

# RF EXPOSURE REPORT

Applicant	ASUSTek COMPUTER INC.
Address	4F,NO. 150,LI-TE RD. PEITOU,TAIPEI 112, TAIWAN

Manufacturer or Supplier	<ol> <li>Shenzhen Gongjin Electronics Co., Ltd</li> <li>Taicang T&amp;W Electronics Co., Ltd.</li> </ol>			
Address	<ol> <li>B116, B118, A211-A213, B201-B213, A311-A313, B411-413, BF08-09 Nanshan Medical Instrument Industry Park,1019# Nanhai Road, Nanshan District, Shenzh Guangdong, 518067, P.R.China</li> <li>Jiangnan Road 89,Ludu Town, Taicang, Jiangsu 215412, P.R.China</li> </ol>			
Product	Wireless N300 Range Extender			
Brand Name	ASUS			
Model	RP-N12			
Additional Model & Model Difference	N/A			
Date of tests				

- FCC Part 2 (Section 2.1091)
- **KDB 447498 D03**
- **⊠** IEEE C95.1

#### CONCLUSION: The submitted sample was found to **COMPLY** with the test requirement

Tested by Yuqiang Yin Project Engineer / EMC Department	Approved by Glyn He Supervisor / EMC Department
Jugians	Date: May 12, 2015
	Date: May 12, 2015

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### **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS150410N020	Original release	May 12, 2015

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#### 1. CERTIFICATION

FCC ID: MSQ-RPN12

PRODUCT: Wireless N300 Range Extender

**BRAND NAME:** ASUS

MODEL NO.: RP-N12

**TEST SAMPLE:** Engineering Sample

APPLICANT: ASUSTek COMPUTER INC.

**TESTED DATE:** May 10, 2015

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

KDB 447498 D03

**IEEE C95.1** 



#### 2. RF EXPOSURE LIMIT

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)					
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

 $Pd = (Pout*G) / (4*pi*r^2)$ 

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

#### 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**.

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#### 5. ANTENNA GAIN

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

Transmitter Circuit	Peak Gain (dBi)	Total Gain (dBi)	Antenna Type
Chain 0	2.0	5.04	Dipole Antenna
Chain 1	2.0	5.01	Dipole Antenna

Note: Total Gain=2+10log(N=2)=2+3.01=5.01dBi

### 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm²)	LIMIT (mW/cm²)
2412-2462	223.394	5.01	20	0.141	1.00

#### Conclusion

Therefore device complies with FCC's RF radiation exposure limits for general population in mobile exposure category (distance > 20cm)

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