+86)755-82591330
Fax	:	(+86)755-82591332
Web	:	www.LCS-cert.com
Mail	:	webmaster@LCS-cert.com
Date of receipt of test sample	:	September 15, 2014
Number of tested samples	:	1
Serial number	:	Prototype
Date of Test	:	September 15, 2014 –September 22, 2014
Date of Report	:	September 22, 2014

FCC TEST REPORT

FCC CFR 47 PART 15 Subpart B: 2013, ANSI C63.4-2009

Report Reference No.	**:**	**LCS1409221010E**
Date Of Issue	:	September 22, 2014
Testing Laboratory Name.....	**:**	**Shenzhen LCS Compliance Testing Laboratory Ltd.**
Address	:	1/F., Xingyuan Industrial Park, Tongda Road, Bao'an Avenue, Bao'an District, Shenzhen, Guangdong, China
Testing Location/ Procedure.....	:	Full application of Harmonised standards ■ Partial application of Harmonised standards □ Other standard testing method □
Applicant's Name	**:**	**Shenzhen Leadfar Industry Co., Ltd.**
Address	:	No.73 ShaTian North Road, ShaTian, KengZi, PingShan, ShenZhen, China 518122
Test Specification		
Standard	:	FCC CFR 47 PART 15 Subpart B: 2013, ANSI C63.4-2009
Test Report Form No.....	:	LCSEMC-1.0
TRF Originator	:	Shenzhen LCS Compliance Testing Laboratory Ltd.
Master TRF.....	:	Dated 2011-03

Test Item Description.	**:**	**Rechargeable Heated Insoles**
Model/ Type Reference	:	LY-FFE08-P
Trade Mark	:	N/A
Ratings.....	:	DC 3.7V by battery Charging voltage: DC 5V
Result	**:**	**Positive**

Compiled by:	**Supervised by:**	**Approved by:**
Jacky Li/ File administrators	Danny Huang/ Technique principal	Gavin Liang/ Manager

FCC -- TEST REPORT

Test Report No. : LCS1409221010E	September 22, 2014 Date of issue

Type / Model.....	: LY-FFE08-P
EUT.....	: Rechargeable Heated Insoles
Applicant.....	**: Shenzhen Leadfar Industry Co., Ltd.**
Address.....	: No.73 ShaTian North Road, ShaTian, KengZi, PingShan, ShenZhen, China 518122
Tel……...	: 0755-28827937
Fax.....	: 0755-84289965
Manufacturer.....	**: Shenzhen Leadfar Industry Co., Ltd.**
Address.....	: No.73 ShaTian North Road, ShaTian, KengZi, PingShan, ShenZhen, China 518122
Tel……...	: 0755-28827937
Fax.....	: 0755-84289965
Factory.....	: **Shenzhen Leadfar Industry Co., Ltd.**
Address.....	: No.73 ShaTian North Road, ShaTian, KengZi, PingShan, ShenZhen, China 518122
Tel……...	: 0755-28827937
Fax.....	: 0755-84289965

Test Result according to the standards on page 5: **Positive**

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

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Test Report Description Page

1. SUMMARY OF STANDARDS AND RESULTS

1.1. Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION			
Description of Test Item	**Standard**	**Limits**	**Results**
Conducted disturbance at mains terminals	FCC CFR 47 PART 15 Subpart B: 2013	Class B	PASS
Radiated disturbance	FCC CFR 47 PART 15 Subpart B: 2013	Class B	PASS
Conducted disturbance at Antenna terminals	FCC CFR 47 PART 15 Subpart B: 2013	---------	N/A
N/A is an abbreviation for Not Applicable.			

2. GENERAL INFORMATION

2.1. Description of Device (EUT)

EUT	:	Rechargeable Heated Insoles
Model Number	:	LY-FFE08-P
Power Supply	:	DC 3.7V by battery Charging voltage: DC 5V
Receving frequency	:	434.08MHz

2.2. Description of Test Facility

Site Description

EMC Lab. : Accredited by CNAS, April 28, 2013
The Certificate Registration Number. is L4595.

Accredited by FCC, July 14, 2011
The Certificate Registration Number. is 899208.

Accredited by Industry Canada, May. 02, 2011
The Certificate Registration Number. is 9642A-1

Accredited by VCCI, Japan January 30, 2012
The Certificate Registration Number. is C-4260 and R-3804

Accredited by ESMD, April 24, 2012
The Certificate Registration Number. is ARCB0108.

Accredited by UL, July 25, 2013
The Certificate Registration Number. is 100571-492.

Accredited by TUV, December 23, 2013
The Certificate Registration Number. is SCN1134

Accredited by Intertek, October 30, 2013
The Certificate Registration Number. is 2011-RTL-L1-50.

2.3. 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 CISPR 16 – 4 “Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements” and is documented in the LCS 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.

2.4. Measurement Uncertainty

Test Item		Frequency Range	Uncertainty	Note
Radiation Uncertainty	:	30MHz~200MHz	±2.96dB	(1)
		200MHz~1000MHz	±3.10dB	(1)
Conduction Uncertainty	:	150kHz~30MHz	±1.63dB	(1)
Power disturbance	:	30MHz~300MHz	±1.60dB	(1)

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3. MEASURING DEVICES AND TEST EQUIPMENT

3.1.Conducted Disturbance

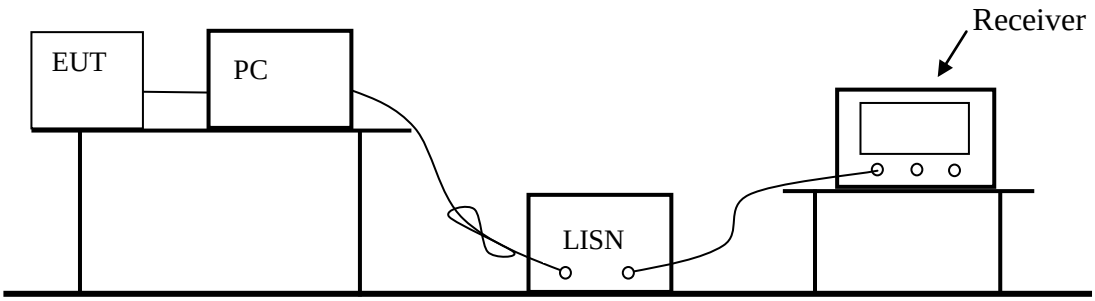
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	101142	2014/06/18	2015/06/17
2	10dB Attenuator	SCHWARZBECK	OSPAM236	9729	2014/06/18	2015/06/17
3	Artificial Mains	ROHDE & SCHWARZ	ENV216	101288	2014/06/18	2015/06/17
4	EMI Test Software	AUDIX	E3	N/A	2014/06/18	2015/06/17

3.2.Radiated Electromagnetic Disturbance

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
1	EMI Test Receiver	ROHDE & SCHWARZ	ESCI	1011423	2014/06/18	2015/06/17
2	Triple-loop Antenna	EVERFINE	LLA-2	11050003	2014/06/18	2015/06/17
3	EMI Test Receiver	ROHDE & SCHWARZ	ESPI	101840	2014/06/18	2015/06/17
4	EMI Test Software	AUDIX	E3	N/A	2014/06/18	2015/06/17

4. POWER LINE CONDUCTED EMISSION MEASUREMENT

4.1.Block Diagram of Test Setup



Ground

4.2.Test Standard

Power Line Conducted Emission Limits (Class B)

Frequency (MHz)			Limit (dBμV)	
			Quasi-peak Level	Average Level
0.15	~	0.50	66.0 ~ 56.0 *	56.0 ~ 46.0 *
0.50	~	5.00	56.0	46.0
5.00	~	30.00	60.0	50.0
NOTE1-The lower limit shall apply at the transition frequencies. NOTE2-The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz.				

4.3.EUT Configuration on Test

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

4.4.Operating Condition of EUT

4.4.1.Setup the EUT as shown on Section 3.2

4.4.2.Turn on the power of all equipments.

4.4.3.Let the EUT work in heating and receving mode and measure it.

4.5.Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC/ANSI C63.4-2009 on Conducted Emission Measurement.

The bandwidth of the test receiver is set at 9kHz.

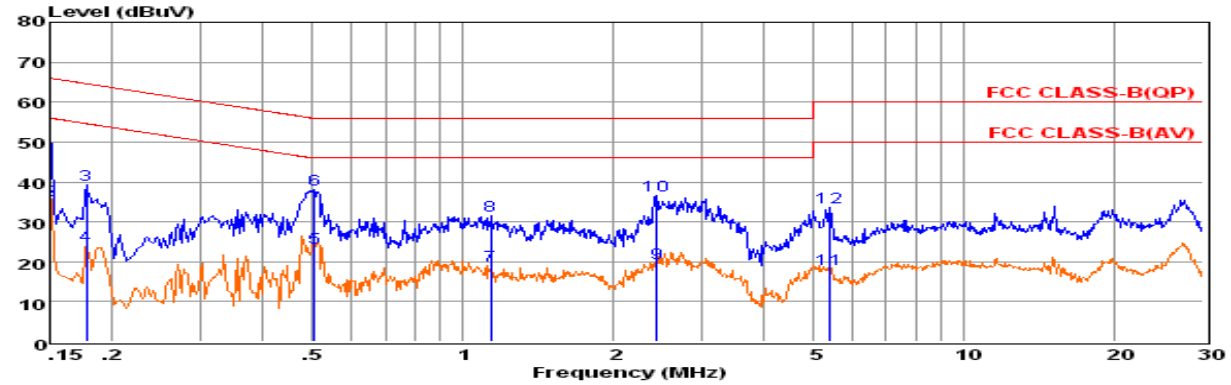
The frequency range from 150kHz to 30MHz is investigated

4.6.Test Results

PASS.

The test result please refer to the next page.

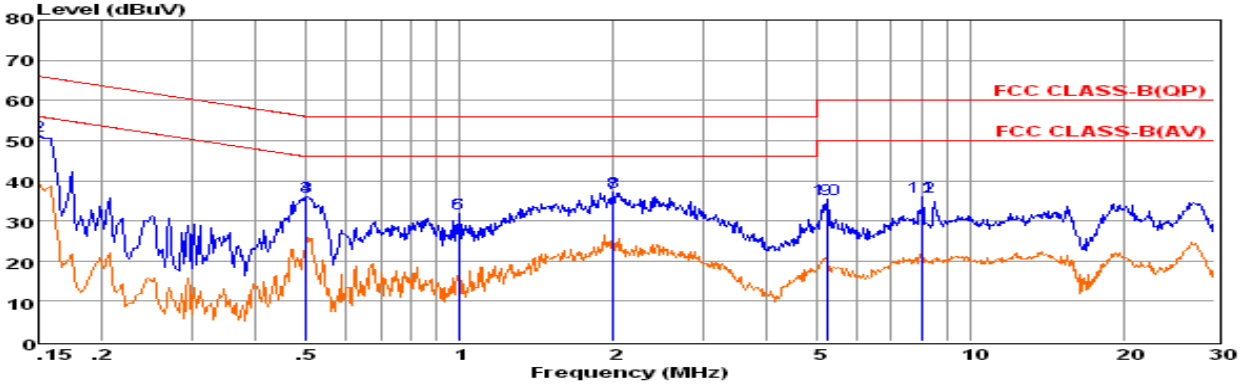
Model No.	LY-FFE08-P	Test Date	September 20, 2014
Environmental Conditions	24℃, 56% RH	Test Mode	Heating & Receving
Pol	Line	Test Engineer	Jacky



	Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.15000	32.43	9.57	0.02	10.00	52.02	66.00	-13.98	QP
2	0.15001	15.80	9.57	0.02	10.00	35.39	56.00	-20.61	Average
3	0.17772	19.55	9.61	0.02	10.00	39.18	64.59	-25.41	QP
4	0.17773	4.46	9.61	0.02	10.00	24.09	54.59	-30.50	Average
5	0.50469	3.98	9.62	0.04	10.00	23.64	46.00	-22.36	Average
6	0.50469	18.45	9.62	0.04	10.00	38.11	56.00	-17.89	QP
7	1.13524	-0.74	9.63	0.05	10.00	18.94	46.00	-27.06	Average
8	1.13523	11.86	9.63	0.05	10.00	31.54	56.00	-24.46	QP
9	2.43464	0.07	9.64	0.05	10.00	19.76	46.00	-26.24	Average
10	2.43463	16.85	9.64	0.05	10.00	36.54	56.00	-19.46	QP
11	5.41872	-1.56	9.66	0.06	10.00	18.16	50.00	-31.84	Average
12	5.41862	13.75	9.66	0.06	10.00	33.47	60.00	-26.53	QP

Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
2. The emission levels that are 20dB below the official limit are not reported.

Model No.	LY-FFE08-P	Test Date	September 20, 2014
Environmental Conditions	24℃, 56% RH	Test Mode	Heating & Receving
Pol	Neutral	Test Engineer	Jacky

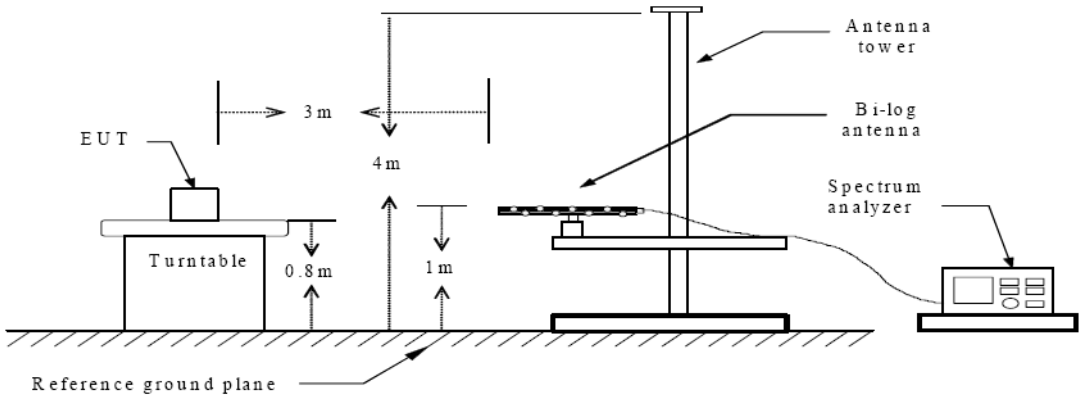


	Freq	Reading	LisnFac	CabLos	Atten_Fac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB	dB	dBuV	dBuV	dB	
1	0.15000	31.44	9.70	0.02	10.00	51.16	66.00	-14.84	QP
2	0.15001	31.48	9.70	0.02	10.00	51.20	56.00	-4.80	Average
3	0.50203	16.34	9.62	0.04	10.00	36.00	56.00	-20.00	QP
4	0.50204	16.34	9.62	0.04	10.00	36.00	46.00	-10.00	Average
5	0.99440	12.29	9.63	0.05	10.00	31.97	56.00	-24.03	QP
6	0.99450	12.13	9.63	0.05	10.00	31.81	46.00	-14.19	Average
7	2.00132	17.14	9.63	0.05	10.00	36.82	46.00	-9.18	Average
8	2.00122	17.45	9.63	0.05	10.00	37.13	56.00	-18.87	QP
9	5.22134	15.81	9.66	0.06	10.00	35.53	50.00	-14.47	Average
10	5.22133	15.73	9.66	0.06	10.00	35.45	60.00	-24.55	QP
11	8.06243	16.09	9.70	0.07	10.00	35.86	60.00	-24.14	QP
12	8.06253	16.08	9.70	0.07	10.00	35.85	50.00	-14.15	Average

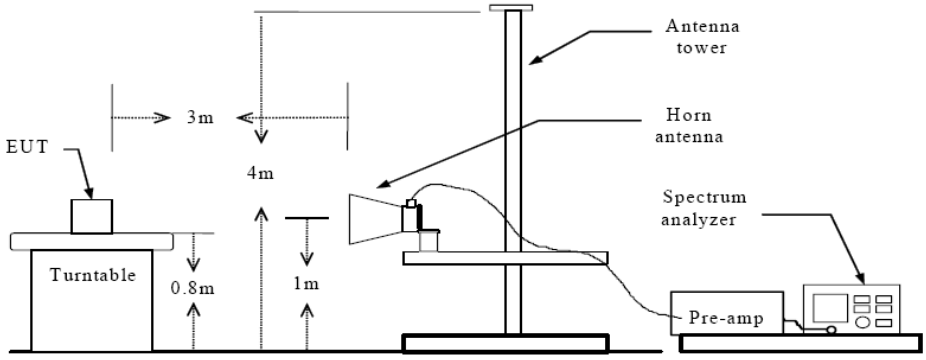
Remarks: 1. Measured = Reading + Lisn Factor +Cable Loss+Atten_Fac.
2. The emission levels that are 20dB below the official limit are not reported.

5. RADIATED EMISSION MEASUREMENT

5.1. Block Diagram of Test Setup



Below 1 GHz



Above 1 GHz

5.2. Radiated Emission Limit (Class B)

Limits for radiated disturbance Blow 1GHz

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30 ~ 88	3	100	40
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46
Above 960	3	500	54

Remark：(1) Emission level (dB)μV = 20 log Emission level μV/m
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

5.3. EUT Configuration on Measurement

The following equipment are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

5.4. Operating Condition of EUT

5.5.1.Setup the EUT as shown in Section 4.2.
5.5.2.Let the EUT work in heating & receving mode (on) and measure it.

5.5. Test Procedure

EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated by-log antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2009 on radiated emission measurement.

The bandwidth of the EMI test receiver is set at 100kHz among 30MHz to 1000MHz.

The bandwidth of the EMI test receiver is set at 1MHz among 1000MHz to 6000MHz.

The frequency range from 30MHz to 6000MHz is checked.

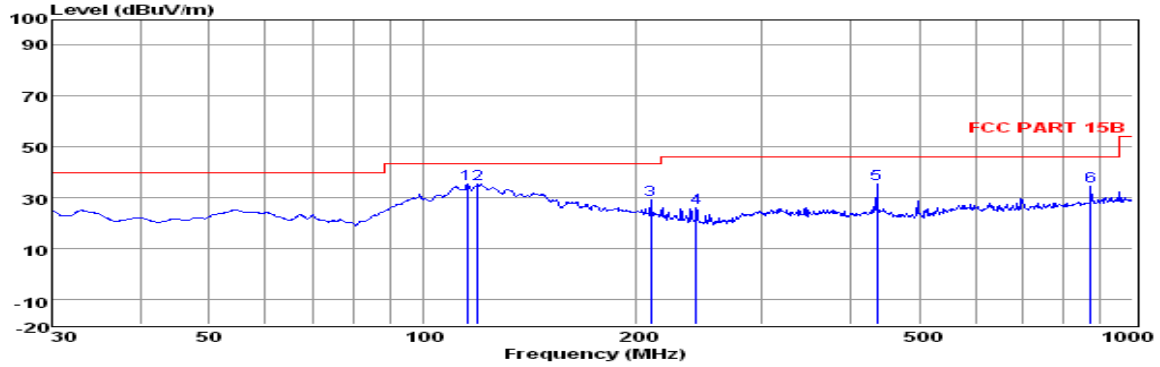
5.6. Radiated Emission Noise Measurement Result

PASS.

The scanning waveforms please refer to the next page.

Note: The result above 1GHz is too low so there is no record.

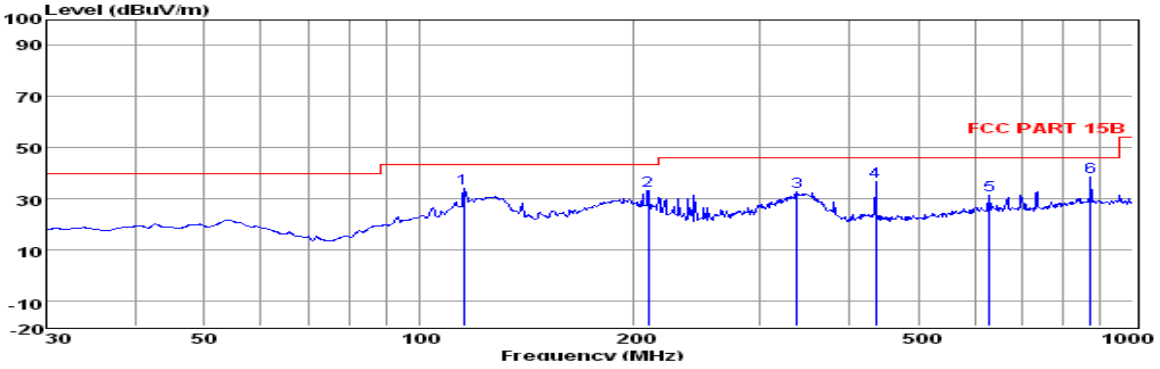
Model No.	LY-FFE08-P	Test Date	September 20, 2014
Environmental Conditions	24℃, 56% RH	Test Mode	Heating & Receving
Pol	Vertical	Detector Function	Quasi-peak
Test Engineer	Jacky	Distance	3m



	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	115.32	23.48	0.68	11.31	35.47	43.50	-8.03	QP
2	119.44	24.07	0.64	10.58	35.29	43.50	-8.21	QP
3	209.31	17.38	0.86	10.86	29.10	43.50	-14.40	QP
4	242.53	12.98	0.90	12.08	25.96	46.00	-20.04	QP
5	435.59	18.36	1.41	15.54	35.31	46.00	-10.69	QP
6	872.18	11.95	1.84	20.80	34.59	46.00	-11.41	QP

Note: 1. All readings are Quasi-peak values.
2. Measured= Reading + Antenna Factor + Cable Loss
3. The emission that ate 20db blow the offficial limit are not reported

Model No.	LY-FFE08-P	Test Date	September 20, 2014
Environmental Conditions	24℃, 56% RH	Test Mode	Heating & Receving
Pol	Horizontal	Detector Function	Quasi-peak
Test Engineer	Jacky	Distance	3m



	Freq	Reading	CabLos	Antfac	Measured	Limit	Over	Remark
	MHz	dBuV	dB	dB/m	dBuV/m	dBuV/m	dB	
1	115.32	21.82	0.68	11.31	33.81	43.50	-9.69	QP
2	209.31	21.56	0.86	10.86	33.28	43.50	-10.22	QP
3	338.40	17.64	1.16	14.06	32.86	46.00	-13.14	QP
4	435.59	19.48	1.41	15.54	36.43	46.00	-9.57	QP
5	629.48	11.33	1.60	18.56	31.49	46.00	-14.51	QP
6	872.18	15.73	1.84	20.80	38.37	46.00	-7.63	QP

Note: 1. All readings are Quasi-peak values.
2. Measured= Reading + Antenna Factor + Cable Loss
3. The emission that ate 20db blow the offficial limit are not reported

8. MANUFACTURER/ APPROVAL HOLDER DECLARATION

The following identical model(s):

LY-FFE08-S	LY-FFE08-M	LY-FFE09-P	LY-FFE09-S
LY-FFE09-M			

Belong to the tested device:

Product description : Rechargeable Heated Insoles

Model name : LY-FFE08-P

Remark: PCB board, structure and internal of these model(s) are the same, So no additional models were tested.

----------THE END OF REPORT----------