# FCC PART 15 CLASS B EMI MEASUREMENT AND TEST REPORT

For

# Striiv Inc.

2400 Broadway Ave. Suite 220, Redwood City, CA 94063, USA

FCC ID: ZXO-PBLVGM0001

August 27, 2012

This Report Concerns: Equipment Type: **Original Report** Striiv Pedometer

Test Engineer: Eric Li

Test Engineer

performing

Adam Yang the tests:

BST12081040Y-1ER-3-2 Report No.:

Receive EUT

August 13, 2012/ August 14-24, 2012 Date/Test Date:

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#### 1. GENERAL INFORMATION

#### 1.1. Report information

1.1.1. This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that BST approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that BST in any way guarantees the later performance of the product/equipment.

1.1.2. The sample/s mentioned in this report is/are supplied by Applicant, BST therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through BST, unless the applicant has authorized BST in writing to do so.

Test Facility -

The test site used to collect the radiated data is located on the address of Shenzhen Certification Technology Service Co., Ltd (FCC Registered Test Site Number: 197647) on 2F, Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, shenzhen 518126, China The Test Site is constructed and calibrated to meet the FCC requirements.

#### 1.2. Measurement Uncertainty

Available upon request.

#### 2. PRODUCT DESCRIPTION

#### 2.1. EUT Description

Applicant : Striiv Inc.

Address : 2400 Broadway Ave. Suite 220, Redwood City, CA 94063, USA

Manufacturer : Dongguan YuanFeng Technology Co., Ltd

Address NO.62, South Fumin Road, Fumin Industrial Park, Dalang Town,

Dongguan City, Guangdong, P.R. China

EUT Description : Striiv Pedometer

Trade Name : Striiv

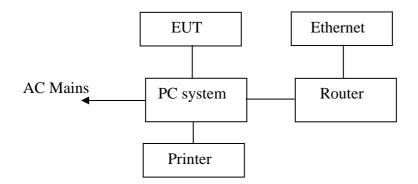
PBLVGM0001, PBLVGM0002, PBLVGM0003, PBLVGM0004,

Model Number : PBLVGM0005, PBLVGM0006, PBLVGM0007, PBLVGM0008,

PBLVGM0009, PBLVGM0010

Power Supply : DC 3.7V Li-ion Battery

#### 2.2. Block Diagram of EUT Configuration



### 2.3. Support Equipment List

Name	Model No	S/N	Manufacturer	Used ""
PC system	AM1830	N/A	N/A Acer	
Printer	HP1020	N/A	HP	
Router	PL-R860	N/A	TP-LINK	

#### 2.4. Test Conditions

Temperature: 20~25

Relative Humidity: 50~63 %

# 3. FCC ID LABEL

FCC ID: ZXO-PBLVGM0001

Label Location on EUT

EUT View/ FCC ID Label Location



## 4. TEST RESULTS SUMMARY

**Table 1 Test Results Summary** 

Test Items	Test Results
Conducted disturbance	Pass
Radiated disturbance	Pass

Statement: All testing was performed using the test procedures found in ANSI C63.4-20003.

#### **Modifications**

No modification was made.

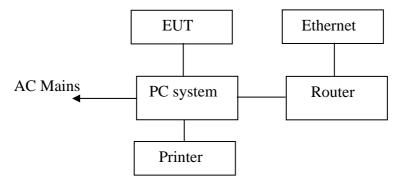
# 5. TEST EQUIPMENT USED

Equipment/Facilities Manufacturer		Model	Serial no.	Date of Cal.	Cal. Interval
3m Semi-Anechoic	Changzhou	EC3048	N/A	May 5, 2012	1 Year
Chamber	Chengyu				
Broadband antenna	SCHWARZBECK	VULB 9168	VULB916	Aug. 14, 2012	1 Year
			8-438		
Horn antenna	R&S	HF906	10027	Aug. 14, 2012	1 Year
ETS Horn Antenna	ETS	3160	SEL0076	May 8, 2012	1 Year
Active Loop Antenna	Beijing Daze	ZN30900A	SEL0097	Apr. 6, 2012	1 Year
Spectrum analyzer	Agilent	E4443A	MY461856	Apr. 6, 2012	1 Year
			49		
Test receiver	R&S	ESCI	100492	Apr. 6, 2012	1 Year
Test receiver	R&S	ESCI	101202	Apr. 6, 2012	1 Year
L.I.S.N.	SCHWARZBECK	NSLK8126	8126466	Apr. 6, 2012	1 Year
L.I.S.N.	SCHWARZBECK	NSLK8126	8126487	Apr. 6, 2012	1 Year
Cable	Resenberger	N/A	NO.1	Apr. 6, 2012	1 Year
Cable	SCHWARZBECK	N/A	NO.2	Apr. 6, 2012	1 Year
Cable	SCHWARZBECK	N/A	NO.3	Apr. 6, 2012	1 Year
Pre-amplifier	SCHWARZBECK	BBV9743	9743-019	Apr. 6, 2012	1 Year
Pre-amplifier	R&S	AFS33-1800	SEL0080	Apr. 6, 2012	1 Year
		2650-30-8P-			
		44			

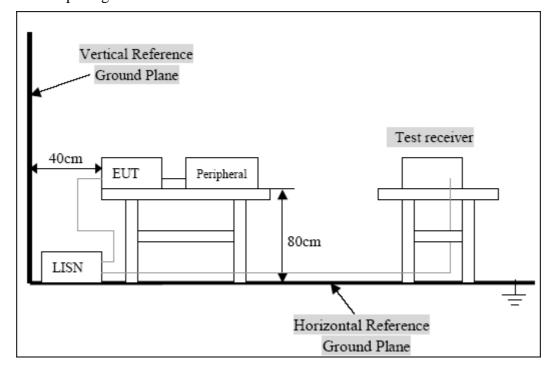
## 6. CONDUCTED EMISSION TEST

# 6.1. Block Diagram of Test Setup

6.1.1.Block Diagram of connection between the EUT and the simulators



## 6.1.2.Test Setup Diagram



#### 6.2. Test Standard

FCC Part 15 CLASS B ANSI C63.4-2003

#### **6.3. Conducted Emission Limit(Class B)**

Frequency	Limits $dB(\mu V)$			
MHz	Quasi-peak Level	Average Level		
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*		
0.50 ~ 5.00	56	46		
5.00 ~ 30.00	60	50		

Notes: 1. \*Decreasing linearly with logarithm of frequency.

#### 6.4. EUT Configuration on Test

The following equipments are installed on conducted emission test to meet FCC Part 15 requirement and operating in a manner, which tends to maximize its emission characteristics in a normal application.

#### 6.4.1.EUT Information

Model Number: PBLVGM0001

Serial Number: N/A

#### **6.5. Operating Condition of EUT**

- 6.5.1. Setup the EUT and simulators as shown in Section 6.1.
- 6.5.2. Turn on the power of all equipments.
- 6.5.3.Let the EUT work in test mode (Connect to PC) and test it.

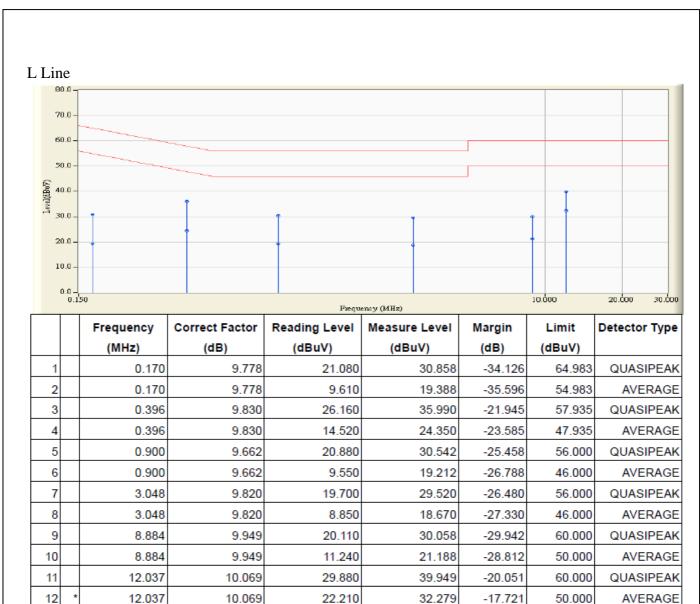
#### 6.6. Test Procedure

The EUT is put on a table of non-conducting material that is 80cm high. The vertical conducting wall of shielding is located 40cm to the rear of the EUT. The power line of the EUT is connected to the AC mains through a line impedance stabilization network (L.I.S.N.). A EMI test receiver is used to test the emissions form both sides of AC line. The bandwidth of EMI test receiver is set at 9kHz.

#### 6.7. Test Result

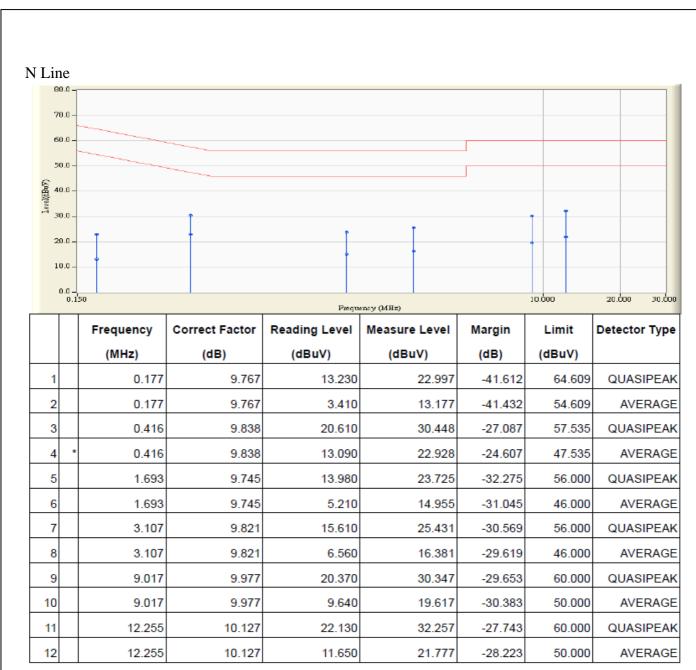
#### **Pass**

ture: 24°C
7: <u>57</u> %
ipply: DC 5V power by PC USB port
PC power: AC120V/60Hz
ineer: Eric Li
7



#### Note:

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. " \* ", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



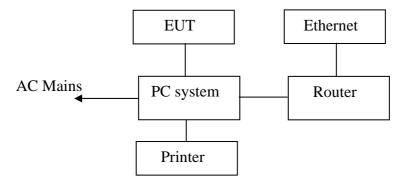
#### Note:

- 1. All Reading Levels are Quasi-Peak and average value.
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- 3. Measurement Level = Reading Level + Correct Factor.

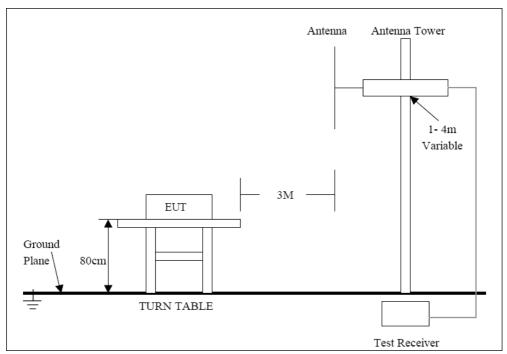
## 7. RADIATED EMISSION MEASUREMENT

# 7.1. Block Diagram of EUT Configuration

7.1.1.Block Diagram of connection between the EUT and the simulators



# 7.1.2.Semi-anechoic Chamber Test Setup Diagram



#### 7.2. Test Standard

FCC Part 15 CLASS B ANSI C63.4-2003

FREQUENCY	DISTANCE	FIELD STRENGTHS LIMITS		
(MHz)	(Meters)	$(dB\mu V/m)$		
30 ~ 88	3	40.0		
88 ~ 216	3	43.5		
216 ~ 960	3	46.0		
Above 1000	3	54.0		

Note:(1) The smaller limit shall apply at the edge between two frequency bands.

(2) Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the EUT or system.

#### 7.4. EUT Configuration on Test

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.

#### 7.5. Operating Condition of EUT

- 7.5.1. Setup the EUT as shown on Section 7.1
- 7.5.2. Turn on the power of all equipments.
- 7.5.3.Let the EUT work in test mode (Connect to PC) and measure it.

#### 7.6. Test Procedure

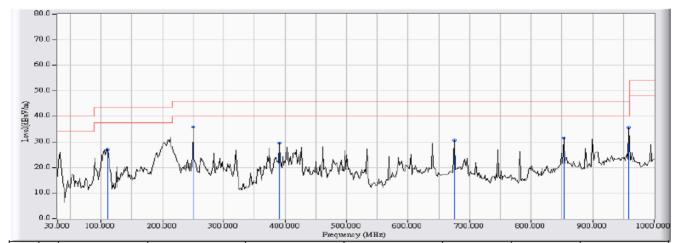
The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Calibrated Loop antenna is used as receiving antenna for frequencies below 30MHz, Calibrated Bilog antenna is used as receiving antenna for frequencies between 30 MHz and 1 GHz, Calibrated Horn antenna is used as receiving antenna for frequencies above 1000MHz. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated emission measurement.

The bandwidth of test receiver is set at 9kHz in below 30MHz. and set at 120kHz in 30-1000MHz.

The final measurement in band 9-90kHz, 110-490kHz and above 1000MHz is performed with Peak detector and Average detector. Except those frequency bands mention above, the final measurement for frequencies below 1000MHz is performed with Quasi Peak detector. The frequency range from 9kHz to 1000MHz is checked. All the test results are listed in Section 7.7.

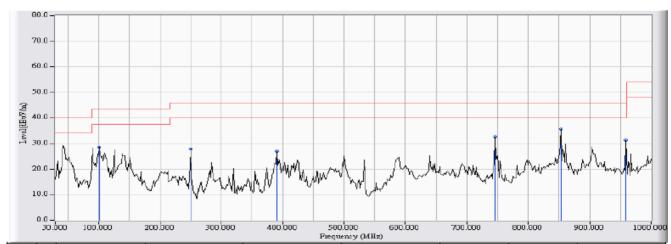
# 7.7. Test Result PASS

# Horizontal polarization



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		110.833	-15.426	42.345	26.918	-16.582	43.500	QUASIPEAK
2	*	249.867	-13.345	49.121	35.776	-10.224	46.000	QUASIPEAK
3		390.517	-9.163	38.857	29.694	-16.306	46.000	QUASIPEAK
4		675.050	-3.408	34.034	30.627	-15.373	46.000	QUASIPEAK
5		852.883	-0.749	32.283	31.534	-14.466	46.000	QUASIPEAK
6		959.583	1.179	34.368	35.547	-10.453	46.000	QUASIPEAK

# **Vertical polarization**



		Frequency	Correct Factor	Reading Level	Measure Level	Margin	Limit	Detector Type
		(MHz)	(dB)	(dBuV)	(dBuV/m)	(dB)	(dBuV/m)	
1		101.133	-11.753	40.243	28.490	-15.010	43.500	QUASIPEAK
2		249.867	-14.145	41.950	27.805	-18.195	46.000	QUASIPEAK
3		390.517	-7.860	34.959	27.099	-18.901	46.000	QUASIPEAK
4		746.183	-5.396	38.023	32.627	-13.373	46.000	QUASIPEAK
5	*	852.883	-2.700	38.346	35.645	-10.355	46.000	QUASIPEAK
6		959.583	-5.055	36.405	31.350	-14.650	46.000	QUASIPEAK