

# MEASUREMENT REPORT of *CORDLESS TELEPHONE*

**Applicant** : Qiaoxing Telecom Industry Co., Ltd.  
**EUT** : 2.4GHz Analog Cordless Phone with CID  
**Model No.** : GH9460XX; GH9620XX; XG3205XX; XG2205XX  
**FCC ID** : R9WGH9460-GH9620  
**Report No.** : K1015593

Test by :

*Training Research Co., Ltd.*

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# CERTIFICATION

**We here by verify that:**

The test data, data evaluation, test procedures and equipment configurations shown in this report were made mainly in accordance with the procedures given in ANSI C63.4 (1992) as a reference. All tests were conducted by ***Training Research Co., Ltd.***, No. 255, Nan-yang Street, Shijr, Taipei Hsien 221, Taiwan. 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** the technical requirements set forth in the FCC Rules Part 15 Subpart C Section 15.249.

**Applicant** : Qiaoxing Telecom Industry Co., Ltd.

**Applicant address** : Qiaoxing Science Industry Zone, Tangquan, Huizhou City, Guangdong, P.R.C.

**Model Name** : GH9460XX; GH9620XX; XG3205XX; XG2205XX

**FCC ID** : R9WGH9460-GH9620

**Test Date** : June 20, 2004

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## I. GENERAL

### 1.1 Introduction

The following measurement report is submitted on behalf of Applicant in support of a Cordless Telephone certification in accordance with Part 2 Subpart J and Part 15 Subpart A and C of the Commission's Rules and Regulations.

### 1.2 Description of EUT

**Product Name** : 2.4GHz Analog Cordless Phone with CID

**Model Name** : GH9460XX; GH9620XX; XG3205XX; XG2205XX

**Frequency Range** : Base: 2402.55 – 2404.50 MHz  
Handset: 2474.00 – 2475.95 MHz

**Support Channel** : 40 Channels

**Power Type** : Base powered by AC adaptor  
=> I/P: 120Vac, 60 Hz, 8W  
=> O/P: 9Vdc, 300mA  
  
Charger powered by AC adaptor  
=> I/P: 120Vac, 60 Hz, 6.5W  
=> O/P: 9Vdc, 200mA  
  
Handset powered by Rechargeable NI-MH Battery  
=> 3.6 V, 600mAh

**Power Cord** : Cable of power adapter  
=> Non-shielded, 188cm length, No bead

**Data Cable** : RJ-11 x 1  
=> Non-shielded, 7 feet length, No bead  
  
RJ-11 x 1  
=> Non-shielded, 210cm length, No bead

### 1.3 Description of Support Equipment

In order to construct the minimum testing, following equipment were used as the support units.

|                     |          |                             |
|---------------------|----------|-----------------------------|
| <b>PABX</b>         | <b>:</b> | <b>King Design</b>          |
| Model No.           | :        | KD8705-A                    |
| Serial No.          | :        | GV101101186                 |
| Power type          | :        | 110 VAC 60Hz                |
| Power cord          | :        | Non – Shielded, 185cm long  |
| <b>EarphoneMIC.</b> | <b>:</b> | <b>God Information Inc.</b> |
| Model No.           | :        | Net8 EarphoneMic            |
| Data cable          | :        | 118cm long, Non – Shielded  |

### 1.4 Configuration of System Under Test

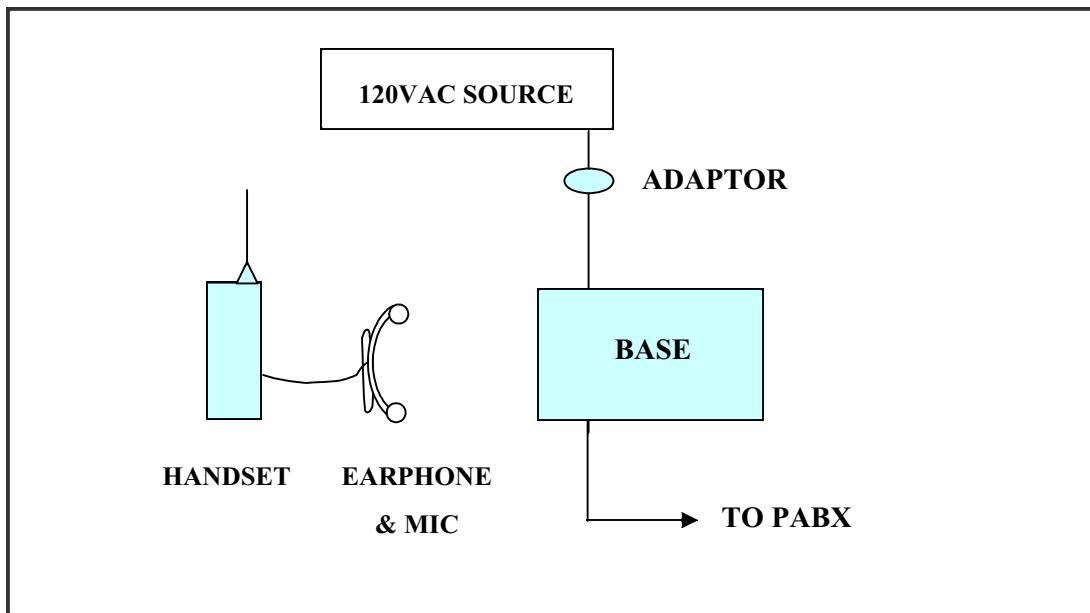


Fig.-1 Configuration of system under test

During testing the EUT was connected to PABX. A diagram of the complete test configuration was shown in Fig-1.

### 1.5 Test Procedure

All measurements contained in this report were performed mainly according to the techniques described in Measurement procedure ANSI C63.4 (1992).

### 1.6 Location of the Test Site

The radiated emissions measurements required by the rules were performed on the **three-meter, Anechoic Chamber (FCC Registration Number: 93906)** maintained by *Training Research Co., Ltd.* 1F, No. 255, Nan-yang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C. Complete description and measurement data have been placed on file with the commission. The conducted power line emissions tests and other test items were performed in an anechoic chamber also located at *Training Research Co., Ltd.* 1F, No. 255, Nan-yang Street, Shijr, Taipei Hsien 221, Taiwan, R.O.C. *Training Research Co., Ltd.* is listed by the FCC as a facility available to do measurement work for others on a contract basis.

### 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 was 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.

In test, the base and handset are tested separately. They were set in Ch01 and Ch40 of EUT and continuously transmitting mode that controlled by test mode of EUT.

## II. Conducted Emissions Measurements

### 2.1 Test Condition & Setup

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 backwall 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 Line Impedance Stabilization Networks (LISNs). 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 150KHz to 30MHz. 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 2.3.

There is a test condition applies in this test item, the setting up procedure is recorded on <1.4>. Two channels were tested, one in the top (CH01) and the other in bottom (CH40).

## 2.2 List of Test Instruments

| Instrument Name              | Model               | Brand           | Serial No.       | Calibration Date | Next time |
|------------------------------|---------------------|-----------------|------------------|------------------|-----------|
| EMI Receiver                 | 8546A               | HP              | 3520A00242       | 07/28/03         | 07/28/04  |
| RF Filter Section            | 85460A              | HP              | 3448A00217       | 07/28/03         | 07/28/04  |
| LISN<br>(EUT)                | LISN-01             | TRC             | 99-05            | 06/21/03         | 06/21/04  |
| LISN<br>(Support E.)         | LISN-01             | TRC             | 9912-03, 04      | 07/21/03         | 07/21/04  |
| Pre-amplifier                | 15542 ZFL-500       | Mini – Circuits | 0 0117           | 05/20/04         | 05/20/05  |
| 6dB<br>Attenuator            | MCL BW-S6W2         | Mini – Circuits | 9915 – Conducted | 05/20/04         | 05/20/05  |
| 10dB<br>Attenuator           | A5542 VAT010        | Mini – Circuits | 0215 – Conducted | 05/20/04         | 05/20/05  |
| Coaxial Cable<br>(2 meter)   | A30A30-0058-50FS-2M | JYEBAO          | SMA-08           | 05/20/04         | 05/20/05  |
| Coaxial Cable<br>(1.1 meter) | A30A30-0058-50FS-1M | JYEBAO          | SMA-09           | 05/20/04         | 05/20/05  |
| Coaxial Cable<br>(20 meter)  | RG-214/U            | JYEBAO          | NP-01            | 05/20/04         | 05/20/05  |
| Coaxial Cable<br>(20 meter)  | RG-214/U            | JYEBAO          | NP-02            | 05/20/04         | 05/20/05  |
| Auto Switch Box<br>(< 30MHz) | ASB-01              | TRC             | 9904-01          | 05/20/04         | 05/20/05  |

### 2.3 Test Result of Conducted Emissions

The following table shows a summary of the highest emissions of power line conducted emissions on the HOT and NATURAL conductors of the EUT power cord.

Test Conditions:

Temperature : 25 °C   Humidity : 73 % RH

**Table 1 Power Line Conducted Emissions (Standby mode of Base)**

| Power Connected Emissions |                 |                   |                 |                      | FCC Class B           |                        |             |
|---------------------------|-----------------|-------------------|-----------------|----------------------|-----------------------|------------------------|-------------|
| Conductor                 | Frequency (KHz) | Peak (dB $\mu$ V) | QP (dB $\mu$ V) | Average (dB $\mu$ V) | QP-limit (dB $\mu$ V) | AVG-limit (dB $\mu$ V) | Margin (dB) |
| Line 1                    | 185.000         | 21.03             | ---             | ---                  | 65.00                 | 55.00                  | -33.97      |
|                           | 201.000         | 21.45             | ---             | ---                  | 64.54                 | 54.54                  | -33.09      |
|                           | 297.000         | 20.91             | ---             | ---                  | 61.80                 | 51.80                  | -30.89      |
|                           | 398.000         | 19.50             | ---             | ---                  | 58.91                 | 48.91                  | -29.41      |
|                           | 499.000         | 19.29             | ---             | ---                  | 56.03                 | 46.03                  | -26.74      |
|                           | 3477.000        | 34.33             | ---             | ---                  | 56.00                 | 46.00                  | -11.67      |
|                           | 11720.000       | 19.52             | ---             | ---                  | 60.00                 | 50.00                  | -30.48      |
|                           | ---             | ---               | ---             | ---                  | ---                   | ---                    | ---         |
|                           | ---             | ---               | ---             | ---                  | ---                   | ---                    | ---         |
| Line 2                    | 182.210         | 58.25             | 55.72           | 16.80                | 65.00                 | 55.00                  | -9.28       |
|                           | 222.000         | 46.92             | ---             | ---                  | 63.94                 | 53.94                  | -7.02       |
|                           | 262.000         | 49.75             | ---             | ---                  | 62.80                 | 52.80                  | -3.05       |
|                           | 300.000         | 46.97             | ---             | ---                  | 61.71                 | 51.71                  | -4.74       |
|                           | 359.000         | 41.84             | ---             | ---                  | 60.03                 | 50.03                  | -8.19       |
|                           | 421.000         | 38.29             | ---             | ---                  | 58.26                 | 48.26                  | -9.97       |
|                           | 485.000         | 33.88             | ---             | ---                  | 56.43                 | 46.43                  | -12.55      |
|                           | 604.000         | 33.96             | ---             | ---                  | 56.00                 | 46.00                  | -12.04      |
|                           | ---             | ---               | ---             | ---                  | ---                   | ---                    | ---         |

NOTE:

(1)Margin = Amplitude – Limit, **The reading amplitudes are all under limit.**

(2)A "+" sign in the margin column means the emission is OVER the Class B Limit and "–" sign of means UNDER the Class B limit

Table 2 Power Line Conducted Emissions (Channel 1 of Base)

| Power Connected Emissions |                 |                   |                 |                      | FCC Class B           |                        |             |
|---------------------------|-----------------|-------------------|-----------------|----------------------|-----------------------|------------------------|-------------|
| Conductor                 | Frequency (KHz) | Peak (dB $\mu$ V) | QP (dB $\mu$ V) | Average (dB $\mu$ V) | QP-limit (dB $\mu$ V) | AVG-limit (dB $\mu$ V) | Margin (dB) |
| Line 1                    | 189.000         | 21.68             | ---             | ---                  | 64.89                 | 54.89                  | -33.21      |
|                           | 238.000         | 19.05             | ---             | ---                  | 63.49                 | 53.49                  | -34.44      |
|                           | 297.000         | 20.82             | ---             | ---                  | 61.80                 | 51.80                  | -30.98      |
|                           | 398.000         | 19.47             | ---             | ---                  | 58.91                 | 48.91                  | -29.44      |
|                           | 499.000         | 19.08             | ---             | ---                  | 56.03                 | 46.03                  | -26.95      |
|                           | 3741.000        | 19.87             | ---             | ---                  | 56.00                 | 46.00                  | -26.13      |
|                           | 25030.000       | 19.17             | ---             | ---                  | 60.00                 | 50.00                  | -30.83      |
|                           | ---             | ---               | ---             | ---                  | ---                   | ---                    | ---         |
|                           | ---             | ---               | ---             | ---                  | ---                   | ---                    | ---         |
|                           | ---             | ---               | ---             | ---                  | ---                   | ---                    | ---         |
| Line 2                    | 155.000         | 50.94             | ---             | ---                  | 65.86                 | 55.86                  | -4.92       |
|                           | 193.000         | 49.71             | ---             | ---                  | 64.77                 | 54.77                  | -5.06       |
|                           | 225.825         | 51.03             | ---             | ---                  | 63.69                 | 53.69                  | -2.66       |
|                           | 366.000         | 33.76             | ---             | ---                  | 59.83                 | 49.83                  | -16.07      |
|                           | 430.000         | 30.83             | ---             | ---                  | 58.00                 | 48.00                  | -17.17      |
|                           | 832.000         | 38.12             | ---             | ---                  | 56.00                 | 46.00                  | -7.88       |
|                           | 1091.000        | 22.57             | ---             | ---                  | 56.00                 | 46.00                  | -23.43      |
|                           | 3702.000        | 27.28             | ---             | ---                  | 56.00                 | 46.00                  | -18.72      |
|                           | 4171.000        | 42.93             | ---             | ---                  | 56.00                 | 46.00                  | -3.07       |

**Table 3 Power Line Conducted Emissions (Channel 40 of Base)**

| <b>Power Connected Emissions</b> |                        |                                   |                                 |                                      | <b>FCC Class B</b>                    |  |                    |
|----------------------------------|------------------------|-----------------------------------|---------------------------------|--------------------------------------|---------------------------------------|--|--------------------|
| <b>Conductor</b>                 | <b>Frequency (KHz)</b> | <b>Peak (dB<math>\mu</math>V)</b> | <b>QP (dB<math>\mu</math>V)</b> | <b>Average (dB<math>\mu</math>V)</b> | <b>QP-limit (dB<math>\mu</math>V)</b> | <b>AVG-limit (dB<math>\mu</math>V)</b> | <b>Margin (dB)</b> |
| Line 1                           | 187.000                | 21.22                             | ---                             | ---                                  | 64.94                                 | 54.94                                  | -33.72             |
|                                  | 195.000                | 21.52                             | ---                             | ---                                  | 64.71                                 | 54.71                                  | -33.19             |
|                                  | 231.000                | 19.15                             | ---                             | ---                                  | 63.69                                 | 53.69                                  | -34.54             |
|                                  | 248.000                | 18.82                             | ---                             | ---                                  | 63.20                                 | 53.20                                  | -34.38             |
|                                  | 297.000                | 20.71                             | ---                             | ---                                  | 61.80                                 | 51.80                                  | -31.09             |
|                                  | 398.000                | 19.59                             | ---                             | ---                                  | 58.91                                 | 48.91                                  | -29.32             |
|                                  | 499.000                | 18.84                             | ---                             | ---                                  | 56.03                                 | 46.03                                  | -27.19             |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
| Line 2                           | 156.000                | 50.35                             | ---                             | ---                                  | 65.83                                 | 55.83                                  | -5.48              |
|                                  | 180.090                | 52.01                             | ---                             | ---                                  | 64.89                                 | 54.89                                  | -2.88              |
|                                  | 229.000                | 45.80                             | ---                             | ---                                  | 63.74                                 | 53.74                                  | -7.94              |
|                                  | 271.000                | 44.95                             | ---                             | ---                                  | 62.54                                 | 52.54                                  | -7.59              |
|                                  | 317.000                | 42.26                             | ---                             | ---                                  | 61.23                                 | 51.23                                  | -8.97              |
|                                  | 363.000                | 35.04                             | ---                             | ---                                  | 59.91                                 | 49.91                                  | -14.87             |
|                                  | 688.000                | 30.79                             | ---                             | ---                                  | 56.00                                 | 46.00                                  | -15.21             |
|                                  | 3510.000               | 19.33                             | ---                             | ---                                  | 56.00                                 | 46.00                                  | -26.67             |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |

**Table 4 Power Line Conducted Emissions (Charging mode by Base)**

| <b>Power Connected Emissions</b> |                        |                                   |                                 |                                      | <b>FCC Class B</b>                    |  |                    |
|----------------------------------|------------------------|-----------------------------------|---------------------------------|--------------------------------------|---------------------------------------|--|--------------------|
| <b>Conductor</b>                 | <b>Frequency (KHz)</b> | <b>Peak (dB<math>\mu</math>V)</b> | <b>QP (dB<math>\mu</math>V)</b> | <b>Average (dB<math>\mu</math>V)</b> | <b>QP-limit (dB<math>\mu</math>V)</b> | <b>AVG-limit (dB<math>\mu</math>V)</b> | <b>Margin (dB)</b> |
| Line 1                           | 158.000                | 20.33                             | ---                             | ---                                  | 65.77                                 | 55.77                                  | -35.44             |
|                                  | 218.000                | 19.98                             | ---                             | ---                                  | 64.06                                 | 54.06                                  | -34.08             |
|                                  | 285.000                | 19.50                             | ---                             | ---                                  | 62.14                                 | 52.14                                  | -32.64             |
|                                  | 370.000                | 19.08                             | ---                             | ---                                  | 59.71                                 | 49.71                                  | -30.63             |
|                                  | 581.000                | 18.82                             | ---                             | ---                                  | 56.00                                 | 46.00                                  | -27.18             |
|                                  | 10090.000              | 18.24                             | ---                             | ---                                  | 60.00                                 | 50.00                                  | -31.76             |
|                                  | 16740.000              | 18.97                             | ---                             | ---                                  | 60.00                                 | 50.00                                  | -31.03             |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
| Line 2                           | 159.000                | 23.96                             | ---                             | ---                                  | 65.74                                 | 55.74                                  | -31.78             |
|                                  | 197.000                | 20.15                             | ---                             | ---                                  | 64.66                                 | 54.66                                  | -34.51             |
|                                  | 262.000                | 19.57                             | ---                             | ---                                  | 62.80                                 | 52.80                                  | -33.23             |
|                                  | 391.000                | 19.08                             | ---                             | ---                                  | 59.11                                 | 49.11                                  | -30.03             |
|                                  | 717.000                | 19.12                             | ---                             | ---                                  | 56.00                                 | 46.00                                  | -26.88             |
|                                  | 5490.000               | 18.22                             | ---                             | ---                                  | 60.00                                 | 50.00                                  | -31.78             |
|                                  | 7960.000               | 18.26                             | ---                             | ---                                  | 60.00                                 | 50.00                                  | -31.74             |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |

**Table 5 Power Line Conducted Emissions (Charging mode by Charger)**

| <b>Power Connected Emissions</b> |                        |                                   |                                 |                                      | <b>FCC Class B</b>                    |  |                    |
|----------------------------------|------------------------|-----------------------------------|---------------------------------|--------------------------------------|---------------------------------------|--|--------------------|
| <b>Conductor</b>                 | <b>Frequency (KHz)</b> | <b>Peak (dB<math>\mu</math>V)</b> | <b>QP (dB<math>\mu</math>V)</b> | <b>Average (dB<math>\mu</math>V)</b> | <b>QP-limit (dB<math>\mu</math>V)</b> | <b>AVG-limit (dB<math>\mu</math>V)</b> | <b>Margin (dB)</b> |
| Line 1                           | 153.000                | 19.10                             | ---                             | ---                                  | 65.91                                 | 55.91                                  | -36.81             |
|                                  | 197.000                | 18.43                             | ---                             | ---                                  | 64.66                                 | 54.66                                  | -36.23             |
|                                  | 264.000                | 18.64                             | ---                             | ---                                  | 62.74                                 | 52.74                                  | -34.10             |
|                                  | 329.000                | 18.61                             | ---                             | ---                                  | 60.89                                 | 50.89                                  | -32.28             |
|                                  | 421.000                | 18.26                             | ---                             | ---                                  | 58.26                                 | 48.26                                  | -30.00             |
|                                  | 651.000                | 18.38                             | ---                             | ---                                  | 56.00                                 | 46.00                                  | -27.62             |
|                                  | 3975.000               | 18.66                             | ---                             | ---                                  | 56.00                                 | 46.00                                  | -27.34             |
|                                  | 8150.000               | 18.29                             | ---                             | ---                                  | 60.00                                 | 50.00                                  | -31.71             |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
| Line 2                           | 152.000                | 33.19                             | ---                             | ---                                  | 65.94                                 | 55.94                                  | -22.75             |
|                                  | 167.000                | 31.11                             | ---                             | ---                                  | 65.51                                 | 55.51                                  | -24.40             |
|                                  | 182.000                | 27.19                             | ---                             | ---                                  | 65.09                                 | 55.09                                  | -27.90             |
|                                  | 206.000                | 30.38                             | ---                             | ---                                  | 64.40                                 | 54.40                                  | -24.02             |
|                                  | 255.000                | 28.04                             | ---                             | ---                                  | 63.00                                 | 53.00                                  | -24.96             |
|                                  | 282.000                | 26.02                             | ---                             | ---                                  | 62.23                                 | 52.23                                  | -26.21             |
|                                  | 320.000                | 23.48                             | ---                             | ---                                  | 61.14                                 | 51.14                                  | -27.66             |
|                                  | 509.000                | 20.22                             | ---                             | ---                                  | 56.00                                 | 46.00                                  | -25.78             |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |
|                                  | ---                    | ---                               | ---                             | ---                                  | ---                                   | ---                                    | ---                |

### III. Radiated Emissions Measurements

#### 3.1 Test Condition & Setup

The EUT was placed in an anechoic chamber and scanned at 3 meter distance to determine its emission characteristics. The physical arrangement of the EUT 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, directivity, and frequency. The exact system configuration which produced the highest emissions was noted so it could be reproduced later during the final tests. This was done to ensure that the final measurements would demonstrate the worst-case interference potential of the EUT.

Final radiation measurements were made on a three-meter, 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 30 MHz to 1000 MHz using an Hewlett Packard 85460A EMI Receiver, SCHWARZECK whole range Small Biconical Antenna (Model No.: UBAA9114 & BBVU9135) is used to measure frequency from 30 MHz to 1GHz. The final test is used the HP 85460A spectrum and 8564E spectrum was examined from 1GHz to 25GHz using an Hewlett Packard Spectrum Analyzer, EMCO/HP Horn Antenna (Model 3115 / 84125-80008) for 1G - 25GHz.

At each frequency, the handset of EUT stands on three orthogonal planes respectively and the EUT was rotated 360 degrees. 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.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. There are two spectrum analyzers use on this testing, HP 8546A / 85460A for frequency 30MHz to 1000MHz, and HP8564E for frequency 1 GHz to 25GHz. No post-detector video filters were used in the test. The spectrum analyzer's 6 dB bandwidth was set to 120KHz (spectrum was examined from 30 MHz to 1000 MHz), the spectrum analyzer's 6 dB bandwidth was set to 1 MHz (spectrum was examined from 1 GHz to 25GHz) and the analyzer was operated in the maximum hold mode.

The actual field intensity in decibels referenced to 1 microvolt per meter (dB<sub>1</sub> V/m) is determined by algebraically adding the measured reading in dB<sub>1</sub> V, the antenna factor (dB), and cable loss (dB) at the appropriate frequency.

**For frequency between 30MHz to 1000MHz**

$F_{Ia} (\text{dBuV/m}) = F_{Ir} (\text{dB}\mu\text{V}) + \text{Correction Factors}$

$F_{Ia}$  : Actual Field Intensity

$F_{Ir}$  : Reading of the Field Intensity

Correction Factors = Antenna Factor + Cable Loss – Amplifier Gain

**For frequency between 1GHz to 25GHz**

$F_{Ia} (\text{dB}\mu\text{V/m}) = F_{Ir} (\text{dB}\mu\text{V}) + \text{Correction Factor}$

$F_{Ia}$  : Actual Field Intensity

$F_{Ir}$  : Reading of the Field Intensity

Correction Factors = Antenna Factor + Cable Loss – Amplifier Gain

### 3.2 List of Test Instruments

| Instrument Name                           | Model                | Brand      | Serial No. | Calibration Date |           |
|---|----------------------|------------|------------|------------------|-----------|
|   |                      |            |            | Last time        | Next time |
| EMI Receiver                              | 8546A                | HP         | 3520A00242 | 07/28/03         | 07/28/04  |
| RF Filter Section                         | 85460A               | HP         | 3448A00217 | 07/28/03         | 07/28/04  |
| Small Biconical Antenna                   | UBAA9114 & BBVU9135  | SCHWARZECK | 127        | 06/21/03         | 06/21/04  |
| Pre-amplifier                             | PA1F                 | TRC        | 1FAC       | 05/20/04         | 05/20/05  |
| Auto Switch Box (>30MHz)                  | ASB-01               | TRC        | 9904-01    | 05/20/04         | 05/20/05  |
| Coaxial Cable (Double shielded, 15 meter) | A30A30-0058-50FS-15M | JYEBAO     | SMA-01     | 05/20/04         | 05/20/05  |
| Coaxial Cable (1.1 meter)                 | A30A30-0058-50FS-1M  | JYEBAO     | SMA-02     | 05/20/04         | 05/20/05  |
| Spectrum Analyzer                         | 8564E                | HP         | 3720A00840 | 07/23/03         | 07/23/04  |
| Microwave Preamplifier                    | 84125C               | HP         | US36433002 | 07/30/03         | 07/30/04  |
| Horn Antenna                              | 3115                 | EMCO       | 9104-3668  | 12/18/03         | 12/18/04  |
| Standard Guide Horn Antenna               | 84125-80008          | HP         | 18-26.5GHz | 09/18/03         | 09/18/04  |
| Standard Guide Horn Antenna               | 84125-80001          | HP         | 26.5-40GHz | 09/18/03         | 09/18/04  |
| Pre-amplifier                             | 84125C               | HP         | US36433002 | 11/19/03         | 11/19/04  |
| Horn Antenna                              | 1196E (3115)         | HP (EMCO)  | 9704-5178  | 12/12/03         | 12/12/04  |
| Pre-amplifier                             | PA2F                 | TRC        | 2F1GZ      | 03/20/04         | 03/20/05  |
| Coaxial Cable (3 miter)                   | A30A30-0058-50FST118 | JYEBAO     | MSA-05     | 03/20/04         | 03/20/05  |
| Coaxial Cable (1 meter)                   | A30A30-0058-50FST118 | JYEBAO     | MSA-04     | 03/20/04         | 03/20/05  |

### 3.3 Test Result of Radiated Emissions

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

Testing room : Temperature : 25 ° C Humidity : 73 % RH

**Table 6 Fundamental Emissions**

| Channel    | Frequency (MHz) | A. P. (H/V) | A.H. (m) | Table (degree) | Peak (dB <sub>i</sub> V/m) | Limit (dB <sub>i</sub> V) | Margin (dB <sub>i</sub> V) |
|------------|-----------------|-------------|----------|----------------|----------------------------|---------------------------|----------------------------|
| Base 01    | 2402.55         | H           | 1.00     | 241            | 84.05                      | 94.00                     | -9.95                      |
|            |                 | V           | 1.00     | 206            | 84.22                      | 94.00                     | -9.78                      |
| Base 40    | 2404.50         | H           | 1.00     | 89             | 82.55                      | 94.00                     | -11.45                     |
|            |                 | V           | 1.00     | 121            | 84.89                      | 94.00                     | -9.11                      |
| Handset 01 | 2474.00         | H           | 1.00     | 84             | 84.58                      | 94.00                     | -9.42                      |
|            |                 | V           | 1.00     | 131            | 82.25                      | 94.00                     | -11.75                     |
| Handset 40 | 2475.95         | H           | 1.00     | 81             | 83.92                      | 94.00                     | -10.08                     |
|            |                 | V           | 1.00     | 136            | 81.09                      | 94.00                     | -12.91                     |

Note:

1. A. P. means antenna polarization, horizontal and vertical.
2. A. H. means antenna height.
3. Table means turntable turning position.
4. Amplitude means the fundamental emission measured.
5. Margin = Amplitude—limit

### 3.4 Test Result of Spurious Radiated Emissions

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

Testing room : Temperature : 25 ° C      Humidity : 73 % RH

**Table 7 Radiated Emissions for 30MHz to 25GHz [Charging mode by Base] [Horizontal]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 93.05             | 27.00                         | 1.00        | 178       | -0.66                      | 26.34  | 43.50                       | -17.16      |
| 100.32            | 24.91                         | 1.00        | 225       | -1.24                      | 23.67  | 43.50                       | -19.83      |
| 798.72            | 28.09                         | 1.00        | 155       | 11.58                      | 39.67  | 46.00                       | -6.33       |
| 829.04            | 21.53                         | 1.00        | 201       | 12.53                      | 34.06  | 46.00                       | -11.94      |

**Table 8 Radiated Emissions for 30MHz to 25GHz [Charging mode by Base] [Vertical]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 82.14             | 25.48                         | 1.00        | 4         | 0.04                       | 25.52  | 40.00                       | -14.48      |
| 174.29            | 31.43                         | 1.00        | 264       | -3.78                      | 27.65  | 43.50                       | -15.85      |
| 288.26            | 34.57                         | 1.00        | 15        | -3.80                      | 30.77  | 46.00                       | -15.23      |
| 608.36            | 21.03                         | 1.00        | 56        | 6.97                       | 28.00  | 46.00                       | -18.00      |
| 798.72            | 25.44                         | 1.00        | 191       | 11.58                      | 37.02  | 46.00                       | -8.98       |

Note:

1. Margin = Amplitude – limit, if margin is minus means under limit.
2. Corrected Amplitude = Reading Amplitude + Correction Factors
3. Correction factor = Antenna factor + (Cable Loss – Amplitude gain) + Switching Box Loss

**Table 9 Radiated Emissions for 30MHz to 25GHz [Charging mode by Charger] [Horizontal]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 94.26             | 28.45                         | 1.00        | 310       | -0.76                      | 27.69  | 43.50                       | -15.81      |
| 103.96            | 30.05                         | 1.00        | 244       | -1.45                      | 28.60  | 43.50                       | -14.90      |
| 134.27            | 23.69                         | 1.00        | 186       | -2.73                      | 20.96  | 43.50                       | -22.54      |
| 798.72            | 28.51                         | 1.00        | 283       | 11.58                      | 40.09  | 46.00                       | -5.91       |

**Table 10 Radiated Emissions for 30MHz to 25GHz [Charging mode by Charger] [Vertical]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 128.21            | 24.99                         | 1.00        | 223       | -2.55                      | 22.44  | 43.50                       | -21.06      |
| 181.56            | 32.28                         | 1.00        | 275       | -3.74                      | 28.54  | 43.50                       | -14.96      |
| 210.66            | 26.04                         | 1.00        | 334       | -3.90                      | 22.14  | 43.50                       | -21.36      |
| 288.26            | 35.48                         | 1.00        | 334       | -3.80                      | 31.68  | 46.00                       | -14.32      |
| 513.79            | 21.12                         | 1.00        | 301       | 3.48                       | 24.60  | 46.00                       | -21.40      |
| 798.72            | 25.60                         | 1.00        | 308       | 11.58                      | 37.18  | 46.00                       | -8.82       |

**Table 11 Radiated Emissions for 30MHz to 1GHz [Base Ch 01, X-axis] [Horizontal]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 39.70             | 26.30                         | 1.00        | 87        | 5.83                       | 32.13  | 40.00                       | -7.87       |
| 93.05             | 29.24                         | 1.00        | 195       | -0.66                      | 28.58  | 43.50                       | -14.92      |
| 103.96            | 26.62                         | 1.00        | 195       | -1.45                      | 25.17  | 43.50                       | -18.33      |
| 190.05            | 31.24                         | 1.00        | 81        | -3.66                      | 27.58  | 43.50                       | -15.92      |
| 802.36            | 29.04                         | 1.00        | 322       | 11.68                      | 40.72  | 46.00                       | -5.28       |
| 829.04            | 22.29                         | 1.00        | 12        | 12.53                      | 34.82  | 46.00                       | -11.18      |

**Table 12 Radiated Emissions for 30MHz to 1GHz [Base Ch 01, X-axis] [Vertical]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 39.70             | 30.97                         | 1.00        | 311       | 5.83                       | 36.80  | 40.00                       | -3.20       |
| 91.84             | 22.11                         | 1.00        | 202       | -0.57                      | 21.54  | 43.50                       | -21.96      |
| 100.32            | 23.38                         | 1.00        | 89        | -1.24                      | 22.14  | 43.50                       | -21.36      |
| 214.30            | 26.43                         | 1.00        | 340       | -3.92                      | 22.51  | 43.50                       | -20.99      |
| 287.05            | 31.46                         | 1.00        | 49        | -3.83                      | 27.63  | 46.00                       | -18.37      |
| 802.36            | 26.53                         | 1.00        | 41        | 11.68                      | 38.21  | 46.00                       | -7.79       |

**Table 13 Radiated Emissions for 1GHz to 25GHz [Base Ch 01, X-axis] [Horizontal]**

| Frequency | Ant. H | Table  | Reading Amplitude |         | CF    | Corrected Amplitude |         | Limit        | Margin |        |
|-----------|--------|--------|-------------------|---------|-------|---------------------|---------|--------------|--------|--------|
|           |        |        | Peak              | Average |       | Peak                | Average |              |        |        |
| MHz       | m      | degree | dB $\mu$ V        |         | dB/m  | dB $\mu$ V/m        |         | dB $\mu$ V/m |        | dB     |
| 1820.83   | 1.00   | 210    | 35.66             | ---     | 10.89 | 46.55               | ---     | 73.96        | 53.96  | -7.41  |
| 4805.00   | 1.00   | 285    | 39.27             | ---     | 3.69  | 42.96               | ---     | 73.96        | 53.96  | -11.00 |
| 7203.54   | 1.00   | 255    | 36.28             | ---     | 9.91  | 46.19               | ---     | 73.96        | 53.96  | -7.77  |
| 9608.12   | 1.00   | 146    | 35.44             | ---     | 11.47 | 46.91               | ---     | 73.96        | 53.96  | -7.05  |
| 12012.71  | 1.00   | 351    | 39.27             | ---     | 10.01 | 49.28               | ---     | 73.96        | 53.96  | -4.68  |

**Table 14 Radiated Emissions for 1GHz to 25GHz [Base Ch 01, X-axis] [Vertical]**

| Frequency | Ant. H | Table  | Reading Amplitude |         | CF    | Corrected Amplitude |         | Limit        | Margin |        |
|-----------|--------|--------|-------------------|---------|-------|---------------------|---------|--------------|--------|--------|
|           |        |        | Peak              | Average |       | Peak                | Average |              |        |        |
| MHz       | m      | degree | dB $\mu$ V        |         | dB/m  | dB $\mu$ V/m        |         | dB $\mu$ V/m |        | dB     |
| 1820.83   | 1.00   | 146    | 37.66             | ---     | 10.89 | 48.55               | ---     | 73.96        | 53.96  | -5.41  |
| 4805.00   | 1.00   | 145    | 39.94             | ---     | 3.69  | 43.63               | ---     | 73.96        | 53.96  | -10.33 |
| 7203.54   | 1.00   | 59     | 36.44             | ---     | 9.91  | 46.35               | ---     | 73.96        | 53.96  | -7.61  |
| 9608.12   | 1.00   | 325    | 36.44             | ---     | 11.47 | 47.91               | ---     | 73.96        | 53.96  | -6.05  |
| 12012.71  | 1.00   | 192    | 39.77             | ---     | 10.01 | 49.78               | ---     | 73.96        | 53.96  | -4.18  |

**Table 15 Radiated Emissions for 30MHz to 1GHz [Base Ch 40, X-axis] [Horizontal]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 39.70             | 27.43                         | 1.00        | 112       | 5.83                       | 33.26  | 40.00                       | -6.74       |
| 93.05             | 28.93                         | 1.00        | 98        | -0.66                      | 28.27  | 43.50                       | -15.23      |
| 100.32            | 26.60                         | 1.00        | 271       | -1.24                      | 25.36  | 43.50                       | -18.14      |
| 190.05            | 27.88                         | 1.00        | 305       | -3.66                      | 24.22  | 43.50                       | -19.28      |
| 802.36            | 29.13                         | 1.48        | 316       | 11.68                      | 40.81  | 46.00                       | -5.19       |
| 829.04            | 21.02                         | 1.00        | 311       | 12.53                      | 33.55  | 46.00                       | -12.45      |

**Table 16 Radiated Emissions for 30MHz to 1GHz [Base Ch 40, X-axis] [Vertical]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 39.70             | 27.43                         | 1.00        | 147       | 5.83                       | 33.26  | 40.00                       | -6.74       |
| 91.84             | 23.77                         | 1.00        | 348       | -0.57                      | 23.20  | 43.50                       | -20.30      |
| 100.32            | 23.62                         | 1.00        | 98        | -1.24                      | 22.38  | 43.50                       | -21.12      |
| 285.84            | 31.44                         | 1.00        | 6         | -3.85                      | 27.59  | 46.00                       | -18.41      |
| 802.36            | 24.78                         | 1.00        | 58        | 11.68                      | 36.46  | 46.00                       | -9.54       |
| 832.67            | 20.79                         | 1.00        | 148       | 12.64                      | 33.43  | 46.00                       | -12.57      |

**Table 17 Radiated Emissions for 1GHz to 25GHz [Base Ch 40, X-axis] [Horizontal]**

| Frequency | Ant. H | Table  | Reading Amplitude |         | CF    | Corrected Amplitude |         | Limit        | Margin |        |
|-----------|--------|--------|-------------------|---------|-------|---------------------|---------|--------------|--------|--------|
|           |        |        | Peak              | Average |       | Peak                | Average |              |        |        |
| MHz       | m      | degree | dB $\mu$ V        |         | dB/m  | dB $\mu$ V/m        |         | dB $\mu$ V/m |        | dB     |
| 4805.00   | 1.00   | 43     | 40.27             | ---     | 3.69  | 43.96               | ---     | 73.96        | 53.96  | -10.00 |
| 7209.58   | 1.00   | 34     | 35.94             | ---     | 9.95  | 45.89               | ---     | 73.96        | 53.96  | -8.07  |
| 9614.17   | 1.00   | 28     | 35.61             | ---     | 11.43 | 47.04               | ---     | 73.96        | 53.96  | -6.92  |
| 12018.75  | 1.00   | 257    | 37.61             | ---     | 9.98  | 47.59               | ---     | 73.96        | 53.96  | -6.37  |

**Table 18 Radiated Emissions for 1GHz to 25GHz [Base Ch 40, X-axis] [Vertical]**

| Frequency | Ant. H | Table  | Reading Amplitude |         | CF    | Corrected Amplitude |         | Limit        | Margin |        |
|-----------|--------|--------|-------------------|---------|-------|---------------------|---------|--------------|--------|--------|
|           |        |        | Peak              | Average |       | Peak                | Average |              |        |        |
| MHz       | m      | degree | dB $\mu$ V        |         | dB/m  | dB $\mu$ V/m        |         | dB $\mu$ V/m |        | dB     |
| 4805.00   | 1.00   | 201    | 39.60             | ---     | 3.69  | 43.29               | ---     | 73.96        | 53.96  | -10.67 |
| 7209.58   | 1.00   | 182    | 35.94             | ---     | 9.95  | 45.89               | ---     | 73.96        | 53.96  | -8.07  |
| 9614.17   | 1.00   | 12     | 35.94             | ---     | 11.43 | 47.37               | ---     | 73.96        | 53.96  | -6.59  |
| 12018.75  | 1.00   | 121    | 38.11             | ---     | 9.98  | 48.09               | ---     | 73.96        | 53.96  | -5.87  |

**Table 19 Radiated Emissions for 30MHz to 1GHz [Handset Ch 01, X-axis] [Horizontal]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 93.05             | 31.15                         | 1.00        | 348       | -0.66                      | 30.49  | 43.50                       | -13.01      |
| 103.96            | 27.94                         | 1.00        | 120       | -1.45                      | 26.49  | 43.50                       | -17.01      |
| 704.15            | 21.42                         | 1.00        | 182       | 9.65                       | 31.07  | 46.00                       | -14.93      |
| 798.72            | 27.24                         | 1.00        | 64        | 11.58                      | 38.82  | 46.00                       | -7.18       |
| 825.40            | 27.88                         | 1.00        | 296       | 12.41                      | 40.29  | 46.00                       | -5.71       |

**Table 20 Radiated Emissions for 30MHz to 1GHz [Handset Ch 01, X-axis] [Vertical]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 288.26            | 39.26                         | 1.00        | 191       | -3.80                      | 35.46  | 46.00                       | -10.54      |
| 615.64            | 21.25                         | 1.00        | 128       | 7.23                       | 28.48  | 46.00                       | -17.52      |
| 798.72            | 27.05                         | 1.00        | 312       | 11.58                      | 38.63  | 46.00                       | -7.37       |
| 825.40            | 30.52                         | 1.00        | 128       | 12.41                      | 42.93  | 46.00                       | -3.07       |

**Table 21 Radiated Emissions for 1GHz to 25GHz [Handset Ch 01, X-axis] [Horizontal]**

| Frequency | Ant. H | Table  | Reading Amplitude |         | CF    | Corrected Amplitude |         | Limit        | Margin |       |
|-----------|--------|--------|-------------------|---------|-------|---------------------|---------|--------------|--------|-------|
|           |        |        | Peak              | Average |       | Peak                | Average |              |        |       |
| MHz       | m      | degree | dB $\mu$ V        |         | dB/m  | dB $\mu$ V/m        |         | dB $\mu$ V/m |        | dB    |
| 1593.75   | 1.00   | 289    | 36.33             | ---     | 14.43 | 50.76               | ---     | 73.96        | 53.96  | -3.20 |
| 1650.00   | 1.00   | 186    | 35.67             | ---     | 13.55 | 49.22               | ---     | 73.96        | 53.96  | -4.74 |
| 2391.67   | 1.00   | 84     | 41.83             | ---     | 9.19  | 51.02               | ---     | 73.96        | 53.96  | -2.94 |
| 3189.58   | 1.00   | 54     | 36.17             | ---     | 11.34 | 47.51               | ---     | 73.96        | 53.96  | -6.45 |
| 9898.12   | 1.00   | 267    | 35.44             | ---     | 11.80 | 47.24               | ---     | 73.96        | 53.96  | -6.72 |
| 12369.17  | 1.00   | 196    | 36.77             | ---     | 9.18  | 45.95               | ---     | 73.96        | 53.96  | -8.01 |

**Table 22 Radiated Emissions for 1GHz to 25GHz [Handset Ch 01, Y-axis] [Vertical]**

| Frequency | Ant. H | Table  | Reading Amplitude |         | CF    | Corrected Amplitude |         | Limit        | Margin |       |
|-----------|--------|--------|-------------------|---------|-------|---------------------|---------|--------------|--------|-------|
|           |        |        | Peak              | Average |       | Peak                | Average |              |        |       |
| MHz       | m      | degree | dB $\mu$ V        |         | dB/m  | dB $\mu$ V/m        |         | dB $\mu$ V/m |        | dB    |
| 1595.83   | 1.00   | 280    | 38.00             | ---     | 14.40 | 52.40               | ---     | 73.96        | 53.96  | -1.56 |
| 1650.00   | 1.00   | 273    | 36.17             | ---     | 13.55 | 49.72               | ---     | 73.96        | 53.96  | -4.24 |
| 2389.58   | 1.00   | 45     | 39.83             | ---     | 9.18  | 49.01               | ---     | 73.96        | 53.96  | -4.95 |
| 3189.58   | 1.00   | 91     | 36.33             | ---     | 11.34 | 47.67               | ---     | 73.96        | 53.96  | -6.29 |
| 9898.12   | 1.00   | 63     | 35.94             | ---     | 11.80 | 47.74               | ---     | 73.96        | 53.96  | -6.22 |
| 12369.17  | 1.00   | 88     | 37.27             | ---     | 9.18  | 46.45               | ---     | 73.96        | 53.96  | -7.51 |

**Table 23 Radiated Emissions for 30MHz to 1GHz [Handset Ch 40, Z-axis] [Horizontal]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 93.05             | 28.28                         | 1.00        | 135       | -0.66                      | 27.62  | 43.50                       | -15.88      |
| 102.75            | 31.32                         | 1.00        | 74        | -1.38                      | 29.94  | 43.50                       | -13.56      |
| 798.72            | 25.65                         | 1.00        | 356       | 11.58                      | 37.23  | 46.00                       | -8.77       |
| 826.61            | 31.09                         | 1.00        | 320       | 12.45                      | 43.54  | 46.00                       | -2.46       |

**Table 24 Radiated Emissions for 30MHz to 1GHz [Handset Ch 40, Z-axis] [Vertical]**

| Radiated Emission |                               |             |           | Correction Factors<br>(dB) | Corrected Amplitude<br>(dB <sub>i</sub> V/m) | FCC Class B (3 M)           |             |
|-------------------|-------------------------------|-------------|-----------|----------------------------|--|-----------------------------|-------------|
| Frequency (MHz)   | Amplitude (dB <sub>i</sub> V) | Ant. H. (m) | Table (°) |                            |  | Limit (dB <sub>i</sub> V/m) | Margin (dB) |
| 213.09            | 26.76                         | 1.00        | 131       | -3.91                      | 22.85  | 43.50                       | -20.65      |
| 288.26            | 35.53                         | 1.00        | 28        | -3.80                      | 31.73  | 46.00                       | -14.27      |
| 798.72            | 26.39                         | 1.00        | 172       | 11.58                      | 37.97  | 46.00                       | -8.03       |
| 826.61            | 27.43                         | 1.00        | 250       | 12.45                      | 39.88  | 46.00                       | -6.12       |

Table 25 Radiated Emissions for 1GHz to 25GHz [Handset Ch 40, X-axis] [Horizontal]

| Frequency | Ant. H | Table  | Reading Amplitude |         | CF    | Corrected Amplitude |         | Limit        | Margin |       |
|-----------|--------|--------|-------------------|---------|-------|---------------------|---------|--------------|--------|-------|
|           |        |        | Peak              | Average |       | Peak                | Average |              |        |       |
| MHz       | m      | degree | dB $\mu$ V        |         | dB/m  | dB $\mu$ V/m        |         | dB $\mu$ V/m |        | dB    |
| 1595.83   | 1.00   | 291    | 35.16             | ---     | 14.40 | 49.56               | ---     | 73.96        | 53.96  | -4.40 |
| 2391.67   | 1.00   | 125    | 40.83             | ---     | 9.19  | 50.02               | ---     | 73.96        | 53.96  | -3.94 |
| 7427.08   | 1.00   | 232    | 34.94             | ---     | 10.35 | 45.29               | ---     | 73.96        | 53.96  | -8.67 |
| 9904.17   | 1.00   | 67     | 34.61             | ---     | 11.77 | 46.38               | ---     | 73.96        | 53.96  | -7.58 |
| 12381.25  | 1.00   | 210    | 37.94             | ---     | 9.11  | 47.05               | ---     | 73.96        | 53.96  | -6.91 |

Table 26 Radiated Emissions for 1GHz to 25GHz [Handset Ch 40, Y-axis] [Vertical]

| Frequency | Ant. H | Table  | Reading Amplitude |         | CF    | Corrected Amplitude |         | Limit        | Margin |       |
|-----------|--------|--------|-------------------|---------|-------|---------------------|---------|--------------|--------|-------|
|           |        |        | Peak              | Average |       | Peak                | Average |              |        |       |
| MHz       | m      | degree | dB $\mu$ V        |         | dB/m  | dB $\mu$ V/m        |         | dB $\mu$ V/m |        | dB    |
| 1595.83   | 1.00   | 270    | 36.33             | ---     | 14.40 | 50.73               | ---     | 73.96        | 53.96  | -3.23 |
| 1650.00   | 1.00   | 247    | 36.33             | ---     | 13.55 | 49.88               | ---     | 73.96        | 53.96  | -4.08 |
| 2391.67   | 1.00   | 360    | 39.50             | ---     | 9.19  | 48.69               | ---     | 73.96        | 53.96  | -5.27 |
| 7427.08   | 1.00   | 123    | 34.78             | ---     | 10.35 | 45.13               | ---     | 73.96        | 53.96  | -8.83 |
| 9904.17   | 1.00   | 118    | 34.61             | ---     | 11.77 | 46.38               | ---     | 73.96        | 53.96  | -7.58 |
| 12381.25  | 1.00   | 237    | 37.94             | ---     | 9.11  | 47.05               | ---     | 73.96        | 53.96  | -6.91 |

#### IV. Verify Frequencies and Channels

This is for sure that all frequencies are in 2402MHz to 2476MHz that verifies the frequency as follow

**Table 27 Verify the Frequency Pairs**

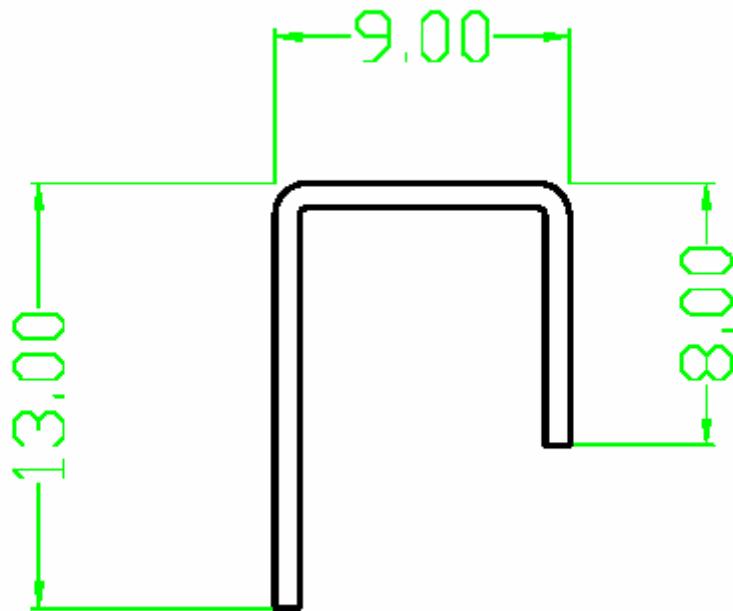
| Channel | Handset (MHz) | Base (MHz) | Channel | Handset (MHz) | Base (MHz) |
|---------|---------------|------------|---------|---------------|------------|
| 1       | 2474.00       | 2402.55    | 21      | 2475.00       | 2403.55    |
| 2       | 2474.05       | 2402.60    | 22      | 2475.05       | 2403.60    |
| 3       | 2474.10       | 2402.65    | 23      | 2475.10       | 2403.65    |
| 4       | 2474.15       | 2402.70    | 24      | 2475.15       | 2403.70    |
| 5       | 2474.20       | 2402.75    | 25      | 2475.20       | 2403.75    |
| 6       | 2474.25       | 2402.80    | 26      | 2475.25       | 2403.80    |
| 7       | 2474.30       | 2402.85    | 27      | 2475.30       | 2403.85    |
| 8       | 2474.35       | 2402.90    | 28      | 2475.35       | 2403.90    |
| 9       | 2474.40       | 2402.95    | 29      | 2475.40       | 2403.95    |
| 10      | 2474.45       | 2403.00    | 30      | 2475.45       | 2404.00    |
| 11      | 2474.50       | 2403.05    | 31      | 2475.50       | 2404.05    |
| 12      | 2474.55       | 2403.10    | 32      | 2475.55       | 2404.10    |
| 13      | 2474.60       | 2403.15    | 33      | 2475.60       | 2404.15    |
| 14      | 2474.65       | 2403.20    | 34      | 2475.65       | 2404.20    |
| 15      | 2474.70       | 2403.25    | 35      | 2475.70       | 2404.25    |
| 16      | 2474.75       | 2403.30    | 36      | 2475.75       | 2404.30    |
| 17      | 2474.80       | 2403.35    | 37      | 2475.80       | 2404.35    |
| 18      | 2474.85       | 2403.40    | 38      | 2475.85       | 2404.40    |
| 19      | 2474.90       | 2403.45    | 39      | 2475.90       | 2404.45    |
| 20      | 2474.95       | 2403.50    | 40      | 2475.95       | 2404.50    |

#### Section 15.214(d) The security code is set automatic:

Every time when you place the handset in the base, your cordless will randomly select over one million possible security codes.

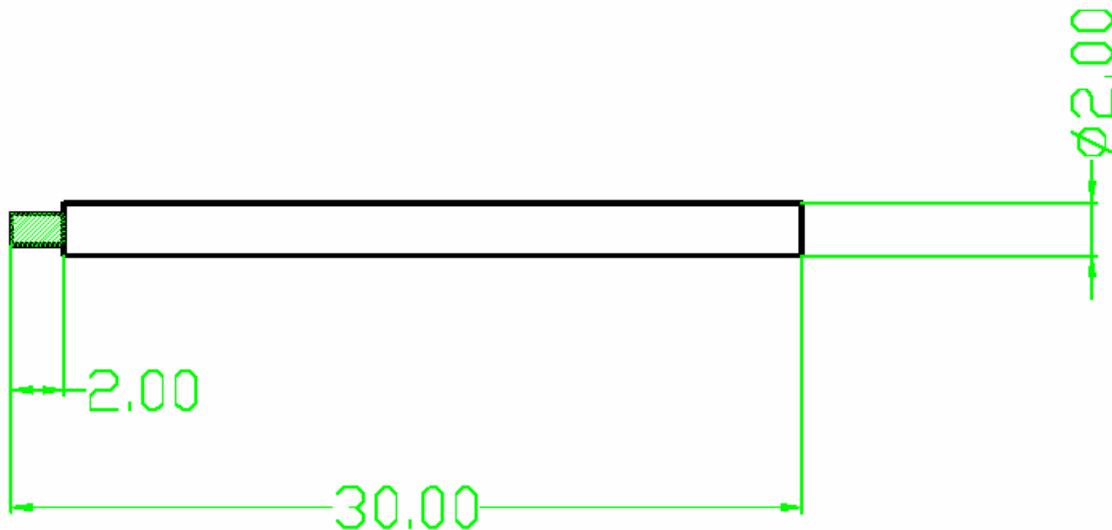
## *Appendix A*

The antenna of the device is screwed inside the device. The user can not remove it freely without any tools from outside the device. This is comply with the FCC rules part 15.203



材料: Ø0.75mm的镀镍钢丝

| KAIZEN PROJECT MANAGEMENT CONSULTANT |                       |  |           |
|--------------------------------------|-----------------------|--|-----------|
| TITLE: 天线                            | PART NO: 57-MYB0-B000 | PROJECTION   | ◎         |
| MODEL: GH9460BASE                    | DRAWN:                | DIMENSIONS ARE IN mm<br>UNLESS OTHERWISE SPECIFIED |           |
| MAT'L: 镀镍钢丝                          | CHECKED:              | TOLERANCE :  |           |
| QTY.: 1                              | SCALE:                | DIMENSION  | TOLERANCE |
|                                      |                       | XXXX   | ±0.05     |
|                                      |                       | XXX  | ±0.1      |
|                                      |                       | XX   | ±0.1      |
|                                      |                       | X  | ±0.1      |
|                                      |                       | ANGULAR  | ±0.5°     |
|                                      |                       | VER1.1   |           |

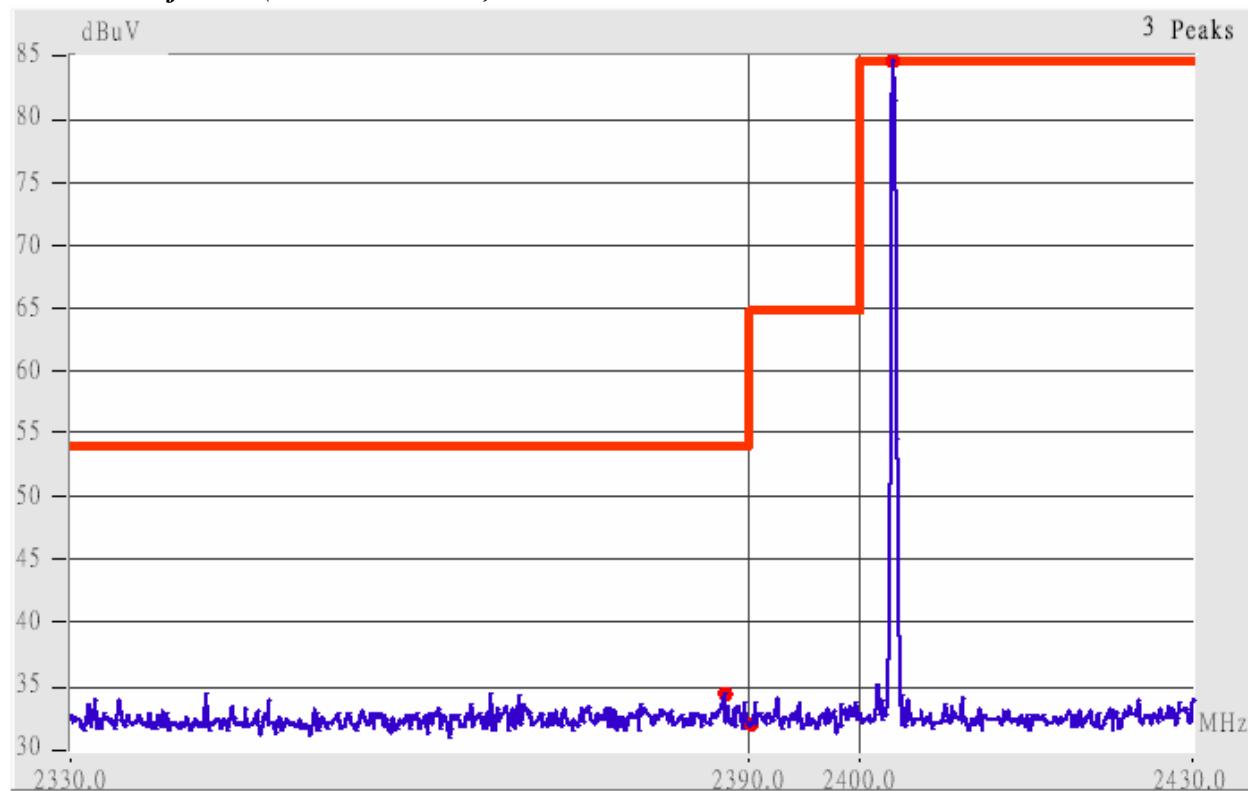


| KAIZEN PROJECT MANAGEMENT CONSULTANT |                       |  |
|--------------------------------------|-----------------------|--|
| TITLE: MYBO HS 天线                    | PART NO: 57-MYBO-H000 | PROJECTION   |
| MODEL: MYBO HS                       | DRAWN:                | DIMENSIONS ARE IN MM<br>UNLESS OTHERWISE SPECIFIED |
| MAT'L: 胶皮线                           | CHECKED:              | TOLERANCE<br>DIMENSION TOLERANCE<br>XXXX ±0.05     |
| QTY.: 1                              | SCALE:                | XXX ±0.1<br>XX ±0.1<br>X ±0.1<br>ANGULAR ±6 ±0.5°  |
|                                      |                       | VER1.1   |

## ***Appendix B***

**§ 15.249(d)** Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

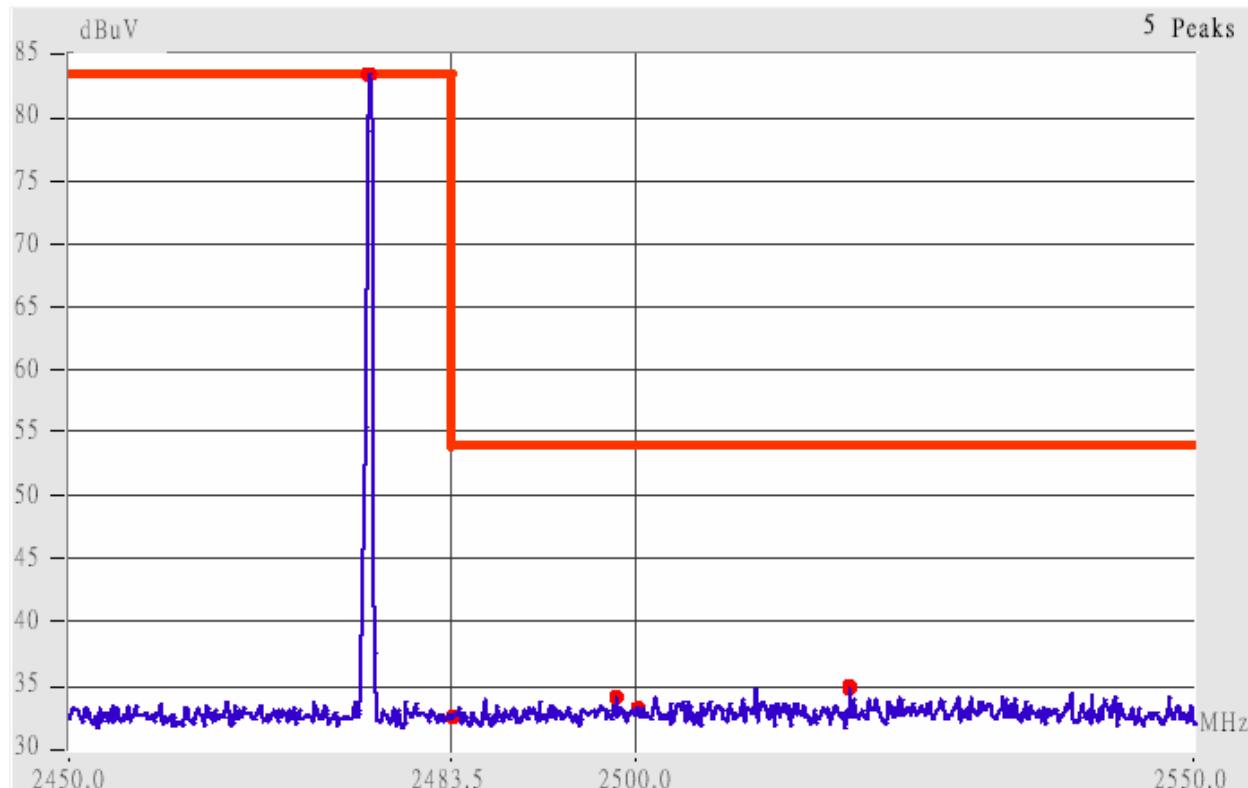
See as next page.

**Channel 1 of Base (Lowest Channel)**

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 1 of base.

1. The lobe left by the fundamental side is already 20dB below the highest emission level.
2. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

| Frequency<br>(MHz) | Ant.<br>P. | Radiated<br>Emission |              |                 |       | Corrected<br>Amplitude<br>(dB $\mu$ V/m) | FCC Class B |         |        |      |  |
|--------------------|------------|----------------------|--------------|-----------------|-------|--|-------------|---------|--------|------|--|
|                    |            | Ant. H.<br>(m)       | Table<br>(°) | Factors<br>(dB) |       |  | Peak        | Average | Peak   | Ave. |  |
|                    |            |                      |              |                 |       |  |             |         |        |      |  |
| 2363.26            | Hor        | 1.00                 | 79           | 9.11            | 44.77 | ---                                      | 74.00       | 53.96   | -9.19  |      |  |
| 2390.02            | Hor        | 1.00                 | 303          | 9.18            | 42.18 | ---                                      | 74.00       | 53.96   | -11.78 |      |  |
| 2387.04            | Ver        | 1.00                 | 49           | 9.17            | 44.34 | ---                                      | 74.00       | 53.96   | -9.62  |      |  |
| 2390.02            | Ver        | 1.00                 | 261          | 9.18            | 41.85 | ---                                      | 74.00       | 53.96   | -12.11 |      |  |

**Channel 40 of Handset (Highest Channel)**

This is the hard copy of our bandedge measurement generated by our bandedge testing program. The plot shown above is the bandedge of channel 40 of handset.

1. The lobe right by the fundamental side is already 20dB below the highest emission level.
2. The emissions recorded in the restricted band is do comply with the Part 15.209(a) – as below

| Radiated Emission |         |             |           |              | Corrected Amplitude |         | FCC Class B          |       |        |             |
|-------------------|---------|-------------|-----------|--------------|---------------------|---------|----------------------|-------|--------|-------------|
| Frequency (MHz)   | Ant. P. | Ant. H. (m) | Table (°) | Factors (dB) | (dB $\mu$ V/m)      |         | Limit (dB $\mu$ V/m) | Peak  | Ave.   | Margin (dB) |
|                   |         |             |           |              | Peak                | Average |                      |       |        |             |
| 2486.24           | Hor     | 1.00        | 195       | 9.45         | 44.95               | ---     | 74.00                | 53.96 | -9.01  |             |
| 2529.87           | Hor     | 1.00        | 28        | 9.55         | 46.05               | ---     | 74.00                | 53.96 | -7.91  |             |
| 2483.50           | Ver     | 1.00        | 215       | 9.44         | 42.28               | ---     | 74.00                | 53.96 | -11.68 |             |
| 2485.60           | Ver     | 1.00        | 315       | 9.45         | 45.12               | ---     | 74.00                | 53.96 | -8.84  |             |
| 2500.01           | Ver     | 1.00        | 59        | 9.49         | 43.16               | ---     | 74.00                | 53.96 | -10.80 |             |
| 2506.19           | Ver     | 1.00        | 355       | 9.50         | 45.17               | ---     | 74.00                | 53.96 | -8.79  |             |