



RF EXPOSURE REPORT

REPORT NO.: SA120604E06

MODEL NO.: DVW324

FCC ID: XCNDVW324

RECEIVED: June 04, 2012

TESTED: July 02, 2012

ISSUED: July 11, 2012

APPLICANT: Ubee Interactive Corp.

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Hsinchu County 302, Taiwan, R.O.C.

ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

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RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|-------------|-------------------|---------------|
| SA120604E06 | Original release | July 11, 2012 |



1. CERTIFICATION

PRODUCT: Broadcom 3383Z Wireless eMTA
BRAND NAME: UBEE
MODEL NO.: DVW324
TEST SAMPLE: R&D SAMPLE
APPLICANT: Ubee Interactive Corp.
TESTED DATE: July 02, 2012
STANDARDS: FCC Part 2 (Section 2.1091)
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment (Model: DVW324) 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:** July 11, 2012
(Elsie Hsu, Specialist)

APPROVED BY :  , **DATE:** July 11, 2012
(May Chen, Deputy Manager)

2. RF EXPOSURE LIMIT

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| FREQUENCY RANGE (MHz) | ELECTRIC FIELD STRENGTH (V/m) | MAGNETIC FIELD STRENGTH (A/m) | POWER DENSITY (mW/cm ²) | AVERAGE TIME (minutes) |
|--|-------------------------------|-------------------------------|-------------------------------------|------------------------|
| LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE | | | | |
| 300-1500 | ... | ... | F/1500 | 30 |
| 1500-100,000 | ... | ... | 1.0 | 30 |

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 3.1416

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

4. 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**.

5. ANTENNA GAIN

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

| Antenna | Brand | Model No. | Gain (dBi) | | Cable Loss (dB) | | Antenna Type | Connect or Type | Cable Length | Frequency range (GHz ~ GHz) |
|---------|--------|------------------------------|--------------------|------|-----------------|------|--------------|-----------------|--------------|-----------------------------|
| | | | Include cable loss | | 2.4GHz | 5GHz | | | | |
| | | | 2.4GHz | 5GHz | 2.4GHz | 5GHz | | | | |
| 1 | WHA YU | C107-510924-A (SSR-20858) | 3.6 | 3.5 | 0.87 | 1.41 | PIFA | HRS | 300mm+/- 5 | 2.4~ 2.5 4.9~ 5.85 |
| 2 | WHA YU | C107-510925-A (SSR-21076) | 3.3 | 3.5 | 0.14 | 0.23 | PIFA | HRS | 50mm +/- 3 | 2.4~ 2.5 4.9~ 5.85 |

6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

For 15.247(2.4GHz):

| FREQUENCY BAND (MHz) | MAX POWER (mW) | ANTENNA GAIN (dBi) | DISTANCE (cm) | POWER DENSITY (mW/ cm ²) | LIMIT (mW/cm ²) |
|----------------------|----------------|--------------------|---------------|--------------------------------------|-----------------------------|
| 2412-2462 | 597.116 | 3.6 | 20 | 0.27214 | 1 |

For 15.247(5GHz):

| FREQUENCY BAND (MHz) | MAX POWER (mW) | ANTENNA GAIN (dBi) | DISTANCE (cm) | POWER DENSITY (mW/ cm ²) | LIMIT (mW/cm ²) |
|----------------------|----------------|--------------------|---------------|--------------------------------------|-----------------------------|
| 5745 ~ 5825 | 289.165 | 3.5 | 20 | 0.12879 | 1 |

For 15.407(5GHz):

| FREQUENCY BAND (MHz) | MAX POWER (mW) | ANTENNA GAIN (dBi) | DISTANCE (cm) | POWER DENSITY (mW/ cm ²) | LIMIT (mW/cm ²) |
|----------------------|----------------|--------------------|---------------|--------------------------------------|-----------------------------|
| 5190 ~ 5230 | 48.613 | 3.5 | 20 | 0.02165 | 1 |

--- END ---