



A D T

# RF EXPOSURE REPORT

**REPORT NO.:** SA120718C09A-1

**MODEL NO.:** MC7750

**FCC ID:** QYLMC7750

**ISSUED:** Nov. 02, 2012

**APPLICANT:** Getac Technology Corporation

**ADDRESS:** 5F., Building A, No. 209, Sec. 1, Nangang Rd.,  
Nangang Dist, Taipei City 11568, Taiwan, R.O.C.

**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)

**TEST LOCATION:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei  
Shan Hsiang, Taoyuan Hsien 333, Taiwan,  
R.O.C.

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.



A D T

## TABLE OF CONTENTS

RELEASE CONTROL RECORD .....	3
1. CERTIFICATION .....	4
2. RF EXPOSURE .....	5
2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE) .....	5
2.2 MPE CALCULATION FORMULA .....	5
2.3 CLASSIFICATION .....	5
2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER .....	6
2.5 EVALUATION OF SIMULTANEOUS TRANSMISSION .....	6



A D T

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120718C09-4	Original release	Nov. 02, 2012



A D T

## 1. CERTIFICATION

**PRODUCT:** WWAN Module

**MODEL NO.:** MC7750

**BRAND:** Sierra Wireless

**APPLICANT:** Getac Technology Corporation

**TEST SAMPLE:** ENGINEERING SAMPLE

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

FCC OET Bulletin 65, Supplement C (01-01)

IEEE C95.1

The above equipment (Model: MC7750) 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** : Ivonne Wu, DATE : Nov. 02, 2012  
Ivonne Wu / Senior Specialist

**APPROVED BY** : Roy Wu, DATE : Nov. 02, 2012  
Roy Wu / Manager

## 2. RF EXPOSURE ASSESSMENT

### 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)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 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

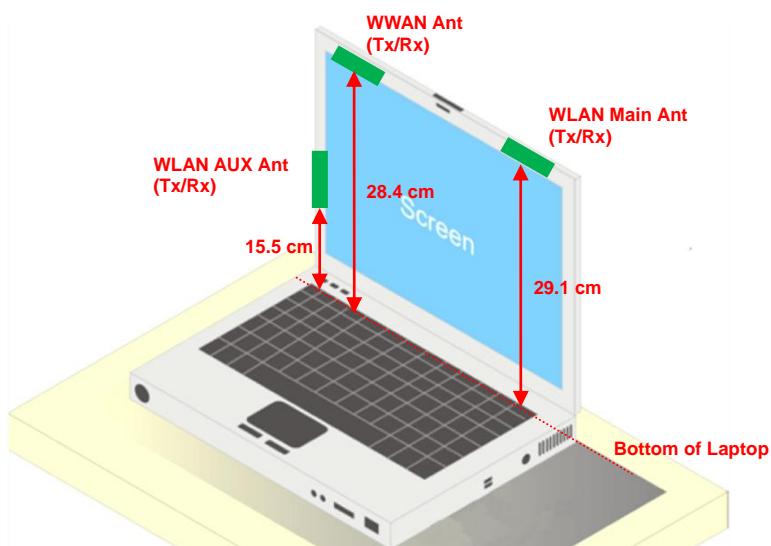
G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

### 2.3 CLASSIFICATION

The WWAN 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**.





A D T

## 2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

Function	Maximum Antenna Gain (dBi)	Maximum Antenna Gain (numeric)	Maximum Output Power (dBm)	Maximum Output Power (mW)	Calculated RF Exposure at r = 20 cm (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
CDMA2000 BC0	1.5	1.41	25.31	339.63	<b>0.10</b>	0.55
CDMA2000 BC1	2.6	1.82	25.28	337.29	<b>0.12</b>	1.00
LTE Band 13	2.41	1.74	23.56	226.99	<b>0.08</b>	0.52

**Note:** The maximum output power is refer to the RF report of the WWAN module (FCC ID: N7NMC7750=j g"qtki kpcn'Ej cpi g'lp'KF 'hdkpi 'hqt'S [ NO E9972)

## 2.5 EVALUATION OF SIMULTANEOUS TRANSMISSION

There is one WWAN module and one WLAN module installed in this laptop PC, and the exposure condition is mobile and portable respectively. According to KDB 616217 D03 4) a), the formula is as following and the calculation is listed in below table.

( $\sum$  of the highest measured 1g SAR / 1.6 W/kg) + ( $\sum$  of the highest MPE / MPE limit) < 1

Co-transmission Configuration	Highest WLAN SAR	SAR Limitation	Highest WWAN MPE	MPE Limitation	Sum of Ratio
WLAN + CDMA BC0	0.011	1.6	0.10	0.55	<b>0.19</b>
WLAN + CDMA BC1	0.011	1.6	0.12	1.00	<b>0.13</b>
WLAN + LTE Band 13	0.011	1.6	0.08	0.52	<b>0.16</b>

**Note:** The highest SAR value is refer to the BVADT WLAN SAR report (FCC ID. QYL6235, Report No.: SA120718C09A, Issue Date: Nov. 02, 2012)

Since the summation for each configuration is less than 1, the simultaneous transmission SAR evaluation is not required.