RF EXPOSURE REPORT

REPORT NO.:	SA120725E06
MODEL NO.:	RG300-3.7-FLF-81, RG300-3.7-1D-FLF-81, RG300-3.7-1D1V-FLF-81, RG300-3.7-1D1V1W-FLF-81, RG300-3.7 2D1V-FLF-81, RG300-3.7-2D1V1W-FLF-81, RG300-3.7-2D1V1W-FLF-81
FCC ID:	V8YFW181RG30015W
RECEIVED:	July 24, 2012
TESTED:	Aug. 11 to 21, 2012
ISSUED:	Sep. 25, 2012
APPLICANT:	Accton Wireless Broadband Corp.
ADDRESS:	3F, No. 1 Creation Rd. III, Science-based Industrial Park Hsinchu 30077, Taiwan, 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.

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
SA120725E06	Original release	Sep. 25, 2012

1. CERTIFICATION

PRODUCT:	WiMAX 802.16e Indoor Gateway
BRAND NAME:	AWB
MODEL NO.:	RG300-3.7-FLF-81, RG300-3.7-1D-FLF-81, RG300-3.7-1D1V-FLF-81, RG300-3.7-1D1V1W-FLF-81, RG300-3.7 2D1V-FLF-81, RG300-3.7-2D1V1W-FLF-81, RG300-3.7-2D1V1W-FLF-81
TEST SAMPLE:	R&D SAMPLE
APPLICANT:	Accton Wireless Broadband Corp.
TESTED DATE:	Aug. 11 to 21, 2012
STANDARDS:	FCC Part 2 (Section 2.1091)
	FCC OET Bulletin 65, Supplement C (01-01)
	IEEE C95.1

The above equipment (Model: RG300-3.7-FLF-81) 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:** Sep. 25, 2012
(Claire Kuan, Specialist)

APPROVED BY : _____ , **DATE:** Sep. 25, 2012
(May Chen, Deputy 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 is classified as **Mobile Device**.

5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

For WiFi:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm^2)	LIMIT (mW/cm^2)
2412-2462	234.423	4.96	20	0.14613	1.00

For WiMAX:

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm^2)	LIMIT (mW/cm^2)
3652.5-3697.5	380.190	9.90	20	0.73915	1.00

CONCLUSION:

Both of the WiMAX and WiFi device can transmit simultaneously, the formula of calculated the exposure 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 0.14613 / 1 + 0.73915 / 1= 0.885, which is less than the “1” limit.

--- END ---