

## RF Exposure Report

**Report No.:** SA160215C06

**FCC ID:** MSQ-RT1P00

**Test Model:** RT-N300 B1

**Series Model:** RT-N12+ B1, RT-N12+ V3

**Received Date:** Feb. 15, 2016

**Test Date:** Apr. 13 ~ Jun. 02, 2016

**Issued Date:** Jun. 03, 2016

**Applicant:** ASUSTek COMPUTER INC.

**Address:** 4F, No. 150 Li-Te Rd., Peitou, Taipei, Taiwan

**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
SA160215C06	Original release	Jun. 03, 2016

## 1 Certificate of Conformity

**Product:** Wireless-N Router

**Brand:** ASUS

**Test Model:** RT-N300 B1

**Series Model:** RT-N12+ B1, RT-N12+ V3

**Sample Status:** Engineering sample

**Applicant:** ASUSTeK COMPUTER INC.

**Test Date:** Apr. 13 ~ Jun. 02, 2016

**Standards:** FCC Part 2 (Section 2.1091)  
KDB 447498 D01 (October 23, 2015)  
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 :**  , **Date:** Jun. 03, 2016  
Pettie Chen / Senior Specialist

**Approved by :**  , **Date:** Jun. 03, 2016  
Ken Liu / Senior 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

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

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

Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
24.90	6.43	20	0.270	1

$$\text{Directional gain} = 10 \log[(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2/2] = 6.43\text{dBi}$$

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