

## RF Exposure Report

**Report No.:** SA140617C17A

**FCC ID:** NKR-F1

**Test Model:** DNUB-F1

**Received Date:** Apr. 13, 2015

**Test Date:** Apr. 23 ~ Jun. 09, 2015

**Issued Date:** Jun. 12, 2015

**Applicant:** Wistron NeWeb Corp.

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

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

**Test Location:** No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City  
33383, TAIWAN (R.O.C.)



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### Release Control Record

Issue No.	Description	Date Issued
SA140617C17A	Original release.	Jun. 12, 2015

## 1 Certificate of Conformity

**Product:** 11 abgn 2X2 USB Module

**Brand:** Funai

**Test Model:** DNUB-F1

**Sample Status:** Engineering sample

**Applicant:** Wistron NeWeb Corp.

**Test Date:** Apr. 23 ~ Jun. 09, 2015

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

KDB 447498 D03

IEEE C95.1

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 :**

  
Ivy Lin / Specialist

**Date:**

Jun. 12, 2015

**Approved by :**

  
Ken Liu / Senior Manager

**Date:**

Jun. 12, 2015

## 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

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

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = 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**.

### 3 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	27.85	0.510	20	0.136	1
5180-5240	16.10	-0.014	20	0.008	1
5260-5320	17.01	0.109	20	0.010	1
5500-5700	20.38	0.290	20	0.023	1
5745-5825	18.70	0.286	20	0.016	1

\*The 2.4GHz & 5GHz band would not transmit simultaneously during the transmission.

#### NOTE:

2.4GHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 0.510 \text{ dBi}$

5180-5240MHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = -0.014 \text{ dBi}$

5260-5320MHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 0.109 \text{ dBi}$

5500-5700MHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 0.290 \text{ dBi}$

5745-5825MHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/2] = 0.286 \text{ dBi}$

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