

## RF Exposure Report

**Report No.:** SA160122E01

**FCC ID:** S9J4144

**Test Model:** RTX4144

**Received Date:** Jan. 22, 2016

**Test Date:** Feb. 03, 2016

**Issued Date:** June 23, 2016

**Applicant:** RTX A/S

**Address:** Stroemmen 6, 9400 Noerresundby, Denmark

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

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Taiwan R.O.C.

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### Release Control Record

Issue No.	Description	Date Issued
SA160122E01	Original release.	June 23, 2016

## 1 Certificate of Conformity

**Product:** RTX4144 Wi-Fi module

**Brand:** RTX

**Test Model:** RTX4144

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** RTX A/S

**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 :**  \_\_\_\_\_, **Date:** June 23, 2016  
Claire Kuan / Specialist

**Approved by :**  \_\_\_\_\_, **Date:** June 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 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 <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
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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