# FCC OET BULLETIN 65 SUPPLEMENT c (EDITION 01-01) RF exposure evaluation report

For

Product Name: AJTWBslim2

Model : AJTWBslim2

Issued to

Taiwan Anjie Electronics Co .,Ltd
1F,No.236,Sec.3,Huanbei Rd.,Jubei City, Hsinchu County,30265,Taiwan

Issued by

**Global Certification Corp.**
**No.146, Sec. 2, Xiangzhang Rd., Xizhi Dist., New Taipei City 221, Taiwan (R.O.C.)**

## Revision History

| Revision | No. | Report Number | Issue Date | Description | Author/ Revised by |
|---|---|---|---|---|---|
| 1. | FRS-860409 | FRS-860409 | Jul. 09, 2018 | Original Report | Michelle |
| | | | | | |

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## 1. General Information

| | | |
|---|---|---|
| **Applicant** | : | Taiwan Anjie Electronics Co .,Ltd |
| **Address** | : | 1F,No.236,Sec.3,Huanbei Rd.,Jubei City, Hsinchu County,30265,Taiwan |
| **Manufacturer** | : | Taiwan Anjie Electronics Co .,Ltd |
| **Address** | : | 1F,No.236,Sec.3,Huanbei Rd.,Jubei City, Hsinchu County,30265,Taiwan |
| **EUT** | : | AJTWBslim2 |
| **Model No.** | : | AJTWBslim2 |

**Test Standards:**

**OET Bulletin 65 Supplement C (Edition 01-01)**

The above equipment was tested by Global Certification Corp. For compliance with the requirements set forth in the OET Bulletin 65 Supplement C (Edition 01-01) and the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested.

The test was carried out on Nov. 20, 2017 and this test report shall not be reproducing in part without written approval of Global Certification Corp.

**Reviewed by:**

Jul. 09, 2018
**Date**

*Adam Chou, Manager*

## 2. Description of the tested samples

| | | |
|---|---|---|
| EUT Name | : | AJTWBslim2 |
| Model Number | : | AJTWBslim2 |
| FCC ID | : | 2AP85-AJTWBSLIM2 |
| Input Voltage | : | DC5V |
| Power From | | ☐Inside ☑Outside<br>☐Adaptor ☐BATTERY ☐Power Supply ☐DC Power Source ☑Support Unit PC |
| Operate Frequency | : | Refer to the channel list as described below |
| Number of Channels | : | 79 |
| Channel spacing | : | ☐N/A ☑ 1 MHz |
| Modulation Type | : | FHSS(GFSK) |
| Antenna Type | : | ☐integral antenna: ☑PCB Printing ☐a dedicated antenna |
| Antenna gain | | -3.9 dBi |

# 3. RF Exposure Introduction

## Requirements

Three different categories of transmitters are defined by the FCC in OET Bulletin 65. These categories are fixed installation, mobile and portable and are defined as follows:

- **Fixed installation:**

Fixed location means that the device, including its antenna, is physically secured at a permanent location and is not able to be easily moved to another location. Additionally, distance to humans form the antenna is maintained to at least 2 meters.

- **Mobile Devices:**

A mobile device is defined as a transmitting device designed to be used in other than fixed locations and to be generally used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structures and the body of the user or nearby persons. Transmitters designed to be used by consumers or workers that can be easily re-located, such as a wireless modem operating in a laptop computer, are considered mobile devices if they meet the 20 centimeter separation requirement. The FCC rules for evaluating mobile devices for RF compliance are found in 47 CFR 2.1091.

- **Portable Devices:**

A portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user. Portable device requirements are found in Section 2.1093 of the FCC's Rules (47 CFR 2.1093)

The FCC also categorizes the use of the device as based upon the user's awareness and ability to exercise control over his or her exposure. The two categories defined are Occupational/Controlled Exposure and General Population/Uncontrolled Exposure. These two categories are defined as follows:

- **Occupational/controlled Exposure:**

In general, occupational/controlled exposure limits are applicable to situation in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure. Awareness of the potential for RF exposure in a workplace or similar environment can be provided through specific training as part of a RF safety program. If appropriate, warning signs and labels can also be used to establish such awareness by providing prominent information on the risk of potential exposure and instructions on methods to minimize such exposure risks.

- **General Population/Uncontrolled Exposure:**

The general population / uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity. Warning labels placed on low-power consumer devices such as cellular telephones are not considered sufficient to allow the device to be considered under the occupational/controlled category, and the general population/uncontrolled exposure limits apply to these devices

## 4. RF Exposure Evaluation

| Function | Freq. (MHz) | Antenna Gain (dBi) | Maximum Output Power (dBm) | Maximum Output Power (mW) | Calculated RF Exposure (mW/cm2) | Limit (mW/cm2) |
|---|---|---|---|---|---|---|
| Bluetooth 2.4G | 2480.00 | -3.9 | 1.58 | 1.44 | 0.182 | 3.00 |

*According to KDB 447498 section 4.3.1, the 1-g SAR test exclusion thresholds at test separation distance ≤ 50 mm are determined by:*

*[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance,mm)] ·[√f(GHz)] ≤ 3.0*

The max. average power of channel, including tune-up tolerance(mW) is 1.44 mW(1.58dBm) @ 2480MHz (With Tune-up tolerance),

The min. test separation distance (mm) is 5 mm,

So, [(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] ·[√f(GHz)] = 0.182 < 3.0 (With Tune-up tolerance).

Therefore, standalone SAR measurements are not required for both head and body.