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# RF EXPOSURE REPORT

**REPORT NO.:** SA120810D01A

**MODEL NO.:** RTL8188CTV

**FCC ID:** RK9-RTL8188CTV

**RECEIVED:** Mar. 21, 2013

**TESTED:** Mar. 27 ~ 28, 2013

**ISSUED:** Apr. 18, 2013

**APPLICANT:** CastleNet Technology Inc.

**ADDRESS:** No.64, Chung-Shan Rd. Tu-Cheng District, New Taipei City, Taiwan 236

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

**LAB ADDRESS:** No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120810D01A	Original release	Apr. 18, 2013



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## 1. CERTIFICATION

**PRODUCT:** 802.11 b/g/n WLAN 1T1R Card  
**MODEL NO.:** RTL8188CTV  
**BRAND NAME:** CastleNet  
**APPLICANT:** CastleNet Technology Inc.  
**TESTED:** Mar. 27 ~ 28, 2013  
**TEST ITEM:** ENGINEERING SAMPLE  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
FCC OET Bulletin 65, Supplement C (01-01)  
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 :** Annie Chang , **DATE:** Apr. 18, 2013  
( Annie Chang / Supervisor )

**APPROVED BY :** Ken Liu , **DATE:** Apr. 18, 2013  
( Ken Liu / Senior Manager )

## 2. RF EXPOSURE LIMIT

### 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

## 3. 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

## 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**.



## 5. 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	23.4	3.80	20	0.1044	1.00

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