

RF Exposure Report

Report No.: SA160122E01A

FCC ID: NKR-DNSA144

Test Model: DNSA-144

Received Date: Jan. 22, 2016

Test Date: Feb. 03, 2016

Issued Date: Mar. 29, 2017

Applicant: Wistron NeWeb 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
SA160122E01A	Original release.	Mar. 29, 2017

1 Certificate of Conformity

Product: 11a/b/g/n IoT WiFi module

Brand: WNC

Test Model: DNSA-144

Sample Status: ENGINEERING SAMPLE

Applicant: Wistron NeWeb Corp.

Test Date: Feb. 03, 2016

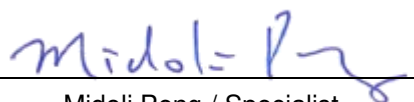
Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-2005

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 :


Midoli Peng / Specialist

Date:

Mar. 29, 2017

Approved by :


May Chen / Manager

Date:

Mar. 29, 2017

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 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

2.2 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

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 antenna provided to the EUT, please refer to the following table:

Transmitter Circuit	Brand Name	Model Name	Gain (dBi) (Include cable loss)	Antenna Type	Connector Type	Frequency range (GHz to GHz)
Chain (0)	WNC	DNAS-144-PC BANT	4.9	PCB	NA	2.4~2.5
			3.9			5.15~5.85

3 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2412-2462	233.884	4.9	20	0.14379	1
5180-5240	10.864	3.9	20	0.00531	1
5260-5320	12.023	3.9	20	0.00587	1
5500-5700	32.584	3.9	20	0.01591	1
5745-5825	16.634	3.9	20	0.00812	1

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