

## RF Exposure Report

**Report No.:** SA161124E06A

**FCC ID:** O6L-A7196

**Test Model:** A7196

**Received Date:** Nov. 24, 2016

**Test Date:** Dec. 08, 2016

**Issued Date:** Dec. 23, 2016

**Applicant:** TRANWO TECHNOLOGY CORP.

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Hsin Chu Laboratory

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### Release Control Record

Issue No.	Description	Date Issued
SA161124E06A	Original release.	Dec. 23, 2016

## 1 Certificate of Conformity

**Product:** 2.4GHz Digital Audio Video Module

**Brand:** TRANWO

**Test Model:** A7196

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** TRANWO TECHNOLOGY CORP.

**Test Date:** Dec. 08, 2016

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

**Prepared by :**  \_\_\_\_\_, **Date:** Dec. 23, 2016  
Claire Kuan / Specialist

**Approved by :**  \_\_\_\_\_, **Date:** Dec. 23, 2016  
May Chen / Manager

## 2 RF Exposure

### 2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

So, this device is classified as **Mobile Device**.

### 2.4 Antenna Gain

The antennas provided to the EUT, please refer to the following table:

Antenna No.	Antenna Net Gain (dBi)	Frequency range (GHz)	Antenna Type	Antenna Connector
1	2	2.4~2.4835	Dipole	R-SMA
2	-0.8343	2.4~2.4835	Dipole	NA

Note:

1. For Antenna 1 connector is R-SMA, RF cable and antenna is can be separated, RF cable is soldered to the modular.
2. For Antenna 2 is no connector, RF cable is soldered to the modular.

## 2.5 Calculation Result

Frequency Band (MHz)	Max Power Avg. (dBm)	Max Power Avg. (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (W/m <sup>2</sup> )
2408~ 2468	18.00	63.096	2	20	0.01989	1

**NOTE:** 1. This power include tune-up tolerance range that specified in MP1 Tune Up power table

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