

# A Test Lab Techno Corp.

No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.)

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## Part 15 C Measurement Report





Report No. : 0812FR11

Applicant : iTMP Technology, Inc.

Product Type : SMHEART LINK

Trade Mark : SMHEART LINK<sup>™</sup>

Product Model : SL

FCC ID : WUU-SMHEART-01-01

Dates of Test : Nov. 12 ~ Dec. 12, 2008

Test Specification : Part 15 Subpart C (15.247)

PUBLIC NOTICE :DA 00-705 Filing and Measurement Guidelines for Frequency Hopping Spread Spectrum

**Systems** 

Location of Test Lab. : Chang-an Lab.

- 1. The test operations have to be performed with cautious behavior, the test results are as attached.
- 2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
- 3. The measurement report has to be written approval of A Test Lab Techno Corp. It may only be reproduced or published in full.

Country Huang

20081208

**Measurement Center Manager** 

John Cheng

**Testing Engineer** 

20081208



## **CERTIFICATION**

### We here by verify that:

The test data, data evaluation, test procedures and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4:2003. All test were conducted by *A Test Lab Techno Corp. No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.)* Also, we attest to the accuracy of each.

We further submit that the energy emitted by the sample EUT tested as described in the report is in compliance with Class B radiated and conducted emission limit of FCC Rules Part 15 Subpart C (15.247).

EUT : SMHEART LINK

Applicant : iTMP Technology, Inc.

351 Paseo Nuevo Santa Barbara, CA93101 United States

Trade Mark : SMHEART LINK™

Model No : SL

FCC ID : WUU-SMHEART-01-01

Country Huang 2008/12/08

Prepared by:

ohr Cheng 2008/12/08

A Test Lab Techno Corp.

No.140-1, Chang-an St., Bade City, Tao-Yuan County 334, Taiwan (R.O.C.) Tel: 03-2710188 / Fax: 03-2710190



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#### **GENERAL**

## 1.1 Description of Equipment under Test (EUT)

iTMP Technology, Inc. Applicant:

351 Paseo Nuevo Santa Barbara, CA93101 United States

Manufacturer Billionton System Inc.

**Manufacturer Address** No. 21, Sui-Lih Rd., Hsin-Chu, 300, Taiwan, R.O.C.

**Product Type SMHEART LINK** SMHEART LINK<sup>TM</sup> **Trade Name** 

**Model Name** SL

**FCC ID** WUU-SMHEART-01-01

5Vdc / 1 A (AC Adapter), 3.7V / 1100mAh (Battery) **Input Rating** 

See Table 1 Frequency of Channel

Type of Modulation **Direct Sequence Spread Spectrum** 

Type of Antenna Internal Type

**Antenna Gain** -2 dBi

V06-2C-G **Hardware** 

**Software** R208

During testing the EUT was operated at Tx or Rx mode for each emission measured. This was done in order to ensure that maximum emission levels were attained.

| 8  | 02.11b/g Mode |
|----|---------------|
| СН | Frequency     |
| 1  | 2412          |
| 2  | 2417          |
| 3  | 2422          |
| 4  | 2427          |
| 5  | 2432          |
| 6  | 2437          |
| 7  | 2442          |
| 8  | 2447          |
| 9  | 2452          |
| 10 | 2457          |
| 11 | 2462          |

Table 1. WLAN Frequency of Each Channel (Working Frequency)



## 1.2 Introduction

The following measurement report is submitted on behalf of **iTMP Technology, Inc.** In support of a Class B Digital Device certification in accordance with Part2 Subpart J and Part 15 Subpart A and B&C of the Commission's and Regulations.

## 1.3 Summary of Tests

|              | 47 CFR Part                             | 15 Subpart C |      |
|--------------|---|--------------|------|
| Reference    | Test                                    | Results      | Note |
| 15.107       | AC Power Conducted Emission             | PASS         |      |
| 15.247(c)    | Transmitter Radiated Emissions          | PASS         |      |
| 15.247(b)    | Max. Output Power                       | PASS         |      |
| 15.247(a)(2) | 6dB RF Bandwidth                        | PASS         |      |
| 15.247(d)    | Max. Power Density                      | PASS         |      |
| 15.247(c)    | Out of Band Conducted Spurious Emission | PASS         |      |
| 15.247(c)    | Band Edge Measurement                   | PASS         |      |
| 15.203       | Antenna Requirement                     | PASS         |      |

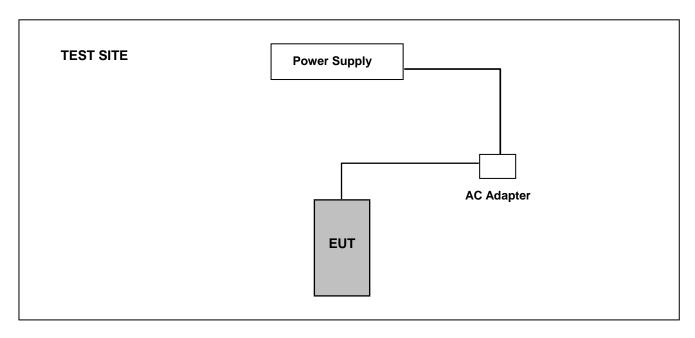


## 1.4 Description of Support Equipment

| Computer        | : DELL                      |
|-----------------|-----------------------------|
| Model No.       | : PP49L                     |
| Serial No.      | : UF230 A03                 |
| FCC ID          | : E2KWM3945ABC              |
|                 |                             |
| <u>Keyboard</u> | : DELL                      |
| Model No.       | : SK-8115                   |
| Serial No.      | : MY-0DJ325-71619-7113-1366 |
| FCC ID          | : FCC DOC                   |
|                 |                             |
| <u>Monitor</u>  | : DELL                      |
| Model No.       | : E177FPc                   |
| Serial No.      | : CN-0FJ179-64180-6BT-4LYS  |
| FCC ID          | : FCC DOC                   |
|                 |                             |
| <u>Mouse</u>    | : DELL                      |
| Model No.       | : M056U0A                   |
| Serial No.      | : F1F026E1                  |
| FCC ID          | : FCC DOC                   |
|                 |                             |
| <u>Printer</u>  | : EPSON                     |
| Model No.       | : C60                       |
| Serial No.      | : DR3K041323                |
| FCC ID          | : FCC DOC                   |



## 1.5 Configuration of System under Test



During EMI testing (LINK) the EUT (SMHEART LINK)'s Power port was connected to AC Adapter.

#### 1.6 Test Procedure

All measurements contained in this report were performed according to the techniques described in Measurement procedure ANSI C63.4-2003 "Measurement of un-Intentional Radiators."

#### 1.7 General Test Condition

The conditions under which the EUT operates were varied to determine their effect on the equipment's emission characteristics. The final configuration of the test system and the mode of operation used during these tests were chosen as that which produced the highest emission levels. However, only those conditions which the EUT was considered likely to encounter in normal use were investigated. The system's radiated and conducted emissions were investigated while the computer alternately transferred data to the EUT as well as to the monitor and printer. Using a test program which sent a continuous data and transferred data to and from the EUT was proven to worst case emissions. The system's physical layout and cabling was randomly arranged to ensure that maximum emission levels were attained.



## 2. Conducted Emissions Requirements

### 2.1 General & Setup:

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 2.6.

### 2.2 Test Equipment List:

| Describe          | Manufacturer    | Model     | Serial Number | Calib         | ration        |
|-------------------|-----------------|-----------|---------------|---------------|---------------|
| Describe          | Manufacture     | Wodel     | Serial Number | Cal. Date     | Due Date      |
| Spectrum Analyzer | Advantest       | R3132     | 160300103     | Mar. 06, 2008 | Mar. 06, 2009 |
| Test Receiver     | R&S             | ESCI      | 100367        | Jun. 05, 2008 | Jun. 05, 2009 |
| LISN              | EMCO            | 3816/2 SH | 00060110      | Jun. 04, 2008 | Jun. 04, 2009 |
| LISN              | EMCO            | 3816/2 SH | 00060111      | Jun. 30, 2008 | Jun. 13, 2009 |
| Transient Limiter | ELECTRO-METRICS | EM-7600   | 777           | Jun. 26, 2008 | Jun. 26, 2009 |



## 2.3 Test Configuration:



Figure 1. Front View of the Test Configuration



Figure 2. Rear View of the Test Configuration



#### 2.4 Test condition:

EUT tested in accordance with the specifications given by the Manufacturer, and exercised in the most unfavorable manner.

#### 2.5 Conducted Emissions Limits:

| Eroguanov rango (MUz) | Limits (dBuV) |          |  |  |  |  |
|-----------------------|---------------|----------|--|--|--|--|
| Frequency range (MHz) | Quasi-peak    | Average  |  |  |  |  |
| 0.15 to 0.50          | 66 to 56      | 56 to 46 |  |  |  |  |
| 0.50 to 5.0           | 56            | 46       |  |  |  |  |
| 5.0 to 30             | 60            | 50       |  |  |  |  |

### 2.6 Measurement Data of Conducted Emissions:

#### 2.6.1 Conducted Emissions (Subpart C)

The following table show a summary of the highest emissions of power line conducted emissions to the HOT and NATURAL conductor of the EUT power.

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK
Test Mode : Stand By Mode

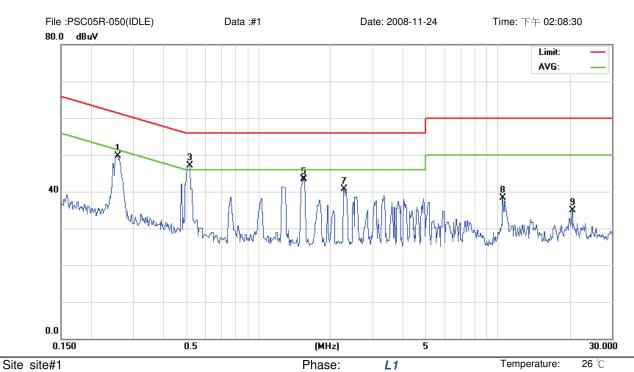
Test Date : 11/24/2008

Please refer to next pager of detail testing data.

Notes:

- 1. L1: One end & Ground L2: The other end & Ground
- 2. Height of table on which the EUT was placed: 0.8 m.
- 3. The Quasi-Peak Value have already met the Average Value Limit showed on above limits.
- 4. The above test results are obtained under the normal condition.





Limit: CISPR22 Class B Conduction(QP)

EUT:

M/N: 08-0270-E Mode: IDLE

Note:

| No. Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|---------|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|         | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1       | 0.2578  | 39.92            | 9.75              | 49.67            | 61.50 | -11.83 | peak     |         |
| 2       | 0.2578  | 25.85            | 9.75              | 35.60            | 51.50 | -15.90 | AVG      |         |
| 3 *     | 0.5180  | 37.40            | 9.79              | 47.19            | 56.00 | -8.81  | peak     |         |
| 4       | 0.5180  | 23.31            | 9.79              | 33.10            | 46.00 | -12.90 | AVG      |         |
| 5       | 1.5439  | 33.59            | 9.81              | 43.40            | 56.00 | -12.60 | peak     |         |
| 6       | 1.5439  | 21.29            | 9.81              | 31.10            | 46.00 | -14.90 | AVG      |         |
| 7       | 2.2729  | 30.74            | 9.87              | 40.61            | 56.00 | -15.39 | peak     |         |
| 8       | 10.5000 | 28.29            | 10.04             | 38.33            | 60.00 | -21.67 | peak     |         |
| 9       | 20.4000 | 24.44            | 10.38             | 34.82            | 60.00 | -25.18 | peak     |         |

Power:

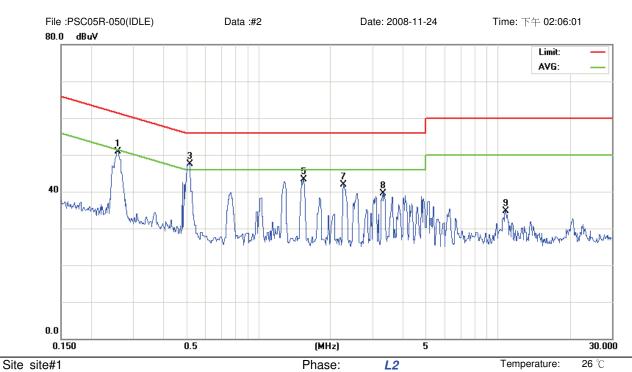
AC 110V/60Hz

Humidity:

55 %

<sup>\*:</sup>Maximum data x:Over limit !:over margin





Limit: CISPR22 Class B Conduction(QP)

EUT:

M/N: 08-0270-E Mode: IDLE

Note:

| No. Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|---------|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|         | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1       | 0.2584  | 41.24            | 9.75              | 50.99            | 61.48 | -10.49 | peak     |         |
| 2       | 0.2584  | 28.15            | 9.75              | 37.90            | 51.48 | -13.58 | AVG      |         |
| 3 *     | 0.5180  | 37.69            | 9.79              | 47.48            | 56.00 | -8.52  | peak     |         |
| 4       | 0.5180  | 26.81            | 9.79              | 36.60            | 46.00 | -9.40  | AVG      |         |
| 5       | 1.5439  | 33.49            | 9.81              | 43.30            | 56.00 | -12.70 | peak     |         |
| 6       | 1.5439  | 23.99            | 9.81              | 33.80            | 46.00 | -12.20 | AVG      |         |
| 7       | 2.2639  | 32.08            | 9.87              | 41.95            | 56.00 | -14.05 | peak     |         |
| 8       | 3.3079  | 29.62            | 9.93              | 39.55            | 56.00 | -16.45 | peak     |         |
| 9       | 10.7500 | 24.66            | 10.07             | 34.73            | 60.00 | -25.27 | peak     |         |

Power:

AC 110V/60Hz

Humidity:

55 %

\*:Maximum data x:Over limit !:over margin



### 2.6.2 Conducted Emissions (Subpart C)

The following table show a summary of the highest emissions of power line conducted emissions to the HOT and NATURAL conductor of the EUT power.

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK

Test Mode : 802.11b CH Low & Middle & High

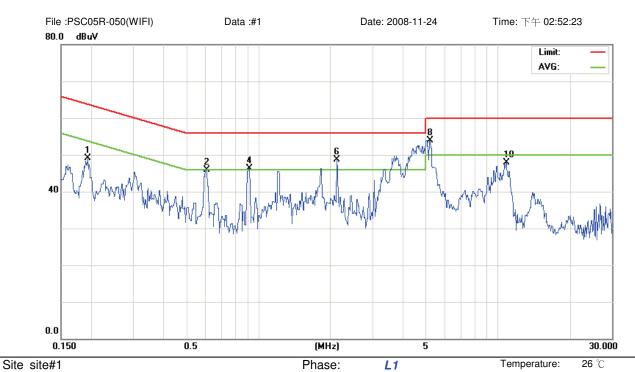
Test Date : 11/24 ~ 11/25/2008

Please refer to next pager of detail testing data.

#### Notes:

- 1. L1: One end & Ground L2: The other end & Ground
- 2. Height of table on which the EUT was placed: 0.8 m.
- 3. The Quasi-Peak Value have already met the Average Value Limit showed on above limits.
- 4. The above test results are obtained under the normal condition.





AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

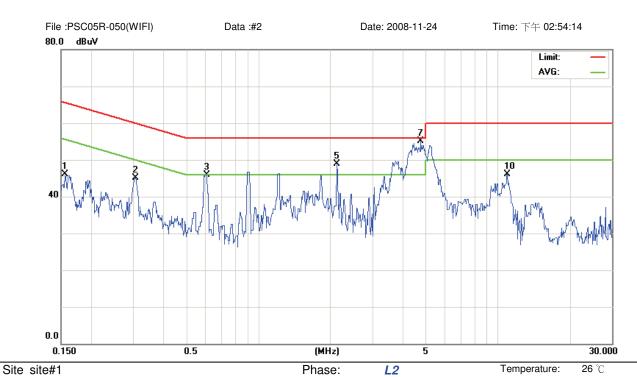
EUT:

M/N: 08-0270-E Mode: WIFI 11b Note: CH01

| No. I | Mk. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-------|-----------|------------------|-------------------|------------------|-------|--------|----------|---------|
|       | MHz       | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1     | 0.1934    | 39.30            | 9.74              | 49.04            | 63.88 | -14.84 | peak     |         |
| 2     | 0.6080    | 36.17            | 9.79              | 45.96            | 56.00 | -10.04 | peak     |         |
| 3     | 0.6080    | 27.11            | 9.79              | 36.90            | 46.00 | -9.10  | AVG      |         |
| 4     | 0.9140    | 36.48            | 9.81              | 46.29            | 56.00 | -9.71  | peak     |         |
| 5     | 0.9140    | 25.29            | 9.81              | 35.10            | 46.00 | -10.90 | AVG      |         |
| 6     | 2.1290    | 38.74            | 9.88              | 48.62            | 56.00 | -7.38  | peak     |         |
| 7     | 2.1290    | 23.12            | 9.88              | 33.00            | 46.00 | -13.00 | AVG      |         |
| 8     | * 5.2000  | 43.85            | 10.07             | 53.92            | 60.00 | -6.08  | peak     |         |
| 9     | 5.2000    | 24.03            | 10.07             | 34.10            | 50.00 | -15.90 | AVG      |         |
| 10    | 10.8000   | 37.85            | 10.07             | 47.92            | 60.00 | -12.08 | peak     |         |
| 11    | 10.8000   | 17.03            | 10.07             | 27.10            | 50.00 | -22.90 | AVG      |         |
|       |           |                  |                   |                  |       |        |          |         |

<sup>\*:</sup>Maximum data x:Over limit !:over margin





AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

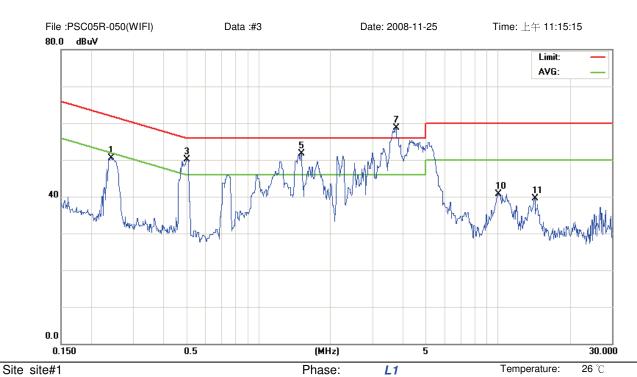
EUT:

M/N: 08-0270-E Mode: WIFI 11b Note: CH01

| No. I | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-------|-----|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|       |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1     |     | 0.1556  | 36.32            | 9.73              | 46.05            | 65.69 | -19.64 | peak     |         |
| 2     |     | 0.3060  | 35.42            | 9.77              | 45.19            | 60.08 | -14.89 | peak     |         |
| 3     |     | 0.6080  | 36.14            | 9.79              | 45.93            | 56.00 | -10.07 | peak     |         |
| 4     |     | 0.6080  | 23.81            | 9.79              | 33.60            | 46.00 | -12.40 | AVG      |         |
| 5     |     | 2.1289  | 39.05            | 9.88              | 48.93            | 56.00 | -7.07  | peak     |         |
| 6     |     | 2.1289  | 21.92            | 9.88              | 31.80            | 46.00 | -14.20 | AVG      |         |
| 7     | *   | 4.7569  | 45.16            | 10.01             | 55.17            | 56.00 | -0.83  | peak     |         |
| 8     |     | 4.7569  | 37.29            | 10.01             | 47.30            | 56.00 | -8.70  | QP       |         |
| 9     |     | 4.7569  | 21.79            | 10.01             | 31.80            | 46.00 | -14.20 | AVG      |         |
| 10    | 1   | 10.9500 | 35.95            | 10.10             | 46.05            | 60.00 | -13.95 | peak     |         |

\*:Maximum data x:Over limit !:over margin





AC 110V/60Hz

Humidity:

Limit: CISPR22 Class B Conduction(QP)

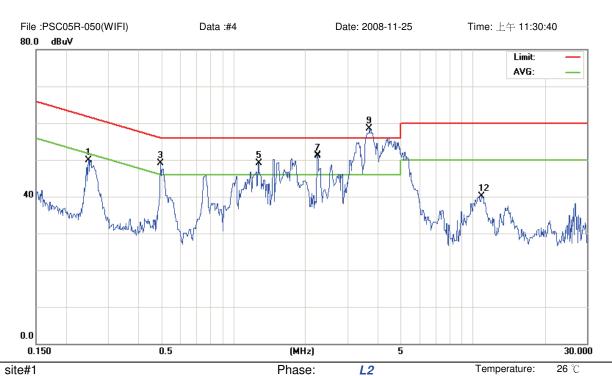
EUT:

M/N: 08-0270-E Mode: WIFI 11b Note: CH06

| No. | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.2417  | 40.76            | 9.75              | 50.51            | 62.03 | -11.52 | peak     |         |
| 2   |     | 0.2417  | 31.35            | 9.75              | 41.10            | 52.03 | -10.93 | AVG      |         |
| 3   |     | 0.5000  | 40.29            | 9.78              | 50.07            | 56.00 | -5.93  | peak     |         |
| 4   |     | 0.5000  | 32.02            | 9.78              | 41.80            | 46.00 | -4.20  | AVG      |         |
| 5   |     | 1.5170  | 41.93            | 9.81              | 51.74            | 56.00 | -4.26  | peak     |         |
| 6   |     | 1.5170  | 27.49            | 9.81              | 37.30            | 46.00 | -8.70  | AVG      |         |
| 7   | *   | 3.7400  | 48.84            | 9.95              | 58.79            | 56.00 | 2.79   | peak     |         |
| 8   |     | 3.7400  | 43.15            | 9.95              | 53.10            | 56.00 | -2.90  | QP       |         |
| 9   |     | 3.7400  | 30.85            | 9.95              | 40.80            | 46.00 | -5.20  | AVG      |         |
| 10  |     | 10.0500 | 30.67            | 10.08             | 40.75            | 60.00 | -19.25 | peak     |         |
| 11  |     | 14.2500 | 29.33            | 10.20             | 39.53            | 60.00 | -20.47 | peak     |         |

<sup>\*:</sup>Maximum data x:Over limit !:over margin





AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

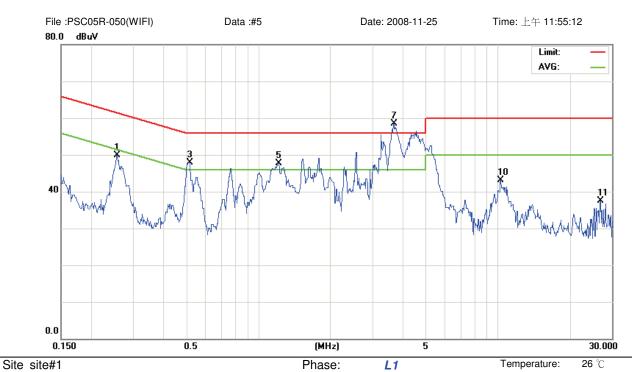
EUT:

M/N: 08-0270-E Mode: WIFI 11b Note: CH06

Reading Correct Measure-Limit Over No. Mk. Freq. Level Factor ment MHz dBuV dB dBuV dBuV dB Detector Comment 1 0.2480 40.18 9.75 49.93 61.82 -11.89 peak 51.82 -23.02 2 0.2480 19.05 9.75 28.80 **AVG** 3 0.4951 39.29 9.78 49.07 56.08 -7.01 peak 4 0.4951 21.12 9.78 30.90 46.08 -15.18 **AVG** 5 1.2740 39.27 9.81 49.08 56.00 -6.92 peak 1.2740 46.00 -15.20 6 20.99 9.81 30.80 **AVG** 7 2.2370 41.32 9.88 51.20 56.00 -4.80 peak 8 2.2370 18.12 46.00 -18.00 AVG 9.88 28.00 3.6950 9 48.64 9.94 58.58 56.00 2.58 peak QP 10 3.6950 42.96 9.94 52.90 56.00 -3.10 11 3.6950 24.46 9.94 34.40 46.00 -11.60 **AVG** 12 10.8500 29.96 10.08 40.04 60.00 -19.96 peak

\*:Maximum data x:Over limit !:over margin





AC 110V/60Hz

Humidity:

Limit: CISPR22 Class B Conduction(QP)

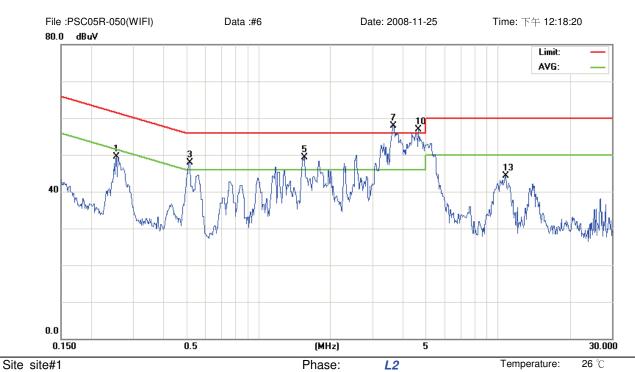
EUT:

M/N: 08-0270-E Mode: WIFI 11b Note: CH11

| No. | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.2564  | 40.08            | 9.75              | 49.83            | 61.54 | -11.71 | peak     |         |
| 2   |     | 0.2564  | 28.15            | 9.75              | 37.90            | 51.54 | -13.64 | AVG      |         |
| 3   |     | 0.5180  | 38.05            | 9.79              | 47.84            | 56.00 | -8.16  | peak     |         |
| 4   |     | 0.5180  | 28.51            | 9.79              | 38.30            | 46.00 | -7.70  | AVG      |         |
| 5   |     | 1.2109  | 37.84            | 9.81              | 47.65            | 56.00 | -8.35  | peak     |         |
| 6   |     | 1.2109  | 26.79            | 9.81              | 36.60            | 46.00 | -9.40  | AVG      |         |
| 7   | *   | 3.6680  | 48.58            | 9.93              | 58.51            | 56.00 | 2.51   | peak     |         |
| 8   |     | 3.6680  | 42.07            | 9.93              | 52.00            | 56.00 | -4.00  | QP       |         |
| 9   |     | 3.6680  | 30.27            | 9.93              | 40.20            | 46.00 | -5.80  | AVG      |         |
| 10  |     | 10.2500 | 33.14            | 10.06             | 43.20            | 60.00 | -16.80 | peak     |         |
| 11  |     | 26.7000 | 27.28            | 10.20             | 37.48            | 60.00 | -22.52 | peak     |         |

\*:Maximum data x:Over limit !:over margin





AC 110V/60Hz

Humidity:

Limit: CISPR22 Class B Conduction(QP)

EUT:

M/N: 08-0270-E Mode: WIFI 11b Note: CH11

| No. | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.2550  | 39.73            | 9.75              | 49.48            | 61.59 | -12.11 | peak     |         |
| 2   |     | 0.2550  | 18.25            | 9.75              | 28.00            | 51.59 | -23.59 | AVG      |         |
| 3   |     | 0.5180  | 38.19            | 9.79              | 47.98            | 56.00 | -8.02  | peak     |         |
| 4   |     | 0.5180  | 19.61            | 9.79              | 29.40            | 46.00 | -16.60 | AVG      |         |
| 5   |     | 1.5530  | 39.45            | 9.81              | 49.26            | 56.00 | -6.74  | peak     |         |
| 6   |     | 1.5530  | 21.79            | 9.81              | 31.60            | 46.00 | -14.40 | AVG      |         |
| 7   | *   | 3.6500  | 47.95            | 9.93              | 57.88            | 56.00 | 1.88   | peak     |         |
| 8   |     | 3.6500  | 44.57            | 9.93              | 54.50            | 56.00 | -1.50  | QP       |         |
| 9   |     | 3.6500  | 23.87            | 9.93              | 33.80            | 46.00 | -12.20 | AVG      |         |
| 10  | Χ   | 4.6490  | 46.97            | 10.01             | 56.98            | 56.00 | 0.98   | peak     |         |
| 11  |     | 4.6490  | 39.49            | 10.01             | 49.50            | 56.00 | -6.50  | QP       |         |
| 12  |     | 4.6490  | 23.49            | 10.01             | 33.50            | 46.00 | -12.50 | AVG      |         |
| 13  |     | 10.7500 | 34.30            | 10.07             | 44.37            | 60.00 | -15.63 | peak     |         |

<sup>\*:</sup>Maximum data x:Over limit !:over margin •Reference Only



#### 2.6.3 Conducted Emissions (Subpart C)

The following table show a summary of the highest emissions of power line conducted emissions to the HOT and NATURAL conductor of the EUT power.

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK

Test Mode : 802.11g CH Low & Middle & High

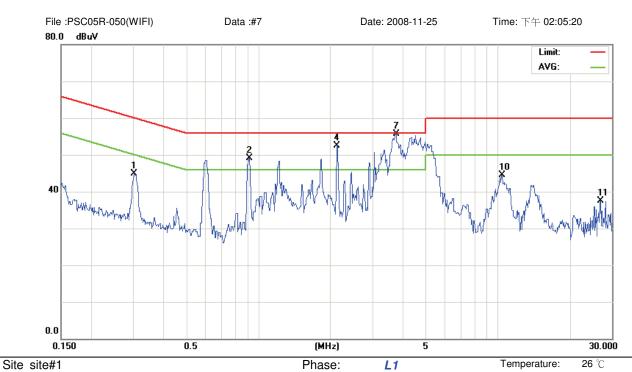
Test Date : 11/25/2008

Please refer to next pager of detail testing data.

#### Notes:

- 1. L1: One end & Ground L2: The other end & Ground
- 2. Height of table on which the EUT was placed: 0.8 m.
- 3. The Quasi-Peak Value have already met the Average Value Limit showed on above limits.
- 4. The above test results are obtained under the normal condition.





AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

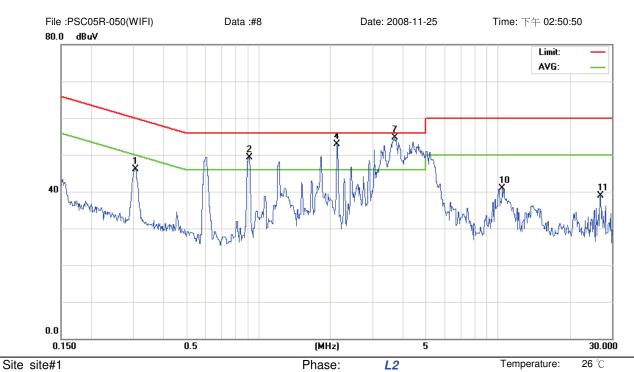
EUT:

M/N: 08-0270-E Mode: WIFI 11g Note: CH01

| No. | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.3033  | 35.17            | 9.77              | 44.94            | 60.15 | -15.21 | peak     |         |
| 2   |     | 0.9140  | 39.27            | 9.81              | 49.08            | 56.00 | -6.92  | peak     |         |
| 3   |     | 0.9140  | 32.79            | 9.81              | 42.60            | 46.00 | -3.40  | AVG      |         |
| 4   |     | 2.1290  | 42.61            | 9.88              | 52.49            | 56.00 | -3.51  | peak     |         |
| 5   |     | 2.1290  | 38.72            | 9.88              | 48.60            | 56.00 | -7.40  | QP       |         |
| 6   |     | 2.1290  | 30.72            | 9.88              | 40.60            | 46.00 | -5.40  | AVG      |         |
| 7   | *   | 3.7400  | 45.77            | 9.95              | 55.72            | 56.00 | -0.28  | peak     |         |
| 8   |     | 3.7400  | 43.45            | 9.95              | 53.40            | 56.00 | -2.60  | QP       |         |
| 9   |     | 3.7400  | 29.95            | 9.95              | 39.90            | 46.00 | -6.10  | AVG      |         |
| 10  |     | 10.3500 | 34.50            | 10.06             | 44.56            | 60.00 | -15.44 | peak     |         |
| 11  |     | 26.7000 | 27.40            | 10.20             | 37.60            | 60.00 | -22.40 | peak     |         |

\*:Maximum data x:Over limit !:over margin





AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

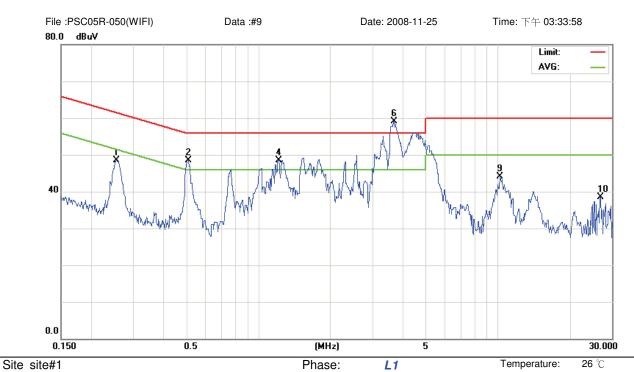
EUT:

M/N: 08-0270-E Mode: WIFI 11g Note: CH01

| No. | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.3061  | 36.42            | 9.77              | 46.19            | 60.07 | -13.88 | peak     |         |
| 2   |     | 0.9140  | 39.58            | 9.81              | 49.39            | 56.00 | -6.61  | peak     |         |
| 3   |     | 0.9140  | 25.29            | 9.81              | 35.10            | 46.00 | -10.90 | AVG      |         |
| 4   |     | 2.1290  | 42.98            | 9.88              | 52.86            | 56.00 | -3.14  | peak     |         |
| 5   |     | 2.1290  | 30.22            | 9.88              | 40.10            | 56.00 | -15.90 | QP       |         |
| 6   |     | 2.1290  | 20.12            | 9.88              | 30.00            | 46.00 | -16.00 | AVG      |         |
| 7   | *   | 3.7130  | 44.76            | 9.94              | 54.70            | 56.00 | -1.30  | peak     |         |
| 8   |     | 3.7130  | 44.06            | 9.94              | 54.00            | 56.00 | -2.00  | QP       |         |
| 9   |     | 3.7130  | 25.66            | 9.94              | 35.60            | 46.00 | -10.40 | AVG      |         |
| 10  |     | 10.4500 | 30.84            | 10.05             | 40.89            | 60.00 | -19.11 | peak     |         |
| 11  |     | 26.7000 | 28.64            | 10.20             | 38.84            | 60.00 | -21.16 | peak     |         |
|     |     |         |                  |                   |                  |       |        |          |         |

<sup>\*:</sup>Maximum data x:Over limit !:over margin





AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

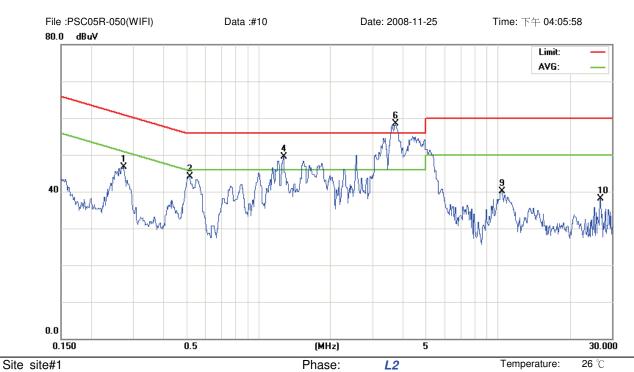
EUT:

M/N: 08-0270-E Mode: WIFI 11g Note: CH06

| No. | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.2550  | 38.81            | 9.75              | 48.56            | 61.59 | -13.03 | peak     |         |
| 2   |     | 0.5090  | 38.70            | 9.79              | 48.49            | 56.00 | -7.51  | peak     |         |
| 3   |     | 0.5090  | 29.71            | 9.79              | 39.50            | 46.00 | -6.50  | AVG      |         |
| 4   |     | 1.2109  | 38.64            | 9.81              | 48.45            | 56.00 | -7.55  | peak     |         |
| 5   |     | 1.2109  | 26.29            | 9.81              | 36.10            | 46.00 | -9.90  | AVG      |         |
| 6   | *   | 3.6679  | 49.17            | 9.93              | 59.10            | 56.00 | 3.10   | peak     |         |
| 7   |     | 3.6679  | 42.37            | 9.93              | 52.30            | 56.00 | -3.70  | QP       |         |
| 8   |     | 3.6679  | 30.27            | 9.93              | 40.20            | 46.00 | -5.80  | AVG      |         |
| 9   | 1   | 10.2000 | 34.05            | 10.07             | 44.12            | 60.00 | -15.88 | peak     |         |
| 10  | 2   | 26.7000 | 28.36            | 10.20             | 38.56            | 60.00 | -21.44 | peak     |         |

\*:Maximum data x:Over limit !:over margin





AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

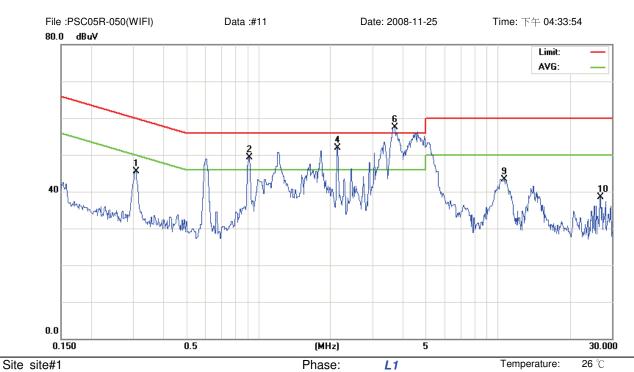
EUT:

M/N: 08-0270-E Mode: WIFI 11g Note: CH06

| No. | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.2732  | 36.87            | 9.76              | 46.63            | 61.02 | -14.39 | peak     |         |
| 2   |     | 0.5180  | 34.34            | 9.79              | 44.13            | 56.00 | -11.87 | peak     |         |
| 3   |     | 0.5180  | 19.31            | 9.79              | 29.10            | 46.00 | -16.90 | AVG      |         |
| 4   |     | 1.2740  | 39.78            | 9.81              | 49.59            | 56.00 | -6.41  | peak     |         |
| 5   |     | 1.2740  | 20.69            | 9.81              | 30.50            | 46.00 | -15.50 | AVG      |         |
| 6   | *   | 3.7310  | 48.59            | 9.95              | 58.54            | 56.00 | 2.54   | peak     |         |
| 7   |     | 3.7310  | 44.35            | 9.95              | 54.30            | 56.00 | -1.70  | QP       |         |
| 8   |     | 3.7310  | 24.95            | 9.95              | 34.90            | 46.00 | -11.10 | AVG      |         |
| 9   |     | 10.3500 | 30.04            | 10.06             | 40.10            | 60.00 | -19.90 | peak     |         |
| 10  |     | 26.7000 | 27.94            | 10.20             | 38.14            | 60.00 | -21.86 | peak     |         |

\*:Maximum data x:Over limit !:over margin





AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

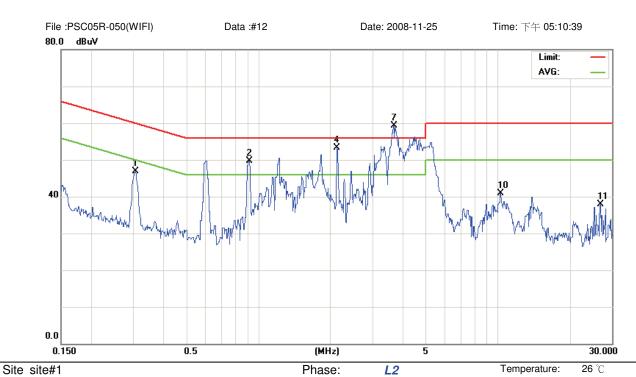
EUT:

M/N: 08-0270-E Mode: WIFI 11g Note: CH11

| No. | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.3075  | 35.73            | 9.77              | 45.50            | 60.04 | -14.54 | peak     |         |
| 2   |     | 0.9140  | 39.56            | 9.81              | 49.37            | 56.00 | -6.63  | peak     |         |
| 3   |     | 0.9140  | 30.09            | 9.81              | 39.90            | 46.00 | -6.10  | AVG      |         |
| 4   |     | 2.1380  | 41.96            | 9.88              | 51.84            | 56.00 | -4.16  | peak     |         |
| 5   |     | 2.1380  | 29.42            | 9.88              | 39.30            | 46.00 | -6.70  | AVG      |         |
| 6   | *   | 3.7040  | 47.62            | 9.94              | 57.56            | 56.00 | 1.56   | peak     |         |
| 7   |     | 3.7040  | 44.56            | 9.94              | 54.50            | 56.00 | -1.50  | QP       |         |
| 8   |     | 3.7040  | 29.66            | 9.94              | 39.60            | 46.00 | -6.40  | AVG      |         |
| 9   |     | 10.6500 | 33.34            | 10.05             | 43.39            | 60.00 | -16.61 | peak     |         |
| 10  |     | 26.7000 | 28.26            | 10.20             | 38.46            | 60.00 | -21.54 | peak     |         |

\*:Maximum data x:Over limit !:over margin





AC 110V/60Hz

Humidity:

55 %

Limit: CISPR22 Class B Conduction(QP)

EUT:

M/N: 08-0270-E Mode: WIFI 11g Note: CH11

| No   | ML  | Eroa    | Reading | Correct | Measure- | Limit  | Over   |          |         |
|------|-----|---------|---------|---------|----------|--------|--------|----------|---------|
| INO. | Mk. | Freq.   | Level   | Factor  | ment     | LIIIII | Ovei   |          |         |
|      |     | MHz     | dBuV    | dB      | dBuV     | dBuV   | dB     | Detector | Comment |
| 1    |     | 0.3061  | 37.05   | 9.77    | 46.82    | 60.07  | -13.25 | peak     |         |
| 2    |     | 0.9140  | 39.89   | 9.81    | 49.70    | 56.00  | -6.30  | peak     |         |
| 3    |     | 0.9140  | 25.49   | 9.81    | 35.30    | 46.00  | -10.70 | AVG      |         |
| 4    |     | 2.1290  | 43.46   | 9.88    | 53.34    | 56.00  | -2.66  | peak     |         |
| 5    |     | 2.1290  | 39.22   | 9.88    | 49.10    | 56.00  | -6.90  | QP       |         |
| 6    |     | 2.1290  | 23.62   | 9.88    | 33.50    | 46.00  | -12.50 | AVG      |         |
| 7    | *   | 3.6680  | 49.46   | 9.93    | 59.39    | 56.00  | 3.39   | peak     |         |
| 8    |     | 3.6680  | 44.47   | 9.93    | 54.40    | 56.00  | -1.60  | QP       |         |
| 9    |     | 3.6680  | 23.17   | 9.93    | 33.10    | 46.00  | -12.90 | AVG      |         |
| 10   |     | 10.2500 | 30.81   | 10.06   | 40.87    | 60.00  | -19.13 | peak     |         |
| 11   |     | 26.7000 | 27.61   | 10.20   | 37.81    | 60.00  | -22.19 | peak     |         |
|      |     |         |         |         |          |        |        |          |         |

<sup>\*:</sup>Maximum data x:Over limit !:over margin



## 3. Radiated Emissions Requirements

#### 3.1 Final radiation measurements were made on a three-meter:

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 30 MHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 120 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on tree orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna (mode VULB9163) at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna (model BBHA9120D&9170) was used in frequencies 1 - 26.5 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).



For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post - detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro colts per meter (dBuV/m).

The actual field is intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

(1) Amplitude (dBuV/m) = FI (dBuV) +AF (dBuV) +CL (dBuV)-Gain (dB)

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency:

Transmitter Output < +30dBm

(b) For spurious frequency:

Spurious emission limits = fundamental emission limit /10



## 3.2 Test Equipment List:

| Describe          | Manufacturer                   | Model     | Serial Number | Calib         | ration        |
|-------------------|--------------------------------|-----------|---------------|---------------|---------------|
| Describe          | Manufacturei                   | Woder     | Serial Number | Cal. Date     | Due Date      |
| Spectrum Analyzer | Agilent                        | E4408B    | MY45107753    | Jun. 05, 2008 | Jun. 05, 2009 |
| Pre Amplifier     | Agilent                        | 8449B     | 3008A02237    | Jun. 03, 2008 | Jun. 03, 2009 |
| Pre Amplifier     | Agilent                        | 8447D     | 2944A10961    | Jun. 10, 2008 | Jun. 10, 2009 |
| Test Receiver     | R&S                            | ESCI      | 100367        | Jun. 05, 2008 | Jun. 05, 2009 |
| Biconilog Antenna | SCHWARZBECK<br>MESS-ELEKTRONIK | VULB9163  | 9163-270      | Jun. 26, 2008 | Jun. 26, 2009 |
| Horn Antenna      | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA9120D | 9120D-550     | Jun. 26, 2008 | Jun. 26, 2009 |
| Horn Antenna      | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA9170  | 9170-320      | Jun. 09, 2008 | Jun. 09, 2009 |
| Horn Antenna      | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA9120E | 0899          | Jun. 26, 2008 | Jun. 26, 2009 |



## 3.3 Test Configuration:



Figure 3. Front View of the Test Configuration



Figure 4. Rear View of the Test Configuration





Figure 5. Front View of the Test Configuration



Figure 6. Rear View of the Test Configuration



## 3.4 Test condition:

EUT tested in accordance with the specifications given by the manufacturer, and exercised in the most unfavorable manner.

## 3.5 Radiated Emissions Limits:

| Frequency range (MHz) | Peak(dBuV) |
|-----------------------|------------|
| 30 to 88              | 40         |
| 88 to 216             | 43.5       |
| 216 to 960            | 46         |
| Above 960             | 54         |



#### 3.6 Measurement Data of Radiated Emissions:

#### 3.6.1 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK

Test Mode : 802.11b CH1 2412.000 (Local Frequency: 2412.000 MHz)

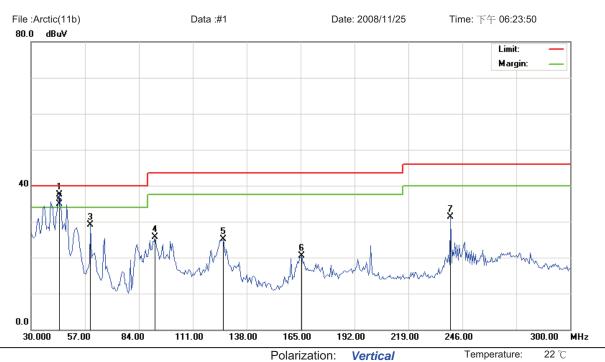
Test Date : 11/12 ~ 11/25/2008

Please refer to next pager of detail testing data.

#### Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





Humidity:

60 %

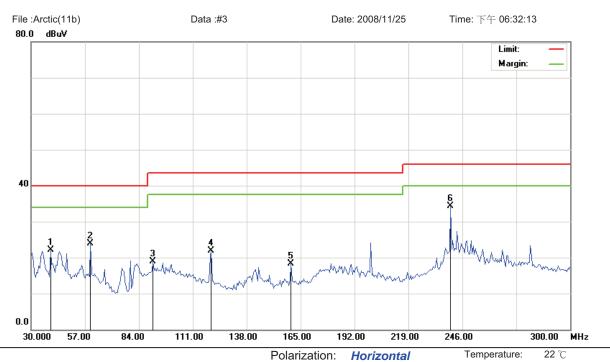
Site Limit: FCC Class B 3M Radiation

M/N: 08-0270-E Mode: WIFI(11b) Note: CH01(2412MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   | *   | 44.0400  | 49.35            | -11.84            | 37.51            | 40.00 | -2.49  | peak     |                   |                 |         |
| 2   | !   | 44.0400  | 46.80            | -11.84            | 34.96            | 40.00 | -5.04  | QP       |                   |                 |         |
| 3   |     | 59.7000  | 41.59            | -12.52            | 29.07            | 40.00 | -10.93 | peak     |                   |                 |         |
| 4   |     | 92.1000  | 38.39            | -12.71            | 25.68            | 43.50 | -17.82 | peak     |                   |                 |         |
| 5   |     | 126.1200 | 40.18            | -15.17            | 25.01            | 43.50 | -18.49 | peak     |                   |                 |         |
| 6   |     | 165.5399 | 35.77            | -15.31            | 20.46            | 43.50 | -23.04 | peak     |                   |                 |         |
| 7   | :   | 240.0600 | 42.66            | -11.43            | 31.23            | 46.00 | -14.77 | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin • Reference Only





Site Limit: FCC Class B 3M Radiation

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b) Note: CH01(2412MHz)

| No. Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|---------|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|         | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1       | 39.7200  | 34.09            | -11.96            | 22.13            | 40.00 | -17.87 | peak     |                   |                 |         |
| 2       | 59.7000  | 36.50            | -12.52            | 23.98            | 40.00 | -16.02 | peak     |                   |                 |         |
| 3       | 91.0199  | 31.89            | -12.95            | 18.94            | 43.50 | -24.56 | peak     |                   |                 |         |
| 4 1     | 20.1800  | 36.08            | -14.23            | 21.85            | 43.50 | -21.65 | peak     |                   |                 |         |
| 5 1     | 60.1400  | 33.82            | -15.49            | 18.33            | 43.50 | -25.17 | peak     |                   |                 |         |
| 6 * 2   | 240.0600 | 45.80            | -11.43            | 34.37            | 46.00 | -11.63 | peak     |                   |                 |         |

Power:

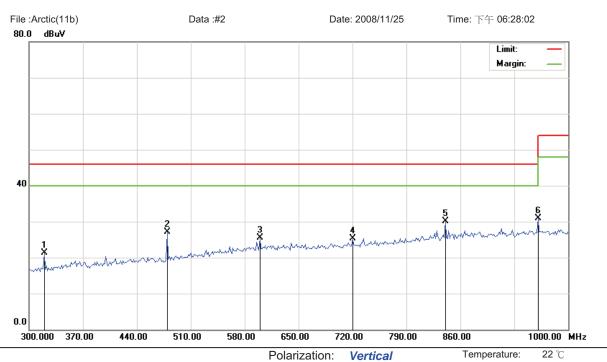
\*:Maximum data x:Over limit !:over margin

•Reference Only

Humidity:

60 %





Site Limit: FCC Class B 3M Radiation

Power:

EUT: Distance: 3m

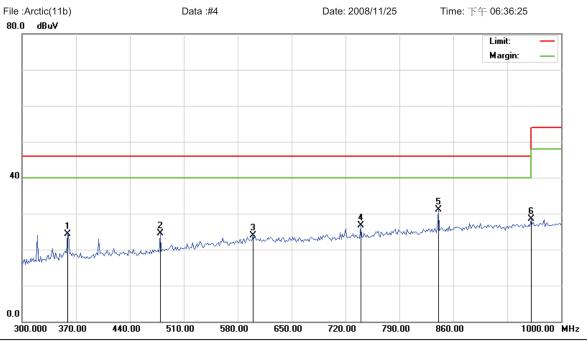
M/N: 08-0270-E Mode: WIFI(11b) Note: CH01(2412MHz)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 319.6000 | 31.05            | -9.82             | 21.23            | 46.00 | -24.77 | peak     |                   |                 |         |
| 2   |    | 479.2000 | 34.72            | -7.60             | 27.12            | 46.00 | -18.88 | peak     |                   |                 |         |
| 3   |    | 599.6000 | 30.49            | -4.91             | 25.58            | 46.00 | -20.42 | peak     |                   |                 |         |
| 4   |    | 720.0000 | 28.84            | -3.55             | 25.29            | 46.00 | -20.71 | peak     |                   |                 |         |
| 5   | *  | 840.4000 | 31.50            | -1.41             | 30.09            | 46.00 | -15.91 | peak     |                   |                 |         |
| 6   |    | 960.8000 | 30.35            | 0.48              | 30.83            | 54.00 | -23.17 | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin Humidity:

60 %





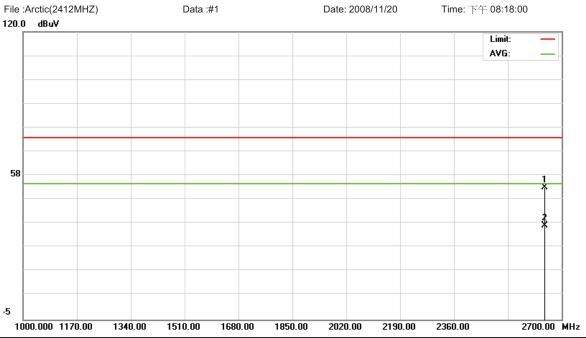
Site Polarization: Horizontal Temperature: 22 °C Limit: FCC Class B 3M Radiation Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b) Note: CH01(2412MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |     | 358.8000 | 33.35            | -8.95             | 24.40            | 46.00 | -21.60 | peak     |                   |                 |         |
| 2   |     | 479.2000 | 32.19            | -7.60             | 24.59            | 46.00 | -21.41 | peak     |                   |                 |         |
| 3   |     | 599.6000 | 28.83            | -4.91             | 23.92            | 46.00 | -22.08 | peak     |                   |                 |         |
| 4   |     | 739.6000 | 29.94            | -3.29             | 26.65            | 46.00 | -19.35 | peak     |                   |                 |         |
| 5   | *   | 840.4000 | 32.52            | -1.41             | 31.11            | 46.00 | -14.89 | peak     |                   |                 |         |
| 6   |     | 960.8000 | 27.98            | 0.48              | 28.46            | 54.00 | -25.54 | peak     |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b)

Note: CH01(2412MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2645.600 | 51.27            | 0.97              | 52.24            | 74.00 | -21.76 | peak     |                   |        |         |
| 2   | *  | 2645.600 | 34.85            | 0.97              | 35.82            | 54.00 | -18.18 | AVG      |                   |        |         |

\*:Maximum data x:Over limit !:over margin

•Reference Only





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b) Note: CH01(2412MHz)

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   | 2   | 2676.200 | 50.60            | 1.02              | 51.62            | 74.00 | -22.38 | peak     |                   |        |         |
| 2   | * 2 | 676.200  | 34.86            | 1.02              | 35.88            | 54.00 | -18.12 | AVG      |                   |        |         |

\*:Maximum data x:Over limit !:over margin





Site Polarization: Vertical Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b)

Note: CH01(2412MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk. | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |     | 2700.000 | 41.53            | 22.58             | 64.11            | 74.00 | -9.89  | peak     |                   |                 |         |
| 2   |     | 2700.000 | 21.70            | 22.58             | 44.28            | 54.00 | -9.72  | AVG      |                   |                 |         |
| 3   |     | 4824.000 | 38.98            | 7.48              | 46.46            | 74.00 | -27.54 | peak     |                   |                 |         |
| 4   |     | 4824.000 | 28.32            | 7.48              | 35.80            | 54.00 | -18.20 | AVG      |                   |                 |         |
| 5   |     | 10000.00 | 38.71            | 17.94             | 56.65            | 74.00 | -17.35 | peak     |                   |                 |         |
| 6   | *   | 10000.00 | 27.45            | 17.94             | 45.39            | 54.00 | -8.61  | AVG      |                   |                 |         |





Site Polarization: Horizontal Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

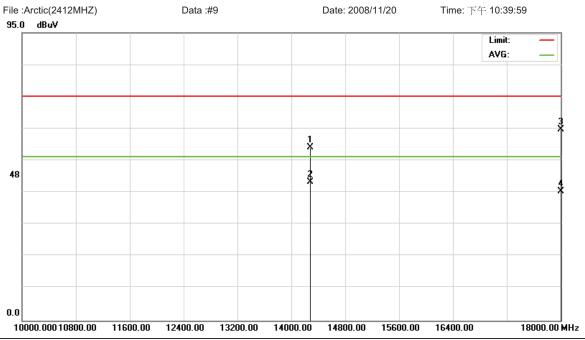
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH01(2412MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 2700.000 | 42.07            | 22.58             | 64.65            | 74.00 | -9.35  | peak     |                   |                 |         |
| 2   |    | 2700.000 | 21.76            | 22.58             | 44.34            | 54.00 | -9.66  | AVG      |                   |                 |         |
| 3   |    | 4824.000 | 39.57            | 7.48              | 47.05            | 74.00 | -26.95 | peak     |                   |                 |         |
| 4   |    | 4824.000 | 28.22            | 7.48              | 35.70            | 54.00 | -18.30 | AVG      |                   |                 |         |
| 5   |    | 9927.000 | 38.74            | 17.78             | 56.52            | 74.00 | -17.48 | peak     |                   |                 |         |
| 6   | *  | 9927.000 | 27.49            | 17.78             | 45.27            | 54.00 | -8.73  | AVG      |                   |                 |         |





Site Polarization: Vertical Temperature: 22  $^{\circ}$ 

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

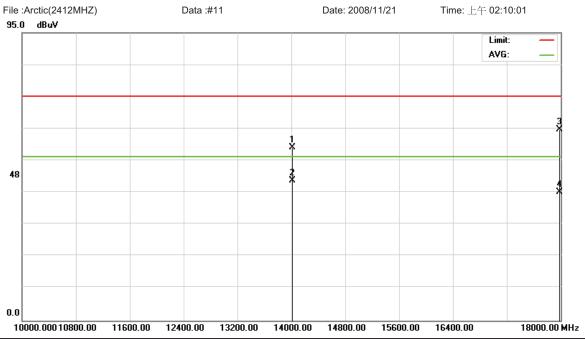
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH01(2412MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 14280.00 | 38.47            | 18.63             | 57.10            | 74.00 | -16.90 | peak     |                   |                 |         |
| 2   | *  | 14280.00 | 27.12            | 18.63             | 45.75            | 54.00 | -8.25  | AVG      |                   |                 |         |
| 3   |    | 18000.00 | 37.39            | 25.57             | 62.96            | 74.00 | -11.04 | peak     |                   |                 |         |
| 4   |    | 18000.00 | 17.12            | 25.57             | 42.69            | 54.00 | -11.31 | AVG      |                   |                 |         |





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

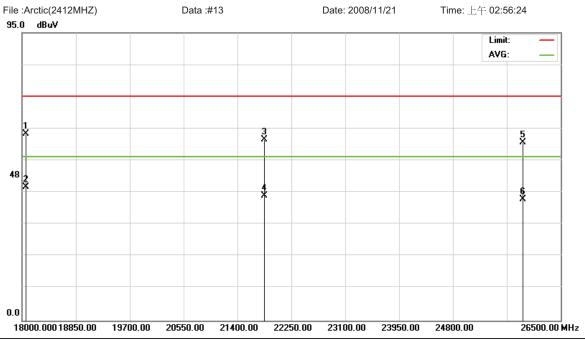
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH01(2412MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 14020.00 | 38.55            | 18.67             | 57.22            | 74.00 | -16.78 | peak     |                   |                 |         |
| 2   | *  | 14020.00 | 27.51            | 18.67             | 46.18            | 54.00 | -7.82  | AVG      |                   |                 |         |
| 3   |    | 17980.00 | 37.79            | 25.21             | 63.00            | 74.00 | -11.00 | peak     |                   |                 |         |
| 4   |    | 17980.00 | 17.29            | 25.21             | 42.50            | 54.00 | -11.50 | AVG      |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

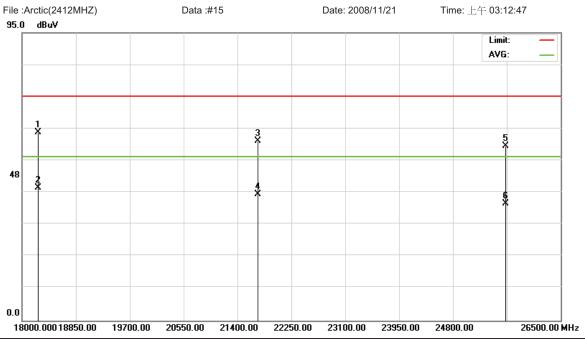
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH01(2412MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  | ,                 | ,                | •     |        |          | /                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 18063.75 | 38.29            | 23.26             | 61.55            | 74.00 | -12.45 | peak     |                   |                 |         |
| 2   | *  | 18063.75 | 20.70            | 23.26             | 43.96            | 54.00 | -10.04 | AVG      |                   |                 |         |
| 3   |    | 21825.00 | 38.53            | 21.20             | 59.73            | 74.00 | -14.27 | peak     |                   |                 |         |
| 4   |    | 21825.00 | 19.98            | 21.20             | 41.18            | 54.00 | -12.82 | AVG      |                   |                 |         |
| 5   |    | 25905.00 | 40.26            | 18.63             | 58.89            | 74.00 | -15.11 | peak     |                   |                 |         |
| 6   |    | 25905.00 | 21.28            | 18.63             | 39.91            | 54.00 | -14.09 | AVG      | -                 | -               |         |





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11b)

Note: CH01(2412MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  |                   |                  | •     |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 18255.00 | 38.92            | 23.20             | 62.12            | 74.00 | -11.88 | peak     |                   |                 |         |
| 2   | *  | 18255.00 | 20.66            | 23.20             | 43.86            | 54.00 | -10.14 | AVG      |                   |                 |         |
| 3   |    | 21718.75 | 37.98            | 21.23             | 59.21            | 74.00 | -14.79 | peak     |                   |                 |         |
| 4   |    | 21718.75 | 20.36            | 21.23             | 41.59            | 54.00 | -12.41 | AVG      |                   |                 |         |
| 5   |    | 25618.17 | 38.69            | 18.90             | 57.59            | 74.00 | -16.41 | peak     |                   |                 |         |
| 6   |    | 25618.17 | 19.67            | 18.90             | 38.57            | 54.00 | -15.43 | AVG      |                   | -               |         |



# 3.6.2 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK

Test Mode : 802.11b CH6 2437.000 (Local Frequency: 2437.000 MHz)

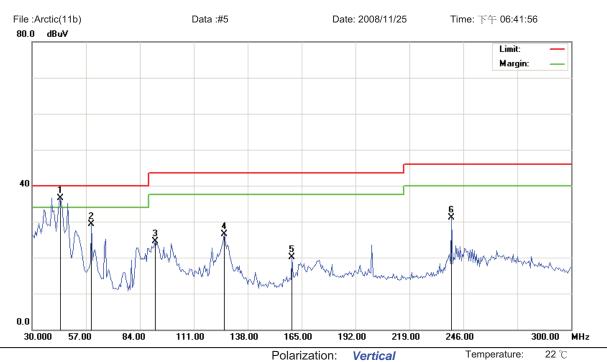
Test Date : 11/12 ~ 11/25/2008

Please refer to next pager of detail testing data.

## Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





60 %

Site Limit: FCC Class B 3M Radiation

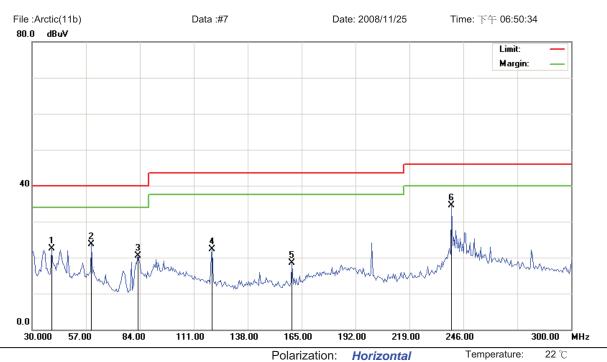
EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b) Note: CH6(2437MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   | *   | 44.0400  | 48.44            | -11.84            | 36.60            | 40.00 | -3.40  | peak     |                   |                 |         |
| 2   |     | 59.7000  | 41.86            | -12.52            | 29.34            | 40.00 | -10.66 | peak     |                   |                 |         |
| 3   |     | 91.5600  | 37.34            | -12.83            | 24.51            | 43.50 | -18.99 | peak     |                   |                 |         |
| 4   |     | 126.1200 | 41.65            | -15.17            | 26.48            | 43.50 | -17.02 | peak     |                   |                 |         |
| 5   |     | 160.1400 | 35.66            | -15.49            | 20.17            | 43.50 | -23.33 | peak     |                   |                 |         |
| 6   | 2   | 240.0600 | 42.52            | -11.43            | 31.09            | 46.00 | -14.91 | peak     |                   |                 |         |

Power:





Site Limit: FCC Class B 3M Radiation

M/N: 08-0270-E Mode: WIFI(11b) Note: CH6(2437MHz)

| No. | Mk | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 39.7200  | 34.48            | -11.96            | 22.52            | 40.00 | -17.48 | peak     |                   |                 |         |
| 2   |    | 59.7000  | 36.26            | -12.52            | 23.74            | 40.00 | -16.26 | peak     |                   |                 |         |
| 3   |    | 82.9200  | 36.09            | -15.49            | 20.60            | 40.00 | -19.40 | peak     |                   |                 |         |
| 4   |    | 120.1800 | 36.47            | -14.23            | 22.24            | 43.50 | -21.26 | peak     |                   |                 |         |
| 5   |    | 160.1400 | 34.05            | -15.49            | 18.56            | 43.50 | -24.94 | peak     |                   |                 |         |
| 6   | *  | 240.0600 | 45.90            | -11.43            | 34.47            | 46.00 | -11.53 | peak     |                   |                 |         |

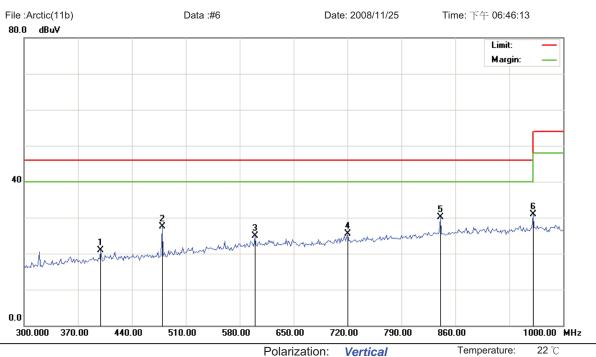
\*:Maximum data x:Over limit !:over margin

•Reference Only

Humidity:

60 %





60 %

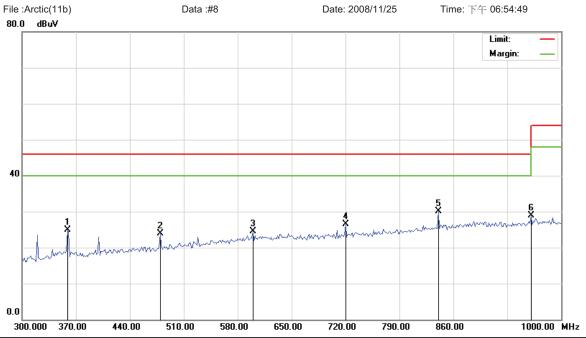
Site Polarization: Vertical
Limit: FCC Class B 3M Radiation Power:

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b) Note: CH6(2437MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |     | 399.4000 | 29.23            | -8.34             | 20.89            | 46.00 | -25.11 | peak     |                   |                 |         |
| 2   |     | 479.2000 | 35.13            | -7.60             | 27.53            | 46.00 | -18.47 | peak     |                   |                 |         |
| 3   |     | 599.6000 | 29.82            | -4.91             | 24.91            | 46.00 | -21.09 | peak     |                   |                 |         |
| 4   |     | 720.0000 | 28.96            | -3.55             | 25.41            | 46.00 | -20.59 | peak     |                   |                 |         |
| 5   | *   | 840.4000 | 31.61            | -1.41             | 30.20            | 46.00 | -15.80 | peak     |                   |                 |         |
| 6   |     | 960.8000 | 30.51            | 0.48              | 30.99            | 54.00 | -23.01 | peak     |                   |                 |         |





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC Class B 3M Radiation Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b) Note: CH6(2437MHz)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 358.8000 | 33.88            | -8.95             | 24.93            | 46.00 | -21.07 | peak     |                   |                 |         |
| 2   |    | 479.2000 | 31.44            | -7.60             | 23.84            | 46.00 | -22.16 | peak     |                   |                 |         |
| 3   |    | 599.6000 | 29.36            | -4.91             | 24.45            | 46.00 | -21.55 | peak     |                   |                 |         |
| 4   |    | 720.0000 | 30.05            | -3.55             | 26.50            | 46.00 | -19.50 | peak     |                   |                 |         |
| 5   | *  | 840.4000 | 31.45            | -1.41             | 30.04            | 46.00 | -15.96 | peak     |                   |                 |         |
| 6   |    | 960.8000 | 28.36            | 0.48              | 28.84            | 54.00 | -25.16 | peak     |                   |                 |         |





Site Polarization: Vertical Temperature: 22  $^{\circ}$ 

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b)

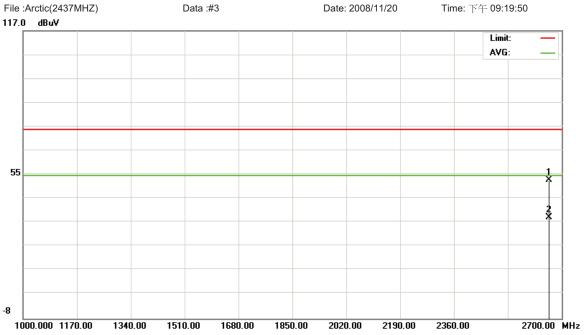
Note: CH06(2437MHz)Antenna 139.7cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | κ. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2669.400 | 51.07            | 1.02              | 52.09            | 74.00 | -21.91 | peak     |                   |        |         |
| 2   | *  | 2669.400 | 34.78            | 1.02              | 35.80            | 54.00 | -18.20 | AVG      |                   |        |         |

\*:Maximum data x:Over limit !:over margin





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b)

Note: CH06(2437MHz)Antenna 151.1cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2659.200 | 51.30            | 0.92              | 52.22            | 74.00 | -21.78 | peak     |                   |        |         |
| 2   | *  | 2659.200 | 34.93            | 0.92              | 35.85            | 54.00 | -18.15 | AVG      |                   |        |         |

\*:Maximum data x:Over limit !:over margin





Site Polarization: Vertical Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b)

Note: CH06(2437MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 2700.000 | 41.41            | 22.58             | 63.99            | 74.00 | -10.01 | peak     |                   |                 |         |
| 2   |    | 2700.000 | 21.68            | 22.58             | 44.26            | 54.00 | -9.74  | AVG      |                   |                 |         |
| 3   |    | 4874.000 | 38.67            | 7.72              | 46.39            | 74.00 | -27.61 | peak     |                   |                 |         |
| 4   |    | 4874.000 | 28.11            | 7.72              | 35.83            | 54.00 | -18.17 | AVG      |                   |                 |         |
| 5   |    | 9799.250 | 39.22            | 17.67             | 56.89            | 74.00 | -17.11 | peak     |                   |                 |         |
| 6   | *  | 9799.250 | 27.50            | 17.67             | 45.17            | 54.00 | -8.83  | AVG      |                   |                 |         |





Site Polarization: Horizontal Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

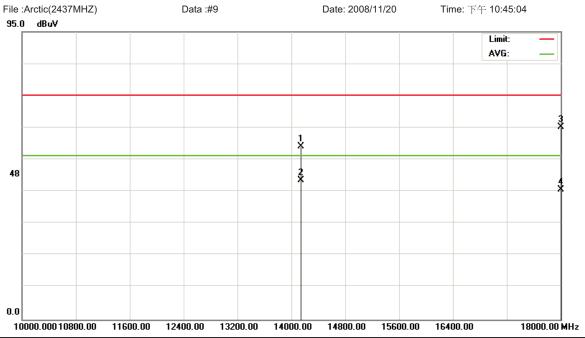
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH06(2437MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 2700.000 | 42.04            | 22.58             | 64.62            | 74.00 | -9.38  | peak     |                   |                 |         |
| 2   |    | 2700.000 | 21.55            | 22.58             | 44.13            | 54.00 | -9.87  | AVG      |                   |                 |         |
| 3   |    | 4874.000 | 38.26            | 7.72              | 45.98            | 74.00 | -28.02 | peak     |                   |                 |         |
| 4   |    | 4874.000 | 29.00            | 7.72              | 36.72            | 54.00 | -17.28 | AVG      |                   |                 |         |
| 5   |    | 9927.000 | 38.61            | 17.78             | 56.39            | 74.00 | -17.61 | peak     |                   |                 |         |
| 6   | *  | 9927.000 | 27.46            | 17.78             | 45.24            | 54.00 | -8.76  | AVG      |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11b)

Note: CH06(2437MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 14140.00 | 38.25            | 18.84             | 57.09            | 74.00 | -16.91 | peak     |                   |                 |         |
| 2   | *  | 14140.00 | 27.02            | 18.84             | 45.86            | 54.00 | -8.14  | AVG      |                   |                 |         |
| 3   |    | 18000.00 | 37.96            | 25.57             | 63.53            | 74.00 | -10.47 | peak     |                   |                 |         |
| 4   |    | 18000.00 | 17.39            | 25.57             | 42.96            | 54.00 | -11.04 | AVG      |                   |                 |         |





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

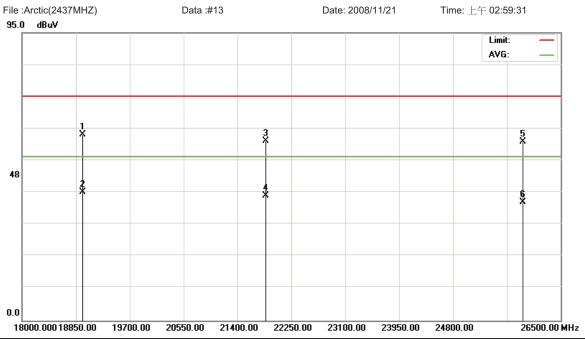
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH06(2437MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 14260.00 | 38.05            | 18.66             | 56.71            | 74.00 | -17.29 | peak     |                   |                 |         |
| 2   | *  | 14260.00 | 27.19            | 18.66             | 45.85            | 54.00 | -8.15  | AVG      |                   |                 |         |
| 3   |    | 17980.00 | 37.35            | 25.21             | 62.56            | 74.00 | -11.44 | peak     |                   |                 |         |
| 4   |    | 17980.00 | 17.22            | 25.21             | 42.43            | 54.00 | -11.57 | AVG      |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

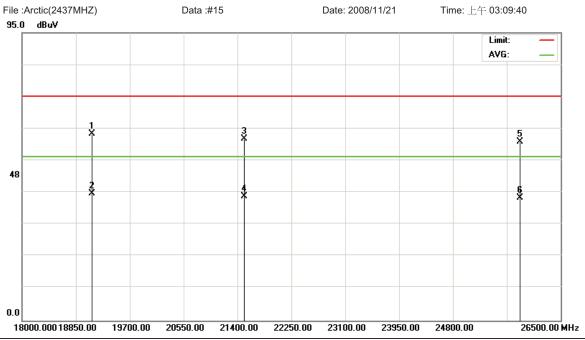
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH06(2437MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  |                   |                  | •     |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 18956.25 | 38.30            | 23.11             | 61.41            | 74.00 | -12.59 | peak     |                   |                 |         |
| 2   | *  | 18956.25 | 19.26            | 23.11             | 42.37            | 54.00 | -11.63 | AVG      |                   |                 |         |
| 3   |    | 21846.25 | 38.02            | 21.20             | 59.22            | 74.00 | -14.78 | peak     |                   |                 |         |
| 4   |    | 21846.25 | 19.98            | 21.20             | 41.18            | 54.00 | -12.82 | AVG      |                   |                 |         |
| 5   |    | 25905.00 | 40.47            | 18.63             | 59.10            | 74.00 | -14.90 | peak     |                   |                 |         |
| 6   |    | 25905.00 | 20.34            | 18.63             | 38.97            | 54.00 | -15.03 | AVG      |                   | -               |         |





Site Polarization: Horizontal Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11b)

Note: CH06(2437MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  |                   |                  | •     |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 19105.00 | 38.70            | 23.00             | 61.70            | 74.00 | -12.30 | peak     |                   |                 |         |
| 2   | *  | 19105.00 | 18.93            | 23.00             | 41.93            | 54.00 | -12.07 | AVG      |                   |                 |         |
| 3   |    | 21506.25 | 38.54            | 21.35             | 59.89            | 74.00 | -14.11 | peak     |                   |                 |         |
| 4   |    | 21506.25 | 19.59            | 21.35             | 40.94            | 54.00 | -13.06 | AVG      |                   |                 |         |
| 5   |    | 25862.50 | 40.40            | 18.67             | 59.07            | 74.00 | -14.93 | peak     |                   |                 |         |
| 6   |    | 25862.50 | 21.76            | 18.67             | 40.43            | 54.00 | -13.57 | AVG      |                   |                 |         |



# 3.6.3 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK

Test Mode : 802.11b CH11 2462.000 (Local Frequency: 2462.000 MHz)

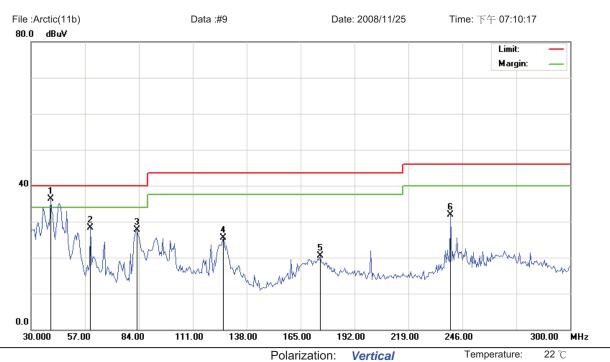
Test Date : 11/12 ~ 11/25/2008

Please refer to next pager of detail testing data.

## Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





Site Limit: FCC Class B 3M Radiation

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b) Note: CH11(2462MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   | *   | 39.7200  | 48.36            | -11.96            | 36.40            | 40.00 | -3.60  | peak     |                   |                 |         |
| 2   |     | 59.7000  | 40.82            | -12.52            | 28.30            | 40.00 | -11.70 | peak     |                   |                 |         |
| 3   |     | 82.9200  | 43.10            | -15.49            | 27.61            | 40.00 | -12.39 | peak     |                   |                 |         |
| 4   | •   | 126.1200 | 40.69            | -15.17            | 25.52            | 43.50 | -17.98 | peak     |                   |                 |         |
| 5   | •   | 174.7200 | 35.19            | -14.67            | 20.52            | 43.50 | -22.98 | peak     |                   |                 |         |
| 6   | 2   | 240.0600 | 43.41            | -11.43            | 31.98            | 46.00 | -14.02 | peak     |                   |                 |         |

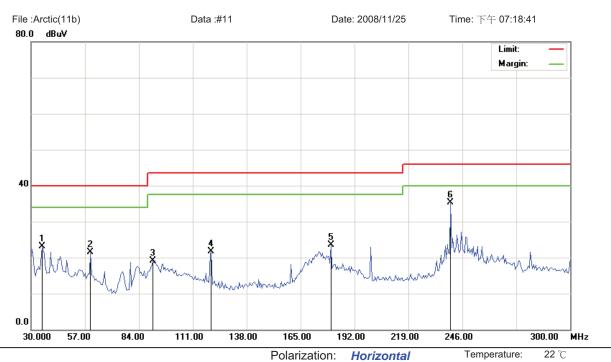
Power:

\*:Maximum data x:Over limit !:over margin

Humidity:

60 %





60 %

Site Limit: FCC Class B 3M Radiation

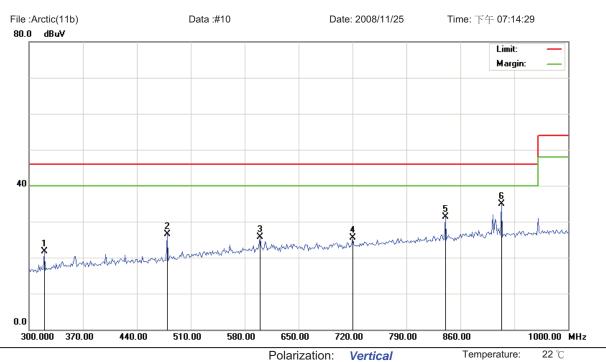
EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b) Note: CH11(2462MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |     | 35.4000  | 36.12            | -13.09            | 23.03            | 40.00 | -16.97 | peak     |                   |                 |         |
| 2   |     | 59.7000  | 33.93            | -12.52            | 21.41            | 40.00 | -18.59 | peak     |                   |                 |         |
| 3   |     | 91.0199  | 32.07            | -12.95            | 19.12            | 43.50 | -24.38 | peak     |                   |                 |         |
| 4   | •   | 120.1800 | 36.02            | -14.23            | 21.79            | 43.50 | -21.71 | peak     |                   |                 |         |
| 5   | •   | 180.1200 | 37.86            | -14.31            | 23.55            | 43.50 | -19.95 | peak     |                   |                 |         |
| 6   | * 2 | 240.0600 | 46.83            | -11.43            | 35.40            | 46.00 | -10.60 | peak     |                   |                 |         |

Power:





60 %

Site
Limit: FCC Class B 3M Radiation

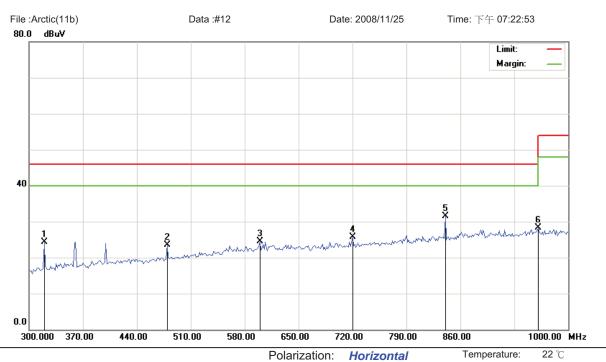
EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b) Note: CH11(2462MHz)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 319.6000 | 31.43            | -9.82             | 21.61            | 46.00 | -24.39 | peak     |                   |                 |         |
| 2   |    | 479.2000 | 34.02            | -7.60             | 26.42            | 46.00 | -19.58 | peak     |                   |                 |         |
| 3   |    | 599.6000 | 30.59            | -4.91             | 25.68            | 46.00 | -20.32 | peak     |                   |                 |         |
| 4   |    | 720.0000 | 29.12            | -3.55             | 25.57            | 46.00 | -20.43 | peak     |                   |                 |         |
| 5   |    | 840.4000 | 32.64            | -1.41             | 31.23            | 46.00 | -14.77 | peak     |                   |                 |         |
| 6   | *  | 913.2000 | 35.18            | -0.19             | 34.99            | 46.00 | -11.01 | peak     |                   |                 |         |

Power:





60 %

Site
Limit: FCC Class B 3M Radiation

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b) Note: CH11(2462MHz)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 319.6000 | 34.13            | -9.82             | 24.31            | 46.00 | -21.69 | peak     |                   |                 |         |
| 2   |    | 479.2000 | 31.09            | -7.60             | 23.49            | 46.00 | -22.51 | peak     |                   |                 |         |
| 3   |    | 599.6000 | 29.36            | -4.91             | 24.45            | 46.00 | -21.55 | peak     |                   |                 |         |
| 4   |    | 720.0000 | 29.34            | -3.55             | 25.79            | 46.00 | -20.21 | peak     |                   |                 |         |
| 5   | *  | 840.4000 | 32.96            | -1.41             | 31.55            | 46.00 | -14.45 | peak     |                   |                 |         |
| 6   |    | 960.8000 | 27.91            | 0.48              | 28.39            | 54.00 | -25.61 | peak     |                   |                 |         |

Power:





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b)

Note: CH11(2462MHz)Antenna 100cm

2.7G-10G AV Scan

| No. | MI | k. Fred | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|---------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2645.60 | 0 50.90          | 0.97              | 51.87            | 74.00 | -22.13 | peak     |                   |        |         |
| 2   | *  | 2645.60 | 0 34.85          | 0.97              | 35.82            | 54.00 | -18.18 | AVG      |                   |        |         |





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11b)

Note: CH11(2462MHz)Antenna 100cm

2.7G-10G AV Scan

| No. | Mł | k. Freq. | _     | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|----------|-------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MHz      | dBuV  | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2638.800 | 50.94 | 0.97              | 51.91            | 74.00 | -22.09 | peak     |                   |        |         |
| 2   | *  | 2638.800 | 34.89 | 0.97              | 35.86            | 54.00 | -18.14 | AVG      |                   |        |         |





Site Polarization: Vertical Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

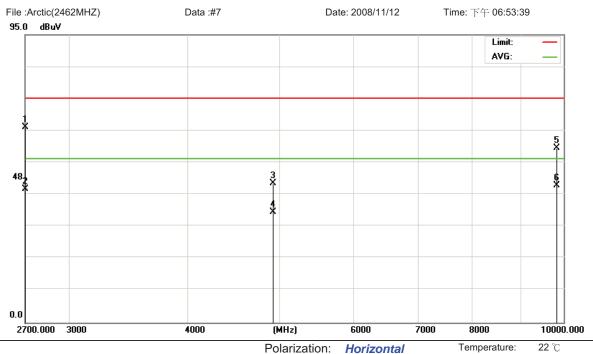
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH11(2462MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 2700.000 | 41.75            | 22.58             | 64.33            | 74.00 | -9.67  | peak     |                   |                 |         |
| 2   |    | 2700.000 | 21.63            | 22.58             | 44.21            | 54.00 | -9.79  | AVG      |                   |                 |         |
| 3   |    | 4924.000 | 38.48            | 7.65              | 46.13            | 74.00 | -27.87 | peak     |                   |                 |         |
| 4   |    | 4924.000 | 29.00            | 7.65              | 36.65            | 54.00 | -17.35 | AVG      |                   |                 |         |
| 5   |    | 9835.750 | 38.56            | 17.83             | 56.39            | 74.00 | -17.61 | peak     |                   |                 |         |
| 6   | *  | 9835.750 | 27.51            | 17.83             | 45.34            | 54.00 | -8.66  | AVG      |                   |                 |         |





60 %

Site Polarization: Horizontal Temperate Limit: FCC part 15 (PK) Power: Humidity:

Limit: FCC part 15 (PK)

EUT:

Power:

Distance: 3m

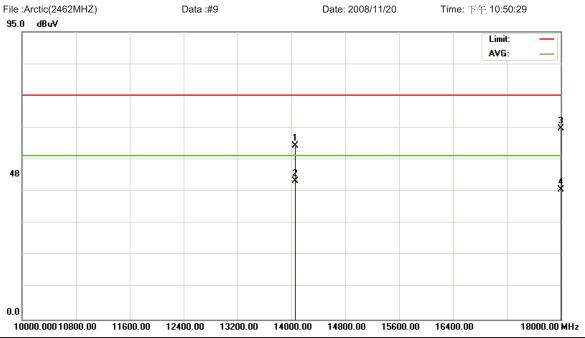
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH11(2462MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 2700.000 | 41.82            | 22.58             | 64.40            | 74.00 | -9.60  | peak     |                   |                 |         |
| 2   |    | 2700.000 | 21.56            | 22.58             | 44.14            | 54.00 | -9.86  | AVG      |                   |                 |         |
| 3   |    | 4924.000 | 38.21            | 7.65              | 45.86            | 74.00 | -28.14 | peak     |                   |                 |         |
| 4   |    | 4924.000 | 28.86            | 7.65              | 36.51            | 54.00 | -17.49 | AVG      |                   |                 |         |
| 5   |    | 9835.750 | 39.68            | 17.83             | 57.51            | 74.00 | -16.49 | peak     |                   |                 |         |
| 6   | *  | 9835.750 | 27.51            | 17.83             | 45.34            | 54.00 | -8.66  | AVG      |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

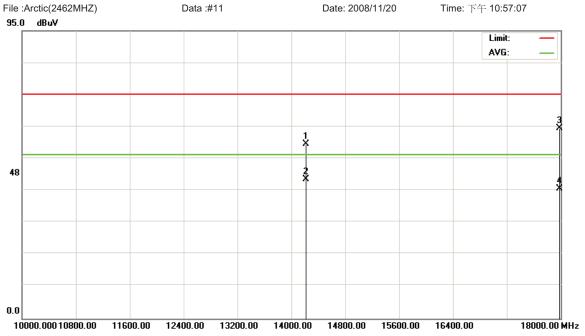
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH11(2462MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 14060.00 | 38.58            | 18.72             | 57.30            | 74.00 | -16.70 | peak     |                   |                 |         |
| 2   | *  | 14060.00 | 27.02            | 18.72             | 45.74            | 54.00 | -8.26  | AVG      |                   |                 |         |
| 3   |    | 18000.00 | 37.41            | 25.57             | 62.98            | 74.00 | -11.02 | peak     |                   |                 |         |
| 4   |    | 18000.00 | 17.41            | 25.57             | 42.98            | 54.00 | -11.02 | AVG      |                   |                 |         |





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

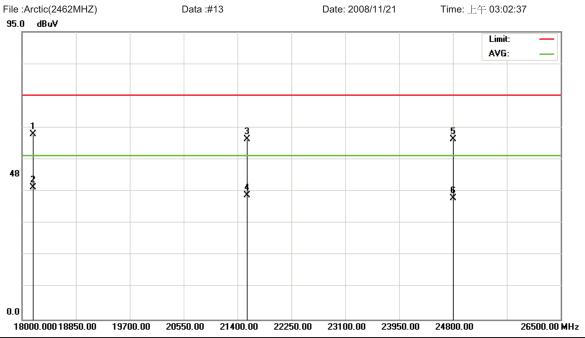
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH11(2462MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 14220.00 | 38.87            | 18.78             | 57.65            | 74.00 | -16.35 | peak     |                   |                 |         |
| 2   | *  | 14220.00 | 27.11            | 18.78             | 45.89            | 54.00 | -8.11  | AVG      |                   |                 |         |
| 3   |    | 17980.00 | 37.68            | 25.21             | 62.89            | 74.00 | -11.11 | peak     |                   |                 |         |
| 4   |    | 17980.00 | 17.56            | 25.21             | 42.77            | 54.00 | -11.23 | AVG      |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

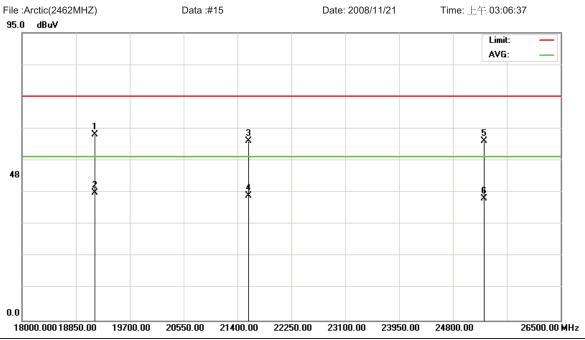
M/N: 08-0270-E Mode: WIFI(11b)

Note: CH11(2462MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  |                   |                  | •     |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | c. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 18170.00 | 38.04            | 23.23             | 61.27            | 74.00 | -12.73 | peak     |                   |                 |         |
| 2   | *  | 18170.00 | 20.26            | 23.23             | 43.49            | 54.00 | -10.51 | AVG      |                   |                 |         |
| 3   |    | 21548.75 | 38.12            | 21.33             | 59.45            | 74.00 | -14.55 | peak     |                   |                 |         |
| 4   |    | 21548.75 | 19.65            | 21.33             | 40.98            | 54.00 | -13.02 | AVG      |                   |                 |         |
| 5   |    | 24800.00 | 40.06            | 19.55             | 59.61            | 74.00 | -14.39 | peak     |                   |                 |         |
| 6   |    | 24800.00 | 20.54            | 19.55             | 40.09            | 54.00 | -13.91 | AVG      |                   |                 |         |





Site Polarization: Horizontal Temperature: 22 ℃ 60 %

Humidity: Limit: FCC part 15 (PK) Power:

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11b)

Note: CH11(2462MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  | ,                 | ,                | ٠ ,   |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 19147.50 | 38.34            | 22.97             | 61.31            | 74.00 | -12.69 | peak     |                   |                 |         |
| 2   | *  | 19147.50 | 19.11            | 22.97             | 42.08            | 54.00 | -11.92 | AVG      |                   |                 |         |
| 3   |    | 21570.00 | 38.00            | 21.31             | 59.31            | 74.00 | -14.69 | peak     |                   |                 |         |
| 4   |    | 21570.00 | 19.80            | 21.31             | 41.11            | 54.00 | -12.89 | AVG      |                   |                 |         |
| 5   |    | 25288.75 | 40.22            | 19.11             | 59.33            | 74.00 | -14.67 | peak     |                   |                 |         |
| 6   |    | 25288.75 | 21.09            | 19.11             | 40.20            | 54.00 | -13.80 | AVG      | -                 |                 |         |



# 3.6.4 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK

Test Mode : 802.11g CH1 2412.000 (Local Frequency: 2412.000 MHz)

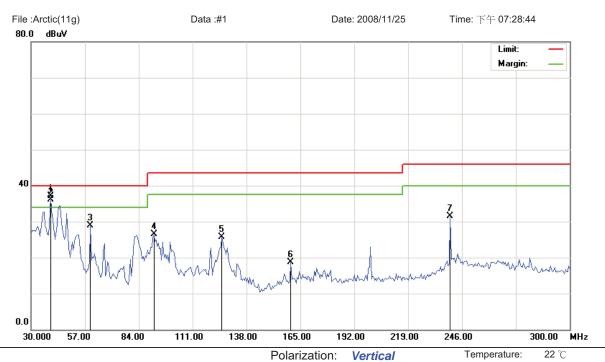
Test Date : 11/12 ~ 11/25/2008

Please refer to next pager of detail testing data.

## Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





Site

Limit: FCC Class B 3M Radiation

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g) Note: CH01(2412MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   | *   | 39.7200  | 49.11            | -11.96            | 37.15            | 40.00 | -2.85  | peak     |                   |                 |         |
| 2   | !   | 39.7200  | 48.13            | -11.96            | 36.17            | 40.00 | -3.83  | QP       |                   |                 |         |
| 3   |     | 59.7000  | 41.44            | -12.52            | 28.92            | 40.00 | -11.08 | peak     |                   |                 |         |
| 4   |     | 91.5600  | 39.40            | -12.83            | 26.57            | 43.50 | -16.93 | peak     |                   |                 |         |
| 5   |     | 125.5800 | 40.85            | -15.11            | 25.74            | 43.50 | -17.76 | peak     |                   |                 |         |
| 6   |     | 160.1400 | 34.29            | -15.49            | 18.80            | 43.50 | -24.70 | peak     |                   |                 |         |
| 7   | :   | 240.0600 | 42.93            | -11.43            | 31.50            | 46.00 | -14.50 | peak     |                   |                 |         |

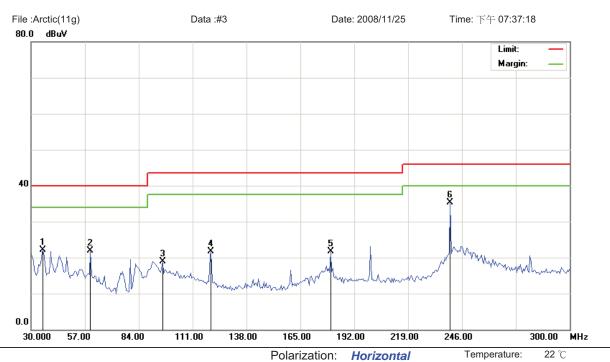
Power:

\*:Maximum data x:Over limit !:over margin •Reference Only

Humidity:

60 %





Site Limit: FCC Class B 3M Radiation

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g) Note: CH01(2412MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |     | 35.9400  | 35.02            | -12.95            | 22.07            | 40.00 | -17.93 | peak     |                   |                 |         |
| 2   |     | 59.7000  | 34.33            | -12.52            | 21.81            | 40.00 | -18.19 | peak     |                   |                 |         |
| 3   |     | 95.8800  | 30.84            | -11.99            | 18.85            | 43.50 | -24.65 | peak     |                   |                 |         |
| 4   |     | 120.1800 | 35.88            | -14.23            | 21.65            | 43.50 | -21.85 | peak     |                   |                 |         |
| 5   |     | 180.1200 | 36.06            | -14.31            | 21.75            | 43.50 | -21.75 | peak     |                   |                 |         |
| 6   | *   | 240.0600 | 46.71            | -11.43            | 35.28            | 46.00 | -10.72 | peak     |                   |                 |         |

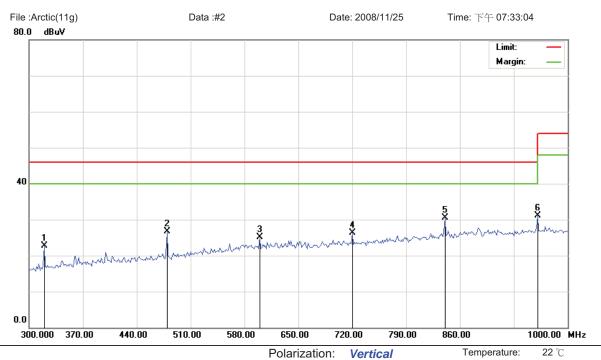
Power:

\*:Maximum data x:Over limit !:over margin

Humidity:

60 %





60 %

Site Limit: FCC Class B 3M Radiation

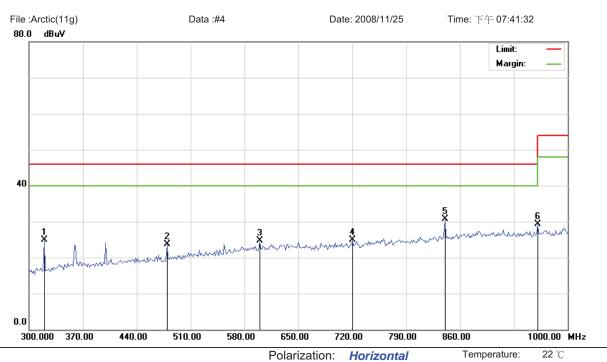
Power:

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g) Note: CH01(2412MHz)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 319.6000 | 32.43            | -9.82             | 22.61            | 46.00 | -23.39 | peak     |                   |                 |         |
| 2   |    | 479.2000 | 34.36            | -7.60             | 26.76            | 46.00 | -19.24 | peak     |                   |                 |         |
| 3   |    | 599.6000 | 29.99            | -4.91             | 25.08            | 46.00 | -20.92 | peak     |                   |                 |         |
| 4   |    | 720.0000 | 29.76            | -3.55             | 26.21            | 46.00 | -19.79 | peak     |                   |                 |         |
| 5   | *  | 840.4000 | 32.01            | -1.41             | 30.60            | 46.00 | -15.40 | peak     |                   |                 |         |
| 6   |    | 960.8000 | 30.60            | 0.48              | 31.08            | 54.00 | -22.92 | peak     |                   |                 |         |





60 %

Site Limit: FCC Class B 3M Radiation

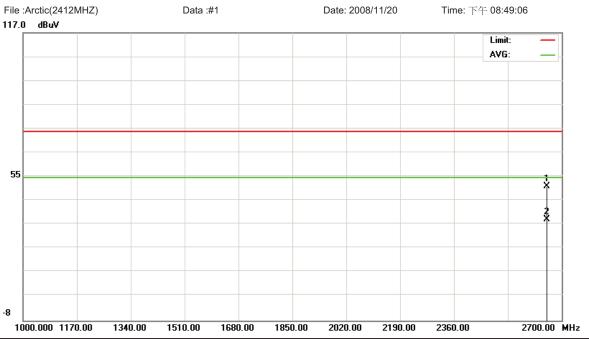
EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g) Note: CH01(2412MHz)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 319.6000 | 34.63            | -9.82             | 24.81            | 46.00 | -21.19 | peak     |                   |                 |         |
| 2   |    | 479.2000 | 31.28            | -7.60             | 23.68            | 46.00 | -22.32 | peak     |                   |                 |         |
| 3   |    | 599.6000 | 29.60            | -4.91             | 24.69            | 46.00 | -21.31 | peak     |                   |                 |         |
| 4   |    | 720.0000 | 28.47            | -3.55             | 24.92            | 46.00 | -21.08 | peak     |                   |                 |         |
| 5   | *  | 840.4000 | 32.04            | -1.41             | 30.63            | 46.00 | -15.37 | peak     |                   |                 |         |
| 6   |    | 960.8000 | 28.90            | 0.48              | 29.38            | 54.00 | -24.62 | peak     |                   |                 |         |

Power:





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

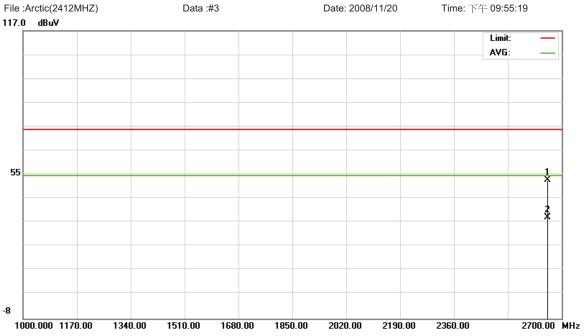
M/N: 08-0270-E Mode: WIFI(11g)

Note: CH01(2412MHz)Antenna 100cm

2.7G-10G AV Scan

| No. | Mł | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2652.400 | 49.36            | 0.95              | 50.31            | 74.00 | -23.69 | peak     |                   |        |         |
| 2   | *  | 2652.400 | 34.85            | 0.95              | 35.80            | 54.00 | -18.20 | AVG      |                   |        |         |





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH01(2412MHz)Antenna 100cm

2.7G-10G AV Scan

| No. | Mł | k. Fre  |    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|---------|----|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MH      | Z  | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2655.80 | 00 | 51.21            | 0.94              | 52.15            | 74.00 | -21.85 | peak     |                   |        |         |
| 2   | *  | 2655.80 | 00 | 34.88            | 0.94              | 35.82            | 54.00 | -18.18 | AVG      |                   |        |         |





Site Polarization: Vertical Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH01(2412MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   | *  | 2700.000 | 41.08            | 22.58             | 63.66            | 74.00 | -10.34 | peak     |                   |                 |         |
| 2   |    | 2700.000 | 21.59            | 22.58             | 44.17            | 74.00 | -29.83 | peak     |                   |                 |         |
| 3   |    | 4824.000 | 39.01            | 7.48              | 46.49            | 74.00 | -27.51 | peak     |                   |                 |         |
| 4   |    | 4824.000 | 28.13            | 7.48              | 35.61            | 74.00 | -38.39 | peak     |                   |                 |         |
| 5   |    | 9963.500 | 38.32            | 17.82             | 56.14            | 74.00 | -17.86 | peak     |                   |                 |         |
| 6   |    | 9963.500 | 27.47            | 17.82             | 45.29            | 74.00 | -28.71 | peak     |                   |                 |         |





Site Polarization: Horizontal Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

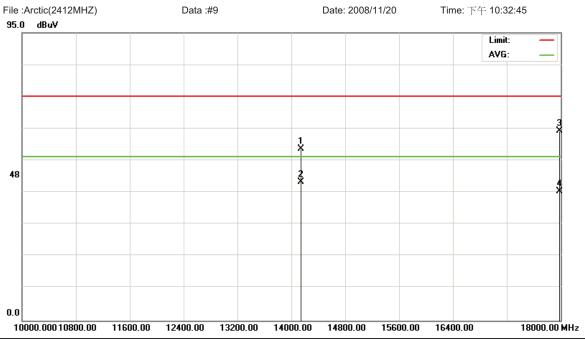
M/N: 08-0270-E Mode: WIFI(11g)

Note: CH01(2412MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | c. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 2700.000 | 41.03            | 22.58             | 63.61            | 74.00 | -10.39 | peak     |                   |                 |         |
| 2   |    | 2700.000 | 21.70            | 22.58             | 44.28            | 54.00 | -9.72  | AVG      |                   |                 |         |
| 3   |    | 4824.000 | 38.68            | 7.48              | 46.16            | 74.00 | -27.84 | peak     |                   |                 |         |
| 4   |    | 4824.000 | 28.15            | 7.48              | 35.63            | 54.00 | -18.37 | AVG      |                   |                 |         |
| 5   |    | 9324.750 | 39.49            | 16.91             | 56.40            | 74.00 | -17.60 | peak     |                   |                 |         |
| 6   | *  | 9324.750 | 28.24            | 16.91             | 45.15            | 54.00 | -8.85  | AVG      |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11g)

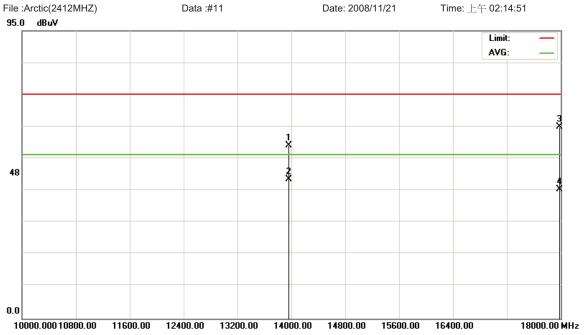
Note: CH01(2412MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 14140.00 | 37.86            | 18.84             | 56.70            | 74.00 | -17.30 | peak     |                   |                 |         |
| 2   | *  | 14140.00 | 26.99            | 18.84             | 45.83            | 54.00 | -8.17  | AVG      |                   |                 |         |
| 3   |    | 17980.00 | 37.48            | 25.21             | 62.69            | 74.00 | -11.31 | peak     |                   |                 |         |
| 4   |    | 17980.00 | 17.33            | 25.21             | 42.54            | 54.00 | -11.46 | AVG      |                   |                 |         |



## **Radiated Emission Measurement**



Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11g)

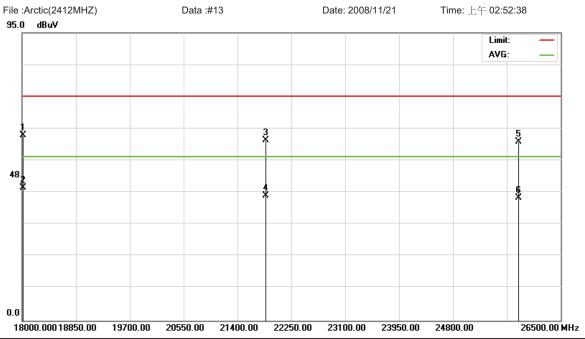
Note: CH01(2412MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 13960.00 | 38.58            | 18.57             | 57.15            | 74.00 | -16.85 | peak     |                   |                 |         |
| 2   | *  | 13960.00 | 27.50            | 18.57             | 46.07            | 54.00 | -7.93  | AVG      |                   |                 |         |
| 3   |    | 17980.00 | 38.19            | 25.21             | 63.40            | 74.00 | -10.60 | peak     |                   |                 |         |
| 4   |    | 17980.00 | 17.36            | 25.21             | 42.57            | 54.00 | -11.43 | AVG      |                   |                 |         |

\*:Maximum data x:Over limit !:over margin





Site Polarization: Vertical Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

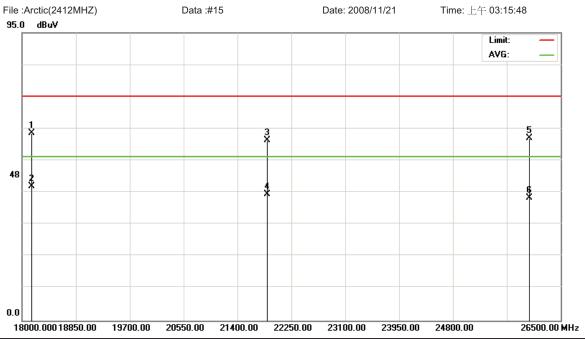
M/N: 08-0270-E Mode: WIFI(11g)

Note: CH01(2412MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  |                   |                  | •     |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | c. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 18021.25 | 37.95            | 23.28             | 61.23            | 74.00 | -12.77 | peak     |                   |                 |         |
| 2   | *  | 18021.25 | 20.45            | 23.28             | 43.73            | 54.00 | -10.27 | AVG      |                   |                 |         |
| 3   |    | 21846.25 | 38.18            | 21.20             | 59.38            | 74.00 | -14.62 | peak     |                   |                 |         |
| 4   |    | 21846.25 | 20.00            | 21.20             | 41.20            | 54.00 | -12.80 | AVG      |                   |                 |         |
| 5   |    | 25841.25 | 40.23            | 18.69             | 58.92            | 74.00 | -15.08 | peak     | -                 |                 |         |
| 6   |    | 25841.25 | 21.91            | 18.69             | 40.60            | 54.00 | -13.40 | AVG      |                   | -               |         |





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH01(2412MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  | •                 |                  | •     |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 18148.75 | 38.57            | 23.22             | 61.79            | 74.00 | -12.21 | peak     |                   |                 |         |
| 2   | *  | 18148.75 | 20.96            | 23.22             | 44.18            | 54.00 | -9.82  | AVG      |                   |                 |         |
| 3   |    | 21867.50 | 38.33            | 21.19             | 59.52            | 74.00 | -14.48 | peak     |                   |                 |         |
| 4   |    | 21867.50 | 20.43            | 21.19             | 41.62            | 54.00 | -12.38 | AVG      |                   |                 |         |
| 5   |    | 26011.25 | 41.68            | 18.54             | 60.22            | 74.00 | -13.78 | peak     | -                 |                 |         |
| 6   |    | 26011.25 | 21.96            | 18.54             | 40.50            | 54.00 | -13.50 | AVG      | -                 |                 |         |



# 3.6.5 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK

Test Mode : 802.11g CH6 2437.000 (Local Frequency: 2437.000 MHz)

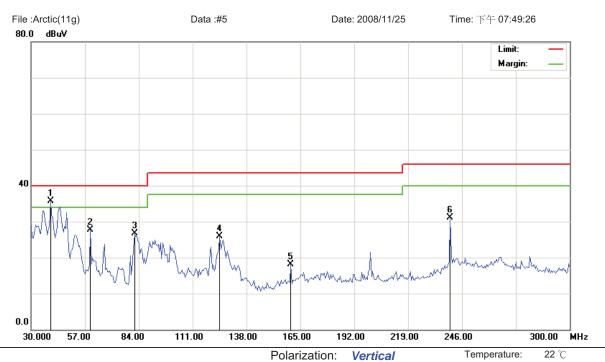
Test Date : 11/12 ~ 11/25/2008

Please refer to next pager of detail testing data.

## Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





60 %

Site Limit: FCC Class B 3M Radiation

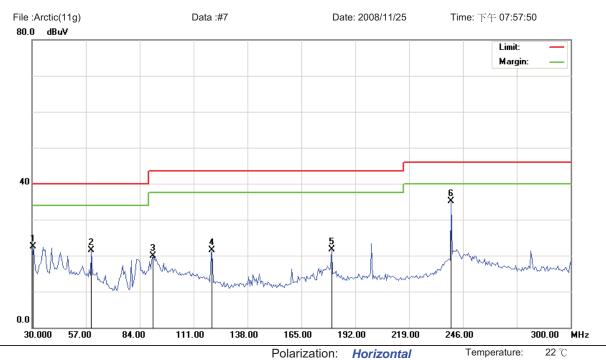
Limit: FCC Class B 3M Radiation Power:

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g) Note: CH06(2437MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   | *   | 39.7200  | 47.61            | -11.96            | 35.65            | 40.00 | -4.35  | peak     |                   |                 |         |
| 2   |     | 59.7000  | 40.27            | -12.52            | 27.75            | 40.00 | -12.25 | peak     |                   |                 |         |
| 3   |     | 81.8399  | 42.49            | -15.88            | 26.61            | 40.00 | -13.39 | peak     |                   |                 |         |
| 4   |     | 124.5000 | 40.78            | -14.95            | 25.83            | 43.50 | -17.67 | peak     |                   |                 |         |
| 5   |     | 160.1400 | 33.61            | -15.49            | 18.12            | 43.50 | -25.38 | peak     |                   |                 |         |
| 6   | :   | 240.0600 | 42.62            | -11.43            | 31.19            | 46.00 | -14.81 | peak     |                   |                 |         |





60 %

•Reference Only

Site

Limit: FCC Class B 3M Radiation

EUT: Distance: 3m

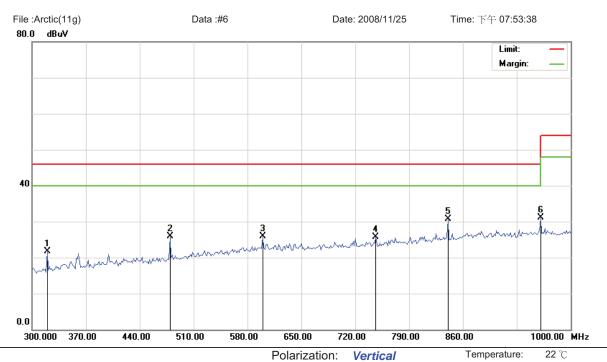
M/N: 08-0270-E Mode: WIFI(11g) Note: CH06(2437MHz)

| No. Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|---------|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|         | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1       | 30.5400  | 35.81            | -13.31            | 22.50            | 40.00 | -17.50 | peak     |                   |                 |         |
| 2       | 59.7000  | 33.97            | -12.52            | 21.45            | 40.00 | -18.55 | peak     |                   |                 |         |
| 3       | 90.4800  | 32.88            | -13.07            | 19.81            | 43.50 | -23.69 | peak     |                   |                 |         |
| 4       | 120.1800 | 35.81            | -14.23            | 21.58            | 43.50 | -21.92 | peak     |                   |                 |         |
| 5       | 180.1200 | 36.00            | -14.31            | 21.69            | 43.50 | -21.81 | peak     |                   |                 |         |
| 6 *     | 240.0600 | 46.51            | -11.43            | 35.08            | 46.00 | -10.92 | peak     |                   |                 |         |

Power:

\*:Maximum data x:Over limit !:over margin





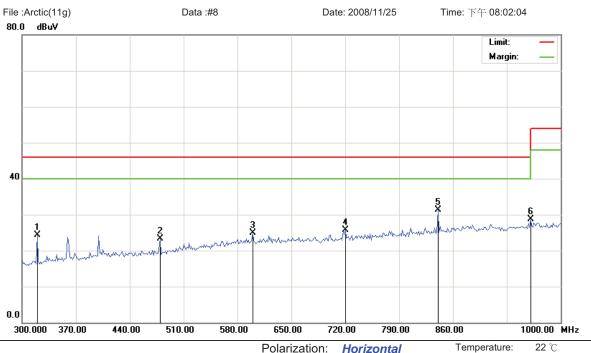
60 %

Site Limit: FCC Class B 3M Radiation

M/N: 08-0270-E Mode: WIFI(11g) Note: CH06(2437MHz)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 319.6000 | 31.62            | -9.82             | 21.80            | 46.00 | -24.20 | peak     |                   |                 |         |
| 2   |    | 479.2000 | 33.46            | -7.60             | 25.86            | 46.00 | -20.14 | peak     |                   |                 |         |
| 3   |    | 599.6000 | 30.79            | -4.91             | 25.88            | 46.00 | -20.12 | peak     |                   |                 |         |
| 4   |    | 746.6000 | 28.76            | -3.11             | 25.65            | 46.00 | -20.35 | peak     |                   |                 |         |
| 5   | *  | 840.4000 | 32.05            | -1.41             | 30.64            | 46.00 | -15.36 | peak     |                   |                 |         |
| 6   |    | 960.8000 | 30.69            | 0.48              | 31.17            | 54.00 | -22.83 | peak     |                   |                 |         |





60 %

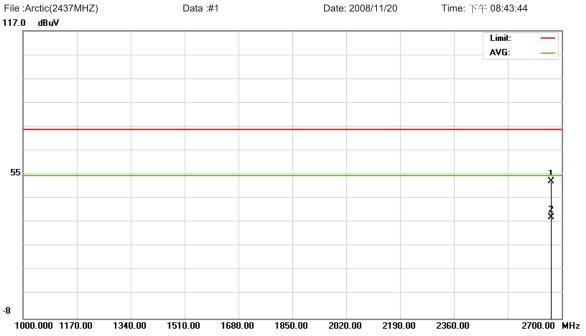
Site Polarization: Horizontal Temperature:
Limit: FCC Class B 3M Radiation Power: Humidity:

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g) Note: CH06(2437MHz)

| No. | Mł | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 319.6000 | 34.13            | -9.82             | 24.31            | 46.00 | -21.69 | peak     |                   |                 |         |
| 2   |    | 479.2000 | 30.85            | -7.60             | 23.25            | 46.00 | -22.75 | peak     |                   |                 |         |
| 3   |    | 599.6000 | 29.72            | -4.91             | 24.81            | 46.00 | -21.19 | peak     |                   |                 |         |
| 4   |    | 720.0000 | 29.21            | -3.55             | 25.66            | 46.00 | -20.34 | peak     |                   |                 |         |
| 5   | *  | 840.4000 | 32.79            | -1.41             | 31.38            | 46.00 | -14.62 | peak     |                   |                 |         |
| 6   |    | 960.8000 | 28.23            | 0.48              | 28.71            | 54.00 | -25.29 | peak     |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

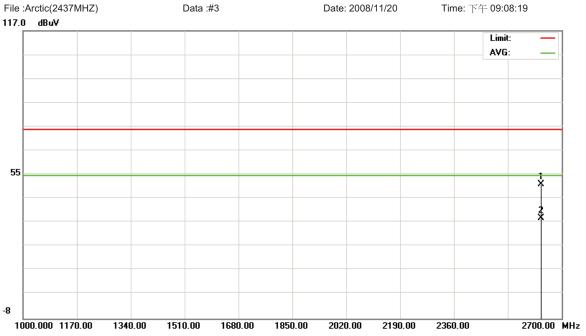
M/N: 08-0270-E Mode: WIFI(11g)

Note: CH06(2437MHz)Antenna 167.4cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | κ. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2666.000 | 50.57            | 0.98              | 51.55            | 74.00 | -22.45 | peak     |                   |        |         |
| 2   | *  | 2666.000 | 34.80            | 0.98              | 35.78            | 54.00 | -18.22 | AVG      |                   |        |         |





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH06(2437MHz)Antenna 147.6cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | M | k.  | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|---|-----|--------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |   |     | MHz    | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |   | 263 | 35.400 | 49.31            | 0.95              | 50.26            | 74.00 | -23.74 | peak     |                   |        |         |
| 2   | * | 263 | 35.400 | 34.79            | 0.95              | 35.74            | 54.00 | -18.26 | AVG      |                   |        |         |





Site Polarization: Vertical Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH06(2437MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 2700.000 | 41.98            | 22.58             | 64.56            | 74.00 | -9.44  | peak     |                   |                 |         |
| 2   |    | 2700.000 | 21.58            | 22.58             | 44.16            | 54.00 | -9.84  | AVG      |                   |                 |         |
| 3   |    | 4874.000 | 38.87            | 7.72              | 46.59            | 74.00 | -27.41 | peak     |                   |                 |         |
| 4   |    | 4874.000 | 28.00            | 7.72              | 35.72            | 54.00 | -18.28 | AVG      |                   |                 |         |
| 5   |    | 9635.000 | 39.78            | 17.06             | 56.84            | 74.00 | -17.16 | peak     |                   |                 |         |
| 6   | *  | 9635.000 | 27.58            | 17.06             | 44.64            | 54.00 | -9.36  | AVG      |                   |                 |         |





Site Polarization: Horizontal Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

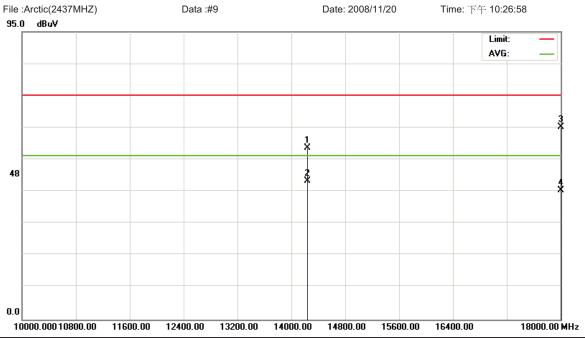
M/N: 08-0270-E Mode: WIFI(11g)

Note: CH06(2437MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 2700.000 | 42.35            | 22.58             | 64.93            | 74.00 | -9.07  | peak     |                   |                 |         |
| 2   |    | 2700.000 | 21.47            | 22.58             | 44.05            | 54.00 | -9.95  | AVG      |                   |                 |         |
| 3   |    | 4874.000 | 37.91            | 7.72              | 45.63            | 74.00 | -28.37 | peak     |                   |                 |         |
| 4   |    | 4874.000 | 27.97            | 7.72              | 35.69            | 54.00 | -18.31 | AVG      |                   |                 |         |
| 5   |    | 9927.000 | 38.63            | 17.78             | 56.41            | 74.00 | -17.59 | peak     |                   |                 |         |
| 6   | *  | 9927.000 | 27.48            | 17.78             | 45.26            | 54.00 | -8.74  | AVG      |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH06(2437MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  | ,                 | , 0              | `     |        | ,        |                   |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 14240.00 | 37.93            | 18.71             | 56.64            | 74.00 | -17.36 | peak     |                   |        |         |
| 2   | *  | 14240.00 | 27.09            | 18.71             | 45.80            | 54.00 | -8.20  | AVG      |                   |        |         |
| 3   |    | 18000.00 | 37.95            | 25.57             | 63.52            | 74.00 | -10.48 | peak     |                   | ·      |         |
| 4   |    | 18000.00 | 17.10            | 25.57             | 42.67            | 54.00 | -11.33 | AVG      |                   |        |         |





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

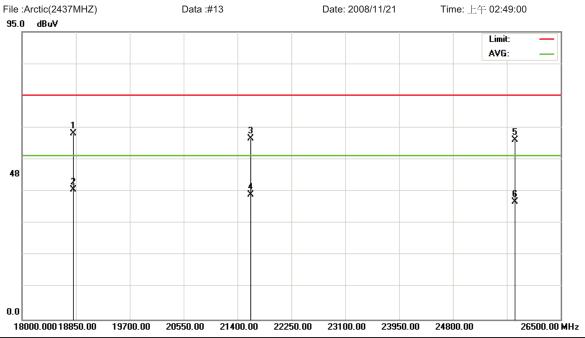
M/N: 08-0270-E Mode: WIFI(11g)

Note: CH06(2437MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 14120.00 | 38.55            | 18.87             | 57.42            | 74.00 | -16.58 | peak     |                   |                 |         |
| 2   | *  | 14120.00 | 27.58            | 18.87             | 46.45            | 54.00 | -7.55  | AVG      |                   |                 |         |
| 3   |    | 17980.00 | 37.97            | 25.21             | 63.18            | 74.00 | -10.82 | peak     |                   |                 |         |
| 4   |    | 17980.00 | 17.50            | 25.21             | 42.71            | 54.00 | -11.29 | AVG      |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

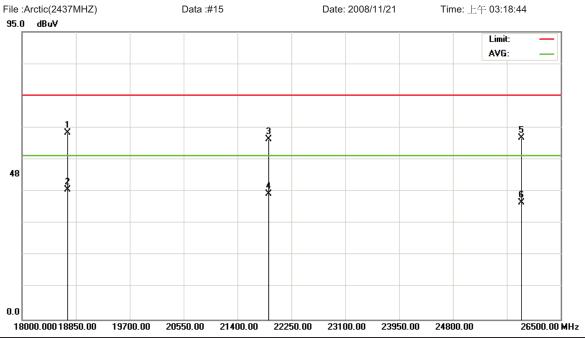
M/N: 08-0270-E Mode: WIFI(11g)

Note: CH06(2437MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  | ,                 | ,                | ٠ ,   |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 18807.50 | 38.22            | 23.16             | 61.38            | 74.00 | -12.62 | peak     |                   |                 |         |
| 2   | *  | 18807.50 | 19.62            | 23.16             | 42.78            | 54.00 | -11.22 | AVG      |                   |                 |         |
| 3   |    | 21612.50 | 38.42            | 21.28             | 59.70            | 74.00 | -14.30 | peak     |                   |                 |         |
| 4   |    | 21612.50 | 19.99            | 21.28             | 41.27            | 54.00 | -12.73 | AVG      |                   |                 |         |
| 5   |    | 25777.50 | 40.46            | 18.74             | 59.20            | 74.00 | -14.80 | peak     | -                 |                 |         |
| 6   |    | 25777.50 | 20.15            | 18.74             | 38.89            | 54.00 | -15.11 | AVG      | -                 |                 |         |





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH06(2437MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  |                   |                  | •     |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 18722.50 | 38.52            | 23.12             | 61.64            | 74.00 | -12.36 | peak     |                   |                 |         |
| 2   | *  | 18722.50 | 19.67            | 23.12             | 42.79            | 54.00 | -11.21 | AVG      |                   |                 |         |
| 3   |    | 21888.75 | 38.40            | 21.18             | 59.58            | 74.00 | -14.42 | peak     |                   |                 |         |
| 4   |    | 21888.75 | 20.33            | 21.18             | 41.51            | 54.00 | -12.49 | AVG      |                   |                 |         |
| 5   |    | 25883.75 | 41.24            | 18.65             | 59.89            | 74.00 | -14.11 | peak     | -                 |                 |         |
| 6   |    | 25883.75 | 19.97            | 18.65             | 38.62            | 54.00 | -15.38 | AVG      |                   | -               |         |



# 3.6.6 Open Field Radiated Emissions (Subpart C)

The highest peak values of radiated emissions from the EUT at various antenna heights, antenna polarization, EUT orientation, etc. are recorded on the following.

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK

Test Mode : 802.11g CH11 2462.000 (Local Frequency: 2462.000 MHz)

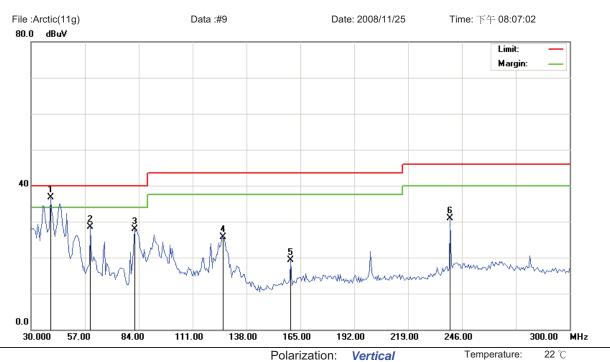
Test Date : 11/12 ~ 11/25/2008

Please refer to next pager of detail testing data.

## Notes:

- 1. Margin= Amplitude Limits
- 2. Distance of Measurement: 3 Meter (30-1000MHz) & (1-10GHz), 1 Meter (10-26.5GHz)
- 3. Height of table for EUT placed: 0.8 Meter.
- 4. ANT= Antenna height.
- 5. Amplitude= Reading Amplitude Amplifier gain + Cable loss + Antenna factor (Auto calculate in spectrum analyzer)
- 6. The EUT was worst case on X axis after pretest on X & Y & Z axis setting.
- 7. The testing data only show below 18GHz's data because measure data above 18GHz was only ambit noise.
- 8. All frequencies from 30MHz to 26.5GHz have been tested





Site Limit: FCC Class B 3M Radiation

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g) Note: CH11(2462MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   | *   | 39.7200  | 48.61            | -11.96            | 36.65            | 40.00 | -3.35  | peak     |                   |                 |         |
| 2   |     | 59.7000  | 40.93            | -12.52            | 28.41            | 40.00 | -11.59 | peak     |                   |                 |         |
| 3   |     | 81.8399  | 43.83            | -15.88            | 27.95            | 40.00 | -12.05 | peak     |                   |                 |         |
| 4   | ,   | 126.1200 | 40.97            | -15.17            | 25.80            | 43.50 | -17.70 | peak     |                   |                 |         |
| 5   | ,   | 160.1400 | 34.78            | -15.49            | 19.29            | 43.50 | -24.21 | peak     |                   |                 |         |
| 6   | 2   | 240.0600 | 42.30            | -11.43            | 30.87            | 46.00 | -15.13 | peak     |                   |                 |         |

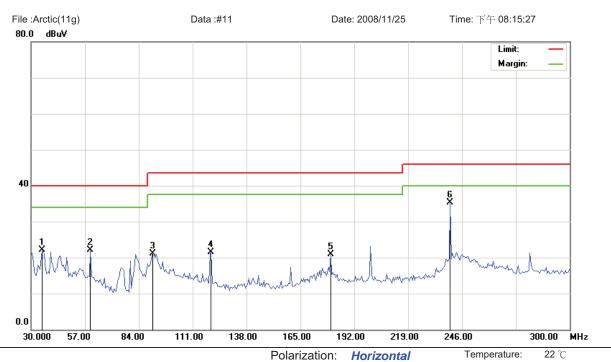
1/12

Power:

\*:Maximum data x:Over limit !:over margin Humidity:

60 %





Site Limit: FCC Class B 3M Radiation

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g) Note: CH11(2462MHz)

| No. | Mk. | Freq.    | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |     | 35.4000  | 35.18            | -13.09            | 22.09            | 40.00 | -17.91 | peak     |                   |                 |         |
| 2   |     | 59.7000  | 34.54            | -12.52            | 22.02            | 40.00 | -17.98 | peak     |                   |                 |         |
| 3   |     | 91.0199  | 33.98            | -12.95            | 21.03            | 43.50 | -22.47 | peak     |                   |                 |         |
| 4   | •   | 120.1800 | 35.72            | -14.23            | 21.49            | 43.50 | -22.01 | peak     |                   |                 |         |
| 5   | •   | 180.1200 | 35.12            | -14.31            | 20.81            | 43.50 | -22.69 | peak     |                   |                 |         |
| 6   | * 2 | 240.0600 | 46.76            | -11.43            | 35.33            | 46.00 | -10.67 | peak     |                   |                 |         |

Power:

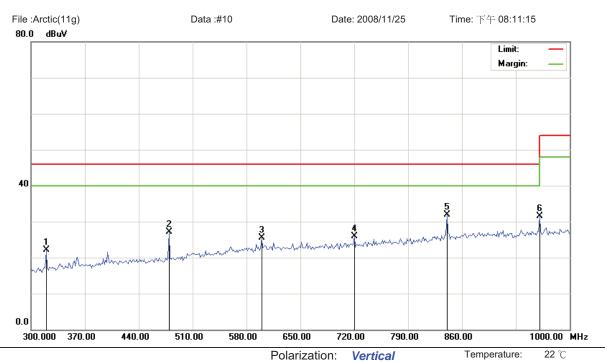
\*:Maximum data x:Over limit !:over margin

•Reference Only

Humidity:

60 %





60 %

Site Limit: FCC Class B 3M Radiation

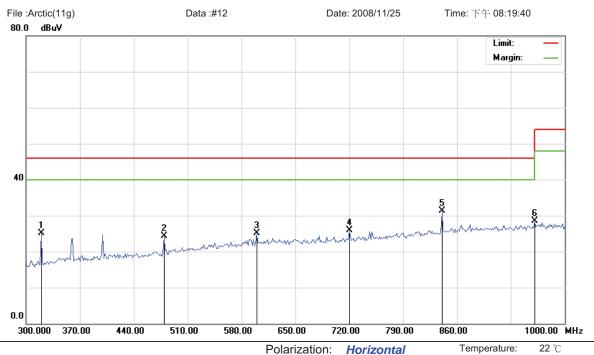
Limit: FCC Class B 3M Radiation Power:

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g) Note: CH11(2462MHz)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 319.6000 | 31.93            | -9.82             | 22.11            | 46.00 | -23.89 | peak     |                   |                 |         |
| 2   |    | 479.2000 | 34.70            | -7.60             | 27.10            | 46.00 | -18.90 | peak     |                   |                 |         |
| 3   |    | 599.6000 | 30.45            | -4.91             | 25.54            | 46.00 | -20.46 | peak     |                   |                 |         |
| 4   |    | 720.0000 | 29.47            | -3.55             | 25.92            | 46.00 | -20.08 | peak     |                   |                 |         |
| 5   | *  | 840.4000 | 33.32            | -1.41             | 31.91            | 46.00 | -14.09 | peak     |                   |                 |         |
| 6   |    | 960.8000 | 30.97            | 0.48              | 31.45            | 54.00 | -22.55 | peak     |                   |                 |         |





60 %

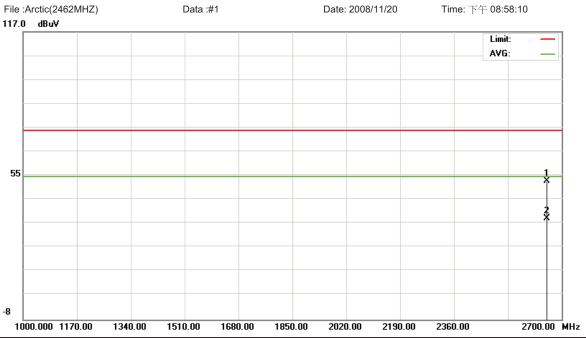
Site Polarization: Horizontal
Limit: FCC Class B 3M Radiation Power:

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g) Note: CH11(2462MHz)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 319.6000 | 34.93            | -9.82             | 25.11            | 46.00 | -20.89 | peak     |                   |                 |         |
| 2   |    | 479.2000 | 31.81            | -7.60             | 24.21            | 46.00 | -21.79 | peak     |                   |                 |         |
| 3   |    | 599.6000 | 30.05            | -4.91             | 25.14            | 46.00 | -20.86 | peak     |                   |                 |         |
| 4   |    | 720.0000 | 29.40            | -3.55             | 25.85            | 46.00 | -20.15 | peak     |                   |                 |         |
| 5   | *  | 840.4000 | 32.67            | -1.41             | 31.26            | 46.00 | -14.74 | peak     |                   |                 |         |
| 6   |    | 960.8000 | 28.06            | 0.48              | 28.54            | 54.00 | -25.46 | peak     |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH11(2462MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2652.400 | 51.22            | 0.95              | 52.17            | 74.00 | -21.83 | peak     |                   |        |         |
| 2   | *  | 2652.400 | 34.82            | 0.95              | 35.77            | 54.00 | -18.23 | AVG      |                   |        |         |

\*:Maximum data x:Over limit !:over margin

•Reference Only





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH11(2462MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2652.400 | 51.00            | 0.95              | 51.95            | 74.00 | -22.05 | peak     |                   |        |         |
| 2   | *  | 2652.400 | 34.83            | 0.95              | 35.78            | 54.00 | -18.22 | AVG      |                   |        |         |

\*:Maximum data x:Over limit !:over margin





Site Polarization: Vertical Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH11(2462MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   | 2   | 700.000 | 41.28            | 22.58             | 63.86            | 74.00 | -10.14 | peak     |                   |                 |         |
| 2   | 2   | 700.000 | 21.47            | 22.58             | 44.05            | 54.00 | -9.95  | AVG      |                   |                 |         |
| 3   | 4   | 924.000 | 38.43            | 7.65              | 46.08            | 74.00 | -27.92 | peak     |                   |                 |         |
| 4   | 4   | 924.000 | 27.84            | 7.65              | 35.49            | 54.00 | -18.51 | AVG      |                   |                 |         |
| 5   | 9   | 324.750 | 39.50            | 16.91             | 56.41            | 74.00 | -17.59 | peak     |                   |                 |         |
| 6   | * 9 | 324.750 | 28.24            | 16.91             | 45.15            | 54.00 | -8.85  | AVG      |                   |                 |         |





Site Temperature: 22 ℃ Polarization: Horizontal 60 %

Humidity: Limit: FCC part 15 (PK) Power:

EUT: Distance: 3m

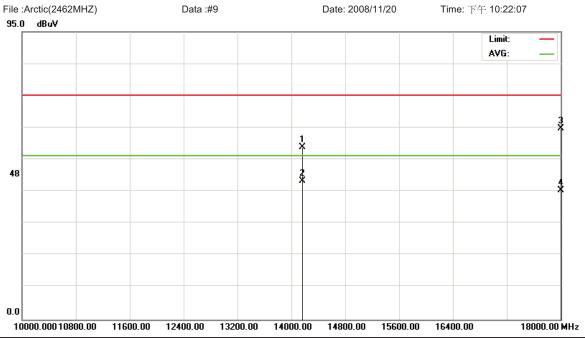
M/N: 08-0270-E Mode: WIFI(11g)

Note: CH11(2462MHz)Antenna 100cm

2.7G-10G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| Иk. Freq. | Reading  | Correct  | Measure-   |  |  |   | Λ 1  | T 11   |  |
|-----------|--|--|--|--|--|---|--|--|--|
|           | Level  | Factor   | ment   | Limit  | Over   |   | Antenna<br>Height  | Table<br>Degree  |  |
| MHz       | dBuV   | dB   | dBuV   | dBuV   | dB   | Detector  | cm   | degree   | Comment  |
| 2700.000  | 41.55  | 22.58  | 64.13  | 74.00  | -9.87  | peak  |  |  |  |
| 2700.000  | 21.48  | 22.58  | 44.06  | 54.00  | -9.94  | AVG   |  |  |  |
| 4924.000  | 39.05  | 7.65   | 46.70  | 74.00  | -27.30   | peak  |  |  |  |
| 4924.000  | 27.84  | 7.65   | 35.49  | 54.00  | -18.51   | AVG   |  |  |  |
| 9872.250  | 38.43  | 17.84  | 56.27  | 74.00  | -17.73   | peak  |  |  |  |
| 9872.250  | 27.56  | 17.84  | 45.40  | 54.00  | -8.60  | AVG   |  |  |  |
| _         | 2700.000<br>2700.000<br>4924.000<br>4924.000<br>9872.250 | 2700.000     41.55       2700.000     21.48       4924.000     39.05       4924.000     27.84       9872.250     38.43 | 2700.000     41.55     22.58       2700.000     21.48     22.58       4924.000     39.05     7.65       4924.000     27.84     7.65       9872.250     38.43     17.84 | 2700.000     41.55     22.58     64.13       2700.000     21.48     22.58     44.06       4924.000     39.05     7.65     46.70       4924.000     27.84     7.65     35.49       9872.250     38.43     17.84     56.27 | 2700.000     41.55     22.58     64.13     74.00       2700.000     21.48     22.58     44.06     54.00       4924.000     39.05     7.65     46.70     74.00       4924.000     27.84     7.65     35.49     54.00       9872.250     38.43     17.84     56.27     74.00 | 2700.000     41.55     22.58     64.13     74.00     -9.87       2700.000     21.48     22.58     44.06     54.00     -9.94       4924.000     39.05     7.65     46.70     74.00     -27.30       4924.000     27.84     7.65     35.49     54.00     -18.51       9872.250     38.43     17.84     56.27     74.00     -17.73 | 2700.000       41.55       22.58       64.13       74.00       -9.87       peak         2700.000       21.48       22.58       44.06       54.00       -9.94       AVG         4924.000       39.05       7.65       46.70       74.00       -27.30       peak         4924.000       27.84       7.65       35.49       54.00       -18.51       AVG         9872.250       38.43       17.84       56.27       74.00       -17.73       peak | 2700.000       41.55       22.58       64.13       74.00       -9.87       peak         2700.000       21.48       22.58       44.06       54.00       -9.94       AVG         4924.000       39.05       7.65       46.70       74.00       -27.30       peak         4924.000       27.84       7.65       35.49       54.00       -18.51       AVG         9872.250       38.43       17.84       56.27       74.00       -17.73       peak | 2700.000       41.55       22.58       64.13       74.00       -9.87       peak         2700.000       21.48       22.58       44.06       54.00       -9.94       AVG         4924.000       39.05       7.65       46.70       74.00       -27.30       peak         4924.000       27.84       7.65       35.49       54.00       -18.51       AVG         9872.250       38.43       17.84       56.27       74.00       -17.73       peak |





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

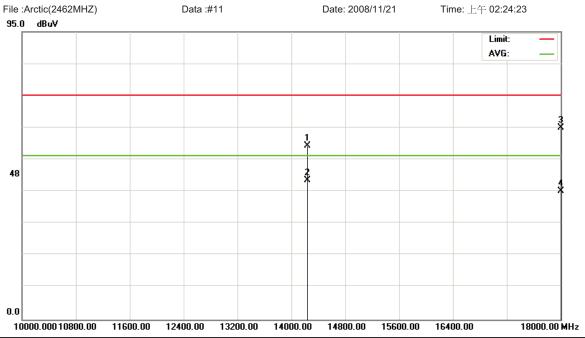
M/N: 08-0270-E Mode: WIFI(11g)

Note: CH11(2462MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  | •                 |                  | `     |        | ,        |                   |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 14160.00 | 38.07            | 18.83             | 56.90            | 74.00 | -17.10 | peak     |                   |        |         |
| 2   | *  | 14160.00 | 27.00            | 18.83             | 45.83            | 54.00 | -8.17  | AVG      |                   |        |         |
| 3   |    | 18000.00 | 37.39            | 25.57             | 62.96            | 74.00 | -11.04 | peak     |                   |        |         |
| 4   |    | 18000.00 | 17.10            | 25.57             | 42.67            | 54.00 | -11.33 | AVG      |                   |        |         |





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

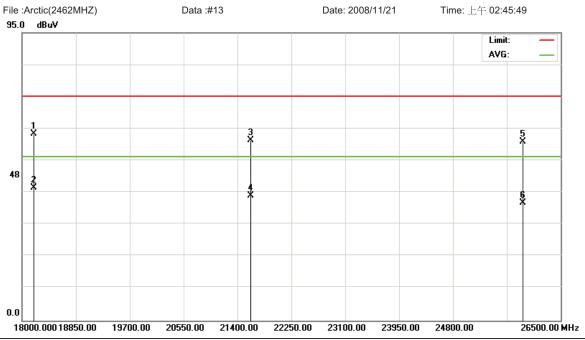
M/N: 08-0270-E Mode: WIFI(11g)

Note: CH11(2462MHz)Antenna 100cm

10G - 18G PK Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 14240.00 | 38.67            | 18.71             | 57.38            | 74.00 | -16.62 | peak     |                   |                 |         |
| 2   | *  | 14240.00 | 27.26            | 18.71             | 45.97            | 54.00 | -8.03  | AVG      |                   |                 |         |
| 3   |    | 18000.00 | 37.79            | 25.57             | 63.36            | 74.00 | -10.64 | peak     |                   |                 |         |
| 4   |    | 18000.00 | 16.90            | 25.57             | 42.47            | 54.00 | -11.53 | AVG      |                   |                 |         |





Site Polarization: Vertical Temperature: 22 °C
Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11g)

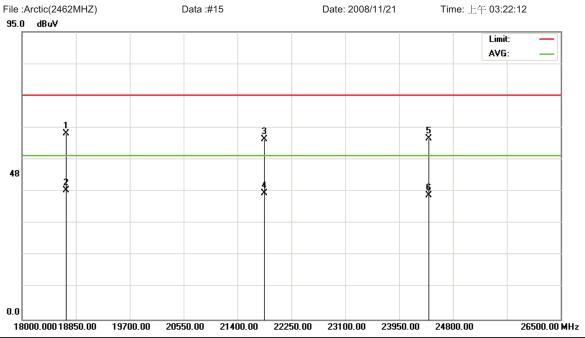
Note: CH11(2462MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  |                   |                  | •     |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 18191.25 | 38.50            | 23.22             | 61.72            | 74.00 | -12.28 | peak     |                   |                 |         |
| 2   | *  | 18191.25 | 20.70            | 23.22             | 43.92            | 54.00 | -10.08 | AVG      |                   |                 |         |
| 3   |    | 21612.50 | 38.16            | 21.28             | 59.44            | 74.00 | -14.56 | peak     |                   |                 |         |
| 4   |    | 21612.50 | 19.97            | 21.28             | 41.25            | 54.00 | -12.75 | AVG      |                   |                 |         |
| 5   |    | 25905.00 | 40.39            | 18.63             | 59.02            | 74.00 | -14.98 | peak     | -                 |                 |         |
| 6   |    | 25905.00 | 20.17            | 18.63             | 38.80            | 54.00 | -15.20 | AVG      |                   | -               |         |

\*:Maximum data x:Over limit !:over margin •Reference Only





Site Temperature: 22 ℃ Polarization: Horizontal 60 %

Humidity: Limit: FCC part 15 (PK) Power:

EUT: Distance: 1m

M/N: 08-0270-E Mode: WIFI(11g)

Note: CH11(2462MHz)Antenna 100cm

10G - 18G AV PRE Scan Att:0; REF:95; Range:95(EUT Power Lever:255)

|     |    |          |                  |                   |                  | •     |        |          | ,                 |                 |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|-----------------|---------|
| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree          | Comment |
| 1   |    | 18701.25 | 38.31            | 23.11             | 61.42            | 74.00 | -12.58 | peak     |                   |                 |         |
| 2   | *  | 18701.25 | 19.64            | 23.11             | 42.75            | 54.00 | -11.25 | AVG      |                   |                 |         |
| 3   |    | 21825.00 | 38.40            | 21.20             | 59.60            | 74.00 | -14.40 | peak     |                   |                 |         |
| 4   |    | 21825.00 | 20.38            | 21.20             | 41.58            | 54.00 | -12.42 | AVG      |                   |                 |         |
| 5   |    | 24417.50 | 40.13            | 19.71             | 59.84            | 74.00 | -14.16 | peak     |                   |                 |         |
| 6   |    | 24417.50 | 21.16            | 19.71             | 40.87            | 54.00 | -13.13 | AVG      |                   | -               |         |

\*:Maximum data x:Over limit !:over margin •Reference Only



# 4. Maximum Conducted Output Power Requirements

#### 4.1 Test Condition & Setup:

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

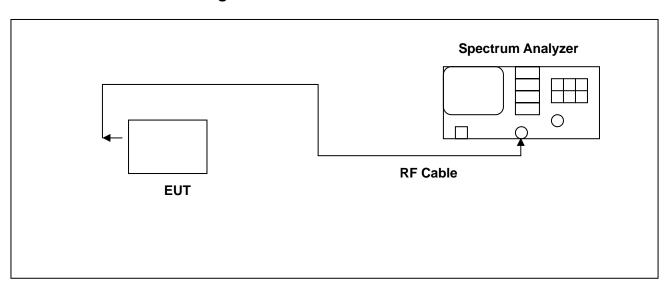
The tests below are run with the EUT's transmitter set at high power in TX mode. The EUT is needed to force selection of output power level and channel number. While testing, EUT was set to transmit continuously. Remove the Subjective device's antenna and connect the RF output port to spectrum analyzer. The maximum peak output power shall not exceed 1 watt.

Use a direct connection between the antenna port of transmitter and the spectrum Analyzer, for prevent the spectrum analyzer input attenuation 40-50 dB. Set the RBW Bandwidth of the emission or use a channel power meter mode.

For antennas with gains of 6 dBi or less, maximum allowed transmitter output is 1 watt (+30 dBm). For antennas with gains greater than 6 dBi, transmitter output level must be decreased by an amount equal to (GAIN - 6)/3 dBm.

The antenna port of the EUT was connected to the input of a power meter. Power was read directly and cable loss correction was added to the reading to obtain power at the EUT antenna terminals.

### 4.2 Test Instruments Configuration:





# 4.3 Test Equipment List:

| Describe          | Manufacturer | Model  | Serial Number | Calibration   |              |
|-------------------|--------------|--------|---------------|---------------|--------------|
| Describe          | Manufacturei | Wodel  | Serial Number | Cal. Date     | Due Date     |
| Spectrum Analyzer | Agilent      | E4445A | MY45300744    | Nov. 29, 2007 | Nov.29, 2008 |

## 4.4 Test Result:

### 802.11b

| Frequency (MHz) | Output (dBm) | Required Limit |
|-----------------|--------------|----------------|
| 2412            | -3.11        | <30dBm         |
| 2437            | -3.07        | <30dBm         |
| 2462            | -3.04        | <30dBm         |

## 802.11g

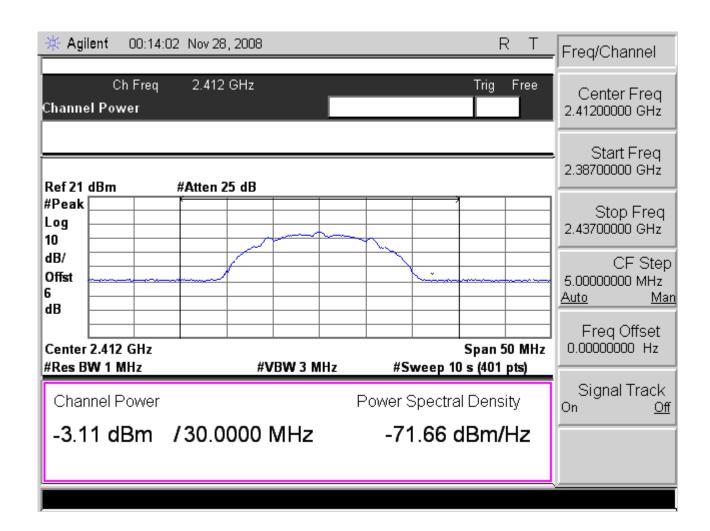
| Frequency (MHz) | Output (dBm) | Required Limit |
|-----------------|--------------|----------------|
| 2412            | 1.64         | <30dBm         |
| 2437            | 1.34         | <30dBm         |
| 2462            | 1.63         | <30dBm         |

Note: Test Graphs See next page.



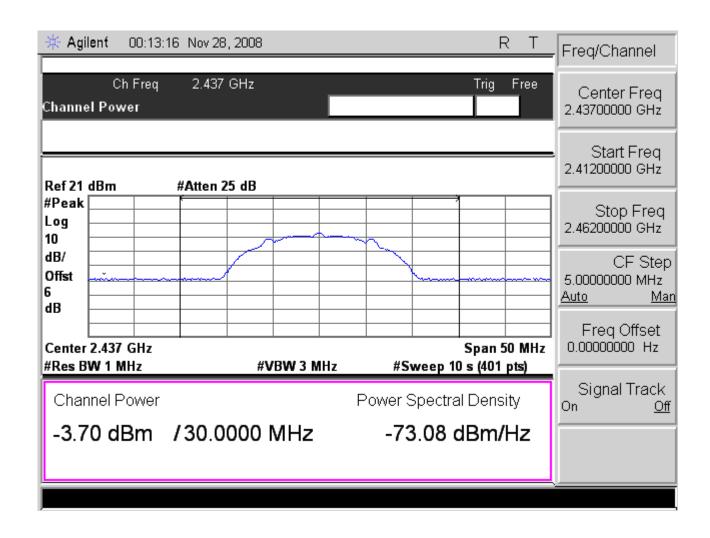
## 4.5 Test Graphs

802.11b CH1 (2412MHz)



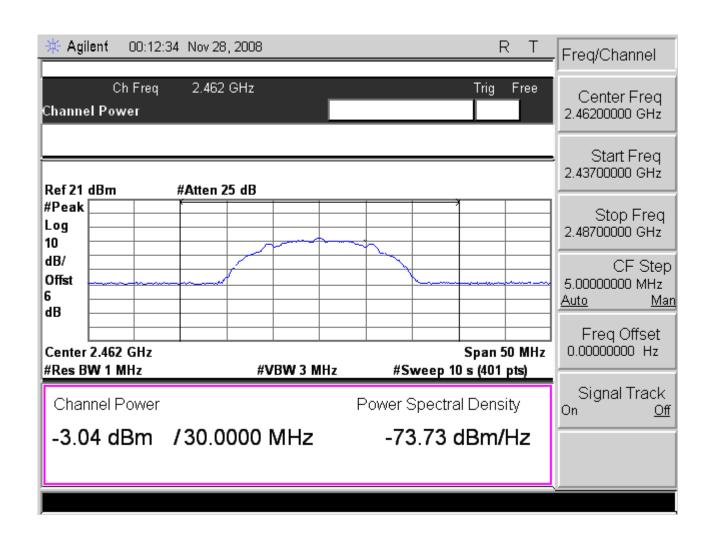


### 802.11b CH6 (2437MHz)



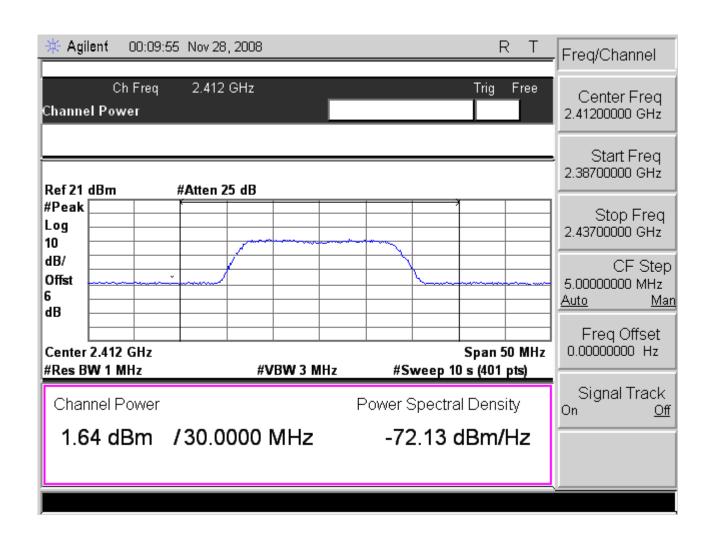


### 802.11b CH11 (2462MHz)



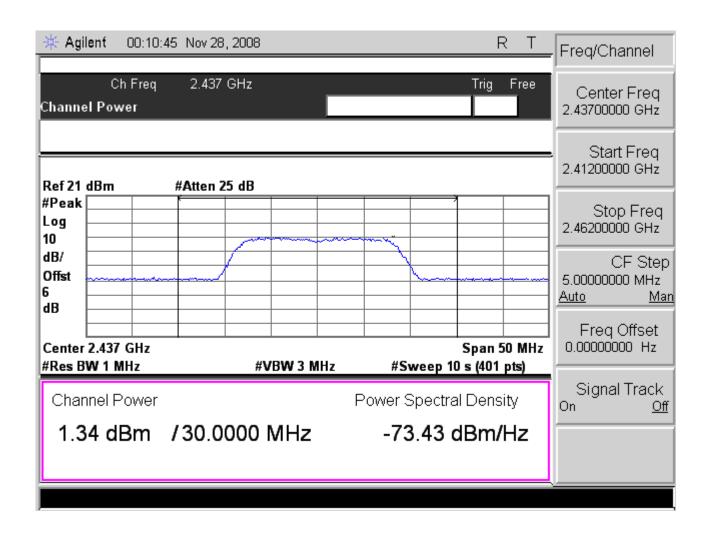


### 802.11g CH1 (2412MHz)



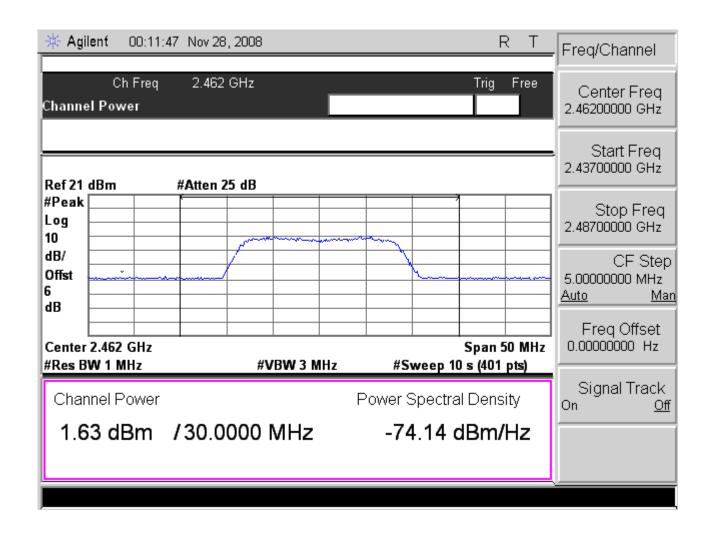


## 802.11g CH6 (2437MHz)





### 802.11g CH11 (2462MHz)





# 5. Minimum 6dB RF Bandwidth Requirements

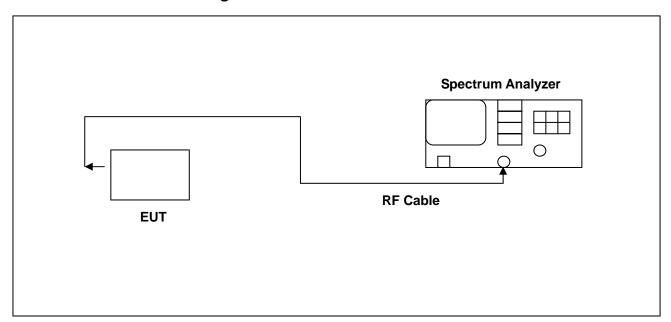
### 5.1 Test Condition & Setup:

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was set to 100 kHz. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK output reading was taken, a DISPLAY line was drawn 6 dB lower than PEAK level. The 6 dB bandwidth was determined from where the channel output spectrum intersected the display line.

The test was performed at 3 channels (Channel 1, 6, 11)

### 5.2 Test Instruments Configuration:



## 5.3 Test Equipment List:

| Describe          | Manufacturer | Model  | Serial Number   | Calibration   |               |
|-------------------|--------------|--------|-----------------|---------------|---------------|
| Describe          | Manufacture  | Wiodei | Serial Nulliber | Cal. Date     | Due Date      |
| Spectrum Analyzer | Agilent      | E4445A | MY45300744      | Nov. 29, 2007 | Nov. 29, 2008 |



## 5.4 Test Result:

### 802.11b

| Frequency (MHz) | Min. 6dB Bandwidth (MHz) | Required Limit |
|-----------------|--------------------------|----------------|
| 2412            | 13.375                   | > 500 KHz      |
| 2437            | 12.500                   | > 500 KHz      |
| 2462            | 14.250                   | > 500 KHz      |

# 802.11g

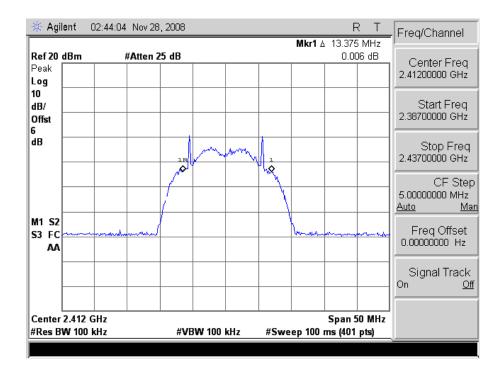
| Frequency (MHz) | Min. 6dB Bandwidth (MHz) | Required Limit |
|-----------------|--------------------------|----------------|
| 2412            | 16.500                   | > 500 KHz      |
| 2437            | 16.500                   | > 500 KHz      |
| 2462            | 16.500                   | > 500 KHz      |

Note: Test Graphs See next page.

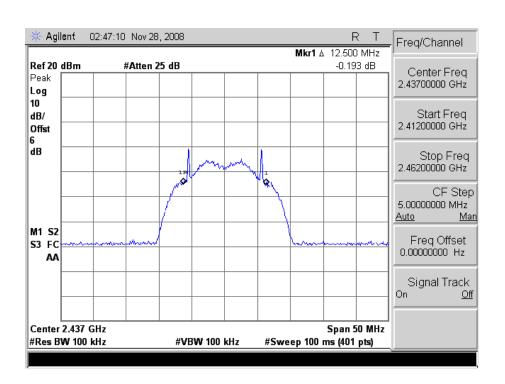


### 5.5 Test Graphs

#### 802.11b (2412MHz)

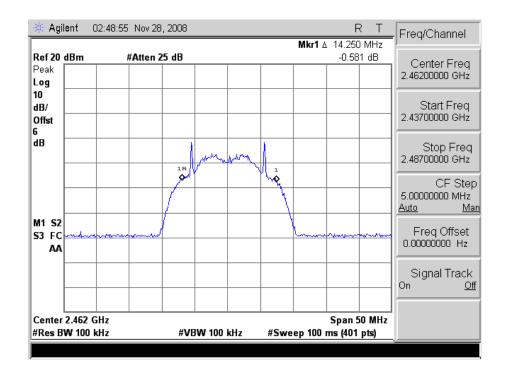


#### 802.11b (2437MHz)



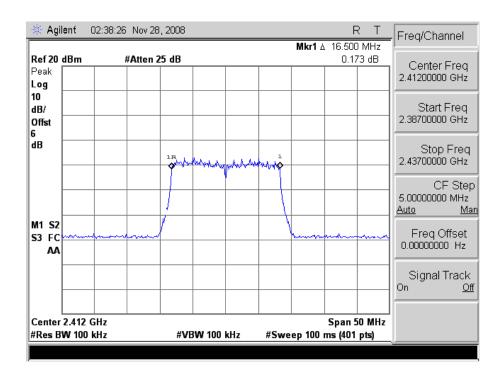


## 802.11b (2462MHz)

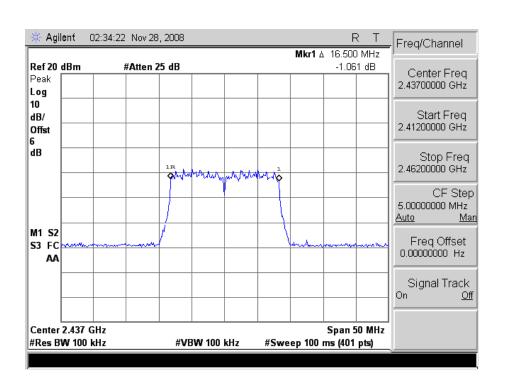




#### 802.11g (2412MHz)

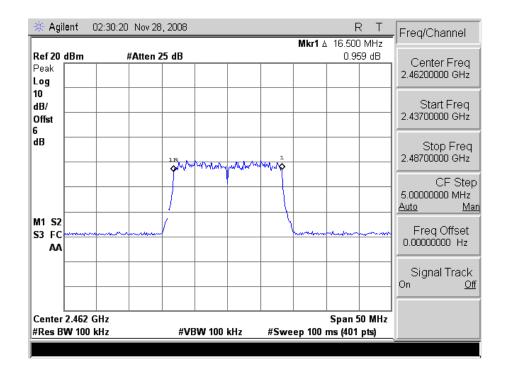


## 802.11g (2437MHz)





## 802.11g (2462MHz)





# 6. Maximum Power Density Requirements

#### 6.1 <u>Test Condition & Setup:</u>

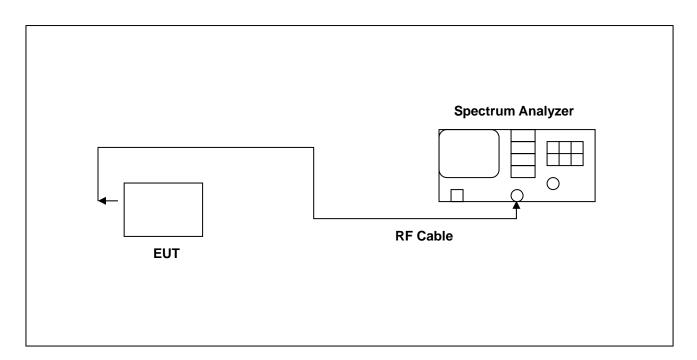
The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The spectrum analyzer RES BW was set to 3 kHz. The START and STOP frequencies were set to the band edges of the maximum output pass band. If there is no clear maximum amplitude in any given portion of the band, it may be necessary to make measurements at a number of bands defined by several START and STOP frequency pairs. The specification calls for a 1 second interval at each 3 kHz bandwidth; total SWEEP TIME is calculated as follows:

SWEEP TIME (SEC) = (Fstop, kHz - Fstart, kHz)/3 kHz

Antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

### 6.2 Test Instruments Configuration:





# 6.3 Test Equipment List:

| Describe          | Manufacturer | Model  | Serial Number   | Calibration   |               |
|-------------------|--------------|--------|-----------------|---------------|---------------|
| Describe          | Manufacture  | Wodel  | Serial Nulliber | Cal. Date     | Due Date      |
| Spectrum Analyzer | Agilent      | E4445A | MY45300744      | Nov. 29, 2007 | Nov. 29, 2008 |

# 6.4 Test Result:

#### 802.11b

| Frequency (MHz) | Power Density (dBm) | Required Limit |
|-----------------|---------------------|----------------|
| 2412            | -30.36              | <8dBm          |
| 2437            | -31.60              | <8dBm          |
| 2462            | -32.85              | <8dBm          |

## 802.11g

| Frequency (MHz) | Power Density (dBm) | Required Limit |
|-----------------|---------------------|----------------|
| 2412            | -16.03              | <8dBm          |
| 2437            | -17.24              | <8dBm          |
| 2462            | -16.59              | <8dBm          |

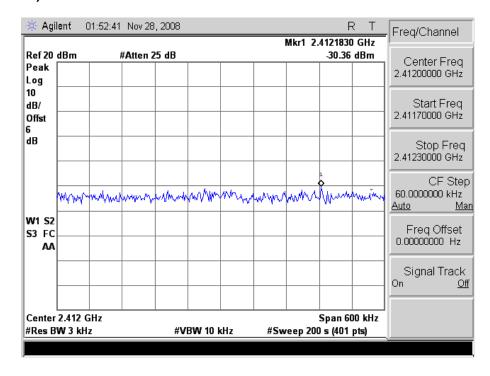
### Note:

- 1. Frequency Span= 600 kHz
- 2. Sweep Time = Frequency Span/3 kHz=200secs
- 3. Test Graphs See next page.

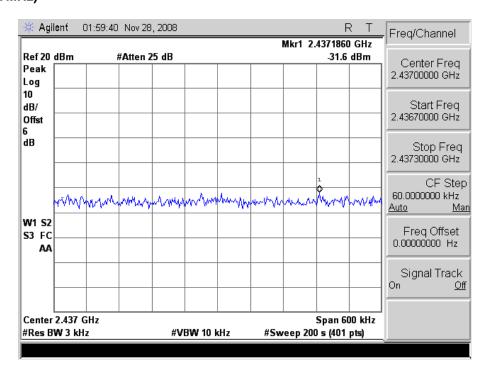


### 6.5 Test Graphs

#### 802.11b (2412MHz)

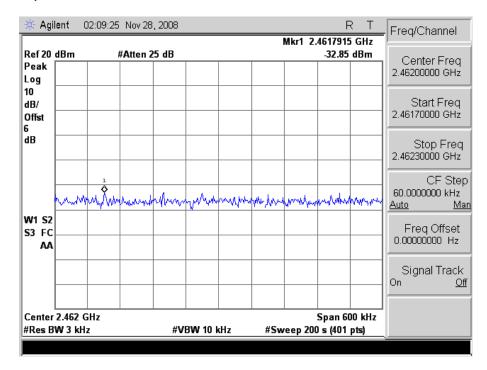


#### 802.11b (2437MHz)



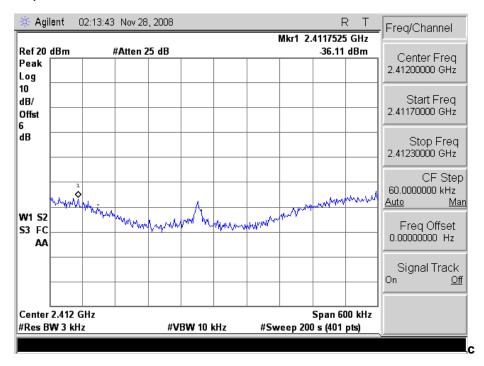


### 802.11b (2462MHz)

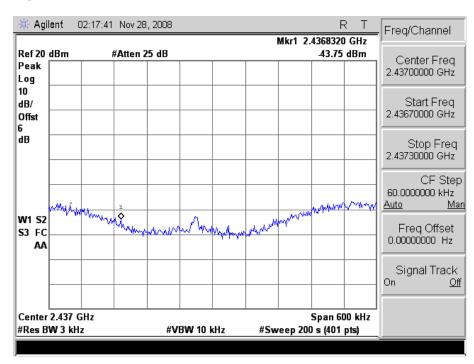




#### 802.11g (2412MHz)

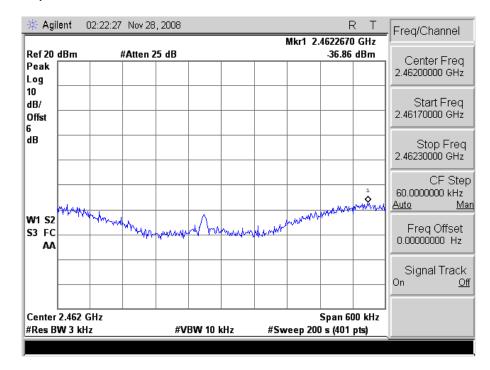


### 802.11g (2437MHz)





## 802.11g (2462MHz)





# 7. Out of Band Conducted Emissions Requirements

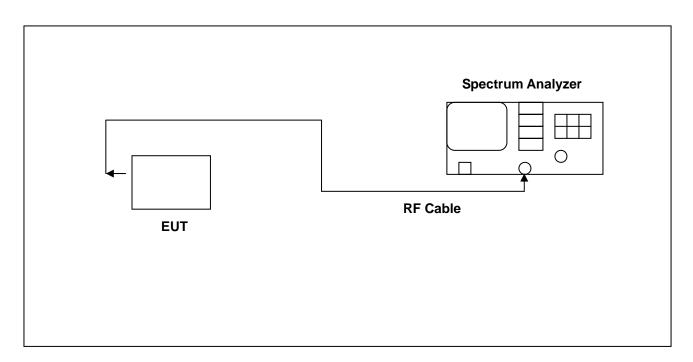
## 7.1 Test Condition & Setup:

The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

In any 100 kHz bandwidth outside the EUT pass band, the RF power produced by the modulation products of the spreading sequence, the information sequence, and the carrier frequency shall be at least 20 dB below that of the maximum in-band 100 kHz emission, antenna output of the EUT was coupled directly to spectrum analyzer; if an external attenuator and/or cable was used, these losses are compensated for with the analyzer OFFSET function.

All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the pass band. The test was performed at 3 channels (Channel 1, 6, 11)

## 7.2 Test Instruments Configuration:





# 7.3 Test Equipment List:

| Describe          | Manufacturer | Model Serial Number |               | Calibration  |              |
|-------------------|--------------|---------------------|---------------|--------------|--------------|
| Describe          | Manufacturei | Wodel               | Serial Number | Cal. Date    | Due Date     |
| Spectrum Analyzer | Agilent      | E4445A              | MY45300744    | Nov.29, 2007 | Nov.29, 2008 |

### 7.4 Test Result:

Refer to attached data sheets. Data shows out of band emissions are suppressed well below the -20 dBc minimum required by the Rules.

Note: Test Graphs See next page.

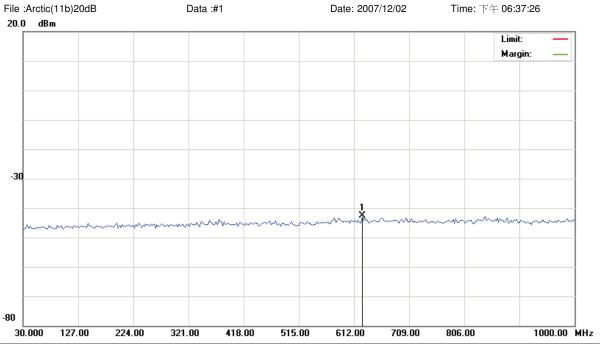


# 7.5 Test Graphs

# 7.5.1 802.11b Test Graphs

Please refer to next pager of detail testing data.





Polarization:

Distance:

Temperature:

26 ℃

Limit: EUT: Power: AC 110V/60Hz

Humidity: 55 %

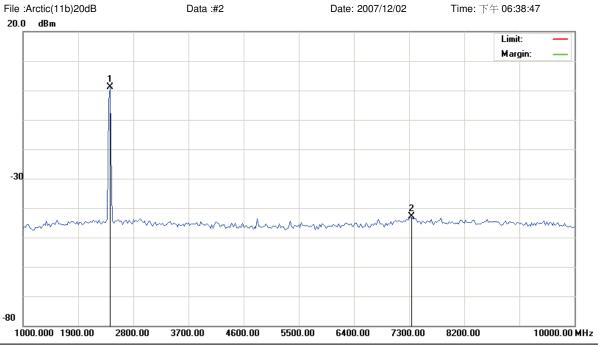
M/N: 08-0270-E Mode: 11b

Note: CH01

| No. | Mŀ | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1   | *  | 626.5500 | -43.31           | 0.80              | -42.51           |       |      | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin





Site site#1 Polarization: Temperature: 26 °C

Limit: Power: AC 110V/60Hz Humidity: 55 %

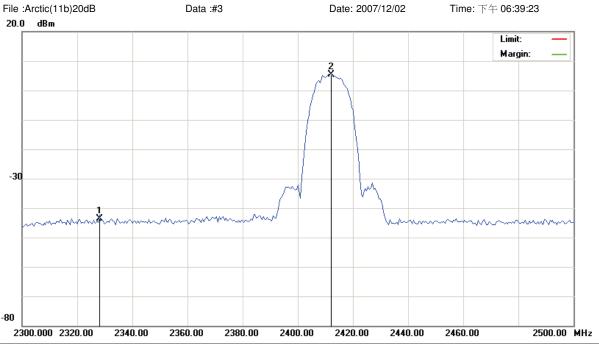
EUT: Distance:

M/N: 08-0270-E Mode: 11b Note: CH01

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|--------|---------|
|     |    | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree | Comment |
| 1   | *  | 2417.500 | 0.21             | 0.82              | 1.03             |       |      | peak     |                   |        |         |
| 2   |    | 7345.000 | -43.83           | 0.86              | -42.97           |       |      | peak     |                   |        |         |

\*:Maximum data x:Over limit !:over margin •Reference Only





Polarization:

Temperature:

26 ℃

Limit:

Power: AC 110V/60Hz Humidity: 55 %

EUT:

Distance:

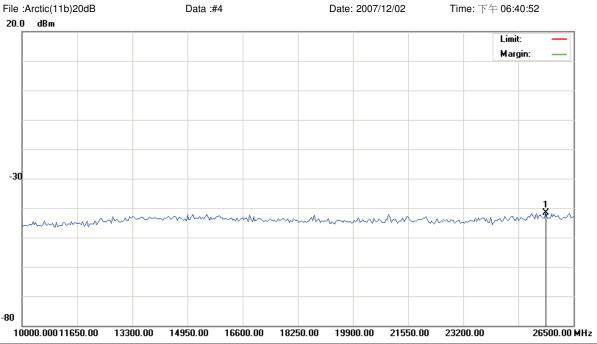
M/N: 08-0270-E Mode: 11b

Note: CH01

| No. | М | 1k. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-----|---|-----|--------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|     |   |     | MHz    | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1   |   | 23  | 28.000 | -44.49           | 0.82              | -43.67           |       |      | peak     |                   |                 |         |
| 2   | * | 24  | 12.000 | 4.65             | 0.82              | 5.47             |       |      | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin •Reference Only





Site site#1 Polarization: Temperature: 26  $^{\circ}$ C

Limit: Power: AC 110V/60Hz Humidity: 55 %

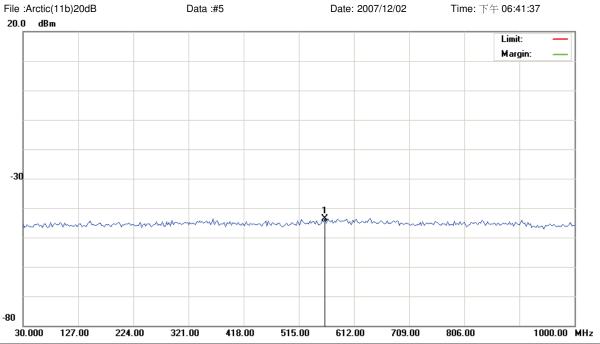
EUT: Distance:

M/N: 08-0270-E Mode: 11b Note: CH01

| No. Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|--------|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|        | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1 *    | 25675.00 | -42.71           | 0.99              | -41.72           |       |      | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin • Reference Only





Polarization:

Distance:

Temperature:

26 ℃

Limit: EUT: Power: AC 110V/60Hz

Humidity: 55 %

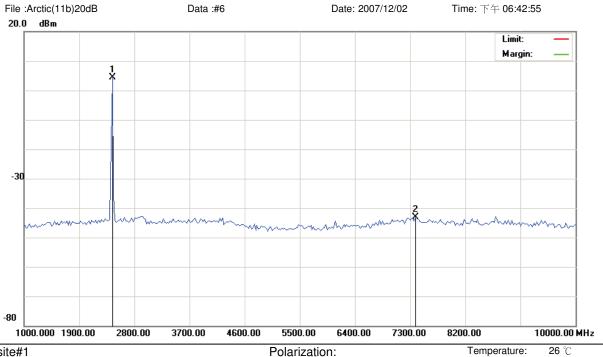
M/N: 08-0270-E

Mode: 11b Note: CH06

| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1   | *  | 561.0750 | -44.54           | 0.80              | -43.74           |       |      | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin





Site site#1 Polarization:

Power: AC 110V/60Hz

Humidity: 55 %

Limit: EUT:

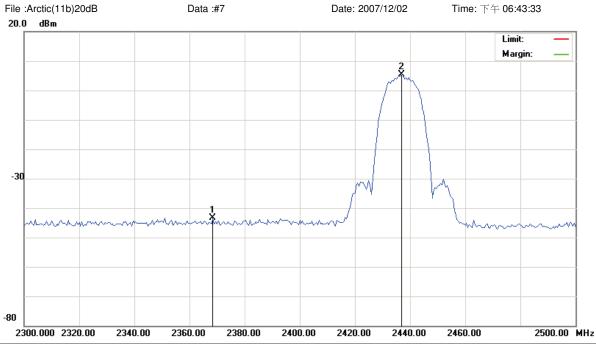
Distance:

M/N: 08-0270-E Mode: 11b Note: CH06

| No. | Mł | k. Fre | q. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|--------|----|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|     |    | MH     | Z  | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1   | *  | 2440.0 | 00 | 3.67             | 0.82              | 4.49             |       |      | peak     |                   |                 |         |
| 2   |    | 7390.0 | 00 | -43.91           | 0.86              | -43.05           |       |      | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin •Reference Only





Polarization:

Distance:

Temperature:

26 ℃

Limit: EUT: Power: AC 110V/60Hz

Humidity: 55 %

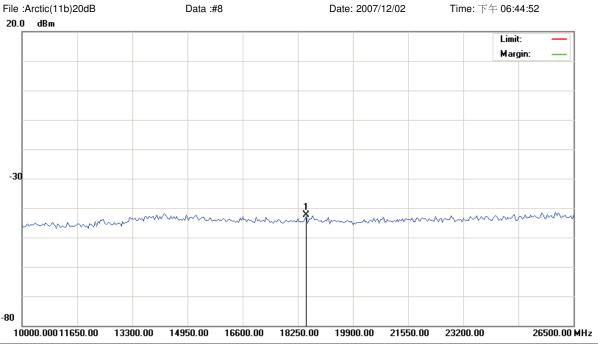
M/N: 08-0270-E

Mode: 11b Note: CH06

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|--------|---------|
|     |    | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree | Comment |
| 1   |    | 2368.500 | -44.25           | 0.82              | -43.43           |       |      | peak     |                   |        |         |
| 2   | *  | 2437.000 | 4.57             | 0.82              | 5.39             |       |      | peak     |                   |        |         |

\*:Maximum data x:Over limit !:over margin • Reference Only





Site site#1 Polarization: Temperature: 26  $^{\circ}$ C

Limit: Power: AC 110V/60Hz Humidity: 55 %

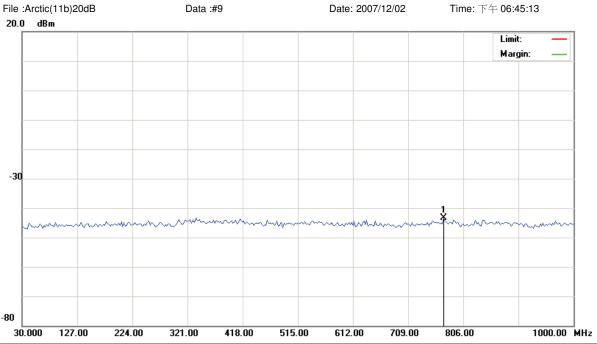
EUT: Distance:

M/N: 08-0270-E Mode: 11b Note: CH06

| No. Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|--------|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|        | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1 *    | 18497.50 | -43.43           | 0.94              | -42.49           |       |      | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin • Reference Only





Polarization:

Distance:

Temperature:

26 ℃

Limit: EUT: Power: AC 110V/60Hz

Humidity: 55 %

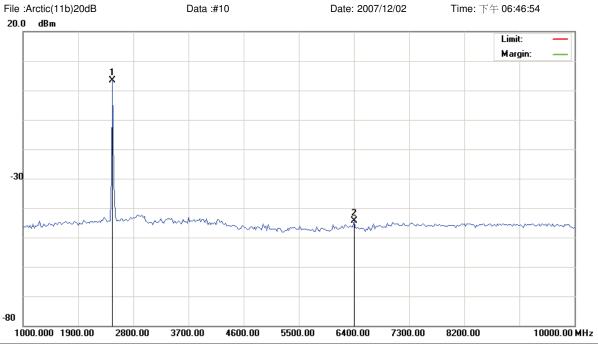
M/N: 08-0270-E

Mode: 11b Note: CH11

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|--------|---------|
|     |    | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree | Comment |
| 1   | *  | 772.0500 | -44.19           | 0.81              | -43.38           |       |      | peak     |                   |        |         |

\*:Maximum data x:Over limit !:over margin





Polarization:

Distance:

Temperature:

26 ℃

Limit: EUT:

Power: AC 110V/60Hz Humidity:

55 %

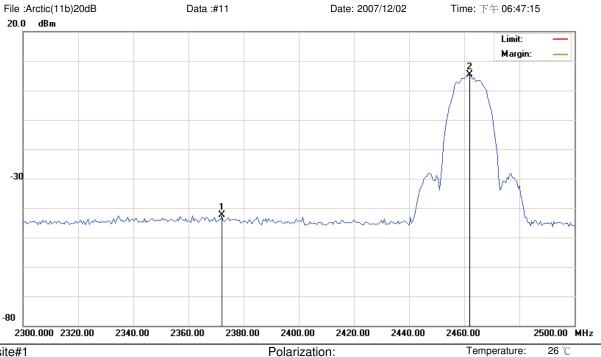
M/N: 08-0270-E Mode: 11b

Note: CH11

| No. | M | k. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-----|---|----|--------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|     |   |    | MHz    | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1   | * | 24 | 62.500 | 2.65             | 0.82              | 3.47             |       |      | peak     |                   |                 |         |
| 2   |   | 64 | 00.000 | -45.13           | 0.85              | -44.28           |       |      | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin •Reference Only





Polarization:

Temperature:

Limit: EUT:

Power: AC 110V/60Hz Humidity: 55 %

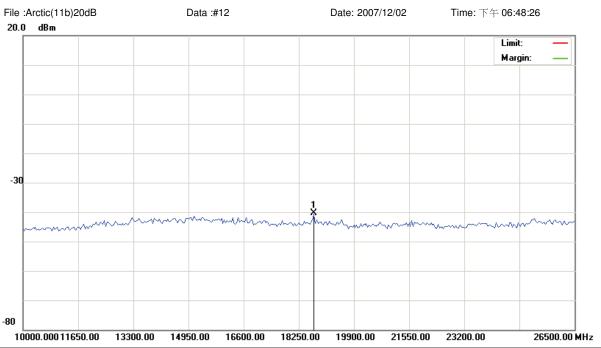
M/N: 08-0270-E Mode: 11b Note: CH11

Distance:

| No. | MI | k. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----|--------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|     |    |    | MHz    | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1   |    | 23 | 72.000 | -43.10           | 0.82              | -42.28           |       |      | peak     |                   |                 |         |
| 2   | *  | 24 | 62.000 | 4.50             | 0.82              | 5.32             |       |      | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin





Site site#1 Polarization: Temperature: 26  $^{\circ}$ C

Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: 08-0270-E Mode: 11b Note: CH11

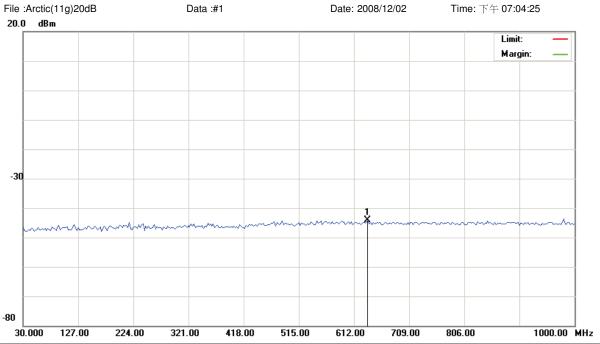
| No. Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|--------|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|        | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1 *    | 18703.75 | -41.36           | 0.94              | -40.42           |       |      | peak     |                   |                 |         |



# 7.5.2 802.11g Test Graphs

Please refer to next pager of detail testing data.





Site site#1

Polarization:

Distance:

Temperature:

26 ℃

Limit: EUT:

Power: AC 110V/60Hz Humidity:

55 %

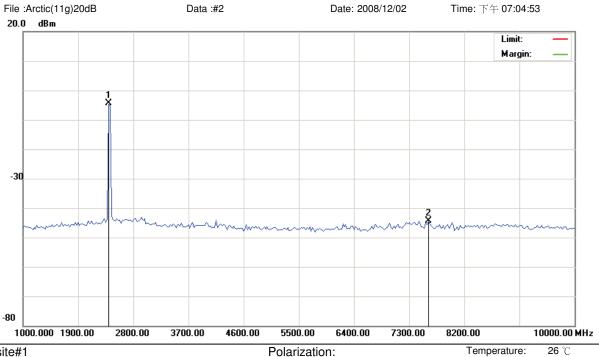
M/N: 08-0270-E

Mode: 11g Note: CH01

| No. M | lk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-------|-----|---------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|       |     | MHz     | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1 *   | 6   | 36.2500 | -45.03           | 0.80              | -44.23           |       |      | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin





Site site#1 Polarization: Temperature:

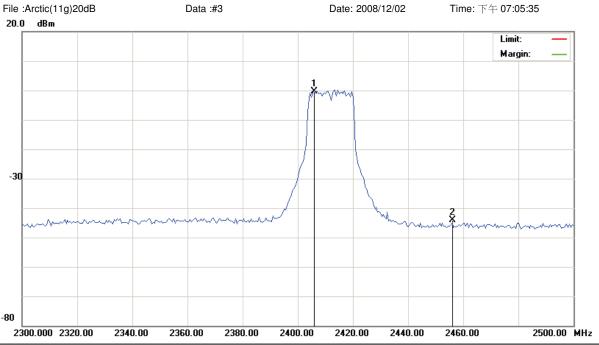
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: 08-0270-E Mode: 11g Note: CH01

| No. | Mł | k. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----|--------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|     |    |    | MHz    | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1   | *  | 23 | 95.000 | -5.24            | 0.82              | -4.42            |       |      | peak     |                   |                 |         |
| 2   |    | 76 | 15.000 | -45.15           | 0.86              | -44.29           |       |      | peak     |                   |                 |         |





Site site#1 Polarization: Temperature: 26  $^{\circ}$ C

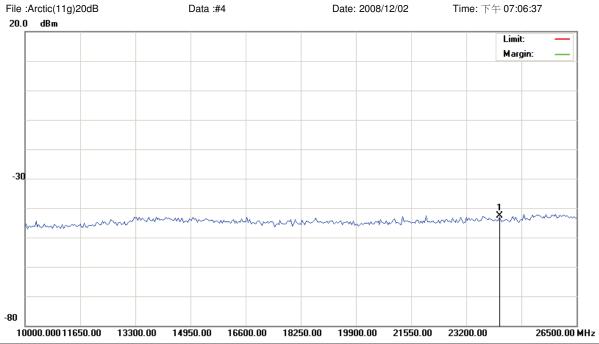
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: 08-0270-E Mode: 11g Note: CH01

| No. | Mŀ | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|--------|---------|
|     |    | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree | Comment |
| 1   | *  | 2406.000 | -1.08            | 0.82              | -0.26            |       |      | peak     |                   |        |         |
| 2   |    | 2456.000 | -44.91           | 0.82              | -44.09           |       |      | peak     |                   |        |         |





Site site#1 Polarization: Temperature: 26  $^{\circ}$ C

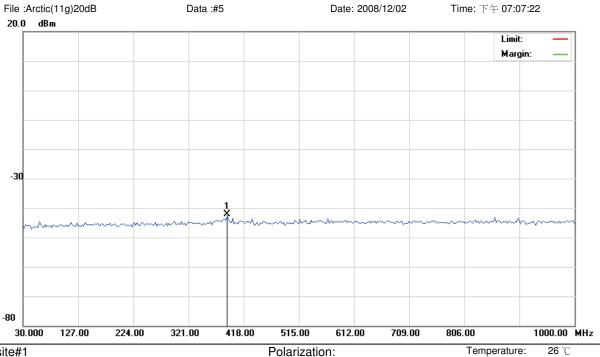
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: 08-0270-E Mode: 11g Note: CH01

| No. Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|--------|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|        | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1 *    | 24190.00 | -43.55           | 0.98              | -42.57           |       |      | peak     |                   |                 |         |





Site site#1 Polarization:

Limit: Power: AC 110V/60Hz Humidity:

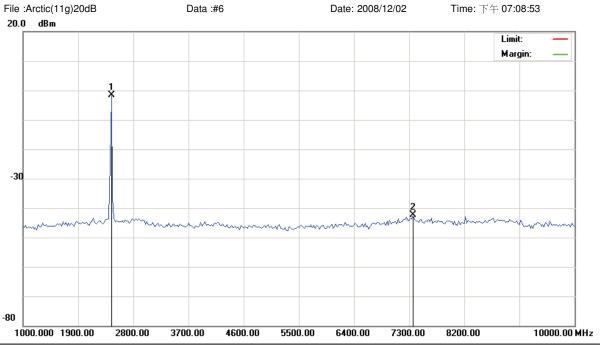
EUT: Distance:

M/N: 08-0270-E Mode: 11g Note: CH06

| No. M | 1k. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-------|-----|---------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|       |     | MHz     | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1 *   | 38  | 88.9000 | -42.93           | 0.80              | -42.13           |       |      | peak     |                   |                 |         |

55 %





Site site#1 Polarization: Temperature: 26 °C

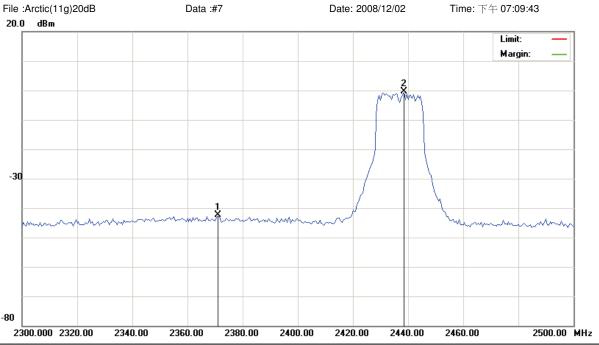
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: 08-0270-E Mode: 11g Note: CH06

| No. | MI | k.  | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height |        |         |
|-----|----|-----|--------|------------------|-------------------|------------------|-------|------|----------|-------------------|--------|---------|
|     |    |     | MHz    | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree | Comment |
| 1   | *  | 244 | 40.000 | -2.33            | 0.82              | -1.51            |       |      | peak     |                   |        |         |
| 2   |    | 736 | 67.500 | -43.12           | 0.86              | -42.26           |       |      | peak     |                   |        |         |





Site site#1

Polarization:

Distance:

Temperature:

26 ℃

Limit: EUT:

Power: AC 110V/60Hz Humidity: 55 %

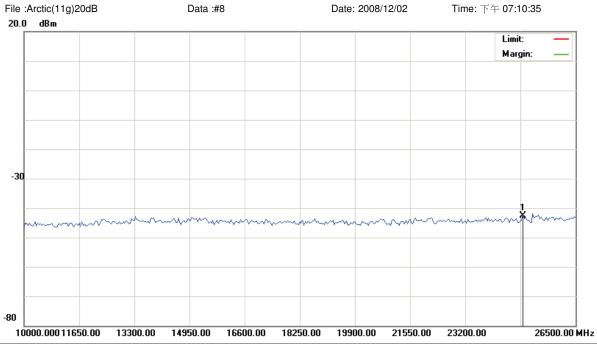
M/N: 08-0270-E

Mode: 11g Note: CH06

| No. | Mk. | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-----|-----|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|     |     | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1   |     | 2371.000 | -43.11           | 0.82              | -42.29           |       |      | peak     |                   |                 |         |
| 2   | *   | 2438.500 | -1.18            | 0.82              | -0.36            |       |      | peak     |                   |                 |         |

\*:Maximum data x:Over limit !:over margin





Site site#1 Polarization: Temperature: 26  $^{\circ}$ C

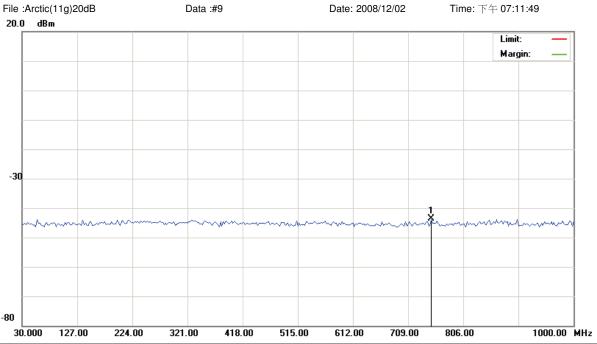
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: 08-0270-E Mode: 11g Note: CH06

| No. Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|--------|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|        | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1 *    | 24932.50 | -43.56           | 0.99              | -42.57           |       |      | peak     |                   |                 |         |





Site site#1

Polarization:

Temperature: 26 ℃

Limit: EUT: Power: AC 110V/60Hz

Humidity: 55 %

M/N: 08-0270-E Mode: 11g

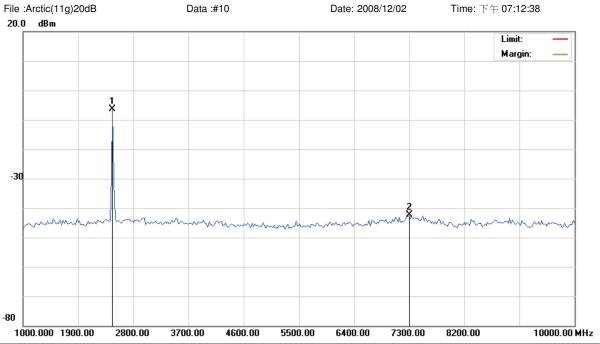
Note: CH11

| No. M | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height | Table<br>Degree |         |
|-------|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|-----------------|---------|
|       | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree          | Comment |
| 1 *   | 750.2250 | -44.45           | 0.81              | -43.64           |       |      | peak     |                   |                 |         |

Distance:

\*:Maximum data x:Over limit !:over margin





Site site#1

Polarization:

Temperature:

26 ℃

Limit: EUT:

Power: AC 110V/60Hz Humidity:

55 %

M/N: 08-0270-E Mode: 11g

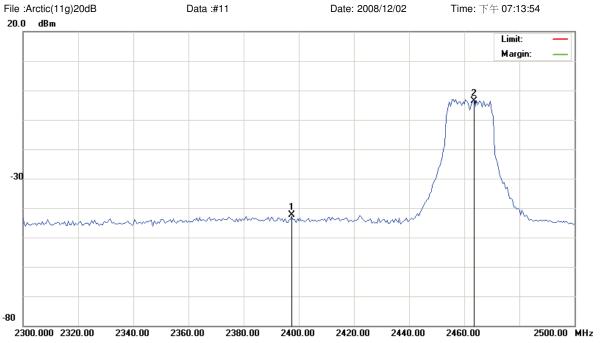
Note: CH11

Distance:

| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|--------|---------|
|     |    | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree | Comment |
| 1   | *  | 2462.500 | -7.09            | 0.82              | -6.27            |       |      | peak     |                   |        |         |
| 2   |    | 7300.000 | -43.24           | 0.86              | -42.38           |       |      | peak     |                   |        |         |

\*:Maximum data x:Over limit !:over margin





Temperature:

26 ℃

Site site#1 Polarization:

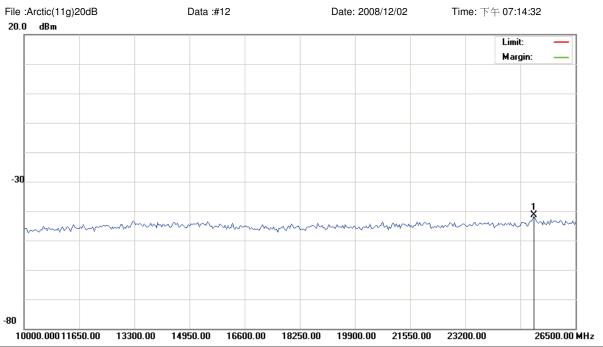
Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: 08-0270-E Mode: 11g Note: CH11

| No. M | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height |        |         |
|-------|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|--------|---------|
|       | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree | Comment |
| 1     | 2397.500 | -43.14           | 0.82              | -42.32           |       |      | peak     |                   |        |         |
| 2 *   | 2463.500 | -4.35            | 0.82              | -3.53            |       |      | peak     |                   |        |         |





Site site#1 Polarization: Temperature: 26 ℃

Limit: Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: 08-0270-E Mode: 11g Note: CH11

| No. Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over |          | Antenna<br>Height |        |         |
|--------|----------|------------------|-------------------|------------------|-------|------|----------|-------------------|--------|---------|
|        | MHz      | dBm              | dB                | dBm              | dBm   | dB   | Detector | cm                | degree | Comment |
| 1 *    | 25262.50 | -42.31           | 0.99              | -41.32           |       |      | peak     |                   |        |         |



# 8. Band Edges Requirements

### 8.1 Test Condition & Setup:

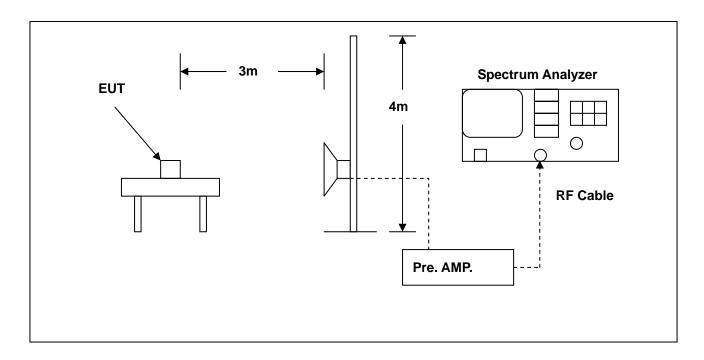
The EUT was setup to ANSI C63.4, 2003; tested to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The emissions on the harmonics frequencies, the limits, and the margin of compliance are presented. These tests were made when the transmitter was in full radiated power. The additional test was performed to show compliance with the requirement at the band-edge frequency 2483.5 MHz and up to 2500 MHz and at 2390.0 MHz.

The transmitter was configured with the worst case antenna and setup to transmit at the highest channel. Then the field strength was measured at 2483.5 MHz.

The transmitter was then configured with the worst case antenna and setup to transmit at the lowest channel. Then the field strength was measured at 2390.0 MHz. These tests were performed at 4 different bit rates.

### 8.2 Test Instruments Configuration:





# 8.3 Test Equipment List:

| Describe          | Manufacturer                   | Model     | Serial Number   | Calib         | ration        |
|-------------------|--------------------------------|-----------|-----------------|---------------|---------------|
| Describe          | Manufacture                    | Wodel     | Serial Nulliber | Cal. Date     | Due Date      |
| Spectrum Analyzer | Agilent                        | E4408B    | MY45107753      | Jun. 05, 2008 | Jun. 05, 2009 |
| Pre Amplifier     | Agilent                        | 8449B     | 3008A02237      | Jun. 03, 2008 | Jun. 03, 2009 |
| Horn Antenna      | SCHWARZBECK<br>MESS-ELEKTRONIK | BBHA9120D | 9120D-550       | Jun. 26, 2008 | Jun. 26, 2009 |



### 8.4 Test Result:

#### 8.4.1 Test Result:

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK

Test Mode : 802.11b Low CH & High CH

Test Date : 11/12/2008

Test Graphs See next page.

#### Notes:

1. Margin= Amplitude - Limits

2. Height of table for EUT placed: 0.8 Meter.

3. ANT= Antenna height.

4. Duty= Duty cycle correction factor.

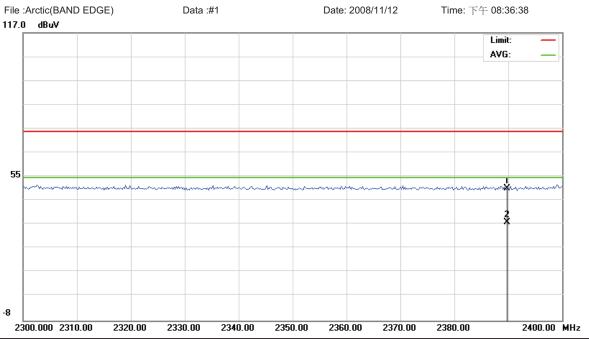
5. Dis= Distance extrapolation factor.

6. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor

(Auto calculate in spectrum analyzer)

7. Actual Amp= Amplitude - Duty - Dis.





Site Polarization: Vertical Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

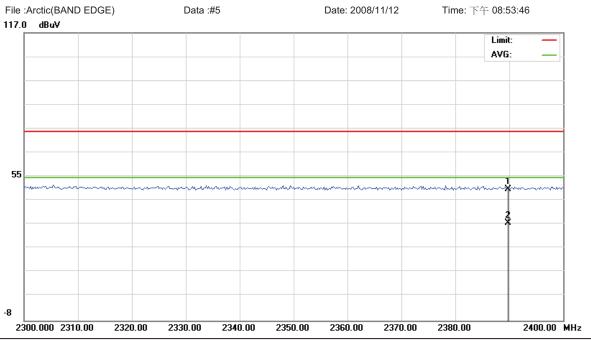
M/N: 08-0270-E

Mode: BAND EDGE(11b)

Note: CH01(2412MHz)Antenna 100cm

| No. | М | lk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|---|-----|--------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |   |     | MHz    | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |   | 23  | 89.800 | 49.11            | 0.16              | 49.27            | 74.00 | -24.73 | peak     |                   |        |         |
| 2   | * | 23  | 89.800 | 34.35            | 0.16              | 34.51            | 54.00 | -19.49 | AVG      |                   |        |         |





Site Polarization: Horizontal Temperature: 22 °C Limit: FCC part 15 (PK) Power: Humidity: 60 %

Limit: FCC part 15 (PK)

EUT:

Distance: 3m

M/N: 08-0270-E

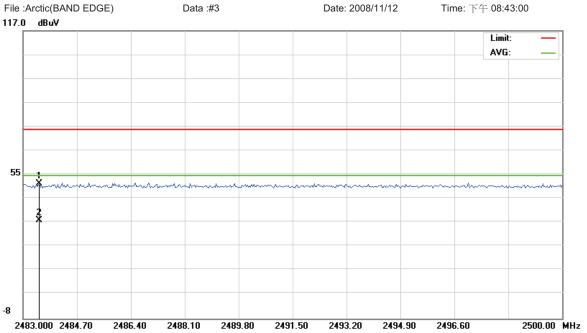
Mode: BAND EDGE(11b)

Note: CH01(2412MHz)Antenna 100cm

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |    | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|----|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm | degree          | Comment |
| 1   |    | 2389.800 | 48.75            | 0.16              | 48.91            | 74.00 | -25.09 | peak     |    |                 |         |
| 2   | *  | 2389.800 | 34.33            | 0.16              | 34.49            | 54.00 | -19.51 | AVG      |    |                 |         |

\*:Maximum data x:Over limit !:over margin





Site

Polarization: Vertical Power:

22 ℃

Limit: FCC part 15 (PK)

Distance: 3m

Temperature: Humidity: 60 %

M/N: 08-0270-E

EUT:

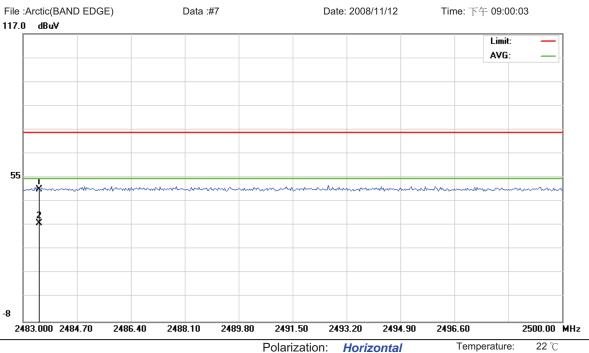
Mode: BAND EDGE(11b)

Note: CH11(2462MHz)Antenna 100cm

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   | Antenna<br>Height |    |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|-------------------|----|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector          | cm | degree | Comment |
| 1   |    | 2483.510 | 50.37            | 0.25              | 50.62            | 74.00 | -23.38 | peak              |    |        |         |
| 2   | *  | 2483.510 | 34.31            | 0.25              | 34.56            | 54.00 | -19.44 | AVG               |    |        |         |

\*:Maximum data x:Over limit !:over margin





Site Polarization: *Horizontal*Limit: FCC part 15 (PK) Power:

EUT: Distance: 3m

M/N: 08-0270-E

Mode: BAND EDGE(11b)

Note: CH11(2462MHz)Antenna 100cm

| No. | Mk | c. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          | Antenna<br>Height |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|-------------------|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm                | degree | Comment |
| 1   |    | 2483.510 | 49.25            | 0.25              | 49.50            | 74.00 | -24.50 | peak     |                   |        |         |
| 2   | *  | 2483.510 | 34.27            | 0.25              | 34.52            | 54.00 | -19.48 | AVG      |                   |        |         |

\*:Maximum data x:Over limit !:over margin

•Reference Only

Humidity:

60 %



#### 8.4.2 Test Result:

Applicant : iTMP Technology, Inc.

Model No : SL

EUT : SMHEART LINK

Test Mode : 802.11g Low CH & High CH

Test Date : 11/12/2008

Test Graphs See next page.

#### Notes:

1. Margin= Amplitude - Limits

2. Height of table for EUT placed: 0.8 Meter.

3. ANT= Antenna height.

4. Duty= Duty cycle correction factor.

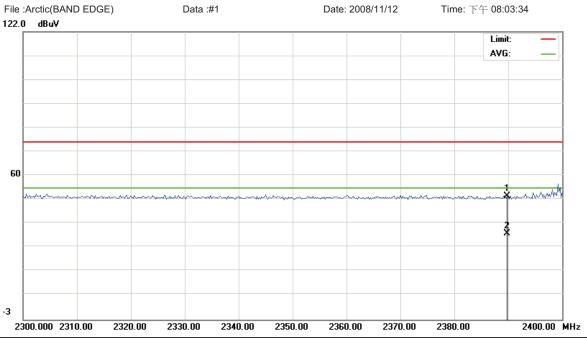
5. Dis= Distance extrapolation factor.

6. Amplitude= Reading Amplitude - Amplifier gain + Cable loss + Antenna factor

(Auto calculate in spectrum analyzer)

7. Actual Amp= Amplitude - Duty - Dis.





Site Polarization: Vertical Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

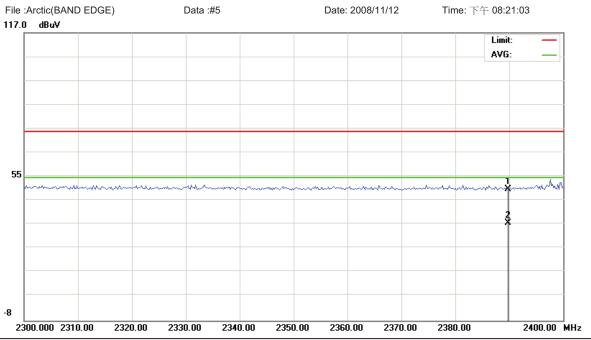
M/N: 08-0270-E

Mode: BAND EDGE(11g)

Note: CH01(2412MHz)Antenna 100cm

| No. | M | k. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   | Antenna<br>Height |    |        |         |
|-----|---|----|--------|------------------|-------------------|------------------|-------|--------|-------------------|----|--------|---------|
|     |   |    | MHz    | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector          | cm | degree | Comment |
| 1   |   | 23 | 89.800 | 50.43            | 0.16              | 50.59            | 74.00 | -23.41 | peak              |    |        |         |
| 2   | * | 23 | 89.800 | 34.33            | 0.16              | 34.49            | 54.00 | -19.51 | AVG               |    |        |         |





Site Polarization: Horizontal Temperature: 22 °C

Limit: FCC part 15 (PK) Power: Humidity: 60 %

EUT: Distance: 3m

M/N: 08-0270-E

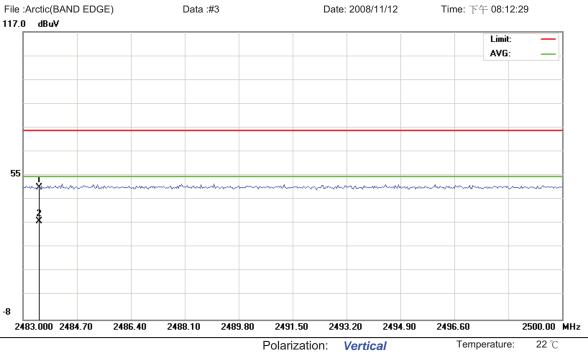
Mode: BAND EDGE(11g)

Note: CH01(2412MHz)Antenna 100cm

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |    | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|----|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm | degree          | Comment |
| 1   |    | 2389.800 | 48.85            | 0.16              | 49.01            | 74.00 | -24.99 | peak     |    |                 |         |
| 2   | *  | 2389.800 | 34.33            | 0.16              | 34.49            | 54.00 | -19.51 | AVG      |    |                 |         |

\*:Maximum data x:Over limit !:over margin





Site Limit: FCC part 15 (PK)

Distance: 3m

Temperature:

22 ℃

EUT:

Power:

Humidity: 60 %

M/N: 08-0270-E

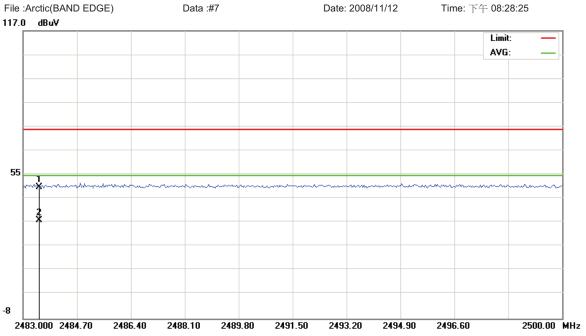
Mode: BAND EDGE(11g)

Note: CH11(2462MHz)Antenna 100cm

| No. | Mk | k. Freq. | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |    | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|----------|----|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | cm | degree          | Comment |
| 1   |    | 2483.510 | 49.09            | 0.25              | 49.34            | 74.00 | -24.66 | peak     |    |                 |         |
| 2   | *  | 2483.510 | 34.29            | 0.25              | 34.54            | 54.00 | -19.46 | AVG      |    |                 |         |

\*:Maximum data x:Over limit !:over margin





Site

Polarization: Horizontal

Temperature:

22 ℃

Limit: FCC part 15 (PK)

Power:

Distance: 3m

Humidity: 60 %

M/N: 08-0270-E

EUT:

Mode: BAND EDGE(11g)

Note: CH11(2462MHz)Antenna 100cm

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   | Antenna<br>Height |    |        |         |
|-----|----|----------|------------------|-------------------|------------------|-------|--------|-------------------|----|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector          | cm | degree | Comment |
| 1   |    | 2483.510 | 48.77            | 0.25              | 49.02            | 74.00 | -24.98 | peak              |    |        |         |
| 2   | *  | 2483.510 | 34.28            | 0.25              | 34.53            | 54.00 | -19.47 | AVG               |    |        |         |

\*:Maximum data x:Over limit !:over margin



# 9. Antenna Requirements

### 9.1 Standard Applicable:

For intentional device, according to 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And According to 15.247 (b), if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

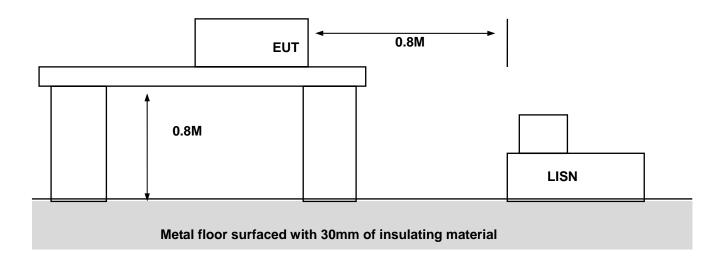
#### 9.2 Antenna Connector Construction

The antenna used in this product is external Whip antenna. And the maximum Gain of this antenna is only -2 dB.



# Appendix A - EUT Test SETUP

### MEASUREMENT OF POWER LINE CONDUCTED RFI VOLTAGE





### **MEASUREMENT OF RADIATED EMISSION**

