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# RF EXPOSURE REPORT

**REPORT NO.:** SA130426C21

**MODEL NO.:** MC8355

**FCC ID:** QYL300GOBI3

**RECEIVED:** Apr. 26, 2013

**ISSUED:** Jun. 03, 2013

**APPLICANT:** Getac Technology Corporation

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

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA130426C21	Original release	Jun. 03, 2013



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## 1. CERTIFICATION

**PRODUCT:** 3G Radio Module  
**MODEL NO.:** MC8355  
**BRAND:** Sierra Wireless  
**APPLICANT:** Getac Technology Corporation  
**TEST SAMPLE:** Identical Prototype  
**STANDARDS:** **FCC Part 2 (Section 2.1091)**  
**FCC OET Bulletin 65, Supplement C (01-01)**  
IEEE C95.1

The above equipment (model: MC8355) 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.

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Vera Huang / Specialist

**APPROVED BY :** *Roy Wu* , **DATE :** Jun. 03, 2013  
Roy Wu / Manager



## 2. RF EXPOSURE

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

F = Frequency in MHz

### 2.2 MPE CALCULATION FORMULA

$$Pd = (P_{out} * G) / (4 * \pi * r^2)$$

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 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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## 2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

Frequency Band (MHz)	Operating Mode	Maximum Conducted (dBm)		Antenna Gain (dBi)	E.I.R.P. (mW)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
		Burst Avg. Power	Time Avg. Power				
GSM850	GPRS10	32.28	26.28	3.30	903.52	0.180	0.55
GSM1900	GPRS10	29.75	23.75	2.48	417.77	0.083	1.00

Frequency Band (MHz)	Conducted Avg. Power (dBm)	Antenna Gain (dBi)	E.I.R.P. (mW)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WCDMA Band II	24.49	2.48	497.74	0.099	1.00
WCDMA Band IV	24.26	0.47	297.17	0.059	1.00
WCDMA Band V	24.24	3.30	567.54	0.113	0.55
CDMA2000 BC0	24.50	3.30	602.56	0.120	0.55
CDMA2000 BC1	24.41	2.48	488.65	0.097	1.00

Frequency band (MHz)	Conducted power (dBm)	Antenna Gain (dBi)	E.I.R.P. (mW)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
WAN 2.4G	20.70	3.20	245.47	0.049	1.00
WLAN 5G	21.30	5.00	426.58	0.085	1.00
Bluetooth	5.06	2.25	5.38	0.001	1.00



## 2.5 Evaluation of Simultaneous transmission

There is one WWAN module and one WLAN/BT module installed in EUT. According to KDB 616217 D03 4) a), the formula is as following and the calculation is listed in below table.

$(\sum \text{ of the highest MPE / MPE limit}) < 1$

Co-transmission Configuration	Highest BT	MPE Limitation	Highest WLAN	MPE Limitation	Highest WWAN	MPE Limitation	Sum of Ratio
BT + WLAN + GSM 850	0.001	1.00	0.085	1.00	0.180	0.55	<b>0.413</b>
BT + WLAN + GSM1900	0.001	1.00	0.085	1.00	0.083	1.00	<b>0.169</b>
BT + WLAN + WCDMA II	0.001	1.00	0.085	1.00	0.099	1.00	<b>0.185</b>
BT + WLAN + WCDMA IV	0.001	1.00	0.085	1.00	0.059	1.00	<b>0.145</b>
BT + WLAN + WCDMA V	0.001	1.00	0.085	1.00	0.113	0.55	<b>0.291</b>
BT + WLAN + CDMA2000 BC0	0.001	1.00	0.085	1.00	0.120	0.55	<b>0.304</b>
BT + WLAN + CDMA2000 BC1	0.001	1.00	0.085	1.00	0.097	1.00	<b>0.183</b>