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# RF EXPOSURE REPORT

**REPORT NO.:** SA140311E07

**MODEL NO.:** T77H505

**FCC ID:** B3QT77H505

**RECEIVED:** Mar. 11, 2014

**TESTED:** Apr. 02, 2014

**ISSUED:** Apr. 21, 2014

**APPLICANT:** BROTHER INDUSTRIES, LTD.

**ADDRESS:** 15-1, Naeshiro-cho, Mizuho-ku, Nagoya, Aichi, Japan.

**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.

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA140311E07	Original release	Apr. 21, 2014



## 1. CERTIFICATION

**PRODUCT:** IEEE802.11b/g/n Wi-Fi module

**BRAND NAME:** Brother

**MODEL NO.:** T77H505

**TEST SAMPLE:** ENGINEERING SAMPLE

**APPLICANT:** BROTHER INDUSTRIES, LTD.

**TESTED DATE:** Apr. 02, 2014

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

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

IEEE C95.1

The above equipment (Model: T77H505) 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 :** CiL , **DATE:** Apr. 21, 2014  
( Claire Kuan, Specialist )

**APPROVED BY :** MC , **DATE:** Apr. 21, 2014  
( May Chen, Manager )



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## 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

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

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

## 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. ANTENNA GAIN

The antenna provided to the EUT, please refer to the following table:

Gain (dBi)	Antenna Type	Connector Type	Frequency range (MHz to MHz)	Cable Loss (dB)
2.12	PCB	NA	2400~2500	NA



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## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2412-2462	240.436	2.12	20	0.07793	1

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