



FCC 47 CFR PART 15 SUBPART C

TEST REPORT

For

Tai-Safety-H Tire Pressure Monitoring System

Model: Tai-SAFETY -HU, Tai-SAFETY -BU

Trade Name: TAI-Electrical

Issued to

**TAI Electrical Products Inc.
2F, 27, Alley 49, Lane 118, Sec. 2, Min Tsu Rd.,
Ping Chang City, Taoyuan, Taiwan, R.O.C.**

Issued by

**Compliance Certification Services Inc.
No. 81-1, Lane 210, Bade Rd. 2, Luchu Hsiang,
Taoyuan Hsien, (338) Taiwan, R.O.C.
<http://www.ccsemc.com.tw>
service@tw.ccsemc.com**



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TABLE OF CONTENTS

| | |
|---|-----------|
| 1. TEST RESULT CERTIFICATION..... | 3 |
| 2. EUT DESCRIPTION | 4 |
| 3. TEST METHODOLOGY | 5 |
| 3.1 EUT CONFIGURATION | 5 |
| 3.2 EUT EXERCISE | 5 |
| 3.3 GENERAL TEST PROCEDURES | 5 |
| 3.4 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS | 6 |
| 3.5 DESCRIPTION OF TEST MODES | 6 |
| 4. INSTRUMENT CALIBRATION..... | 7 |
| 4.1 MEASURING INSTRUMENT CALIBRATION | 7 |
| 4.2 MEASUREMENT EQUIPMENT USED | 7 |
| 5. FACILITIES AND ACCREDITATIONS | 8 |
| 5.1 FACILITIES | 8 |
| 5.2 EQUIPMENT | 8 |
| 5.3 TABLE OF ACCREDITATIONS AND LISTINGS | 9 |
| 6. SETUP OF EQUIPMENT UNDER TEST | 10 |
| 6.1 SETUP CONFIGURATION OF EUT | 10 |
| 6.2 SUPPORT EQUIPMENT | 10 |
| 7. FCC PART 15.231 REQUIREMENTS..... | 11 |
| 7.1 20DB BANDWIDTH | 11 |
| 7.2 LIMIT OF TRANSMISSION TIME | 13 |
| 7.3 DUTY CYCLE..... | 15 |
| 7.4 RADIATED EMISSIONS | 17 |
| 7.5 POWERLINE CONDUCTED EMISSIONS | 22 |
| APPENDIX I PHOTOGRAPHS OF TEST SETUP | 23 |



1. TEST RESULT CERTIFICATION

Applicant: TAI Electrical Products Inc.
2F, 27, Alley 49, Lane 118, Sec. 2, Min Tsu Rd.,
Ping Chang City, Taoyuan, Taiwan, R.O.C.

Equipment Under Test: Tai-Safety-H Tire Pressure Monitoring System

Trade Name: TAI-Electrical

Model: Tai-SAFETY -HU, Tai-SAFETY -BU

Date of Test: June 17 ~ 22, 2006

| APPLICABLE STANDARDS | |
|------------------------------|-------------------------|
| STANDARD | TEST RESULT |
| FCC 47 CFR Part 15 Subpart C | No non-compliance noted |

We hereby certify that:

The above equipment was tested by Compliance Certification Services Inc. 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 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15.207, 15.209 and Part 15.231.

The test results of this report relate only to the tested sample identified in this report.

Approved by:

Gavin Lim
Section Manager
Compliance Certification Services Inc.

Reviewed by:

Amanda Wu
Section Manager
Compliance Certification Services Inc.



2. EUT DESCRIPTION

| | |
|-----------------------------|---|
| Product | Tai-Safety-H Tire Pressure Monitoring System |
| Trade Name | TAI-Electrical |
| Model Number | Tai-SAFETY -HU, Tai-SAFETY -BU |
| Model Difference | All the specification and layout are identical except they come with different external appearance (antenna) and model numbers. |
| Power Supply | LITHIUM Battery (Rating: 3.6V) |
| Frequency Range | 315 MHz |
| Modulation Technique | FSK |
| Antenna Designation | Tire Valve Antenna / Gain: -10 dBi |

Remark:

1. *The sample selected for test was engineering sample that approximated to production product and was provided by manufacturer.*
2. *This submittal(s) (test report) is intended for FCC ID: TD3-TA12006002 filing to comply with Section 15.207, 15.209 and 15.231 of the FCC Part 15, Subpart C Rules.*



3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4 (2001) and FCC CFR 47 2.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055, 2.1057, 15.207, 15.209 and 15.231.

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2 EUT EXERCISE

The EUT was operated in the engineering mode to fix the TX frequency that was for the purpose of the measurements.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4. Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4.

3.4 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

| MHz | MHz | MHz | GHz |
|----------------------------|---------------------|-----------------|------------------|
| 0.090 - 0.110 | 16.42 - 16.423 | 399.9 - 410 | 4.5 - 5.15 |
| ¹ 0.495 - 0.505 | 16.69475 - 16.69525 | 608 - 614 | 5.35 - 5.46 |
| 2.1735 - 2.1905 | 16.80425 - 16.80475 | 960 - 1240 | 7.25 - 7.75 |
| 4.125 - 4.128 | 25.5 - 25.67 | 1300 - 1427 | 8.025 - 8.5 |
| 4.17725 - 4.17775 | 37.5 - 38.25 | 1435 - 1626.5 | 9.0 - 9.2 |
| 4.20725 - 4.20775 | 73 - 74.6 | 1645.5 - 1646.5 | 9.3 - 9.5 |
| 6.215 - 6.218 | 74.8 - 75.2 | 1660 - 1710 | 10.6 - 12.7 |
| 6.26775 - 6.26825 | 108 - 121.94 | 1718.8 - 1722.2 | 13.25 - 13.4 |
| 6.31175 - 6.31225 | 123 - 138 | 2200 - 2300 | 14.47 - 14.5 |
| 8.291 - 8.294 | 149.9 - 150.05 | 2310 - 2390 | 15.35 - 16.2 |
| 8.362 - 8.366 | 156.52475 - | 2483.5 - 2500 | 17.7 - 21.4 |
| 8.37625 - 8.38675 | 156.52525 | 2655 - 2900 | 22.01 - 23.12 |
| 8.41425 - 8.41475 | 156.7 - 156.9 | 3260 - 3267 | 23.6 - 24.0 |
| 12.29 - 12.293 | 162.0125 - 167.17 | 3332 - 3339 | 31.2 - 31.8 |
| 12.51975 - 12.52025 | 167.72 - 173.2 | 3345.8 - 3358 | 36.43 - 36.5 |
| 12.57675 - 12.57725 | 240 - 285 | 3600 - 4400 | (²) |
| 13.36 - 13.41 | 322 - 335.4 | | |

¹ Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

² Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

3.5 DESCRIPTION OF TEST MODES

The EUT comes with two different types of antenna for sale. After the preliminary test, the EUT (model: Tai-SAFETY -HU) had found to emit the worst emissions and therefore had been tested under normal operating and standby condition. Hardware used to control the EUT for staying in continuous transmitting and receiving mode for testing.

The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.



4. INSTRUMENT CALIBRATION

4.1 MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipment, which is traceable to recognized national standards

4.2 MEASUREMENT EQUIPMENT USED

Equipment Used for Emissions Measurement

Remark: Each piece of equipment is scheduled for calibration once a year.

| Conducted Emissions Test Site | | | | |
|-------------------------------|--------------|--------|---------------|-----------------|
| Name of Equipment | Manufacturer | Model | Serial Number | Calibration Due |
| Spectrum Analyzer | Agilent | E4446A | MY43360131 | 01/18/2007 |

| 3M Semi Anechoic Chamber | | | | |
|--------------------------|----------------|-------------------|----------------------------|-----------------|
| Name of Equipment | Manufacturer | Model | Serial Number | Calibration Due |
| Spectrum Analyzer | Agilent | E4446A | US42510252 | 07/25/2006 |
| Test Receiver | Rohde&Schwarz | ESCI | 100064 | 11/05/2006 |
| Switch Controller | TRC | Switch Controller | SC94050010 | 05/05/2007 |
| 4 Port Switch | TRC | 4 Port Switch | SC94050020 | 05/05/2007 |
| Horn-Antenna | TRC | HA-0502 | 06 | 06/02/2007 |
| Horn-Antenna | TRC | HA-0801 | 04 | 05/05/2007 |
| Horn-Antenna | TRC | HA-1201A | 01 | 07/04/2006 |
| Horn-Antenna | TRC | HA-1301A | 01 | 07/04/2006 |
| Bilog- Antenna | Sunol Sciences | JB3 | A030205 | 03/09/2007 |
| Turn Table | Max-Full | MFT-120S | T120S940302 | N.C.R. |
| Antenna Tower | Max-Full | MFA-430 | A440940302 | N.C.R. |
| Controller | Max-Full | MF-CM886 | CC-C-1F-13 | N.C.R. |
| Site NSA | CCS | N/A | FCC: 965860 IC: IC 6106 | 09/26/2008 |
| Test S/W | | | LABVIEW (V 6.1) | |

Remark: The measurement uncertainty is less than +/-2.0065dB (30MHz ~ 1GHz), +/-3.0958dB (Above 1GHz) which is evaluated as per the NAMAS NIS 81 and CISPR/A/291/CDV.



5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

No.199, Chunghsen Road, Hsintien City, Taipei Hsien, Taiwan, R.O.C.

Tel: 886-2-2217-0894 / Fax: 886-2-2217-1029

No.11, Wugong 6th Rd., Wugu Industrial Park, Taipei Hsien 248, Taiwan

Tel: 886-2-2299-9720 / Fax: 886-2-2298-4045

No.81-1, Lane 210, Bade 2nd Rd., Luchu Hsiang, Taoyuan Hsien 338, Taiwan

Tel: 886-3-324-0332 / Fax: 886-3-324-5235

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, biconical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements.

Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

5.3 TABLE OF ACCREDITATIONS AND LISTINGS

| Country | Agency | Scope of Accreditation | Logo |
|---------|-----------------|--|---|
| USA | A2LA | EN 55011, EN 55014-1/2, CISPR 11, CISPR 14-1/2, EN 55022, EN 55015, CISPR 22, CISPR 15, AS/NZS 3548, VCCI V3 (2001), CFR 47, FCC Part 15/18, CNS 13783-1, CNS 13439, CNS 13438, CNS 13803, CNS 14115, EN 55024, IEC 801-2, IEC 801-3, IEC 801-4, IEC/EN 61000-3-2, EIC/EN 61000-3-3, IEC/EN 61000-4-2/3/4/5/6/8/11, EN 50081-1/ EN 61000-6-3, EN 50081-2/EN 61000-6-4, EN 50081-2/EN 61000-6-1: 2001 |  0824-01 |
| USA | FCC | 3/10 meter Open Area Test Sites (93105, 90471) / 3M Semi Anechoic Chamber (965860) to perform FCC Part 15/18 measurements |  93105, 90471 965860 |
| Japan | VCCI | 3/10 meter Open Area Test Sites to perform conducted/radiated measurements |  R-393/1066/725/879 C-402/747/912 |
| Norway | NEMKO | EN 50081-1/2, EN 50082-1/2, IEC 61000-6-1/2, EN 50091-2, EN 50130-4, EN 55011, EN 55013, EN 55014-1/2, EN 55015, EN 55022, EN 55024, EN 61000-3-2/3, EN 61326-1, IEC 61000-4-2/3/4/5/6/8/11, EN 60601-1-2, EN 300 328, EN 300 422-2, EN 301 419-1, EN 301 489-01/03/07/08/09/17, EN 301 419-2/3, EN 300 454-2, EN 301 357-2 |  ELA 124a ELA 124b ELA 124c |
| Taiwan | TAF | EN 300 328, EN 300 220-1, EN 300 220-2, EN 300 220-3, 47 CFR FCC Part 15 Subpart C, EN 61000-3-2, EN 61000-3-3, CNS 13439, CNS 13783-1, CNS 14115, CNS 13438, AS/NZS CISPR 22, CNS 13022-1, IEC 61000-4-2/3/4/5/6/8/11, CNS 13022-2/3 |  Testing Laboratory 0363 |
| Taiwan | BSMI | CNS 13438, CNS 13783-1, CNS 13439, CNS 14115 |  SL2-IS-E-0014 SL2-IN-E-0014 SL2-A1-E-0014 SL2-R1-E-0014 SL2-R2-E-0014 SL2-L1-E-0014 |
| Canada | Industry Canada | 3/10 meter Open Area Test Sites (IC 3991-3, IC 3991-4) / 3M Semi Anechoic Chamber (IC 6106) to perform RSS 212 Issue 1 |  IC 3991-3 IC 3991-4 IC 6106 |

* No part of this report may be used to claim or imply product endorsement by A2LA any agency of the US Government.



6. SETUP OF EQUIPMENT UNDER TEST

6.1 SETUP CONFIGURATION OF EUT

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

6.2 SUPPORT EQUIPMENT

| No. | Device Type | Brand | Model | Series No. | FCC ID | Data Cable | Power Cord |
|-----|-------------|-------|-------|------------|--------|------------|------------|
| | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Remark:

1. *All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.*
2. *Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.*

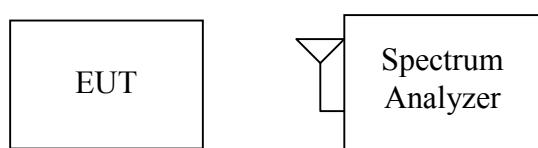
7. FCC PART 15.231 REQUIREMENTS

7.1 20DB BANDWIDTH

LIMIT

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

Test Configuration



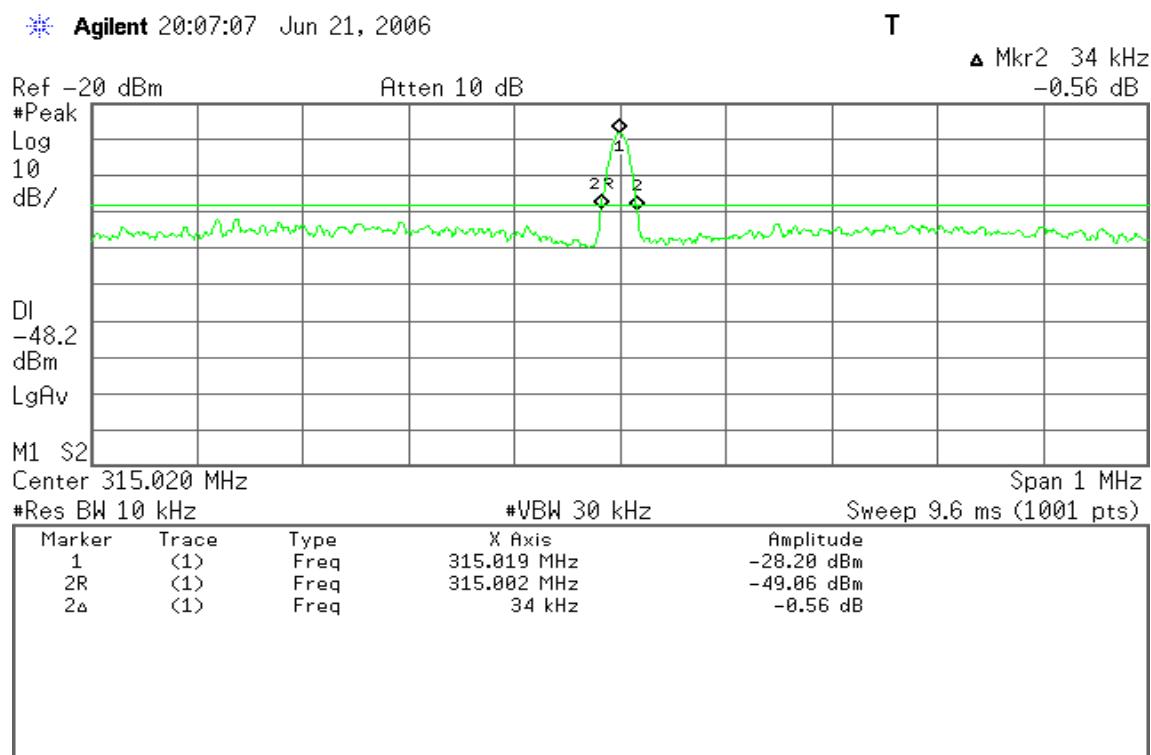
The spectrum analyzer center frequency is set to the transmitter frequency. The RBW is set to 10 kHz and VBW is set 30kHz.

TEST RESULTS

No non-compliance noted.

Test Data

| Frequency (MHz) | 20 dB Bandwidth (kHz) | Limit (MHz) | Result |
|-----------------|-----------------------|-------------|--------|
| 315.02 | 34.00 | 0.7876 | PASS |

Test Plot

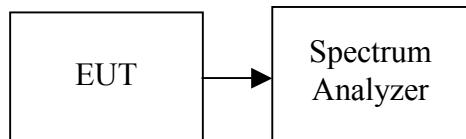


7.2 LIMIT OF TRANSMISSION TIME

LIMIT

According to 15.231(e), in addition, devices operated under the provisions of this paragraph shall be provided with a means for automatically limiting operation so that the duration of each transmission shall not be greater than one second and the silent period between transmissions shall be at least 30 times the duration of the transmission but in no case less than 10 seconds.

Test Configuration



TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The spectrum analyzer center frequency is set to the transmitter frequency. The RBW and VBW are set to 1MHz.

TEST RESULTS

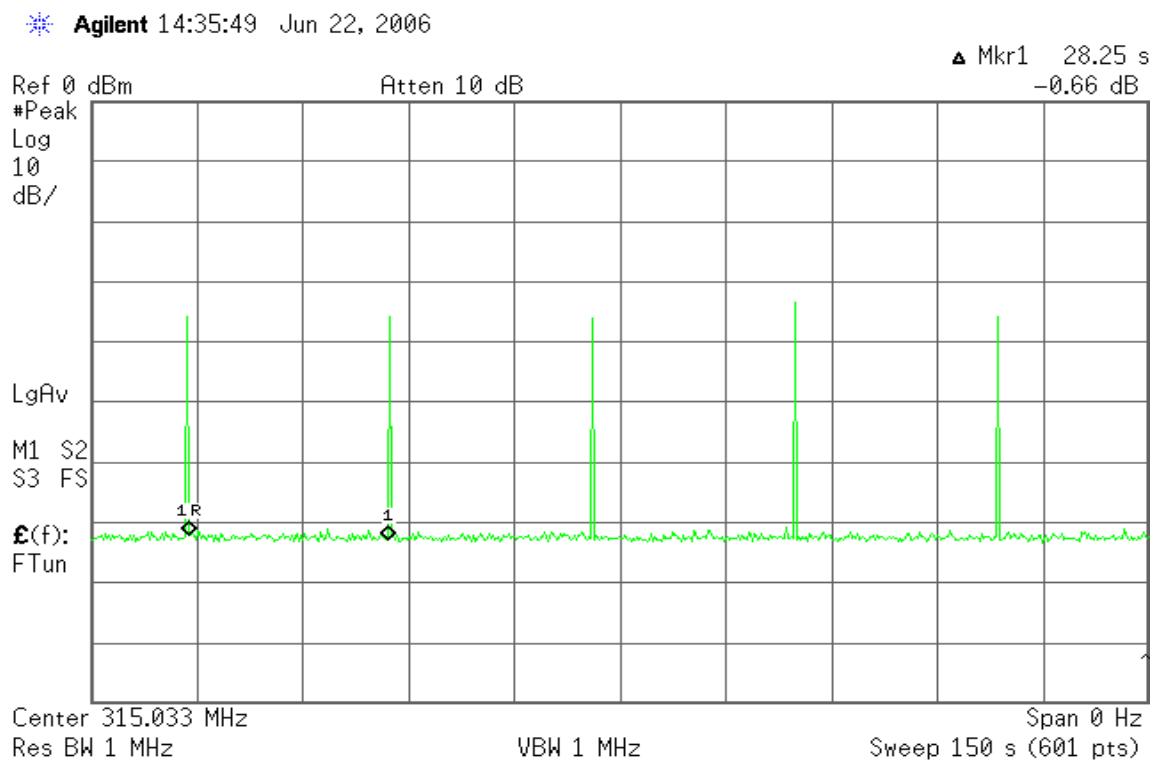
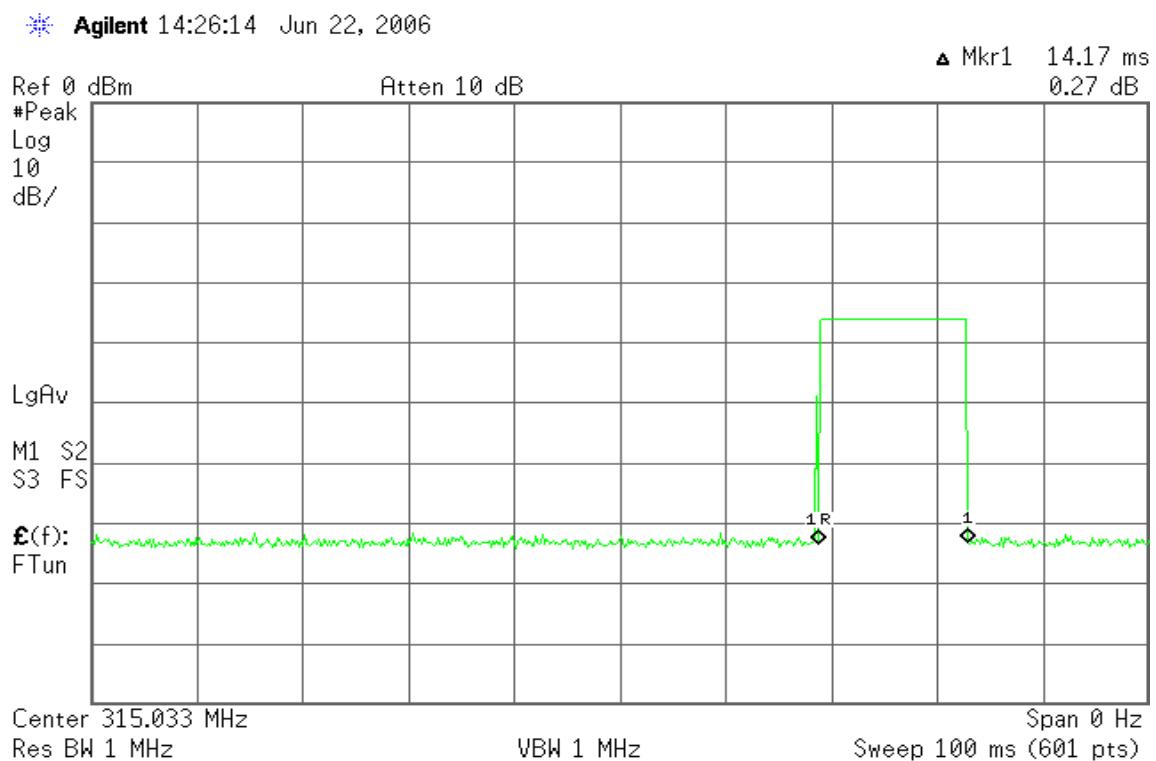
No non-compliance noted

Test Data

| Frequency (MHz) | Transmission Time (s) | Maximum Transmission Limit (s) | Silent Duration (s) | Minimum Silent Duration Limit (s) | Silent Period Versus Transmission Time Ratio | Minimum Ratio Limit | Result |
|-----------------|-----------------------|--------------------------------|---------------------|-----------------------------------|--|---------------------|--------|
| 433.97 | 0.01410 | 1.00 | 28.25 | 10.00 | 2003.55 | 30.00 | Pass |

Test Plot

Ton

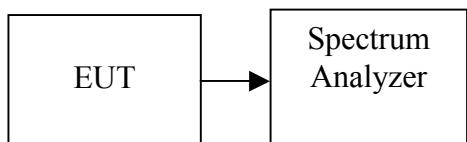


7.3 DUTY CYCLE CORRECTION FACTOR

LIMIT

Nil (No dedicated limit specified in the Rules)

Test Configuration



TEST PROCEDURE

1. Place the EUT on the table and set it in transmitting mode.
2. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.
3. Set center frequency of spectrum analyzer = operating frequency.
4. Set the spectrum analyzer as RBW, VBW=1MHz, Span = 0Hz, Adjust Sweep = 100ms.
5. Repeat above procedures until all frequency measured were complete.

TEST RESULTS

No non-compliance noted

Test Data

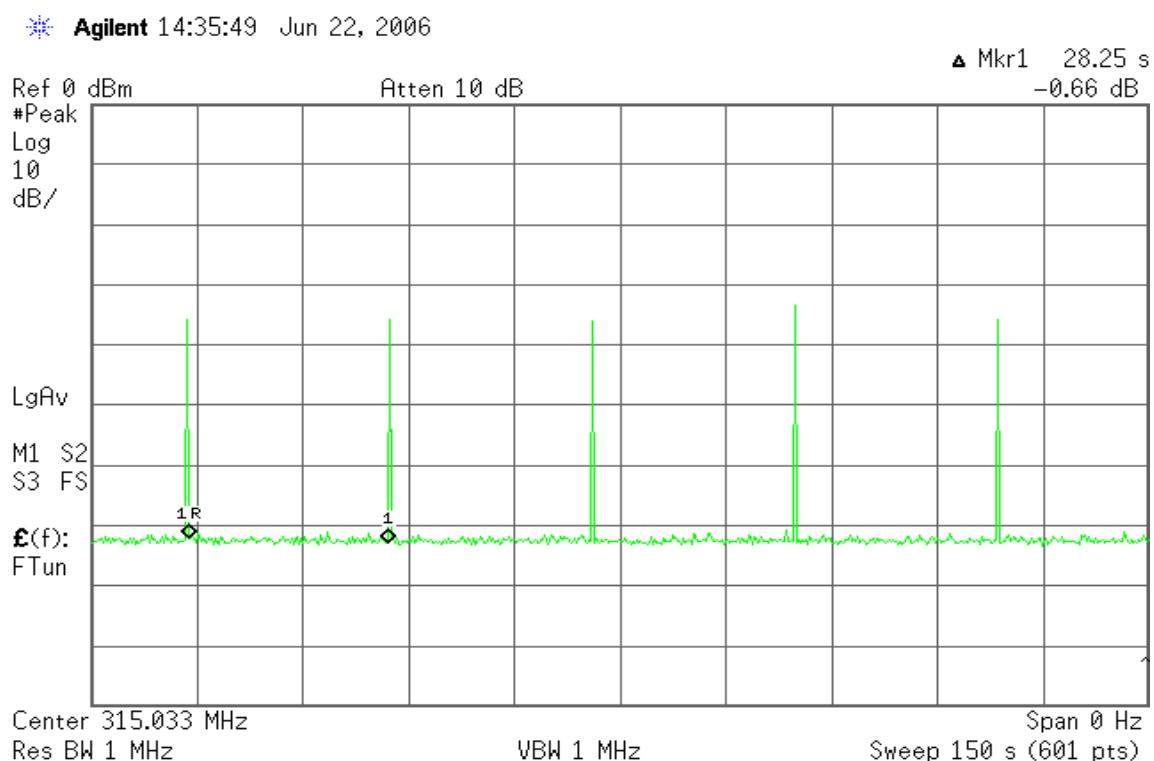
T_p = 100ms

T_{on} = 14.17 (ms)

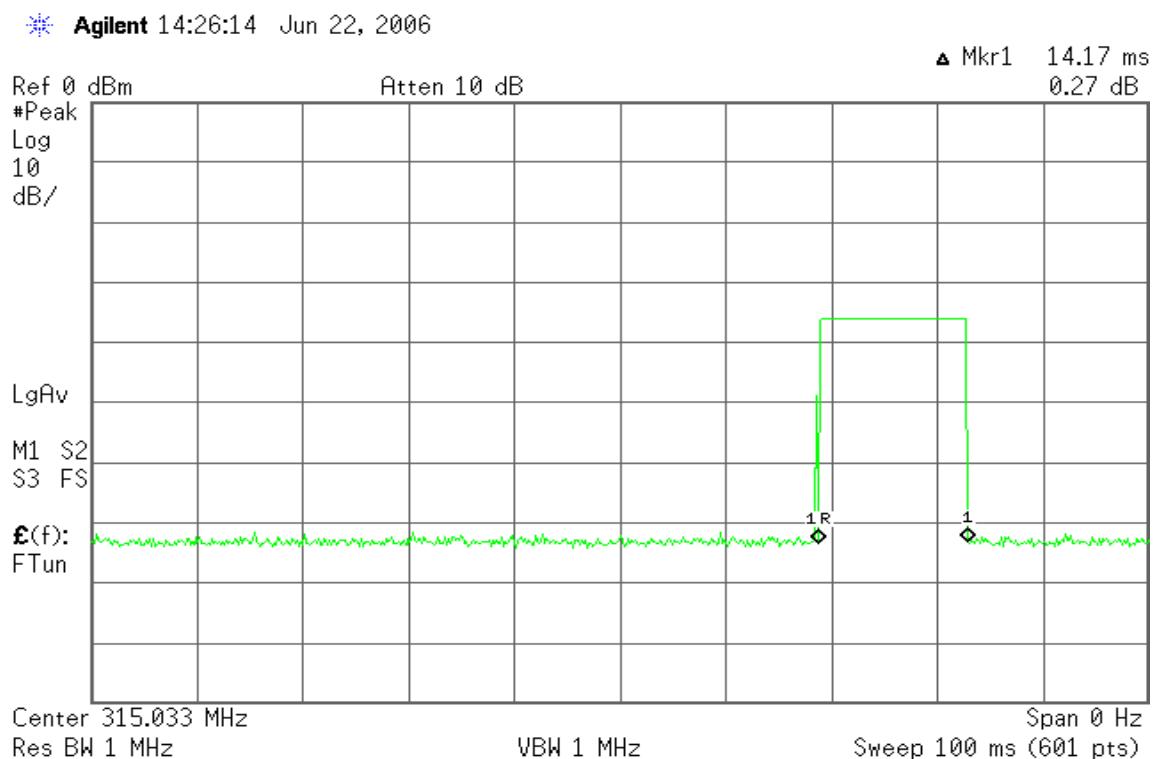
Duty Cycle Correction Factor = $20 * \log(T_{on} / T_p) = 20 * \log(14.17/100) = -16.97 \text{ dBuV}$

Test Plot

Tp in 100ms



Ton





7.4 RADIATED EMISSIONS

LIMIT

- According to §15.231(e), intentional radiators may operate at a periodic rate exceeding that specified in paragraph (a) and may be employed for any type of operation, including operation prohibited in paragraph (a), provided the intentional radiator complies with the provisions of paragraphs (b) through (d) of this Section, except the field strength table in paragraph (b) is replaced by the following:

| Fundamental Frequency (MHz) | Field Strength of Fundamental (microvolts/meter) | Field Strength of Spurious Emissions (microvolts/meter) |
|-----------------------------|--|---|
| 40.66 – 40.70 | 1000 | 100 |
| 70 – 130 | 500 | 50 |
| 130 – 174 | 500 to 1500 ** | 50 to 150 ** |
| 174 – 260 | 1500 | 150 |
| 260 – 470 | 1500 to 5000 ** | 150 to 500 ** |
| Above 470 | 5000 | 500 |

*Remark: ** linear interpolations*

[Where F is the frequency in MHz, the formulas for calculating the maximum permitted fundamental field strengths are as follows: for the band 130-174 MHz, uV/m at 3 meters = 22.72727(F) - 2454.545; for the band 260-470 MHz, uV/m at 3 meters = 16.6667(F) - 2833.3333. The maximum permitted unwanted emission level is 20 dB below the maximum permitted fundamental level.]

- Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength (mV/m) | Measurement Distance (m) |
|-----------------|-----------------------|--------------------------|
| 30-88 | 100* | 3 |
| 88-216 | 150* | 3 |
| 216-960 | 200* | 3 |
| Above 960 | 500 | 3 |

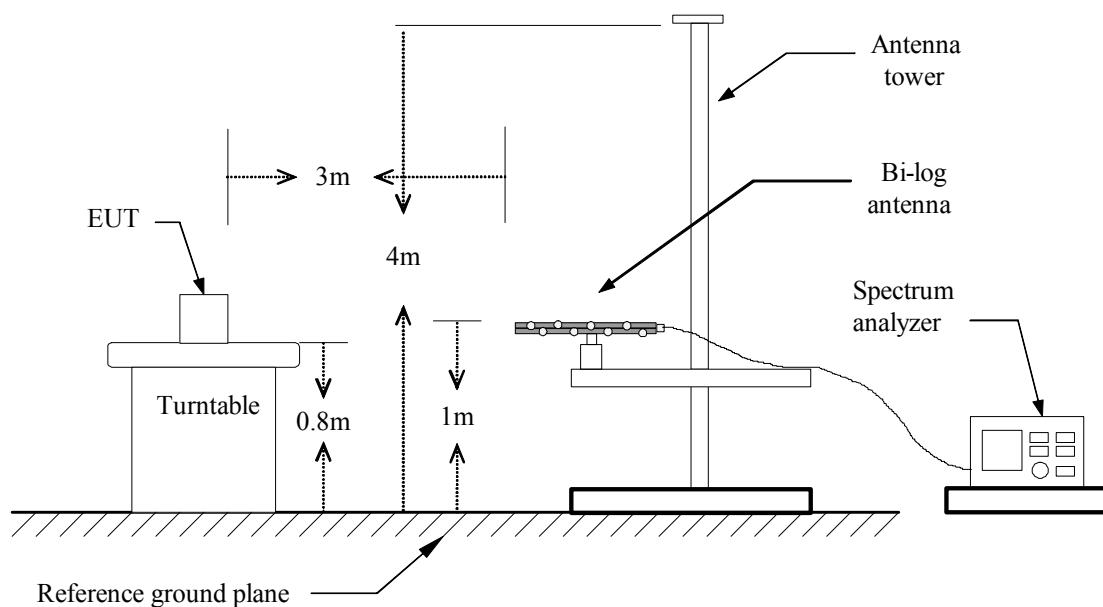
Remark: Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

- In the above emission table, the tighter limit applies at the band edges.

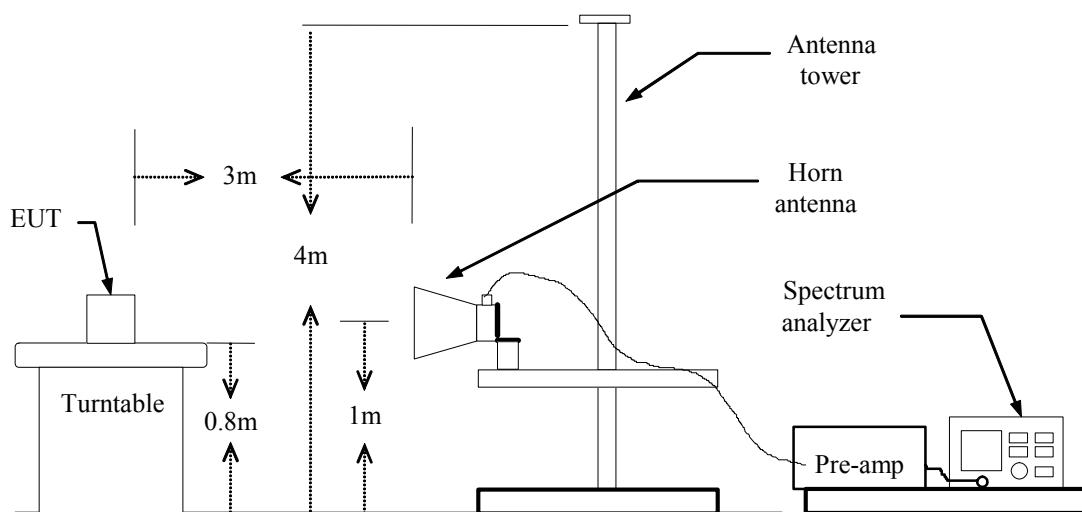
| Frequency (MHz) | Field Strength (μ V/m at 3-meter) | Field Strength (dB μ V/m at 3-meter) |
|-----------------|--|--|
| 30-88 | 100 | 40 |
| 88-216 | 150 | 43.5 |
| 216-960 | 200 | 46 |
| Above 960 | 500 | 54 |

Test Configuration

Below 1 GHz



Above 1 GHz





TEST PROCEDURE

1. The EUT is placed on a turntable, which is 0.8m above ground plane.
2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
6. Set the spectrum analyzer in the following setting as:

Below 1GHz:

RBW=100kHz / VBW=300kHz / Sweep=AUTO

Above 1GHz:

(a) PEAK: RBW=VBW=1MHz / Sweep=AUTO

(b) AVERAGE: RBW=1MHz / VBW=10Hz / Sweep=AUTO

7. Repeat above procedures until the measurements for all frequencies are complete.



TEST RESULTS

Below 1 GHz

Operation Mode: Tx

Test Date: June 17, 2006

Temperature: 25°C

Tested by: James Yu

Humidity: 40 % RH

Polarity: Ver. / Hor.

| Freq. (MHz) | Ant. Pol (H/V) | Reading (Peak) (dBuV) | Correction Factor (dB/m) | Result (Peak) (dBuV/m) | Duty Cycle Correction Factor (dBuV) | Result (Average/ Quasi-peak) (dBuV/m) | Limit (Average/ Quasi-peak) (dBuV/m) | Margin (dB) | Remark |
|----------------|-------------------|-----------------------------|--------------------------------|------------------------------|--|--|---|----------------|--------|
| 315.03 | V | 77.96 | -25.83 | 52.13 | -16.97 | 35.16 | 67.67 | -32.51 | AVG |
| 629.78 | V | 46.66 | -18.67 | 27.99 | --- | --- | 46.00 | -18.01 | Peak |
| 945.03 | V | 51.31 | -14.69 | 36.63 | --- | --- | 46.00 | -9.37 | Peak |
| N/A | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 315.02 | H | 89.12 | -25.83 | 63.29 | -16.97 | 46.32 | 67.67 | -21.35 | AVG |
| 629.78 | H | 51.37 | -18.67 | 32.70 | --- | --- | 46.00 | -13.30 | Peak |
| 945.03 | H | 54.86 | -14.69 | 40.17 | --- | --- | 46.00 | -5.83 | Peak |
| N/A | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

Remark:

1. Measuring frequencies from 30 MHz to the 1GHz.
2. Radiated emissions measured in frequency range from 30 MHz to 1000MHz were made with an instrument using peak/quasi-peak/average detector mode.
3. Quasi-peak test would be performed if the peak result were greater than the quasi-peak limit or as required by the applicant.
4. Data of measurement within this frequency range shown “ --- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “ N/A ” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark Result (dBuV/m) – Limit (dBuV/m).

**Above 1 GHz****Operation Mode:** TX **Test Date:** June 17, 2006**Temperature:** 25°C **Tested by:** James Yu**Humidity:** 40 % RH **Polarity:** Ver. / Hor.

| Frequency (MHz) | Ant. Pol. (H/V) | Reading (Peak) (dBuV) | Reading (Average) (dBuV) | Correction Factor (dB/m) | Result (Peak) (dBuV/m) | Result (Average) (dBuV/m) | Limit (Peak) (dBuV/m) | Limit (Average) (dBuV/m) | Margin (dB) | Remark |
|-----------------|-----------------|-----------------------|--------------------------|--------------------------|------------------------|---------------------------|-----------------------|--------------------------|-------------|--------|
| 1256.67 | V | 41.84 | --- | -13.82 | 28.02 | --- | 74.00 | 54.00 | -25.98 | Peak |
| 1571.67 | V | 57.81 | --- | -13.73 | 44.09 | --- | 74.00 | 54.00 | -9.91 | Peak |
| 1886.67 | V | 49.73 | --- | -13.12 | 36.61 | --- | 74.00 | 54.00 | -17.39 | Peak |
| 2201.67 | V | 51.38 | --- | -12.49 | 38.89 | --- | 74.00 | 54.00 | -15.11 | Peak |
| N/A | | | | | | | | | | |
| | | | | | | | | | | |
| 1256.67 | H | 46.43 | --- | -13.82 | 32.62 | --- | 74.00 | 54.00 | -21.38 | Peak |
| 1571.67 | H | 63.79 | --- | -13.73 | 50.07 | --- | 74.00 | 54.00 | -3.93 | Peak |
| 1886.67 | H | 59.97 | --- | -13.12 | 46.85 | --- | 74.00 | 54.00 | -7.15 | Peak |
| 2201.67 | H | 52.98 | --- | -12.49 | 40.49 | --- | 74.00 | 54.00 | -13.51 | Peak |
| N/A | | | | | | | | | | |
| | | | | | | | | | | |

Remark:

1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using peak/average detector mode.
3. Average test would be performed if the peak result were greater than the average limit or as required by the applicant.
4. Data of measurement within this frequency range shown “---” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
5. Measurements above show only up to 6 maximum emissions noted, or would be lesser, with “N/A” remark, if no specific emissions from the EUT are recorded (ie: margin>20dB from the applicable limit) and considered that's already beyond the background noise floor.
6. Margin (dB) = Remark result (dBuV/m) – Average limit (dBuV/m).



7.5 POWERLINE CONDUCTED EMISSIONS

LIMIT

According to §15.207(a), except as shown in paragraphs (b) and (c) of this section, for an intentional radiator that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the boundary between the frequency ranges.

| Frequency Range (MHz) | Limits (dB μ V) | |
|--------------------------|---------------------|-----------|
| | Quasi-peak | Average |
| 0.15 to 0.50 | 66 to 56* | 56 to 46* |
| 0.50 to 5 | 56 | 46 |
| 5 to 30 | 60 | 50 |

* Decreases with the logarithm of the frequency.

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

Test Procedure

Not applicable (Since the EUT is powered by battery)

TEST RESULTS

Not applicable (Since the EUT is powered by battery)