



SAR TEST REPORT

No. 2009EEE00834

For

HUAWEI Technologies Co., Ltd.

HSDPA USB Stick

E1612

With

Hardware Version: CD74TCPU

Software Version: 11.802.08.00.00

FCCID: QISE1612

Issued Date: 2009-3-17



No. DAT-P-114/01-01

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of TMC Beijing.

Test Laboratory:

TMC Beijing, Telecommunication Metrology Center of Ministry of Information Industry

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1 Test Laboratory

1.1 Testing Location

Company Name: TMC Beijing, Telecommunication Metrology Center of MII
Address: No 52, Huayuan beilu, Haidian District, Beijing, P.R.China
Postal Code: 100083
Telephone: +86-10-62303288
Fax: +86-10-62304793

1.2 Testing Environment

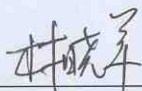
Temperature: 18°C~25 °C,
Relative humidity: 30%~ 70%
Ground system resistance: < 0.5 Ω

Ambient noise is checked and found very low and in compliance with requirement of standards.
Reflection of surrounding objects is minimized and in compliance with requirement of standards.

1.3 Project Data

Project Leader: Sun Qian
Test Engineer: Lin Xiaojun
Testing Start Date: February 16, 2009
Testing End Date: February 17, 2009

1.4 Signature



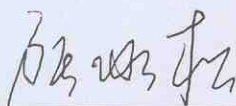
Lin Xiaojun

(Prepared this test report)



Sun Qian

(Reviewed this test report)



Lu Bingsong

Deputy Director of the laboratory
(Approved this test report)

2 Client Information

2.1 Applicant Information

Company Name: HUAWEI Technologies Co., Ltd.
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City: Shenzhen
Postal Code: 518129
Country: China
Telephone: +86 (0)755-28780808
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2.2 Manufacturer Information

Company Name: HUAWEI Technologies Co., Ltd.
Address /Post: Bantian, Longgang District, Shenzhen, Guangdong
City: Shenzhen
Postal Code: 518129
Country: China
Telephone: +86 (0)755-28780808
Fax: +86 (0)755-28780808

3 Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1 About EUT

Description: GSM/GPRS Data Card
Model Name: HSDPA USB Stick
Brand Name: HUAWEI
Frequency Band: GSM/GPRS/EGPRS 850/1900
GPRS/EGPRS Class: 12



Picture 1: Constituents of the sample

3.2 Internal Identification of EUT used during the test

EUT ID*	SN or IMEI	HW Version	SW Version
EUT1	352201030000564	CD74TCPU	11.802.08.00.00

*EUT ID: is used to identify the test sample in the lab internally.

4 CHARACTERISTICS OF THE TEST

4.1 Applicable Limit Regulations

EN 50360–2001: Product standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones.

It specifies the maximum exposure limit of **2.0 W/kg** as averaged over any 10 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

ANSI C95.1–1999: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

4.2 Applicable Measurement Standards

EN 62209-1–2006: Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz).

IEEE 1528–2003: Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques.

OET Bulletin 65 (Edition 97-01) and Supplement C(Edition 01-01): Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits.

IEC 62209-2 (Draft): Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures – Part 2: Procedure to determine the Specific Absorption Rate (SAR) in the head and body for 30MHz to 6GHz Handheld and Body-Mounted Devices used in close proximity to the Body.

KDB 447498 D01: Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies v03r02

KDB 447498 D02: SAR Measurement Procedures for USB Dongle Transmitters

KDB 941225 D01: SAR Measurement Procedures for 3G devices v02

KDB 941225 D02: Guidance for Requesting a Permit-But-Ask for 3GPP R6-HSPA v01

They specify the measurement method for demonstration of compliance with the SAR limits for such equipments.

5 OPERATIONAL CONDITIONS DURING TEST

5.1 Schematic Test Configuration

5.1.1 Test positions and host laptops

The EUT is tested at the following 5 test positions all with the distance ≤ 0.5 cm between the EUT and the phantom bottom:

Note: position 1&2 are horizontal orientations, position 3&4 are vertical orientations. The distance between the EUT and phantom for position 1 is the same as position 2, and also the distance between the EUT and phantom for position 3 is the same as position 4. Position 5 should be tested as the antenna is located at the tip of the EUT.



Horizontal-down

Picture 2-a: Test position 1 (EUT is connected to laptop via a USB cable which is shorter than 12 inches and distance between EUT and phantom is 5mm)



Horizontal-up

Picture 2-b: Test position 2 (distance between EUT and phantom is 5mm)



Vertical-Front

Picture 2-c: Test position 3 (distance between EUT and phantom is 5mm)



Vertical-Back

Picture 2-d: Test position 4 (distance between EUT and phantom is 5mm)



Picture 2-e: Test position 5(distance between EUT and phantom is 0mm)

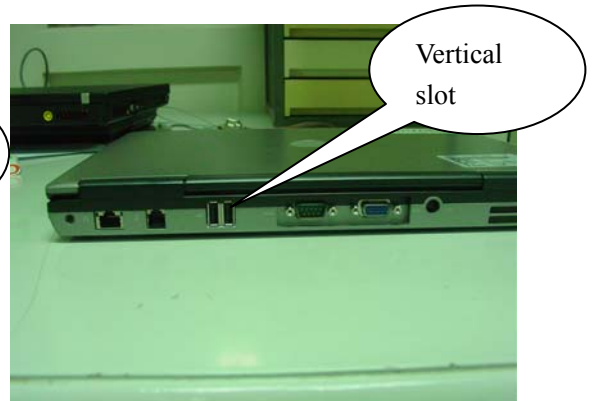
The following host laptops are used during the tests to test the 4 orientations (two horizontals and two verticals) of the EUT: Laptop A (Dell D630) and Laptop B (IBM R60), and the used USB slots are marked in the pictures.



Picture 3-a: laptop A



Picture 3-b: laptop A (horizontal slot)



Picture 3-c: laptop A (vertical slot)



Picture 4-a: laptop B



Picture 4-b: laptop B (vertical slot)