
OET Bulletin 65 (MPE) Test Report

Report No.: AGC02B120401-1F7

FCC ID : NZRF2414
PRODUCT DESIGNATION : WCDMA/HSDPA/HSUPA IP MODEM
BRAND NAME : Four-Faith
TEST MODEL : F2414
CLIENT : Xiamen Four-Faith Communication Technology Co., Ltd.
DATE OF ISSUE : May 10, 2012
STANDARD(S) : FCC Part 22H & 24E Rules
REPORT VERSION : V1.0

Attestation of Global Compliance Co., Ltd.

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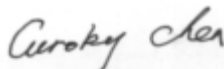
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1. TEST RESULT CERTIFICATION

Applicant Name:	Xiamen Four-Faith Communication Technology Co., Ltd.
Address:	J1-J3, 3rd Floor, No.44, GuanRi Road, SoftWare Park, XiaMen, China. Zip Code:361008
Manufacturer Name:	Xiamen Four-Faith Communication Technology Co., Ltd.
Address:	J1-J3, 3rd Floor, No.44, GuanRi Road, SoftWare Park, XiaMen, China. Zip Code:361008
Product Designation	WCDMA/HSDPA/HSUPA IP MODEM
Brand Name	Four-Faith
Test Model	F2414
Test Standard	FCC Part 22H & 24E Rules
File Number:	AGC02B120401-1F2A
Date of Test:	May 05, 2012 to May 08, 2012

We (AGC), Attestation of Global Compliance Co., Ltd. for compliance with the requirements set forth in the FCC Standard OET Bulletin 65 (Edition 97-01) Supplement C (Edition 01-01) The results of testing in this report apply to the product/system which was tested only.

Tested By: 
Curoky Chen May 10, 2012

Reviewed By 
Forrest Lei May 10, 2012

Approved By 
Solger Zhang May 10, 2012

2. TECHNICAL INFORMATION

Note: the following data is based on the information by the applicant.

EUT DESCRIPTION

A major technical description of EUT is described as following:

Product Designation:	WCDMA/HSDPA/HSUPA IP MODEM
Hardware version:	V1.2
Software version:	V1.2
FCC ID:	NZRF2414
Frequency Bands:	<input checked="" type="checkbox"/> GSM 850 <input checked="" type="checkbox"/> PCS 1900 (U.S. Bands) <input checked="" type="checkbox"/> GSM 900 <input checked="" type="checkbox"/> DCS 1800 (Non-U.S. Bands) U.S. Bands: <input checked="" type="checkbox"/> UMTS FDD Band II <input checked="" type="checkbox"/> UMTS FDD Band V Non-U.S. Bands: <input checked="" type="checkbox"/> UMTS FDD Band I
Antenna:	detachable Antenna
Antenna gain:	1.5dBi
Power Supply:	DC 12V by adapter
Adapter Input:	AC100-240V, 0.5A
Adapter Output:	DC12V, 500mA
GPRS Class	12

Note:

1. For more details, please refer to the User's manual of the EUT.

3. RF EXPOSURE MEASUREMENT

3.1 INTRODUCTION

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 20 cm or more from persons.

The 1992 ANSI/IEEE standard (See Listed limit table) specifies a minimum separation distance of 20 cm for performing reliable field measurements to determine adherence to MPE limits.

If the minimum separation distance between a transmitter and nearby persons is more than 20 cm under normal operating conditions, compliance with MPE limits may be determined at such distance from the transmitter. When applicable, operation instructions and prominent warning labels may be used to alert the exposed persons to maintain a specified distance from the transmitter or to limit their exposure durations and usage conditions to ensure compliance.

3.2 FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE(MPE)

LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Time E ² , H ² or S (Minutes)
0.3 -- 1.34	614	1.63	(100)*	30
1.34 -- 30	824/f	2.19/f	(180/f ²)*	30
30 -- 300	27.5	0.073	0.2	30
300 -- 1500	--	--	f/1500	30
1500 -- 100,000	--	--	1.0	30

*Note:

1. f=Frequency in MHz * Plane-wave Equivalent Power Density
2. The averaging time for General Population/Uncontrolled exposure to fixed transmitters is not applicable for mobile and portable transmitters. See 47 CFR §§2.1091 and 2.1093 on source-based time-averaging requirements for mobile and portable transmitters.

4. CLASSIFICATION OF THE ASSESSMENT METHODS

According to user manual, The antenna of the product, under normal use condition is at least 0.25m away from the body of the user. Warning statement to the user for keeping at least 25cm separation distance and the prohibition of operating to a person has been printed on the user's manual. So, this product under normal use is located on electromagnetic far field between the human body.

$$S = \frac{PG}{4\pi R^2}$$

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator R=distance to the center of radiation of the antenna

5. EUT OPERATION CONDITION

Make the EUT to transmit at lowest, middle and highest channel individually.

6. TEST RESULTS

Note: report the worst result in this part.

Antenna Gain=1.5dBi(Numeric 1.413), $\Pi=3.1416$

GPRS 850:

Channel	Frequency	Output Power	Output Power	Power Density	Power Density Limit	Result
	MHz	dBm	mW	mW/cm ²	mW/cm ²	Pass/Fail
128	824.2	32.61	1823.90	0.33	0.55	Pass
--	--	--	--	--	--	
--	--	--	--	--	--	

Note: The output power refer to **AGC02B120401-1F2** in section 1.1 and section 5. According to the user manual, The minimum seperation distance which used for MPE caculation is 25 cm