RF EXPOSURE REPORT

REPORT NO.:	SA120821E05A
MODEL NO.:	RV315W
FCC ID:	N89-RV315W
RECEIVED:	Feb. 22, 2013
TESTED:	Mar. 07, 2013
ISSUED:	Apr. 03, 2013
APPLICANT:	CyberTAN Technology, Inc.
ADDRESS:	No.99, Park Avenue III, Science-based Industrial Park, Hsinchu, Taiwan 308,R.O.C.
ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
LAB ADDRESS :	No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.
TEST LOCATION (1):	No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.
TEST LOCATION (2):	No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.

This report should not be used by the client to claim product certification, approval, or endorsement by any government agencies.

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120821E05A	Original release	Apr. 03, 2013

1. CERTIFICATION

PRODUCT:	Cisco Broadband Wireless VPN Router
BRAND NAME:	CISCO
MODEL NO.:	RV315W
TEST SAMPLE:	ENGINEERING SAMPLE
APPLICANT:	CyberTAN Technology, Inc.
TESTED DATE:	Mar. 07, 2013
STANDARDS:	FCC Part 2 (Section 2.1091)
	FCC OET Bulletin 65, Supplement C (01-01)
	IEEE C95.1

The above equipment (Model: RV315W) 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:** *Apr. 03, 2013*
(Elsie Hsu, Specialist)

APPROVED BY : _____ , **DATE:** *Apr. 03, 2013*
(May Chen, 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^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

3. MPE CALCULATION FORMULA

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

where

Pd = power density in mW/cm^2

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 classified as mobile device.

This product could be applied with one USB Cellular Modem, and the safe distance is 33 cm for collocated radio.

5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

For WLAN:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm^2)	LIMIT (mW/cm^2)
2412-2462	114.247	1.4	20	0.03137	1.00

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm^2)	LIMIT (mW/cm^2)
2412-2462	114.247	1.4	33	0.01152	1.00

For USB Cellular Modem:

DEVICE	MAX EIRP (mW)	MAX EIRP (dBm)	DISTANCE (cm)	POWER DENSITY (mW/ cm^2)	LIMIT (mW/cm^2)
USB Cellular Modem	7000	38.45	33	0.51152	0.55

This product can operate with a plug-in 3G device which has maximum of 7W ERP(7000mW EIRP) output power.

CONCLUSION:

Both of the WLAN and plug-in device (USB Cellular Modem 3G) can transmit simultaneously, the formula of calculated the MPE is:

$CPD_1 / LPD_1 + CPD_2 / LPD_2$ + ……etc. < 1

CPD = Calculation power density

LPD = Limit of power density

Therefore, the worst-case situation is 0.03137 / 1 + 0.51152 / 0.55= 0.961, which is less than “1”. This confirmed that the device comply with FCC 1.1310 MPE limit.

--- END ---